Analytical Resources, LLC
Analytical Chemists and Consultants

07 April 2023

Ali Judkins
Anchor QEA, LLC
1201 3rd Ave, Suite 2600
Seattle, WA 98101

RE: AOC5 MR Phase 1

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)	Associated SDG ID(s)
23A0134	N/A

Susan Dunnihoo

Digitally signed by Susan Dunnihoo
Date: 2023.04.07 10:34:17 -07'00'

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclosed Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

Susan Dunnihoo, Director, Client Services

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Accredited in accordance with nelac
Cert# 100006-012

1 of 2 — 23A0134

CHAIN-OF-CUSTODY/TEST REQUEST FORM

№ 3439

Project/Client Name: AOCS MR Phase 1
Project Number: 210075 01.02
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: ARL
Attn: Sue Dunihoo
Shipper: Courier
Form filled out by: K. McPeek

Shipping Date: 1/6/23
Airbill Number: —
Turnaround requested: std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) PCBs	SIM SVOCs	SIM metals	TOC / total solids	D/F	Archive		Comments / Instructions [Jar tag number(s)]
1/6/23	0828	LDW23-SS1205	4	Sediment	X	X	X	X	NA	X		
	0936	-SS1188			X	X	X	X	NA	X		
	0952	-SS1179			X	X	X	X	NA	X		
	1104	-SS1142			X	X	X	X	NA	X		
	1122	-SS1173			X	X	X	X	NA	X		
	1141	-SS1160			X	X	X	X	X	X		
	1229	-SS1152			X	X	X	X	NA	X		
	1243	-SS1131			X	X	X	X	NA	X		
	1257	-SS1129			X	X	X	X	NA	X		
	1315	-SS1124			X	X	X	X	NA	X		
	1329	-SS1123			X	X	X	X	NA	X		
	1344	-SS1116			X	X	X	X	NA	X		
		Total Number of Containers	48	Purchase Order / Statement of Work # APT-110222-AOCS-ARL								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara Vandervort	YARED	YARED	Jacob Walter
Signature: Amara Vandervort			
Company: Windward	Company: YA YA SAFETY	Company: YA YA SAFETY	Company: AR, LLC
Date/Time: 1/6/23 1703	Date/Time: 1/6/23 4:55	Date/Time: 1/6/23 17:26	Date/Time: 01/06/23 1726

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

Wind Ward environmental LLC
200 1st Ave W, Suite 500
Seattle, WA 98119
206.378.1364

2 of 23A0134

CHAIN-OF-CUSTODY/TEST REQUEST FORM

№ 3963

Project/Client Name: AOCS MR Phase 1
Project Number: 210075.01.02
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: ARL
Attn: Sue Dunnihoo
Shipper: Courier
Form filled out by: AV/CC

Shipping Date: 1/6/23
Airbill Number: —
Turnaround requested: std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required)								Comments / Instructions [Jar tag number(s)]
					AC BS	SMS SVOCs	SMS metals	TOC/TS	D/F	Archive	Arsenic	cPAH	
1/6/23	1412	LDW23-IT1210	4	sediment	X	X	X	X	NA	X			
	1441	LDW23-IT1194	4		X	—	—	X	X	X	X	X	
	1346	LDW23-SC249	4		X	X	X	X	NA	X			
	1510	LDW23-SC1077	3		X	—	—	X	—	X			
		Total Number of Containers	15		Purchase Order / Statement of Work # APJ-116022-AOCS-ARL								

1/6/23

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara Vandervort	YHARED	YHARED	Jacob Hunter
Signature: Amara Vandervort			
Company: Windward	Company: YA YA SAFETY	Company: YA YA SAFETY	Company: AR, LLC
Date/Time: 1/6/23 1703	Date/Time: 1/6/23 4:55PM	Date/Time: 1/6/23 17:26	Date/Time: 01/06/23 1726

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

Windward environmental LLC
200 1st Ave W, Suite 500
Seattle, WA 98119
206.378.1364

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Anchor QEA
COC No(s): 3439 & 3963 NA JGW
Assigned ARI Job No: 23A0134

Project Name: AOCS MR Phase 1
Delivered by: Fed-Ex UPS Courier Hand Delivered Other:
Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)
2.4 4.1 2.4 5.4 1.8 1.4

Time 1726
If cooler temperature is out of compliance fill out form 00070F
Temp Gun ID#: 70079708

Cooler Accepted by: JGW Date: 01/06/23 Time: 1726

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used?	Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:		
Was sufficient ice used (if appropriate)?	NA	YES	NO
How were bottles sealed in plastic bags?	Individually	Grouped	Not JGW
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA		

Were the sample(s) split by ARI? NA YES Date/Time: Equipment: Split by:

Samples Logged by: JGW Date: 01/07/23 Time: 1046 Labels checked by: JGW

*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle, WA 98101	Project Manager: Ali Judkins	04/04/2023 09:22

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Matrix	Date Sampled	Date Received
23A0134-01	LDW23-SS1205	Solid	01/06/23 08:28	01/06/23 17:26
23A0134-02	LDW23-SS1188	Solid	01/06/23 09:36	01/06/23 17:26
23A0134-03	LDW23-SS1179	Solid	01/06/23 09:52	01/06/23 17:26
23A0134-04	LDW23-SS1242	Solid	01/06/23 11:04	01/06/23 17:26
23A0134-05	LDW23-SS1173	Solid	01/06/23 11:22	01/06/23 17:26
23A0134-06	LDW23-SS1160	Solid	01/06/23 11:41	01/06/23 17:26
23A0134-07	LDW23-SS1152	Solid	01/06/23 12:29	01/06/23 17:26
23A0134-08	LDW23-SS1131	Solid	01/06/23 12:43	01/06/23 17:26
23A0134-09	LDW23-SS1129	Solid	01/06/23 12:57	01/06/23 17:26
23A0134-10	LDW23-SS1124	Solid	01/06/23 13:15	01/06/23 17:26
23A0134-11	LDW23-SS1123	Solid	01/06/23 13:29	01/06/23 17:26
23A0134-12	LDW23-SS1116	Solid	01/06/23 13:44	01/06/23 17:26
23A0134-13	LDW23-IT1210	Solid	01/06/23 14:12	01/06/23 17:26
23A0134-14	LDW23-IT1194	Solid	01/06/23 14:41	01/06/23 17:26
23A0134-15	LDW23-SC1249	Solid	01/06/23 13:46	01/06/23 17:26
23A0134-16	LDW23-SC1077	Solid	01/06/23 15:10	01/06/23 17:26

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	07-Apr-2023 09:45

Case Narrative

Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Work Order: 23A0134

Sample receipt

Samples as listed on the preceding page were received 06-Jan-2023 17:26 under ARI work order 23A0134. For details regarding sample receipt, please refer to the Cooler Receipt Form. Samples were frozen on receipt to preserve holding times.

Semivolatiles - EPA Method SW8270E

The sample(s) were extracted and analyzed within the recommended holding times for samples stored frozen.

Several extracts in sequence SLC0111 were outside the 12-hour window and reanalyzed in a new sequence. The extract for sample LDW23-SS1123 was analyzed 28 minutes outside the 12-hour sequence window. The extract was not reanalyzed as it had passed the 40-day extract holding time.

Initial and continuing calibrations were within method requirements, with accepted excursions outside the 20% window. Associated positive results have been "Q"-flagged.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries and relative percent difference (RPD) were within control limits.

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits.

The reference material (SRM) percent recoveries were within control limits.

Semivolatiles - EPA Method SW8270E-SIM

The sample(s) were extracted and analyzed within the recommended holding times for samples stored frozen.

Initial and continuing calibrations were within method requirements, with accepted excursions outside the 20% window. Associated positive results have been "Q"-flagged.

SLC0396-CCV1 shows d12-perylene at <50% when compared to the ICV.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The batch BLA0410 blank spike duplicate (BSD/LCSD) spike recovery for pentachlorophenol was high of control limits, and the relative percent difference (RPD) were within control limits.

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits.

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	07-Apr-2023 09:45

Case Narrative

The reference material (SRM) percent recoveries were within control limits.

Polynuclear Aromatic Hydrocarbons (cPAH) - EPA Method SW8270E-SIM

The sample(s) were extracted and analyzed within the recommended holding times for samples stored frozen.

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surro*gate* percent recovery for Dibenzo[a,h]anthracene-d14 was high of control limits for several extracts, flagged on the summary sheets.

The method blank(s) were clean at the reporting limits.

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries and relative percent difference (RPD) were within control limits.

The matrix spike duplicate (MSD) percent recoveries and relative percent difference (RPD) high of advisory control limits are flagged on the summary sheet.

The reference material (SRM) percent recoveries were within control limits.

Pesticides - EPA Method SW8081B (Hexachlorobenzene)

The sample(s) were extracted and analyzed within the recommended holding times for samples stored frozen.

Initial and continuing calibrations were within method requirements. No PEM was run in sequence SLB0156. As the target analyte is only hexachlorobenzene, no corrective action is required. The calibrations SLB0156-CCV1 and SLB0156-PEM2 had recovery of hexabromobiphenyl outside limits on the second column.

The internal standard 1-bromo-2-nitrobenzene was high of control limits on the first column for LDW23- 1116.

The surrogate percent recoveries for decachlorobiphenyl in BLA0409-MSD1 have been flagged "NRS", indicating no recovery can be calculated due to interference.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits.

Results with greater than 40% difference between the results on the two analytical columns have been “P1”-flagged.

PCB Aroclors - EPA Method SW8082A

The sample(s) were extracted and analyzed within the recommended holding times for samples stored frozen.

Initical calibration SLB0012-ICV2 and calibration SLB0012-CCV4 fail low for aroclor 1260 on the ZB5 analytical column. SLB0012-CCV5 fails low for aroclor 1254 on the ZB5 column. SLB0012-CCV4 fails low for aroclor 1248 on the ZB5 column. All associated data is reported from the ZB35 column as primary. The recovery for tetrachlorometaxlyene (TCMX) is high of control limits on both columns for SLB0012-CCV3. As TCMX is used as an indicator of blowdown efficiency and is not

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Seattle WA, 98101	Project Manager: Ali Judkins	07-Apr-2023 09:45

Case Narrative

required by the method, no further corrective action was taken.

The hexabromobiphenyl (HBB) was low of limits in SLB0012-CCV7 on the first column.

The surrogate percent recoveries for decachlorobiphenyl were high of control limits in sample LDW23-IT1210, attributed to interference from the matrix.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries were low of advisory control limits and flagged on the summary sheet. The relative percent differences (RPD) were within advisory control limits.

The reference material (SRM) percent recoveries were within control limits.

Results with greater than 40% difference between the results on the two analytical columns have been "P1"-flagged.

The analyst noted aroclors were identified using the best fit, considering miscellaneous interfering peaks throughout the chromatogram inflating results and matrix interference from oily extracts.

Total Metals - EPA Method 6020B

The sample(s) were digested and analyzed within the recommended holding times for samples stored frozen.

The analyst noted SLC0521-CCV9 and SLC0521-CCVF to show cadmium high due to noisy indium-1, and that affected analytes appeared noisy. SLC0521-CCV8 showed germanium to be slightly noisy but the %R and analytes were noted to be okay. Multiple samples showed high scandium. SLC0521-IFA showed chromium 53 to be high. Chromium was rerun in sequence SLD0005. In SLD0005-IFAand SLD0041-IFA, chromium 53 was noted to be high. In SLD0041-HCV2, zinc-6 was noted to be less than 200.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.

The batch BLC0703 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries were low of advisory limits for silver and relative percent difference (RPD) were within advisory control limits. A post spike had acceptable recovery. The duplicate (DUP) relative percent differences (RPD) were within advisory control limits, reported under work order 23A0133.

Total Mercury - EPA Method 7471B

The sample(s) were digested and analyzed within the recommended holding times for samples stored frozen.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.

The batch BLA0694 matrix spike duplicate (MSD) percent recovery was low of control limits. The duplicate (DUP) relative percent difference (RPD) was high advisory control limits. The post spike had acceptable recovery, reported under work order 23A0099.

The batch BLC0704 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD)

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	07-Apr-2023 09:45

Case Narrative

were within advisory control limits. The duplicate (DUP) relative percent difference (RPD) was flagged as outside advisory control limits, but "L"-flagged, indicating the analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to +/- RL instead of 20% RPD. Reported under work order 23A0133.

Wet Chemistry (Total Organic Carbon and Total Solids)

The sample(s) were prepared and analyzed within the recommended holding times for samples stored frozen.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.

The reference material (SRM) percent recoveries were within control limits.

The matrix spike (MS) percent recoveries and the duplicate (DUP) relative percent difference (RPD) were within advisory control limits.

Dioxin/Furans - EPA Method 1613

The sample(s) were extracted and analyzed within the recommended holding times for samples stored frozen. Analysis was performed using an application specific column developed by Restek. The RTX-Dioxin2 column has unique isomer separation for the 2378-TCDF, eliminating the need for confirmation analysis.

The SLB0345-CCV1 and SLB0345-ICV1 showed surrogates 13C12-1,2,3,7,8-PeCDF and 13C12-2,3,4,7,8-PeCDF low of limits. SLB0345-CCV2 showed 1,2,3,6,7,8-HxCDF, 3C12-1,2,3,7,8-PeCDD, 13C12-1,2,3,7,8-PeCDF, and 13C12-2,3,4,7,8-PeCDF low of limits.

The labeled internal standard area for 13C12-1,2,3,6,7,8-HxCDD in the OPR was high of control limits. The labeled internal standard areas for 13C12-1,2,3,4,7,8-HxCDD, 13C12-1,2,3,6,7,8-HxCDD, and 13C12-1,2,3,6,7,8-HxCDF in the method blank were high of control limits. as sample and SRM labels were in control, outliers are flagged and no further corrective action was taken.

The cleanup surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits, with response or EMPC response below the reporting limit. Associated positive results have been "B"-flagged.

The OPR (Ongoing Precision and Recovery) standard percent recovery for 1,2,3,6,7,8-HxCDF (83.9%) has been flagged outside of control limits (84-130%).

The batch BLA0261 duplicate (DUP) relative percent difference (RPD) was high of advisory control limits for 2,3,7,8-TCDF, reported under work order 23A0100.

The reference material (SRM) percent recoveries were within control limits.

Revised to correct SIM-SVOA MS/MSD initial sample amounts 04/07/2023

QUALIFIERS AND NOTES

Qualifier	Definition
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20% RSD, <20% drift or minimum RRF)
P1	The reported value is greater than 40% difference between the concentrations determined on two GC columns where applicable.
NRS	This surrogate not reported due to chromatographic interference
L	Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to +/- RL instead of 20% RPD
J	Estimated concentration value detected below the reporting limit.
EMPC	Estimated Maximum Possible Concentration qualifier for HRGCMS Dioxin
D	The reported value is from a dilution
B	This analyte was detected in the method blank.
*	Flagged value is not within established control limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1205

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-01 C	SDG:	23A0134
Sampled:	01/06/23 08:28	Prepared:	01/19/23 13:35	File ID:	NT1802262310.D
% Solids:	57.38	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 17:52
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	17.47 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	857		4.4	20.0
106-44-5	4-Methylphenol	1	11.7	J	7.4	20.0
91-20-3	Naphthalene	1	7.0	J	4.2	20.0
91-57-6	2-Methylnaphthalene	1	6.1	J	4.5	20.0
208-96-8	Acenaphthylene	1	20.0	U	6.2	20.0
131-11-3	Dimethylphthalate	1	20.0	U	4.4	20.0
83-32-9	Acenaphthene	1	6.5	J	5.2	20.0
132-64-9	Dibenzofuran	1	20.0	U	14.1	20.0
86-73-7	Fluorene	1	20.0	U	14.5	20.0
85-01-8	Phenanthrene	1	57.5		8.7	20.0
120-12-7	Anthracene	1	22.0		7.2	20.0
206-44-0	Fluoranthene	1	147		6.1	20.0
129-00-0	Pyrene	1	154		5.7	20.0
85-68-7	Butylbenzylphthalate	1	20.0	U	9.4	20.0
56-55-3	Benzo(a)anthracene	1	78.9		5.9	20.0
218-01-9	Chrysene	1	97.2		6.0	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	53.5		5.4	49.9
	Benzofluoranthenes, Total	1	177		10.0	39.9
50-32-8	Benzo(a)pyrene	1	78.4		4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	34.0		14.6	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.0	U	17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	39.6		13.6	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	748.18	553	73.9	27 - 120	
Phenol-d5	748.18	559	74.7	29 - 120	
2-Chlorophenol-d4	748.18	545	72.8	31 - 120	
1,2-Dichlorobenzene-d4	498.79	318	63.7	32 - 120	
Nitrobenzene-d5	498.79	367	73.6	30 - 120	
2-Fluorobiphenyl	498.79	363	72.7	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1205

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

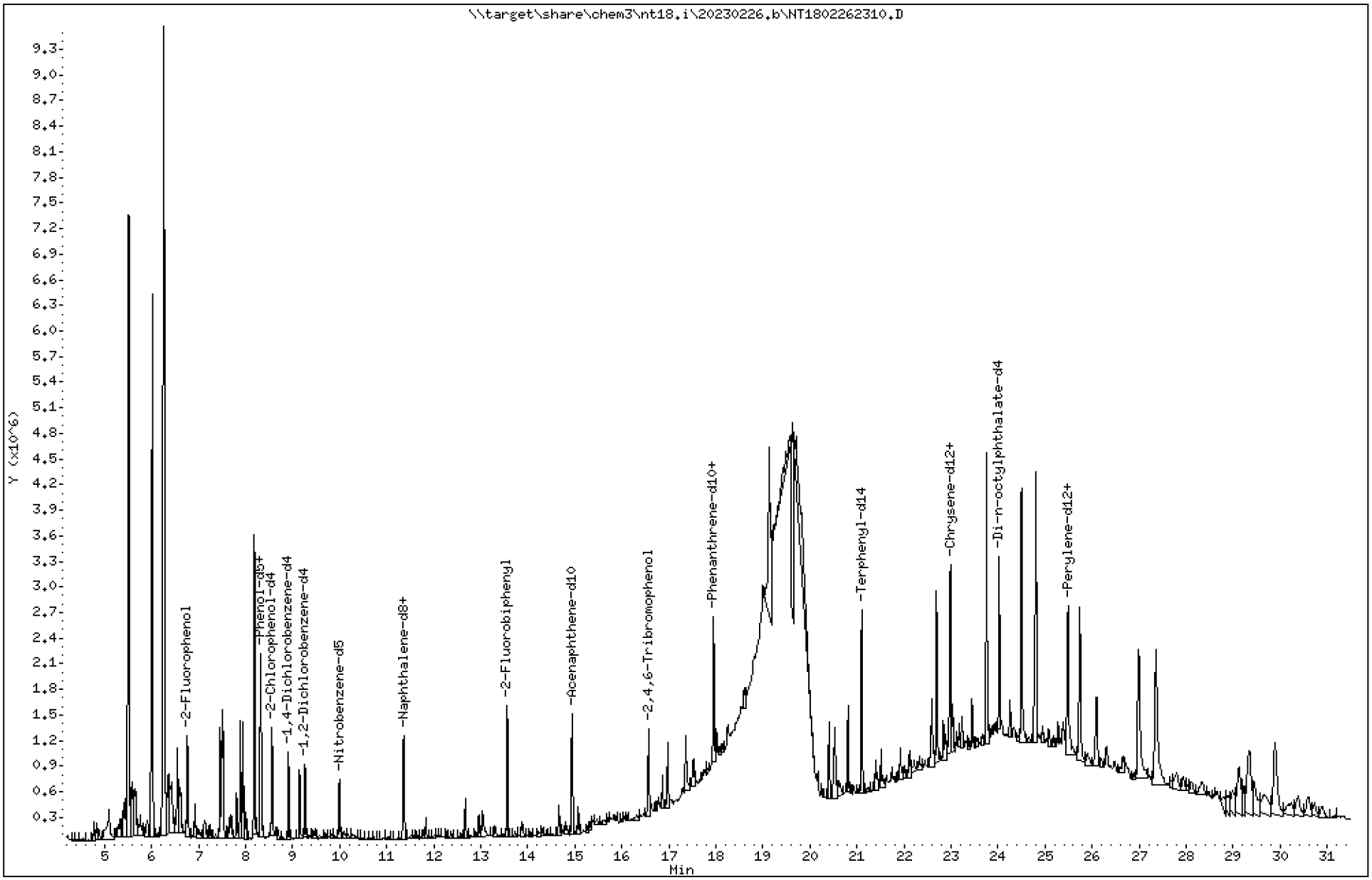
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-01 C	SDG:	23A0134
Sampled:	01/06/23 08:28	Prepared:	01/19/23 13:35	File ID:	NT1802262310.D
% Solids:	57.38	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 17:52
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	17.47 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	748.18	684	91.5	24 - 134	
p-Terphenyl-d14	498.79	366	73.4	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262310.D
Date : 26-FEB-2023 17:52
Client ID:
Sample Info: 23A0134-01

Instrument: nt18.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262310.D

Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

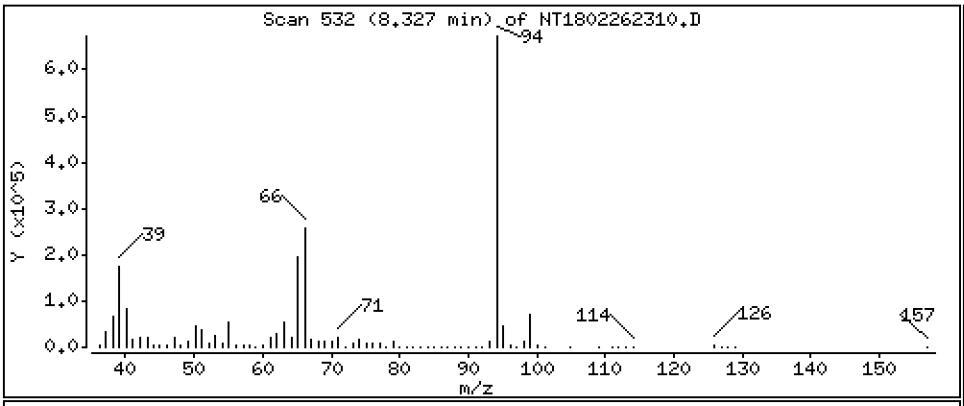
Operator: VTS

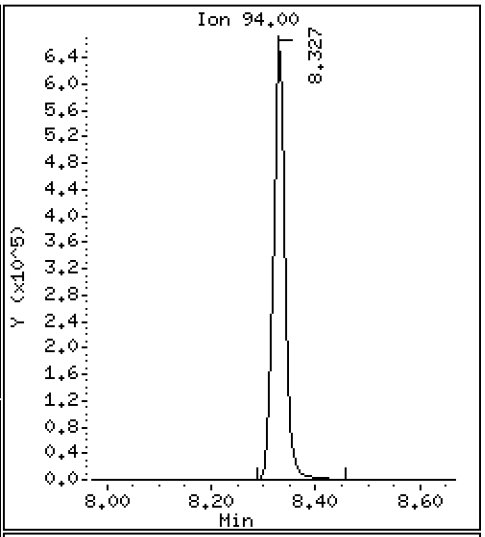
Column phase: ZB-5msi

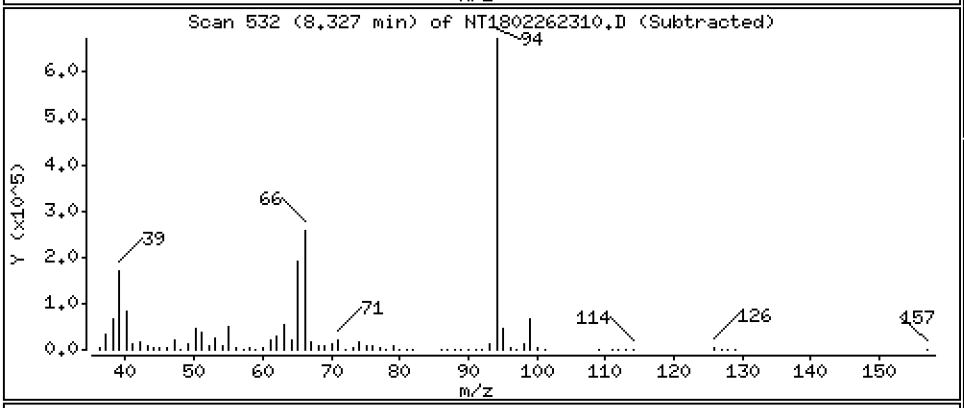
Column diameter: 0.25

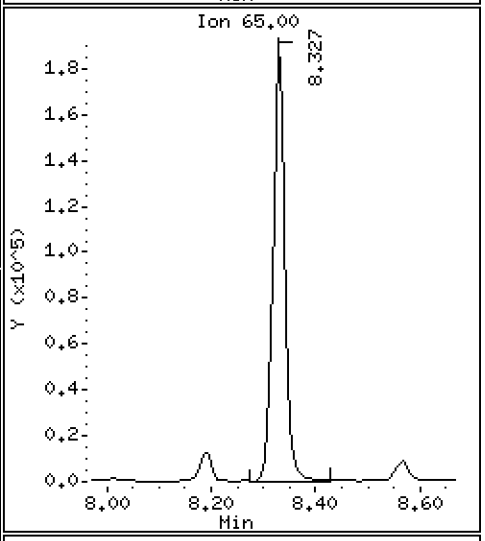
3 Phenol

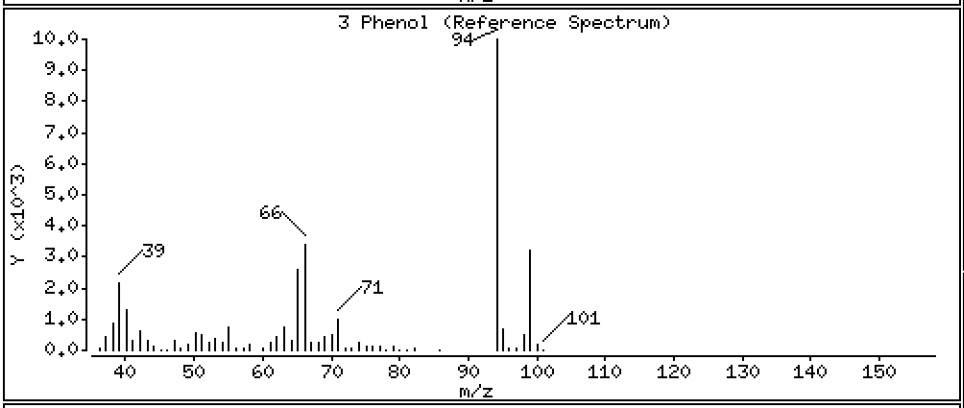
Concentration: 8.595 ug/mL

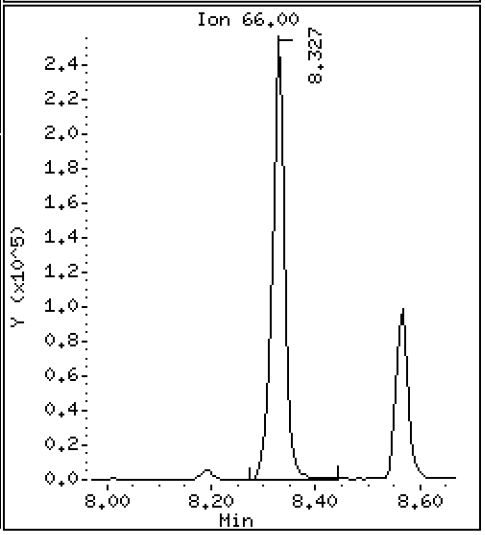


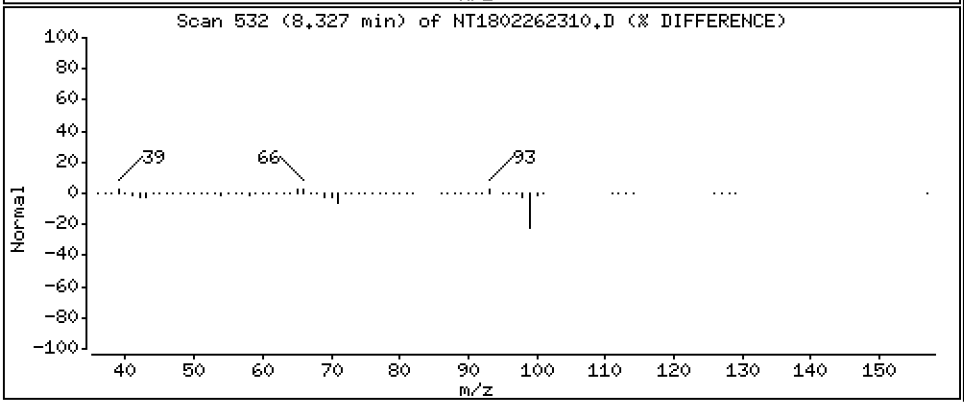












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

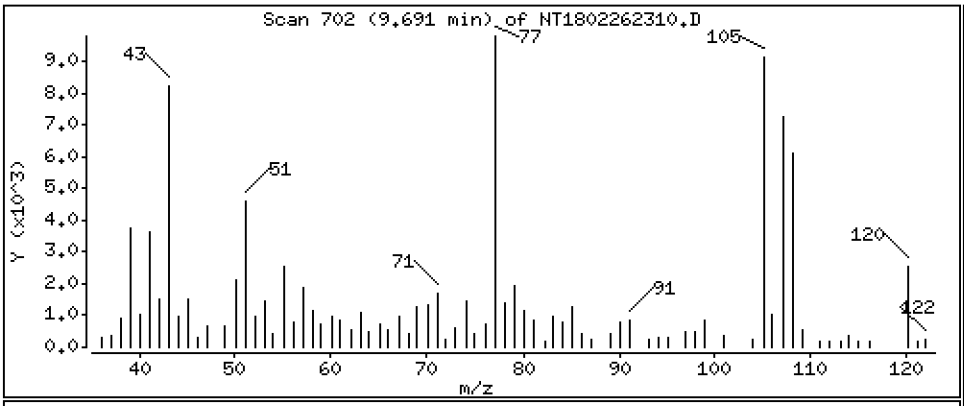
Operator: VTS

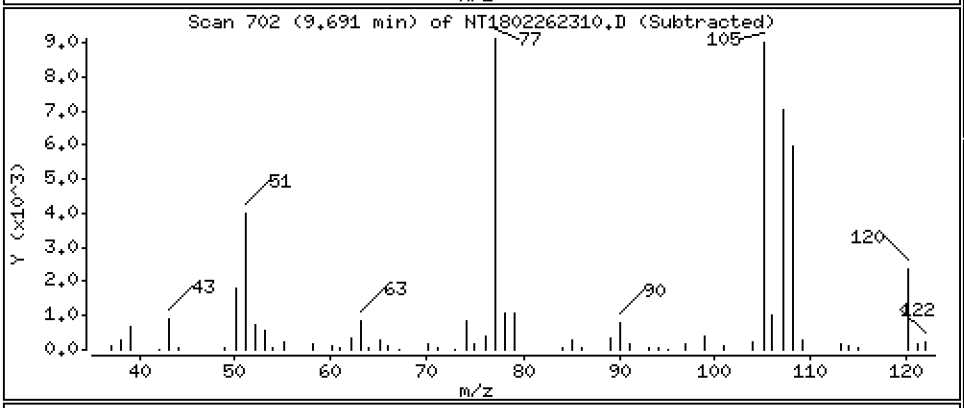
Column phase: ZB-5msi

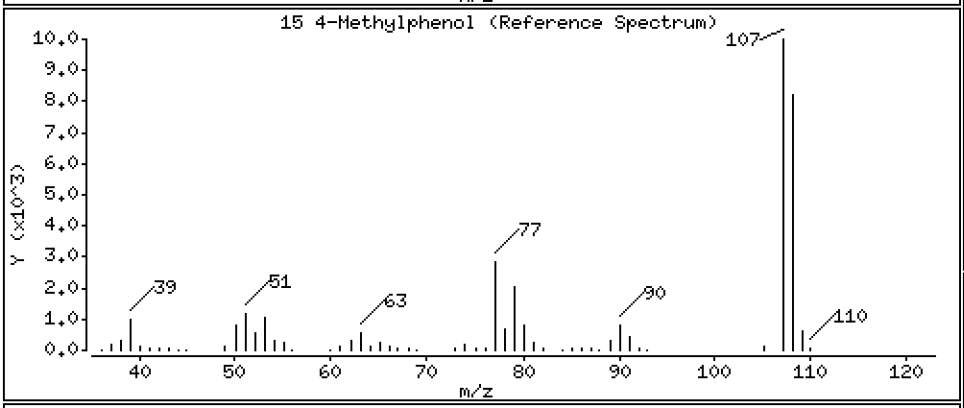
Column diameter: 0.25

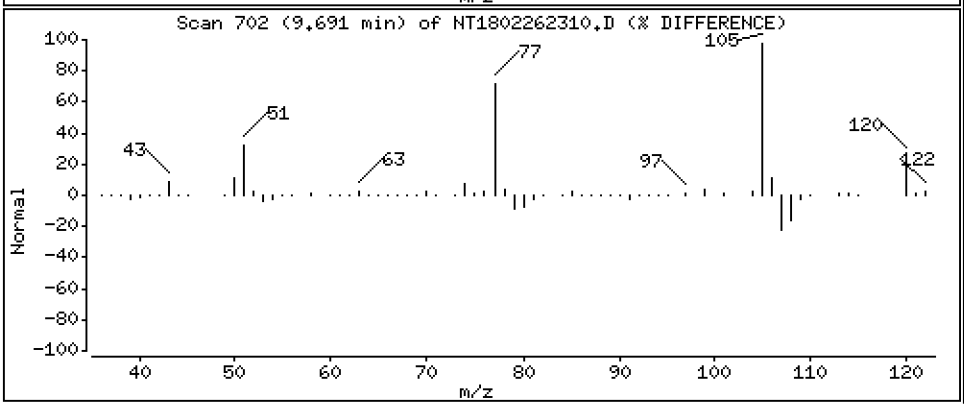
15 4-Methylphenol

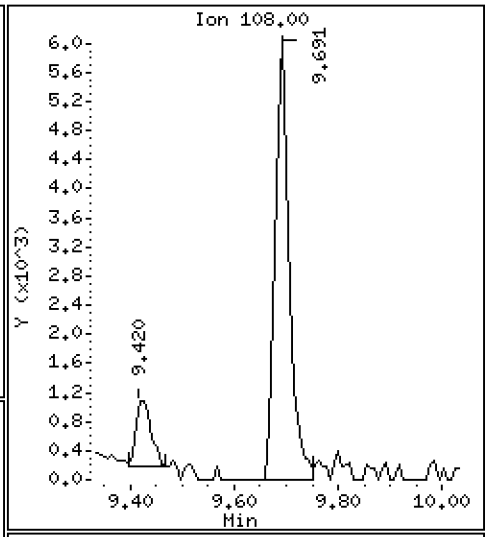
Concentration: 0.1173 ug/mL

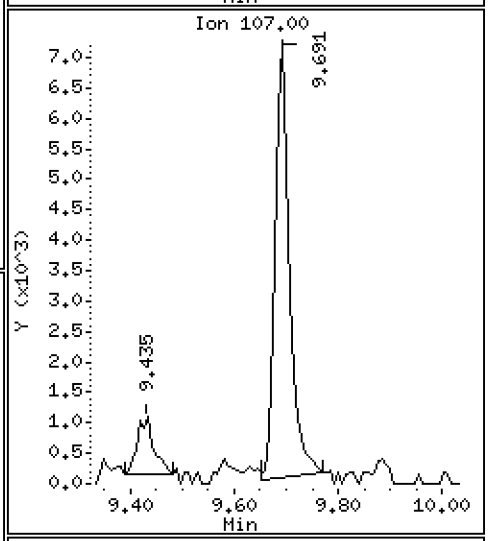


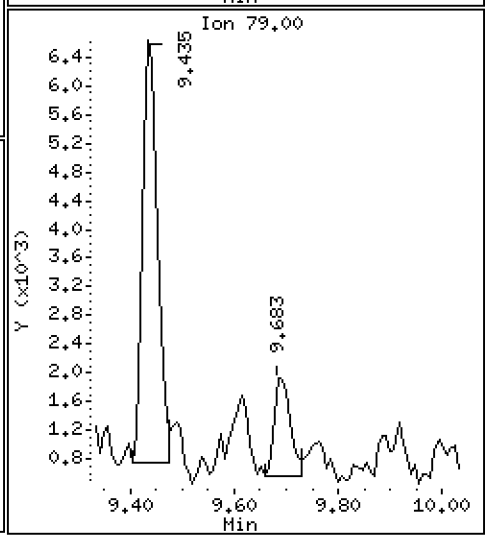












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

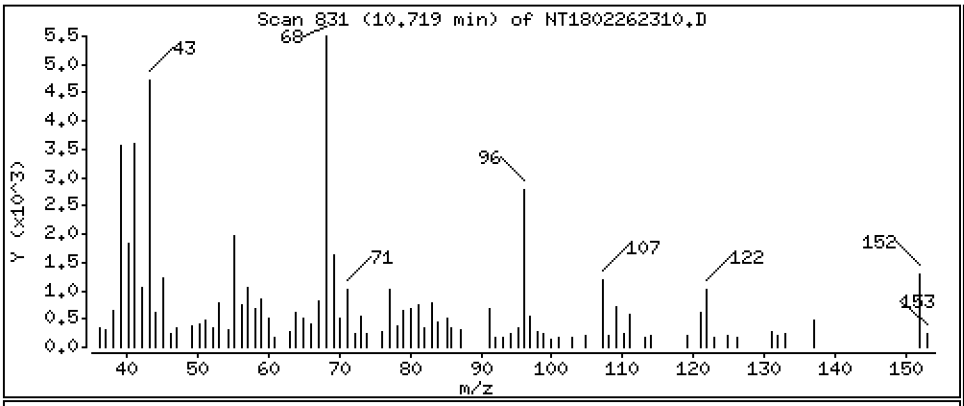
Operator: VTS

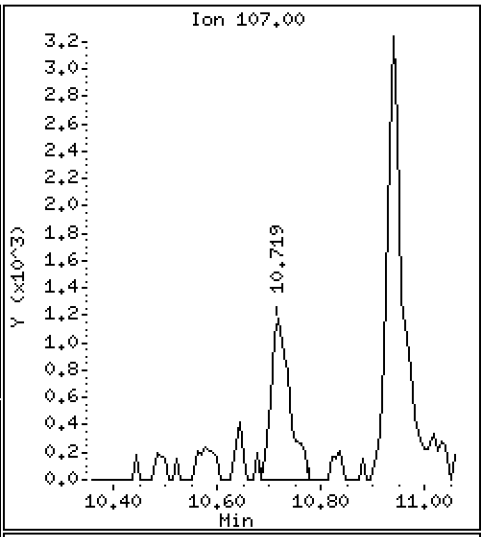
Column phase: ZB-5msi

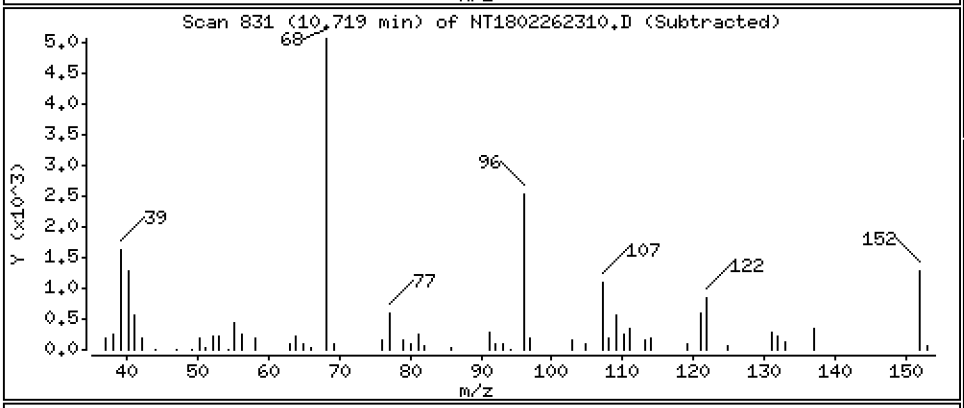
Column diameter: 0.25

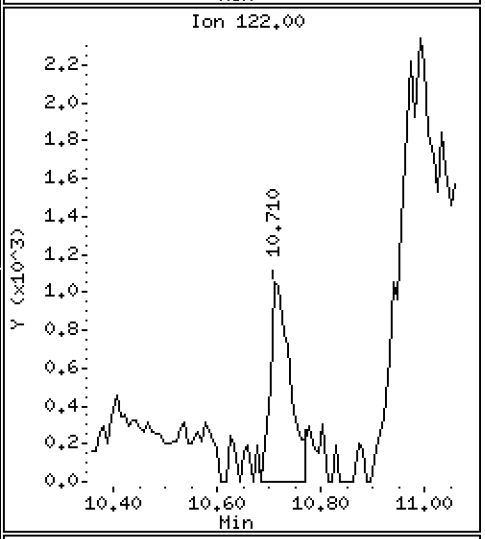
22 2,4-Dimethylphenol

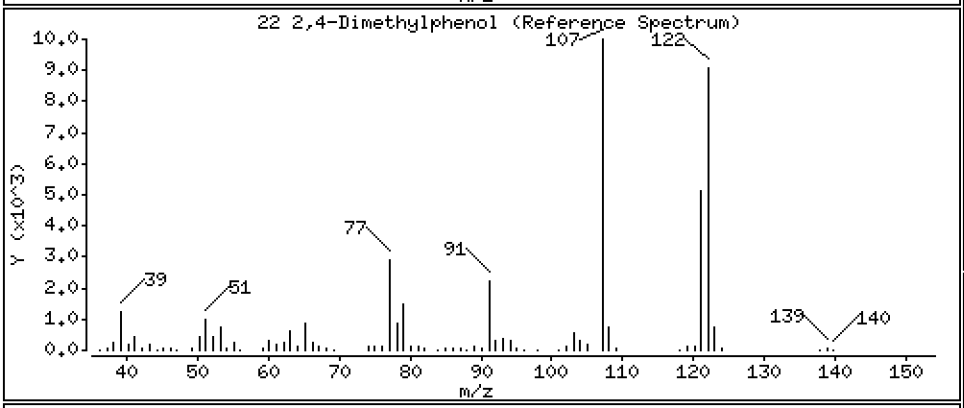
Concentration: 0.03242 ug/mL

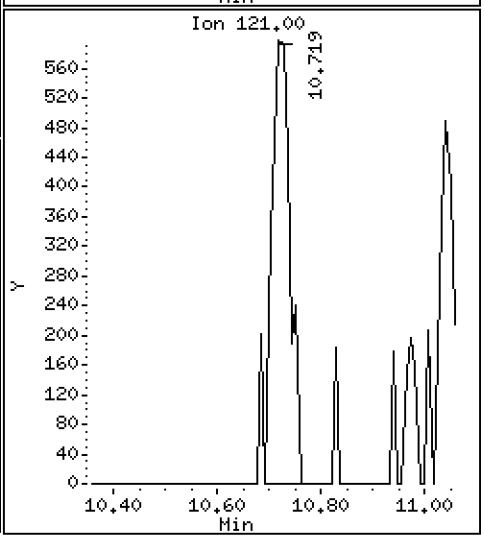


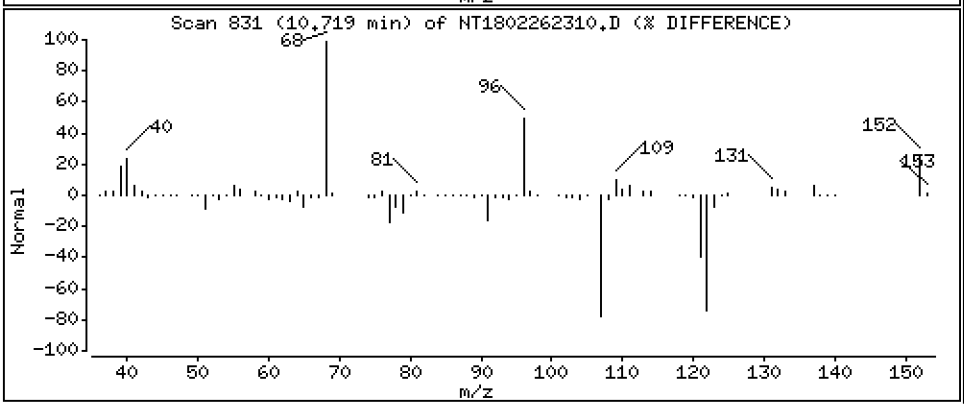












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

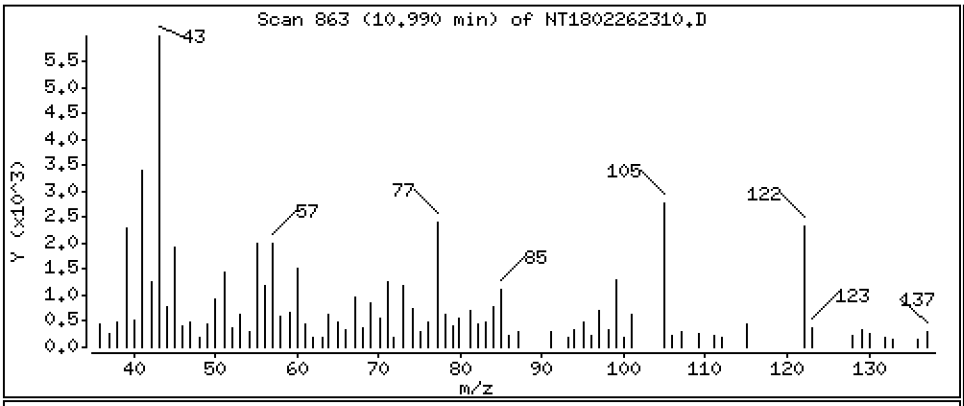
Operator: VTS

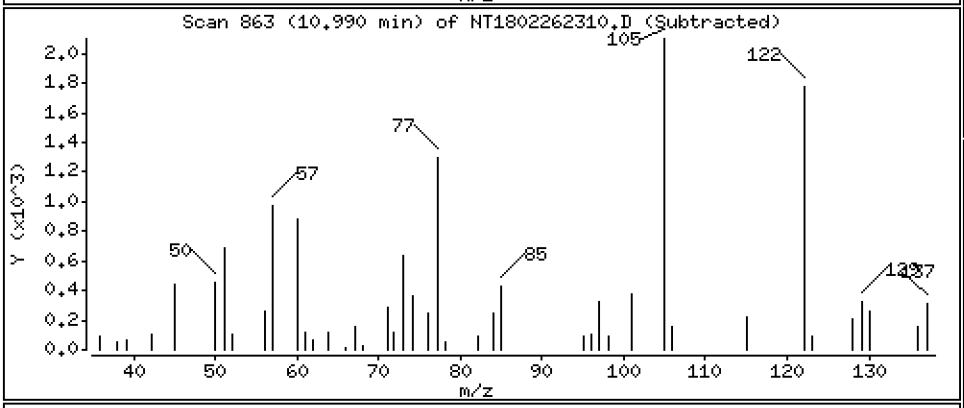
Column phase: ZB-5msi

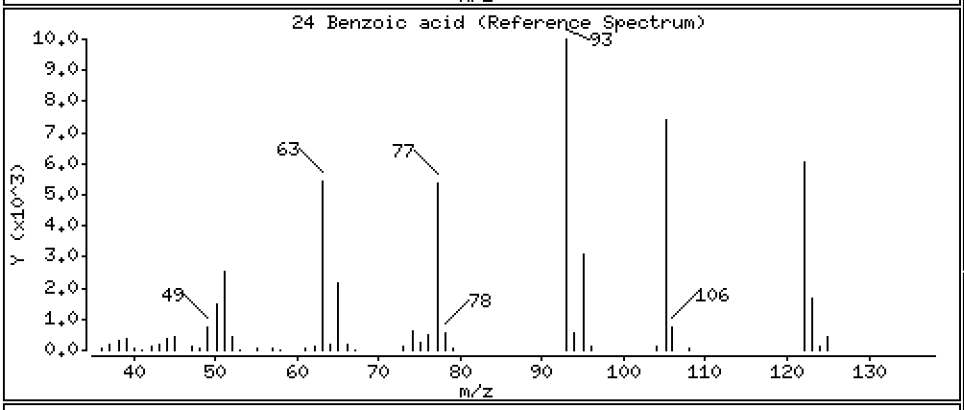
Column diameter: 0.25

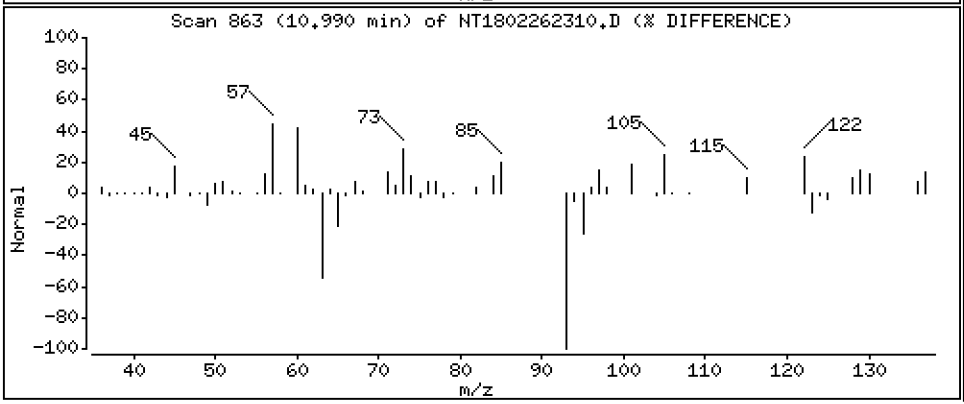
24 Benzoic acid

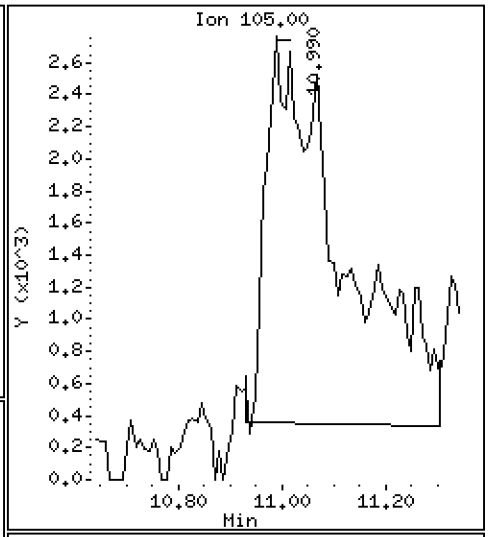
Concentration: 0.7224 ug/mL

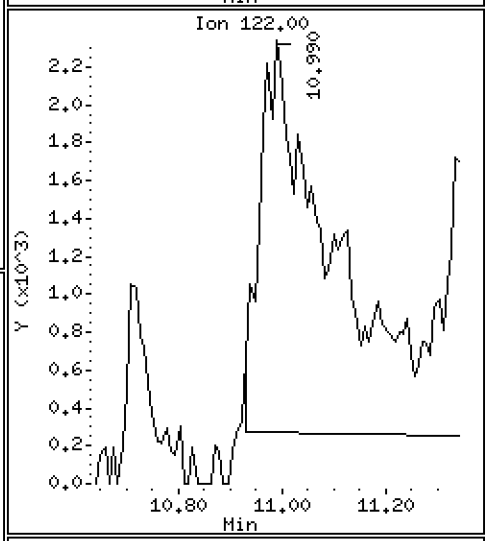


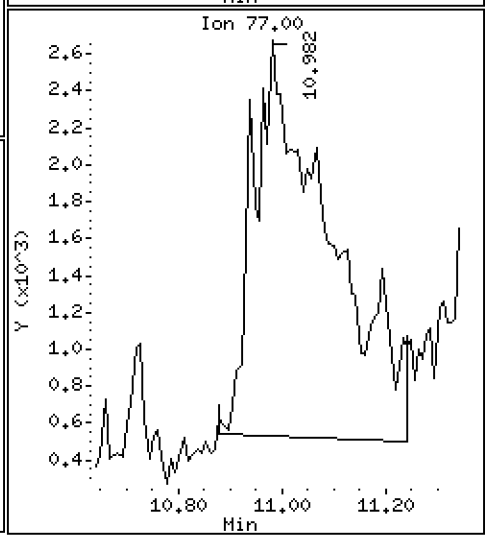












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

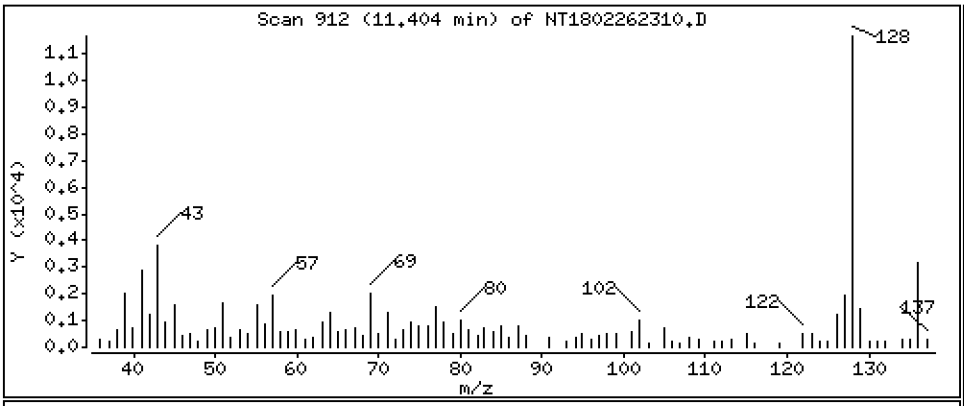
Operator: VTS

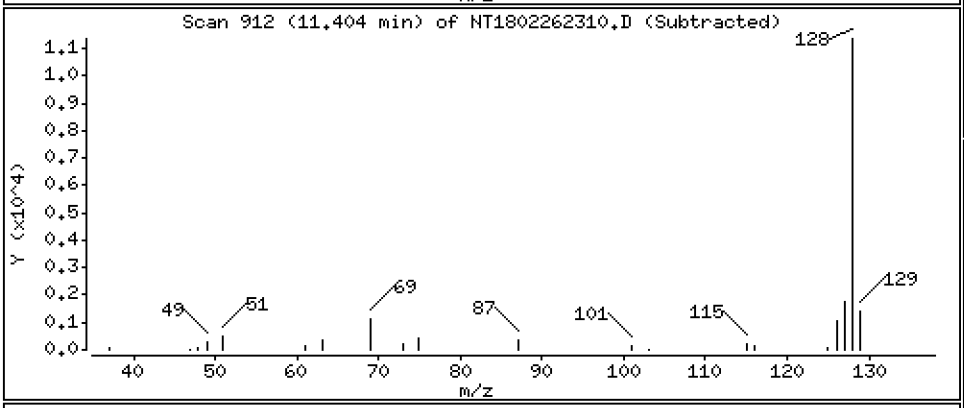
Column phase: ZB-5msi

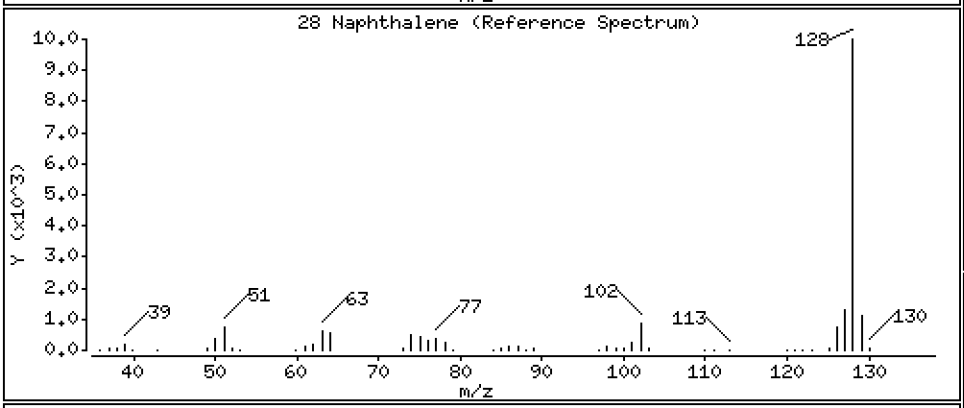
Column diameter: 0.25

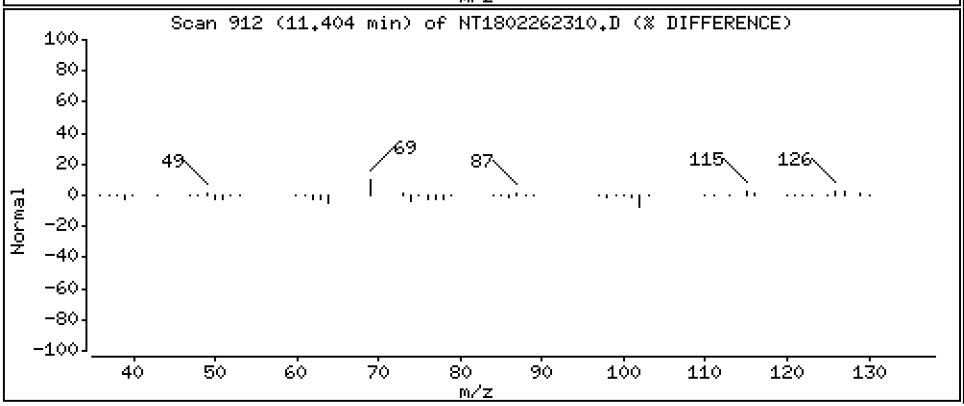
28 Naphthalene

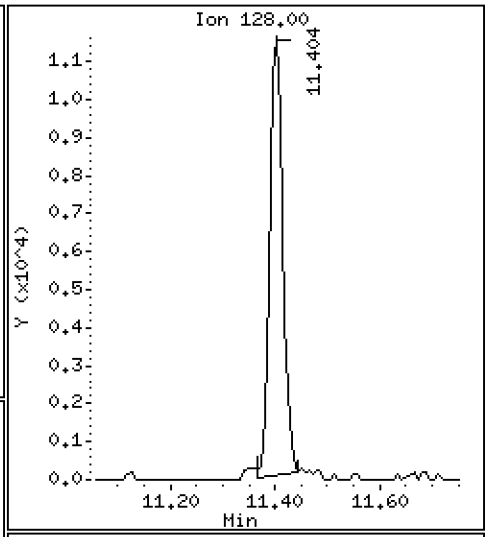
Concentration: 0.07032 ug/mL

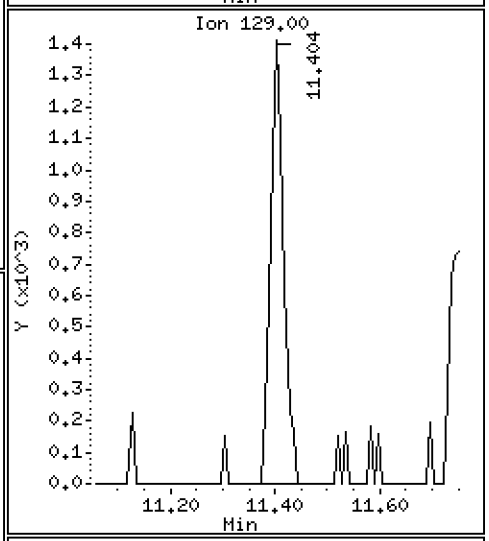


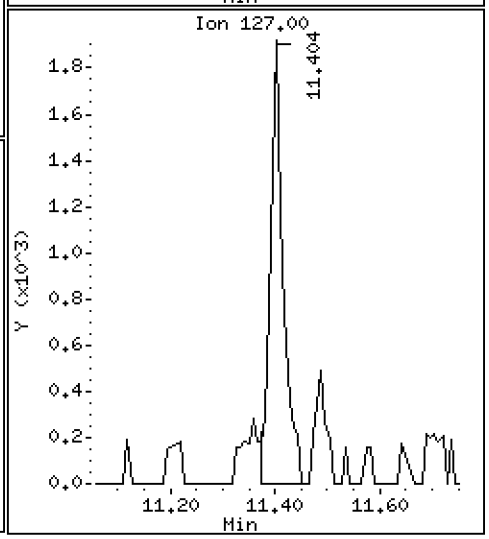












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

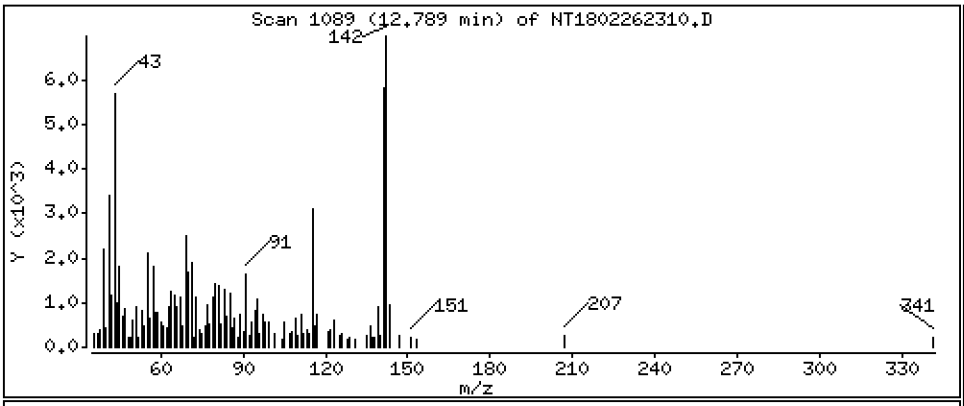
Operator: VTS

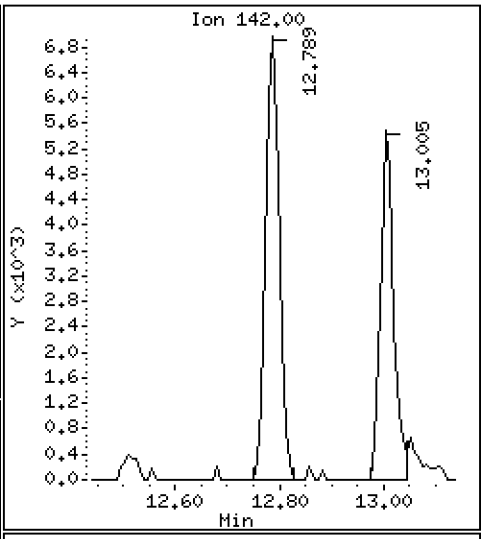
Column phase: ZB-5msi

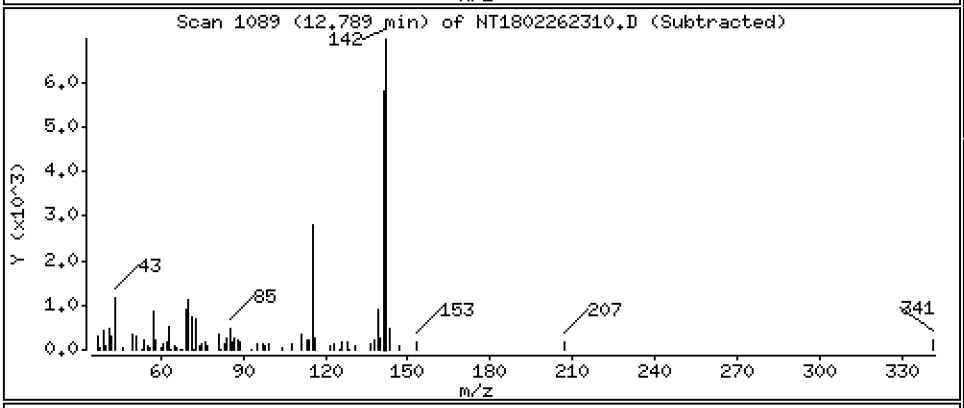
Column diameter: 0.25

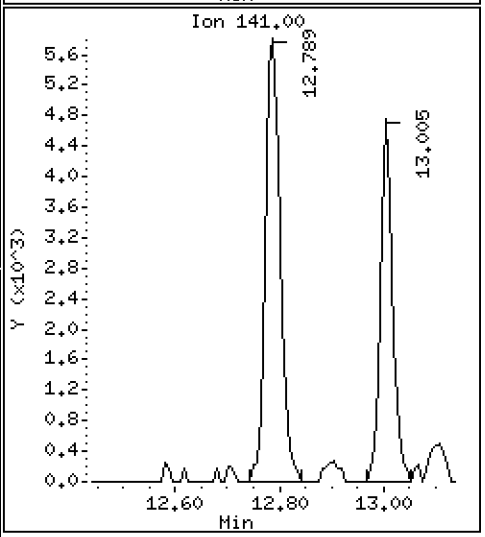
32 2-Methylnaphthalene

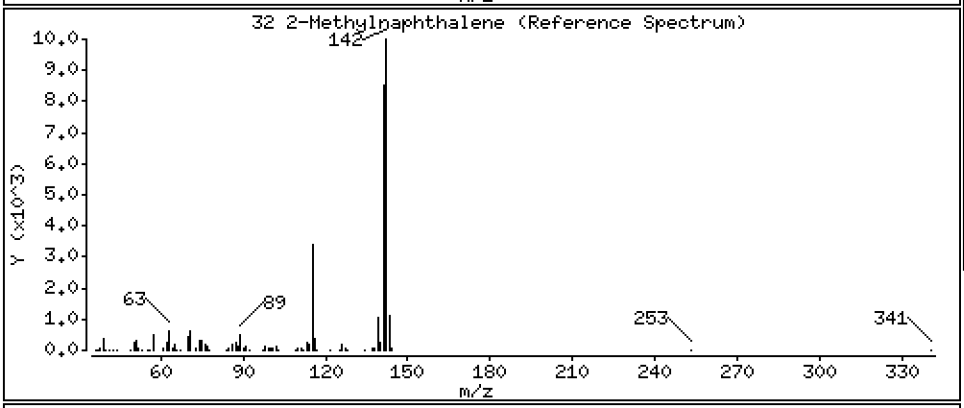
Concentration: 0.06078 ug/mL

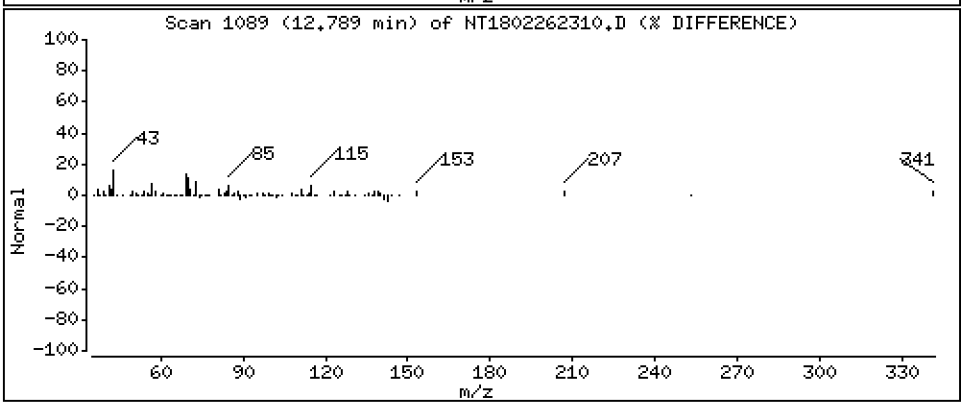












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

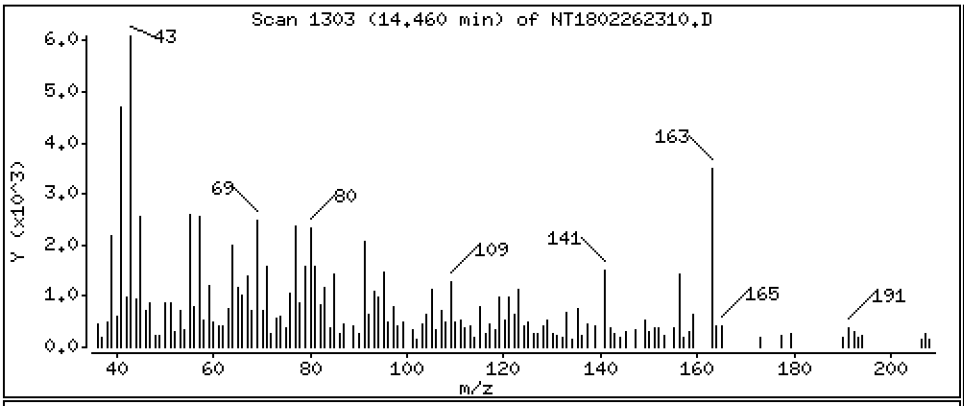
Operator: VTS

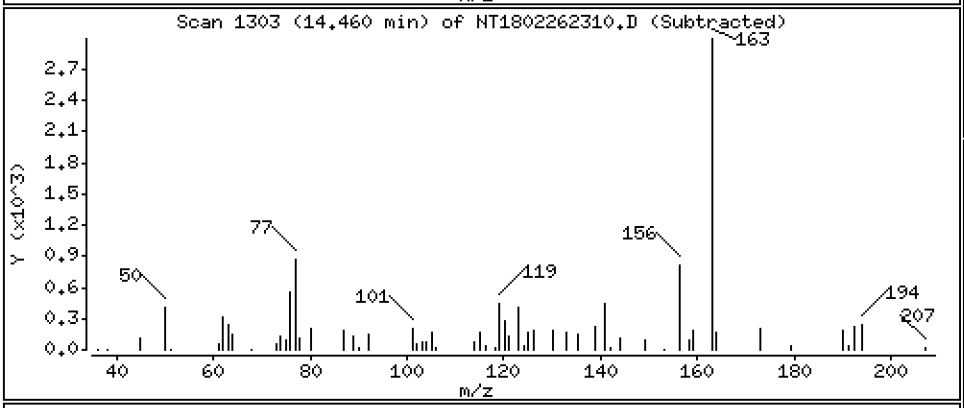
Column phase: ZB-5msi

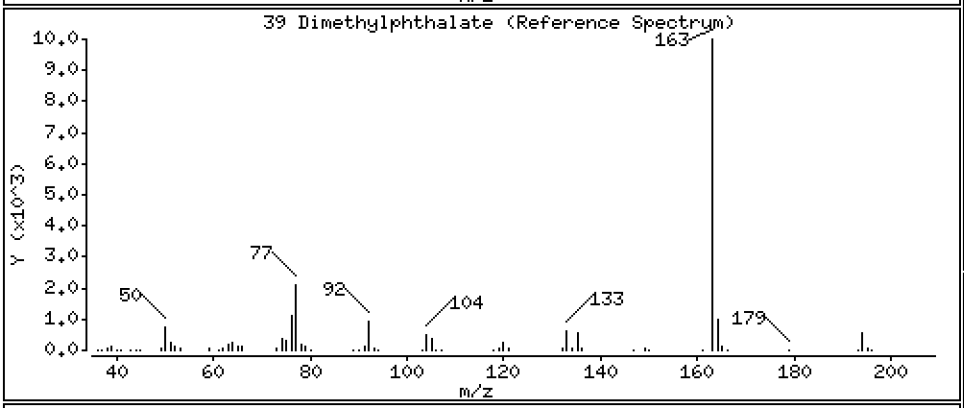
Column diameter: 0.25

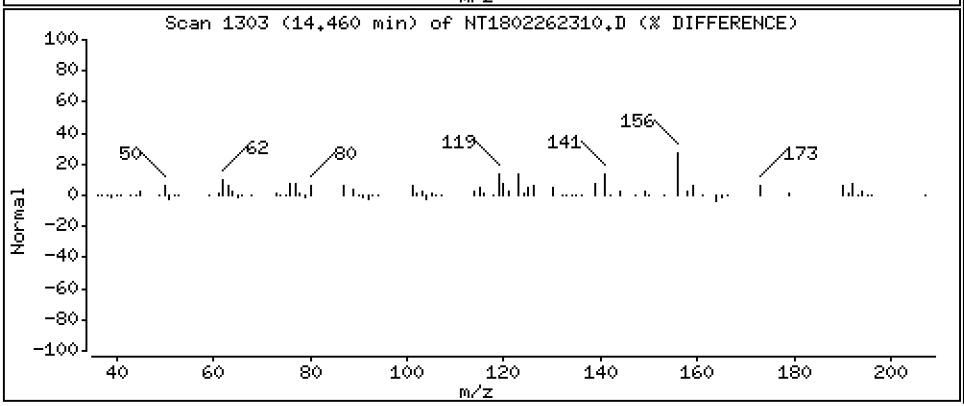
39 Dimethylphthalate

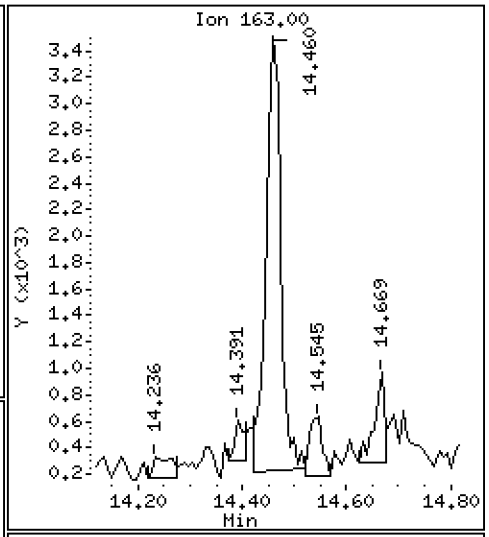
Concentration: 0.03472 ug/mL

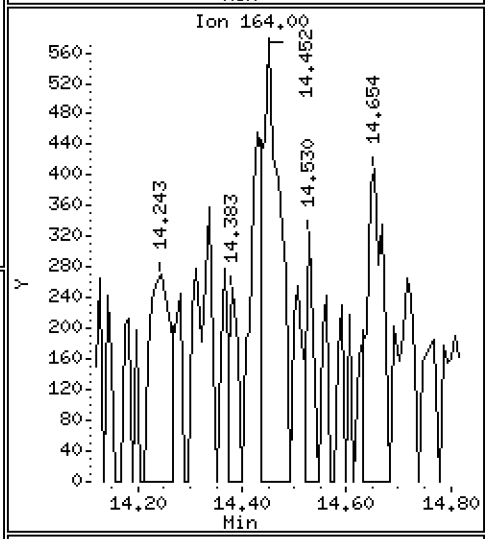


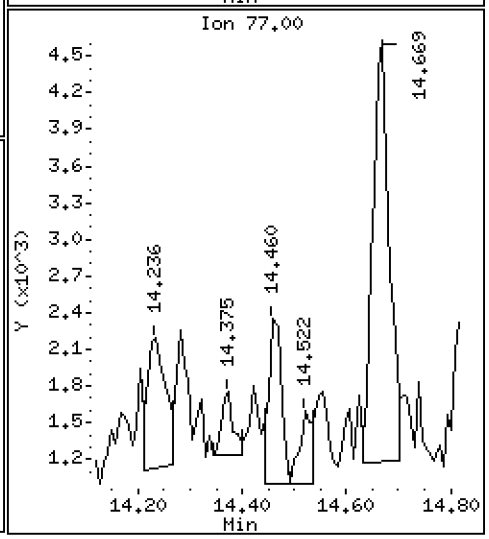












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

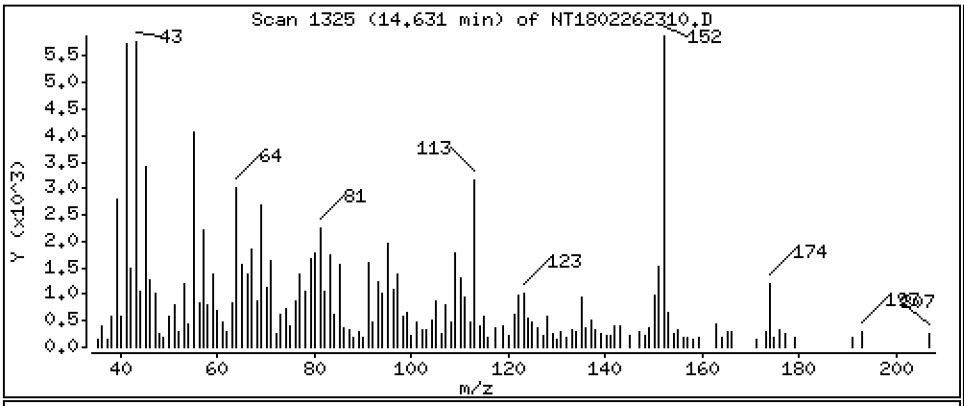
Operator: VTS

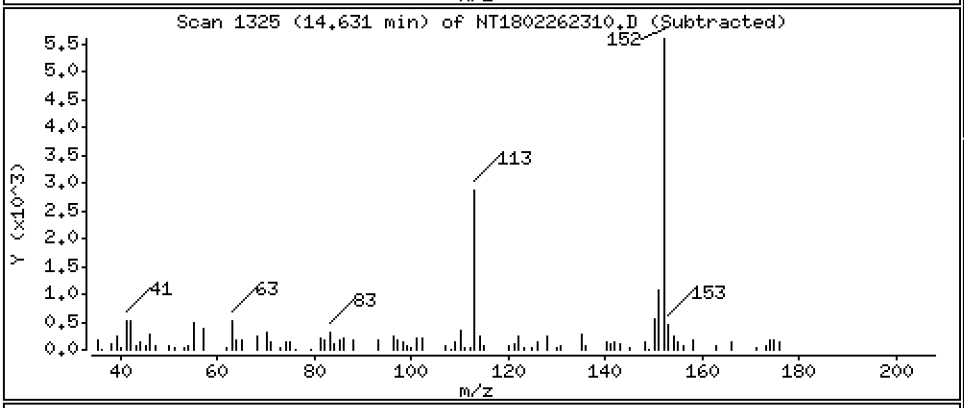
Column phase: ZB-5msi

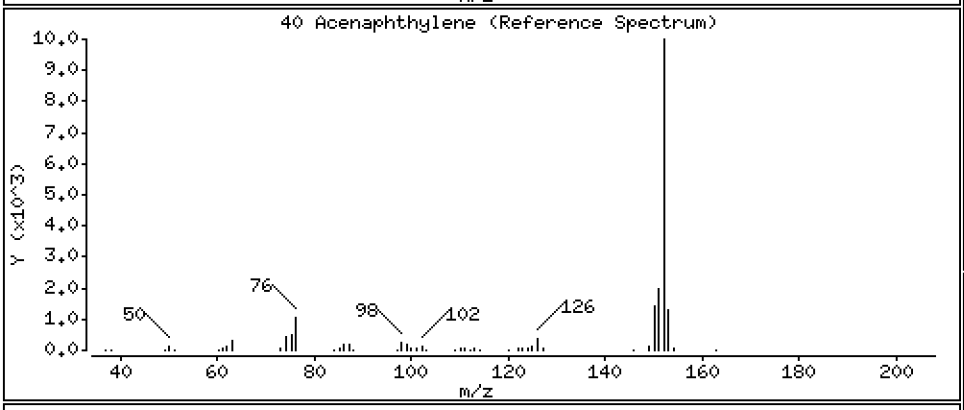
Column diameter: 0.25

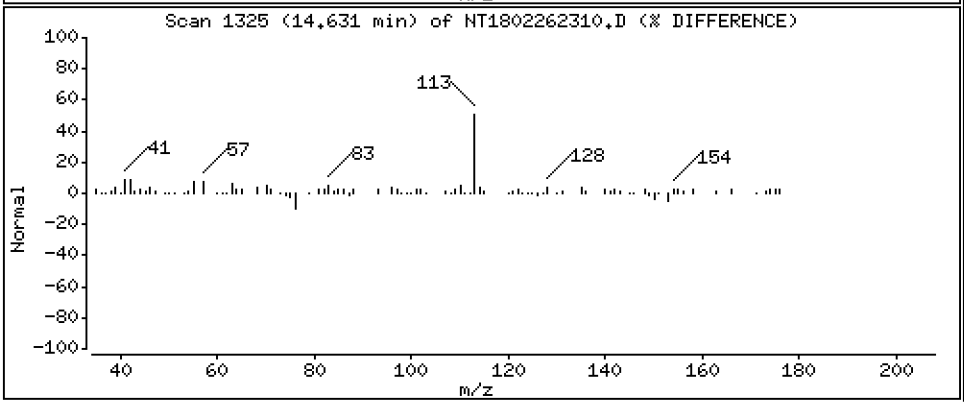
40 Acenaphthylene

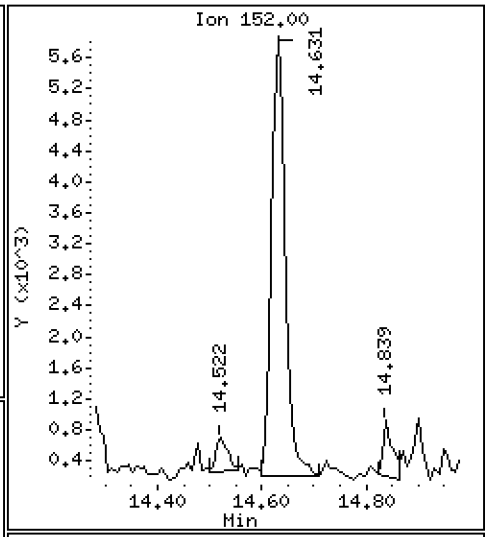
Concentration: 0.03534 ug/mL

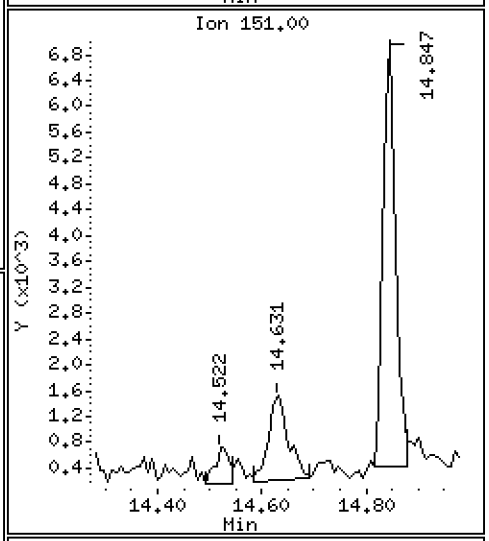


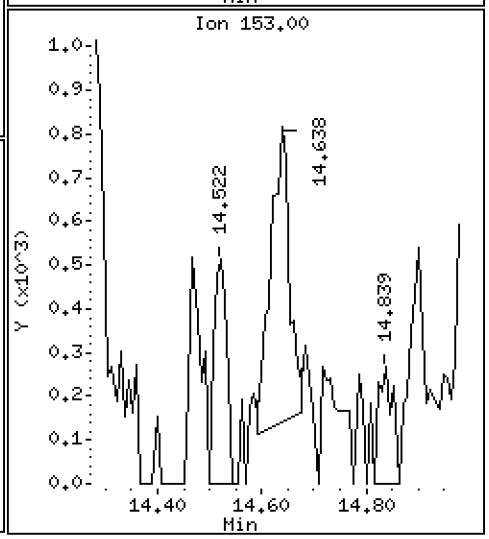












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262310.D

Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

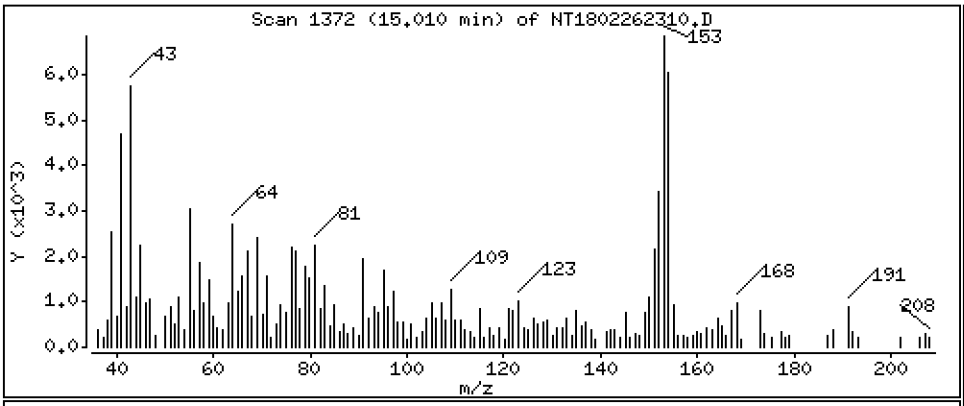
Operator: VTS

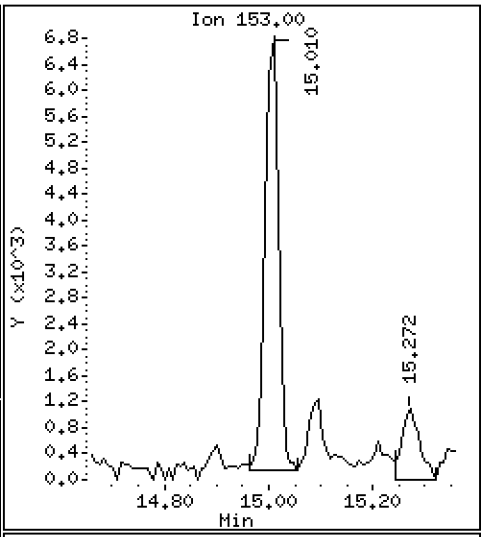
Column phase: ZB-5msi

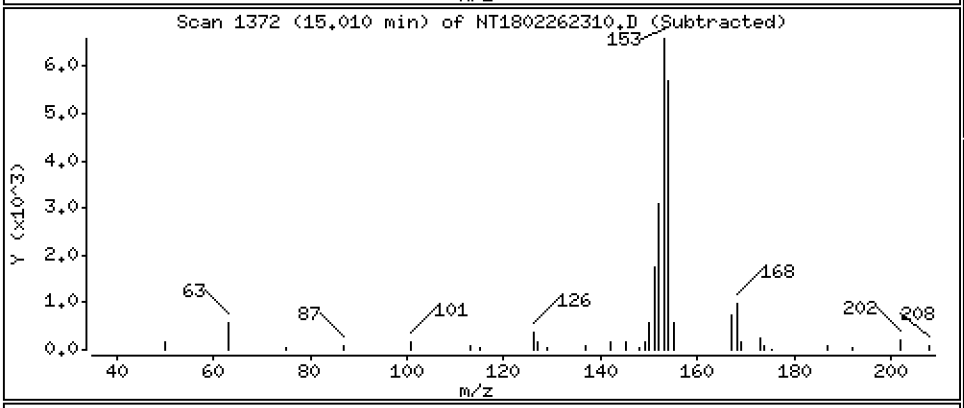
Column diameter: 0.25

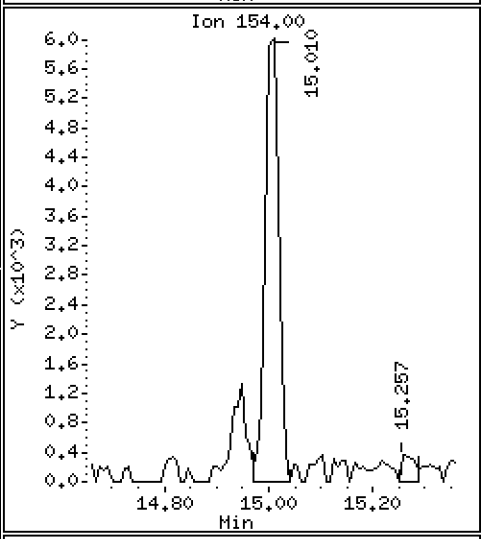
44 Acenaphthene

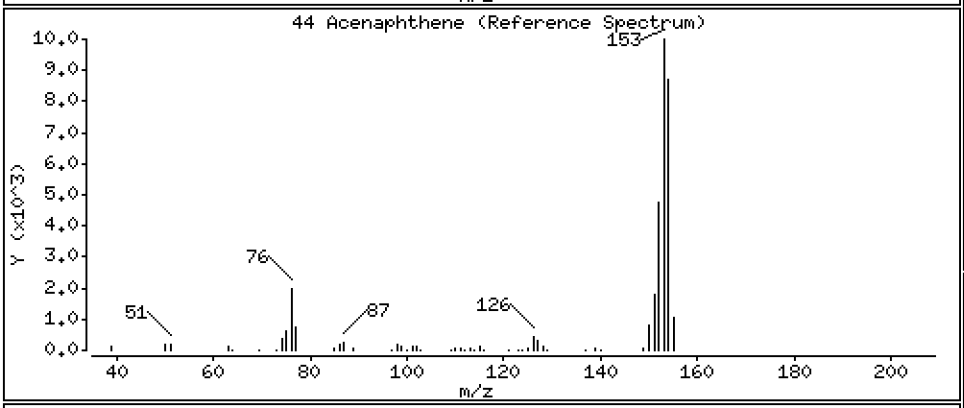
Concentration: 0.06481 ug/mL

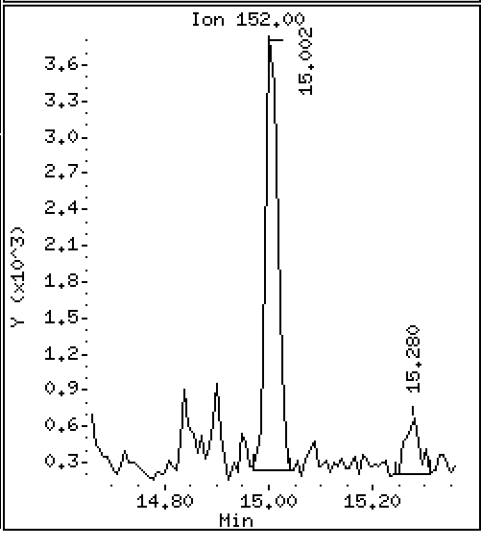


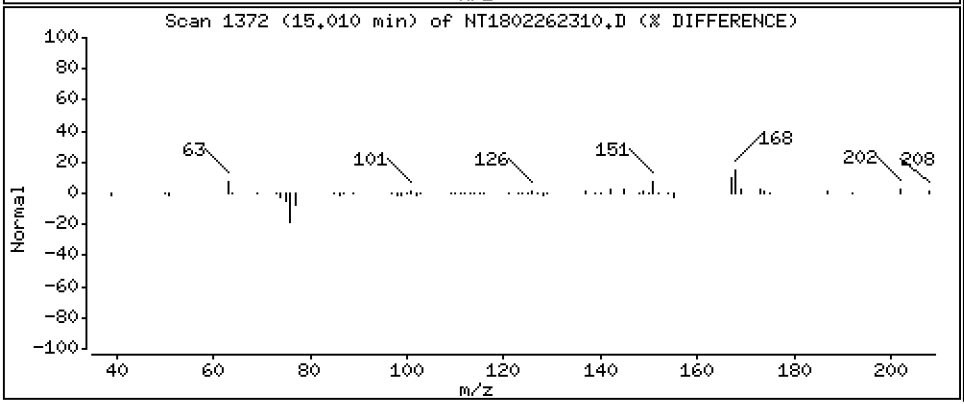












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

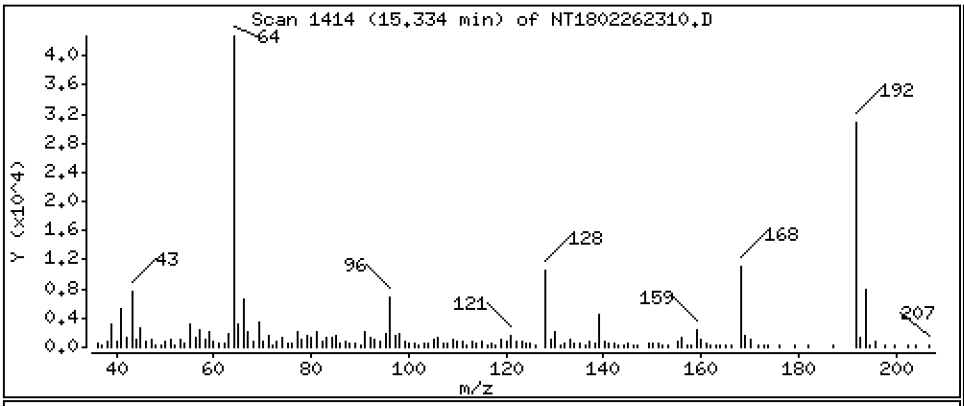
Operator: VTS

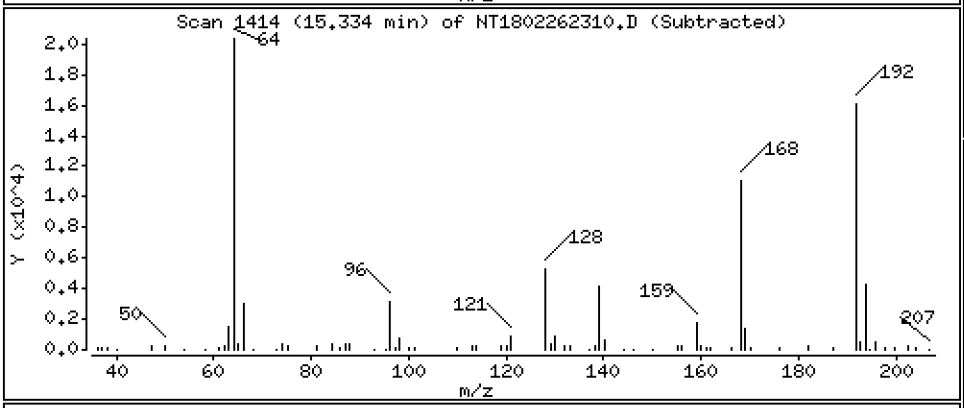
Column phase: ZB-5msi

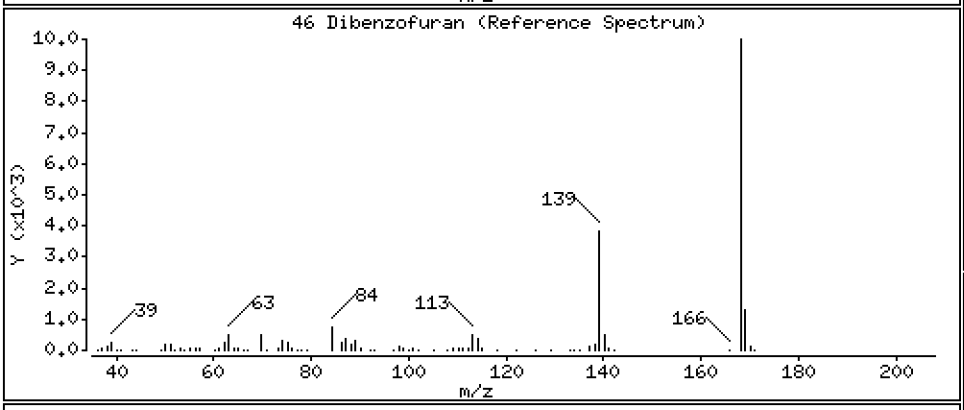
Column diameter: 0.25

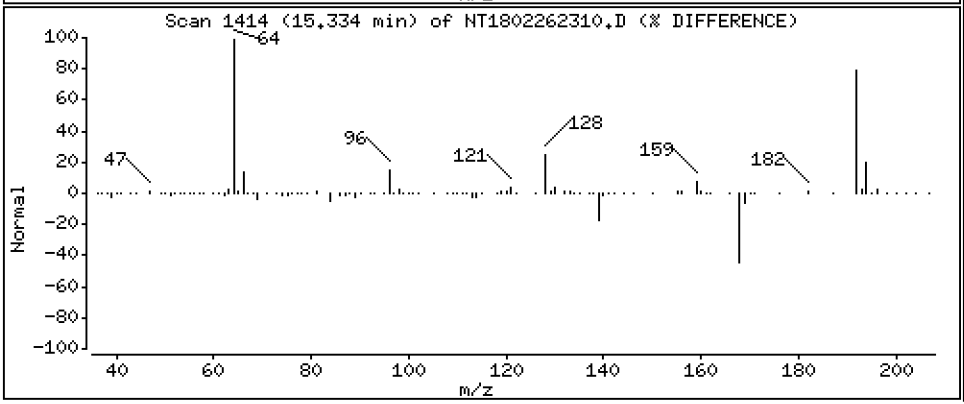
46 Dibenzofuran

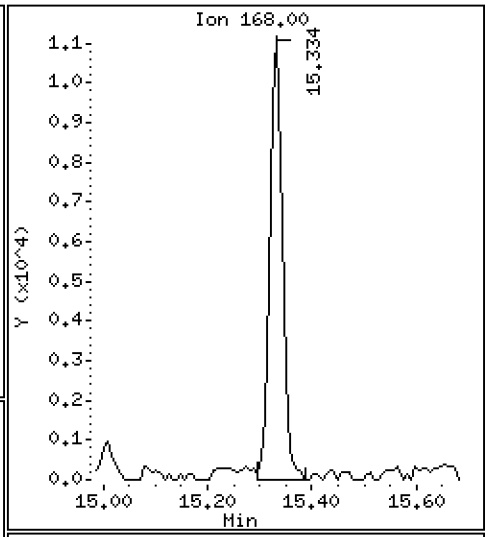
Concentration: 0.06952 ug/mL

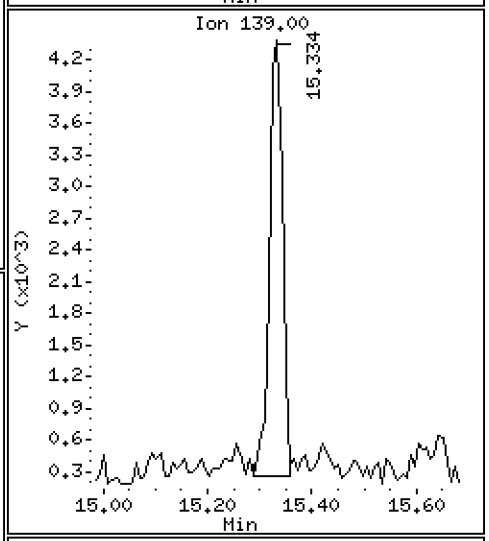


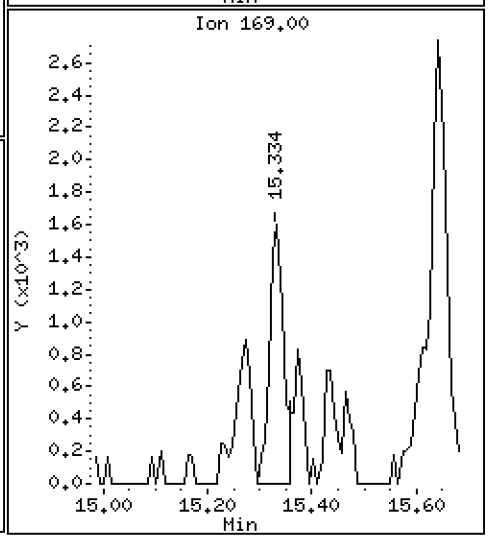












Date : 26-FEB-2023 17:52

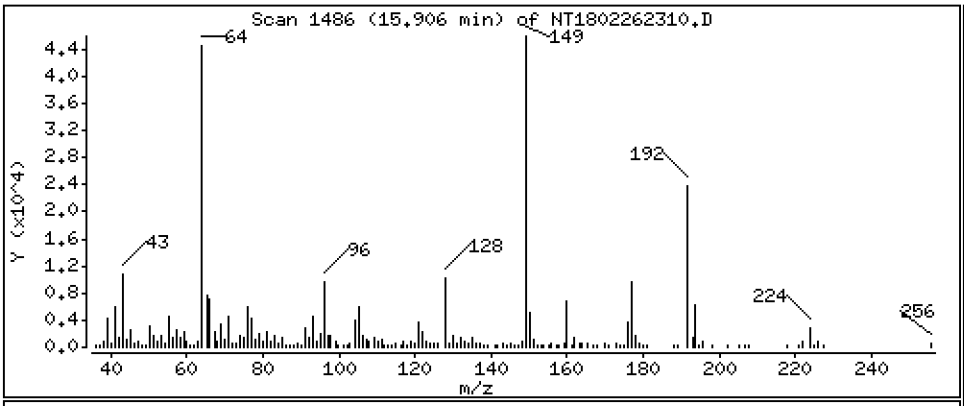
Client ID: Instrument: nt18.i

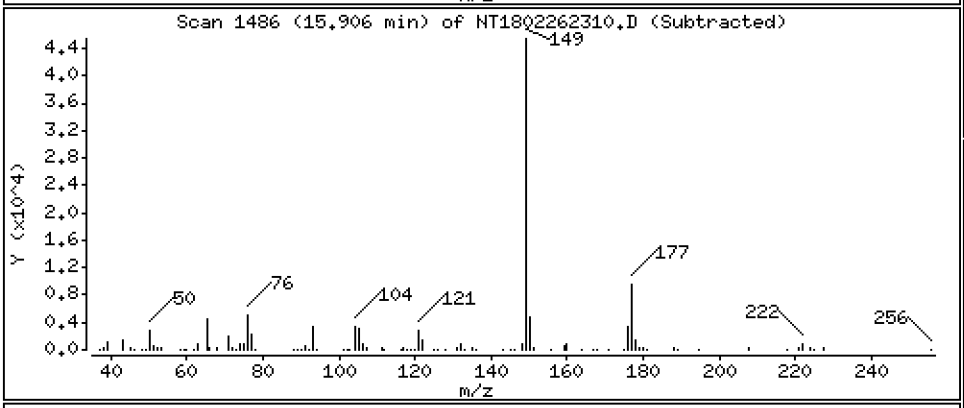
Sample Info: 23A0134-01

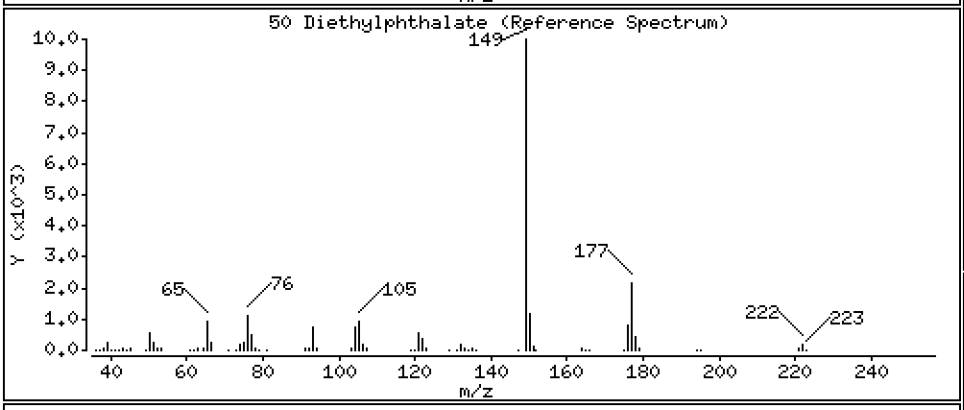
Operator: VTS

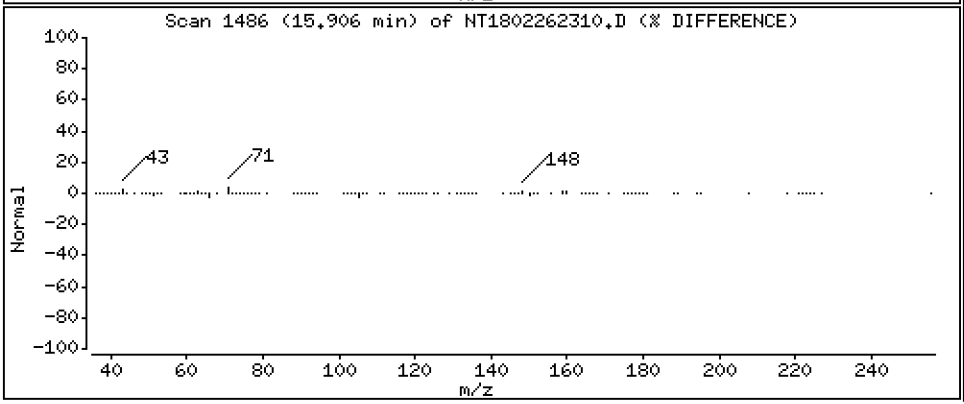
Column phase: ZB-5msi Column diameter: 0.25

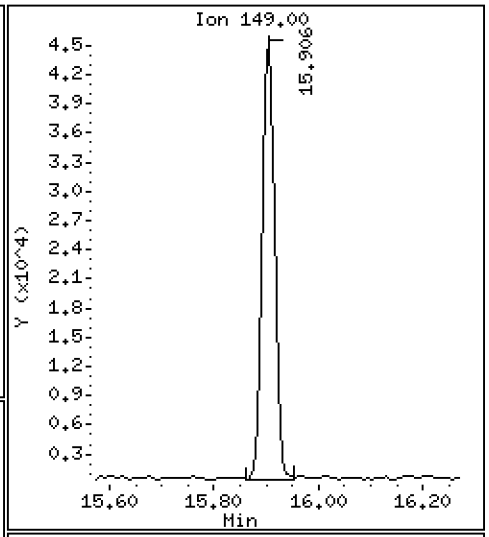
50 Diethylphthalate Concentration: 0.3775 ug/mL

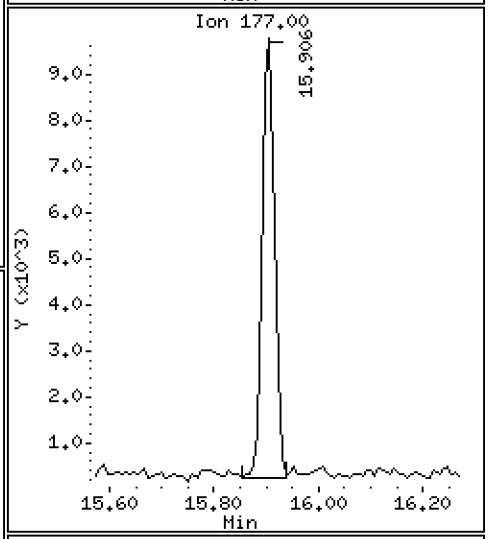


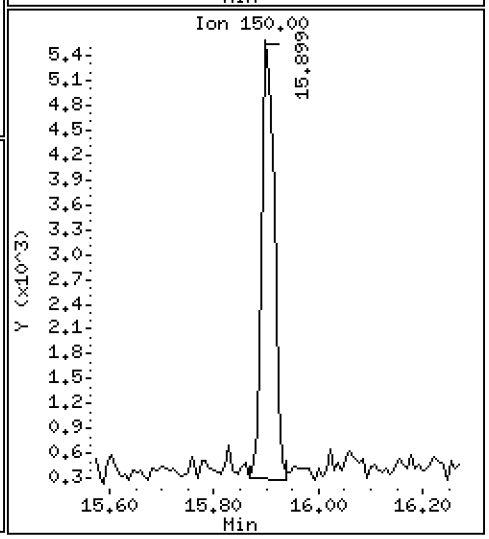












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262310.D

Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

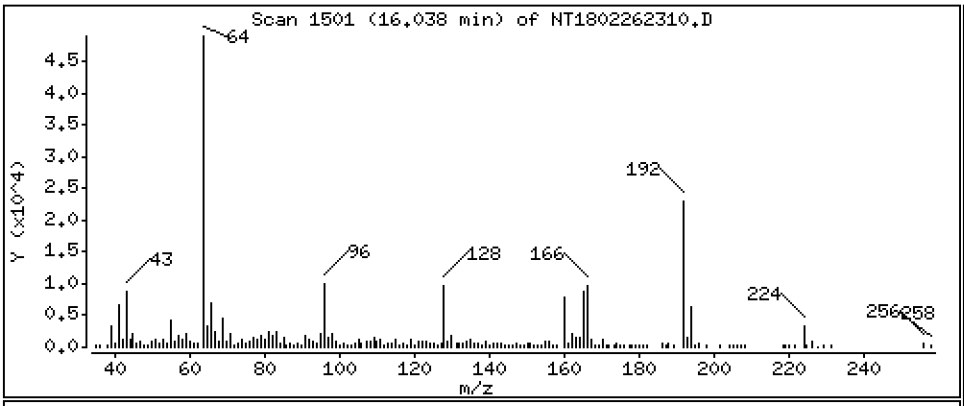
Operator: VTS

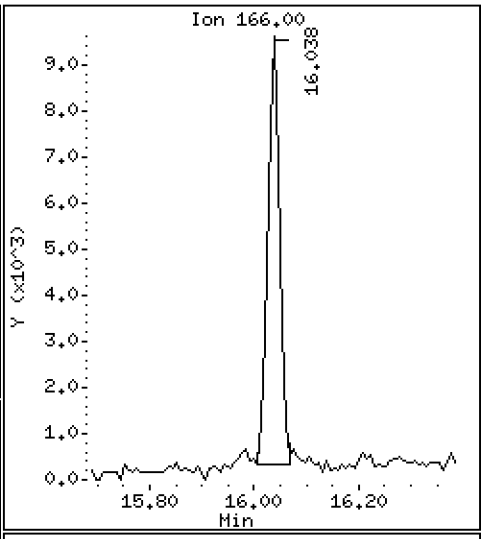
Column phase: ZB-5msi

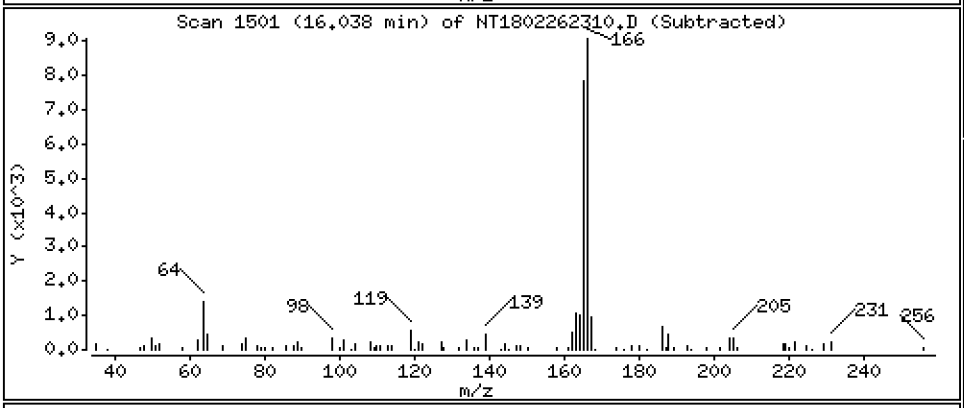
Column diameter: 0.25

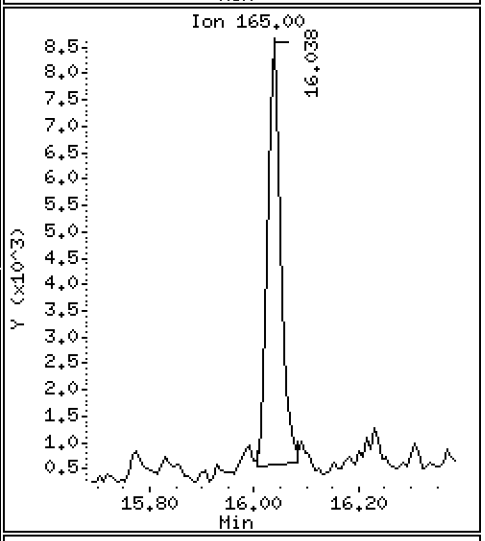
49 Fluorene

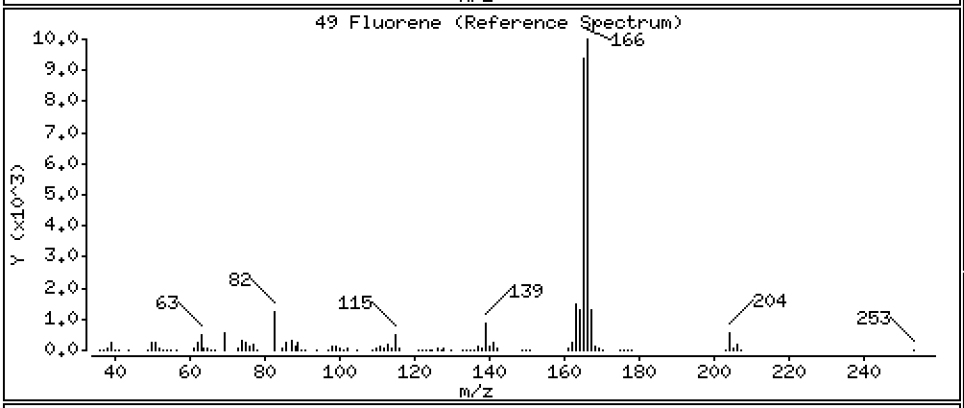
Concentration: 0.06888 ug/mL

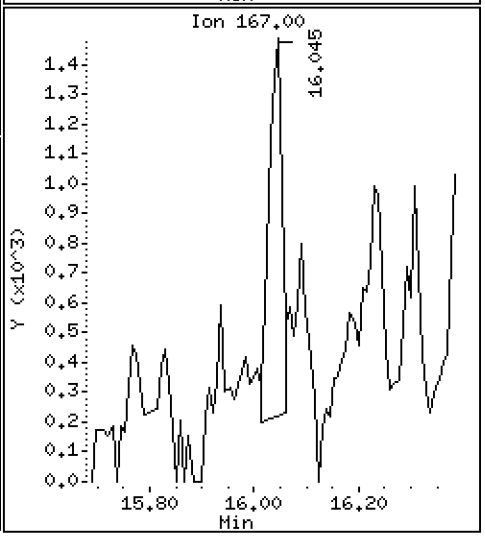


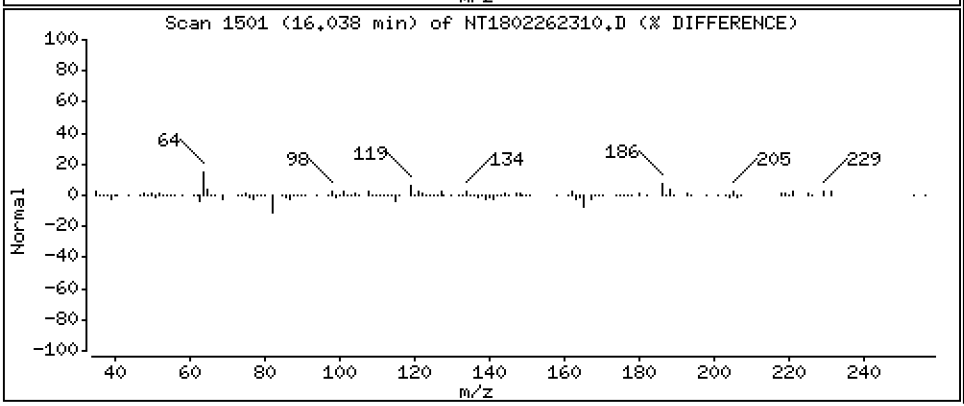












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

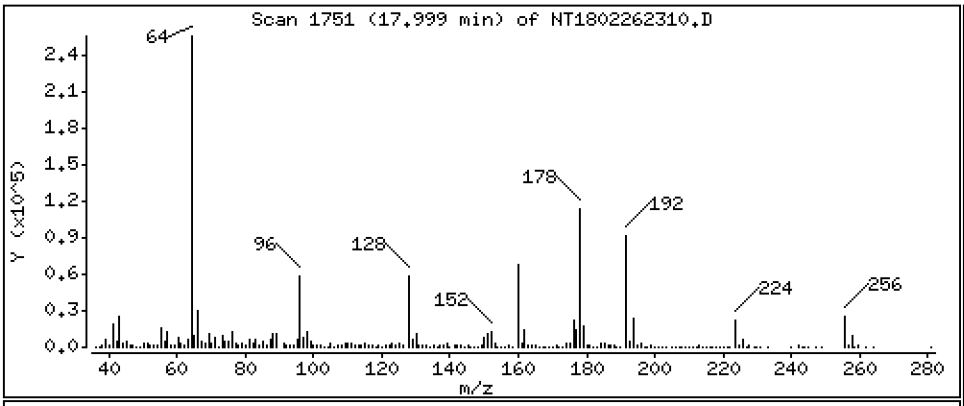
Operator: VTS

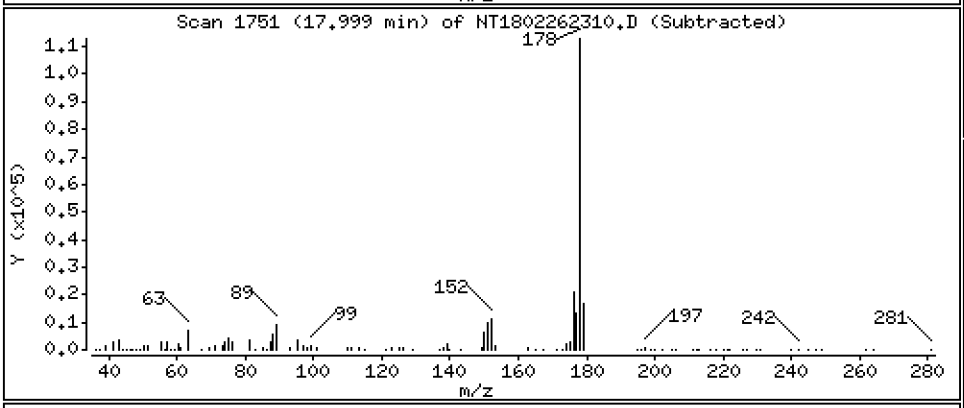
Column phase: ZB-5msi

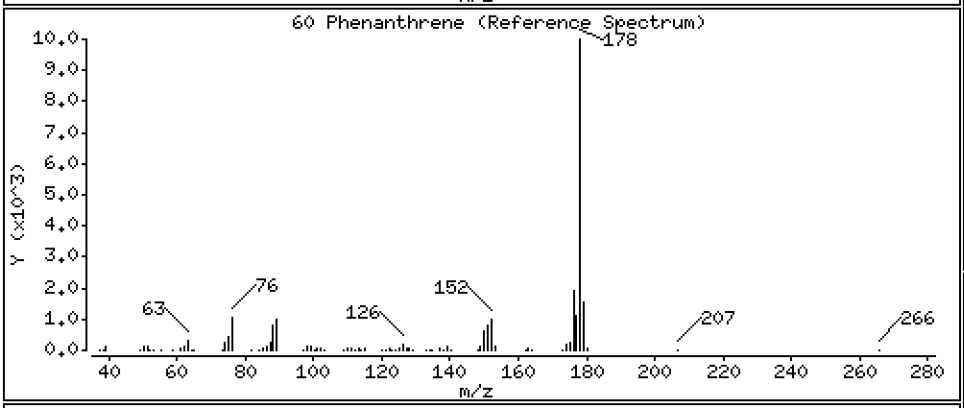
Column diameter: 0.25

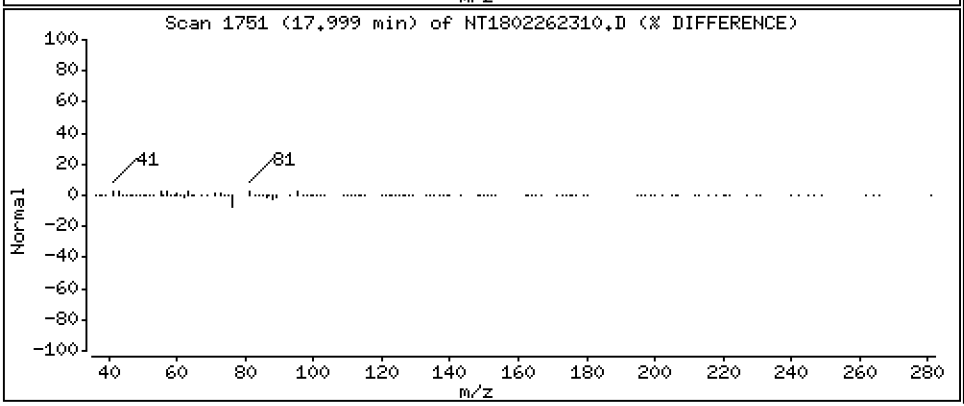
60 Phenanthrene

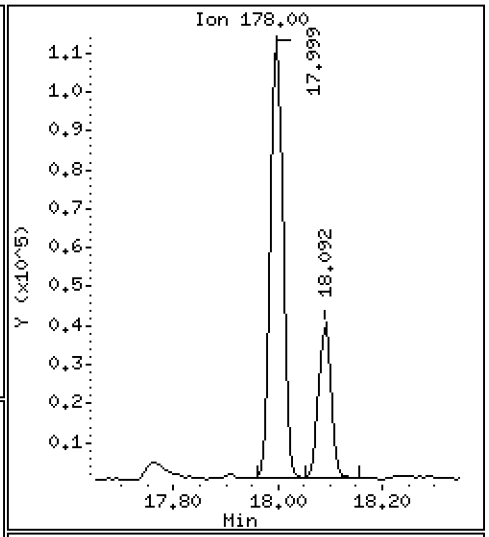
Concentration: 0.5762 ug/mL

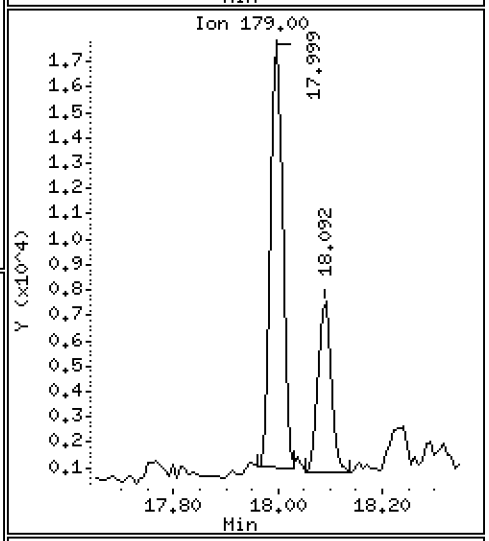


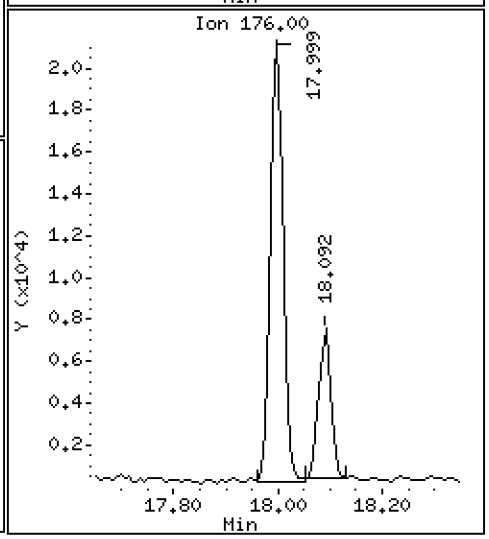












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

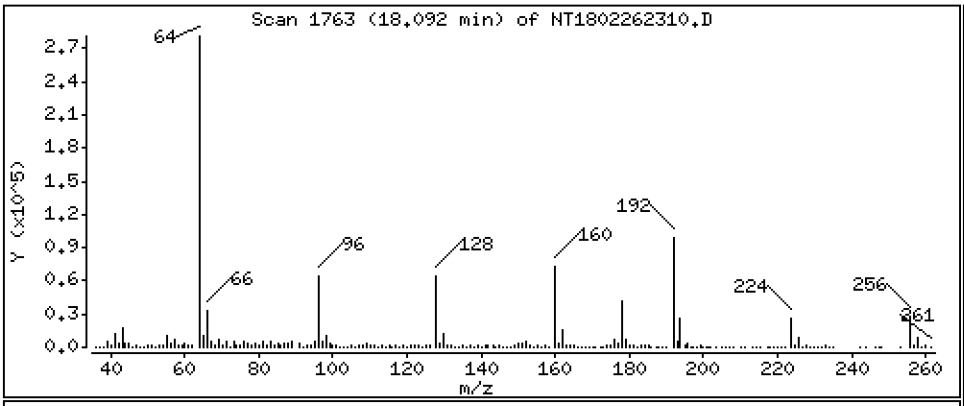
Operator: VTS

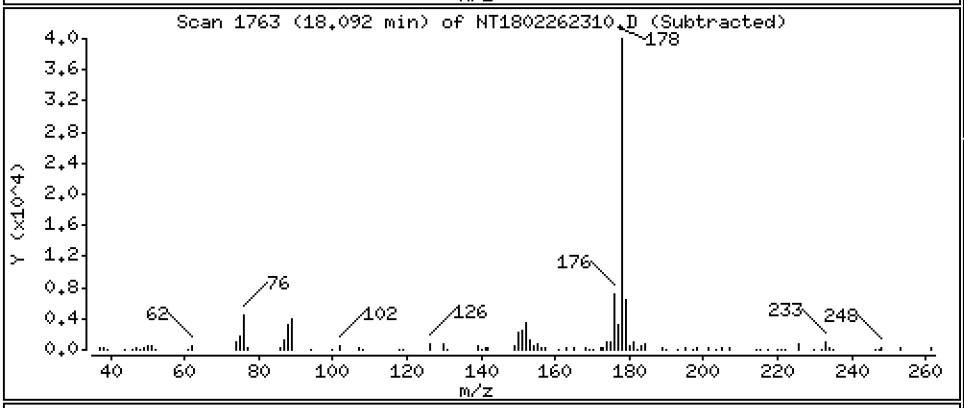
Column phase: ZB-5msi

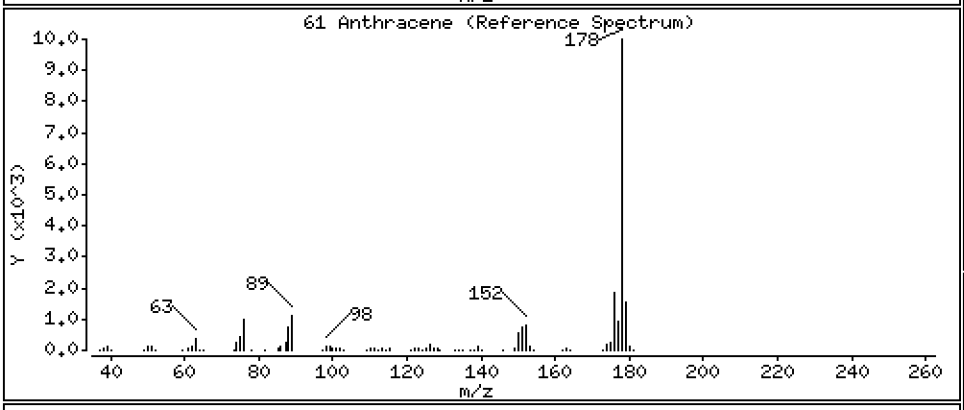
Column diameter: 0.25

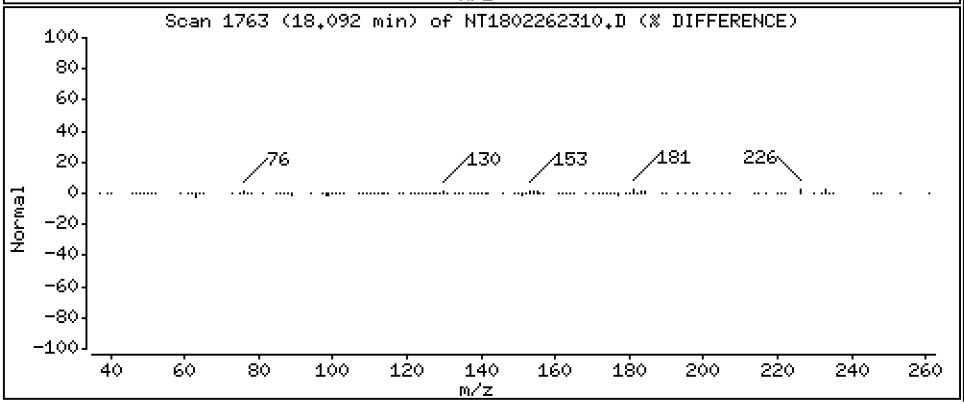
61 Anthracene

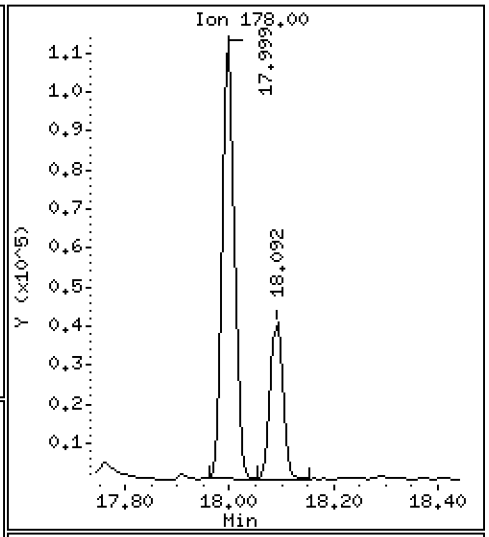
Concentration: 0.2204 ug/mL

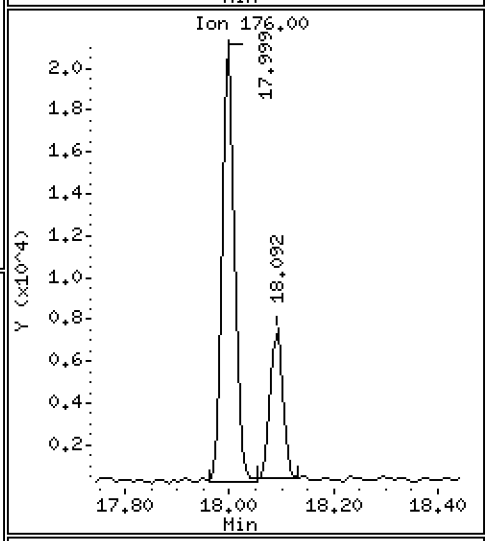


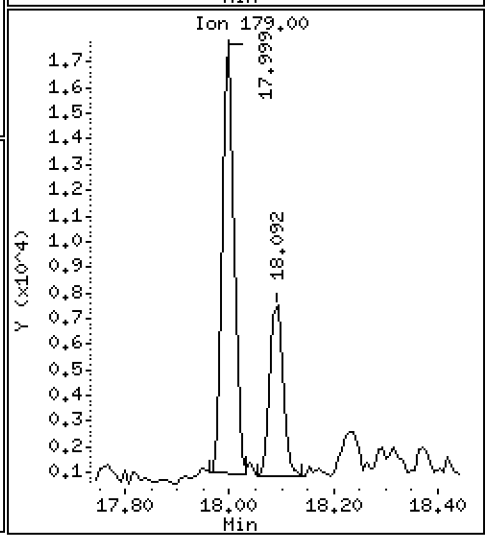












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

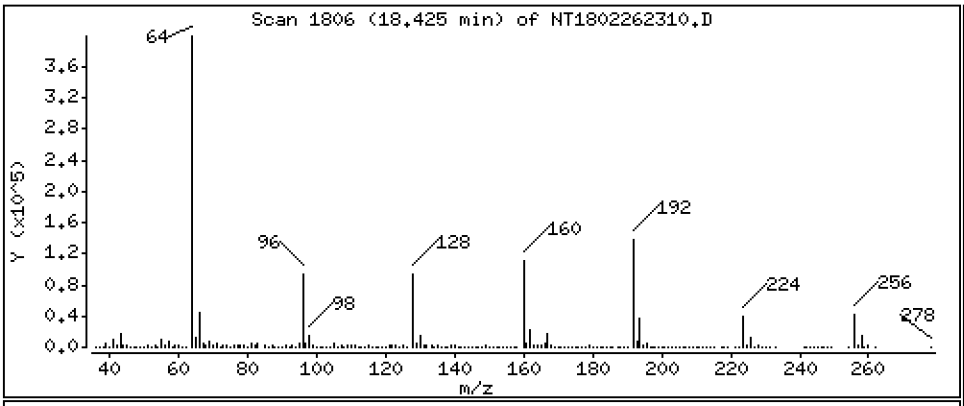
Operator: VTS

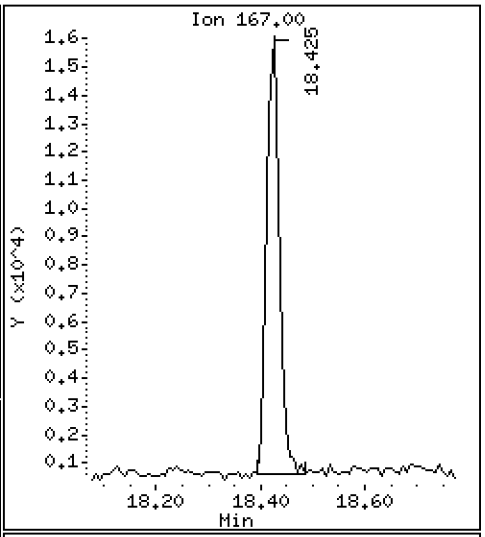
Column phase: ZB-5msi

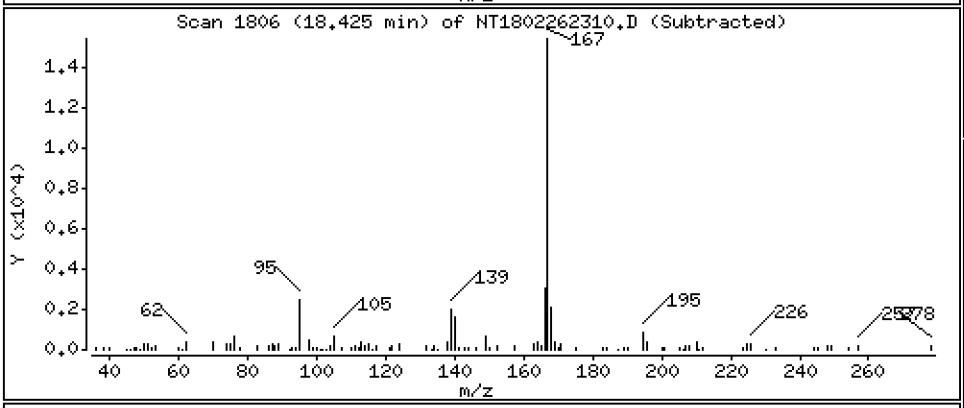
Column diameter: 0.25

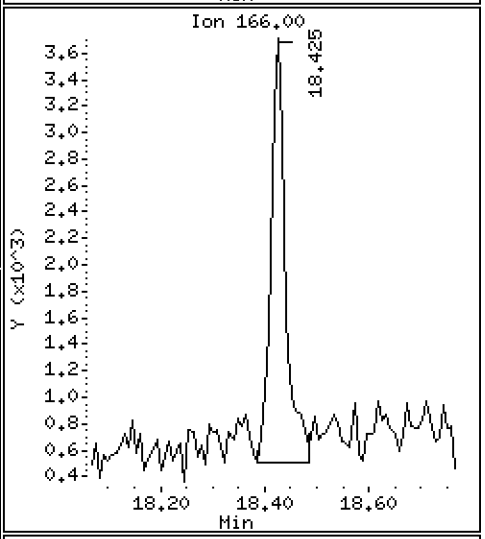
62 Carbazole

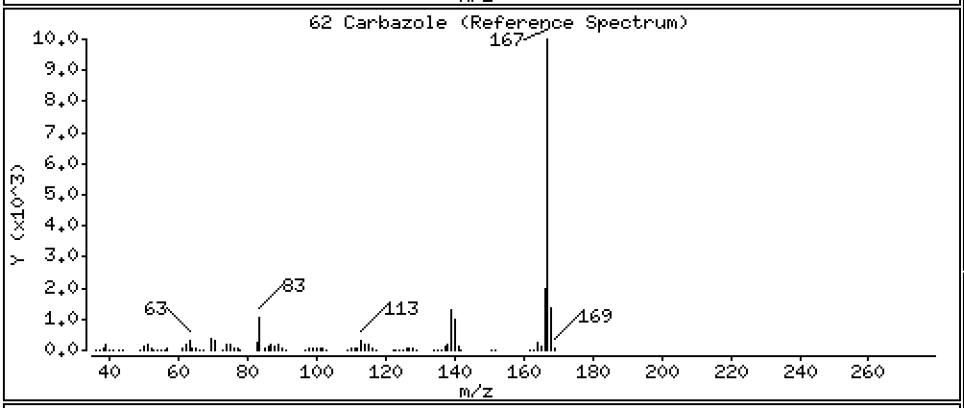
Concentration: 0.09093 ug/mL

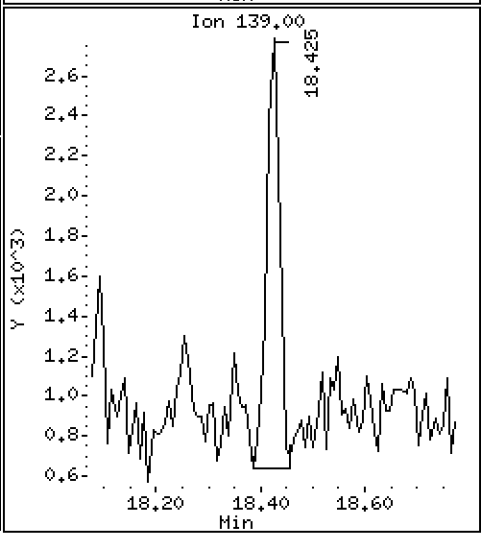


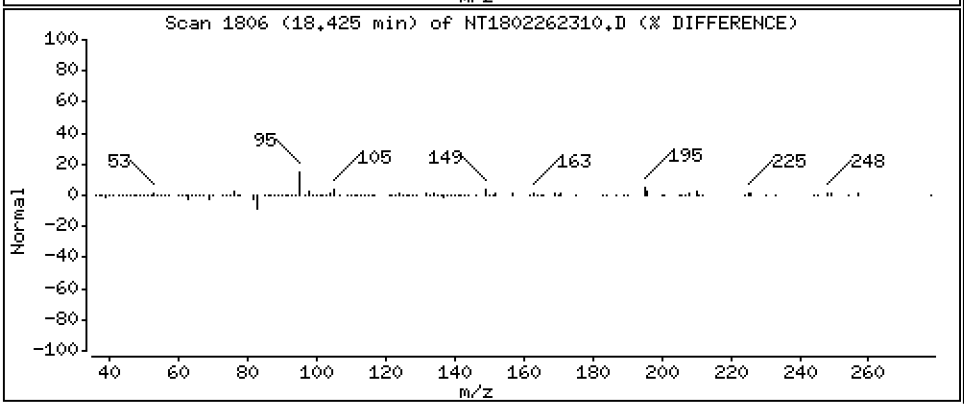












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262310.D

Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

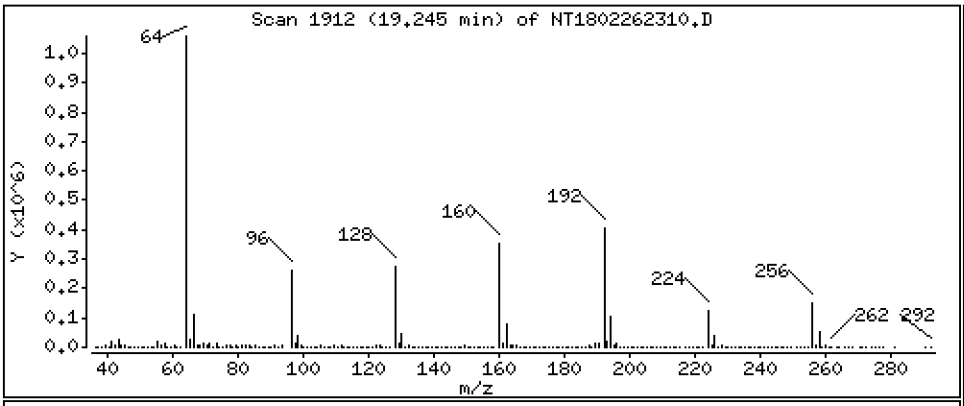
Operator: VTS

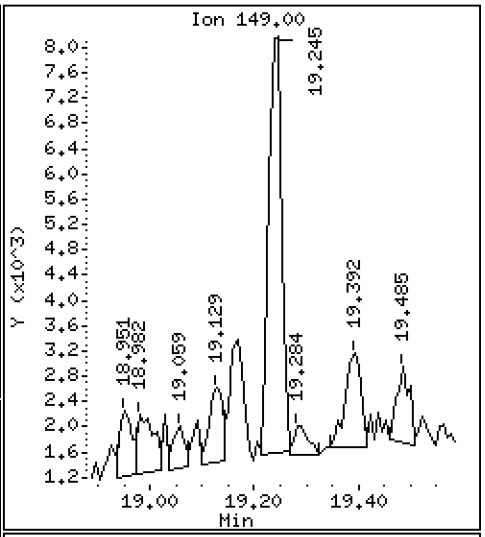
Column phase: ZB-5msi

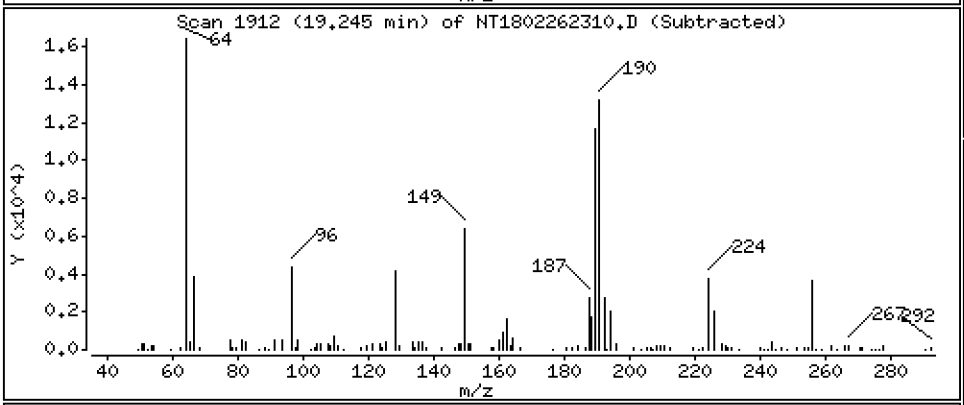
Column diameter: 0.25

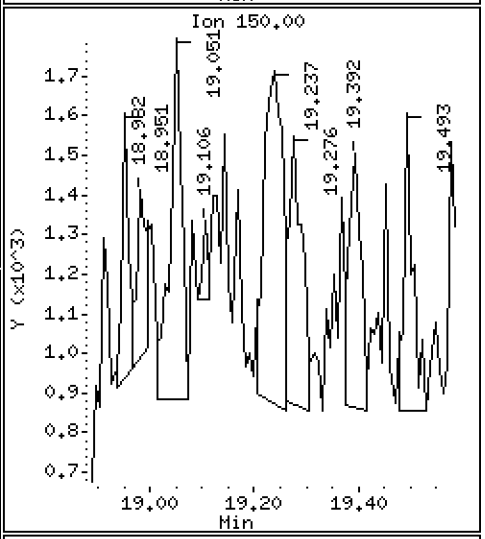
63 Di-n-butylphthalate

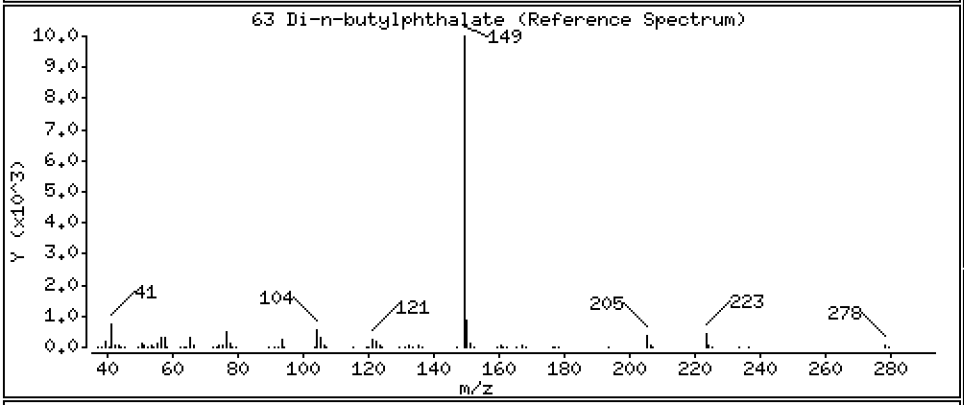
Concentration: 0.03597 ug/mL

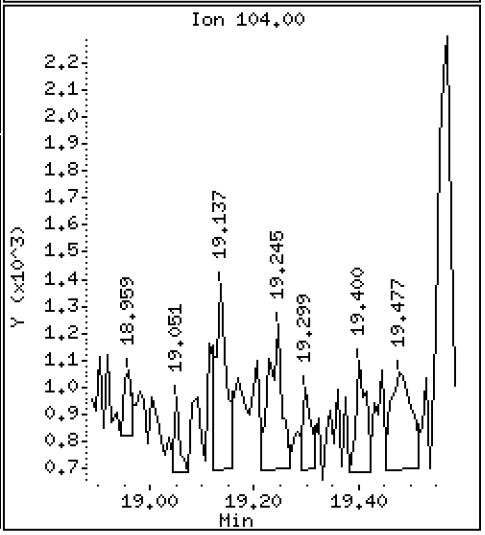


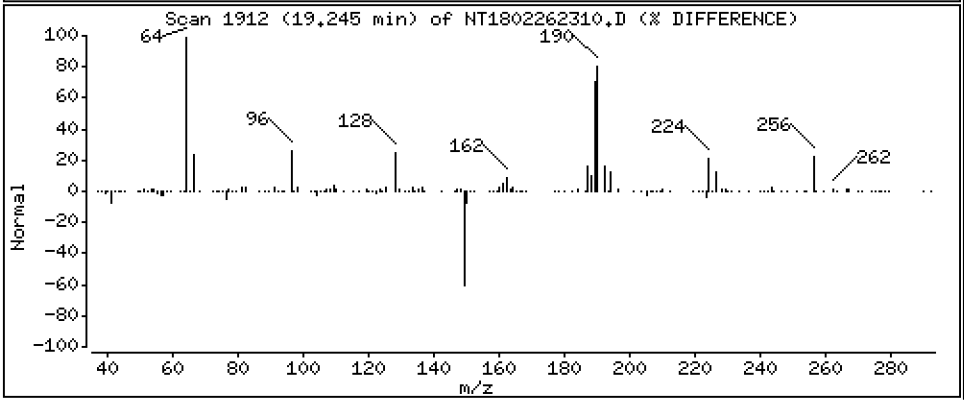












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

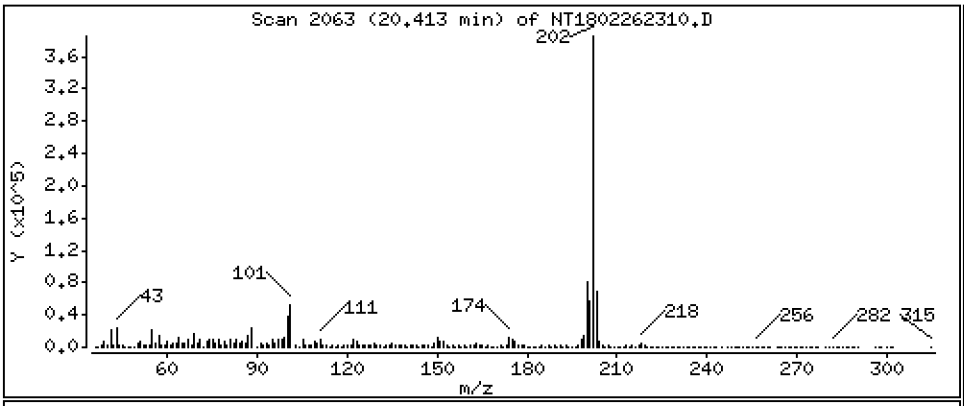
Operator: VTS

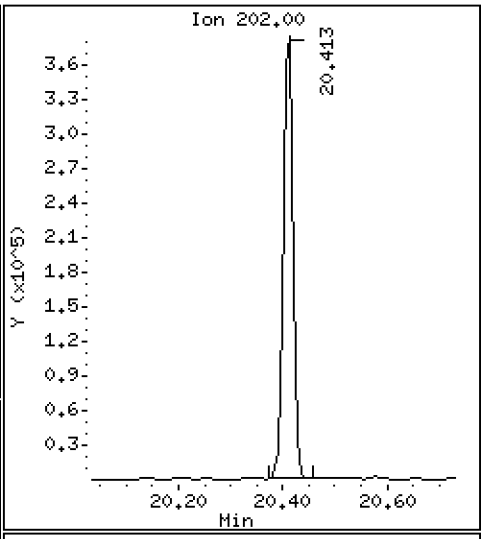
Column phase: ZB-5msi

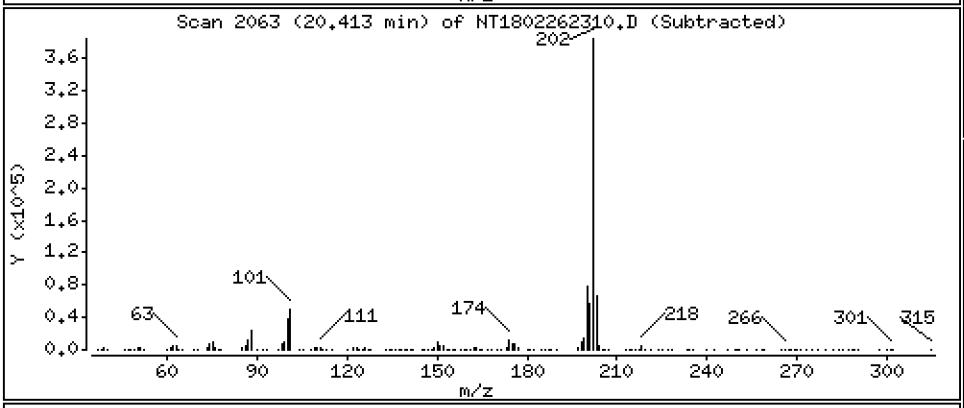
Column diameter: 0.25

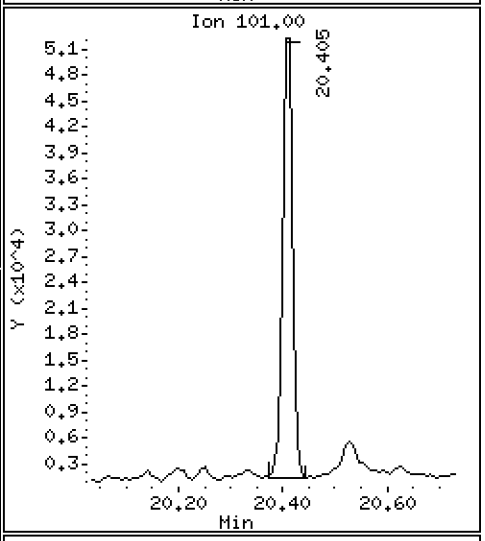
64 Fluoranthene

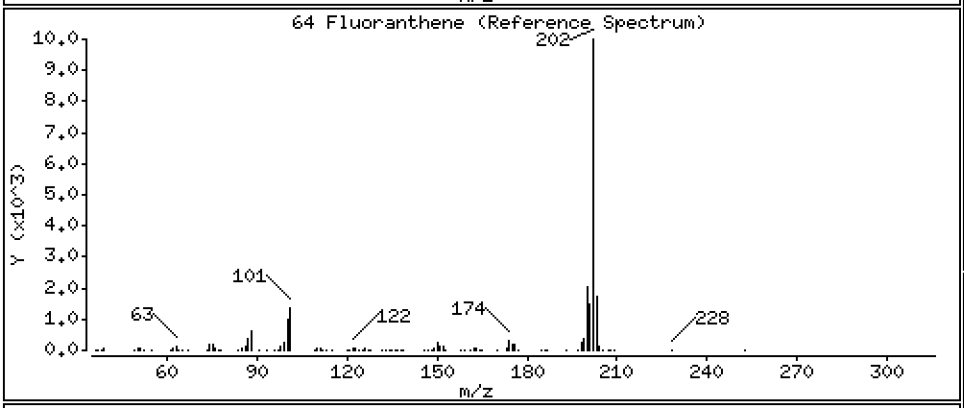
Concentration: 1.474 ug/mL

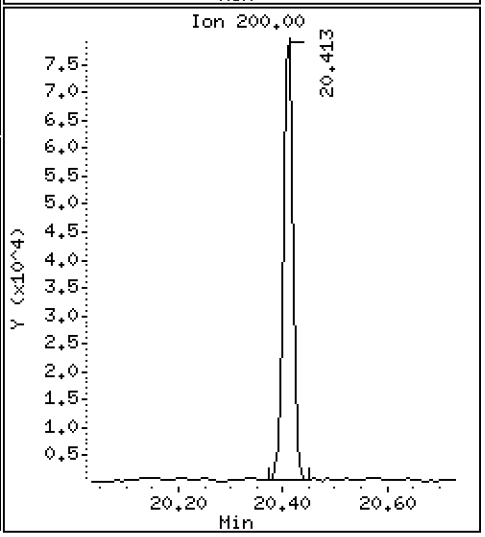


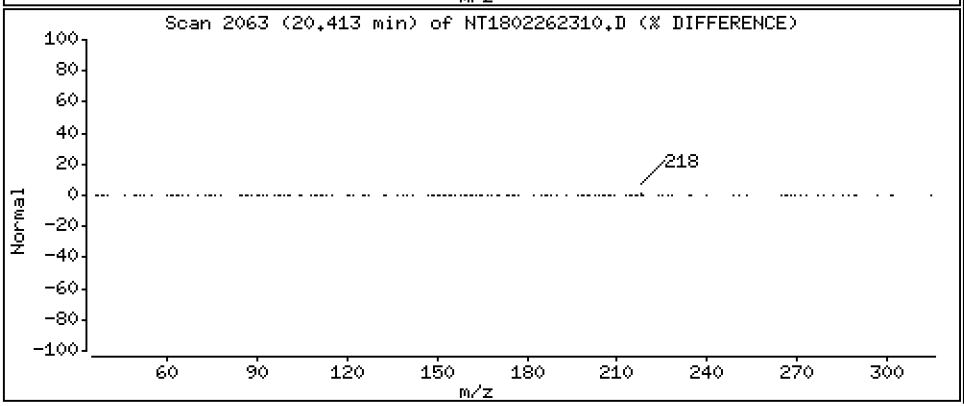












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

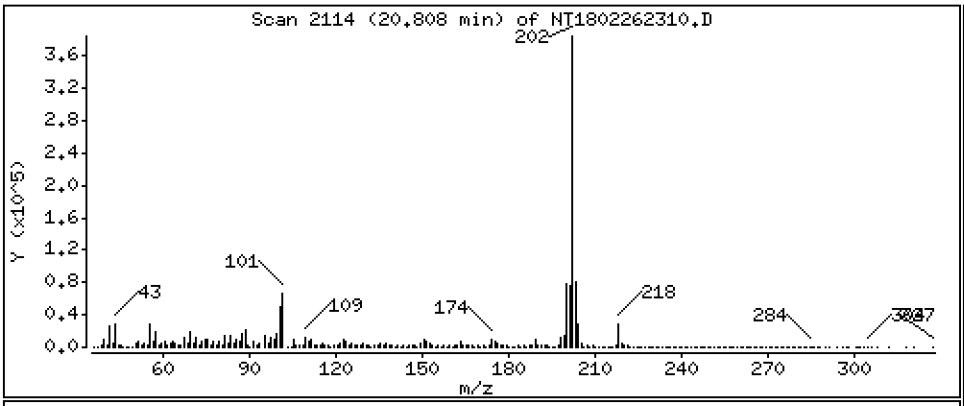
Operator: VTS

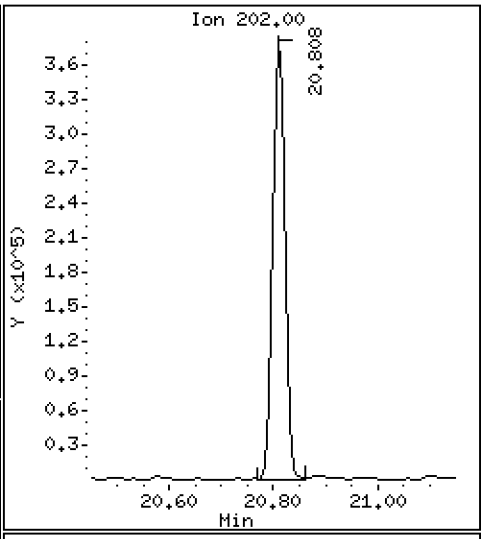
Column phase: ZB-5msi

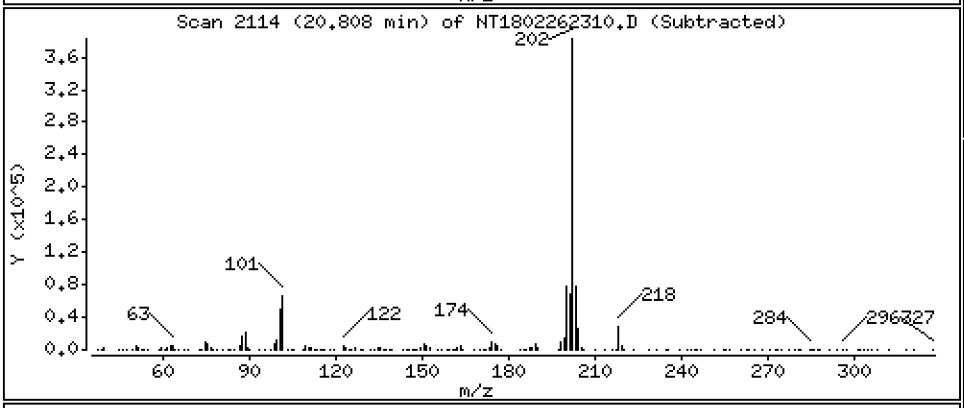
Column diameter: 0.25

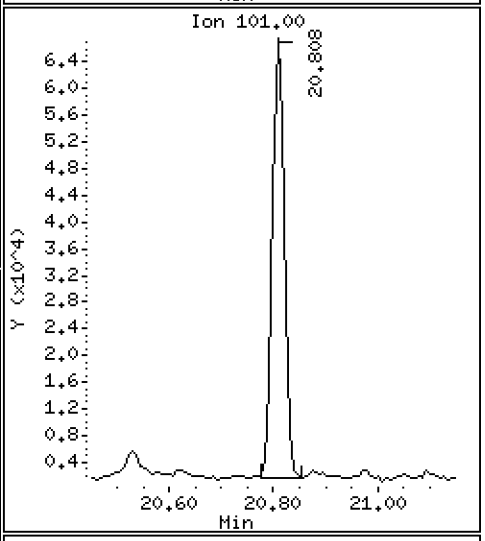
65 Pyrene

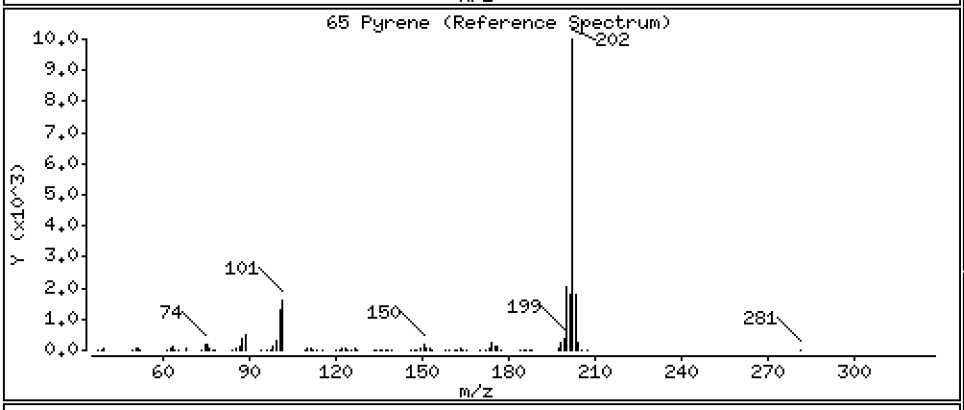
Concentration: 1.546 ug/mL

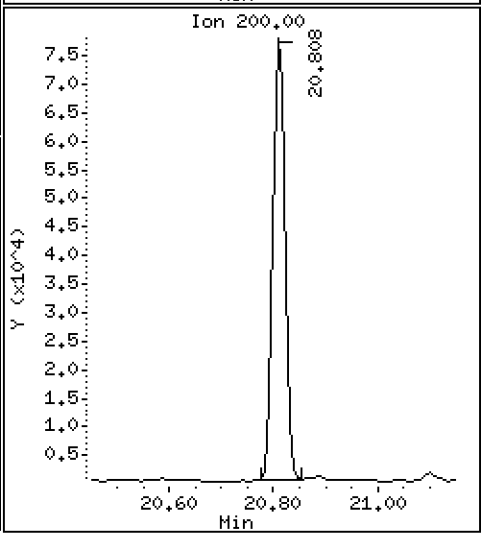


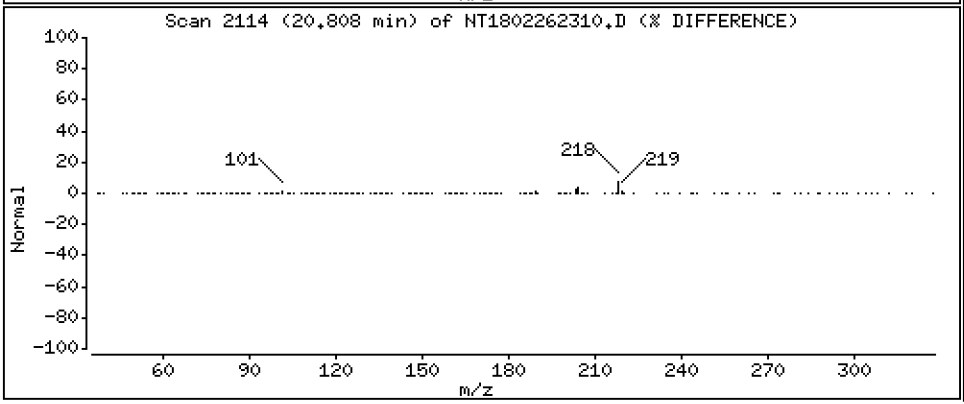












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

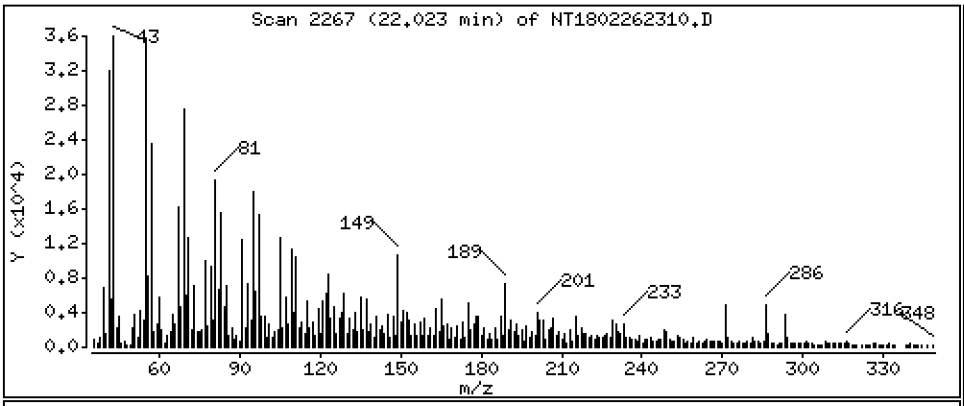
Operator: VTS

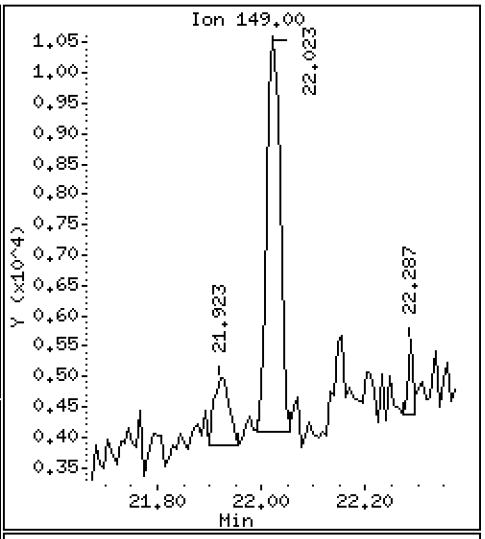
Column phase: ZB-5msi

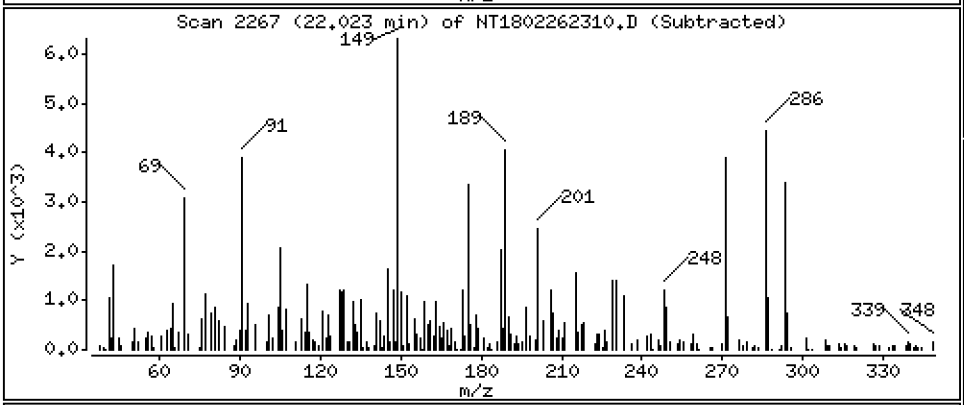
Column diameter: 0.25

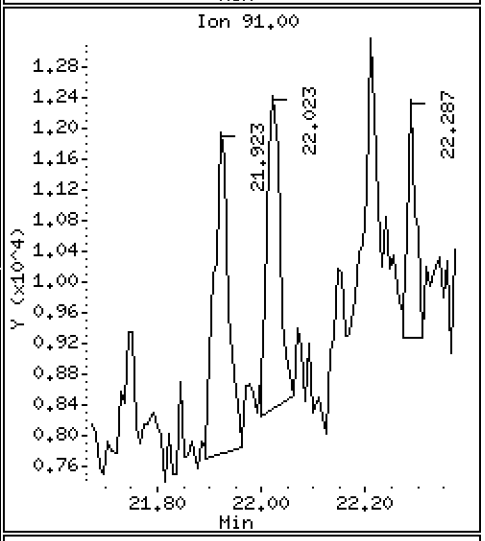
67 Butylbenzylphthalate

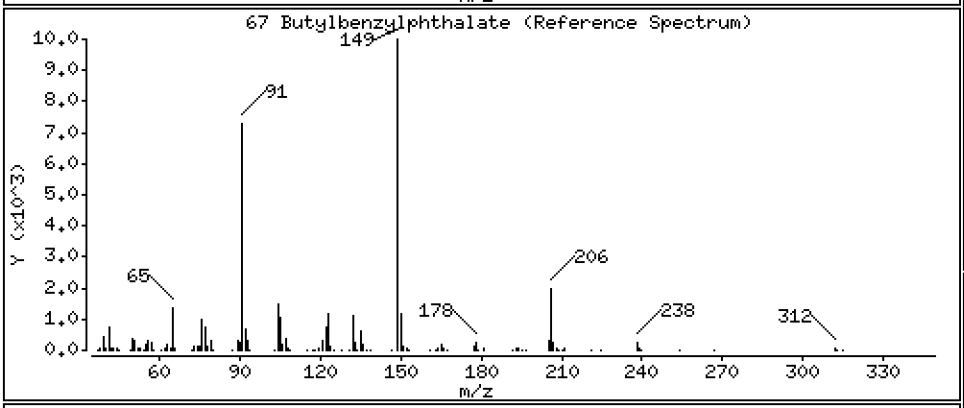
Concentration: 0.07692 ug/mL

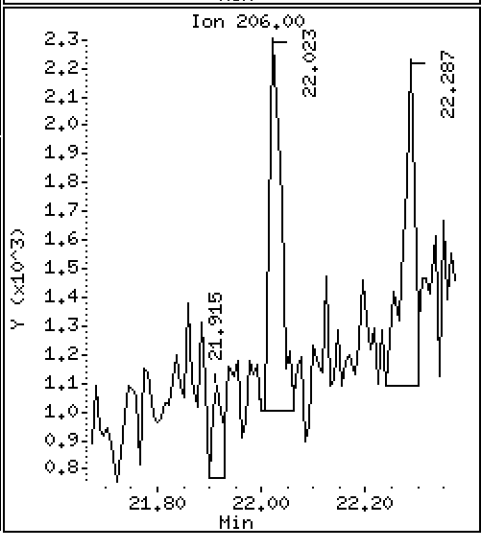


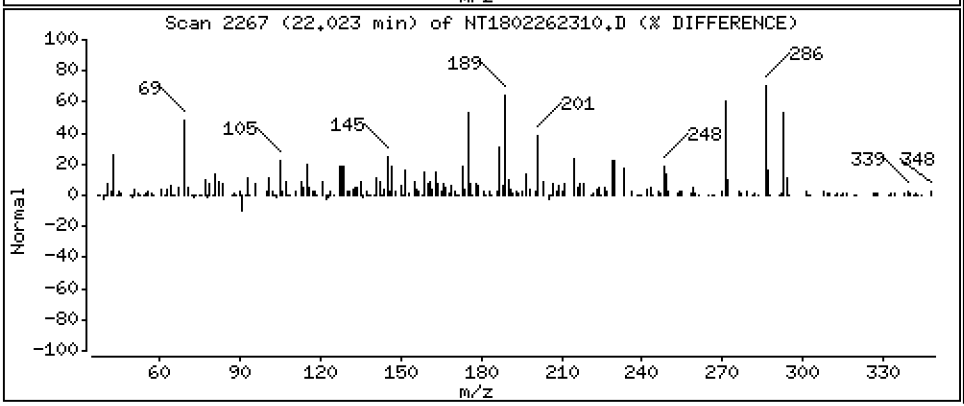












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

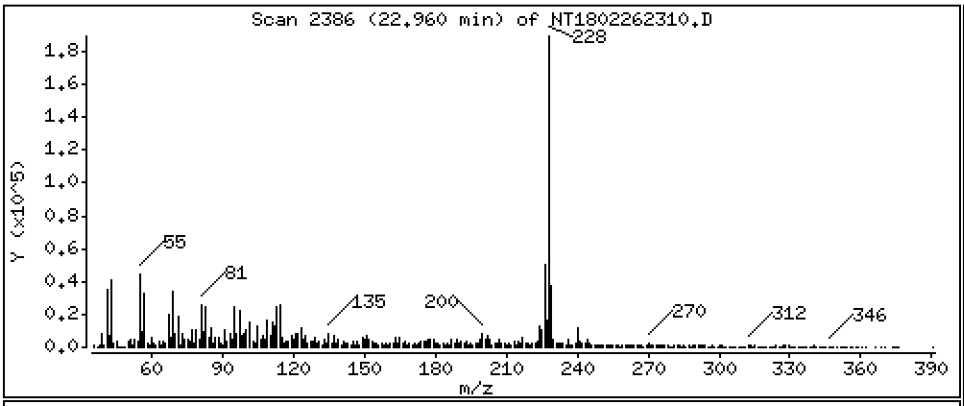
Operator: VTS

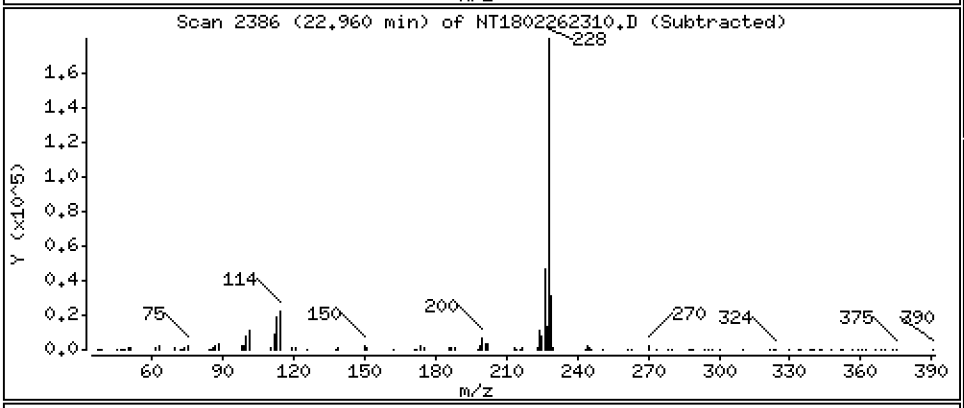
Column phase: ZB-5msi

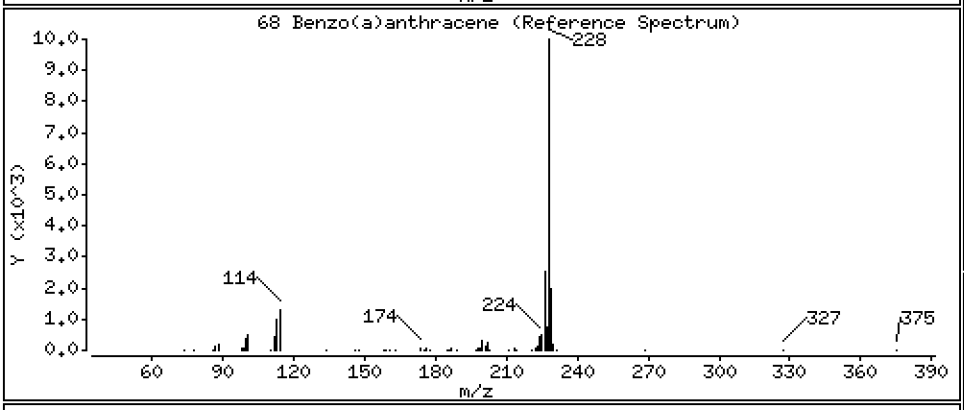
Column diameter: 0.25

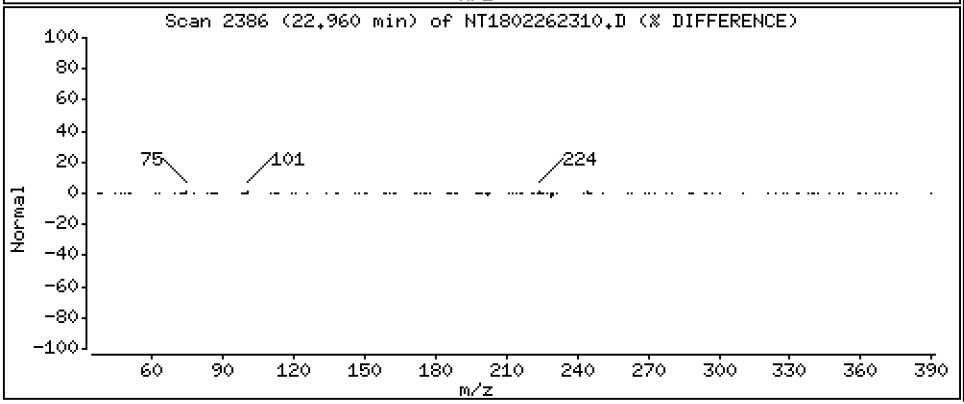
68 Benzo(a)anthracene

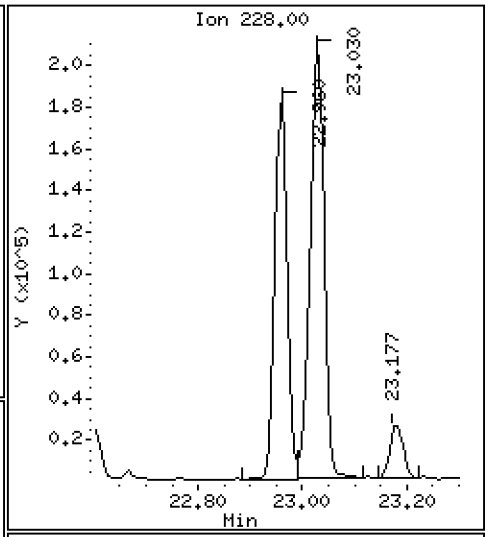
Concentration: 0.7911 ug/mL

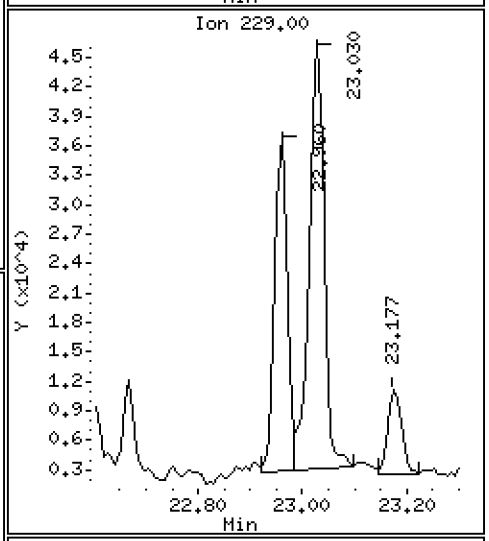


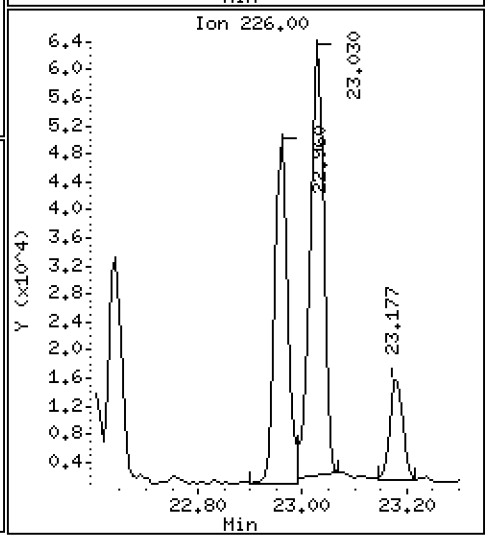












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

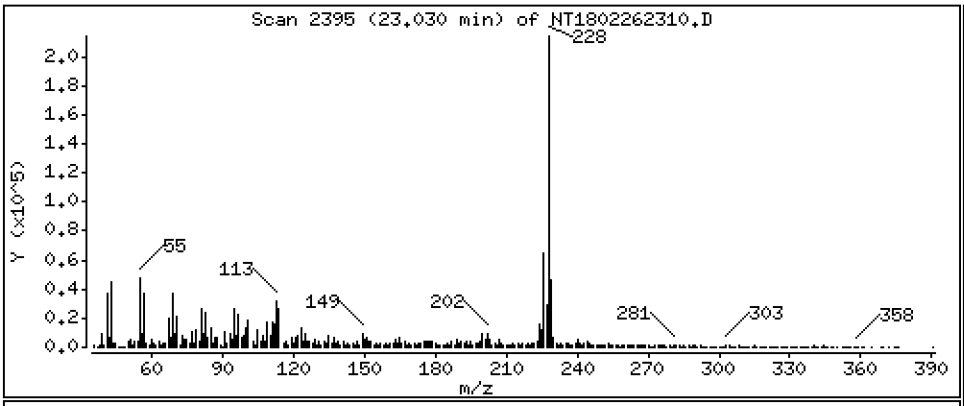
Operator: VTS

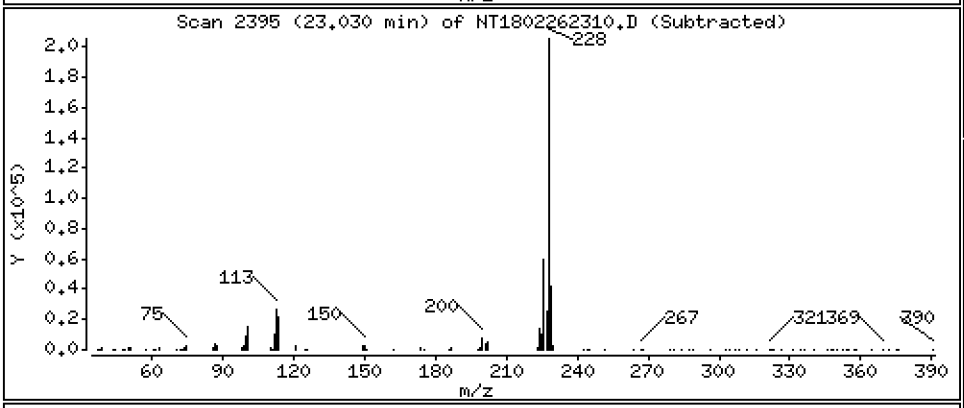
Column phase: ZB-5msi

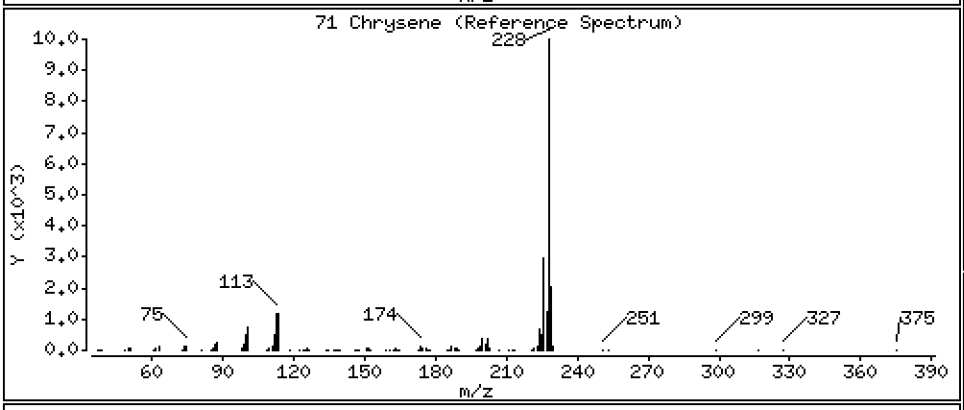
Column diameter: 0.25

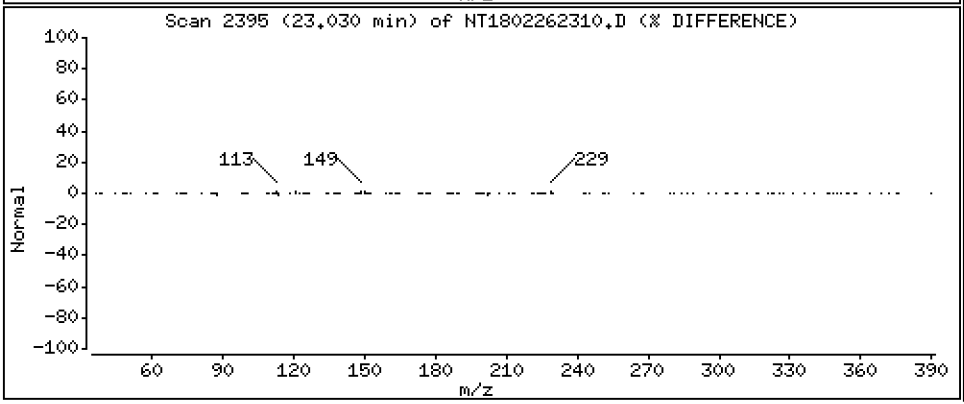
71 Chrysene

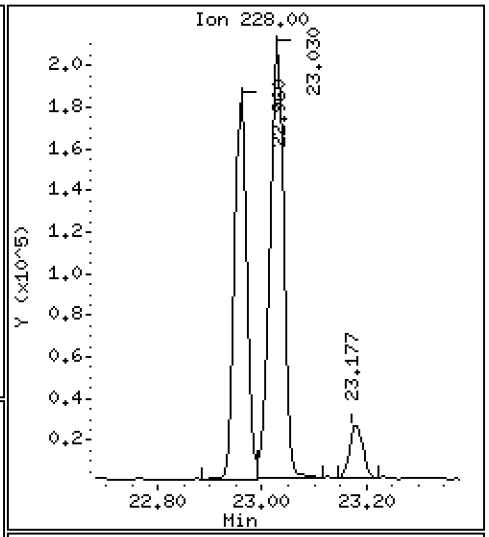
Concentration: 0.9739 ug/mL

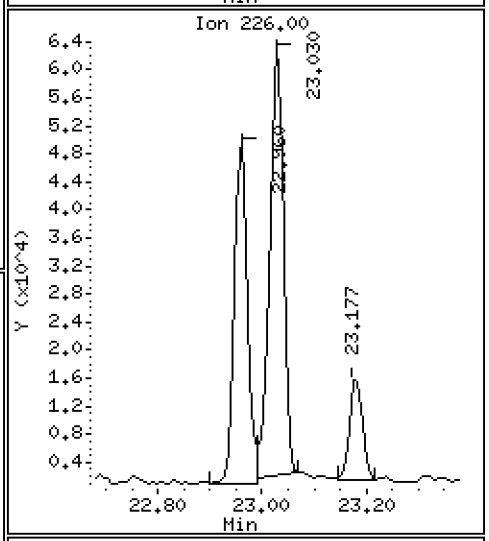


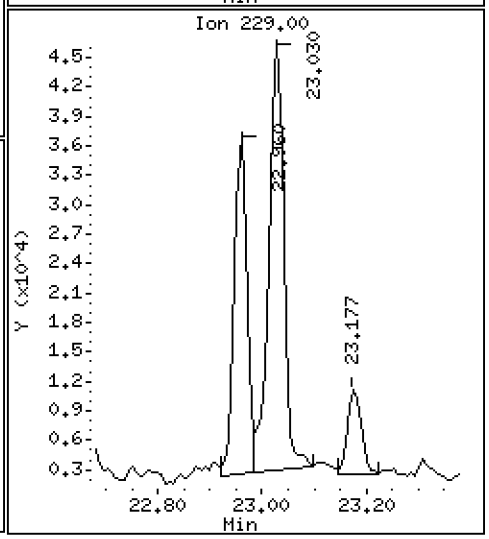












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

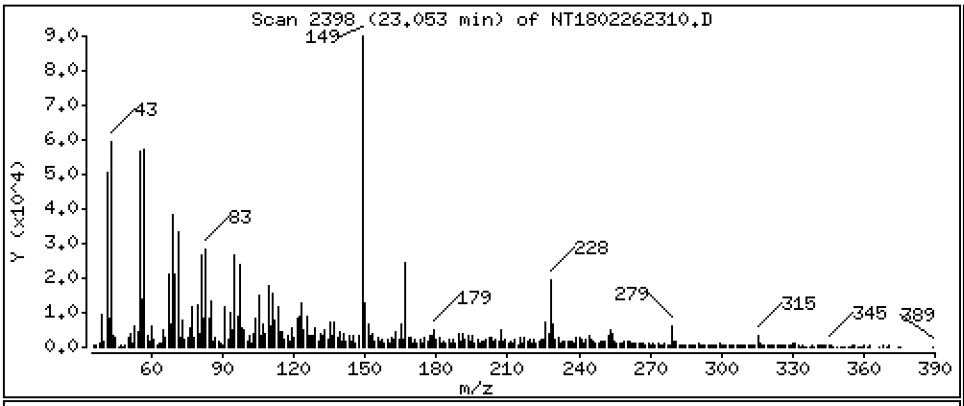
Operator: VTS

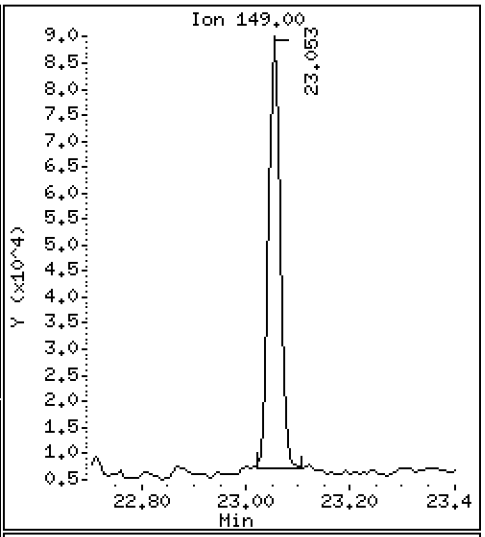
Column phase: ZB-5msi

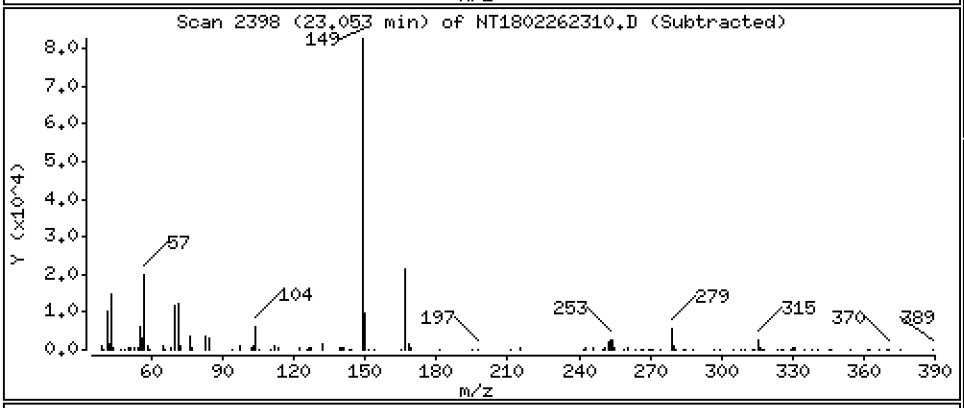
Column diameter: 0.25

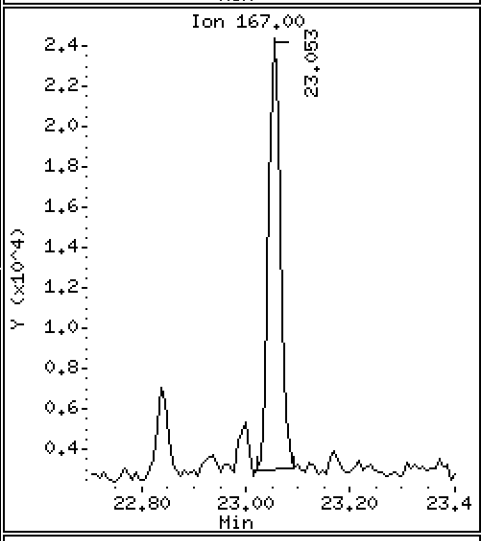
72 bis(2-Ethylhexyl)phthalate

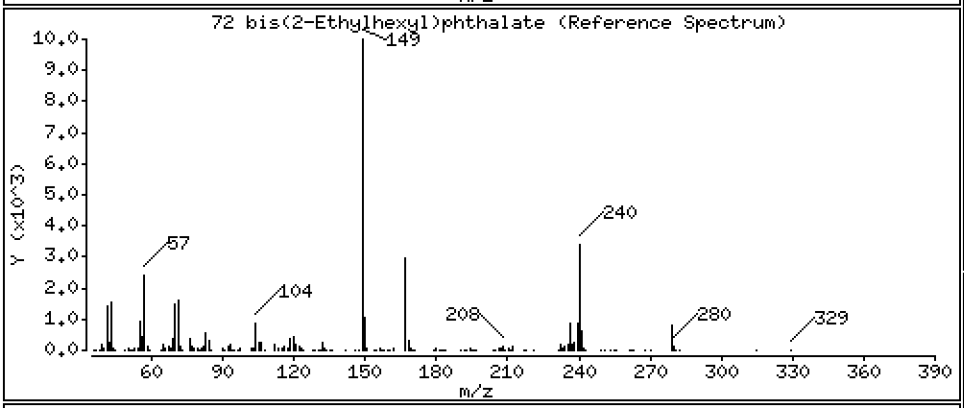
Concentration: 0.5365 ug/mL

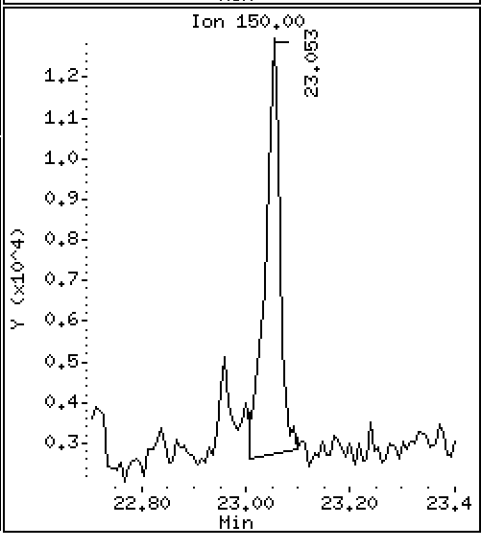


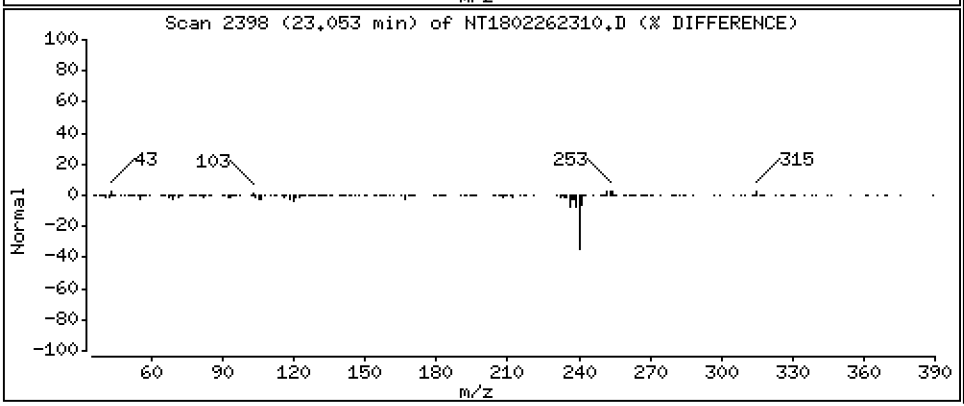












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262310.D

Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

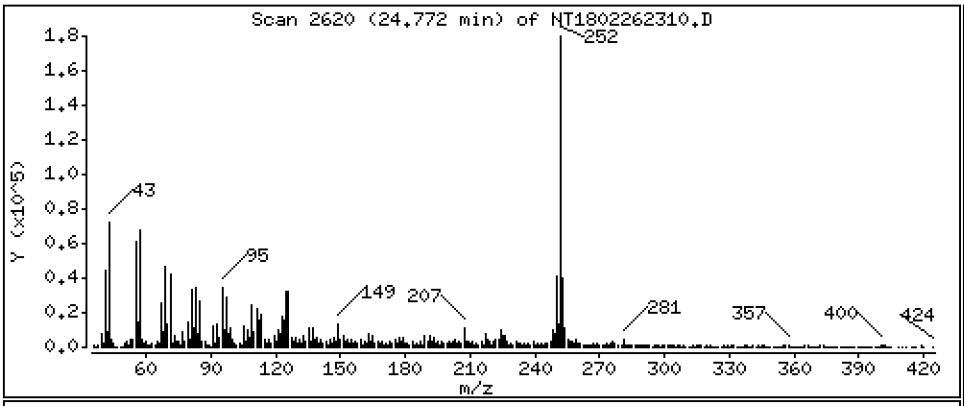
Operator: VTS

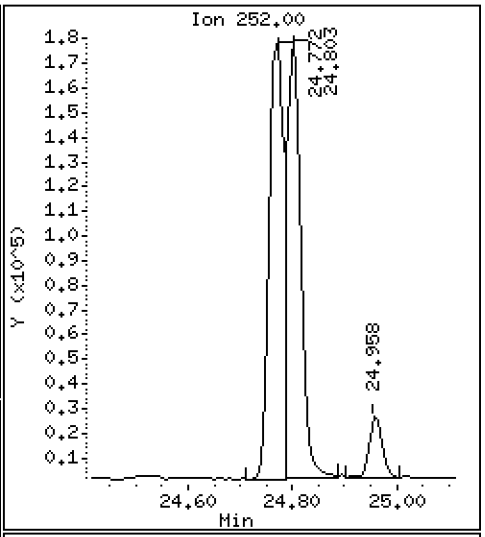
Column phase: ZB-5msi

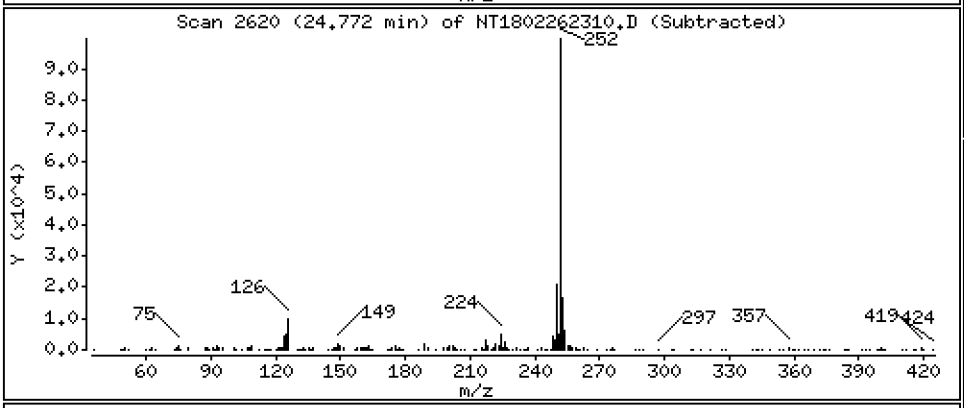
Column diameter: 0.25

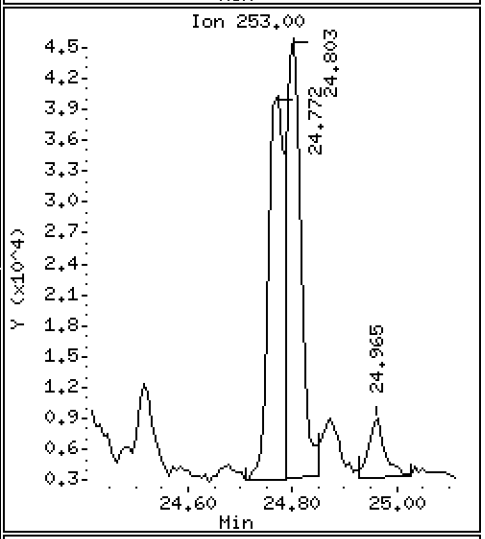
74 Benzo(b)fluoranthene

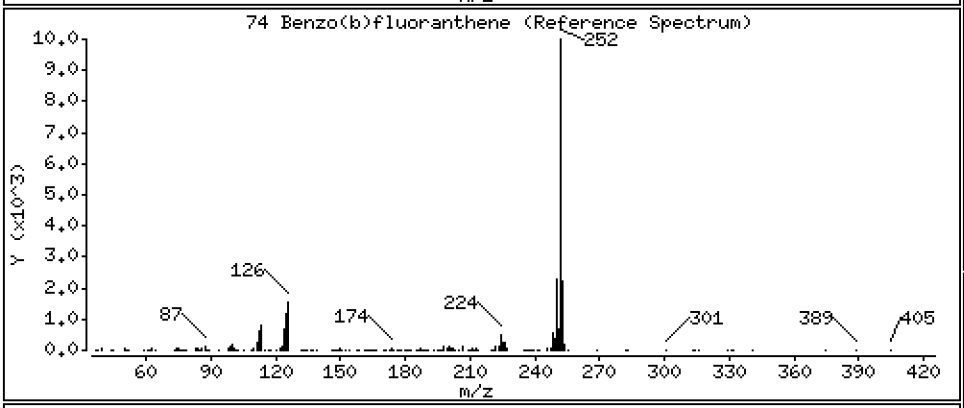
Concentration: 0.9691 ug/mL

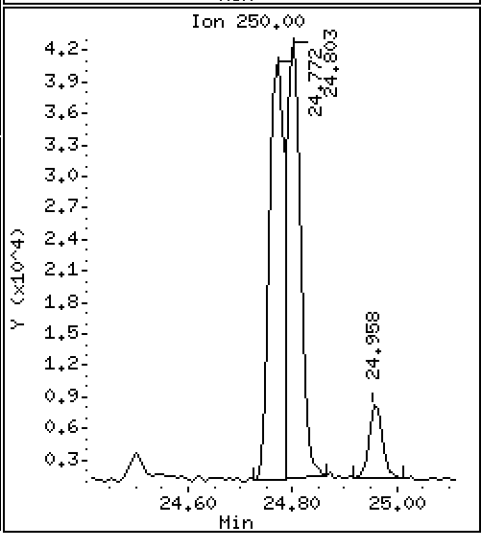


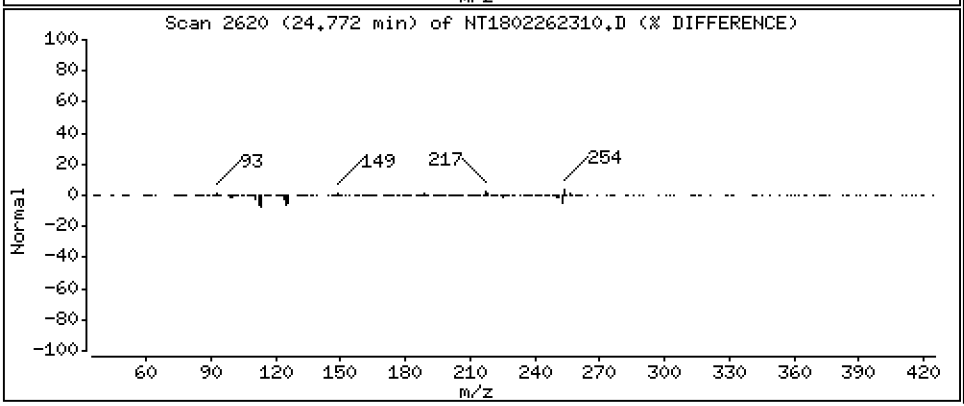












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

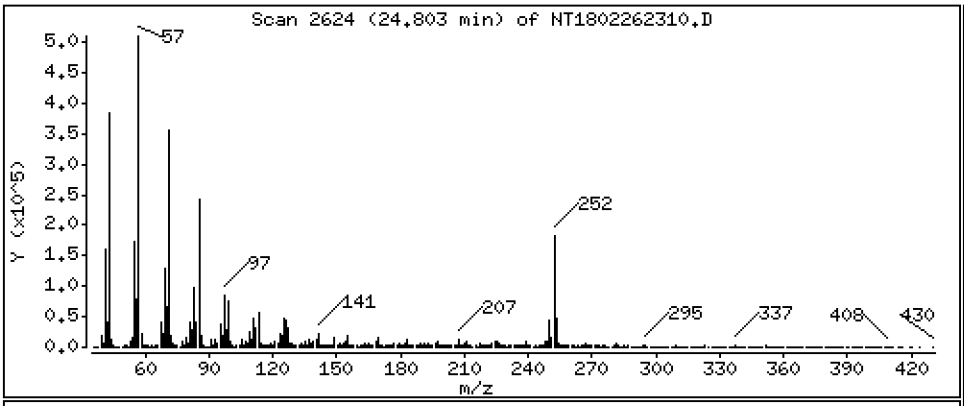
Operator: VTS

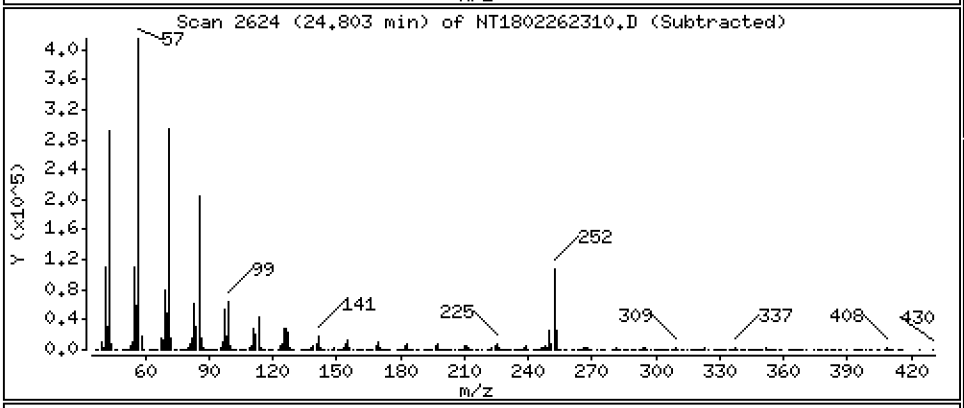
Column phase: ZB-5msi

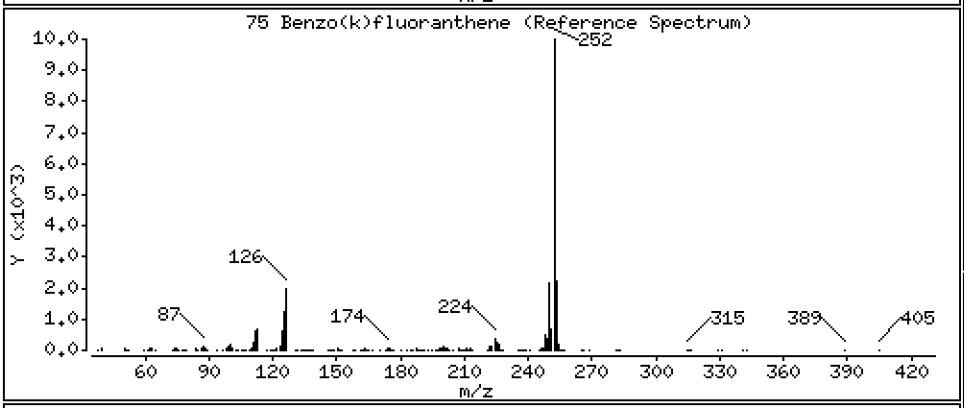
Column diameter: 0.25

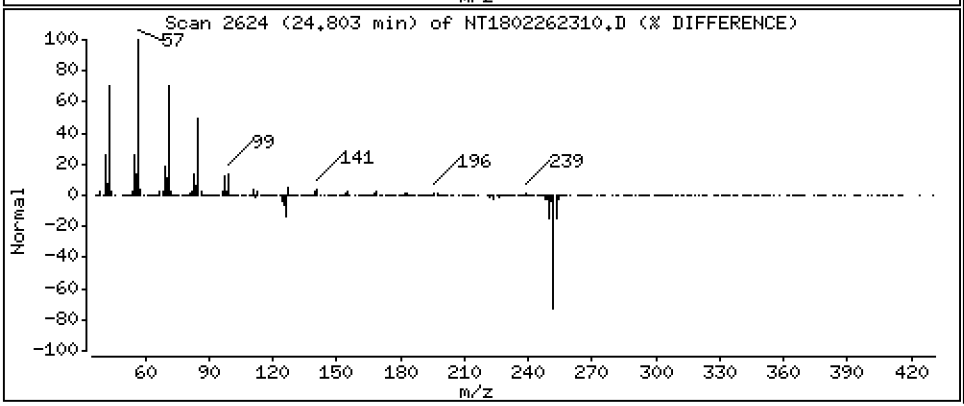
75 Benzo(k)fluoranthene

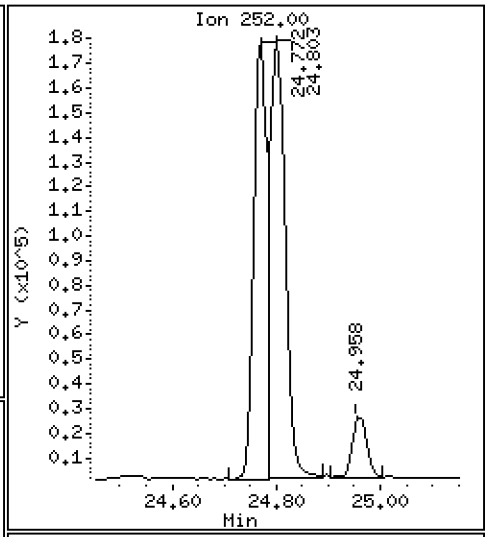
Concentration: 0.8701 ug/mL

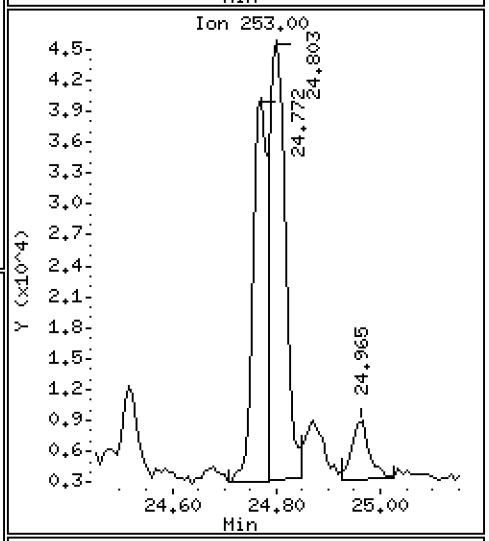


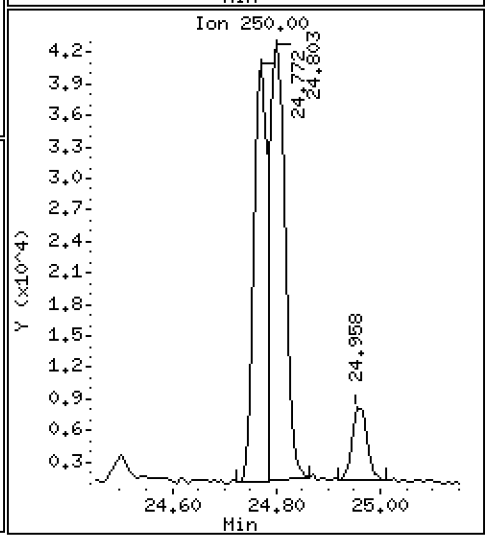












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

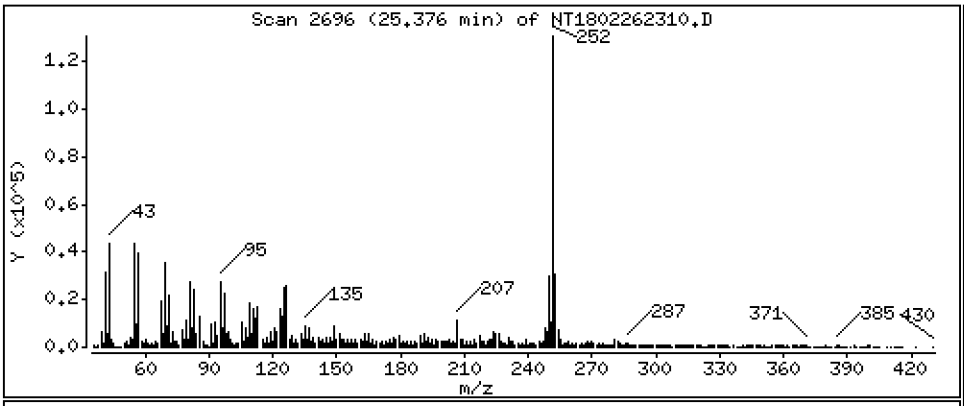
Operator: VTS

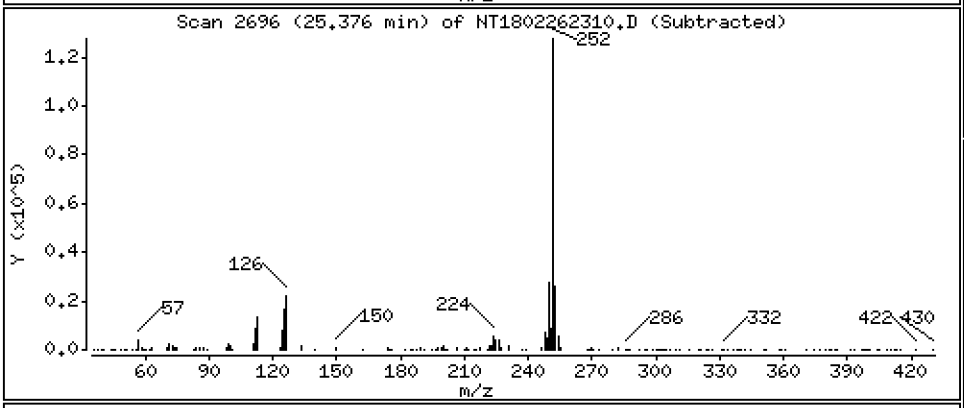
Column phase: ZB-5msi

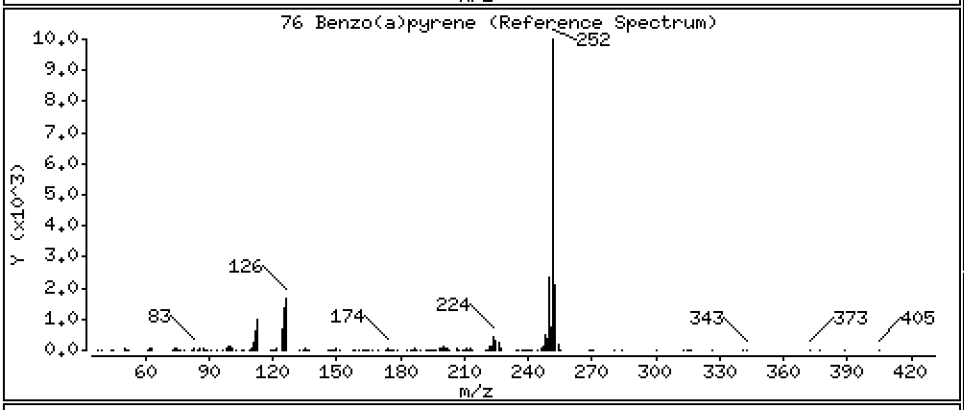
Column diameter: 0.25

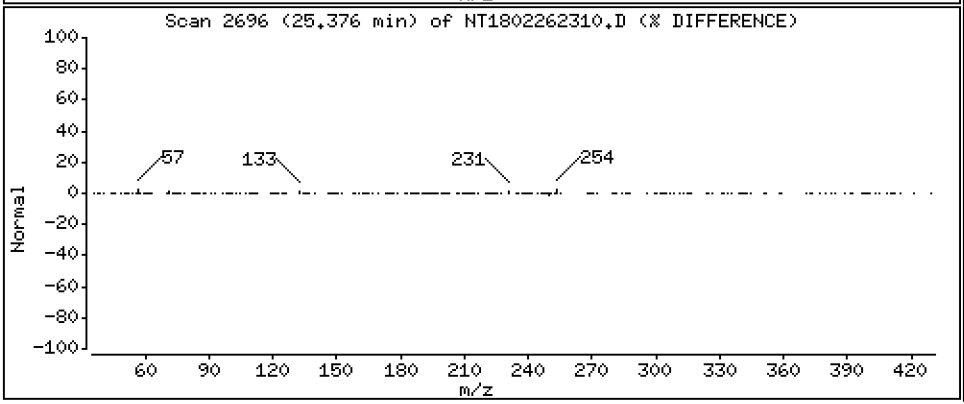
76 Benzo(a)pyrene

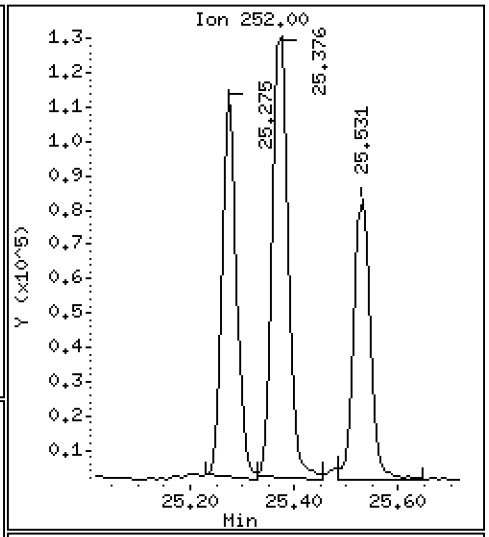
Concentration: 0.7863 ug/mL

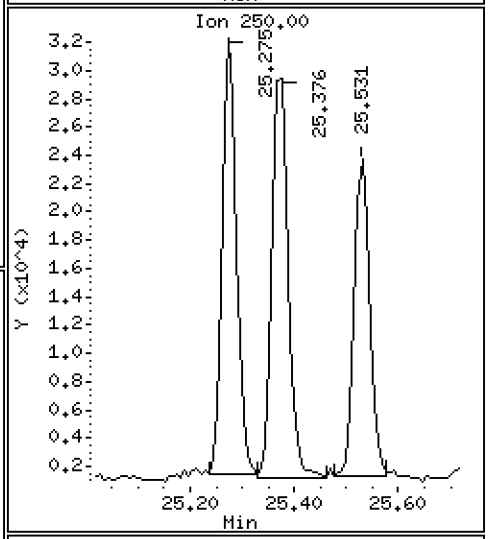


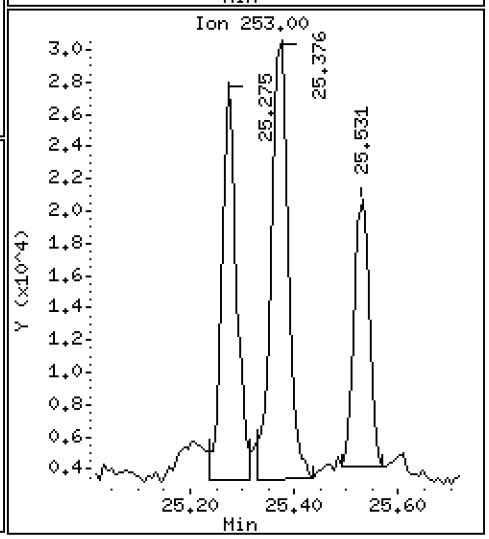












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

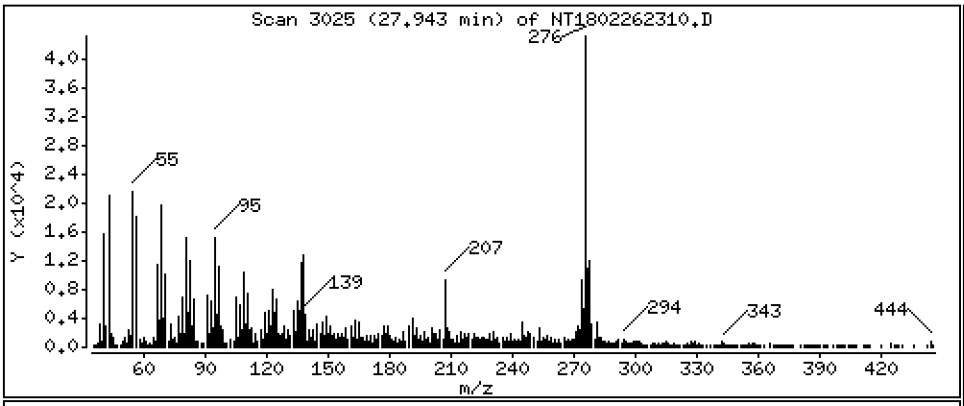
Operator: VTS

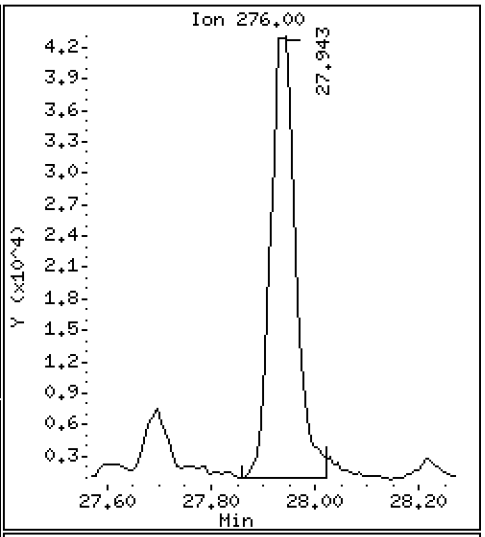
Column phase: ZB-5msi

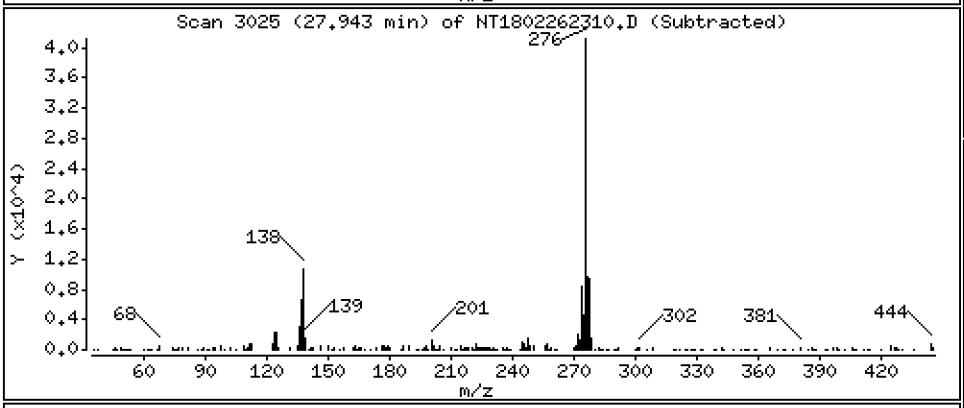
Column diameter: 0.25

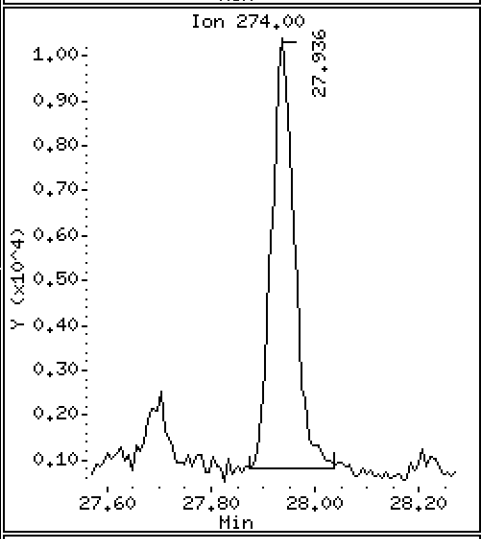
78 Indeno(1,2,3-cd)pyrene

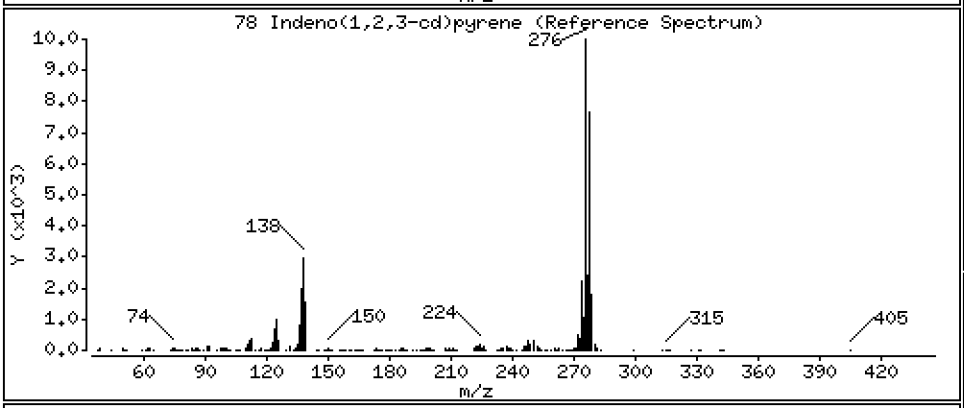
Concentration: 0.3411 ug/mL

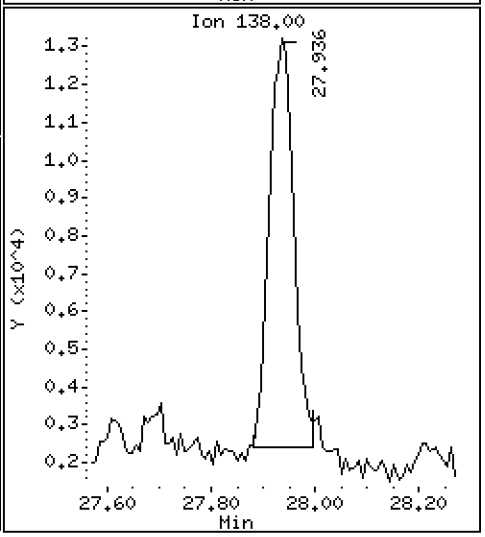


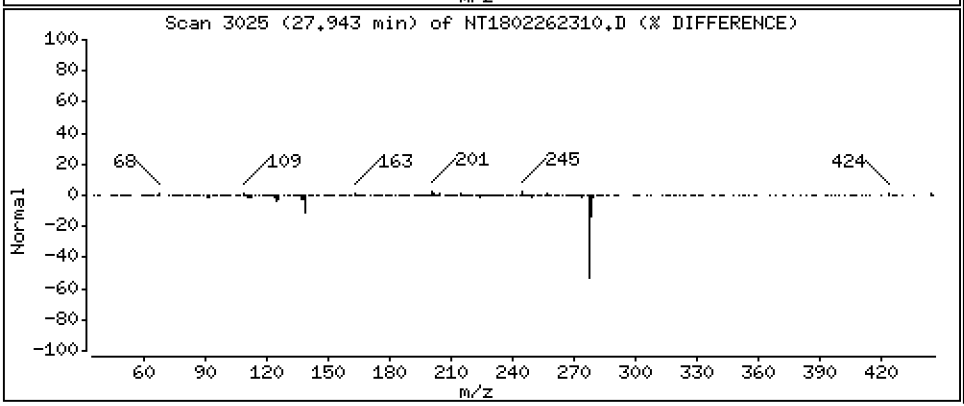












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

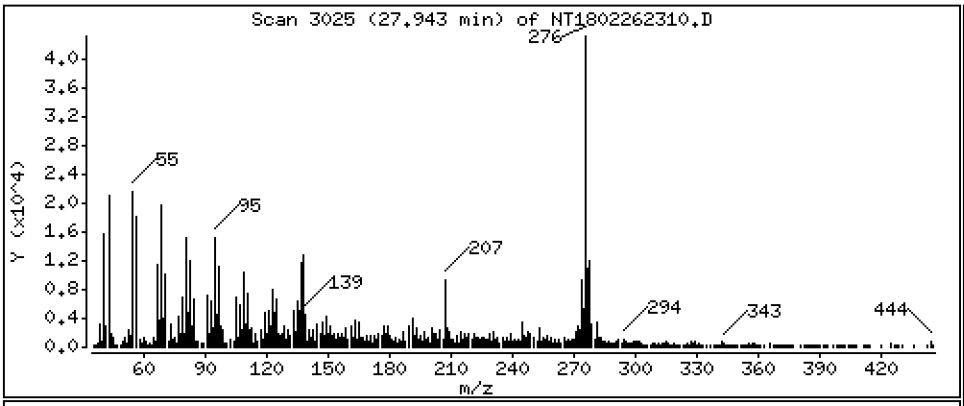
Operator: VTS

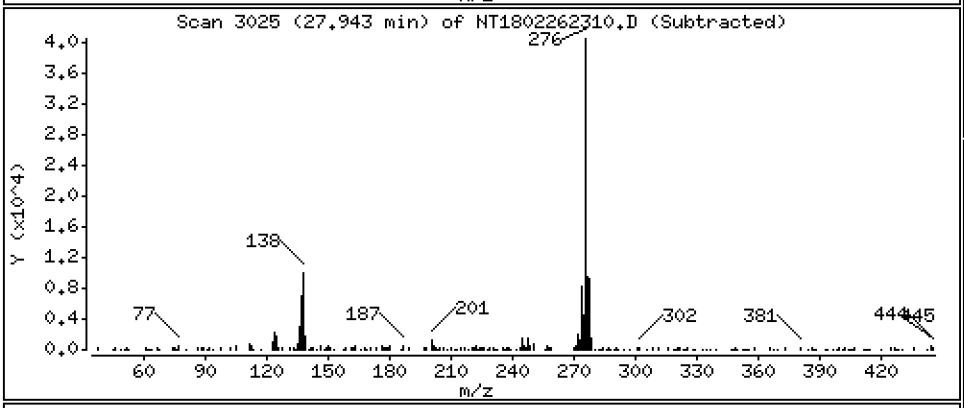
Column phase: ZB-5msi

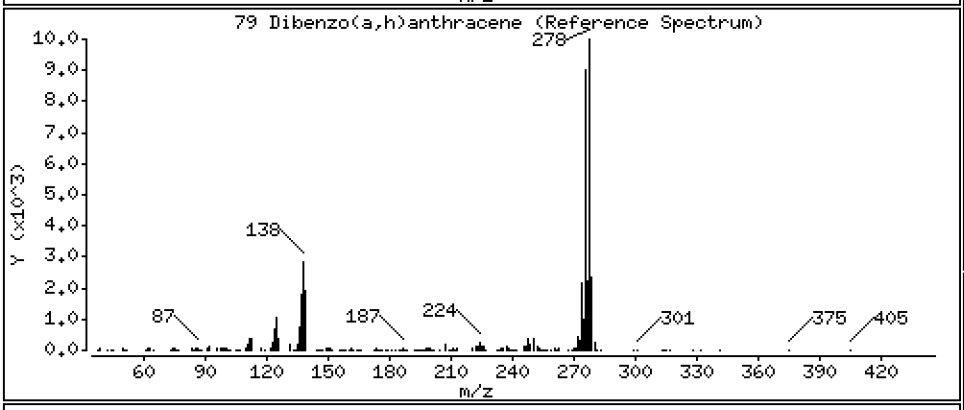
Column diameter: 0.25

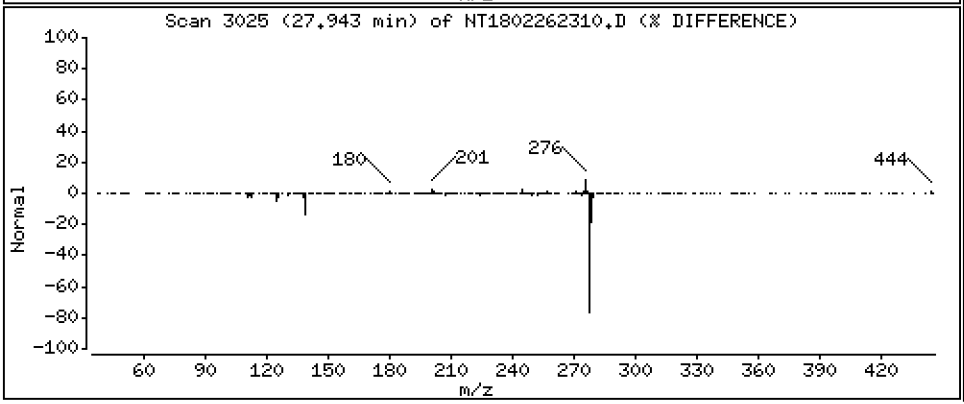
79 Dibenzo(a,h)anthracene

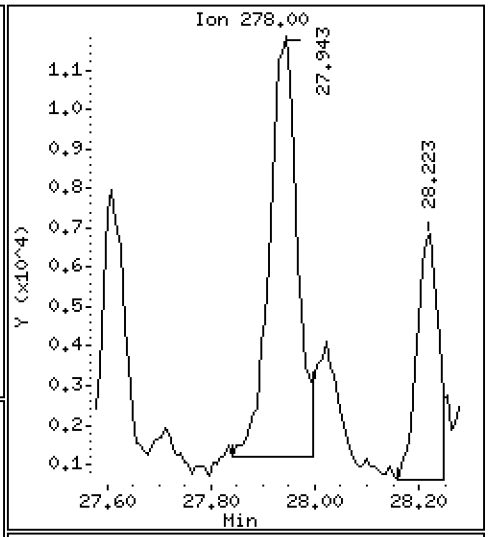
Concentration: 0.1126 ug/mL

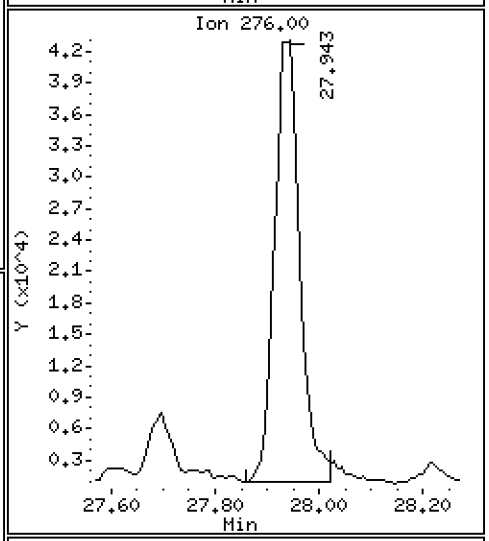


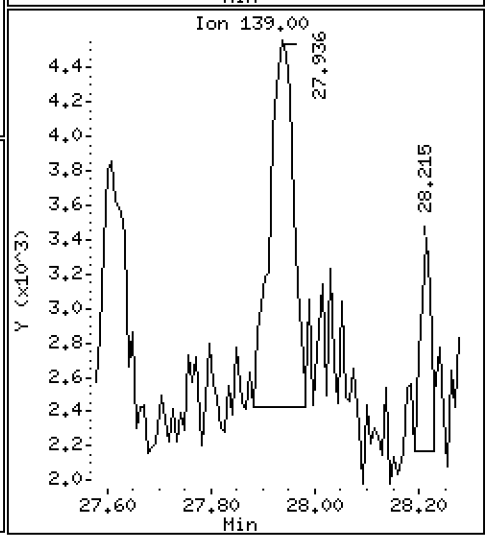












Date : 26-FEB-2023 17:52

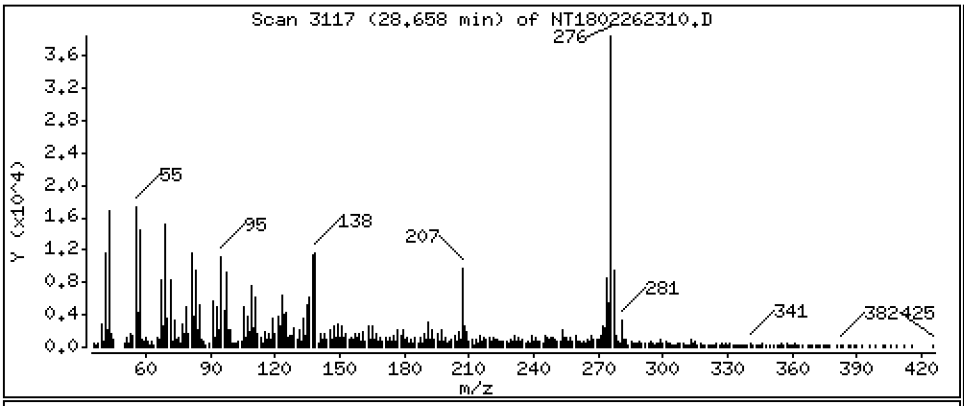
Client ID: Instrument: nt18.i

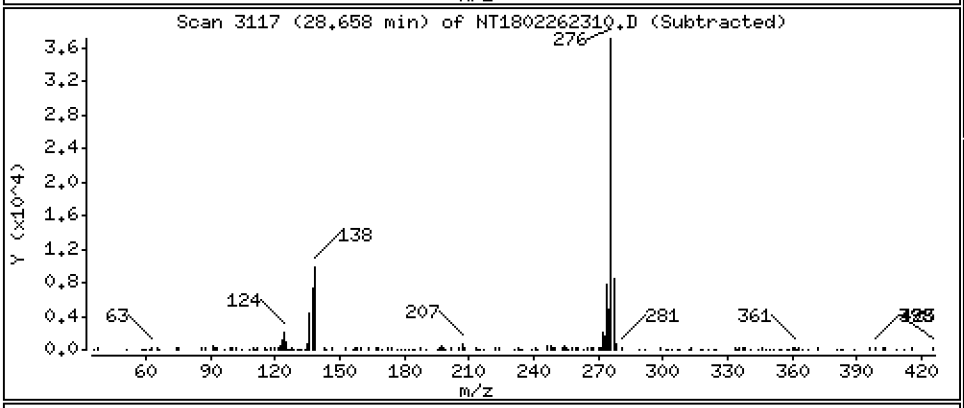
Sample Info: 23A0134-01

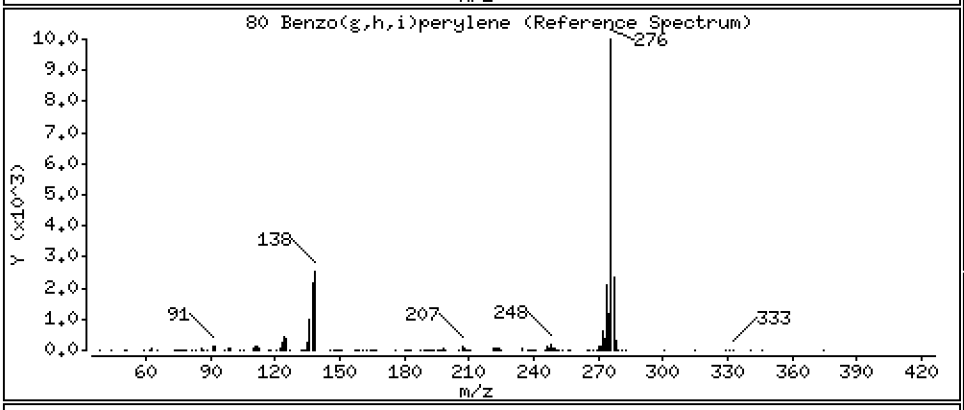
Operator: VTS

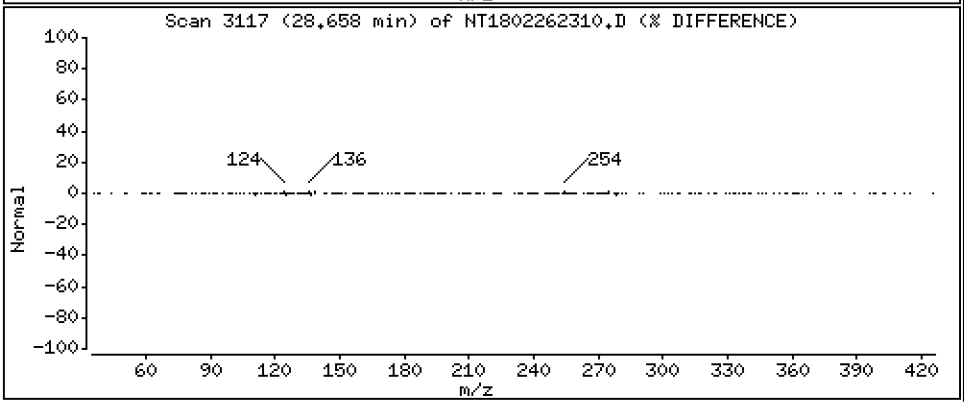
Column phase: ZB-5msi Column diameter: 0.25

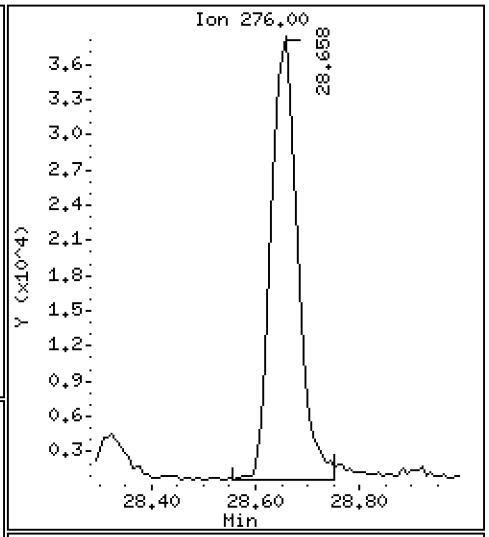
80 Benzo(g,h,i)perylene Concentration: 0.3970 ug/mL

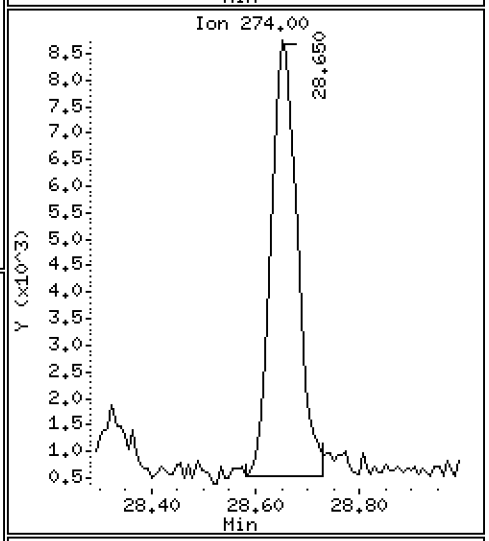


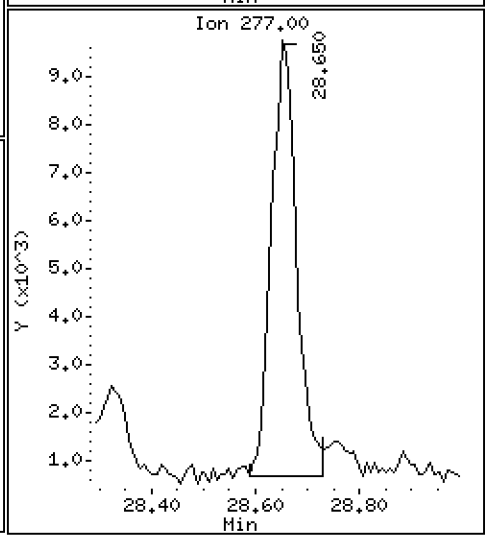












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262310.D

Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

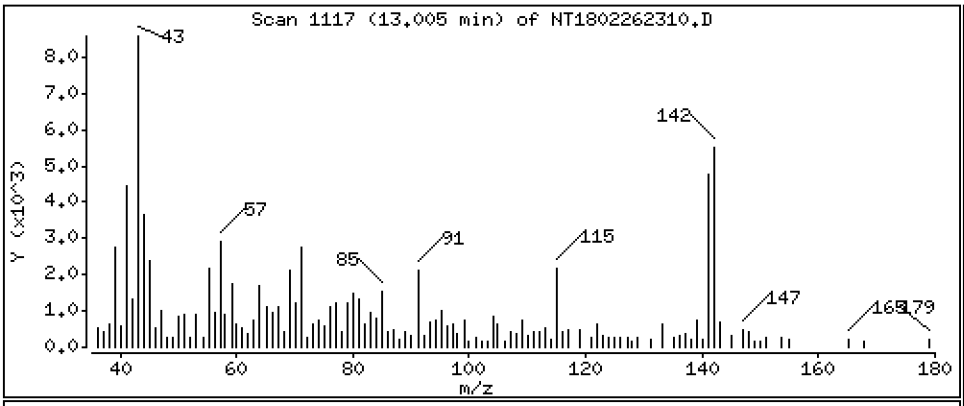
Operator: VTS

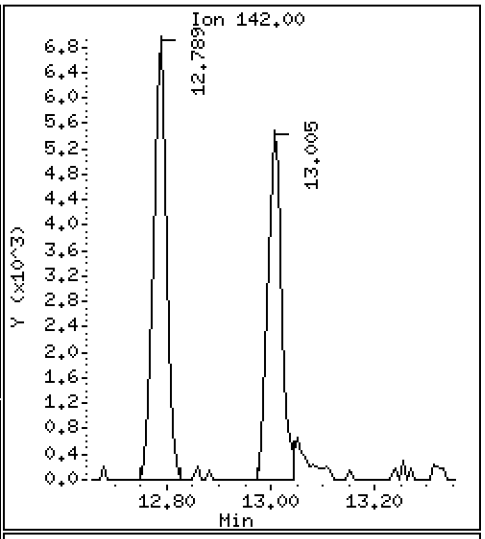
Column phase: ZB-5msi

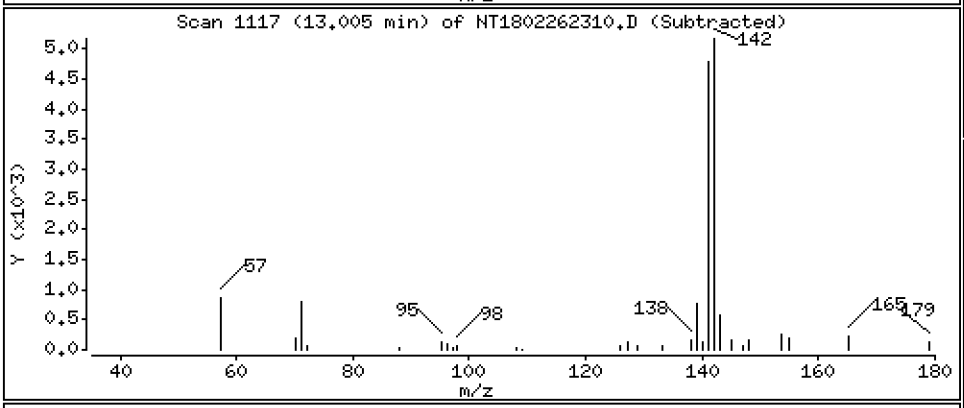
Column diameter: 0.25

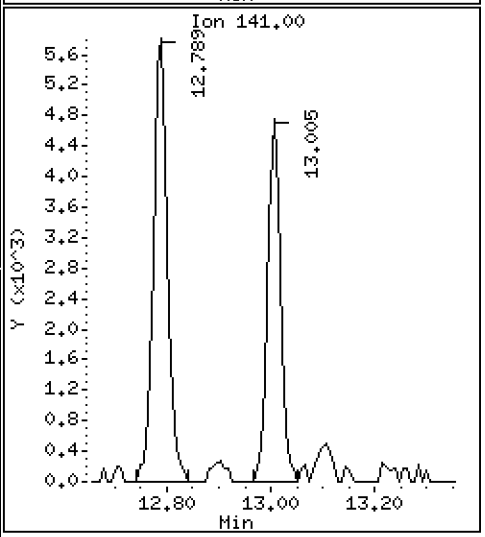
105 1-methylnaphthalene

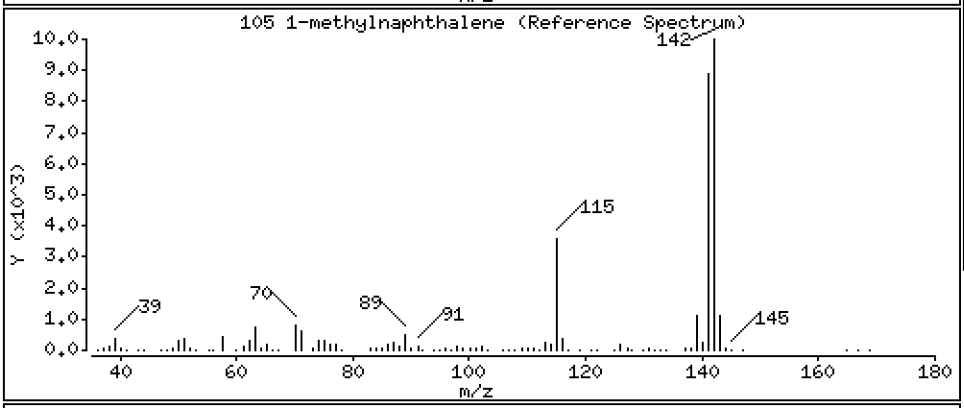
Concentration: 0.05390 ug/mL

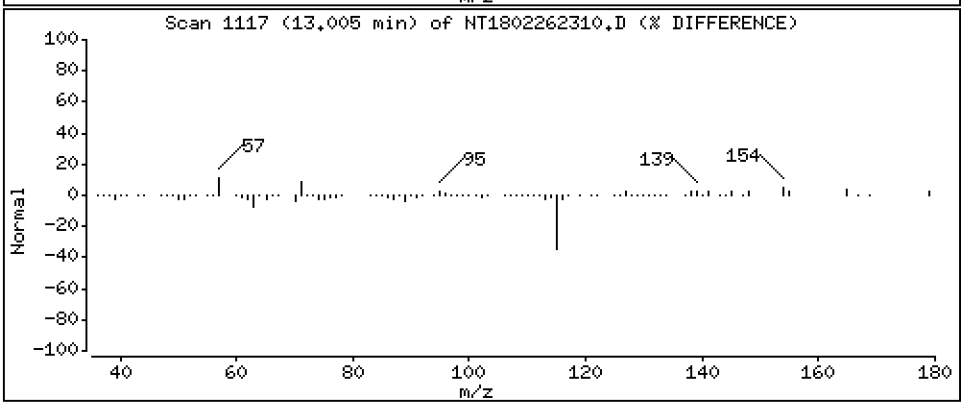












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262310.D

Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

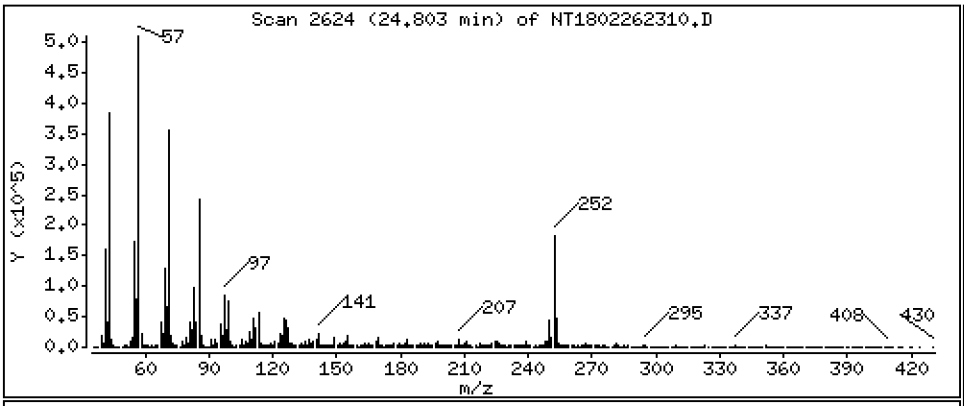
Operator: VTS

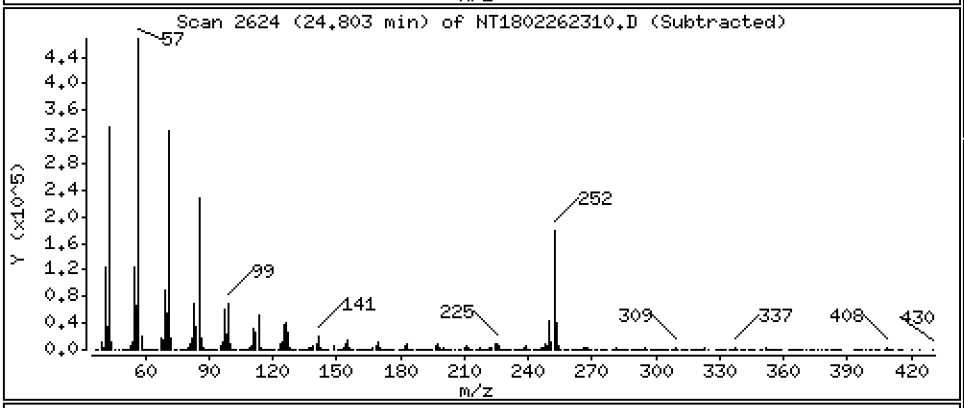
Column phase: ZB-5msi

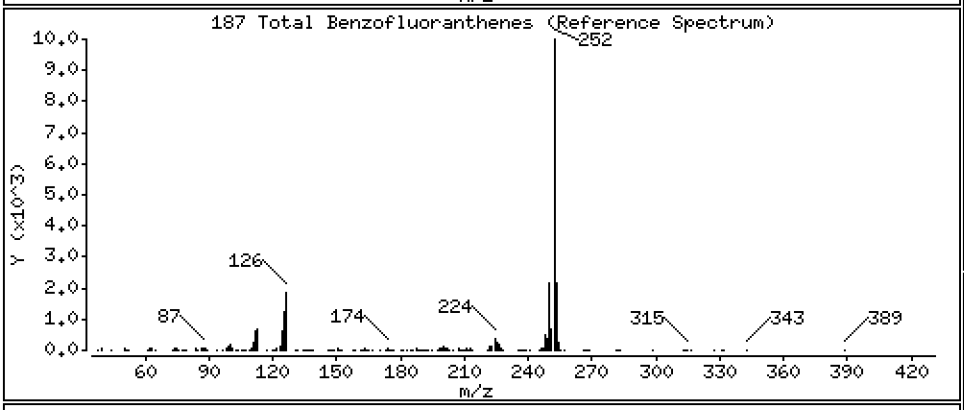
Column diameter: 0.25

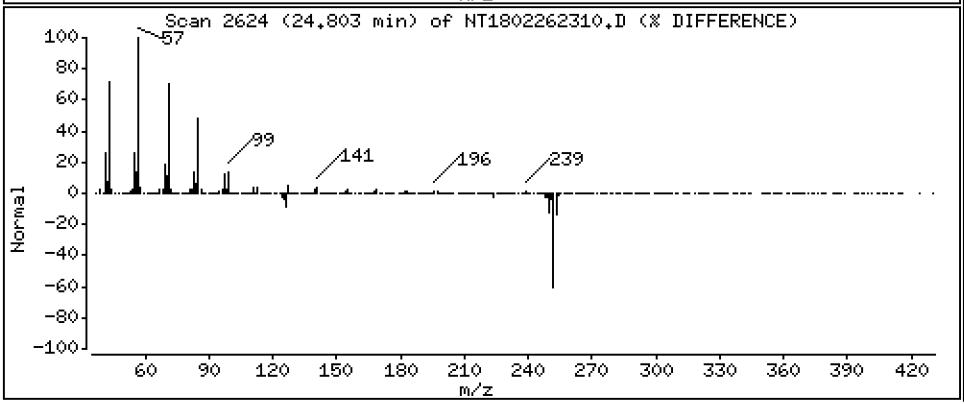
187 Total Benzofluoranthenes

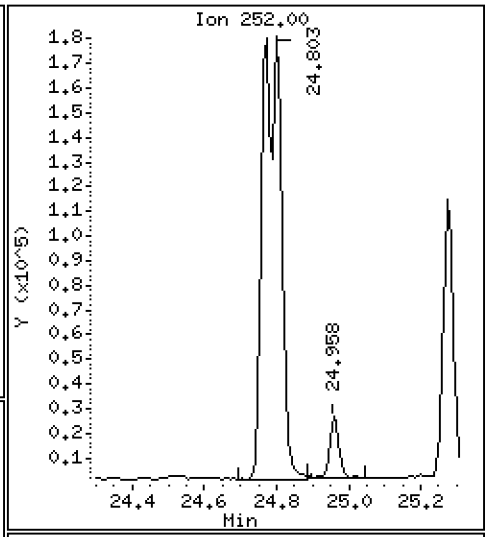
Concentration: 1.774 ug/mL

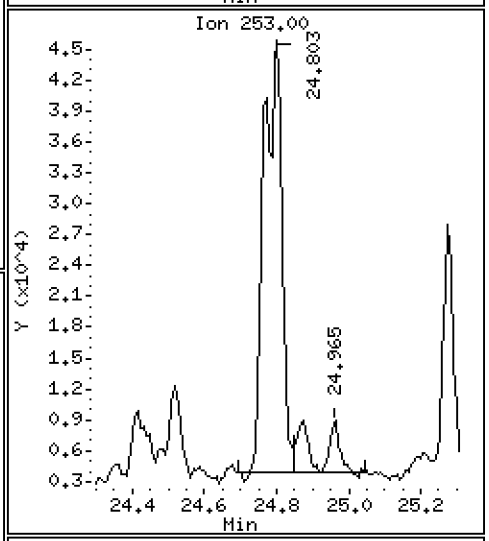


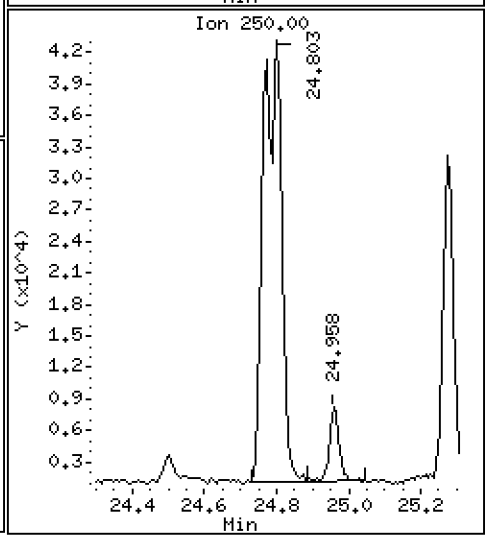












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262310.D
Lab Smp Id: 23A0134-01
Inj Date : 26-FEB-2023 17:52
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-01
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1	2-Fluorophenol	112	6.766	6.743	(0.759)	490017	5.54296	5.543
$	2	Phenol-d5	99	8.304	8.296	(0.931)	639976	5.60154	5.602
	3	Phenol	94	8.327	8.319	(0.934)	1021648	8.59454	8.595
$	5	2-Chlorophenol-d4	132	8.566	8.559	(0.961)	542931	5.46105	5.461
	4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6	2-Chlorophenol	128	Compound Not Detected.					
	7	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8	1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	259114	4.00000	
	9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10	1,2-Dichlorobenzene-d4	152	9.264	9.272	(1.039)	224396	3.18382	3.184
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	11	Benzyl alcohol	108	Compound Not Detected.					
	14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13	2-Methylphenol	108	Compound Not Detected.					
	17	Hexachloroethane	117	Compound Not Detected.					
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15	4-Methylphenol	108	9.691	9.683	(1.087)	11243	0.11731	0.1173
$	18	Nitrobenzene-d5	82	9.993	9.993	(0.879)	372793	3.68171	3.682
	19	Nitrobenzene	77	Compound Not Detected.					
	20	Isophorone	82	Compound Not Detected.					
	21	2-Nitrophenol	139	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	10.718	10.710	(0.943)	2957	0.03242	0.03242
	23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24	Benzoic acid	105	10.990	10.990	(0.967)	25013	0.72236	0.7224(MH)
	25	2,4-Dichlorophenol	162	Compound Not Detected.					
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.365	11.365	(1.000)	950101	4.00000	
	28	Naphthalene	128	11.403	11.403	(1.003)	20539	0.07032	0.07032
	29	4-Chloroaniline	127	Compound Not Detected.					
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32	2-Methylnaphthalene	142	12.788	12.788	(1.125)	12062	0.06078	0.06078
	33	Hexachlorocyclopentadiene	237	Compound Not Detected.					

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.562	13.570	(0.908)	774008	3.63514	3.635
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	14.460	14.468	(0.968)	6205	0.03472	0.03472
	40 Acenaphthylene	152	14.630	14.630	(0.979)	9900	0.03534	0.03534
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	14.939	14.947	(1.000)	505016	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.009	15.009	(1.005)	11491	0.06481	0.06481
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.334	15.334	(1.026)	17842	0.06952	0.06952
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	15.906	15.921	(1.065)	70673	0.37745	0.3775
	49 Fluorene	166	16.037	16.037	(1.073)	14166	0.06888	0.06888
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	180302	6.85995	6.860
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	17.952	17.952	(1.000)	994180	4.00000	
	60 Phenanthrene	178	17.999	17.999	(1.003)	180179	0.57619	0.5762
	61 Anthracene	178	18.092	18.092	(1.008)	65679	0.22040	0.2204
	62 Carbazole	167	18.424	18.424	(1.026)	24830	0.09093	0.09093
	63 Di-n-butylphthalate	149	19.244	19.237	(1.072)	10873	0.03597	0.03597
	64 Fluoranthene	202	20.413	20.382	(0.888)	519761	1.47359	1.474
	65 Pyrene	202	20.807	20.800	(0.905)	581394	1.54553	1.546
$	66 Terphenyl-d14	244	21.101	21.094	(0.918)	1107155	3.66950	3.669
	67 Butylbenzylphthalate	149	22.023	22.023	(0.958)	10987	0.07692	0.07692
	68 Benzo(a)anthracene	228	22.960	22.952	(0.999)	287517	0.79109	0.7911
*	69 Chrysene-d12	240	22.991	22.983	(1.000)	1006722	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.029	23.029	(1.002)	368055	0.97387	0.9739
	72 bis(2-Ethylhexyl)phthalate	149	23.053	23.053	(0.960)	120427	0.53655	0.5365
*	134 Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	1563332	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	24.771	24.764	(0.972)	353042	0.96906	0.9691
	75 Benzo(k)fluoranthene	252	24.802	24.802	(0.973)	359228	0.87005	0.8701(H)
	76 Benzo(a)pyrene	252	25.375	25.368	(0.996)	265569	0.78633	0.7863
*	77 Perylene-d12	264	25.484	25.476	(1.000)	1116679	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.943	27.920	(1.097)	144626	0.34112	0.3411
	79 Dibenzo(a,h)anthracene	278	27.943	27.927	(1.097)	39822	0.11262	0.1126
	80 Benzo(g,h,i)perylene	276	28.658	28.642	(1.125)	134948	0.39701	0.3970
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	142	13.005	13.005	(1.144)	9684	0.05390	0.05390
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.802	24.802	(0.973)	653336	1.77373	1.774
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262310.D
Lab Smp Id: 23A0134-01
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	259114	6.14
27 Naphthalene-d8	943164	471582	1886328	950101	0.74
42 Acenaphthene-d10	501893	250947	1003786	505016	0.62
59 Phenanthrene-d10	896502	448251	1793004	994180	10.90
69 Chrysene-d12	842481	421241	1684962	1006722	19.49
134 Di-n-octylphthala	1278043	639022	2556086	1563332	22.32
77 Perylene-d12	915681	457841	1831362	1116679	21.95

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.94	-0.05
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.00
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	-0.00
77 Perylene-d12	25.48	24.98	25.98	25.48	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262310.D

Lab ID: 23A0134-01
nt18.i, ABN.m, 26-FEB-2023 17:52

RT	CO-ELUTION COMPOUNDS
27.943	Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene
27.943	Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: NT1802262302.D

On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

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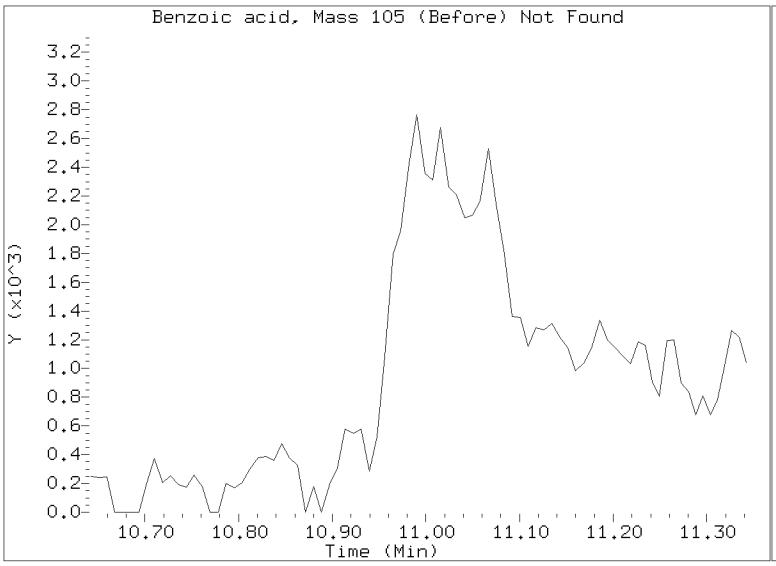
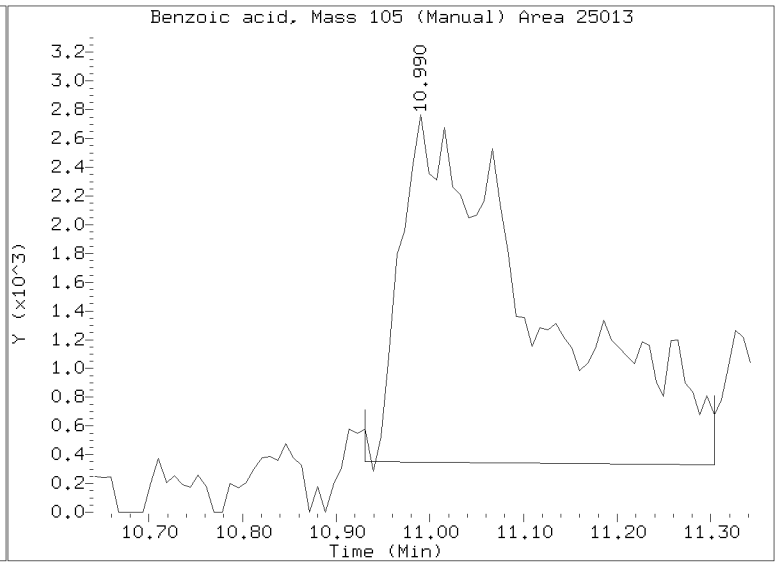
Injection Date: 26-FEB-2023 17:52
Lab ID:23A0134-01 Client ID:
Report Date: 03/10/2023 07:46





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1188

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-02 C	SDG:	23A0134
Sampled:	01/06/23 09:36	Prepared:	01/19/23 13:35	File ID:	NT1802262311.D
% Solids:	46.55	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 18:32
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	21.59 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	462		4.4	19.9
106-44-5	4-Methylphenol	1	19.9	U	7.4	19.9
91-20-3	Naphthalene	1	12.8	J	4.2	19.9
91-57-6	2-Methylnaphthalene	1	9.8	J	4.5	19.9
208-96-8	Acenaphthylene	1	28.0		6.2	19.9
131-11-3	Dimethylphthalate	1	19.9	U	4.4	19.9
83-32-9	Acenaphthene	1	87.1		5.2	19.9
132-64-9	Dibenzofuran	1	50.1		14.0	19.9
86-73-7	Fluorene	1	74.1		14.5	19.9
85-01-8	Phenanthrene	1	610		8.7	19.9
120-12-7	Anthracene	1	162		7.2	19.9
206-44-0	Fluoranthene	1	1400		6.1	19.9
129-00-0	Pyrene	1	1120		5.7	19.9
85-68-7	Butylbenzylphthalate	1	12.0	J	9.4	19.9
56-55-3	Benzo(a)anthracene	1	558		5.9	19.9
218-01-9	Chrysene	1	709		6.0	19.9
117-81-7	bis(2-Ethylhexyl)phthalate	1	96.1		5.4	49.8
	Benzofluoranthenes, Total	1	915		10.0	39.8
50-32-8	Benzo(a)pyrene	1	346		4.2	19.9
193-39-5	Indeno(1,2,3-cd)pyrene	1	95.2		14.6	19.9
53-70-3	Dibenzo(a,h)anthracene	1	34.1		17.1	19.9
191-24-2	Benzo(g,h,i)perylene	1	87.3		13.5	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	746.26	554	74.2	27 - 120	
Phenol-d5	746.26	560	75.0	29 - 120	
2-Chlorophenol-d4	746.26	554	74.3	31 - 120	
1,2-Dichlorobenzene-d4	497.51	317	63.8	32 - 120	
Nitrobenzene-d5	497.51	363	73.0	30 - 120	
2-Fluorobiphenyl	497.51	357	71.9	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1188

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-02 C	SDG:	23A0134
Sampled:	01/06/23 09:36	Prepared:	01/19/23 13:35	File ID:	NT1802262311.D
% Solids:	46.55	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 18:32
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	21.59 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	746.26	705	94.5	24 - 134	
p-Terphenyl-d14	497.51	383	77.0	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D

Date : 26-FEB-2023 18:32

Client ID:

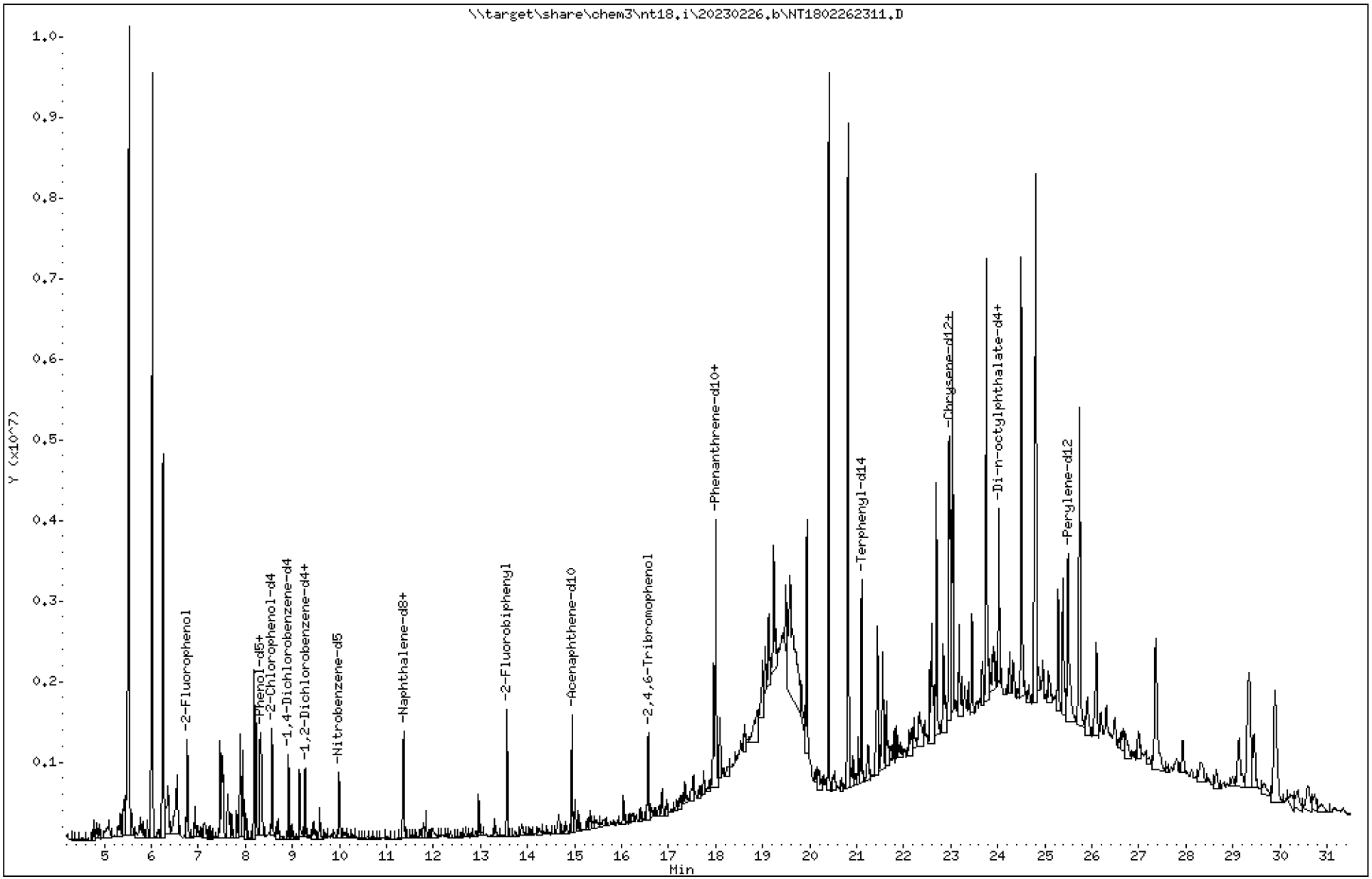
Instrument: nt18.i

Sample Info: 23A0134-02

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

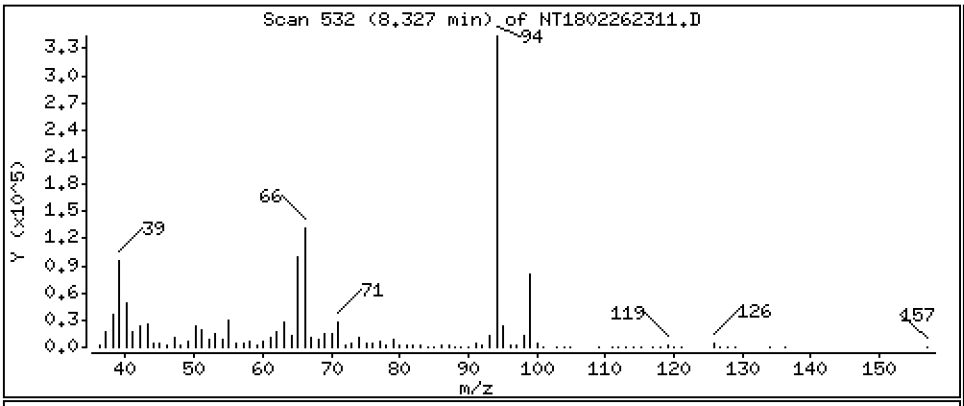
Operator: VTS

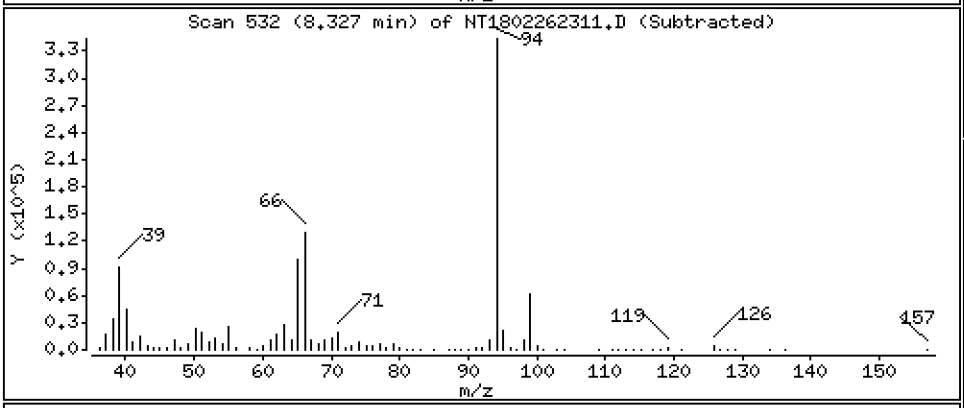
Column phase: ZB-5msi

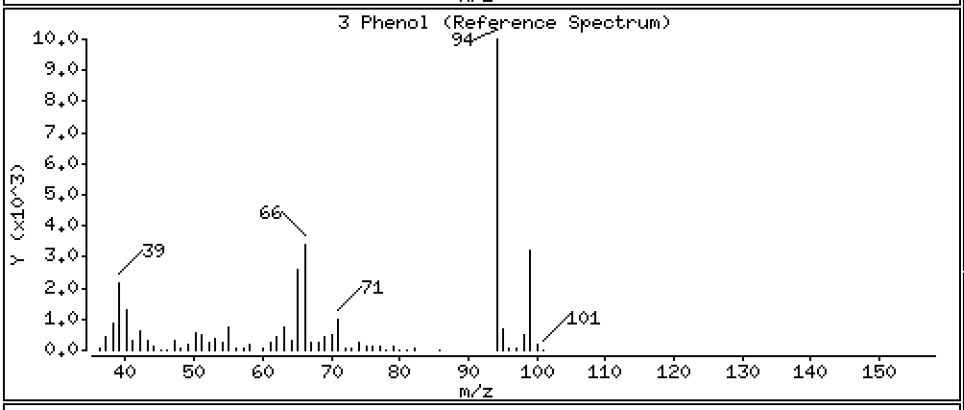
Column diameter: 0.25

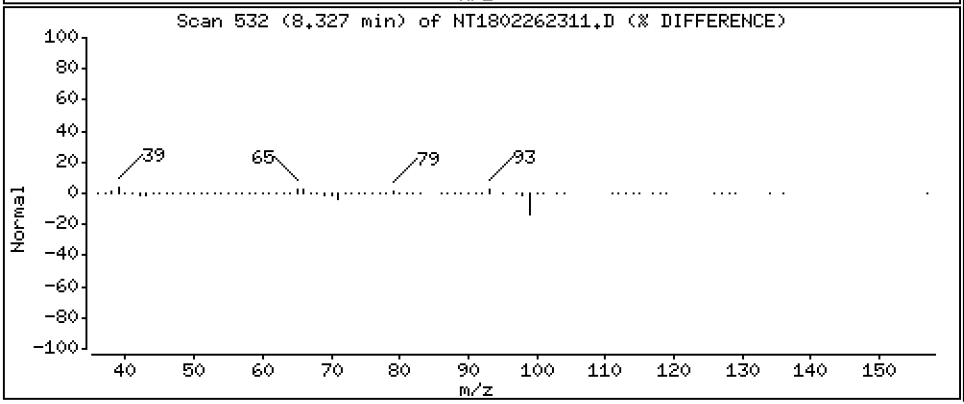
3 Phenol

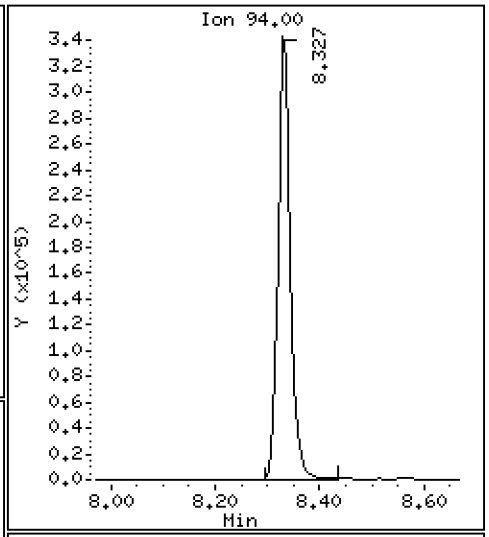
Concentration: 4.643 ug/mL

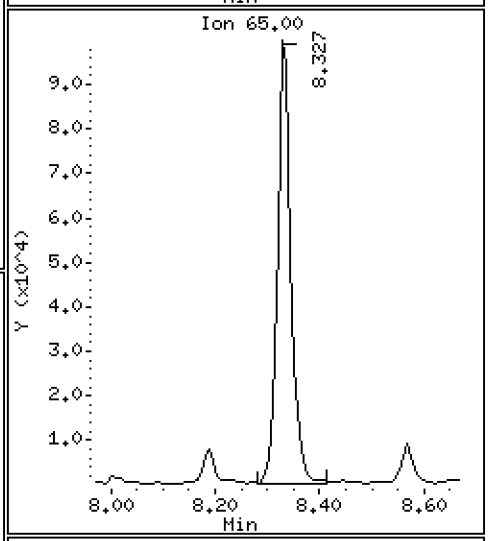


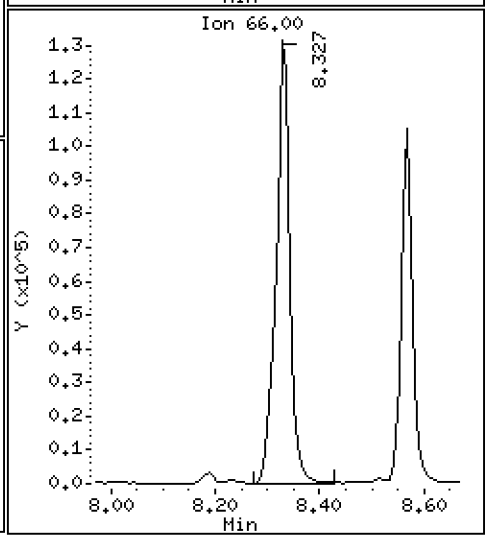












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

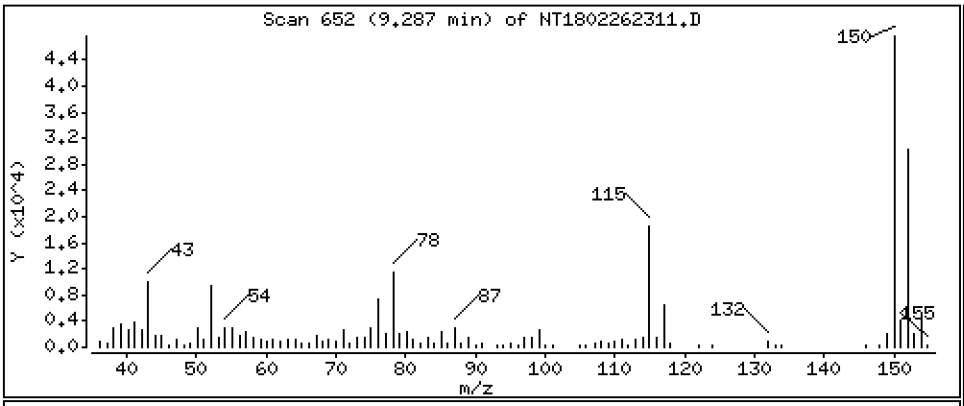
Operator: VTS

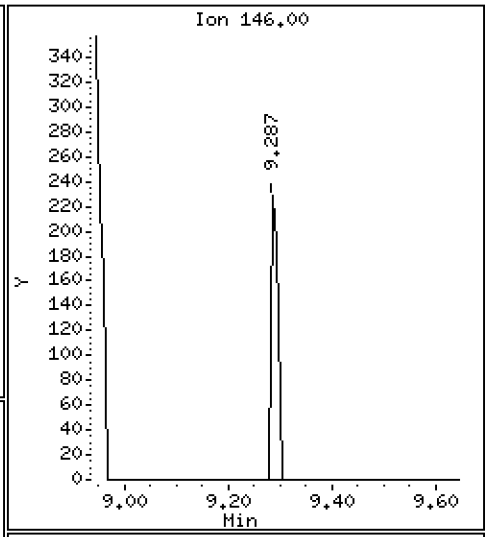
Column phase: ZB-5msi

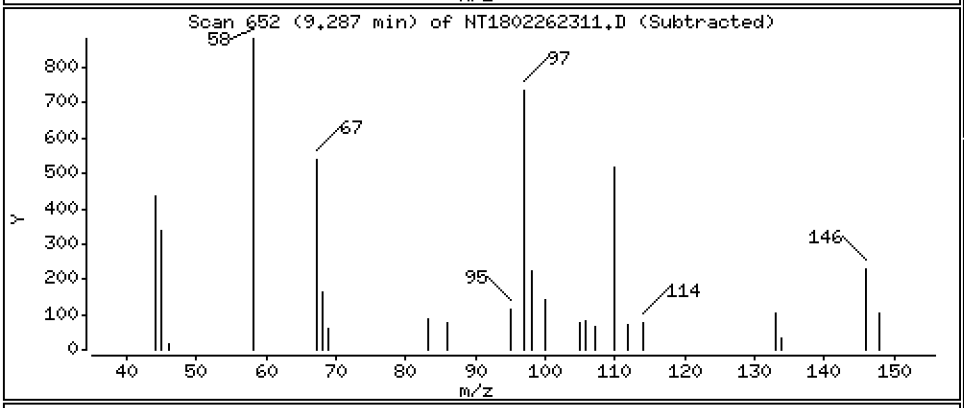
Column diameter: 0.25

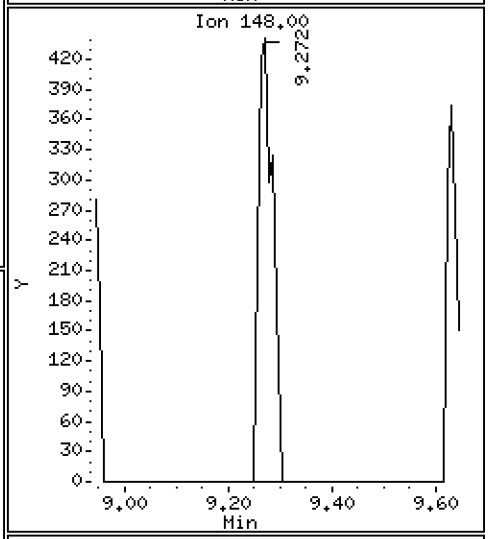
12 1,2-Dichlorobenzene

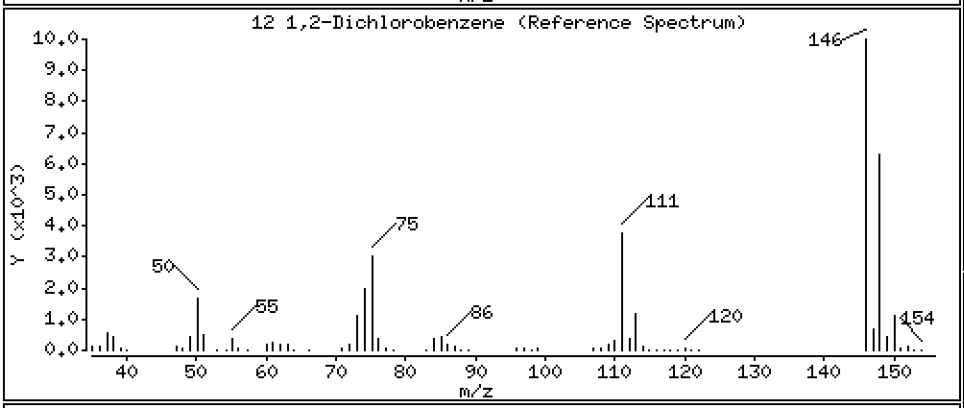
Concentration: 0.001807 ug/mL

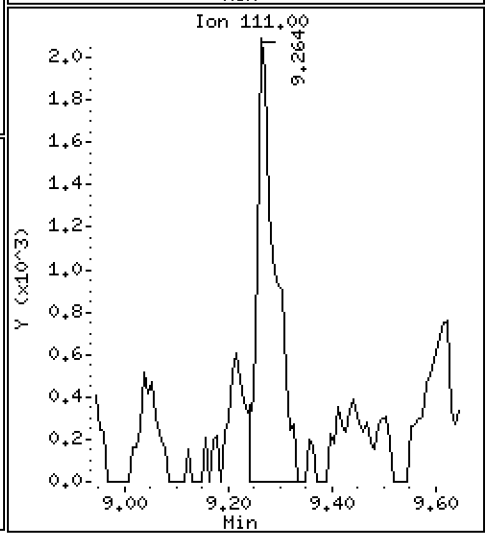


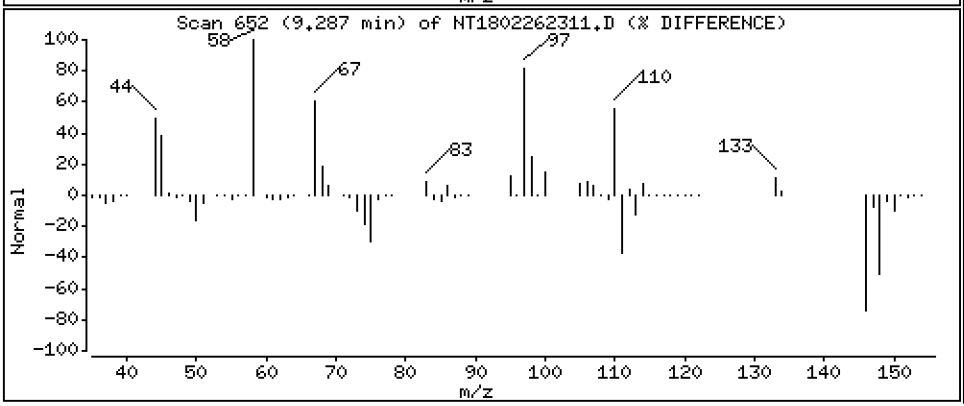












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

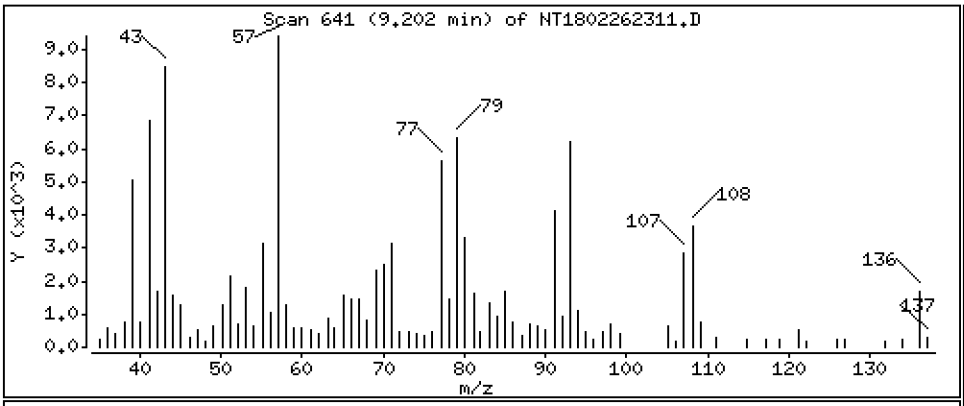
Operator: VTS

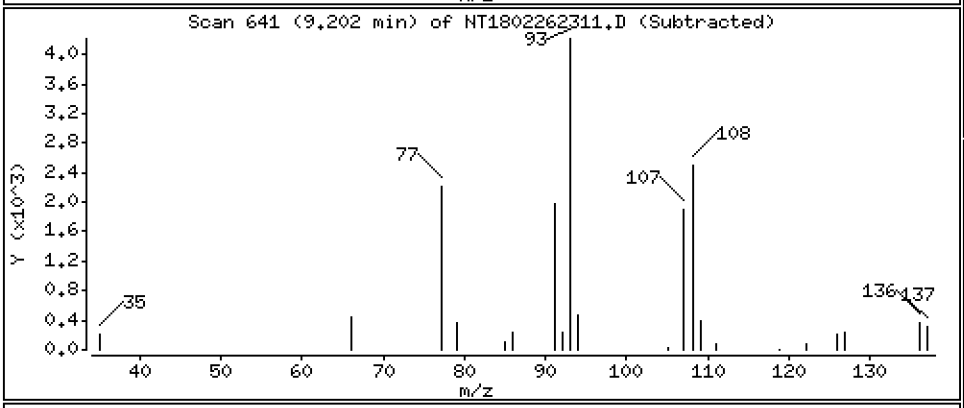
Column phase: ZB-5msi

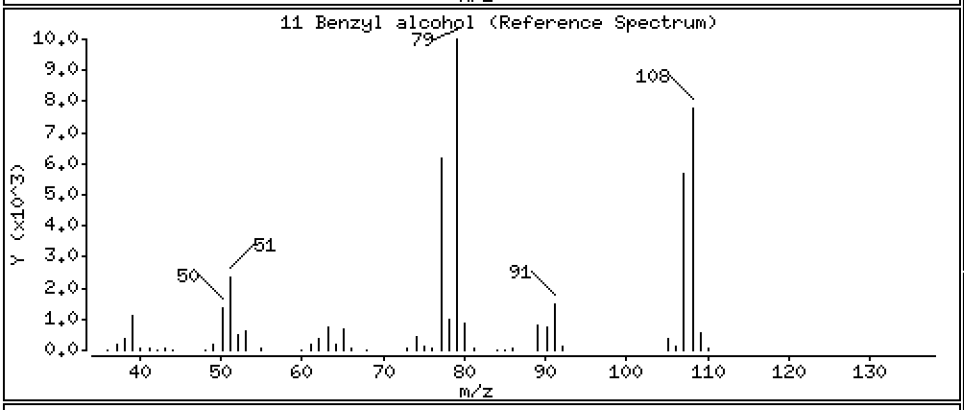
Column diameter: 0.25

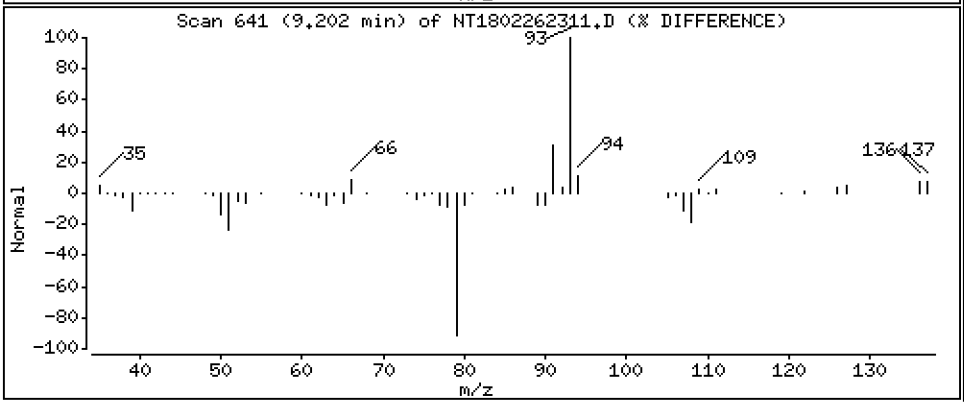
11 Benzyl alcohol

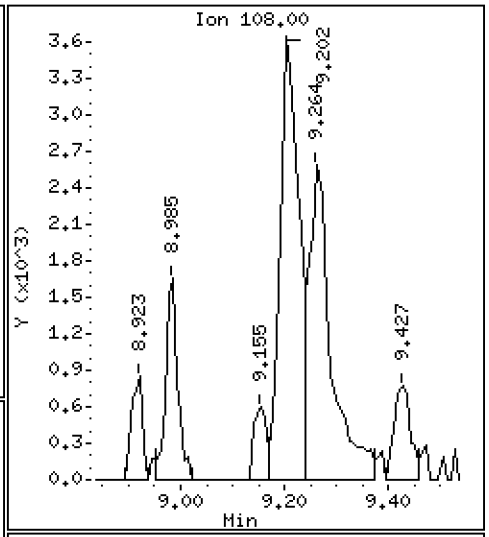
Concentration: 0.1656 ug/mL

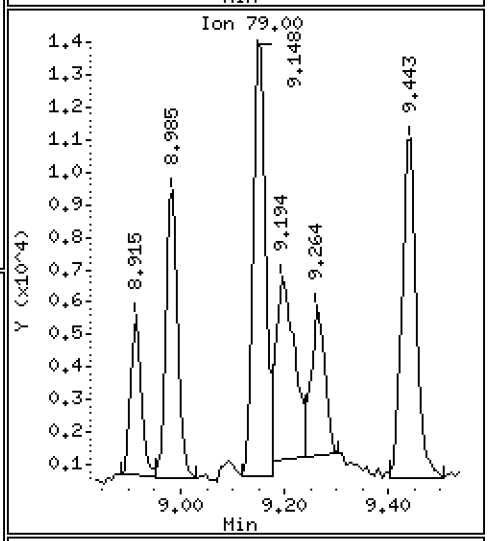


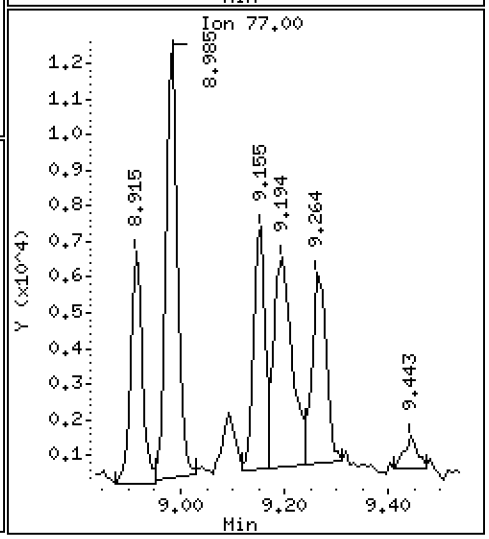












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

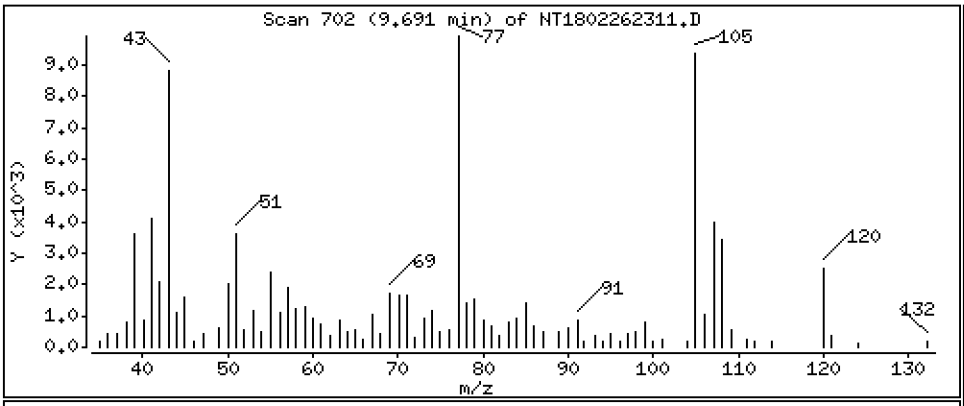
Operator: VTS

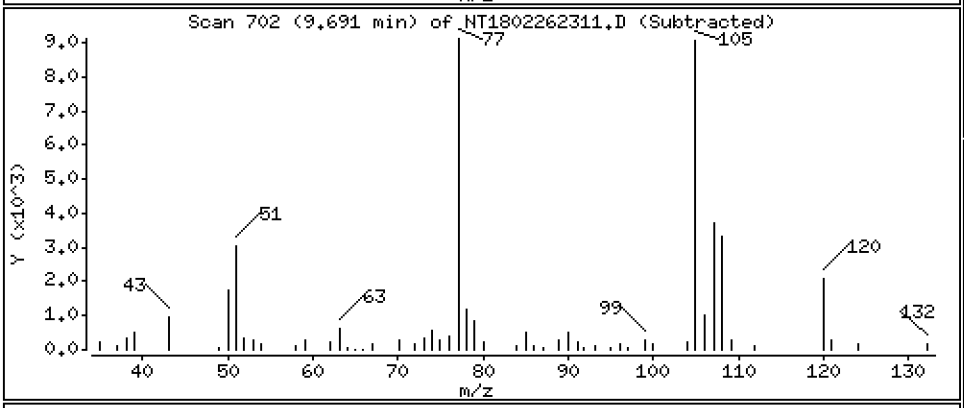
Column phase: ZB-5msi

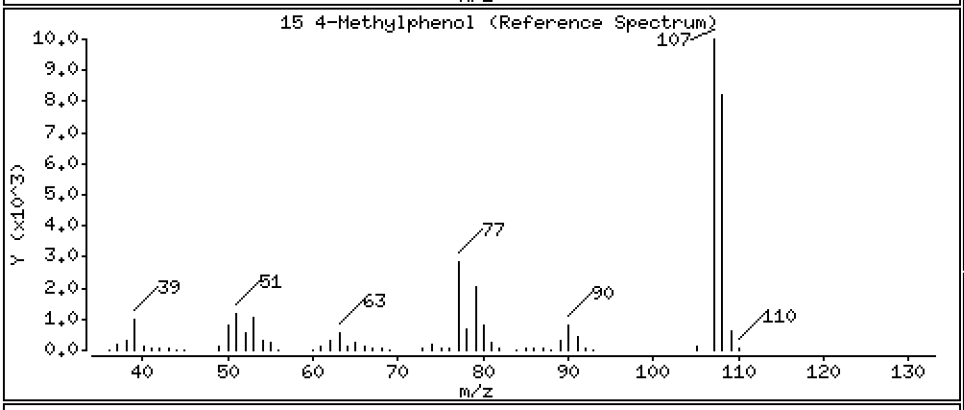
Column diameter: 0.25

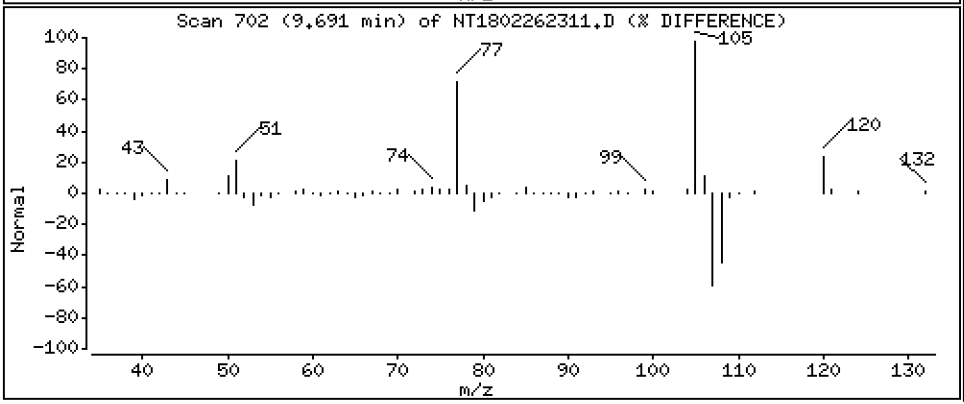
15 4-Methylphenol

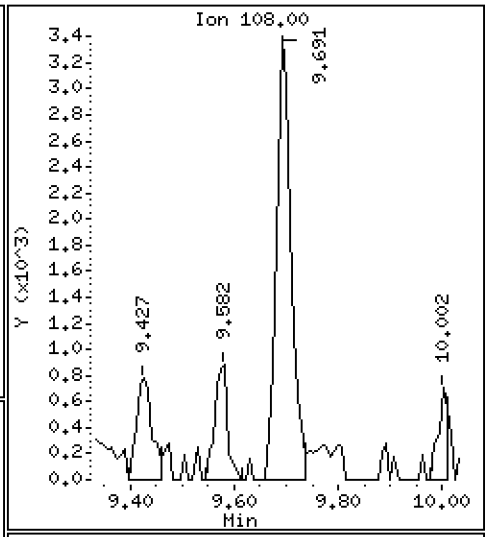
Concentration: 0.06894 ug/mL

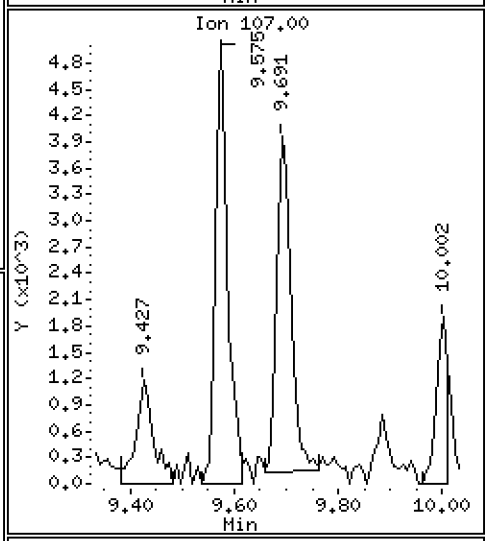


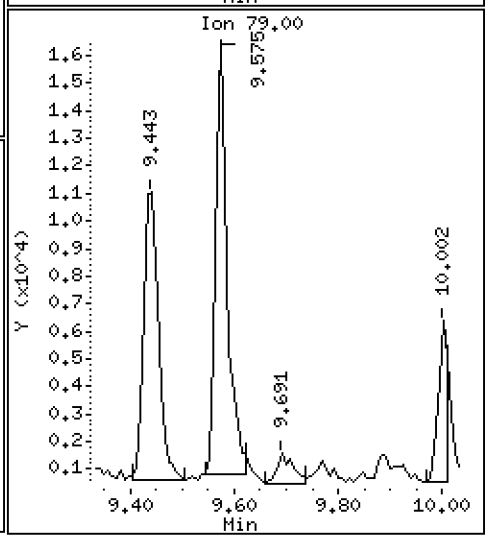












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

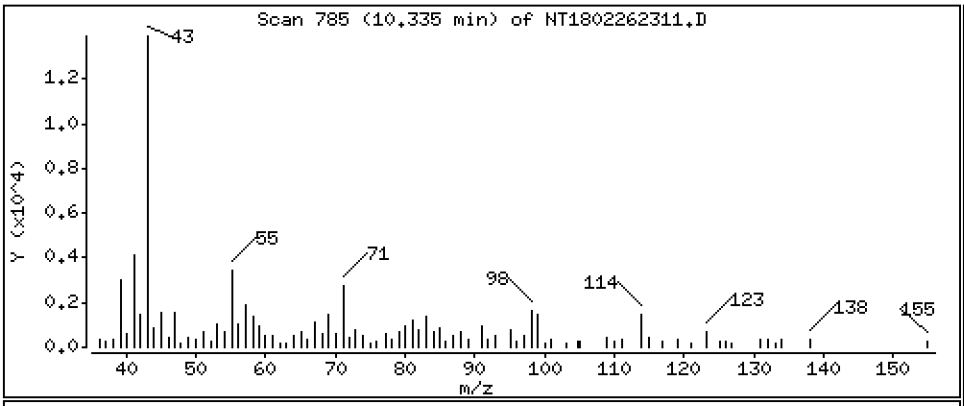
Operator: VTS

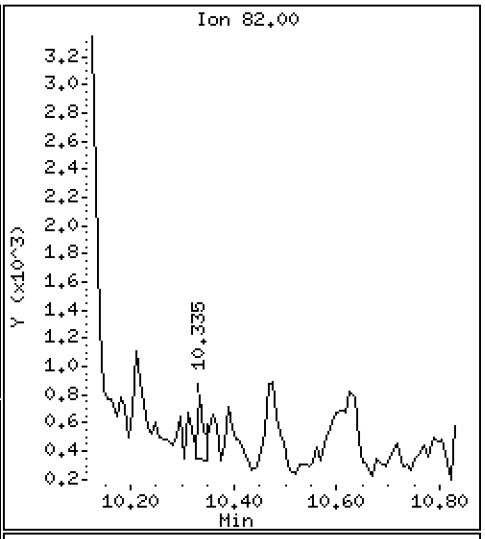
Column phase: ZB-5msi

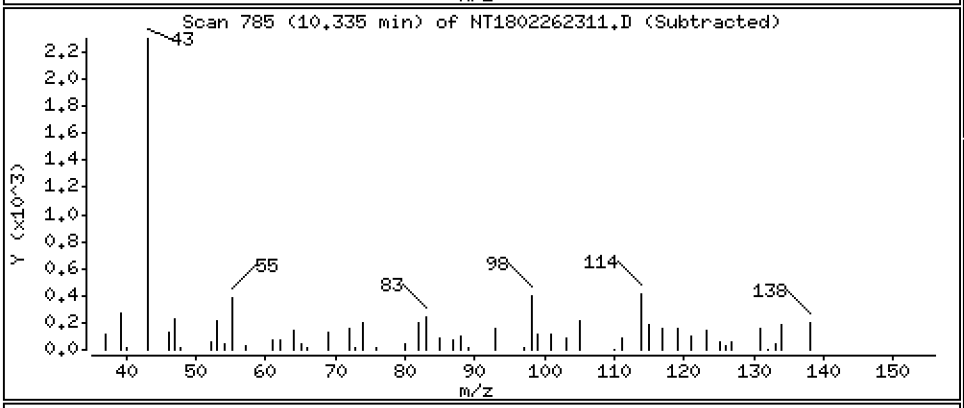
Column diameter: 0.25

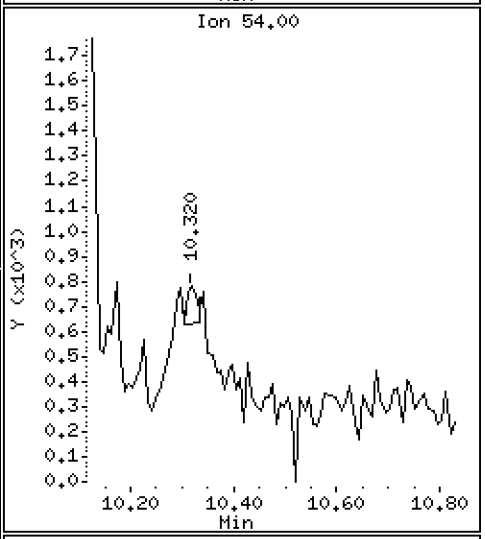
20 Isophorone

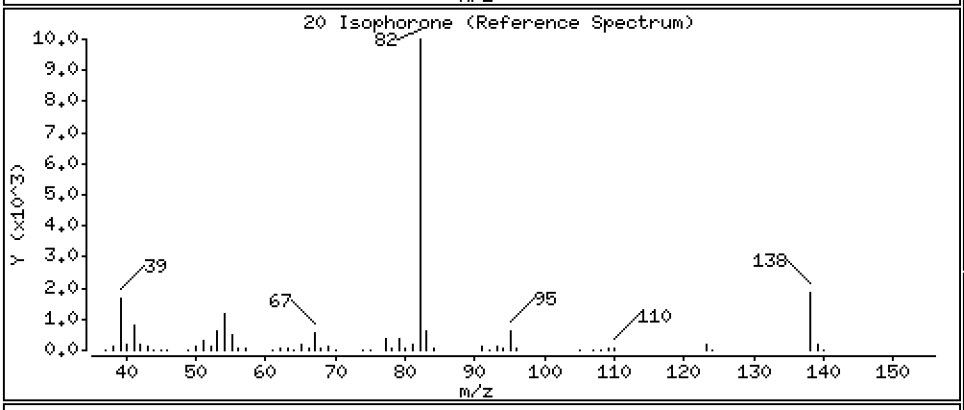
Concentration: 0.003229 ug/mL

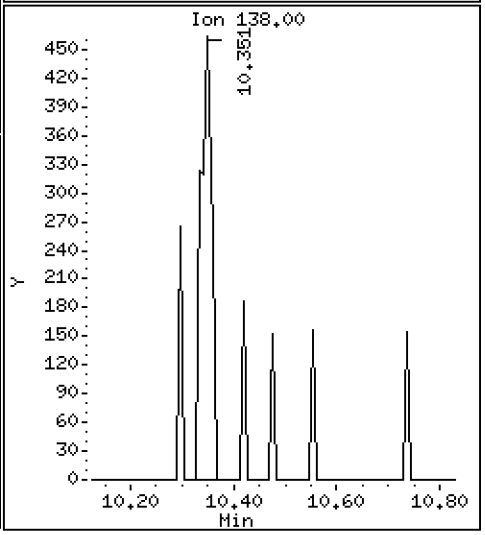


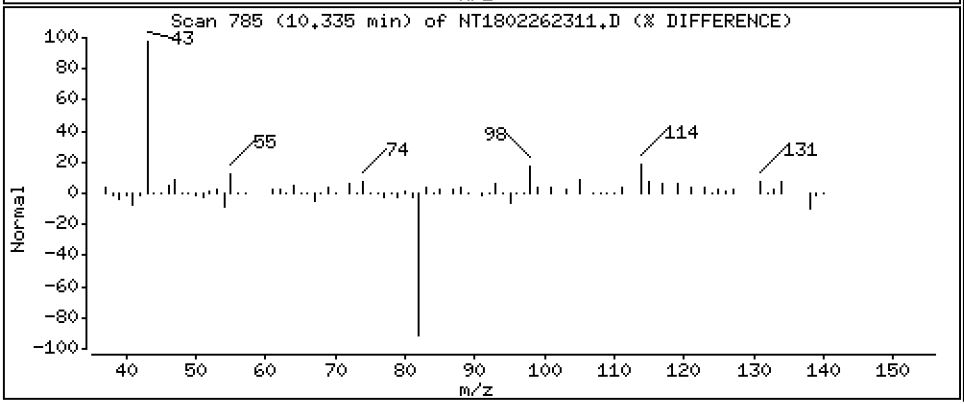












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

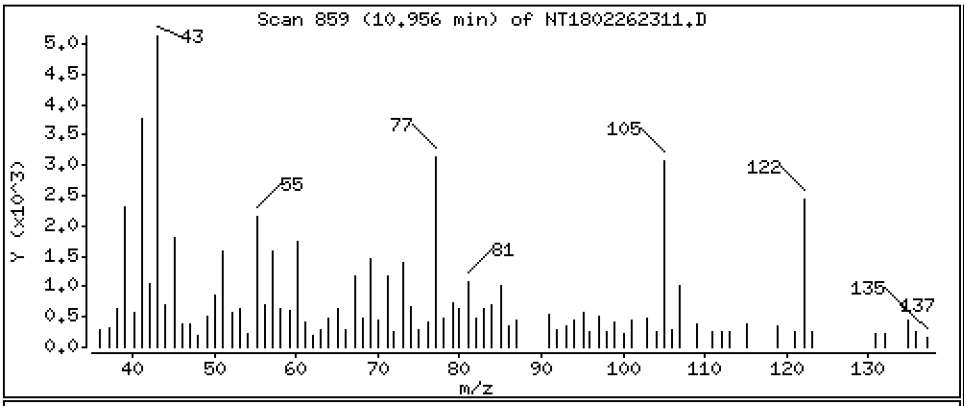
Operator: VTS

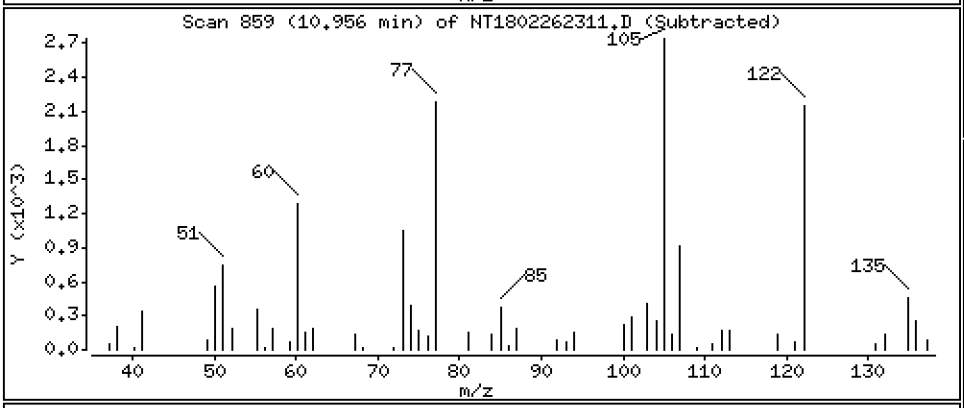
Column phase: ZB-5msi

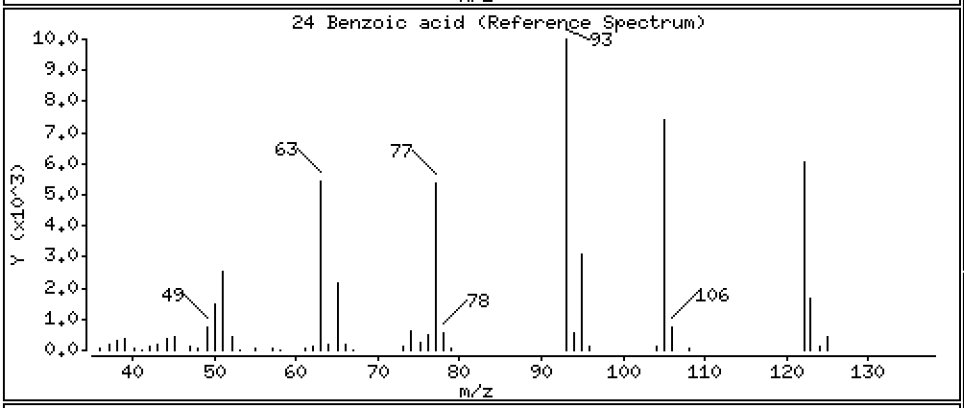
Column diameter: 0.25

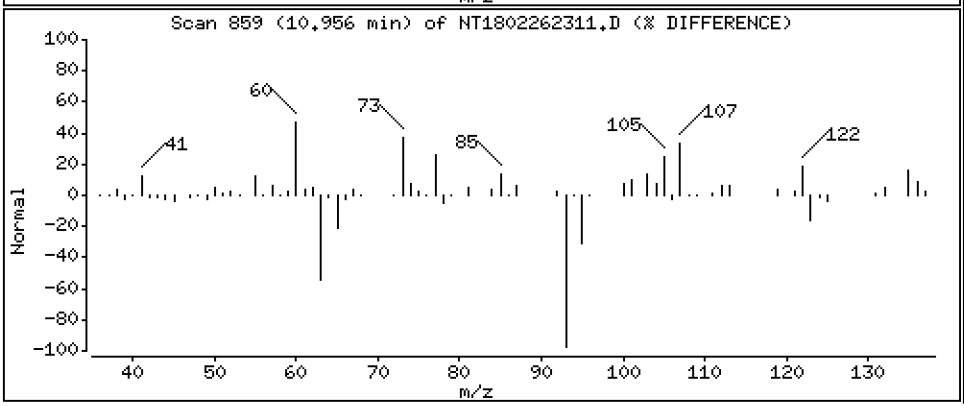
24 Benzoic acid

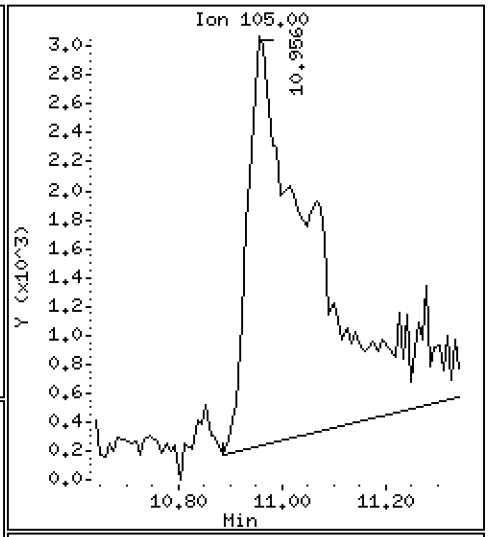
Concentration: 0.8809 ug/mL

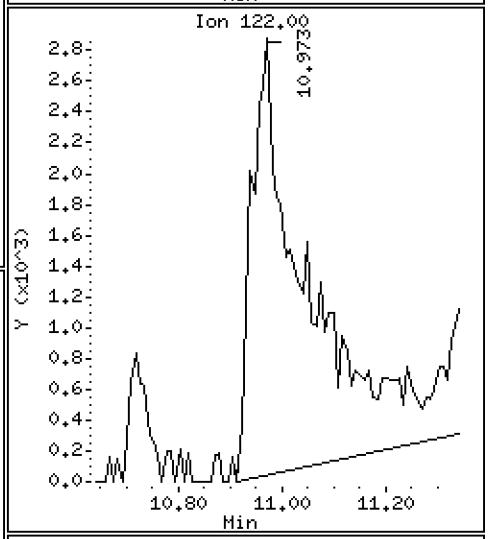


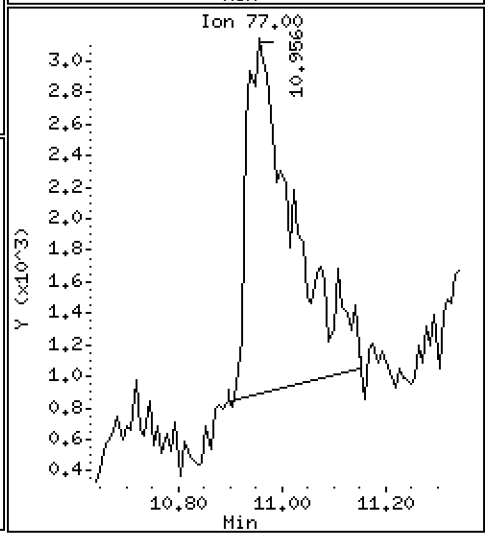












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

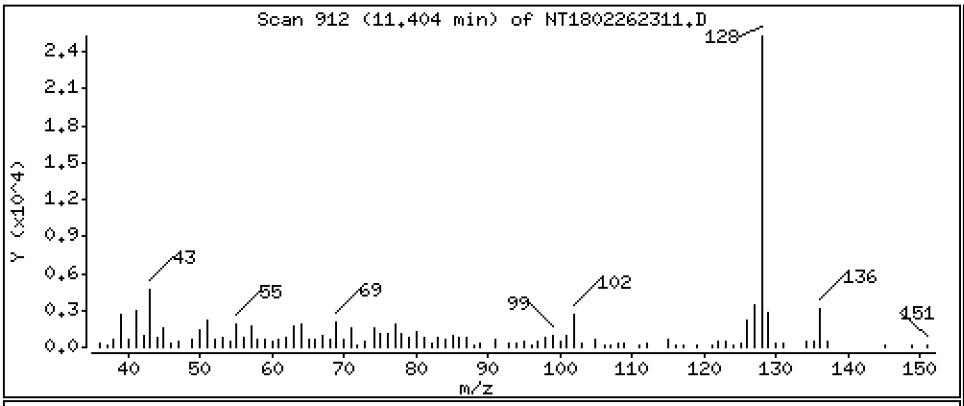
Operator: VTS

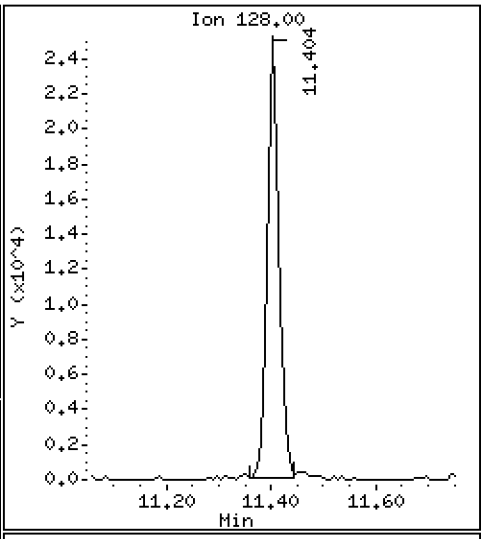
Column phase: ZB-5msi

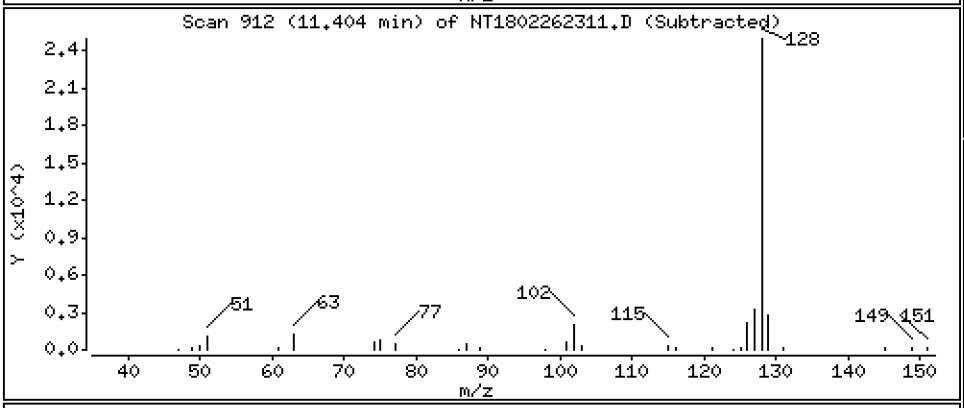
Column diameter: 0.25

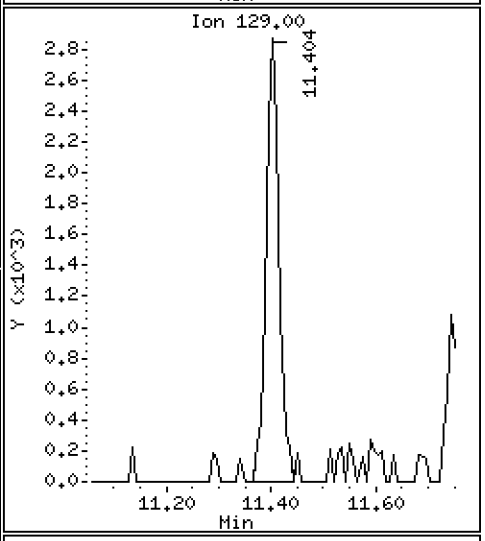
28 Naphthalene

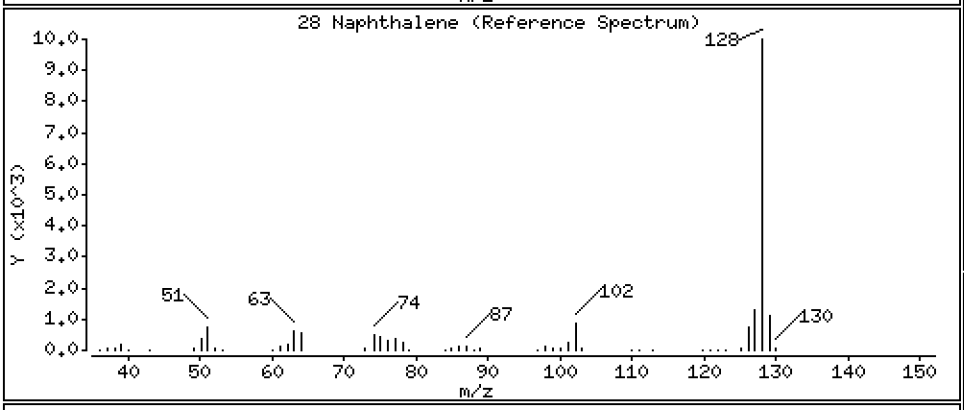
Concentration: 0.1288 ug/mL

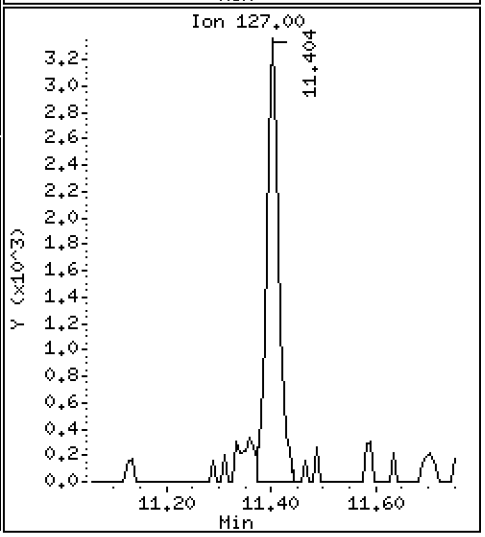


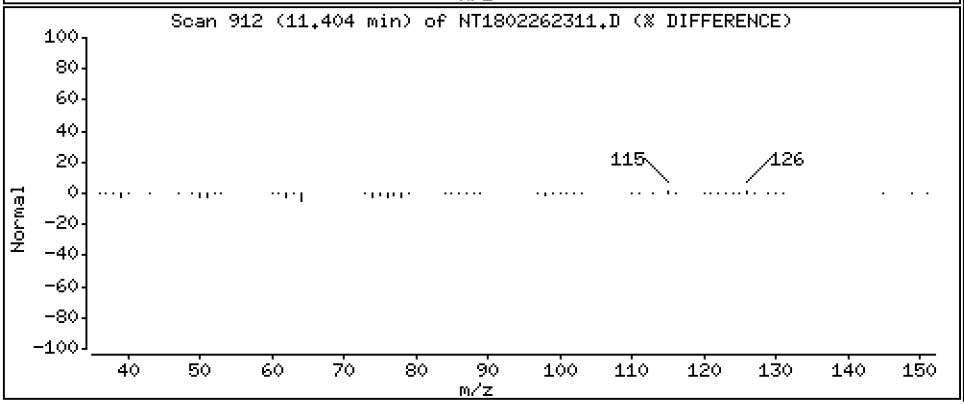












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

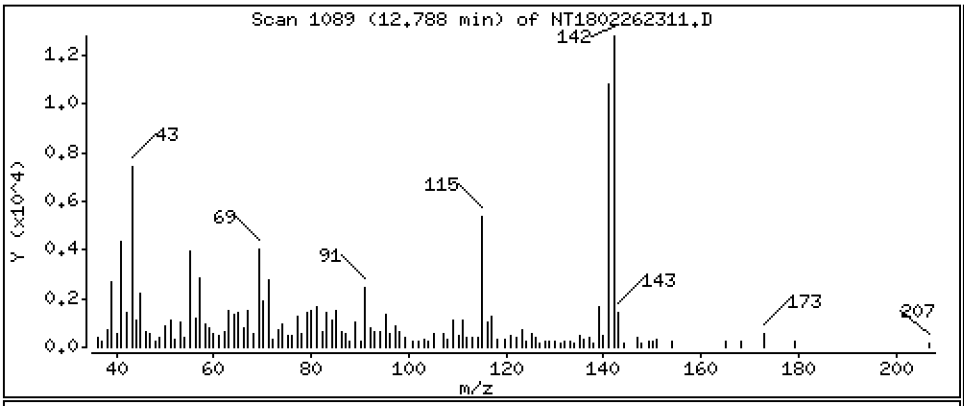
Operator: VTS

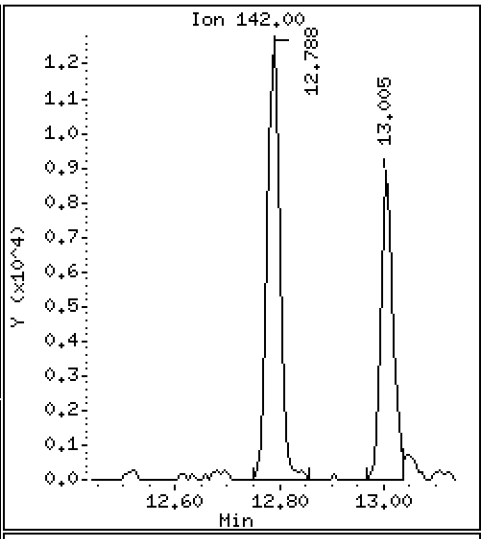
Column phase: ZB-5msi

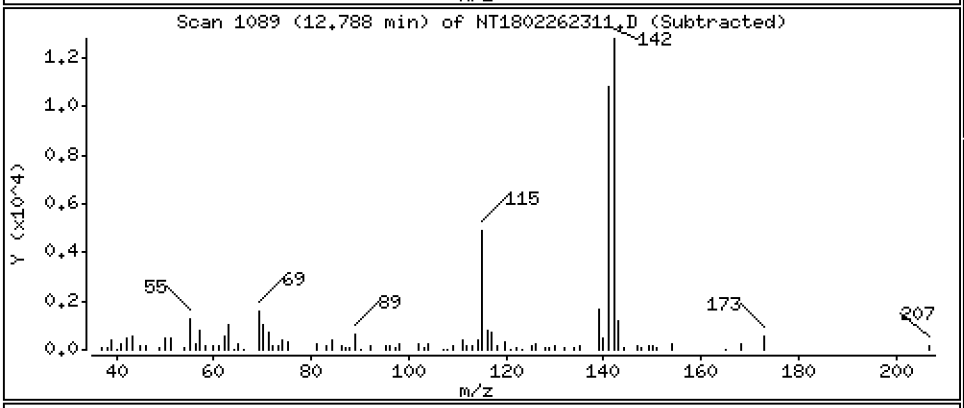
Column diameter: 0.25

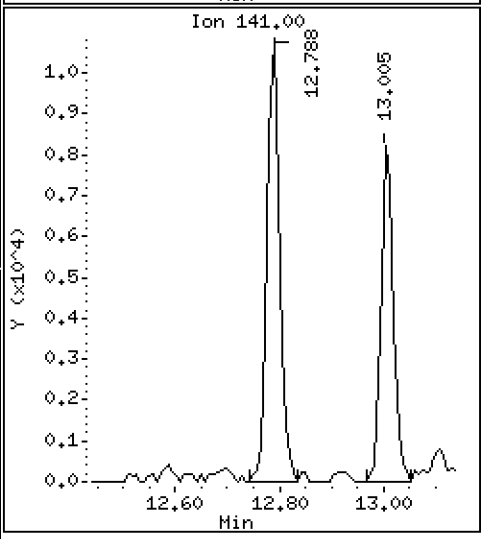
32 2-Methylnaphthalene

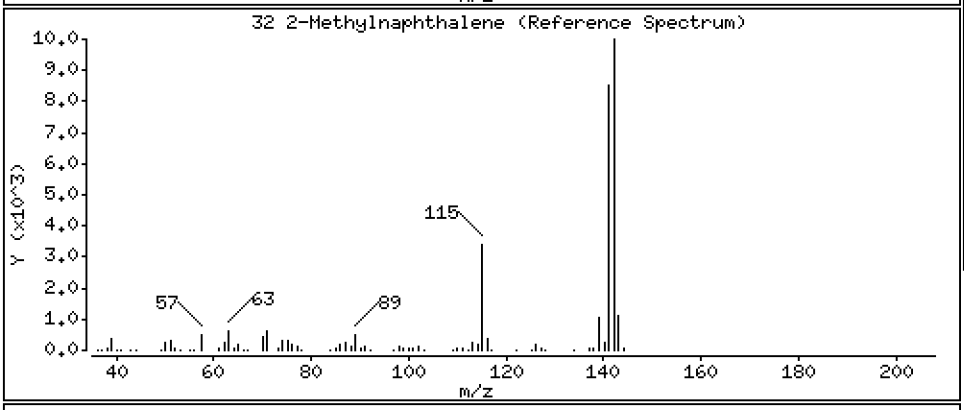
Concentration: 0.09873 ug/mL

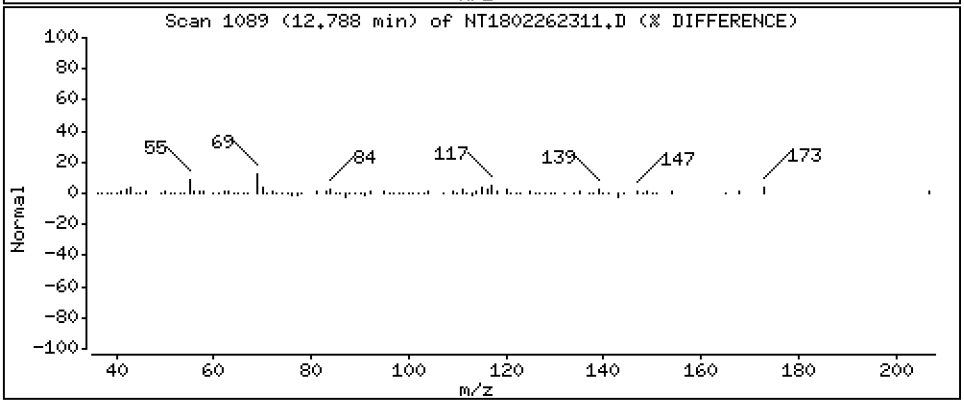












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

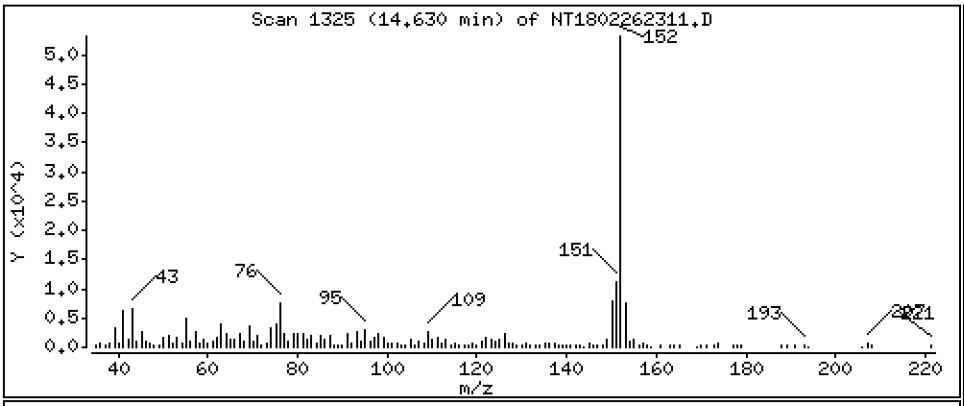
Operator: VTS

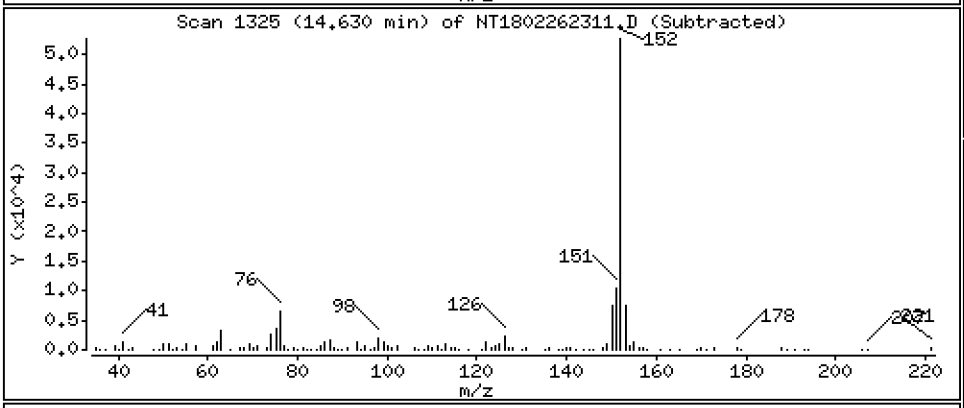
Column phase: ZB-5msi

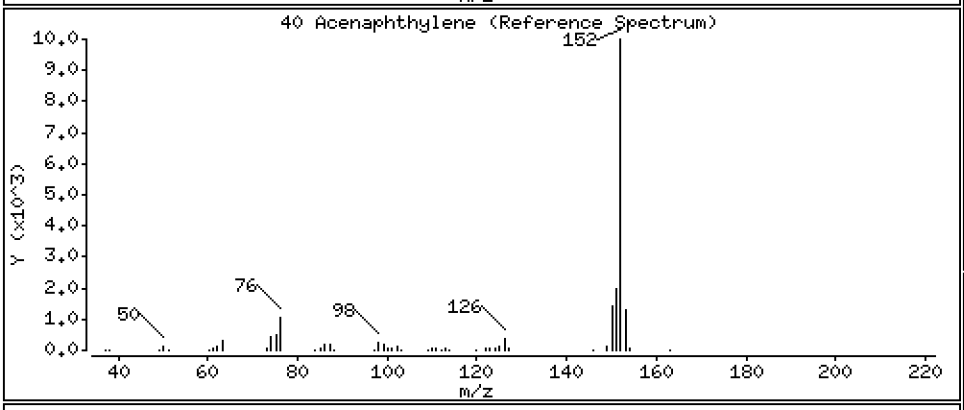
Column diameter: 0.25

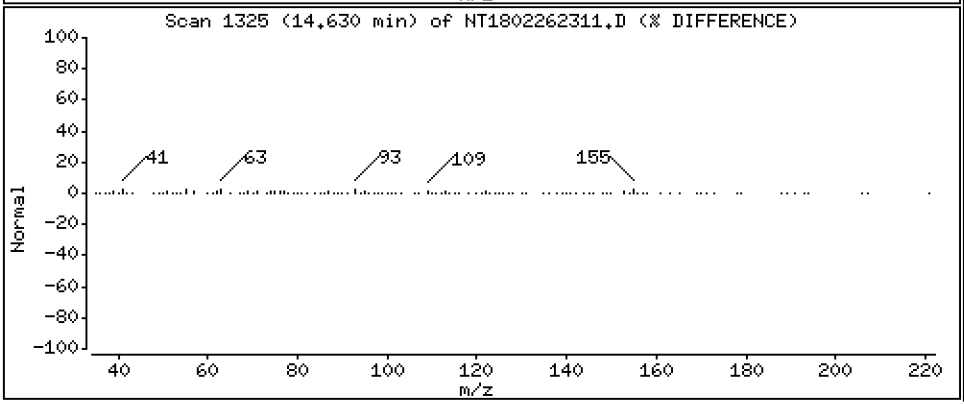
40 Acenaphthylene

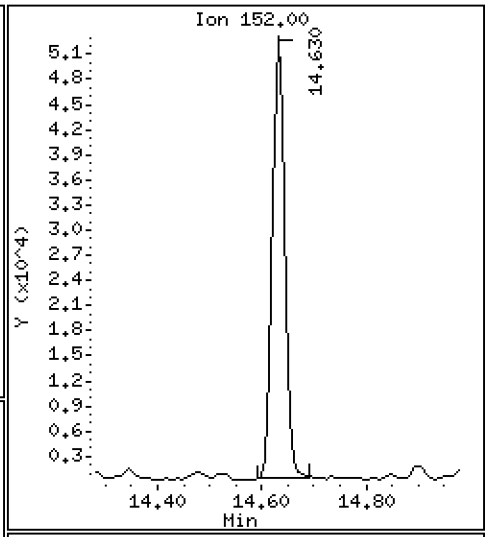
Concentration: 0.2815 ug/mL

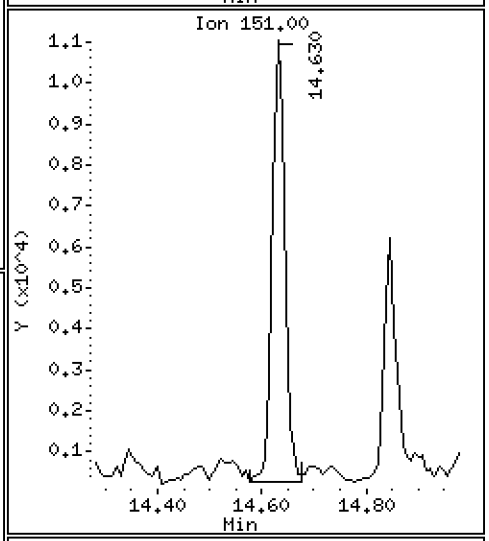


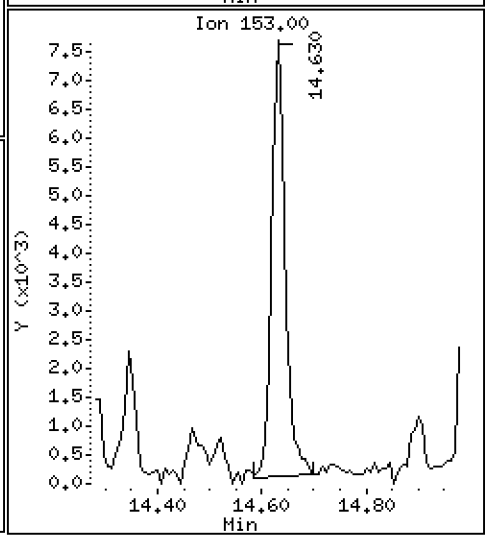












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

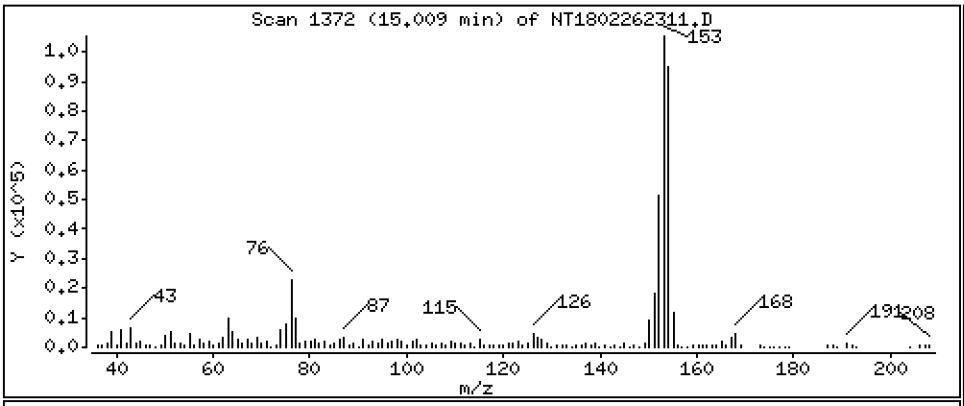
Operator: VTS

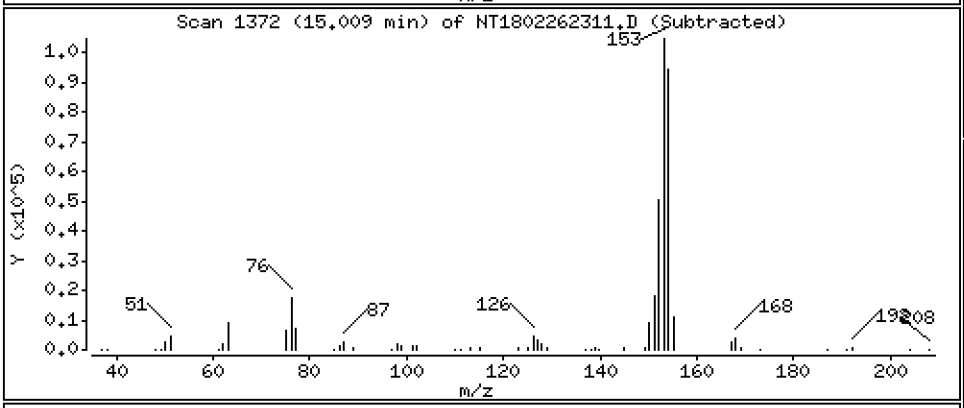
Column phase: ZB-5msi

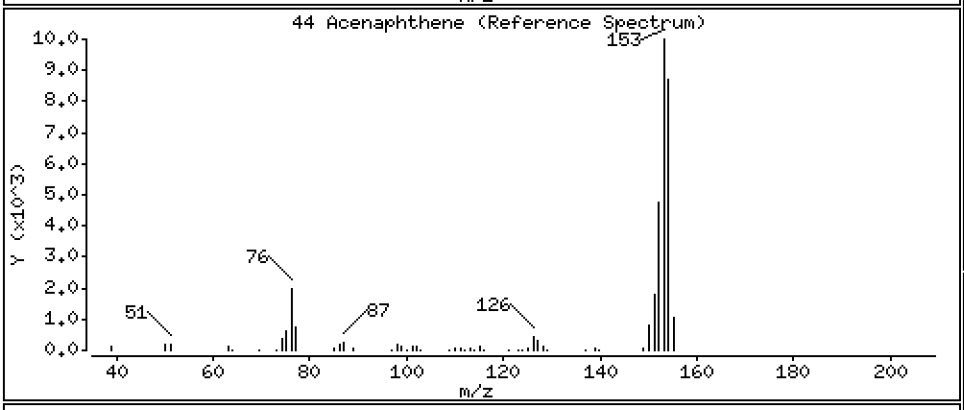
Column diameter: 0.25

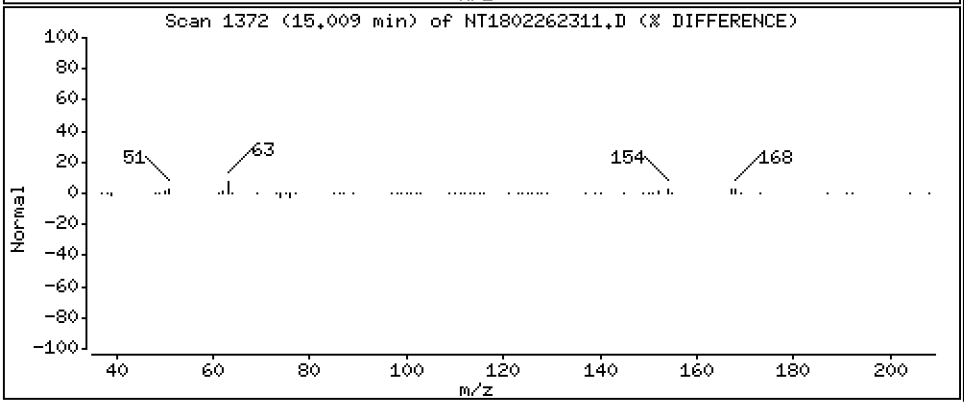
44 Acenaphthene

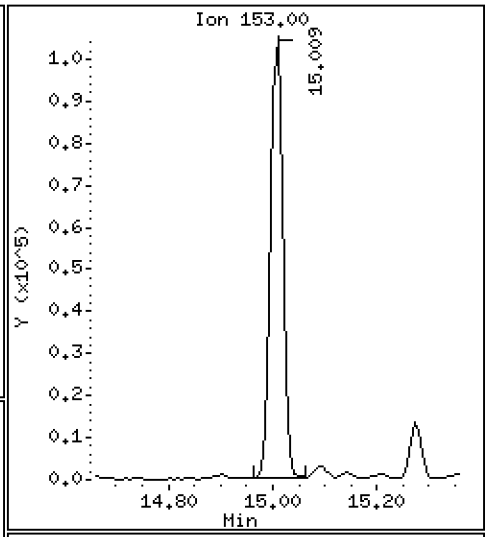
Concentration: 0.8757 ug/mL

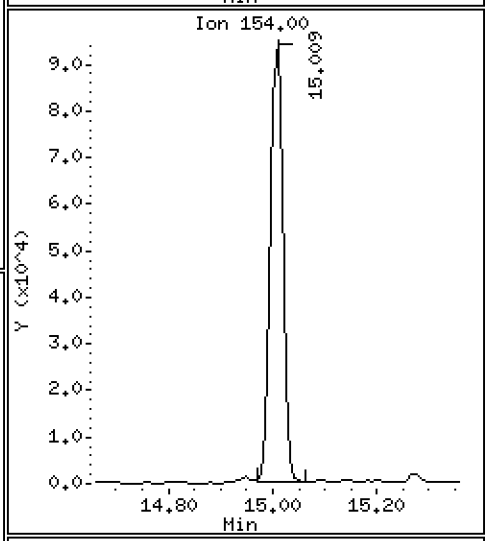


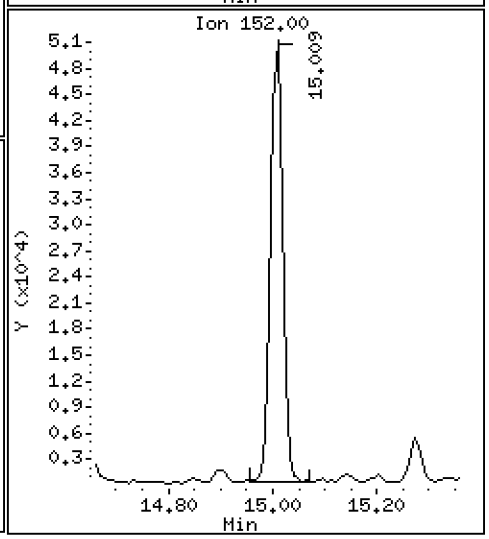












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

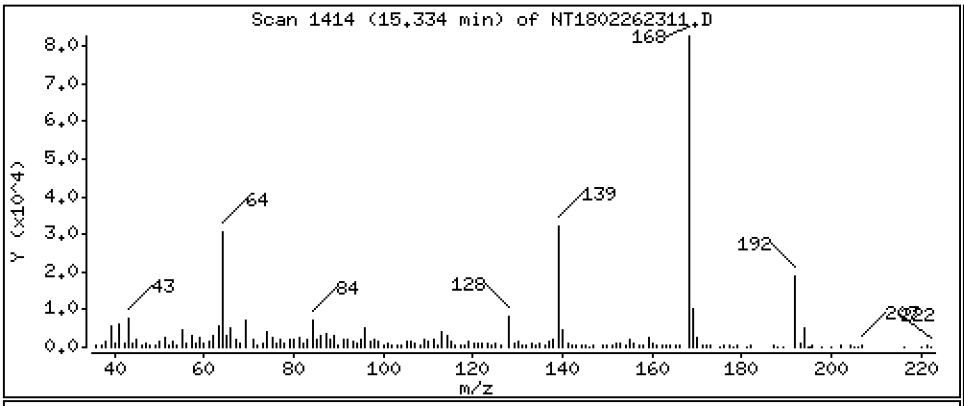
Operator: VTS

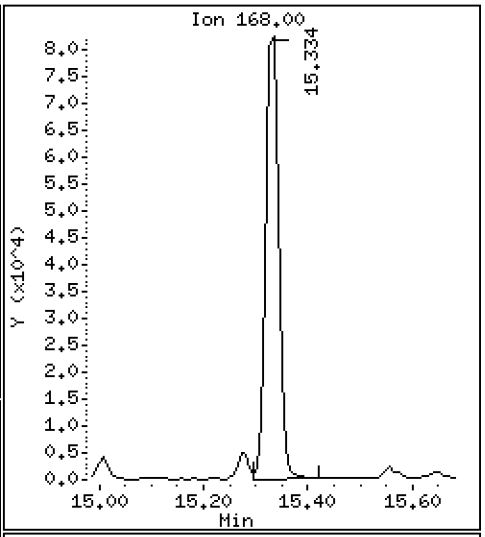
Column phase: ZB-5msi

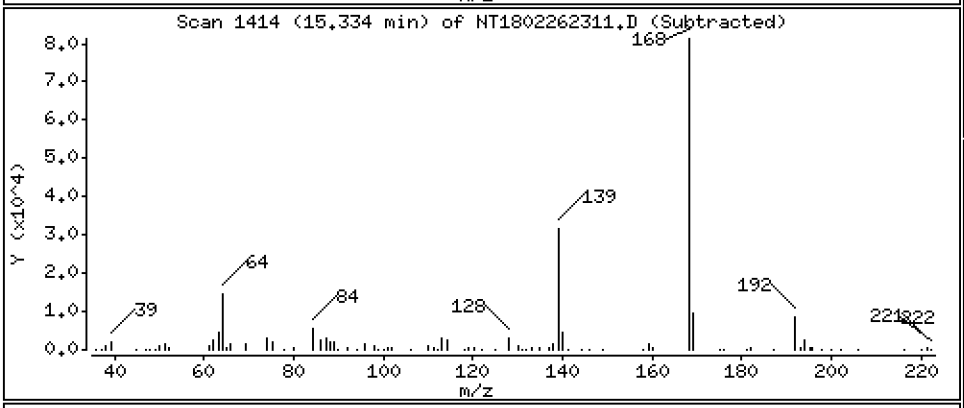
Column diameter: 0.25

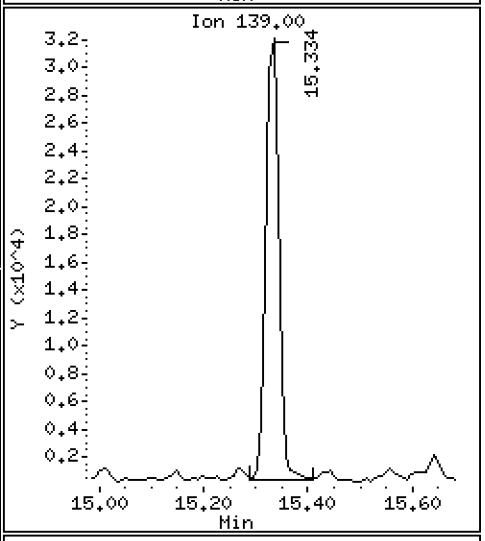
46 Dibenzofuran

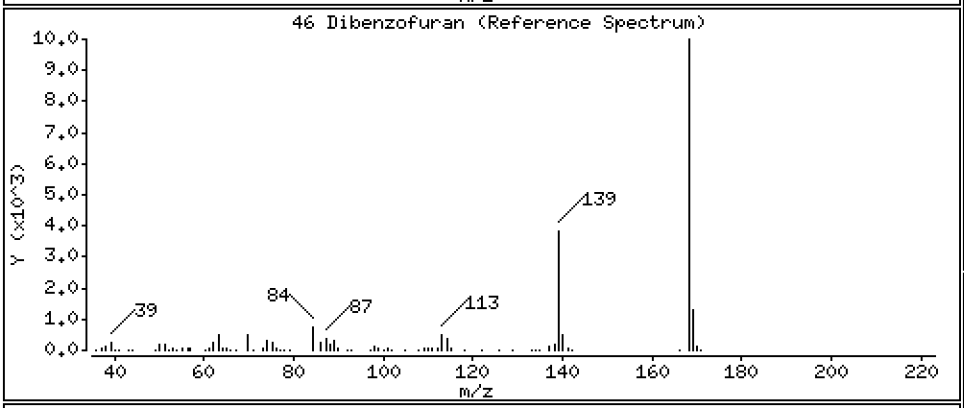
Concentration: 0.5035 ug/mL

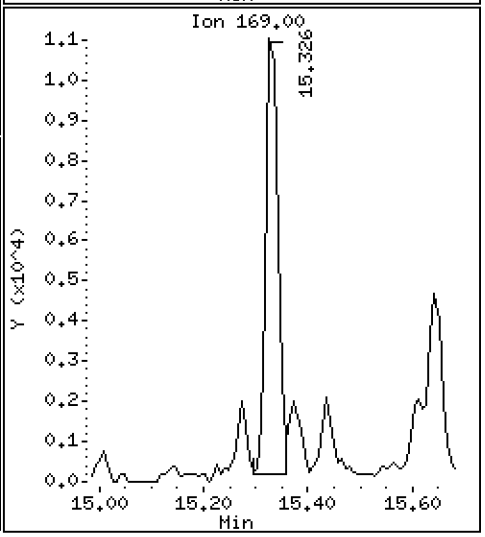


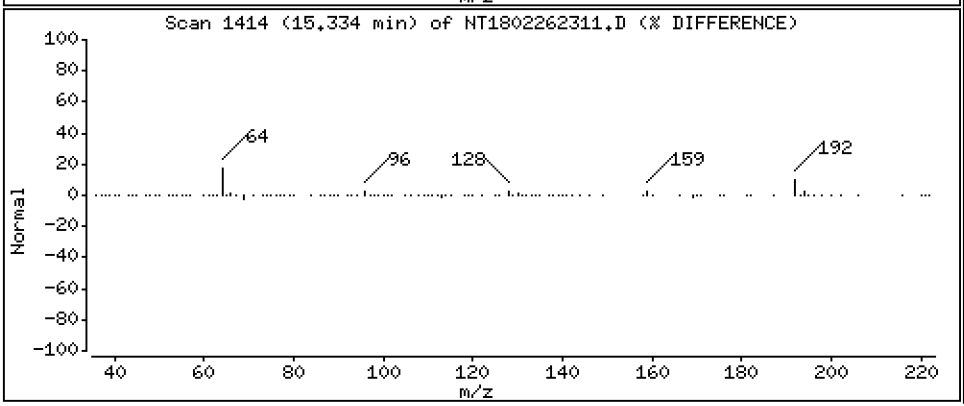












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

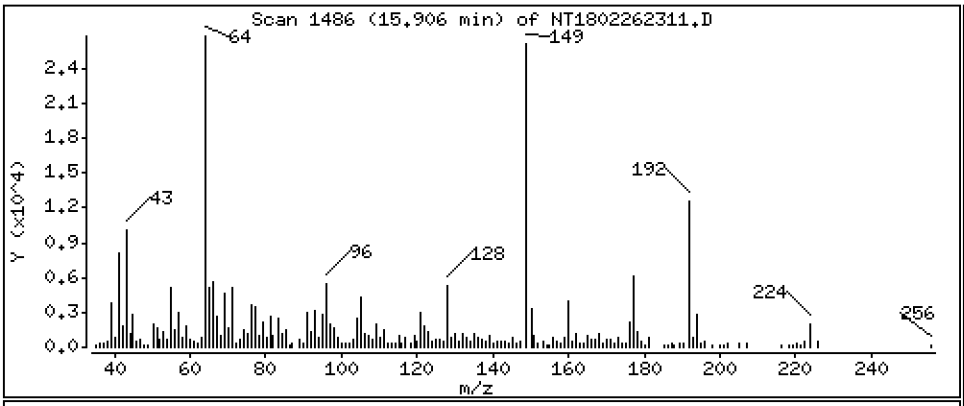
Operator: VTS

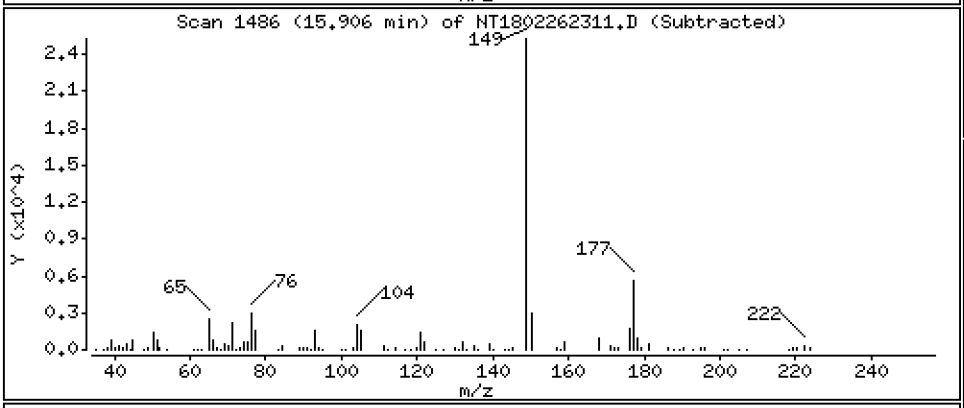
Column phase: ZB-5msi

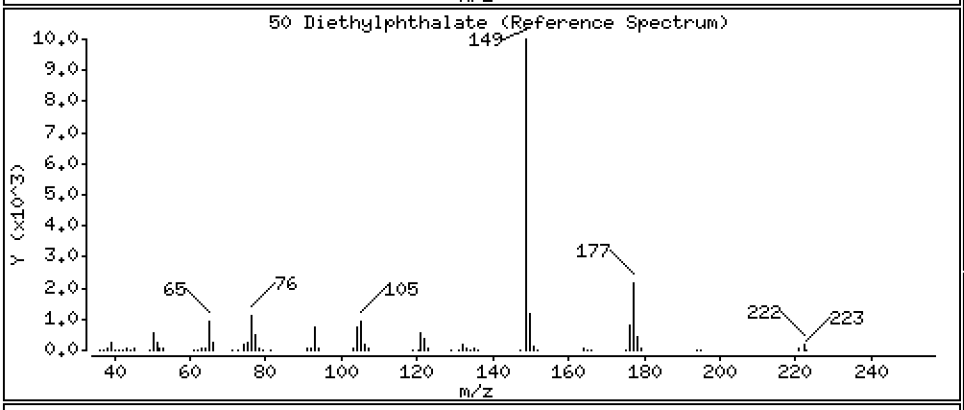
Column diameter: 0.25

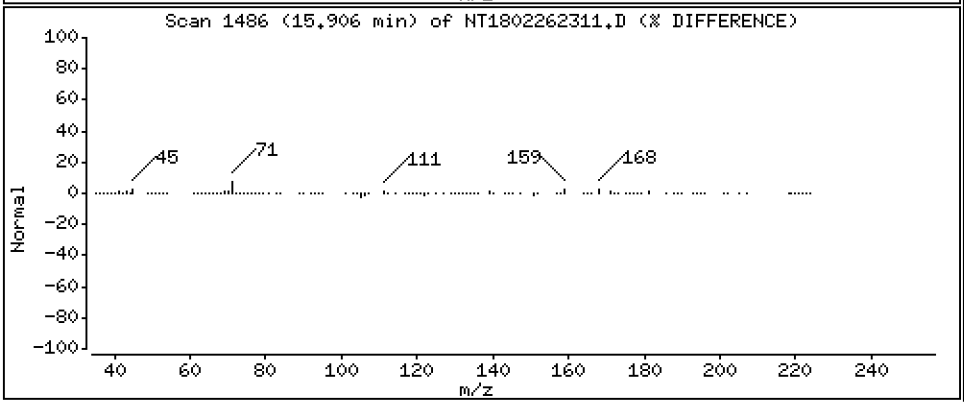
50 Diethylphthalate

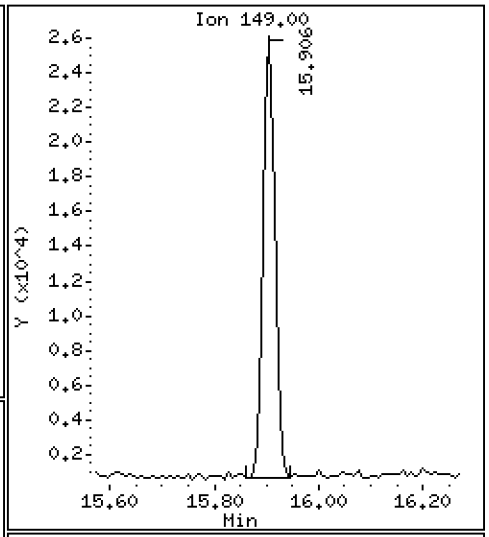
Concentration: 0.1946 ug/mL

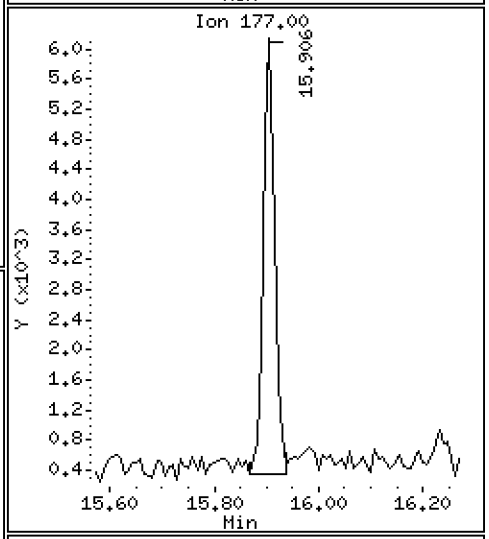


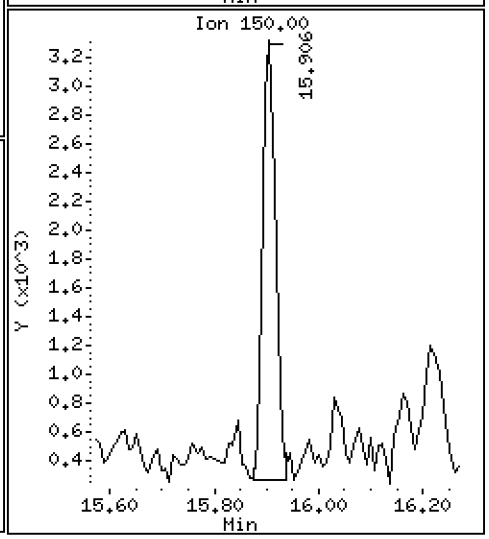












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

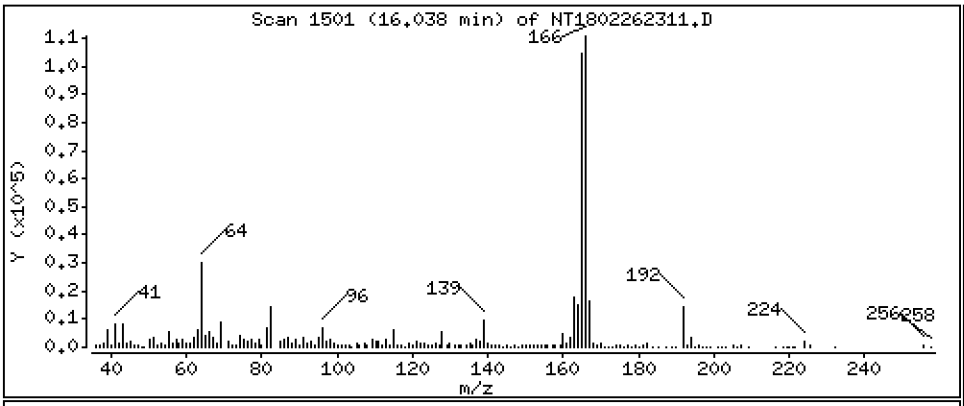
Operator: VTS

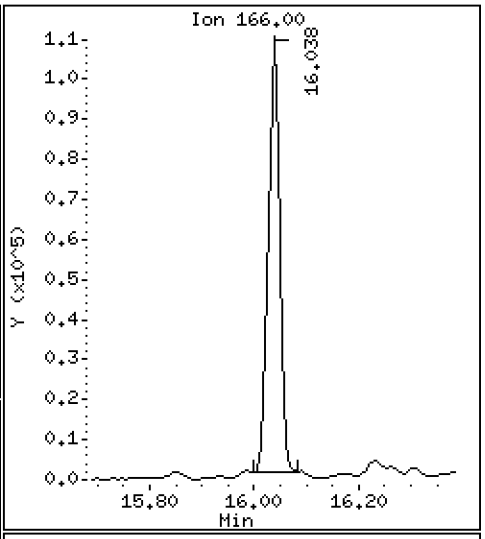
Column phase: ZB-5msi

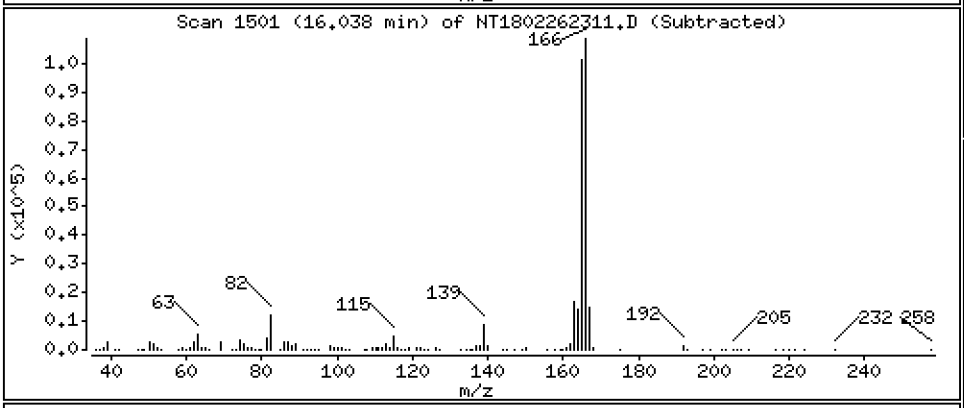
Column diameter: 0.25

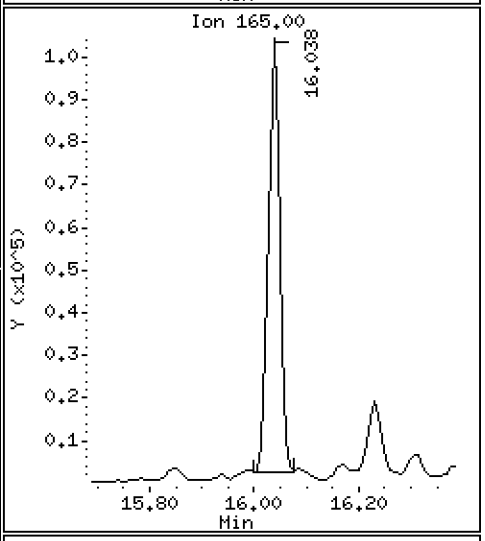
49 Fluorene

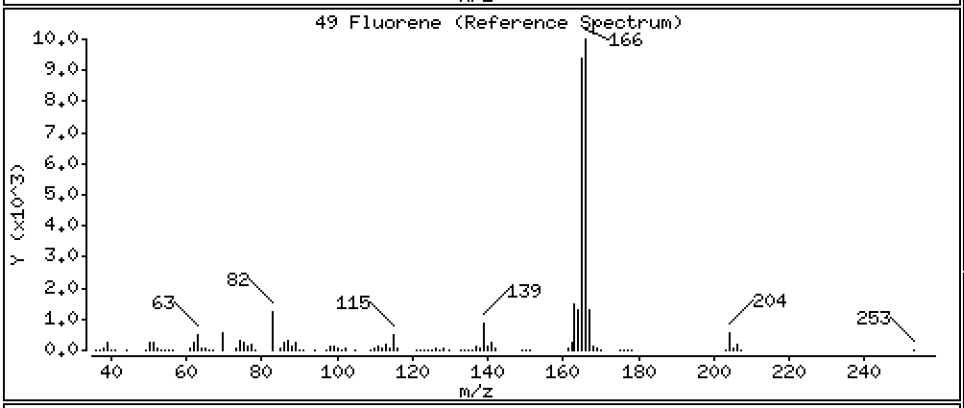
Concentration: 0.7448 ug/mL

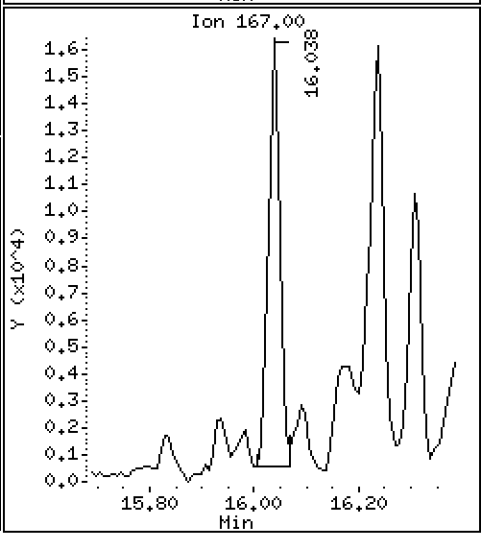


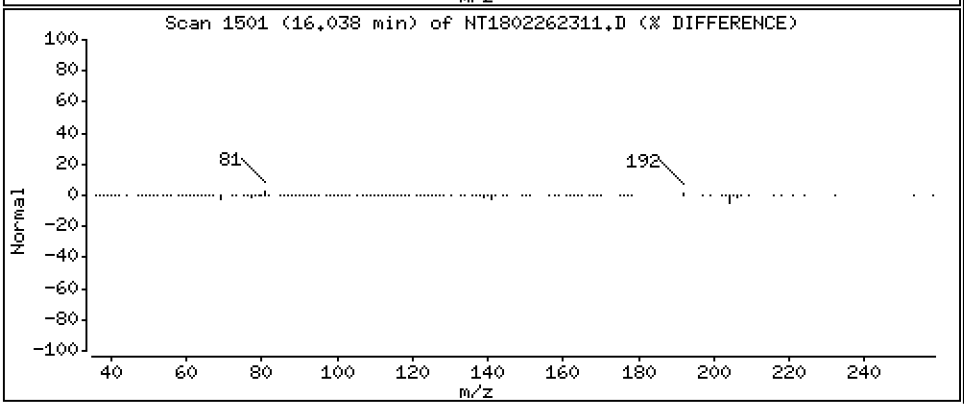












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

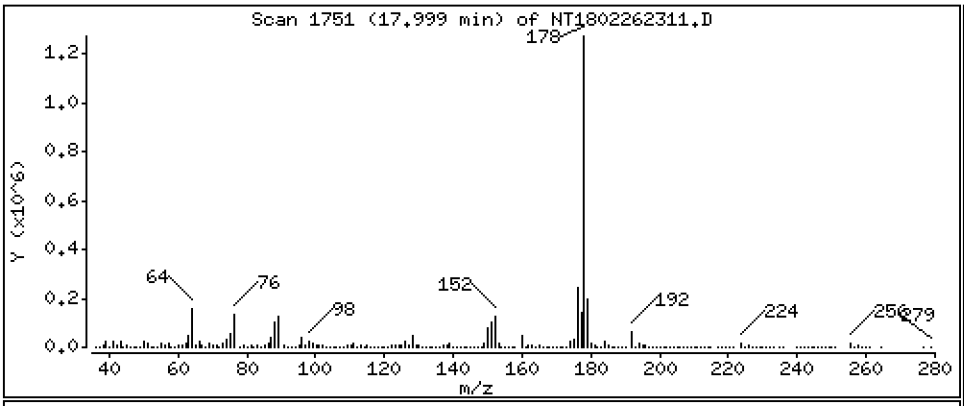
Operator: VTS

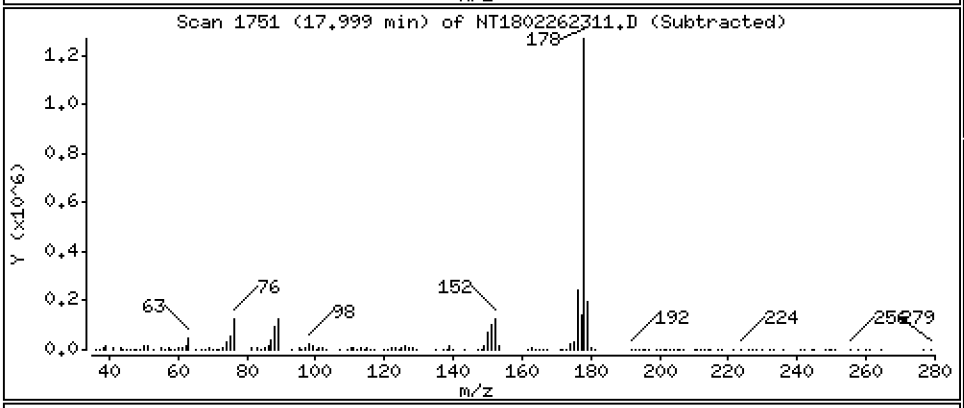
Column phase: ZB-5msi

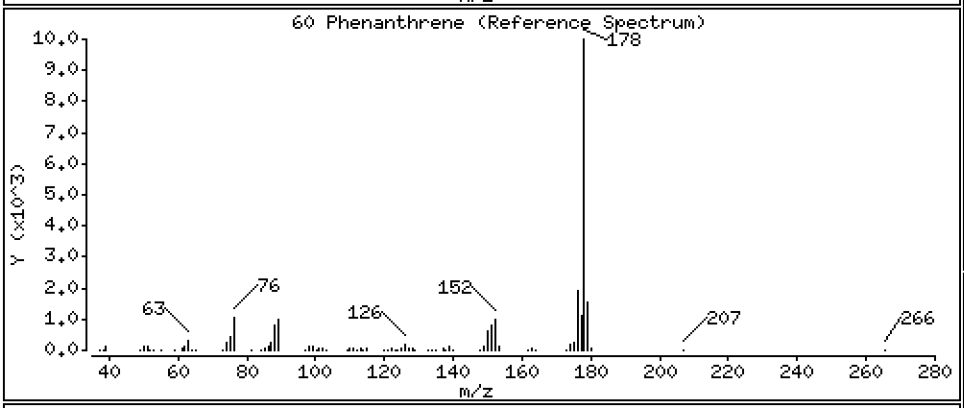
Column diameter: 0.25

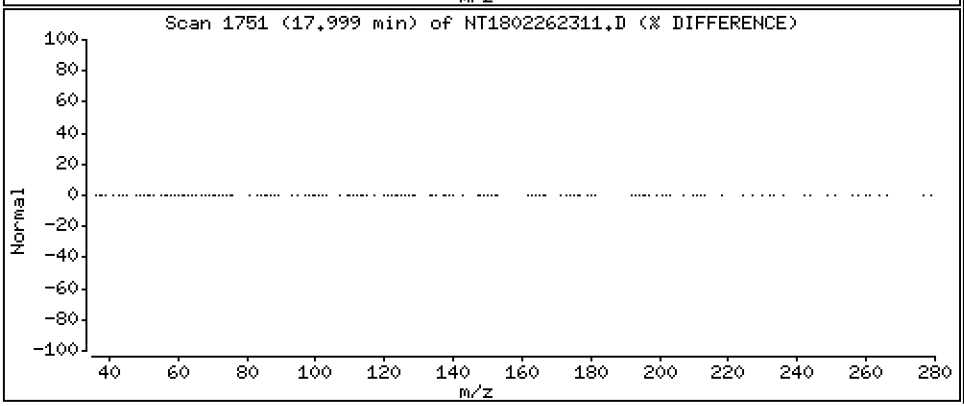
60 Phenanthrene

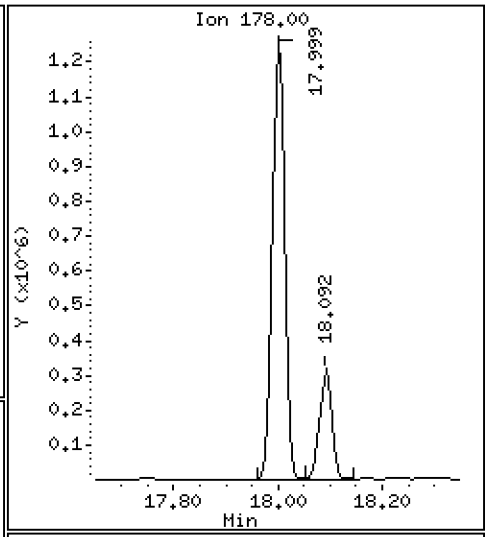
Concentration: 6.133 ug/mL

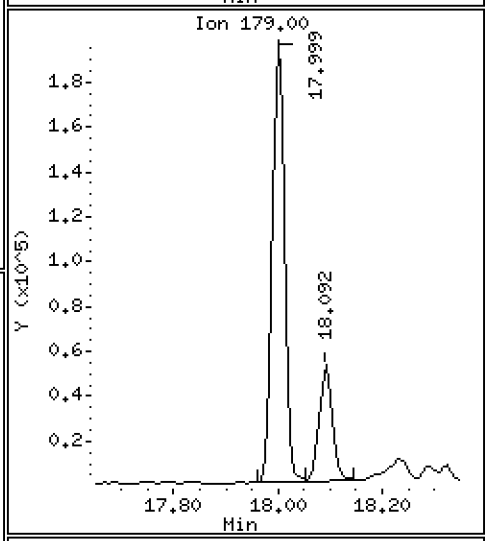


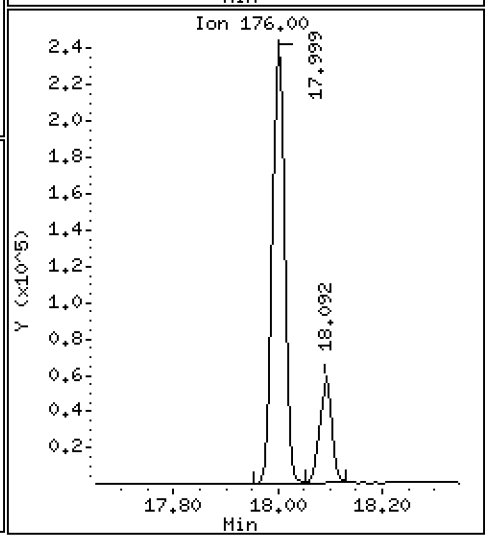












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

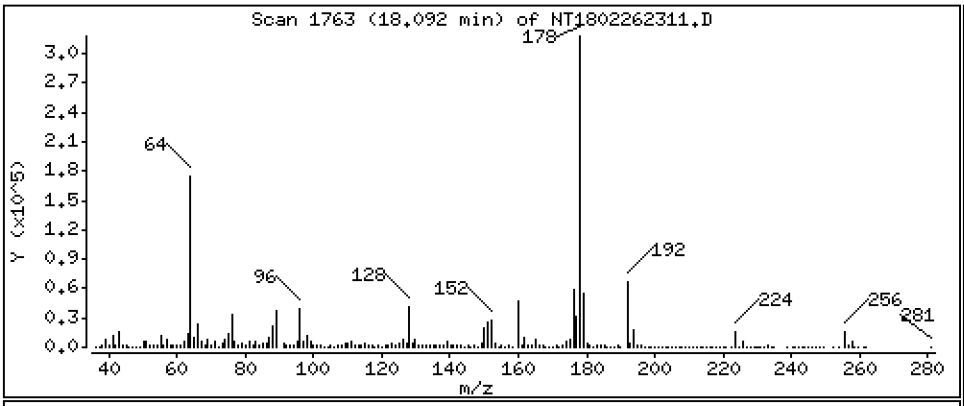
Operator: VTS

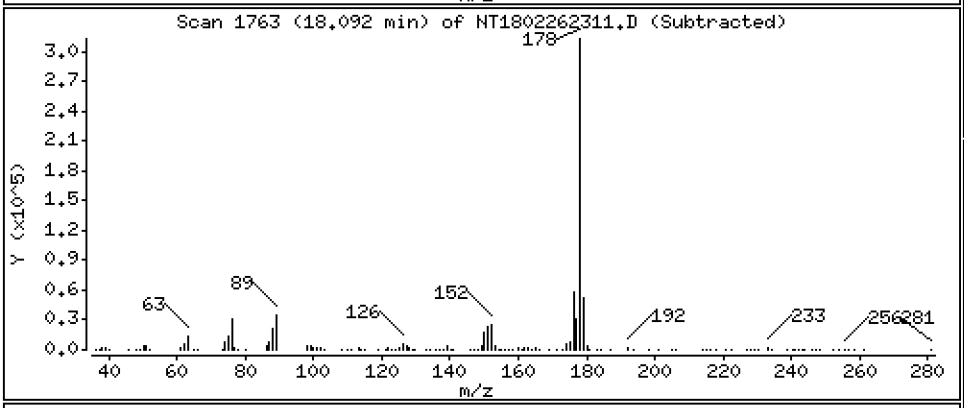
Column phase: ZB-5msi

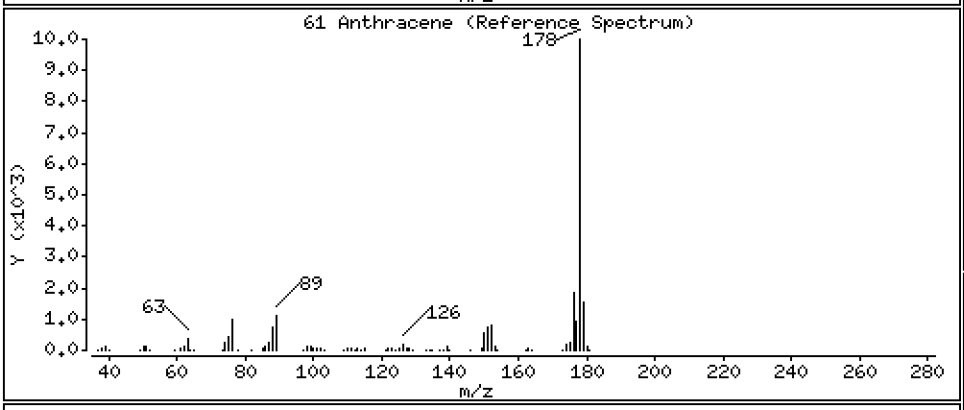
Column diameter: 0.25

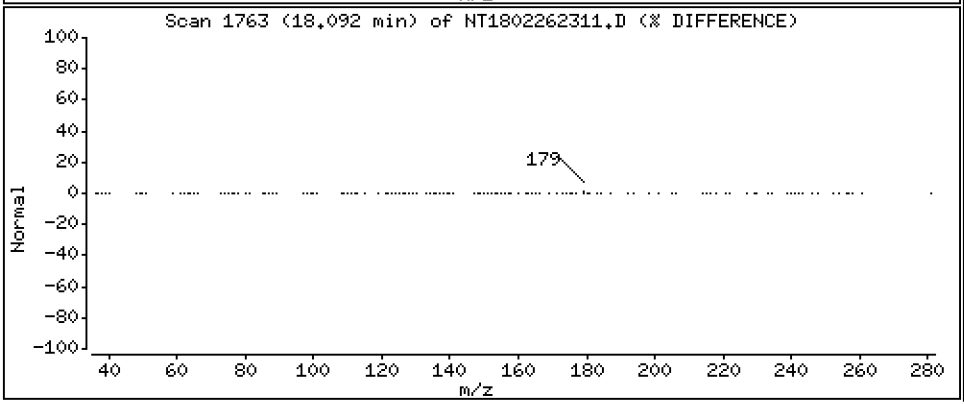
61 Anthracene

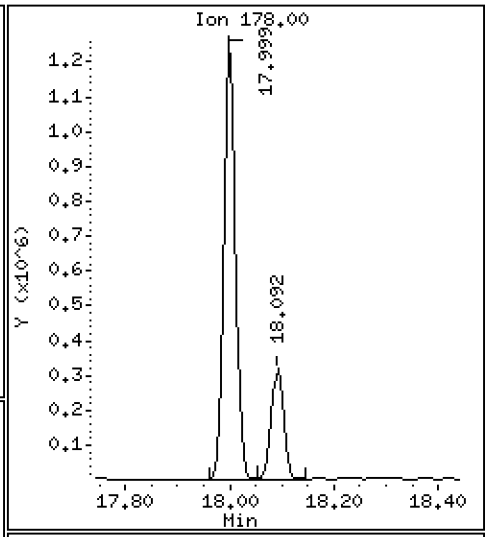
Concentration: 1.630 ug/mL

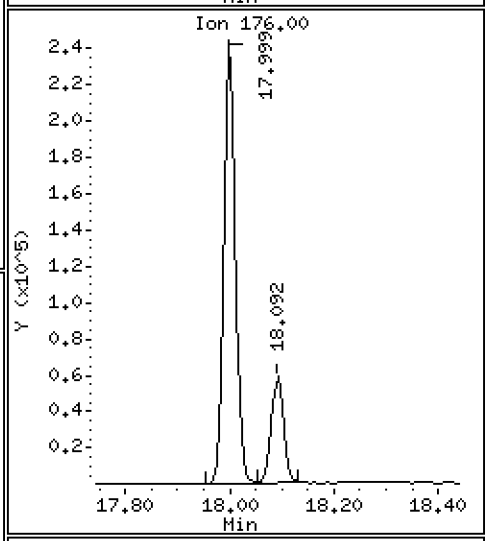


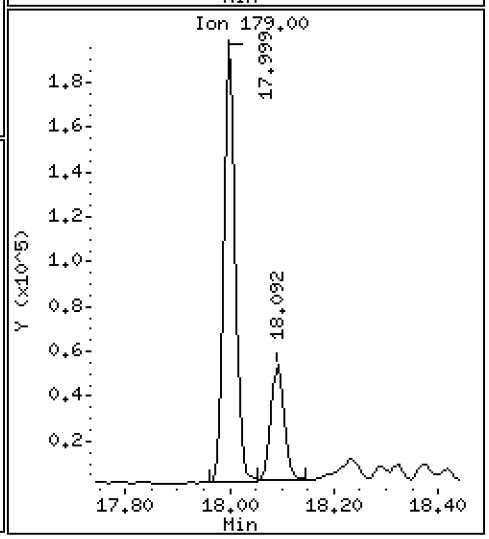












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

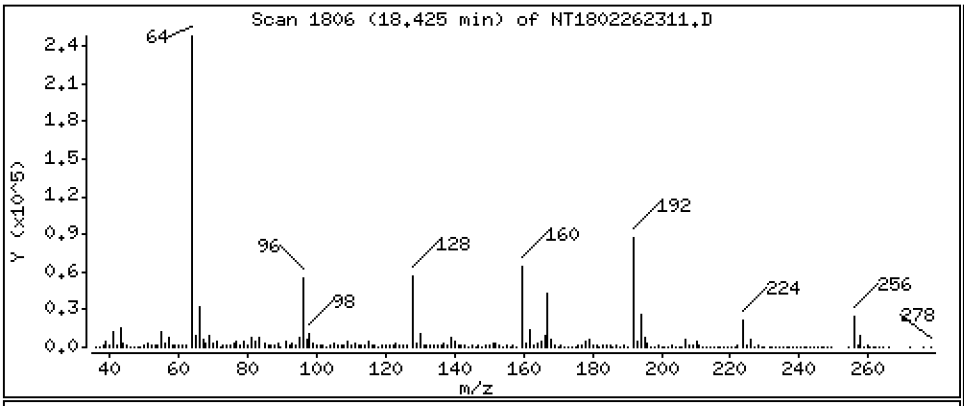
Operator: VTS

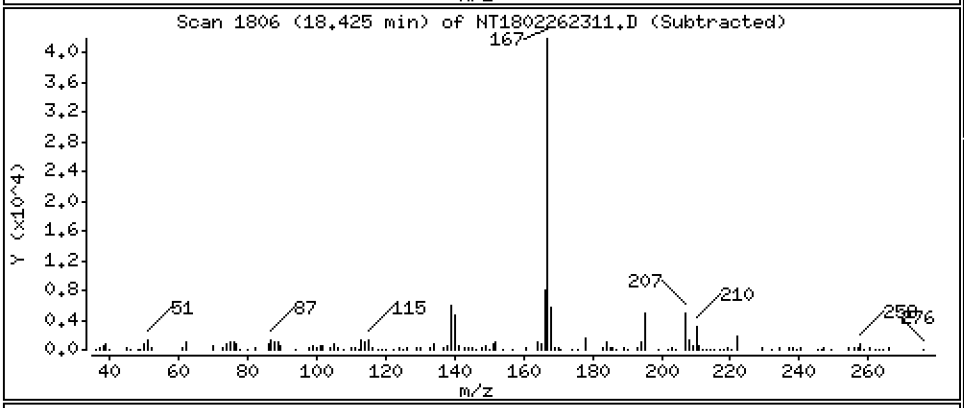
Column phase: ZB-5msi

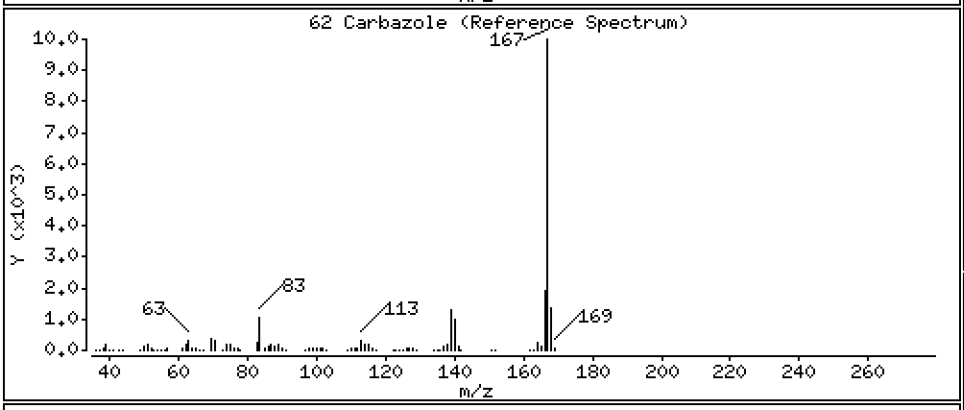
Column diameter: 0.25

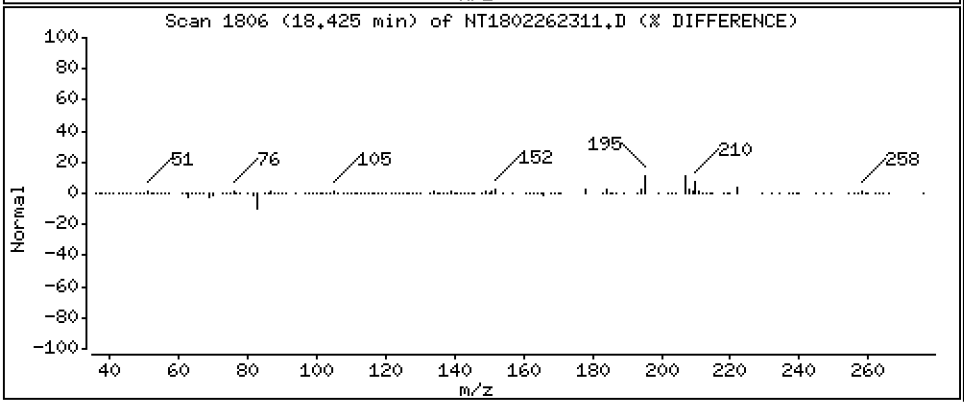
62 Carbazole

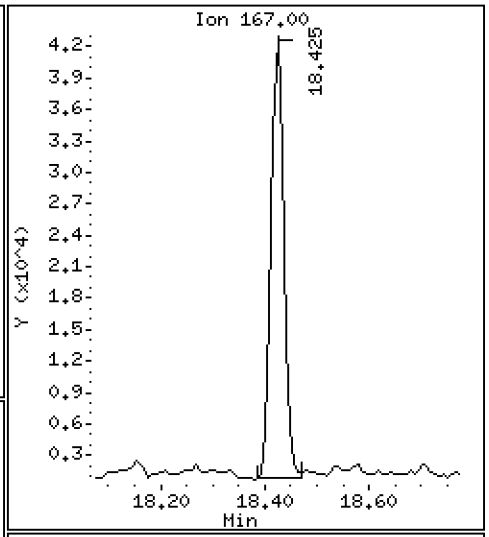
Concentration: 0.2459 ug/mL

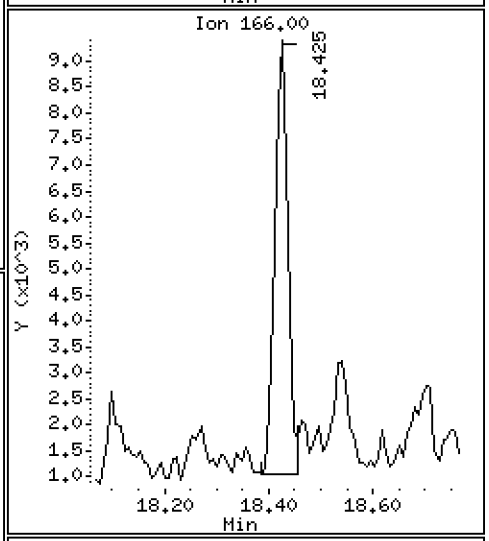


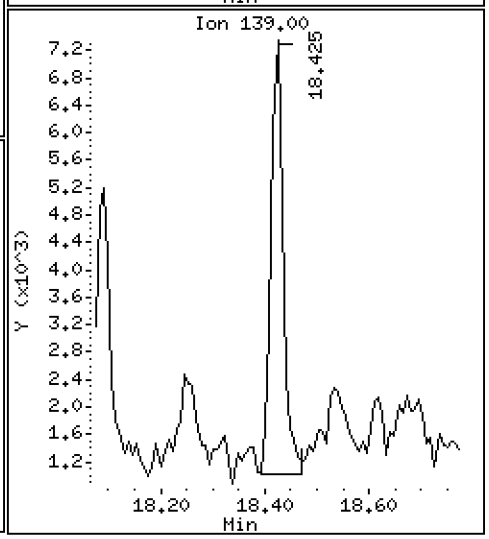












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

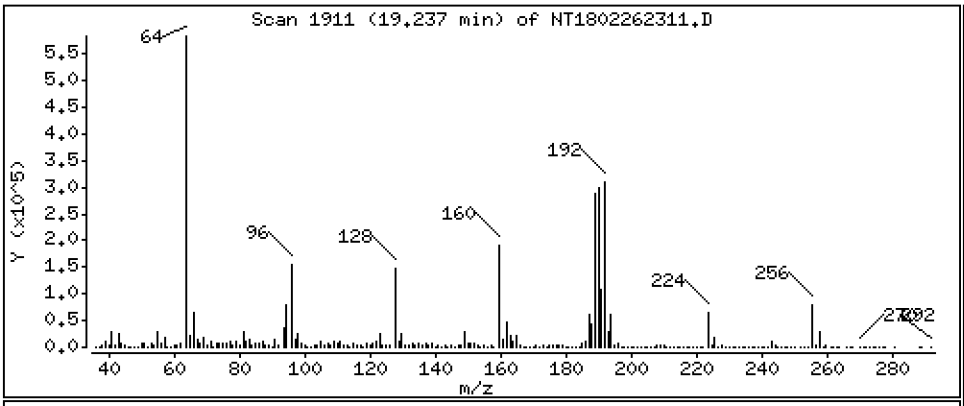
Operator: VTS

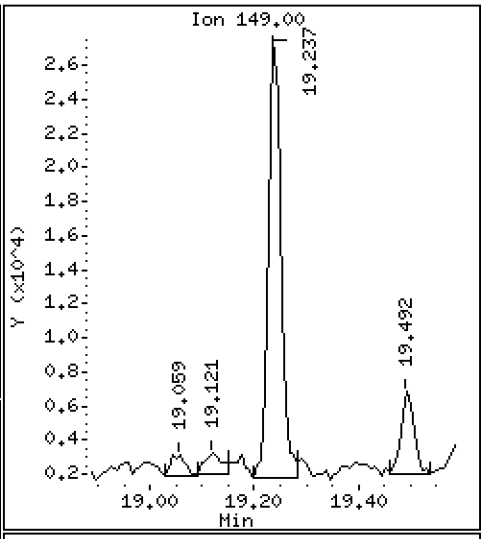
Column phase: ZB-5msi

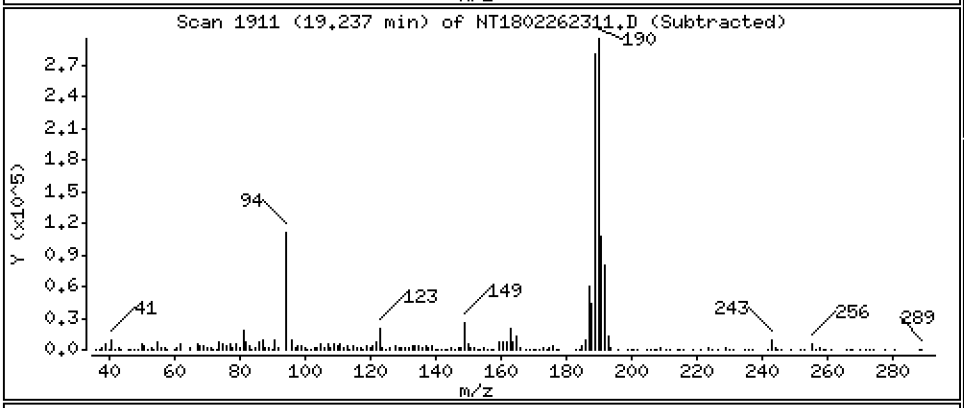
Column diameter: 0.25

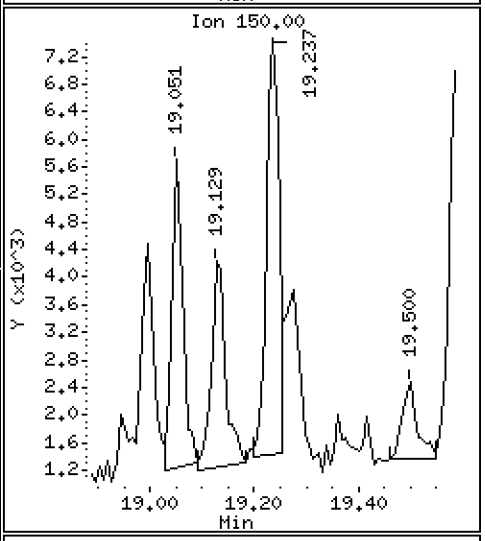
63 Di-n-butylphthalate

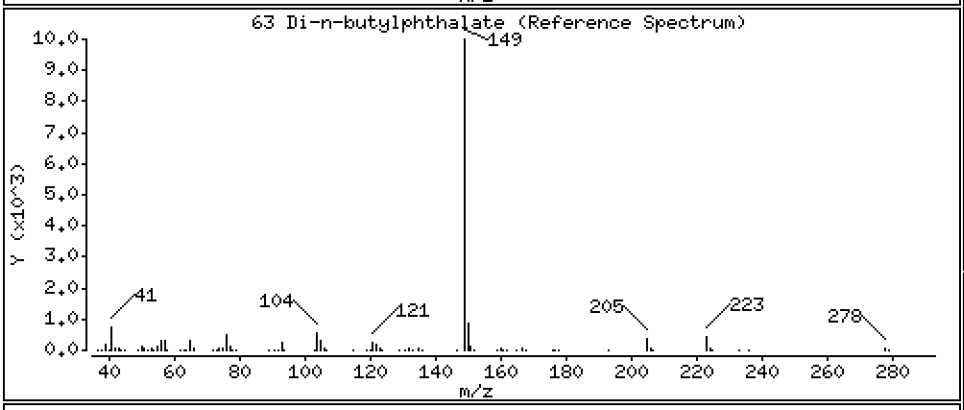
Concentration: 0.1319 ug/mL

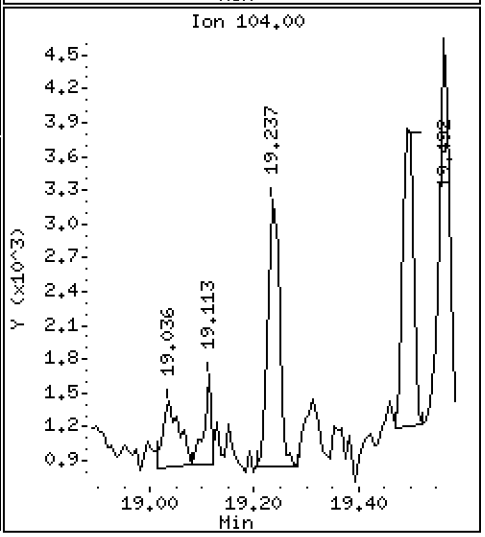


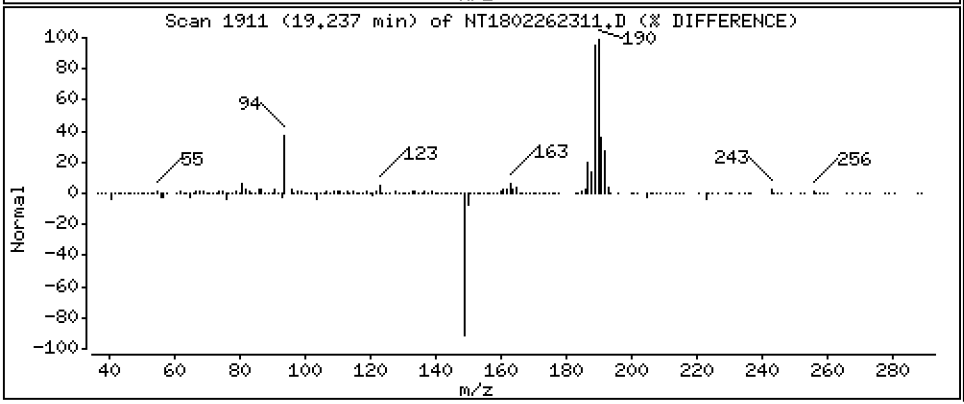












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

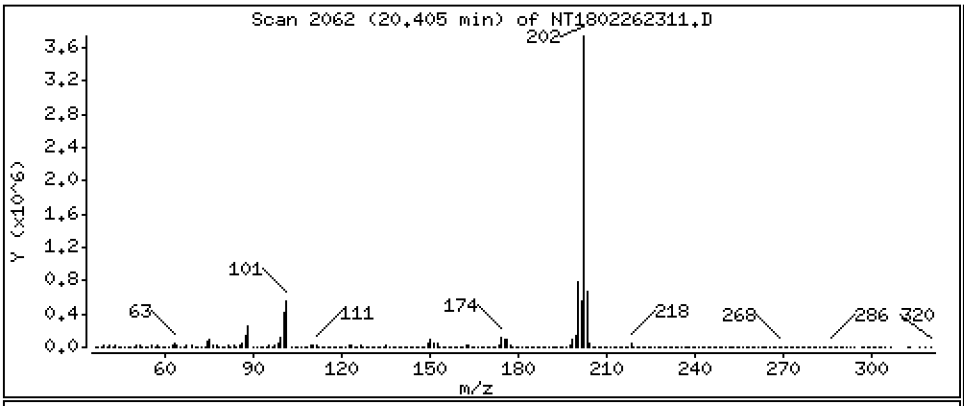
Operator: VTS

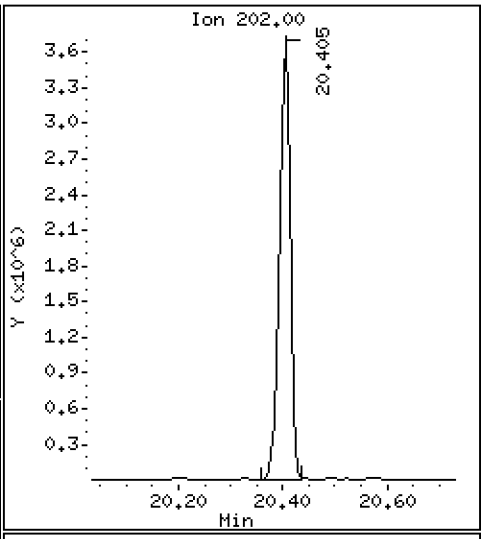
Column phase: ZB-5msi

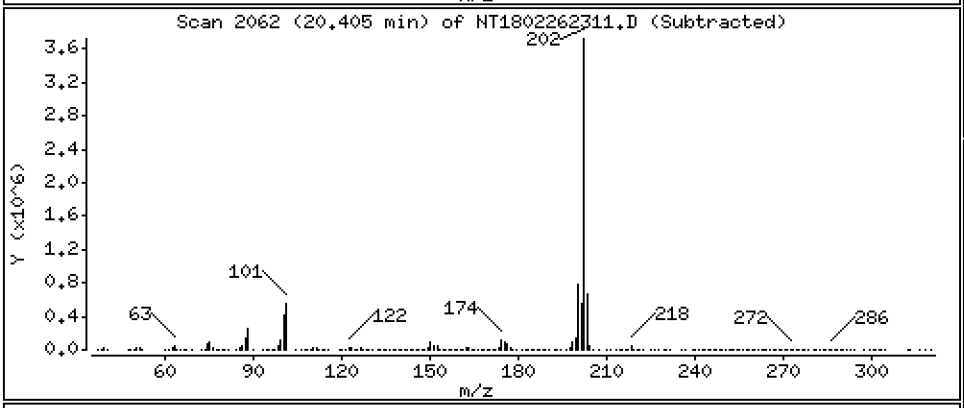
Column diameter: 0.25

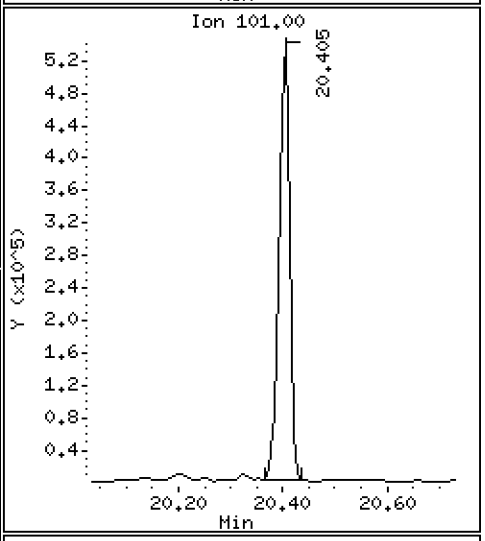
64 Fluoranthene

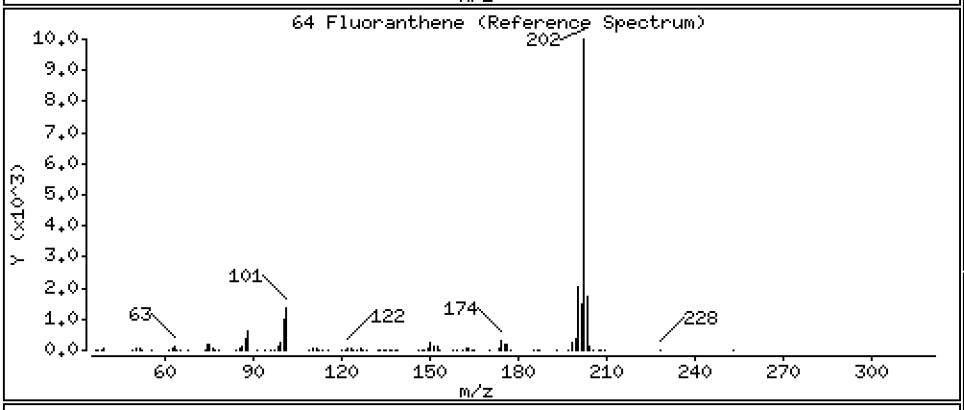
Concentration: 14.06 ug/mL

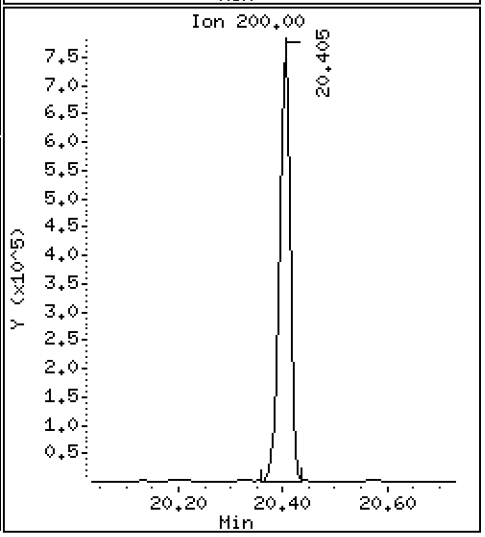


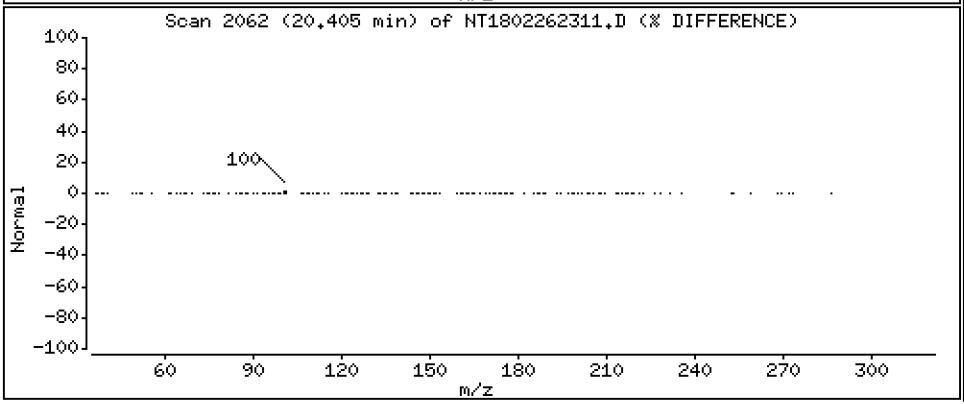












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

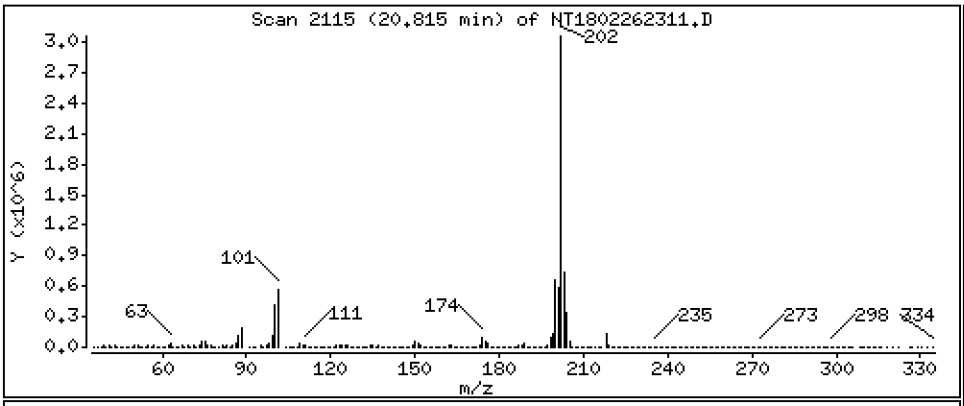
Operator: VTS

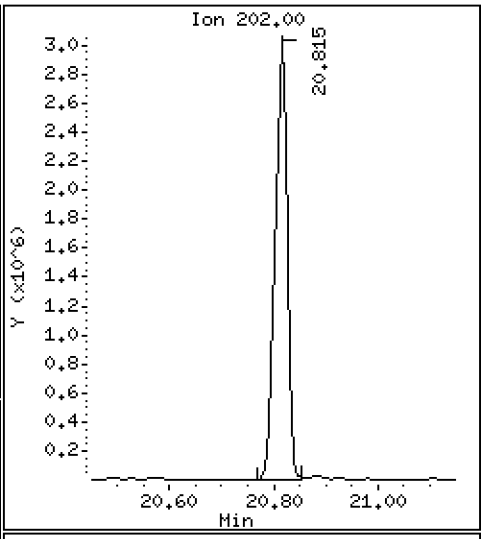
Column phase: ZB-5msi

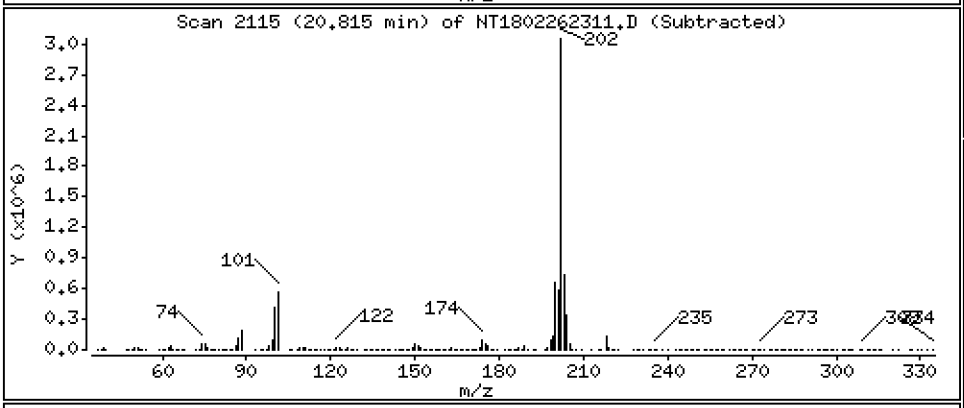
Column diameter: 0.25

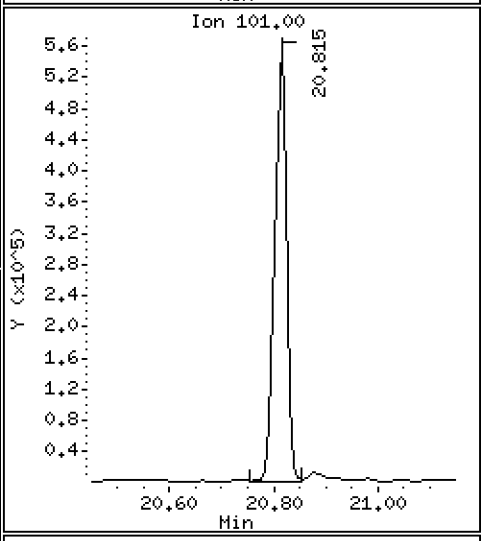
65 Pyrene

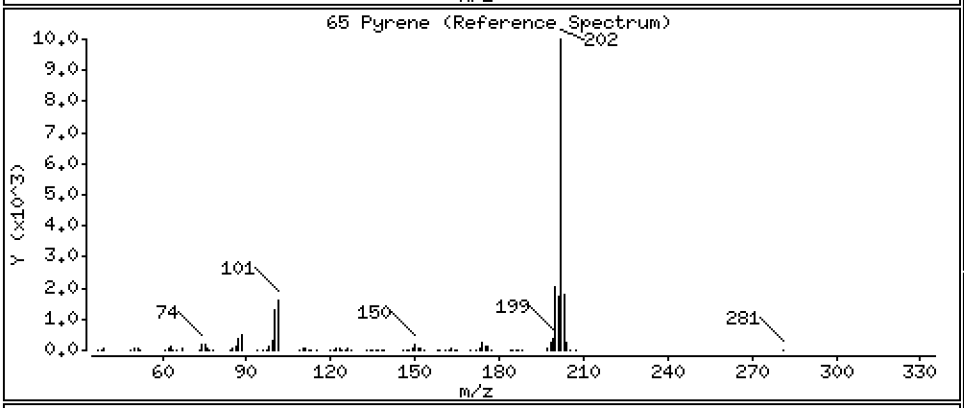
Concentration: 11.27 ug/mL

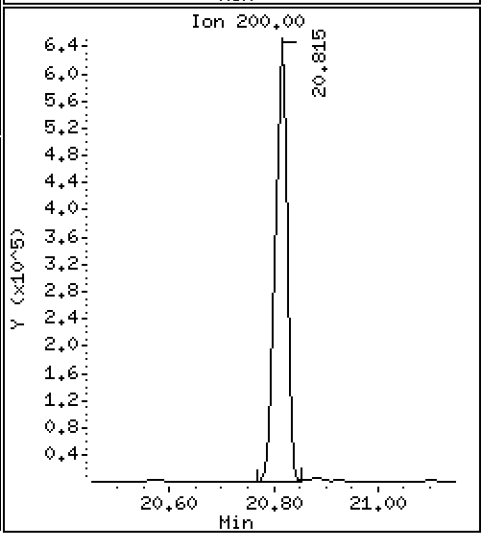


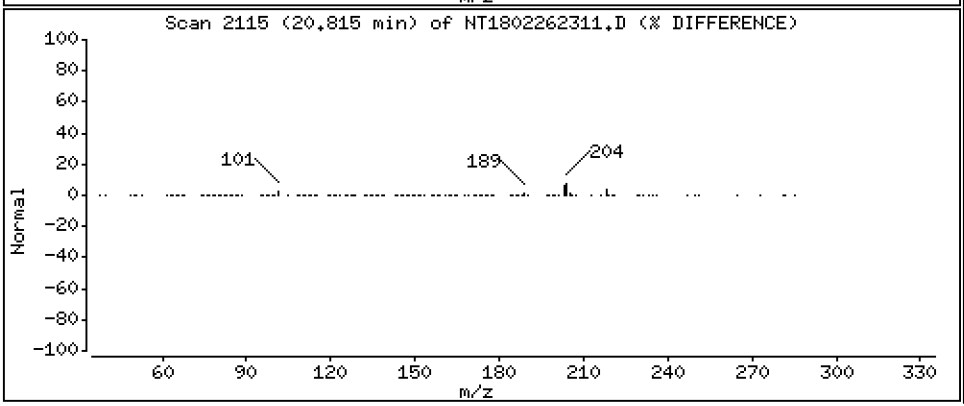












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

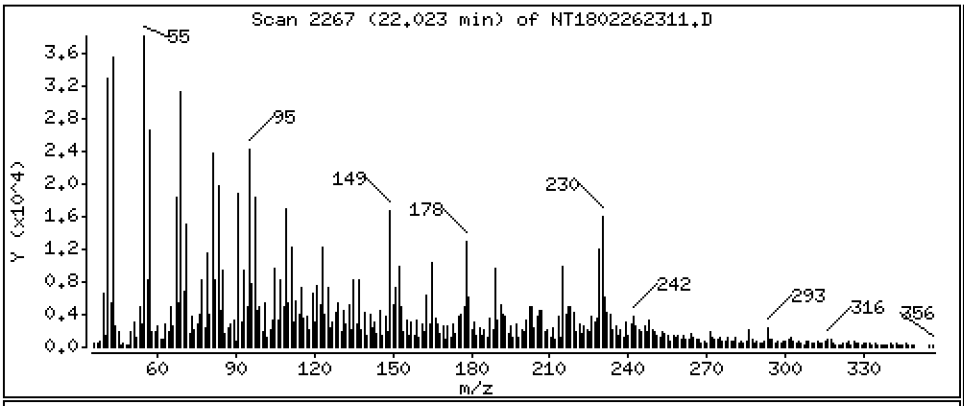
Operator: VTS

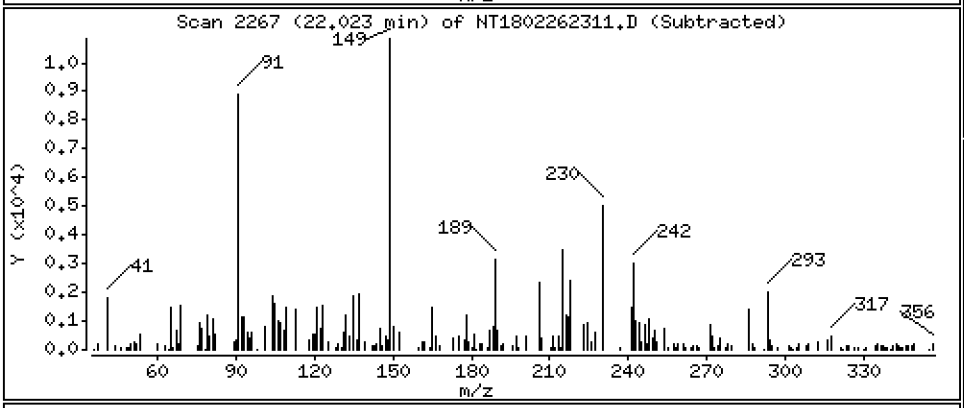
Column phase: ZB-5msi

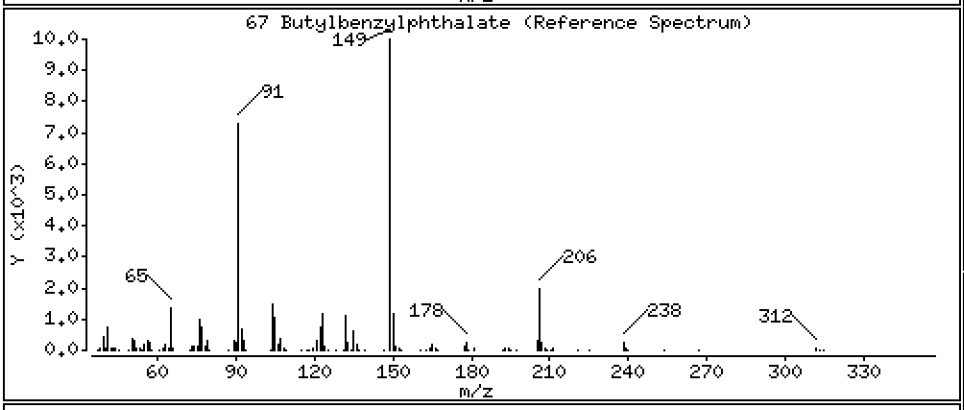
Column diameter: 0.25

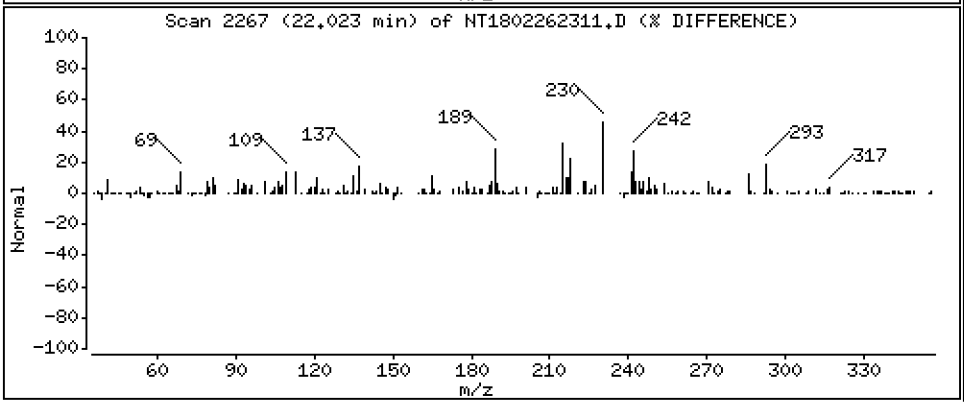
67 Butylbenzylphthalate

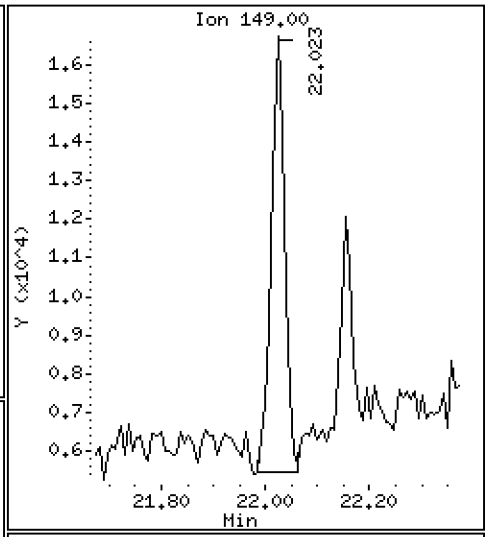
Concentration: 0.1209 ug/mL

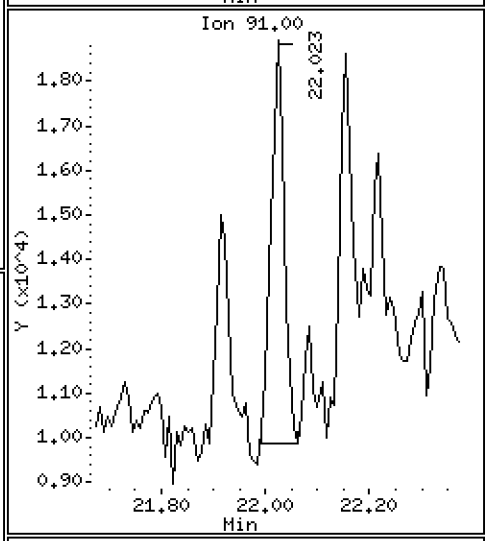


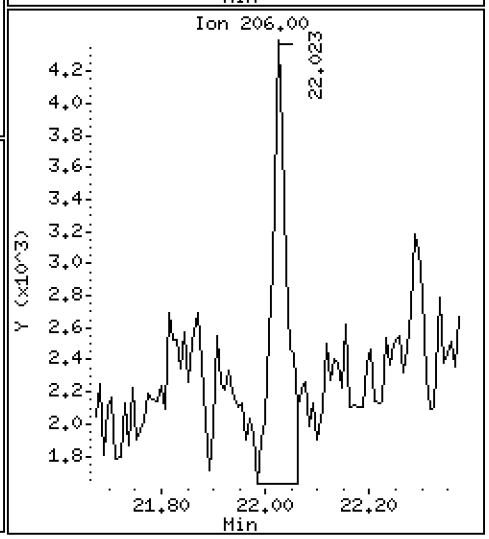












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

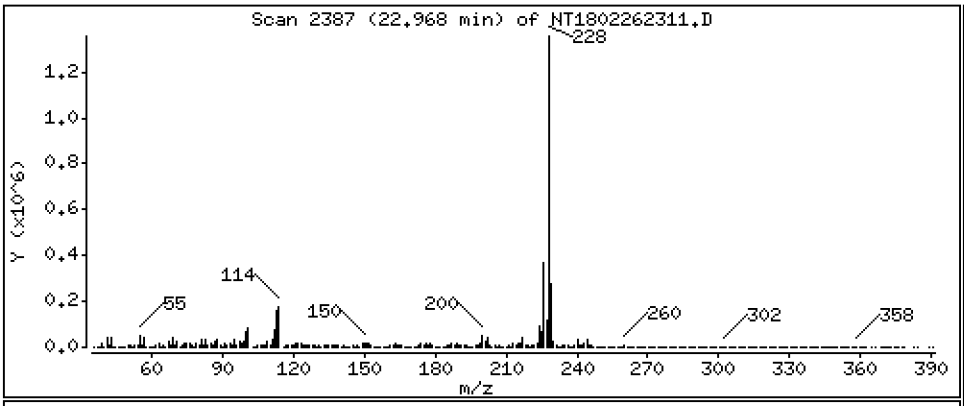
Operator: VTS

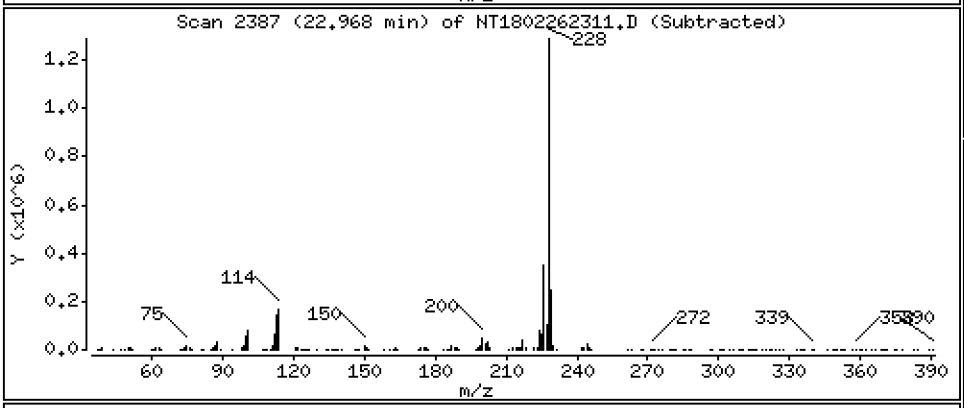
Column phase: ZB-5msi

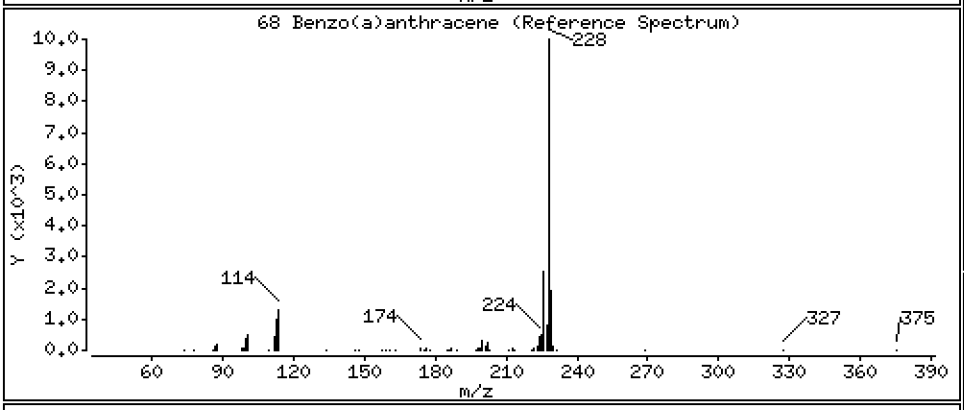
Column diameter: 0.25

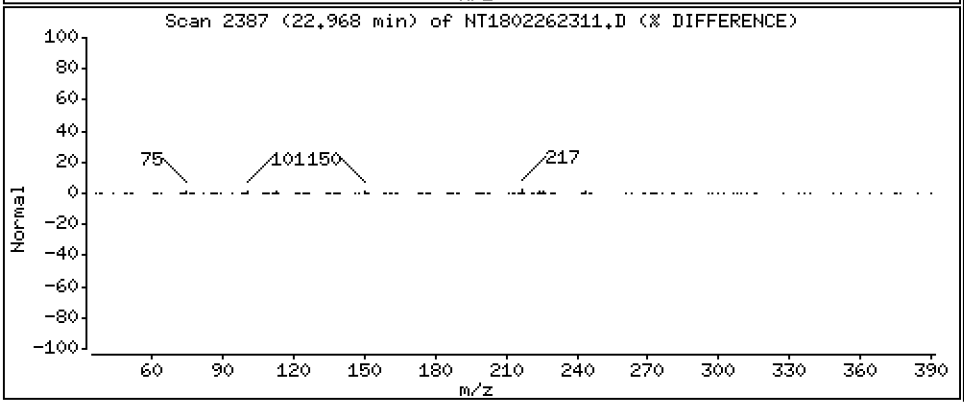
68 Benzo(a)anthracene

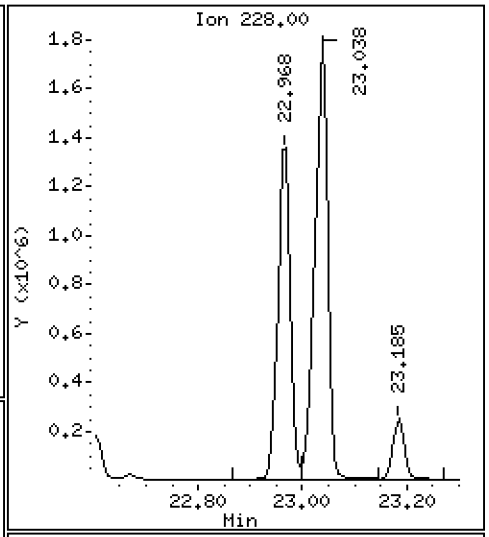
Concentration: 5.612 ug/mL

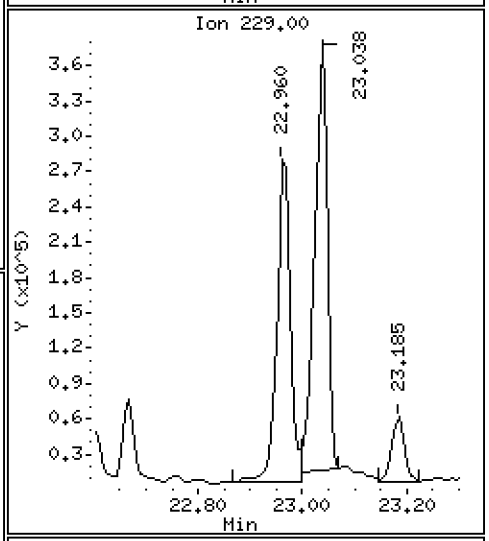


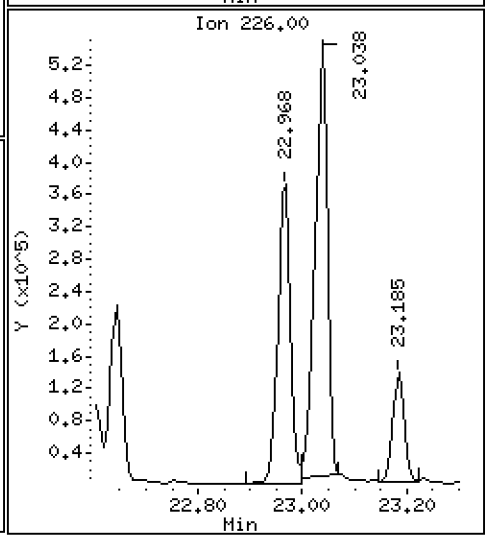












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

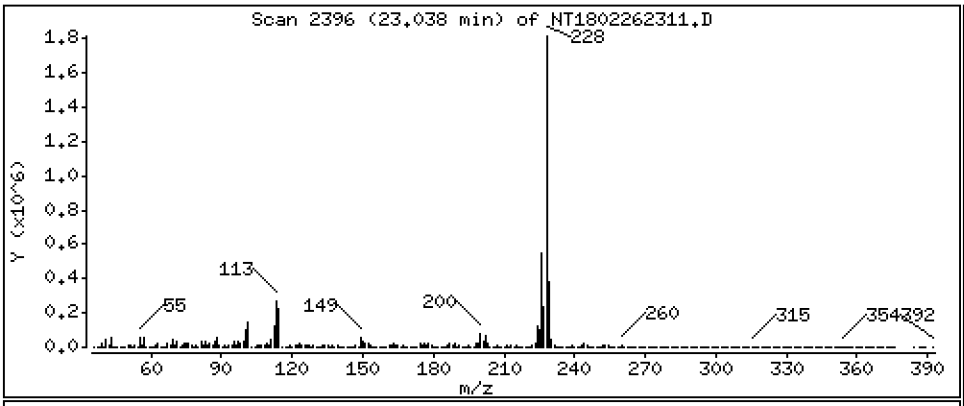
Operator: VTS

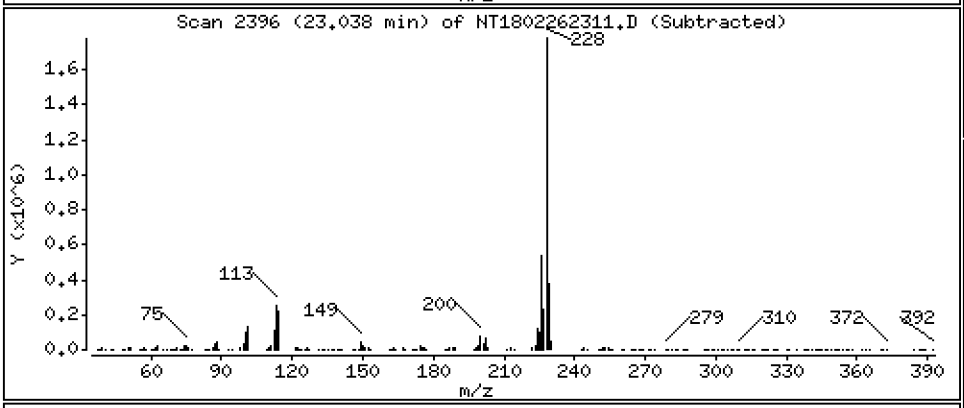
Column phase: ZB-5msi

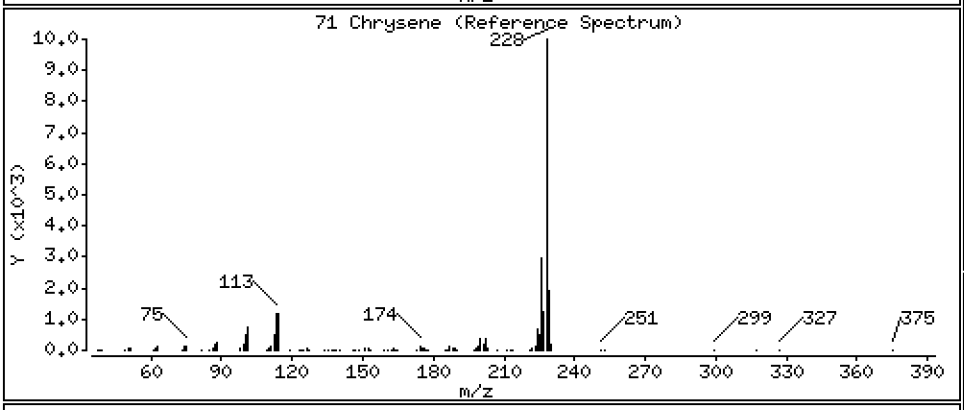
Column diameter: 0.25

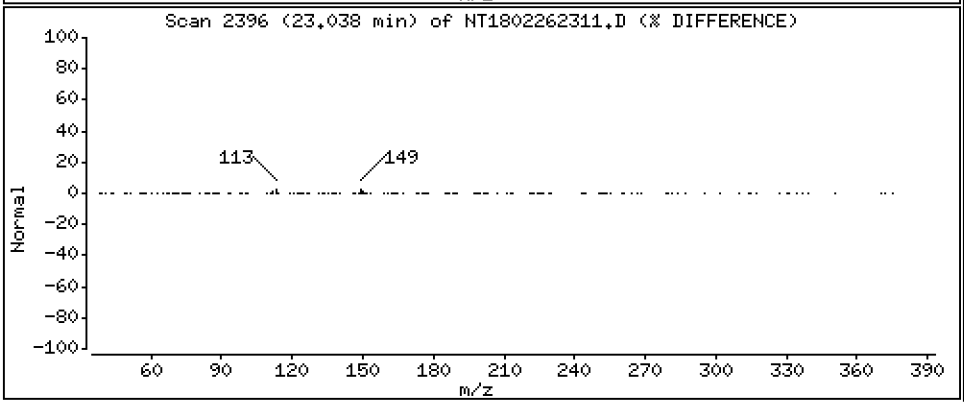
71 Chrysene

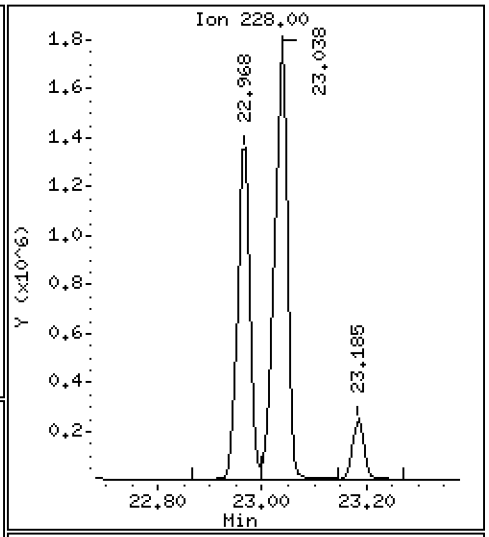
Concentration: 7.127 ug/mL

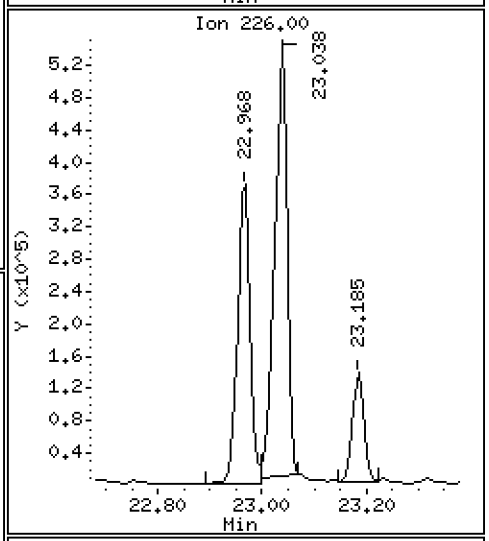


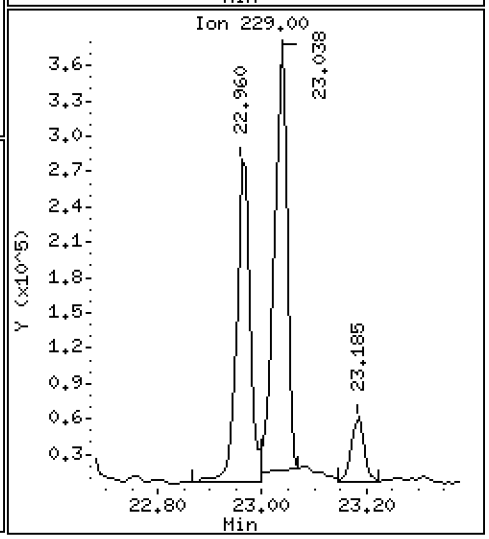












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

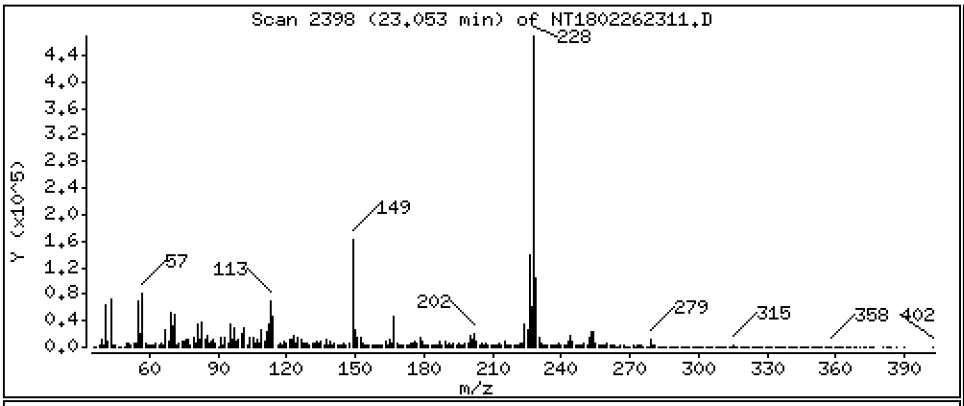
Operator: VTS

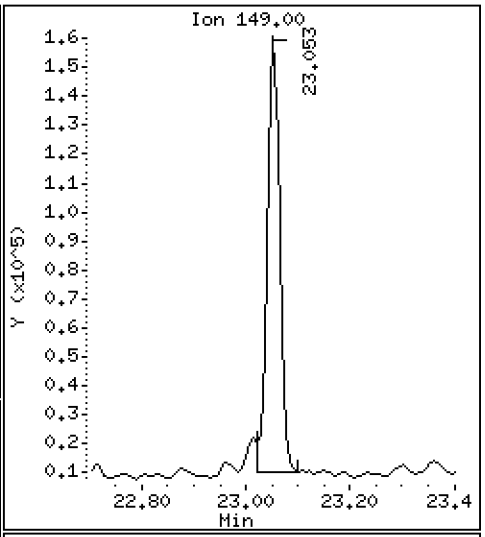
Column phase: ZB-5msi

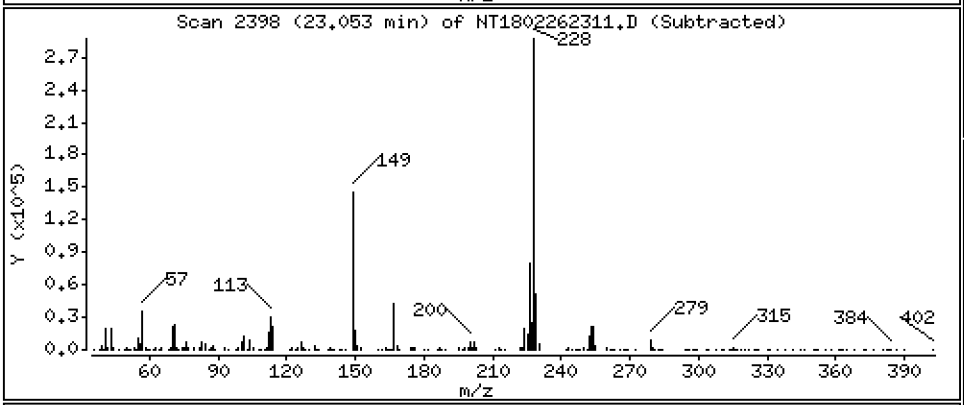
Column diameter: 0.25

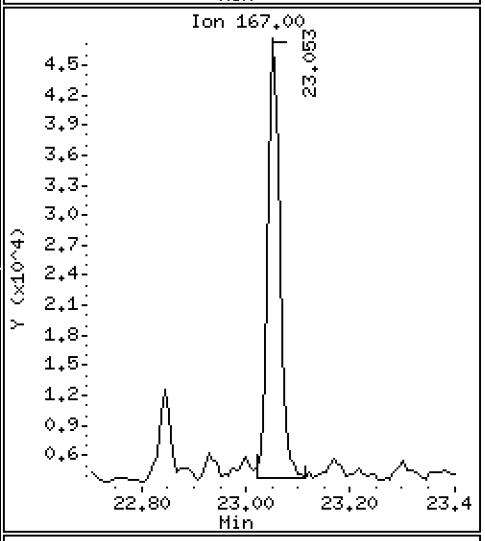
72 bis(2-Ethylhexyl)phthalate

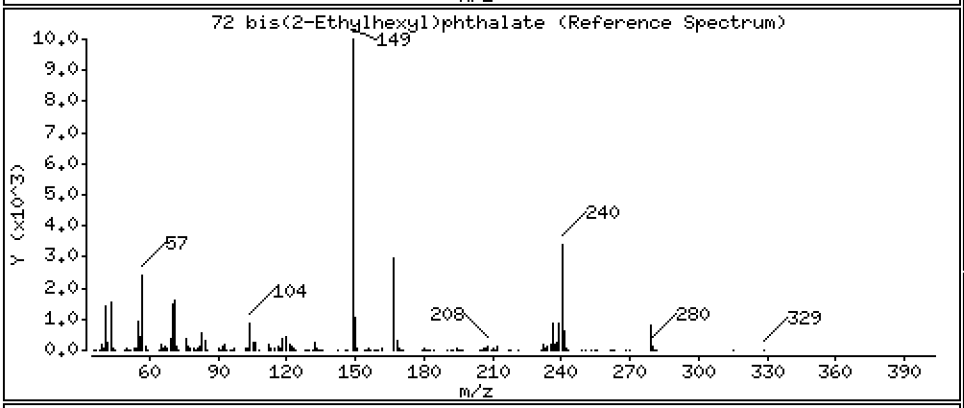
Concentration: 0.9657 ug/mL

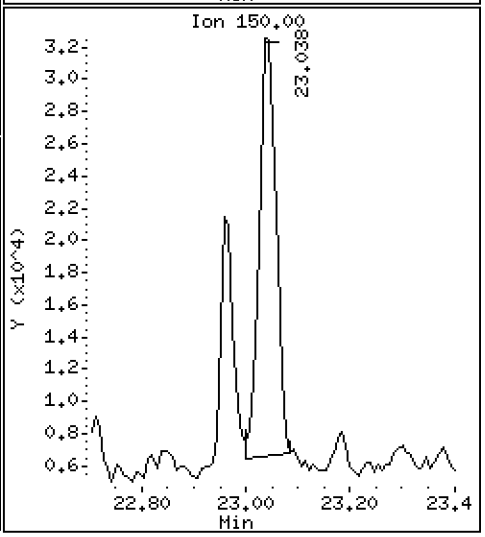


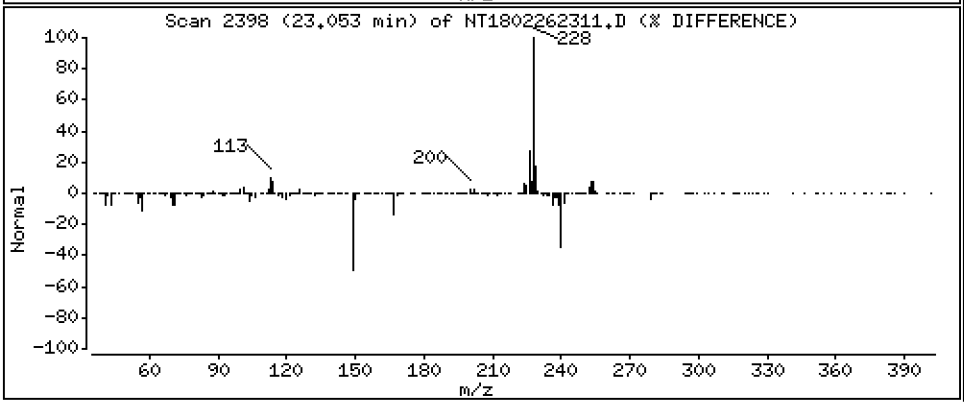












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

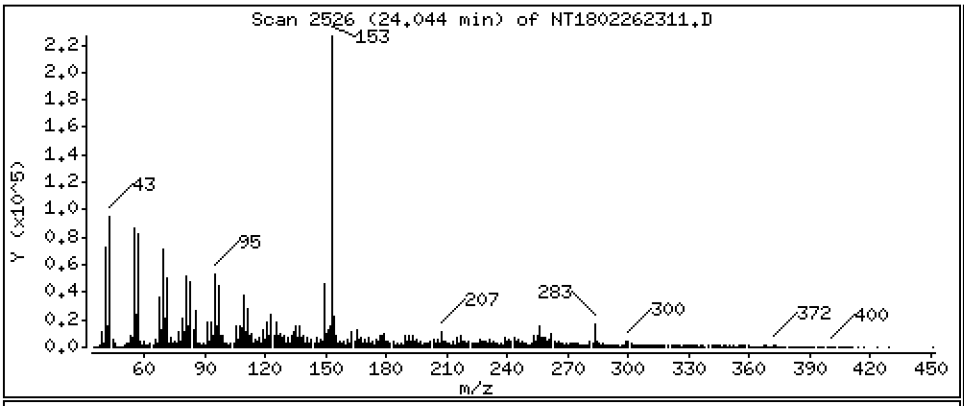
Operator: VTS

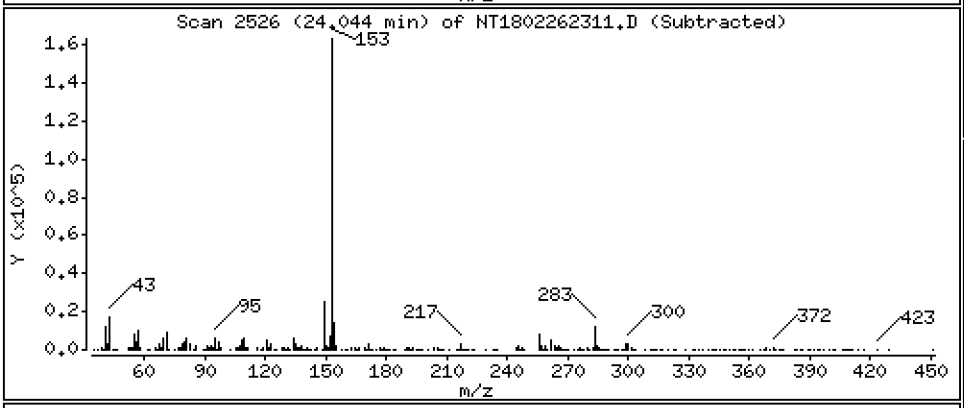
Column phase: ZB-5msi

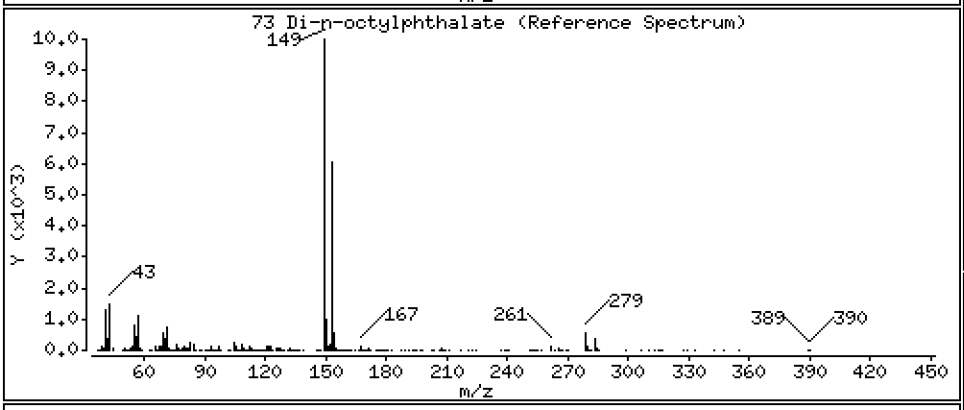
Column diameter: 0.25

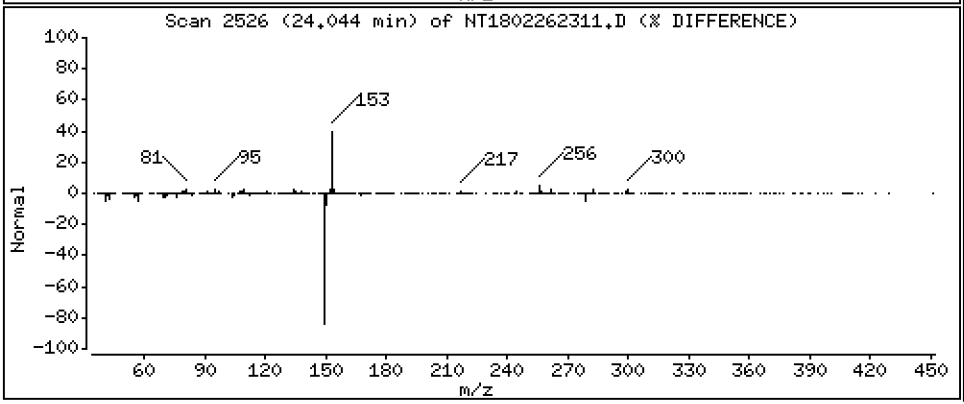
73 Di-n-octylphthalate

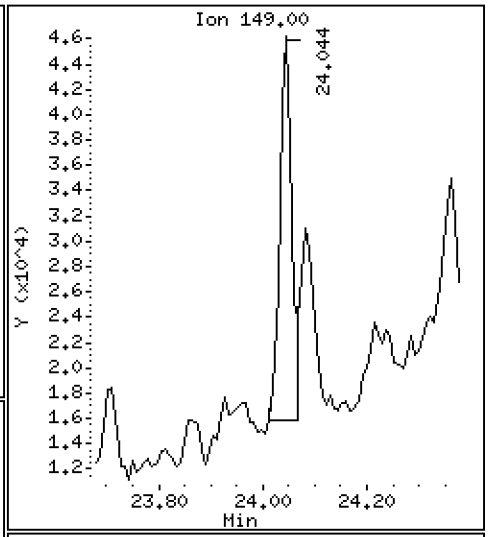
Concentration: 0.1051 ug/mL

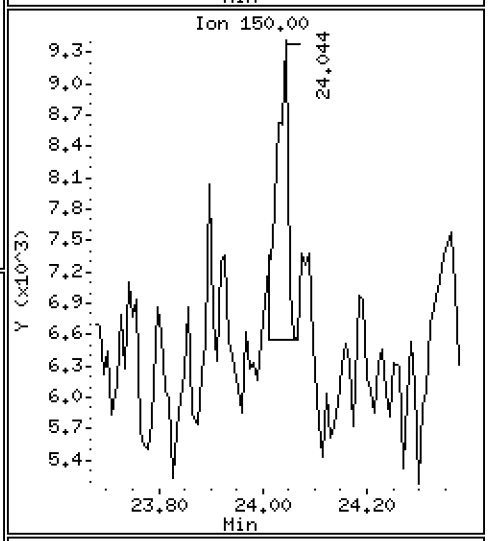


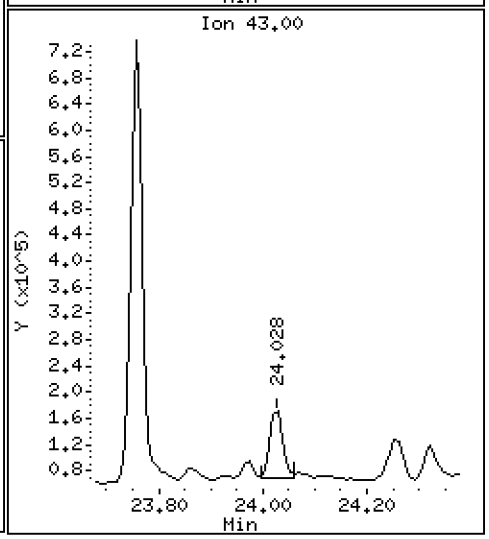












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

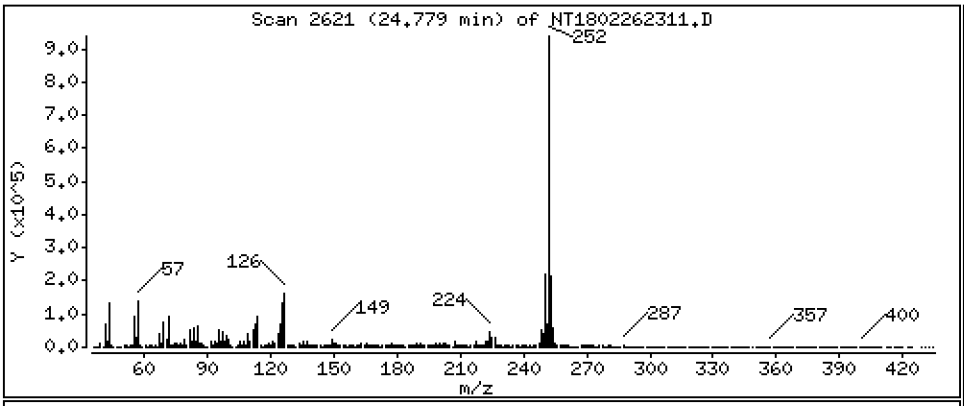
Operator: VTS

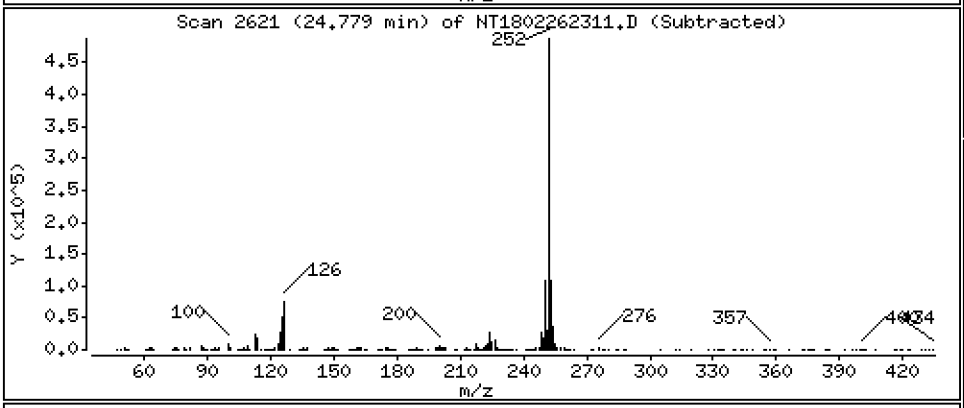
Column phase: ZB-5msi

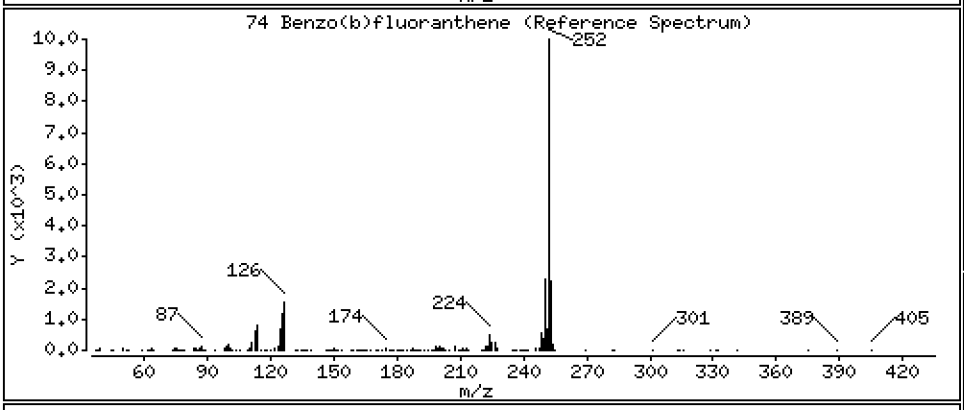
Column diameter: 0.25

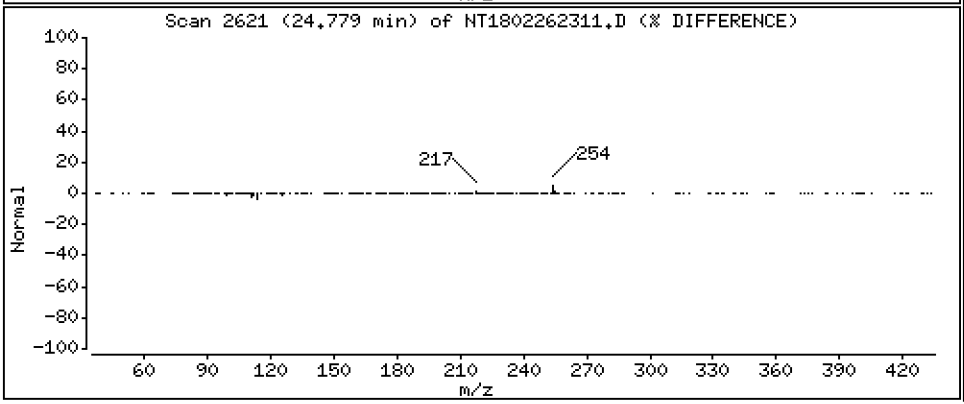
74 Benzo(b)fluoranthene

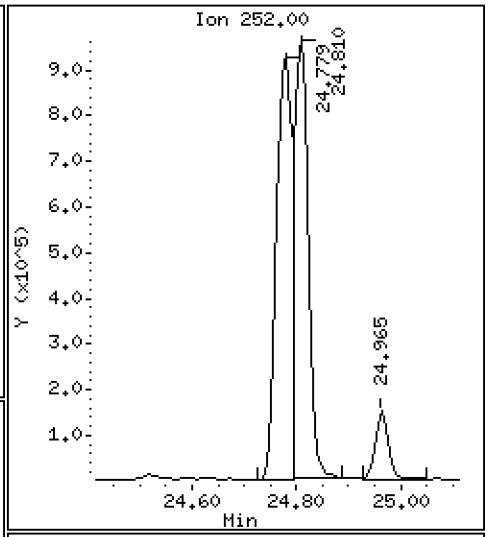
Concentration: 5.169 ug/mL

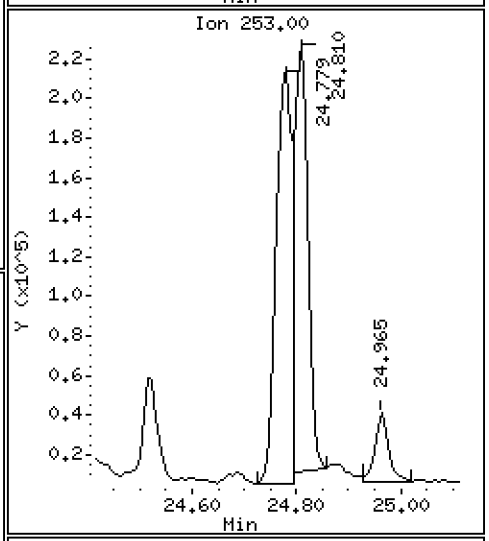


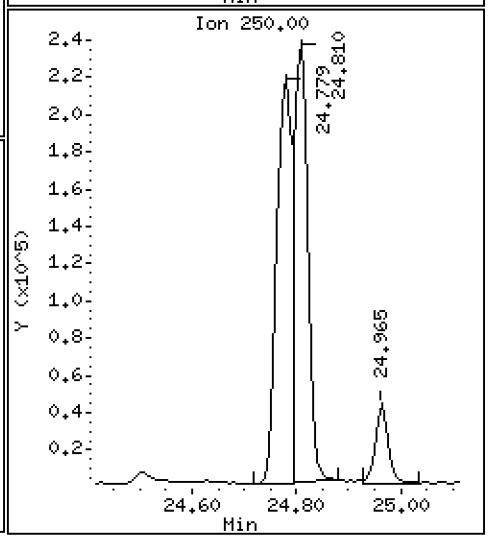












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

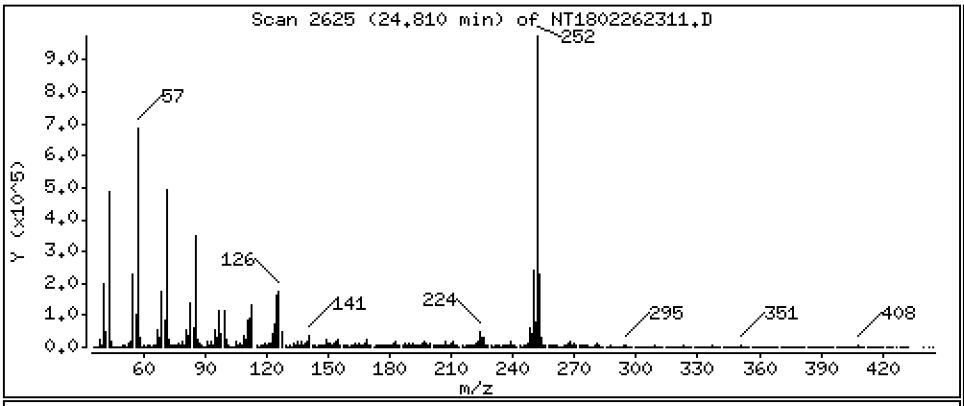
Operator: VTS

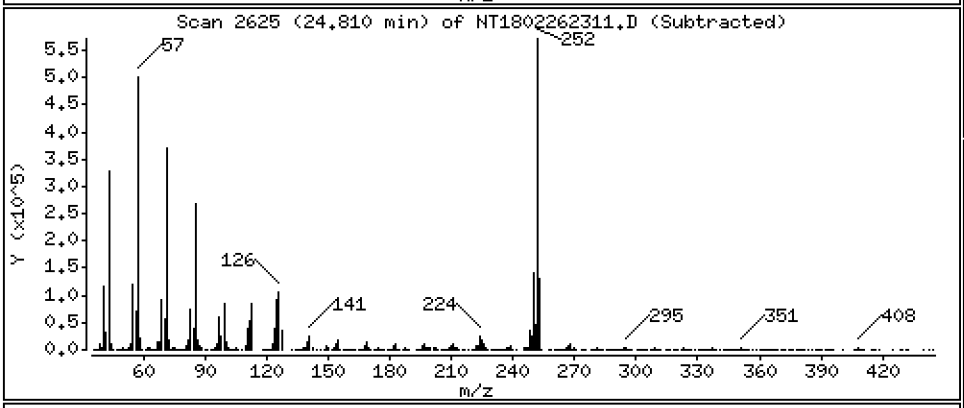
Column phase: ZB-5msi

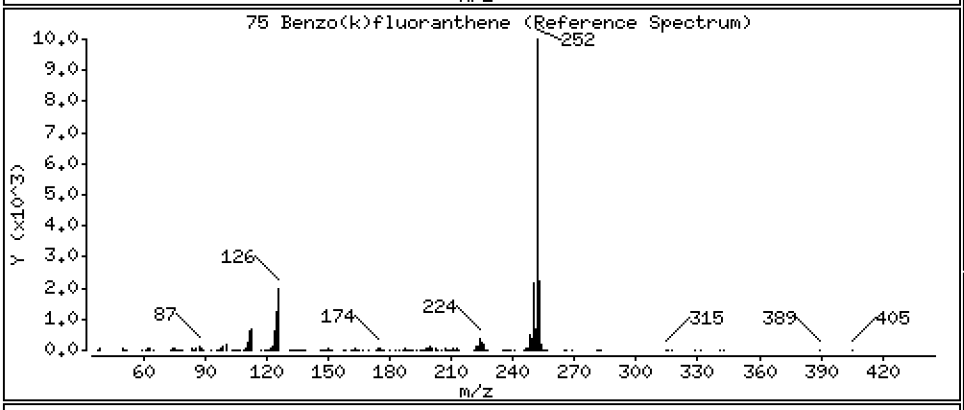
Column diameter: 0.25

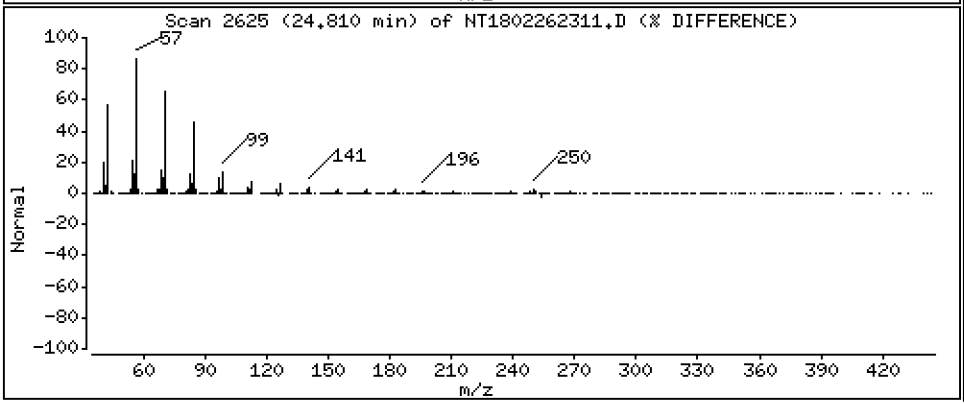
75 Benzo(k)fluoranthene

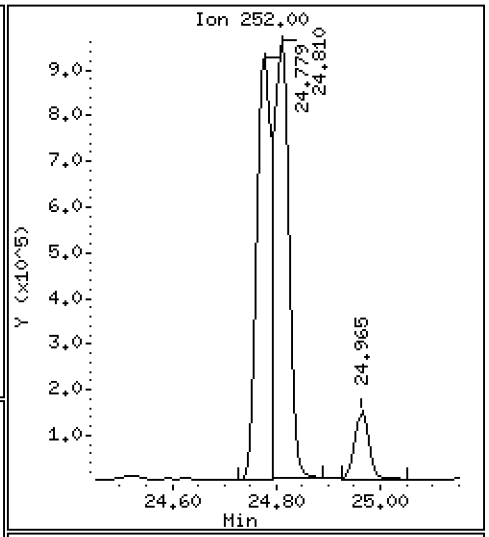
Concentration: 4.369 ug/mL

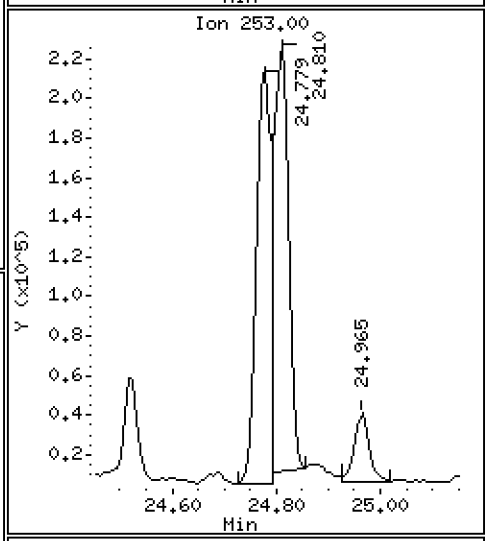


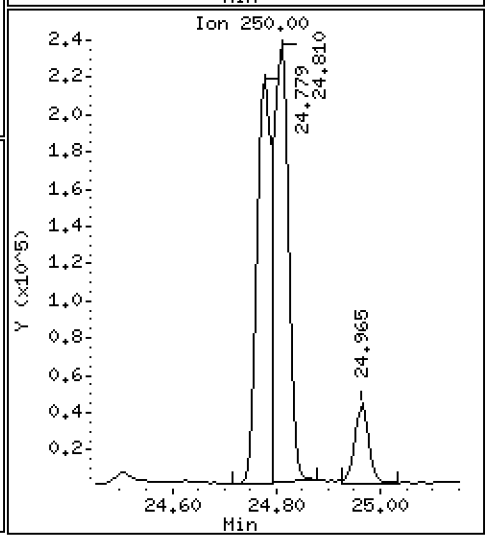












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

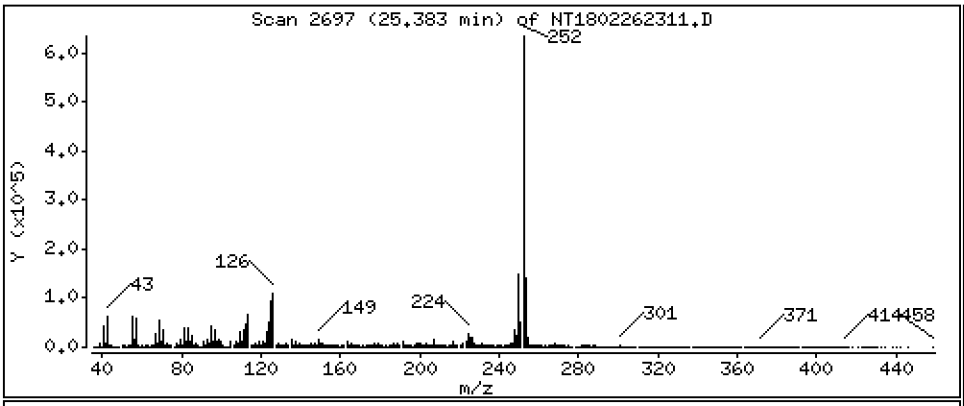
Operator: VTS

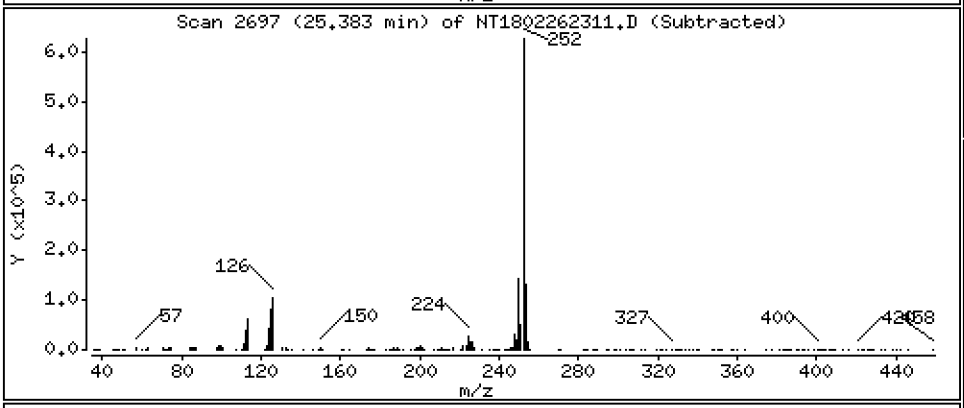
Column phase: ZB-5msi

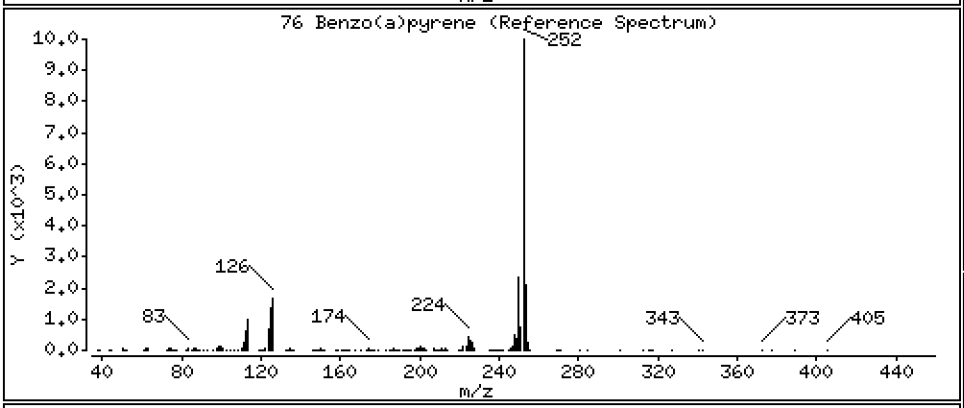
Column diameter: 0.25

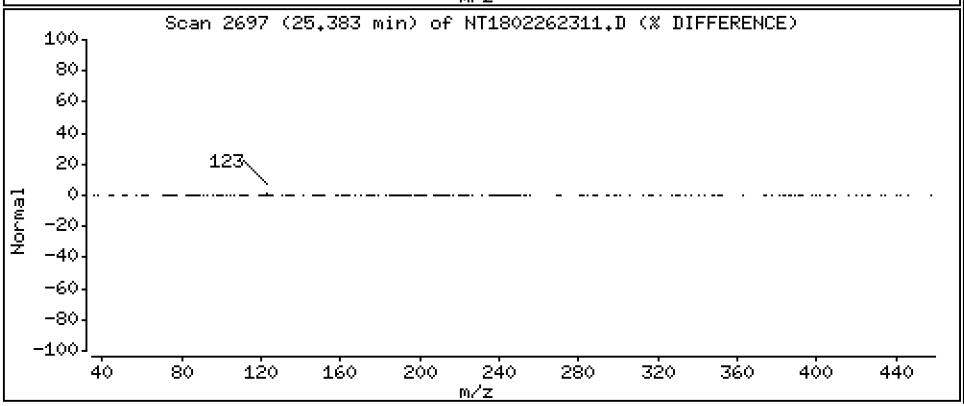
76 Benzo(a)pyrene

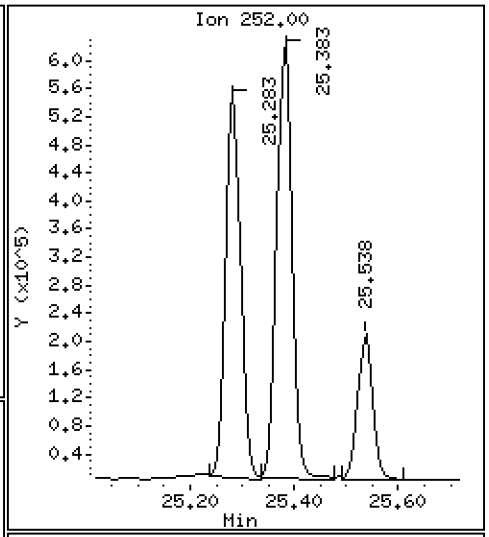
Concentration: 3.474 ug/mL

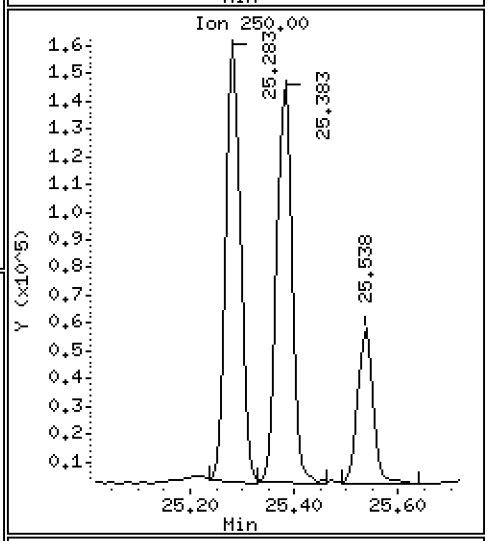


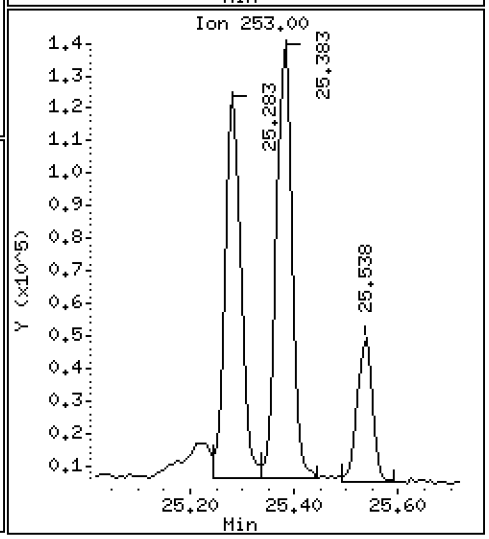












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

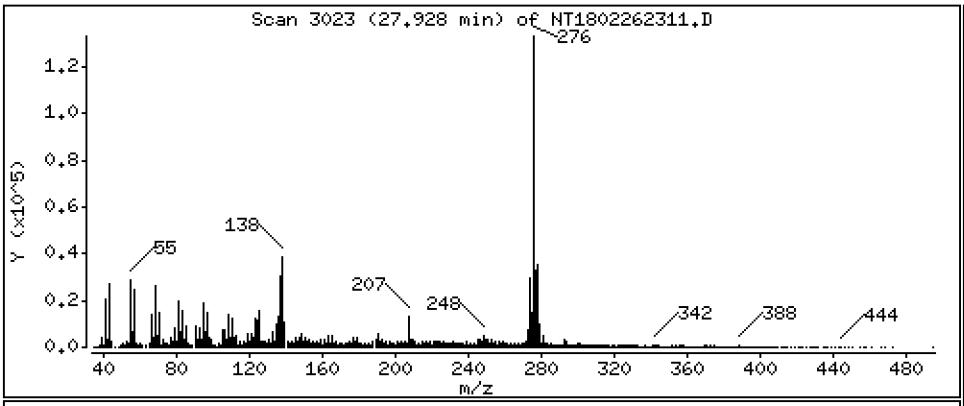
Operator: VTS

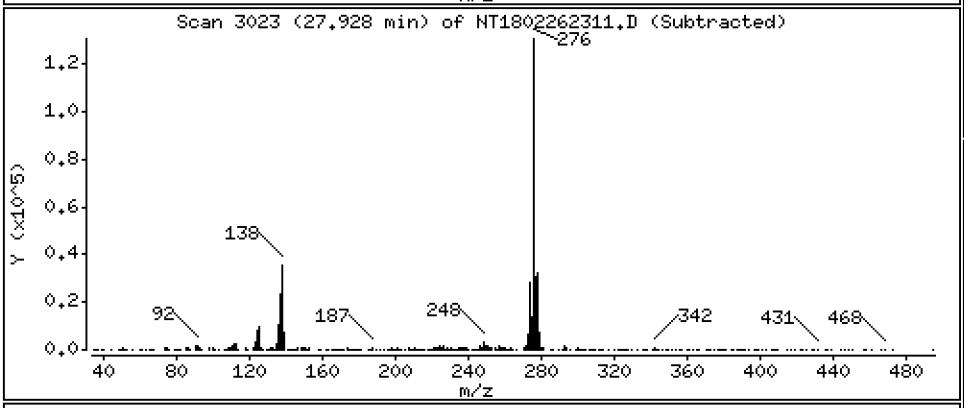
Column phase: ZB-5msi

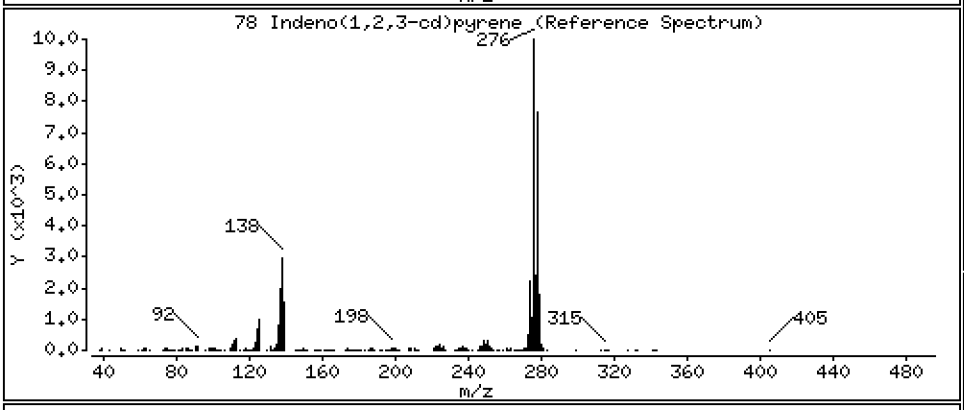
Column diameter: 0.25

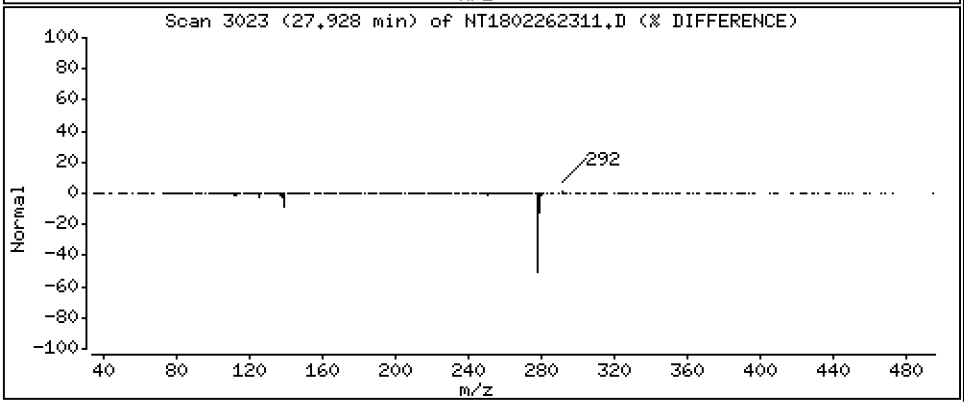
78 Indeno(1,2,3-cd)pyrene

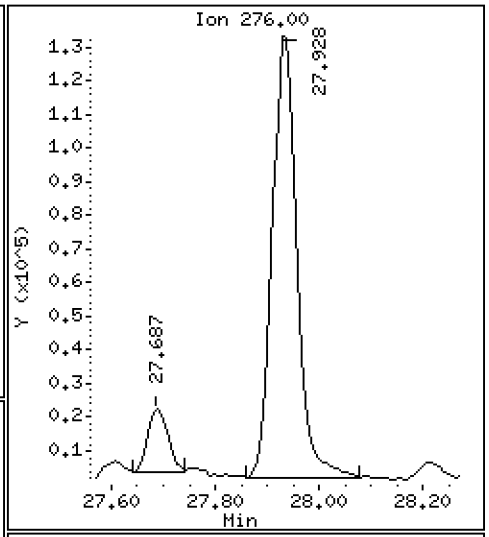
Concentration: 0.9565 ug/mL

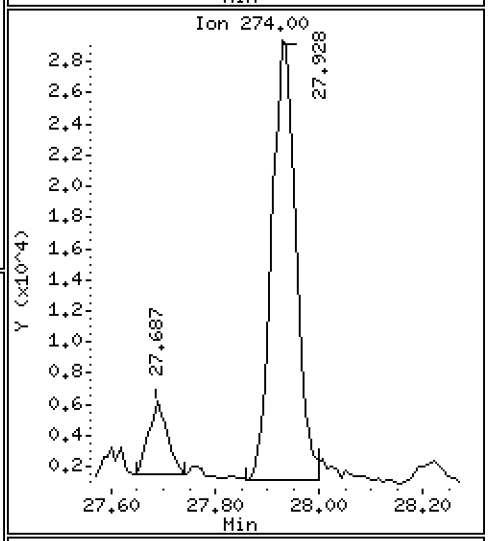


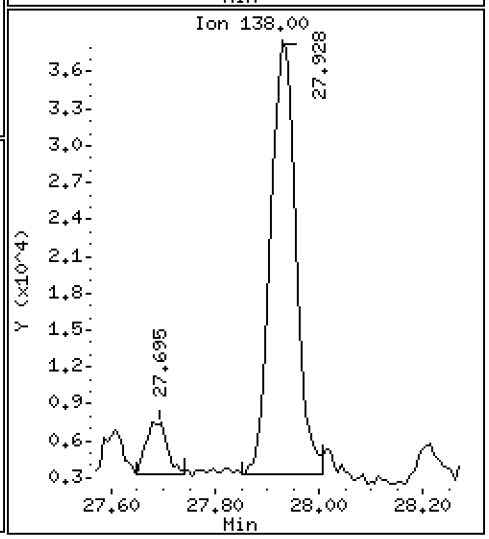












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

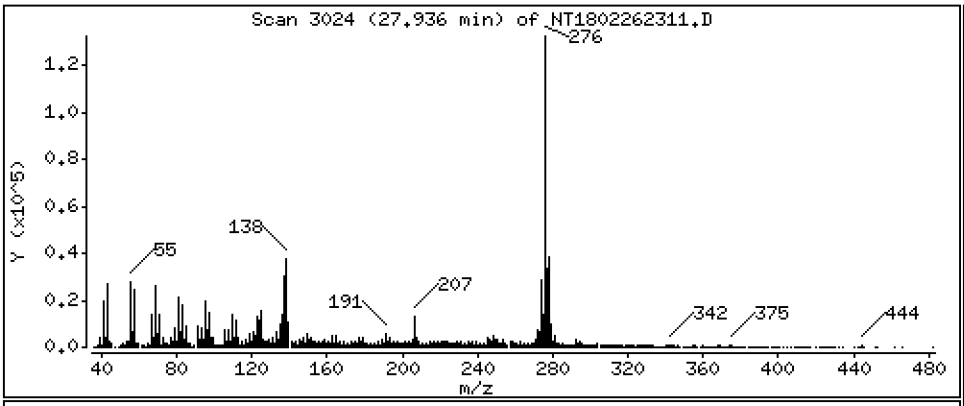
Operator: VTS

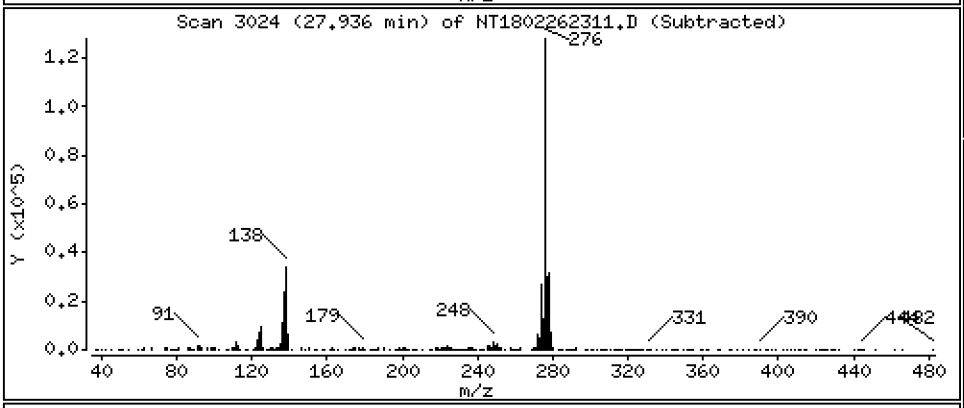
Column phase: ZB-5msi

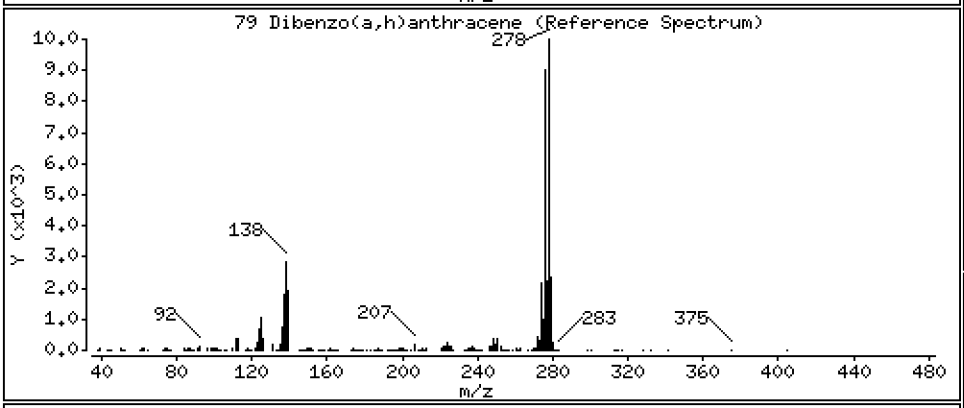
Column diameter: 0.25

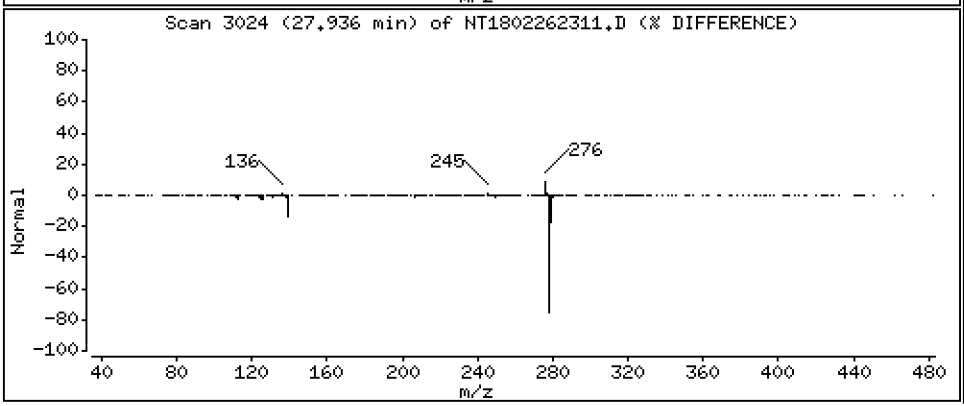
79 Dibenzo(a,h)anthracene

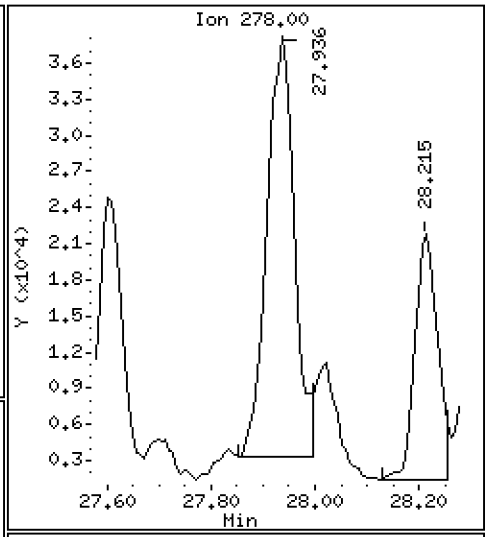
Concentration: 0.3426 ug/mL

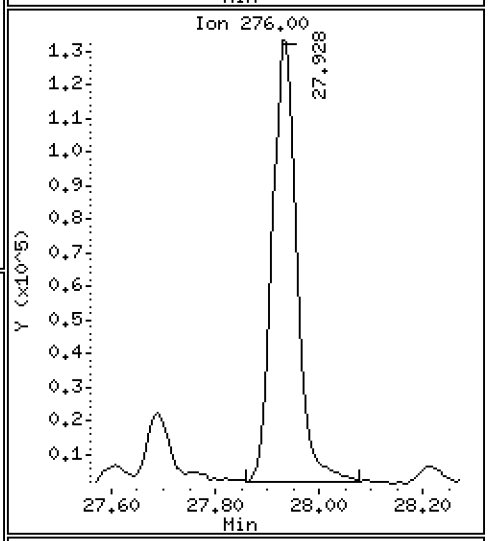


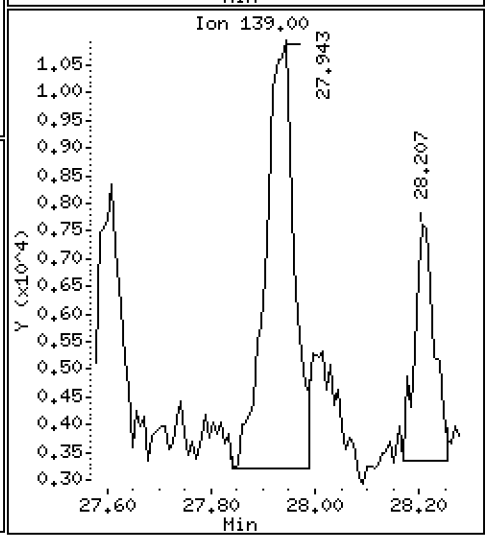












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

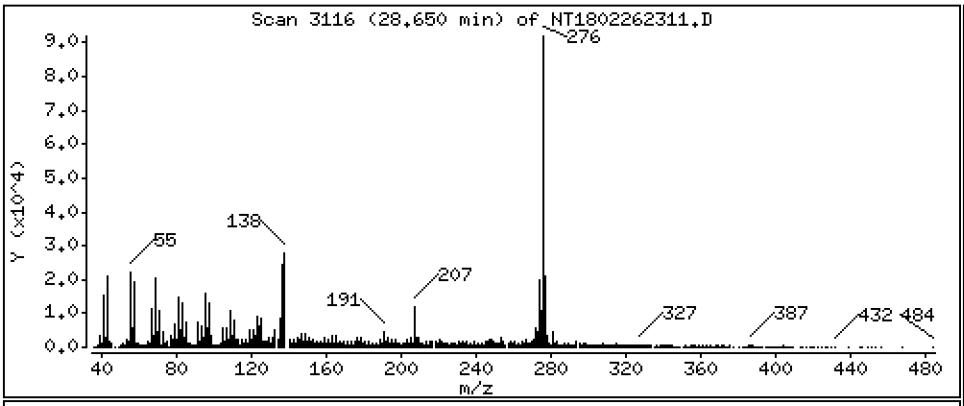
Operator: VTS

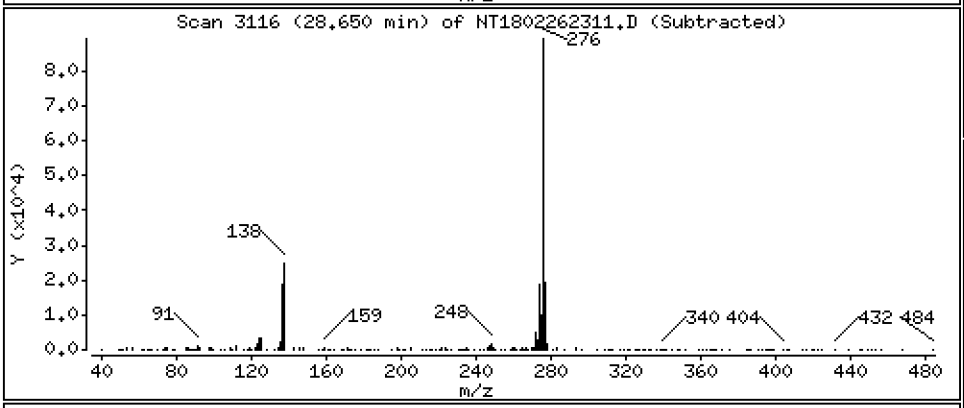
Column phase: ZB-5msi

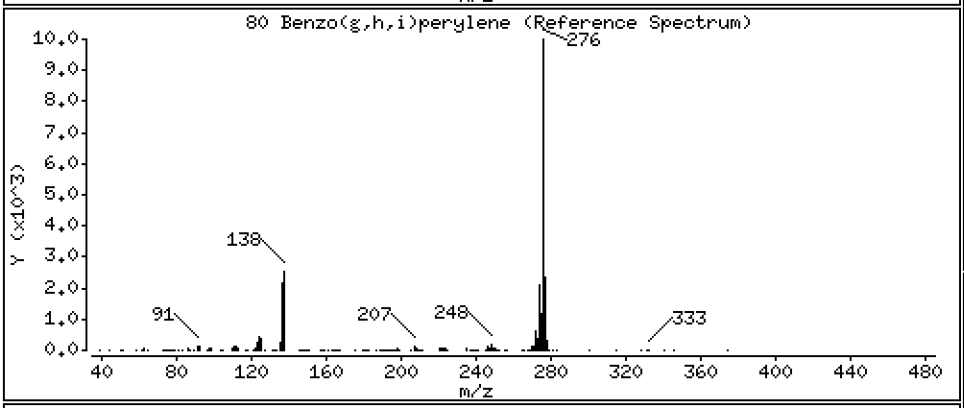
Column diameter: 0.25

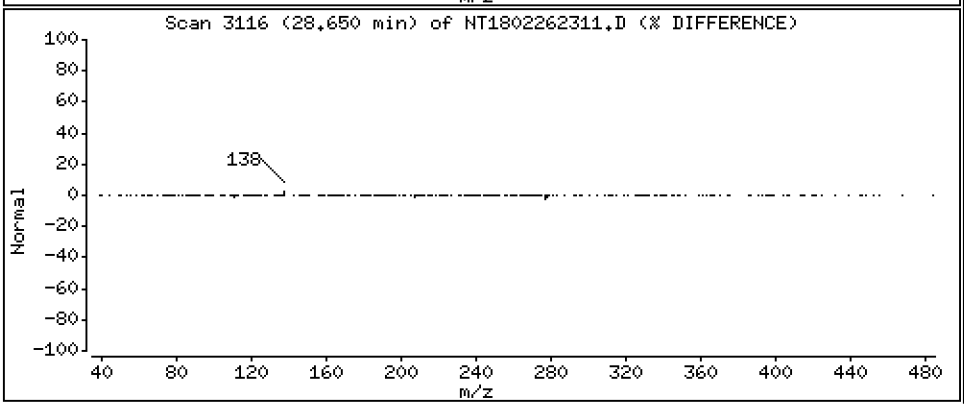
80 Benzo(g,h,i)perylene

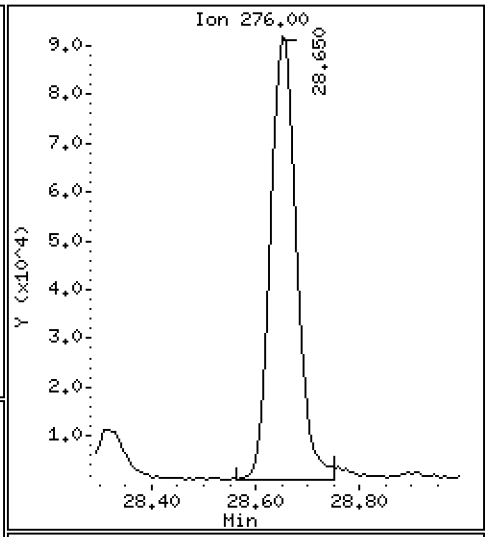
Concentration: 0.8772 ug/mL

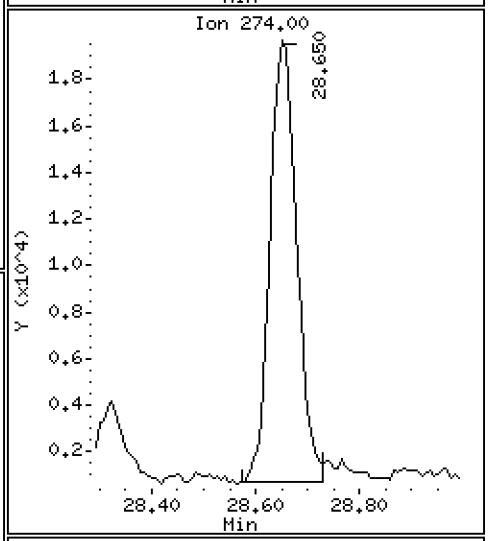


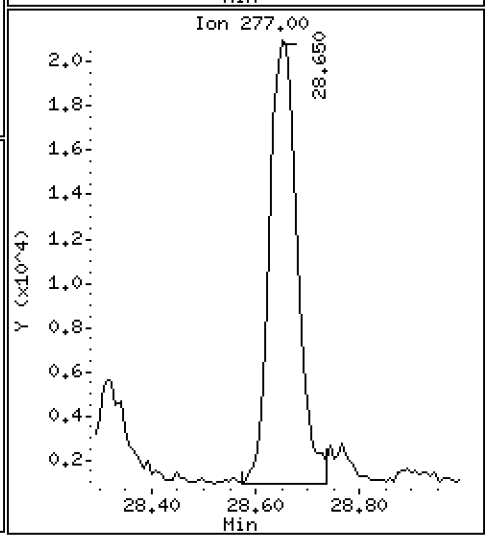












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

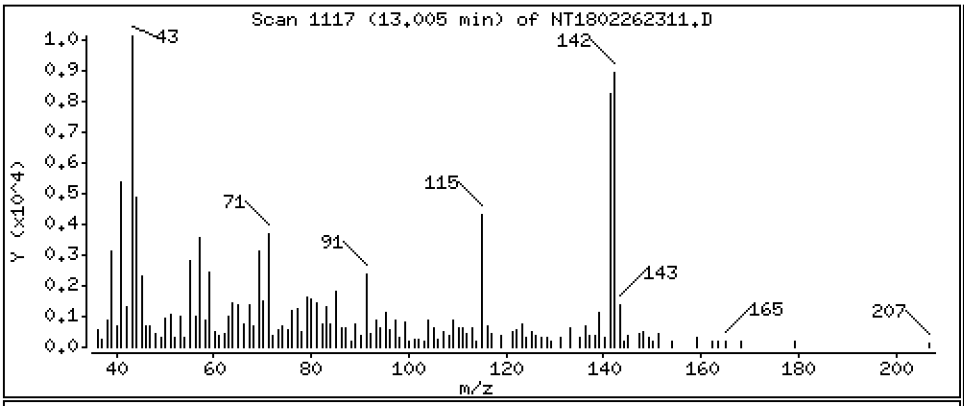
Operator: VTS

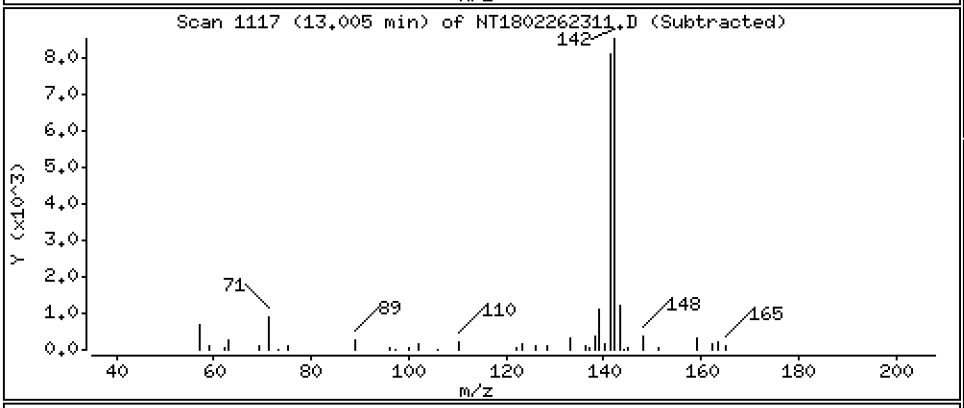
Column phase: ZB-5msi

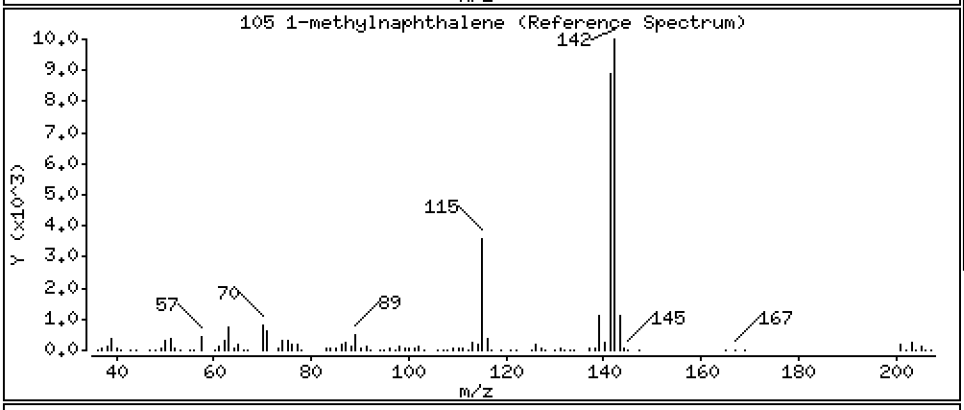
Column diameter: 0.25

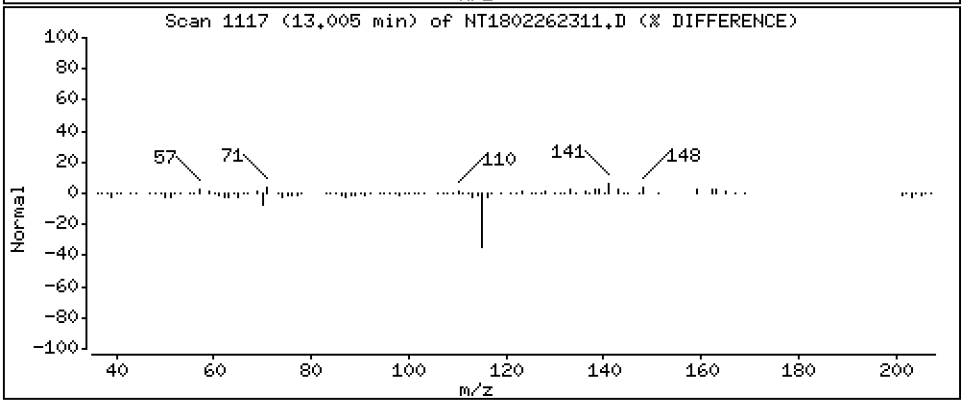
105 1-methylnaphthalene

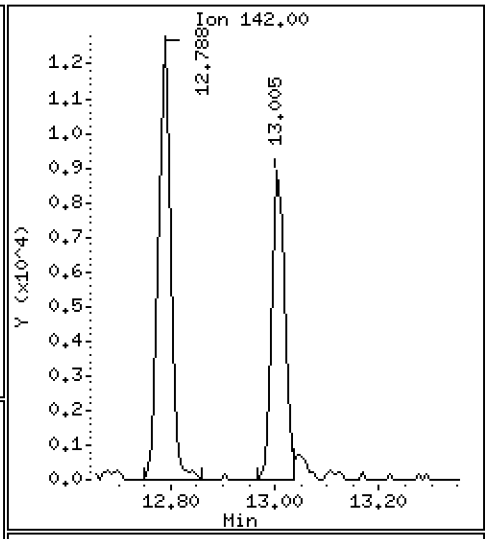
Concentration: 0.07769 ug/mL

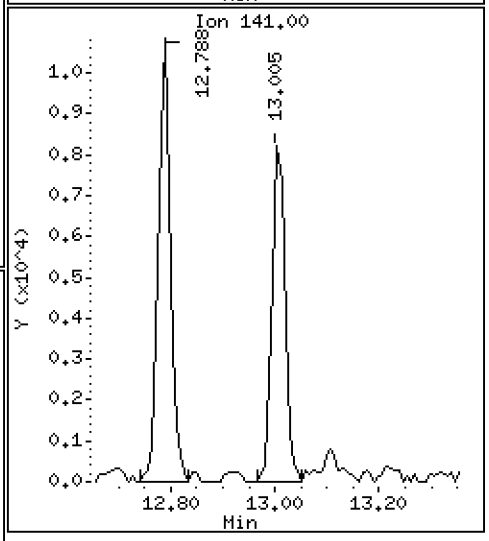












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

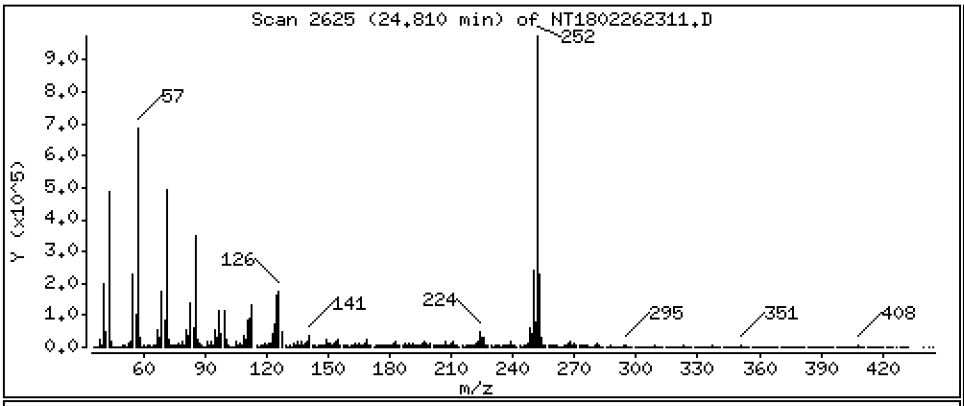
Operator: VTS

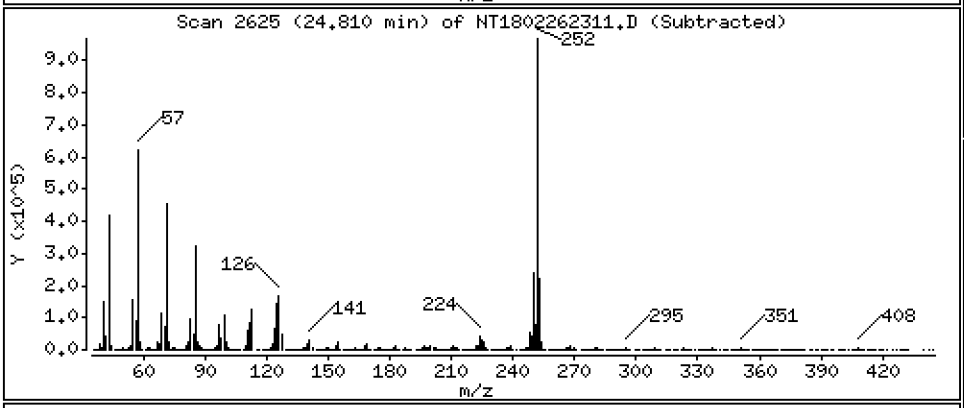
Column phase: ZB-5msi

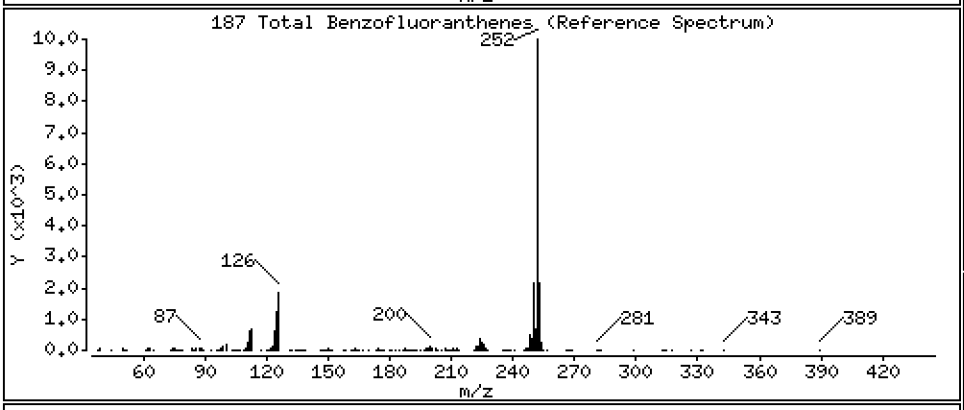
Column diameter: 0.25

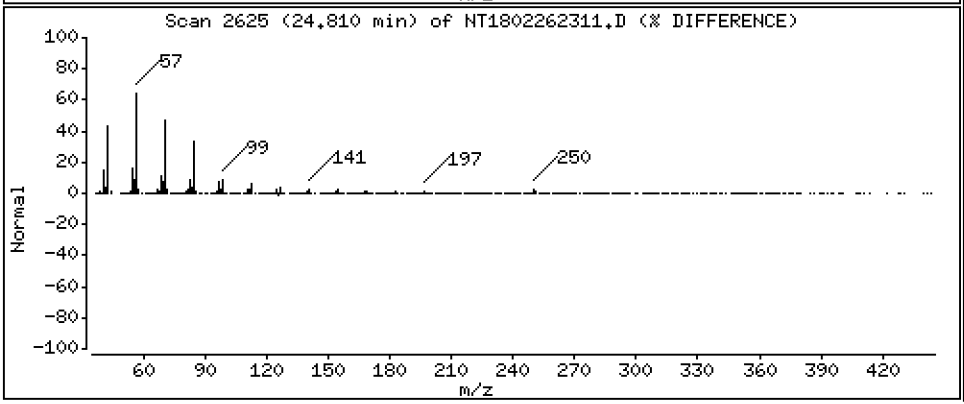
187 Total Benzofluoranthenes

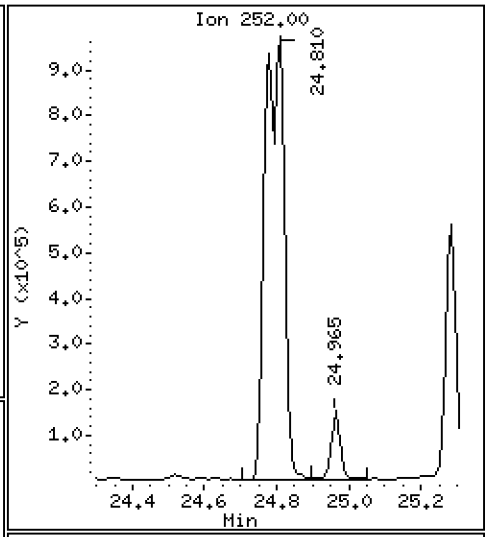
Concentration: 9.191 ug/mL

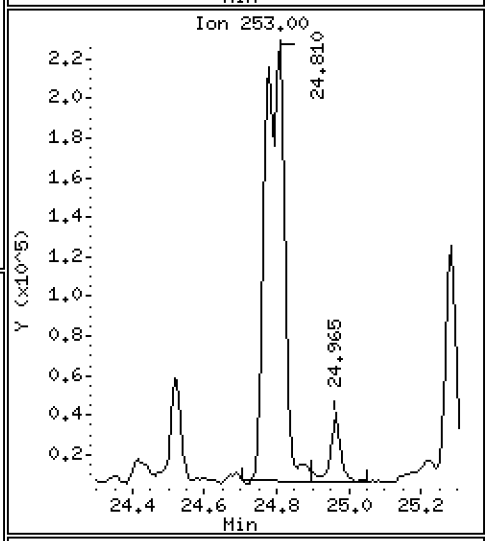


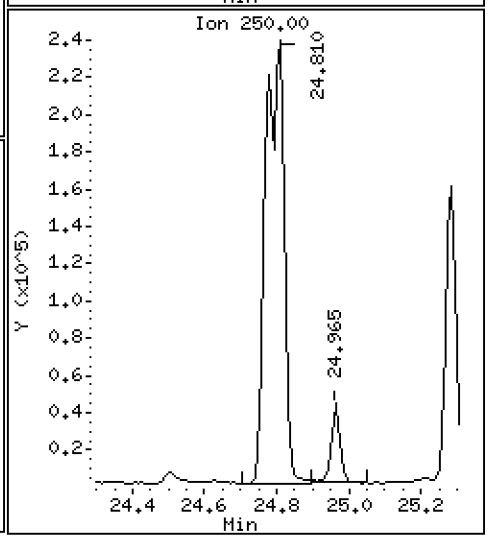












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262311.D
Lab Smp Id: 23A0134-02
Inj Date : 26-FEB-2023 18:32
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-02
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.766	6.743	(0.759)	497429	5.56761	5.568
$	2 Phenol-d5	99	8.311	8.296	(0.932)	649627	5.62620	5.626
	3 Phenol	94	8.327	8.319	(0.934)	557829	4.64333	4.643
$	5 2-Chlorophenol-d4	132	8.566	8.559	(0.961)	559821	5.57170	5.572
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.914	8.915	(1.000)	261869	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.271	9.272	(1.040)	227062	3.18775	3.188
	12 1,2-Dichlorobenzene	146	9.287	9.295	(1.042)	195	0.00181	0.001807
	11 Benzyl alcohol	108	9.202	9.186	(1.032)	9458	0.16558	0.1656
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.691	9.683	(1.087)	6677	0.06894	0.06894
$	18 Nitrobenzene-d5	82	9.993	9.993	(0.879)	384795	3.65022	3.650
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	10.335	10.475	(0.909)	418	0.00323	0.003229
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	10.956	10.990	(0.964)	31770	0.88090	0.8809(M)
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	989150	4.00000	
	28 Naphthalene	128	11.403	11.403	(1.003)	39163	0.12880	0.1288
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	20399	0.09873	0.09873
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	13.562	13.570	(0.907)	801463	3.59264	3.593
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
40	Acenaphthylene	152	14.630	14.630	(0.979)	82637	0.28154	0.2815
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	14.947	14.947	(1.000)	529116	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	15.009	15.009	(1.004)	162672	0.87567	0.8757
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.334	15.334	(1.026)	135371	0.50346	0.5035
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	15.906	15.921	(1.064)	38183	0.19464	0.1946
49	Fluorene	166	16.037	16.037	(1.073)	160492	0.74484	0.7448
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	195490	7.08763	7.088
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	17.952	17.952	(1.000)	1011676	4.00000	
60	Phenanthrene	178	17.999	17.999	(1.003)	1951554	6.13287	6.133
61	Anthracene	178	18.092	18.092	(1.008)	494277	1.62996	1.630
62	Carbazole	167	18.424	18.424	(1.026)	68319	0.24586	0.2459
63	Di-n-butylphthalate	149	19.237	19.237	(1.072)	40584	0.13195	0.1319
64	Fluoranthene	202	20.405	20.382	(0.888)	5538003	14.0622	14.06
65	Pyrene	202	20.815	20.800	(0.905)	4733403	11.2695	11.27
$ 66	Terphenyl-d14	244	21.101	21.094	(0.918)	1296695	3.84913	3.849
67	Butylbenzylphthalate	149	22.023	22.023	(0.958)	19284	0.12091	0.1209
68	Benzo(a)anthracene	228	22.967	22.952	(0.999)	2277321	5.61192	5.612
* 69	Chrysene-d12	240	22.991	22.983	(1.000)	1124043	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.037	23.029	(1.002)	3007264	7.12669	7.127
72	bis(2-Ethylhexyl)phthalate	149	23.053	23.053	(0.959)	235250	0.96566	0.9657
* 134	Di-n-octylphthalate-d4	153	24.028	24.020	(1.000)	1696842	4.00000	
73	Di-n-octylphthalate	149	24.043	24.028	(1.001)	49677	0.10506	0.1051
74	Benzo(b)fluoranthene	252	24.779	24.764	(0.972)	1998182	5.16862	5.169
75	Benzo(k)fluoranthene	252	24.810	24.802	(0.973)	1914022	4.36856	4.369(H)
76	Benzo(a)pyrene	252	25.383	25.368	(0.996)	1245093	3.47413	3.474
* 77	Perylene-d12	264	25.491	25.476	(1.000)	1184980	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.927	27.920	(1.096)	430341	0.95650	0.9565
79	Dibenzo(a,h)anthracene	278	27.935	27.927	(1.096)	128561	0.34262	0.3426
80	Benzo(g,h,i)perylene	276	28.650	28.642	(1.124)	316406	0.87721	0.8772
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.005	13.005	(1.144)	14531	0.07769	0.07769
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.810	24.802	(0.973)	3592451	9.19092	9.191
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262311.D
Lab Smp Id: 23A0134-02
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	261869	7.27
27 Naphthalene-d8	943164	471582	1886328	989150	4.88
42 Acenaphthene-d10	501893	250947	1003786	529116	5.42
59 Phenanthrene-d10	896502	448251	1793004	1011676	12.85
69 Chrysene-d12	842481	421241	1684962	1124043	33.42
134 Di-n-octylphthala	1278043	639022	2556086	1696842	32.77
77 Perylene-d12	915681	457841	1831362	1184980	29.41

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.91	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	-0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.00
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
134 Di-n-octylphthala	24.02	23.52	24.52	24.03	0.03
77 Perylene-d12	25.48	24.98	25.98	25.49	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262311.D

Lab ID: 23A0134-02
nt18.i, ABN.m, 26-FEB-2023 18:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.909	0.922	-0.0123	Isophorone

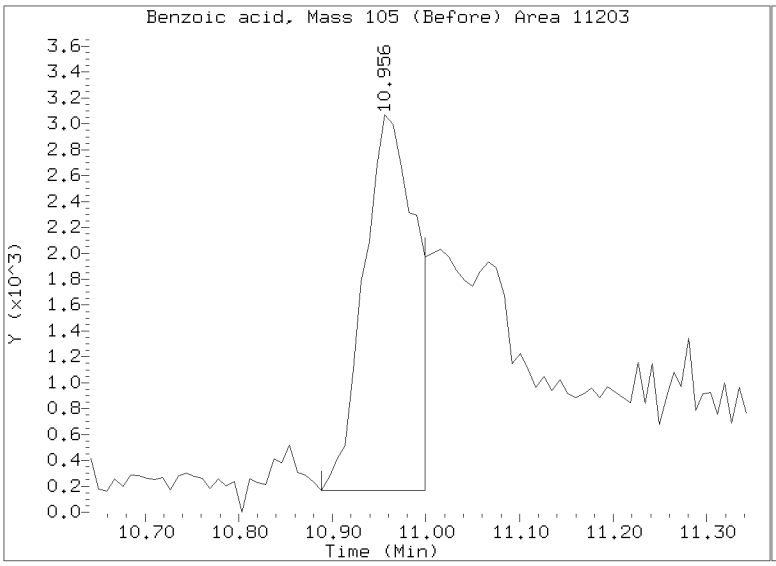
RRT check based on Ccal File: NT1802262302.D

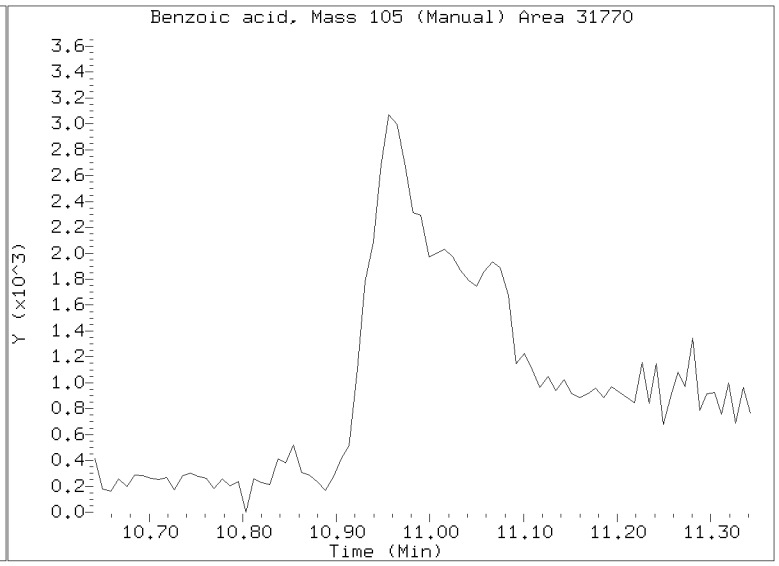
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/NT1802262311.D
Injection Date: 26-FEB-2023 18:32
Lab ID:23A0134-02 Client ID:
Report Date: 03/10/2023 07:46





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1179

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-03 C	SDG:	23A0134
Sampled:	01/06/23 09:52	Prepared:	01/19/23 13:35	File ID:	NT1802262312.D
% Solids:	47.33	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 19:12
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	21.38 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	196		4.3	19.8
106-44-5	4-Methylphenol	1	7.5	J	7.3	19.8
91-20-3	Naphthalene	1	24.5		4.2	19.8
91-57-6	2-Methylnaphthalene	1	12.9	J	4.5	19.8
208-96-8	Acenaphthylene	1	20.0		6.2	19.8
131-11-3	Dimethylphthalate	1	5.0	J	4.3	19.8
83-32-9	Acenaphthene	1	32.0		5.2	19.8
132-64-9	Dibenzofuran	1	17.6	J	14.0	19.8
86-73-7	Fluorene	1	30.5		14.4	19.8
85-01-8	Phenanthrene	1	349		8.6	19.8
120-12-7	Anthracene	1	63.2		7.1	19.8
206-44-0	Fluoranthene	1	644		6.0	19.8
129-00-0	Pyrene	1	759		5.6	19.8
85-68-7	Butylbenzylphthalate	1	18.6	J	9.3	19.8
56-55-3	Benzo(a)anthracene	1	248		5.9	19.8
218-01-9	Chrysene	1	434		6.0	19.8
117-81-7	bis(2-Ethylhexyl)phthalate	1	144		5.4	49.4
	Benzofluoranthenes, Total	1	1200		9.9	39.5
50-32-8	Benzo(a)pyrene	1	599		4.2	19.8
193-39-5	Indeno(1,2,3-cd)pyrene	1	191		14.5	19.8
53-70-3	Dibenzo(a,h)anthracene	1	64.4		17.0	19.8
191-24-2	Benzo(g,h,i)perylene	1	170		13.4	19.8

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	741.17	534	72.1	27 - 120	
Phenol-d5	741.17	558	75.3	29 - 120	
2-Chlorophenol-d4	741.17	548	73.9	31 - 120	
1,2-Dichlorobenzene-d4	494.11	313	63.4	32 - 120	
Nitrobenzene-d5	494.11	372	75.3	30 - 120	
2-Fluorobiphenyl	494.11	373	75.5	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1179

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-03 C	SDG:	23A0134
Sampled:	01/06/23 09:52	Prepared:	01/19/23 13:35	File ID:	NT1802262312.D
% Solids:	47.33	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 19:12
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	21.38 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	741.17	755	102	24 - 134	
p-Terphenyl-d14	494.11	380	76.9	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262312.D

Date : 26-FEB-2023 19:12

Client ID:

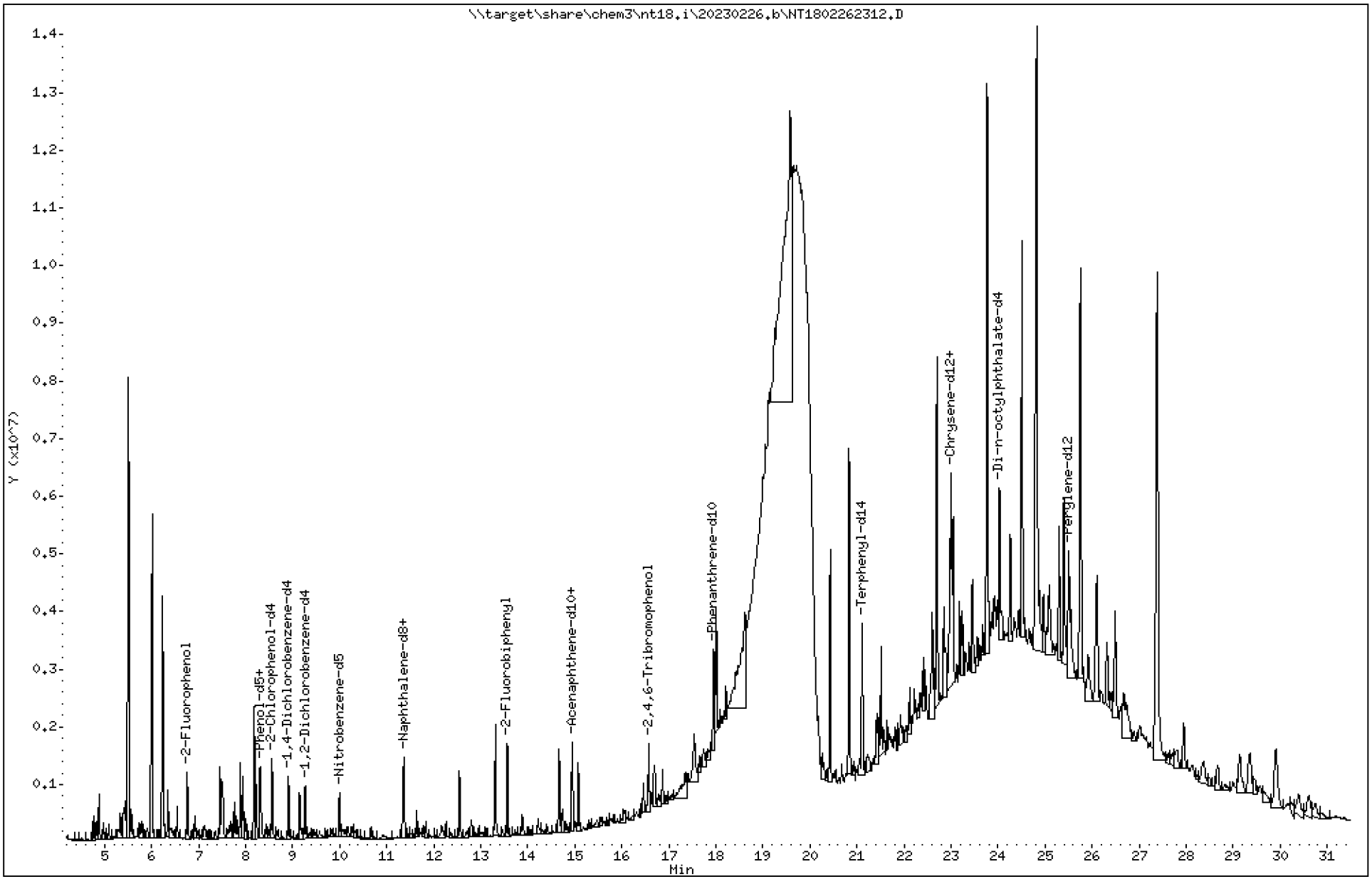
Instrument: nt18.i

Sample Info: 23A0134-03

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

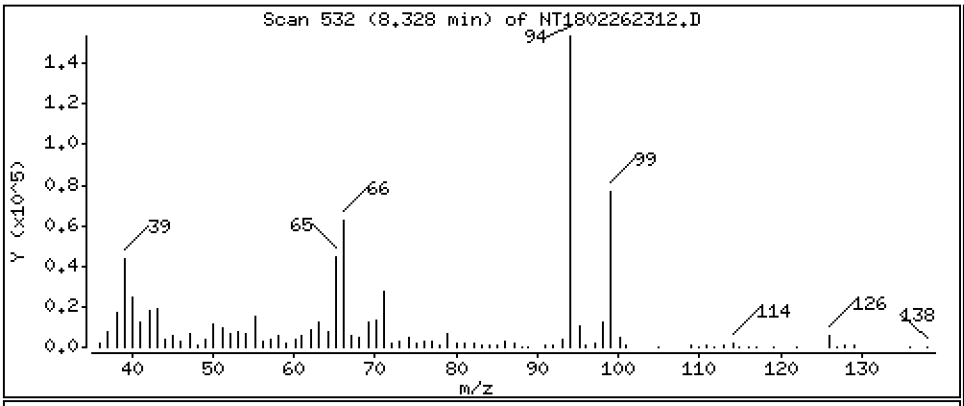
Operator: VTS

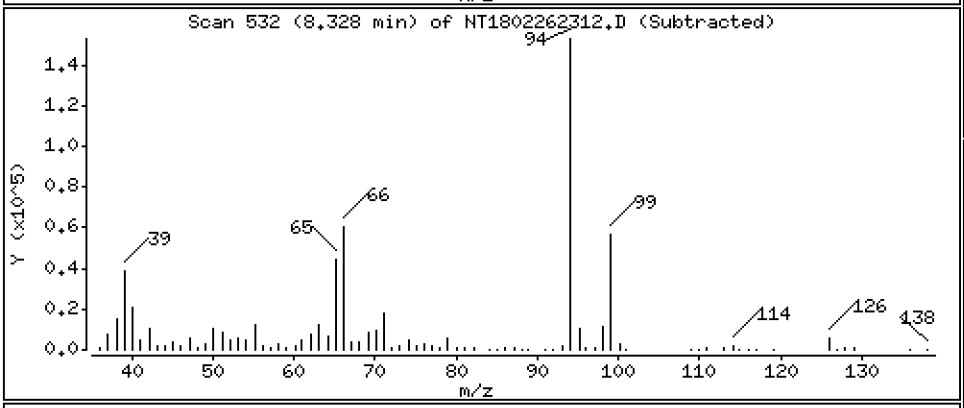
Column phase: ZB-5msi

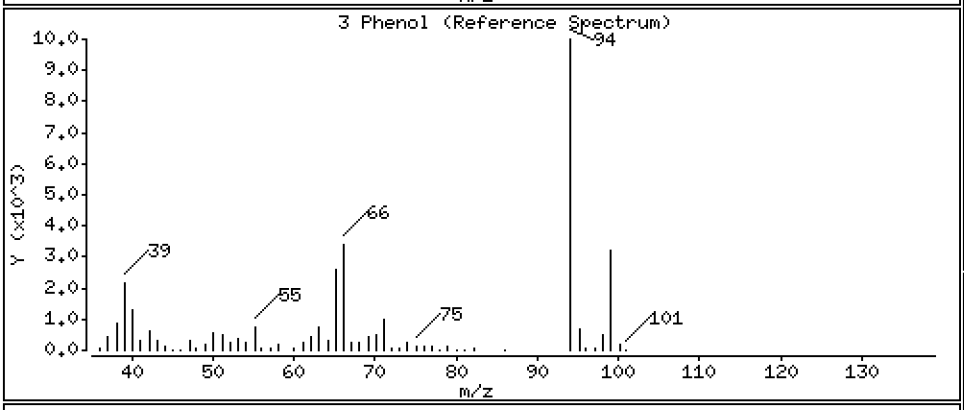
Column diameter: 0.25

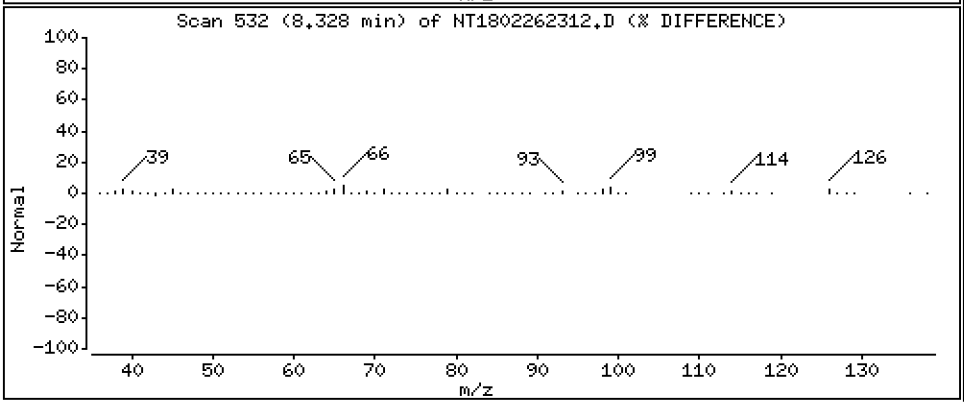
3 Phenol

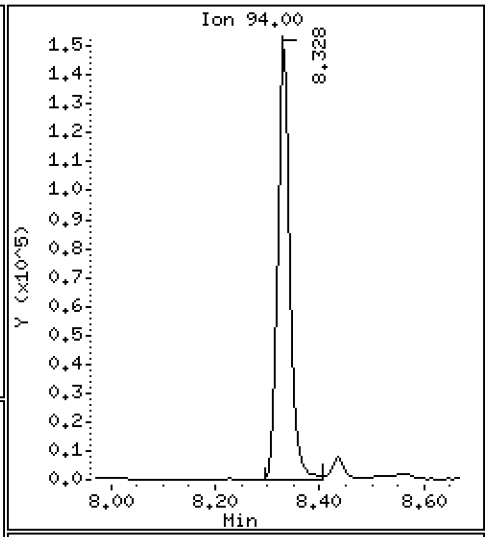
Concentration: 1.983 ug/mL

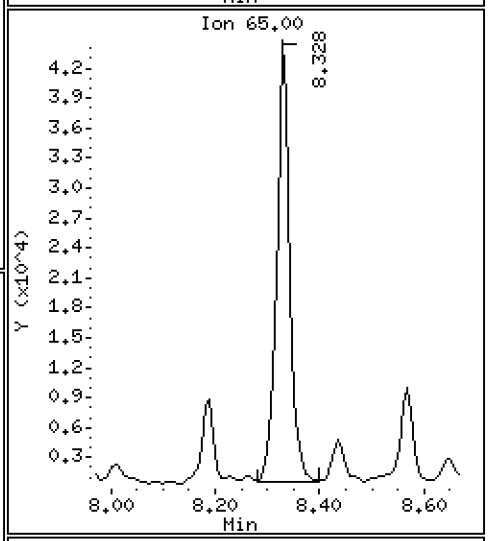


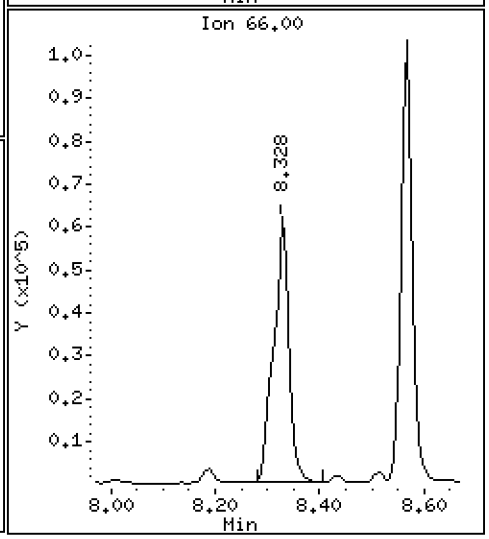












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

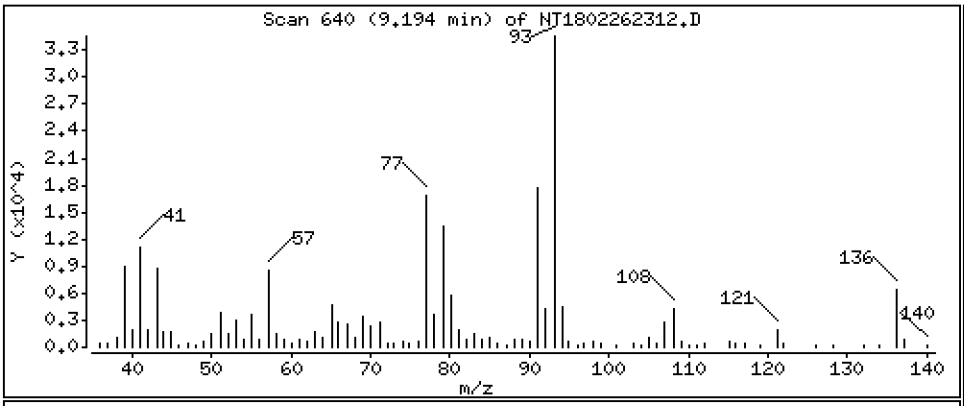
Operator: VTS

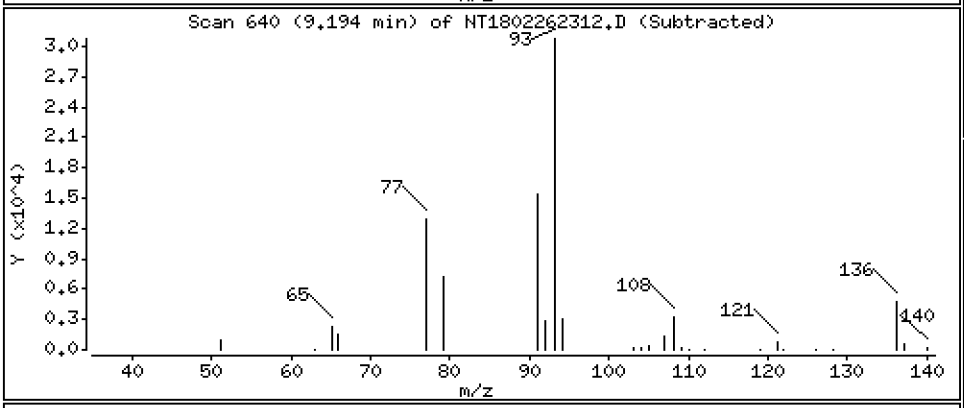
Column phase: ZB-5msi

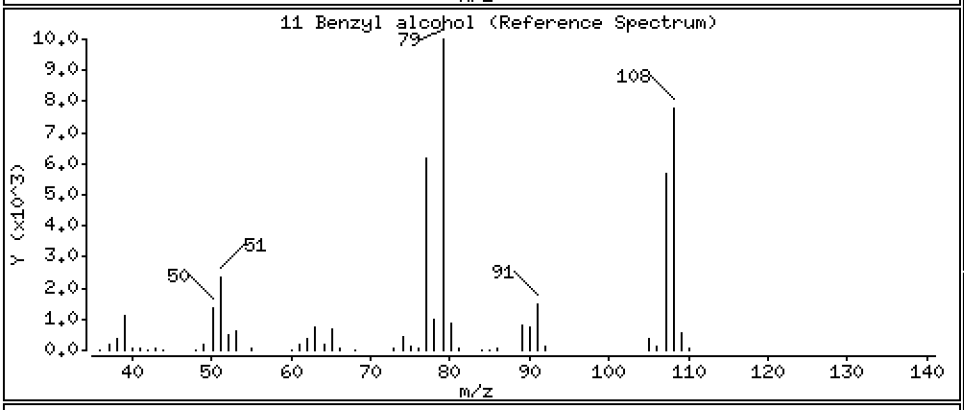
Column diameter: 0.25

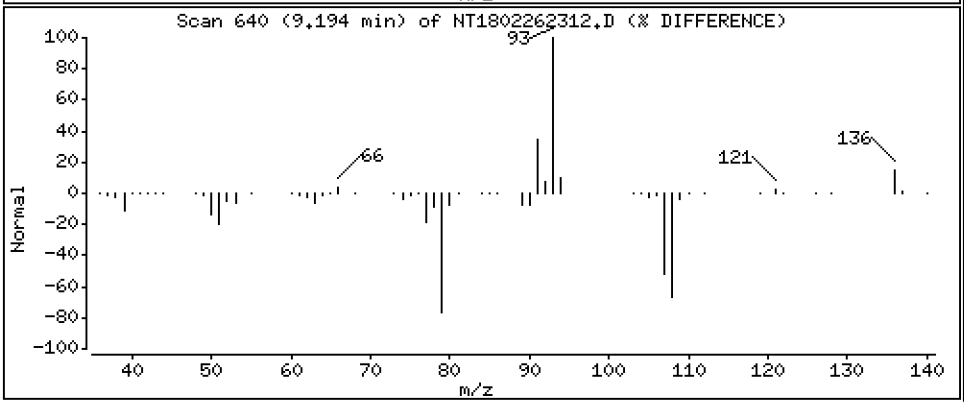
11 Benzyl alcohol

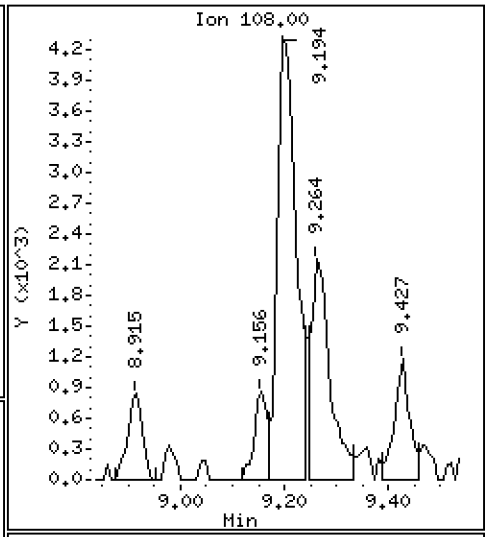
Concentration: 0.1893 ug/mL

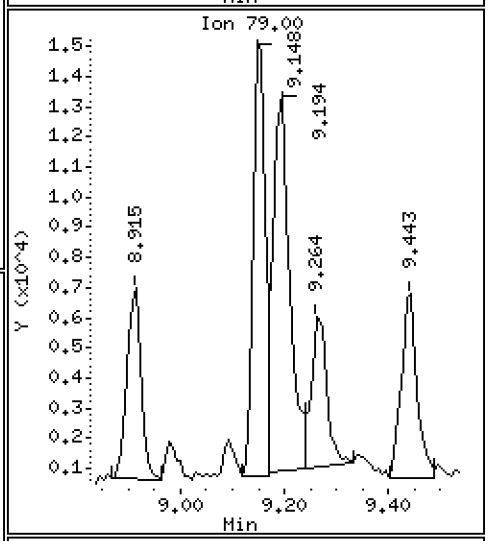


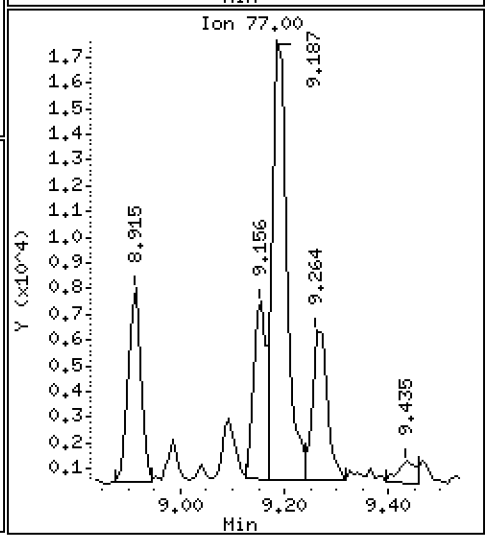












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

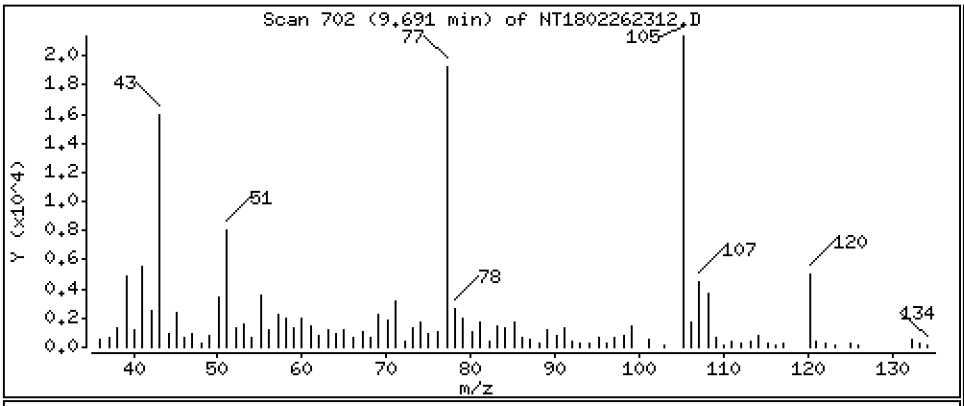
Operator: VTS

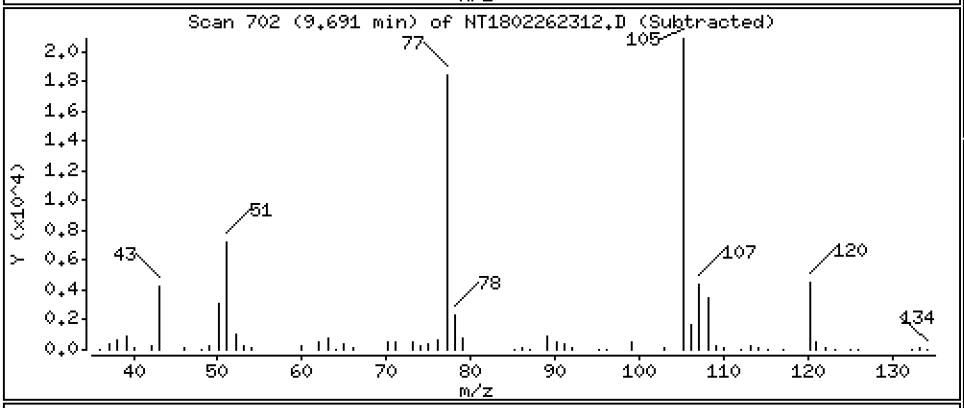
Column phase: ZB-5msi

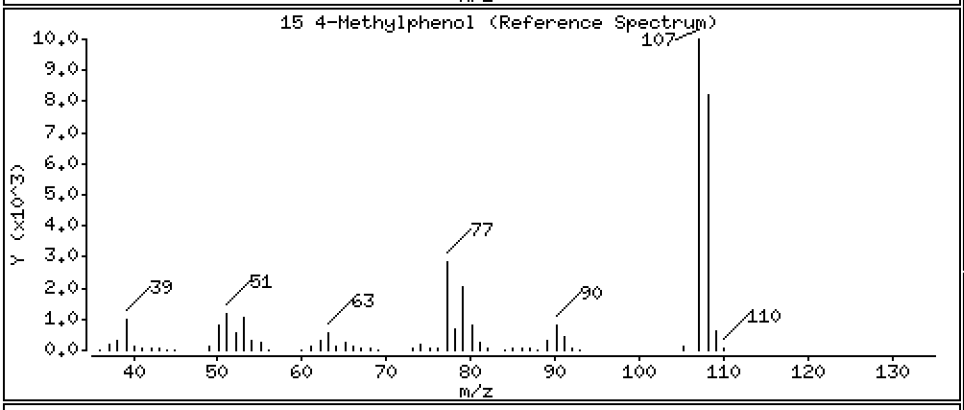
Column diameter: 0.25

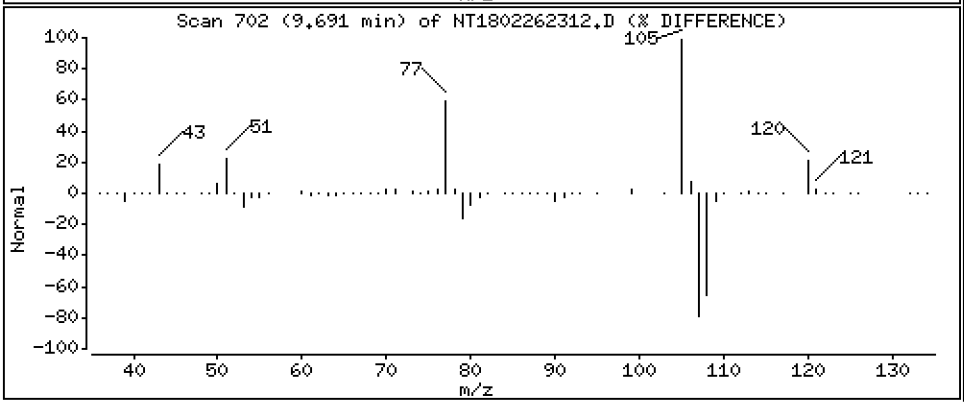
15 4-Methylphenol

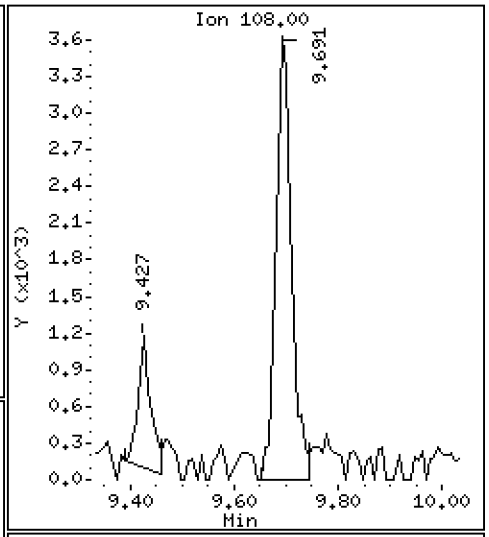
Concentration: 0.07636 ug/mL

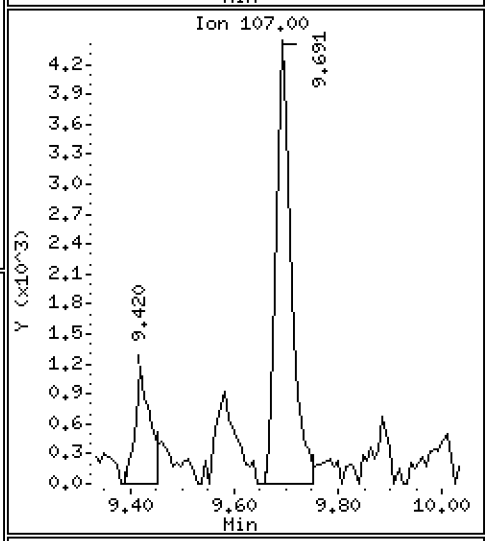


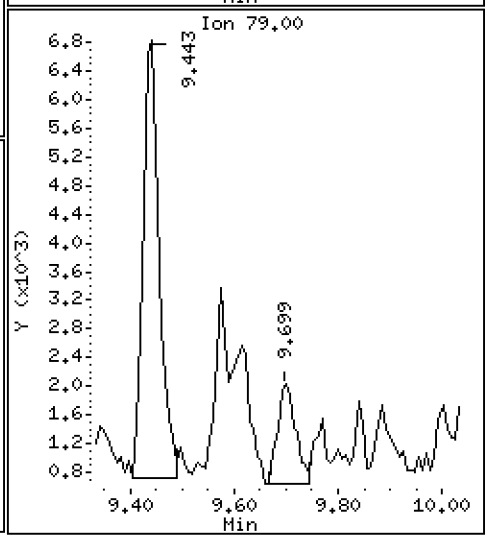












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

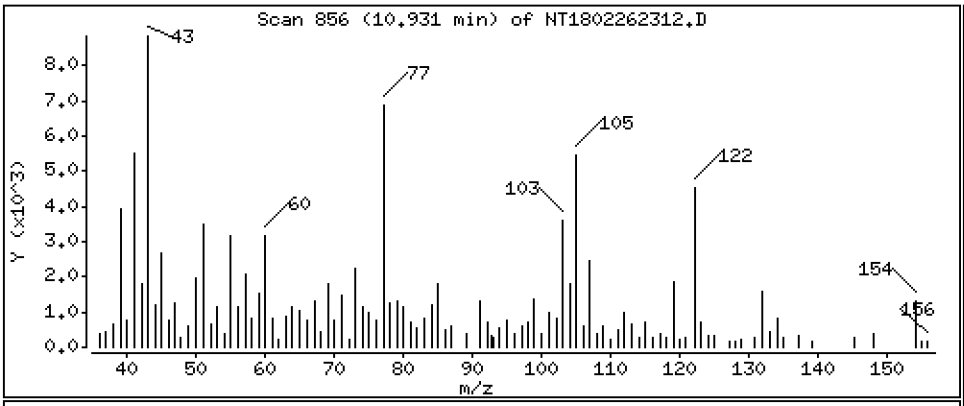
Operator: VTS

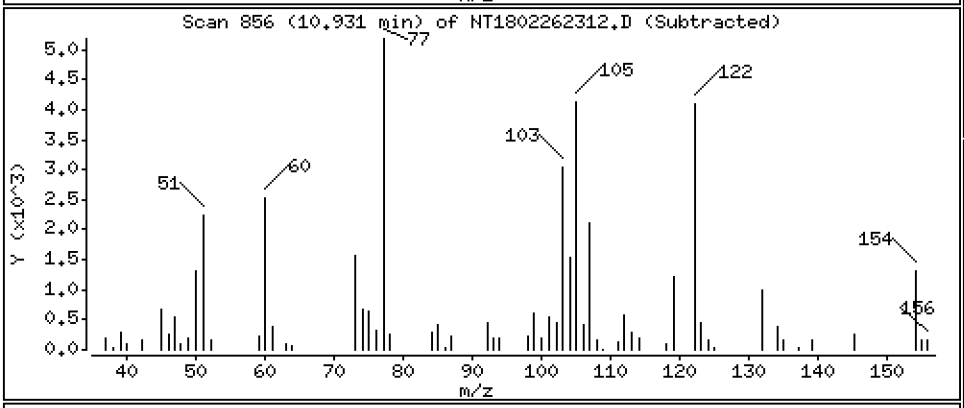
Column phase: ZB-5msi

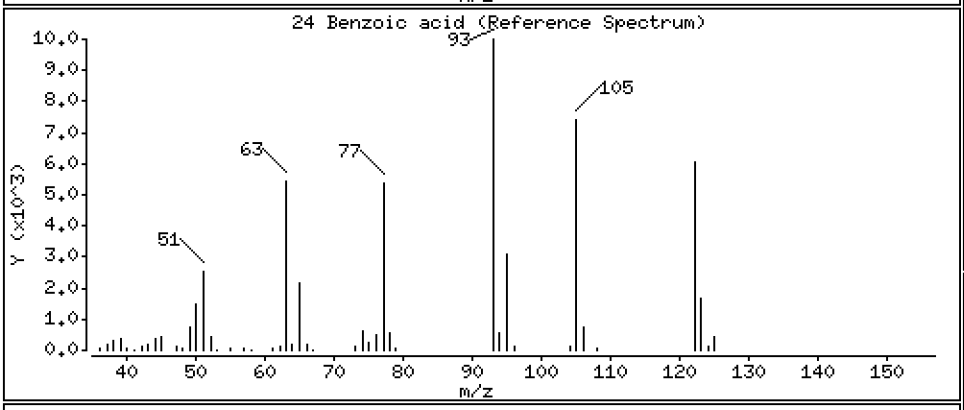
Column diameter: 0.25

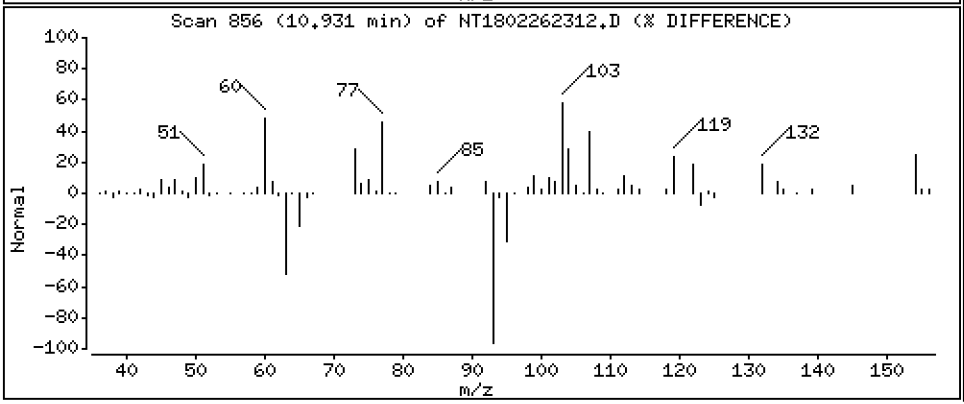
24 Benzoic acid

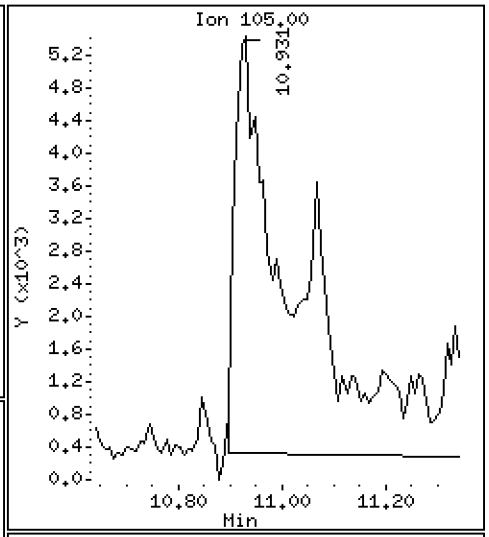
Concentration: 1.414 ug/mL

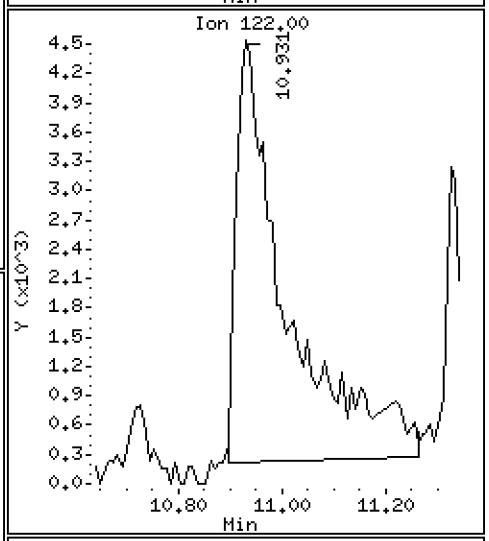


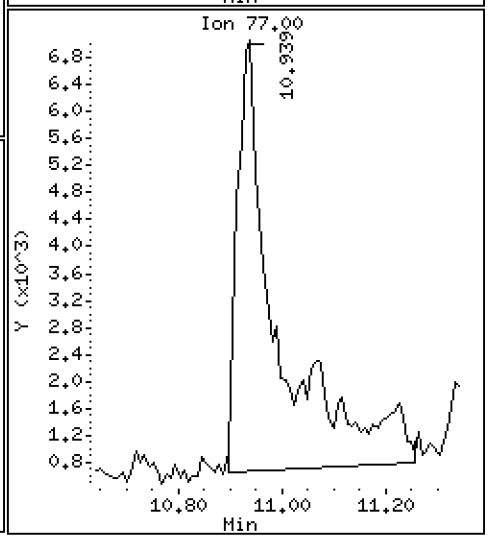












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262312.D

Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

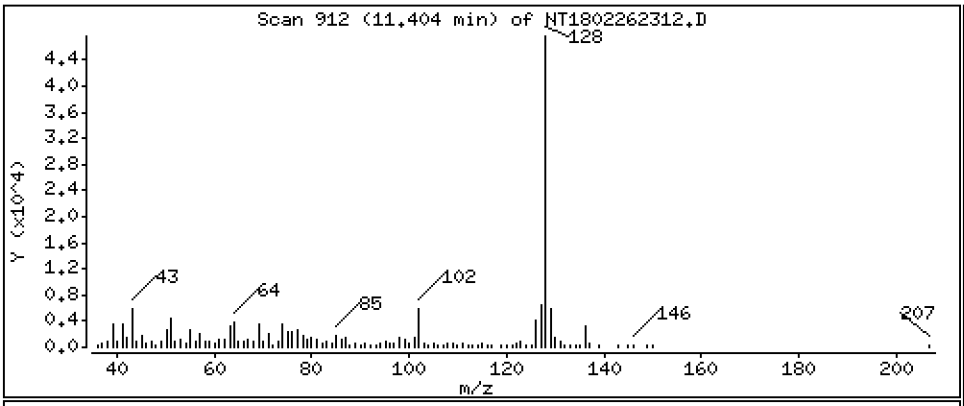
Operator: VTS

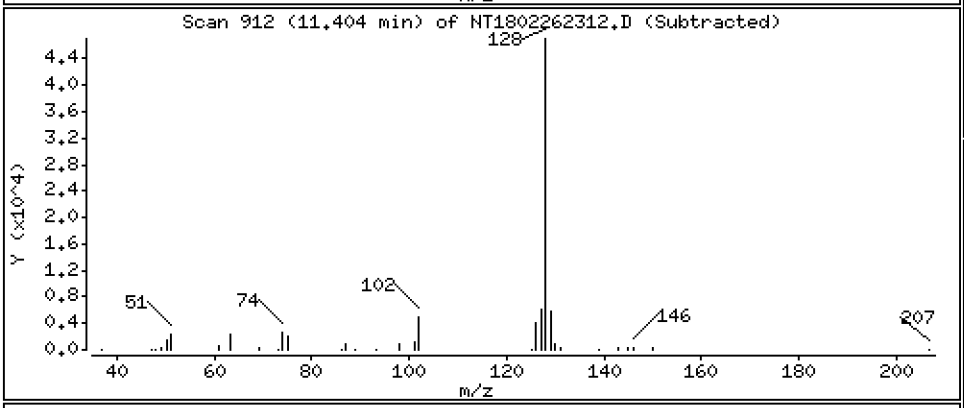
Column phase: ZB-5msi

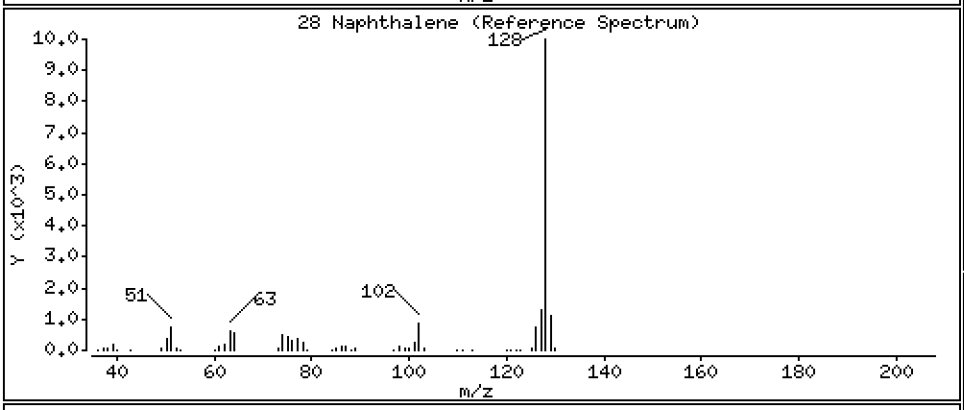
Column diameter: 0.25

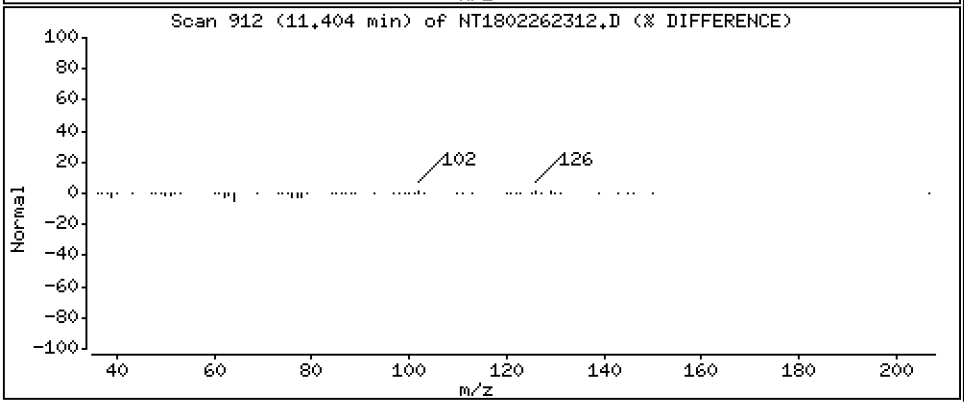
28 Naphthalene

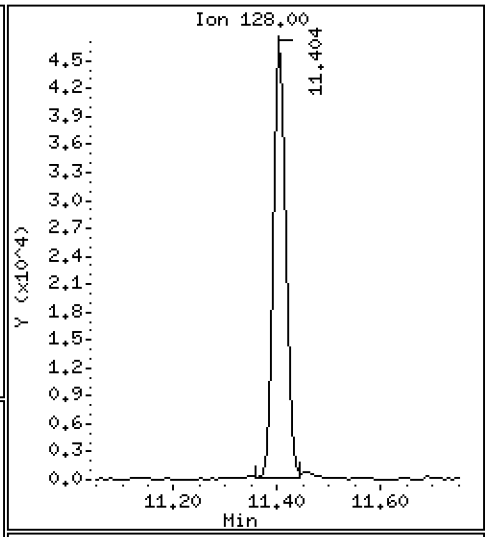
Concentration: 0.2478 ug/mL

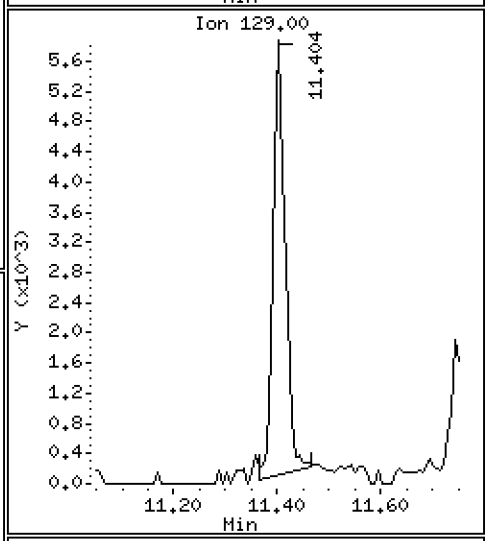


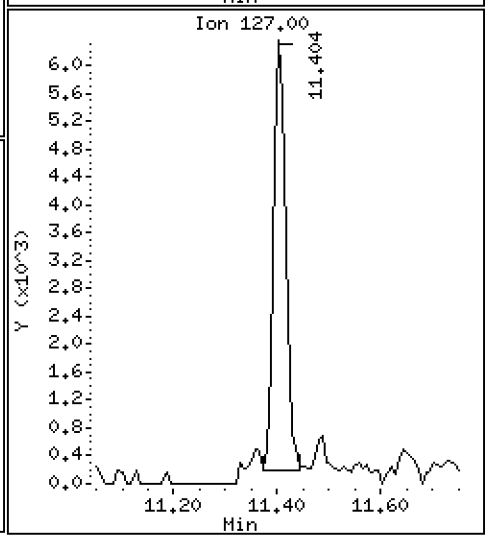












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262312.D

Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

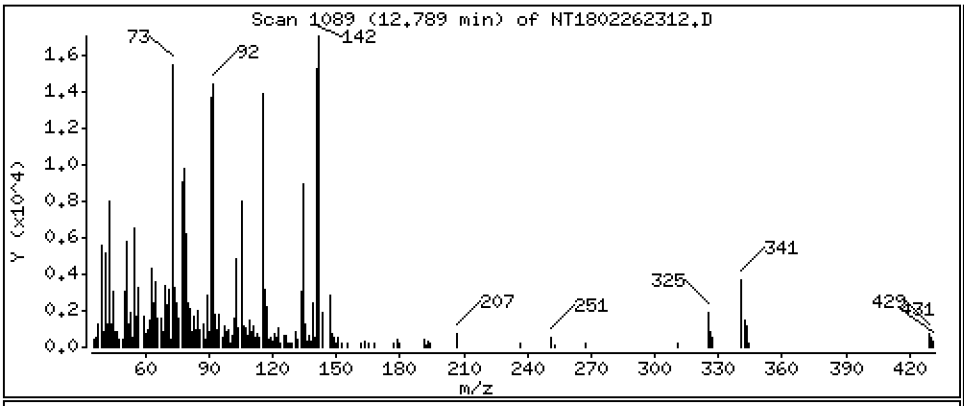
Operator: VTS

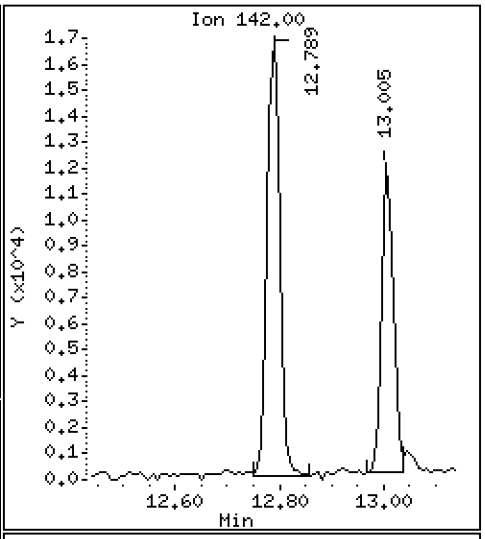
Column phase: ZB-5msi

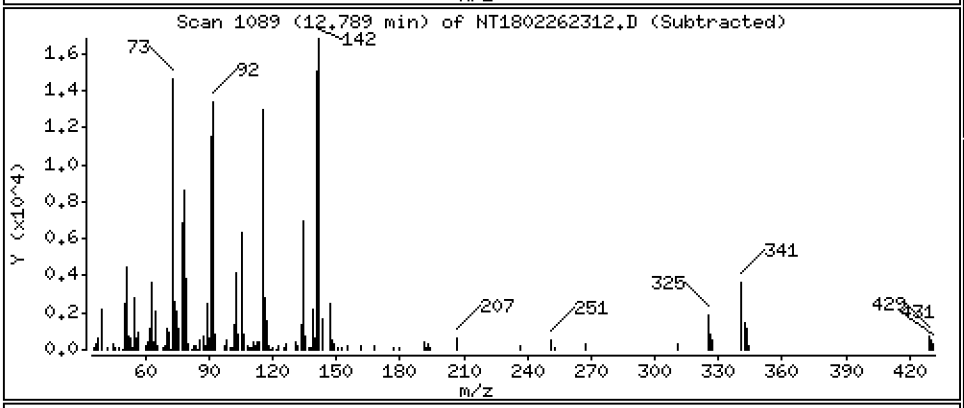
Column diameter: 0.25

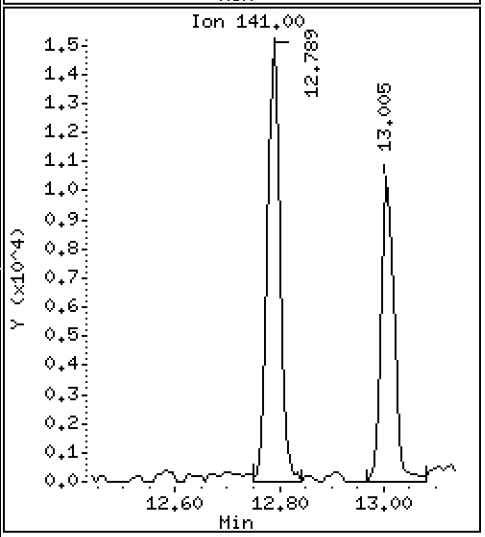
32 2-Methylnaphthalene

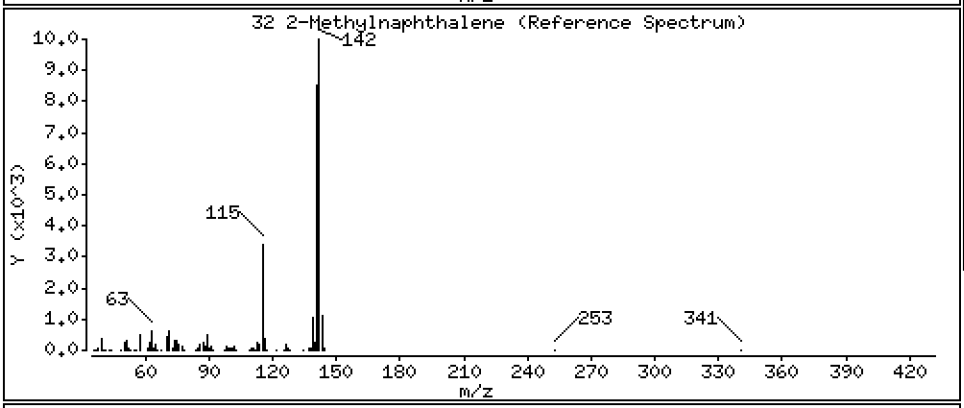
Concentration: 0.1308 ug/mL

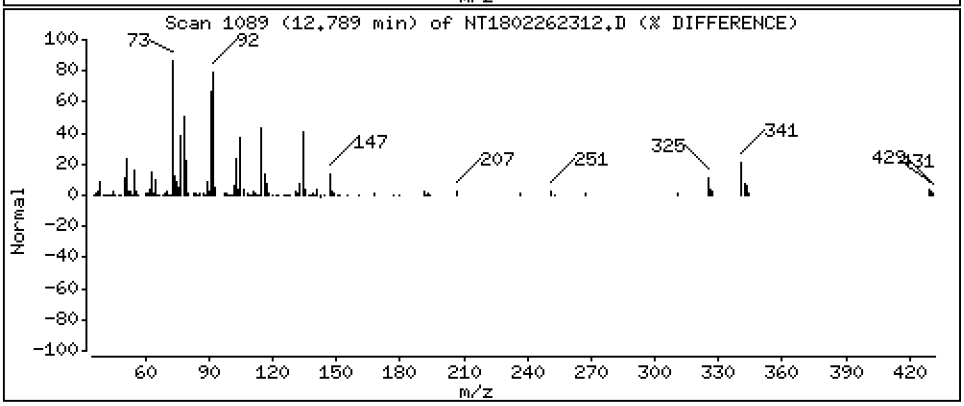












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262312.D

Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

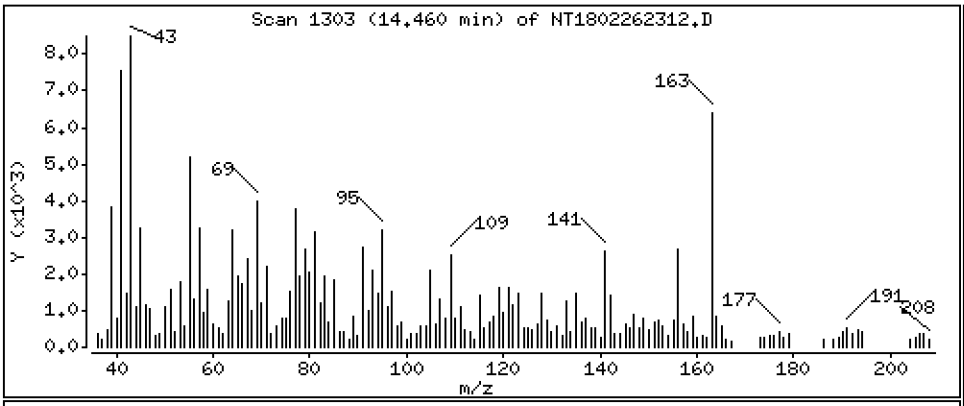
Operator: VTS

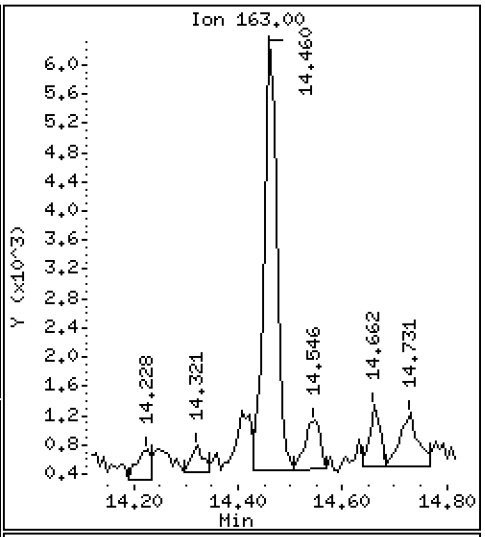
Column phase: ZB-5msi

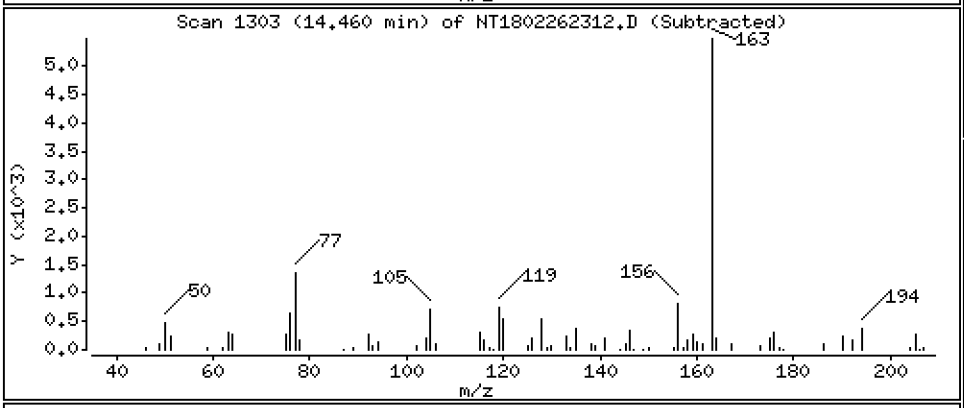
Column diameter: 0.25

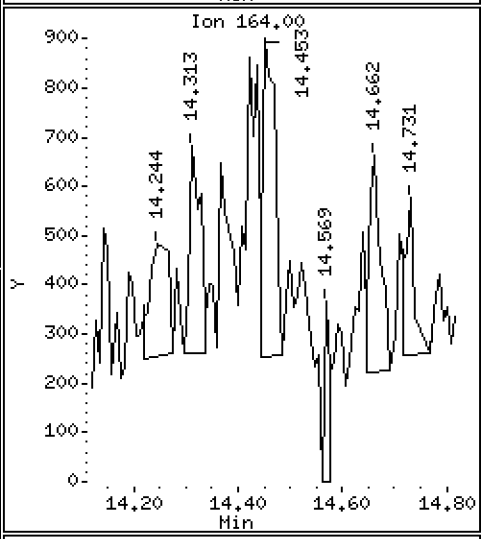
39 Dimethylphthalate

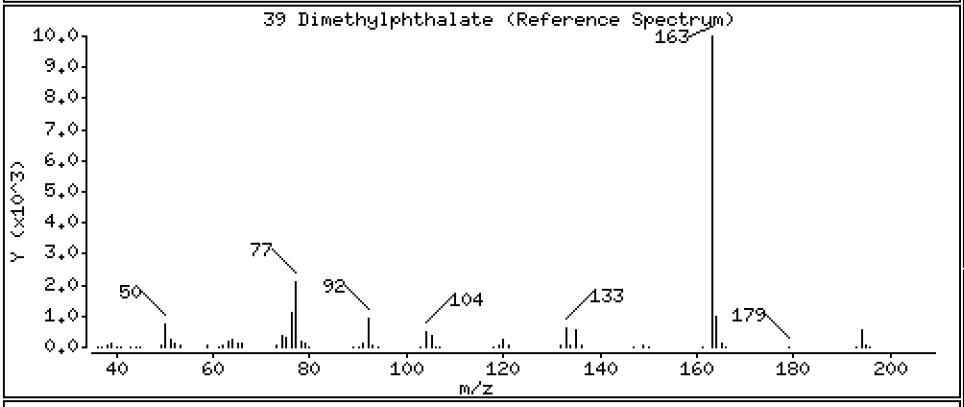
Concentration: 0.05077 ug/mL

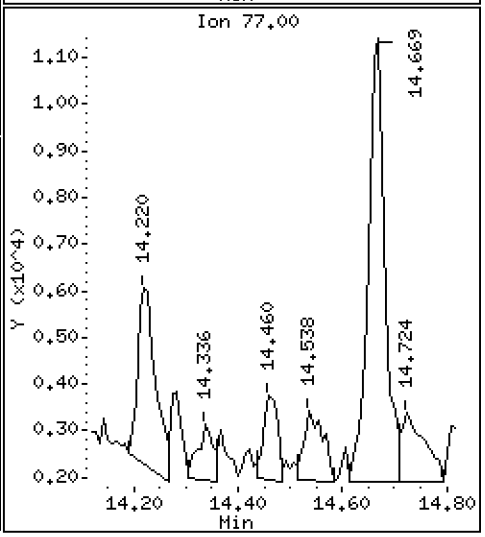


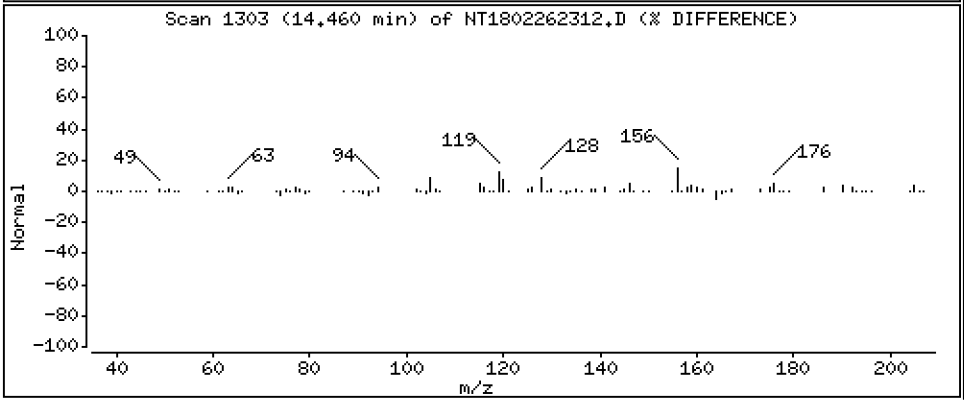












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

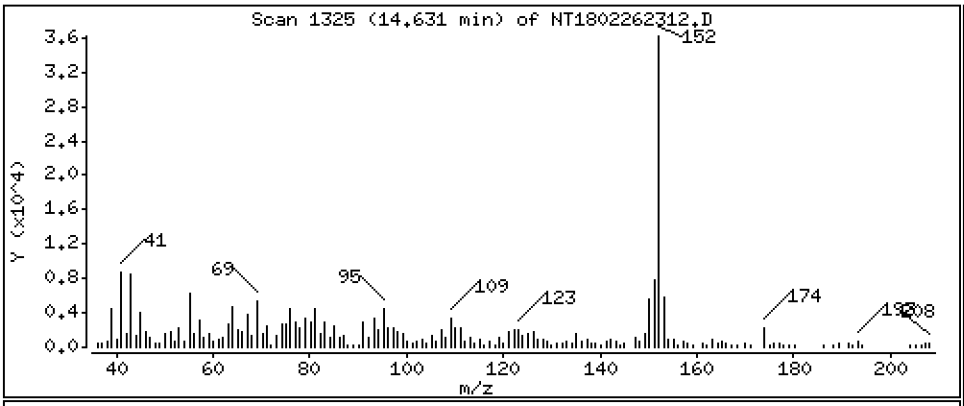
Operator: VTS

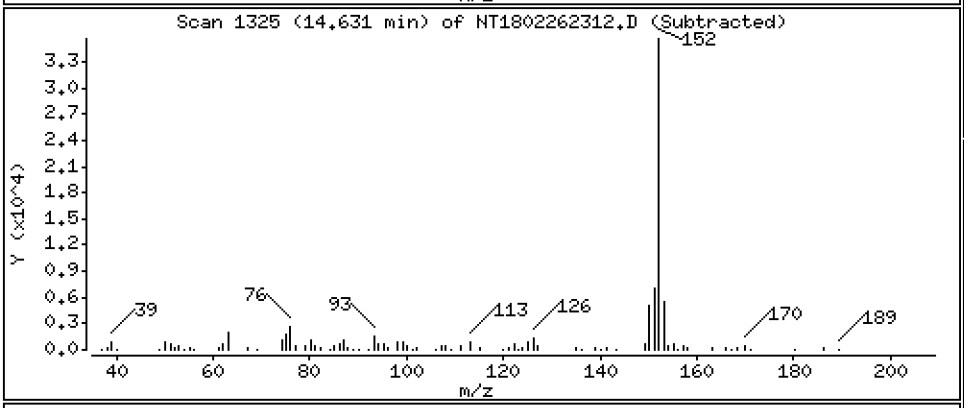
Column phase: ZB-5msi

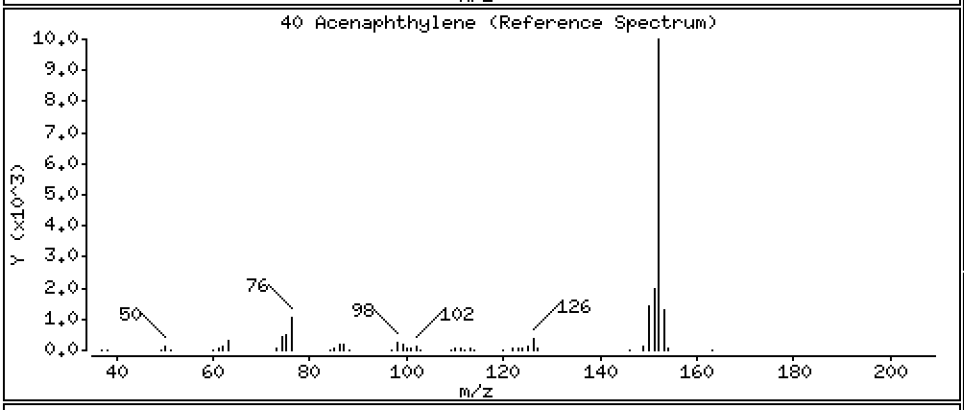
Column diameter: 0.25

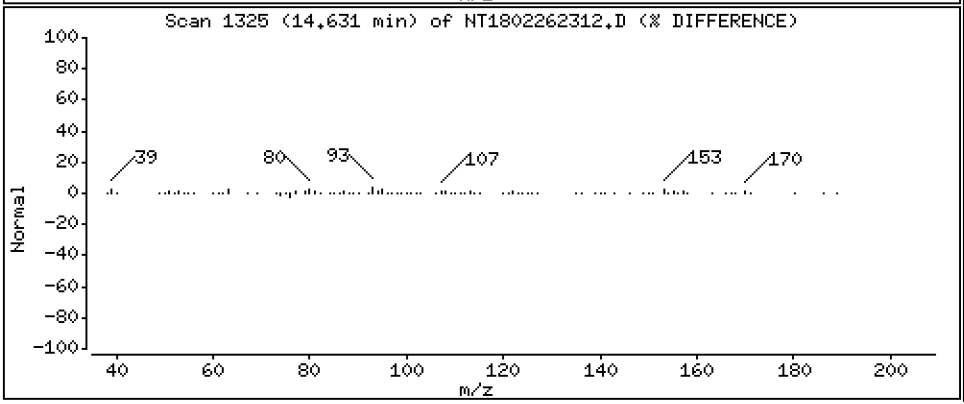
40 Acenaphthylene

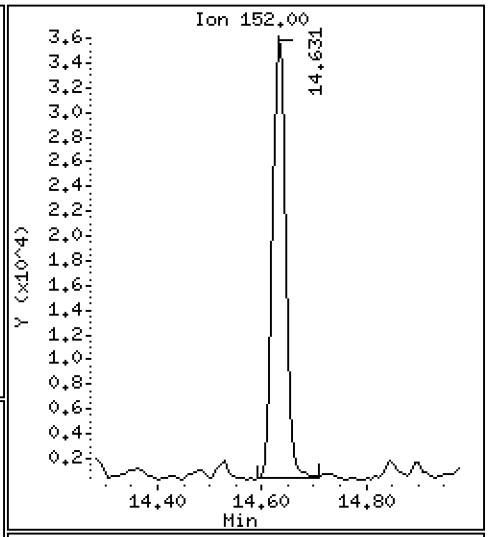
Concentration: 0.2026 ug/mL

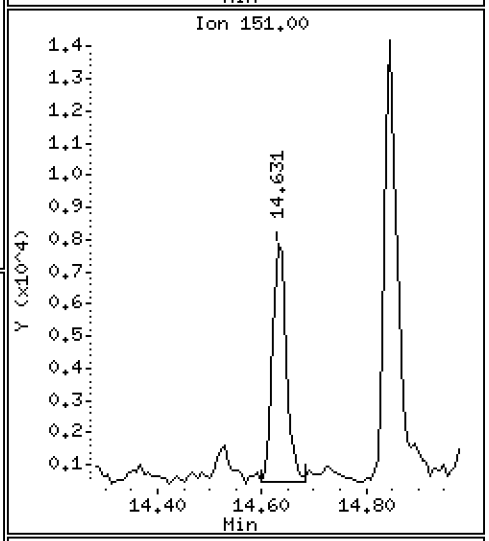


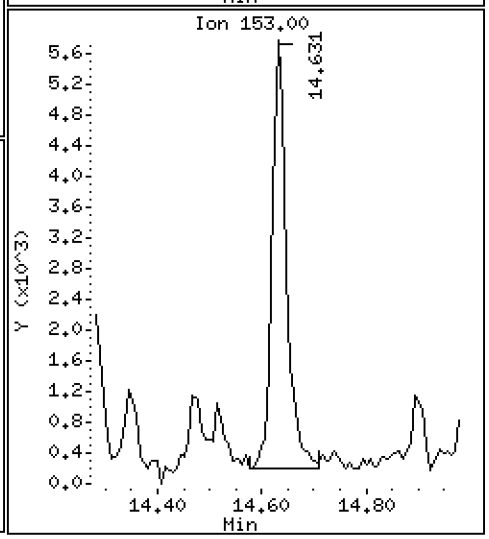












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

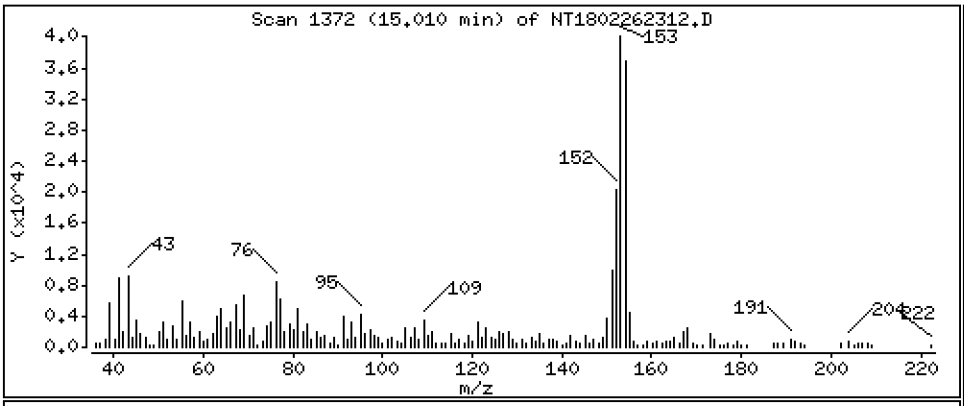
Operator: VTS

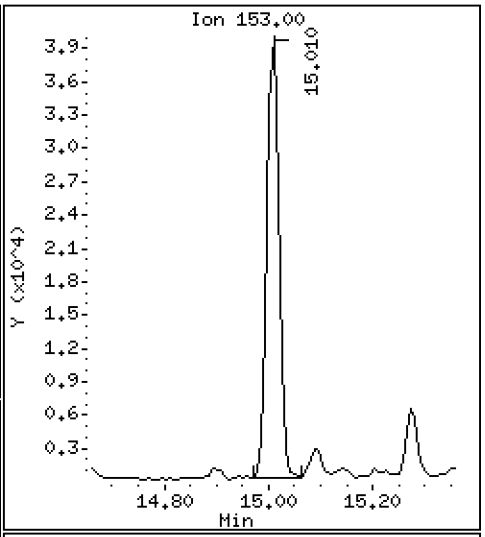
Column phase: ZB-5msi

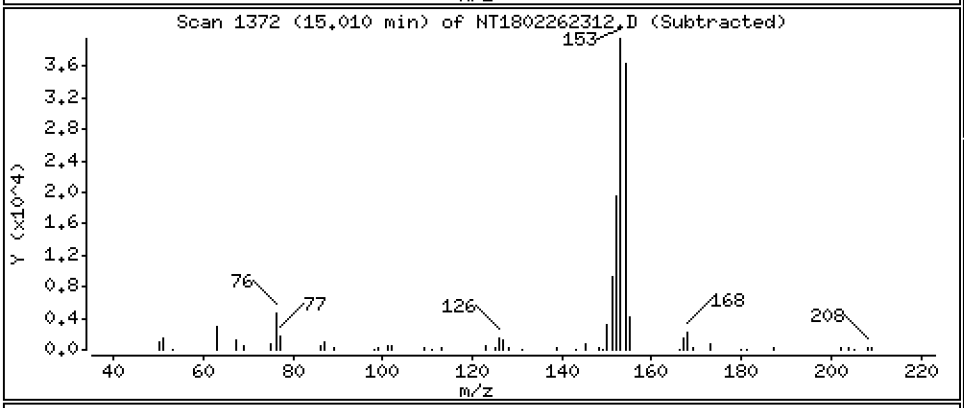
Column diameter: 0.25

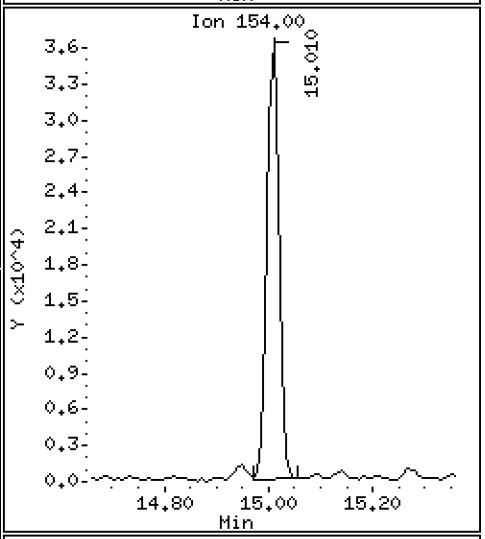
44 Acenaphthene

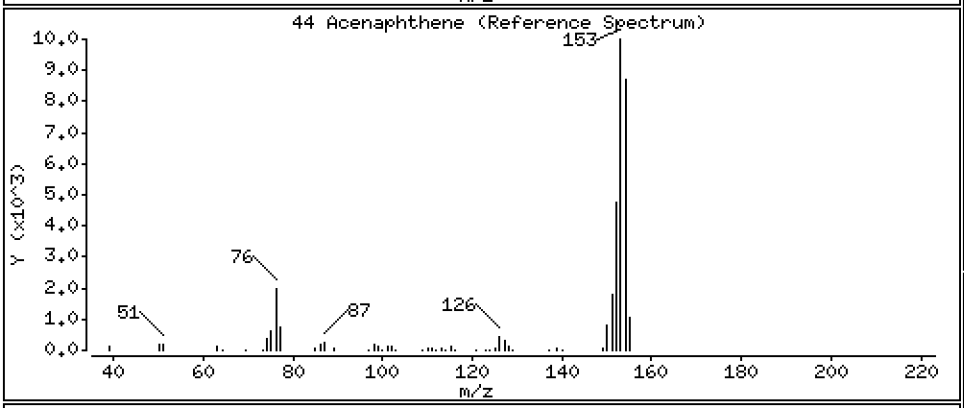
Concentration: 0.3237 ug/mL

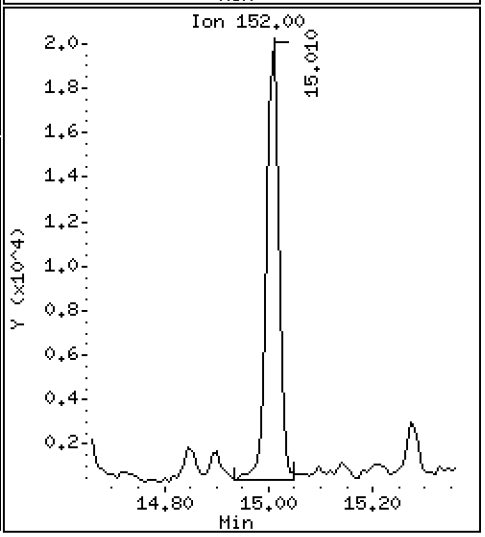


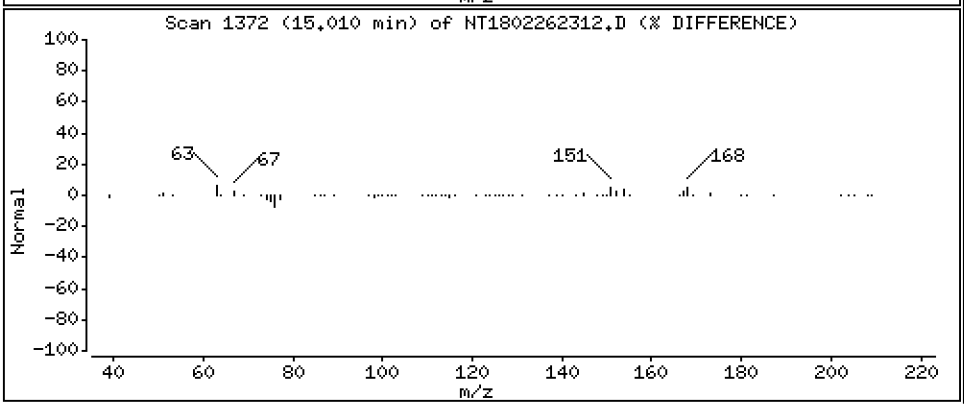












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

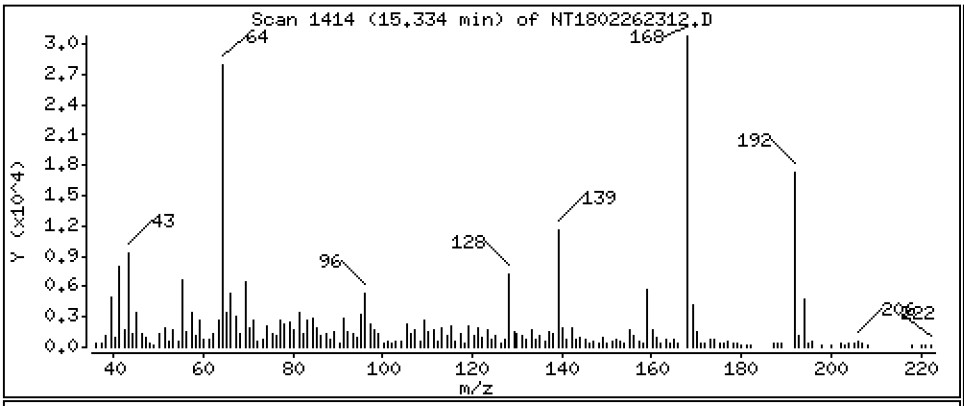
Operator: VTS

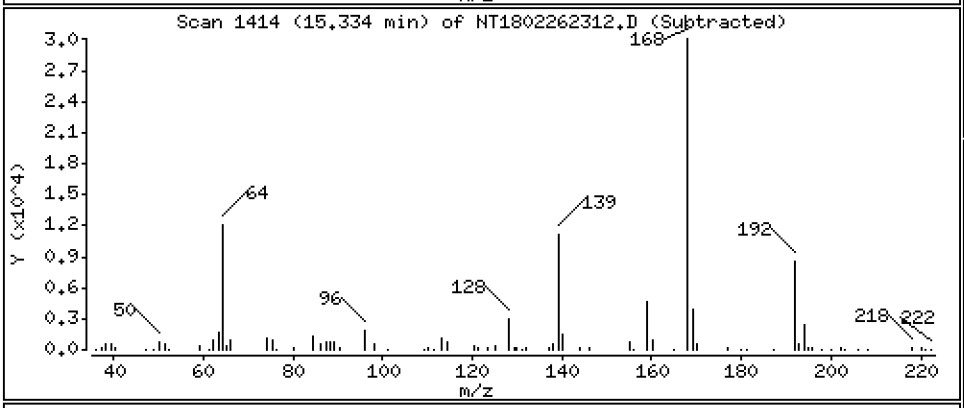
Column phase: ZB-5msi

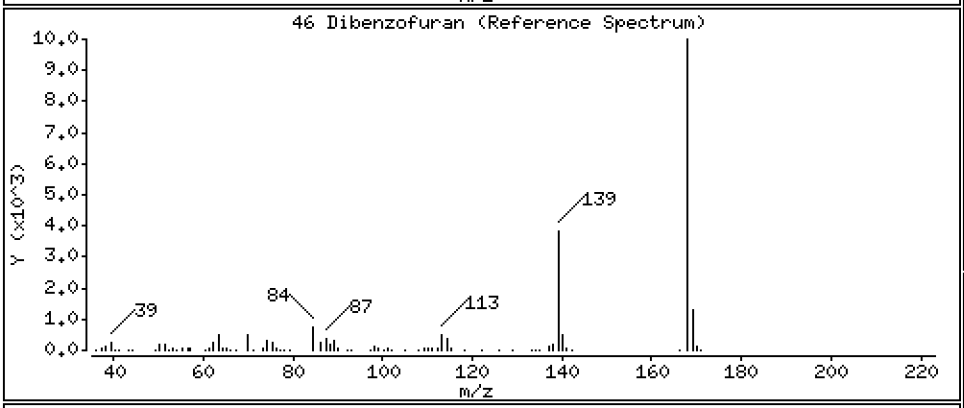
Column diameter: 0.25

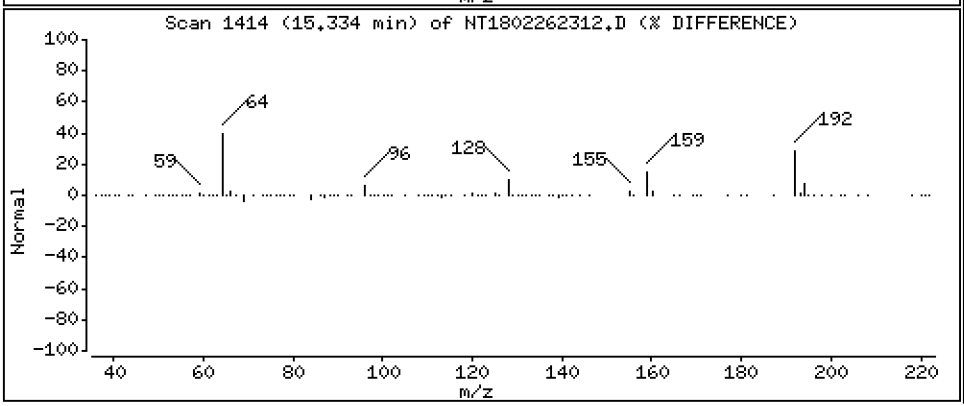
46 Dibenzofuran

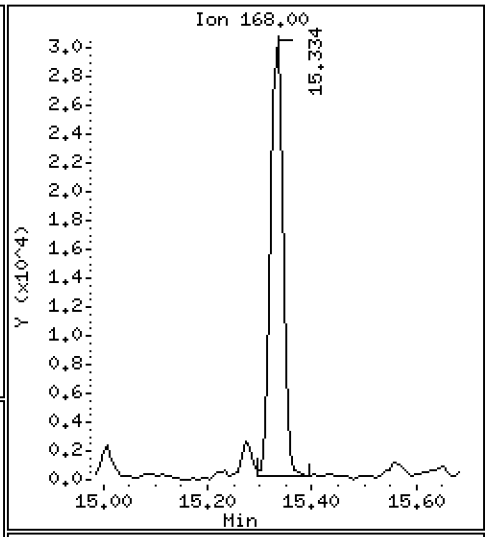
Concentration: 0.1784 ug/mL

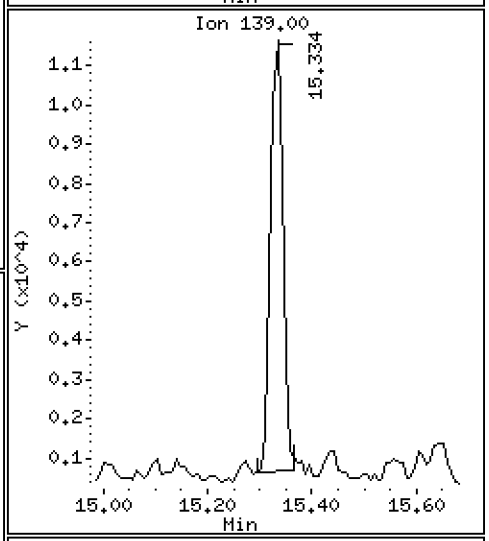


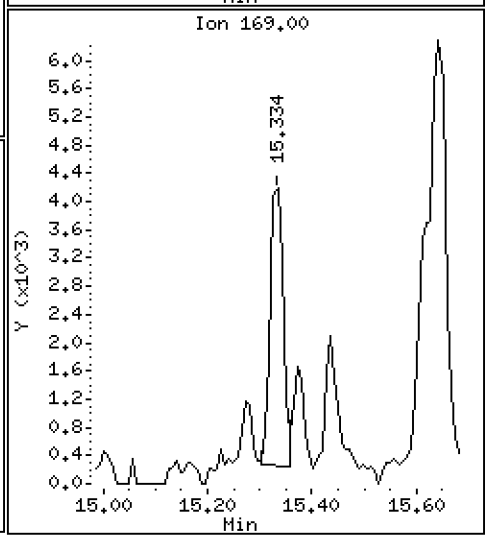












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

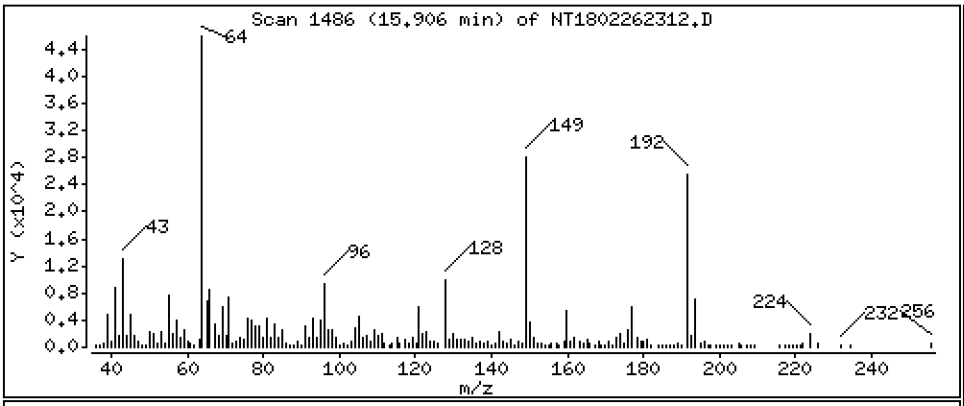
Operator: VTS

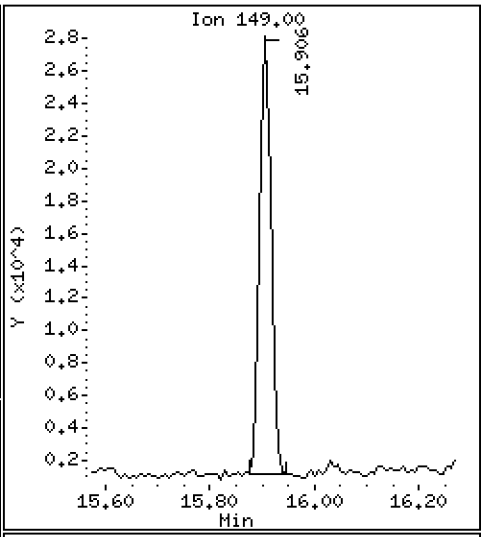
Column phase: ZB-5msi

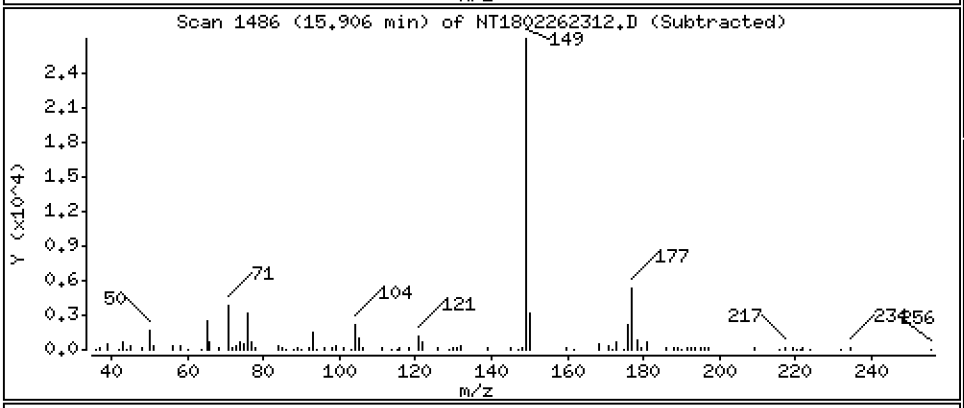
Column diameter: 0.25

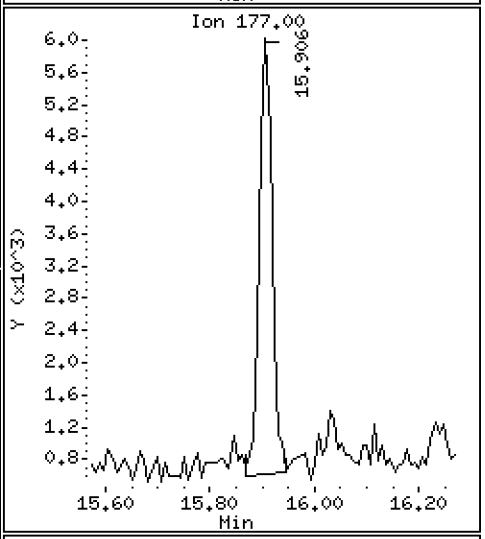
50 Diethylphthalate

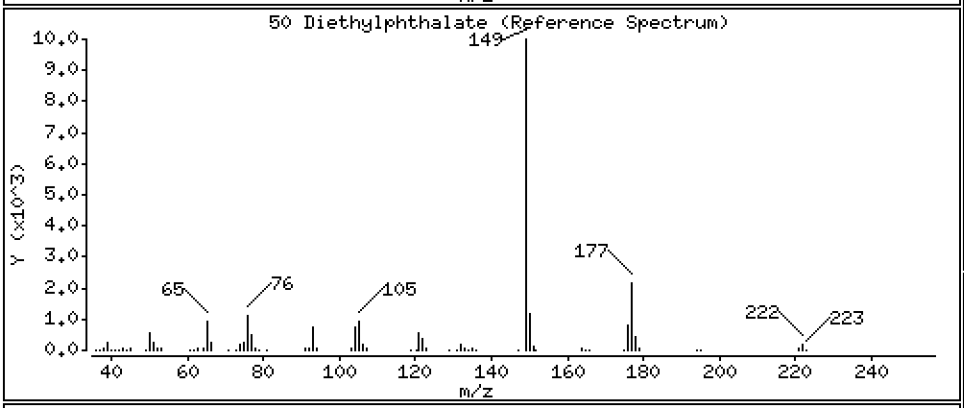
Concentration: 0.1979 ug/mL

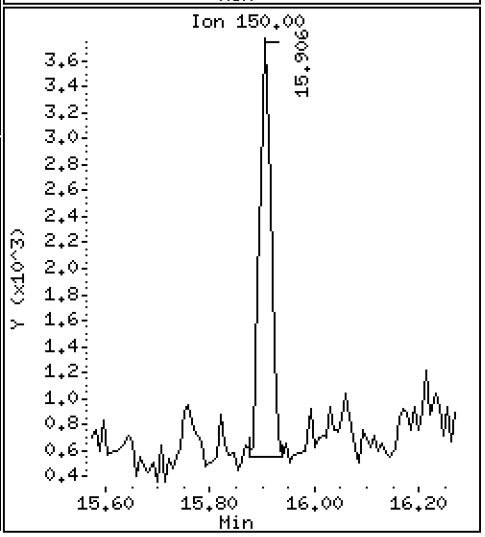


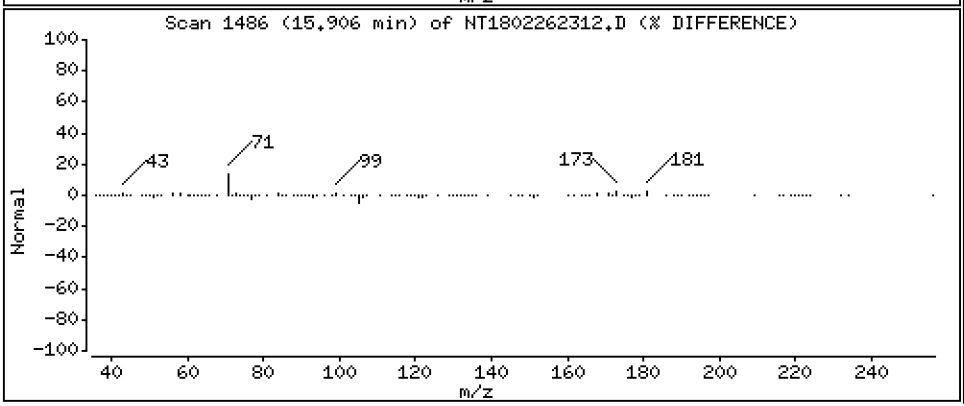












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

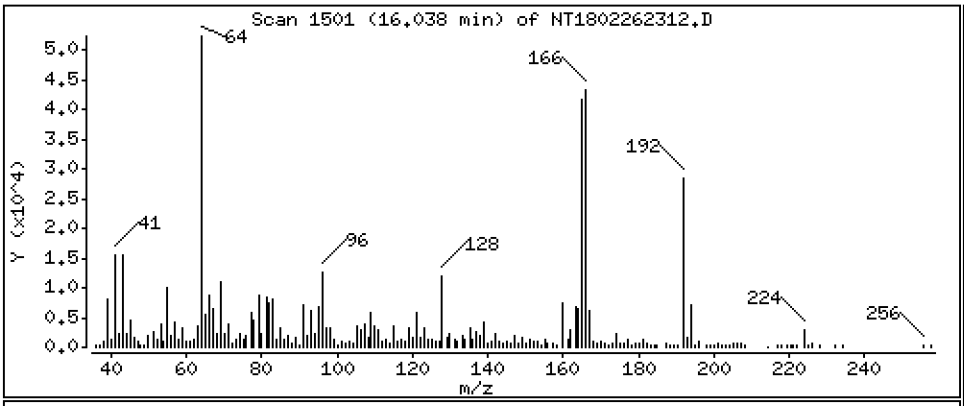
Operator: VTS

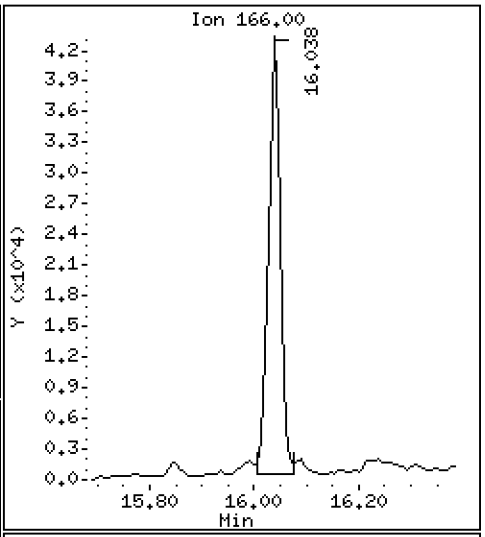
Column phase: ZB-5msi

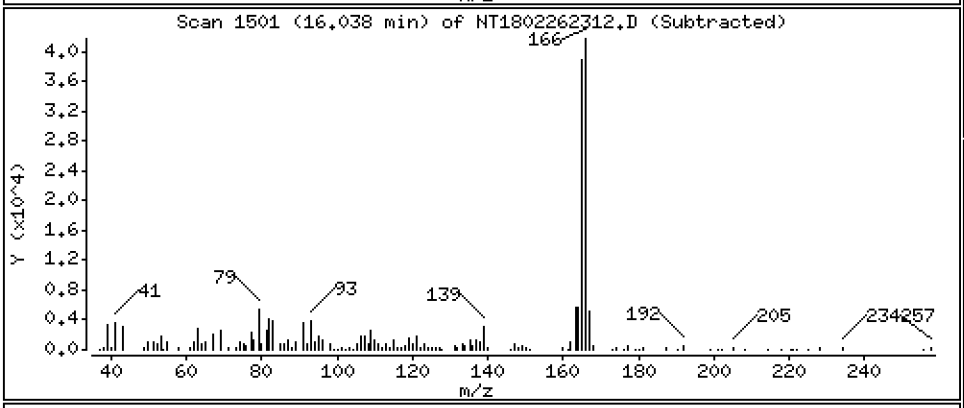
Column diameter: 0.25

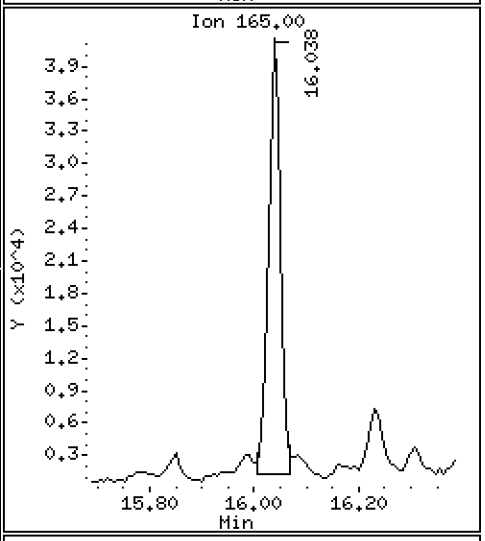
49 Fluorene

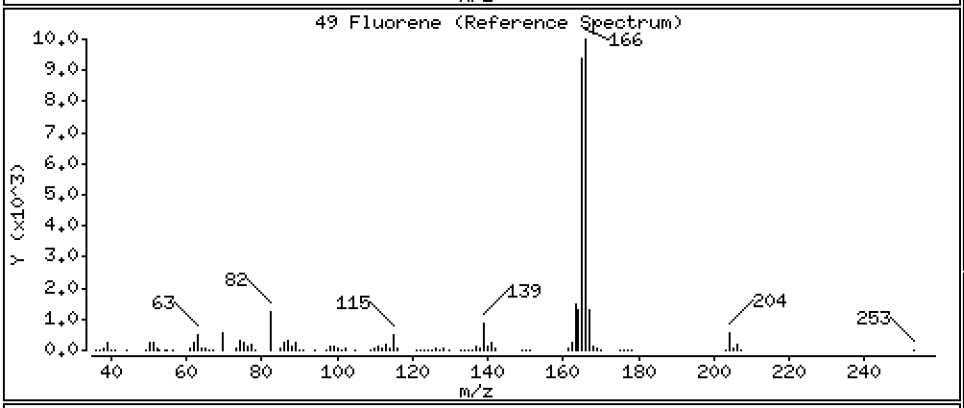
Concentration: 0.3085 ug/mL

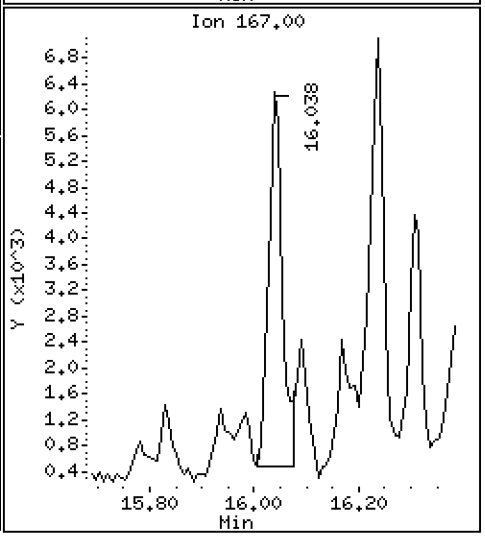


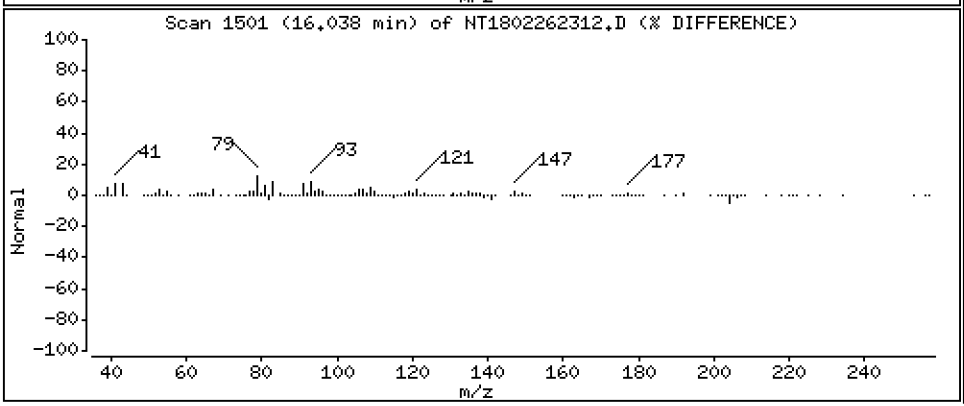












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

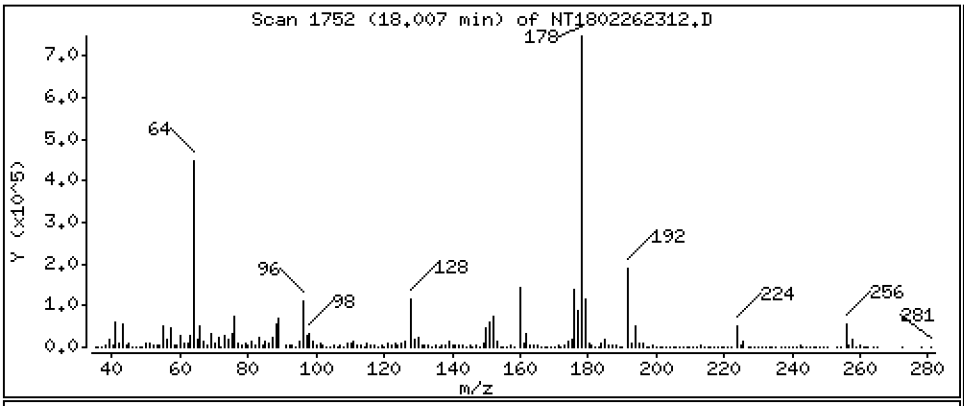
Operator: VTS

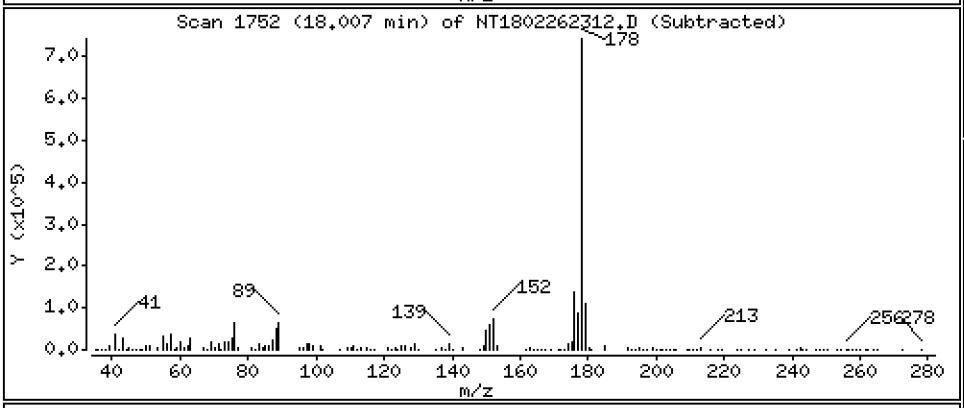
Column phase: ZB-5msi

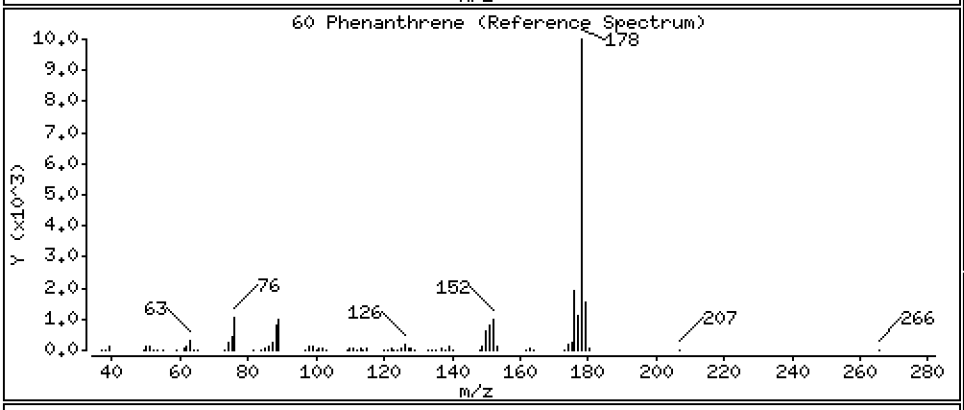
Column diameter: 0.25

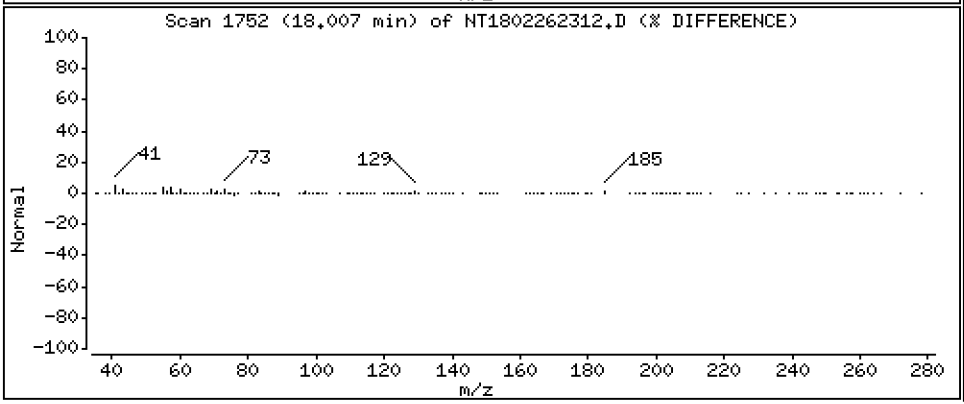
60 Phenanthrene

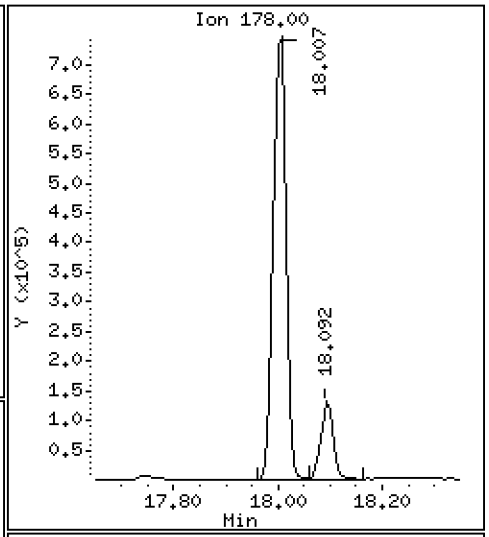
Concentration: 3.527 ug/mL

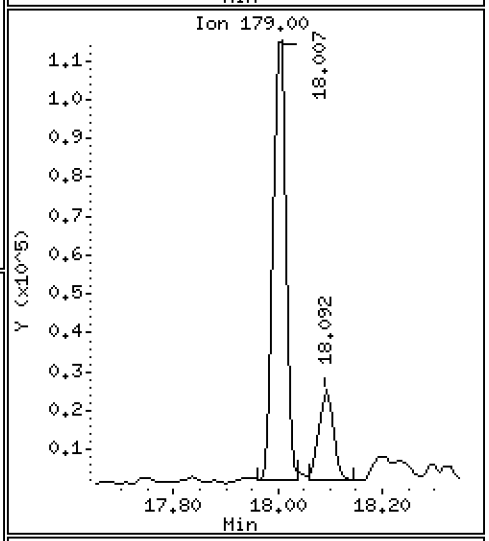


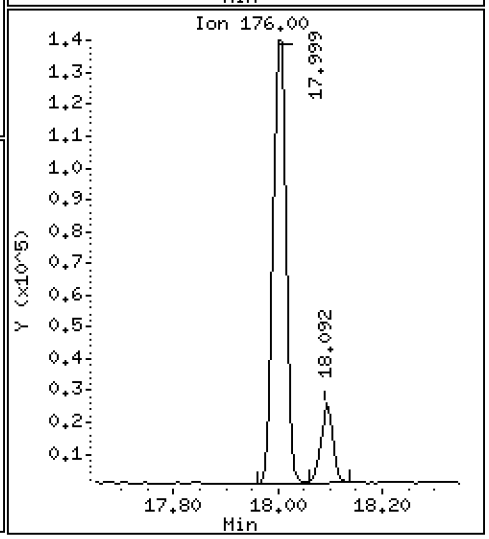












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262312.D

Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

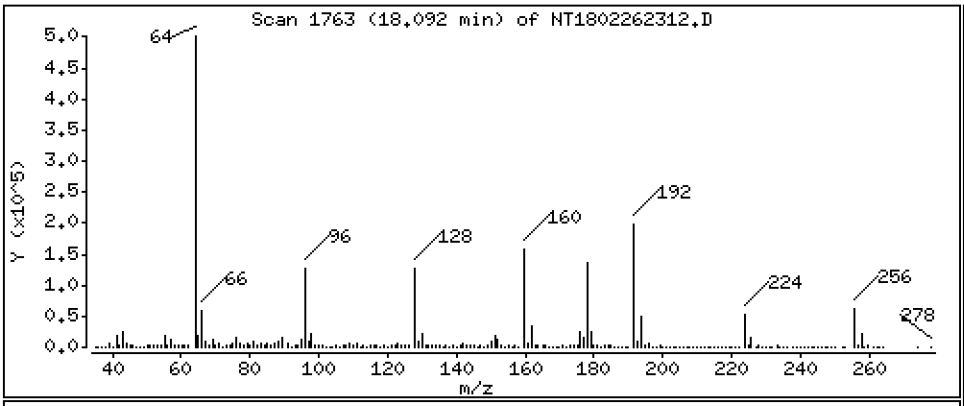
Operator: VTS

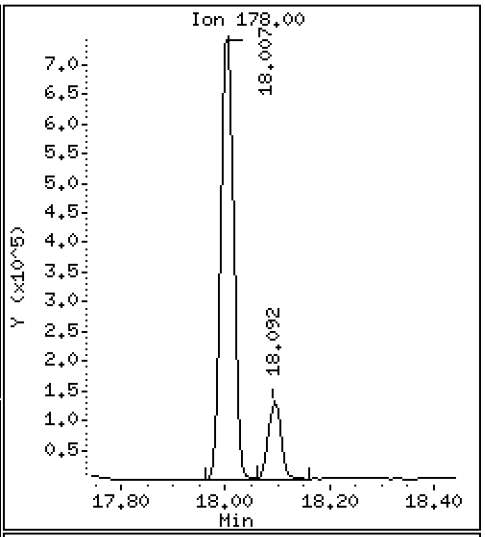
Column phase: ZB-5msi

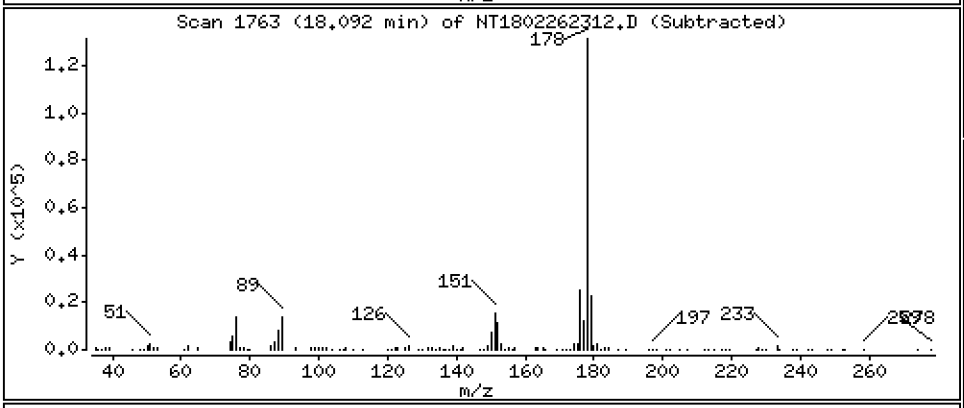
Column diameter: 0.25

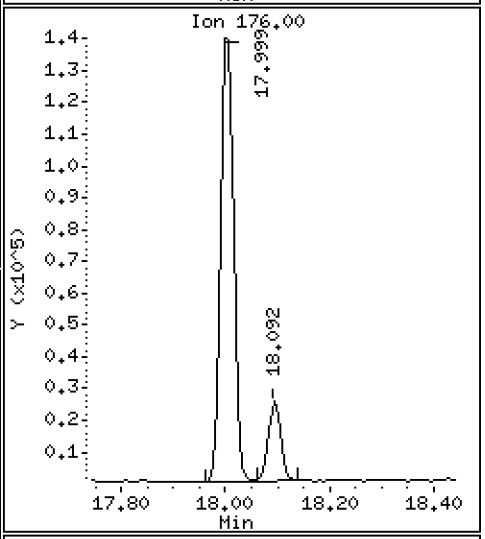
61 Anthracene

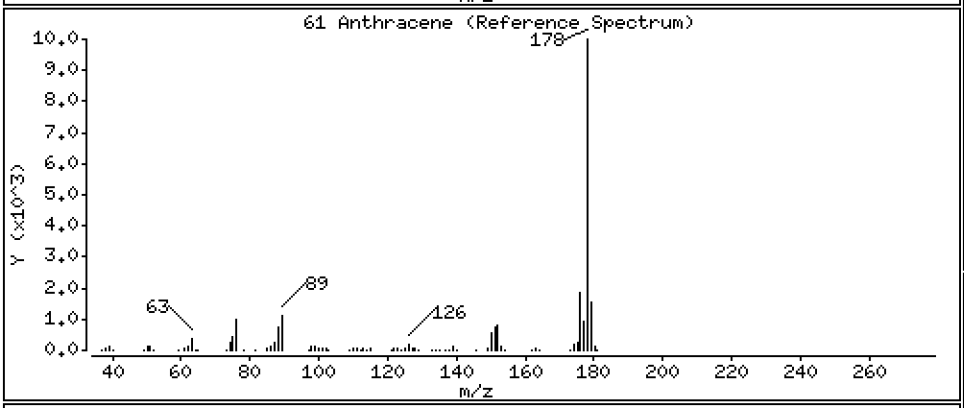
Concentration: 0.6400 ug/mL

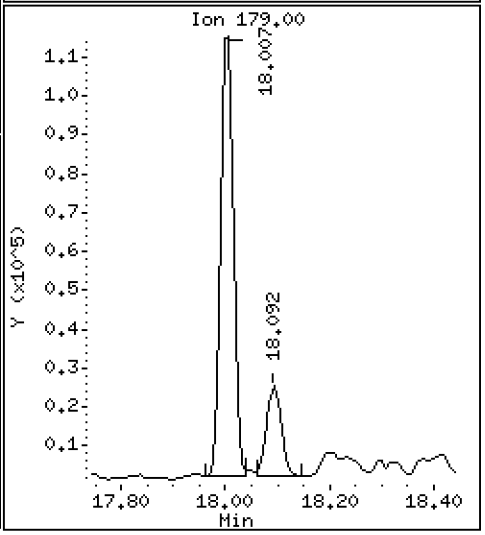


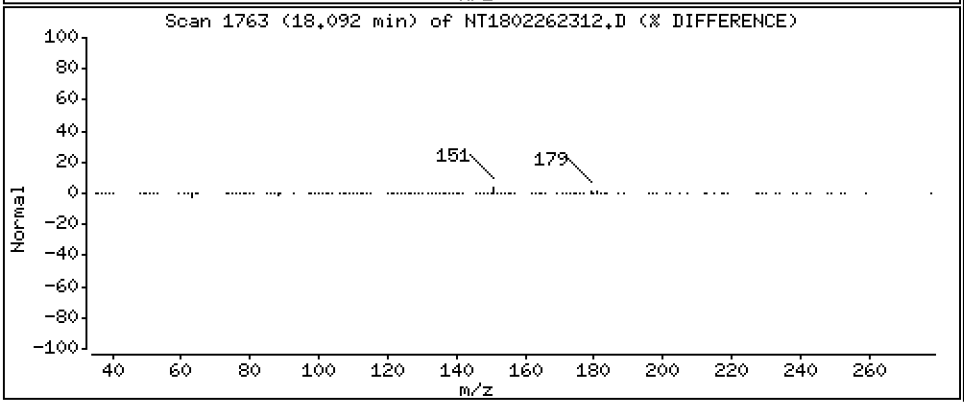












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

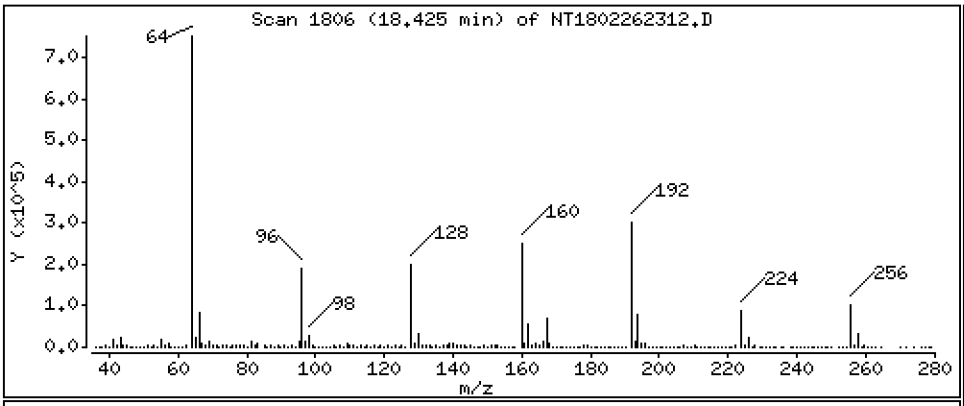
Operator: VTS

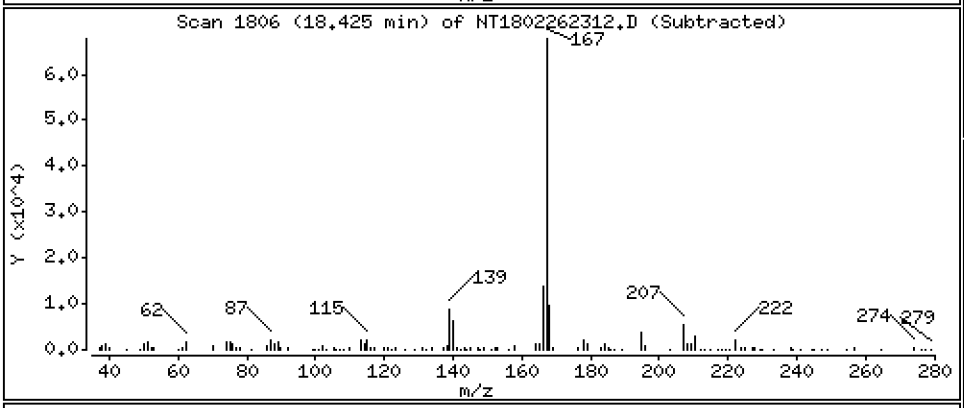
Column phase: ZB-5msi

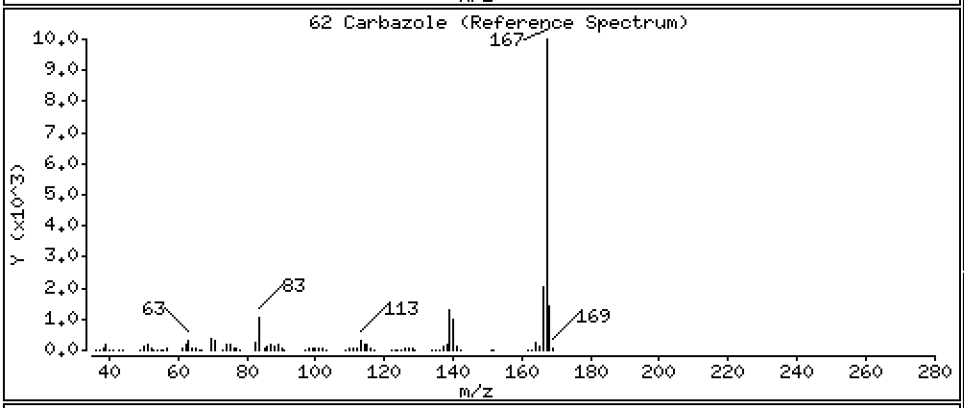
Column diameter: 0.25

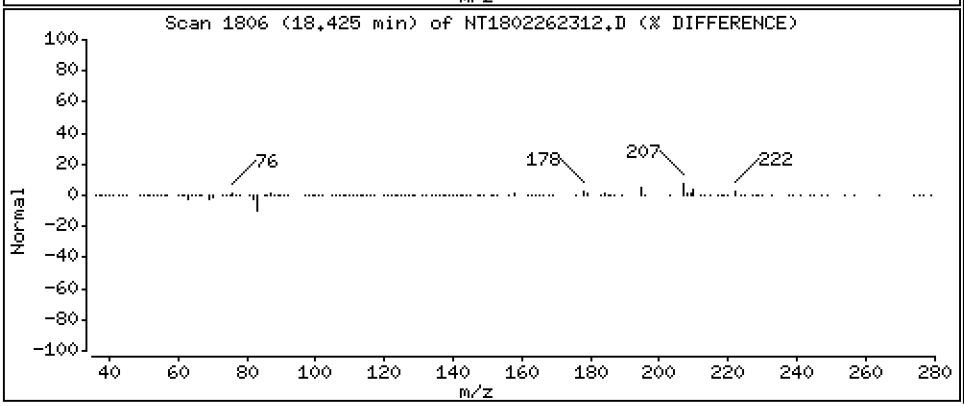
62 Carbazole

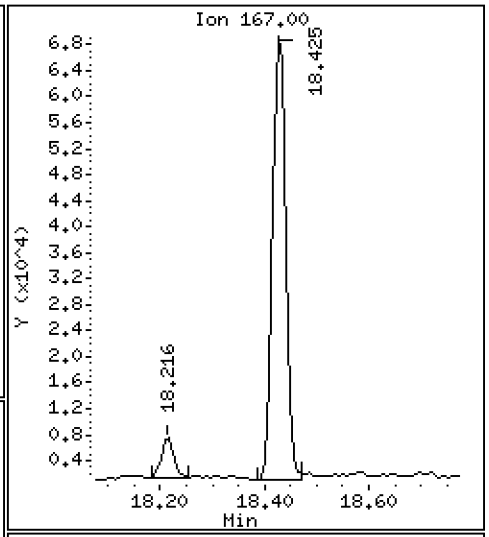
Concentration: 0.3775 ug/mL

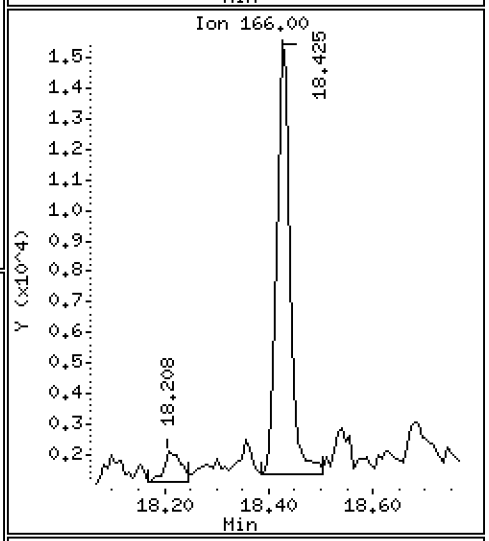


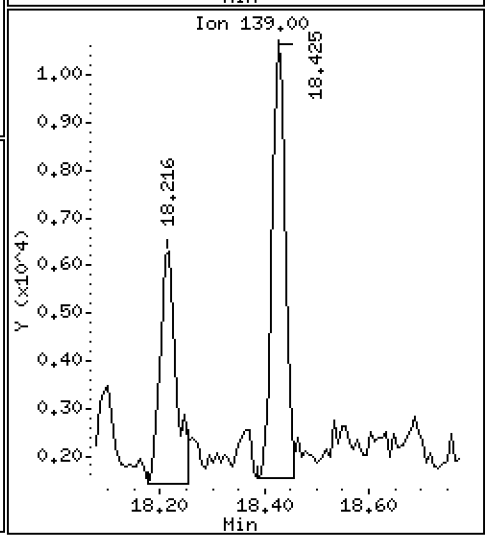












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

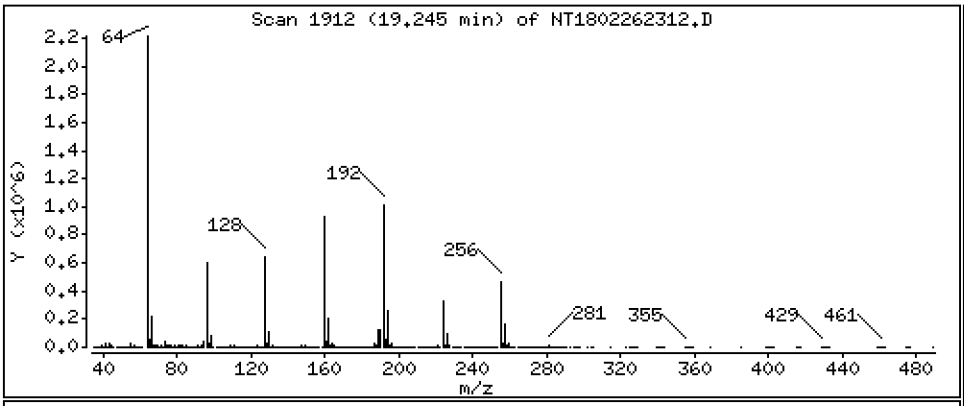
Operator: VTS

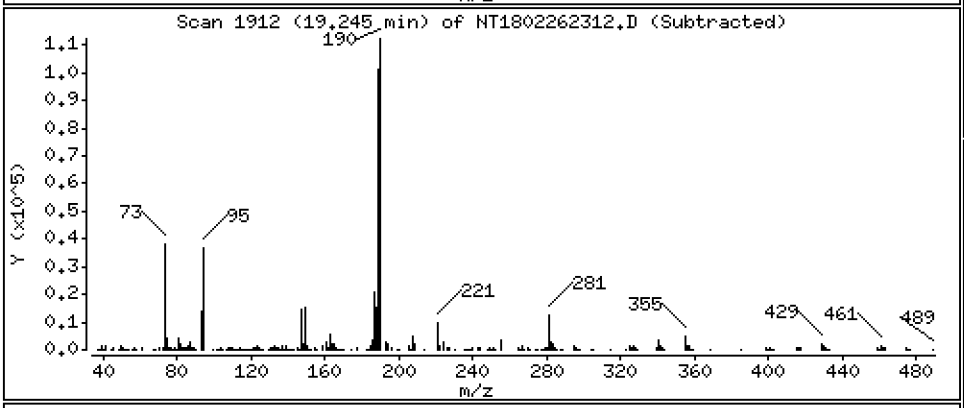
Column phase: ZB-5msi

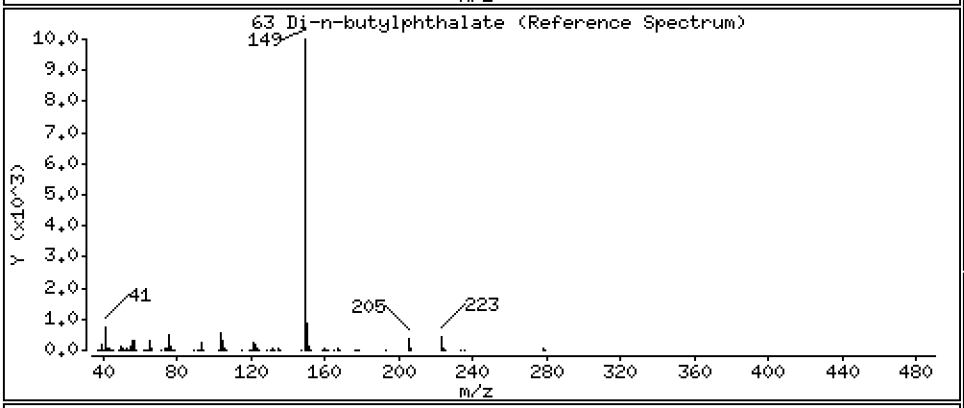
Column diameter: 0.25

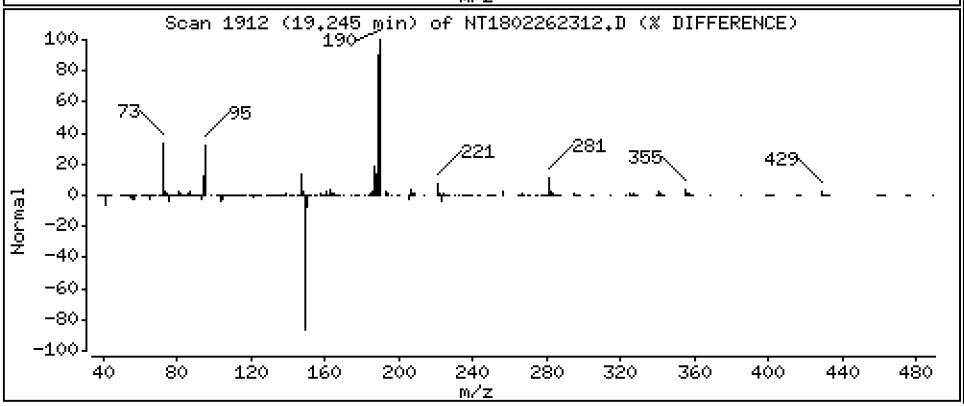
63 Di-n-butylphthalate

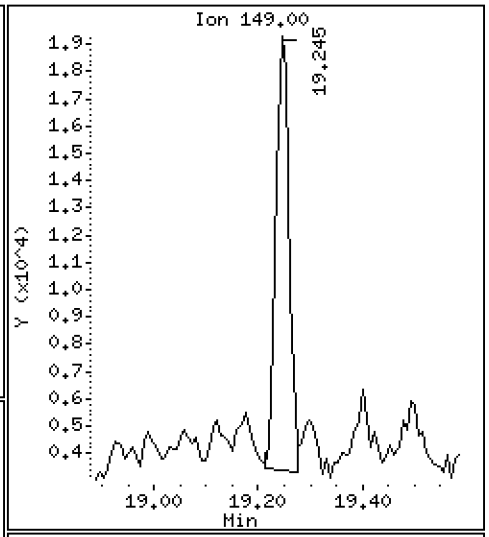
Concentration: 0.08066 ug/mL

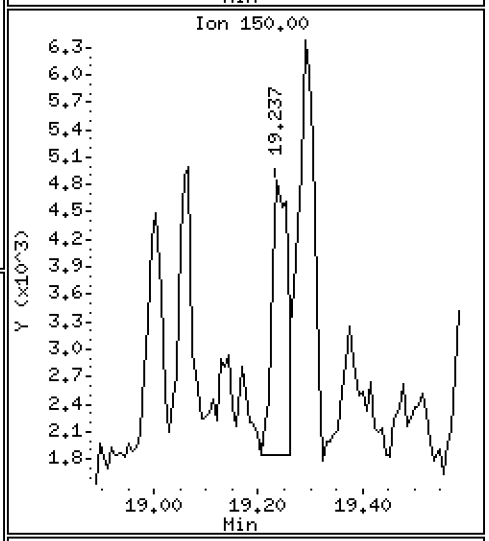


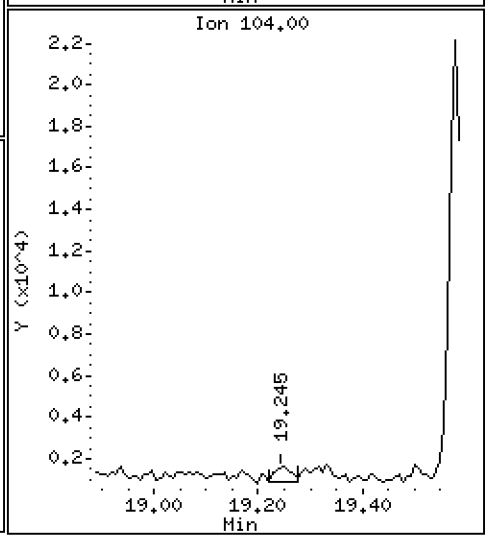












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

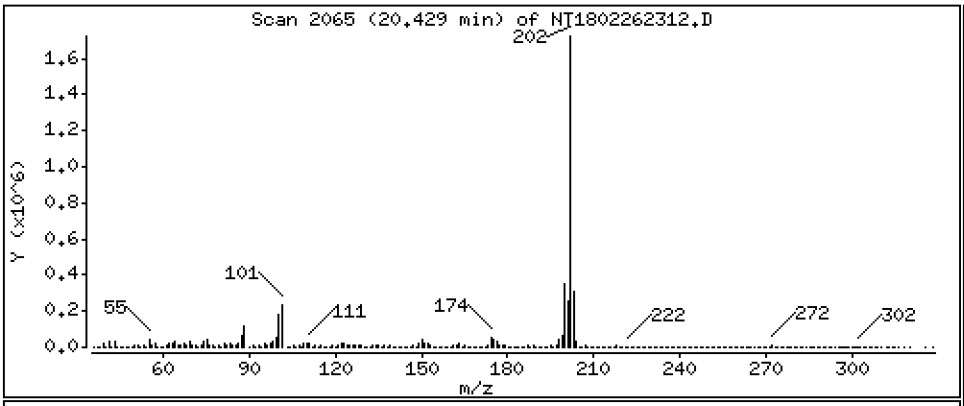
Operator: VTS

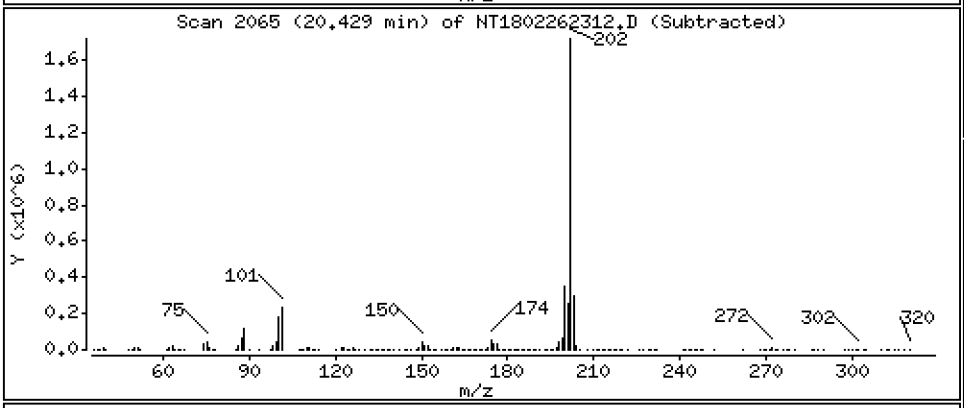
Column phase: ZB-5msi

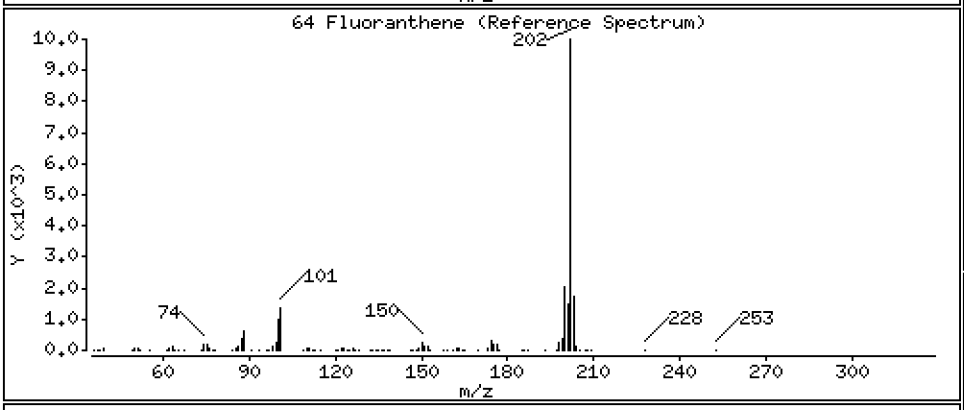
Column diameter: 0.25

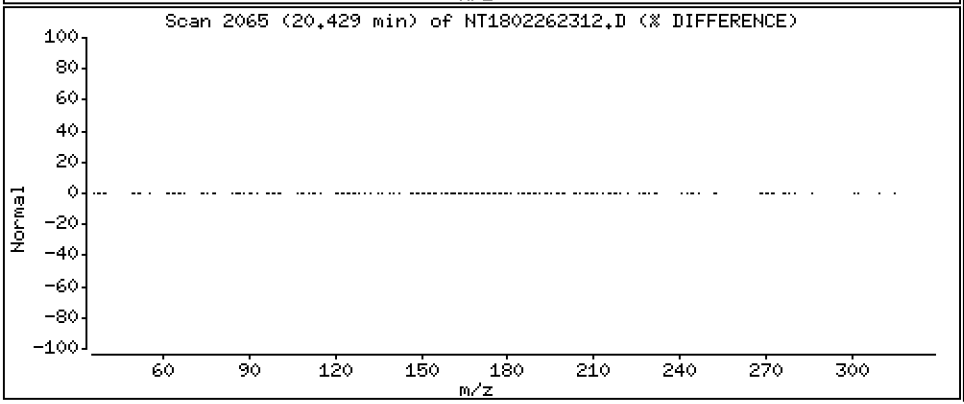
64 Fluoranthene

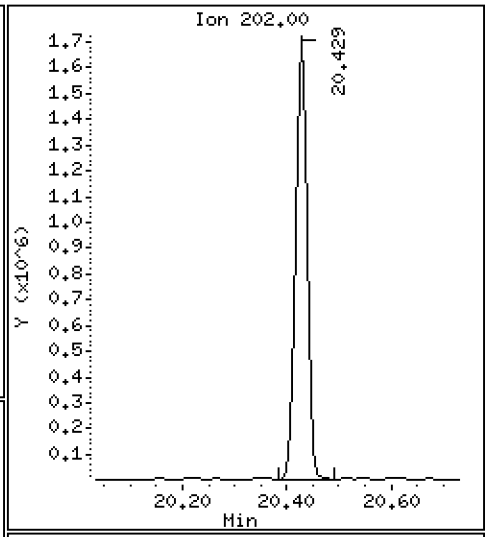
Concentration: 6.517 ug/mL

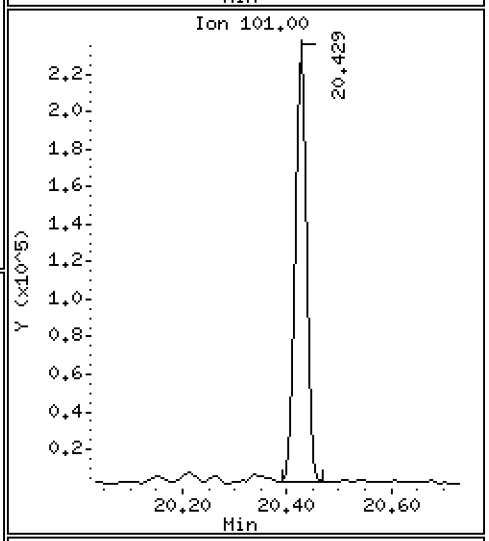


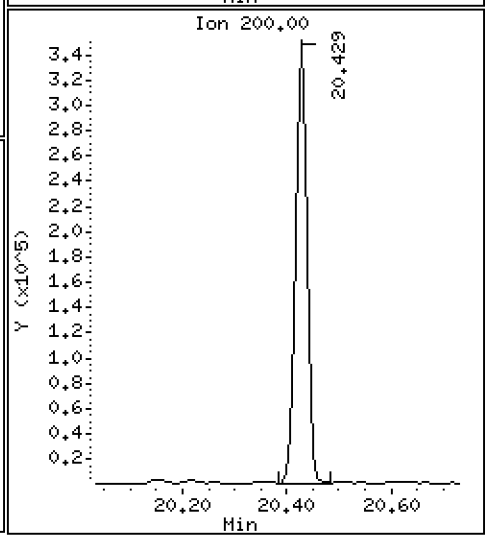












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

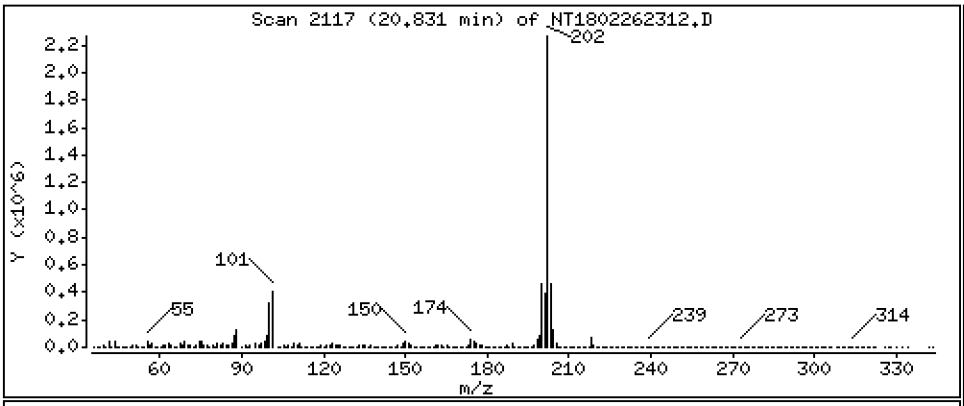
Operator: VTS

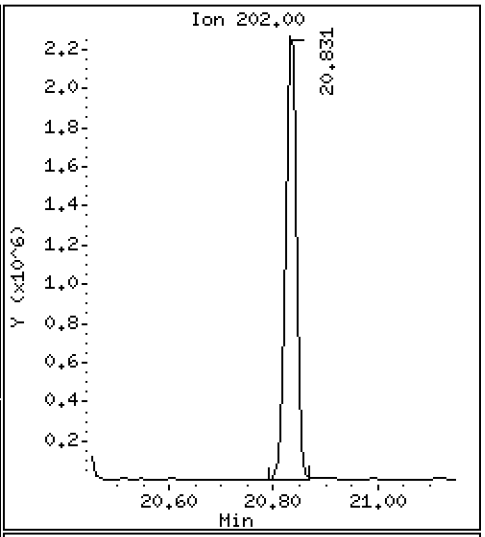
Column phase: ZB-5msi

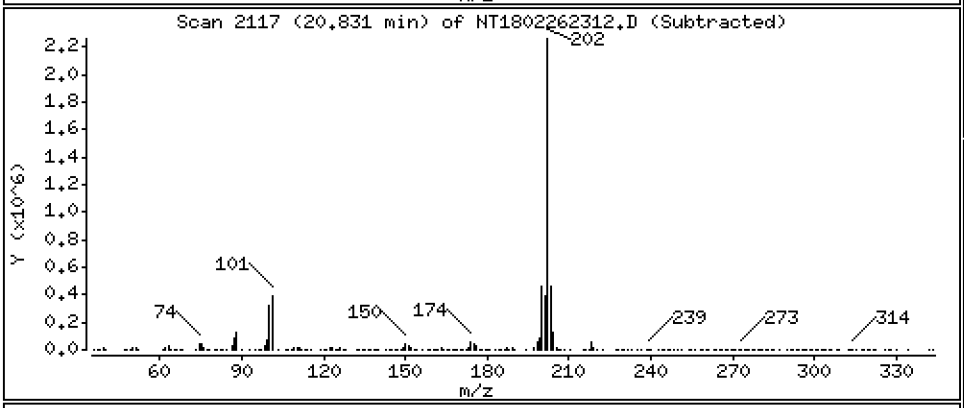
Column diameter: 0.25

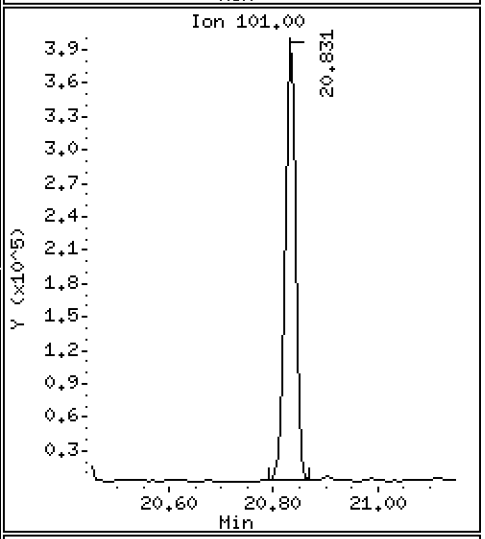
65 Pyrene

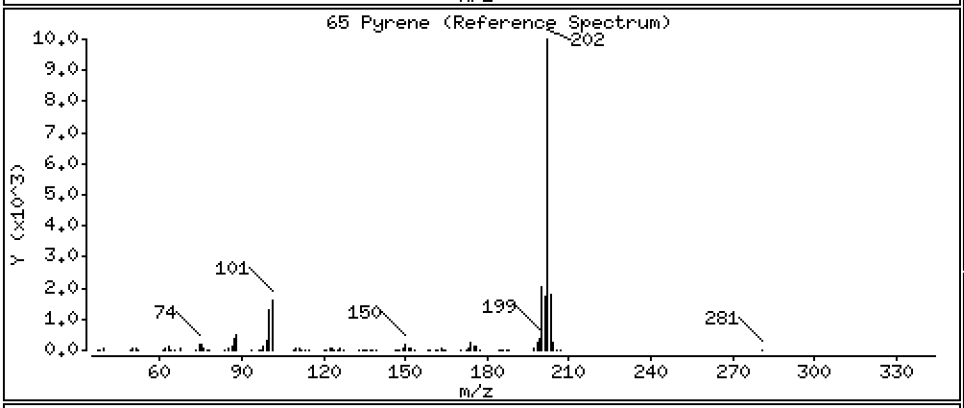
Concentration: 7.682 ug/mL

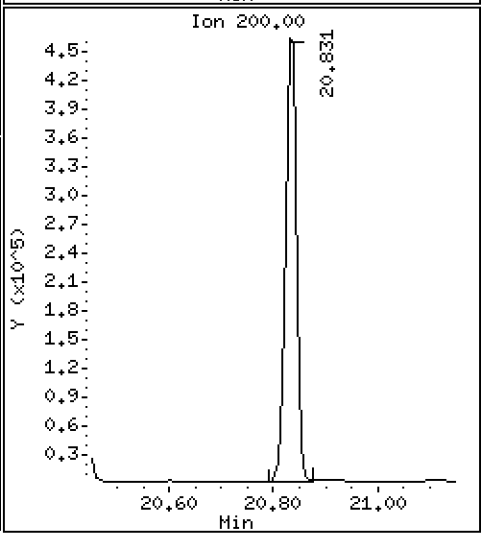


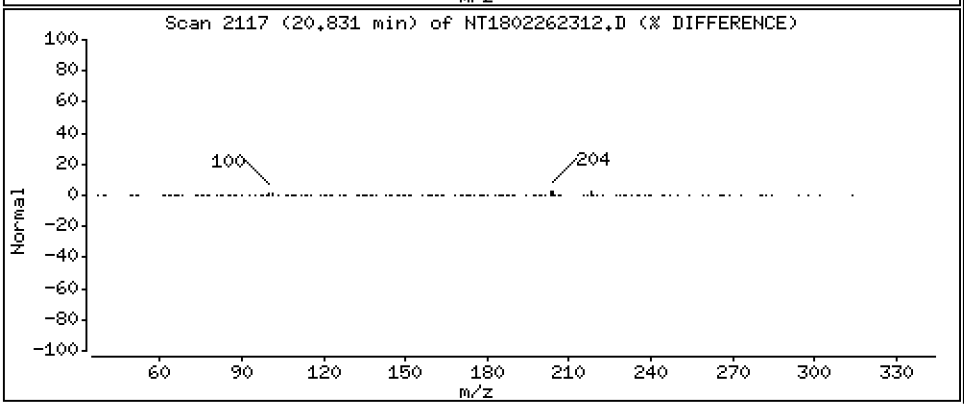












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

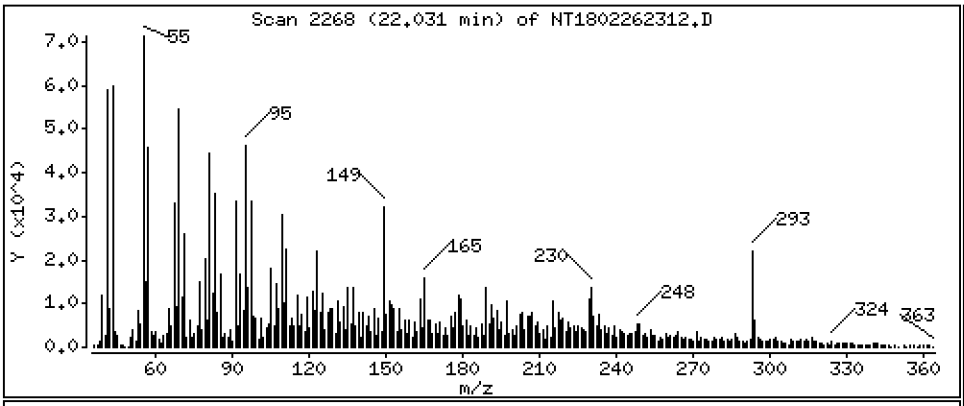
Operator: VTS

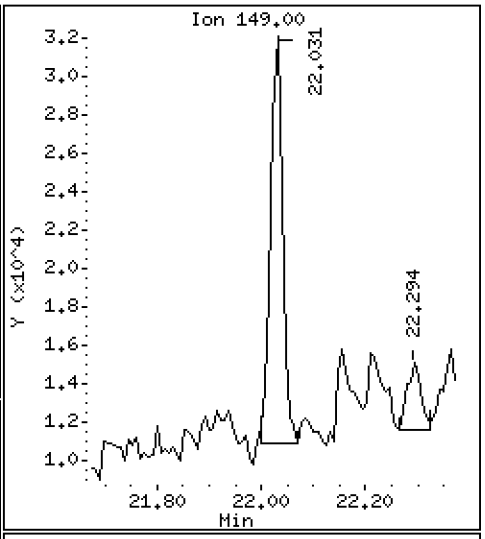
Column phase: ZB-5msi

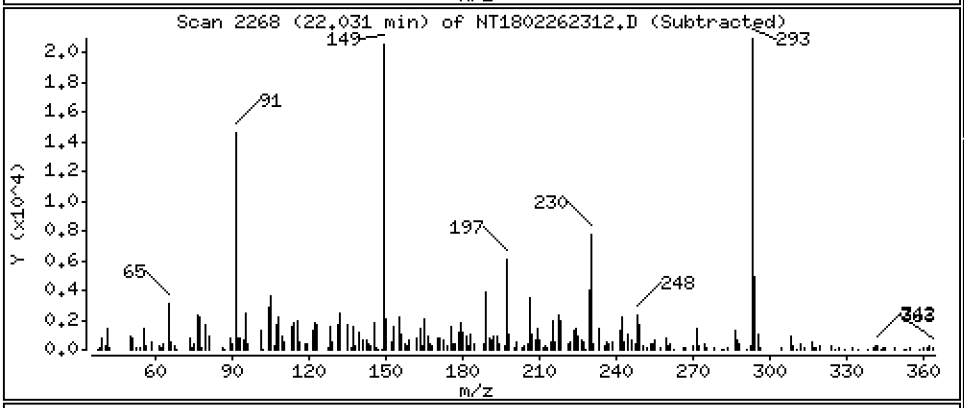
Column diameter: 0.25

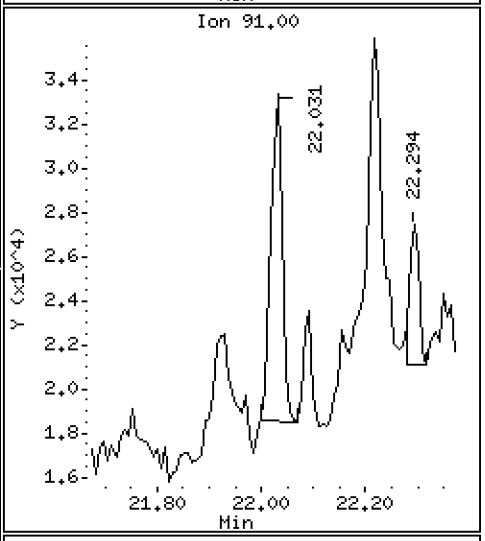
67 Butylbenzylphthalate

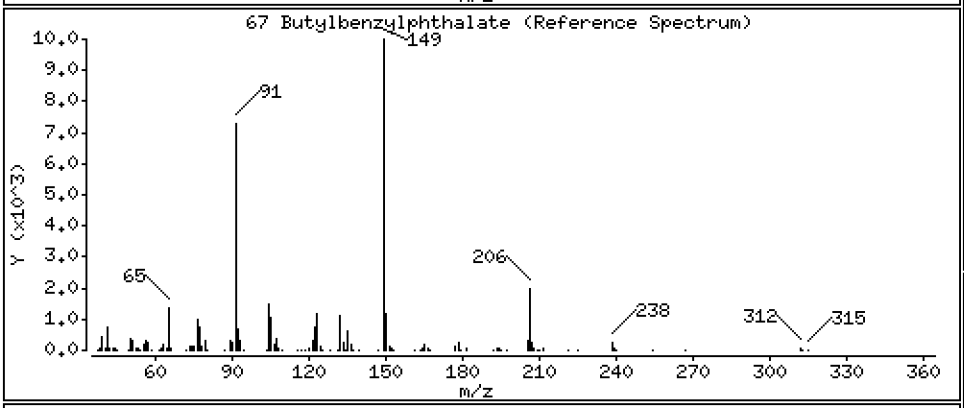
Concentration: 0.1884 ug/mL

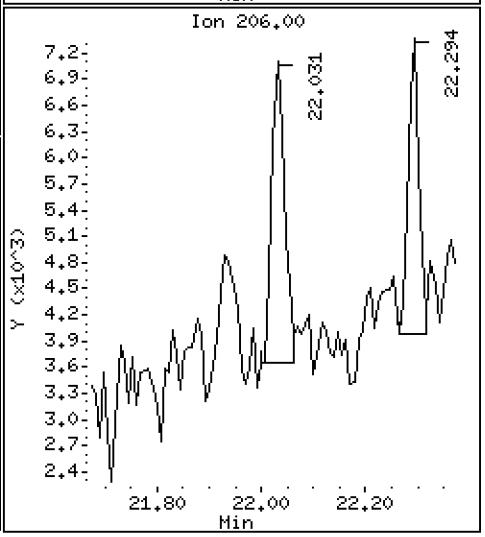


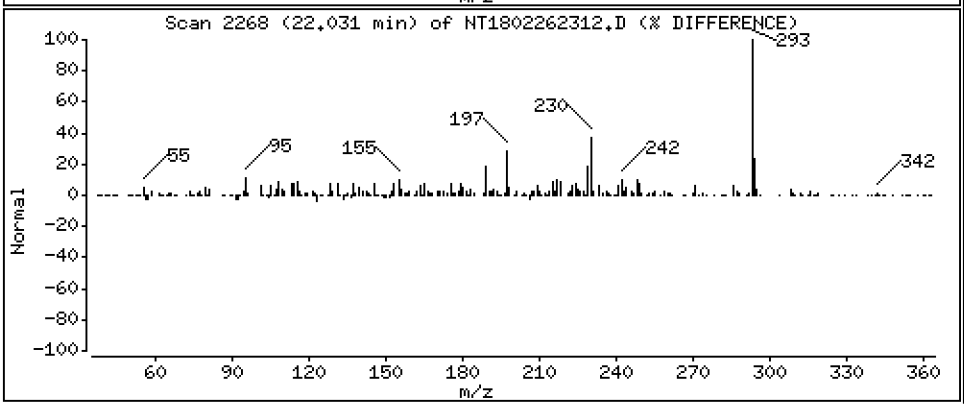












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

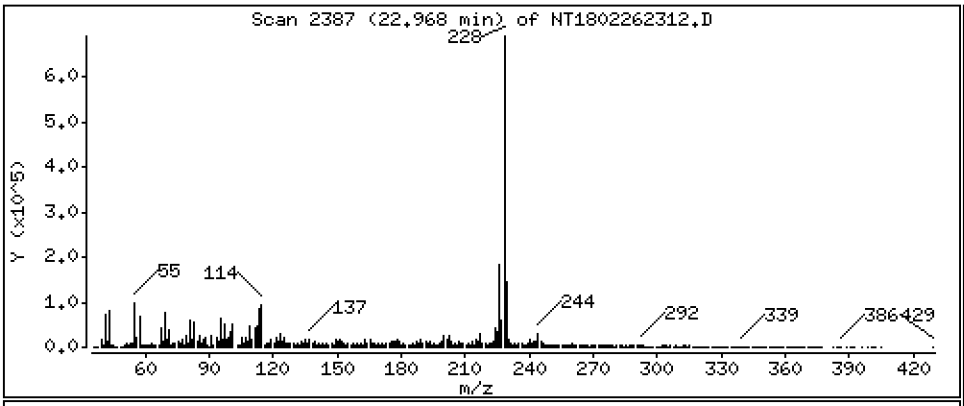
Operator: VTS

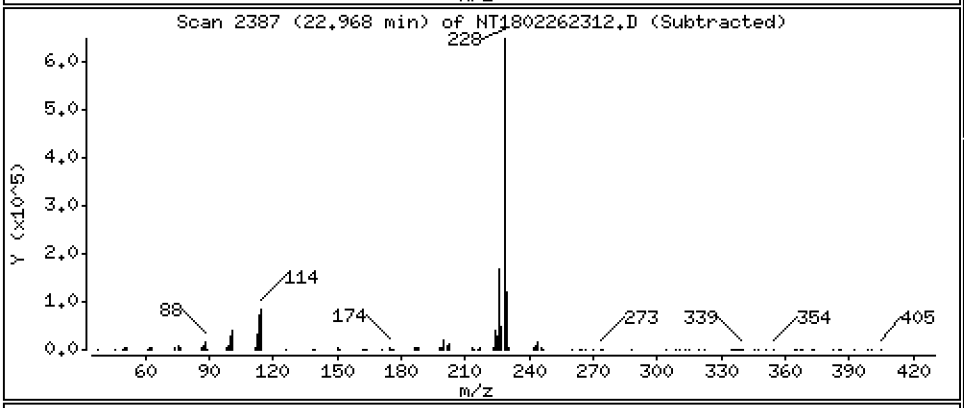
Column phase: ZB-5msi

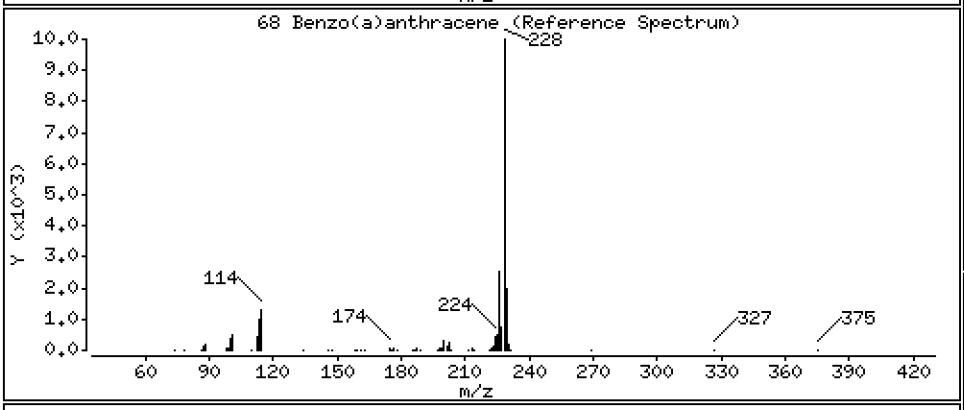
Column diameter: 0.25

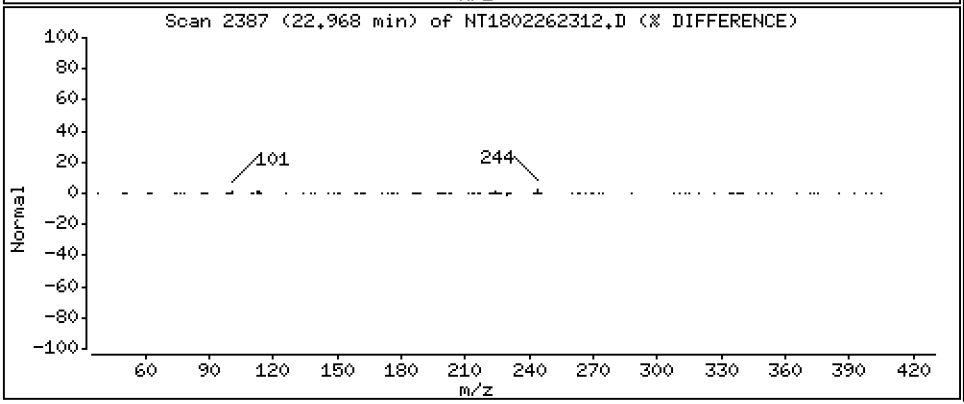
68 Benzo(a)anthracene

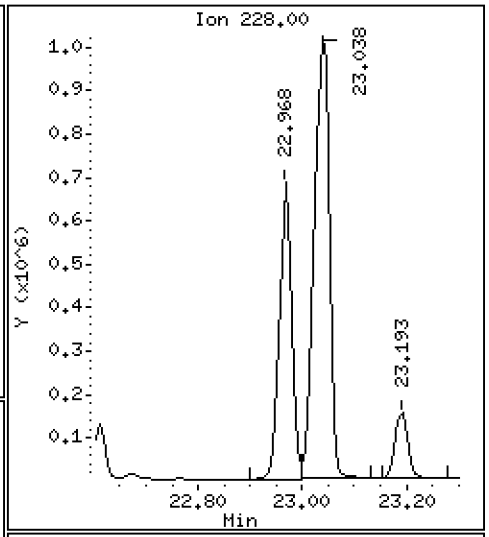
Concentration: 2.511 ug/mL

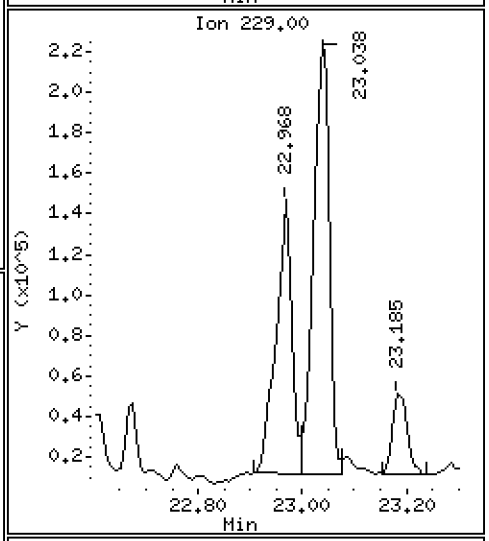


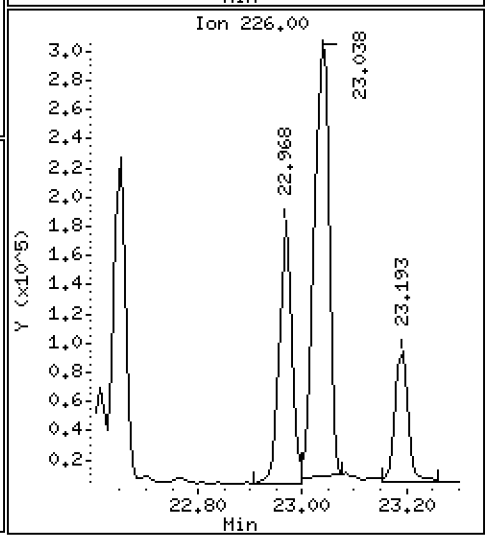












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262312.D

Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

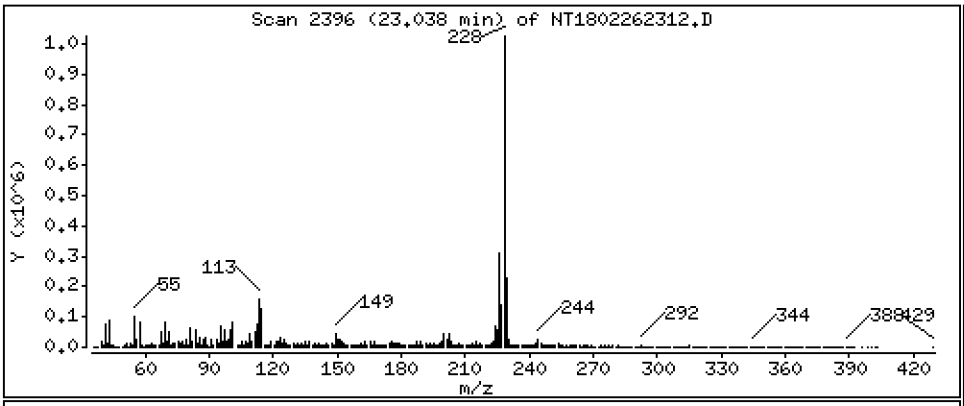
Operator: VTS

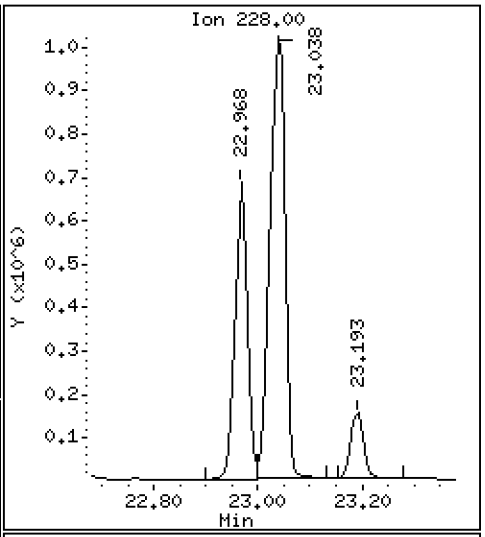
Column phase: ZB-5msi

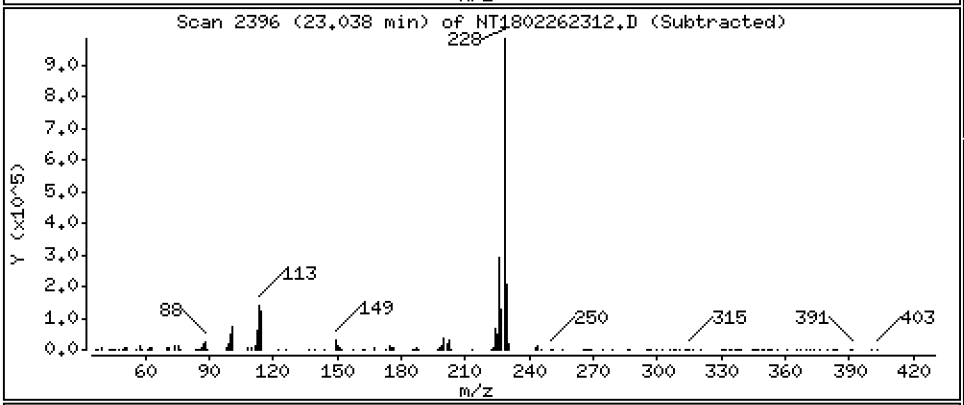
Column diameter: 0.25

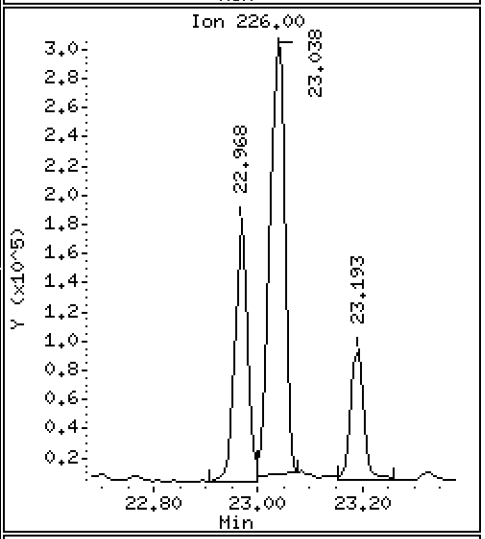
71 Chrysene

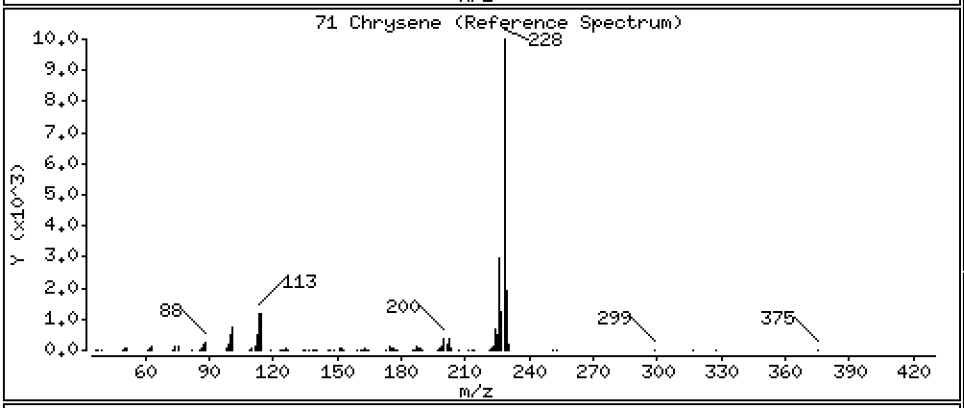
Concentration: 4.389 ug/mL

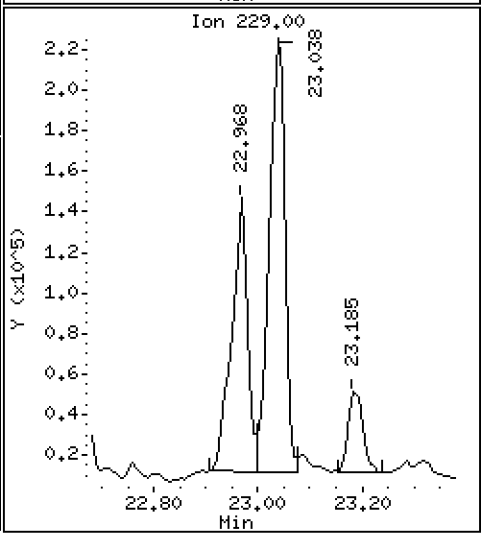


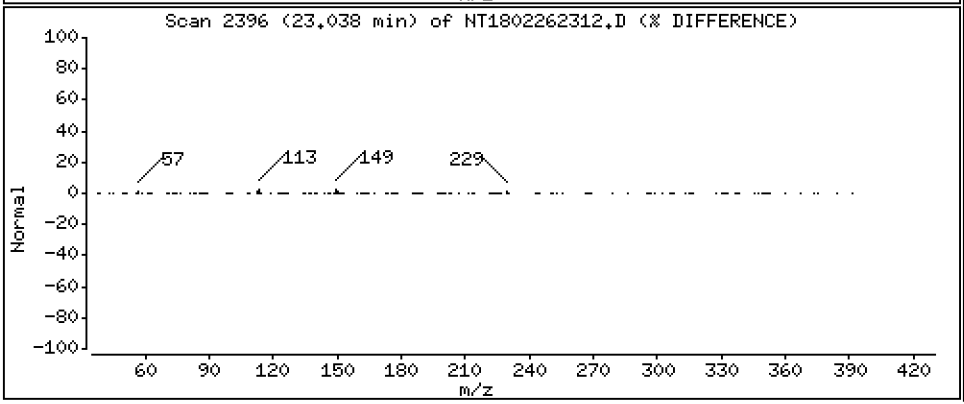












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

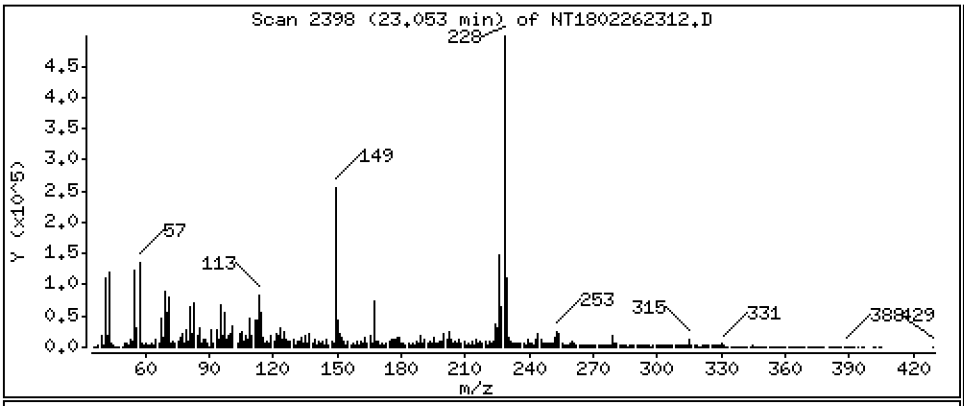
Operator: VTS

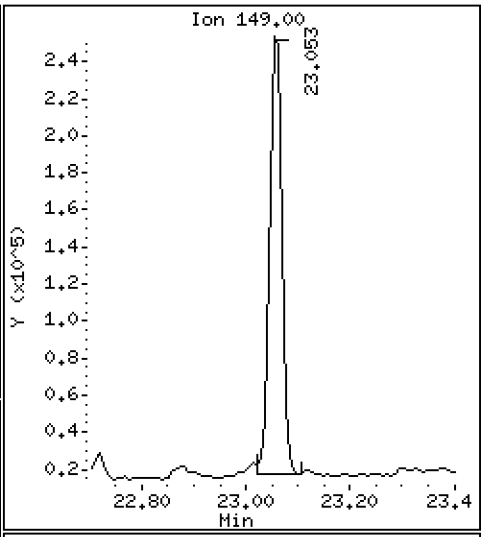
Column phase: ZB-5msi

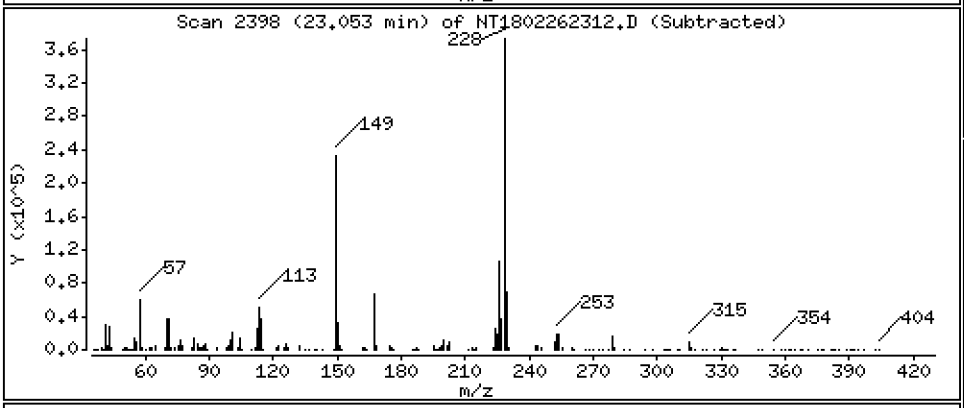
Column diameter: 0.25

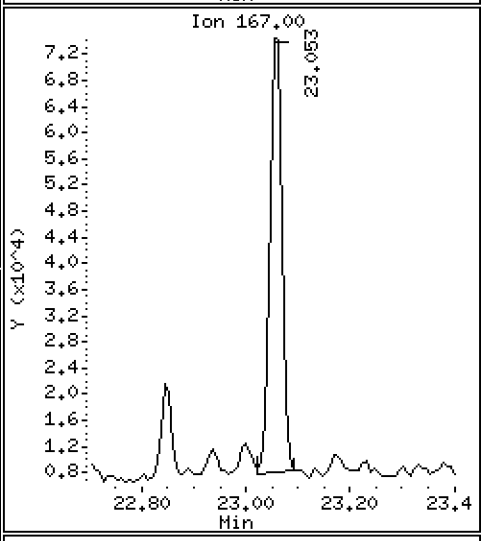
72 bis(2-Ethylhexyl)phthalate

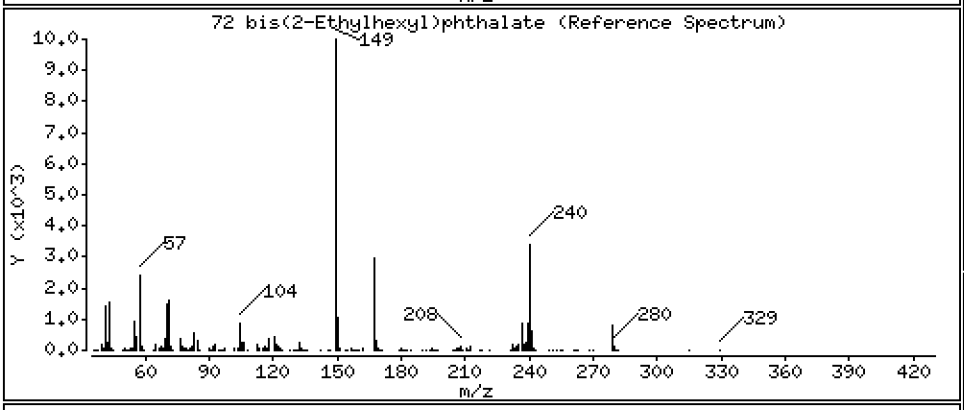
Concentration: 1.460 ug/mL

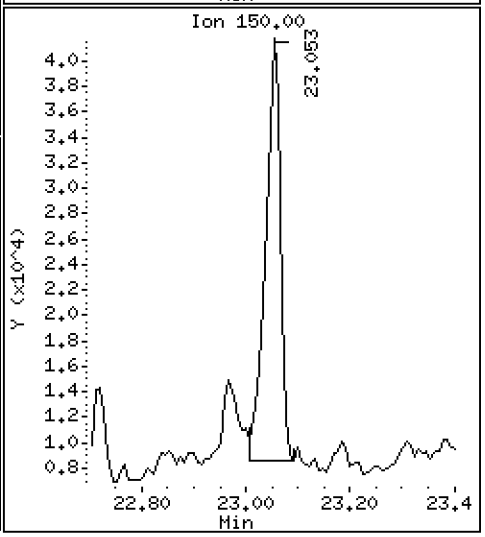


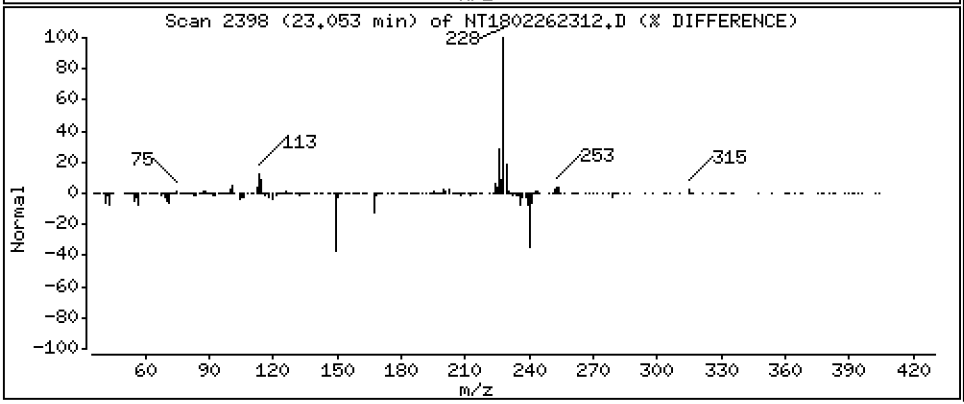












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

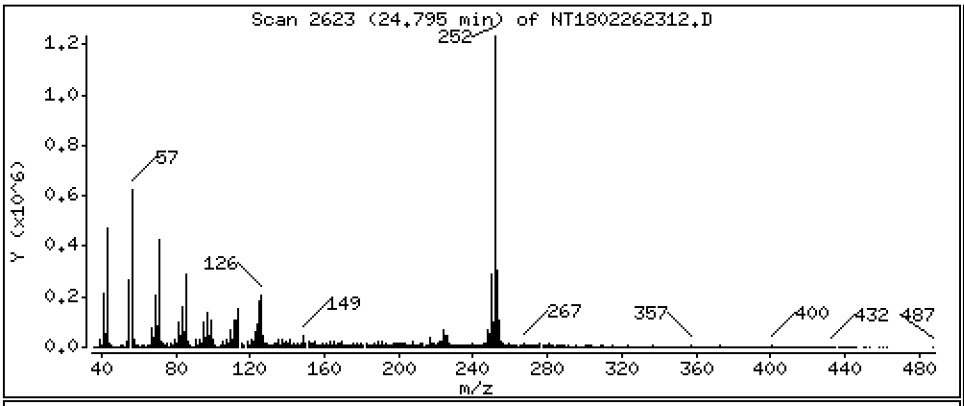
Operator: VTS

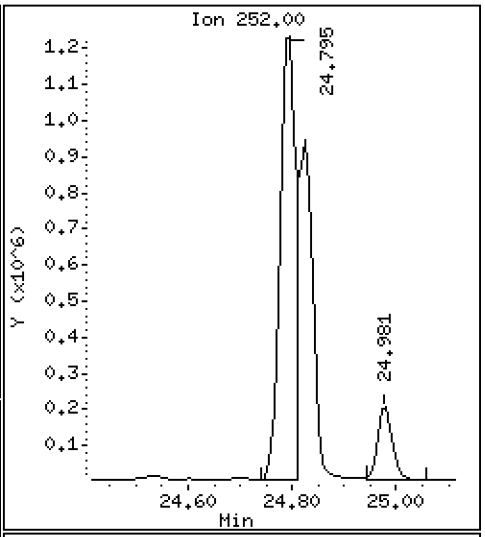
Column phase: ZB-5msi

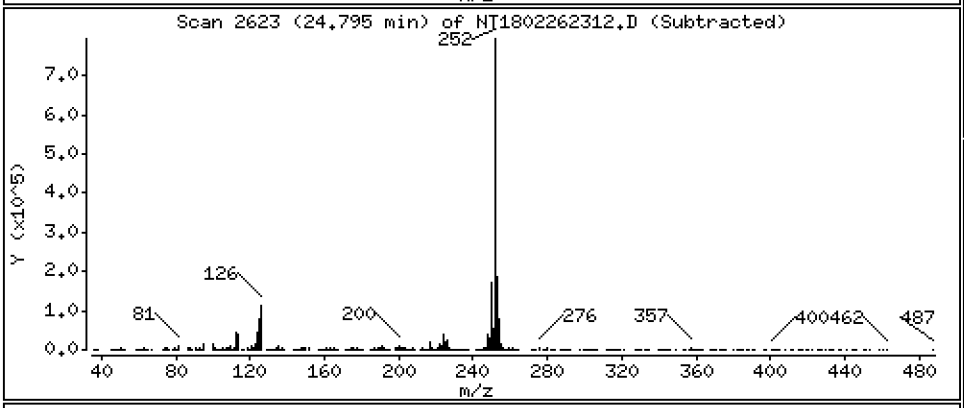
Column diameter: 0.25

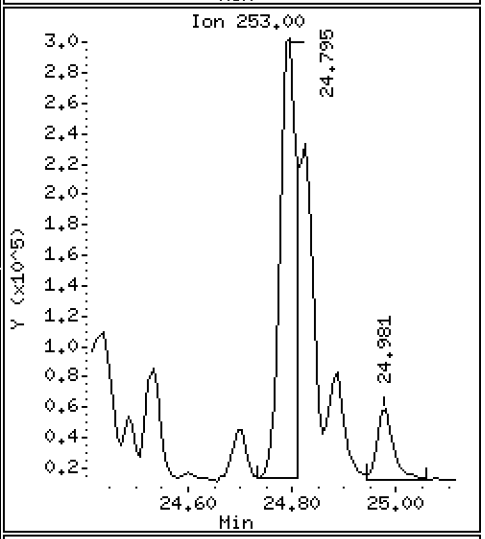
74 Benzo(b)fluoranthene

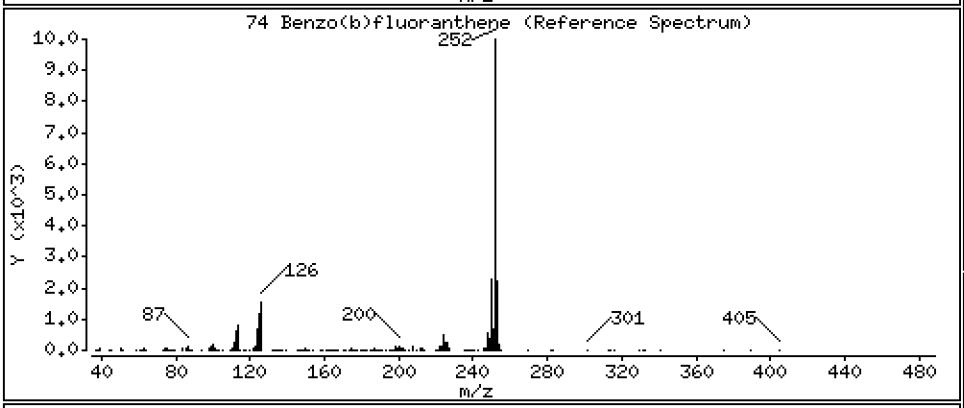
Concentration: 7.926 ug/mL

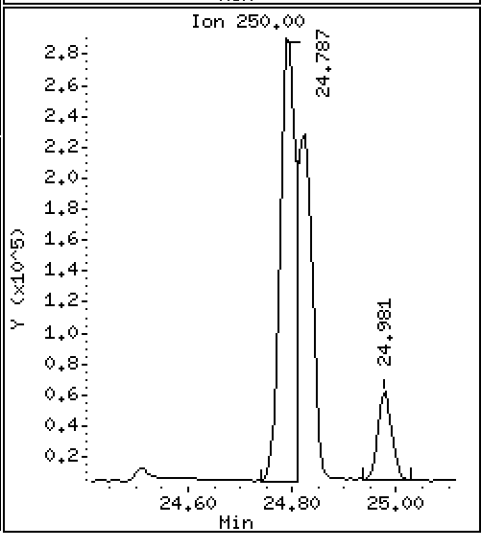


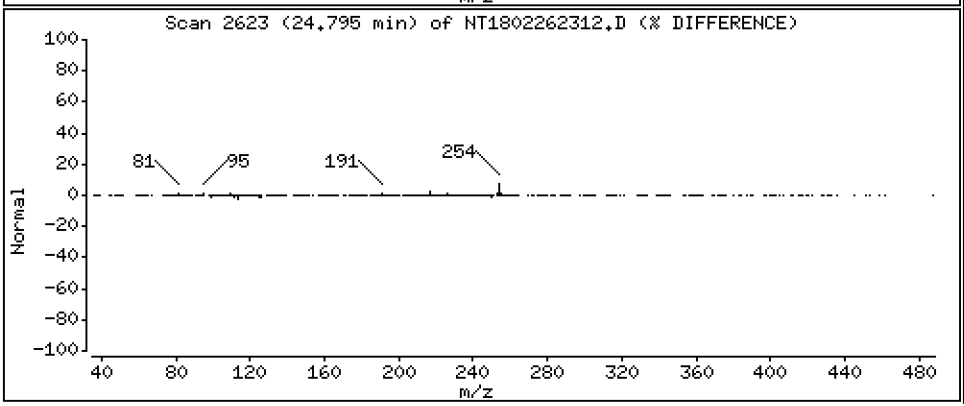












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

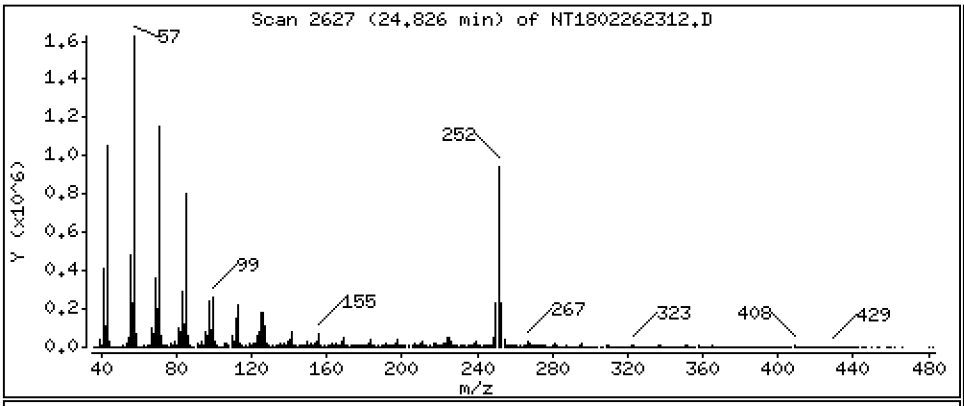
Operator: VTS

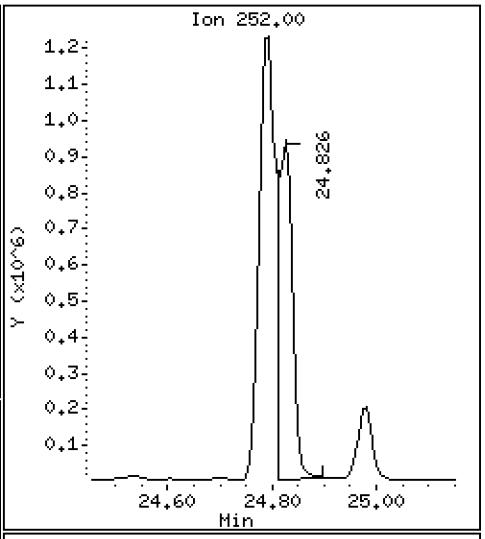
Column phase: ZB-5msi

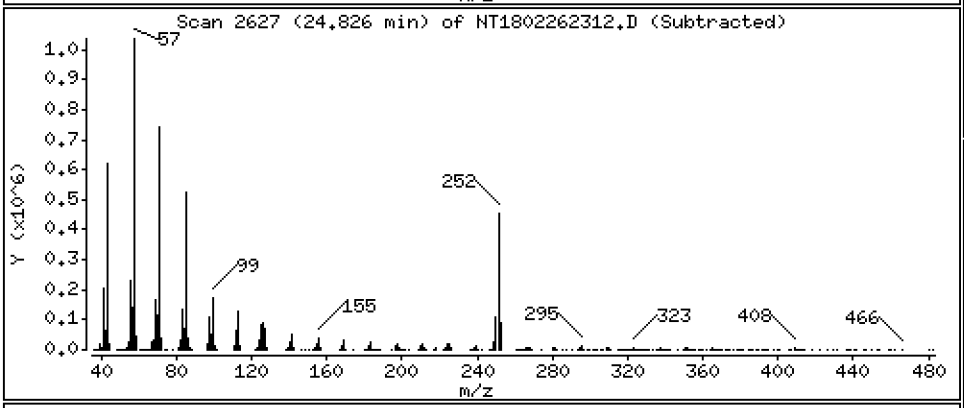
Column diameter: 0.25

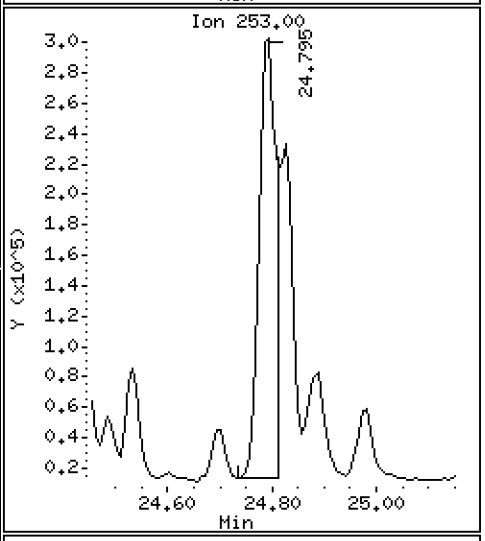
75 Benzo(k)fluoranthene

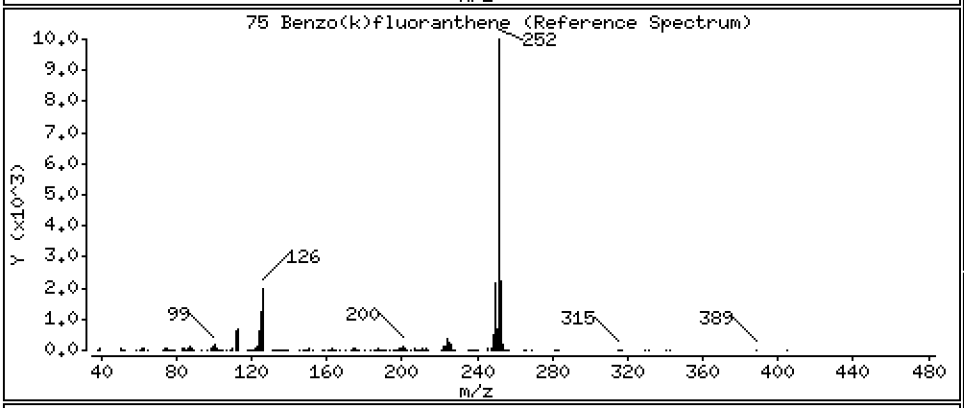
Concentration: 4.881 ug/mL

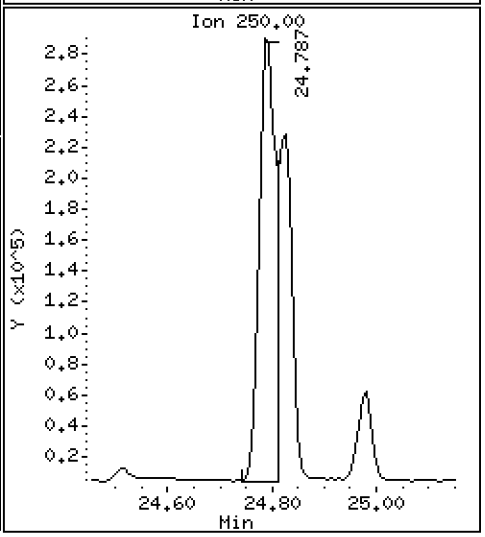


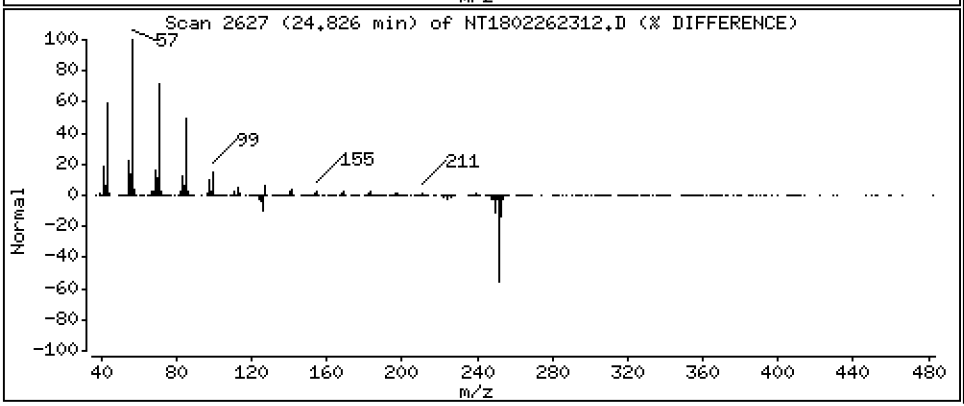












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

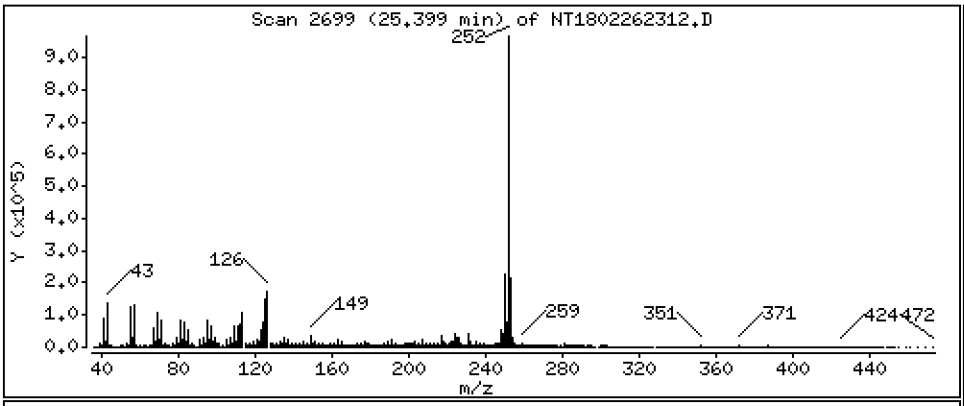
Operator: VTS

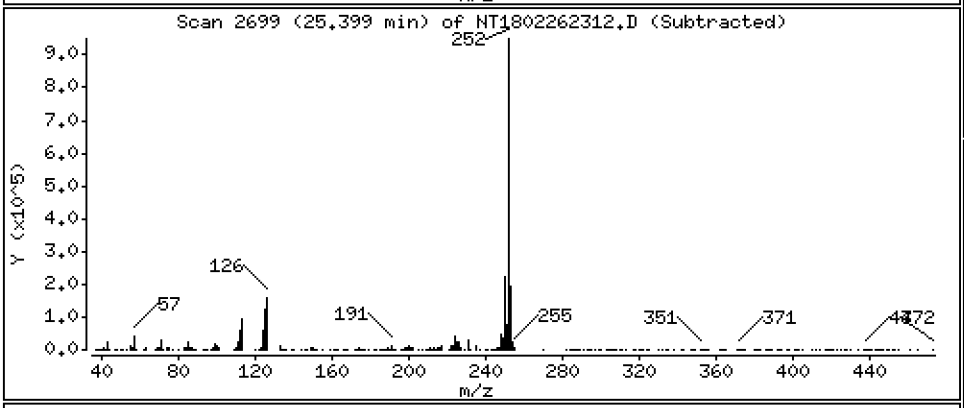
Column phase: ZB-5msi

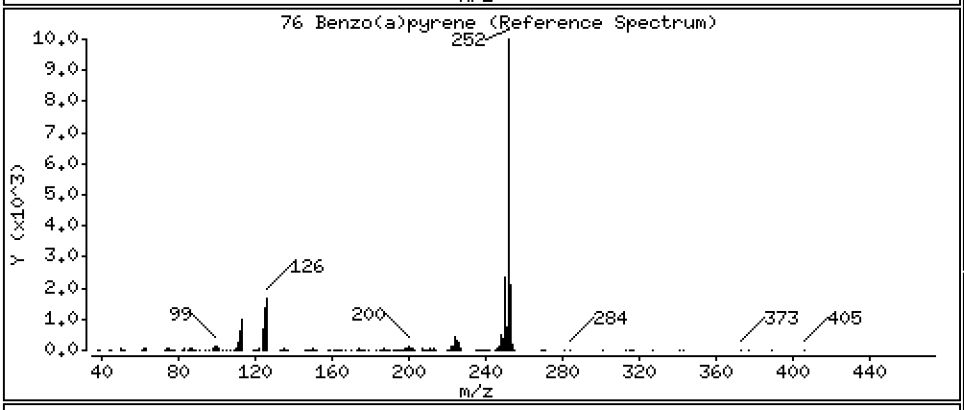
Column diameter: 0.25

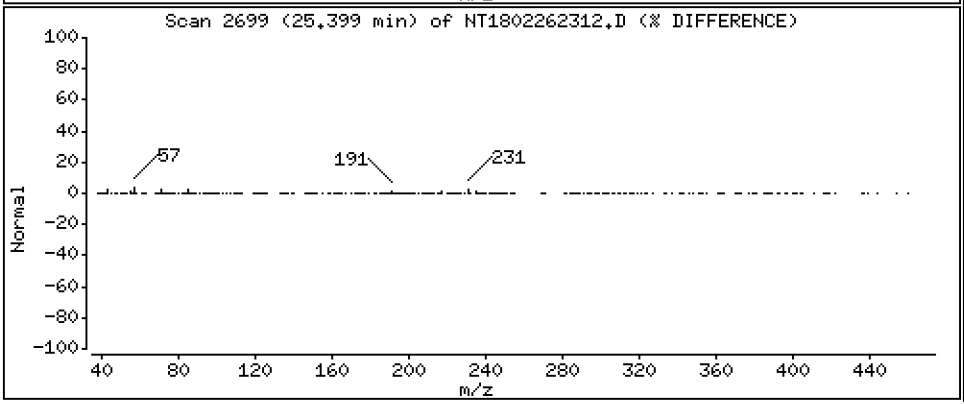
76 Benzo(a)pyrene

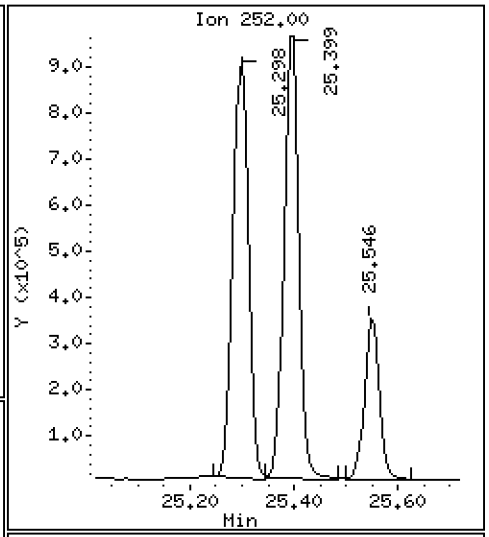
Concentration: 6.057 ug/mL

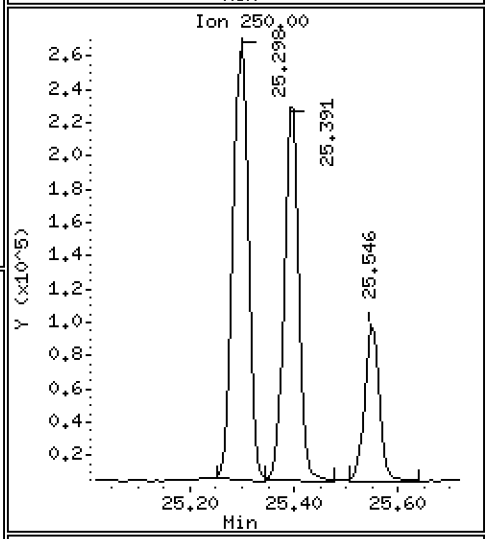


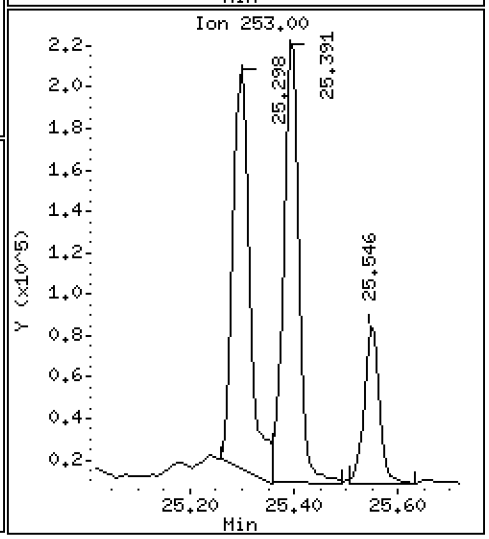












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

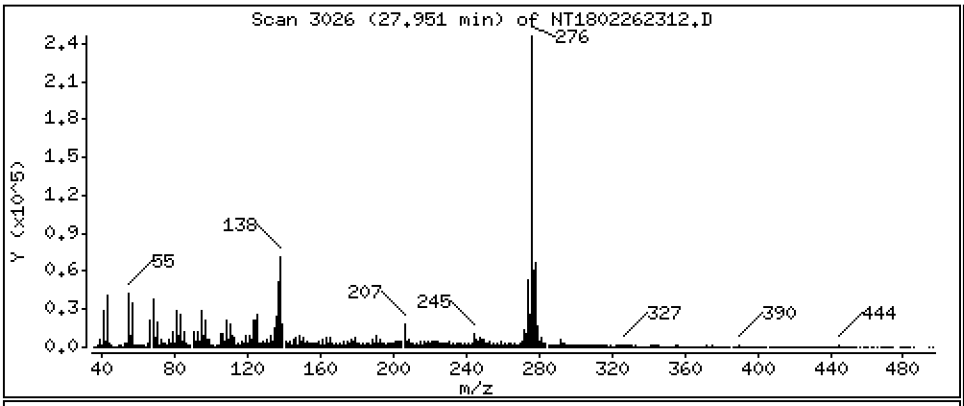
Operator: VTS

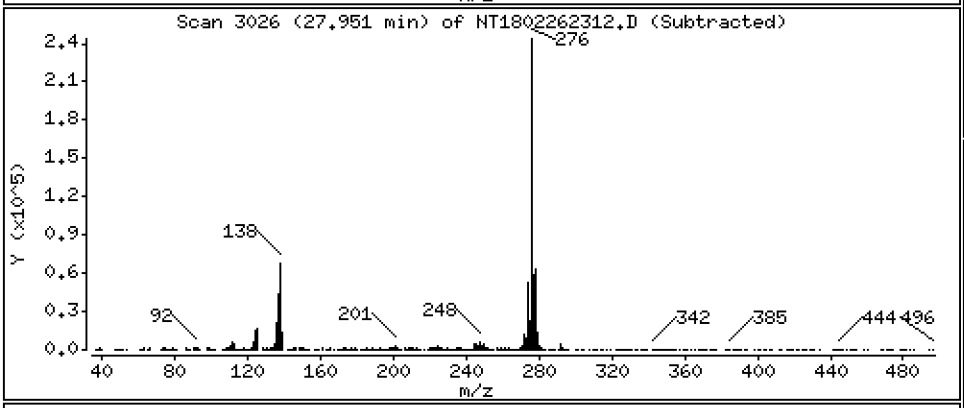
Column phase: ZB-5msi

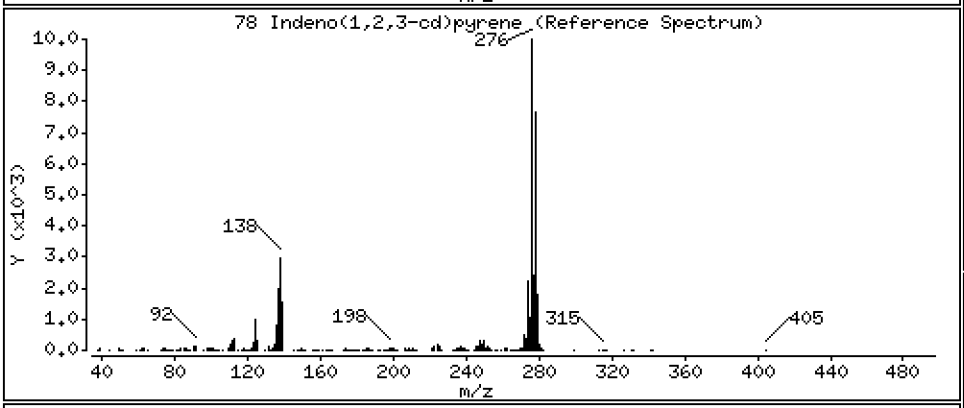
Column diameter: 0.25

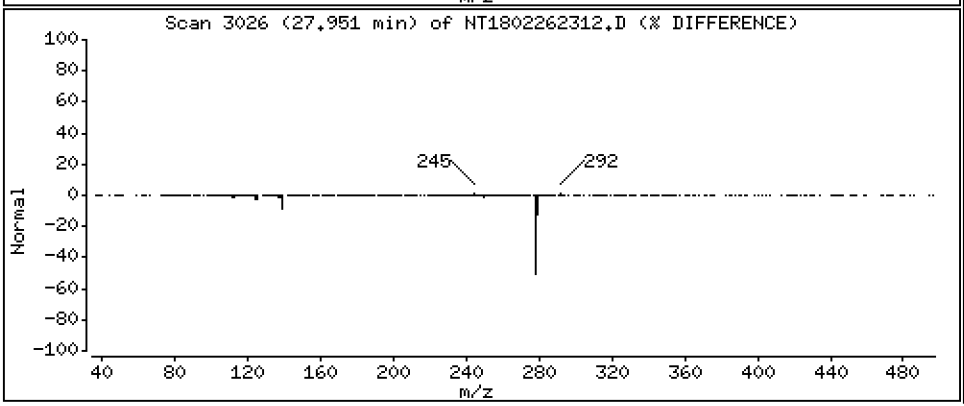
78 Indeno(1,2,3-cd)pyrene

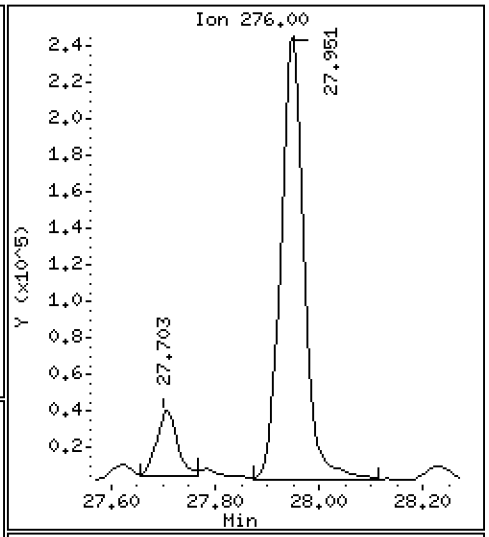
Concentration: 1.928 ug/mL

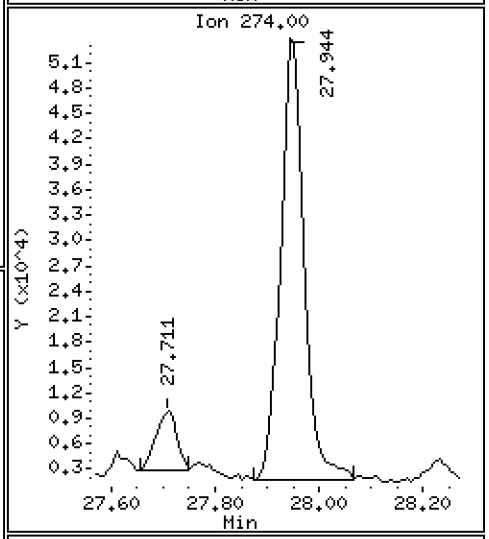


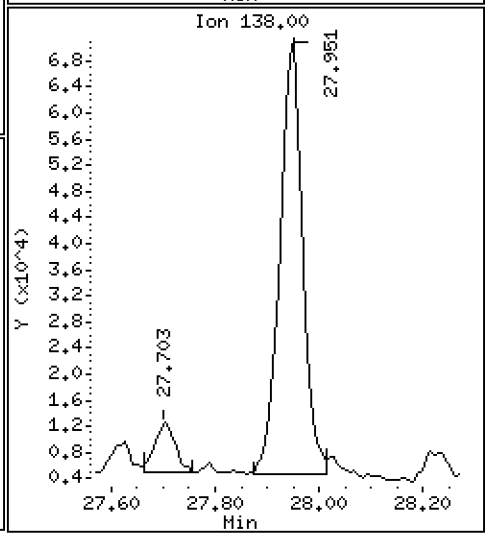












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

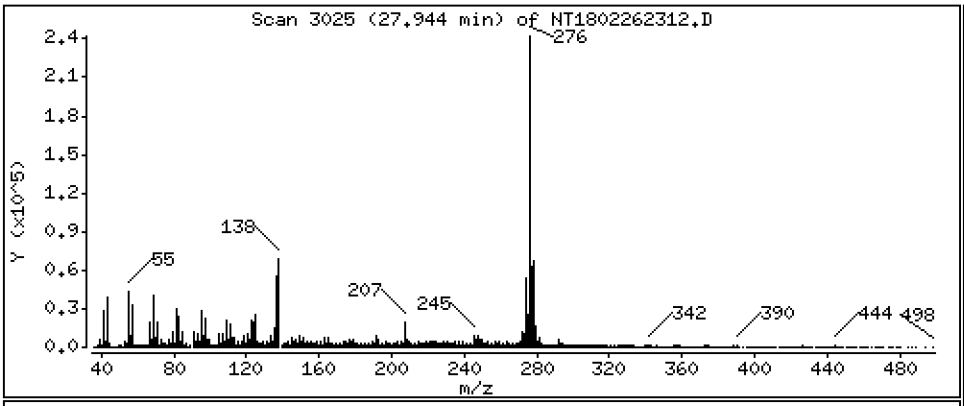
Operator: VTS

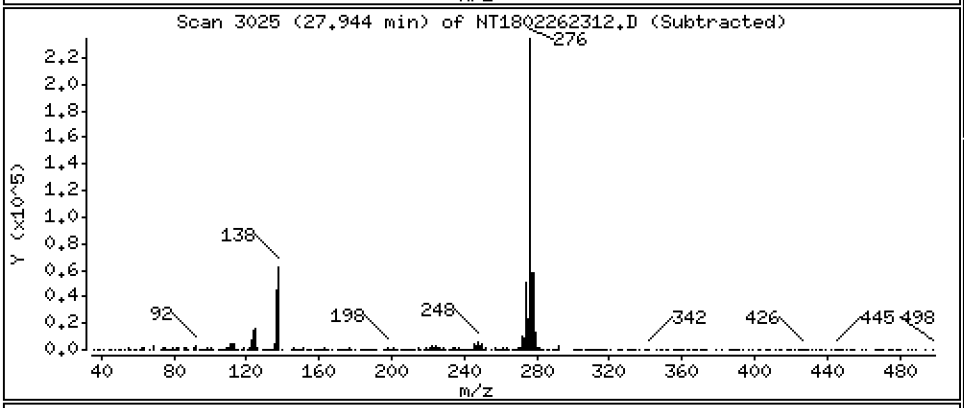
Column phase: ZB-5msi

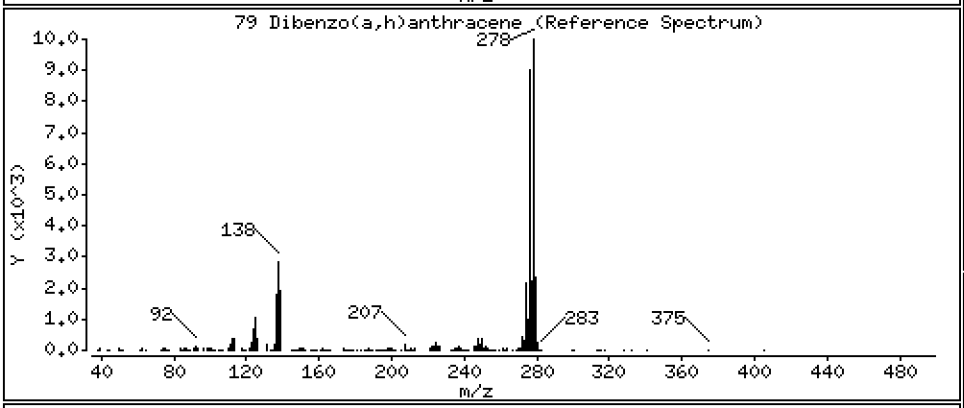
Column diameter: 0.25

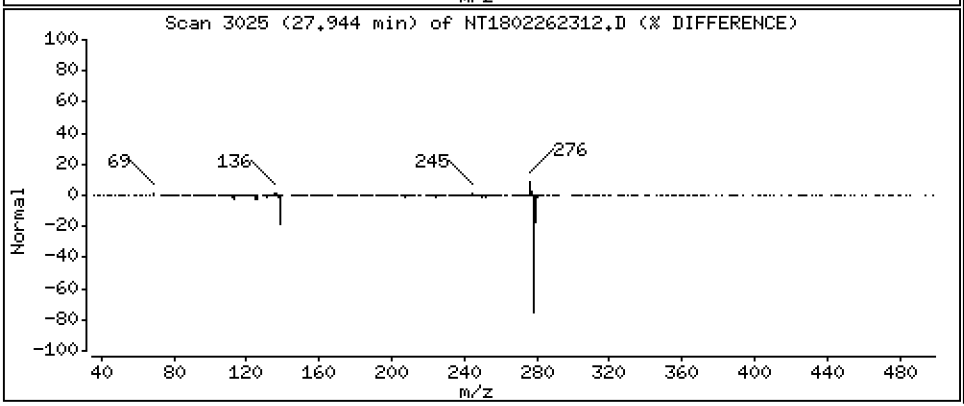
79 Dibenzo(a,h)anthracene

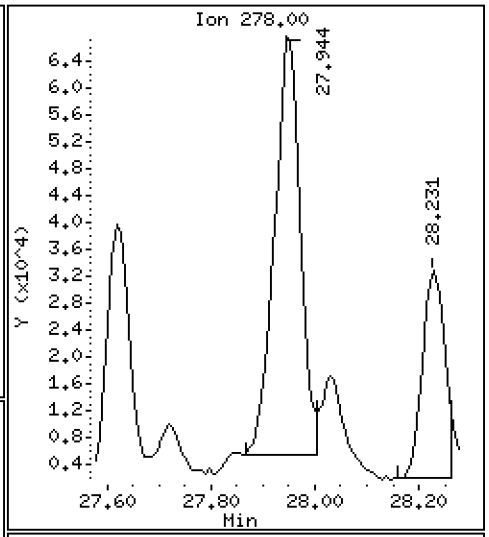
Concentration: 0.6515 ug/mL

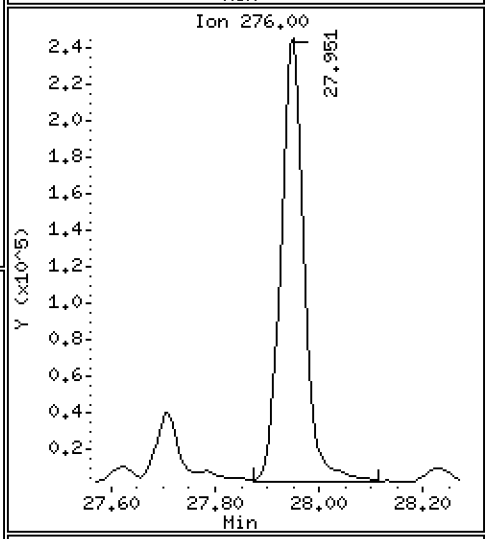


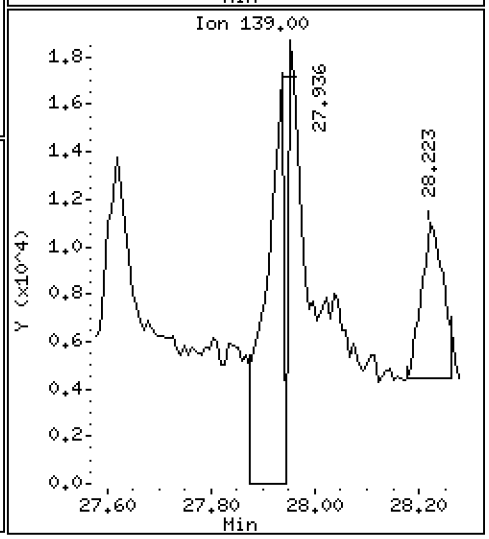












Date : 26-FEB-2023 19:12

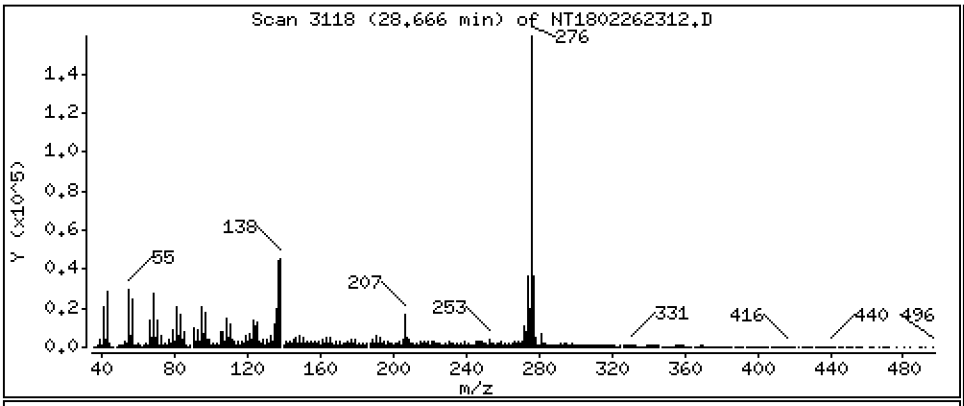
Client ID: Instrument: nt18.i

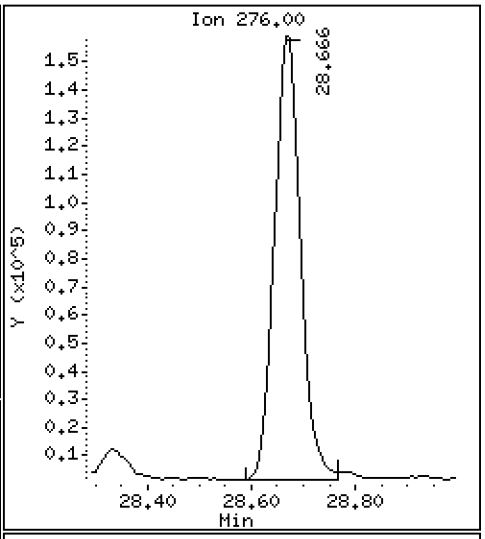
Sample Info: 23A0134-03

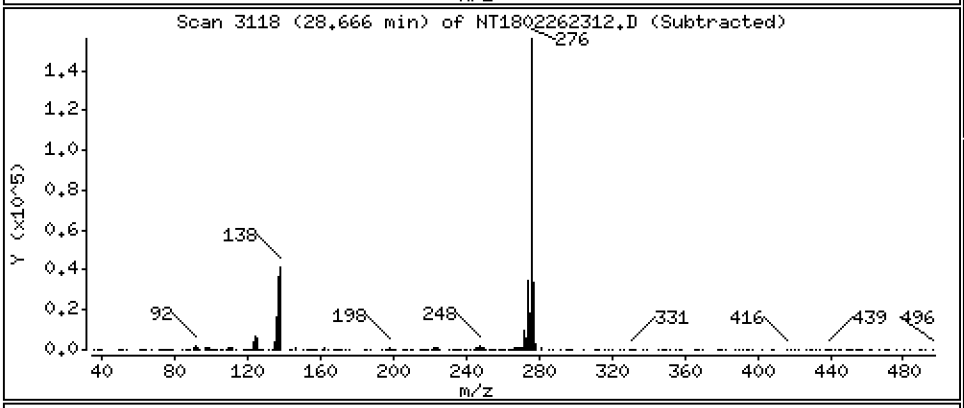
Operator: VTS

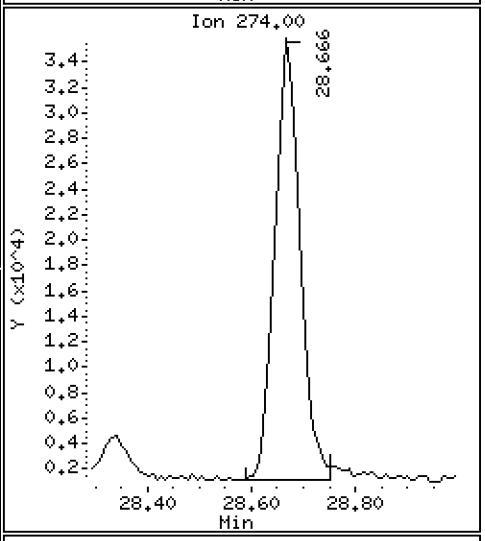
Column phase: ZB-5msi Column diameter: 0.25

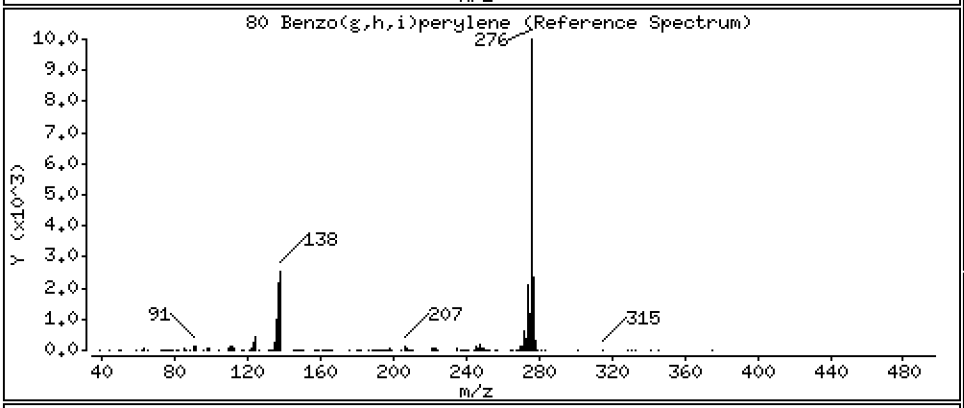
80 Benzo(g,h,i)perylene Concentration: 1.722 ug/mL

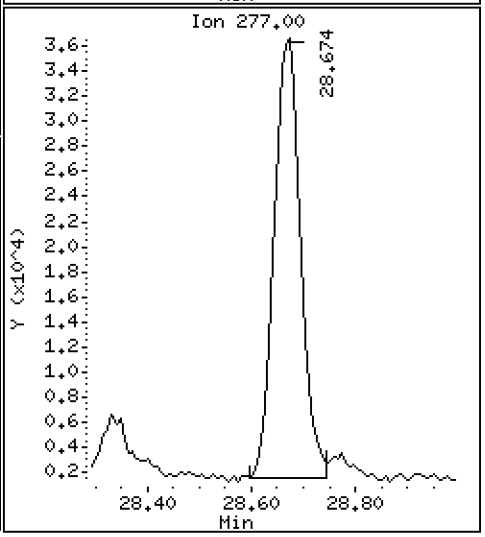


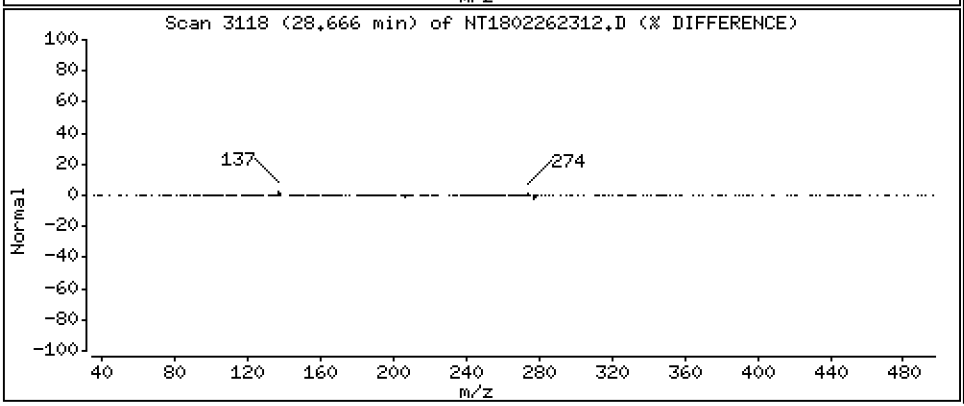












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

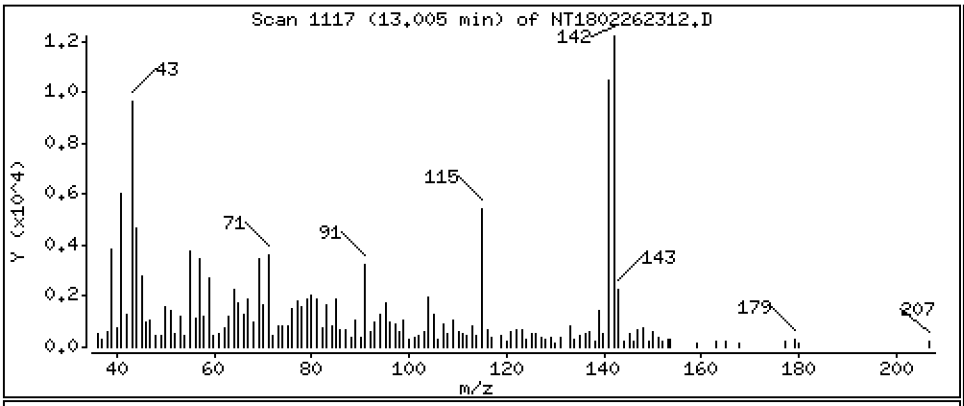
Operator: VTS

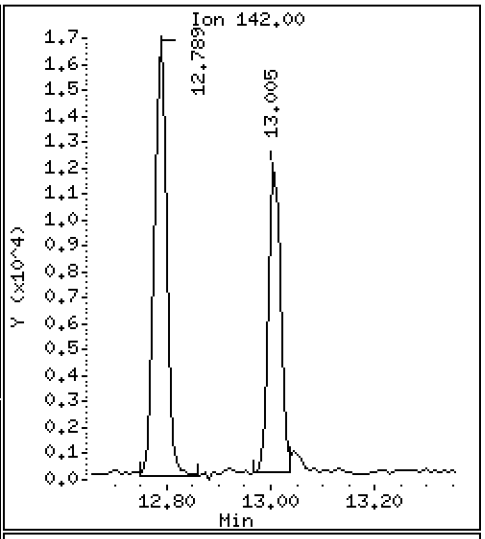
Column phase: ZB-5msi

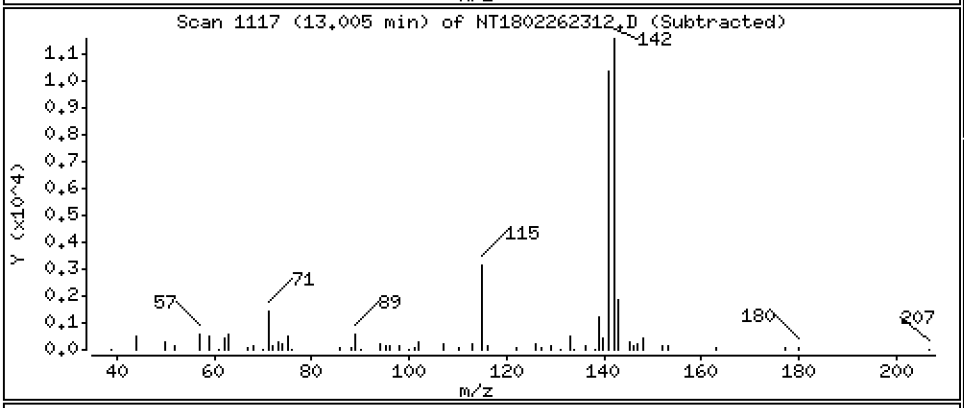
Column diameter: 0.25

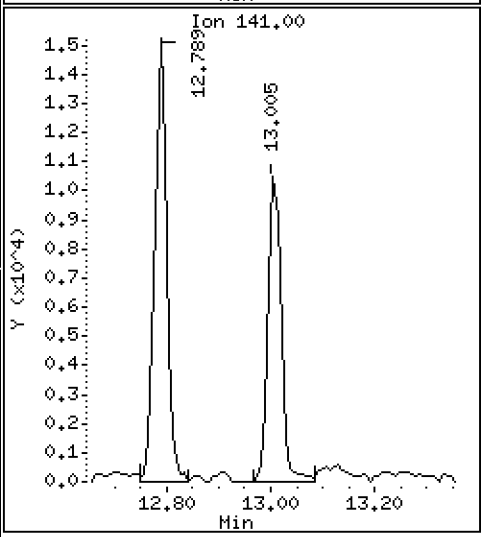
105 1-methylnaphthalene

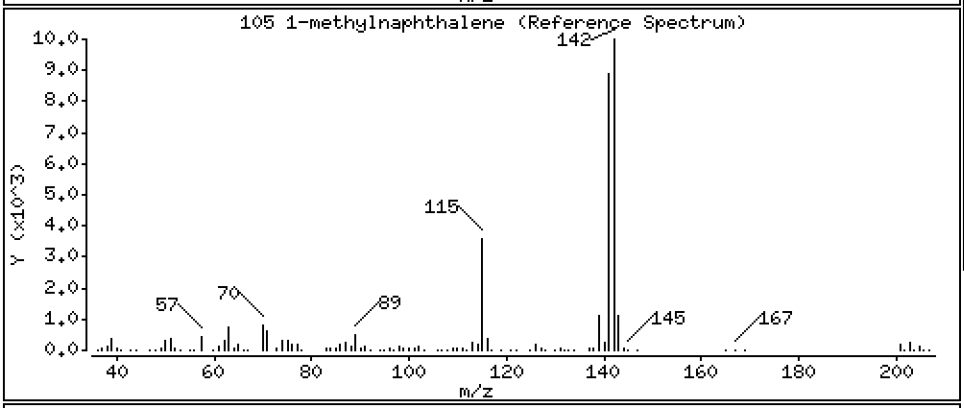
Concentration: 0.09697 ug/mL

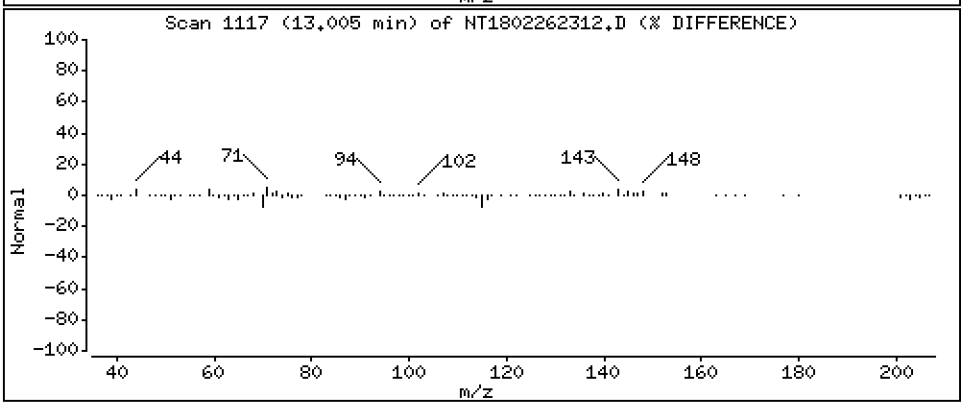












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262312.D

Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

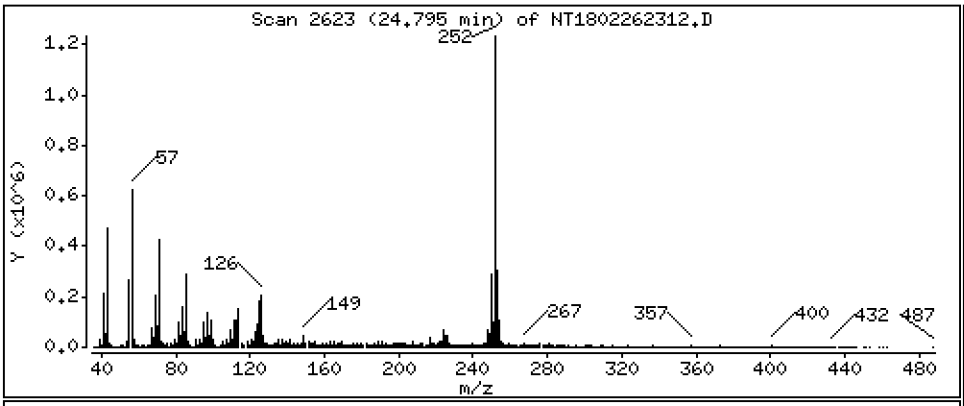
Operator: VTS

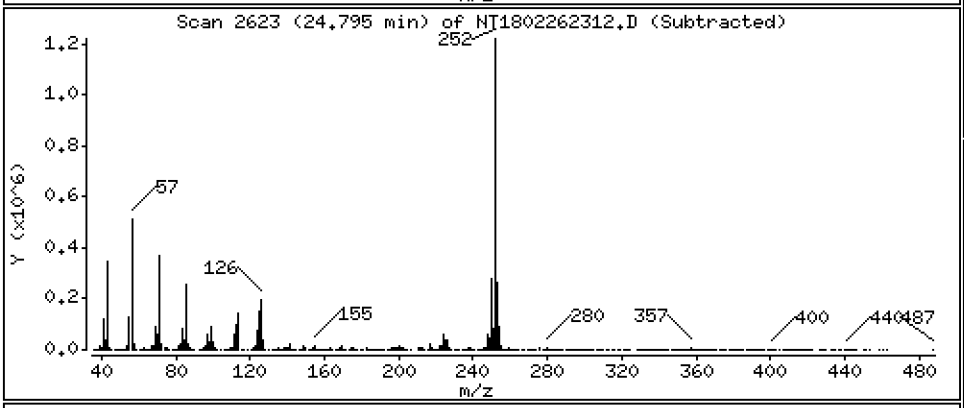
Column phase: ZB-5msi

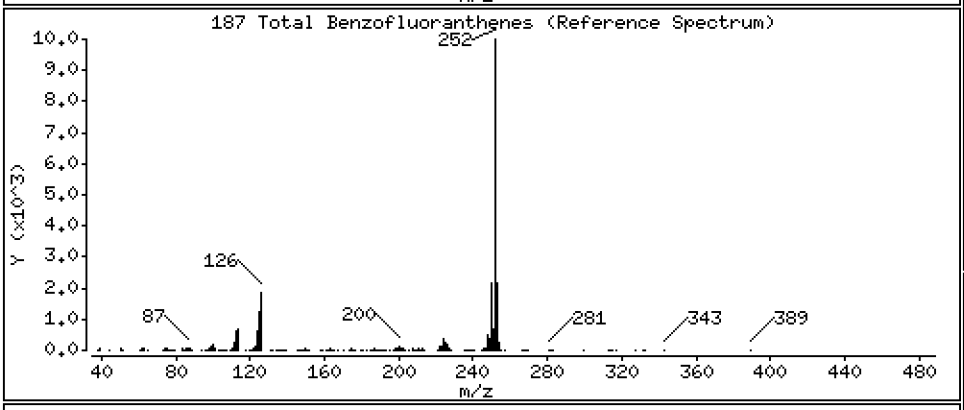
Column diameter: 0.25

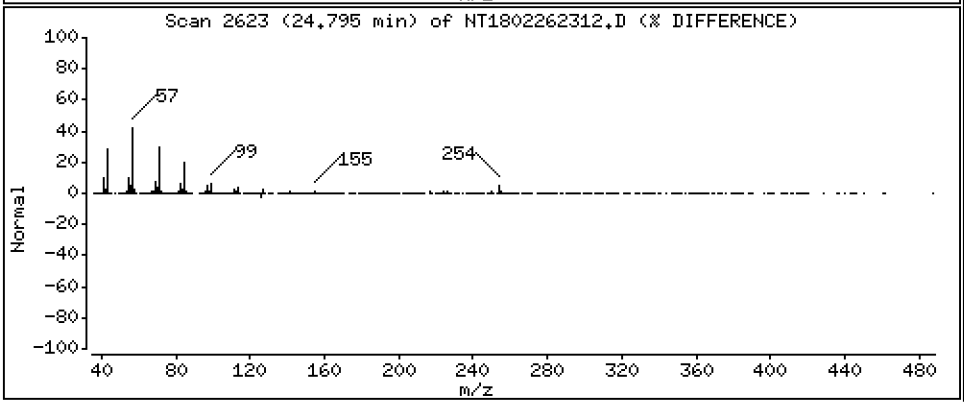
187 Total Benzofluoranthenes

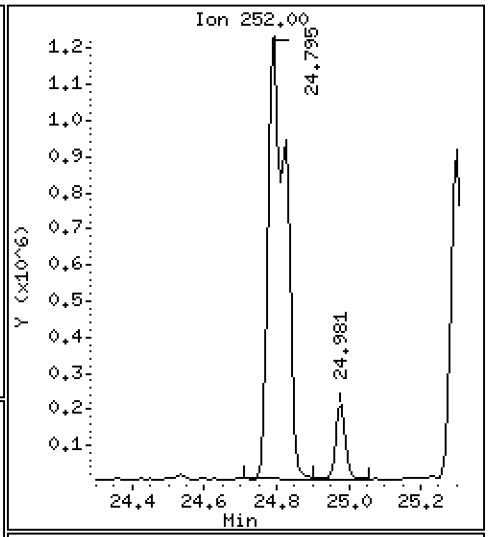
Concentration: 12.18 ug/mL

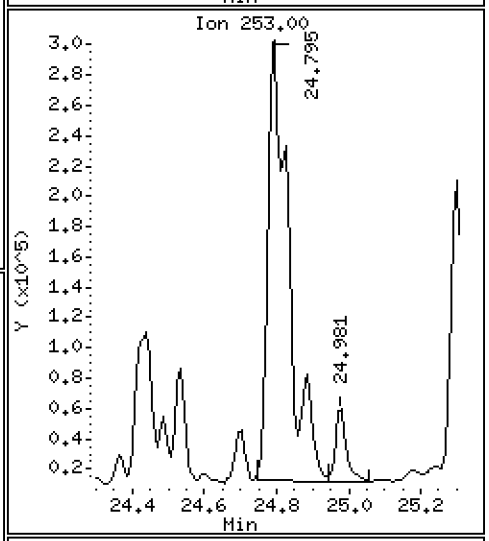


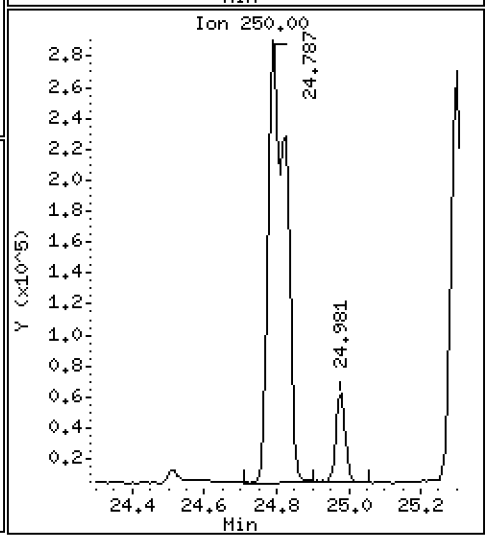












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262312.D
Lab Smp Id: 23A0134-03
Inj Date : 26-FEB-2023 19:12
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-03
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	6.766	6.743	(0.759)	491922	5.40441	5.404
$ 2	Phenol-d5	99	8.312	8.296	(0.932)	663970	5.64435	5.644
3	Phenol	94	8.327	8.319	(0.934)	242678	1.98277	1.983
$ 5	2-Chlorophenol-d4	132	8.566	8.559	(0.961)	567726	5.54615	5.546
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	266790	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	9.272	9.272	(1.040)	230051	3.17014	3.170
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	9.194	9.186	(1.031)	11015	0.18928	0.1893
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	9.691	9.683	(1.087)	7535	0.07636	0.07636
$ 18	Nitrobenzene-d5	82	9.993	9.993	(0.879)	395277	3.76326	3.763
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	10.930	10.990	(0.962)	50896	1.41426	1.414(MH)
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.365	11.365	(1.000)	985574	4.00000	
28	Naphthalene	128	11.404	11.403	(1.003)	75068	0.24778	0.2478
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	12.788	12.788	(1.125)	26933	0.13083	0.1308
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.562	13.570	(0.907)	843331	3.77368	3.774
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	14.460	14.468	(0.967)	9522	0.05077	0.05077
	40 Acenaphthylene	152	14.630	14.630	(0.979)	59578	0.20262	0.2026
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	14.947	14.947	(1.000)	530046	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.009	15.009	(1.004)	60237	0.32369	0.3237
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.334	15.334	(1.026)	48063	0.17844	0.1784
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	15.906	15.921	(1.064)	38883	0.19786	0.1979
	49 Fluorene	166	16.037	16.037	(1.073)	66597	0.30853	0.3085
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	211889	7.63865	7.639
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	17.952	17.952	(1.000)	1102776	4.00000	
	60 Phenanthrene	178	18.007	17.999	(1.003)	1223309	3.52674	3.527
	61 Anthracene	178	18.092	18.092	(1.008)	211542	0.63997	0.6400
	62 Carbazole	167	18.424	18.424	(1.026)	114329	0.37745	0.3775
	63 Di-n-butylphthalate	149	19.245	19.237	(1.072)	27044	0.08066	0.08066
	64 Fluoranthene	202	20.428	20.382	(0.888)	2751269	6.51748	6.517
	65 Pyrene	202	20.831	20.800	(0.906)	3458690	7.68229	7.682
$	66 Terphenyl-d14	244	21.109	21.094	(0.918)	1388358	3.84479	3.845
	67 Butylbenzylphthalate	149	22.031	22.023	(0.958)	32203	0.18838	0.1884
	68 Benzo(a)anthracene	228	22.968	22.952	(0.999)	1092103	2.51072	2.511
*	69 Chrysene-d12	240	22.999	22.983	(1.000)	1204859	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.037	23.029	(1.002)	1985064	4.38872	4.389
	72 bis(2-Ethylhexyl)phthalate	149	23.053	23.053	(0.959)	369423	1.45984	1.460
*	134 Di-n-octylphthalate-d4	153	24.028	24.020	(1.000)	1762598	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	24.795	24.764	(0.972)	2727042	7.92561	7.926
	75 Benzo(k)fluoranthene	252	24.826	24.802	(0.974)	1903308	4.88092	4.881(M)
	76 Benzo(a)pyrene	252	25.399	25.368	(0.996)	1932129	6.05734	6.057
*	77 Perylene-d12	264	25.499	25.476	(1.000)	1054654	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.951	27.920	(1.096)	771955	1.92782	1.928
	79 Dibenzo(a,h)anthracene	278	27.943	27.927	(1.096)	217557	0.65145	0.6515
	80 Benzo(g,h,i)perylene	276	28.665	28.642	(1.124)	552880	1.72222	1.722
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	142	13.005	13.005	(1.144)	18072	0.09697	0.09697
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.795	24.802	(0.972)	4237352	12.1805	12.18
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262312.D
Lab Smp Id: 23A0134-03
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	266790	9.29
27 Naphthalene-d8	943164	471582	1886328	985574	4.50
42 Acenaphthene-d10	501893	250947	1003786	530046	5.61
59 Phenanthrene-d10	896502	448251	1793004	1102776	23.01
69 Chrysene-d12	842481	421241	1684962	1204859	43.01
134 Di-n-octylphthala	1278043	639022	2556086	1762598	37.91
77 Perylene-d12	915681	457841	1831362	1054654	15.18

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.07
134 Di-n-octylphthala	24.02	23.52	24.52	24.03	0.03
77 Perylene-d12	25.48	24.98	25.98	25.50	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262312.D

Lab ID: 23A0134-03
nt18.i, ABN.m, 26-FEB-2023 19:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.962	0.967	-0.0052	Benzoic acid

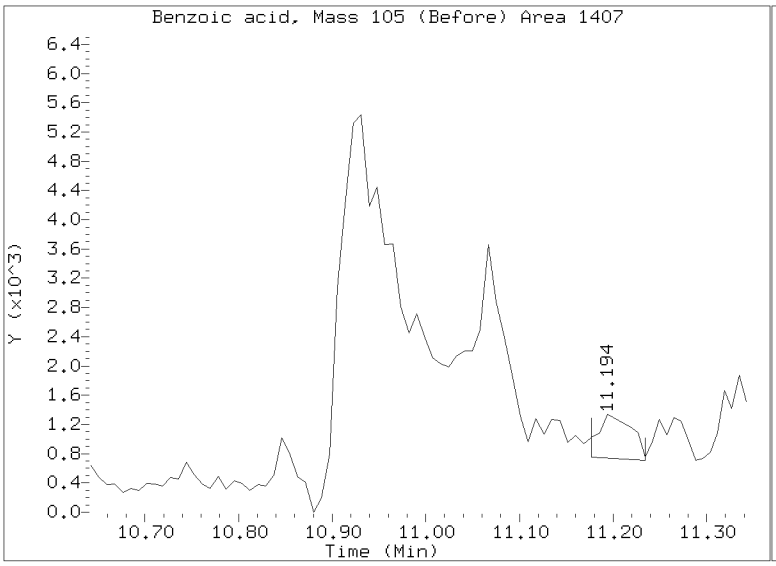
RRT check based on Ccal File: NT1802262302.D

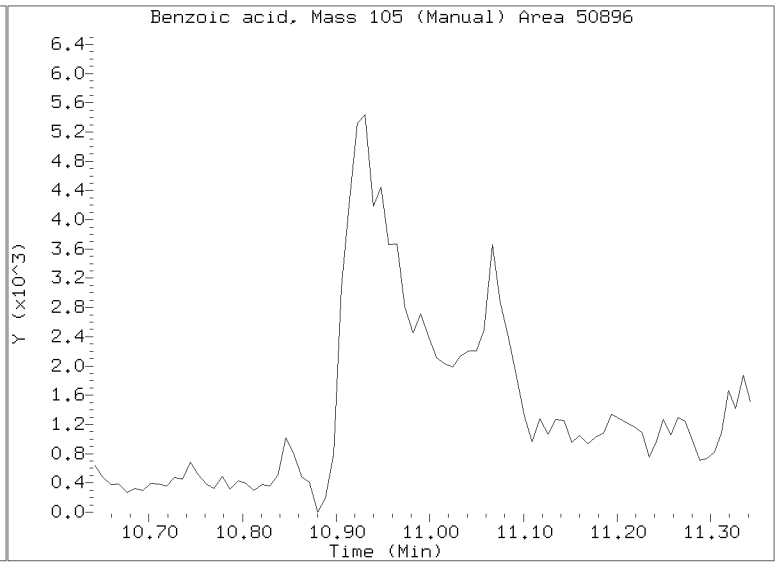
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

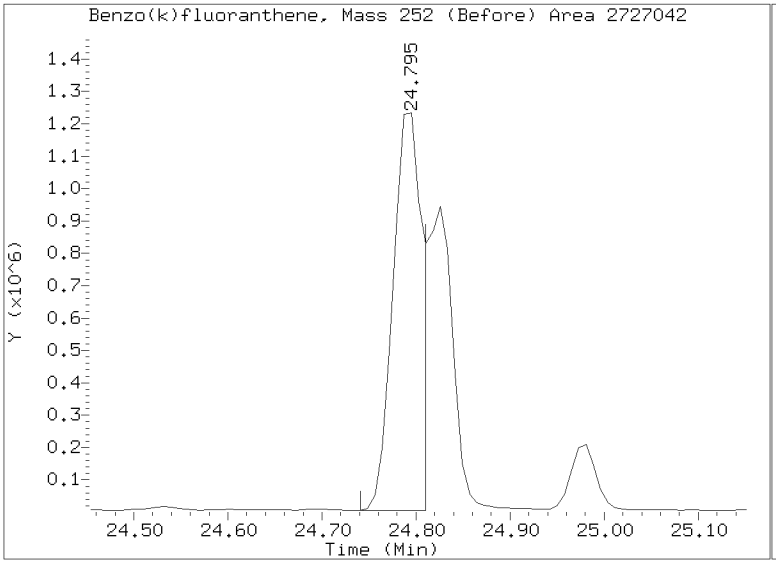
* Only compounds listed in the work order have been verified by the analyst *

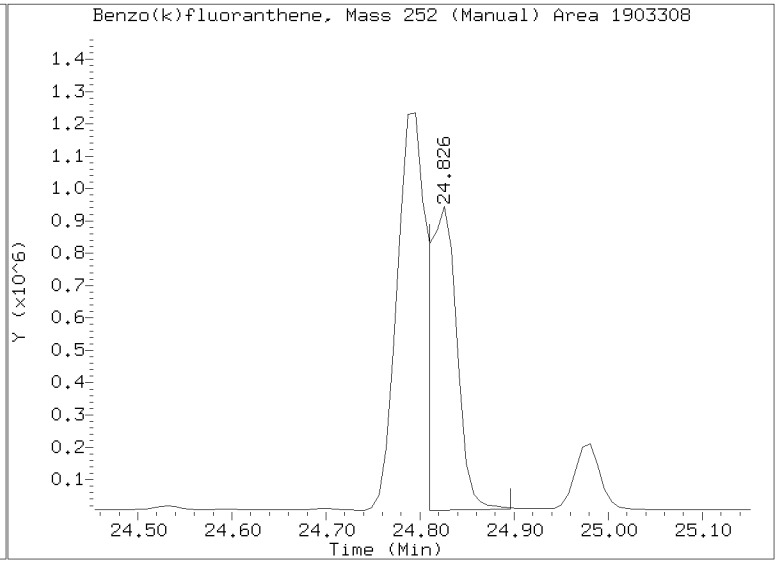
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/NT1802262312.D
Injection Date: 26-FEB-2023 19:12
Lab ID:23A0134-03 Client ID:
Report Date: 03/10/2023 07:46









Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1242

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-04 C	SDG:	23A0134
Sampled:	01/06/23 11:04	Prepared:	01/19/23 13:35	File ID:	NT1802262313.D
% Solids:	46.37	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 19:53
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	21.64 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	55.7		4.4	19.9
106-44-5	4-Methylphenol	1	19.9	U	7.4	19.9
91-20-3	Naphthalene	1	9.7	J	4.2	19.9
91-57-6	2-Methylnaphthalene	1	9.4	J	4.5	19.9
208-96-8	Acenaphthylene	1	19.9	U	6.2	19.9
131-11-3	Dimethylphthalate	1	19.9	U	4.4	19.9
83-32-9	Acenaphthene	1	6.6	J	5.2	19.9
132-64-9	Dibenzofuran	1	19.9	U	14.1	19.9
86-73-7	Fluorene	1	19.9	U	14.5	19.9
85-01-8	Phenanthrene	1	51.7		8.7	19.9
120-12-7	Anthracene	1	19.4	J	7.2	19.9
206-44-0	Fluoranthene	1	105		6.1	19.9
129-00-0	Pyrene	1	163		5.7	19.9
85-68-7	Butylbenzylphthalate	1	11.7	J	9.4	19.9
56-55-3	Benzo(a)anthracene	1	64.8		5.9	19.9
218-01-9	Chrysene	1	99.0		6.0	19.9
117-81-7	bis(2-Ethylhexyl)phthalate	1	121		5.4	49.8
	Benzofluoranthenes, Total	1	230		10.0	39.9
50-32-8	Benzo(a)pyrene	1	74.1		4.2	19.9
193-39-5	Indeno(1,2,3-cd)pyrene	1	21.8		14.6	19.9
53-70-3	Dibenzo(a,h)anthracene	1	19.9	U	17.2	19.9
191-24-2	Benzo(g,h,i)perylene	1	24.6		13.5	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	747.42	494	66.1	27 - 120	
Phenol-d5	747.42	507	67.8	29 - 120	
2-Chlorophenol-d4	747.42	505	67.5	31 - 120	
1,2-Dichlorobenzene-d4	498.28	296	59.4	32 - 120	
Nitrobenzene-d5	498.28	341	68.5	30 - 120	
2-Fluorobiphenyl	498.28	344	69.0	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1242

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

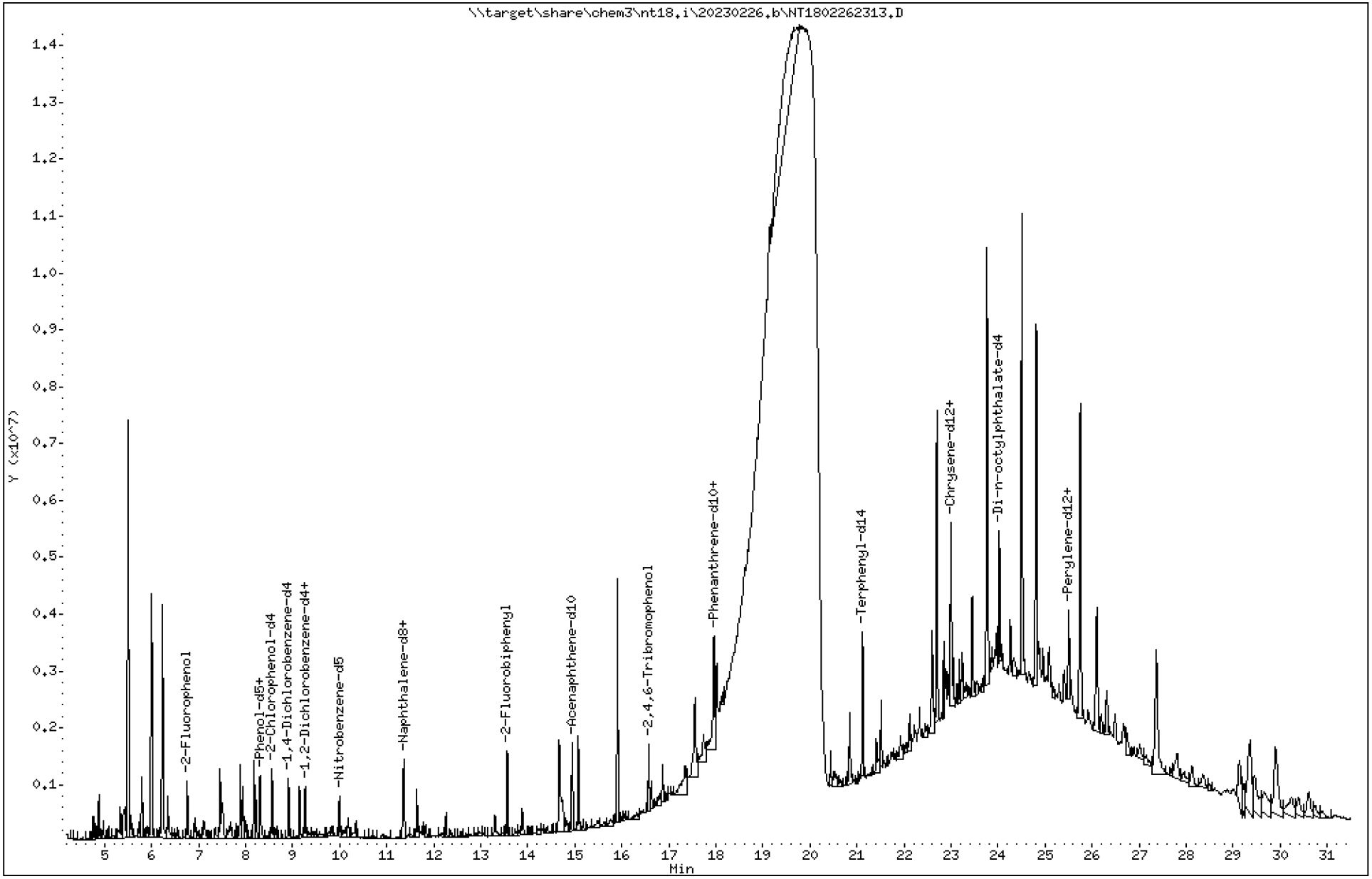
Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-04 C	SDG:	23A0134
Sampled:	01/06/23 11:04	Prepared:	01/19/23 13:35	File ID:	NT1802262313.D
% Solids:	46.37	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 19:53
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	21.64 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	747.42	720	96.4	24 - 134	
p-Terphenyl-d14	498.28	388	77.9	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D
Date : 26-FEB-2023 19:53
Client ID:
Sample Info: 23A0134-04

Instrument: nt18.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

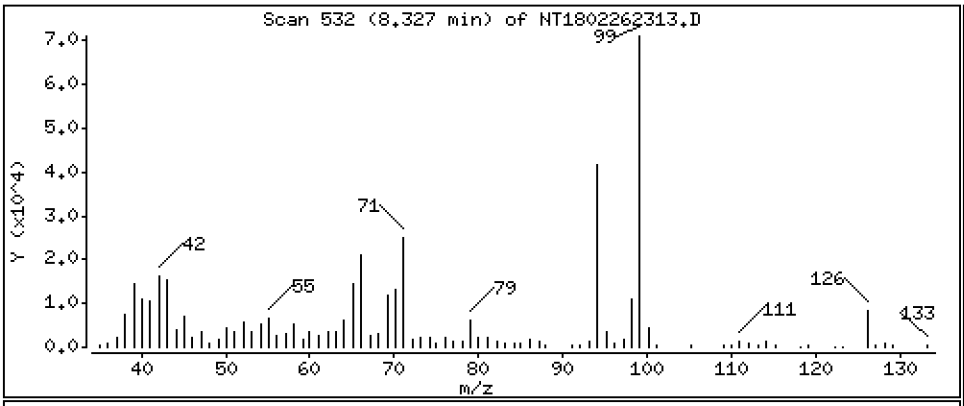
Operator: VTS

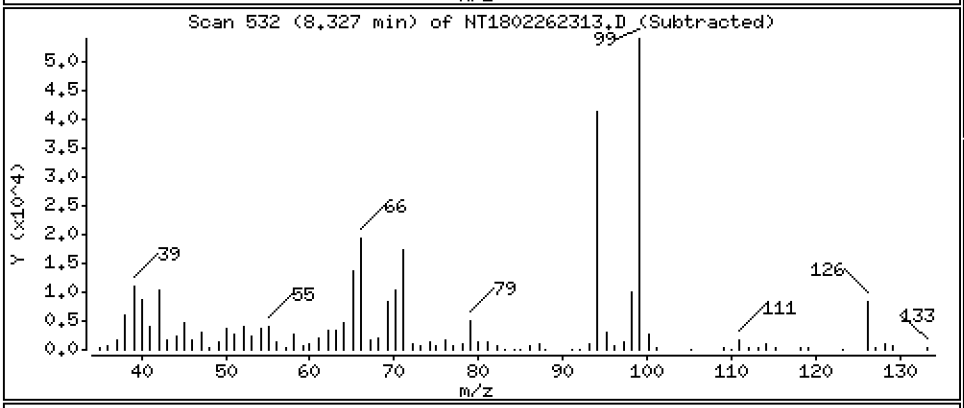
Column phase: ZB-5msi

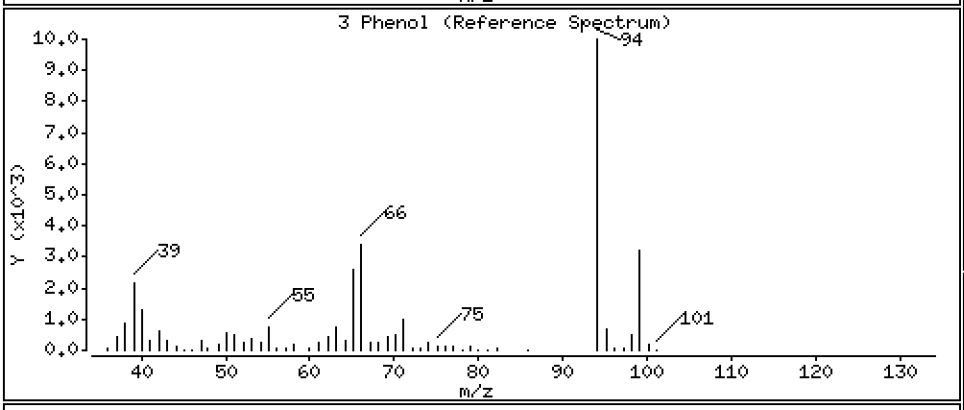
Column diameter: 0.25

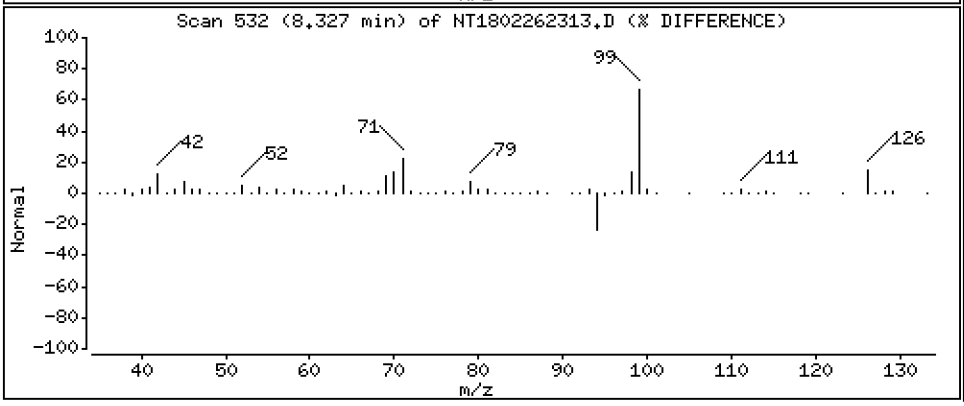
3 Phenol

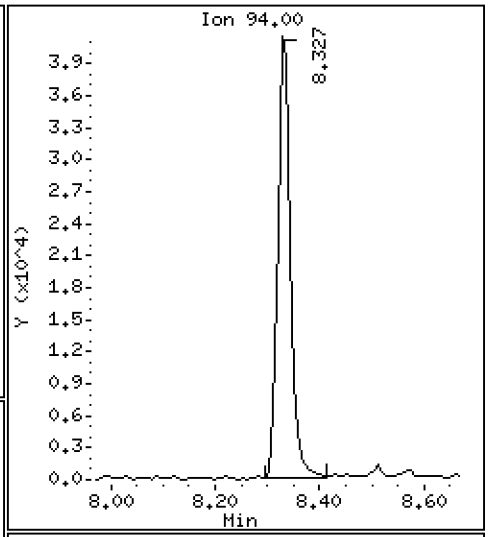
Concentration: 0.5587 ug/mL

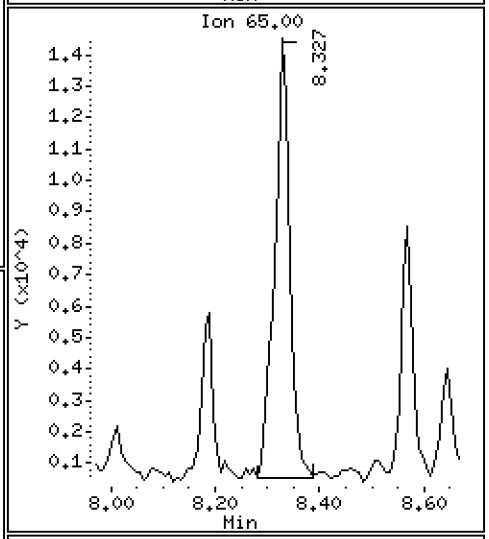


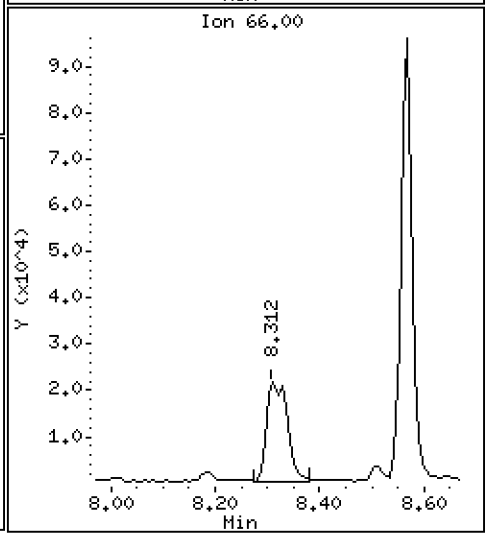












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

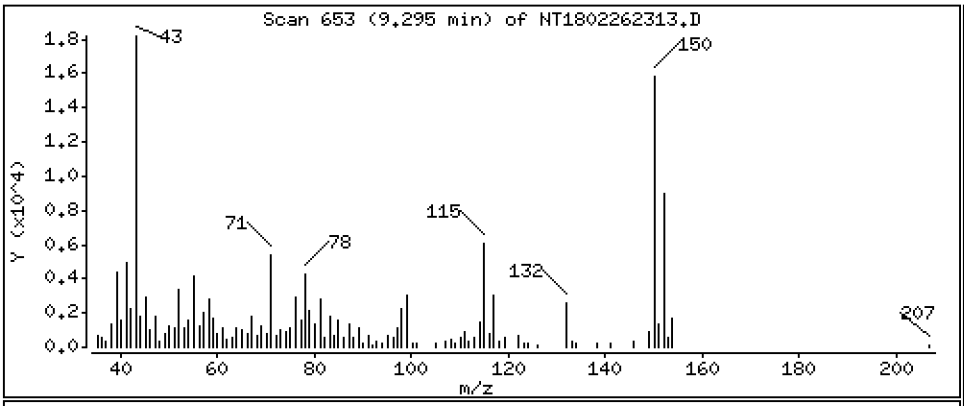
Operator: VTS

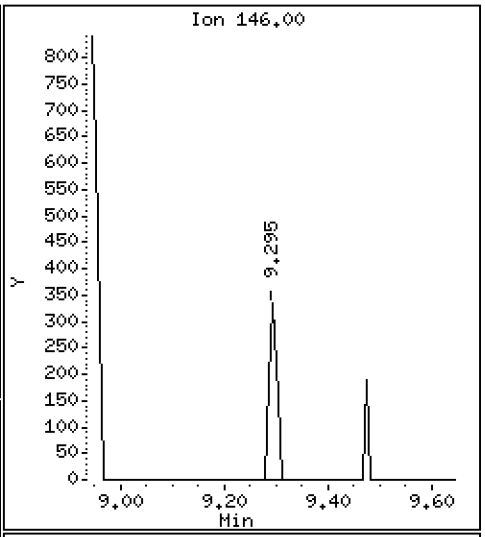
Column phase: ZB-5msi

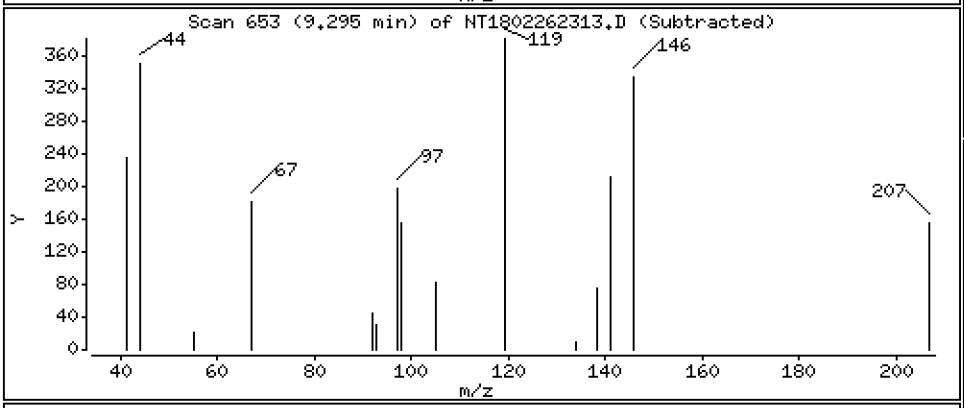
Column diameter: 0.25

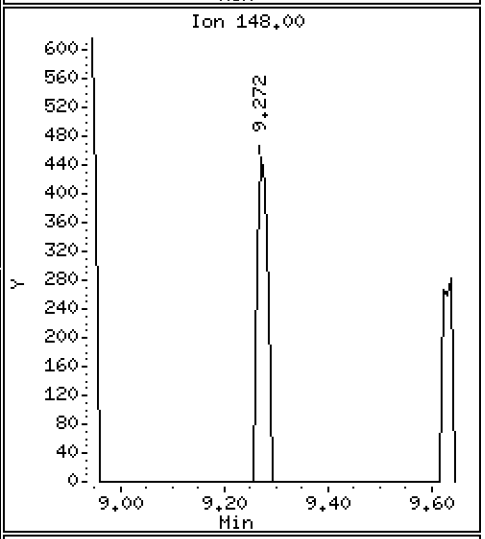
12 1,2-Dichlorobenzene

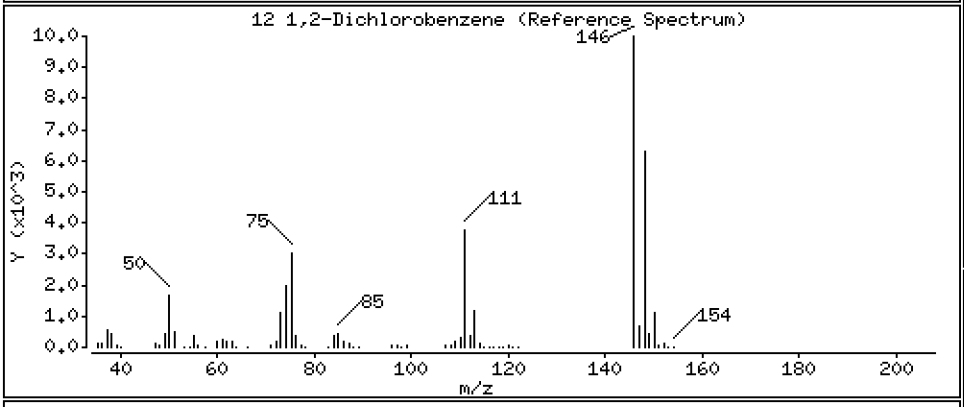
Concentration: 0.002814 ug/mL

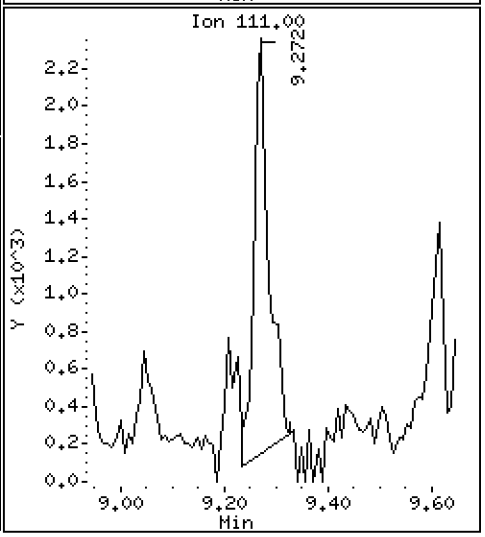


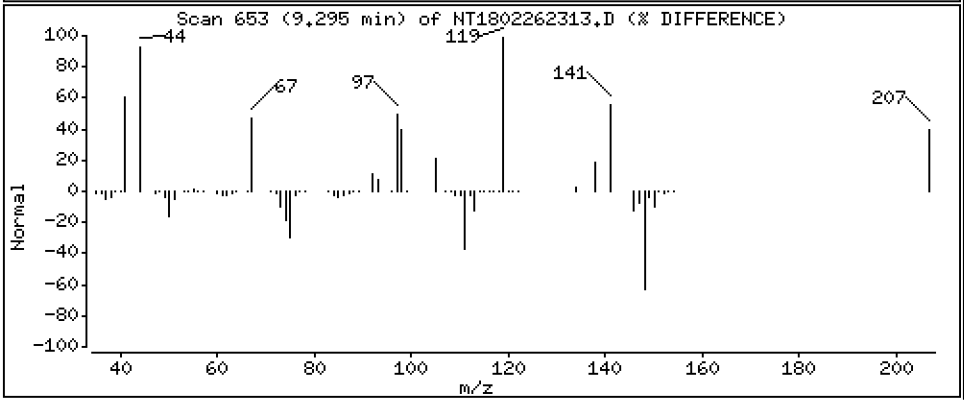












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

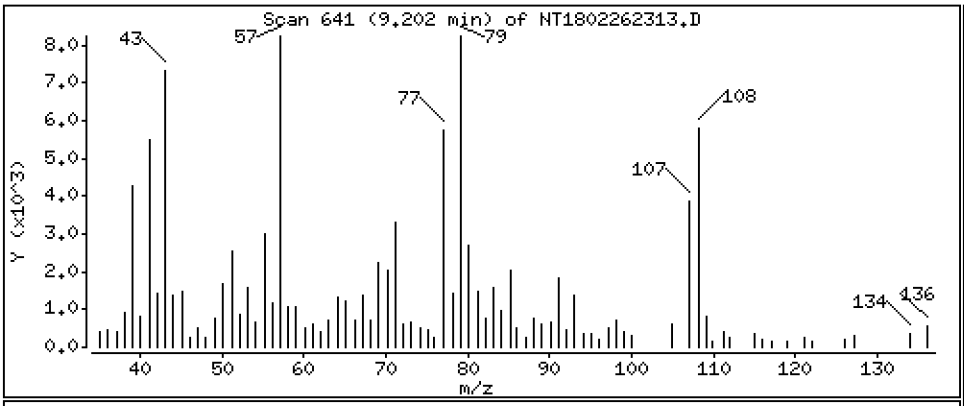
Operator: VTS

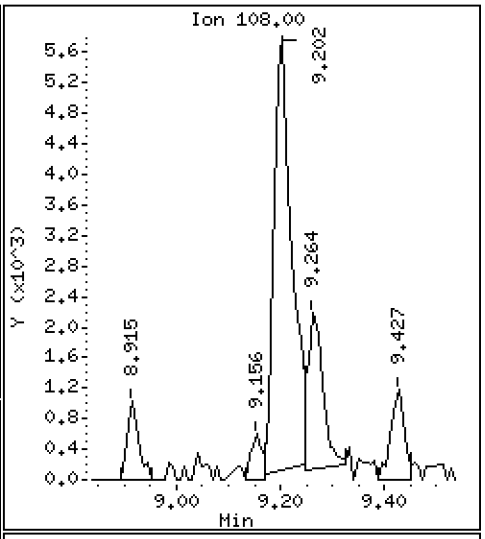
Column phase: ZB-5msi

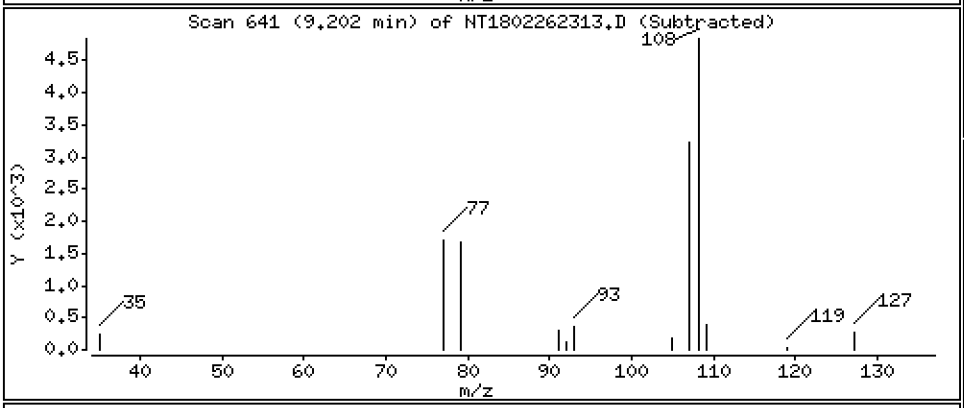
Column diameter: 0.25

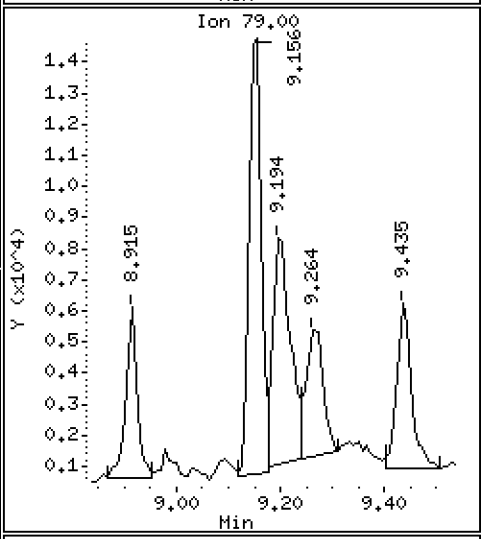
11 Benzyl alcohol

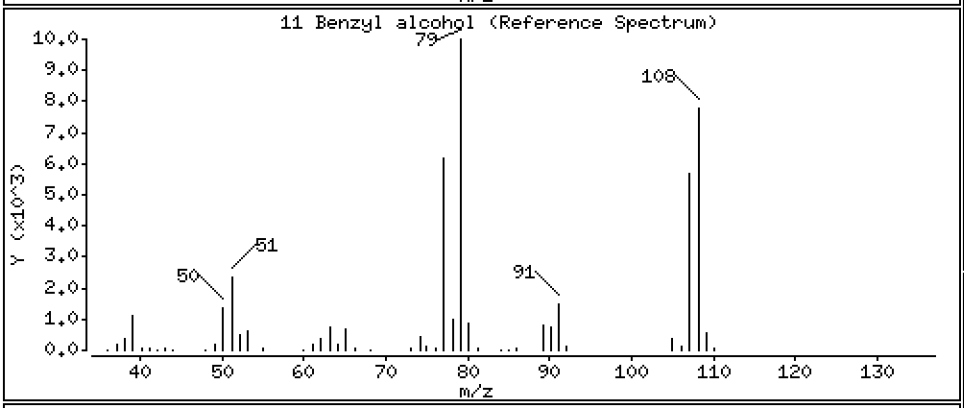
Concentration: 0.2312 ug/mL

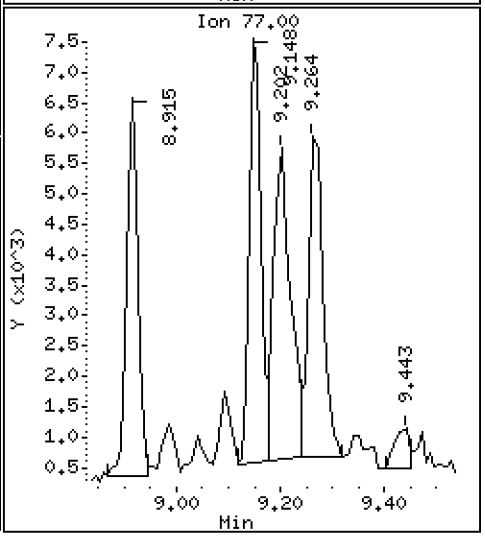


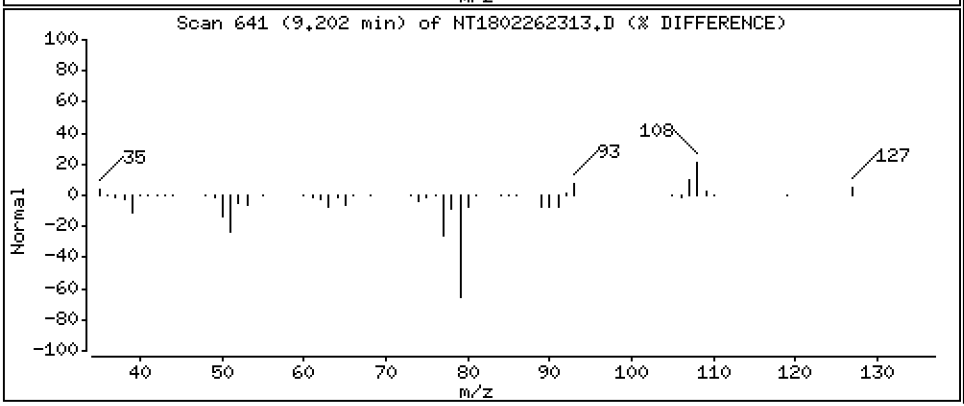












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

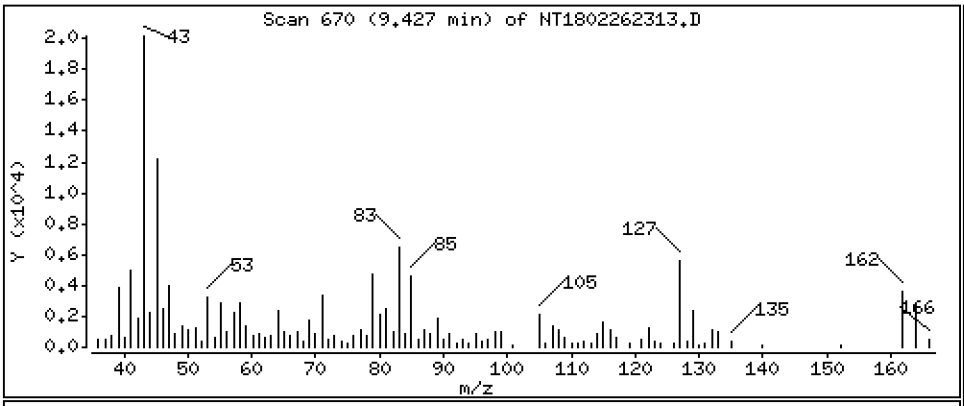
Operator: VTS

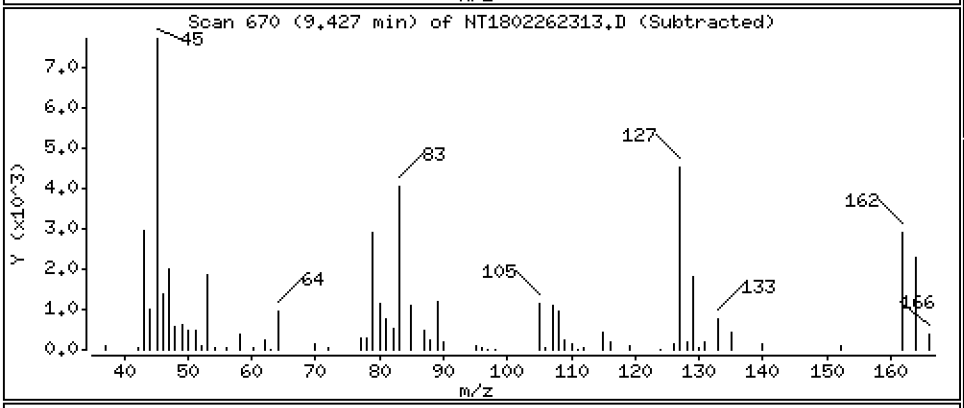
Column phase: ZB-5msi

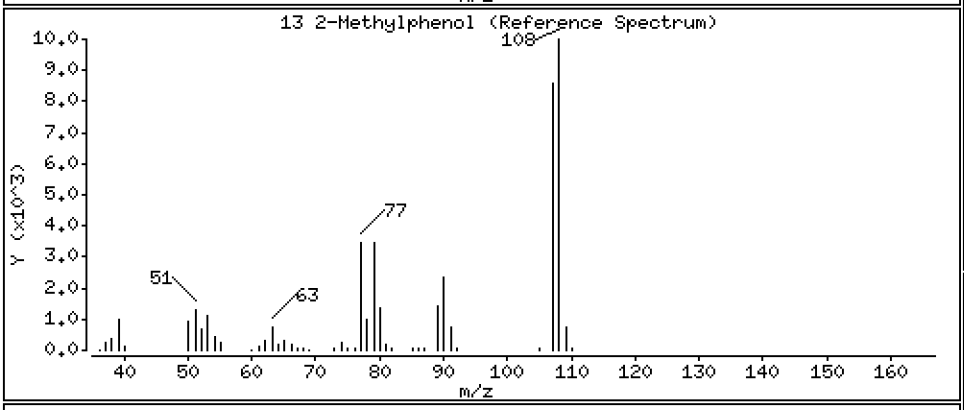
Column diameter: 0.25

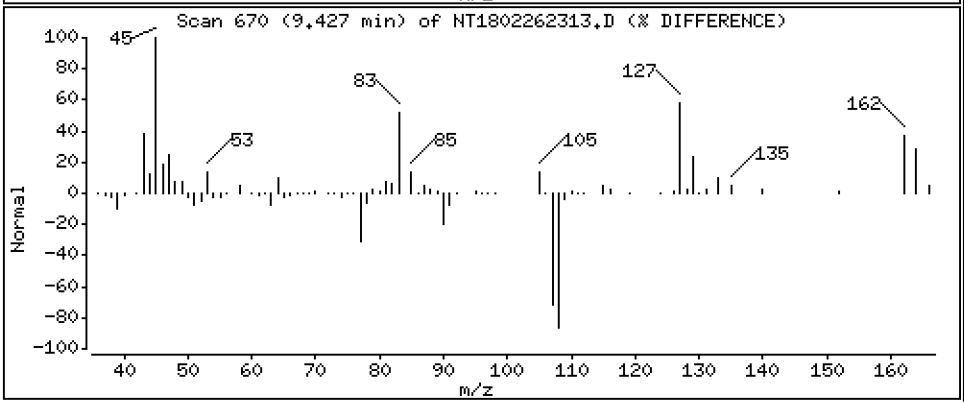
13 2-Methylphenol

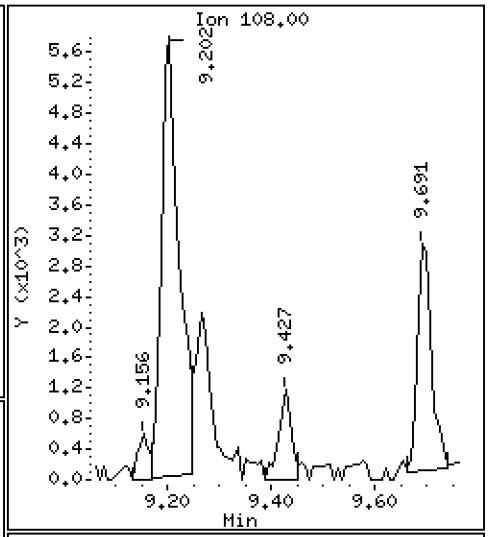
Concentration: 0.02145 ug/mL

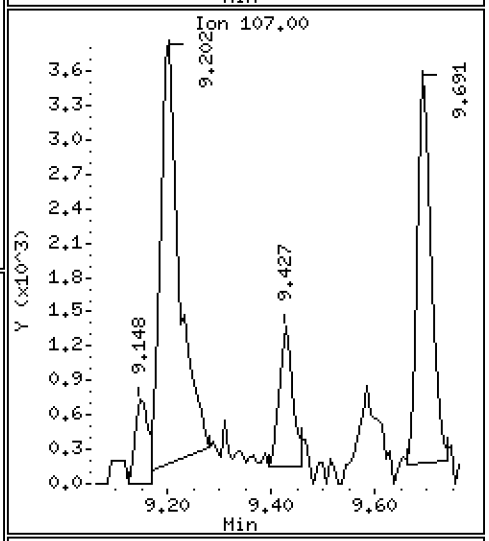


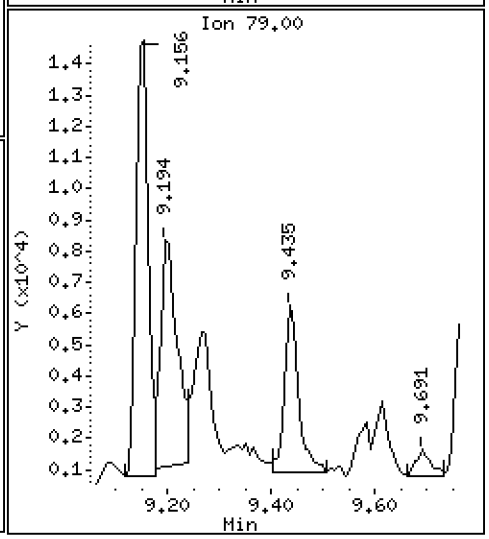












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

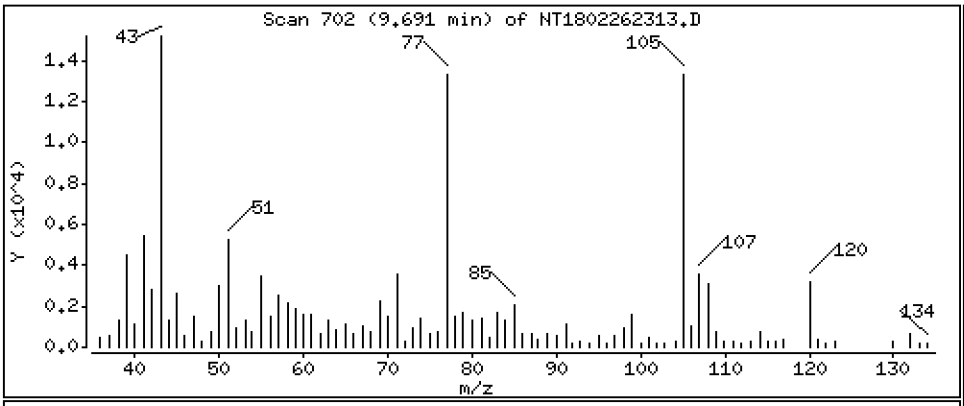
Operator: VTS

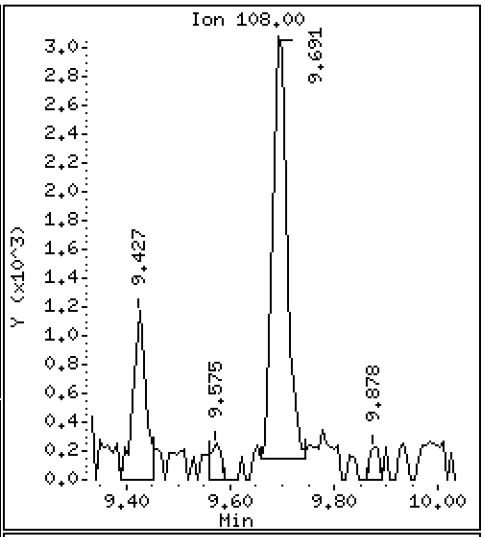
Column phase: ZB-5msi

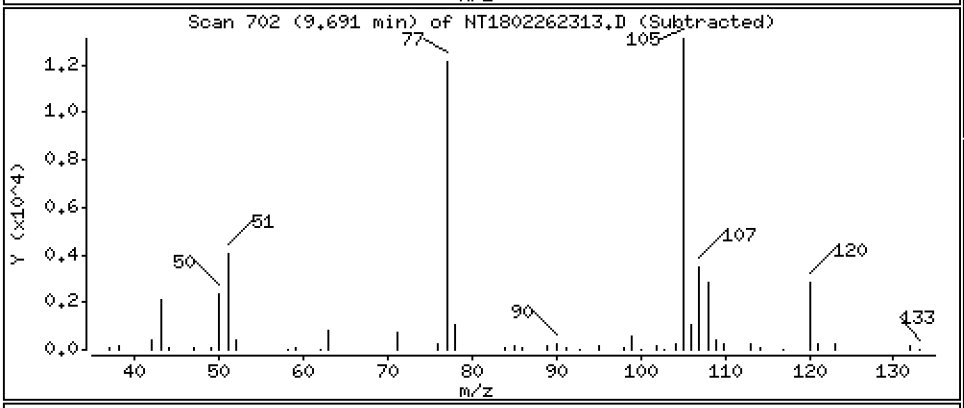
Column diameter: 0.25

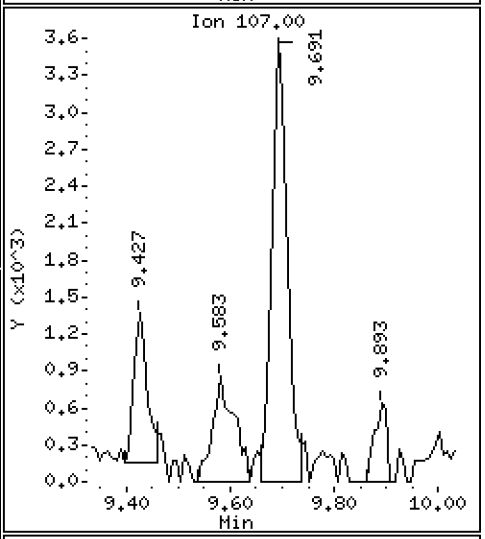
15 4-Methylphenol

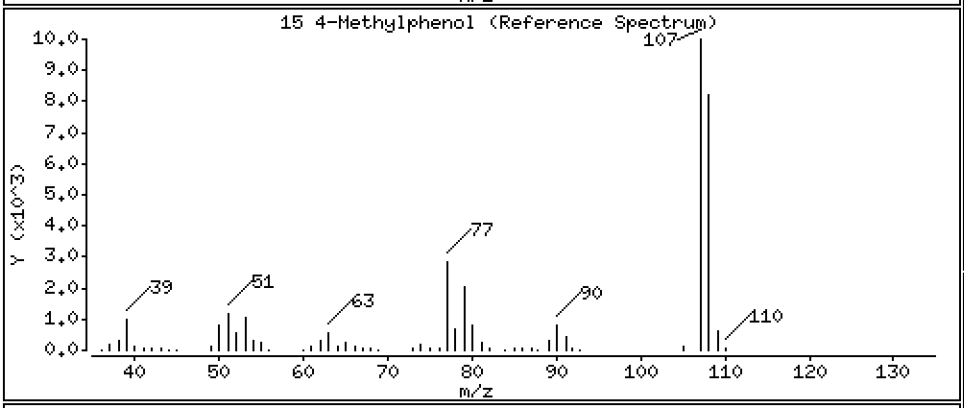
Concentration: 0.05696 ug/mL

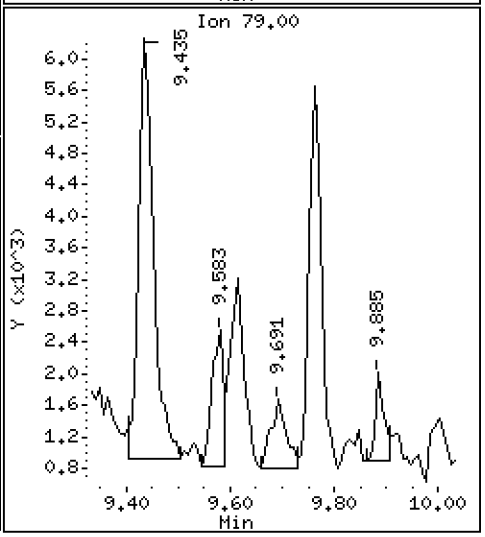


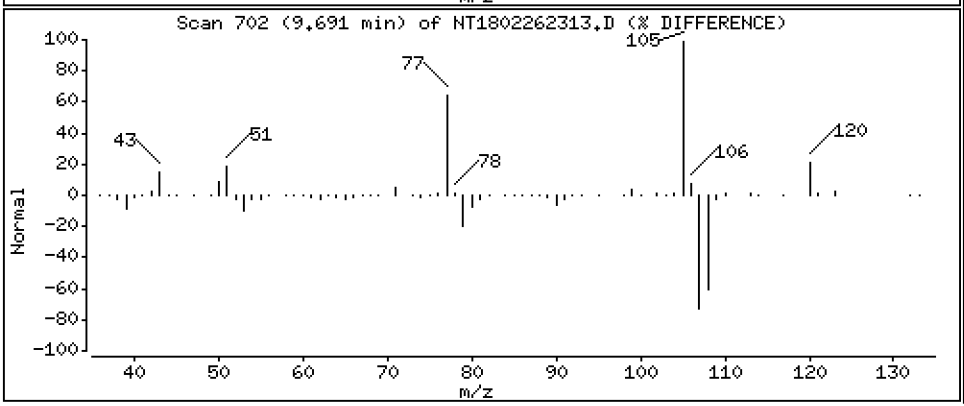












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

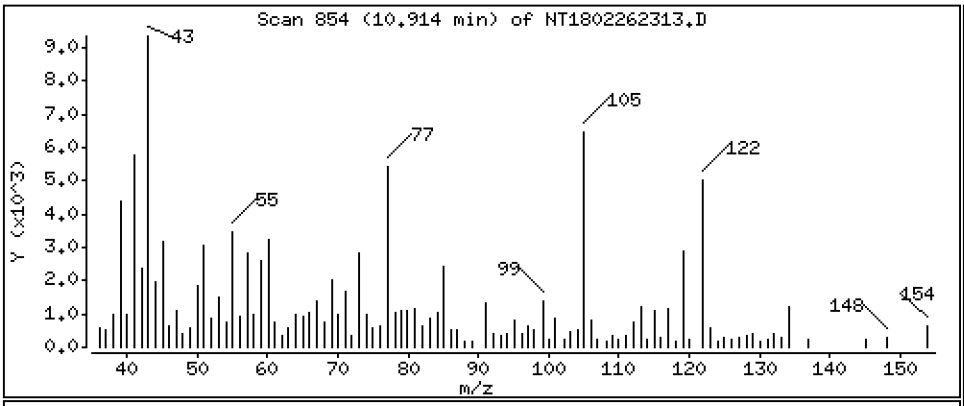
Operator: VTS

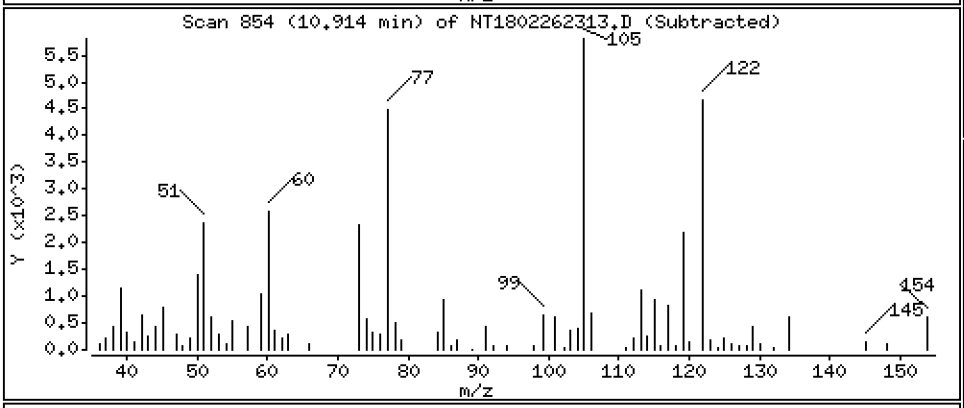
Column phase: ZB-5msi

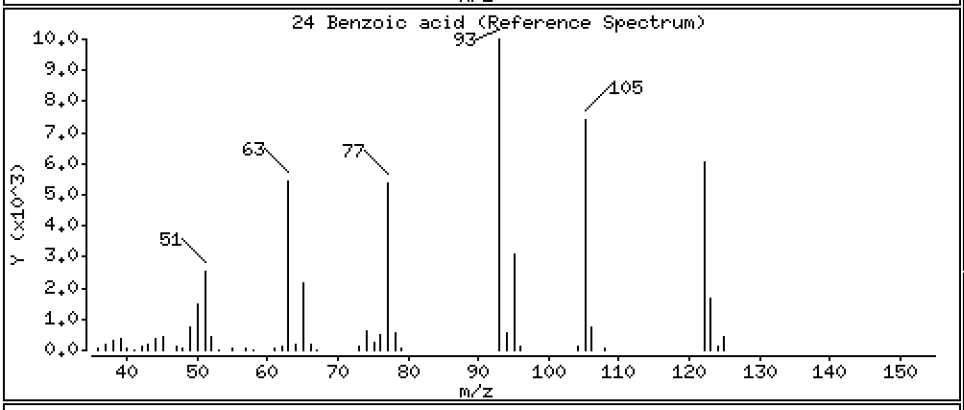
Column diameter: 0.25

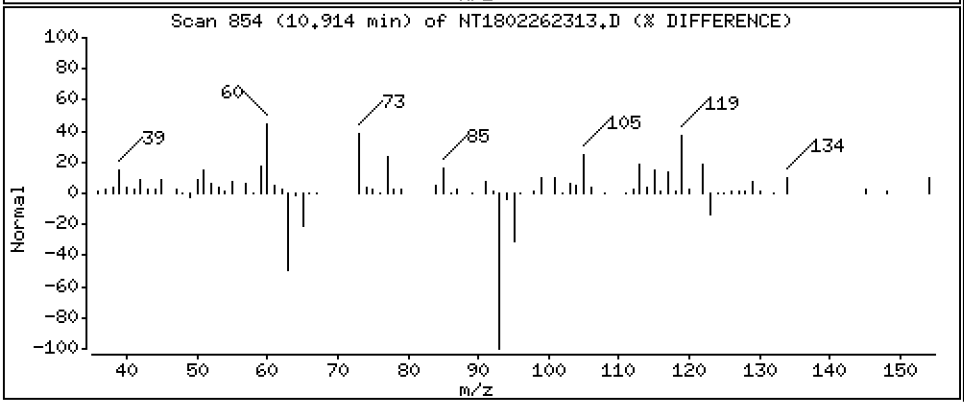
24 Benzoic acid

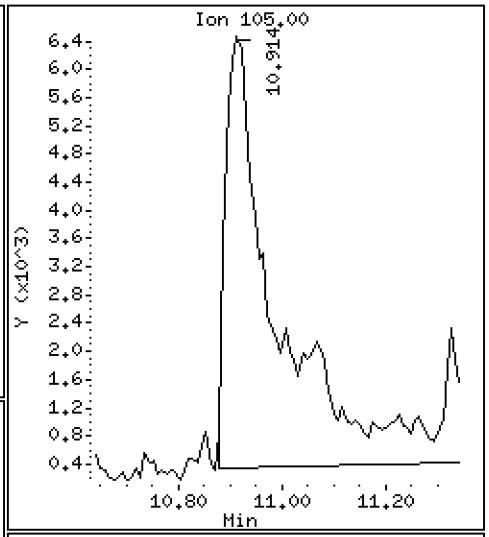
Concentration: 1.352 ug/mL

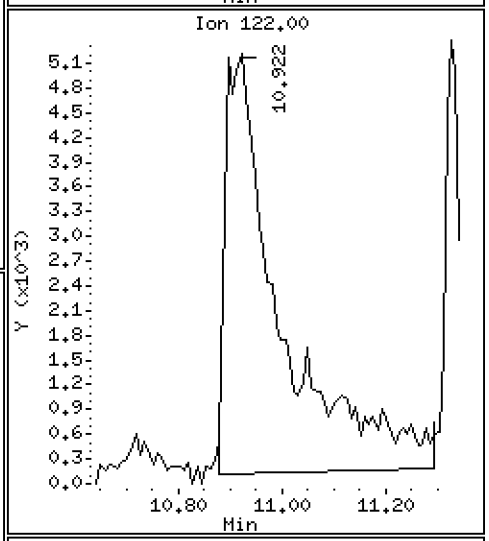


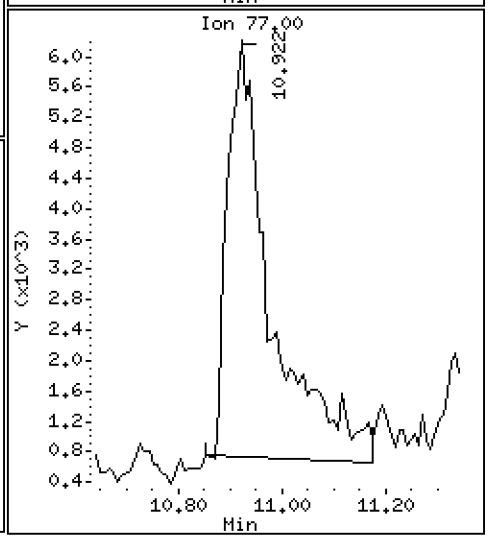












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

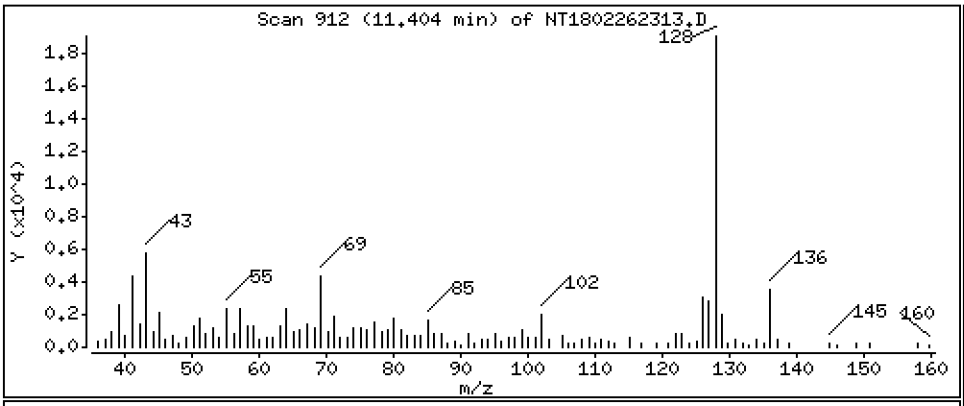
Operator: VTS

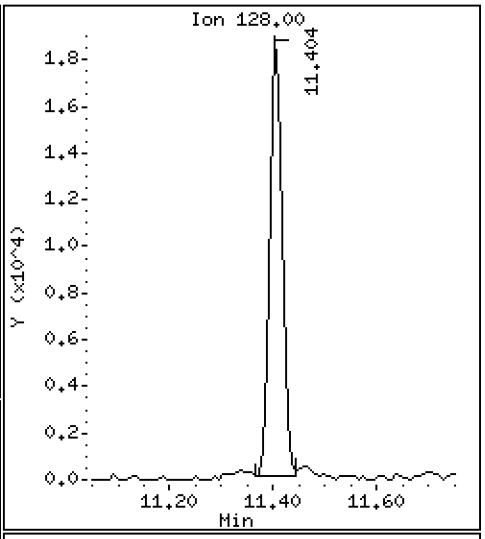
Column phase: ZB-5msi

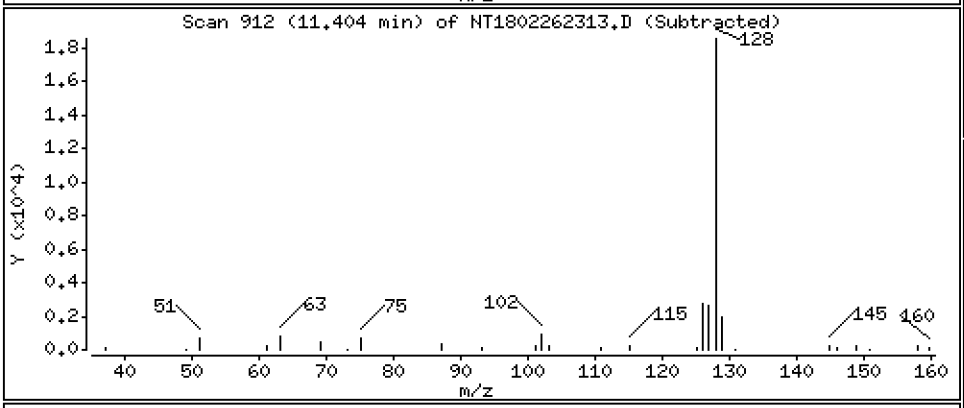
Column diameter: 0.25

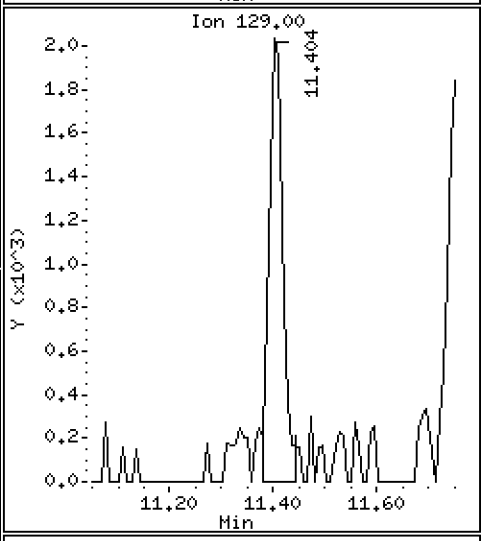
28 Naphthalene

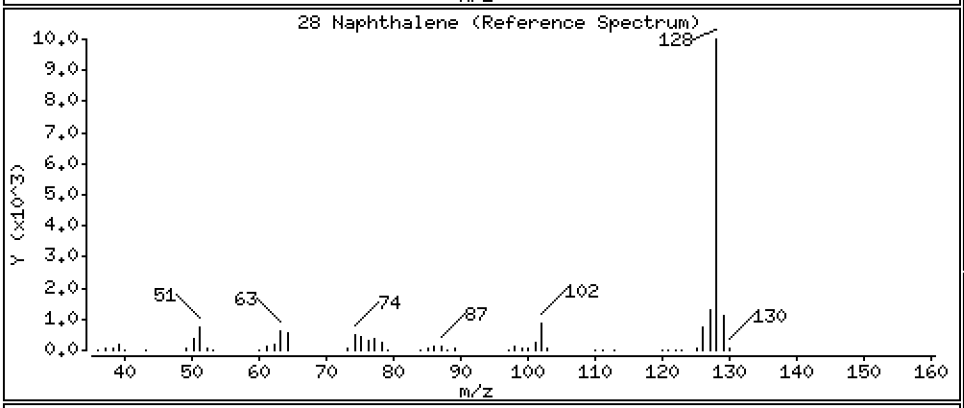
Concentration: 0.09749 ug/mL

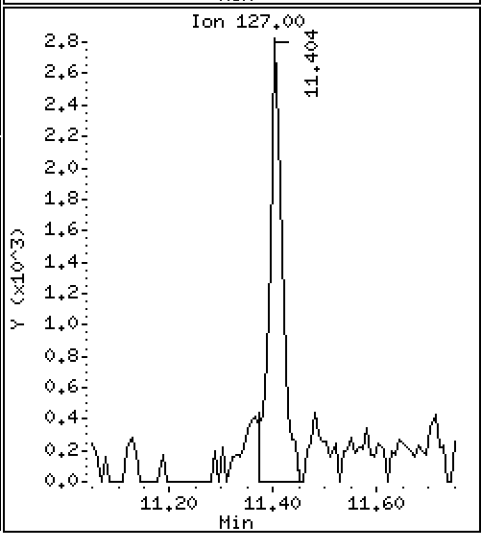


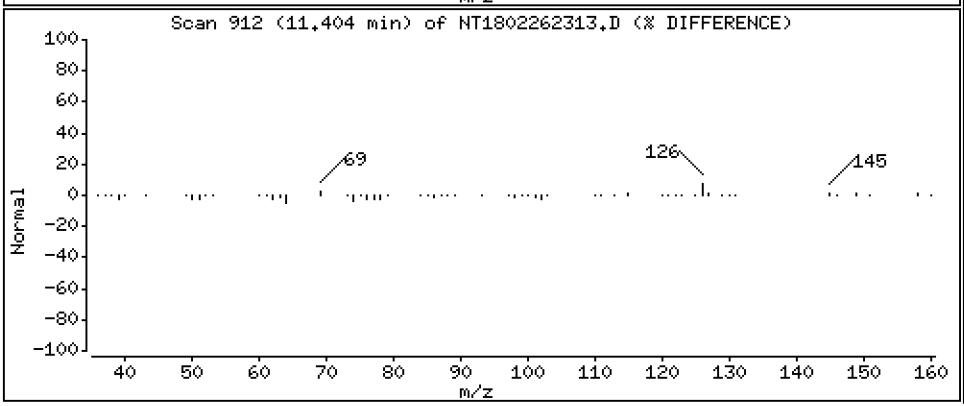












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

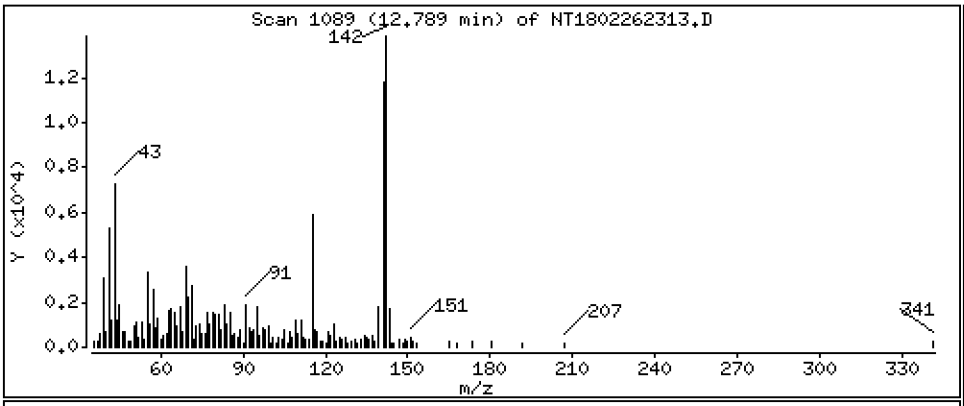
Operator: VTS

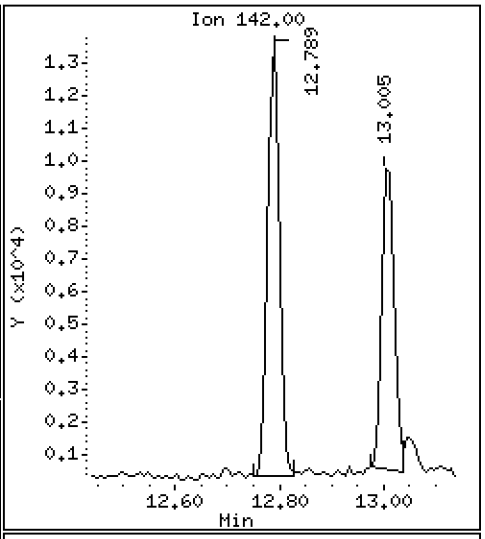
Column phase: ZB-5msi

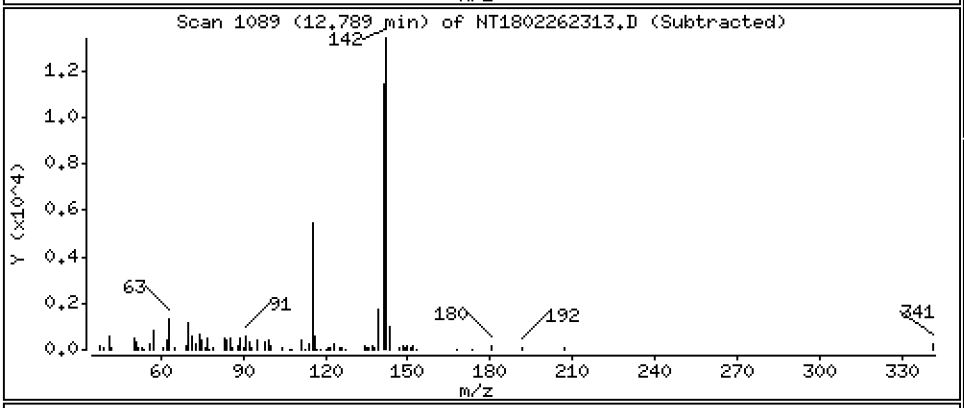
Column diameter: 0.25

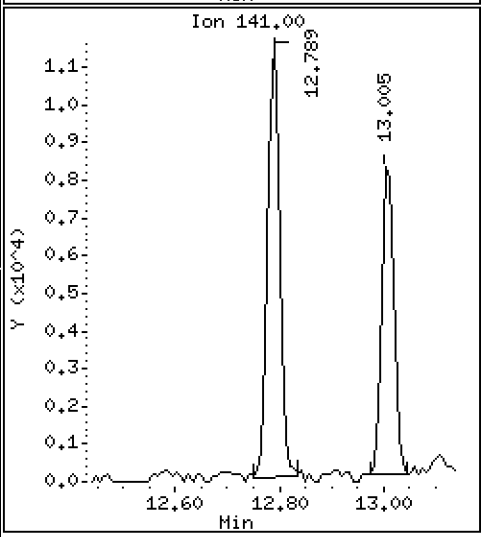
32 2-Methylnaphthalene

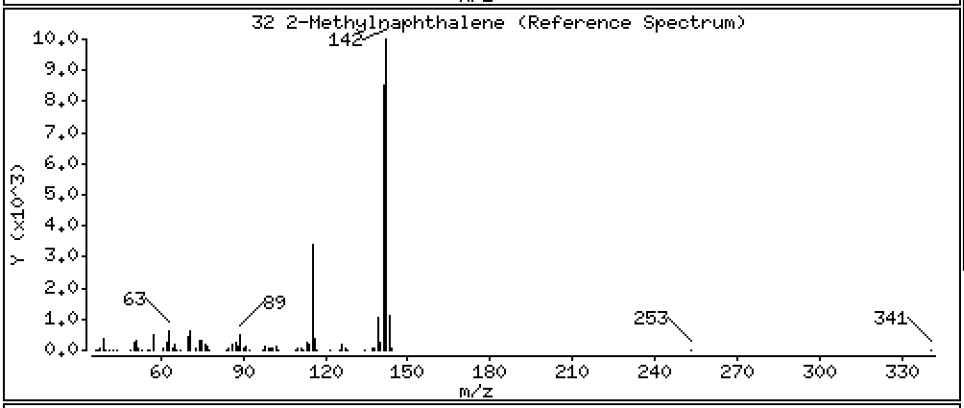
Concentration: 0.09464 ug/mL

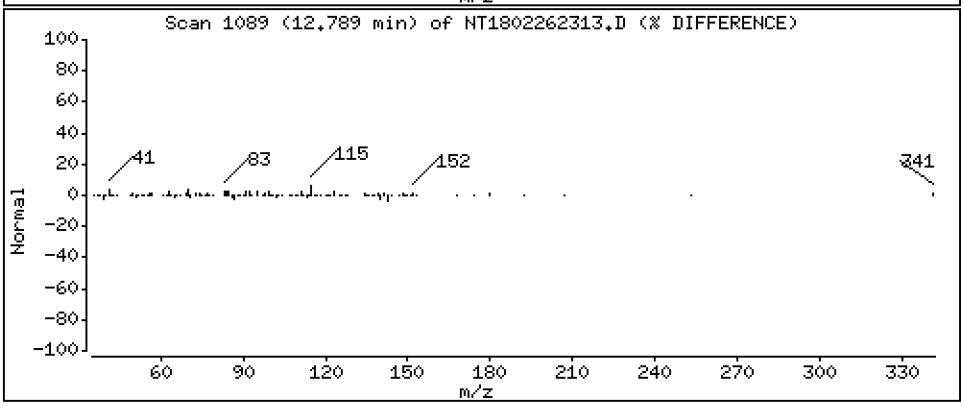












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

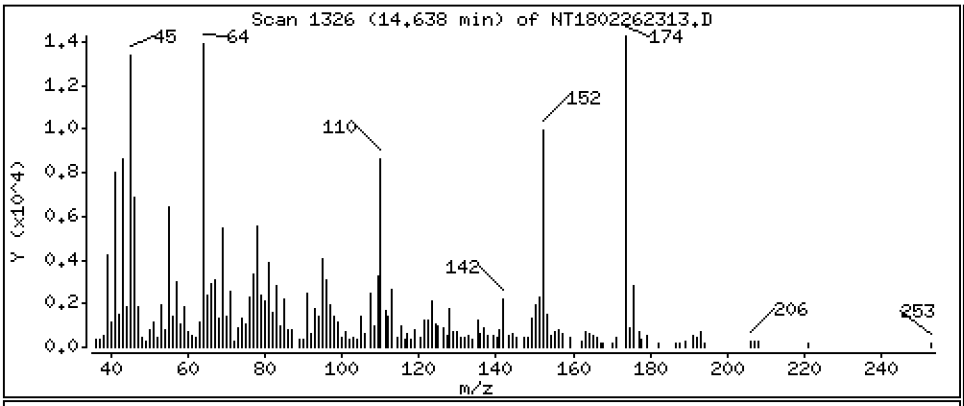
Operator: VTS

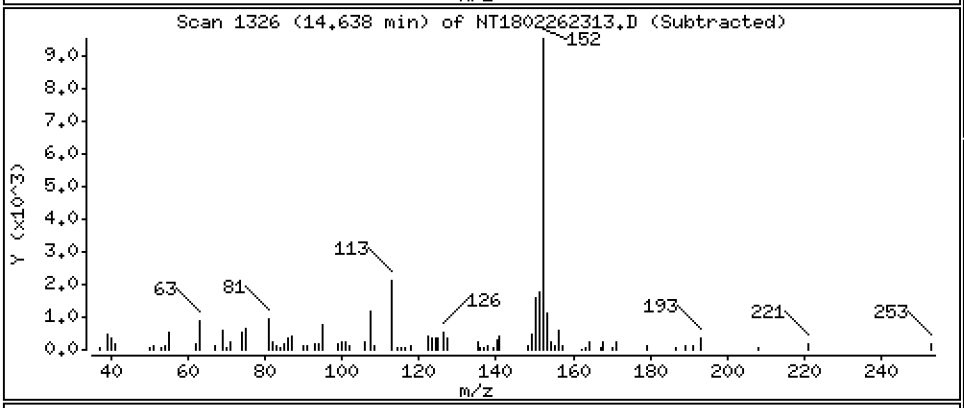
Column phase: ZB-5msi

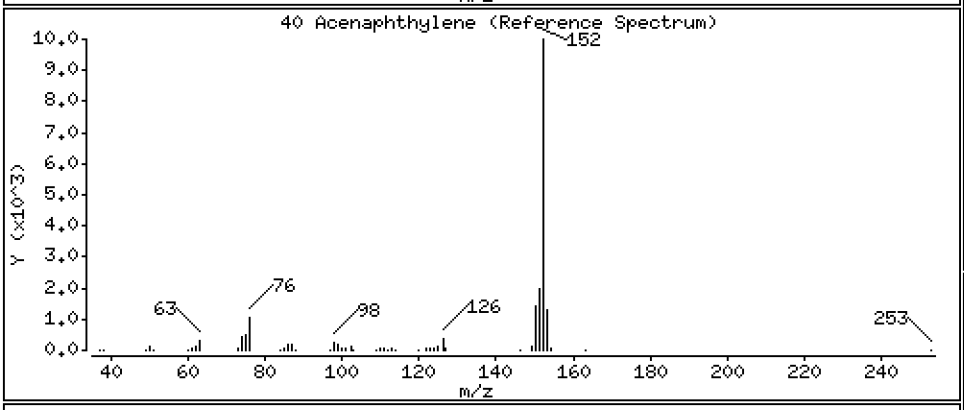
Column diameter: 0.25

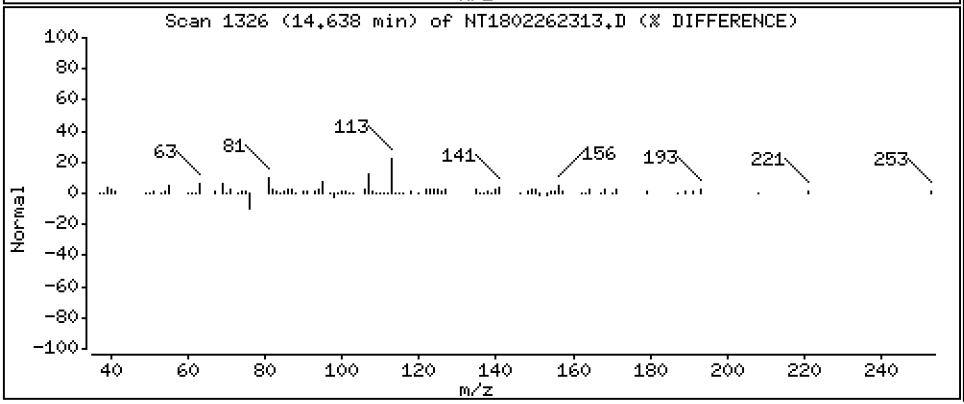
40 Acenaphthylene

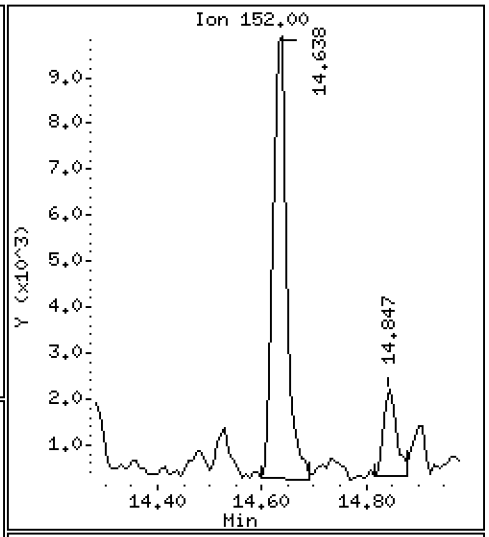
Concentration: 0.05654 ug/mL

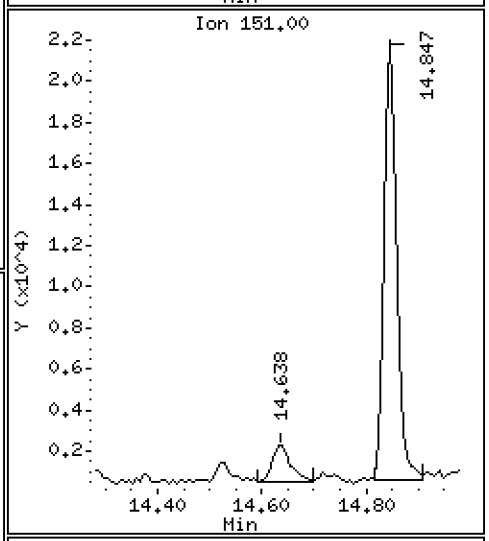


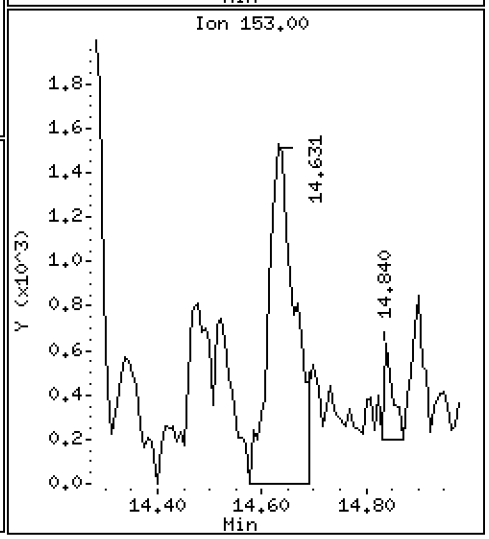












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

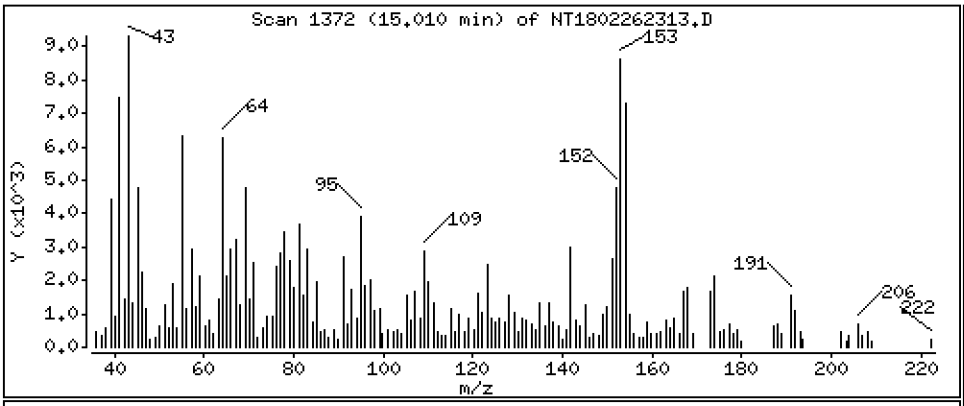
Operator: VTS

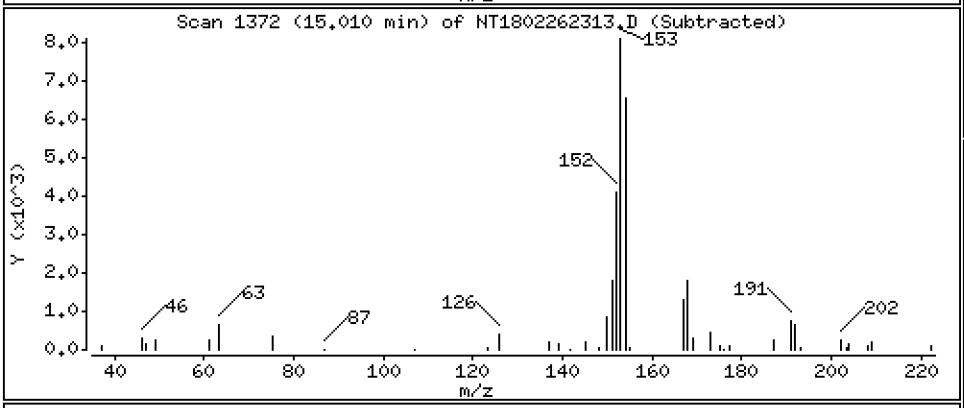
Column phase: ZB-5msi

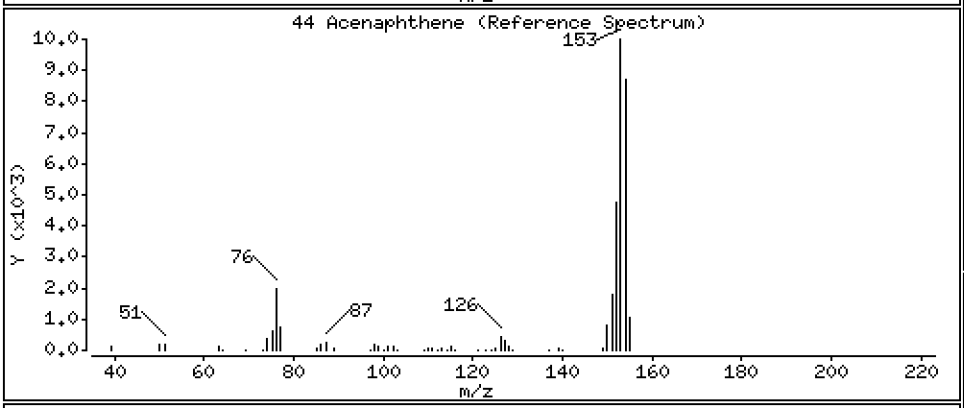
Column diameter: 0.25

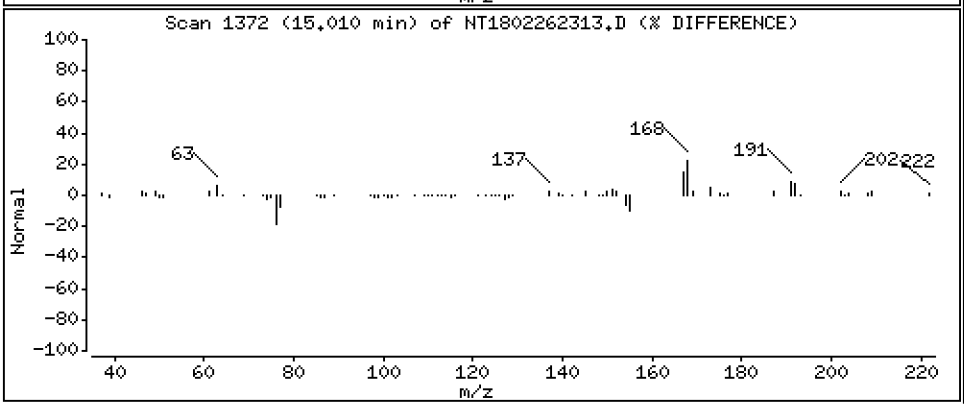
44 Acenaphthene

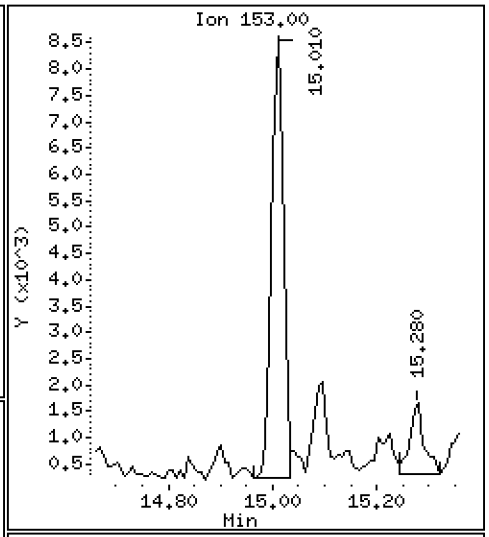
Concentration: 0.06624 ug/mL

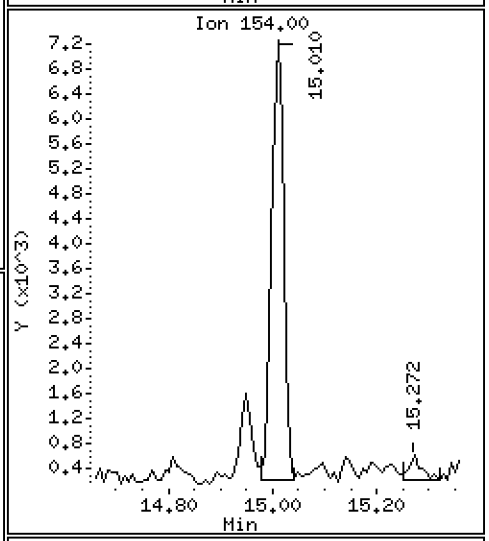


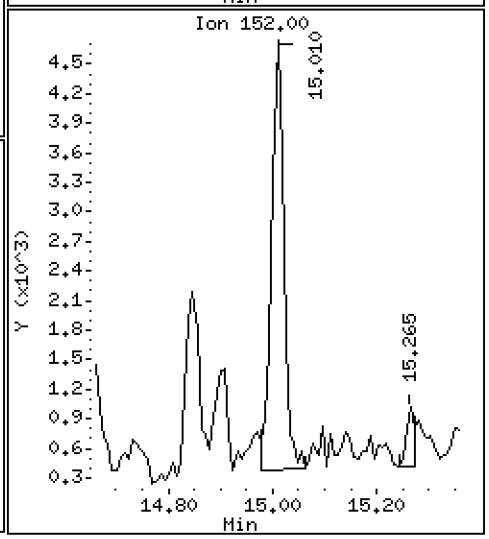












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

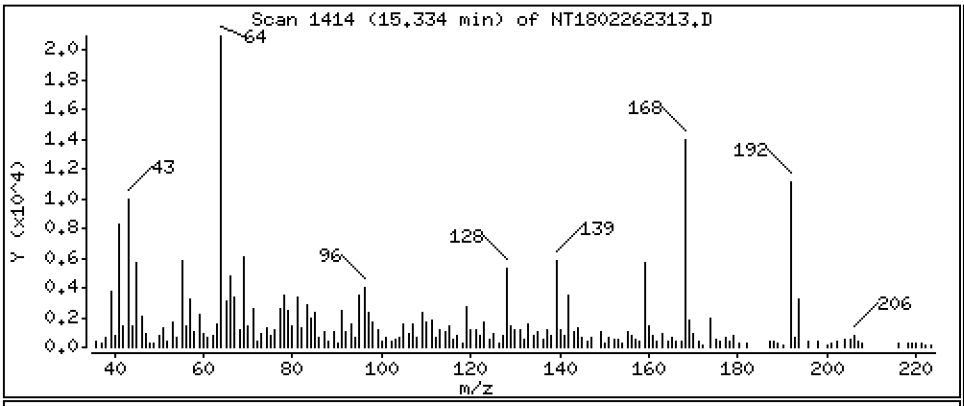
Operator: VTS

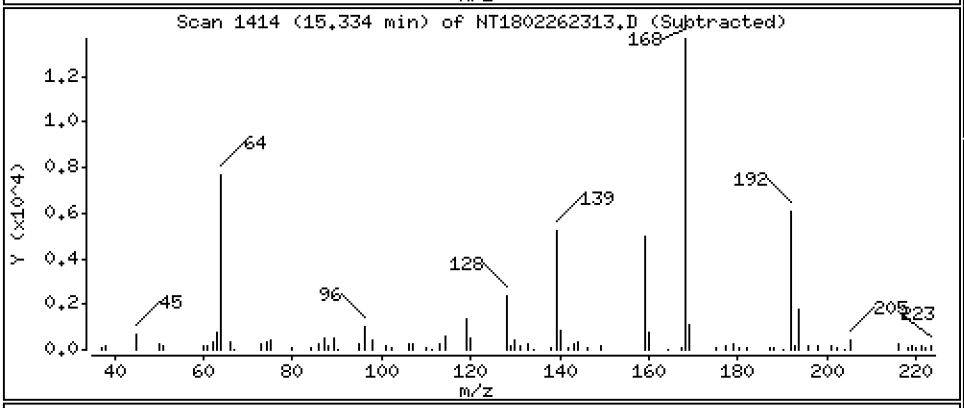
Column phase: ZB-5msi

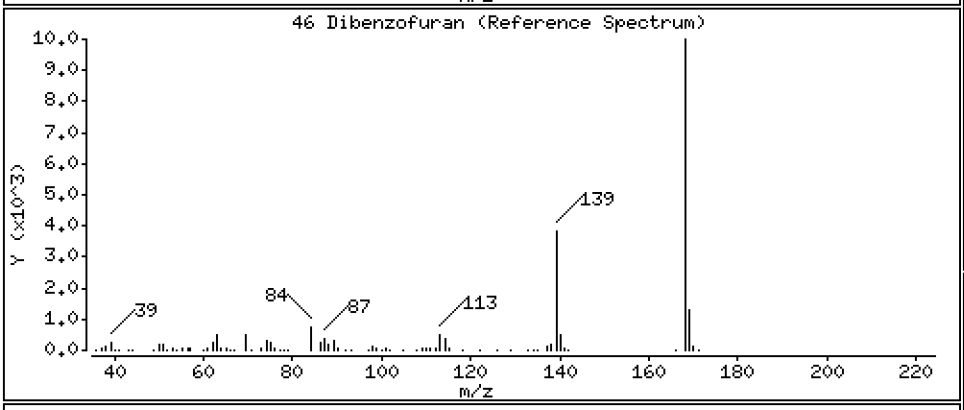
Column diameter: 0.25

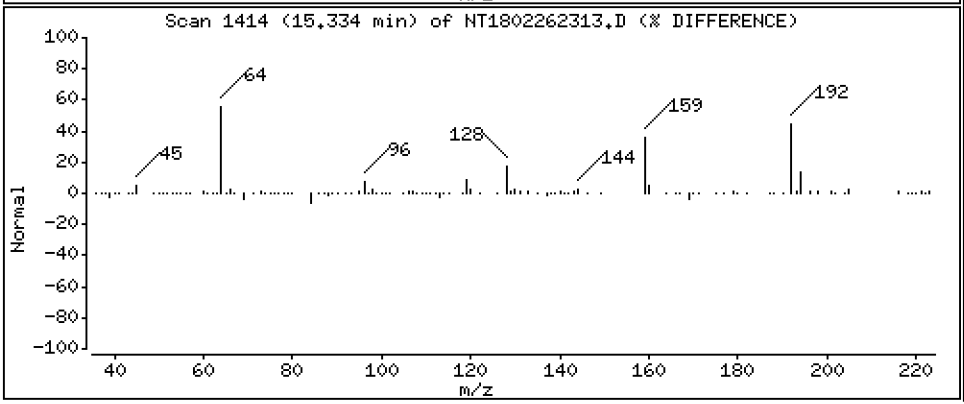
46 Dibenzofuran

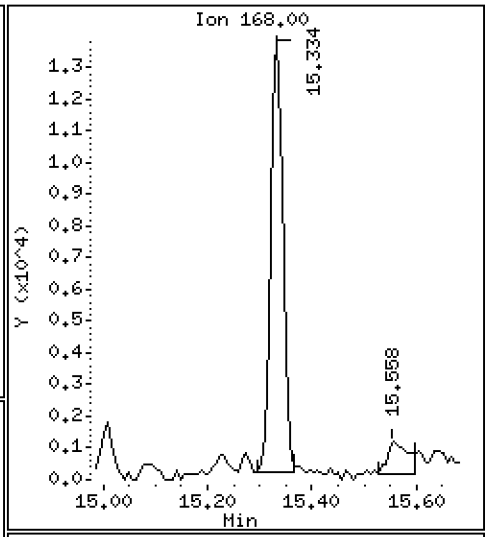
Concentration: 0.07541 ug/mL

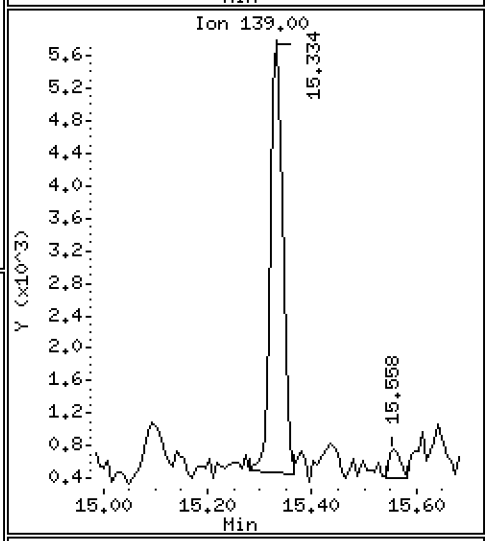


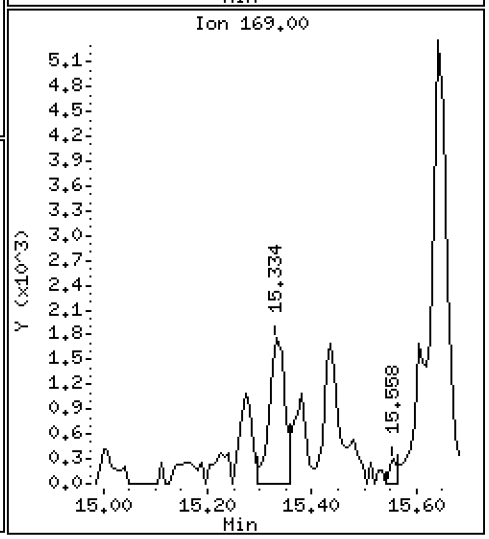












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

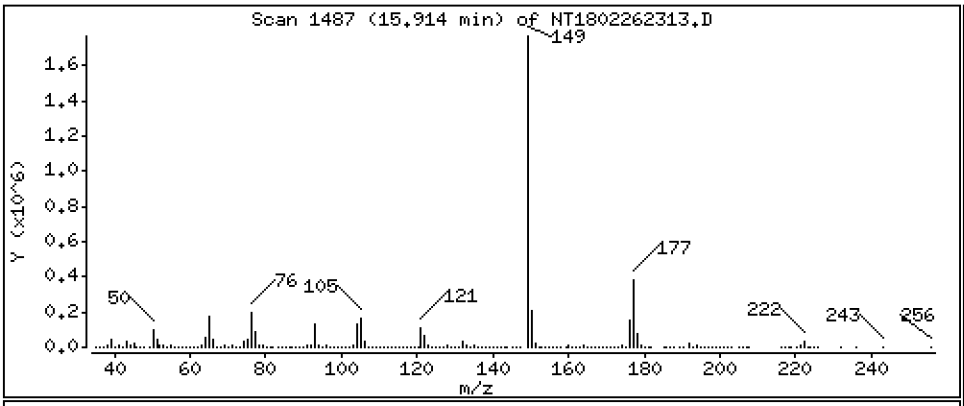
Operator: VTS

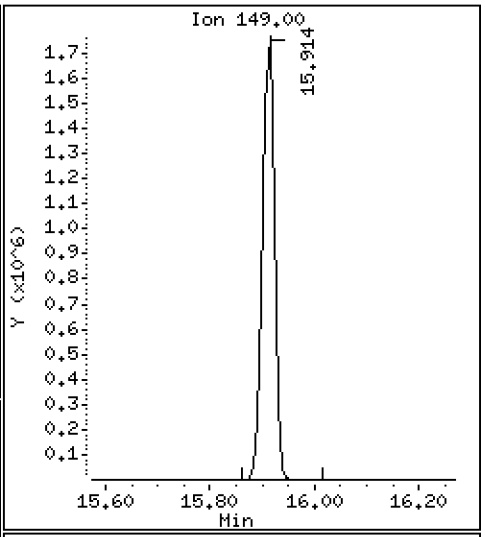
Column phase: ZB-5msi

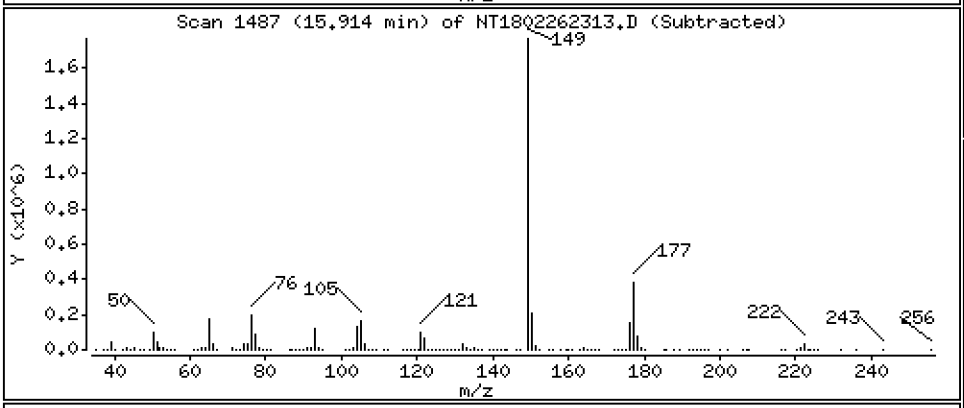
Column diameter: 0.25

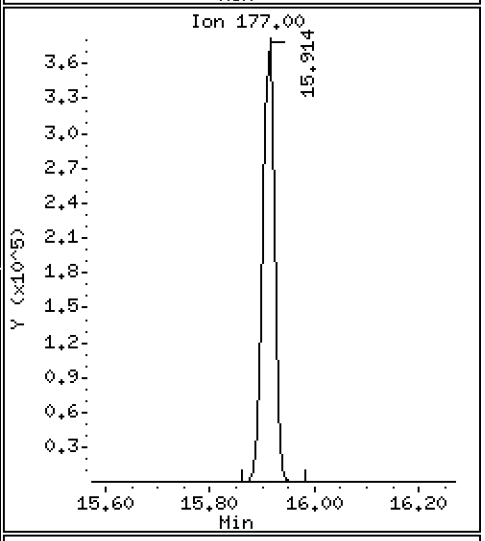
50 Diethylphthalate

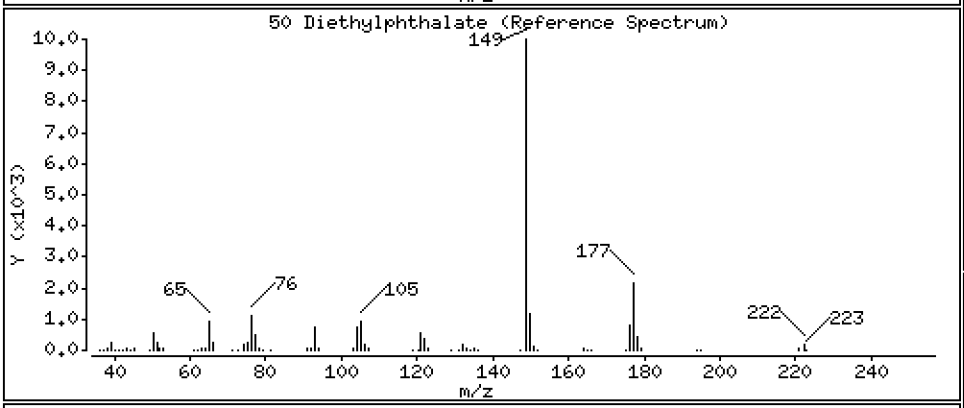
Concentration: 14.64 ug/mL

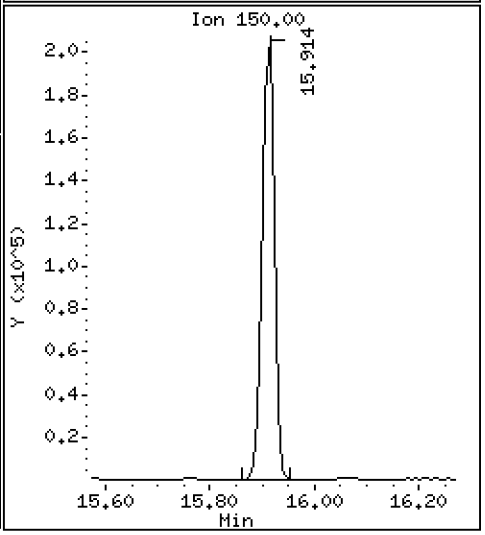


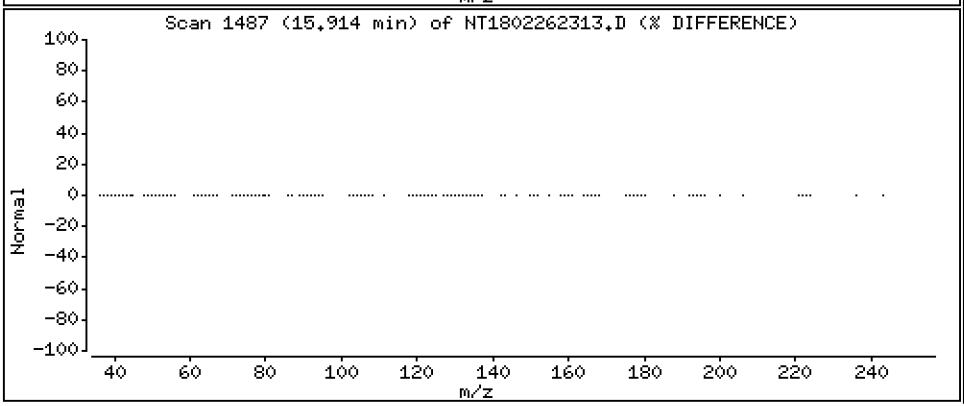












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

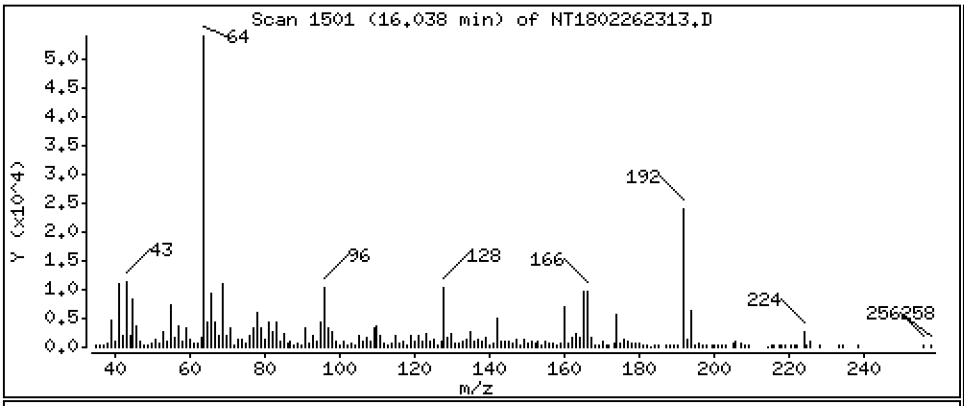
Operator: VTS

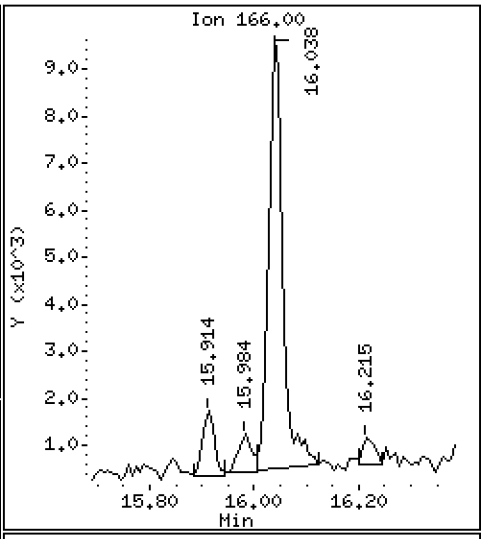
Column phase: ZB-5msi

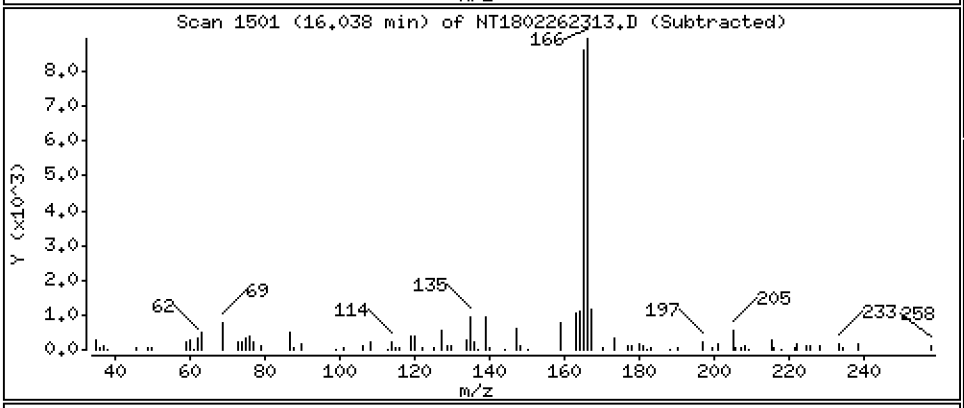
Column diameter: 0.25

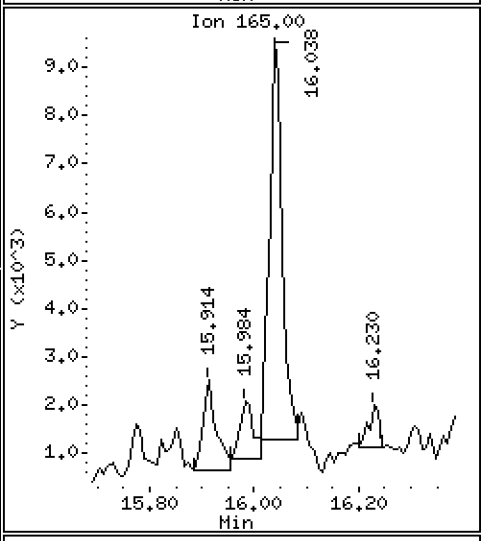
49 Fluorene

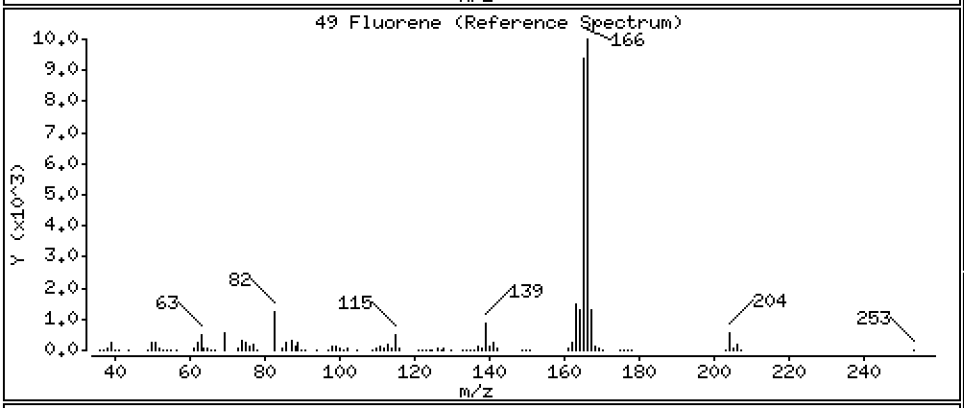
Concentration: 0.07729 ug/mL

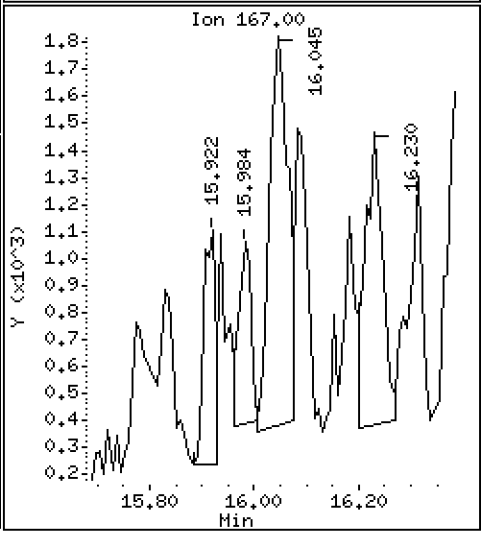


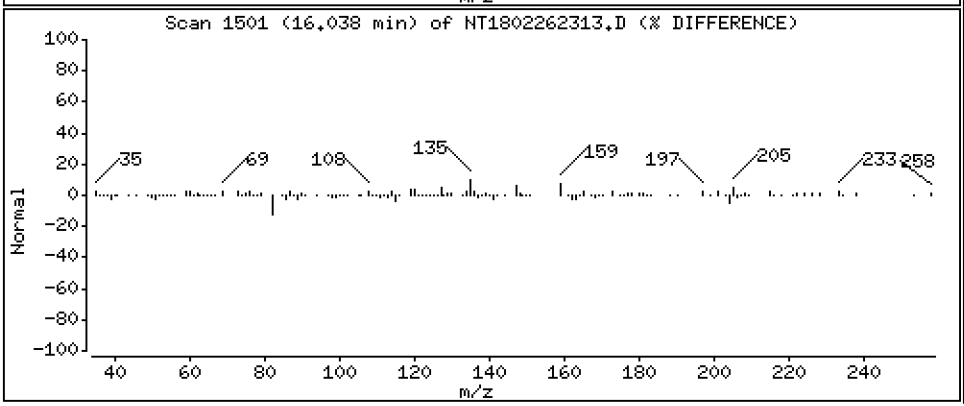












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

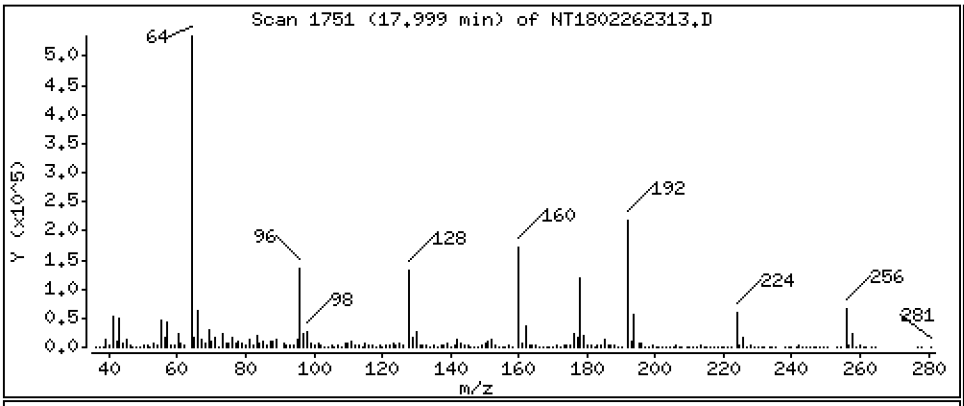
Operator: VTS

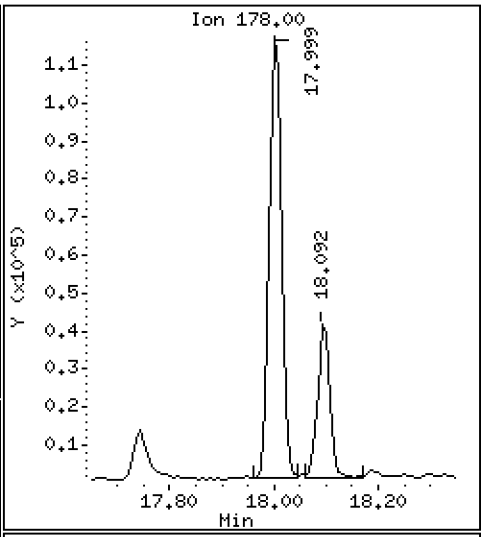
Column phase: ZB-5msi

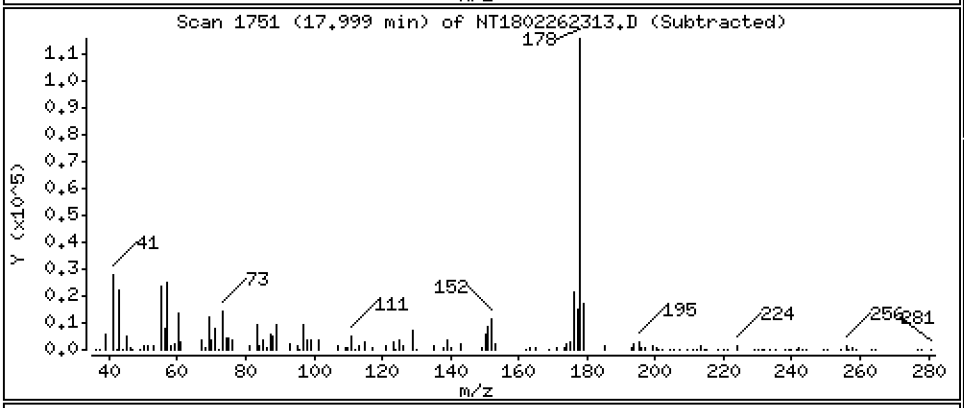
Column diameter: 0.25

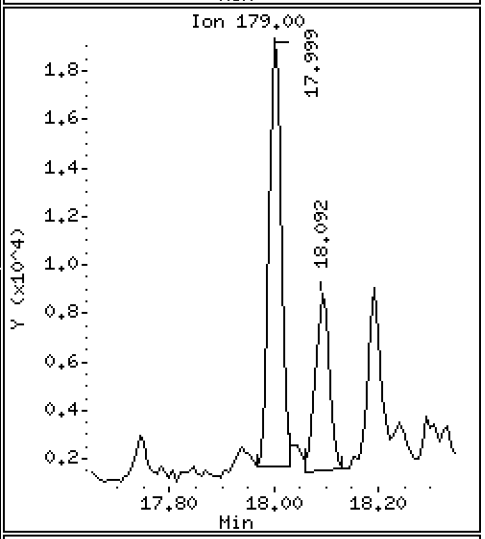
60 Phenanthrene

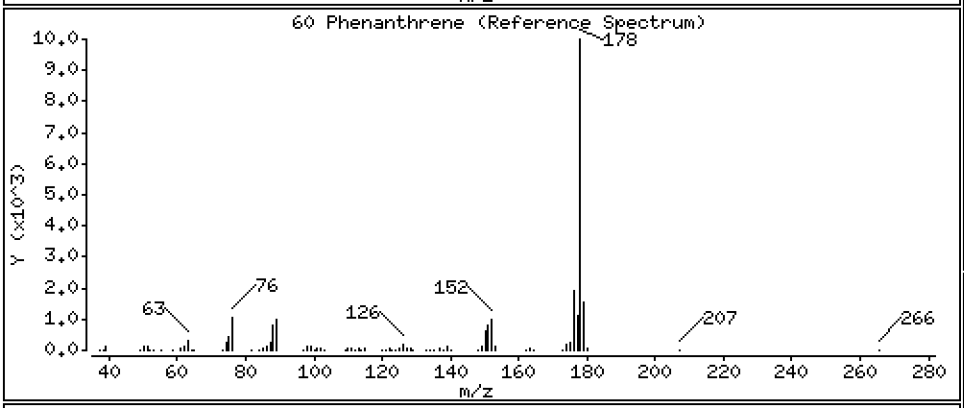
Concentration: 0.5187 ug/mL

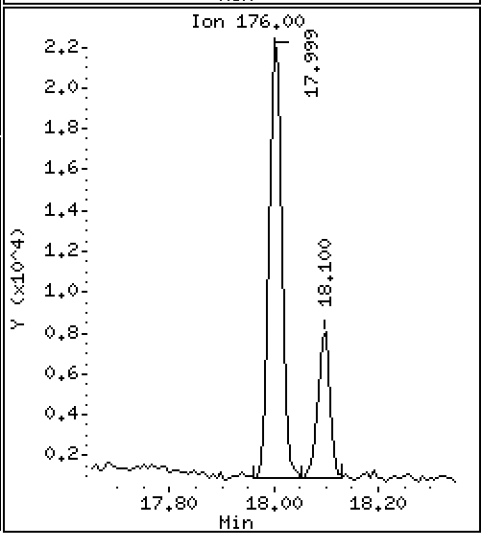


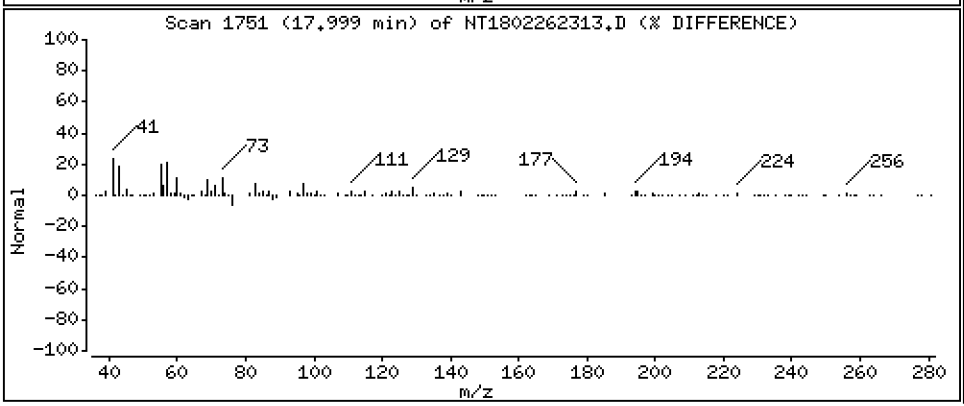












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

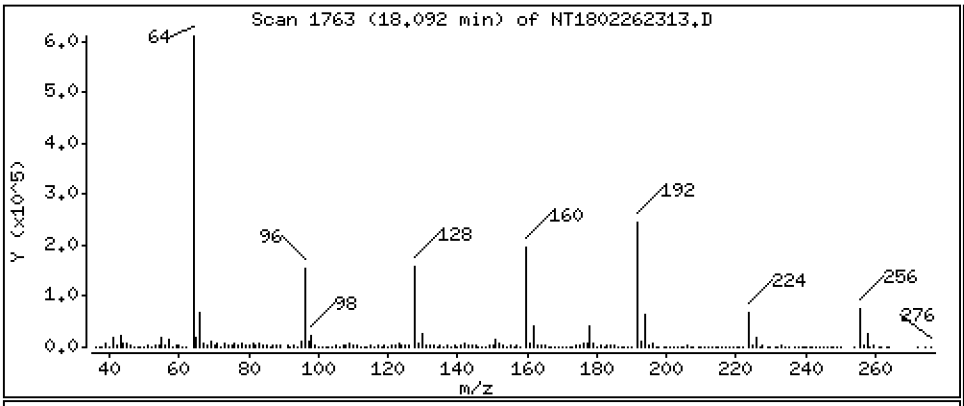
Operator: VTS

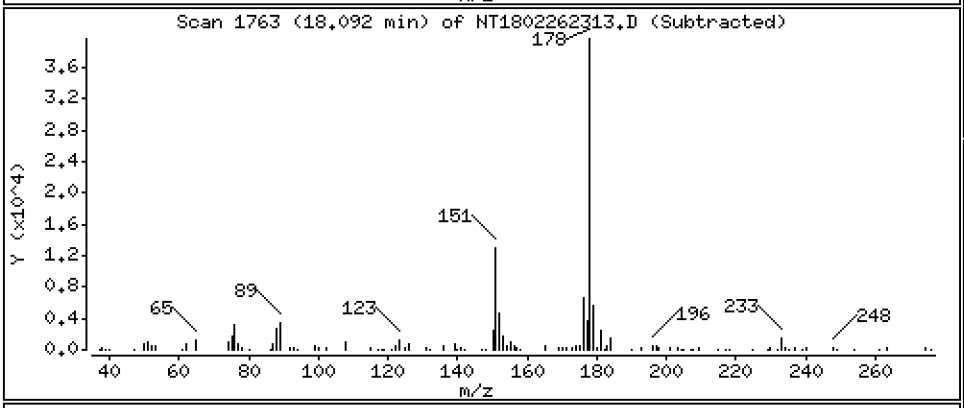
Column phase: ZB-5msi

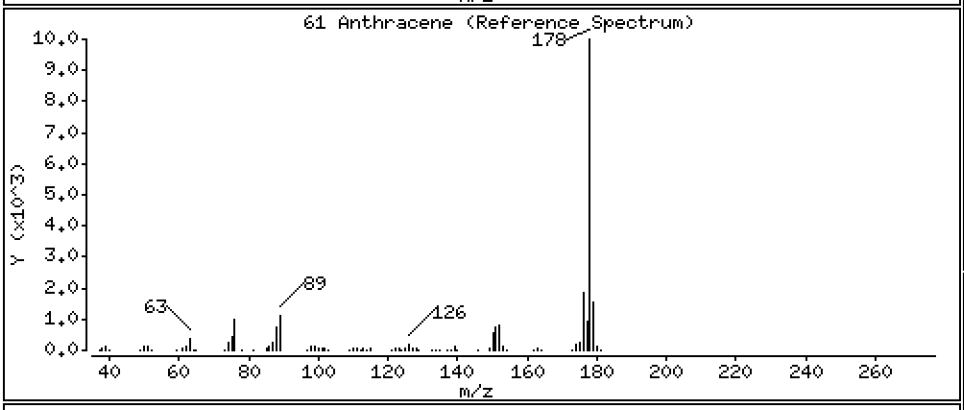
Column diameter: 0.25

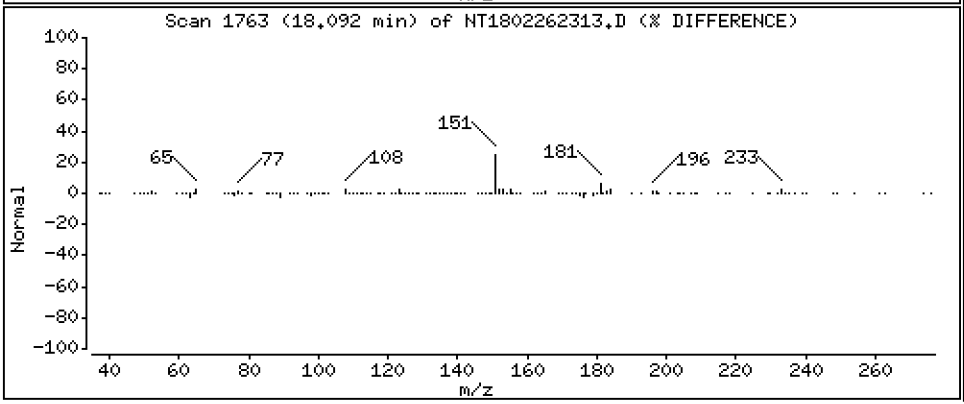
61 Anthracene

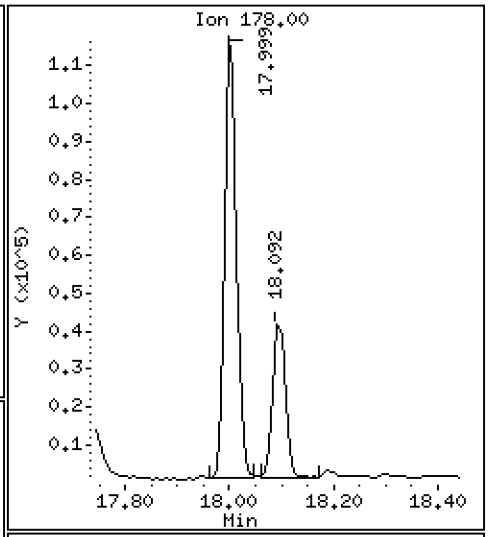
Concentration: 0.1949 ug/mL

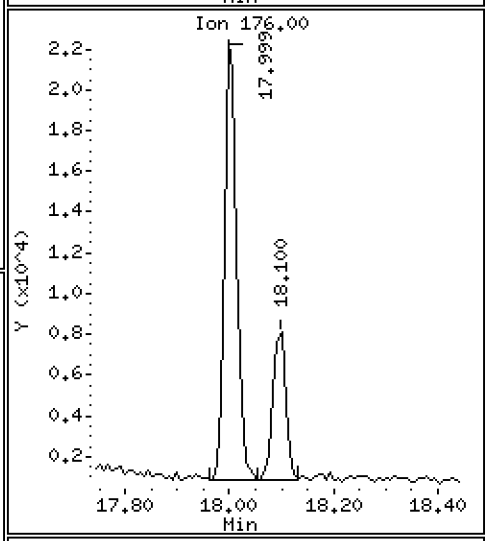


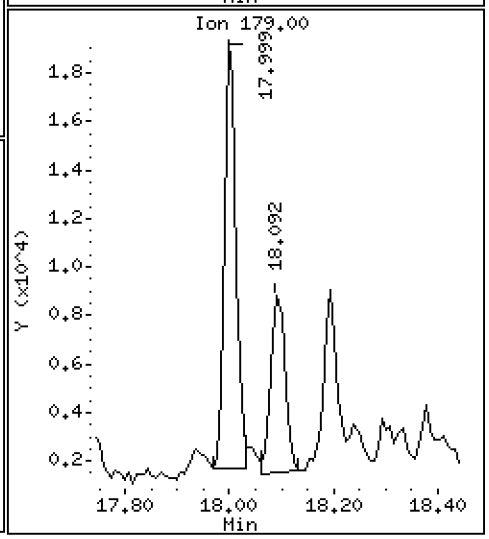












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

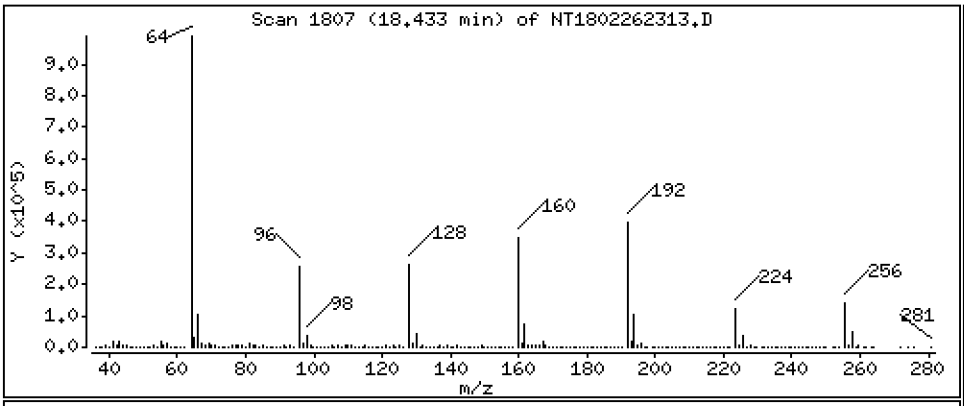
Operator: VTS

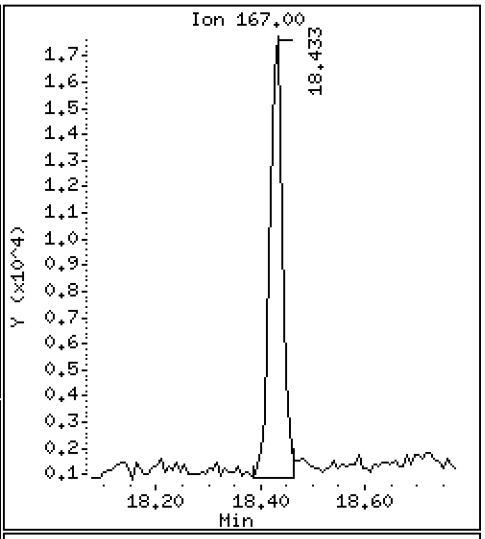
Column phase: ZB-5msi

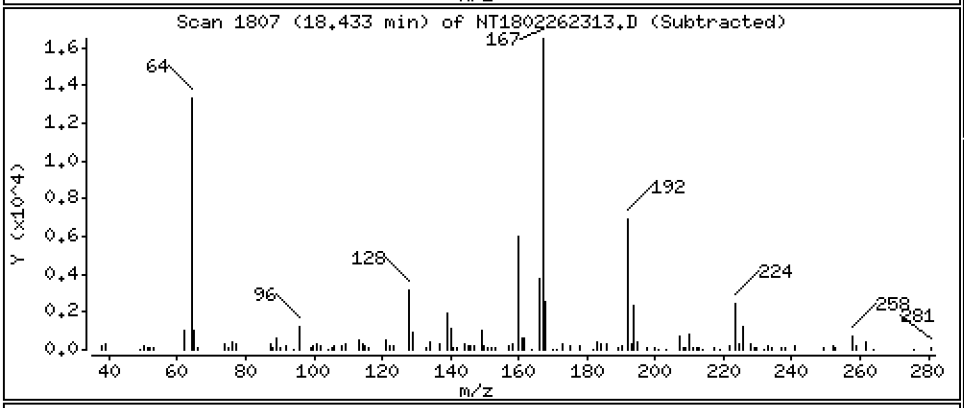
Column diameter: 0.25

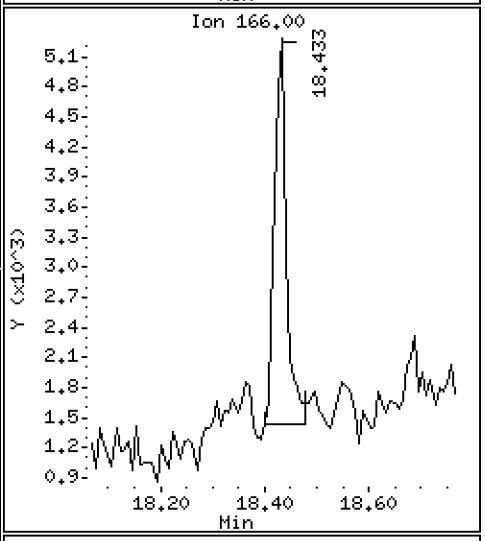
62 Carbazole

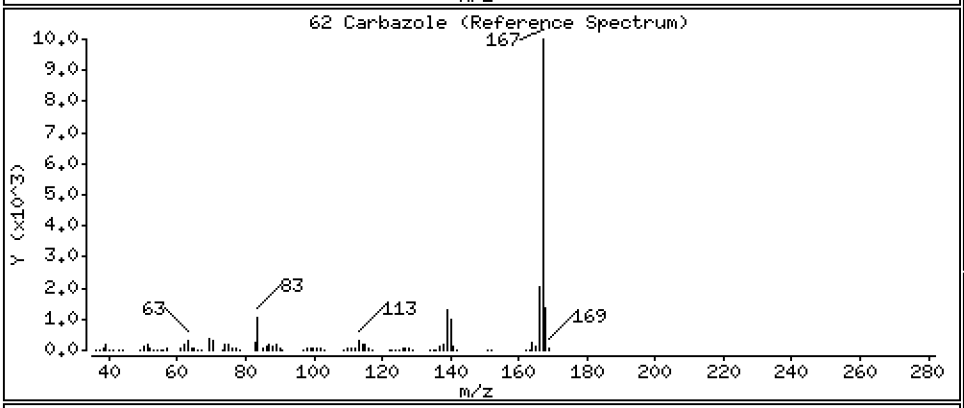
Concentration: 0.09129 ug/mL

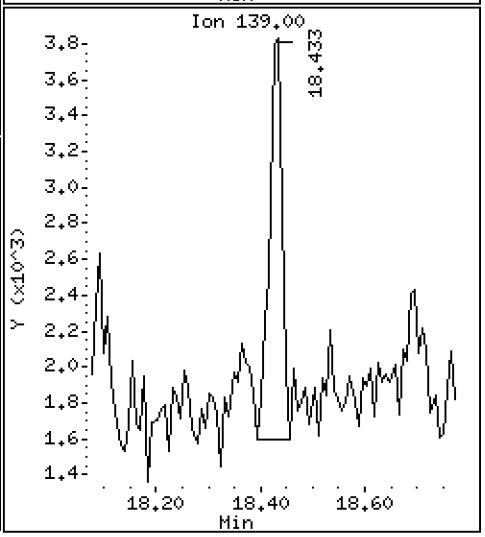


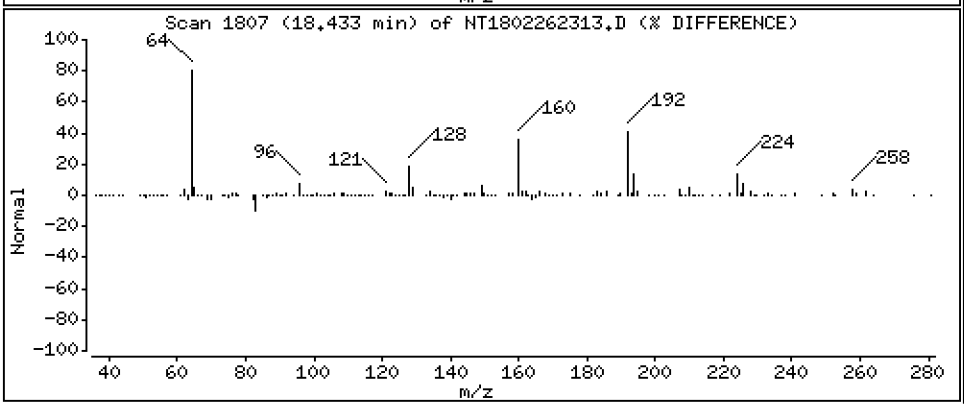












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

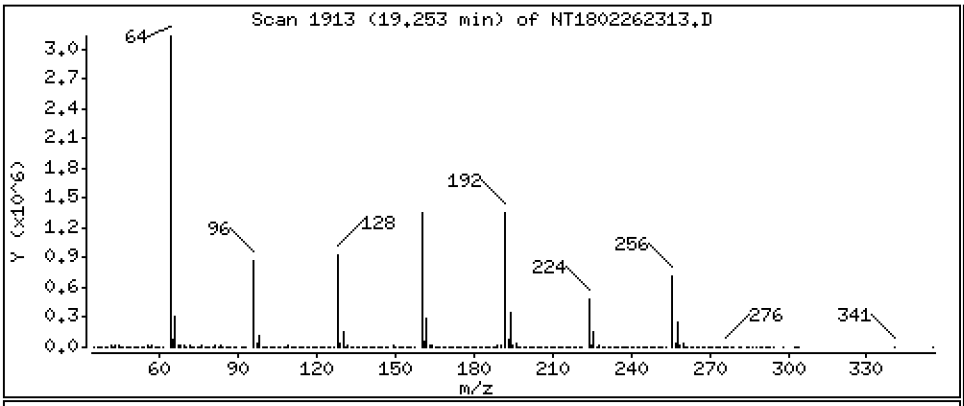
Operator: VTS

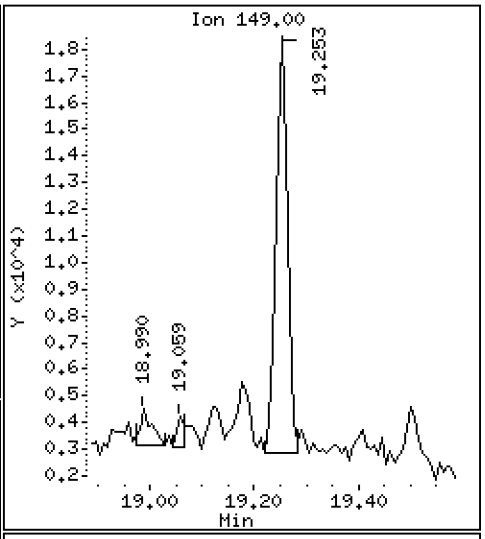
Column phase: ZB-5msi

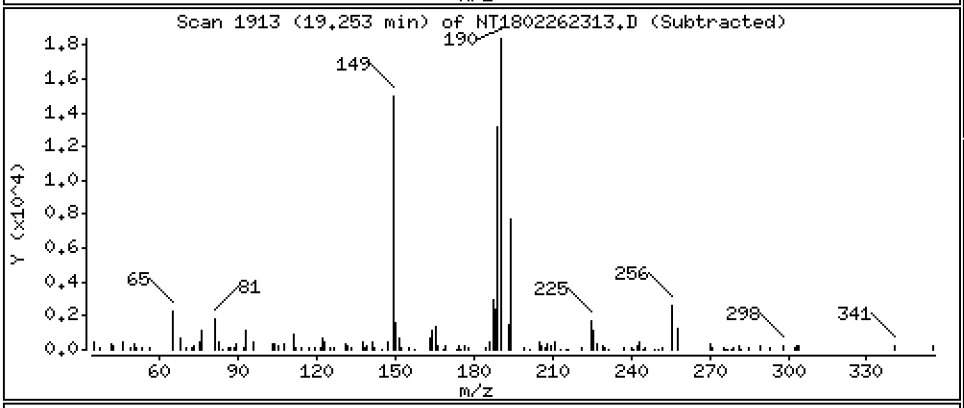
Column diameter: 0.25

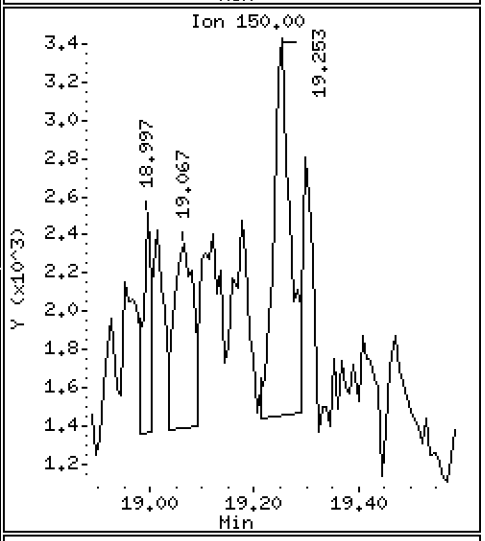
63 Di-n-butylphthalate

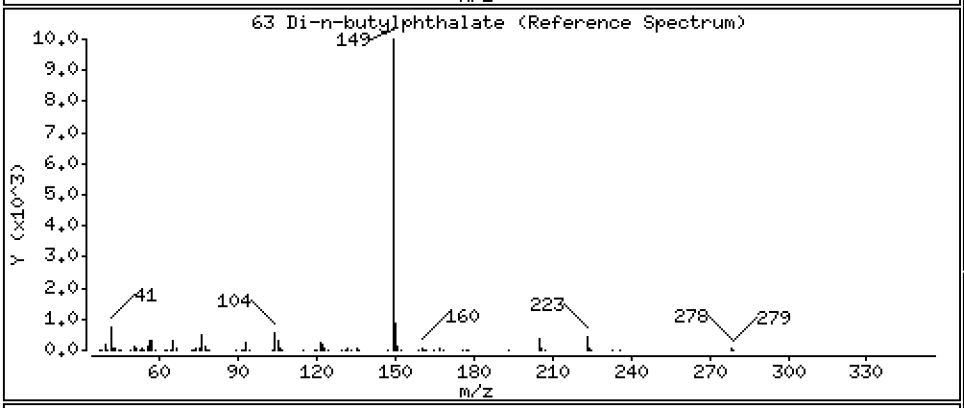
Concentration: 0.06919 ug/mL

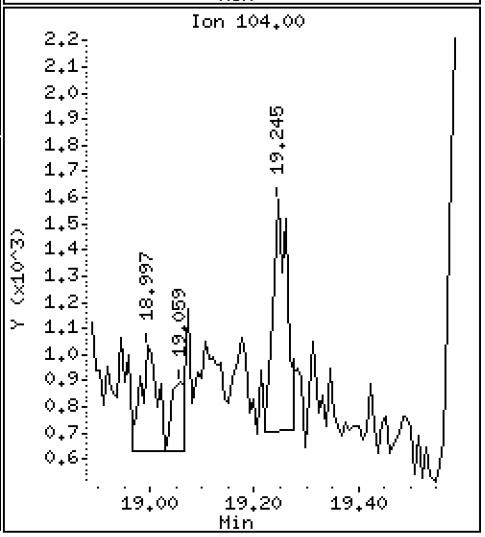


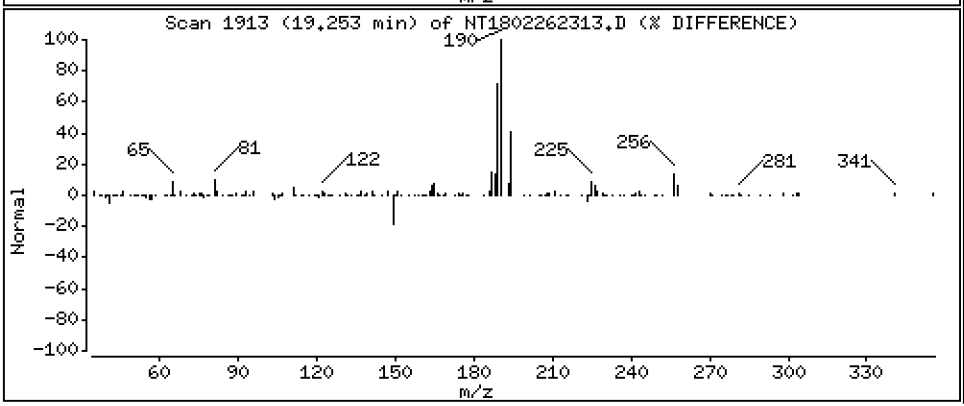












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

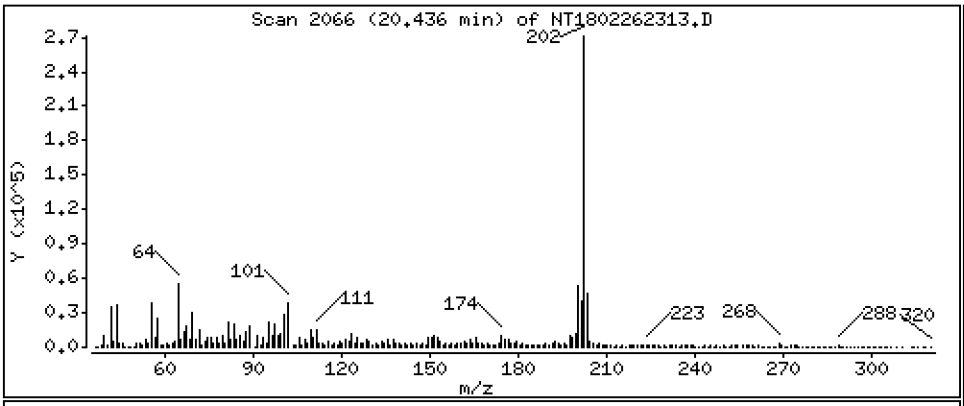
Operator: VTS

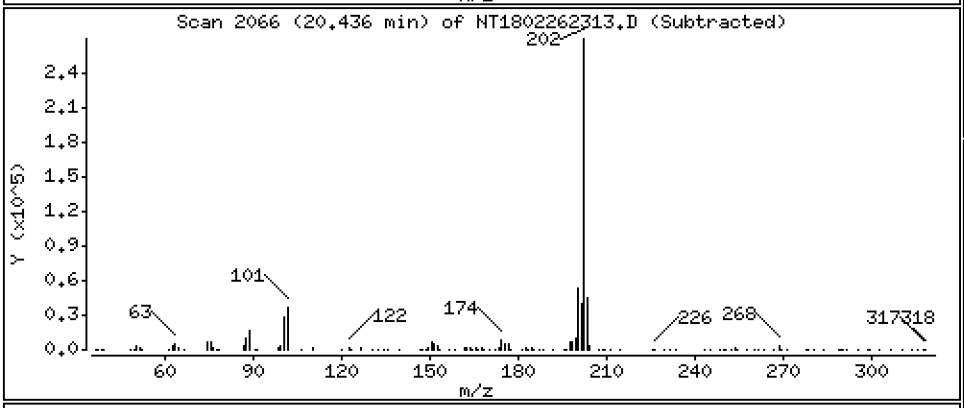
Column phase: ZB-5msi

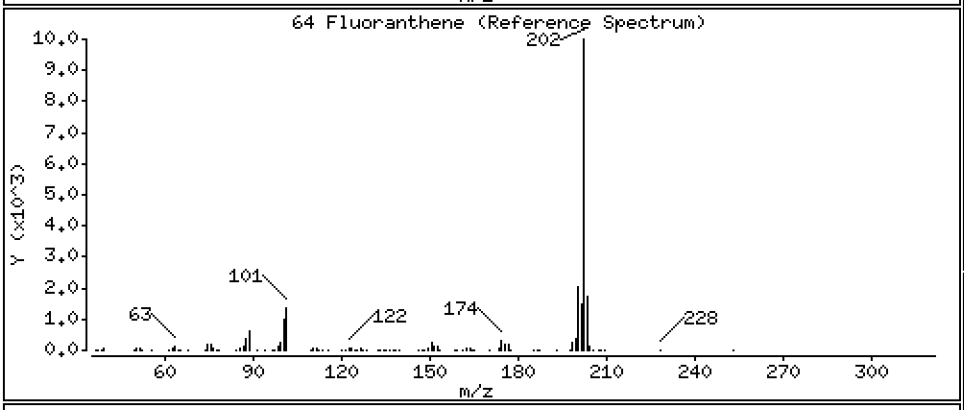
Column diameter: 0.25

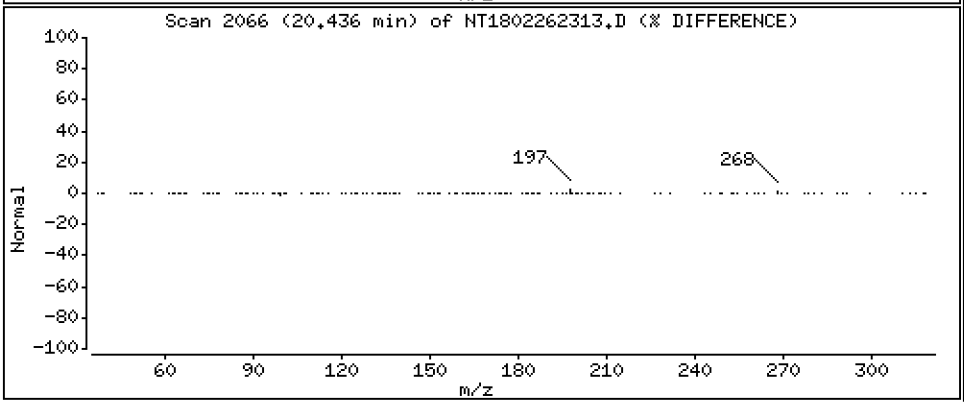
64 Fluoranthene

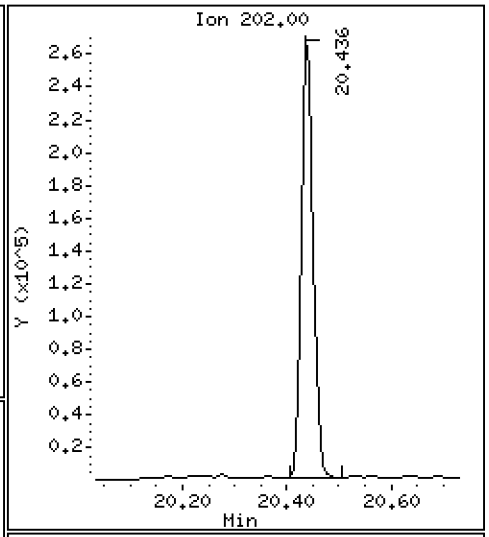
Concentration: 1.056 ug/mL

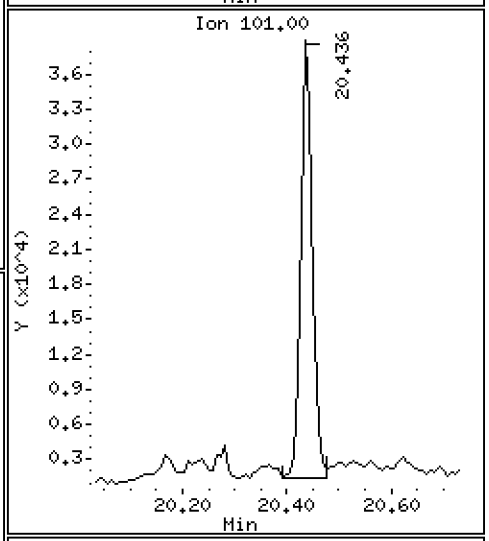


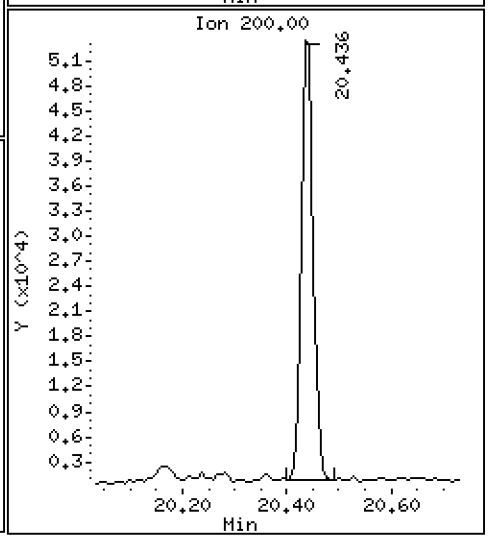












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

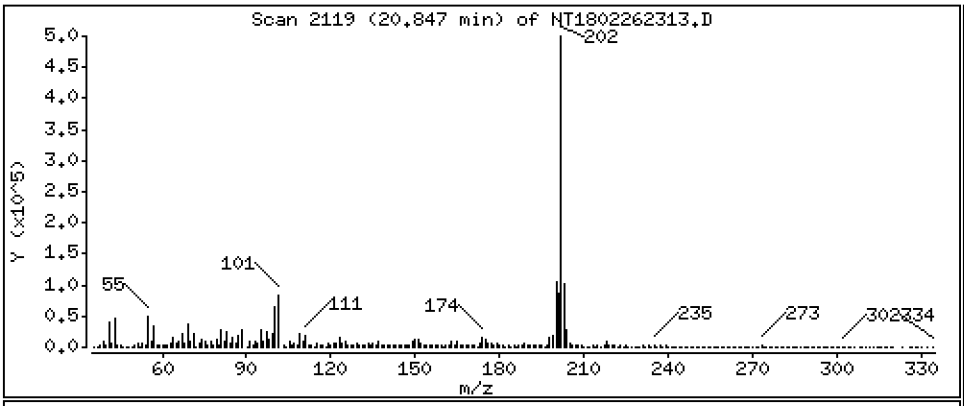
Operator: VTS

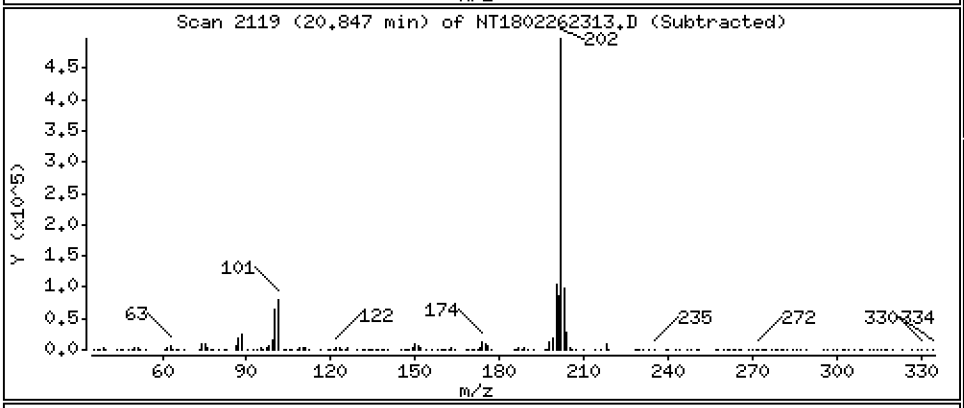
Column phase: ZB-5msi

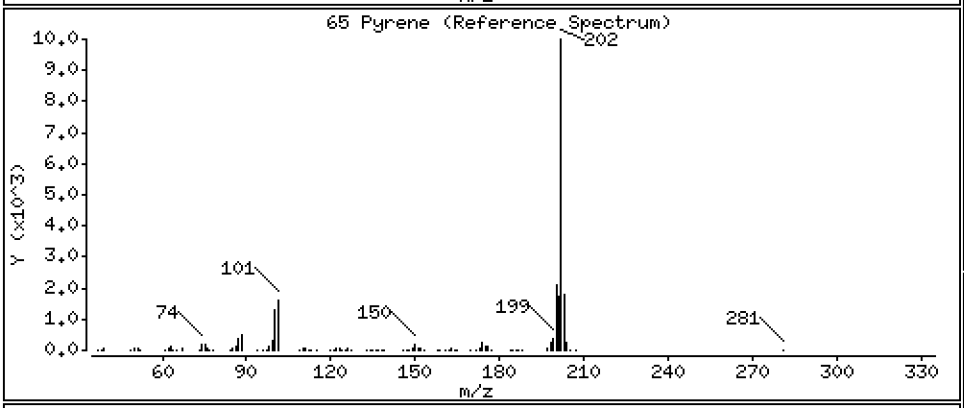
Column diameter: 0.25

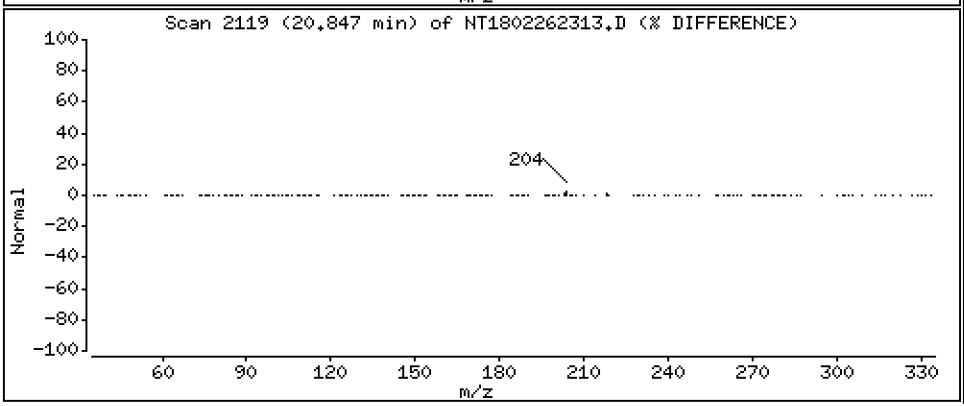
65 Pyrene

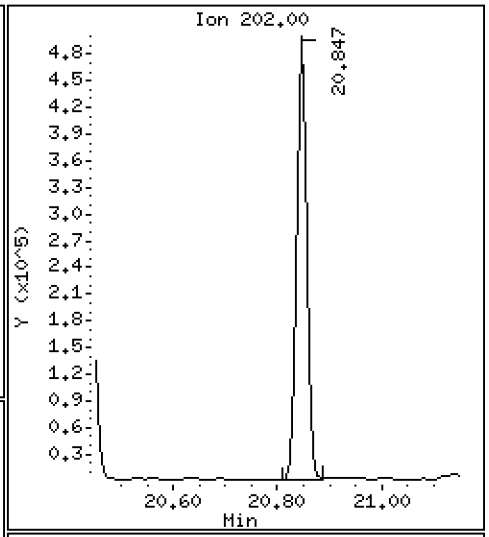
Concentration: 1.635 ug/mL

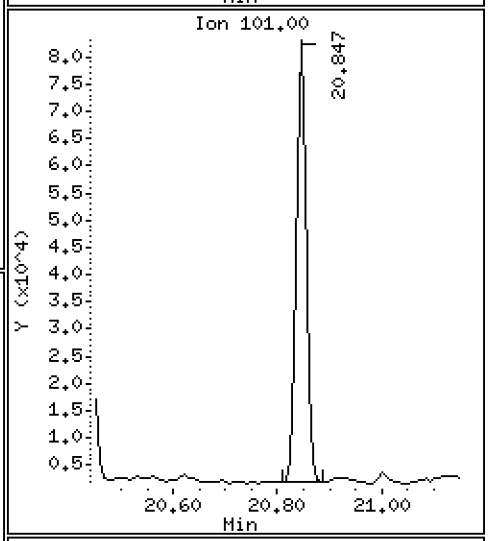


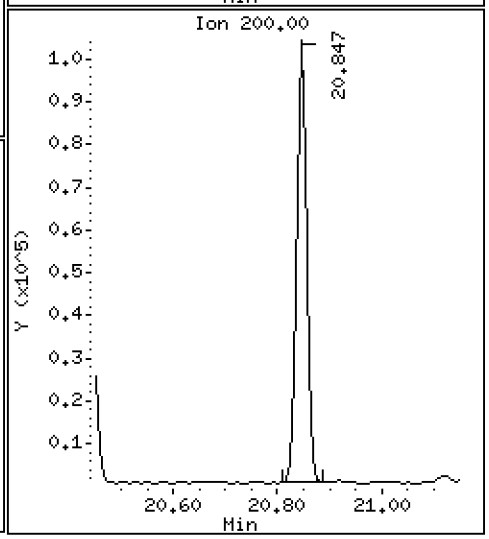












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

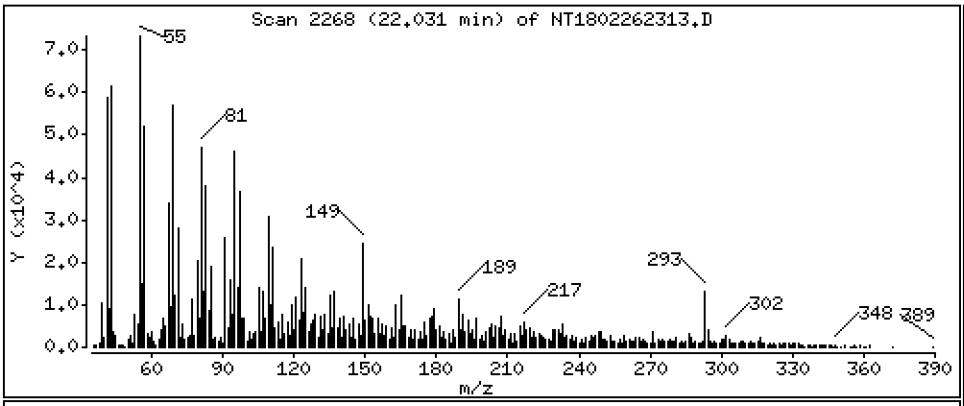
Operator: VTS

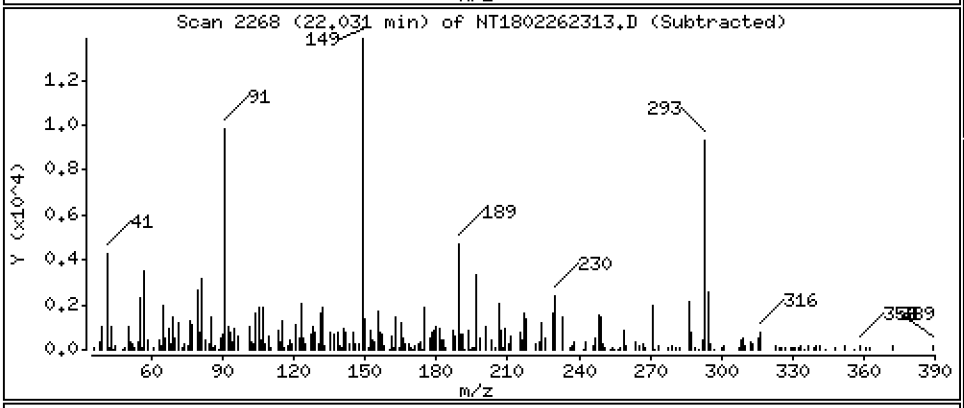
Column phase: ZB-5msi

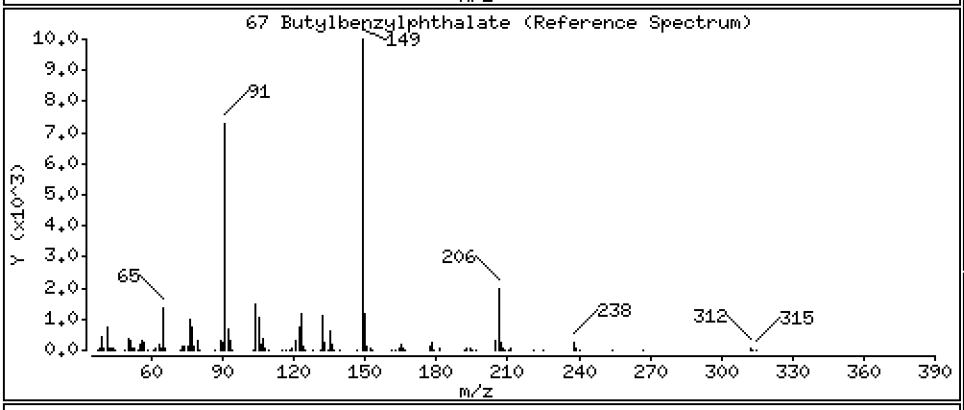
Column diameter: 0.25

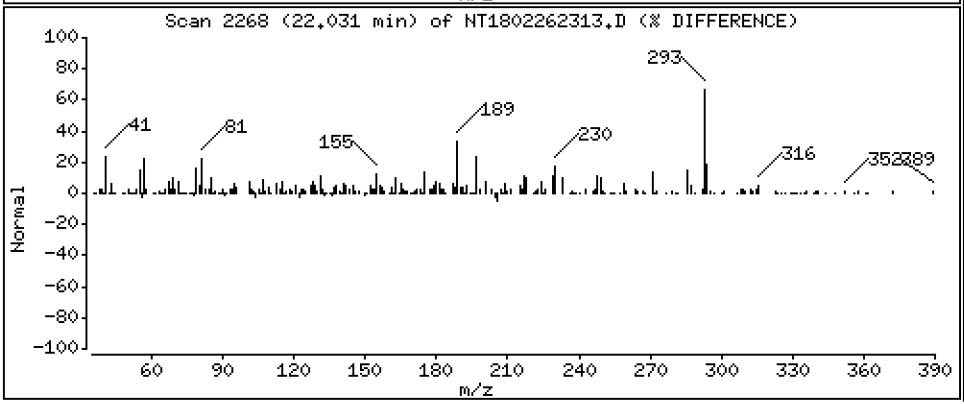
67 Butylbenzylphthalate

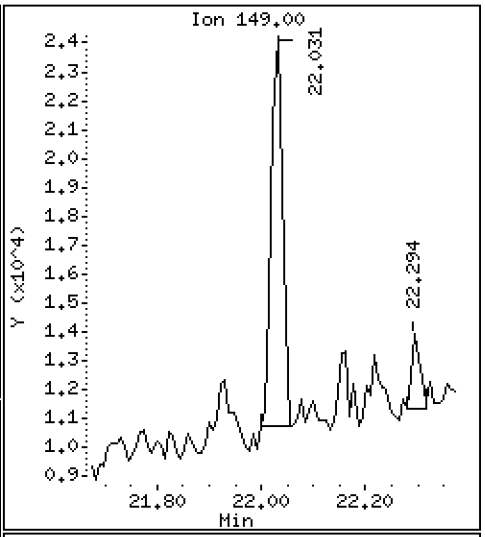
Concentration: 0.1178 ug/mL

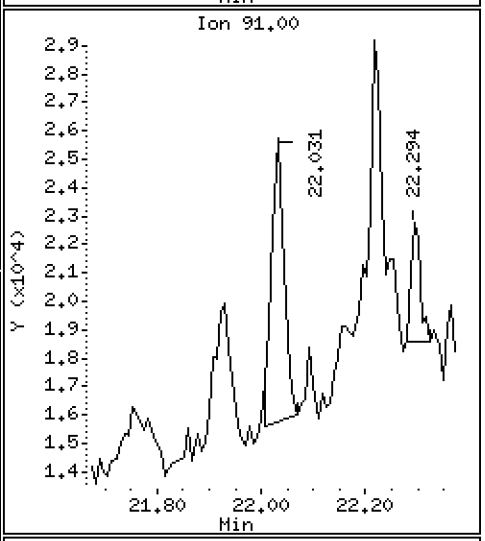


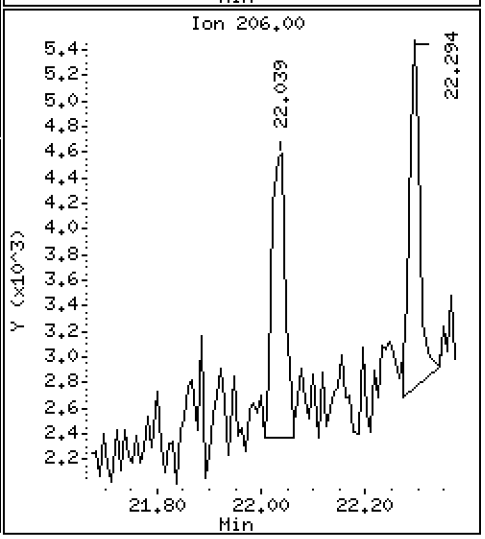












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

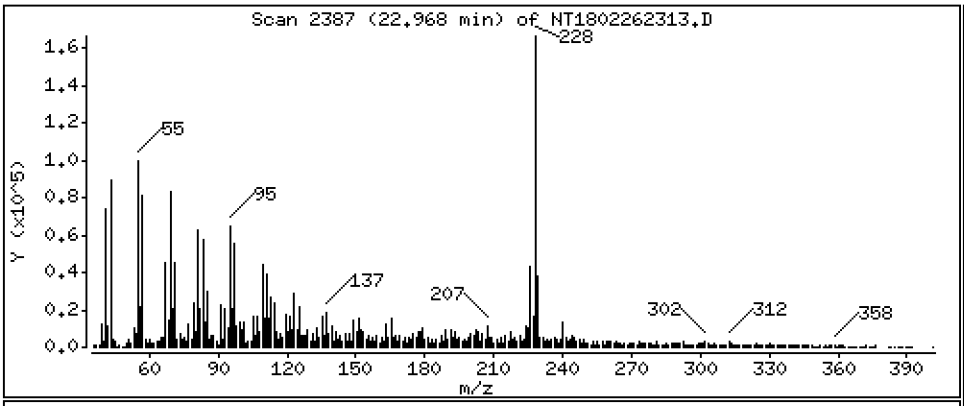
Operator: VTS

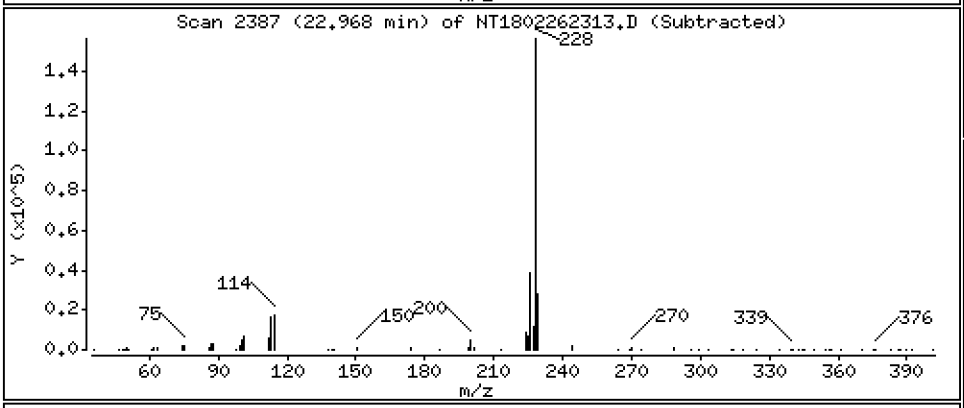
Column phase: ZB-5msi

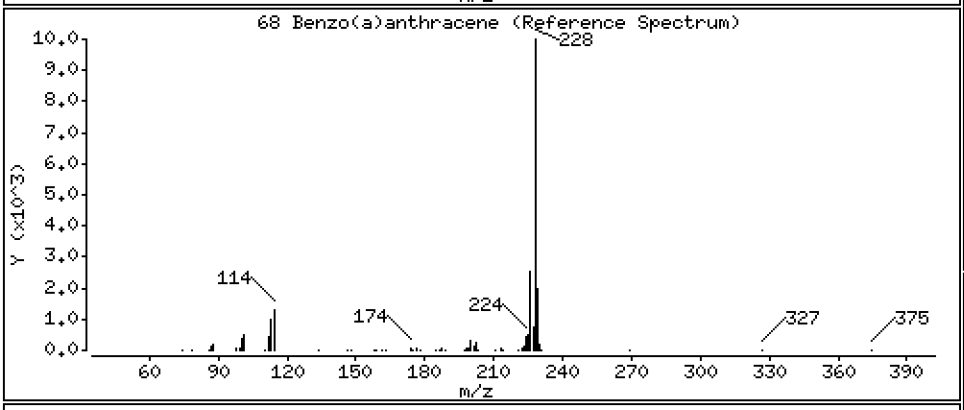
Column diameter: 0.25

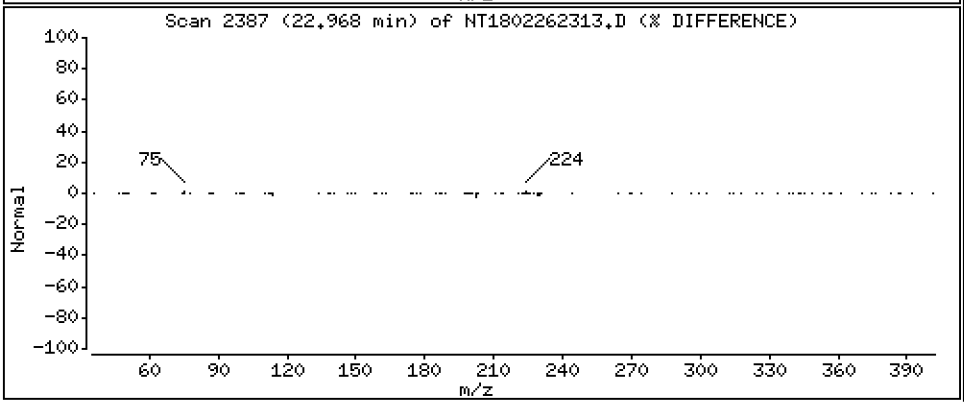
68 Benzo(a)anthracene

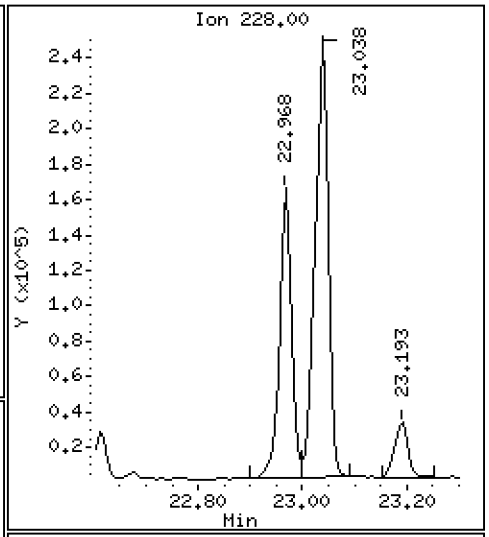
Concentration: 0.6500 ug/mL

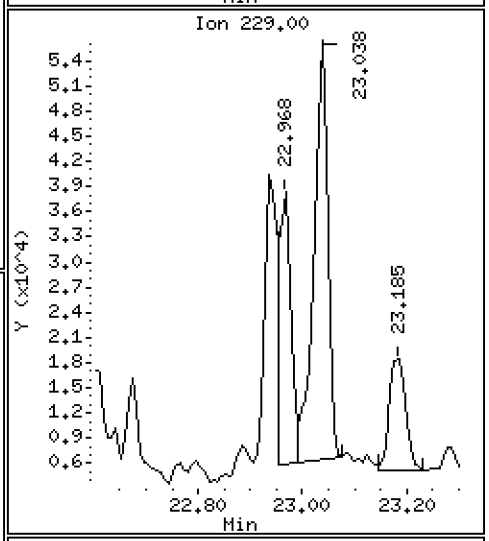


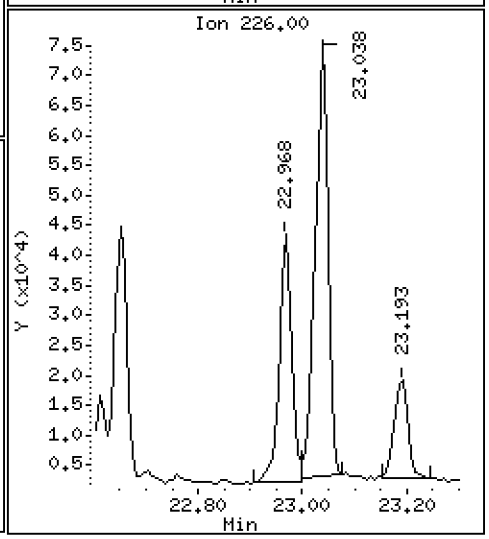












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

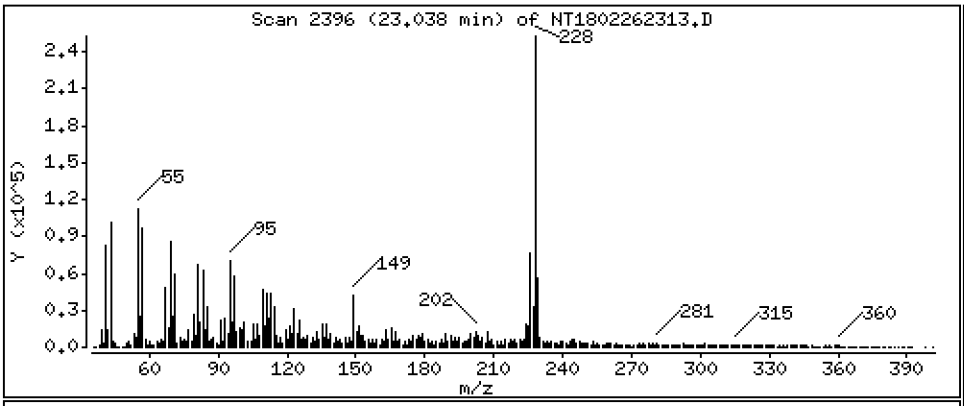
Operator: VTS

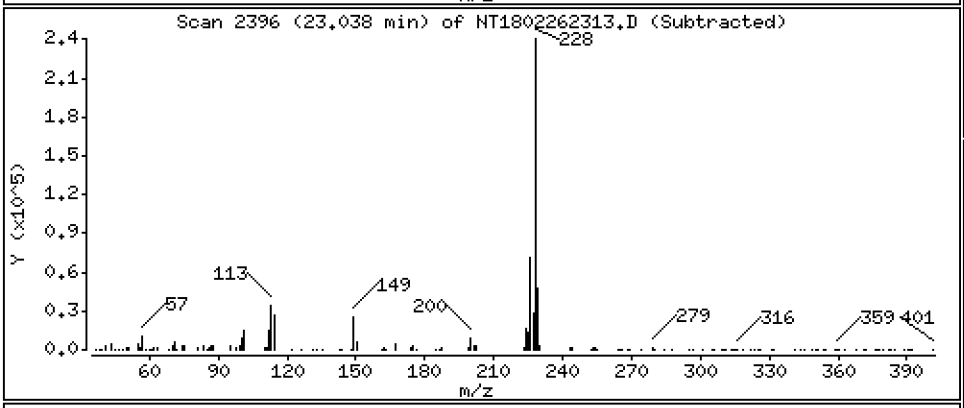
Column phase: ZB-5msi

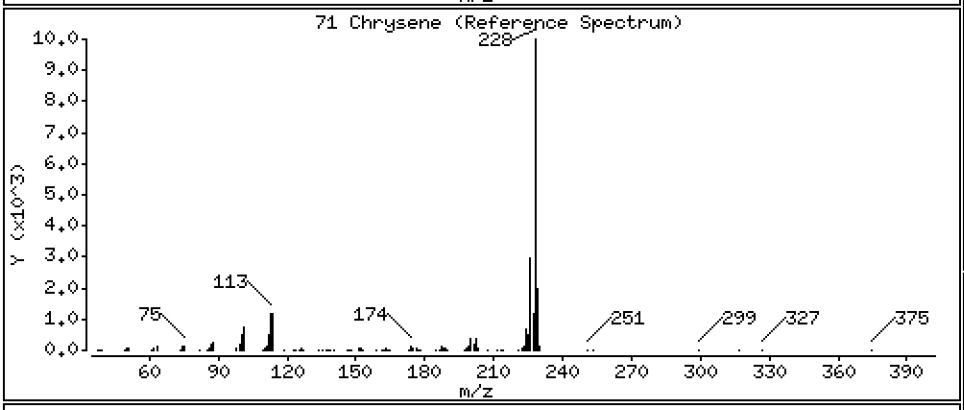
Column diameter: 0.25

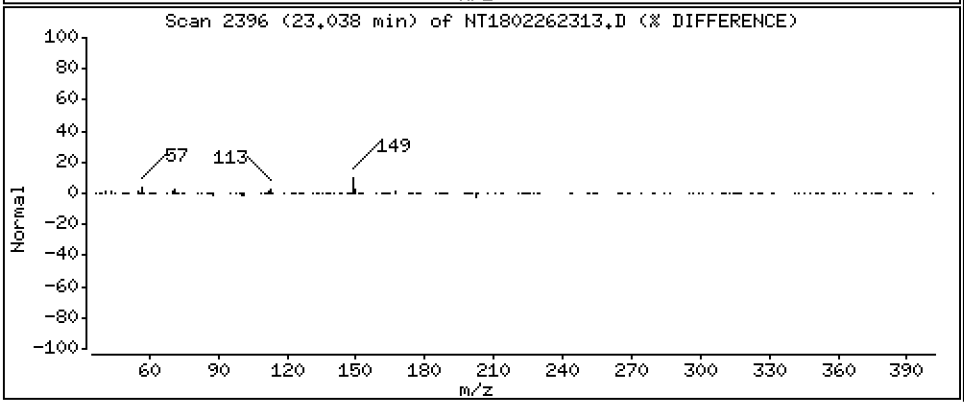
71 Chrysene

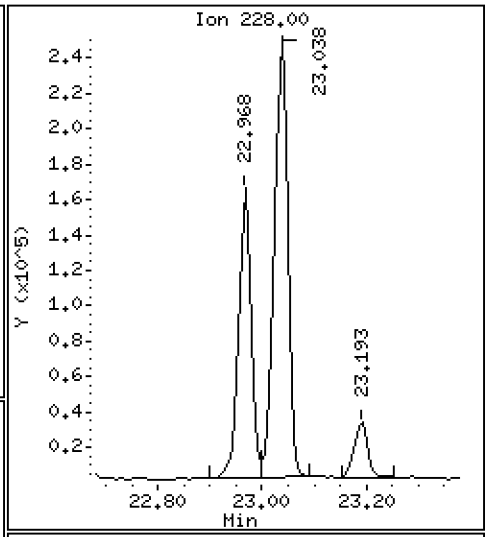
Concentration: 0.9936 ug/mL

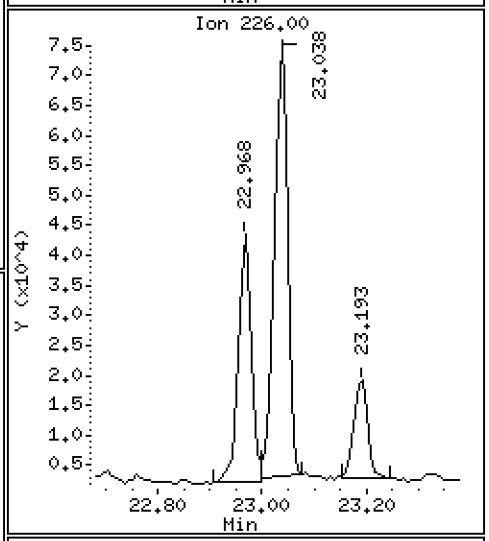


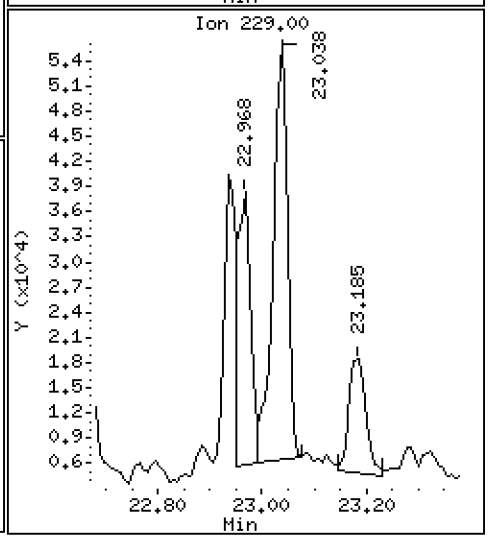












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

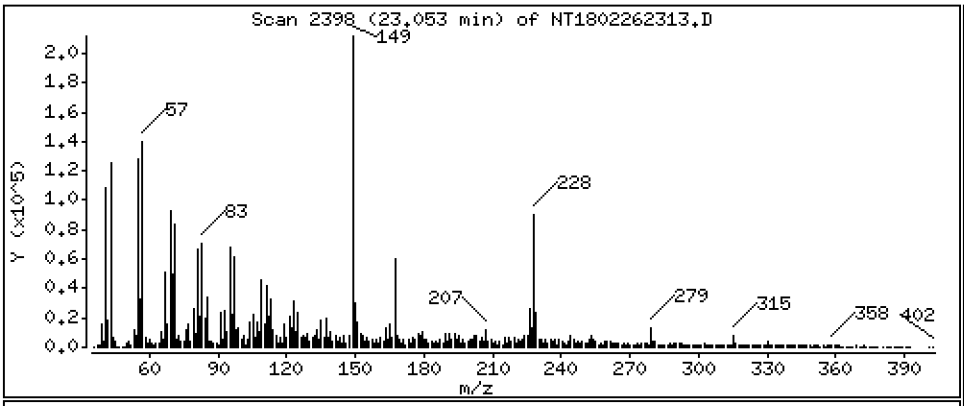
Operator: VTS

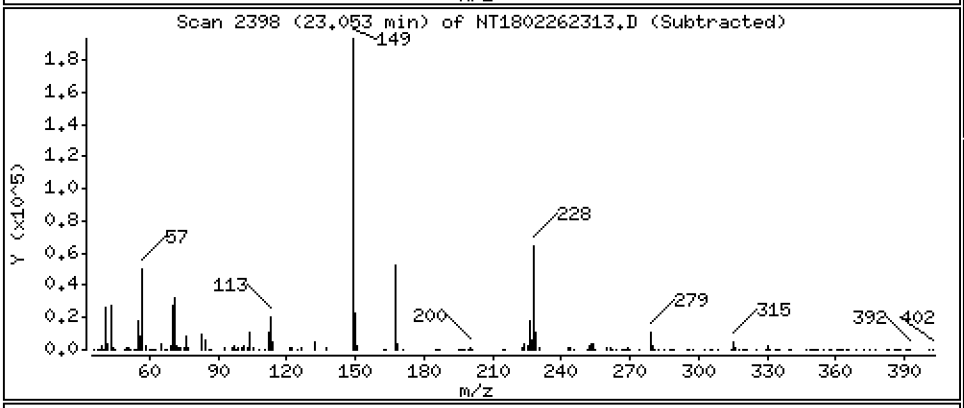
Column phase: ZB-5msi

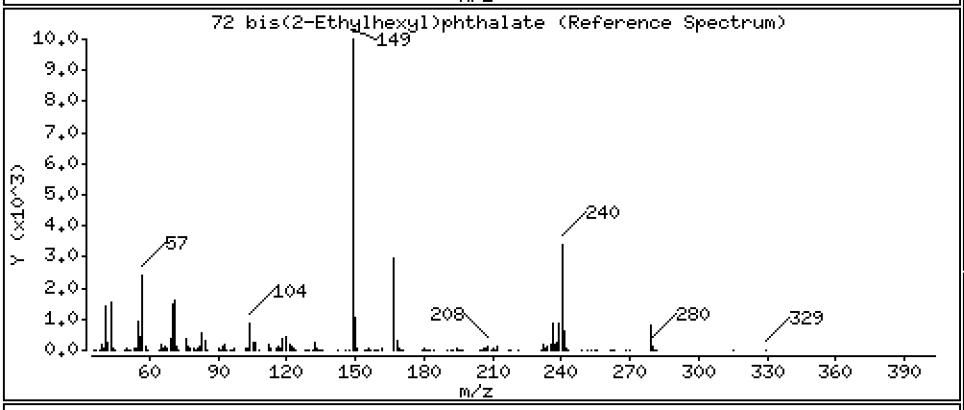
Column diameter: 0.25

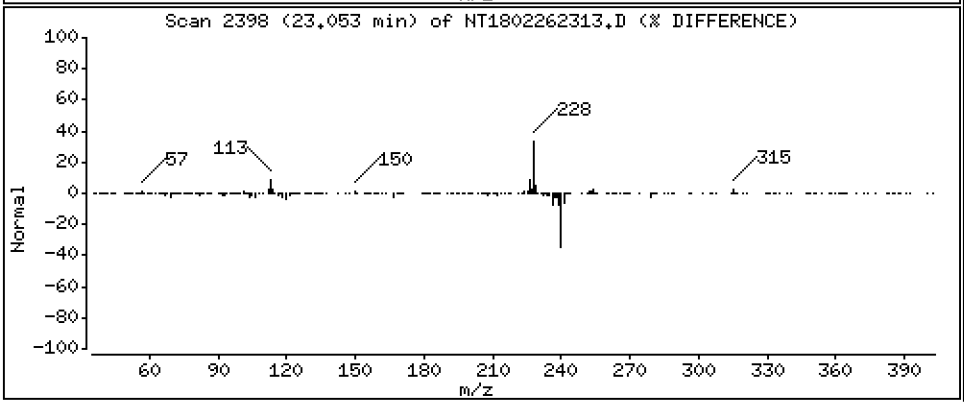
72 bis(2-Ethylhexyl)phthalate

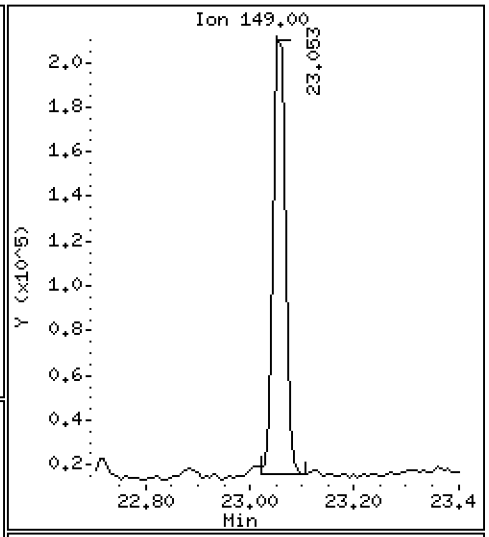
Concentration: 1.215 ug/mL

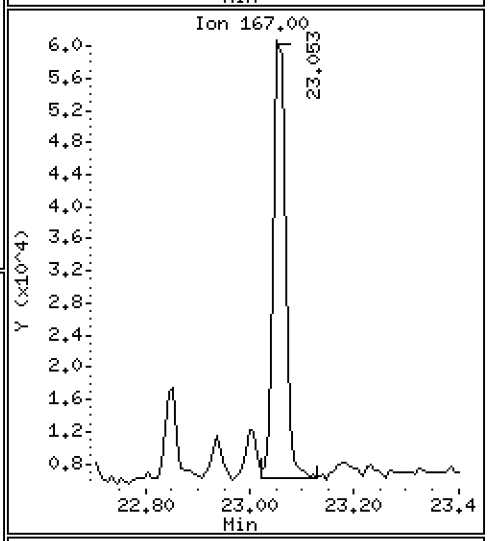


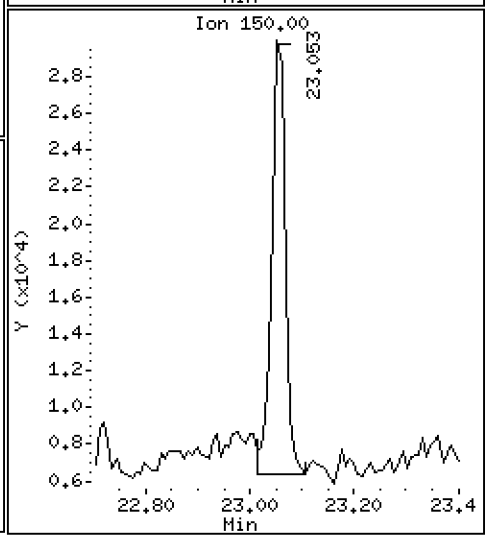












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

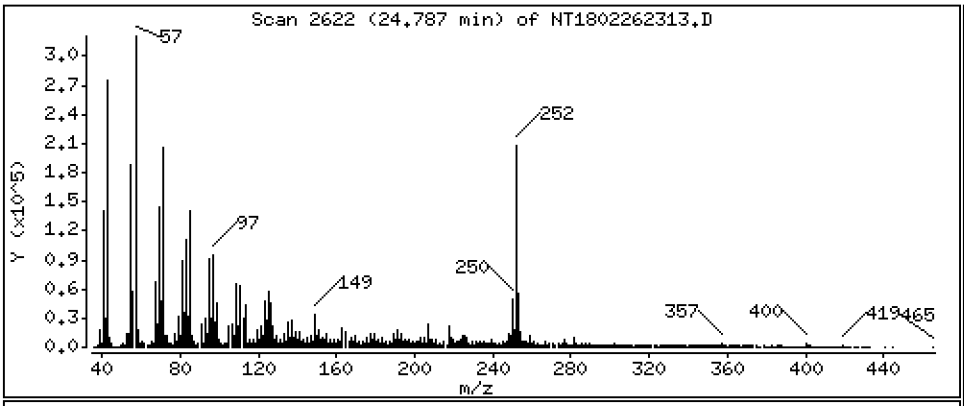
Operator: VTS

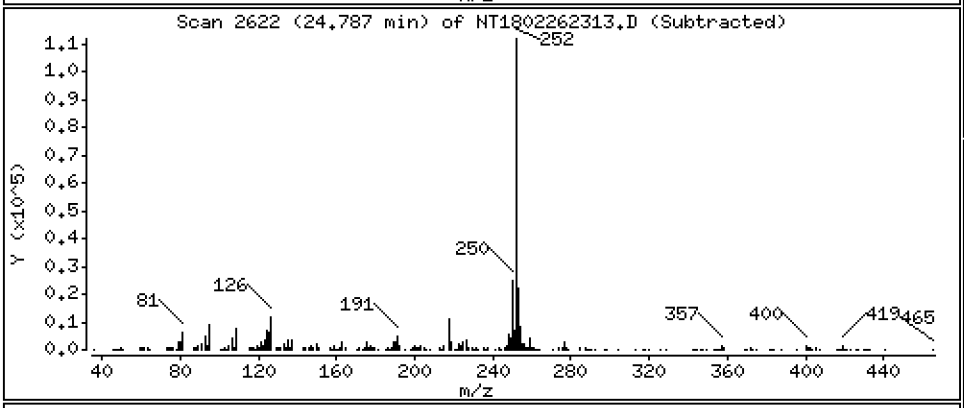
Column phase: ZB-5msi

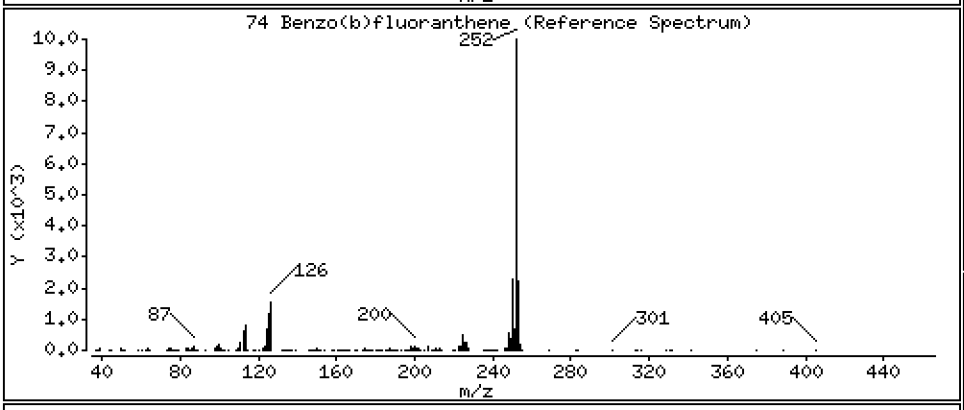
Column diameter: 0.25

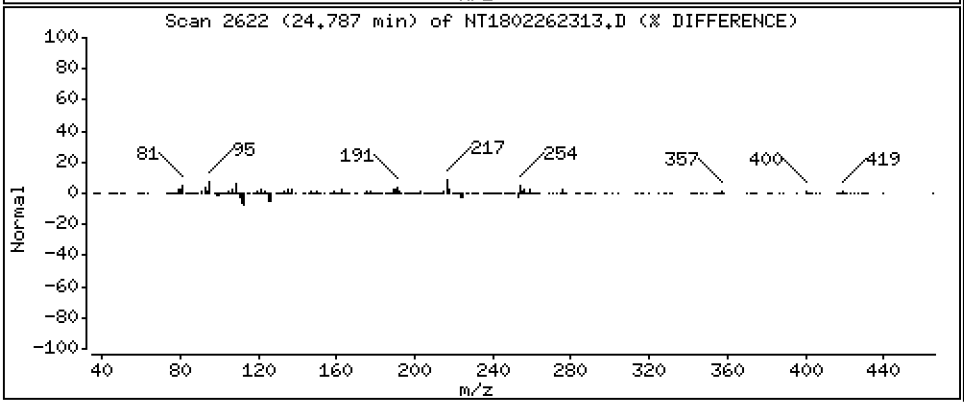
74 Benzo(b)fluoranthene

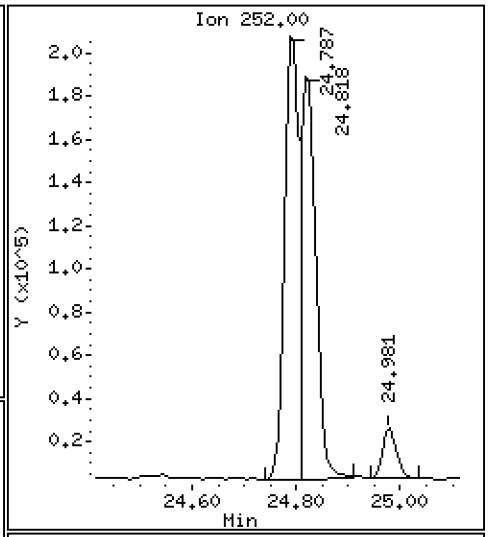
Concentration: 1.413 ug/mL

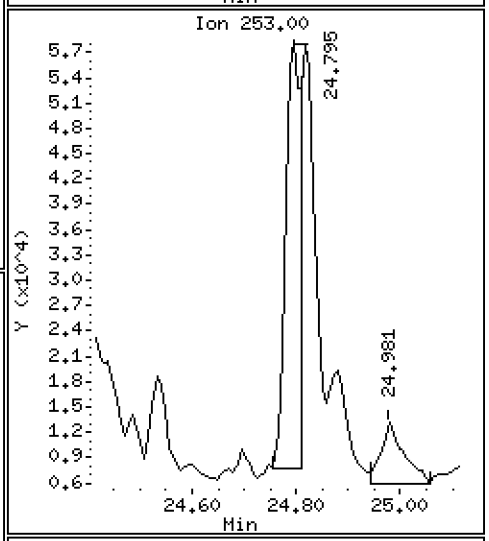


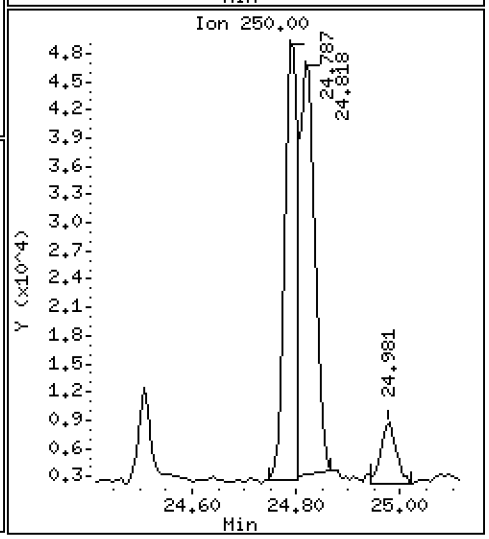












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

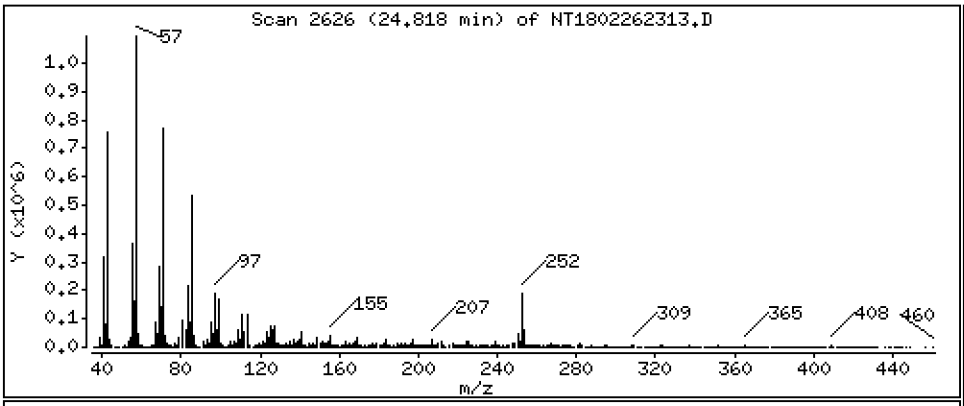
Operator: VTS

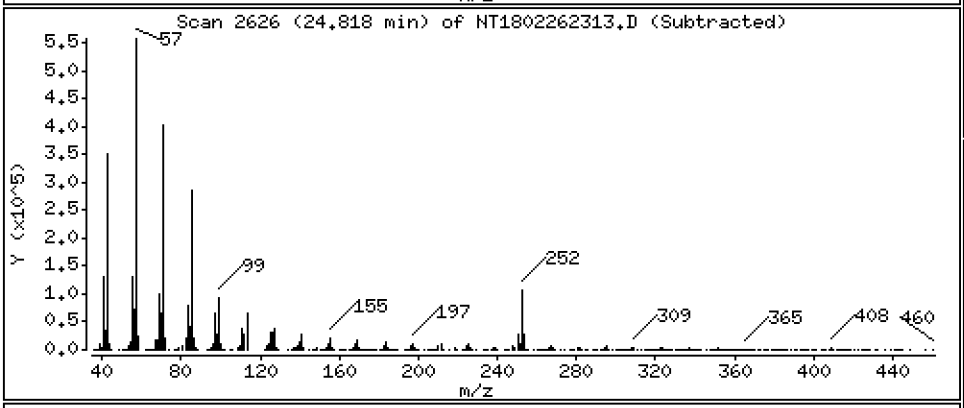
Column phase: ZB-5msi

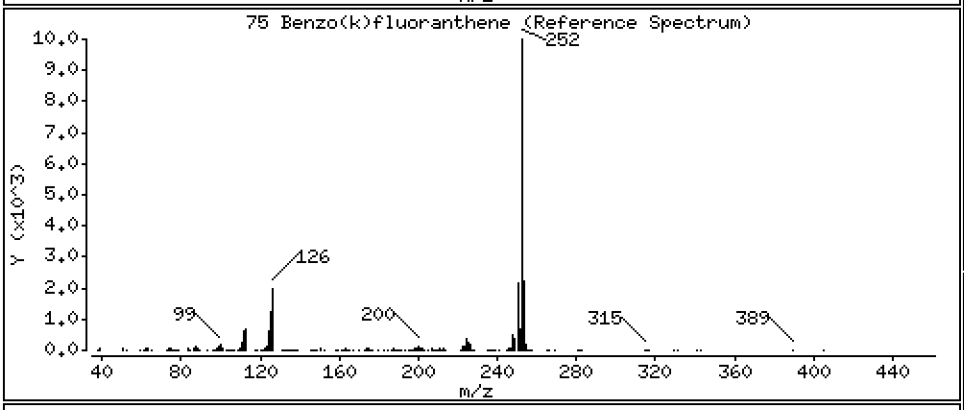
Column diameter: 0.25

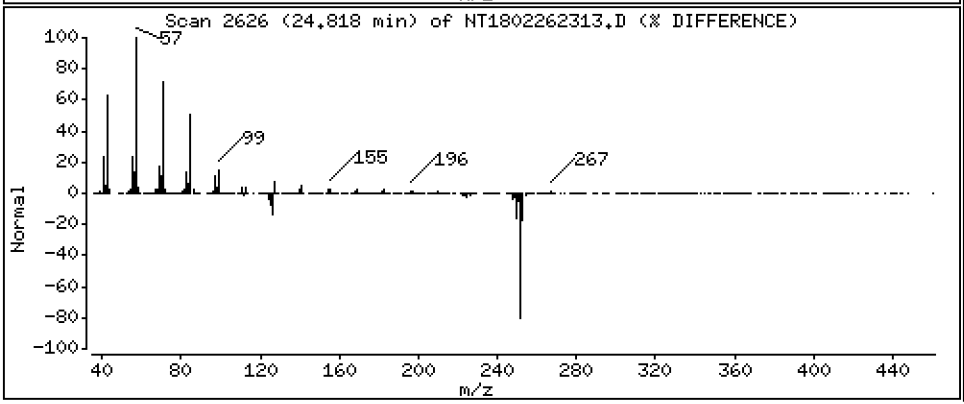
75 Benzo(k)fluoranthene

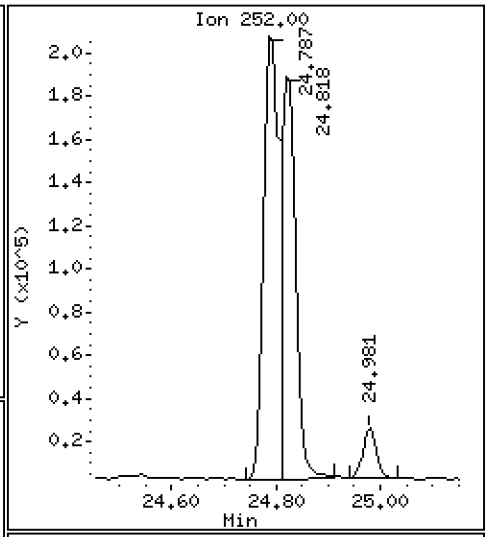
Concentration: 1.017 ug/mL

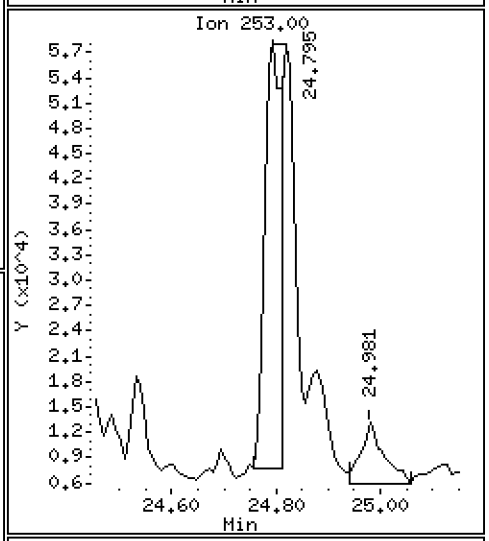


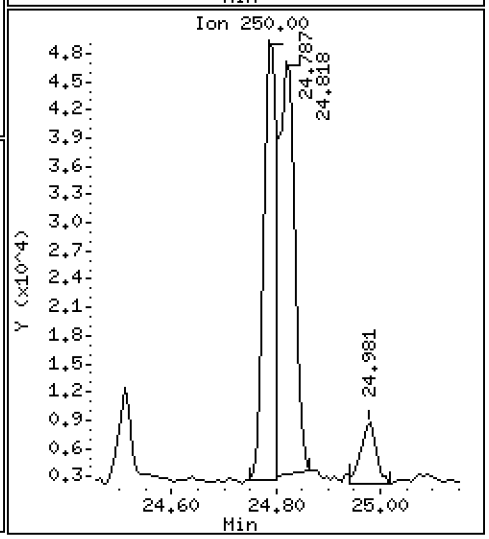












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

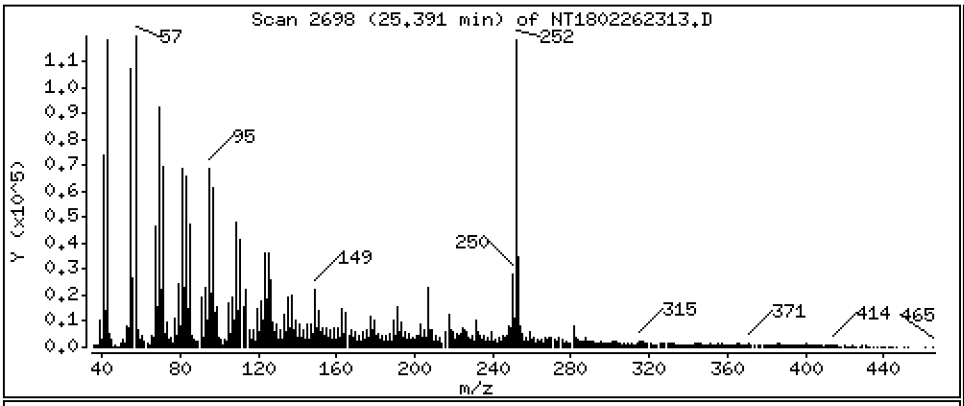
Operator: VTS

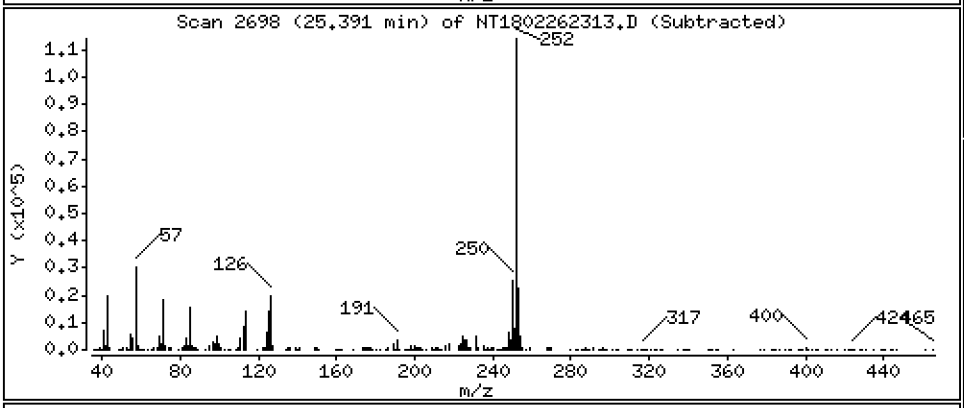
Column phase: ZB-5msi

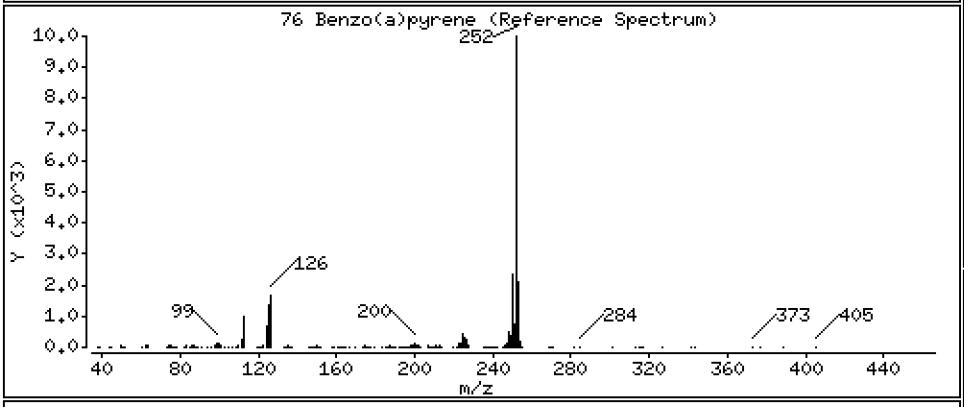
Column diameter: 0.25

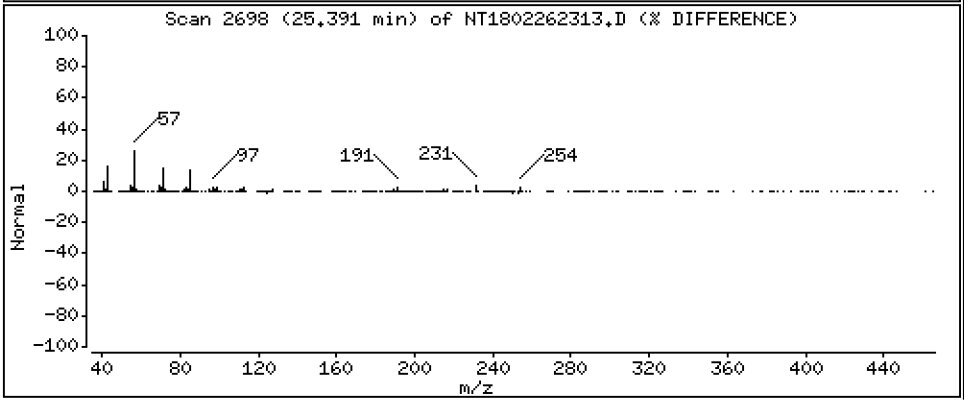
76 Benzo(a)pyrene

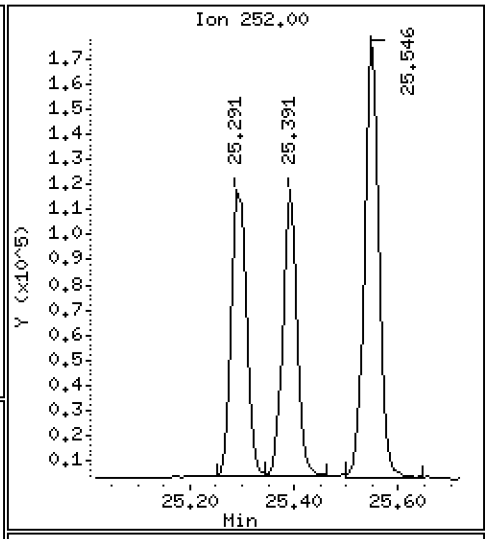
Concentration: 0.7440 ug/mL

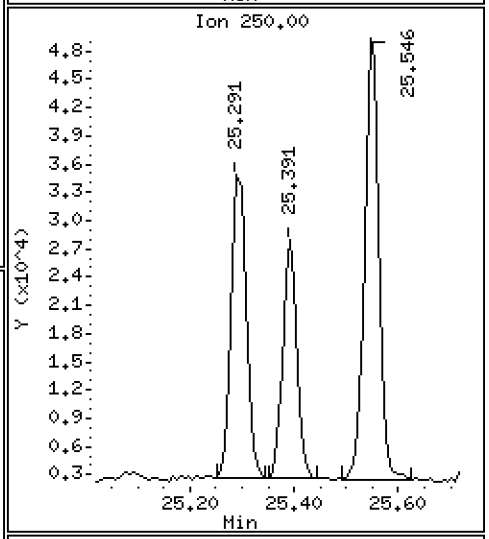


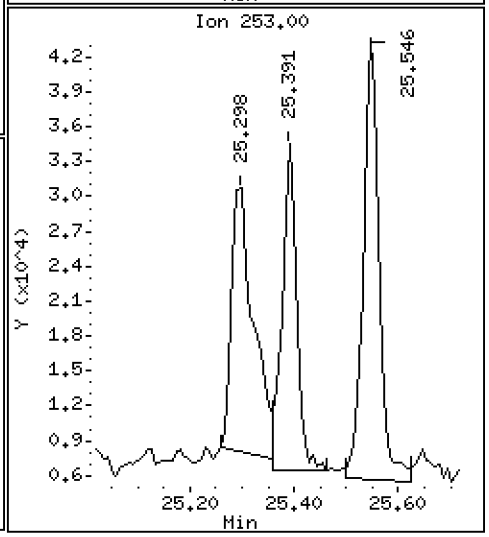












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

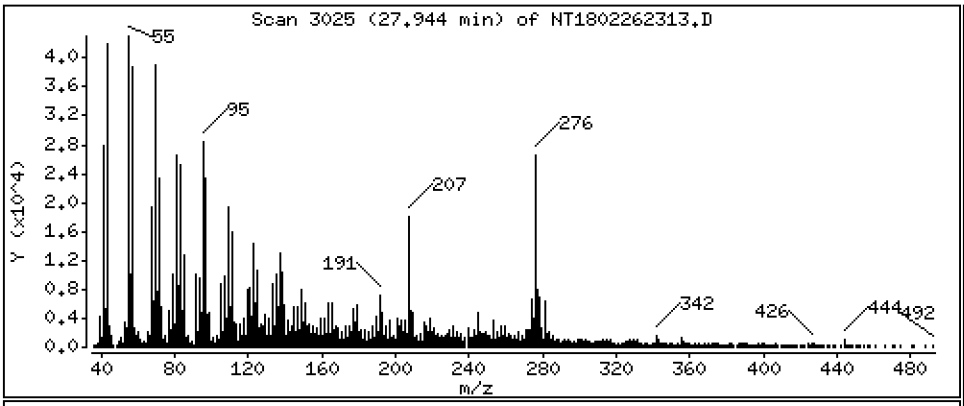
Operator: VTS

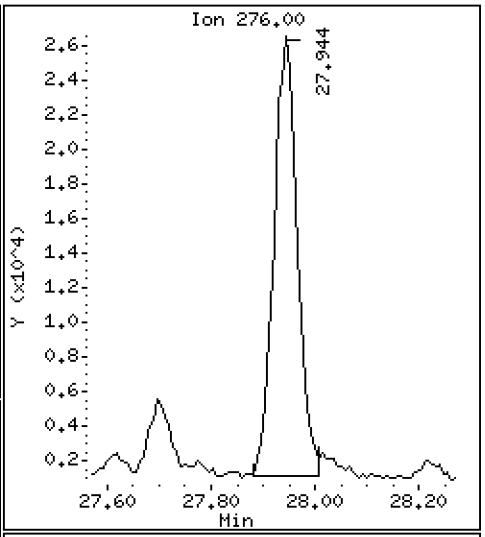
Column phase: ZB-5msi

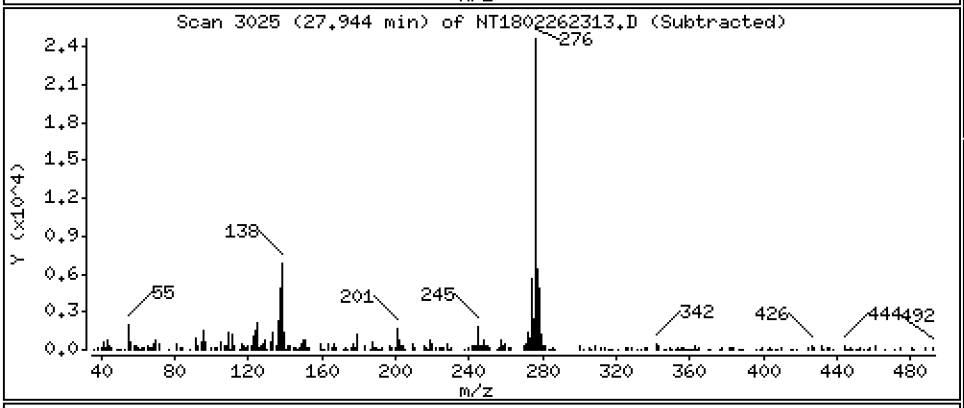
Column diameter: 0.25

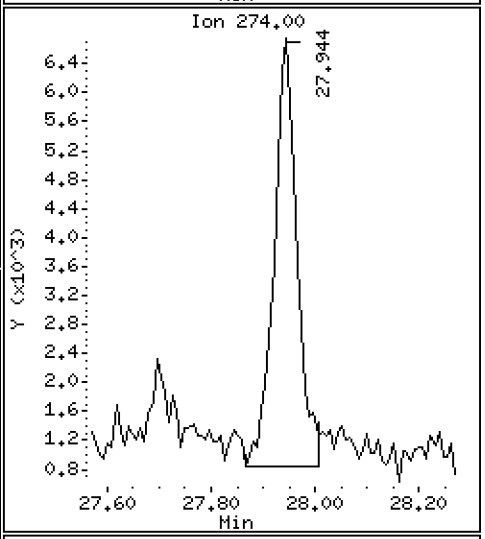
78 Indeno(1,2,3-cd)pyrene

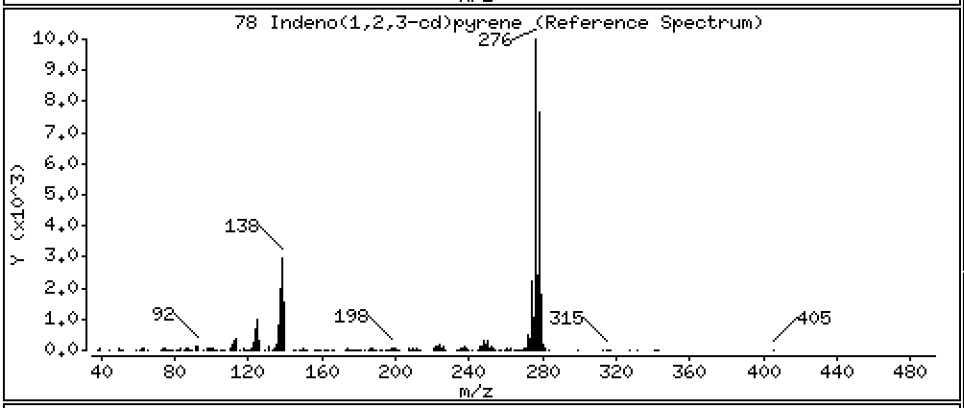
Concentration: 0.2186 ug/mL

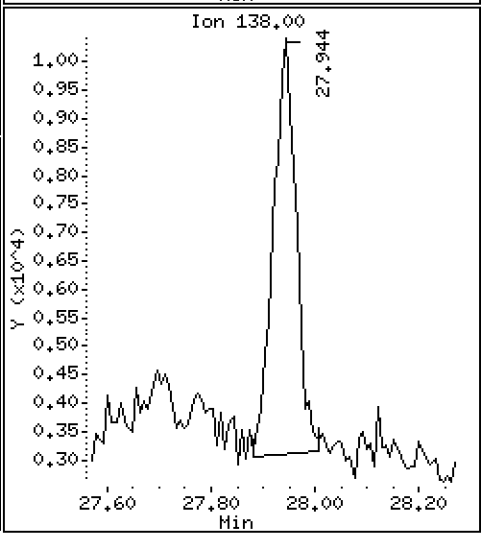


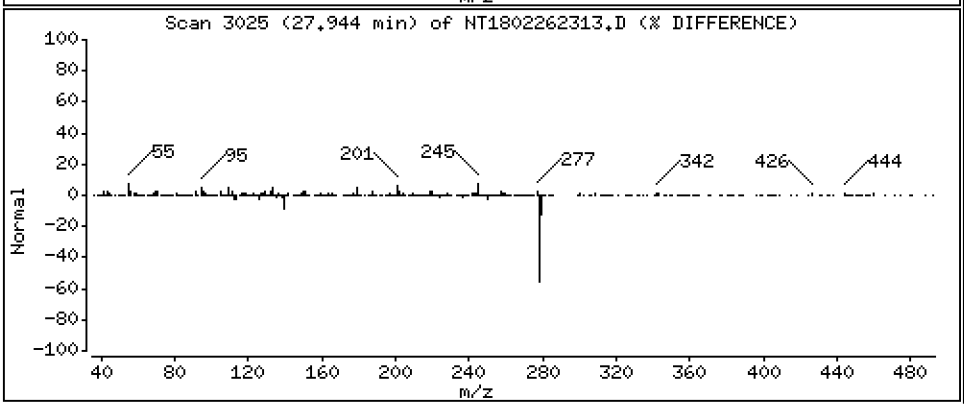












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

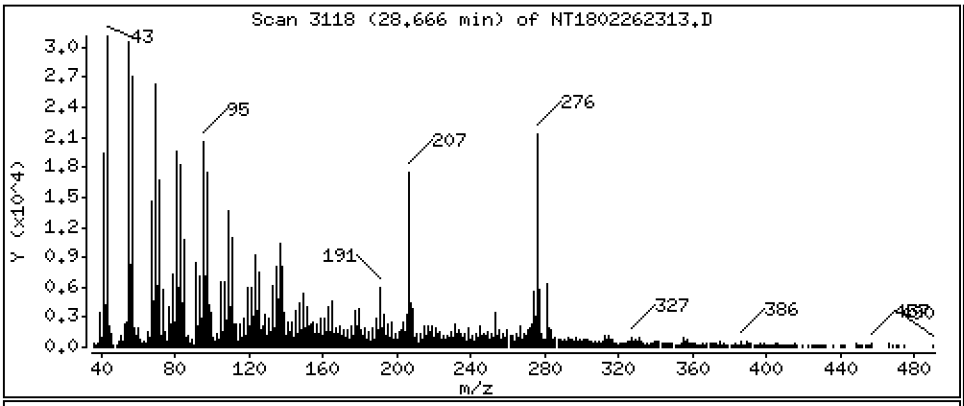
Operator: VTS

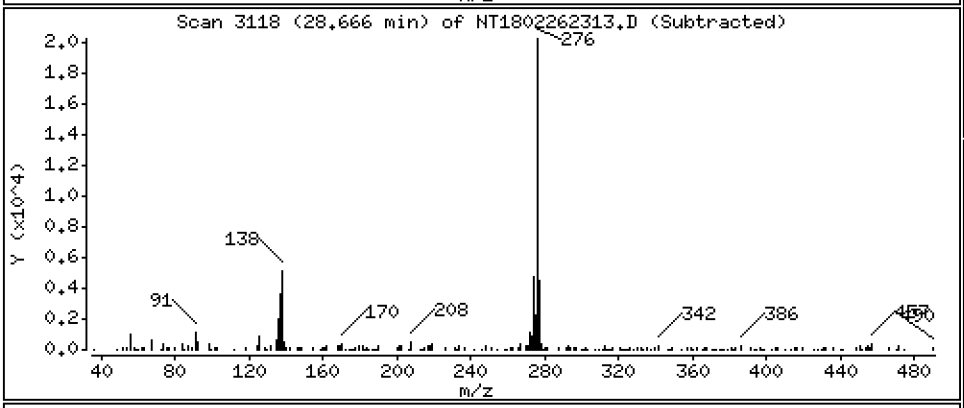
Column phase: ZB-5msi

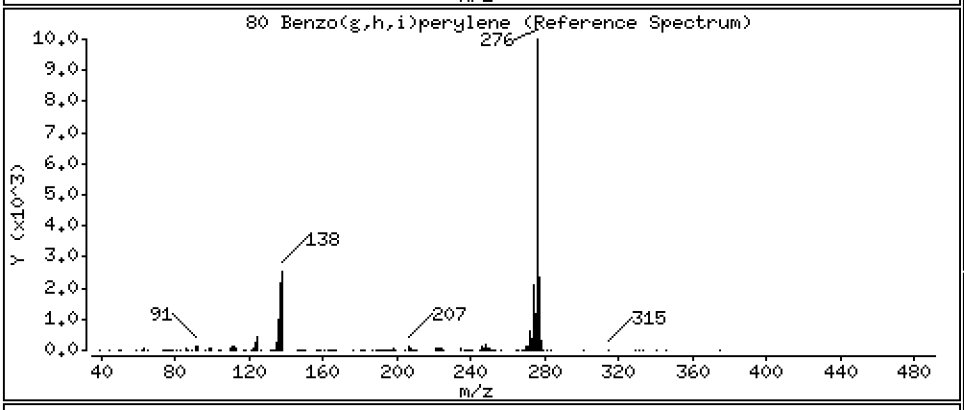
Column diameter: 0.25

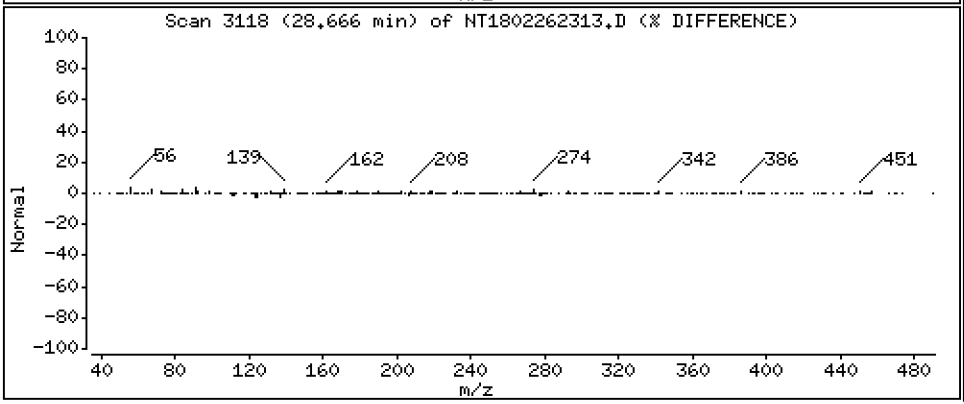
80 Benzo(g,h,i)perylene

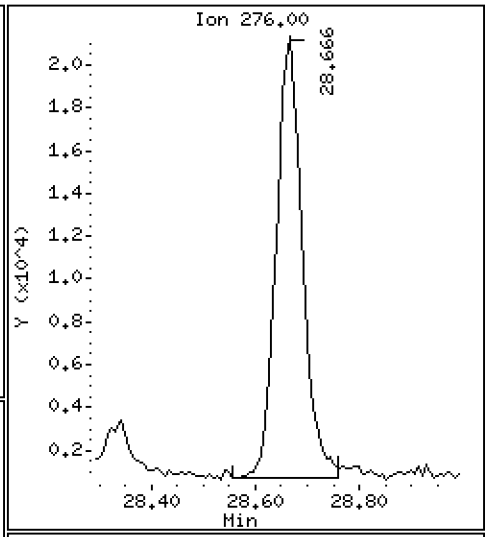
Concentration: 0.2466 ug/mL

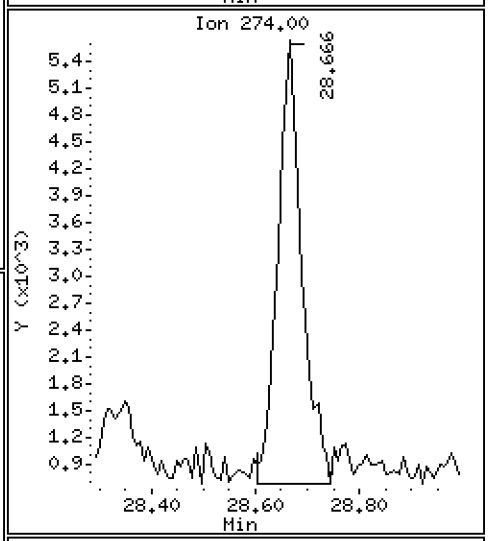


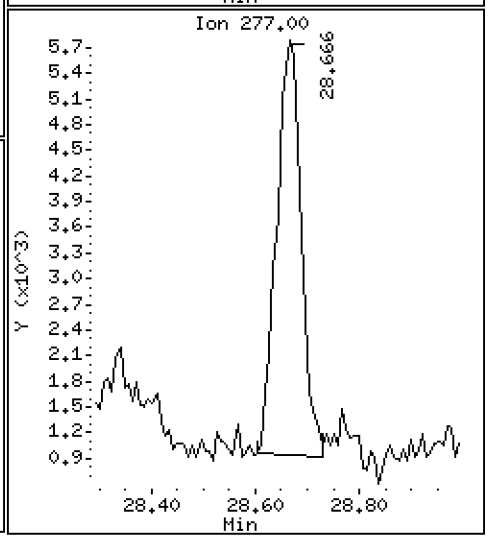












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

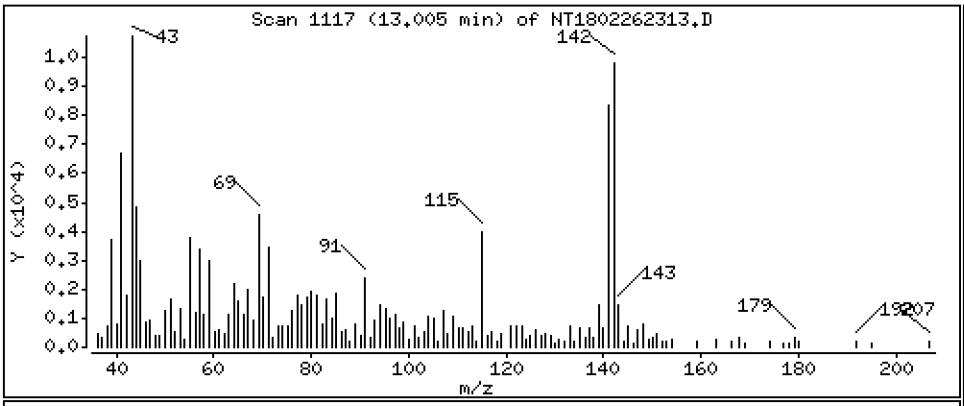
Operator: VTS

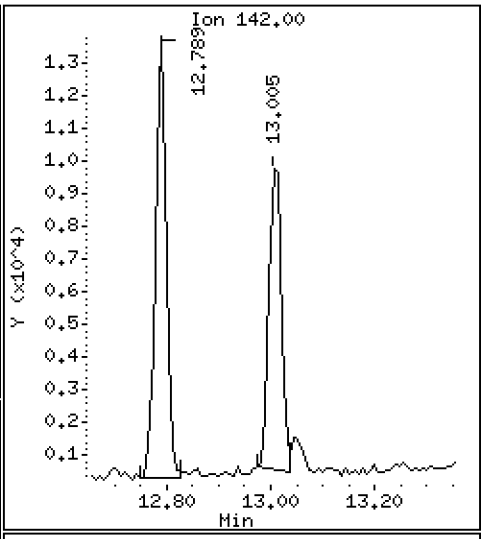
Column phase: ZB-5msi

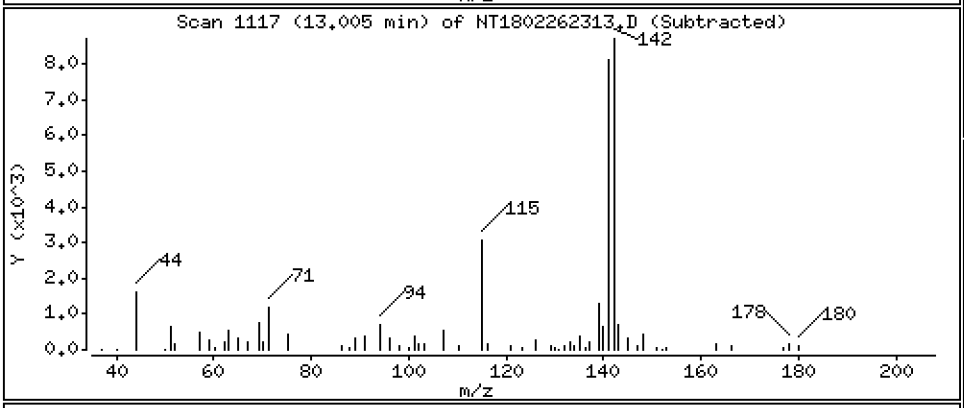
Column diameter: 0.25

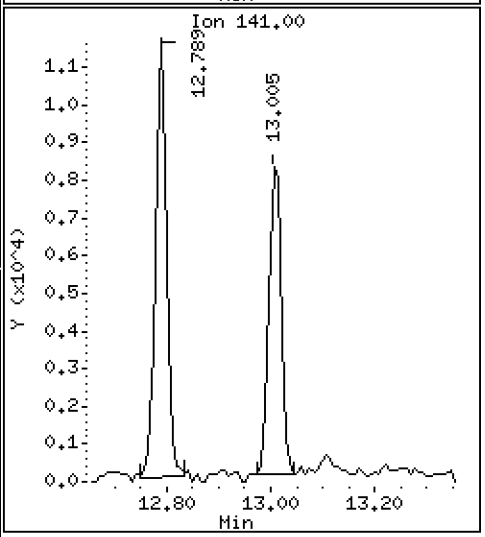
105 1-methylnaphthalene

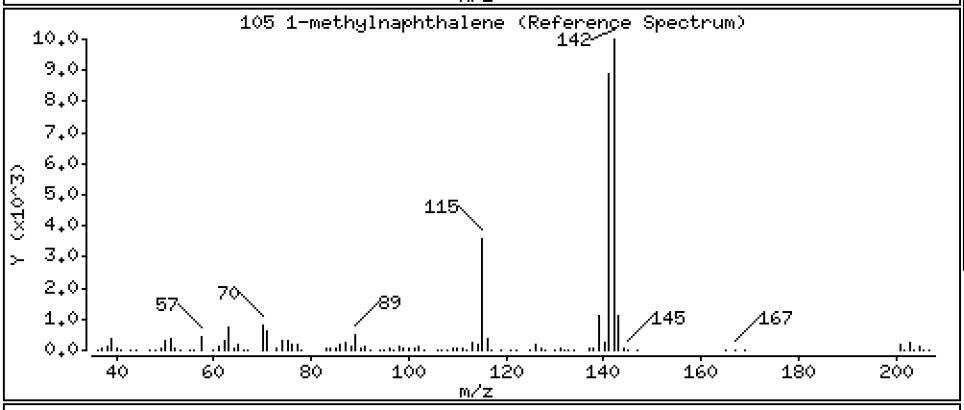
Concentration: 0.07909 ug/mL

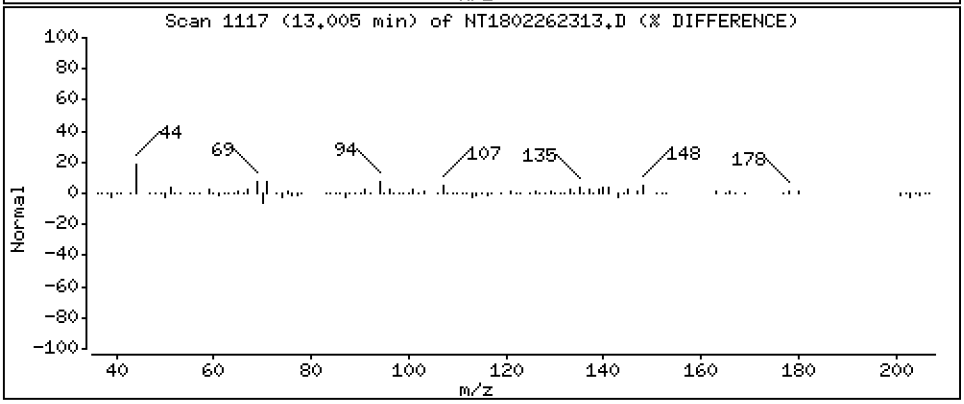












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

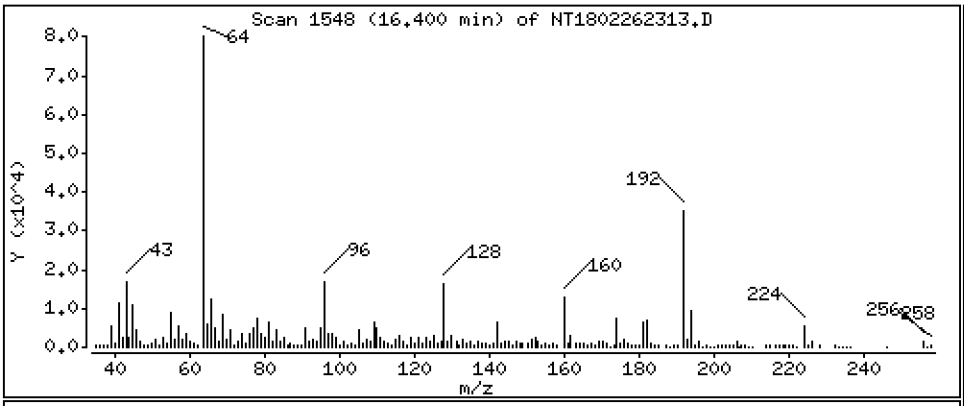
Operator: VTS

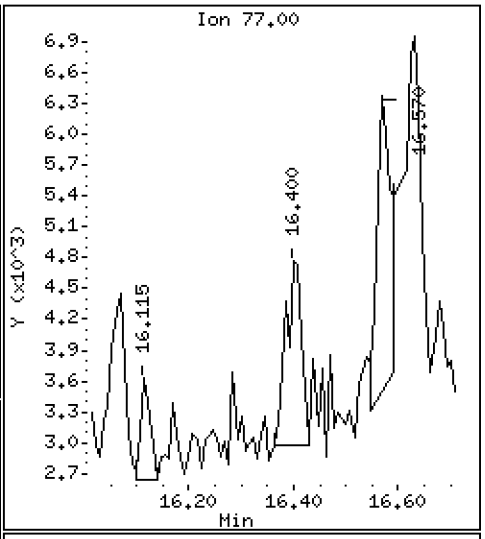
Column phase: ZB-5msi

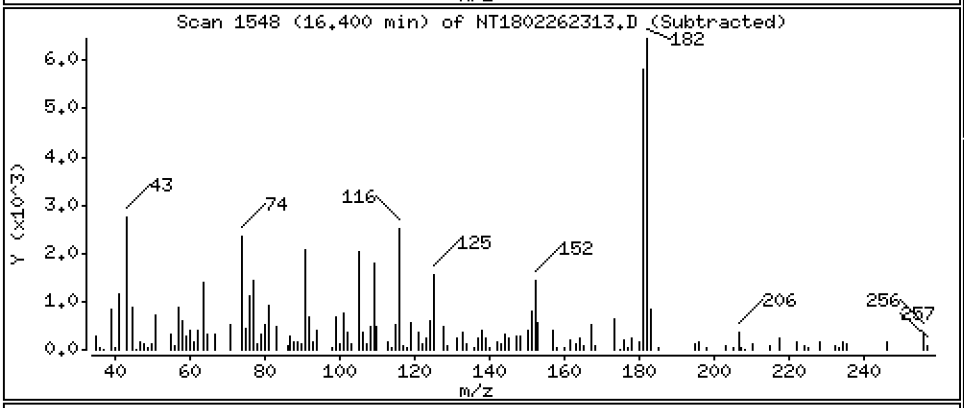
Column diameter: 0.25

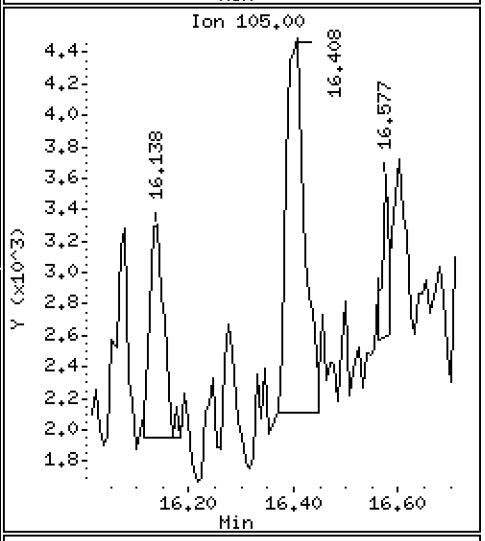
111 Azobenzene (1,2-DP-Hydrazine)

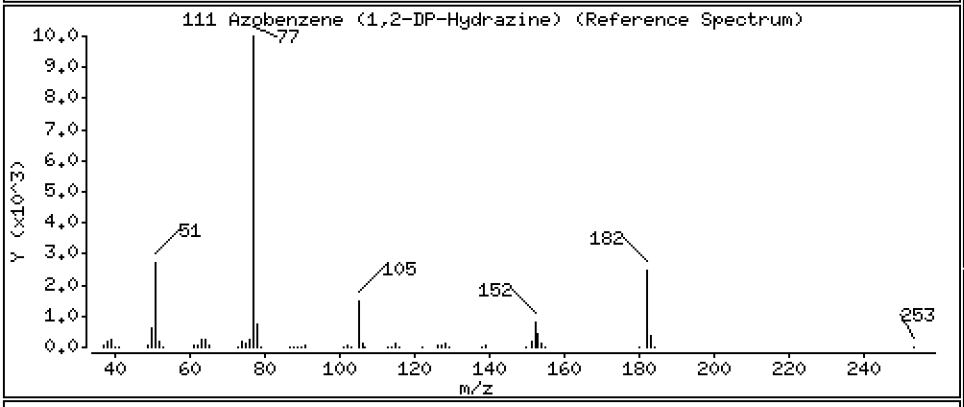
Concentration: 0.01779 ug/mL

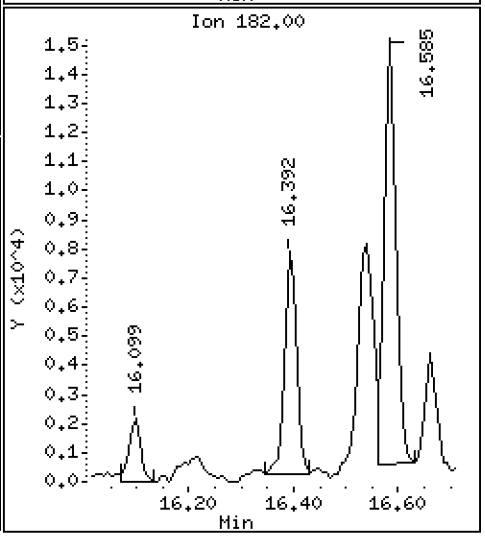


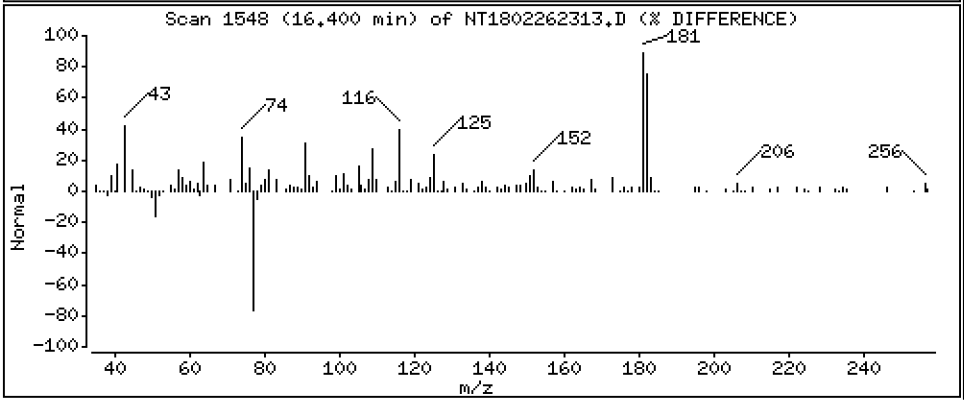












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

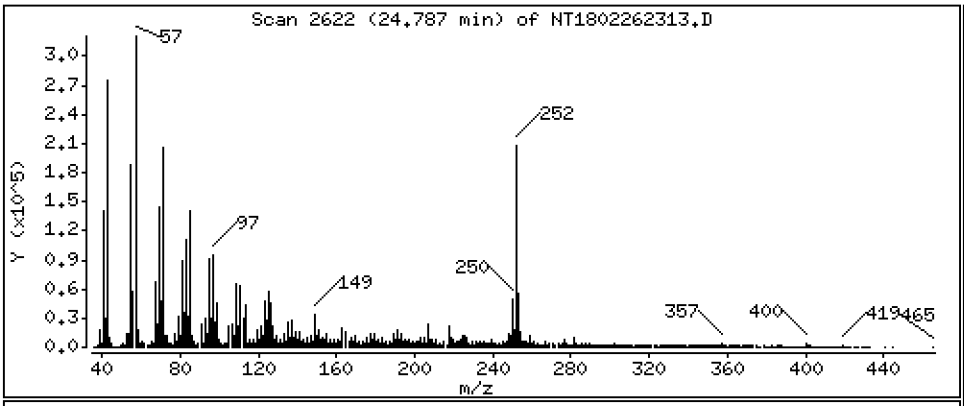
Operator: VTS

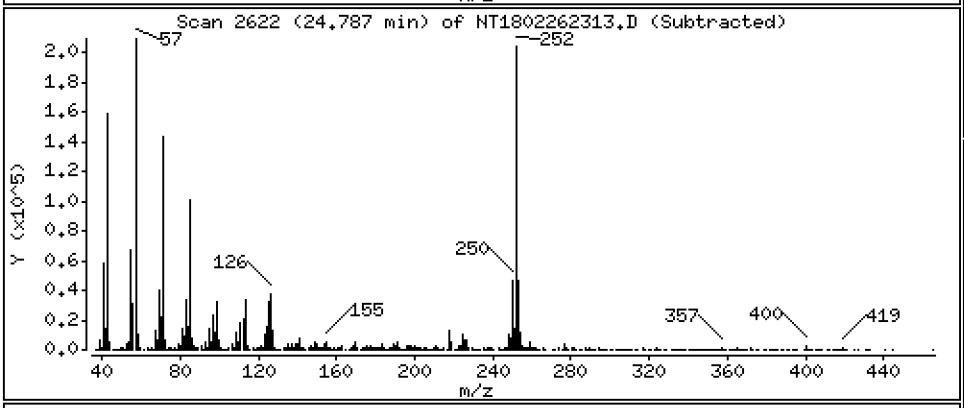
Column phase: ZB-5msi

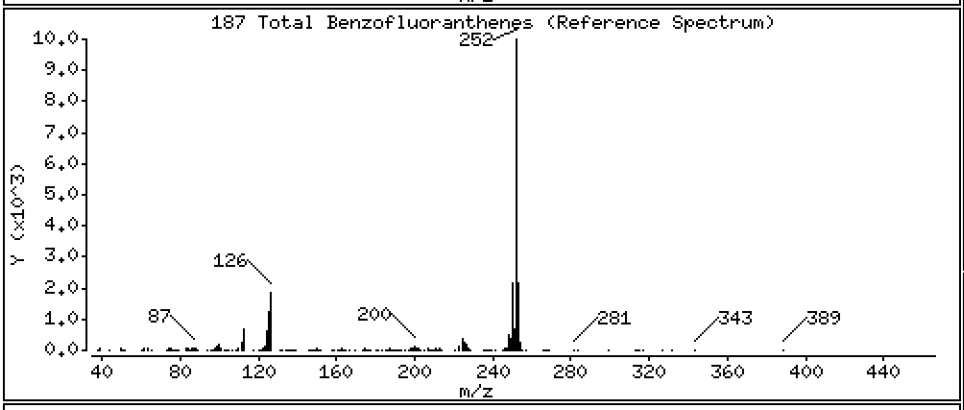
Column diameter: 0.25

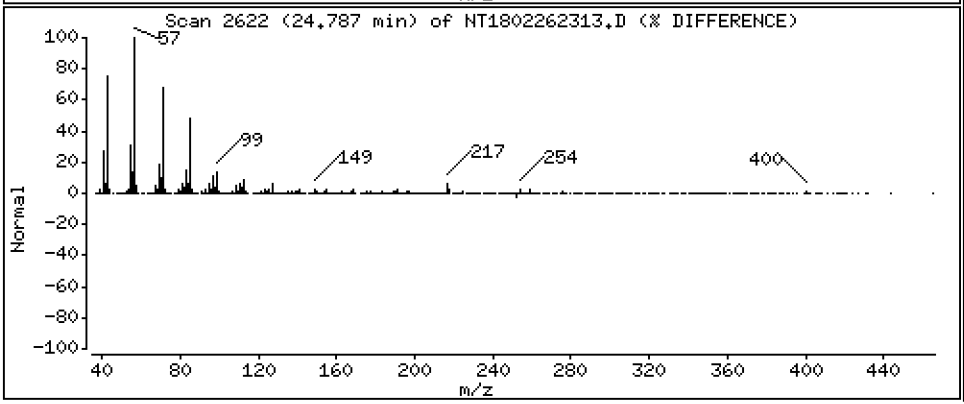
187 Total Benzofluoranthenes

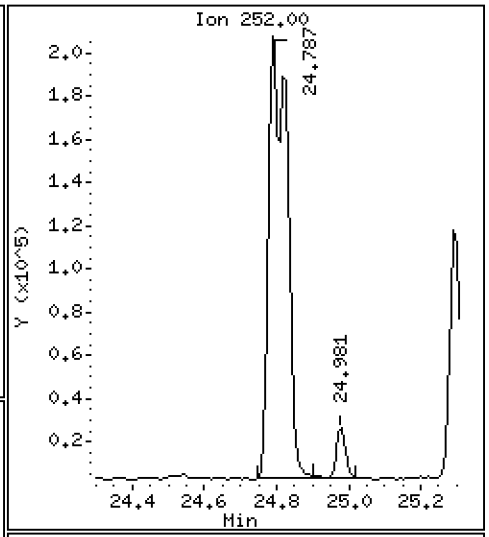
Concentration: 2.303 ug/mL

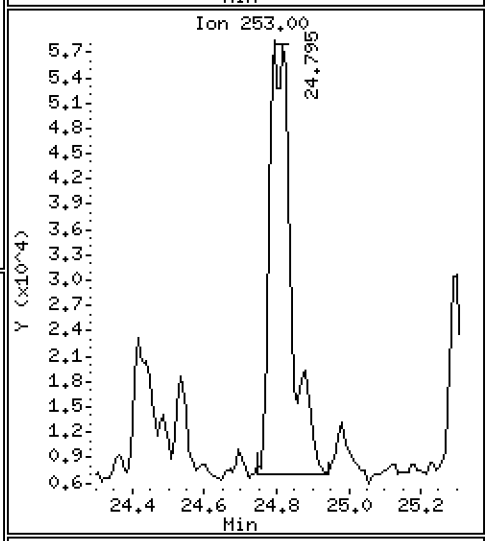


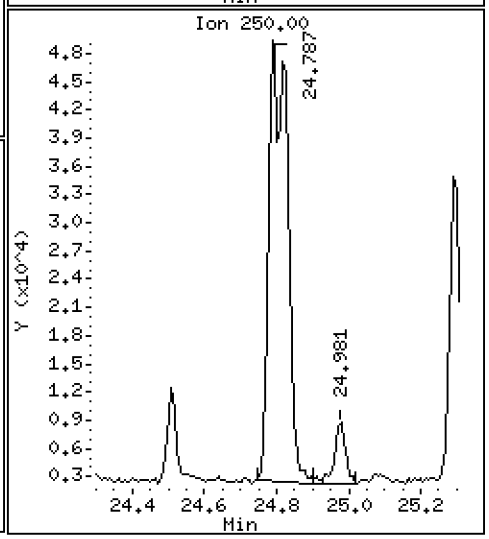












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262313.D
Lab Smp Id: 23A0134-04
Inj Date : 26-FEB-2023 19:53
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-04
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.766	6.743	(0.759)	456692	4.96049	4.960
$	2 Phenol-d5	99	8.312	8.296	(0.932)	604858	5.08356	5.084
	3 Phenol	94	8.327	8.319	(0.934)	69168	0.55872	0.5587
$	5 2-Chlorophenol-d4	132	8.566	8.559	(0.961)	524355	5.06439	5.064
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	269849	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.272	9.272	(1.040)	218145	2.97200	2.972
	12 1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	313	0.00281	0.002814
	11 Benzyl alcohol	108	9.202	9.186	(1.032)	13608	0.23118	0.2312
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	9.427	9.411	(1.057)	2054	0.02145	0.02145
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.691	9.683	(1.087)	5685	0.05696	0.05696
$	18 Nitrobenzene-d5	82	9.993	9.993	(0.879)	363470	3.42287	3.423
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	10.913	10.990	(0.960)	49173	1.35178	1.352(M)
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	996392	4.00000	
	28 Naphthalene	128	11.403	11.403	(1.003)	29861	0.09749	0.09749
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	19698	0.09464	0.09464
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	13.562	13.570	(0.907)	787903	3.45053	3.451
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
40	Acenaphthylene	152	14.638	14.630	(0.979)	16987	0.05654	0.05654
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	14.947	14.947	(1.000)	541587	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	15.009	15.009	(1.004)	12596	0.06624	0.06624
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.334	15.334	(1.026)	20754	0.07541	0.07541
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	15.914	15.921	(1.065)	2939113	14.6373	14.64
49	Fluorene	166	16.037	16.037	(1.073)	17046	0.07729	0.07729
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	204268	7.22814	7.228
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	17.960	17.952	(1.000)	1114726	4.00000	
60	Phenanthrene	178	17.999	17.999	(1.002)	181877	0.51872	0.5187
61	Anthracene	178	18.092	18.092	(1.007)	65106	0.19485	0.1949
62	Carbazole	167	18.432	18.424	(1.026)	27950	0.09129	0.09129
63	Di-n-butylphthalate	149	19.252	19.237	(1.072)	23448	0.06919	0.06919
64	Fluoranthene	202	20.436	20.382	(0.889)	421437	1.05553	1.056
65	Pyrene	202	20.846	20.800	(0.906)	696328	1.63525	1.635
$ 66	Terphenyl-d14	244	21.117	21.094	(0.918)	1330624	3.89599	3.896
67	Butylbenzylphthalate	149	22.031	22.023	(0.958)	19055	0.11785	0.1178
68	Benzo(a)anthracene	228	22.968	22.952	(0.999)	267421	0.65001	0.6500
* 69	Chrysene-d12	240	22.998	22.983	(1.000)	1139581	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.037	23.029	(1.002)	425087	0.99365	0.9936
72	bis(2-Ethylhexyl)phthalate	149	23.053	23.053	(0.959)	298345	1.21525	1.215
* 134	Di-n-octylphthalate-d4	153	24.028	24.020	(1.000)	1709976	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	24.787	24.764	(0.972)	448888	1.41252	1.413
75	Benzo(k)fluoranthene	252	24.818	24.802	(0.973)	366444	1.01746	1.017(H)
76	Benzo(a)pyrene	252	25.391	25.368	(0.996)	219177	0.74397	0.7440
* 77	Perylene-d12	264	25.499	25.476	(1.000)	974079	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.943	27.920	(1.096)	80828	0.21855	0.2186
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	28.665	28.642	(1.124)	73113	0.24659	0.2466
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.005	13.005	(1.144)	14902	0.07909	0.07909
111	Azobenzene (1,2-DP-Hydrazine)	77	16.400	16.361	(1.097)	3935	0.01779	0.01779

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.787	24.802	(0.972)	739948	2.30296	2.303
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262313.D
Lab Smp Id: 23A0134-04
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	269849	10.54
27 Naphthalene-d8	943164	471582	1886328	996392	5.64
42 Acenaphthene-d10	501893	250947	1003786	541587	7.91
59 Phenanthrene-d10	896502	448251	1793004	1114726	24.34
69 Chrysene-d12	842481	421241	1684962	1139581	35.26
134 Di-n-octylphthala	1278043	639022	2556086	1709976	33.80
77 Perylene-d12	915681	457841	1831362	974079	6.38

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.07
134 Di-n-octylphthala	24.02	23.52	24.52	24.03	0.03
77 Perylene-d12	25.48	24.98	25.98	25.50	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262313.D

Lab ID: 23A0134-04
nt18.i, ABN.m, 26-FEB-2023 19:53

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.960	0.967	-0.0067	Benzoic acid

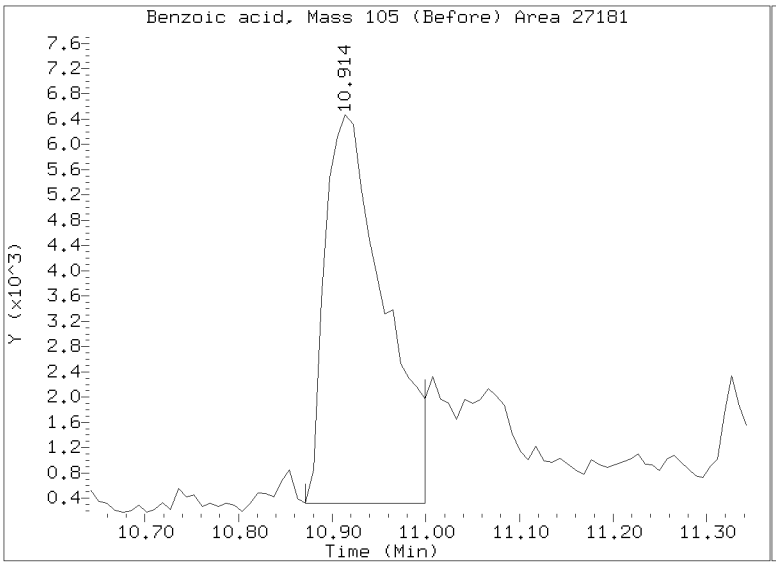
RRT check based on Ccal File: NT1802262302.D

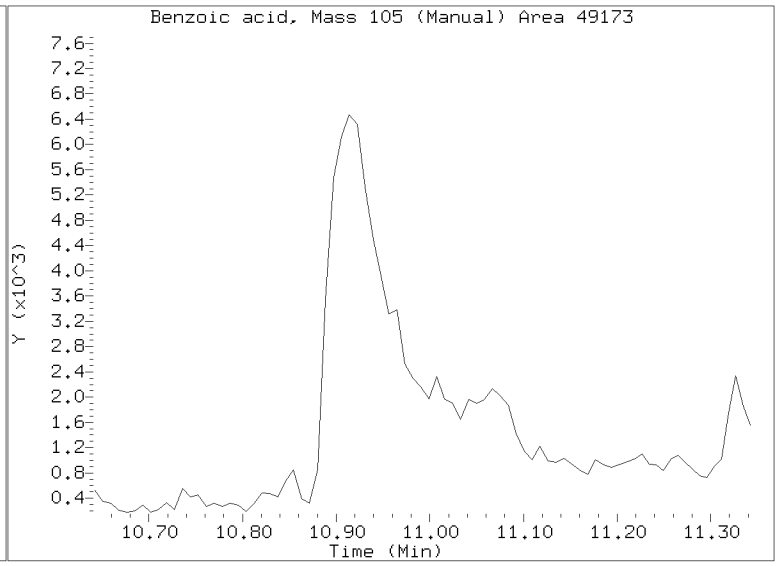
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/NT1802262313.D
Injection Date: 26-FEB-2023 19:53
Lab ID:23A0134-04 Client ID:
Report Date: 03/10/2023 07:47





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1173

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-05 C	SDG:	23A0134
Sampled:	01/06/23 11:22	Prepared:	01/19/23 13:35	File ID:	NT1802262314.D
% Solids:	47.16	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 20:33
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	21.82 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	451		4.3	19.4
106-44-5	4-Methylphenol	1	12.0	J	7.2	19.4
91-20-3	Naphthalene	1	20.5		4.1	19.4
91-57-6	2-Methylnaphthalene	1	15.4	J	4.4	19.4
208-96-8	Acenaphthylene	1	15.9	J	6.1	19.4
131-11-3	Dimethylphthalate	1	6.0	J	4.3	19.4
83-32-9	Acenaphthene	1	24.9		5.1	19.4
132-64-9	Dibenzofuran	1	23.6		13.7	19.4
86-73-7	Fluorene	1	32.0		14.2	19.4
85-01-8	Phenanthrene	1	151		8.5	19.4
120-12-7	Anthracene	1	96.4		7.0	19.4
206-44-0	Fluoranthene	1	410		5.9	19.4
129-00-0	Pyrene	1	341		5.5	19.4
85-68-7	Butylbenzylphthalate	1	14.6	J	9.1	19.4
56-55-3	Benzo(a)anthracene	1	194		5.8	19.4
218-01-9	Chrysene	1	276		5.9	19.4
117-81-7	bis(2-Ethylhexyl)phthalate	1	175		5.3	48.6
	Benzofluoranthenes, Total	1	519		9.7	38.9
50-32-8	Benzo(a)pyrene	1	188		4.1	19.4
193-39-5	Indeno(1,2,3-cd)pyrene	1	40.9		14.2	19.4
53-70-3	Dibenzo(a,h)anthracene	1	19.4	U	16.7	19.4
191-24-2	Benzo(g,h,i)perylene	1	37.6		13.2	19.4

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	728.84	534	73.3	27 - 120	
Phenol-d5	728.84	544	74.6	29 - 120	
2-Chlorophenol-d4	728.84	543	74.5	31 - 120	
1,2-Dichlorobenzene-d4	485.89	315	64.9	32 - 120	
Nitrobenzene-d5	485.89	366	75.2	30 - 120	
2-Fluorobiphenyl	485.89	363	74.6	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1173

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

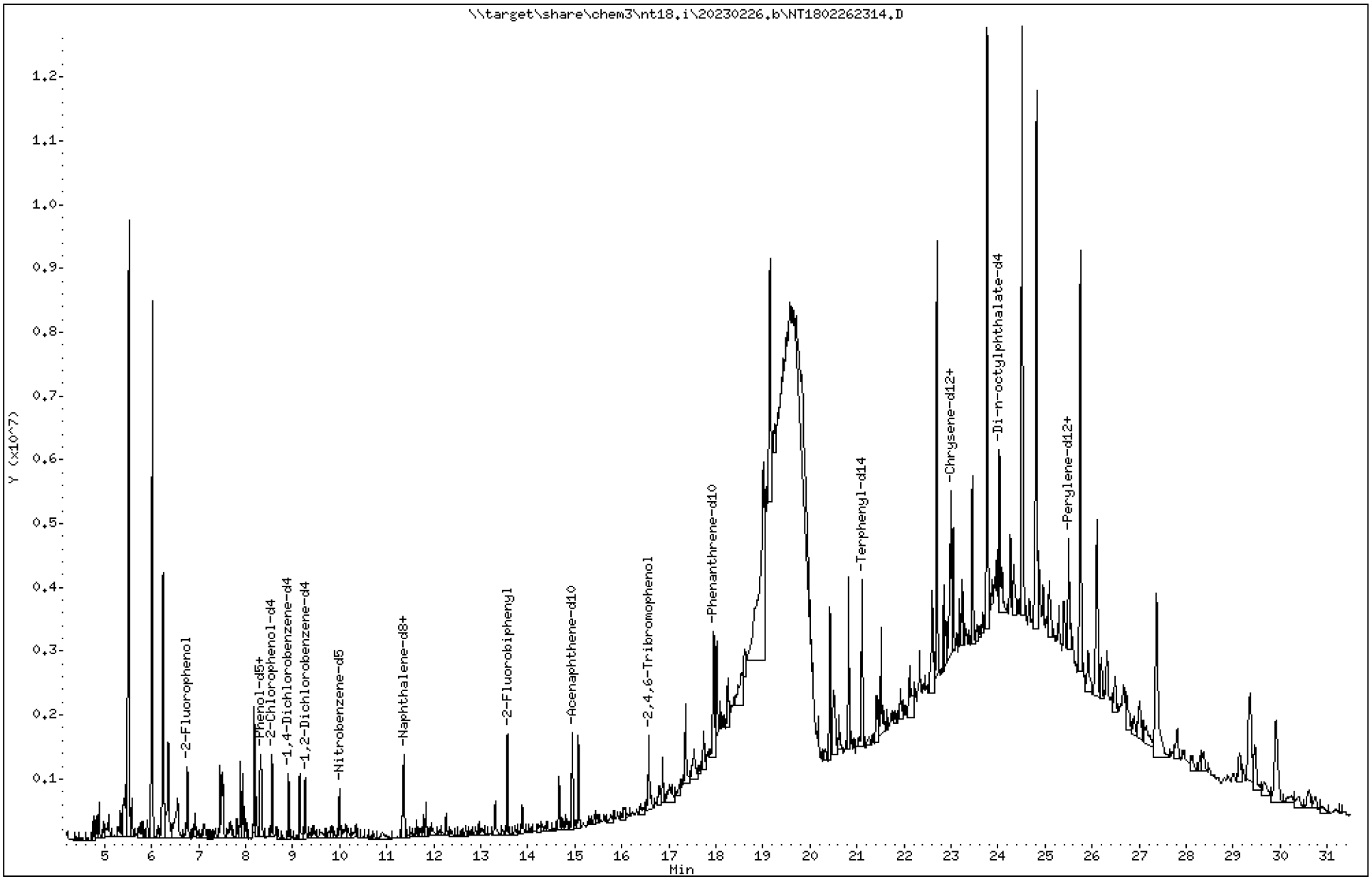
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-05 C	SDG:	23A0134
Sampled:	01/06/23 11:22	Prepared:	01/19/23 13:35	File ID:	NT1802262314.D
% Solids:	47.16	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 20:33
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	21.82 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	728.84	733	101	24 - 134	
p-Terphenyl-d14	485.89	388	79.9	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262314.D
Date : 26-FEB-2023 20:33
Client ID:
Sample Info: 23A0134-05

Instrument: nt18.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

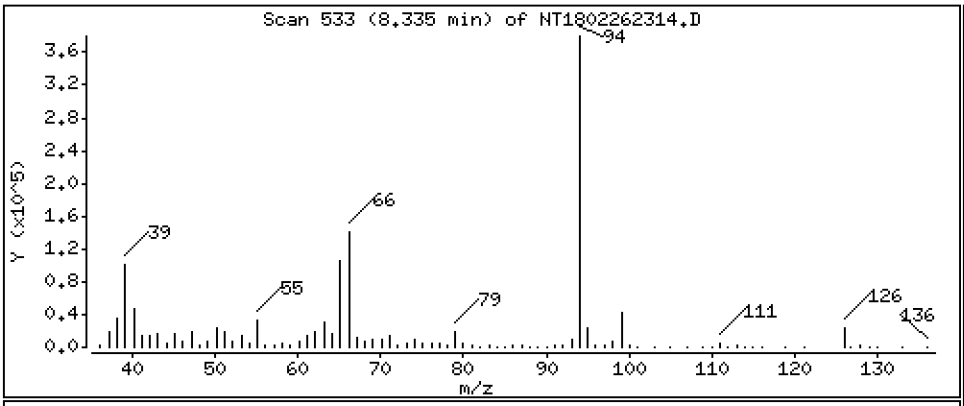
Operator: VTS

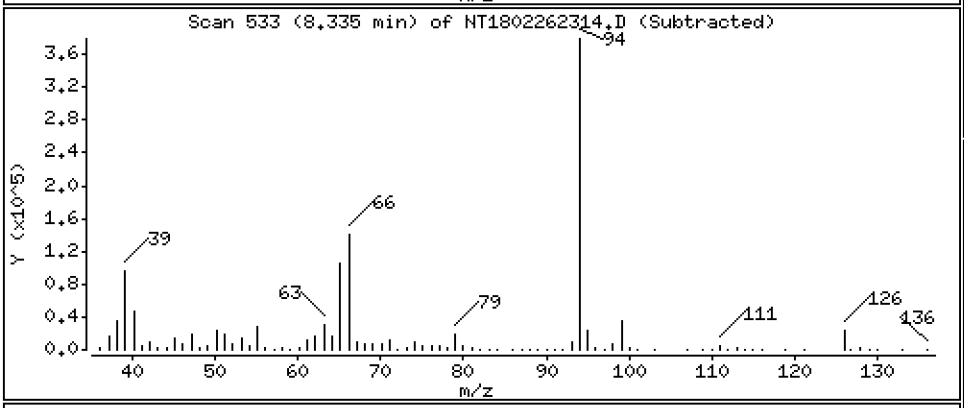
Column phase: ZB-5msi

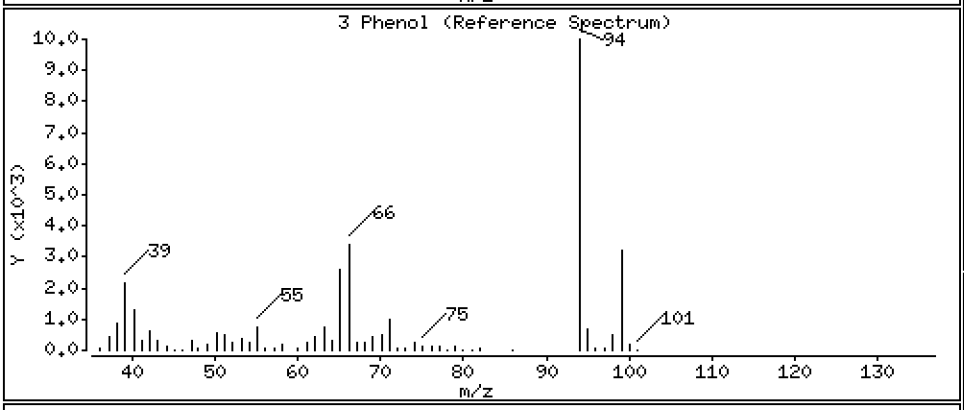
Column diameter: 0.25

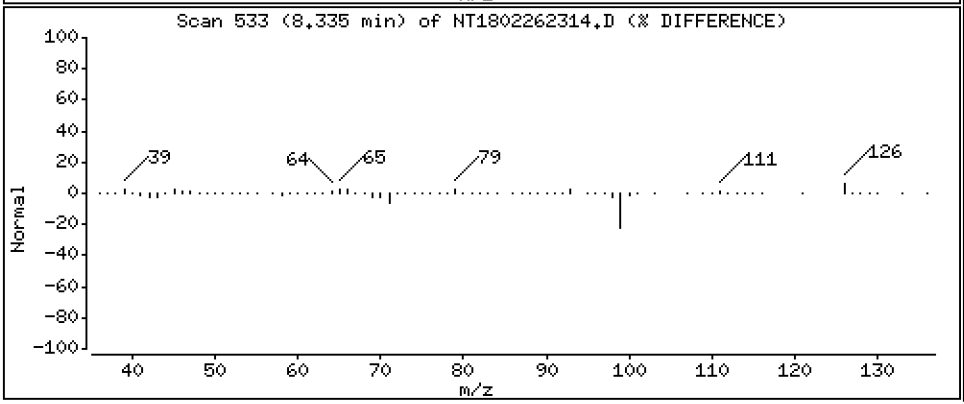
3 Phenol

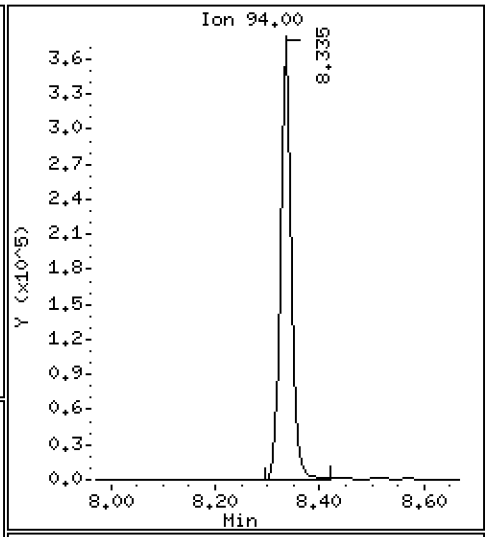
Concentration: 4.642 ug/mL

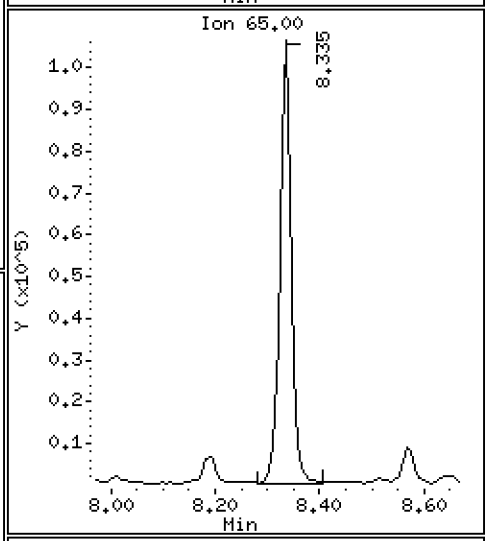


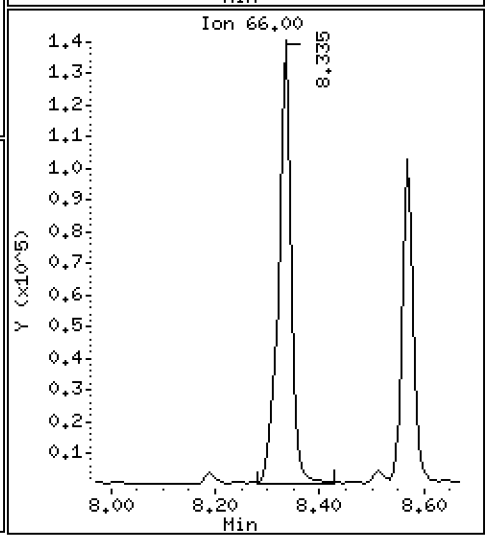












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

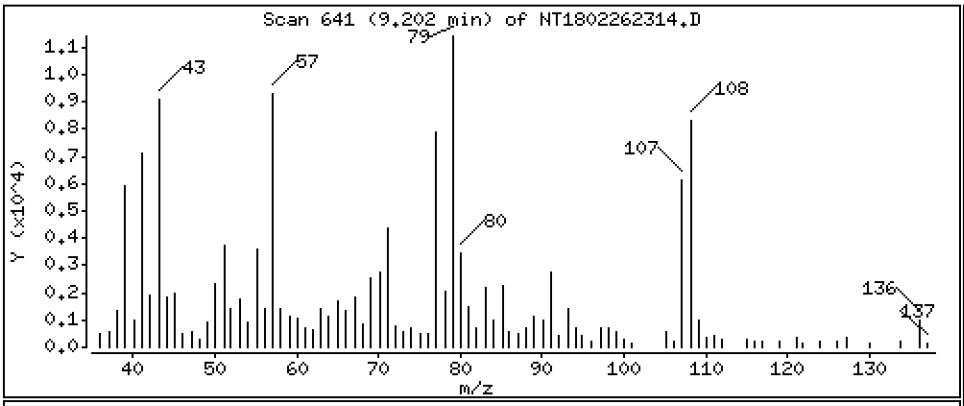
Operator: VTS

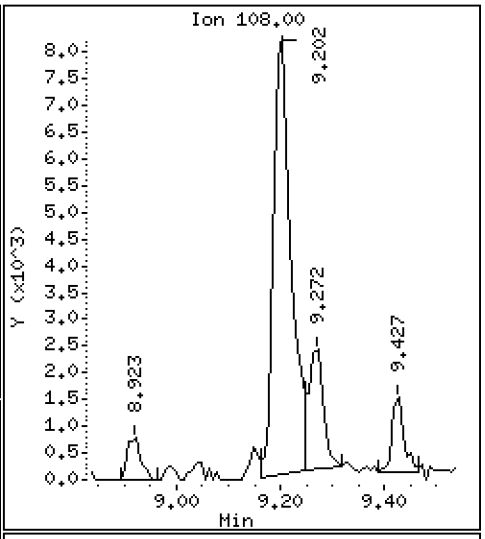
Column phase: ZB-5msi

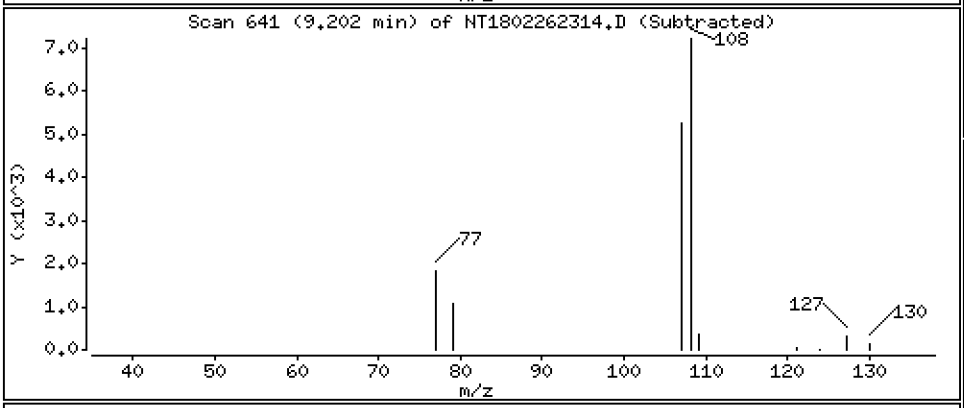
Column diameter: 0.25

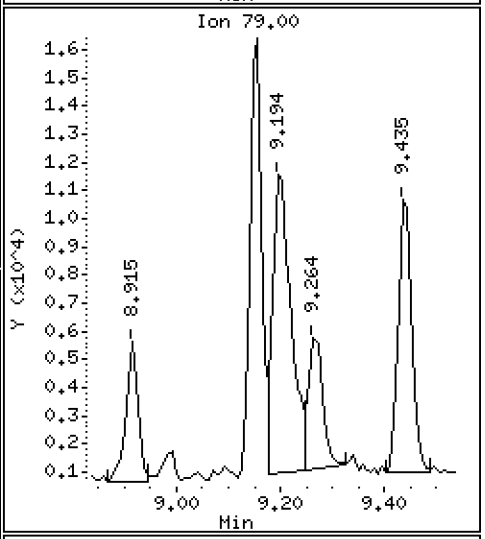
11 Benzyl alcohol

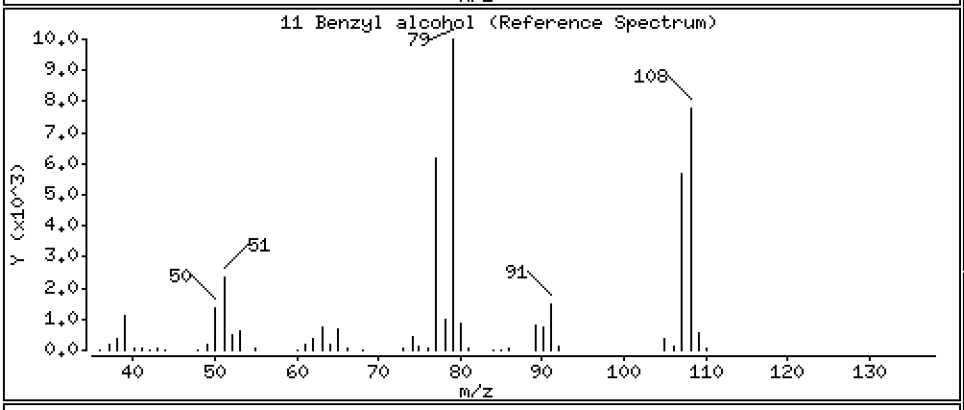
Concentration: 0.3436 ug/mL

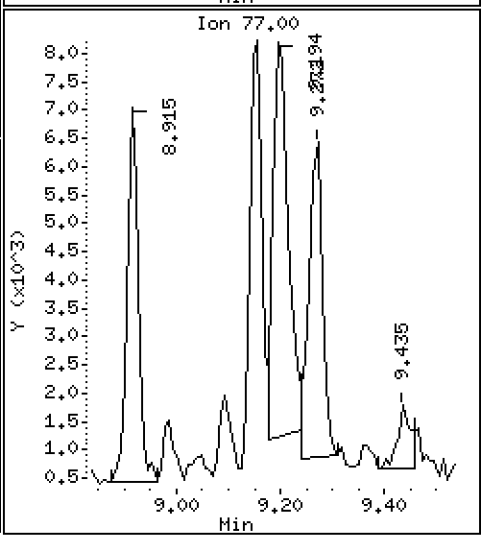


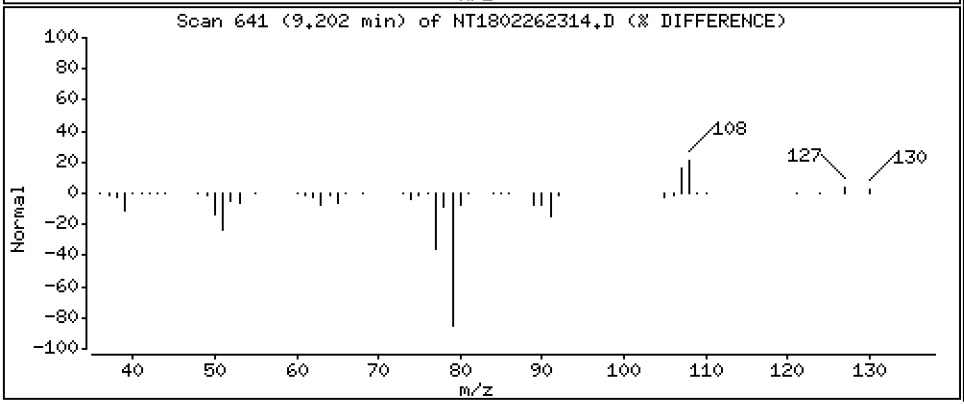












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

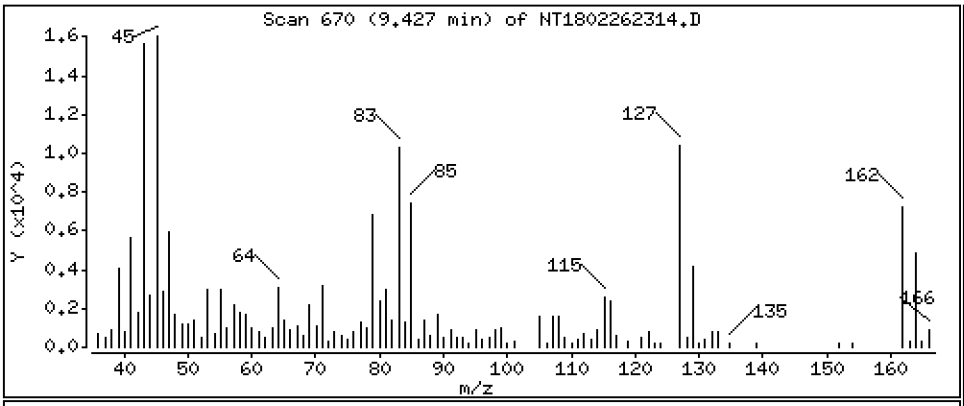
Operator: VTS

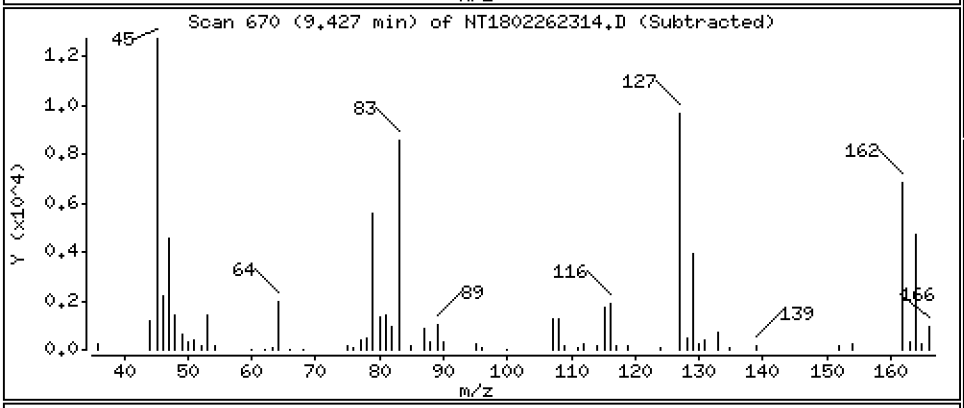
Column phase: ZB-5msi

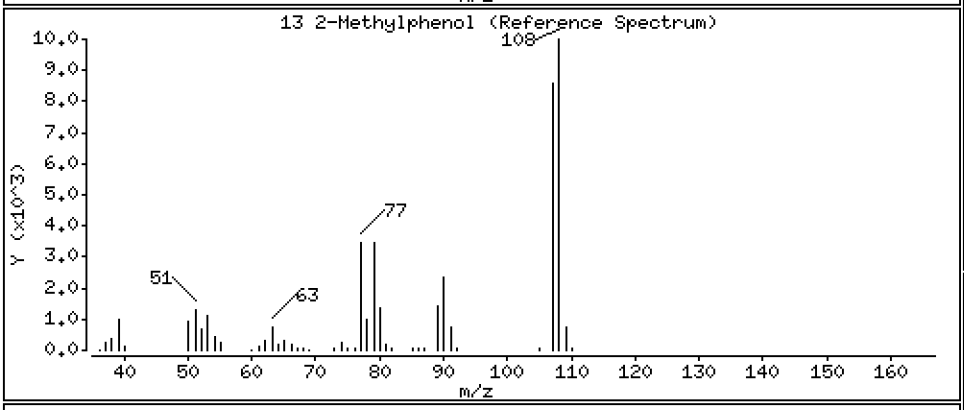
Column diameter: 0.25

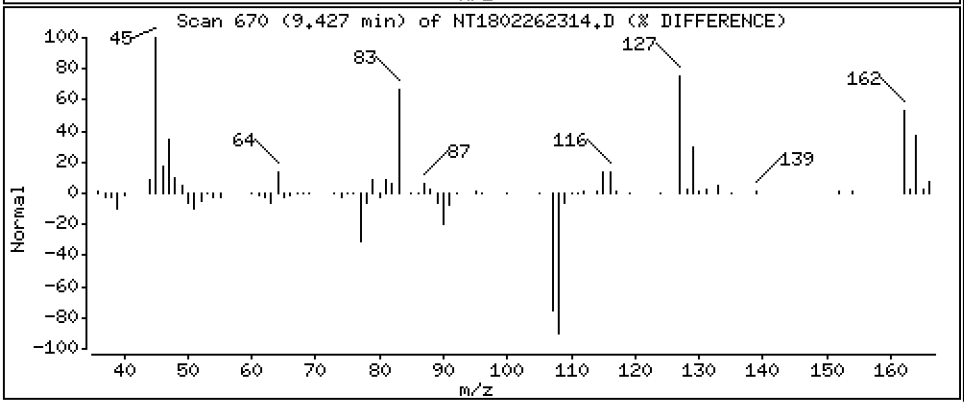
13 2-Methylphenol

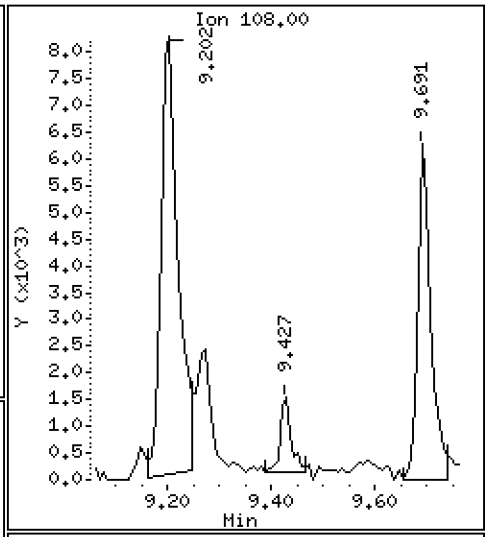
Concentration: 0.02304 ug/mL

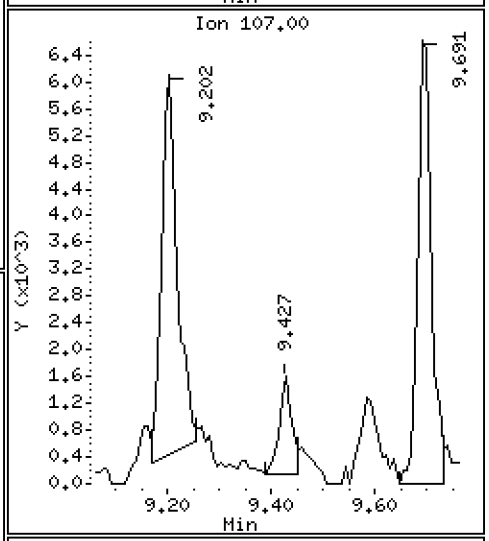


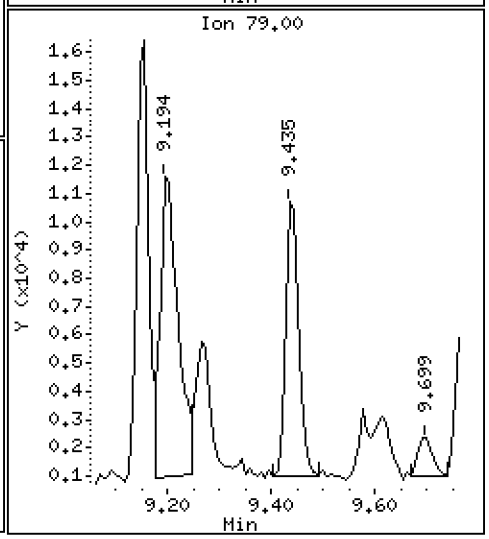












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

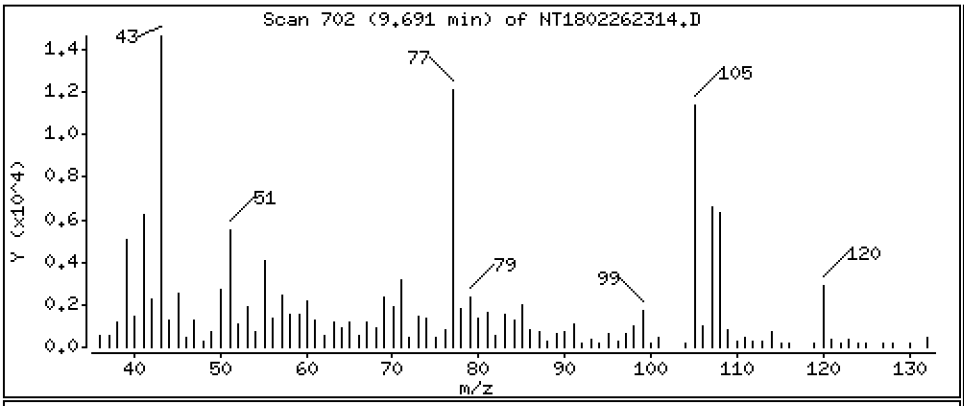
Operator: VTS

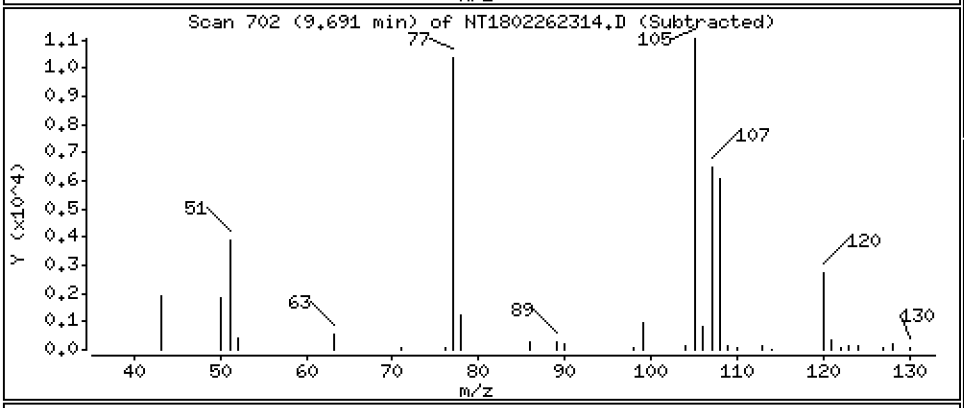
Column phase: ZB-5msi

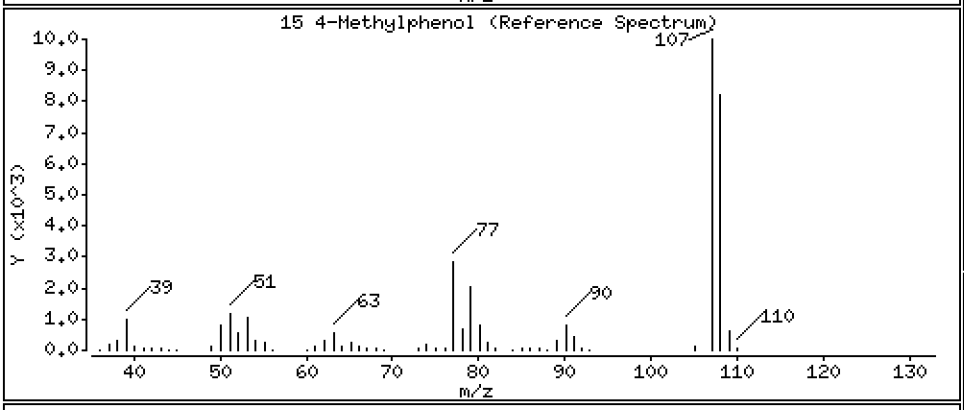
Column diameter: 0.25

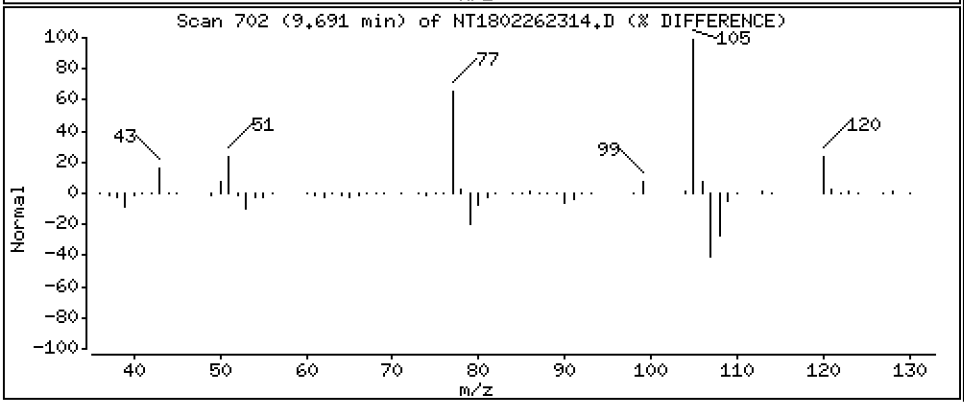
15 4-Methylphenol

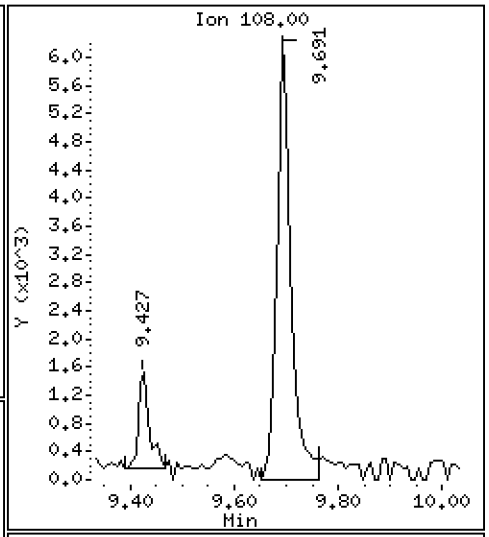
Concentration: 0.1236 ug/mL

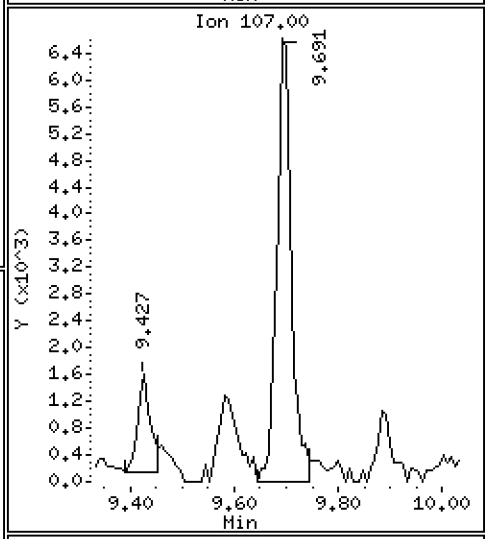


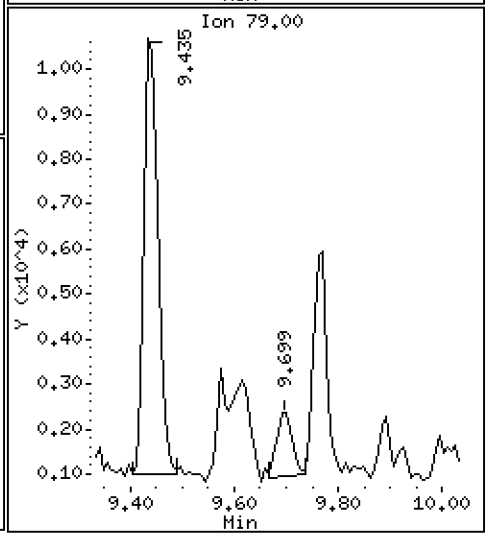












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262314.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

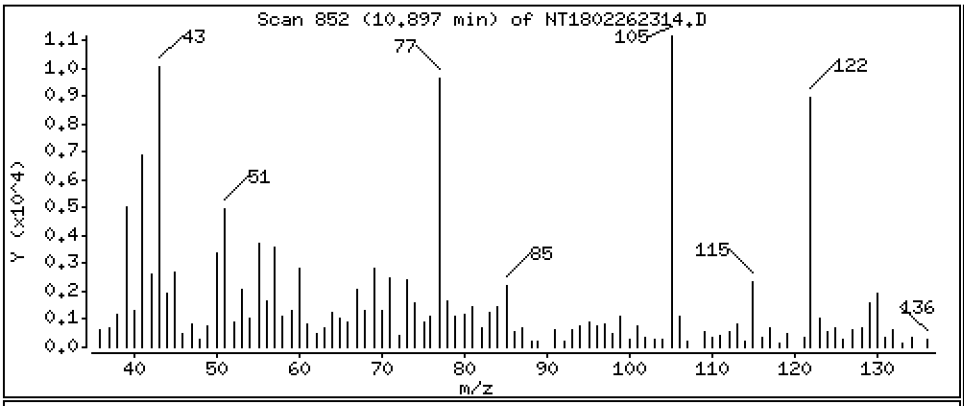
Operator: VTS

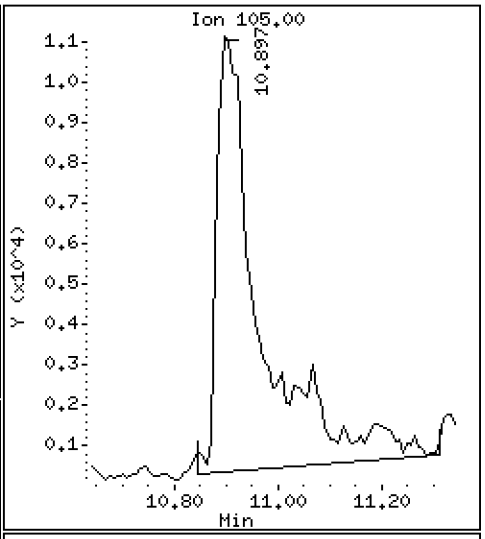
Column phase: ZB-5msi

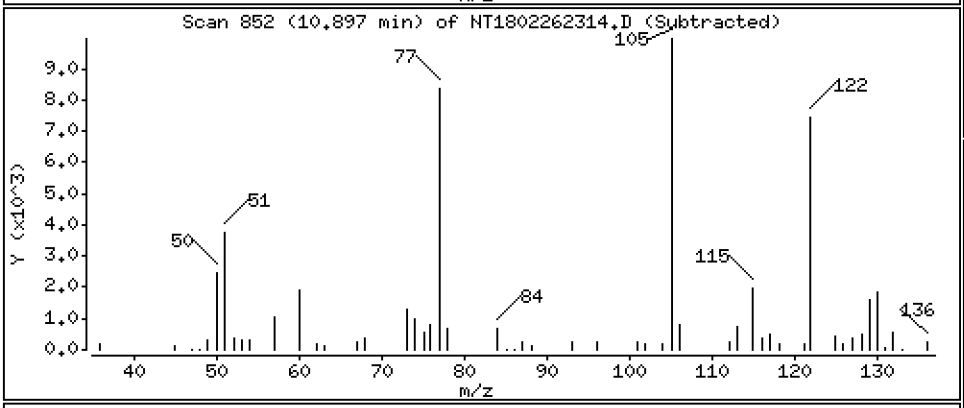
Column diameter: 0.25

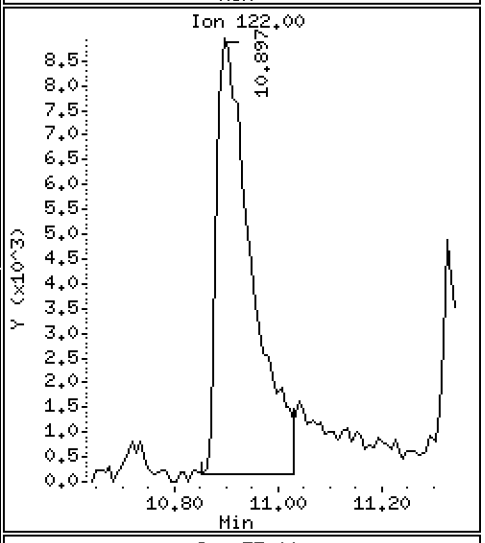
24 Benzoic acid

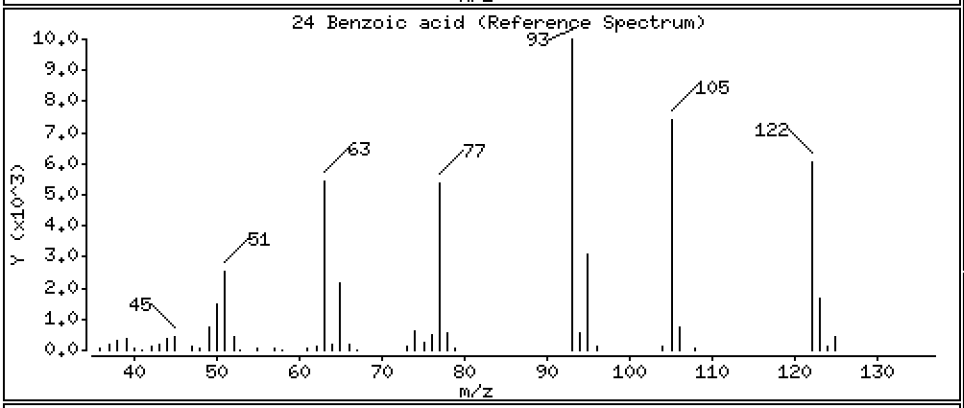
Concentration: 1.811 ug/mL

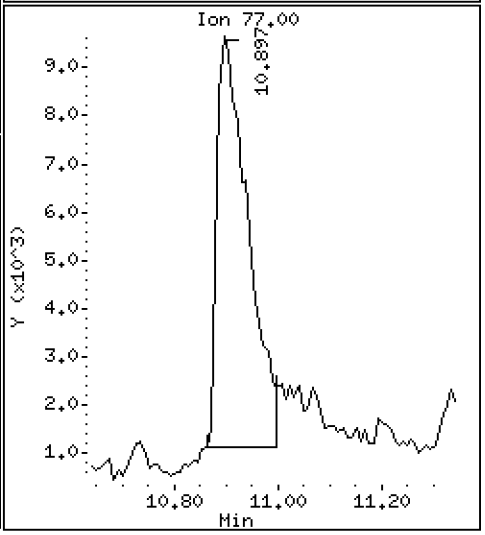


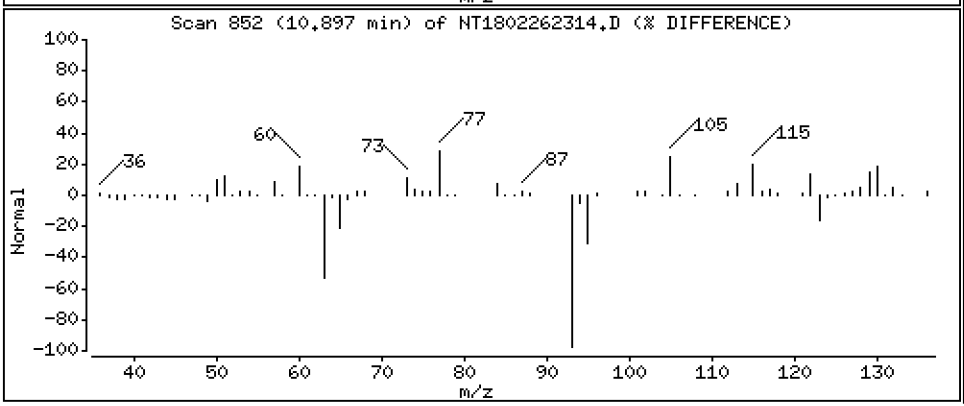












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262314.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

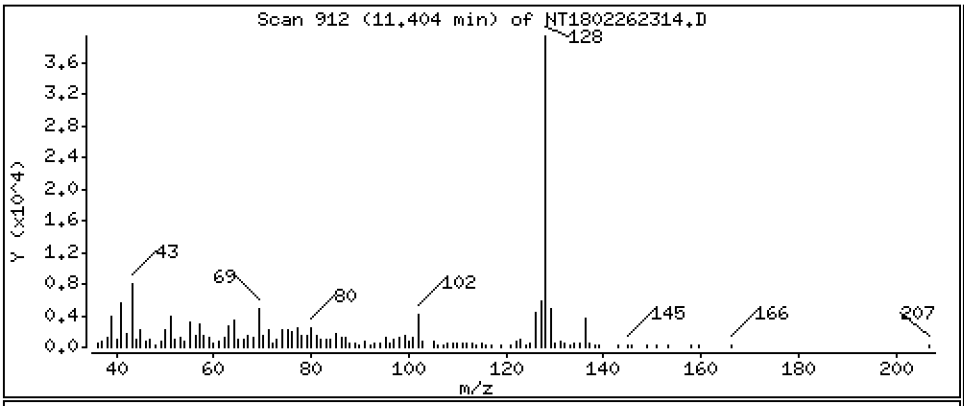
Operator: VTS

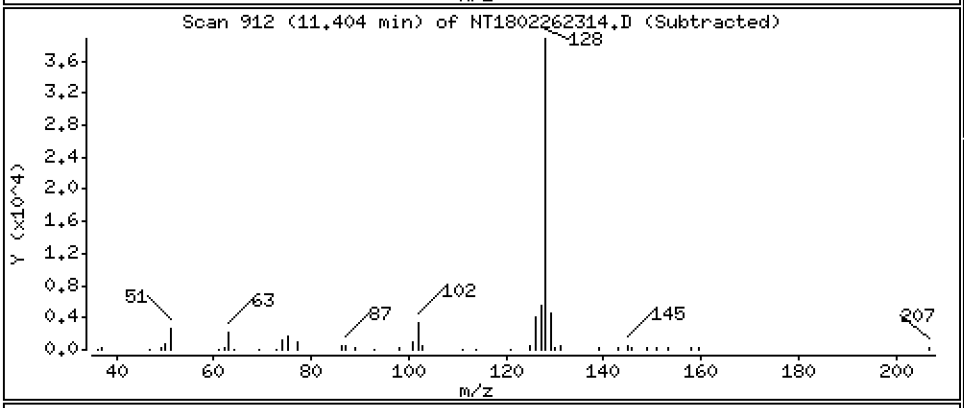
Column phase: ZB-5msi

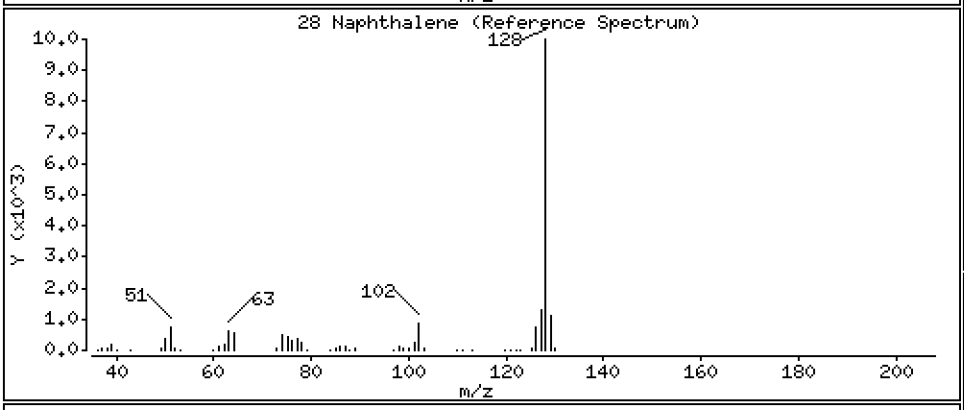
Column diameter: 0.25

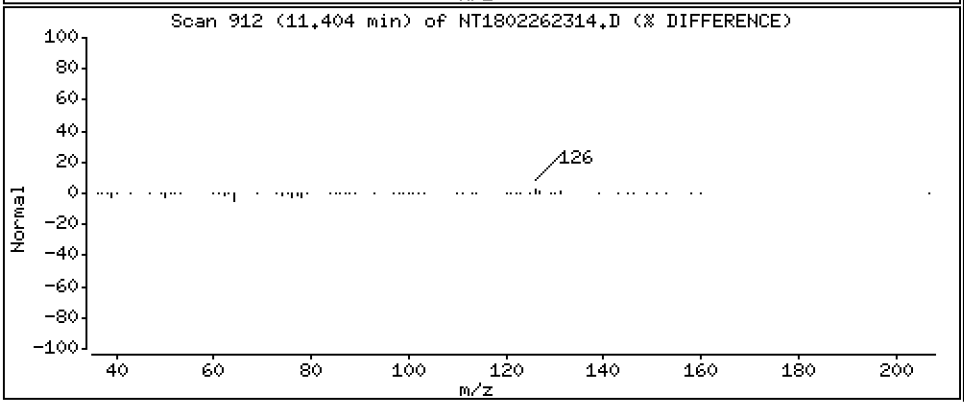
28 Naphthalene

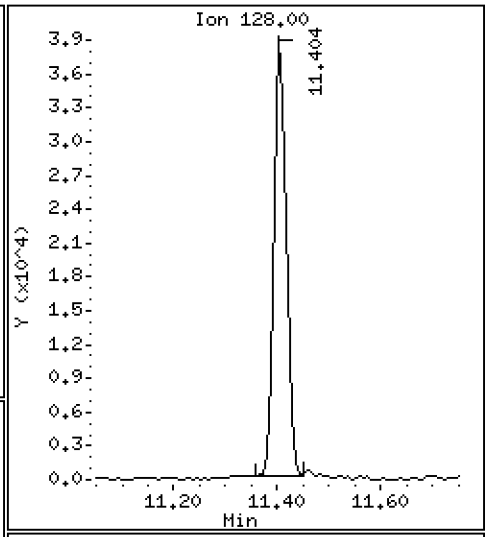
Concentration: 0.2111 ug/mL

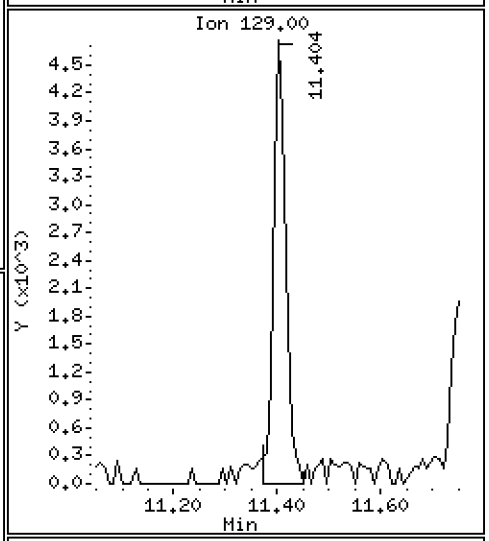


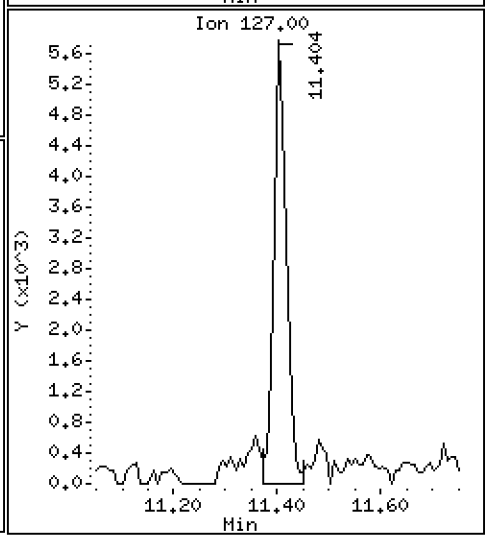












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

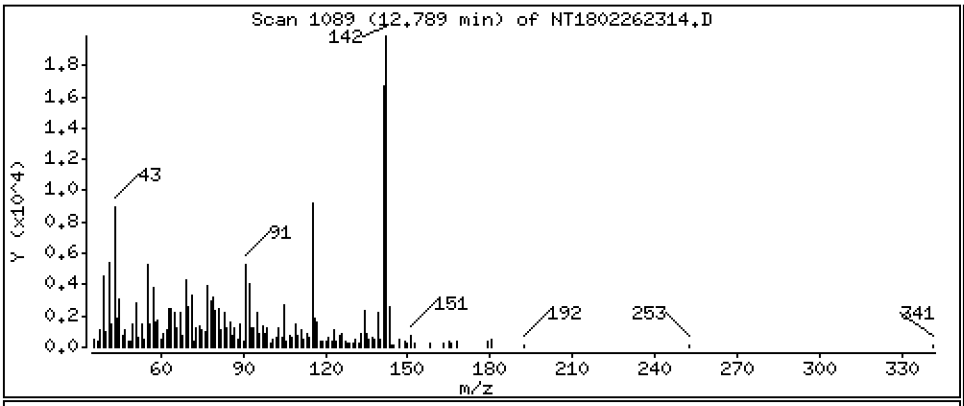
Operator: VTS

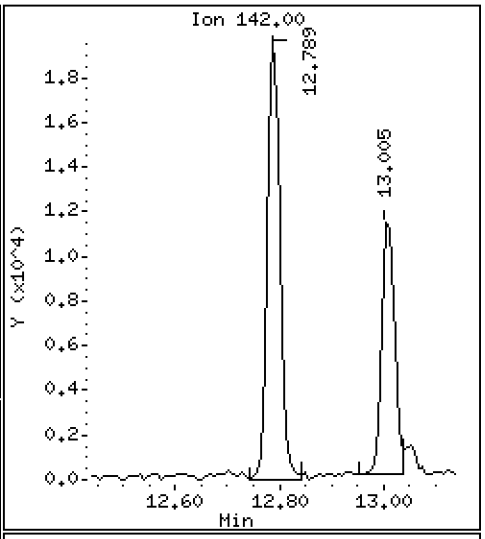
Column phase: ZB-5msi

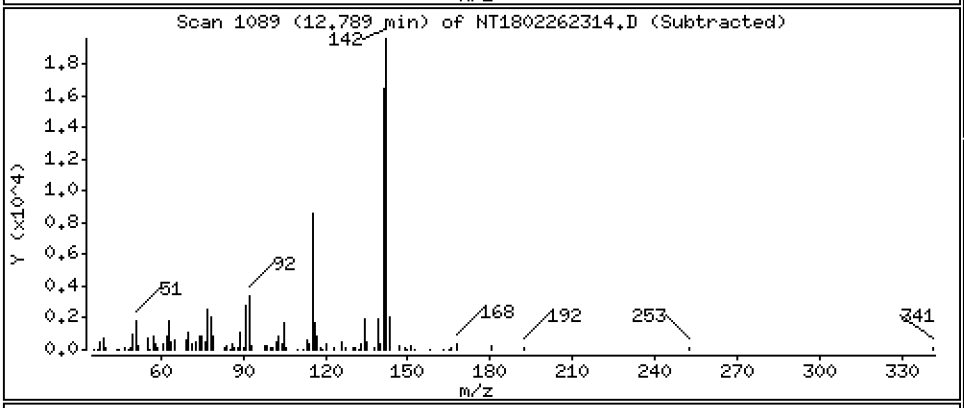
Column diameter: 0.25

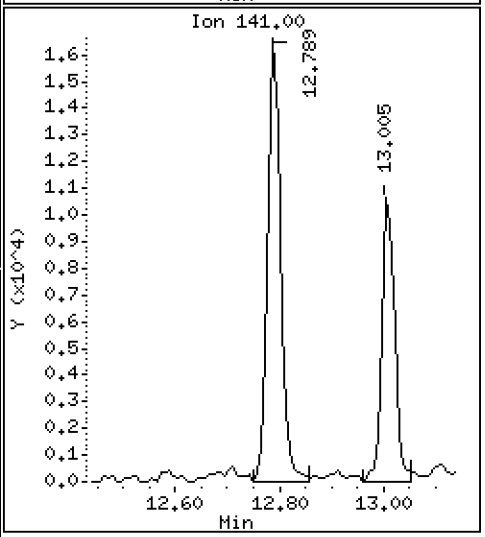
32 2-Methylnaphthalene

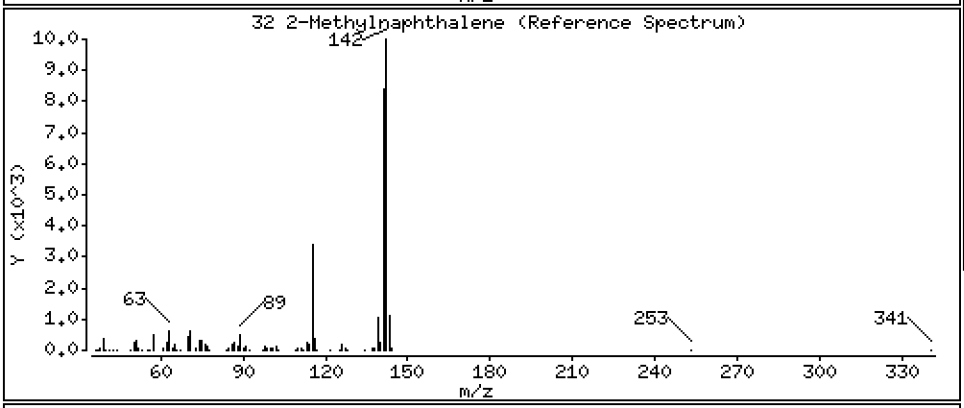
Concentration: 0.1586 ug/mL

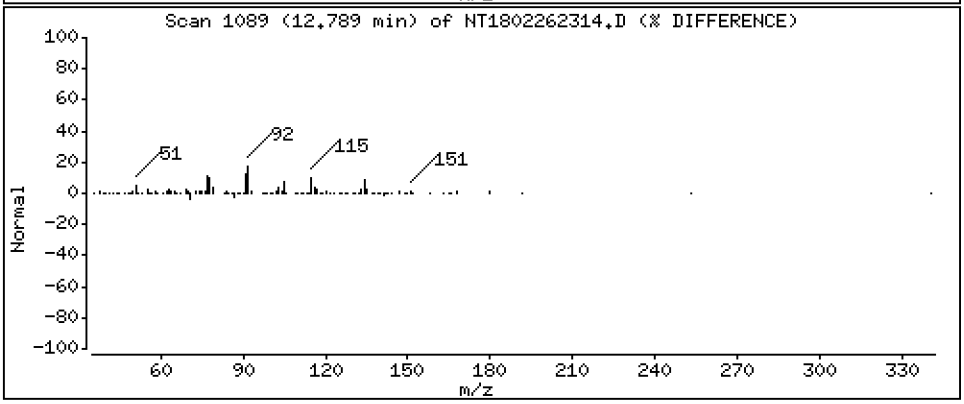












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262314.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

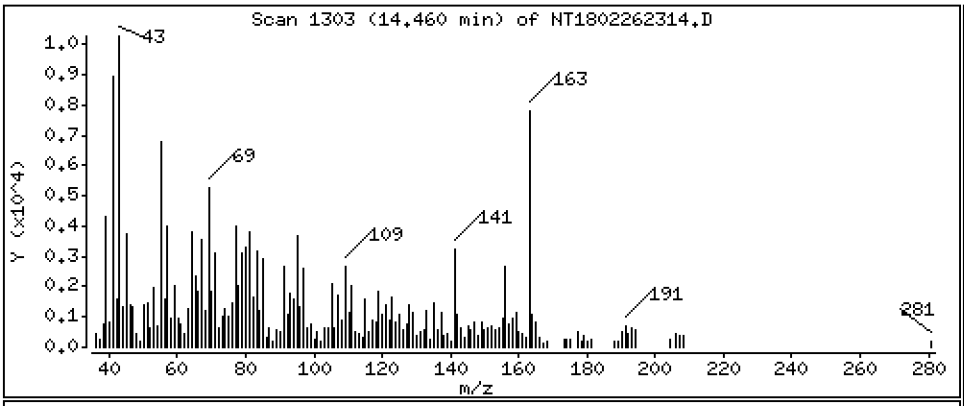
Operator: VTS

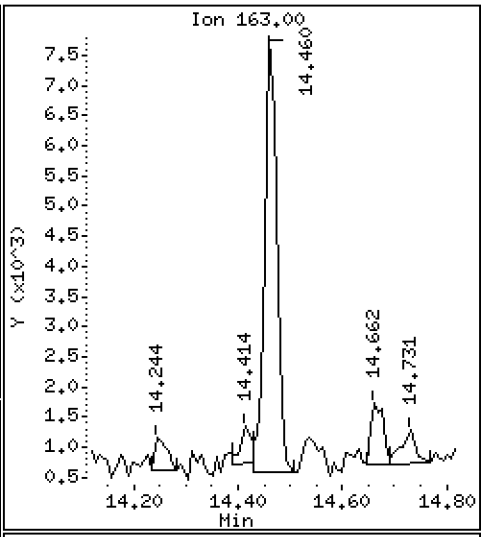
Column phase: ZB-5msi

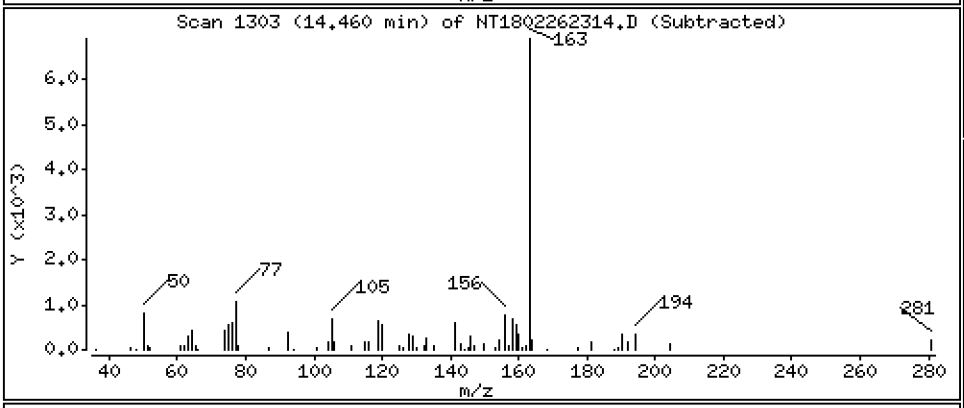
Column diameter: 0.25

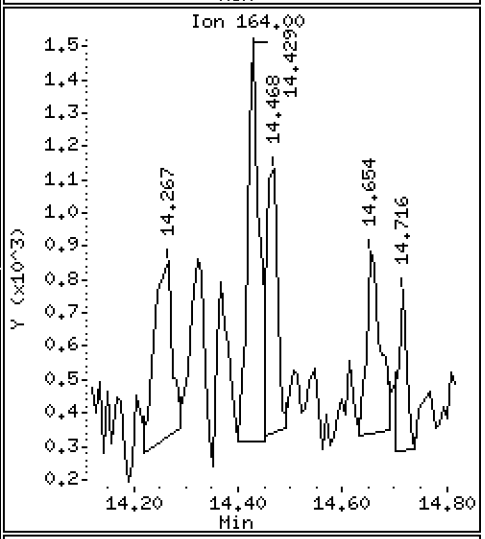
39 Dimethylphthalate

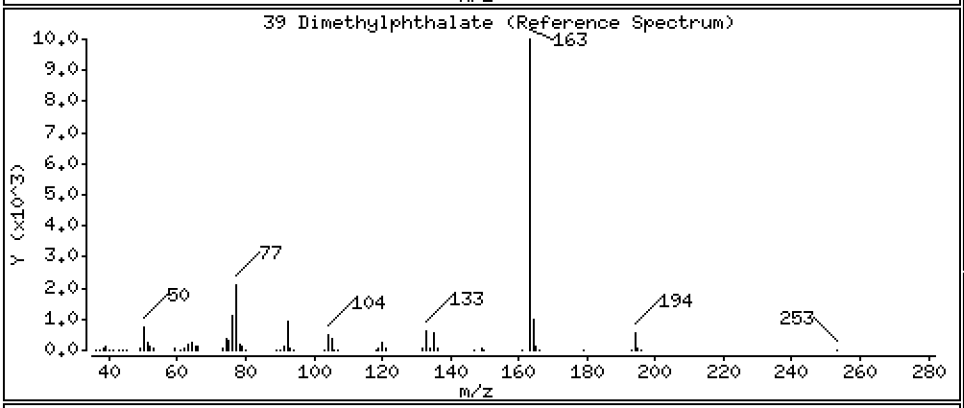
Concentration: 0.06130 ug/mL

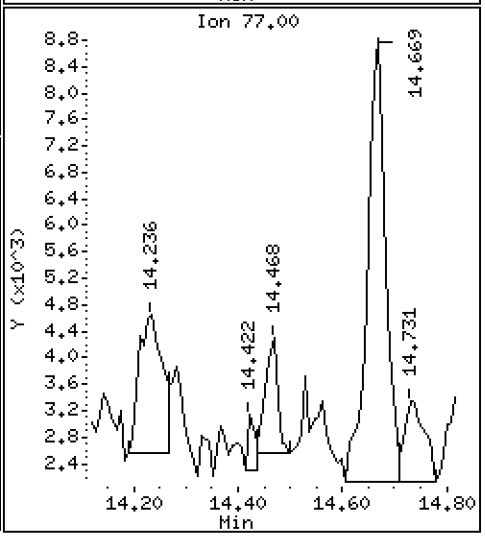


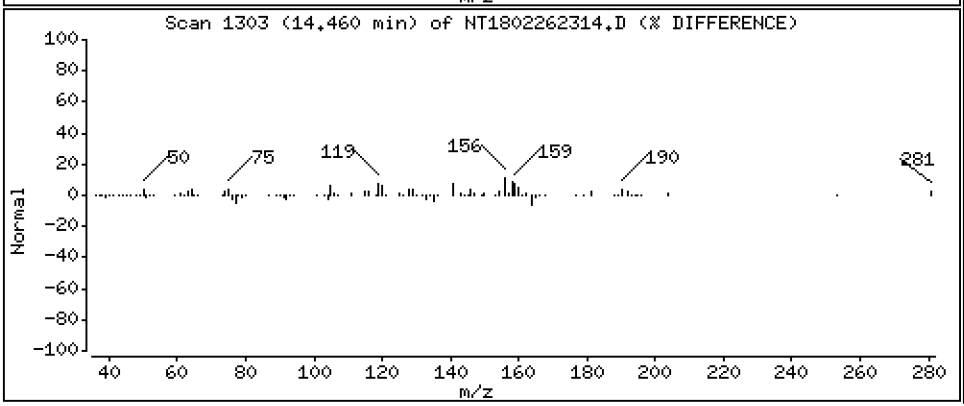












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

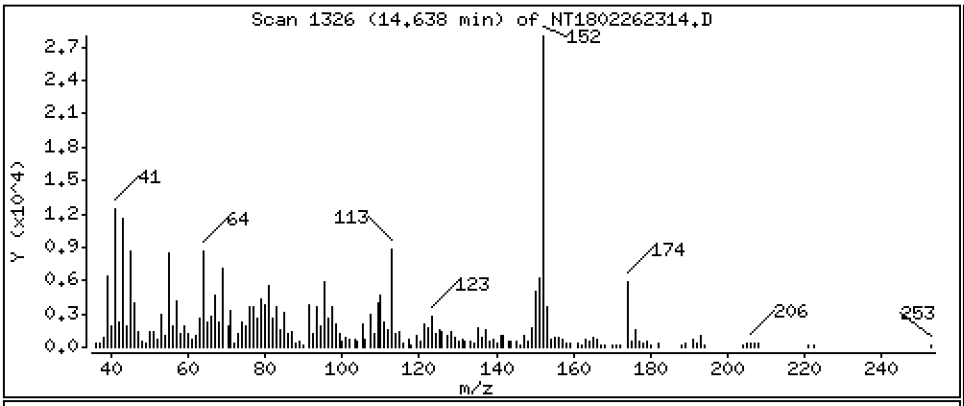
Operator: VTS

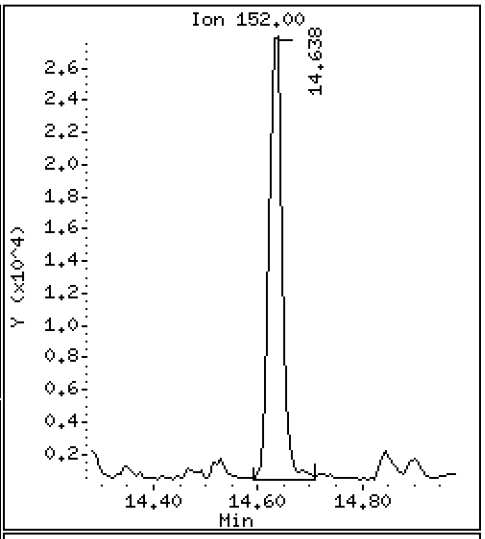
Column phase: ZB-5msi

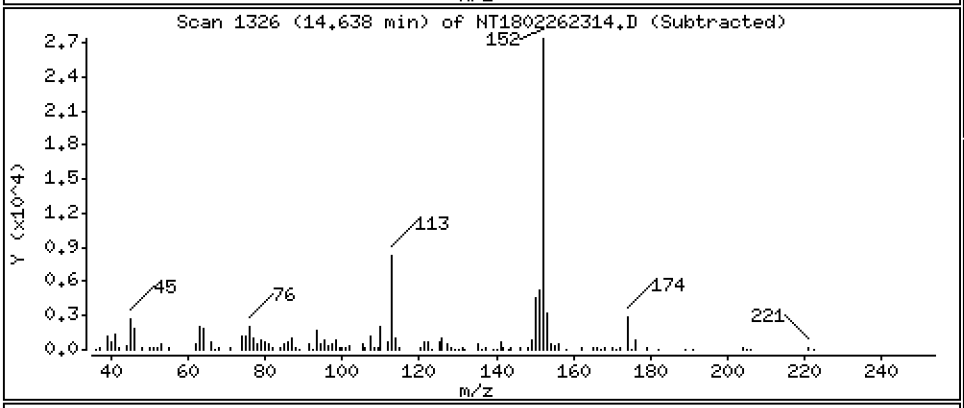
Column diameter: 0.25

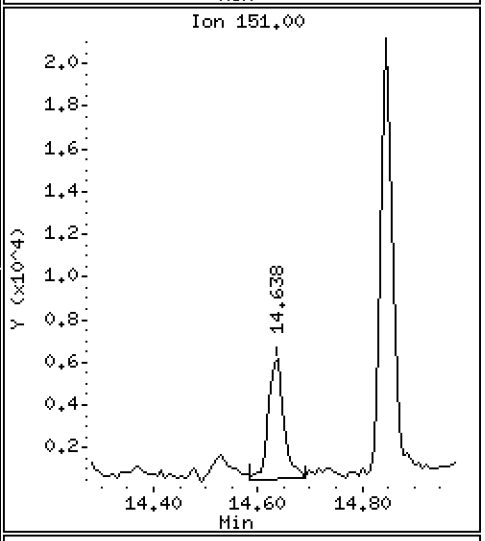
40 Acenaphthylene

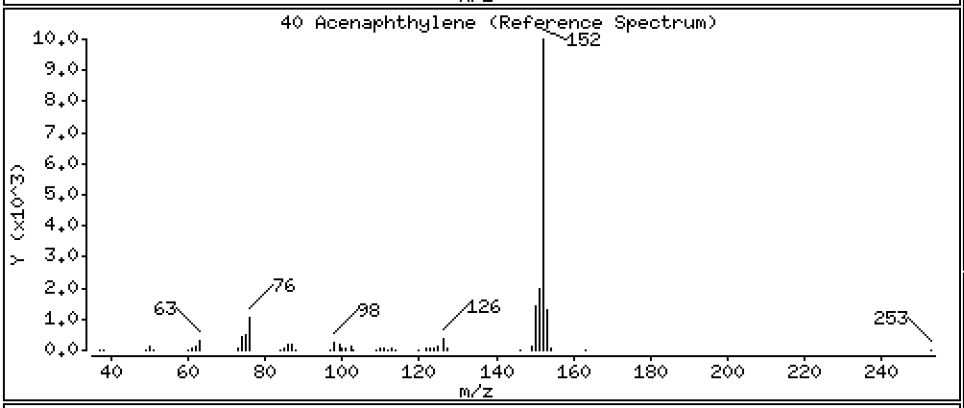
Concentration: 0.1639 ug/mL

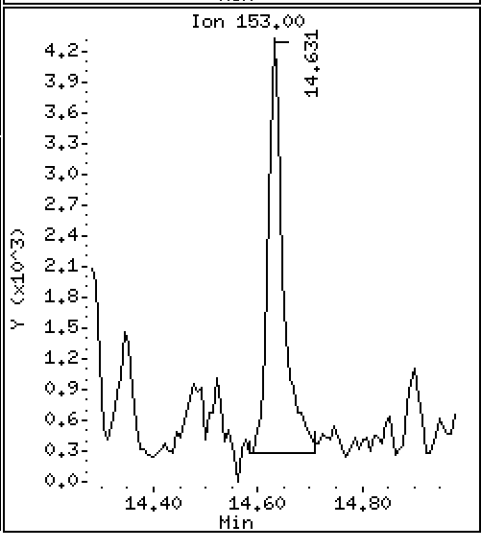


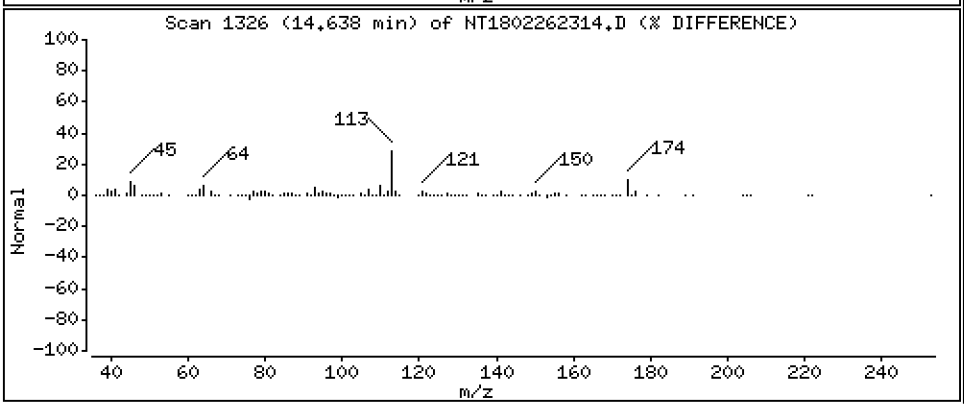












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

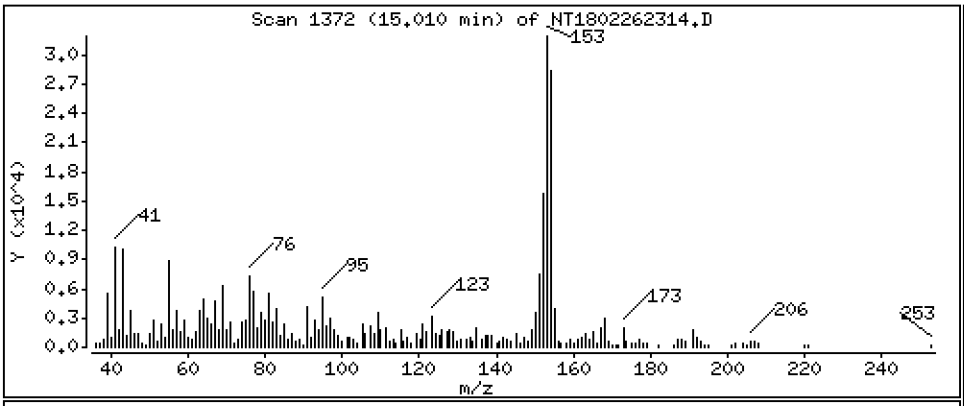
Operator: VTS

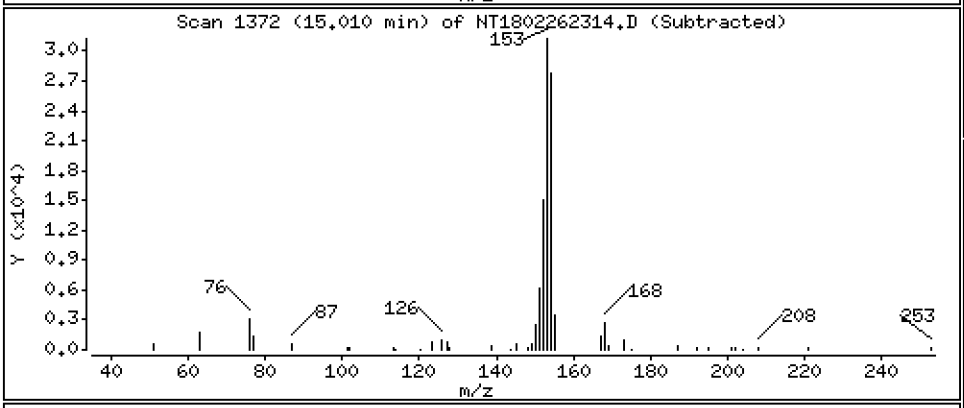
Column phase: ZB-5msi

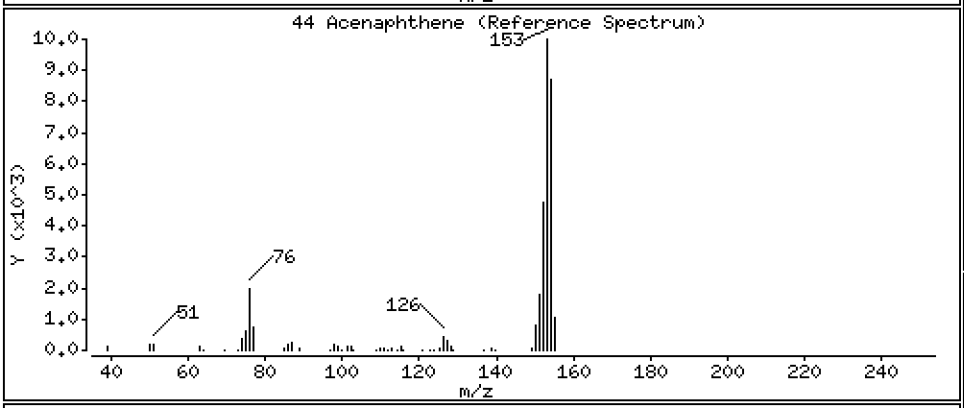
Column diameter: 0.25

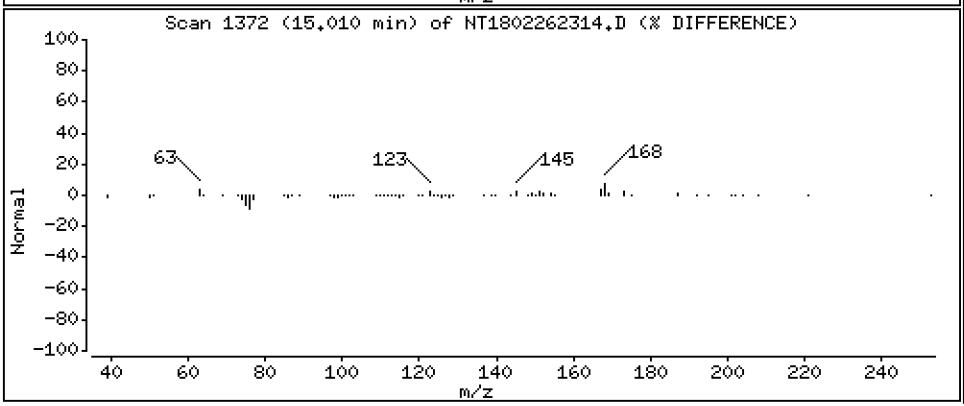
44 Acenaphthene

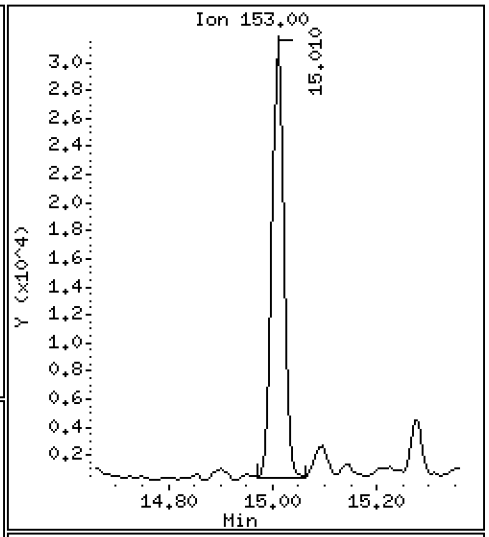
Concentration: 0.2563 ug/mL

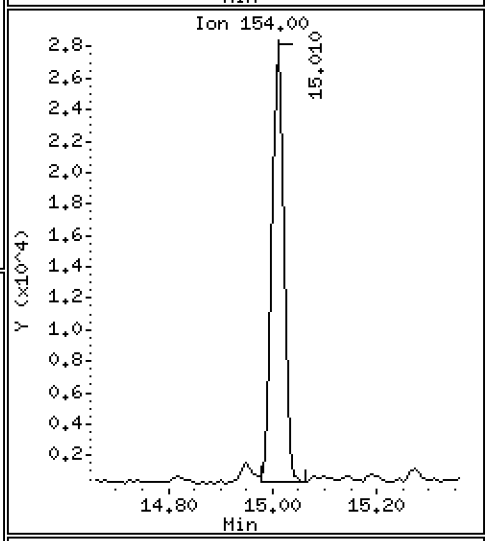


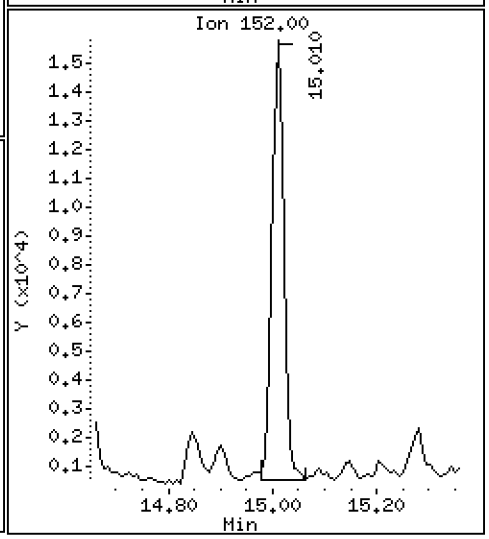












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

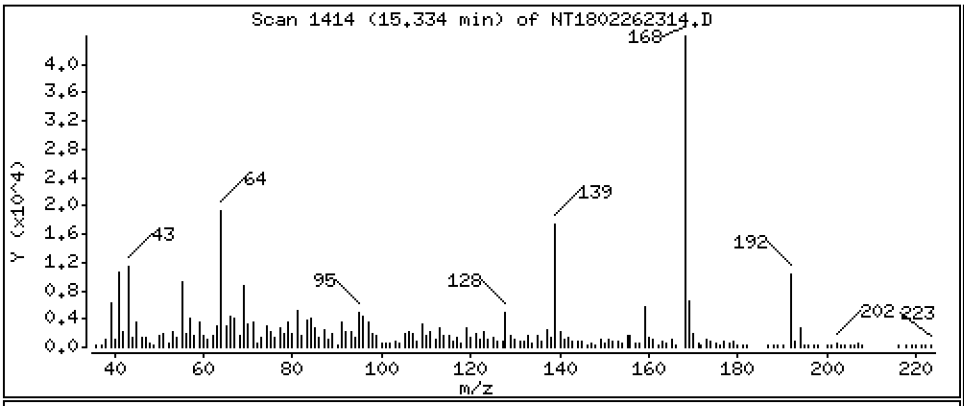
Operator: VTS

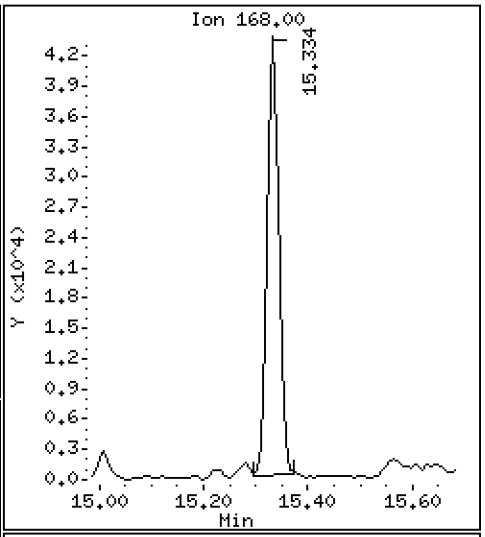
Column phase: ZB-5msi

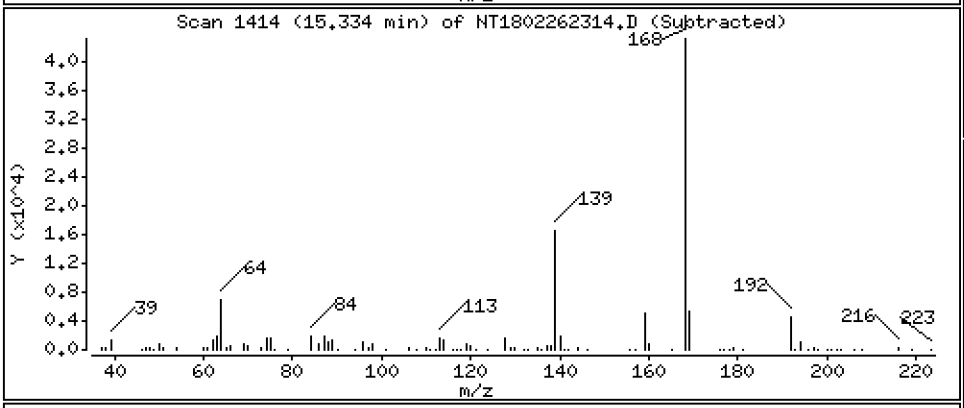
Column diameter: 0.25

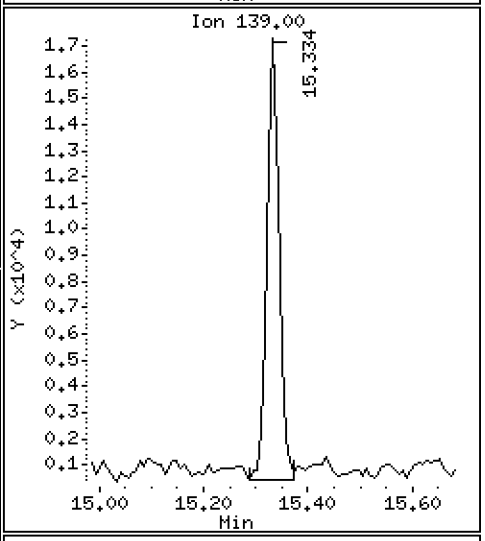
46 Dibenzofuran

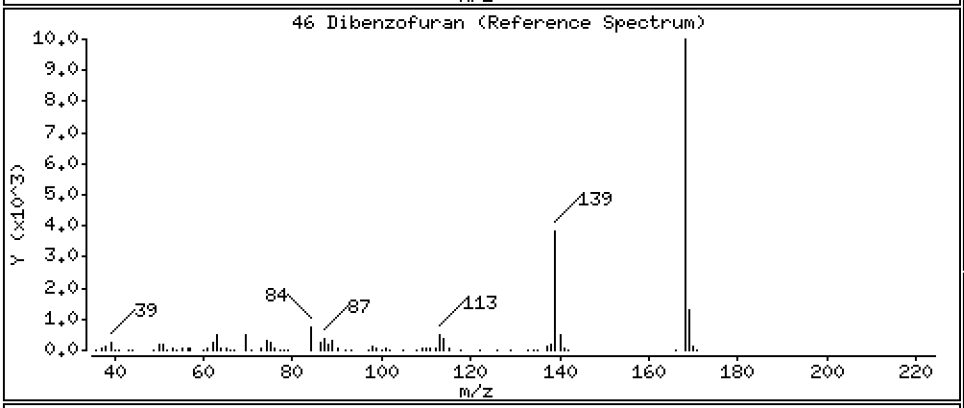
Concentration: 0.2433 ug/mL

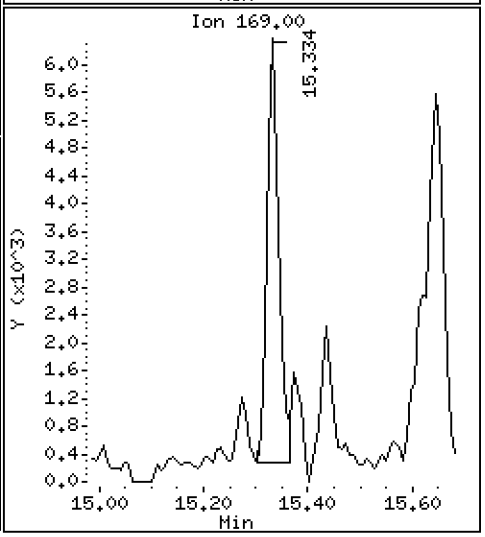


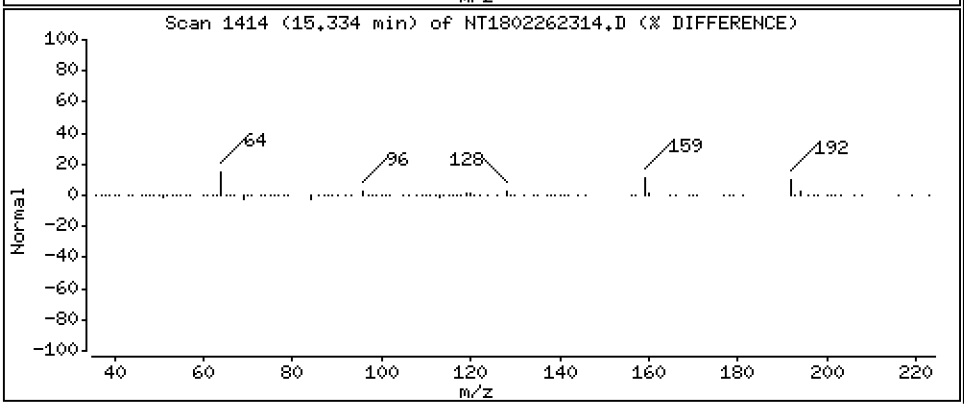












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262314.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

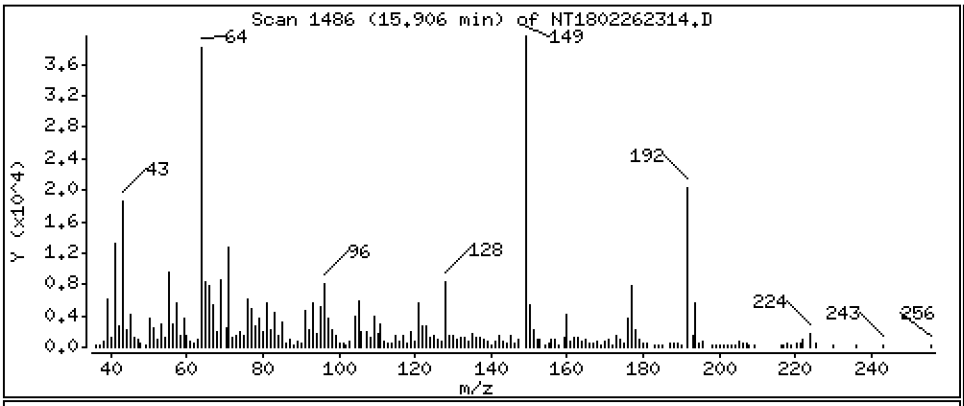
Operator: VTS

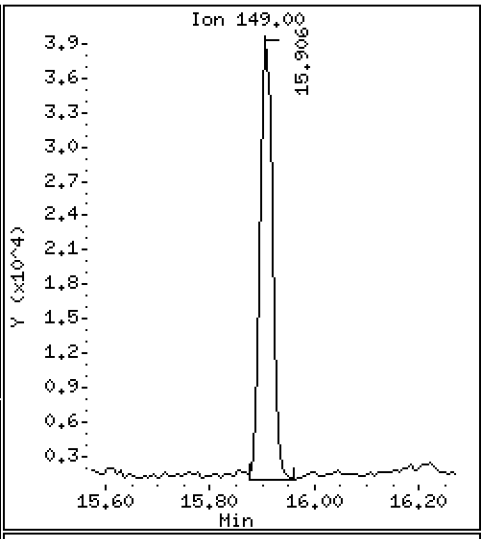
Column phase: ZB-5msi

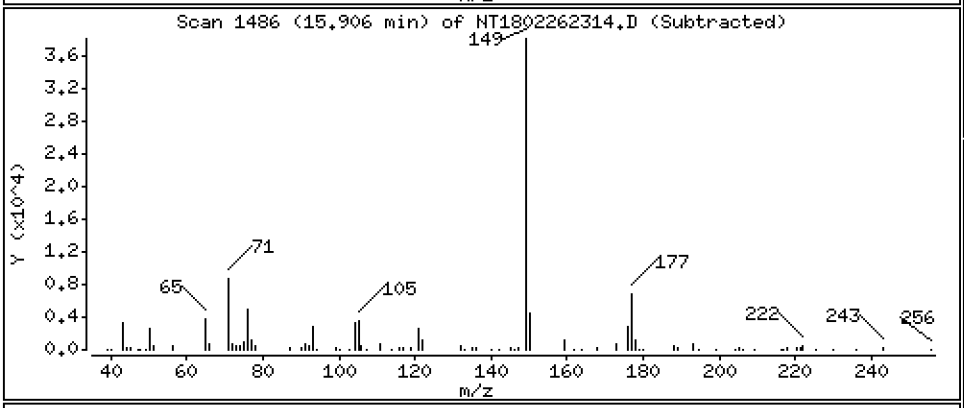
Column diameter: 0.25

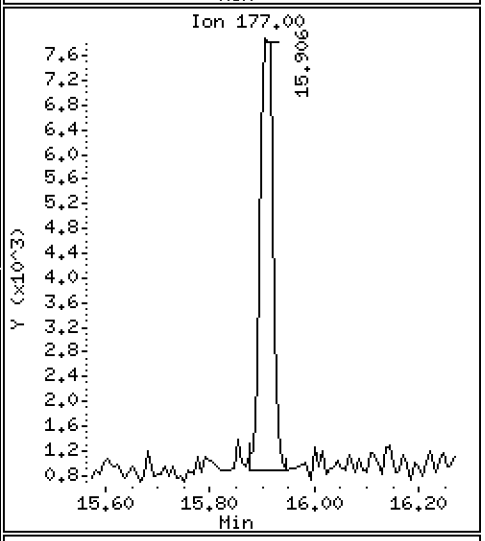
50 Diethylphthalate

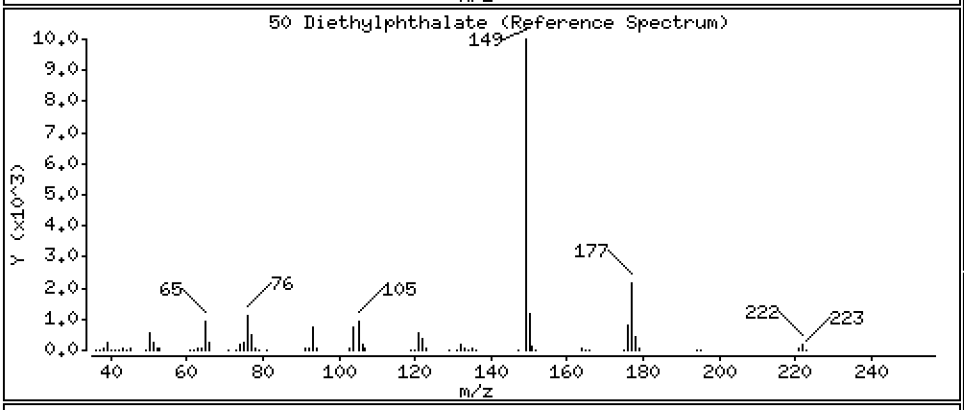
Concentration: 0.3147 ug/mL

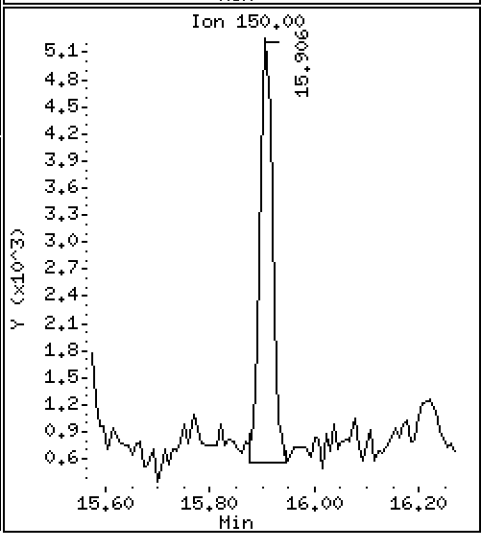


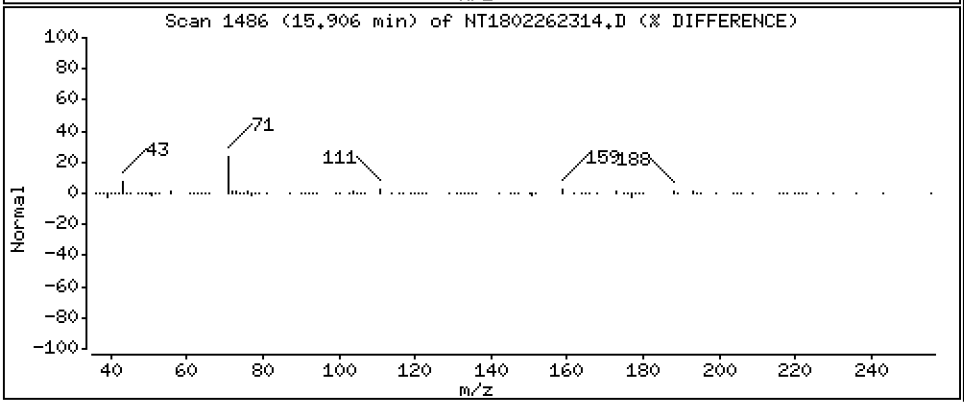












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

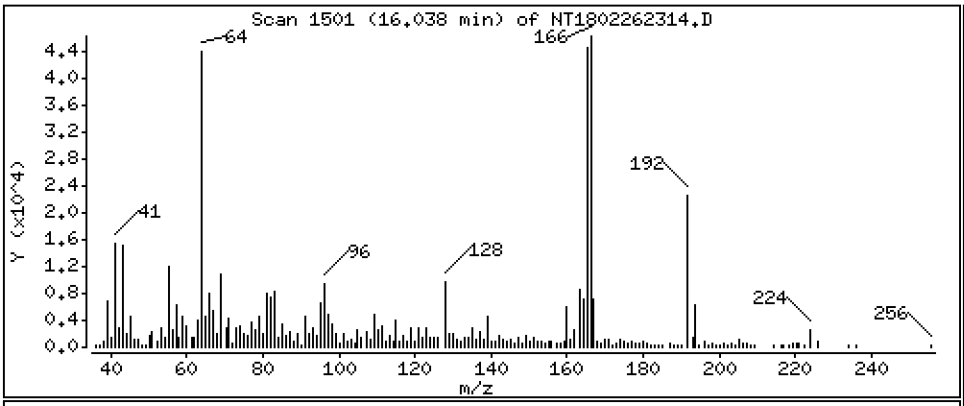
Operator: VTS

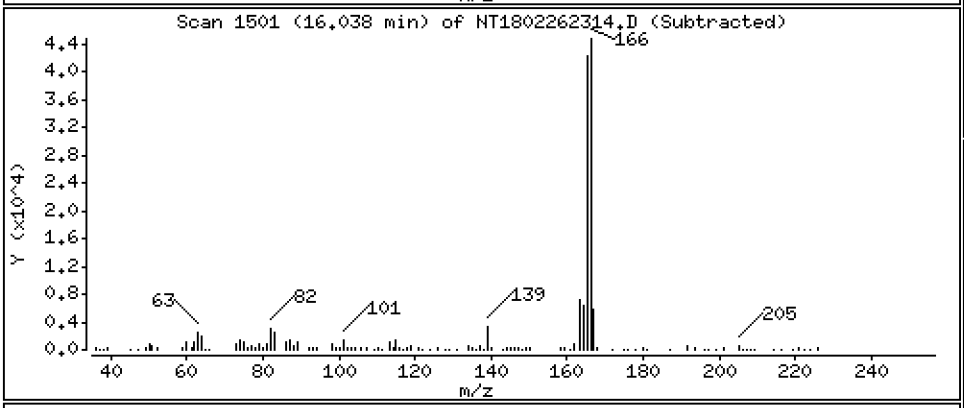
Column phase: ZB-5msi

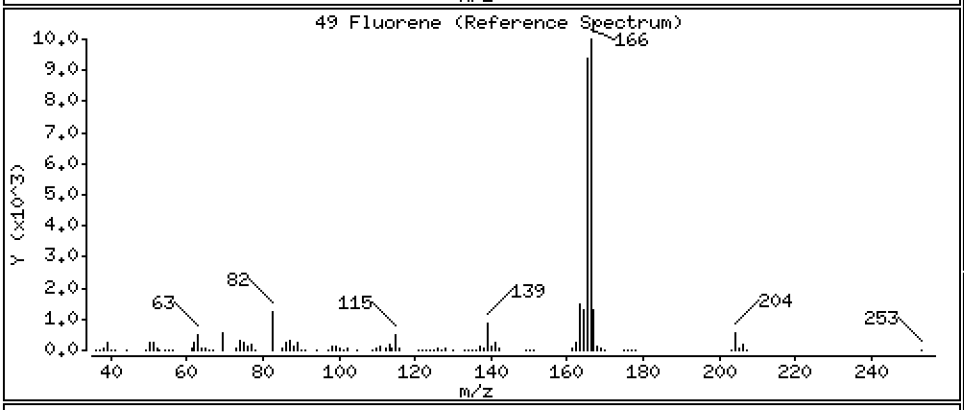
Column diameter: 0.25

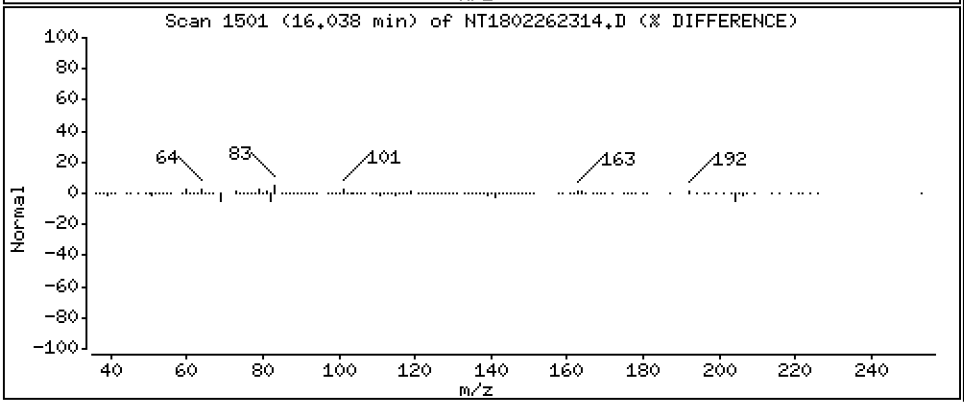
49 Fluorene

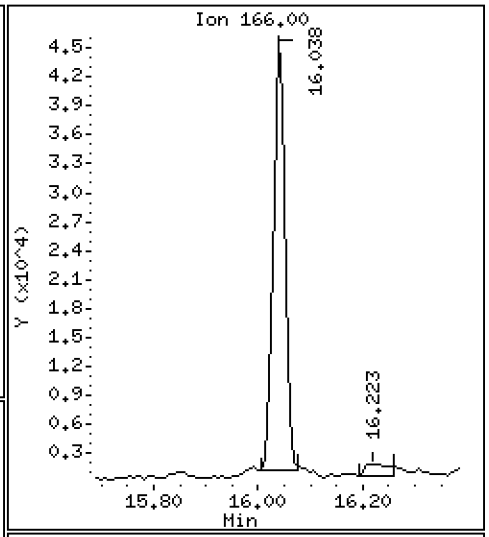
Concentration: 0.3292 ug/mL

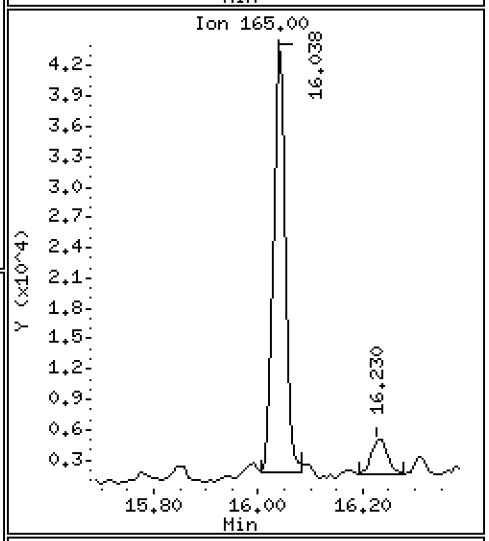


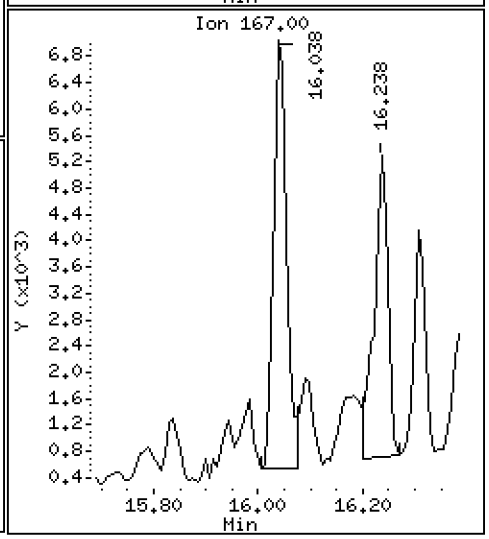












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

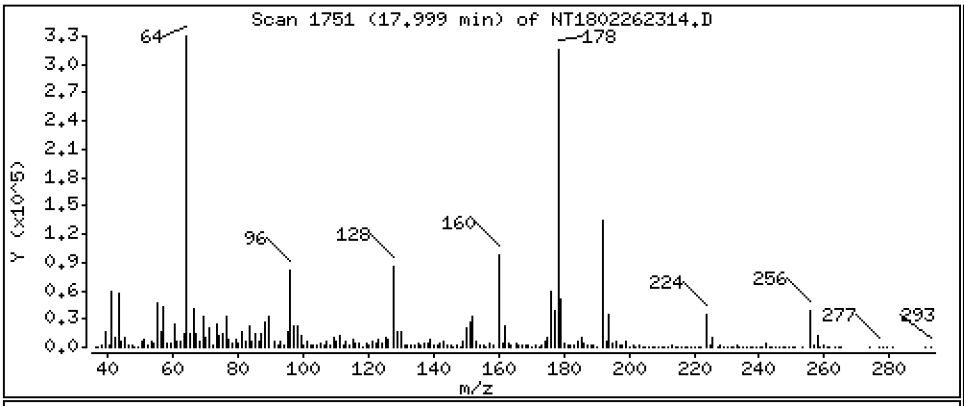
Operator: VTS

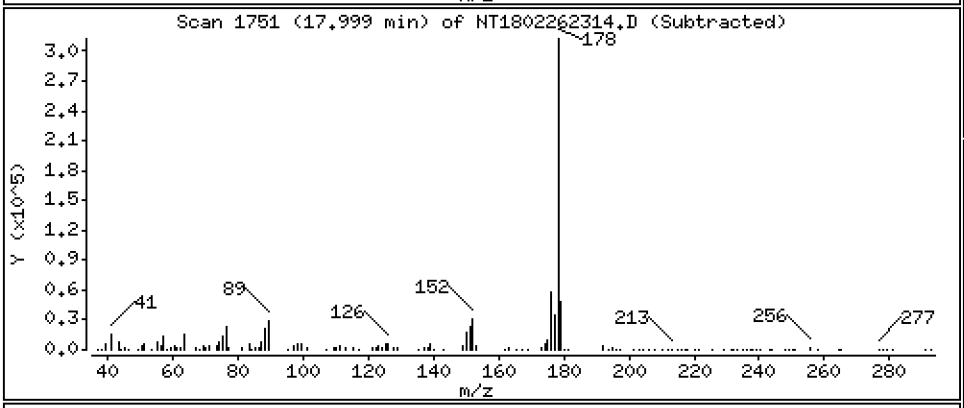
Column phase: ZB-5msi

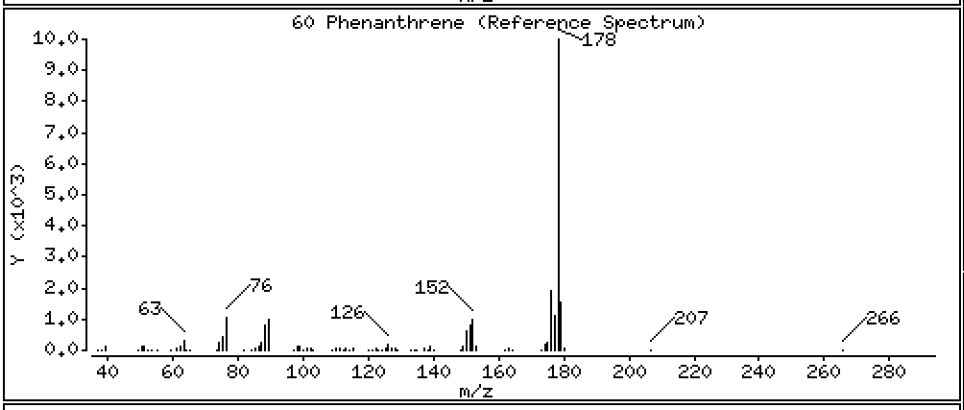
Column diameter: 0.25

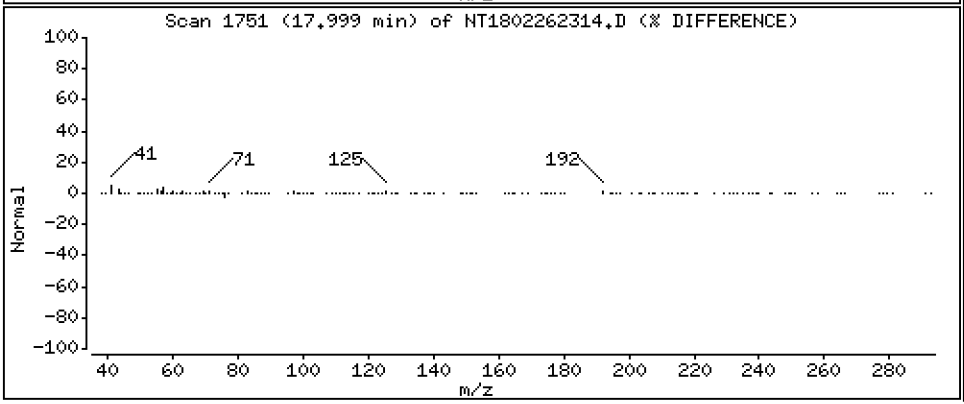
60 Phenanthrene

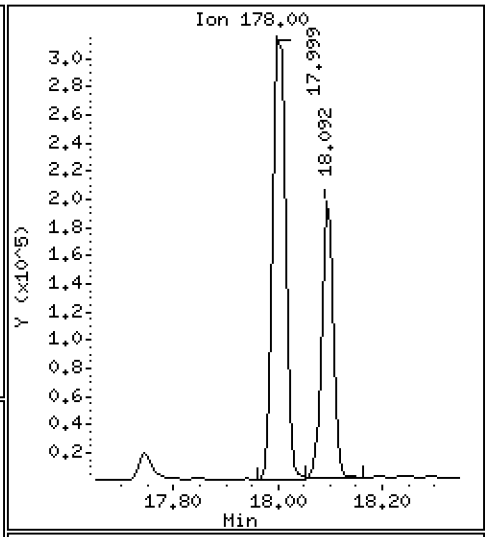
Concentration: 1.555 ug/mL

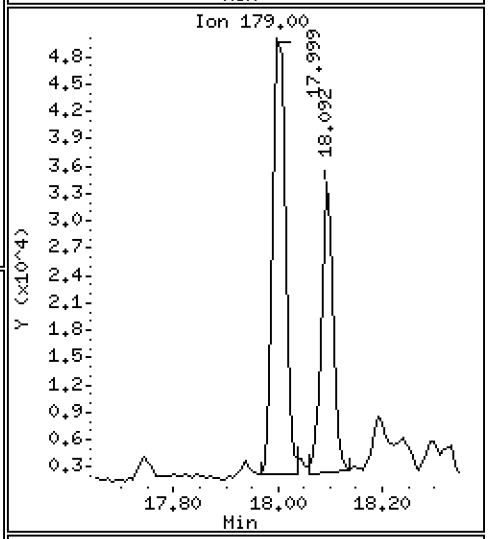


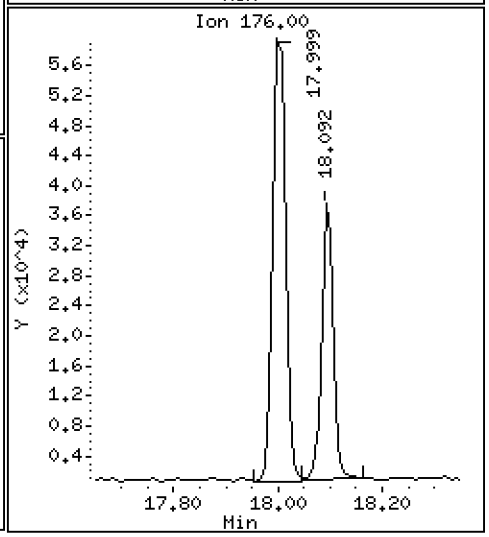












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262314.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

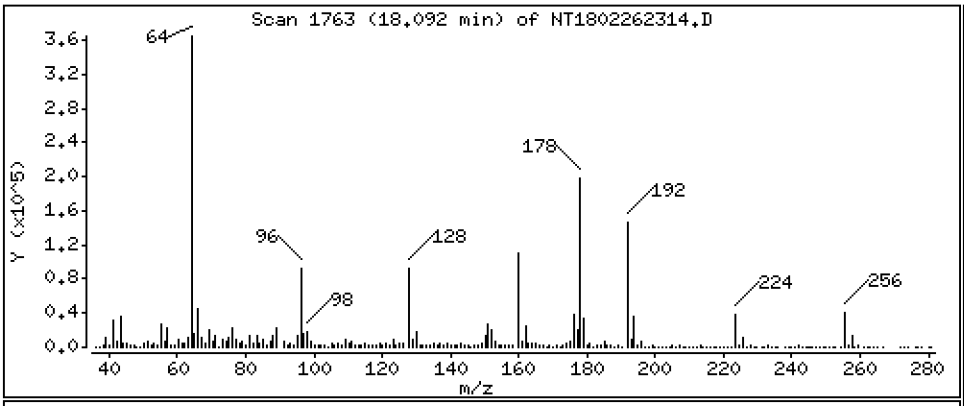
Operator: VTS

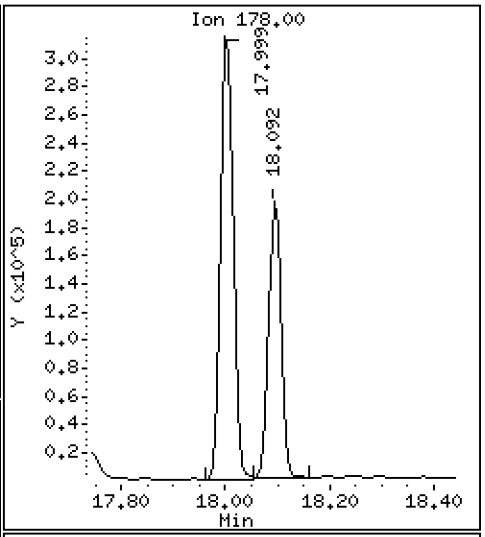
Column phase: ZB-5msi

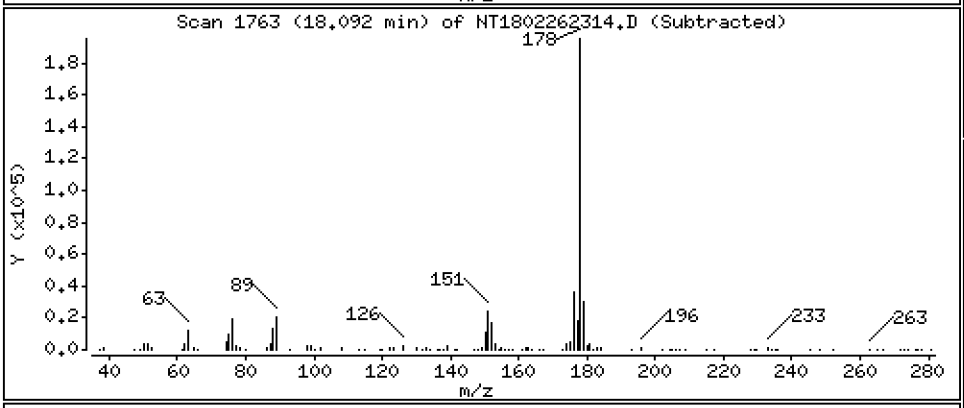
Column diameter: 0.25

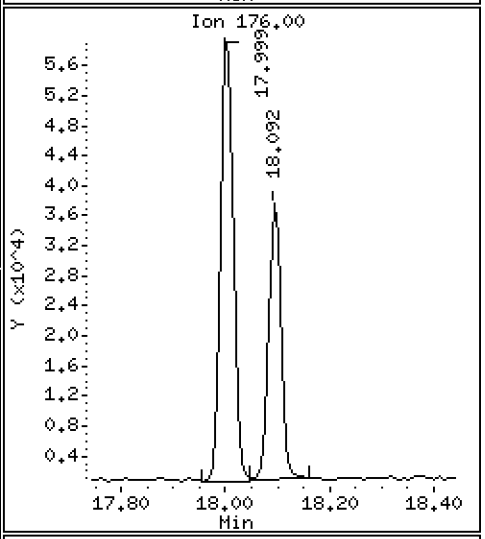
61 Anthracene

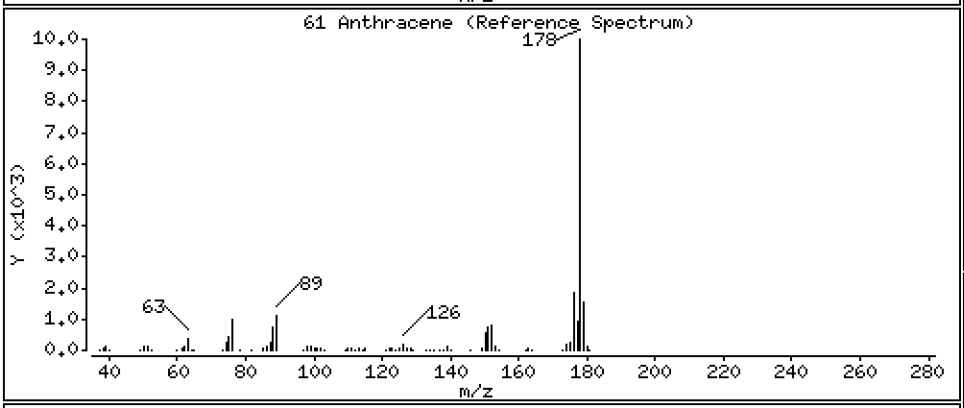
Concentration: 0.9918 ug/mL

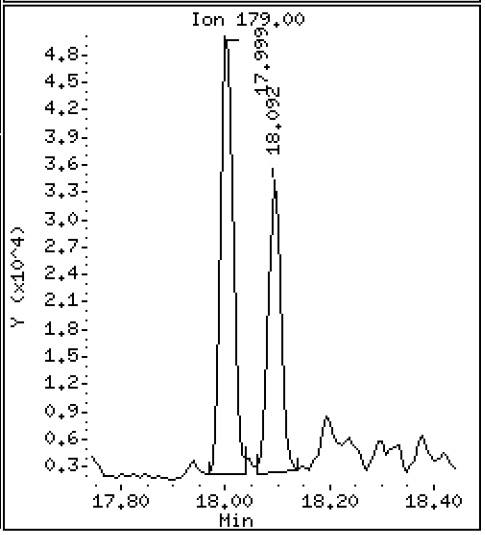


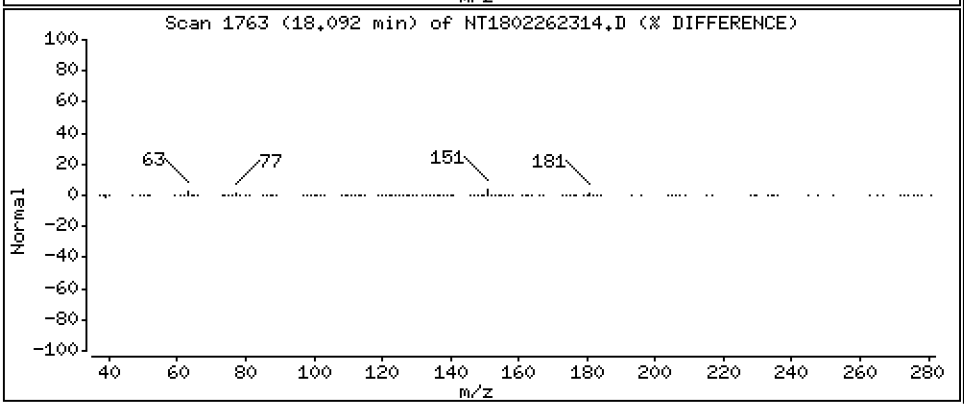












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

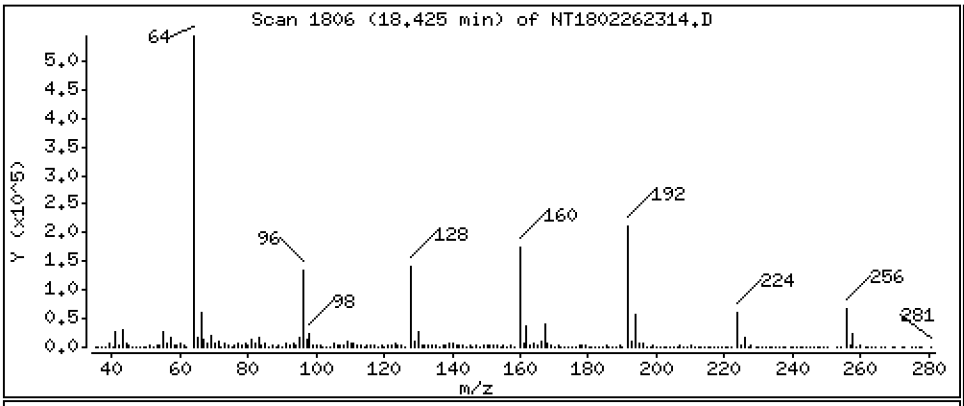
Operator: VTS

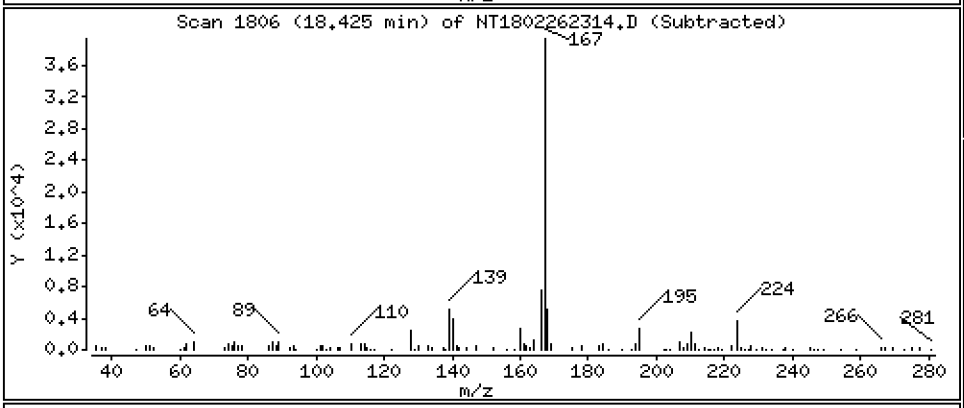
Column phase: ZB-5msi

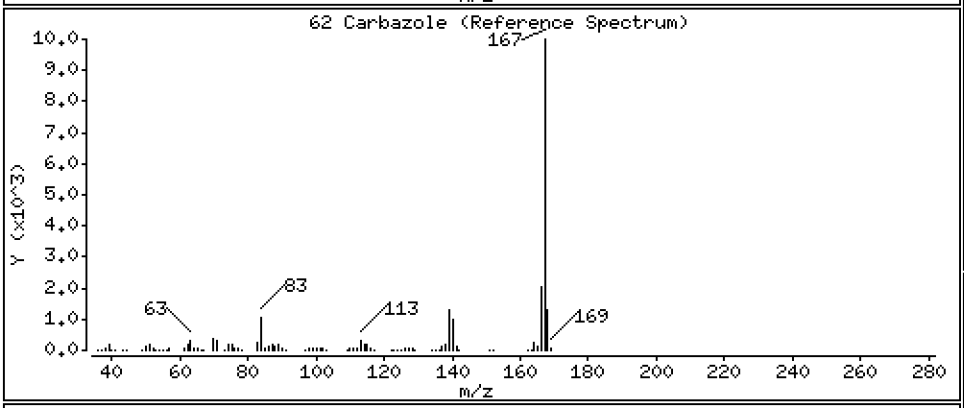
Column diameter: 0.25

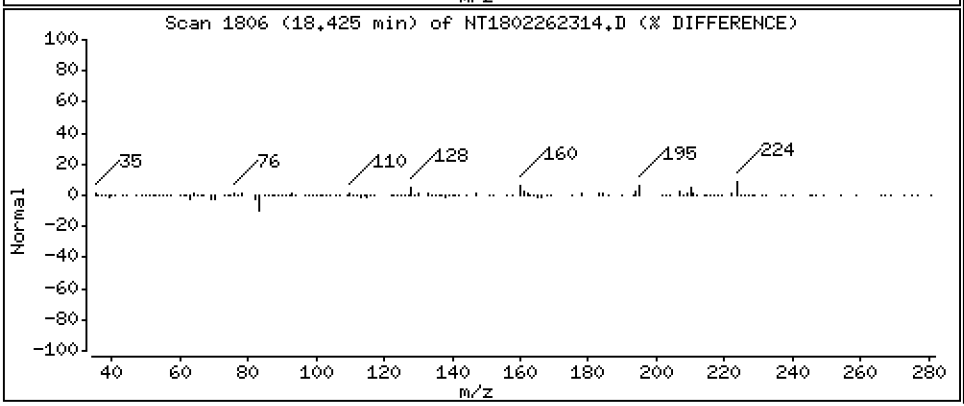
62 Carbazole

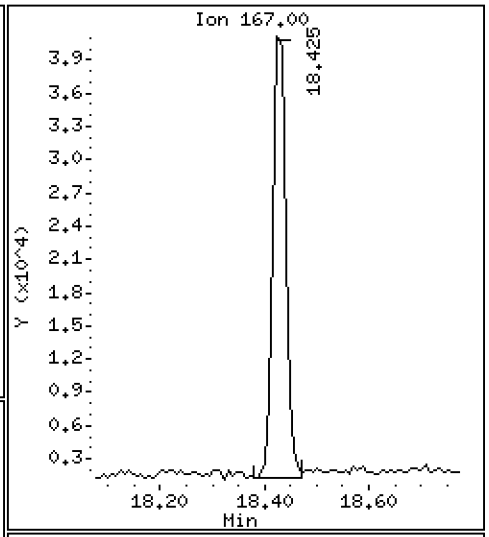
Concentration: 0.2305 ug/mL

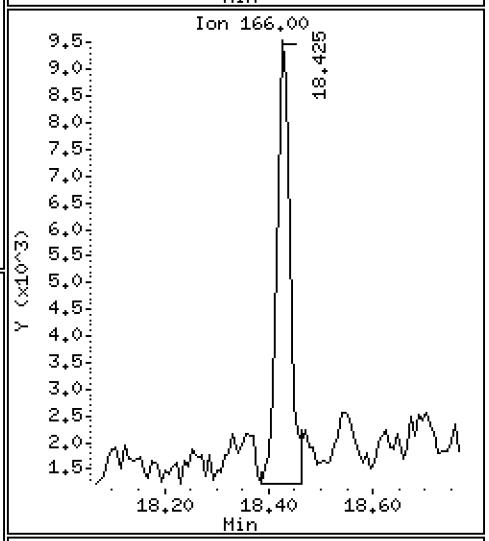


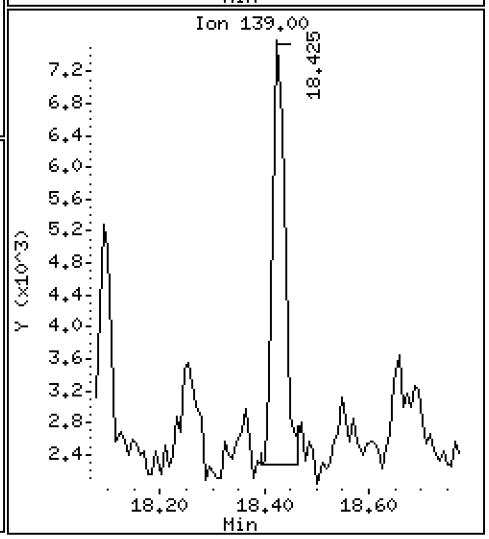












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

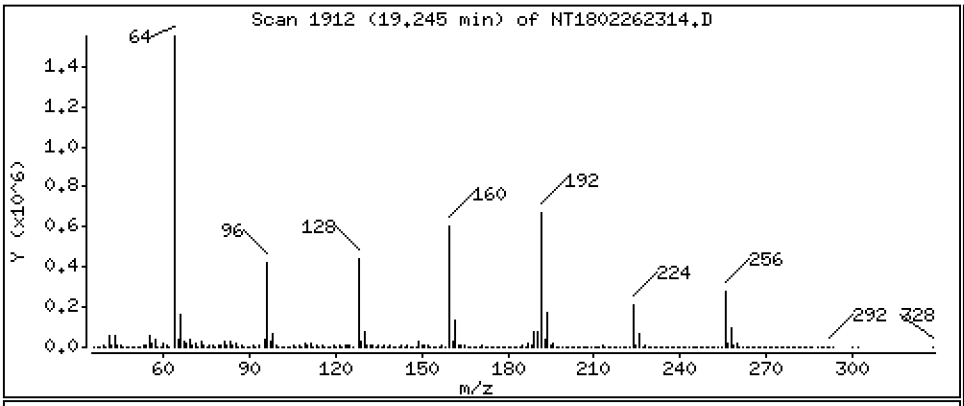
Operator: VTS

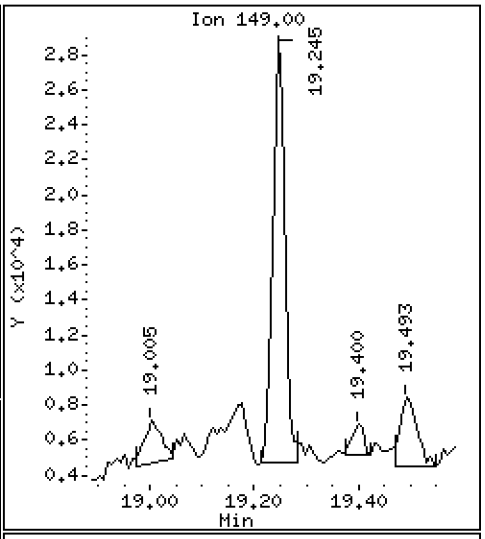
Column phase: ZB-5msi

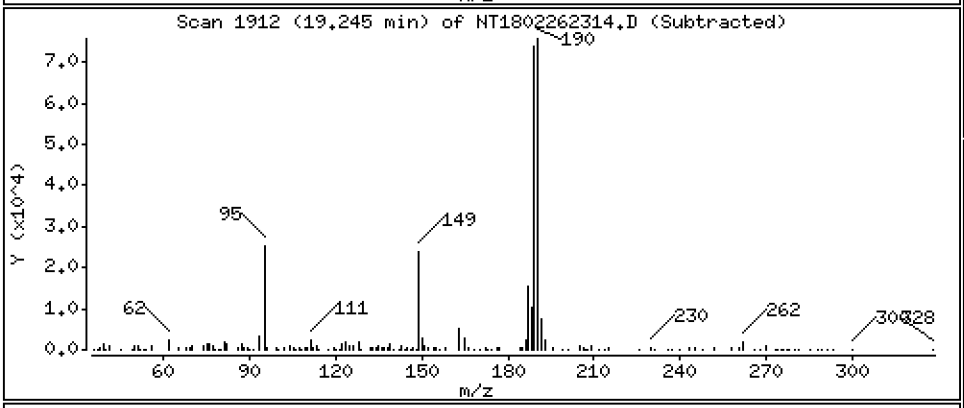
Column diameter: 0.25

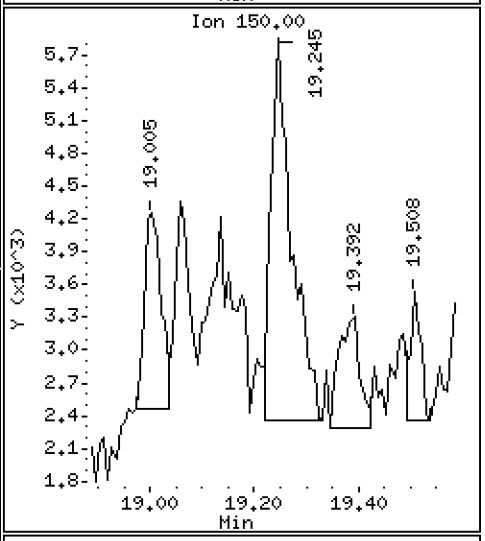
63 Di-n-butylphthalate

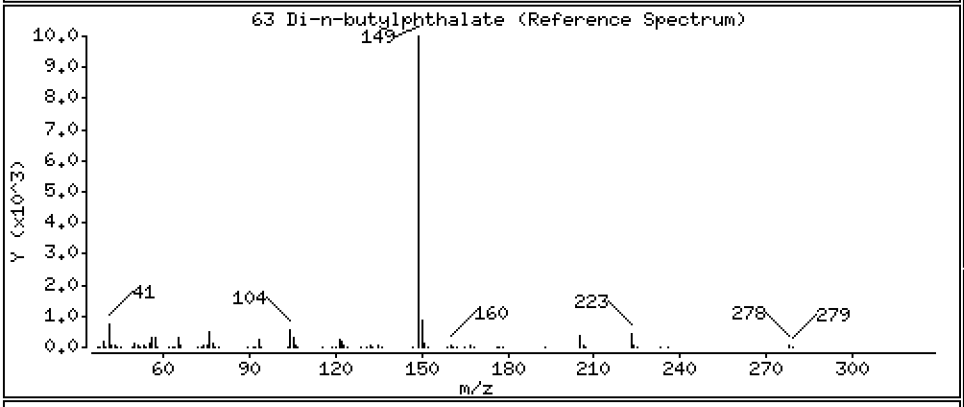
Concentration: 0.1216 ug/mL

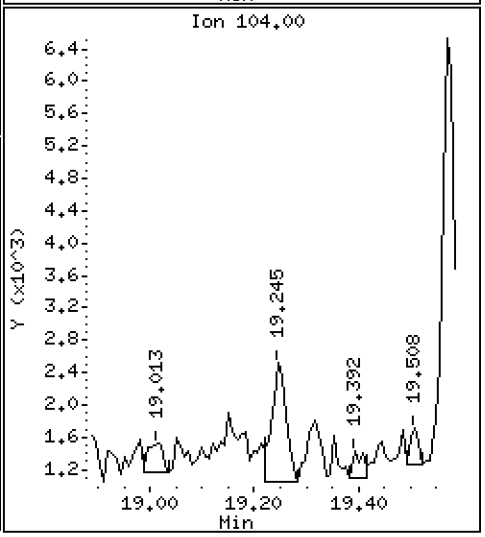


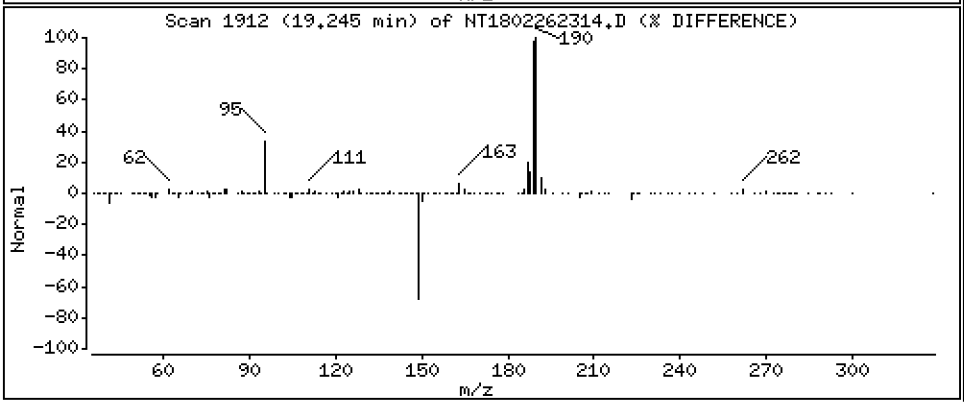












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

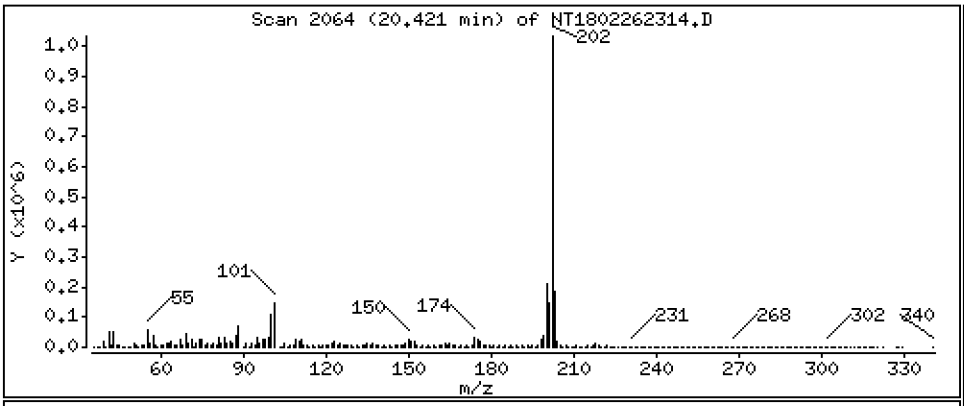
Operator: VTS

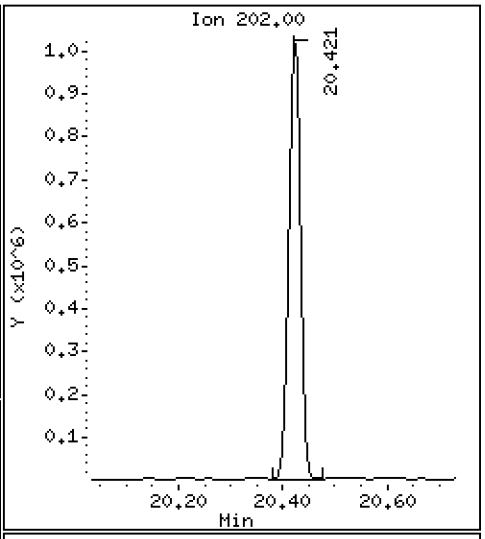
Column phase: ZB-5msi

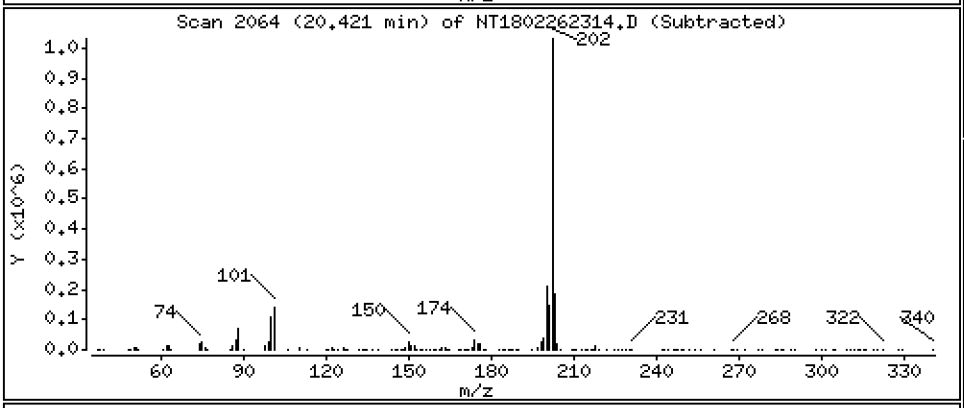
Column diameter: 0.25

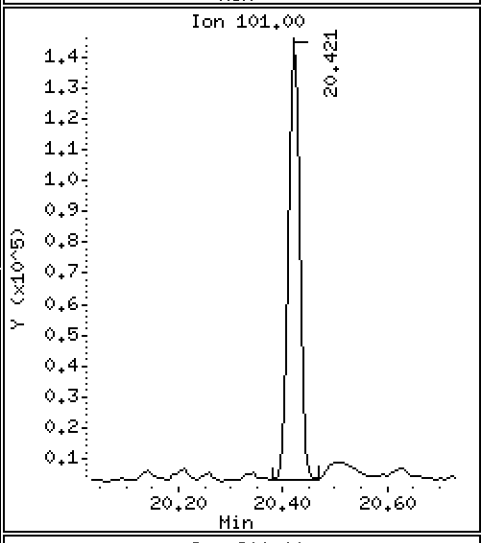
64 Fluoranthene

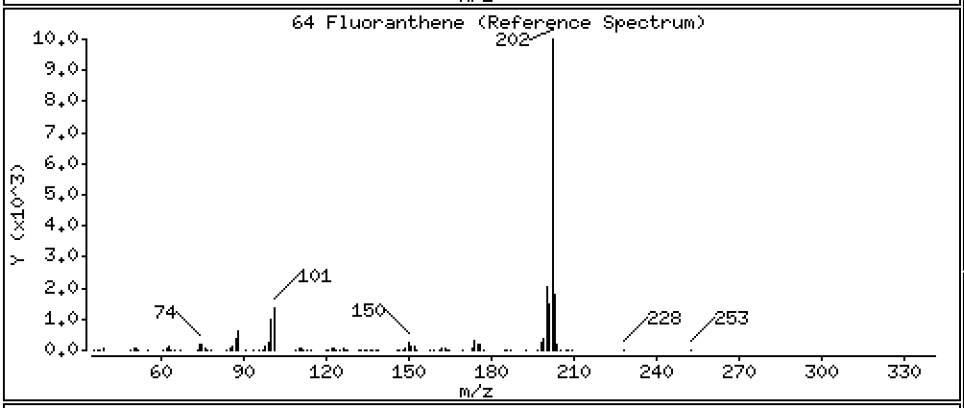
Concentration: 4.215 ug/mL

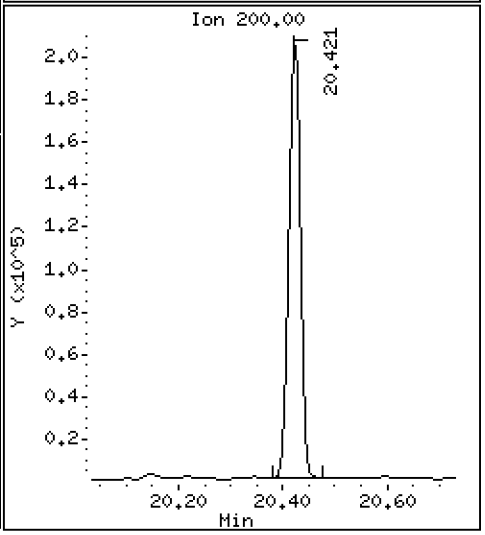


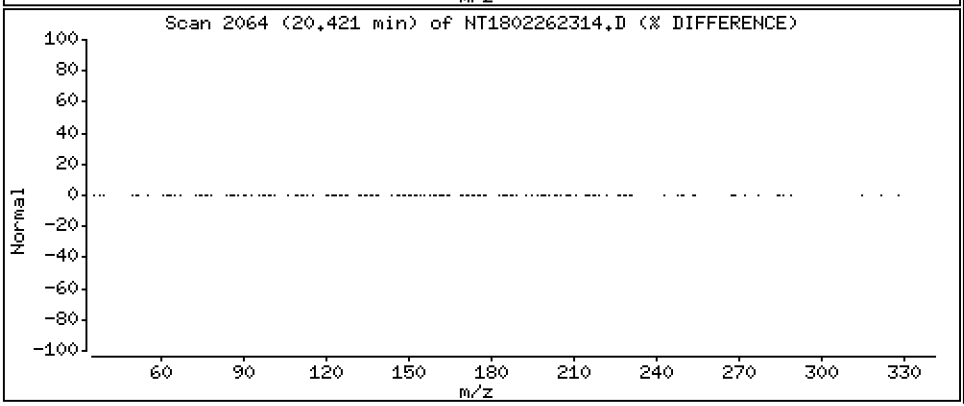












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262314.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

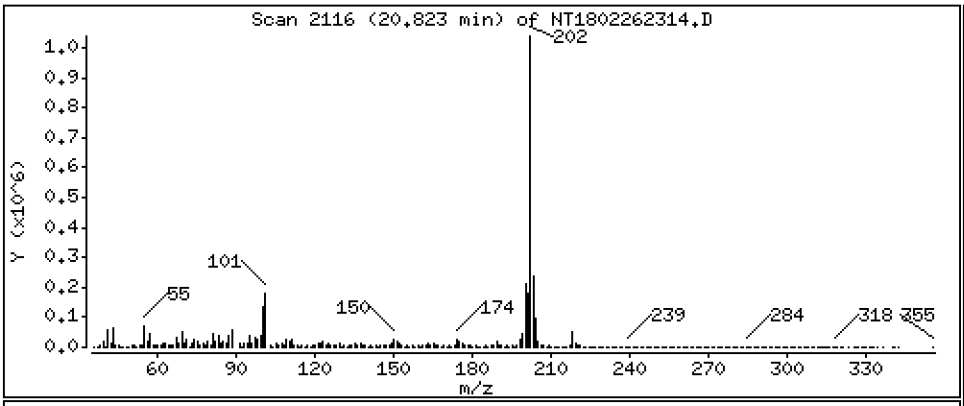
Operator: VTS

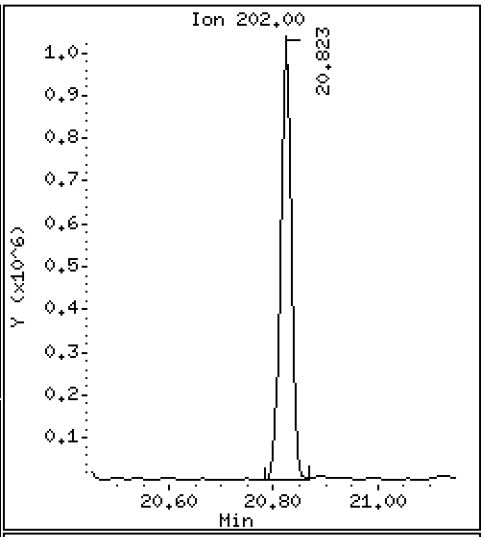
Column phase: ZB-5msi

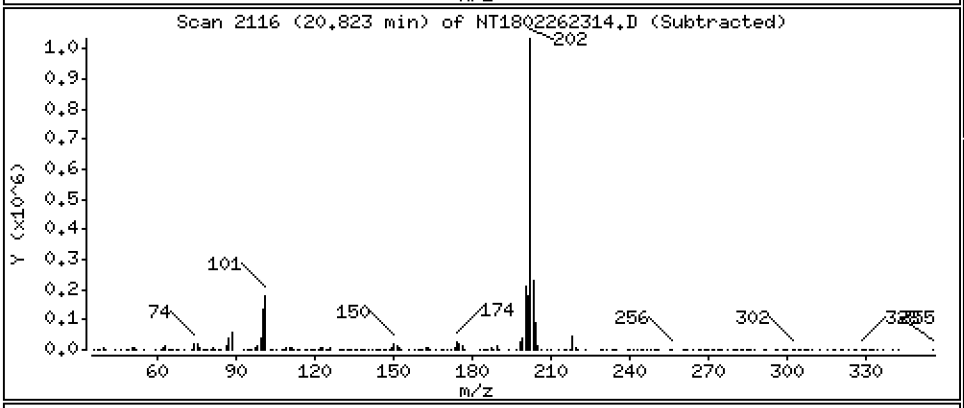
Column diameter: 0.25

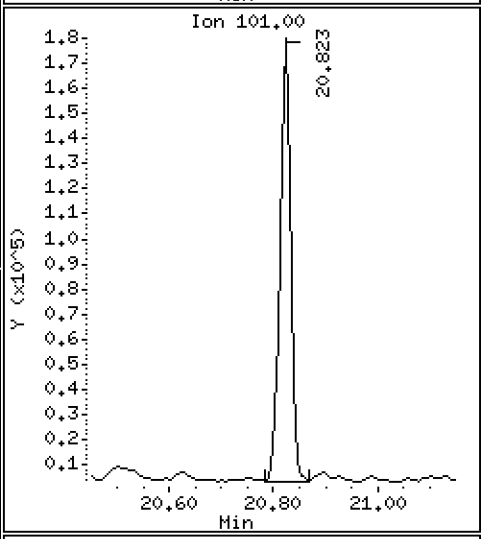
65 Pyrene

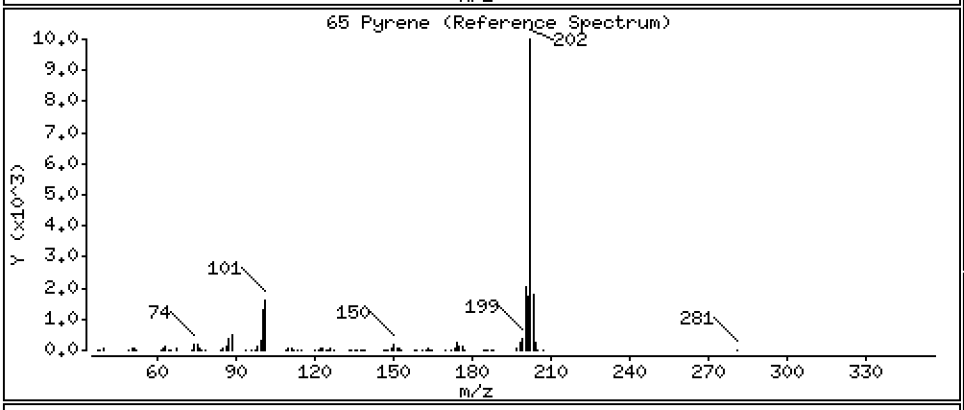
Concentration: 3.511 ug/mL

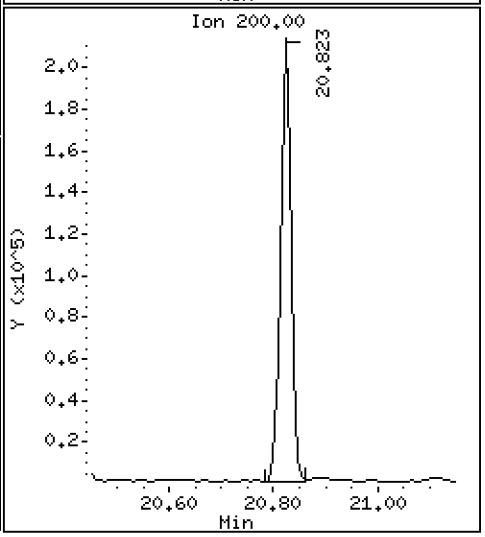


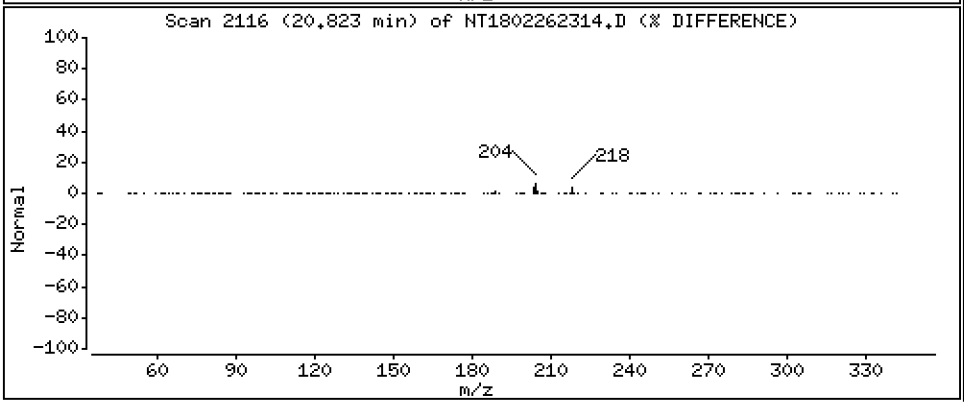












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

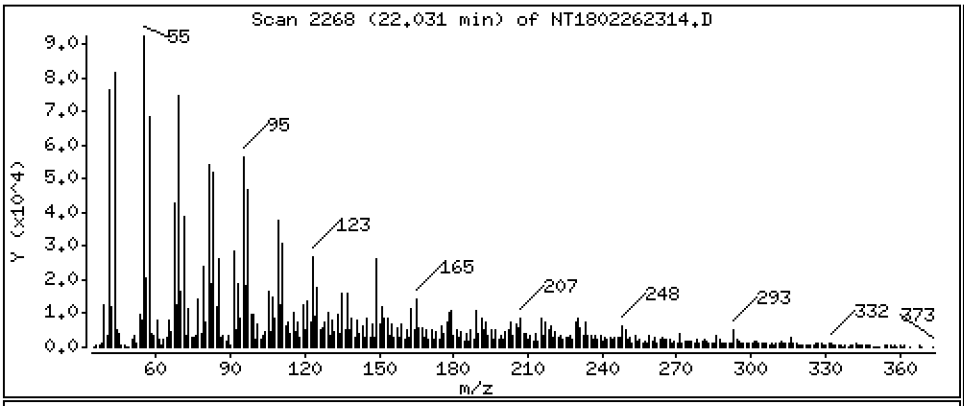
Operator: VTS

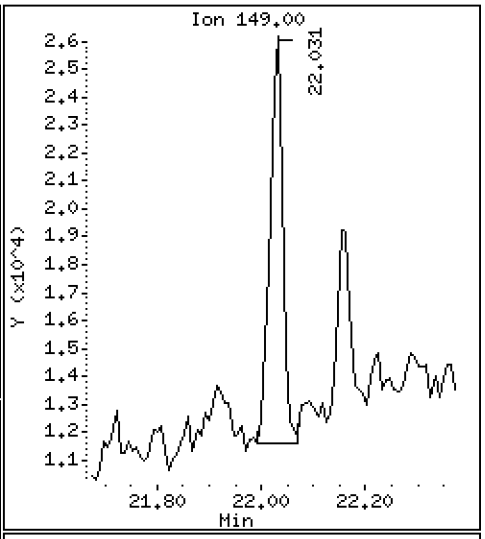
Column phase: ZB-5msi

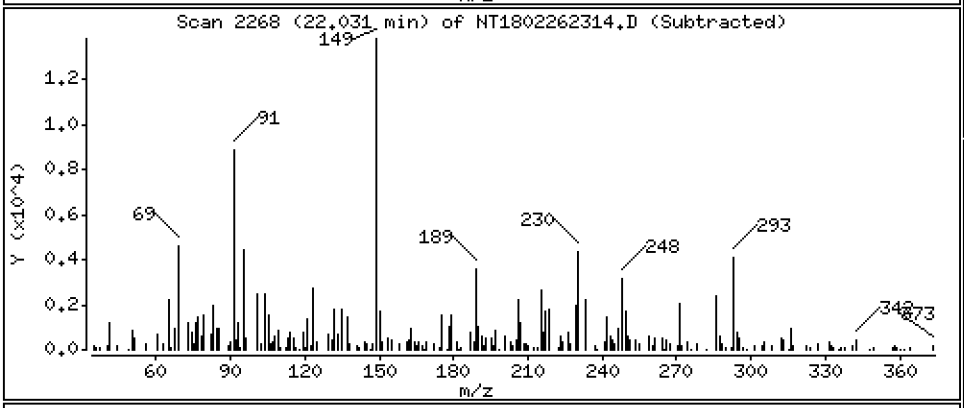
Column diameter: 0.25

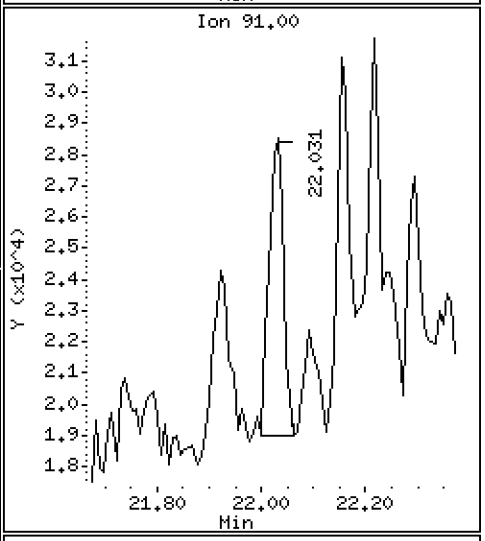
67 Butylbenzylphthalate

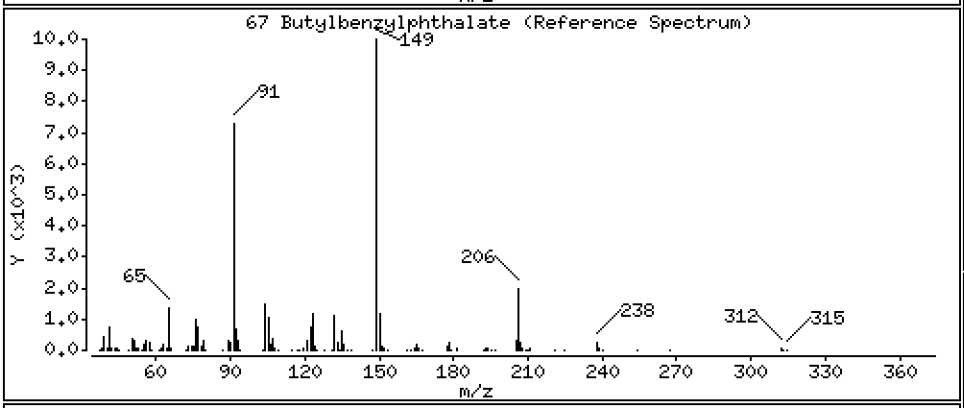
Concentration: 0.1498 ug/mL

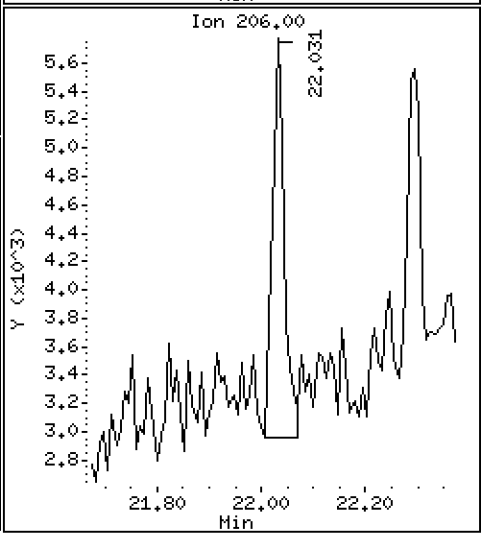


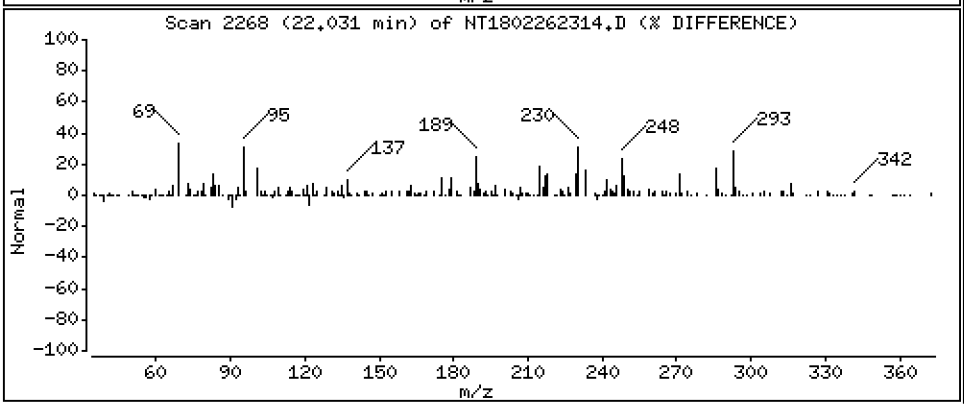












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262314.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

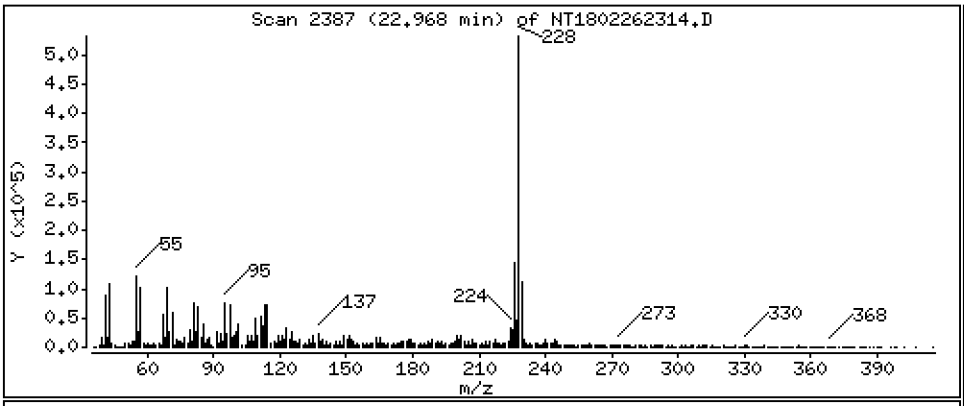
Operator: VTS

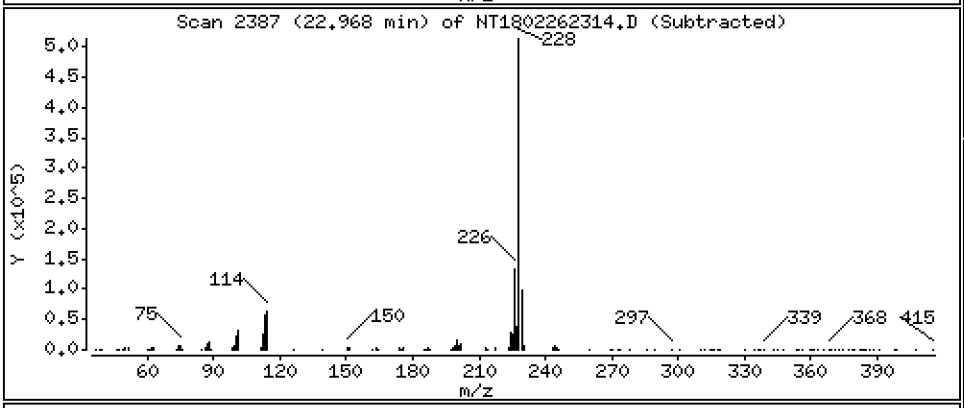
Column phase: ZB-5msi

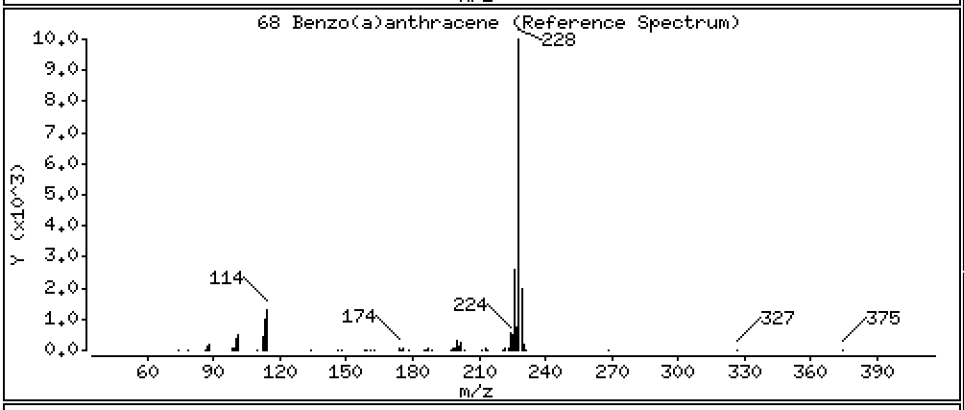
Column diameter: 0.25

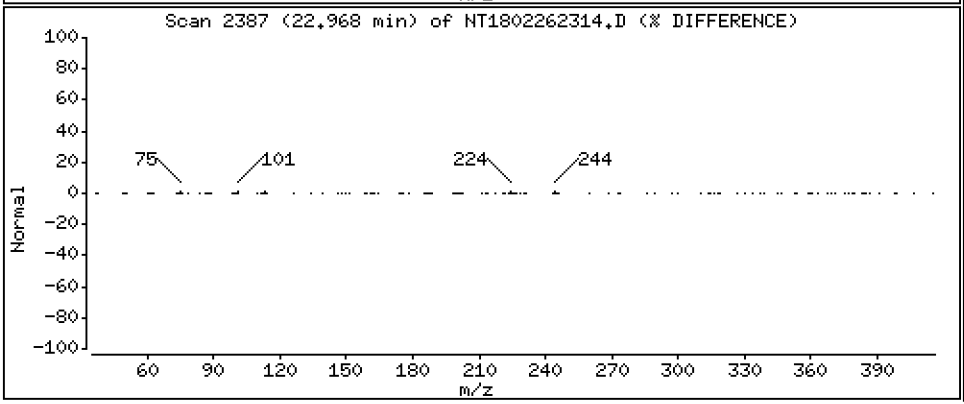
68 Benzo(a)anthracene

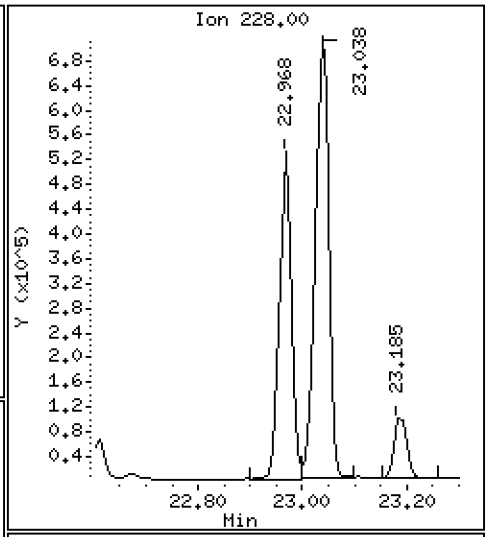
Concentration: 1.995 ug/mL

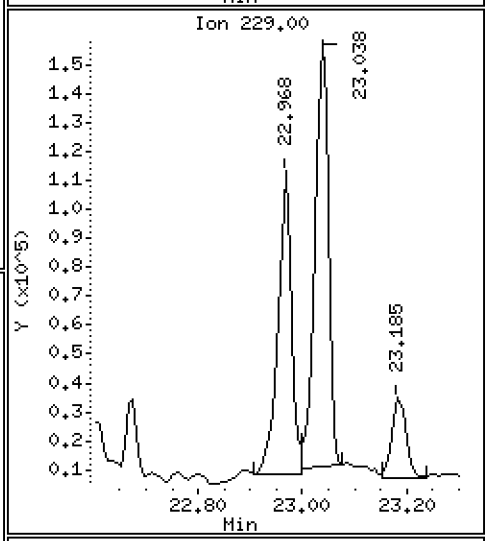


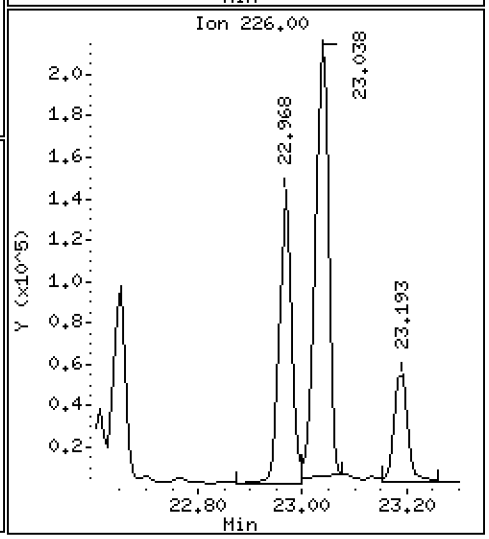












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

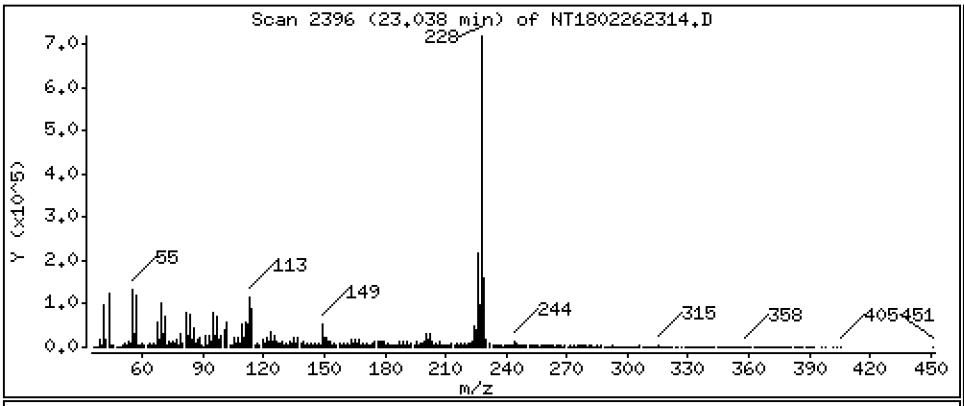
Operator: VTS

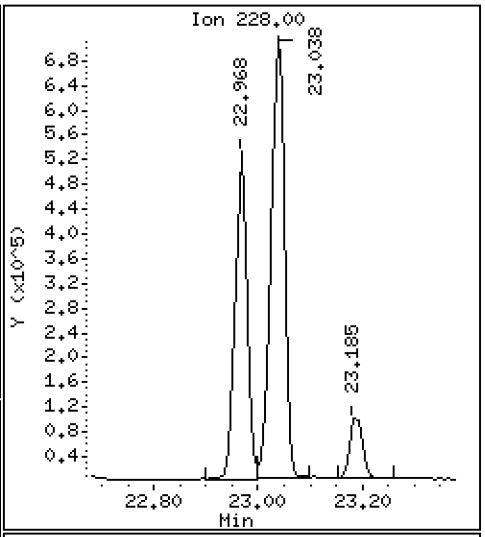
Column phase: ZB-5msi

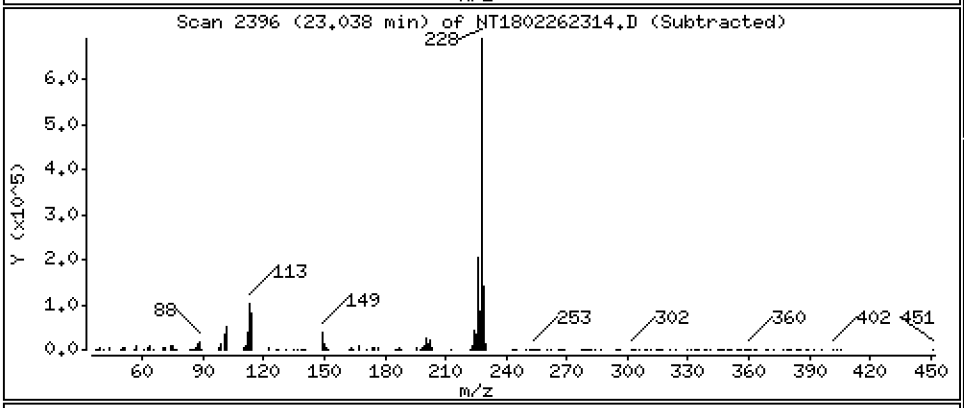
Column diameter: 0.25

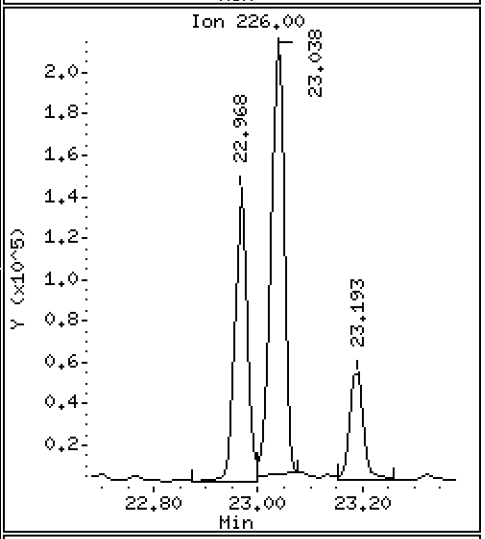
71 Chrysene

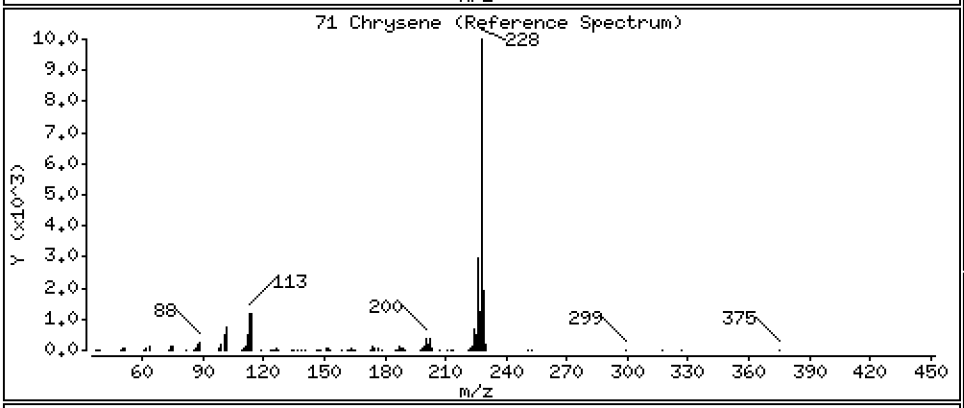
Concentration: 2.838 ug/mL

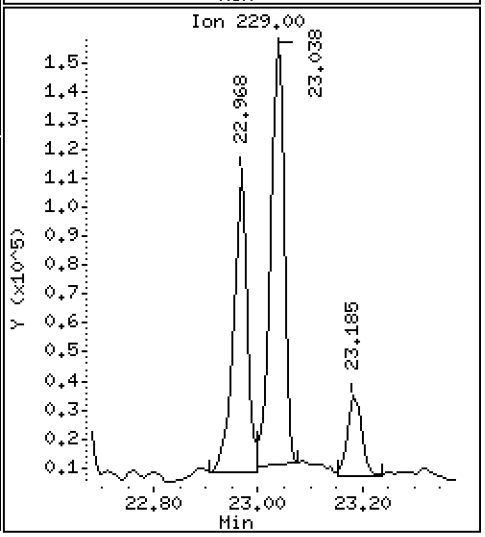


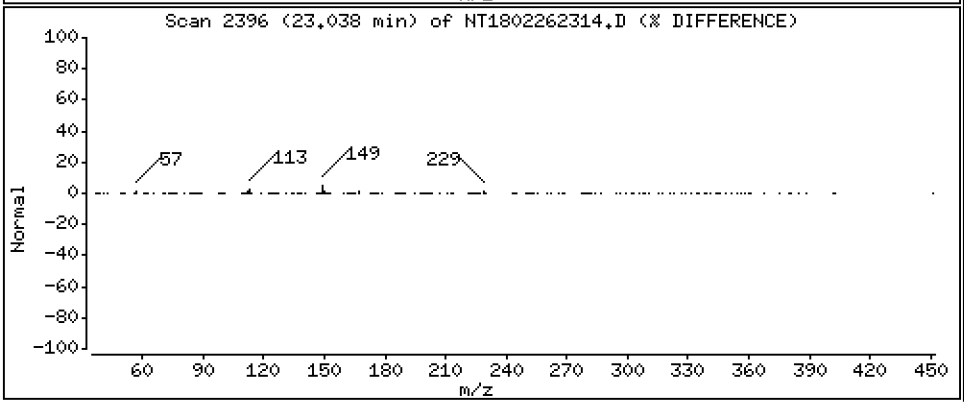












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

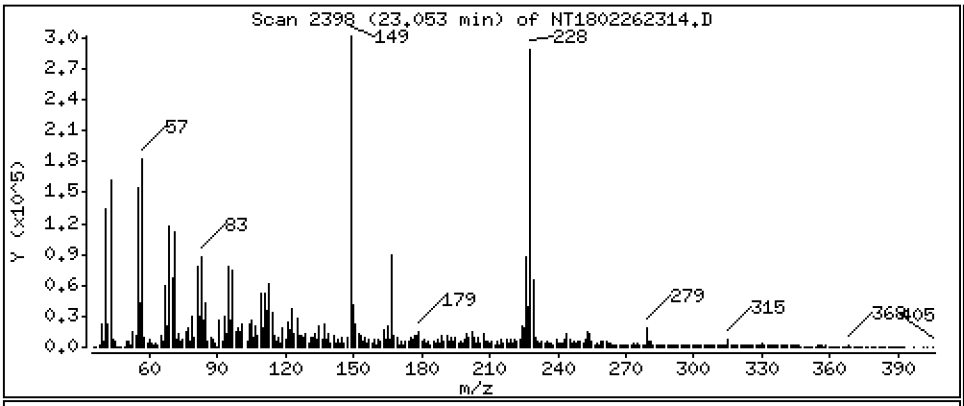
Operator: VTS

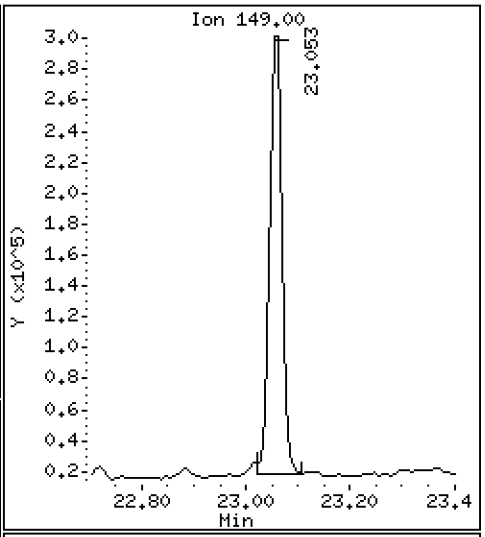
Column phase: ZB-5msi

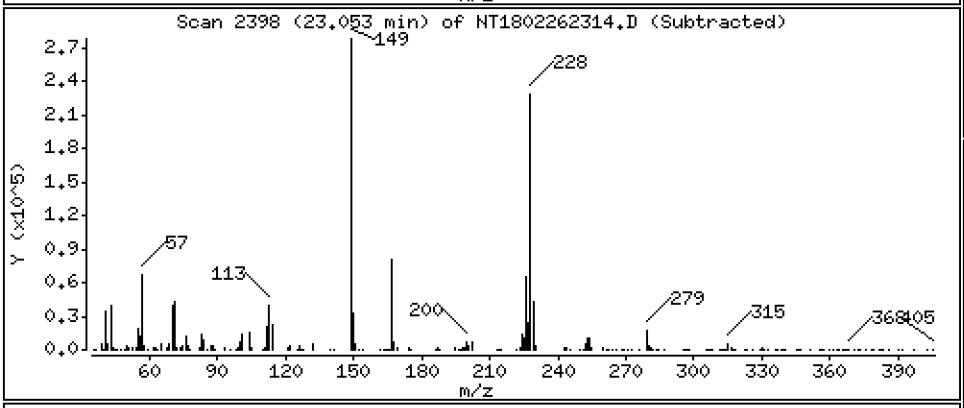
Column diameter: 0.25

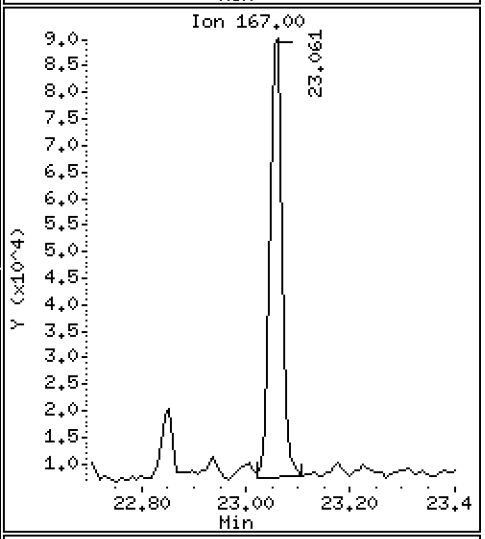
72 bis(2-Ethylhexyl)phthalate

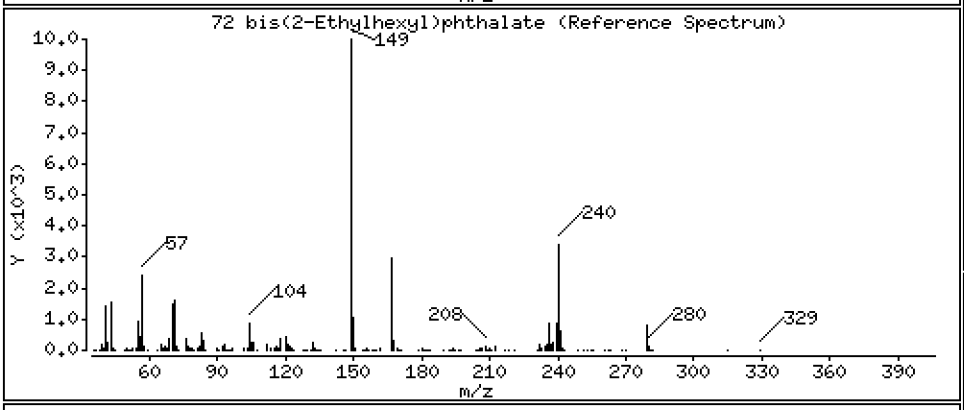
Concentration: 1.800 ug/mL

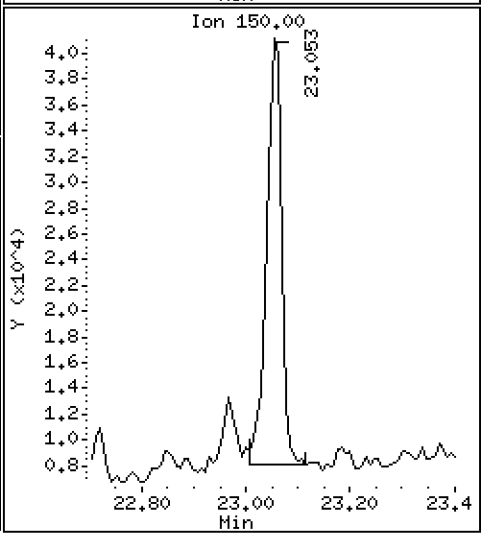


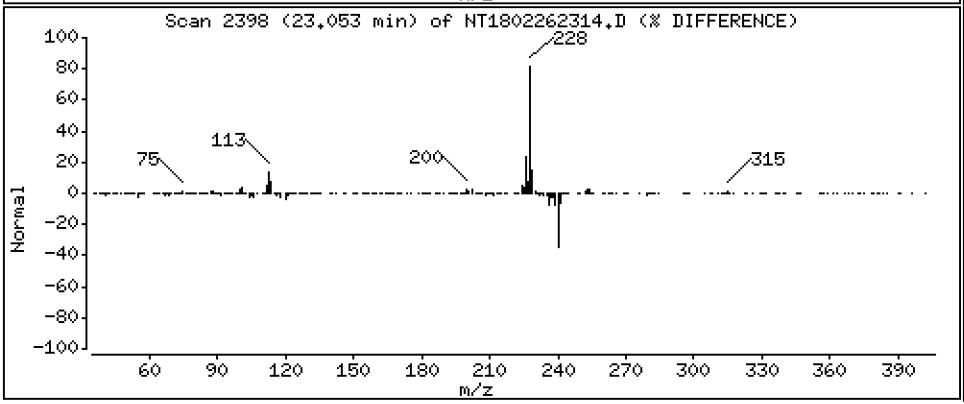












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

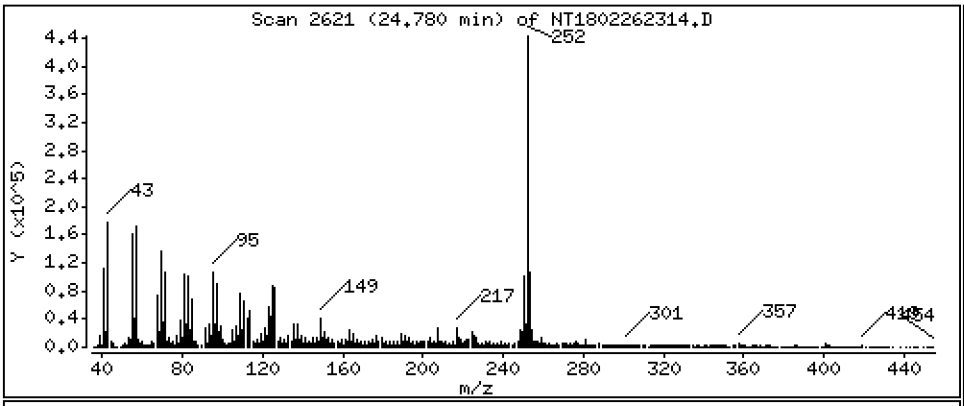
Operator: VTS

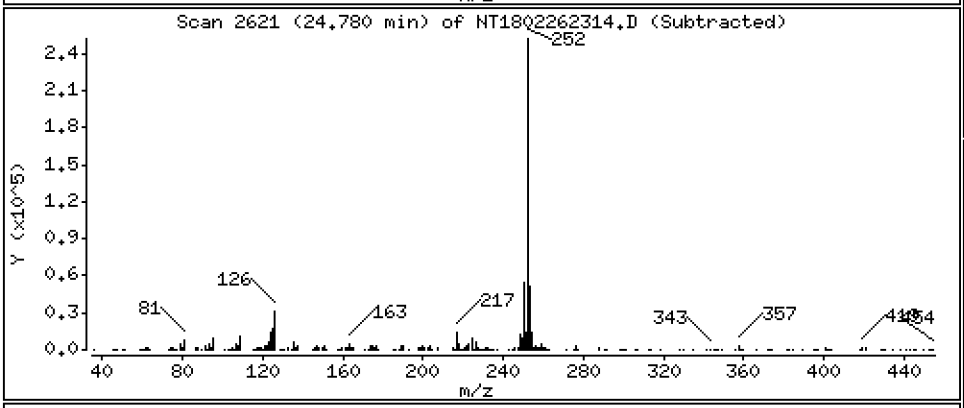
Column phase: ZB-5msi

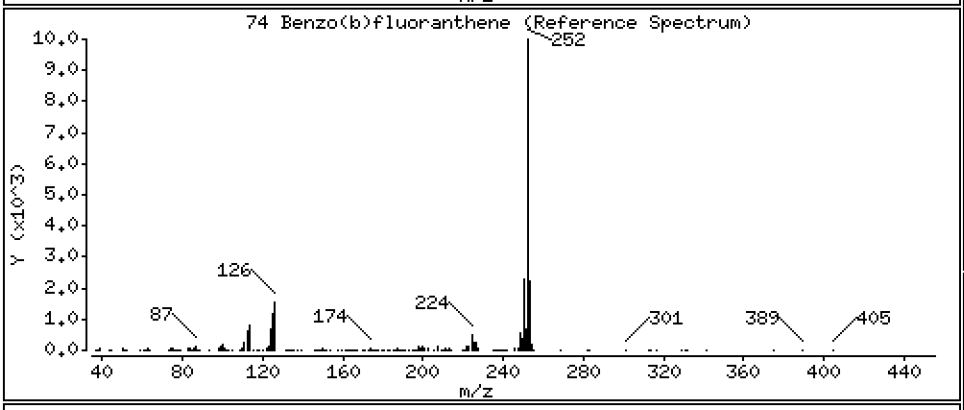
Column diameter: 0.25

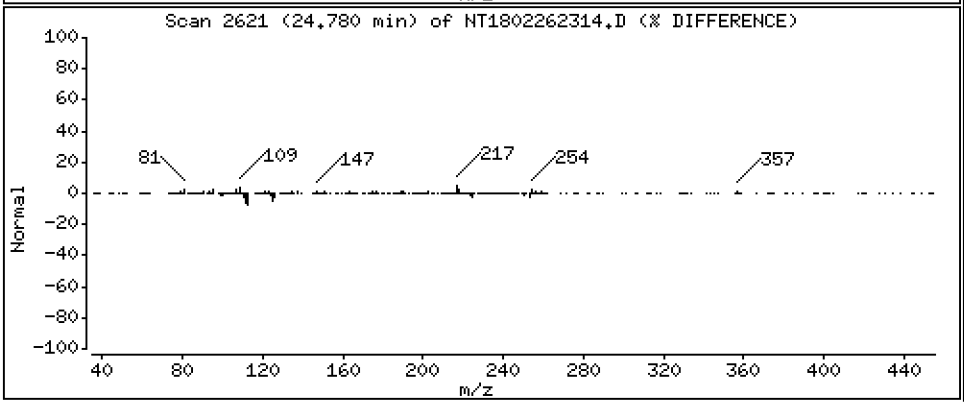
74 Benzo(b)fluoranthene

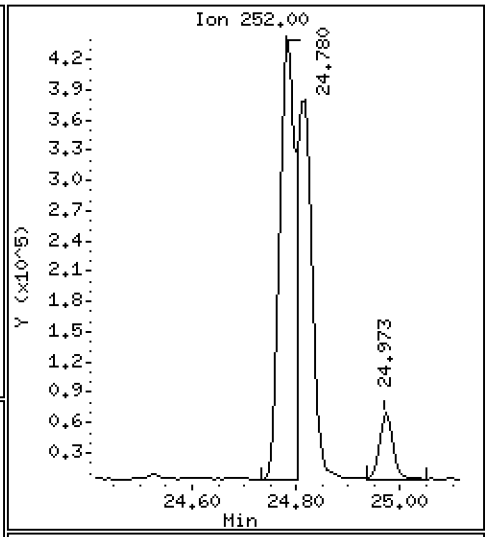
Concentration: 3.262 ug/mL

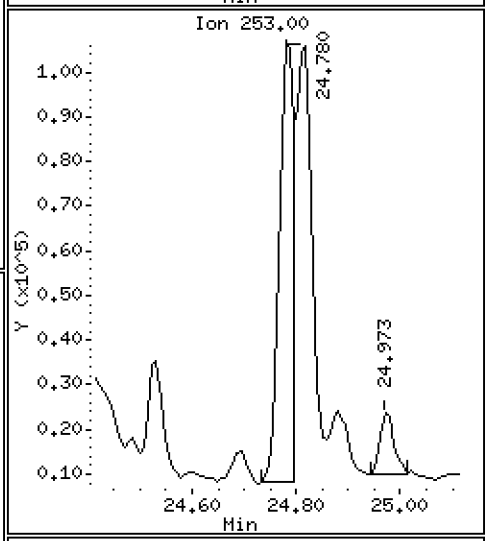


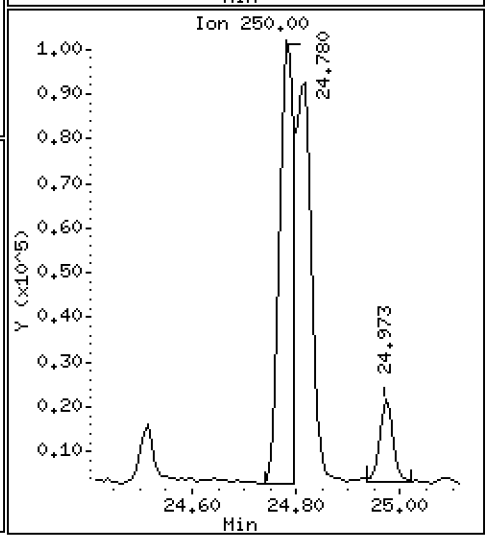












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262314.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

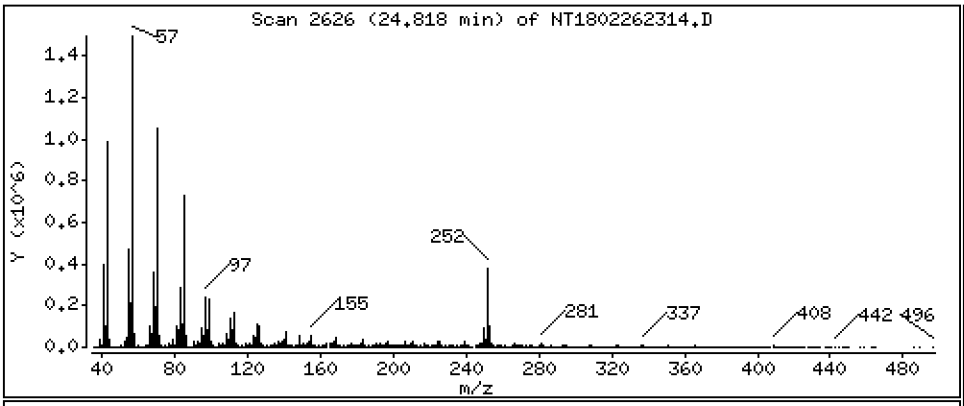
Operator: VTS

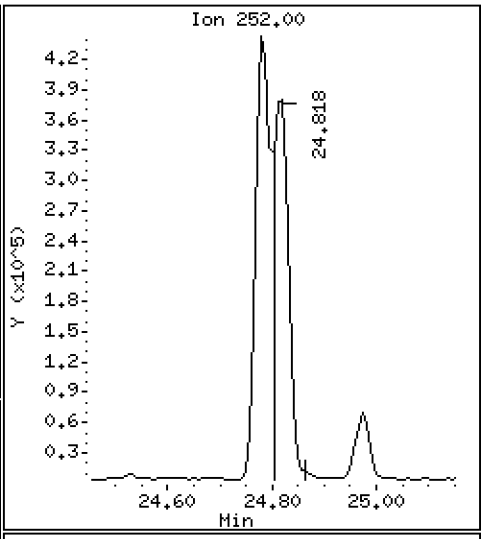
Column phase: ZB-5msi

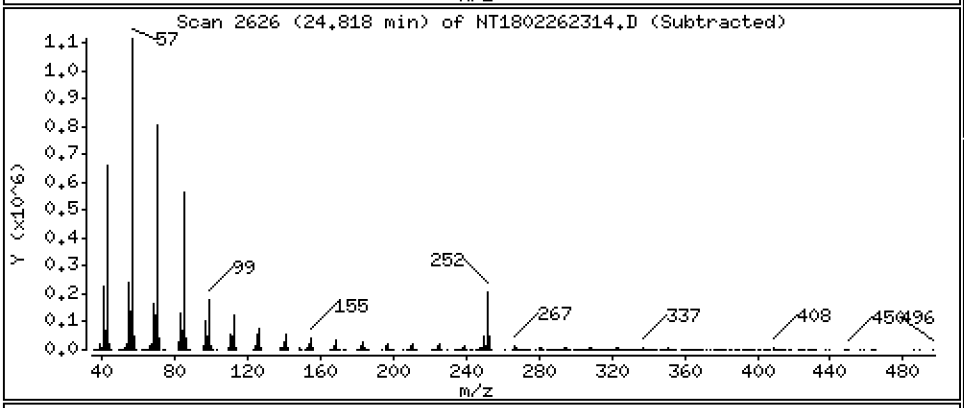
Column diameter: 0.25

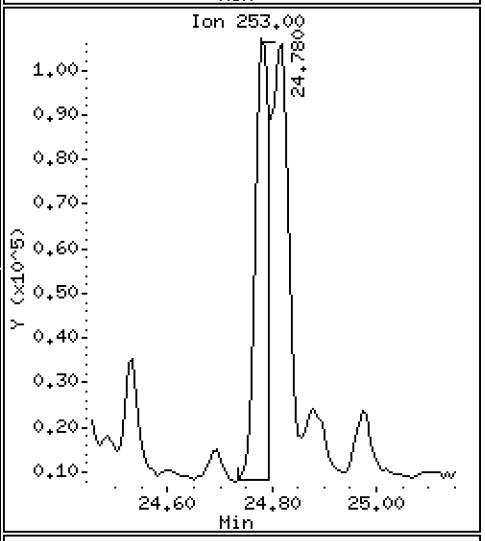
75 Benzo(k)fluoranthene

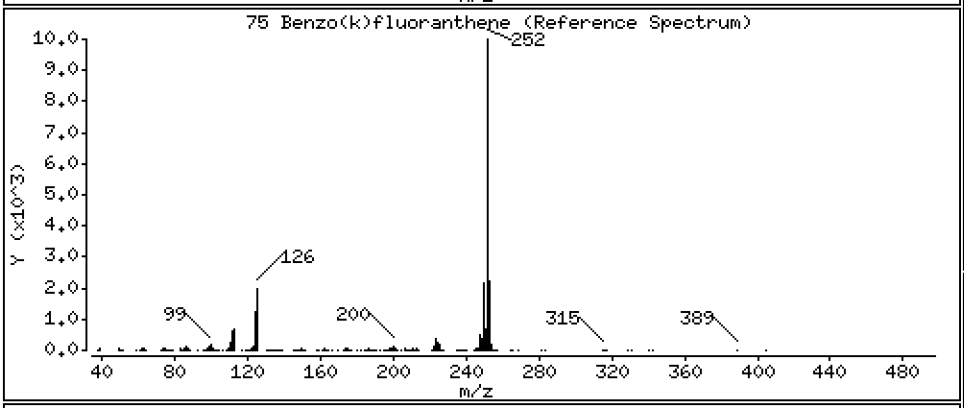
Concentration: 2.375 ug/mL

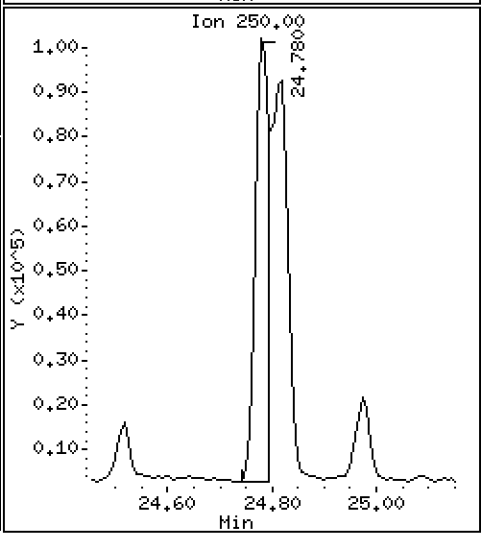


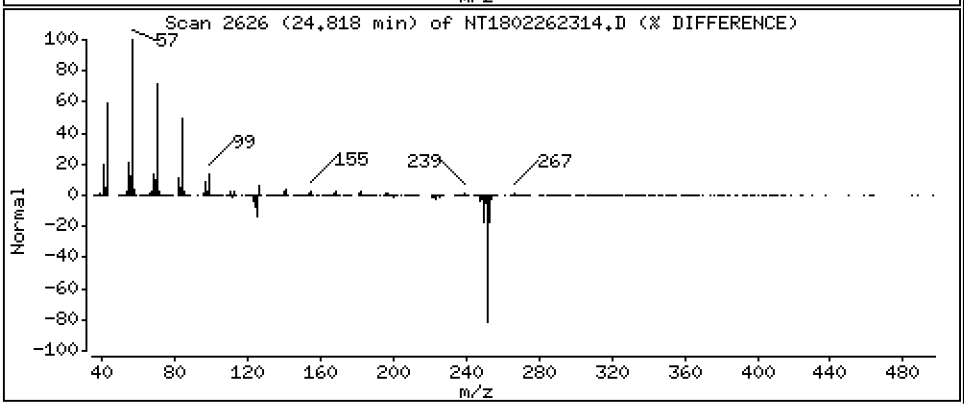












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

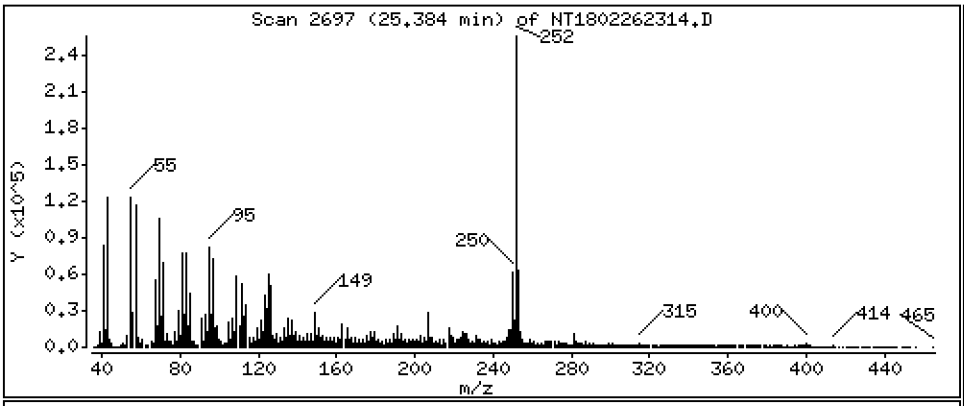
Operator: VTS

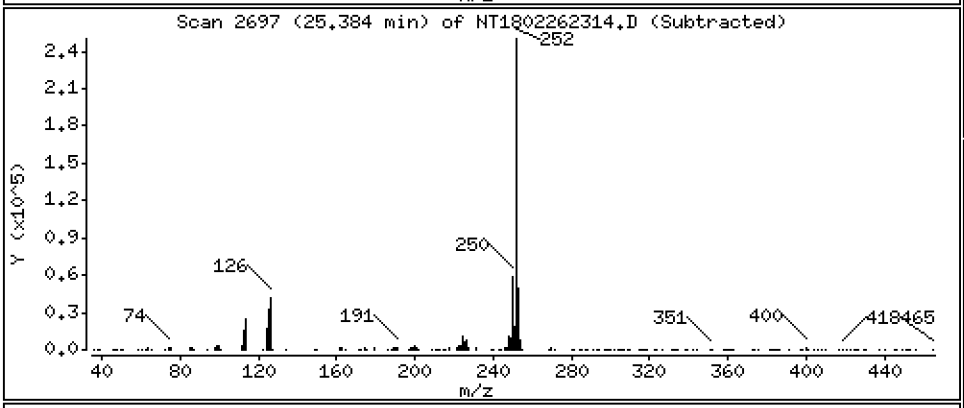
Column phase: ZB-5msi

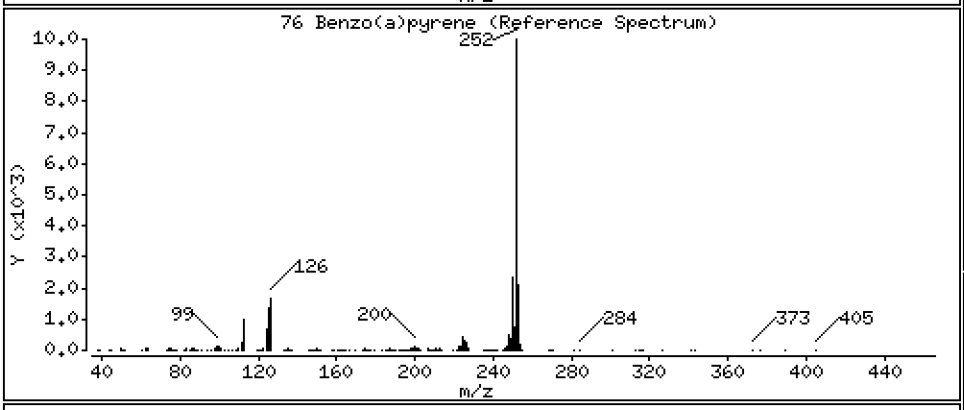
Column diameter: 0.25

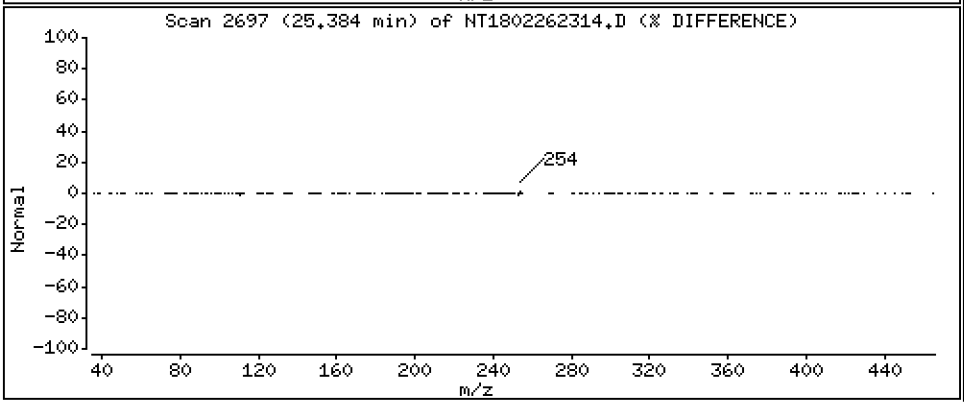
76 Benzo(a)pyrene

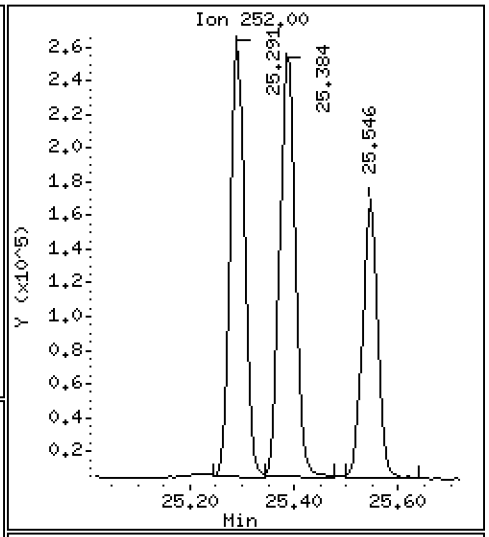
Concentration: 1.939 ug/mL

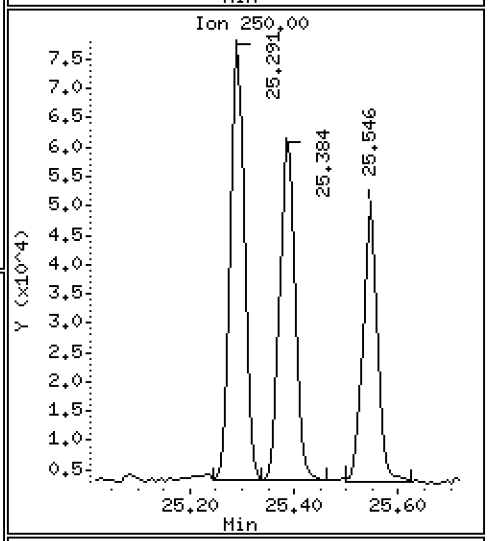


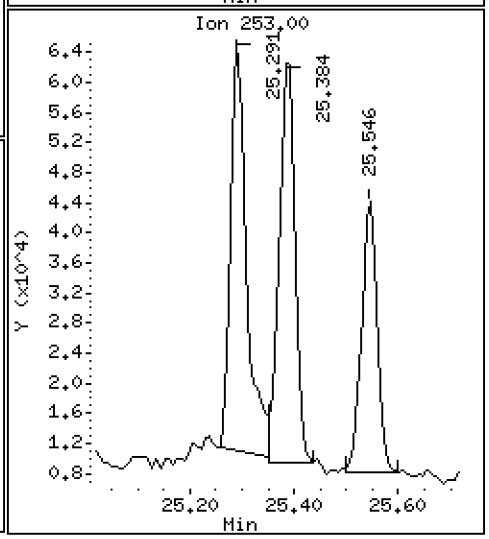












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

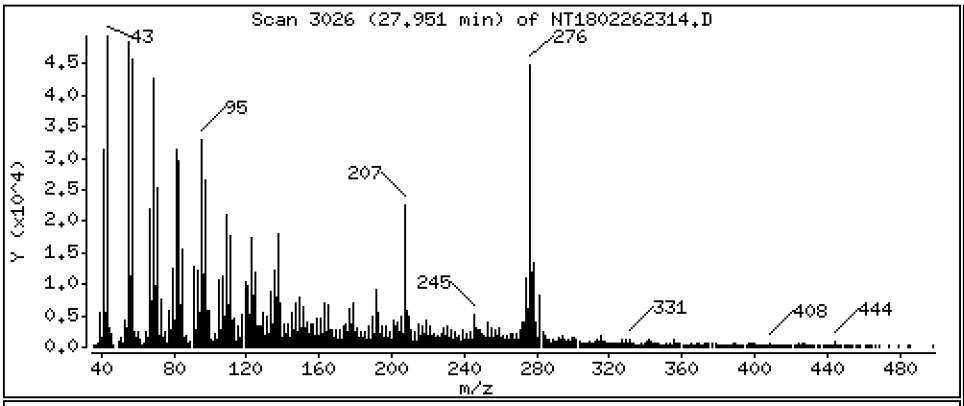
Operator: VTS

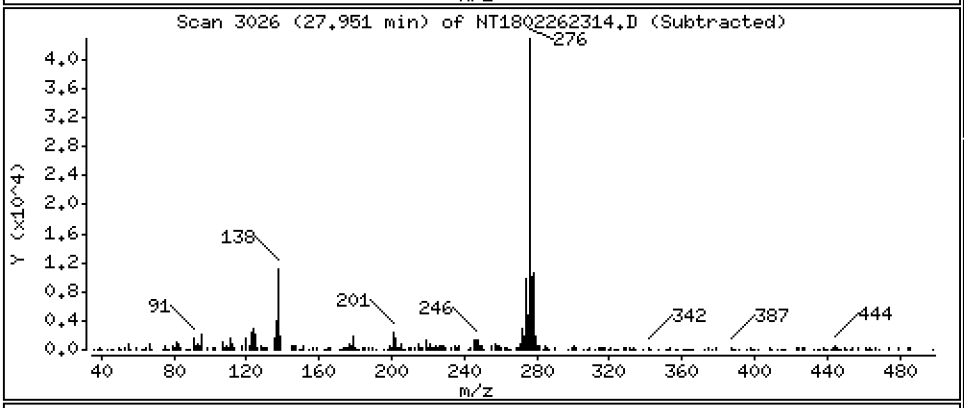
Column phase: ZB-5msi

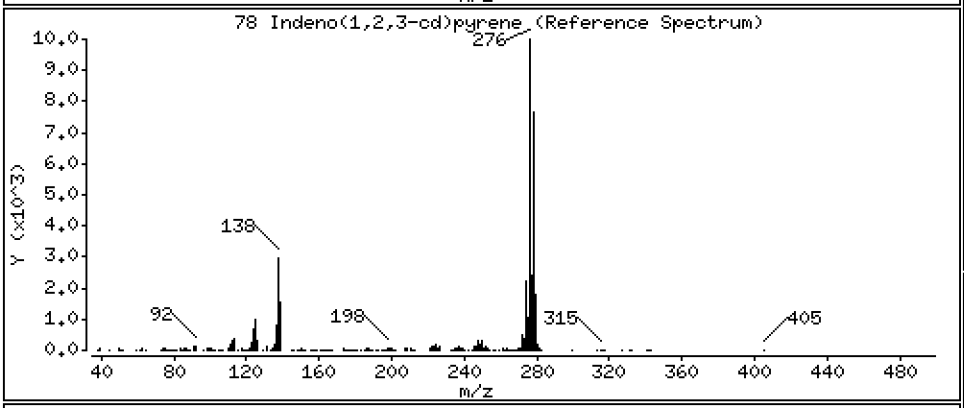
Column diameter: 0.25

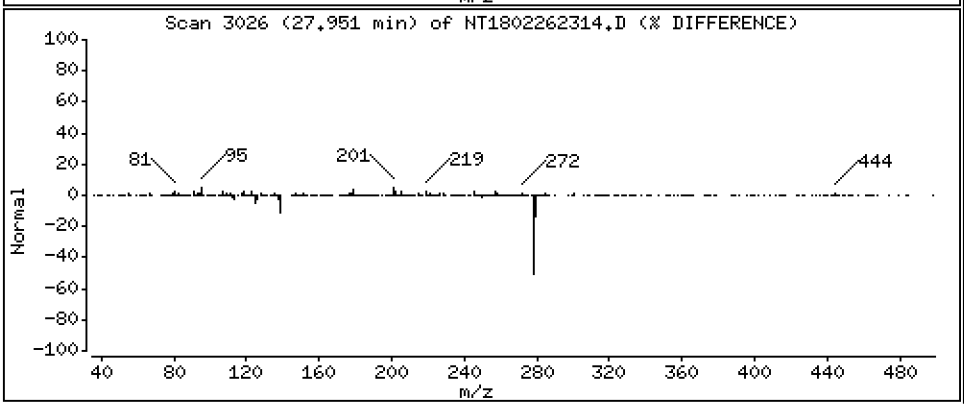
78 Indeno(1,2,3-cd)pyrene

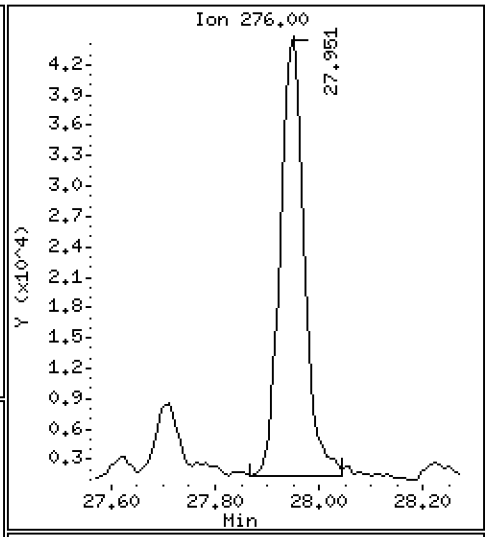
Concentration: 0.4210 ug/mL

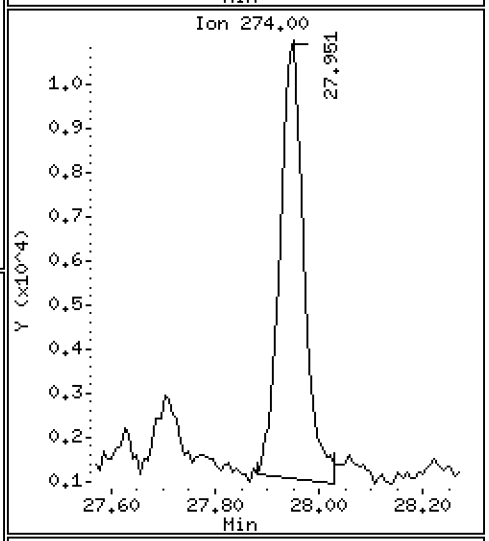


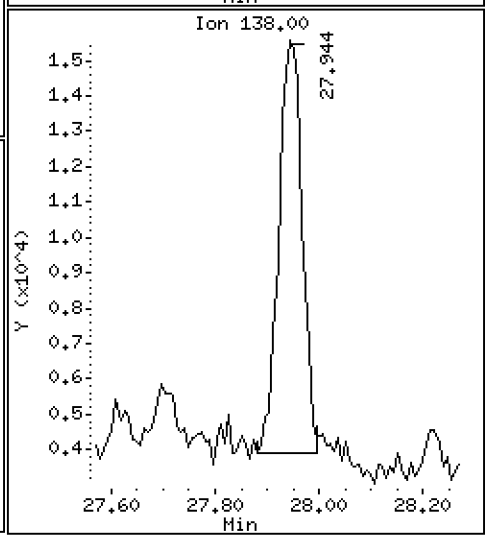












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262314.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

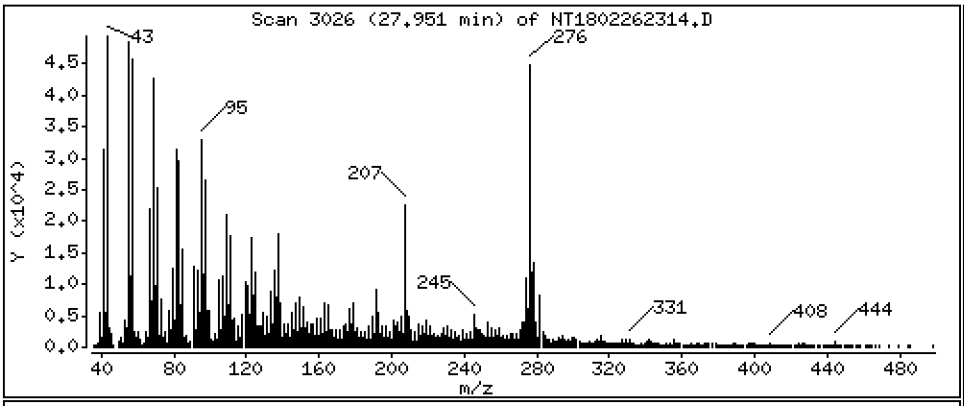
Operator: VTS

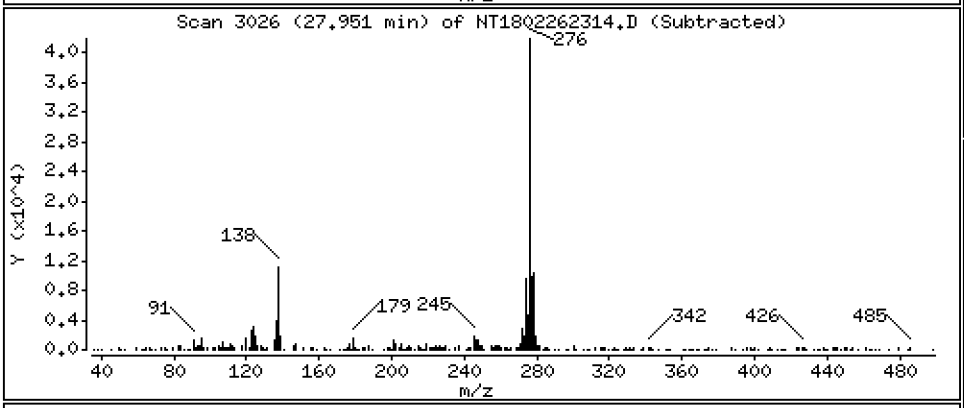
Column phase: ZB-5msi

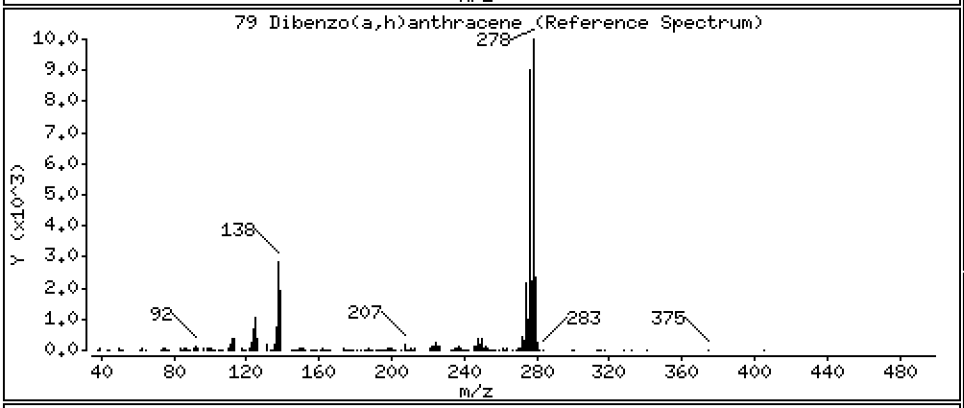
Column diameter: 0.25

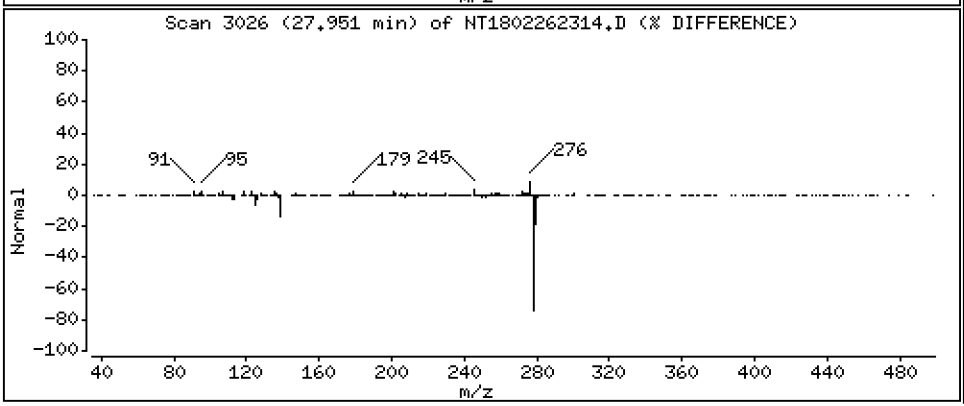
79 Dibenzo(a,h)anthracene

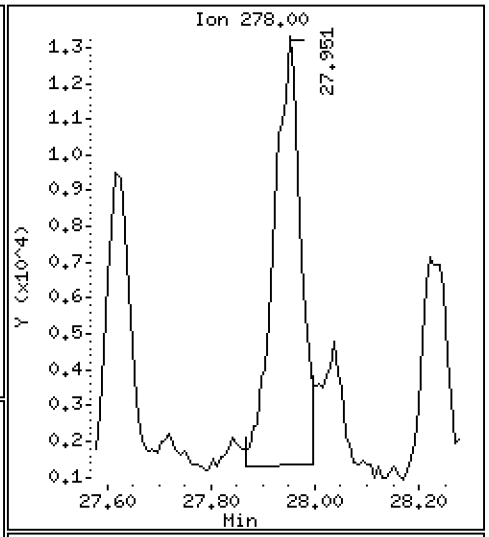
Concentration: 0.1535 ug/mL

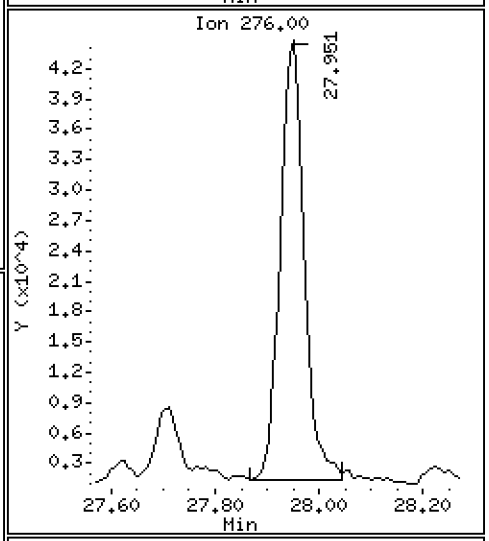


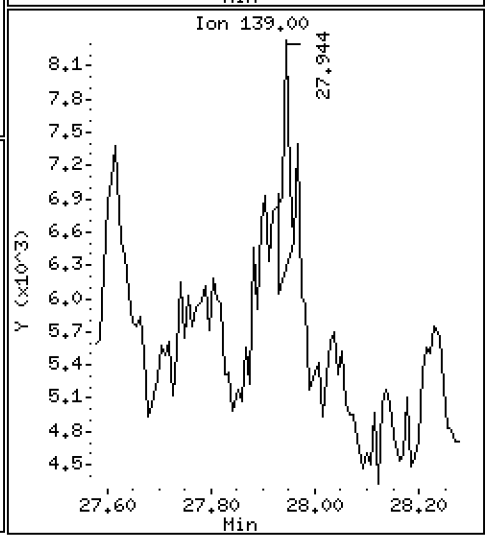












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

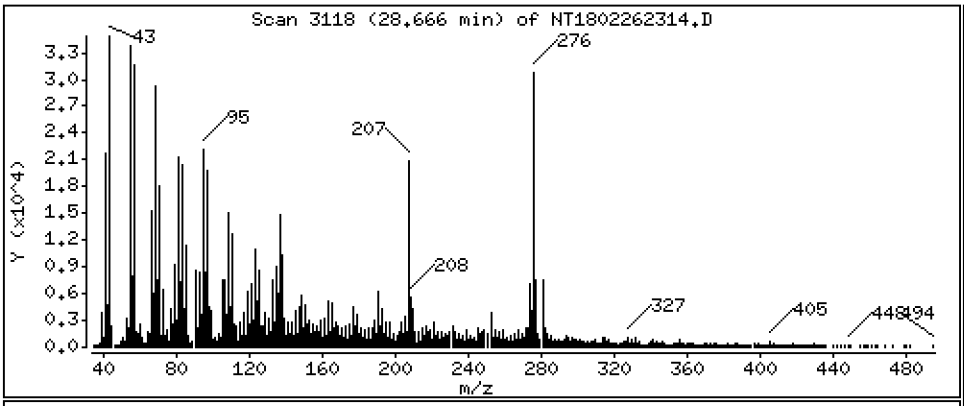
Operator: VTS

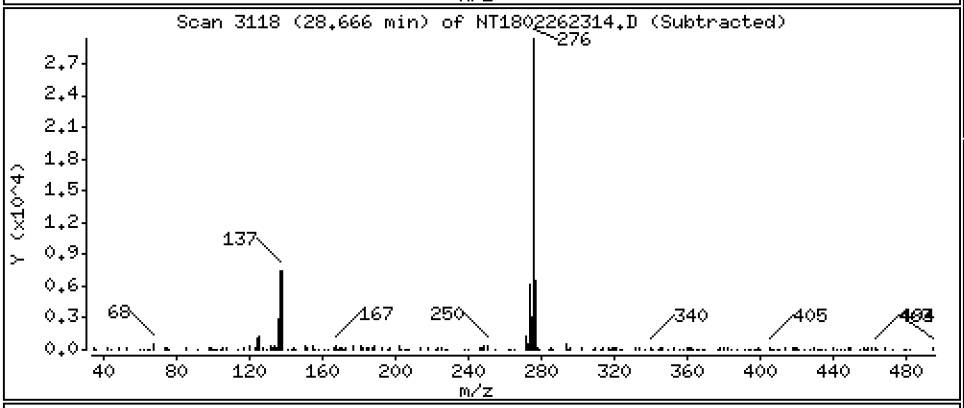
Column phase: ZB-5msi

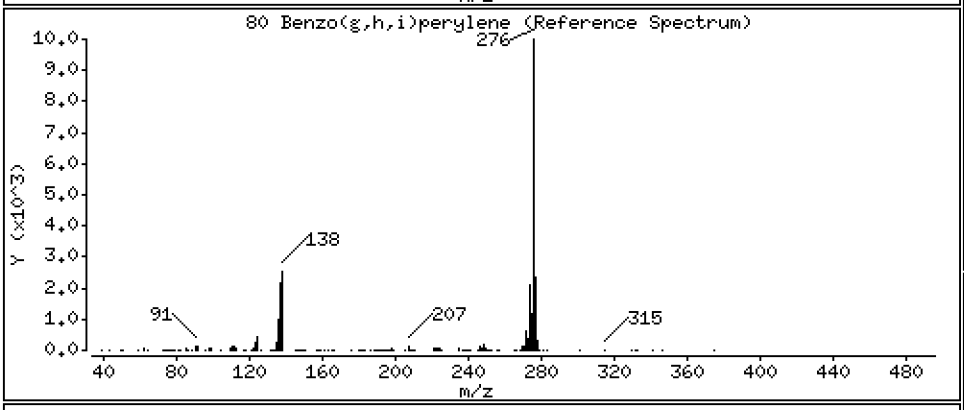
Column diameter: 0.25

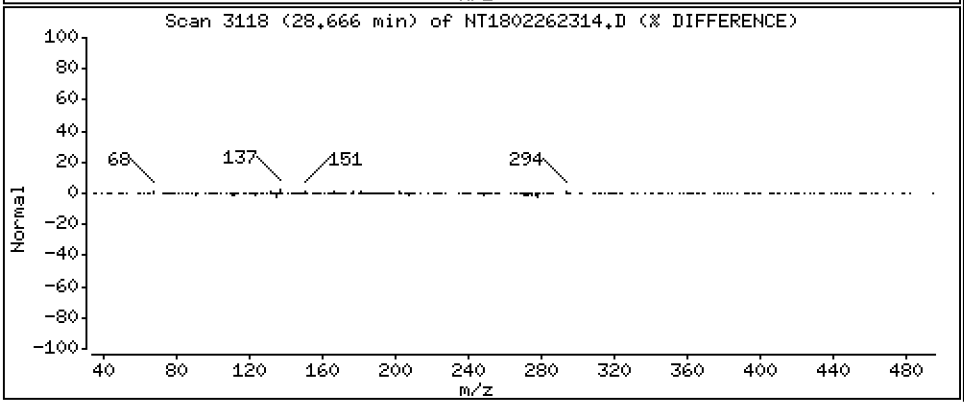
80 Benzo(g,h,i)perylene

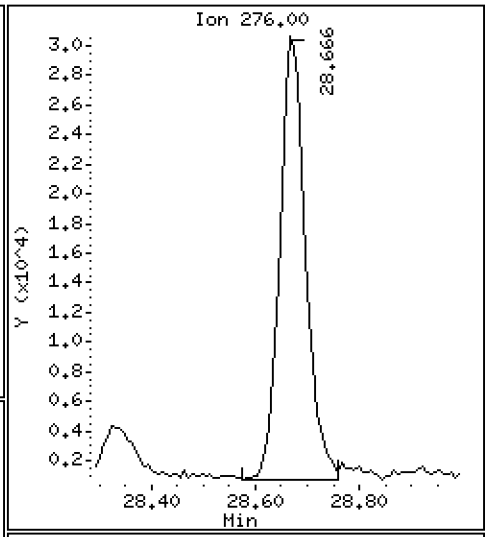
Concentration: 0.3874 ug/mL

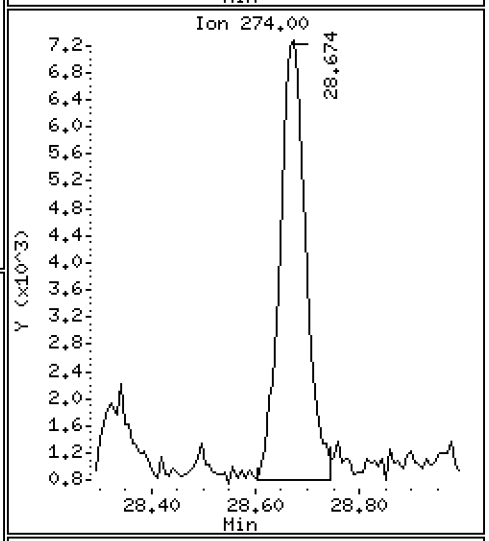


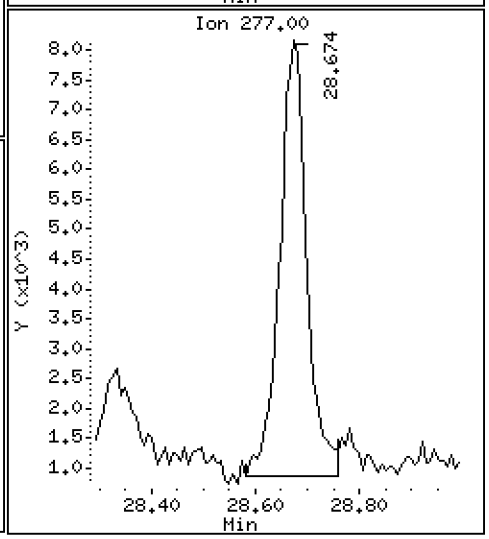












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

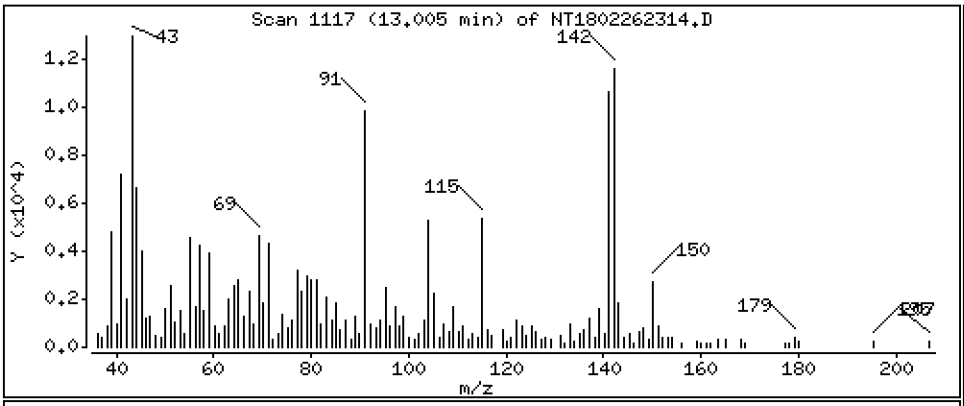
Operator: VTS

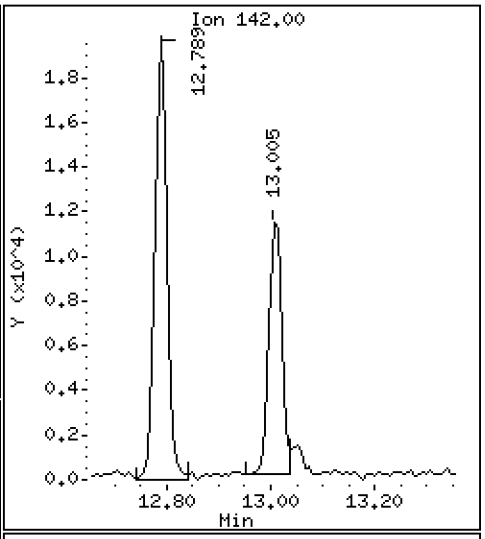
Column phase: ZB-5msi

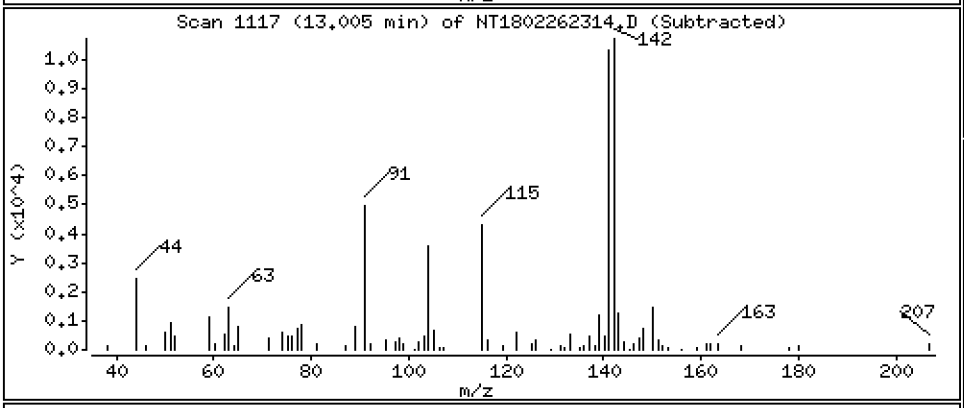
Column diameter: 0.25

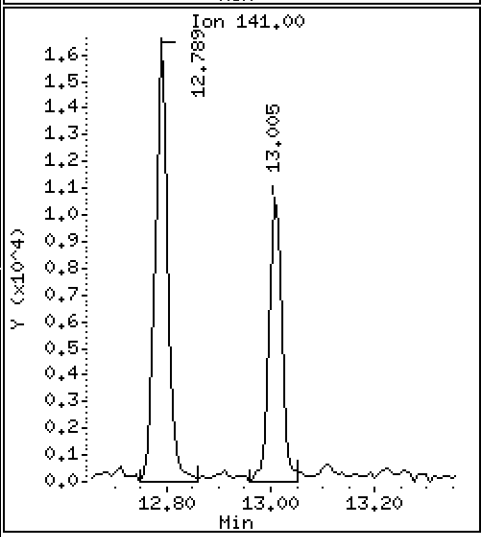
105 1-methylnaphthalene

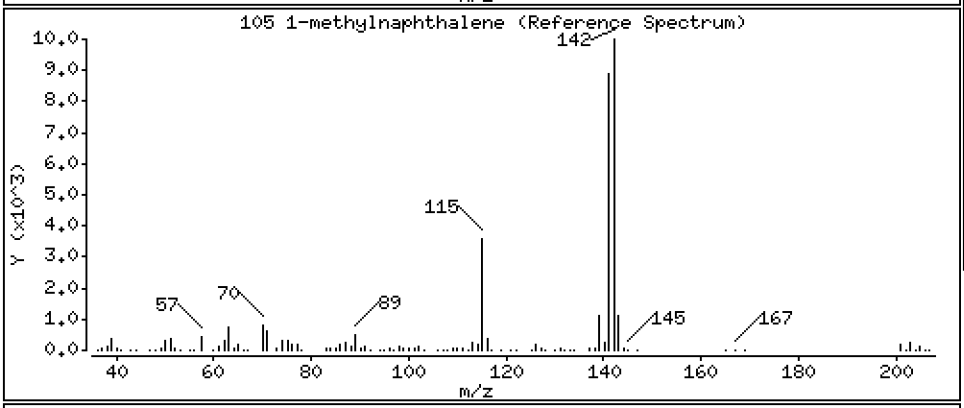
Concentration: 0.1069 ug/mL

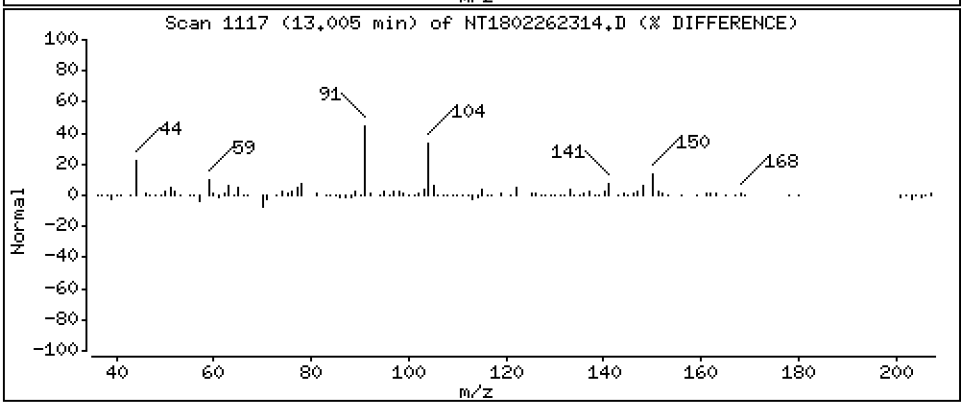












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

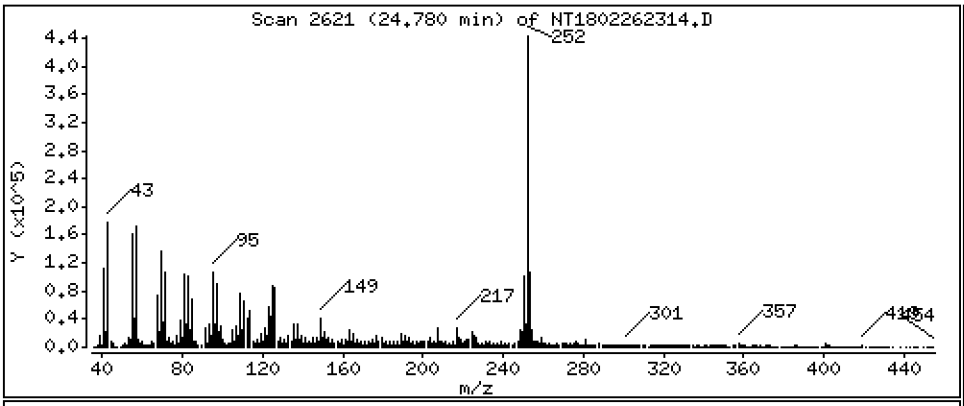
Operator: VTS

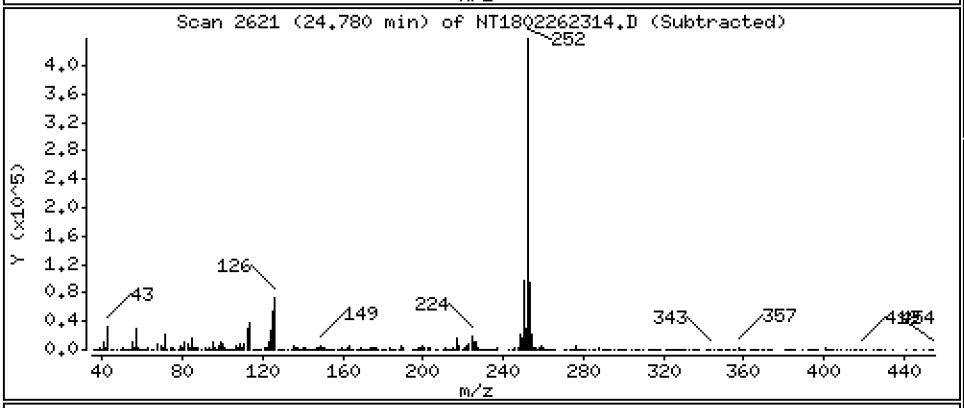
Column phase: ZB-5msi

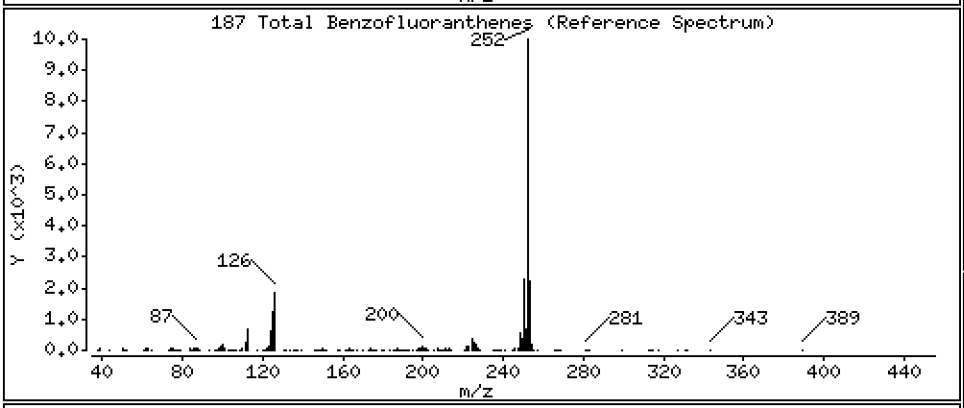
Column diameter: 0.25

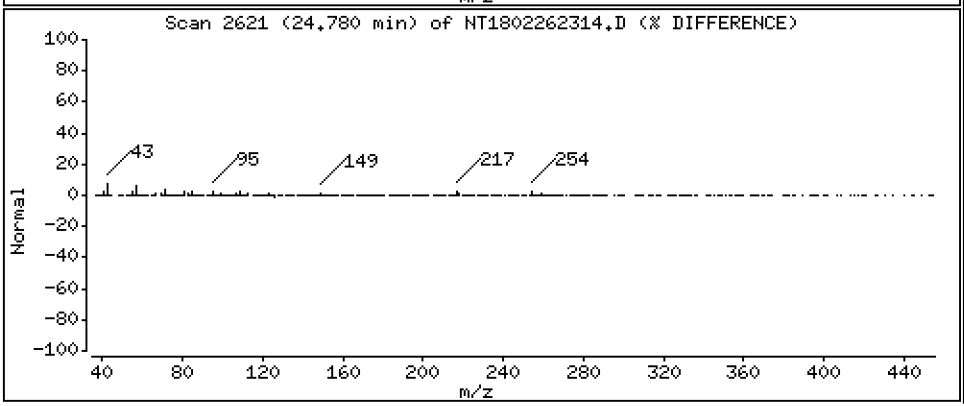
187 Total Benzofluoranthenes

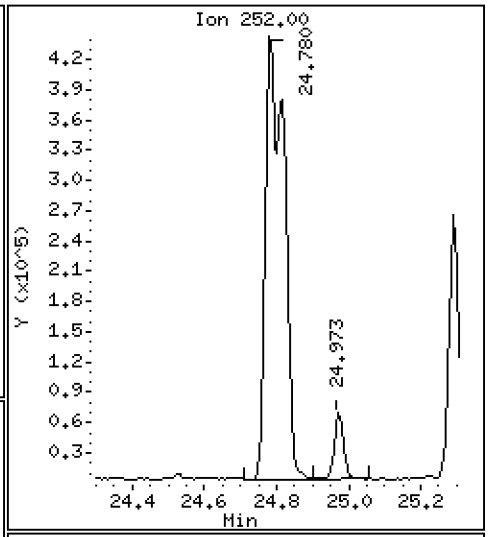
Concentration: 5.339 ug/mL

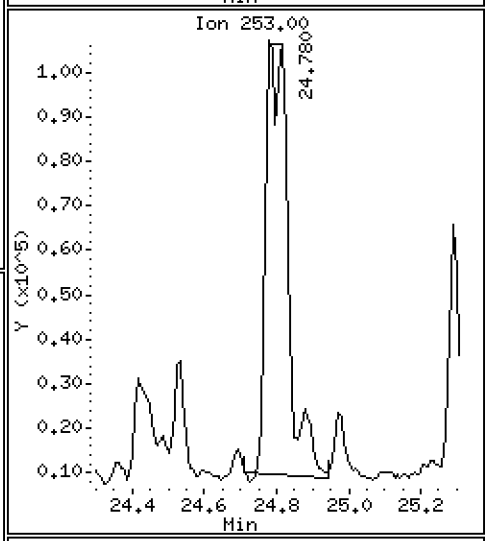


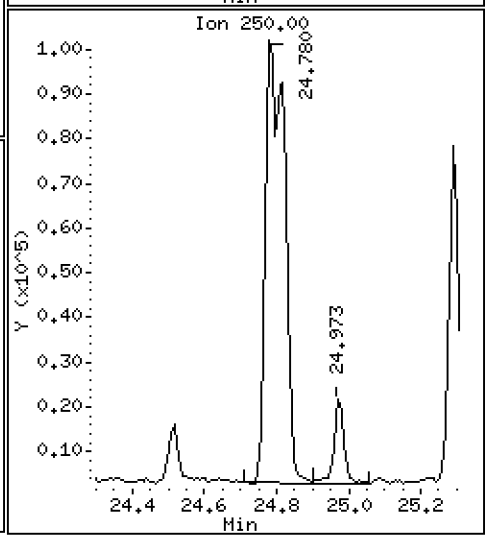












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262314.D
Lab Smp Id: 23A0134-05
Inj Date : 26-FEB-2023 20:33
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-05
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.766	6.743	(0.759)	479464	5.49676	5.497
$	2 Phenol-d5	99	8.312	8.296	(0.932)	630754	5.59530	5.595
	3 Phenol	94	8.335	8.319	(0.935)	544454	4.64197	4.642
$	5 2-Chlorophenol-d4	132	8.566	8.559	(0.961)	548417	5.59065	5.591
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	255665	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.272	9.272	(1.040)	225681	3.24525	3.245
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	9.202	9.186	(1.032)	19163	0.34362	0.3436
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	9.427	9.411	(1.057)	2090	0.02304	0.02304
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.691	9.683	(1.087)	11687	0.12359	0.1236
$	18 Nitrobenzene-d5	82	9.993	9.993	(0.879)	379281	3.76159	3.762
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	10.896	10.990	(0.959)	62629	1.81090	1.811(M)
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	946109	4.00000	
	28 Naphthalene	128	11.403	11.403	(1.003)	61390	0.21108	0.2111
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	31350	0.15863	0.1586
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.570	13.570	(0.908)	804455	3.73148	3.731
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	14.460	14.468	(0.967)	11090	0.06130	0.06130
	40 Acenaphthylene	152	14.638	14.630	(0.979)	46487	0.16389	0.1639
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	14.947	14.947	(1.000)	511330	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.009	15.009	(1.004)	46015	0.25632	0.2563
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.334	15.334	(1.026)	63209	0.24326	0.2433
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	15.906	15.921	(1.064)	59668	0.31474	0.3147
	49 Fluorene	166	16.037	16.037	(1.073)	68557	0.32924	0.3292
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	201647	7.54079	7.541
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	17.952	17.952	(1.000)	1044038	4.00000	
	60 Phenanthrene	178	17.999	17.999	(1.003)	510785	1.55542	1.555
	61 Anthracene	178	18.092	18.092	(1.008)	310389	0.99183	0.9918
	62 Carbazole	167	18.424	18.424	(1.026)	66097	0.23049	0.2305
	63 Di-n-butylphthalate	149	19.244	19.237	(1.072)	38600	0.12161	0.1216
	64 Fluoranthene	202	20.420	20.382	(0.888)	1679760	4.21456	4.215
	65 Pyrene	202	20.823	20.800	(0.905)	1492545	3.51128	3.511
$	66 Terphenyl-d14	244	21.109	21.094	(0.918)	1361239	3.99268	3.993
	67 Butylbenzylphthalate	149	22.031	22.023	(0.958)	24186	0.14985	0.1498
	68 Benzo(a)anthracene	228	22.968	22.952	(0.999)	819130	1.99455	1.995
*	69 Chrysene-d12	240	22.998	22.983	(1.000)	1137568	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.037	23.029	(1.002)	1211921	2.83790	2.838
	72 bis(2-Ethylhexyl)phthalate	149	23.053	23.053	(0.959)	445813	1.80029	1.800
*	134 Di-n-octylphthalate-d4	153	24.028	24.020	(1.000)	1724830	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	24.779	24.764	(0.972)	954510	3.26157	3.262
	75 Benzo(k)fluoranthene	252	24.818	24.802	(0.973)	787653	2.37483	2.375(M)
	76 Benzo(a)pyrene	252	25.383	25.368	(0.995)	525975	1.93873	1.939
*	77 Perylene-d12	264	25.499	25.476	(1.000)	897024	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.951	27.920	(1.096)	143374	0.42097	0.4210
	79 Dibenzo(a,h)anthracene	278	27.951	27.927	(1.096)	43597	0.15349	0.1535
	80 Benzo(g,h,i)perylene	276	28.665	28.642	(1.124)	105775	0.38739	0.3874
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	142	13.005	13.005	(1.144)	19118	0.10686	0.1069
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.779	24.802	(0.972)	1579704	5.33889	5.339
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262314.D
Lab Smp Id: 23A0134-05
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	255665	4.73
27 Naphthalene-d8	943164	471582	1886328	946109	0.31
42 Acenaphthene-d10	501893	250947	1003786	511330	1.88
59 Phenanthrene-d10	896502	448251	1793004	1044038	16.46
69 Chrysene-d12	842481	421241	1684962	1137568	35.03
134 Di-n-octylphthala	1278043	639022	2556086	1724830	34.96
77 Perylene-d12	915681	457841	1831362	897024	-2.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.07
134 Di-n-octylphthala	24.02	23.52	24.52	24.03	0.03
77 Perylene-d12	25.48	24.98	25.98	25.50	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262314.D

Lab ID: 23A0134-05
nt18.i, ABN.m, 26-FEB-2023 20:33

RT	CO-ELUTION COMPOUNDS
27.951	Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene
27.951	Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.959	0.967	-0.0082	Benzoic acid

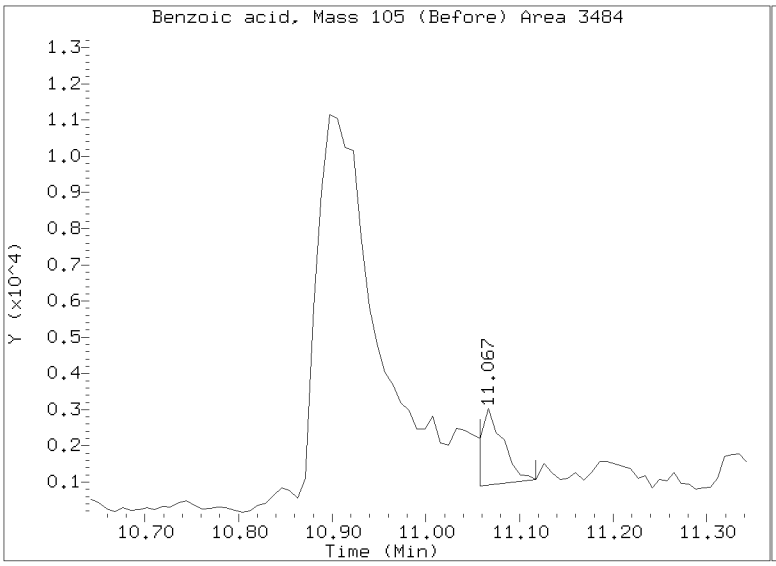
RRT check based on Ccal File: NT1802262302.D

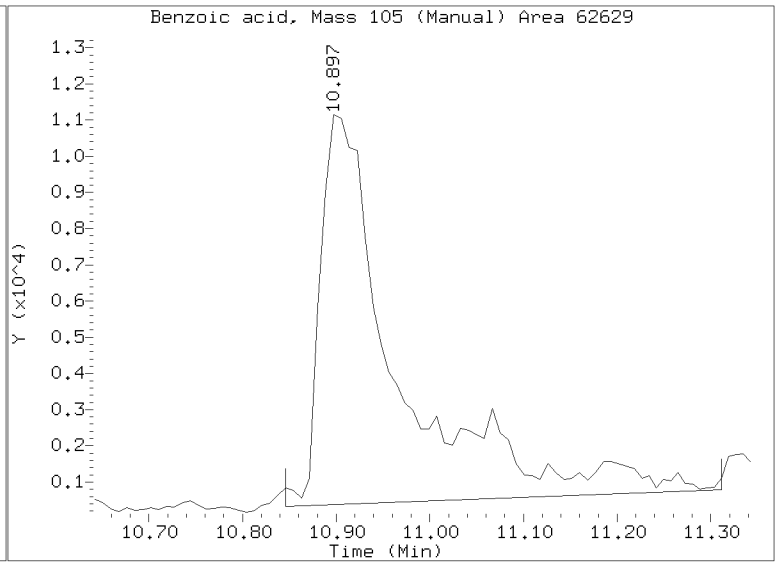
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

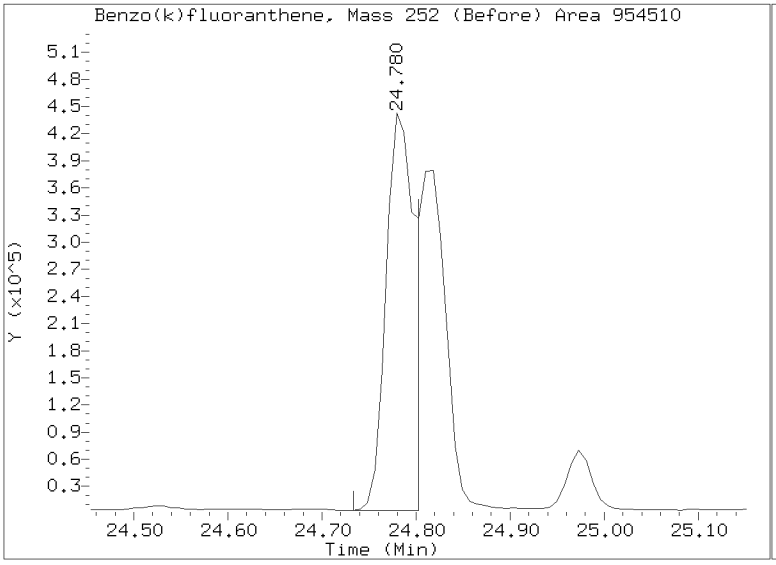
* Only compounds listed in the work order have been verified by the analyst *

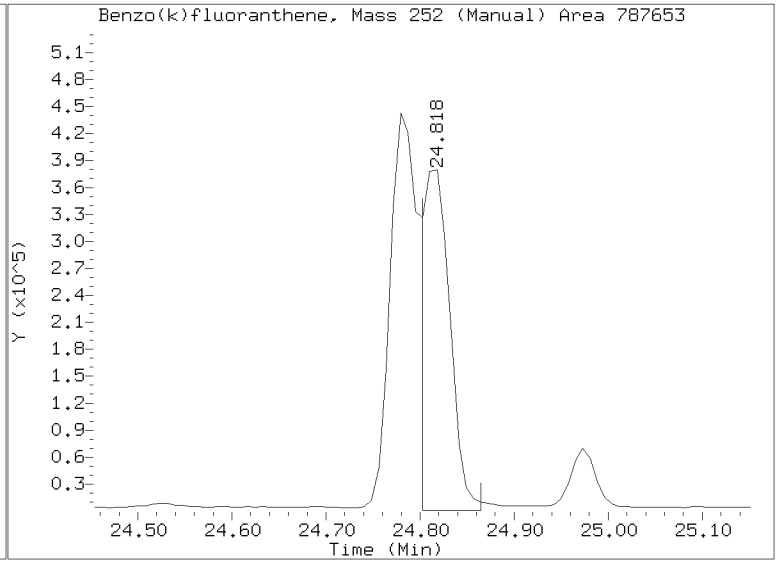
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/NT1802262314.D
Injection Date: 26-FEB-2023 20:33
Lab ID:23A0134-05 Client ID:
Report Date: 03/10/2023 07:47









Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1160

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-06 C	SDG:	23A0134
Sampled:	01/06/23 11:41	Prepared:	01/19/23 13:35	File ID:	NT1802262315.D
% Solids:	40.27	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 21:13
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	25.07 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	354		4.3	19.8
106-44-5	4-Methylphenol	1	19.8	U	7.3	19.8
91-20-3	Naphthalene	1	4.4	J	4.2	19.8
91-57-6	2-Methylnaphthalene	1	19.8	U	4.5	19.8
208-96-8	Acenaphthylene	1	6.5	J	6.2	19.8
131-11-3	Dimethylphthalate	1	19.8	U	4.3	19.8
83-32-9	Acenaphthene	1	8.4	J	5.2	19.8
132-64-9	Dibenzofuran	1	19.8	U	14.0	19.8
86-73-7	Fluorene	1	19.8	U	14.4	19.8
85-01-8	Phenanthrene	1	35.5		8.6	19.8
120-12-7	Anthracene	1	22.1		7.1	19.8
206-44-0	Fluoranthene	1	142		6.0	19.8
129-00-0	Pyrene	1	117		5.6	19.8
85-68-7	Butylbenzylphthalate	1	29.4		9.3	19.8
56-55-3	Benzo(a)anthracene	1	70.8		5.9	19.8
218-01-9	Chrysene	1	164		6.0	19.8
117-81-7	bis(2-Ethylhexyl)phthalate	1	277		5.4	49.5
	Benzofluoranthenes, Total	1	225		9.9	39.6
50-32-8	Benzo(a)pyrene	1	71.0		4.2	19.8
193-39-5	Indeno(1,2,3-cd)pyrene	1	16.6	J	14.5	19.8
53-70-3	Dibenzo(a,h)anthracene	1	19.8	U	17.1	19.8
191-24-2	Benzo(g,h,i)perylene	1	16.1	J	13.5	19.8

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	742.89	551	74.2	27 - 120	
Phenol-d5	742.89	550	74.1	29 - 120	
2-Chlorophenol-d4	742.89	567	76.3	31 - 120	
1,2-Dichlorobenzene-d4	495.26	325	65.7	32 - 120	
Nitrobenzene-d5	495.26	374	75.6	30 - 120	
2-Fluorobiphenyl	495.26	378	76.4	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1160

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

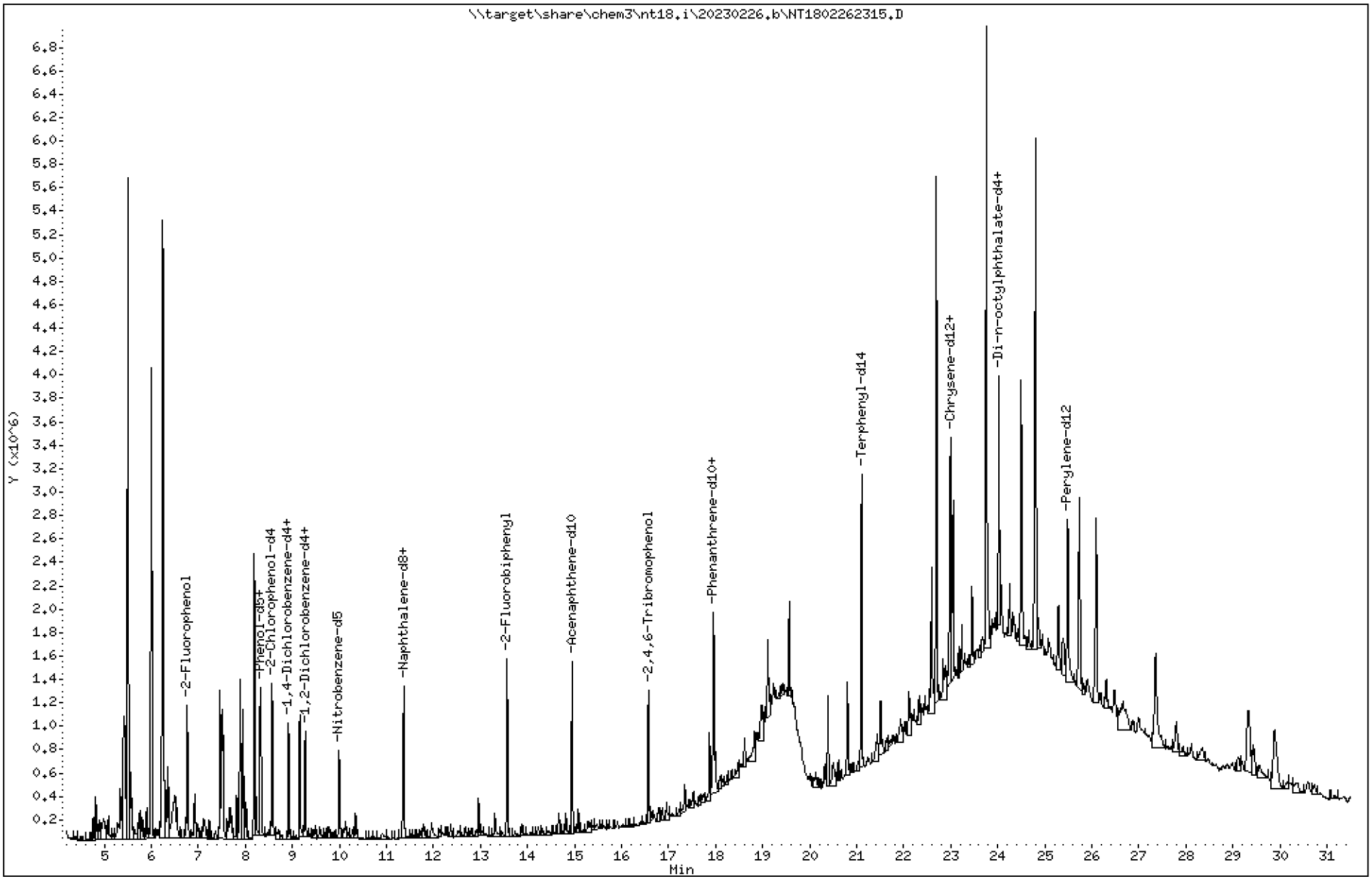
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-06 C	SDG:	23A0134
Sampled:	01/06/23 11:41	Prepared:	01/19/23 13:35	File ID:	NT1802262315.D
% Solids:	40.27	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 21:13
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	25.07 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	742.89	758	102	24 - 134	
p-Terphenyl-d14	495.26	424	85.5	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262315.D
Date : 26-FEB-2023 21:13
Client ID:
Sample Info: 23A0134-06

Instrument: nt18.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

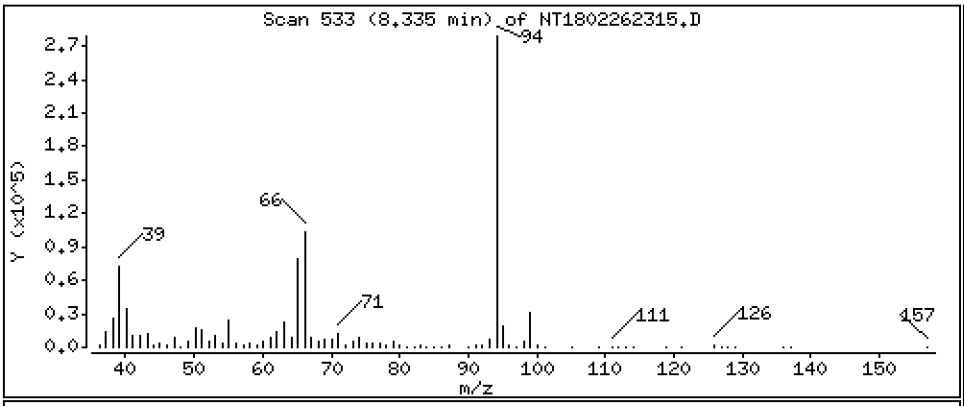
Operator: VTS

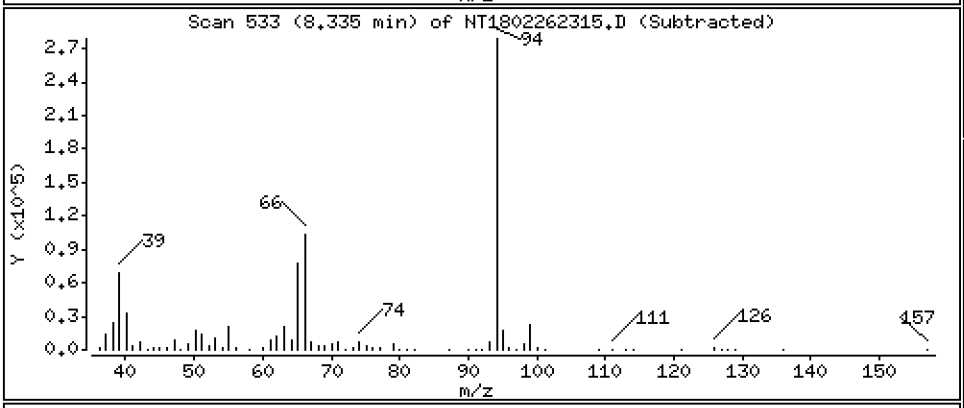
Column phase: ZB-5msi

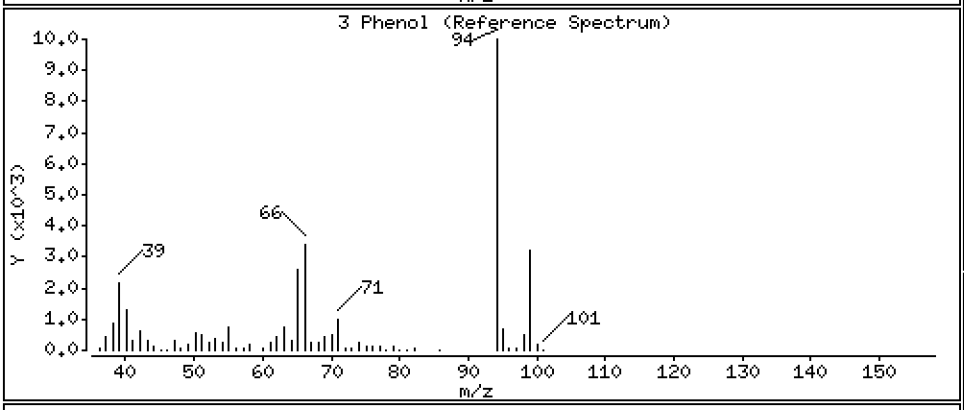
Column diameter: 0.25

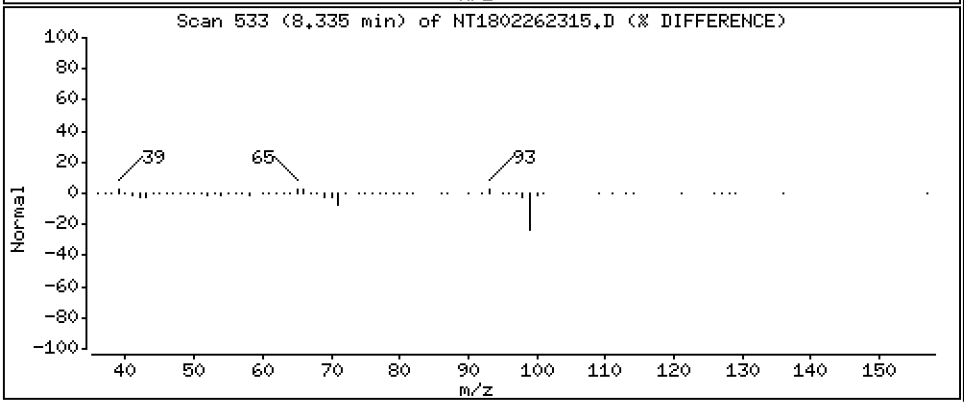
3 Phenol

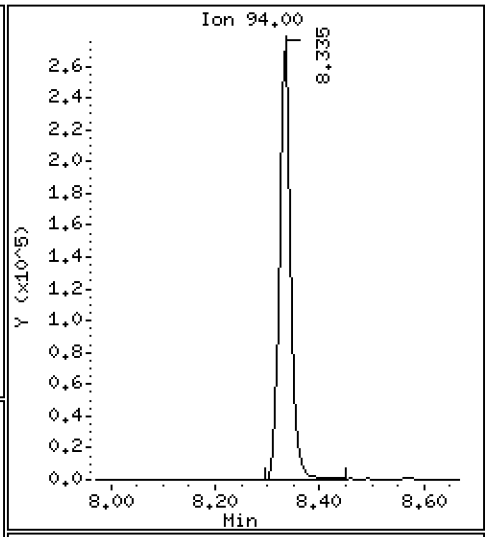
Concentration: 3.579 ug/mL

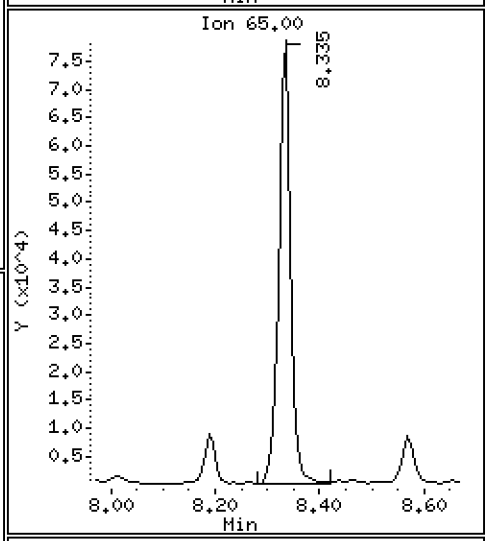


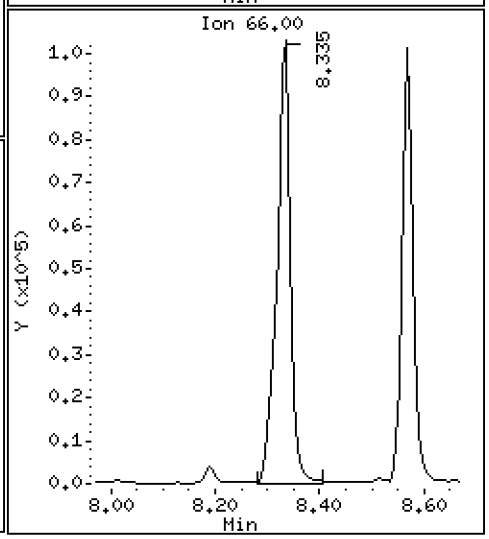












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

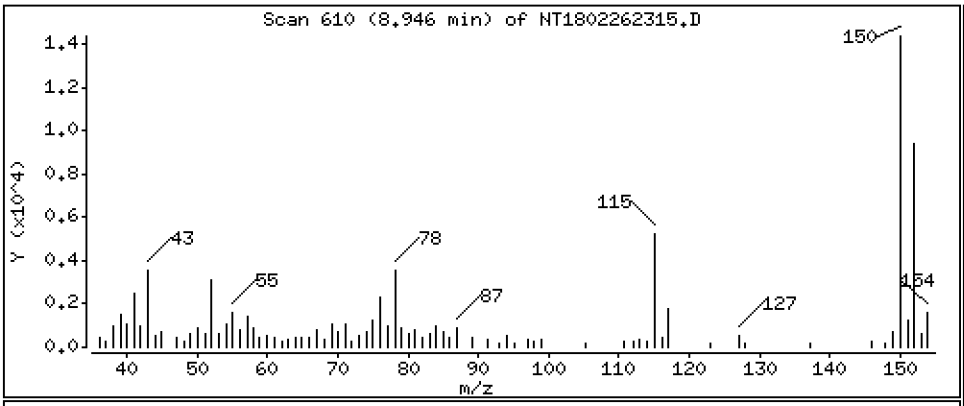
Operator: VTS

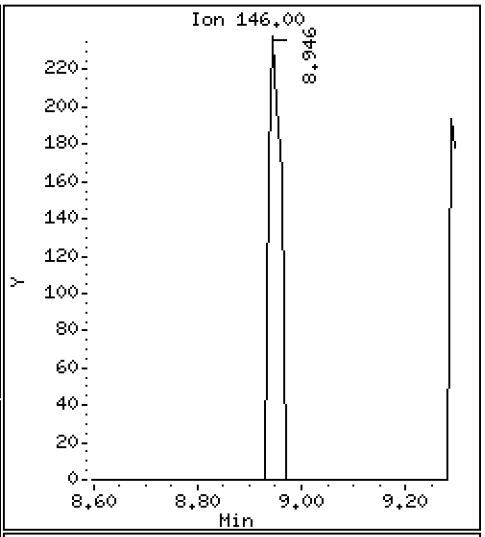
Column phase: ZB-5msi

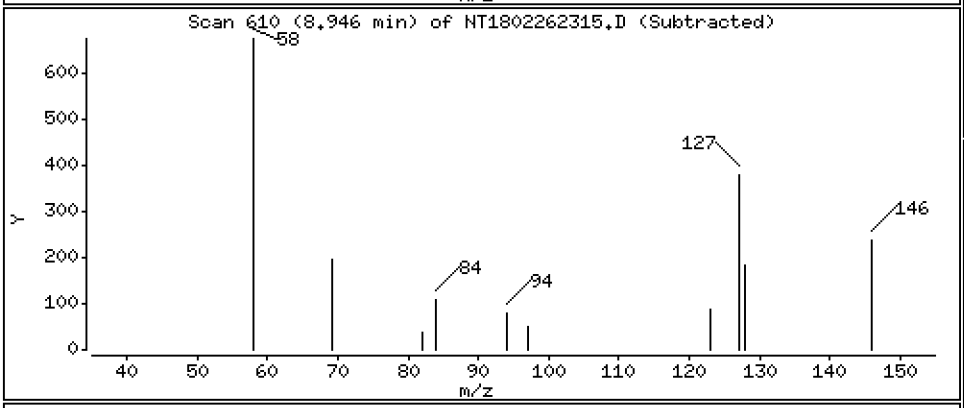
Column diameter: 0.25

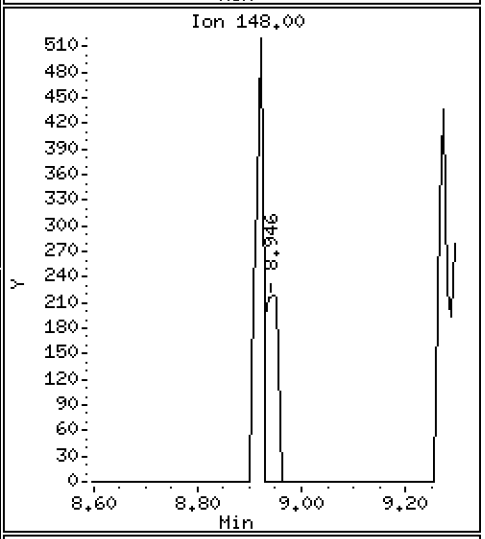
9 1,4-Dichlorobenzene

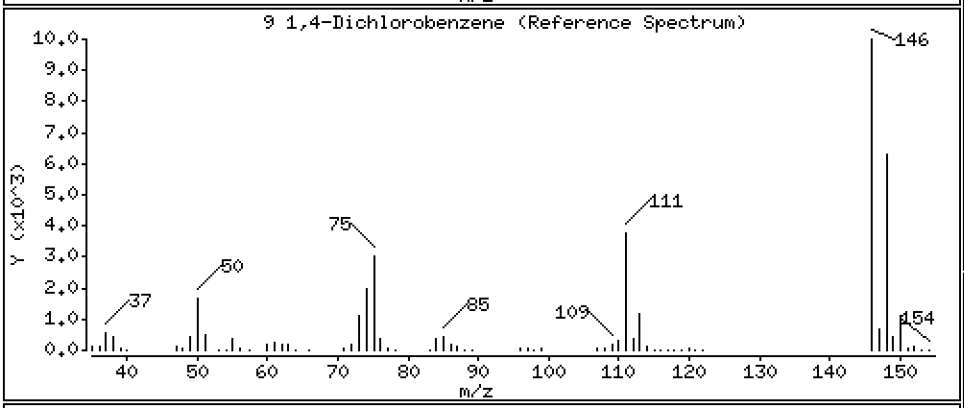
Concentration: 0.003362 ug/mL

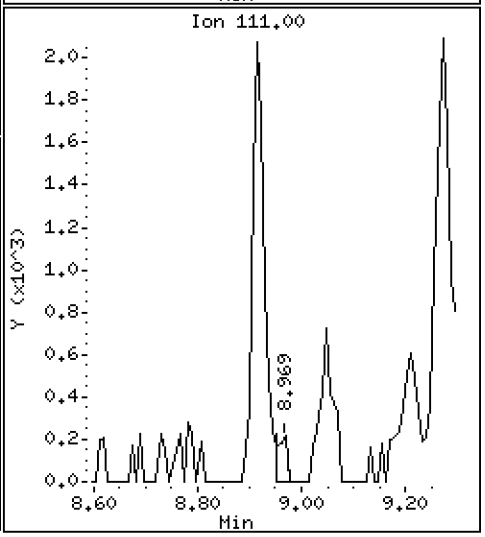


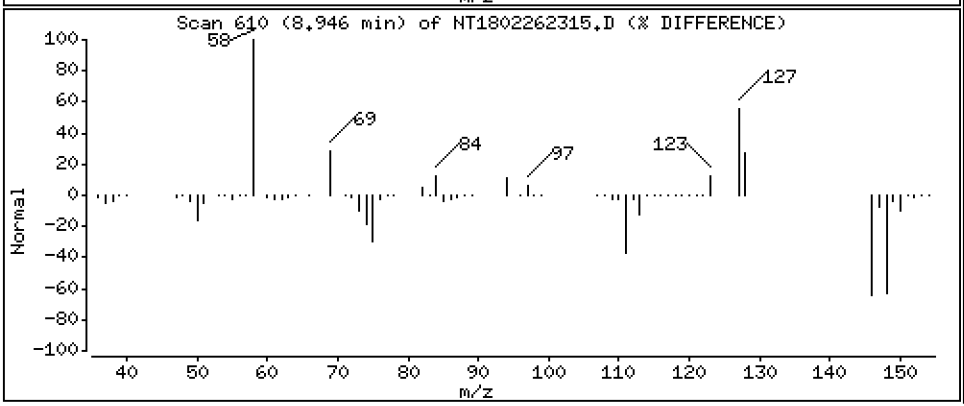












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262315.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

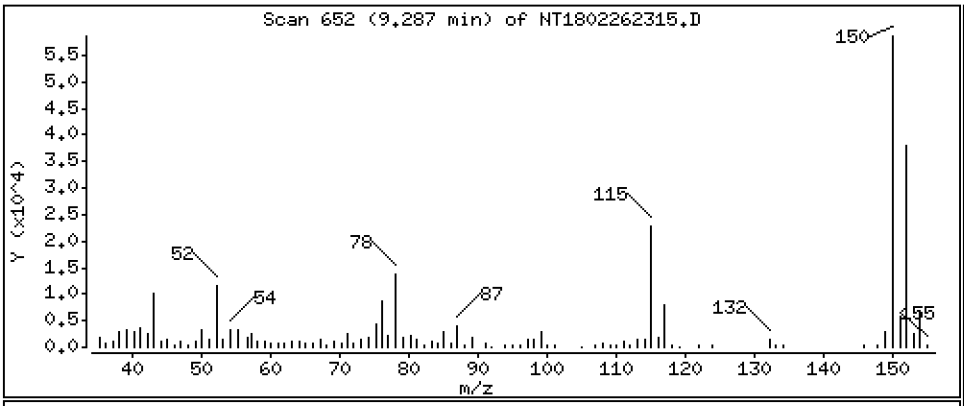
Operator: VTS

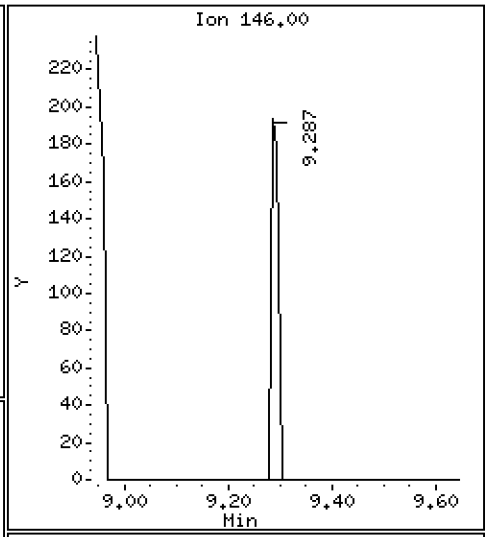
Column phase: ZB-5msi

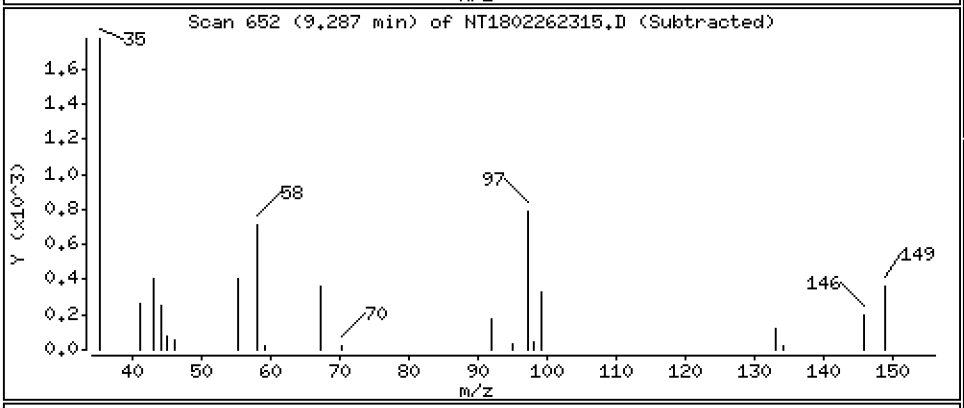
Column diameter: 0.25

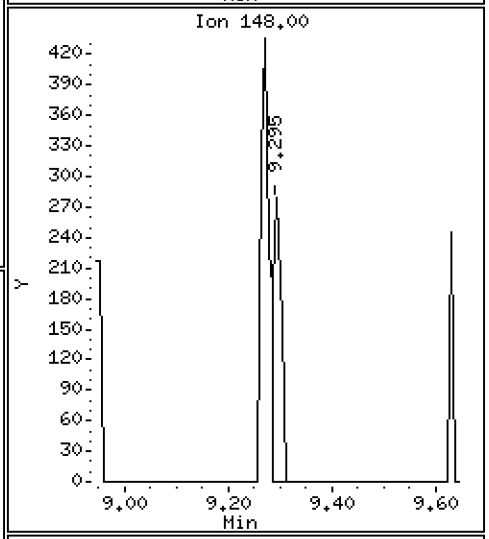
12 1,2-Dichlorobenzene

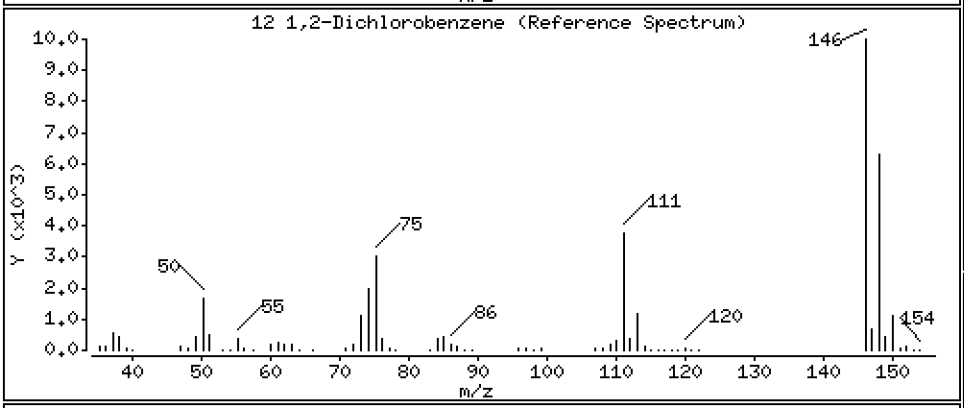
Concentration: 0.001665 ug/mL

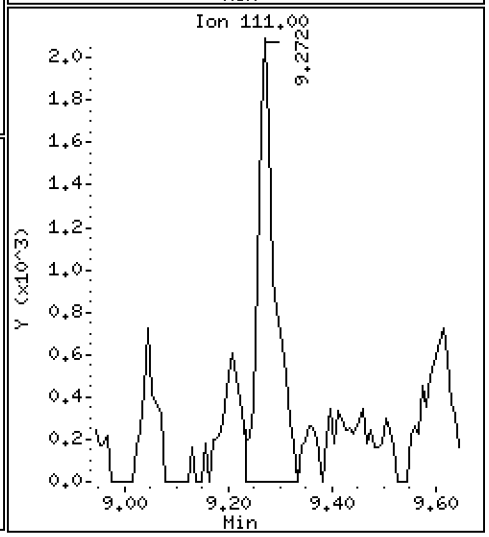


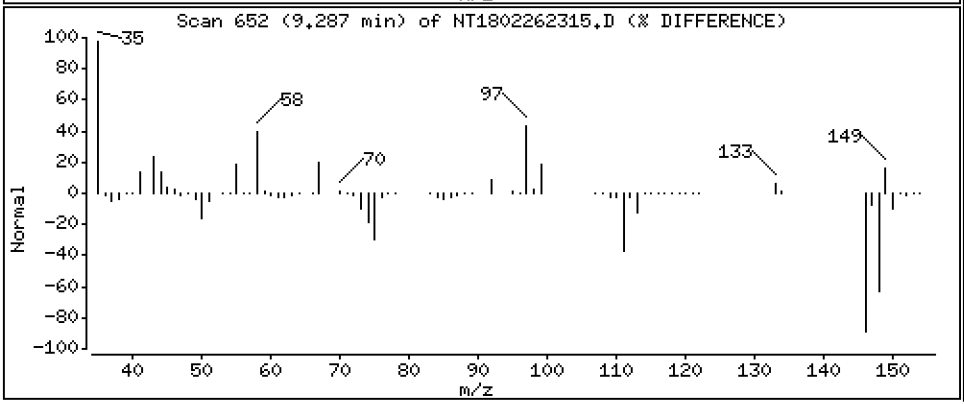












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

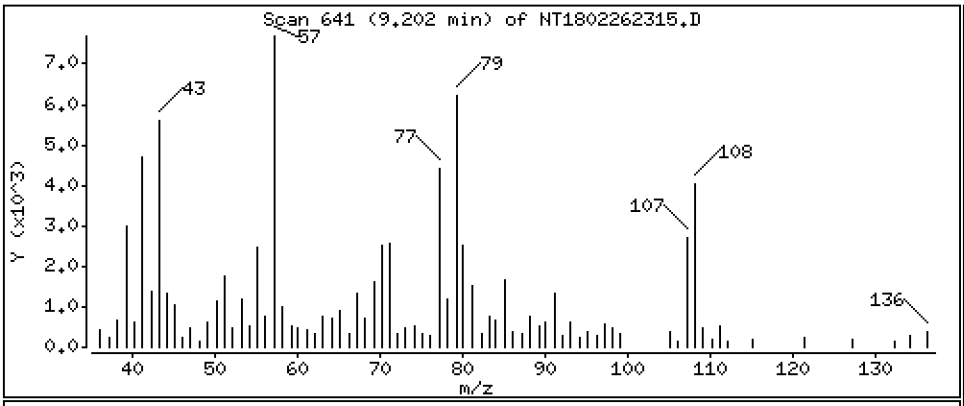
Operator: VTS

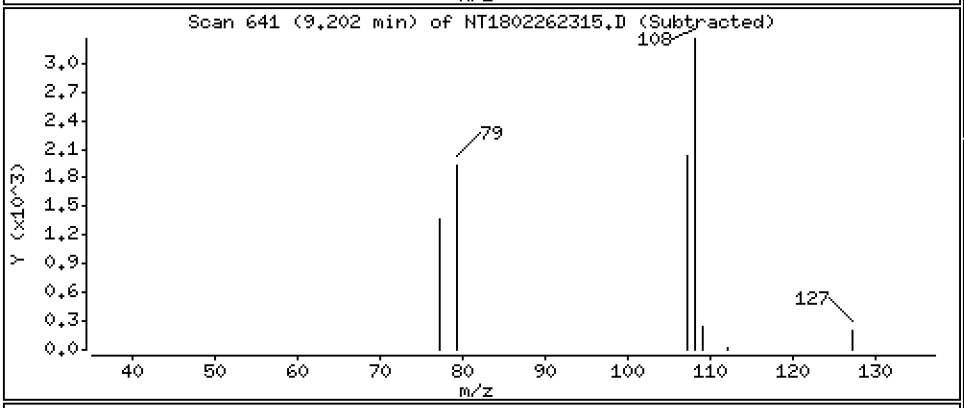
Column phase: ZB-5msi

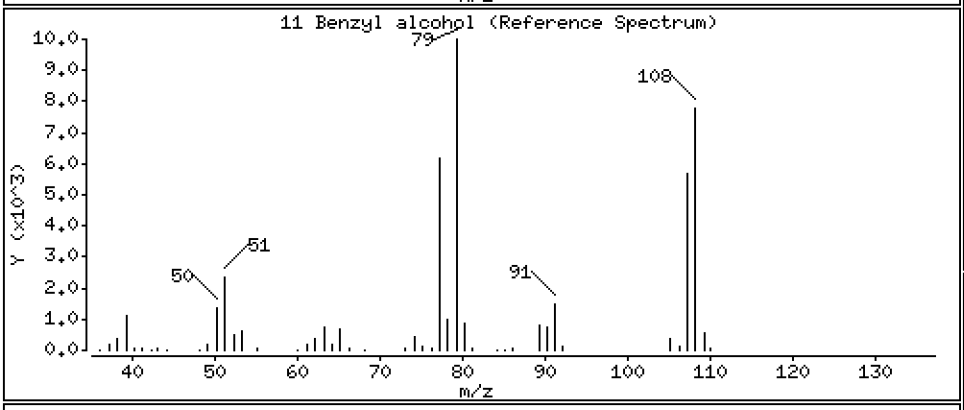
Column diameter: 0.25

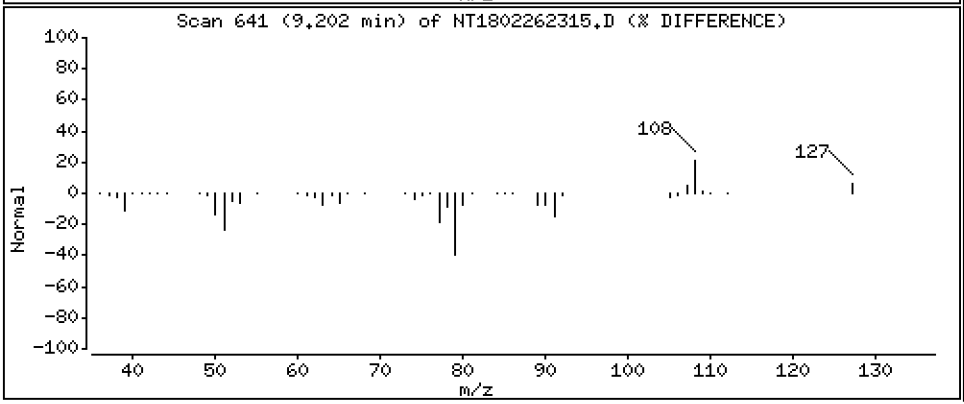
11 Benzyl alcohol

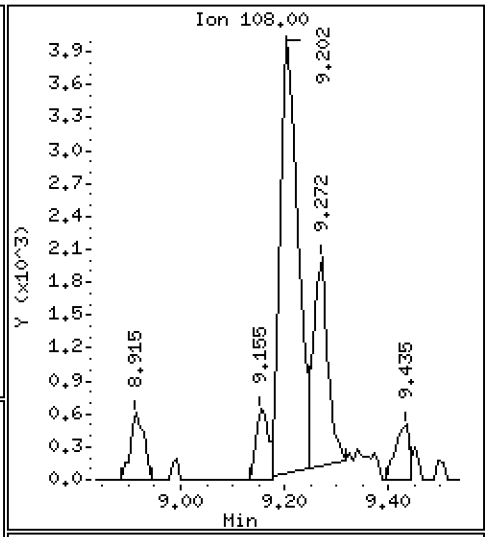
Concentration: 0.1747 ug/mL

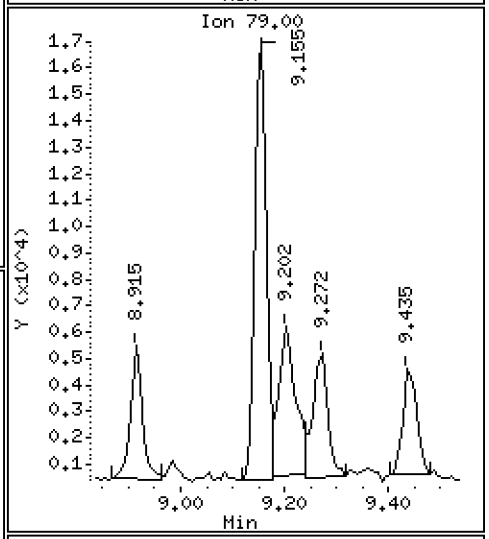


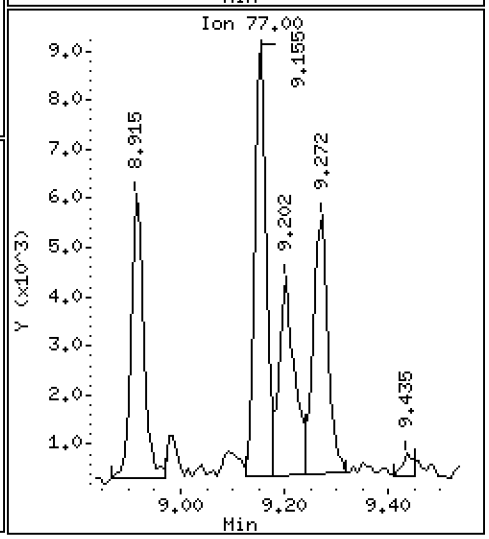












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

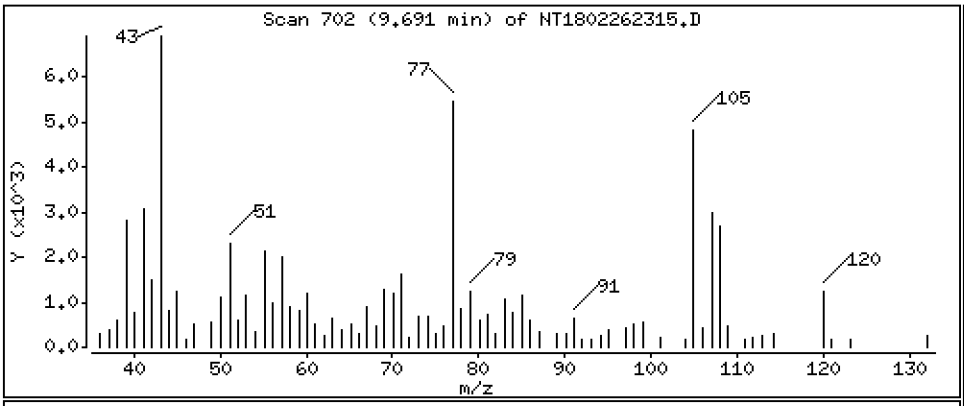
Operator: VTS

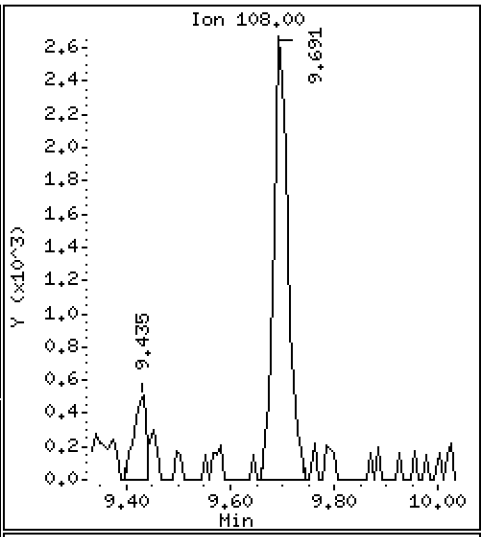
Column phase: ZB-5msi

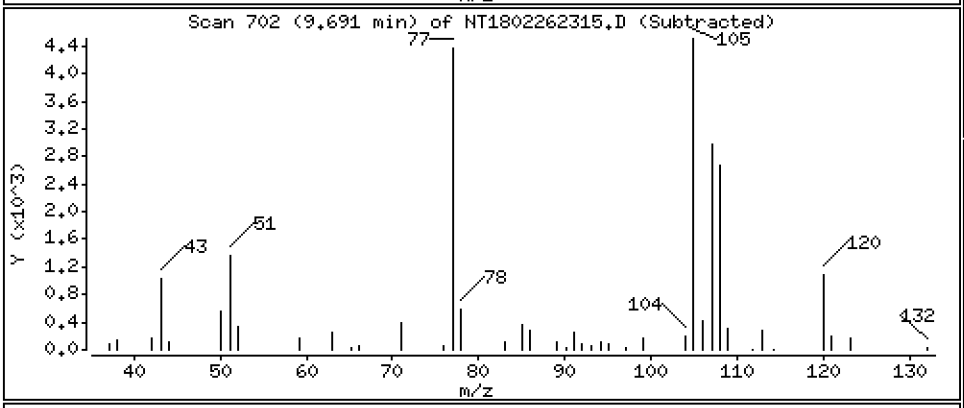
Column diameter: 0.25

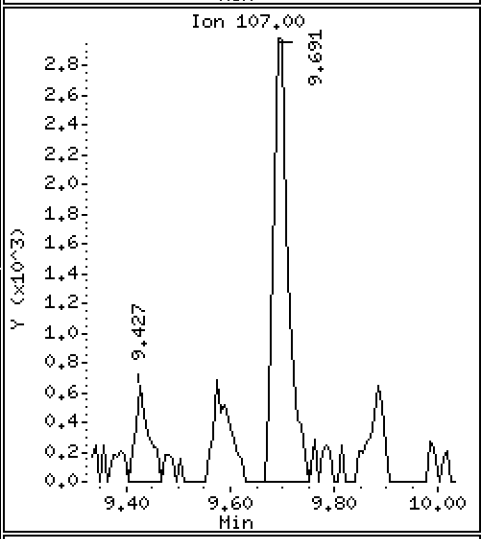
15 4-Methylphenol

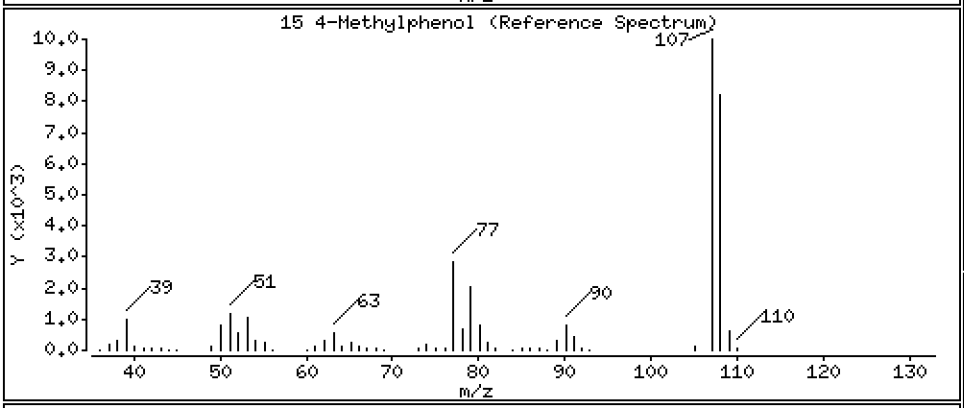
Concentration: 0.05613 ug/mL

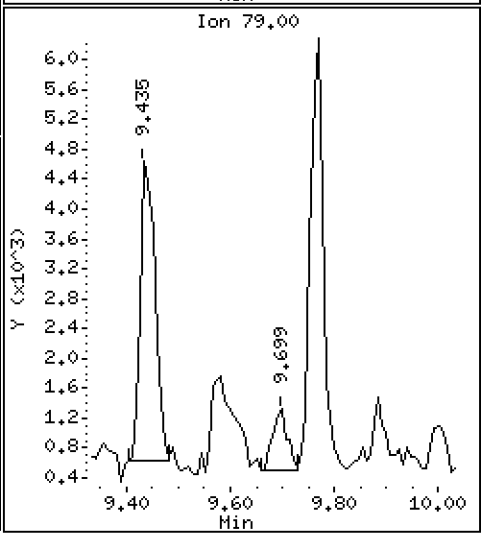


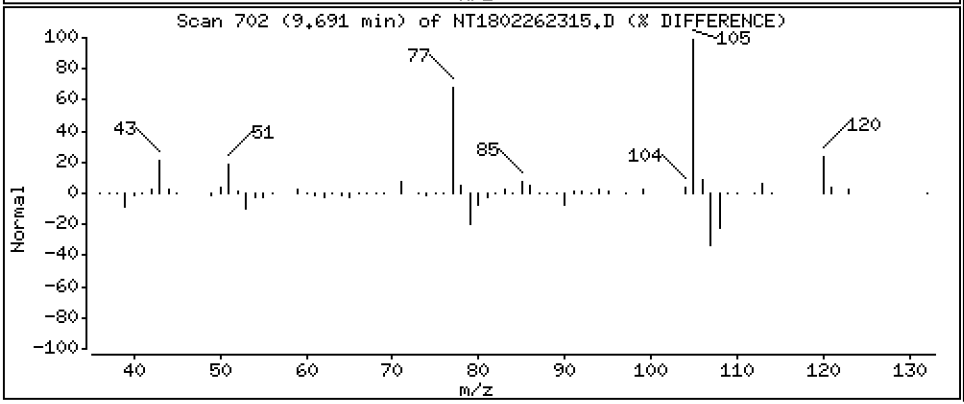












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

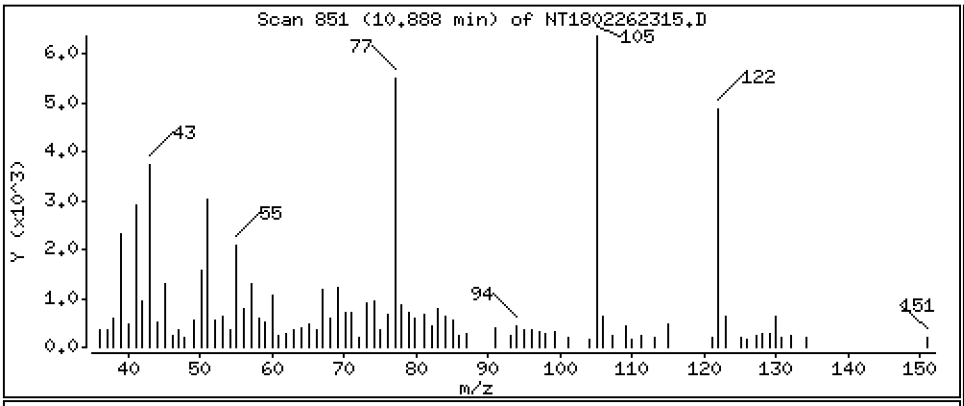
Operator: VTS

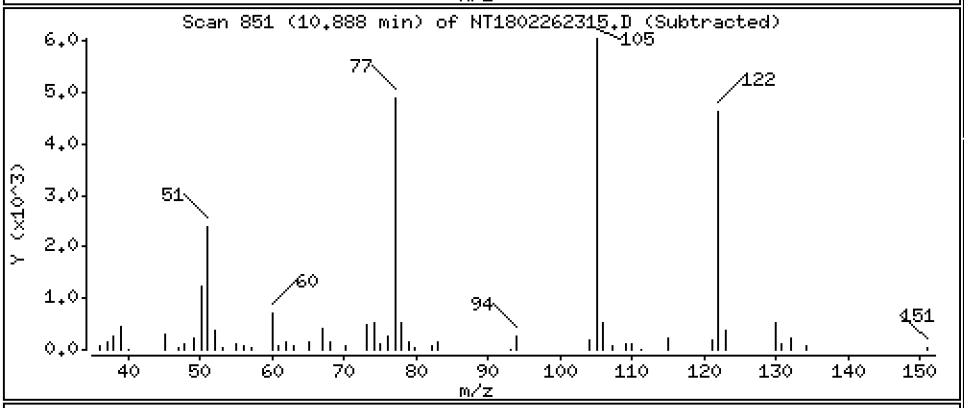
Column phase: ZB-5msi

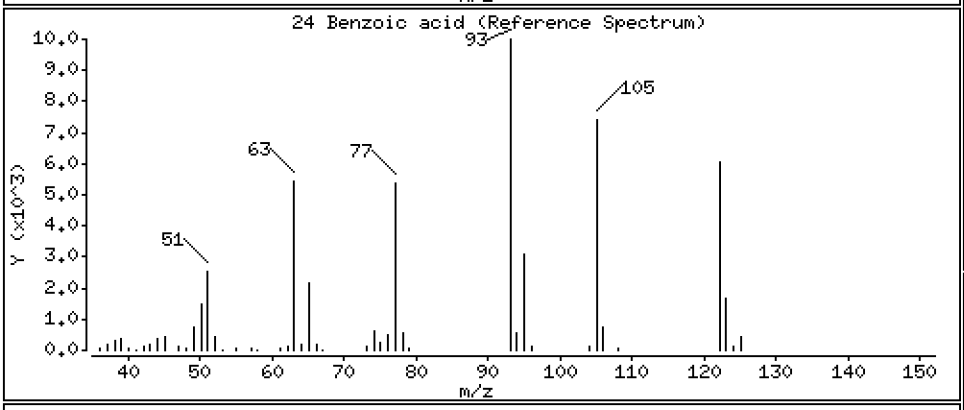
Column diameter: 0.25

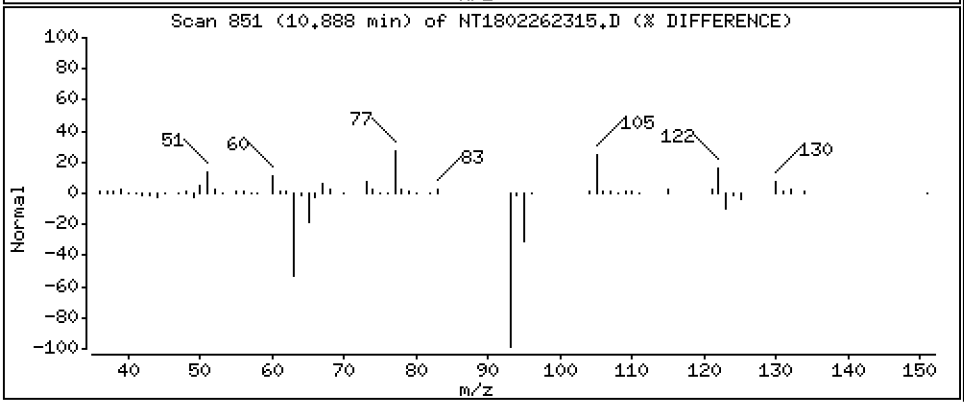
24 Benzoic acid

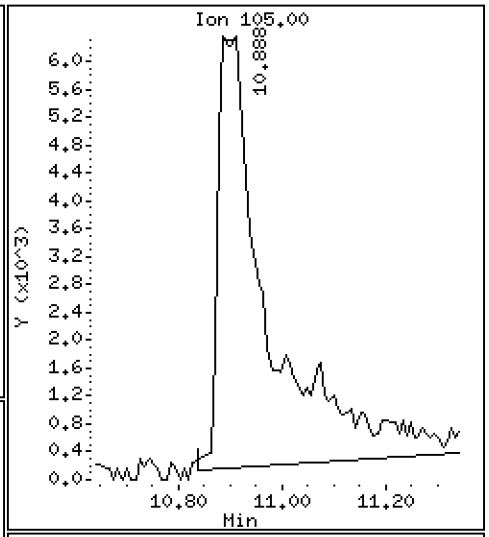
Concentration: 1.311 ug/mL

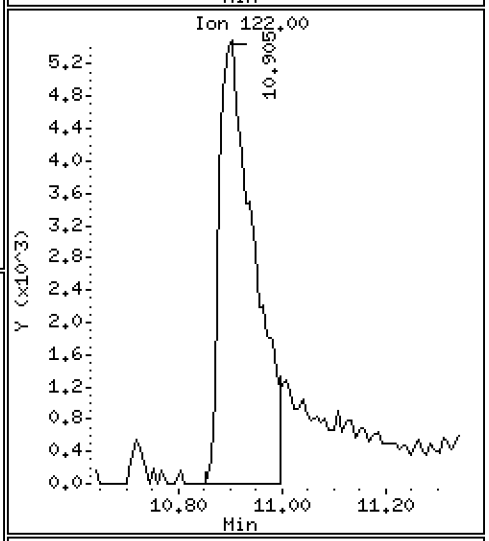


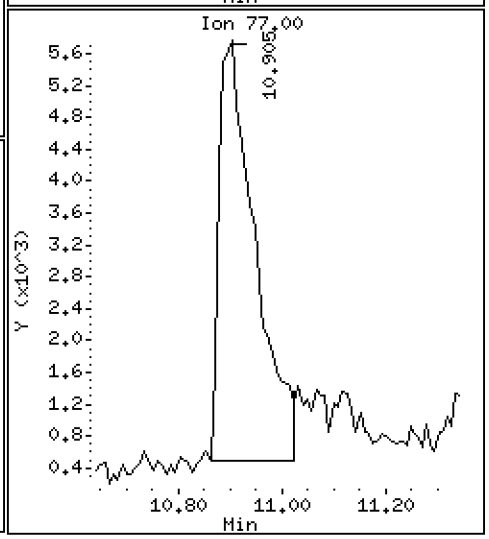












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

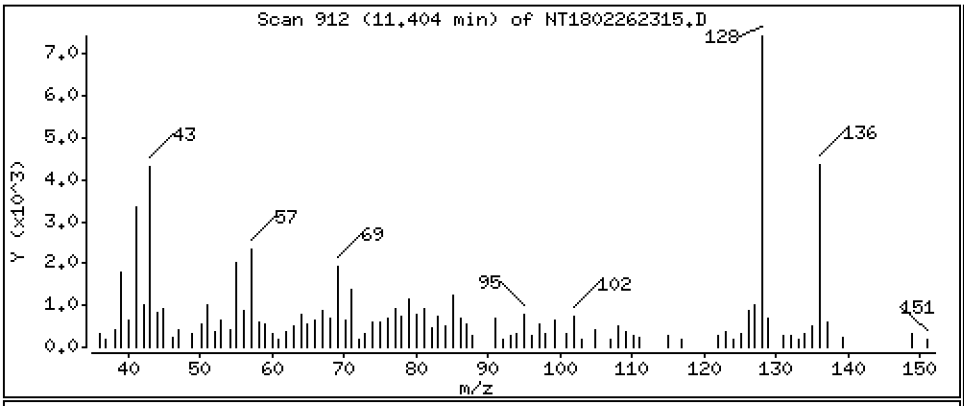
Operator: VTS

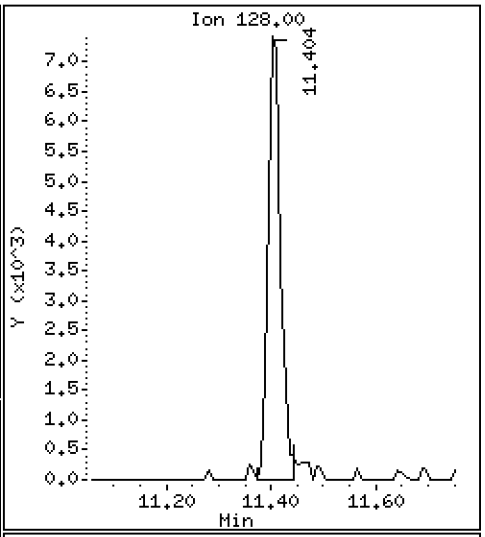
Column phase: ZB-5msi

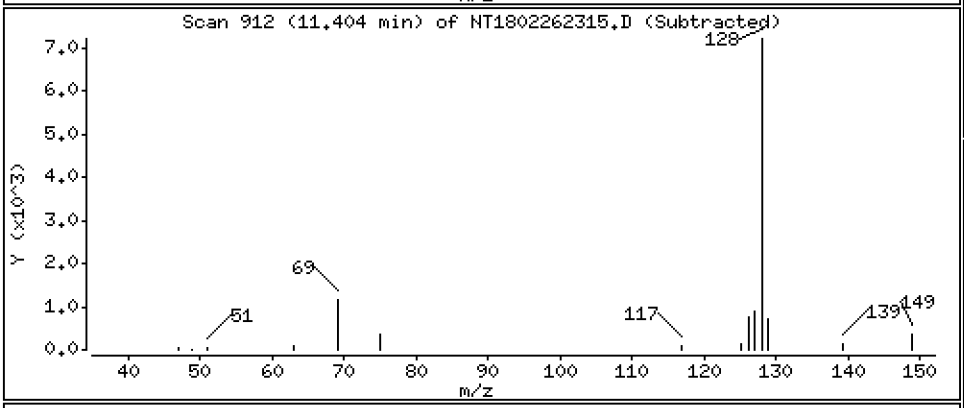
Column diameter: 0.25

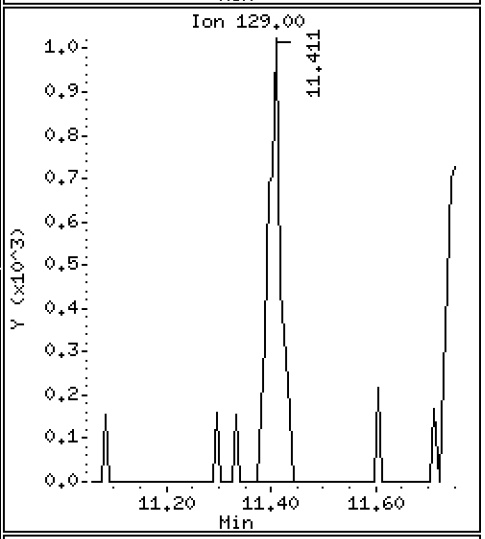
28 Naphthalene

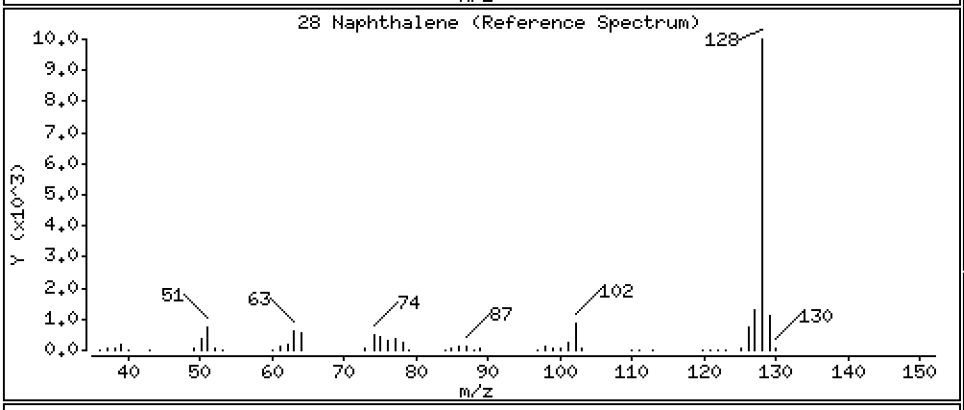
Concentration: 0.04436 ug/mL

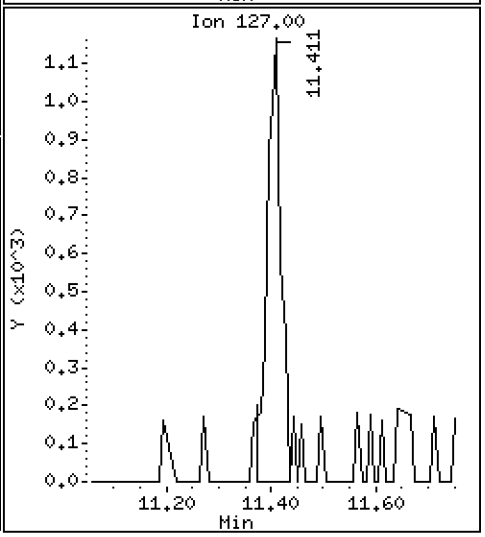


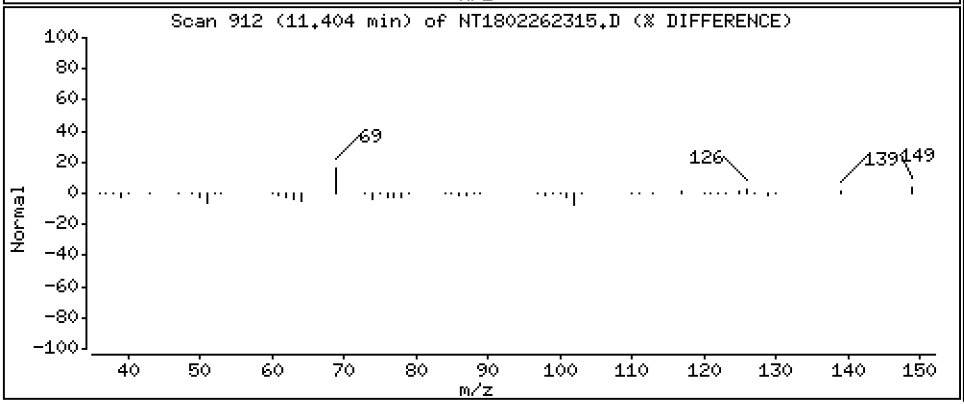












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

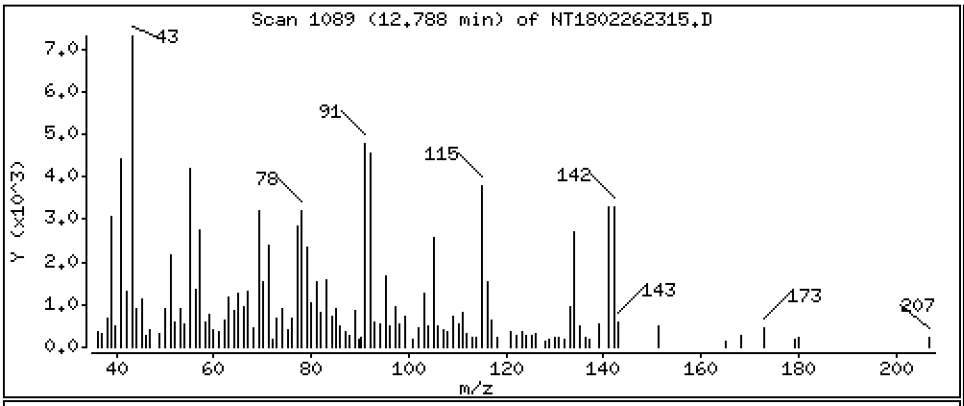
Operator: VTS

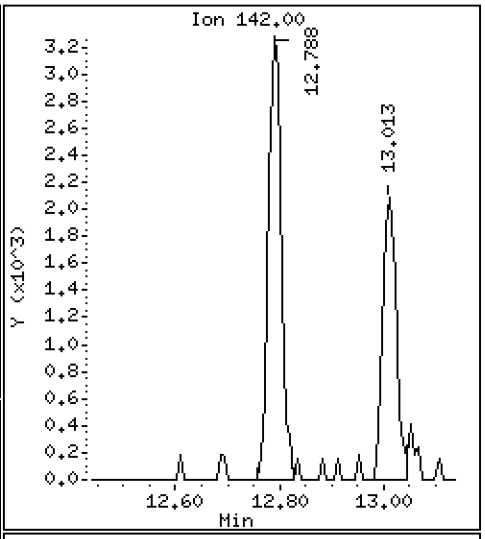
Column phase: ZB-5msi

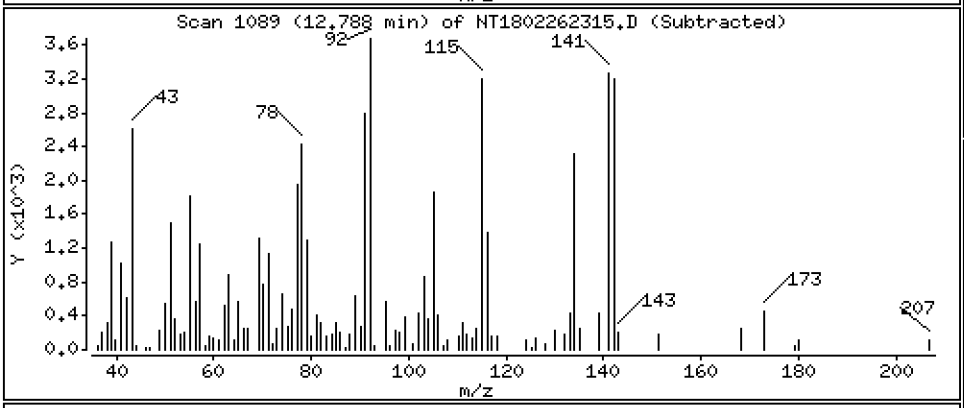
Column diameter: 0.25

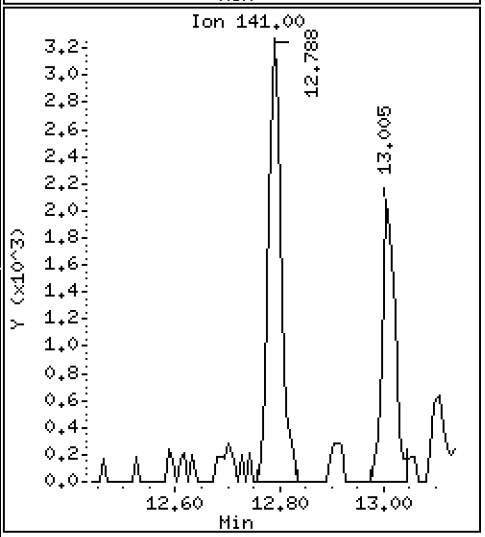
32 2-Methylnaphthalene

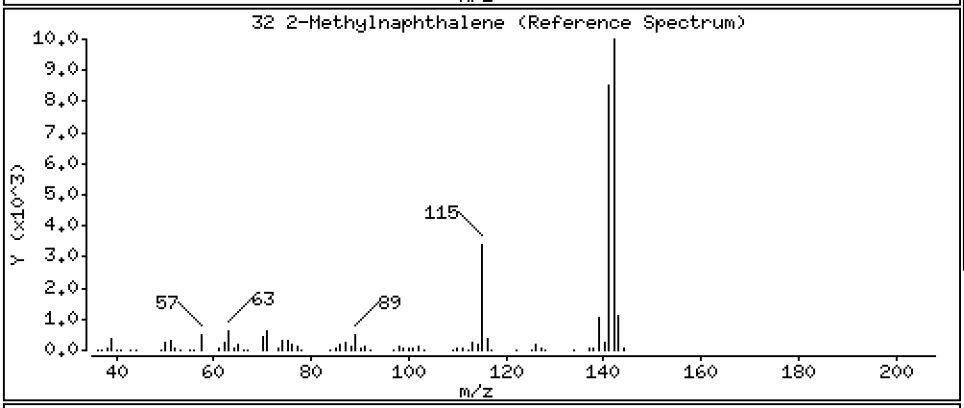
Concentration: 0.02756 ug/mL

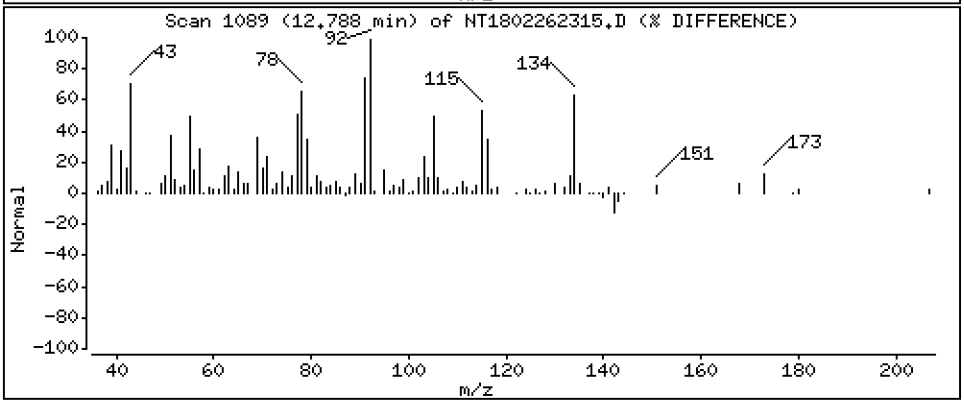












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

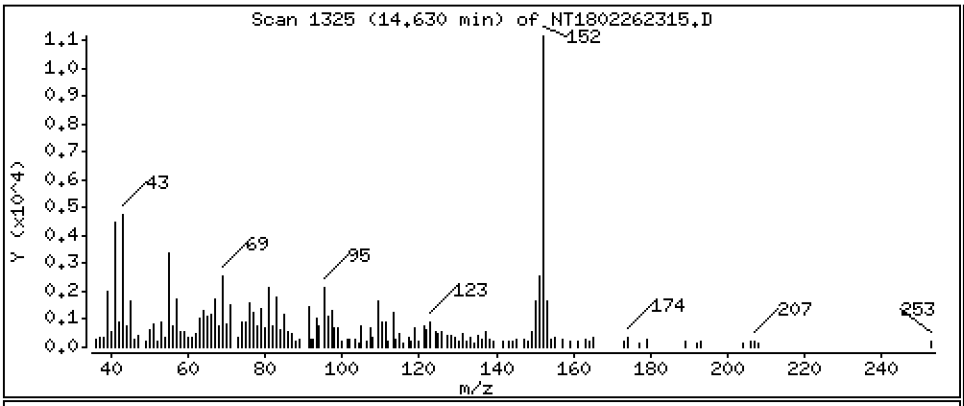
Operator: VTS

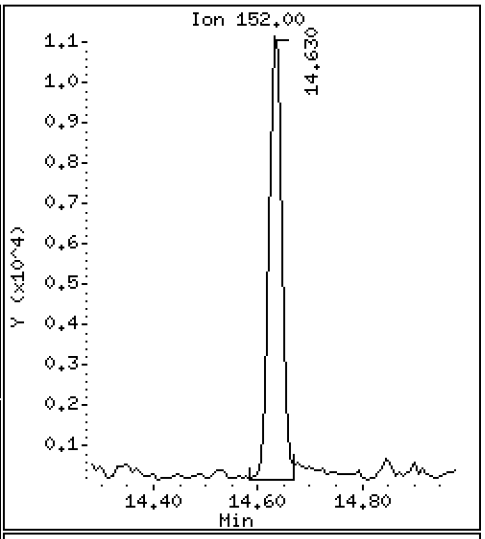
Column phase: ZB-5msi

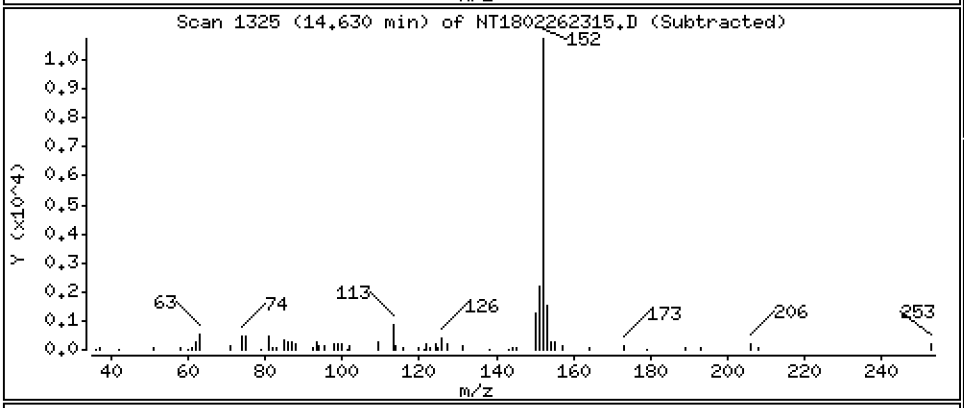
Column diameter: 0.25

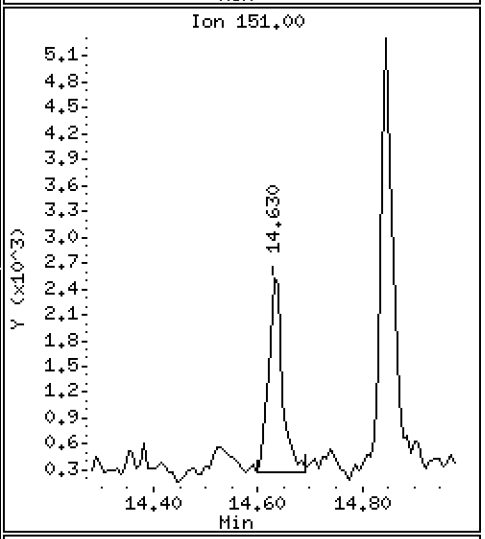
40 Acenaphthylene

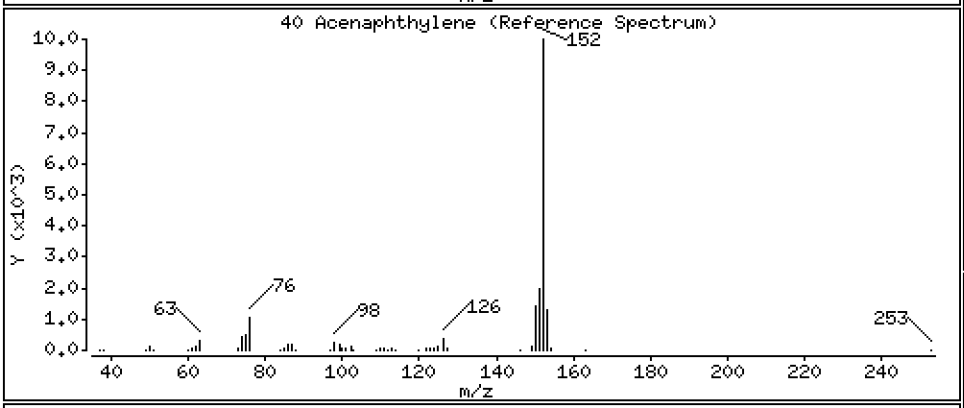
Concentration: 0.06573 ug/mL

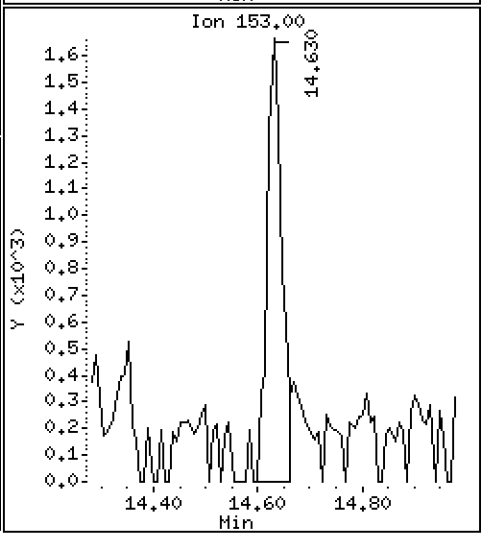


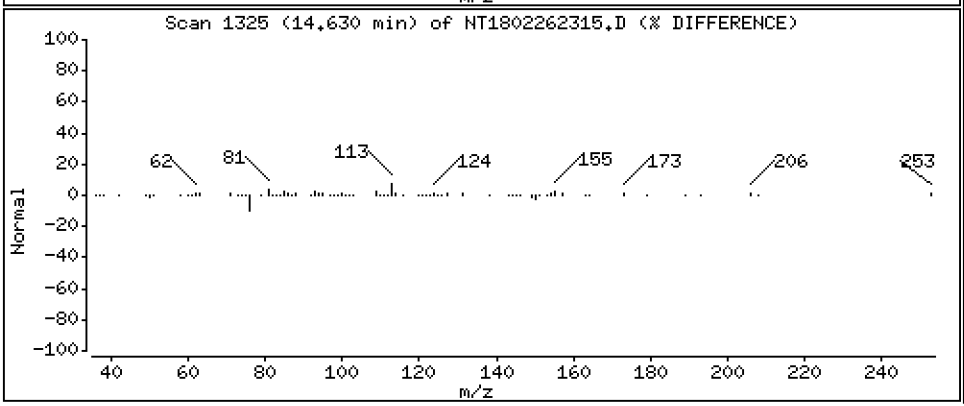












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262315.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

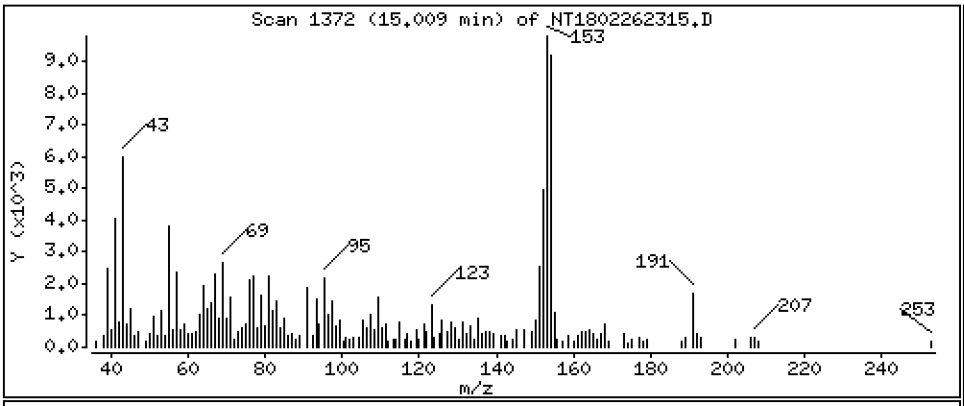
Operator: VTS

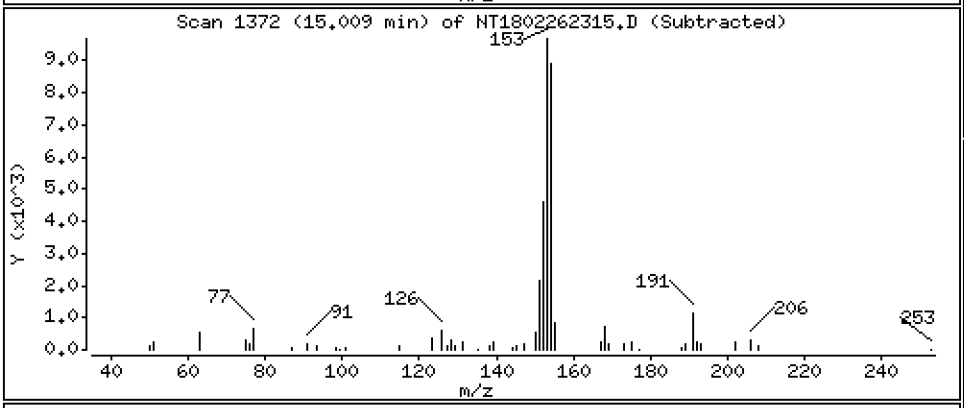
Column phase: ZB-5msi

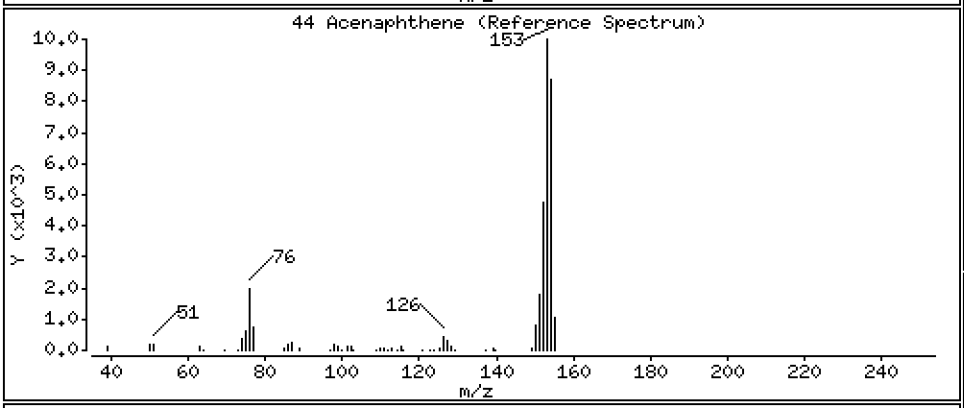
Column diameter: 0.25

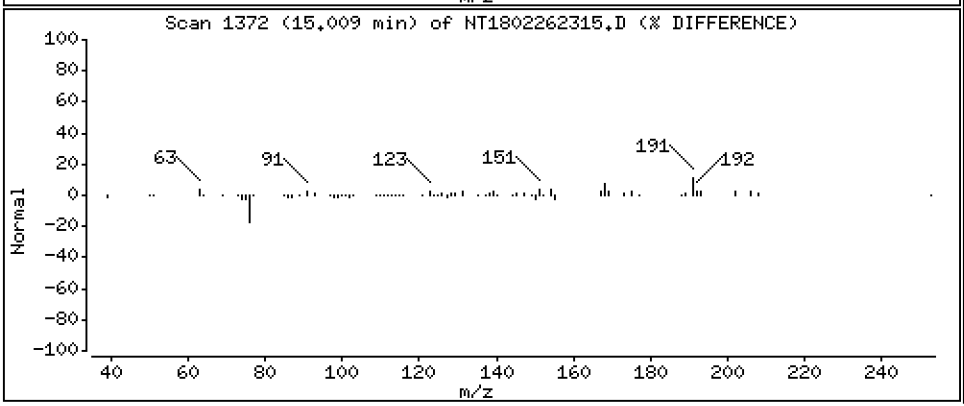
44 Acenaphthene

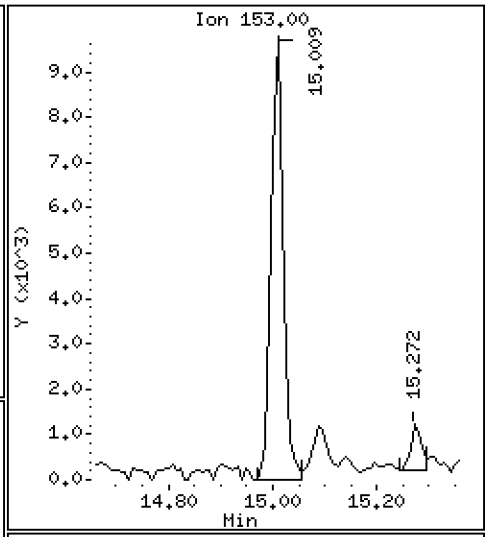
Concentration: 0.08509 ug/mL

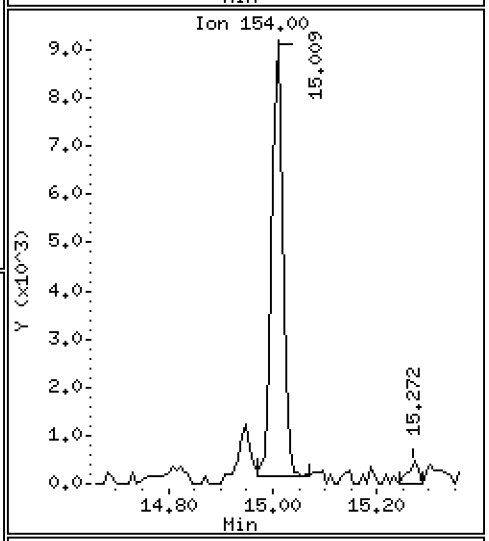


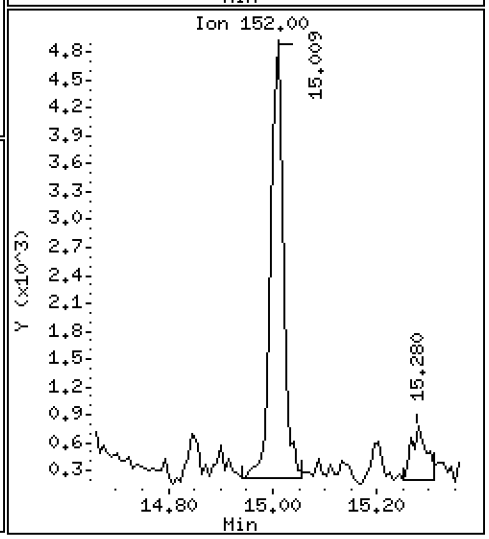












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

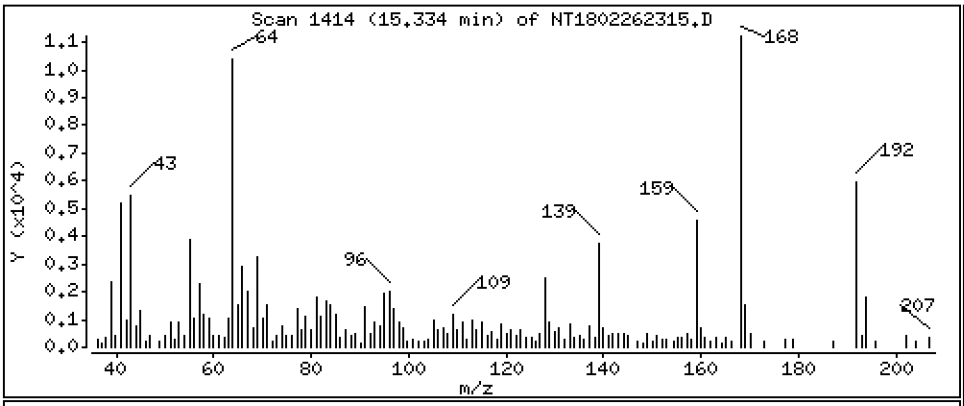
Operator: VTS

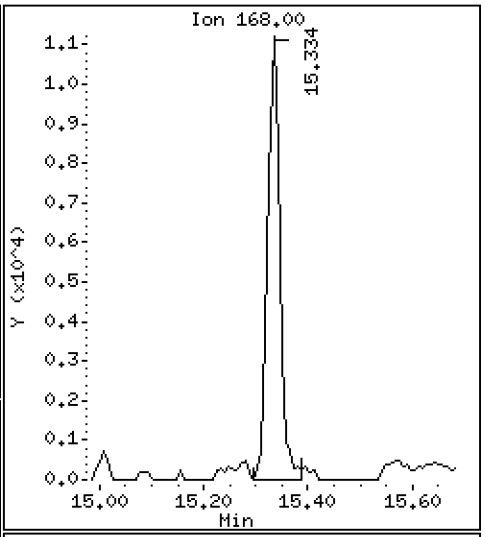
Column phase: ZB-5msi

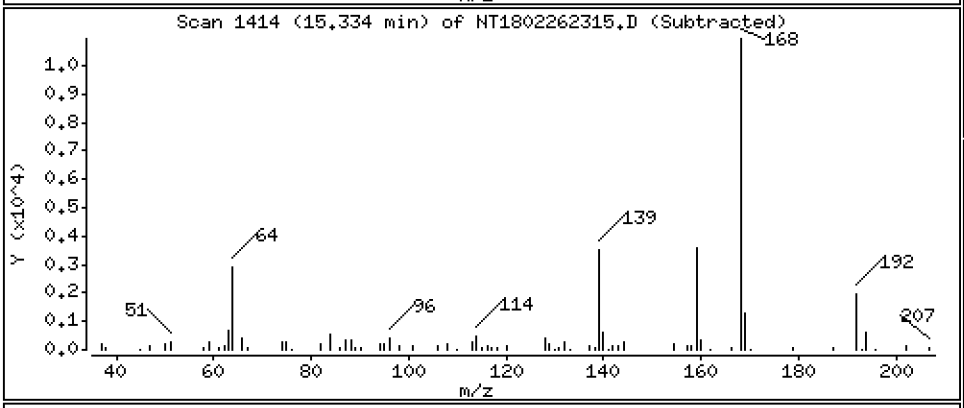
Column diameter: 0.25

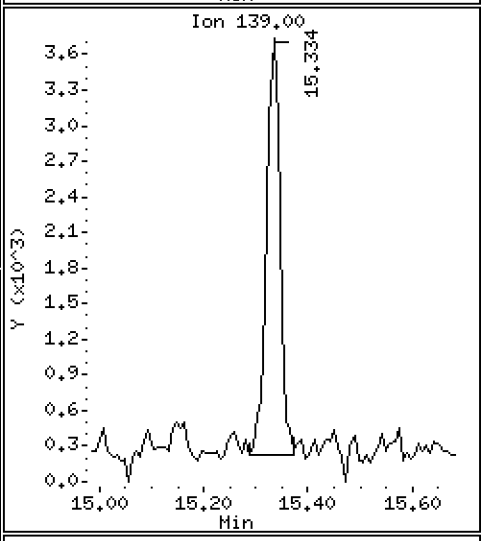
46 Dibenzofuran

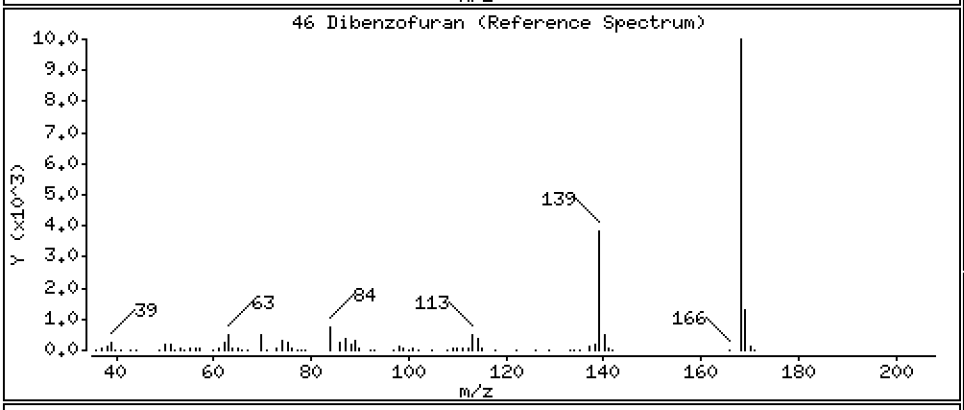
Concentration: 0.06860 ug/mL

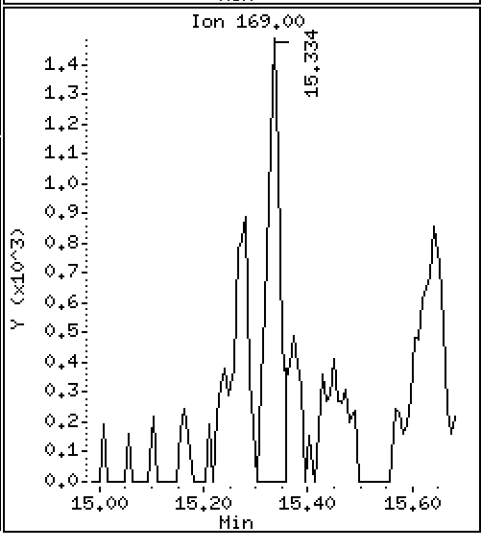


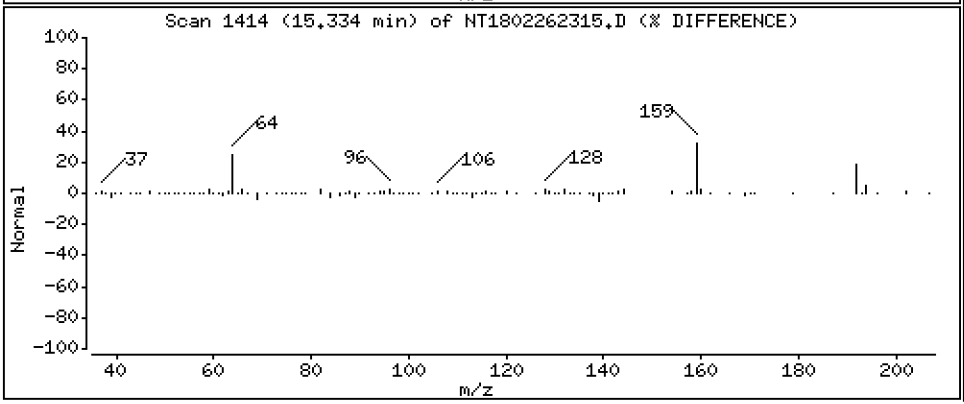












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

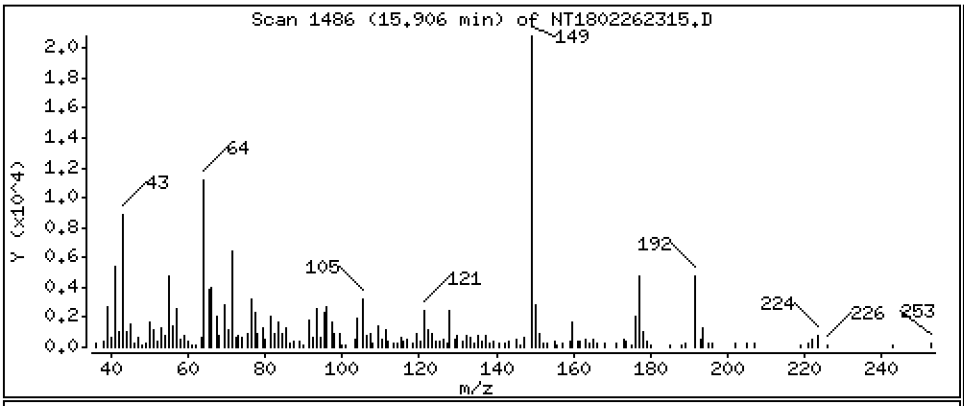
Operator: VTS

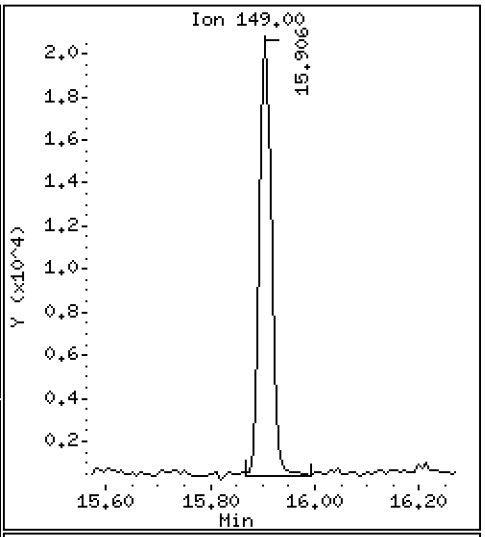
Column phase: ZB-5msi

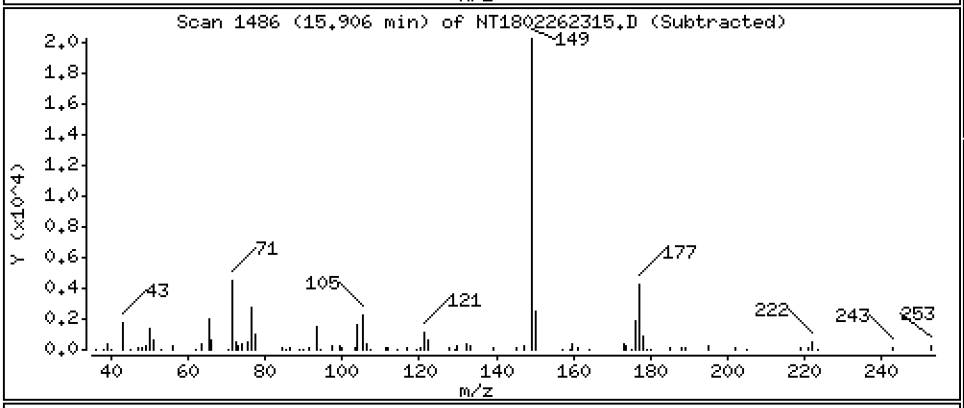
Column diameter: 0.25

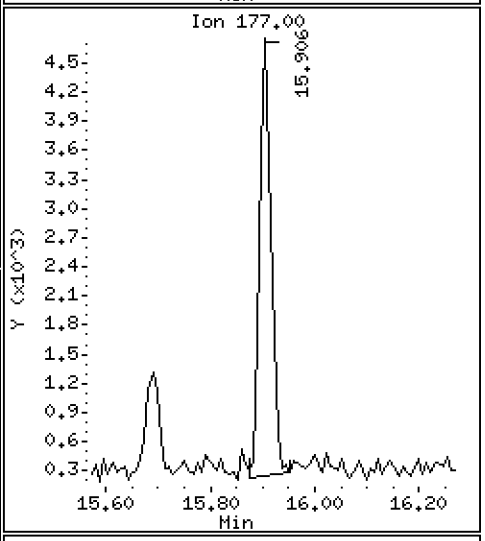
50 Diethylphthalate

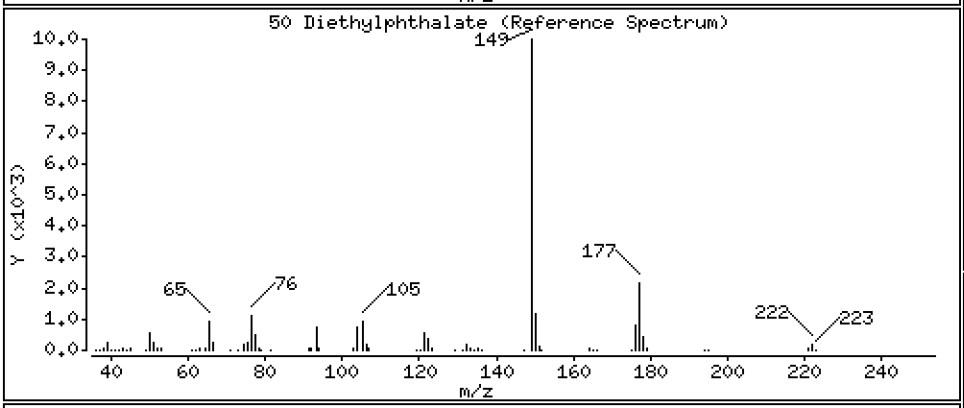
Concentration: 0.1894 ug/mL

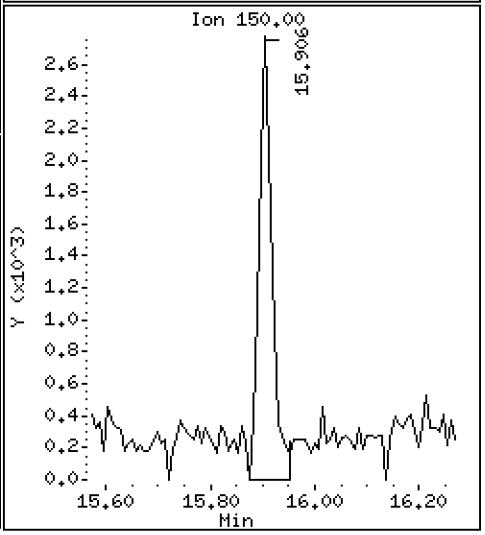


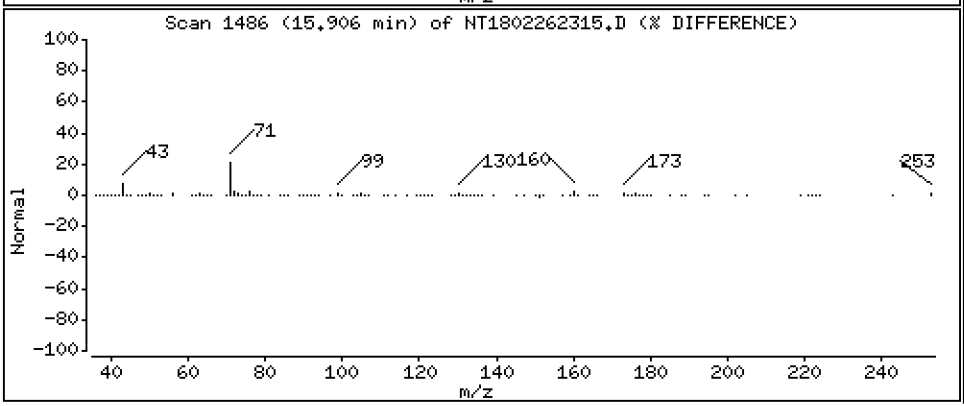












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

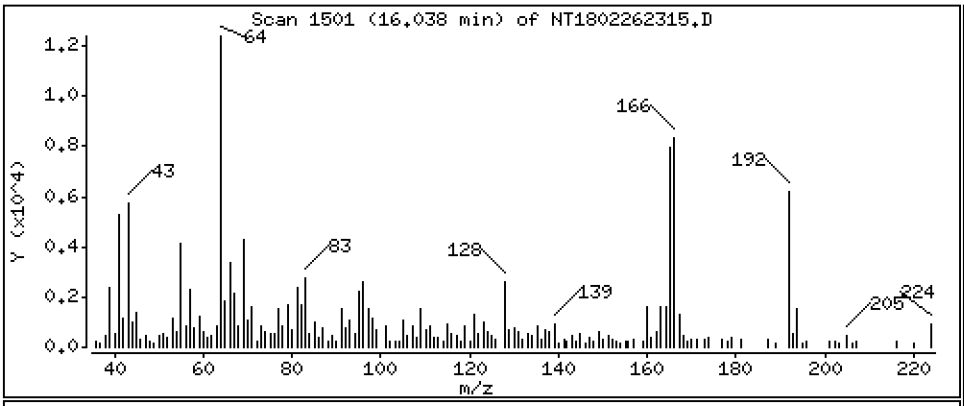
Operator: VTS

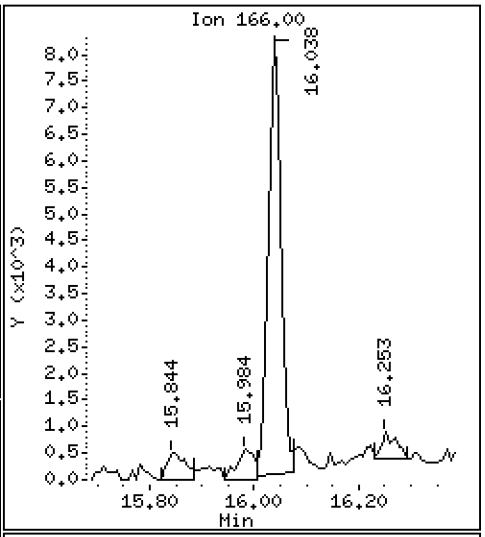
Column phase: ZB-5msi

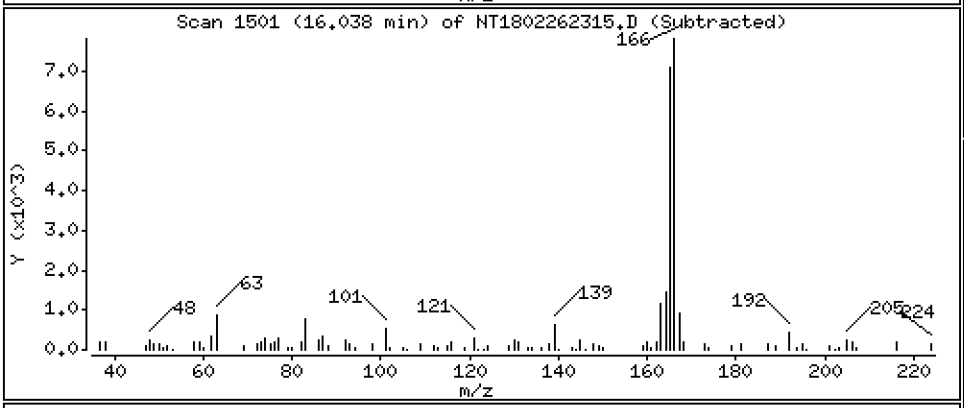
Column diameter: 0.25

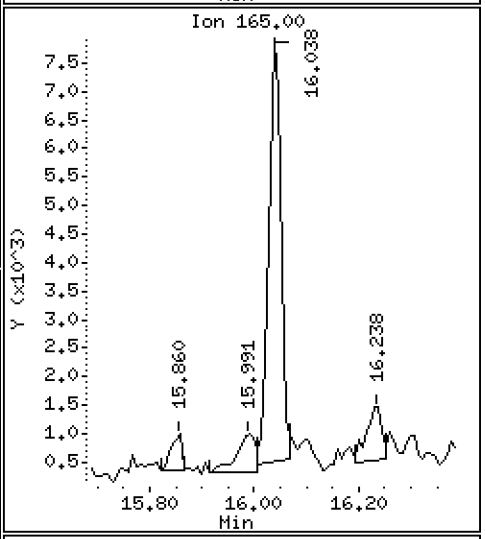
49 Fluorene

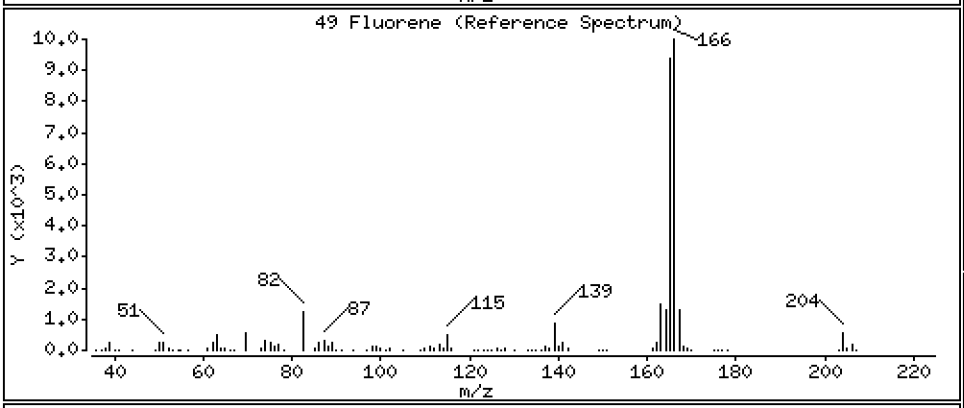
Concentration: 0.06770 ug/mL

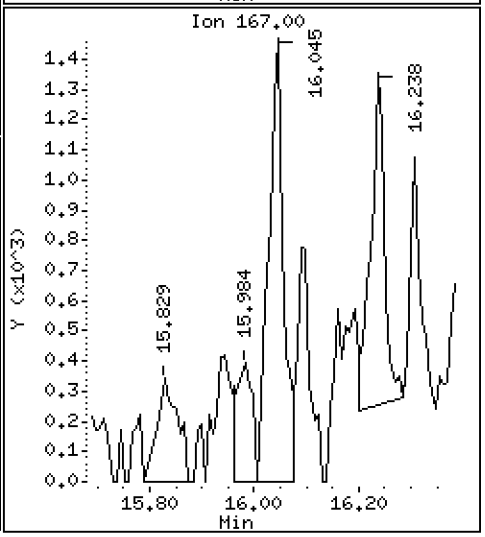


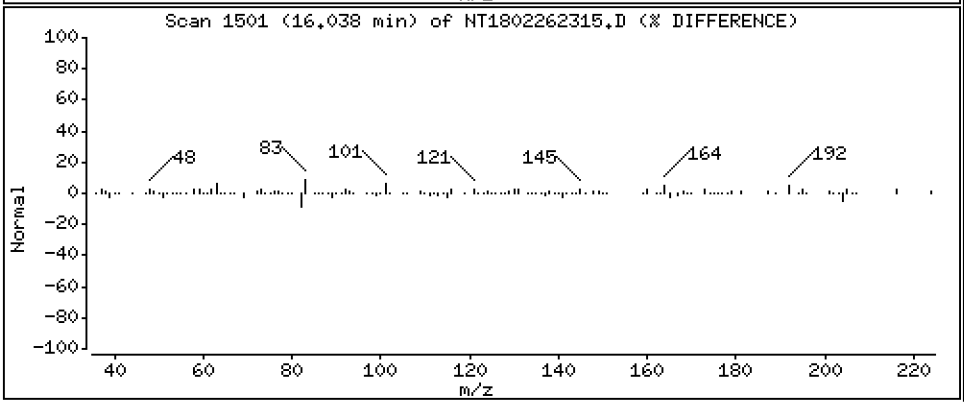












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

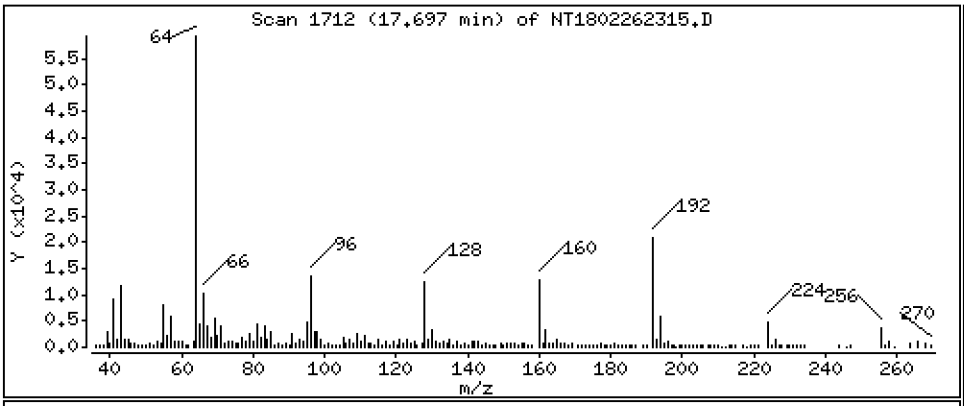
Operator: VTS

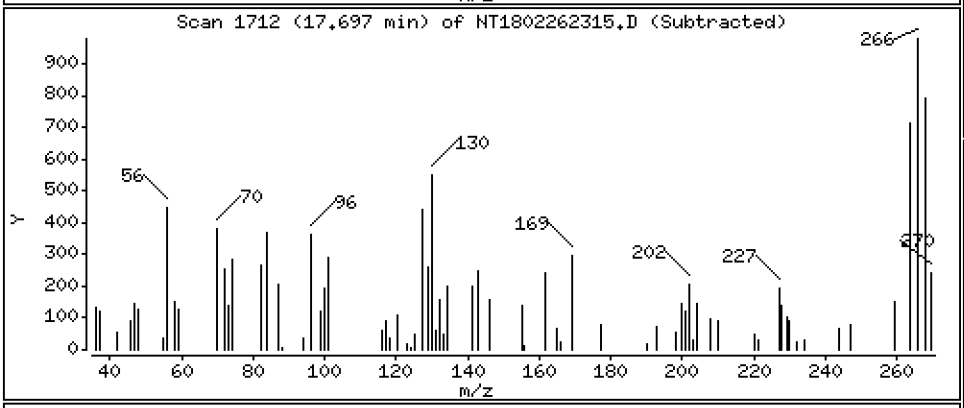
Column phase: ZB-5msi

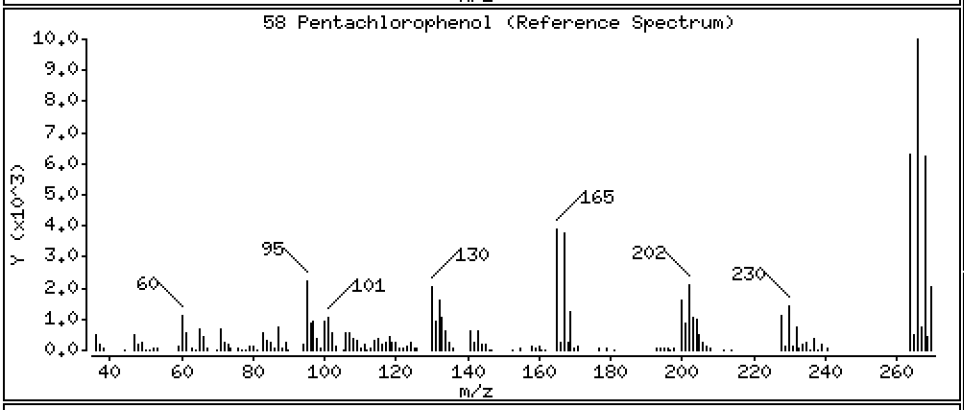
Column diameter: 0.25

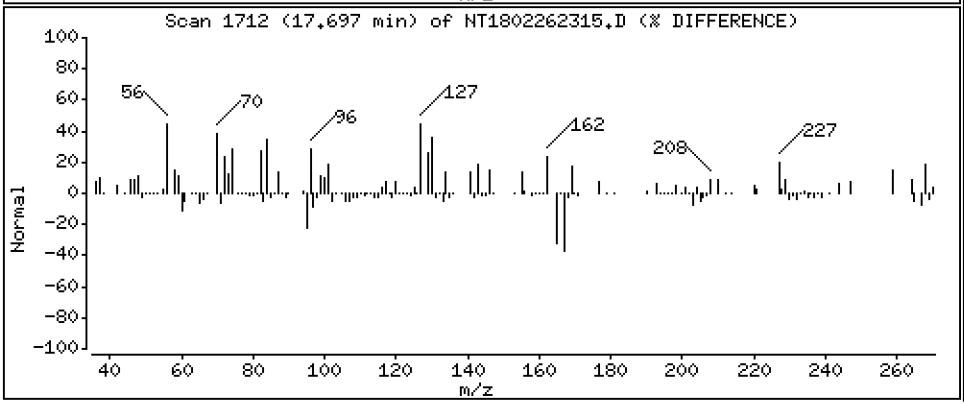
58 Pentachlorophenol

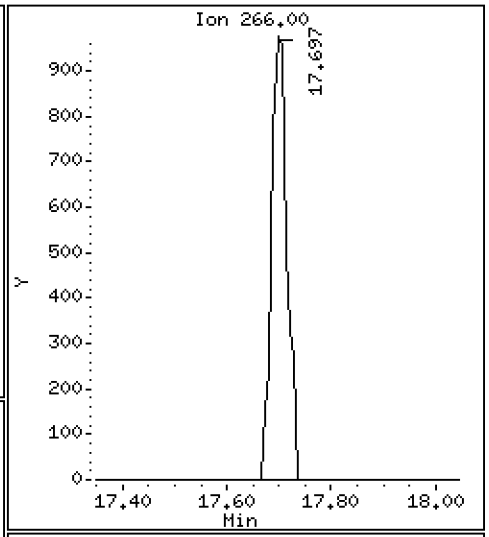
Concentration: 0.1130 ug/mL

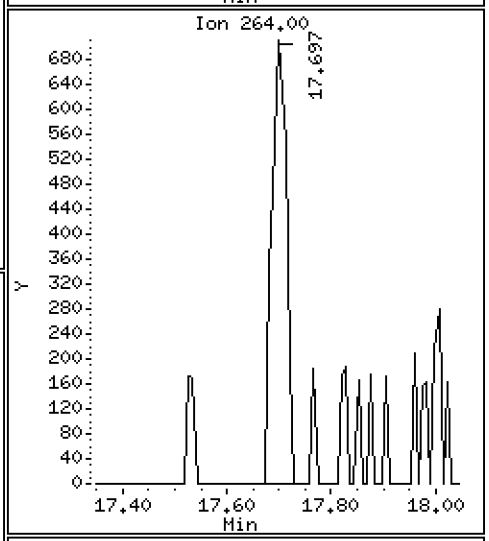


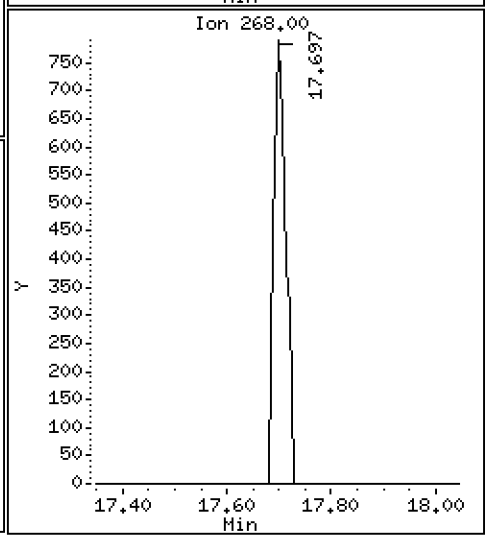












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

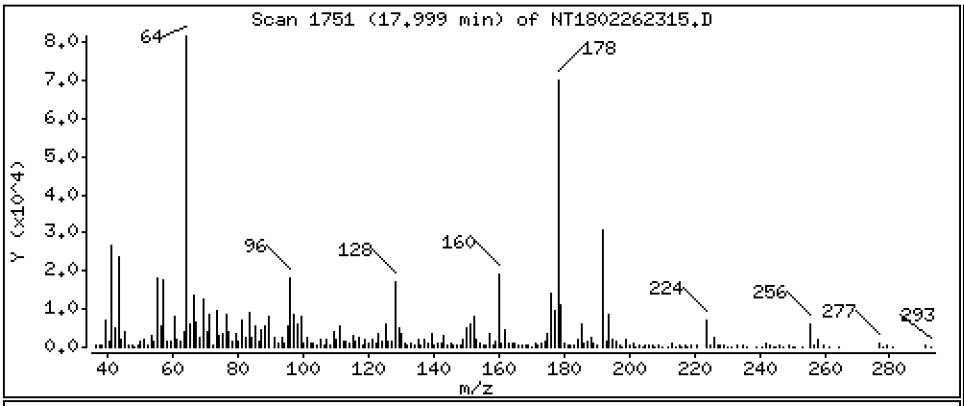
Operator: VTS

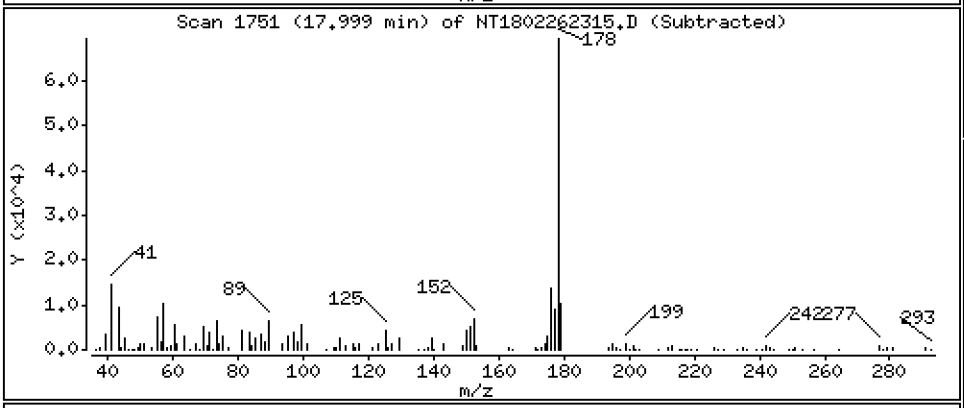
Column phase: ZB-5msi

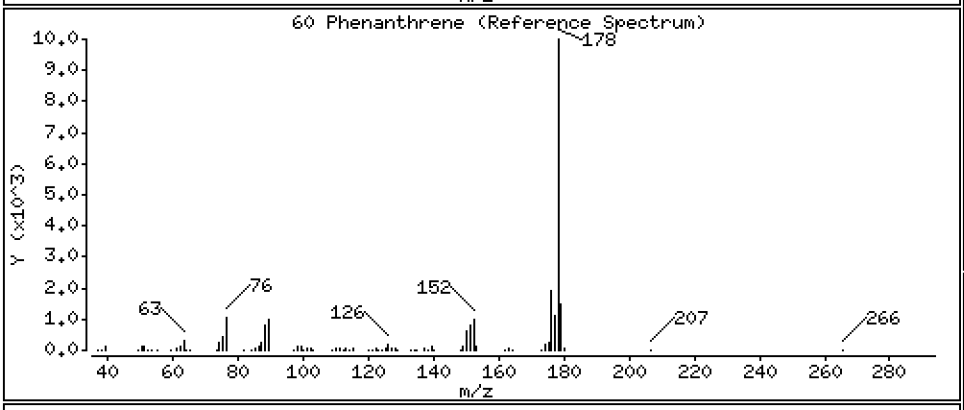
Column diameter: 0.25

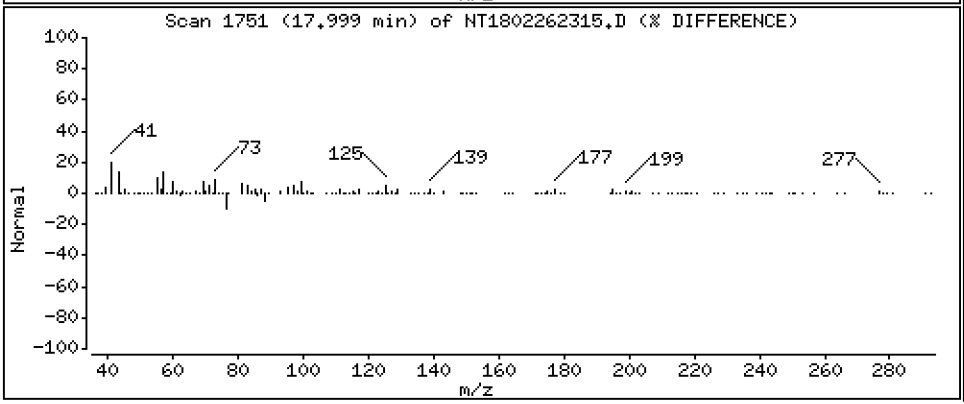
60 Phenanthrene

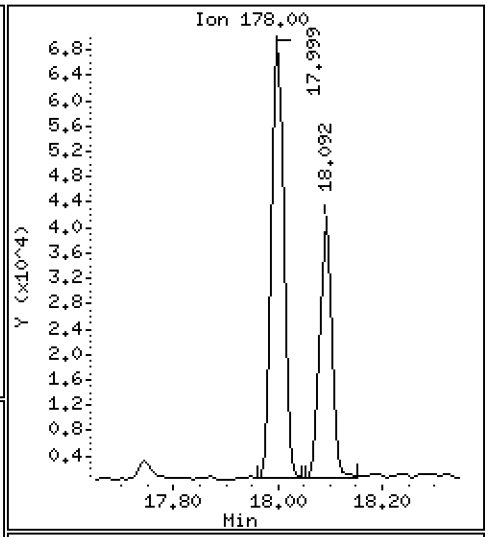
Concentration: 0.3589 ug/mL

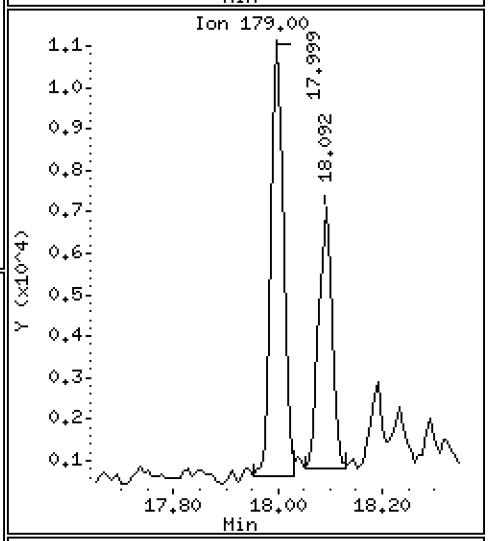


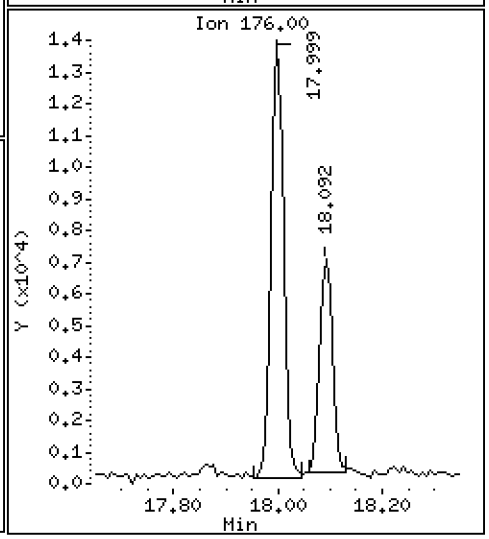












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

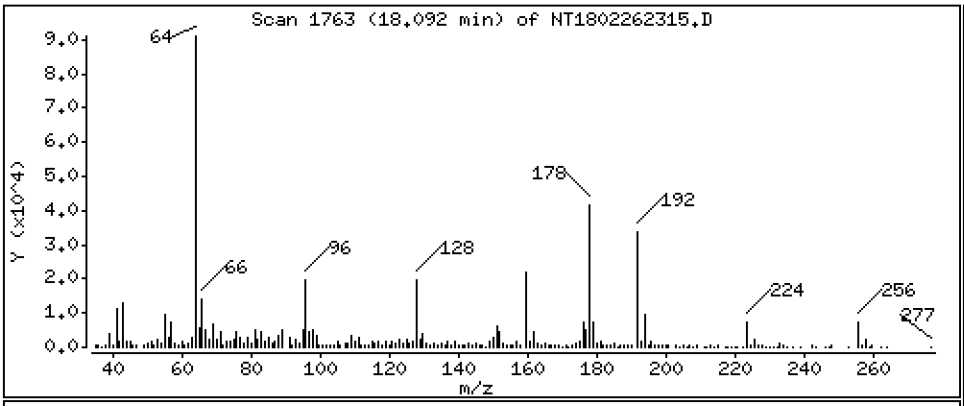
Operator: VTS

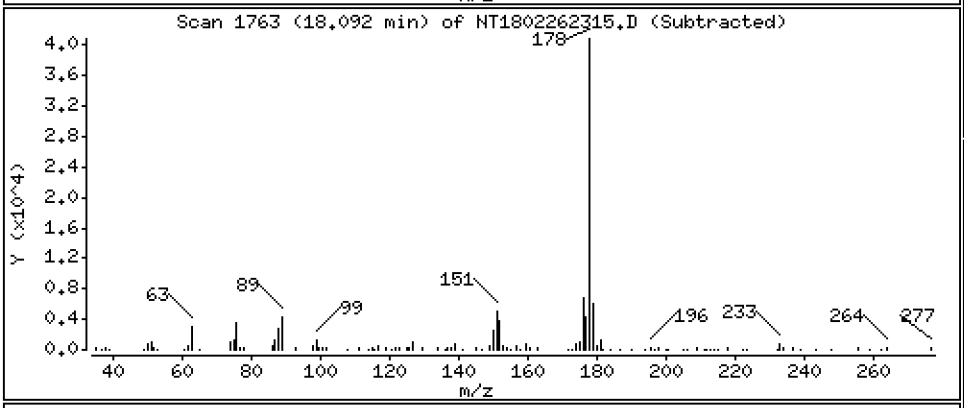
Column phase: ZB-5msi

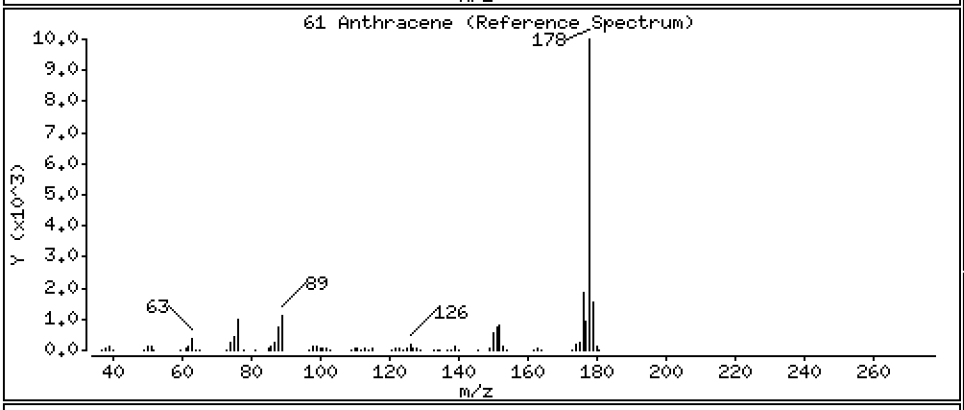
Column diameter: 0.25

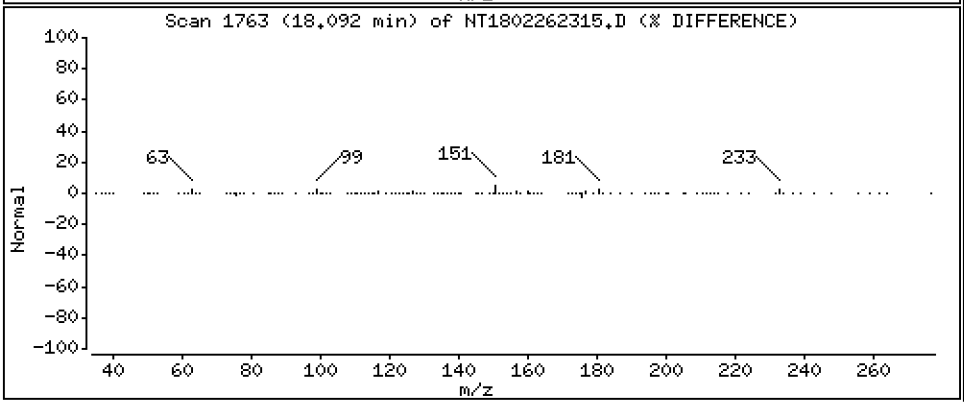
61 Anthracene

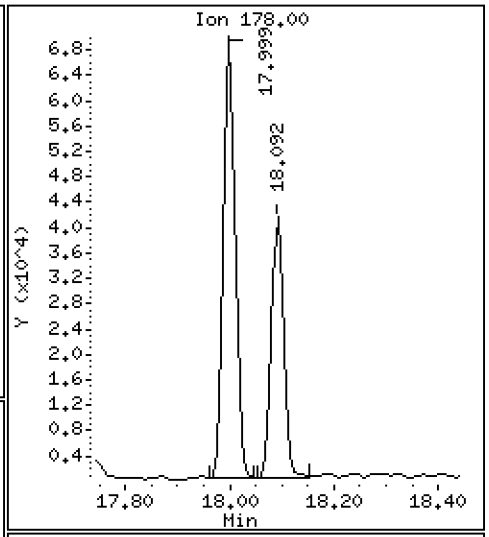
Concentration: 0.2230 ug/mL

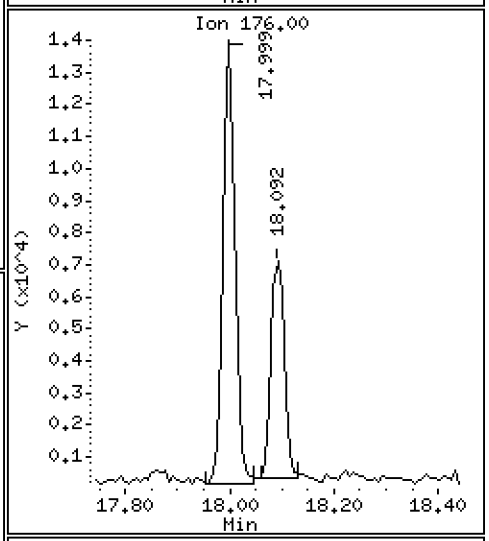


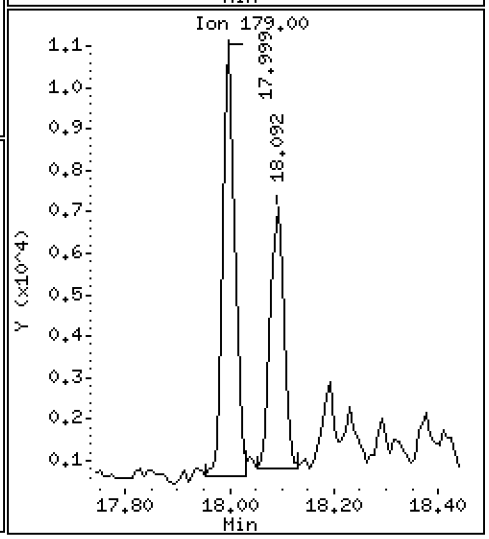












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262315.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

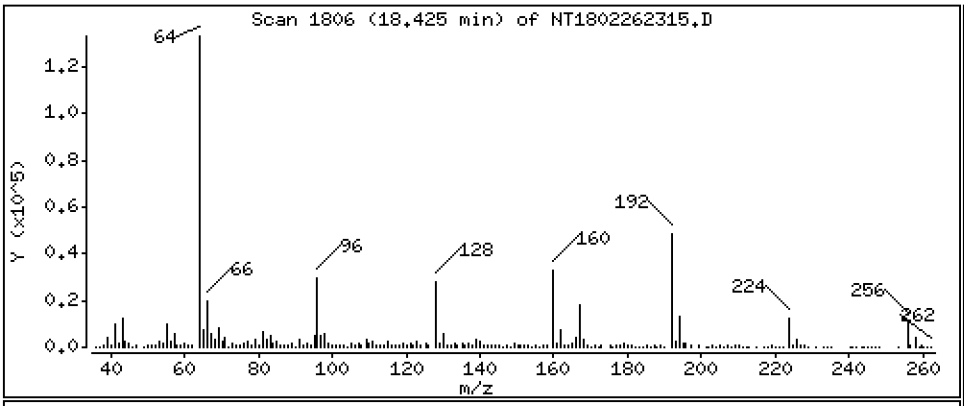
Operator: VTS

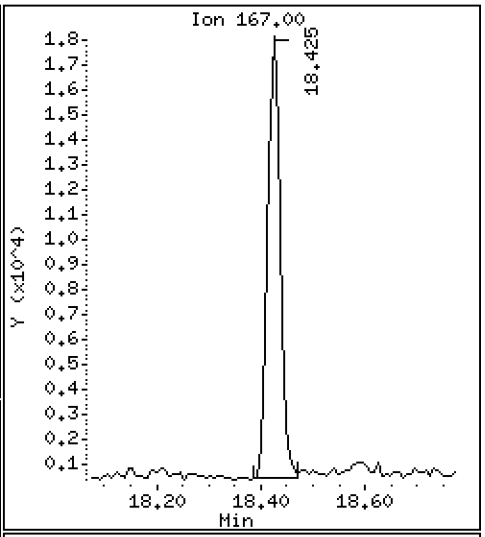
Column phase: ZB-5msi

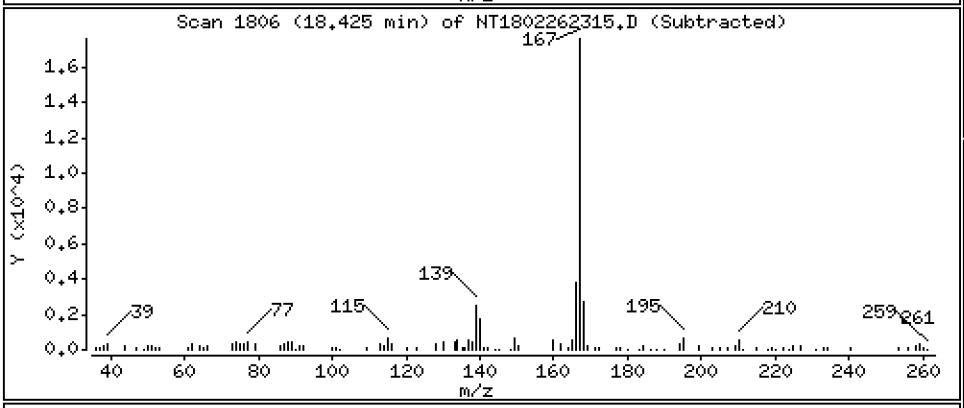
Column diameter: 0.25

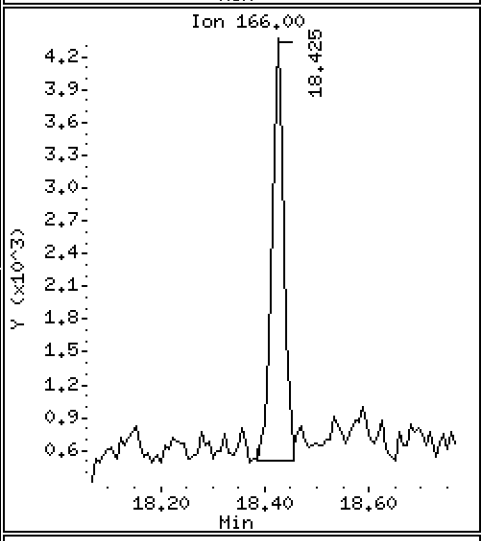
62 Carbazole

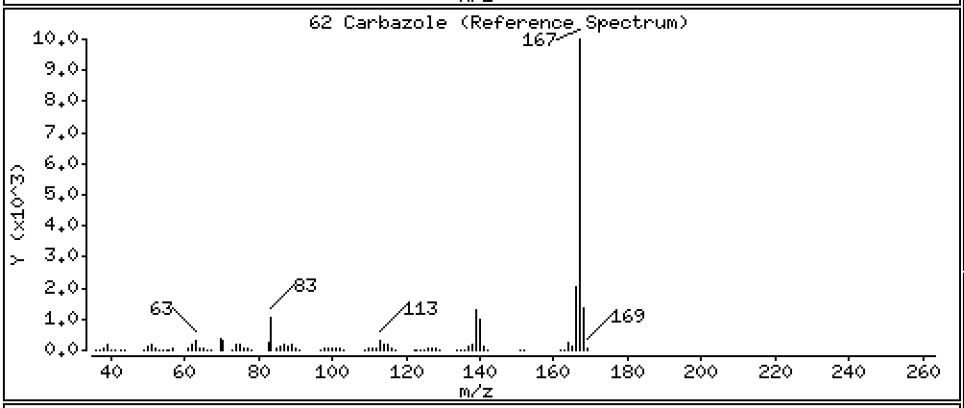
Concentration: 0.1093 ug/mL

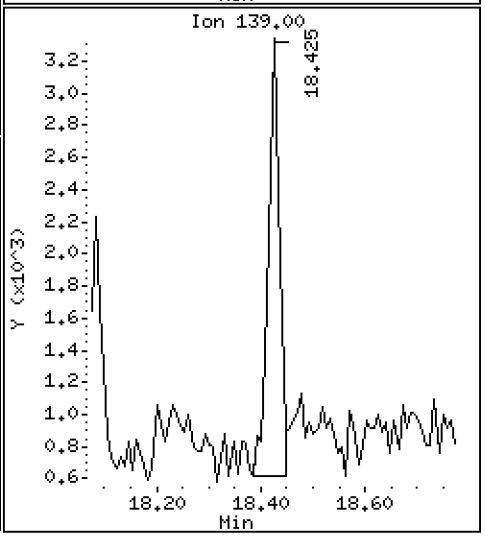


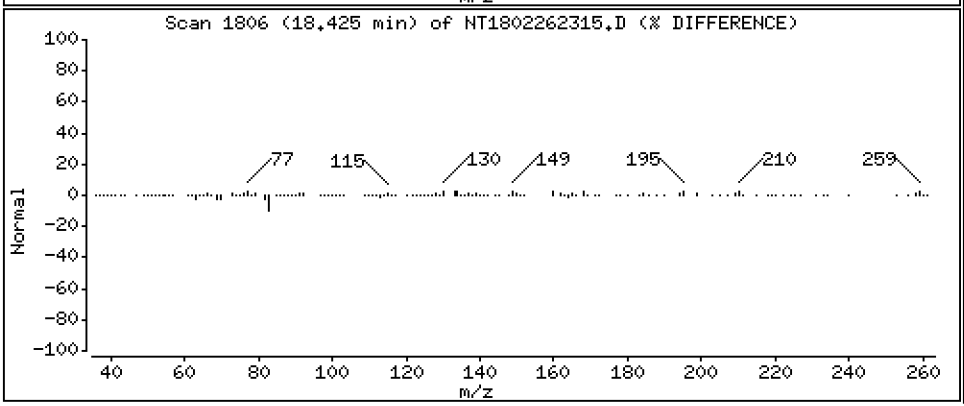












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

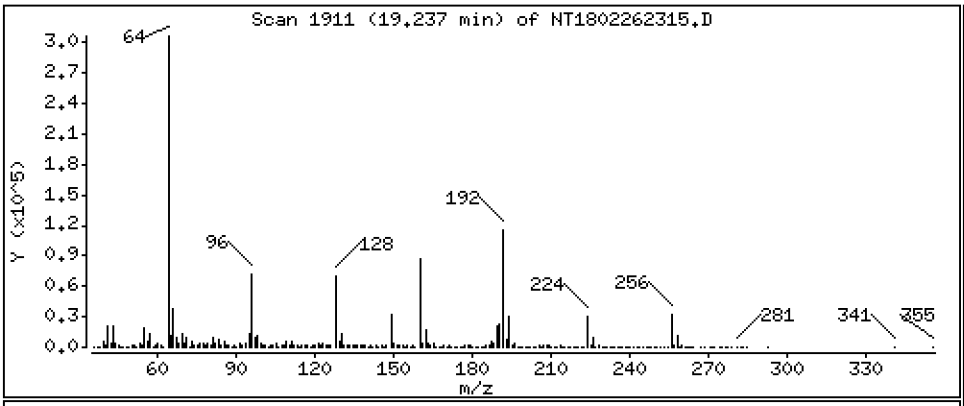
Operator: VTS

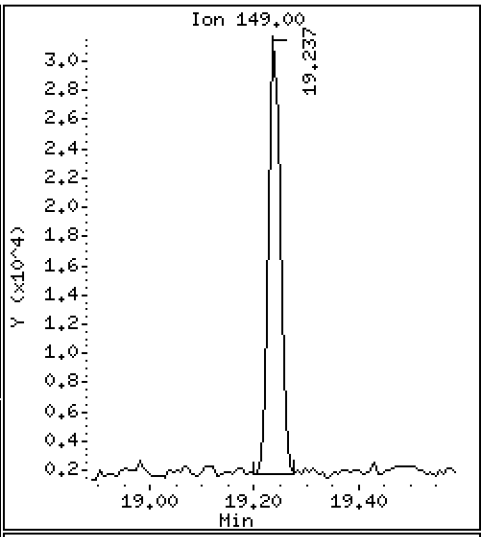
Column phase: ZB-5msi

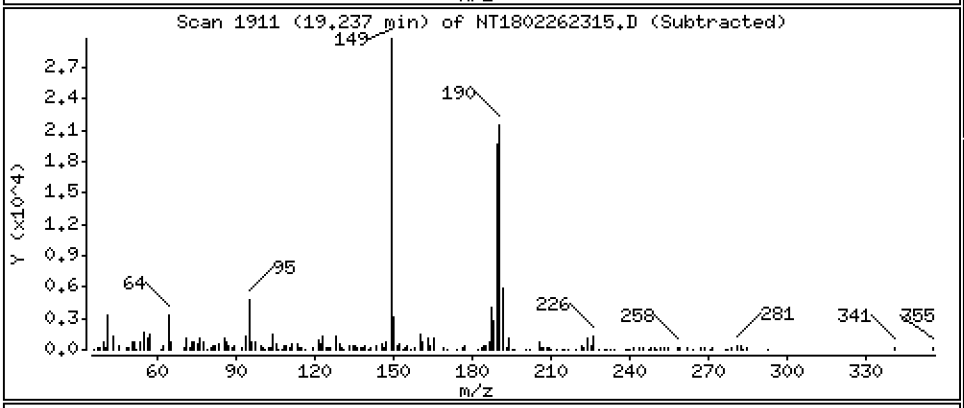
Column diameter: 0.25

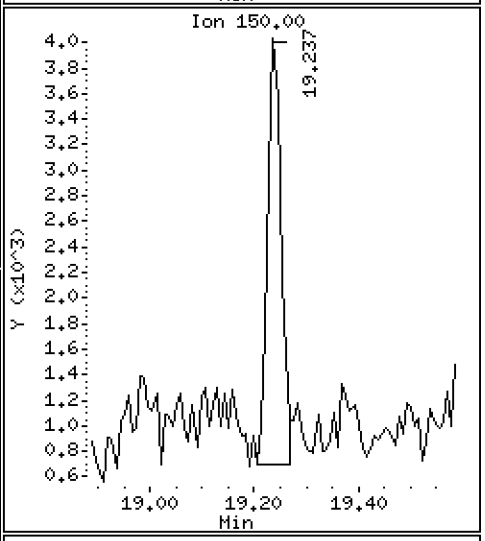
63 Di-n-butylphthalate

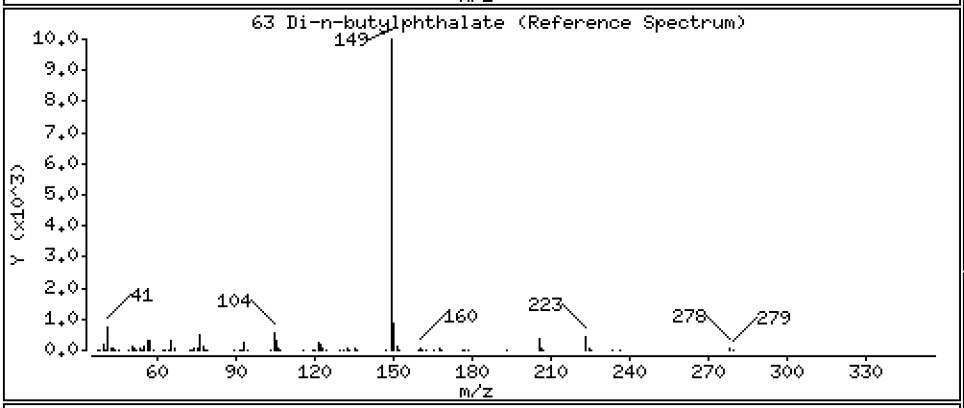
Concentration: 0.1537 ug/mL

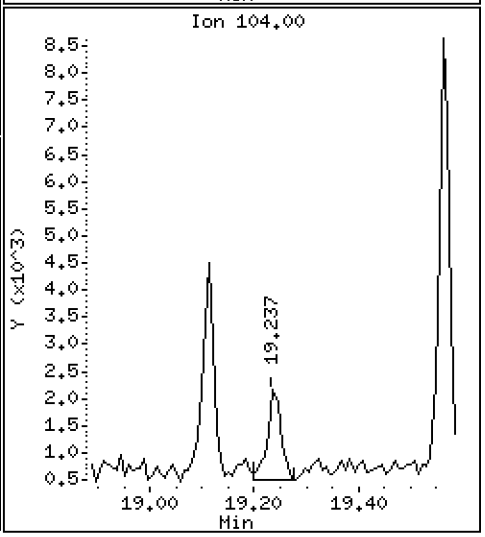


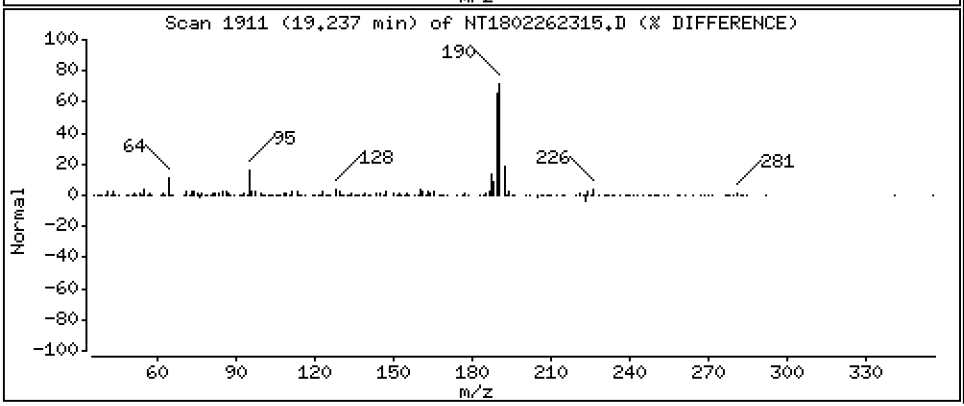












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

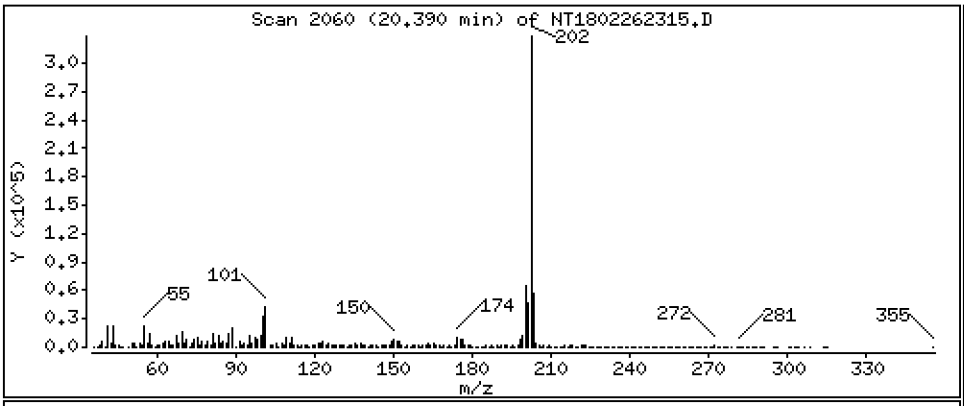
Operator: VTS

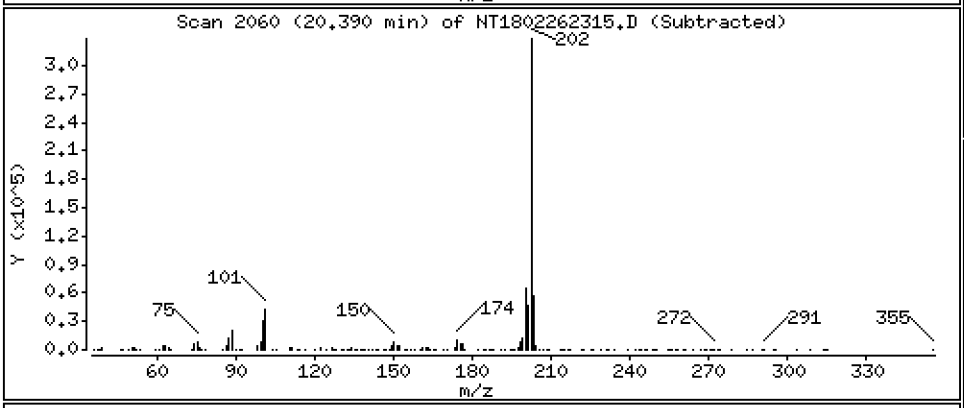
Column phase: ZB-5msi

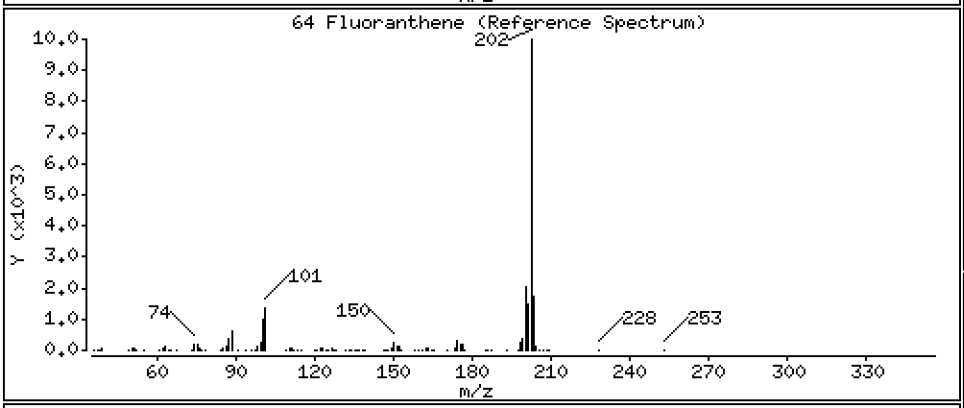
Column diameter: 0.25

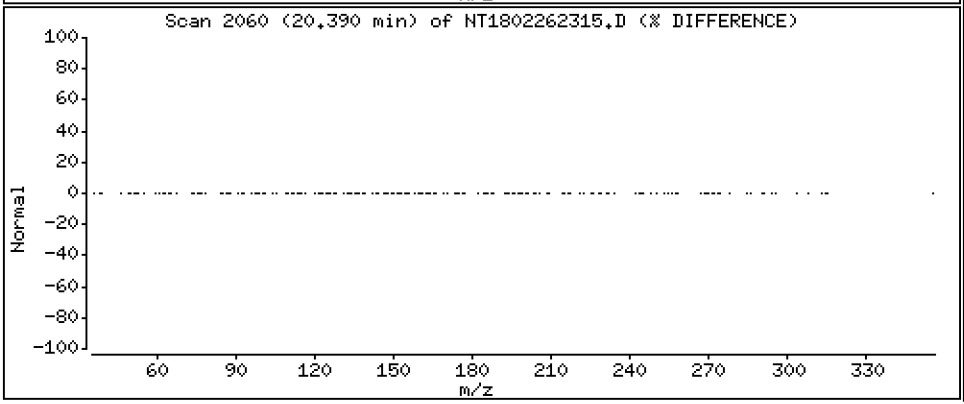
64 Fluoranthene

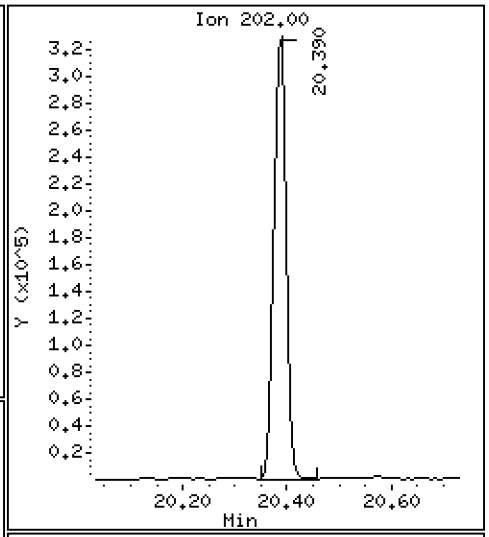
Concentration: 1.435 ug/mL

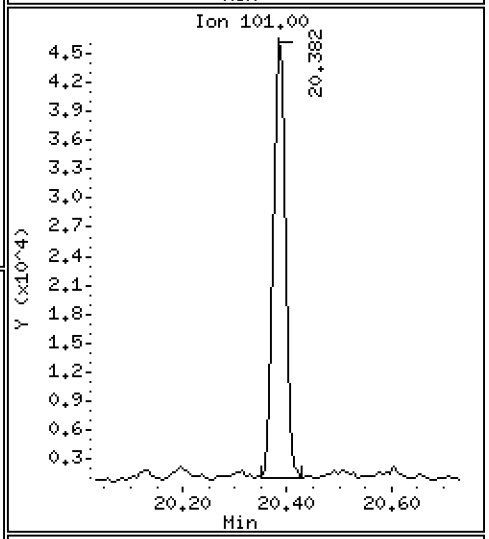


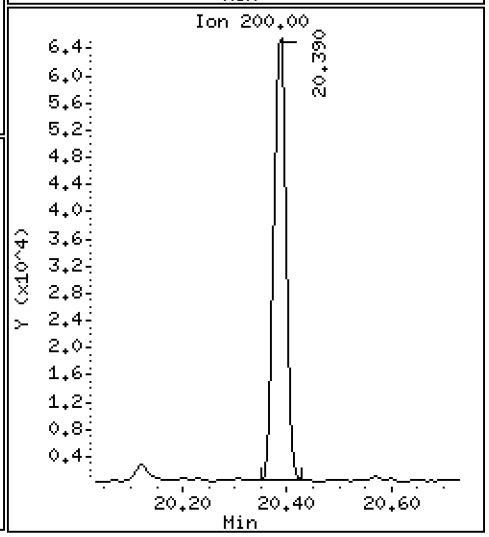












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

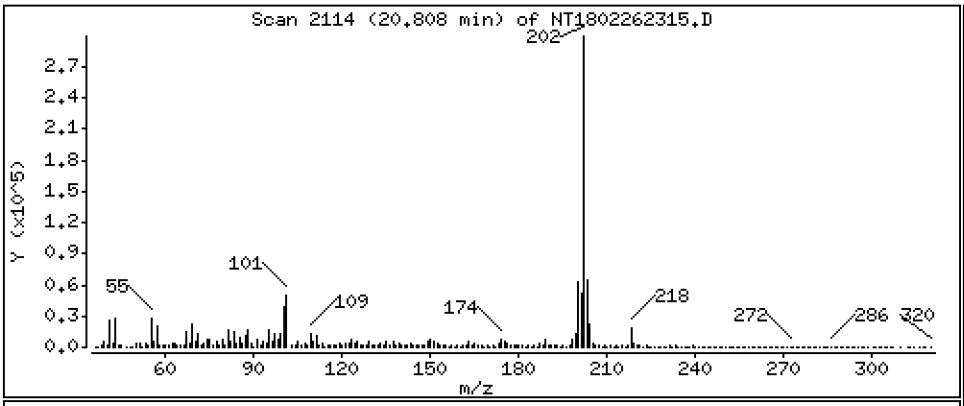
Operator: VTS

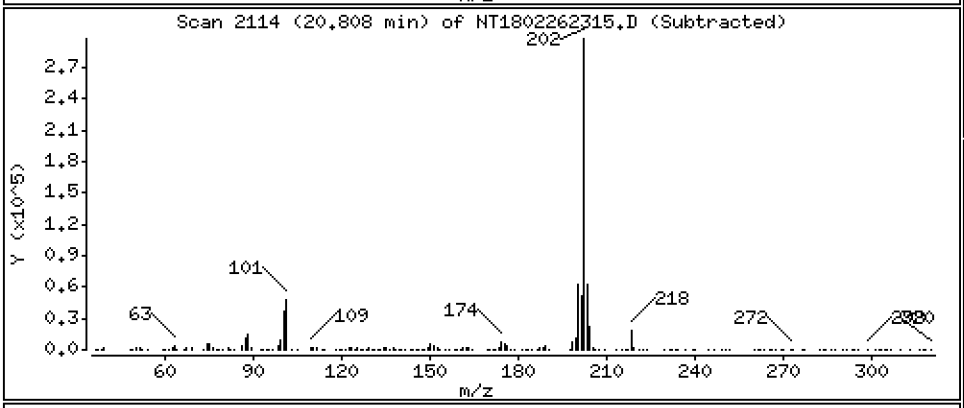
Column phase: ZB-5msi

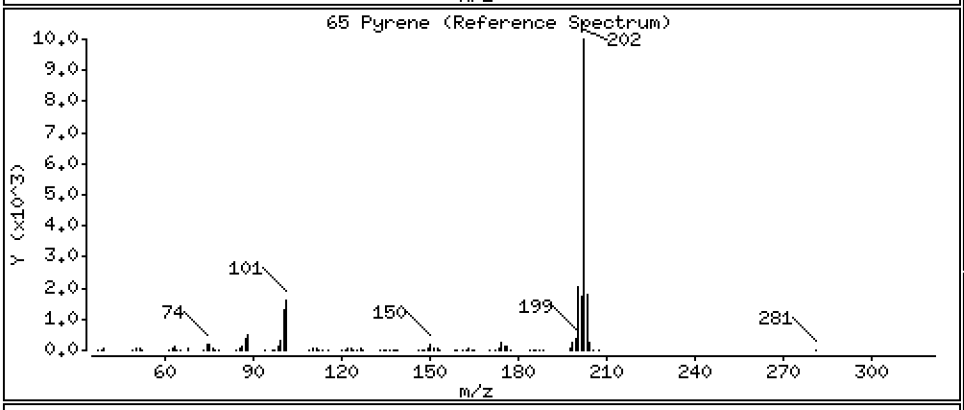
Column diameter: 0.25

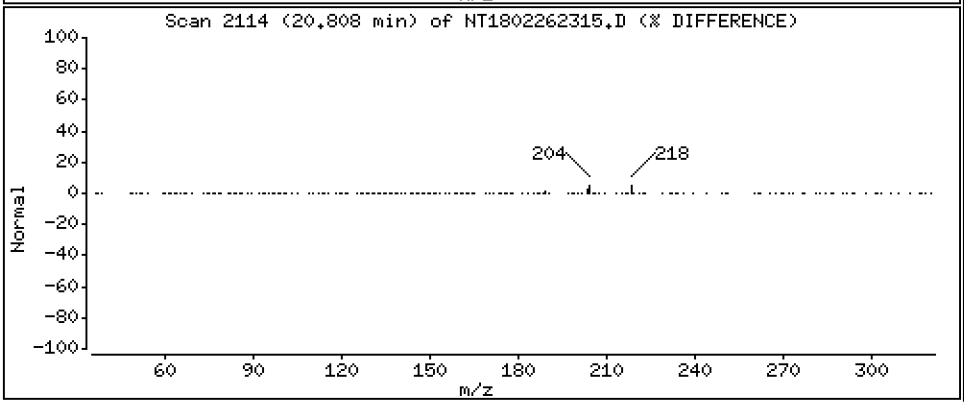
65 Pyrene

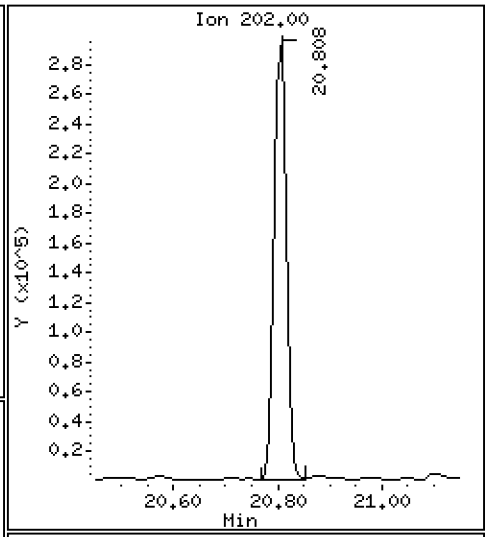
Concentration: 1.184 ug/mL

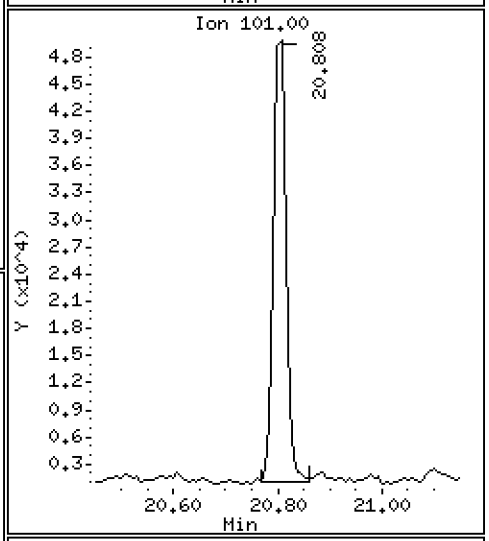


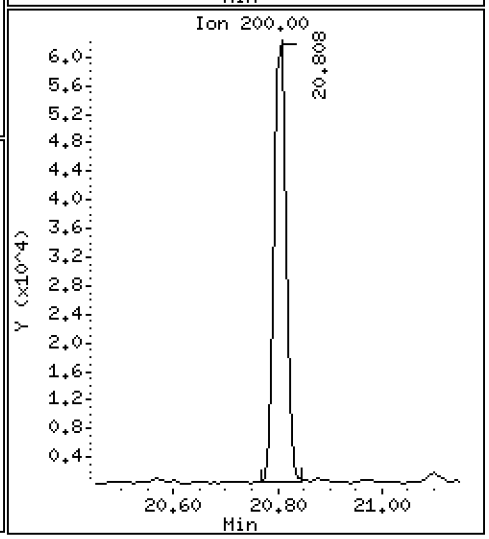












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

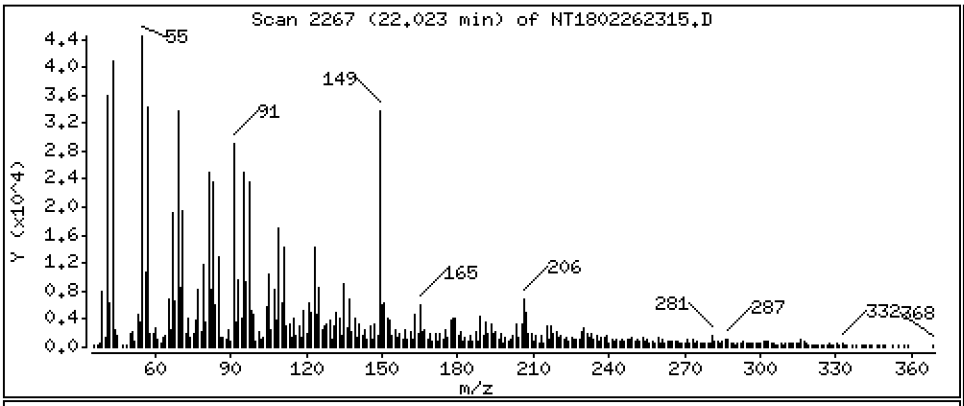
Operator: VTS

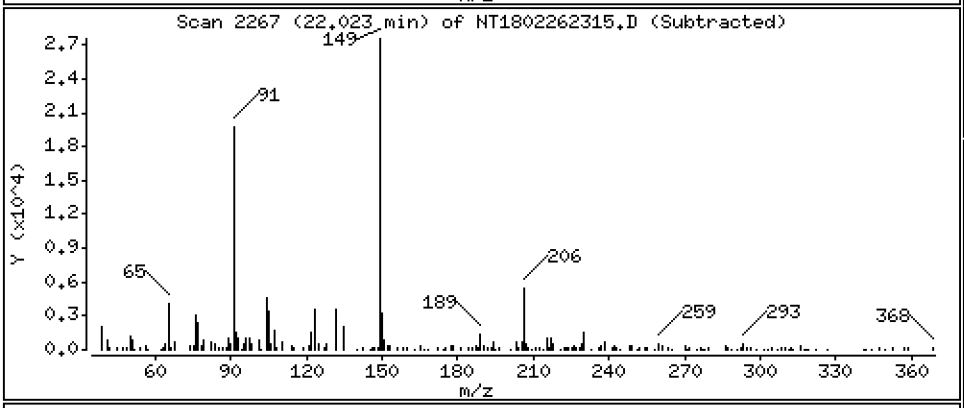
Column phase: ZB-5msi

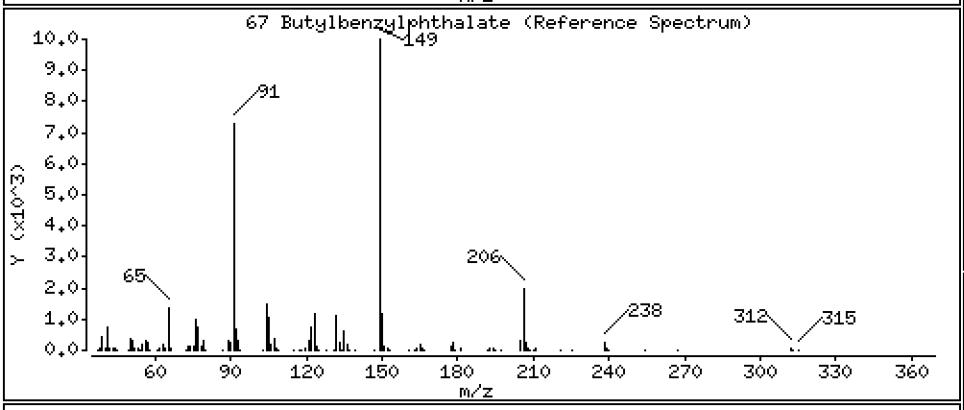
Column diameter: 0.25

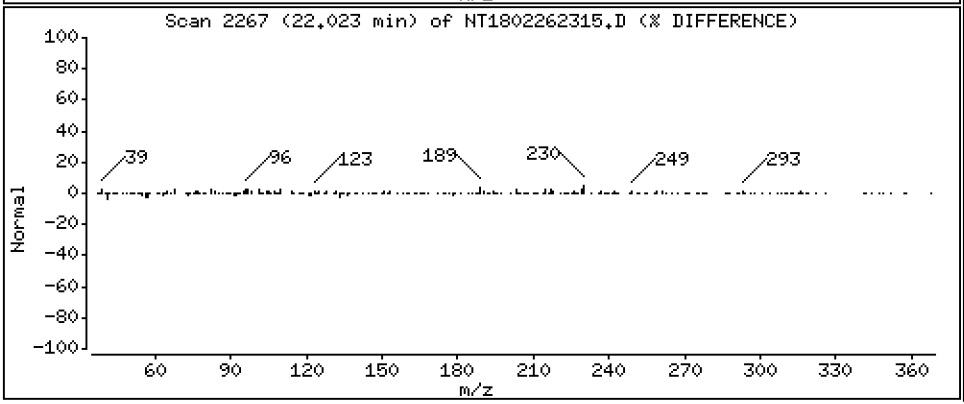
67 Butylbenzylphthalate

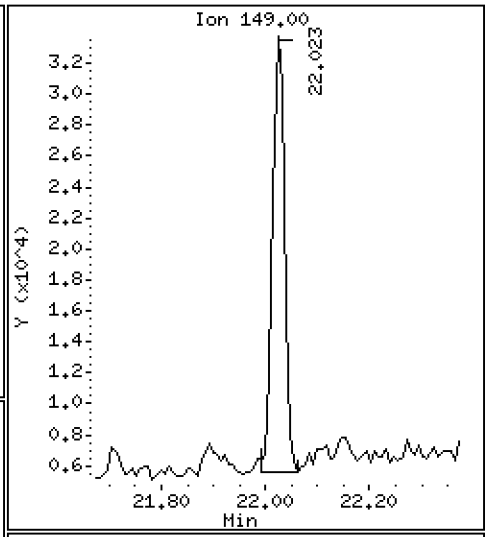
Concentration: 0.2969 ug/mL

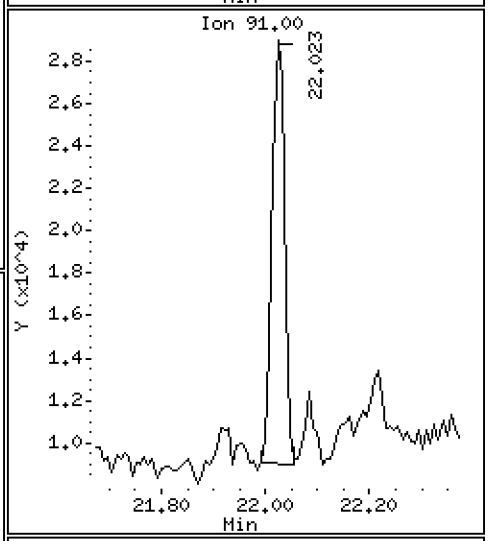


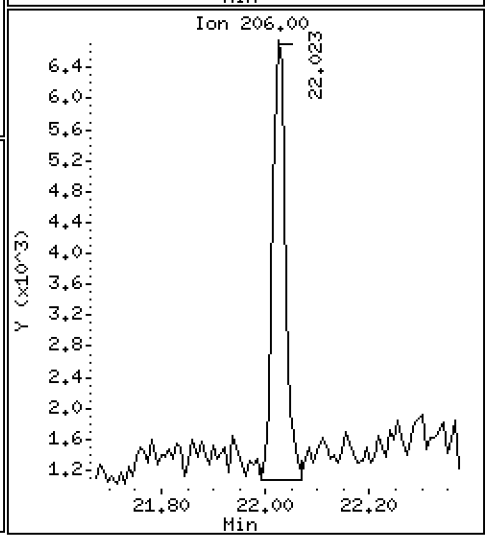












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

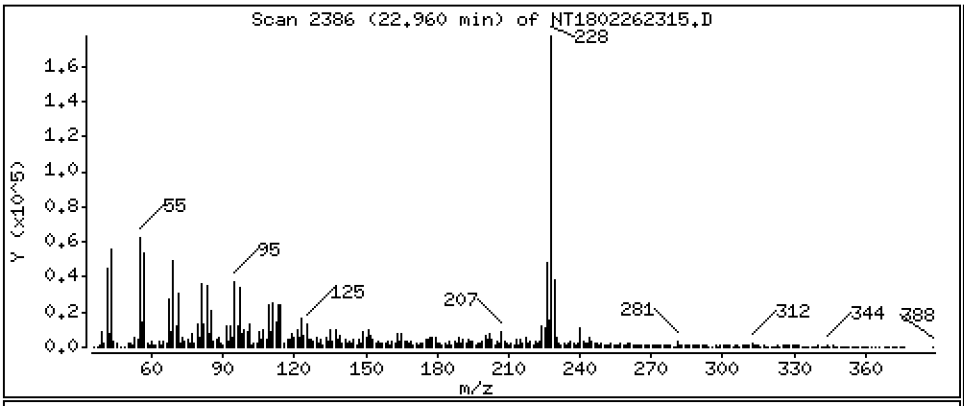
Operator: VTS

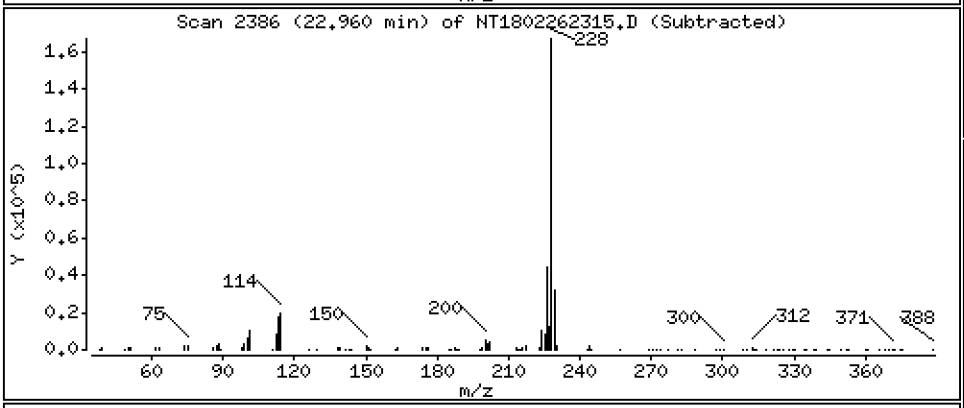
Column phase: ZB-5msi

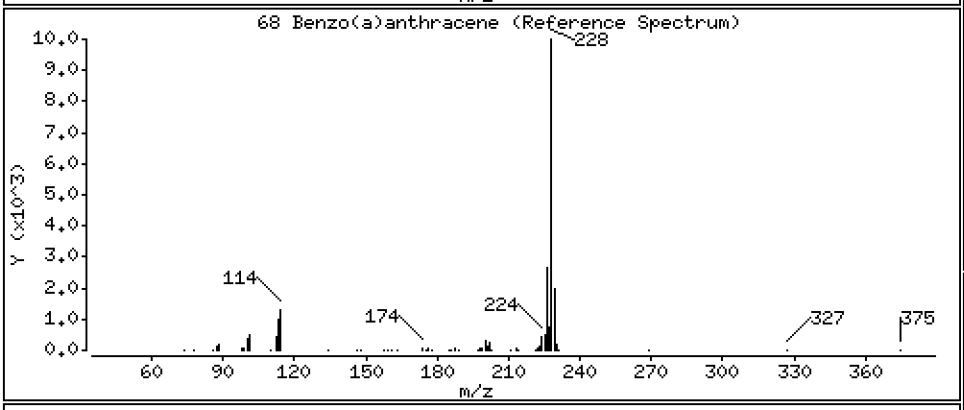
Column diameter: 0.25

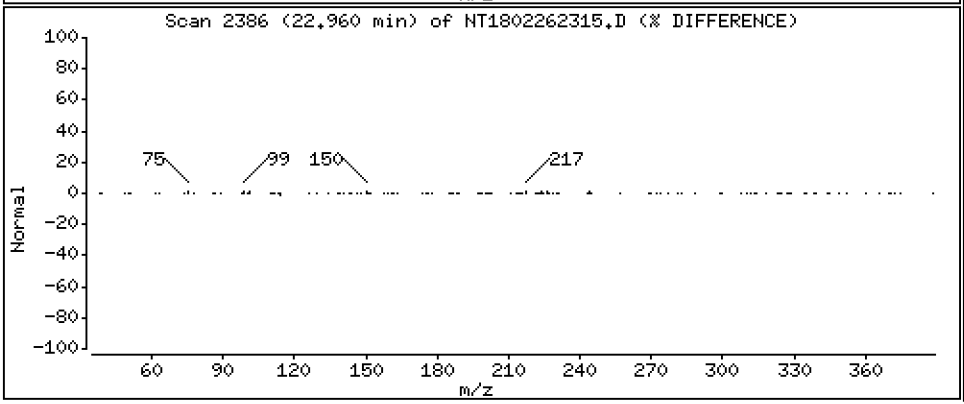
68 Benzo(a)anthracene

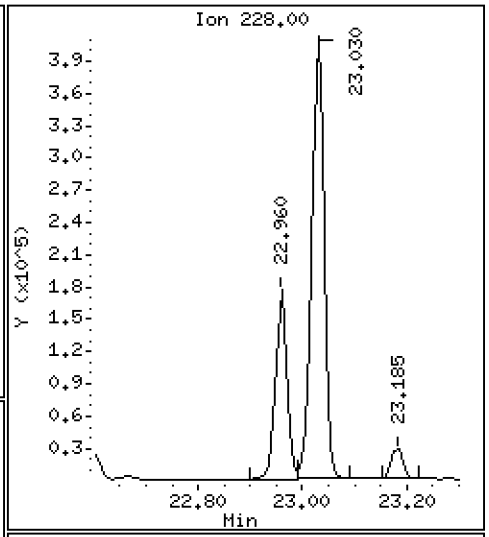
Concentration: 0.7148 ug/mL

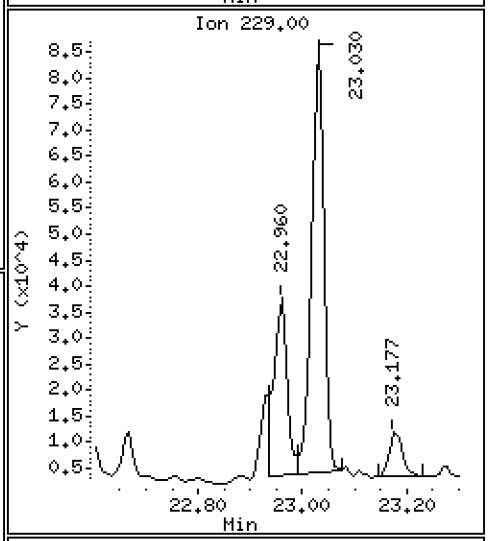


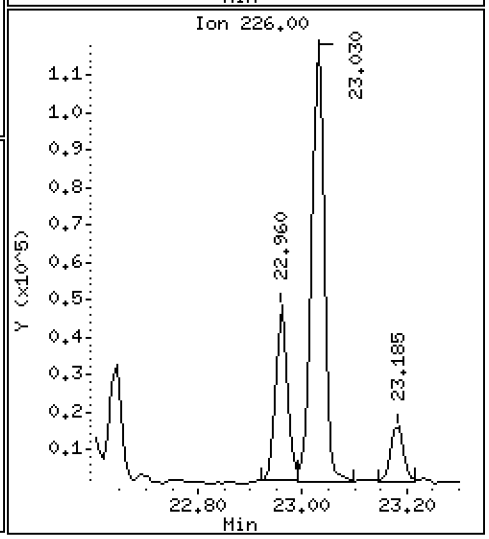












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

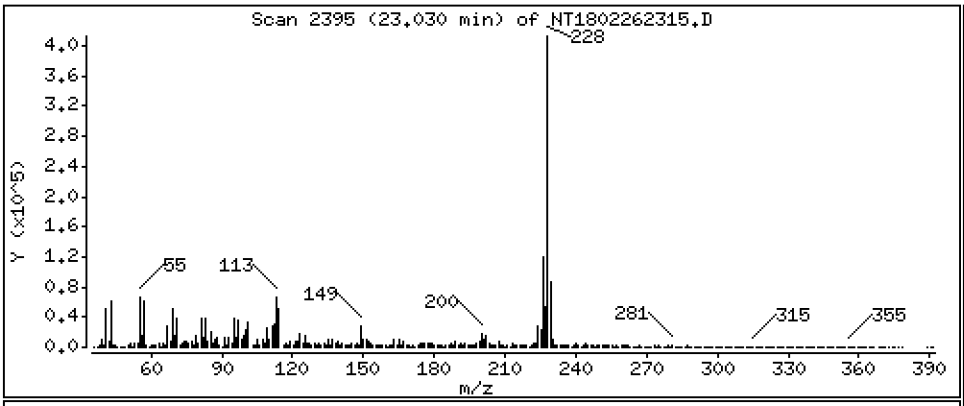
Operator: VTS

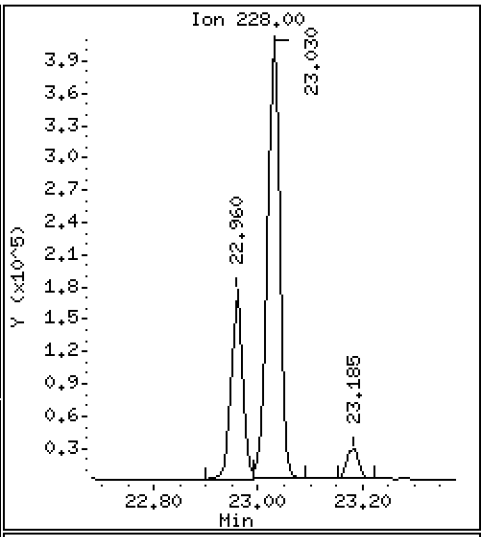
Column phase: ZB-5msi

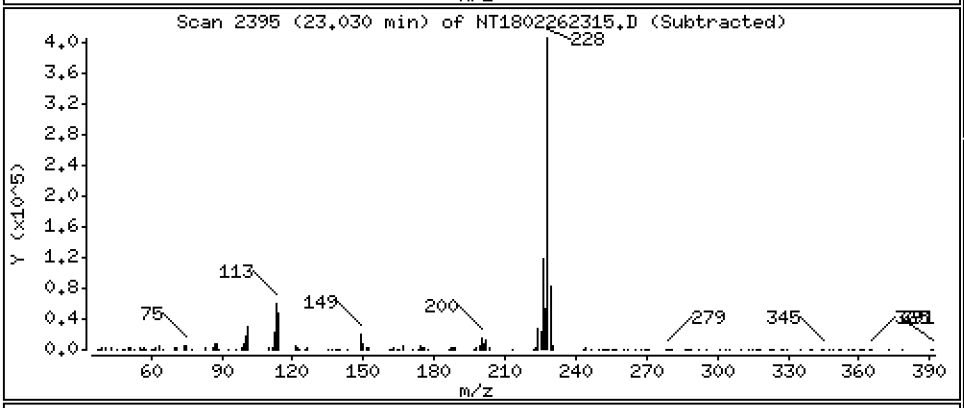
Column diameter: 0.25

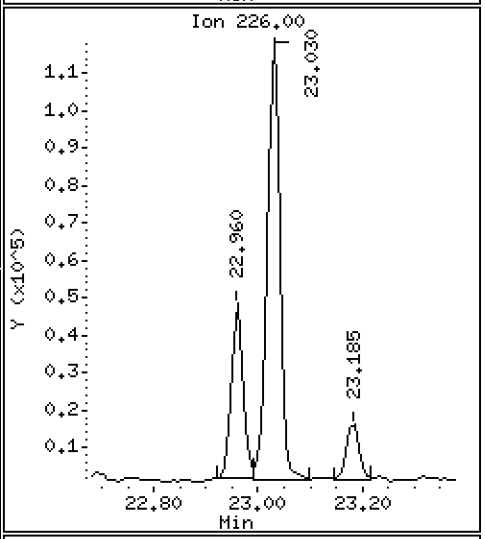
71 Chrysene

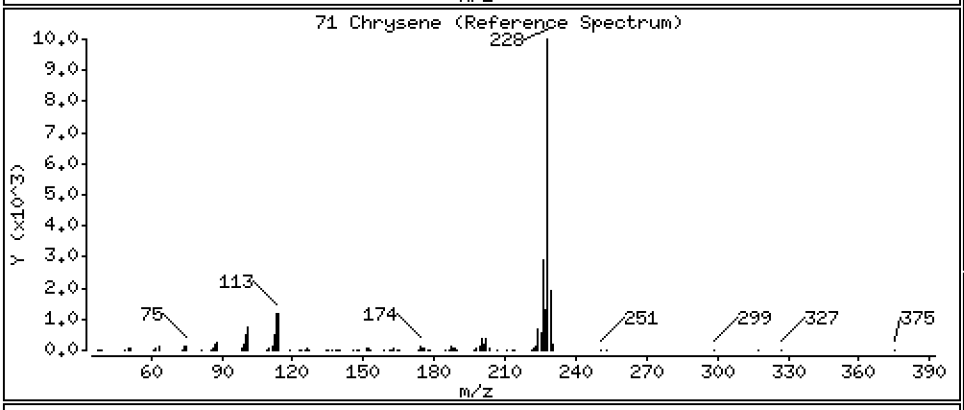
Concentration: 1.655 ug/mL

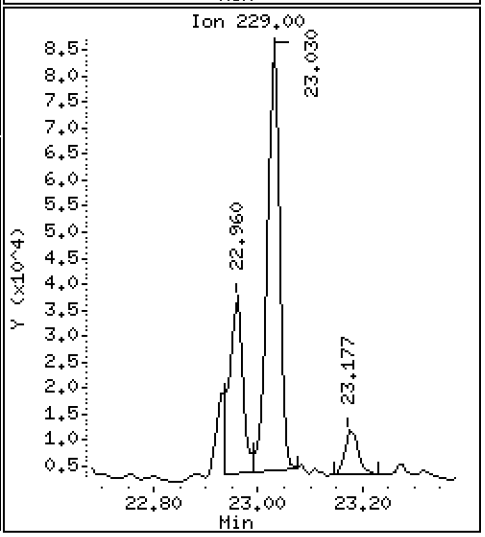


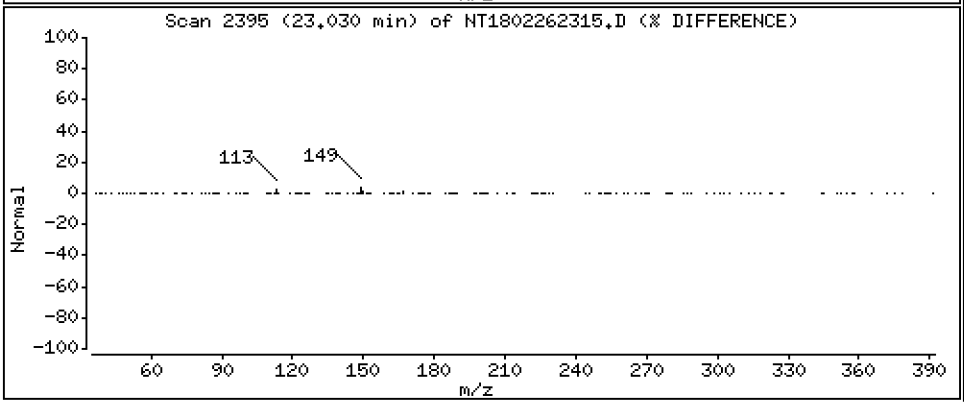












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262315.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

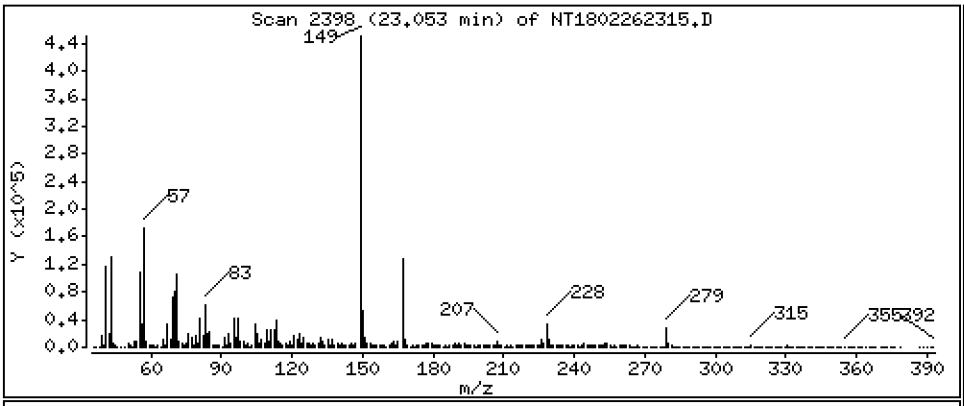
Operator: VTS

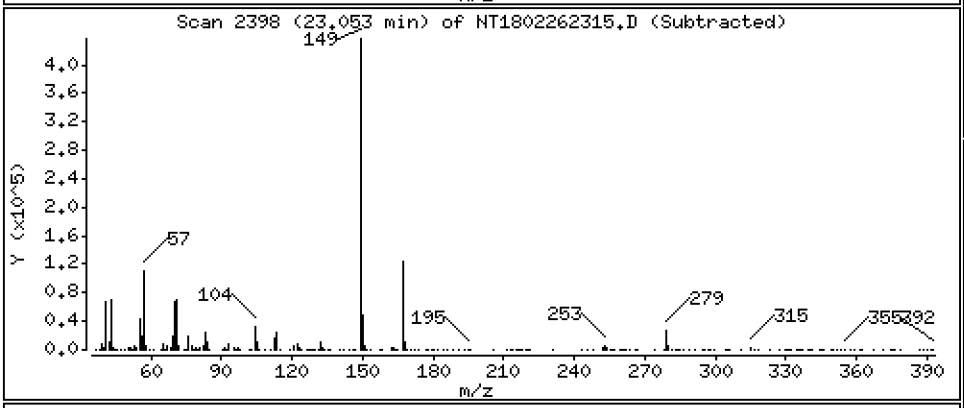
Column phase: ZB-5msi

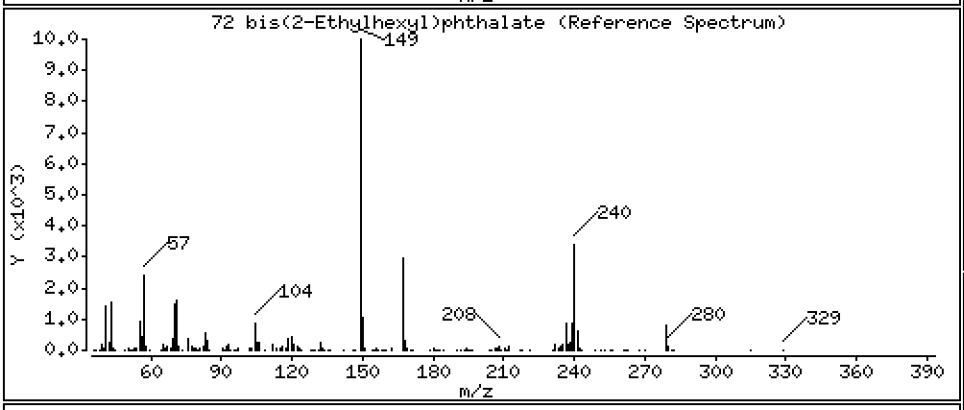
Column diameter: 0.25

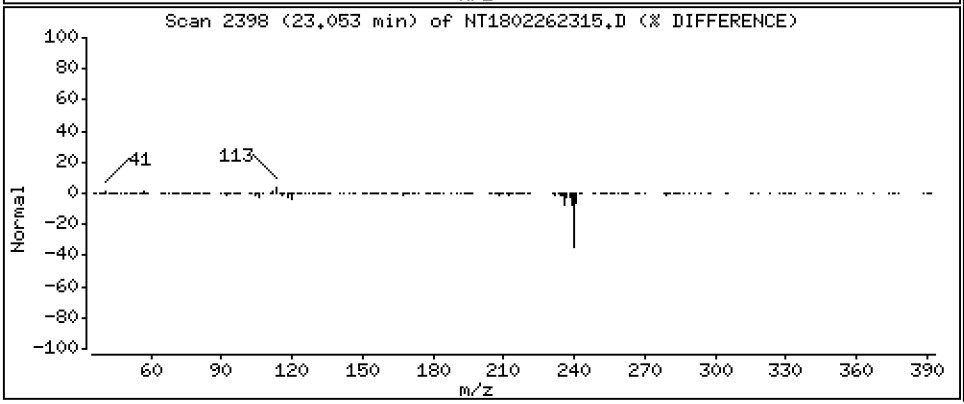
72 bis(2-Ethylhexyl)phthalate

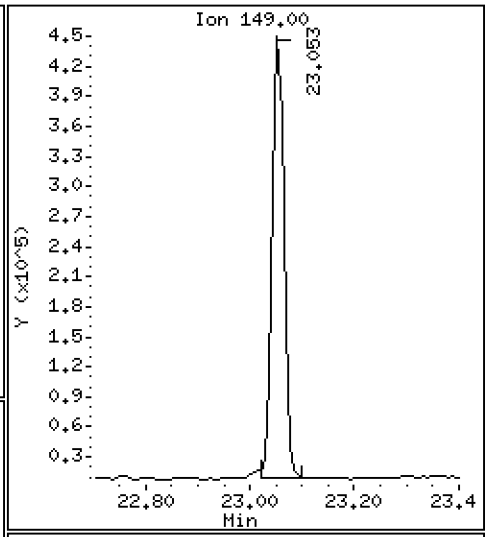
Concentration: 2.800 ug/mL

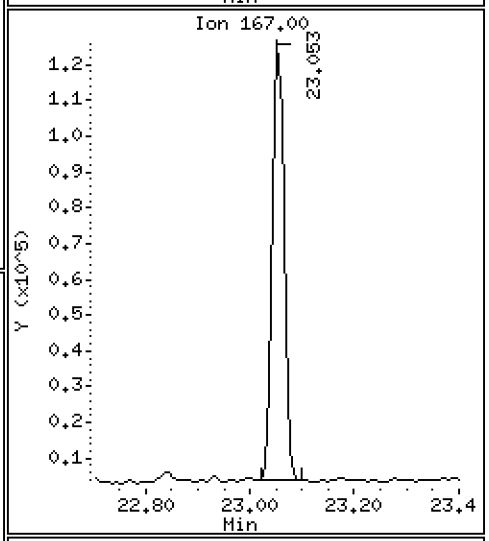


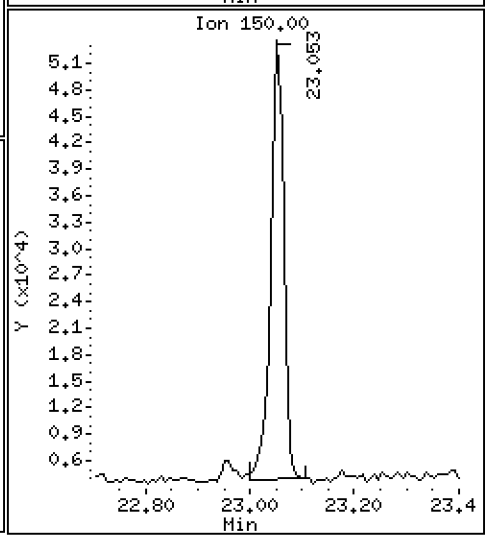












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

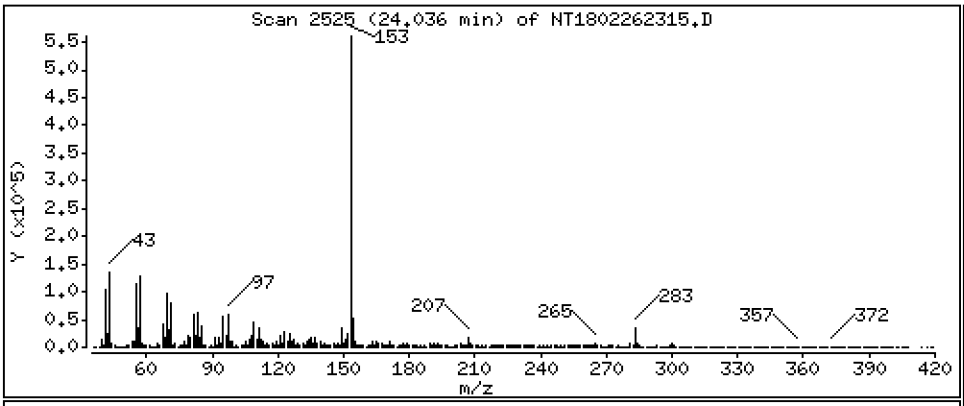
Operator: VTS

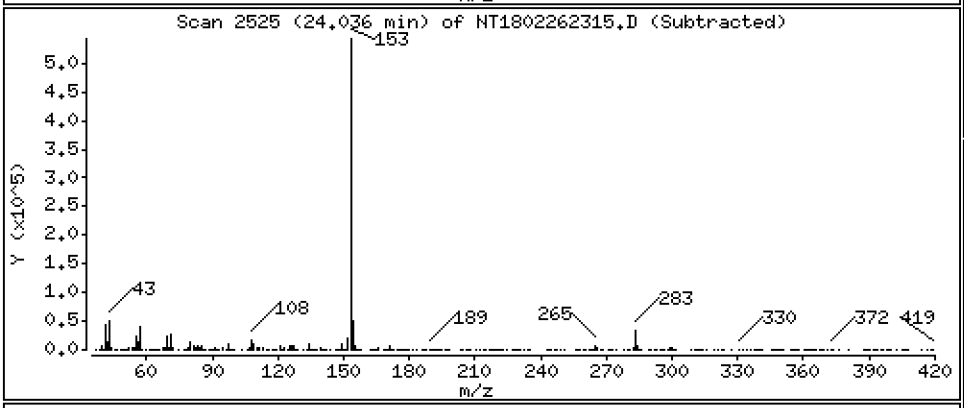
Column phase: ZB-5msi

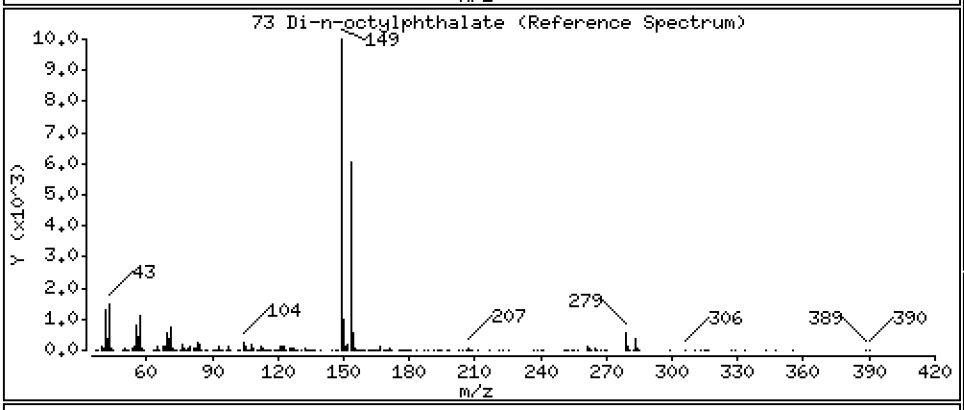
Column diameter: 0.25

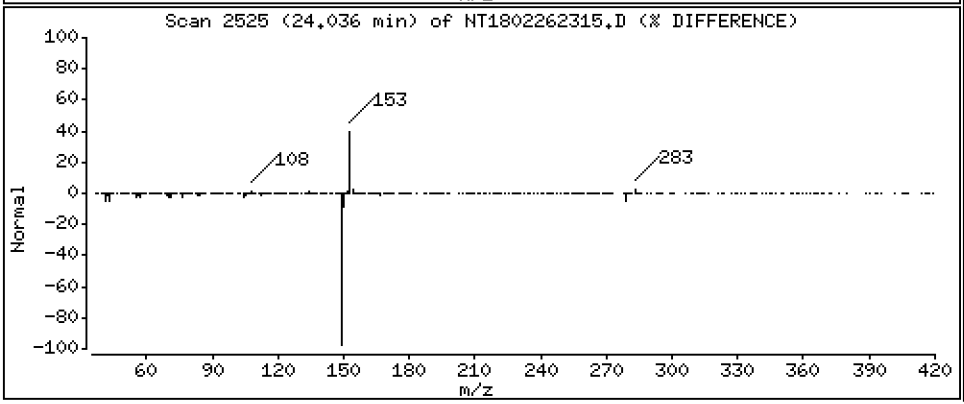
73 Di-n-octylphthalate

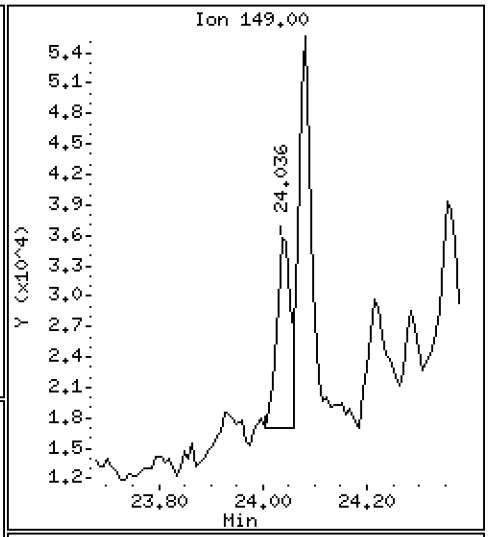
Concentration: 0.07892 ug/mL

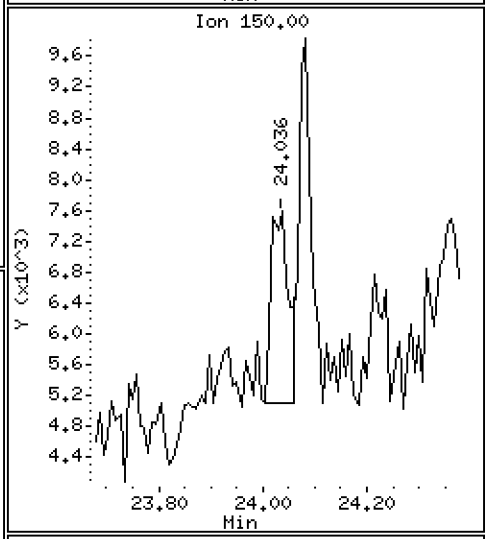


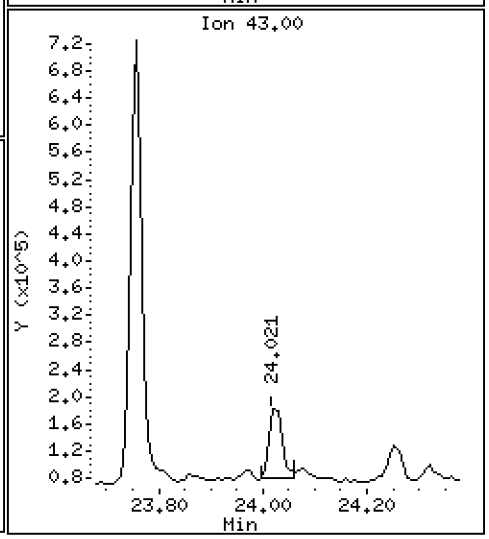












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

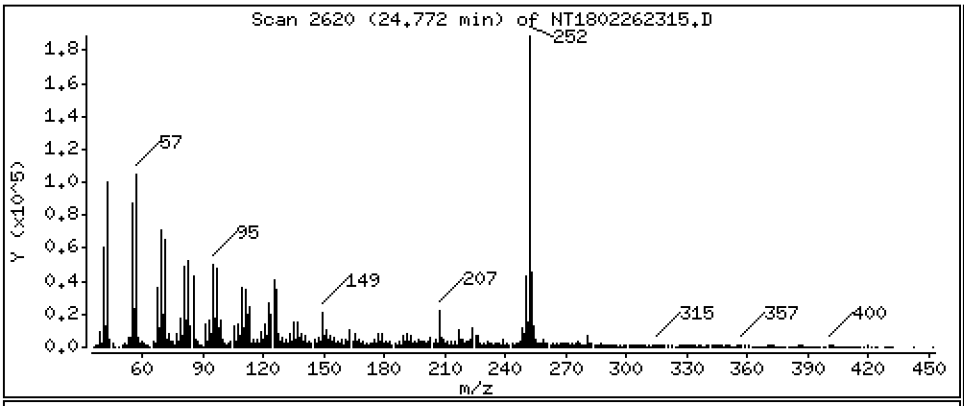
Operator: VTS

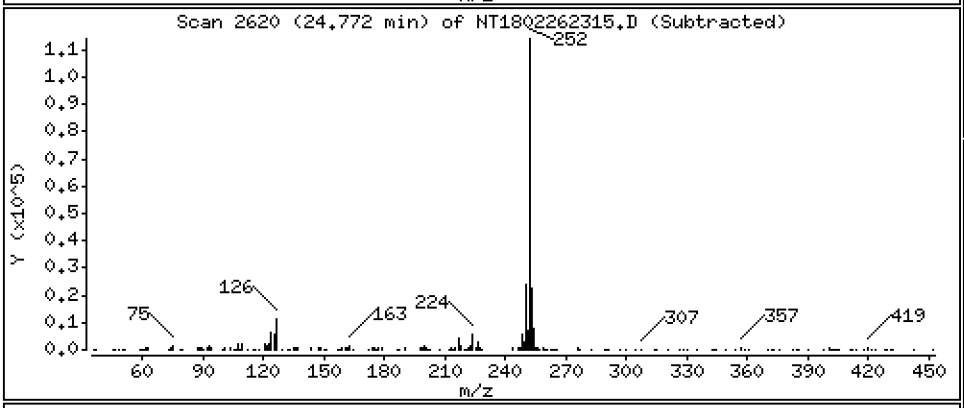
Column phase: ZB-5msi

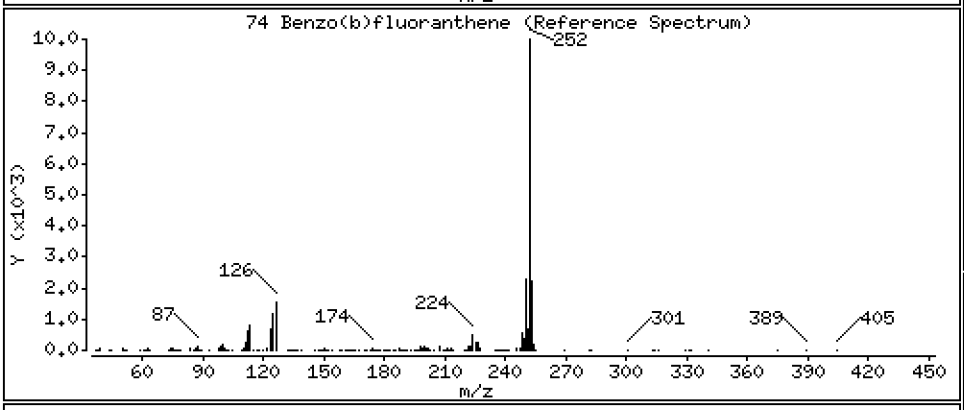
Column diameter: 0.25

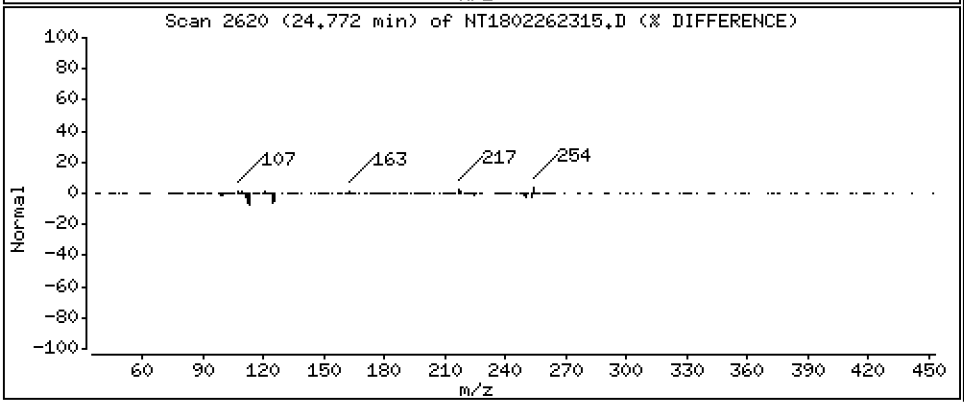
74 Benzo(b)fluoranthene

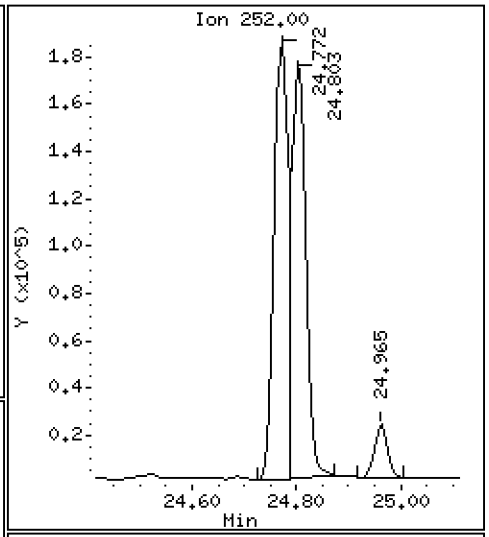
Concentration: 1.210 ug/mL

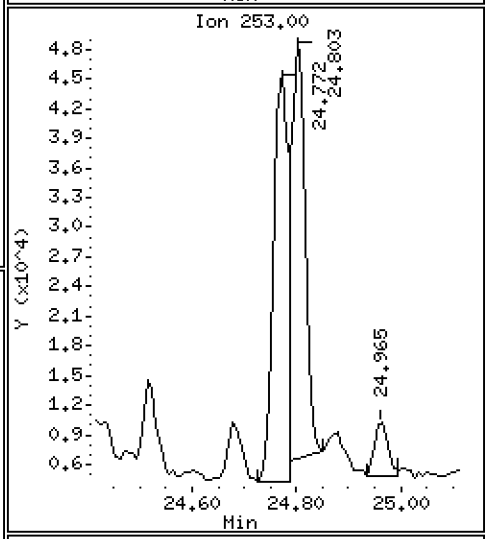


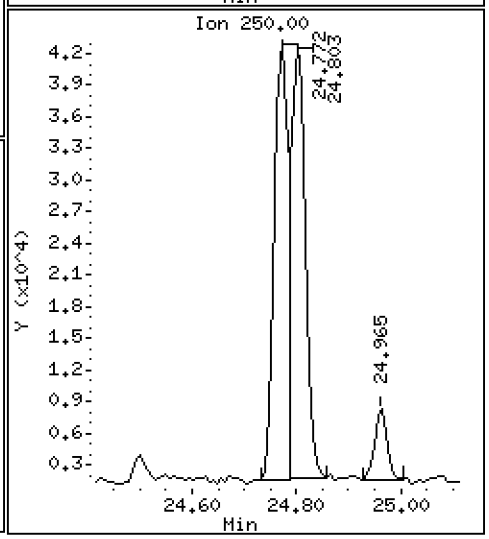












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

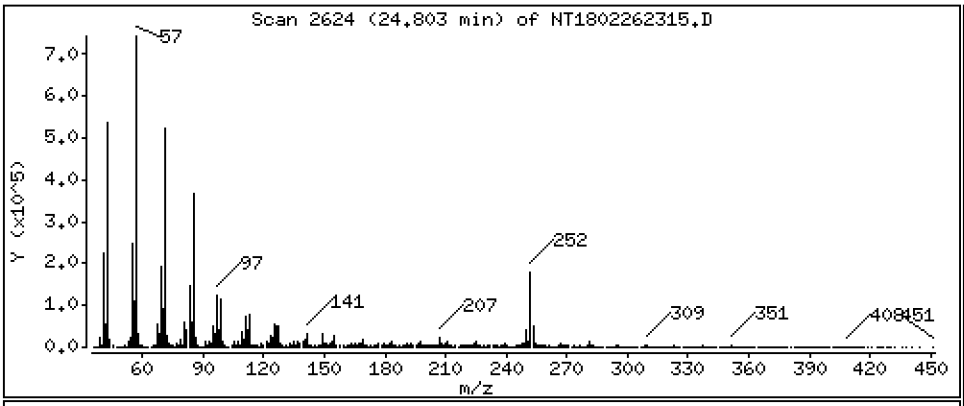
Operator: VTS

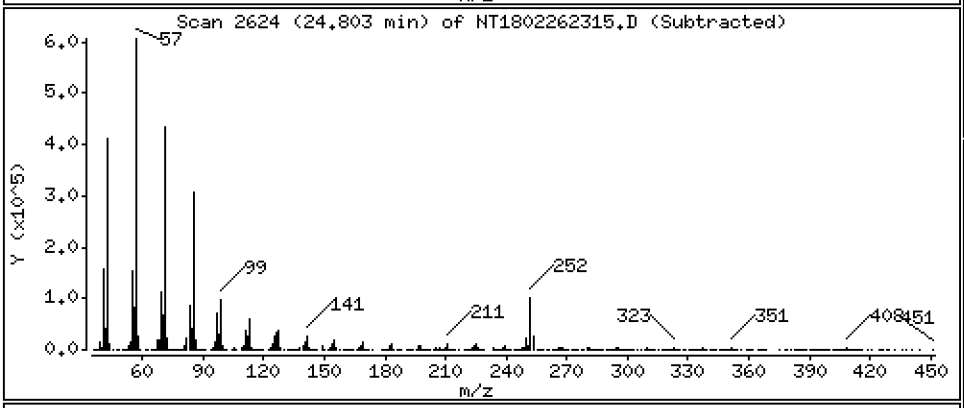
Column phase: ZB-5msi

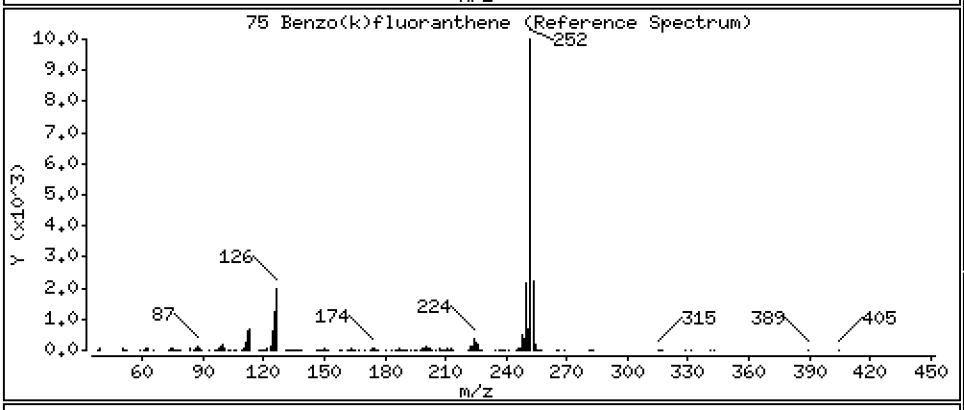
Column diameter: 0.25

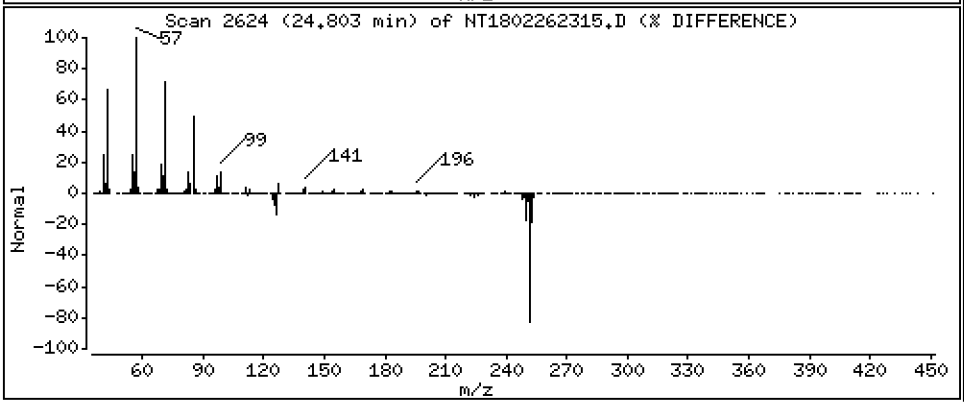
75 Benzo(k)fluoranthene

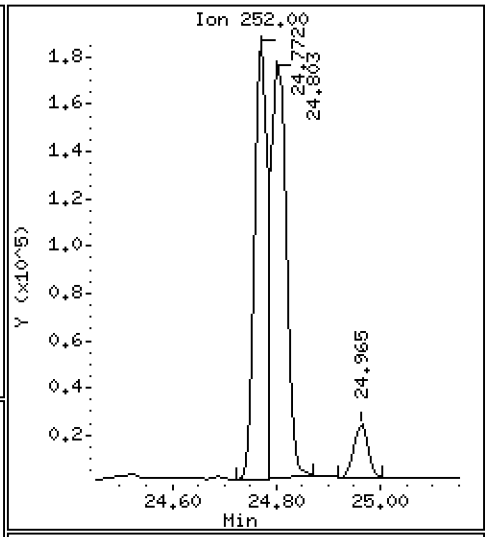
Concentration: 1.137 ug/mL

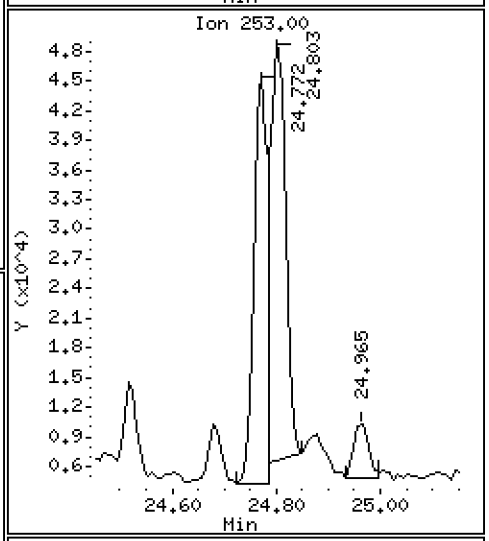


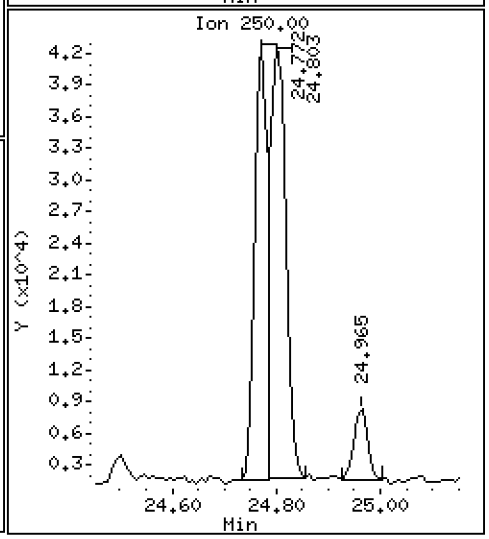












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

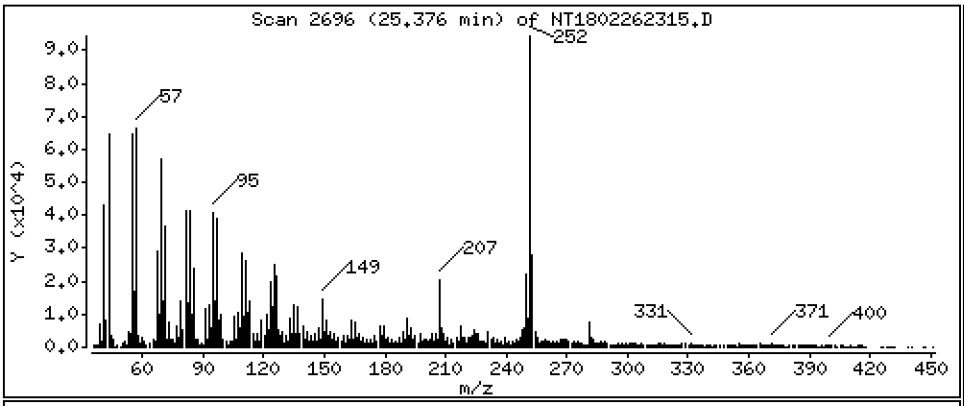
Operator: VTS

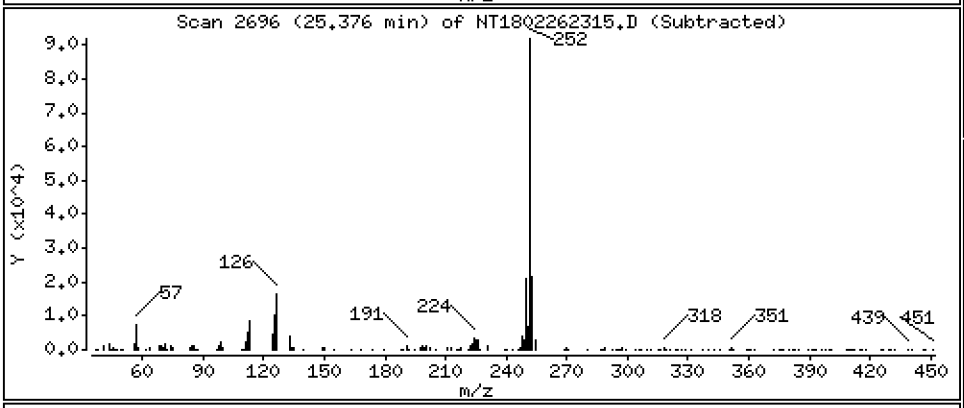
Column phase: ZB-5msi

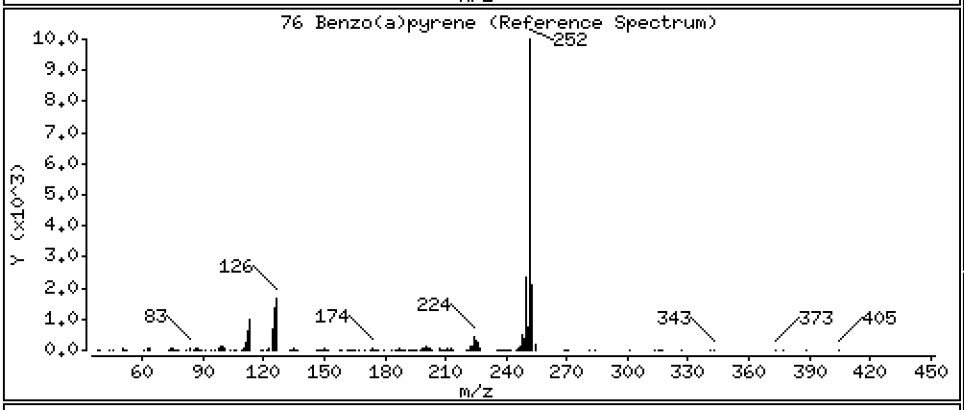
Column diameter: 0.25

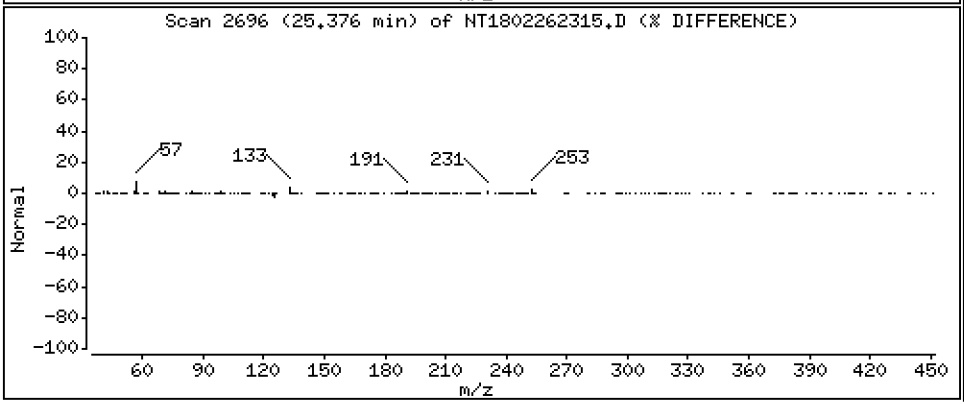
76 Benzo(a)pyrene

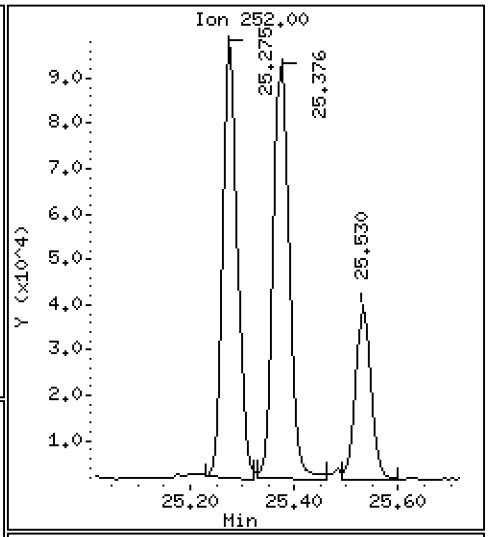
Concentration: 0.7172 ug/mL

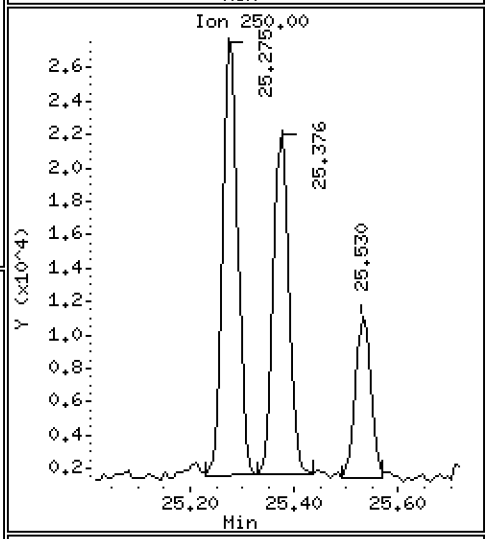


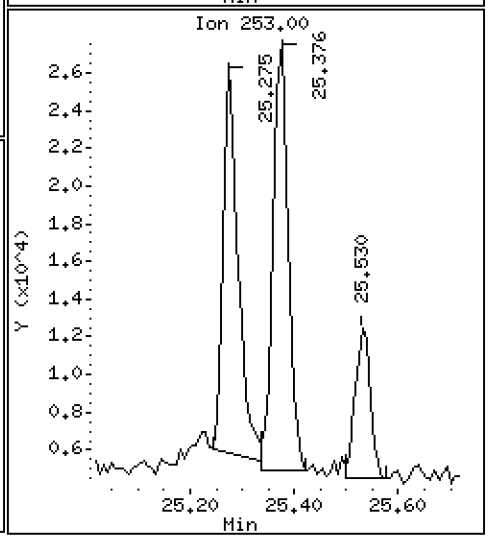












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

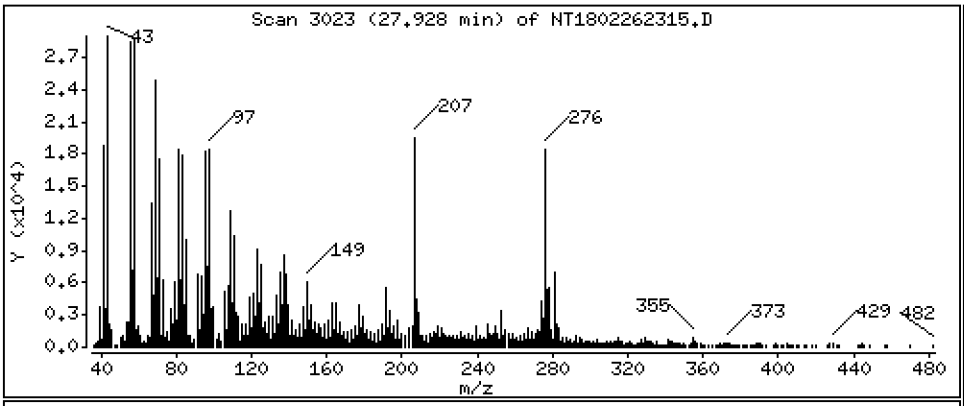
Operator: VTS

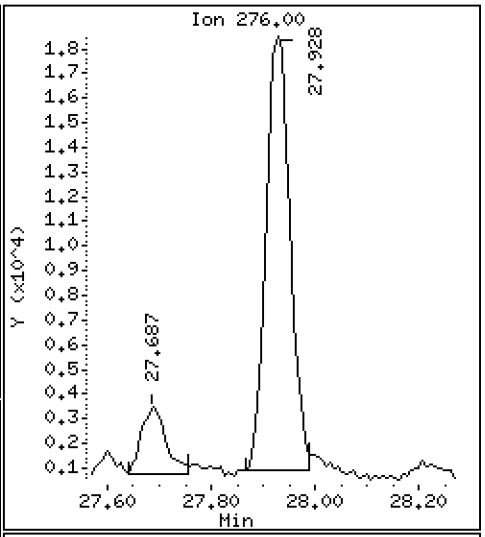
Column phase: ZB-5msi

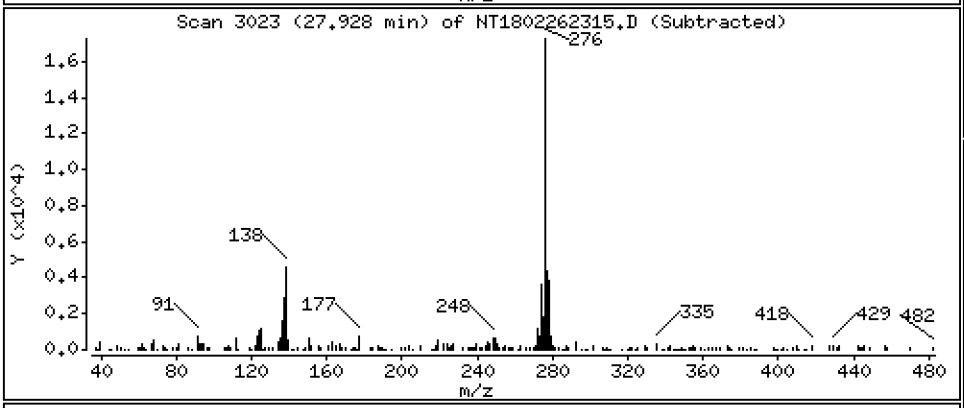
Column diameter: 0.25

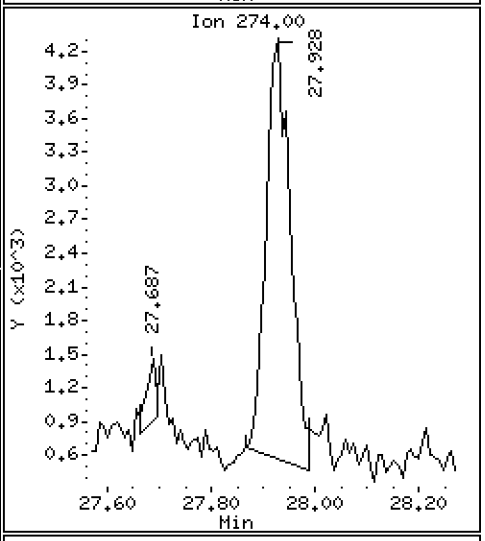
78 Indeno(1,2,3-cd)pyrene

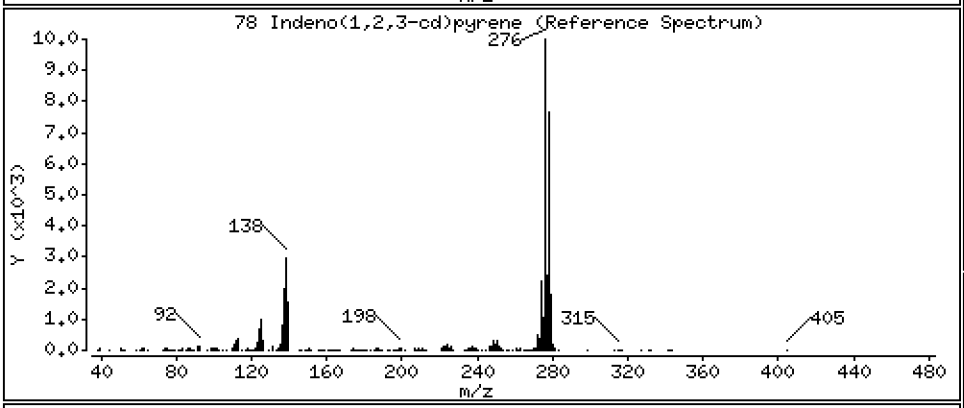
Concentration: 0.1673 ug/mL

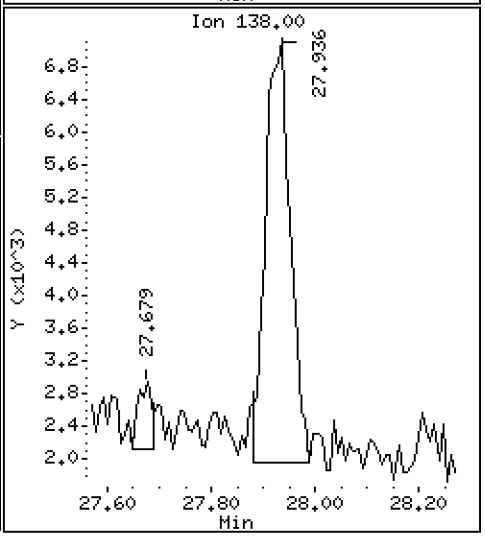


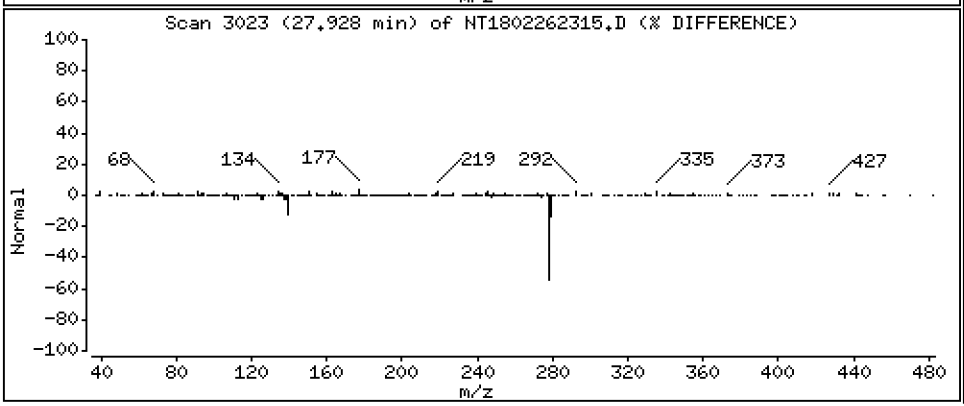












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

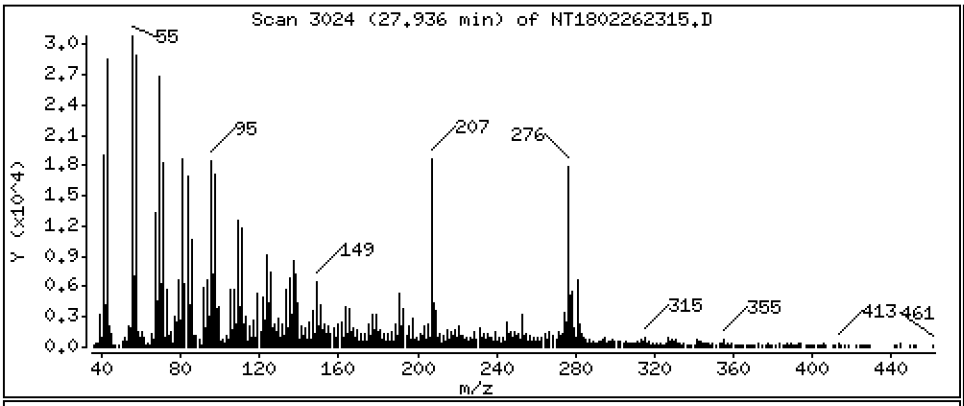
Operator: VTS

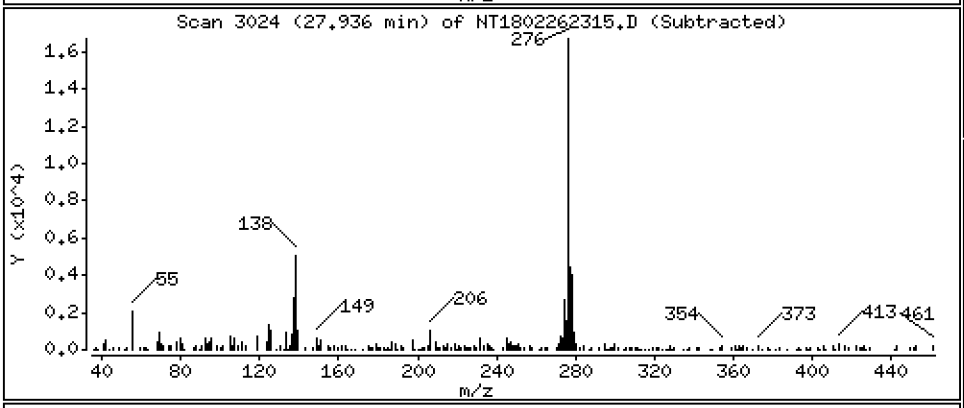
Column phase: ZB-5msi

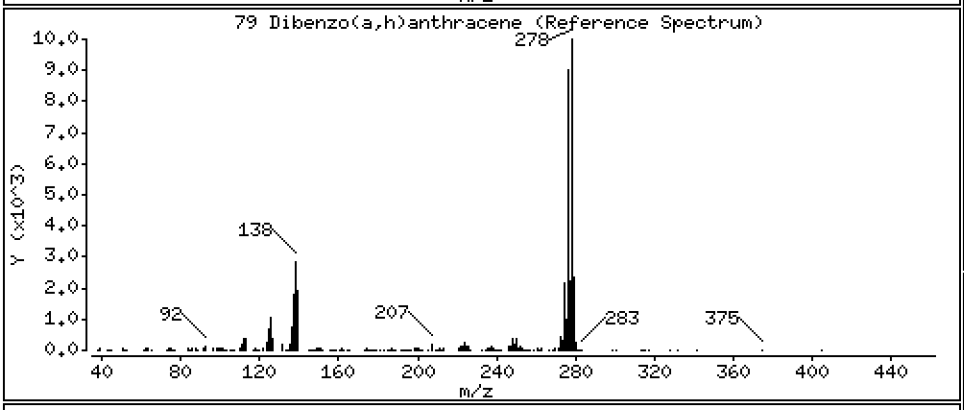
Column diameter: 0.25

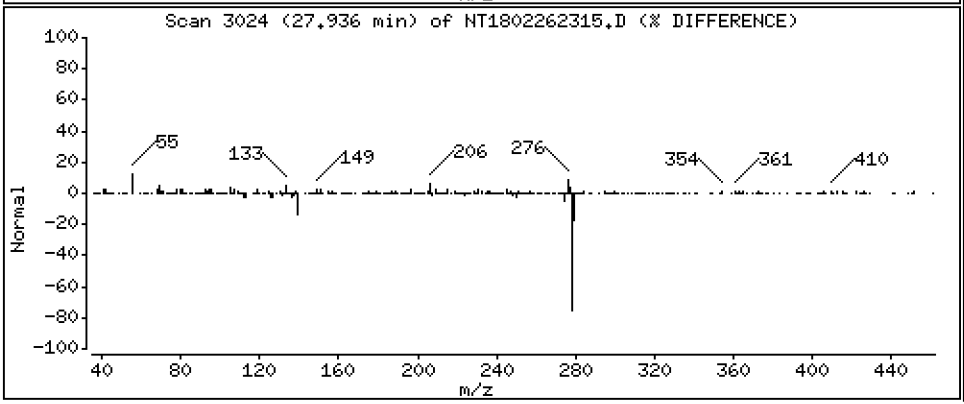
79 Dibenzo(a,h)anthracene

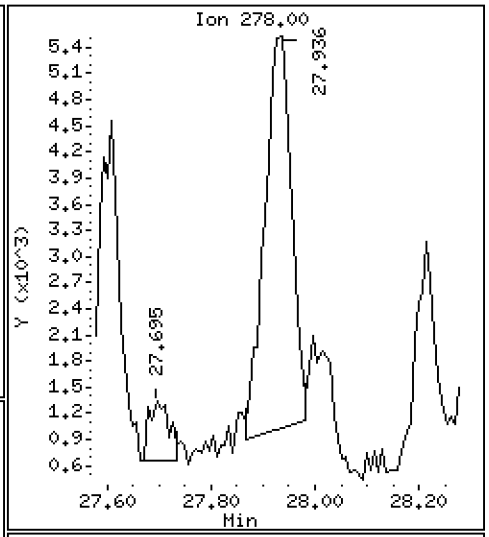
Concentration: 0.05820 ug/mL

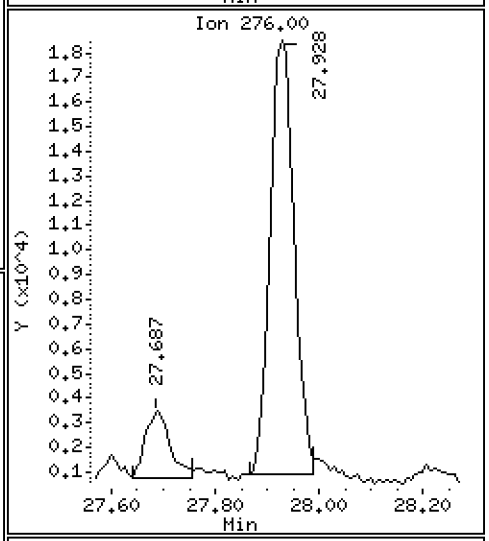


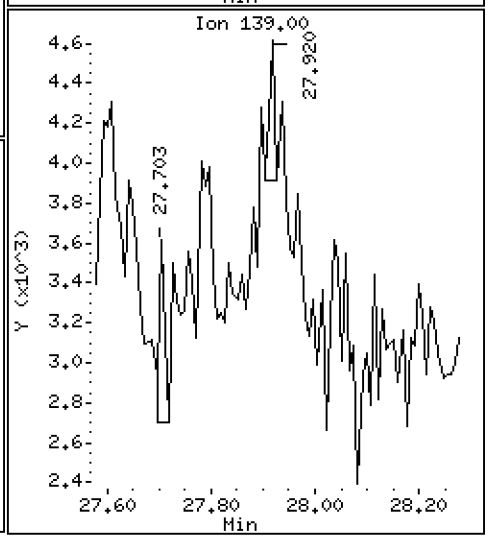












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

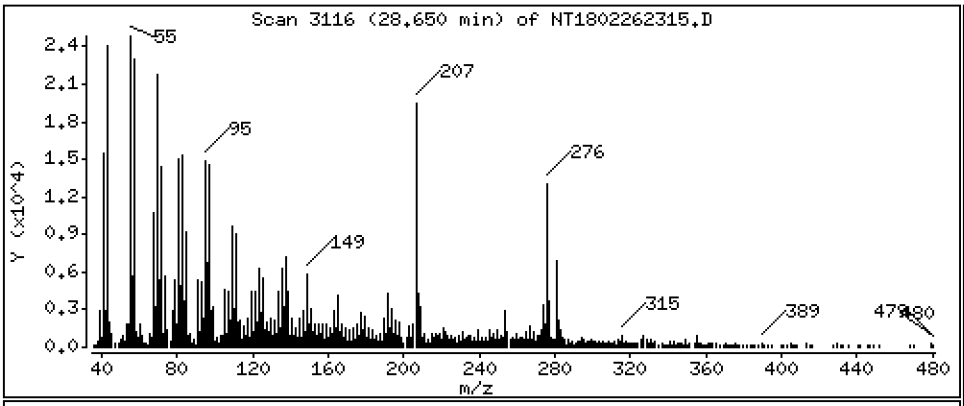
Operator: VTS

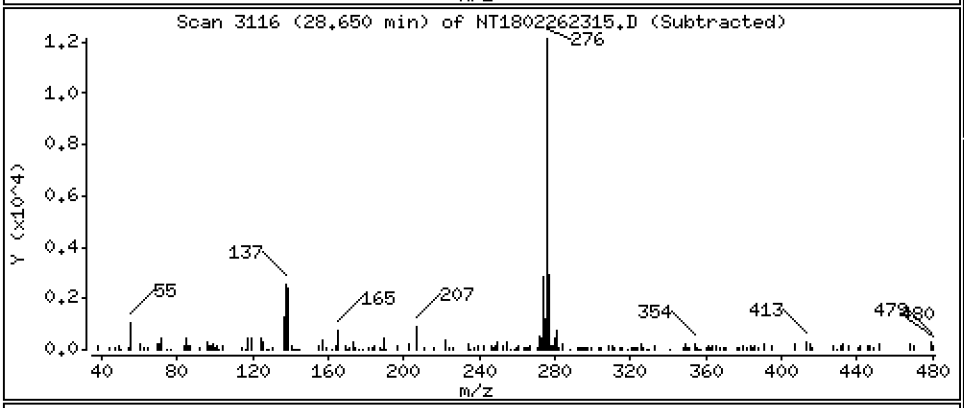
Column phase: ZB-5msi

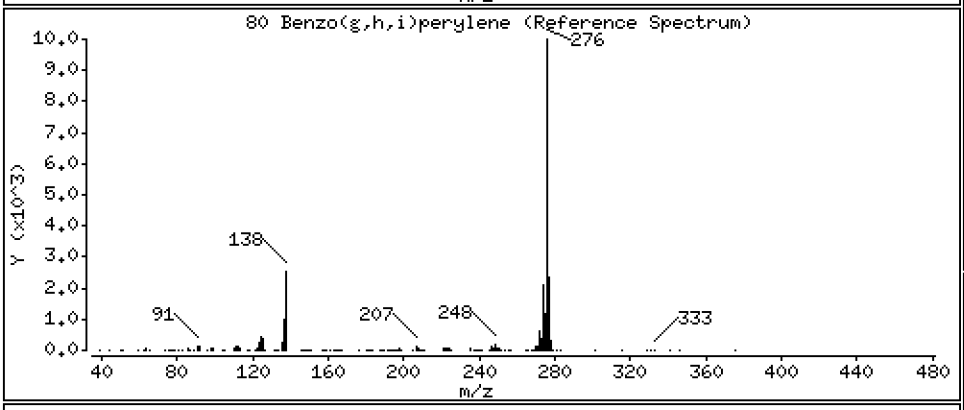
Column diameter: 0.25

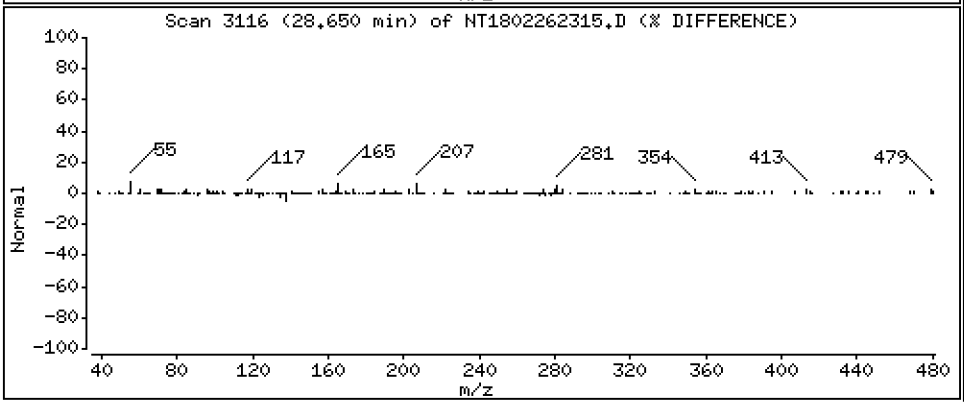
80 Benzo(g,h,i)perylene

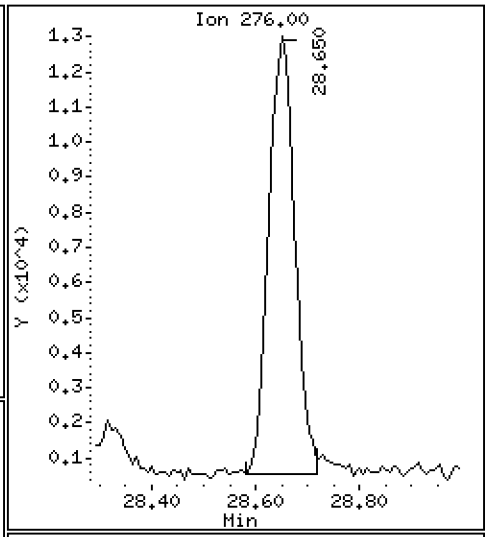
Concentration: 0.1628 ug/mL

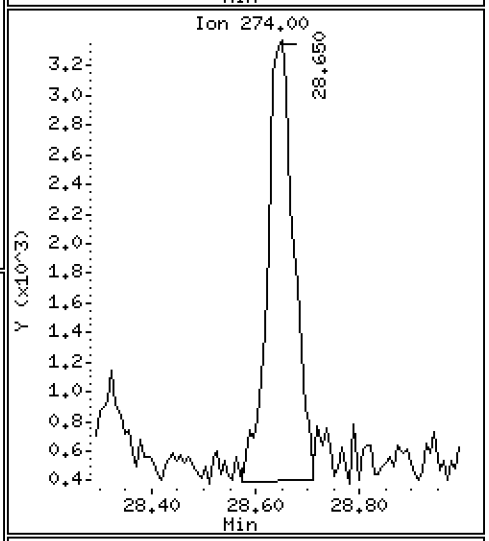


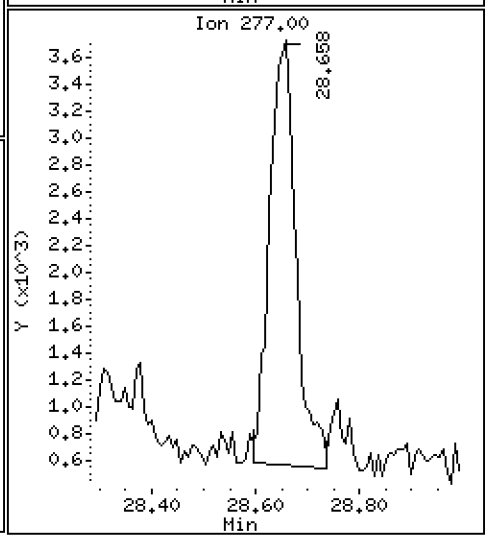












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262315.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

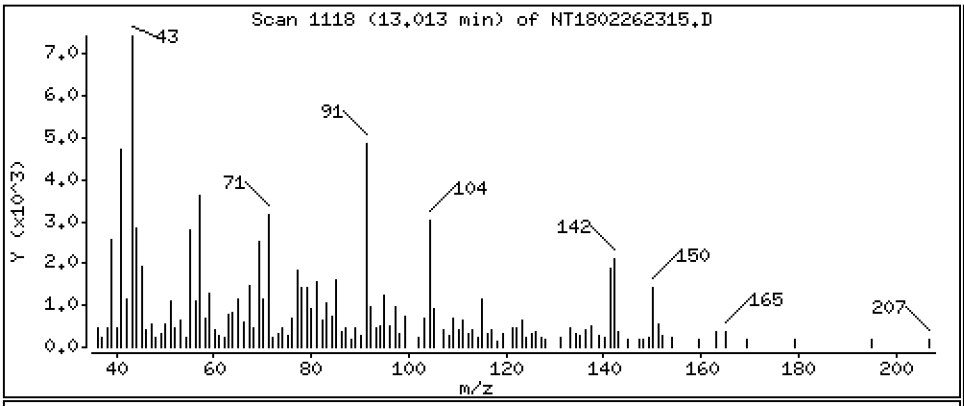
Operator: VTS

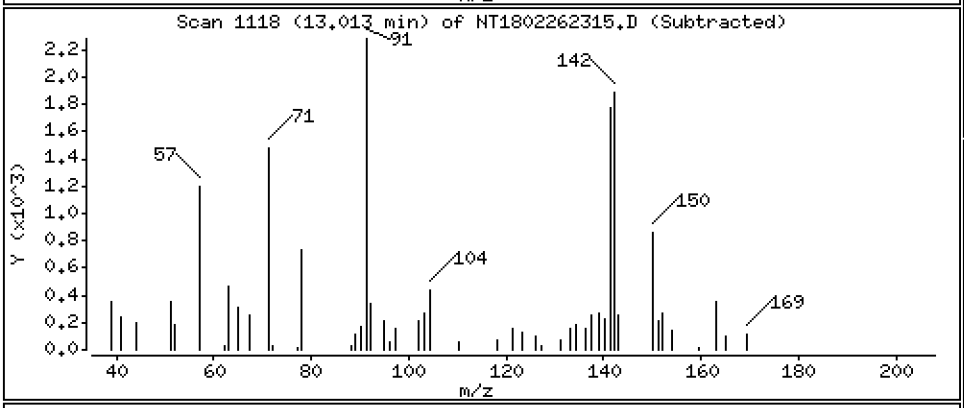
Column phase: ZB-5msi

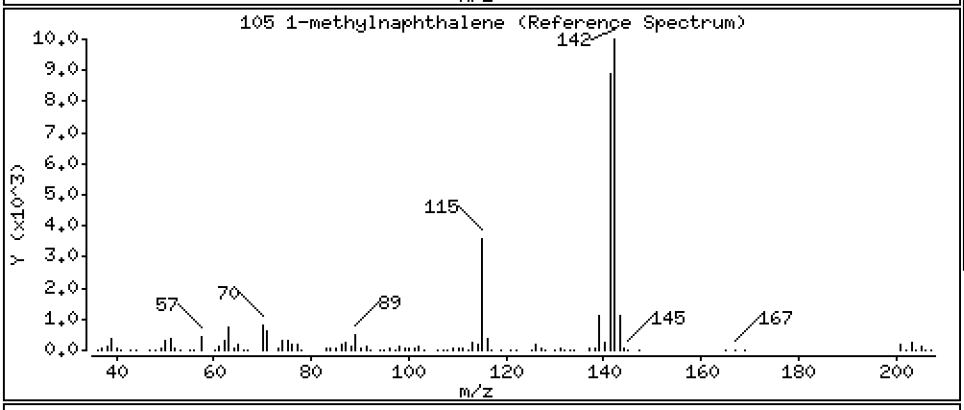
Column diameter: 0.25

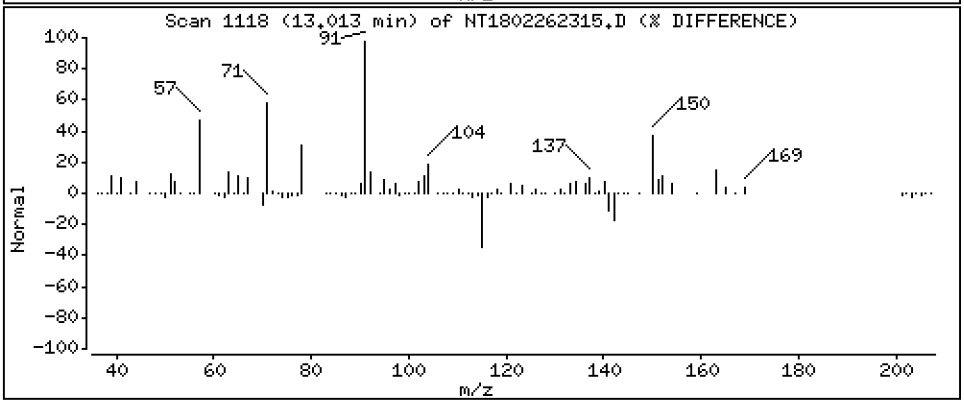
105 1-methylnaphthalene

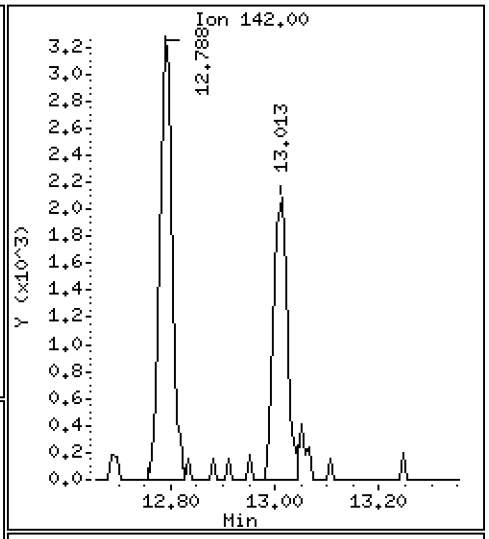
Concentration: 0.02088 ug/mL

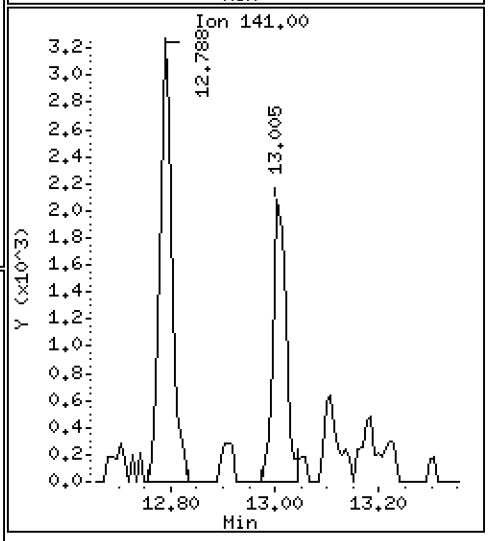












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Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

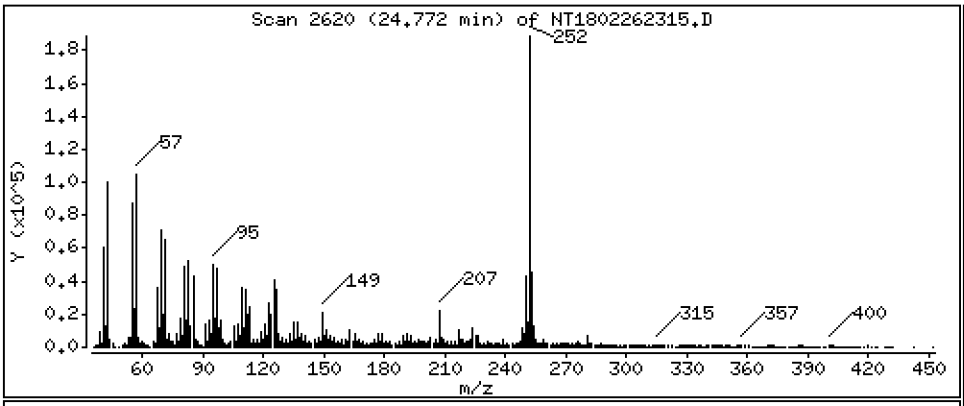
Operator: VTS

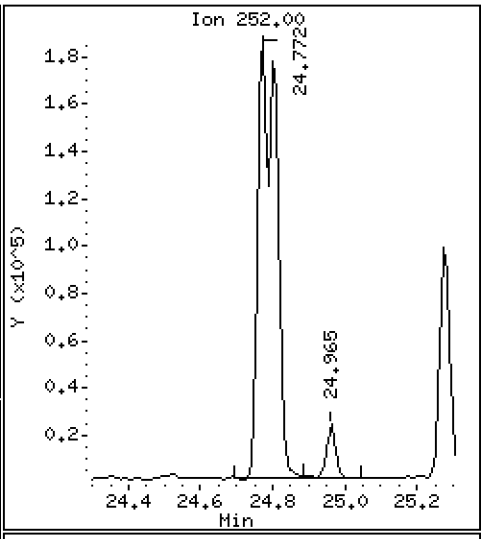
Column phase: ZB-5msi

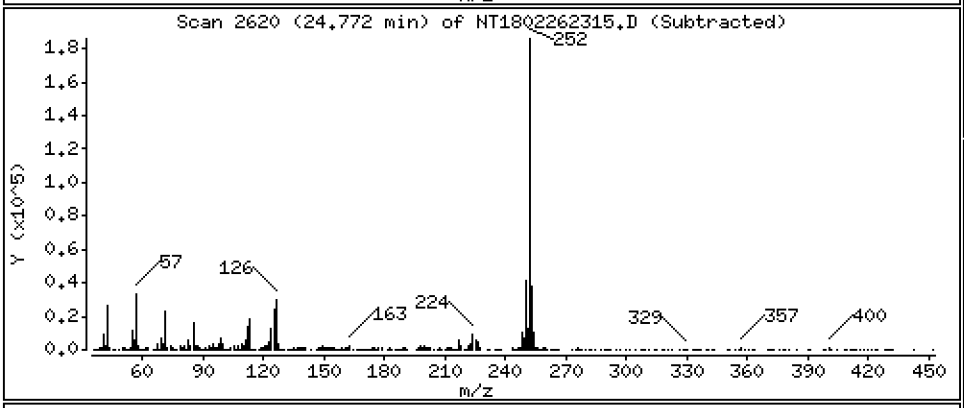
Column diameter: 0.25

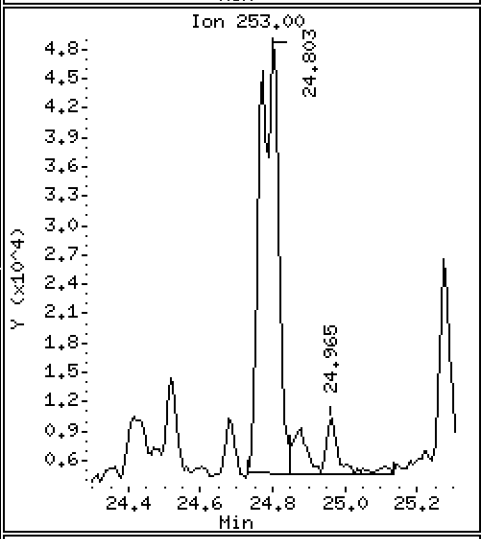
187 Total Benzofluoranthenes

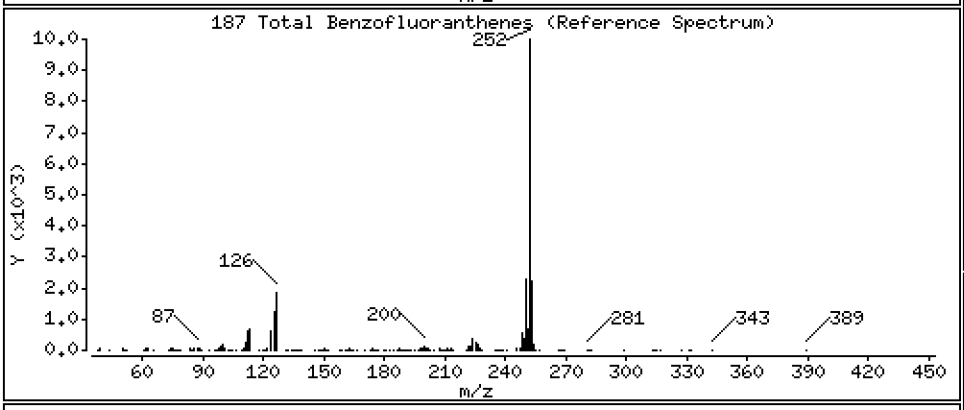
Concentration: 2.274 ug/mL

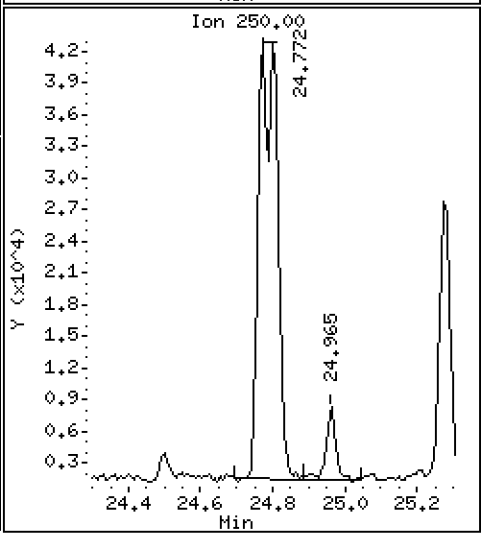


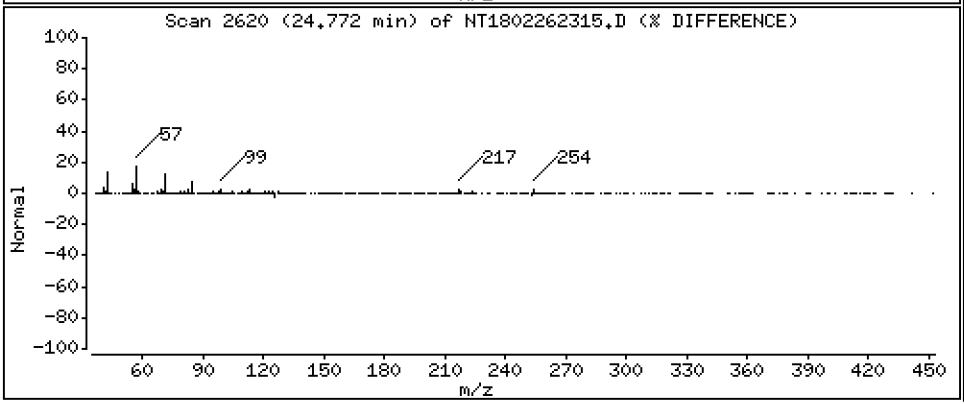












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262315.D
Lab Smp Id: 23A0134-06
Inj Date : 26-FEB-2023 21:13
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-06
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.766	6.743	(0.759)	478638	5.56517	5.565
$	2 Phenol-d5	99	8.311	8.296	(0.932)	617615	5.55651	5.557
	3 Phenol	94	8.335	8.319	(0.935)	413862	3.57863	3.579
$	5 2-Chlorophenol-d4	132	8.566	8.559	(0.961)	553348	5.72098	5.721
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.914	8.915	(1.000)	252087	4.00000	
	9 1,4-Dichlorobenzene	146	8.945	8.946	(1.003)	360	0.00336	0.003362
$	10 1,2-Dichlorobenzene-d4	152	9.271	9.272	(1.040)	225195	3.28422	3.284
	12 1,2-Dichlorobenzene	146	9.287	9.295	(1.042)	173	0.00167	0.001665
	11 Benzyl alcohol	108	9.201	9.186	(1.032)	9609	0.17475	0.1747
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.691	9.683	(1.087)	5233	0.05613	0.05613
$	18 Nitrobenzene-d5	82	9.993	9.993	(0.879)	372322	3.78020	3.780
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	10.888	10.990	(0.958)	44220	1.31075	1.311(M)
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	924178	4.00000	
	28 Naphthalene	128	11.403	11.403	(1.003)	12603	0.04436	0.04436
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	5321	0.02756	0.02756
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.570	13.570	(0.908)	803690	3.81791	3.818
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	14.630	14.630	(0.979)	18206	0.06573	0.06573
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	14.947	14.947	(1.000)	499279	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	15.009	15.009	(1.004)	14916	0.08509	0.08509
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.334	15.334	(1.026)	17404	0.06860	0.06860
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	15.906	15.921	(1.064)	35064	0.18942	0.1894
	49	Fluorene	166	16.037	16.037	(1.073)	13765	0.06770	0.06770
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	200040	7.65499	7.655
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	17.697	17.697	(0.986)	1952	0.11302	0.1130
*	59	Phenanthrene-d10	188	17.952	17.952	(1.000)	946583	4.00000	
	60	Phenanthrene	178	17.999	17.999	(1.003)	106848	0.35887	0.3589
	61	Anthracene	178	18.091	18.092	(1.008)	63273	0.22300	0.2230
	62	Carbazole	167	18.424	18.424	(1.026)	28413	0.10928	0.1093
	63	Di-n-butylphthalate	149	19.237	19.237	(1.072)	44241	0.15373	0.1537
	64	Fluoranthene	202	20.389	20.382	(0.887)	514522	1.43475	1.435
	65	Pyrene	202	20.807	20.800	(0.905)	452840	1.18399	1.184
$	66	Terphenyl-d14	244	21.101	21.094	(0.918)	1311619	4.27567	4.276
	67	Butylbenzylphthalate	149	22.023	22.023	(0.958)	43118	0.29690	0.2969
	68	Benzo(a)anthracene	228	22.960	22.952	(0.999)	264134	0.71480	0.7148
*	69	Chrysene-d12	240	22.991	22.983	(1.000)	1023554	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	23.029	23.029	(1.002)	635935	1.65501	1.655
	72	bis(2-Ethylhexyl)phthalate	149	23.052	23.053	(0.960)	653395	2.79962	2.800
*	134	Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	1625598	4.00000	
	73	Di-n-octylphthalate	149	24.036	24.028	(1.001)	35749	0.07892	0.07892
	74	Benzo(b)fluoranthene	252	24.771	24.764	(0.972)	345509	1.21004	1.210
	75	Benzo(k)fluoranthene	252	24.802	24.802	(0.973)	368031	1.13731	1.137(H)
	76	Benzo(a)pyrene	252	25.375	25.368	(0.996)	189839	0.71719	0.7172
*	77	Perylene-d12	264	25.484	25.476	(1.000)	875205	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	27.927	27.920	(1.096)	55603	0.16733	0.1673
	79	Dibenzo(a,h)anthracene	278	27.935	27.927	(1.096)	16128	0.05820	0.05820
	80	Benzo(g,h,i)perylene	276	28.650	28.642	(1.124)	43377	0.16282	0.1628
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	13.012	13.005	(1.145)	3649	0.02088	0.02088
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.771	24.802	(0.972)	656606	2.27444	2.274
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262315.D
Lab Smp Id: 23A0134-06
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	252087	3.26
27 Naphthalene-d8	943164	471582	1886328	924178	-2.01
42 Acenaphthene-d10	501893	250947	1003786	499279	-0.52
59 Phenanthrene-d10	896502	448251	1793004	946583	5.59
69 Chrysene-d12	842481	421241	1684962	1023554	21.49
134 Di-n-octylphthala	1278043	639022	2556086	1625598	27.19
77 Perylene-d12	915681	457841	1831362	875205	-4.42

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.91	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	-0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.00
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	-0.00
77 Perylene-d12	25.48	24.98	25.98	25.48	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262315.D

Lab ID: 23A0134-06
nt18.i, ABN.m, 26-FEB-2023 21:13

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.958	0.967	-0.0090	Benzoic acid

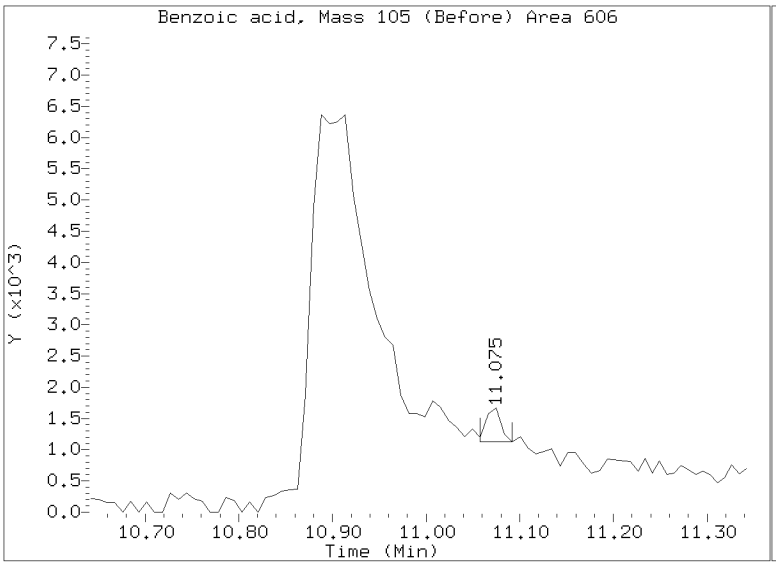
RRT check based on Ccal File: NT1802262302.D

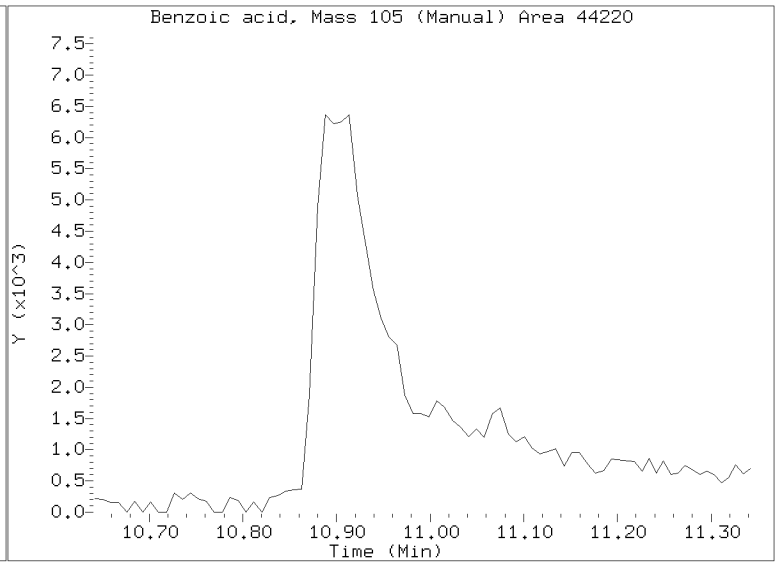
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/NT1802262315.D
Injection Date: 26-FEB-2023 21:13
Lab ID:23A0134-06 Client ID:
Report Date: 03/10/2023 07:47





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1152

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-07 C	SDG:	23A0134
Sampled:	01/06/23 12:29	Prepared:	01/19/23 13:35	File ID:	NT1802262316.D
% Solids:	43.66	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 21:53
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	23.28 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	321		4.3	19.7
106-44-5	4-Methylphenol	1	19.7	U	7.3	19.7
91-20-3	Naphthalene	1	7.5	J	4.2	19.7
91-57-6	2-Methylnaphthalene	1	6.6	J	4.4	19.7
208-96-8	Acenaphthylene	1	19.7	U	6.1	19.7
131-11-3	Dimethylphthalate	1	19.7	U	4.3	19.7
83-32-9	Acenaphthene	1	43.9		5.1	19.7
132-64-9	Dibenzofuran	1	30.8		13.9	19.7
86-73-7	Fluorene	1	30.6		14.3	19.7
85-01-8	Phenanthrene	1	91.6		8.6	19.7
120-12-7	Anthracene	1	27.7		7.1	19.7
206-44-0	Fluoranthene	1	161		6.0	19.7
129-00-0	Pyrene	1	138		5.6	19.7
85-68-7	Butylbenzylphthalate	1	9.7	J	9.3	19.7
56-55-3	Benzo(a)anthracene	1	66.8		5.9	19.7
218-01-9	Chrysene	1	96.6		6.0	19.7
117-81-7	bis(2-Ethylhexyl)phthalate	1	84.8		5.4	49.2
	Benzofluoranthenes, Total	1	210		9.8	39.4
50-32-8	Benzo(a)pyrene	1	67.7		4.2	19.7
193-39-5	Indeno(1,2,3-cd)pyrene	1	17.4	J	14.4	19.7
53-70-3	Dibenzo(a,h)anthracene	1	19.7	U	17.0	19.7
191-24-2	Benzo(g,h,i)perylene	1	16.7	J	13.4	19.7

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	737.90	531	71.9	27 - 120	
Phenol-d5	737.90	524	71.1	29 - 120	
2-Chlorophenol-d4	737.90	526	71.3	31 - 120	
1,2-Dichlorobenzene-d4	491.93	313	63.6	32 - 120	
Nitrobenzene-d5	491.93	353	71.8	30 - 120	
2-Fluorobiphenyl	491.93	351	71.3	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1152

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-07 C	SDG:	23A0134
Sampled:	01/06/23 12:29	Prepared:	01/19/23 13:35	File ID:	NT1802262316.D
% Solids:	43.66	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 21:53
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	23.28 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	737.90	683	92.5	24 - 134	
p-Terphenyl-d14	491.93	385	78.3	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

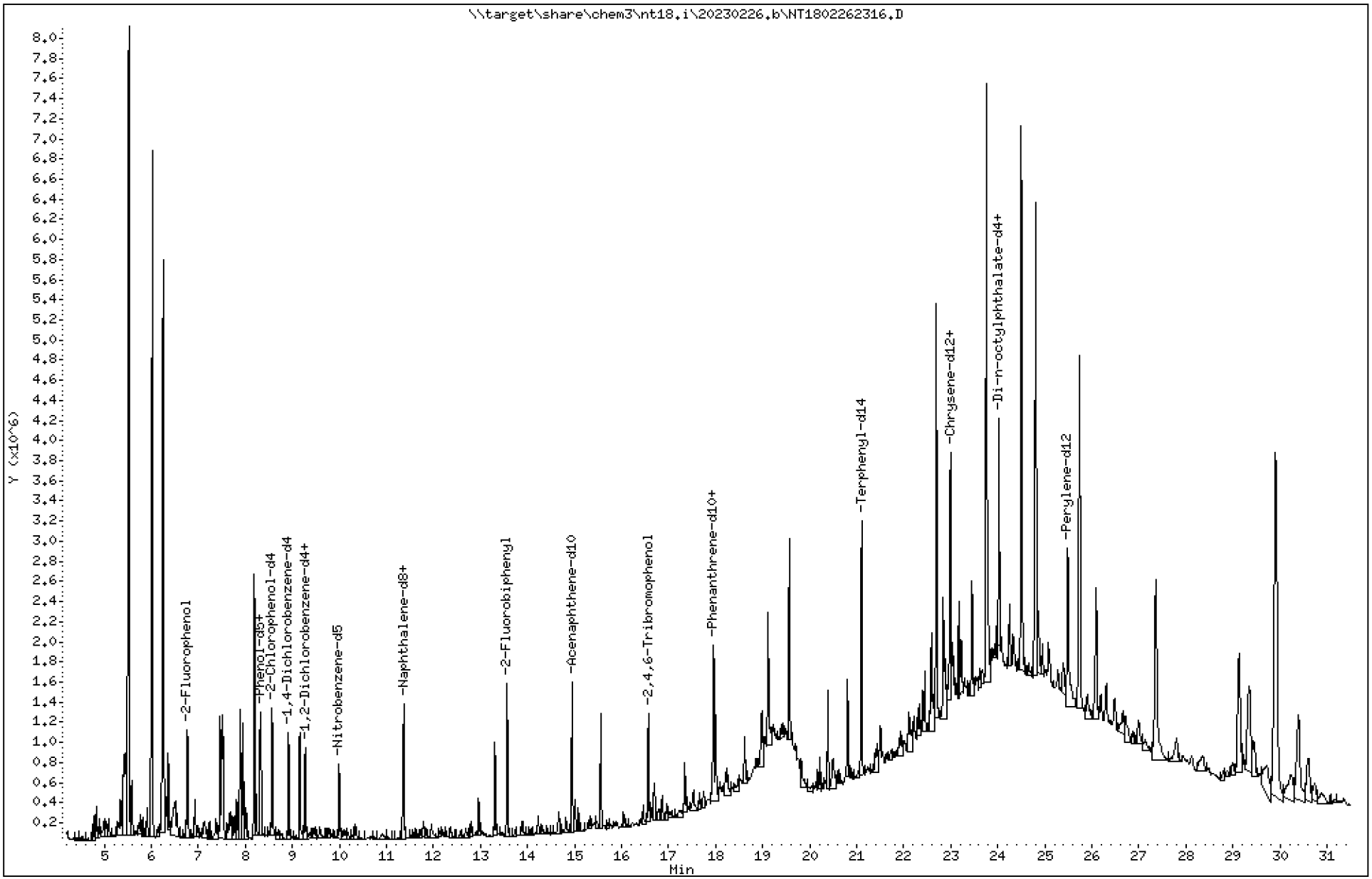
Sample Info: 23A0134-07

Column phase: ZB-5msi

Instrument: nt18.i

Operator: VTS

Column diameter: 0.25



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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

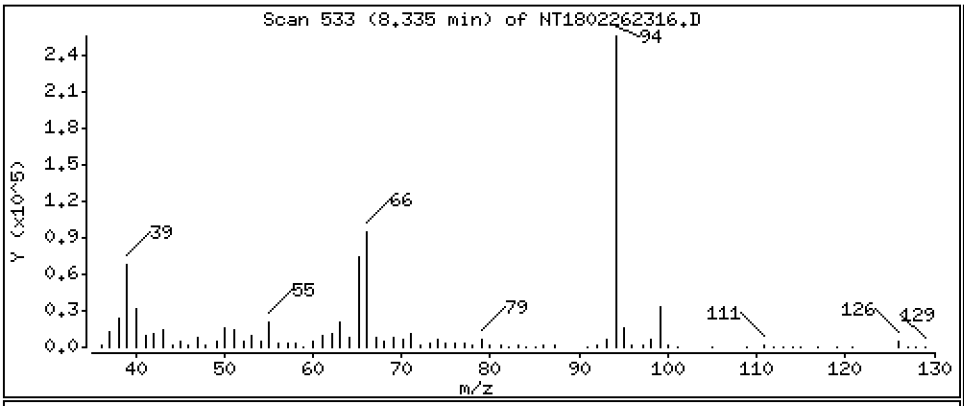
Operator: VTS

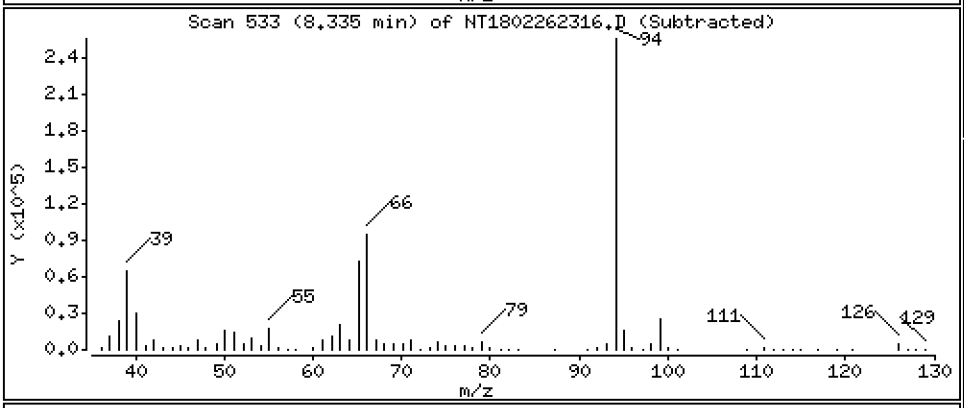
Column phase: ZB-5msi

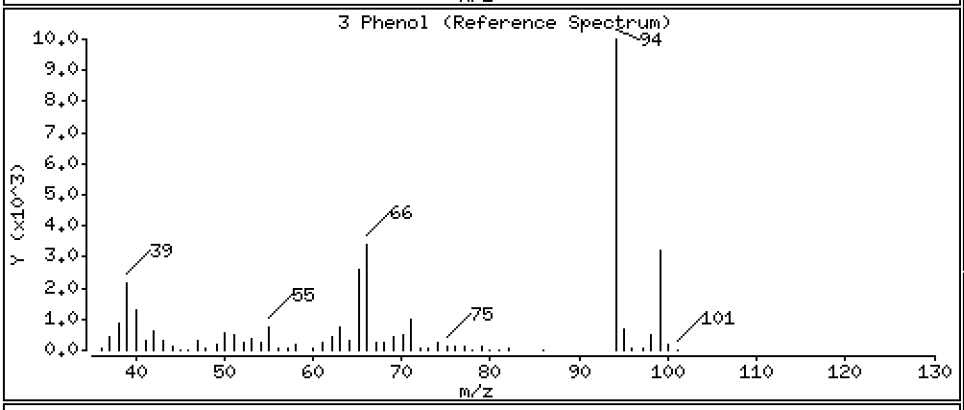
Column diameter: 0.25

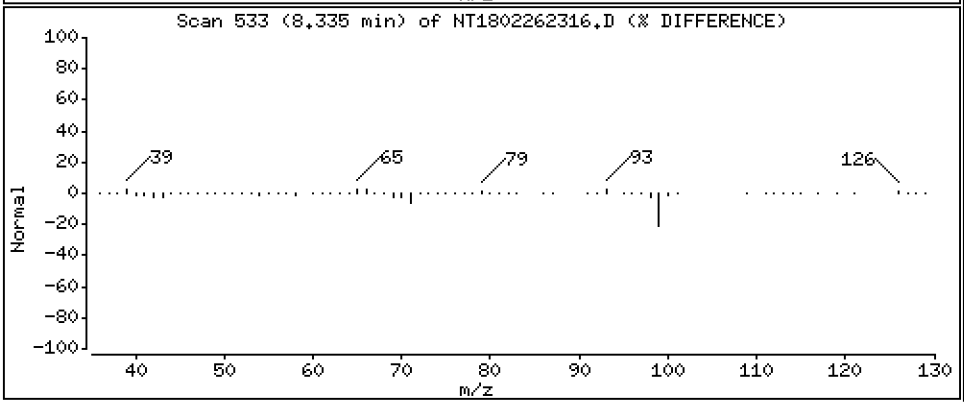
3 Phenol

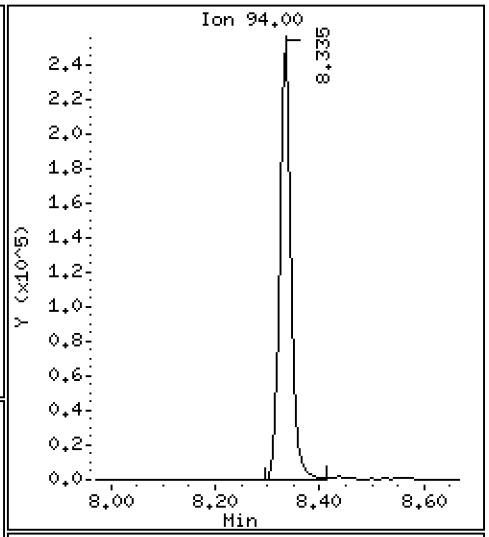
Concentration: 3.258 ug/mL

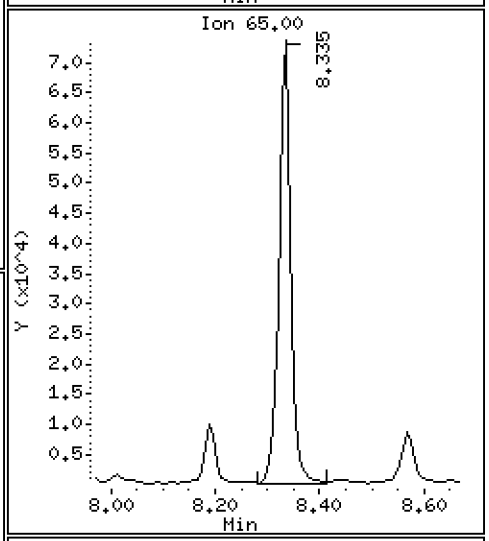


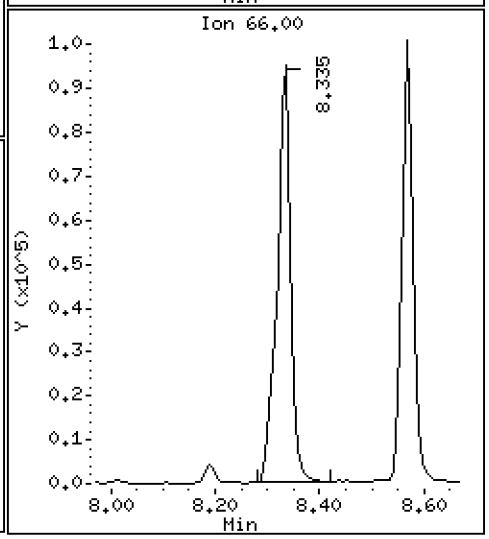












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

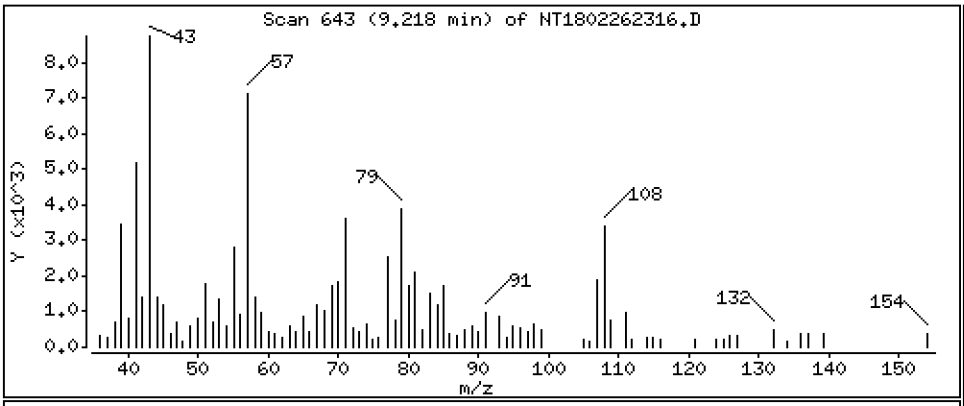
Operator: VTS

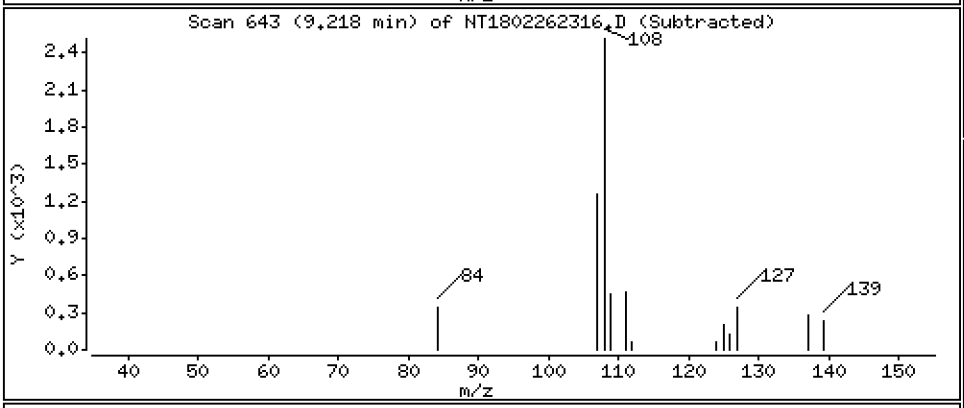
Column phase: ZB-5msi

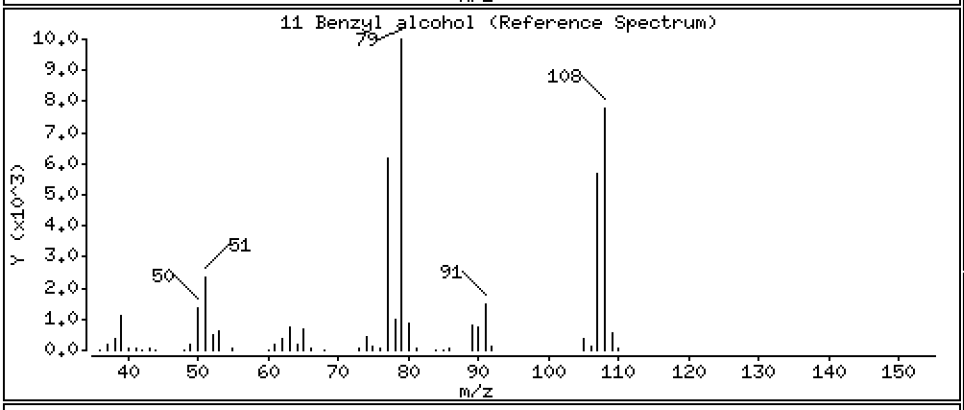
Column diameter: 0.25

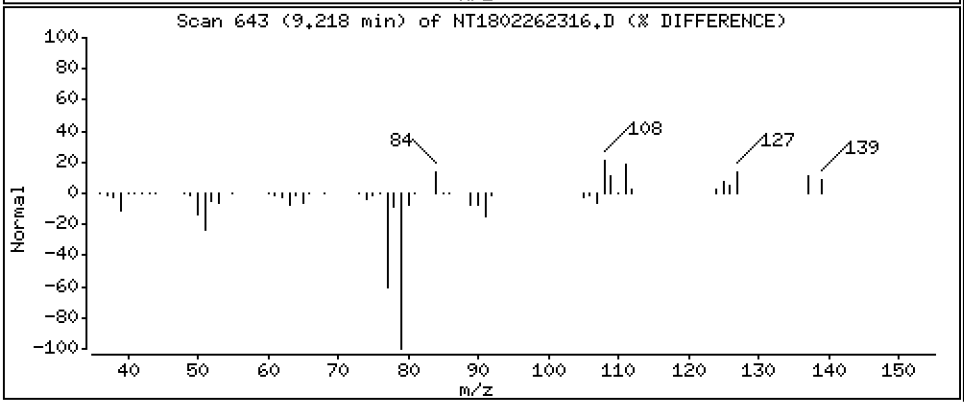
11 Benzyl alcohol

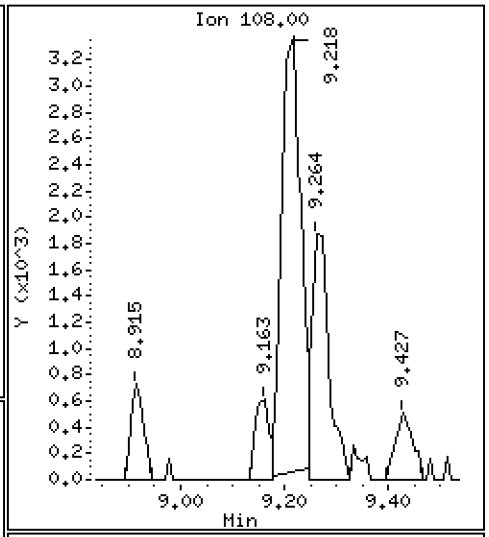
Concentration: 0.1610 ug/mL

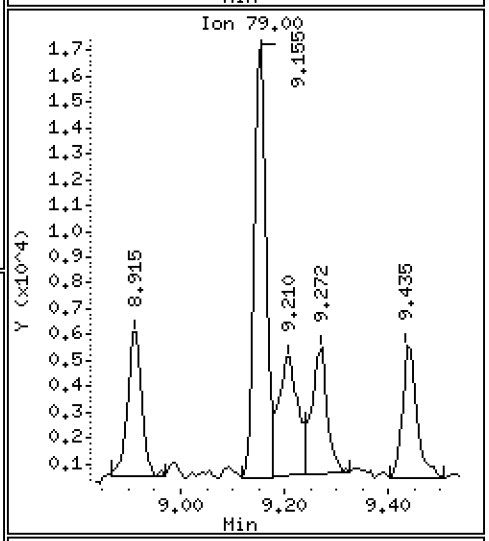


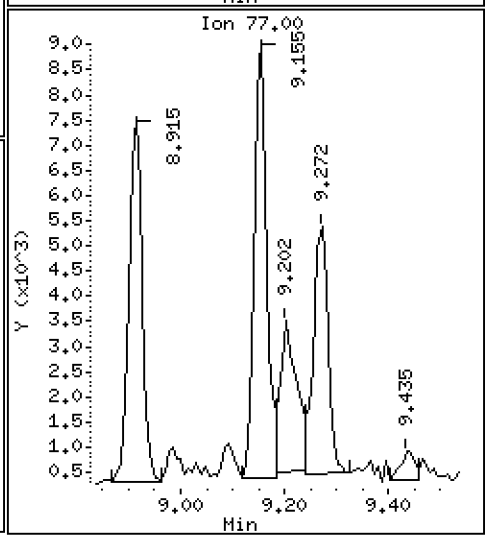












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

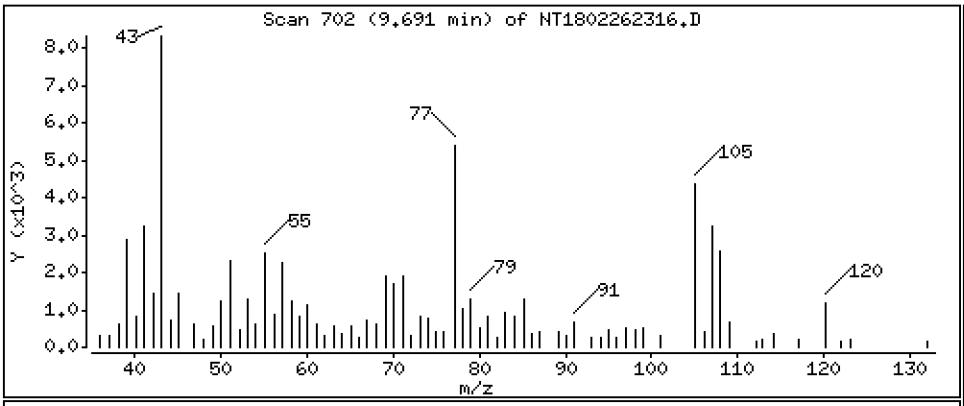
Operator: VTS

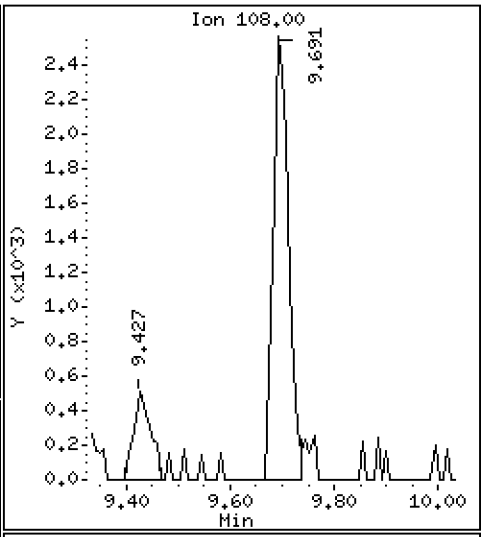
Column phase: ZB-5msi

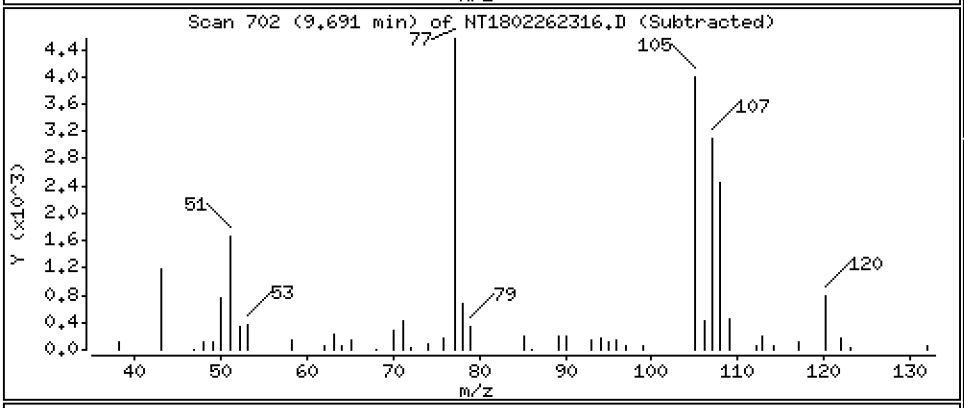
Column diameter: 0.25

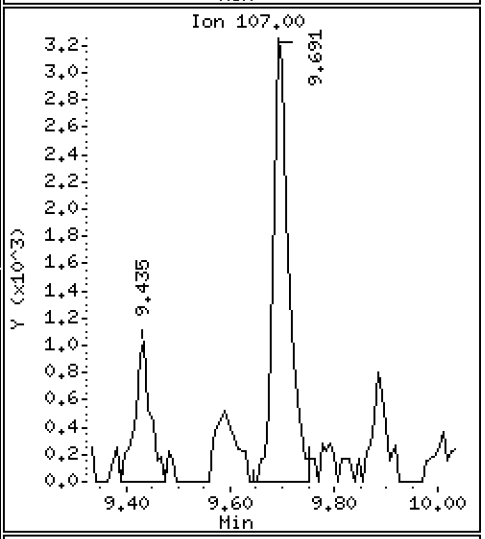
15 4-Methylphenol

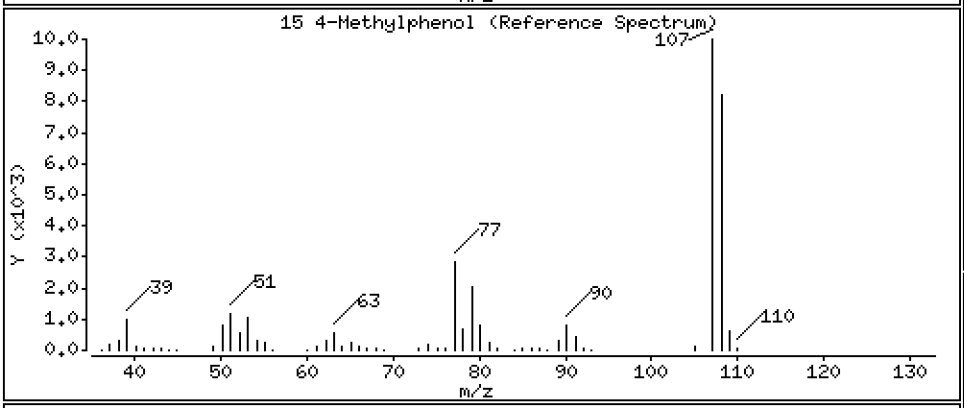
Concentration: 0.05614 ug/mL

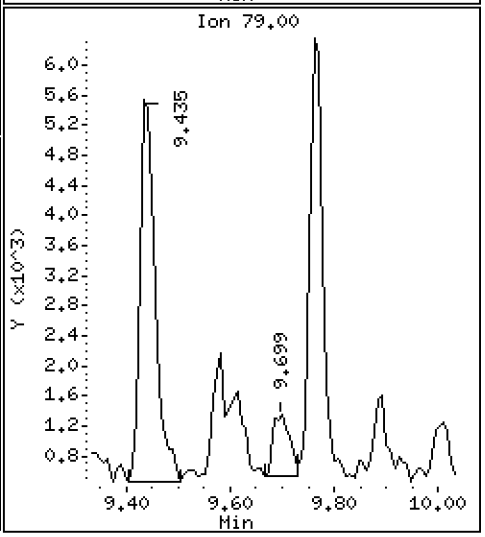


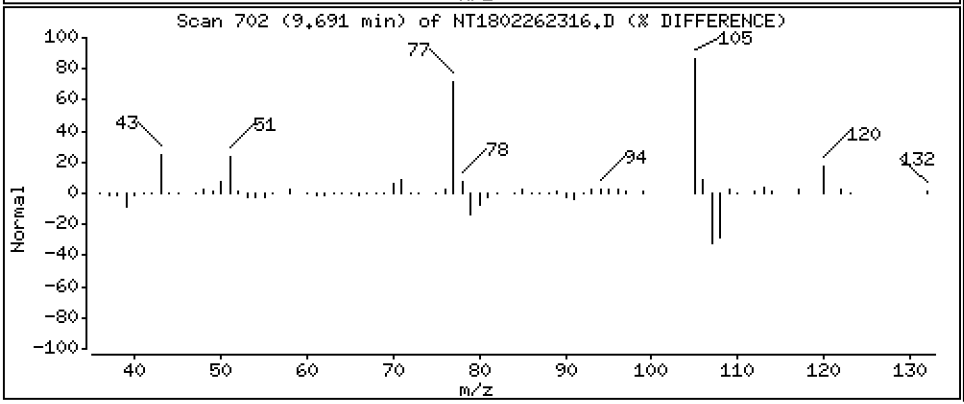












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

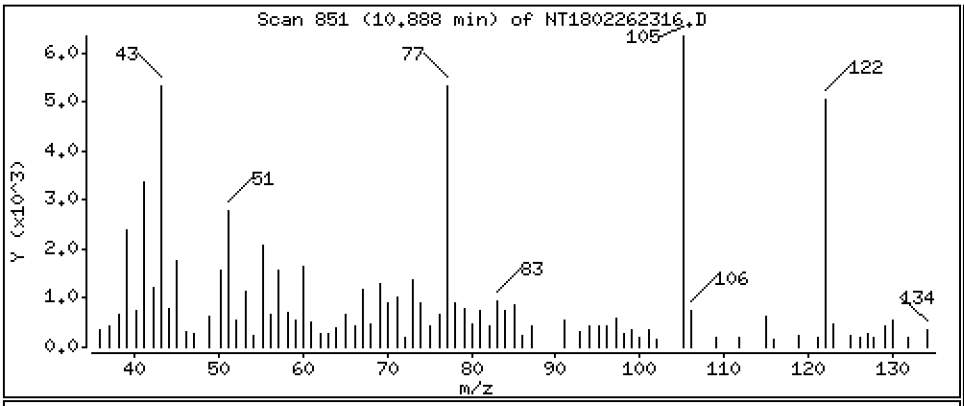
Operator: VTS

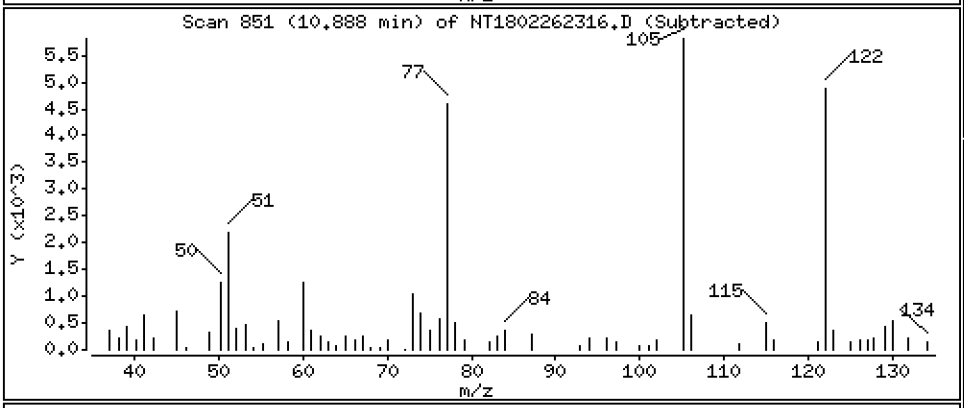
Column phase: ZB-5msi

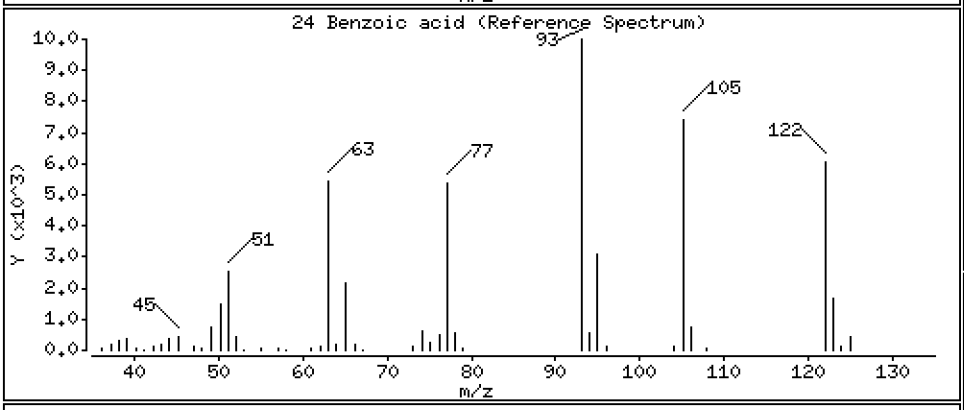
Column diameter: 0.25

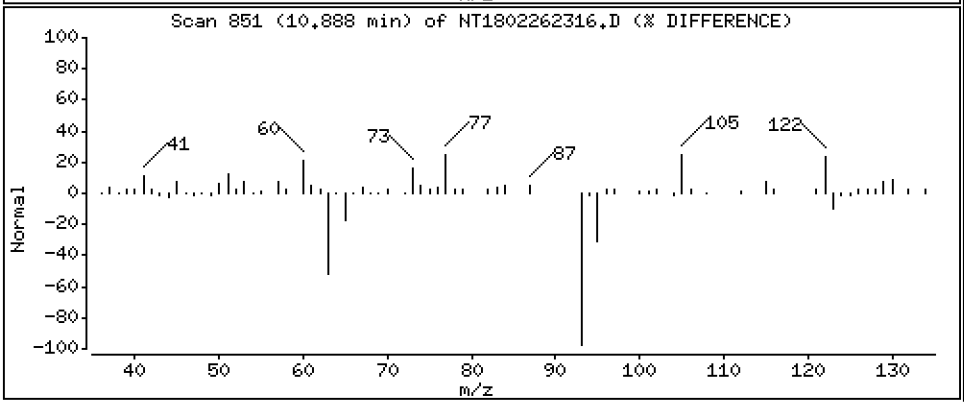
24 Benzoic acid

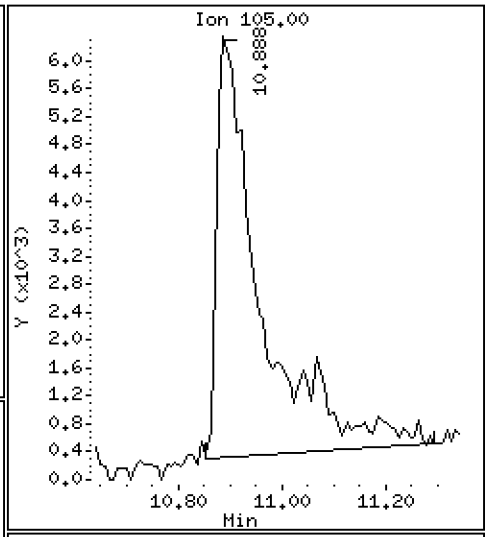
Concentration: 1.031 ug/mL

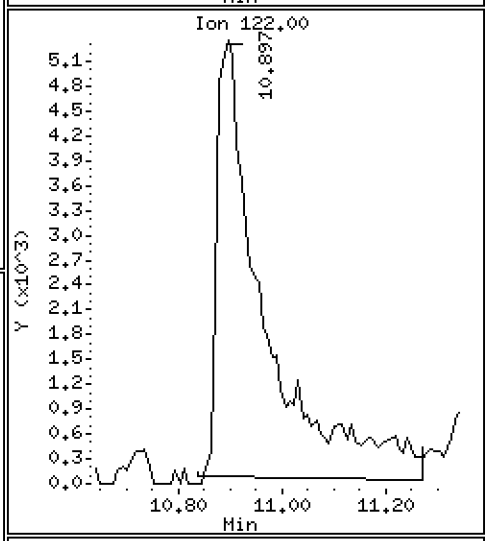


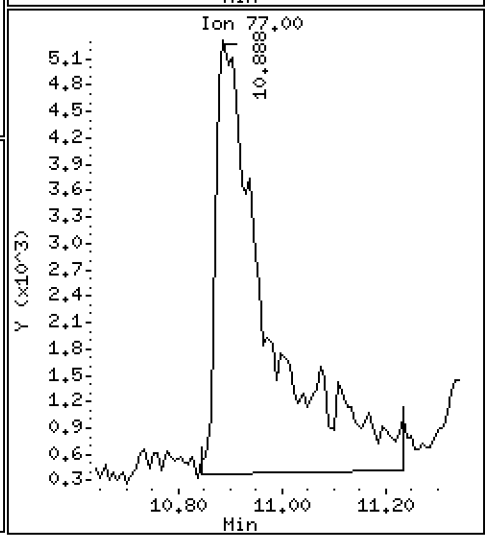












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

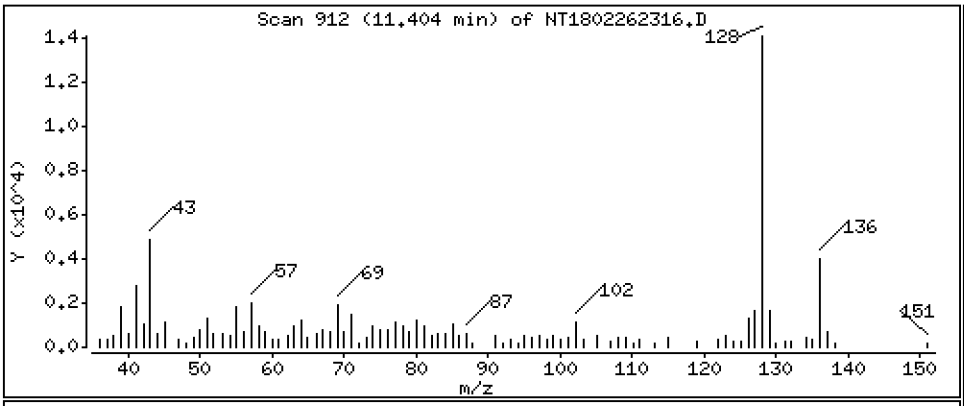
Operator: VTS

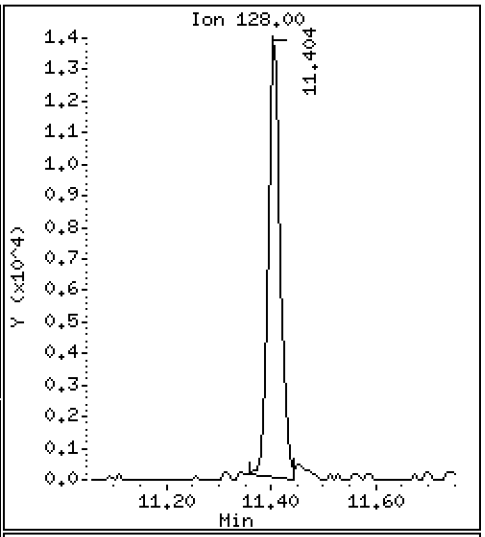
Column phase: ZB-5msi

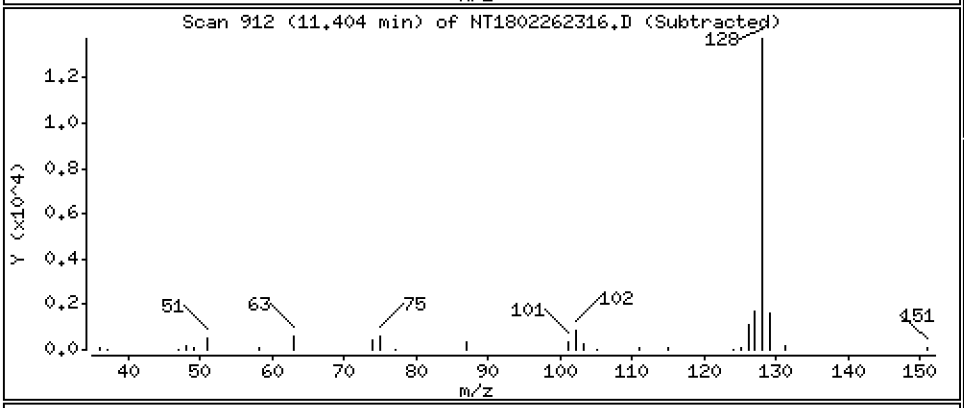
Column diameter: 0.25

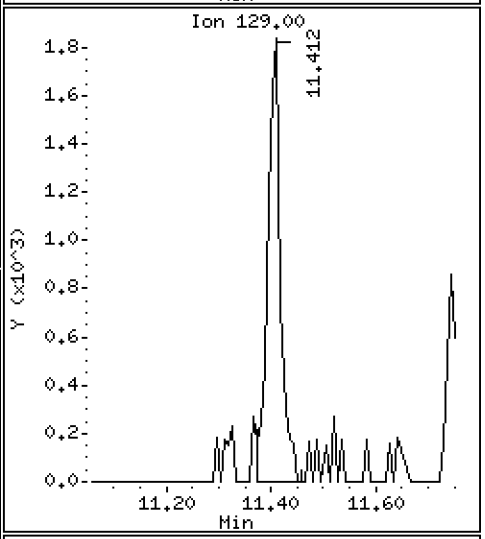
28 Naphthalene

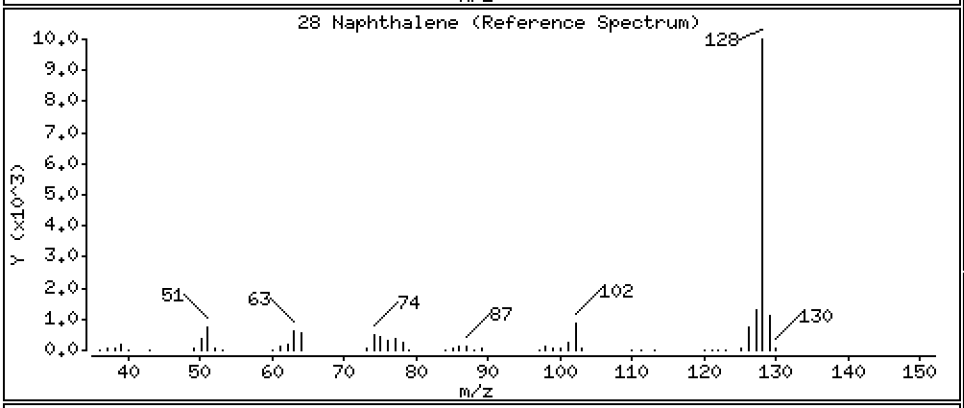
Concentration: 0.07647 ug/mL

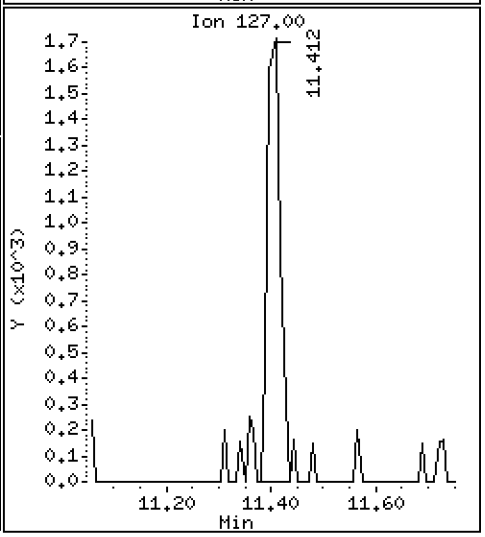


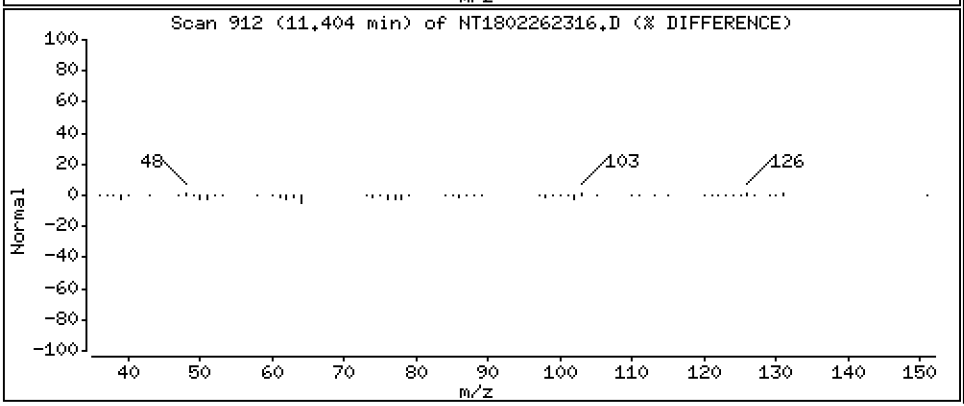












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

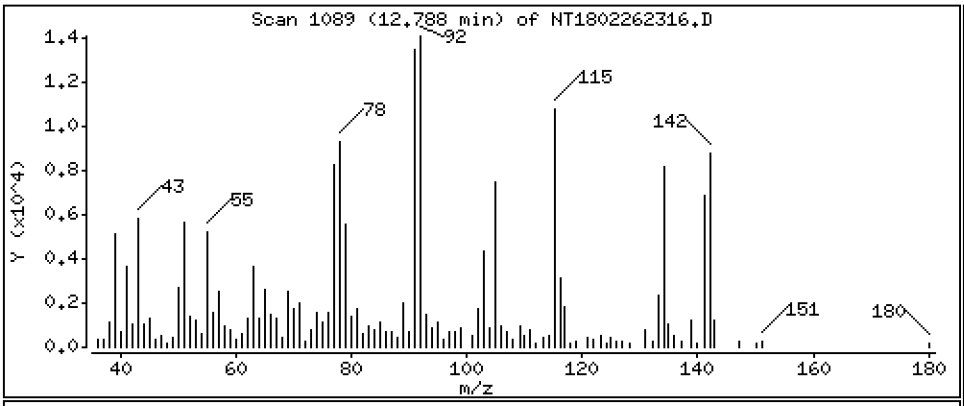
Operator: VTS

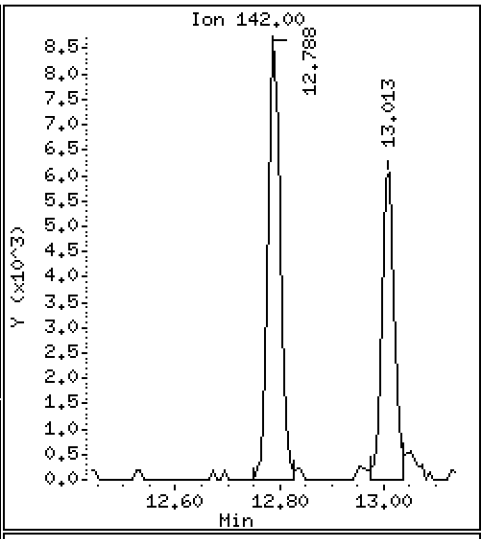
Column phase: ZB-5msi

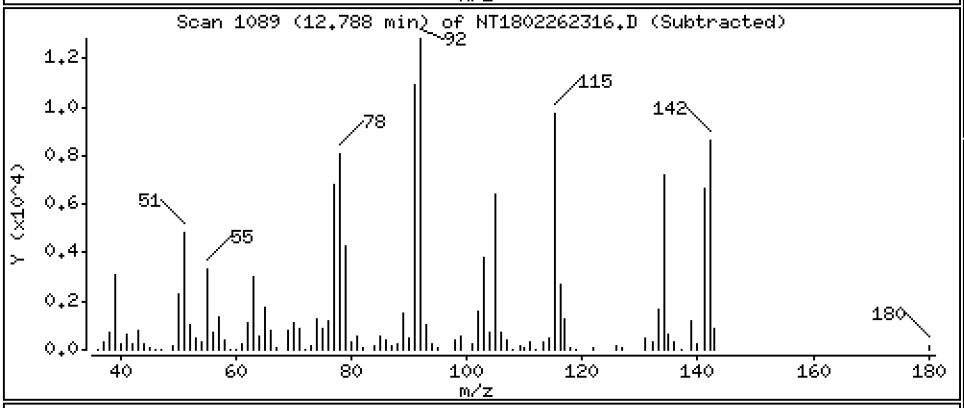
Column diameter: 0.25

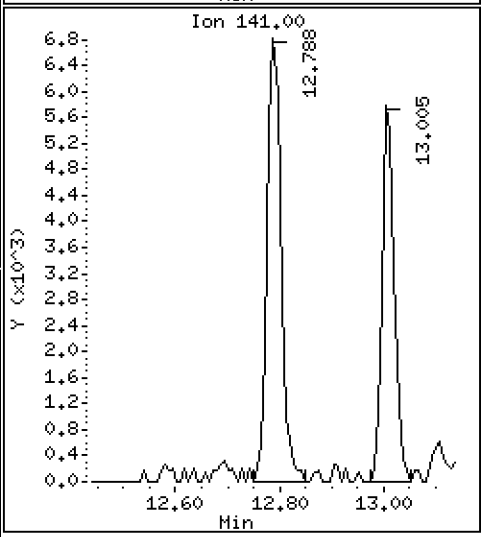
32 2-Methylnaphthalene

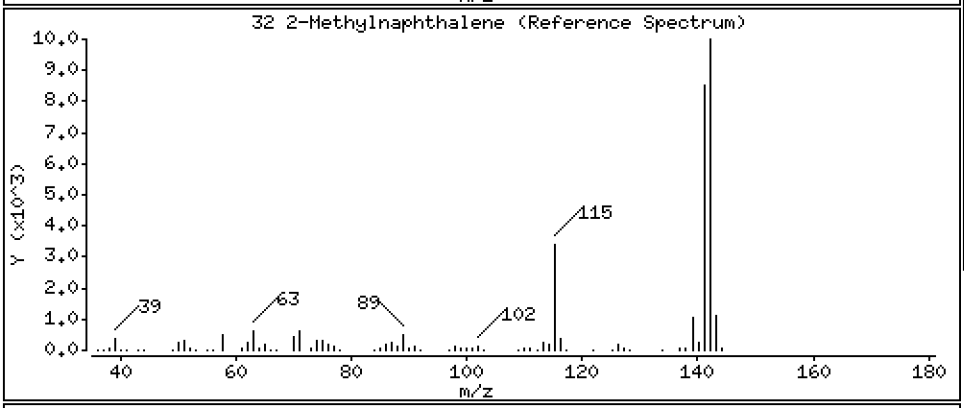
Concentration: 0.06671 ug/mL

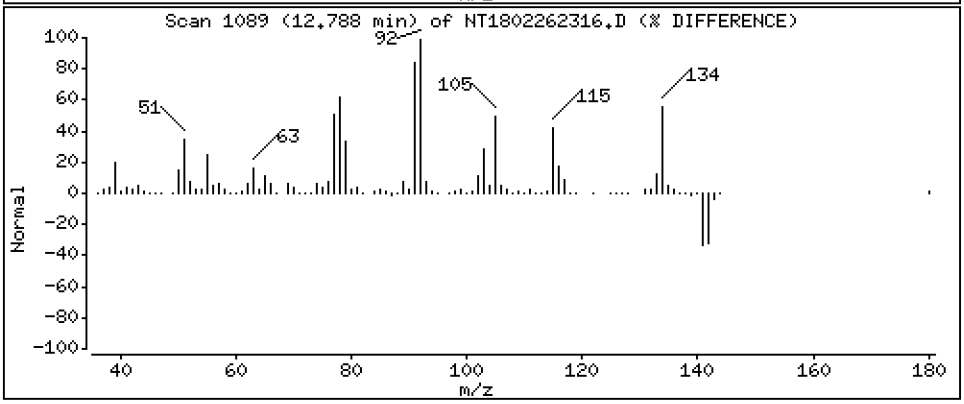












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

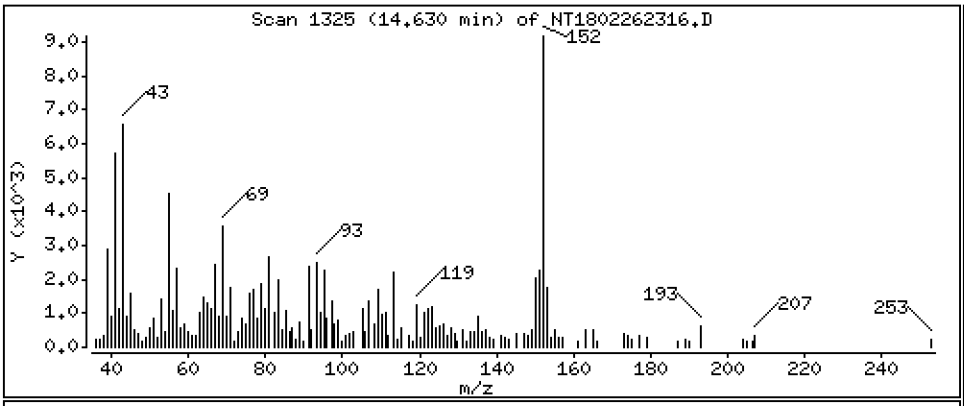
Operator: VTS

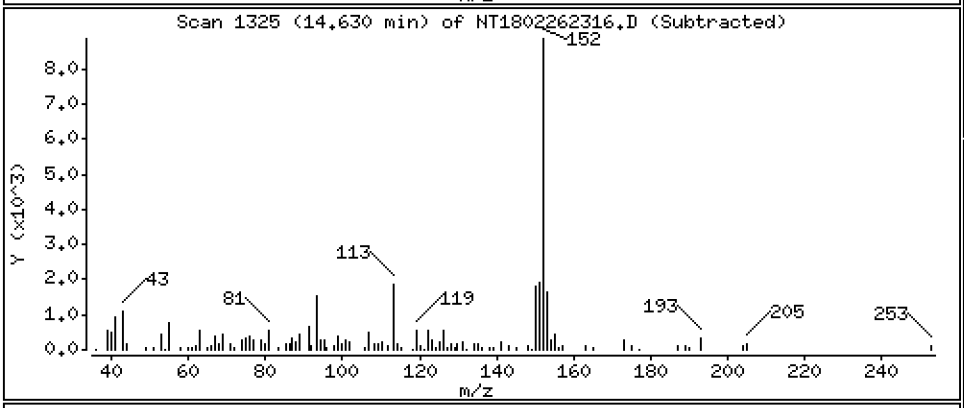
Column phase: ZB-5msi

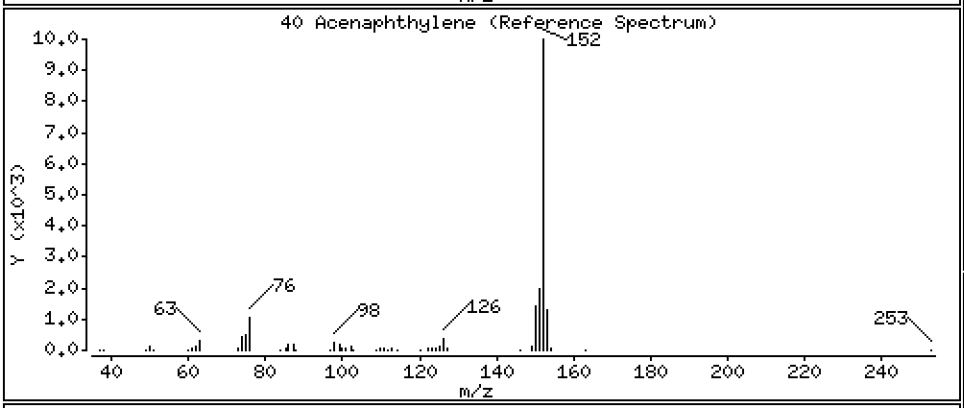
Column diameter: 0.25

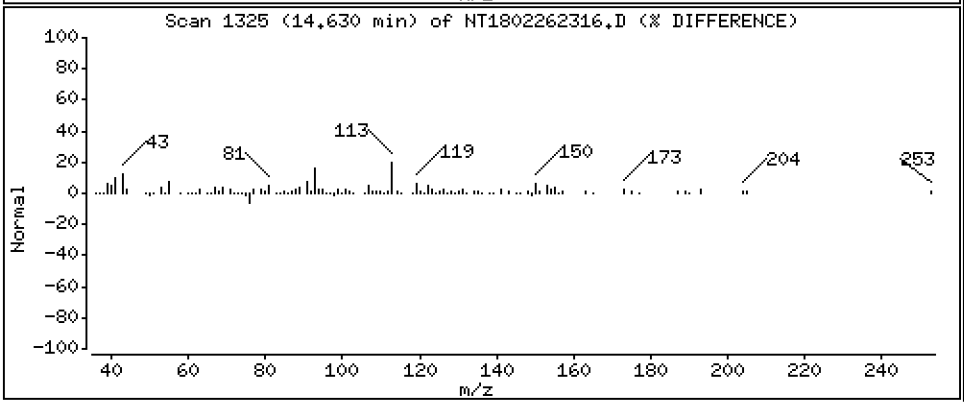
40 Acenaphthylene

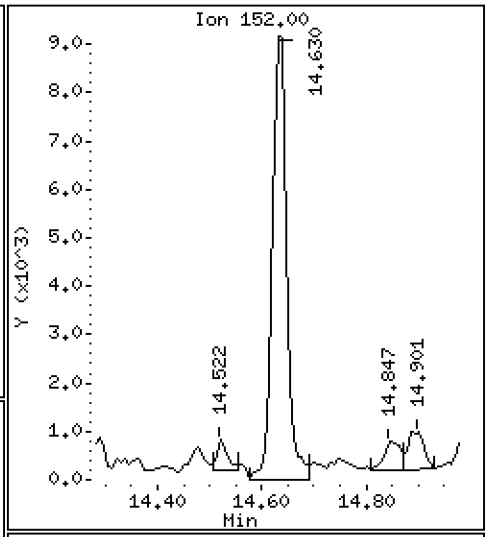
Concentration: 0.05927 ug/mL

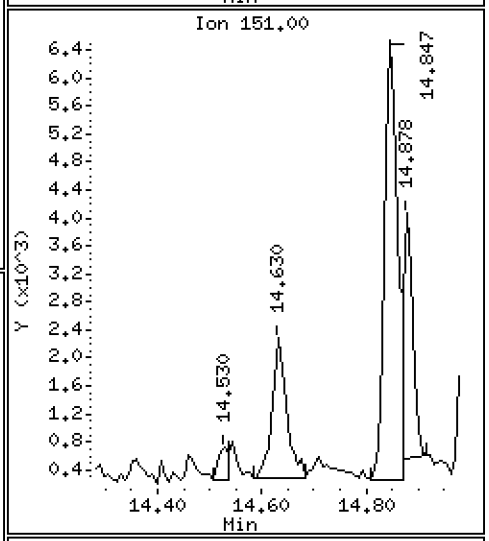


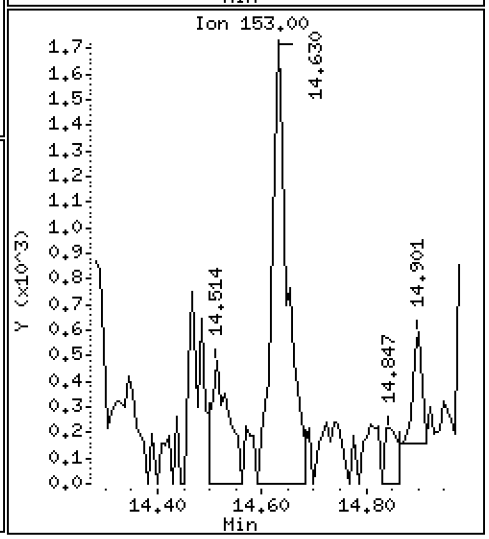












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

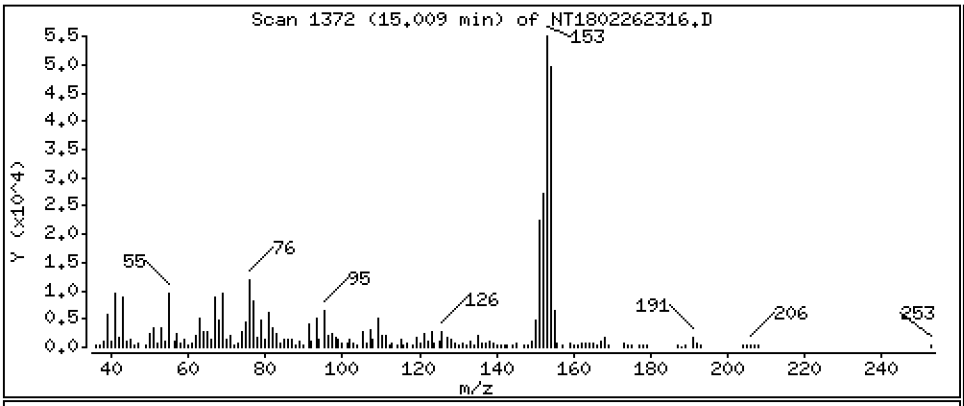
Operator: VTS

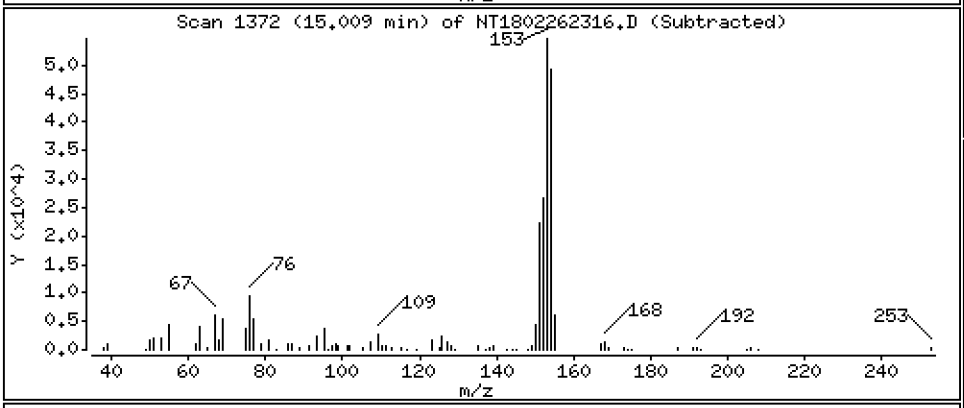
Column phase: ZB-5msi

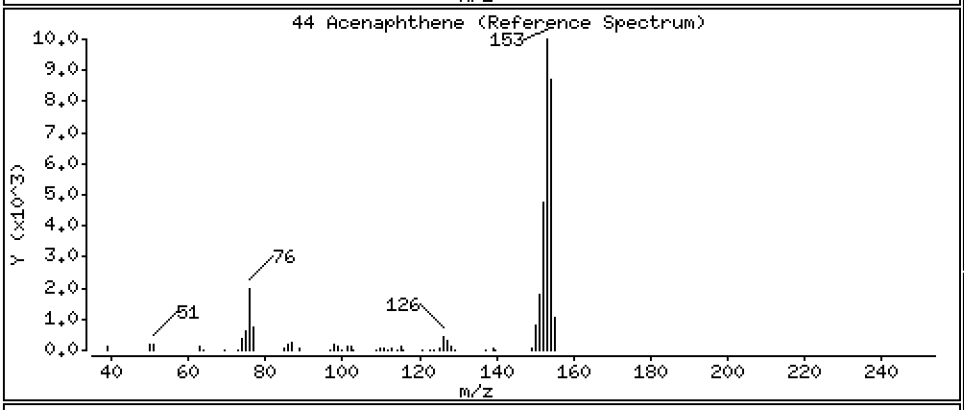
Column diameter: 0.25

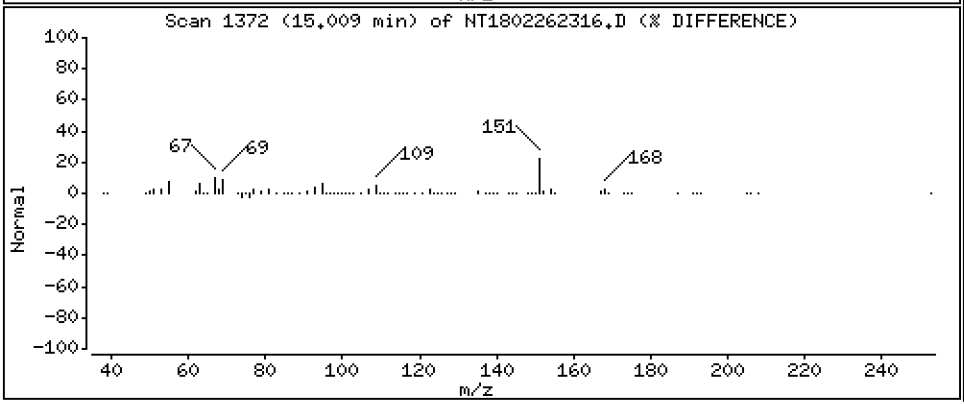
44 Acenaphthene

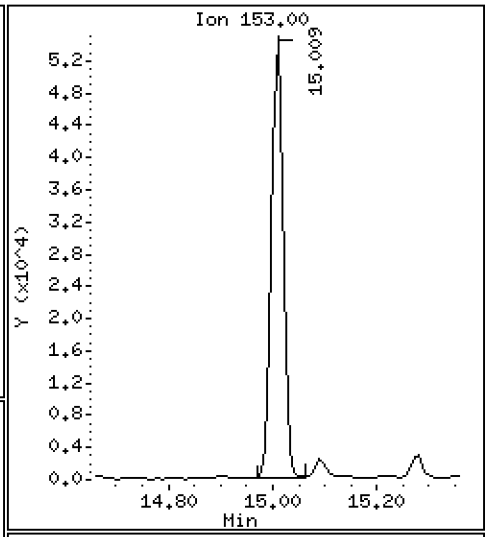
Concentration: 0.4459 ug/mL

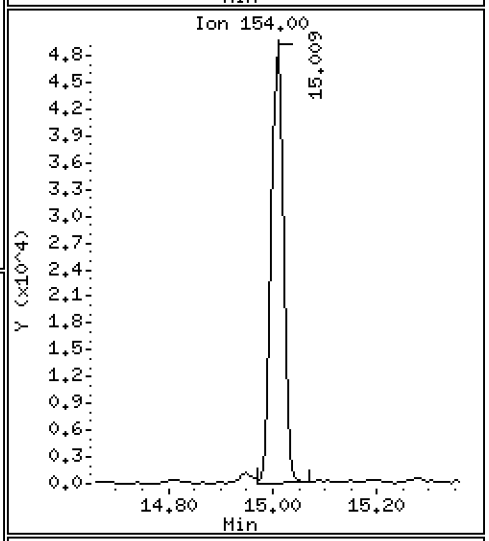


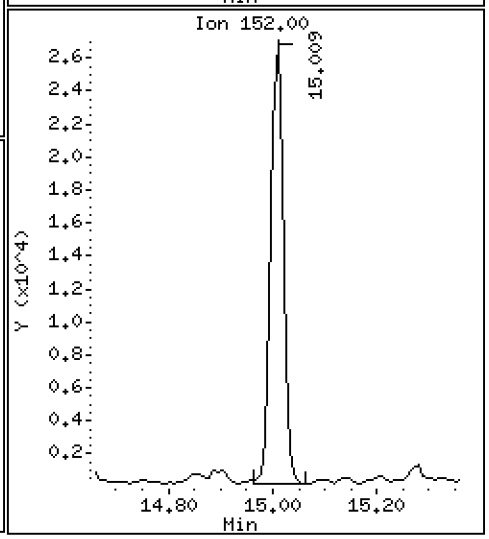












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

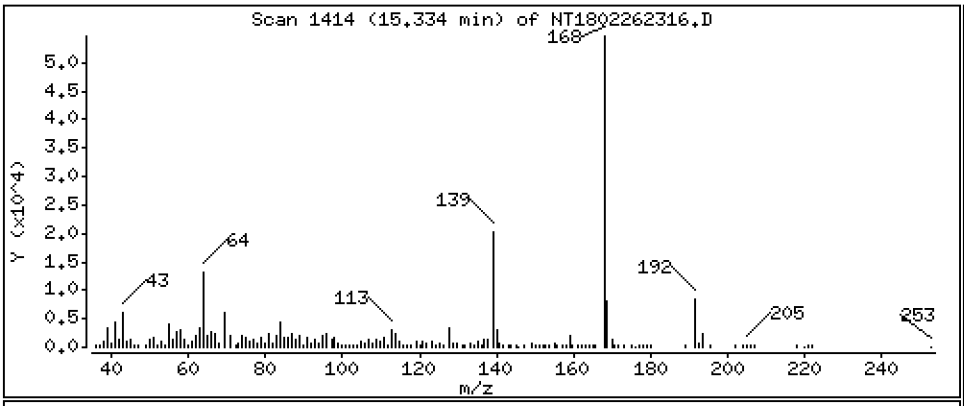
Operator: VTS

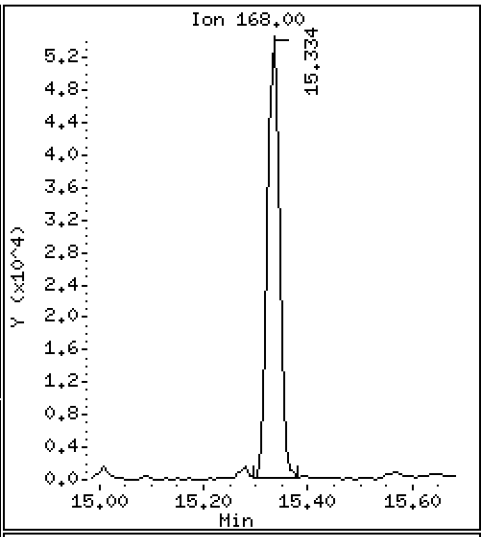
Column phase: ZB-5msi

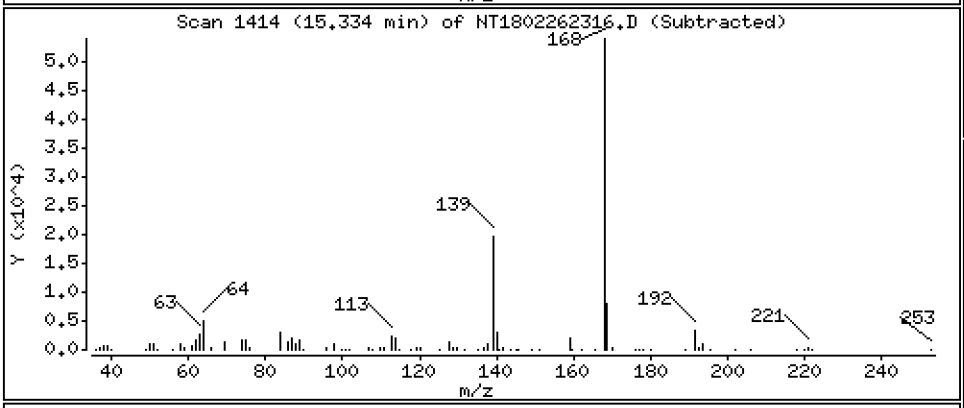
Column diameter: 0.25

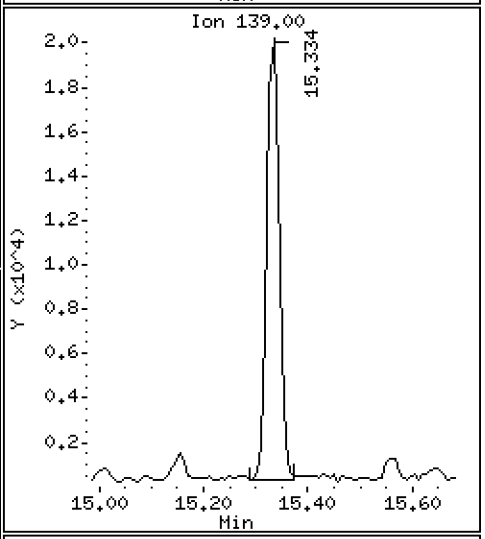
46 Dibenzofuran

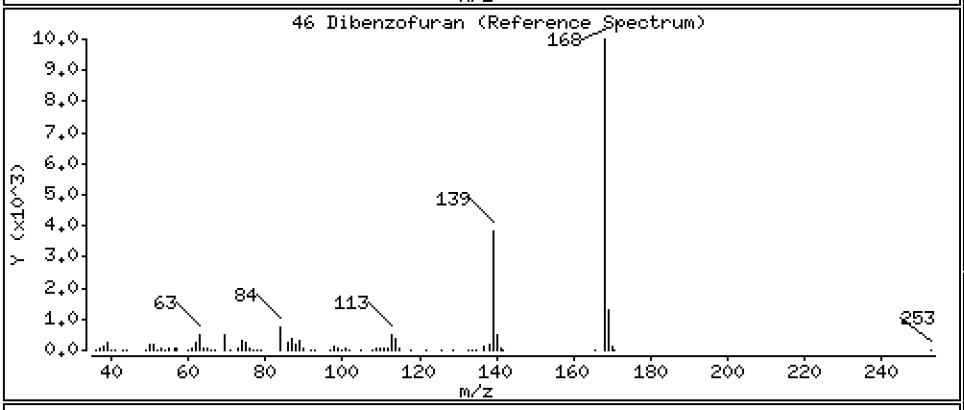
Concentration: 0.3134 ug/mL

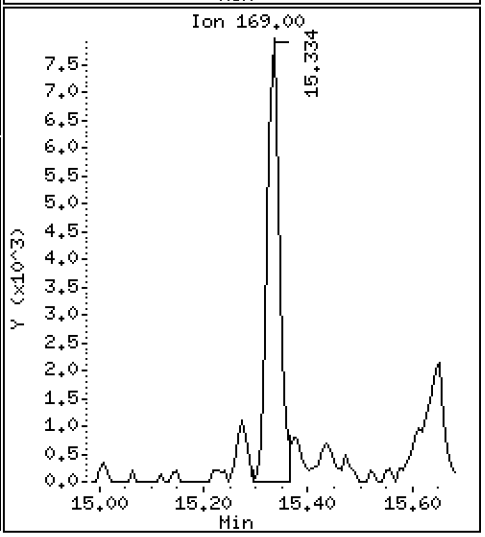


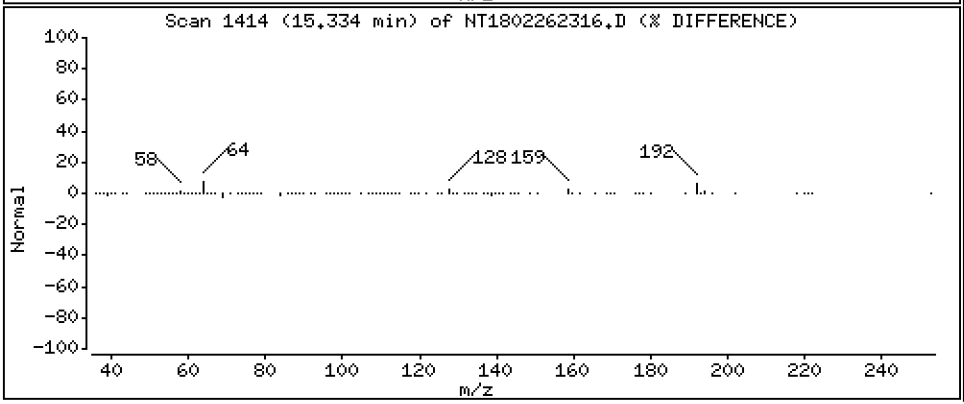












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

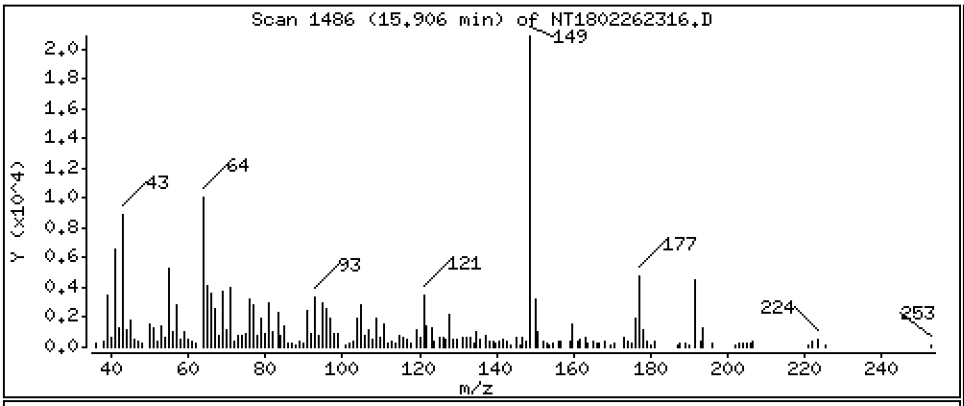
Operator: VTS

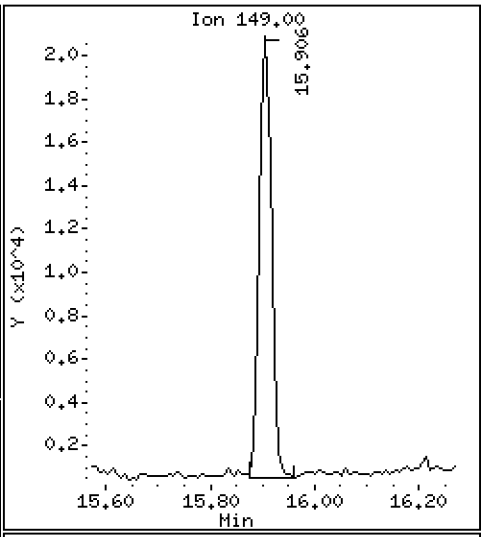
Column phase: ZB-5msi

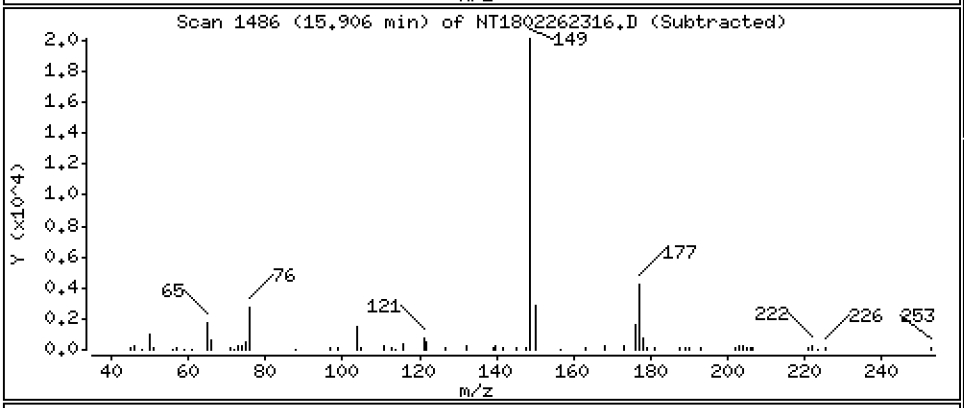
Column diameter: 0.25

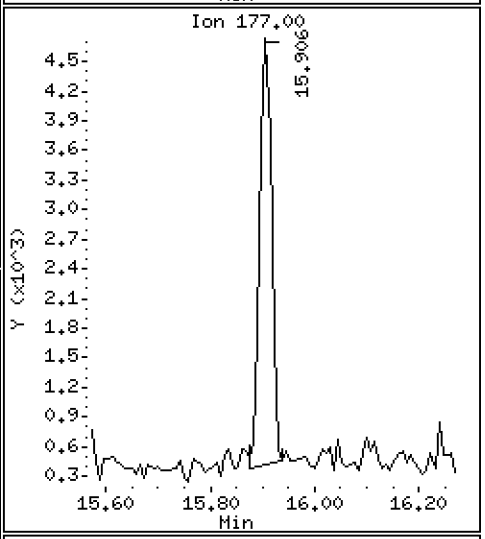
50 Diethylphthalate

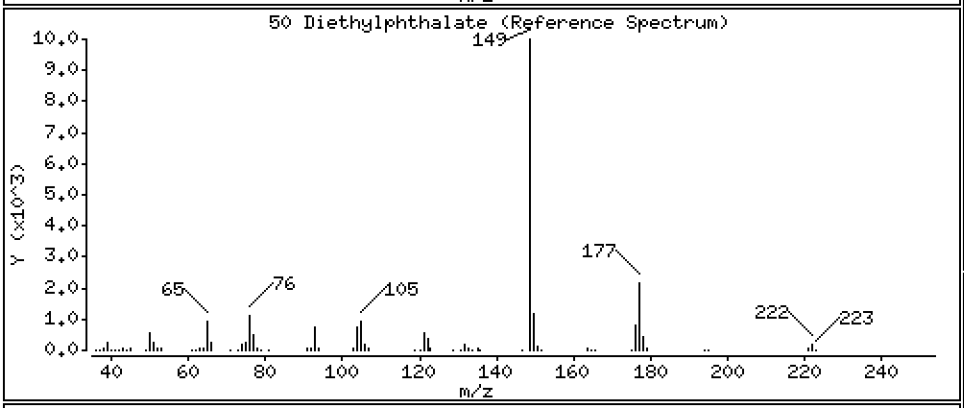
Concentration: 0.1643 ug/mL

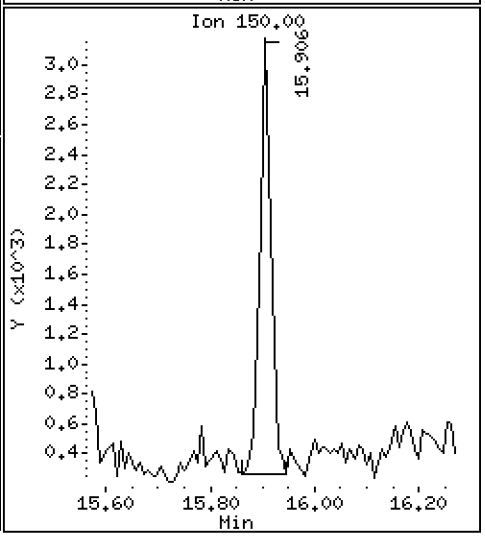


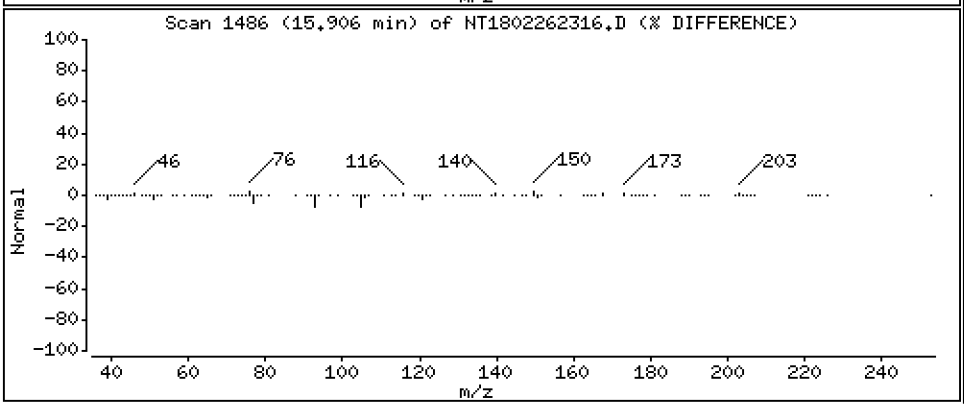












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

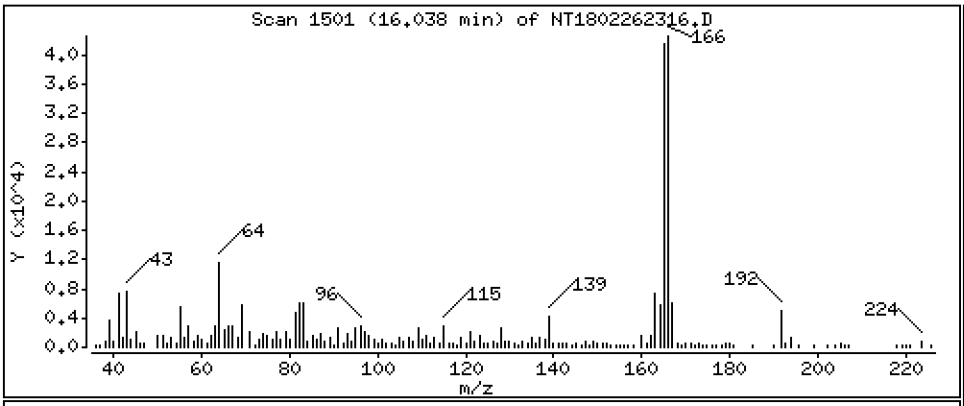
Operator: VTS

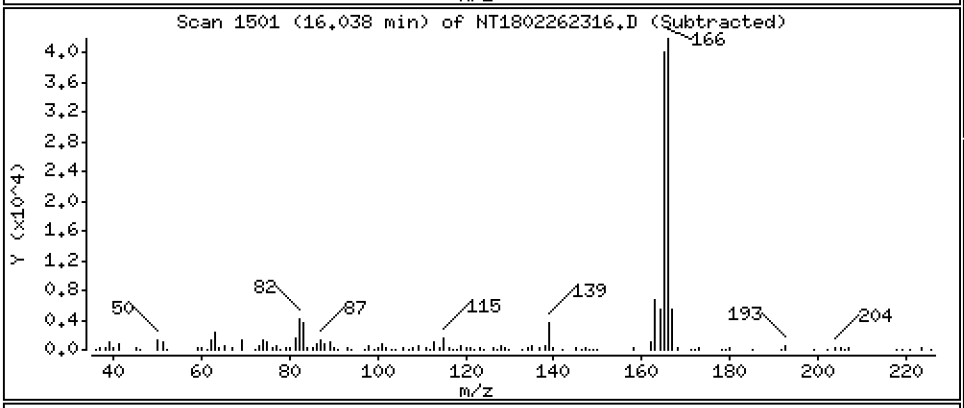
Column phase: ZB-5msi

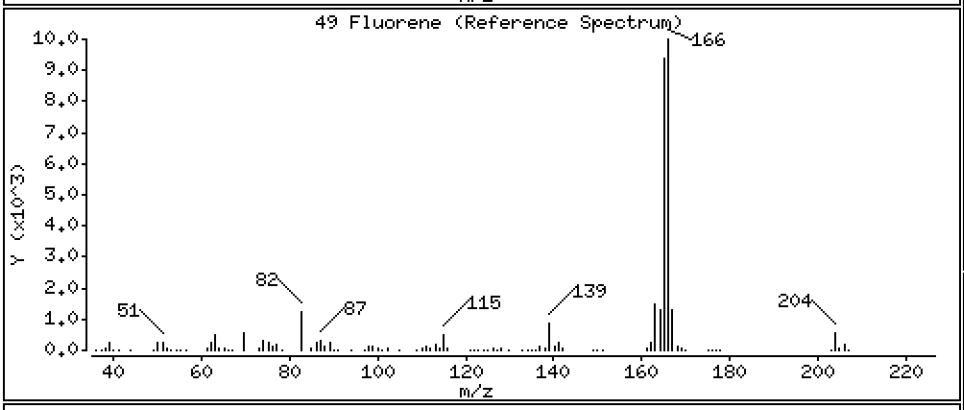
Column diameter: 0.25

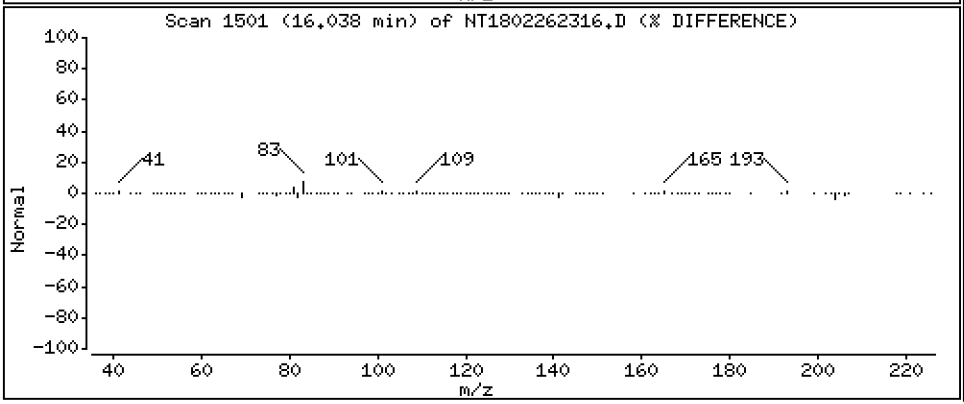
49 Fluorene

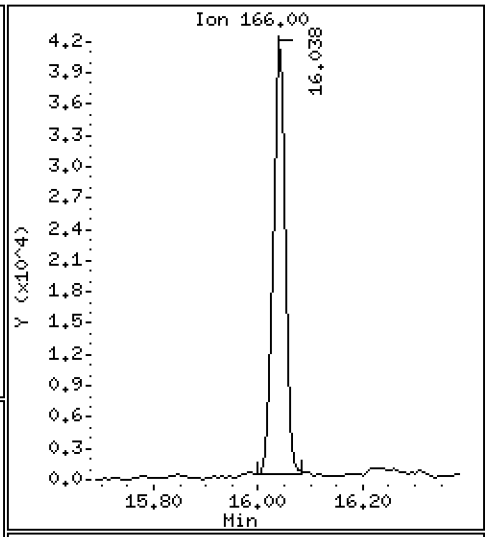
Concentration: 0.3110 ug/mL

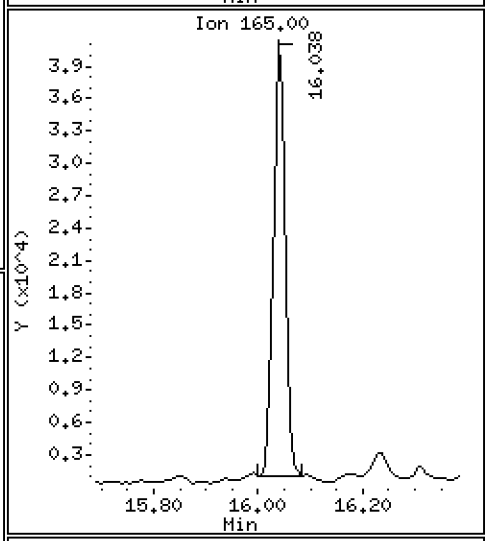


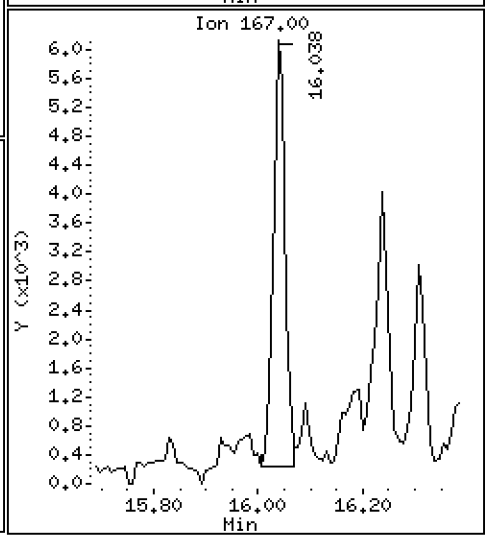












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

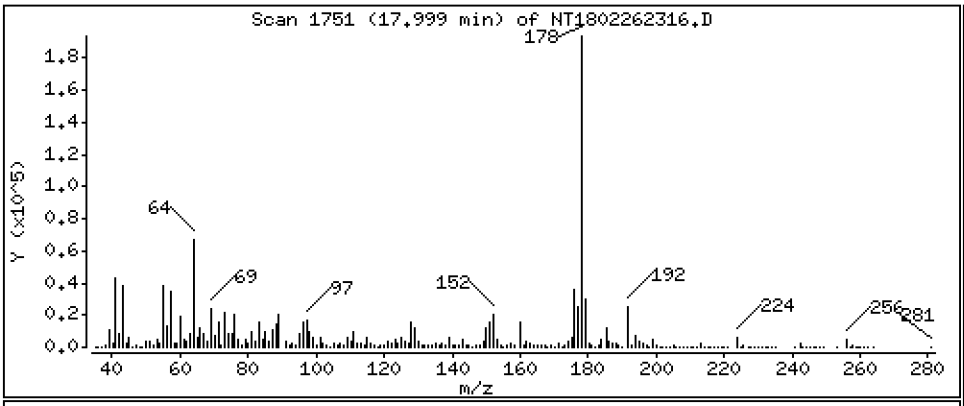
Operator: VTS

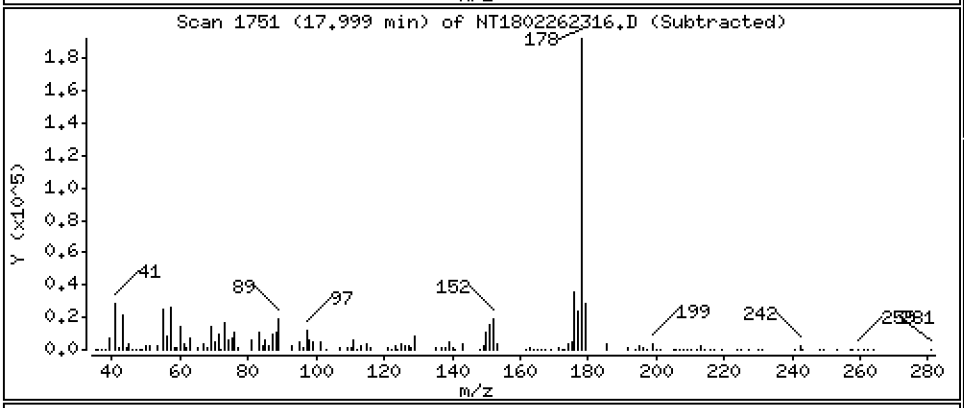
Column phase: ZB-5msi

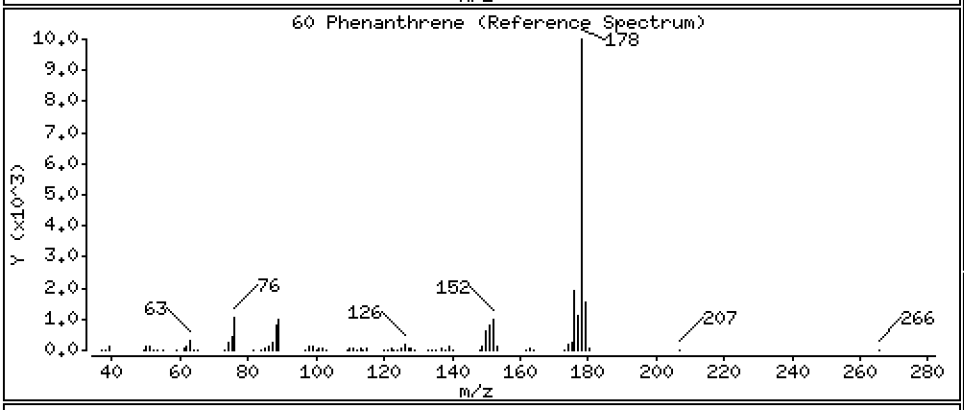
Column diameter: 0.25

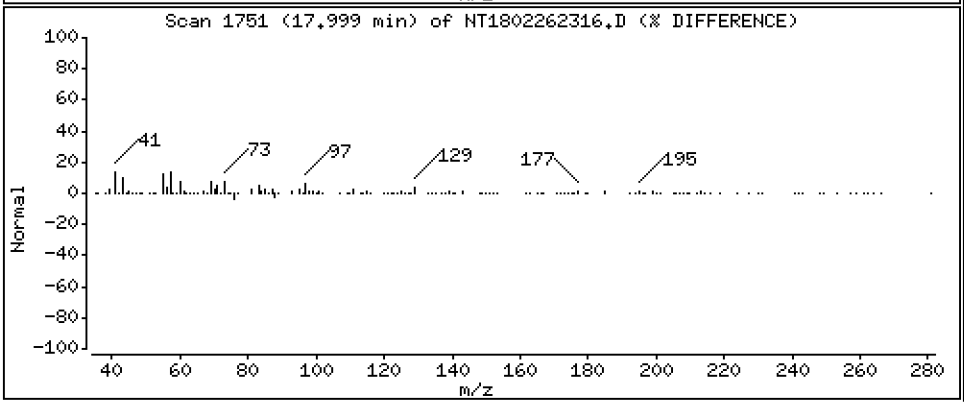
60 Phenanthrene

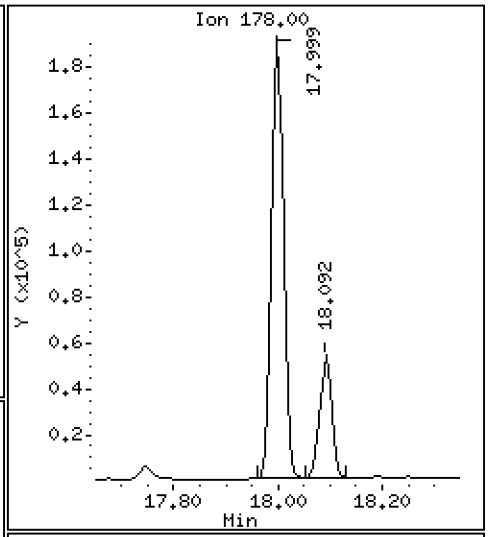
Concentration: 0.9312 ug/mL

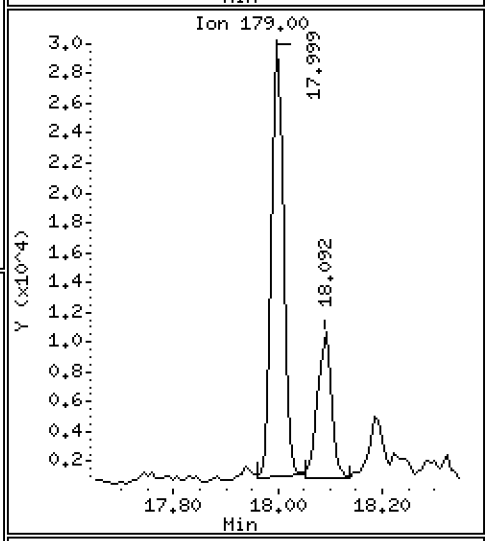


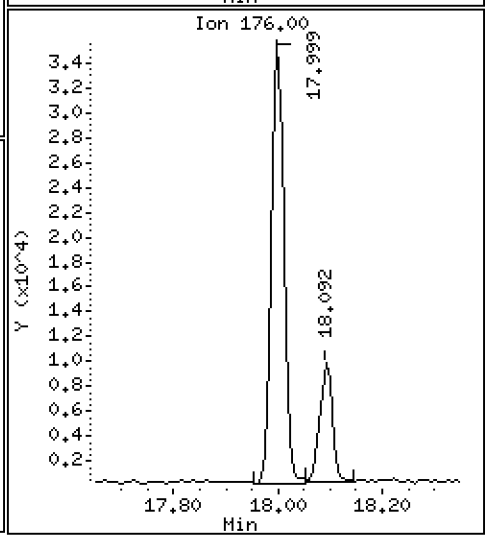












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

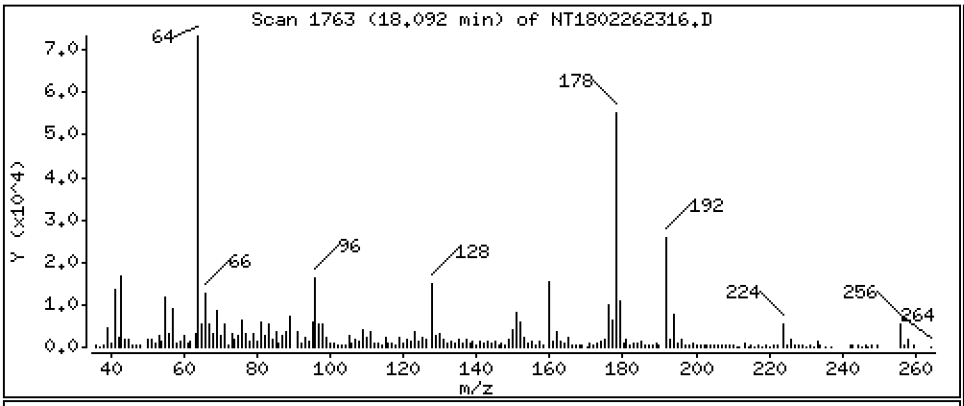
Operator: VTS

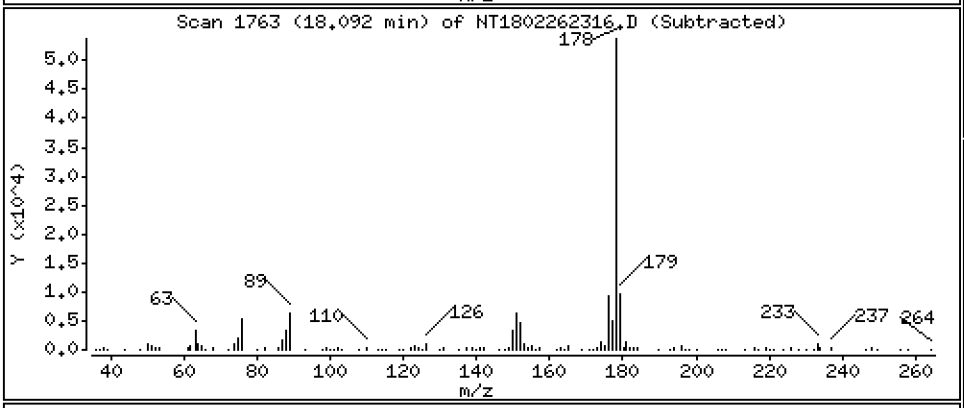
Column phase: ZB-5msi

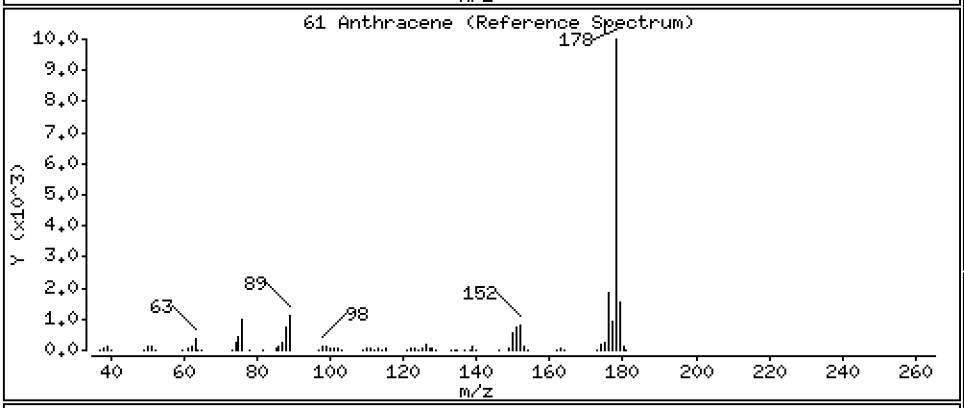
Column diameter: 0.25

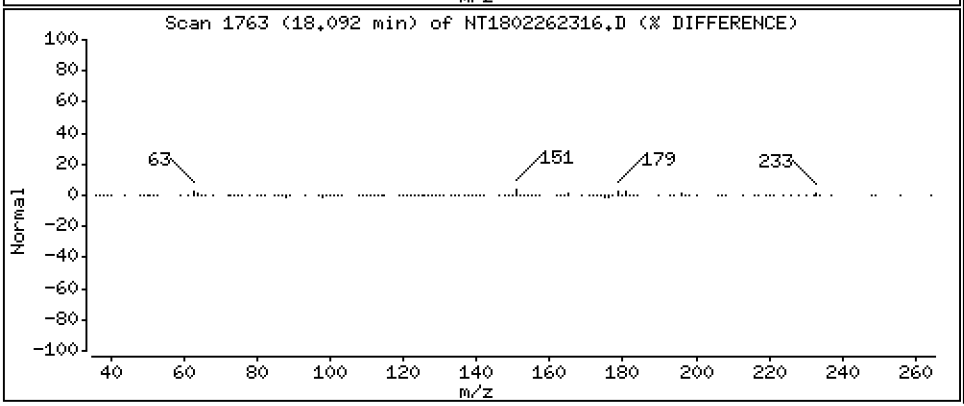
61 Anthracene

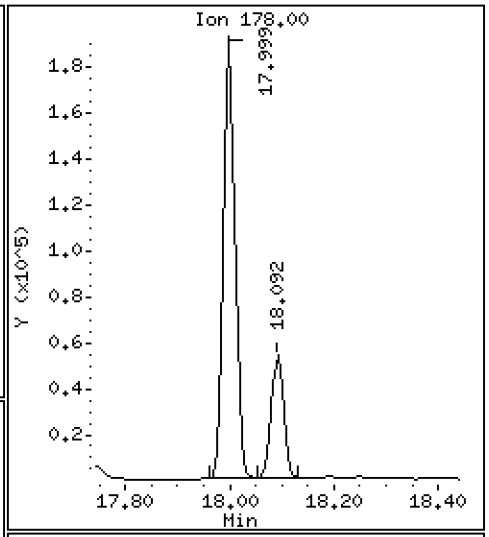
Concentration: 0.2819 ug/mL

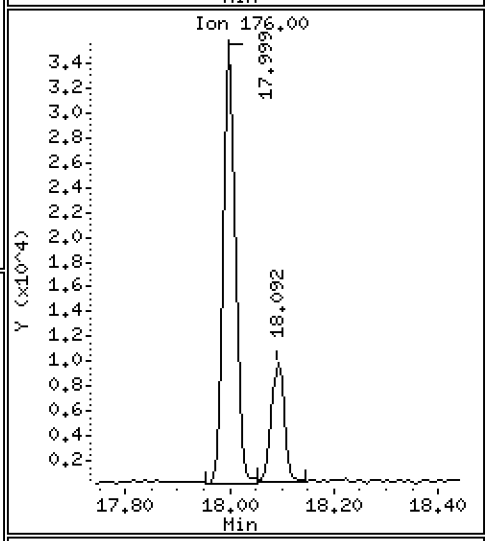


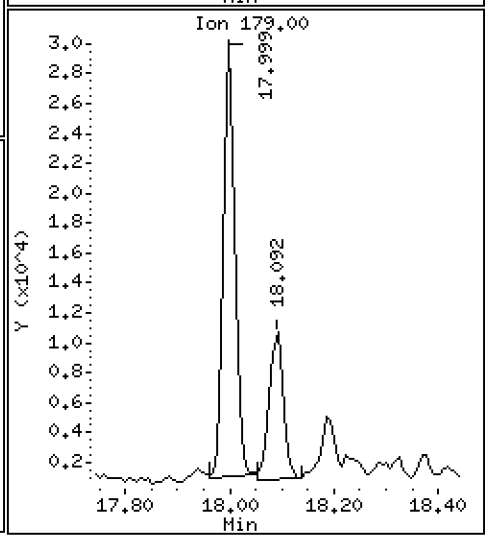












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

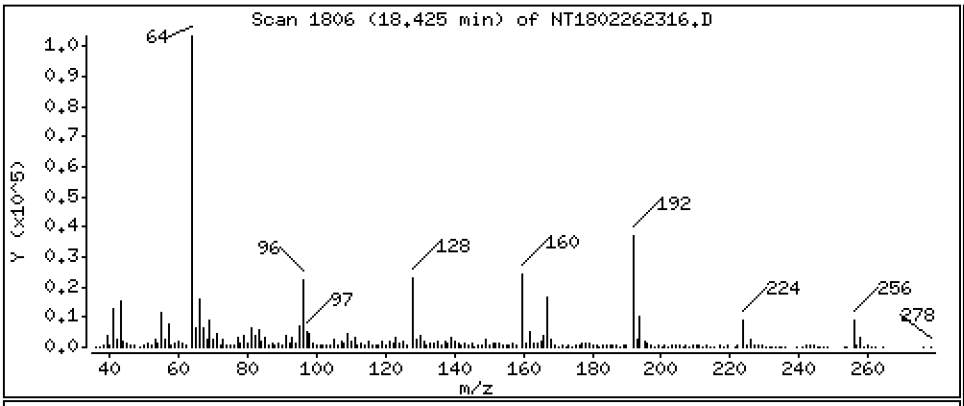
Operator: VTS

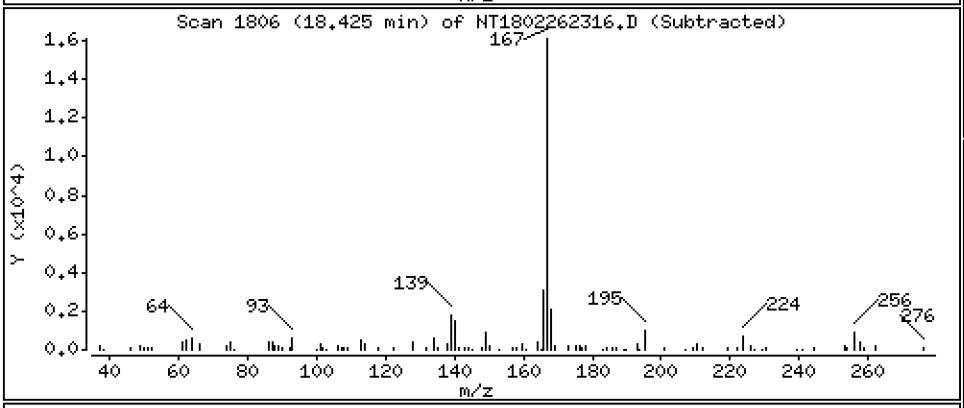
Column phase: ZB-5msi

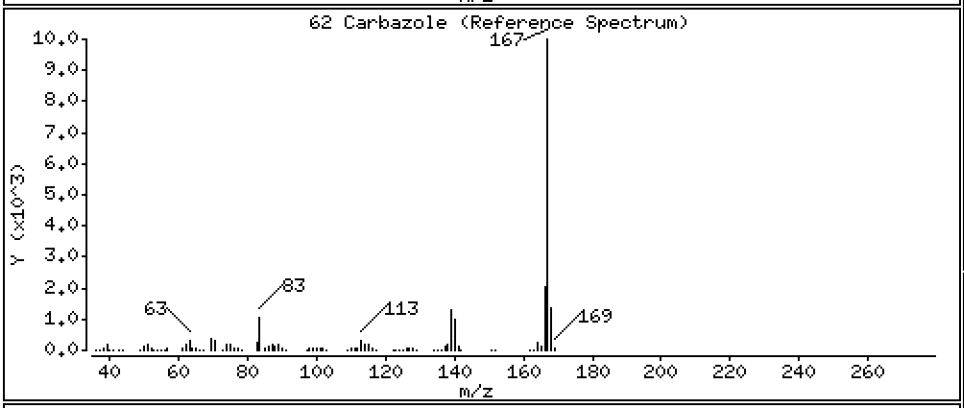
Column diameter: 0.25

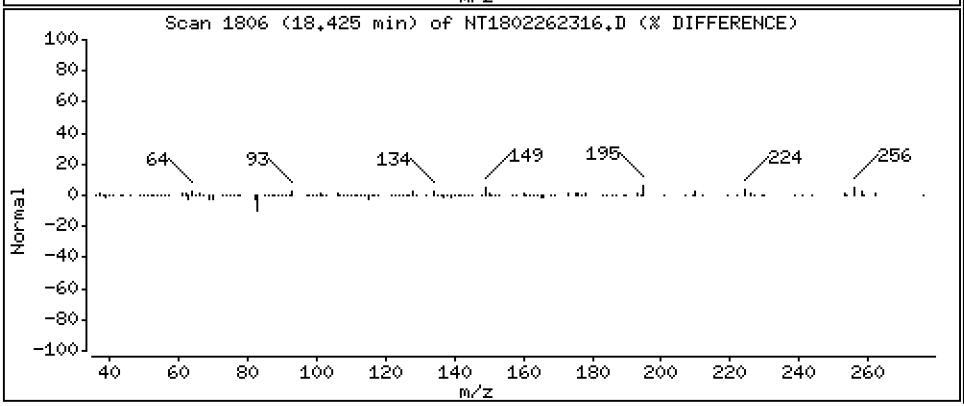
62 Carbazole

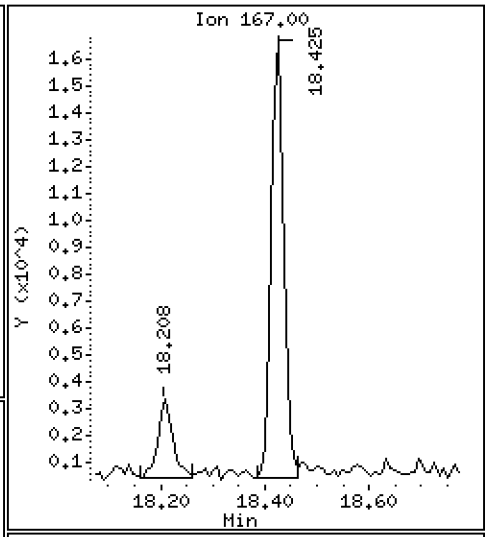
Concentration: 0.09435 ug/mL

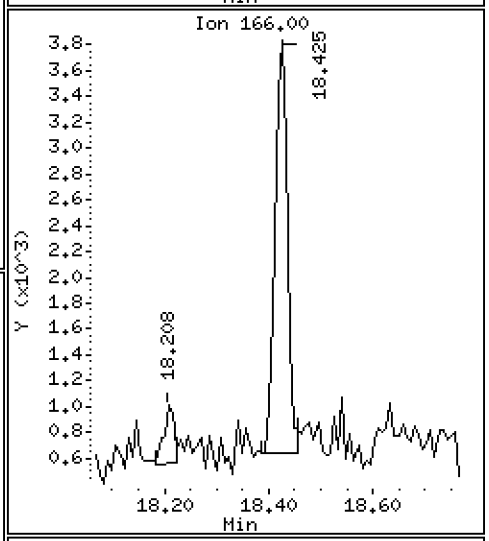


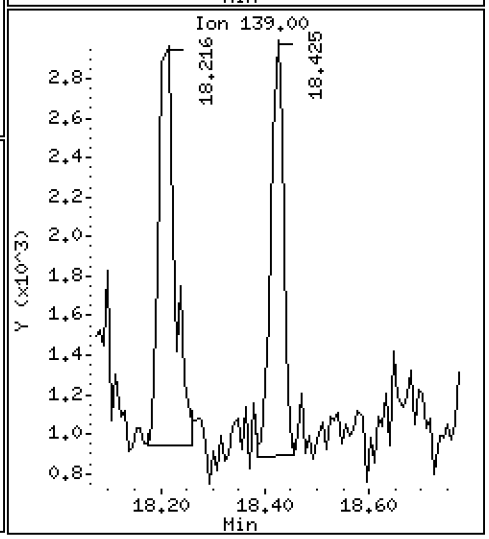












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

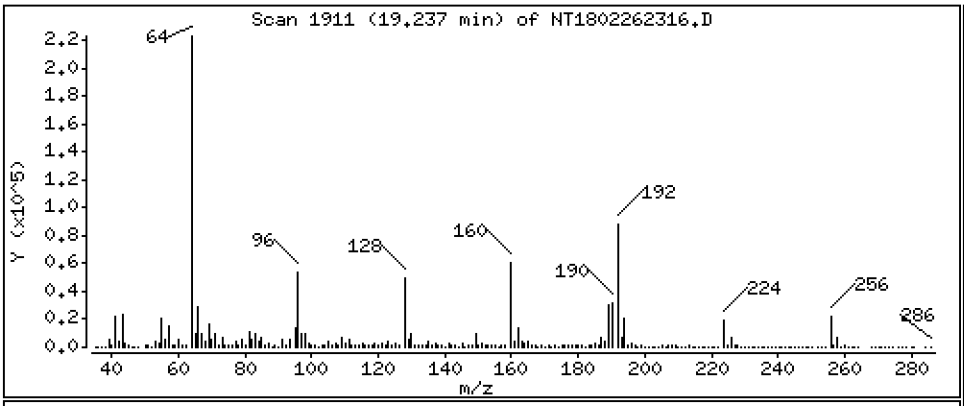
Operator: VTS

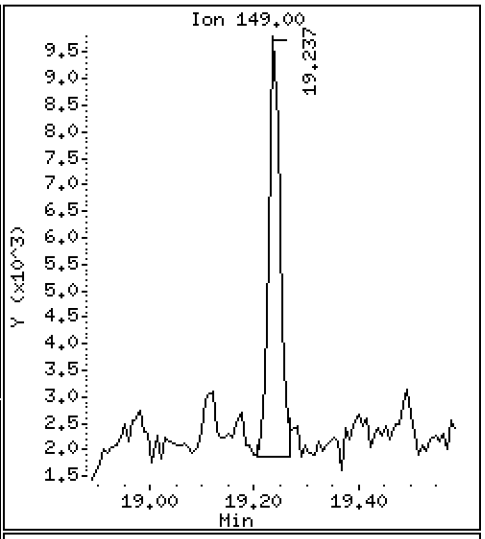
Column phase: ZB-5msi

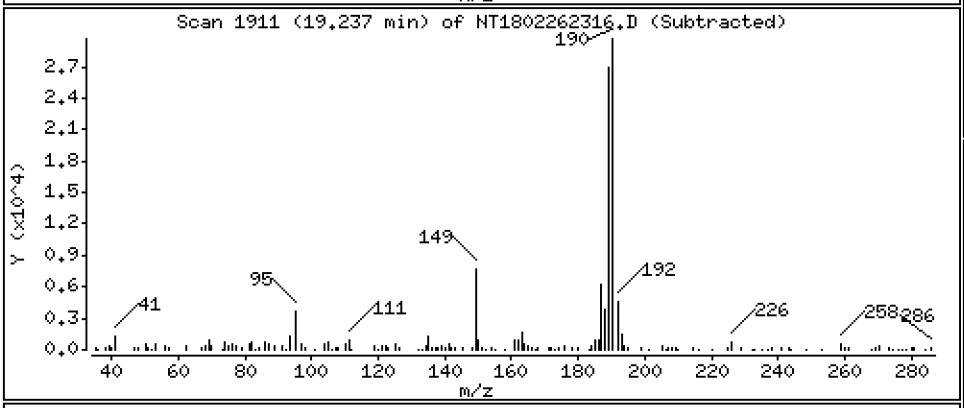
Column diameter: 0.25

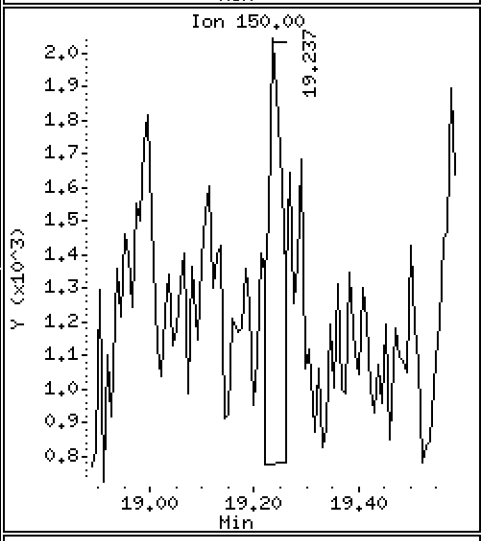
63 Di-n-butylphthalate

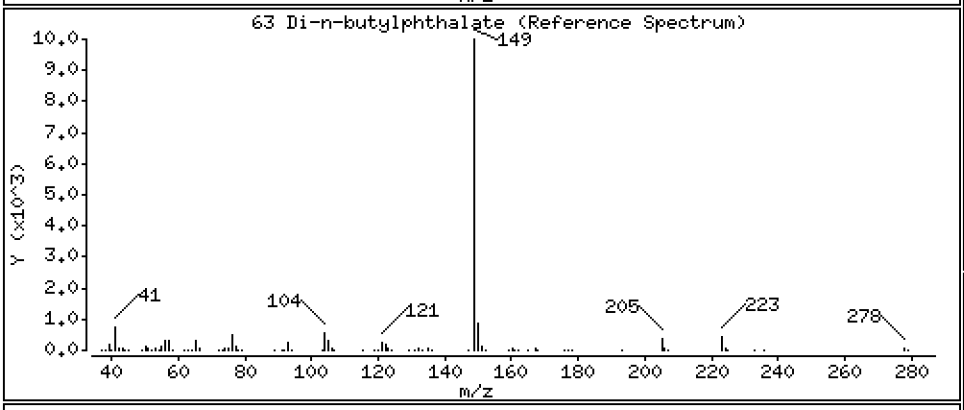
Concentration: 0.03700 ug/mL

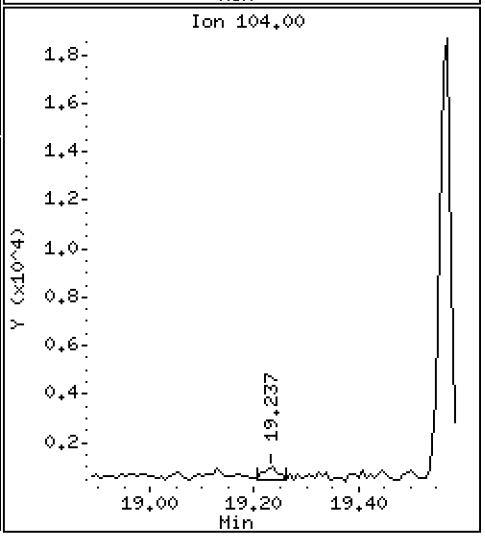


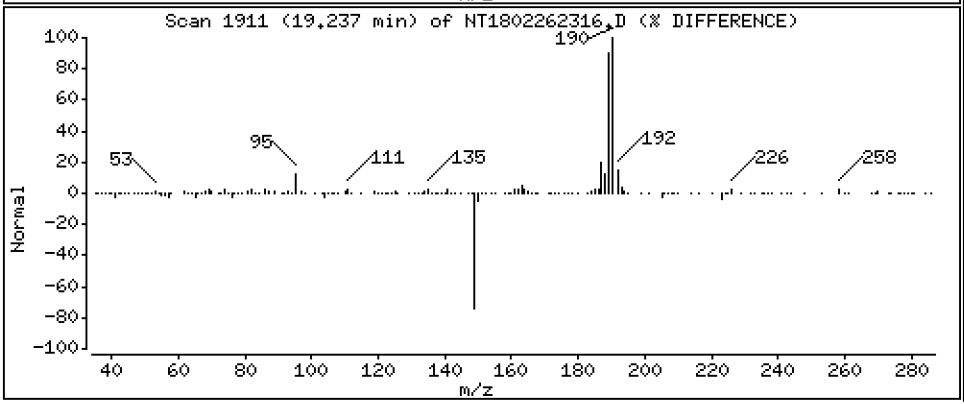












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

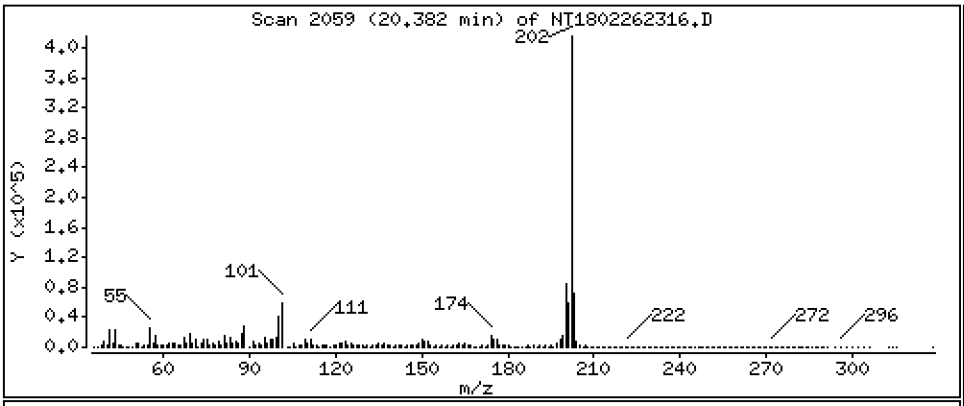
Operator: VTS

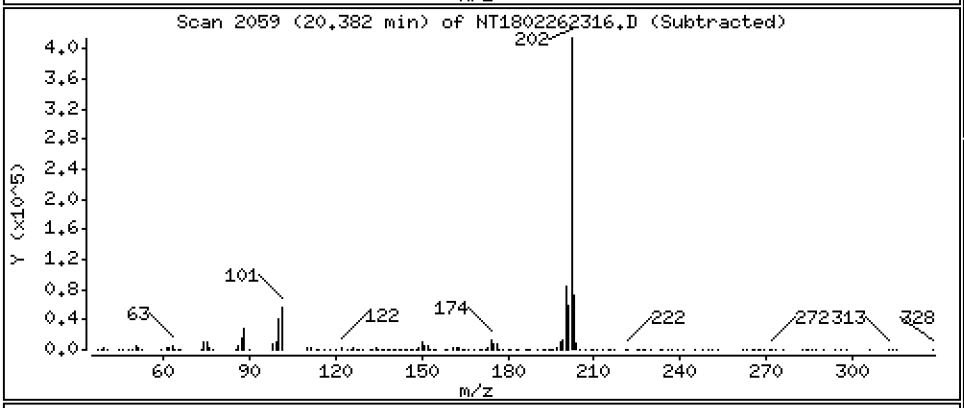
Column phase: ZB-5msi

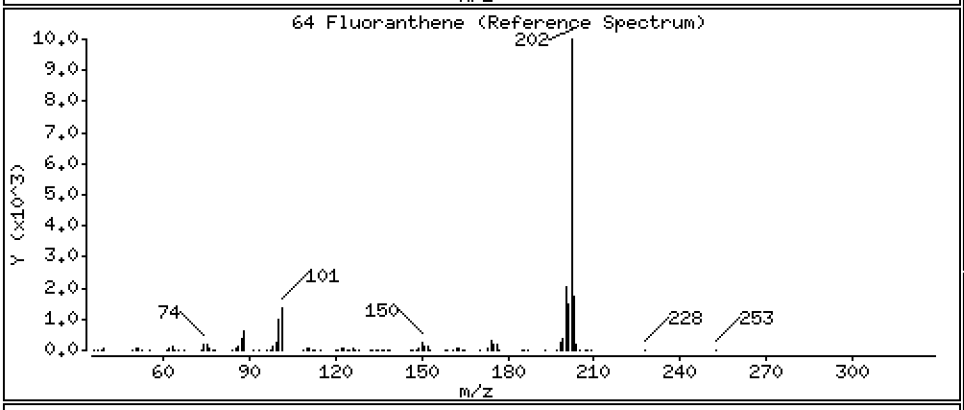
Column diameter: 0.25

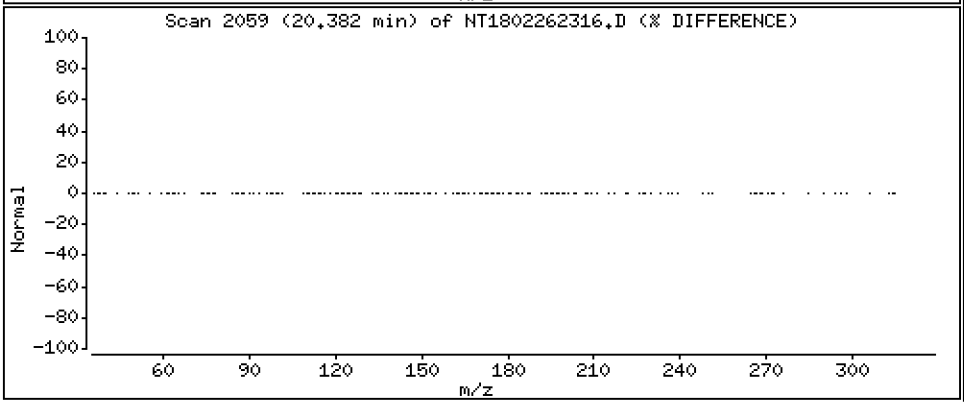
64 Fluoranthene

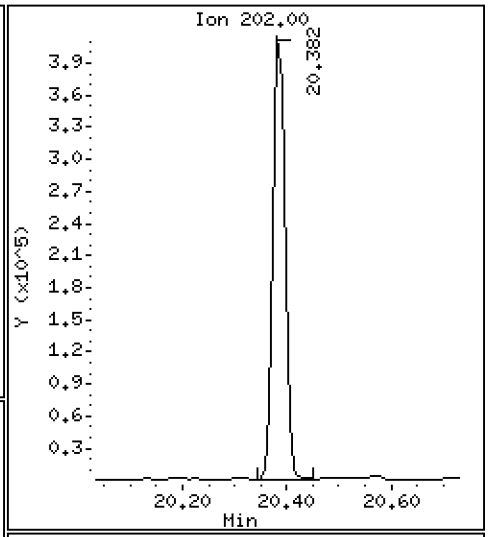
Concentration: 1.641 ug/mL

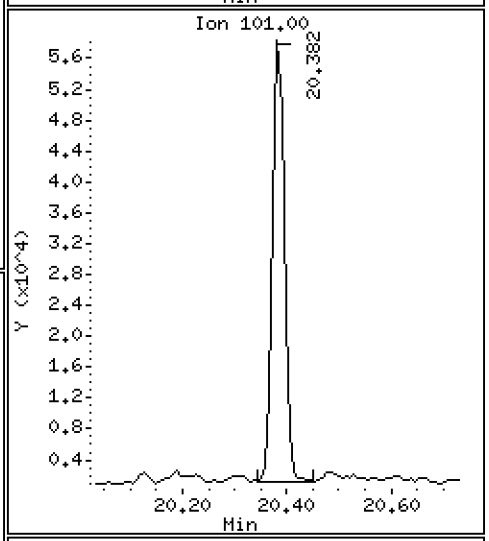


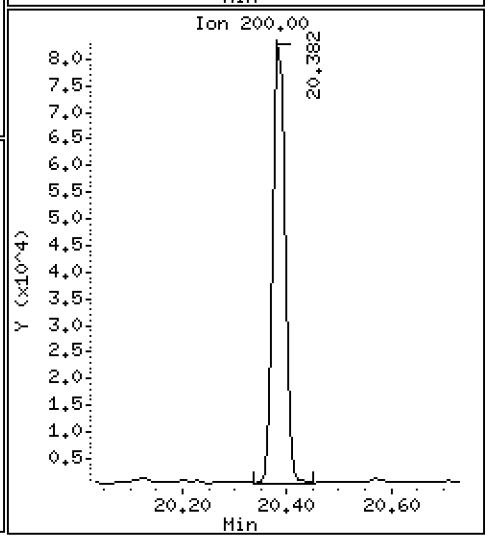












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

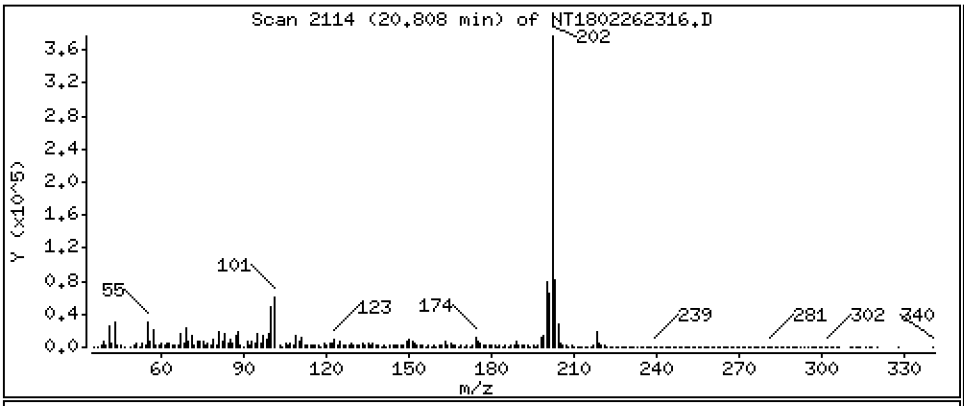
Operator: VTS

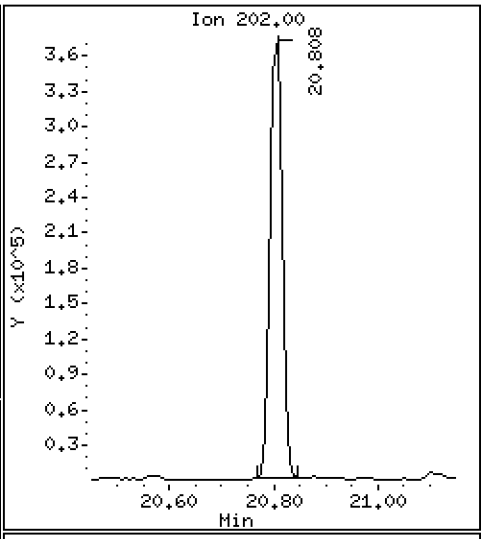
Column phase: ZB-5msi

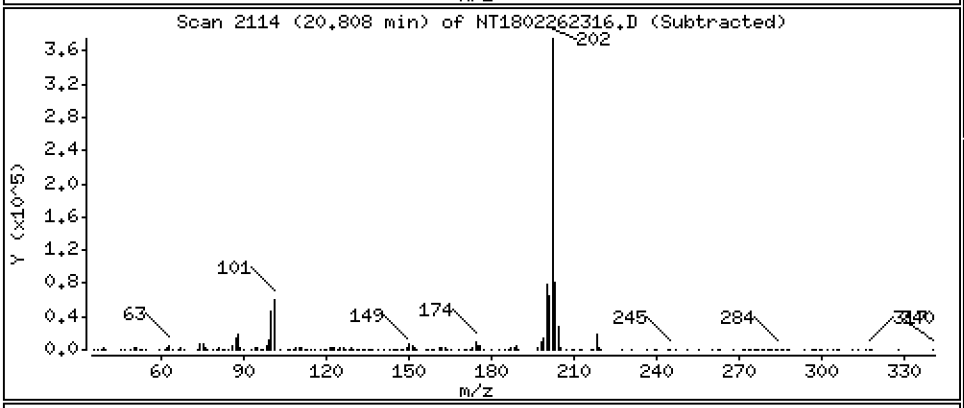
Column diameter: 0.25

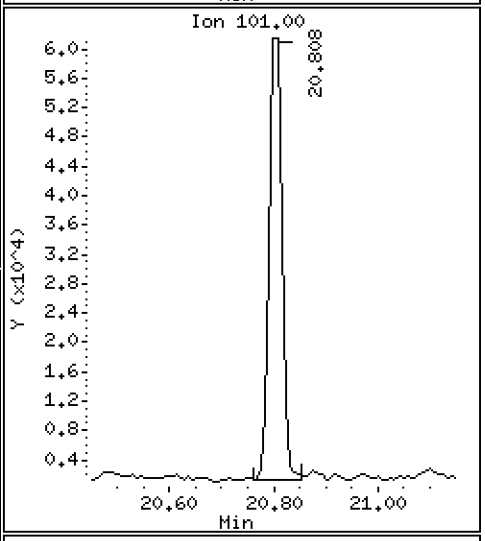
65 Pyrene

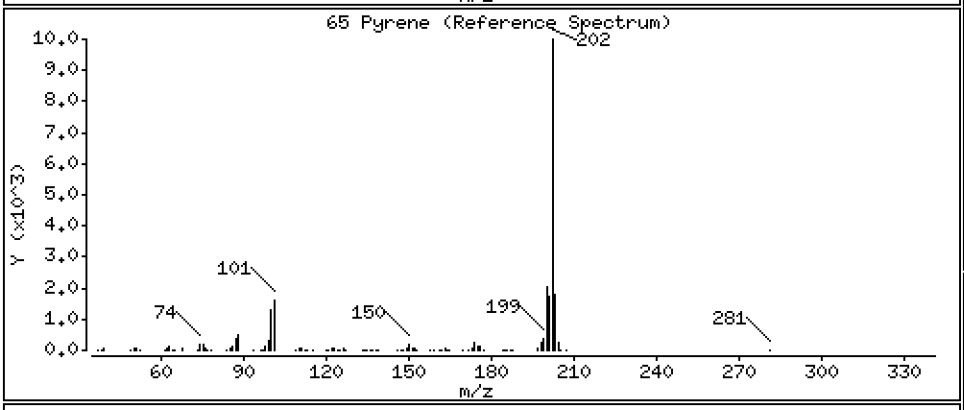
Concentration: 1.402 ug/mL

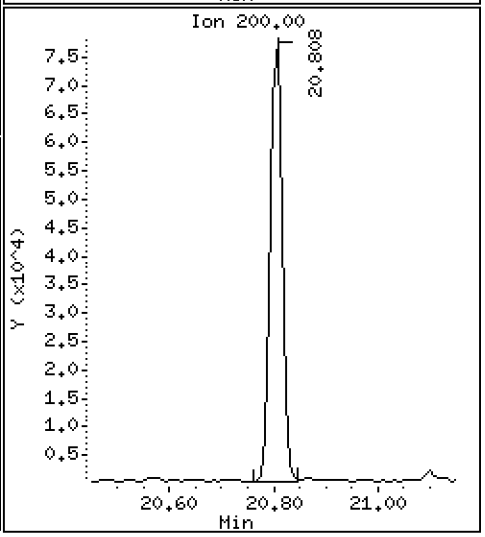


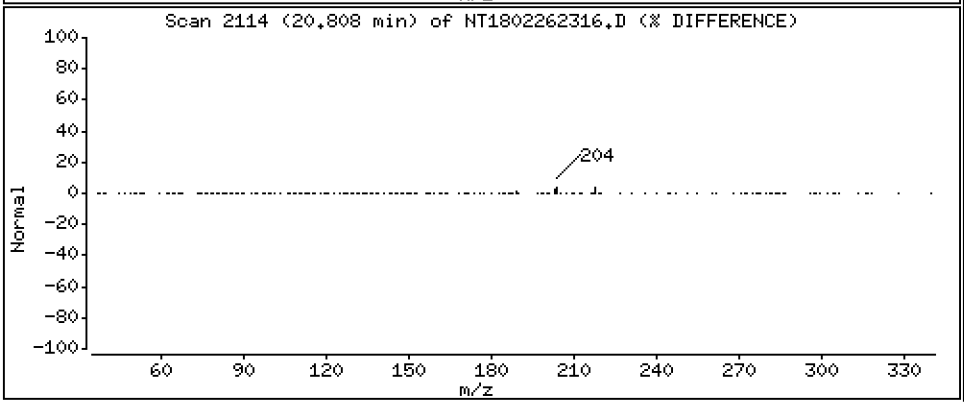












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

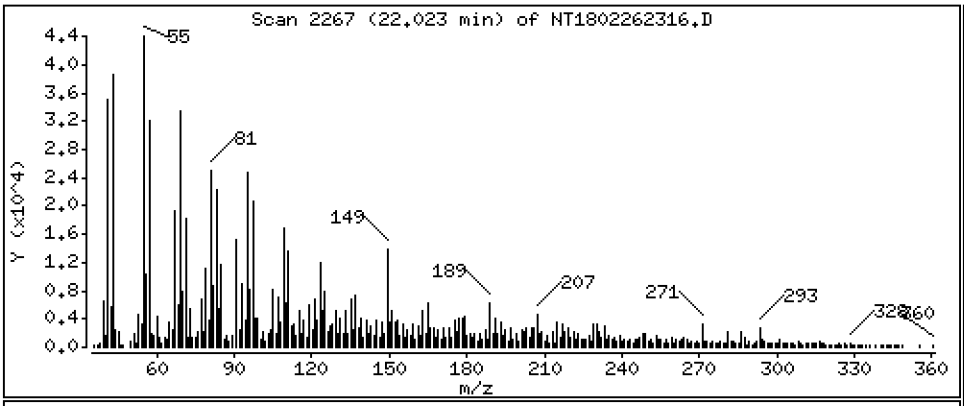
Operator: VTS

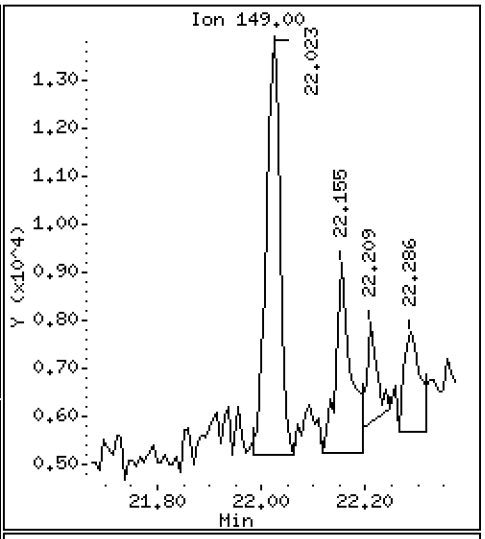
Column phase: ZB-5msi

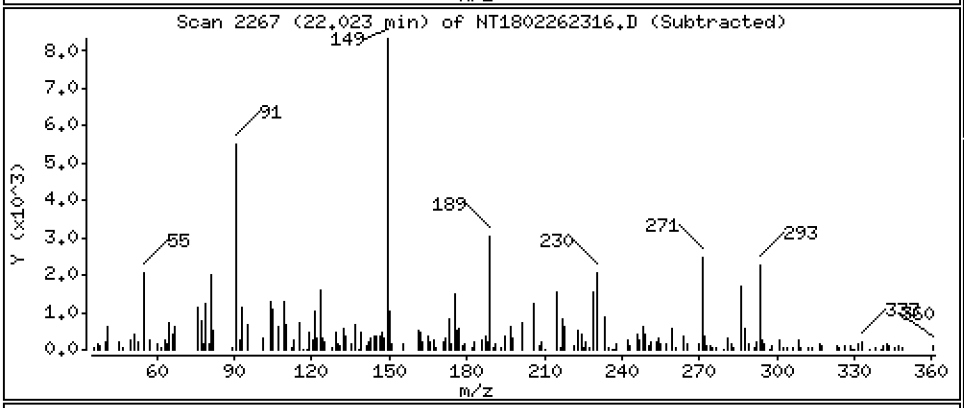
Column diameter: 0.25

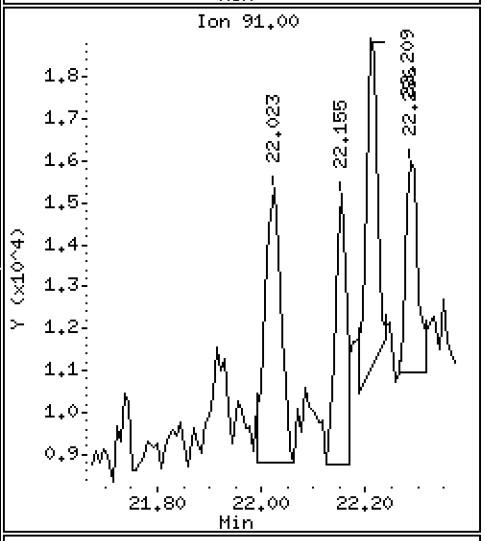
67 Butylbenzylphthalate

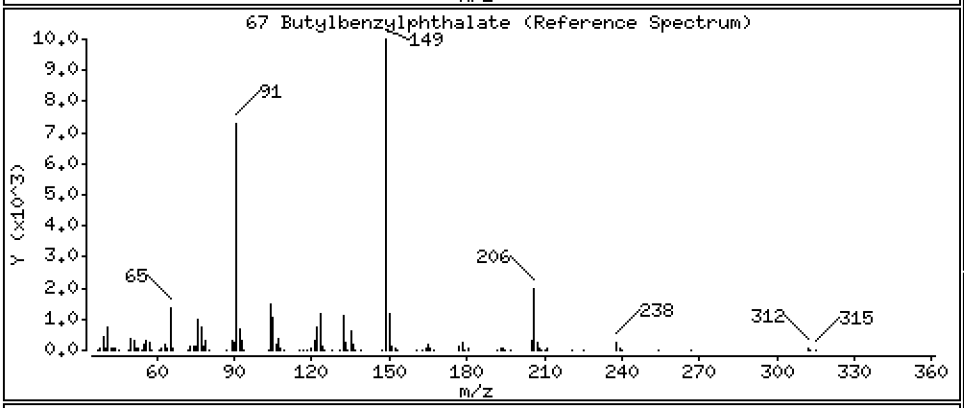
Concentration: 0.09827 ug/mL

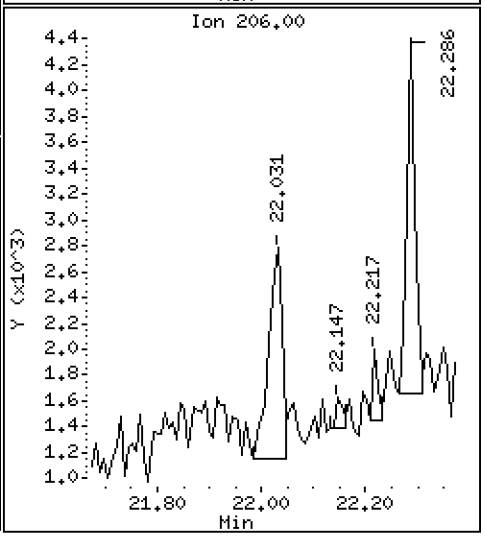


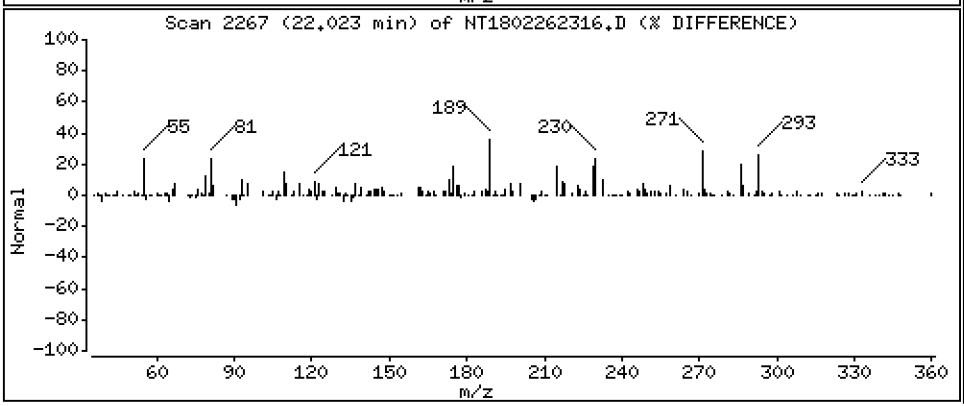












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

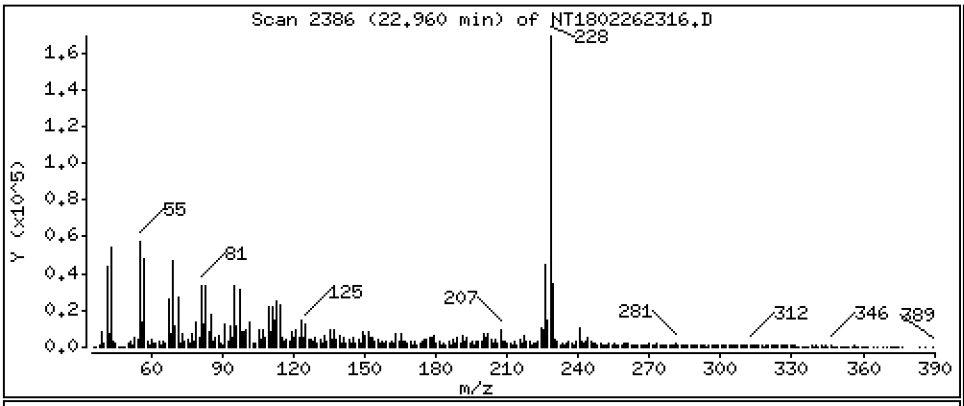
Operator: VTS

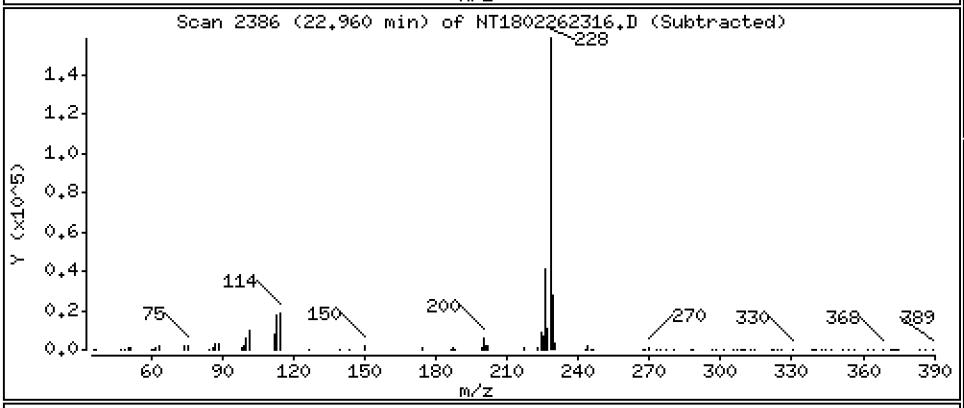
Column phase: ZB-5msi

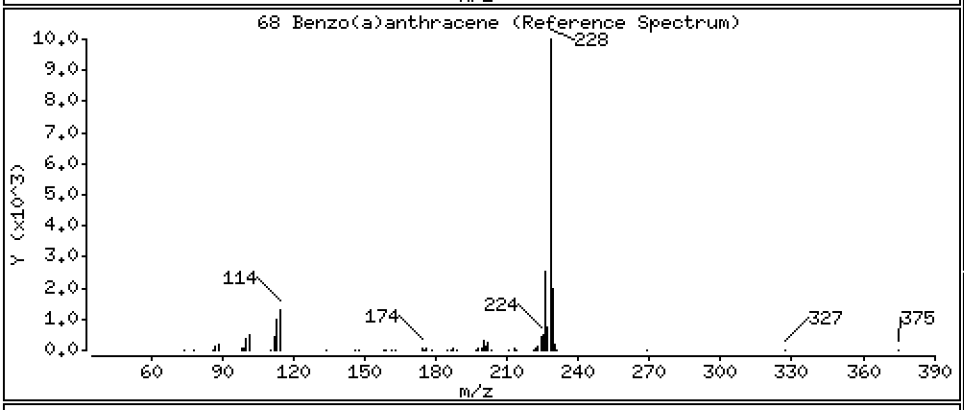
Column diameter: 0.25

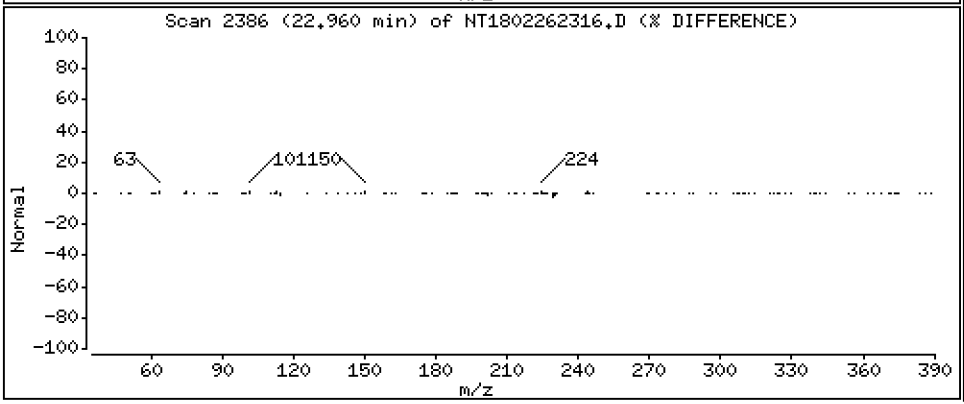
68 Benzo(a)anthracene

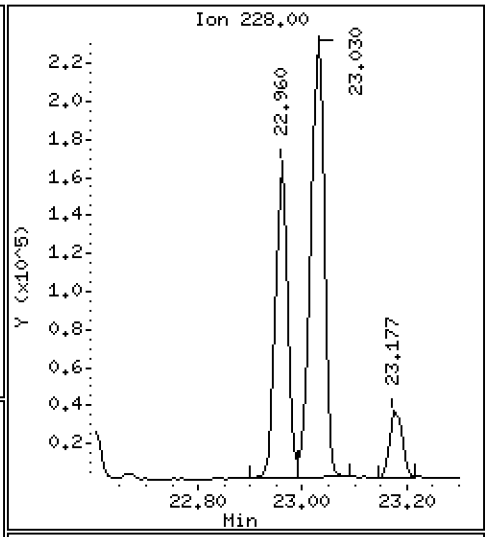
Concentration: 0.6786 ug/mL

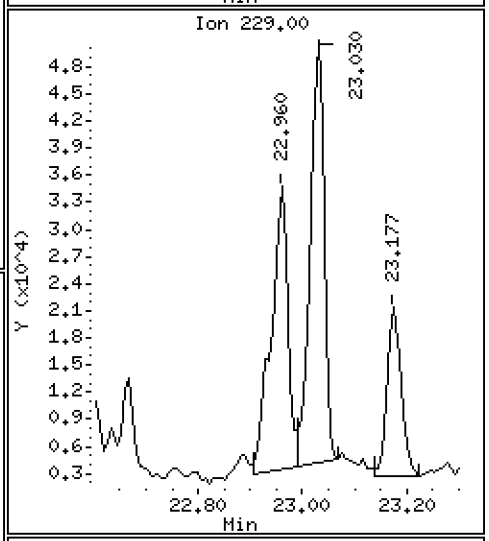


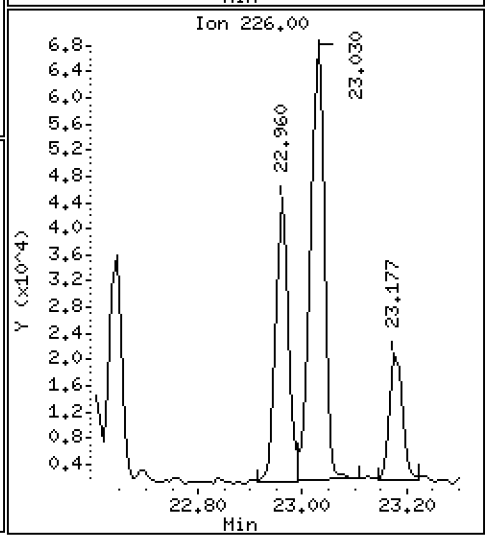












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

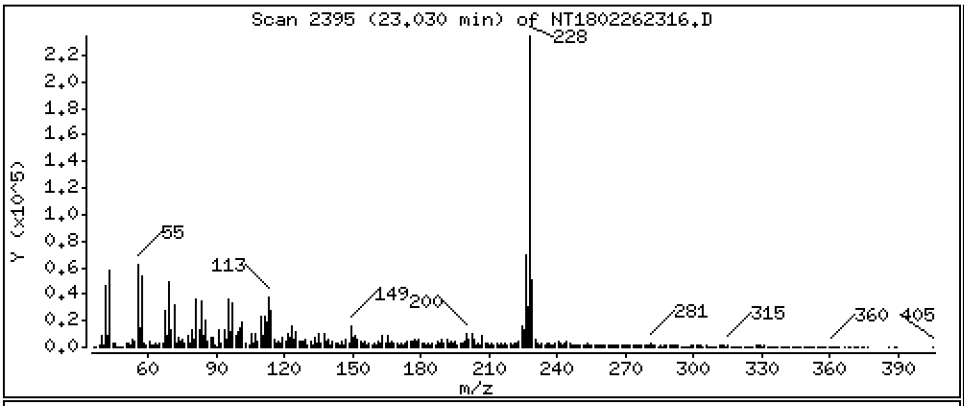
Operator: VTS

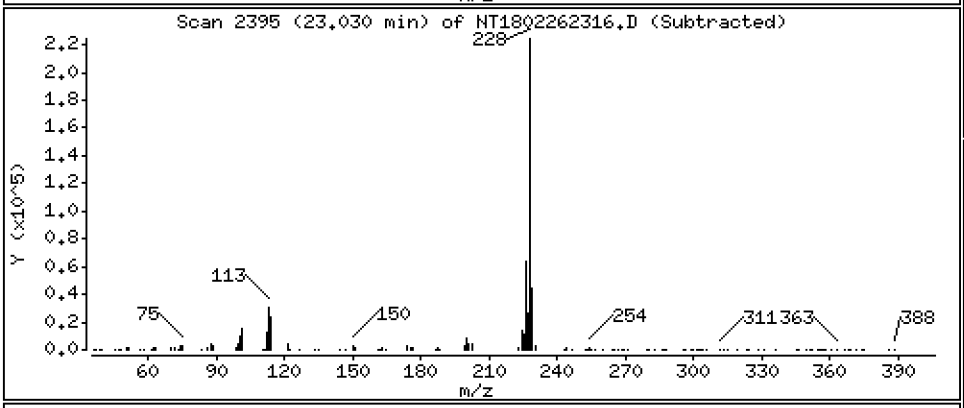
Column phase: ZB-5msi

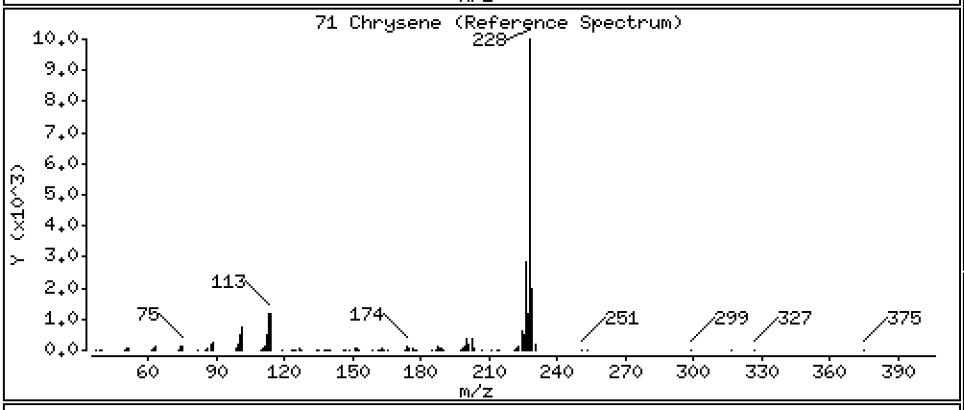
Column diameter: 0.25

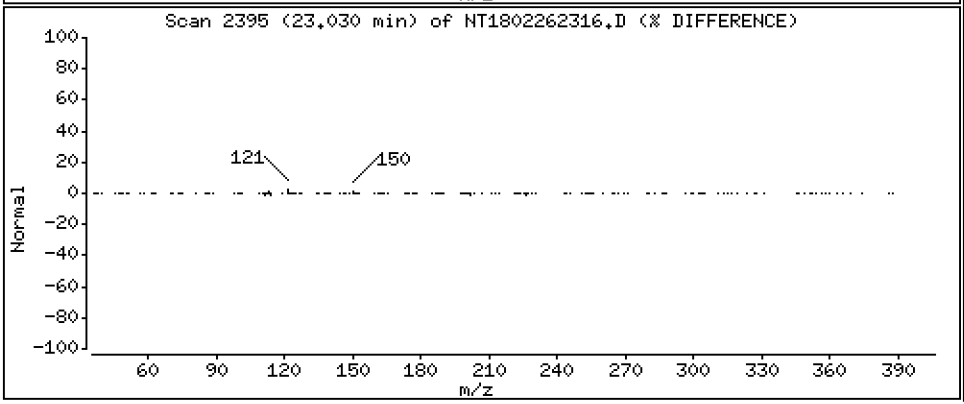
71 Chrysene

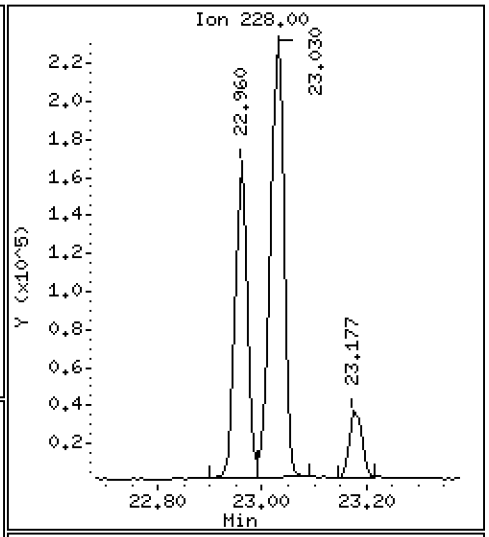
Concentration: 0.9820 ug/mL

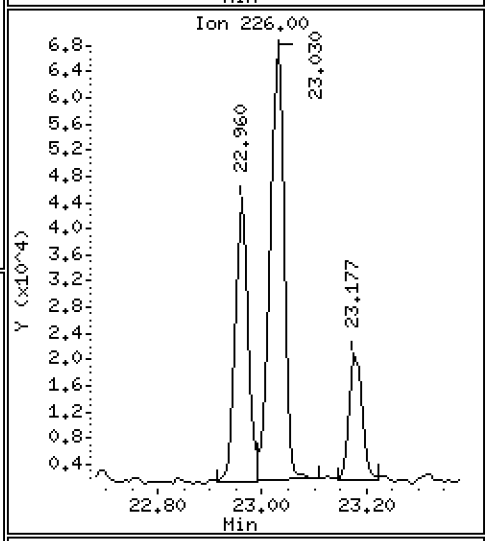


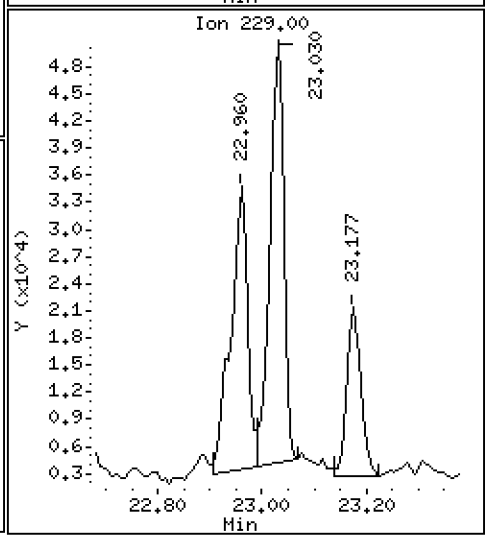












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

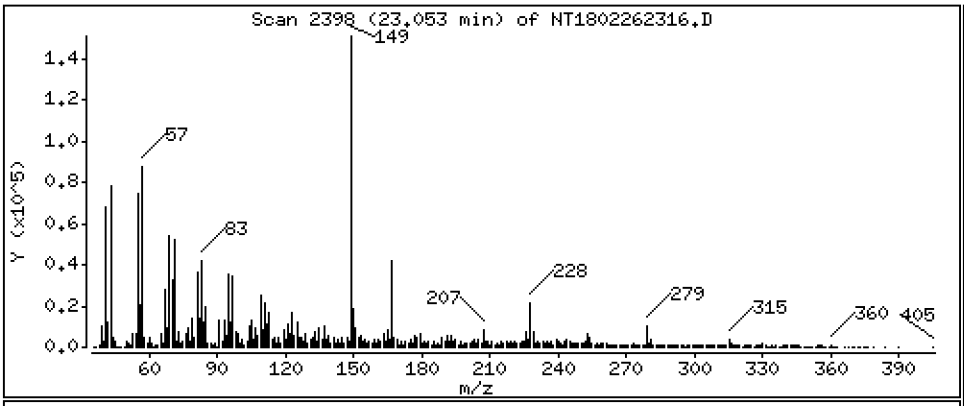
Operator: VTS

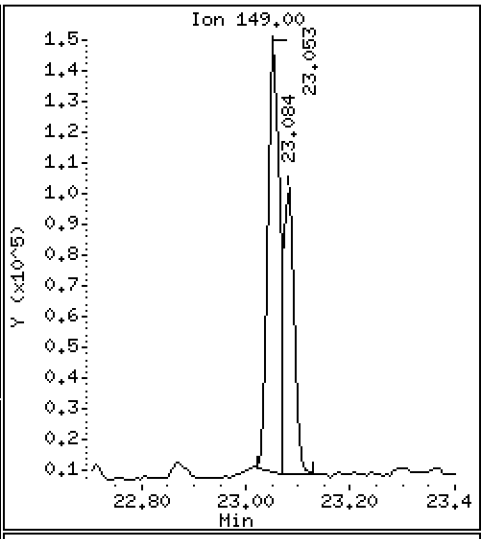
Column phase: ZB-5msi

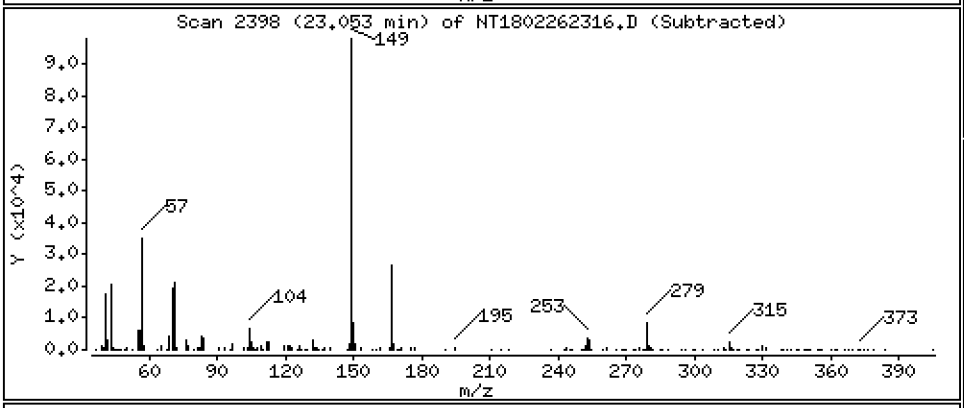
Column diameter: 0.25

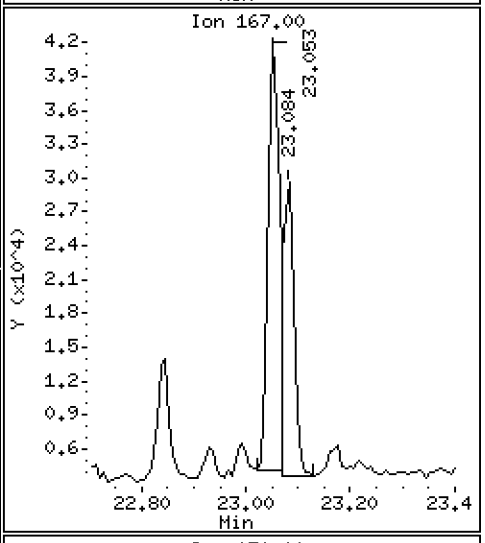
72 bis(2-Ethylhexyl)phthalate

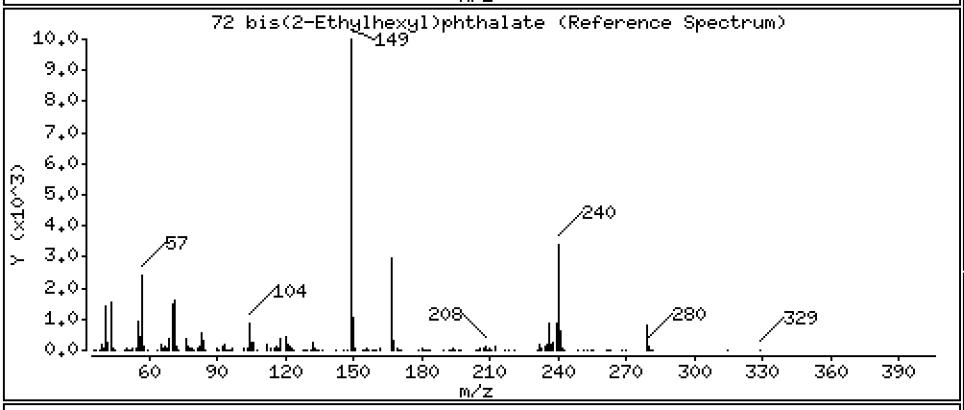
Concentration: 0.8615 ug/mL

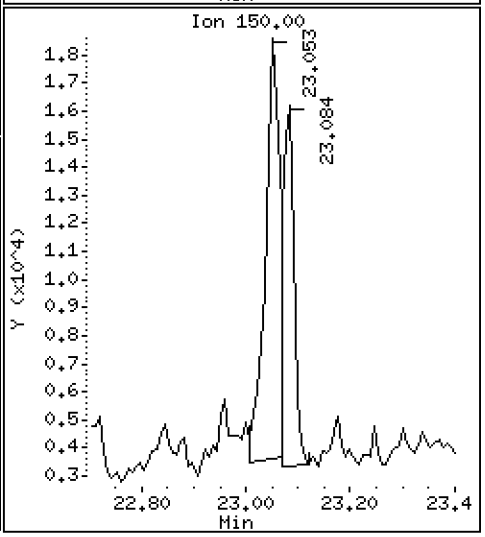


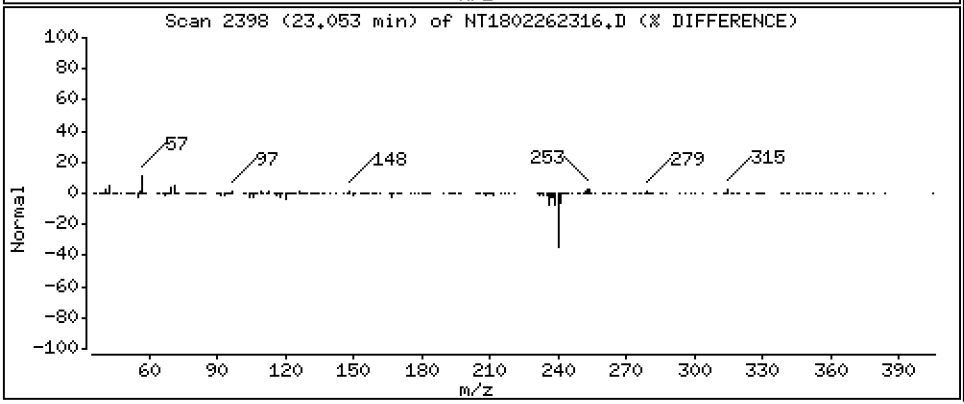












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

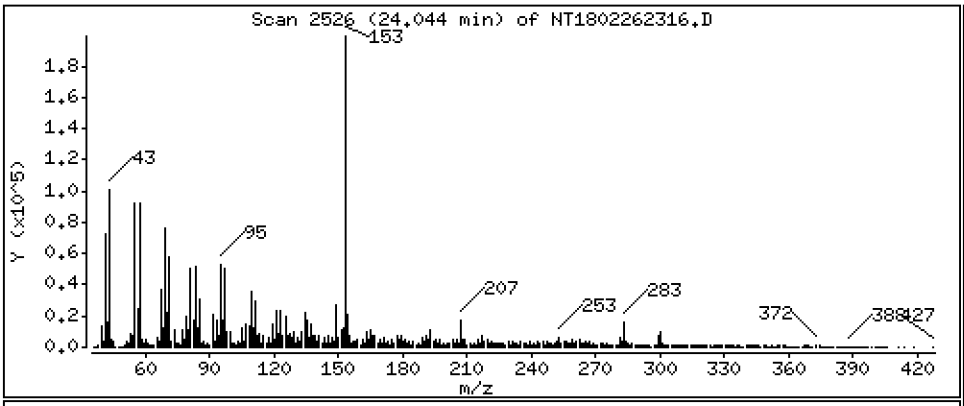
Operator: VTS

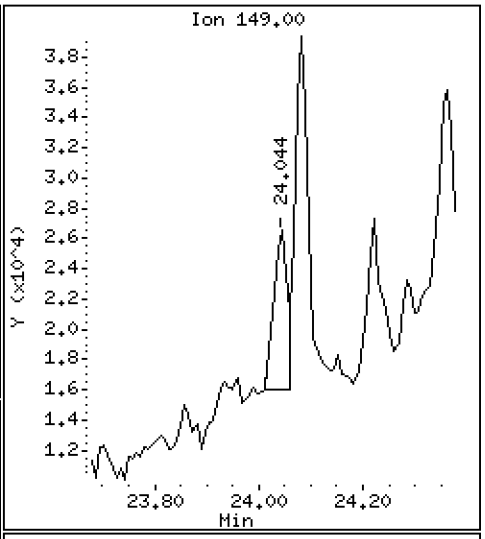
Column phase: ZB-5msi

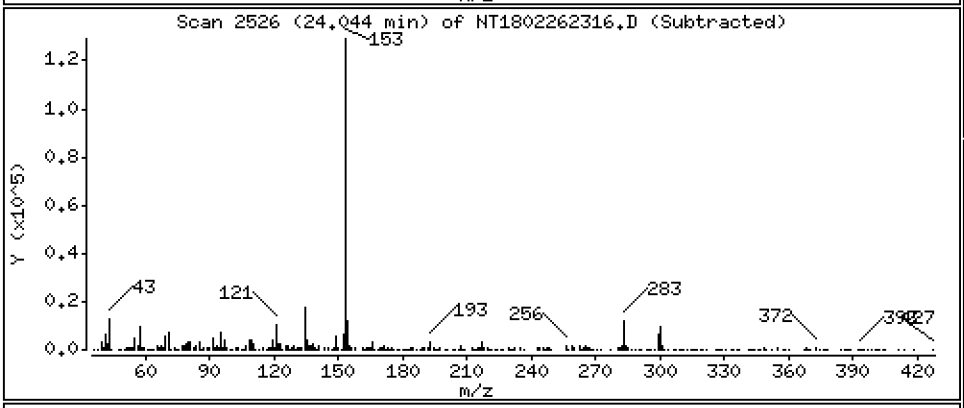
Column diameter: 0.25

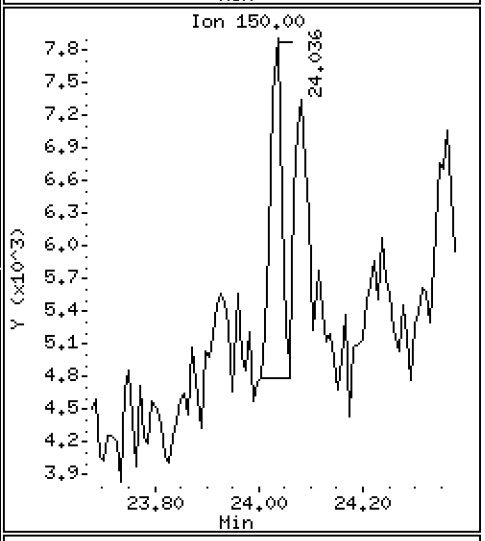
73 Di-n-octylphthalate

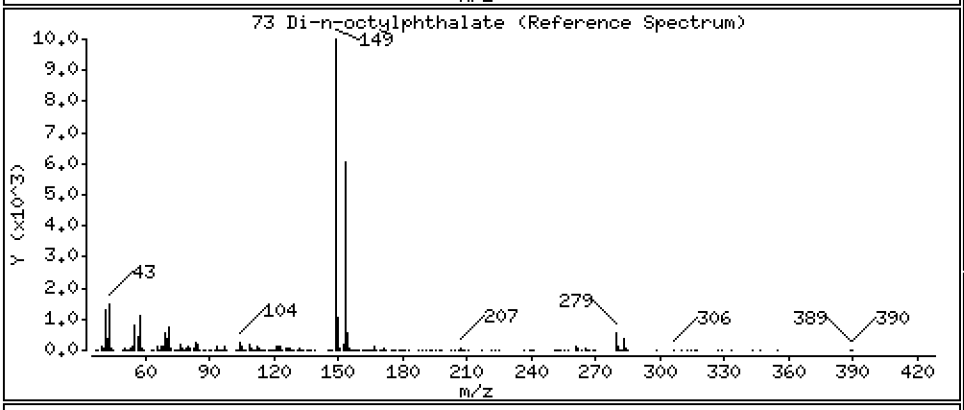
Concentration: 0.03951 ug/mL

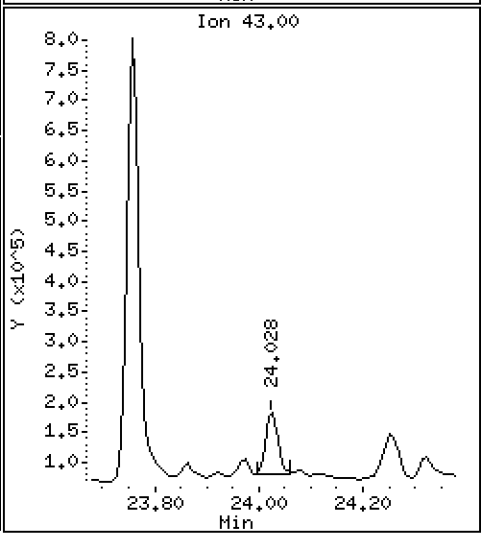


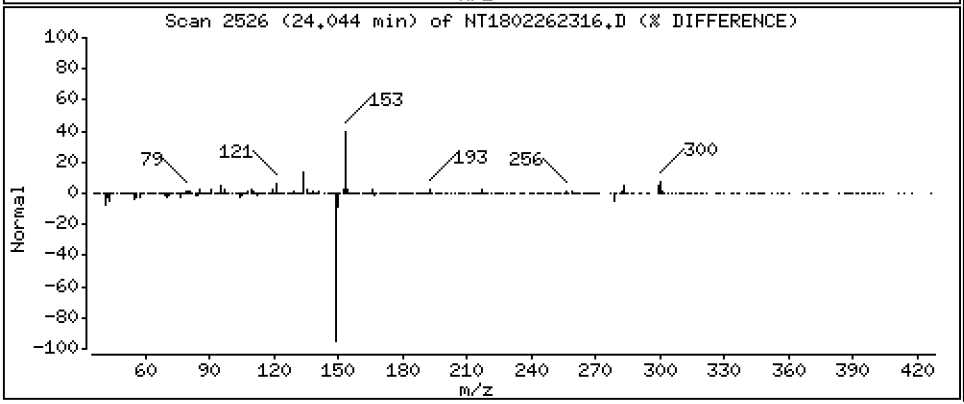












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

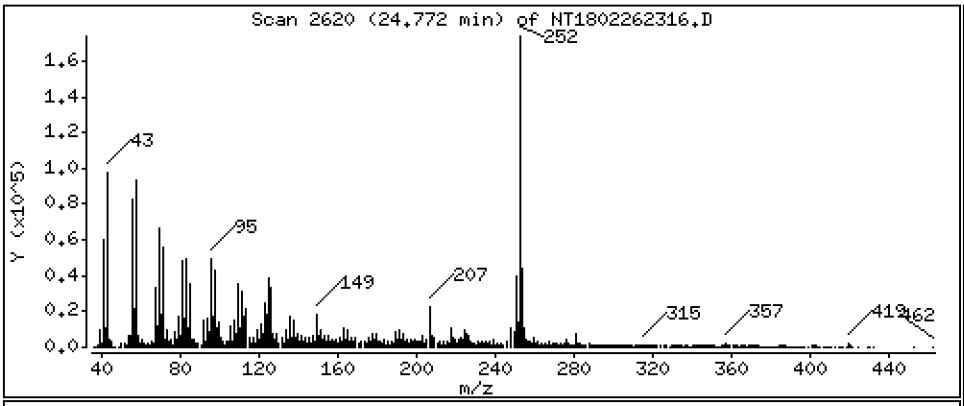
Operator: VTS

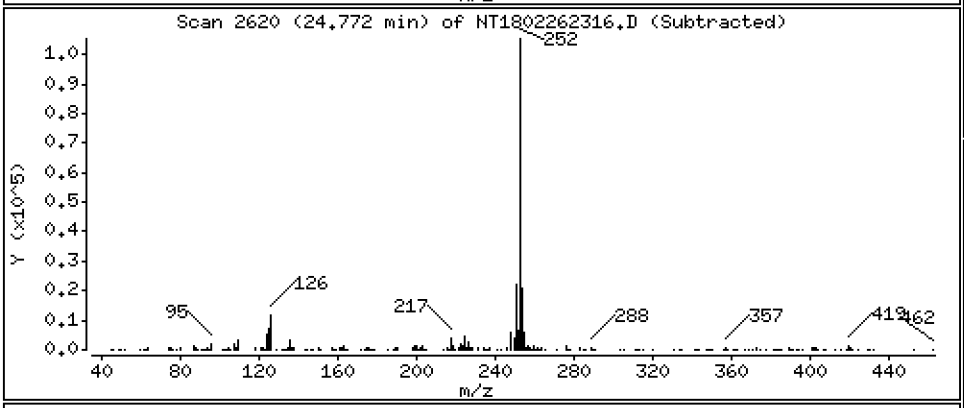
Column phase: ZB-5msi

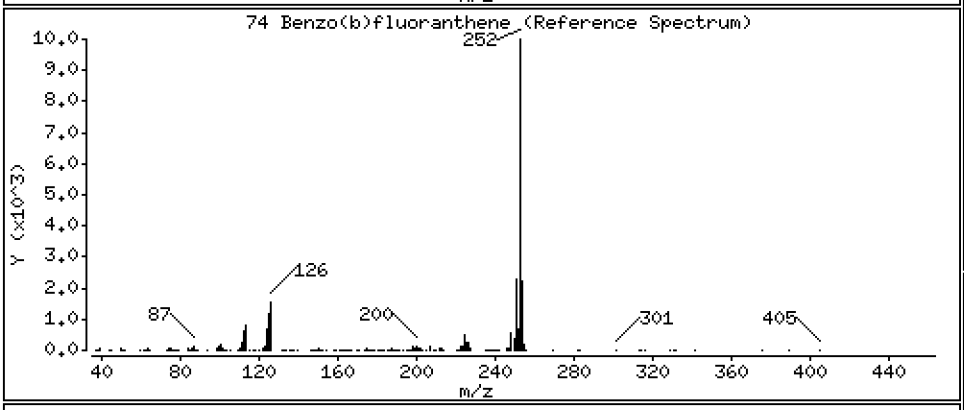
Column diameter: 0.25

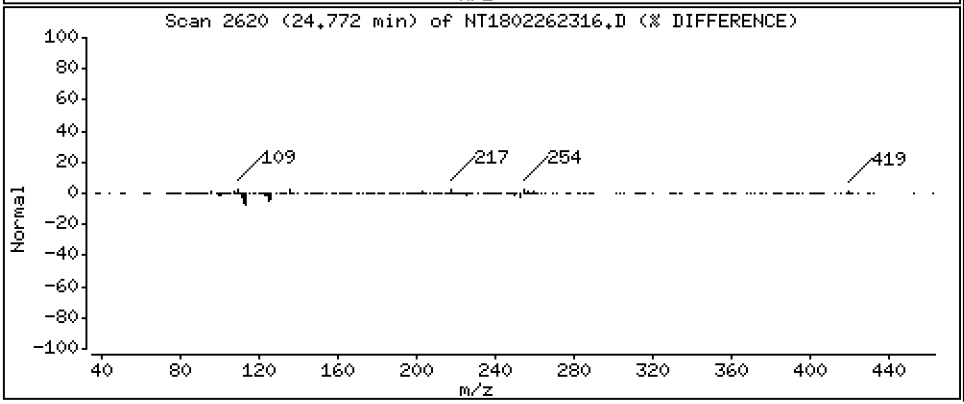
74 Benzo(b)fluoranthene

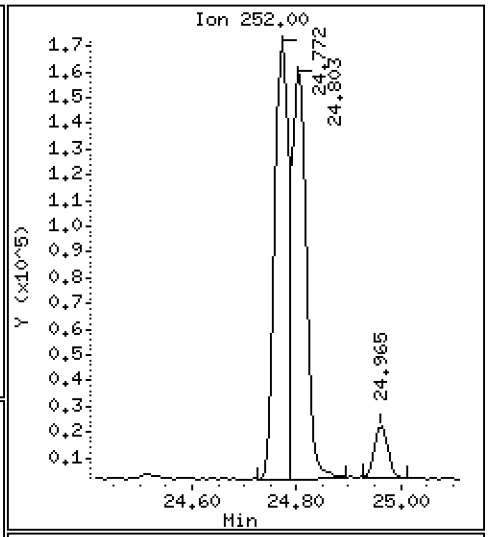
Concentration: 1.112 ug/mL

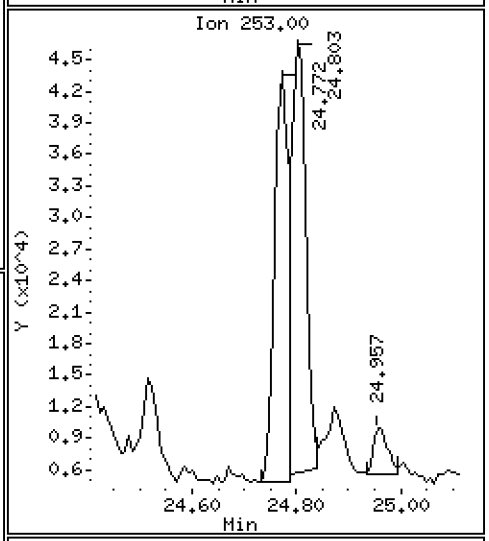


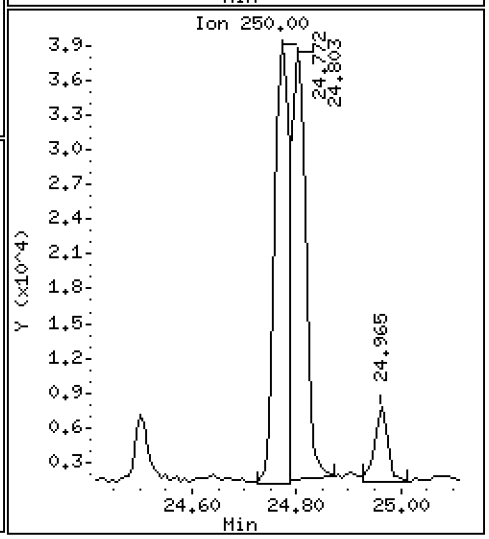












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

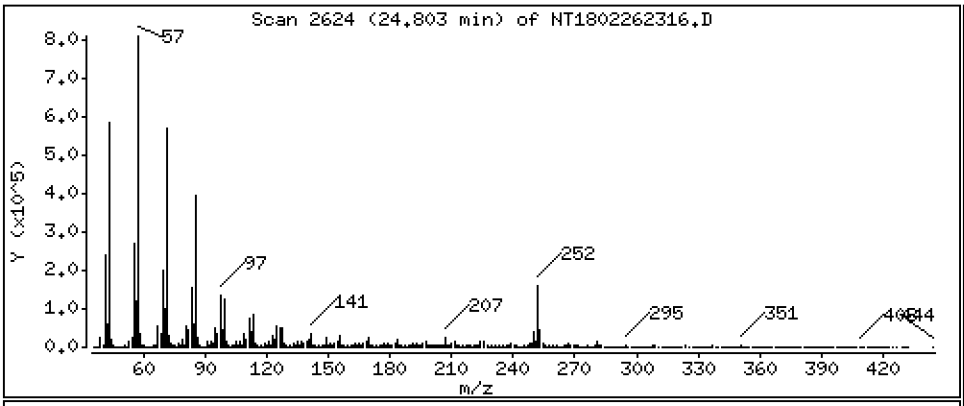
Operator: VTS

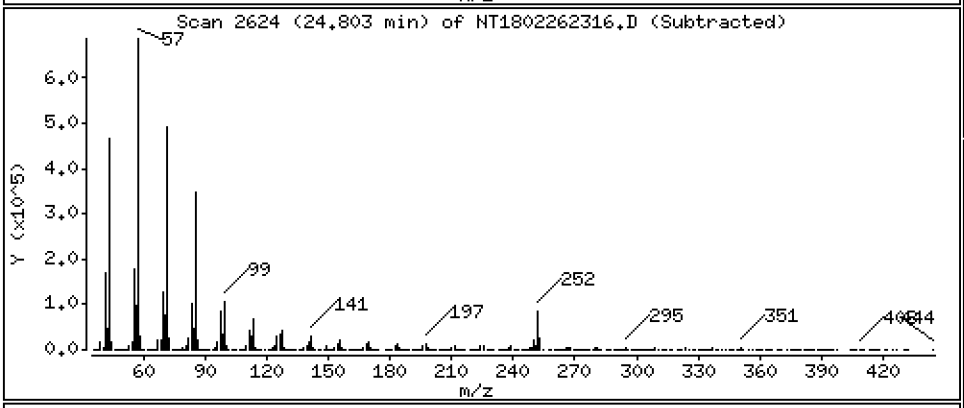
Column phase: ZB-5msi

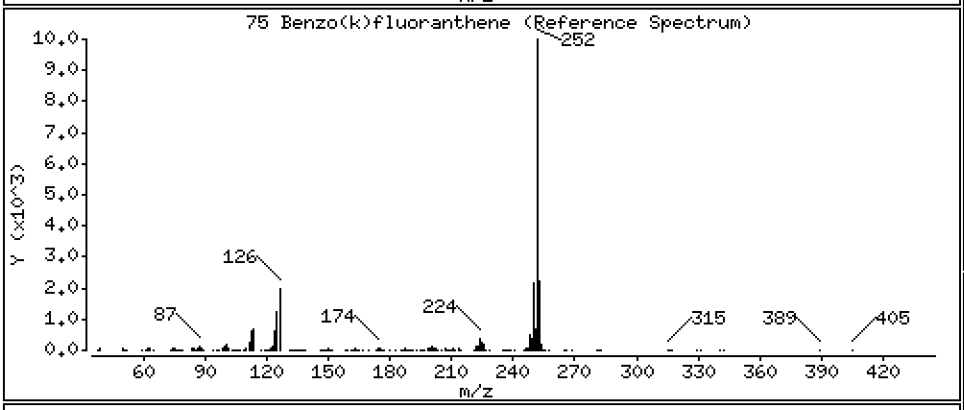
Column diameter: 0.25

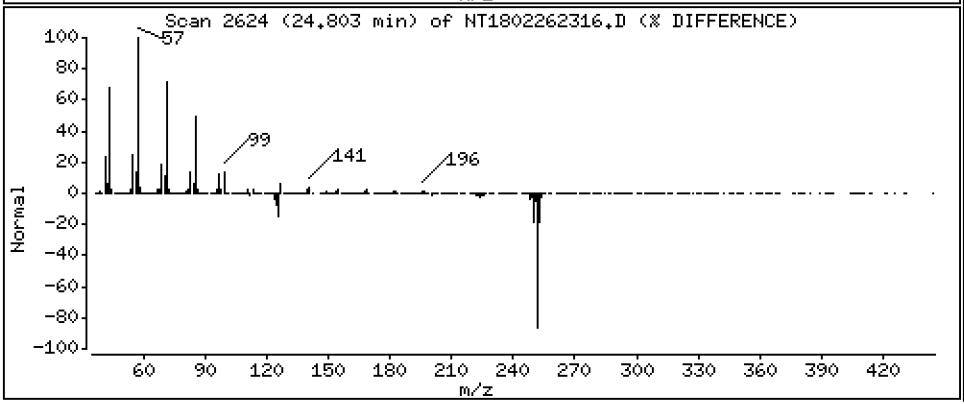
75 Benzo(k)fluoranthene

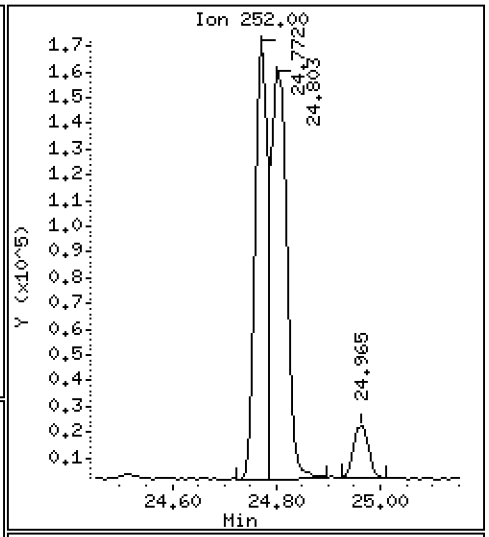
Concentration: 1.097 ug/mL

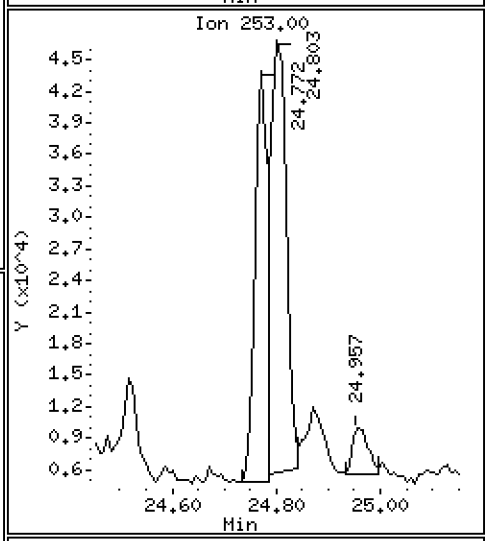


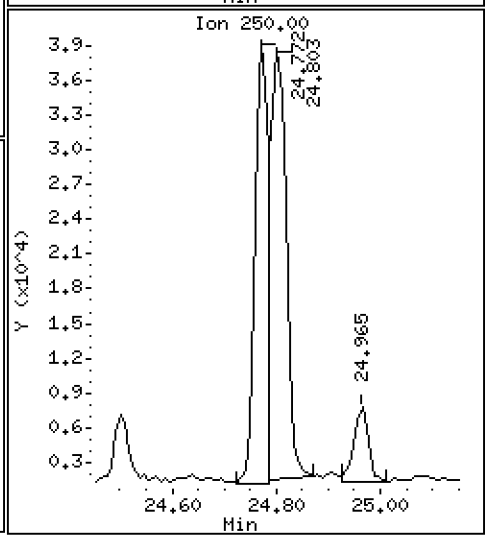












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

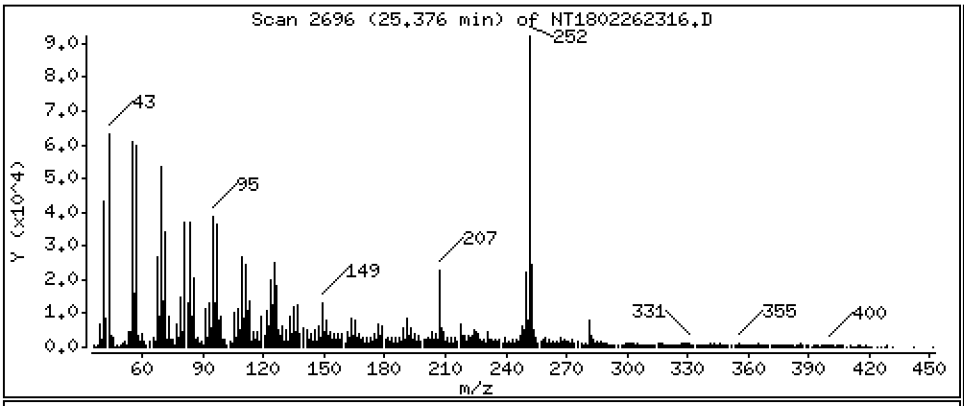
Operator: VTS

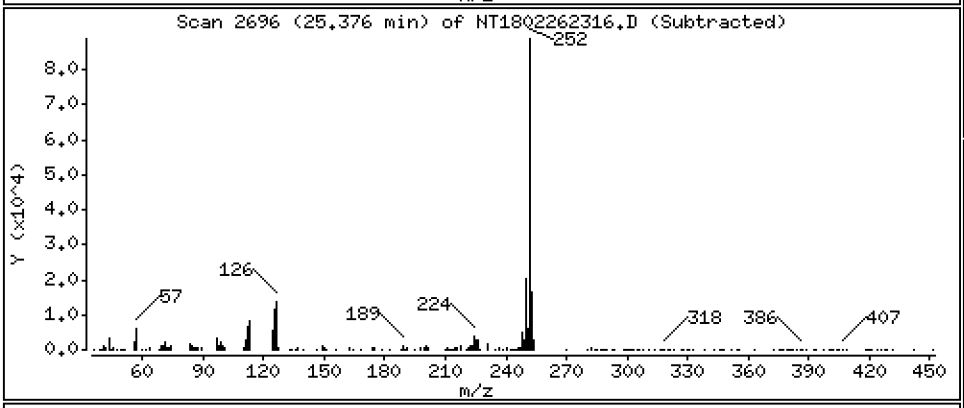
Column phase: ZB-5msi

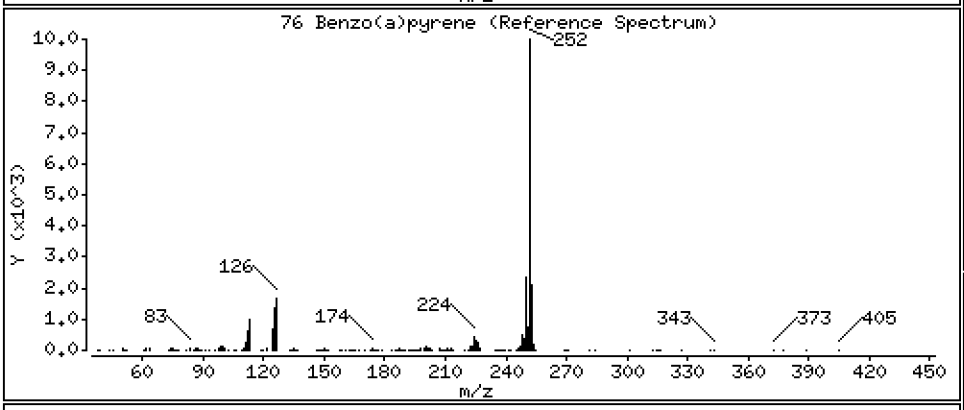
Column diameter: 0.25

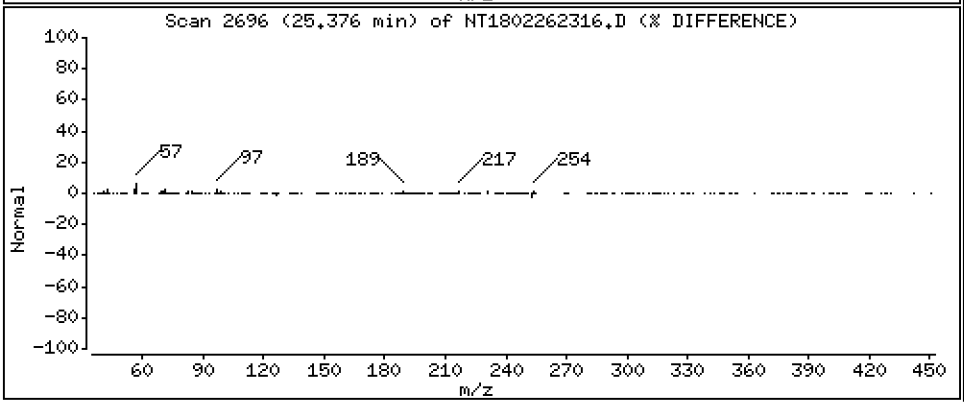
76 Benzo(a)pyrene

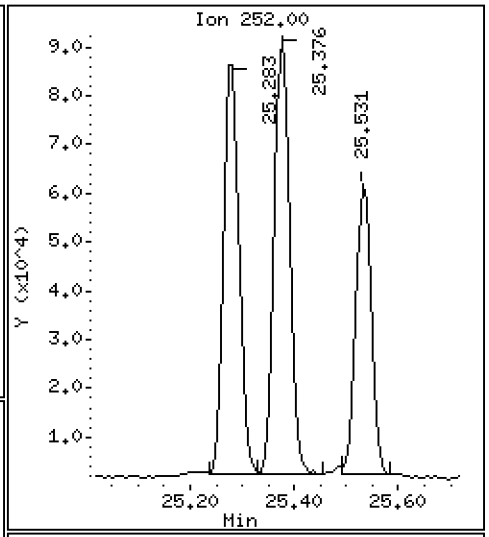
Concentration: 0.6884 ug/mL

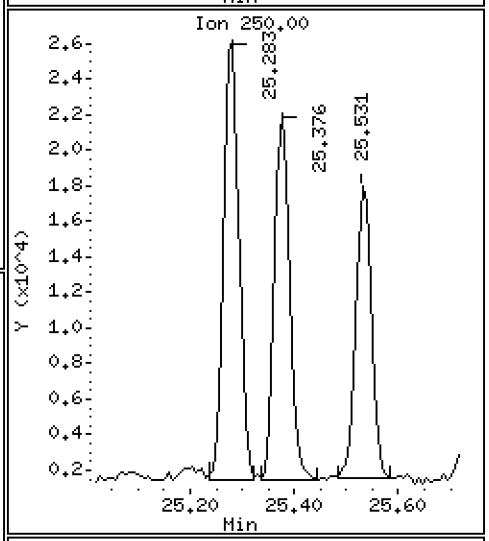


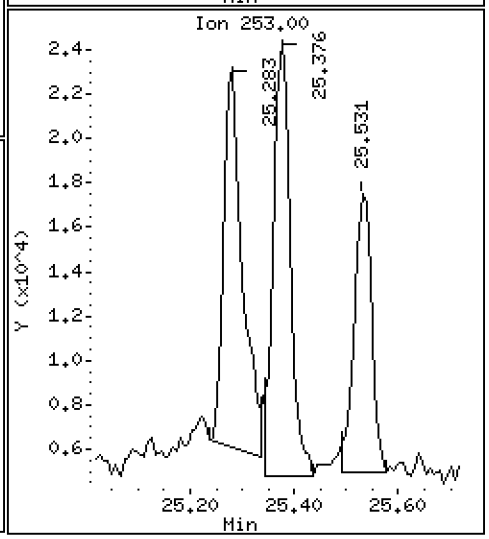












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

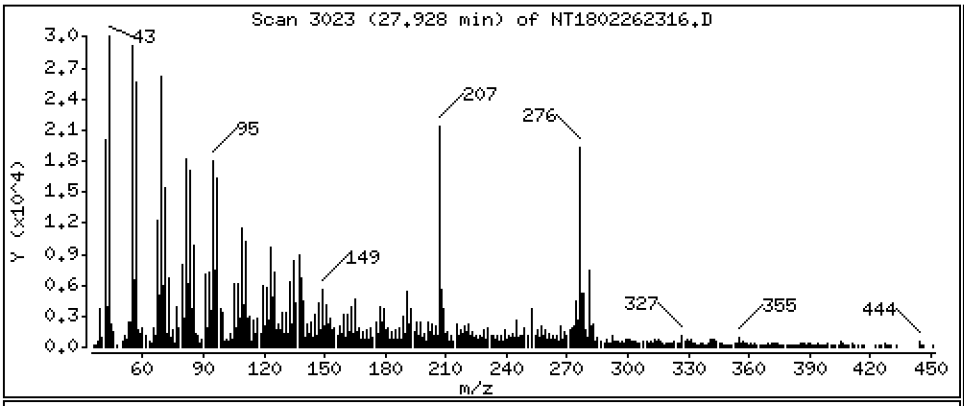
Operator: VTS

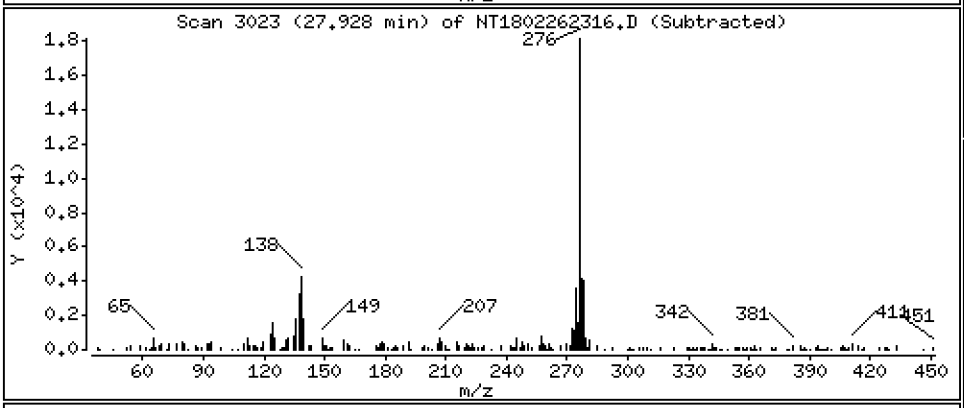
Column phase: ZB-5msi

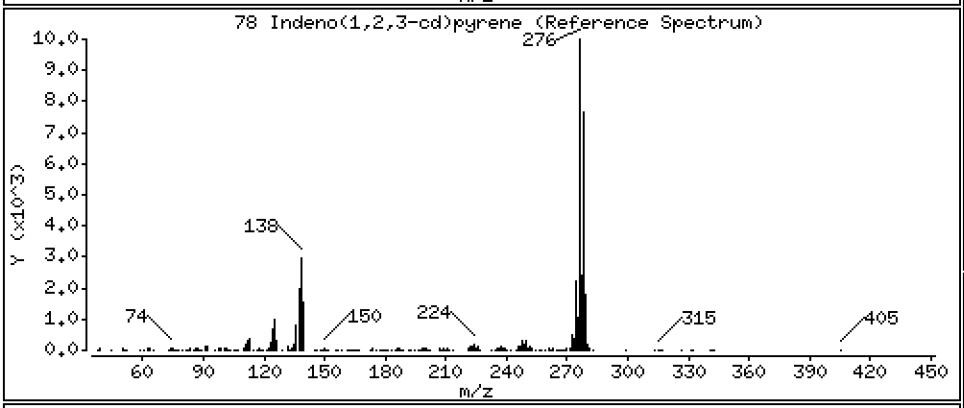
Column diameter: 0.25

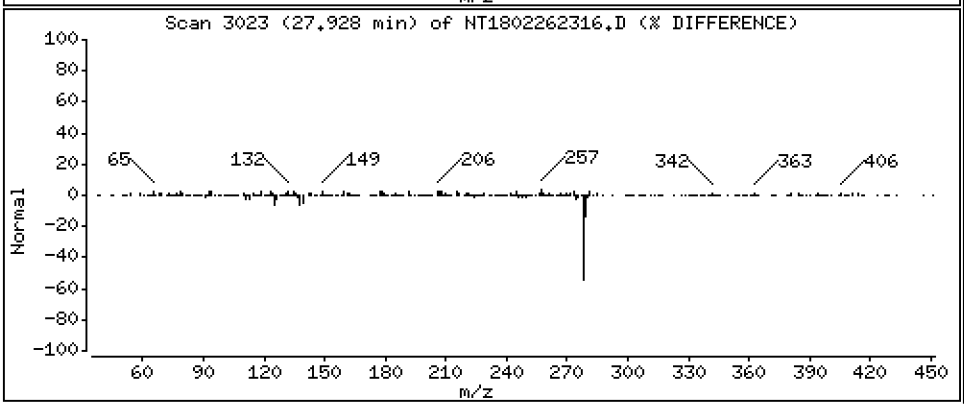
78 Indeno(1,2,3-cd)pyrene

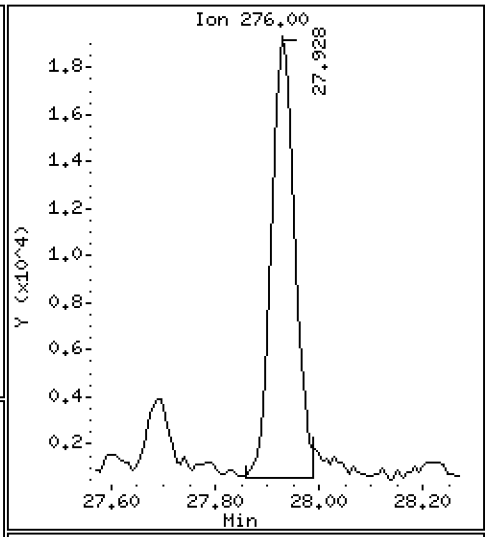
Concentration: 0.1770 ug/mL

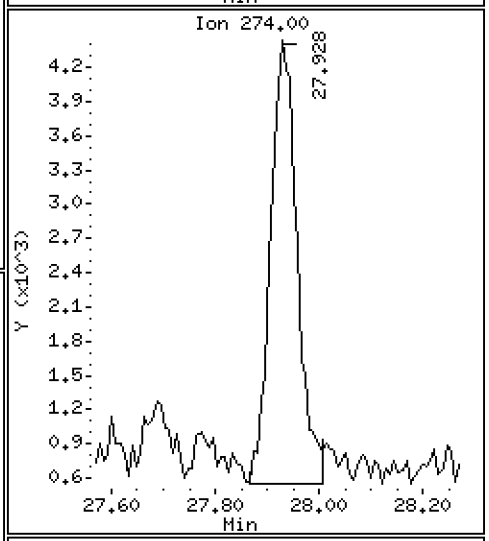


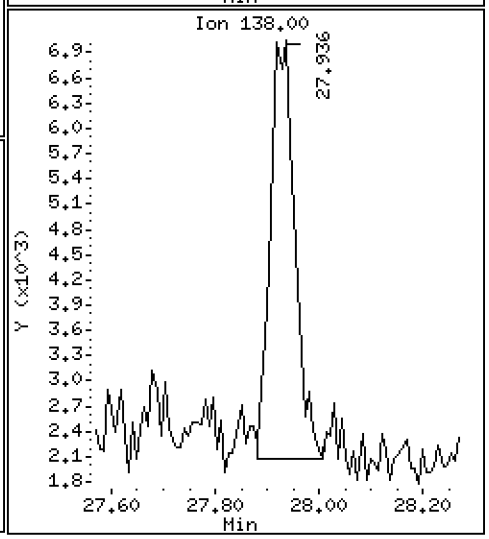












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

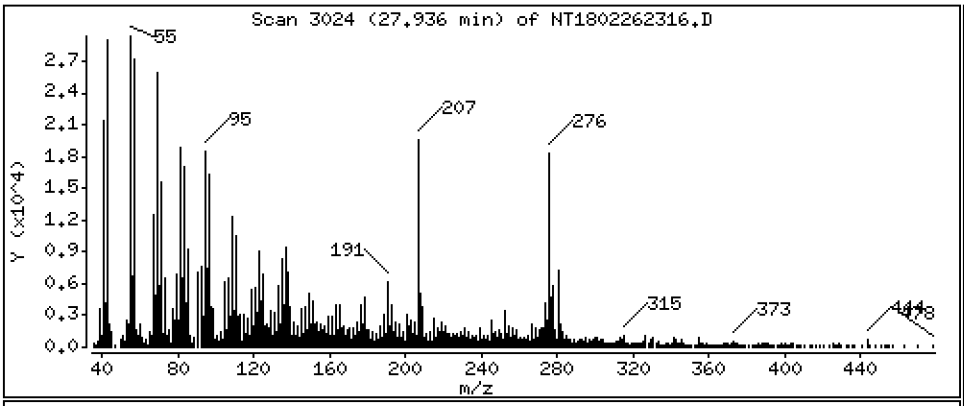
Operator: VTS

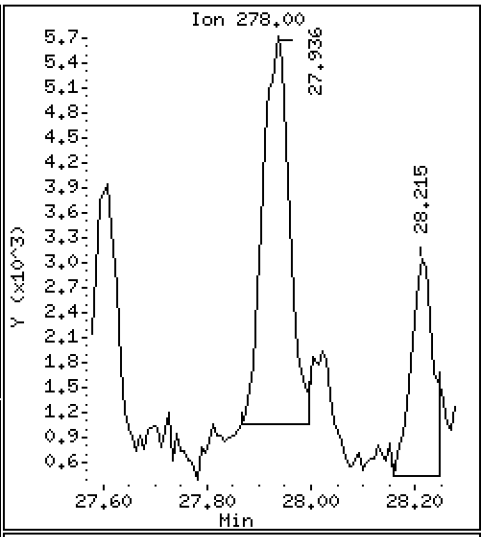
Column phase: ZB-5msi

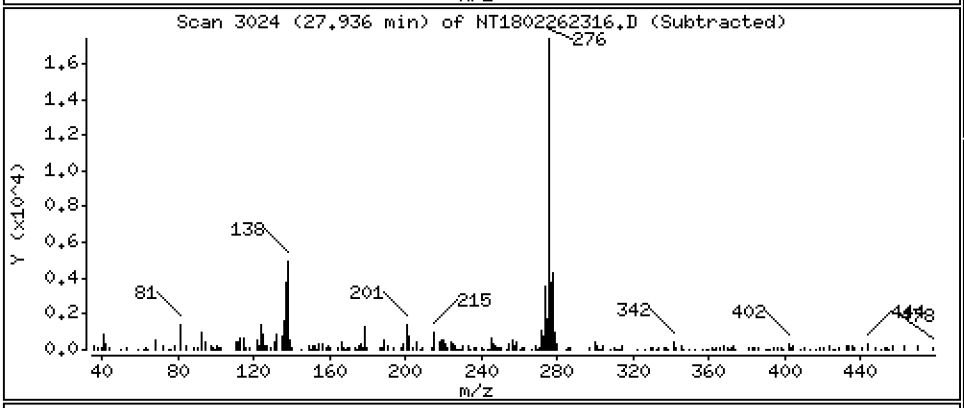
Column diameter: 0.25

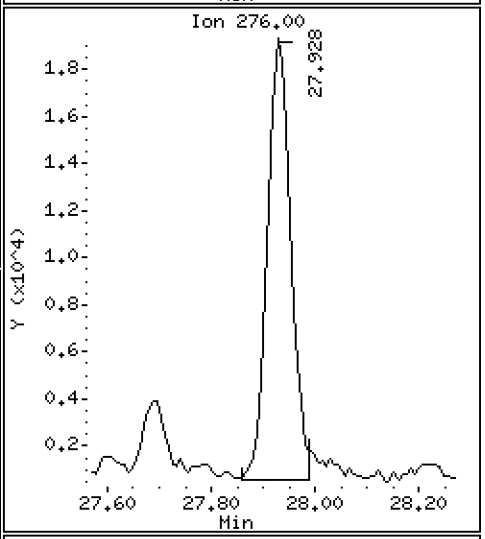
79 Dibenzo(a,h)anthracene

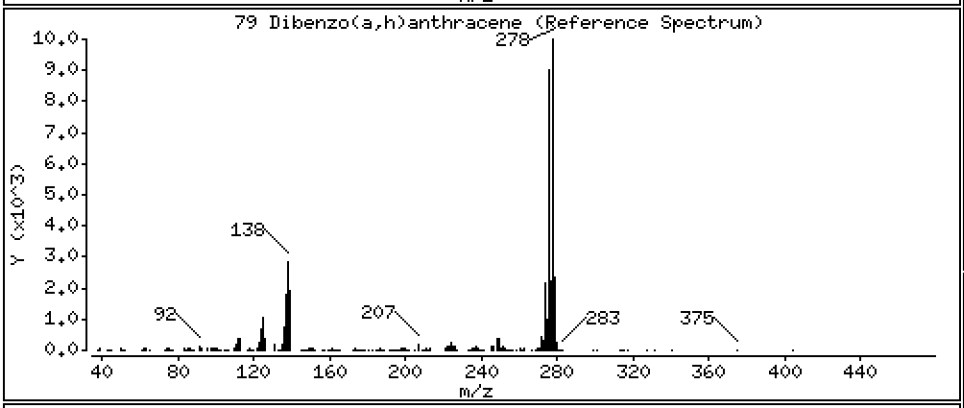
Concentration: 0.06056 ug/mL

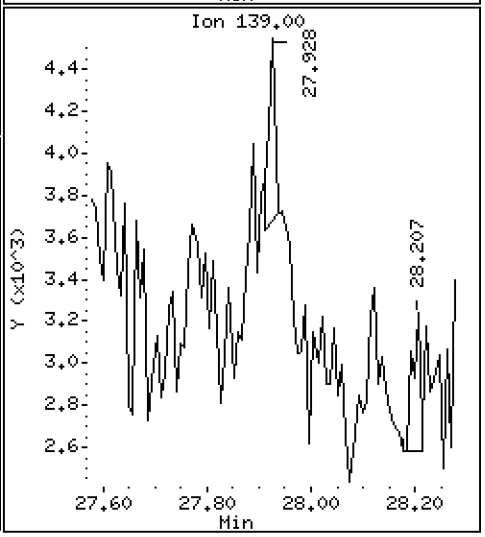


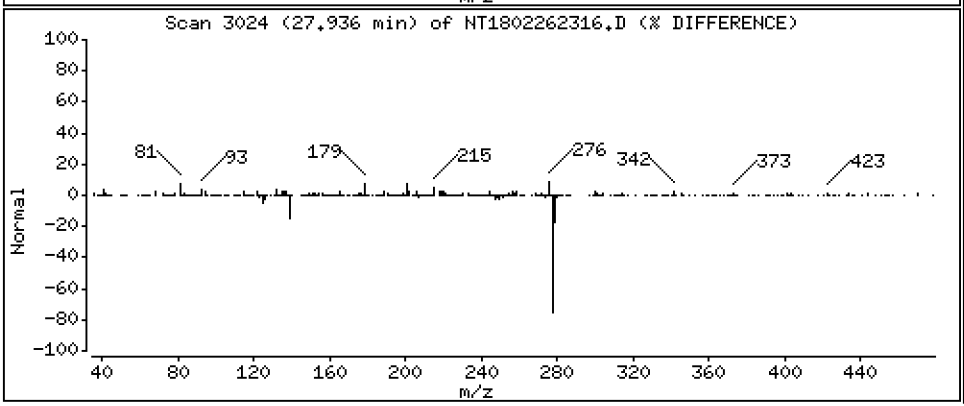












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

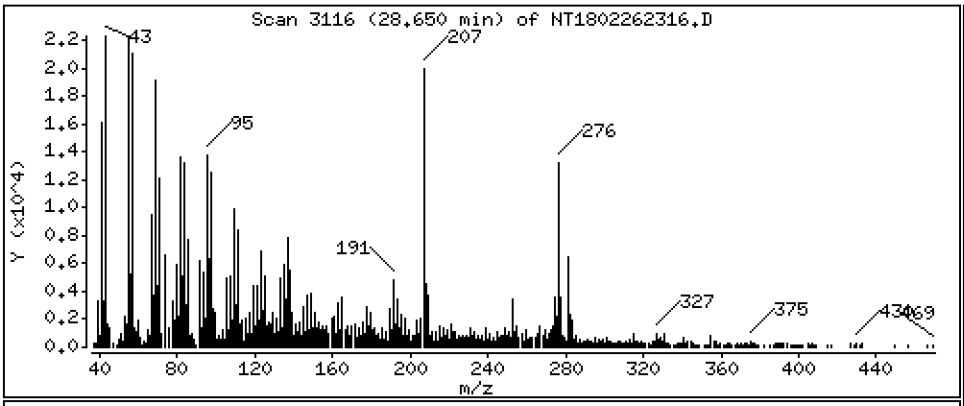
Operator: VTS

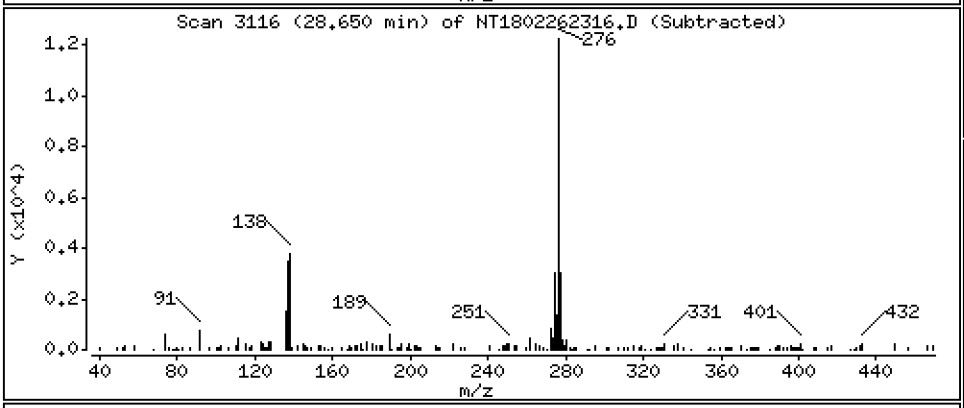
Column phase: ZB-5msi

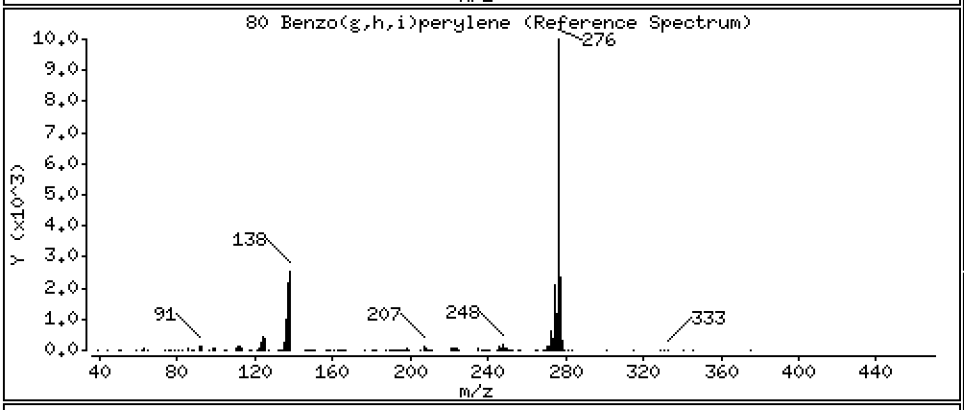
Column diameter: 0.25

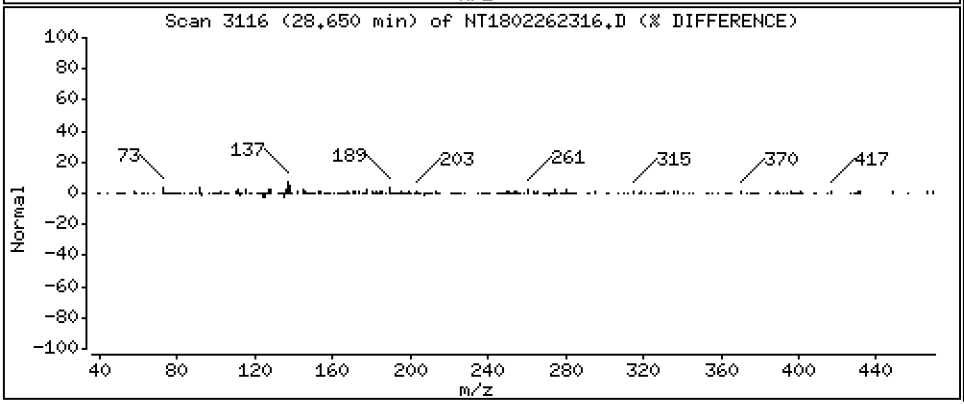
80 Benzo(g,h,i)perylene

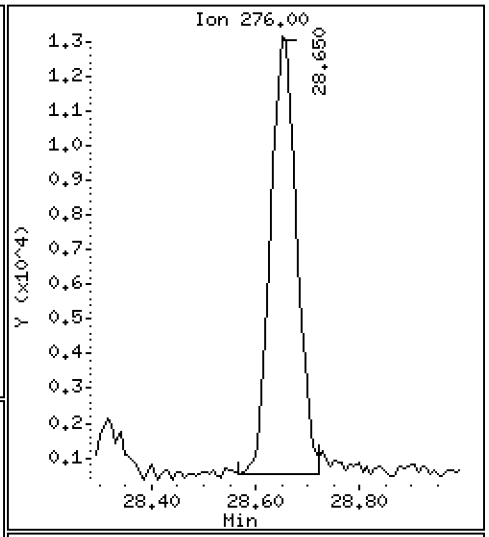
Concentration: 0.1701 ug/mL

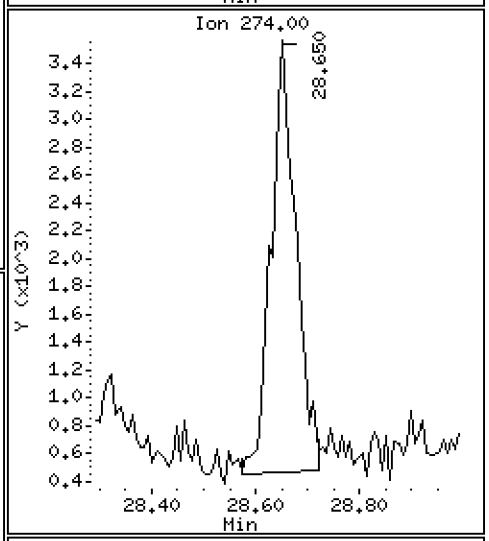


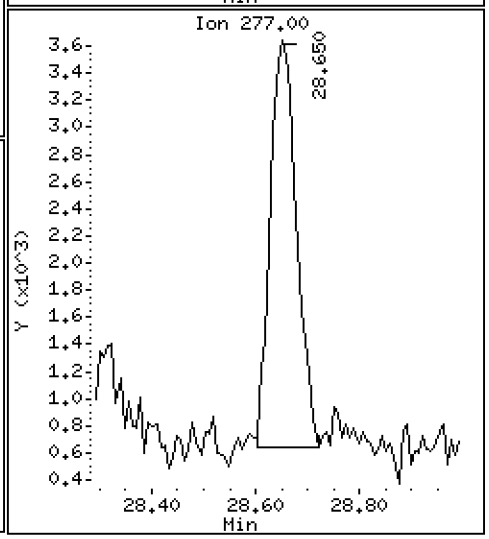












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

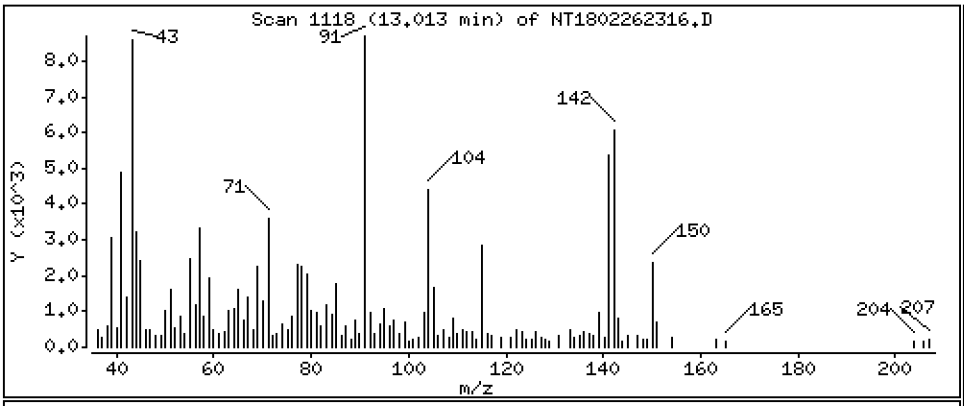
Operator: VTS

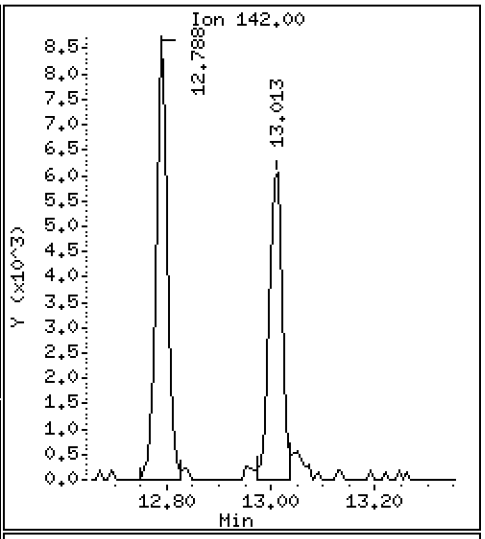
Column phase: ZB-5msi

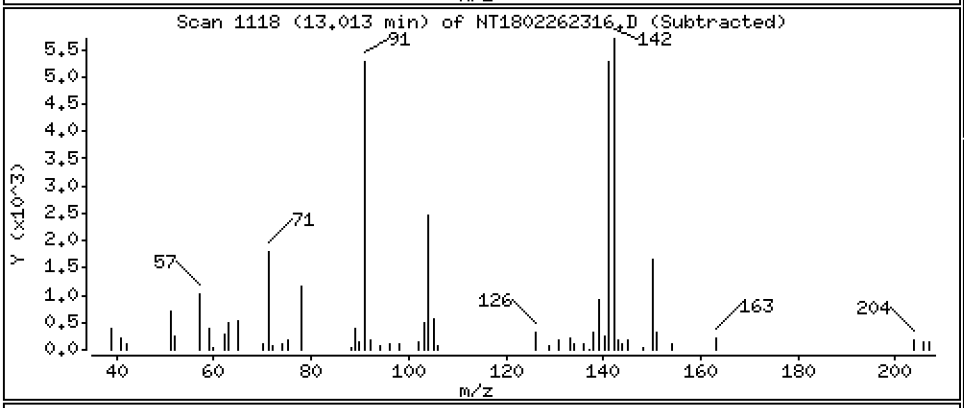
Column diameter: 0.25

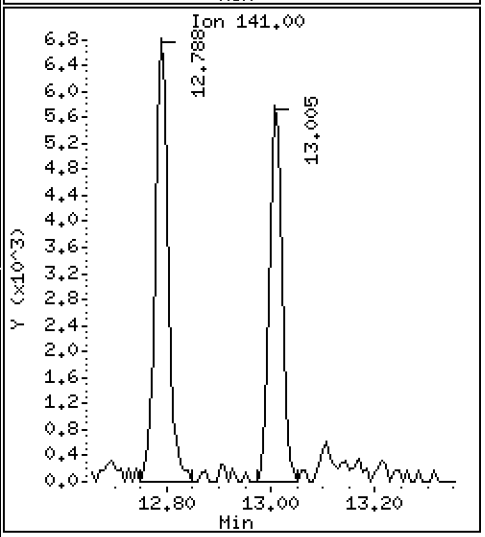
105 1-methylnaphthalene

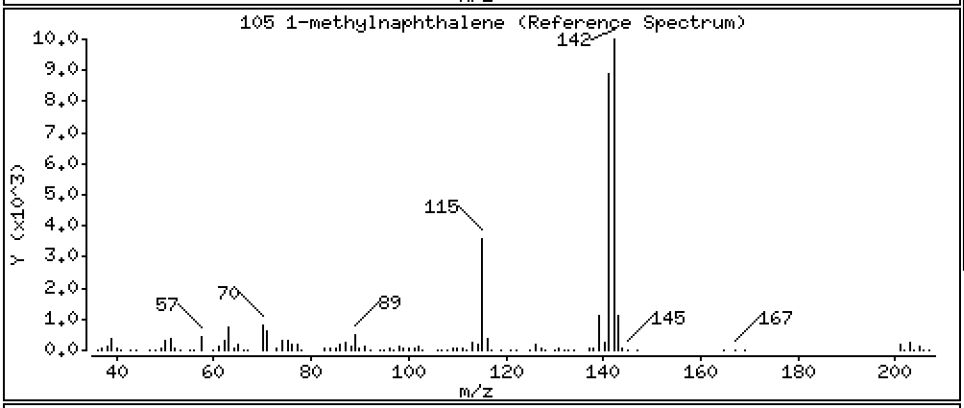
Concentration: 0.05636 ug/mL

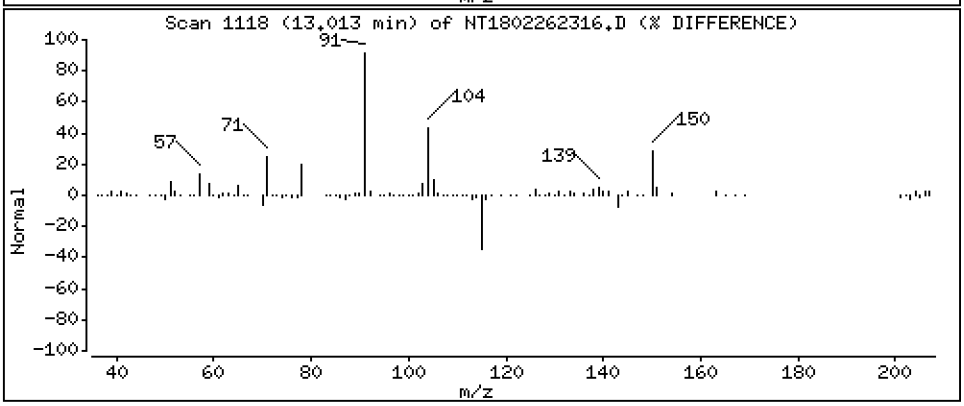












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

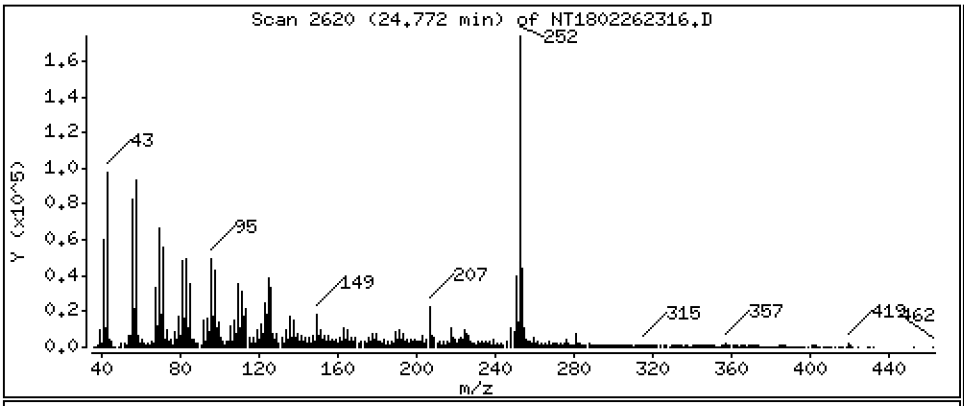
Operator: VTS

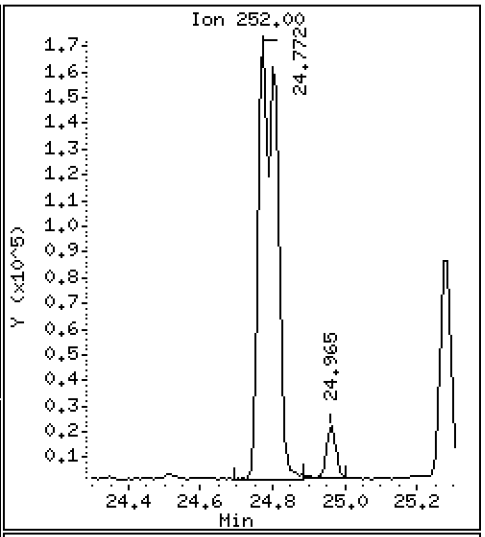
Column phase: ZB-5msi

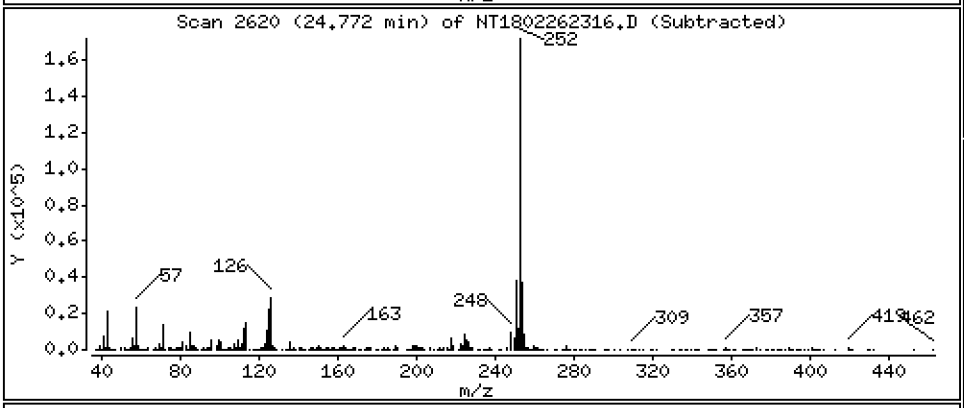
Column diameter: 0.25

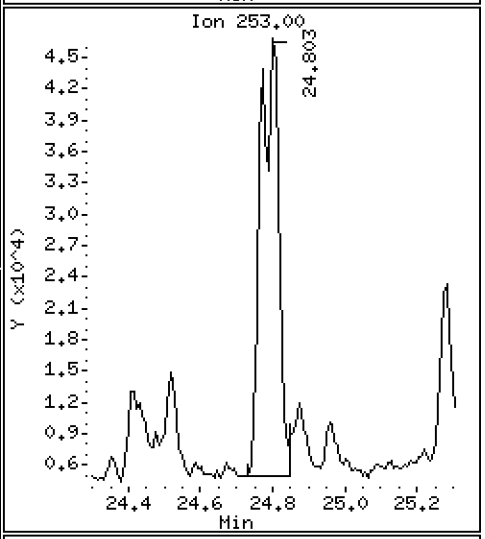
187 Total Benzofluoranthenes

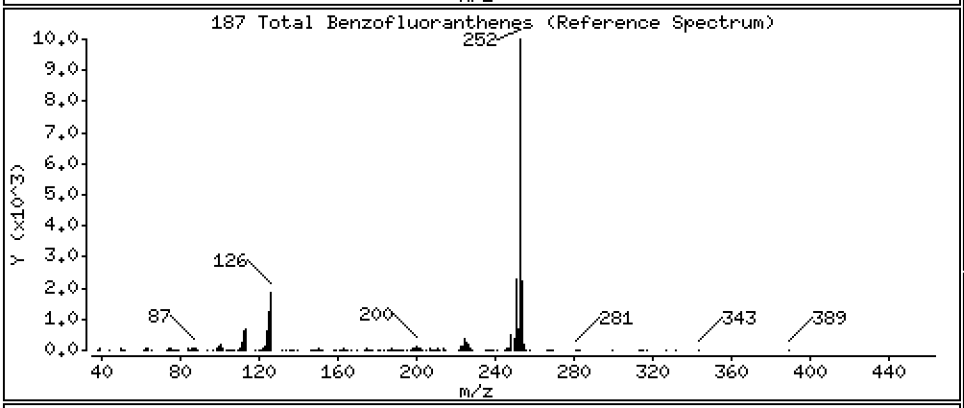
Concentration: 2.139 ug/mL

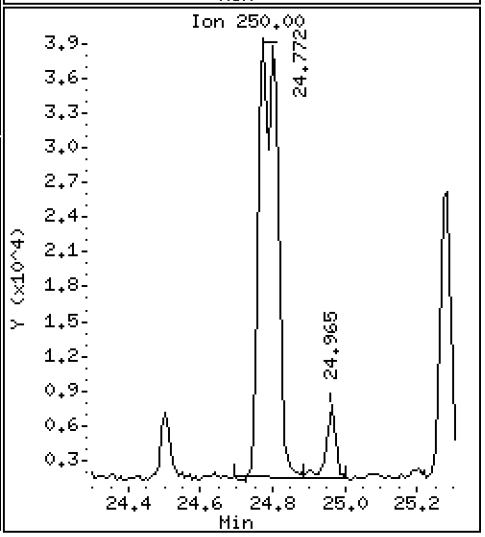


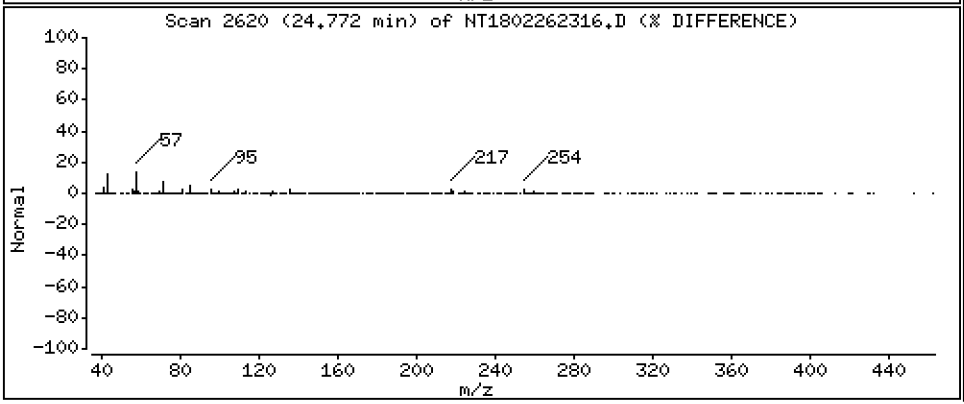












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262316.D
Lab Smp Id: 23A0134-07
Inj Date : 26-FEB-2023 21:53
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-07
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	6.766	6.743	(0.759)	471568	5.39433	5.394
$ 2	Phenol-d5	99	8.311	8.296	(0.932)	602287	5.33102	5.331
3	Phenol	94	8.335	8.319	(0.935)	382945	3.25777	3.258
$ 5	2-Chlorophenol-d4	132	8.566	8.559	(0.961)	525392	5.34414	5.344
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	8.914	8.915	(1.000)	256229	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	9.271	9.272	(1.040)	221462	3.17757	3.178
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	9.217	9.186	(1.034)	9000	0.16103	0.1610
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	9.691	9.683	(1.087)	5320	0.05614	0.05614
$ 18	Nitrobenzene-d5	82	9.993	9.993	(0.879)	366278	3.58974	3.590
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	10.888	10.990	(0.958)	36010	1.03113	1.031(M)
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.365	11.365	(1.000)	957414	4.00000	
28	Naphthalene	128	11.403	11.403	(1.003)	22507	0.07647	0.07647
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	12.788	12.788	(1.125)	13341	0.06671	0.06671
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.570	13.570	(0.908)	776590	3.56534	3.565
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	14.630	14.630	(0.979)	16985	0.05927	0.05927
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	14.947	14.947	(1.000)	516620	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	15.009	15.009	(1.004)	80869	0.44585	0.4459
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.334	15.334	(1.026)	82270	0.31337	0.3134
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	15.906	15.921	(1.064)	31478	0.16434	0.1643
	49	Fluorene	166	16.037	16.037	(1.073)	65439	0.31105	0.3110
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	186620	6.93708	6.937
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	17.952	17.952	(1.000)	991802	4.00000	
	60	Phenanthrene	178	17.999	17.999	(1.003)	290511	0.93124	0.9312
	61	Anthracene	178	18.092	18.092	(1.008)	83801	0.28189	0.2819
	62	Carbazole	167	18.424	18.424	(1.026)	25702	0.09435	0.09435
	63	Di-n-butylphthalate	149	19.237	19.237	(1.072)	11158	0.03700	0.03700
	64	Fluoranthene	202	20.382	20.382	(0.887)	625598	1.64102	1.641
	65	Pyrene	202	20.807	20.800	(0.905)	570164	1.40234	1.402
$	66	Terphenyl-d14	244	21.101	21.094	(0.918)	1277057	3.91611	3.916
	67	Butylbenzylphthalate	149	22.023	22.023	(0.958)	15171	0.09827	0.09827
	68	Benzo(a)anthracene	228	22.960	22.952	(0.999)	266571	0.67861	0.6786
*	69	Chrysene-d12	240	22.991	22.983	(1.000)	1088086	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	23.029	23.029	(1.002)	401129	0.98202	0.9820
	72	bis(2-Ethylhexyl)phthalate	149	23.052	23.053	(0.959)	208689	0.86154	0.8615
*	134	Di-n-octylphthalate-d4	153	24.028	24.020	(1.000)	1687180	4.00000	
	73	Di-n-octylphthalate	149	24.043	24.028	(1.001)	18573	0.03951	0.03951
	74	Benzo(b)fluoranthene	252	24.771	24.764	(0.972)	312204	1.11249	1.112
	75	Benzo(k)fluoranthene	252	24.802	24.802	(0.973)	348870	1.09691	1.097(H)
	76	Benzo(a)pyrene	252	25.375	25.368	(0.996)	179101	0.68843	0.6884
*	77	Perylene-d12	264	25.484	25.476	(1.000)	860190	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	27.927	27.920	(1.096)	57792	0.17695	0.1770
	79	Dibenzo(a,h)anthracene	278	27.935	27.927	(1.096)	16494	0.06056	0.06056
	80	Benzo(g,h,i)perylene	276	28.650	28.642	(1.124)	44529	0.17007	0.1701
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	13.012	13.005	(1.145)	10204	0.05636	0.05636
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.771	24.802	(0.972)	606949	2.13913	2.139
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262316.D
Lab Smp Id: 23A0134-07
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	256229	4.96
27 Naphthalene-d8	943164	471582	1886328	957414	1.51
42 Acenaphthene-d10	501893	250947	1003786	516620	2.93
59 Phenanthrene-d10	896502	448251	1793004	991802	10.63
69 Chrysene-d12	842481	421241	1684962	1088086	29.15
134 Di-n-octylphthala	1278043	639022	2556086	1687180	32.01
77 Perylene-d12	915681	457841	1831362	860190	-6.06

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.91	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	-0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.00
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
134 Di-n-octylphthala	24.02	23.52	24.52	24.03	0.03
77 Perylene-d12	25.48	24.98	25.98	25.48	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262316.D

Lab ID: 23A0134-07
nt18.i, ABN.m, 26-FEB-2023 21:53

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.958	0.967	-0.0090	Benzoic acid

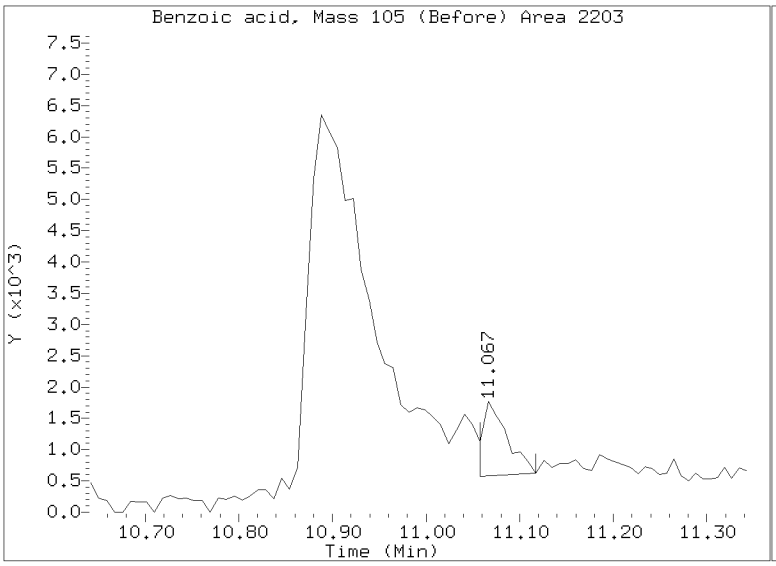
RRT check based on Ccal File: NT1802262302.D

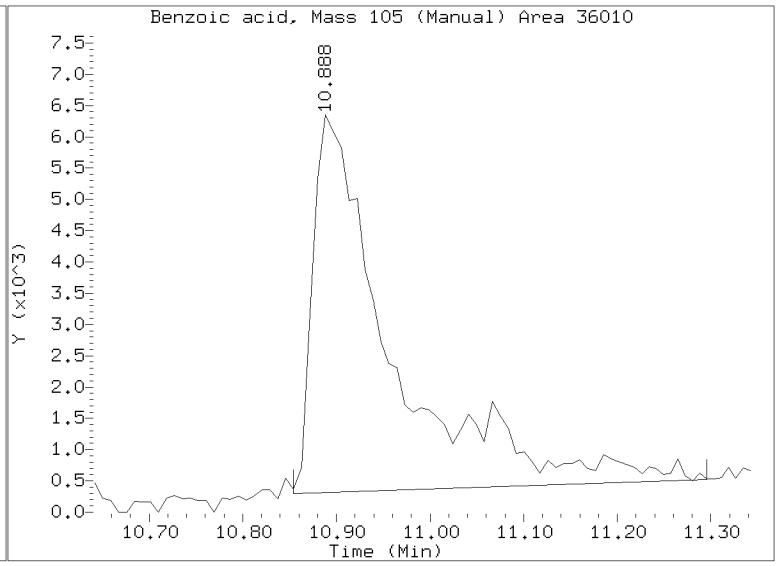
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/NT1802262316.D
Injection Date: 26-FEB-2023 21:53
Lab ID:23A0134-07 Client ID:
Report Date: 03/10/2023 07:47





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1131

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-08 C	SDG:	23A0134
Sampled:	01/06/23 12:43	Prepared:	01/19/23 13:35	File ID:	NT1802262317.D
% Solids:	54.73	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 22:33
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	18.68 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	400		4.3	19.6
106-44-5	4-Methylphenol	1	9.7	J	7.2	19.6
91-20-3	Naphthalene	1	9.0	J	4.1	19.6
91-57-6	2-Methylnaphthalene	1	7.3	J	4.4	19.6
208-96-8	Acenaphthylene	1	19.6	U	6.1	19.6
131-11-3	Dimethylphthalate	1	19.6	U	4.3	19.6
83-32-9	Acenaphthene	1	7.4	J	5.1	19.6
132-64-9	Dibenzofuran	1	19.6	U	13.8	19.6
86-73-7	Fluorene	1	19.6	U	14.3	19.6
85-01-8	Phenanthrene	1	62.0		8.5	19.6
120-12-7	Anthracene	1	22.9		7.0	19.6
206-44-0	Fluoranthene	1	159		6.0	19.6
129-00-0	Pyrene	1	159		5.6	19.6
85-68-7	Butylbenzylphthalate	1	57.6		9.2	19.6
56-55-3	Benzo(a)anthracene	1	77.9		5.8	19.6
218-01-9	Chrysene	1	104		5.9	19.6
117-81-7	bis(2-Ethylhexyl)phthalate	1	81.7		5.3	48.9
	Benzofluoranthenes, Total	1	247		9.8	39.1
50-32-8	Benzo(a)pyrene	1	84.7		4.1	19.6
193-39-5	Indeno(1,2,3-cd)pyrene	1	20.5		14.3	19.6
53-70-3	Dibenzo(a,h)anthracene	1	19.6	U	16.9	19.6
191-24-2	Benzo(g,h,i)perylene	1	19.3	J	13.3	19.6

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	733.60	515	70.1	27 - 120	
Phenol-d5	733.60	516	70.3	29 - 120	
2-Chlorophenol-d4	733.60	519	70.7	31 - 120	
1,2-Dichlorobenzene-d4	489.07	301	61.6	32 - 120	
Nitrobenzene-d5	489.07	343	70.1	30 - 120	
2-Fluorobiphenyl	489.07	336	68.6	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1131

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

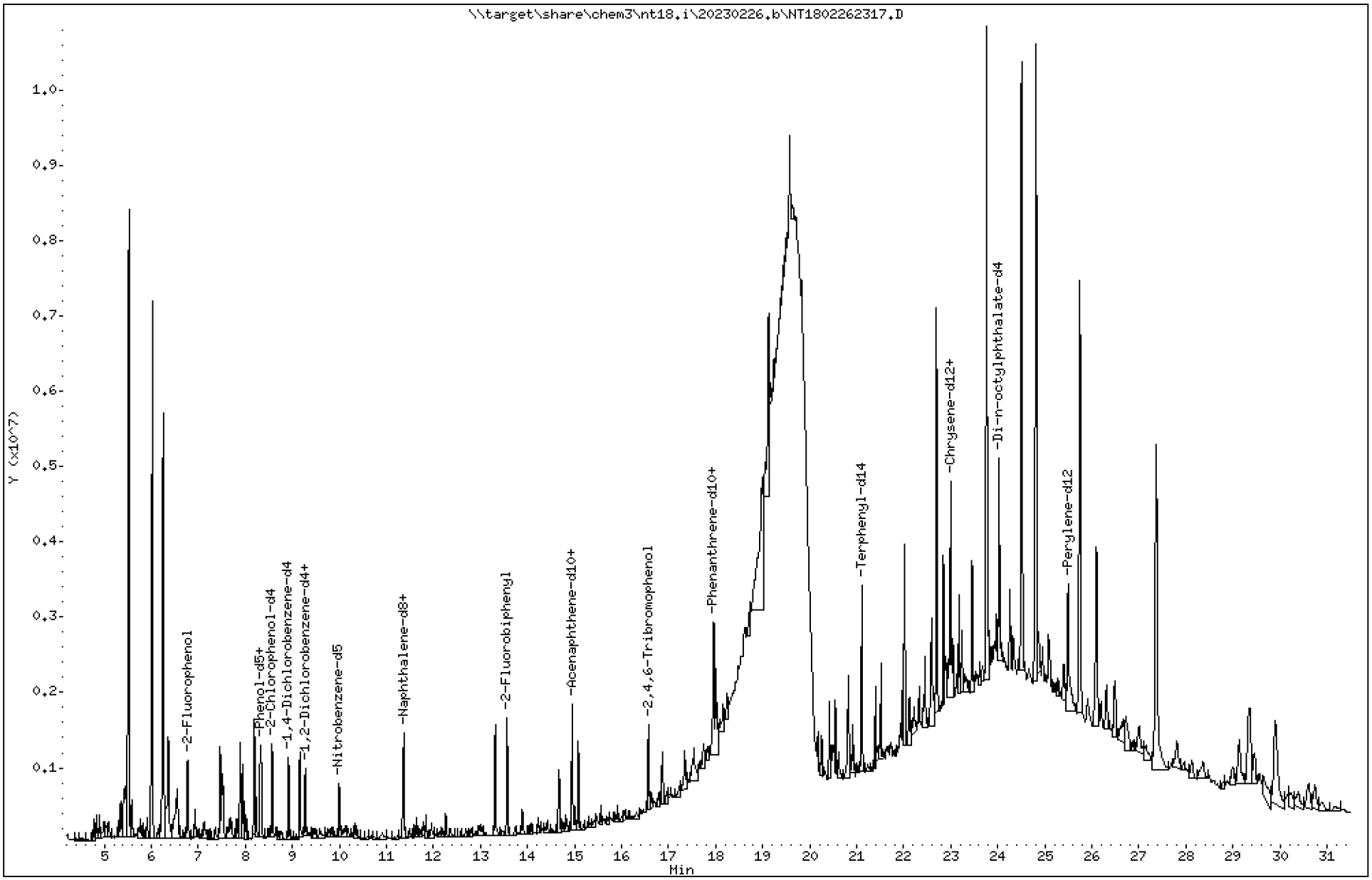
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-08 C	SDG:	23A0134
Sampled:	01/06/23 12:43	Prepared:	01/19/23 13:35	File ID:	NT1802262317.D
% Solids:	54.73	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 22:33
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	18.68 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	733.60	686	93.6	24 - 134	
p-Terphenyl-d14	489.07	375	76.7	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D
Date : 26-FEB-2023 22:33
Client ID:
Sample Info: 23A0134-08

Instrument: nt18.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

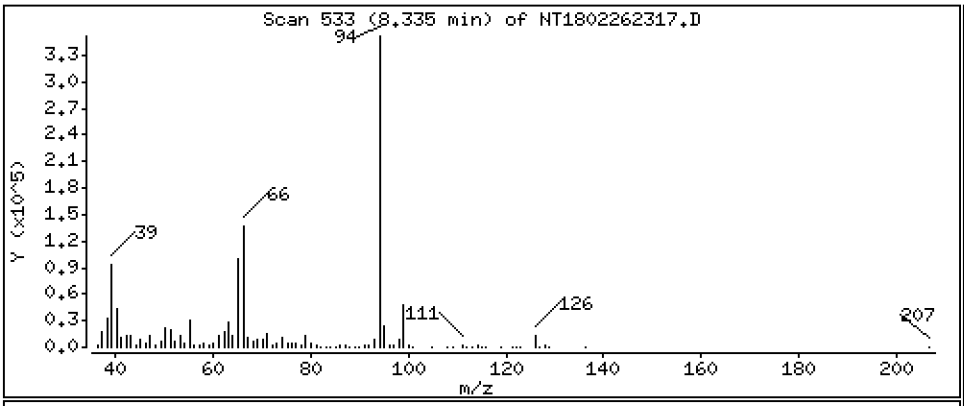
Operator: VTS

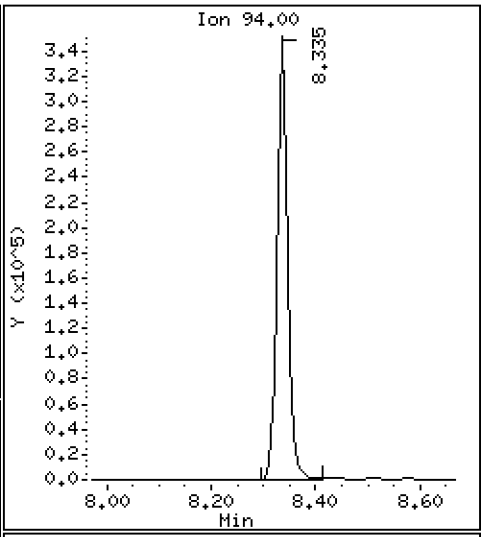
Column phase: ZB-5msi

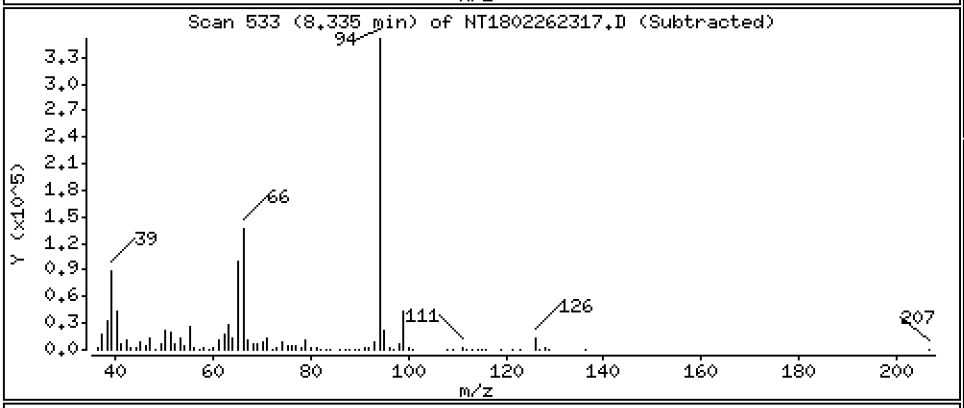
Column diameter: 0.25

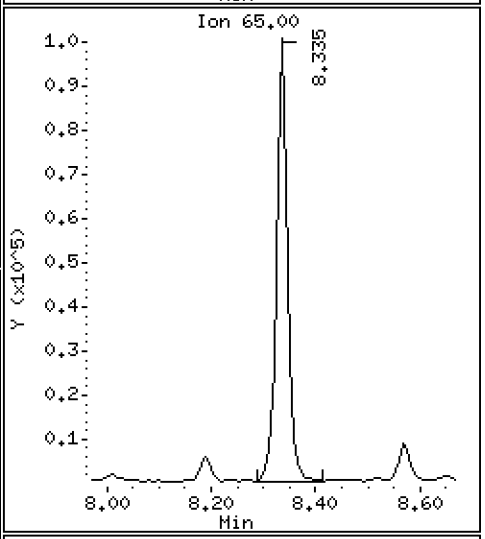
3 Phenol

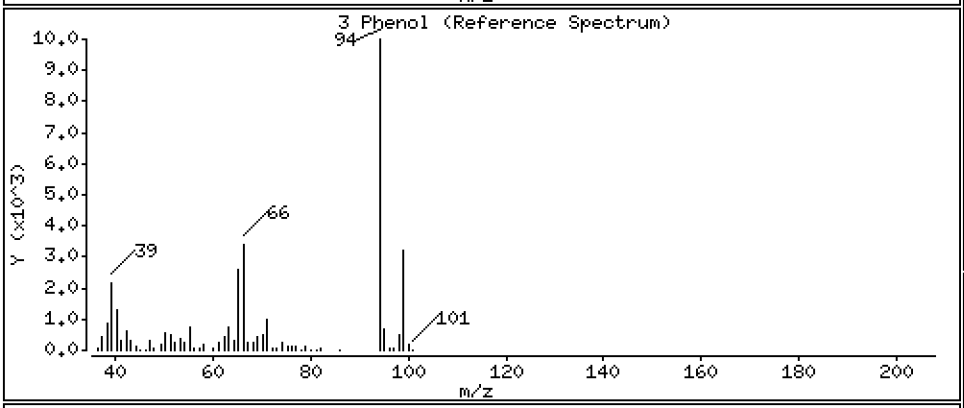
Concentration: 4.092 ug/mL

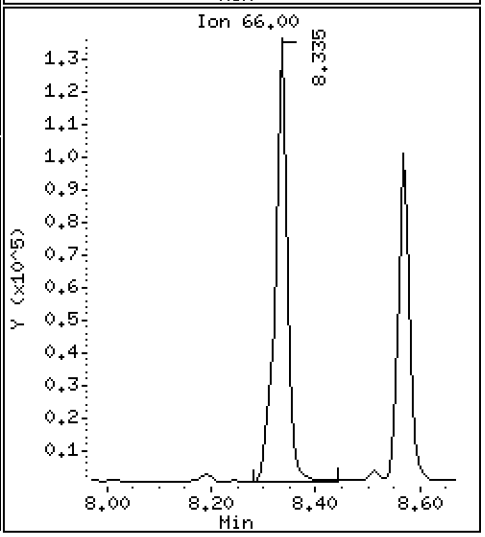


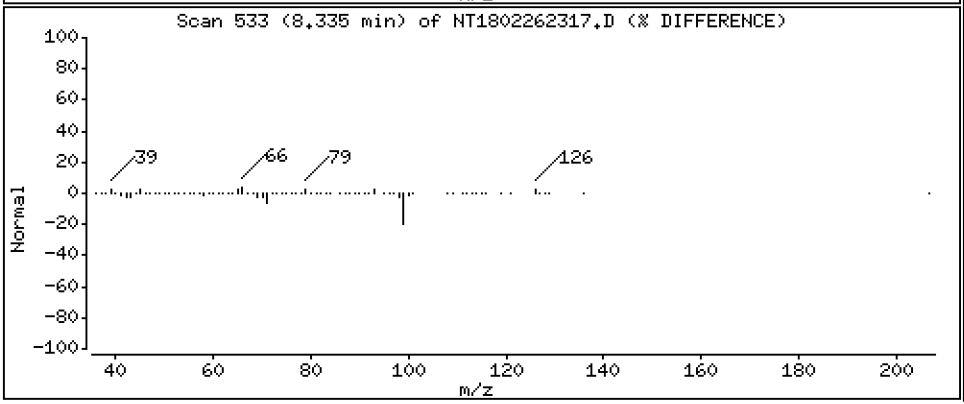












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

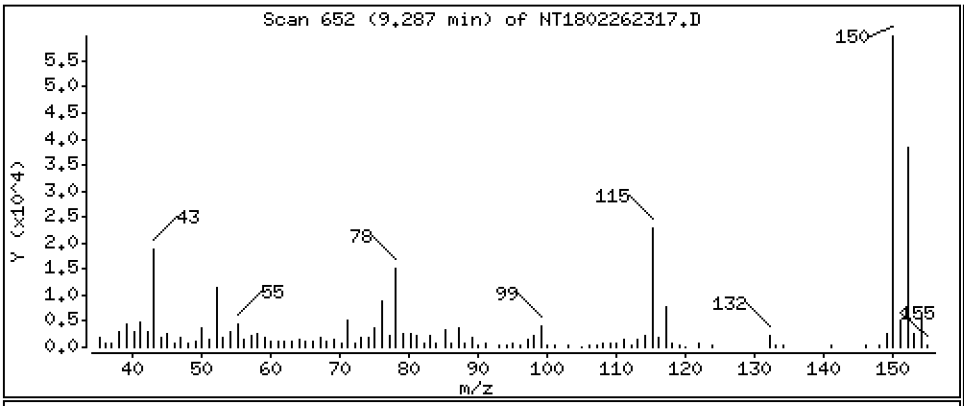
Operator: VTS

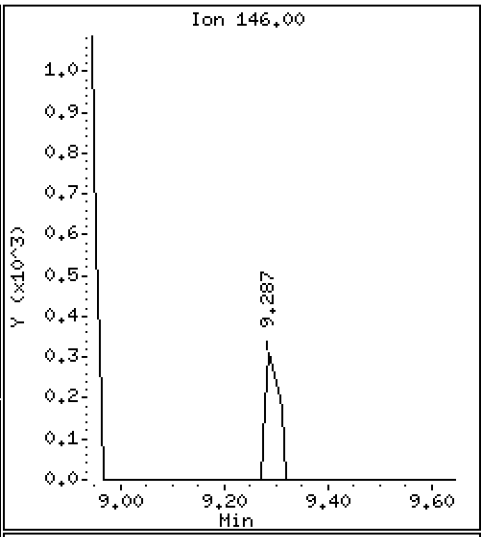
Column phase: ZB-5msi

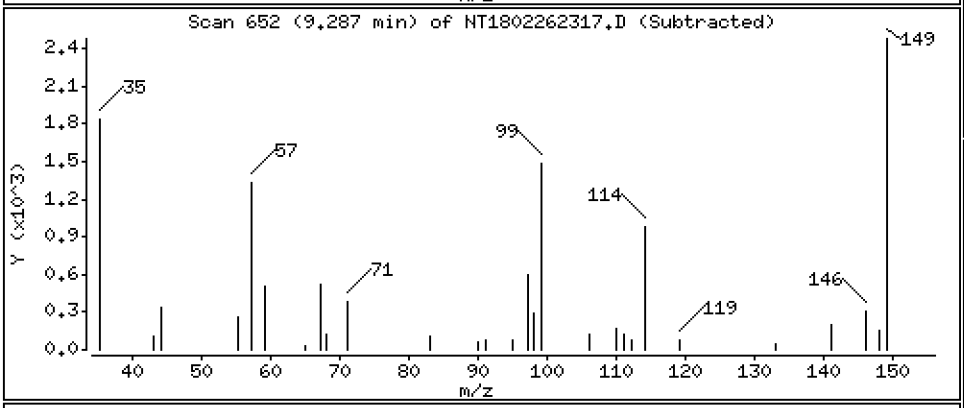
Column diameter: 0.25

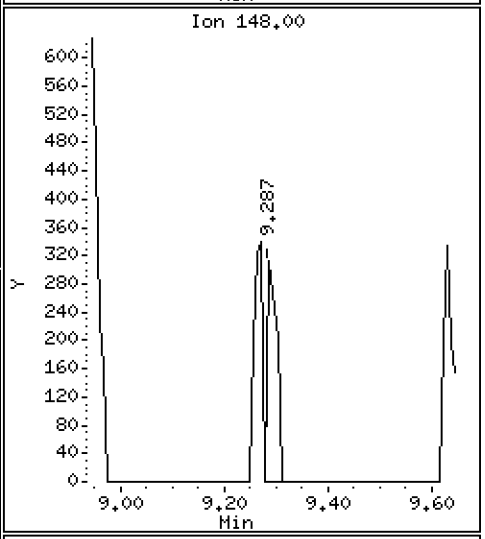
12 1,2-Dichlorobenzene

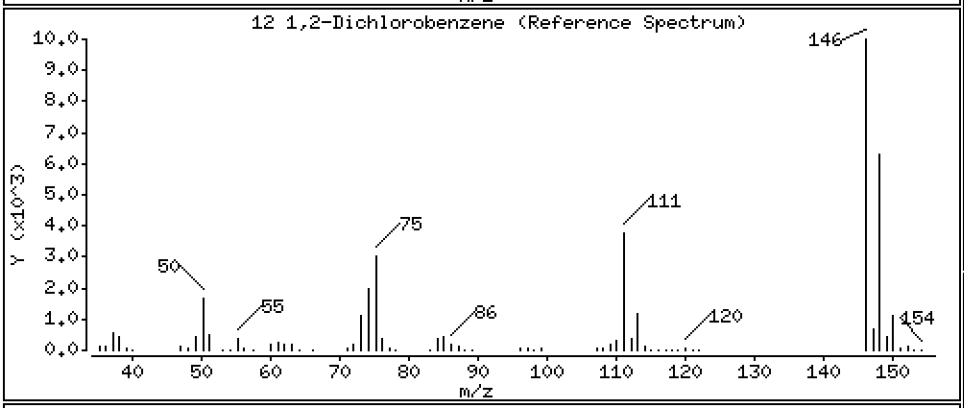
Concentration: 0.004928 ug/mL

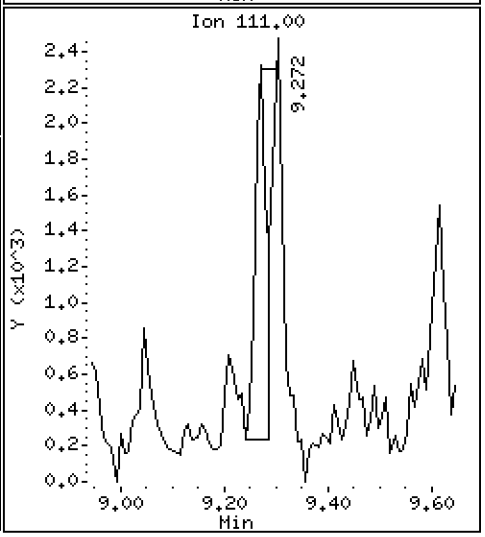


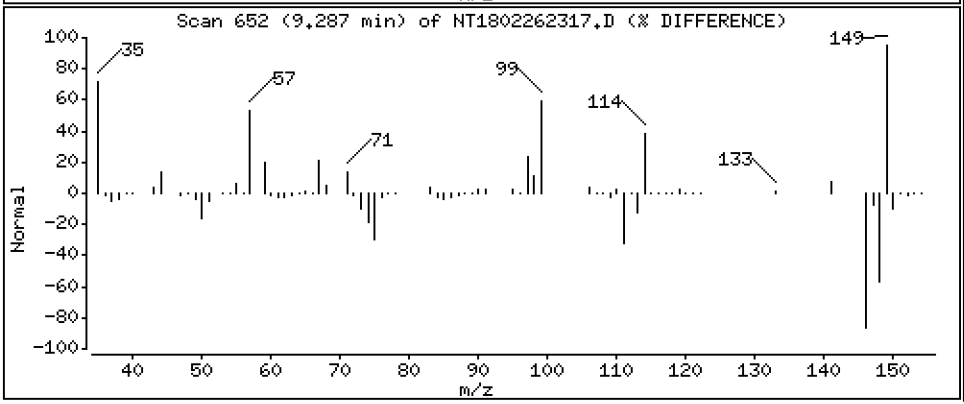












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

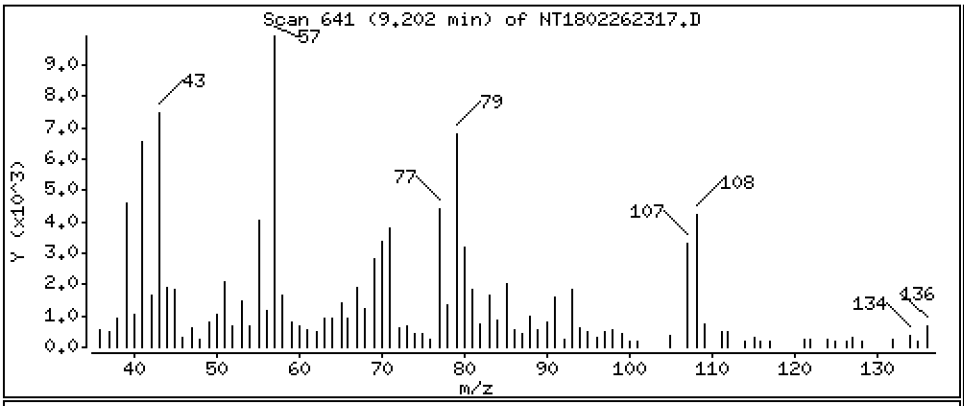
Operator: VTS

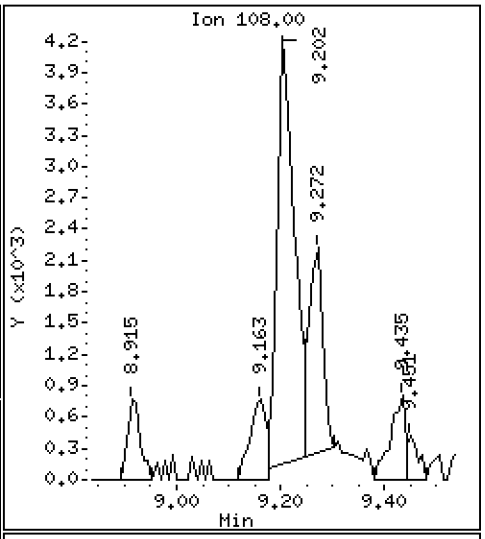
Column phase: ZB-5msi

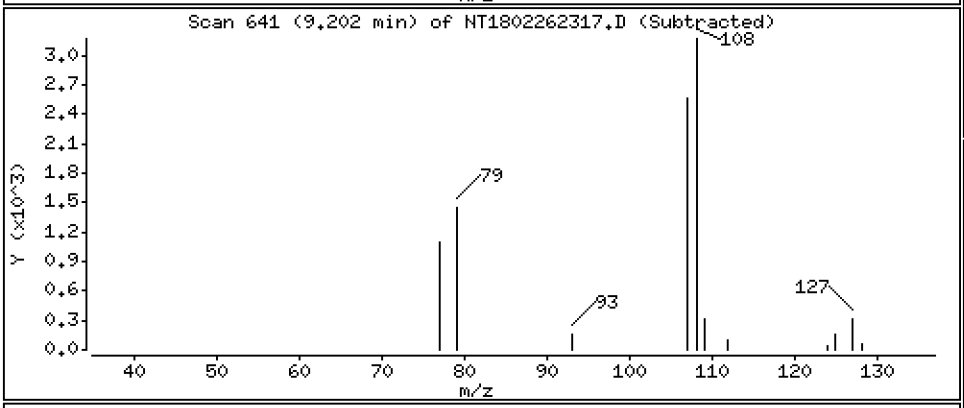
Column diameter: 0.25

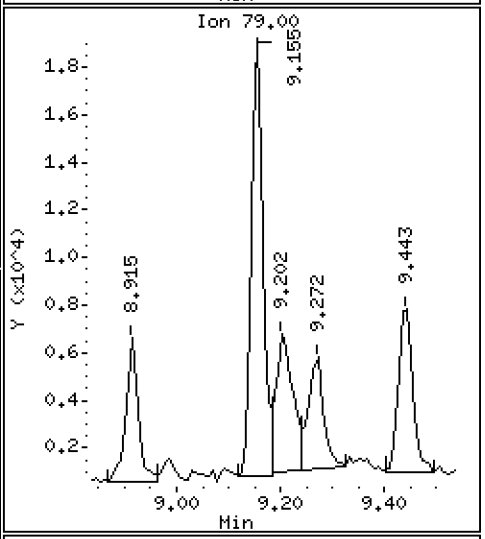
11 Benzyl alcohol

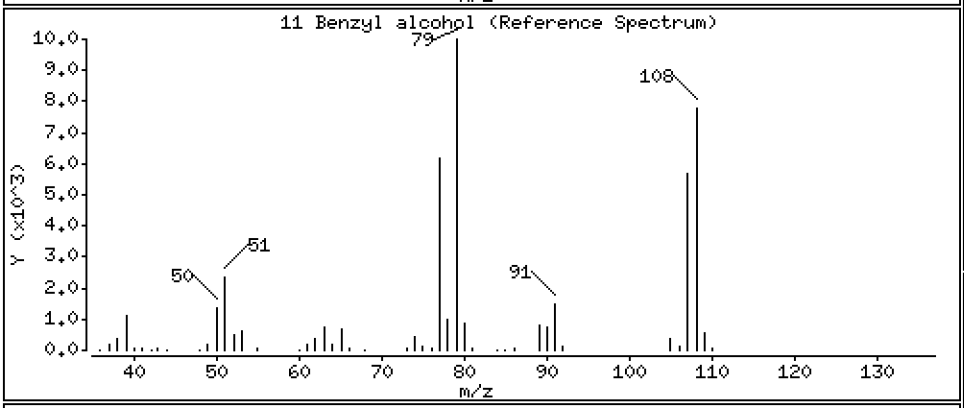
Concentration: 0.1671 ug/mL

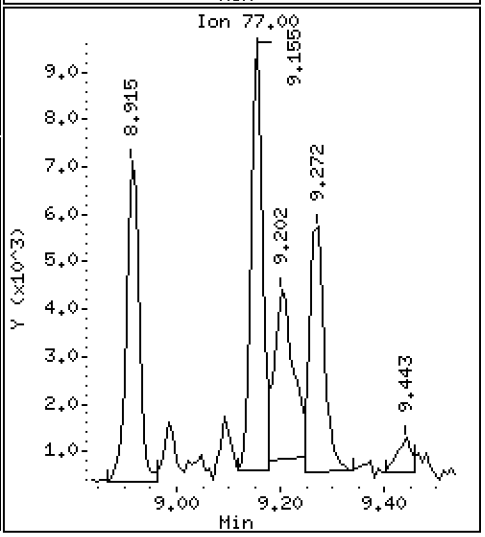


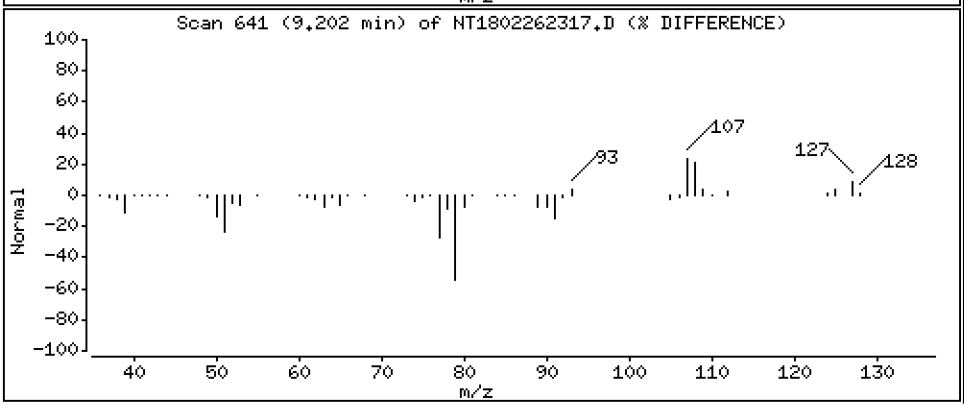












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

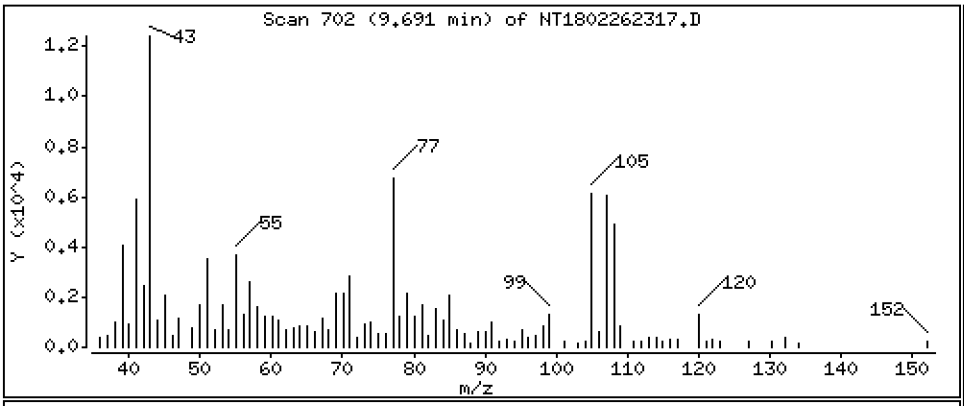
Operator: VTS

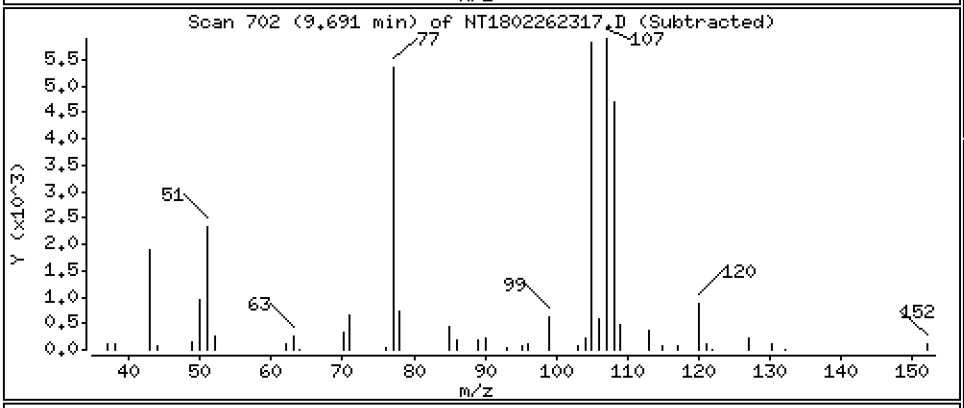
Column phase: ZB-5msi

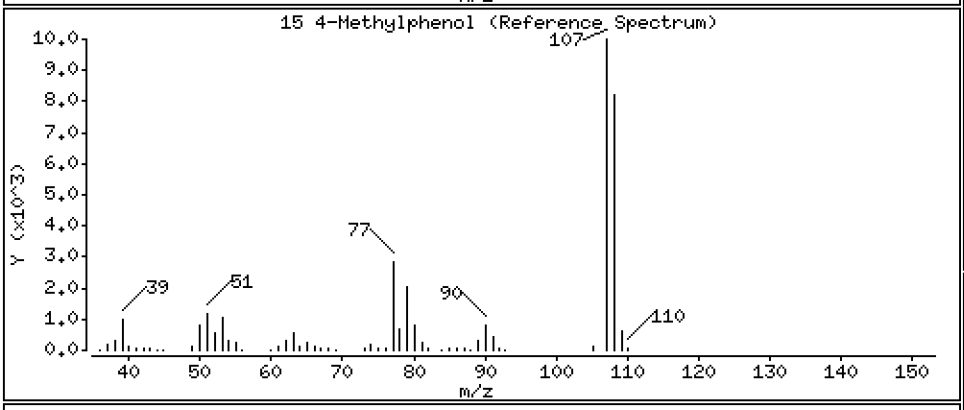
Column diameter: 0.25

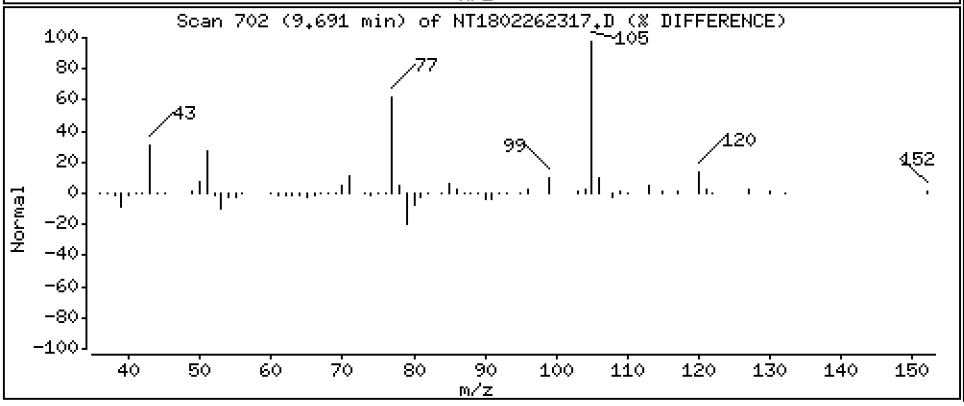
15 4-Methylphenol

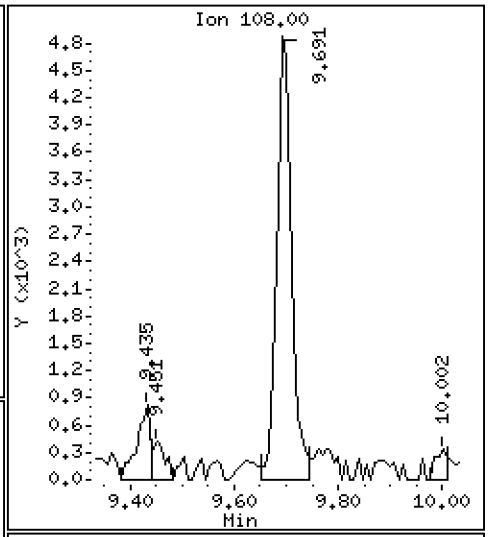
Concentration: 0.09869 ug/mL

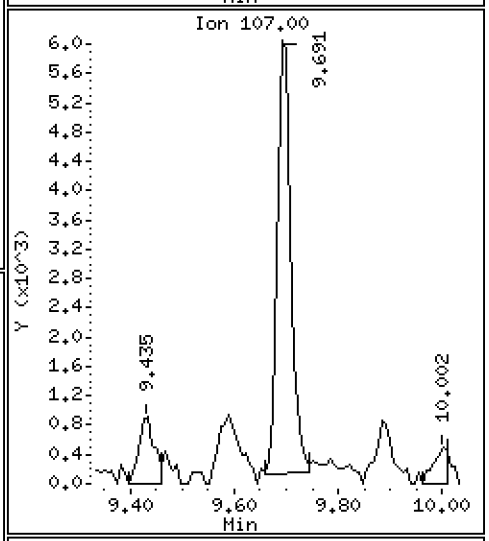


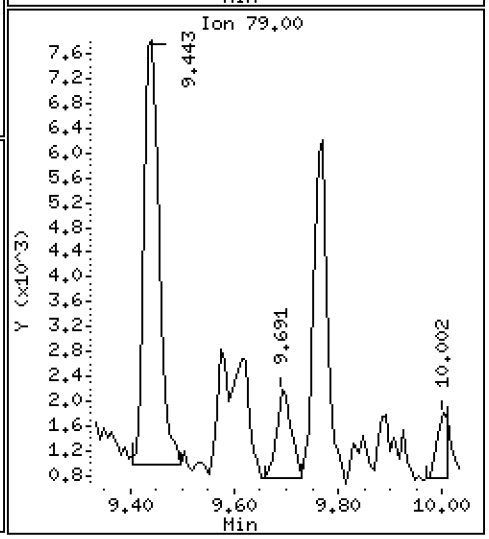












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

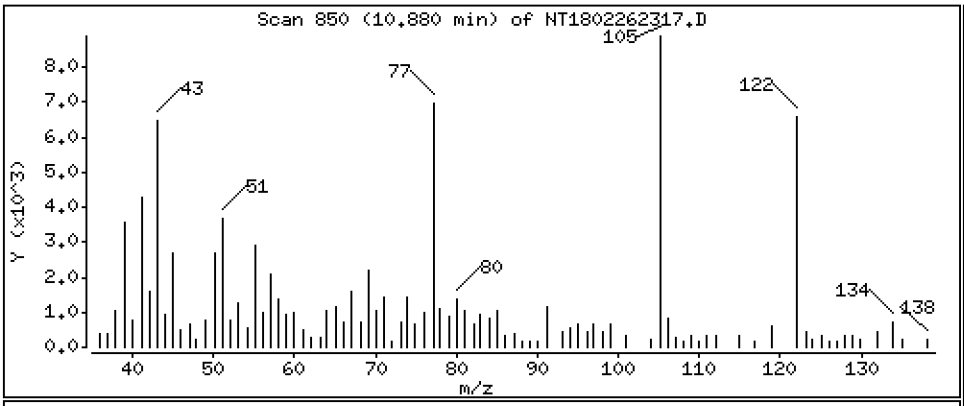
Operator: VTS

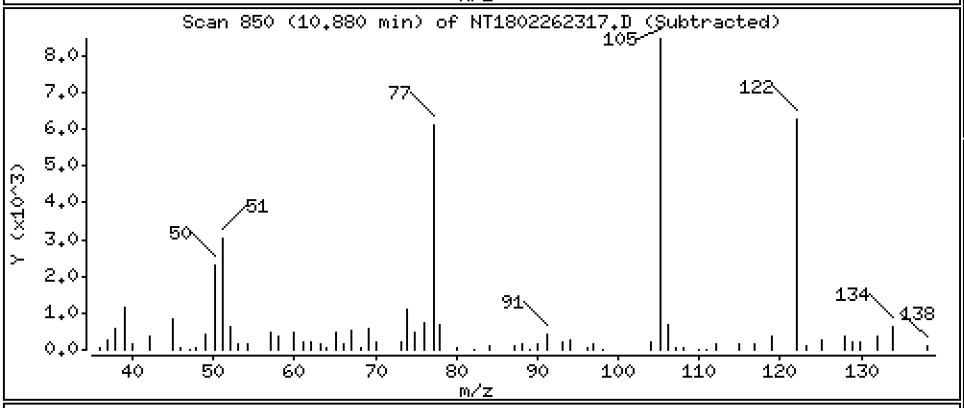
Column phase: ZB-5msi

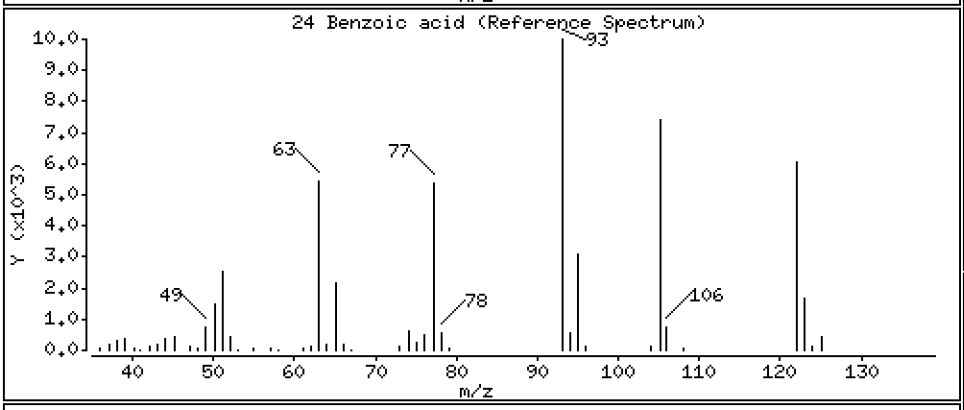
Column diameter: 0.25

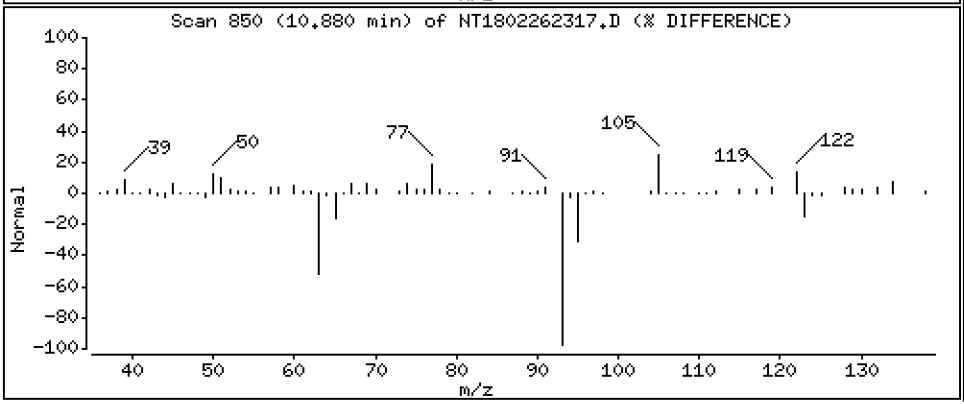
24 Benzoic acid

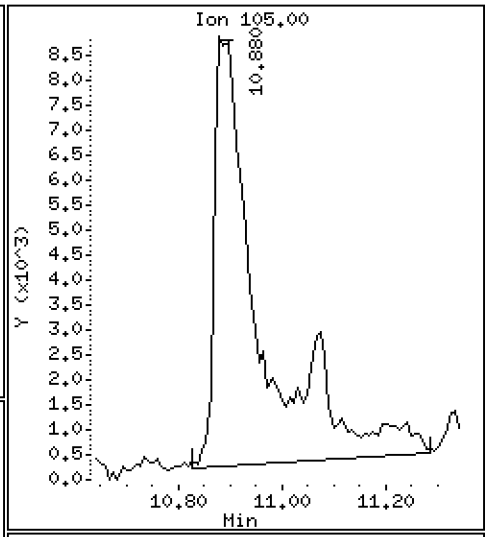
Concentration: 1.463 ug/mL

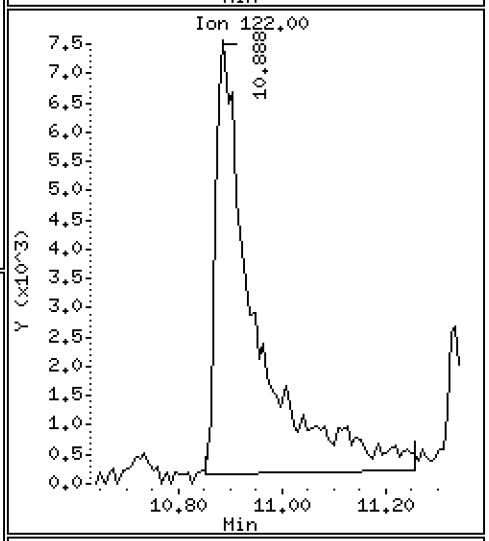


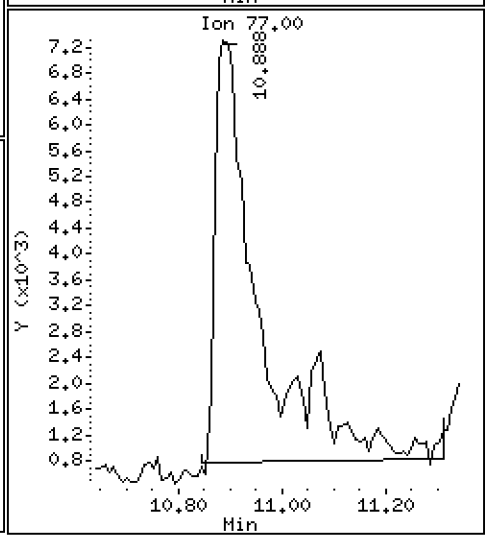












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

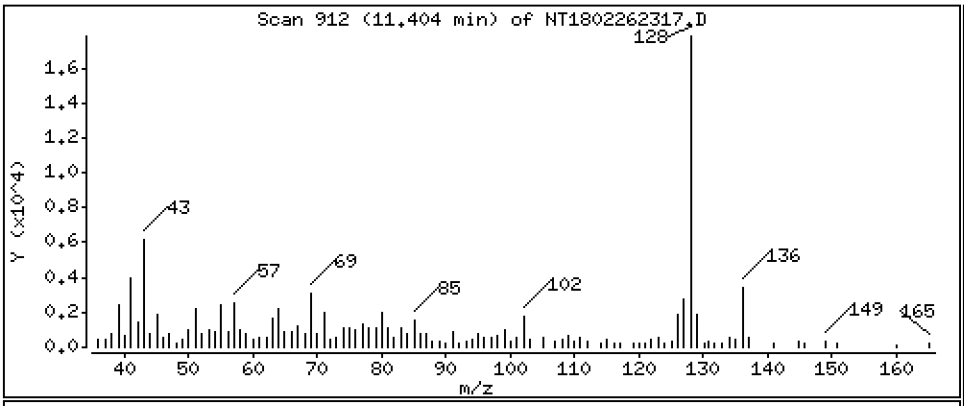
Operator: VTS

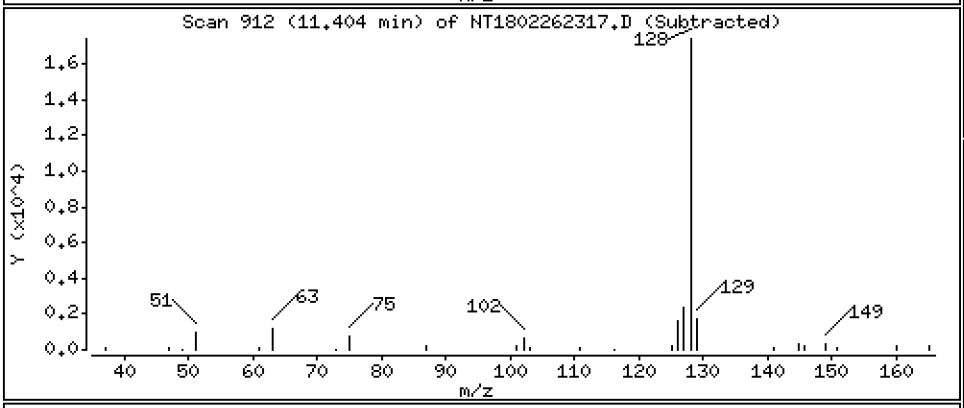
Column phase: ZB-5msi

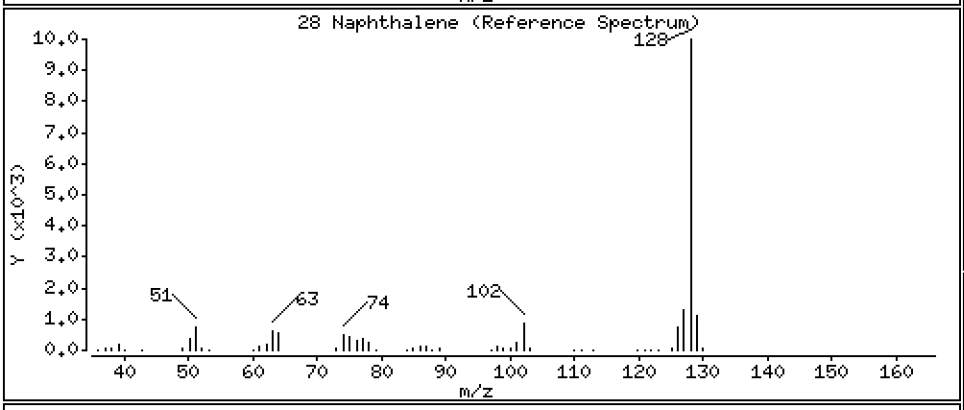
Column diameter: 0.25

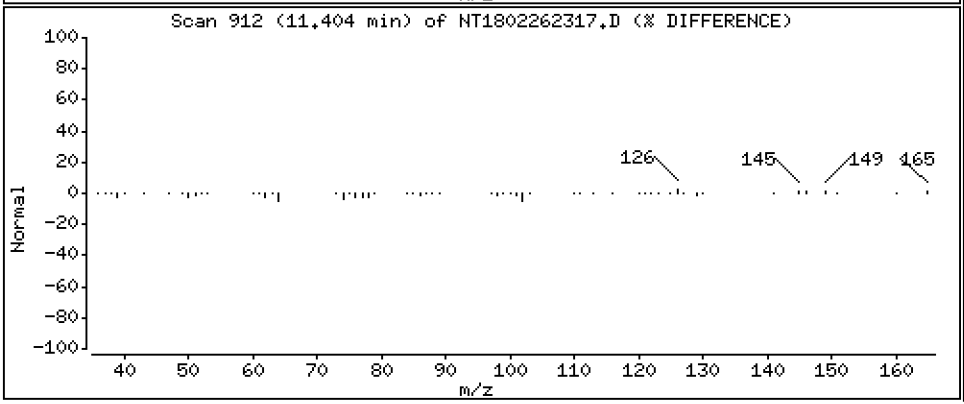
28 Naphthalene

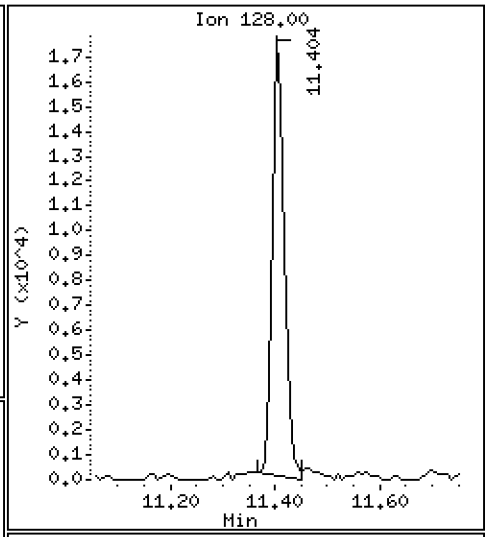
Concentration: 0.09178 ug/mL

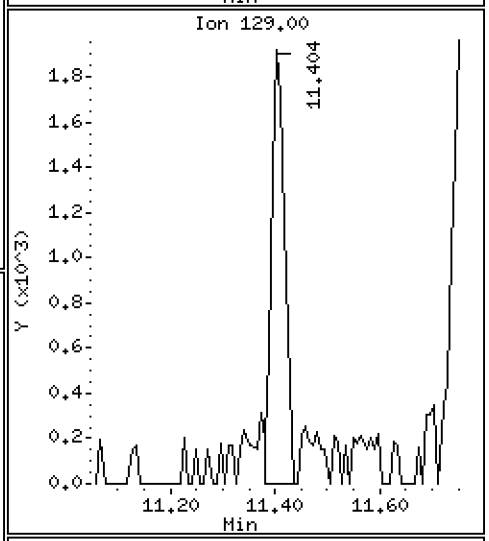


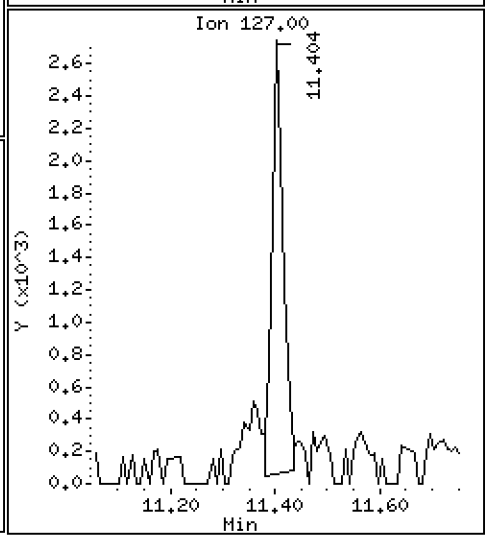












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

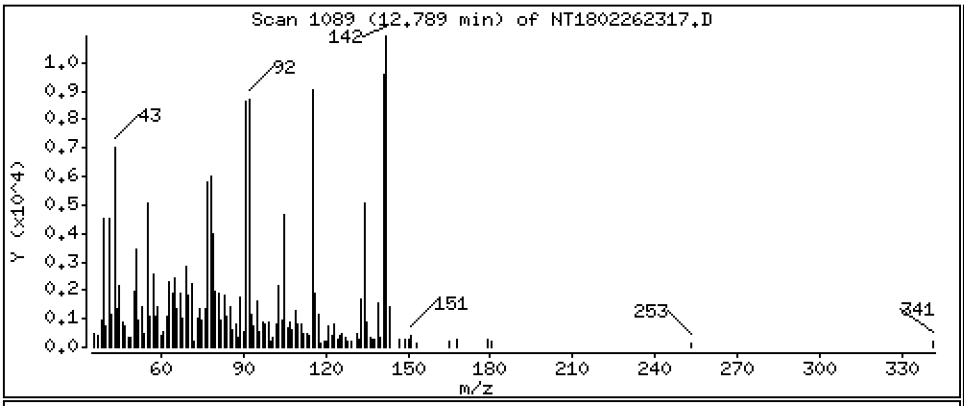
Operator: VTS

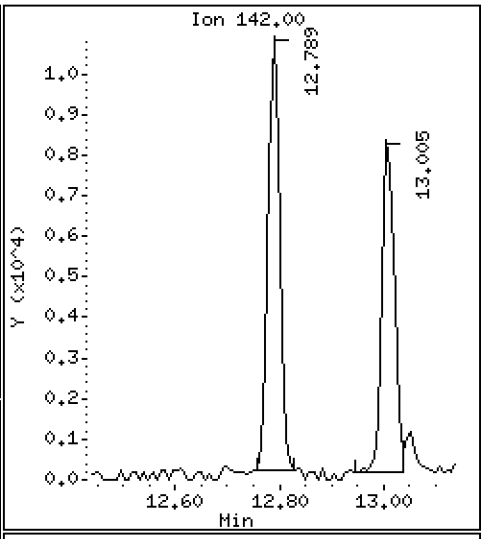
Column phase: ZB-5msi

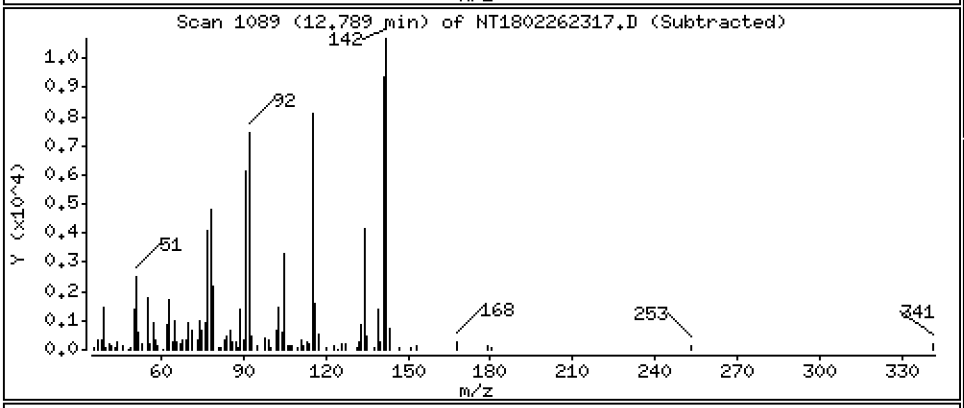
Column diameter: 0.25

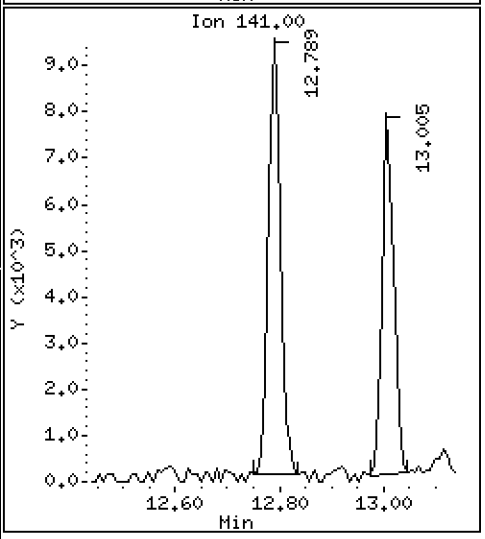
32 2-Methylnaphthalene

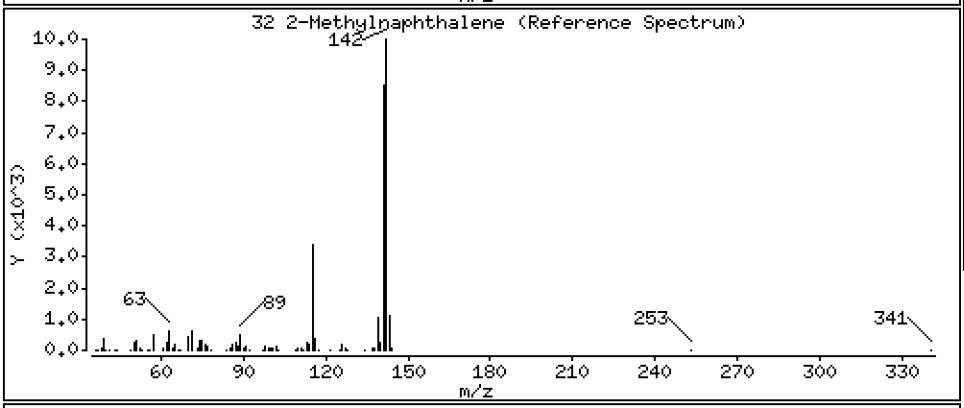
Concentration: 0.07490 ug/mL

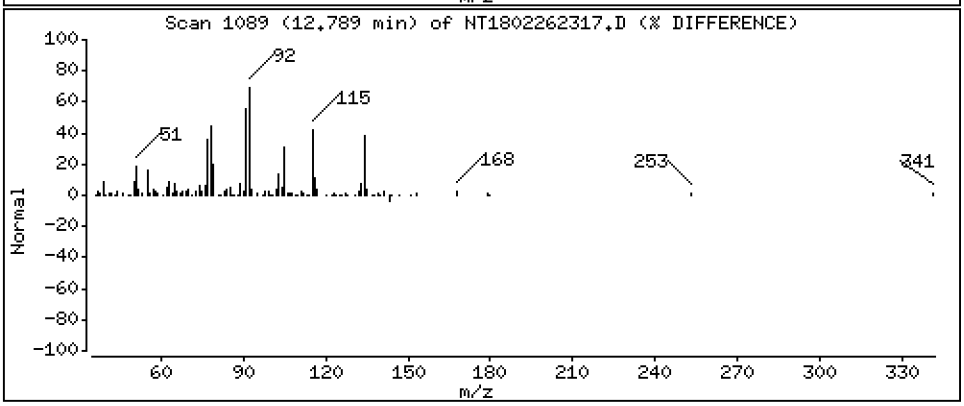












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

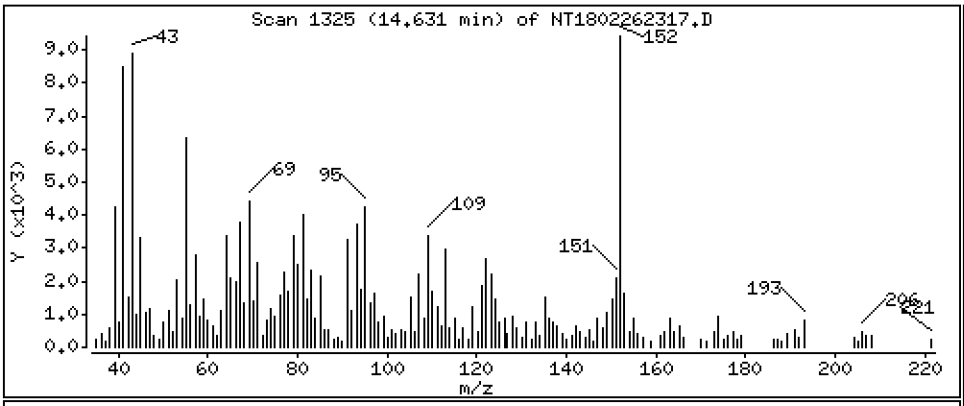
Operator: VTS

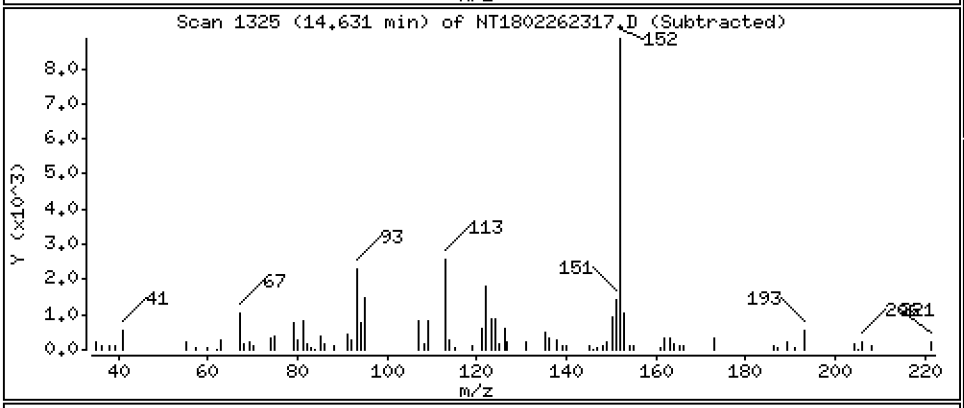
Column phase: ZB-5msi

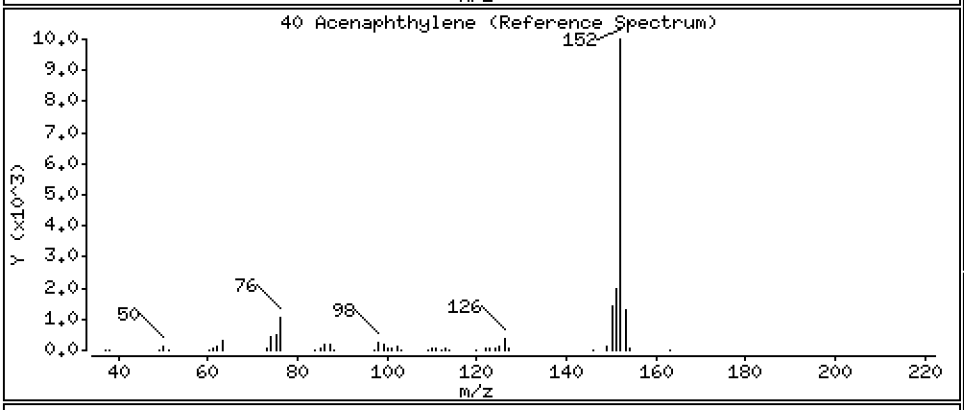
Column diameter: 0.25

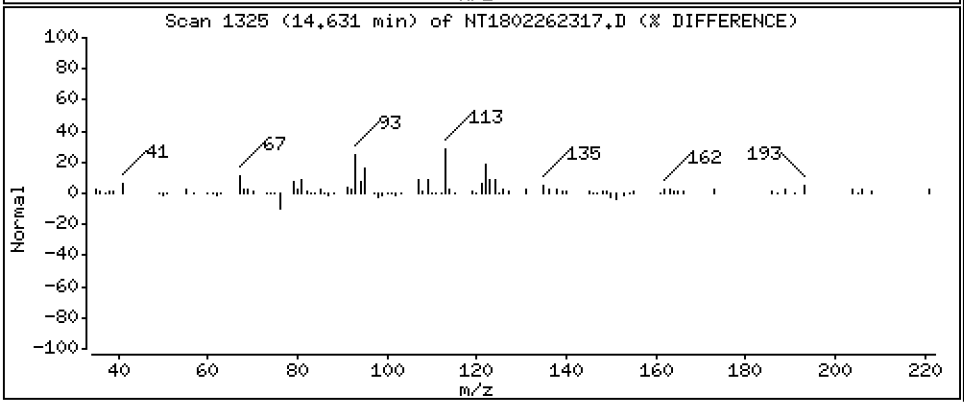
40 Acenaphthylene

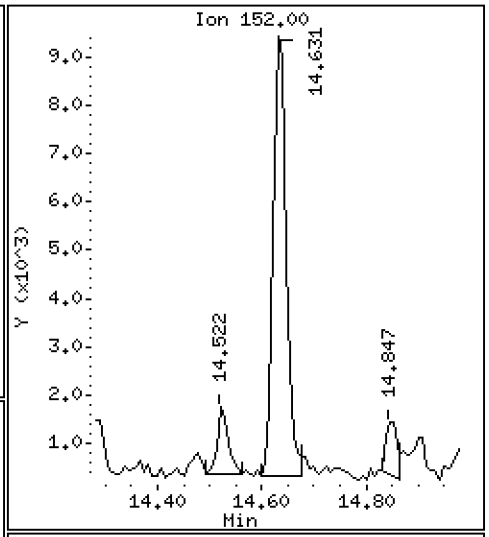
Concentration: 0.04989 ug/mL

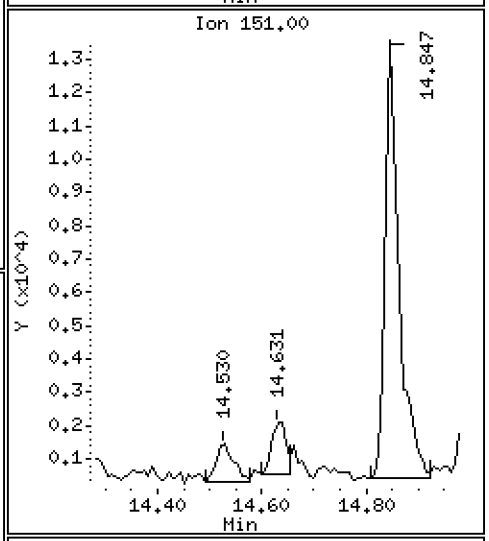


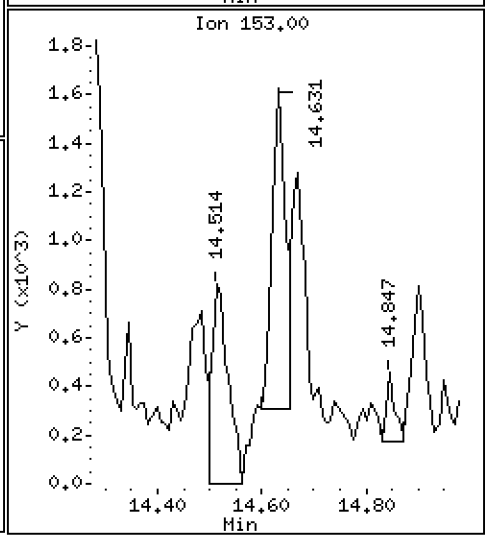












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

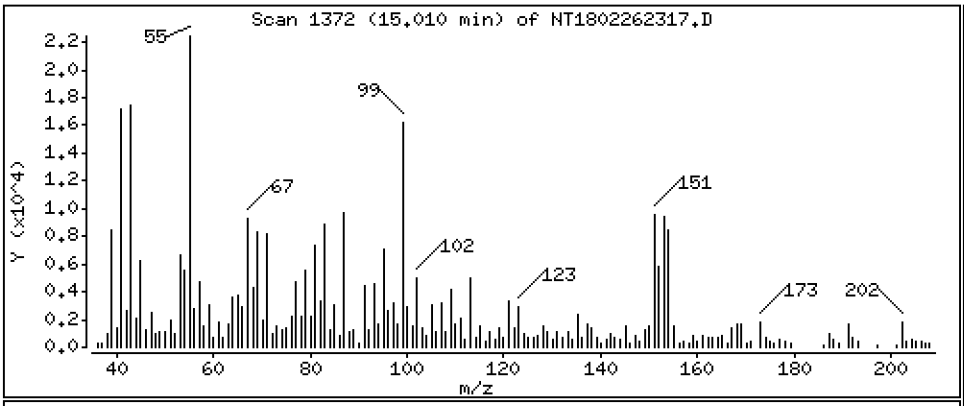
Operator: VTS

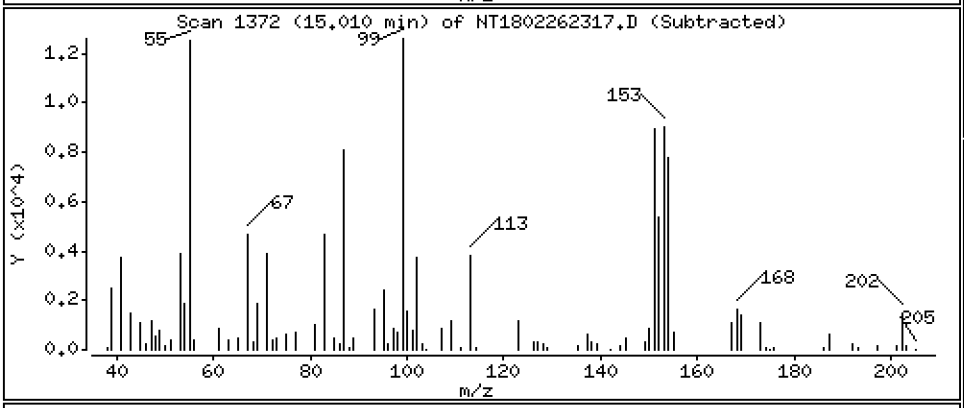
Column phase: ZB-5msi

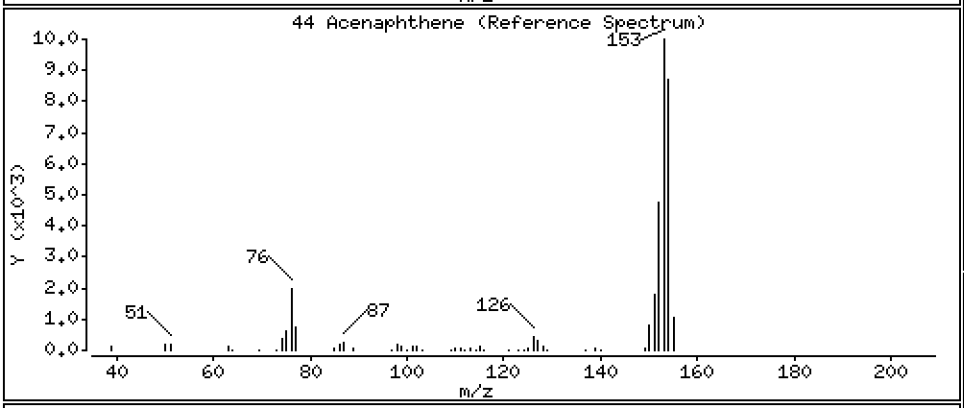
Column diameter: 0.25

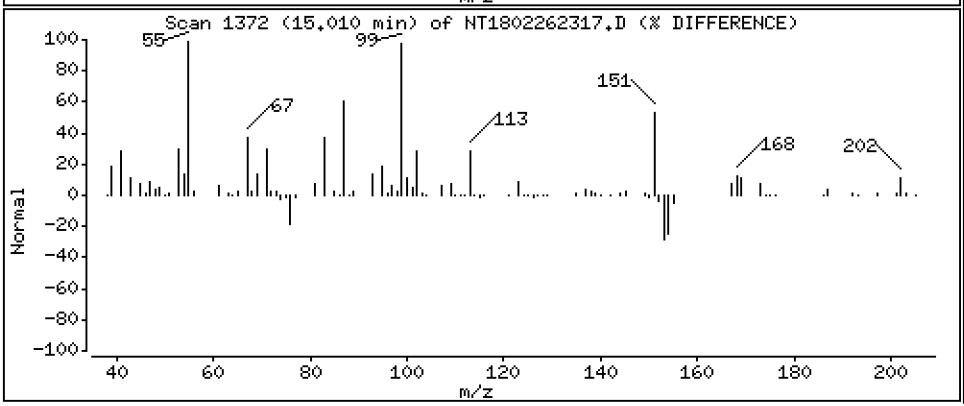
44 Acenaphthene

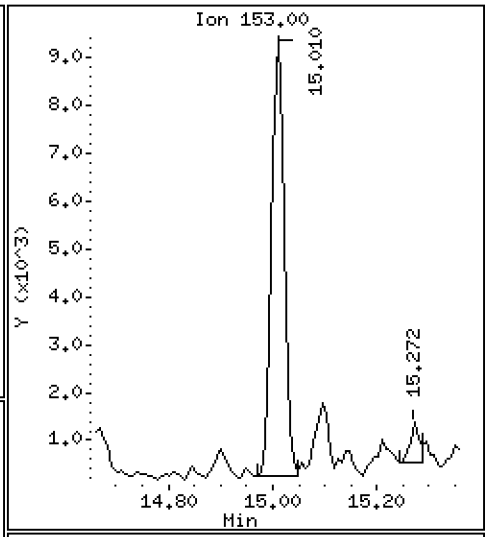
Concentration: 0.07555 ug/mL

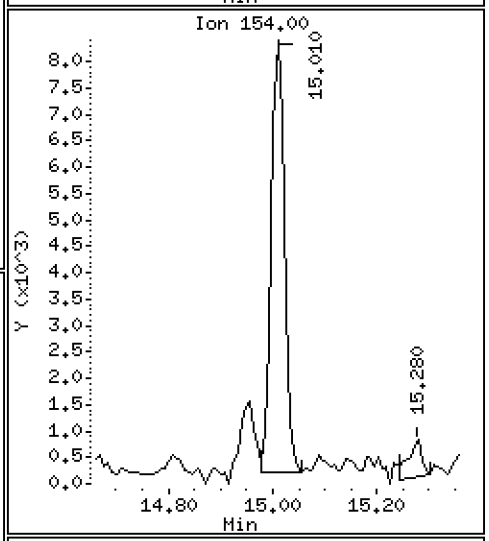


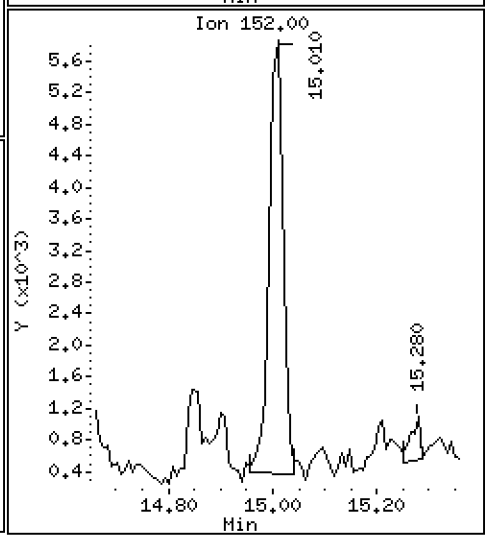












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

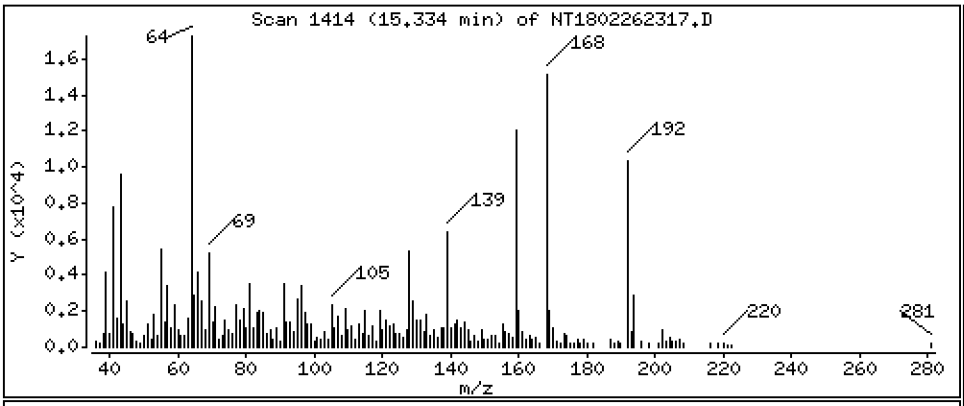
Operator: VTS

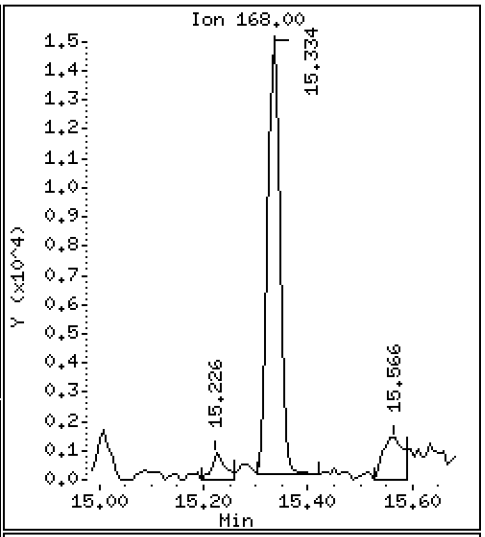
Column phase: ZB-5msi

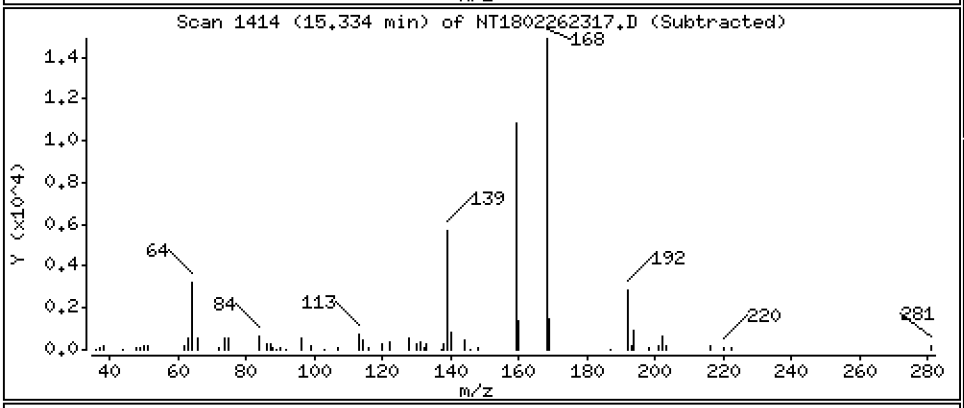
Column diameter: 0.25

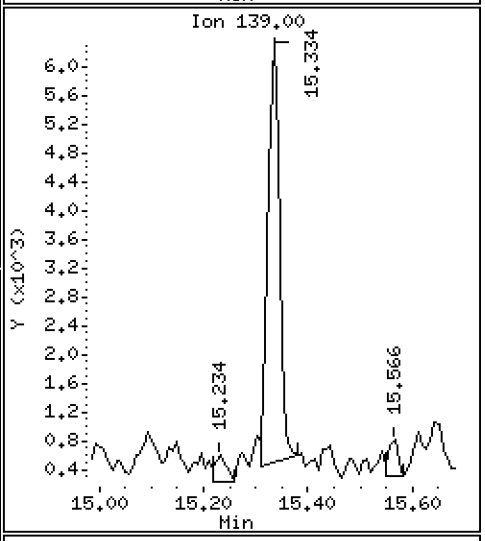
46 Dibenzofuran

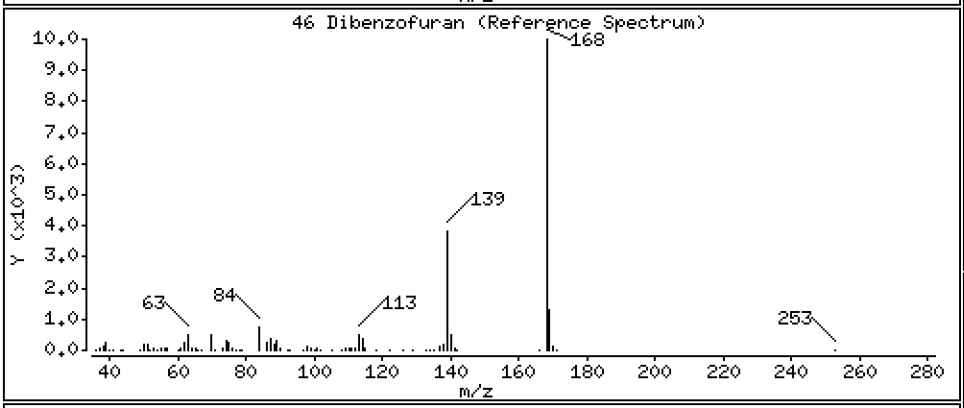
Concentration: 0.08315 ug/mL

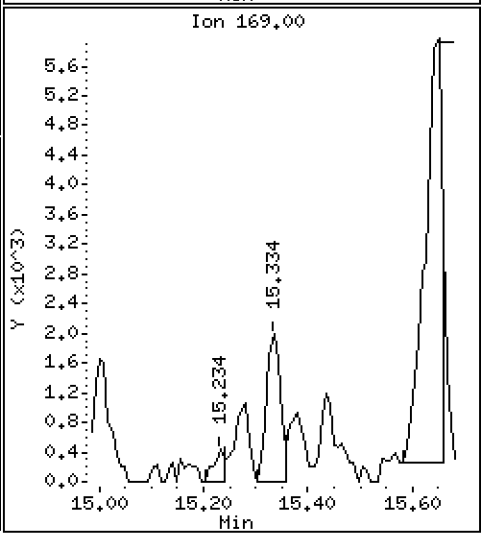


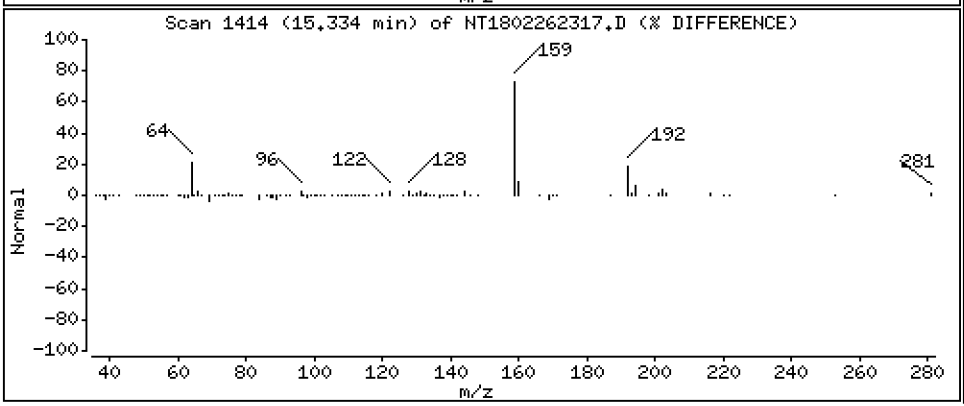












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

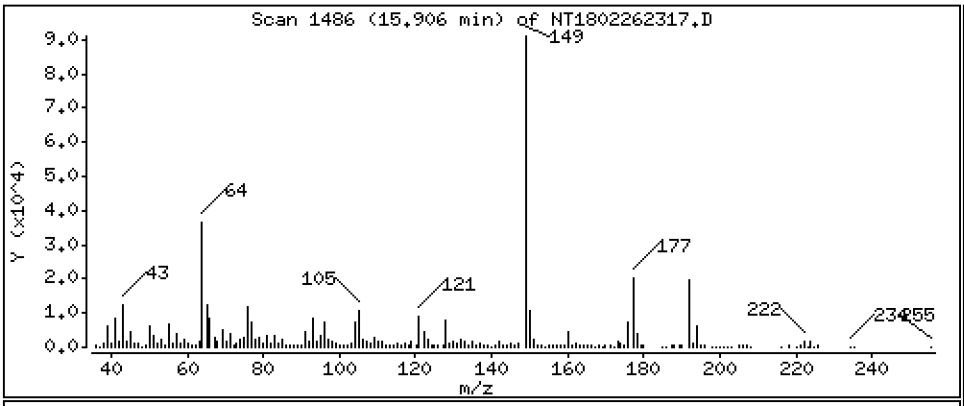
Operator: VTS

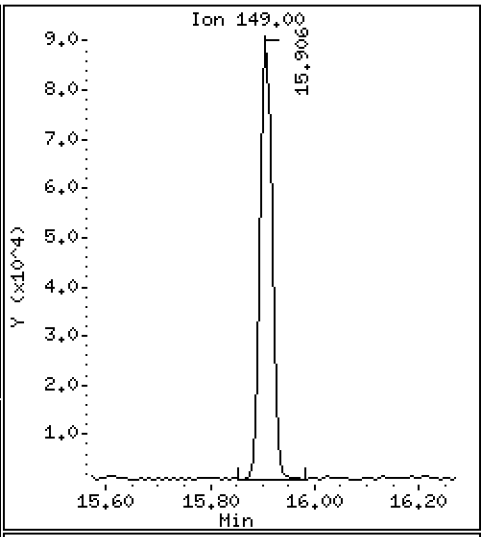
Column phase: ZB-5msi

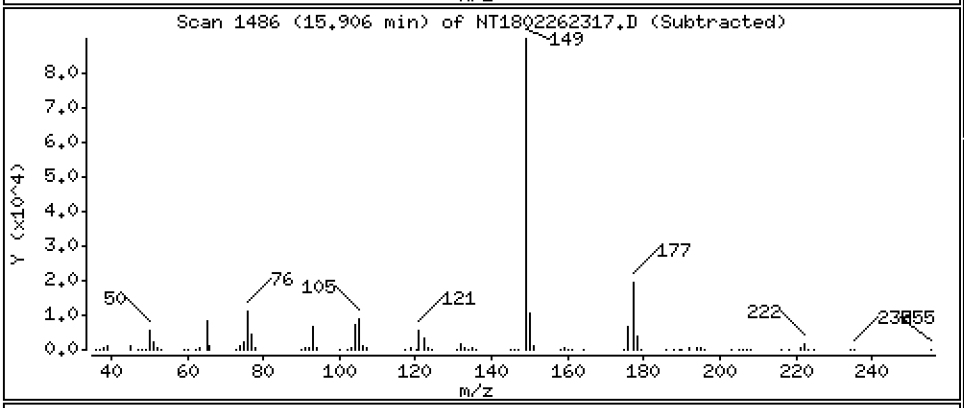
Column diameter: 0.25

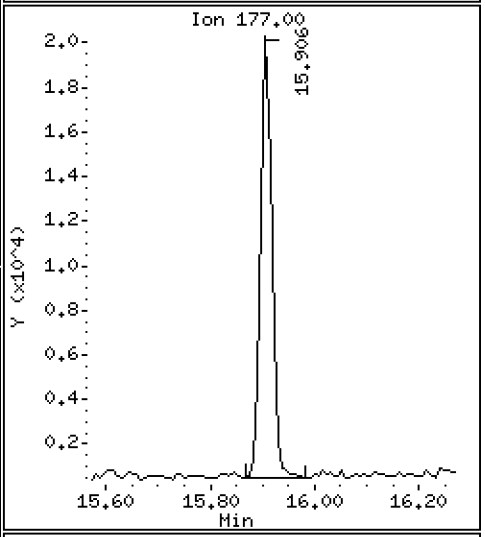
50 Diethylphthalate

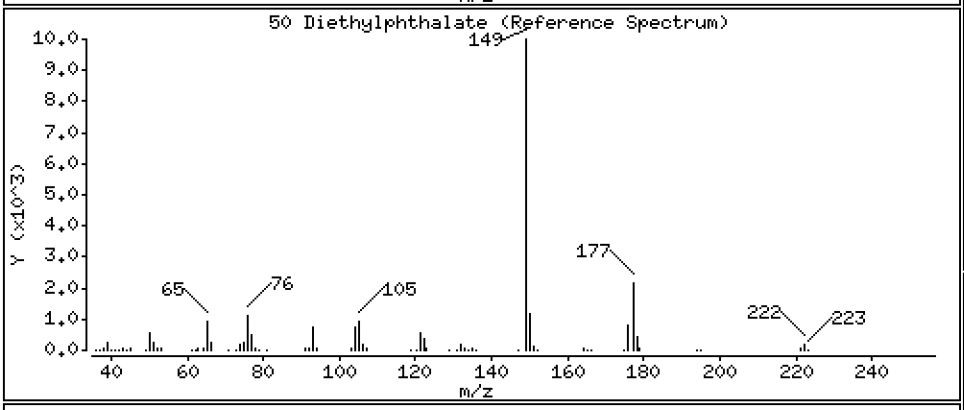
Concentration: 0.7472 ug/mL

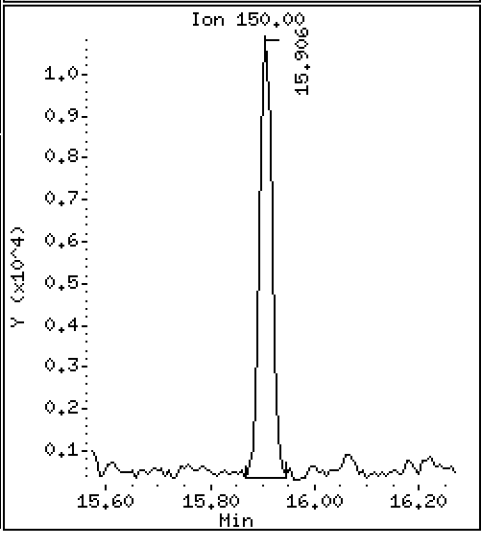


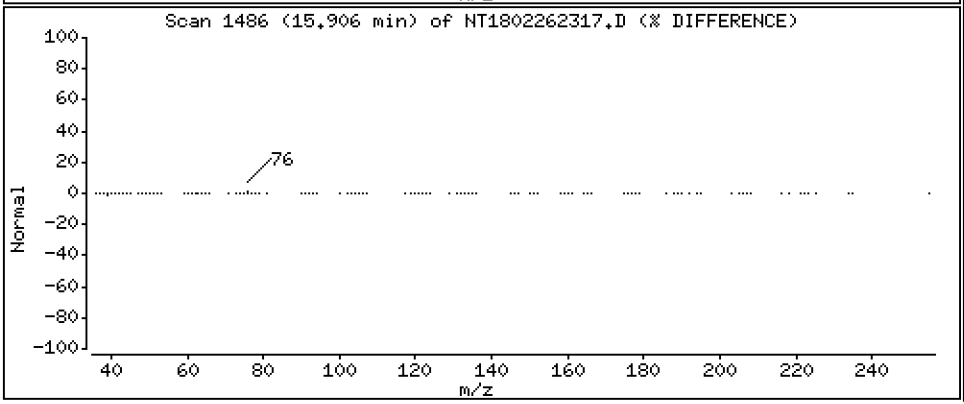












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

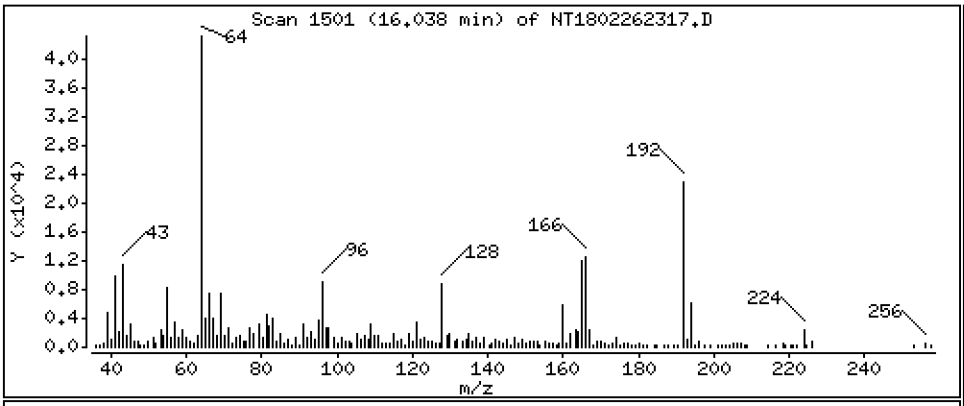
Operator: VTS

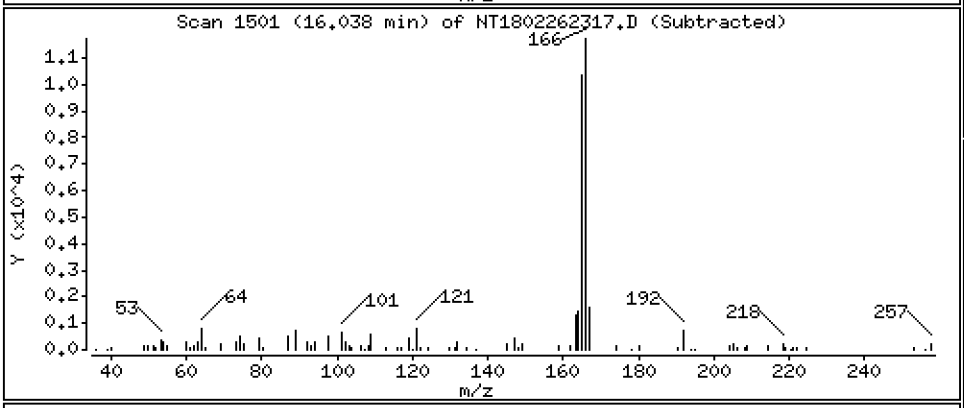
Column phase: ZB-5msi

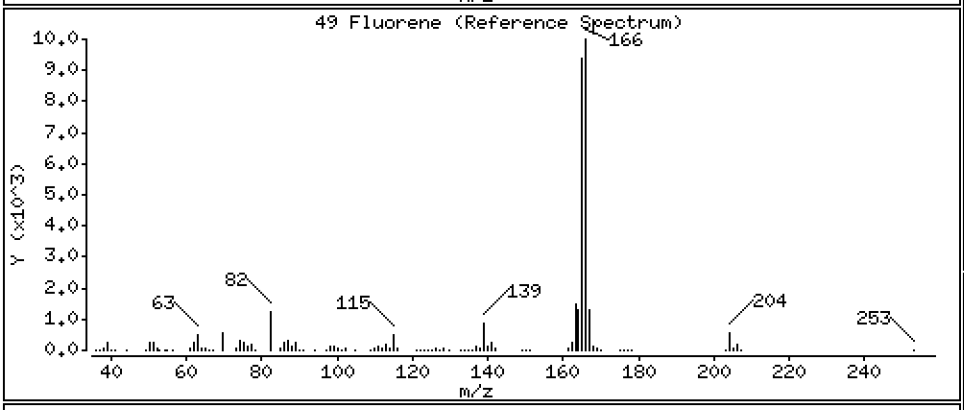
Column diameter: 0.25

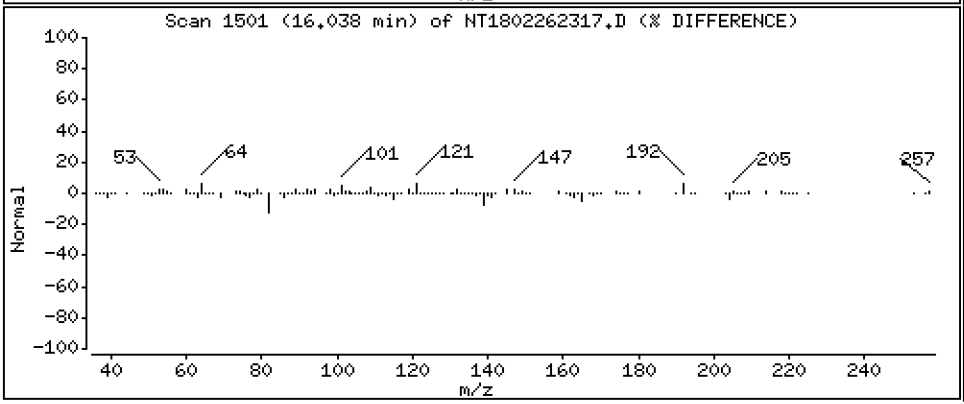
49 Fluorene

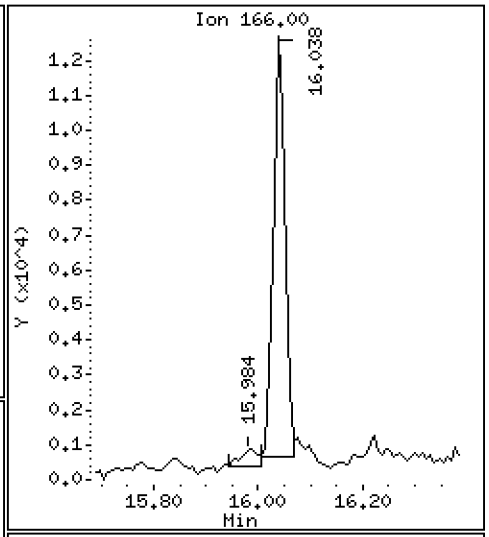
Concentration: 0.08265 ug/mL

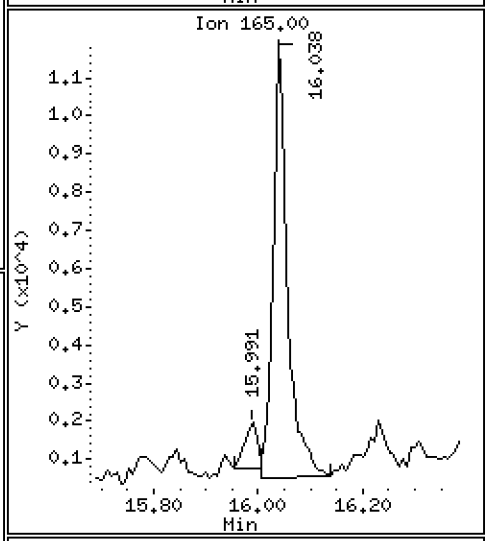


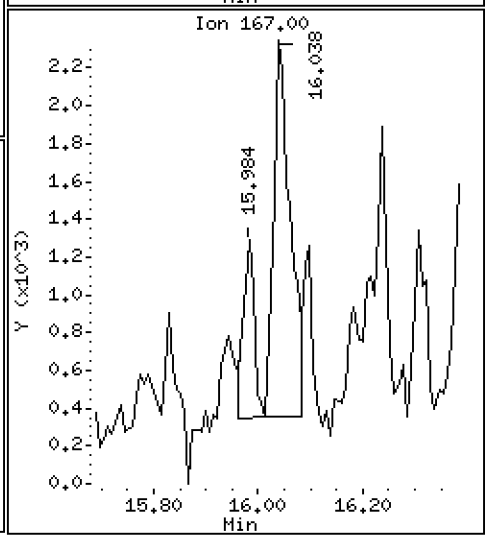












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

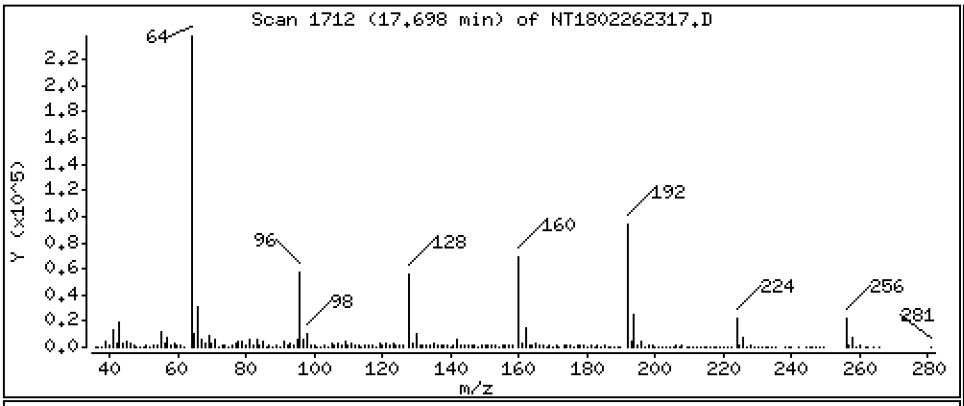
Operator: VTS

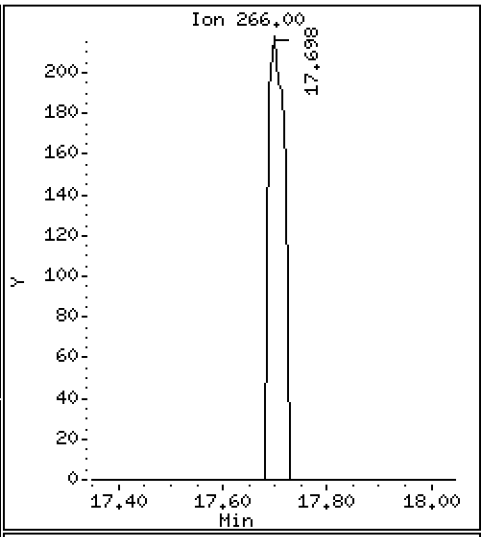
Column phase: ZB-5msi

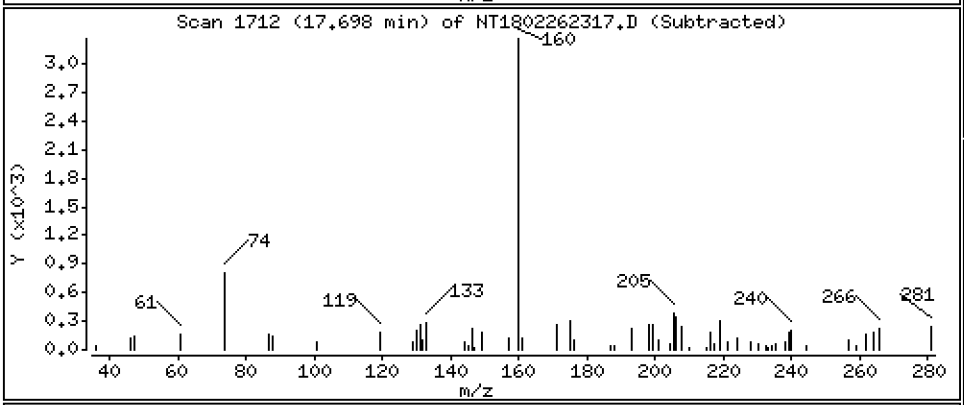
Column diameter: 0.25

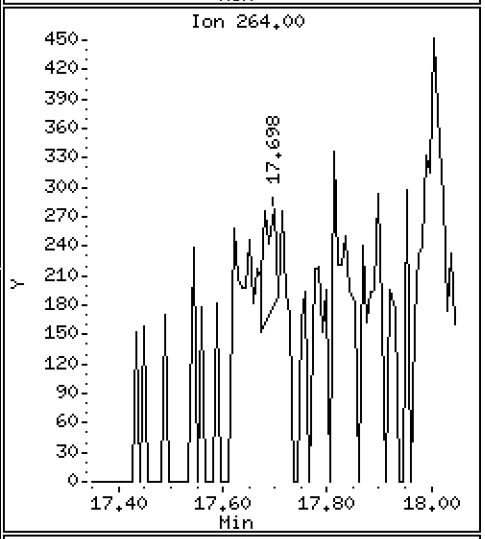
58 Pentachlorophenol

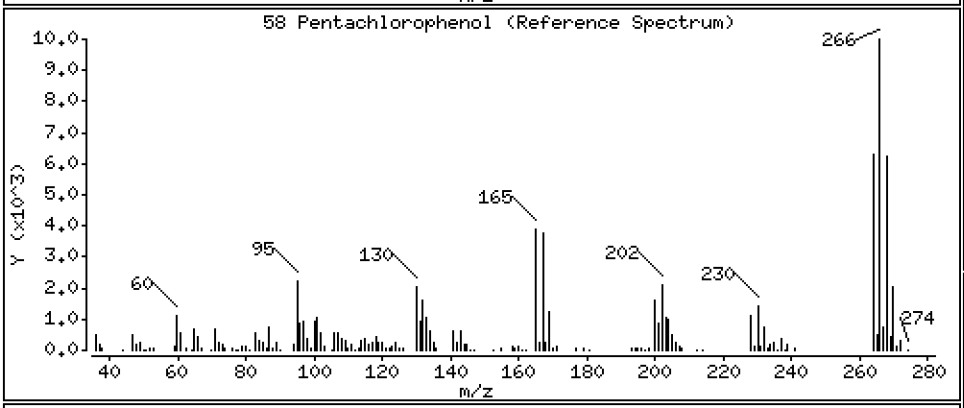
Concentration: 0.02197 ug/mL

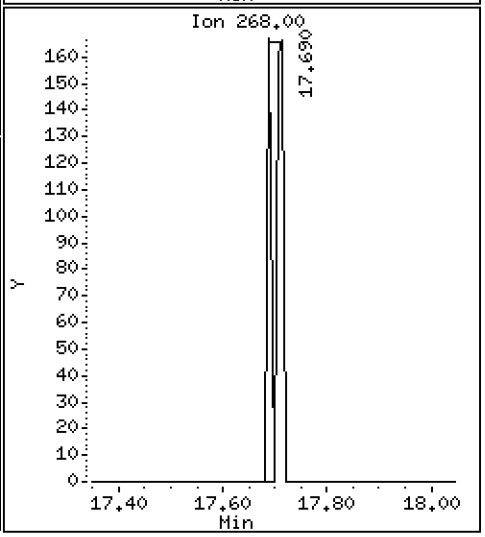


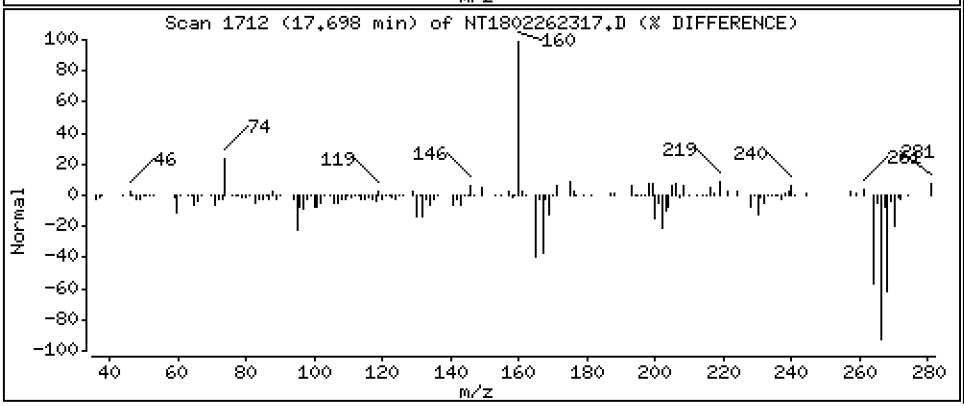












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

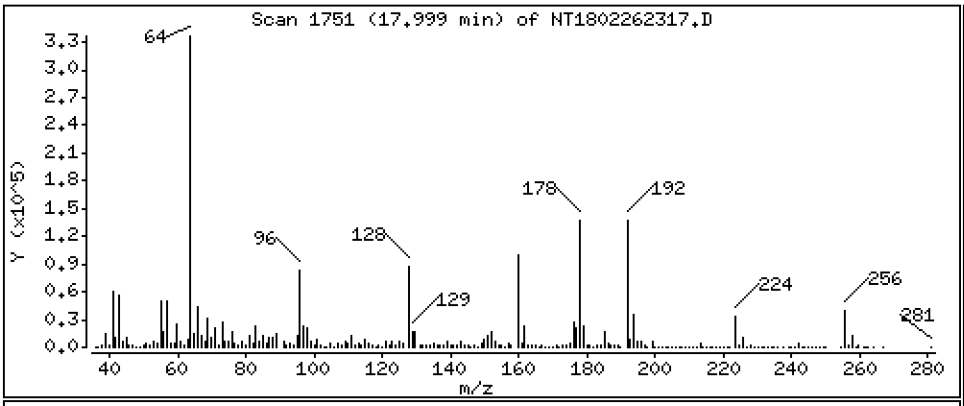
Operator: VTS

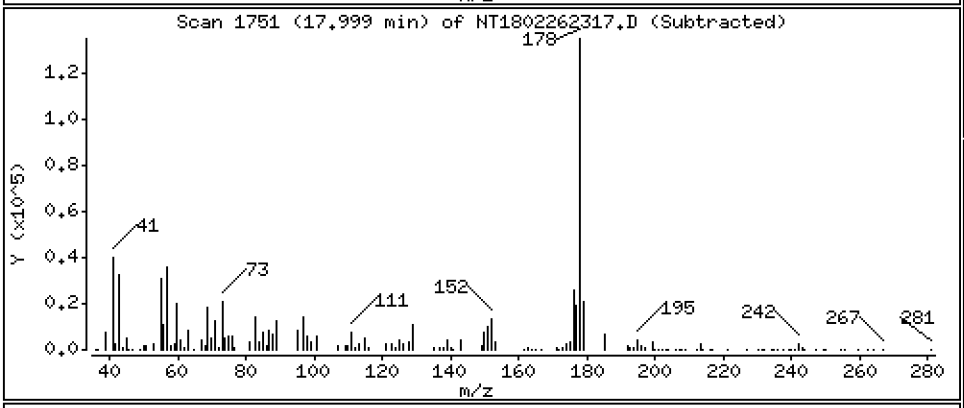
Column phase: ZB-5msi

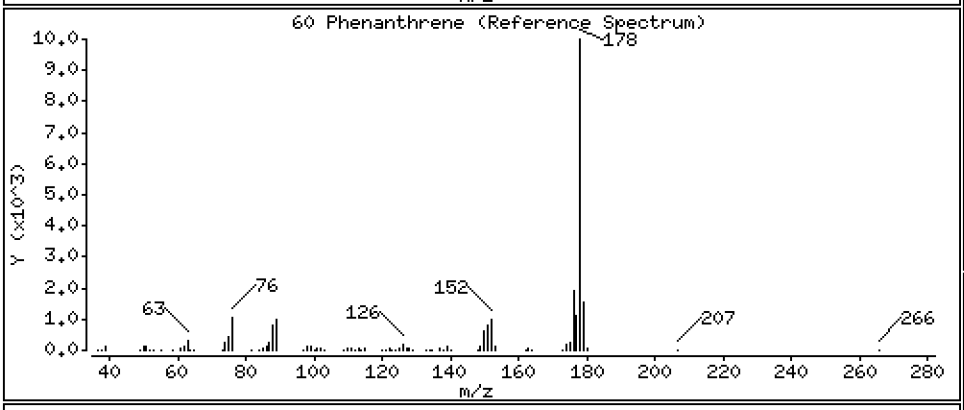
Column diameter: 0.25

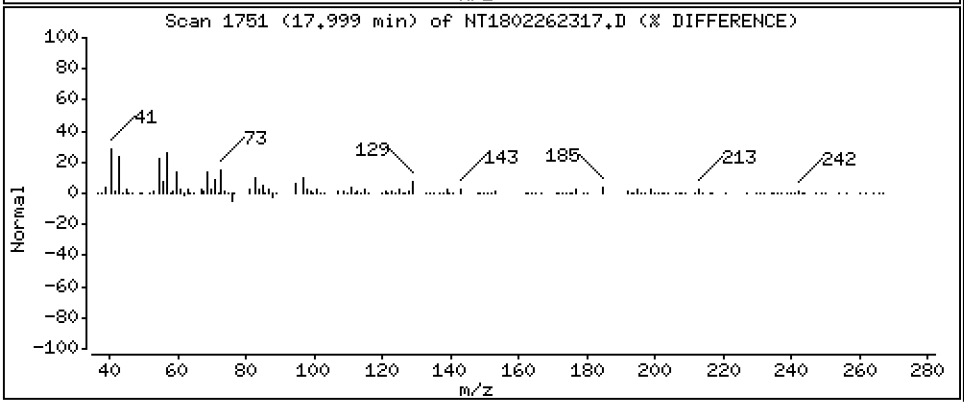
60 Phenanthrene

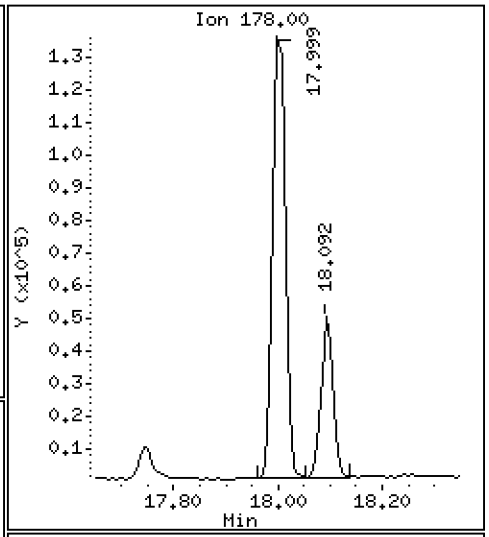
Concentration: 0.6342 ug/mL

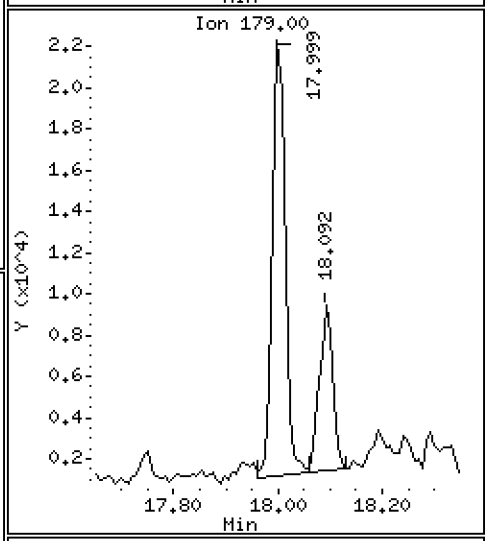


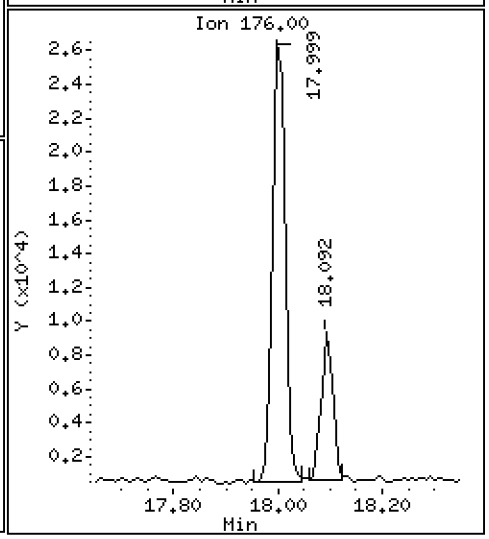












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

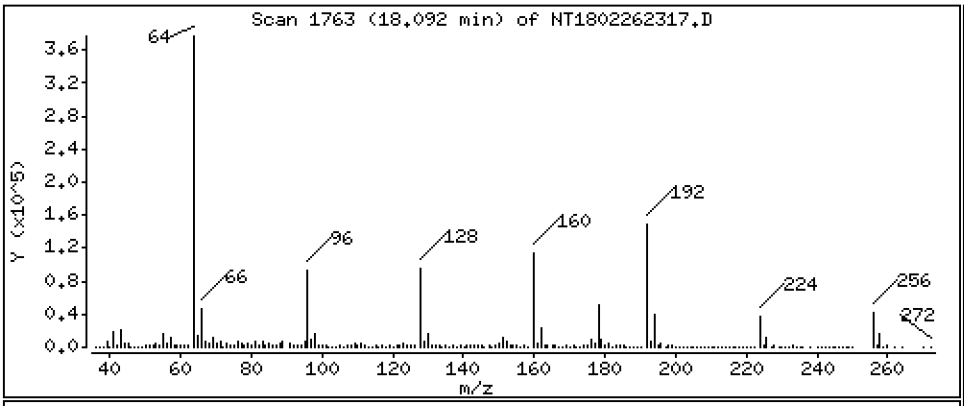
Operator: VTS

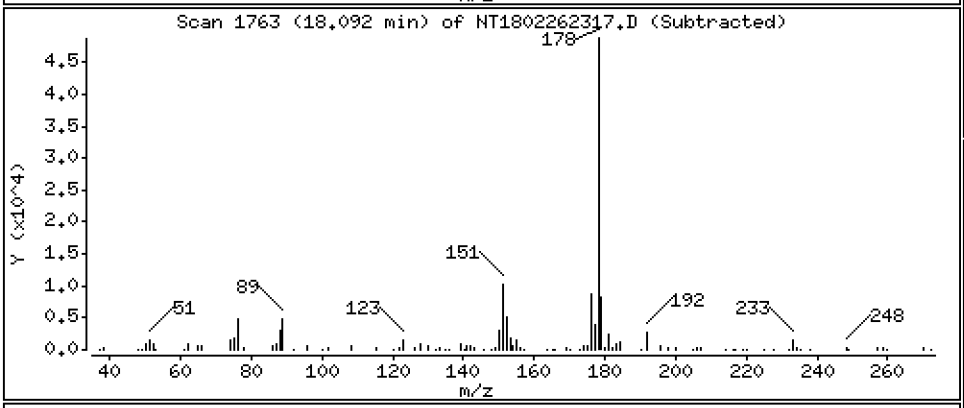
Column phase: ZB-5msi

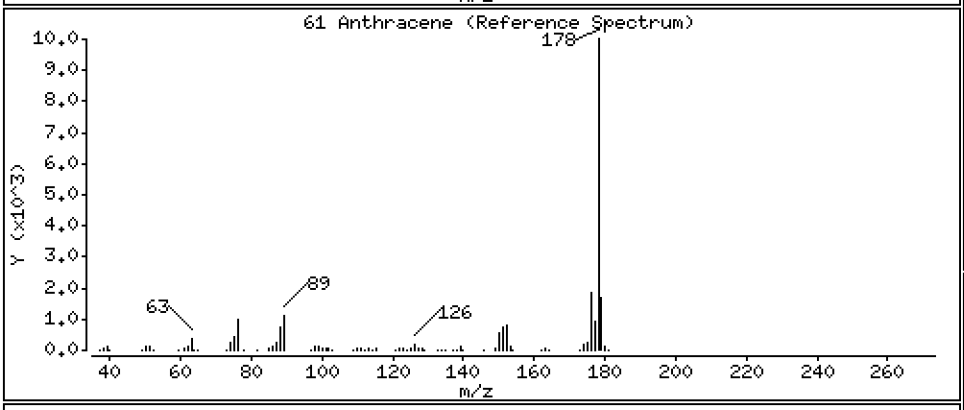
Column diameter: 0.25

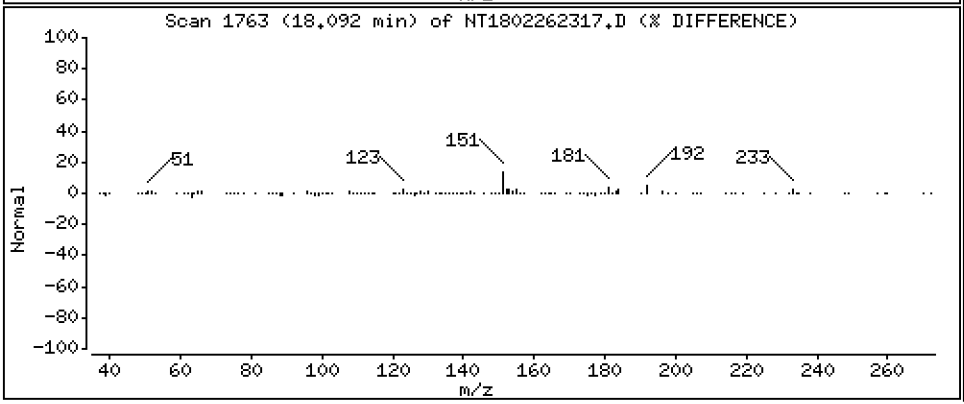
61 Anthracene

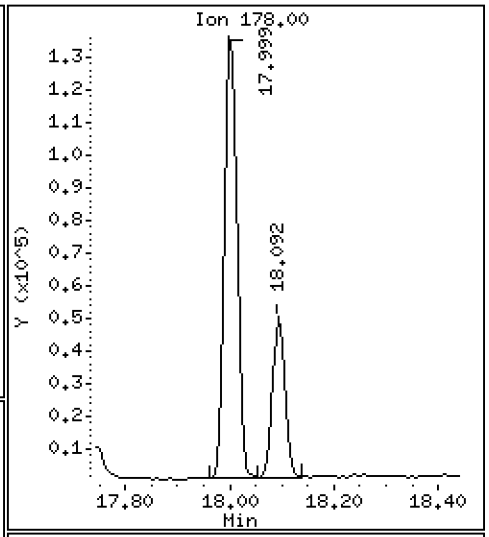
Concentration: 0.2343 ug/mL

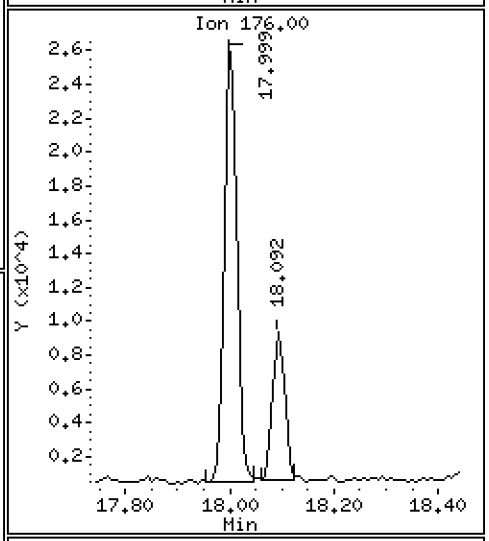


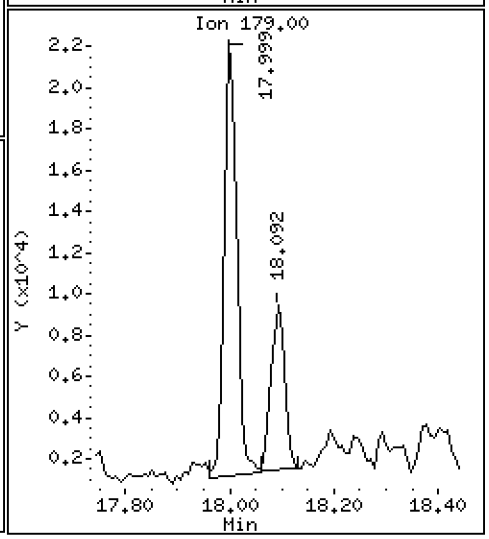












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

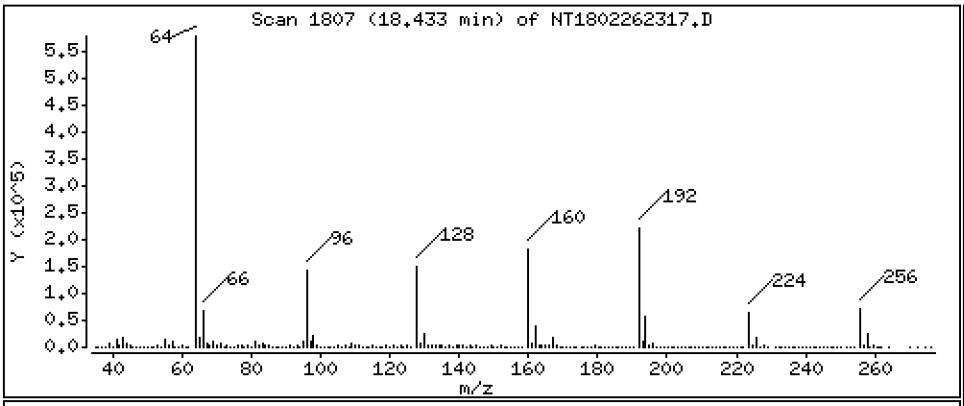
Operator: VTS

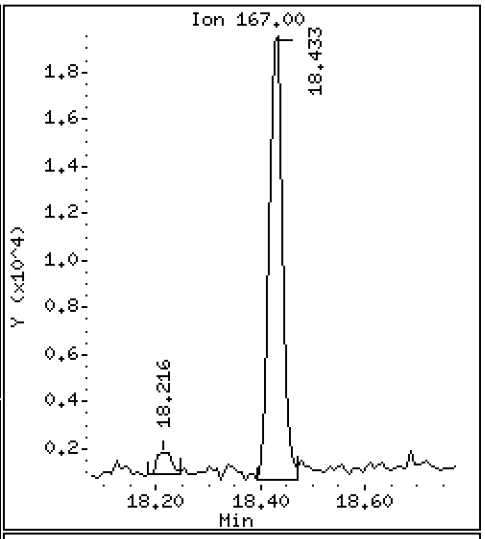
Column phase: ZB-5msi

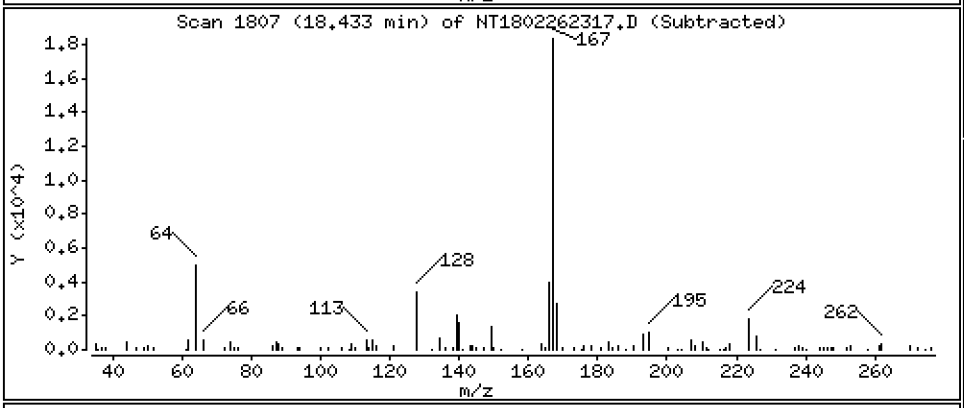
Column diameter: 0.25

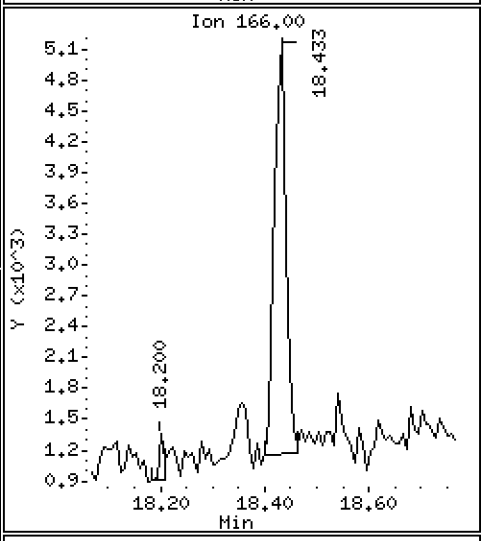
62 Carbazole

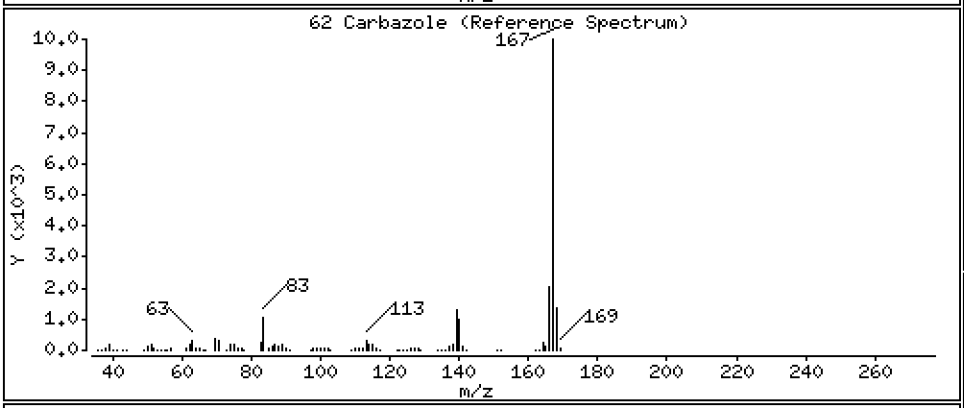
Concentration: 0.1072 ug/mL

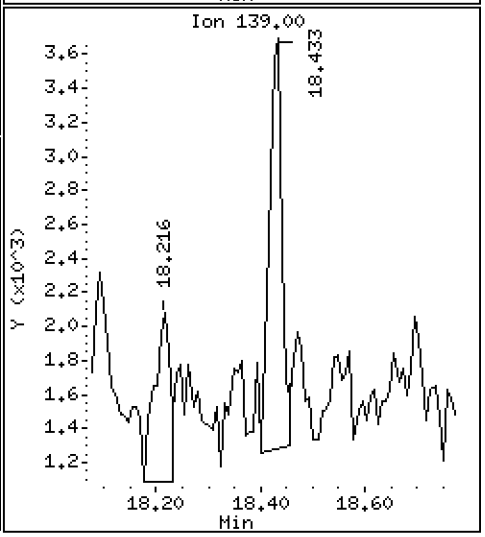


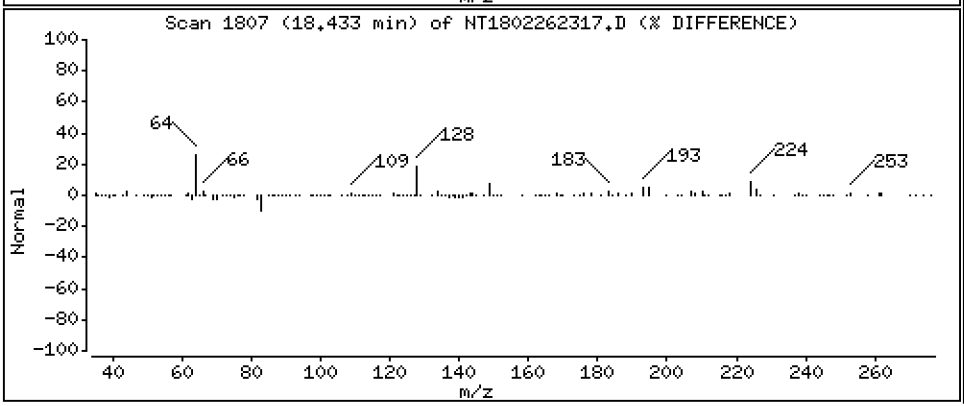












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

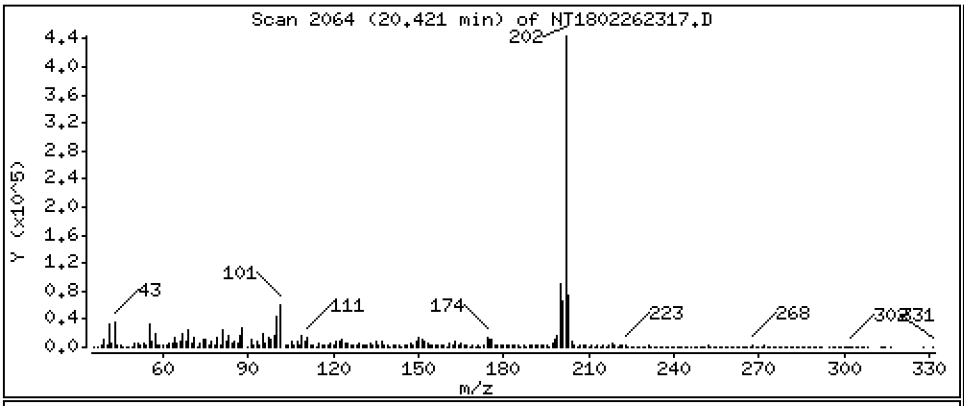
Operator: VTS

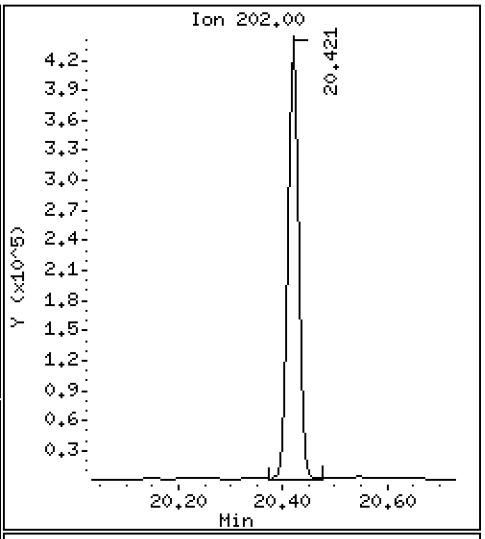
Column phase: ZB-5msi

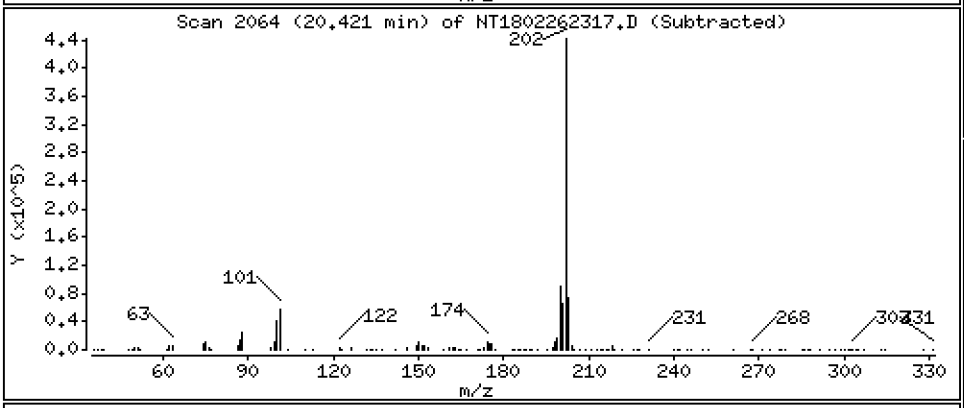
Column diameter: 0.25

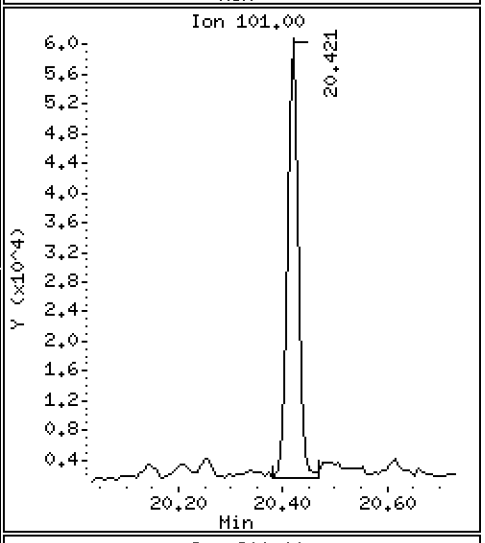
64 Fluoranthene

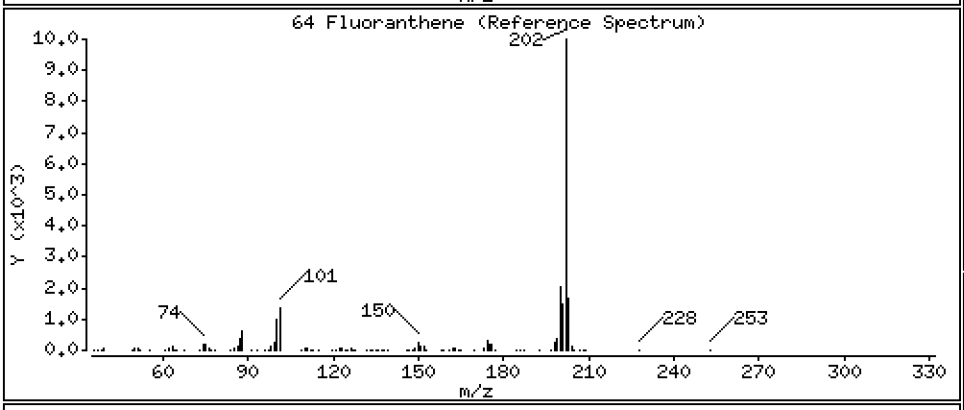
Concentration: 1.627 ug/mL

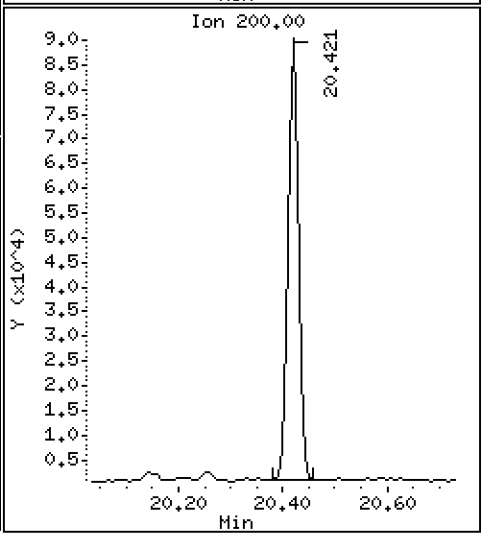


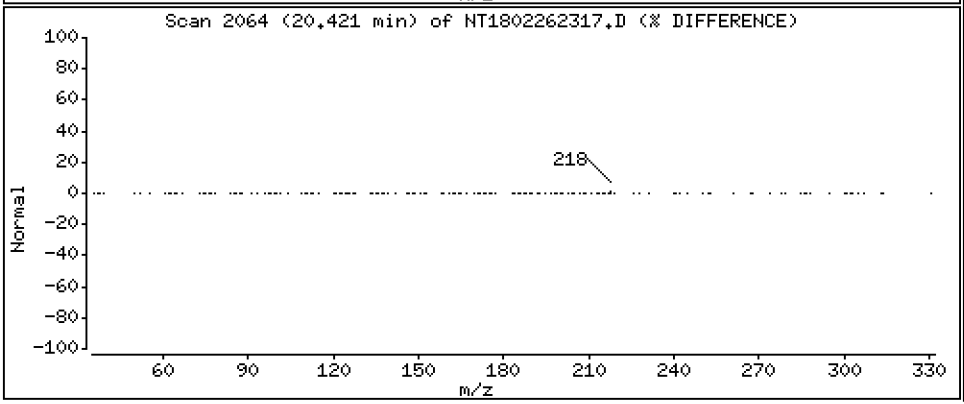












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

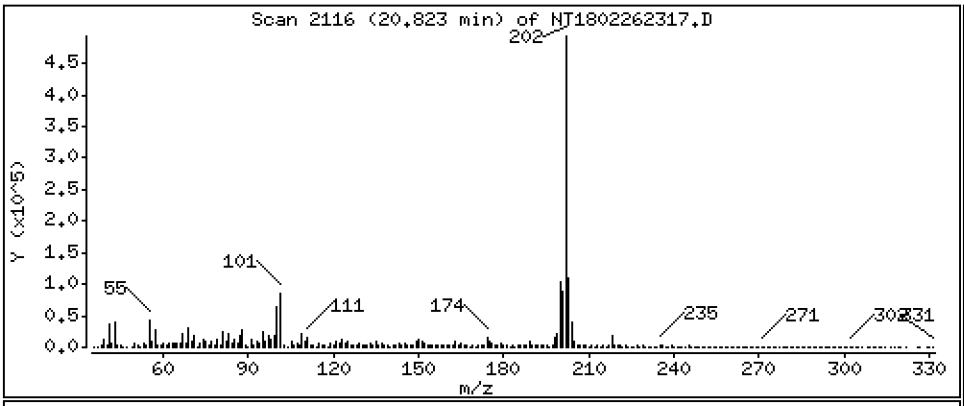
Operator: VTS

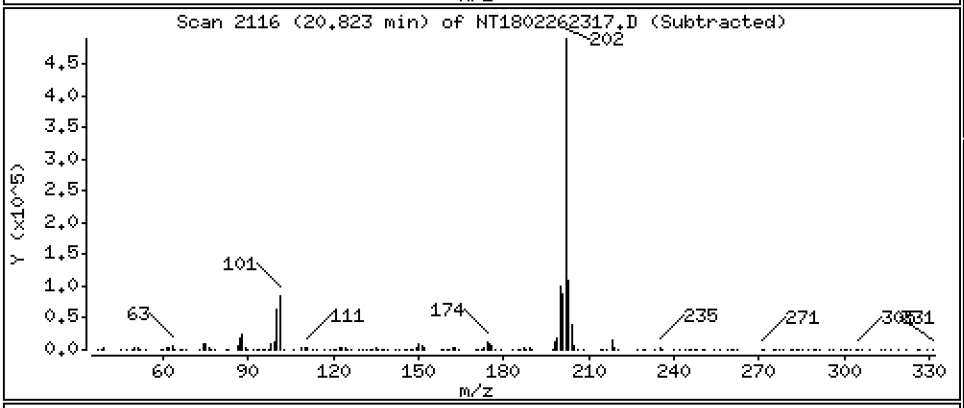
Column phase: ZB-5msi

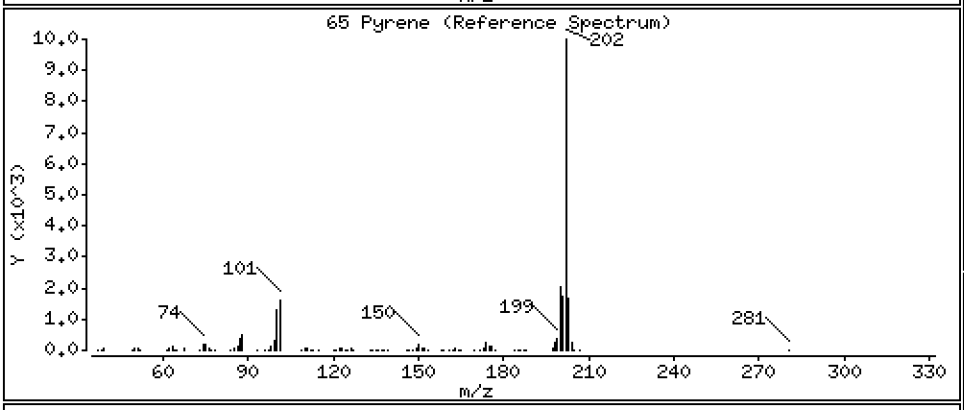
Column diameter: 0.25

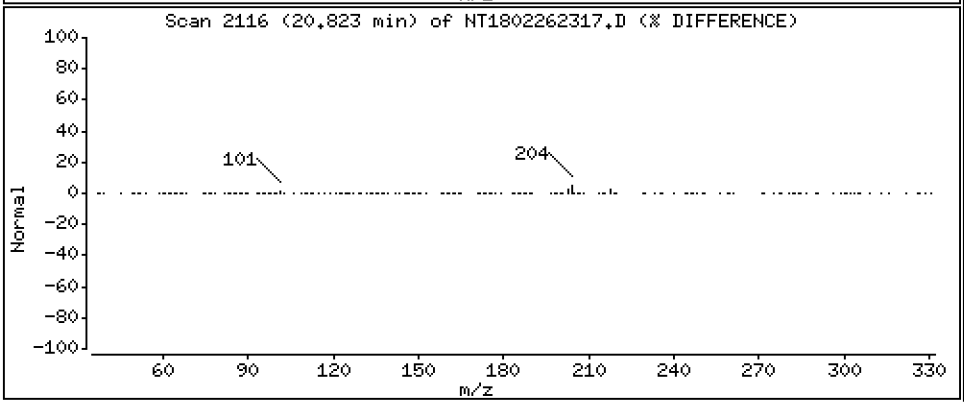
65 Pyrene

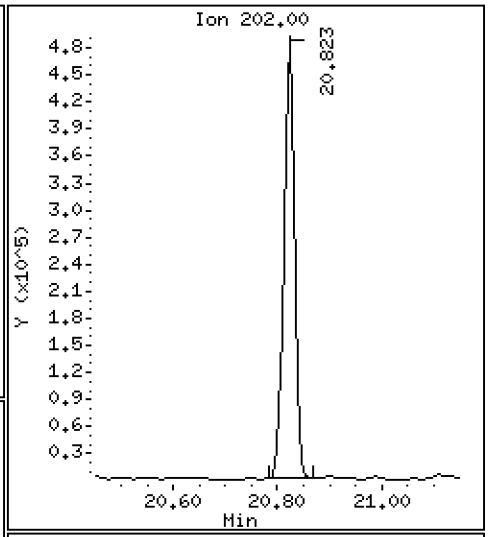
Concentration: 1.625 ug/mL

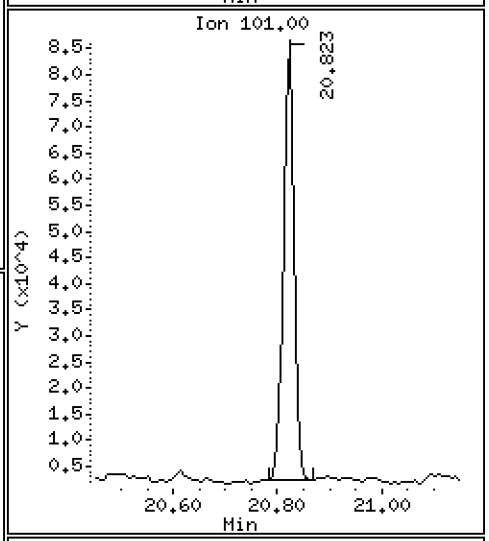


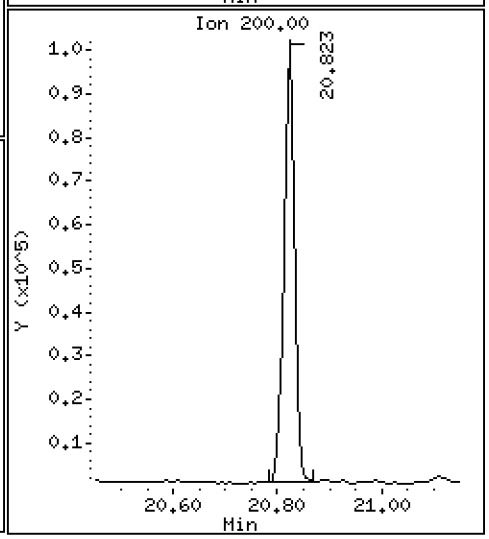












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

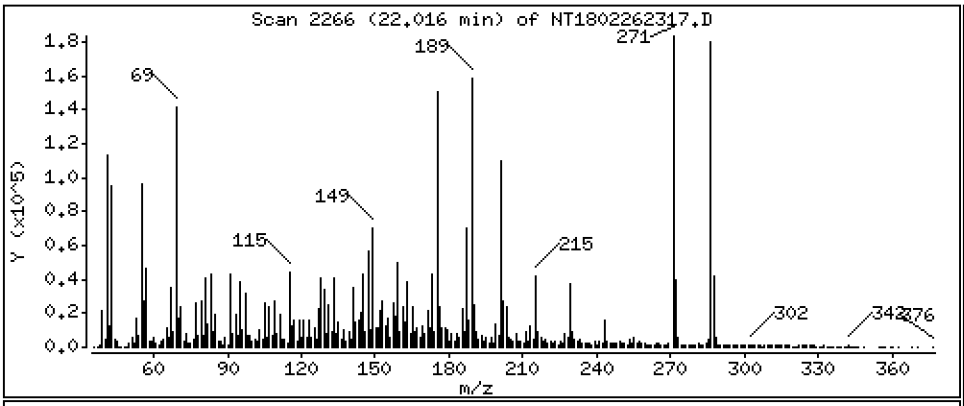
Operator: VTS

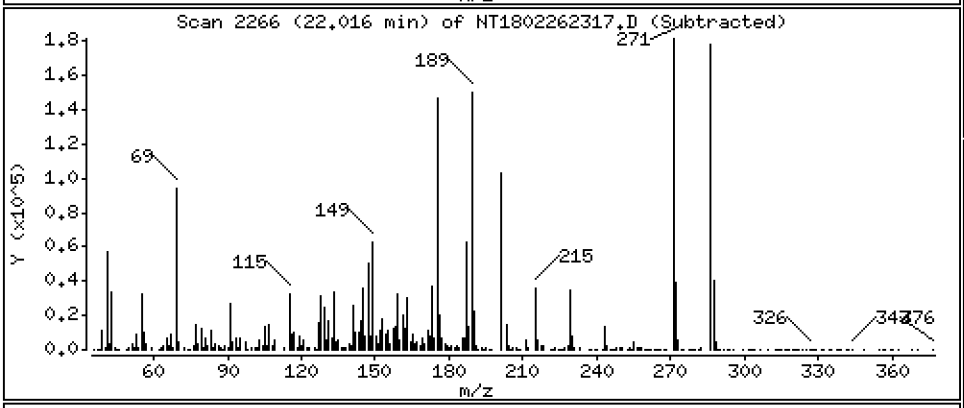
Column phase: ZB-5msi

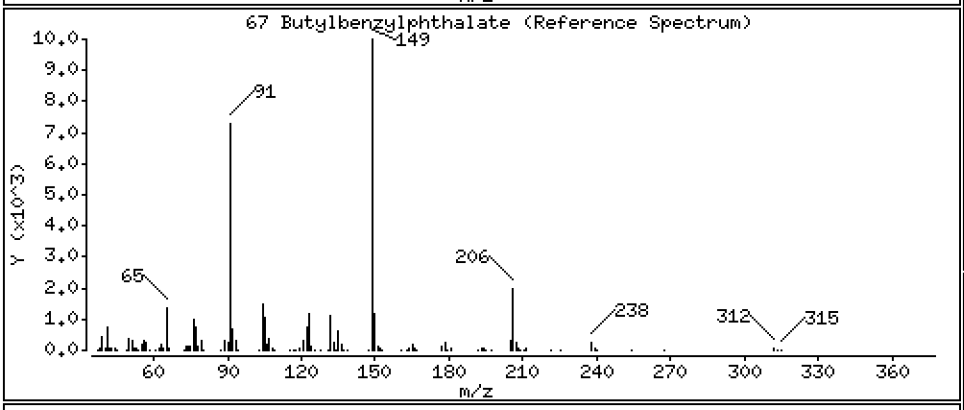
Column diameter: 0.25

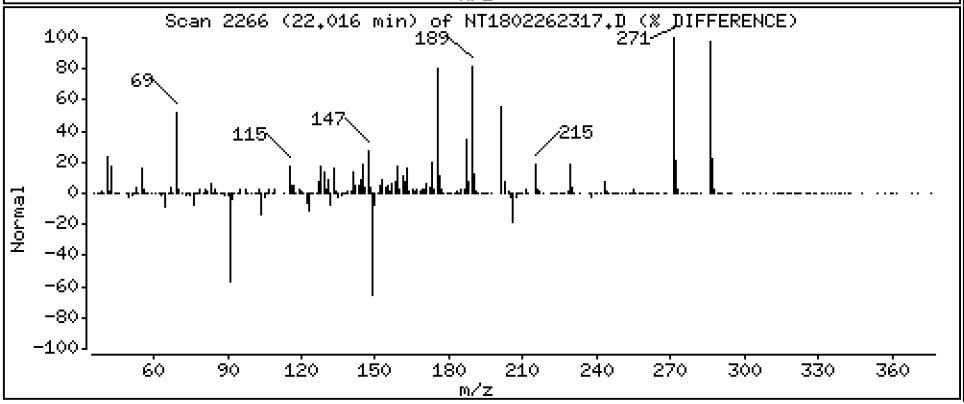
67 Butylbenzylphthalate

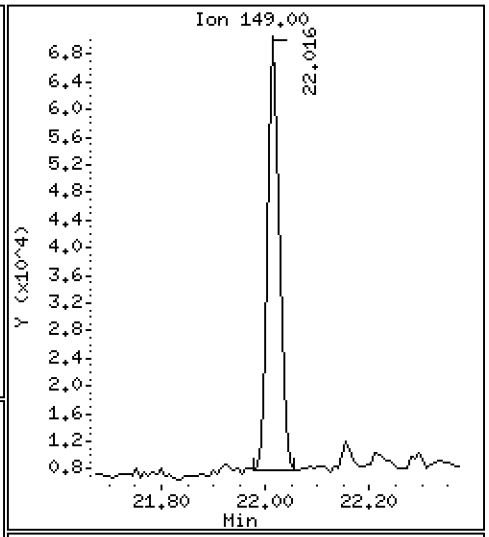
Concentration: 0.5885 ug/mL

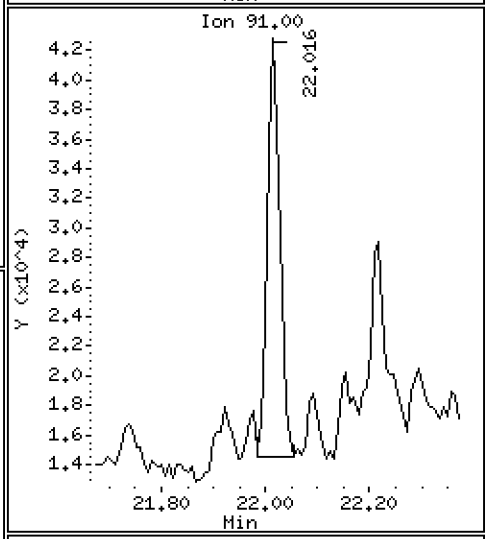


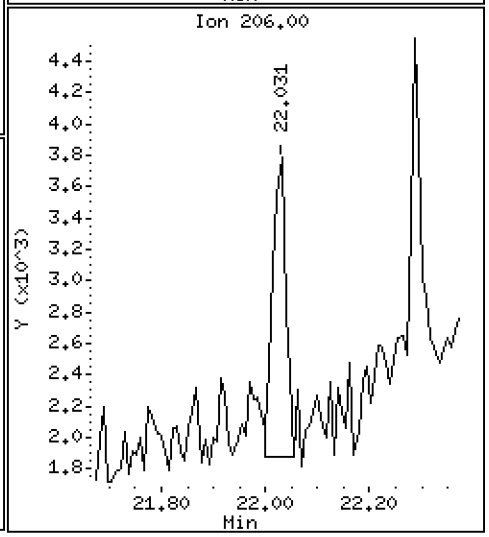












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

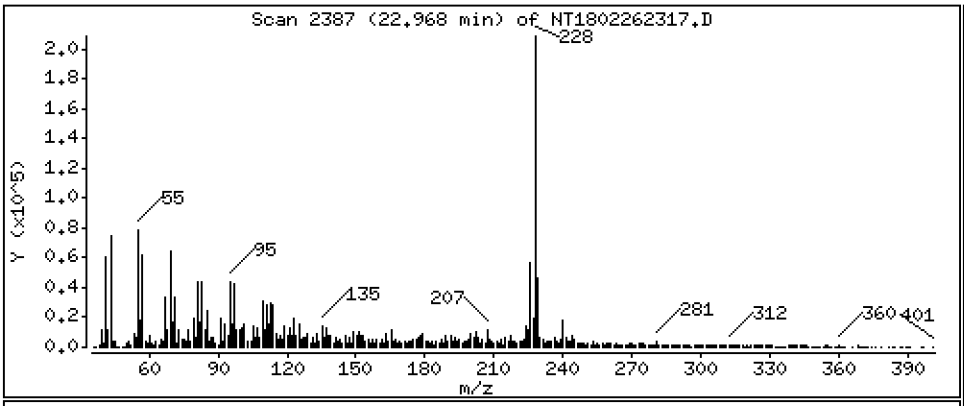
Operator: VTS

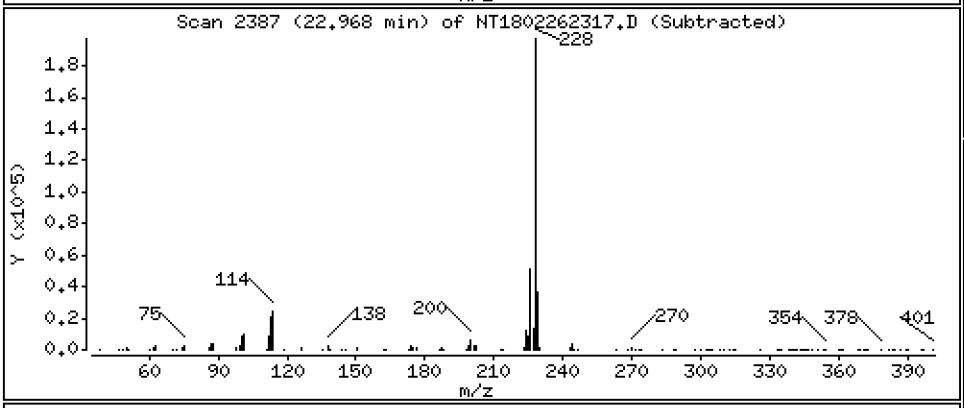
Column phase: ZB-5msi

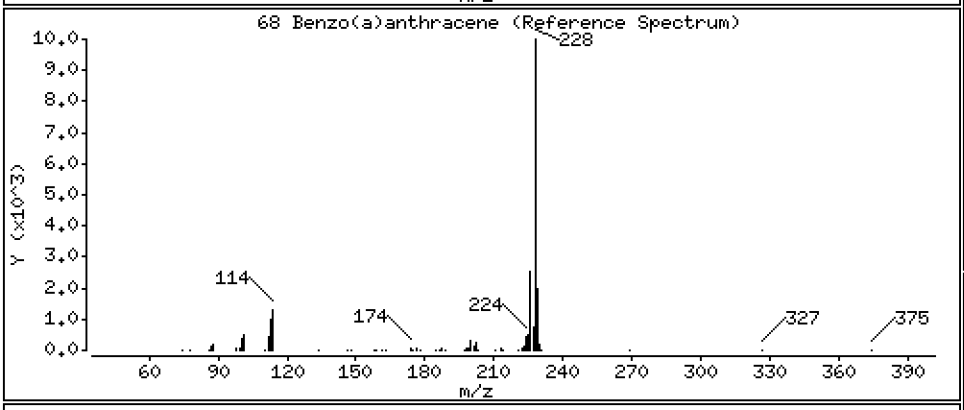
Column diameter: 0.25

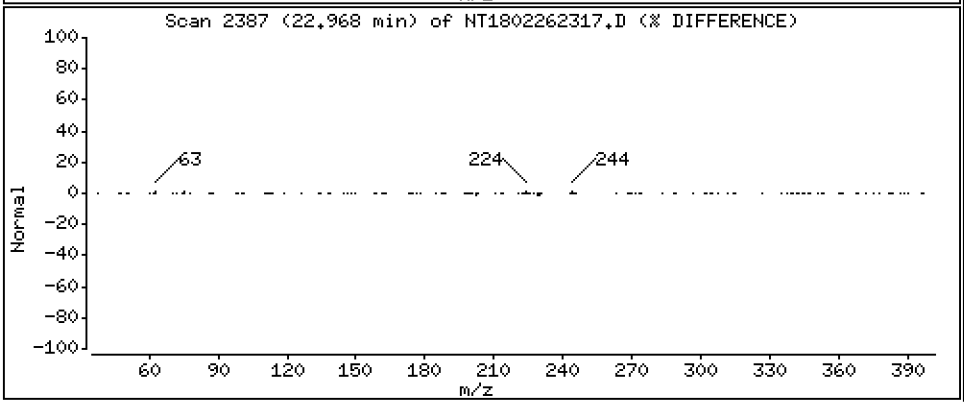
68 Benzo(a)anthracene

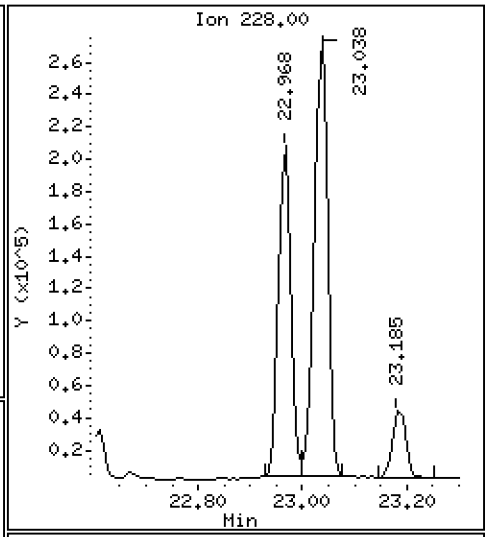
Concentration: 0.7964 ug/mL

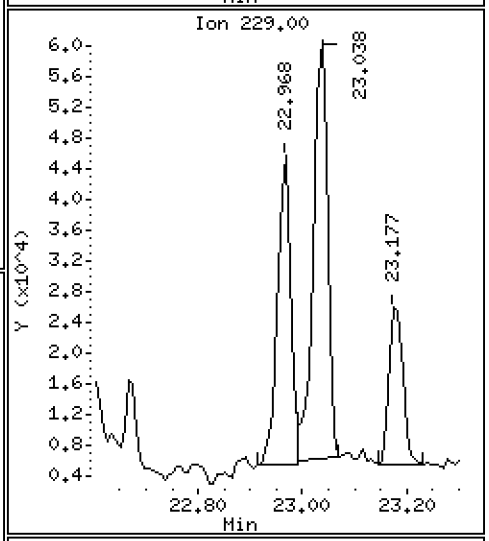


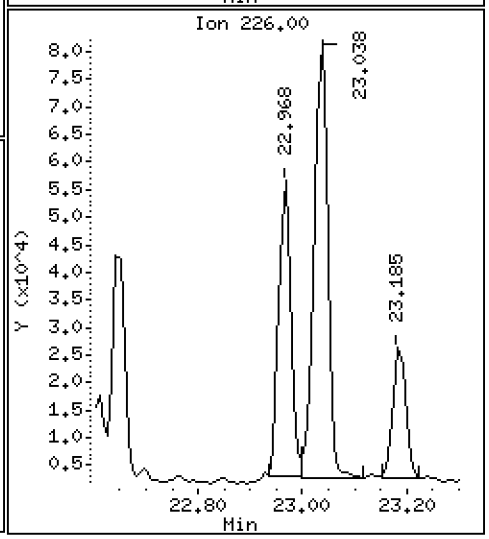












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

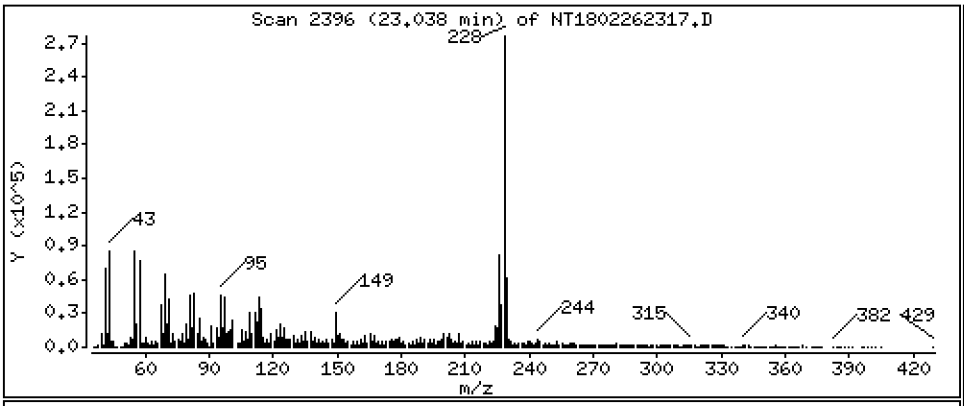
Operator: VTS

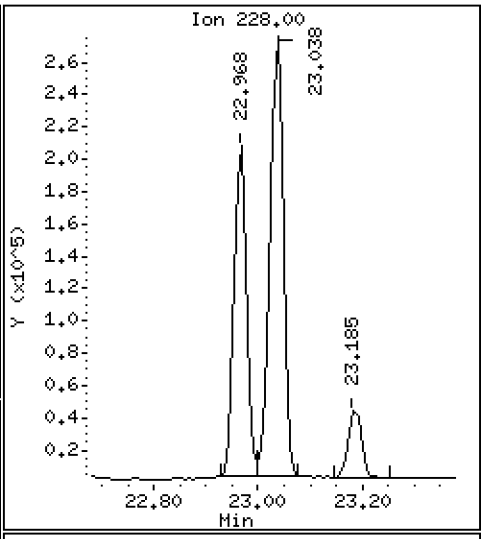
Column phase: ZB-5msi

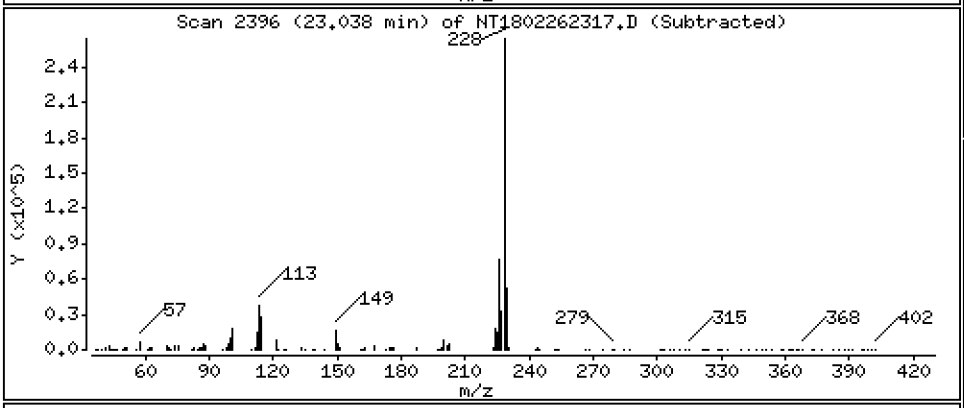
Column diameter: 0.25

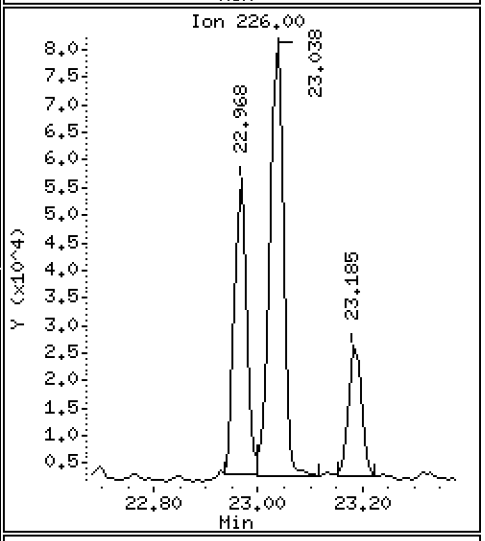
71 Chrysene

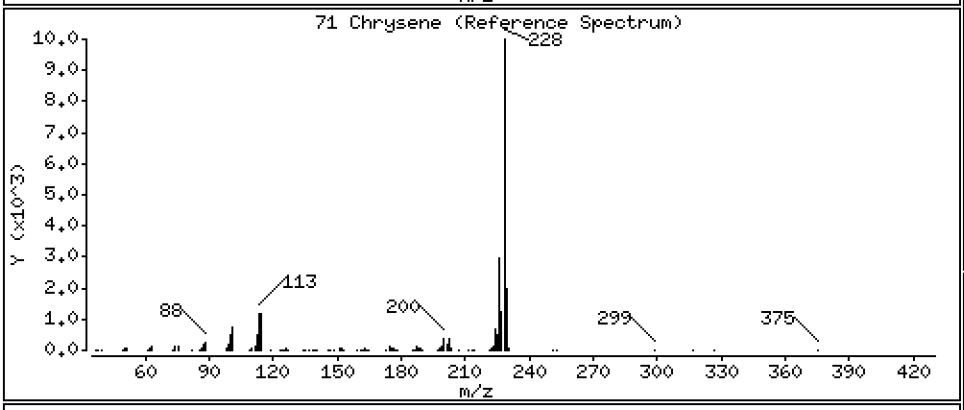
Concentration: 1.062 ug/mL

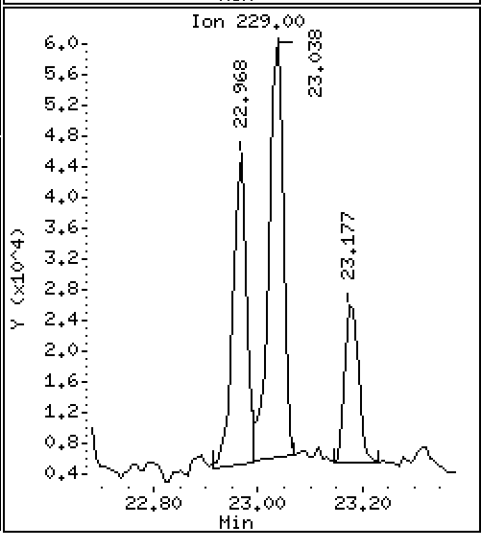


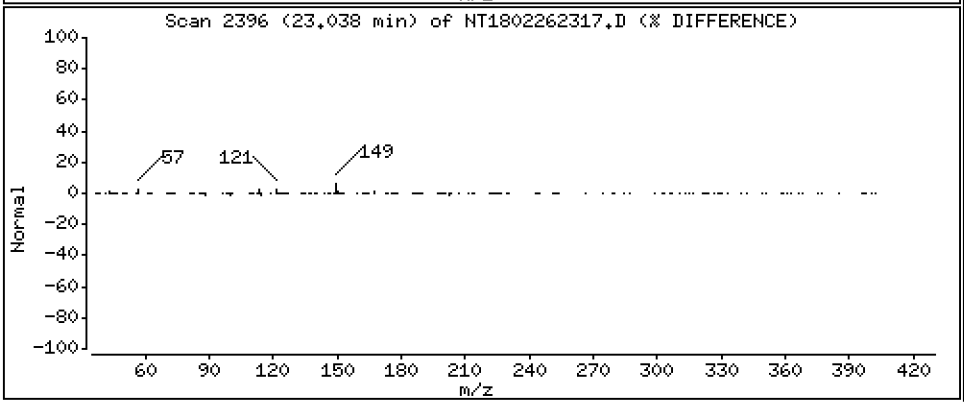












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

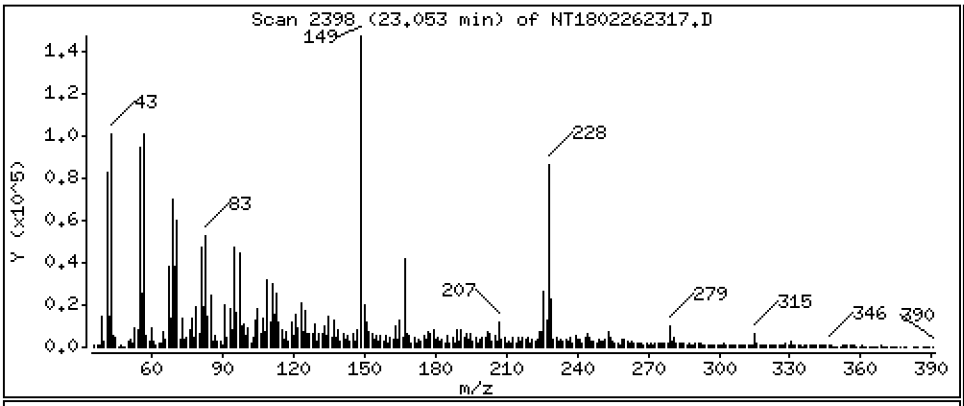
Operator: VTS

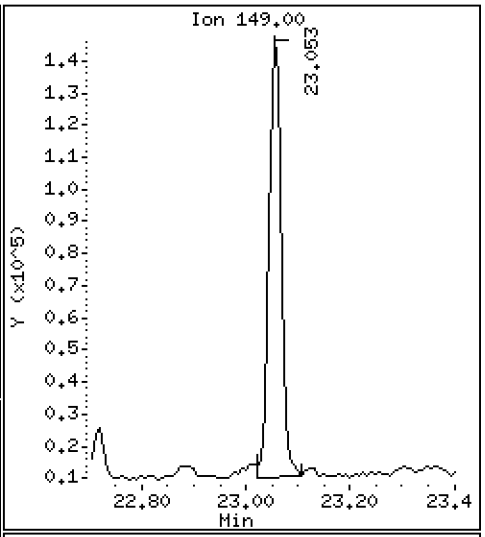
Column phase: ZB-5msi

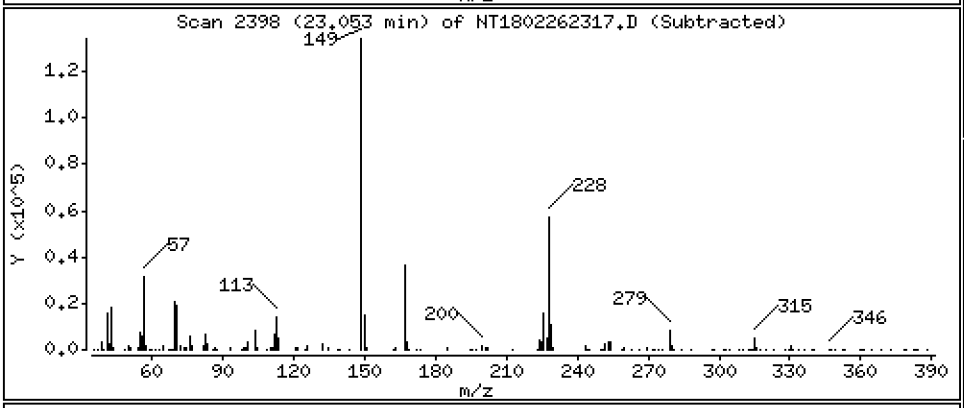
Column diameter: 0.25

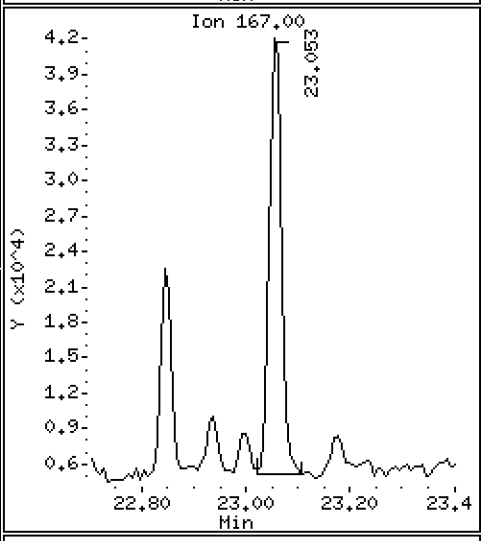
72 bis(2-Ethylhexyl)phthalate

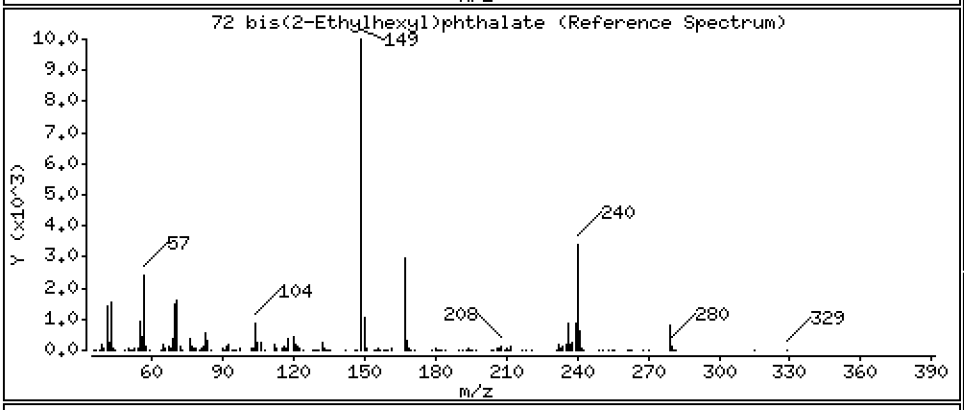
Concentration: 0.8356 ug/mL

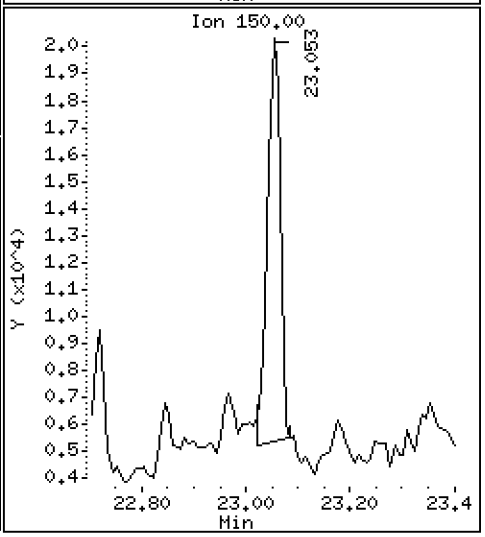


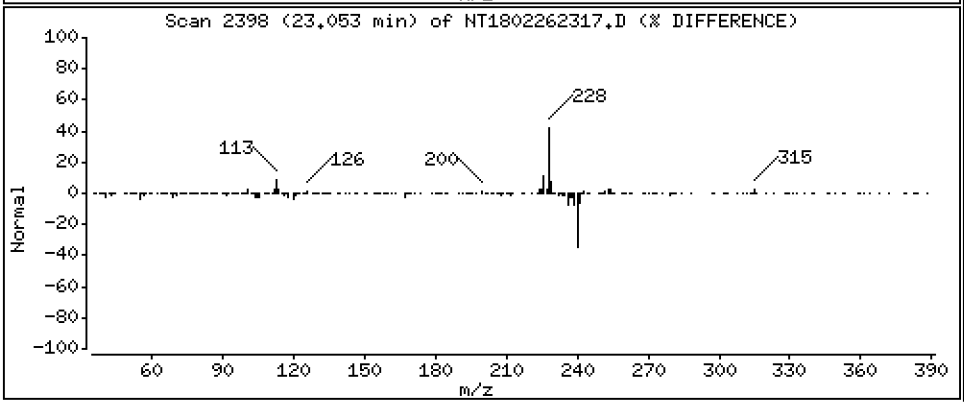












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

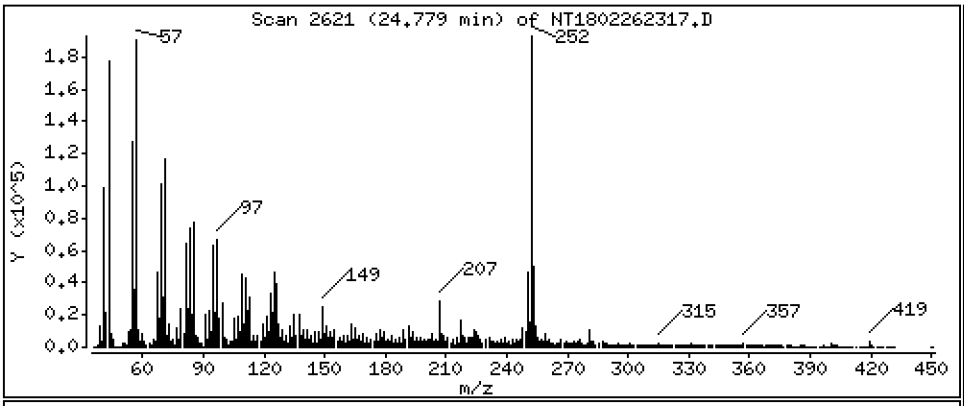
Operator: VTS

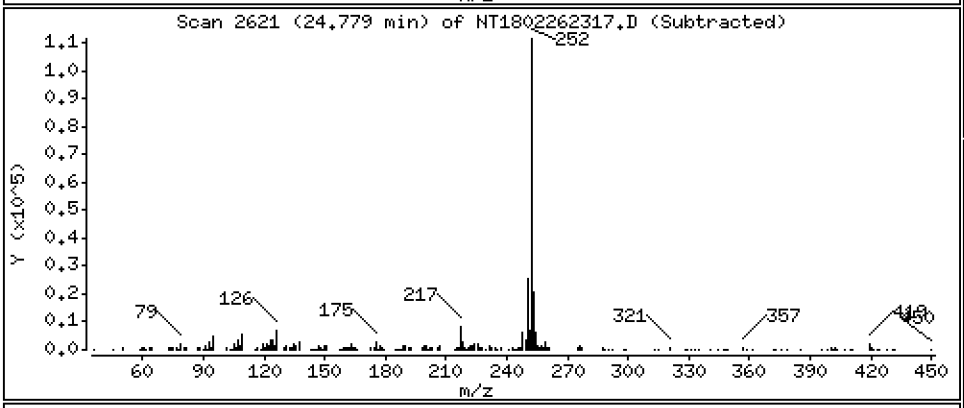
Column phase: ZB-5msi

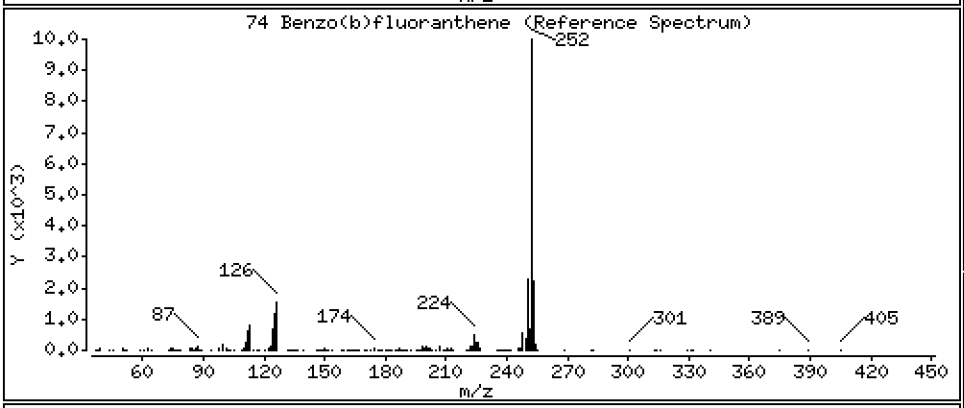
Column diameter: 0.25

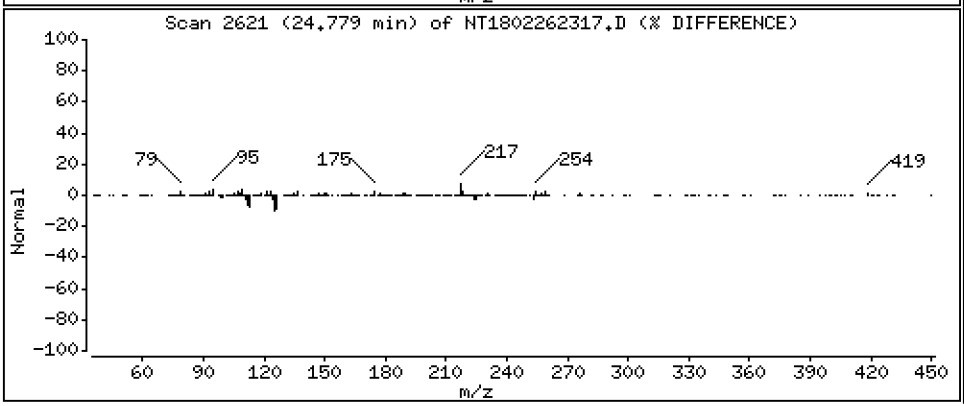
74 Benzo(b)fluoranthene

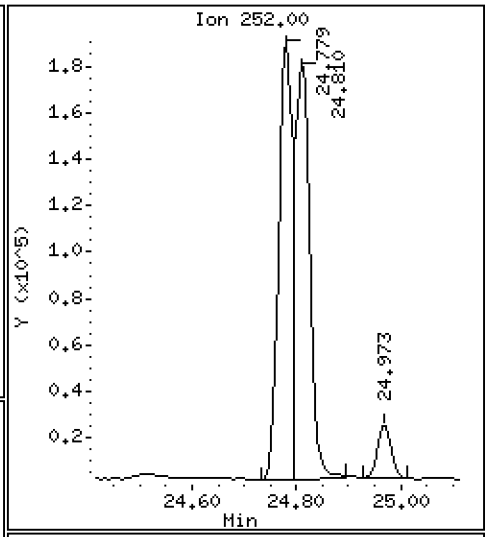
Concentration: 1.345 ug/mL

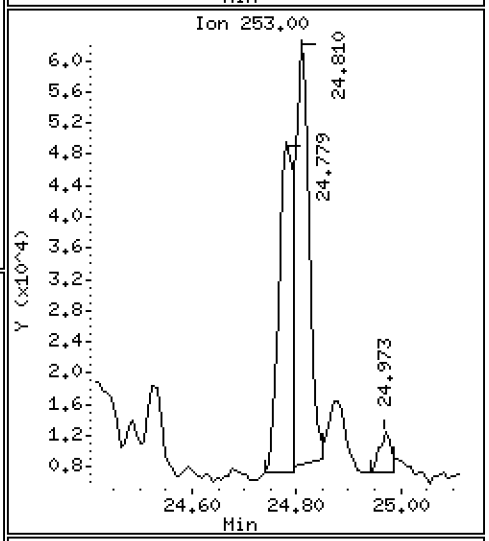


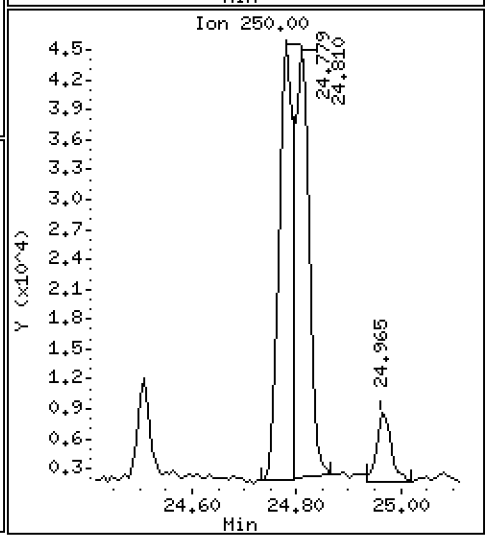












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

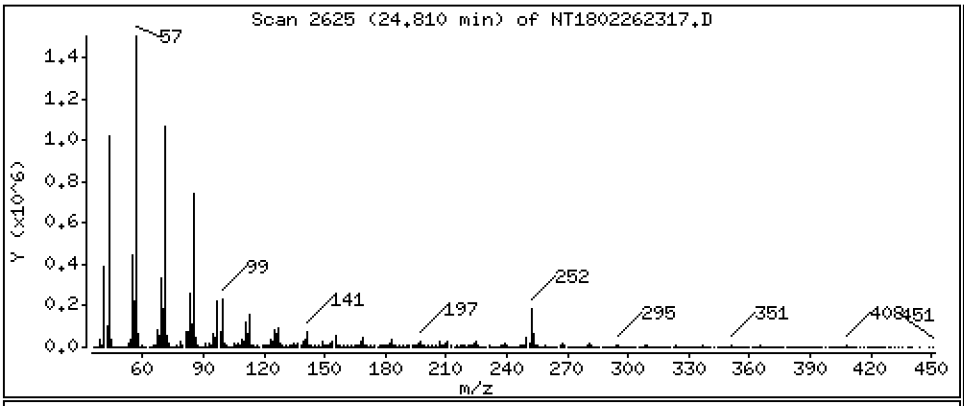
Operator: VTS

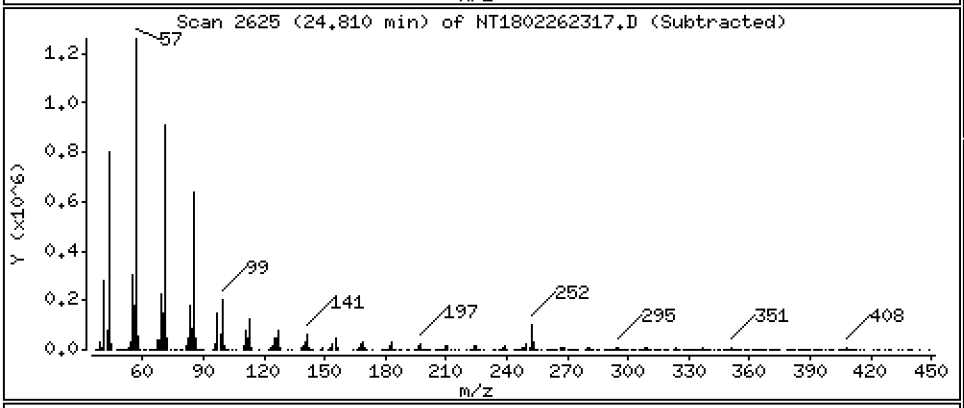
Column phase: ZB-5msi

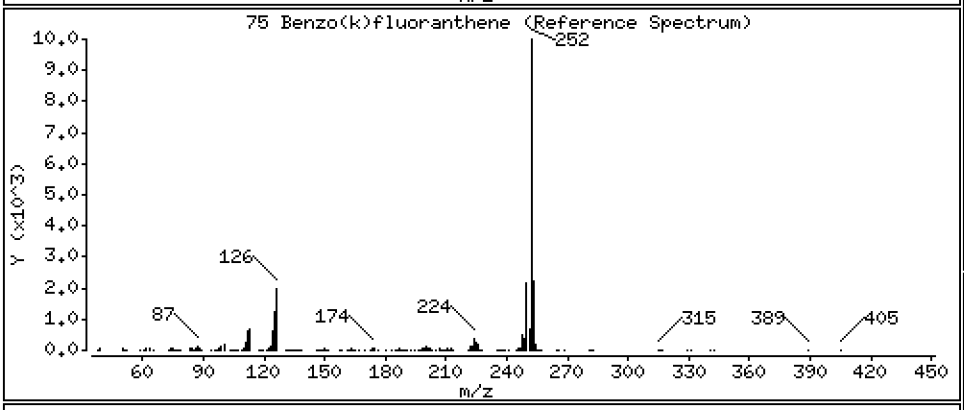
Column diameter: 0.25

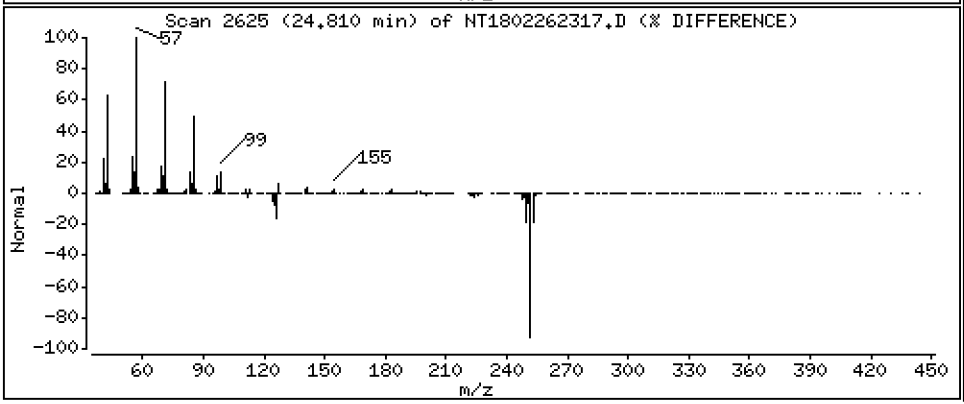
75 Benzo(k)fluoranthene

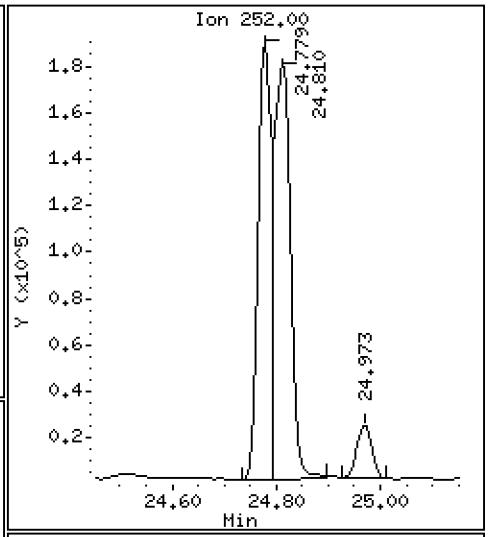
Concentration: 1.267 ug/mL

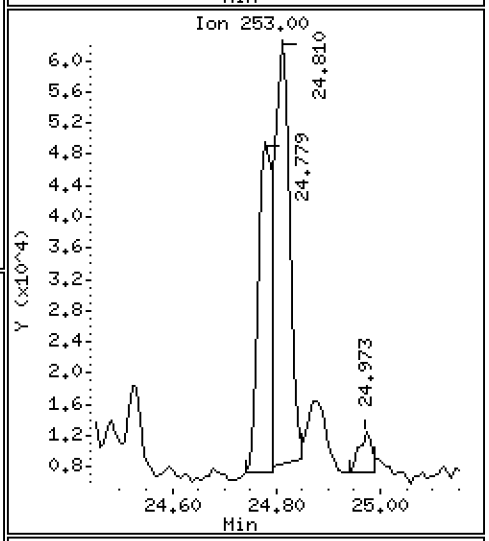


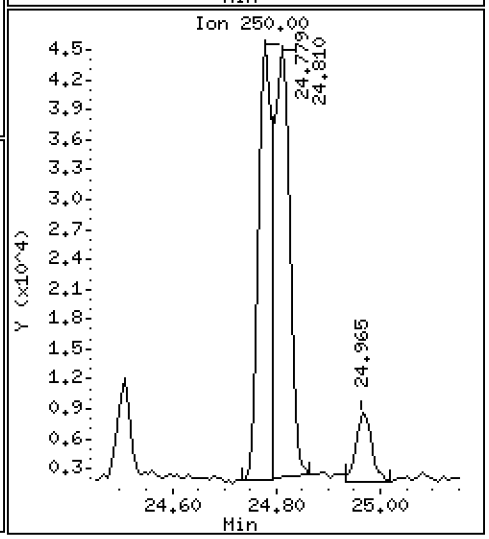












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

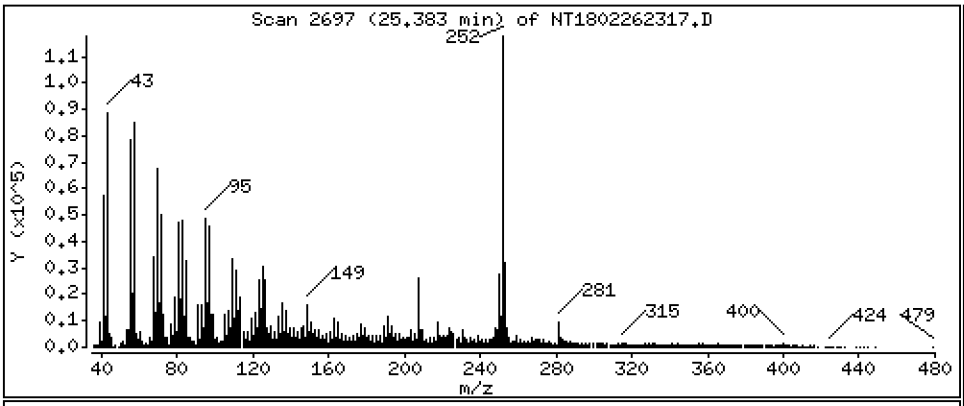
Operator: VTS

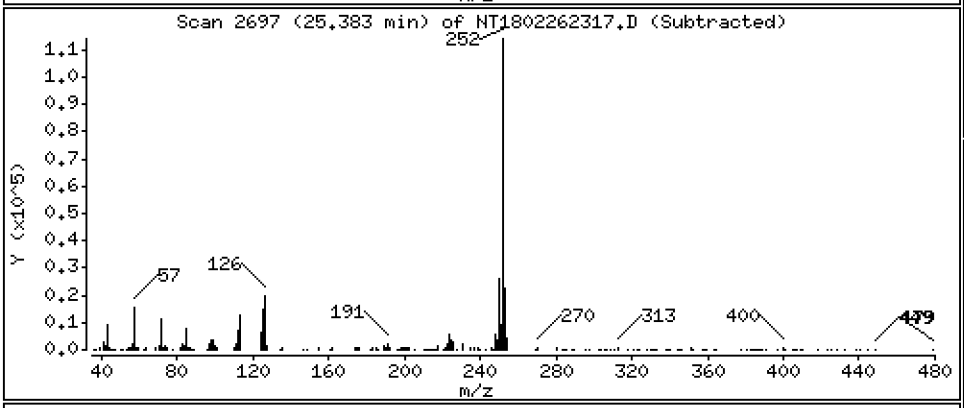
Column phase: ZB-5msi

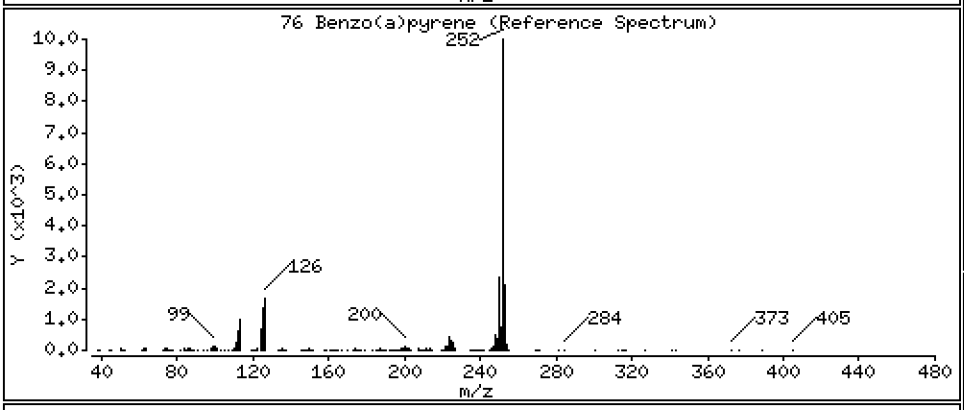
Column diameter: 0.25

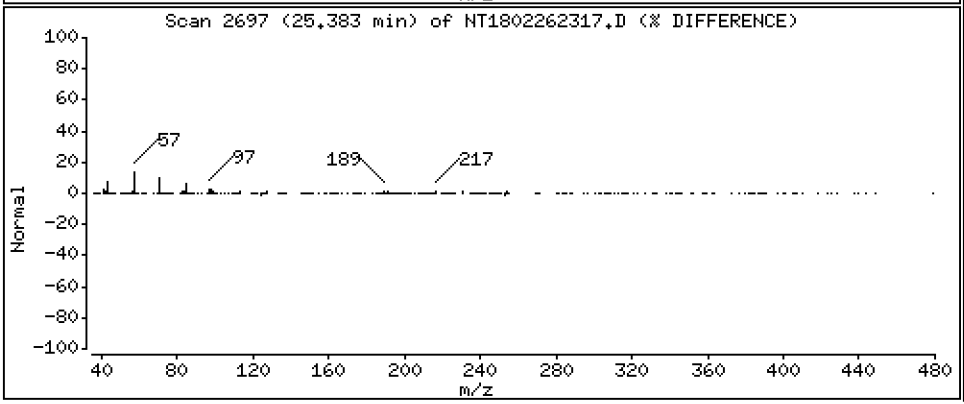
76 Benzo(a)pyrene

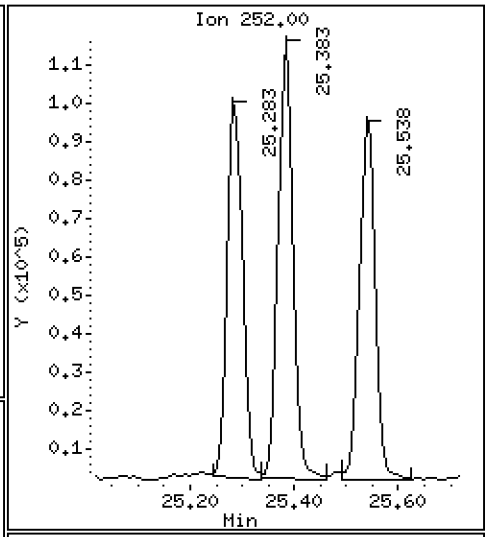
Concentration: 0.8662 ug/mL

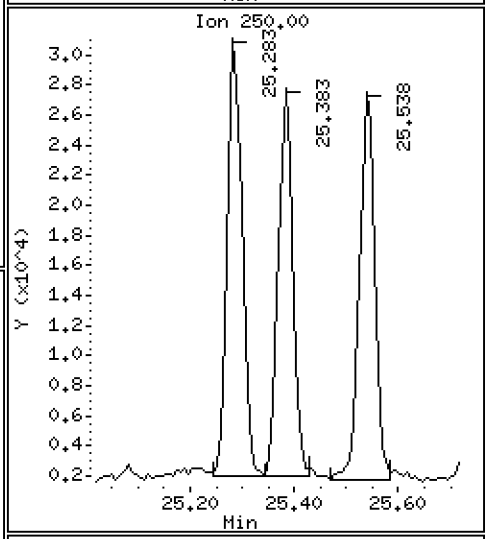


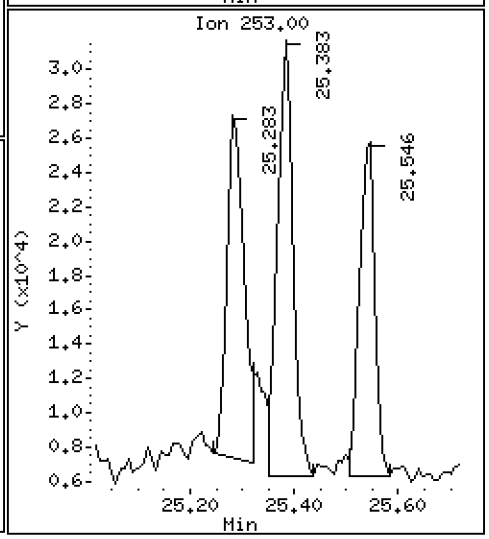












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

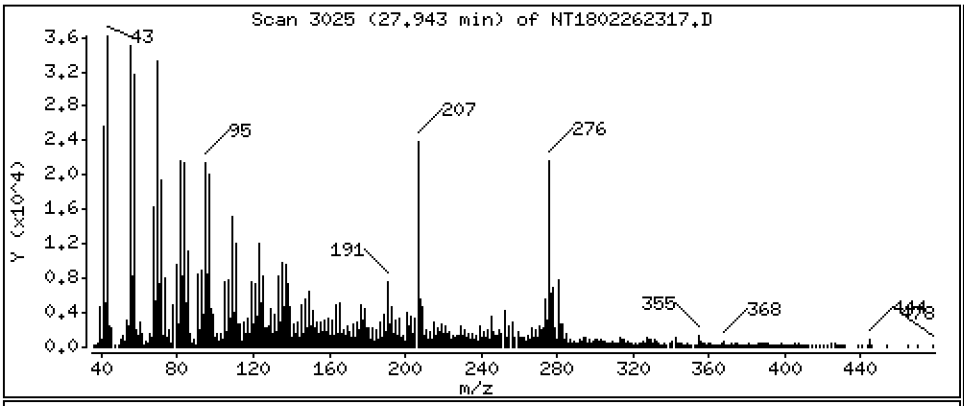
Operator: VTS

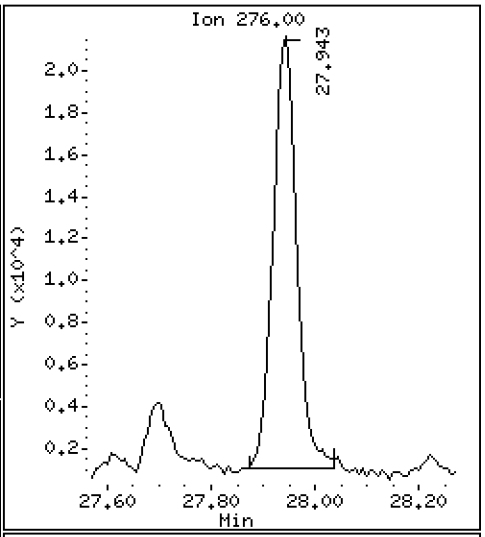
Column phase: ZB-5msi

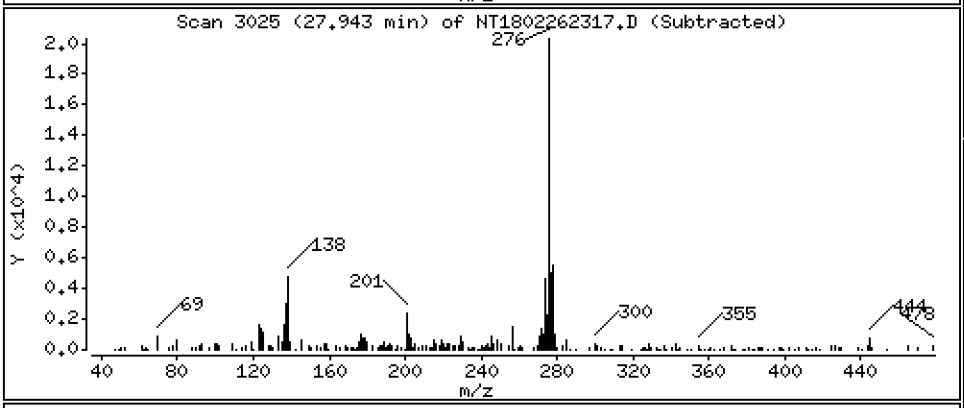
Column diameter: 0.25

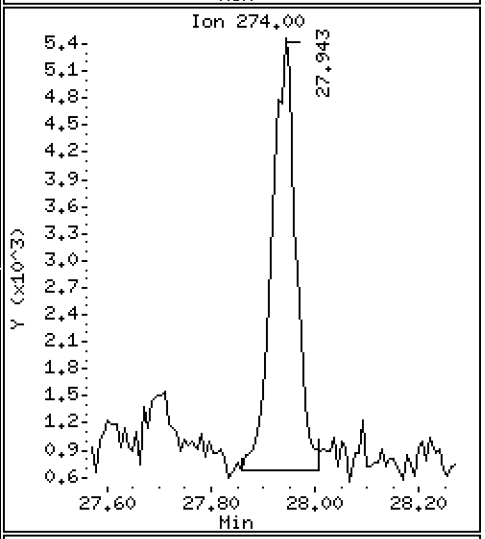
78 Indeno(1,2,3-cd)pyrene

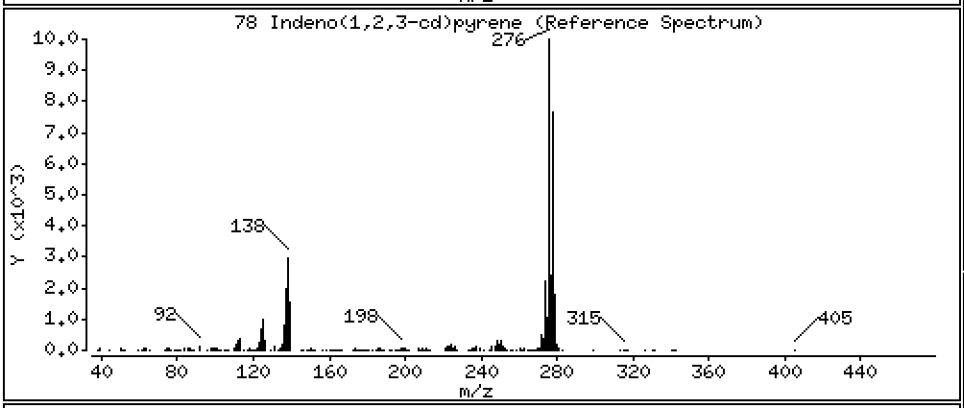
Concentration: 0.2096 ug/mL

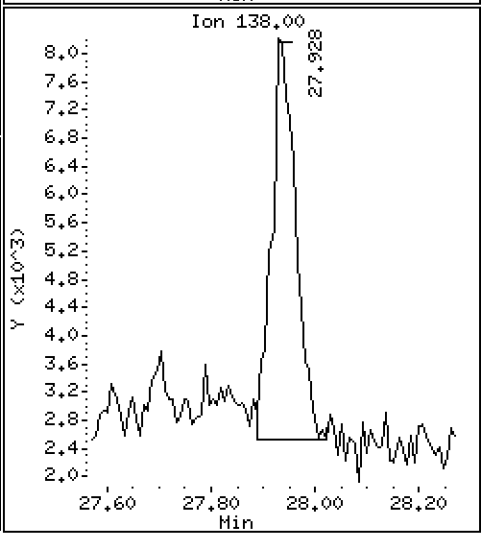


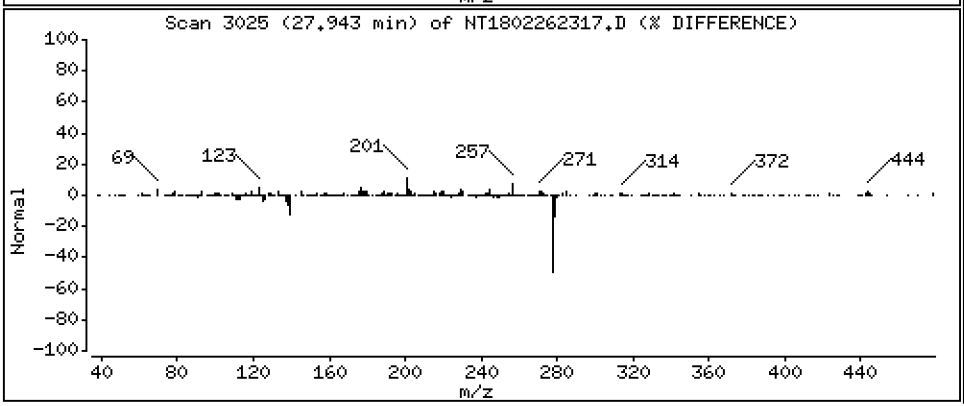












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

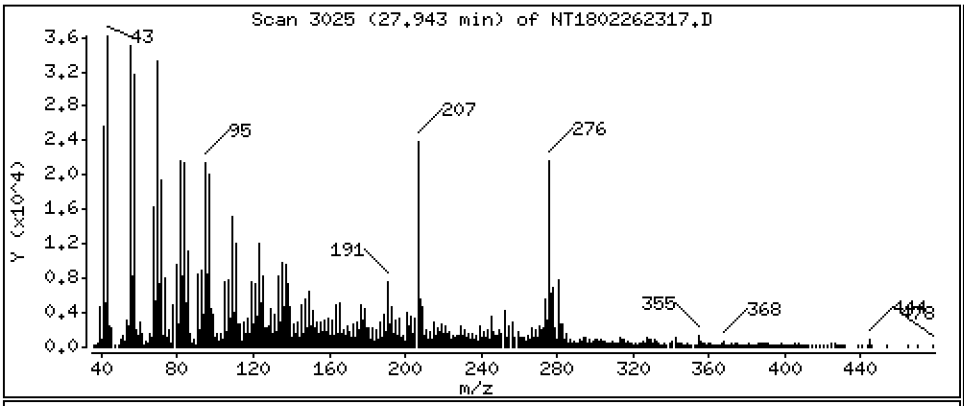
Operator: VTS

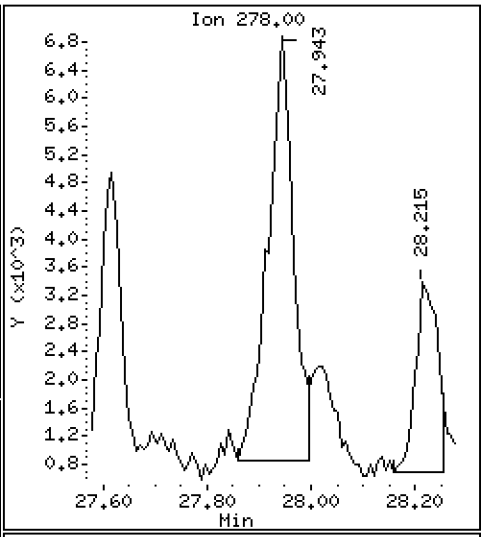
Column phase: ZB-5msi

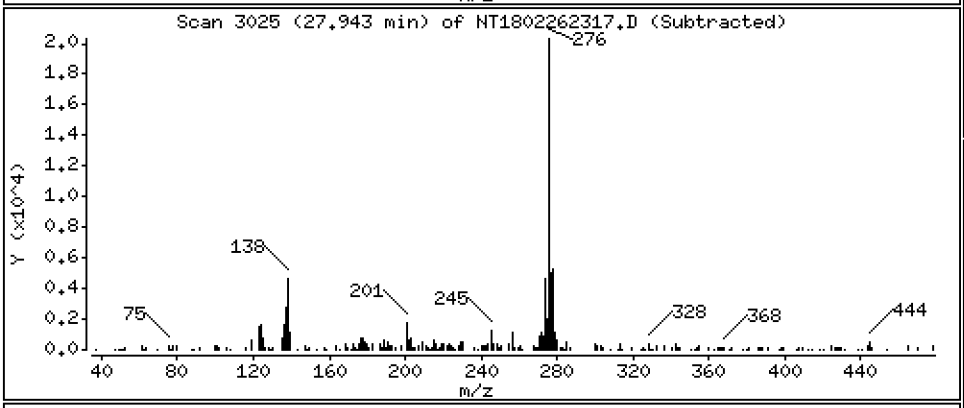
Column diameter: 0.25

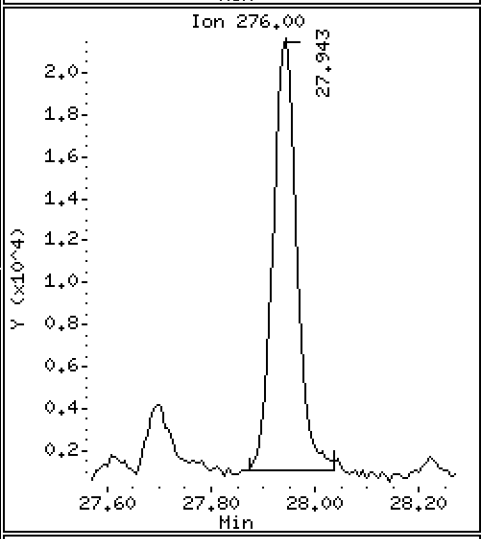
79 Dibenzo(a,h)anthracene

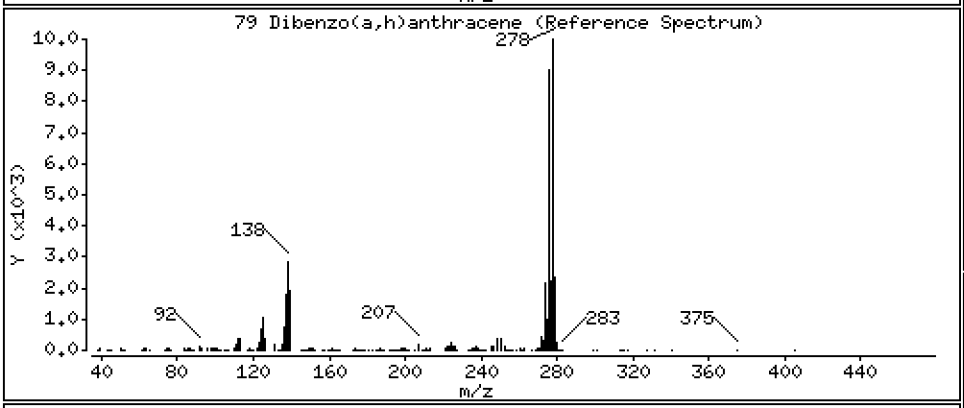
Concentration: 0.07861 ug/mL

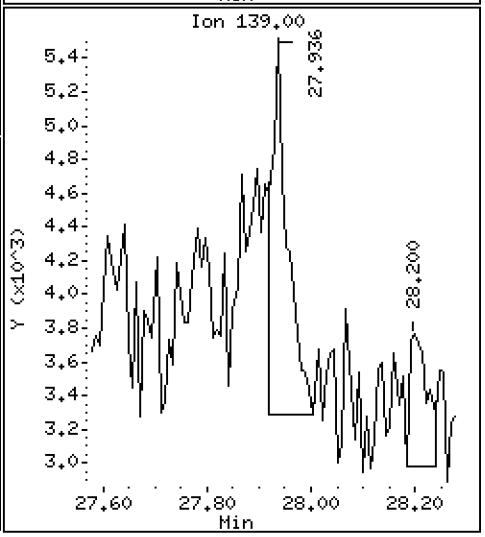


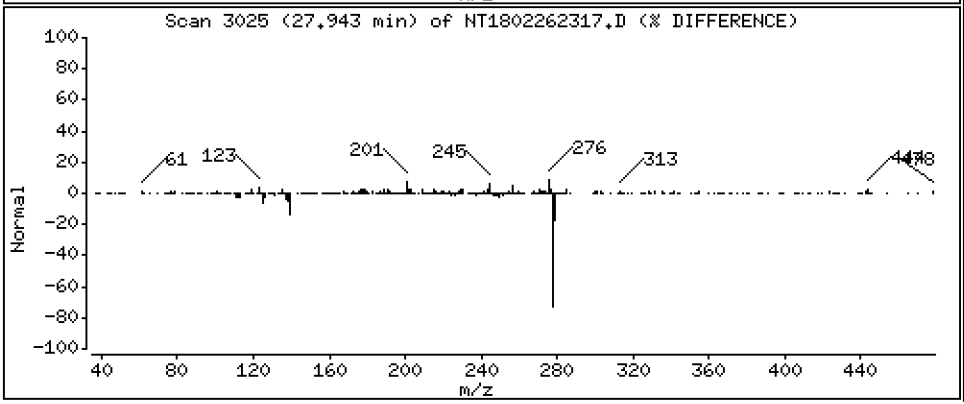












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

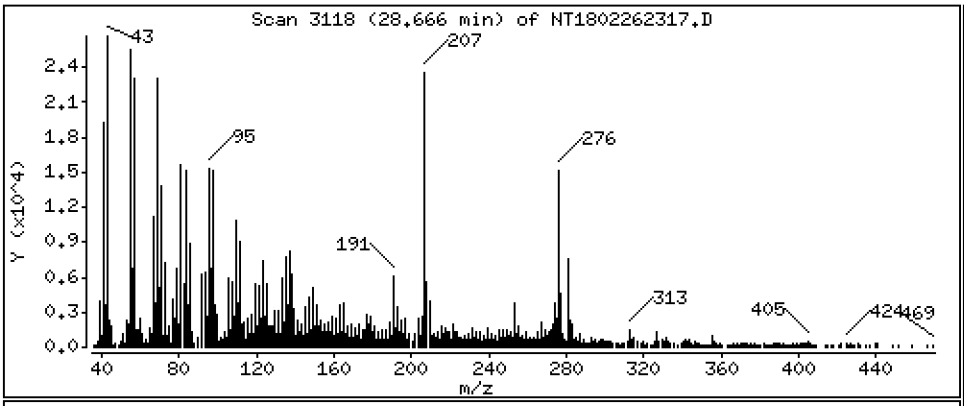
Operator: VTS

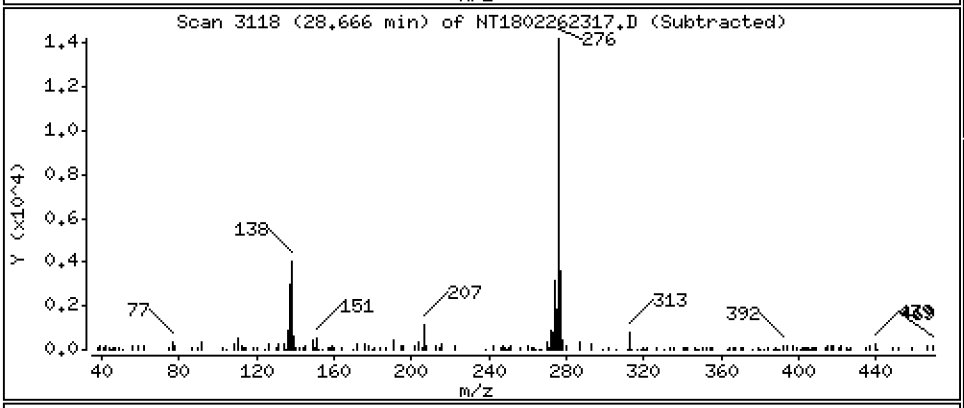
Column phase: ZB-5msi

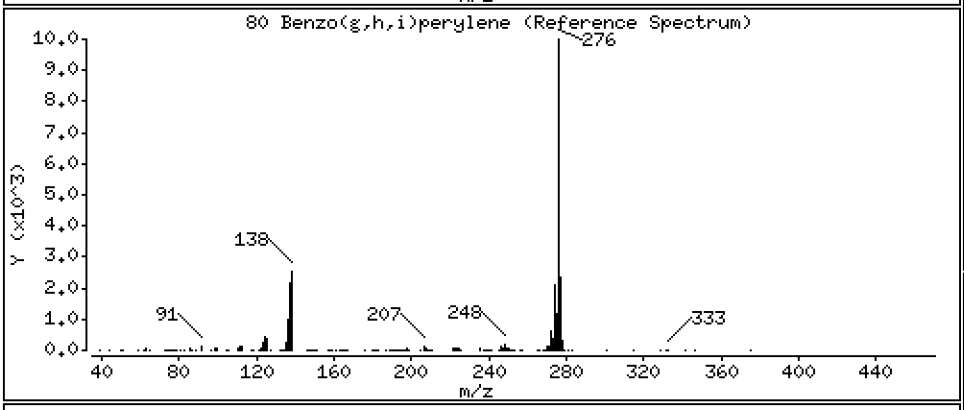
Column diameter: 0.25

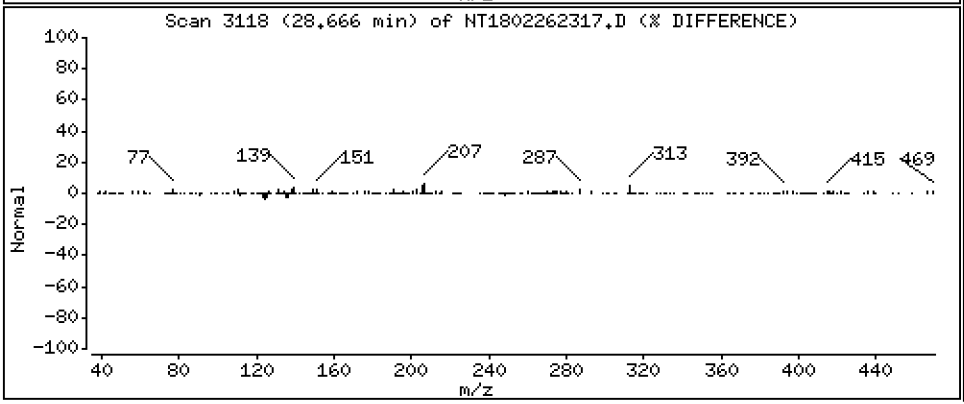
80 Benzo(g,h,i)perylene

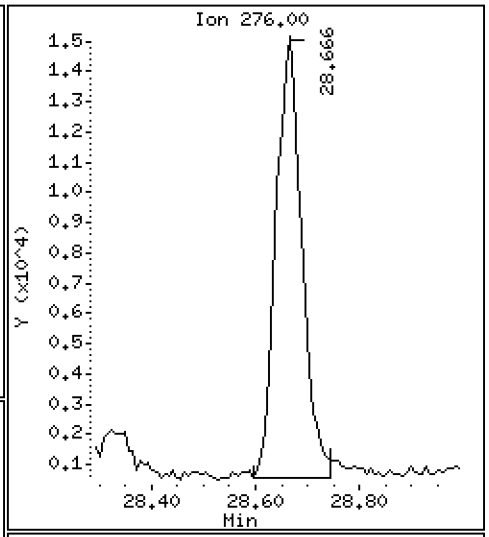
Concentration: 0.1972 ug/mL

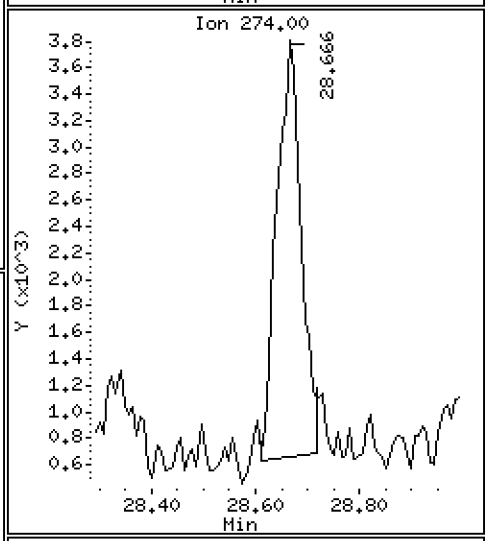


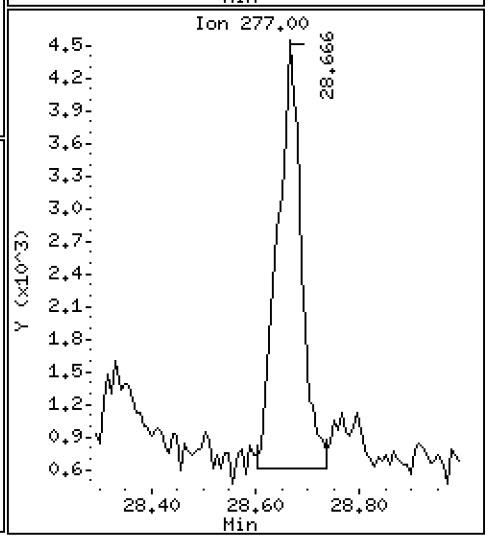












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

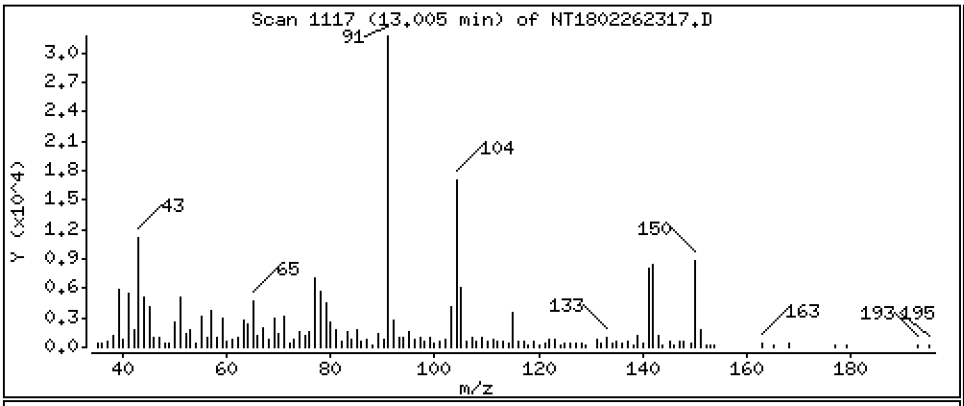
Operator: VTS

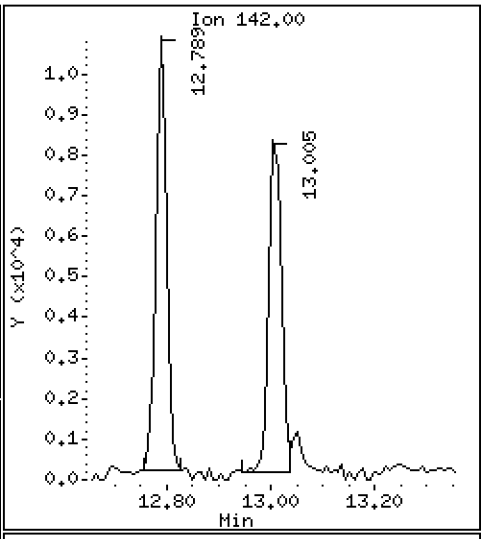
Column phase: ZB-5msi

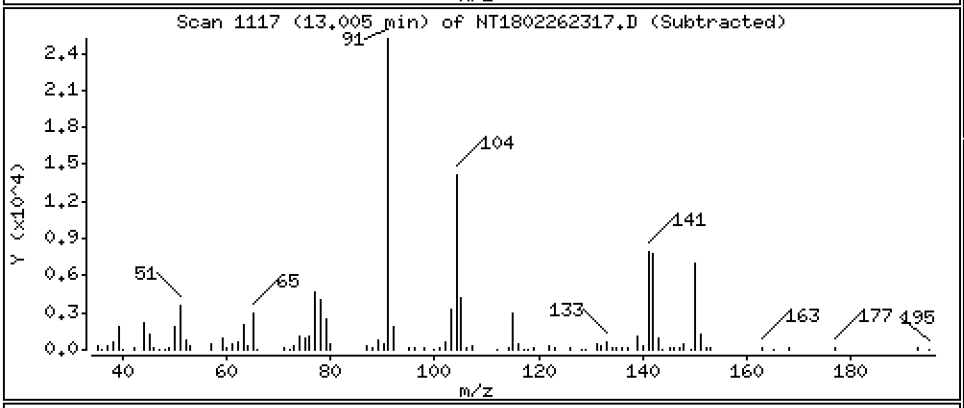
Column diameter: 0.25

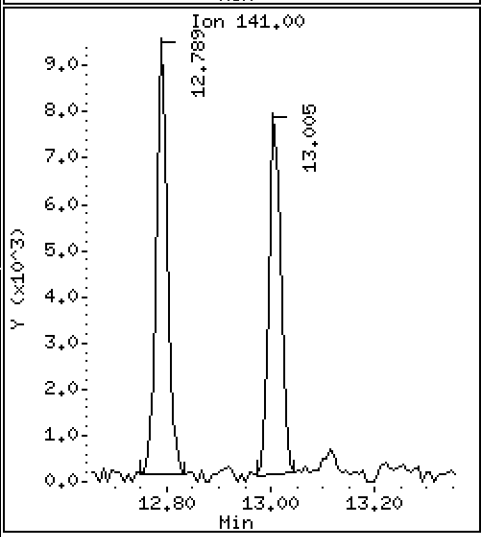
105 1-methylnaphthalene

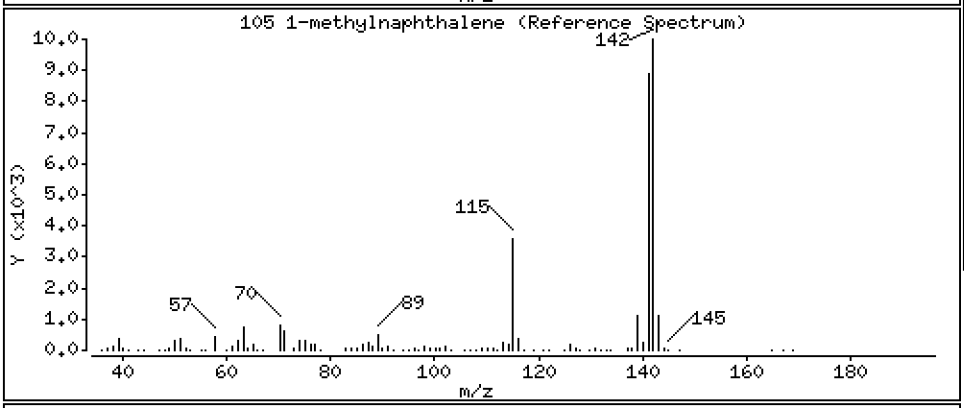
Concentration: 0.06947 ug/mL

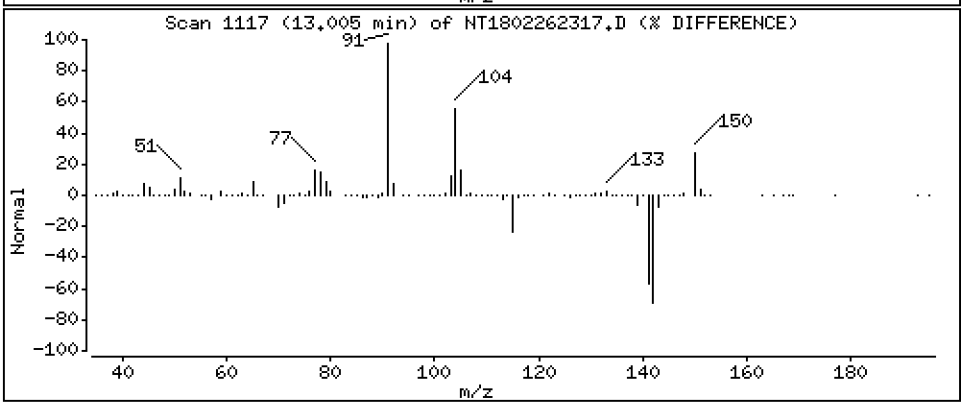












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

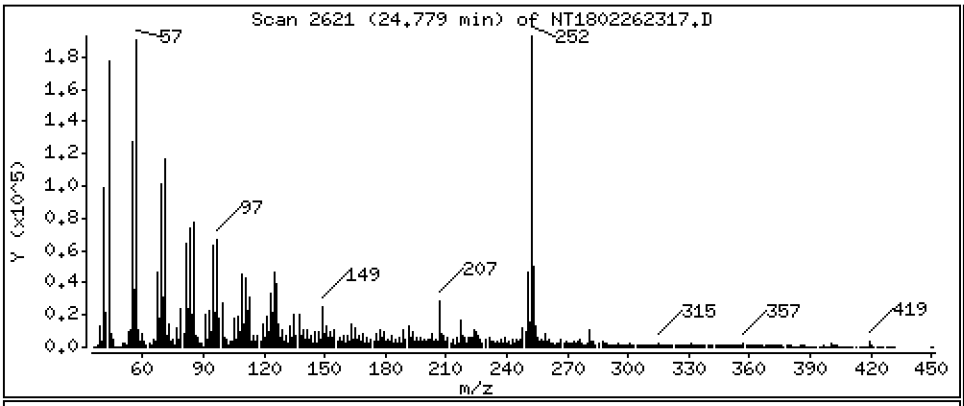
Operator: VTS

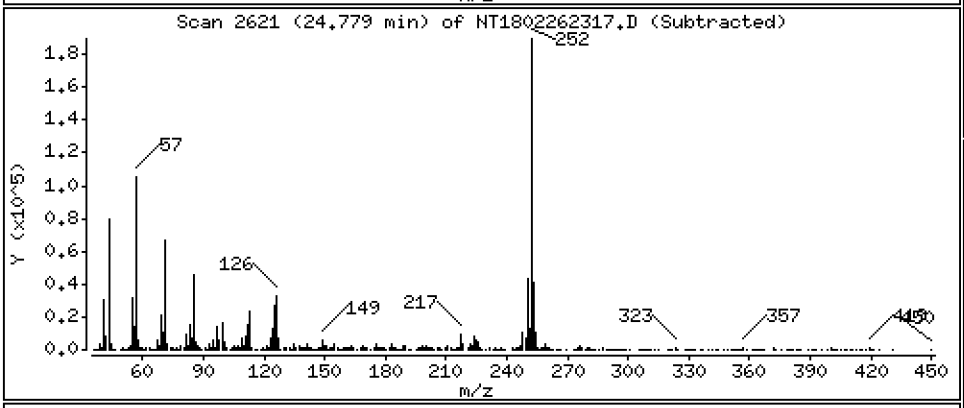
Column phase: ZB-5msi

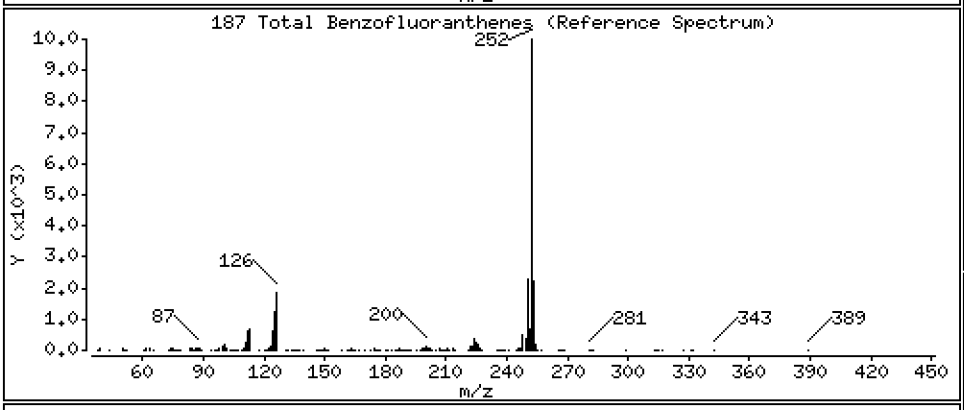
Column diameter: 0.25

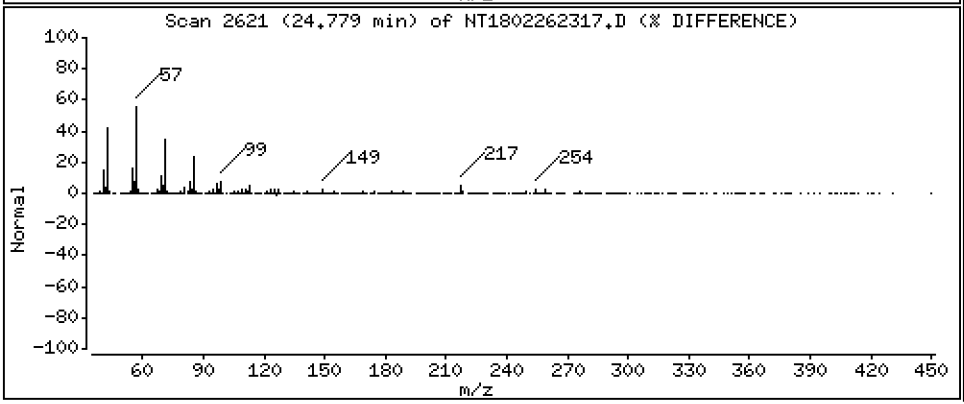
187 Total Benzofluoranthenes

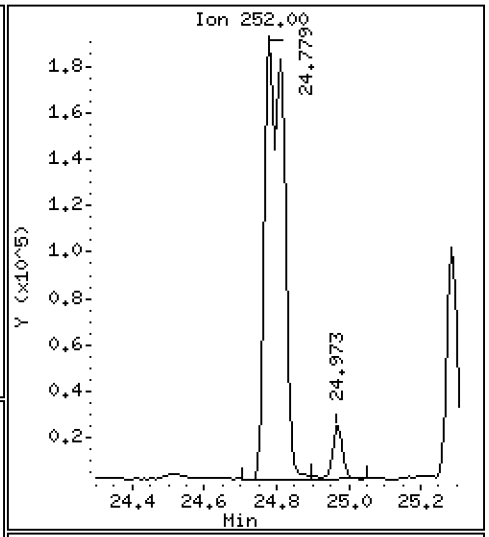
Concentration: 2.526 ug/mL

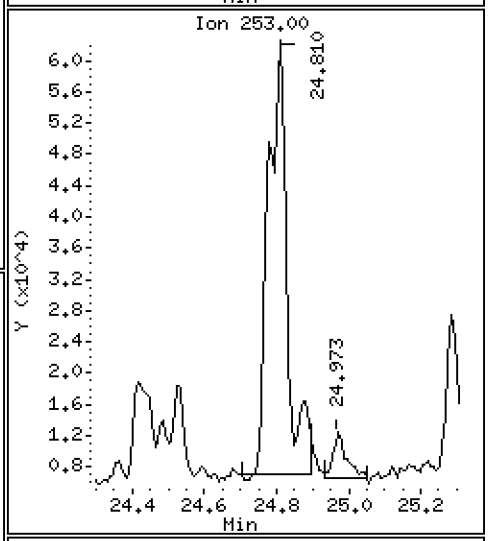


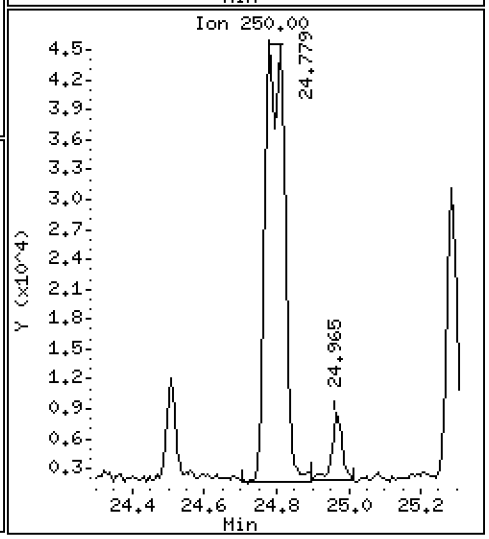












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262317.D
Lab Smp Id: 23A0134-08
Inj Date : 26-FEB-2023 22:33
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-08
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	6.774	6.743	(0.760)	478965	5.26110	5.261
$ 2	Phenol-d5	99	8.311	8.296	(0.932)	620650	5.27512	5.275
3	Phenol	94	8.335	8.319	(0.935)	500977	4.09242	4.092
$ 5	2-Chlorophenol-d4	132	8.566	8.559	(0.961)	542789	5.30157	5.302
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	266839	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	9.271	9.272	(1.040)	223522	3.07960	3.080
12	1,2-Dichlorobenzene	146	9.287	9.295	(1.042)	542	0.00493	0.004928
11	Benzyl alcohol	108	9.202	9.186	(1.032)	9724	0.16706	0.1671
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	9.691	9.683	(1.087)	9740	0.09869	0.09869
$ 18	Nitrobenzene-d5	82	9.993	9.993	(0.879)	374989	3.50685	3.507
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	10.879	10.990	(0.957)	53596	1.46271	1.463(M)
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.365	11.365	(1.000)	1003350	4.00000	
28	Naphthalene	128	11.403	11.403	(1.003)	28309	0.09178	0.09178
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	12.788	12.788	(1.125)	15697	0.07490	0.07490
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	13.570	13.570	(0.908)	794397	3.43194	3.432
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
40	Acenaphthylene	152	14.630	14.630	(0.979)	15194	0.04989	0.04989(H)
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	14.947	14.947	(1.000)	549008	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	15.009	15.009	(1.004)	14562	0.07555	0.07555
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.334	15.334	(1.026)	23197	0.08315	0.08315
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	15.906	15.921	(1.064)	152097	0.74723	0.7472
49	Fluorene	166	16.037	16.037	(1.073)	18479	0.08265	0.08265
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	200750	7.01807	7.018
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	17.697	17.697	(0.986)	441	0.02197	0.02197
* 59	Phenanthrene-d10	188	17.952	17.952	(1.000)	1100646	4.00000	
60	Phenanthrene	178	17.999	17.999	(1.003)	219546	0.63417	0.6342
61	Anthracene	178	18.092	18.092	(1.008)	77301	0.23431	0.2343
62	Carbazole	167	18.432	18.424	(1.027)	32420	0.10724	0.1072
63	Di-n-butylphthalate	149	Compound Not Detected.					
64	Fluoranthene	202	20.420	20.382	(0.888)	656335	1.62699	1.627
65	Pyrene	202	20.823	20.800	(0.905)	699249	1.62527	1.625
$ 66	Terphenyl-d14	244	21.109	21.094	(0.918)	1323018	3.83399	3.834
67	Butylbenzylphthalate	149	22.015	22.023	(0.957)	96142	0.58851	0.5885
68	Benzo(a)anthracene	228	22.967	22.952	(0.999)	331049	0.79642	0.7964
* 69	Chrysene-d12	240	22.998	22.983	(1.000)	1151391	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.037	23.029	(1.002)	459001	1.06192	1.062
72	bis(2-Ethylhexyl)phthalate	149	23.053	23.053	(0.959)	212502	0.83558	0.8356
* 134	Di-n-octylphthalate-d4	153	24.028	24.020	(1.000)	1771376	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	24.779	24.764	(0.972)	368388	1.34528	1.345
75	Benzo(k)fluoranthene	252	24.810	24.802	(0.973)	393144	1.26681	1.267(H)
76	Benzo(a)pyrene	252	25.383	25.368	(0.996)	219888	0.86619	0.8662
* 77	Perylene-d12	264	25.491	25.476	(1.000)	839352	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.943	27.920	(1.096)	66794	0.20959	0.2096
79	Dibenzo(a,h)anthracene	278	27.943	27.927	(1.096)	20894	0.07861	0.07861
80	Benzo(g,h,i)perylene	276	28.665	28.642	(1.125)	50378	0.19718	0.1972
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.005	13.005	(1.144)	13181	0.06947	0.06947
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.779	24.802	(0.972)	699435	2.52629	2.526
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262317.D
Lab Smp Id: 23A0134-08
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	266839	9.31
27 Naphthalene-d8	943164	471582	1886328	1003350	6.38
42 Acenaphthene-d10	501893	250947	1003786	549008	9.39
59 Phenanthrene-d10	896502	448251	1793004	1100646	22.77
69 Chrysene-d12	842481	421241	1684962	1151391	36.67
134 Di-n-octylphthala	1278043	639022	2556086	1771376	38.60
77 Perylene-d12	915681	457841	1831362	839352	-8.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	-0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.00
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.07
134 Di-n-octylphthala	24.02	23.52	24.52	24.03	0.03
77 Perylene-d12	25.48	24.98	25.98	25.49	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262317.D

Lab ID: 23A0134-08
nt18.i, ABN.m, 26-FEB-2023 22:33

RT	CO-ELUTION COMPOUNDS
27.943	Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene
27.943	Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.967	-0.0097	Benzoic acid

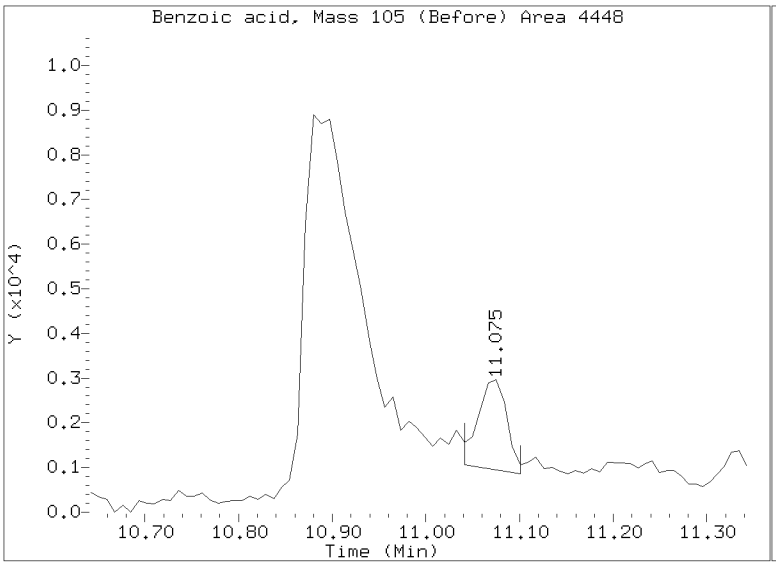
RRT check based on Ccal File: NT1802262302.D

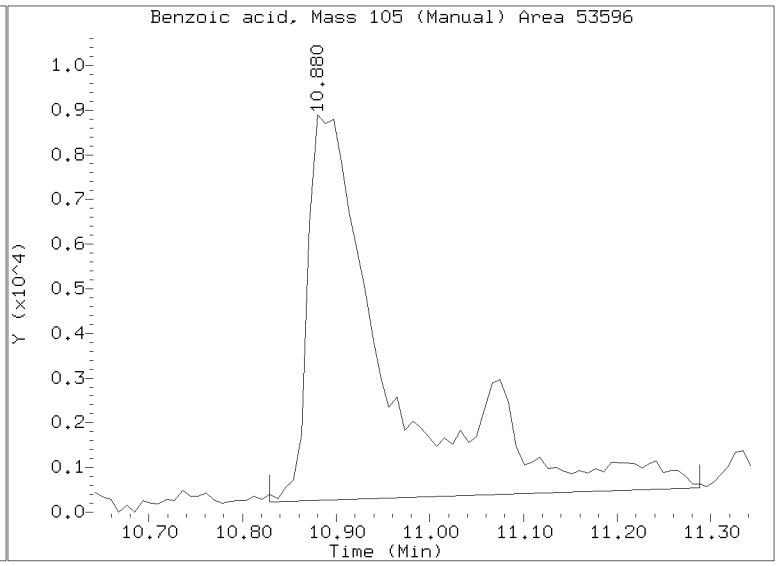
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/NT1802262317.D
Injection Date: 26-FEB-2023 22:33
Lab ID:23A0134-08 Client ID:
Report Date: 03/10/2023 07:47





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1129

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-09 C	SDG:	23A0134
Sampled:	01/06/23 12:57	Prepared:	01/19/23 13:35	File ID:	NT1802262318.D
% Solids:	48.04	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 23:14
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	21.37 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	305		4.3	19.5
106-44-5	4-Methylphenol	1	8.8	J	7.2	19.5
91-20-3	Naphthalene	1	18.5	J	4.1	19.5
91-57-6	2-Methylnaphthalene	1	20.6		4.4	19.5
208-96-8	Acenaphthylene	1	13.0	J	6.1	19.5
131-11-3	Dimethylphthalate	1	19.5	U	4.3	19.5
83-32-9	Acenaphthene	1	28.2		5.1	19.5
132-64-9	Dibenzofuran	1	54.6		13.8	19.5
86-73-7	Fluorene	1	25.6		14.2	19.5
85-01-8	Phenanthrene	1	673		8.5	19.5
120-12-7	Anthracene	1	51.9		7.0	19.5
206-44-0	Fluoranthene	1	544		5.9	19.5
129-00-0	Pyrene	1	373		5.5	19.5
85-68-7	Butylbenzylphthalate	1	12.4	J	9.2	19.5
56-55-3	Benzo(a)anthracene	1	108		5.8	19.5
218-01-9	Chrysene	1	159		5.9	19.5
117-81-7	bis(2-Ethylhexyl)phthalate	1	182		5.3	48.7
	Benzofluoranthenes, Total	1	324		9.7	39.0
50-32-8	Benzo(a)pyrene	1	97.8		4.1	19.5
193-39-5	Indeno(1,2,3-cd)pyrene	1	23.1		14.3	19.5
53-70-3	Dibenzo(a,h)anthracene	1	19.5	U	16.8	19.5
191-24-2	Benzo(g,h,i)perylene	1	21.6		13.2	19.5

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	730.56	519	71.0	27 - 120	
Phenol-d5	730.56	521	71.3	29 - 120	
2-Chlorophenol-d4	730.56	527	72.1	31 - 120	
1,2-Dichlorobenzene-d4	487.04	312	64.0	32 - 120	
Nitrobenzene-d5	487.04	360	74.0	30 - 120	
2-Fluorobiphenyl	487.04	353	72.6	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1129

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-09 C	SDG:	23A0134
Sampled:	01/06/23 12:57	Prepared:	01/19/23 13:35	File ID:	NT1802262318.D
% Solids:	48.04	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 23:14
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	21.37 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	730.56	688	94.1	24 - 134	
p-Terphenyl-d14	487.04	390	80.1	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262318.D

Date : 26-FEB-2023 23:14

Client ID:

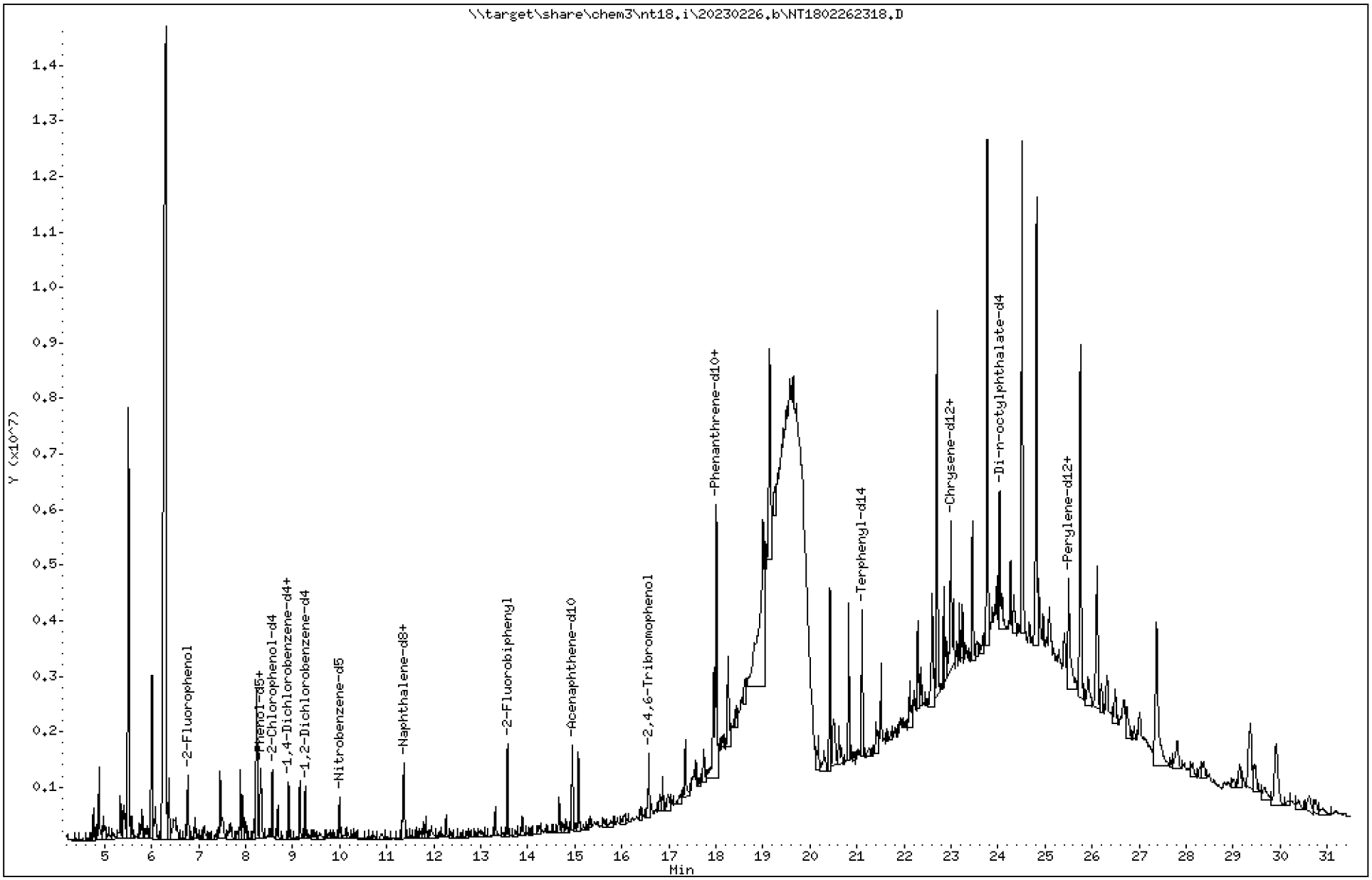
Instrument: nt18.i

Sample Info: 23A0134-09

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

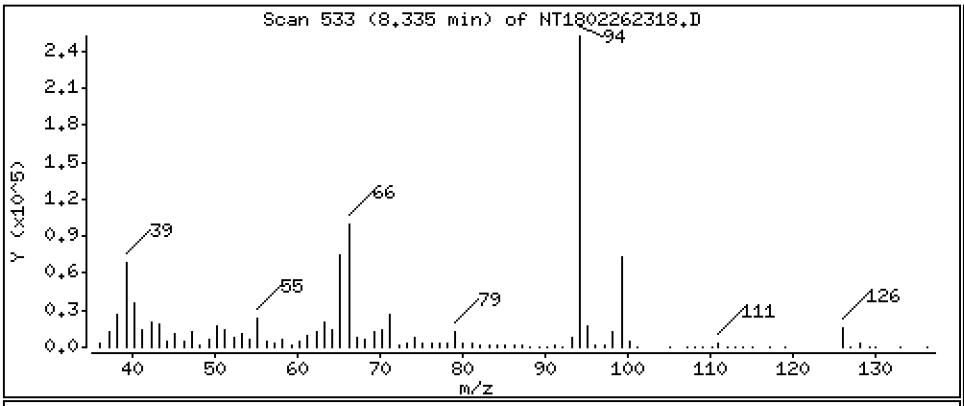
Operator: VTS

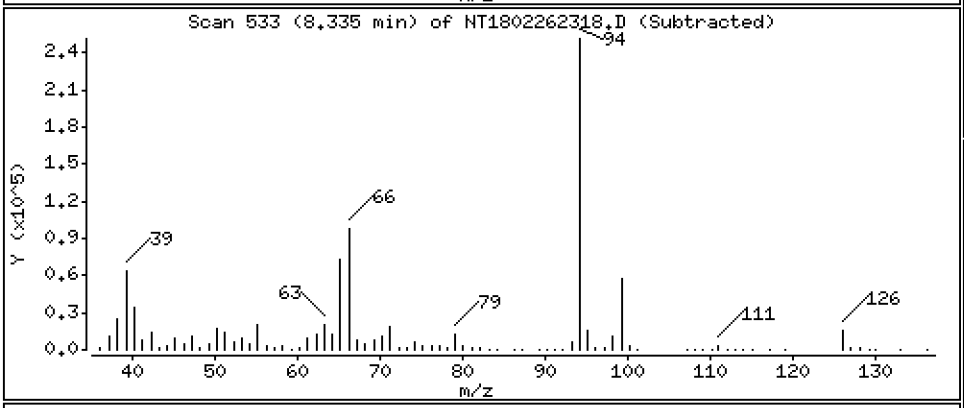
Column phase: ZB-5msi

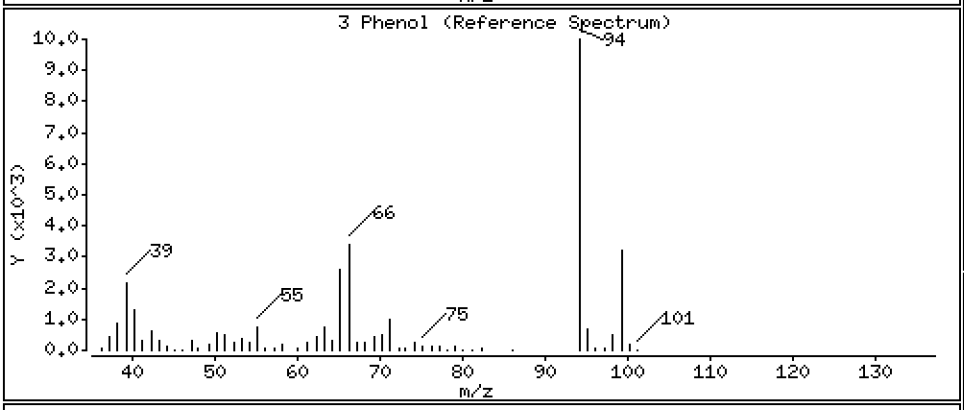
Column diameter: 0.25

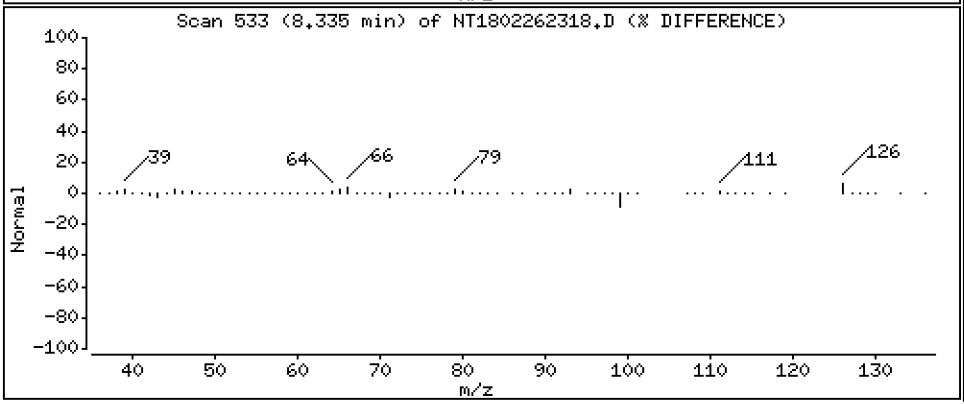
3 Phenol

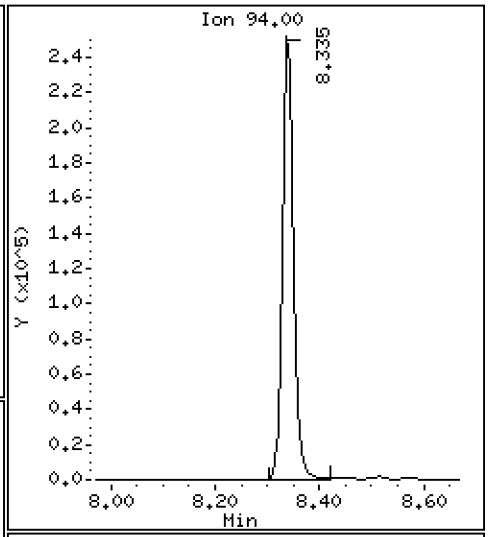
Concentration: 3.132 ug/mL

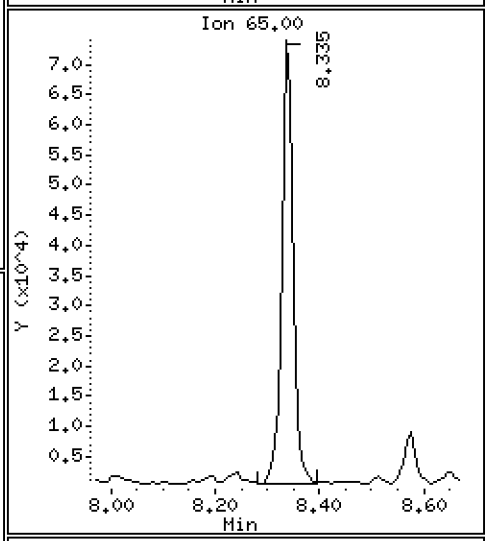


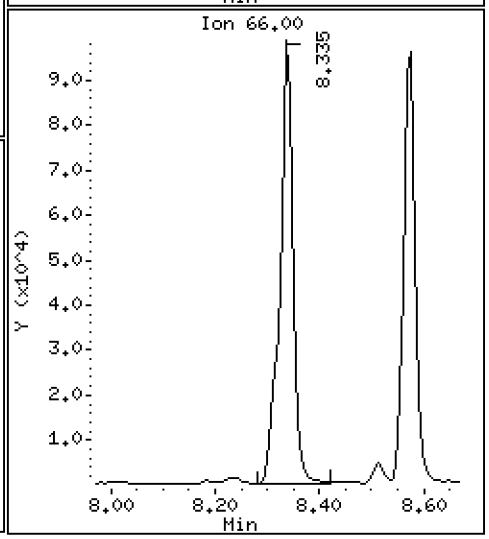












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

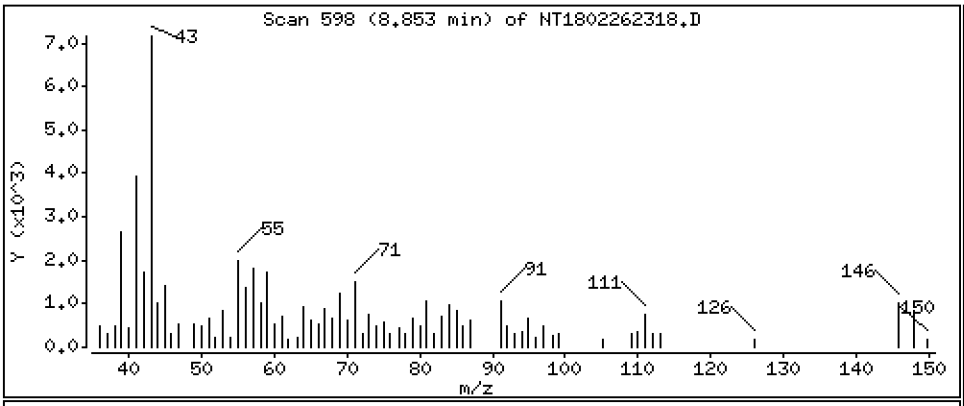
Operator: VTS

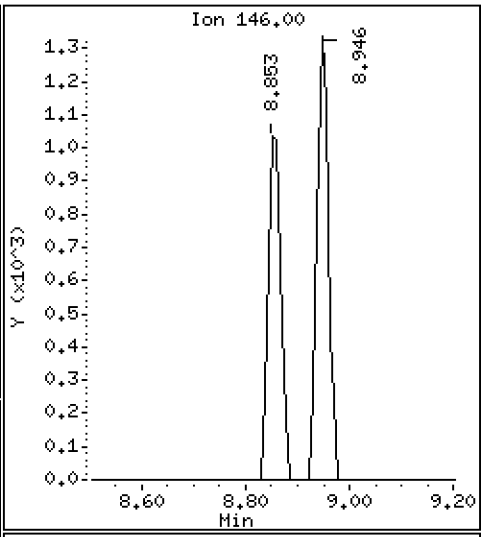
Column phase: ZB-5msi

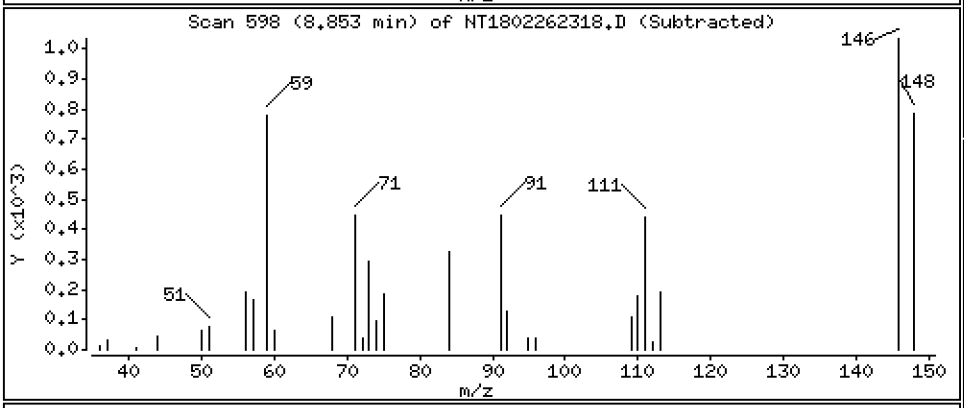
Column diameter: 0.25

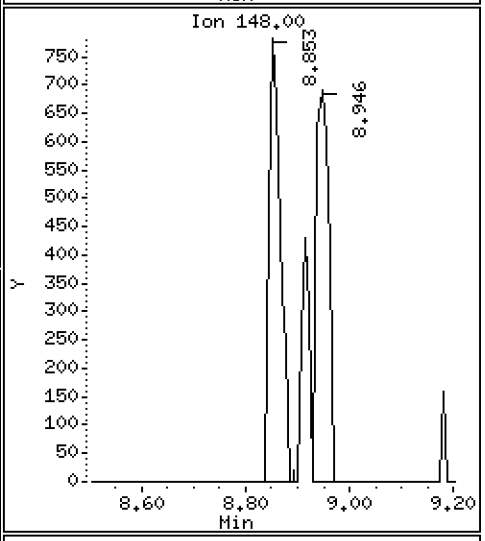
7 1,3-Dichlorobenzene

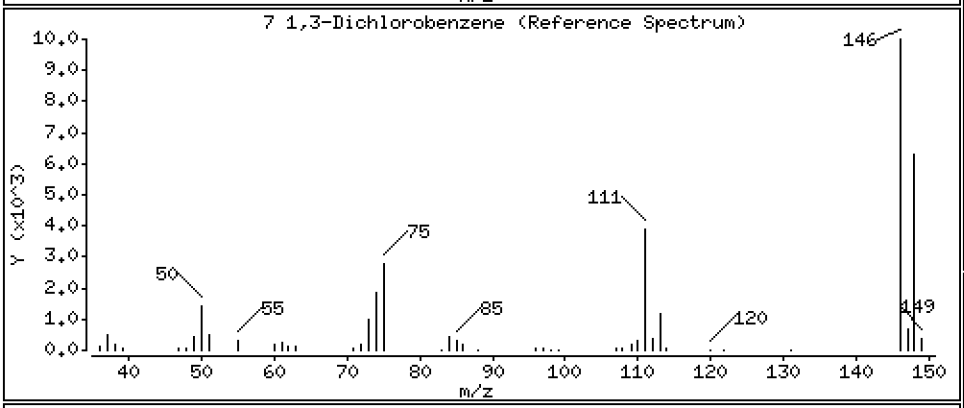
Concentration: 0.01526 ug/mL

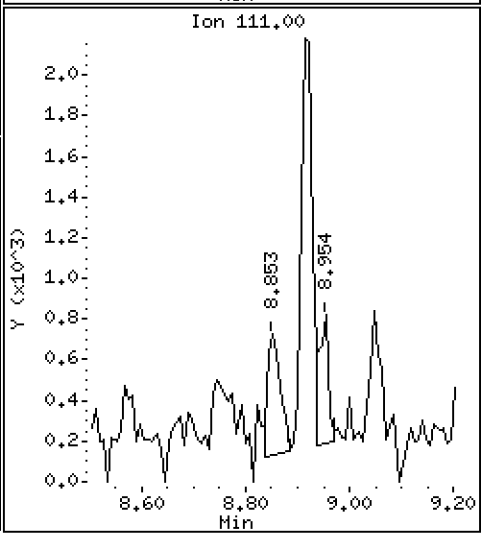


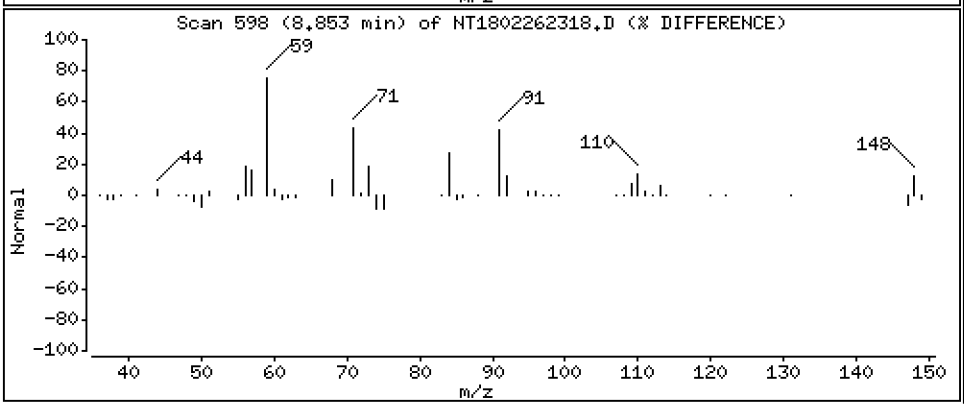












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

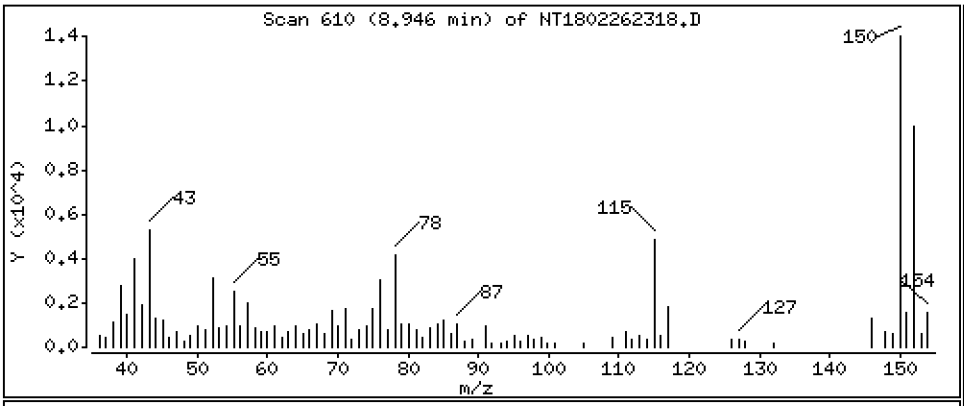
Operator: VTS

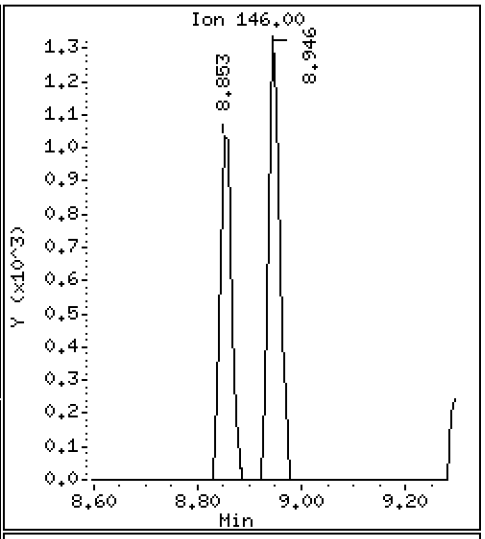
Column phase: ZB-5msi

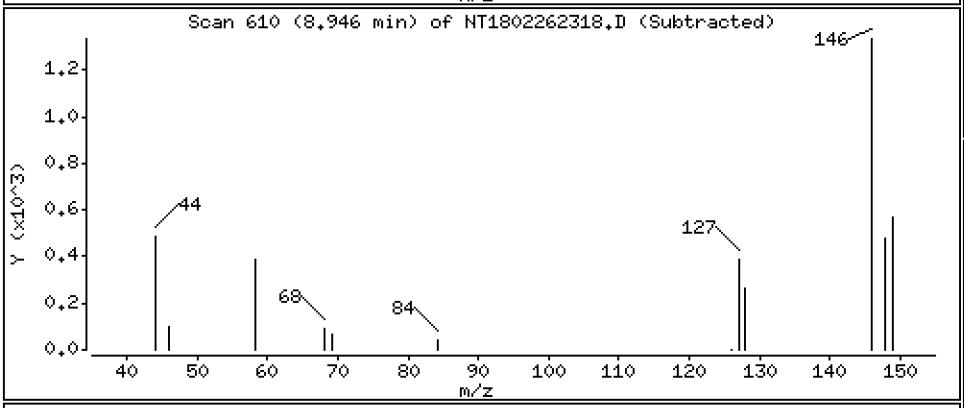
Column diameter: 0.25

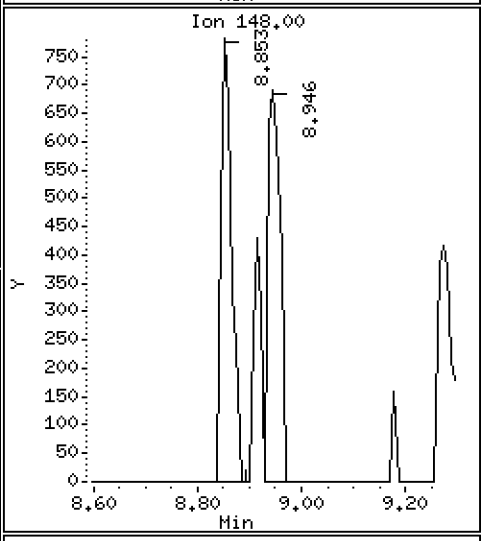
9 1,4-Dichlorobenzene

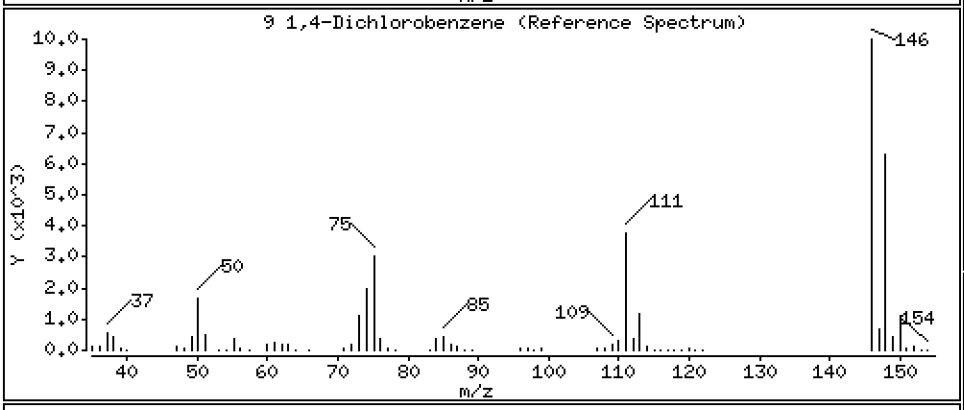
Concentration: 0.01730 ug/mL

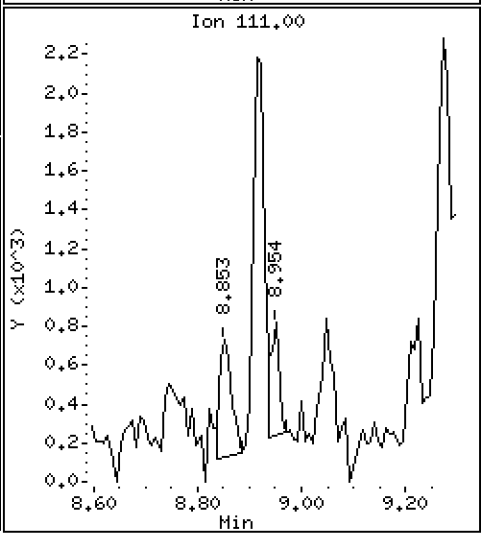


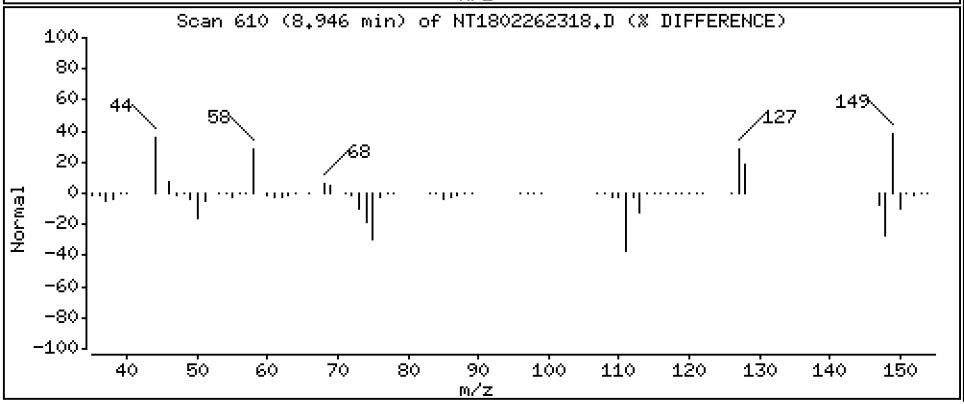












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

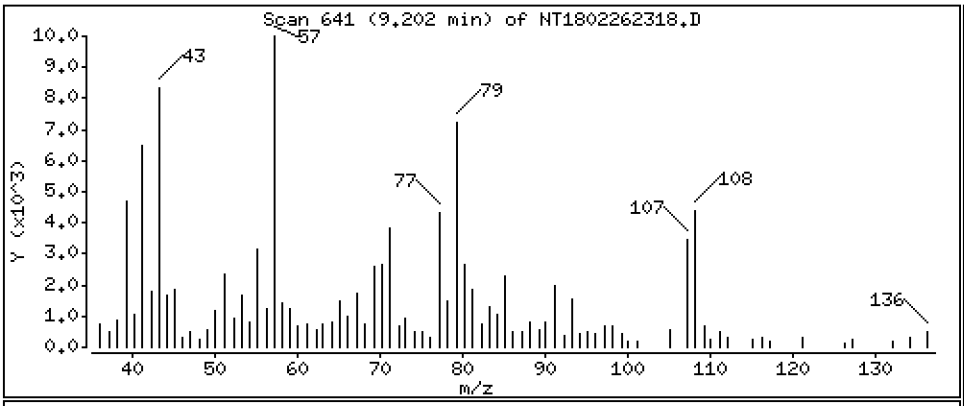
Operator: VTS

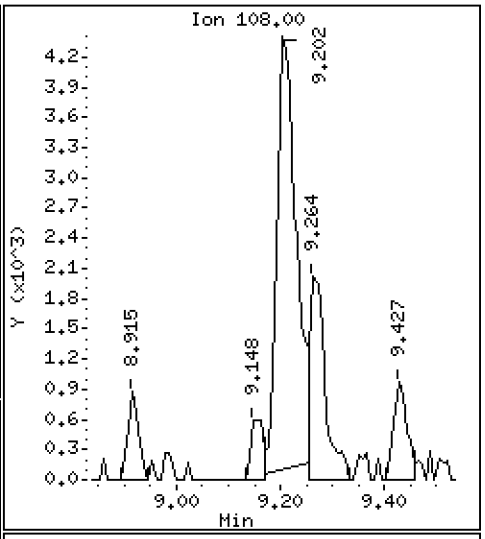
Column phase: ZB-5msi

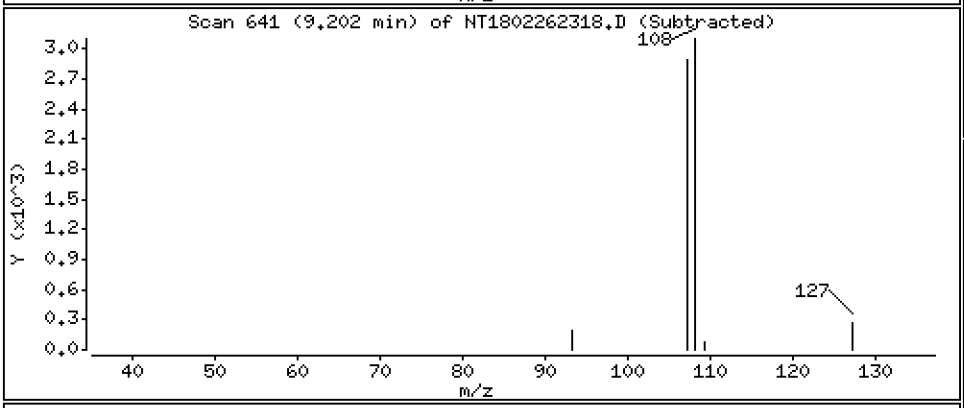
Column diameter: 0.25

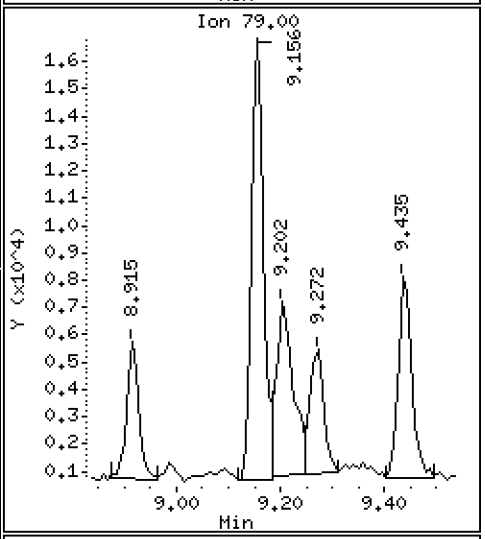
11 Benzyl alcohol

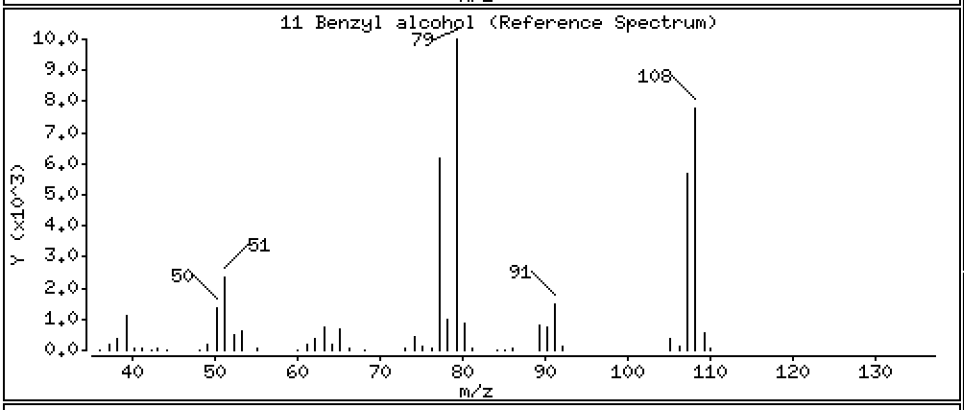
Concentration: 0.2017 ug/mL

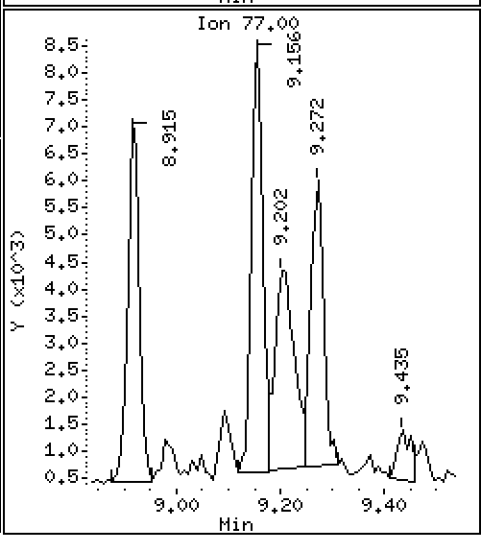


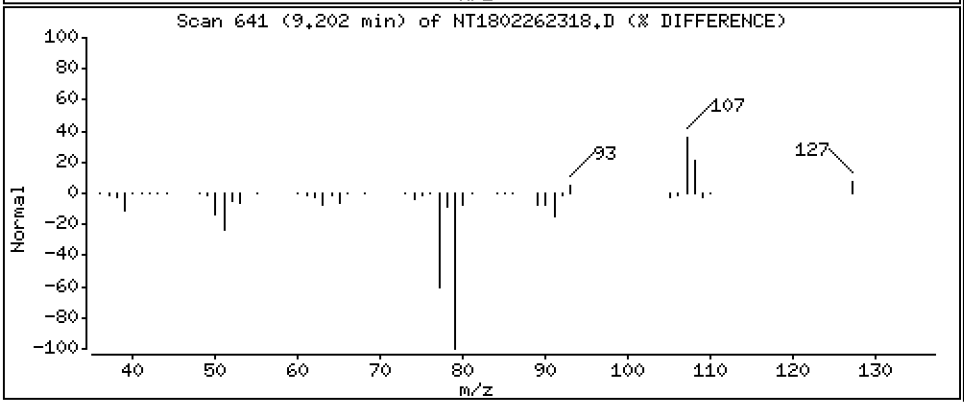












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

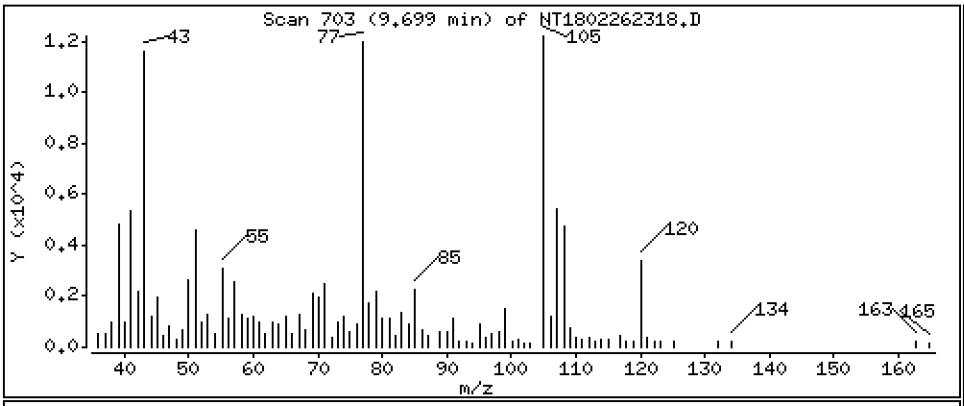
Operator: VTS

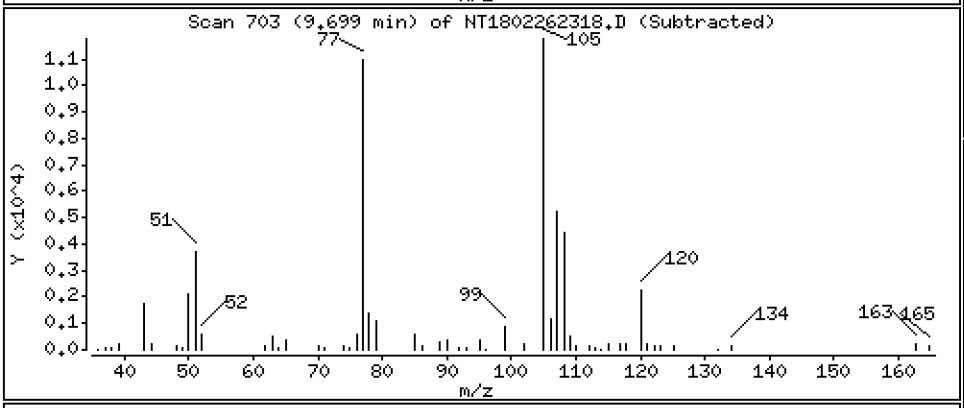
Column phase: ZB-5msi

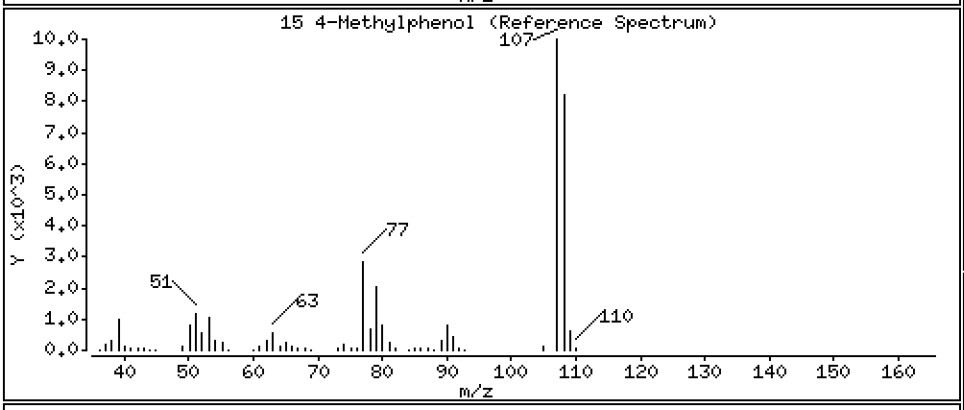
Column diameter: 0.25

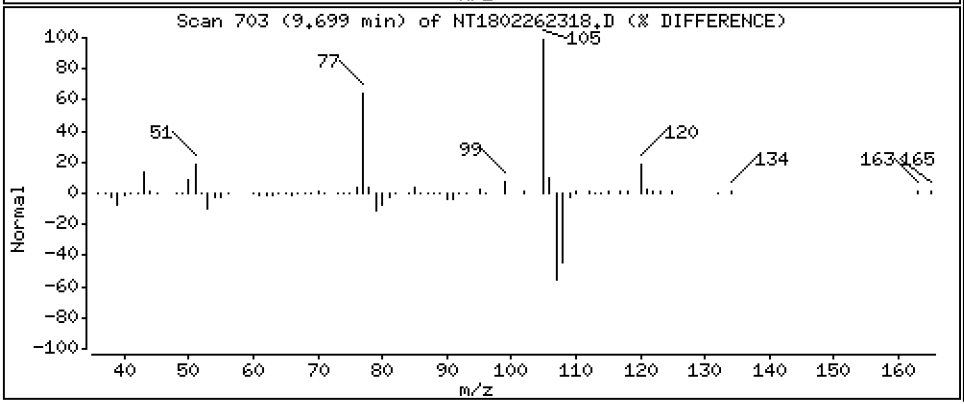
15 4-Methylphenol

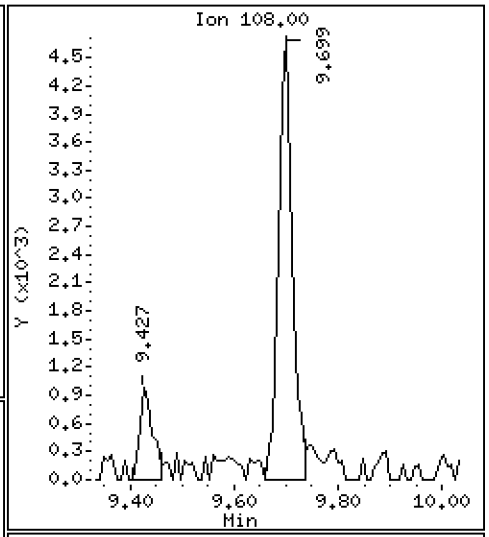
Concentration: 0.09066 ug/mL

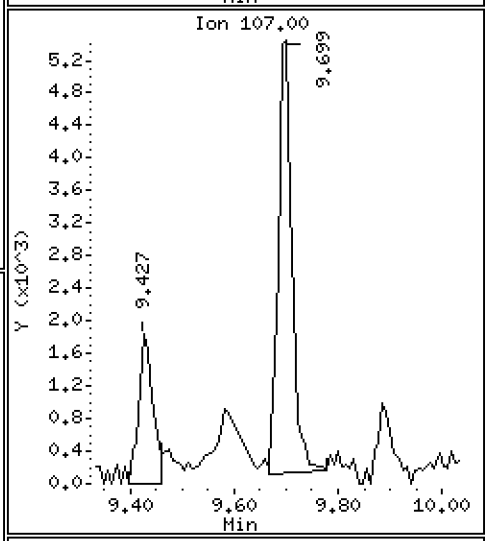


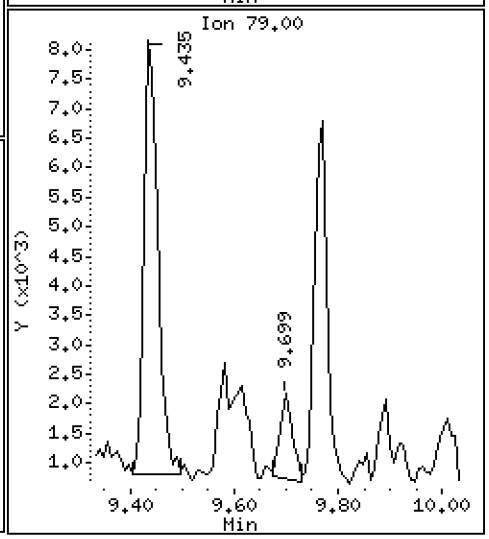












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262318.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

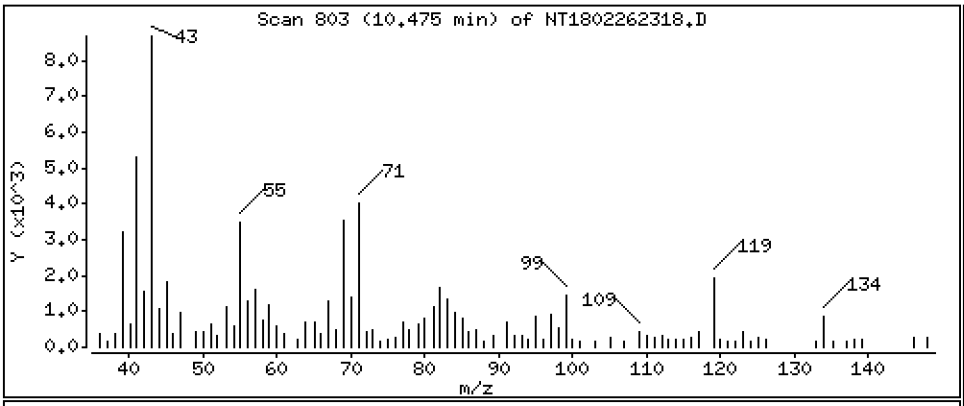
Operator: VTS

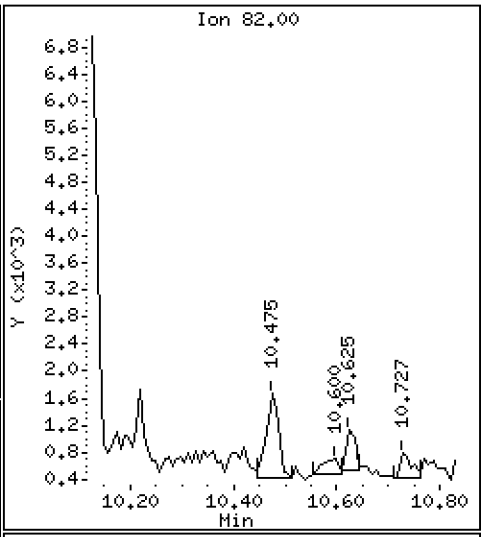
Column phase: ZB-5msi

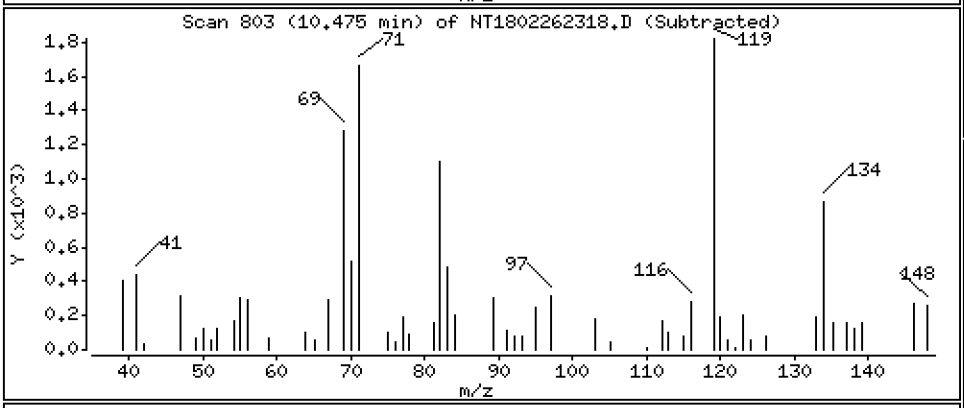
Column diameter: 0.25

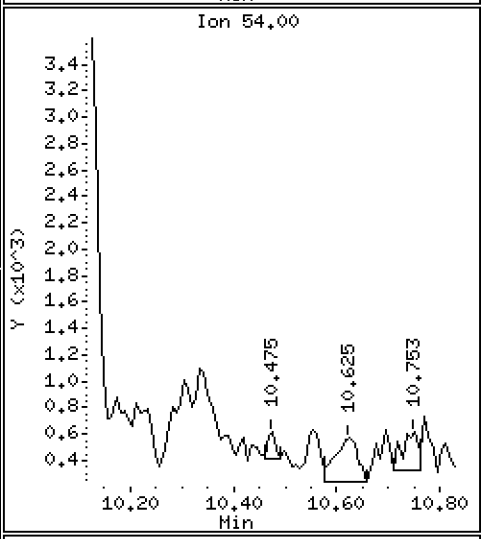
20 Isophorone

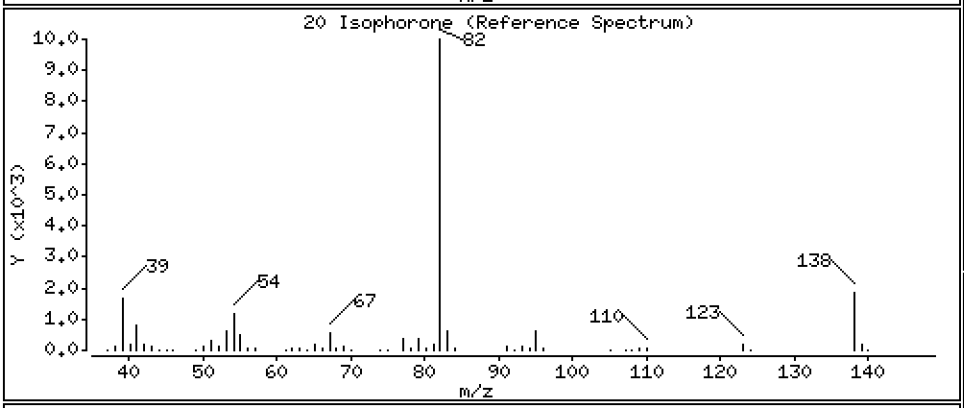
Concentration: 0.01722 ug/mL

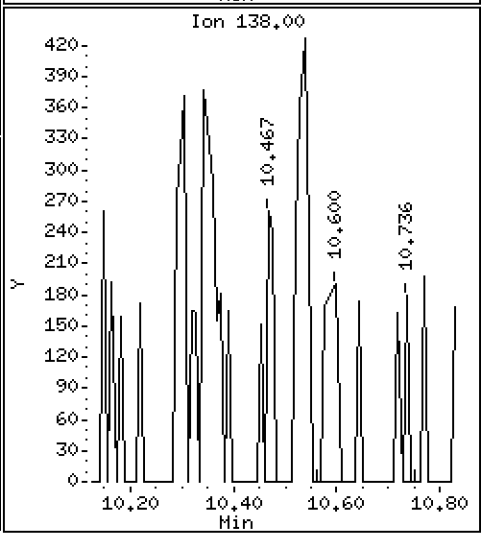


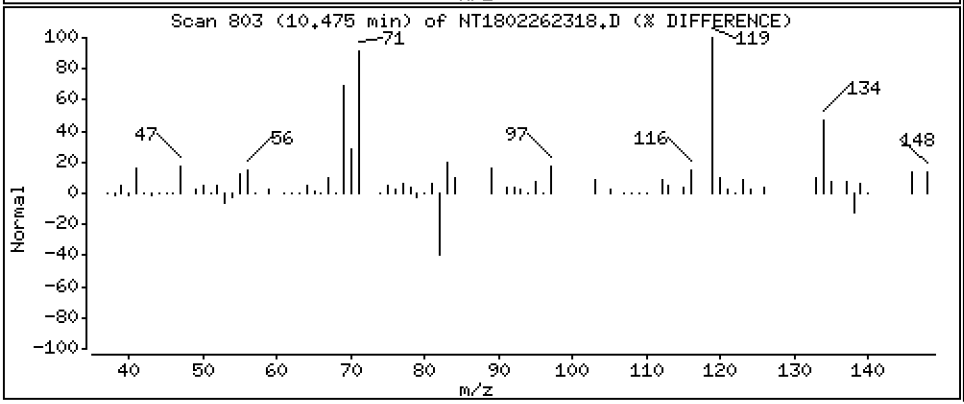












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262318.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

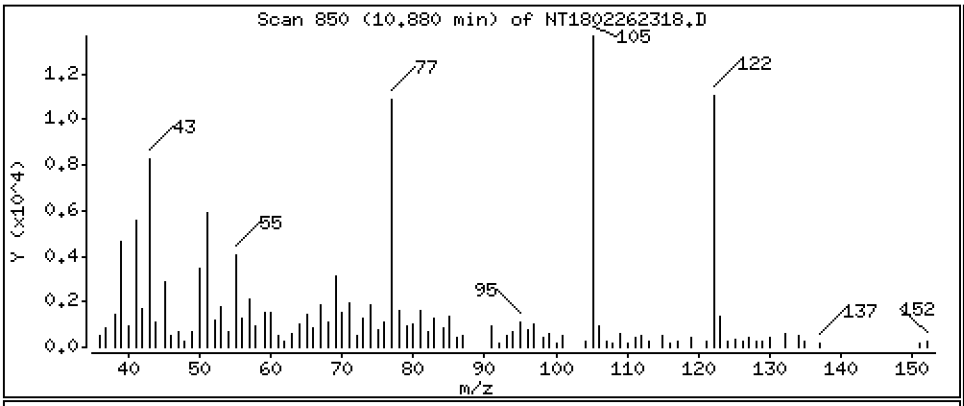
Operator: VTS

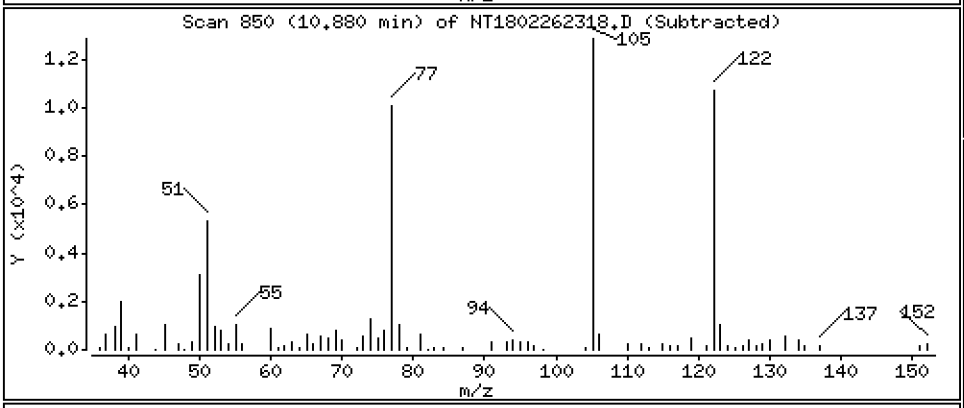
Column phase: ZB-5msi

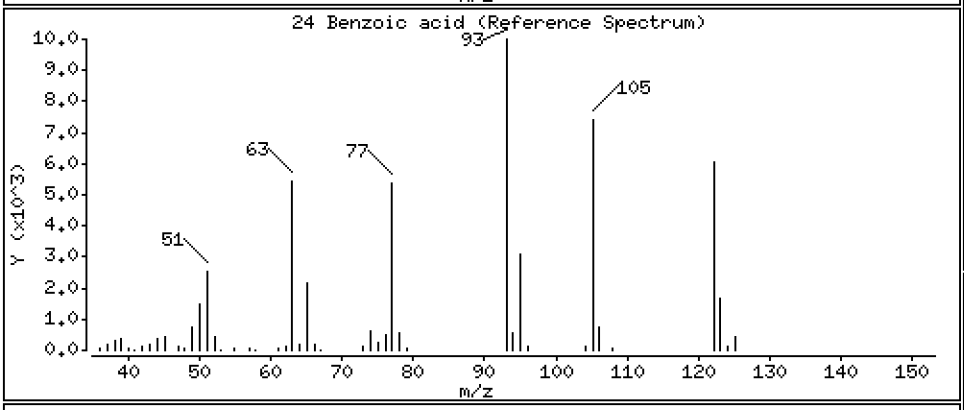
Column diameter: 0.25

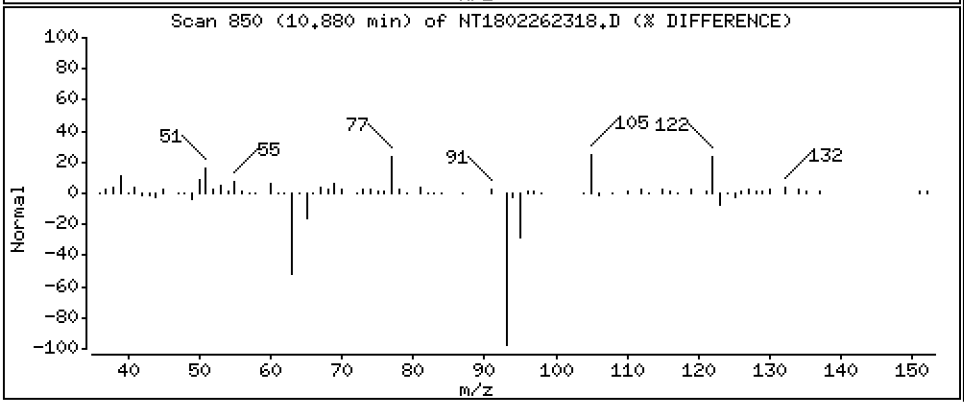
24 Benzoic acid

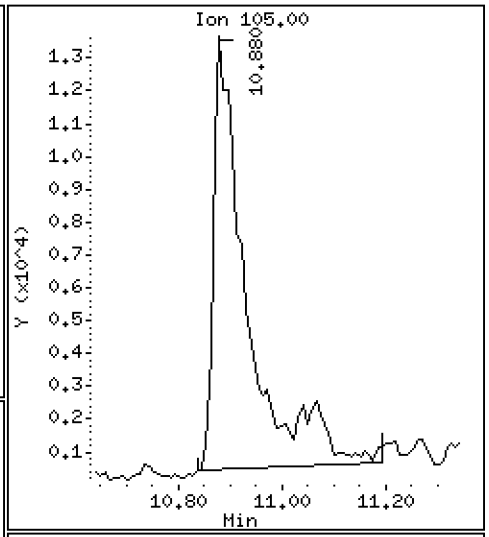
Concentration: 1.642 ug/mL

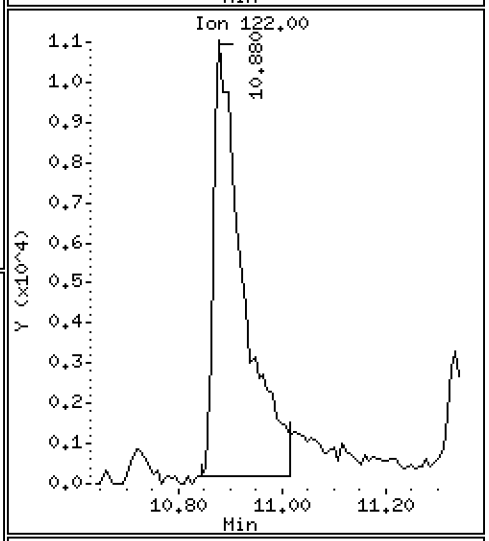


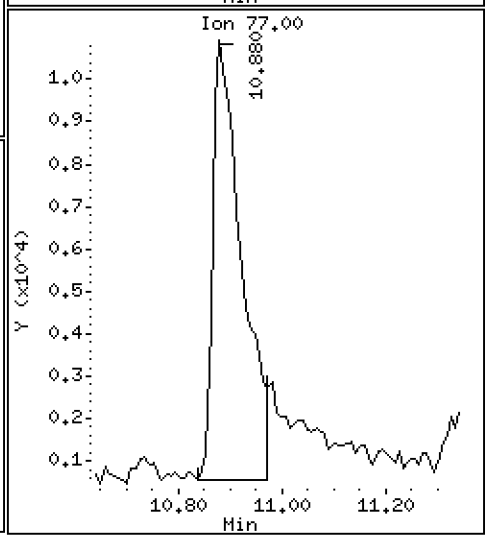












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

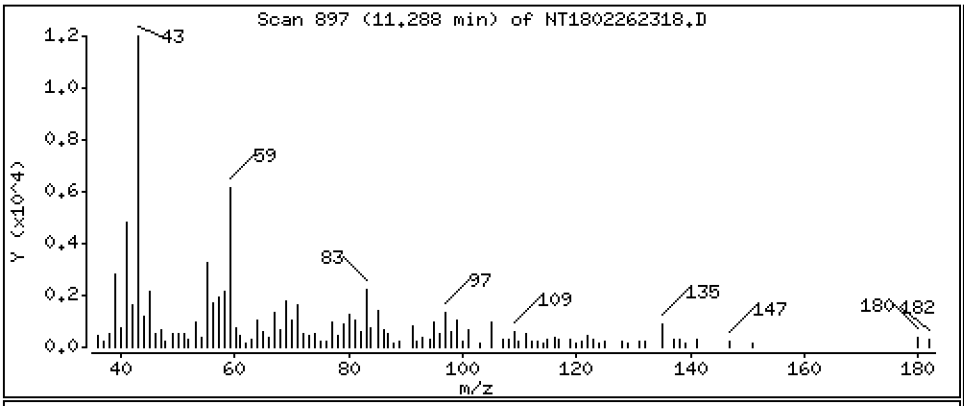
Operator: VTS

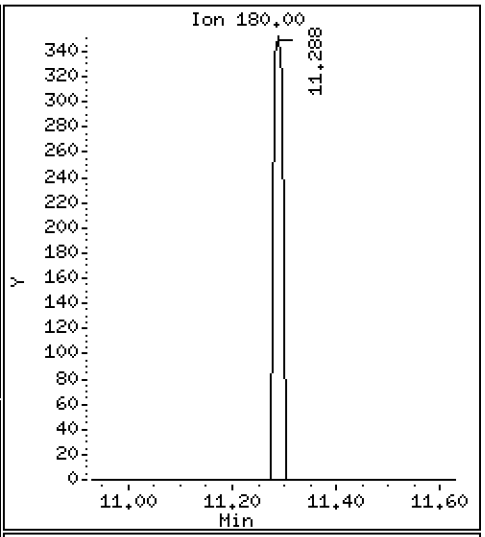
Column phase: ZB-5msi

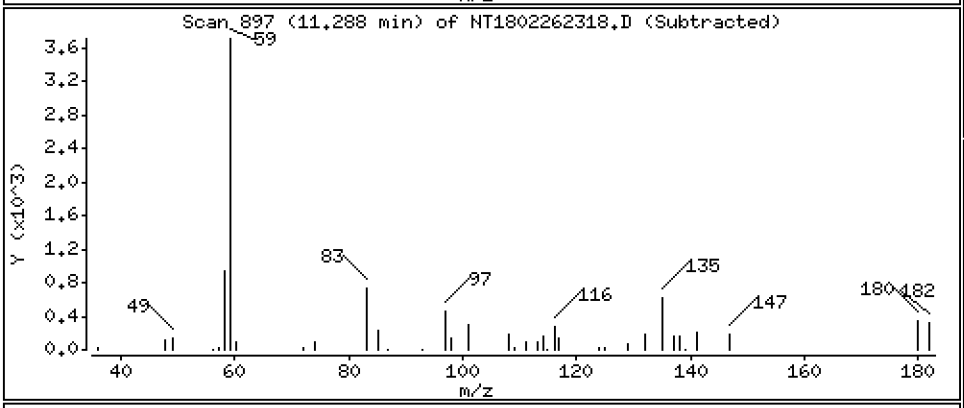
Column diameter: 0.25

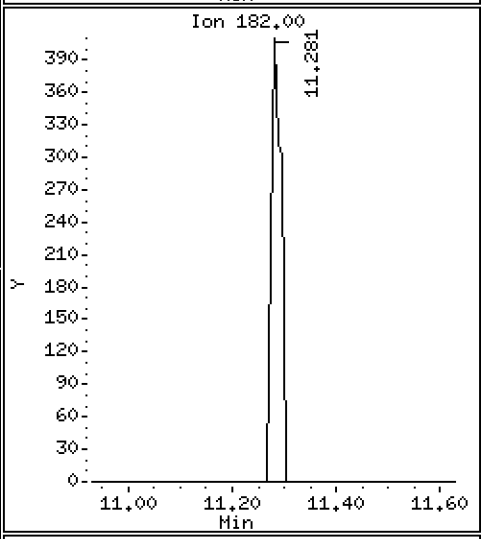
26 1,2,4-Trichlorobenzene

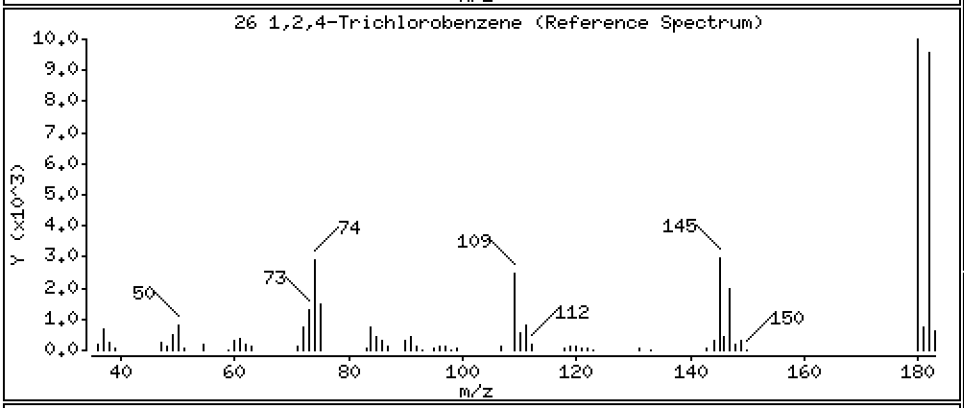
Concentration: 0.005217 ug/mL

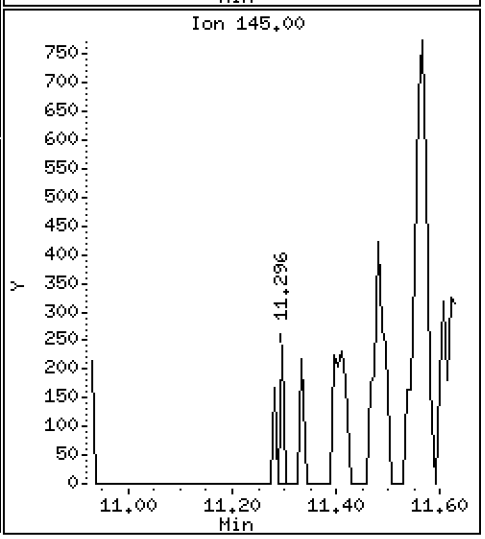


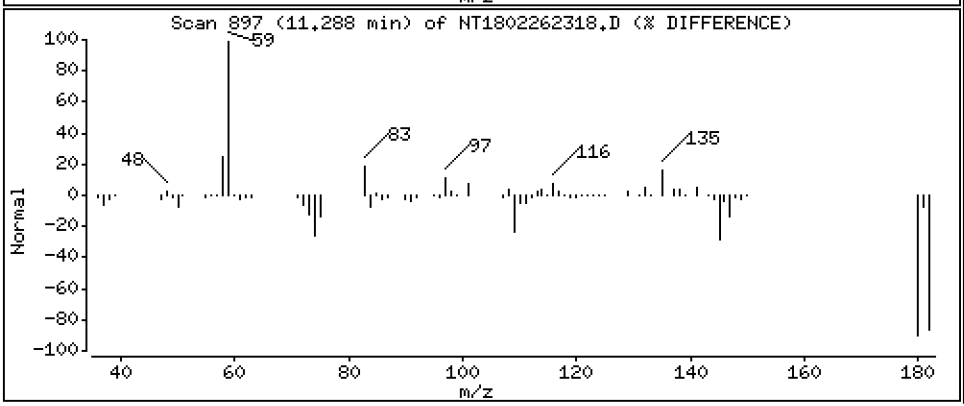












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262318.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

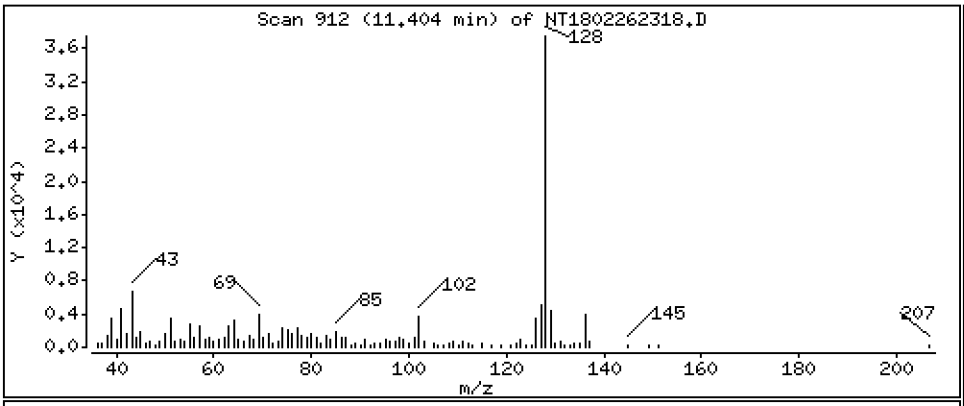
Operator: VTS

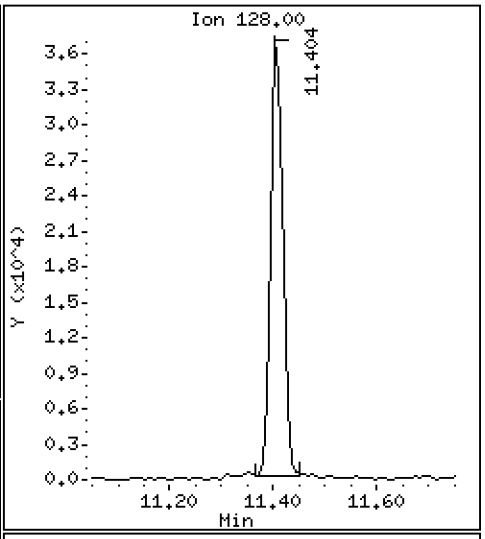
Column phase: ZB-5msi

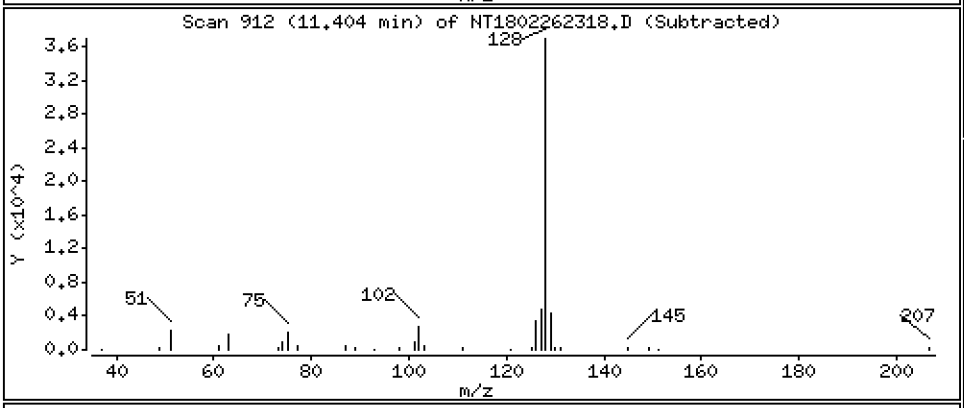
Column diameter: 0.25

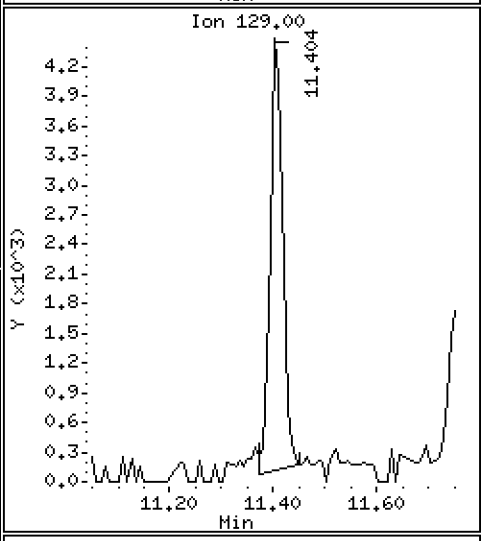
28 Naphthalene

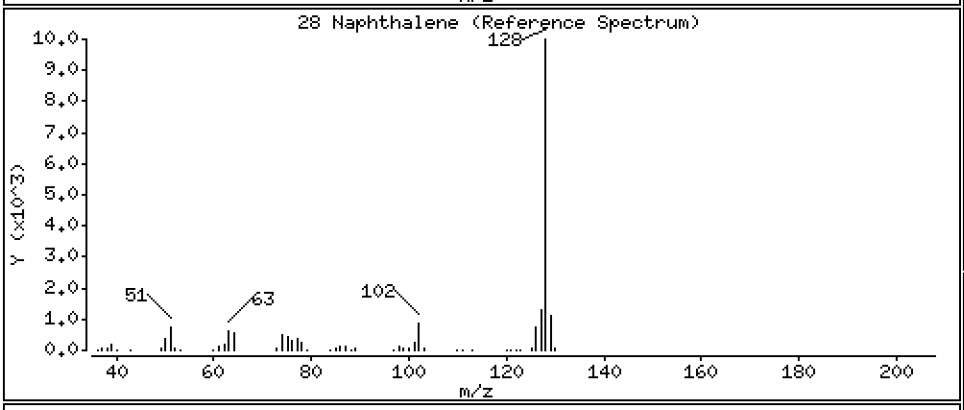
Concentration: 0.1903 ug/mL

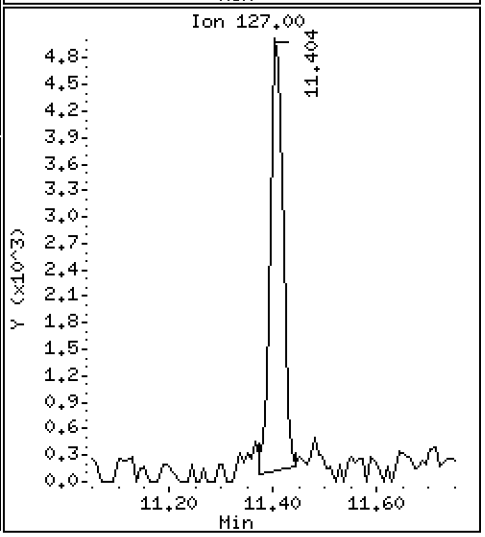


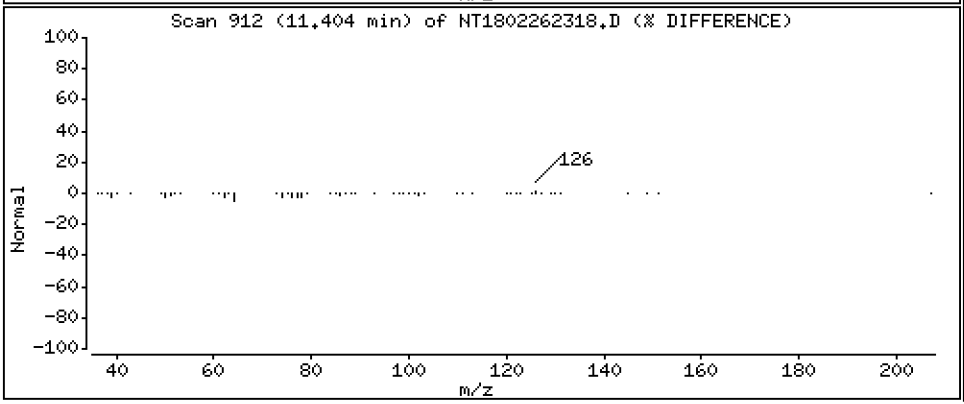












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

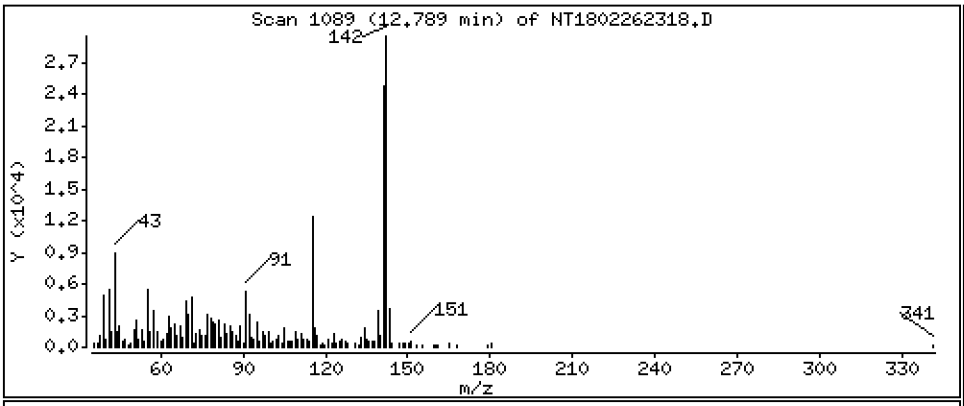
Operator: VTS

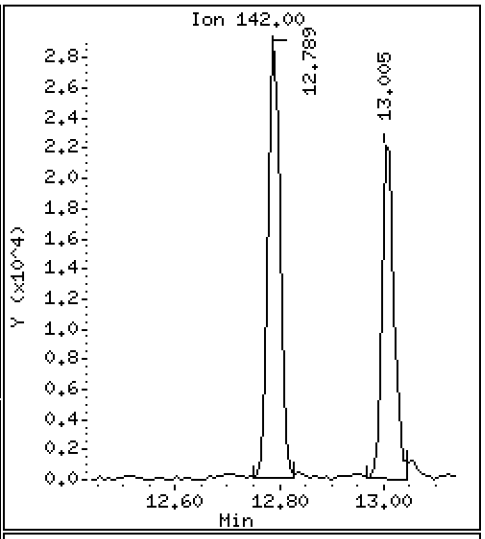
Column phase: ZB-5msi

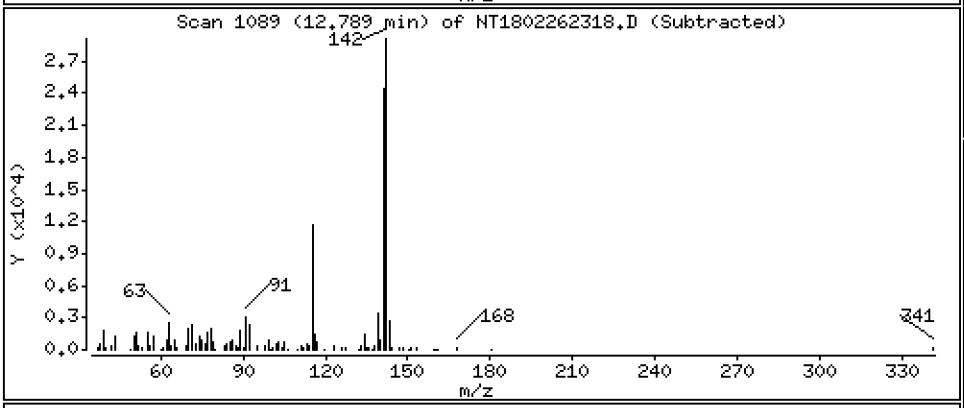
Column diameter: 0.25

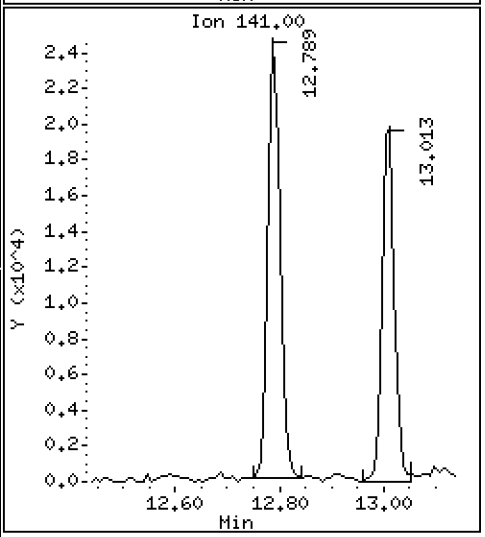
32 2-Methylnaphthalene

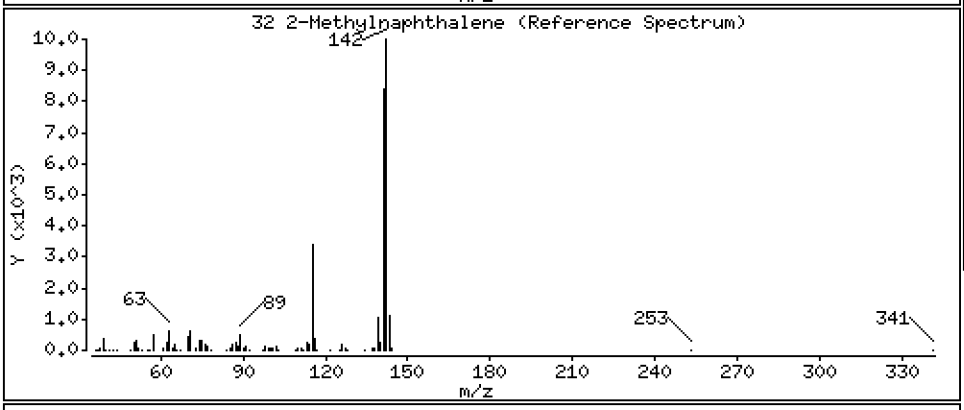
Concentration: 0.2119 ug/mL

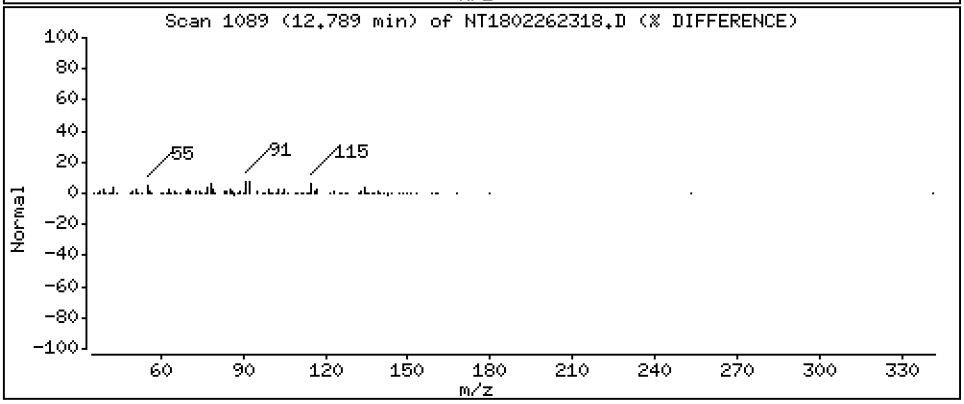












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

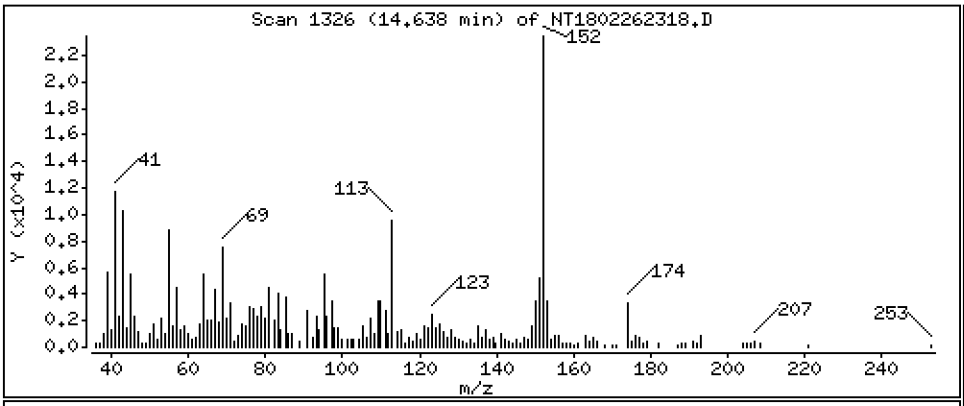
Operator: VTS

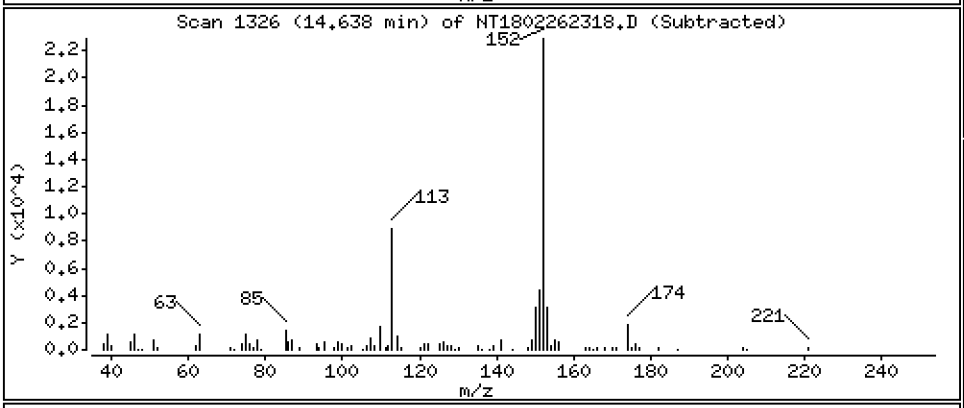
Column phase: ZB-5msi

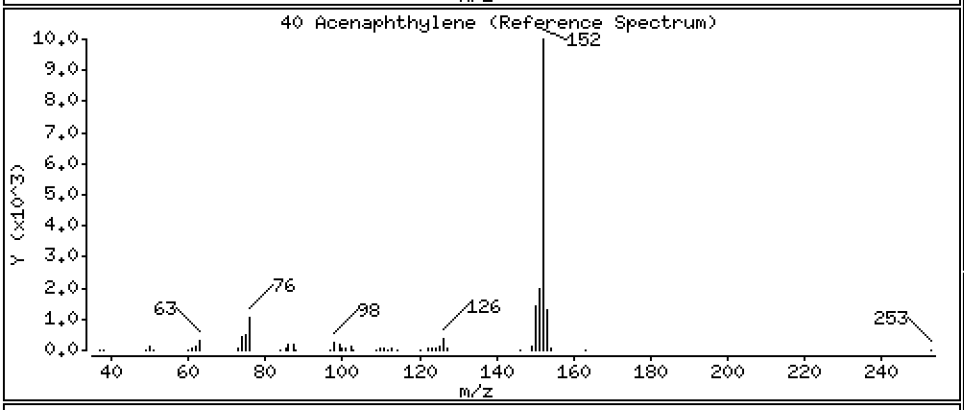
Column diameter: 0.25

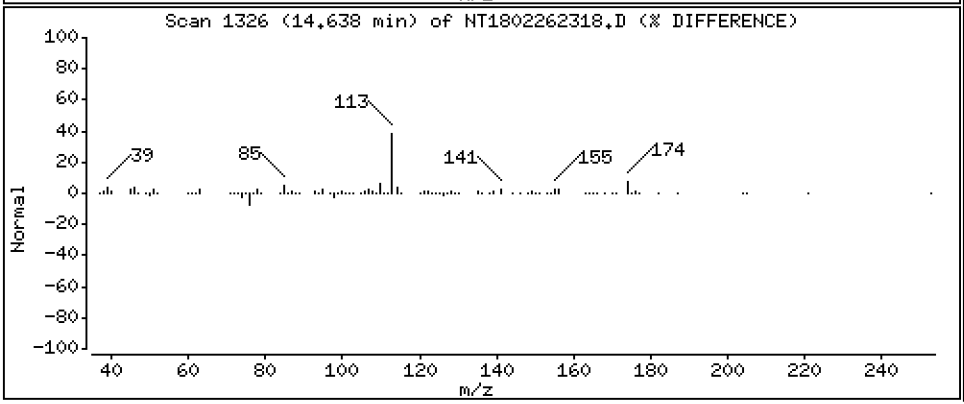
40 Acenaphthylene

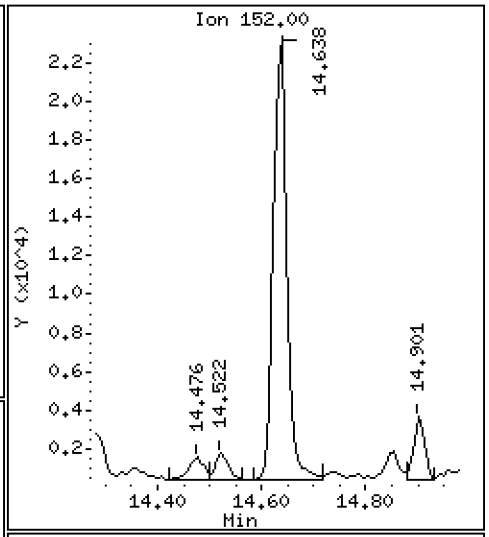
Concentration: 0.1330 ug/mL

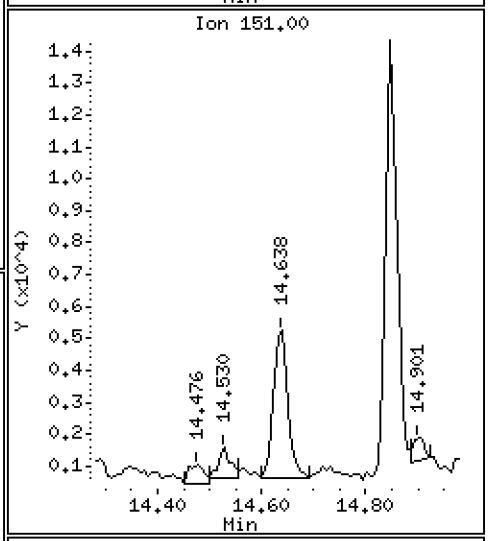


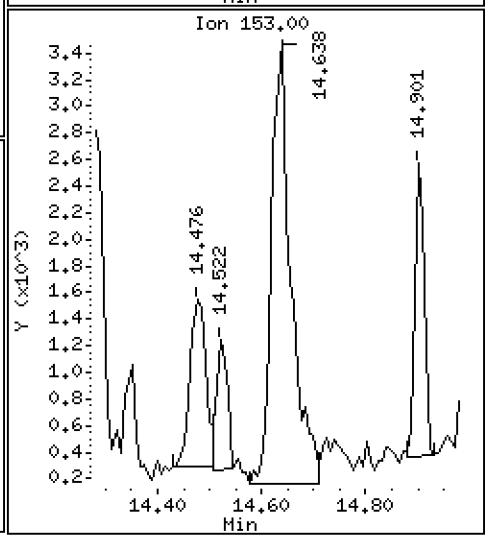












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

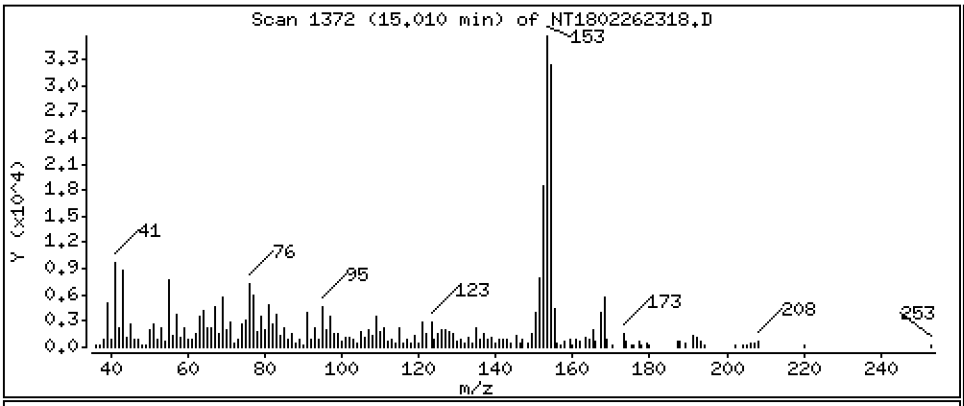
Operator: VTS

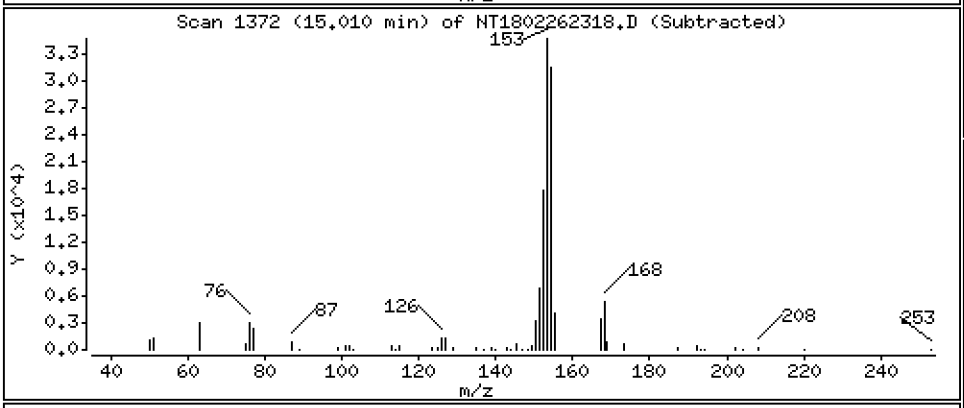
Column phase: ZB-5msi

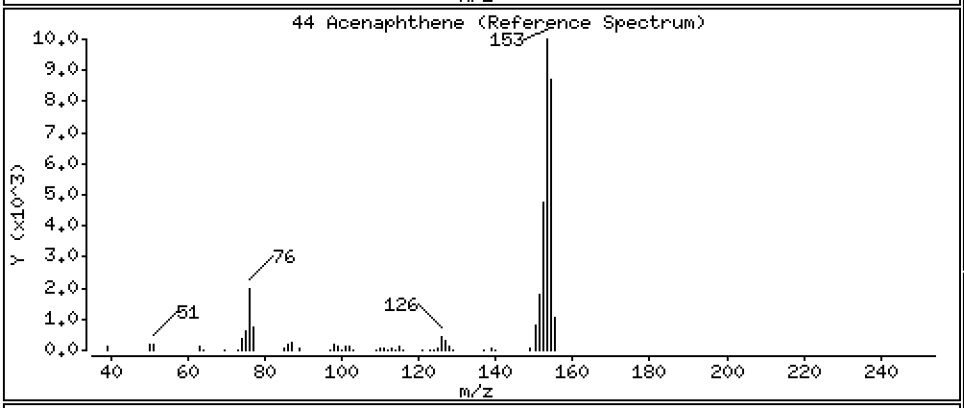
Column diameter: 0.25

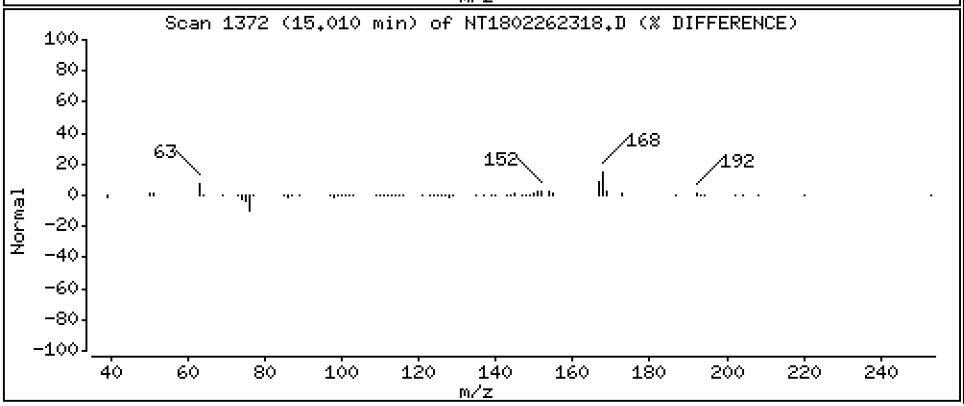
44 Acenaphthene

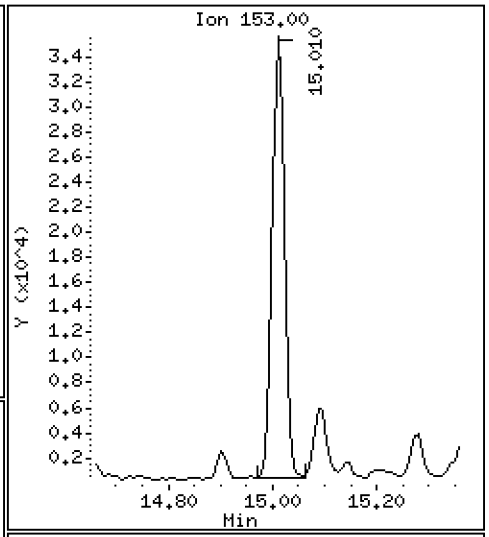
Concentration: 0.2897 ug/mL

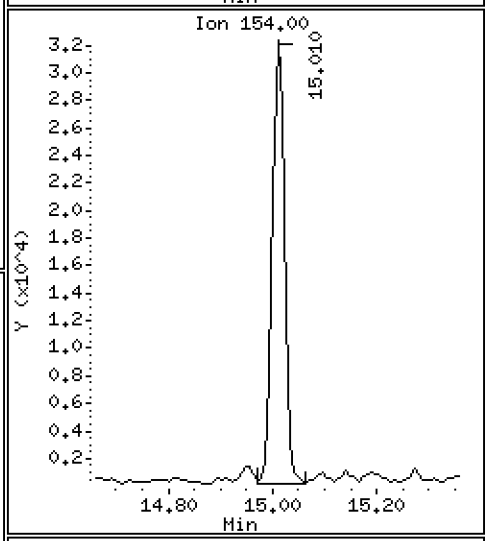


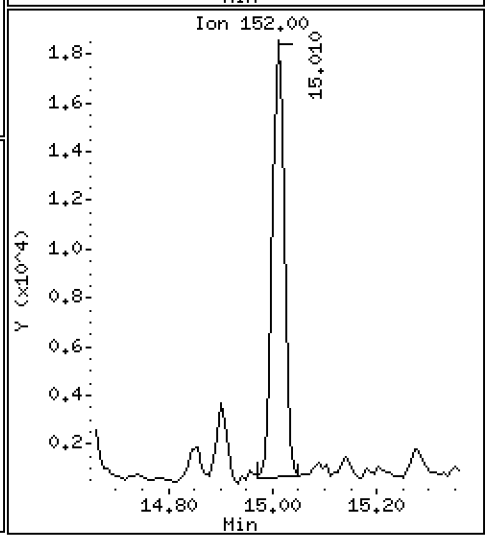












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262318.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

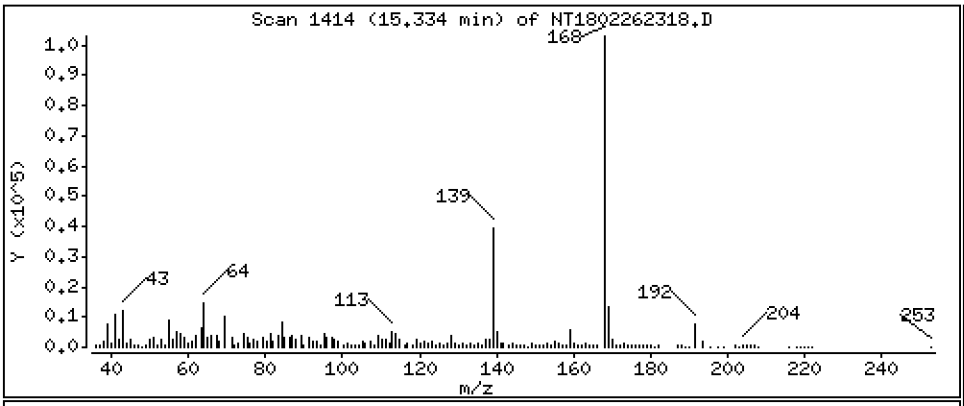
Operator: VTS

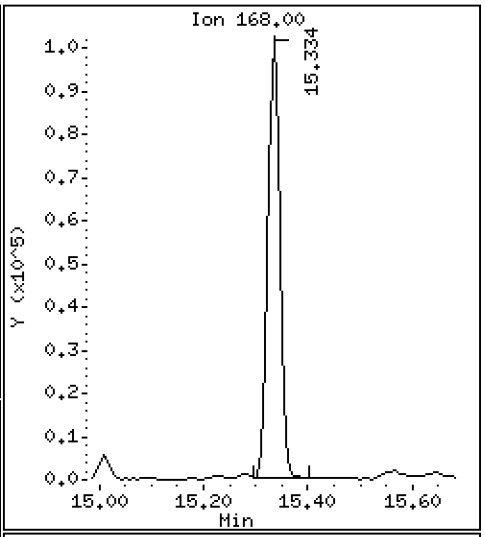
Column phase: ZB-5msi

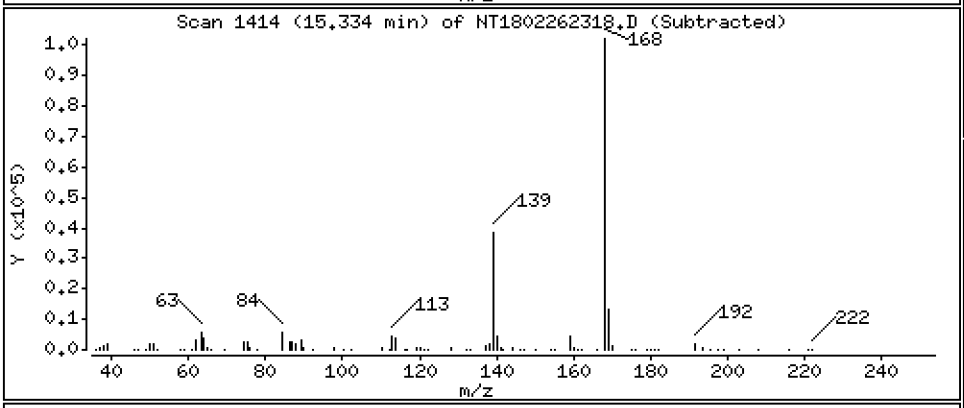
Column diameter: 0.25

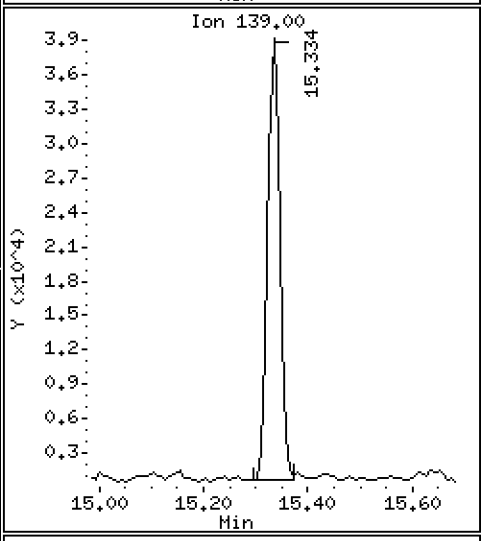
46 Dibenzofuran

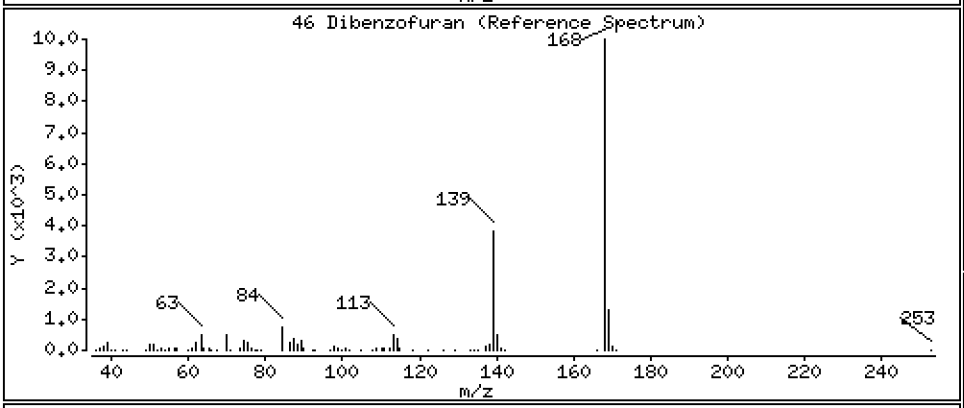
Concentration: 0.5610 ug/mL

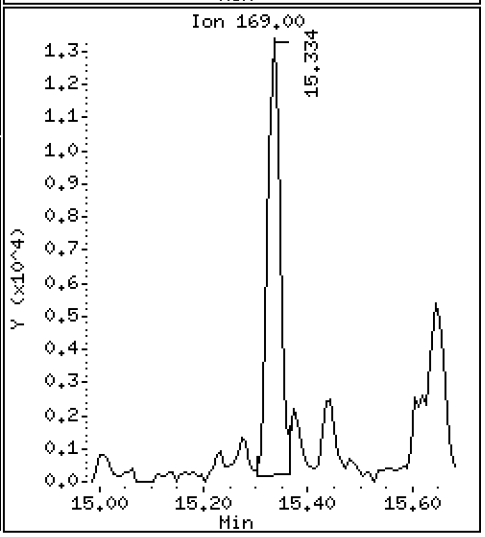


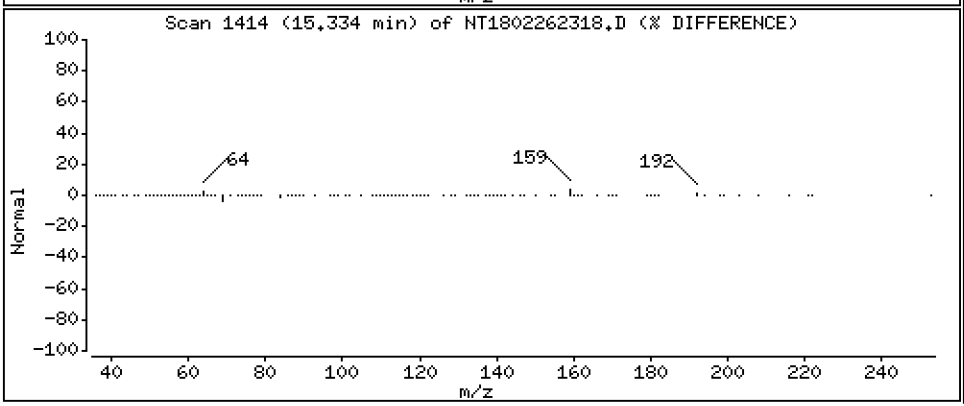












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262318.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

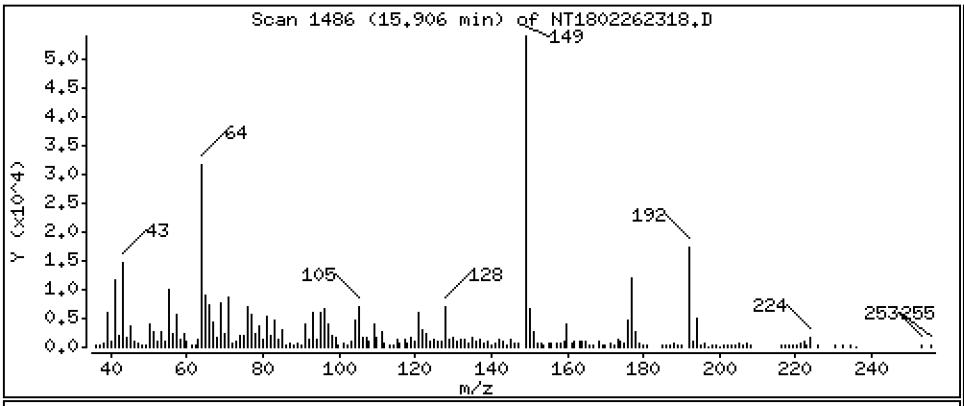
Operator: VTS

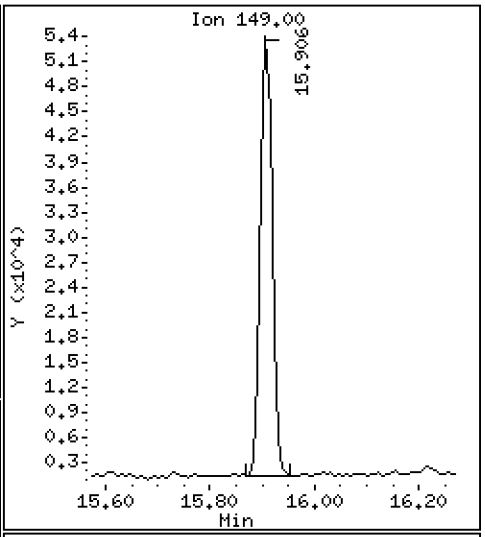
Column phase: ZB-5msi

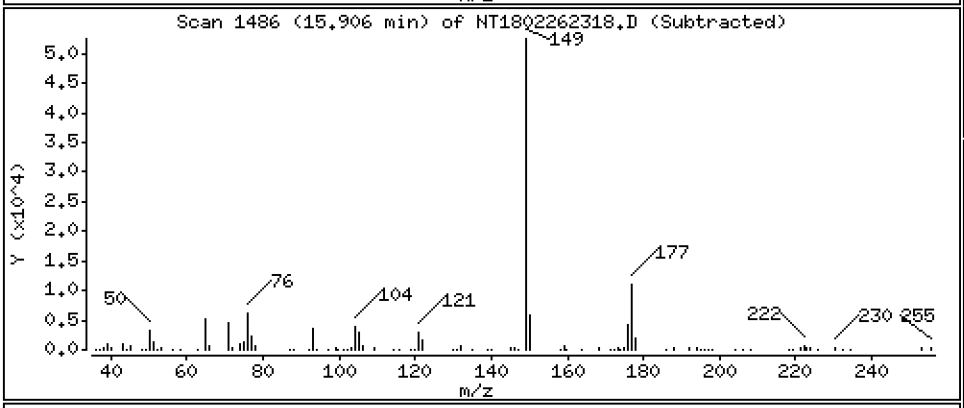
Column diameter: 0.25

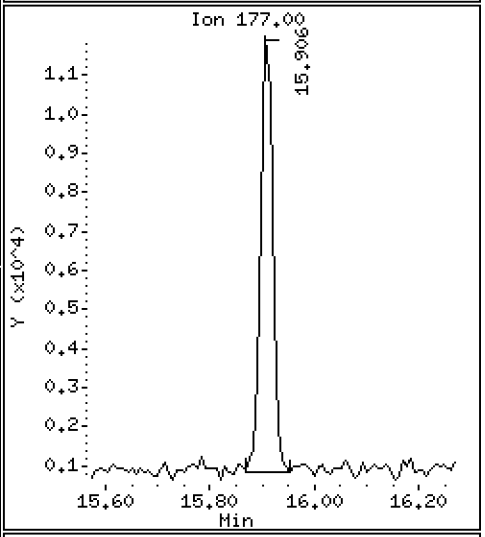
50 Diethylphthalate

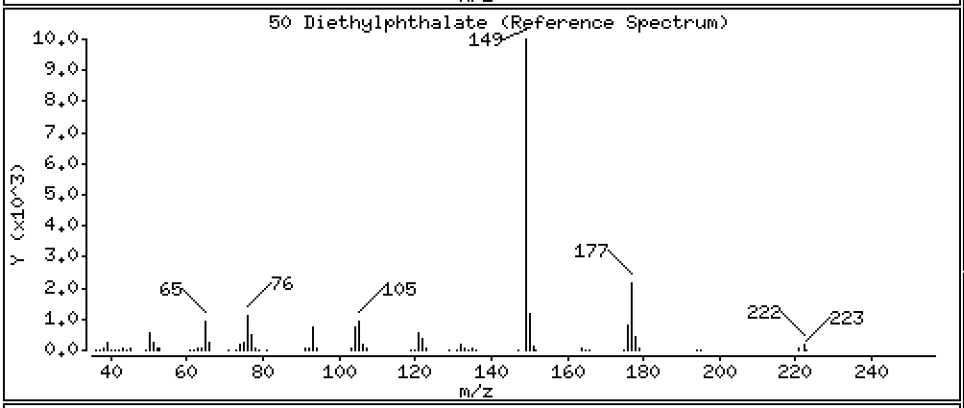
Concentration: 0.3975 ug/mL

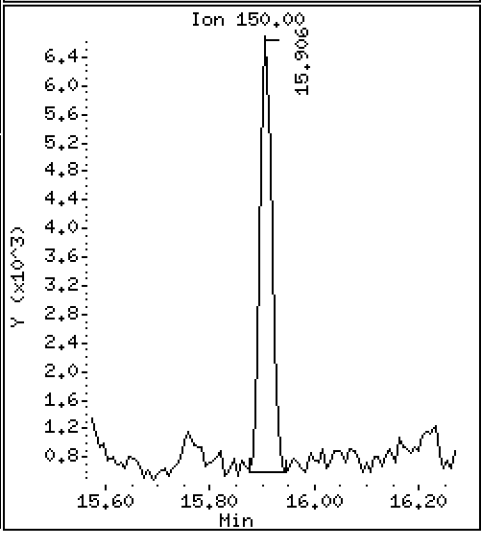


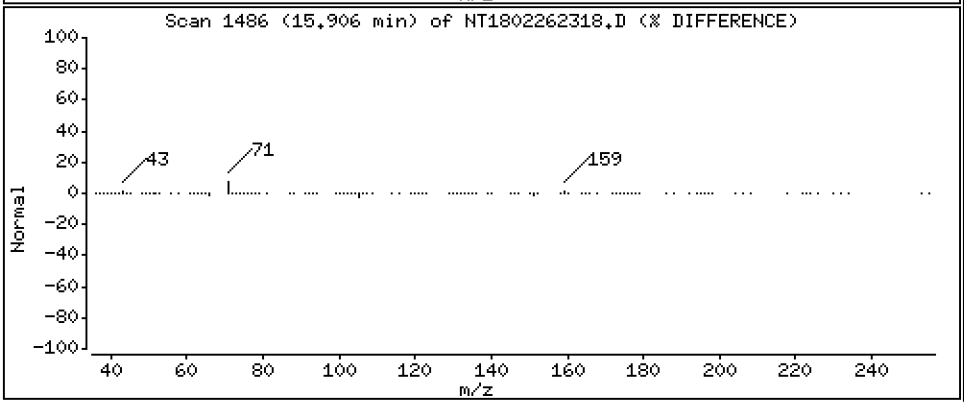












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

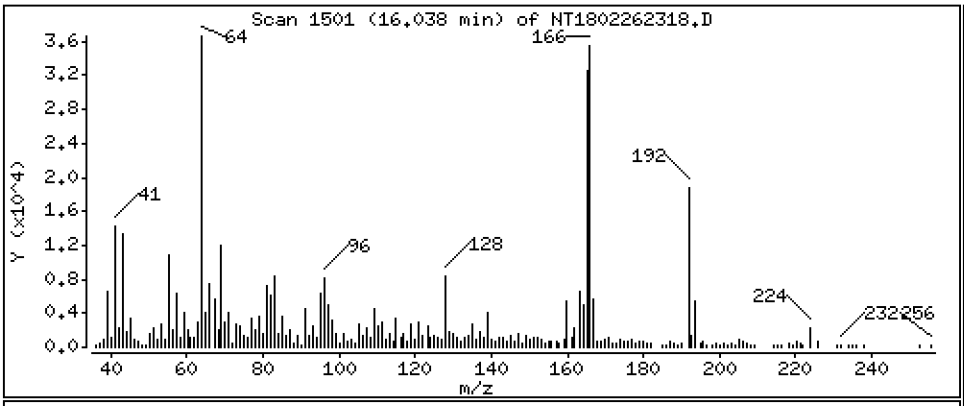
Operator: VTS

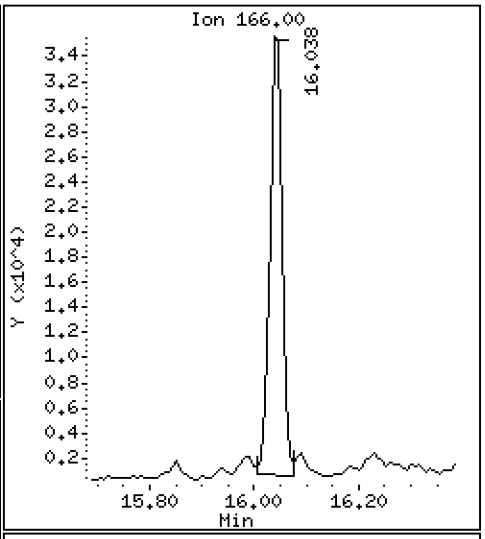
Column phase: ZB-5msi

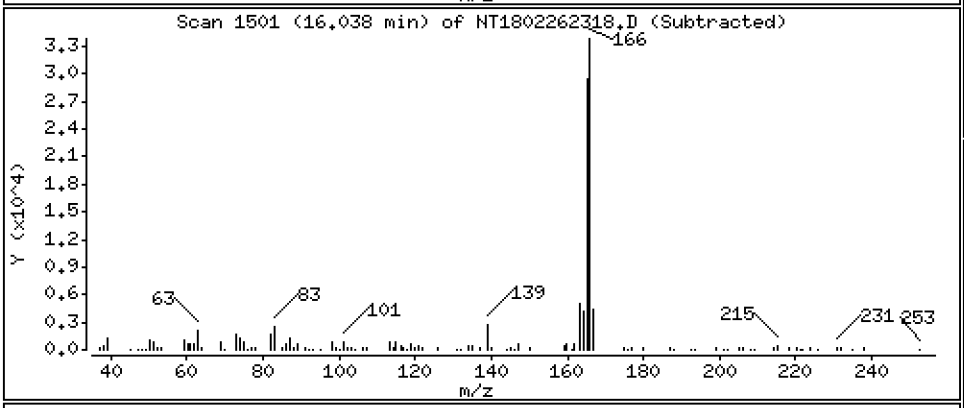
Column diameter: 0.25

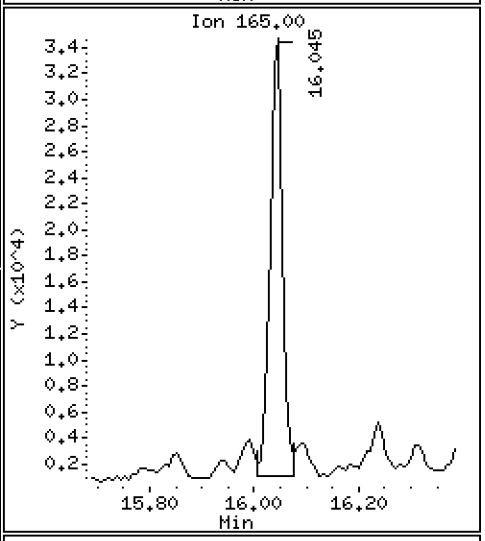
49 Fluorene

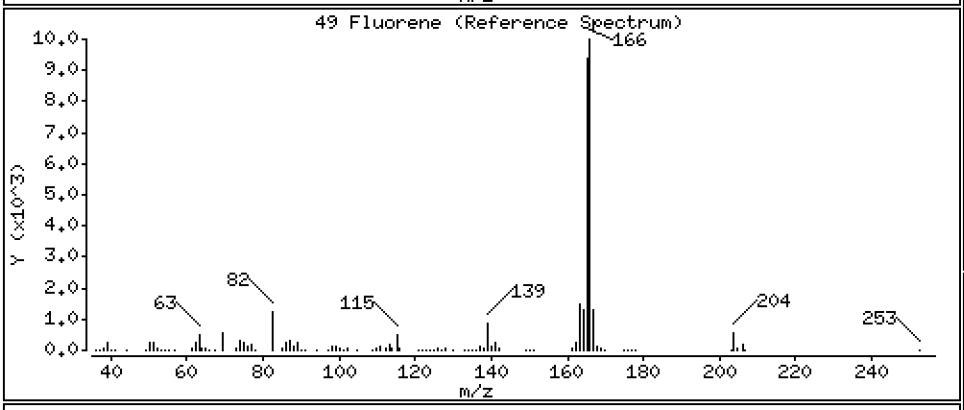
Concentration: 0.2627 ug/mL

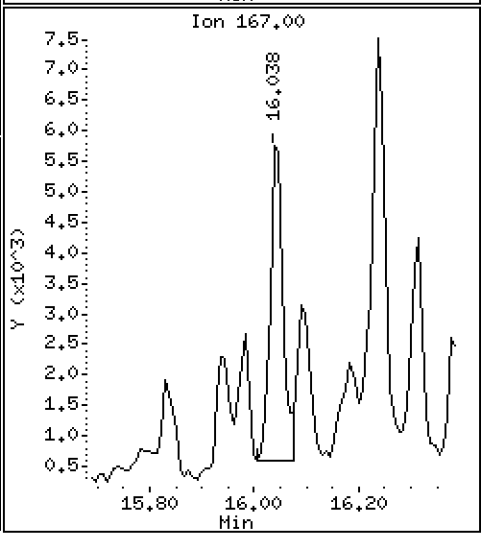


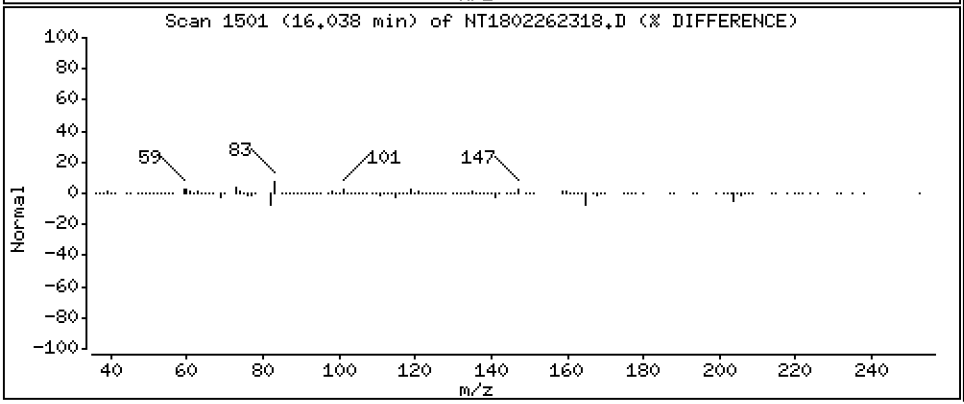












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

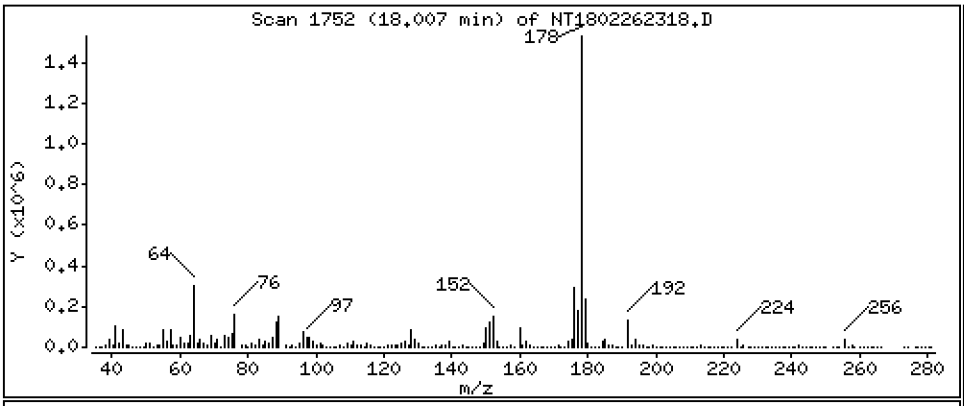
Operator: VTS

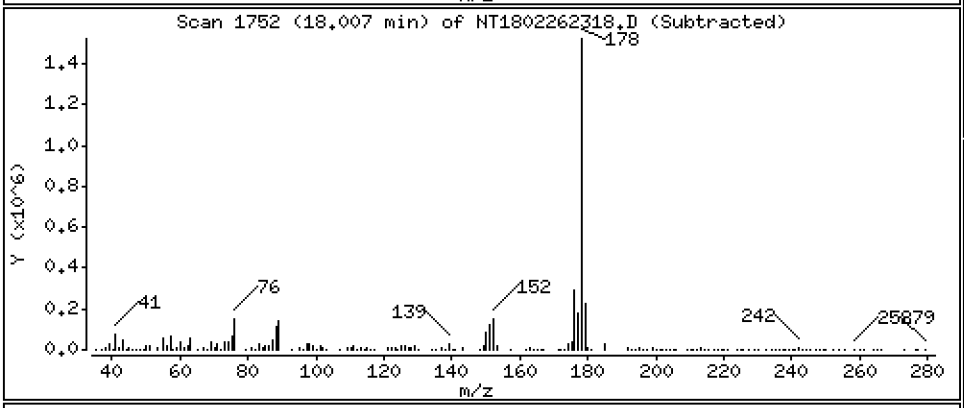
Column phase: ZB-5msi

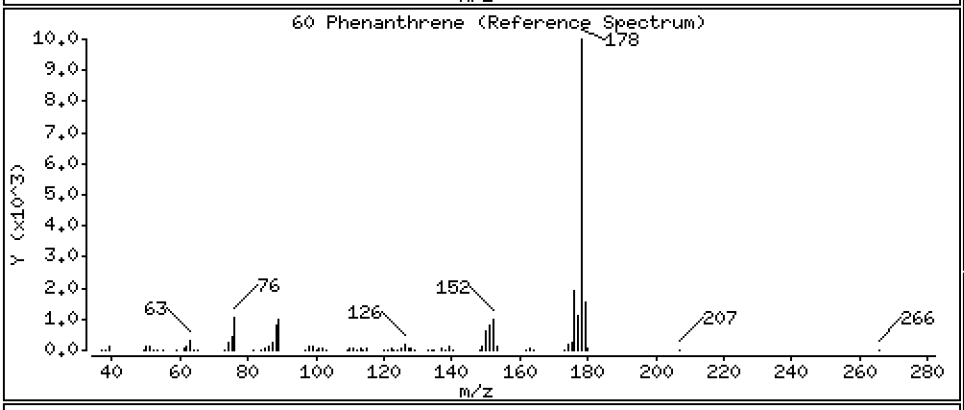
Column diameter: 0.25

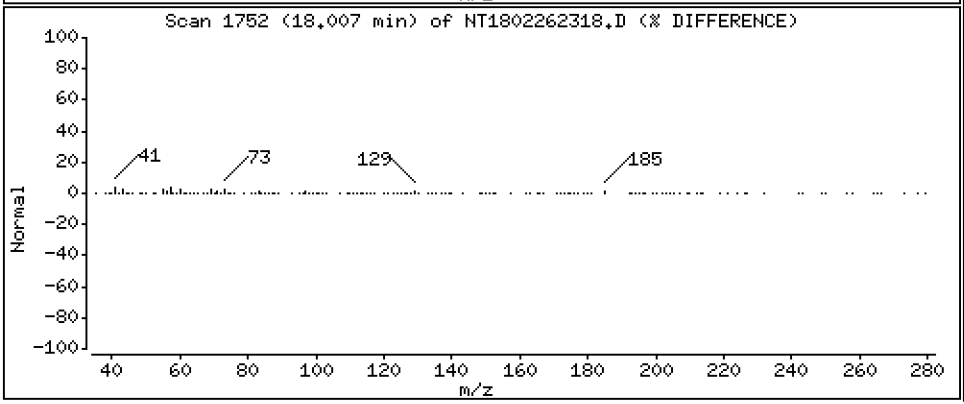
60 Phenanthrene

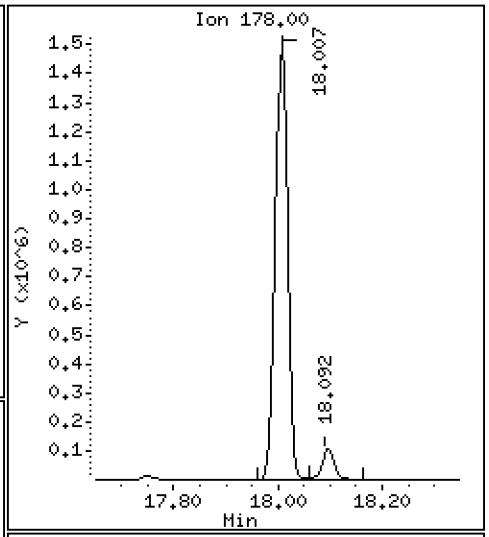
Concentration: 6.913 ug/mL

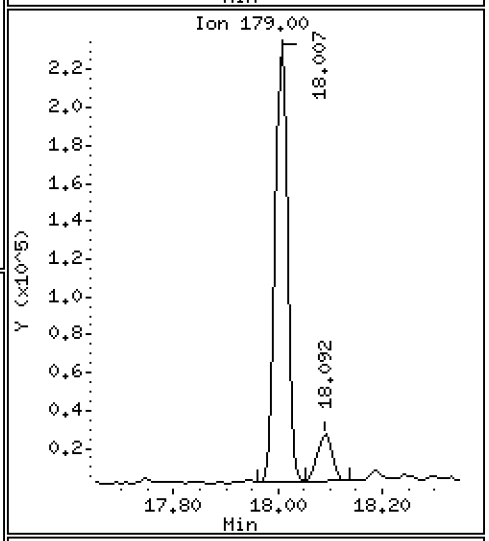


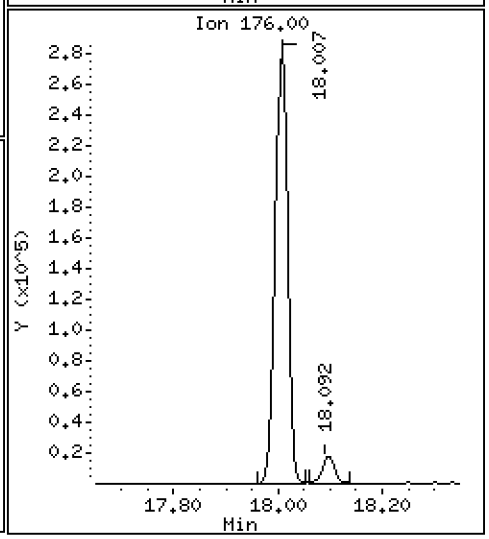












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

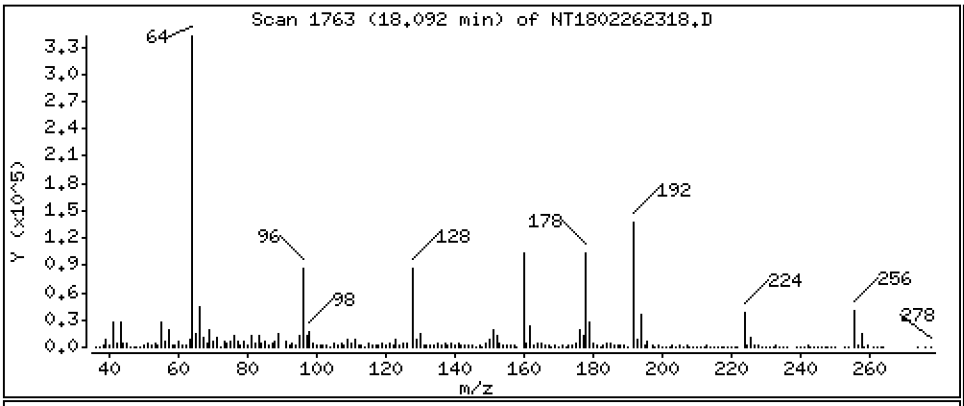
Operator: VTS

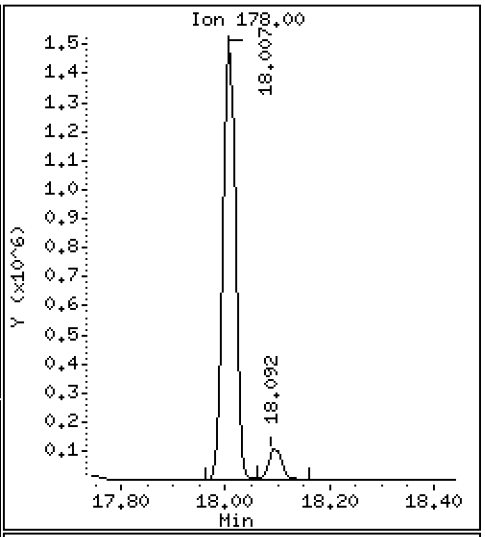
Column phase: ZB-5msi

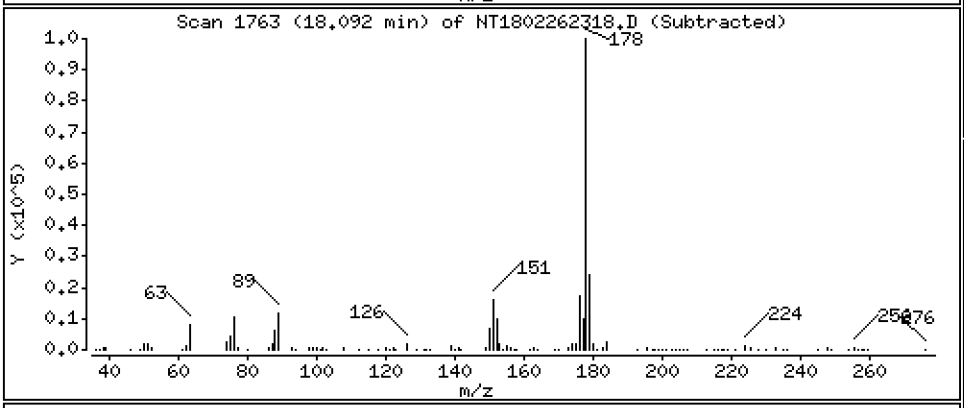
Column diameter: 0.25

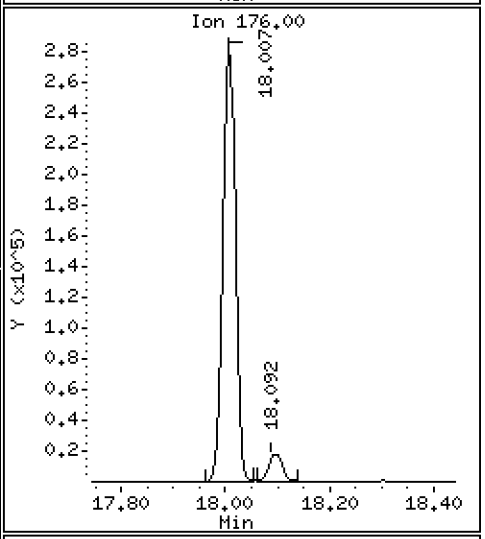
61 Anthracene

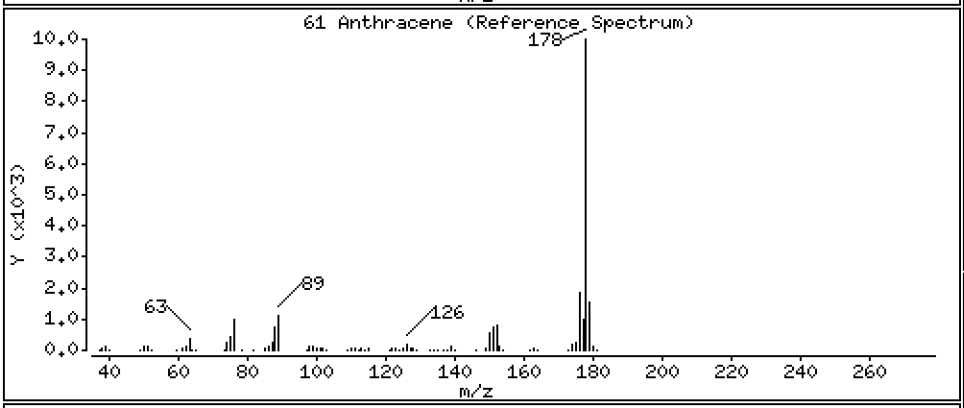
Concentration: 0.5329 ug/mL

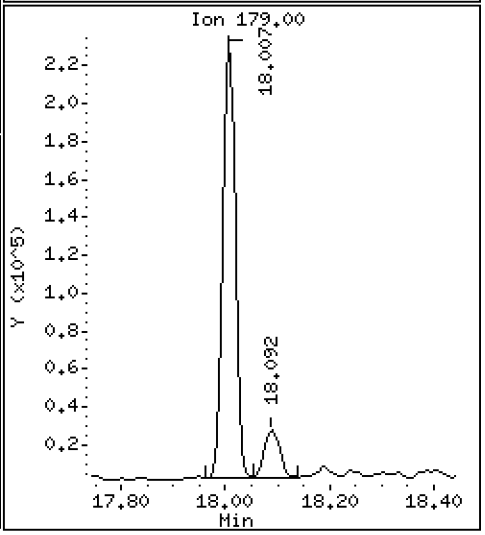


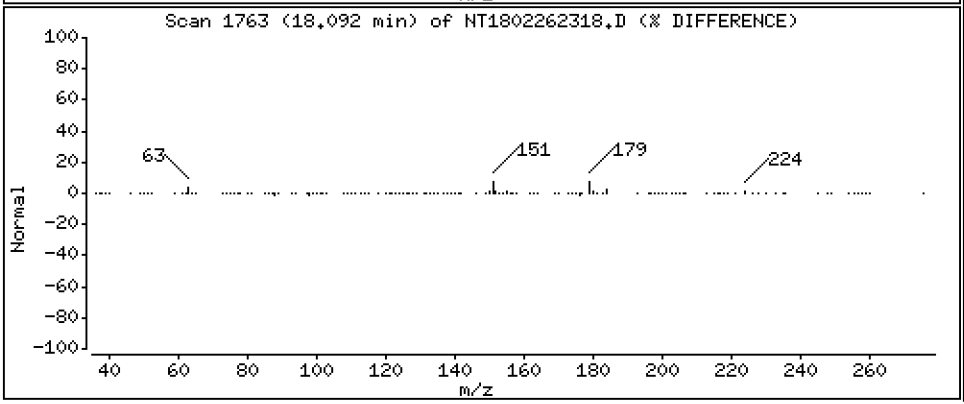












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

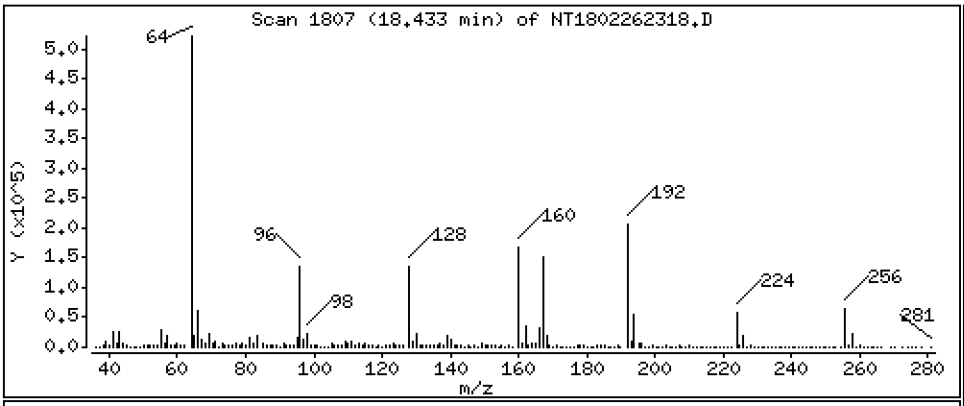
Operator: VTS

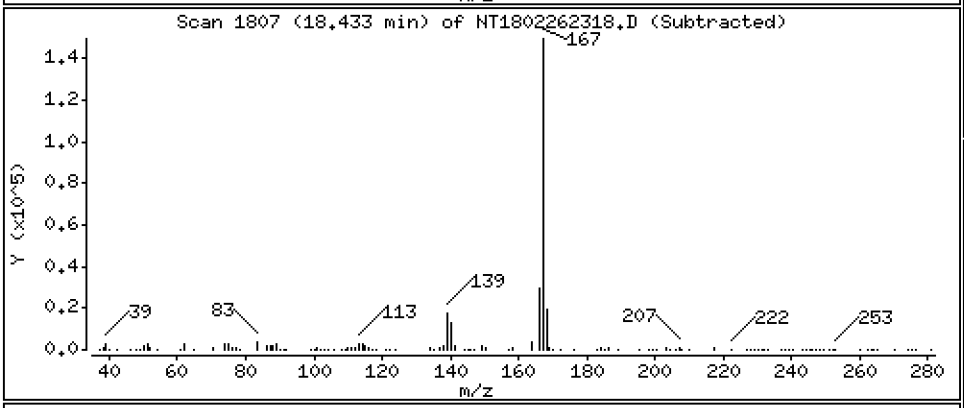
Column phase: ZB-5msi

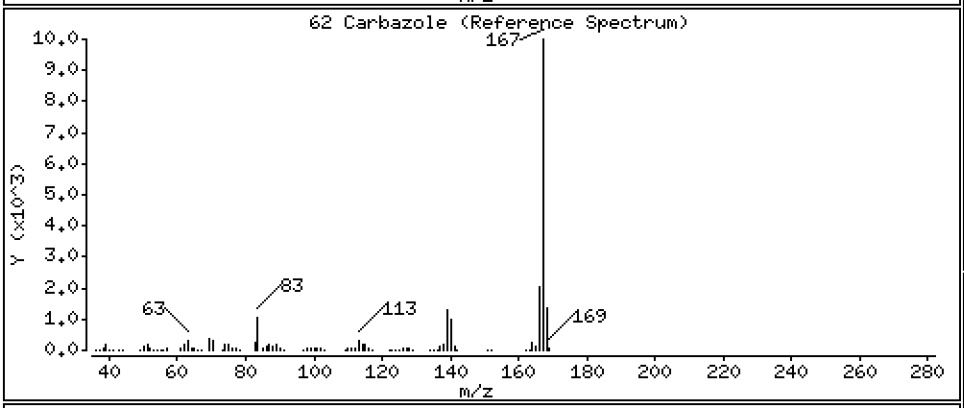
Column diameter: 0.25

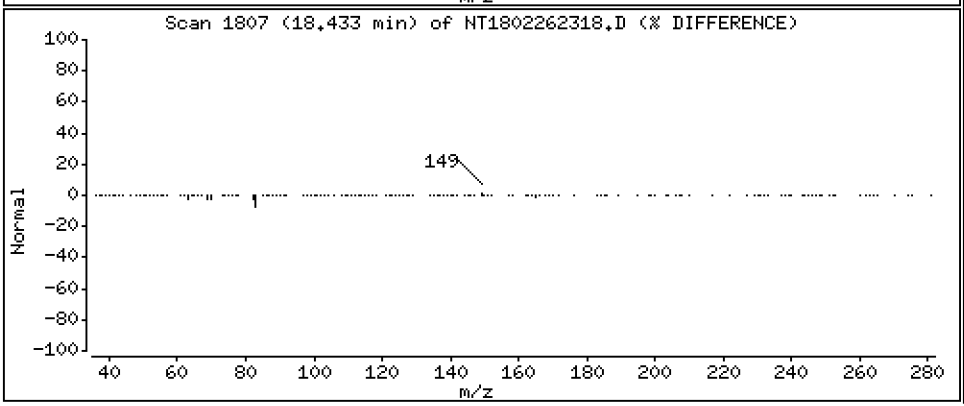
62 Carbazole

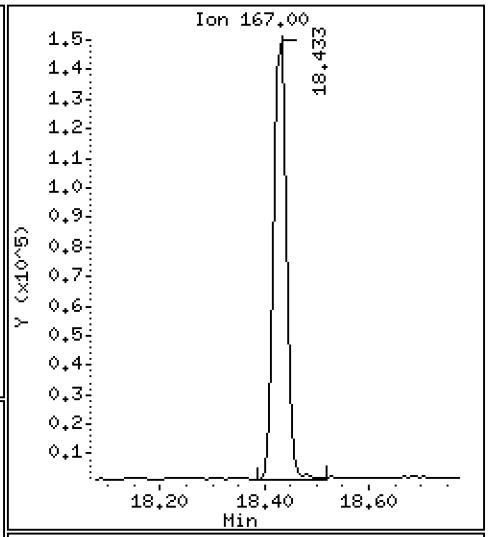
Concentration: 0.8082 ug/mL

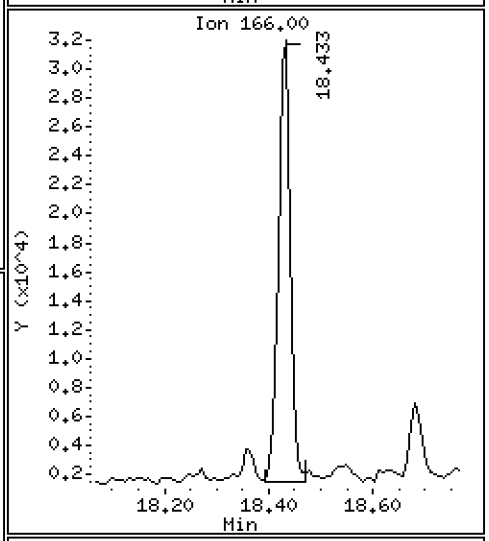


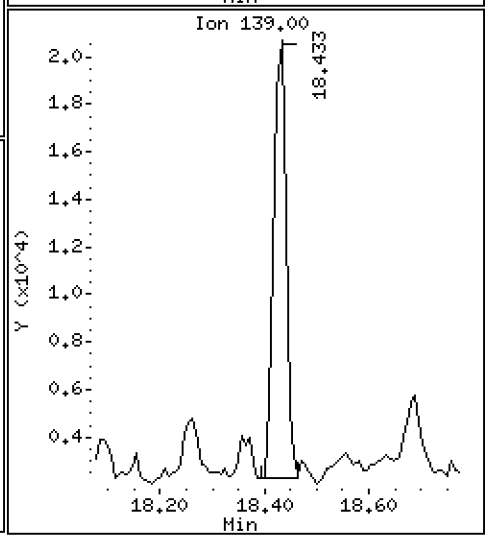












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

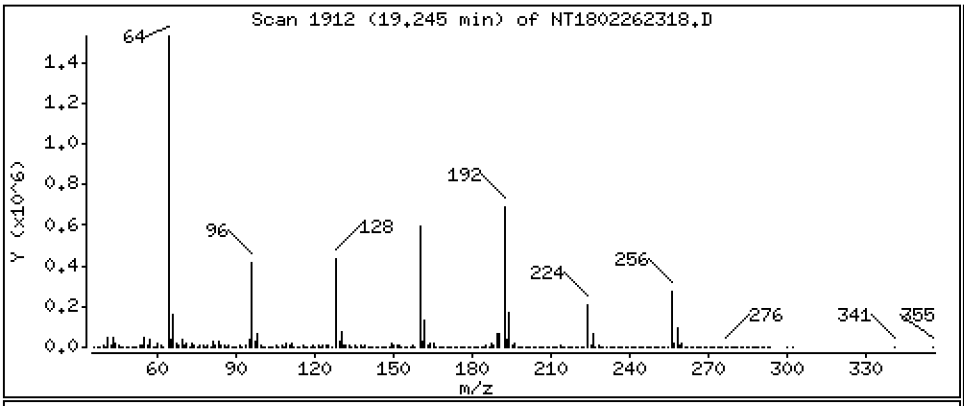
Operator: VTS

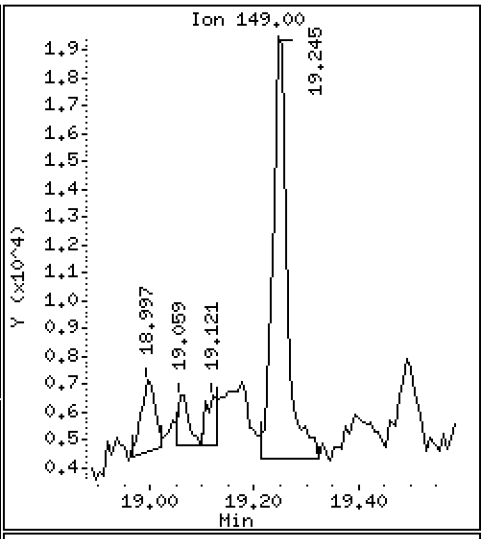
Column phase: ZB-5msi

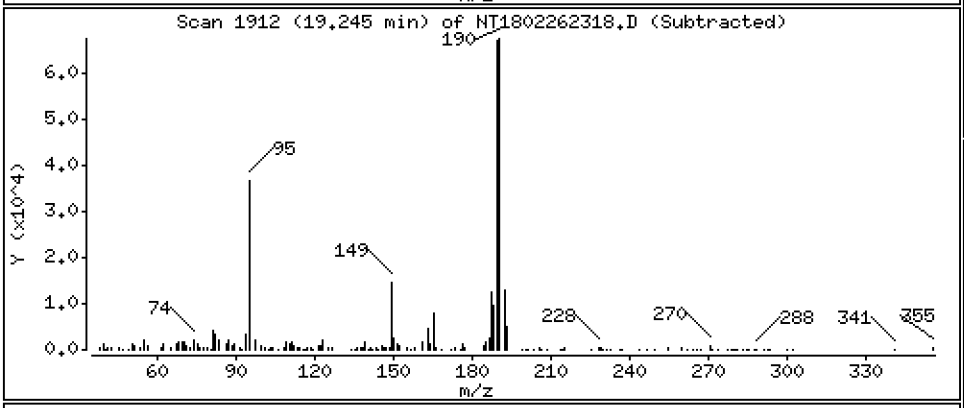
Column diameter: 0.25

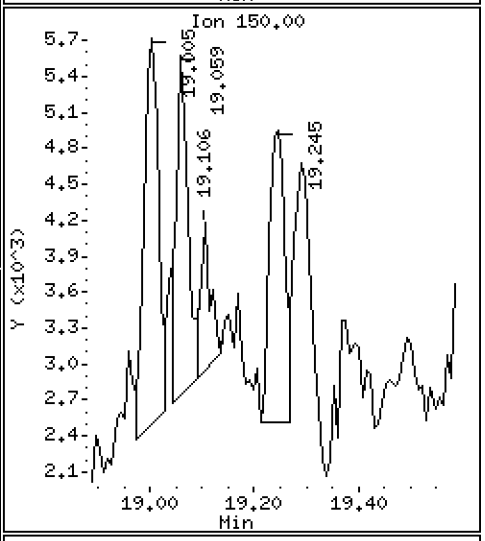
63 Di-n-butylphthalate

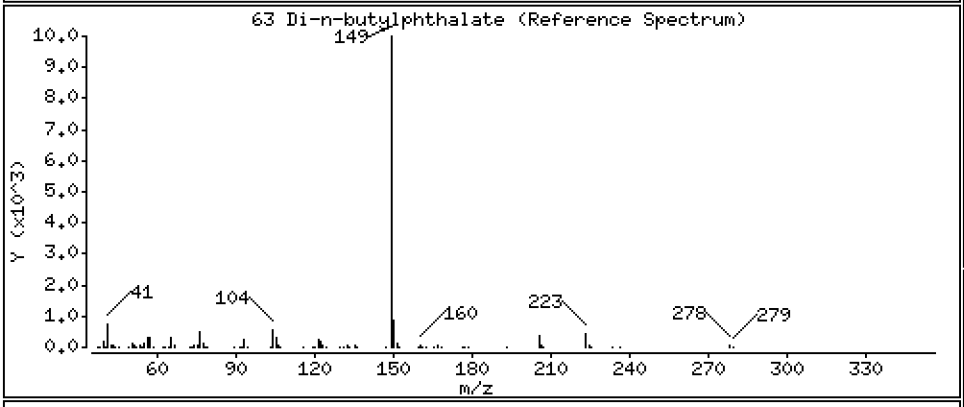
Concentration: 0.08891 ug/mL

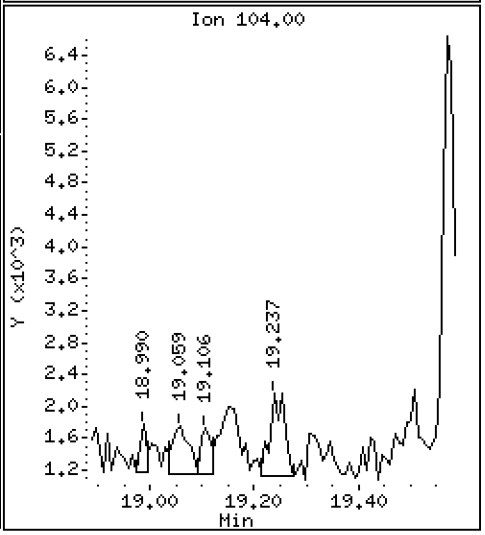


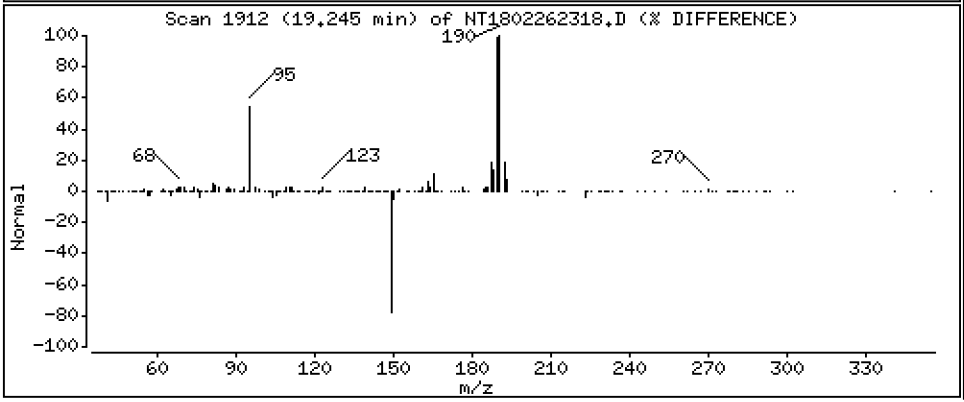












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

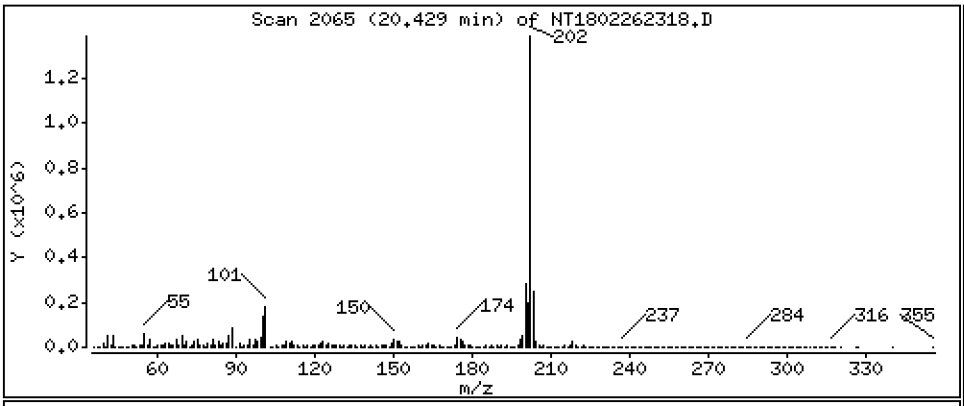
Operator: VTS

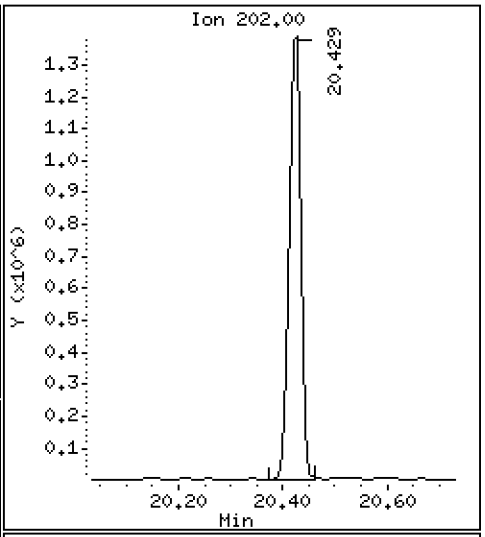
Column phase: ZB-5msi

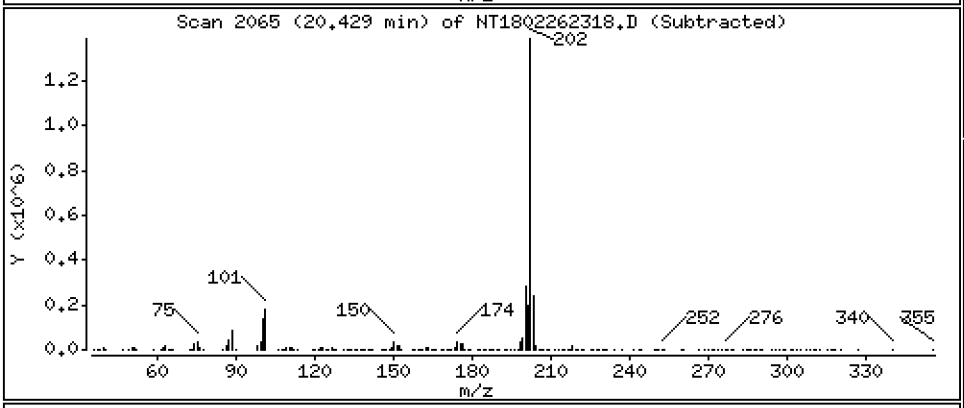
Column diameter: 0.25

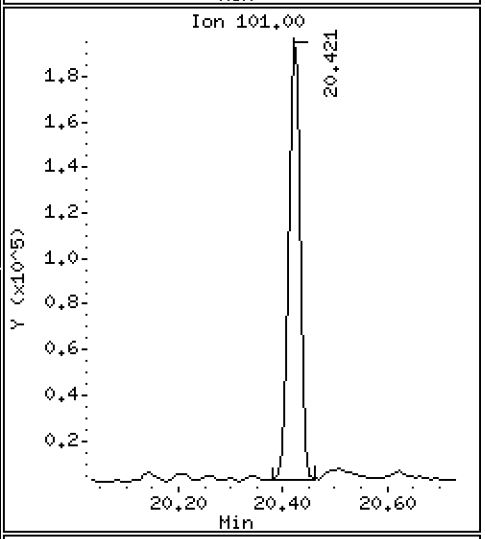
64 Fluoranthene

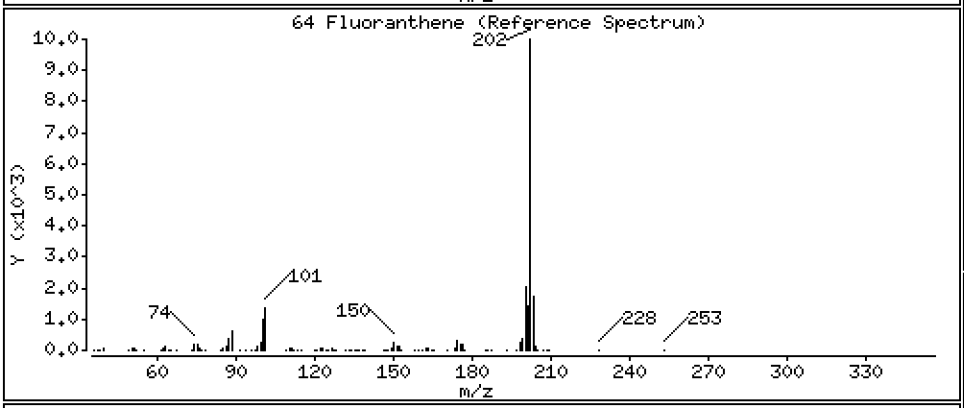
Concentration: 5.582 ug/mL

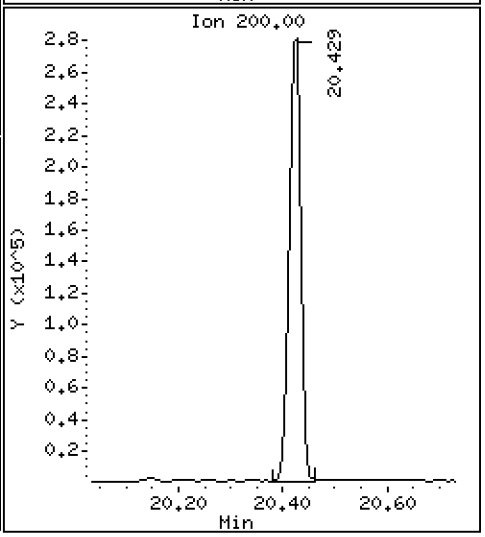


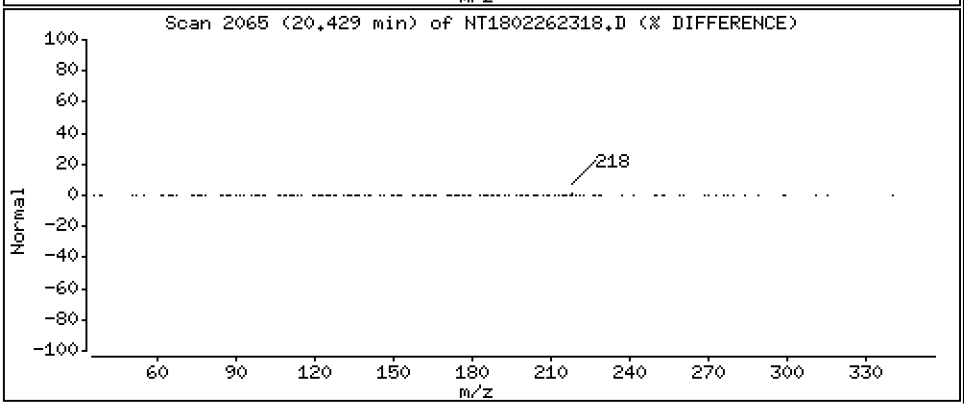












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262318.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

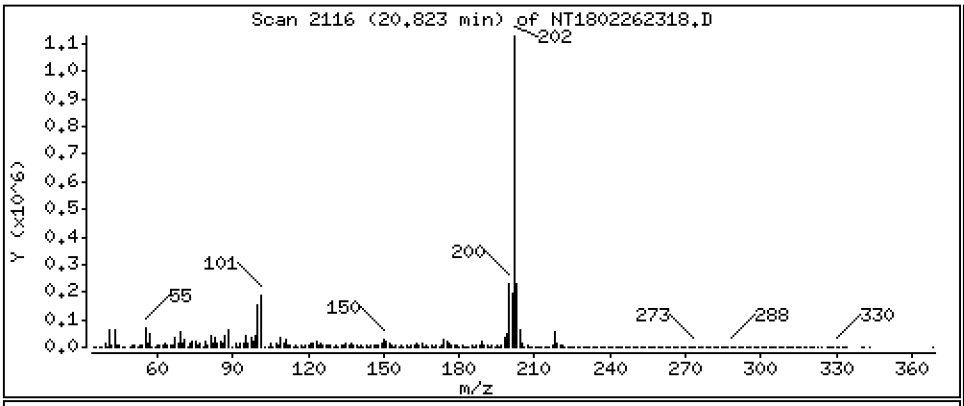
Operator: VTS

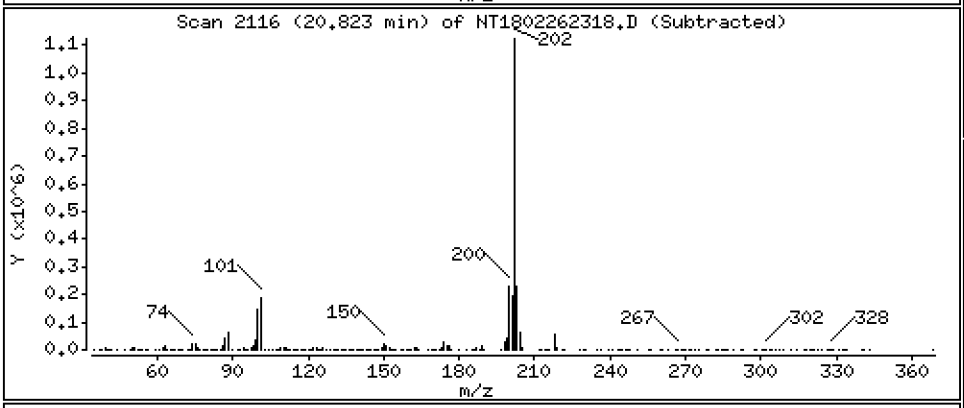
Column phase: ZB-5msi

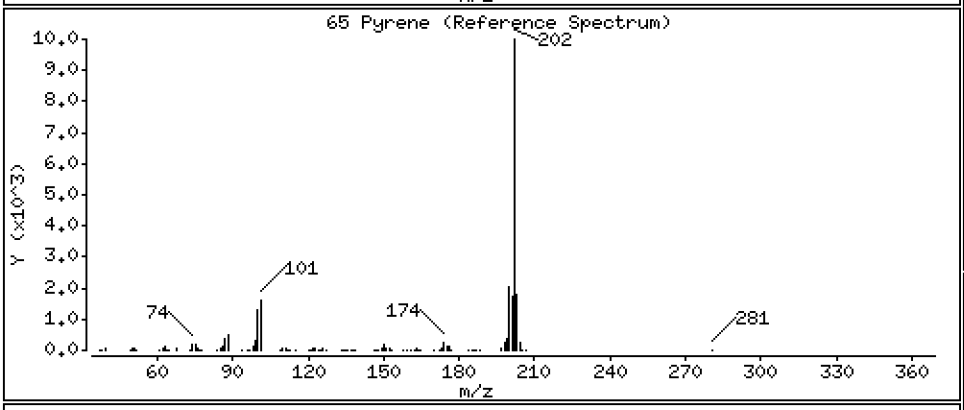
Column diameter: 0.25

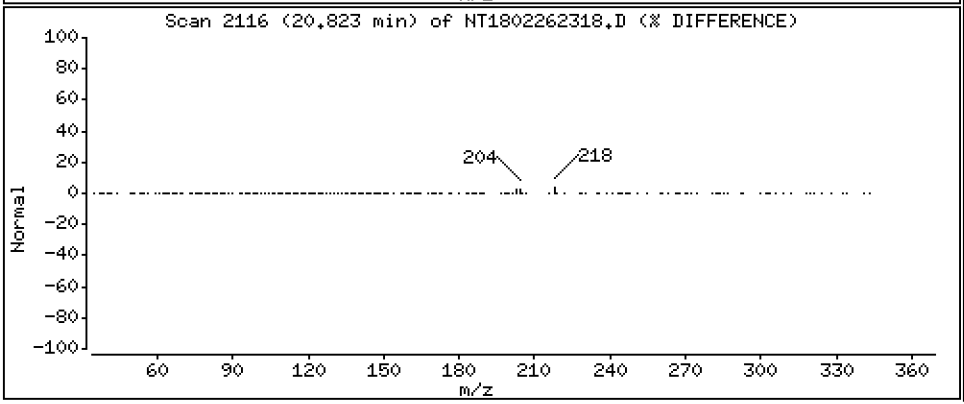
65 Pyrene

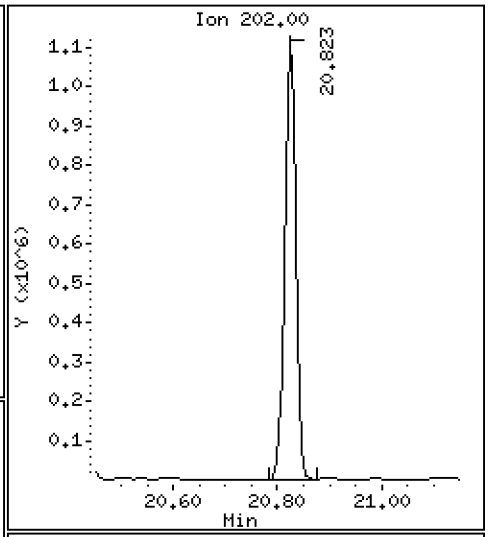
Concentration: 3.828 ug/mL

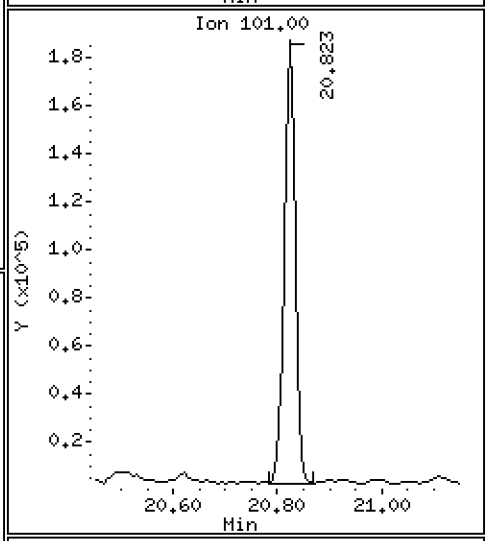


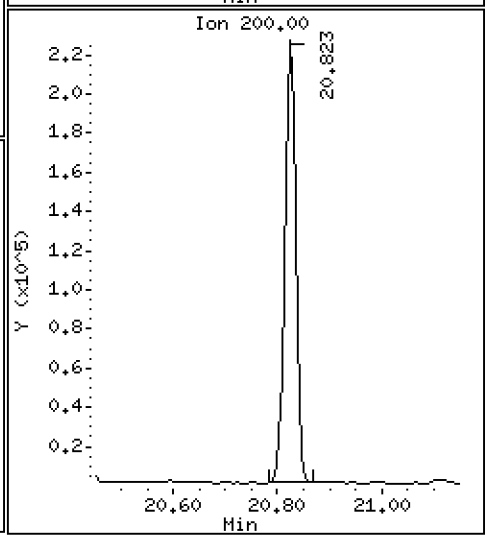












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

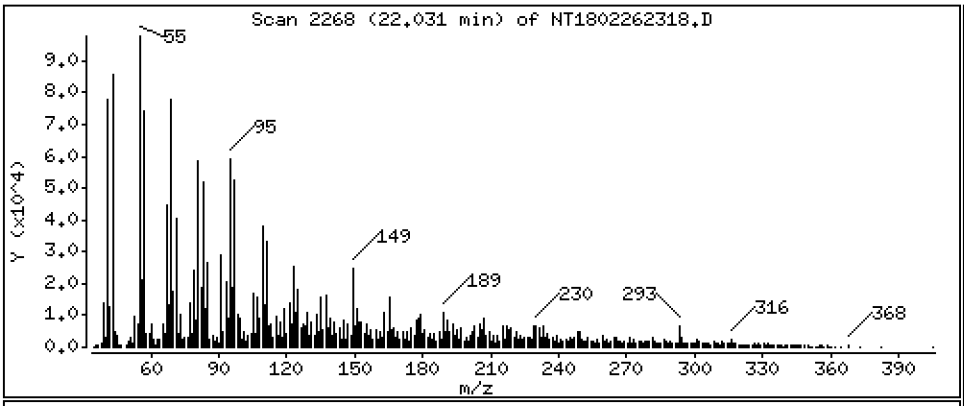
Operator: VTS

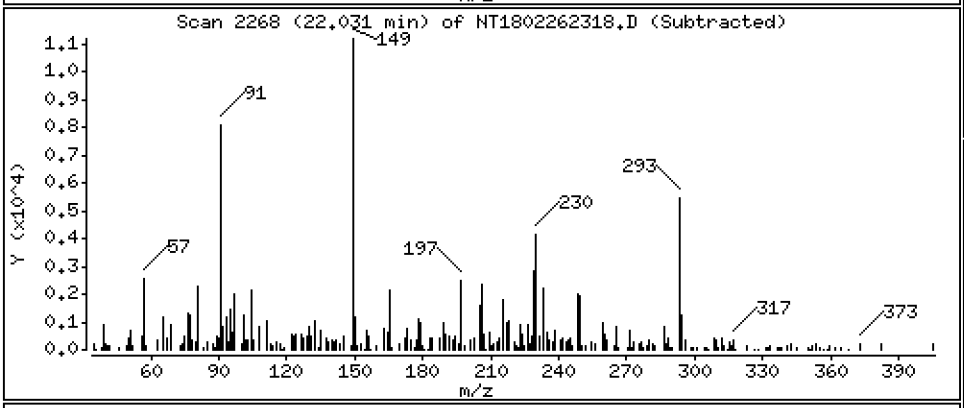
Column phase: ZB-5msi

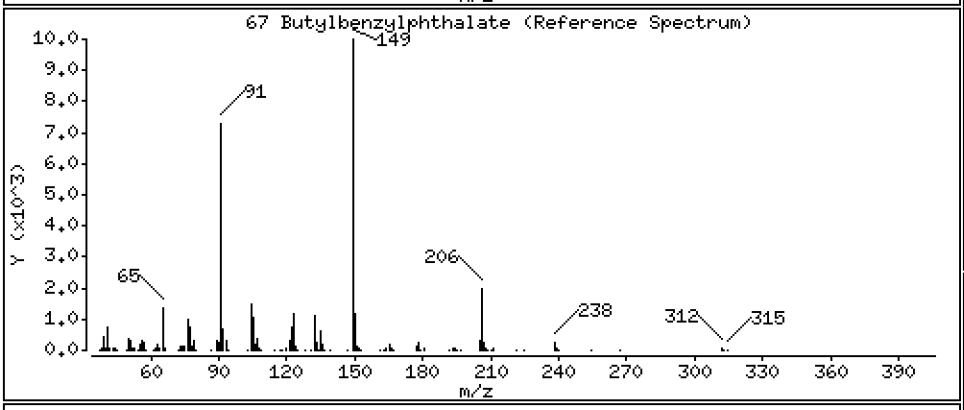
Column diameter: 0.25

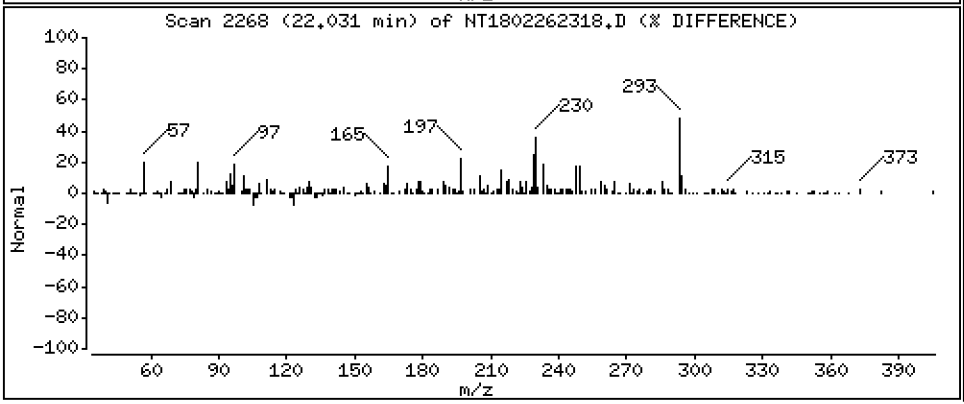
67 Butylbenzylphthalate

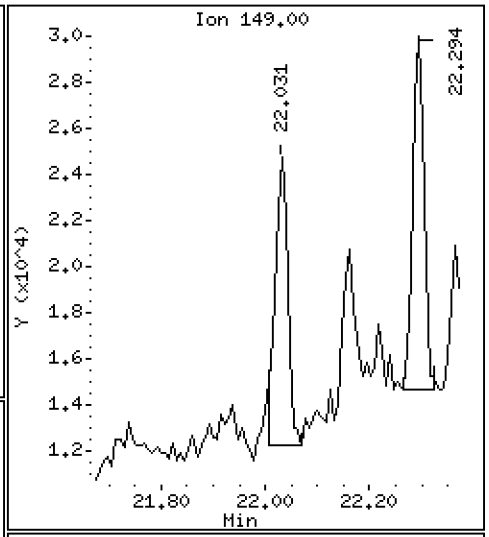
Concentration: 0.1269 ug/mL

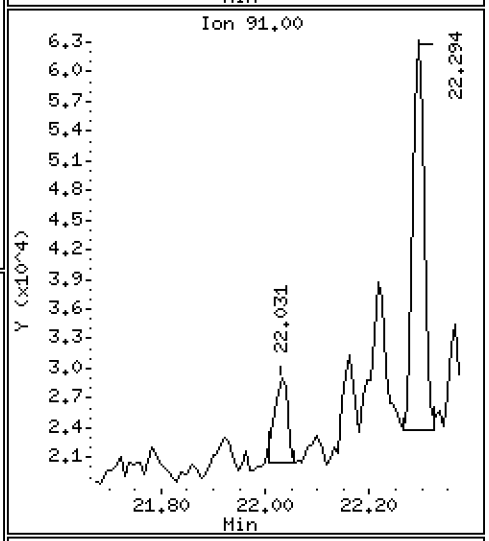


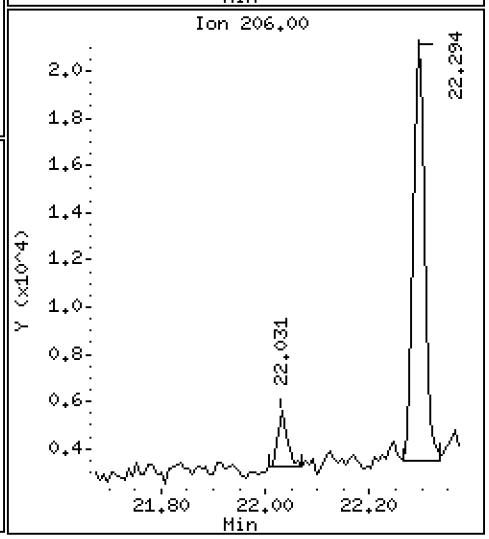












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262318.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

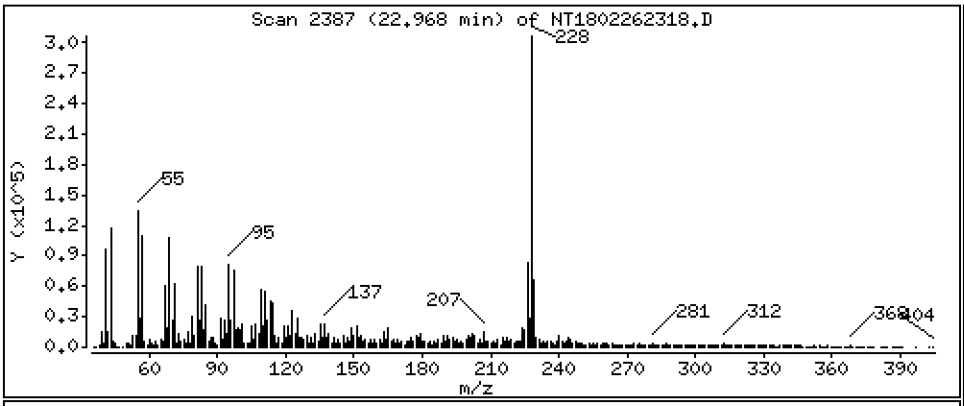
Operator: VTS

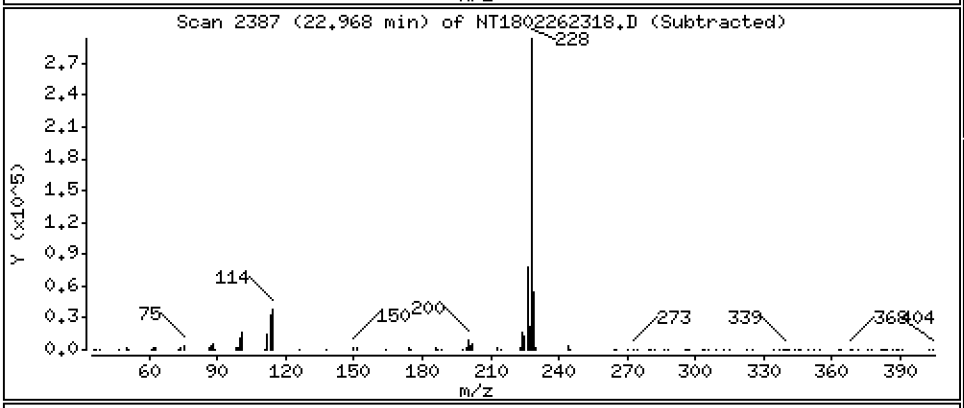
Column phase: ZB-5msi

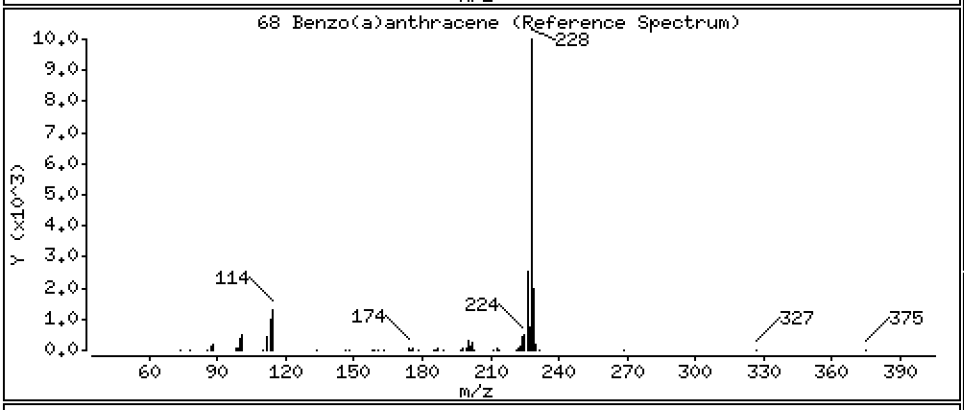
Column diameter: 0.25

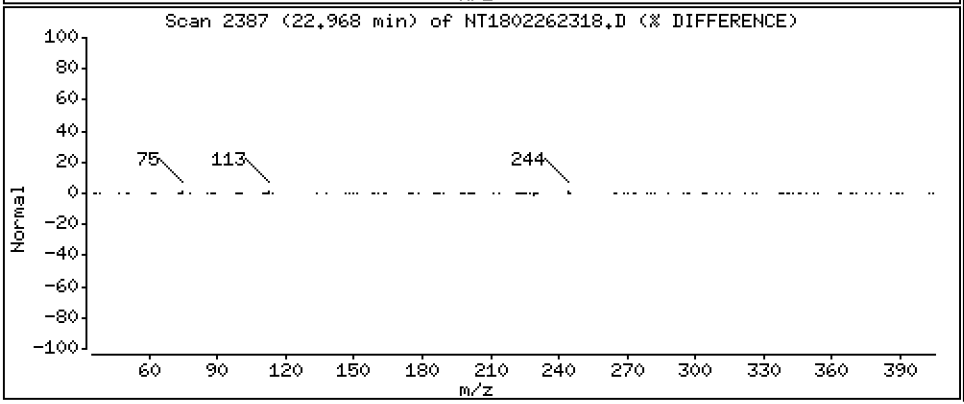
68 Benzo(a)anthracene

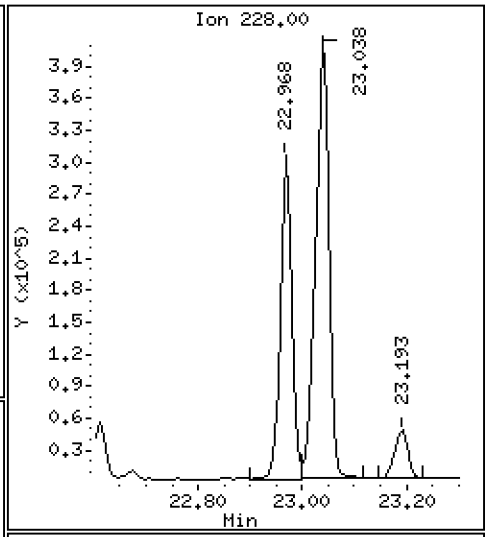
Concentration: 1.108 ug/mL

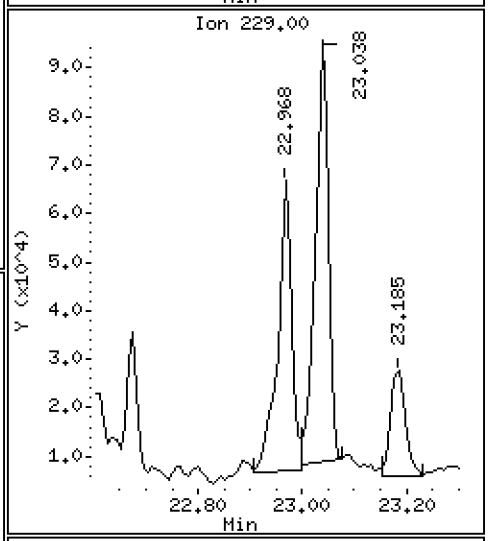


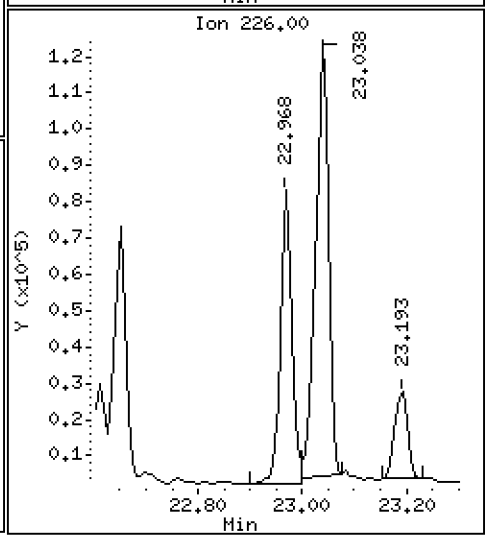












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

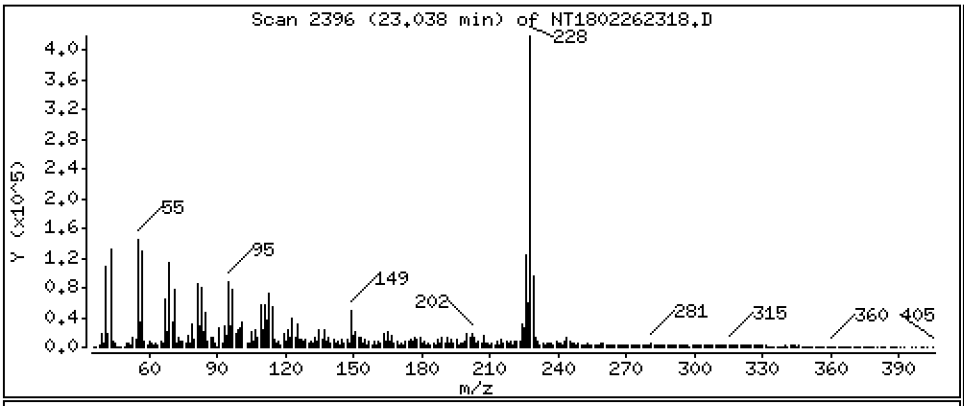
Operator: VTS

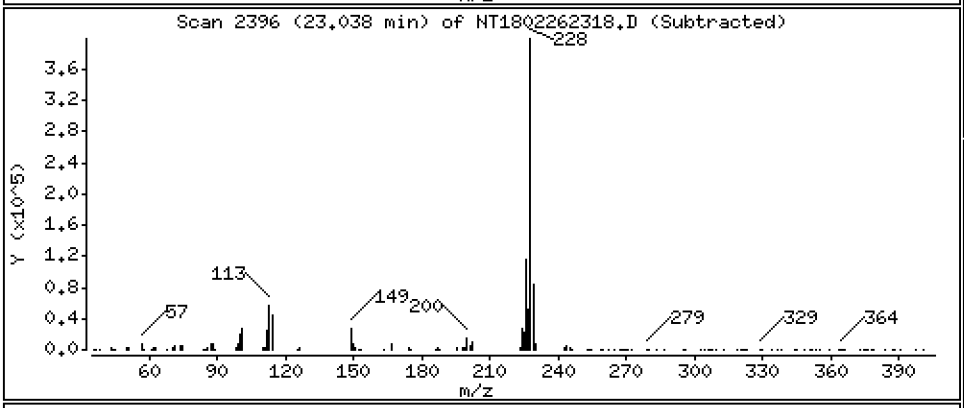
Column phase: ZB-5msi

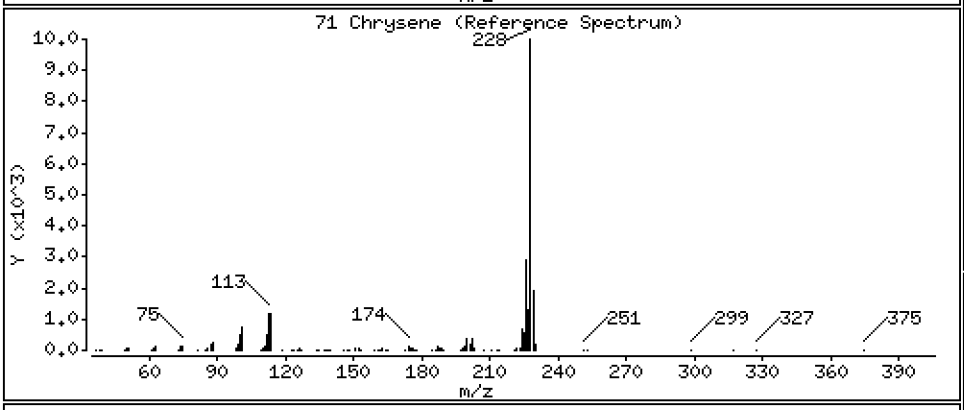
Column diameter: 0.25

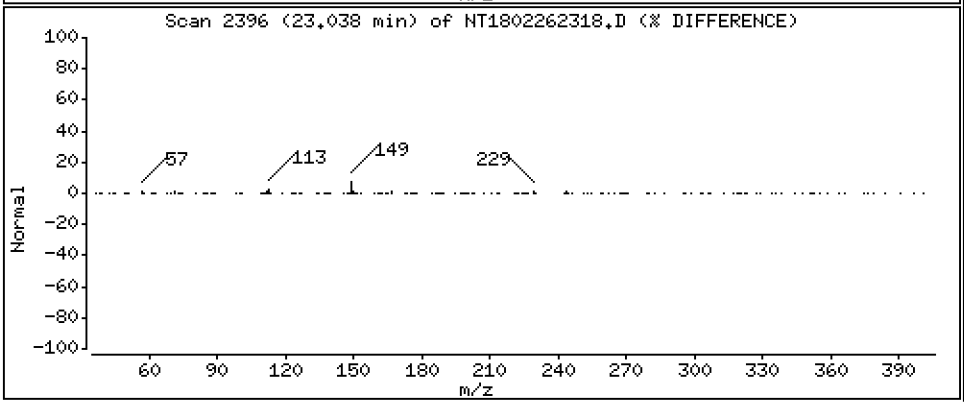
71 Chrysene

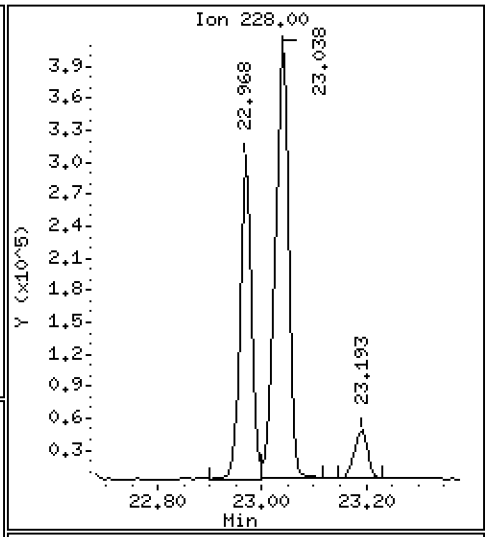
Concentration: 1.635 ug/mL

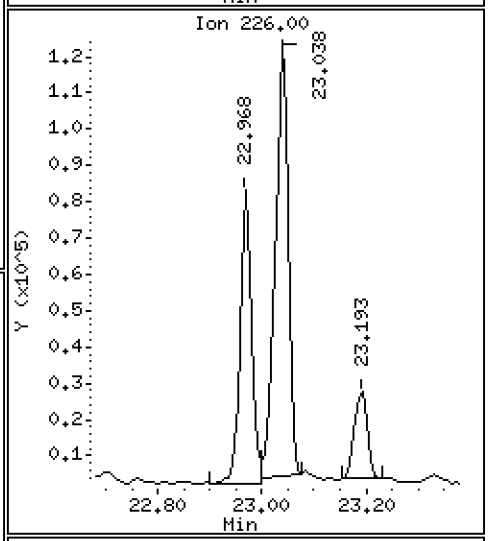


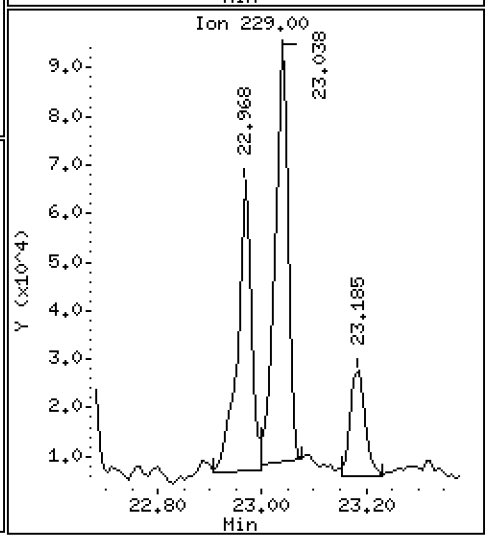












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

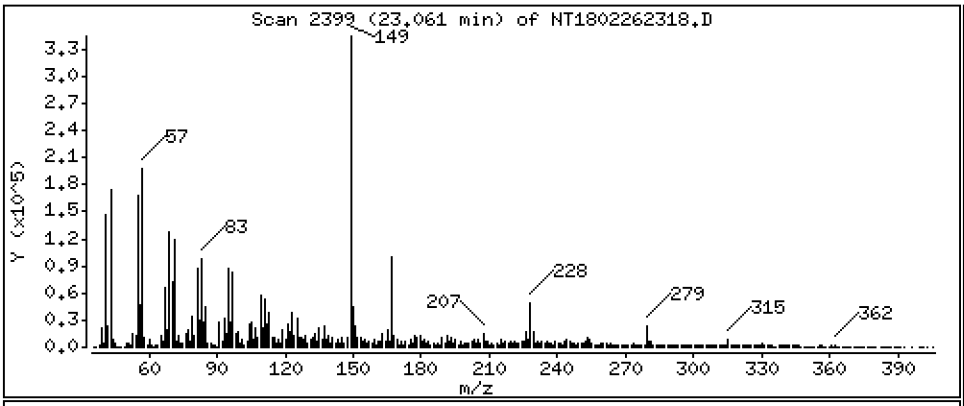
Operator: VTS

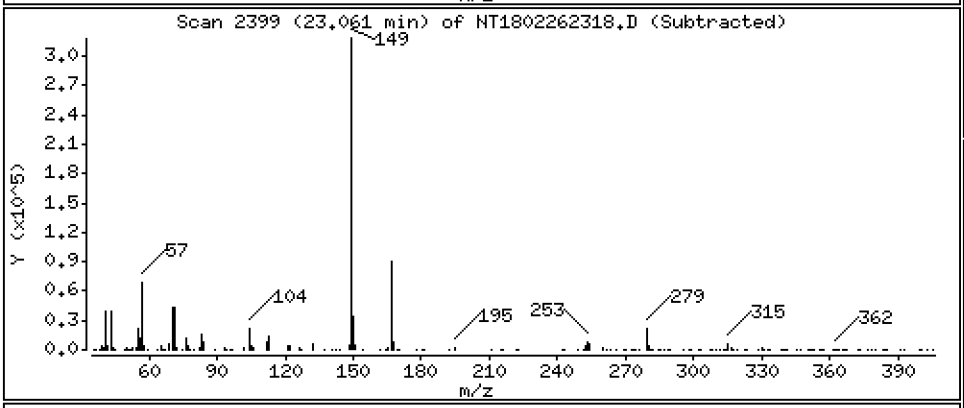
Column phase: ZB-5msi

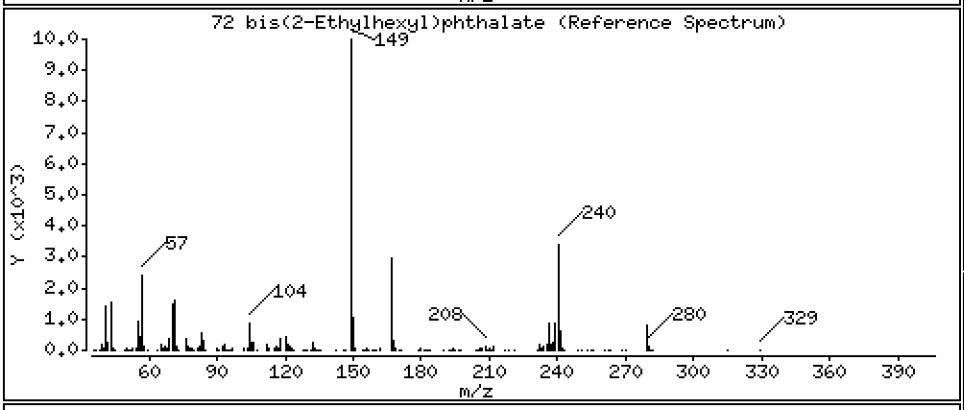
Column diameter: 0.25

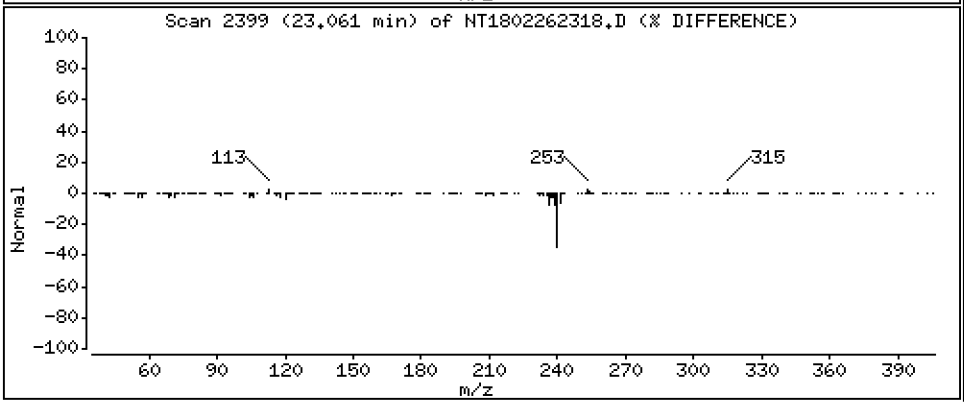
72 bis(2-Ethylhexyl)phthalate

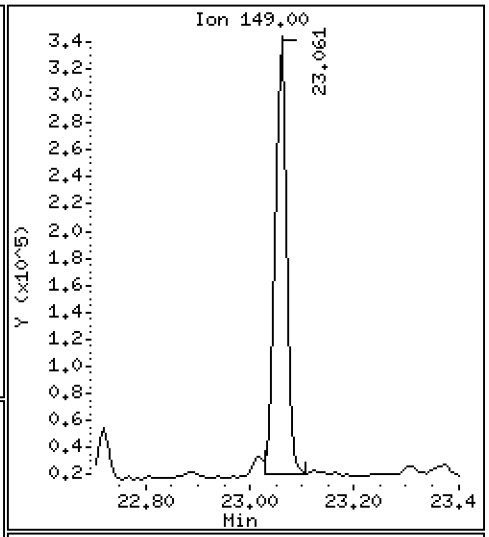
Concentration: 1.873 ug/mL

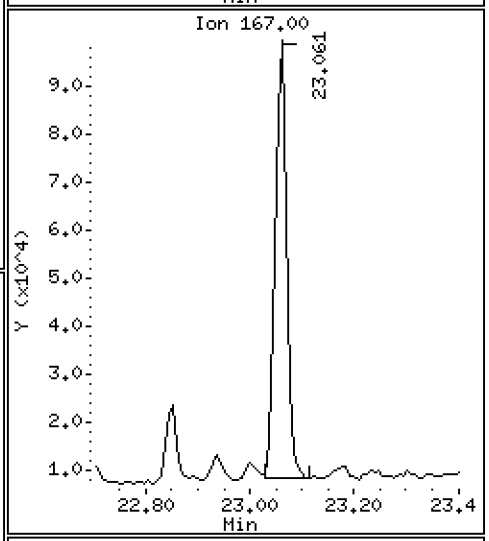


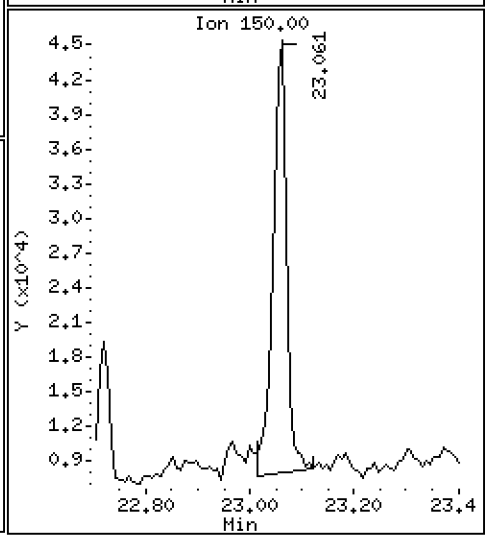












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

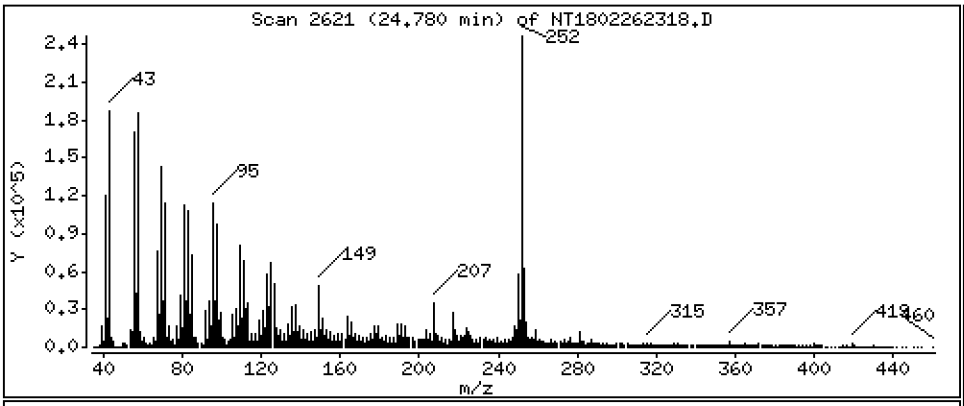
Operator: VTS

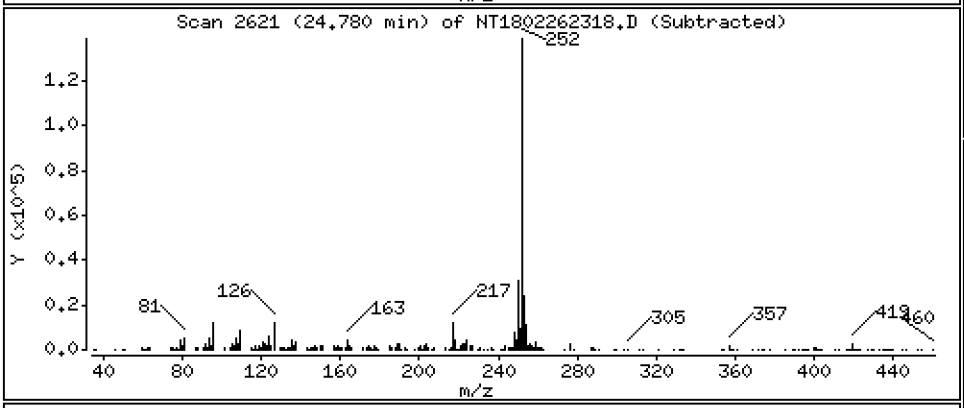
Column phase: ZB-5msi

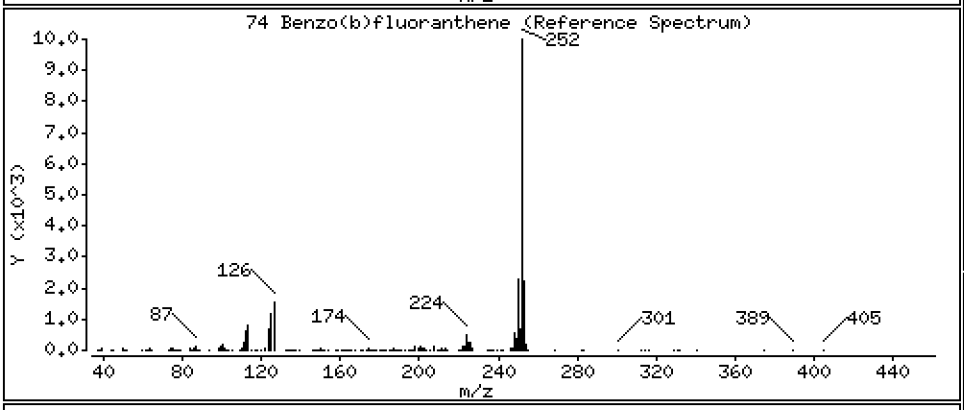
Column diameter: 0.25

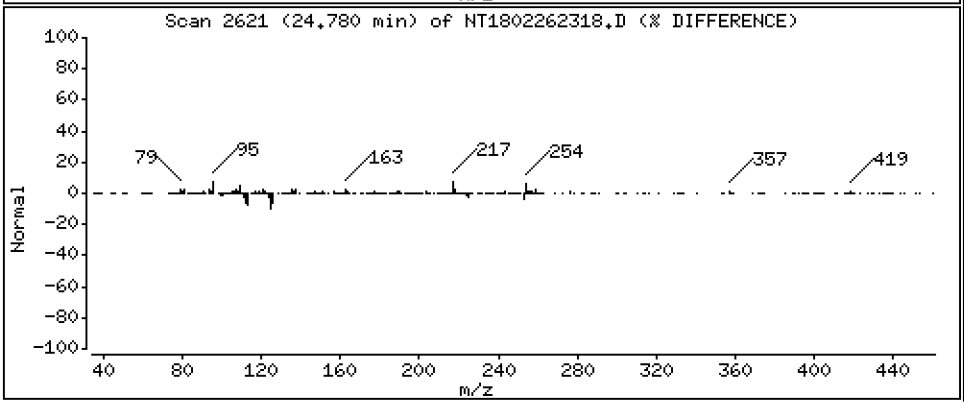
74 Benzo(b)fluoranthene

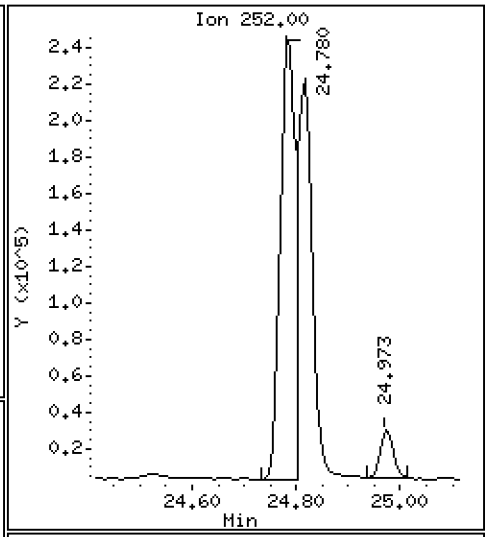
Concentration: 1.961 ug/mL

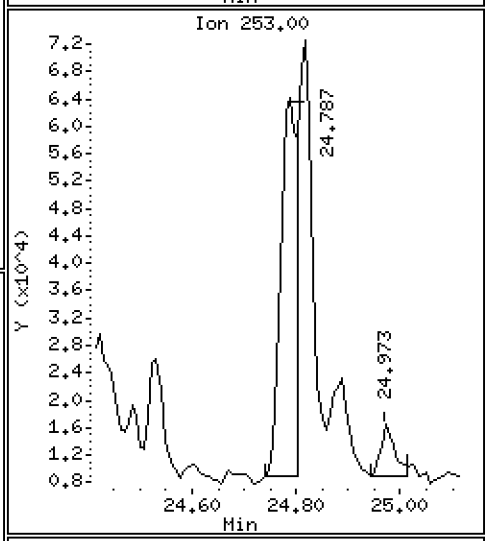


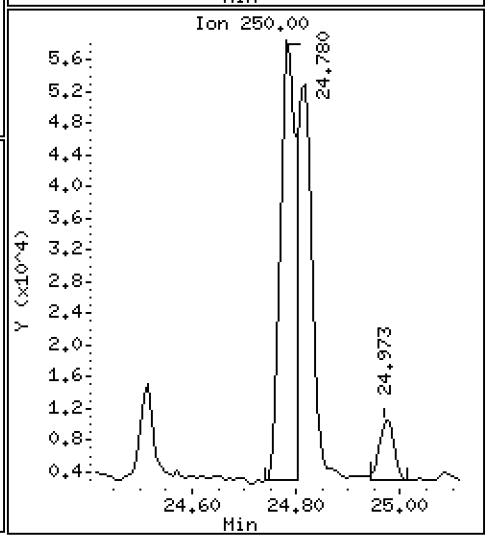












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

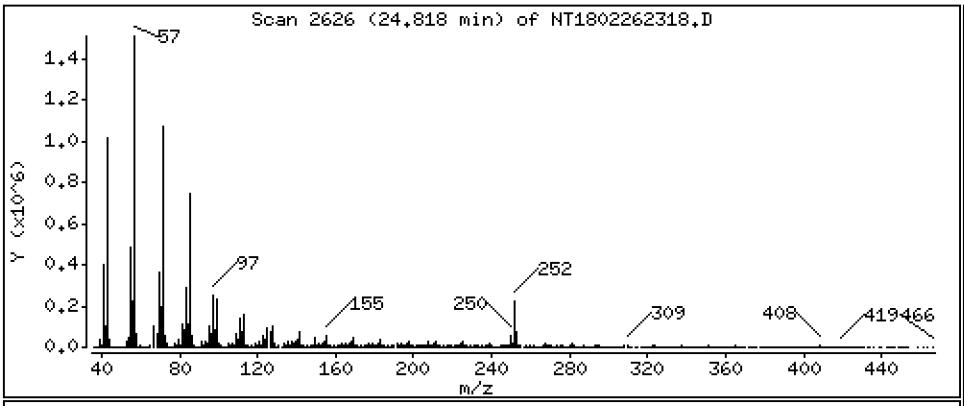
Operator: VTS

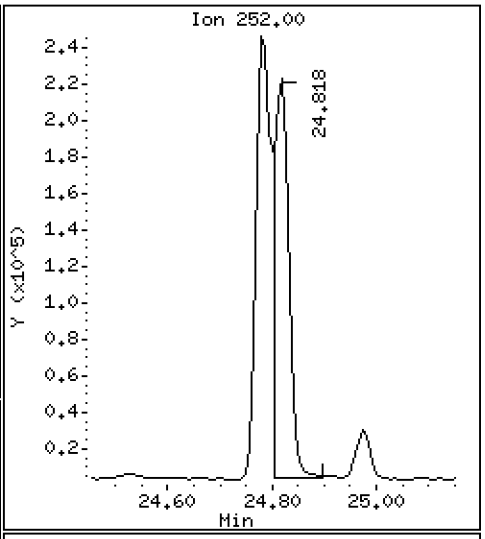
Column phase: ZB-5msi

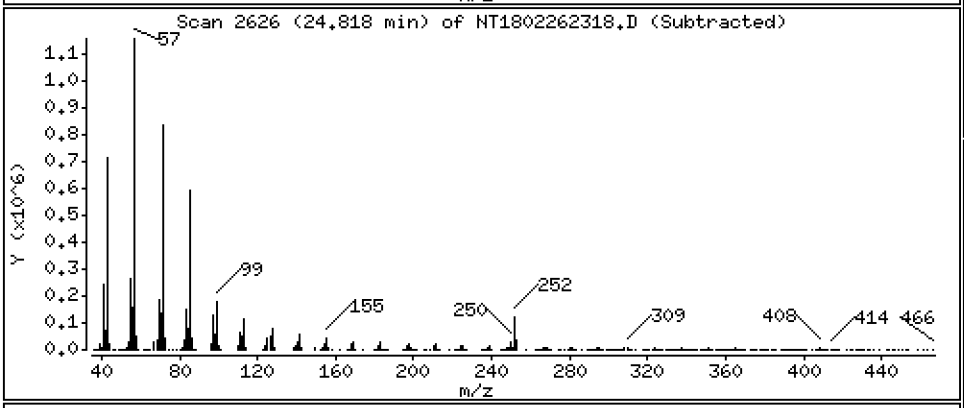
Column diameter: 0.25

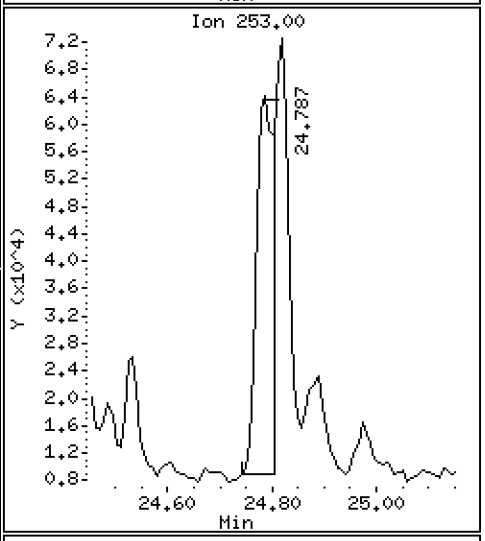
75 Benzo(k)fluoranthene

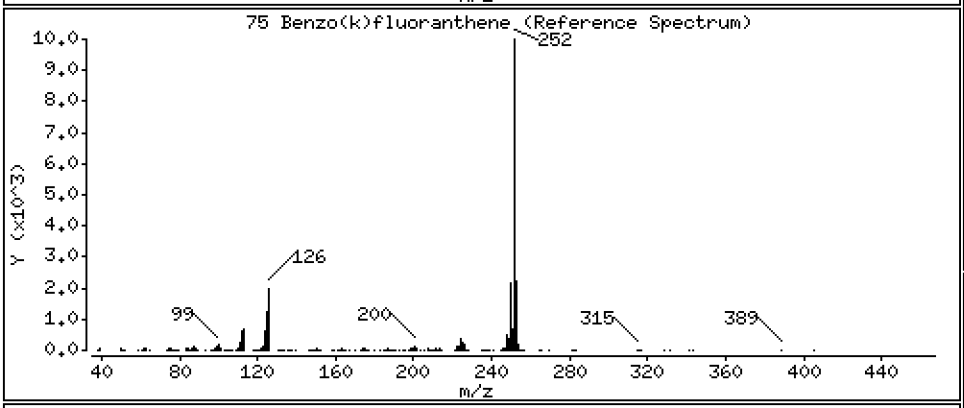
Concentration: 1.498 ug/mL

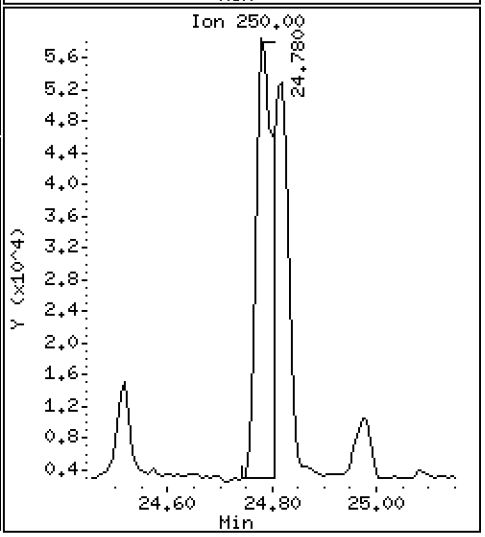


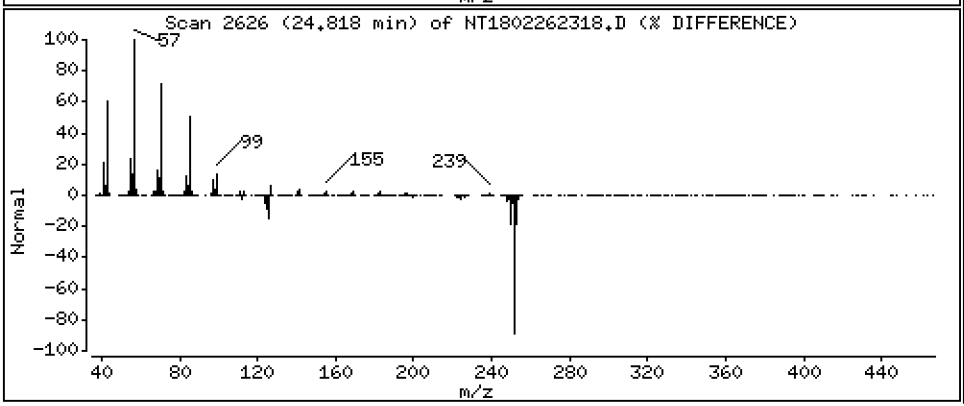












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262318.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

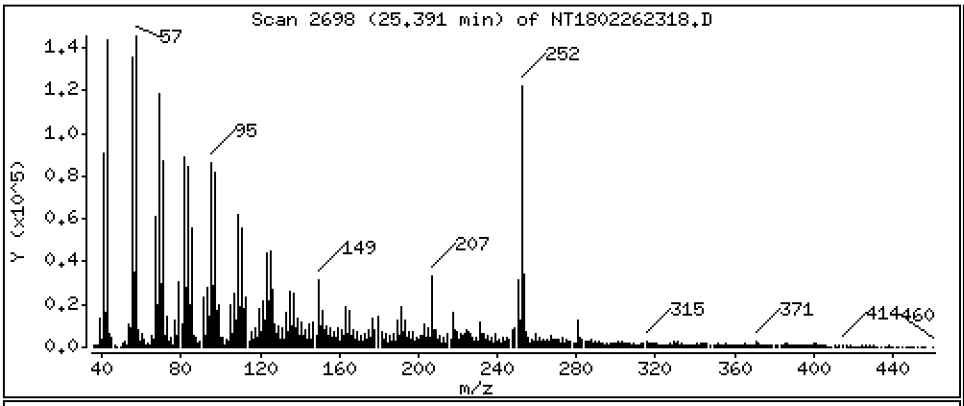
Operator: VTS

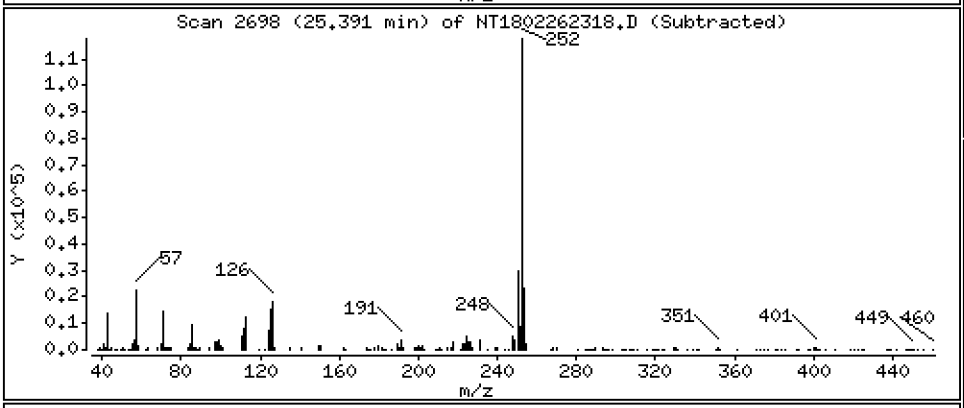
Column phase: ZB-5msi

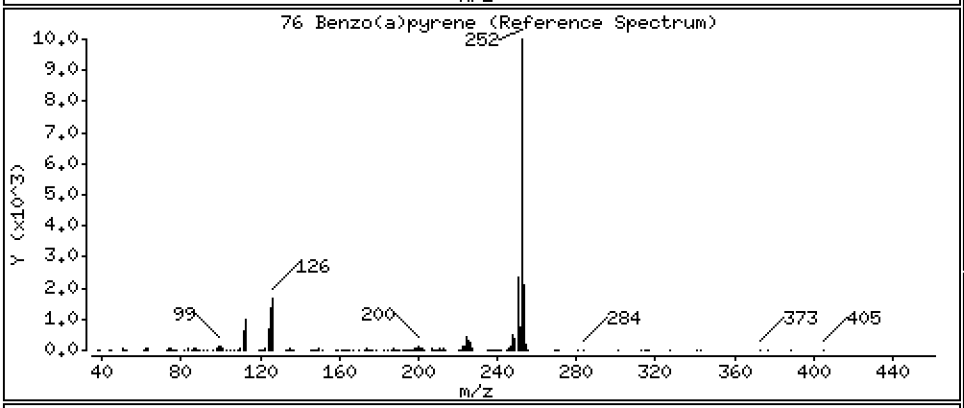
Column diameter: 0.25

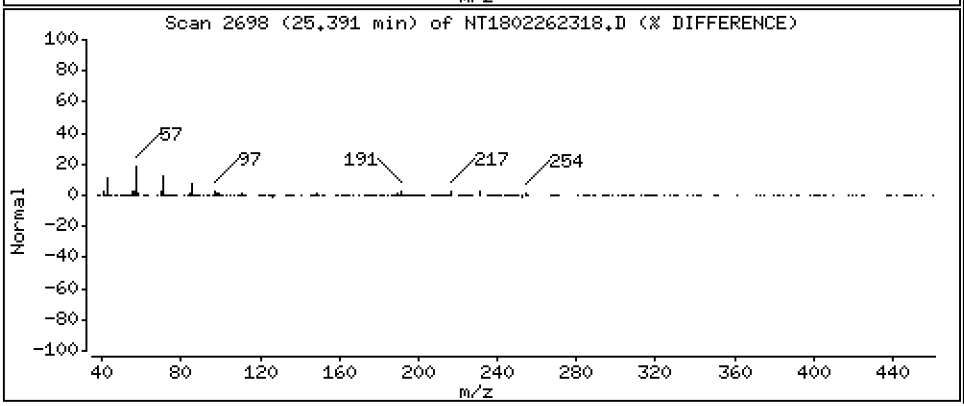
76 Benzo(a)pyrene

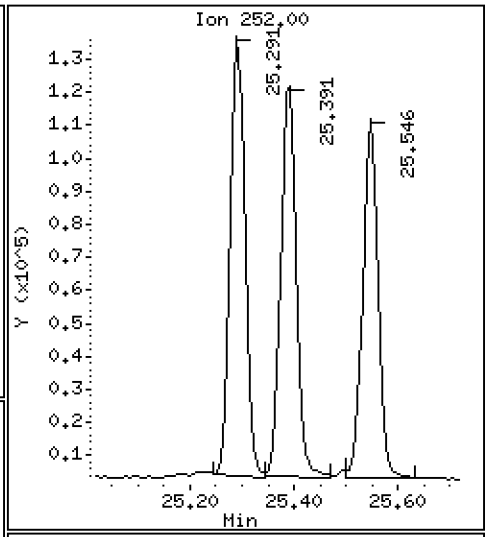
Concentration: 1.004 ug/mL

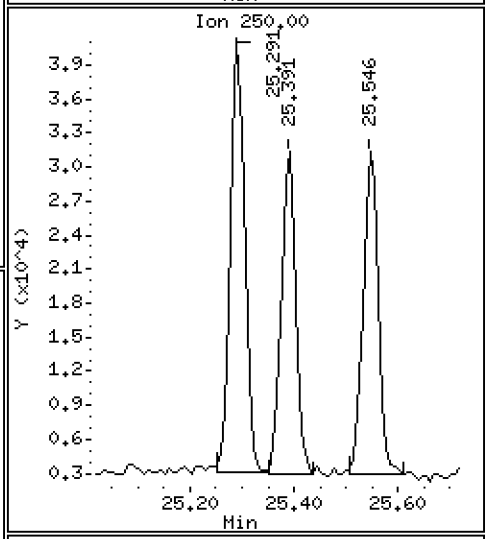


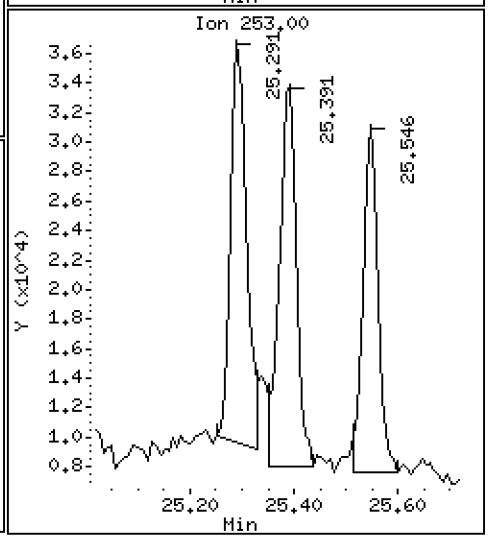












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

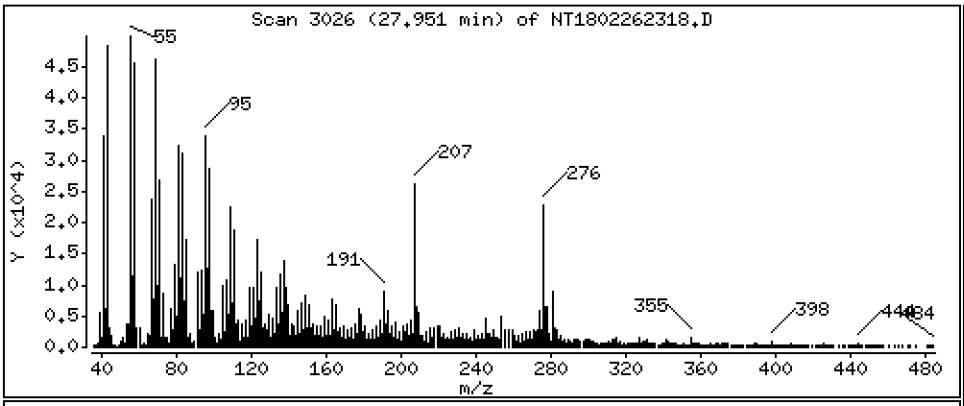
Operator: VTS

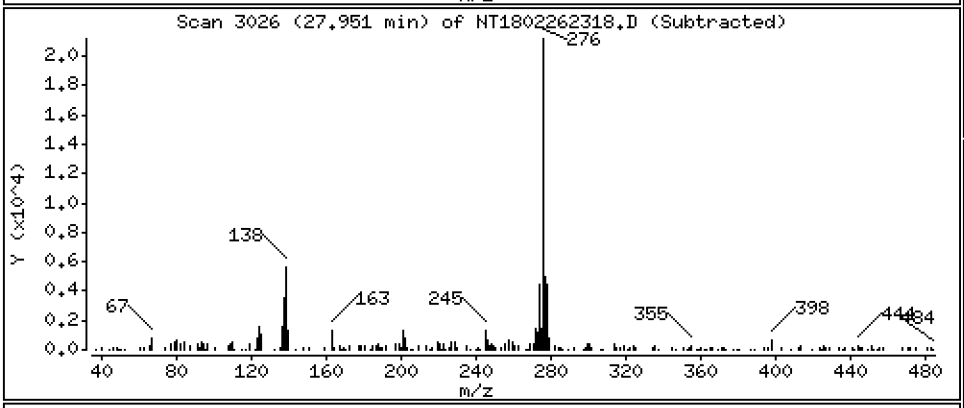
Column phase: ZB-5msi

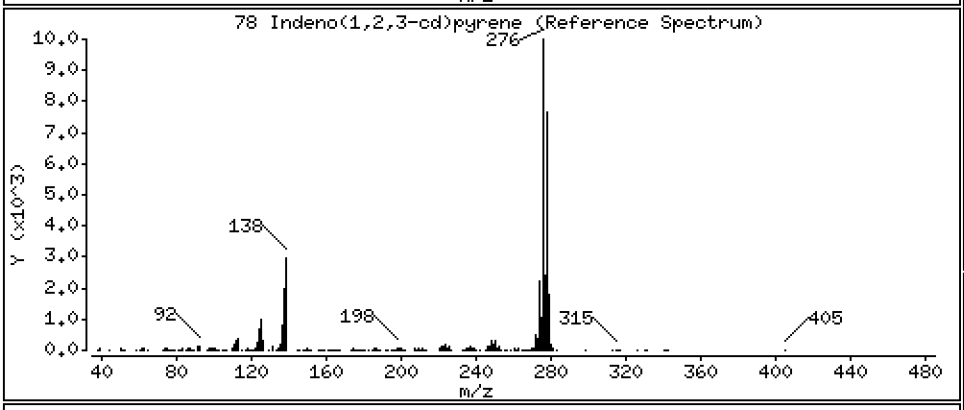
Column diameter: 0.25

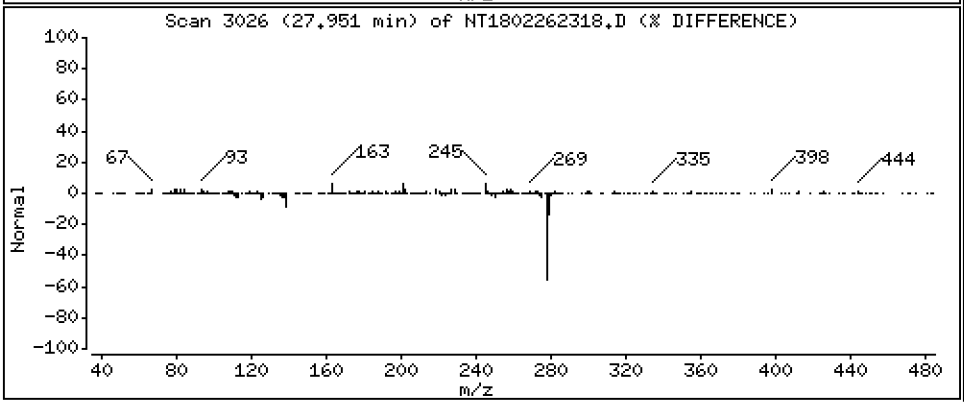
78 Indeno(1,2,3-cd)pyrene

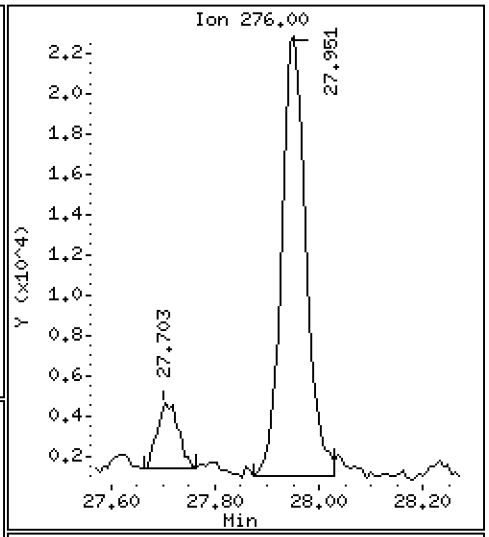
Concentration: 0.2367 ug/mL

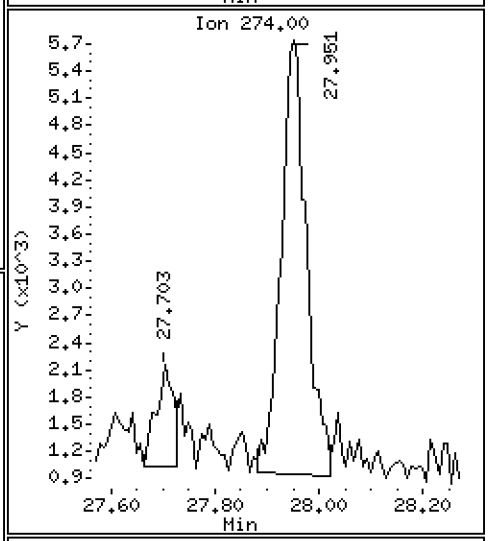


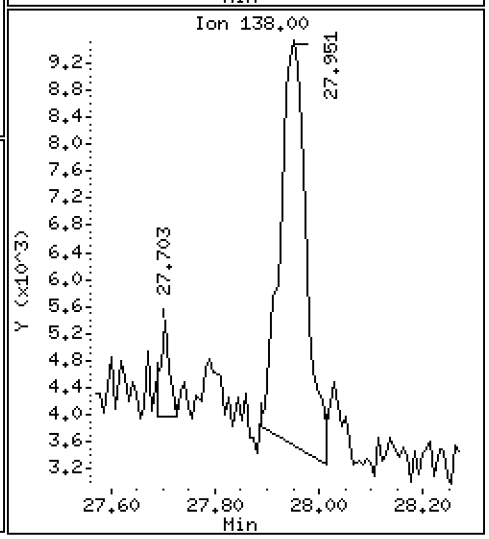












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

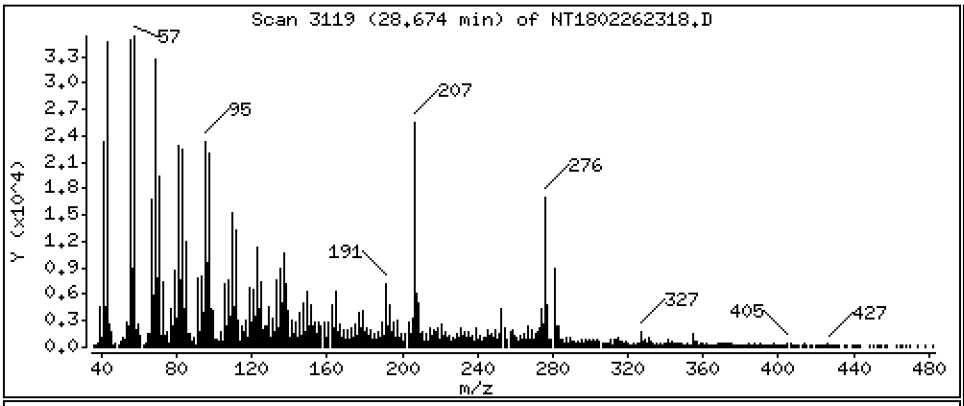
Operator: VTS

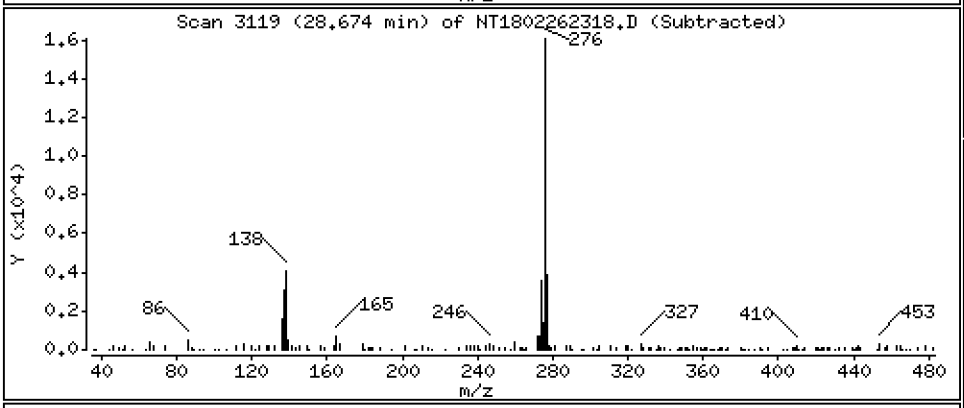
Column phase: ZB-5msi

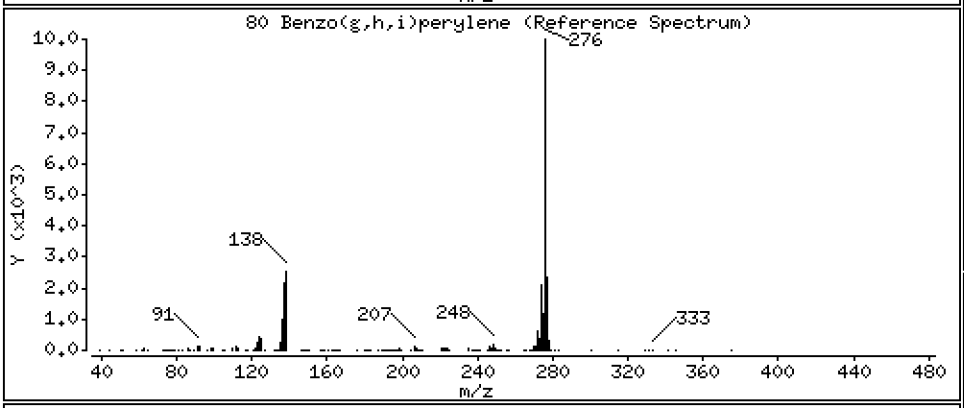
Column diameter: 0.25

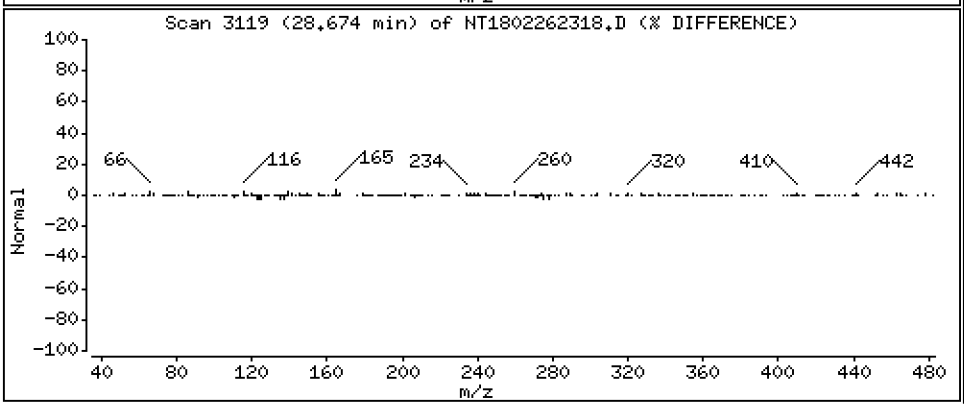
80 Benzo(g,h,i)perylene

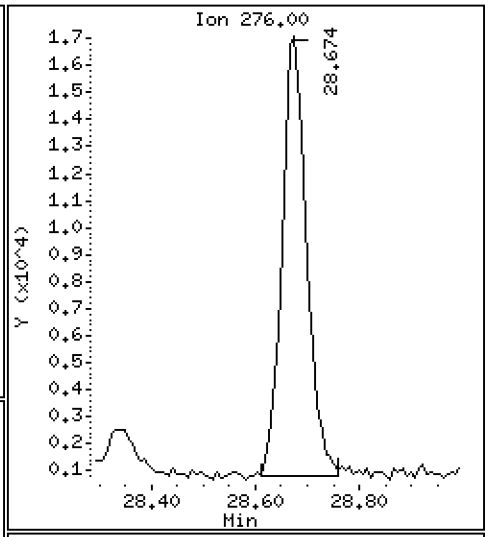
Concentration: 0.2214 ug/mL

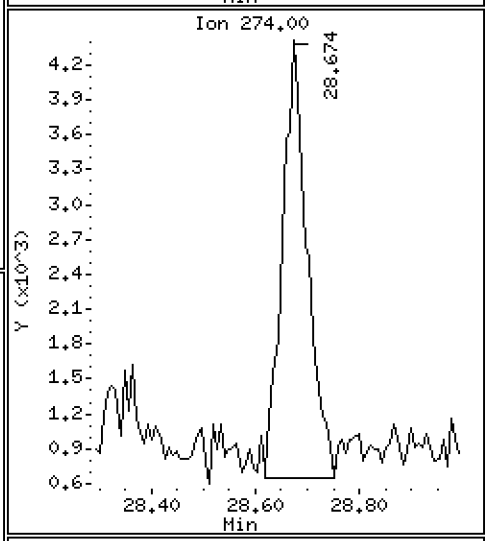


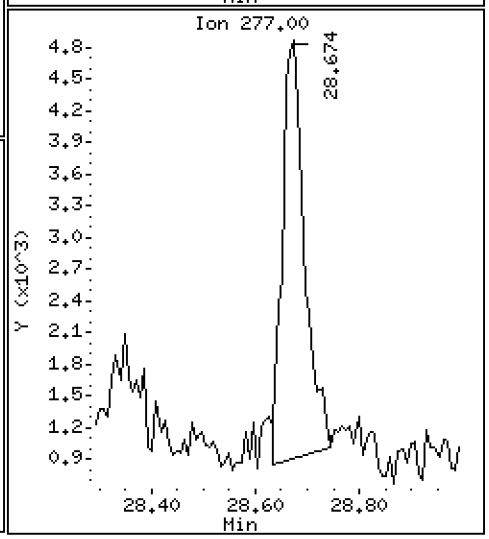












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Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

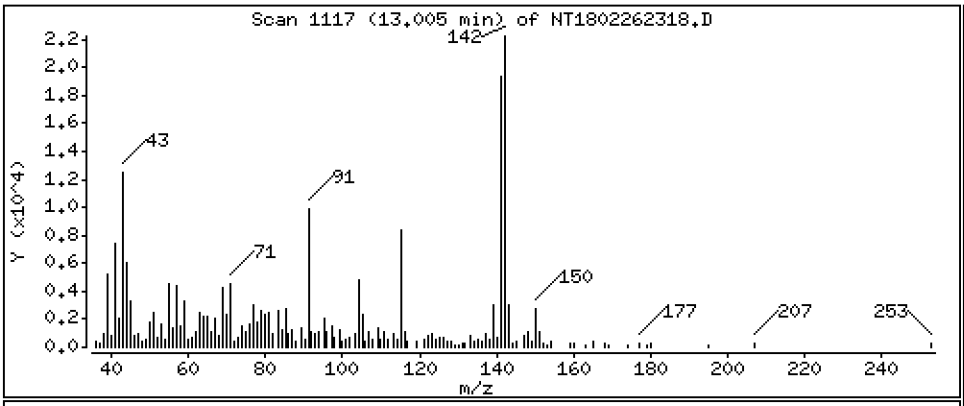
Operator: VTS

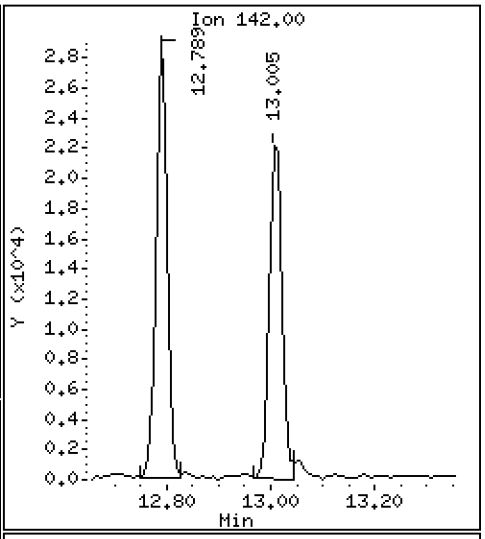
Column phase: ZB-5msi

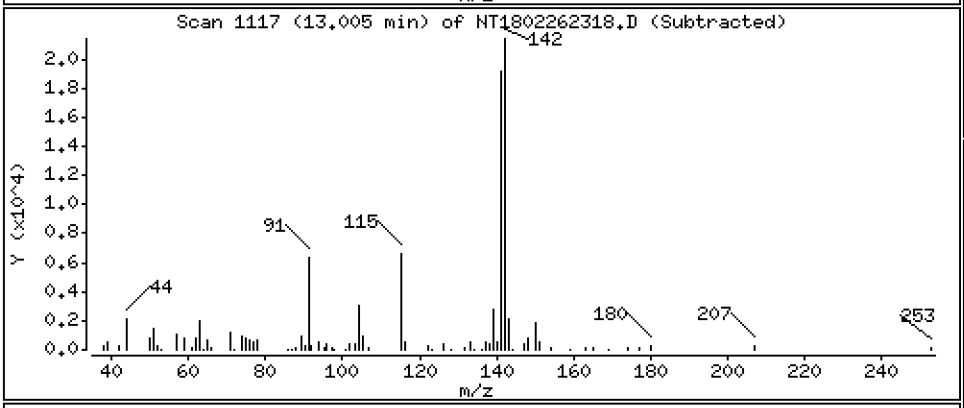
Column diameter: 0.25

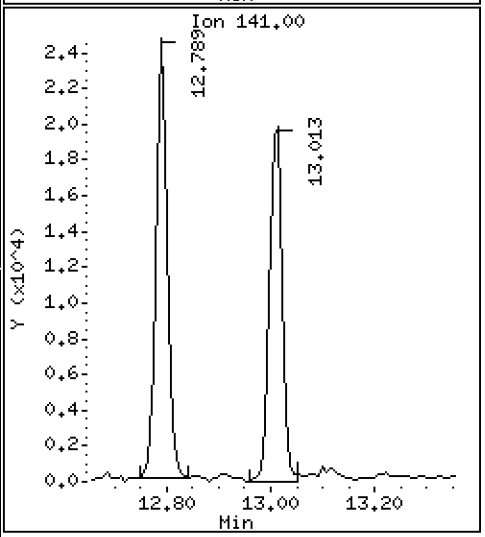
105 1-methylnaphthalene

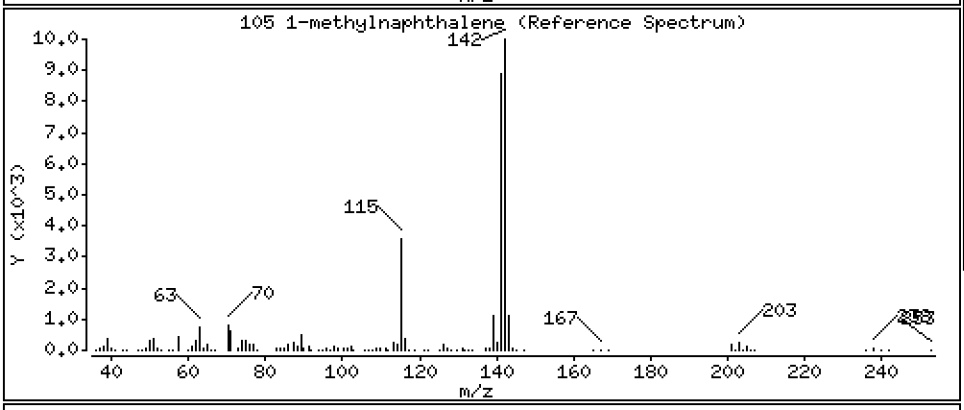
Concentration: 0.1947 ug/mL

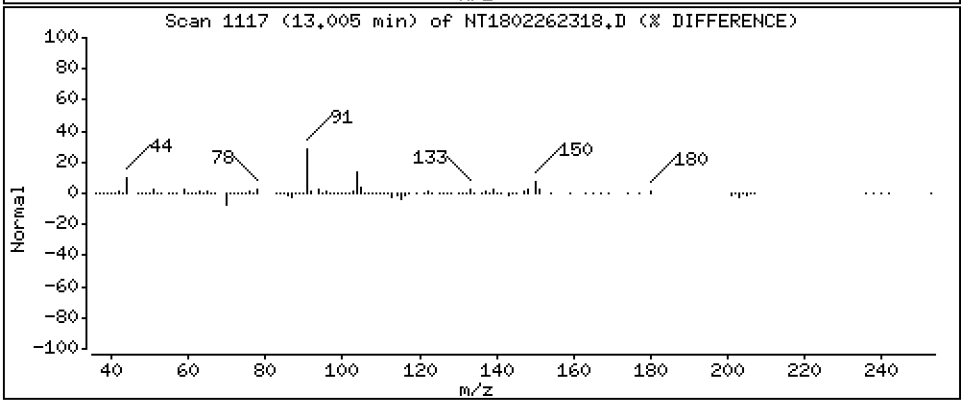












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262318.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

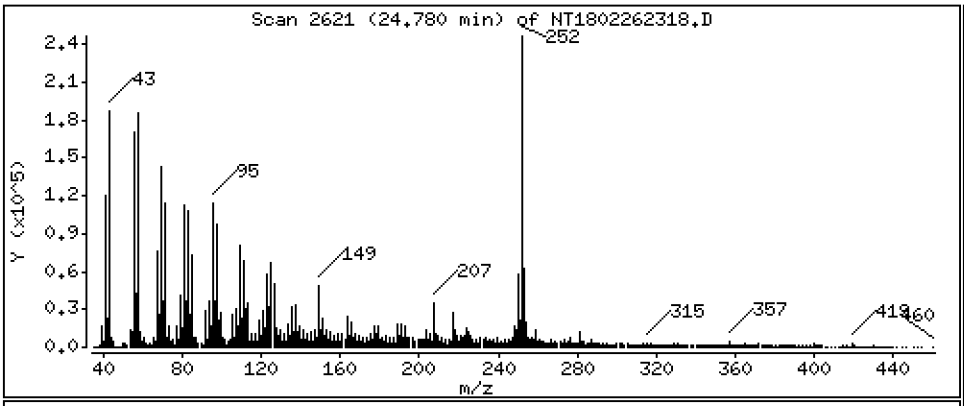
Operator: VTS

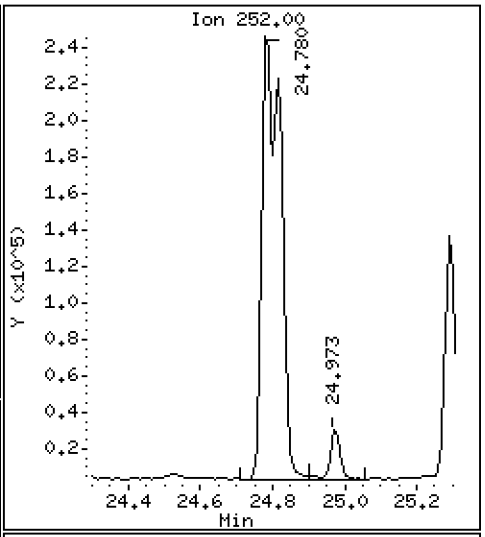
Column phase: ZB-5msi

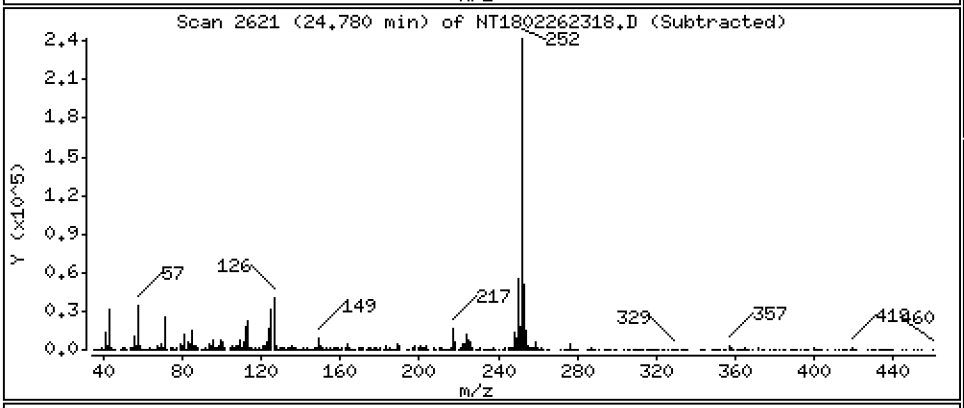
Column diameter: 0.25

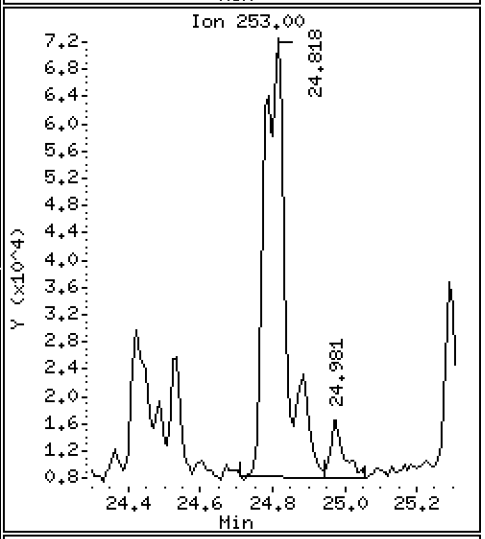
187 Total Benzofluoranthenes

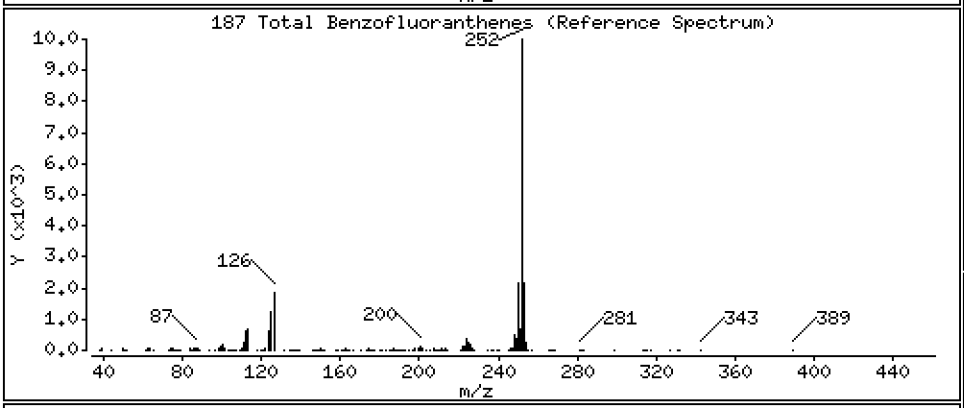
Concentration: 3.328 ug/mL

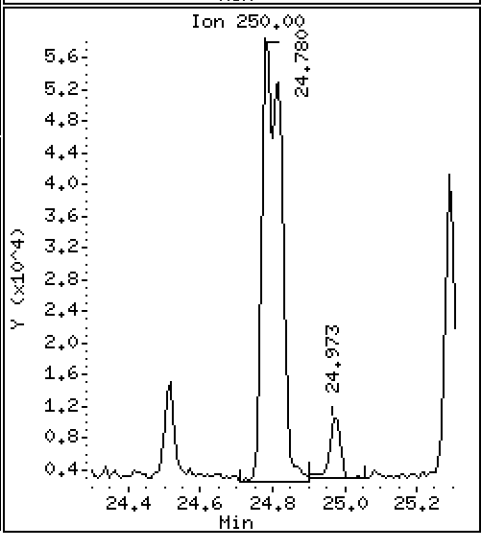


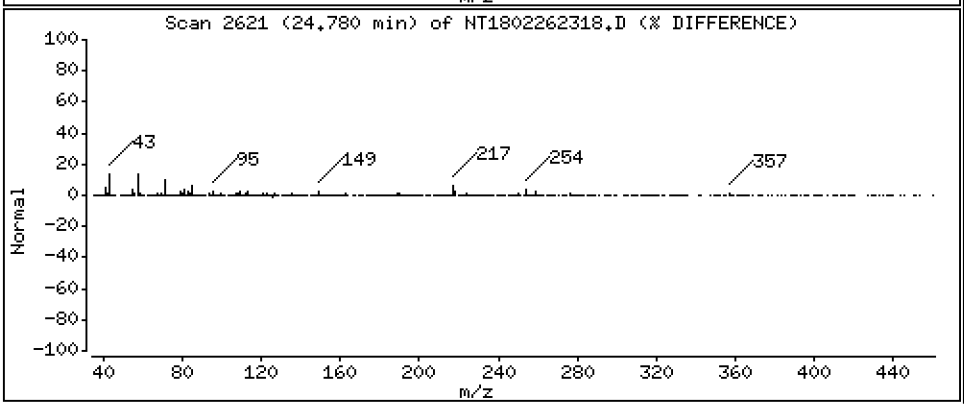












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262318.D
Lab Smp Id: 23A0134-09
Inj Date : 26-FEB-2023 23:14
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-09
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

								CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.774	6.743	(0.760)	482004		5.32347	5.323
$	2 Phenol-d5	99	8.319	8.296	(0.933)	626124		5.35078	5.351
	3 Phenol	94	8.335	8.319	(0.935)	381321		3.13202	3.132
$	5 2-Chlorophenol-d4	132	8.574	8.559	(0.962)	550814		5.40940	5.409
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.						
	6 2-Chlorophenol	128	Compound Not Detected.						
	7 1,3-Dichlorobenzene	146	8.853	8.853	(0.993)	1687		0.01526	0.01526
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	265386		4.00000	
	9 1,4-Dichlorobenzene	146	8.946	8.946	(1.003)	1950		0.01730	0.01730
$	10 1,2-Dichlorobenzene-d4	152	9.272	9.272	(1.040)	230848		3.19795	3.198
	12 1,2-Dichlorobenzene	146	Compound Not Detected.						
	11 Benzyl alcohol	108	9.202	9.186	(1.032)	11679		0.20175	0.2017
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.						
	13 2-Methylphenol	108	Compound Not Detected.						
	17 Hexachloroethane	117	Compound Not Detected.						
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.						
	15 4-Methylphenol	108	9.699	9.683	(1.088)	8899		0.09066	0.09066
$	18 Nitrobenzene-d5	82	9.994	9.993	(0.879)	387180		3.69810	3.698
	19 Nitrobenzene	77	Compound Not Detected.						
	20 Isophorone	82	10.475	10.475	(0.922)	2214		0.01722	0.01722
	21 2-Nitrophenol	139	Compound Not Detected.						
	22 2,4-Dimethylphenol	107	Compound Not Detected.						
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	24 Benzoic acid	105	10.880	10.990	(0.957)	58922		1.64156	1.642(M)
	25 2,4-Dichlorophenol	162	Compound Not Detected.						
	26 1,2,4-Trichlorobenzene	180	11.288	11.280	(0.993)	466		0.00522	0.005217
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	982393		4.00000	
	28 Naphthalene	128	11.404	11.403	(1.003)	57459		0.19027	0.1903
	29 4-Chloroaniline	127	Compound Not Detected.						
	30 Hexachlorobutadiene	225	Compound Not Detected.						
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	43484		0.21190	0.2119
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.						

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.570	13.570	(0.908)	822417	3.62897	3.629
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	14.638	14.630	(0.979)	39655	0.13299	0.1330
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	14.947	14.947	(1.000)	537514	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	15.009	15.009	(1.004)	54677	0.28973	0.2897
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.334	15.334	(1.026)	153236	0.56100	0.5610
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	15.906	15.921	(1.064)	79210	0.39747	0.3975
	49	Fluorene	166	16.037	16.037	(1.073)	57492	0.26265	0.2627
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.577	16.569	(1.109)	197729	7.05827	7.058
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	17.960	17.952	(1.000)	1085820	4.00000	
	60	Phenanthrene	178	18.007	17.999	(1.003)	2361144	6.91337	6.913
	61	Anthracene	178	18.092	18.092	(1.007)	173433	0.53287	0.5329
	62	Carbazole	167	18.432	18.424	(1.026)	241033	0.80819	0.8082
	63	Di-n-butylphthalate	149	19.245	19.237	(1.072)	29350	0.08891	0.08891
	64	Fluoranthene	202	20.428	20.382	(0.888)	2291631	5.58219	5.582
	65	Pyrene	202	20.823	20.800	(0.905)	1675885	3.82769	3.828
$	66	Terphenyl-d14	244	21.109	21.094	(0.918)	1405689	4.00289	4.003
	67	Butylbenzylphthalate	149	22.031	22.023	(0.958)	21096	0.12689	0.1269
	68	Benzo(a)anthracene	228	22.968	22.952	(0.999)	468631	1.10784	1.108
*	69	Chrysene-d12	240	22.999	22.983	(1.000)	1171717	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	23.037	23.029	(1.002)	719182	1.63499	1.635
	72	bis(2-Ethylhexyl)phthalate	149	23.060	23.053	(0.960)	478511	1.87287	1.873
*	134	Di-n-octylphthalate-d4	153	24.028	24.020	(1.000)	1779595	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	24.779	24.764	(0.972)	518231	1.96121	1.961
	75	Benzo(k)fluoranthene	252	24.818	24.802	(0.973)	448620	1.49807	1.498(M)
	76	Benzo(a)pyrene	252	25.391	25.368	(0.996)	246051	1.00446	1.004
*	77	Perylene-d12	264	25.499	25.476	(1.000)	809934	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	27.951	27.920	(1.096)	72779	0.23667	0.2367
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80	Benzo(g,h,i)perylene	276	28.673	28.642	(1.124)	54572	0.22135	0.2214
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	13.005	13.005	(1.144)	36173	0.19473	0.1947
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.779	24.802	(0.972)	889138	3.32812	3.328
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262318.D
Lab Smp Id: 23A0134-09
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	265386	8.71
27 Naphthalene-d8	943164	471582	1886328	982393	4.16
42 Acenaphthene-d10	501893	250947	1003786	537514	7.10
59 Phenanthrene-d10	896502	448251	1793004	1085820	21.12
69 Chrysene-d12	842481	421241	1684962	1171717	39.08
134 Di-n-octylphthala	1278043	639022	2556086	1779595	39.24
77 Perylene-d12	915681	457841	1831362	809934	-11.55

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.07
134 Di-n-octylphthala	24.02	23.52	24.52	24.03	0.03
77 Perylene-d12	25.48	24.98	25.98	25.50	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262318.D

Lab ID: 23A0134-09
nt18.i, ABN.m, 26-FEB-2023 23:14

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.967	-0.0097	Benzoic acid

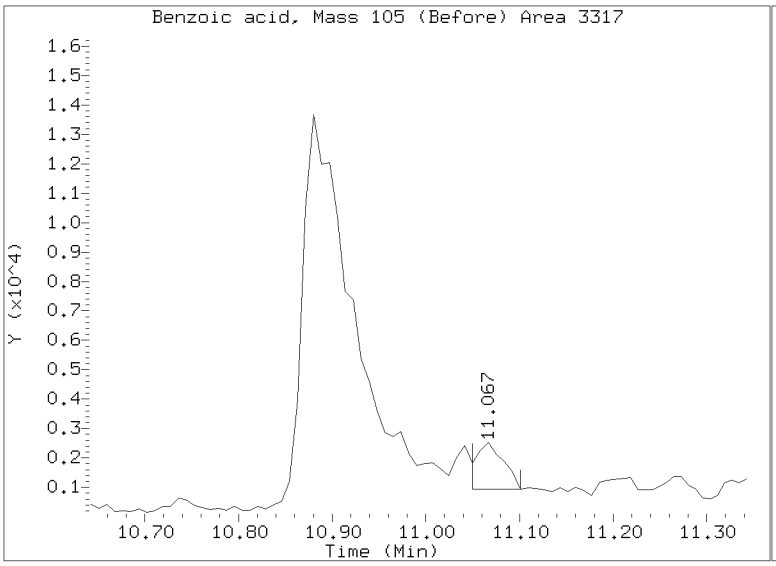
RRT check based on Ccal File: NT1802262302.D

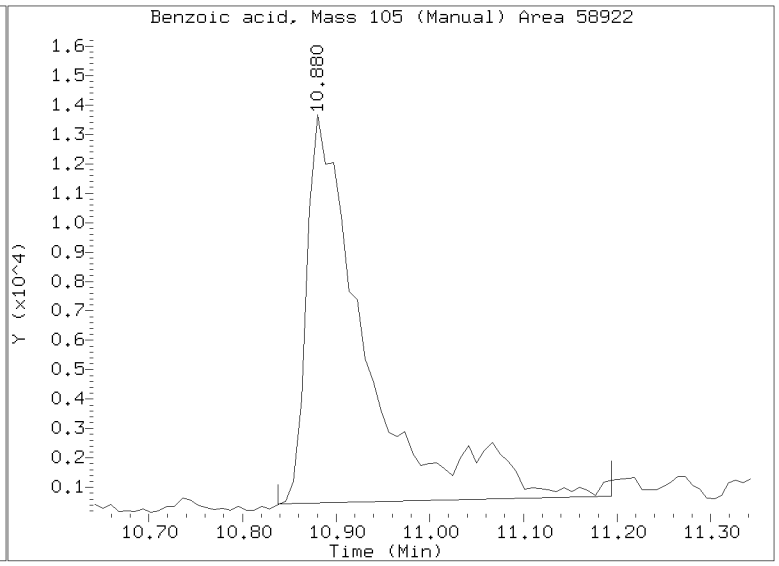
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

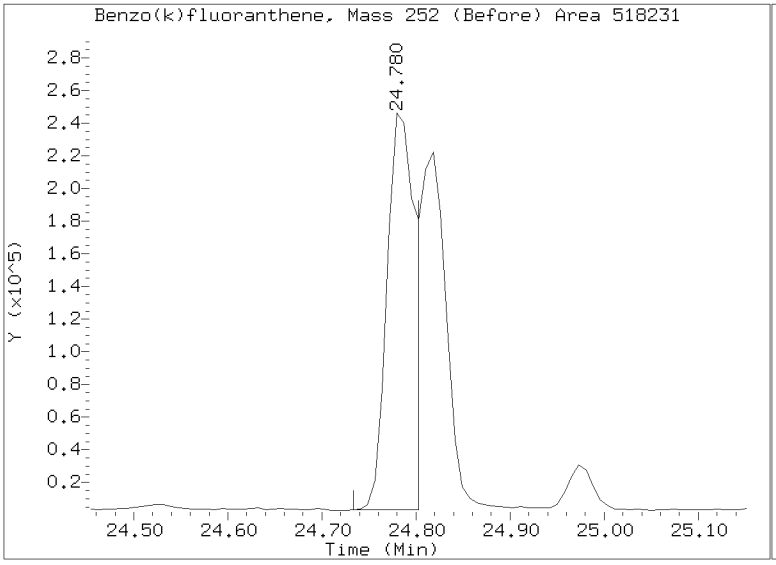
* Only compounds listed in the work order have been verified by the analyst *

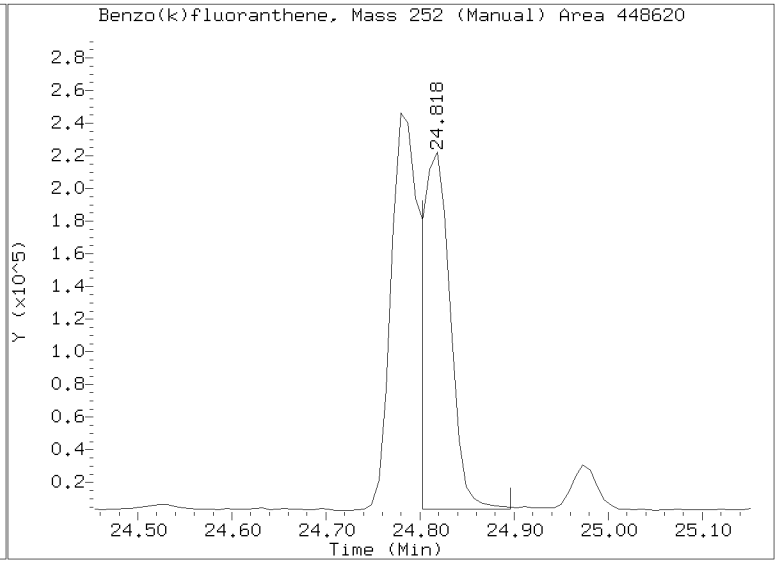
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/NT1802262318.D
Injection Date: 26-FEB-2023 23:14
Lab ID:23A0134-09 Client ID:
Report Date: 03/10/2023 07:47









Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1124

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-10 C	SDG:	23A0134
Sampled:	01/06/23 13:15	Prepared:	01/19/23 13:35	File ID:	NT1802262319.D
% Solids:	48.45	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 23:54
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	20.64 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	190		4.4	20.0
106-44-5	4-Methylphenol	1	10.0	J	7.4	20.0
91-20-3	Naphthalene	1	14.2	J	4.2	20.0
91-57-6	2-Methylnaphthalene	1	14.3	J	4.5	20.0
208-96-8	Acenaphthylene	1	9.3	J	6.2	20.0
131-11-3	Dimethylphthalate	1	20.0	U	4.4	20.0
83-32-9	Acenaphthene	1	8.5	J	5.2	20.0
132-64-9	Dibenzofuran	1	20.0	U	14.1	20.0
86-73-7	Fluorene	1	20.0	U	14.6	20.0
85-01-8	Phenanthrene	1	68.6		8.7	20.0
120-12-7	Anthracene	1	30.6		7.2	20.0
206-44-0	Fluoranthene	1	337		6.1	20.0
129-00-0	Pyrene	1	278		5.7	20.0
85-68-7	Butylbenzylphthalate	1	11.5	J	9.4	20.0
56-55-3	Benzo(a)anthracene	1	115		6.0	20.0
218-01-9	Chrysene	1	163		6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	103		5.5	50.0
	Benzofluoranthenes, Total	1	459		10.0	40.0
50-32-8	Benzo(a)pyrene	1	123		4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	26.1		14.6	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.0	U	17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	25.9		13.6	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.99	486	64.8	27 - 120	
Phenol-d5	749.99	516	68.8	29 - 120	
2-Chlorophenol-d4	749.99	503	67.1	31 - 120	
1,2-Dichlorobenzene-d4	500.00	292	58.4	32 - 120	
Nitrobenzene-d5	500.00	344	68.7	30 - 120	
2-Fluorobiphenyl	500.00	342	68.5	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1124

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

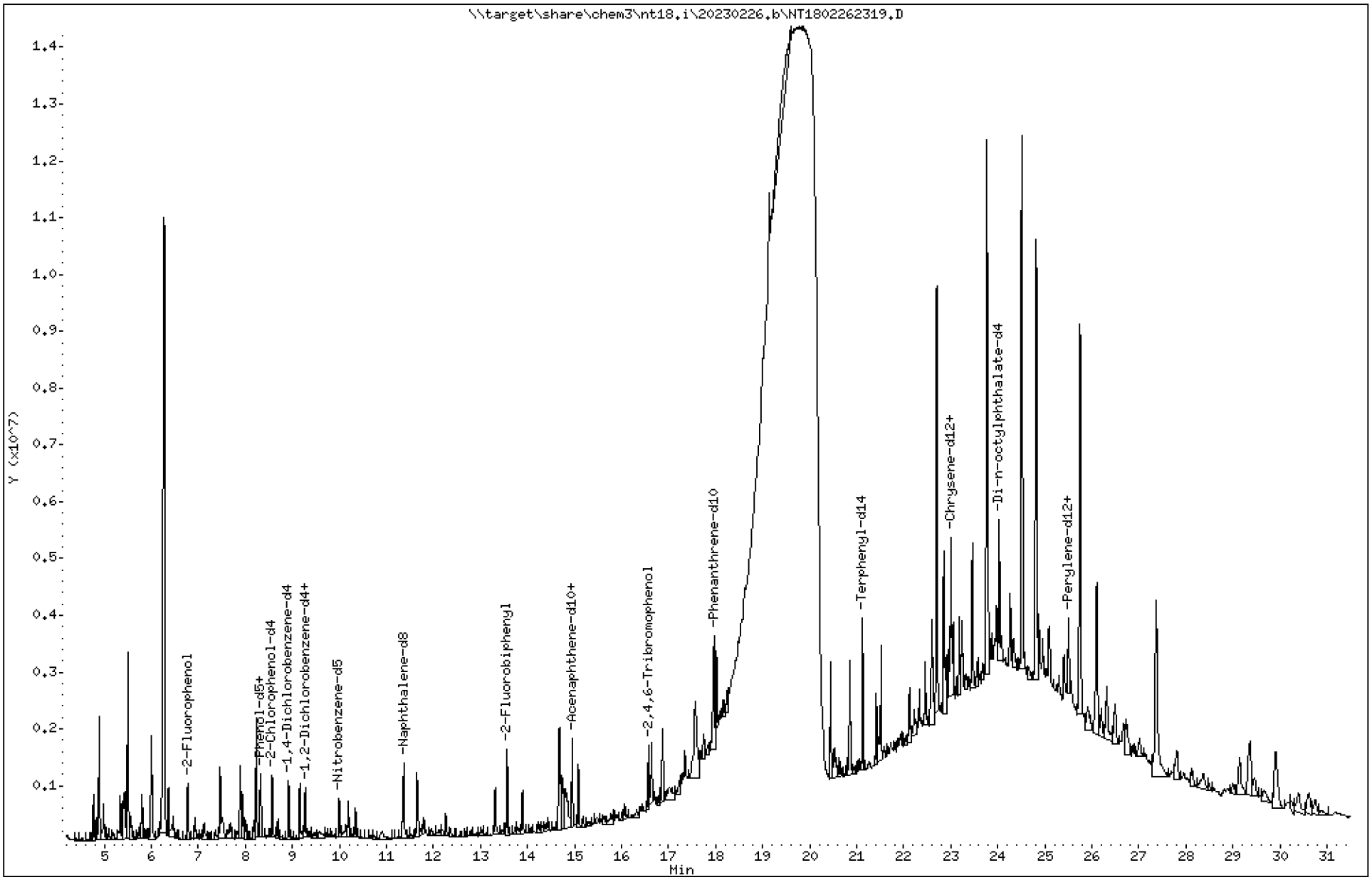
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-10 C	SDG:	23A0134
Sampled:	01/06/23 13:15	Prepared:	01/19/23 13:35	File ID:	NT1802262319.D
% Solids:	48.45	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 23:54
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	20.64 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	749.99	708	94.4	24 - 134	
p-Terphenyl-d14	500.00	395	79.1	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262319.D
Date : 26-FEB-2023 23:54
Client ID:
Sample Info: 23A0134-10

Instrument: nt18.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

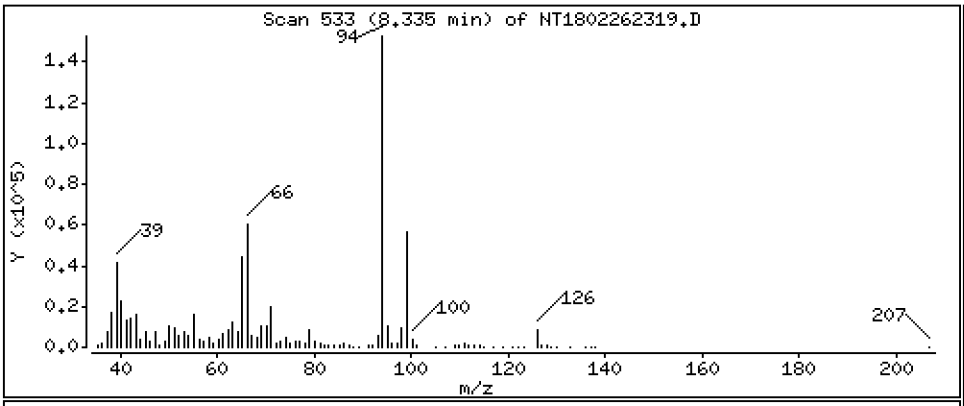
Operator: VTS

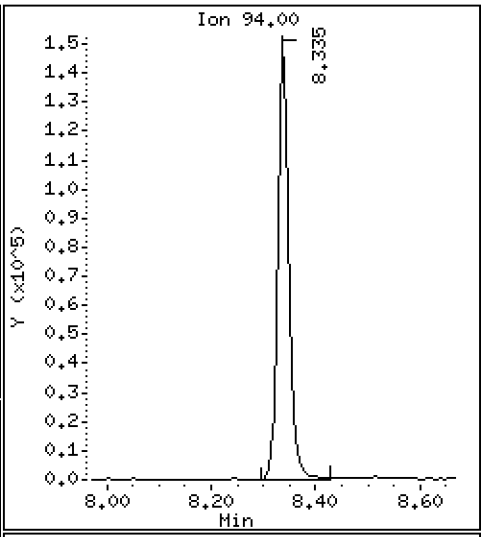
Column phase: ZB-5msi

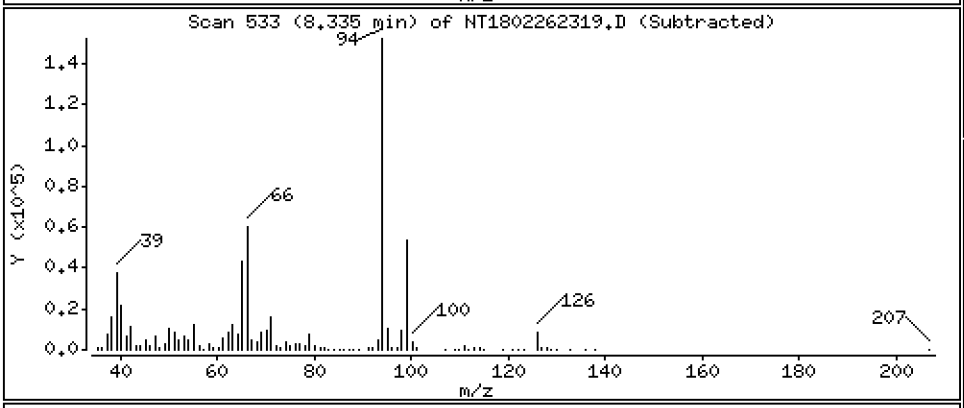
Column diameter: 0.25

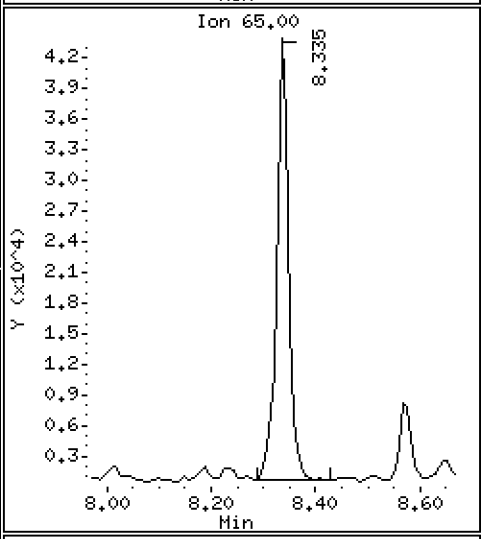
3 Phenol

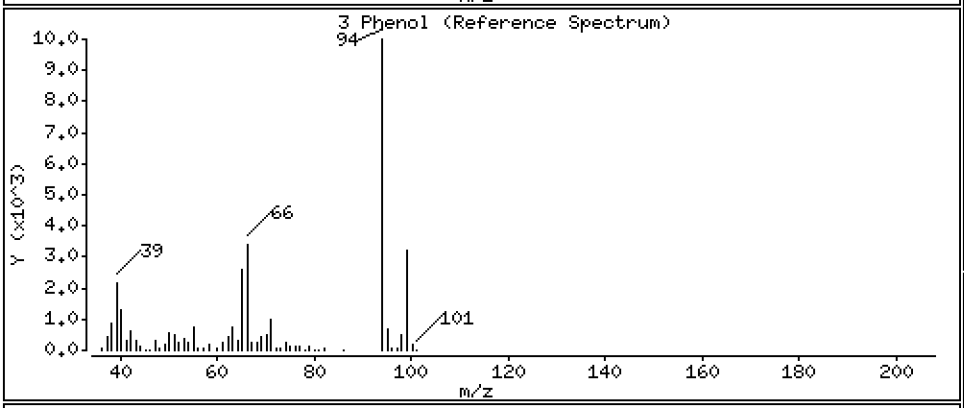
Concentration: 1.899 ug/mL

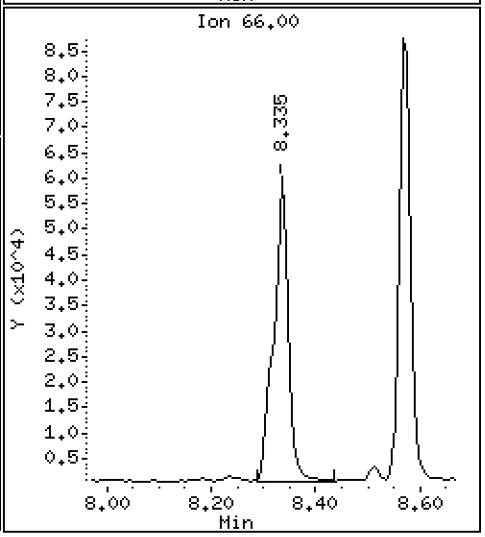


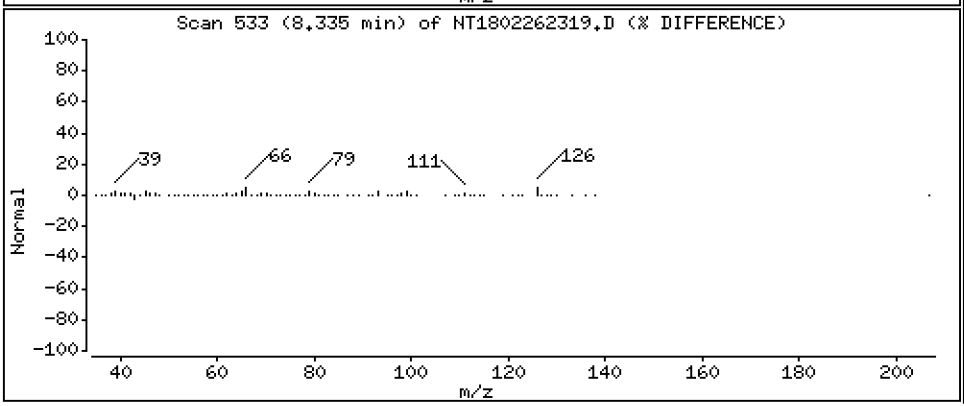












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262319.D

Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

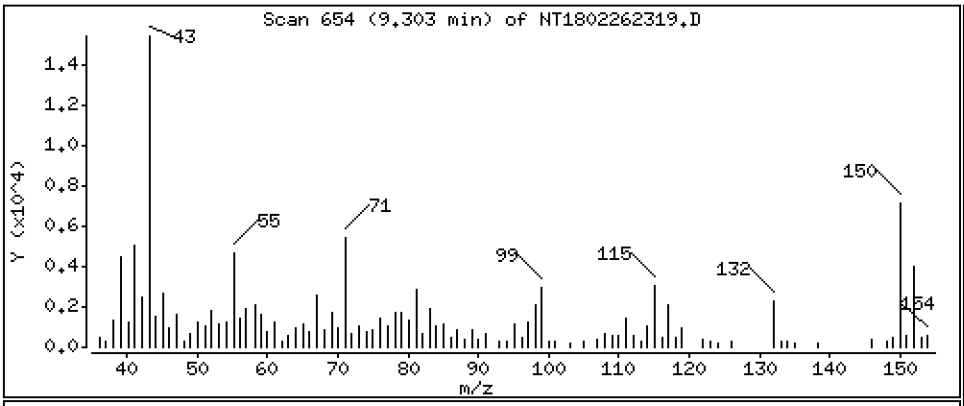
Operator: VTS

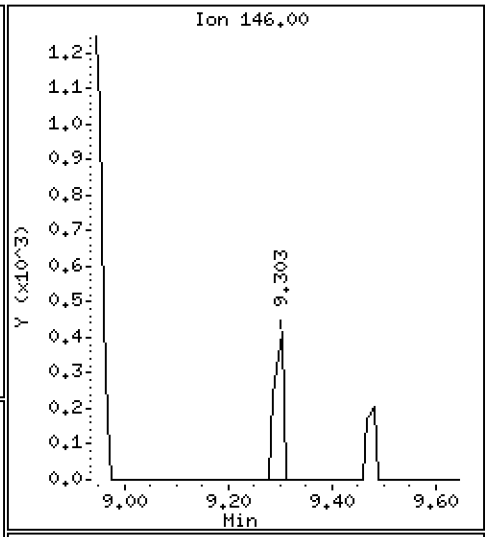
Column phase: ZB-5msi

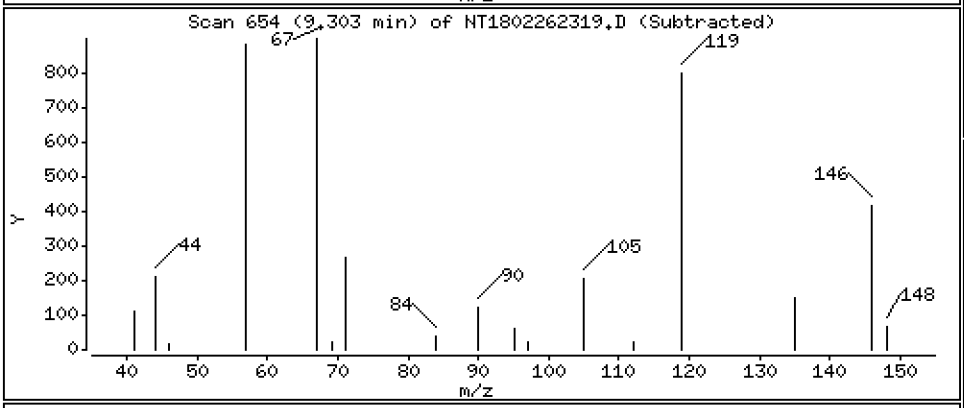
Column diameter: 0.25

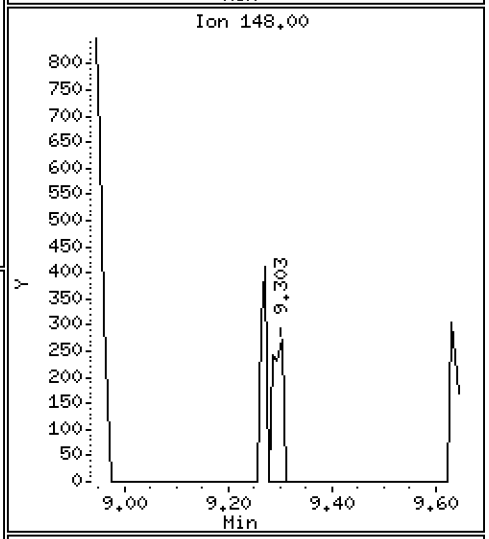
12 1,2-Dichlorobenzene

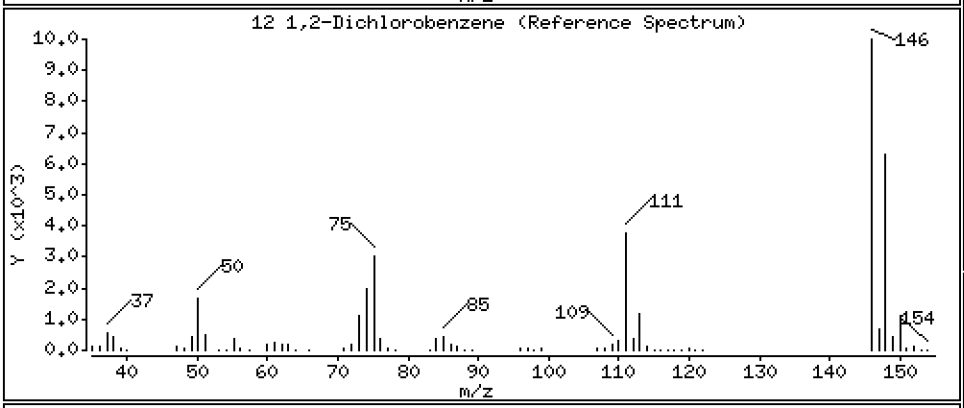
Concentration: 0.004202 ug/mL

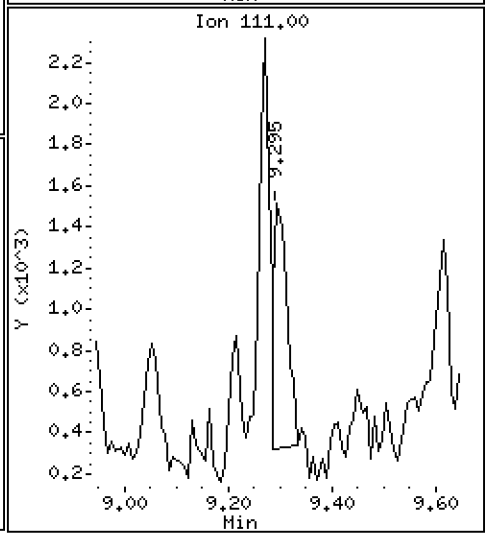


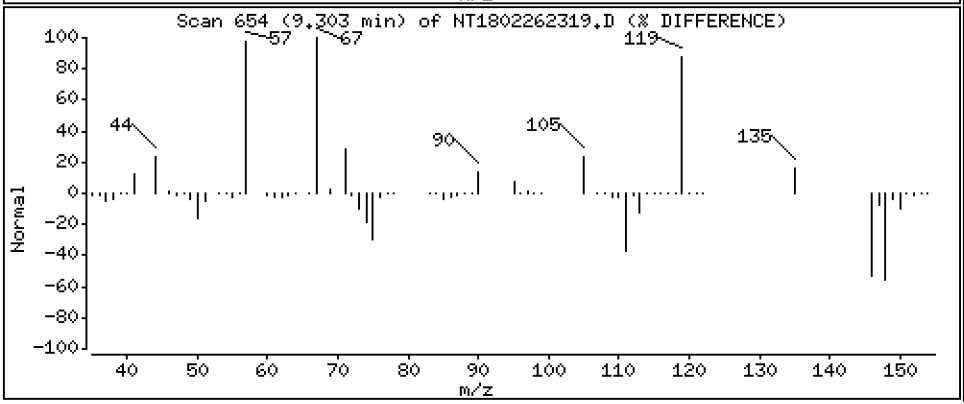












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

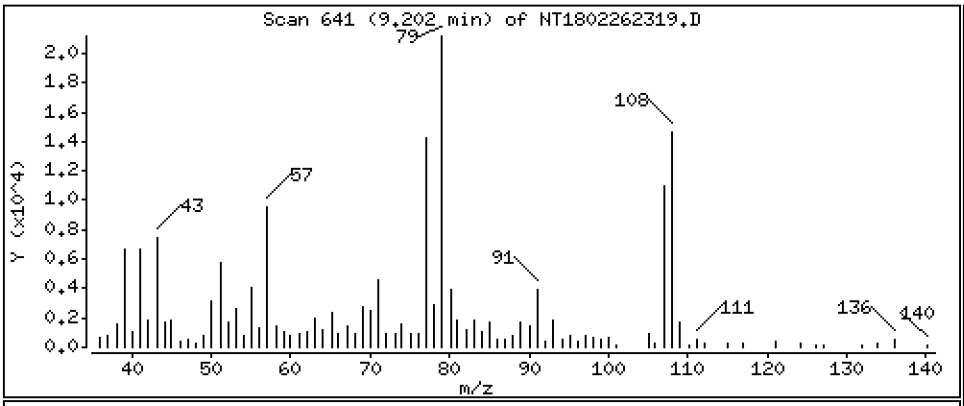
Operator: VTS

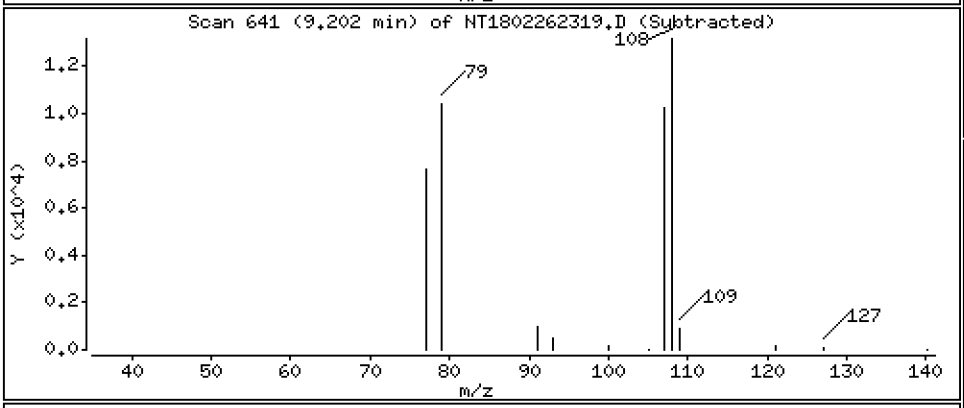
Column phase: ZB-5msi

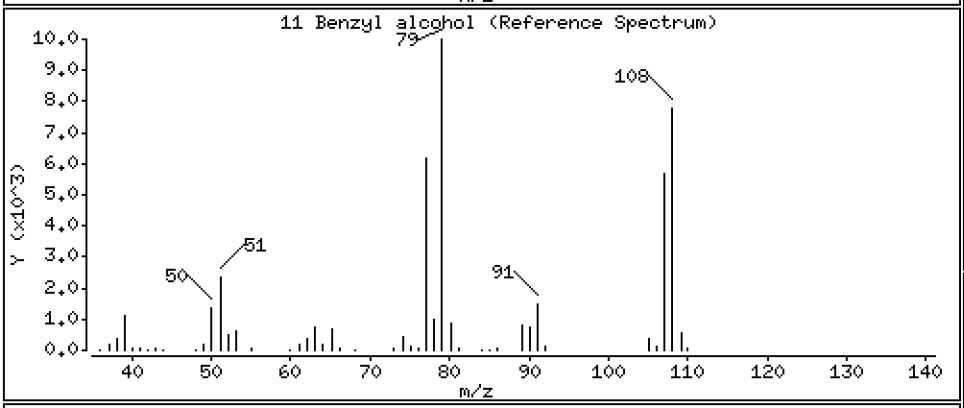
Column diameter: 0.25

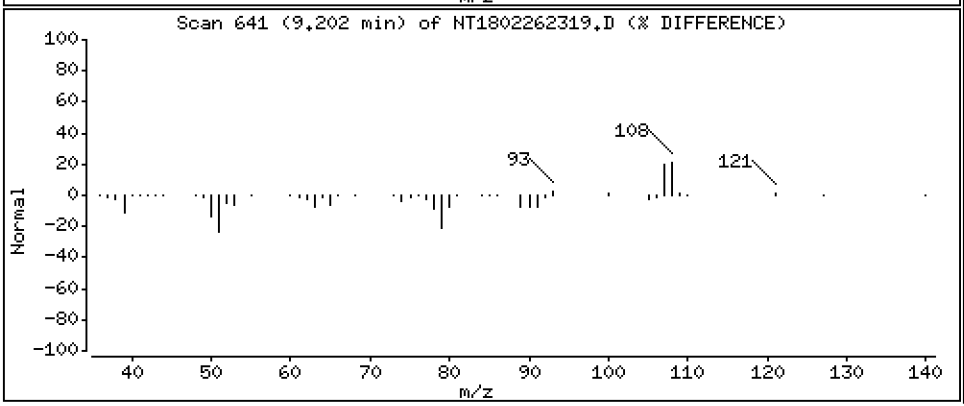
11 Benzyl alcohol

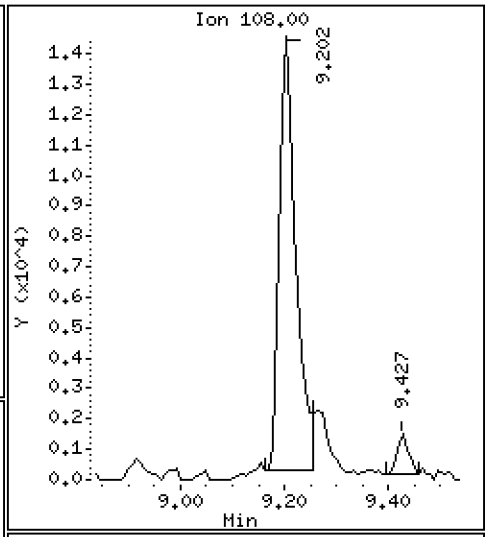
Concentration: 0.5568 ug/mL

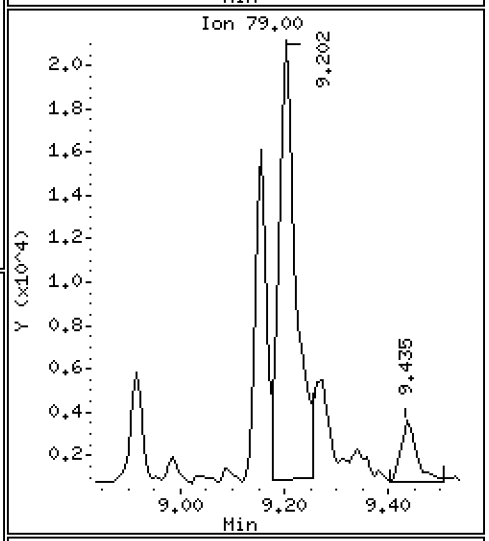


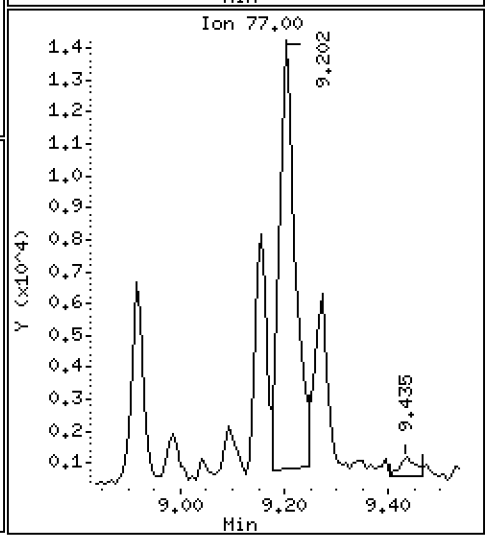












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262319.D

Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

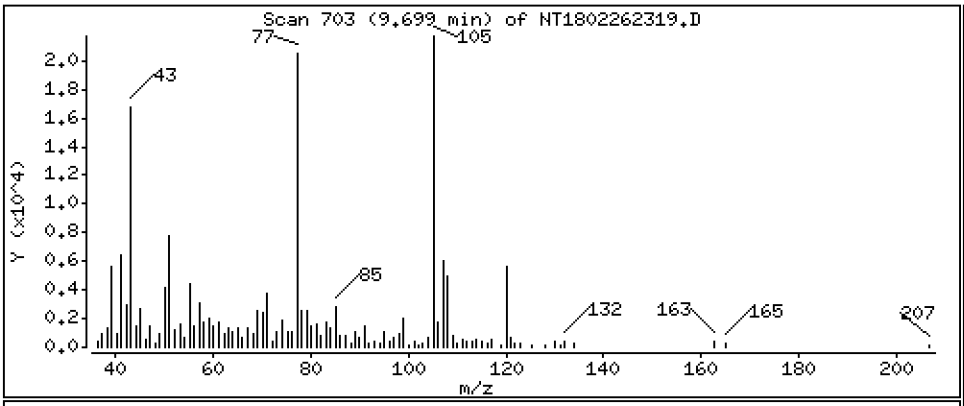
Operator: VTS

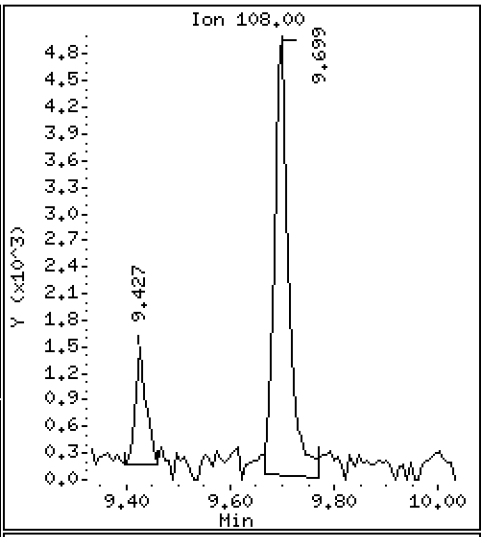
Column phase: ZB-5msi

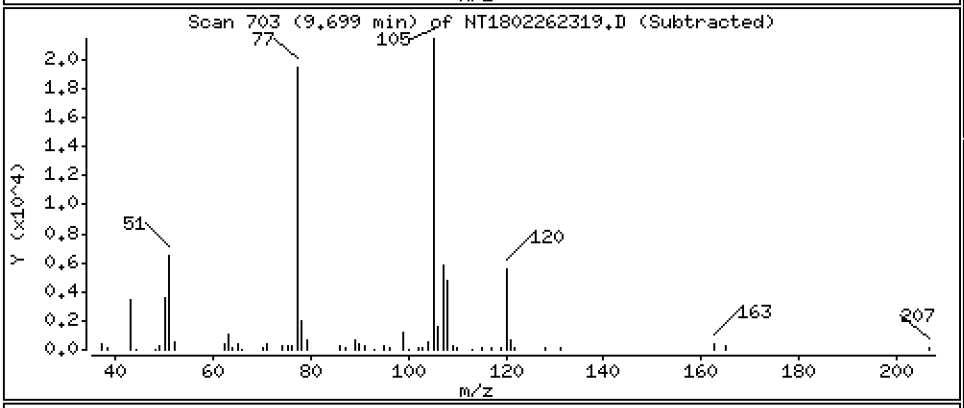
Column diameter: 0.25

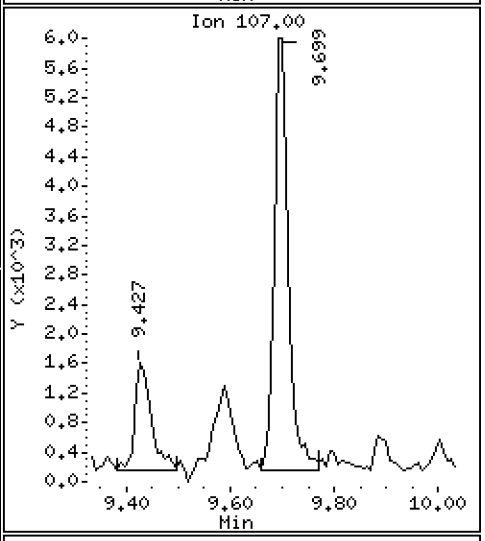
15 4-Methylphenol

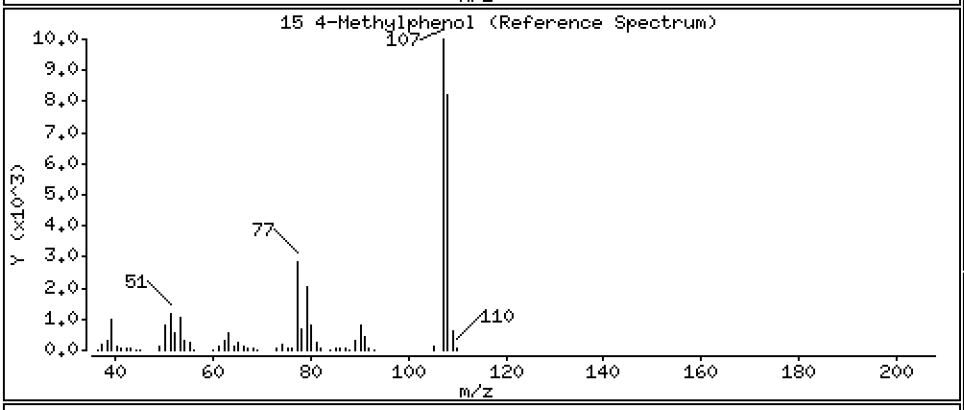
Concentration: 0.1003 ug/mL

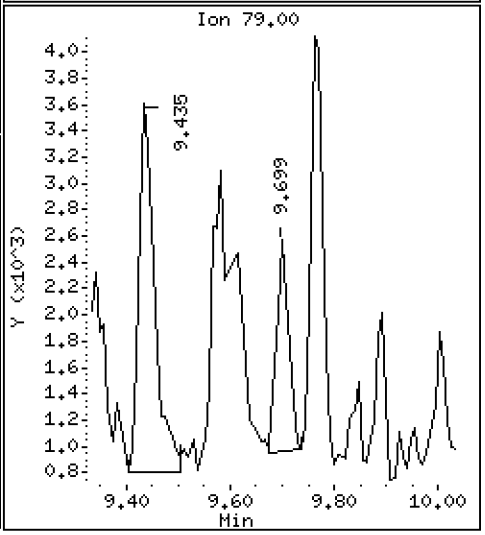


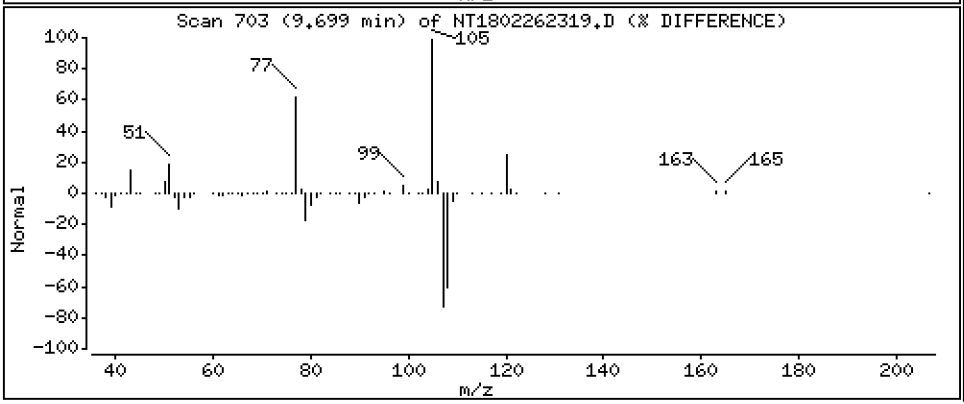












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

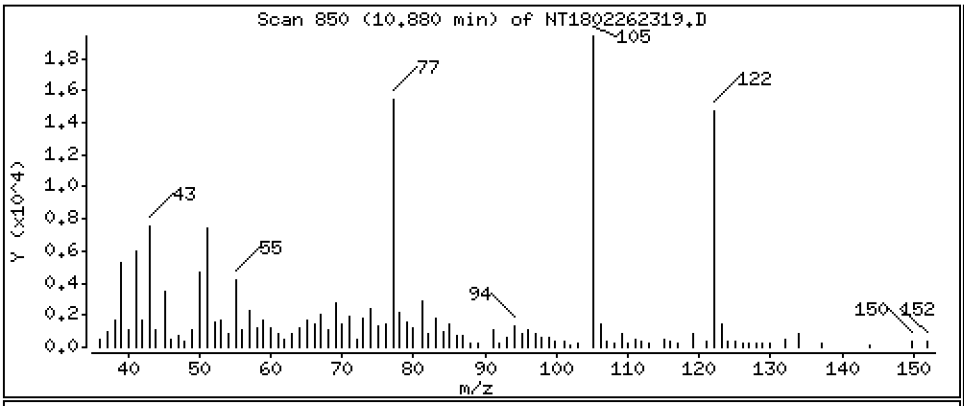
Operator: VTS

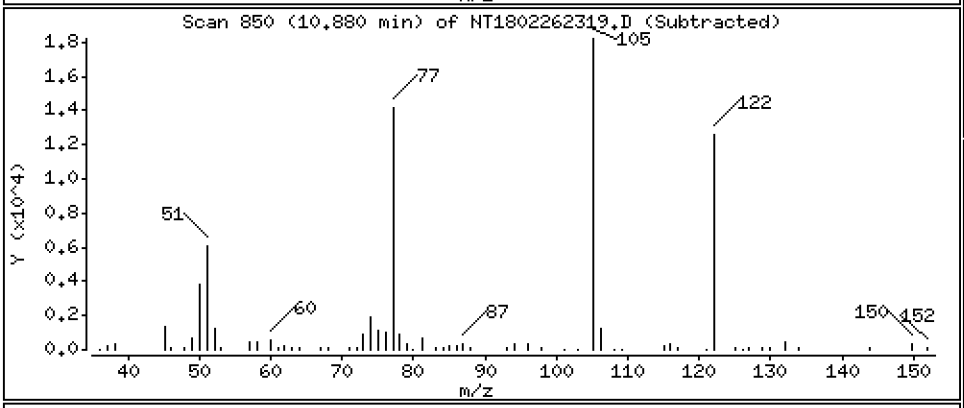
Column phase: ZB-5msi

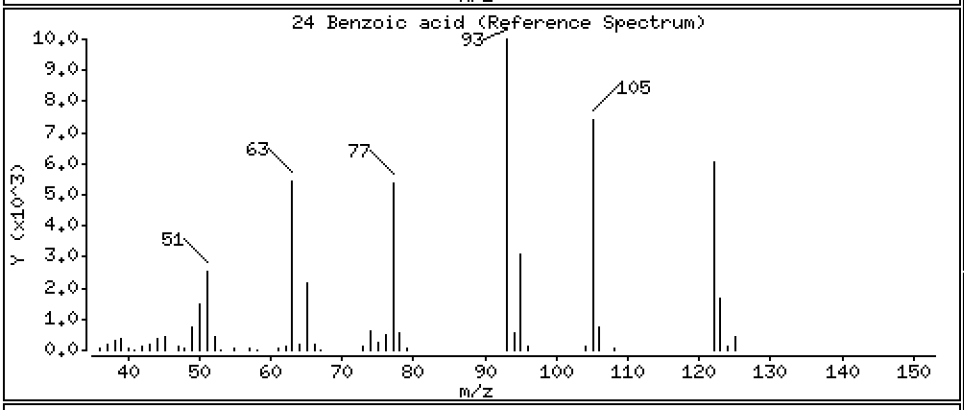
Column diameter: 0.25

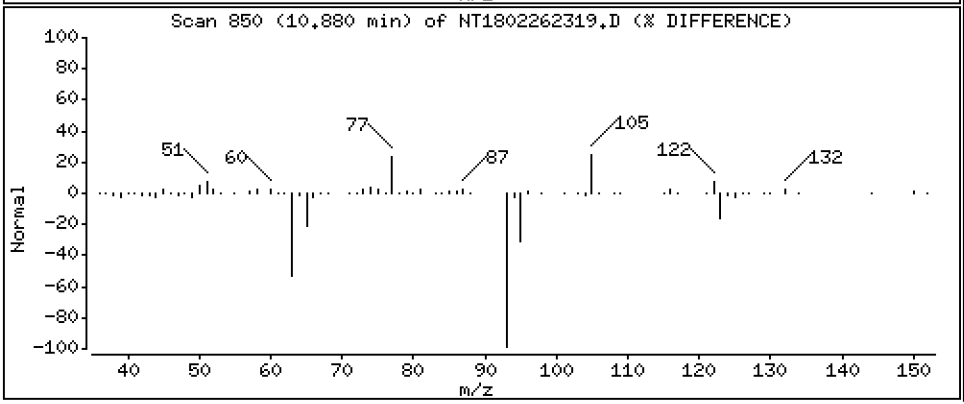
24 Benzoic acid

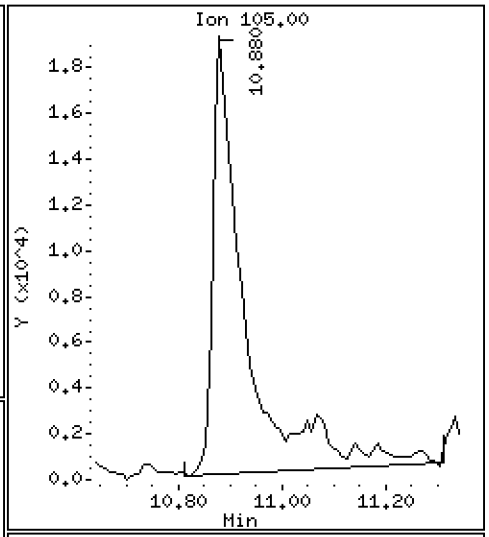
Concentration: 2.376 ug/mL

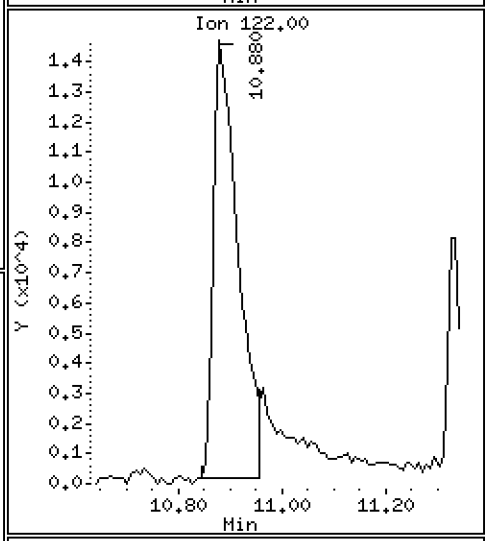


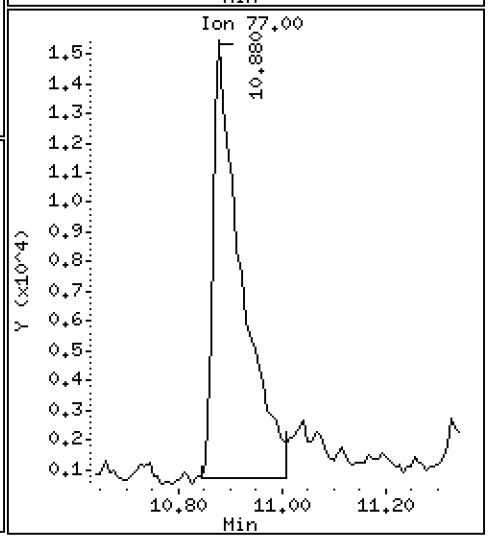












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

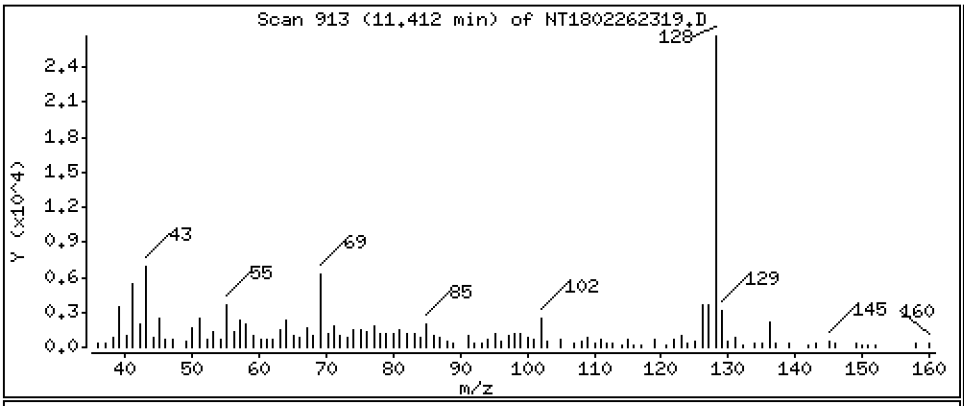
Operator: VTS

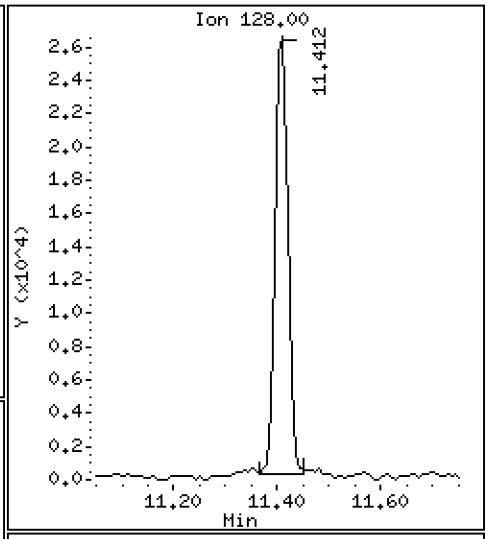
Column phase: ZB-5msi

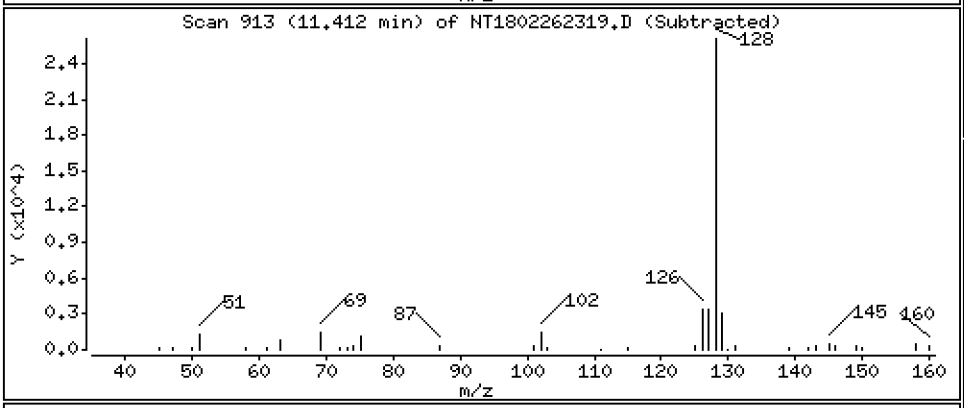
Column diameter: 0.25

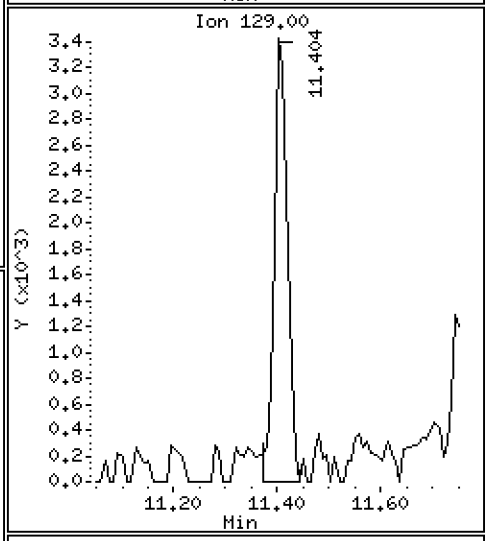
28 Naphthalene

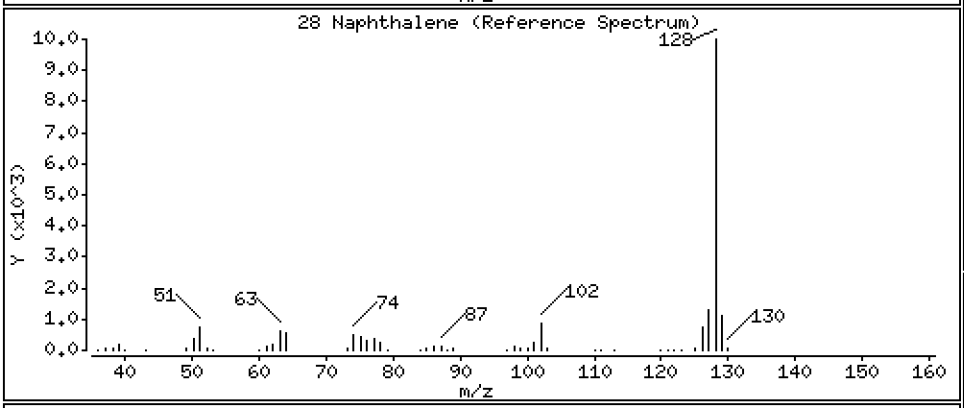
Concentration: 0.1425 ug/mL

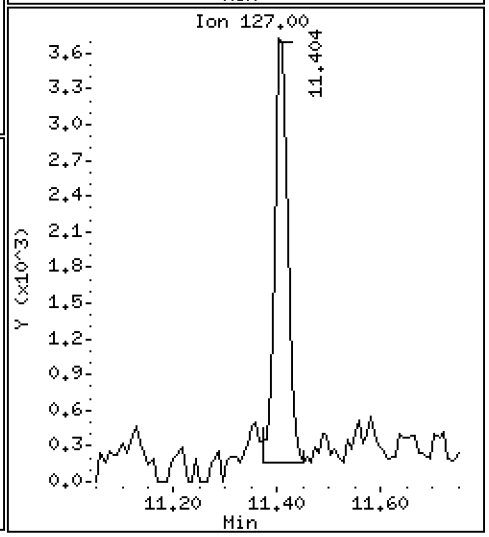


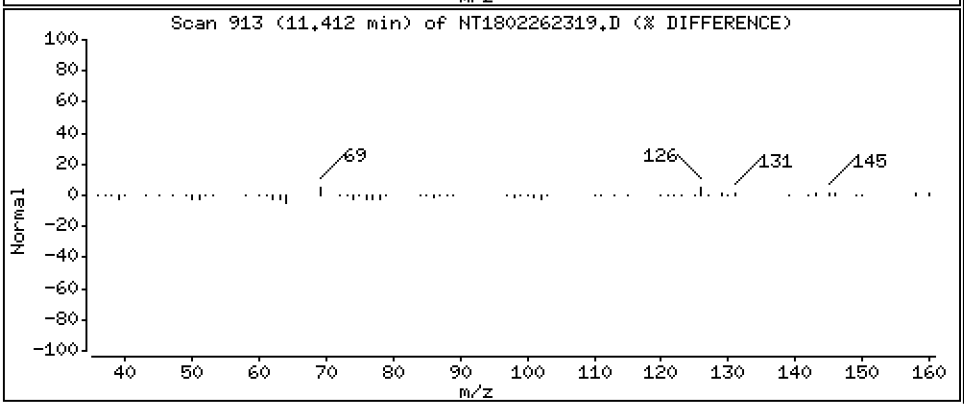












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

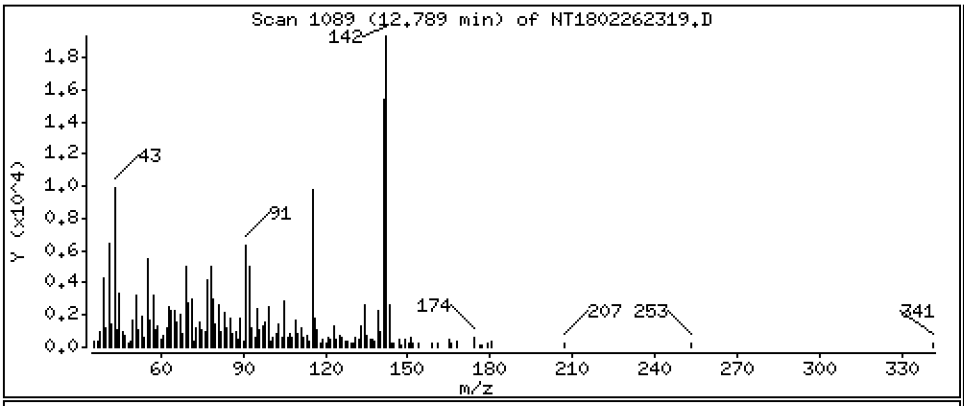
Operator: VTS

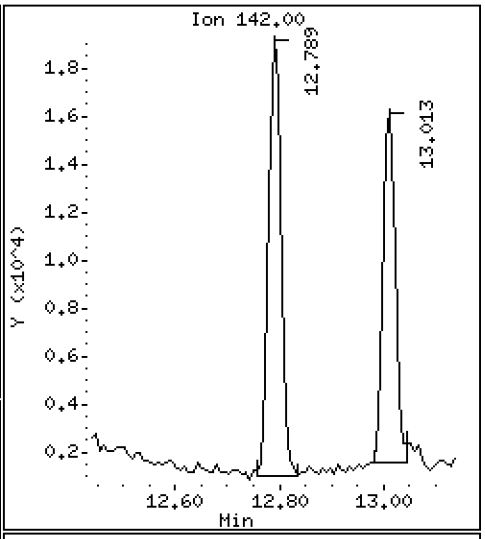
Column phase: ZB-5msi

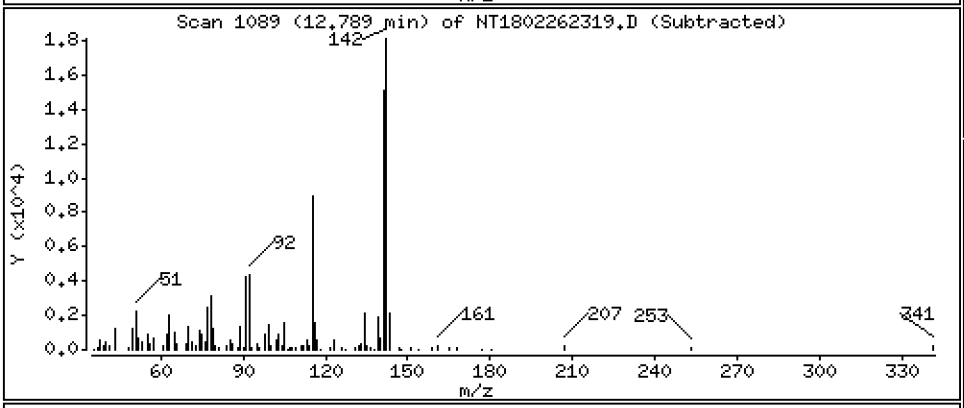
Column diameter: 0.25

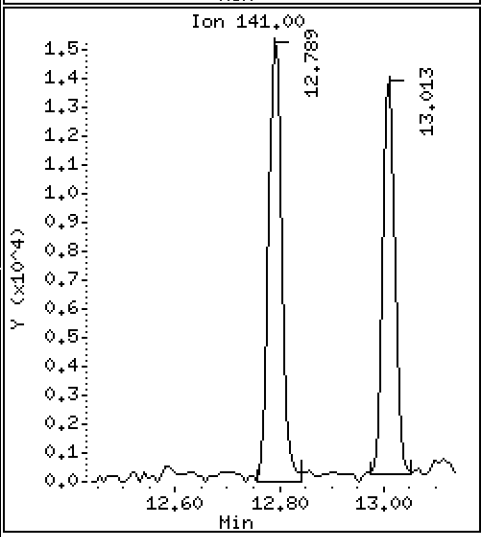
32 2-Methylnaphthalene

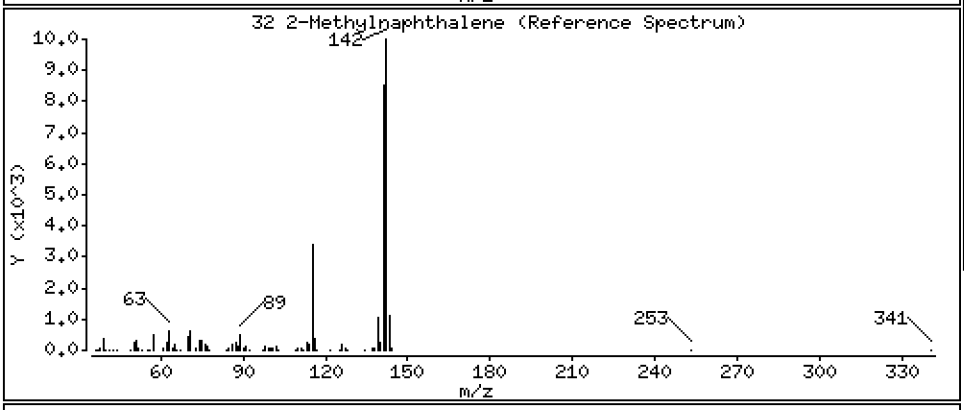
Concentration: 0.1433 ug/mL

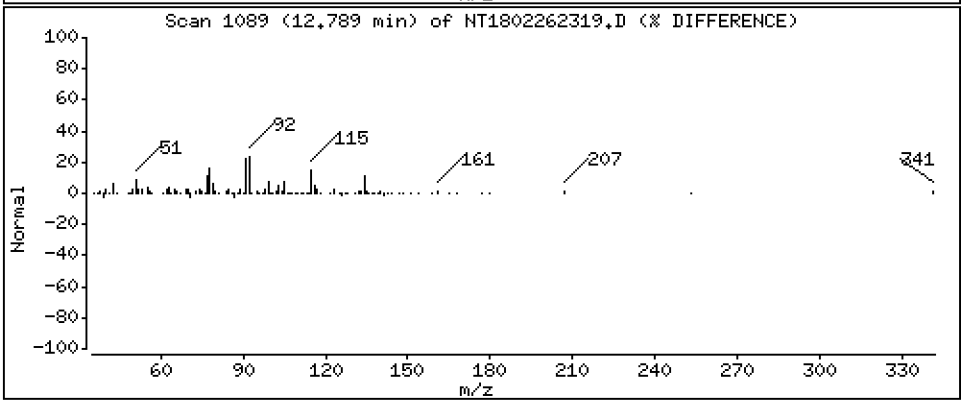












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

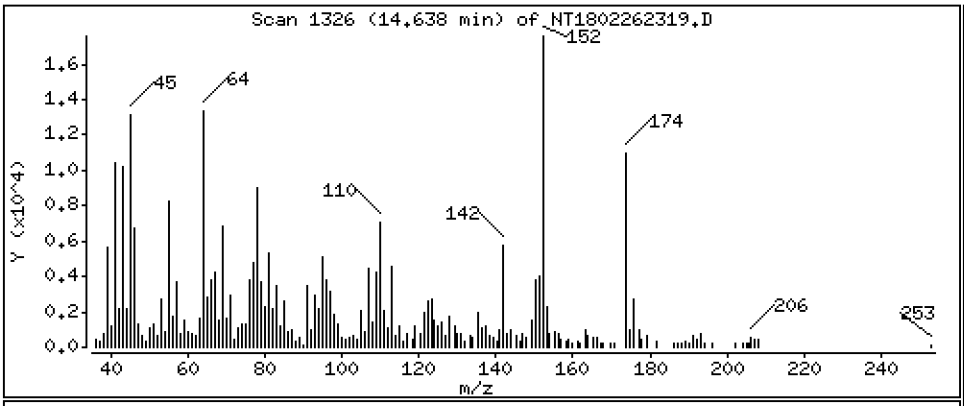
Operator: VTS

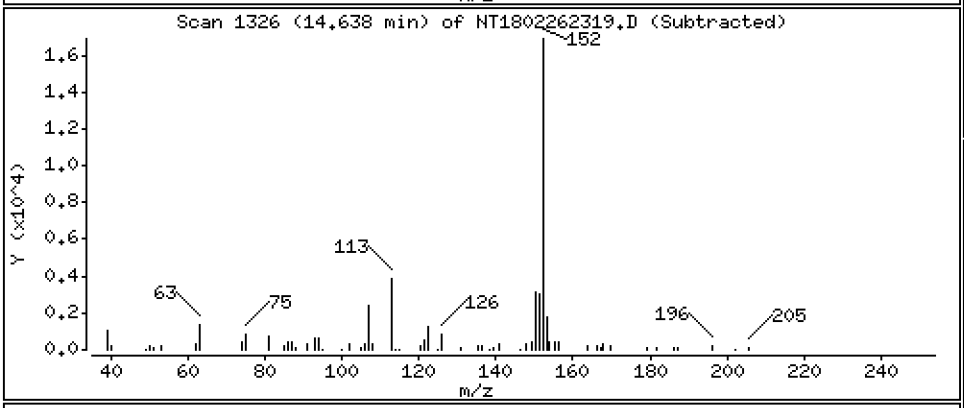
Column phase: ZB-5msi

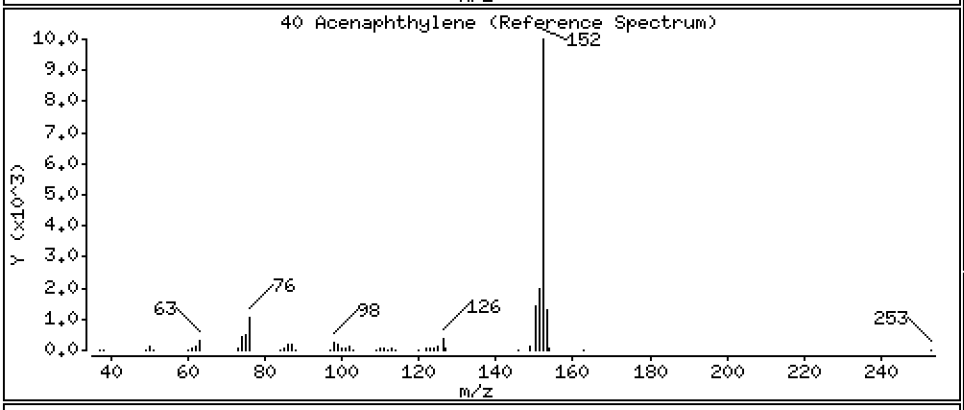
Column diameter: 0.25

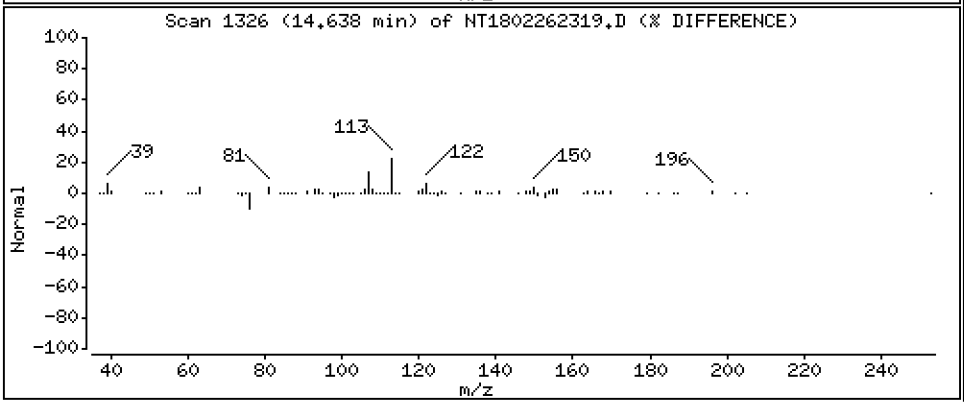
40 Acenaphthylene

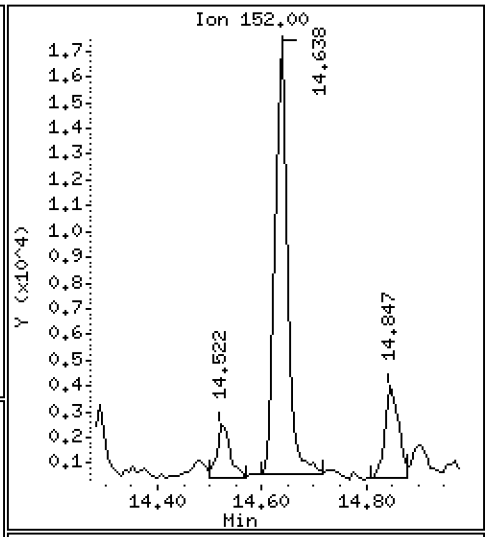
Concentration: 0.09255 ug/mL

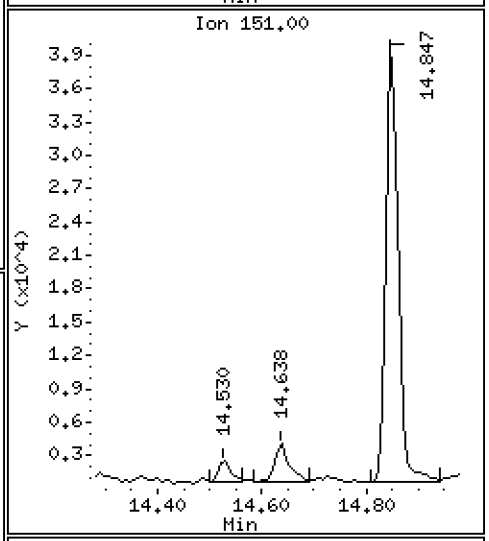


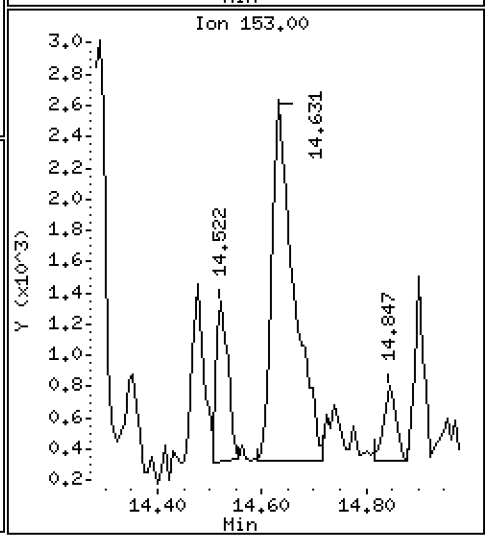












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

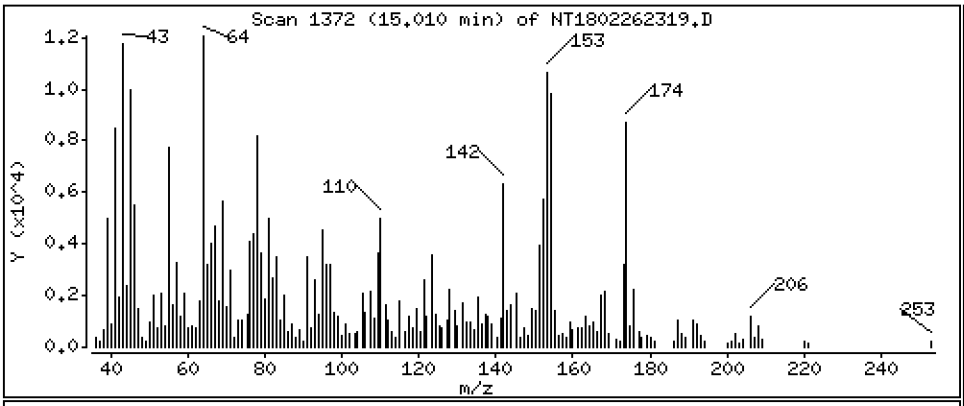
Operator: VTS

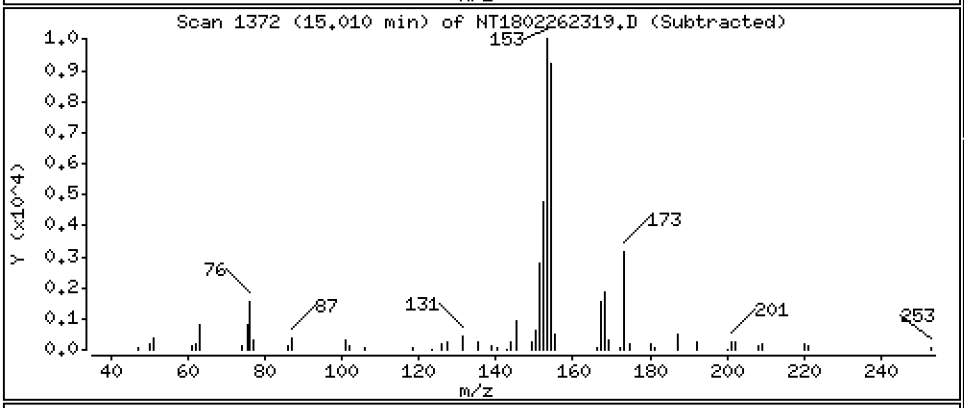
Column phase: ZB-5msi

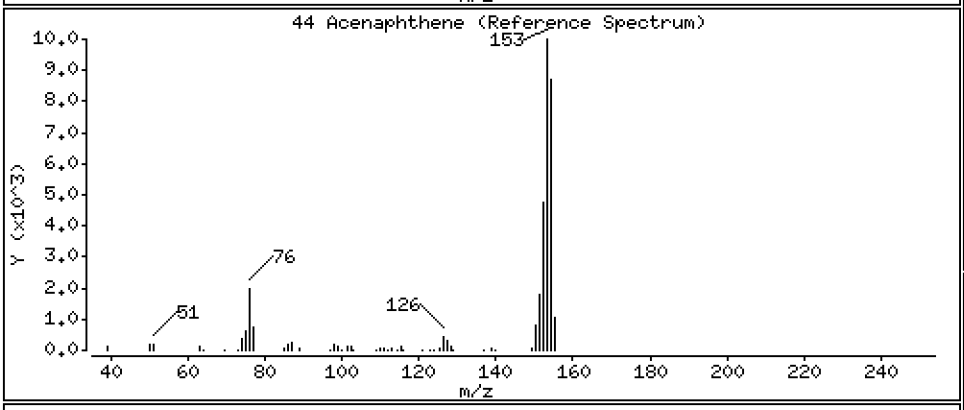
Column diameter: 0.25

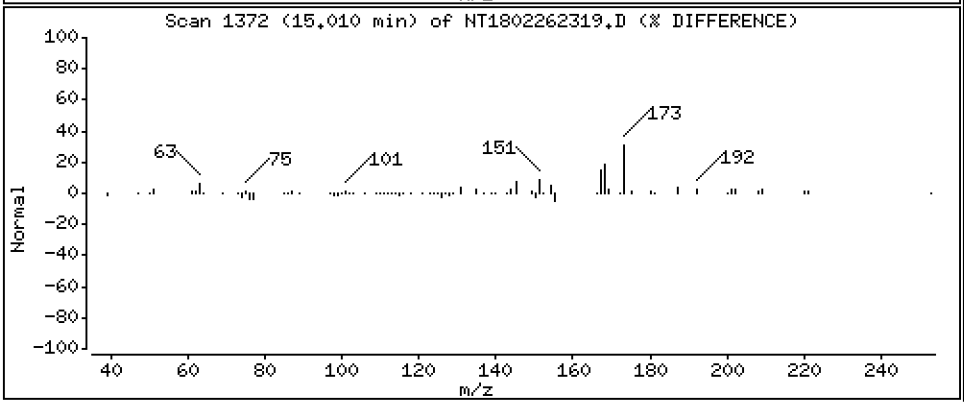
44 Acenaphthene

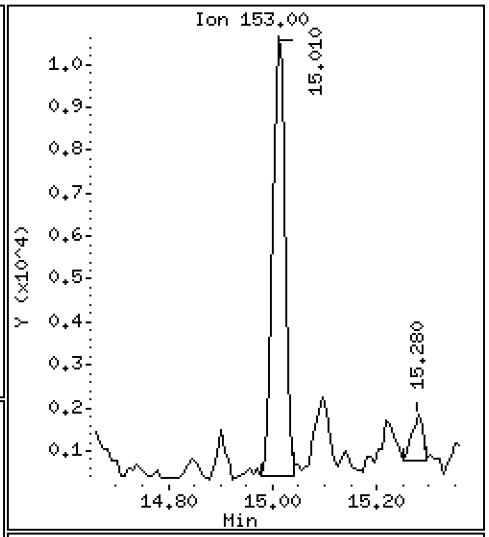
Concentration: 0.08515 ug/mL

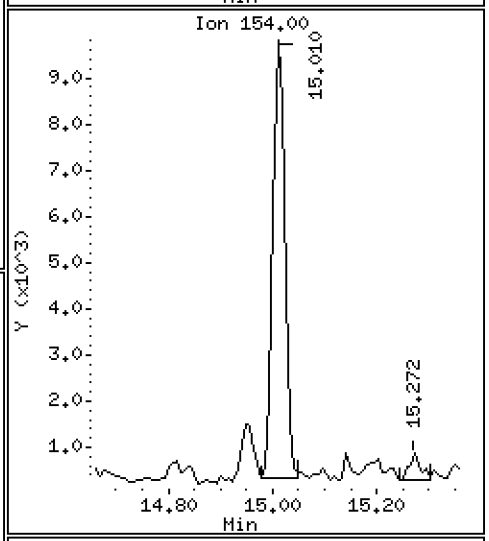


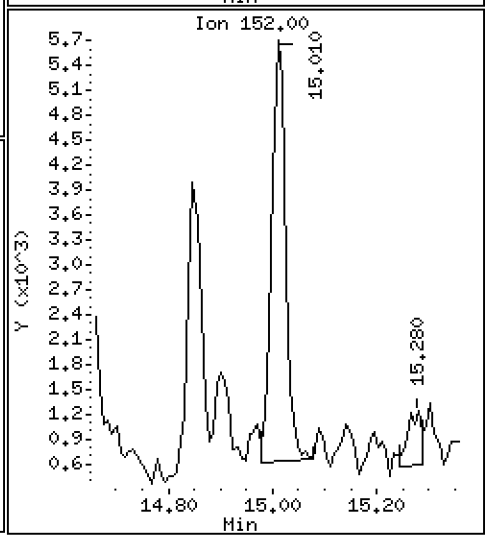












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

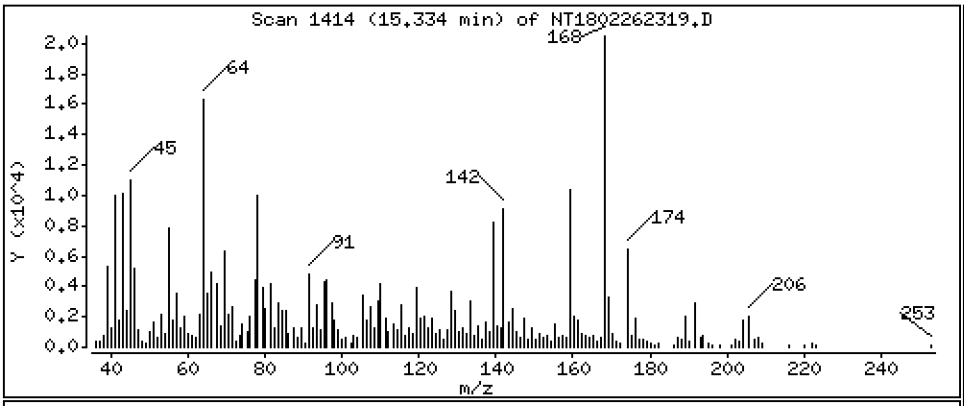
Operator: VTS

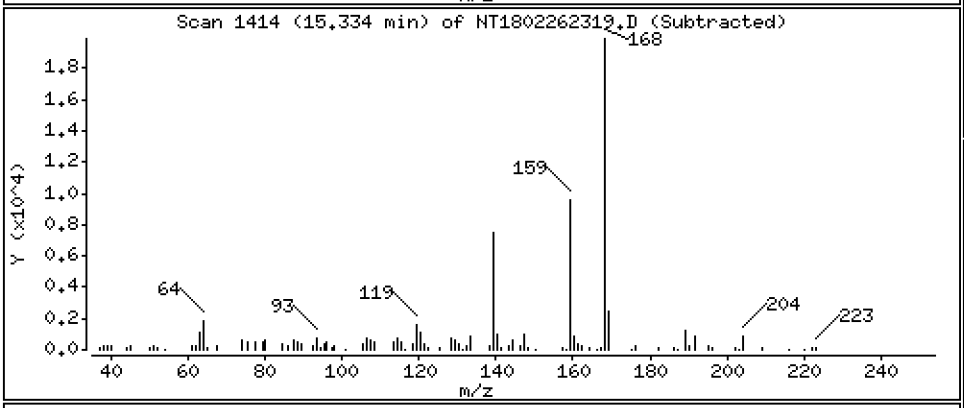
Column phase: ZB-5msi

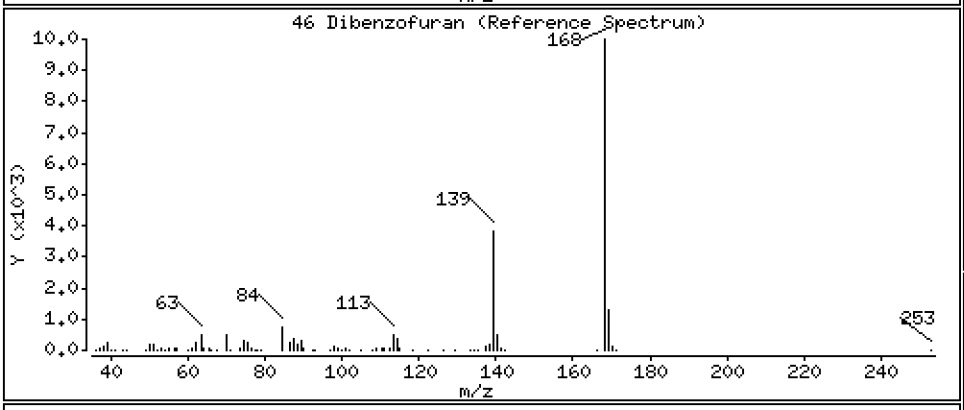
Column diameter: 0.25

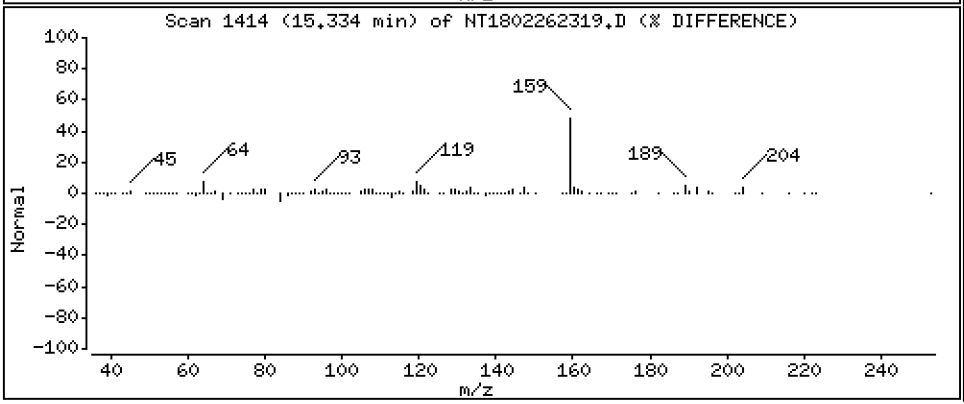
46 Dibenzofuran

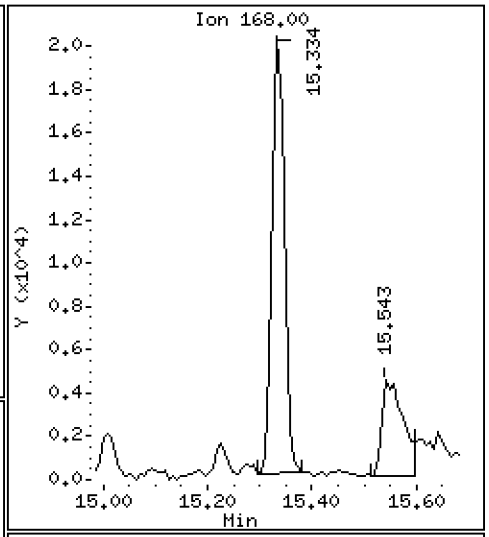
Concentration: 0.1153 ug/mL

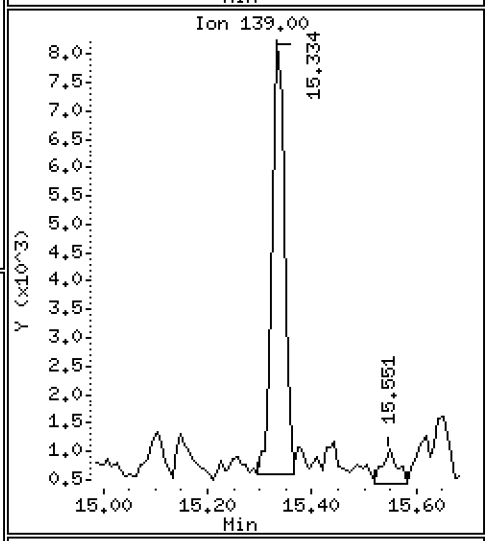


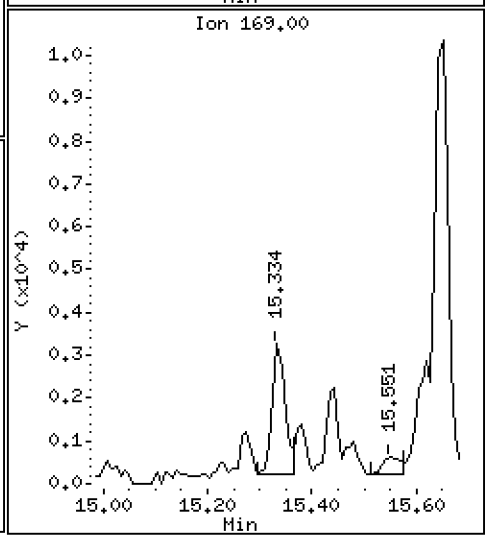












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262319.D

Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

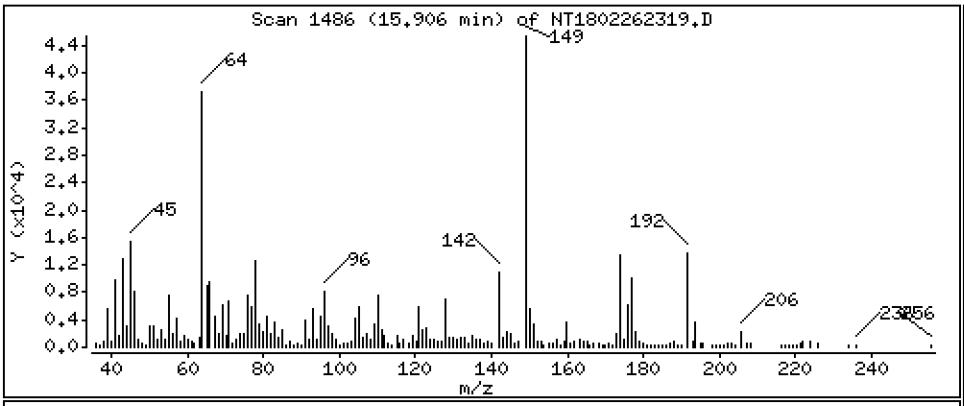
Operator: VTS

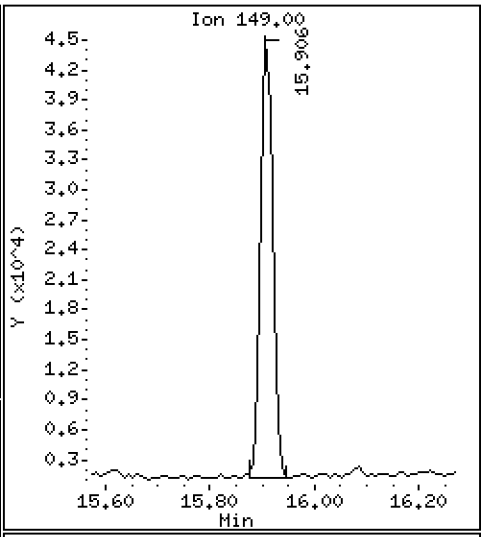
Column phase: ZB-5msi

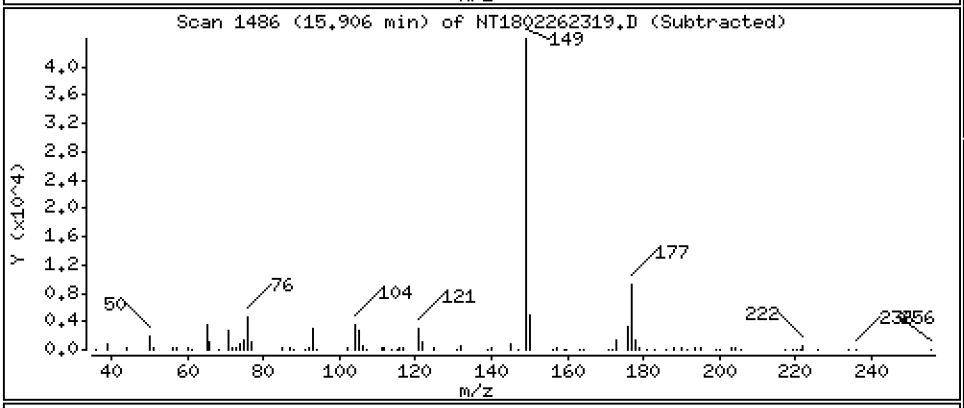
Column diameter: 0.25

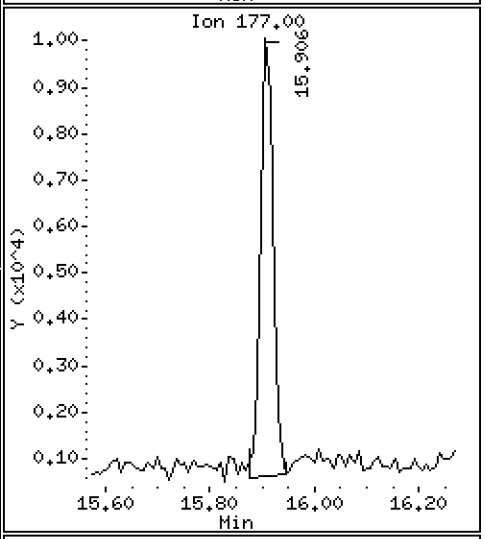
50 Diethylphthalate

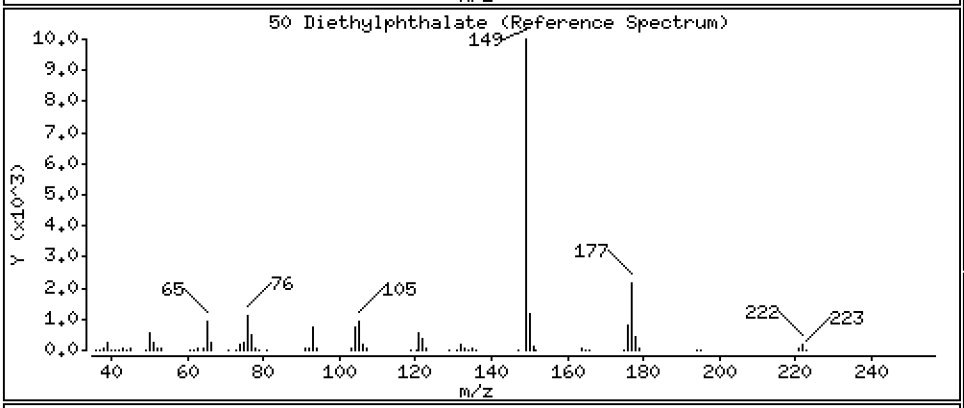
Concentration: 0.3410 ug/mL

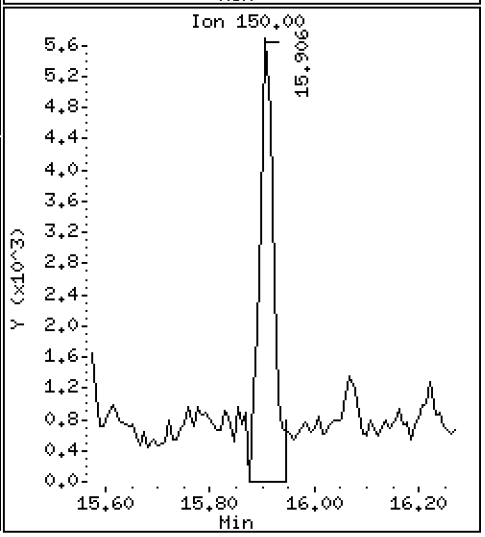


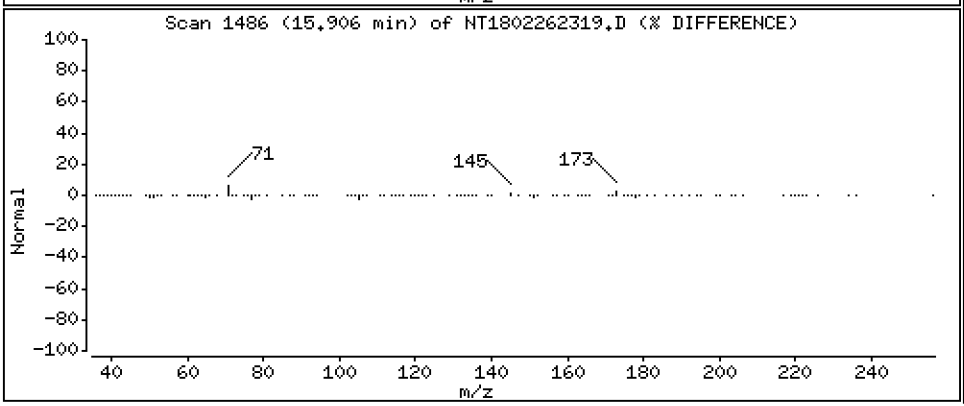












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262319.D

Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

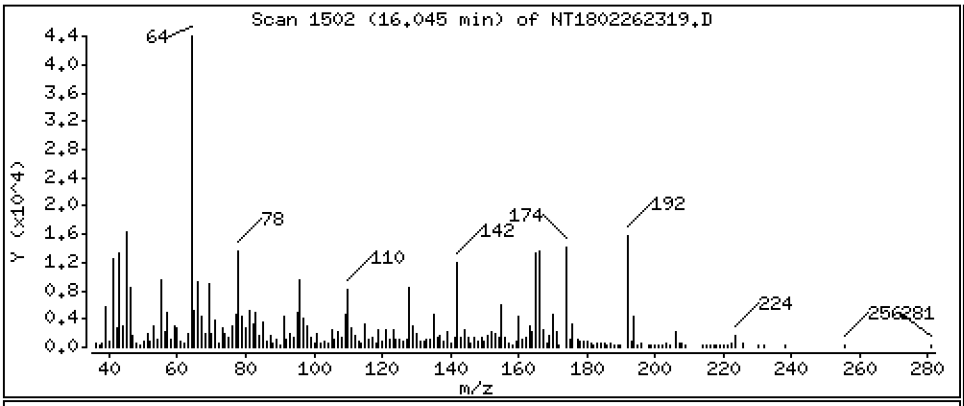
Operator: VTS

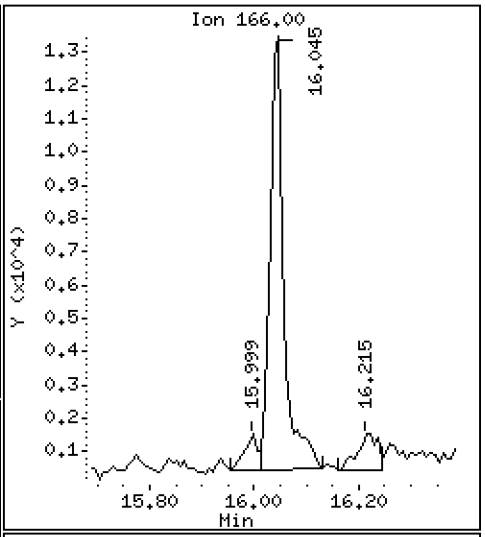
Column phase: ZB-5msi

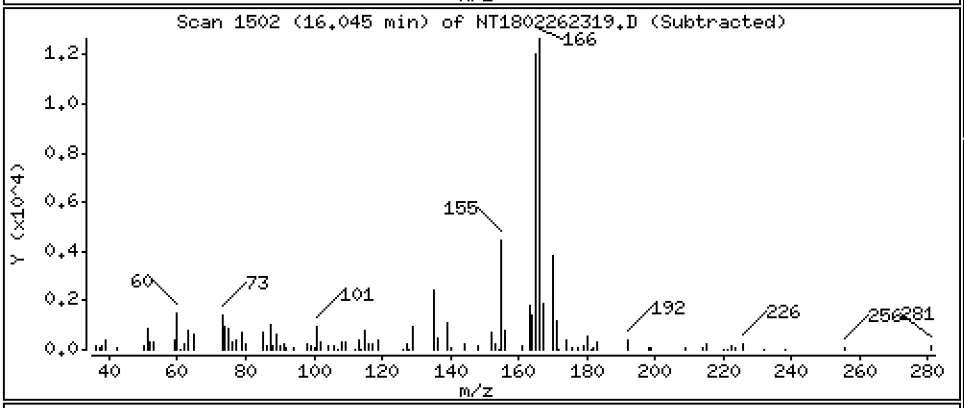
Column diameter: 0.25

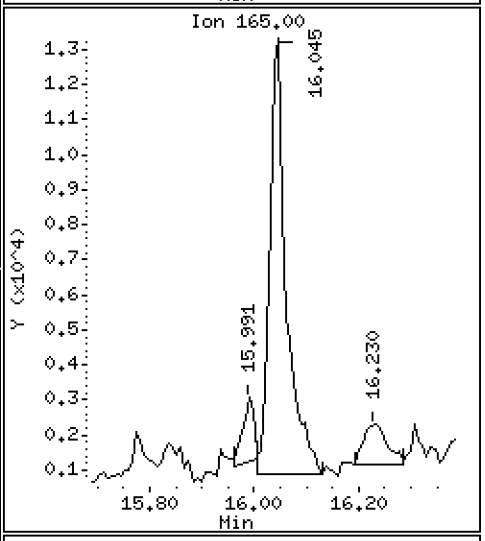
49 Fluorene

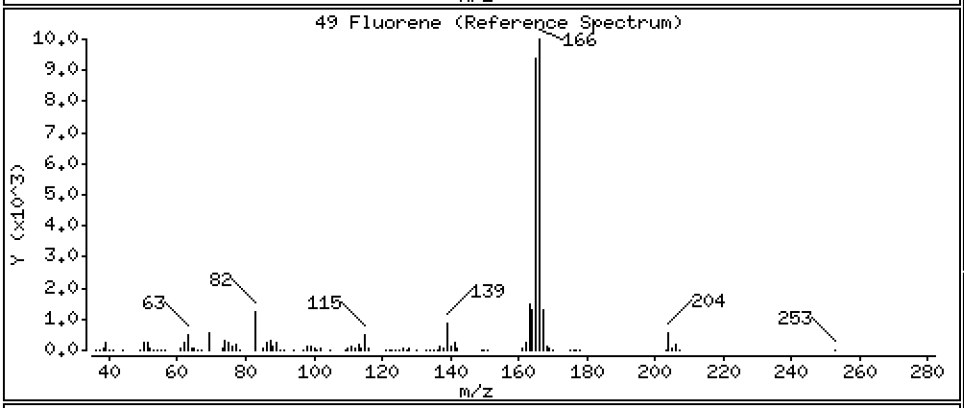
Concentration: 0.1103 ug/mL

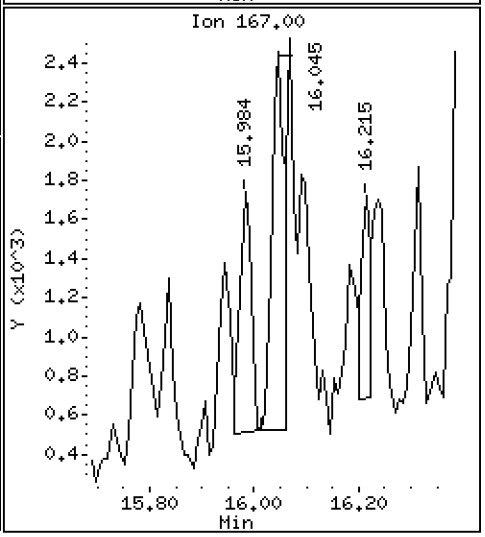


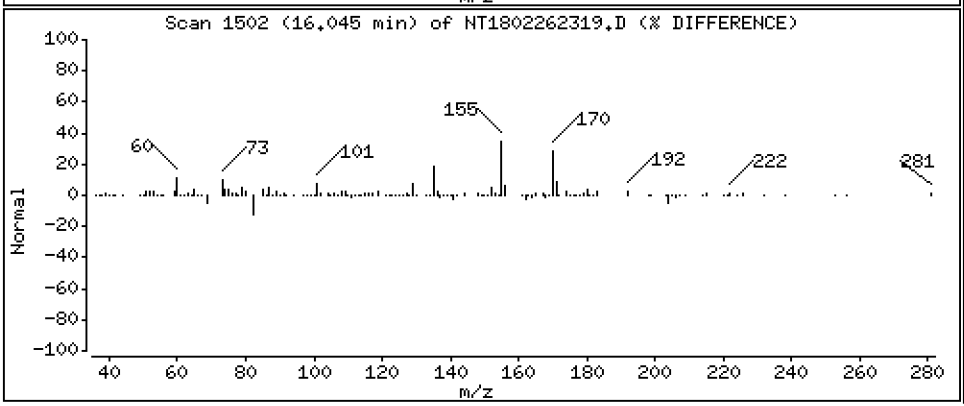












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

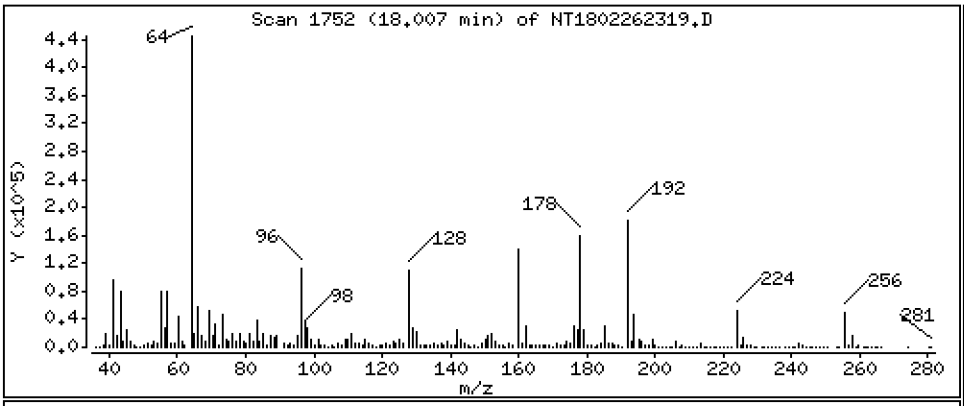
Operator: VTS

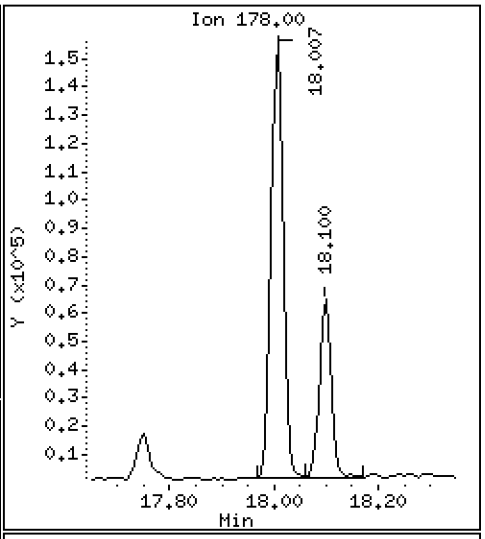
Column phase: ZB-5msi

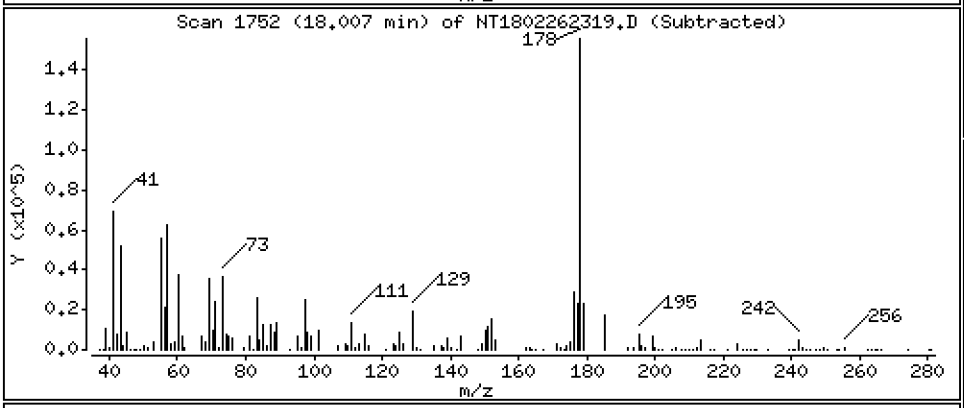
Column diameter: 0.25

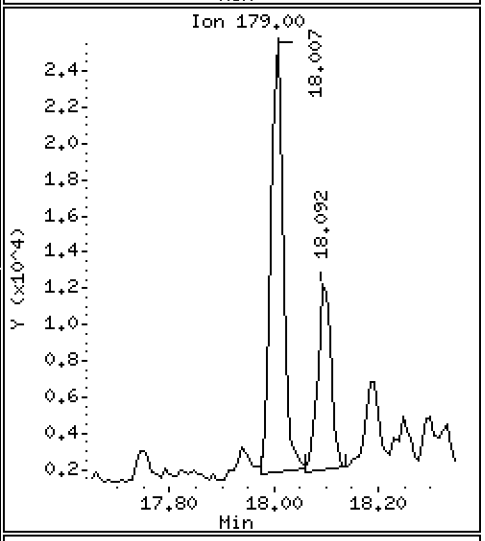
60 Phenanthrene

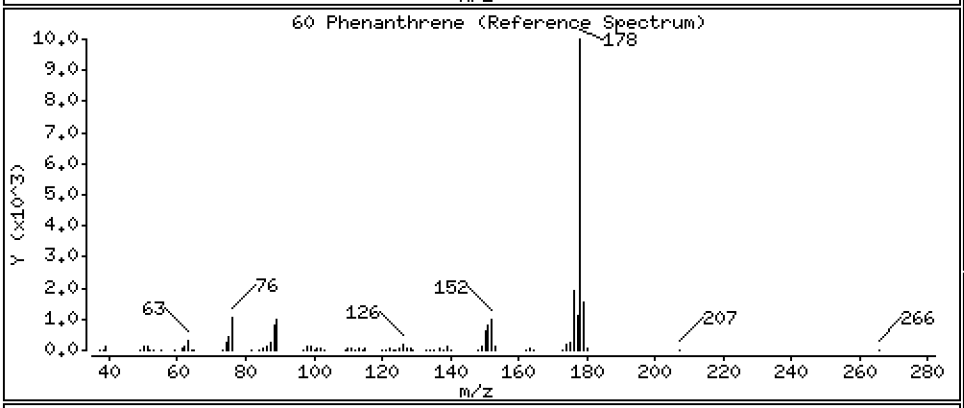
Concentration: 0.6858 ug/mL

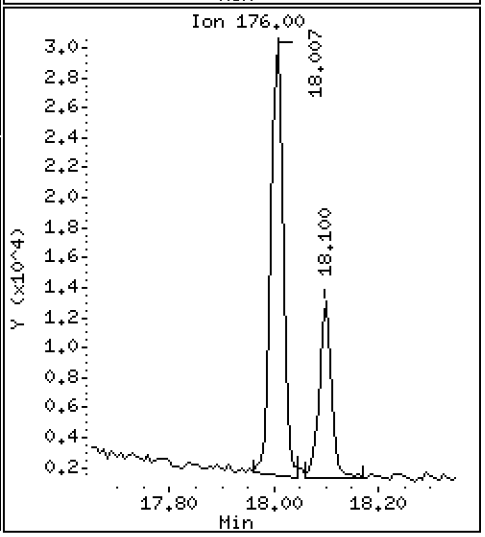


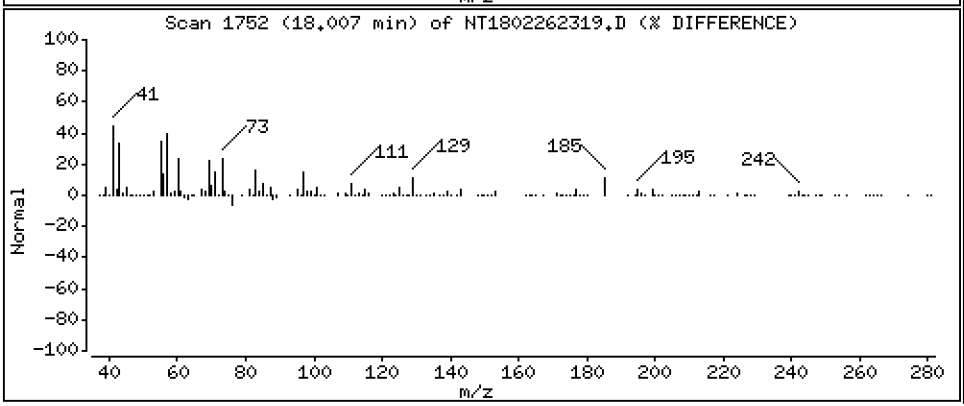












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

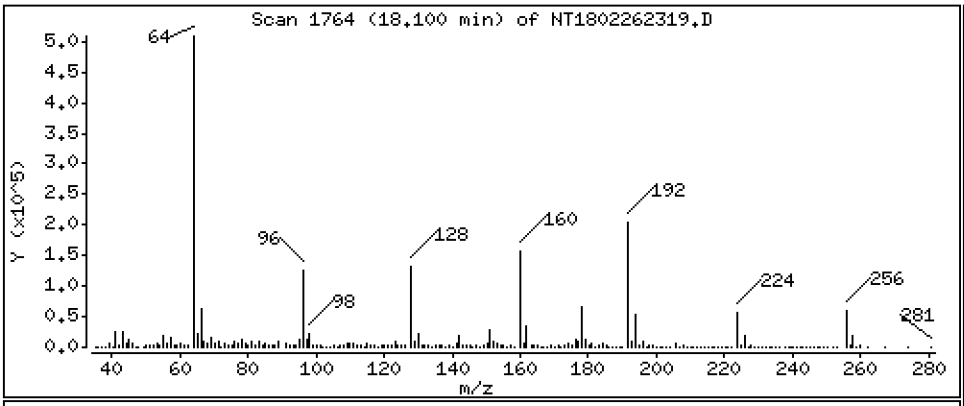
Operator: VTS

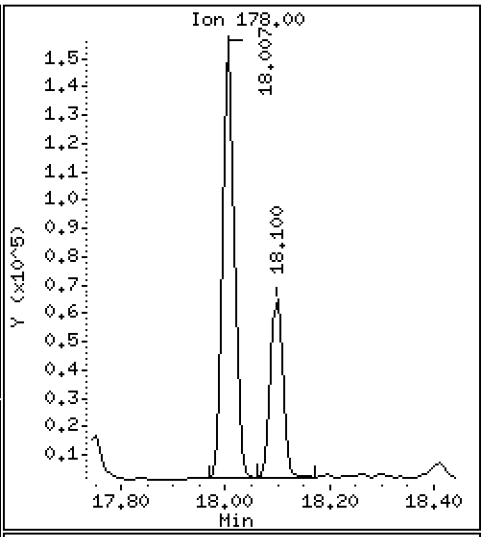
Column phase: ZB-5msi

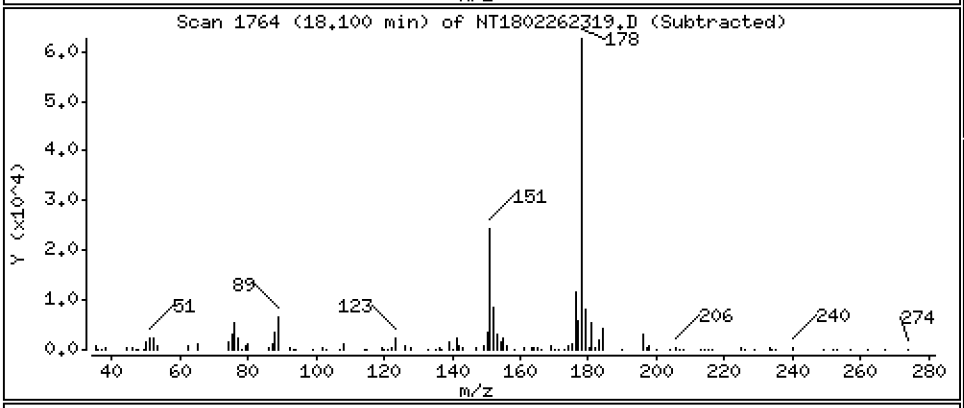
Column diameter: 0.25

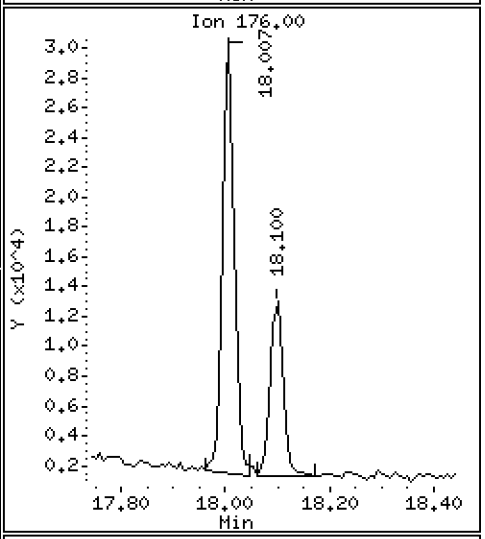
61 Anthracene

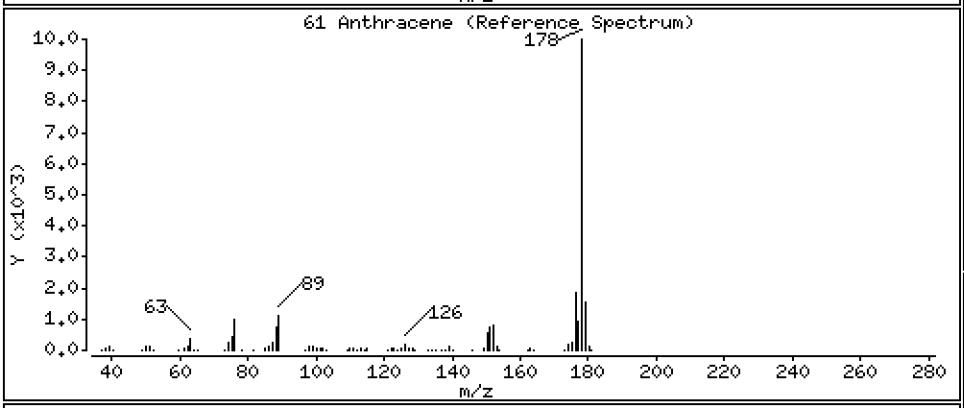
Concentration: 0.3065 ug/mL

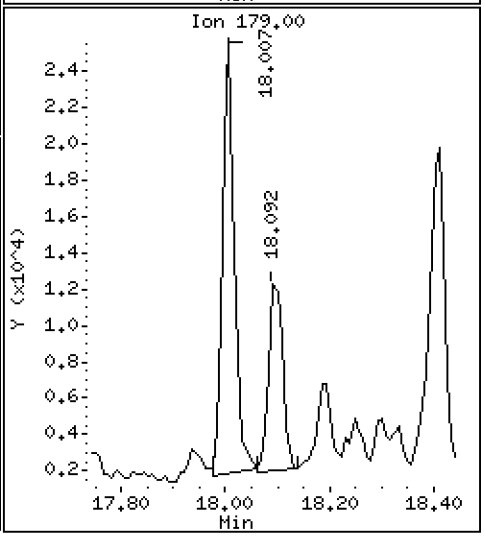


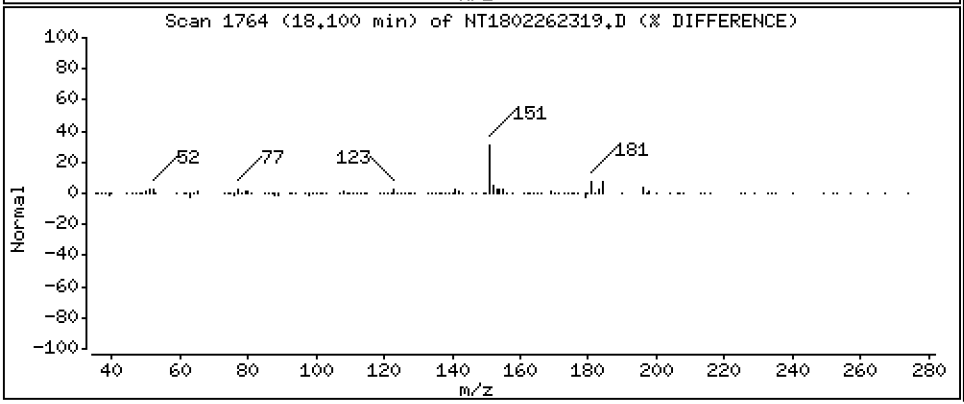












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

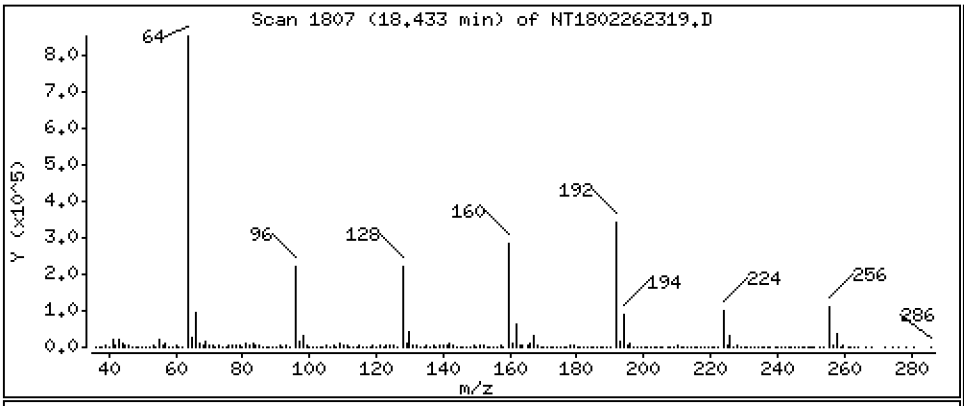
Operator: VTS

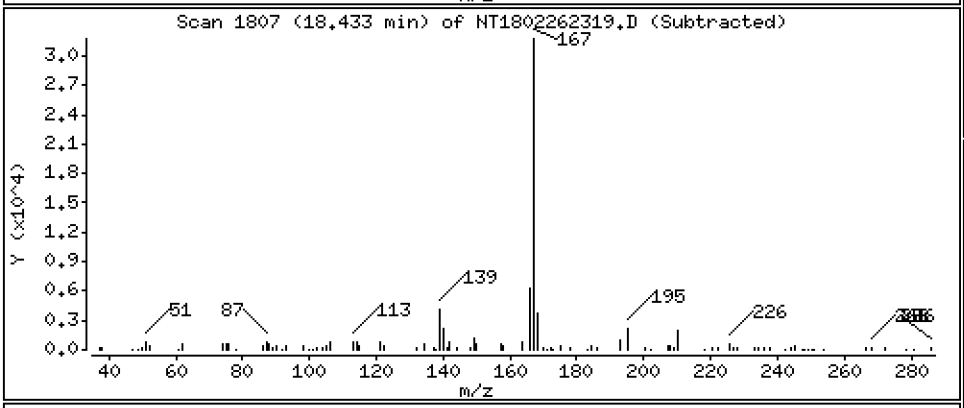
Column phase: ZB-5msi

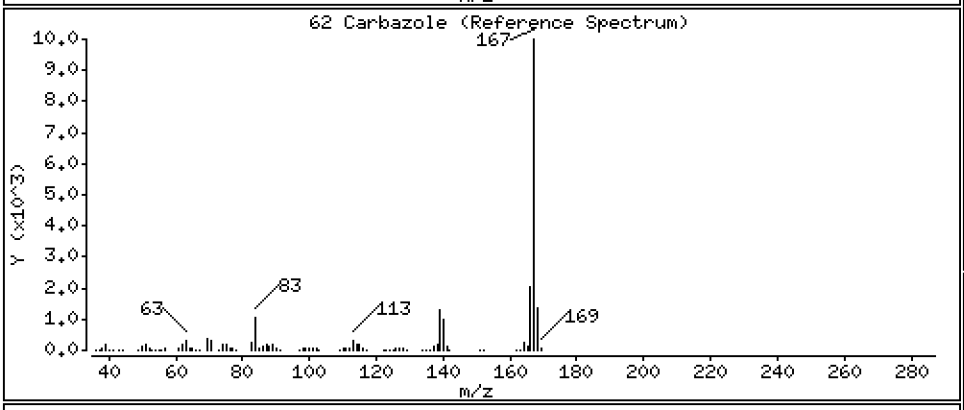
Column diameter: 0.25

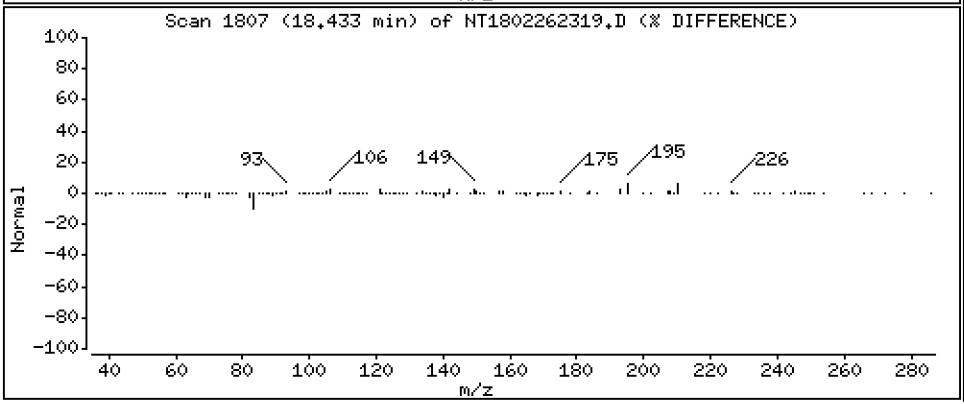
62 Carbazole

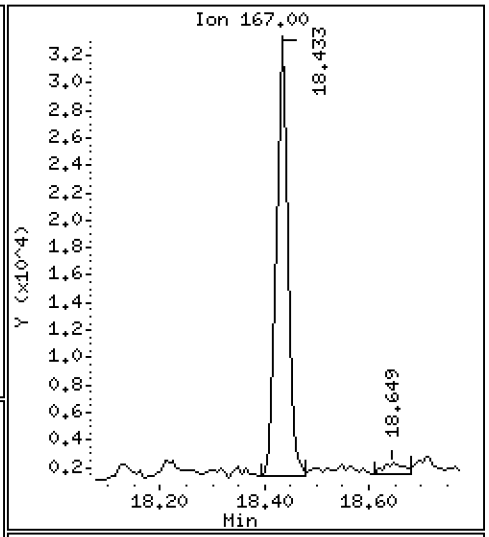
Concentration: 0.1601 ug/mL

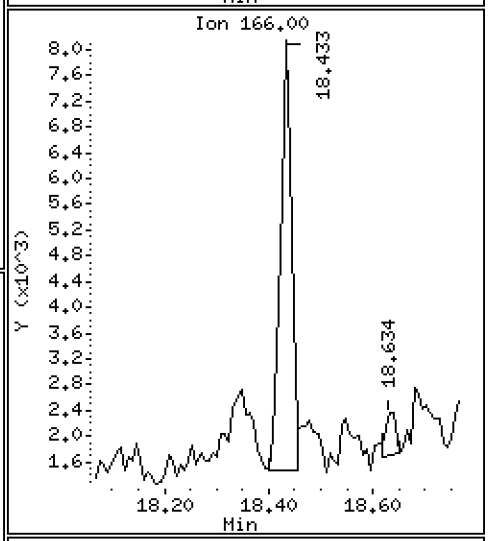


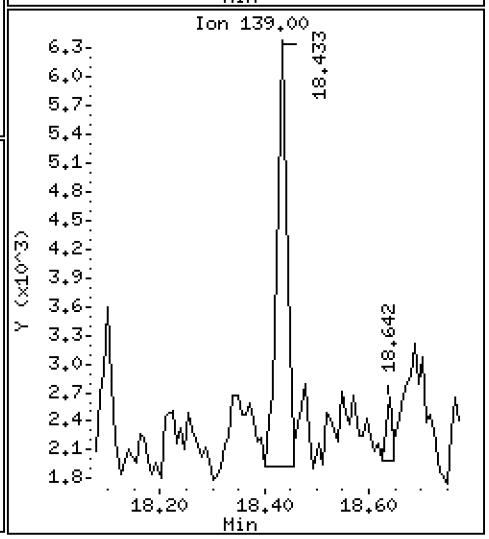












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

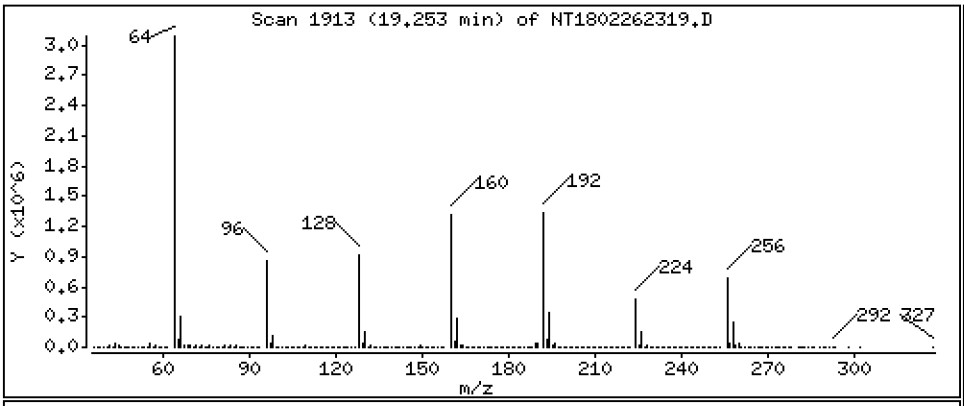
Operator: VTS

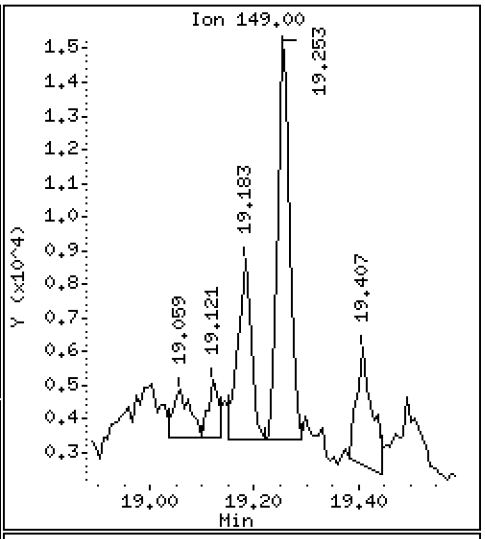
Column phase: ZB-5msi

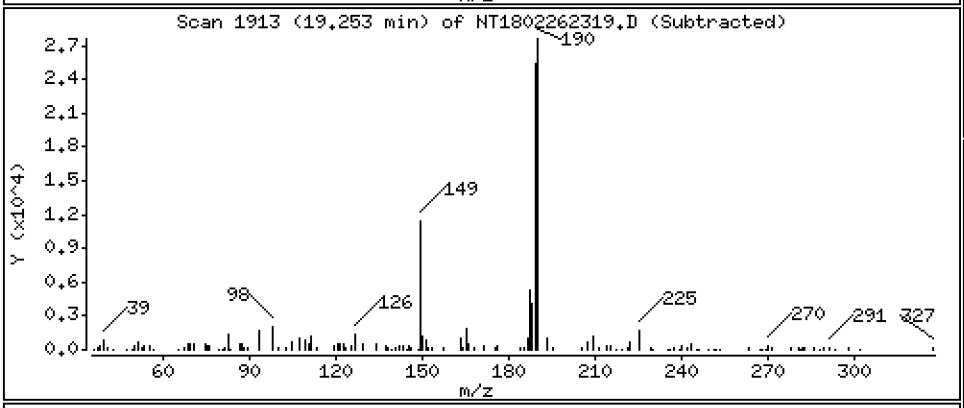
Column diameter: 0.25

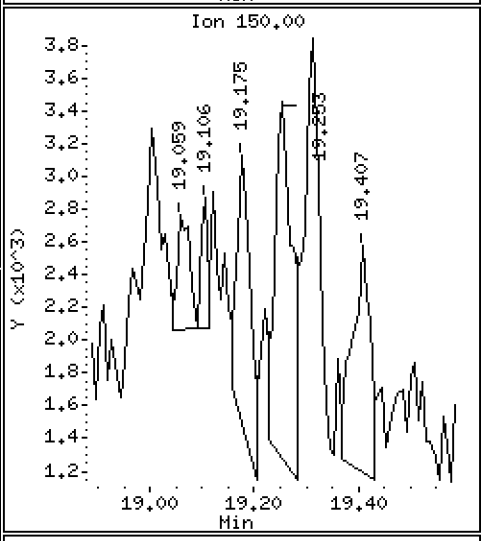
63 Di-n-butylphthalate

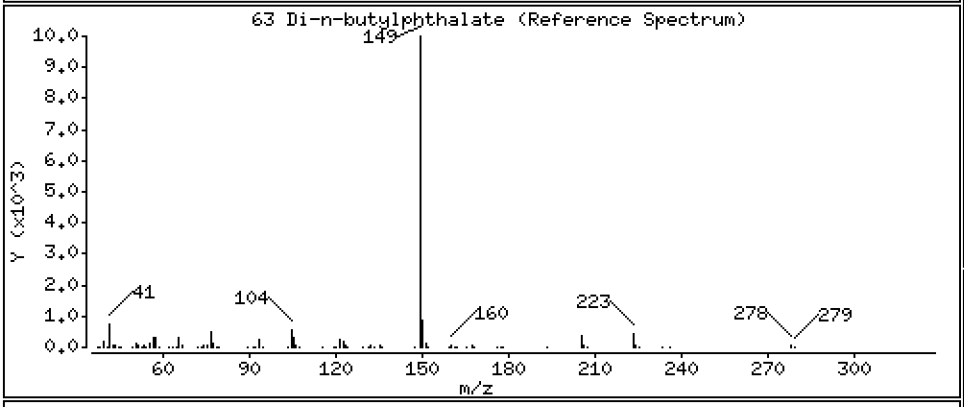
Concentration: 0.05705 ug/mL

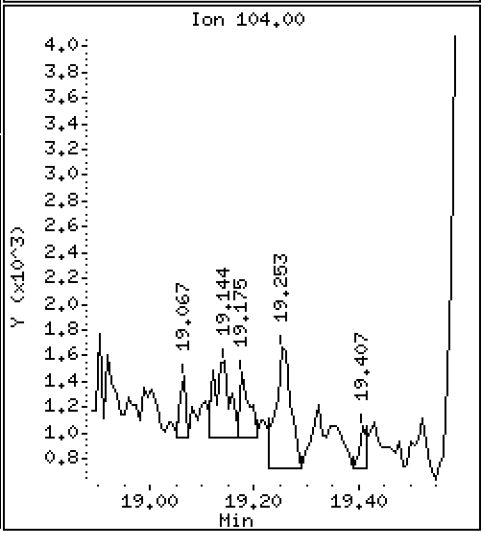


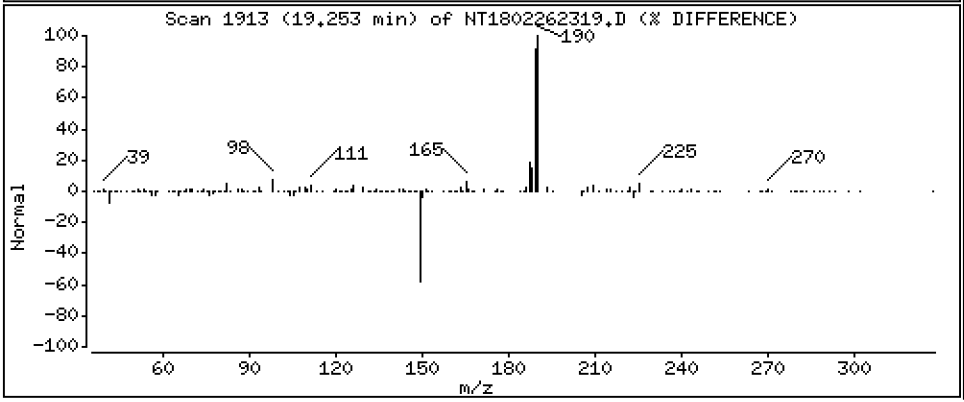












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

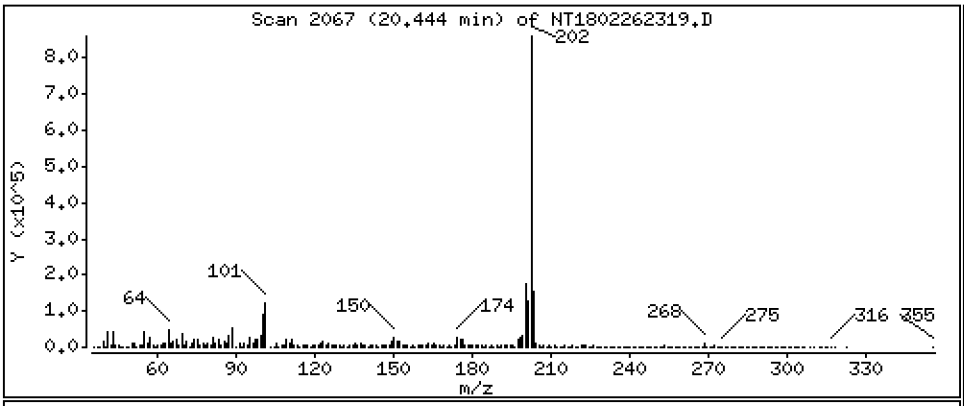
Operator: VTS

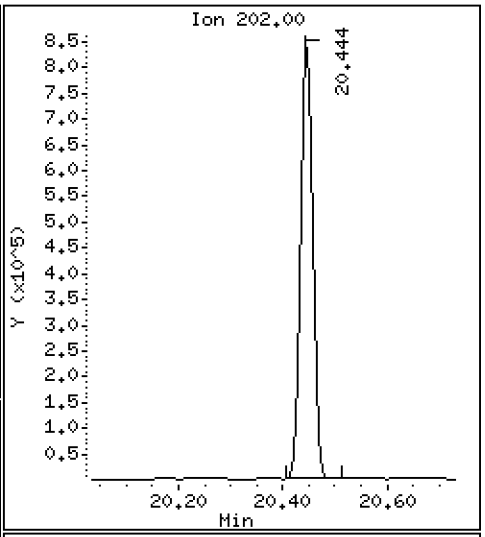
Column phase: ZB-5msi

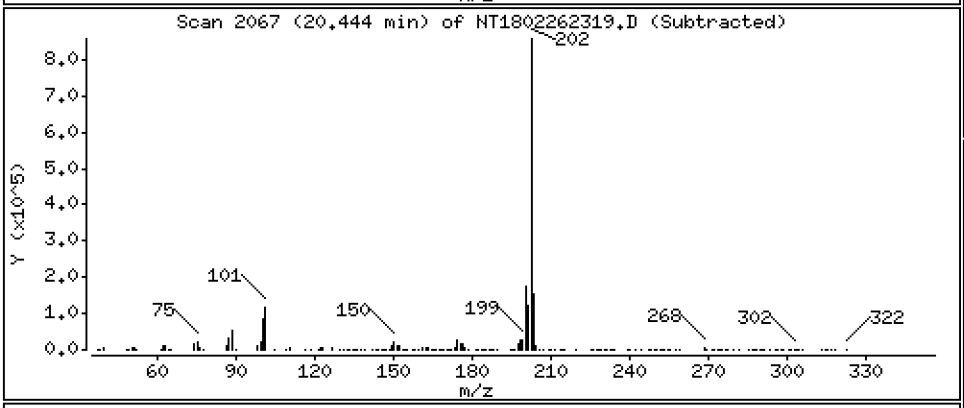
Column diameter: 0.25

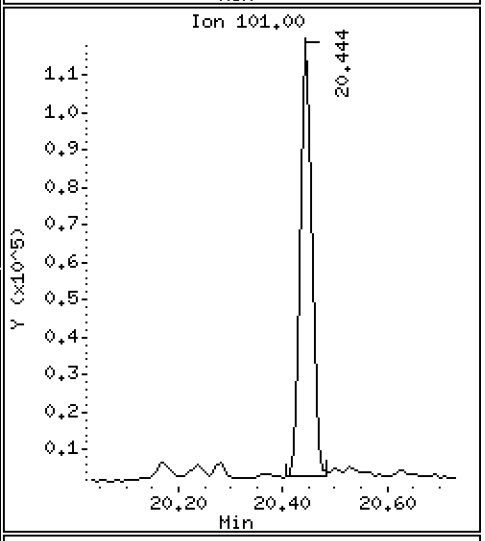
64 Fluoranthene

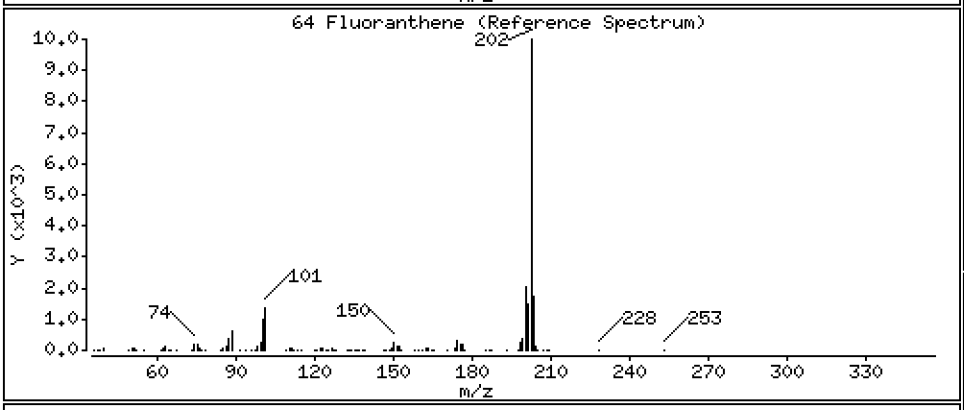
Concentration: 3.368 ug/mL

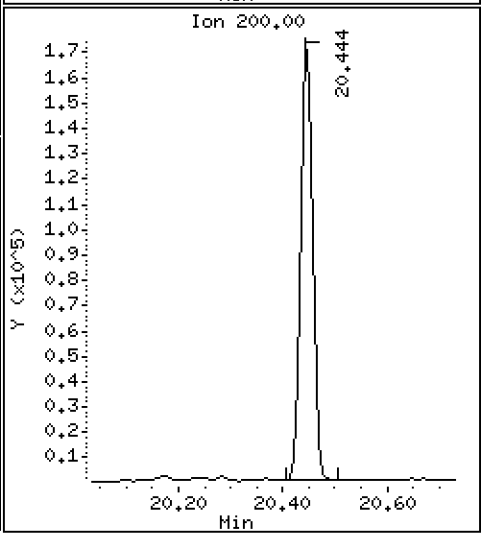


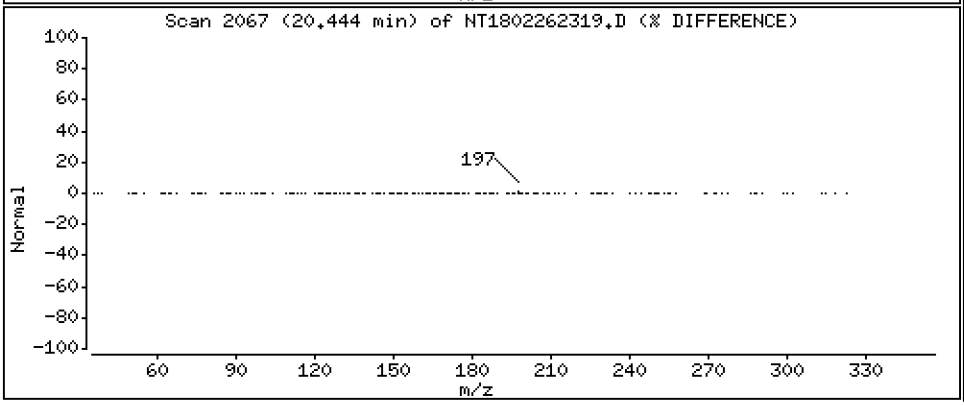












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262319.D

Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

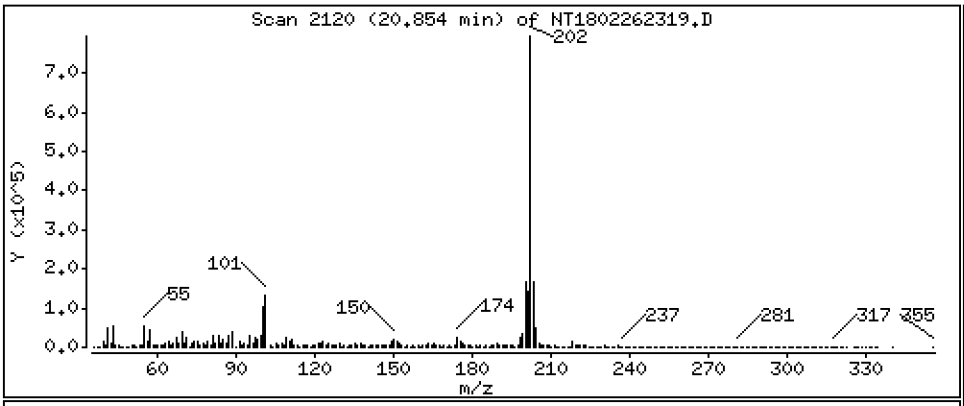
Operator: VTS

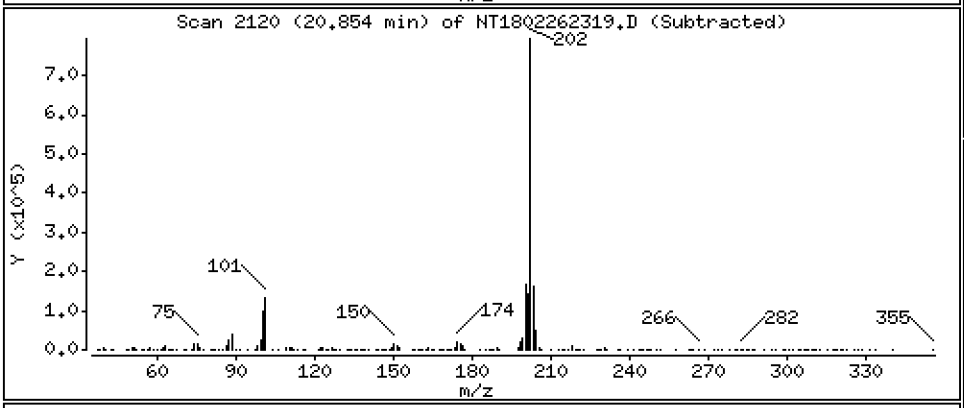
Column phase: ZB-5msi

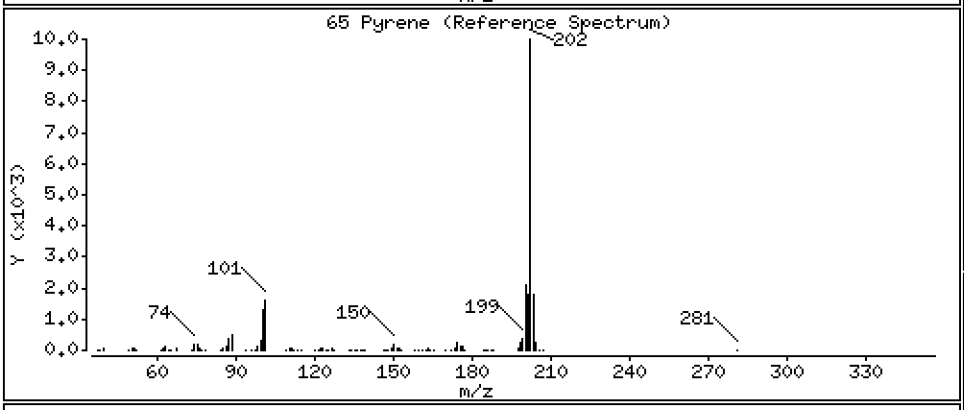
Column diameter: 0.25

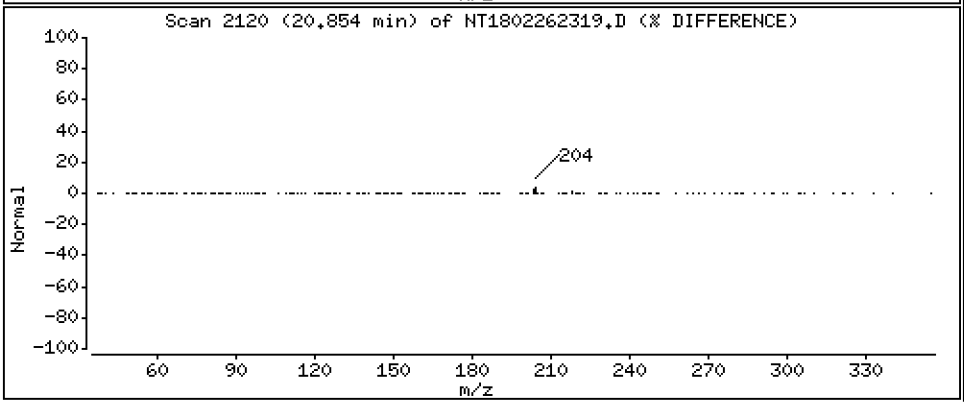
65 Pyrene

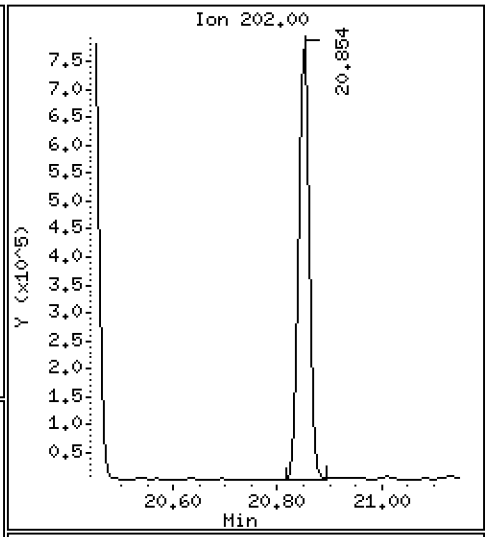
Concentration: 2.785 ug/mL

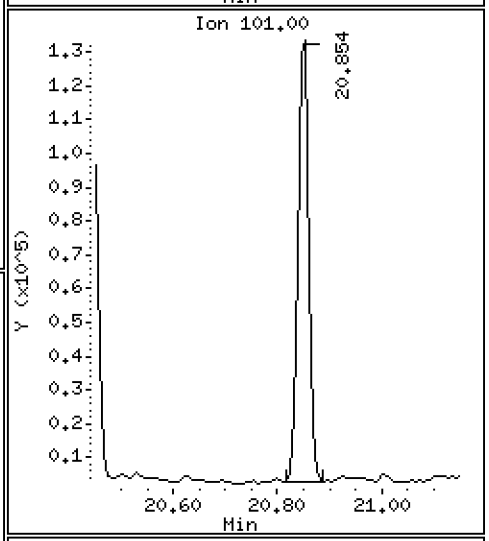


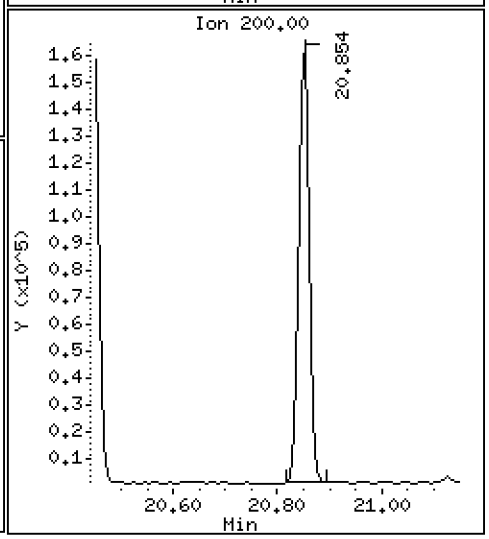












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

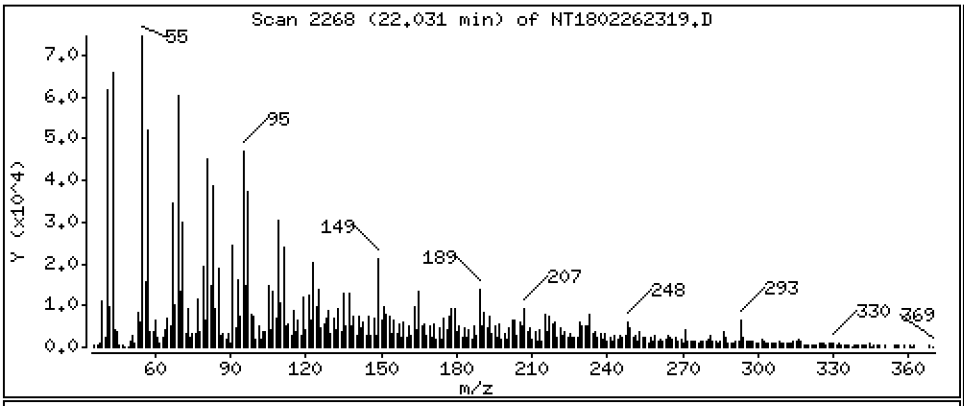
Operator: VTS

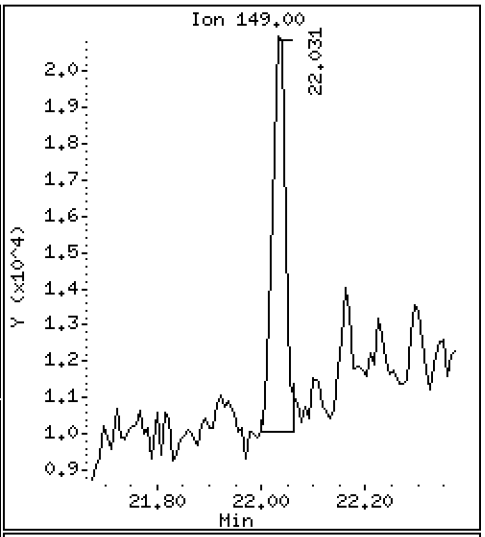
Column phase: ZB-5msi

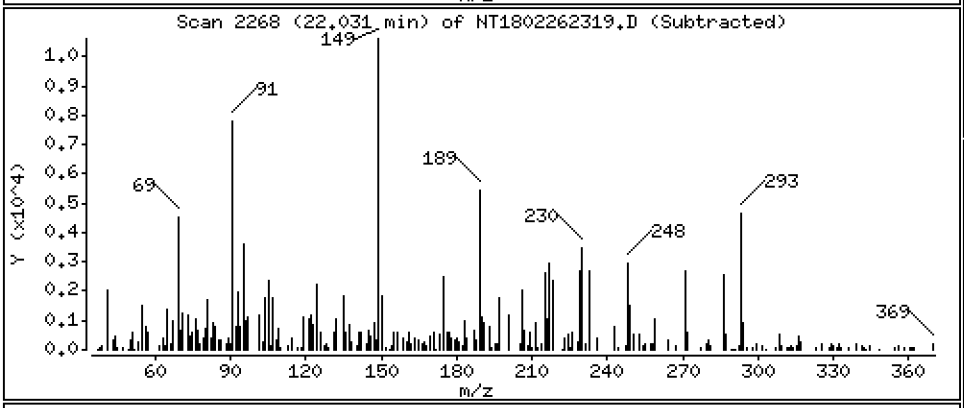
Column diameter: 0.25

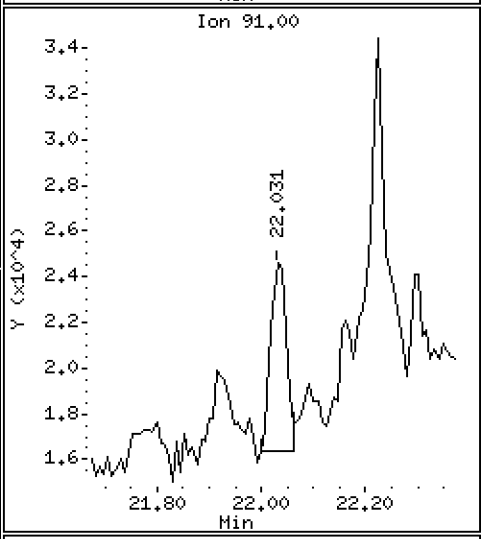
67 Butylbenzylphthalate

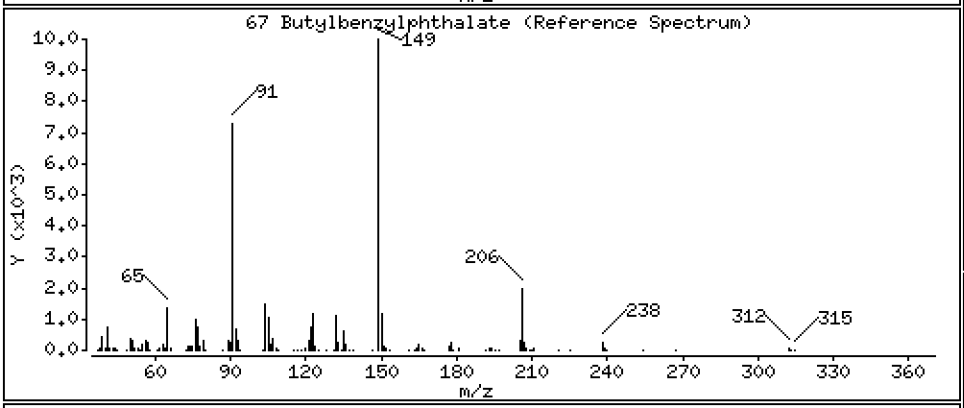
Concentration: 0.1154 ug/mL

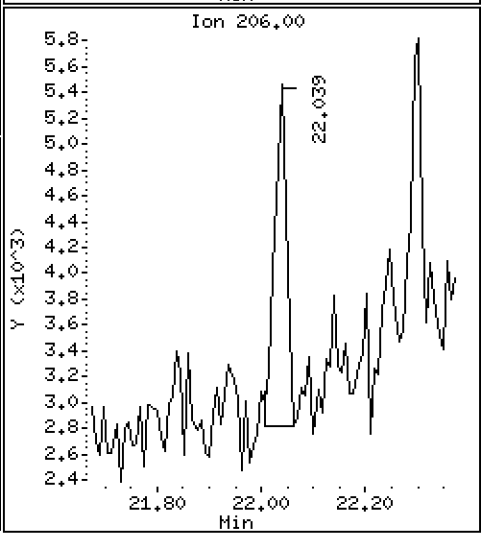


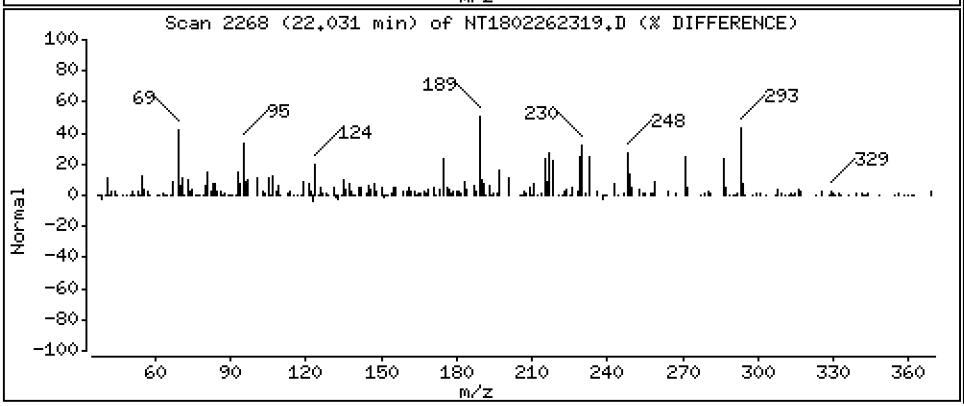












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262319.D

Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

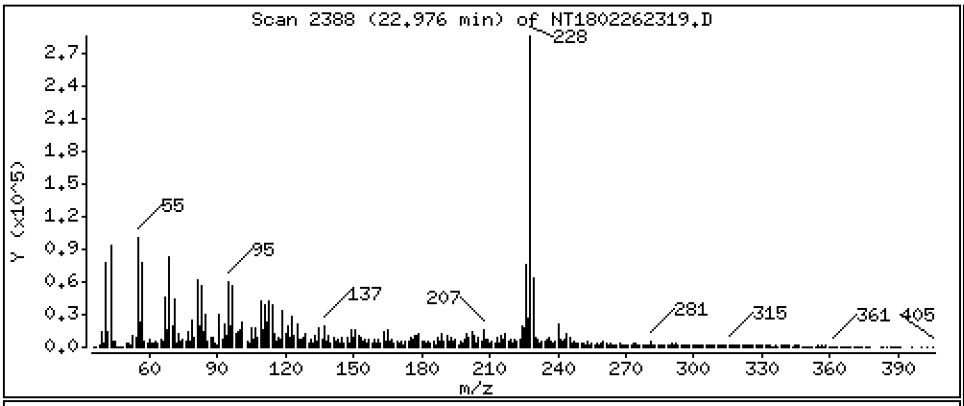
Operator: VTS

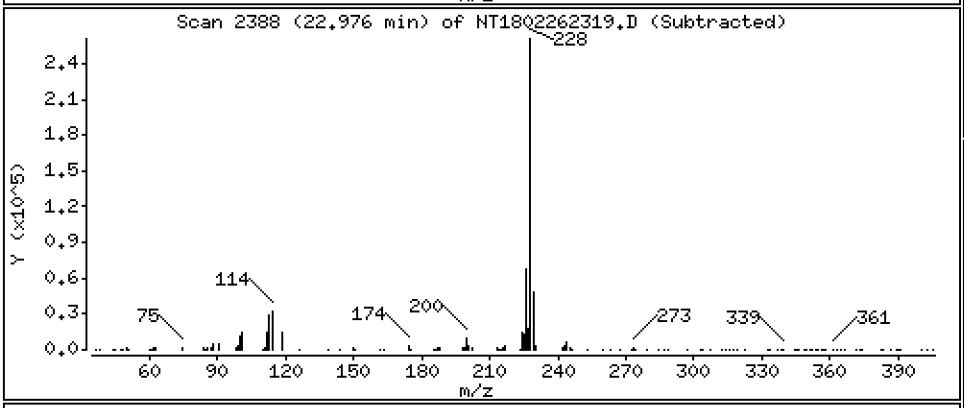
Column phase: ZB-5msi

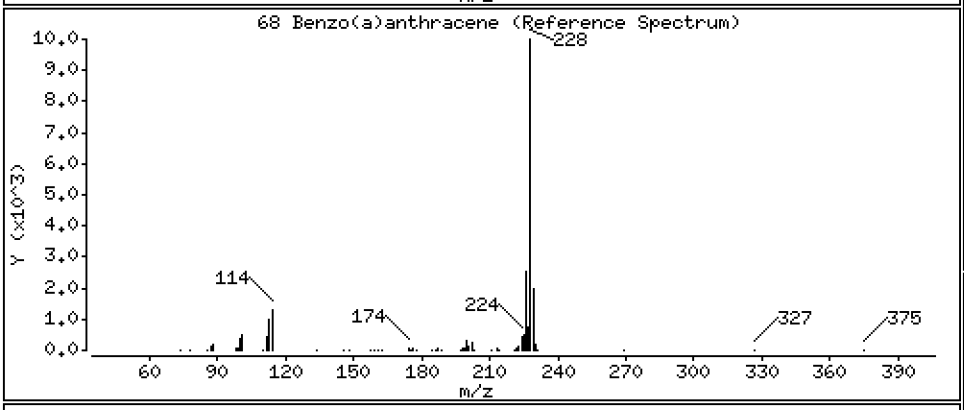
Column diameter: 0.25

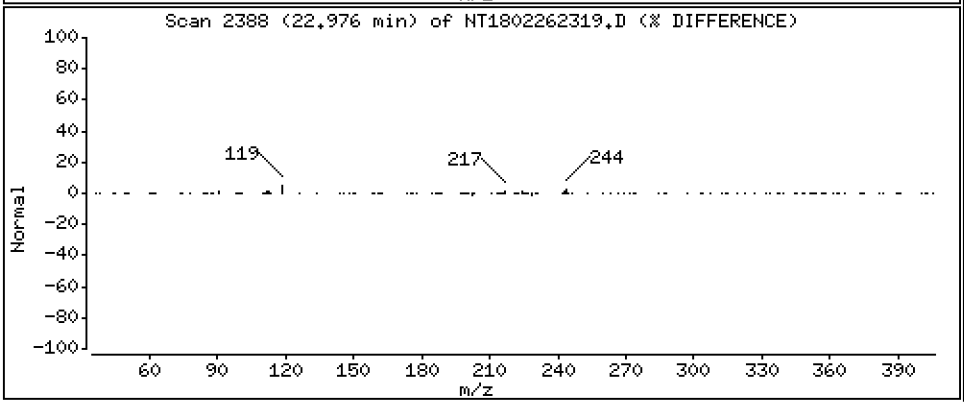
68 Benzo(a)anthracene

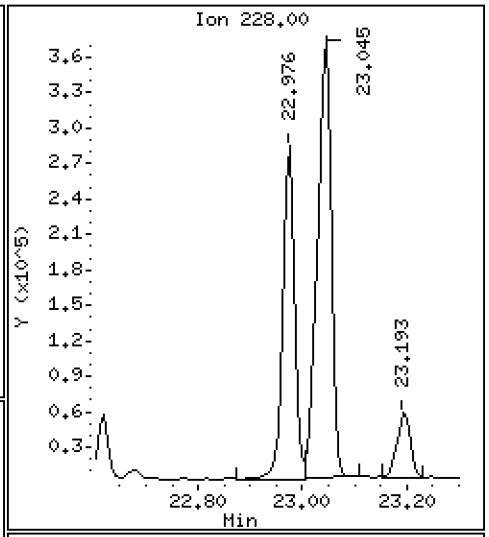
Concentration: 1.155 ug/mL

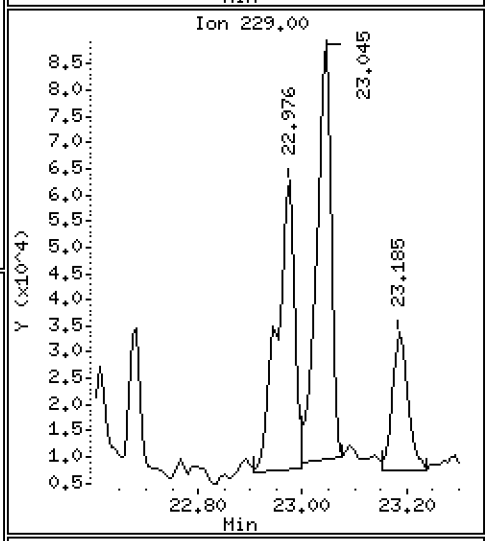


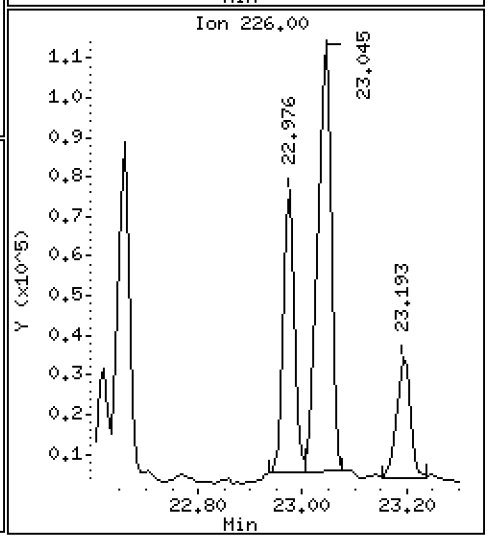












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262319.D

Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

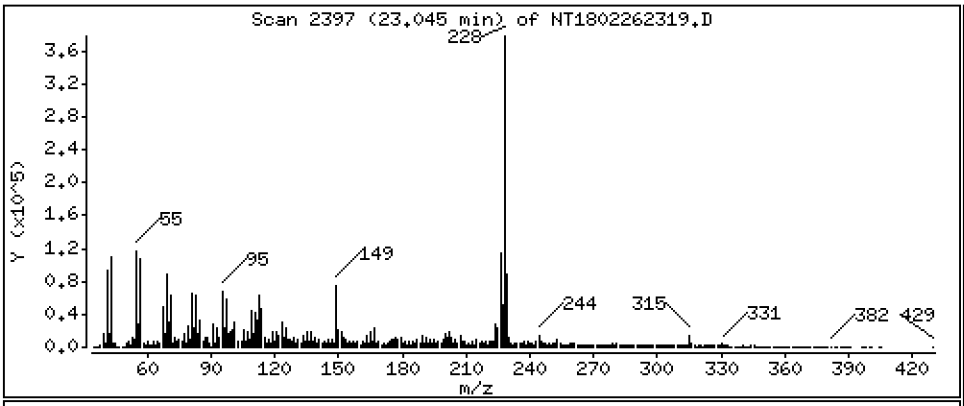
Operator: VTS

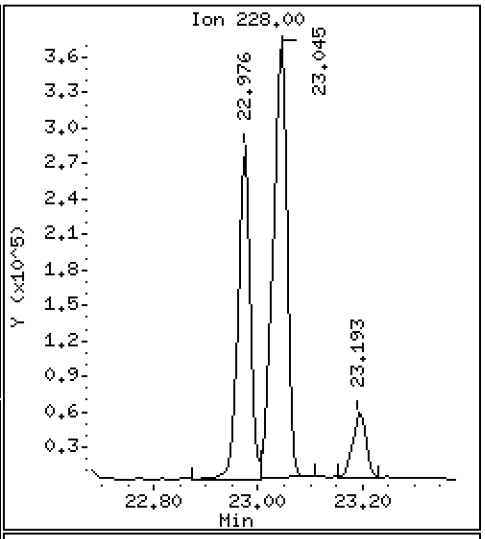
Column phase: ZB-5msi

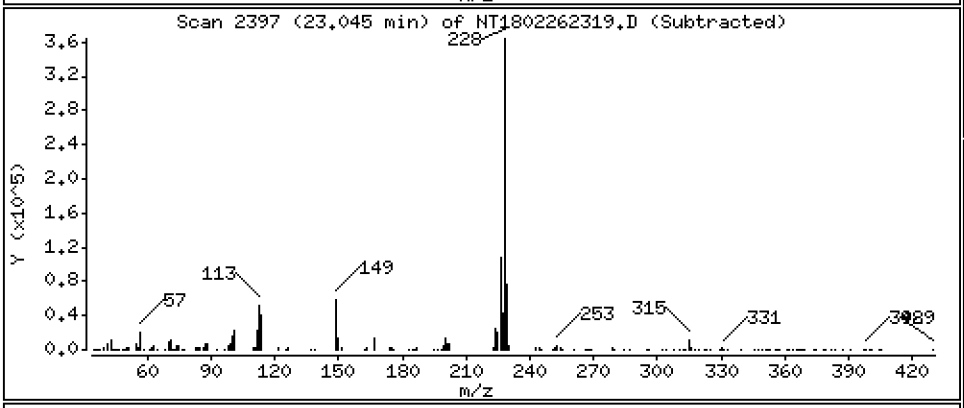
Column diameter: 0.25

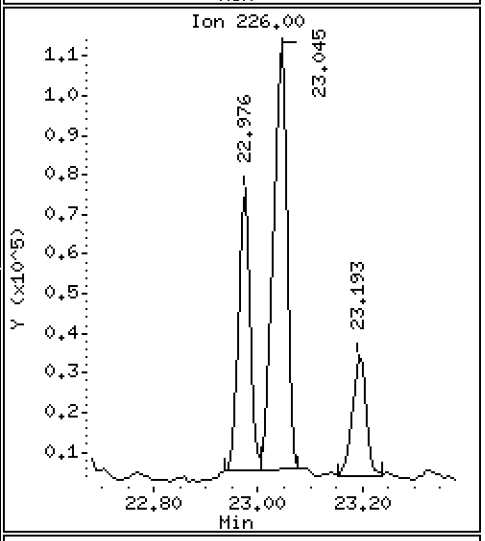
71 Chrysene

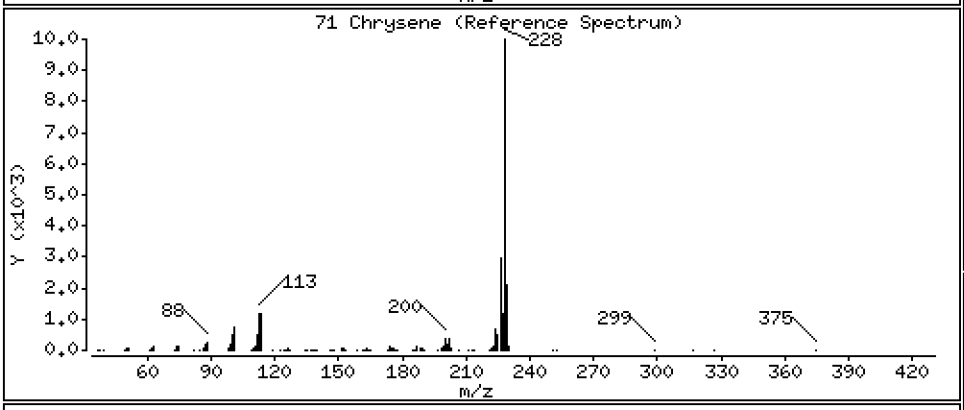
Concentration: 1.632 ug/mL

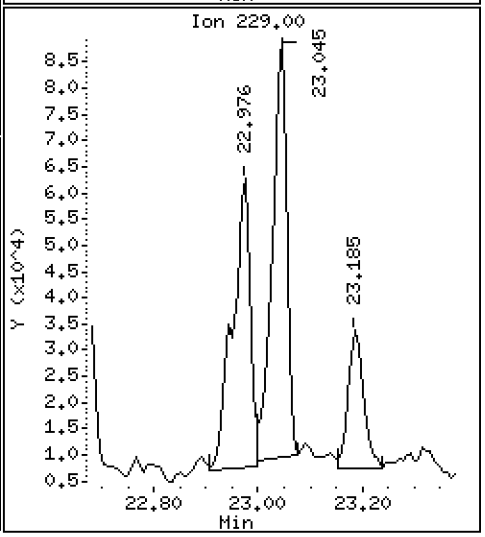


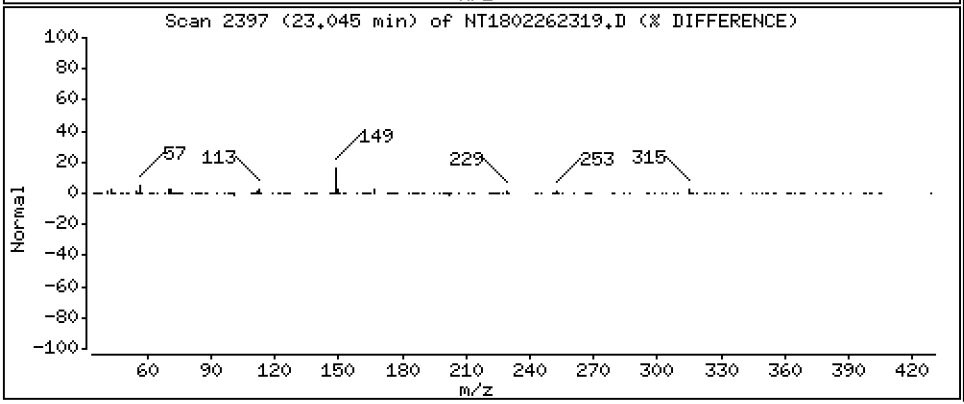












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

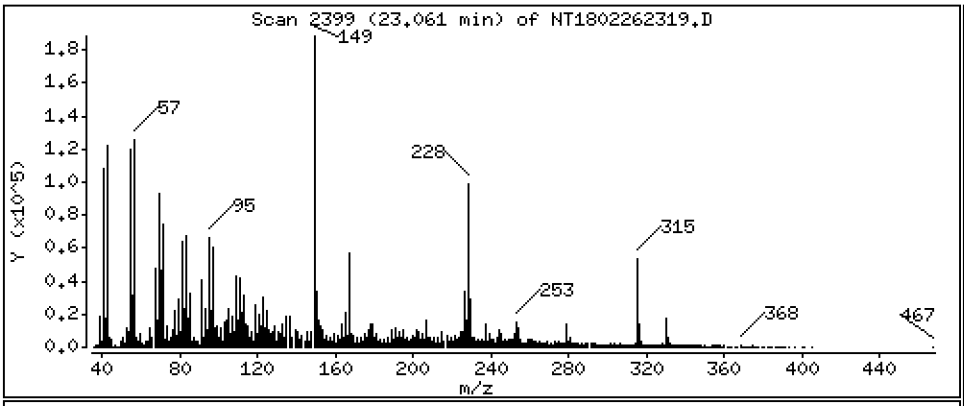
Operator: VTS

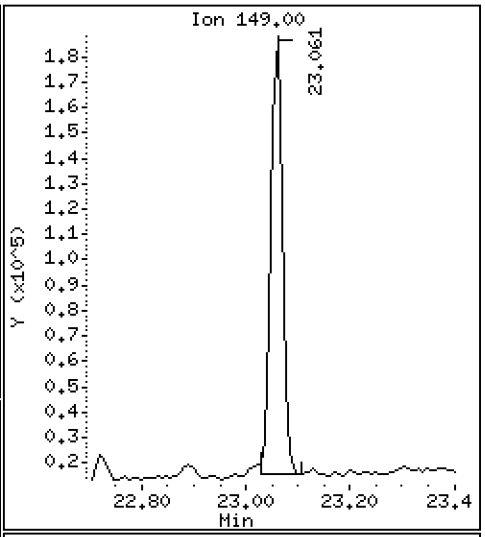
Column phase: ZB-5msi

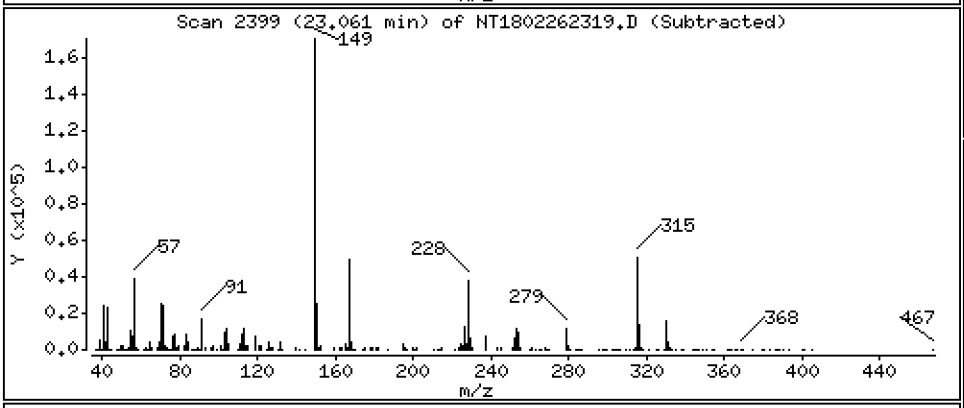
Column diameter: 0.25

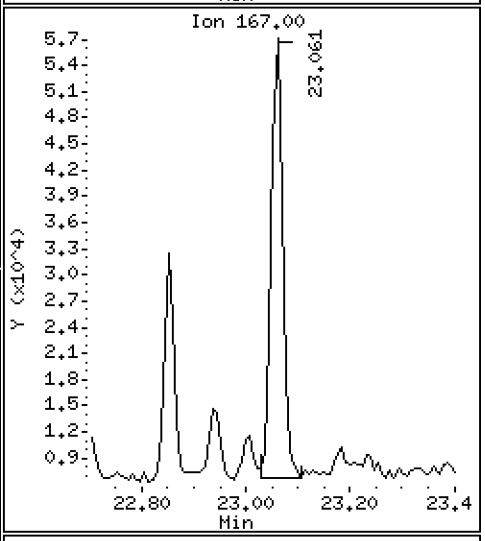
72 bis(2-Ethylhexyl)phthalate

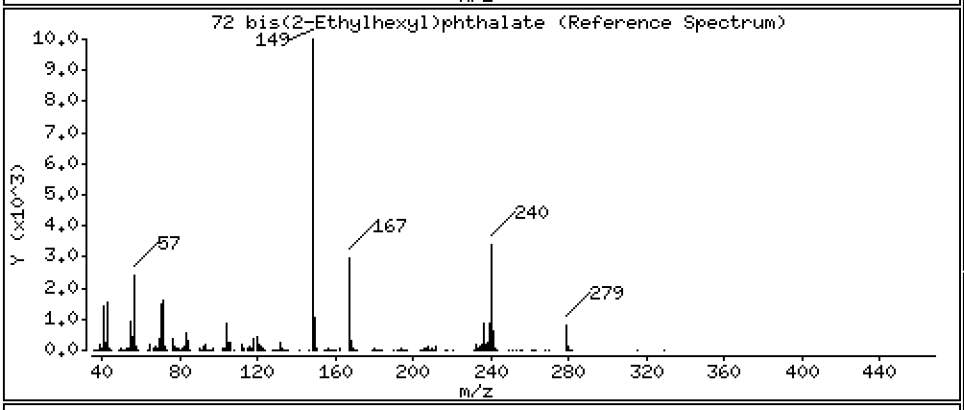
Concentration: 1.027 ug/mL

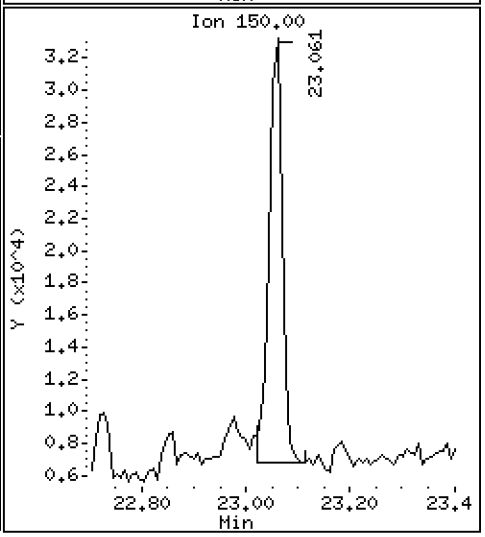


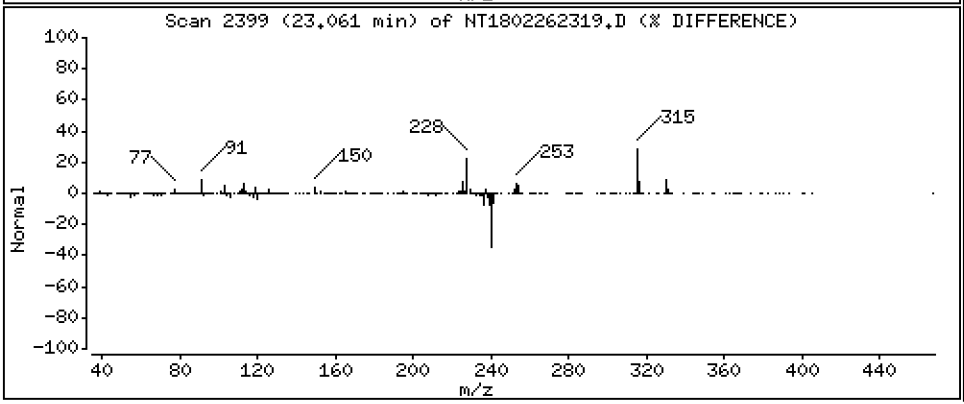












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

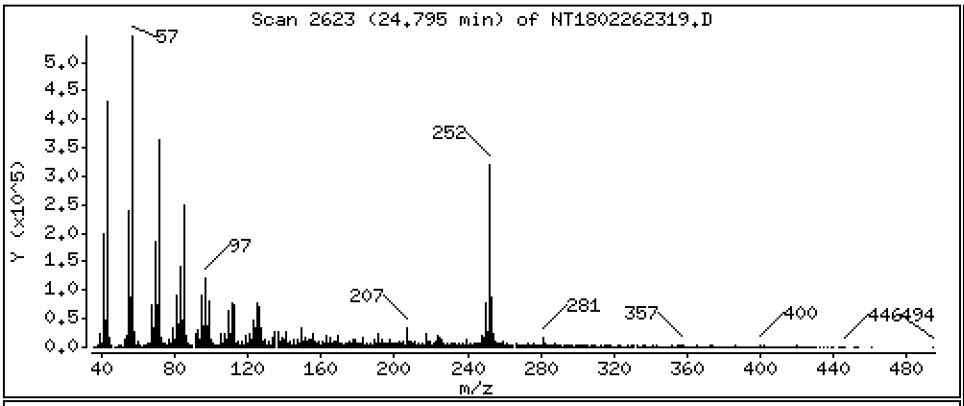
Operator: VTS

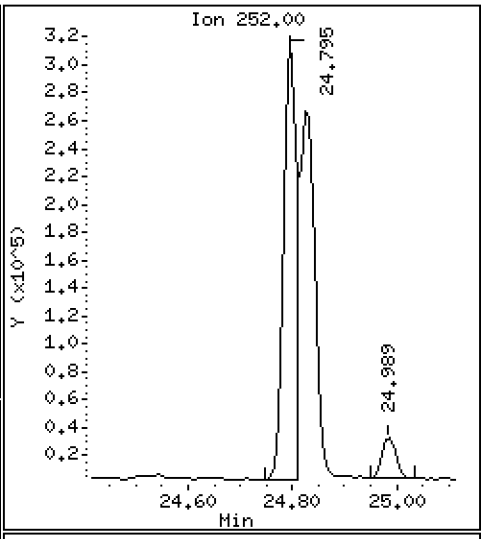
Column phase: ZB-5msi

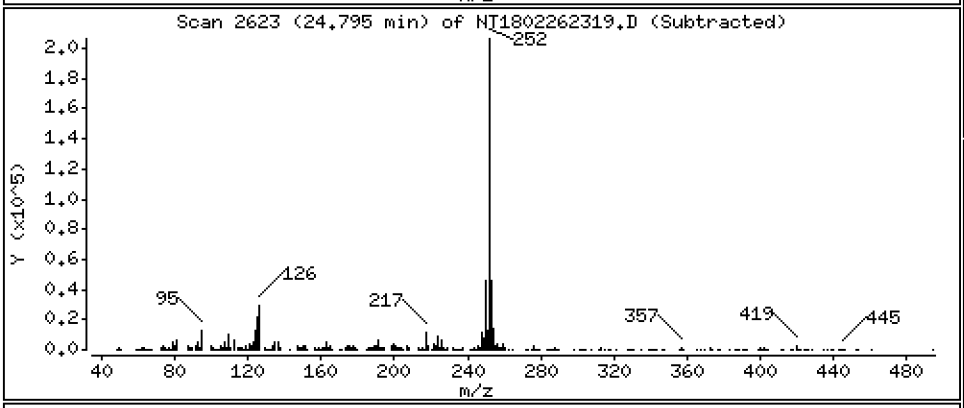
Column diameter: 0.25

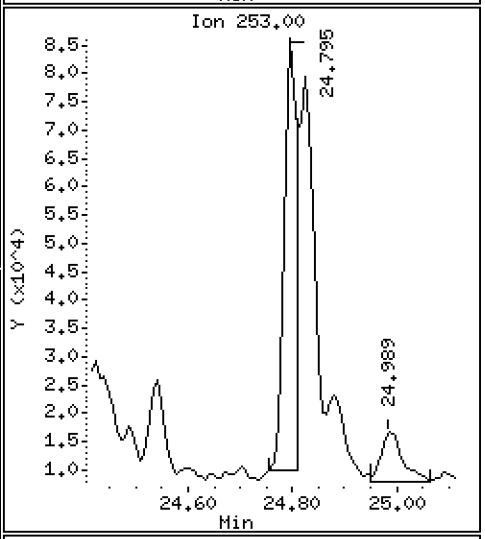
74 Benzo(b)fluoranthene

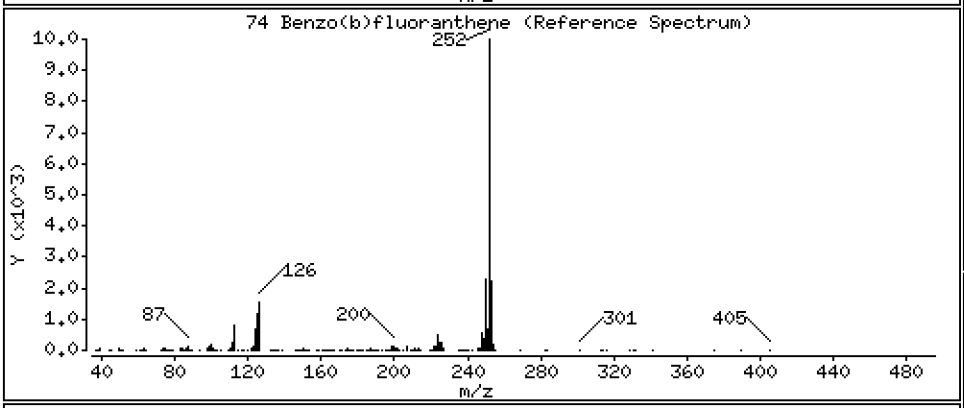
Concentration: 2.526 ug/mL

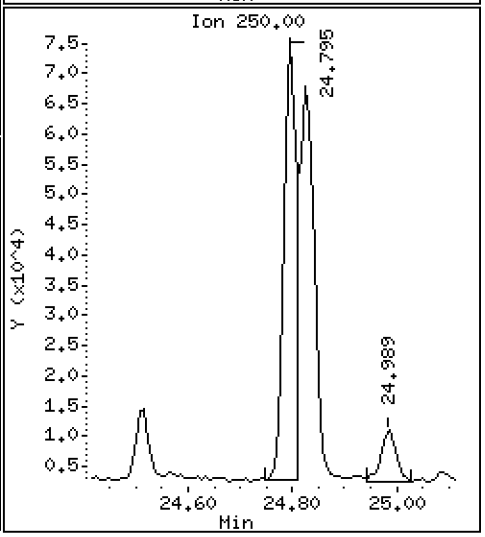


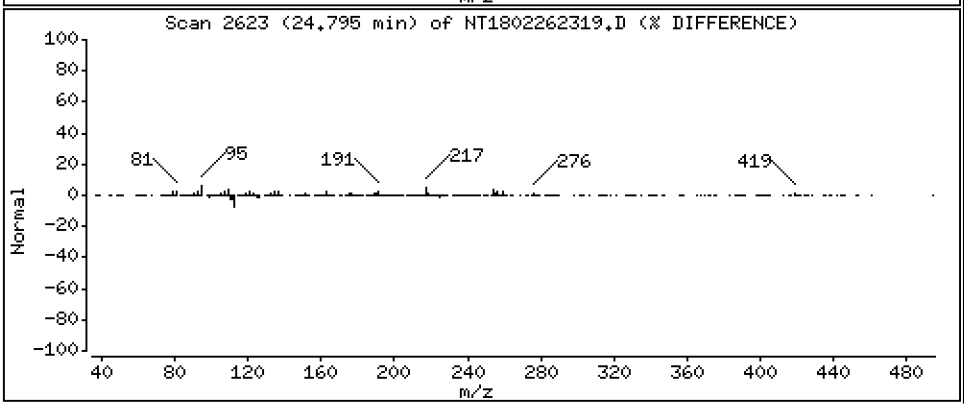












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

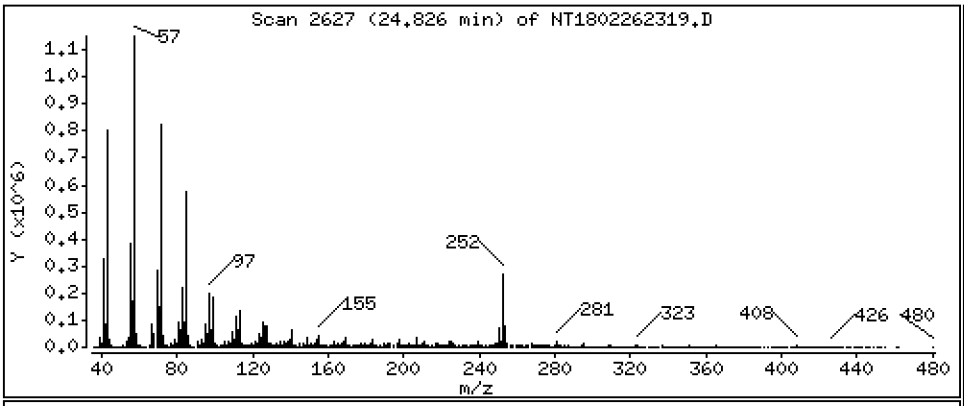
Operator: VTS

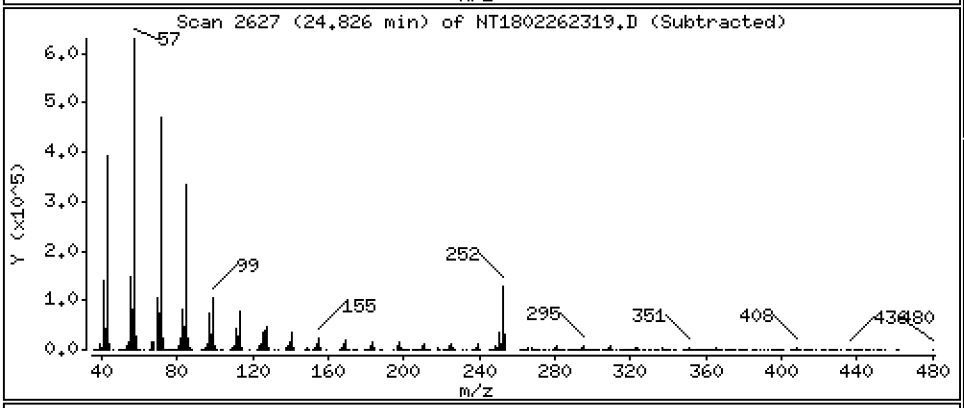
Column phase: ZB-5msi

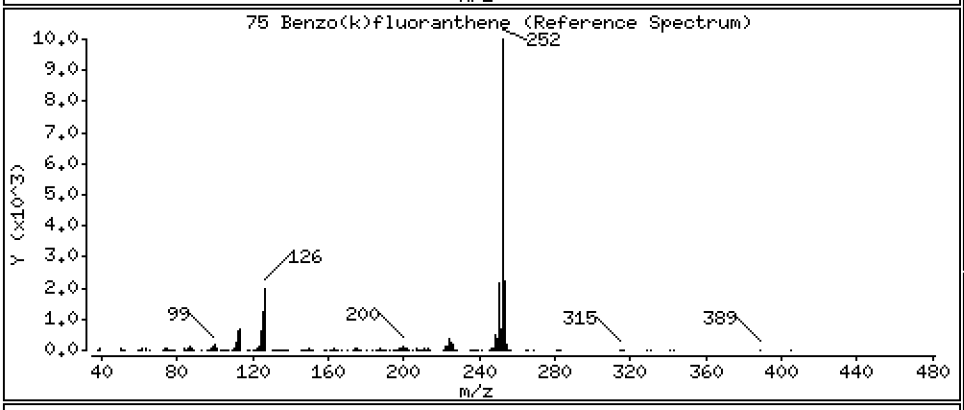
Column diameter: 0.25

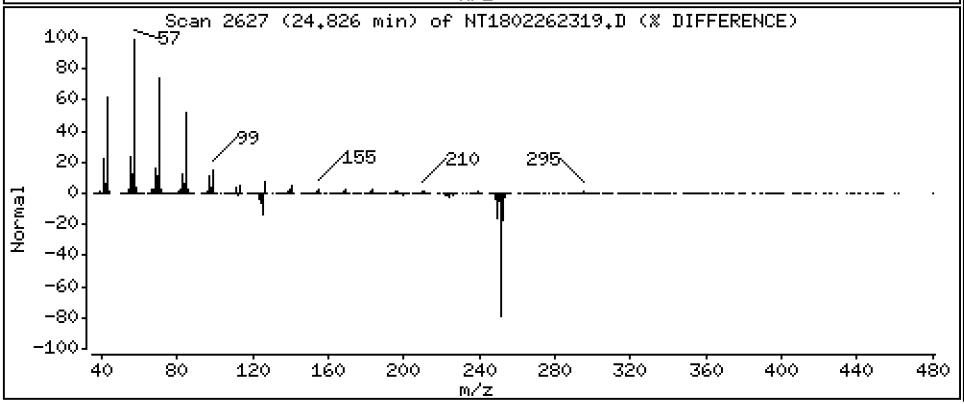
75 Benzo(k)fluoranthene

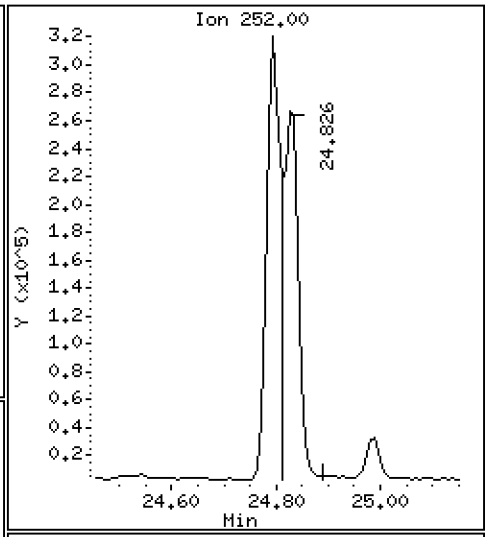
Concentration: 2.291 ug/mL

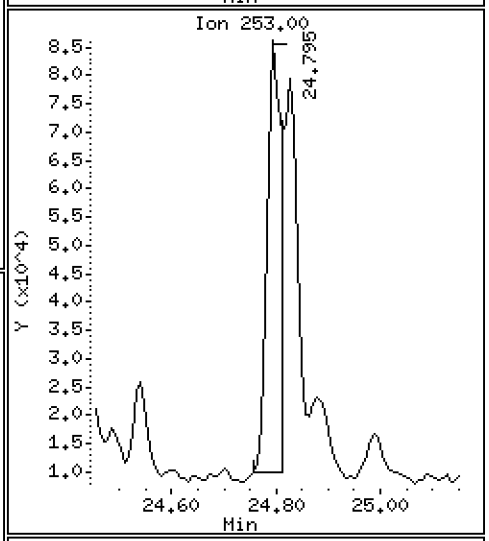


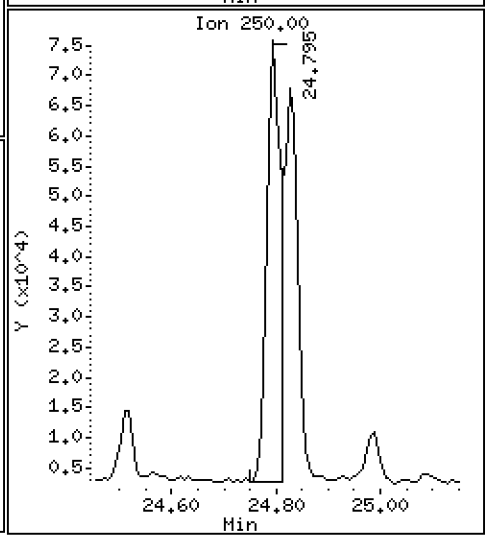












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262319.D

Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

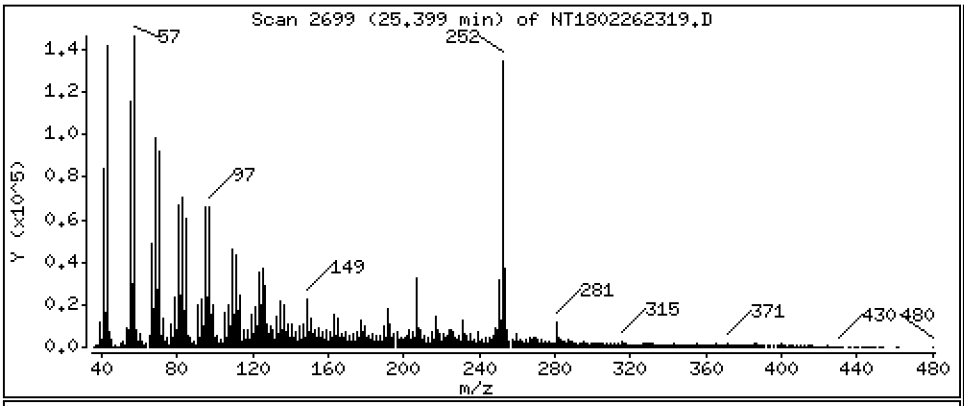
Operator: VTS

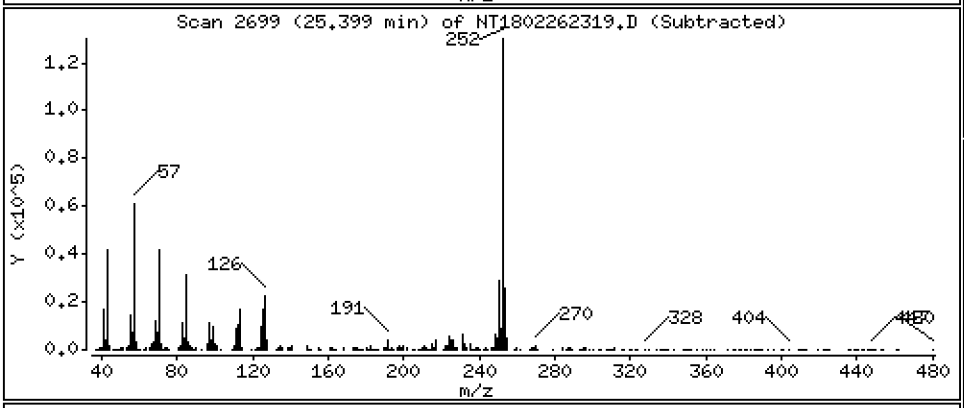
Column phase: ZB-5msi

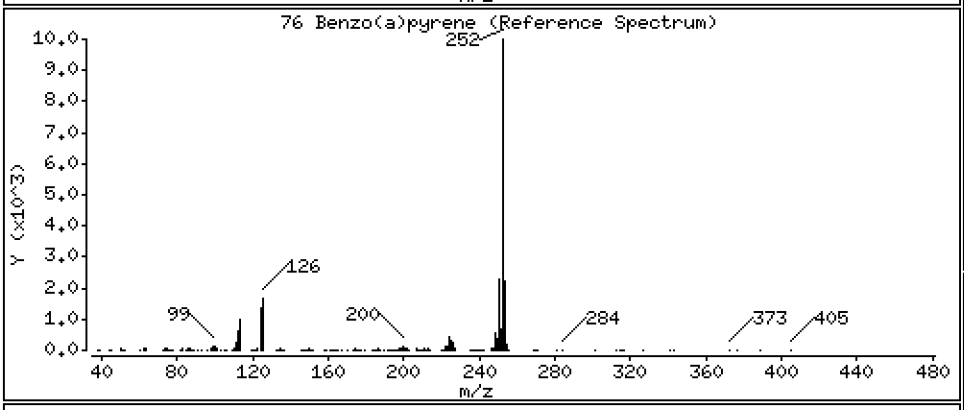
Column diameter: 0.25

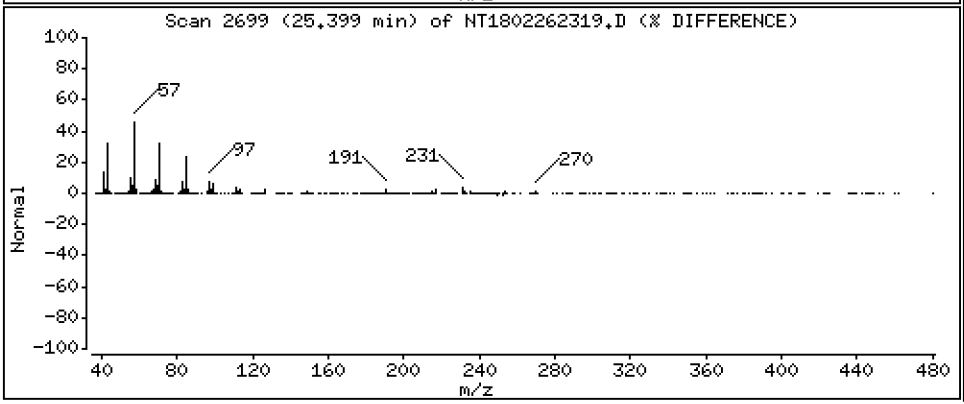
76 Benzo(a)pyrene

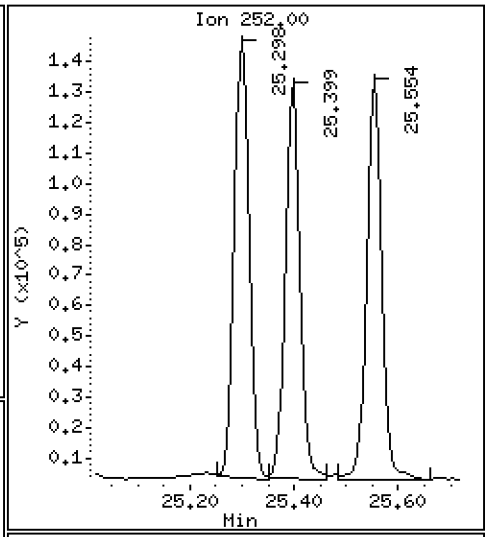
Concentration: 1.233 ug/mL

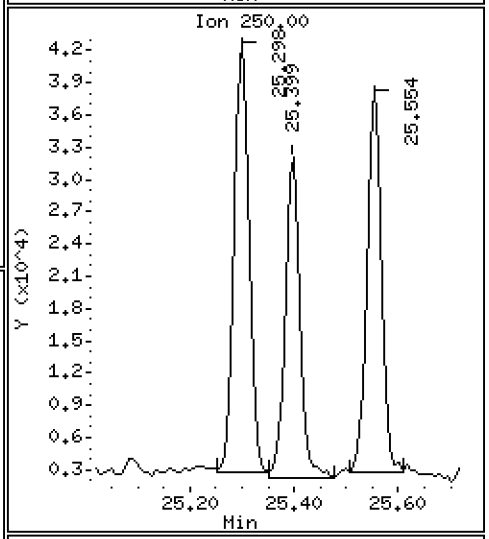


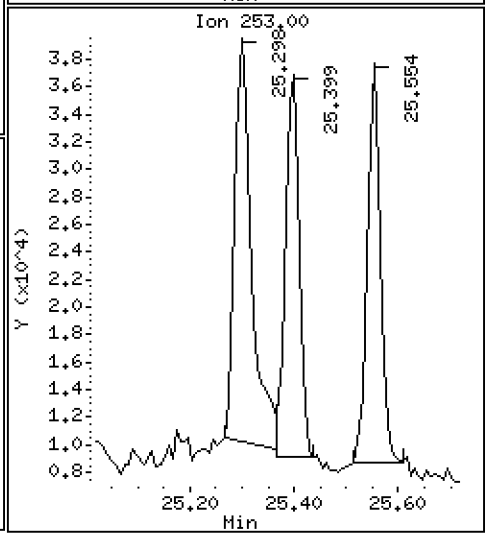












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262319.D

Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

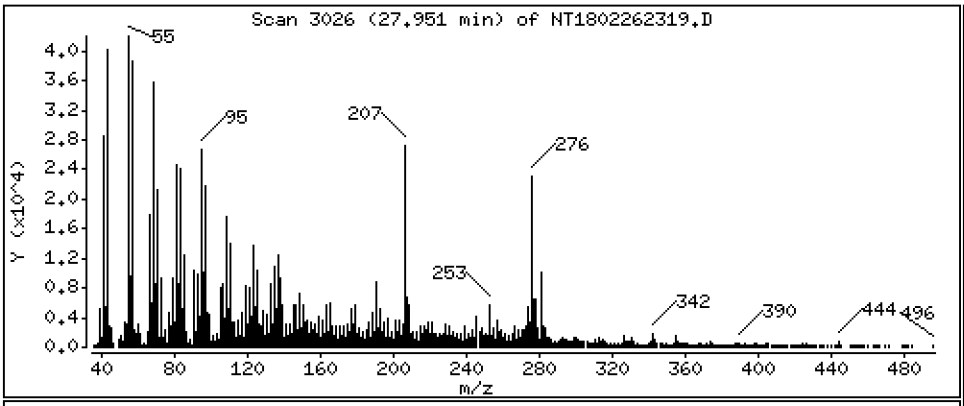
Operator: VTS

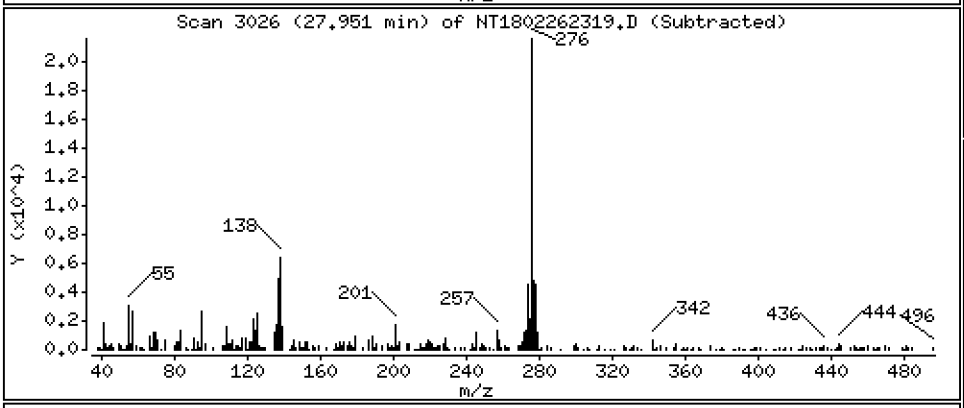
Column phase: ZB-5msi

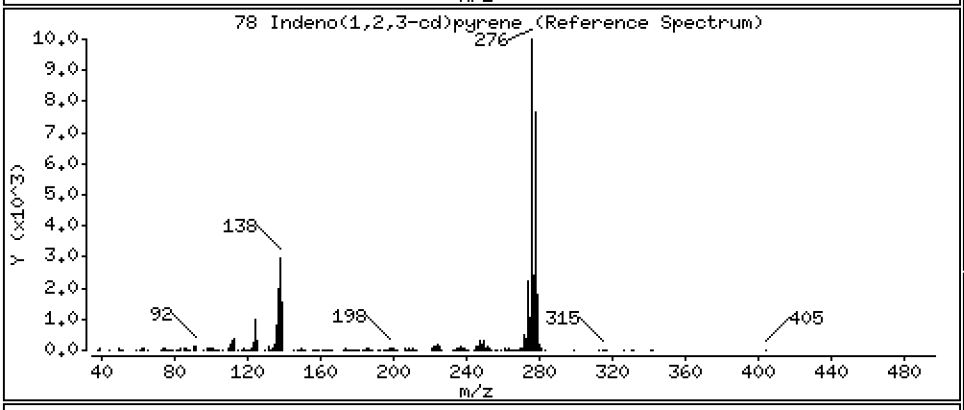
Column diameter: 0.25

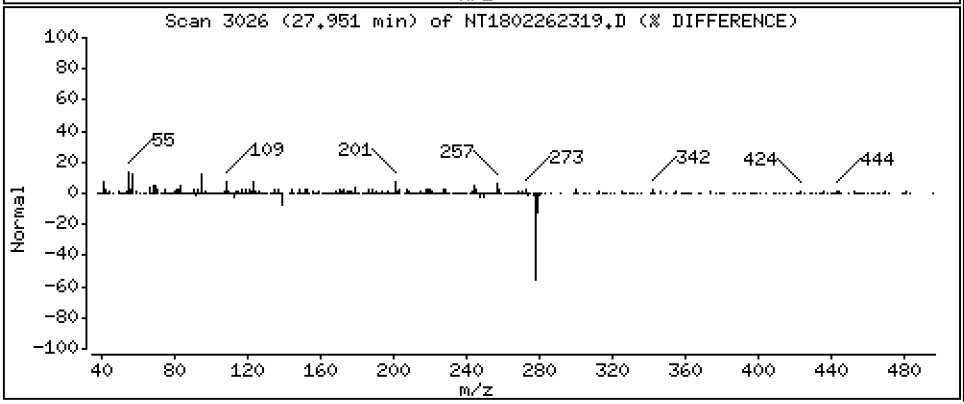
78 Indeno(1,2,3-cd)pyrene

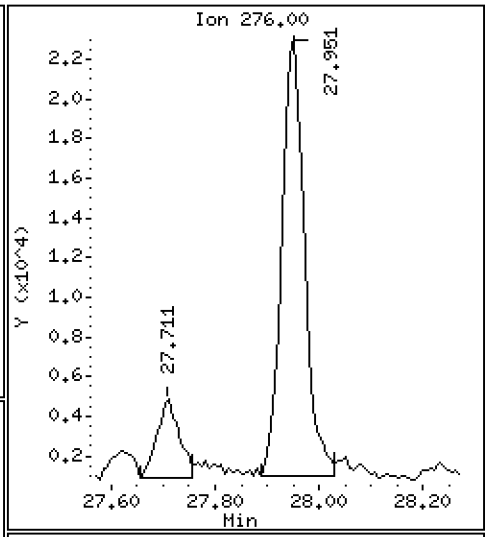
Concentration: 0.2609 ug/mL

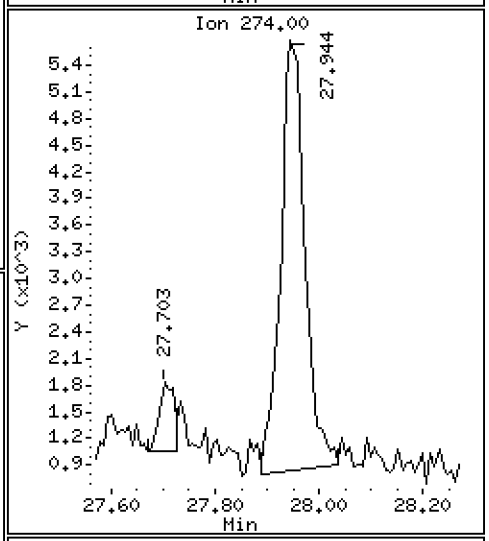


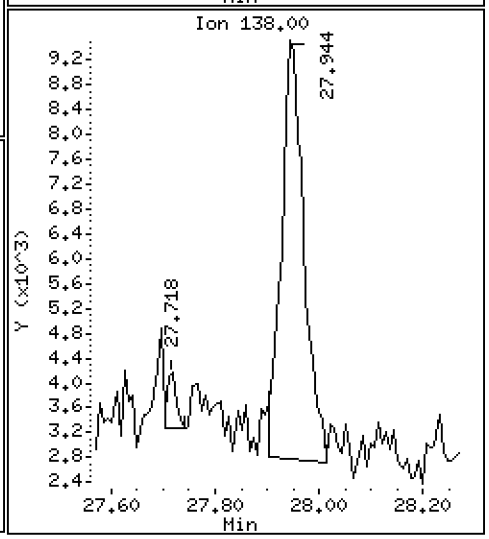












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

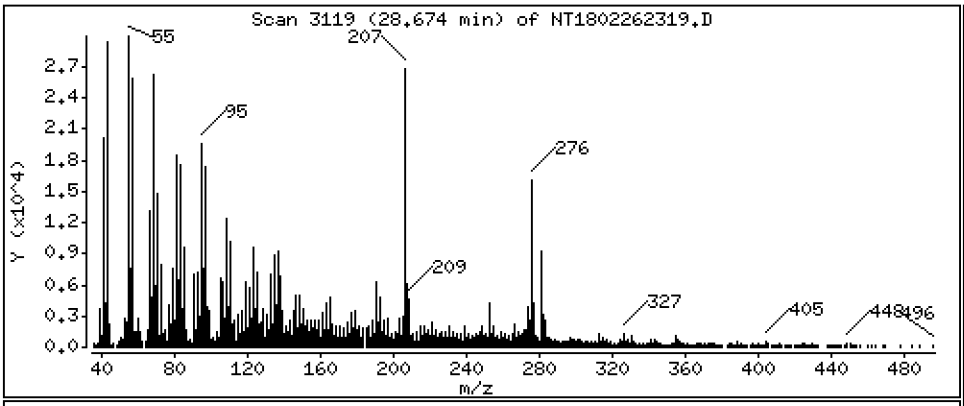
Operator: VTS

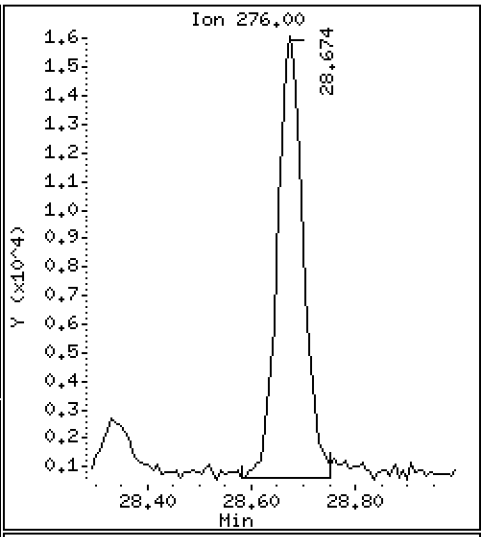
Column phase: ZB-5msi

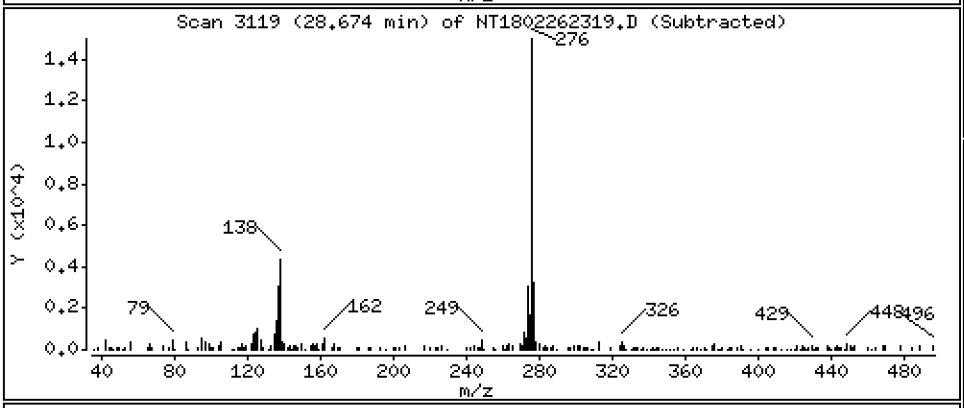
Column diameter: 0.25

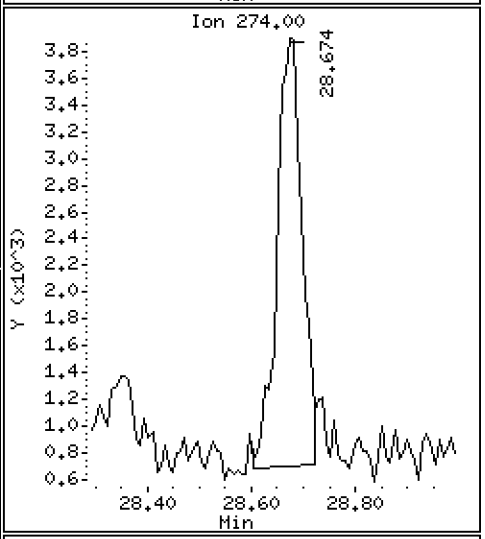
80 Benzo(g,h,i)perylene

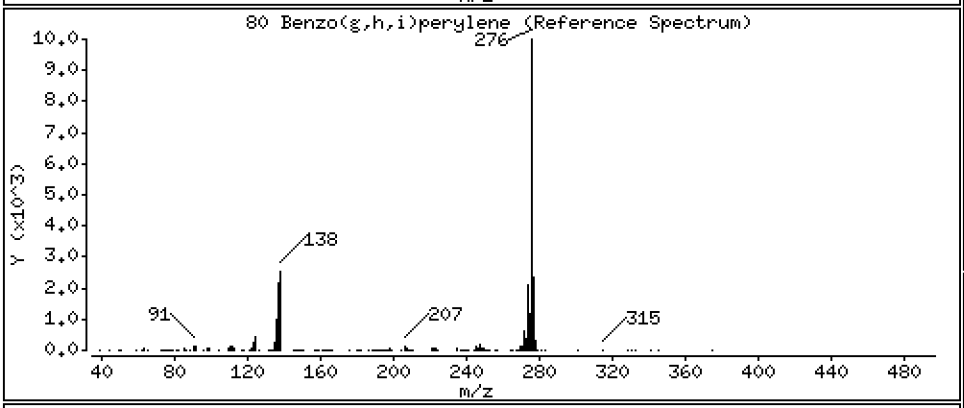
Concentration: 0.2590 ug/mL

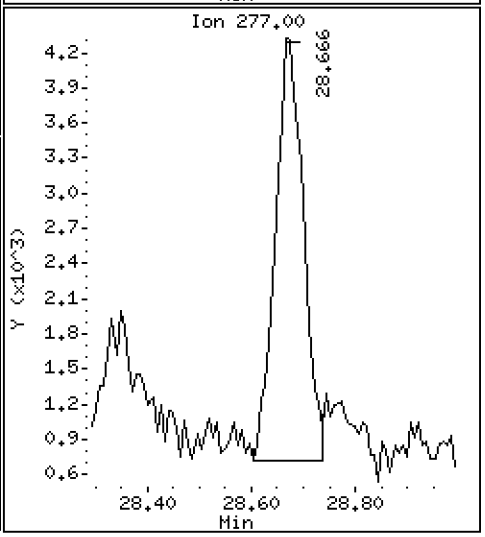


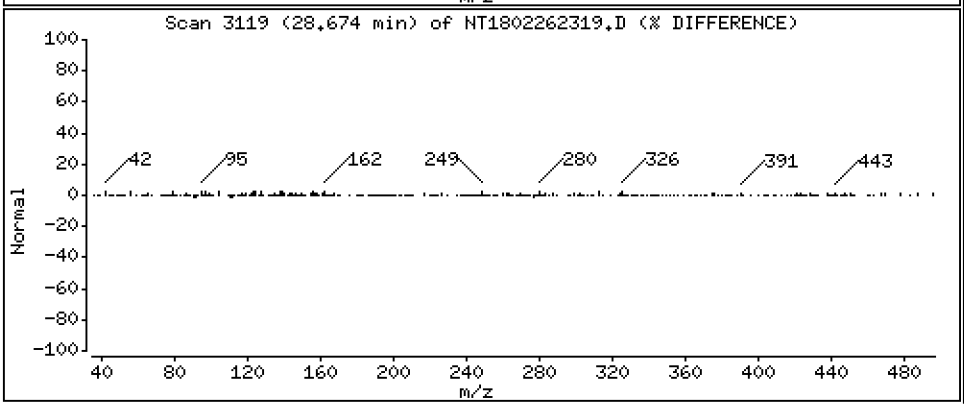












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

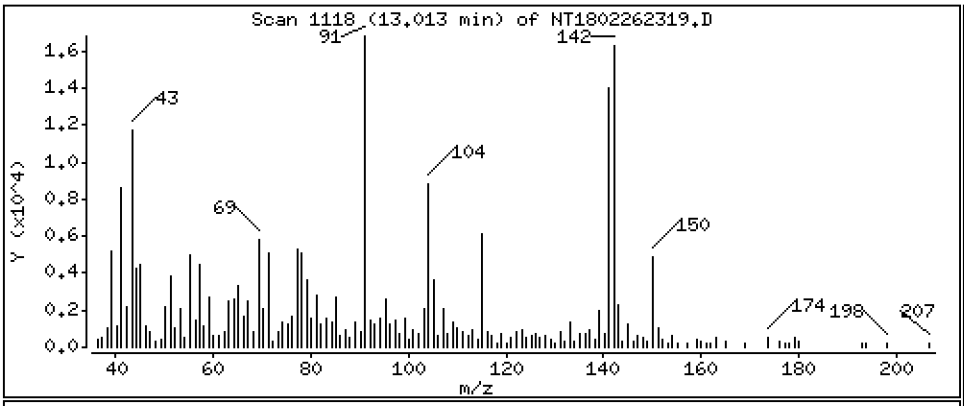
Operator: VTS

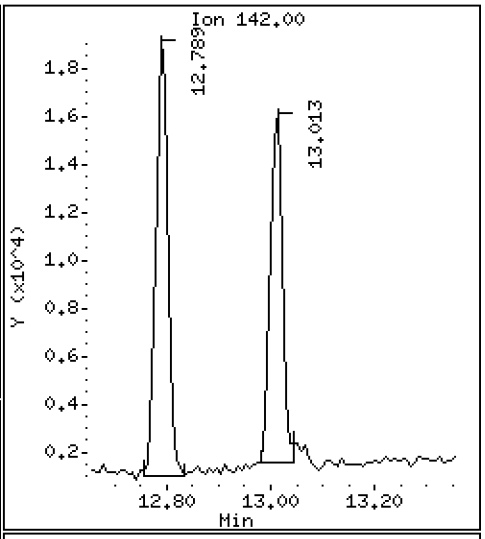
Column phase: ZB-5msi

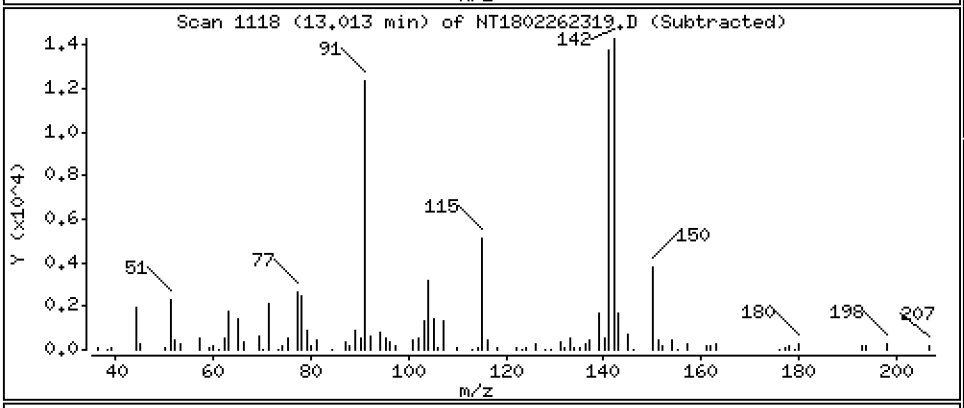
Column diameter: 0.25

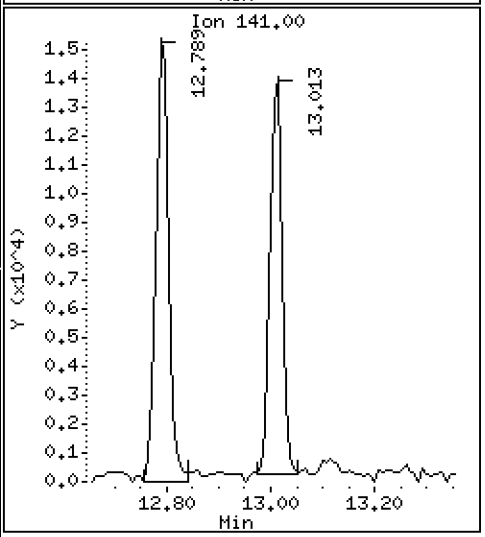
105 1-methylnaphthalene

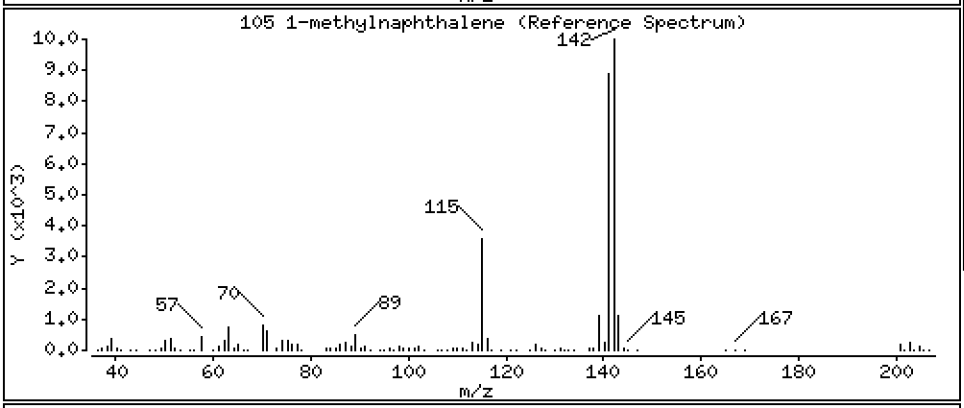
Concentration: 0.1265 ug/mL

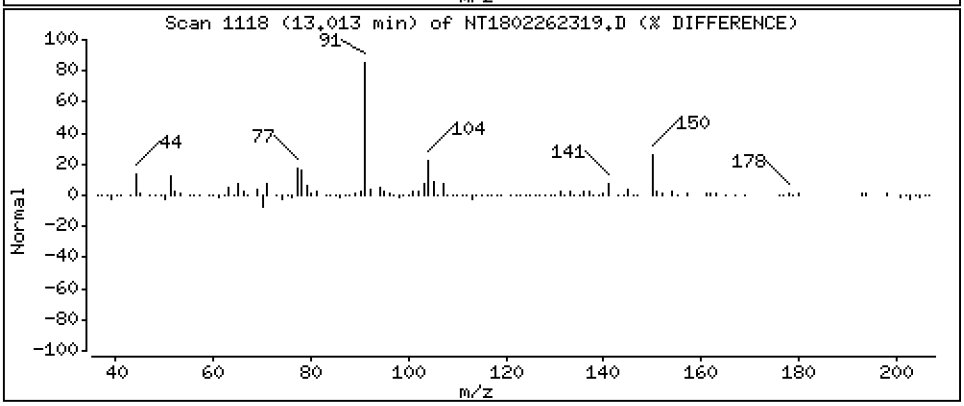












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

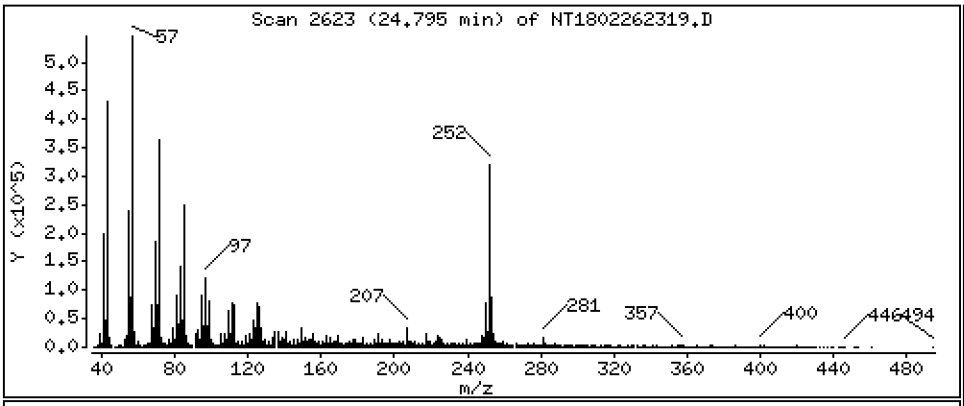
Operator: VTS

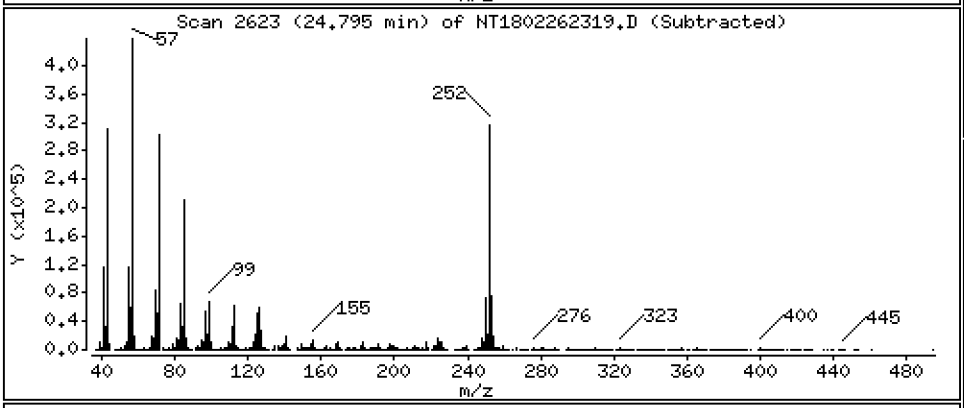
Column phase: ZB-5msi

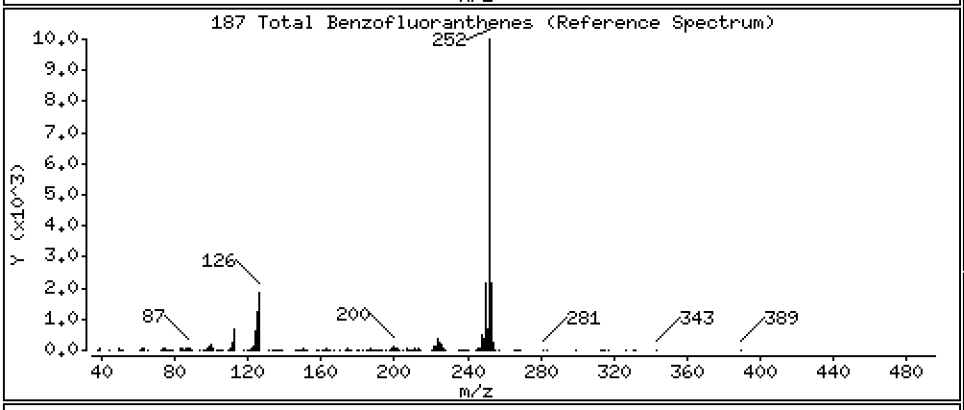
Column diameter: 0.25

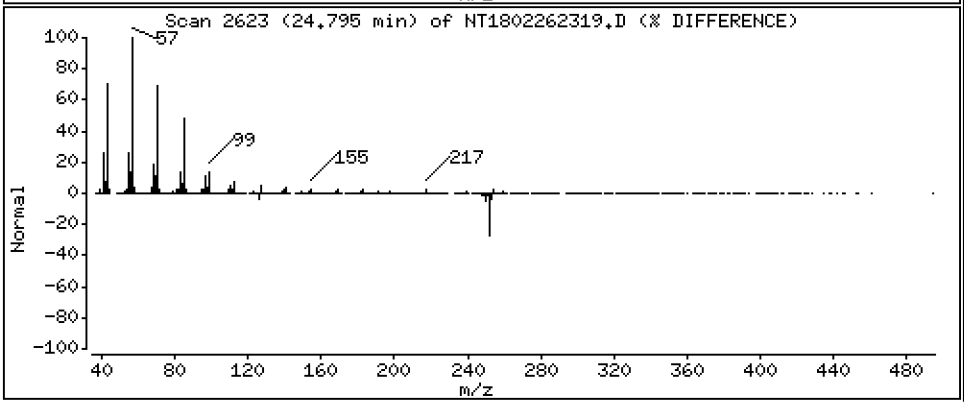
187 Total Benzofluoranthenes

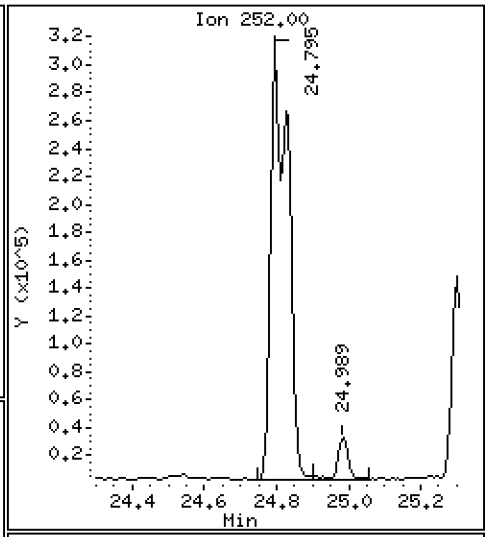
Concentration: 4.592 ug/mL

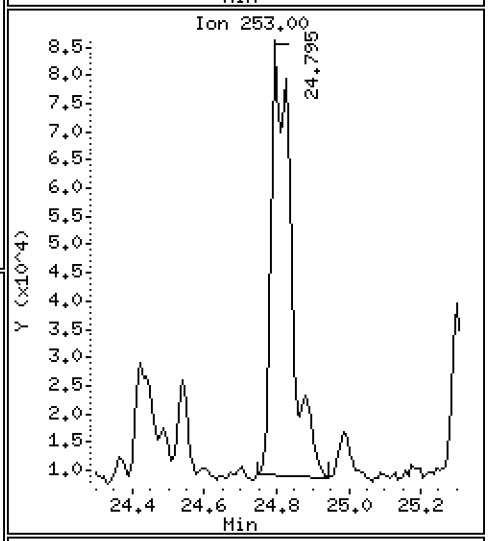


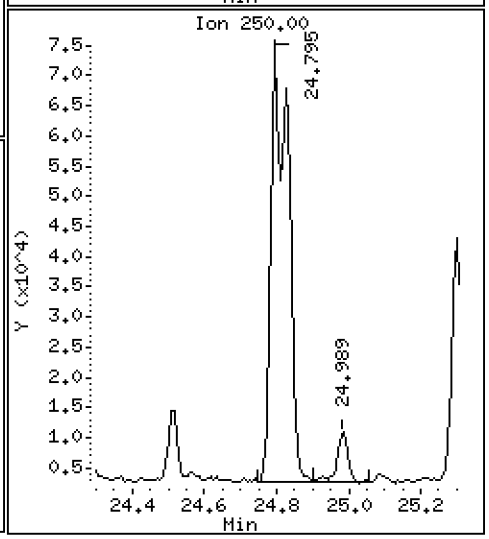












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262319.D
Lab Smp Id: 23A0134-10
Inj Date : 26-FEB-2023 23:54
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-10
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.774	6.743	(0.760)	430596	4.85780	4.858
$	2 Phenol-d5	99	8.312	8.296	(0.932)	590755	5.15691	5.157
	3 Phenol	94	8.335	8.319	(0.935)	226372	1.89925	1.899
$	5 2-Chlorophenol-d4	132	8.574	8.559	(0.962)	501322	5.02906	5.029
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	259808	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.272	9.272	(1.040)	206228	2.91823	2.918
	12 1,2-Dichlorobenzene	146	9.303	9.295	(1.044)	450	0.00420	0.004202
	11 Benzyl alcohol	108	9.202	9.186	(1.032)	31558	0.55685	0.5568
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.699	9.683	(1.088)	9638	0.10030	0.1003
$	18 Nitrobenzene-d5	82	9.993	9.993	(0.879)	354025	3.43526	3.435
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	10.880	10.990	(0.957)	84131	2.37637	2.376(M)
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	966998	4.00000	
	28 Naphthalene	128	11.411	11.403	(1.004)	42357	0.14249	0.1425
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	28936	0.14325	0.1433
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.570	13.570	(0.908)	769469	3.42343	3.423
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	14.638	14.630	(0.979)	27370	0.09255	0.09255
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	14.947	14.947	(1.000)	533103	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.009	15.009	(1.004)	15938	0.08515	0.08515
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.334	15.334	(1.026)	31239	0.11531	0.1153
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	15.906	15.921	(1.064)	67389	0.34095	0.3410
	49 Fluorene	166	16.045	16.037	(1.073)	23951	0.11032	0.1103
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	16.577	16.569	(1.109)	196833	7.08317	7.083
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	17.960	17.952	(1.000)	1097408	4.00000	
	60 Phenanthrene	178	18.007	17.999	(1.003)	236718	0.68579	0.6858
	61 Anthracene	178	18.099	18.092	(1.008)	100807	0.30646	0.3065
	62 Carbazole	167	18.432	18.424	(1.026)	48255	0.16009	0.1601
	63 Di-n-butylphthalate	149	19.252	19.237	(1.072)	19033	0.05705	0.05705
	64 Fluoranthene	202	20.444	20.382	(0.889)	1321033	3.36841	3.368
	65 Pyrene	202	20.854	20.800	(0.907)	1164768	2.78473	2.785
$	66 Terphenyl-d14	244	21.125	21.094	(0.919)	1326573	3.95428	3.954
	67 Butylbenzylphthalate	149	22.031	22.023	(0.958)	18324	0.11538	0.1154
	68 Benzo(a)anthracene	228	22.975	22.952	(0.999)	466702	1.15488	1.155
*	69 Chrysene-d12	240	22.998	22.983	(1.000)	1119364	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.045	23.029	(1.002)	685830	1.63209	1.632
	72 bis(2-Ethylhexyl)phthalate	149	23.060	23.053	(0.960)	252962	1.02701	1.027
*	134 Di-n-octylphthalate-d4	153	24.028	24.020	(1.000)	1715607	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	24.795	24.764	(0.972)	573659	2.52562	2.526
	75 Benzo(k)fluoranthene	252	24.826	24.802	(0.974)	589726	2.29096	2.291(M)
	76 Benzo(a)pyrene	252	25.399	25.368	(0.996)	259576	1.23278	1.233
*	77 Perylene-d12	264	25.499	25.476	(1.000)	696203	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.951	27.920	(1.096)	68966	0.26091	0.2609
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	28.673	28.642	(1.124)	54890	0.25902	0.2590
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	142	13.013	13.005	(1.145)	23124	0.12646	0.1265
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.795	24.802	(0.972)	1054536	4.59203	4.592
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262319.D
Lab Smp Id: 23A0134-10
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	259808	6.43
27 Naphthalene-d8	943164	471582	1886328	966998	2.53
42 Acenaphthene-d10	501893	250947	1003786	533103	6.22
59 Phenanthrene-d10	896502	448251	1793004	1097408	22.41
69 Chrysene-d12	842481	421241	1684962	1119364	32.87
134 Di-n-octylphthala	1278043	639022	2556086	1715607	34.24
77 Perylene-d12	915681	457841	1831362	696203	-23.97

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.07
134 Di-n-octylphthala	24.02	23.52	24.52	24.03	0.03
77 Perylene-d12	25.48	24.98	25.98	25.50	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262319.D

Lab ID: 23A0134-10
nt18.i, ABN.m, 26-FEB-2023 23:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.967	-0.0097	Benzoic acid

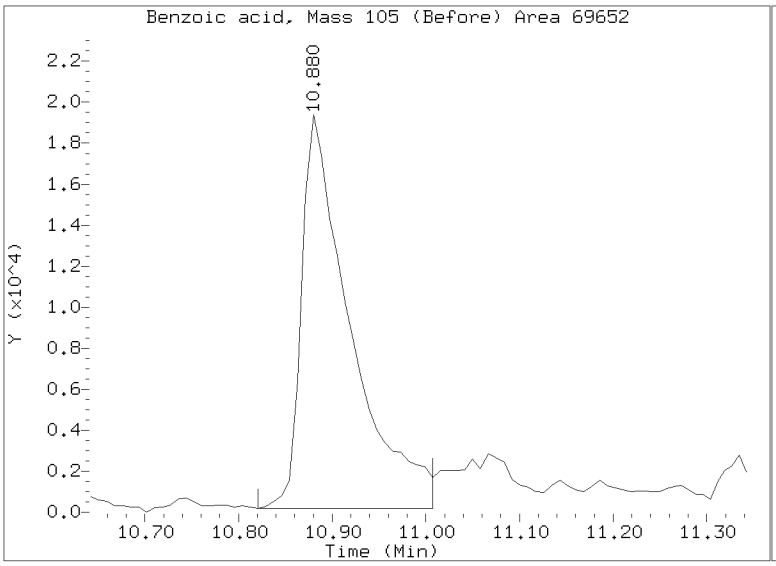
RRT check based on Ccal File: NT1802262302.D

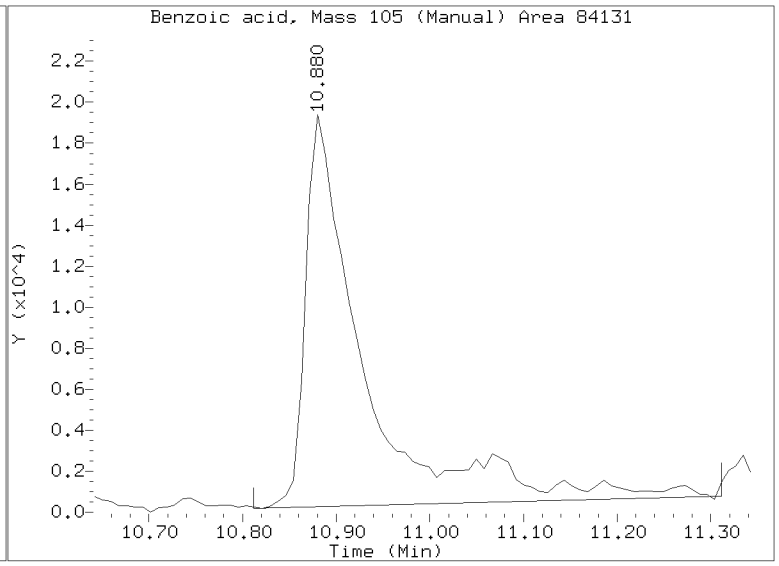
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

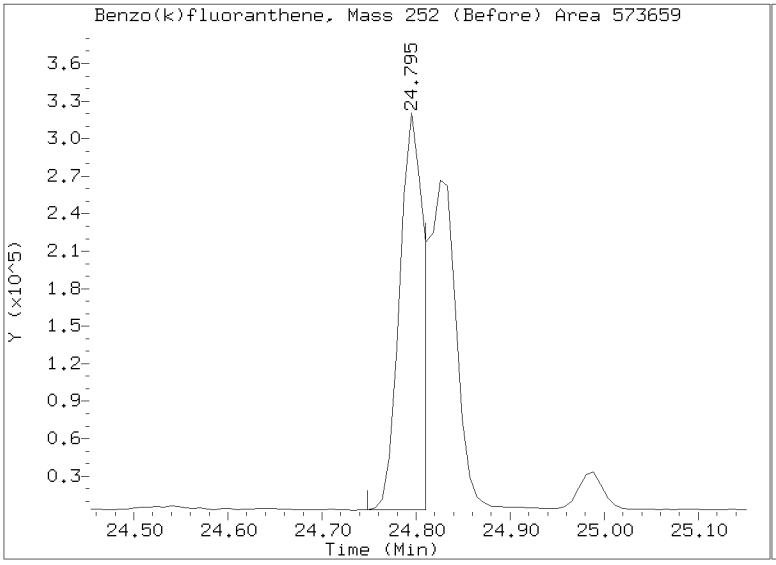
* Only compounds listed in the work order have been verified by the analyst *

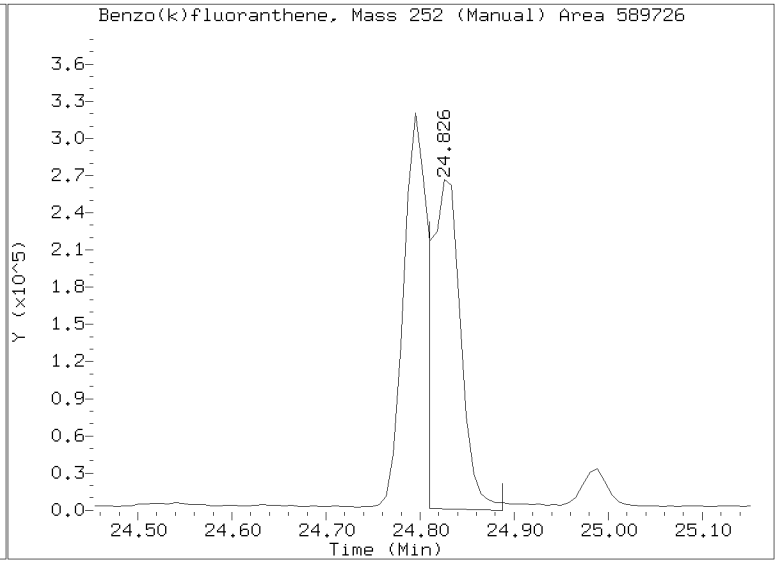
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/NT1802262319.D
Injection Date: 26-FEB-2023 23:54
Lab ID:23A0134-10 Client ID:
Report Date: 03/10/2023 07:47









Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1123

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-11 C	SDG:	23A0134
Sampled:	01/06/23 13:29	Prepared:	01/19/23 13:35	File ID:	NT1802262320.D
% Solids:	51.95	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/27/23 00:34
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	19.28 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	315		4.4	20.0
106-44-5	4-Methylphenol	1	8.6	J	7.4	20.0
91-20-3	Naphthalene	1	12.9	J	4.2	20.0
91-57-6	2-Methylnaphthalene	1	10.5	J	4.5	20.0
208-96-8	Acenaphthylene	1	8.7	J	6.2	20.0
131-11-3	Dimethylphthalate	1	20.0	U	4.4	20.0
83-32-9	Acenaphthene	1	9.3	J	5.2	20.0
132-64-9	Dibenzofuran	1	20.0	U	14.1	20.0
86-73-7	Fluorene	1	20.0	U	14.5	20.0
85-01-8	Phenanthrene	1	77.3		8.7	20.0
120-12-7	Anthracene	1	35.5		7.2	20.0
206-44-0	Fluoranthene	1	193		6.1	20.0
129-00-0	Pyrene	1	205		5.7	20.0
85-68-7	Butylbenzylphthalate	1	17.1	J	9.4	20.0
56-55-3	Benzo(a)anthracene	1	107		6.0	20.0
218-01-9	Chrysene	1	156		6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	136		5.5	49.9
	Benzofluoranthenes, Total	1	385		10.0	39.9
50-32-8	Benzo(a)pyrene	1	116		4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	25.8		14.6	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.0	U	17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	25.4		13.6	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	748.80	547	73.0	27 - 120	
Phenol-d5	748.80	554	74.0	29 - 120	
2-Chlorophenol-d4	748.80	545	72.8	31 - 120	
1,2-Dichlorobenzene-d4	499.20	316	63.3	32 - 120	
Nitrobenzene-d5	499.20	363	72.7	30 - 120	
2-Fluorobiphenyl	499.20	360	72.1	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1123

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

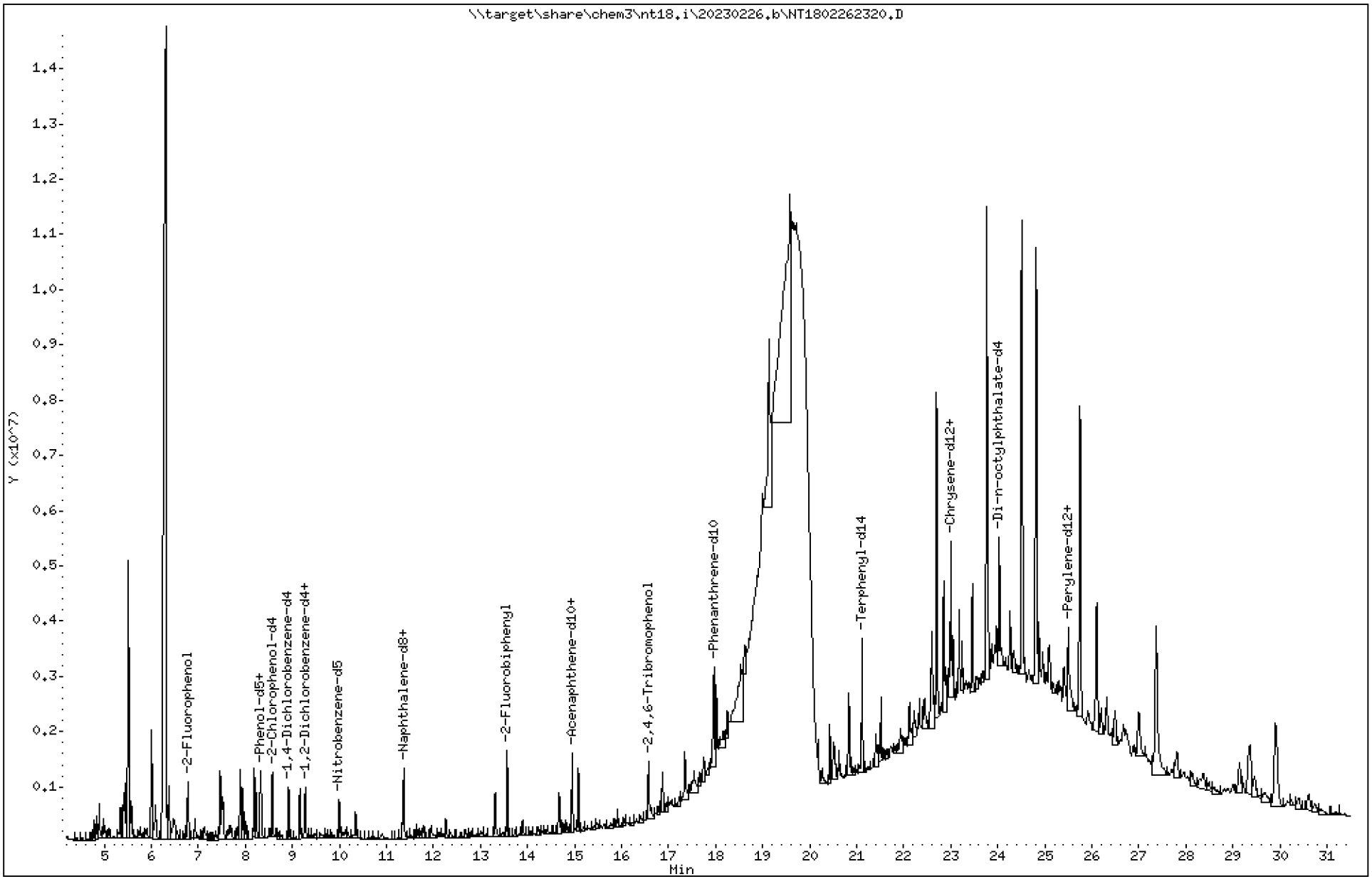
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-11 C	SDG:	23A0134
Sampled:	01/06/23 13:29	Prepared:	01/19/23 13:35	File ID:	NT1802262320.D
% Solids:	51.95	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/27/23 00:34
Batch:	BLA0410	Sequence:	SLC0111	Initial/Final:	19.28 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	748.80	718	95.9	24 - 134	
p-Terphenyl-d14	499.20	390	78.1	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D
Date : 27-FEB-2023 00:34
Client ID:
Sample Info: 23A0134-11

Instrument: nt18.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

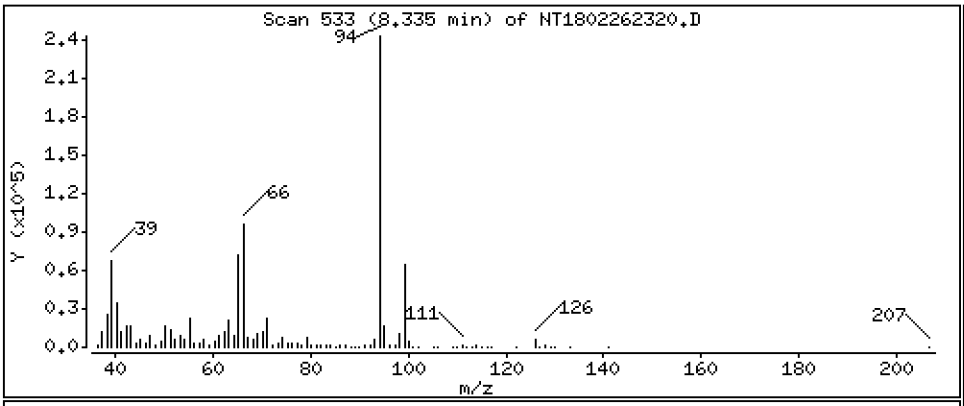
Operator: VTS

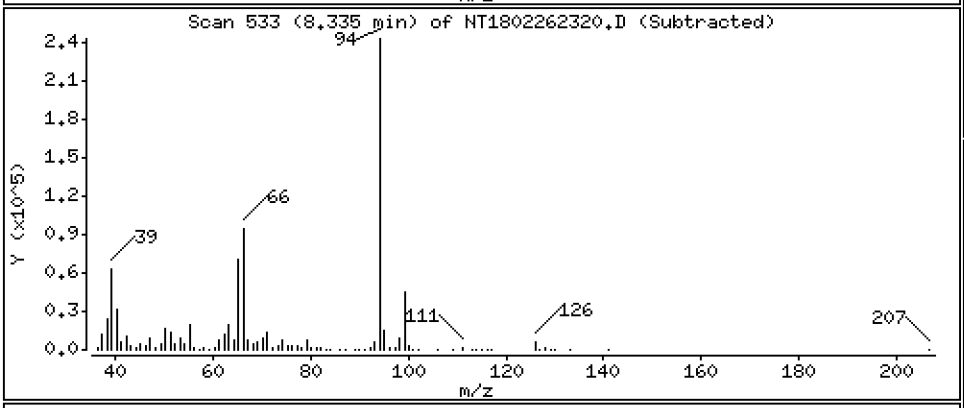
Column phase: ZB-5msi

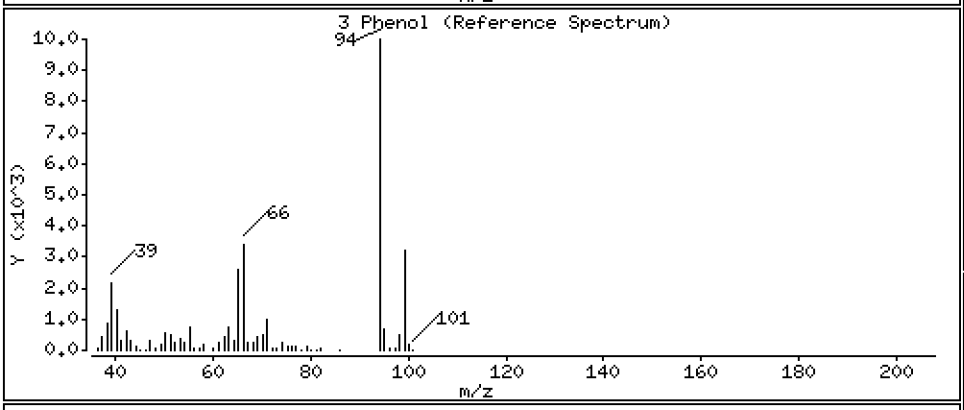
Column diameter: 0.25

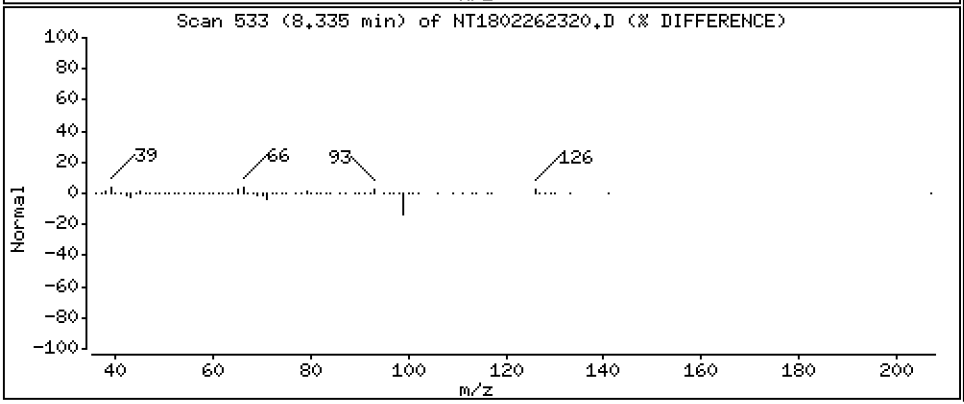
3 Phenol

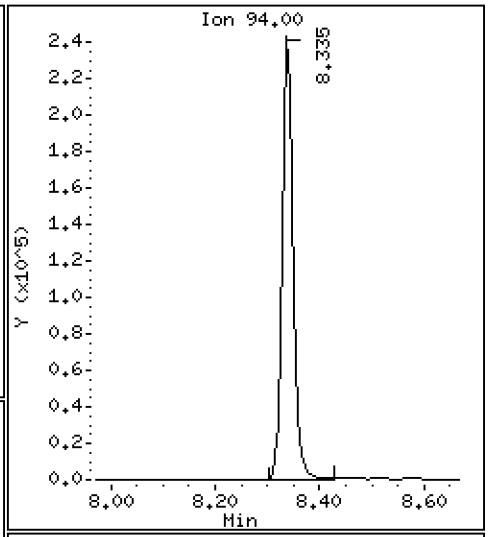
Concentration: 3.153 ug/mL

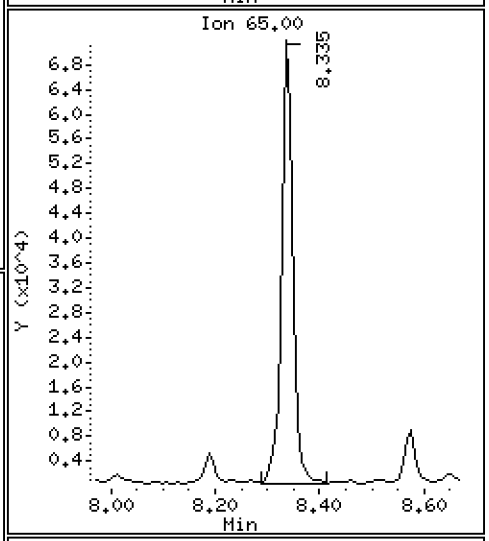


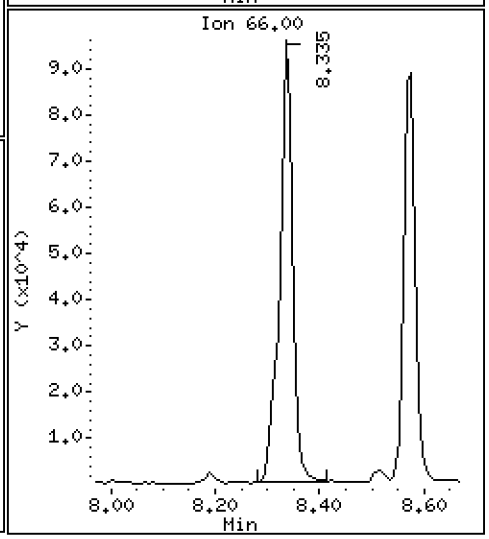












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

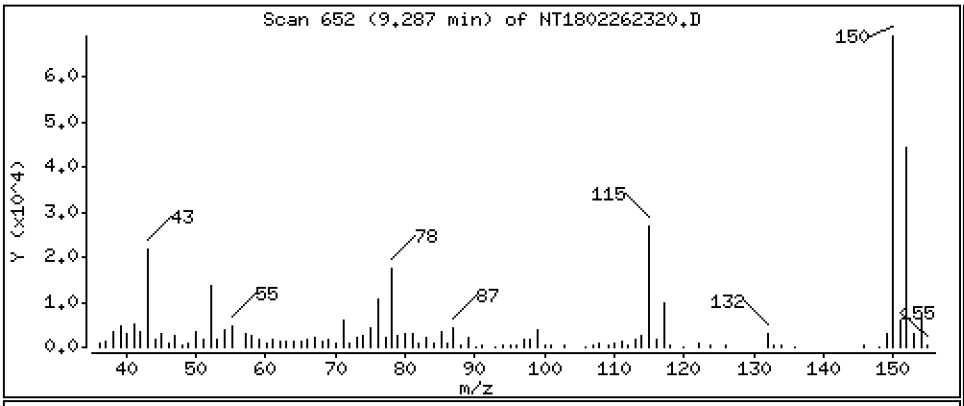
Operator: VTS

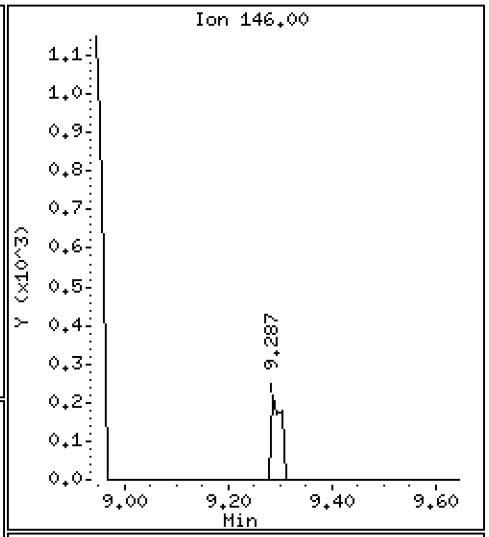
Column phase: ZB-5msi

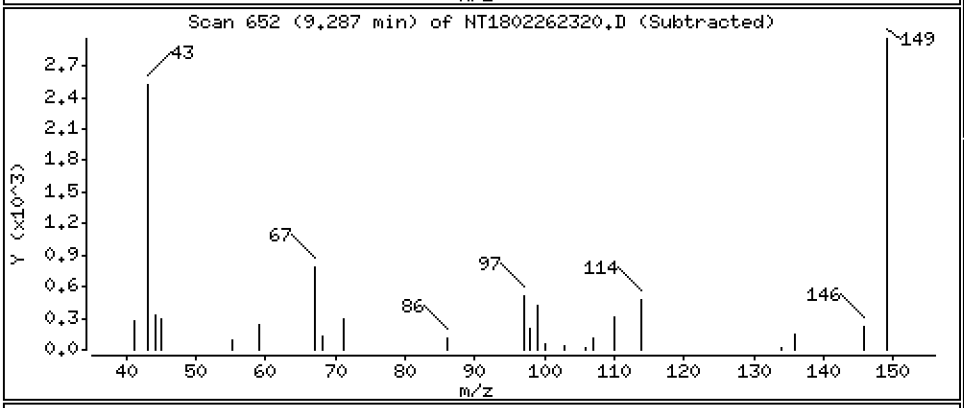
Column diameter: 0.25

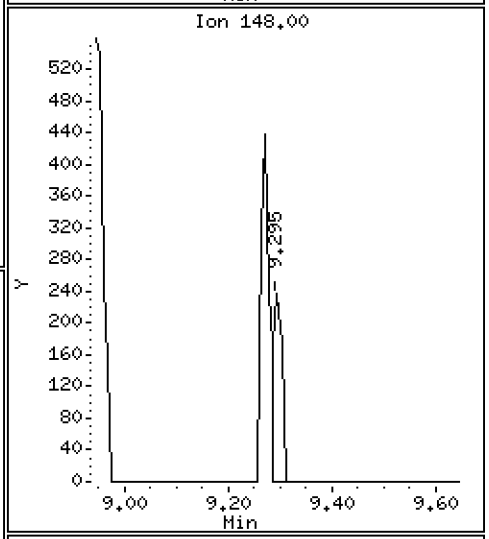
12 1,2-Dichlorobenzene

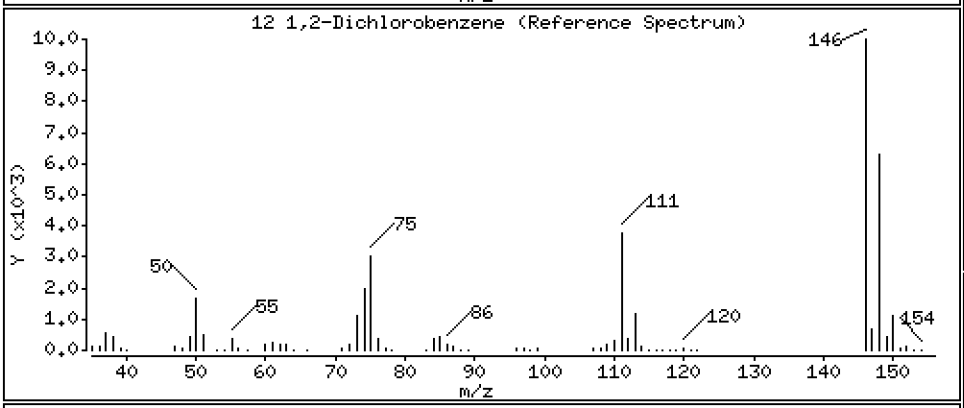
Concentration: 0.002566 ug/mL

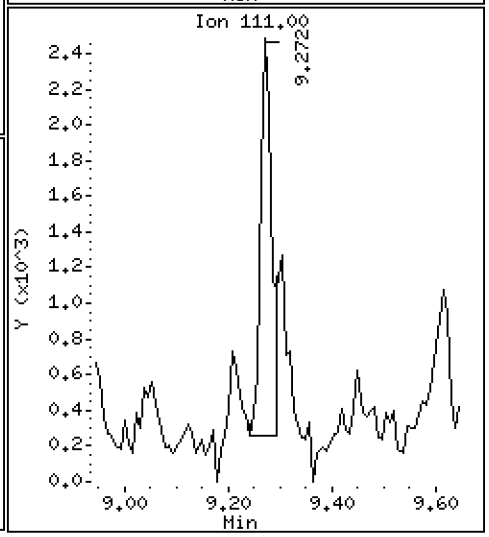


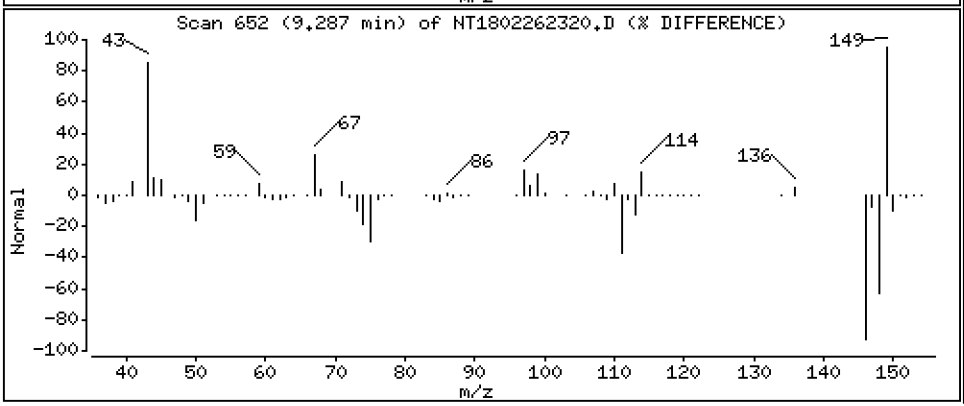












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

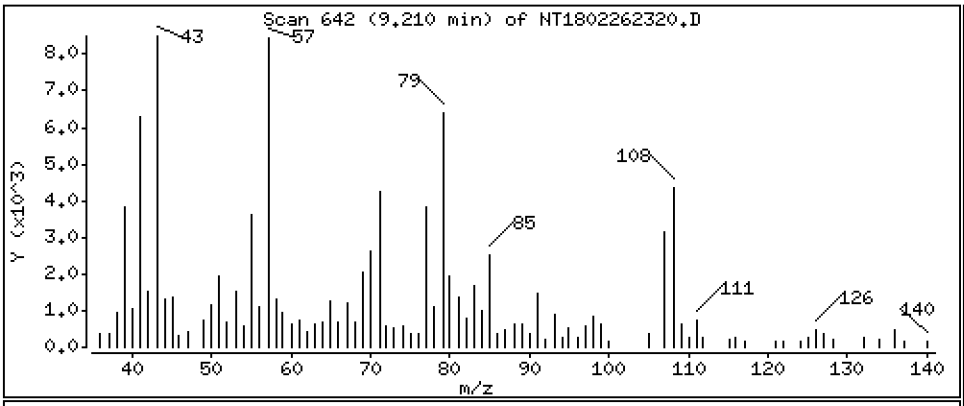
Operator: VTS

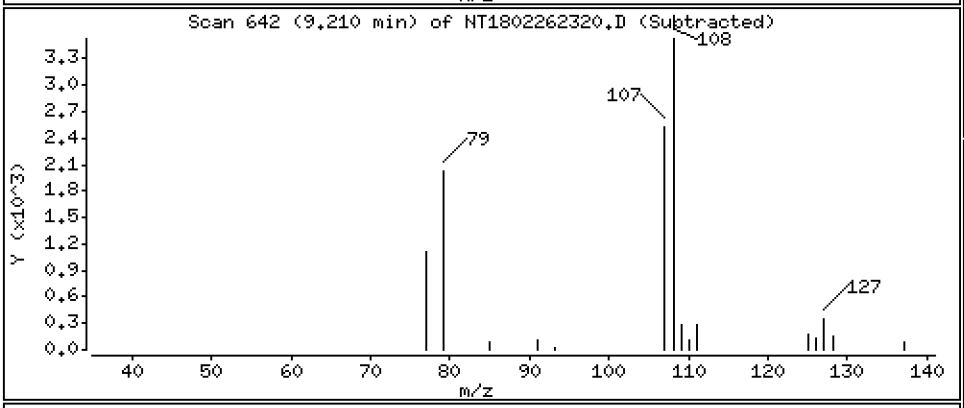
Column phase: ZB-5msi

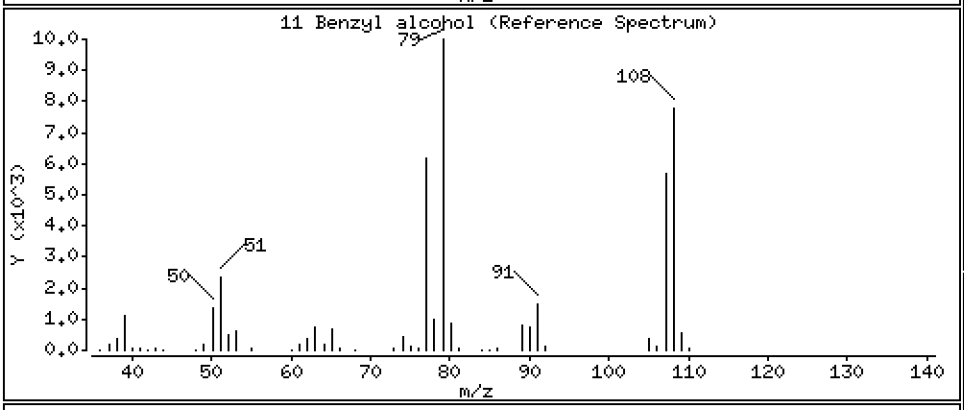
Column diameter: 0.25

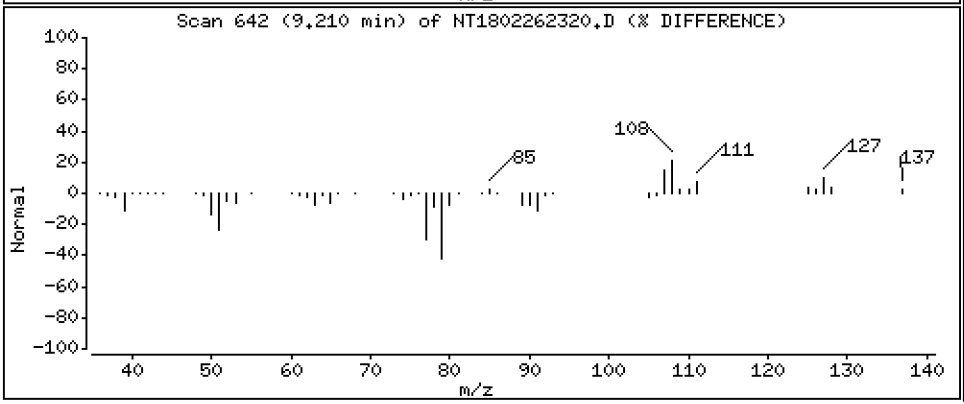
11 Benzyl alcohol

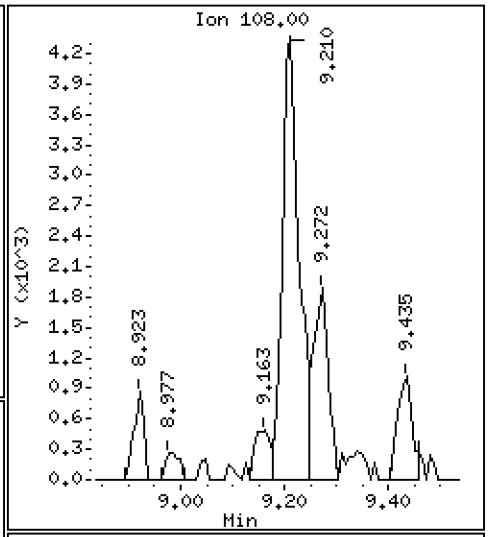
Concentration: 0.1844 ug/mL

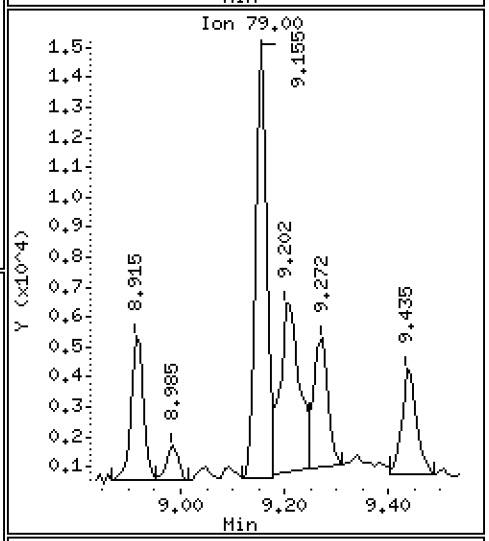


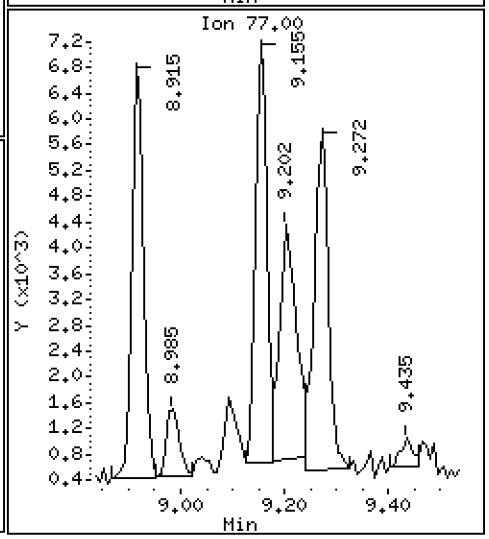












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

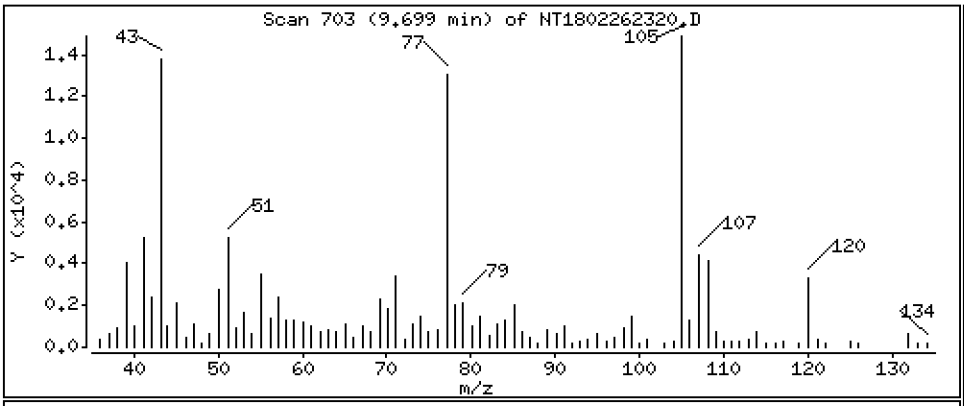
Operator: VTS

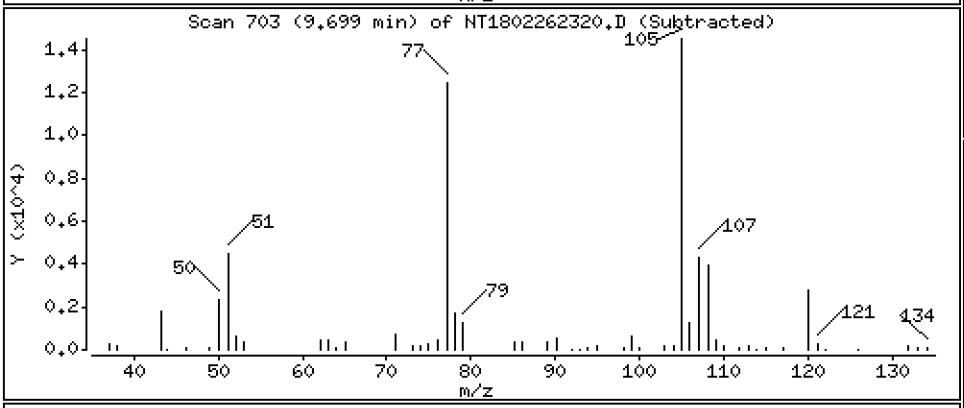
Column phase: ZB-5msi

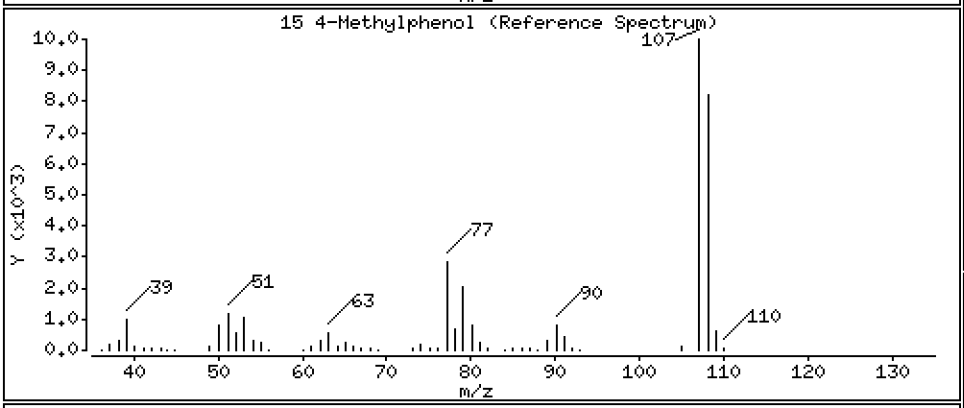
Column diameter: 0.25

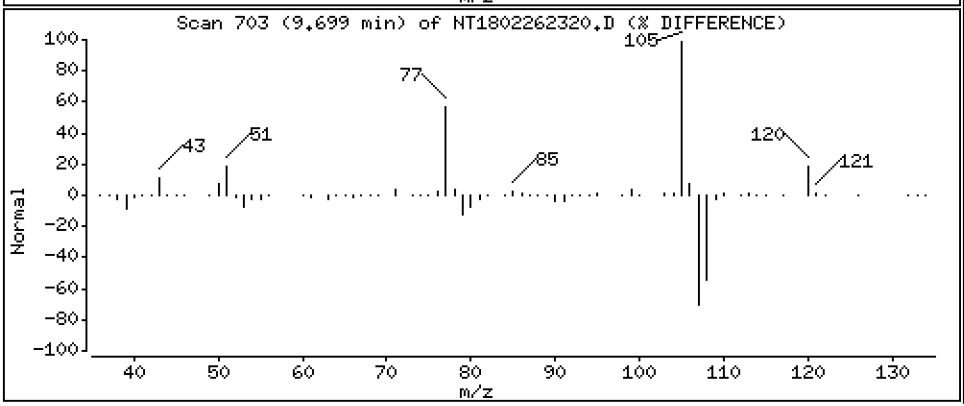
15 4-Methylphenol

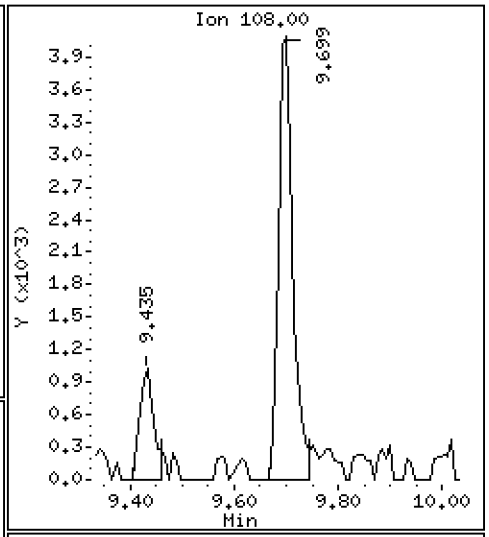
Concentration: 0.08628 ug/mL

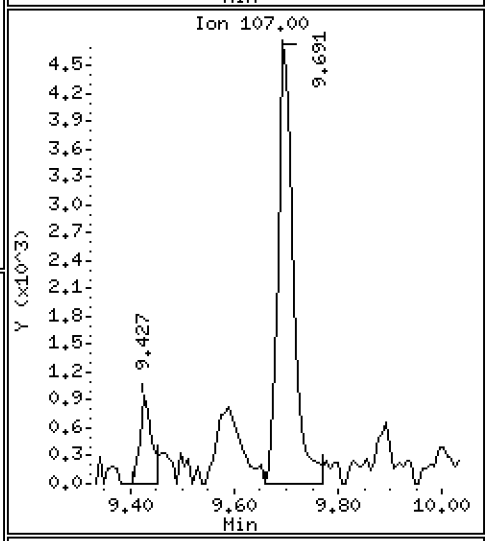


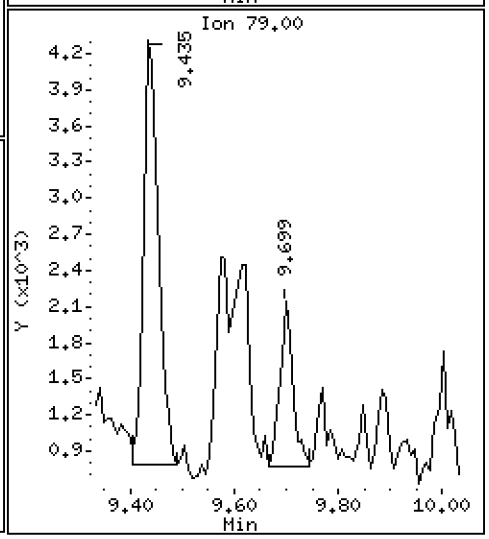












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

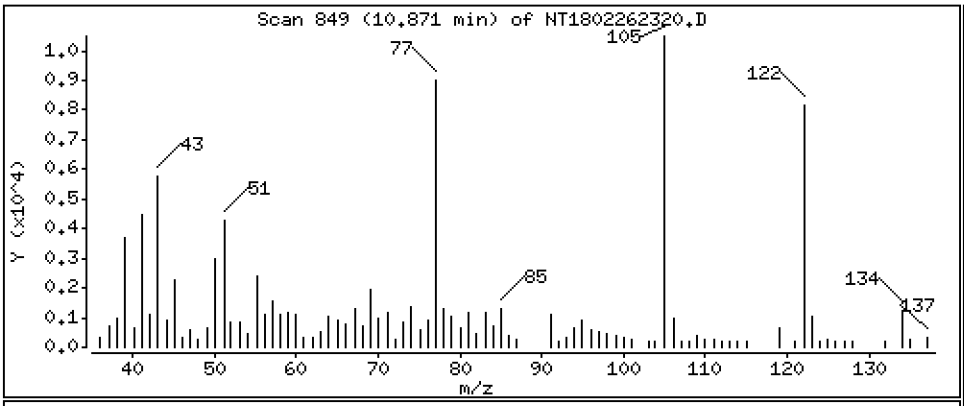
Operator: VTS

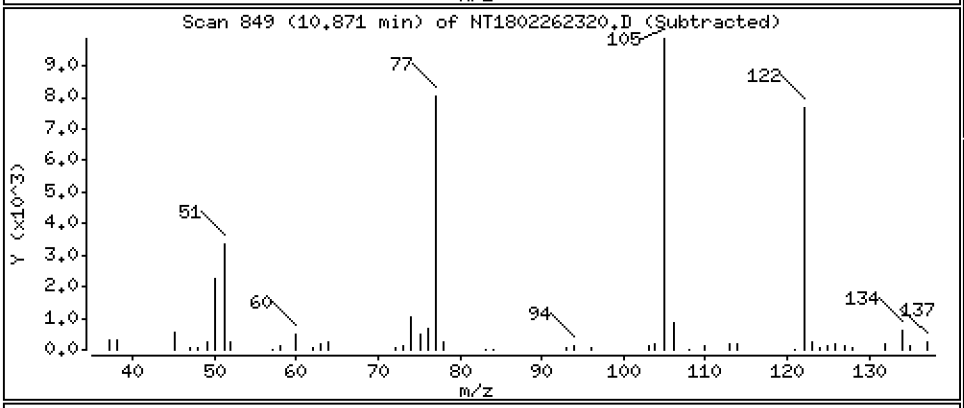
Column phase: ZB-5msi

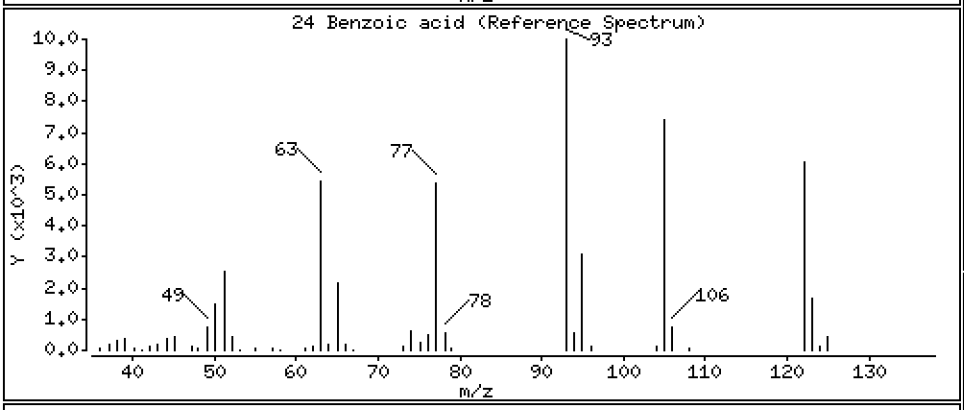
Column diameter: 0.25

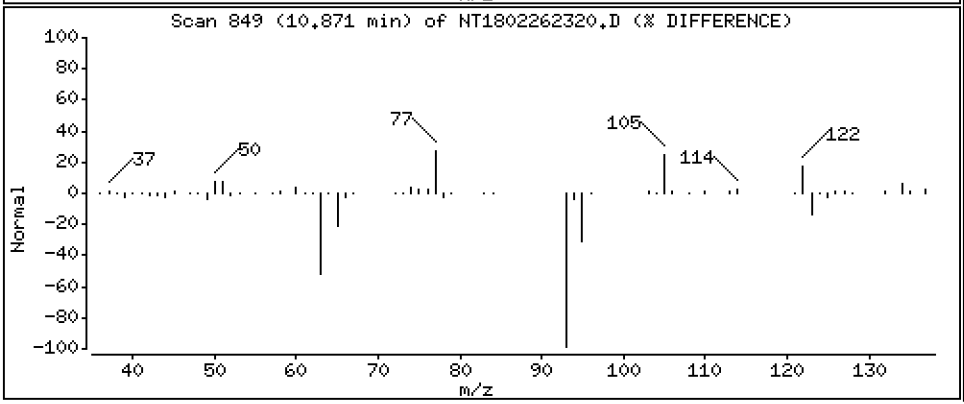
24 Benzoic acid

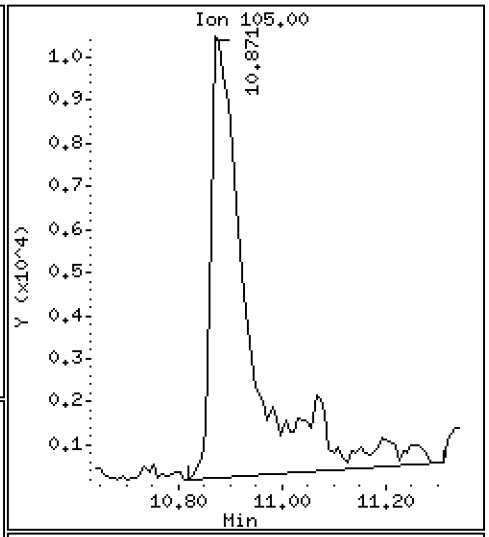
Concentration: 1.552 ug/mL

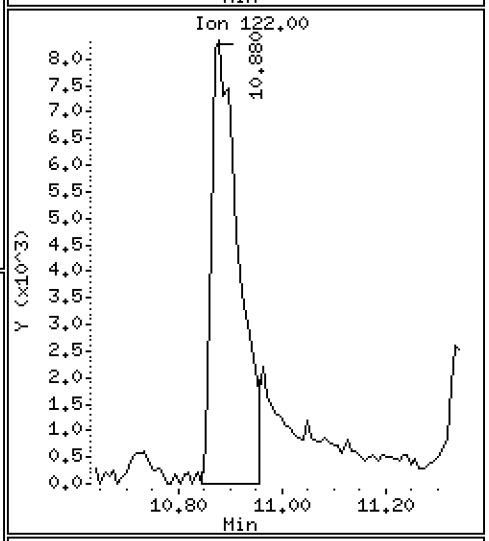


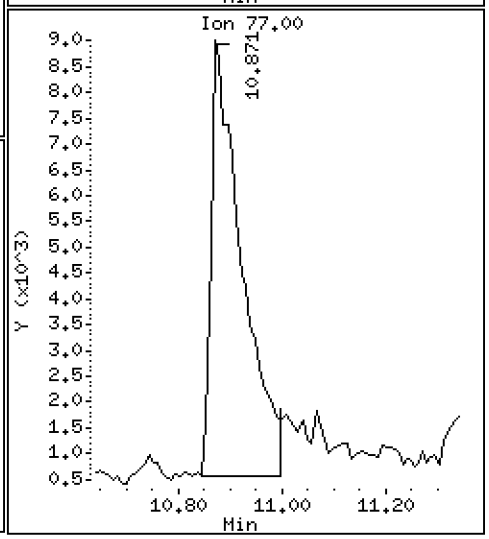












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

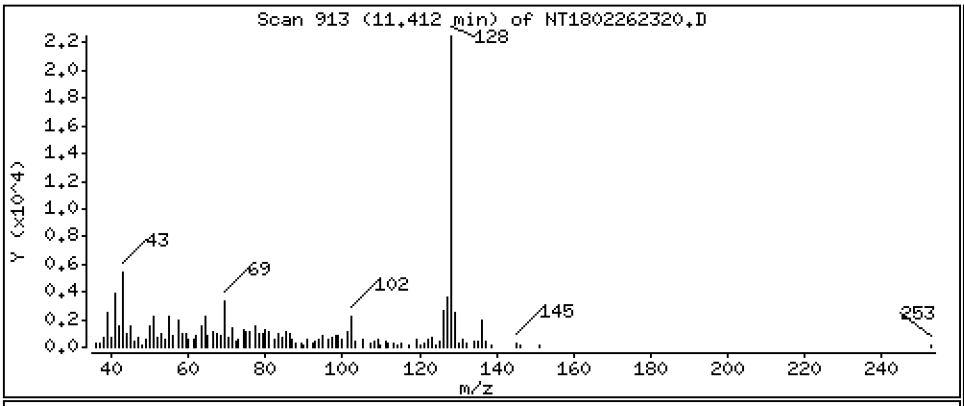
Operator: VTS

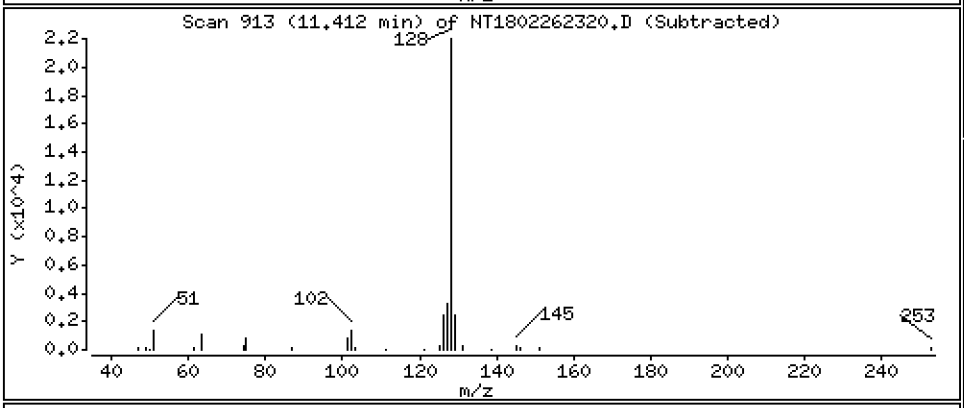
Column phase: ZB-5msi

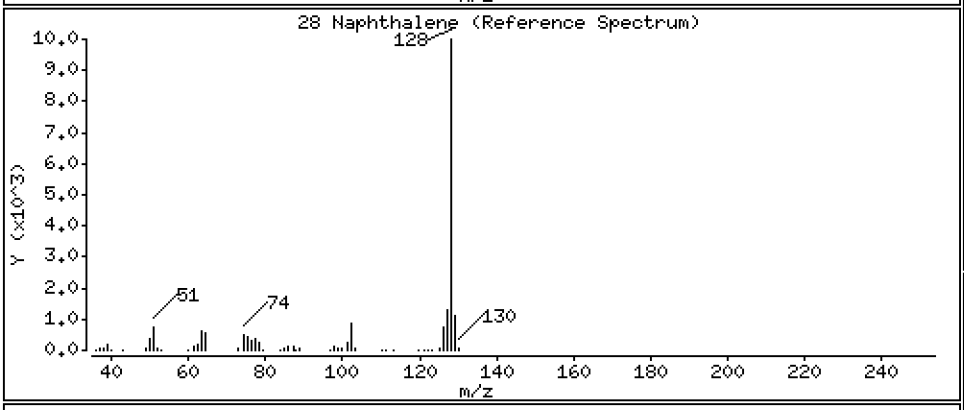
Column diameter: 0.25

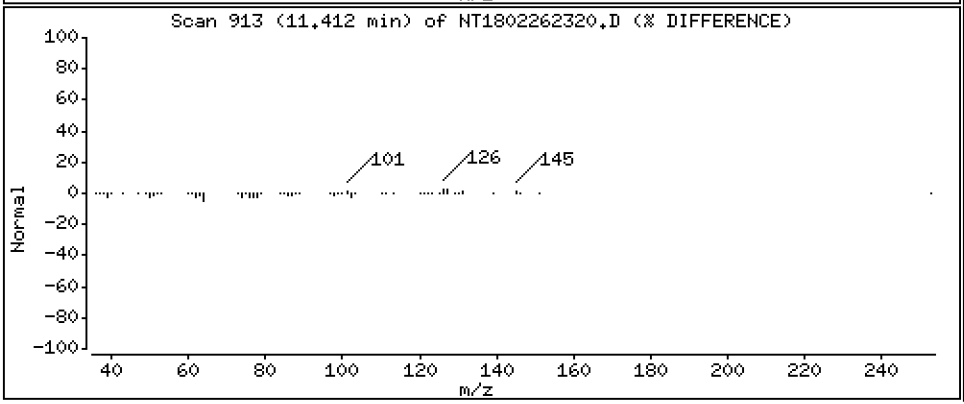
28 Naphthalene

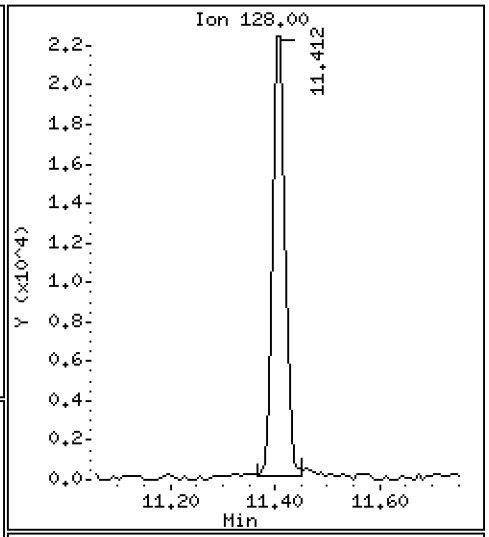
Concentration: 0.1288 ug/mL

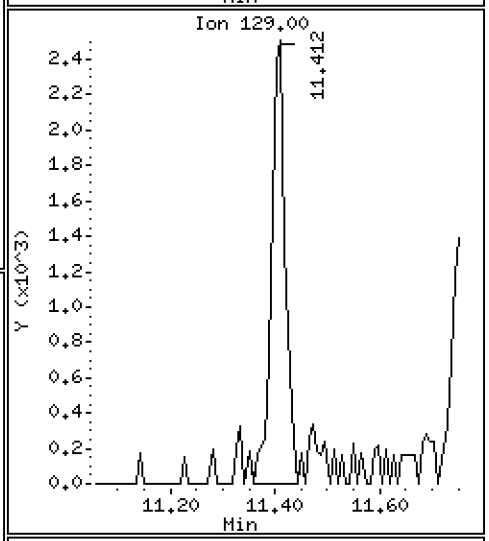


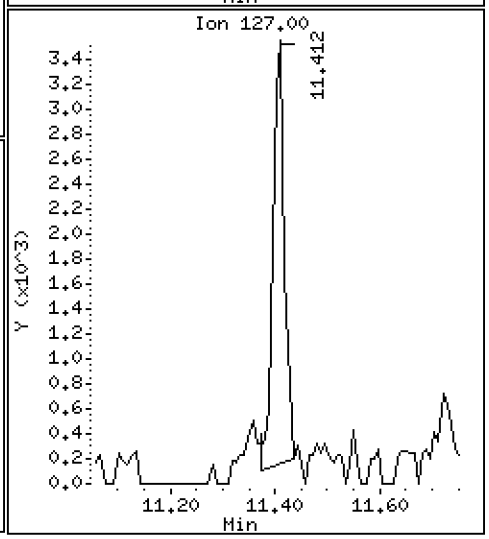












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

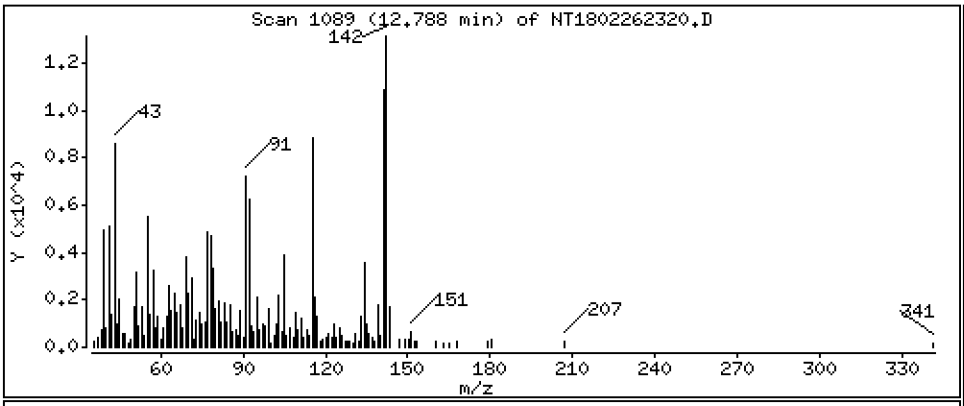
Operator: VTS

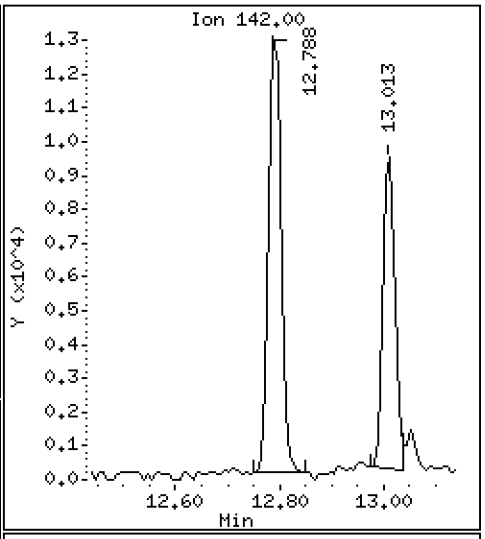
Column phase: ZB-5msi

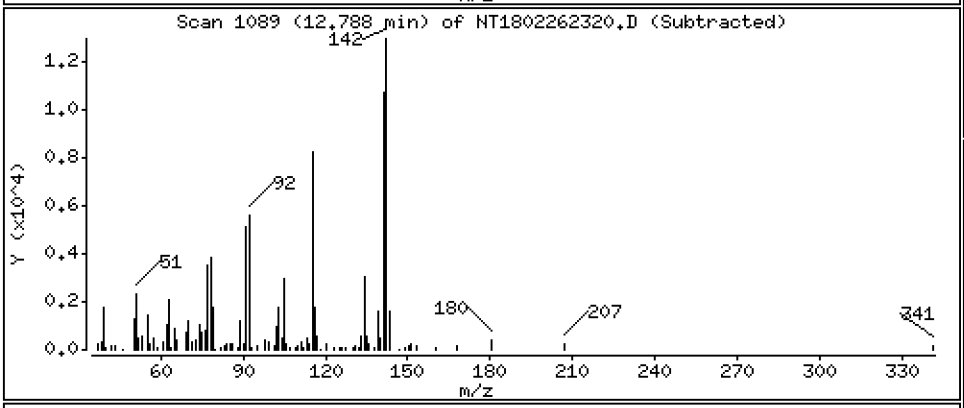
Column diameter: 0.25

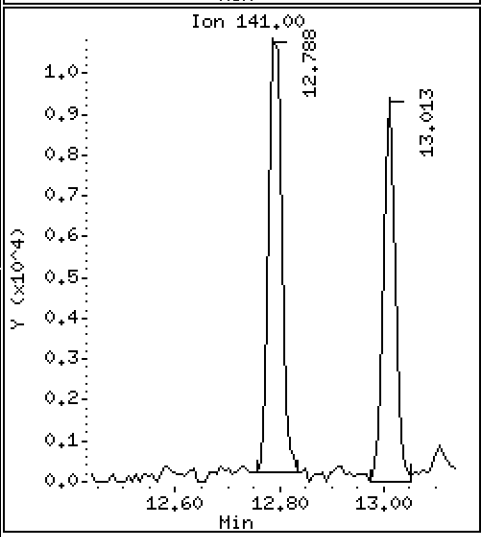
32 2-Methylnaphthalene

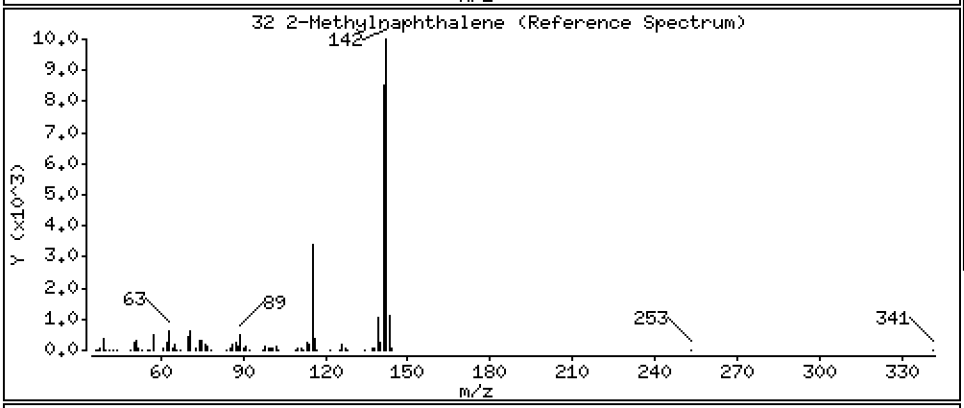
Concentration: 0.1049 ug/mL

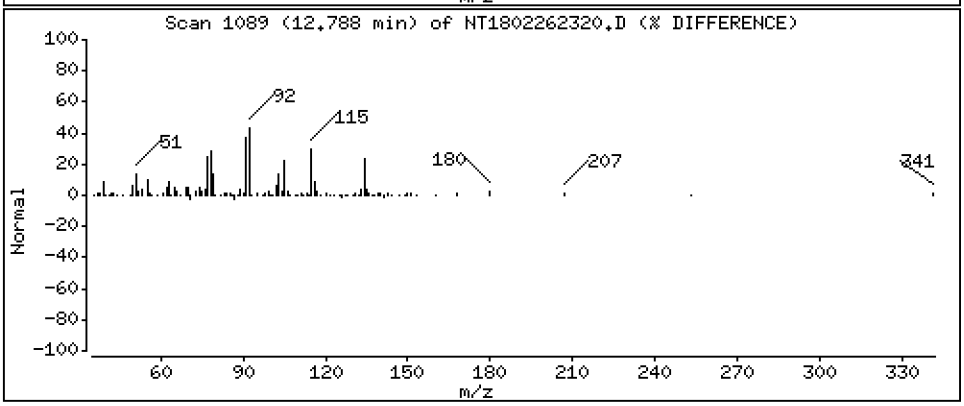












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

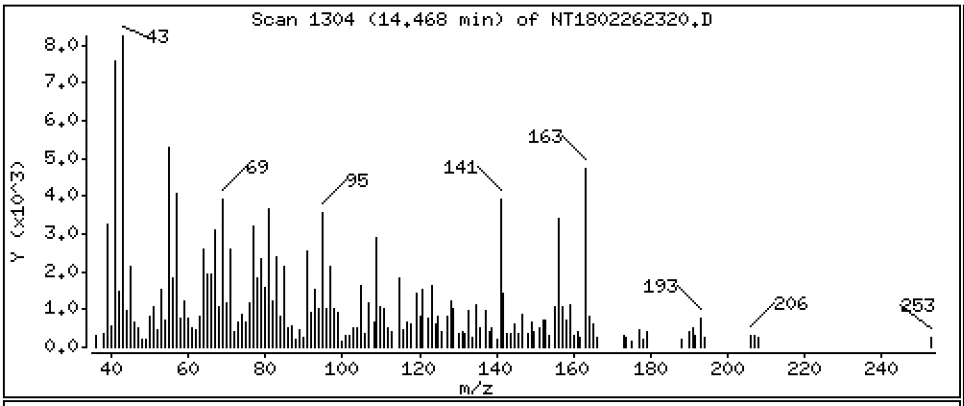
Operator: VTS

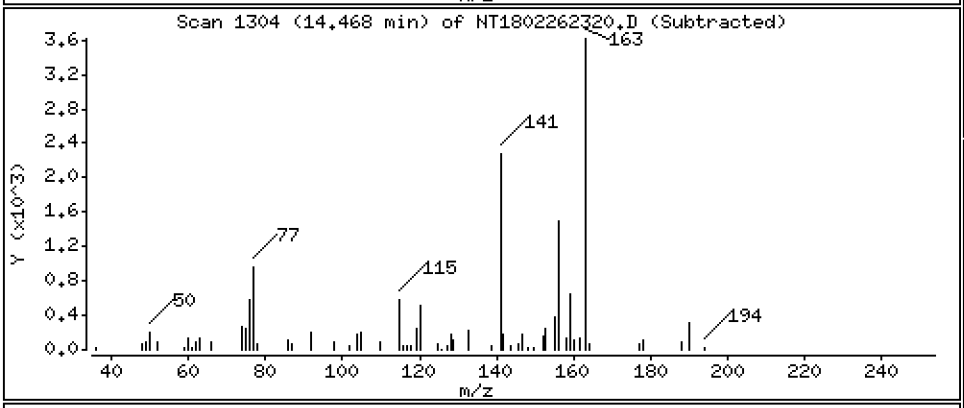
Column phase: ZB-5msi

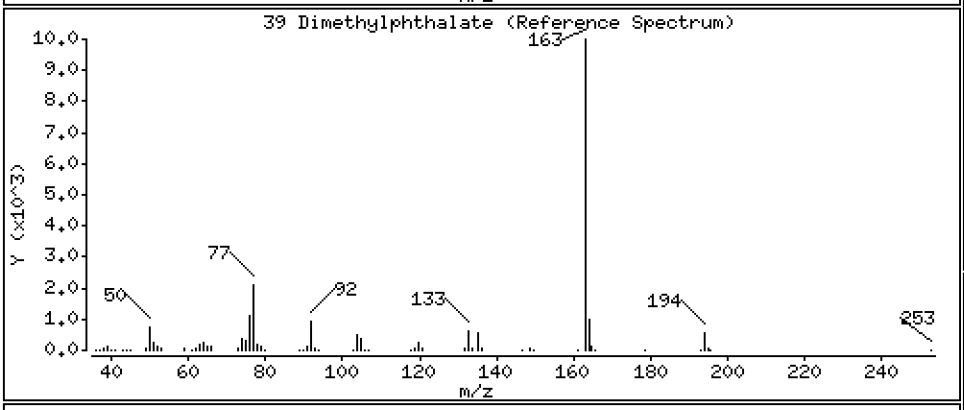
Column diameter: 0.25

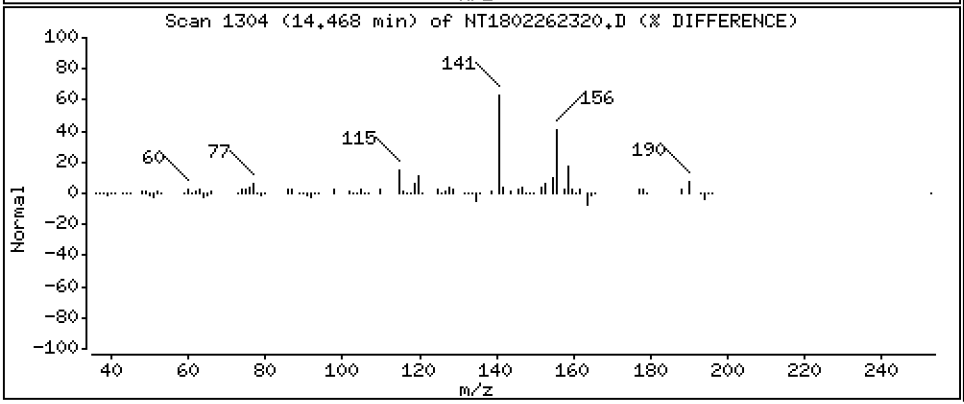
39 Dimethylphthalate

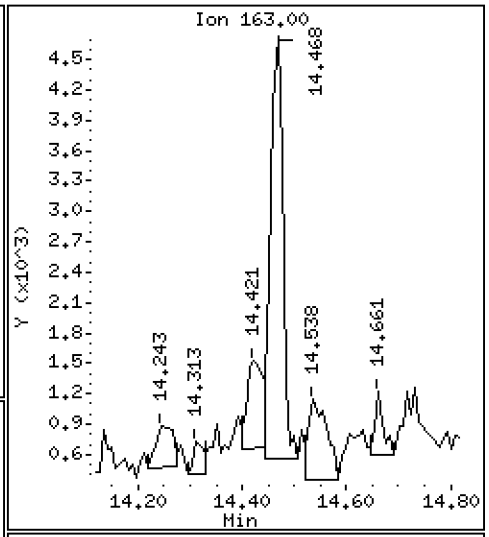
Concentration: 0.03712 ug/mL

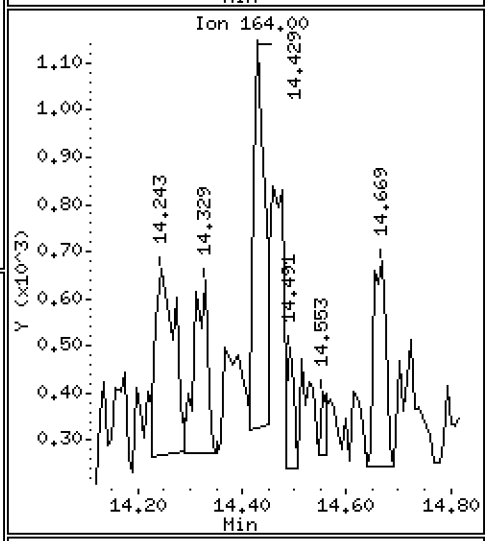


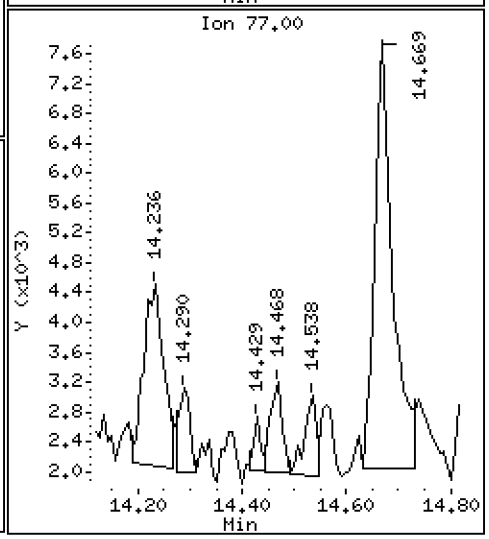












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

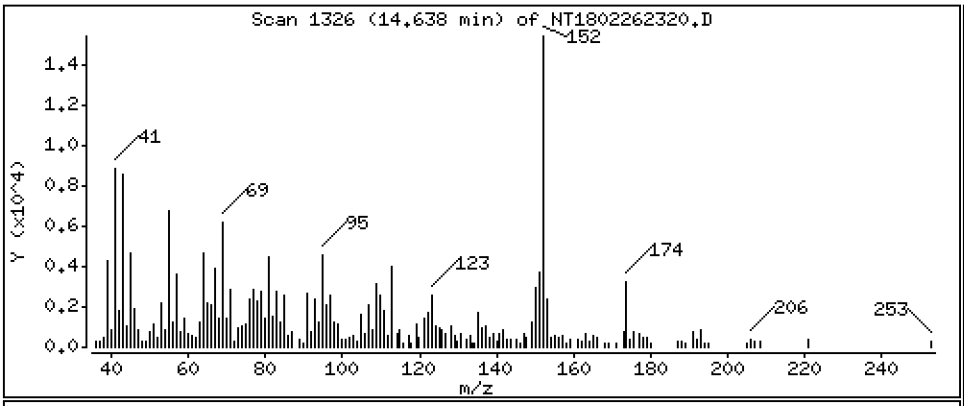
Operator: VTS

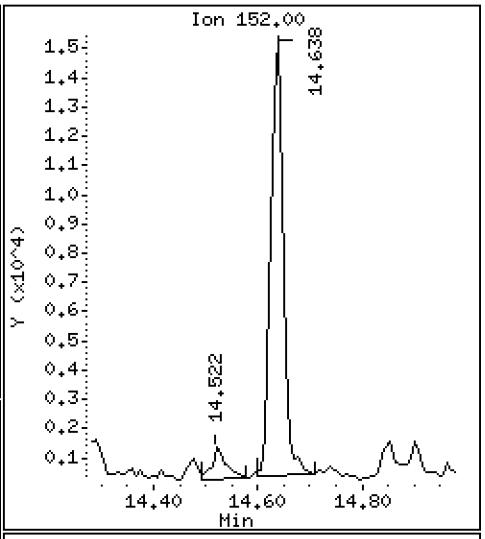
Column phase: ZB-5msi

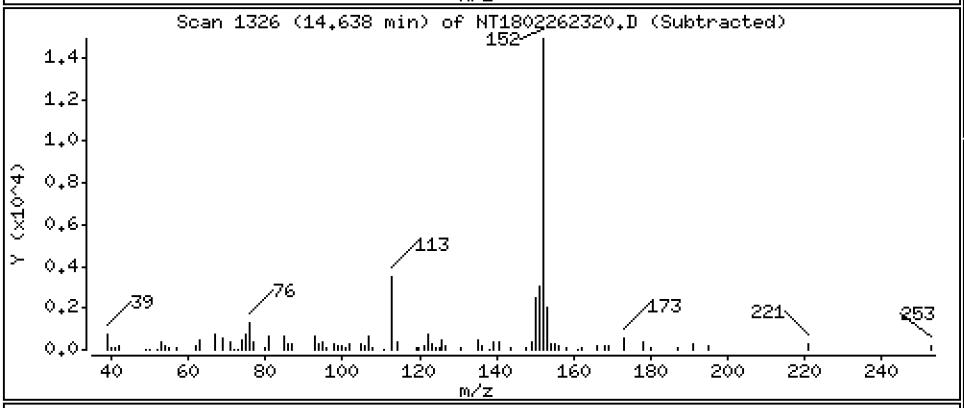
Column diameter: 0.25

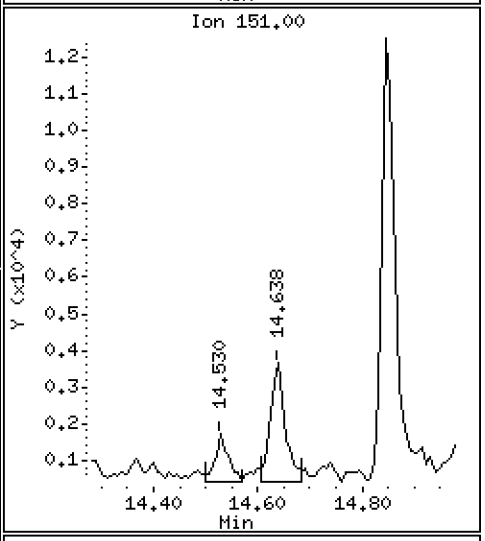
40 Acenaphthylene

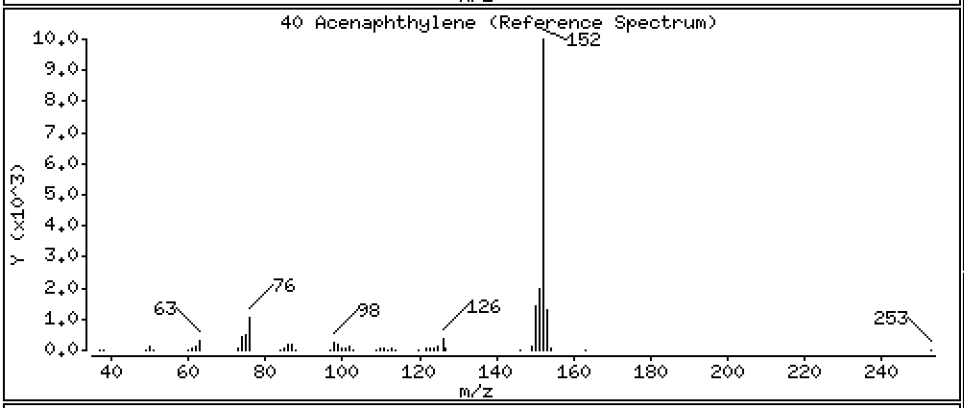
Concentration: 0.08706 ug/mL

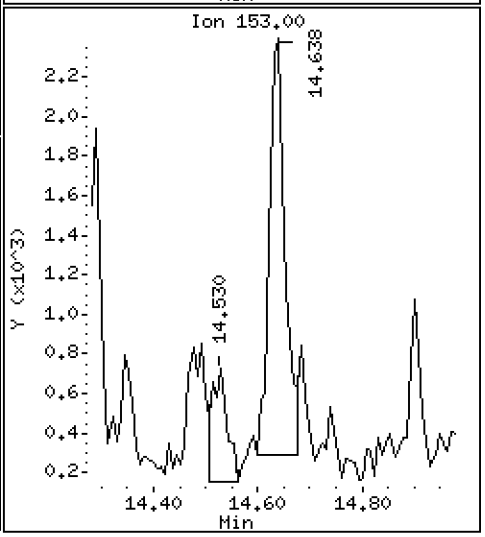


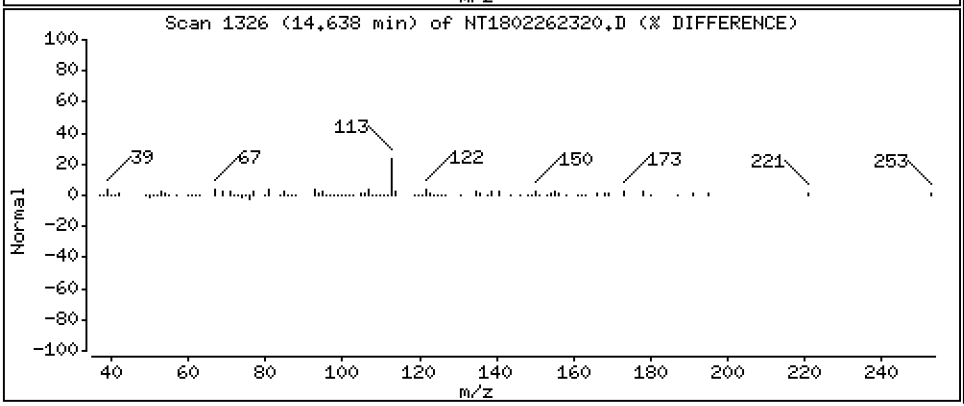












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

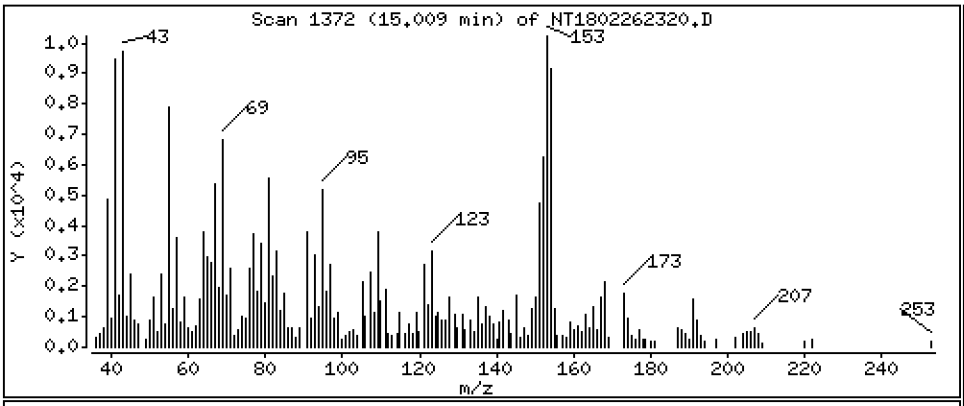
Operator: VTS

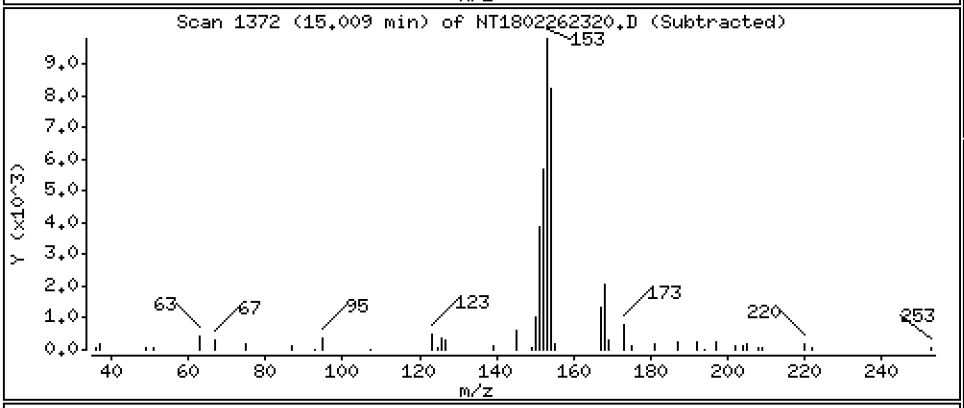
Column phase: ZB-5msi

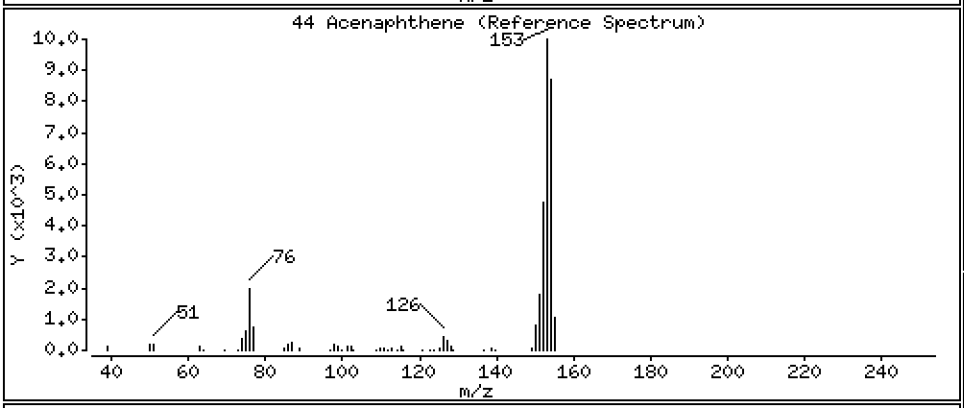
Column diameter: 0.25

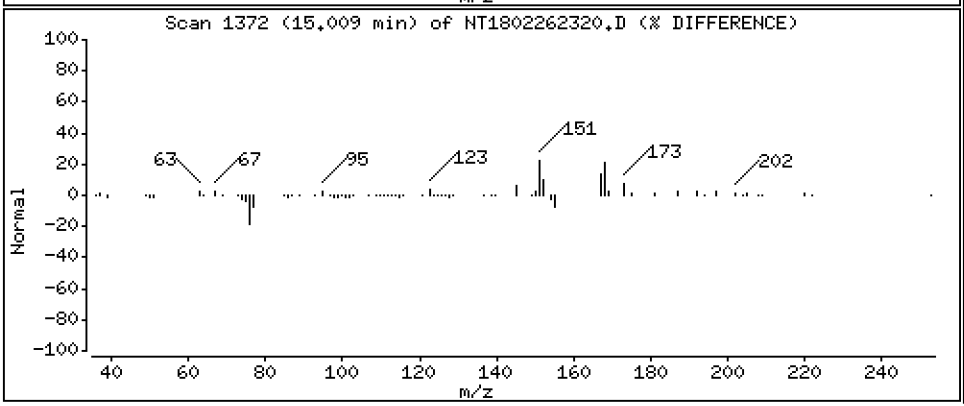
44 Acenaphthene

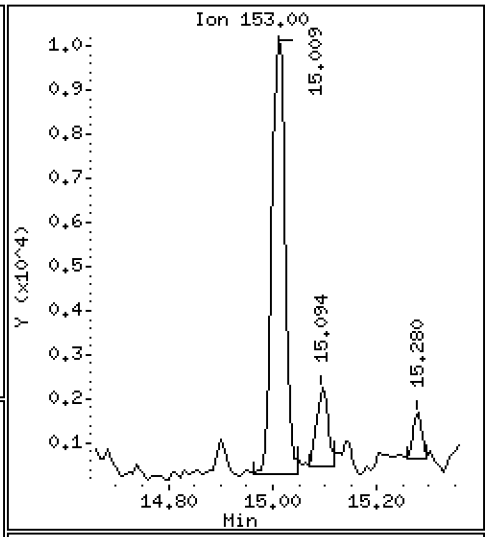
Concentration: 0.09331 ug/mL

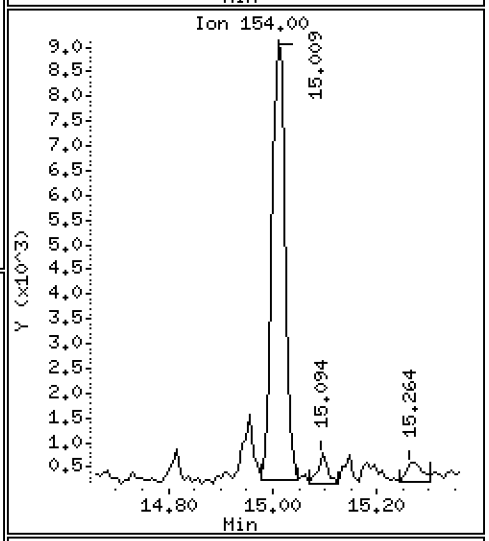


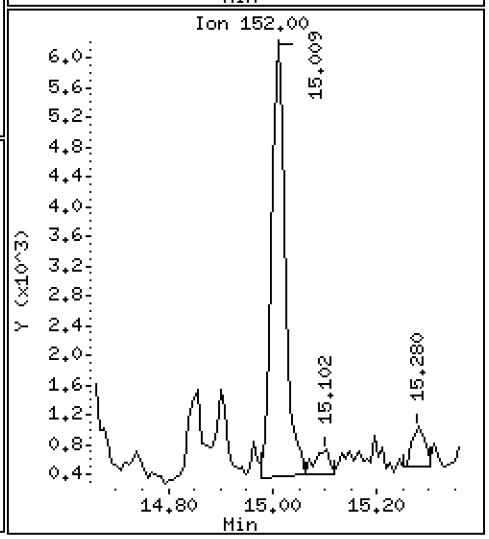












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

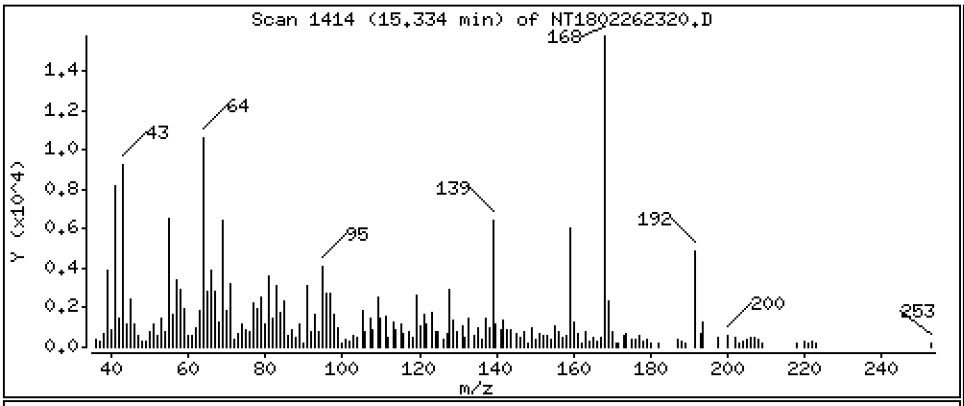
Operator: VTS

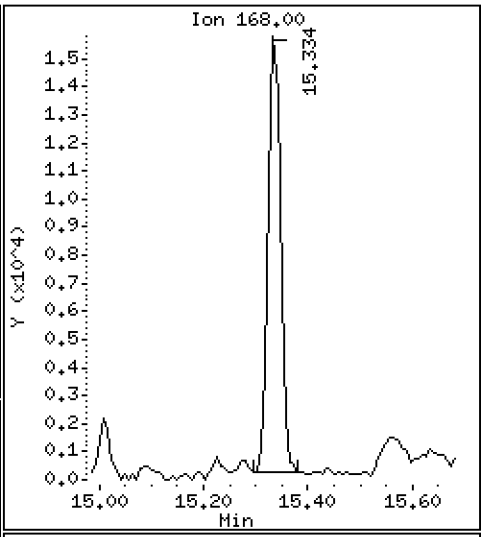
Column phase: ZB-5msi

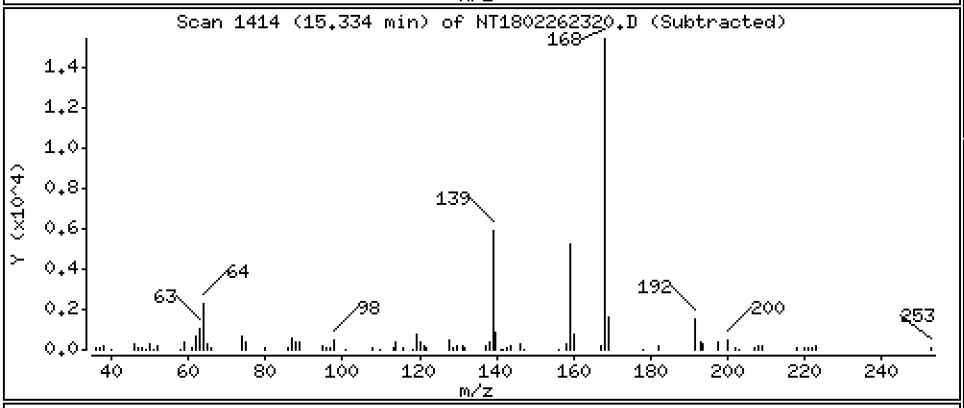
Column diameter: 0.25

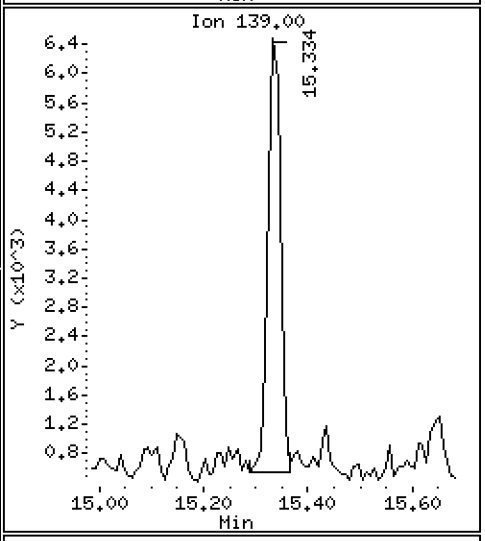
46 Dibenzofuran

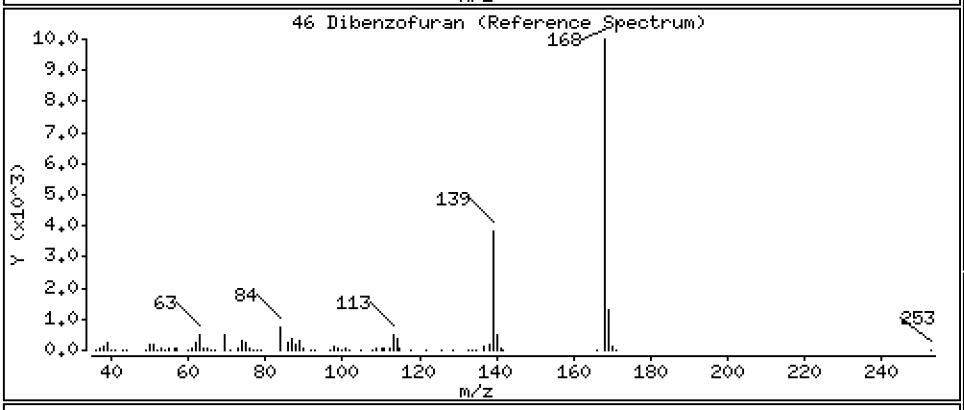
Concentration: 0.09531 ug/mL

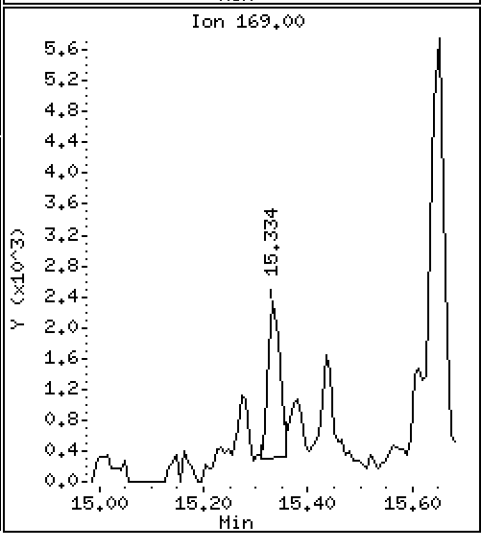


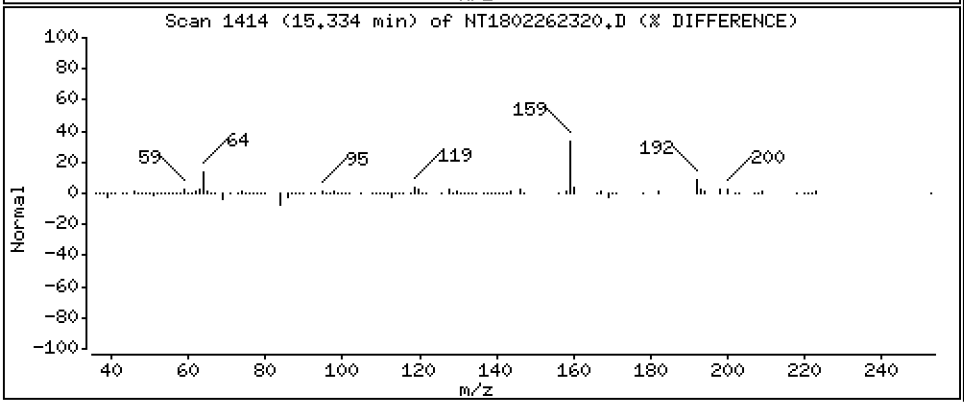












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

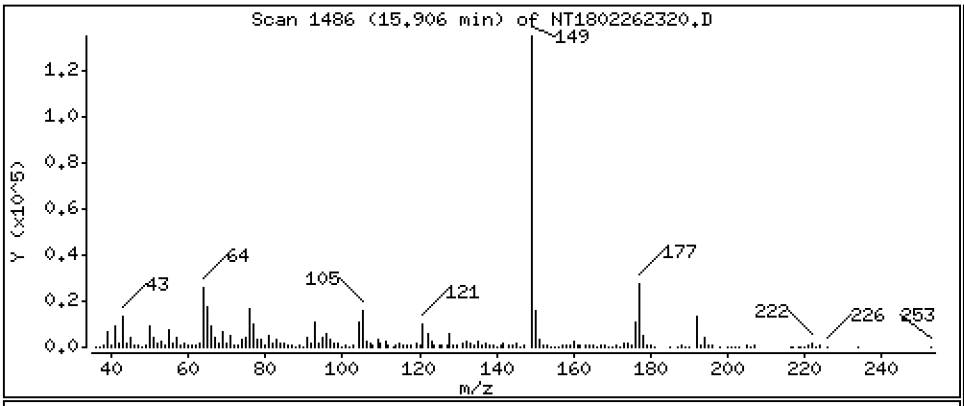
Operator: VTS

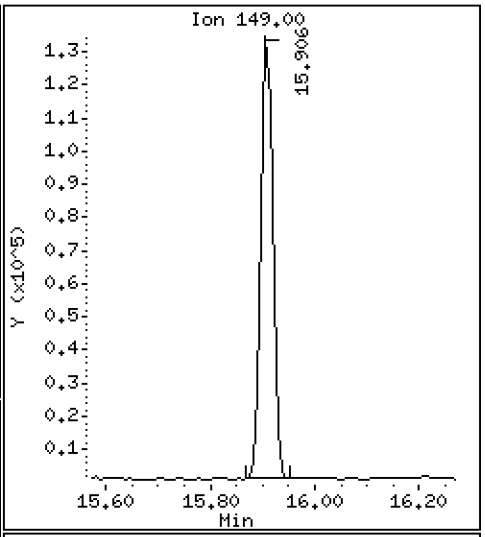
Column phase: ZB-5msi

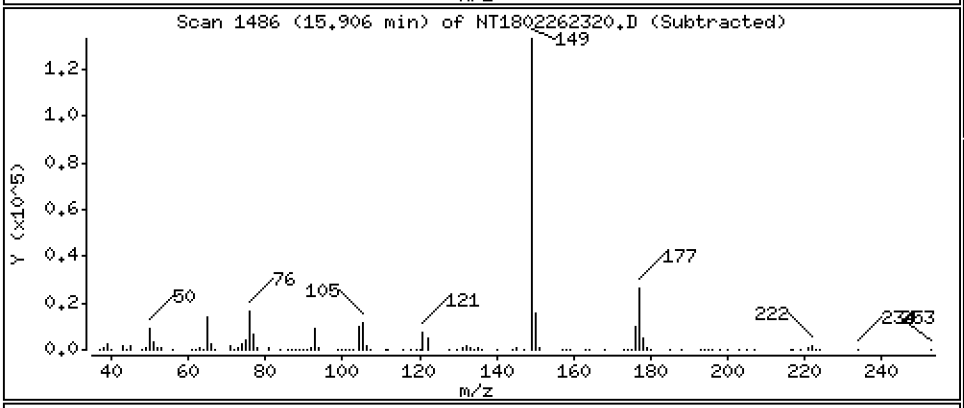
Column diameter: 0.25

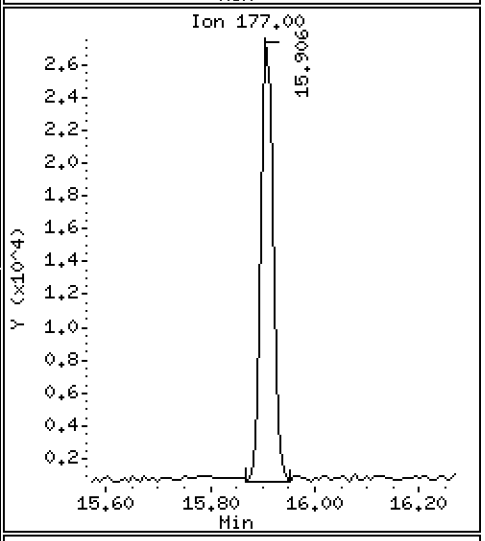
50 Diethylphthalate

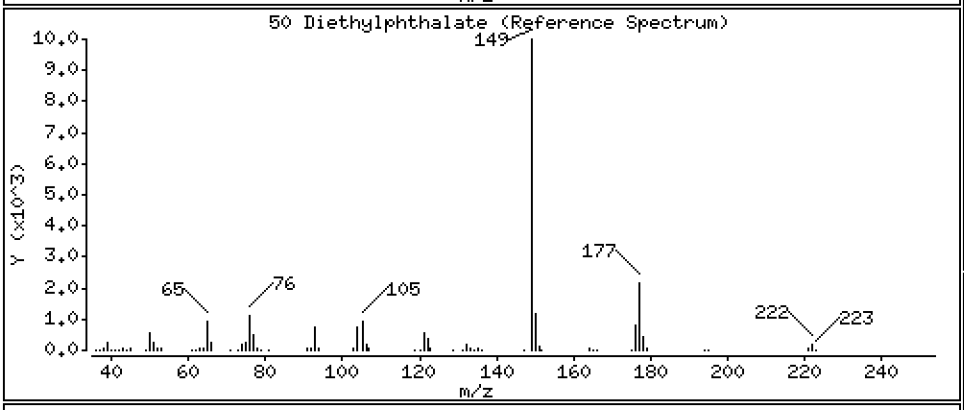
Concentration: 1.066 ug/mL

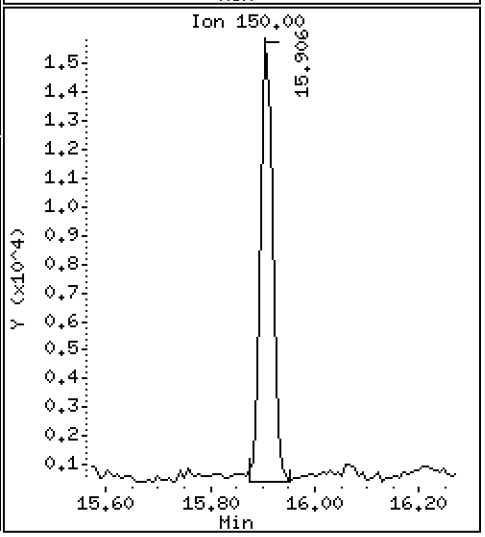


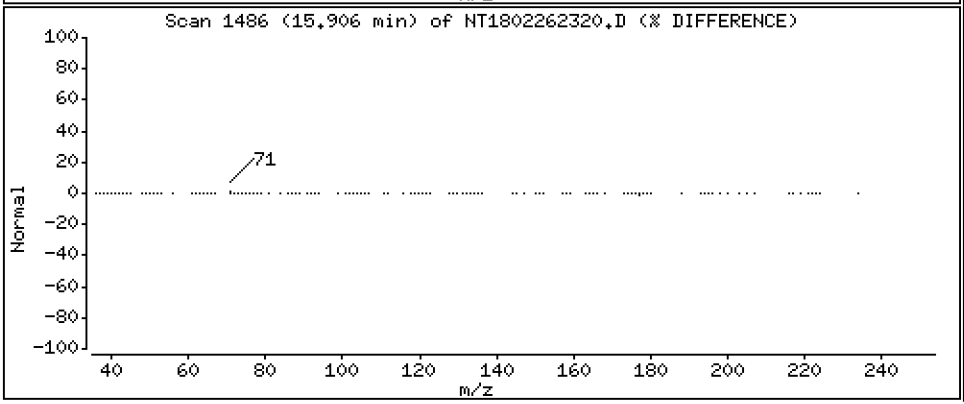












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

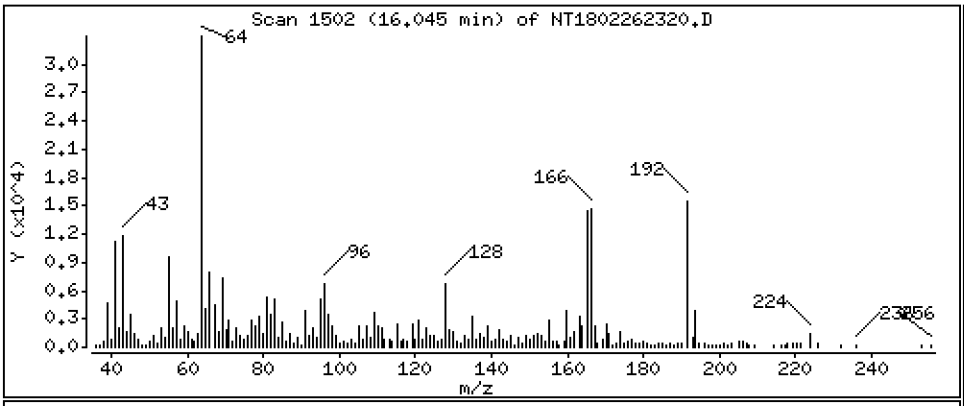
Operator: VTS

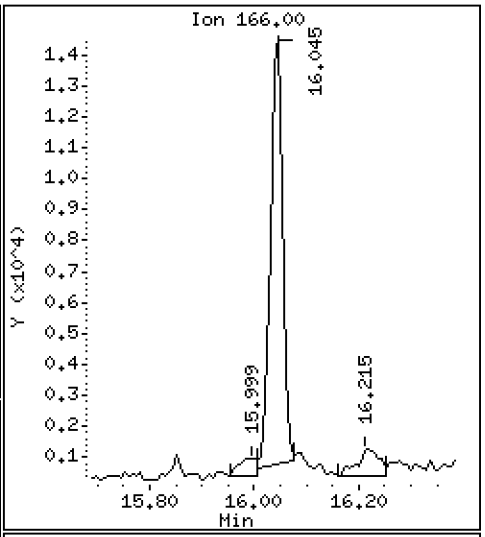
Column phase: ZB-5msi

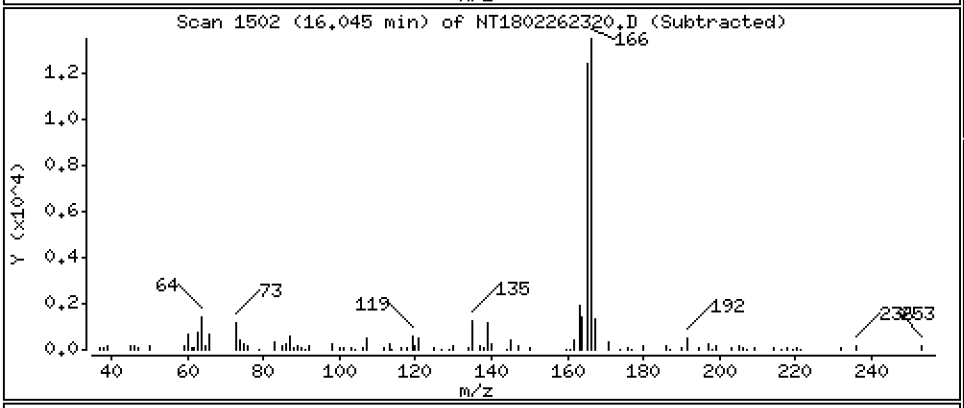
Column diameter: 0.25

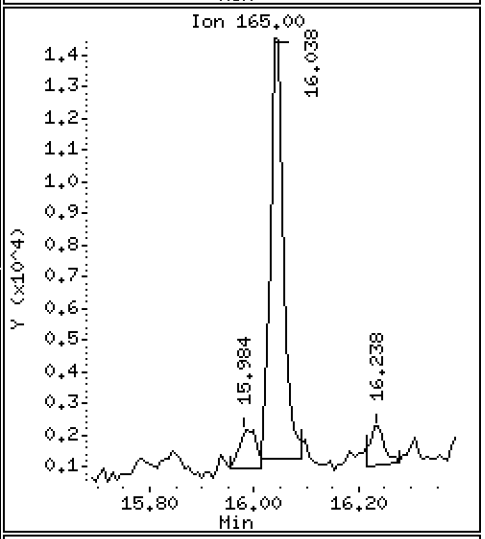
49 Fluorene

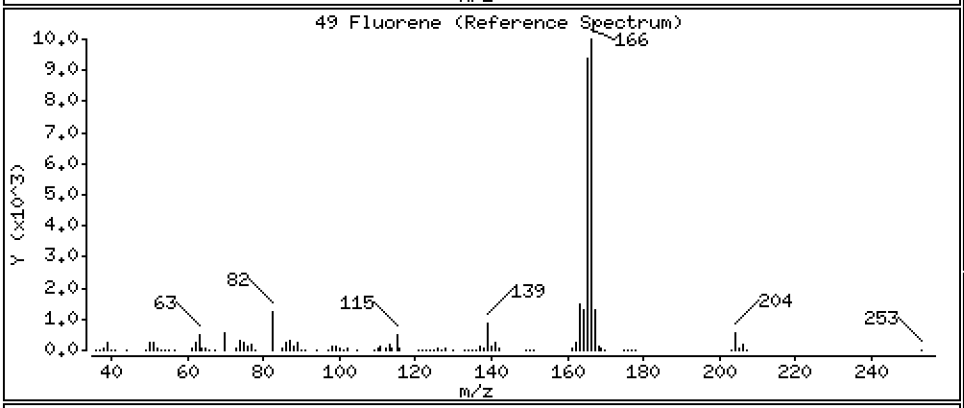
Concentration: 0.1093 ug/mL

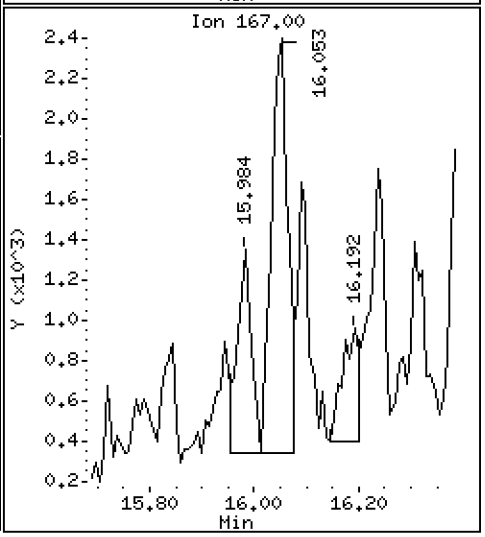


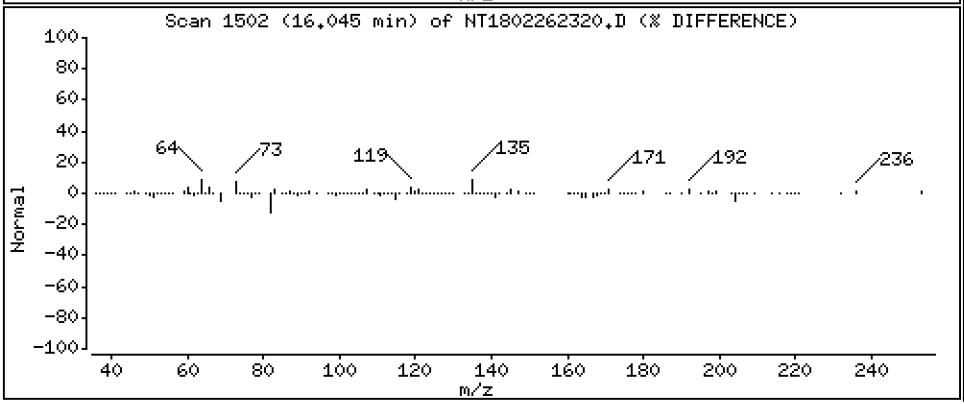












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

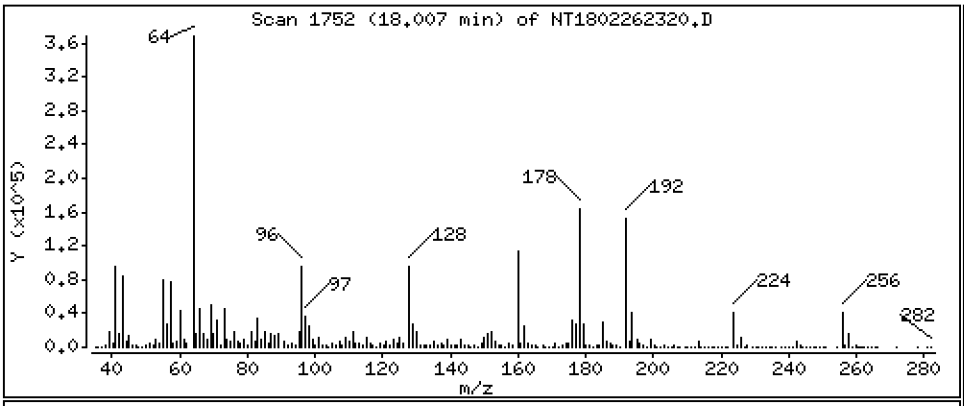
Operator: VTS

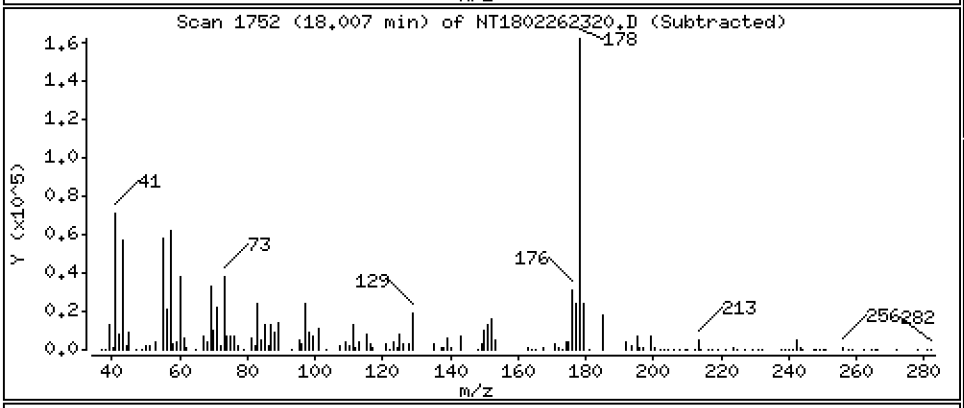
Column phase: ZB-5msi

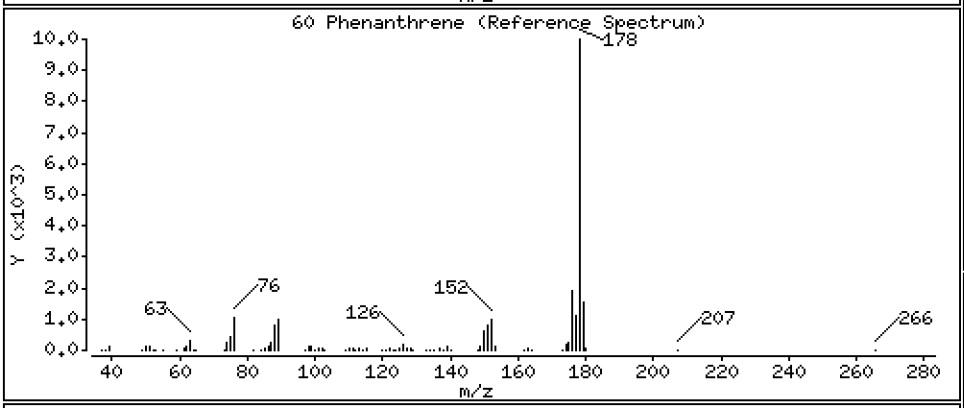
Column diameter: 0.25

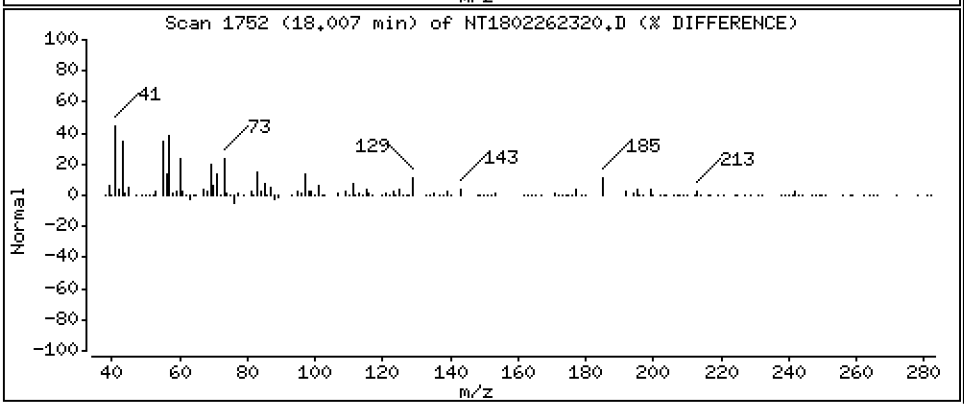
60 Phenanthrene

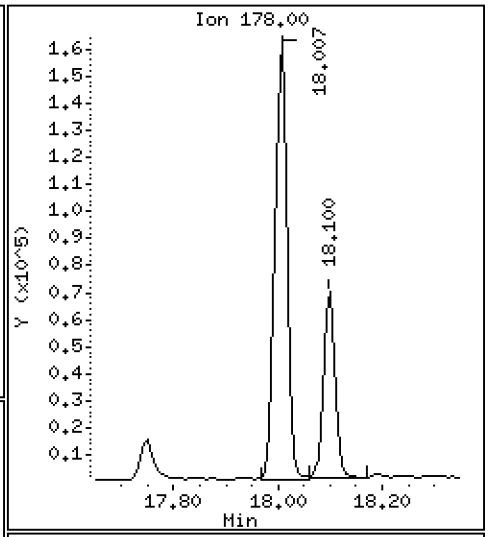
Concentration: 0.7742 ug/mL

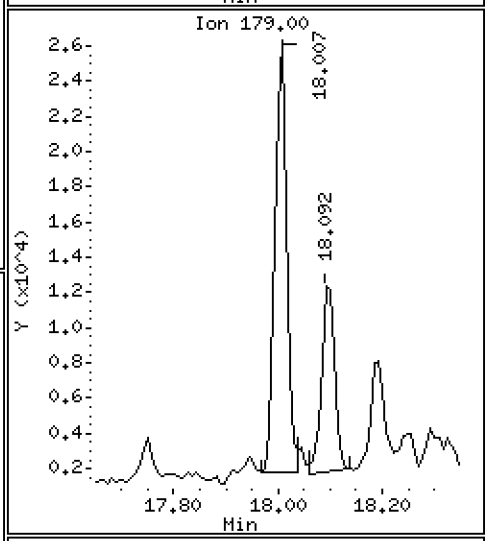


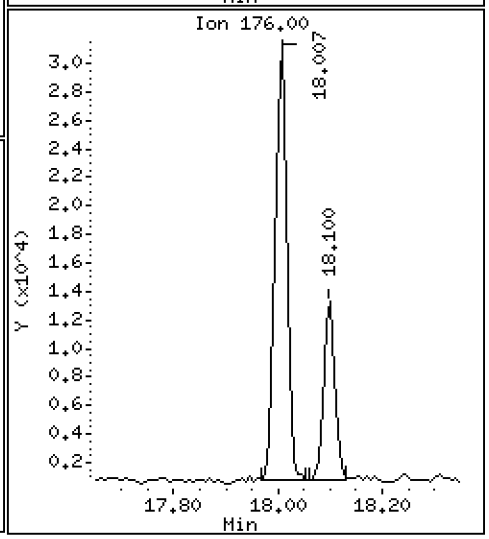












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

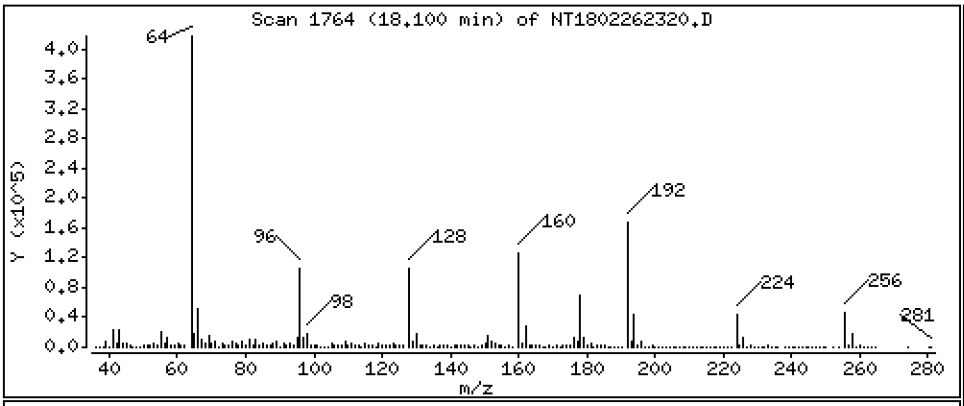
Operator: VTS

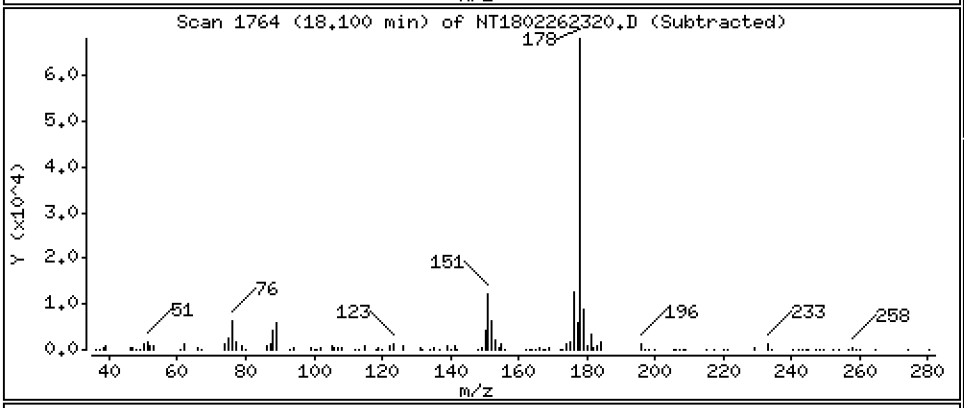
Column phase: ZB-5msi

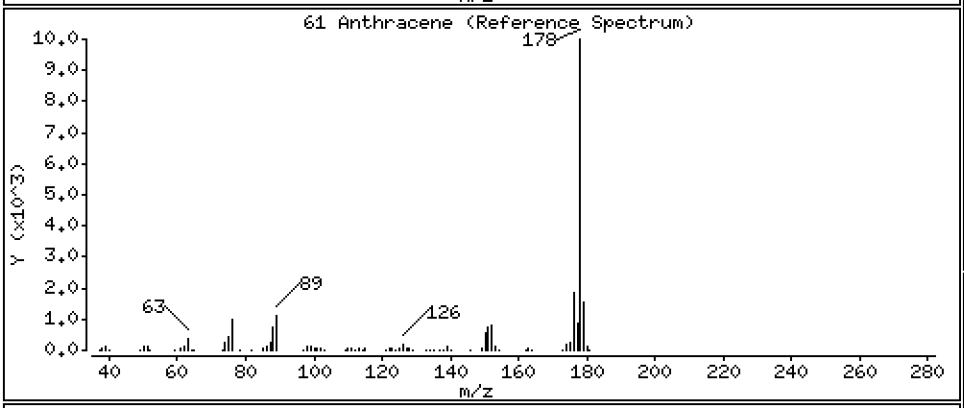
Column diameter: 0.25

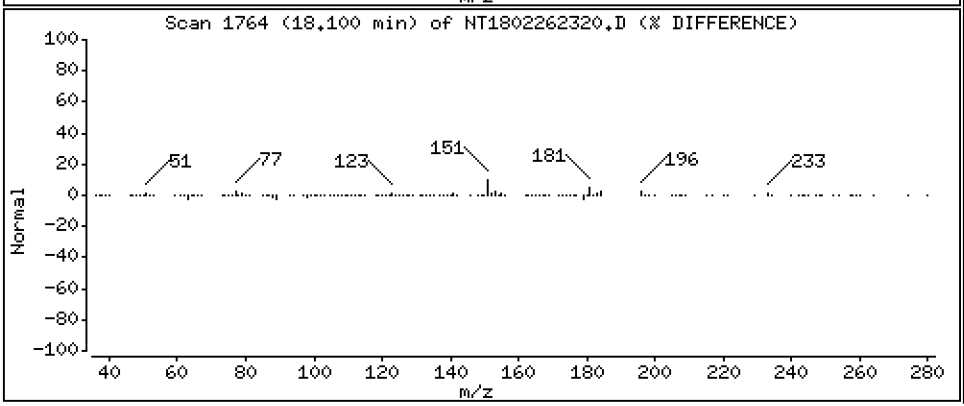
61 Anthracene

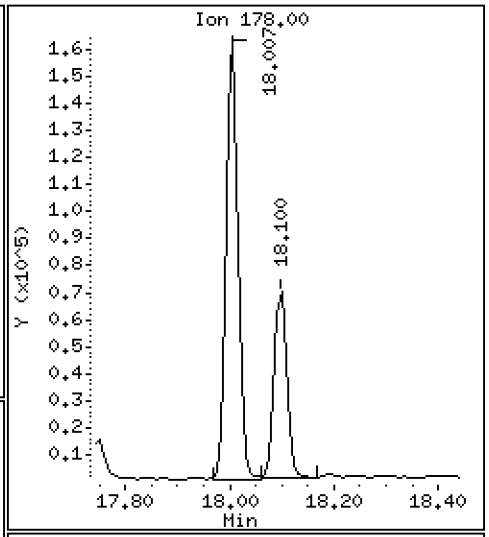
Concentration: 0.3558 ug/mL

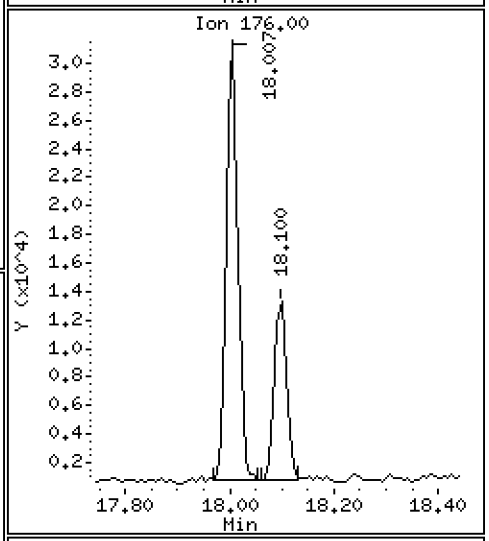


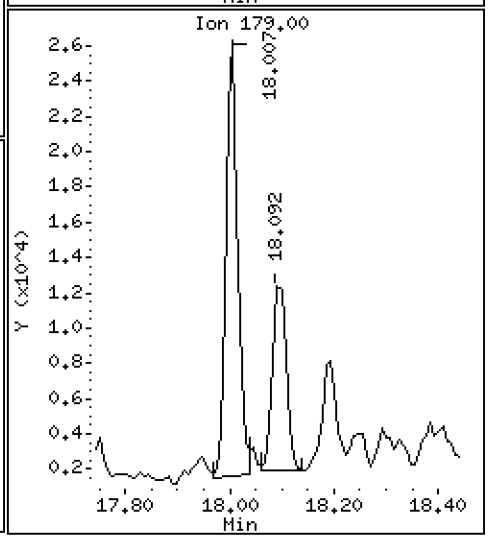












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

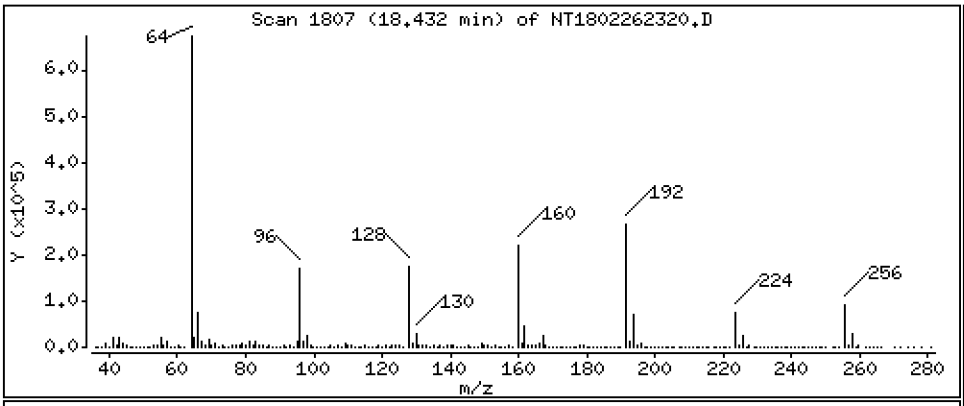
Operator: VTS

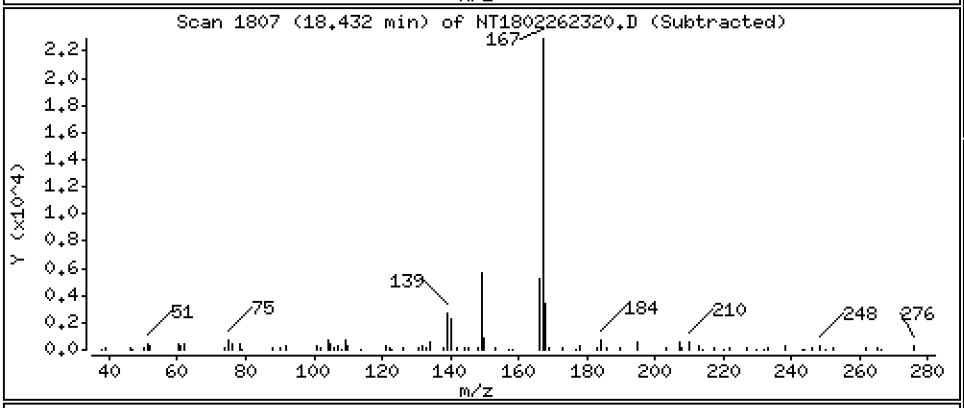
Column phase: ZB-5msi

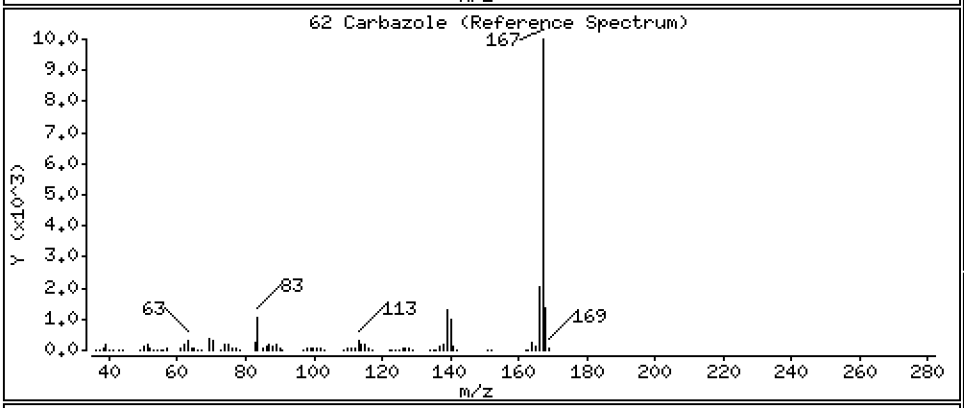
Column diameter: 0.25

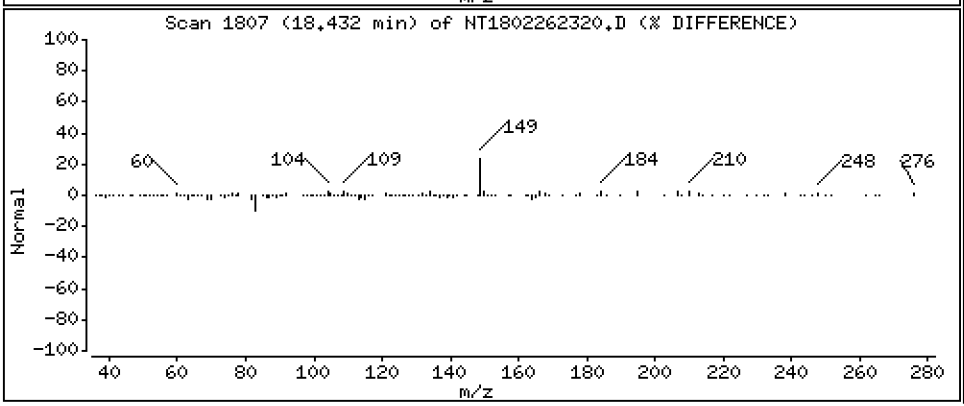
62 Carbazole

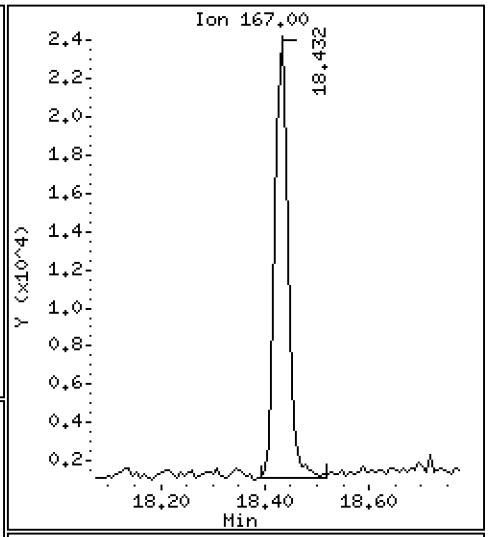
Concentration: 0.1360 ug/mL

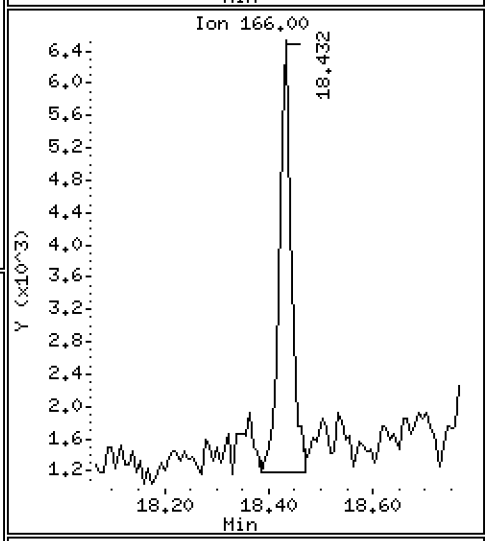


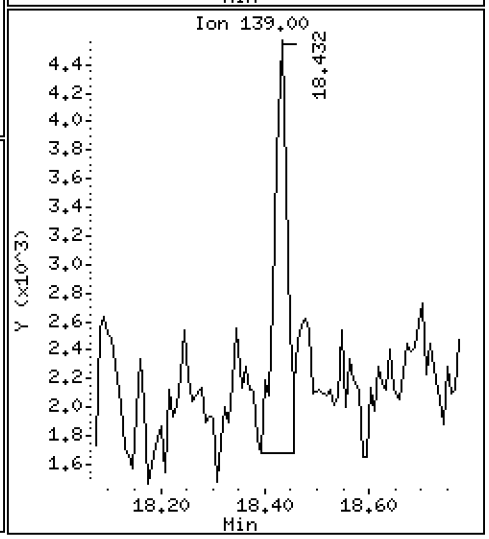












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

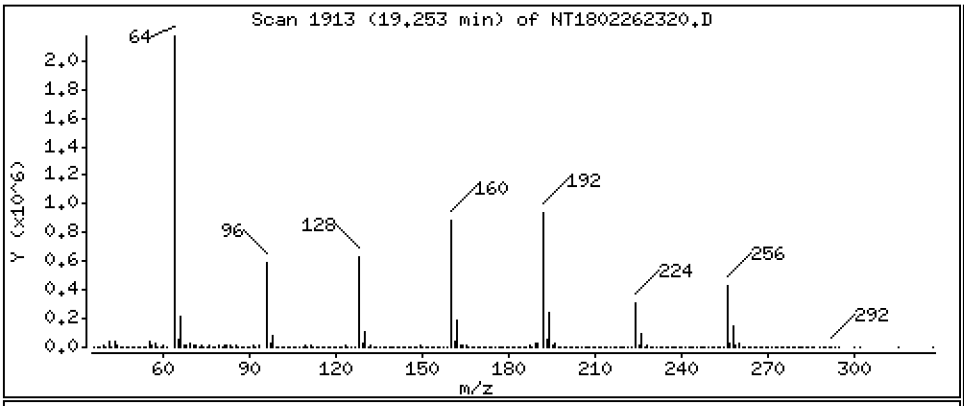
Operator: VTS

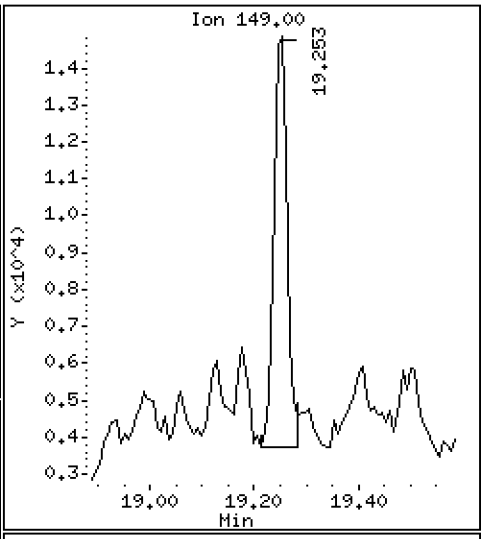
Column phase: ZB-5msi

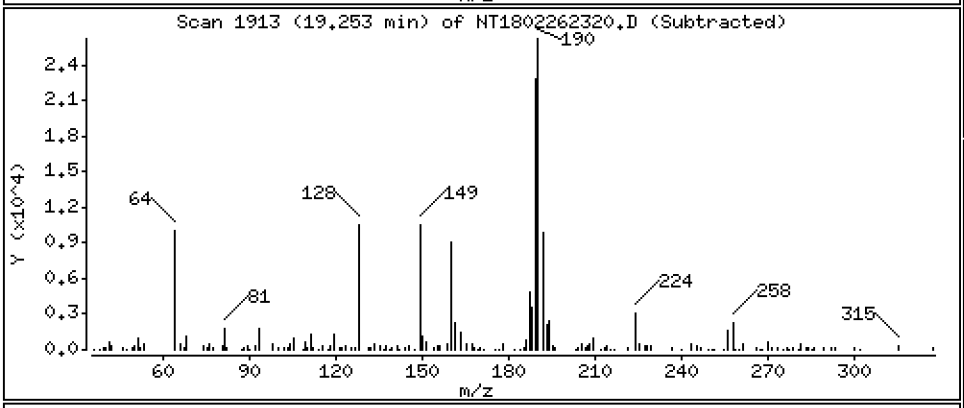
Column diameter: 0.25

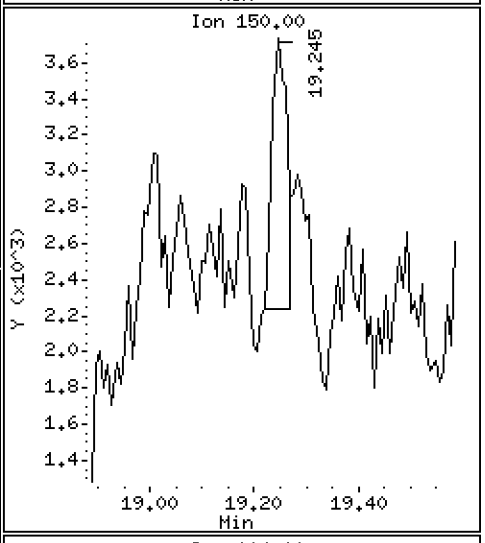
63 Di-n-butylphthalate

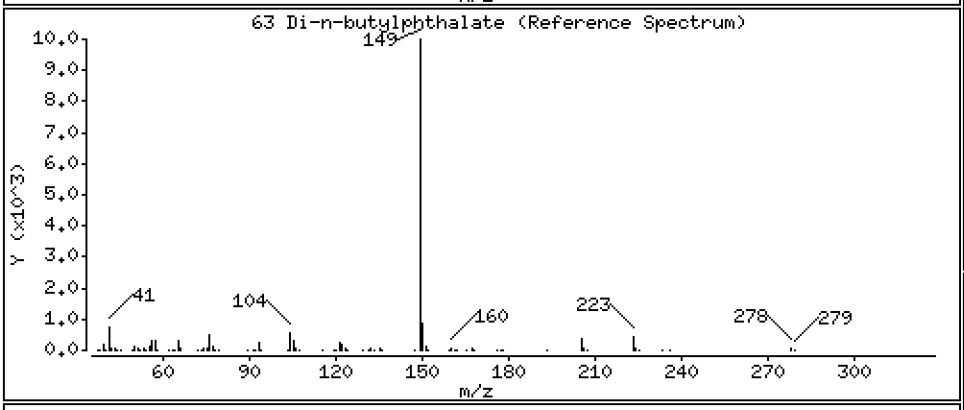
Concentration: 0.06083 ug/mL

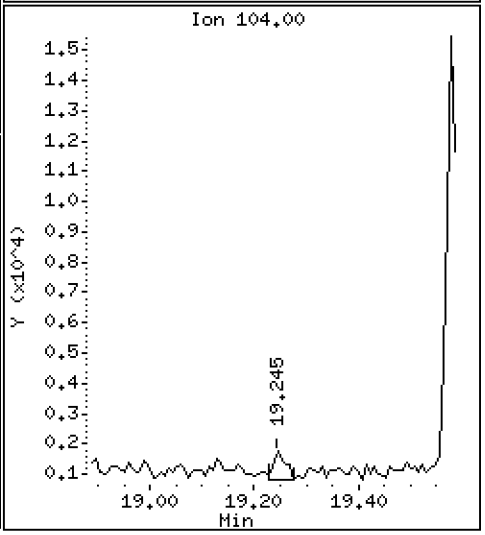


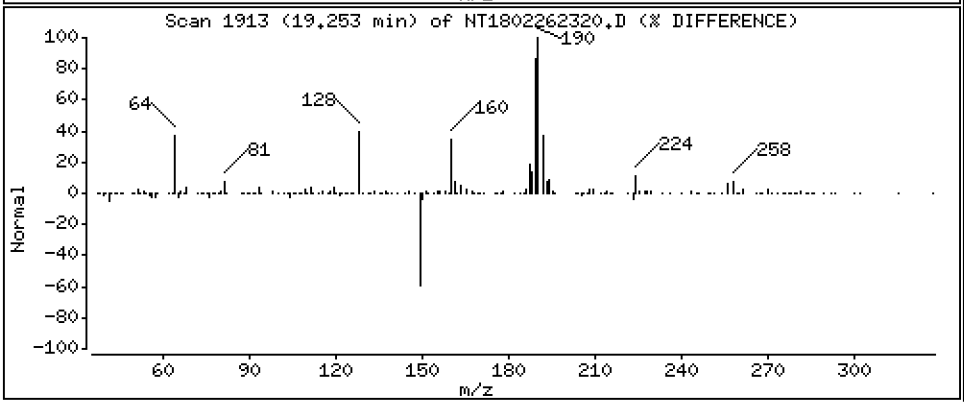












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

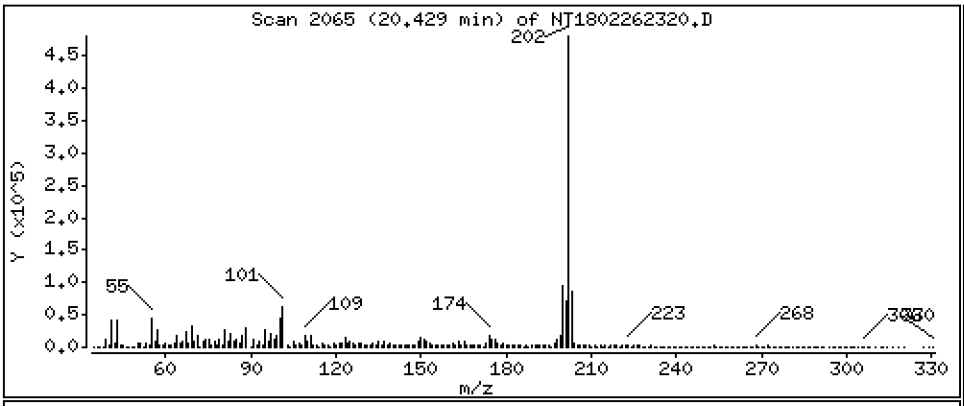
Operator: VTS

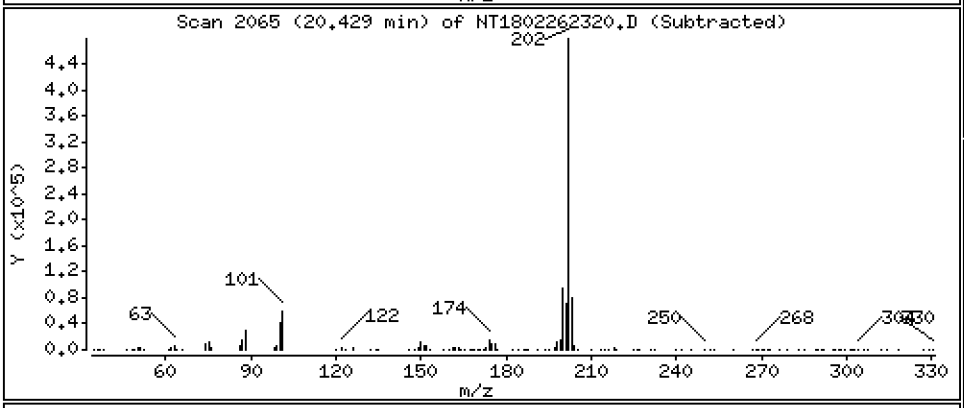
Column phase: ZB-5msi

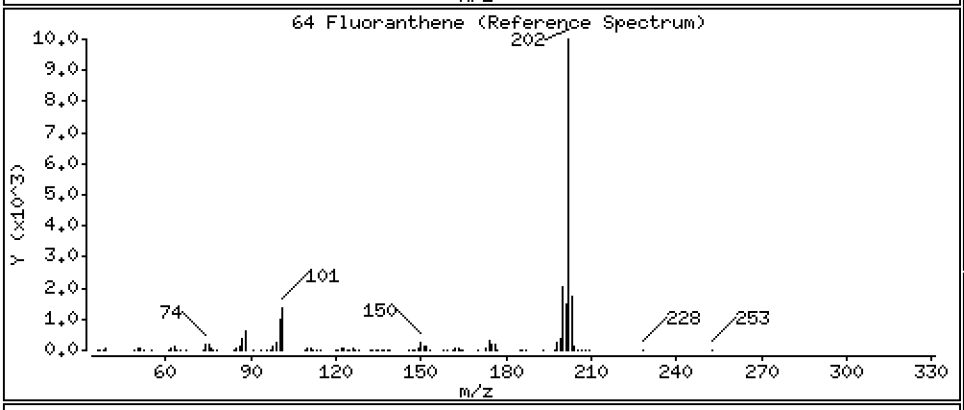
Column diameter: 0.25

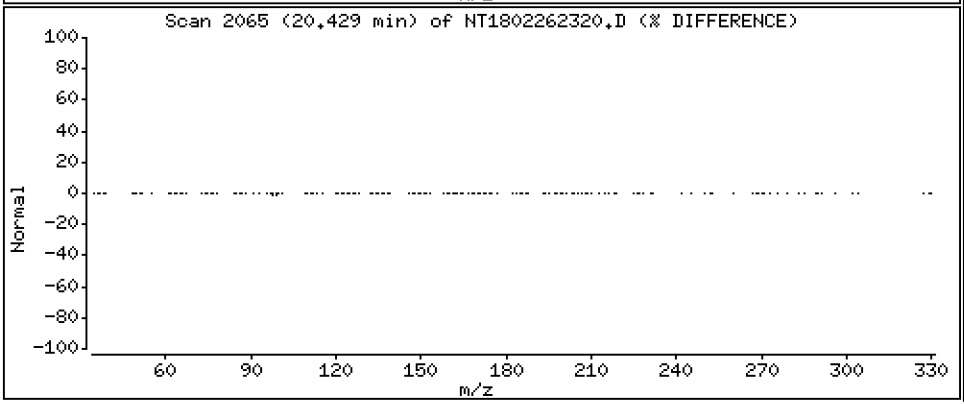
64 Fluoranthene

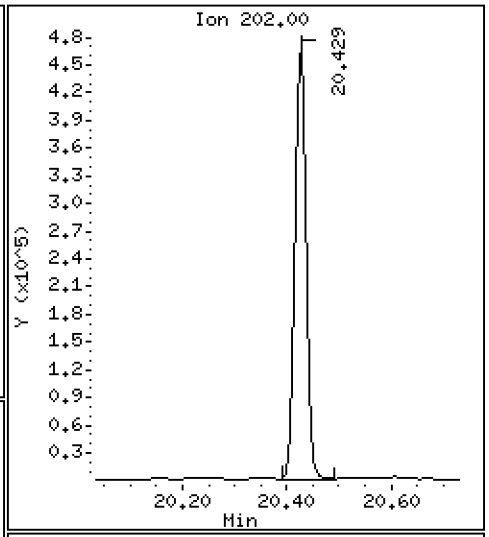
Concentration: 1.931 ug/mL

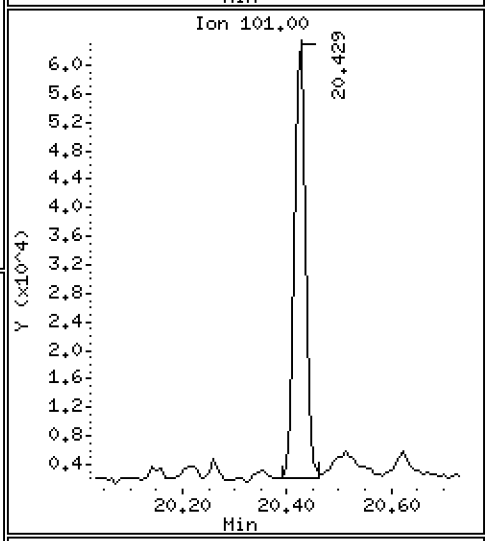


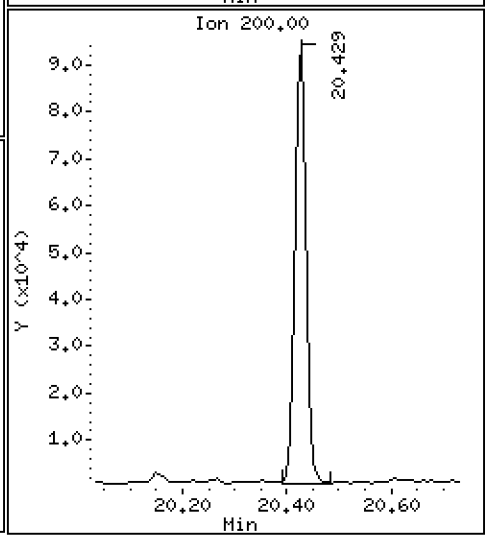












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

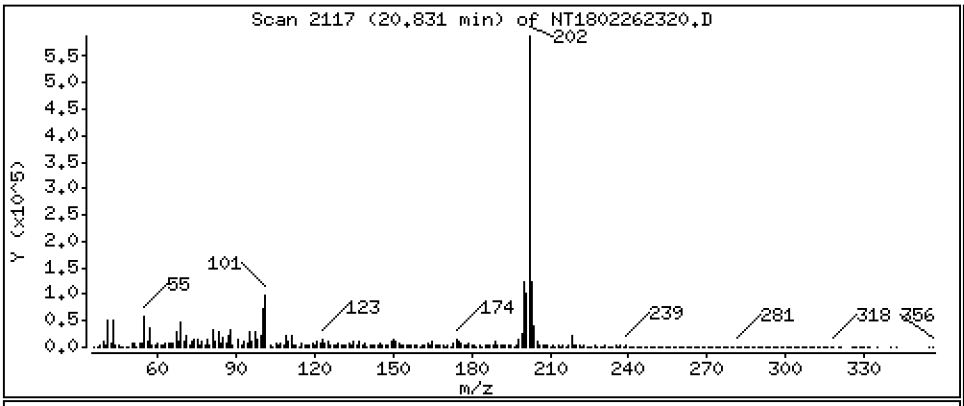
Operator: VTS

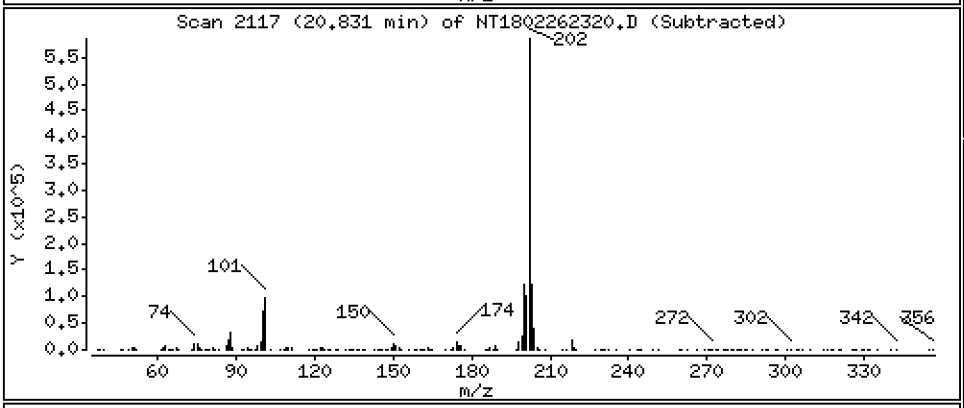
Column phase: ZB-5msi

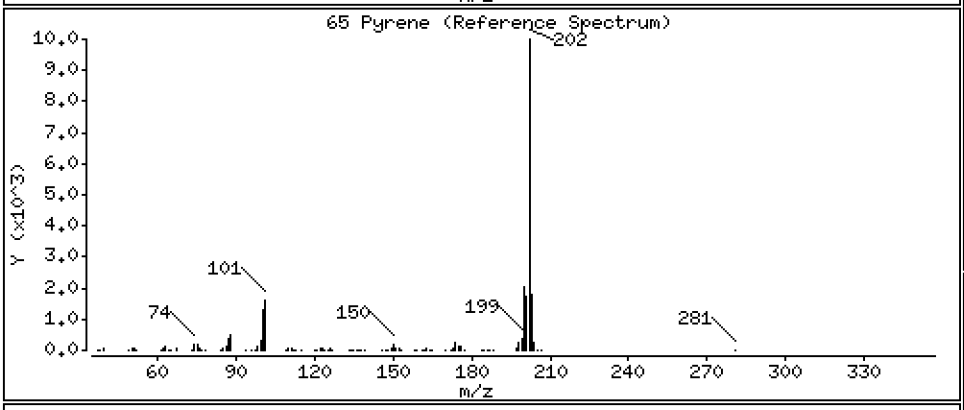
Column diameter: 0.25

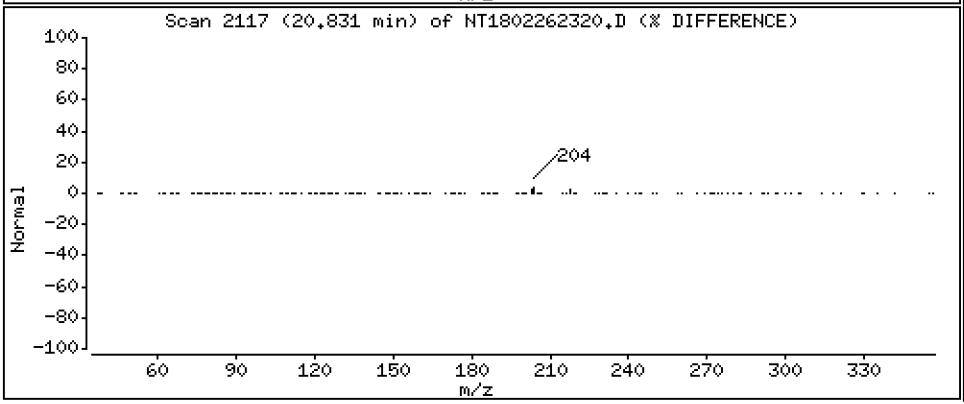
65 Pyrene

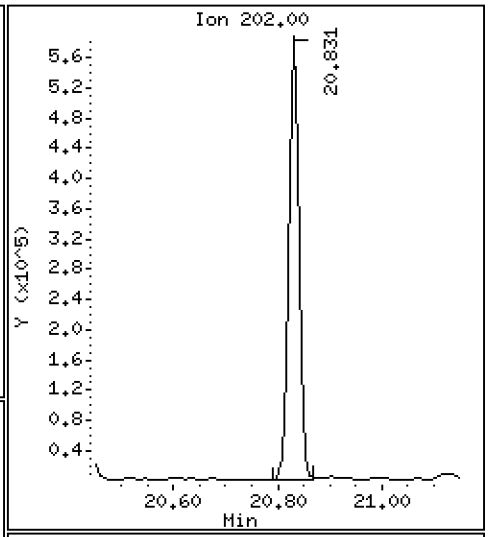
Concentration: 2.050 ug/mL

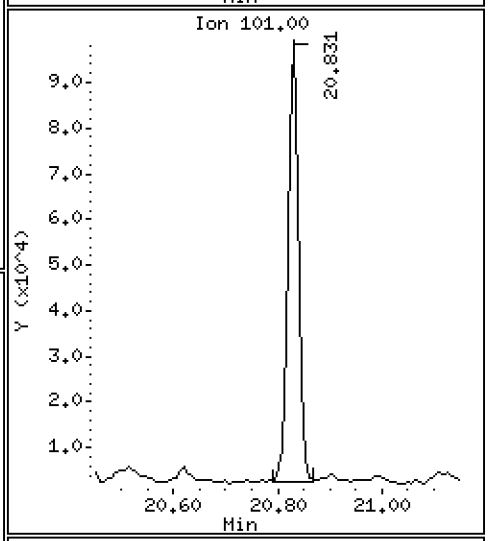


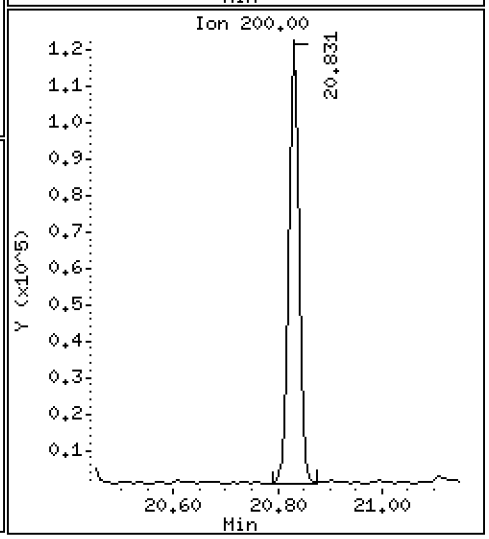












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

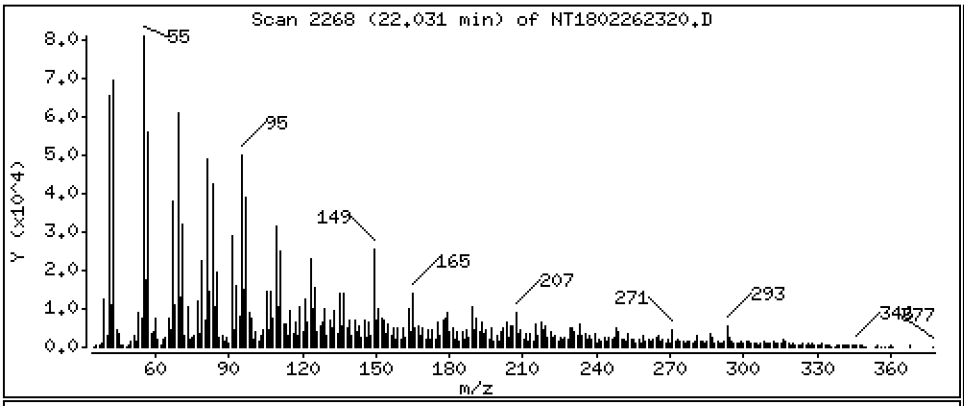
Operator: VTS

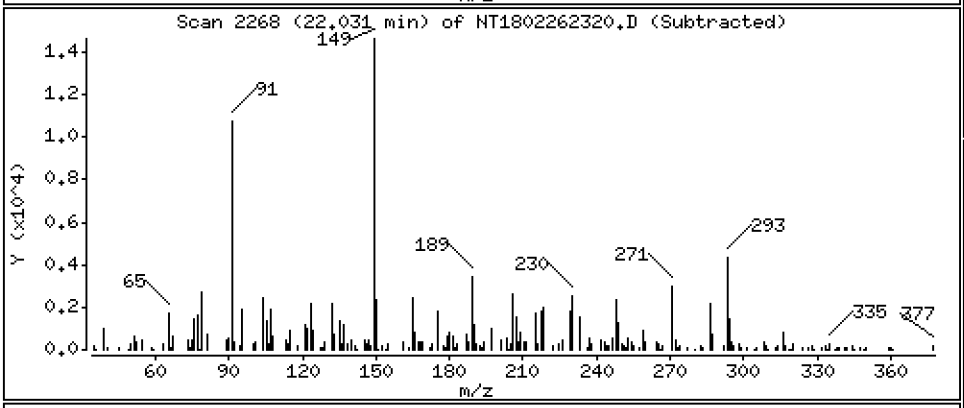
Column phase: ZB-5msi

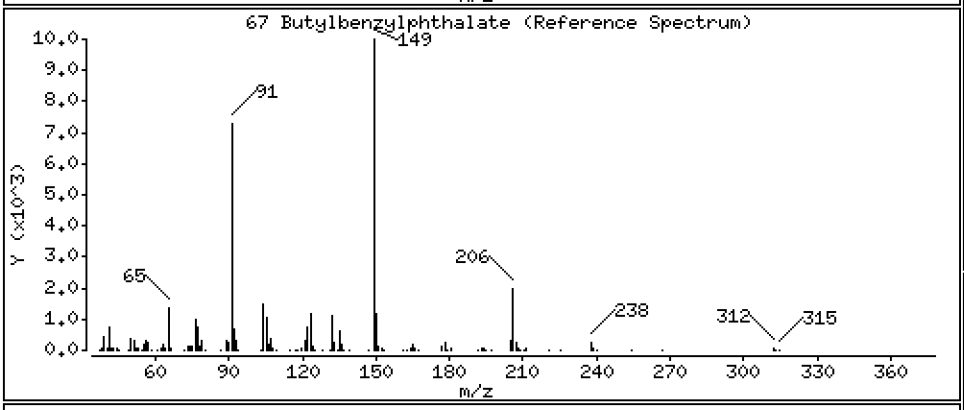
Column diameter: 0.25

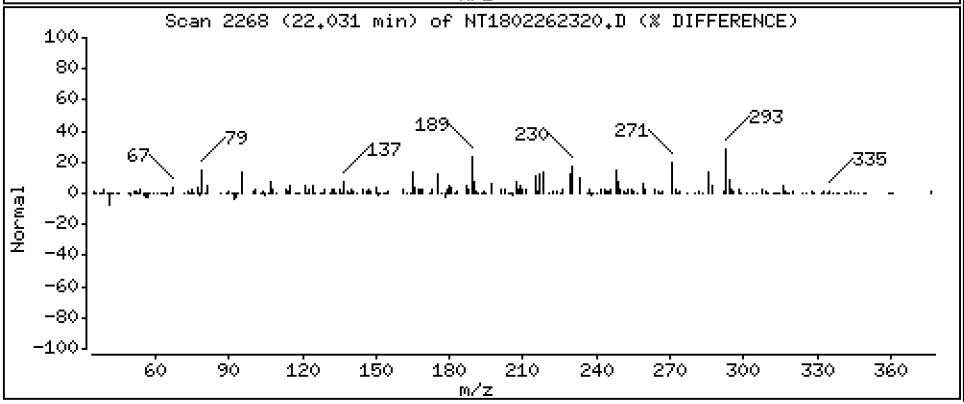
67 Butylbenzylphthalate

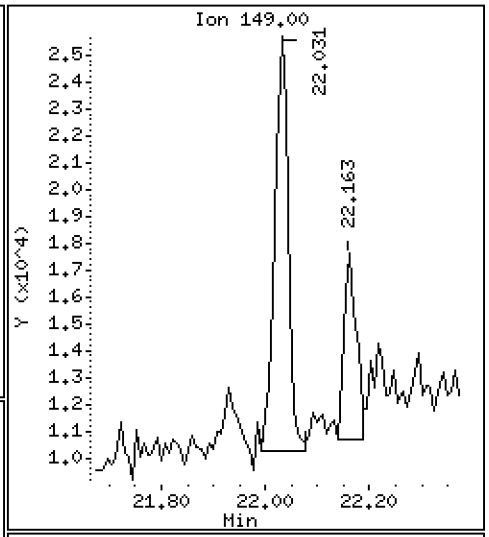
Concentration: 0.1717 ug/mL

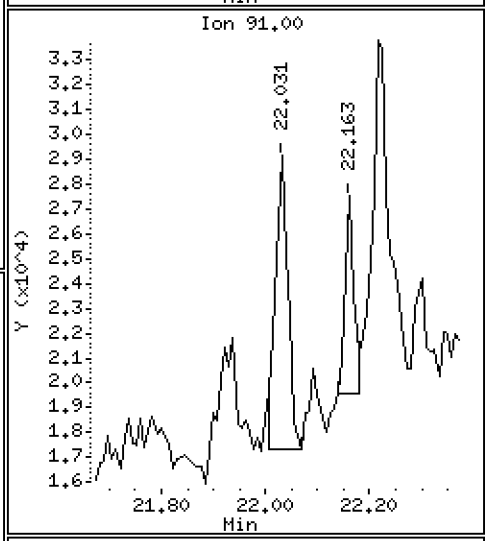


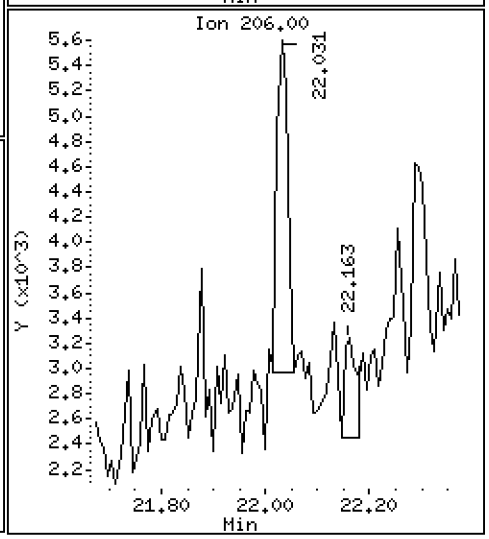












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

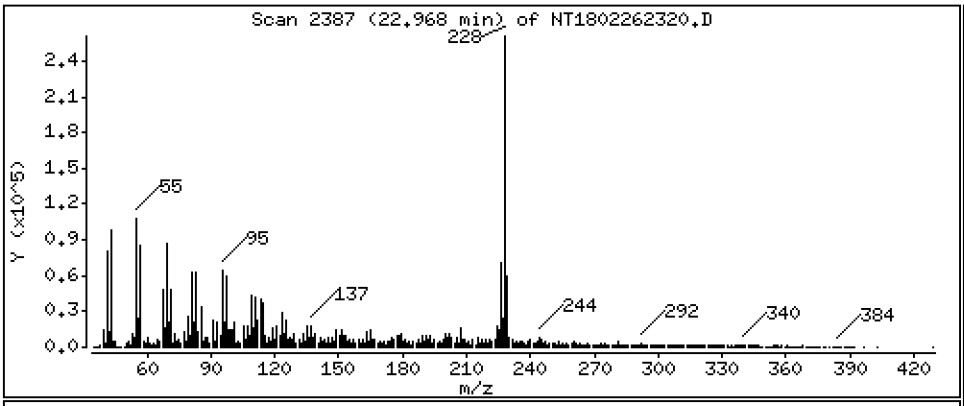
Operator: VTS

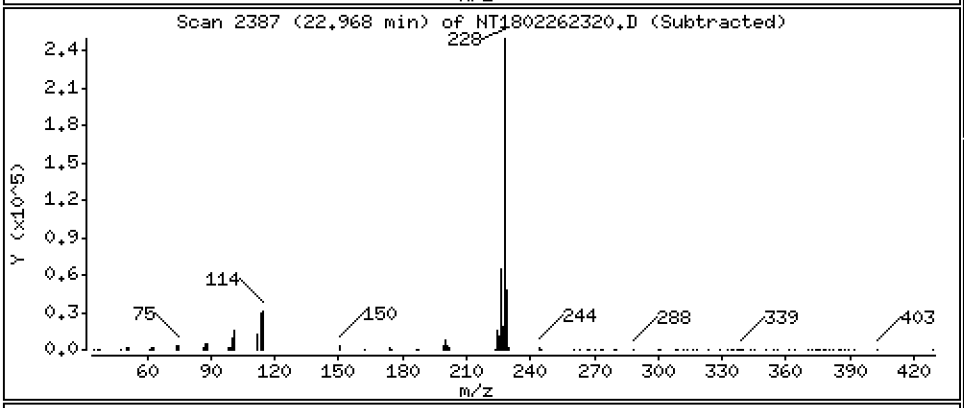
Column phase: ZB-5msi

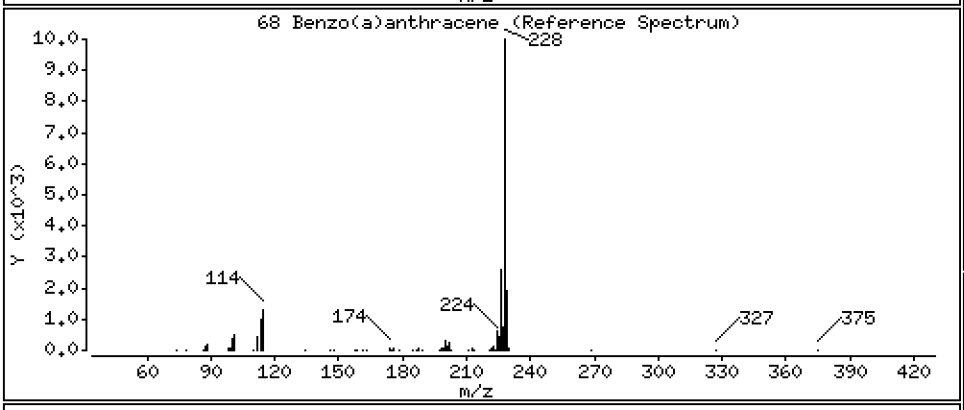
Column diameter: 0.25

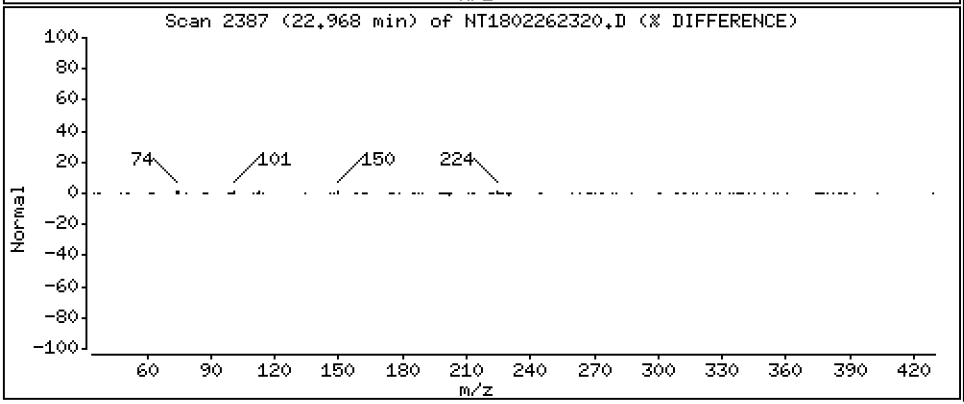
68 Benzo(a)anthracene

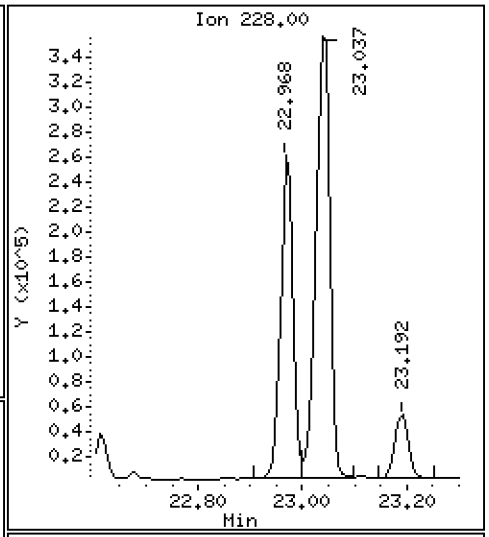
Concentration: 1.073 ug/mL

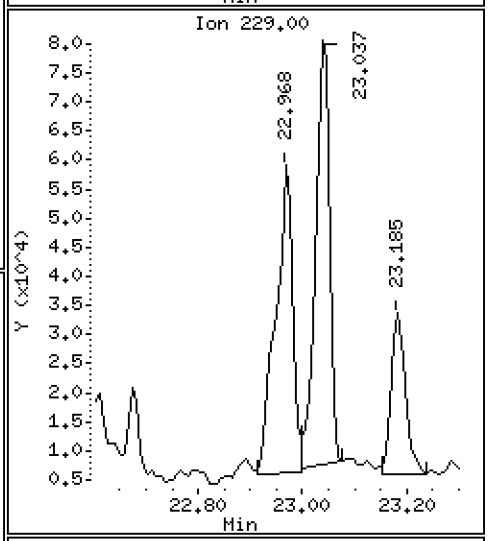


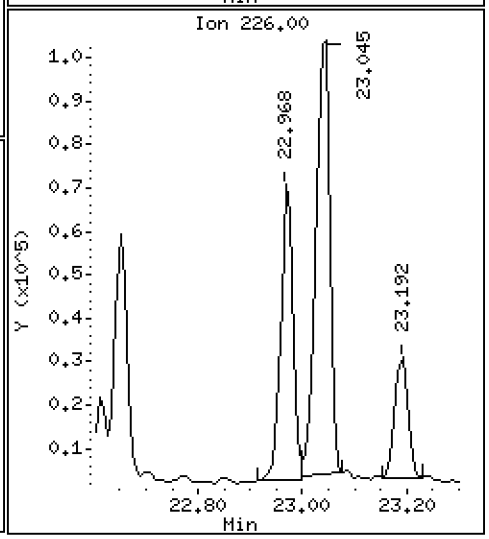












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

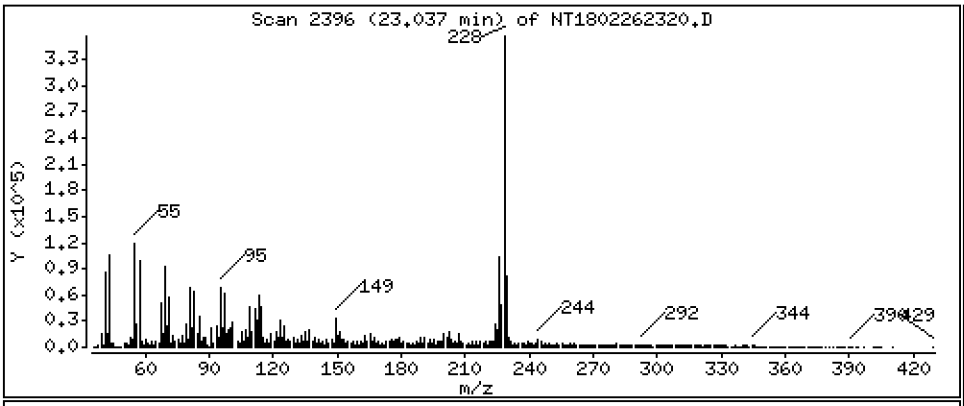
Operator: VTS

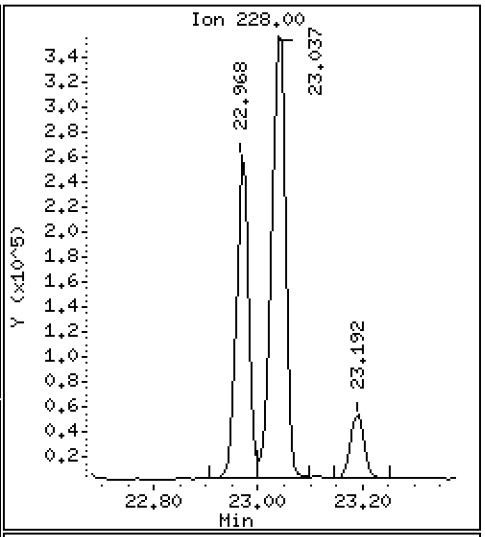
Column phase: ZB-5msi

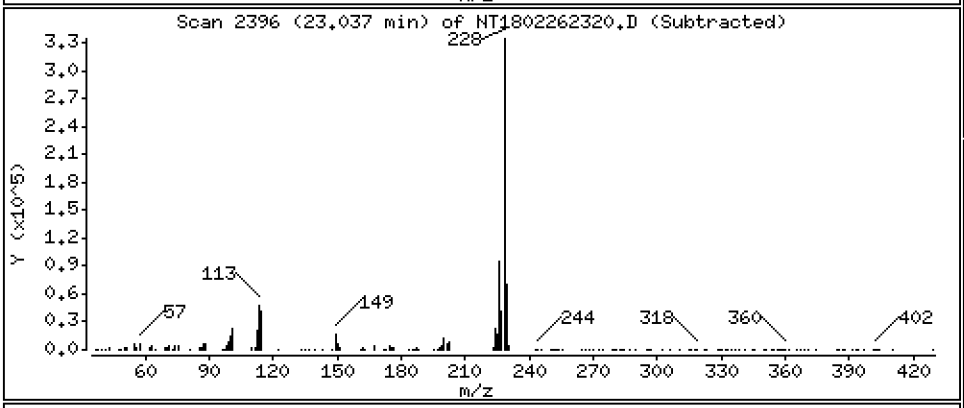
Column diameter: 0.25

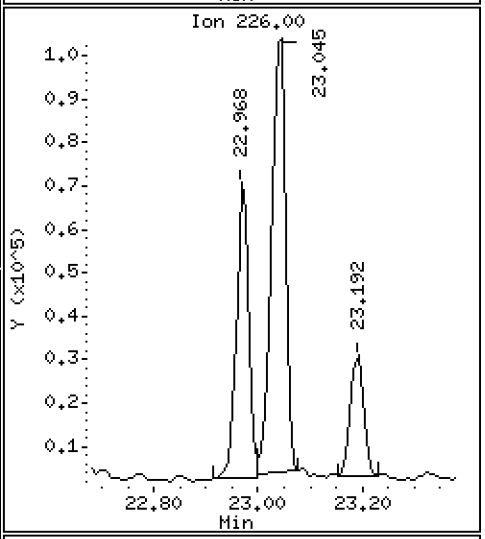
71 Chrysene

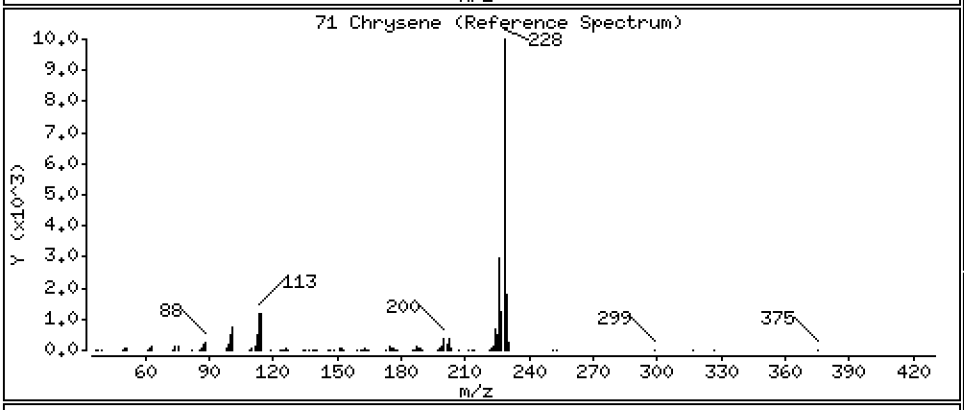
Concentration: 1.558 ug/mL

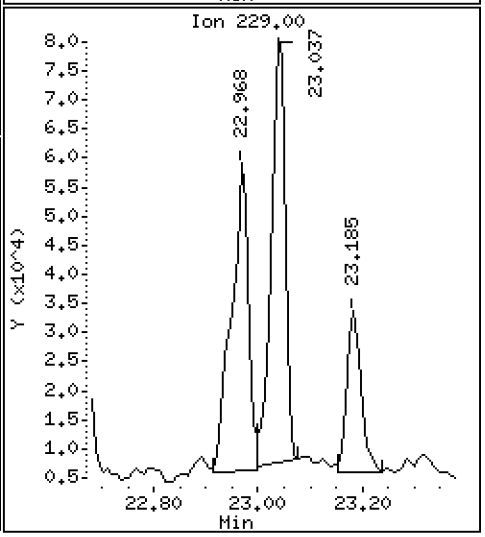


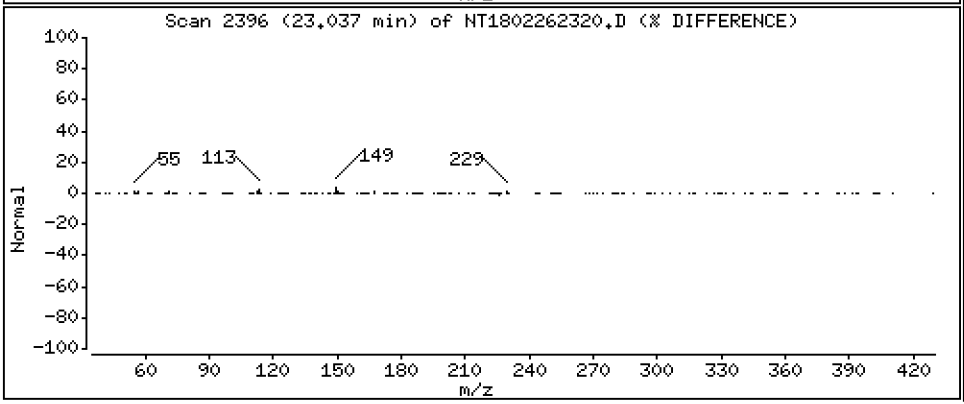












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

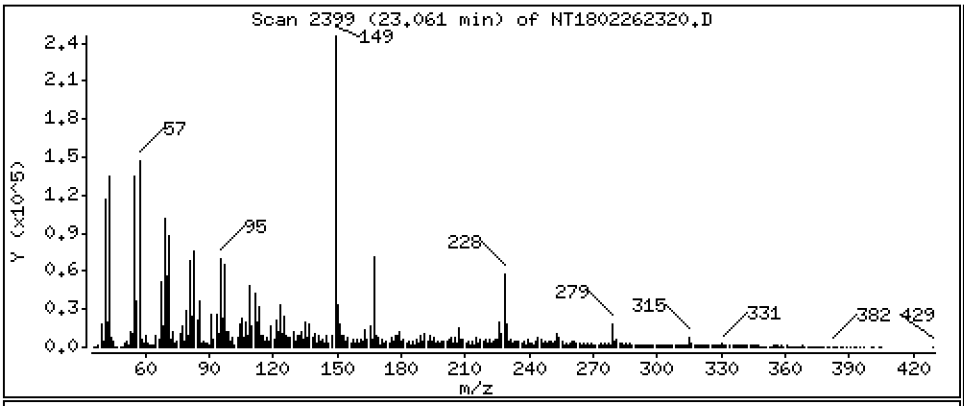
Operator: VTS

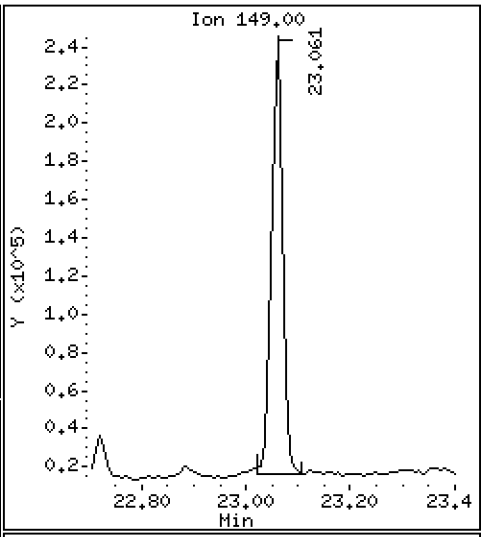
Column phase: ZB-5msi

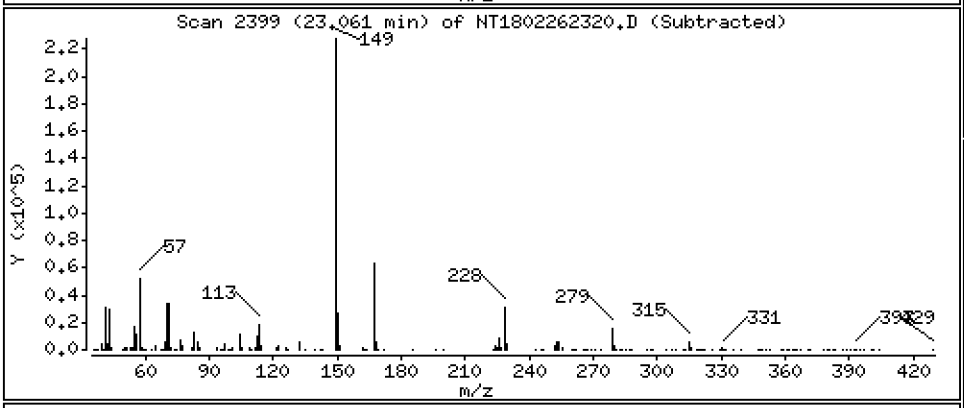
Column diameter: 0.25

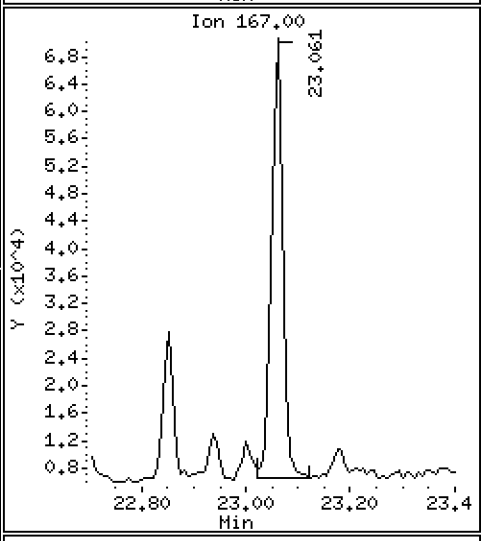
72 bis(2-Ethylhexyl)phthalate

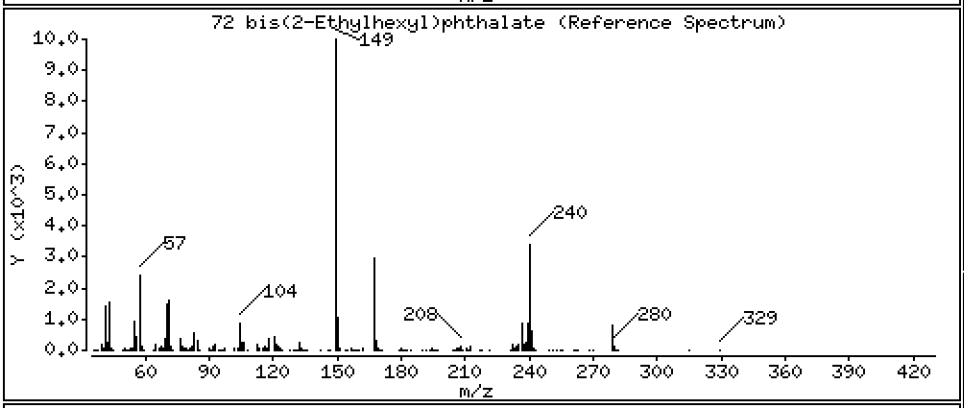
Concentration: 1.360 ug/mL

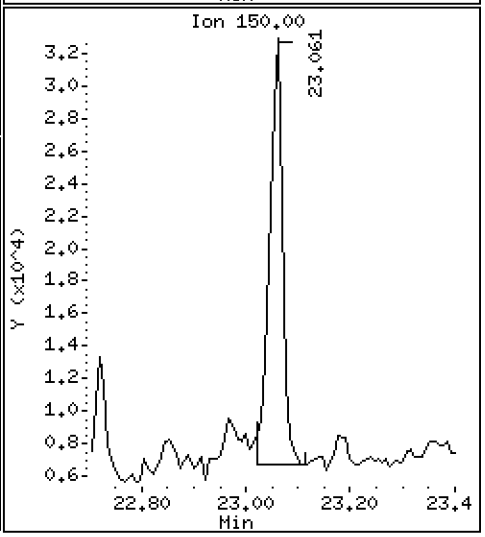


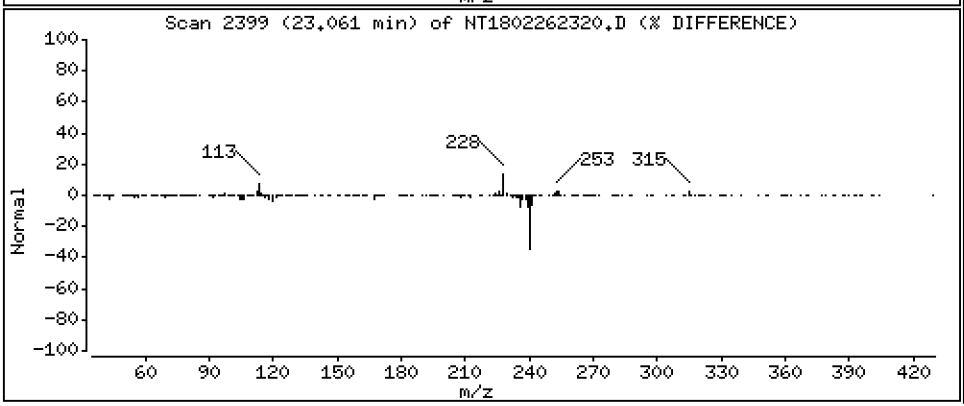












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

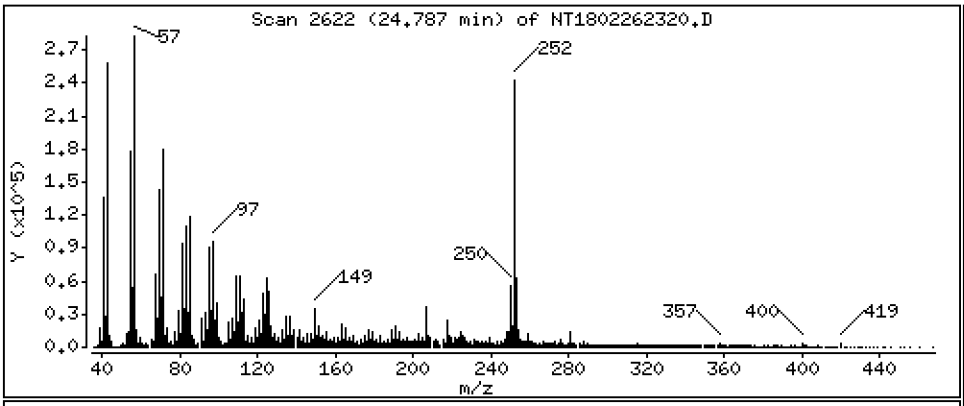
Operator: VTS

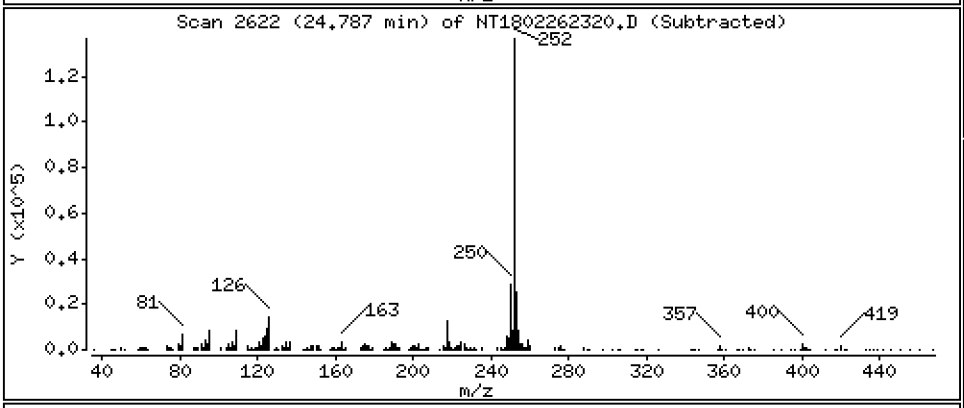
Column phase: ZB-5msi

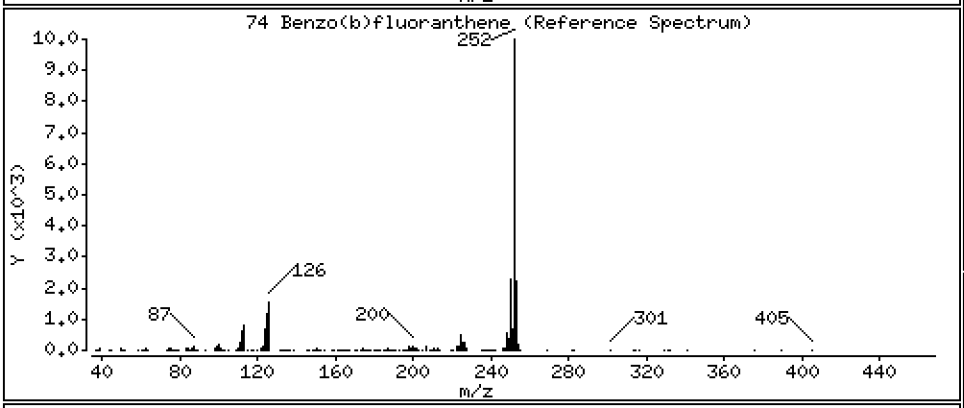
Column diameter: 0.25

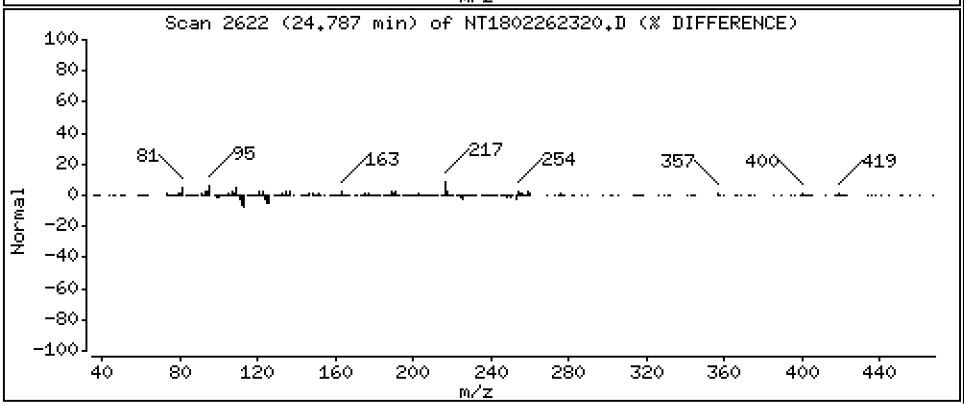
74 Benzo(b)fluoranthene

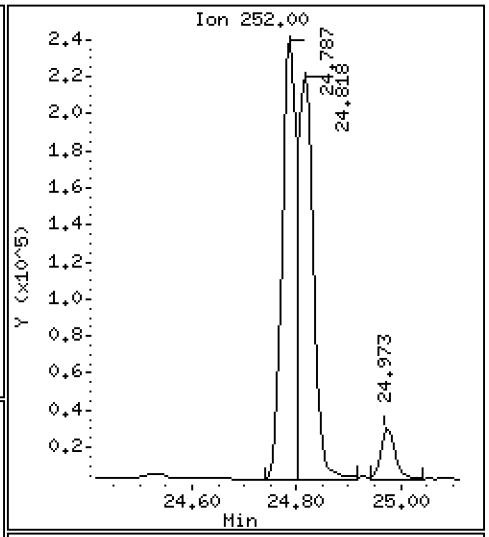
Concentration: 2.127 ug/mL

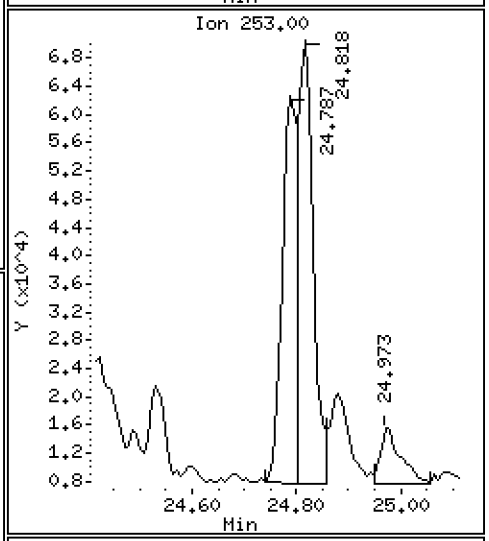


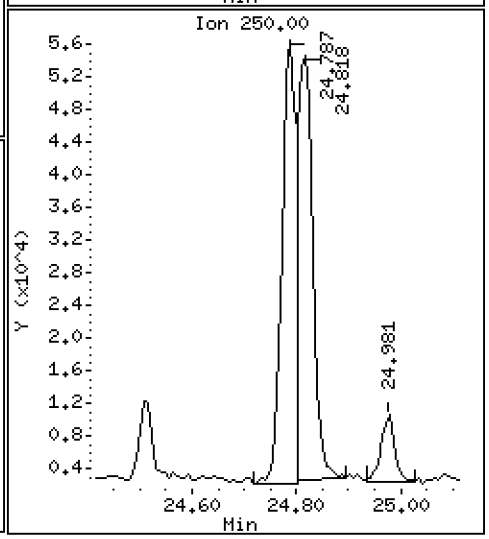












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

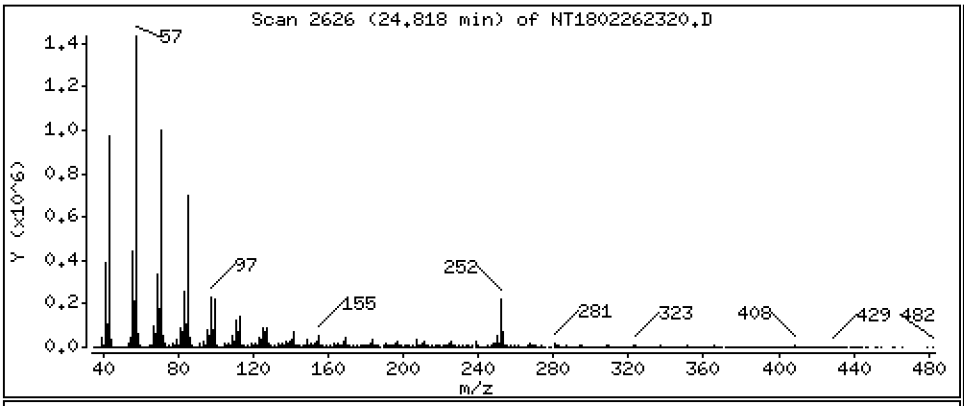
Operator: VTS

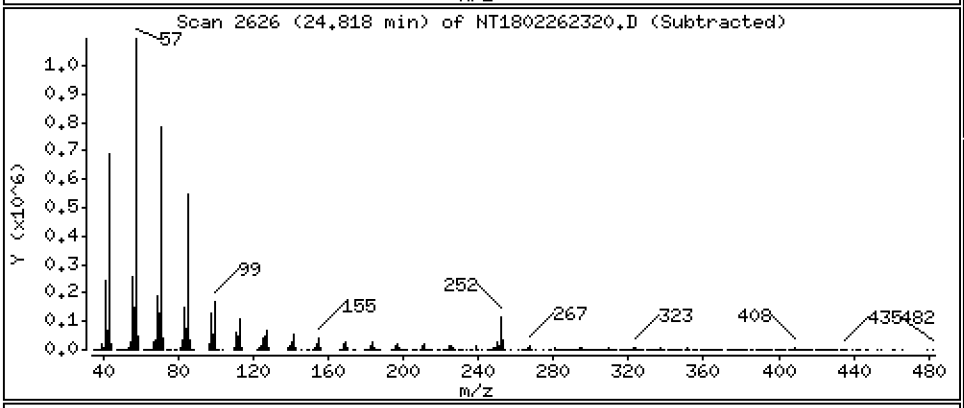
Column phase: ZB-5msi

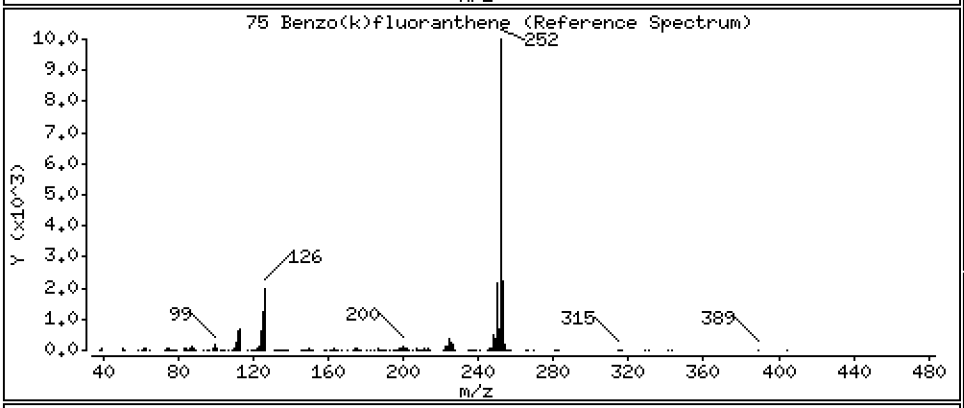
Column diameter: 0.25

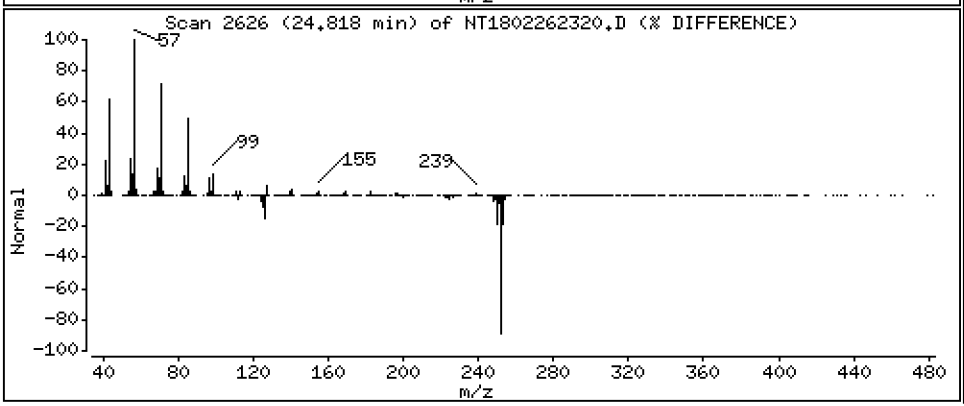
75 Benzo(k)fluoranthene

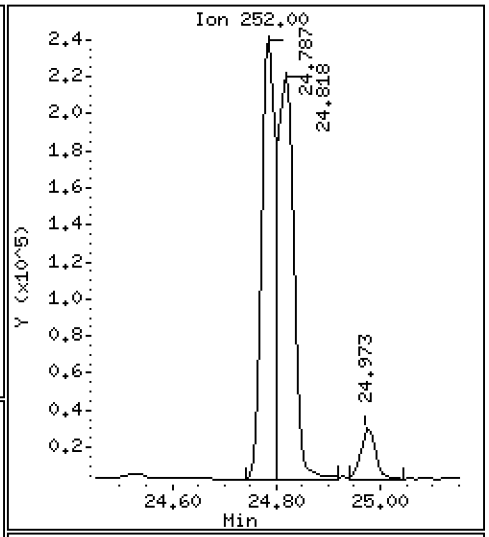
Concentration: 1.885 ug/mL

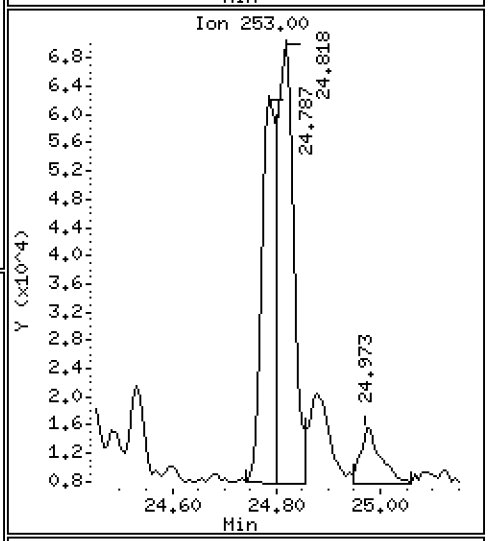


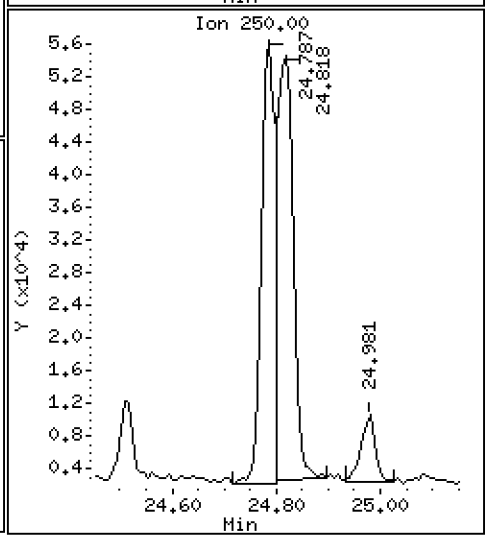












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

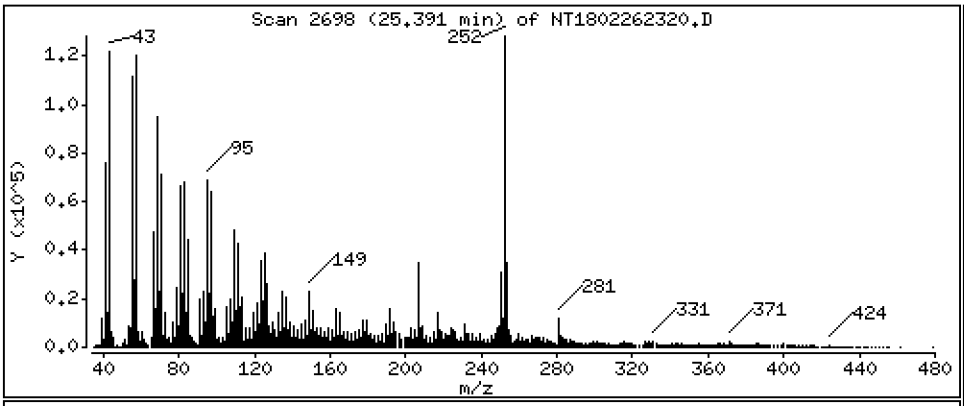
Operator: VTS

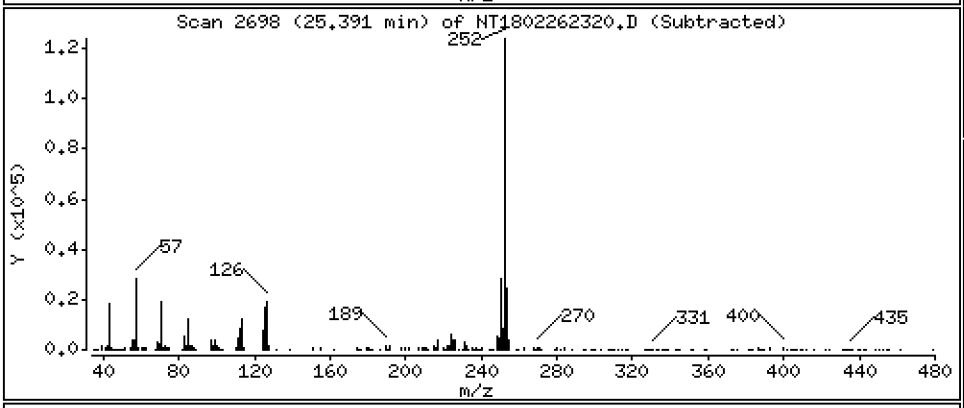
Column phase: ZB-5msi

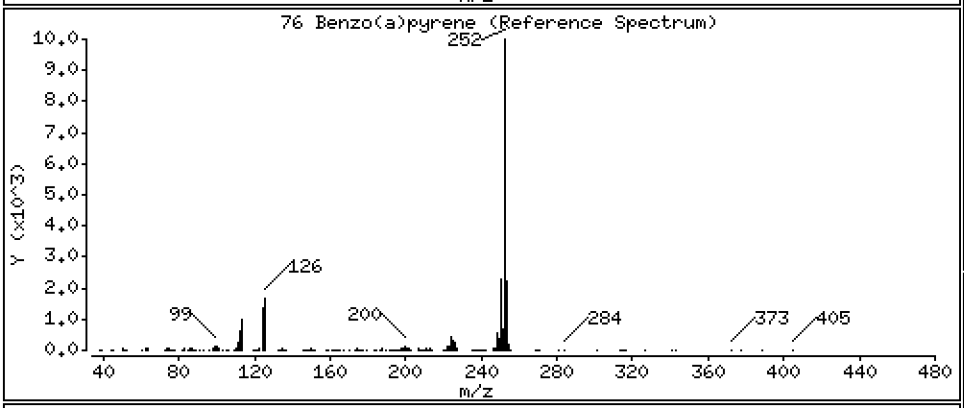
Column diameter: 0.25

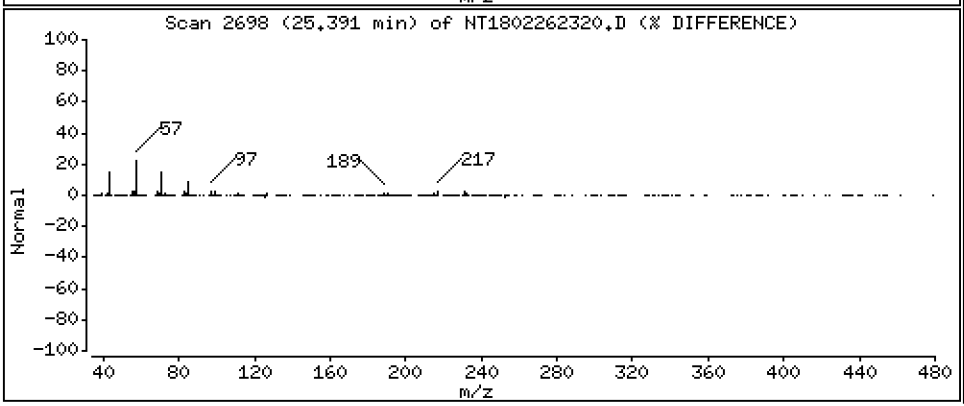
76 Benzo(a)pyrene

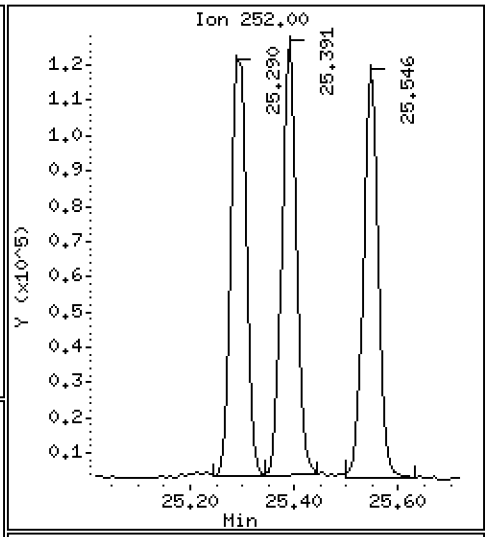
Concentration: 1.164 ug/mL

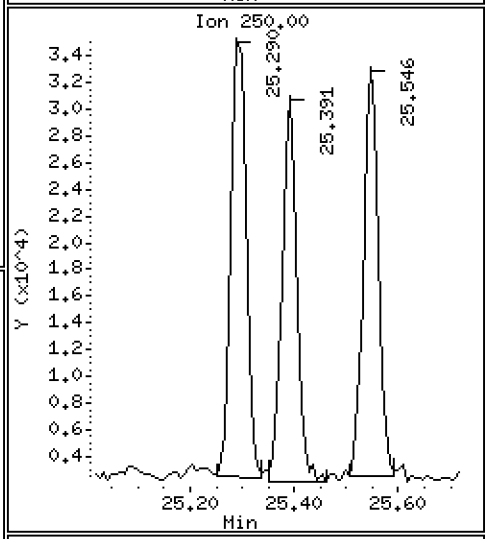


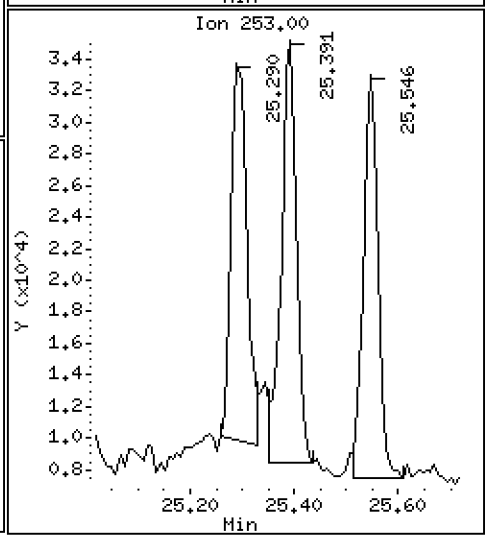












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

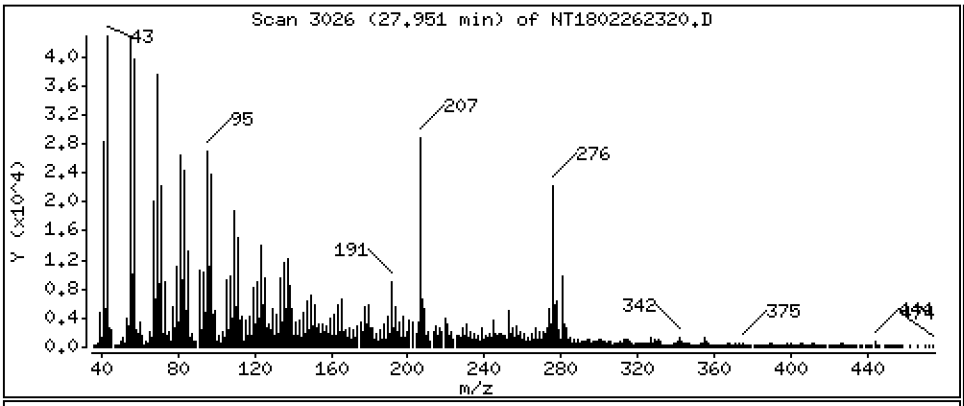
Operator: VTS

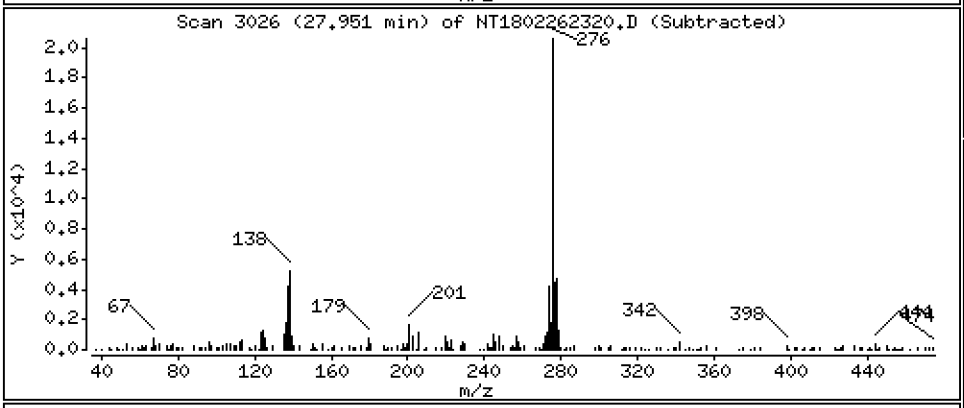
Column phase: ZB-5msi

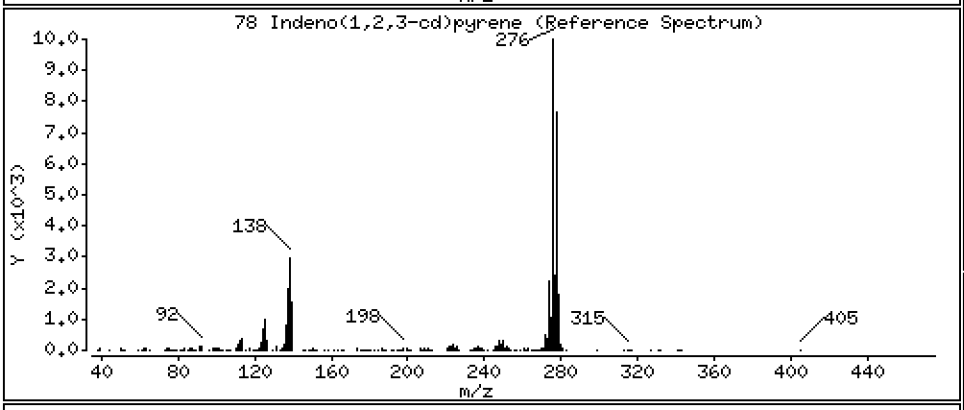
Column diameter: 0.25

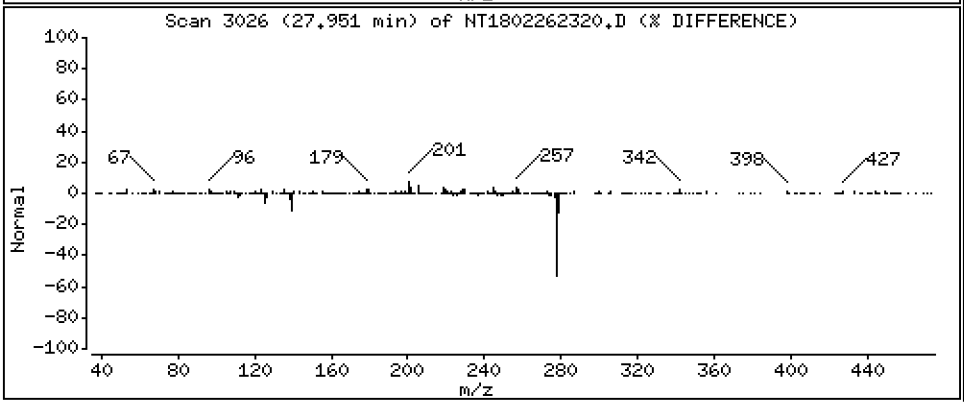
78 Indeno(1,2,3-cd)pyrene

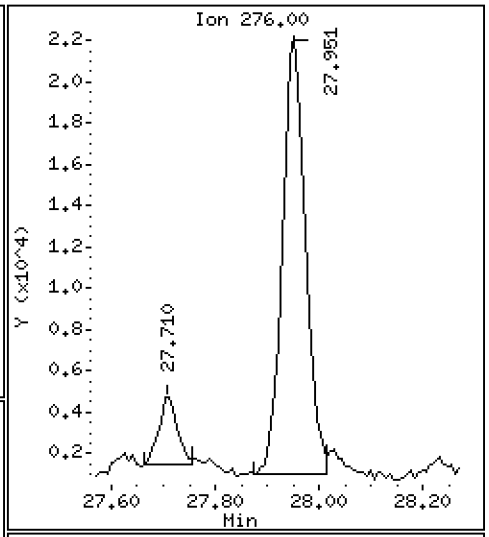
Concentration: 0.2589 ug/mL

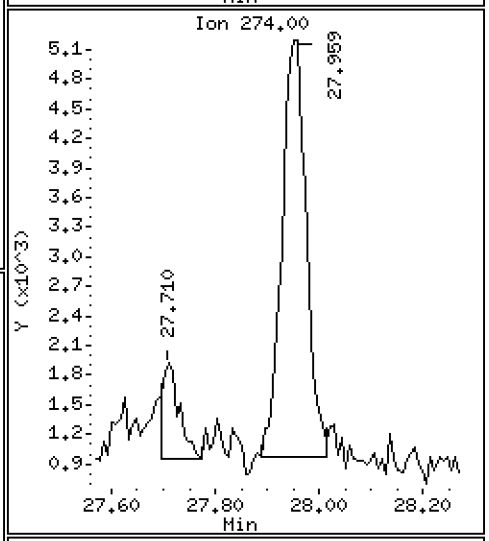


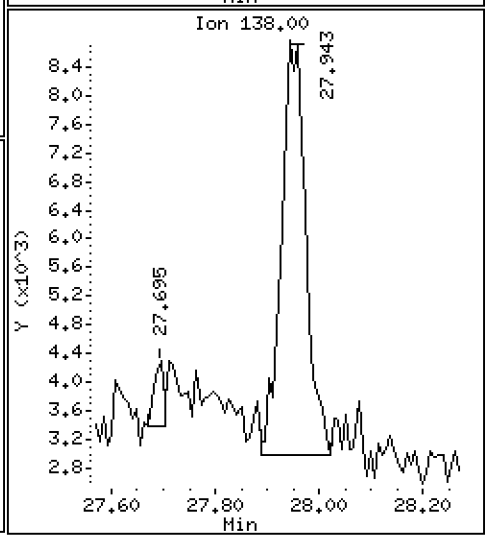












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

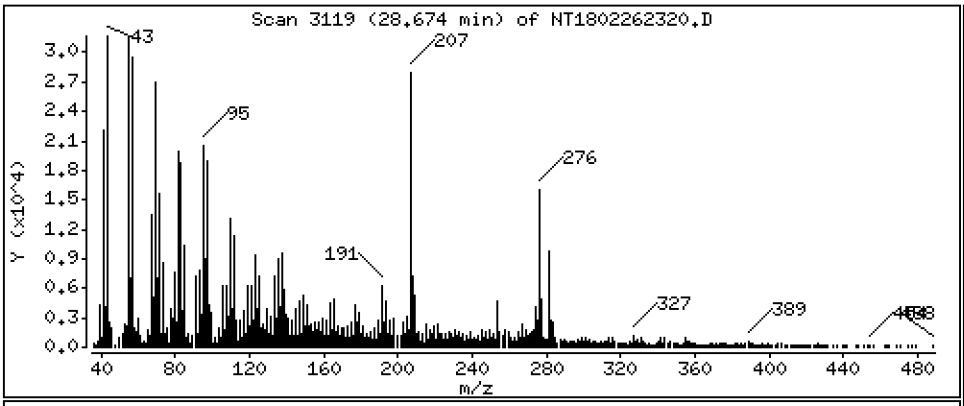
Operator: VTS

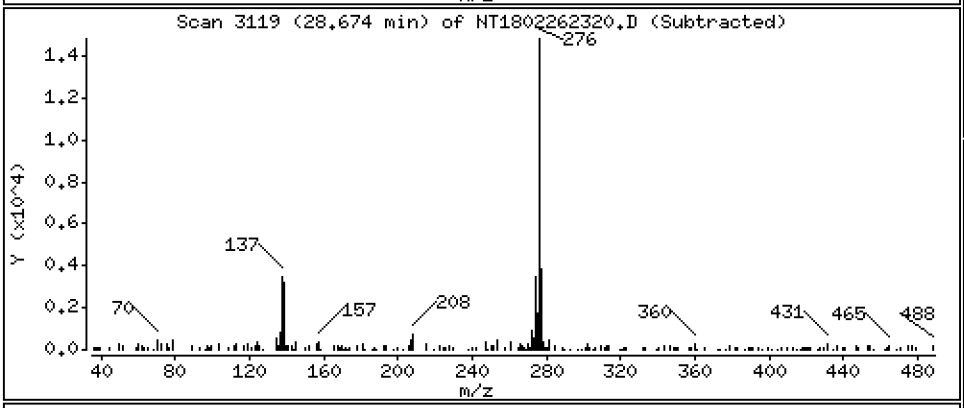
Column phase: ZB-5msi

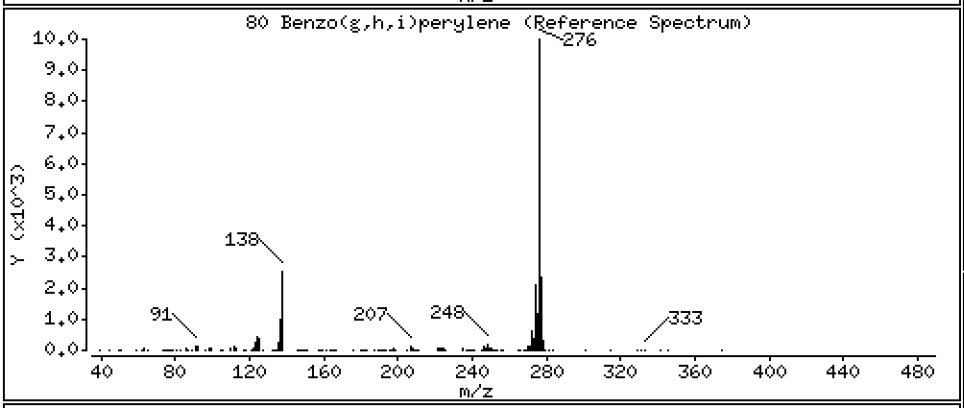
Column diameter: 0.25

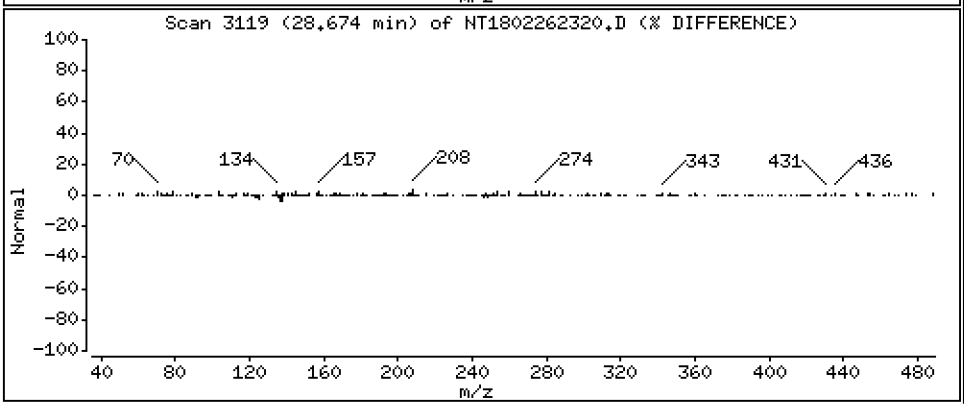
80 Benzo(g,h,i)perylene

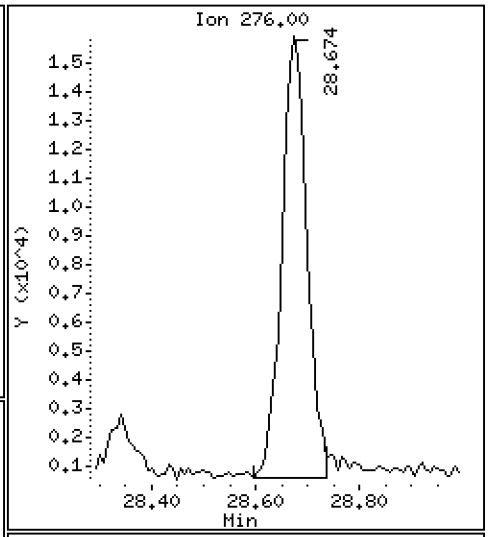
Concentration: 0.2539 ug/mL

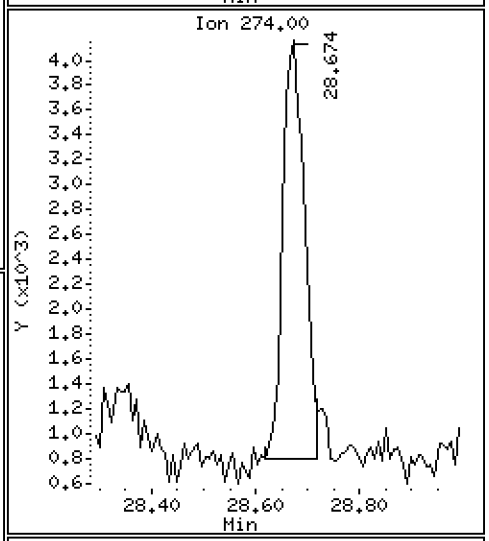


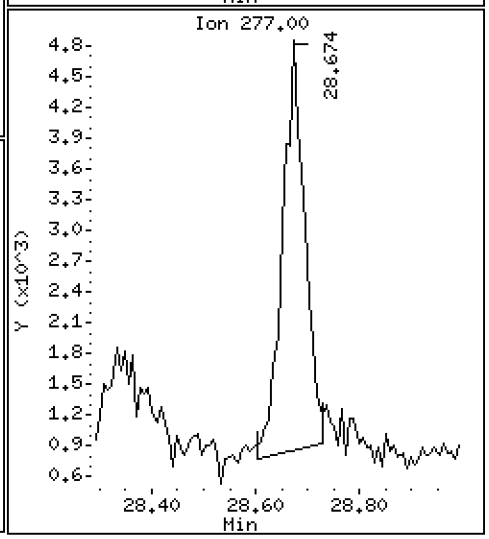












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

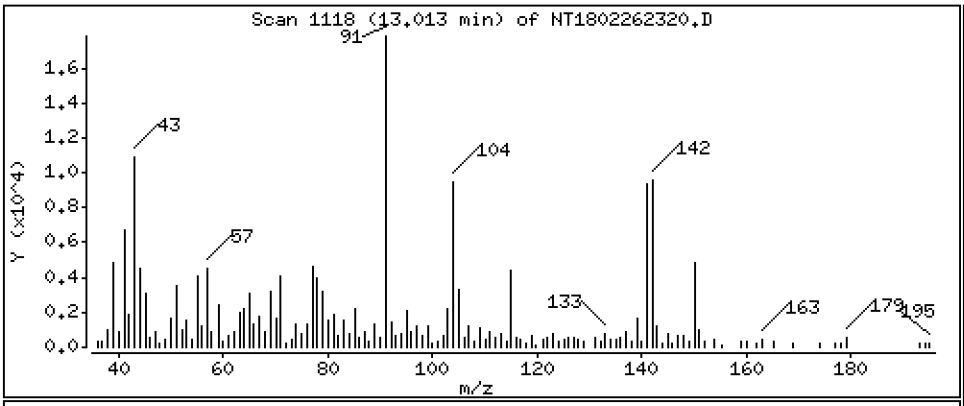
Operator: VTS

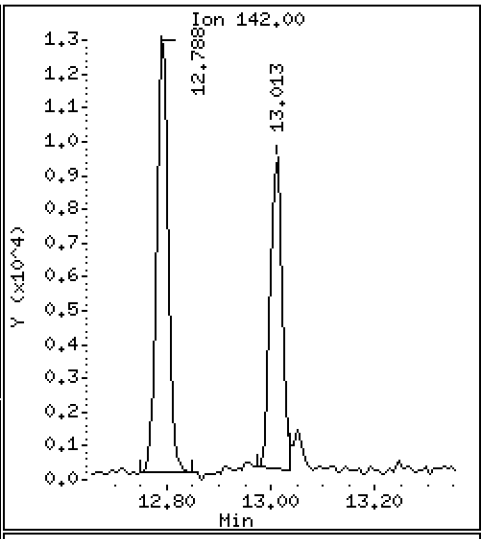
Column phase: ZB-5msi

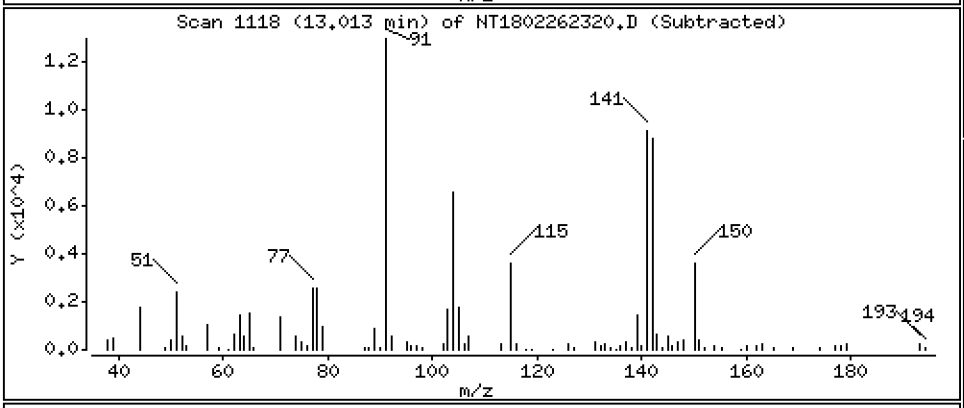
Column diameter: 0.25

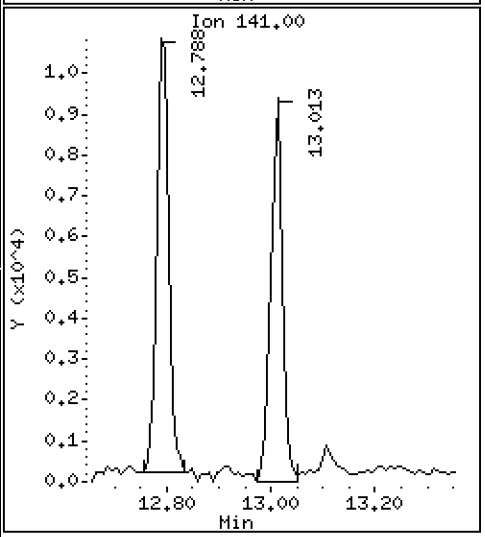
105 1-methylnaphthalene

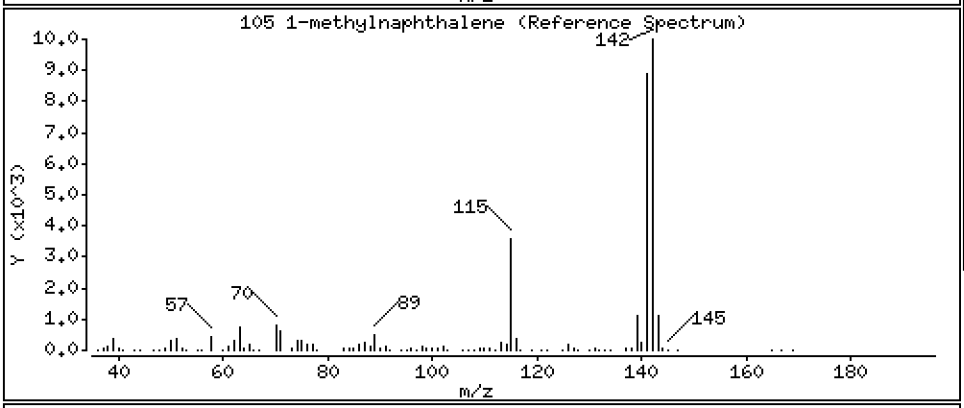
Concentration: 0.08010 ug/mL

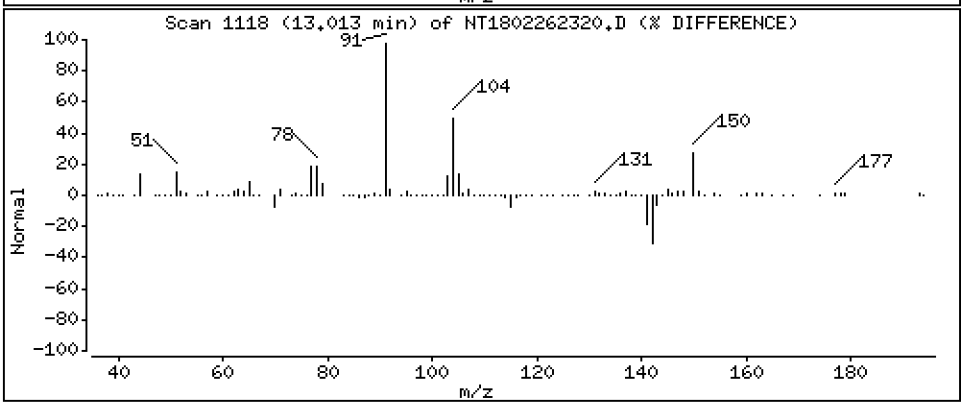












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

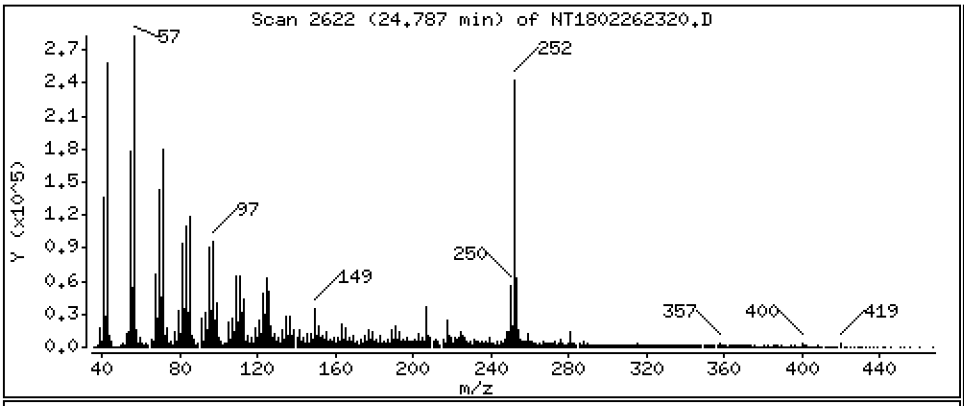
Operator: VTS

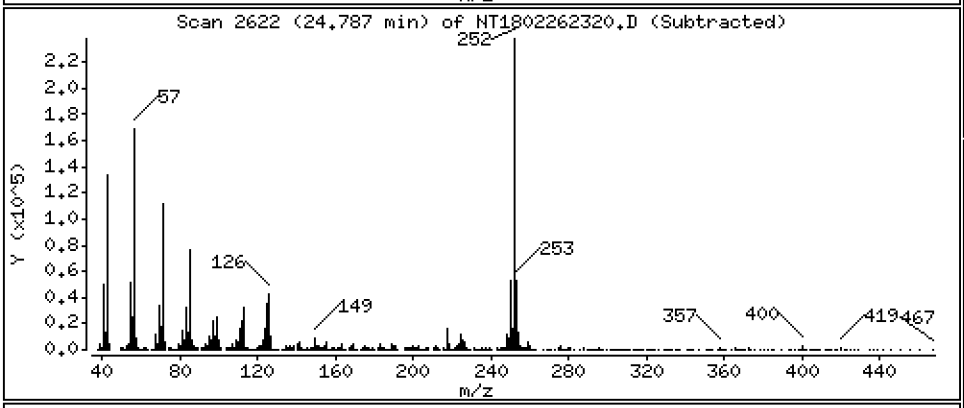
Column phase: ZB-5msi

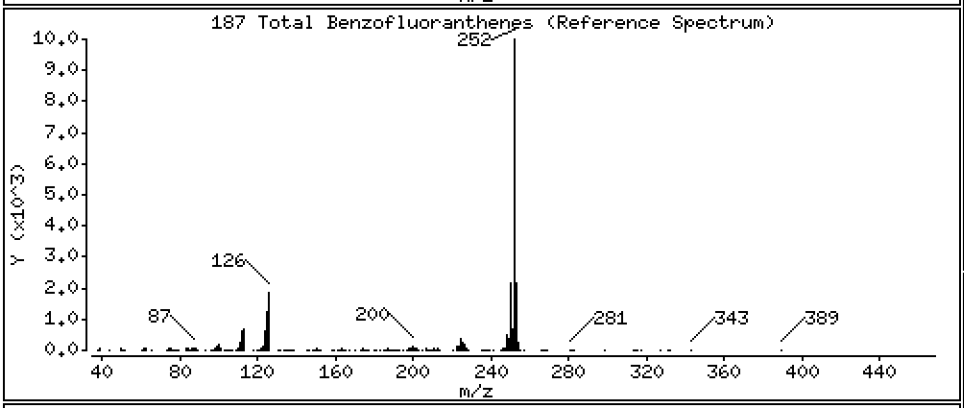
Column diameter: 0.25

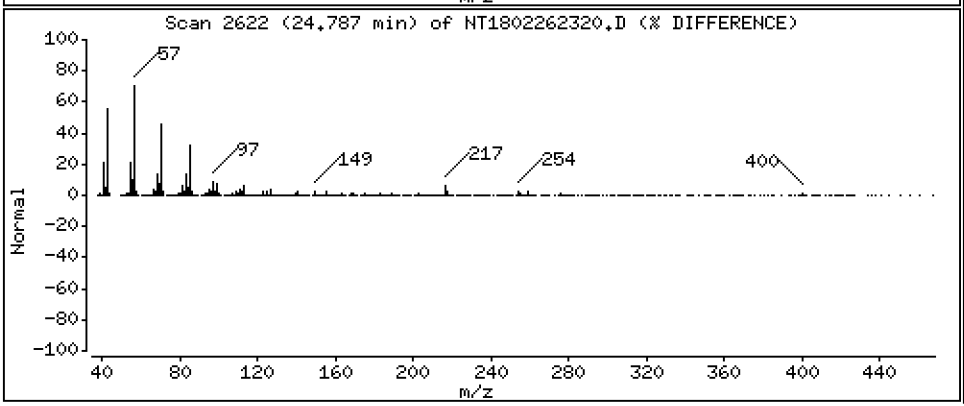
187 Total Benzofluoranthenes

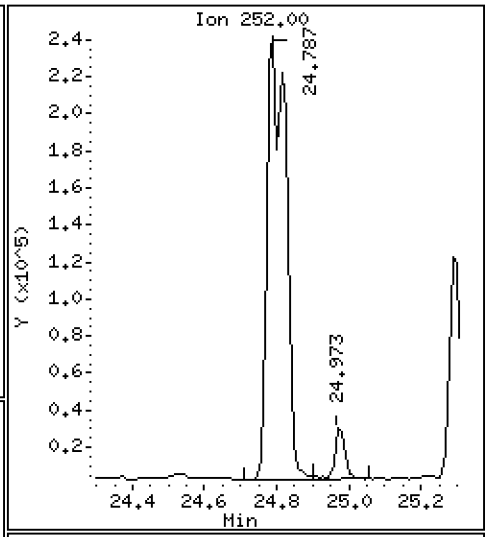
Concentration: 3.861 ug/mL

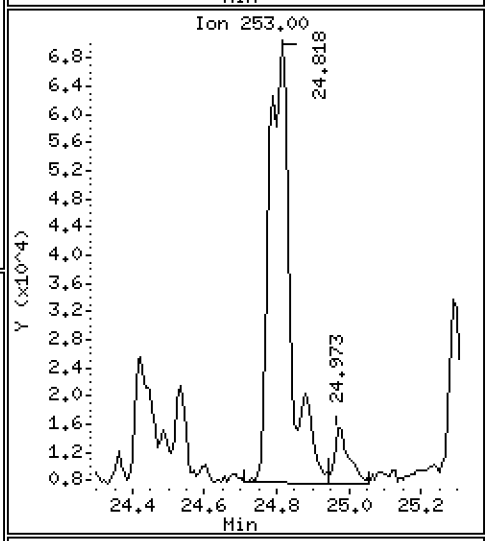


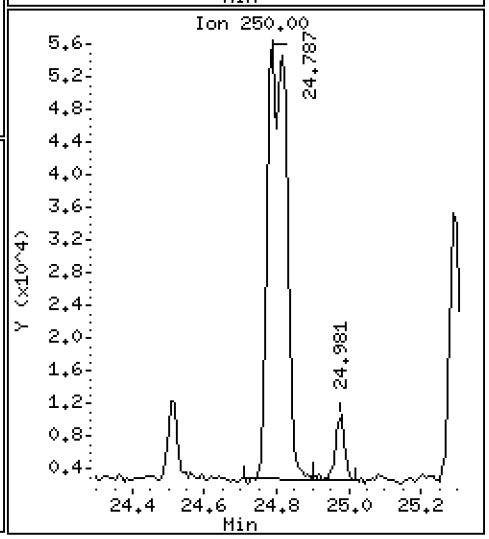












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262320.D
Lab Smp Id: 23A0134-11
Inj Date : 27-FEB-2023 00:34
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-11
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	6.782	6.743	(0.761)	468236	5.47780	5.478
$ 2	Phenol-d5	99	8.319	8.296	(0.933)	613239	5.55117	5.551
3	Phenol	94	8.335	8.319	(0.935)	362395	3.15293	3.153
$ 5	2-Chlorophenol-d4	132	8.574	8.559	(0.962)	524985	5.46121	5.461
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	8.914	8.915	(1.000)	250542	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	9.271	9.272	(1.040)	215643	3.16431	3.164
12	1,2-Dichlorobenzene	146	9.287	9.295	(1.042)	265	0.00257	0.002566
11	Benzyl alcohol	108	9.209	9.186	(1.033)	10076	0.18437	0.1844
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	9.698	9.683	(1.088)	7995	0.08628	0.08628
$ 18	Nitrobenzene-d5	82	9.993	9.993	(0.879)	362723	3.63690	3.637
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	10.871	10.990	(0.957)	53059	1.55215	1.552(M)
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.365	11.365	(1.000)	935827	4.00000	
28	Naphthalene	128	11.411	11.403	(1.004)	37061	0.12883	0.1288
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	12.788	12.788	(1.125)	20500	0.10487	0.1049
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	13.570	13.570	(0.908)	768092	3.60645	3.606
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	14.467	14.468	(0.968)	6635	0.03712	0.03712
40	Acenaphthylene	152	14.638	14.630	(0.979)	24397	0.08706	0.08706
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	14.947	14.947	(1.000)	505143	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	15.009	15.009	(1.004)	16548	0.09331	0.09331(H)
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.334	15.334	(1.026)	24465	0.09531	0.09531
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	15.906	15.921	(1.064)	199644	1.06600	1.066
49	Fluorene	166	16.045	16.037	(1.073)	22476	0.10926	0.1093
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	16.577	16.569	(1.109)	189539	7.19264	7.193
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	17.960	17.952	(1.000)	1041436	4.00000	
60	Phenanthrene	178	18.006	17.999	(1.003)	253597	0.77417	0.7742
61	Anthracene	178	18.099	18.092	(1.008)	111079	0.35583	0.3558
62	Carbazole	167	18.432	18.424	(1.026)	38901	0.13599	0.1360
63	Di-n-butylphthalate	149	19.252	19.237	(1.072)	19259	0.06083	0.06083
64	Fluoranthene	202	20.428	20.382	(0.888)	734253	1.93057	1.931
65	Pyrene	202	20.830	20.800	(0.906)	831379	2.04961	2.050
$ 66	Terphenyl-d14	244	21.109	21.094	(0.918)	1270383	3.90480	3.905
67	Butylbenzylphthalate	149	22.030	22.023	(0.958)	26451	0.17174	0.1717
68	Benzo(a)anthracene	228	22.967	22.952	(0.999)	420492	1.07296	1.073
* 69	Chrysene-d12	240	22.998	22.983	(1.000)	1085535	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.037	23.029	(1.002)	635040	1.55832	1.558
72	bis(2-Ethylhexyl)phthalate	149	23.060	23.053	(0.960)	329786	1.36031	1.360
* 134	Di-n-octylphthalate-d4	153	24.028	24.020	(1.000)	1688607	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	24.787	24.764	(0.972)	474432	2.12715	2.127
75	Benzo(k)fluoranthene	252	24.818	24.802	(0.973)	476360	1.88457	1.885(H)
76	Benzo(a)pyrene	252	25.391	25.368	(0.996)	240692	1.16410	1.164
* 77	Perylene-d12	264	25.499	25.476	(1.000)	683638	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.951	27.920	(1.096)	67203	0.25891	0.2589
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	28.673	28.642	(1.124)	52843	0.25394	0.2539
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.012	13.005	(1.145)	14174	0.08010	0.08010
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.787	24.802	(0.972)	870628	3.86087	3.861
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262320.D
Lab Smp Id: 23A0134-11
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	250542	2.63
27 Naphthalene-d8	943164	471582	1886328	935827	-0.78
42 Acenaphthene-d10	501893	250947	1003786	505143	0.65
59 Phenanthrene-d10	896502	448251	1793004	1041436	16.17
69 Chrysene-d12	842481	421241	1684962	1085535	28.85
134 Di-n-octylphthala	1278043	639022	2556086	1688607	32.12
77 Perylene-d12	915681	457841	1831362	683638	-25.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.91	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	-0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.07
134 Di-n-octylphthala	24.02	23.52	24.52	24.03	0.03
77 Perylene-d12	25.48	24.98	25.98	25.50	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262320.D

Lab ID: 23A0134-11
nt18.i, ABN.m, 27-FEB-2023 00:34

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.967	-0.0105	Benzoic acid

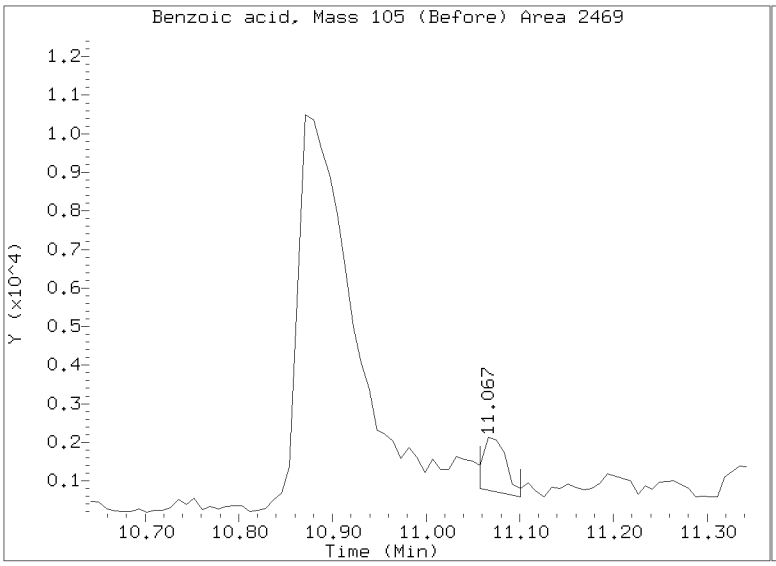
RRT check based on Ccal File: NT1802262302.D

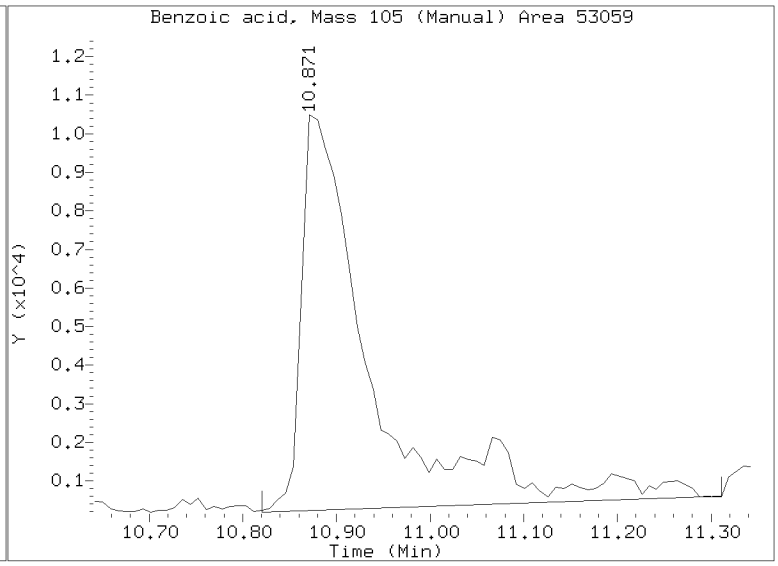
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/NT1802262320.D
Injection Date: 27-FEB-2023 00:34
Lab ID:23A0134-11 Client ID:
Report Date: 03/10/2023 07:47





LDW23-SS1116

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-12 C	SDG:	23A0134
Sampled:	01/06/23 13:44	Prepared:	01/19/23 13:35	File ID:	NT1802272307.D
% Solids:	58.81	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/27/23 21:11
Batch:	BLA0410	Sequence:	SLC0385	Initial/Final:	17.14 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	91.8		4.4	19.8
106-44-5	4-Methylphenol	1	46.8		7.3	19.8
91-20-3	Naphthalene	1	8.5	J	4.2	19.8
91-57-6	2-Methylnaphthalene	1	7.3	J	4.5	19.8
208-96-8	Acenaphthylene	1	19.8	U	6.2	19.8
131-11-3	Dimethylphthalate	1	19.8	U	4.4	19.8
83-32-9	Acenaphthene	1	19.8	U	5.2	19.8
132-64-9	Dibenzofuran	1	19.8	U	14.0	19.8
86-73-7	Fluorene	1	19.8	U	14.5	19.8
85-01-8	Phenanthrene	1	25.4		8.7	19.8
120-12-7	Anthracene	1	9.5	J	7.1	19.8
206-44-0	Fluoranthene	1	67.5		6.0	19.8
129-00-0	Pyrene	1	86.2		5.6	19.8
85-68-7	Butylbenzylphthalate	1	16.4	J	9.3	19.8
56-55-3	Benzo(a)anthracene	1	31.7		5.9	19.8
218-01-9	Chrysene	1	38.5		6.0	19.8
117-81-7	bis(2-Ethylhexyl)phthalate	1	43.5	J	5.4	49.6
	Benzofluoranthenes, Total	1	118		9.9	39.7
50-32-8	Benzo(a)pyrene	1	40.8		4.2	19.8
193-39-5	Indeno(1,2,3-cd)pyrene	1	19.8	U	14.5	19.8
53-70-3	Dibenzo(a,h)anthracene	1	19.8	U	17.1	19.8
191-24-2	Benzo(g,h,i)perylene	1	17.4	J	13.5	19.8

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	744.05	544	73.2	27 - 120	
Phenol-d5	744.05	528	71.0	29 - 120	
2-Chlorophenol-d4	744.05	566	76.0	31 - 120	
1,2-Dichlorobenzene-d4	496.03	334	67.4	32 - 120	
Nitrobenzene-d5	496.03	360	72.5	30 - 120	
2-Fluorobiphenyl	496.03	363	73.1	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1116

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-12 C	SDG:	23A0134
Sampled:	01/06/23 13:44	Prepared:	01/19/23 13:35	File ID:	NT1802272307.D
% Solids:	58.81	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/27/23 21:11
Batch:	BLA0410	Sequence:	SLC0385	Initial/Final:	17.14 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	744.05	622	83.6	24 - 134	
p-Terphenyl-d14	496.03	384	77.4	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272307.D

Date : 27-FEB-2023 21:11

Client ID:

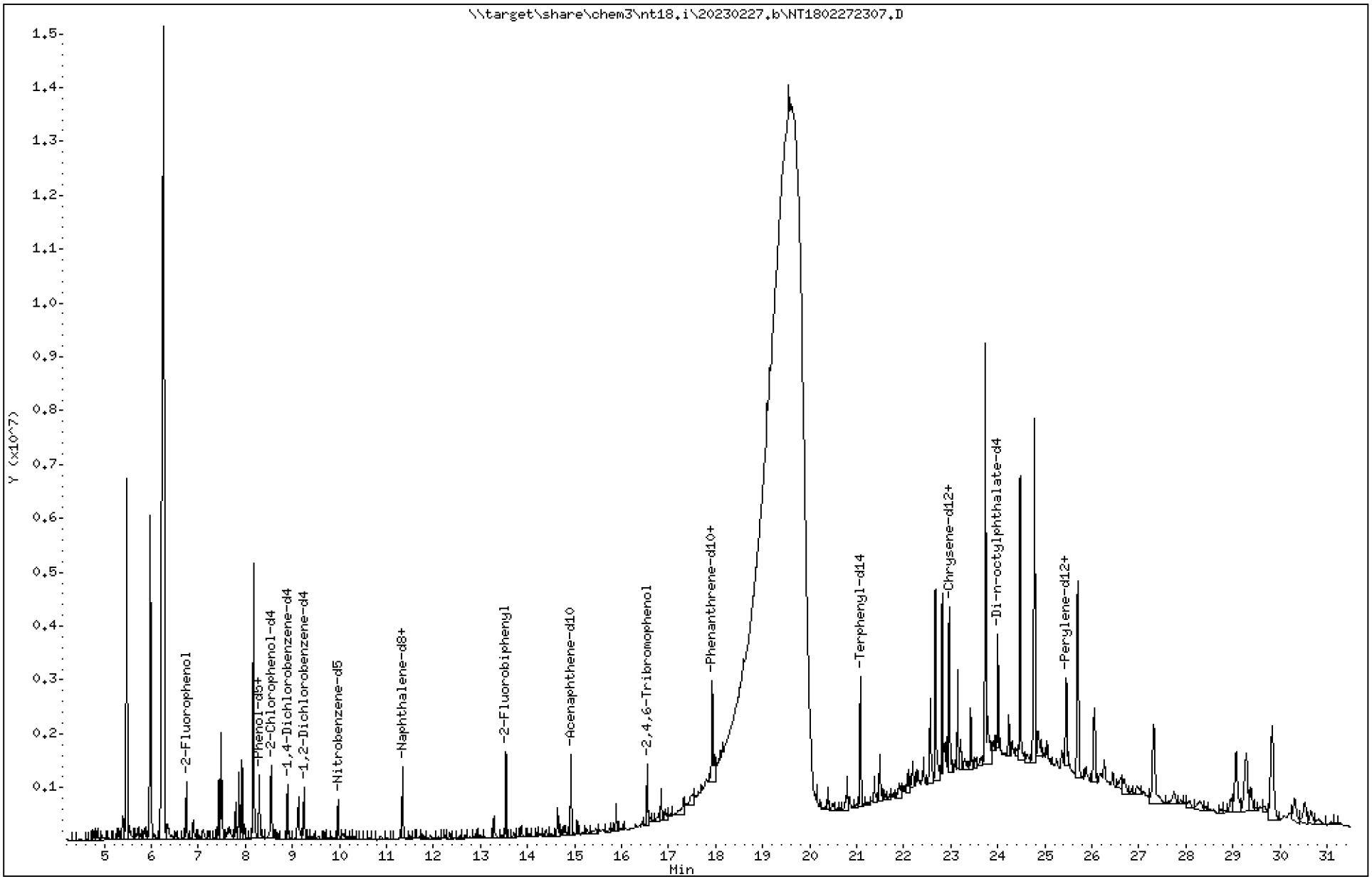
Instrument: nt18.i

Sample Info: 23A0134-12

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

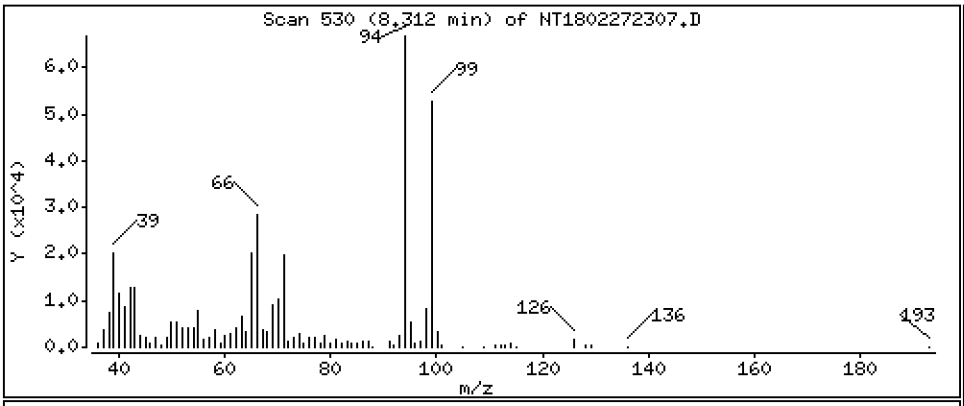
Operator: VTS

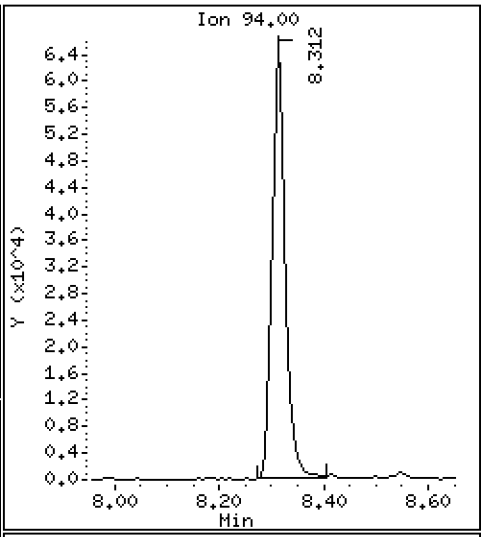
Column phase: ZB-5msi

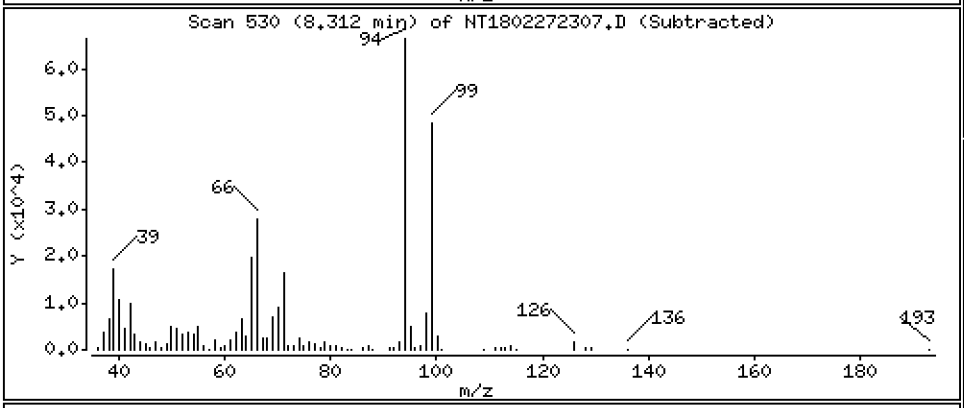
Column diameter: 0.25

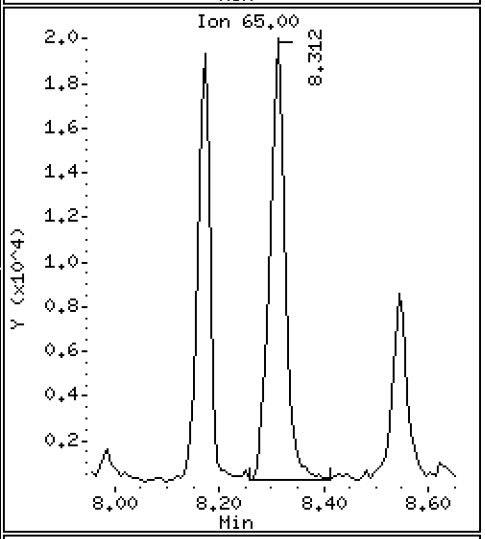
3 Phenol

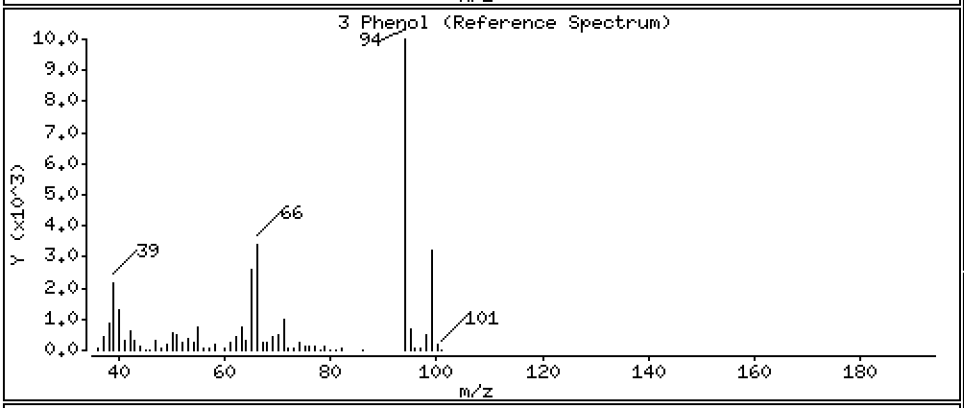
Concentration: 0.9252 ug/mL

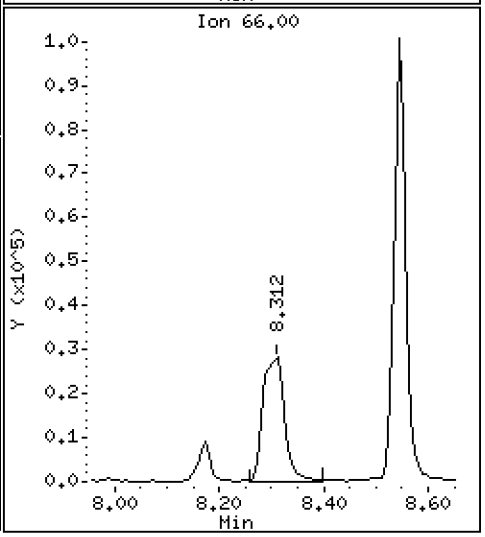


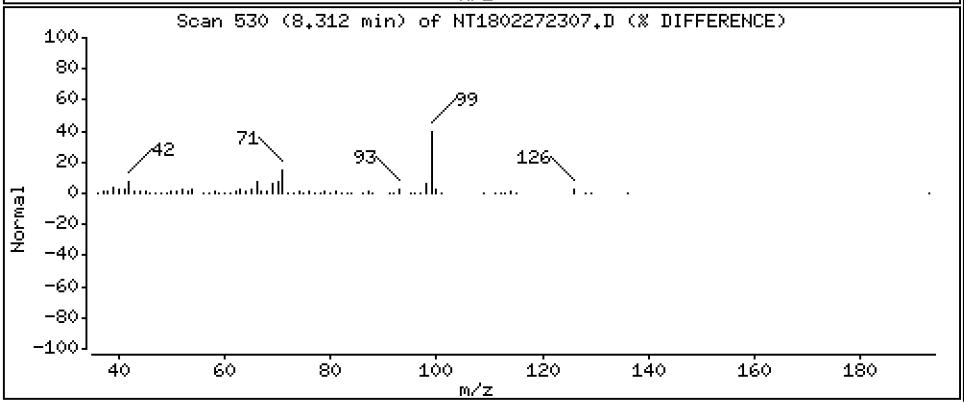












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

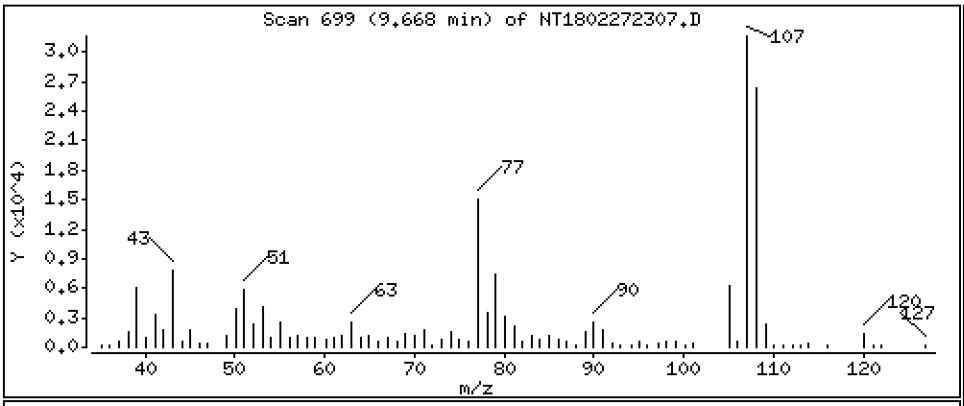
Operator: VTS

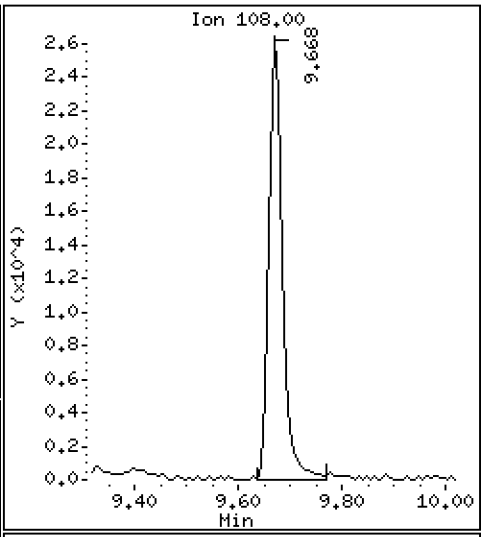
Column phase: ZB-5msi

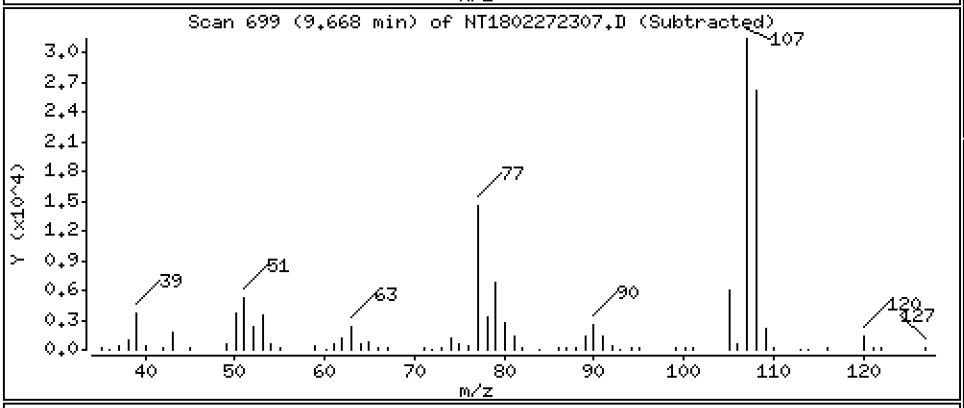
Column diameter: 0.25

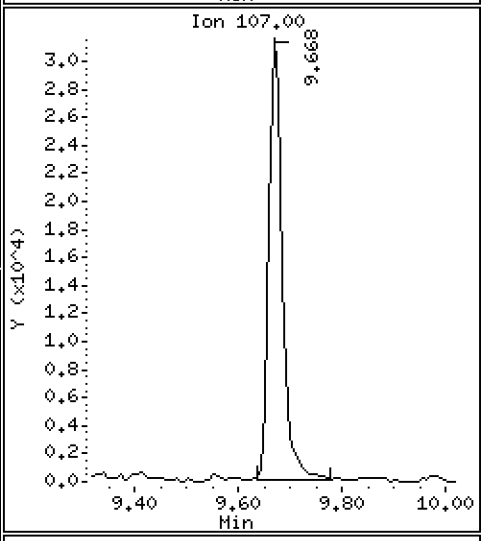
15 4-Methylphenol

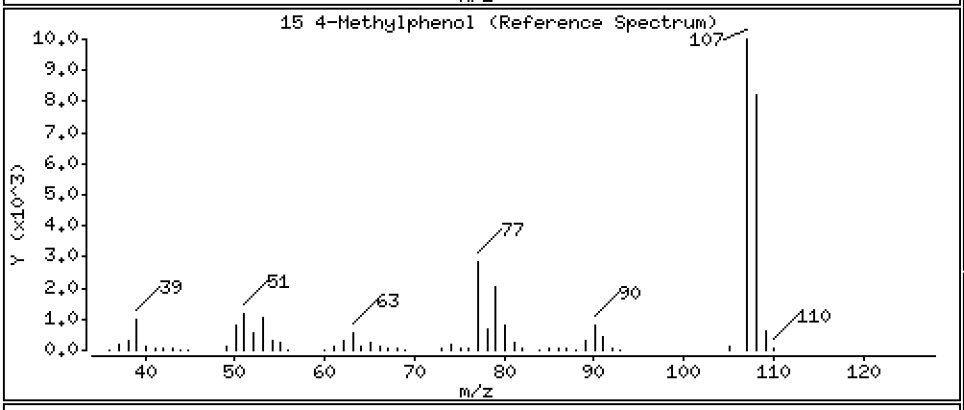
Concentration: 0.4713 ug/mL

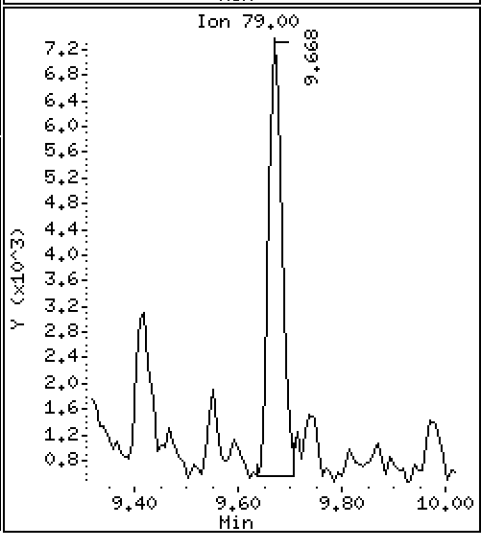


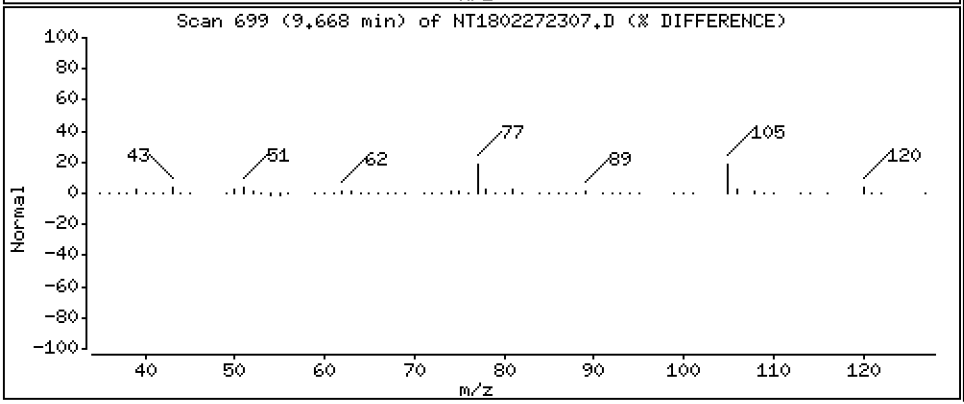












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

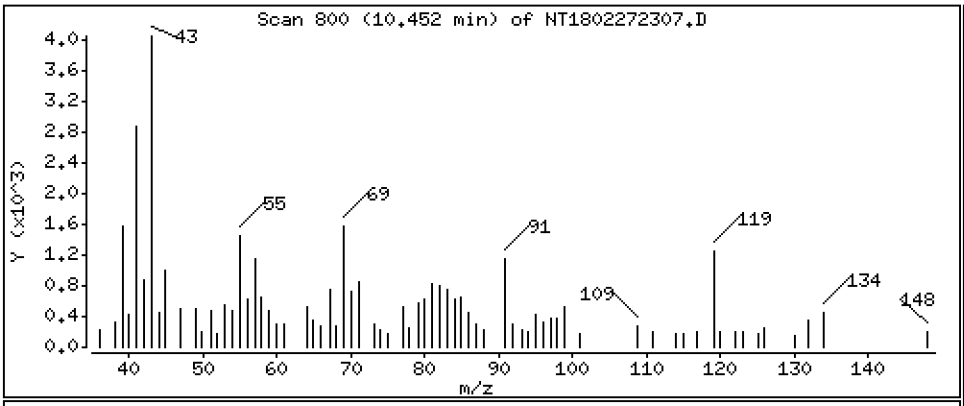
Operator: VTS

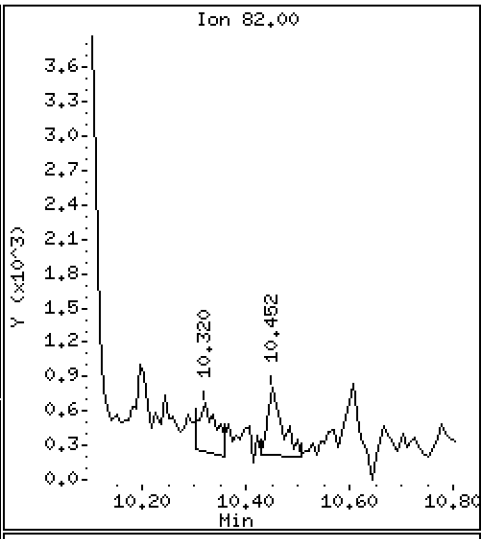
Column phase: ZB-5msi

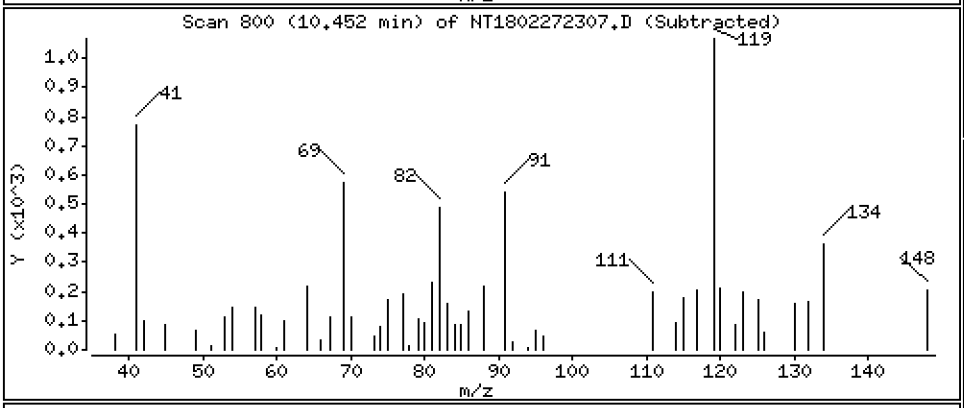
Column diameter: 0.25

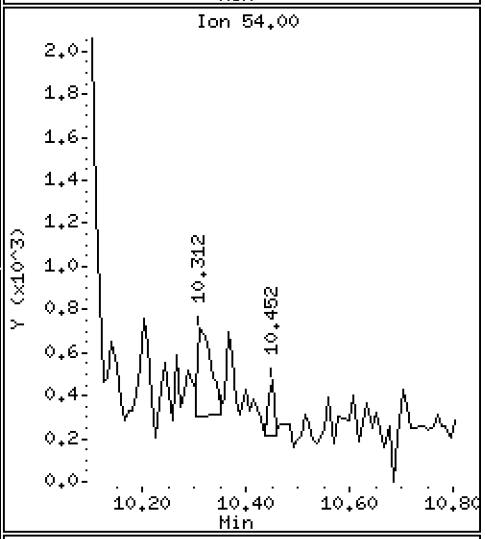
20 Isophorone

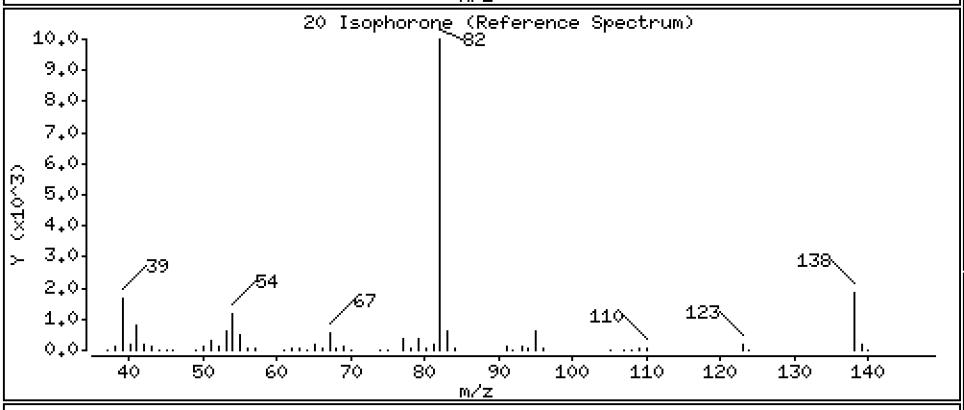
Concentration: 0.009233 ug/mL

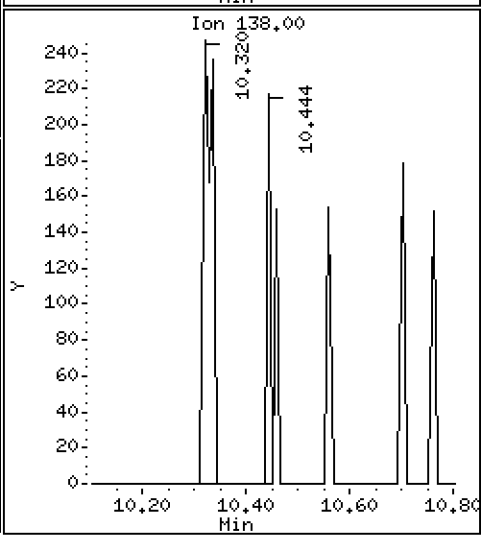


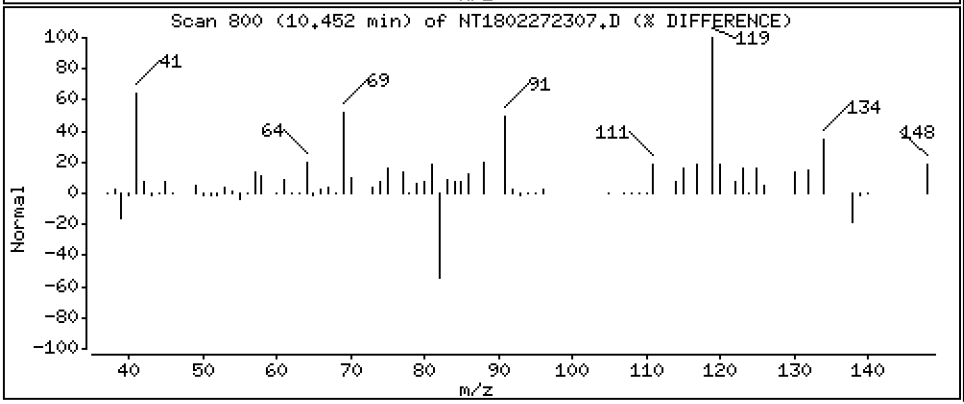












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

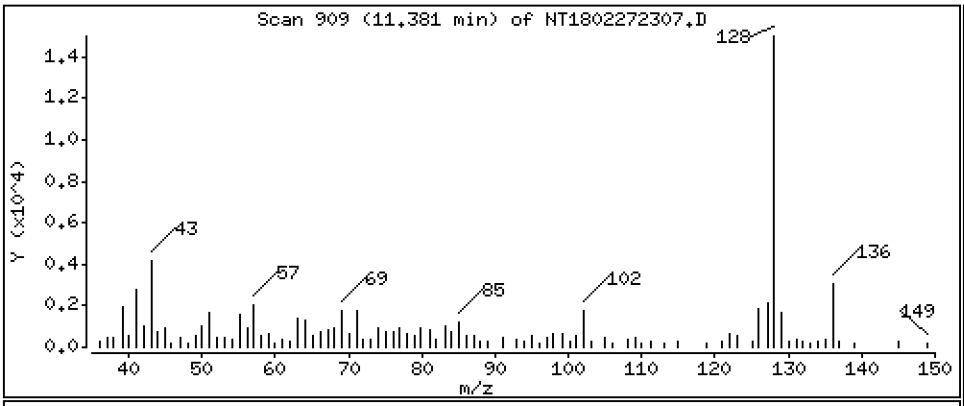
Operator: VTS

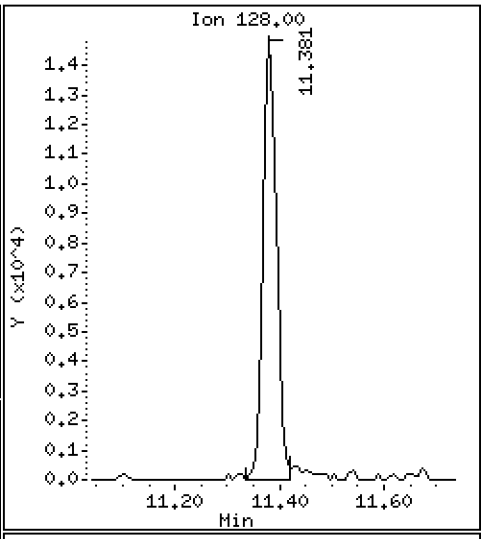
Column phase: ZB-5msi

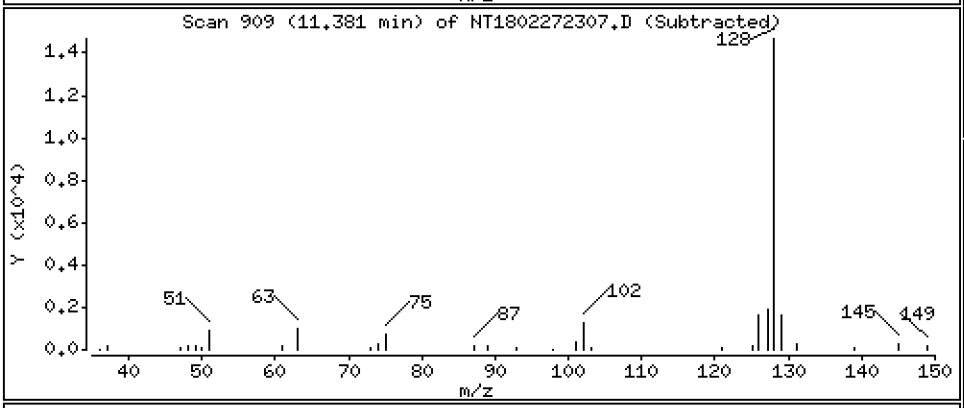
Column diameter: 0.25

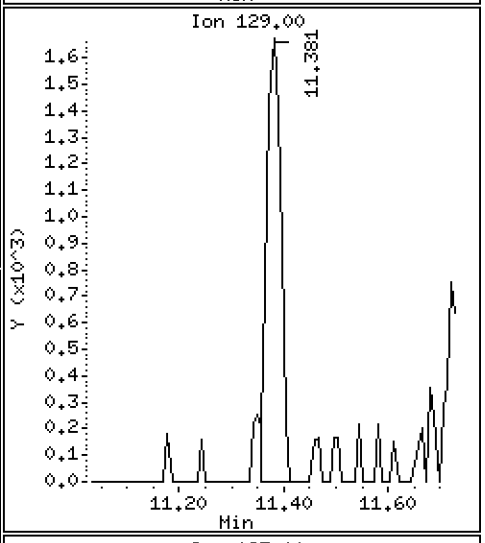
28 Naphthalene

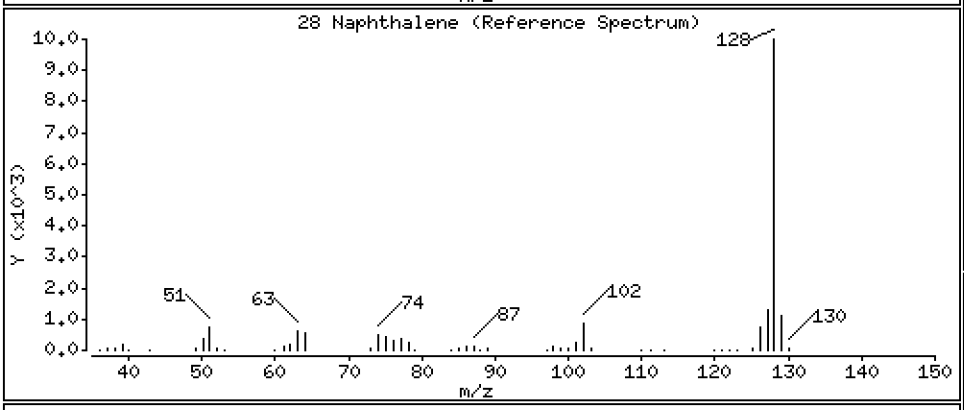
Concentration: 0.08554 ug/mL

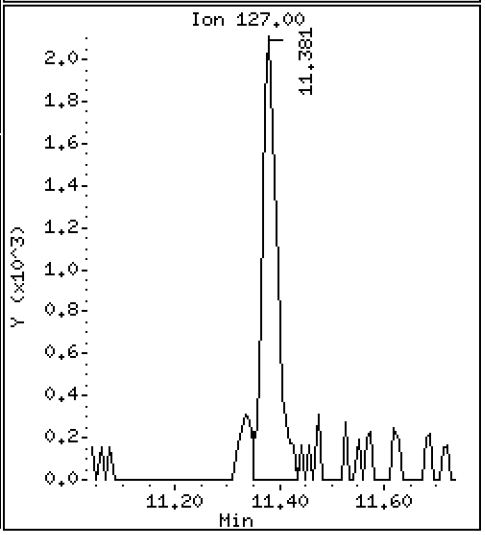


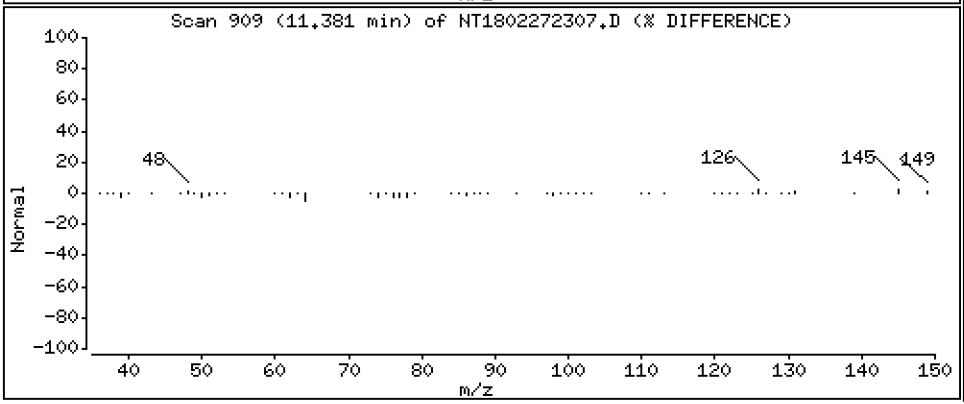












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272307.D

Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

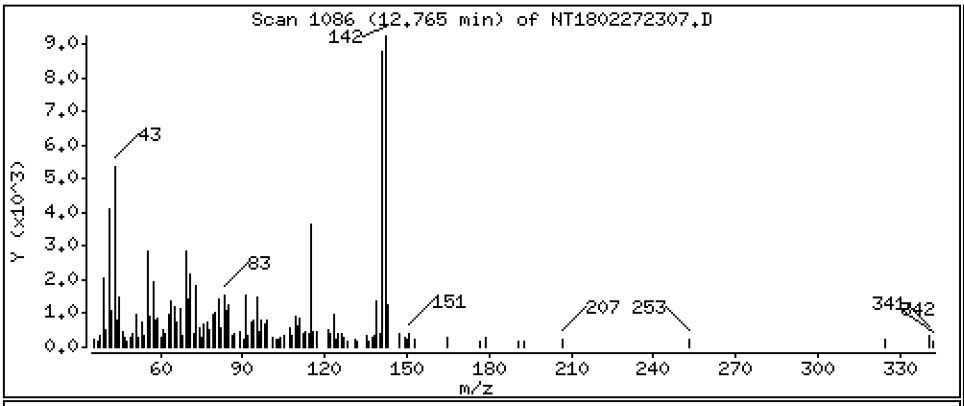
Operator: VTS

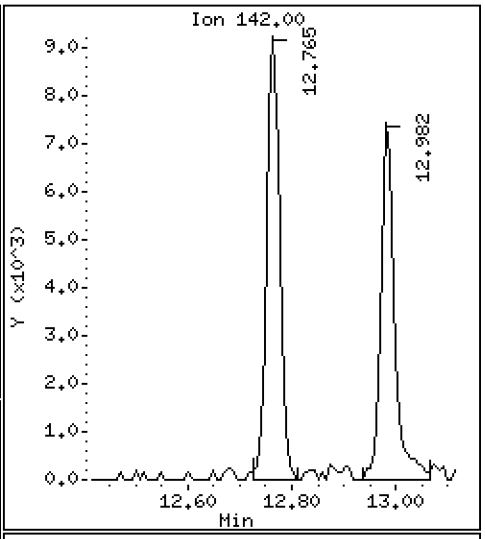
Column phase: ZB-5msi

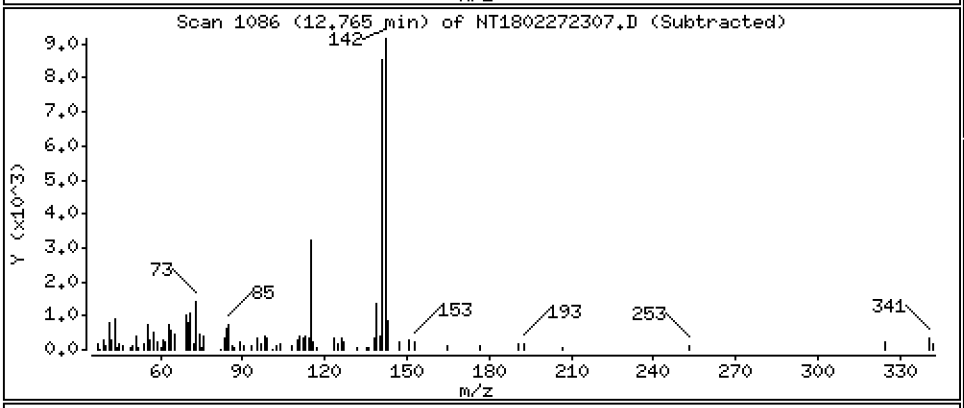
Column diameter: 0.25

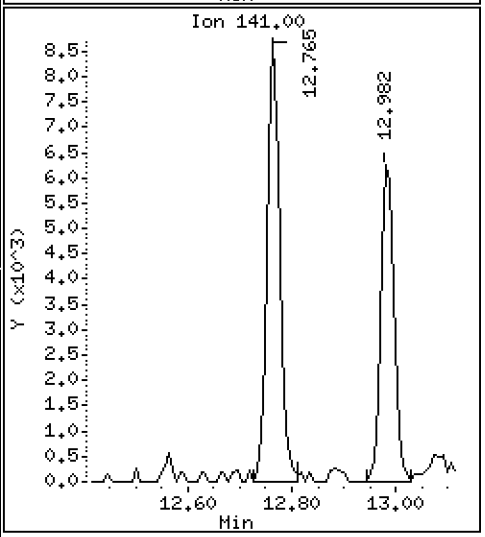
32 2-Methylnaphthalene

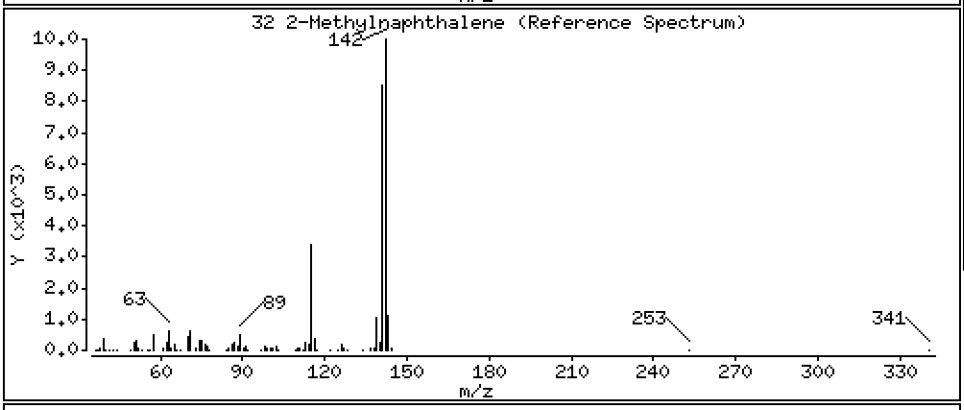
Concentration: 0.07337 ug/mL

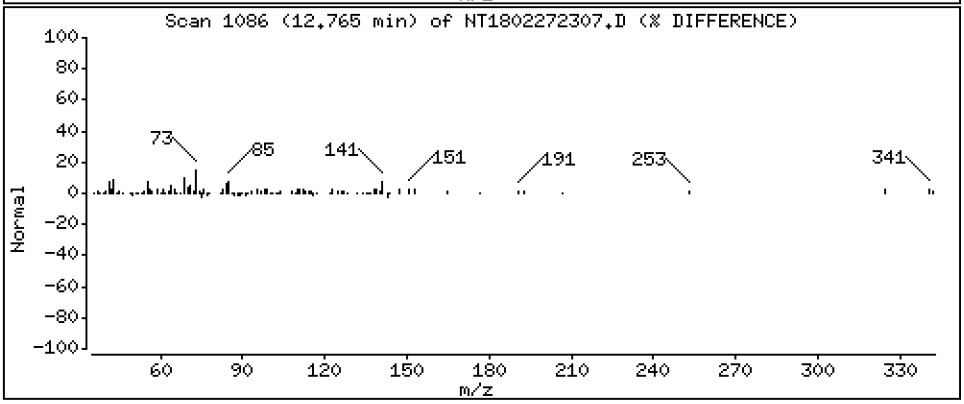












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272307.D

Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

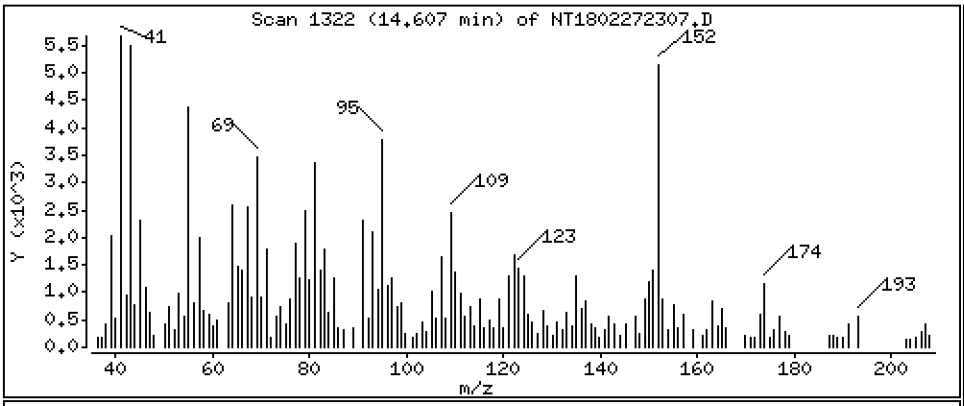
Operator: VTS

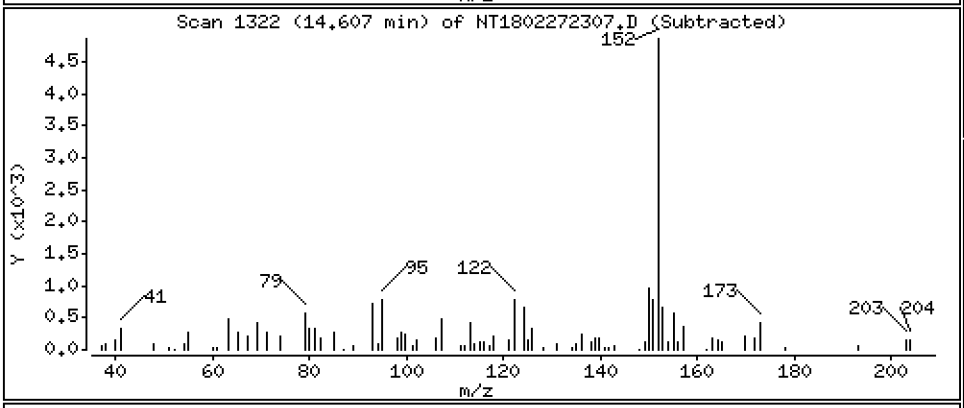
Column phase: ZB-5msi

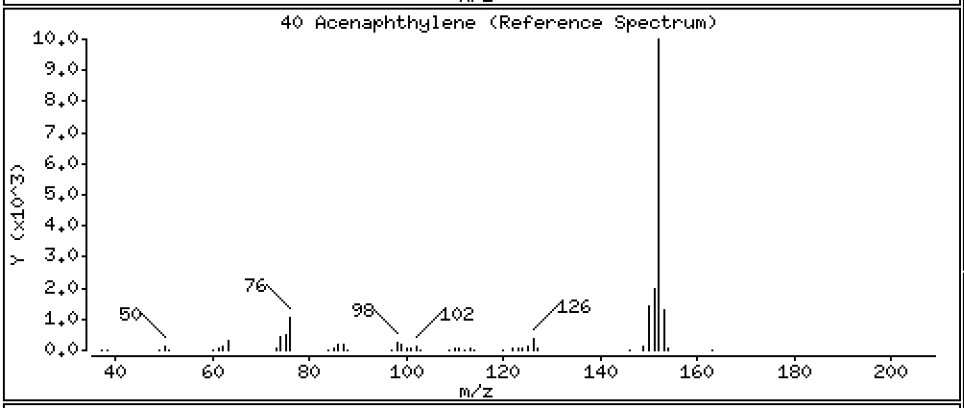
Column diameter: 0.25

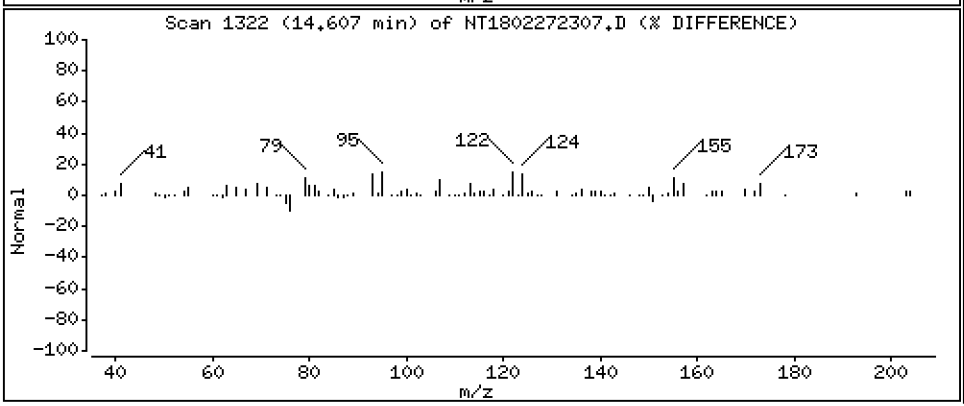
40 Acenaphthylene

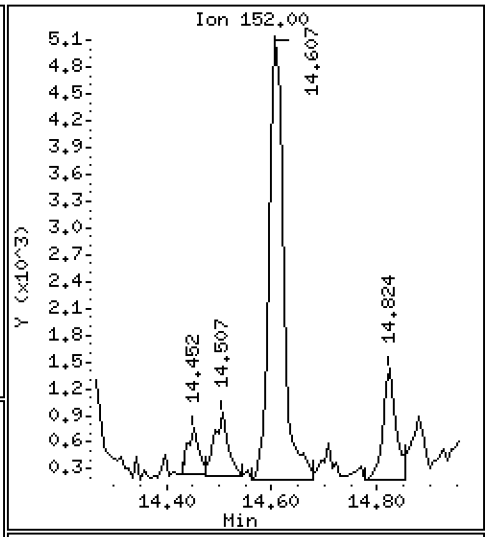
Concentration: 0.03086 ug/mL

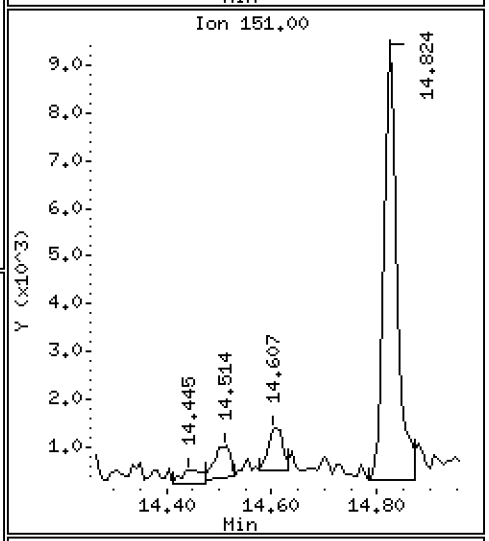


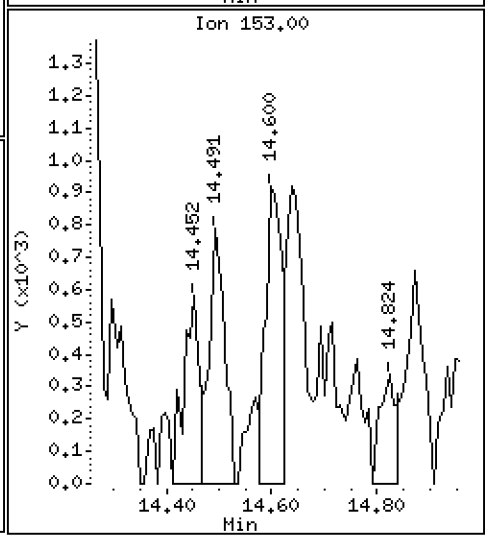












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272307.D

Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

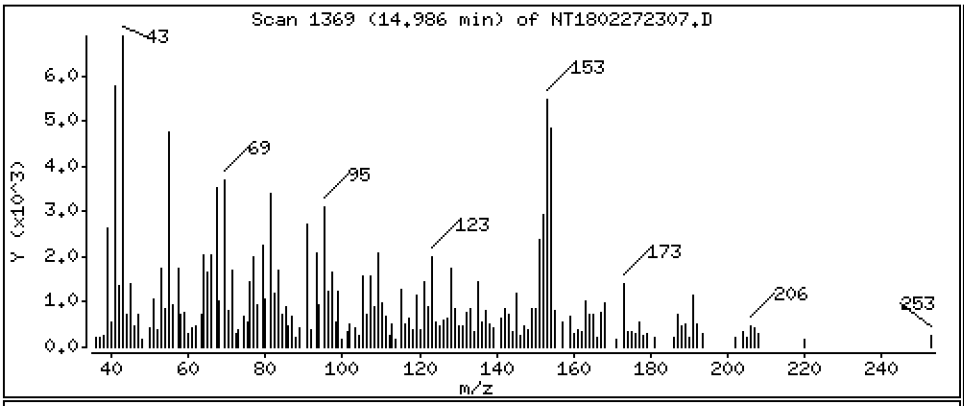
Operator: VTS

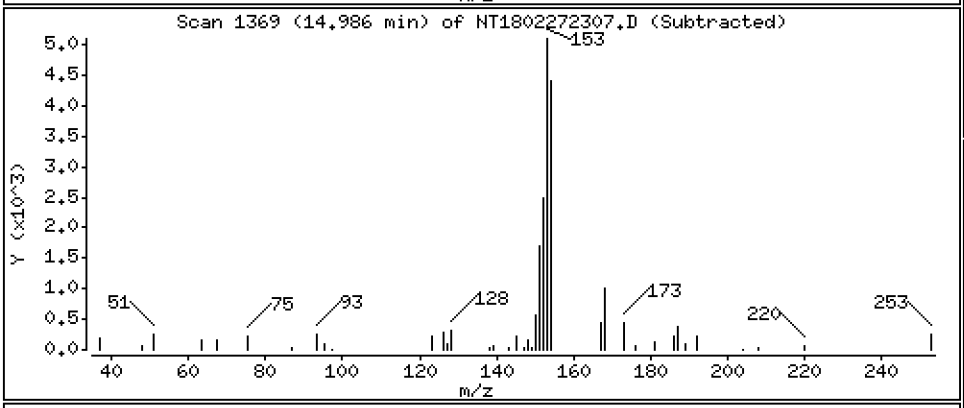
Column phase: ZB-5msi

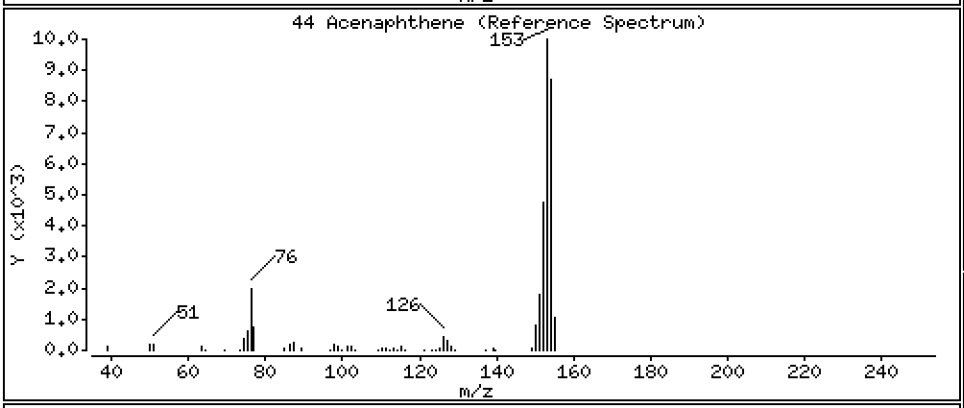
Column diameter: 0.25

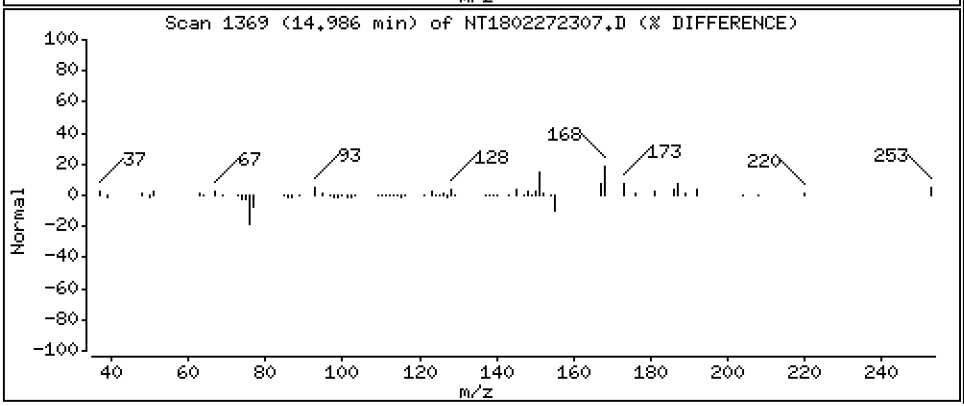
44 Acenaphthene

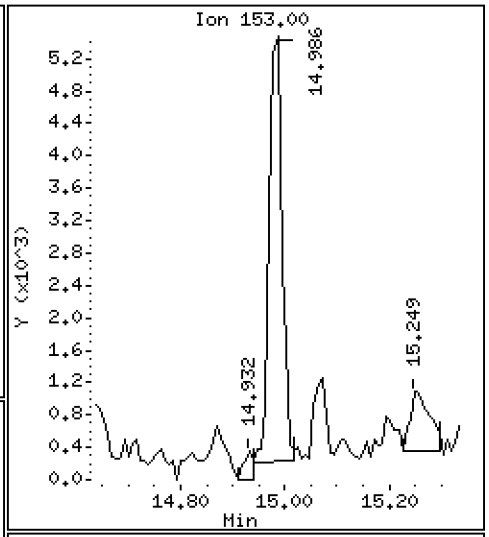
Concentration: 0.04566 ug/mL

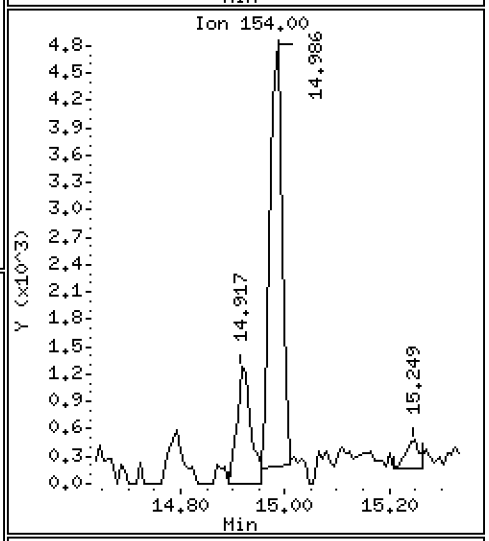


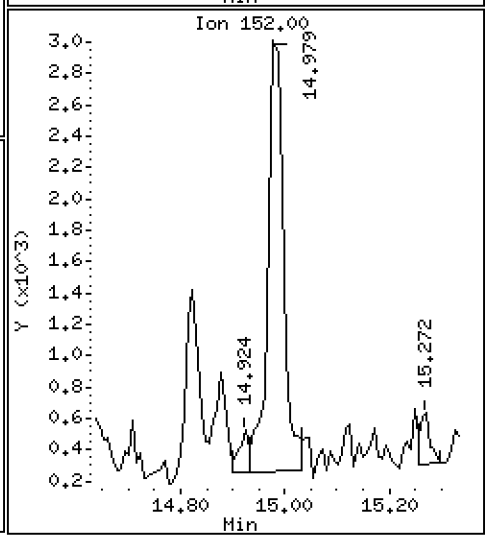












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

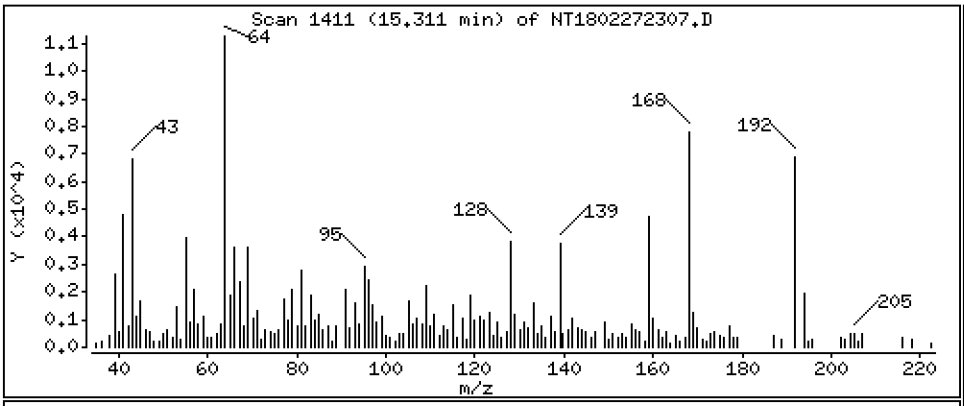
Operator: VTS

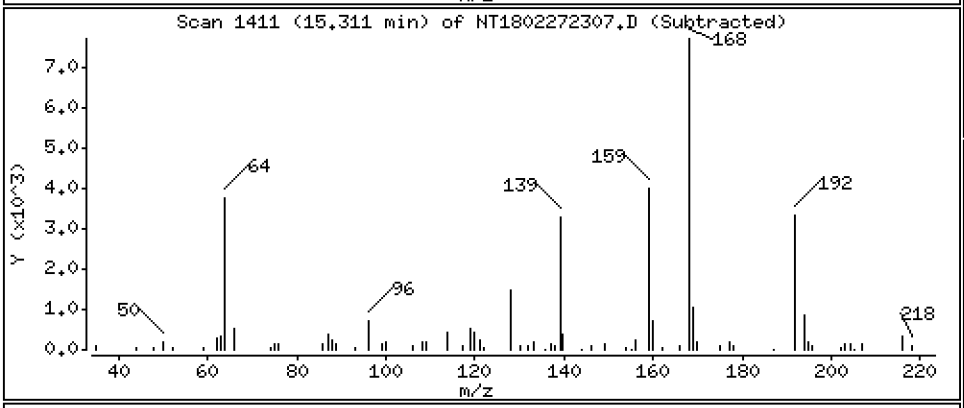
Column phase: ZB-5msi

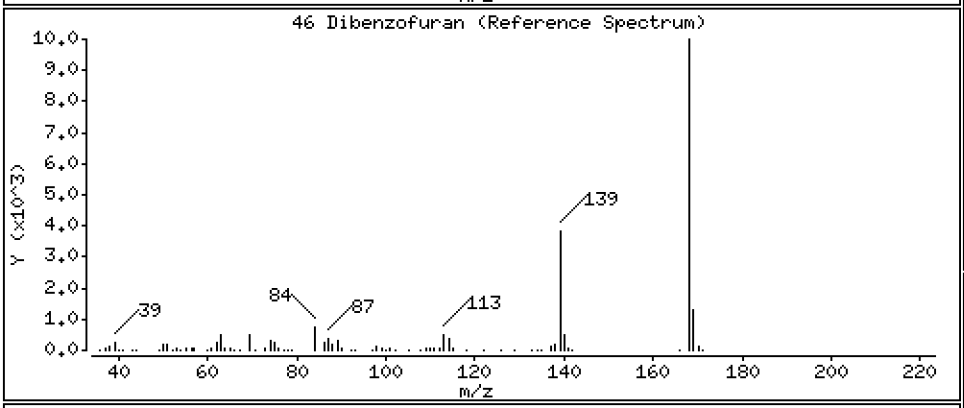
Column diameter: 0.25

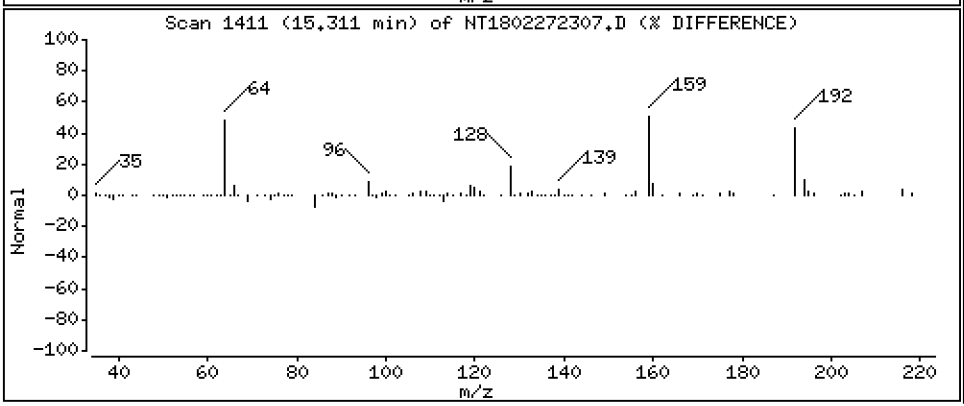
46 Dibenzofuran

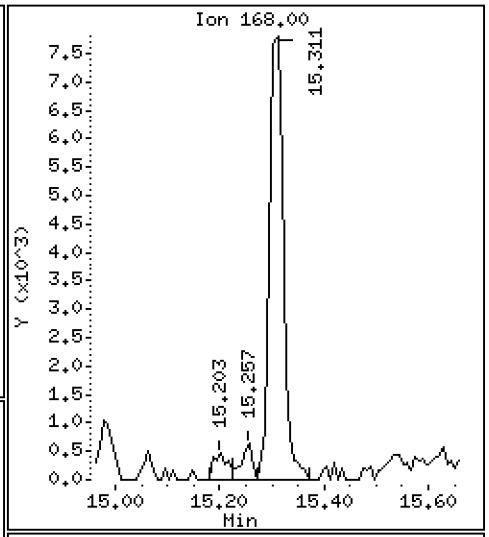
Concentration: 0.05089 ug/mL

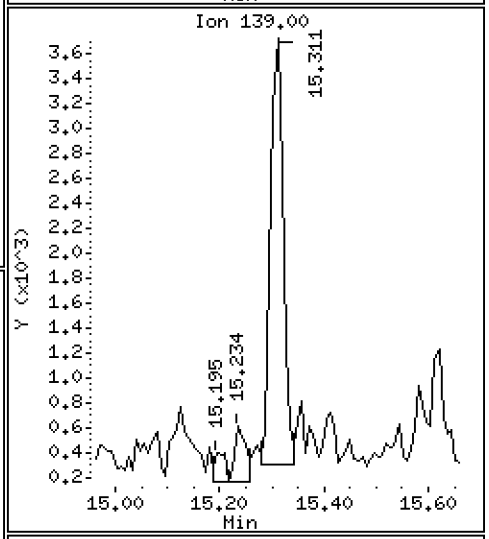


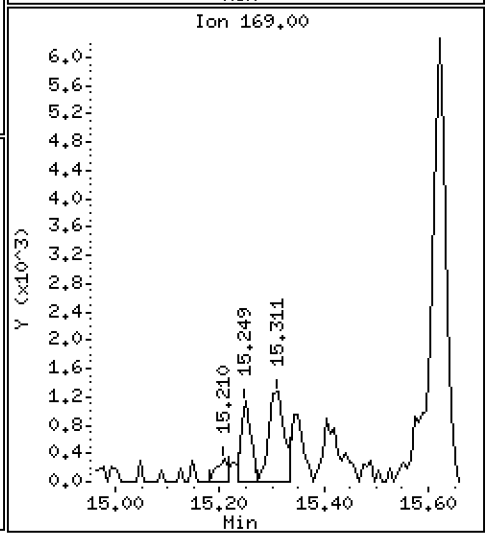












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

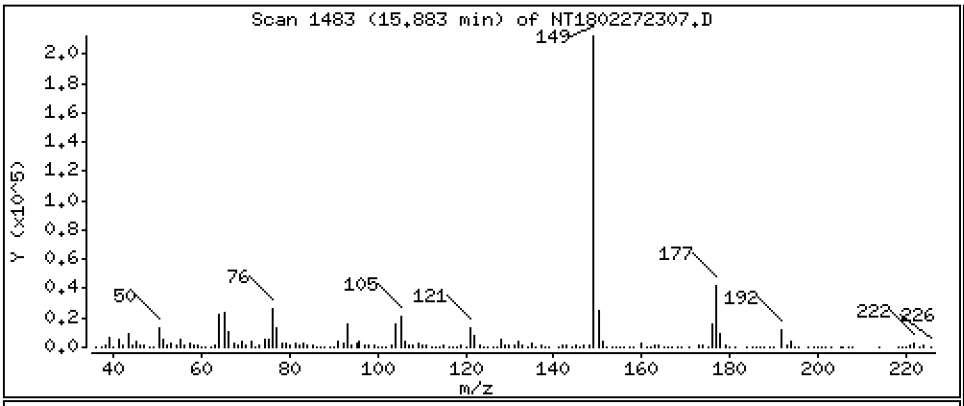
Operator: VTS

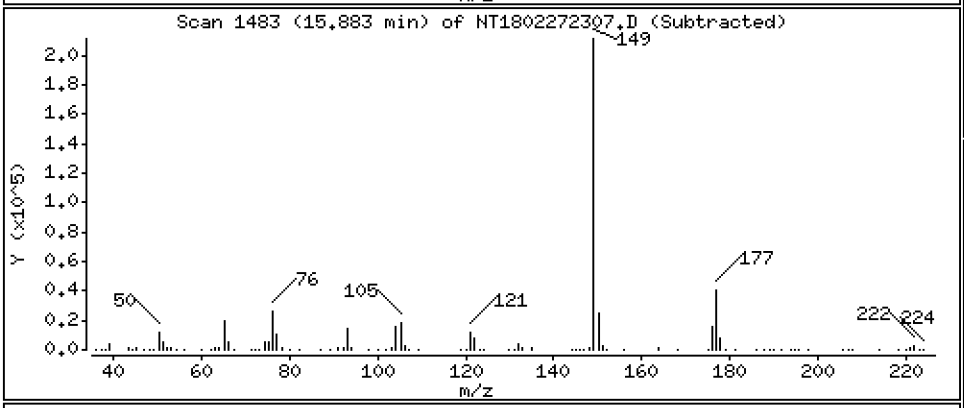
Column phase: ZB-5msi

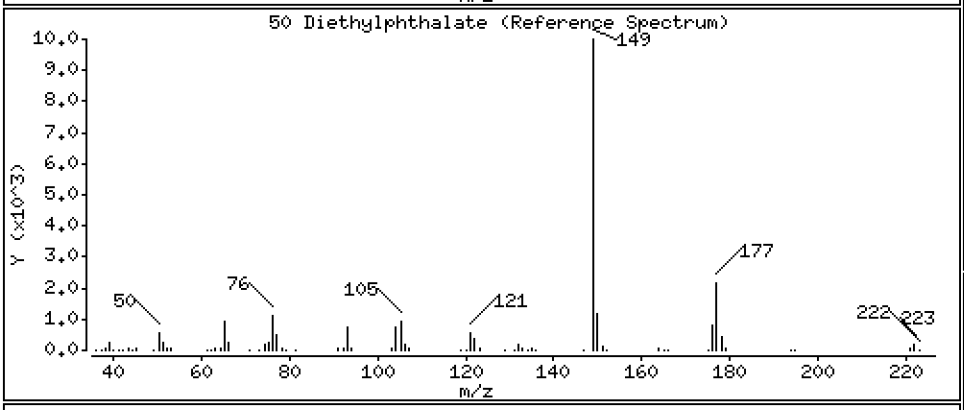
Column diameter: 0.25

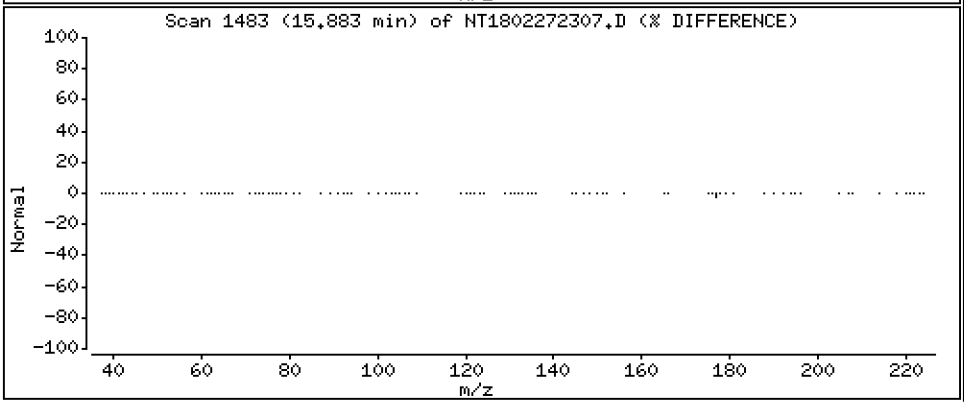
50 Diethylphthalate

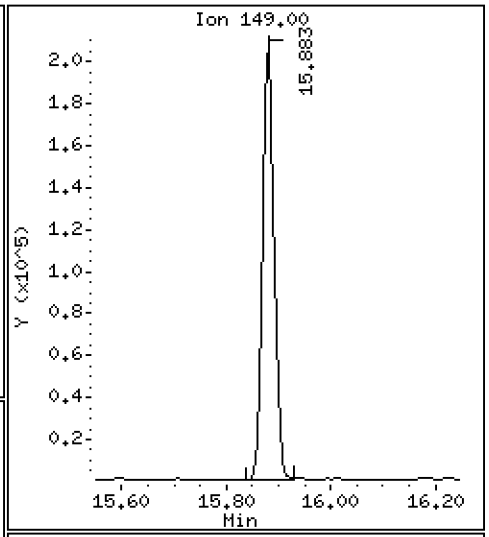
Concentration: 1.578 ug/mL

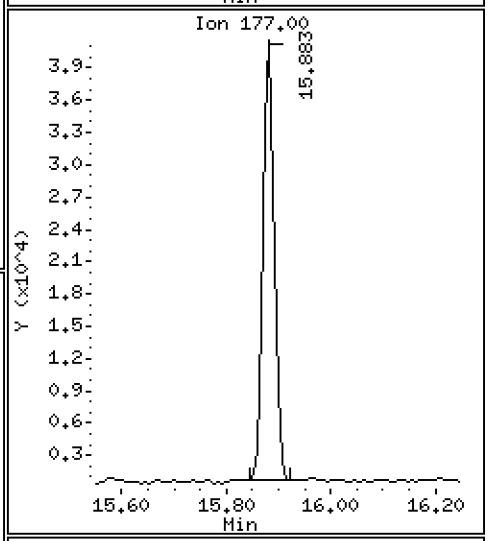


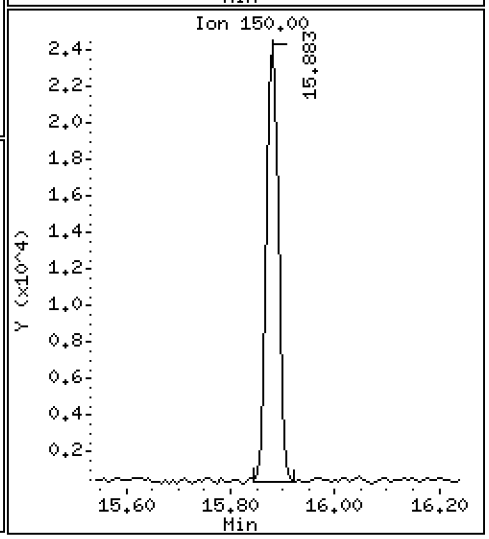












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

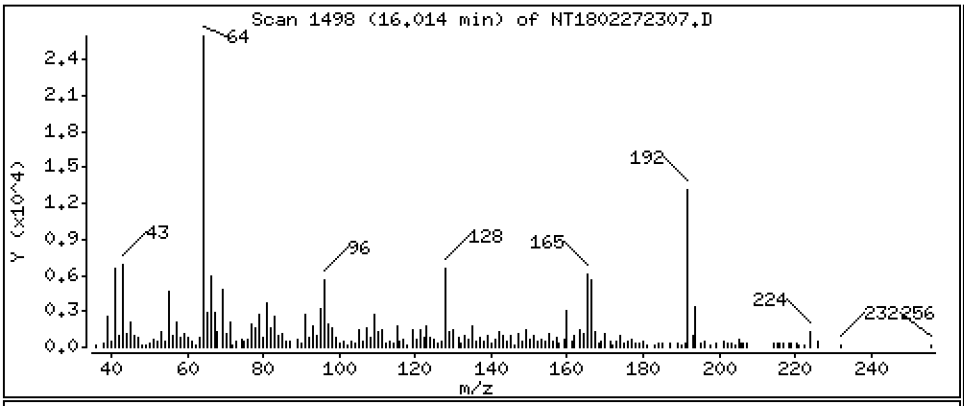
Operator: VTS

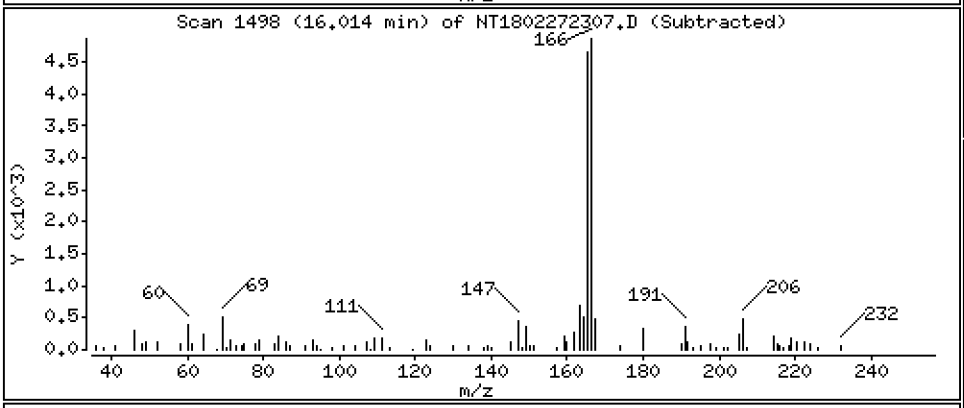
Column phase: ZB-5msi

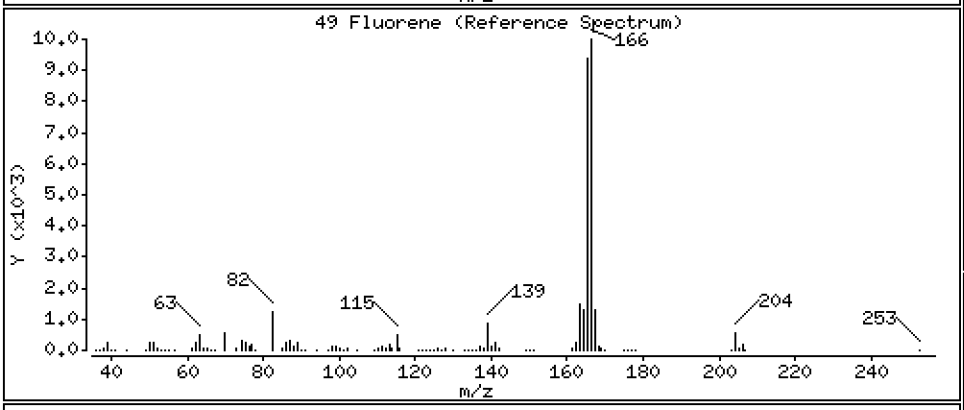
Column diameter: 0.25

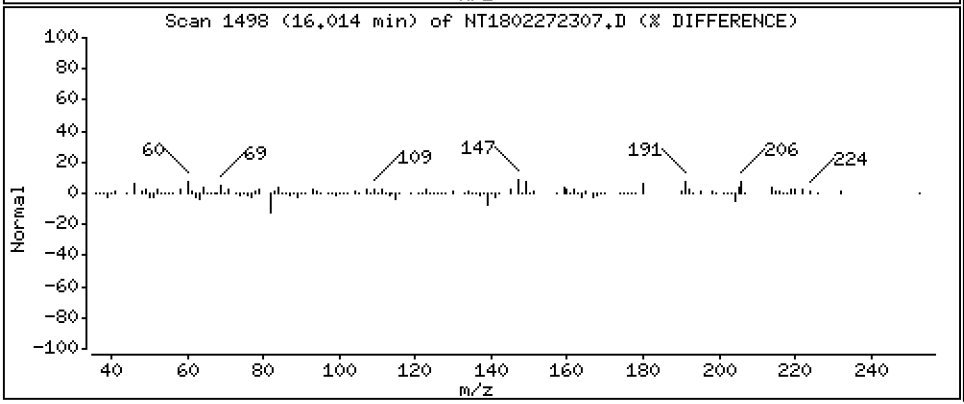
49 Fluorene

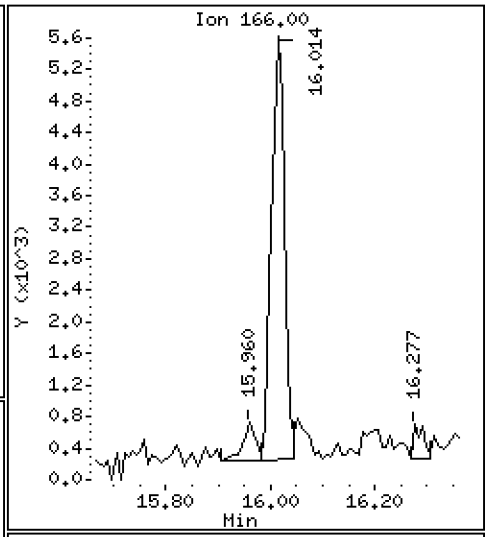
Concentration: 0.04206 ug/mL

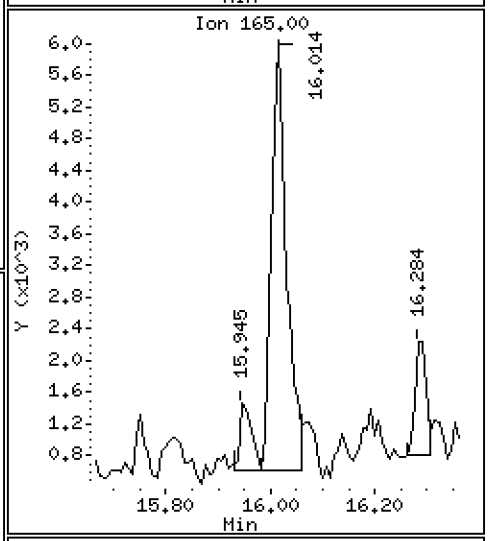


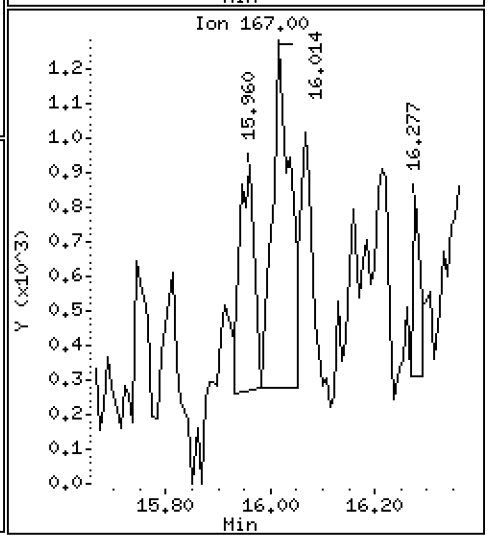












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272307.D

Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

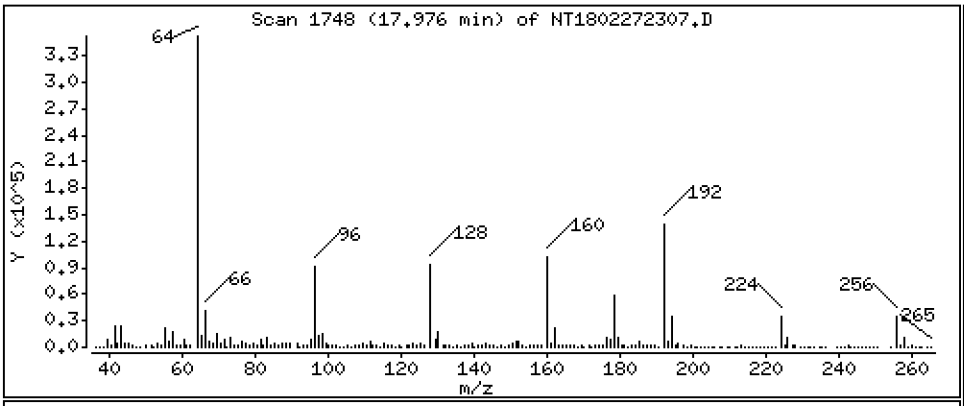
Operator: VTS

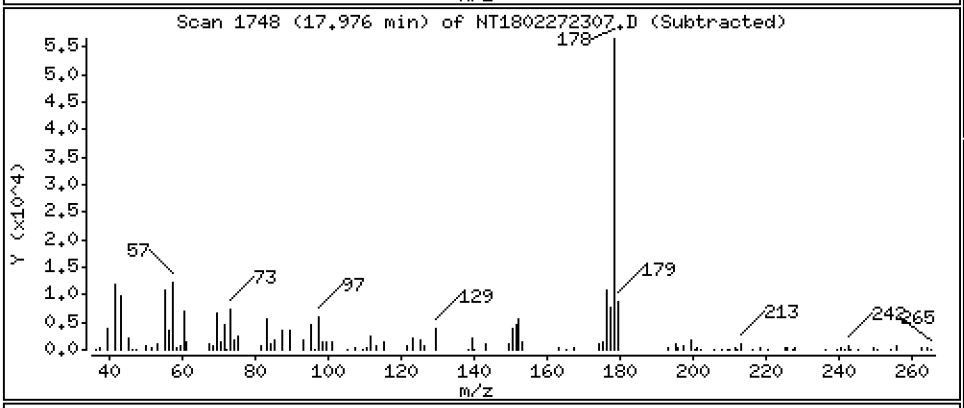
Column phase: ZB-5msi

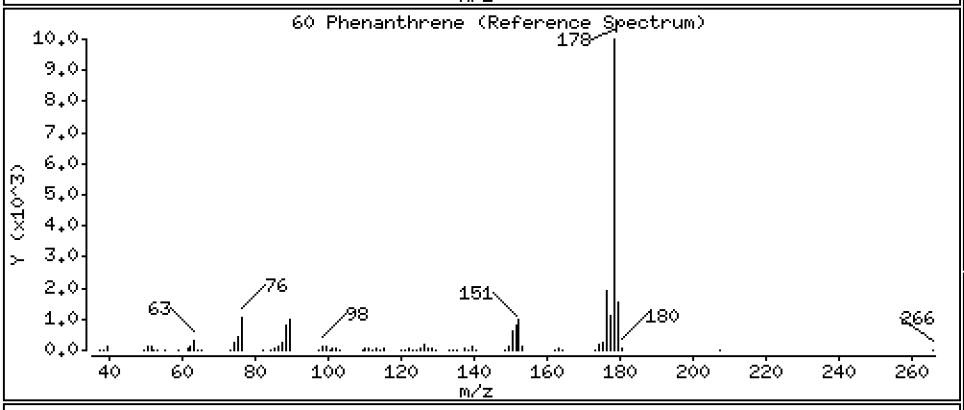
Column diameter: 0.25

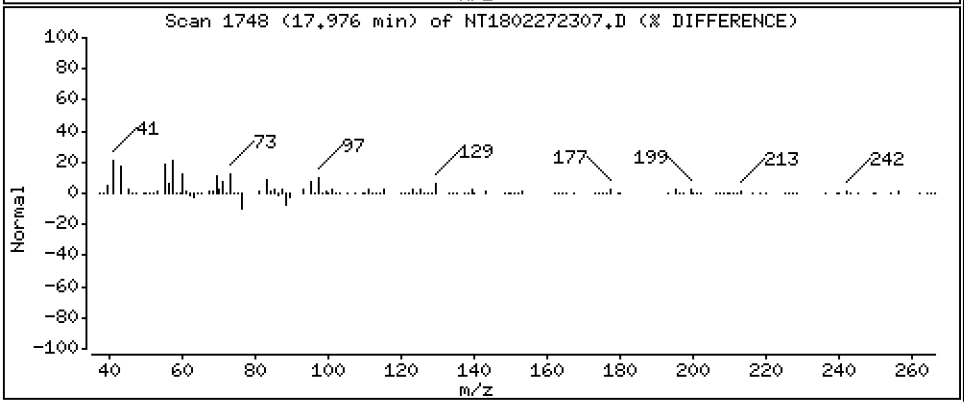
60 Phenanthrene

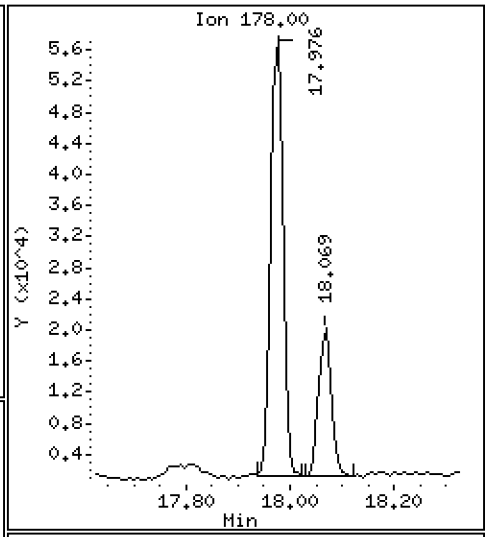
Concentration: 0.2562 ug/mL

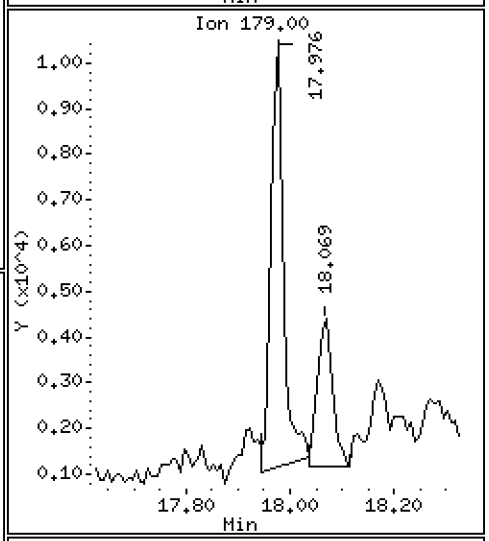


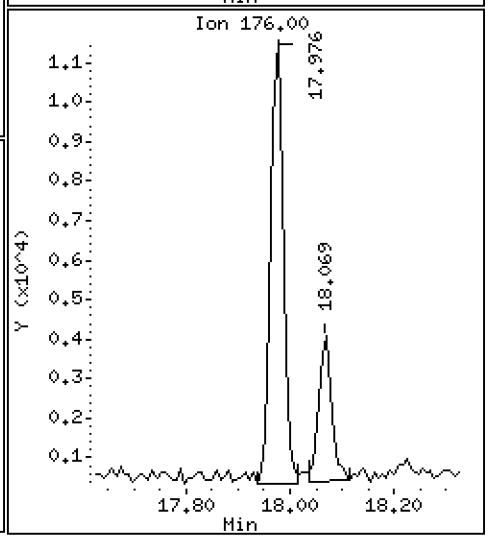












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272307.D

Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

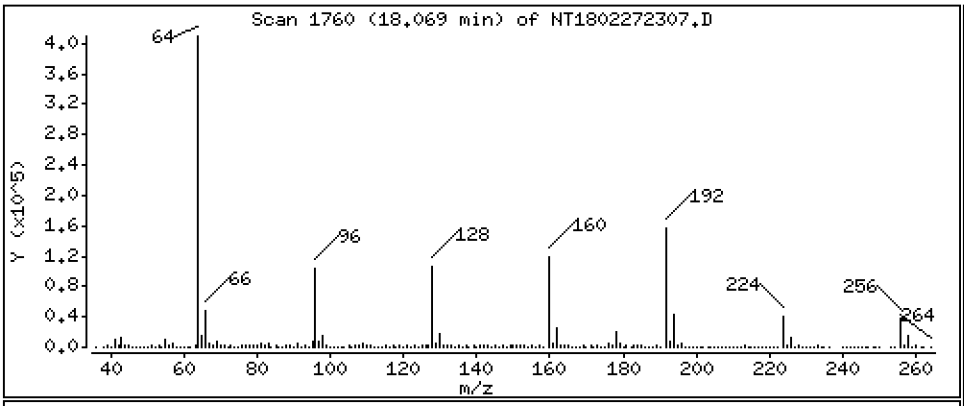
Operator: VTS

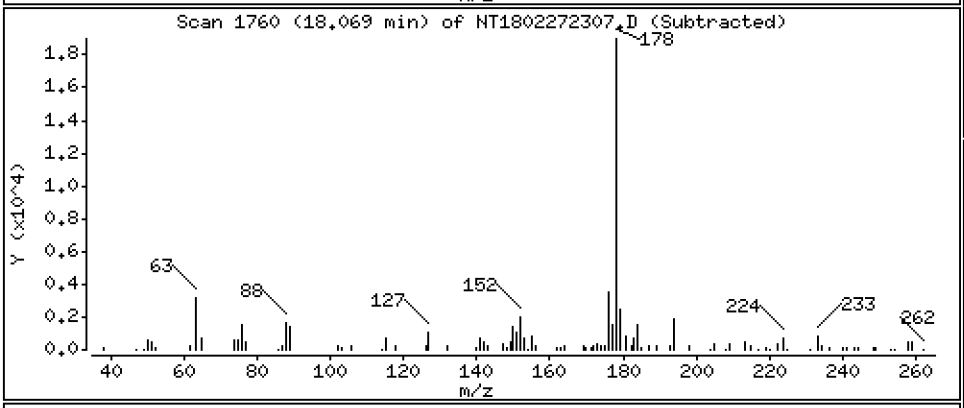
Column phase: ZB-5msi

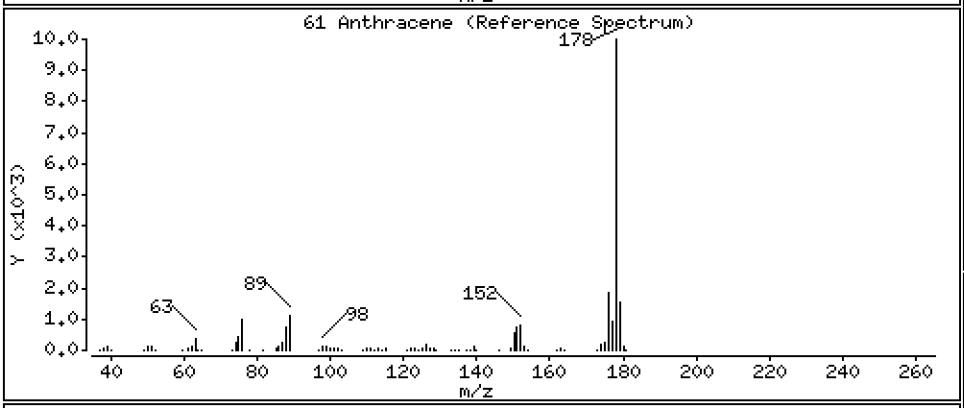
Column diameter: 0.25

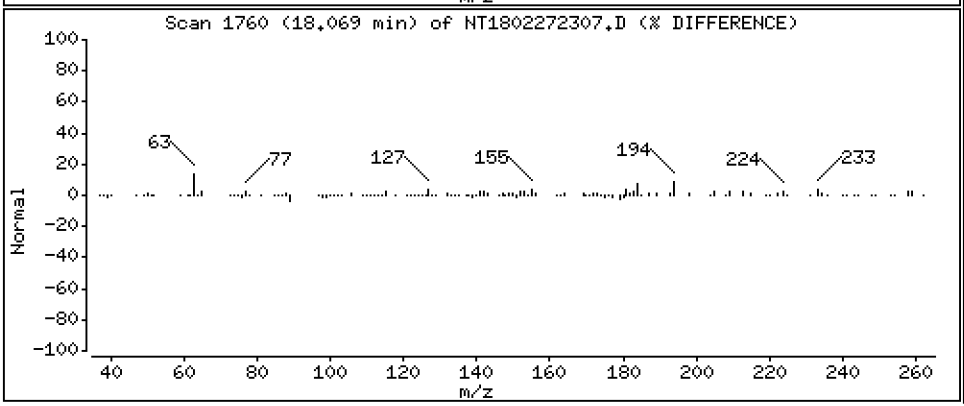
61 Anthracene

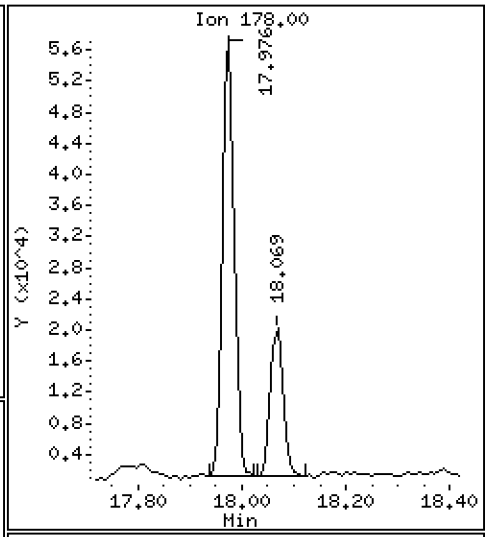
Concentration: 0.09610 ug/mL

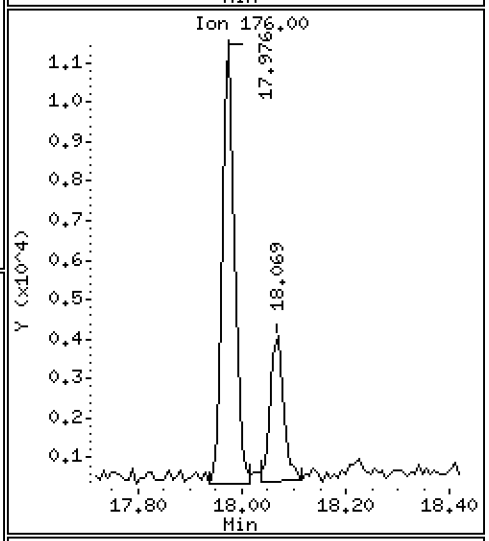


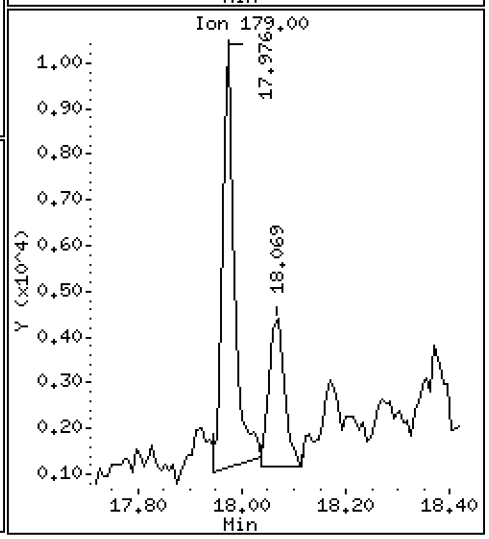












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

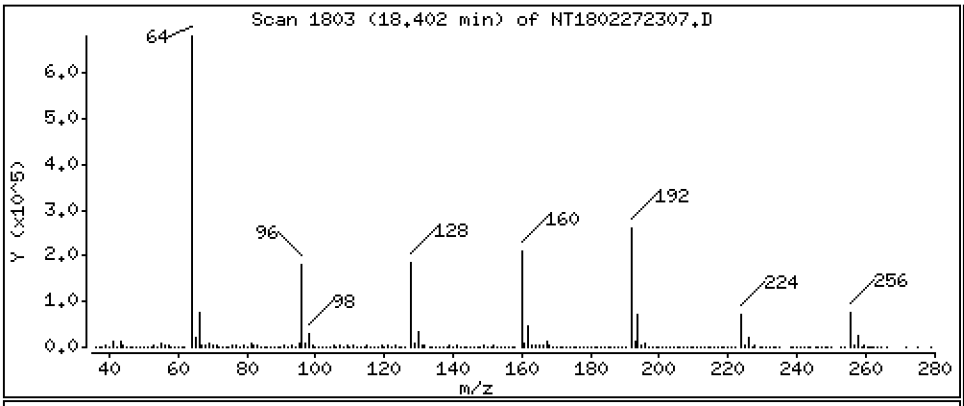
Operator: VTS

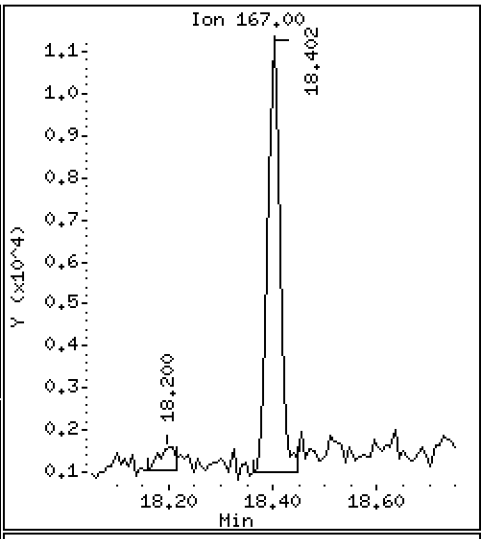
Column phase: ZB-5msi

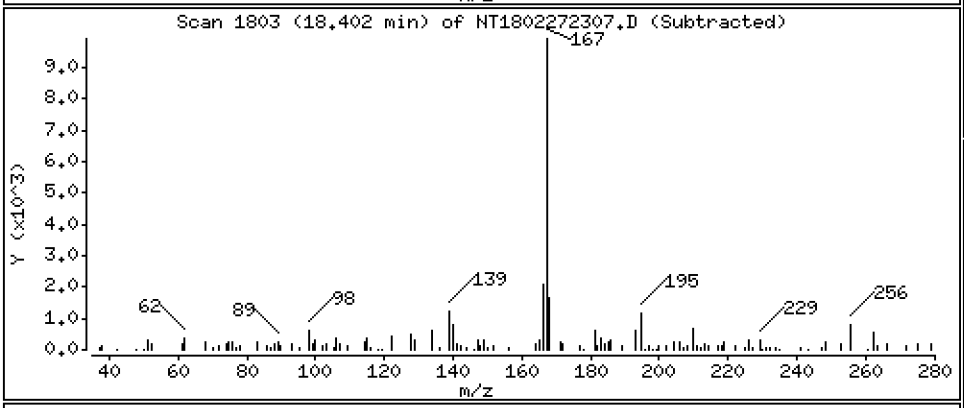
Column diameter: 0.25

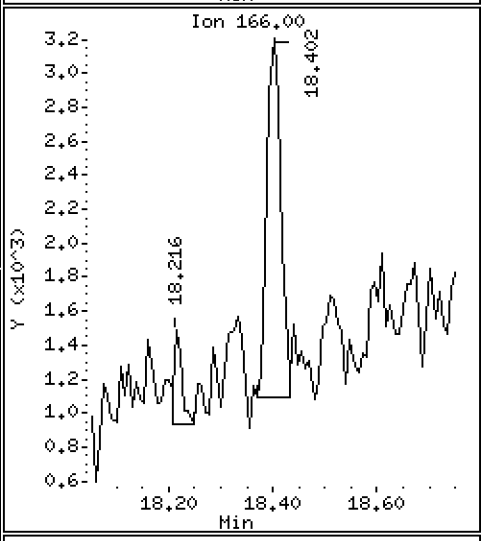
62 Carbazole

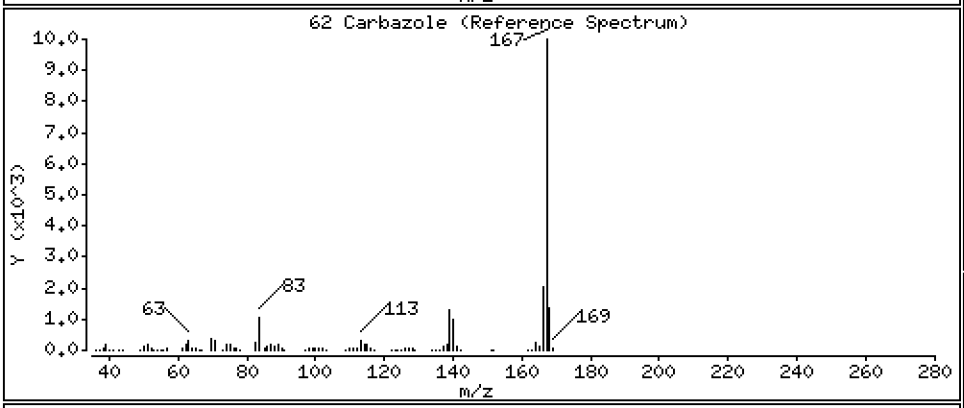
Concentration: 0.05421 ug/mL

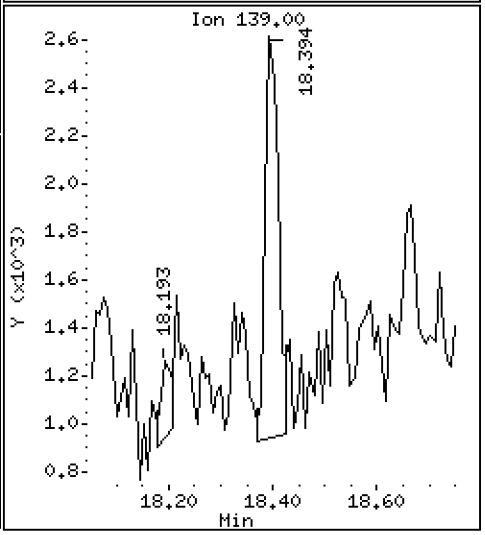


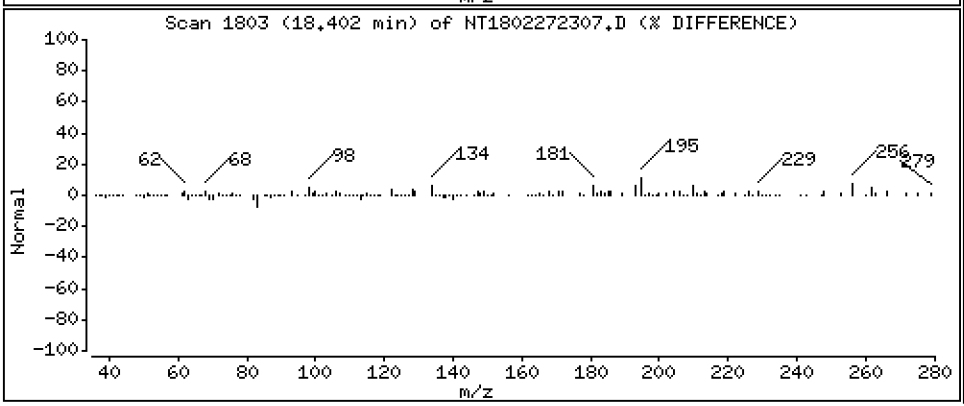












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

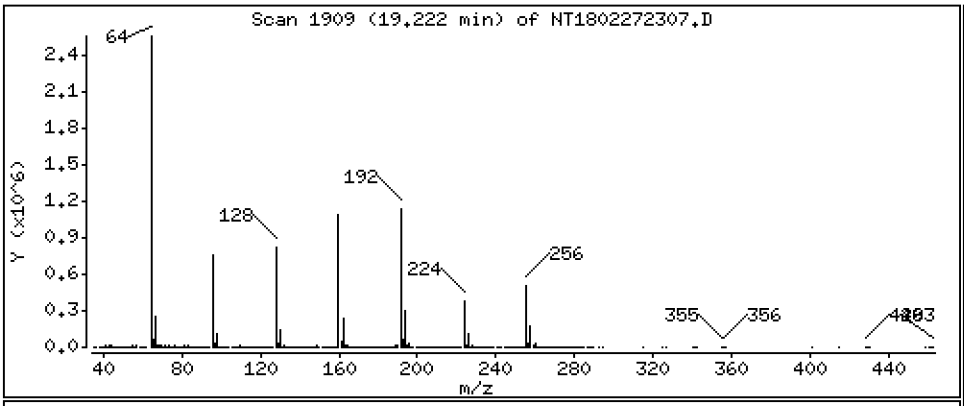
Operator: VTS

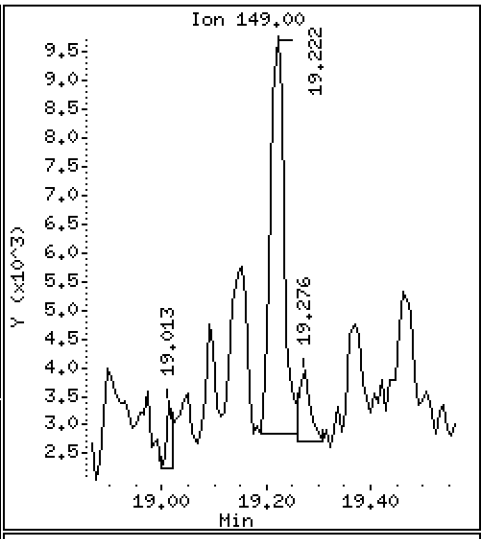
Column phase: ZB-5msi

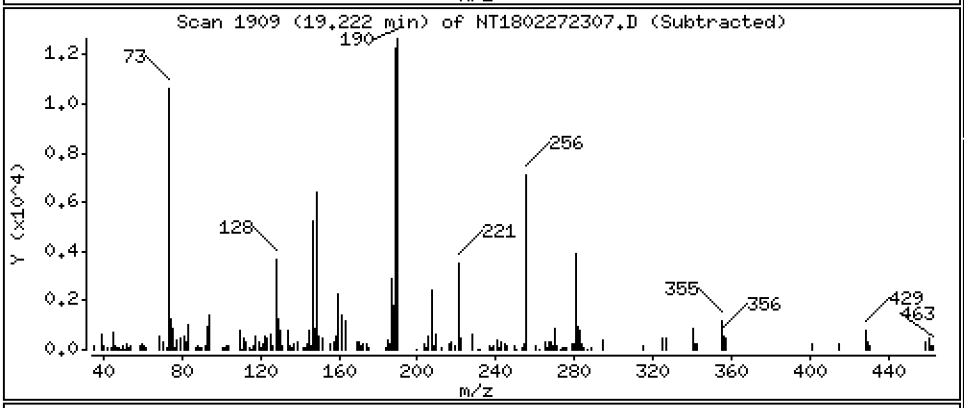
Column diameter: 0.25

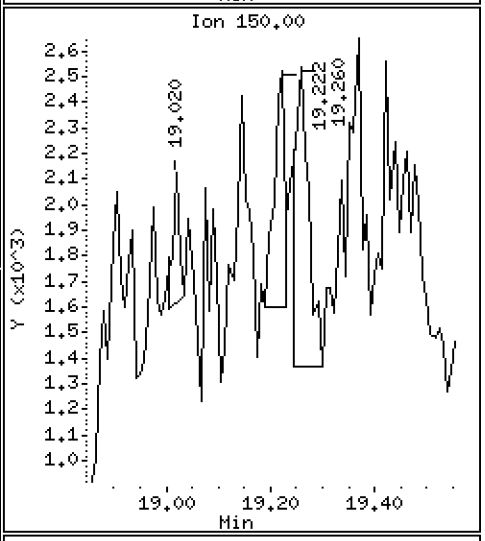
63 Di-n-butylphthalate

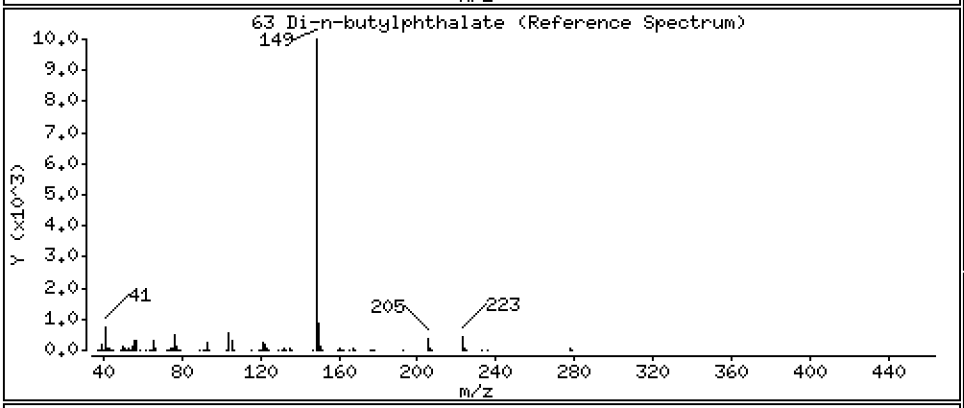
Concentration: 0.03669 ug/mL

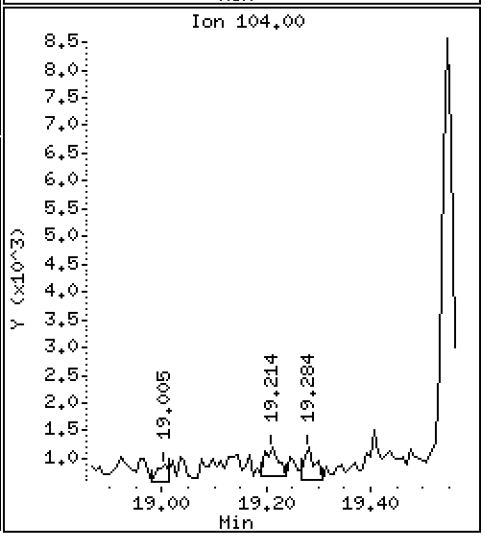


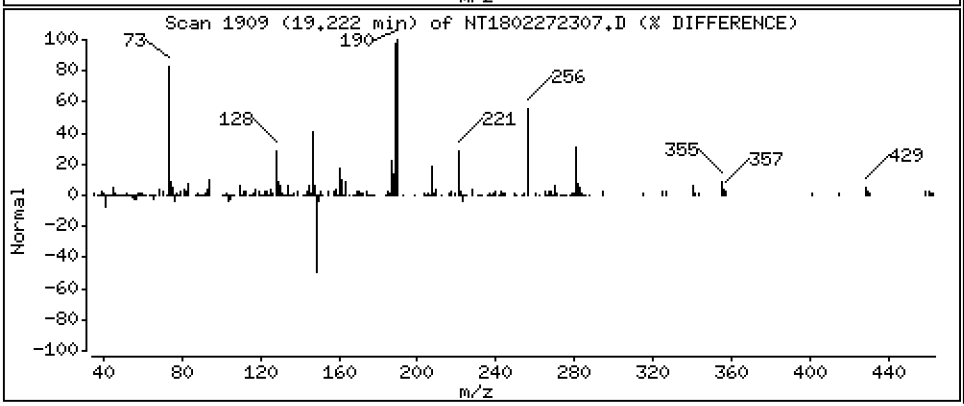












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

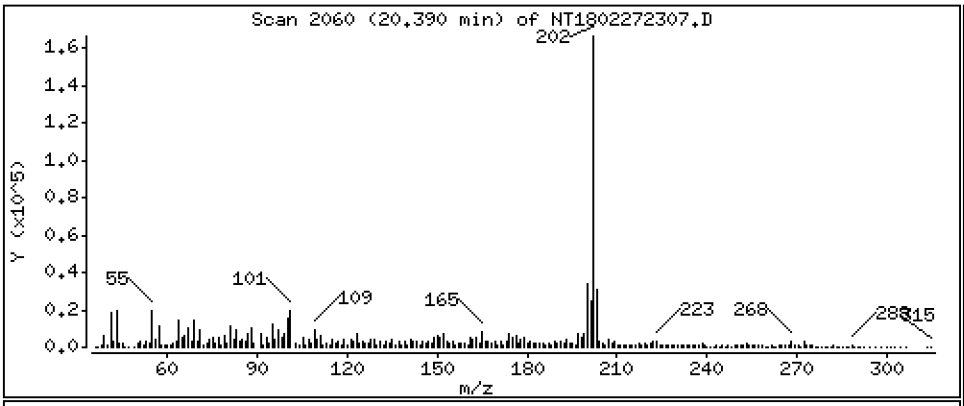
Operator: VTS

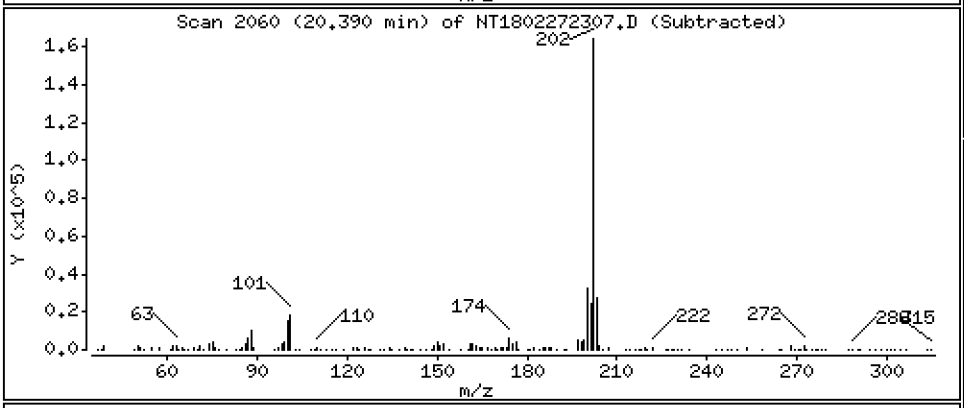
Column phase: ZB-5msi

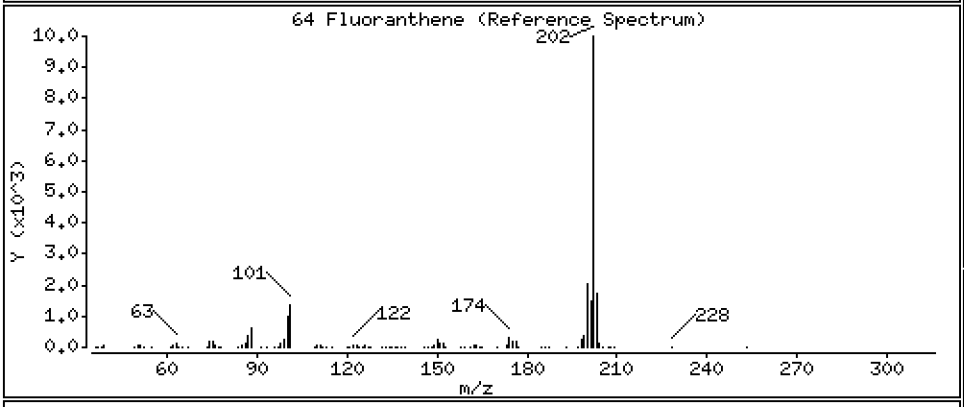
Column diameter: 0.25

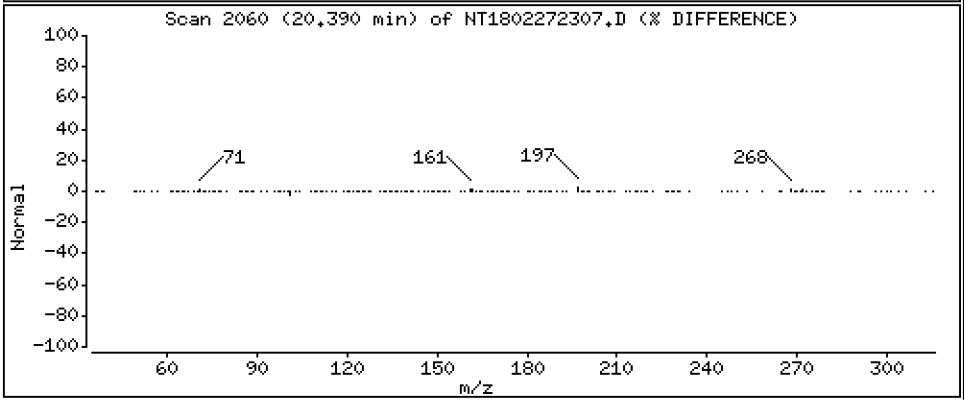
64 Fluoranthene

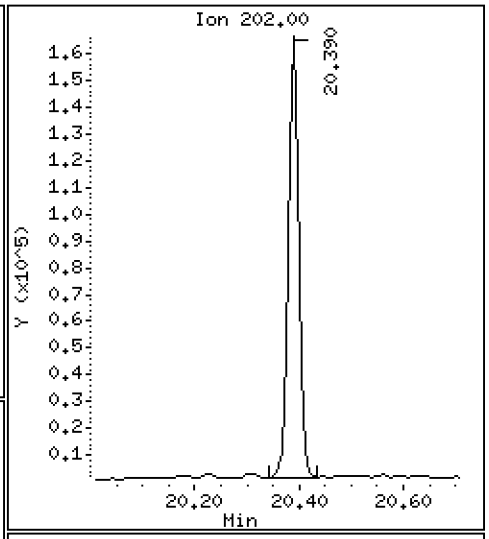
Concentration: 0.6806 ug/mL

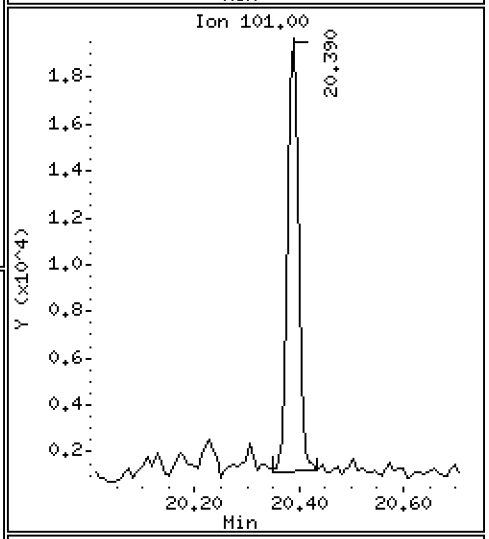


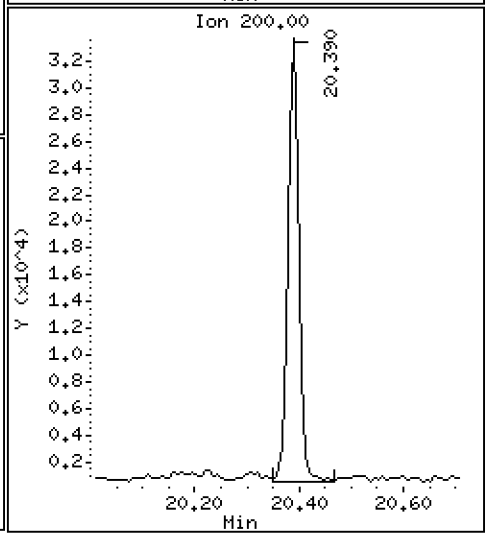












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

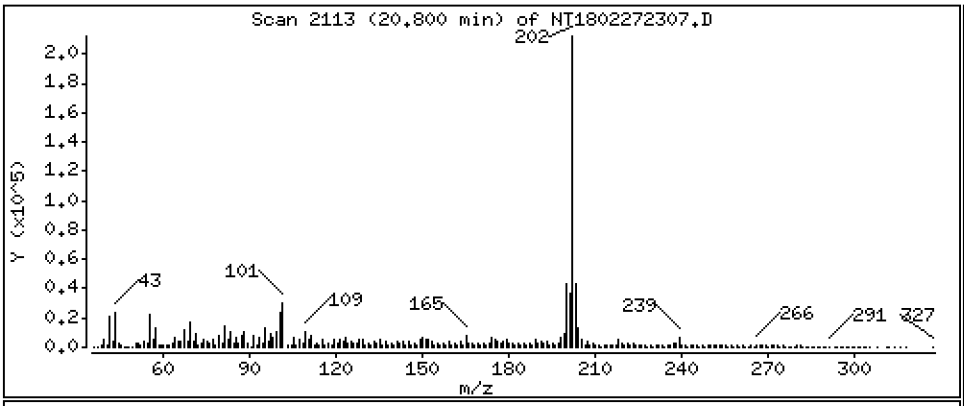
Operator: VTS

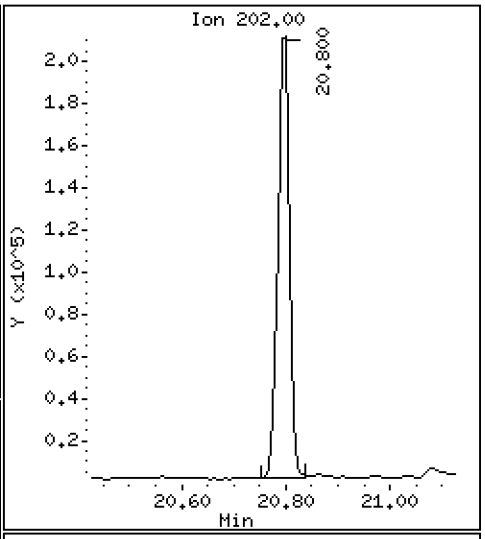
Column phase: ZB-5msi

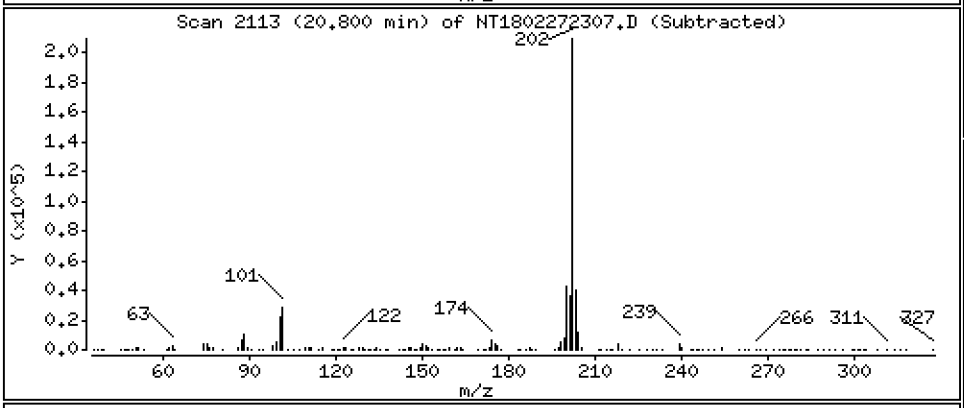
Column diameter: 0.25

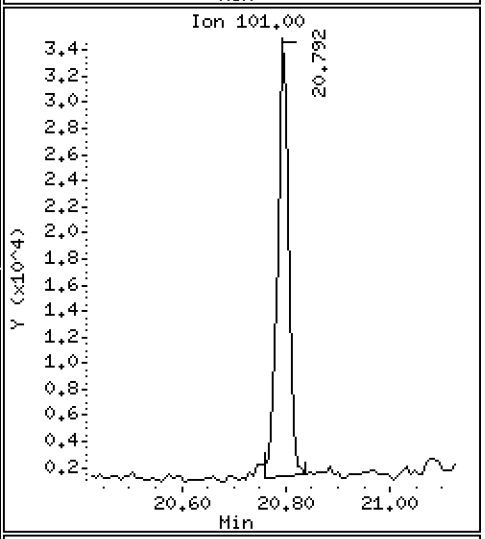
65 Pyrene

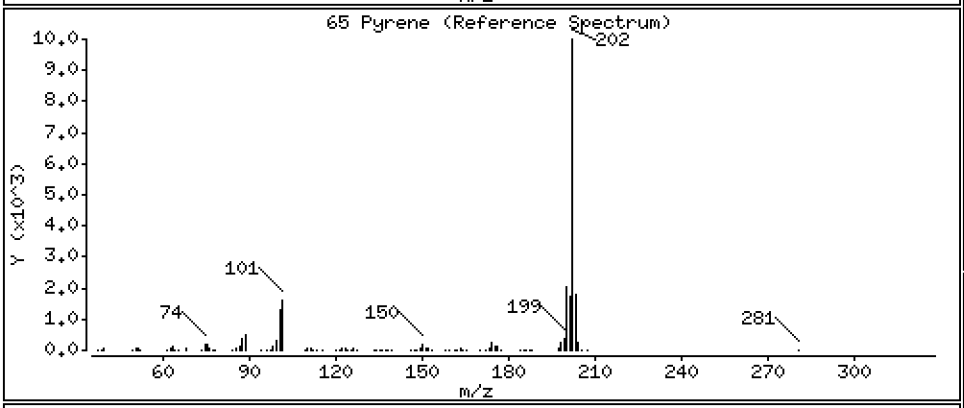
Concentration: 0.8688 ug/mL

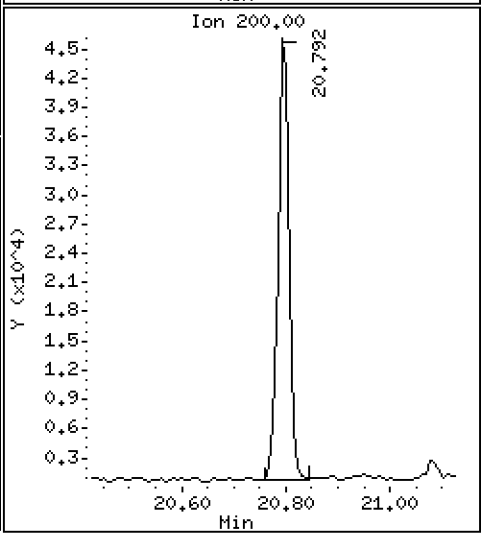


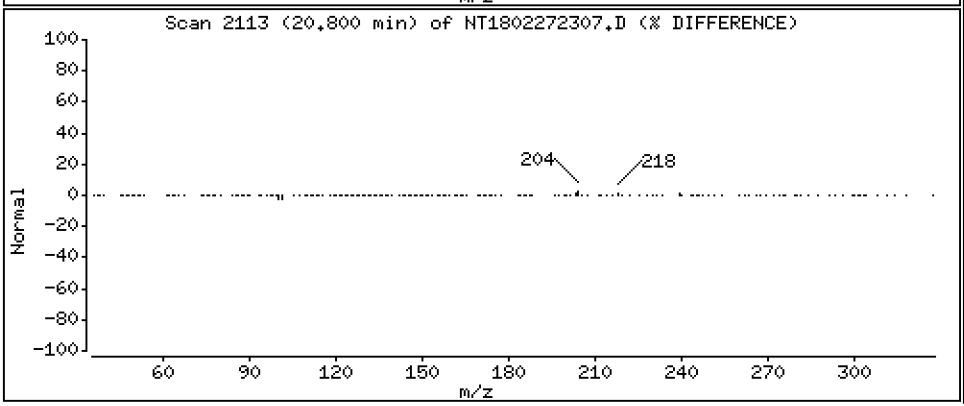












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

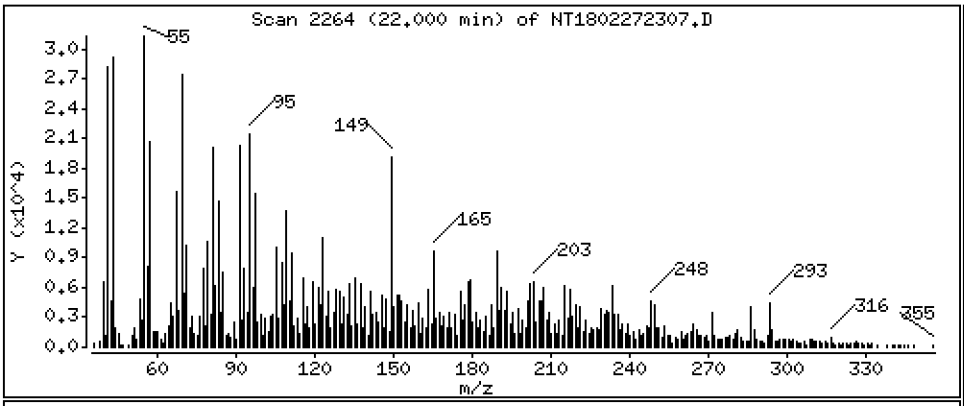
Operator: VTS

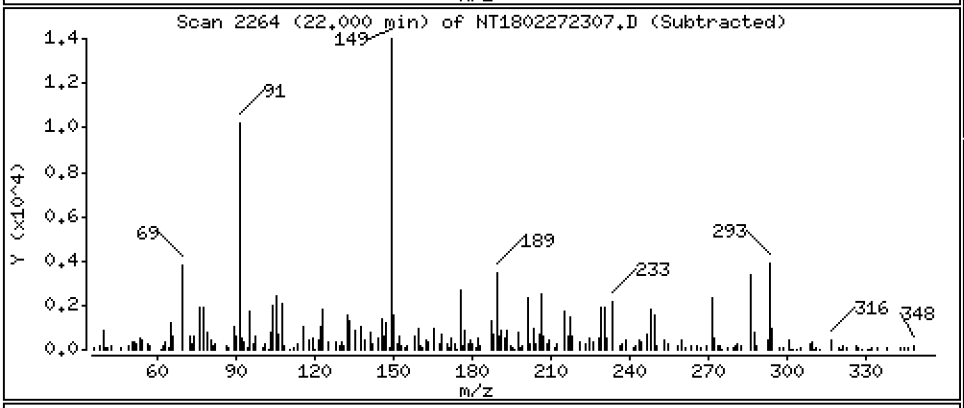
Column phase: ZB-5msi

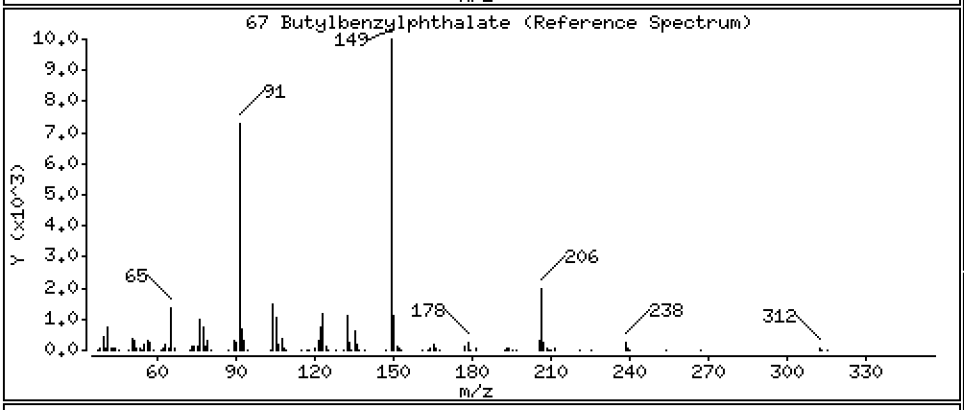
Column diameter: 0.25

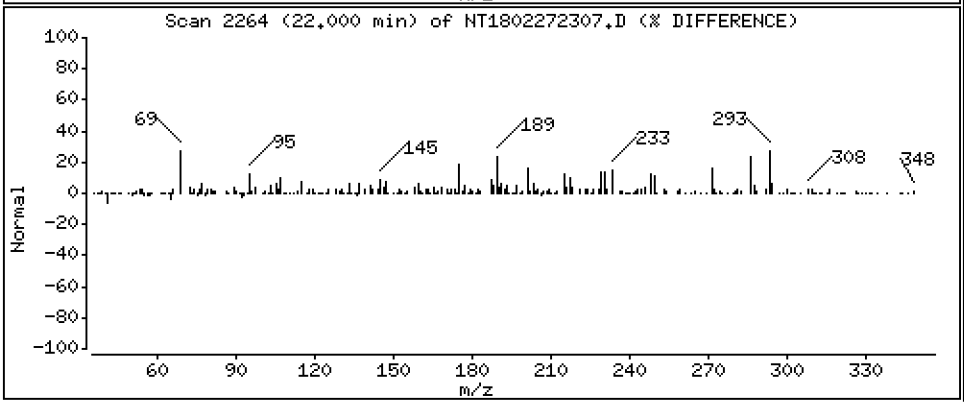
67 Butylbenzylphthalate

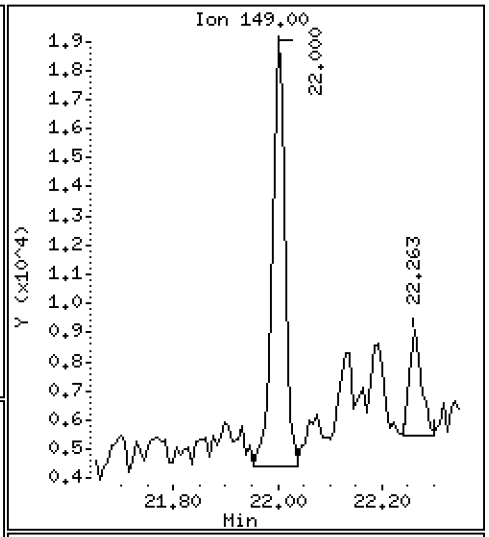
Concentration: 0.1653 ug/mL

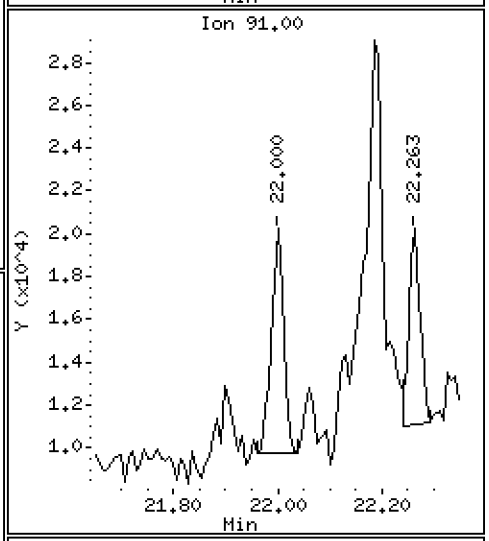


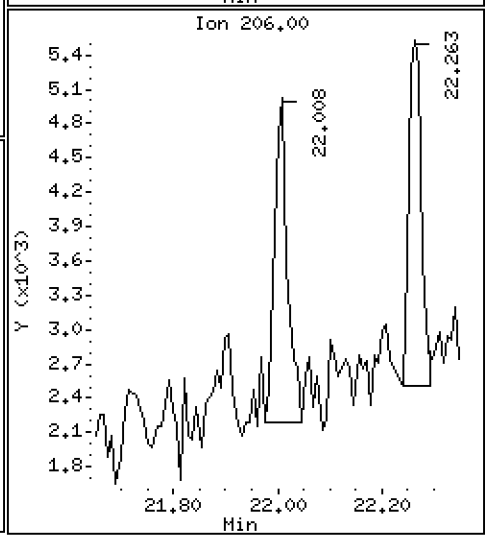












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

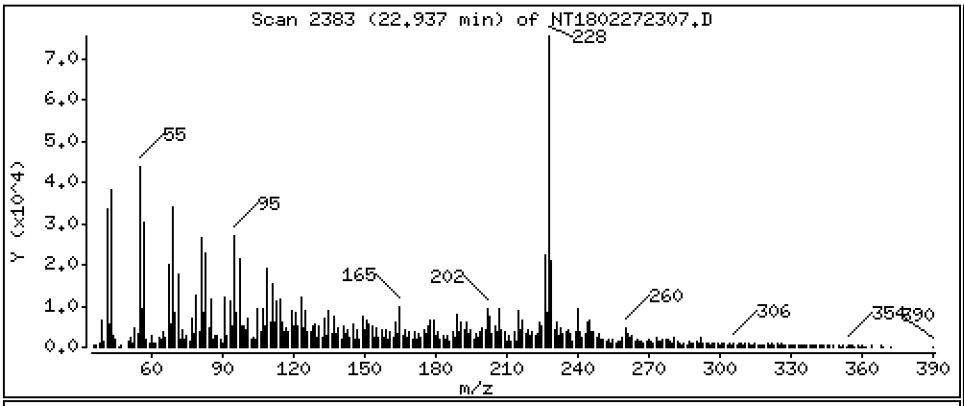
Operator: VTS

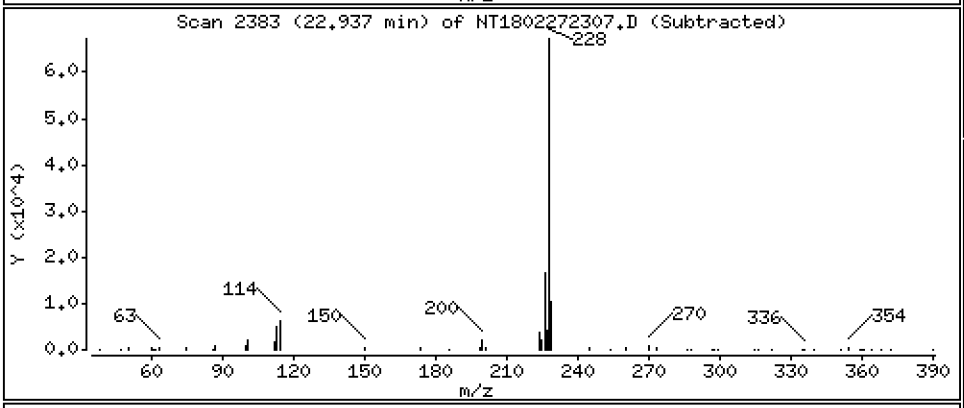
Column phase: ZB-5msi

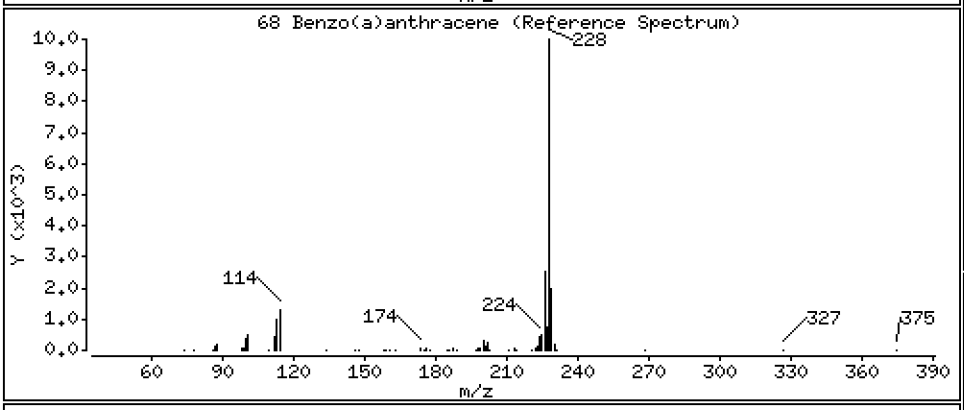
Column diameter: 0.25

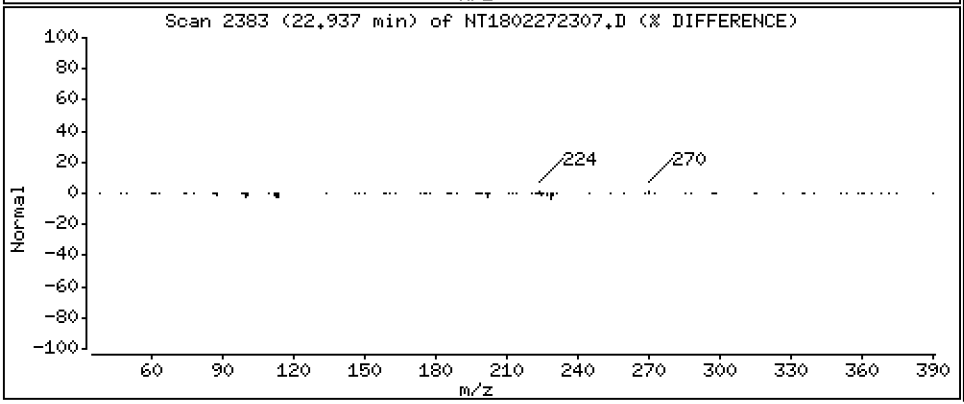
68 Benzo(a)anthracene

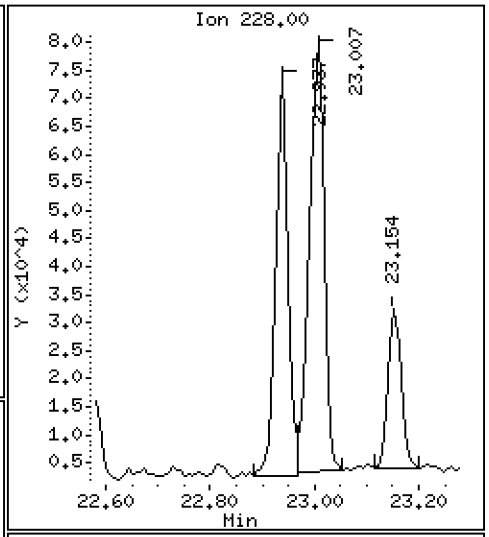
Concentration: 0.3198 ug/mL

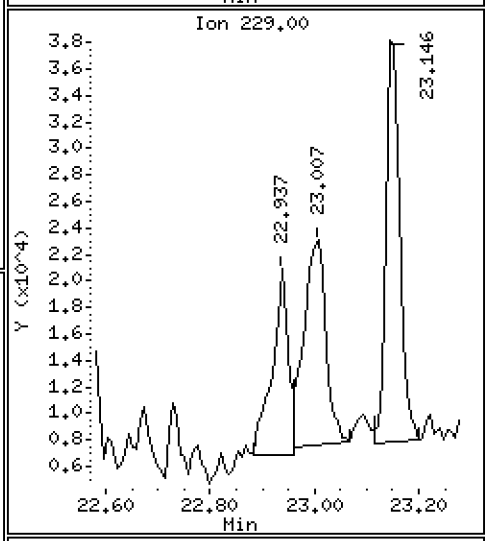


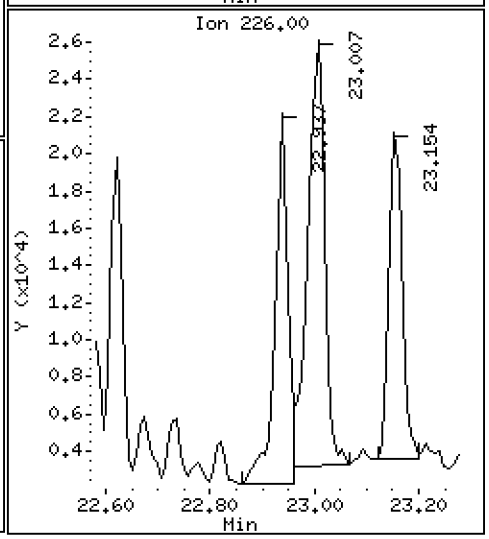












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272307.D

Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

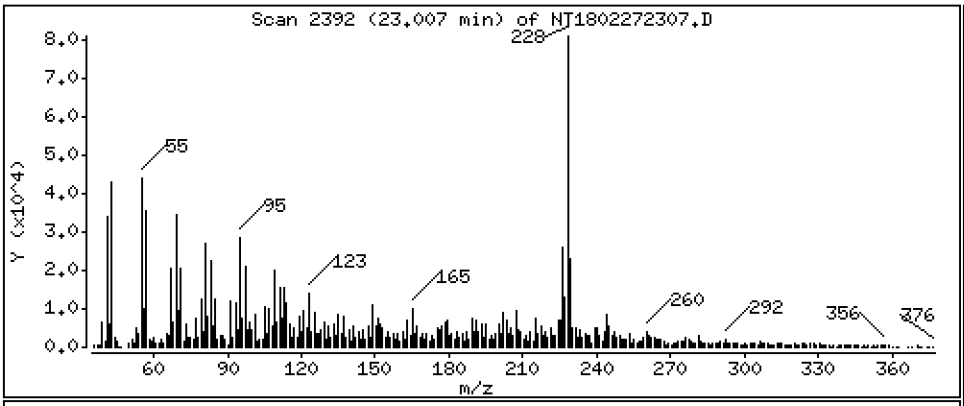
Operator: VTS

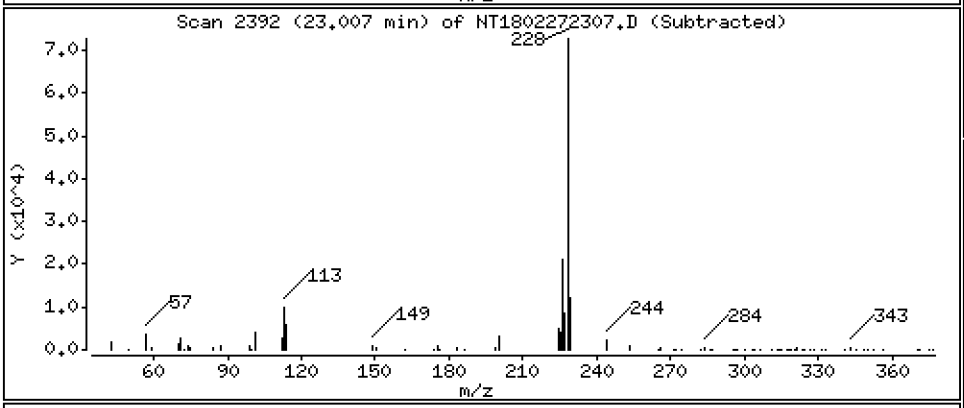
Column phase: ZB-5msi

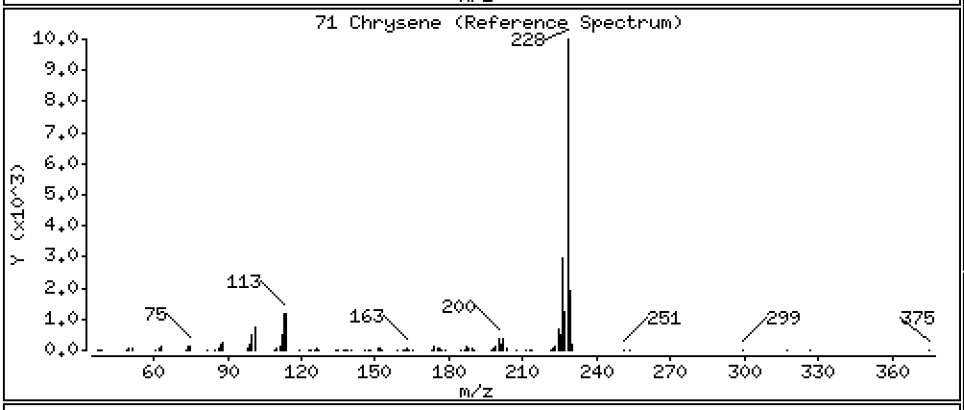
Column diameter: 0.25

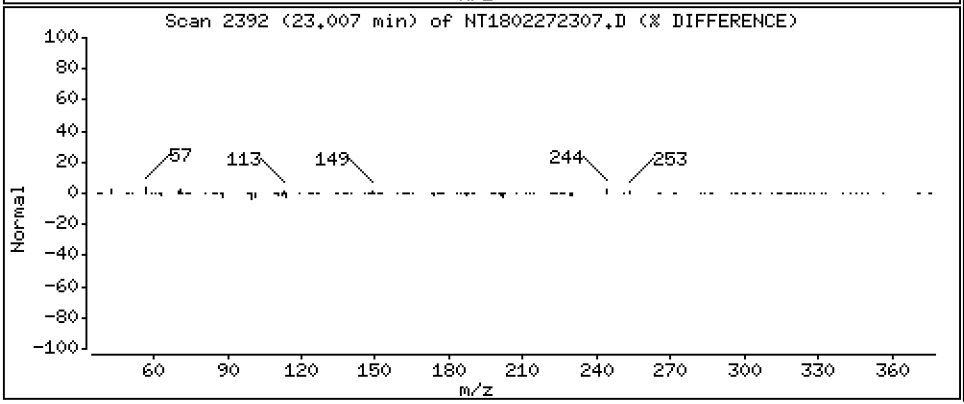
71 Chrysene

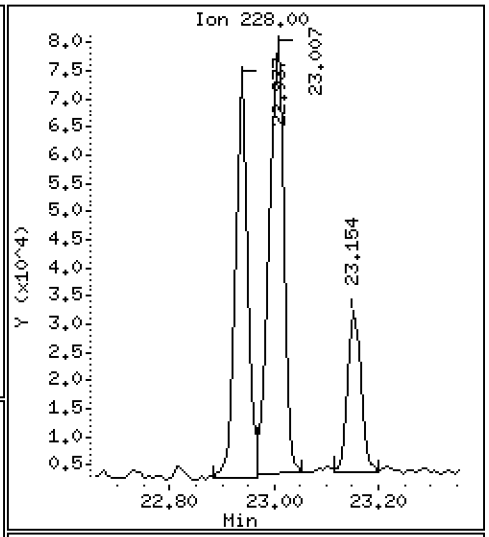
Concentration: 0.3879 ug/mL

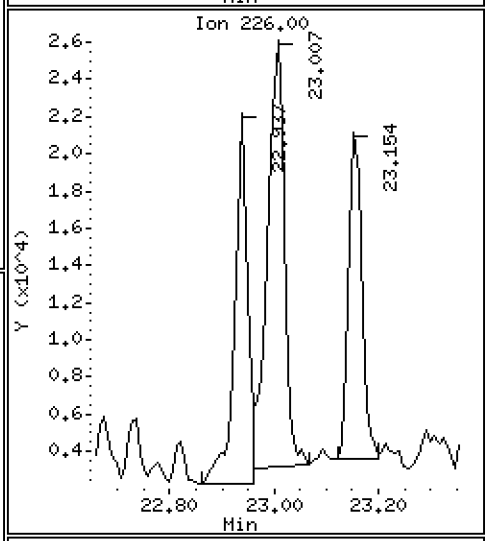


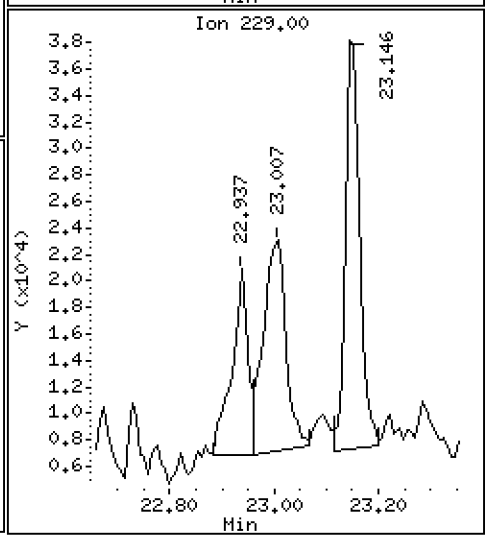












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

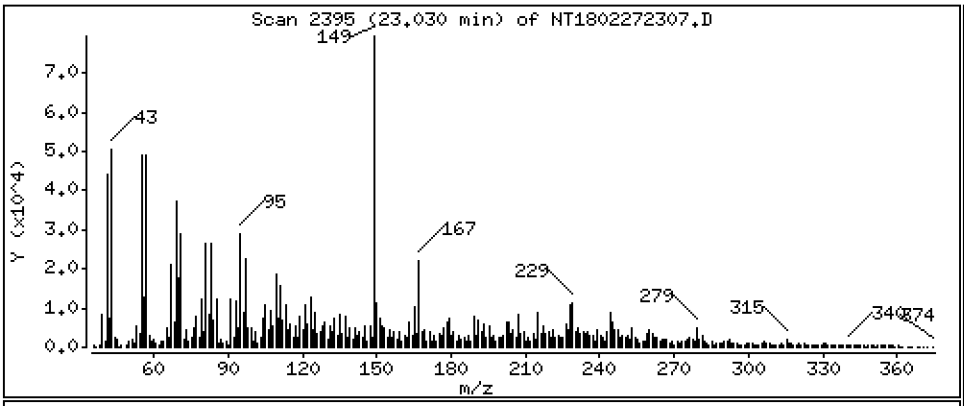
Operator: VTS

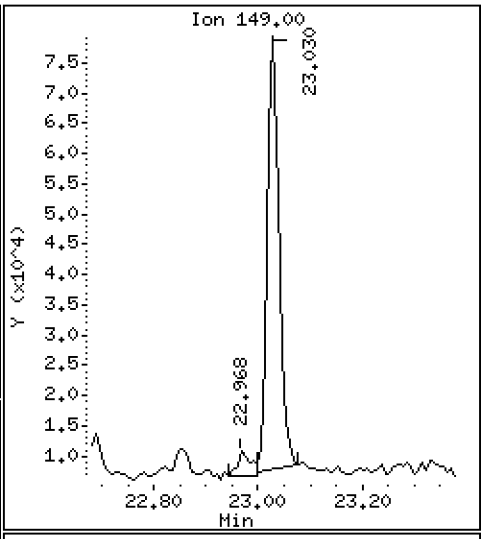
Column phase: ZB-5msi

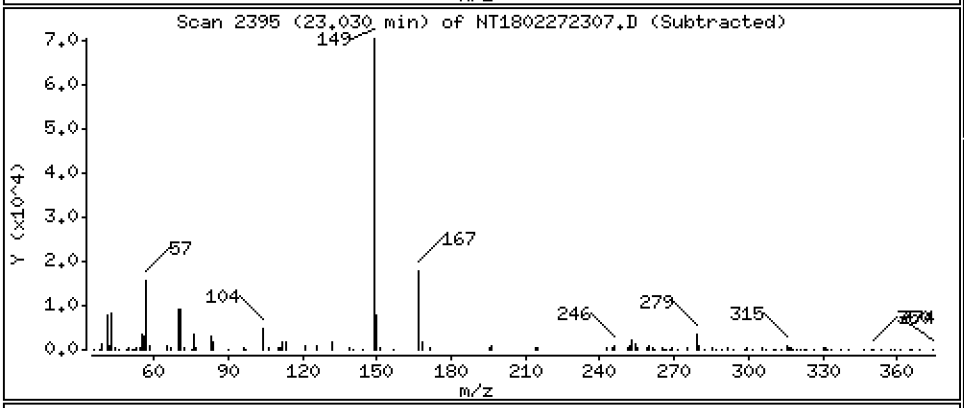
Column diameter: 0.25

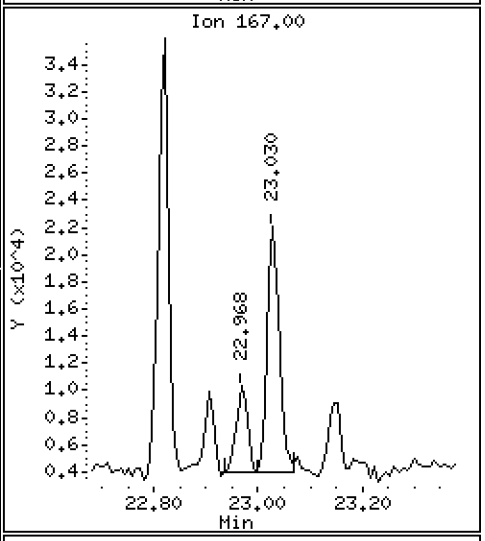
72 bis(2-Ethylhexyl)phthalate

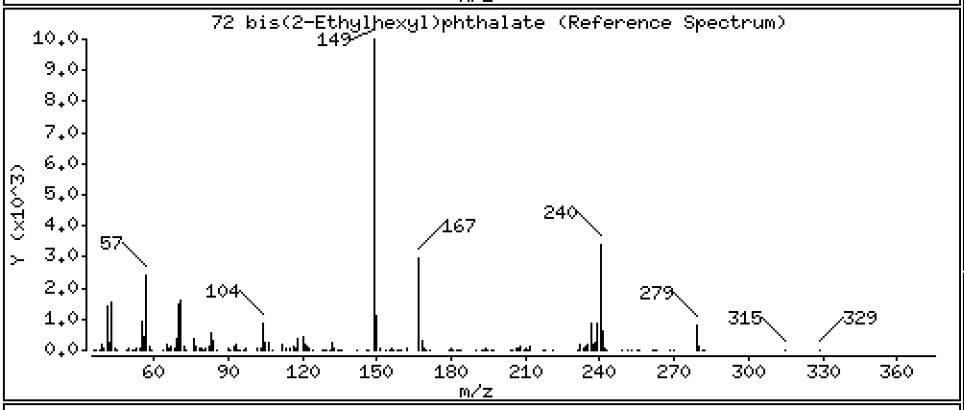
Concentration: 0.4381 ug/mL

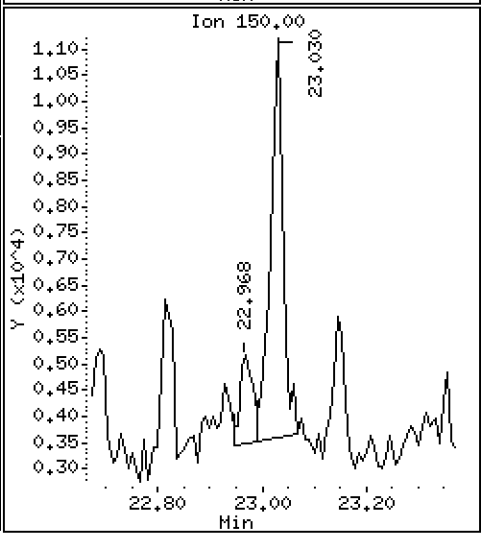


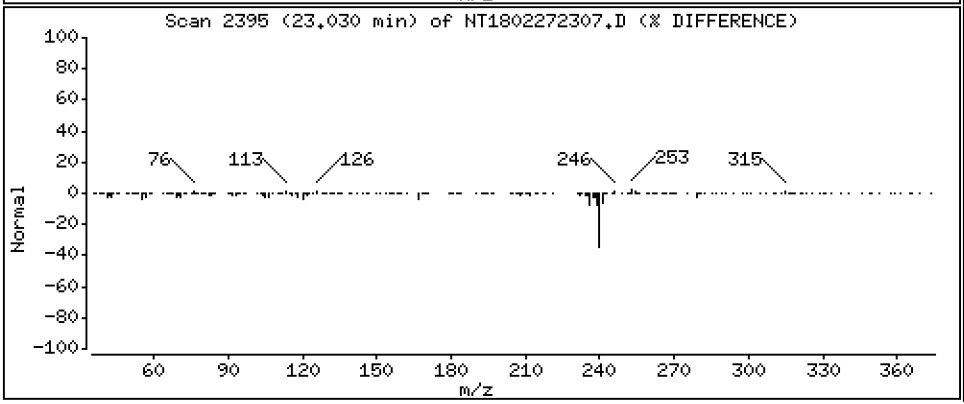












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

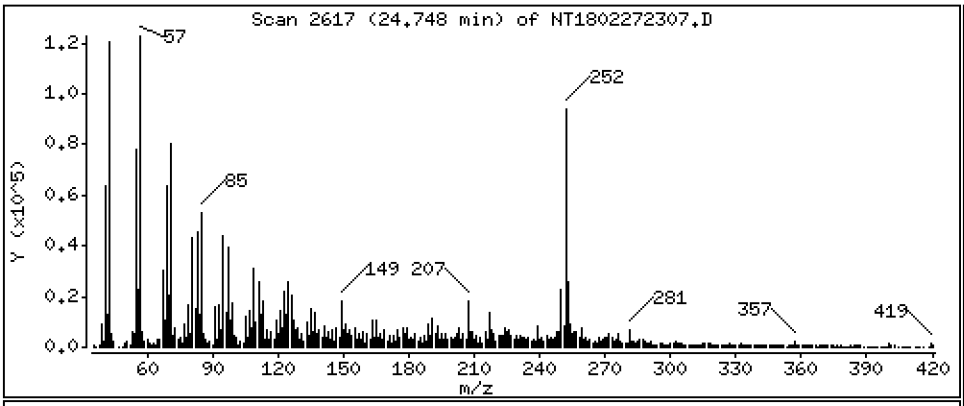
Operator: VTS

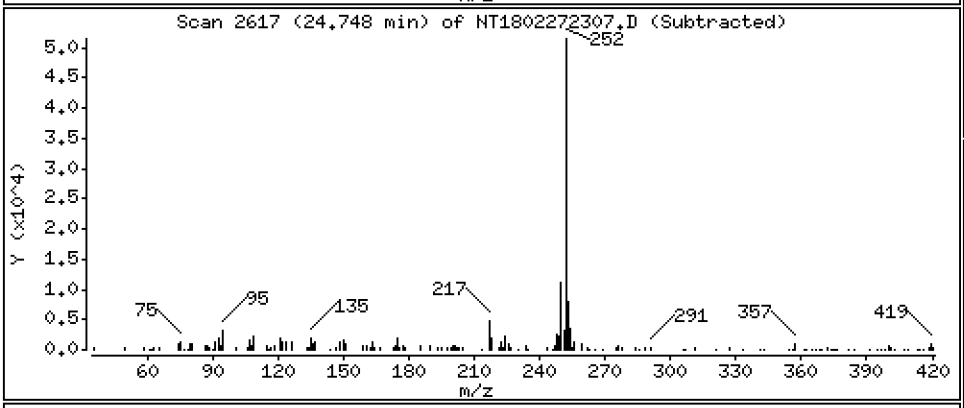
Column phase: ZB-5msi

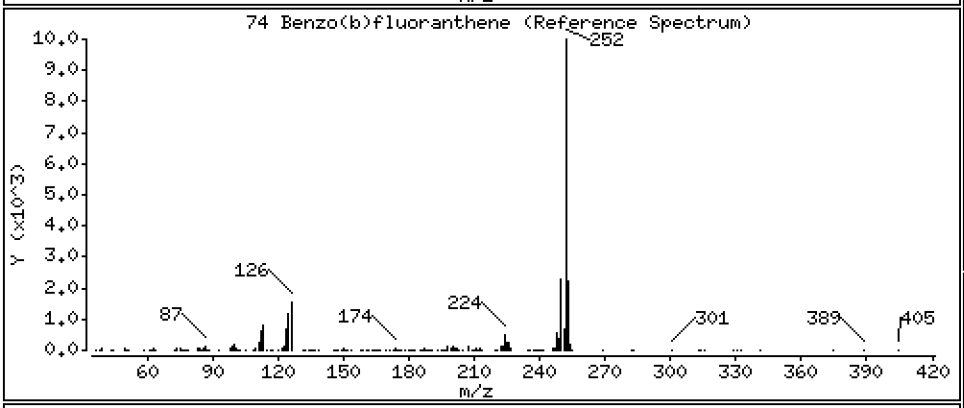
Column diameter: 0.25

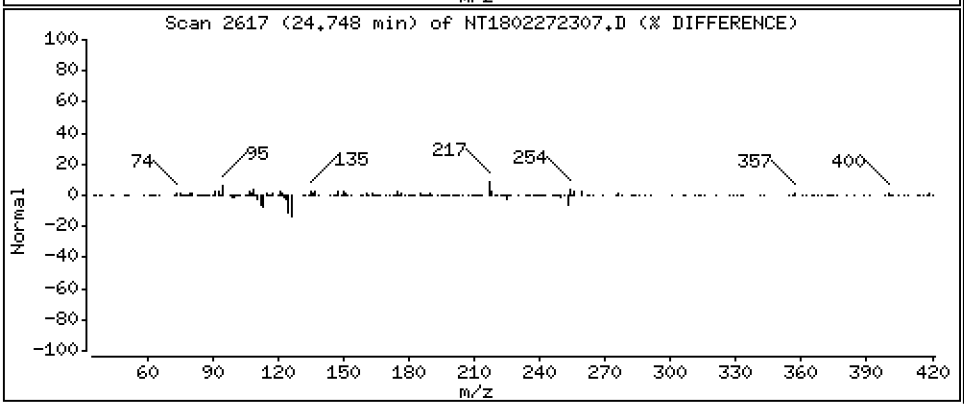
74 Benzo(b)fluoranthene

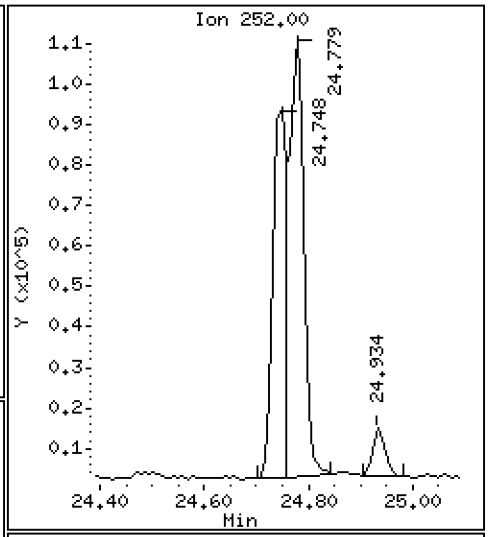
Concentration: 0.5054 ug/mL

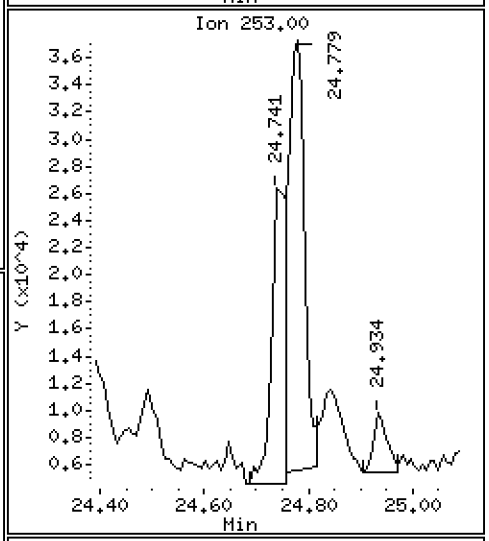


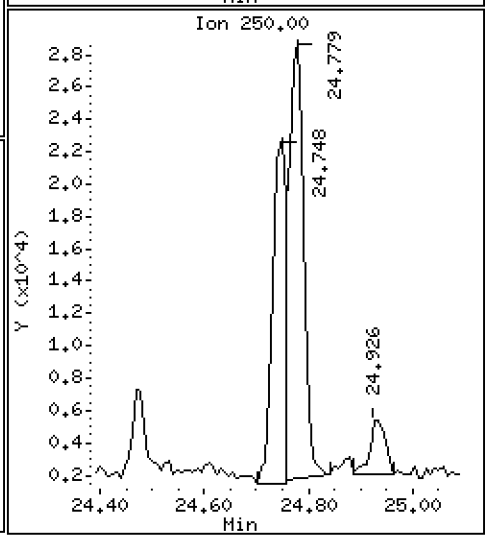












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

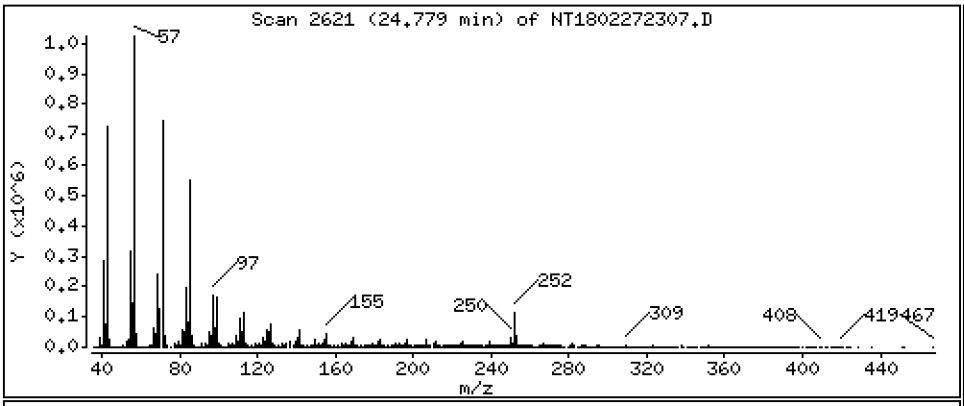
Operator: VTS

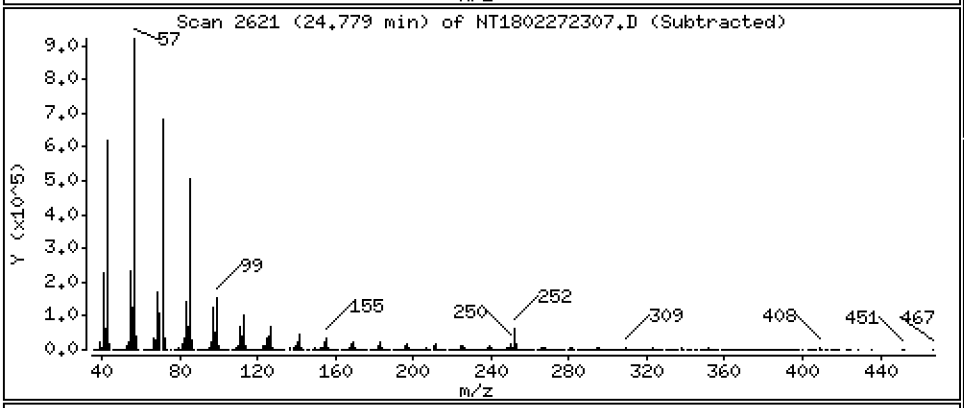
Column phase: ZB-5msi

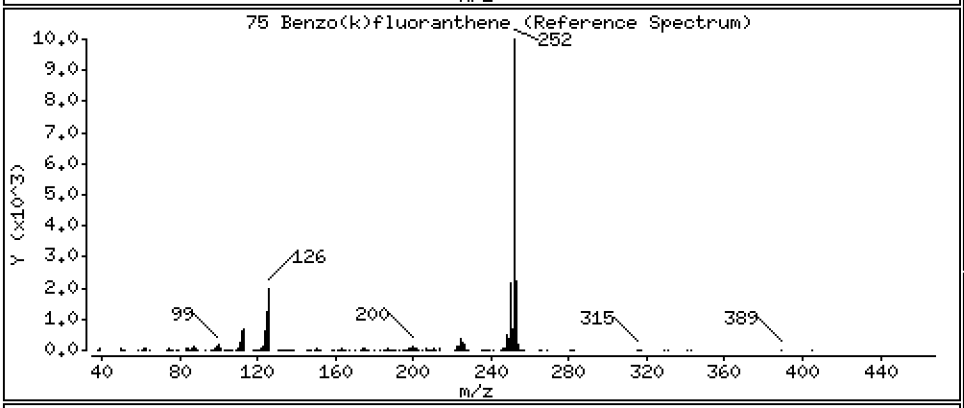
Column diameter: 0.25

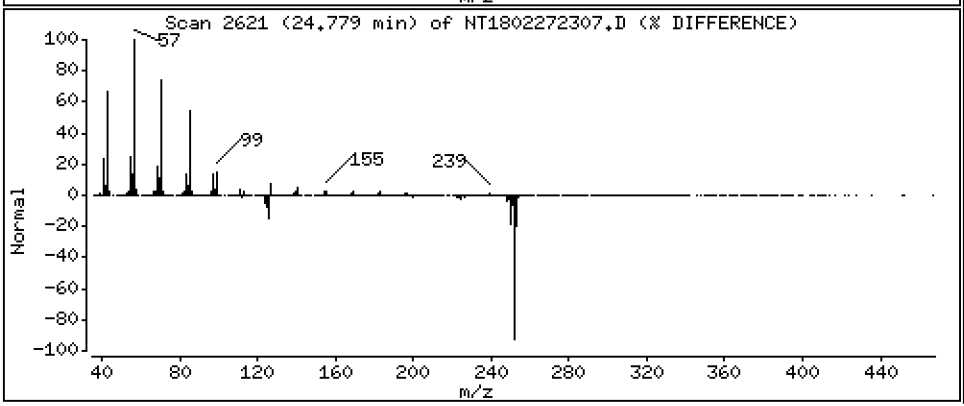
75 Benzo(k)fluoranthene

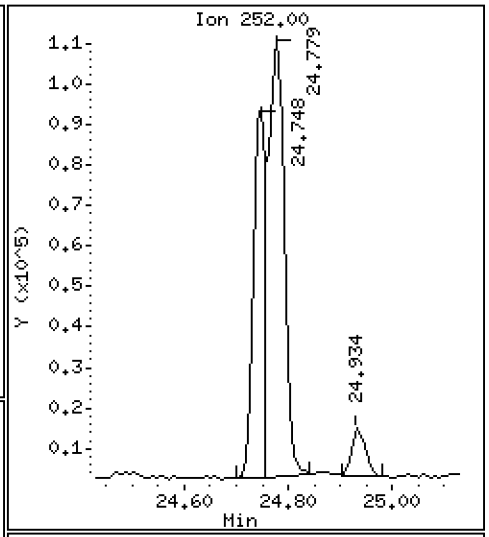
Concentration: 0.6919 ug/mL

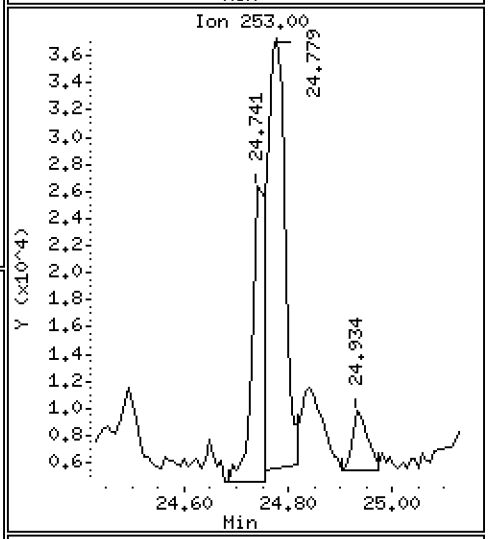


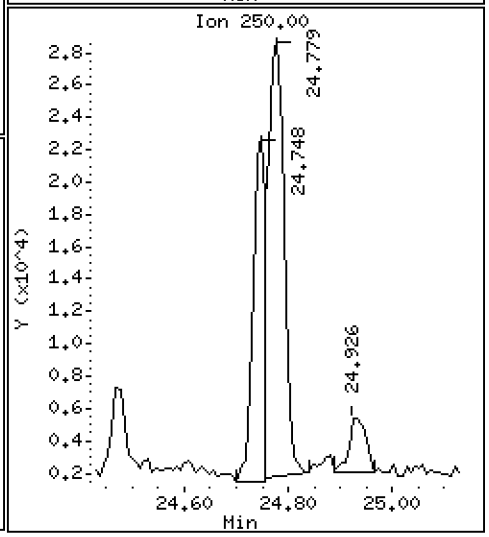












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

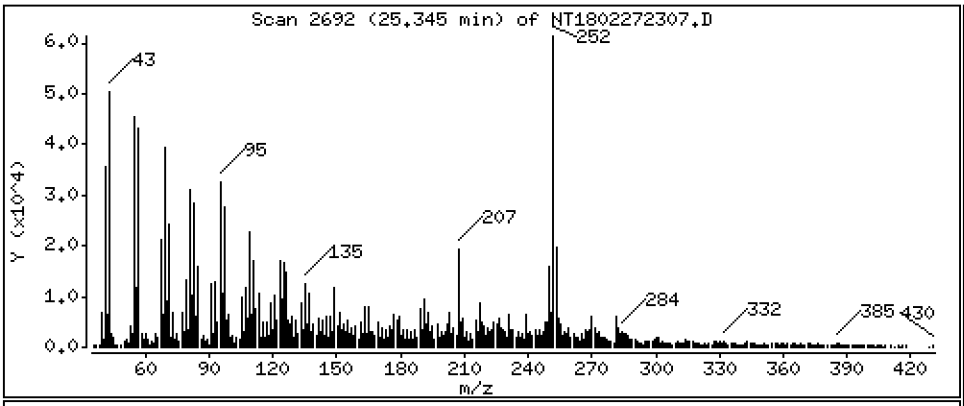
Operator: VTS

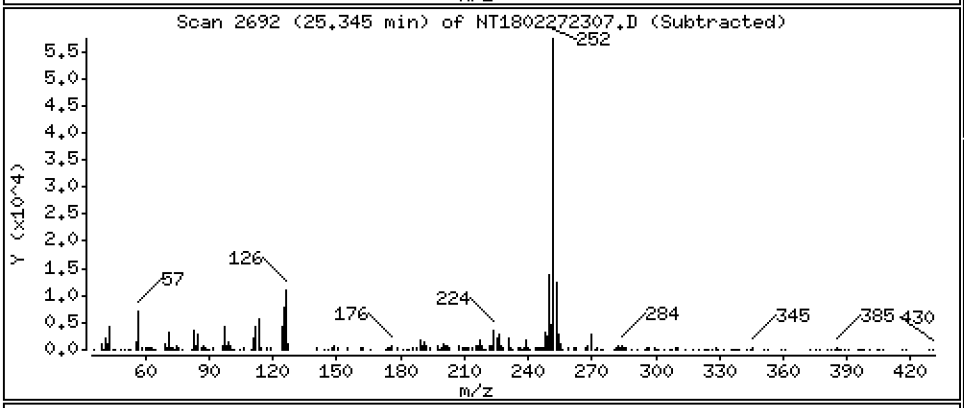
Column phase: ZB-5msi

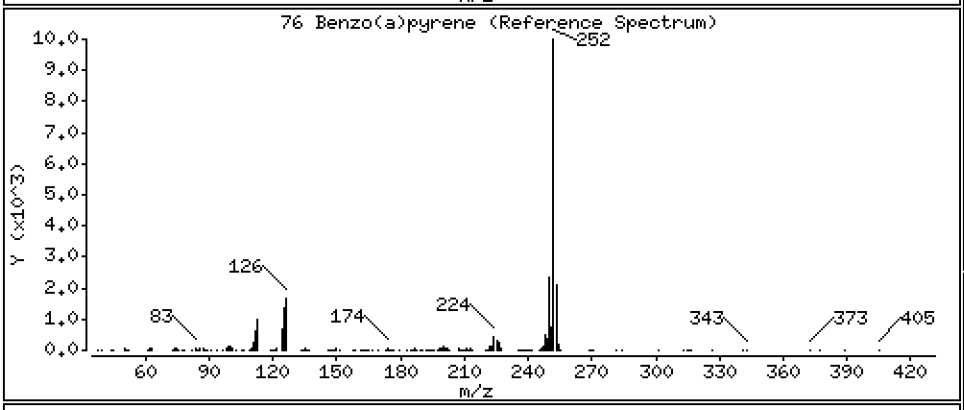
Column diameter: 0.25

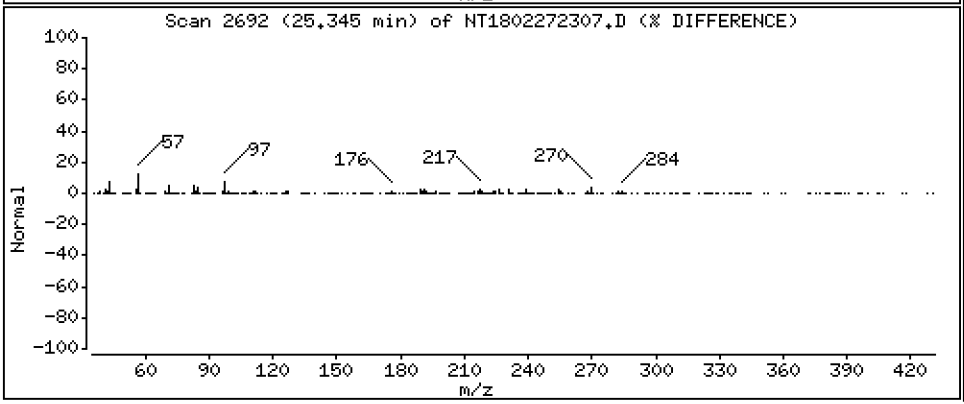
76 Benzo(a)pyrene

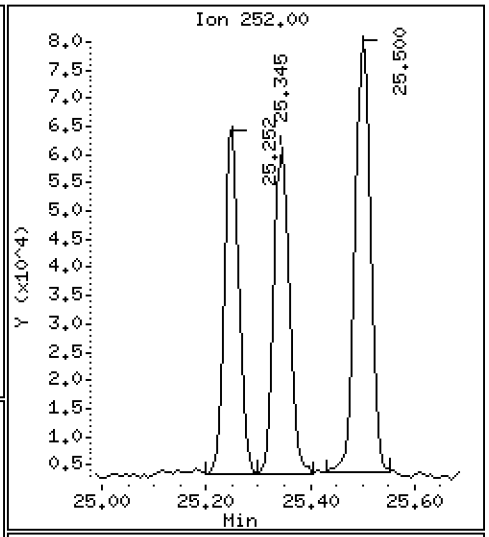
Concentration: 0.4111 ug/mL

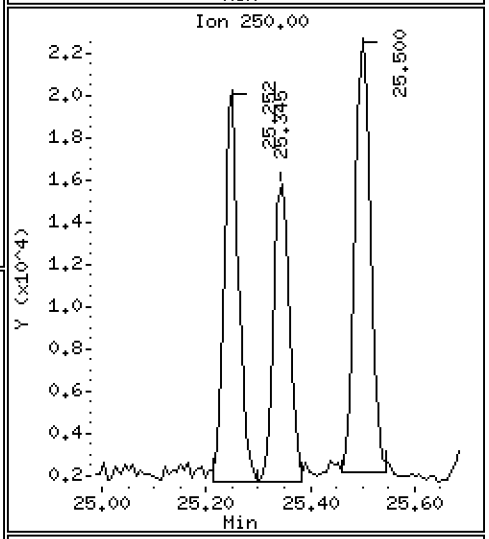


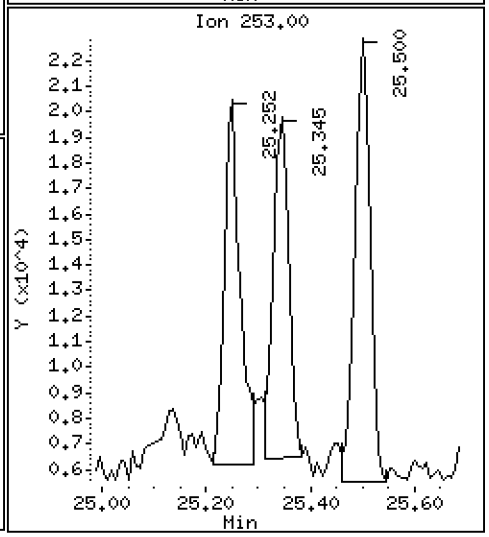












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

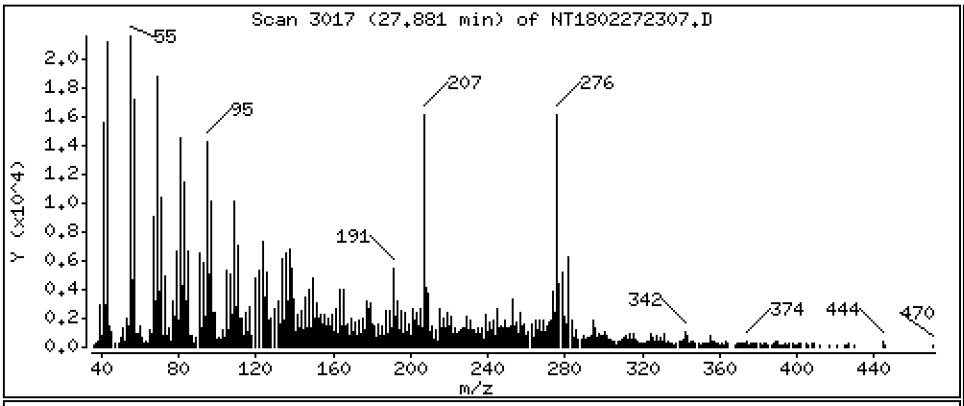
Operator: VTS

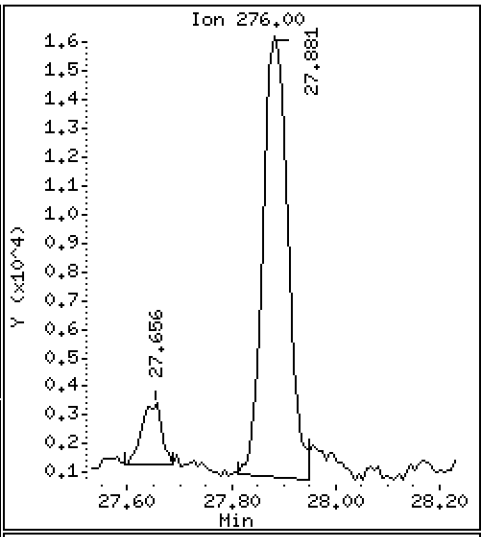
Column phase: ZB-5msi

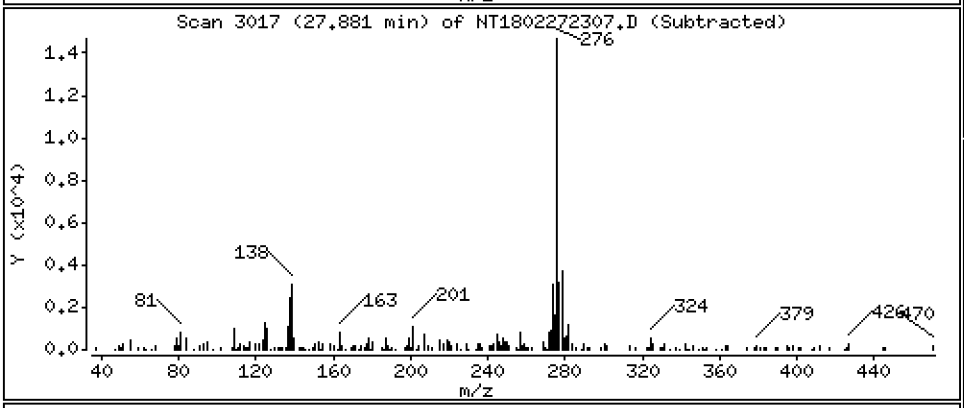
Column diameter: 0.25

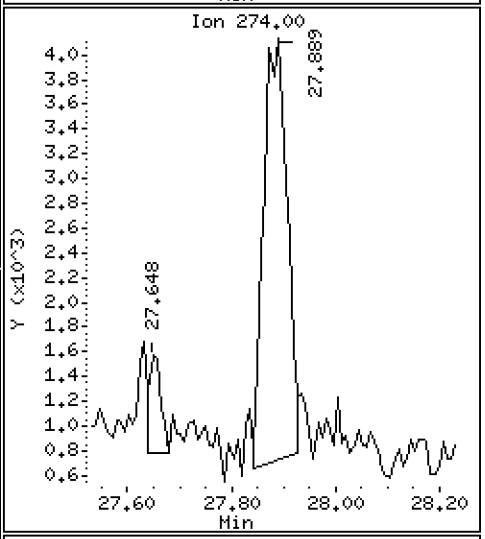
78 Indeno(1,2,3-cd)pyrene

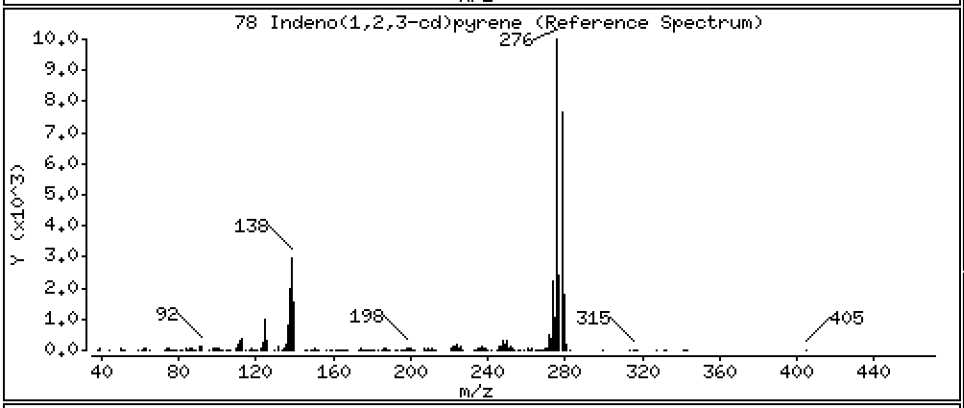
Concentration: 0.1427 ug/mL

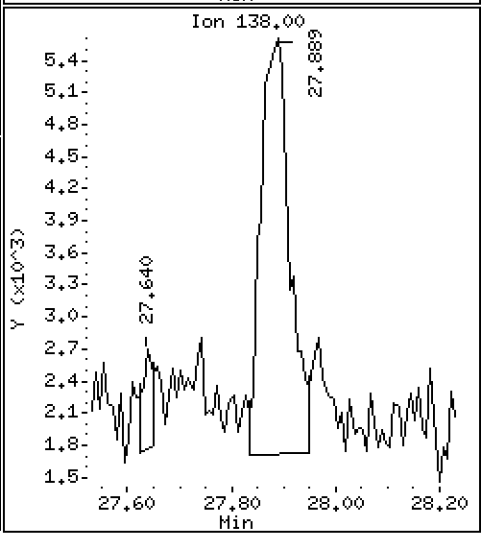


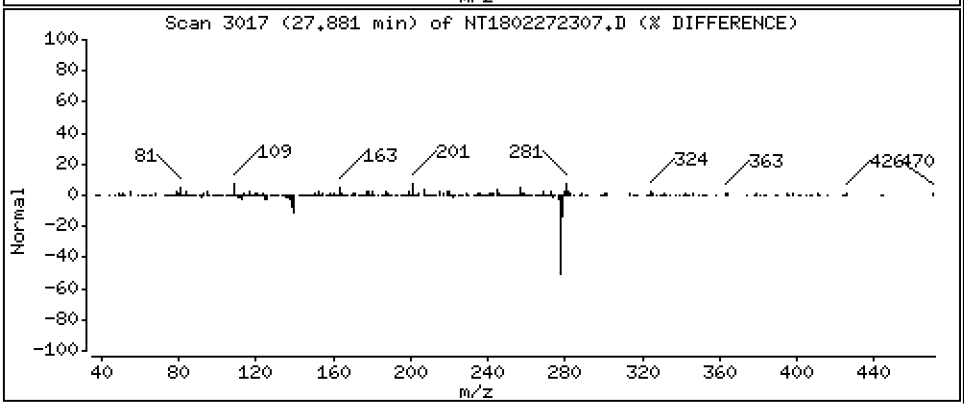












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

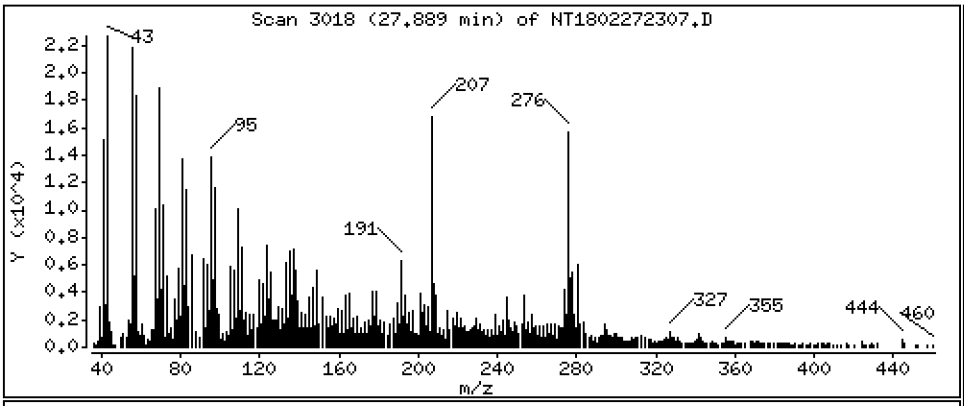
Operator: VTS

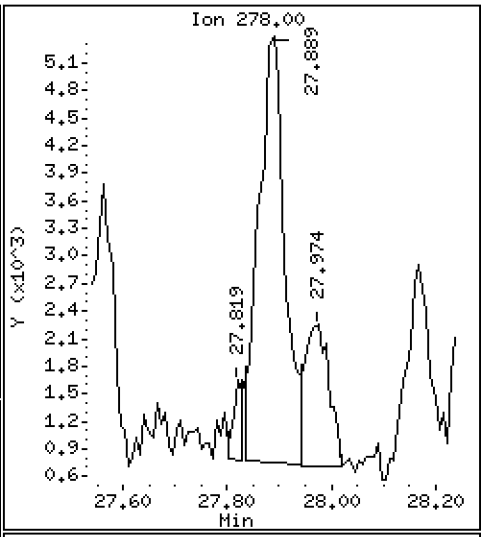
Column phase: ZB-5msi

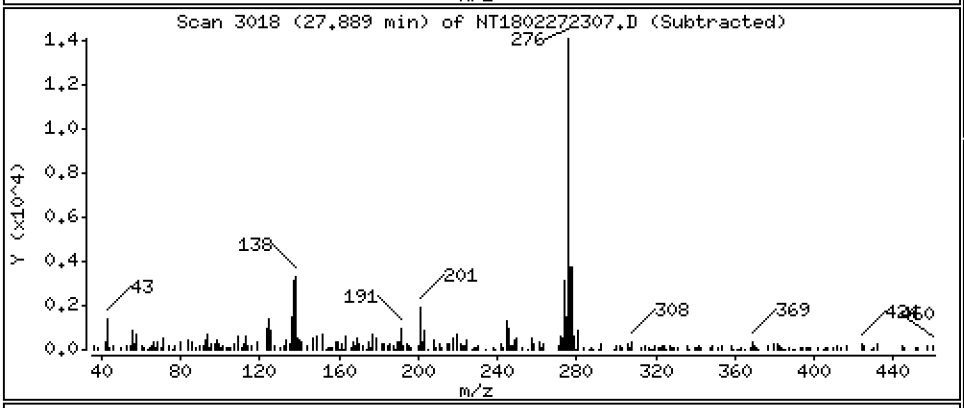
Column diameter: 0.25

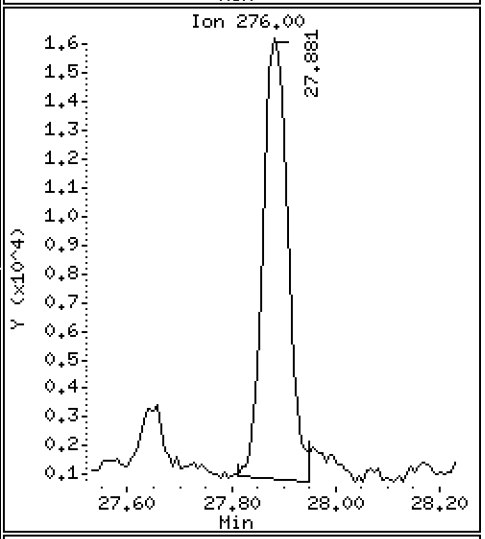
79 Dibenzo(a,h)anthracene

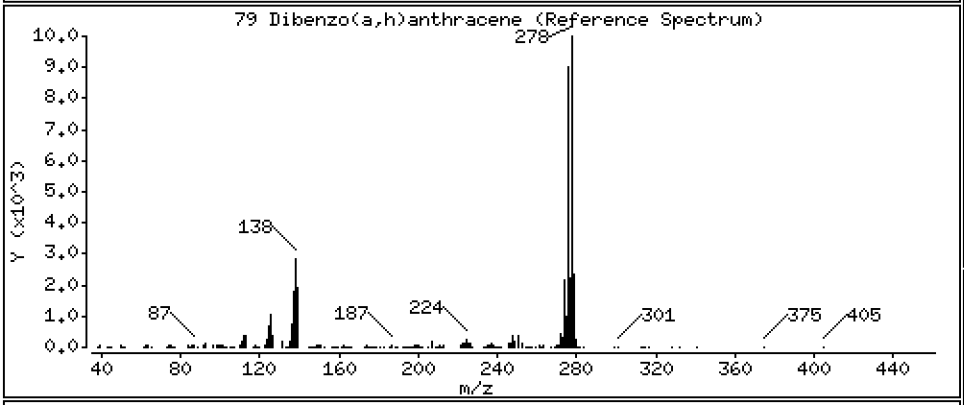
Concentration: 0.05499 ug/mL

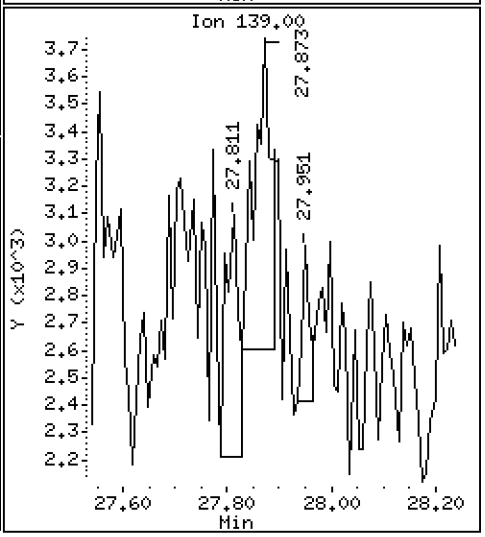


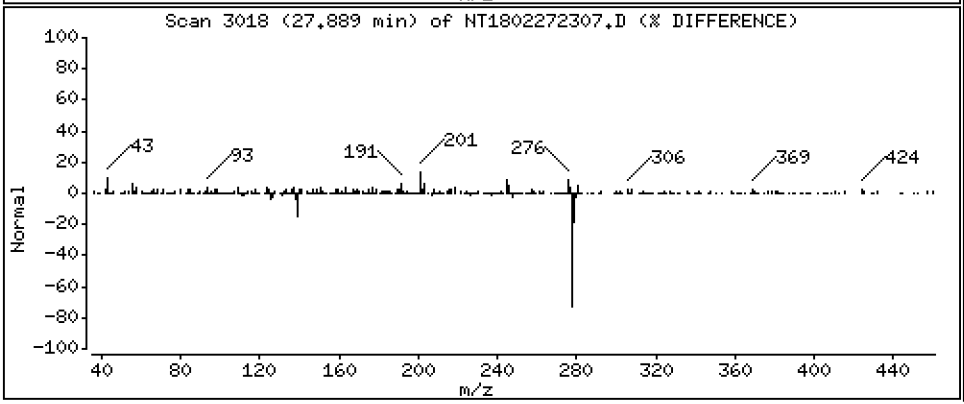












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

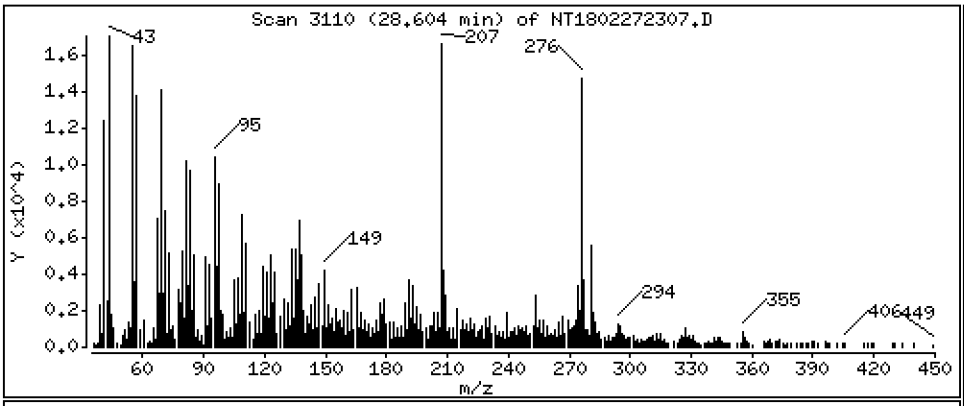
Operator: VTS

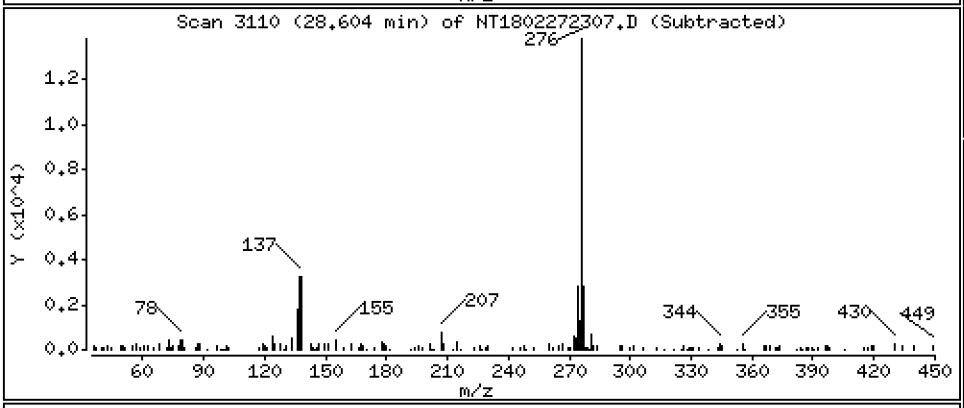
Column phase: ZB-5msi

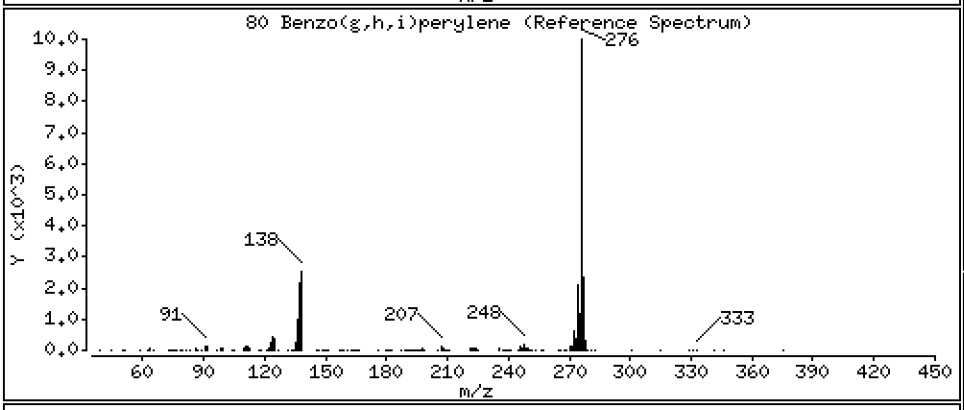
Column diameter: 0.25

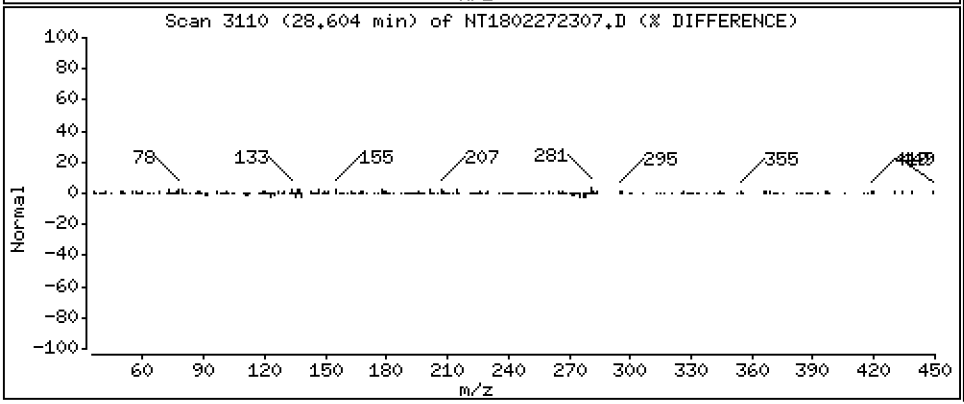
80 Benzo(g,h,i)perylene

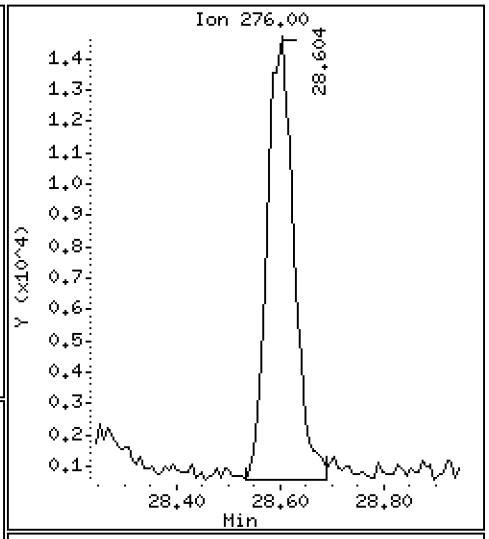
Concentration: 0.1750 ug/mL

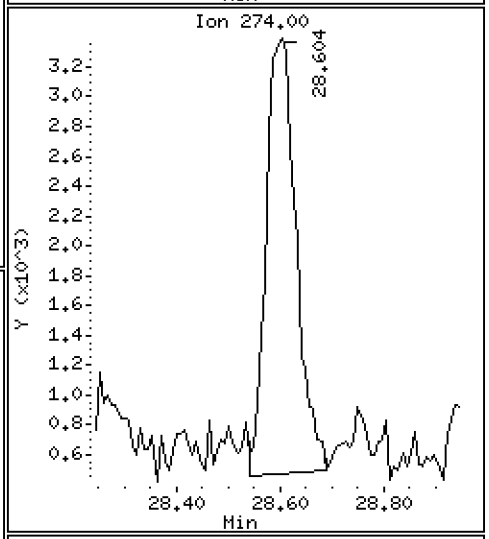


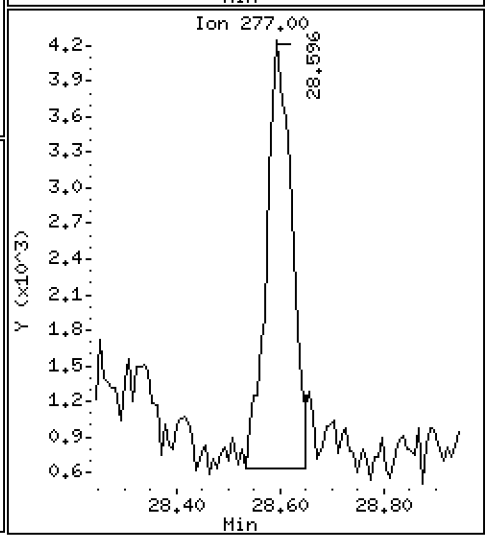












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

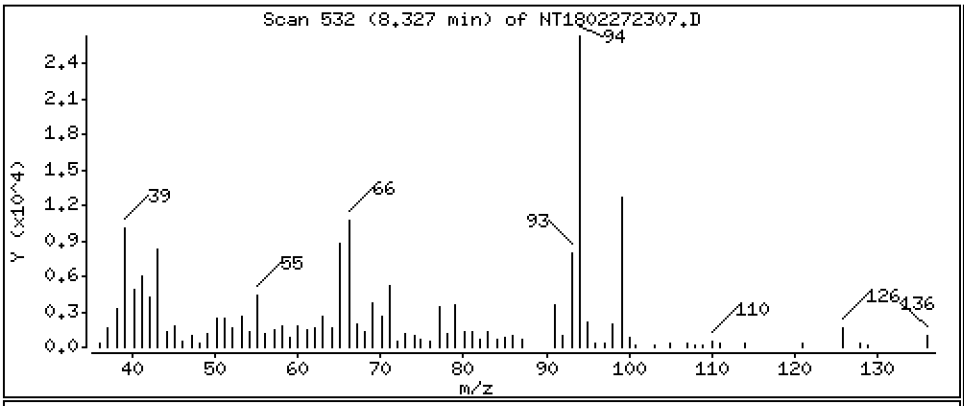
Operator: VTS

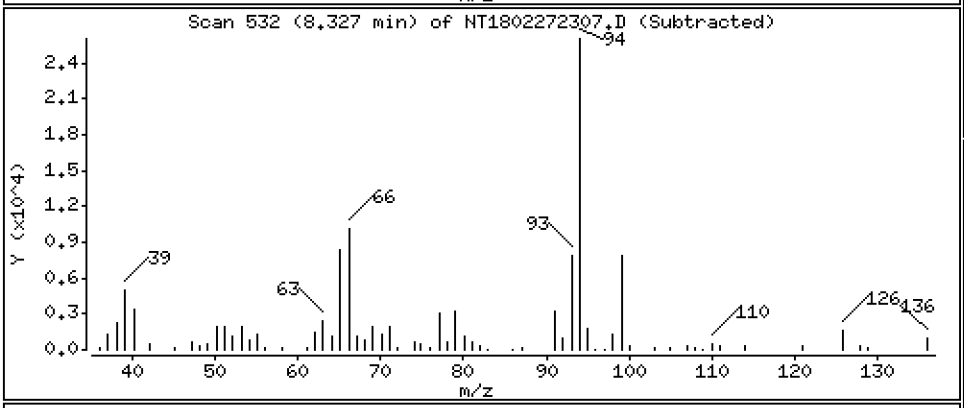
Column phase: ZB-5msi

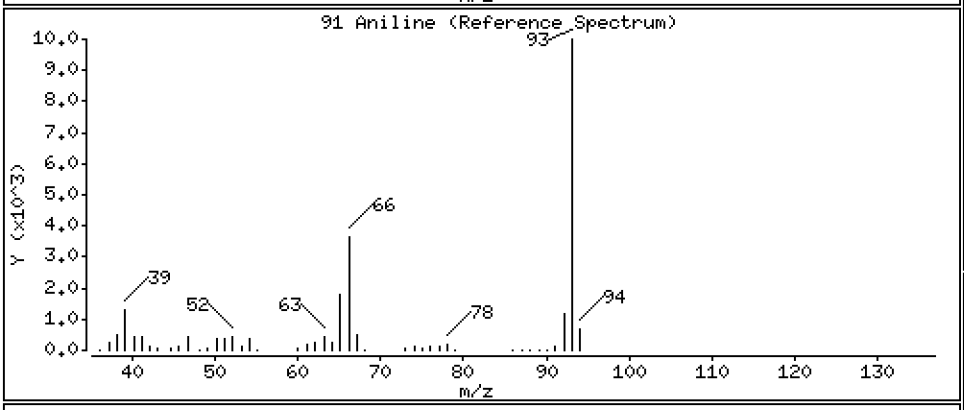
Column diameter: 0.25

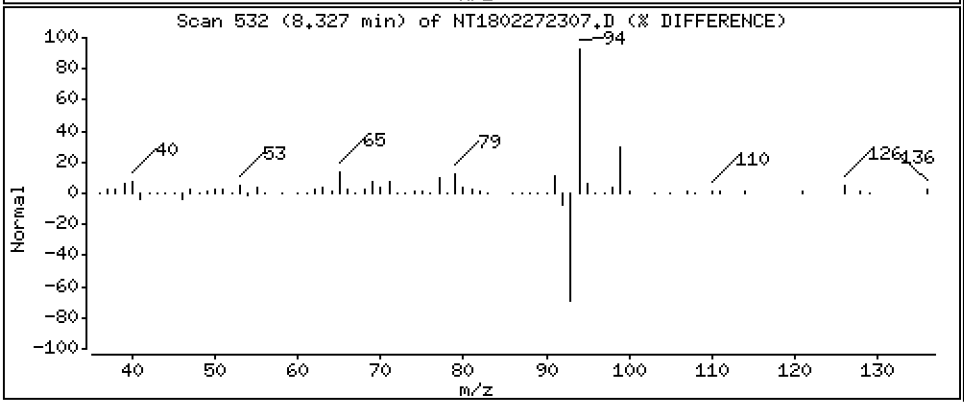
91 Aniline

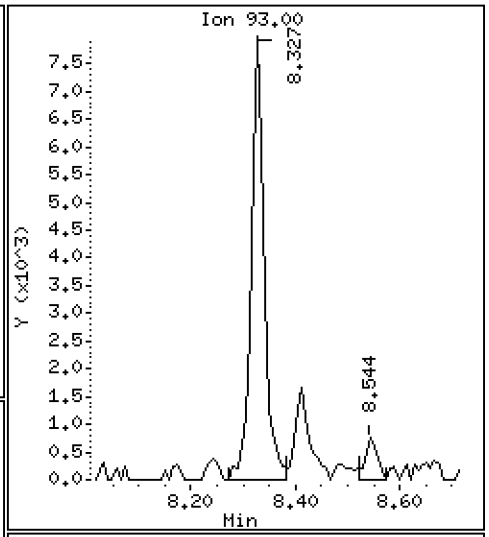
Concentration: 0.1043 ug/mL

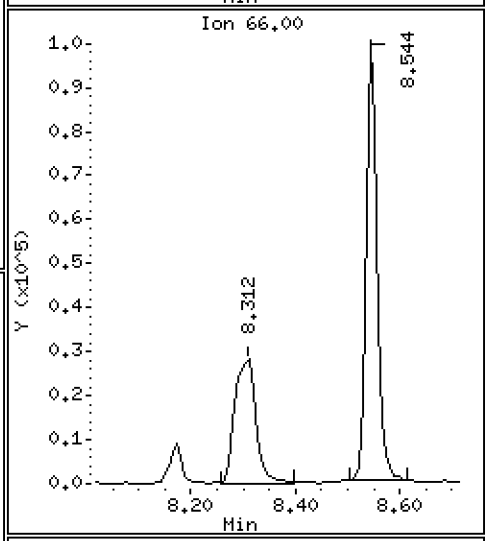


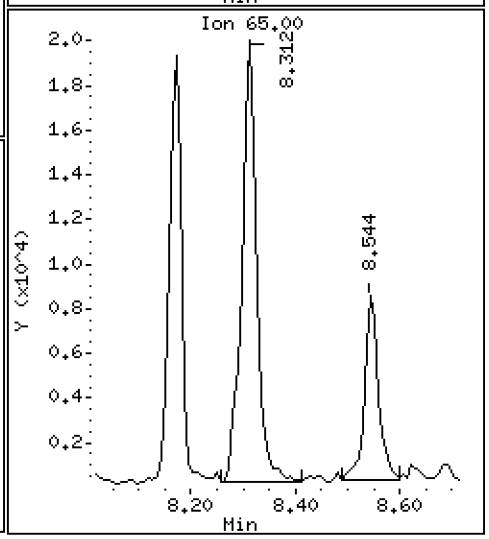












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

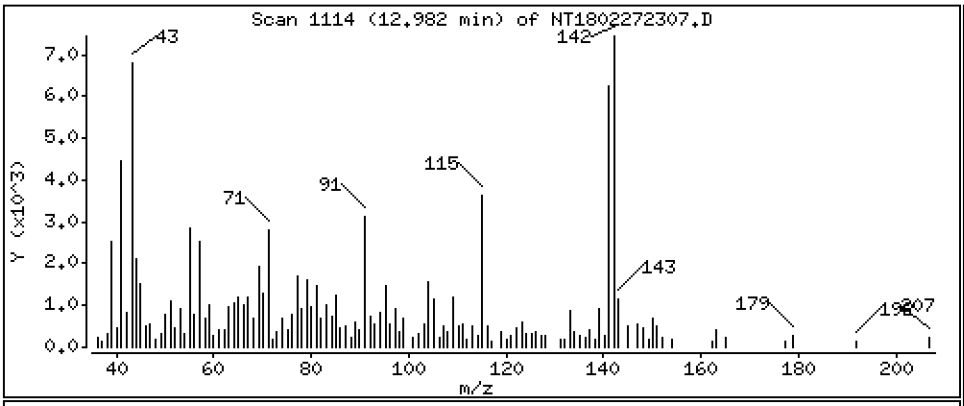
Operator: VTS

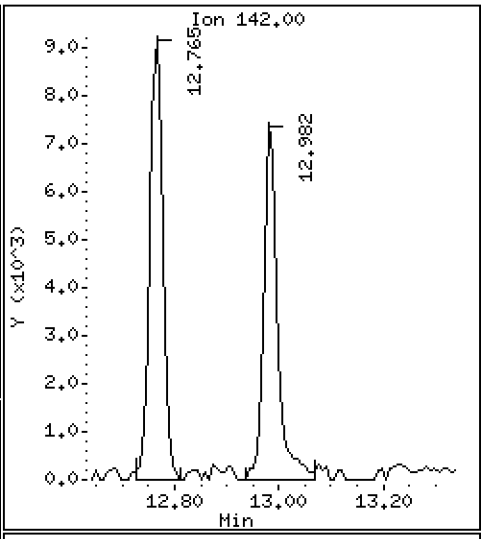
Column phase: ZB-5msi

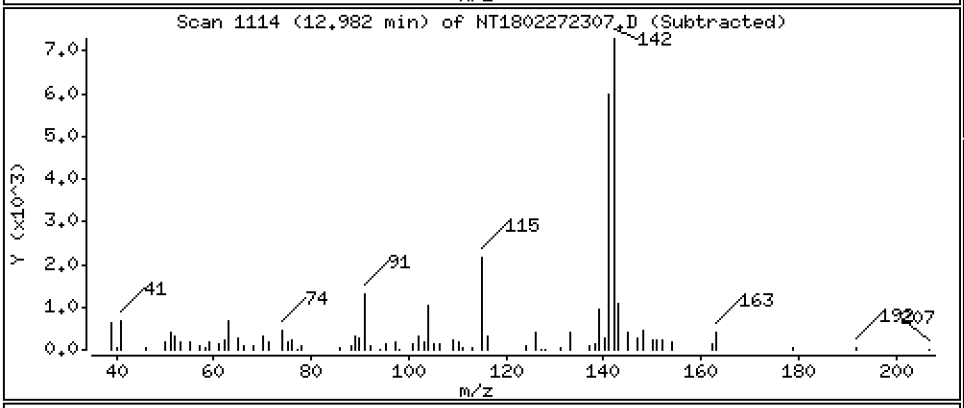
Column diameter: 0.25

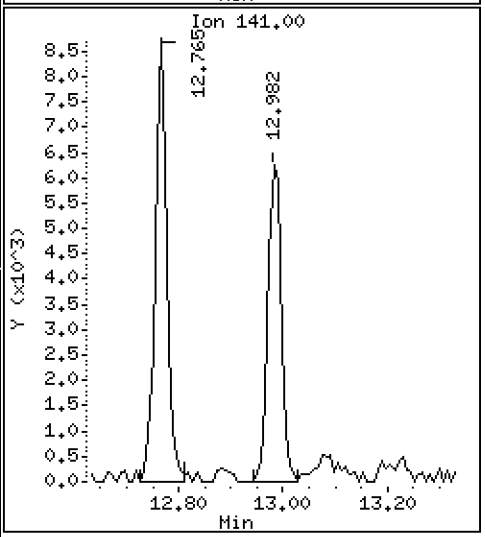
105 1-methylnaphthalene

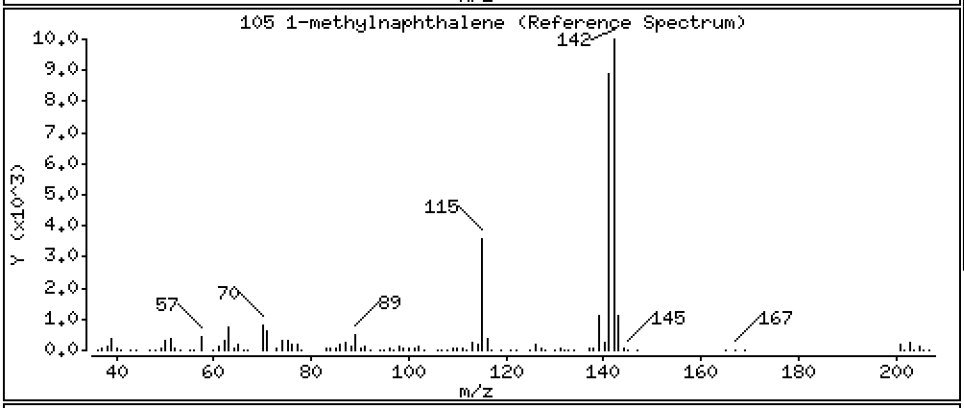
Concentration: 0.07077 ug/mL

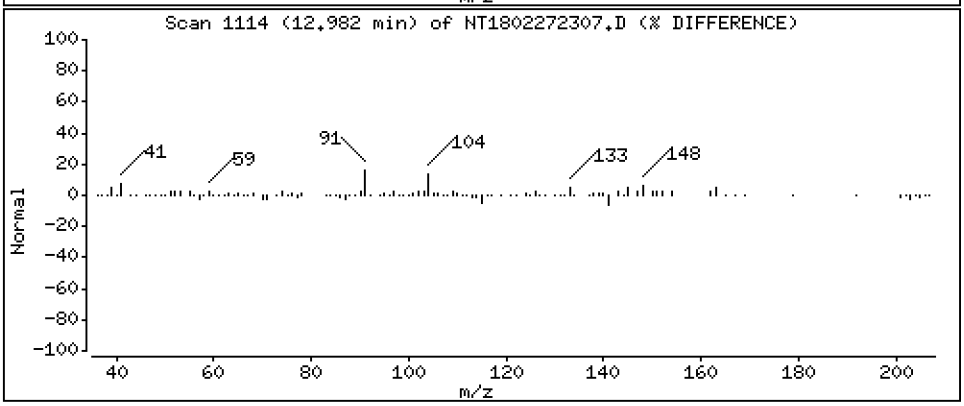












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

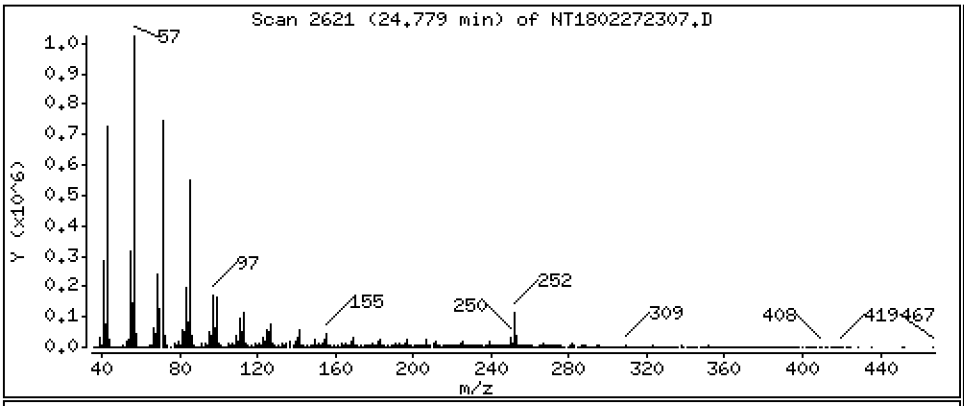
Operator: VTS

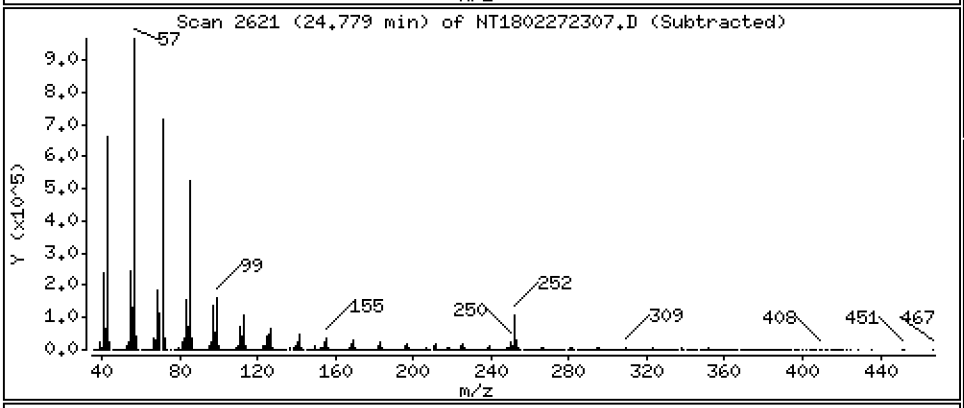
Column phase: ZB-5msi

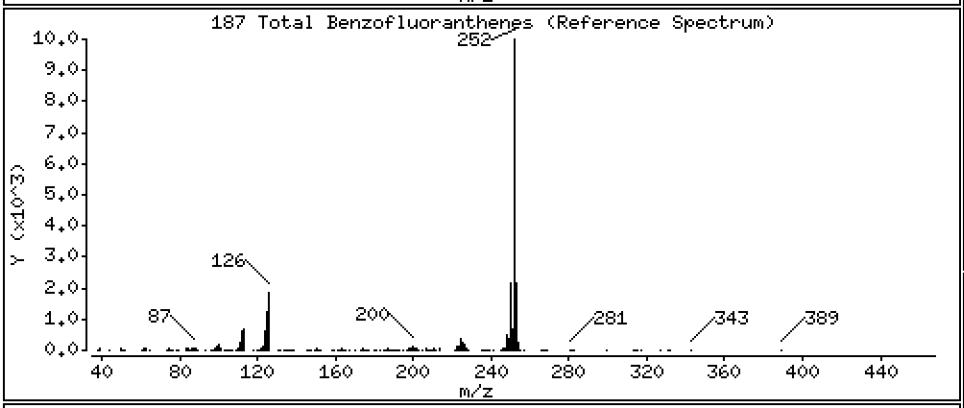
Column diameter: 0.25

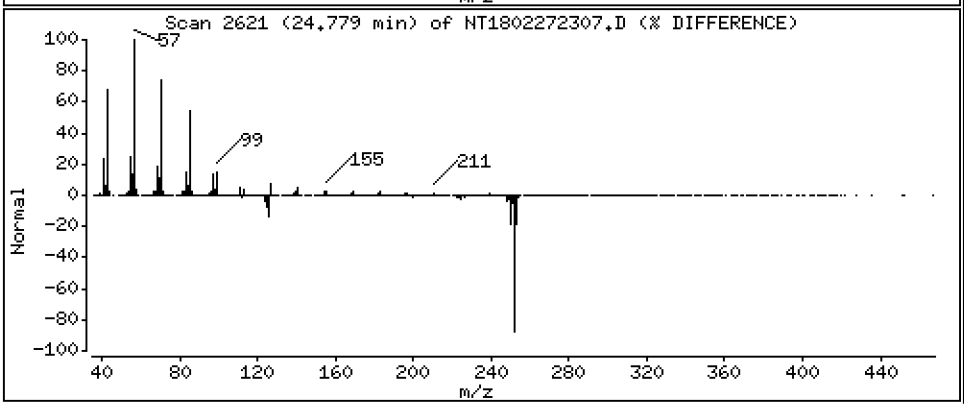
187 Total Benzofluoranthenes

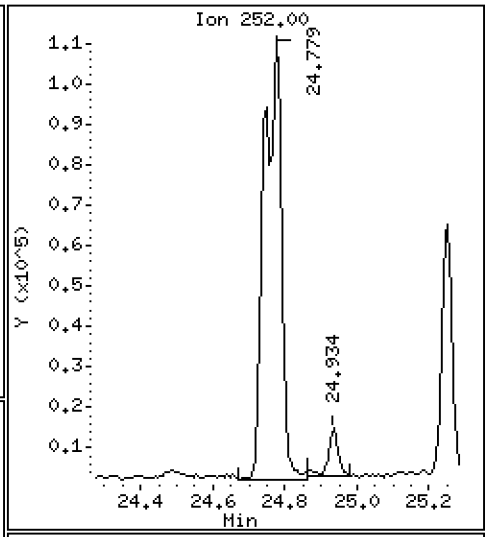
Concentration: 1.190 ug/mL

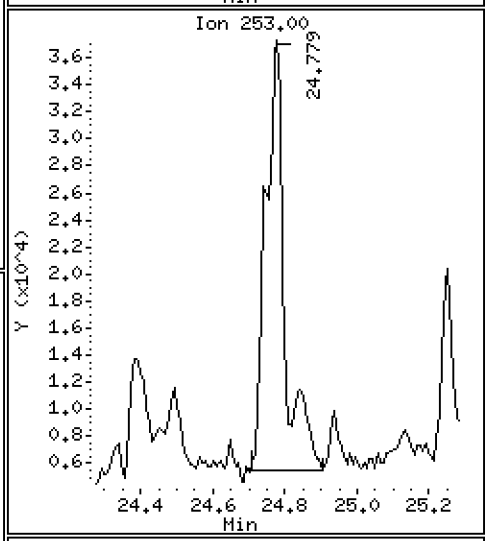


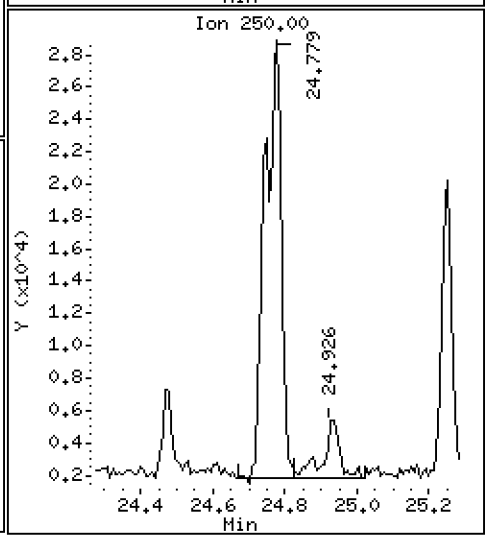












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230227.b\NT1802272307.D
Lab Smp Id: 23A0134-12
Inj Date : 27-FEB-2023 21:11
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-12
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230227.b\ABN.m
Meth Date : 24-Mar-2023 10:19 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.743	6.728	(0.758)	492535	5.48739	5.487
$	2 Phenol-d5	99	8.288	8.288	(0.932)	617469	5.32301	5.323
	3 Phenol	94	8.311	8.304	(0.935)	111667	0.92522	0.9252
$	5 2-Chlorophenol-d4	132	8.543	8.543	(0.961)	575671	5.70301	5.703
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.891	8.891	(1.000)	263083	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.248	9.248	(1.040)	241023	3.36814	3.368
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.667	9.667	(1.087)	45855	0.47125	0.4713
$	18 Nitrobenzene-d5	82	9.970	9.970	(0.879)	384176	3.62410	3.624
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	10.451	10.451	(0.921)	1202	0.00923	0.009233
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.342	11.342	(1.000)	994677	4.00000	
	28 Naphthalene	128	11.380	11.388	(1.003)	26156	0.08554	0.08554
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.765	12.765	(1.125)	15245	0.07337	0.07337
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.539	13.546	(0.908)	824188	3.65408	3.654
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	14.607	14.607	(0.979)	9157	0.03086	0.03086
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	14.916	14.924	(1.000)	534970	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	14.986	14.986	(1.005)	8576	0.04566	0.04566
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.310	15.310	(1.026)	13835	0.05089	0.05089
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	15.883	15.898	(1.065)	313061	1.57838	1.578
	49	Fluorene	166	16.014	16.014	(1.074)	9162	0.04206	0.04206
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.546	16.546	(1.109)	173858	6.27024	6.270
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	17.929	17.929	(1.000)	1080409	4.00000	
	60	Phenanthrene	178	17.975	17.975	(1.003)	87075	0.25623	0.2562
	61	Anthracene	178	18.068	18.068	(1.008)	31123	0.09610	0.09610
	62	Carbazole	167	18.401	18.401	(1.026)	16088	0.05421	0.05421
	63	Di-n-butylphthalate	149	19.221	19.213	(1.072)	12051	0.03669	0.03669
	64	Fluoranthene	202	20.389	20.358	(0.888)	238567	0.68061	0.6806
	65	Pyrene	202	20.799	20.776	(0.906)	324788	0.86880	0.8688
$	66	Terphenyl-d14	244	21.078	21.070	(0.918)	1160284	3.86968	3.870
	67	Butylbenzylphthalate	149	21.999	21.999	(0.958)	23458	0.16526	0.1653
	68	Benzo(a)anthracene	228	22.936	22.929	(0.999)	115498	0.31978	0.3198
*	69	Chrysene-d12	240	22.967	22.960	(1.000)	1000454	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	23.006	23.006	(1.002)	145683	0.38789	0.3879
	72	bis(2-Ethylhexyl)phthalate	149	23.029	23.029	(0.960)	105672	0.43811	0.4381
*	134	Di-n-octylphthalate-d4	153	23.997	23.997	(1.000)	1680018	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	24.748	24.740	(0.972)	155593	0.50541	0.5054
	75	Benzo(k)fluoranthene	252	24.779	24.779	(0.974)	241414	0.69194	0.6919
	76	Benzo(a)pyrene	252	25.344	25.336	(0.996)	117326	0.41111	0.4111
*	77	Perylene-d12	264	25.453	25.445	(1.000)	943619	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	27.881	27.881	(1.095)	51114	0.14267	0.1427
	79	Dibenzo(a,h)anthracene	278	27.889	27.889	(1.096)	16432	0.05499	0.05499
	80	Benzo(g,h,i)perylene	276	28.603	28.595	(1.124)	50279	0.17505	0.1750
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	8.327	8.365	(0.937)	14332	0.10433	0.1043
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	12.981	12.989	(1.145)	13311	0.07077	0.07077
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.779	24.779	(0.974)	370292	1.18967	1.190
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272307.D
Lab Smp Id: 23A0134-12
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230227.b\ABN.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:03
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	269759	134880	539518	263083	-2.47
27 Naphthalene-d8	1037039	518520	2074078	994677	-4.08
42 Acenaphthene-d10	556159	278080	1112318	534970	-3.81
59 Phenanthrene-d10	1021294	510647	2042588	1080409	5.79
69 Chrysene-d12	922264	461132	1844528	1000454	8.48
134 Di-n-octylphthala	1611284	805642	3222568	1680018	4.27
77 Perylene-d12	948357	474179	1896714	943619	-0.50

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.89	8.39	9.39	8.89	0.00
27 Naphthalene-d8	11.34	10.84	11.84	11.34	0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.92	-0.05
59 Phenanthrene-d10	17.93	17.43	18.43	17.93	0.00
69 Chrysene-d12	22.96	22.46	23.46	22.97	0.03
134 Di-n-octylphthala	24.00	23.50	24.50	24.00	0.00
77 Perylene-d12	25.45	24.95	25.95	25.45	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272307.D

Lab ID: 23A0134-12
nt18.i, ABN.m, 27-FEB-2023 21:11

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1802272302.D

On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

LDW23-IT1210

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-13 C	SDG:	23A0134
Sampled:	01/06/23 14:12	Prepared:	01/19/23 13:35	File ID:	NT1802272308.D
% Solids:	55.49	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/27/23 21:51
Batch:	BLA0410	Sequence:	SLC0385	Initial/Final:	18.02 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	17.7	J	4.4	20.0
106-44-5	4-Methylphenol	1	9.7	J	7.4	20.0
91-20-3	Naphthalene	1	22.5		4.2	20.0
91-57-6	2-Methylnaphthalene	1	17.0	J	4.5	20.0
208-96-8	Acenaphthylene	1	13.0	J	6.2	20.0
131-11-3	Dimethylphthalate	1	20.0	U	4.4	20.0
83-32-9	Acenaphthene	1	23.3		5.2	20.0
132-64-9	Dibenzofuran	1	18.0	J	14.1	20.0
86-73-7	Fluorene	1	21.2		14.6	20.0
85-01-8	Phenanthrene	1	125		8.7	20.0
120-12-7	Anthracene	1	75.1		7.2	20.0
206-44-0	Fluoranthene	1	281		6.1	20.0
129-00-0	Pyrene	1	1070		5.7	20.0
85-68-7	Butylbenzylphthalate	1	57.9		9.4	20.0
56-55-3	Benzo(a)anthracene	1	274		6.0	20.0
218-01-9	Chrysene	1	338		6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	469		5.5	50.0
	Benzofluoranthenes, Total	1	789		10.0	40.0
50-32-8	Benzo(a)pyrene	1	272		4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	36.0		14.7	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.0	U	17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	34.9		13.6	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	750.05	517	68.9	27 - 120	
Phenol-d5	750.05	523	69.8	29 - 120	
2-Chlorophenol-d4	750.05	547	72.9	31 - 120	
1,2-Dichlorobenzene-d4	500.04	306	61.2	32 - 120	
Nitrobenzene-d5	500.04	336	67.2	30 - 120	
2-Fluorobiphenyl	500.04	329	65.8	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-IT1210

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

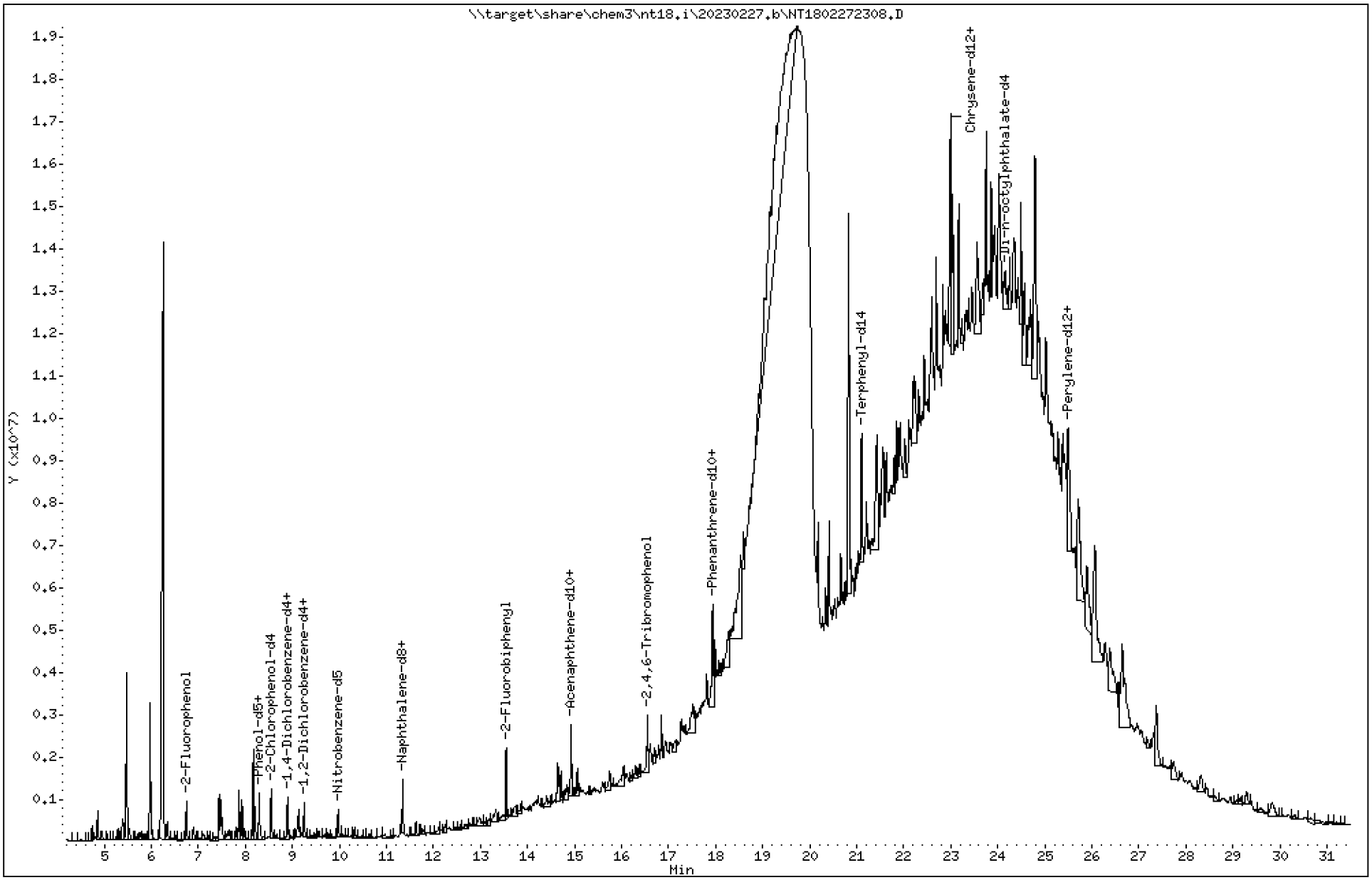
Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-13 C	SDG:	23A0134
Sampled:	01/06/23 14:12	Prepared:	01/19/23 13:35	File ID:	NT1802272308.D
% Solids:	55.49	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/27/23 21:51
Batch:	BLA0410	Sequence:	SLC0385	Initial/Final:	18.02 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	750.05	644	85.9	24 - 134	
p-Terphenyl-d14	500.04	370	73.9	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272308.D
Date : 27-FEB-2023 21:51
Client ID:
Sample Info: 23A0134-13

Instrument: nt18.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272308.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

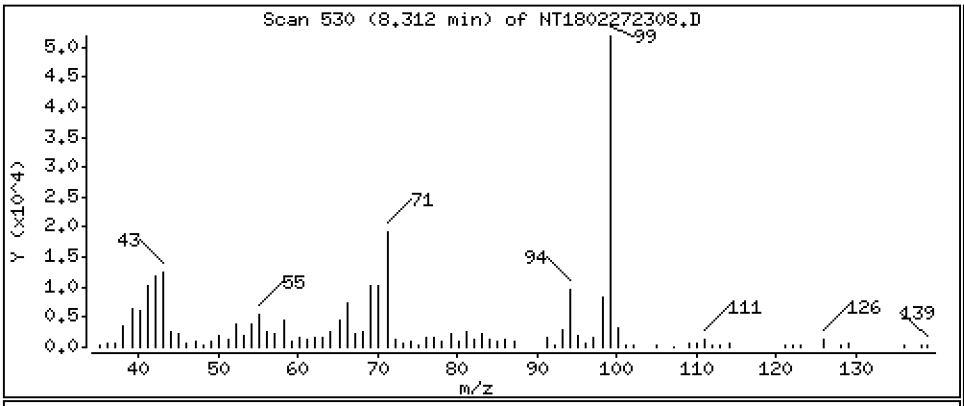
Operator: VTS

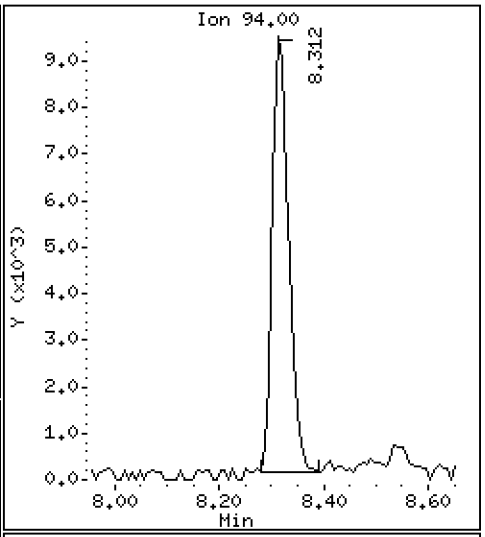
Column phase: ZB-5msi

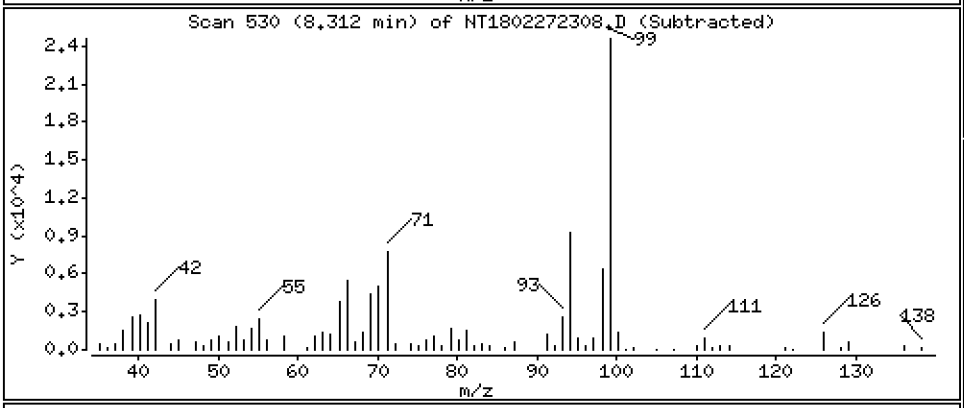
Column diameter: 0.25

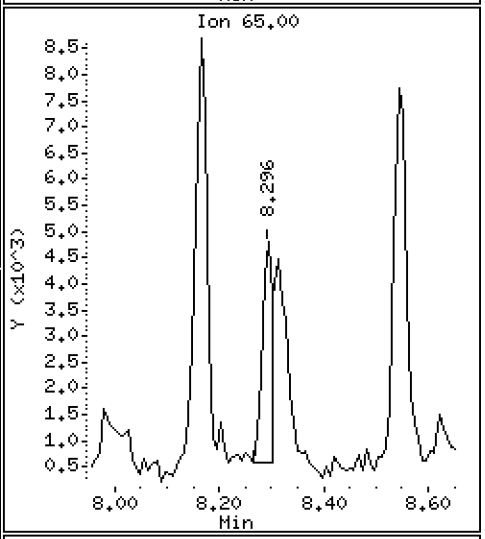
3 Phenol

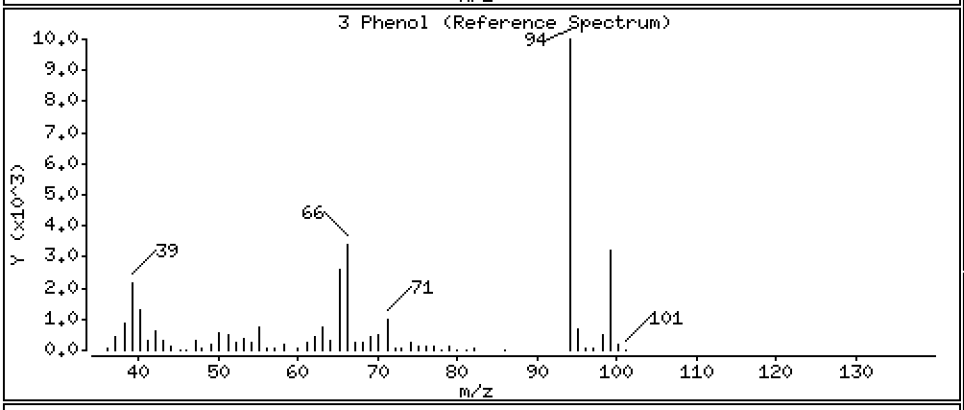
Concentration: 0.1769 ug/mL

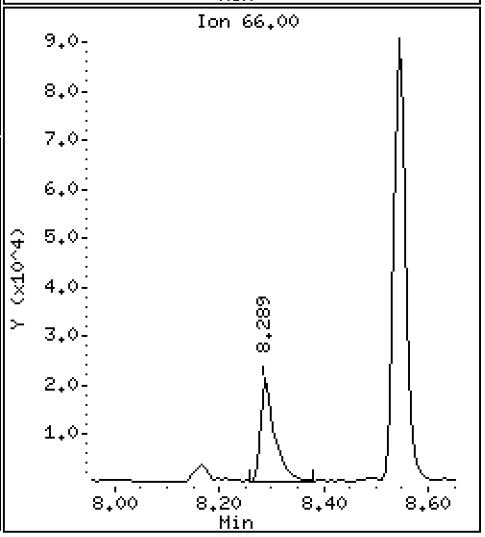


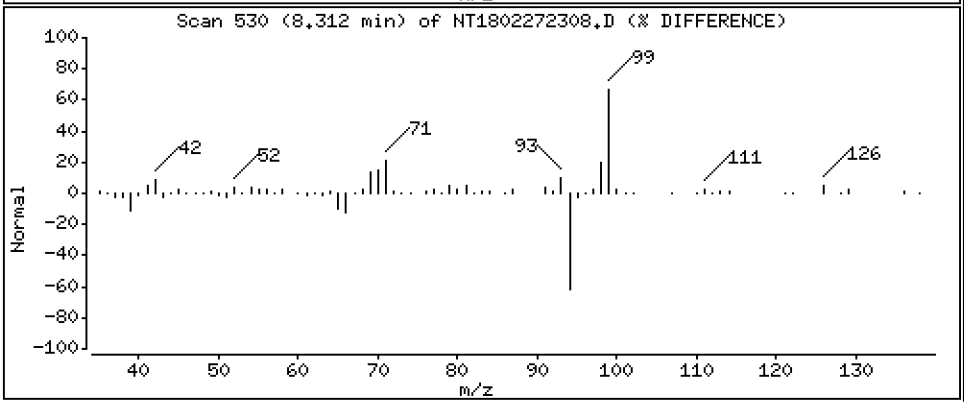












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

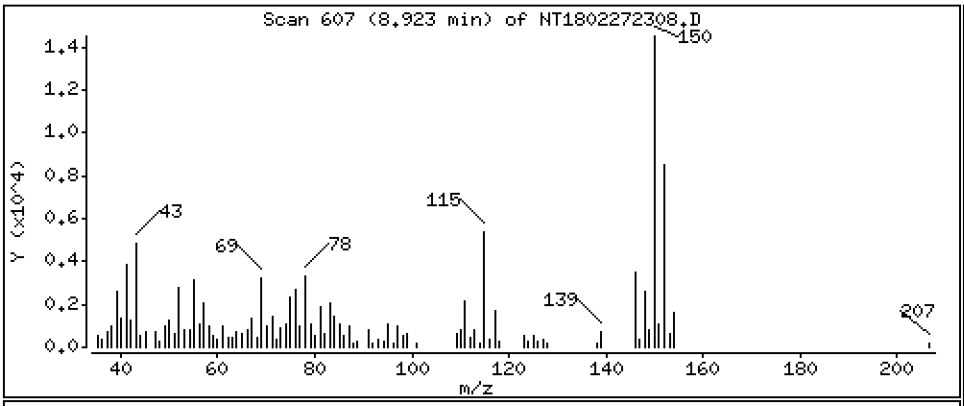
Operator: VTS

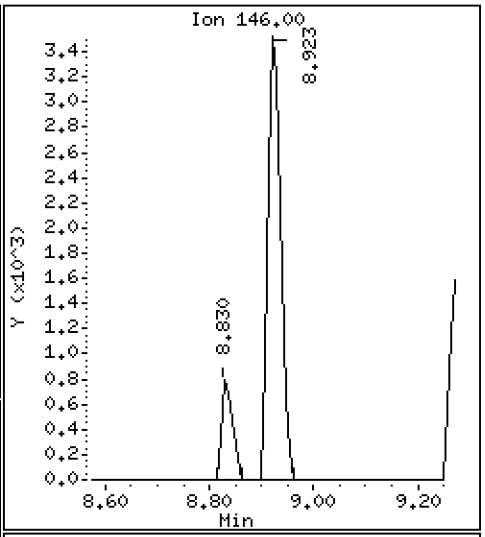
Column phase: ZB-5msi

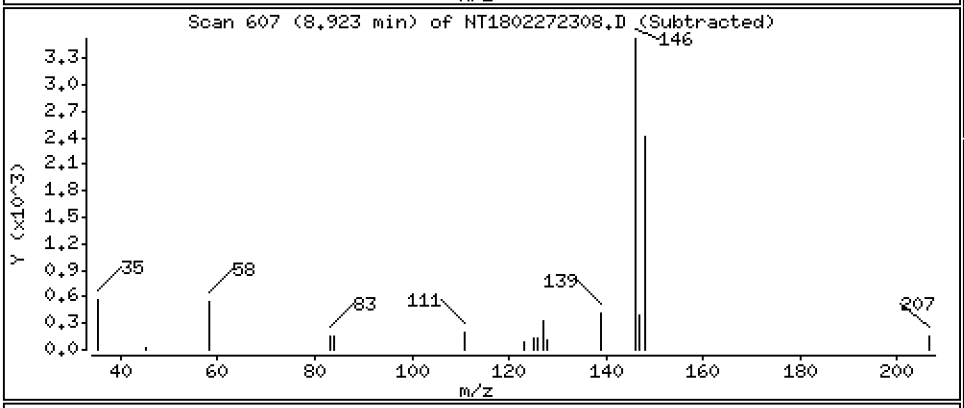
Column diameter: 0.25

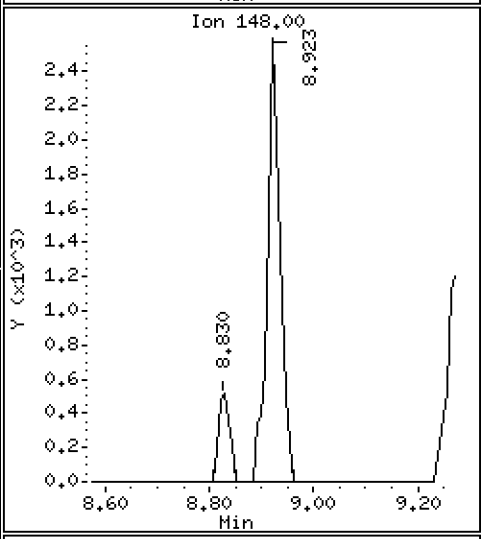
9 1,4-Dichlorobenzene

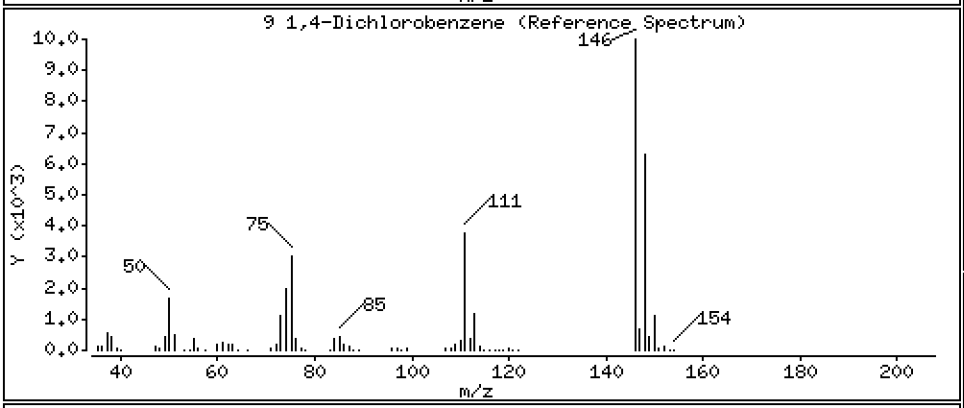
Concentration: 0.05701 ug/mL

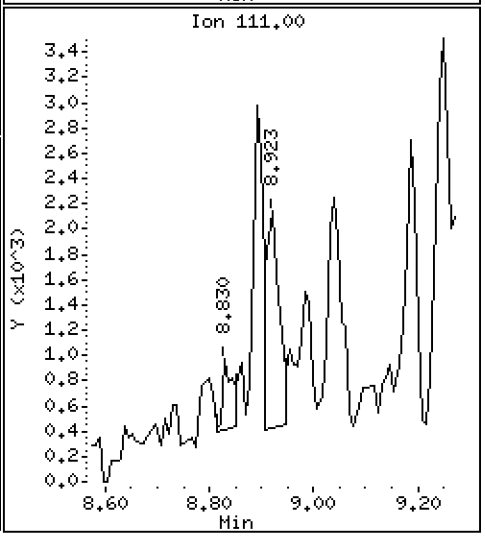


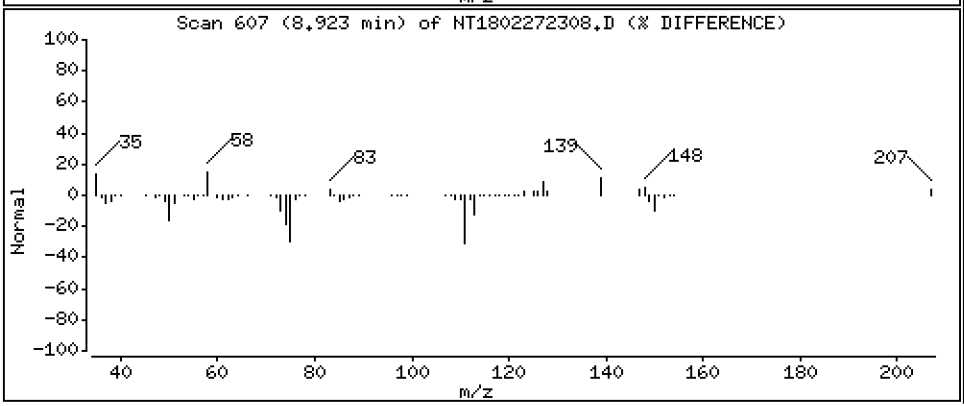












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

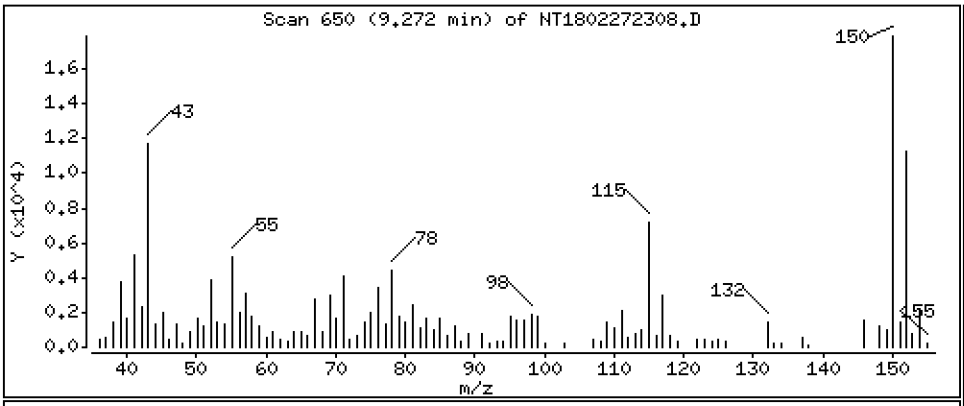
Operator: VTS

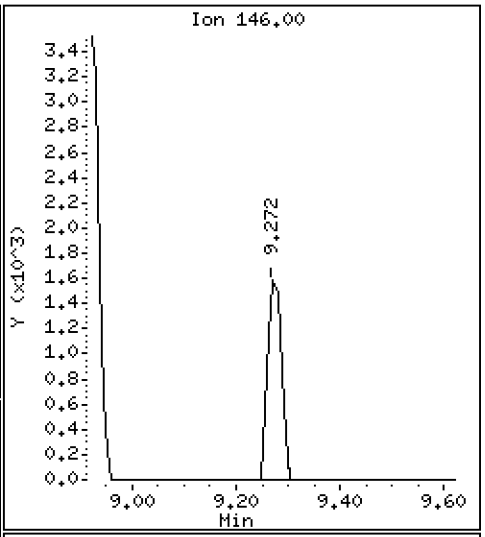
Column phase: ZB-5msi

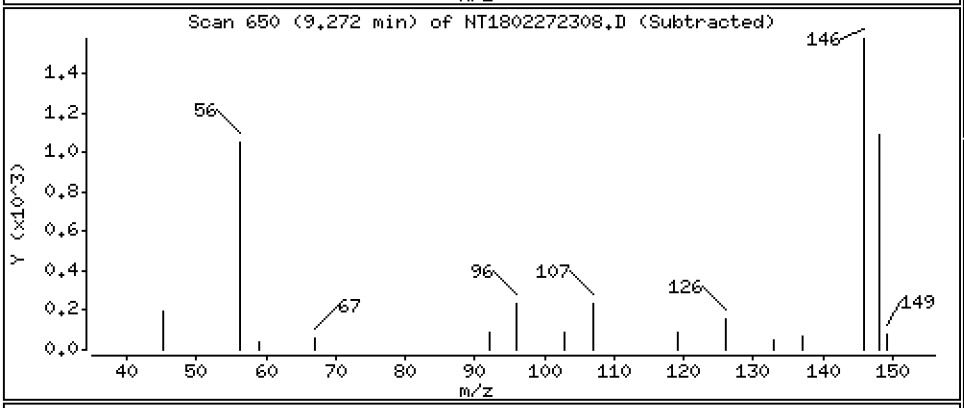
Column diameter: 0.25

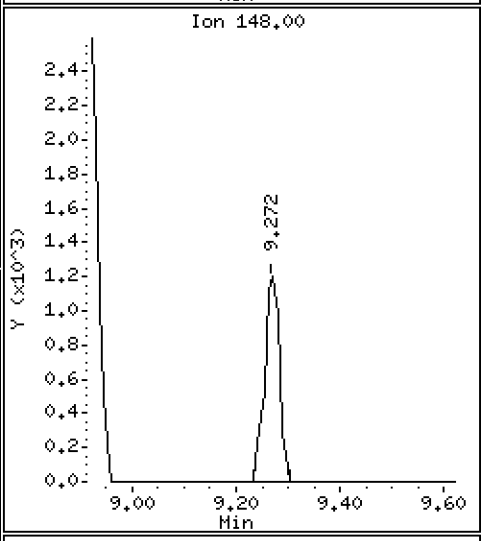
12 1,2-Dichlorobenzene

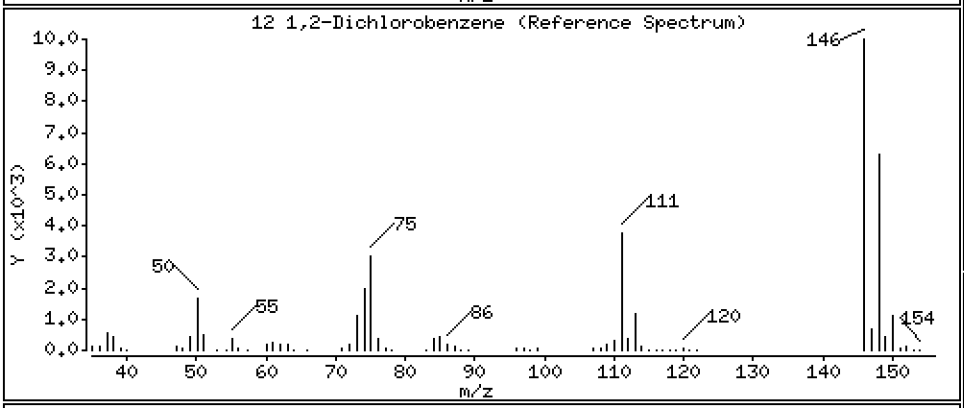
Concentration: 0.02778 ug/mL

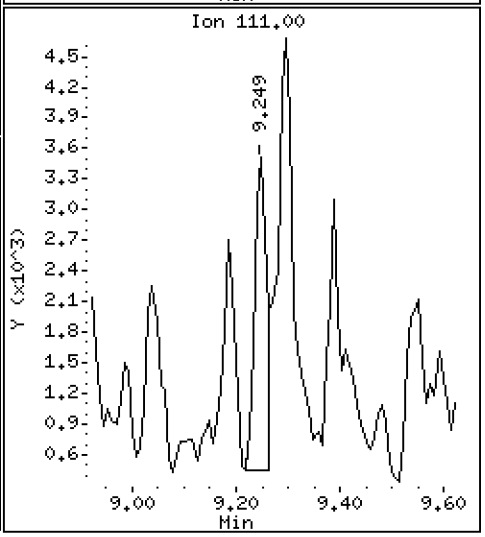


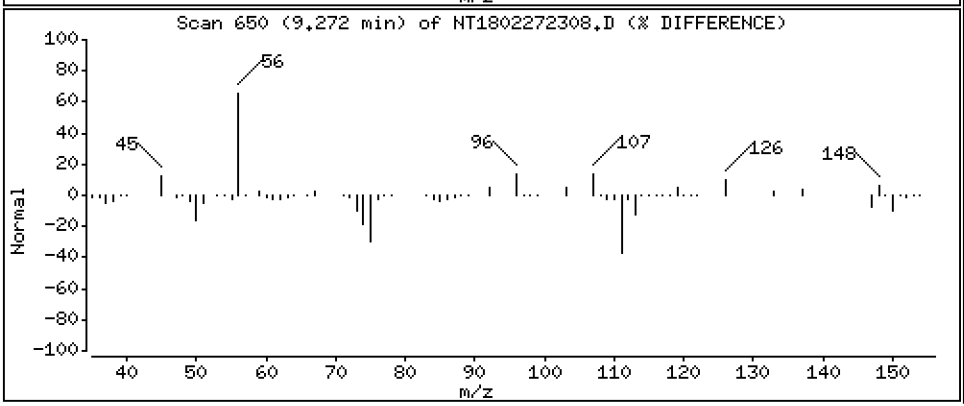












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

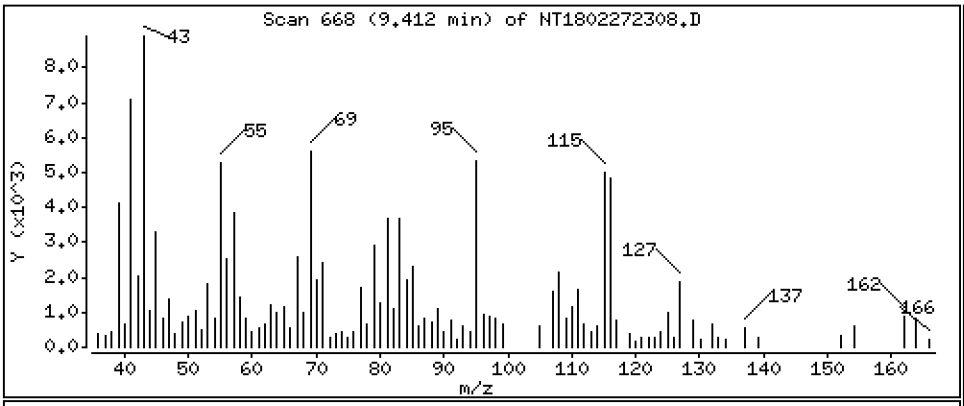
Operator: VTS

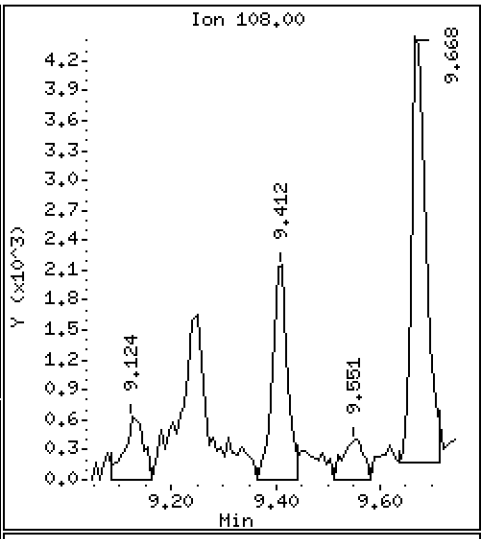
Column phase: ZB-5msi

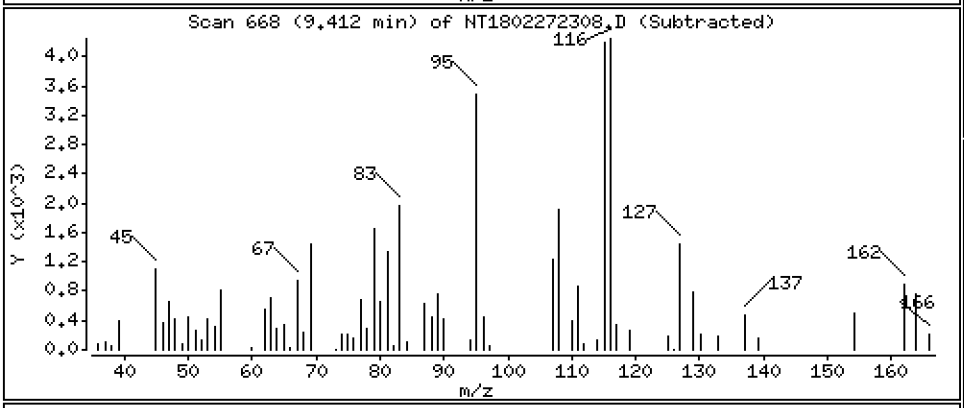
Column diameter: 0.25

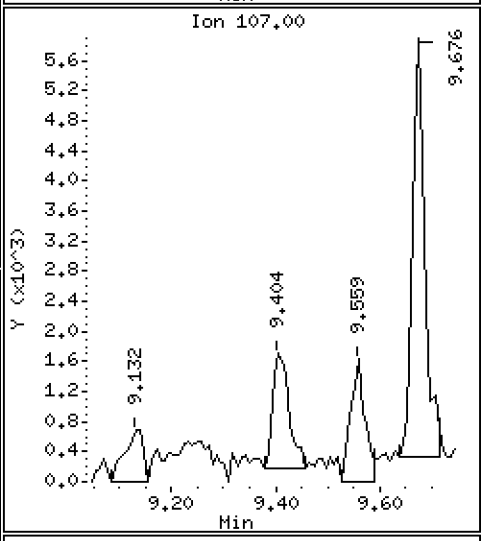
13 2-Methylphenol

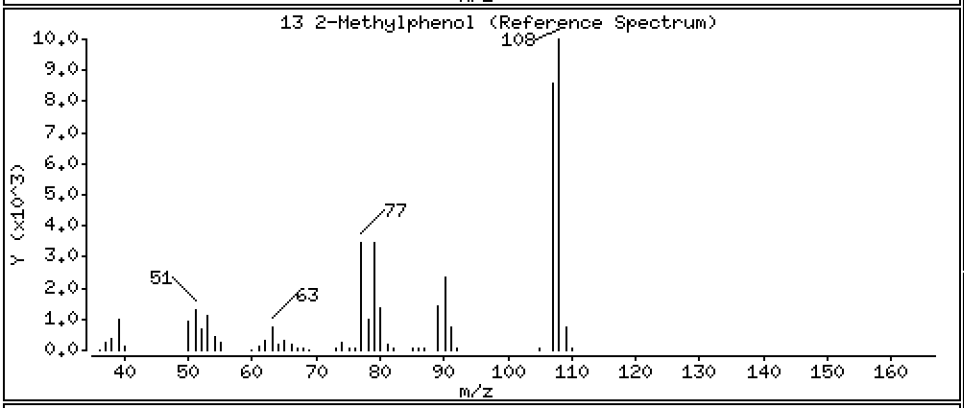
Concentration: 0.05041 ug/mL

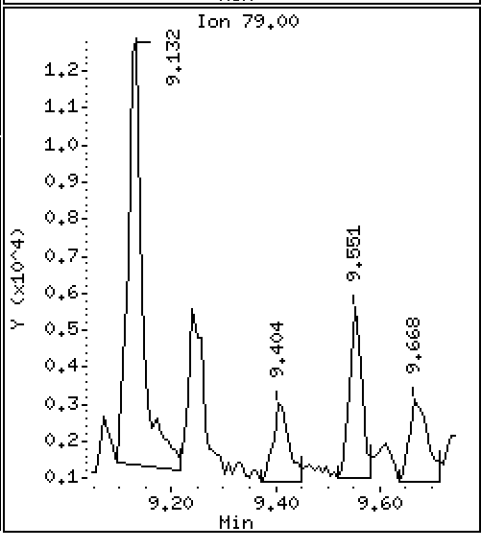


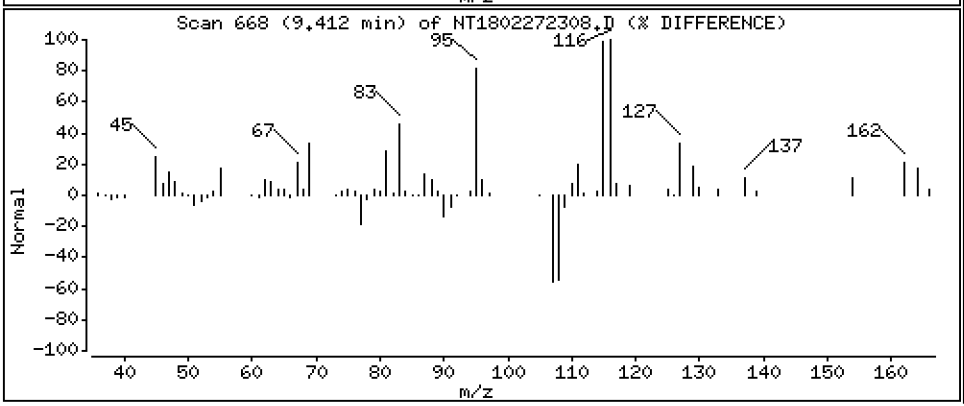












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272308.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

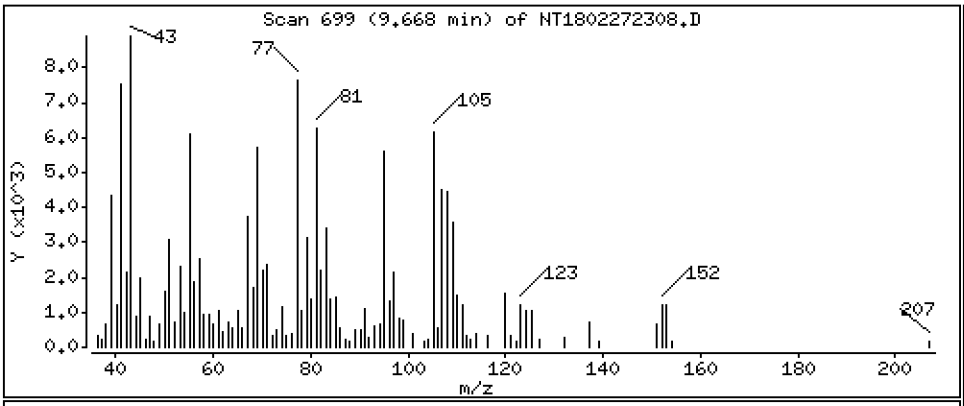
Operator: VTS

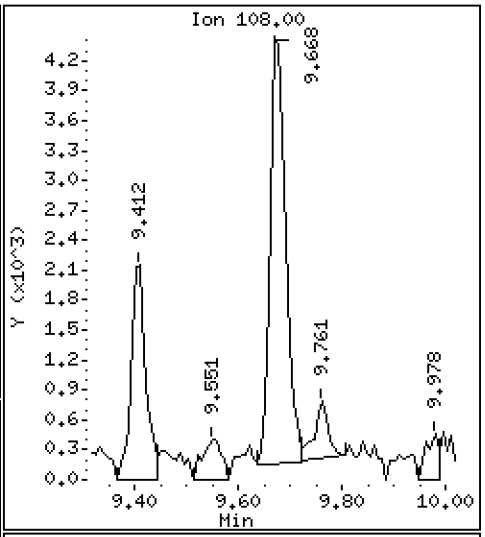
Column phase: ZB-5msi

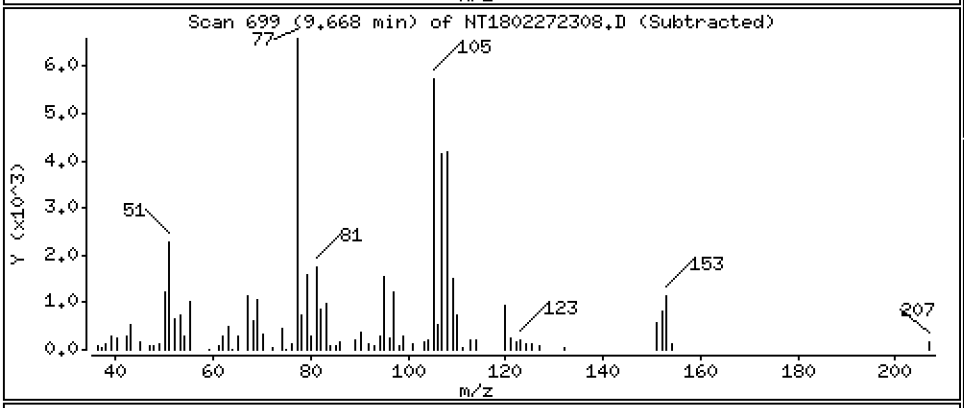
Column diameter: 0.25

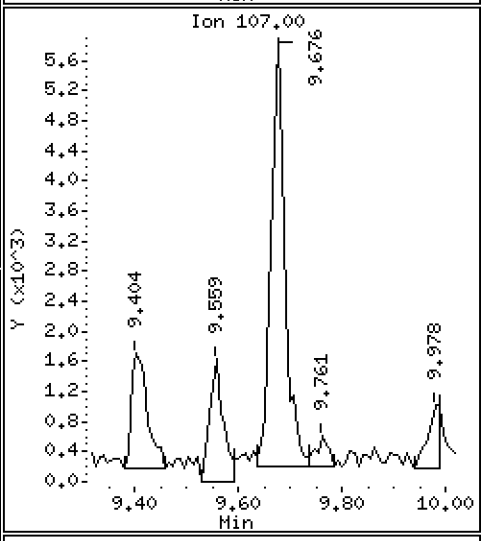
15 4-Methylphenol

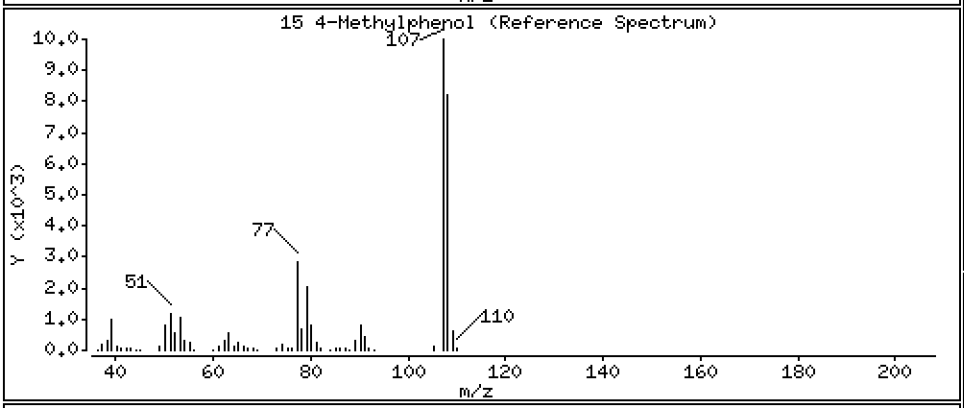
Concentration: 0.09723 ug/mL

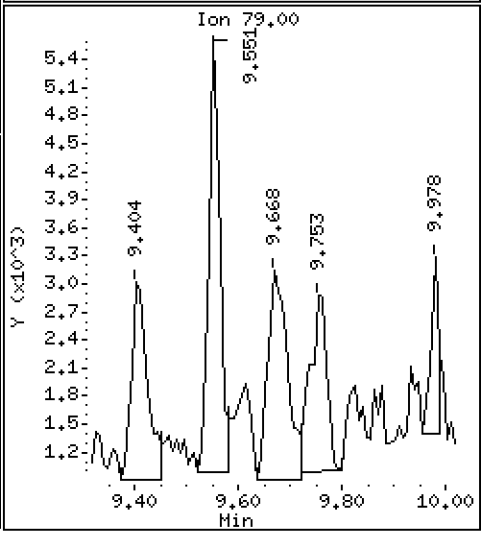


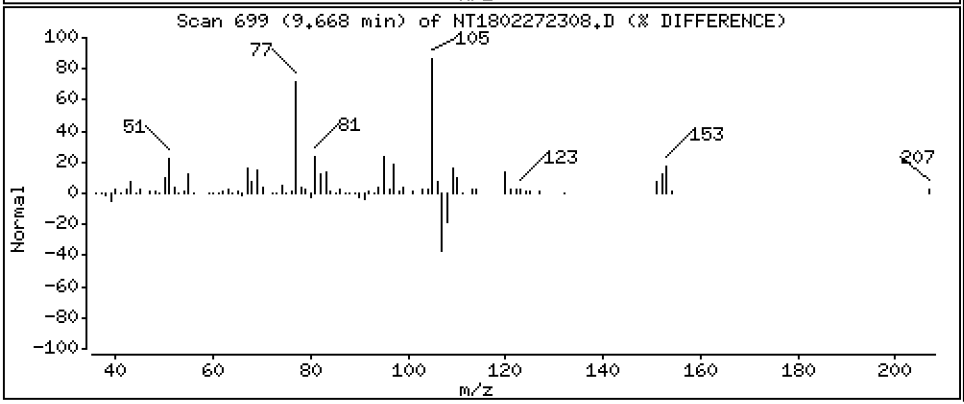












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272308.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

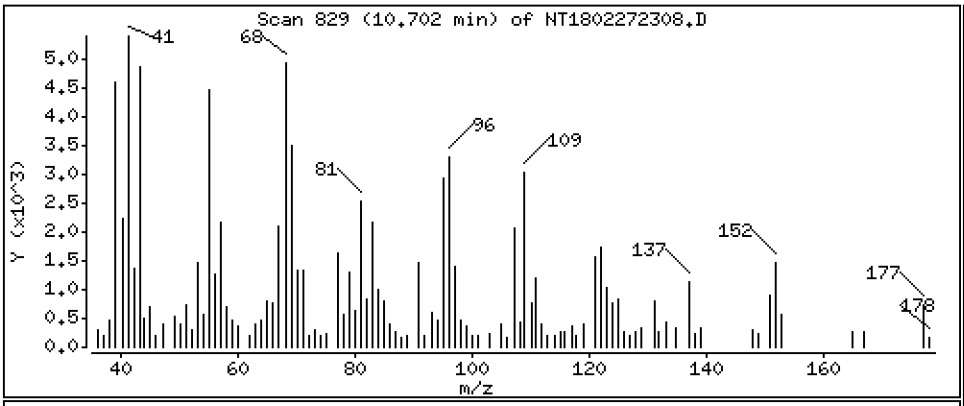
Operator: VTS

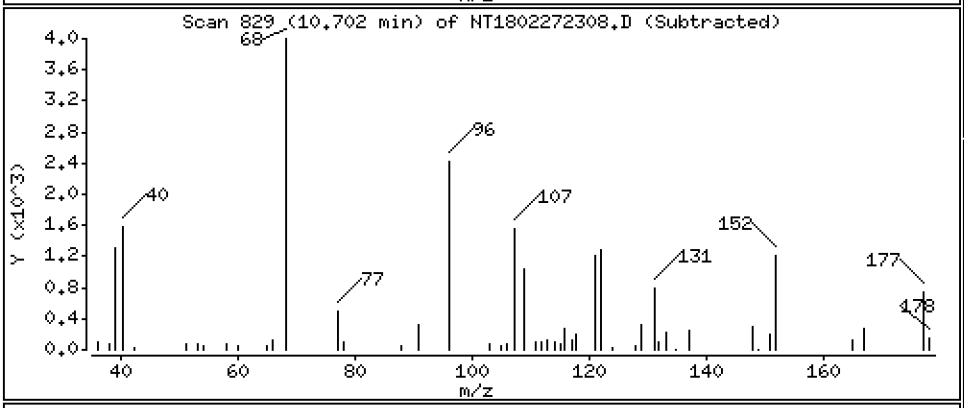
Column phase: ZB-5msi

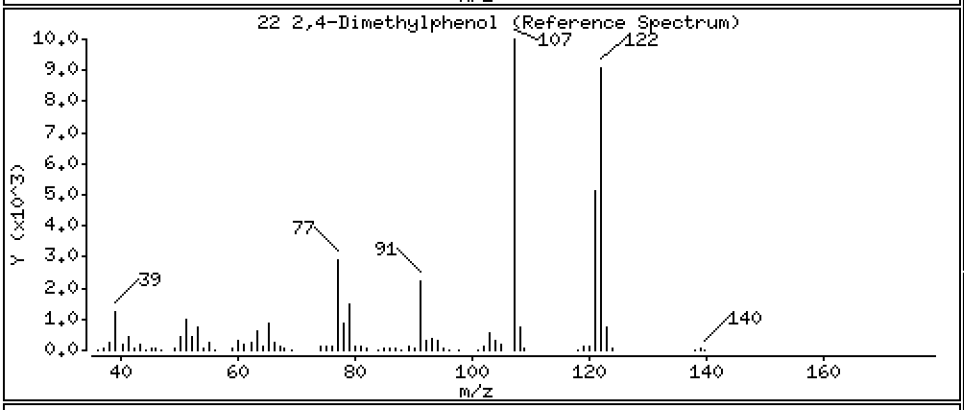
Column diameter: 0.25

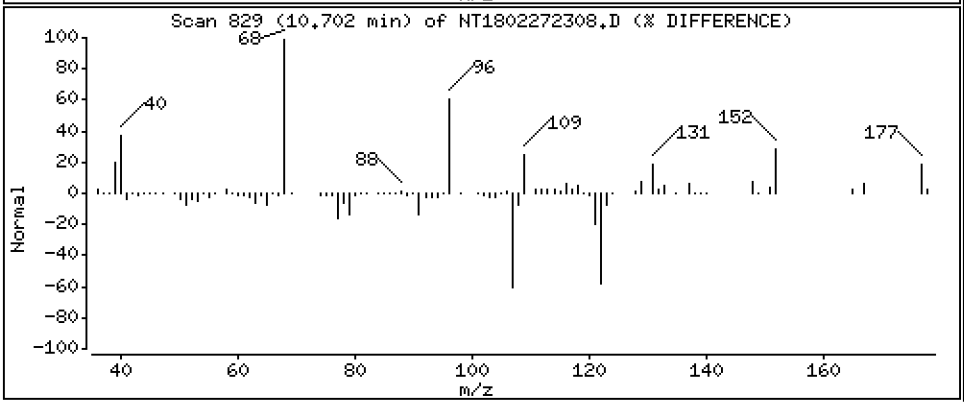
22 2,4-Dimethylphenol

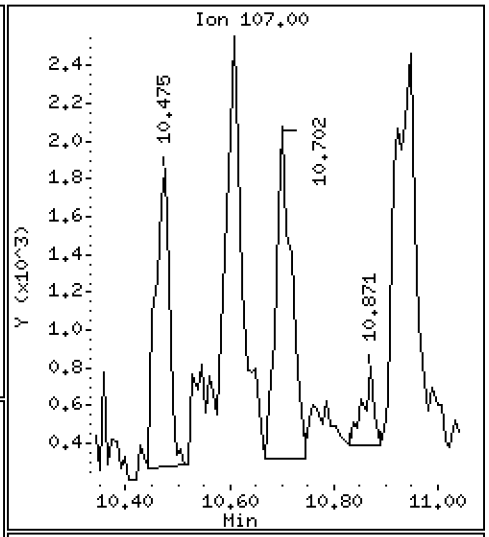
Concentration: 0.04048 ug/mL

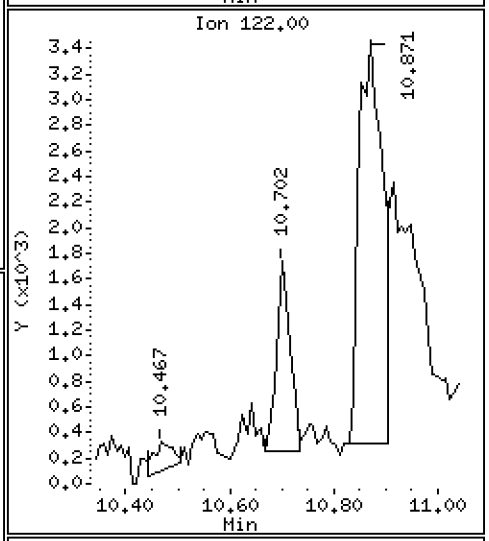


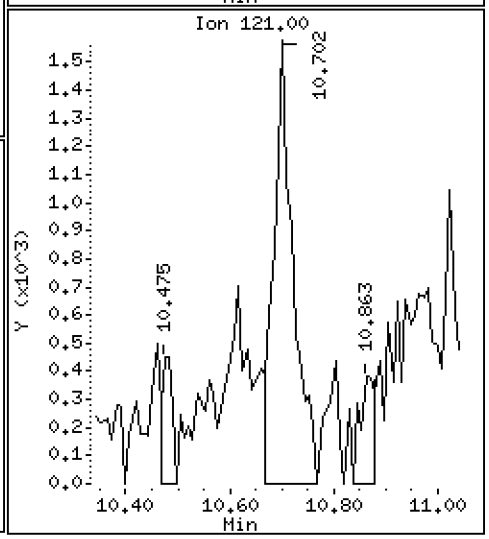












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272308.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

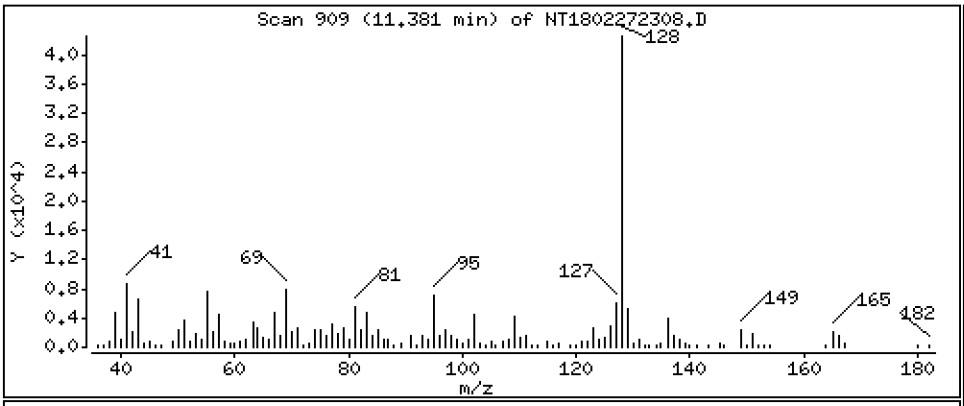
Operator: VTS

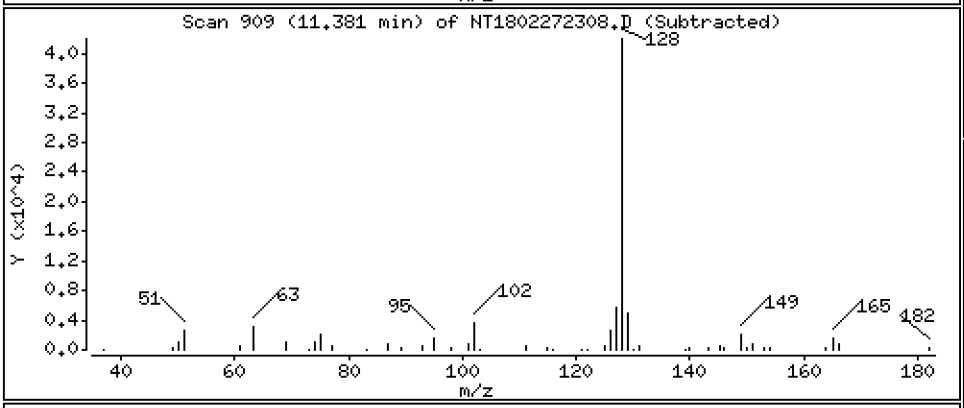
Column phase: ZB-5msi

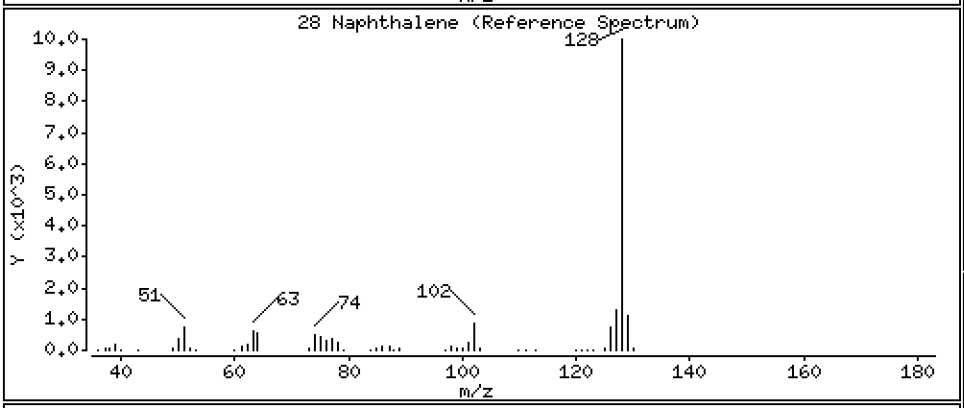
Column diameter: 0.25

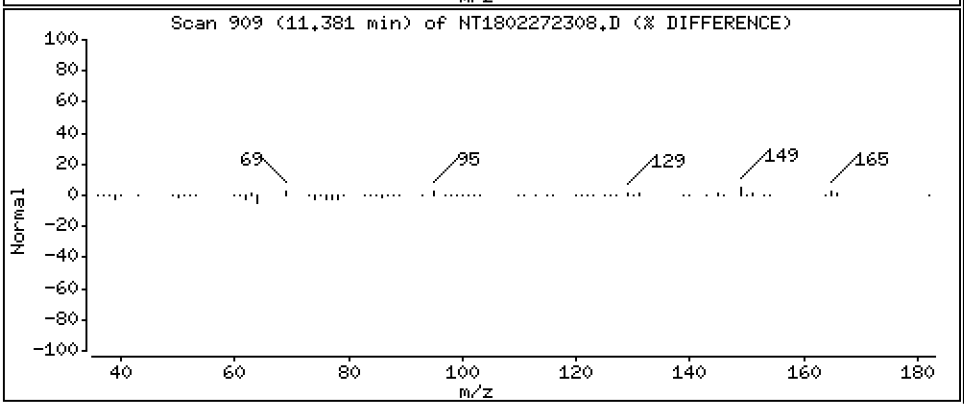
28 Naphthalene

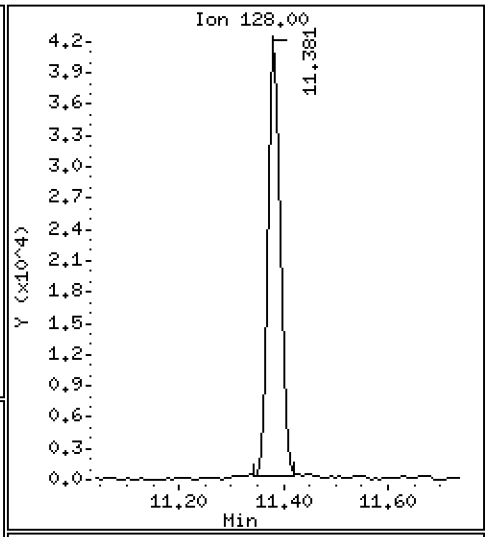
Concentration: 0.2246 ug/mL

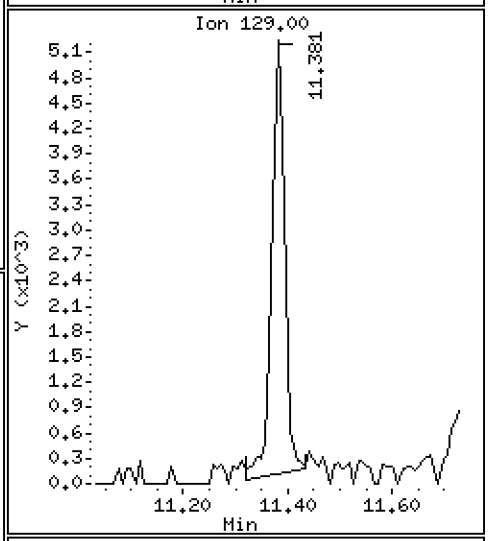


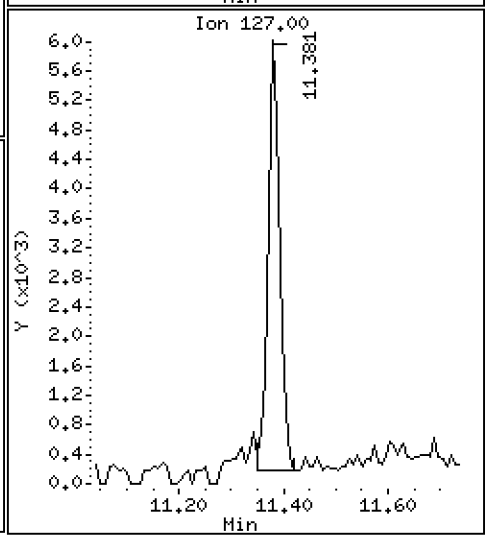












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272308.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

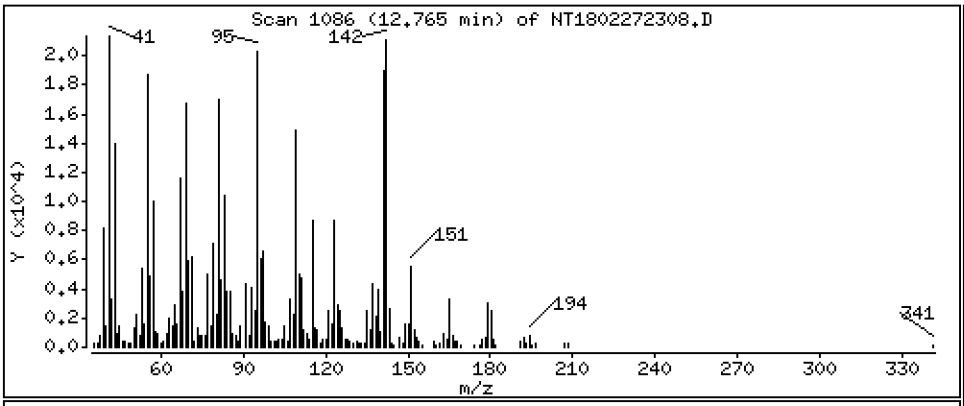
Operator: VTS

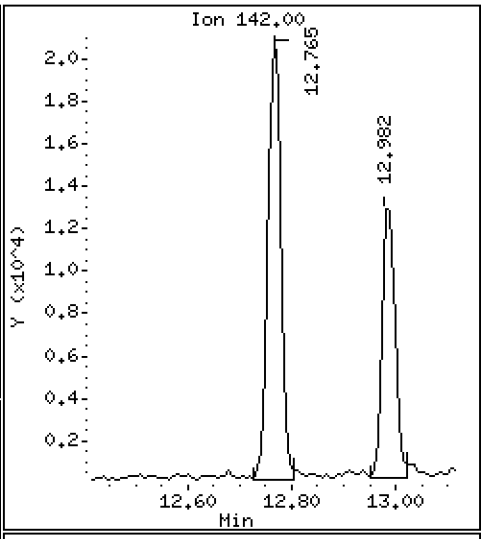
Column phase: ZB-5msi

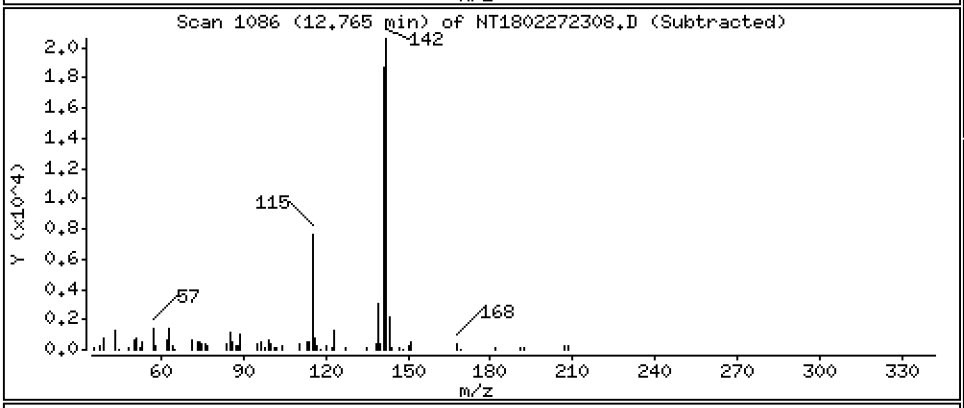
Column diameter: 0.25

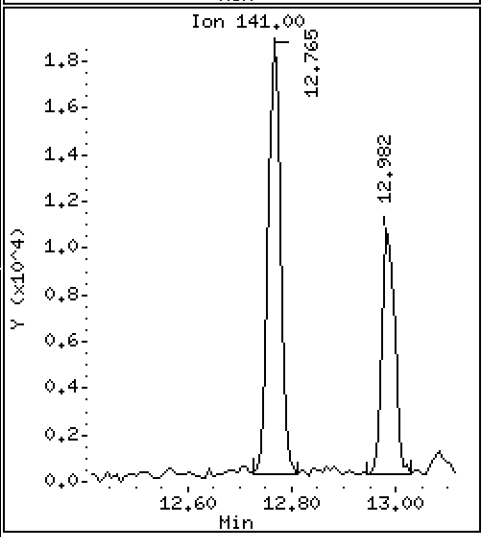
32 2-Methylnaphthalene

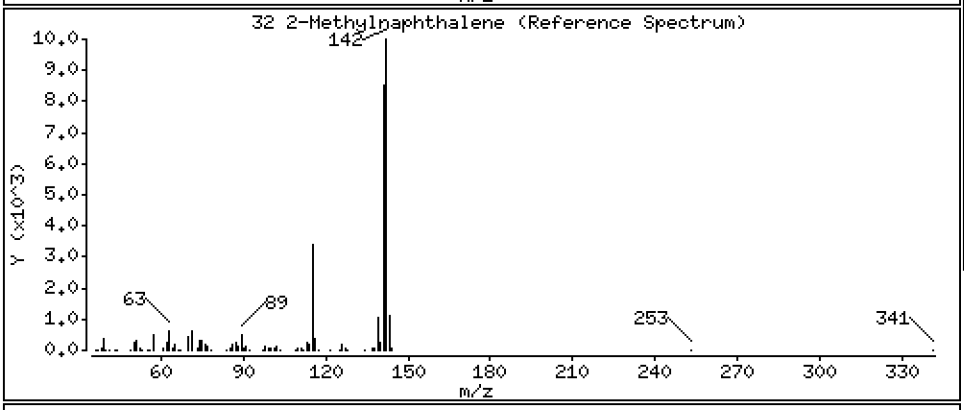
Concentration: 0.1698 ug/mL

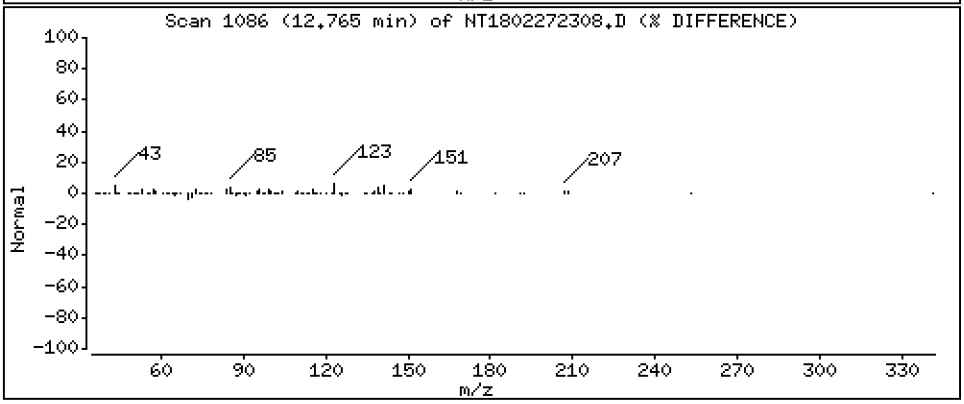












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272308.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

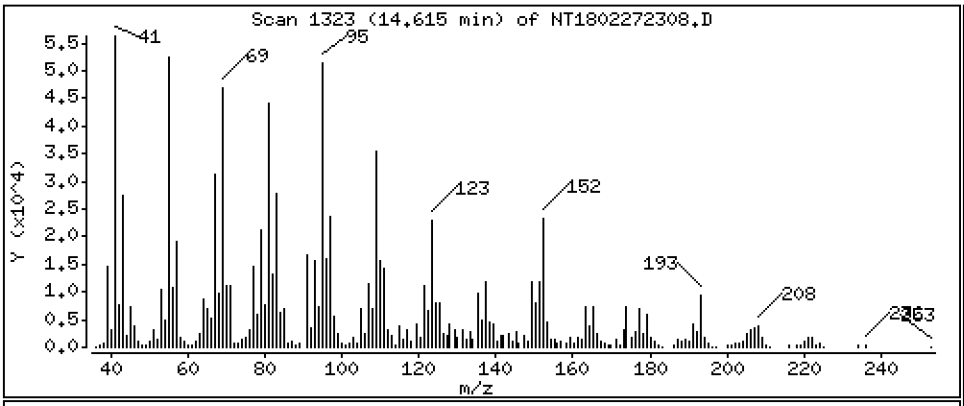
Operator: VTS

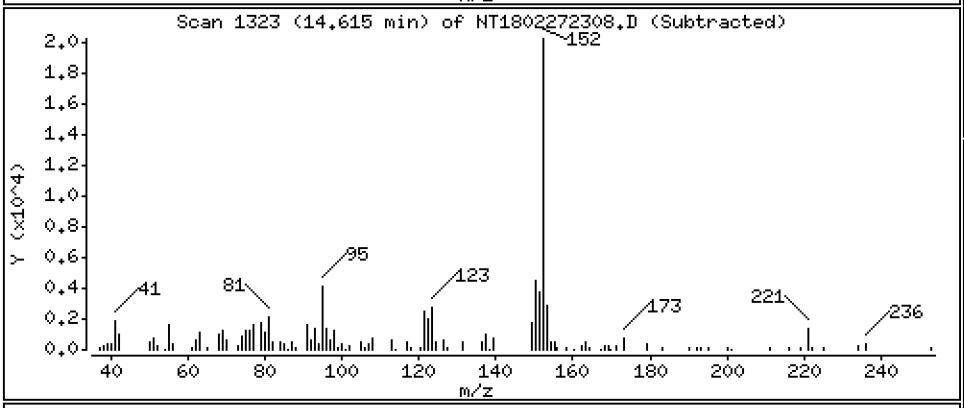
Column phase: ZB-5msi

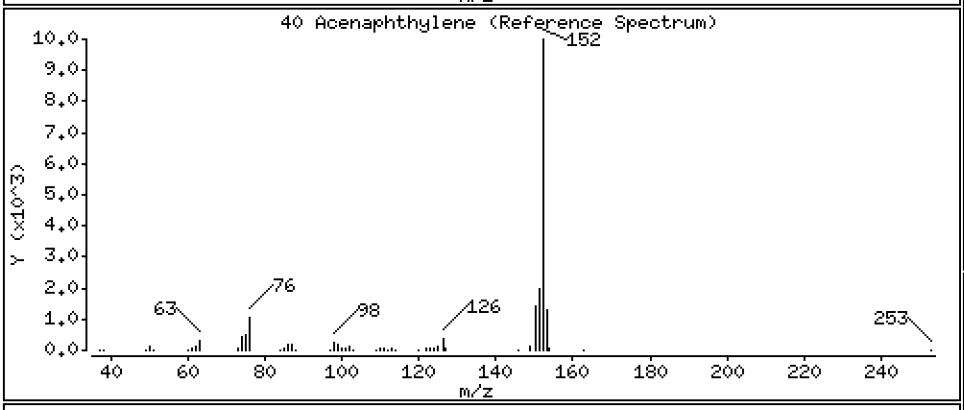
Column diameter: 0.25

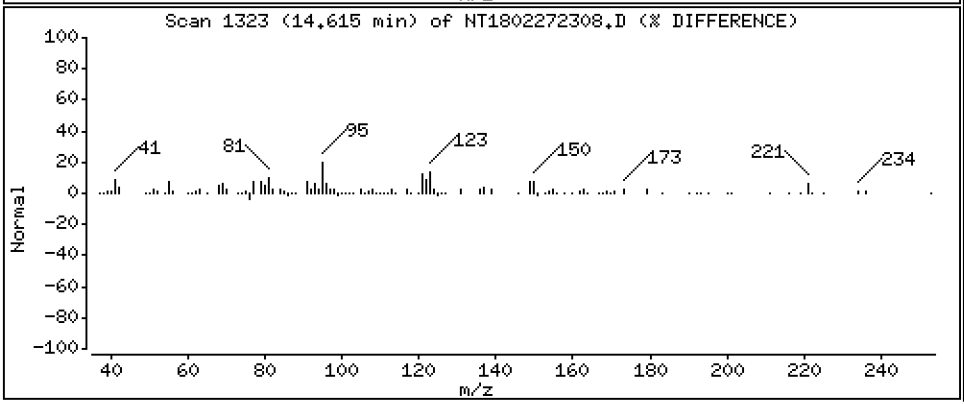
40 Acenaphthylene

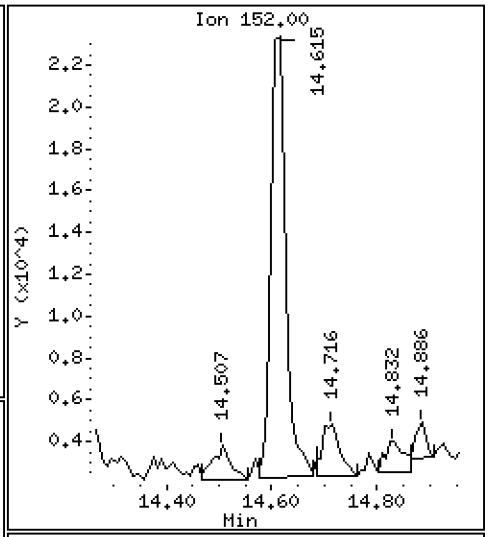
Concentration: 0.1301 ug/mL

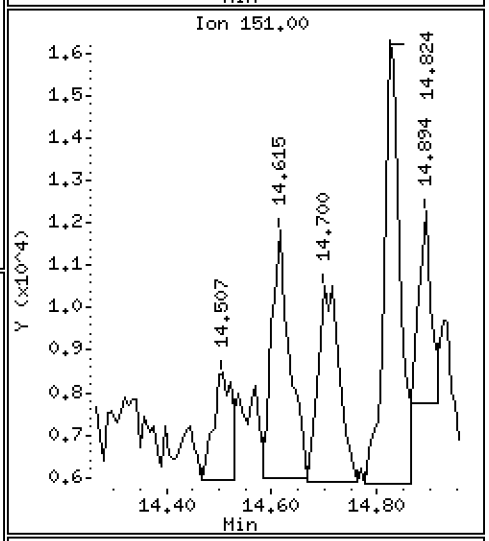


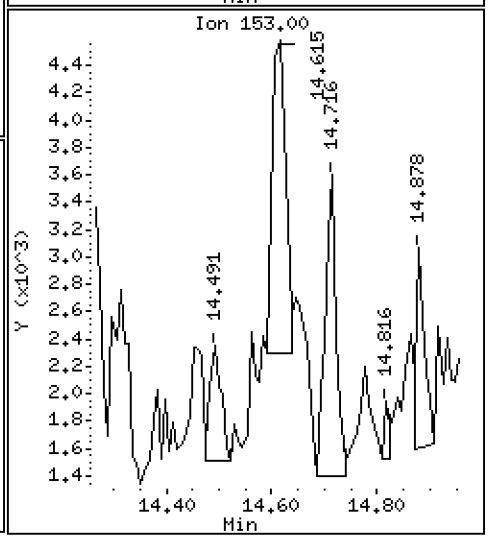












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

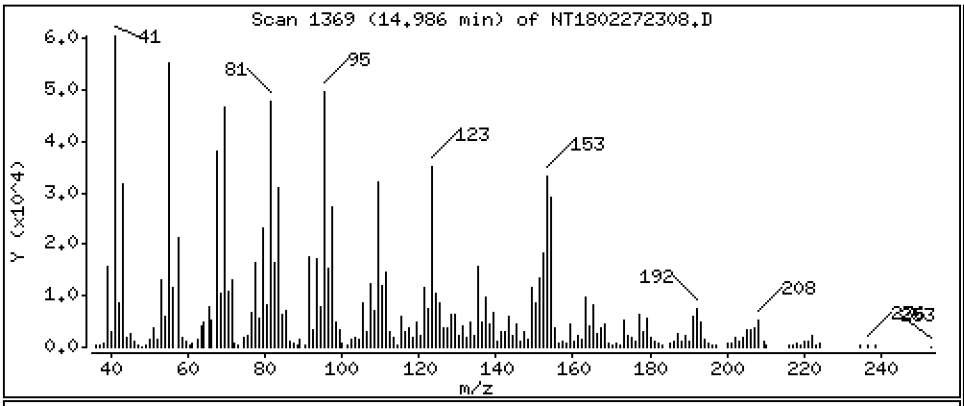
Operator: VTS

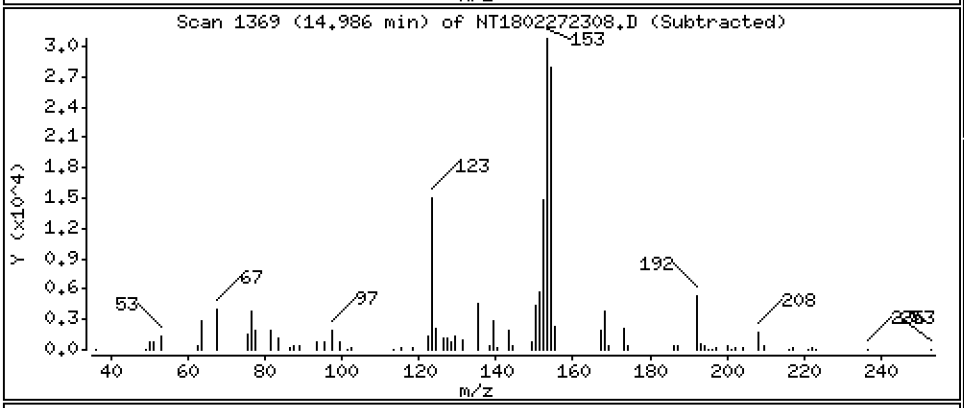
Column phase: ZB-5msi

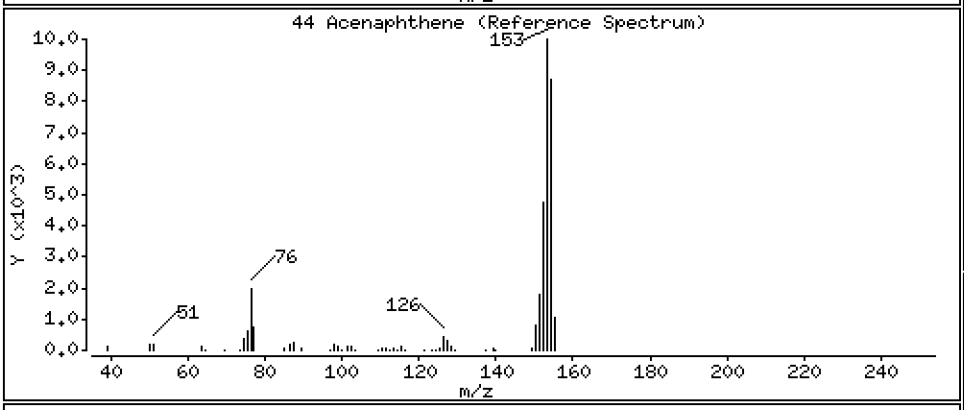
Column diameter: 0.25

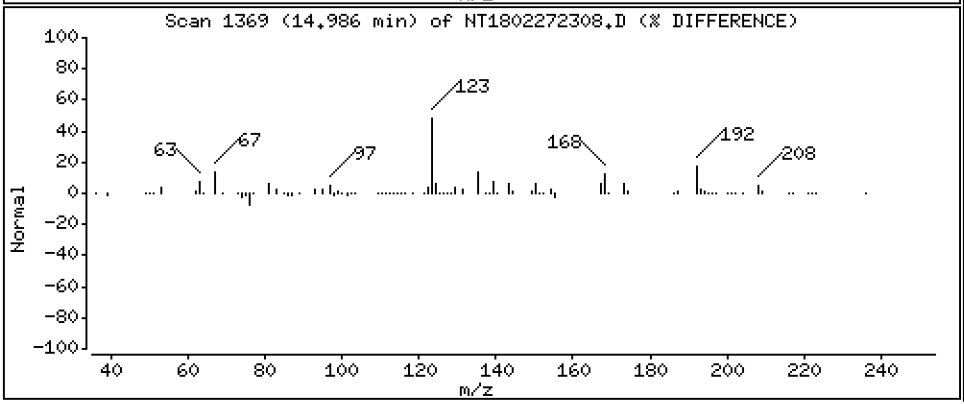
44 Acenaphthene

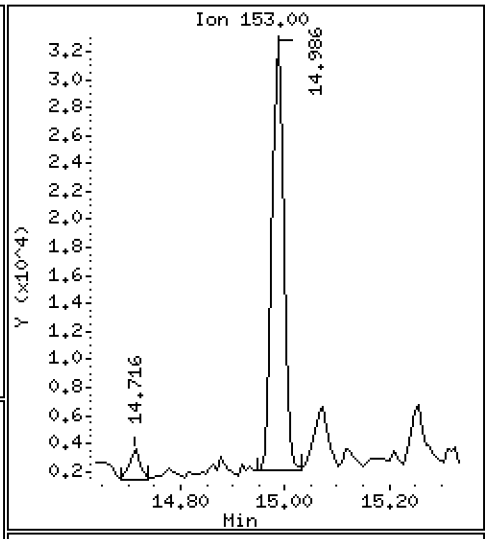
Concentration: 0.2328 ug/mL

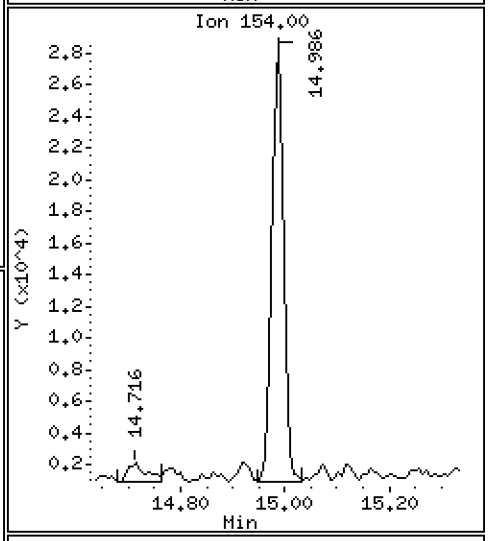


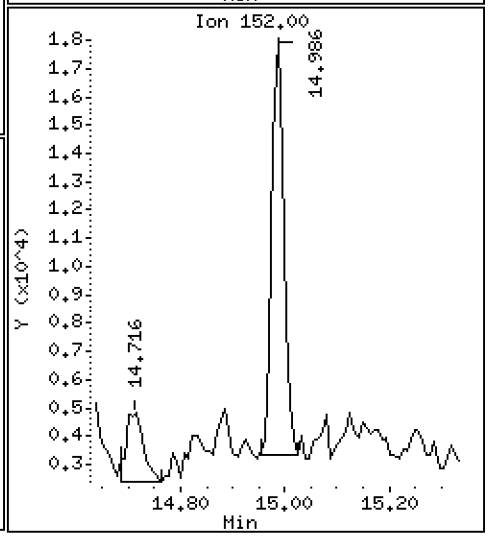












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

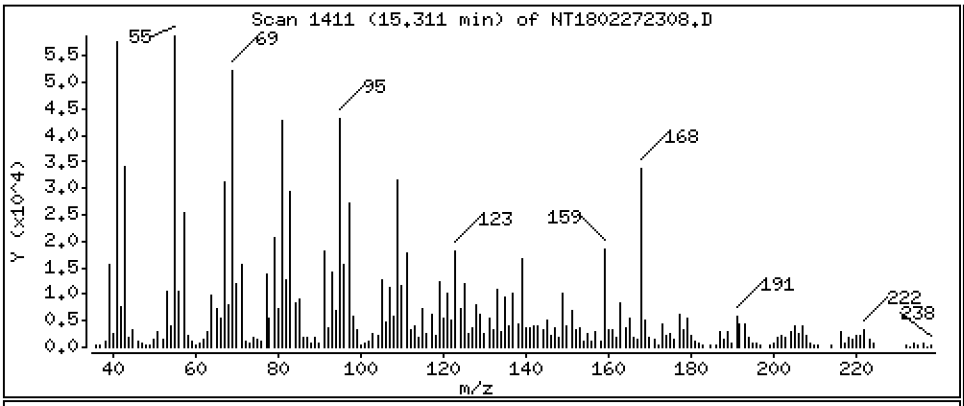
Operator: VTS

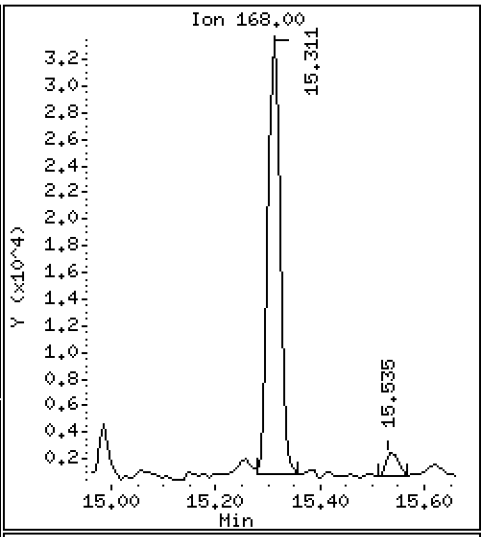
Column phase: ZB-5msi

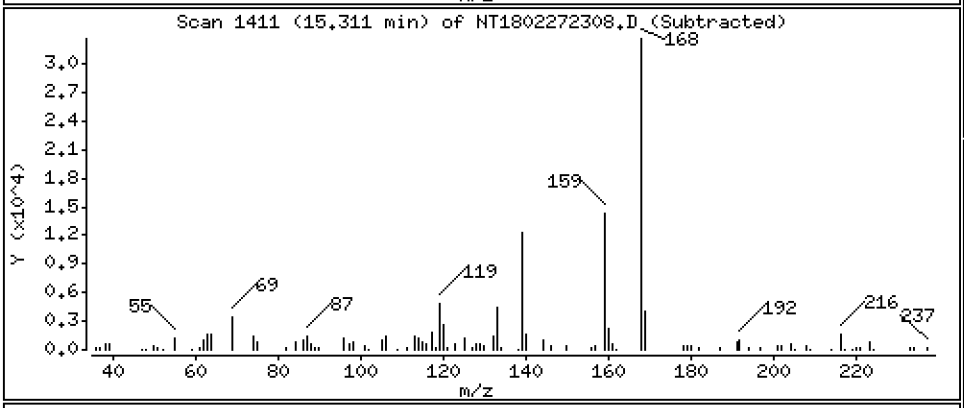
Column diameter: 0.25

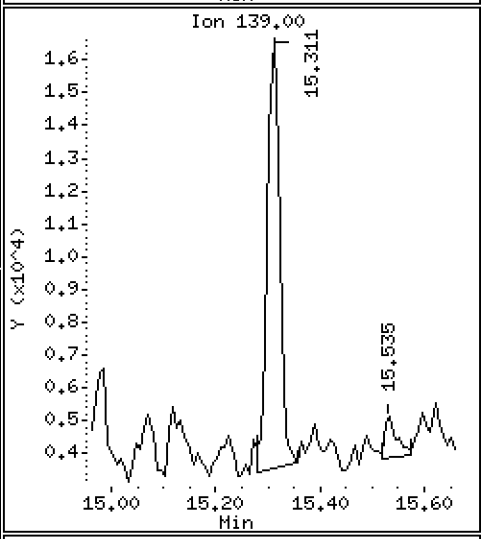
46 Dibenzofuran

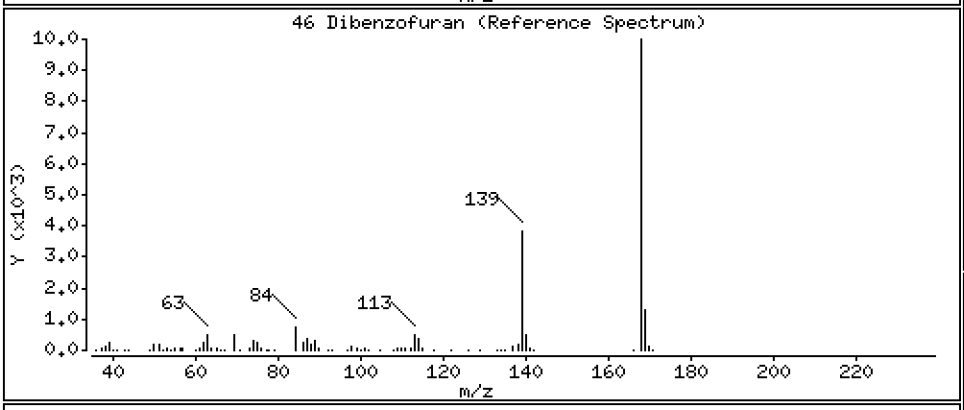
Concentration: 0.1799 ug/mL

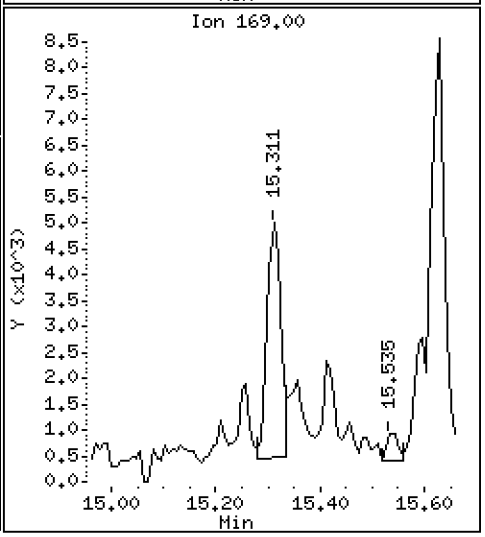


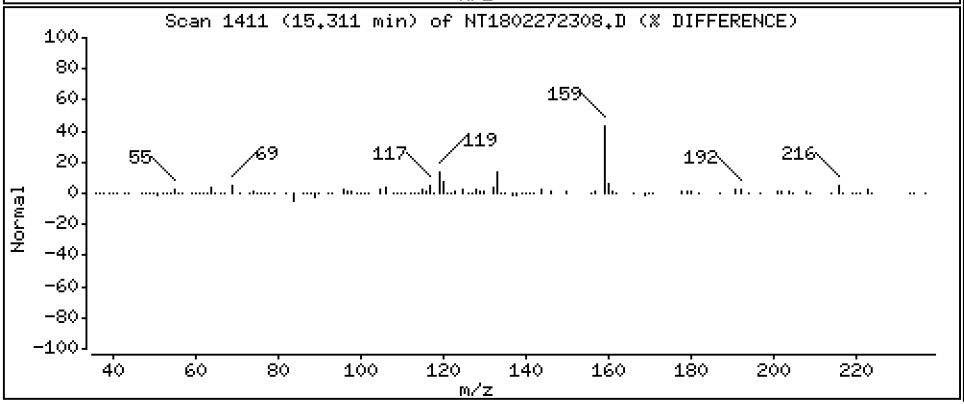












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

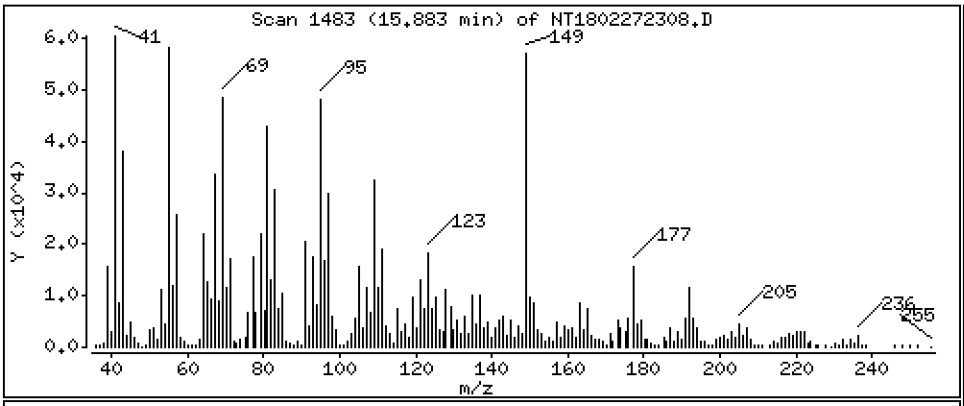
Operator: VTS

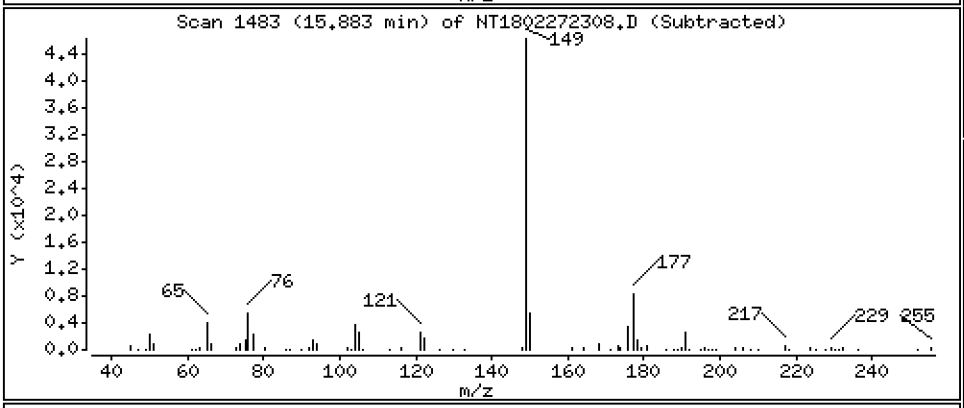
Column phase: ZB-5msi

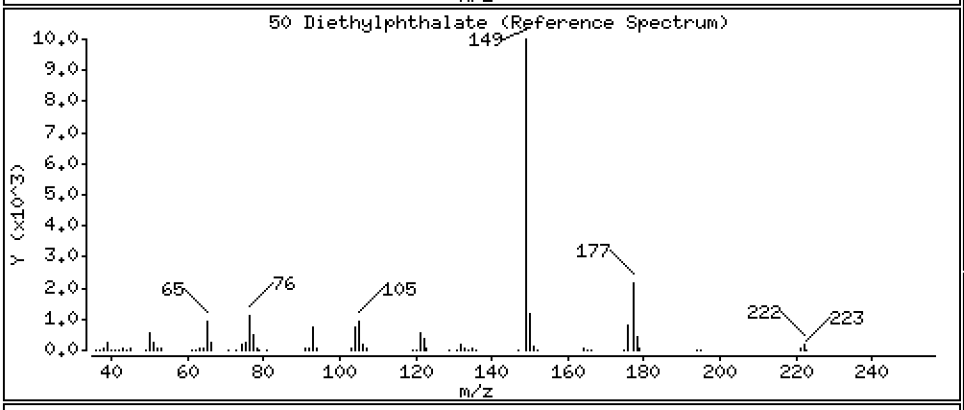
Column diameter: 0.25

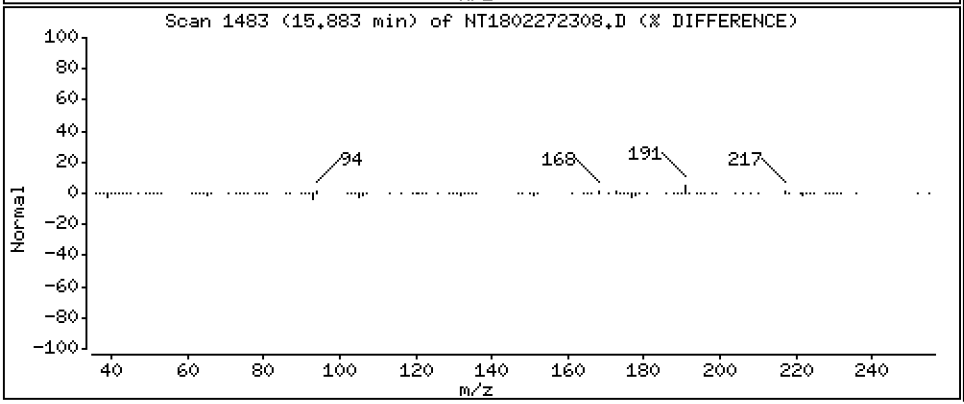
50 Diethylphthalate

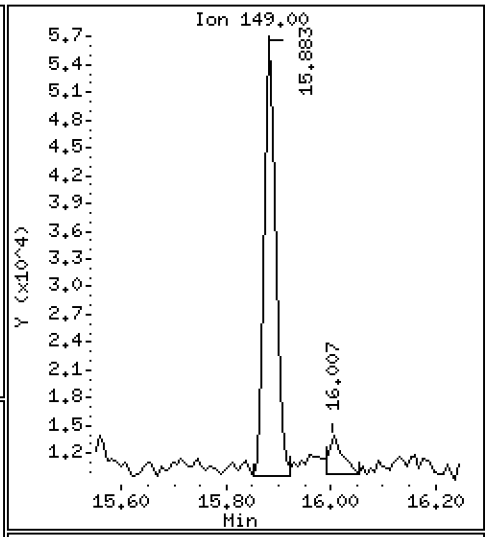
Concentration: 0.3457 ug/mL

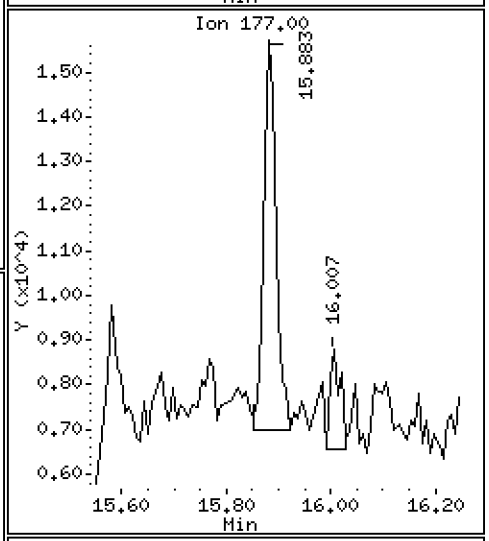


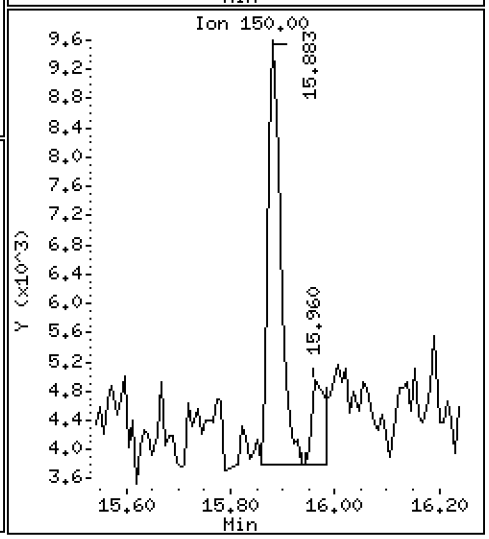












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272308.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

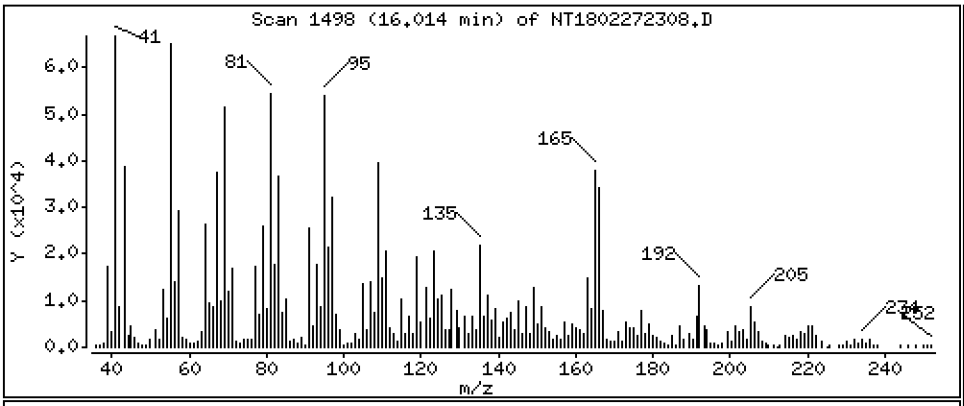
Operator: VTS

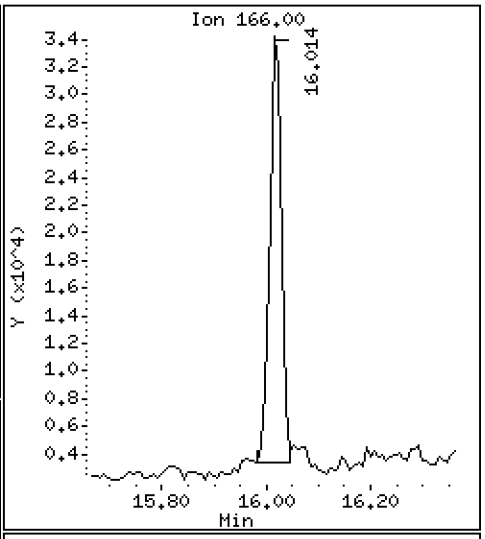
Column phase: ZB-5msi

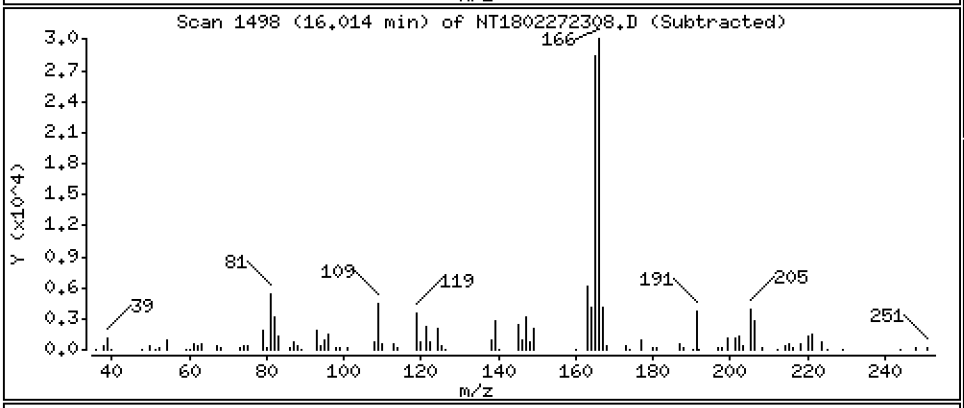
Column diameter: 0.25

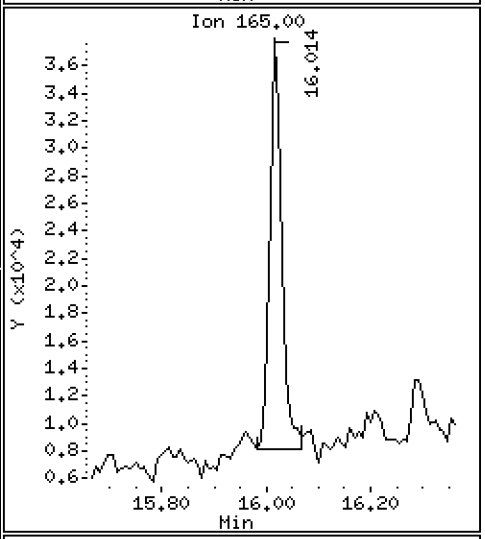
49 Fluorene

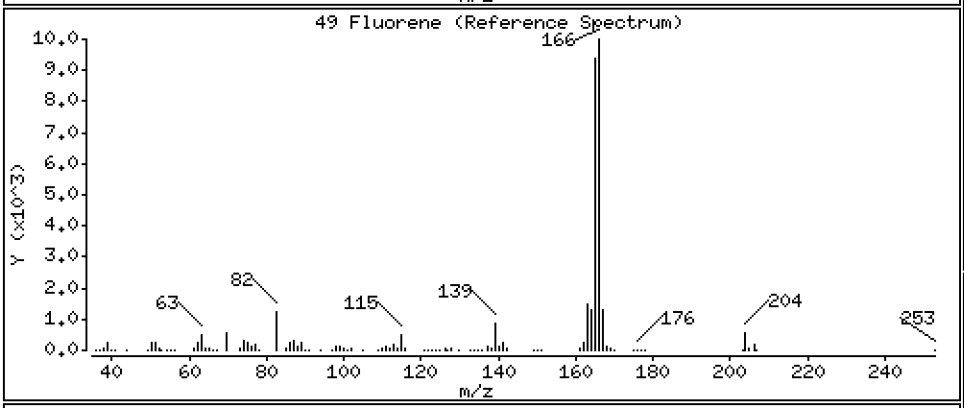
Concentration: 0.2120 ug/mL

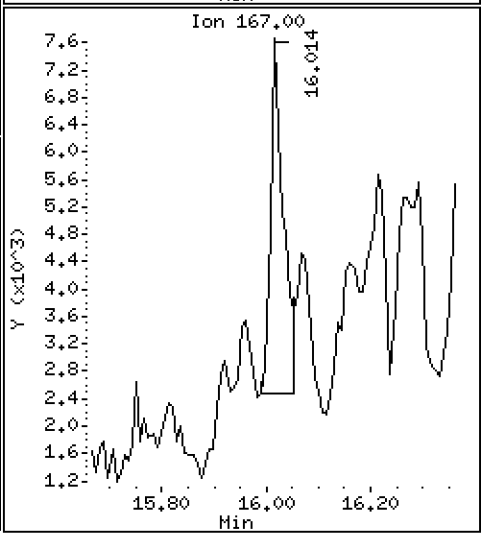


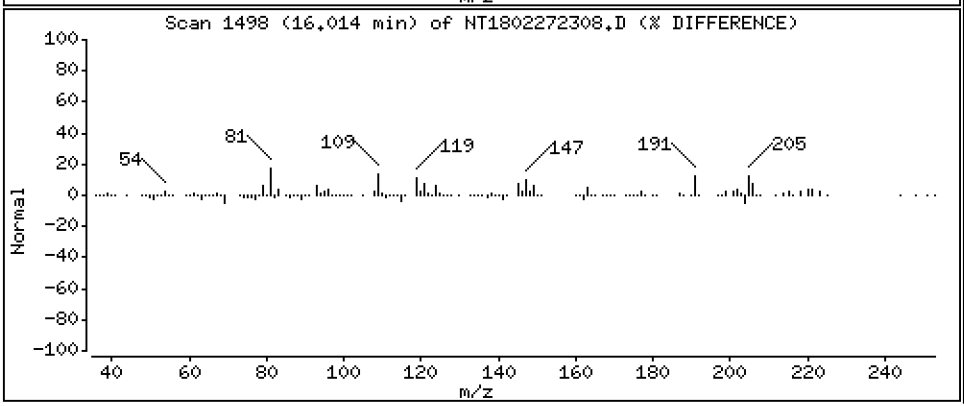












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

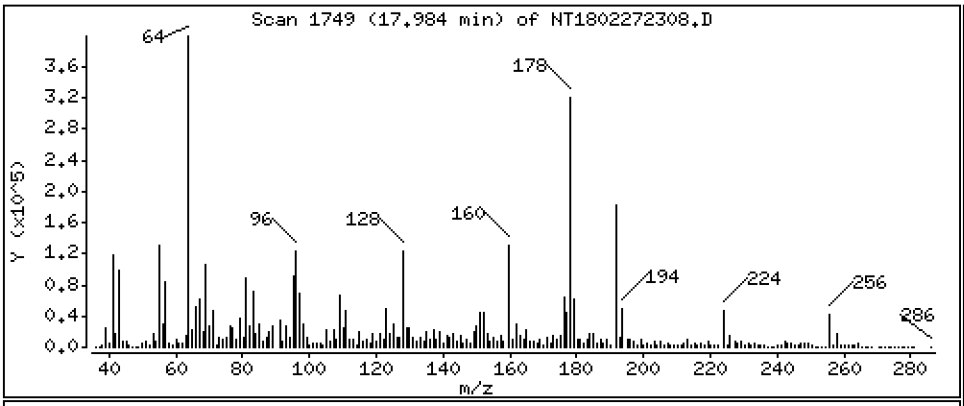
Operator: VTS

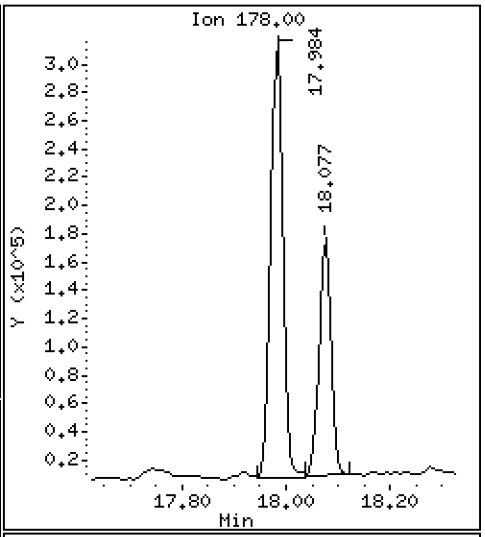
Column phase: ZB-5msi

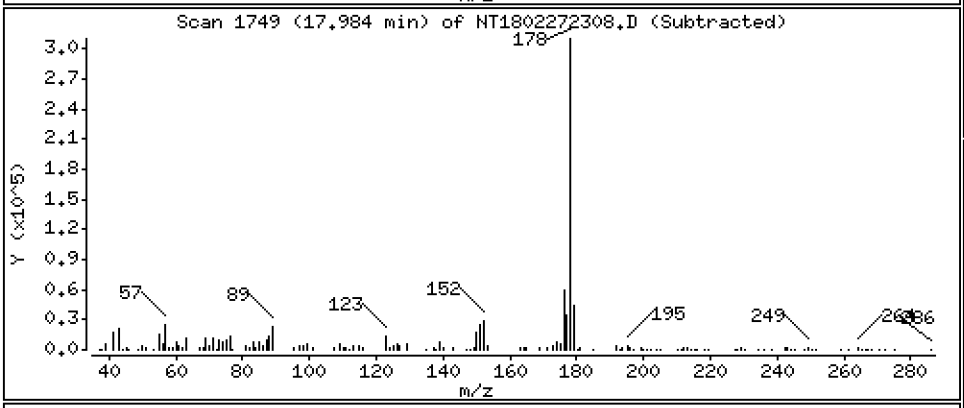
Column diameter: 0.25

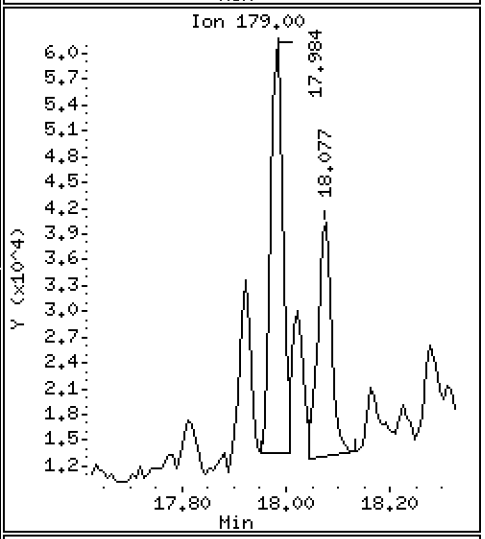
60 Phenanthrene

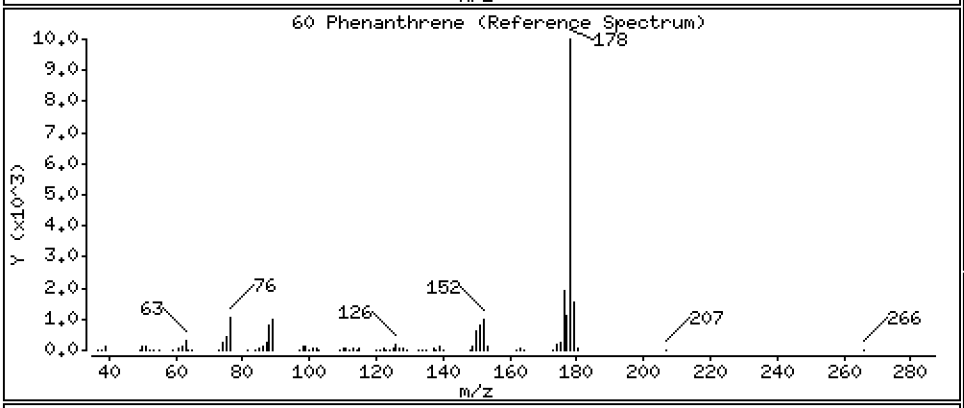
Concentration: 1.253 ug/mL

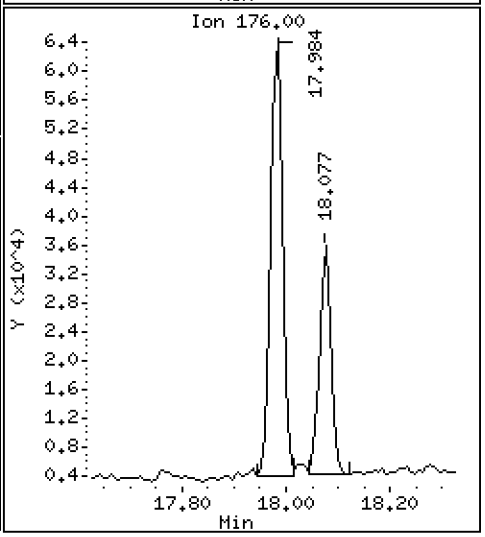


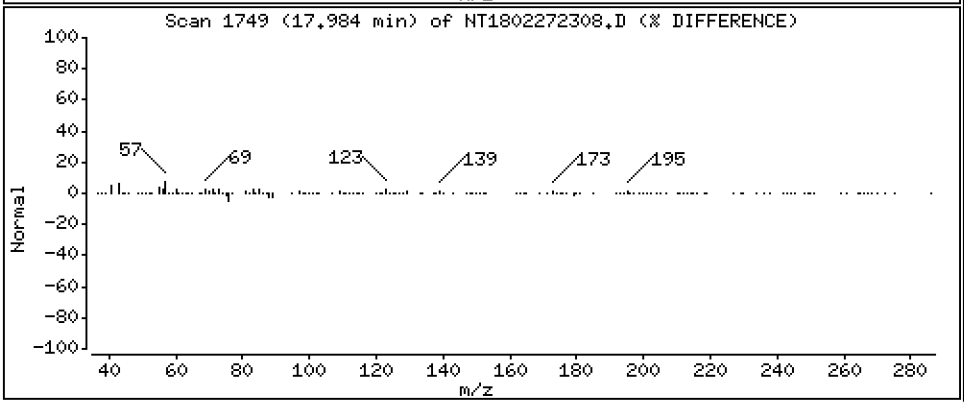












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

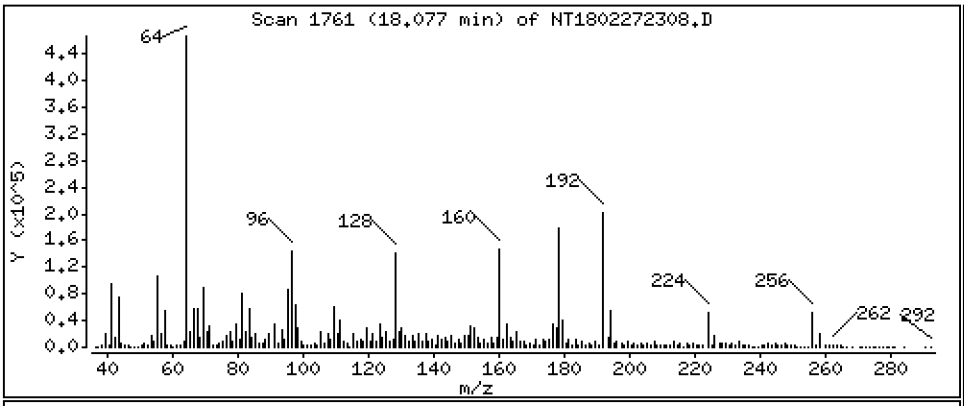
Operator: VTS

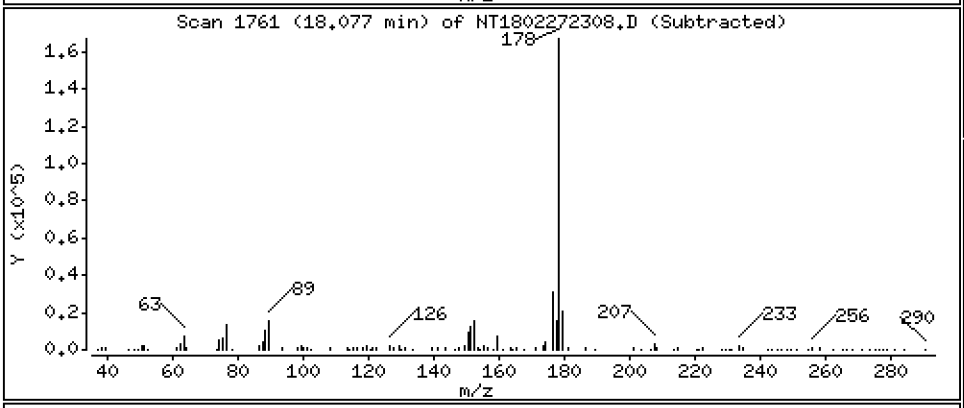
Column phase: ZB-5msi

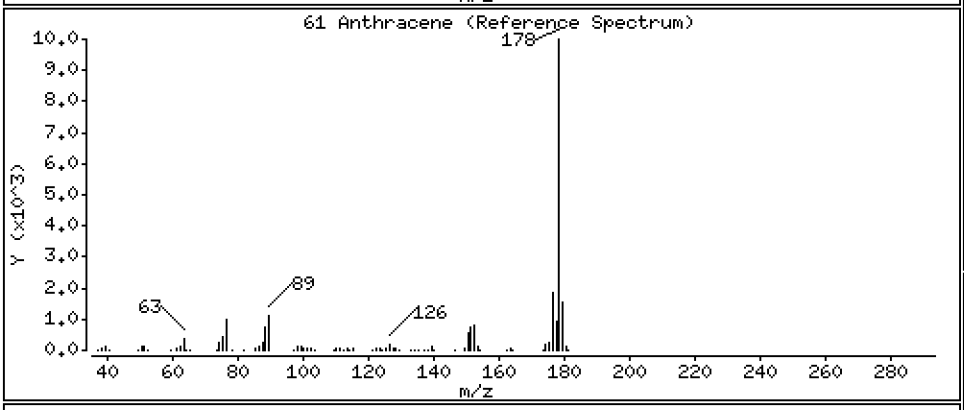
Column diameter: 0.25

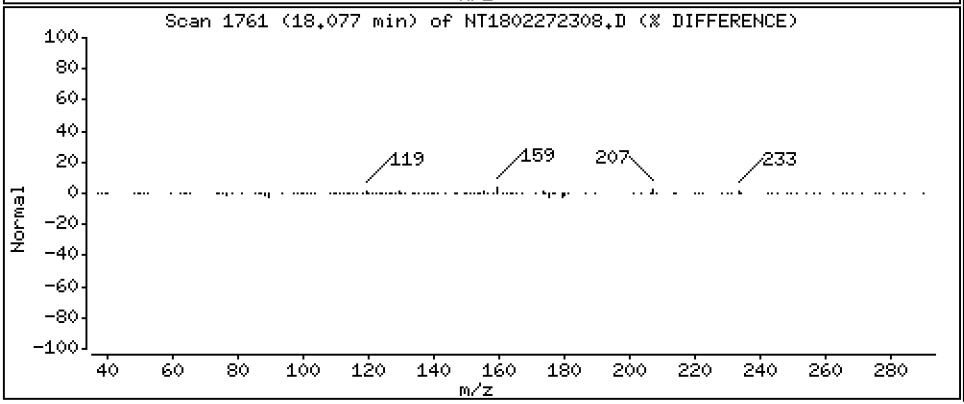
61 Anthracene

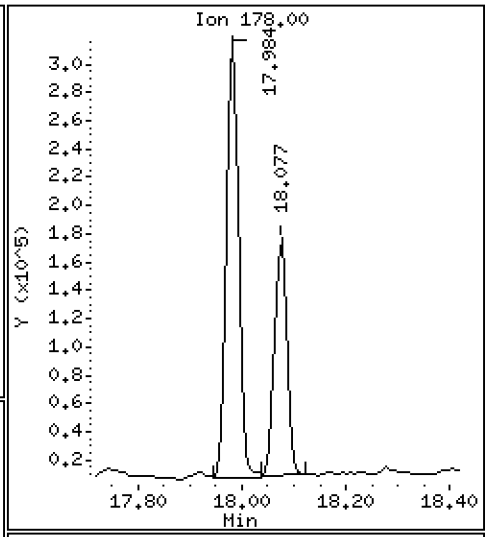
Concentration: 0.7505 ug/mL

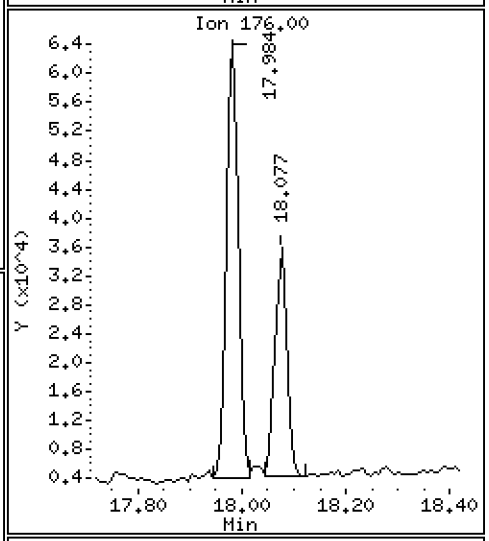


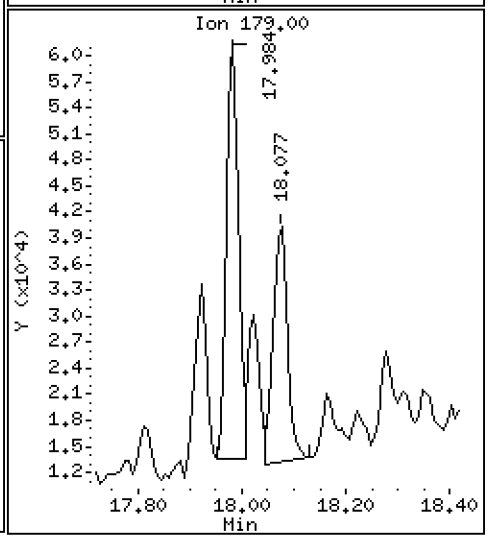












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

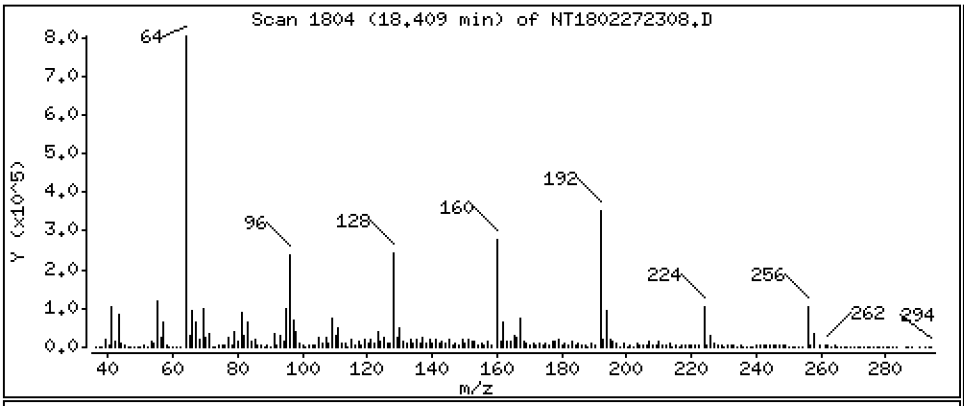
Operator: VTS

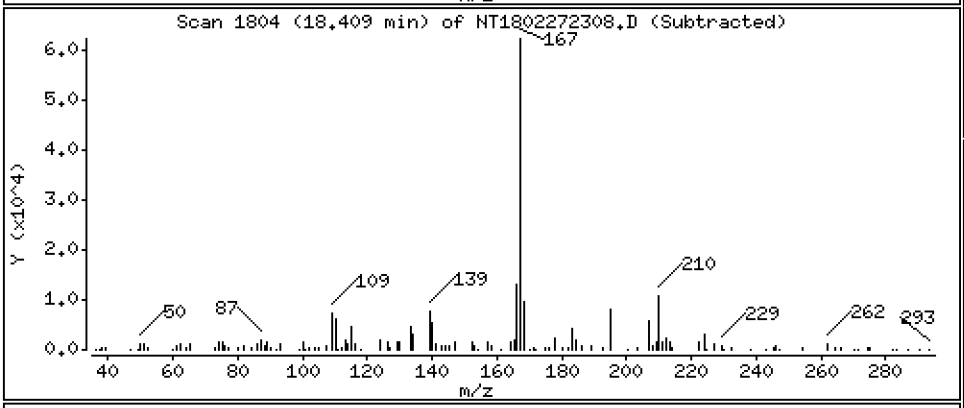
Column phase: ZB-5msi

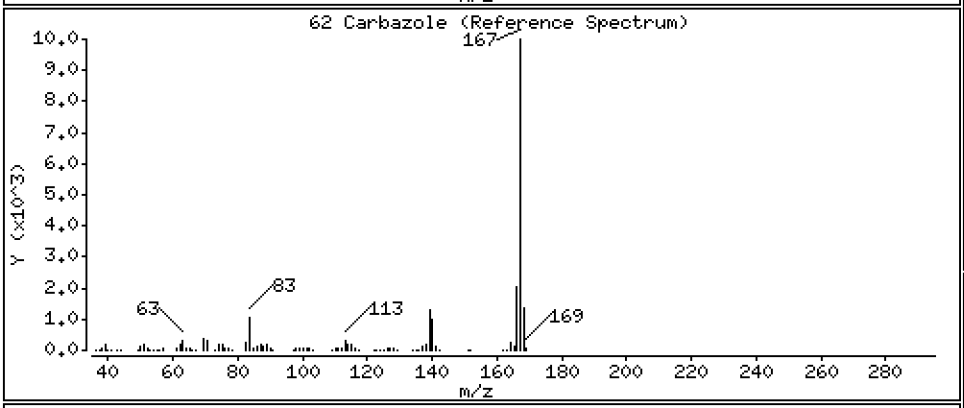
Column diameter: 0.25

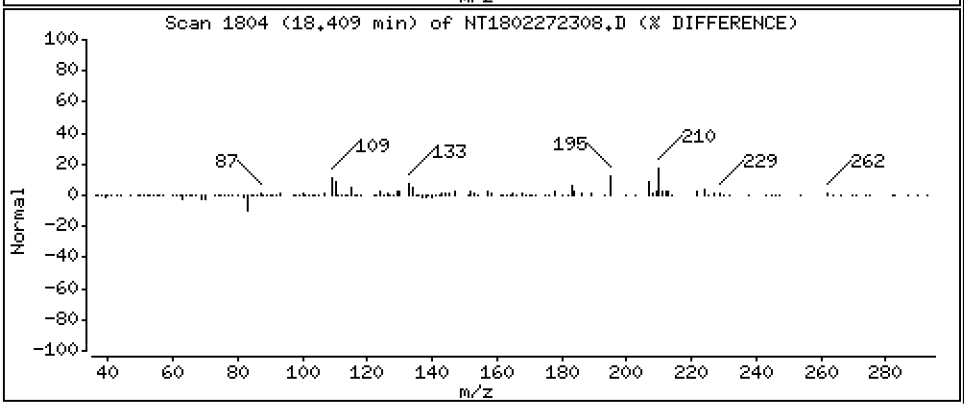
62 Carbazole

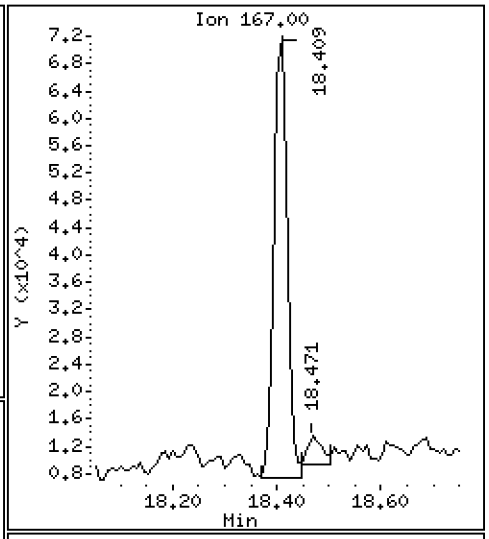
Concentration: 0.3258 ug/mL

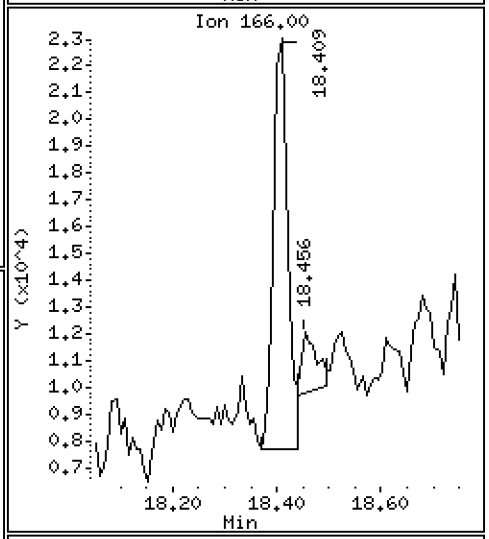


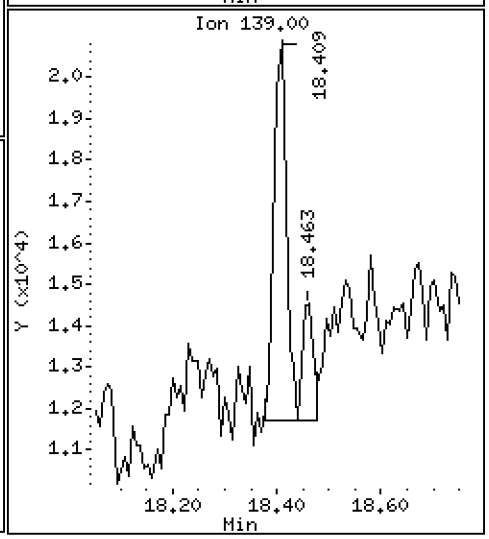












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

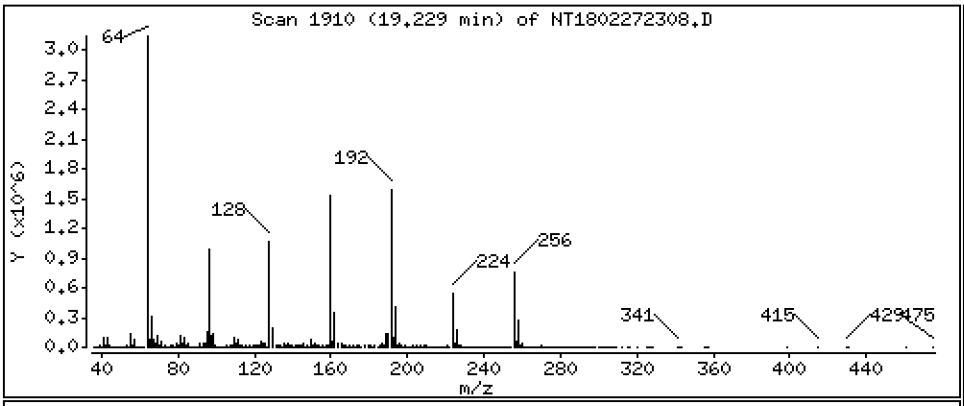
Operator: VTS

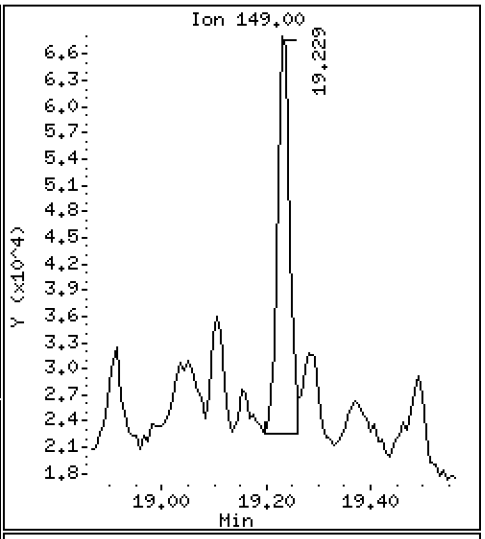
Column phase: ZB-5msi

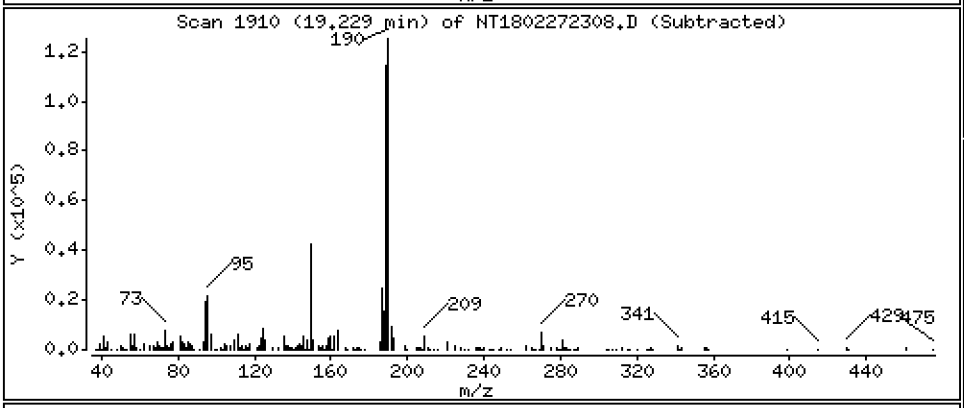
Column diameter: 0.25

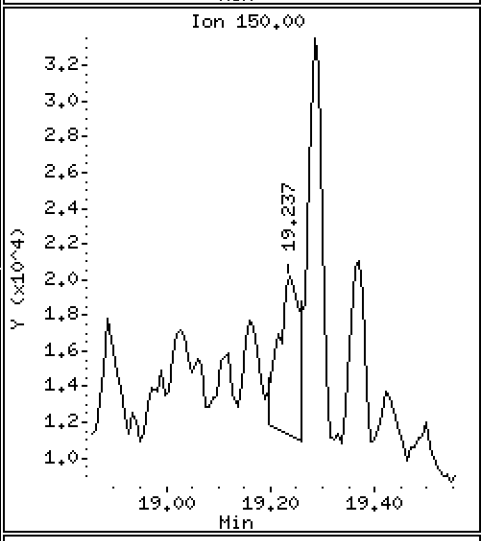
63 Di-n-butylphthalate

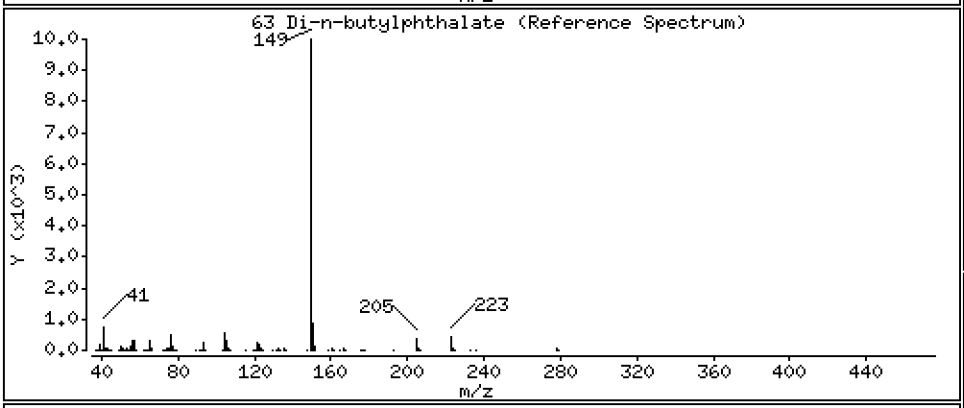
Concentration: 0.2088 ug/mL

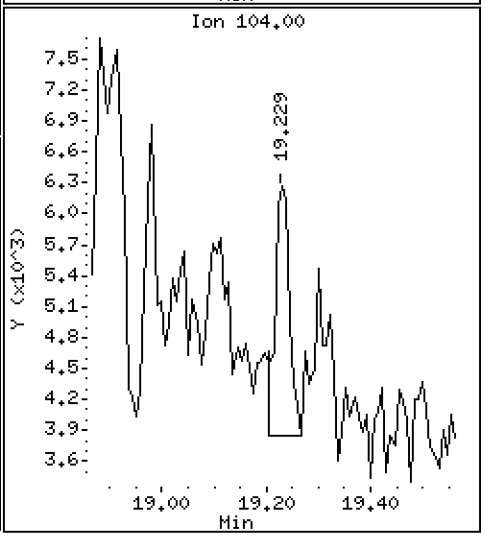


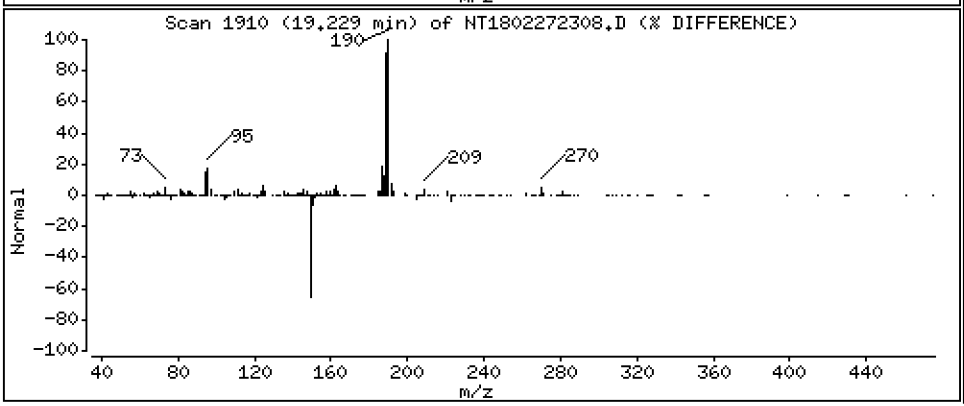












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

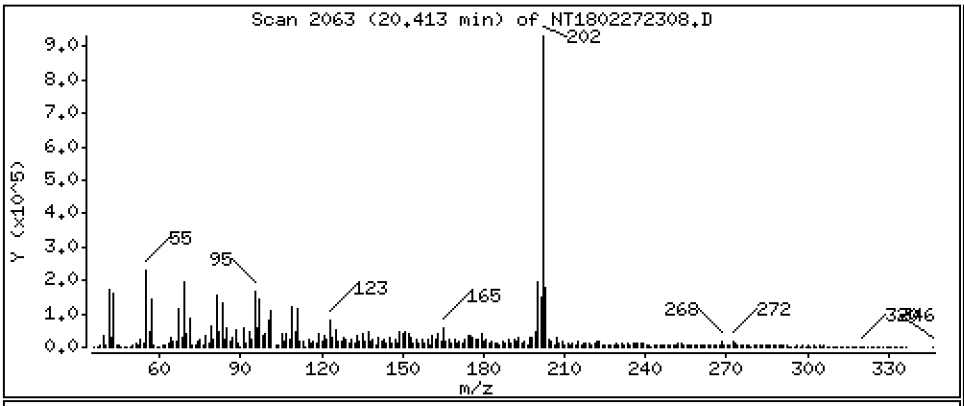
Operator: VTS

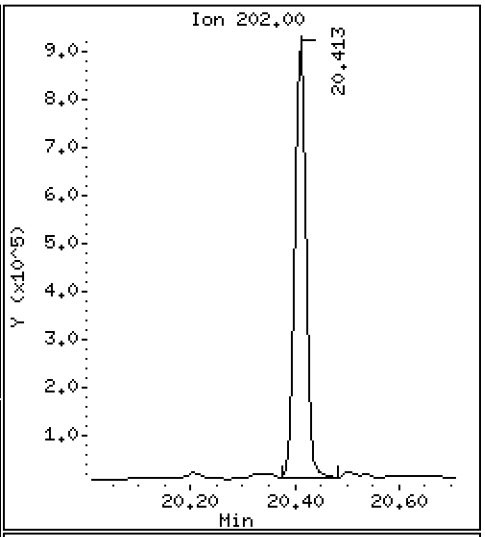
Column phase: ZB-5msi

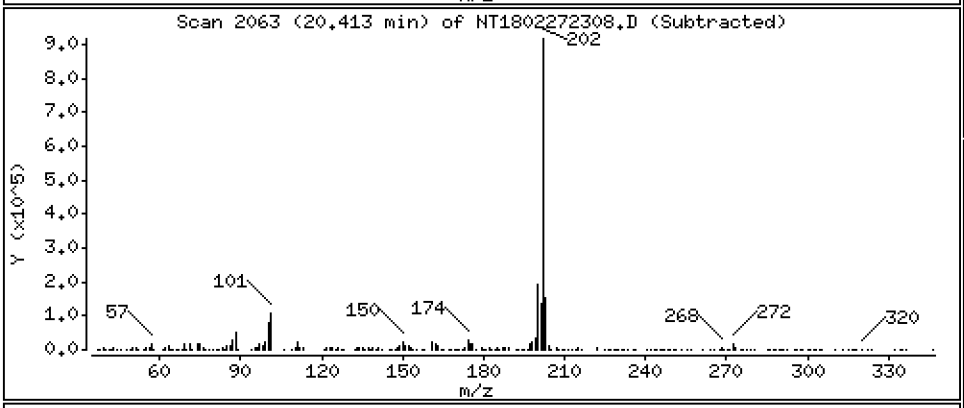
Column diameter: 0.25

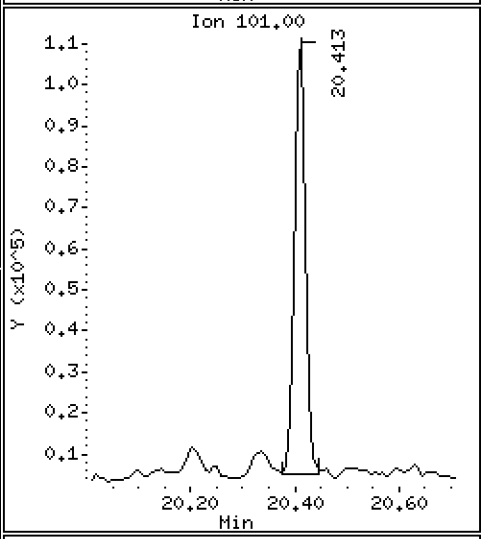
64 Fluoranthene

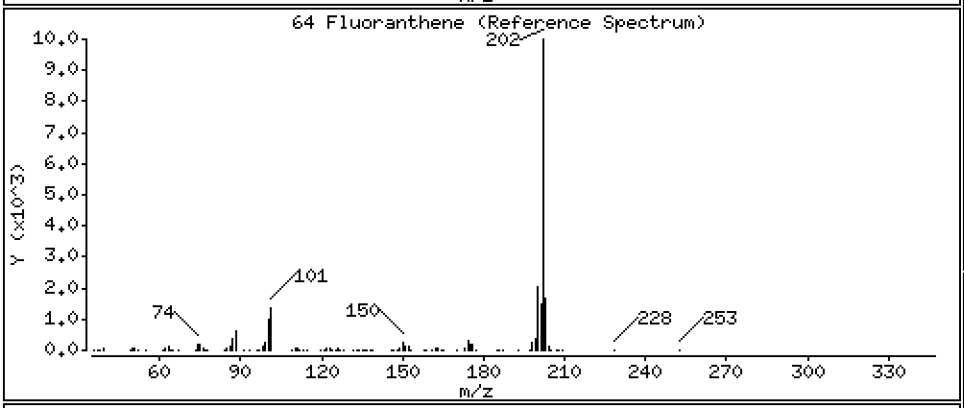
Concentration: 2.814 ug/mL

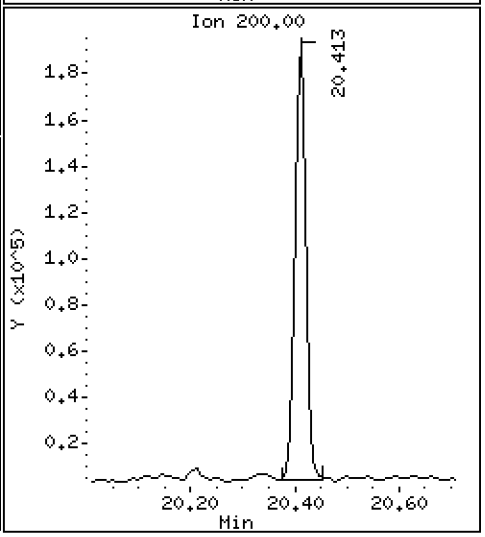


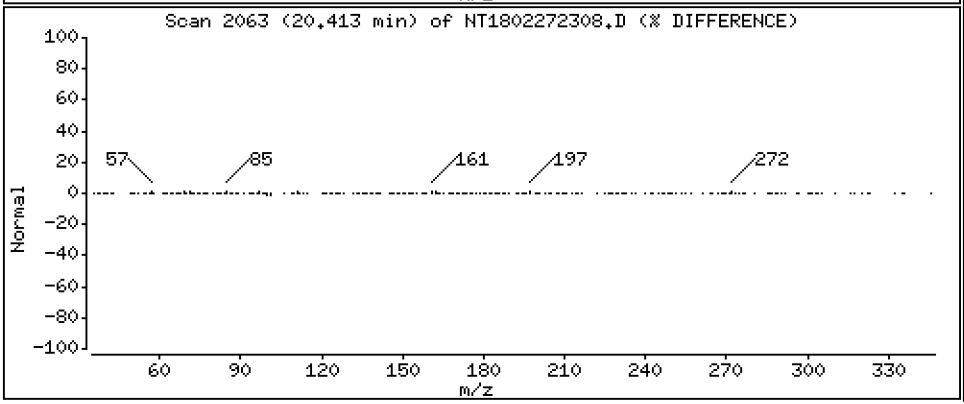












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

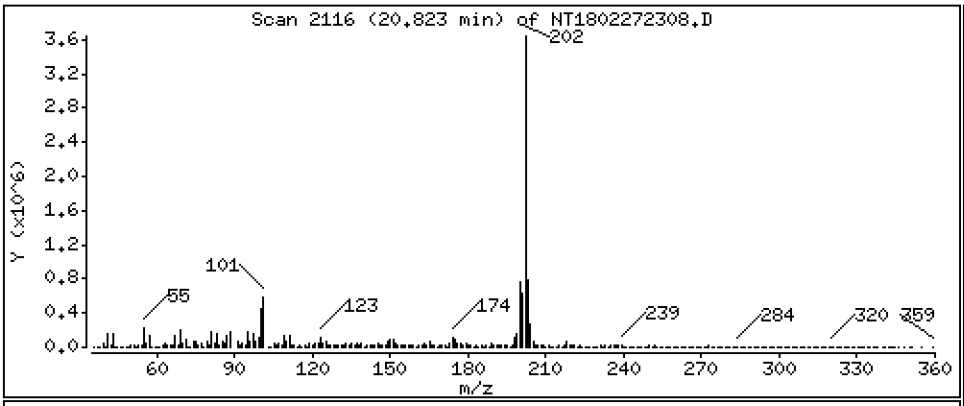
Operator: VTS

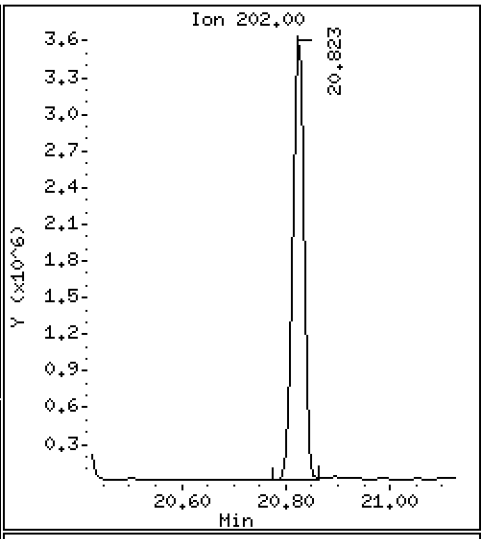
Column phase: ZB-5msi

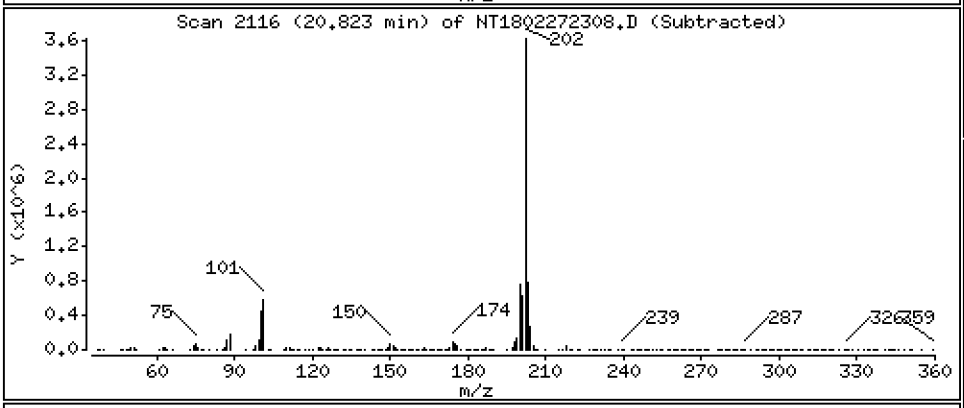
Column diameter: 0.25

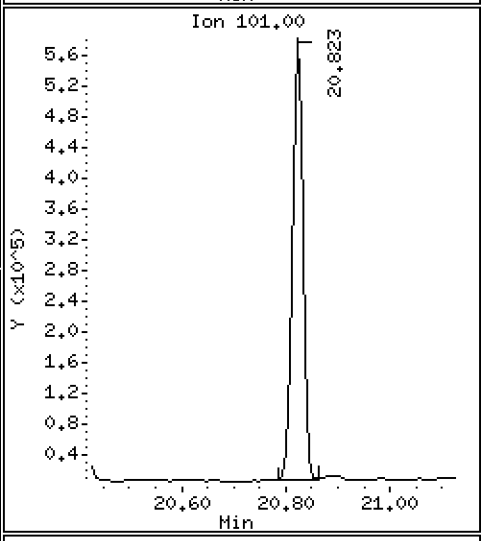
65 Pyrene

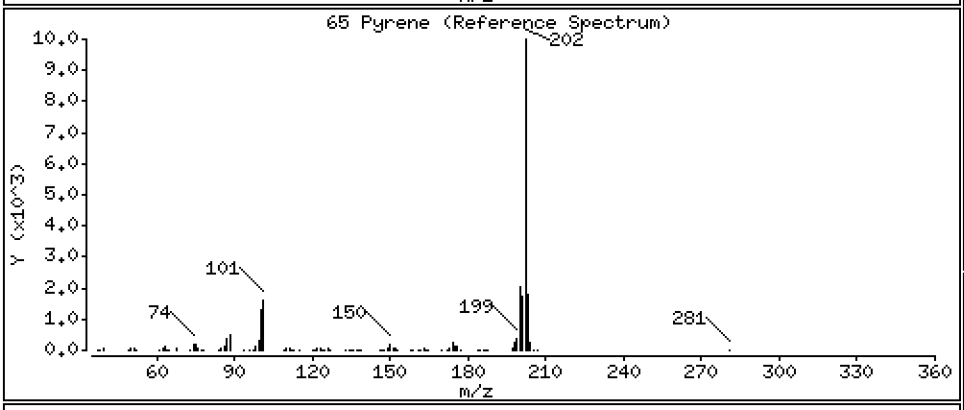
Concentration: 10.66 ug/mL

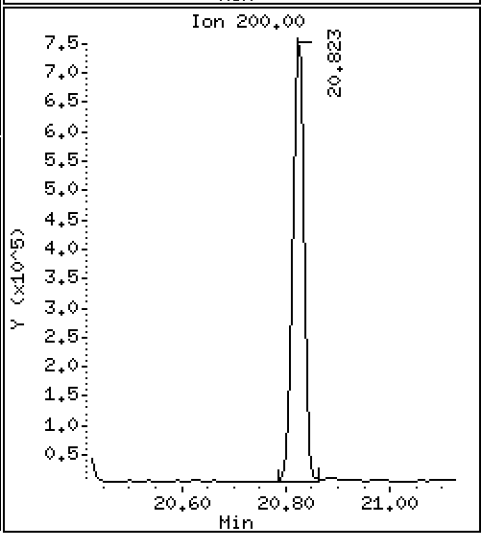


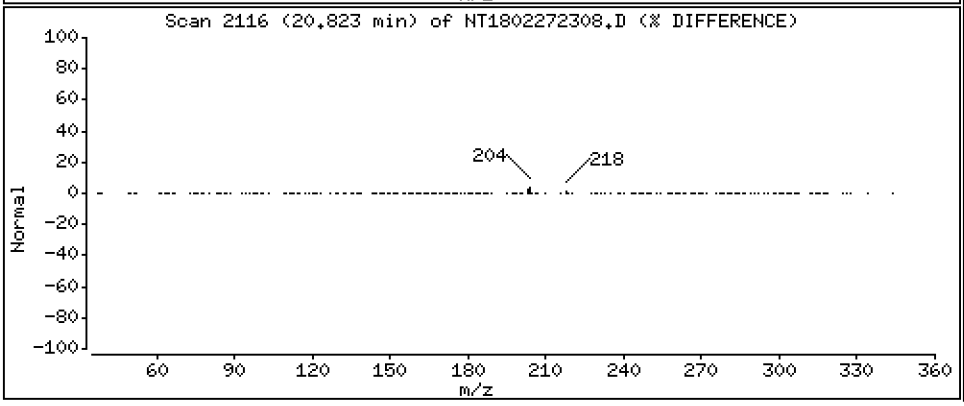












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272308.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

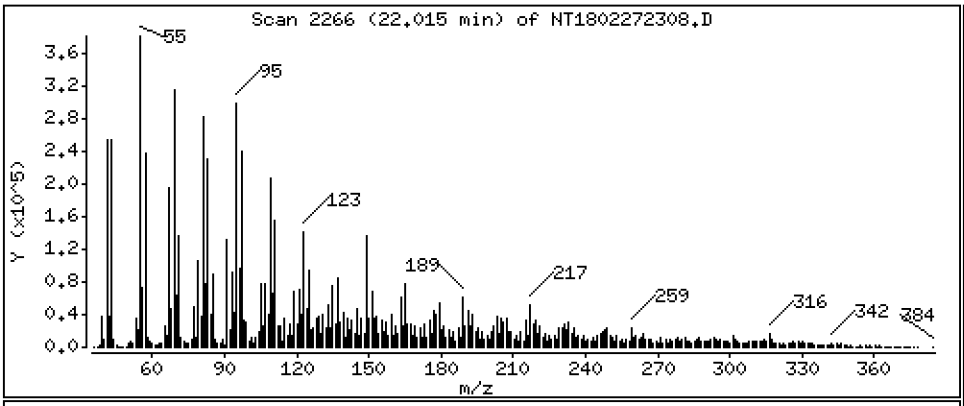
Operator: VTS

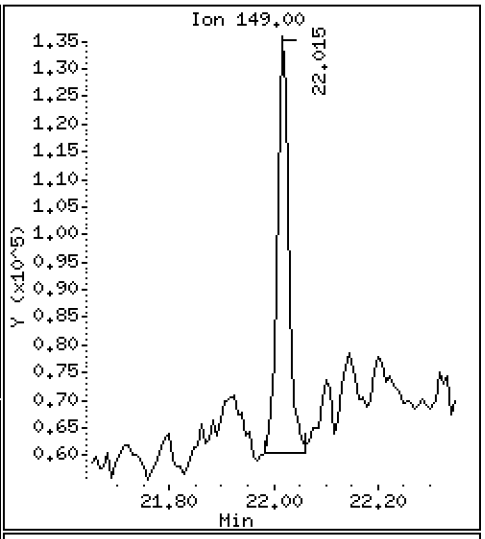
Column phase: ZB-5msi

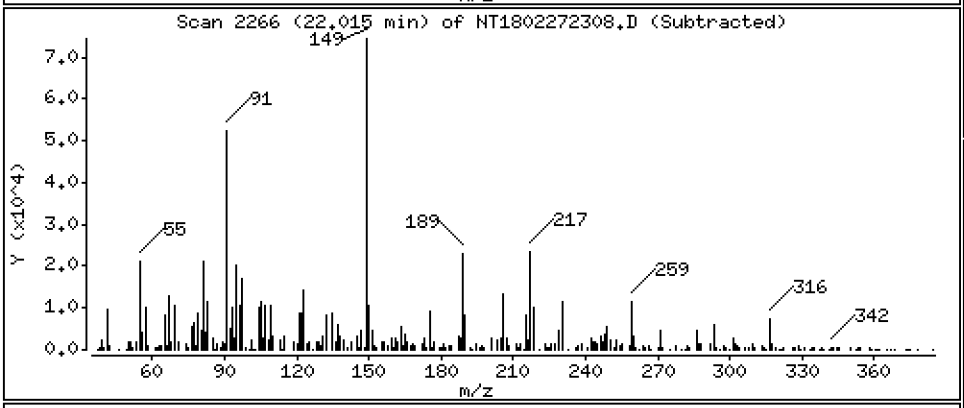
Column diameter: 0.25

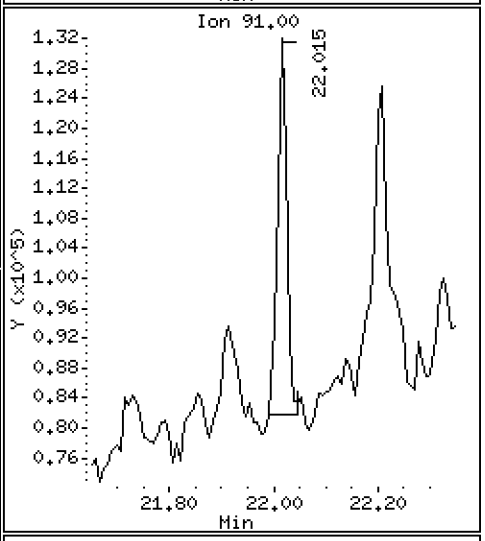
67 Butylbenzylphthalate

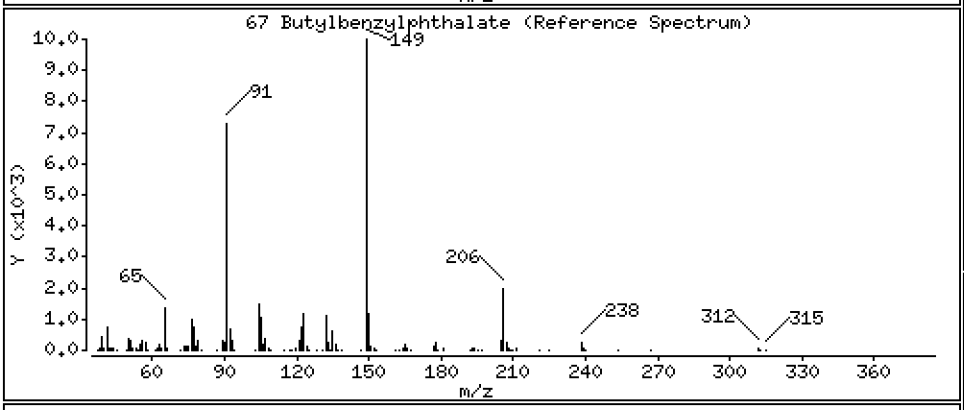
Concentration: 0.5786 ug/mL

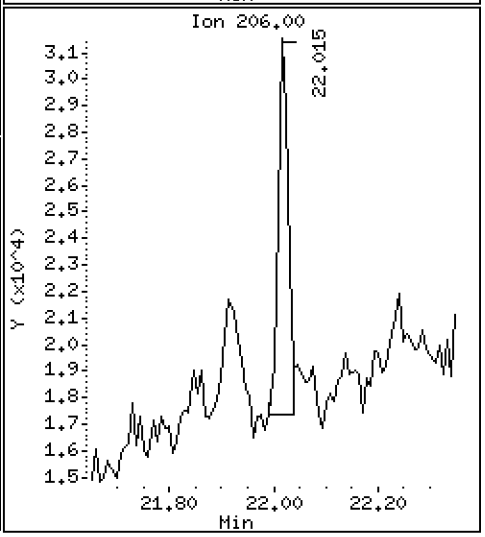


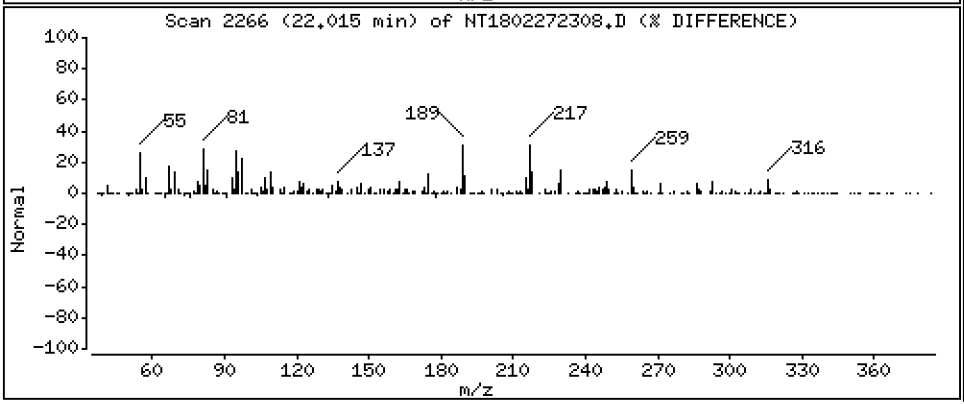












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

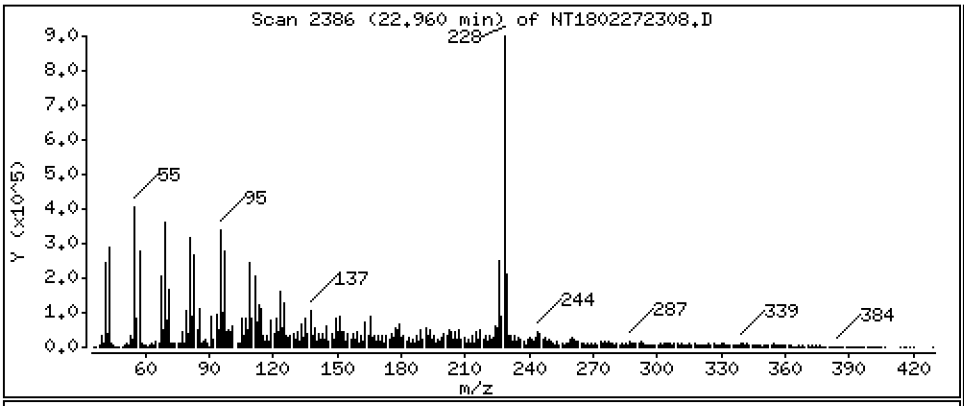
Operator: VTS

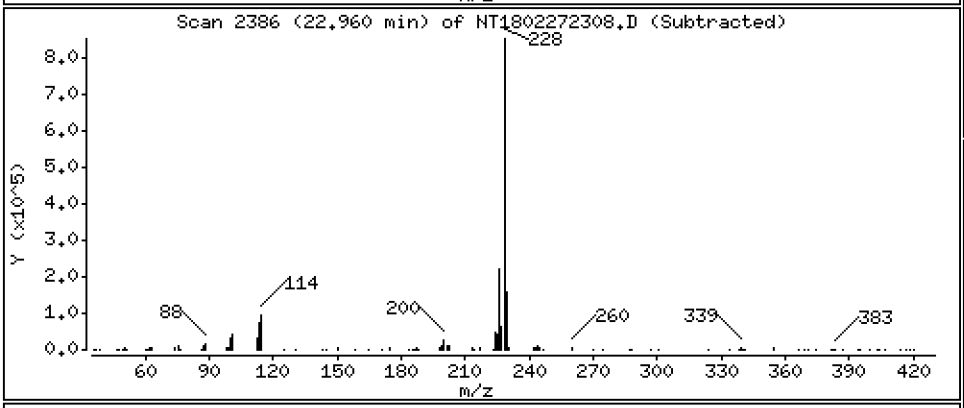
Column phase: ZB-5msi

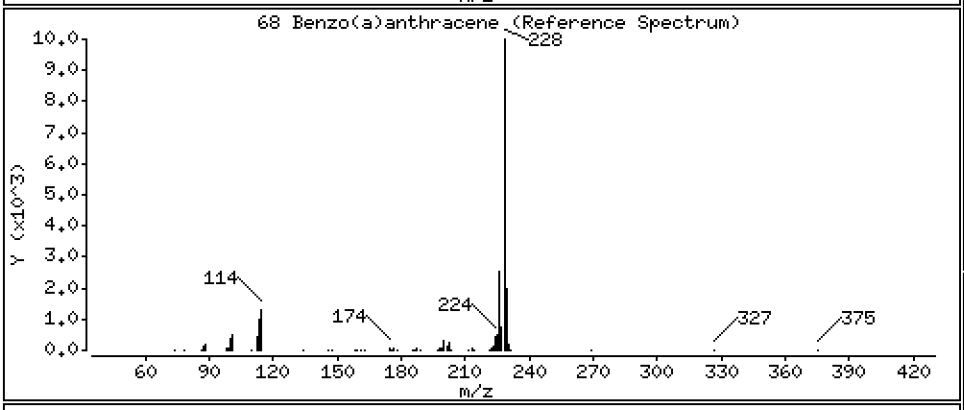
Column diameter: 0.25

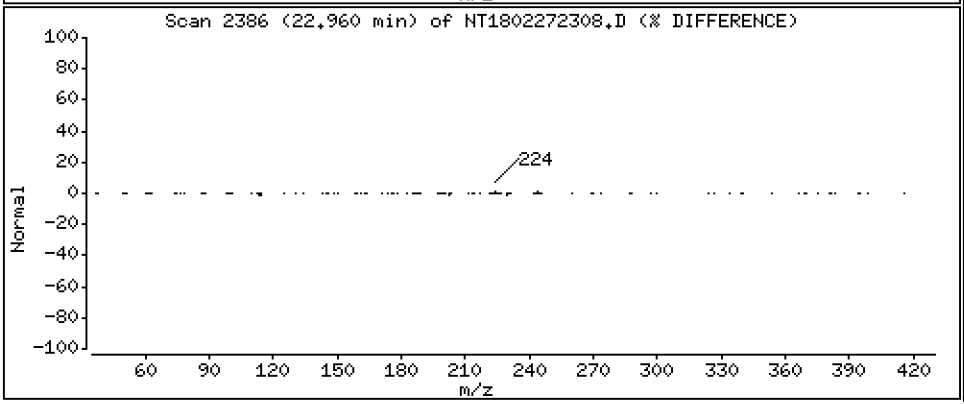
68 Benzo(a)anthracene

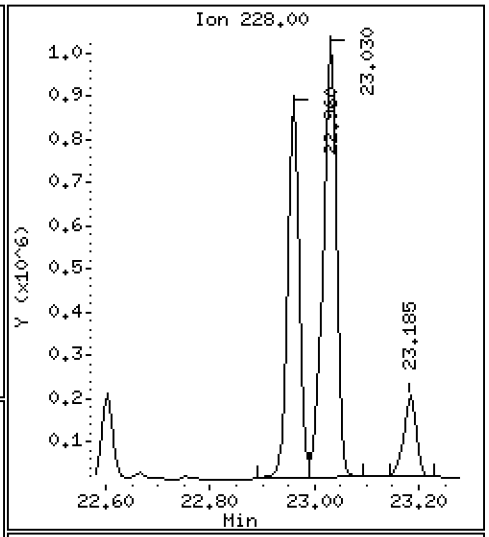
Concentration: 2.739 ug/mL

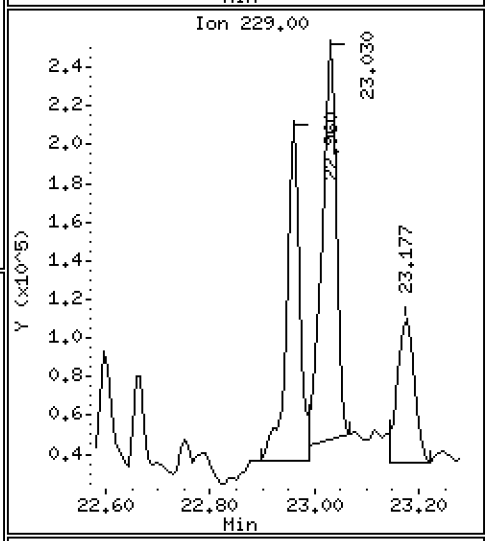


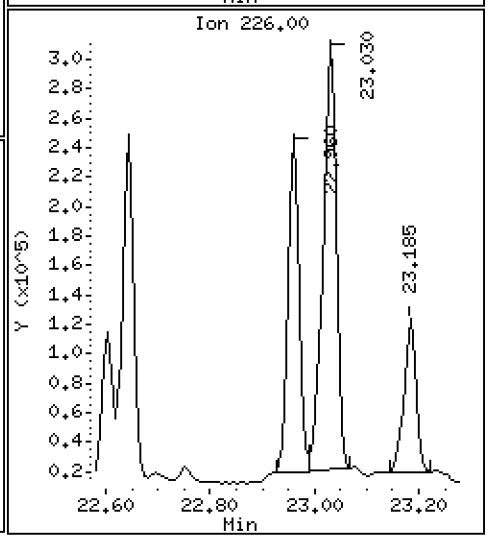












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272308.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

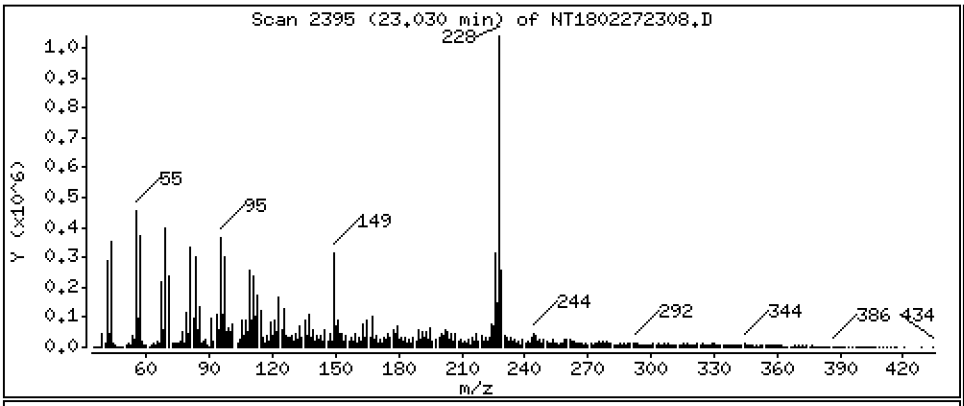
Operator: VTS

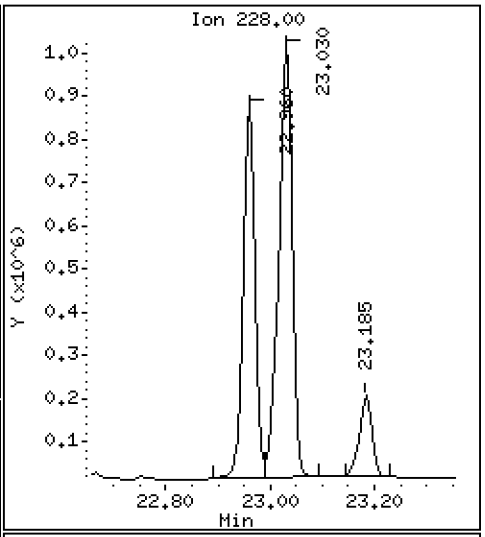
Column phase: ZB-5msi

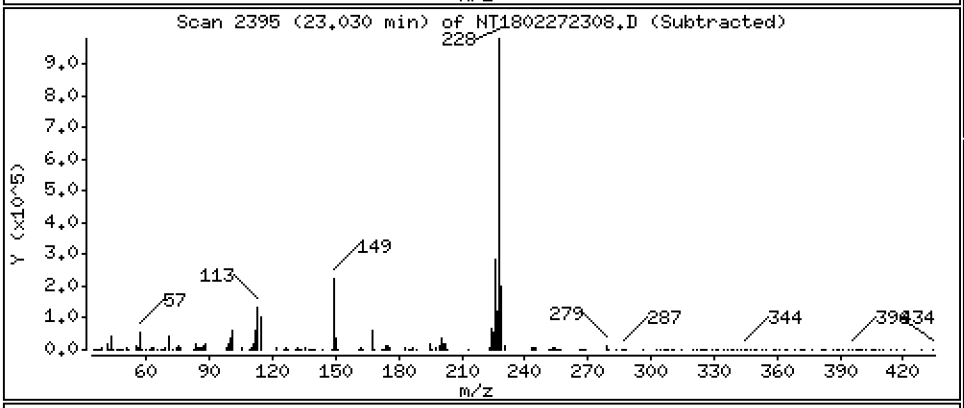
Column diameter: 0.25

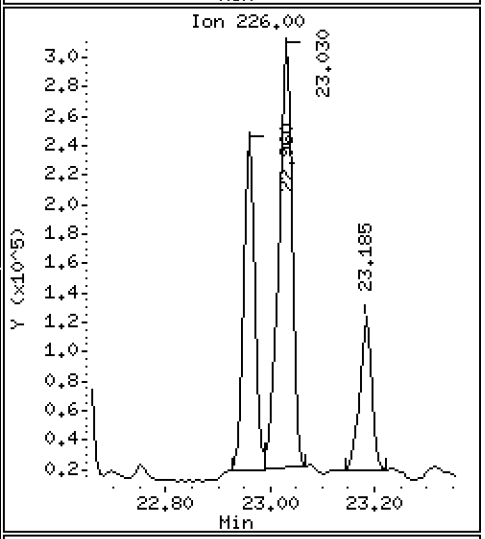
71 Chrysene

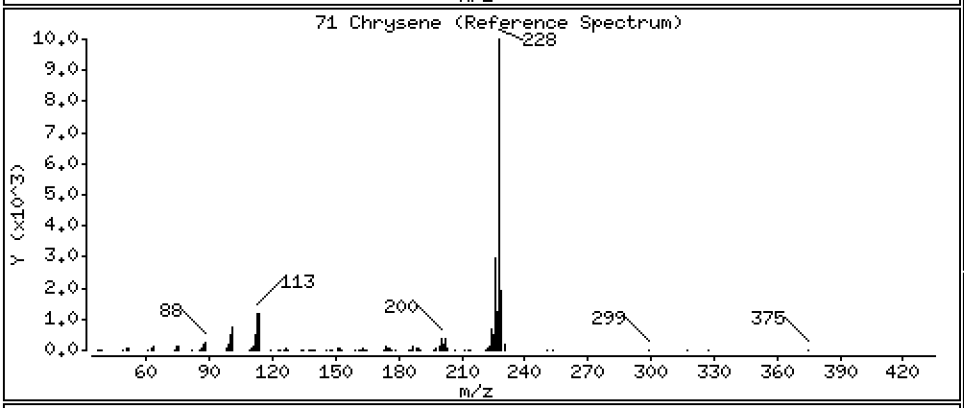
Concentration: 3.377 ug/mL

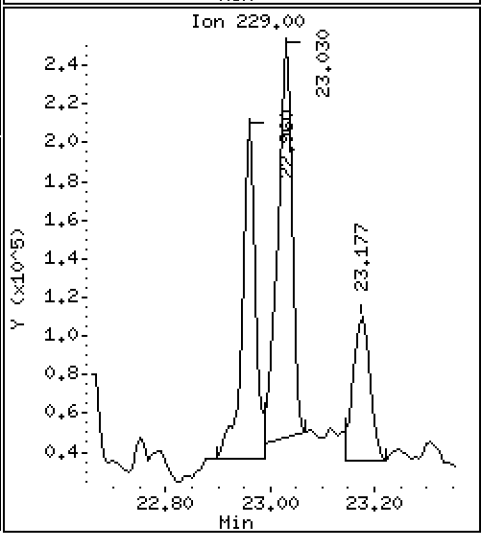


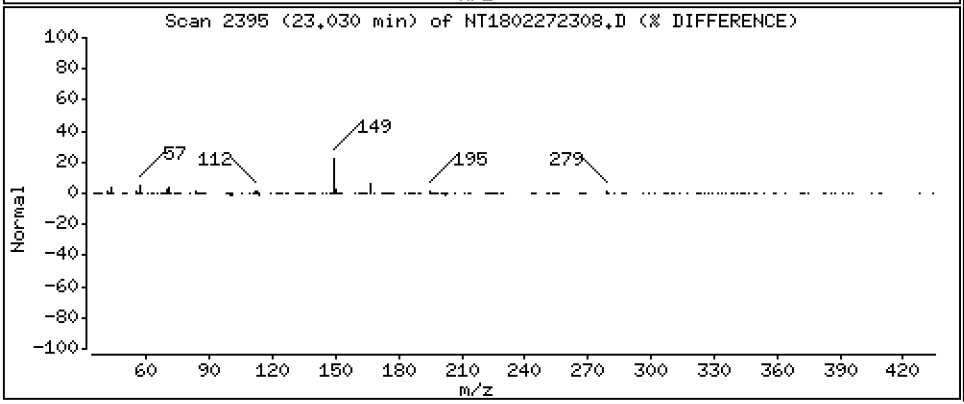












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

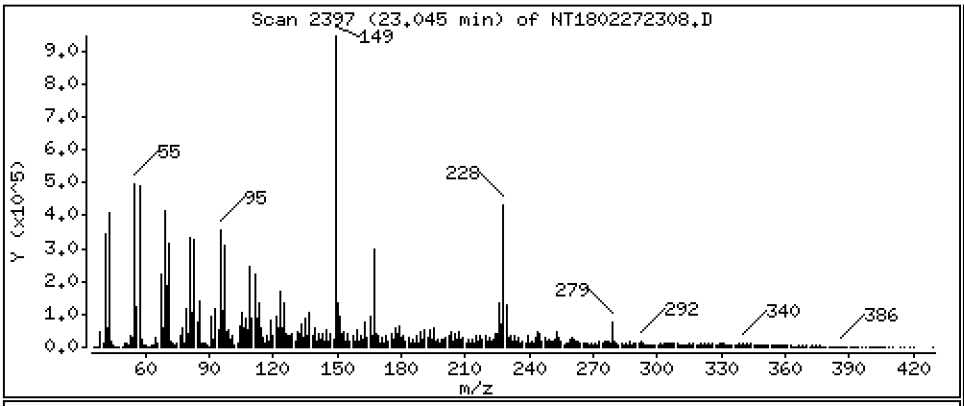
Operator: VTS

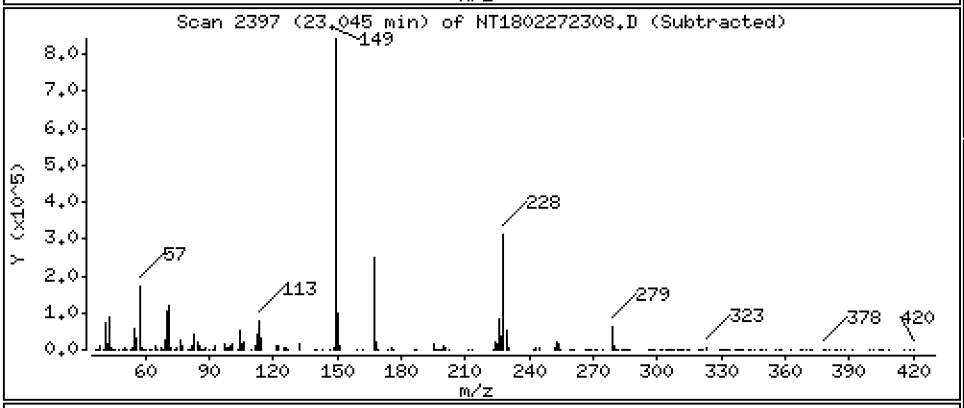
Column phase: ZB-5msi

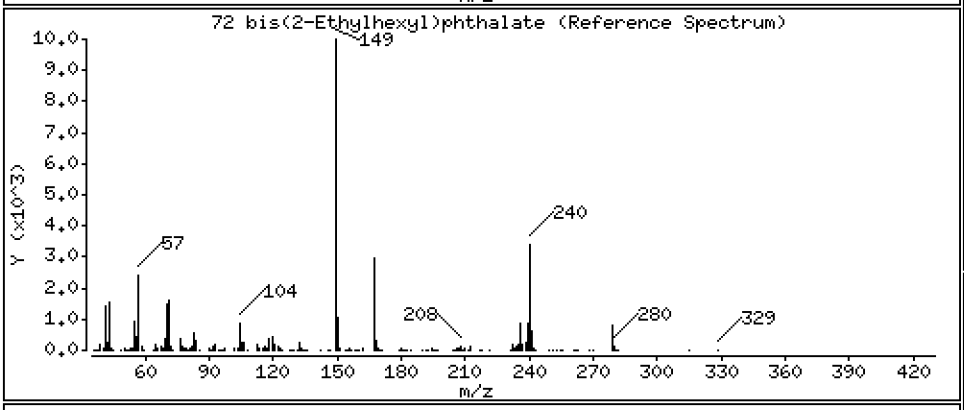
Column diameter: 0.25

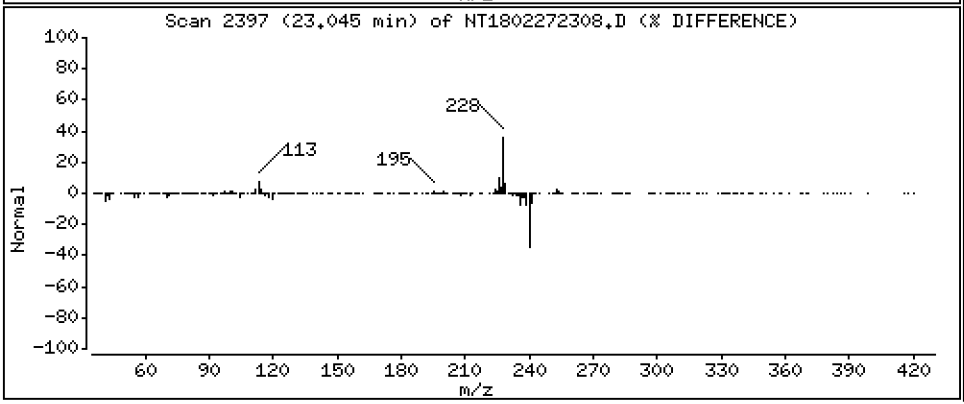
72 bis(2-Ethylhexyl)phthalate

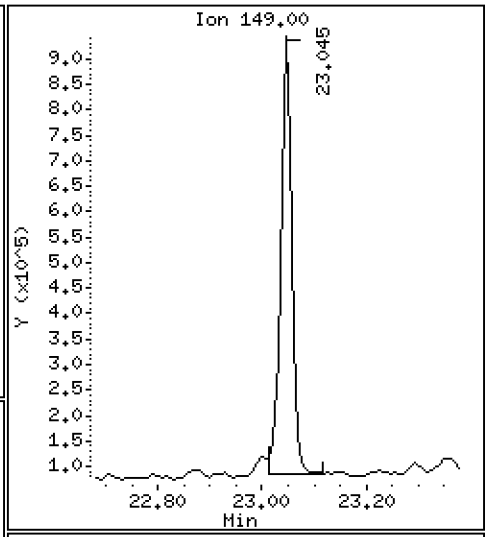
Concentration: 4.694 ug/mL

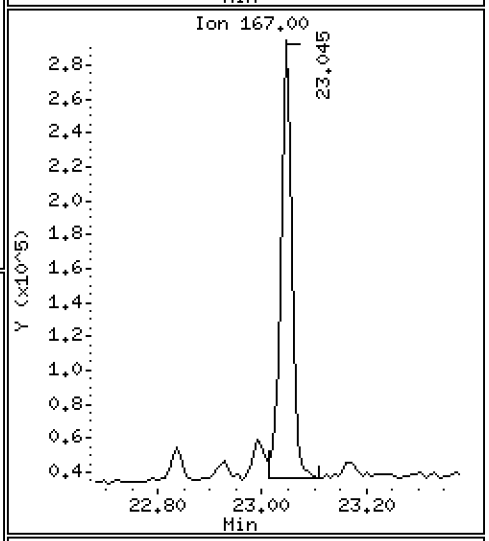


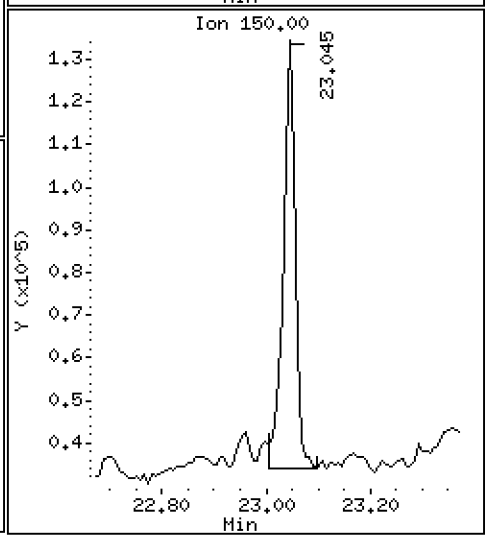












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

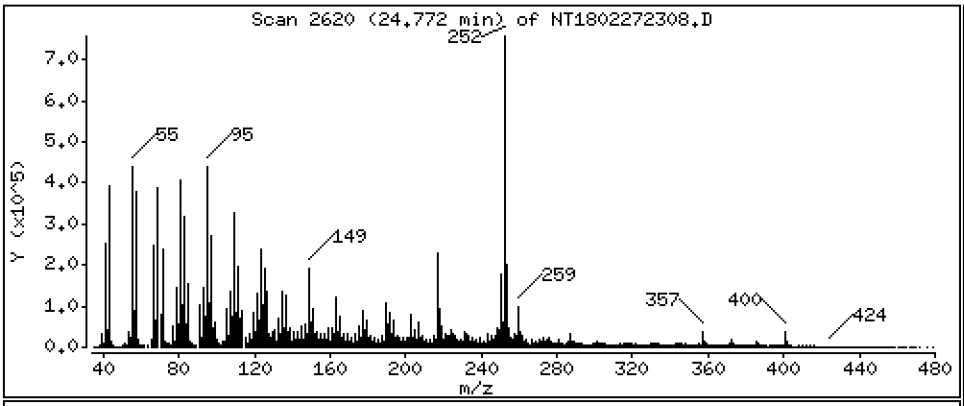
Operator: VTS

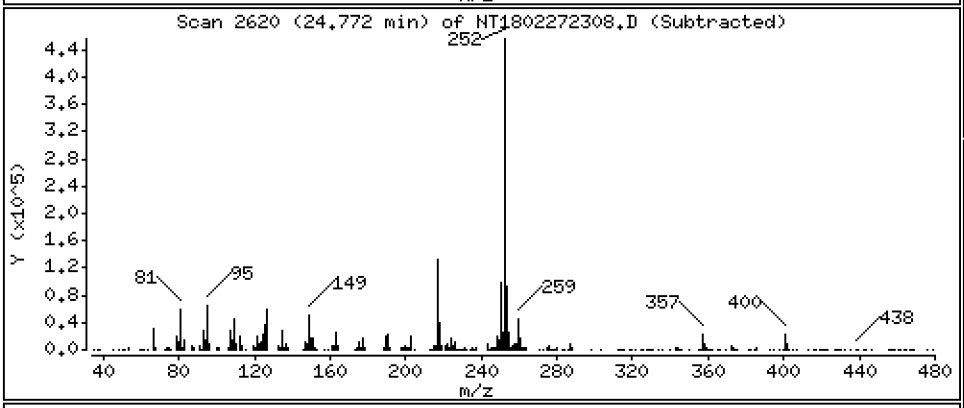
Column phase: ZB-5msi

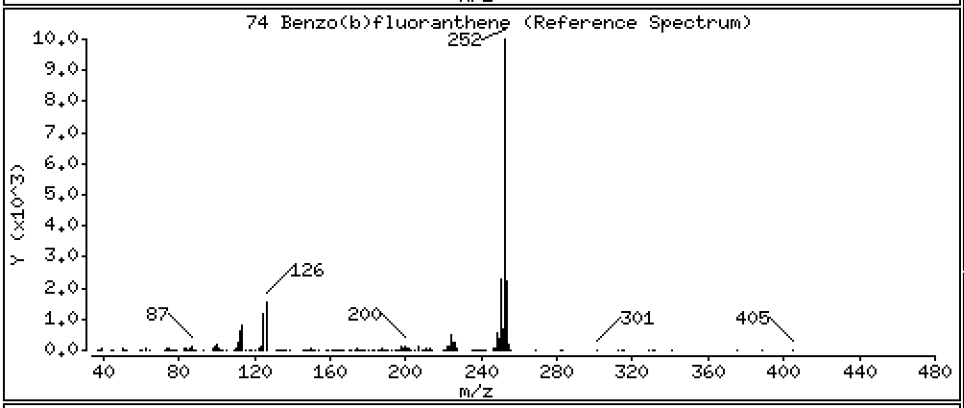
Column diameter: 0.25

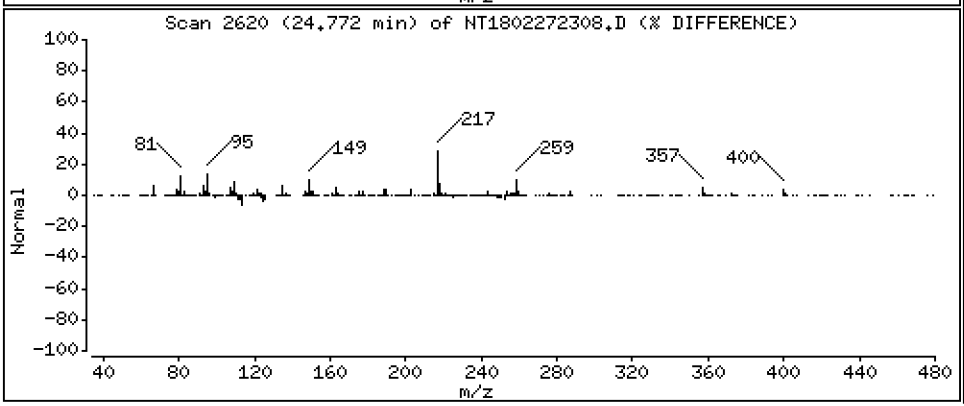
74 Benzo(b)fluoranthene

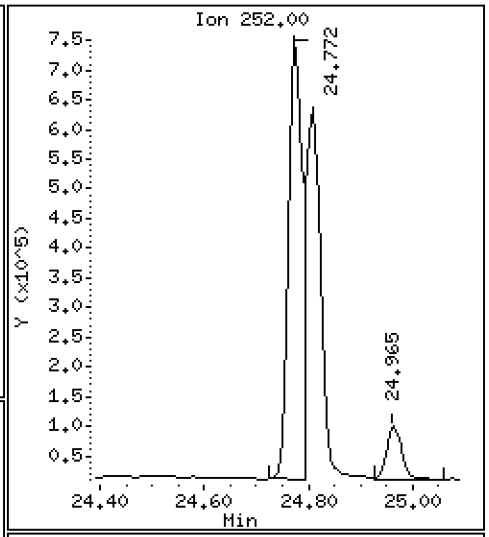
Concentration: 4.856 ug/mL

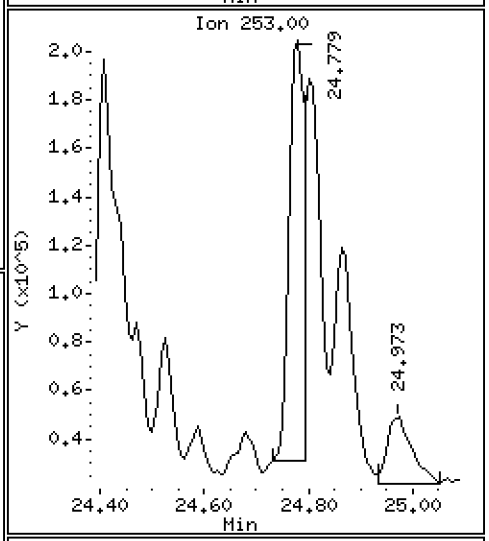


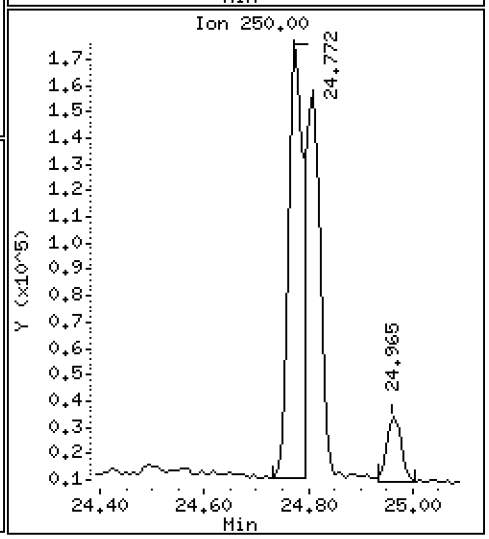












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

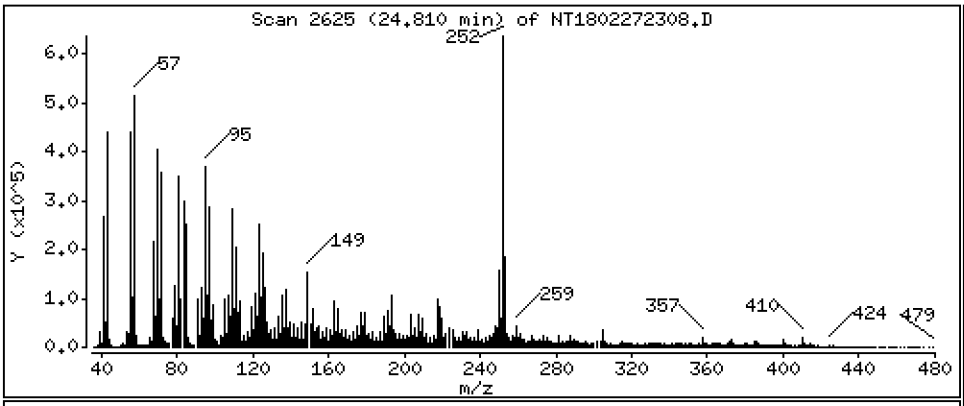
Operator: VTS

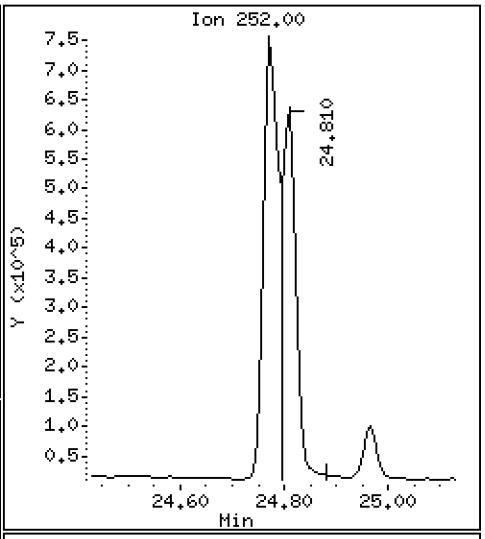
Column phase: ZB-5msi

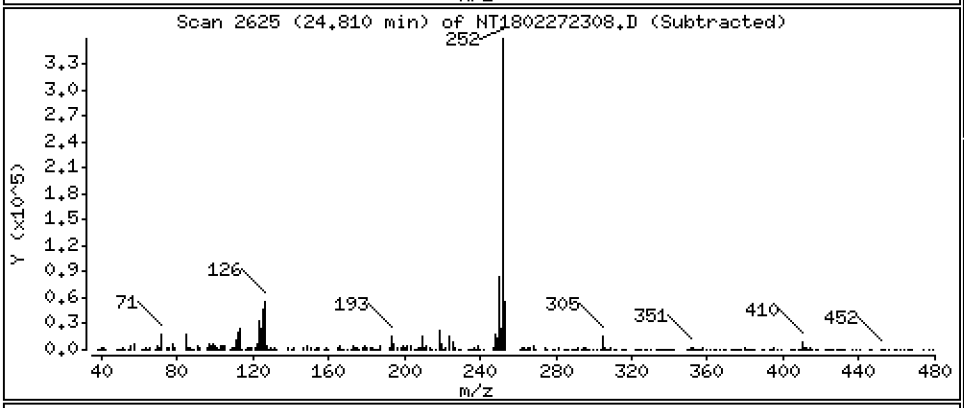
Column diameter: 0.25

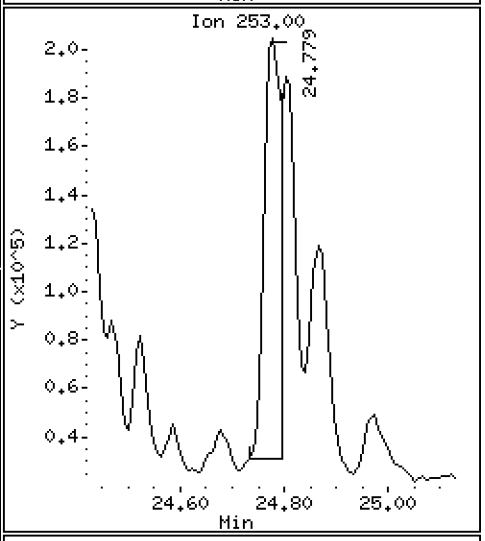
75 Benzo(k)fluoranthene

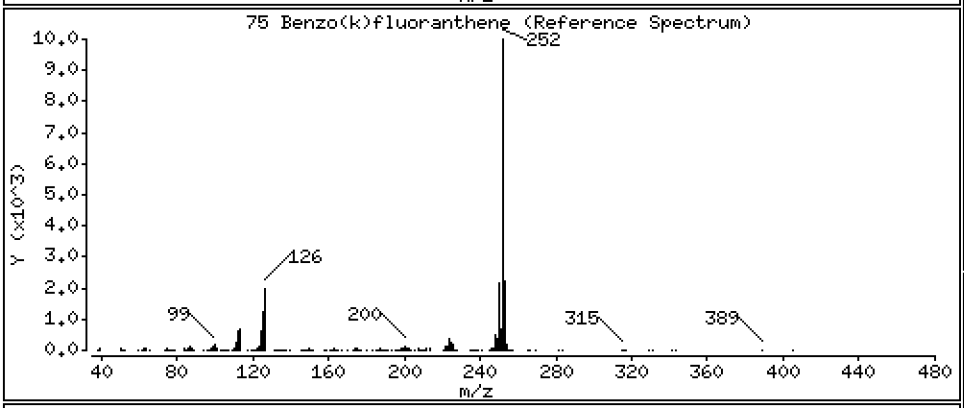
Concentration: 3.436 ug/mL

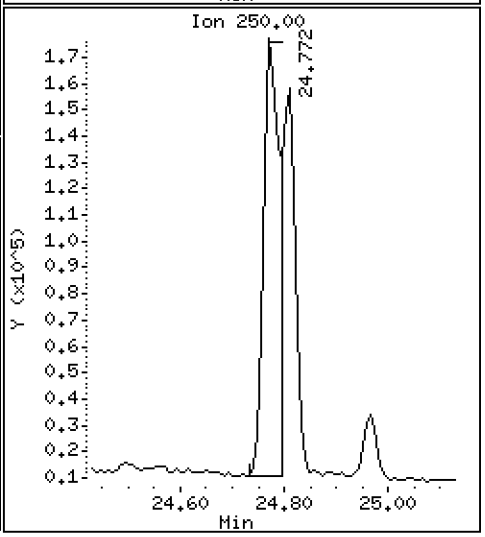


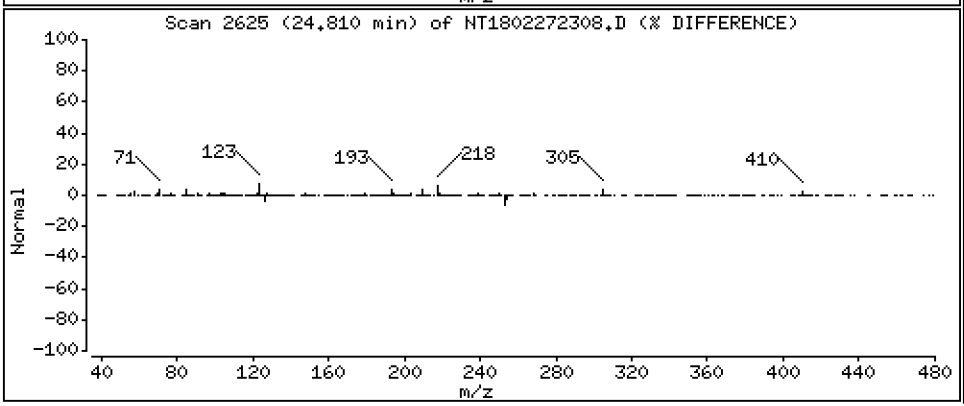












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

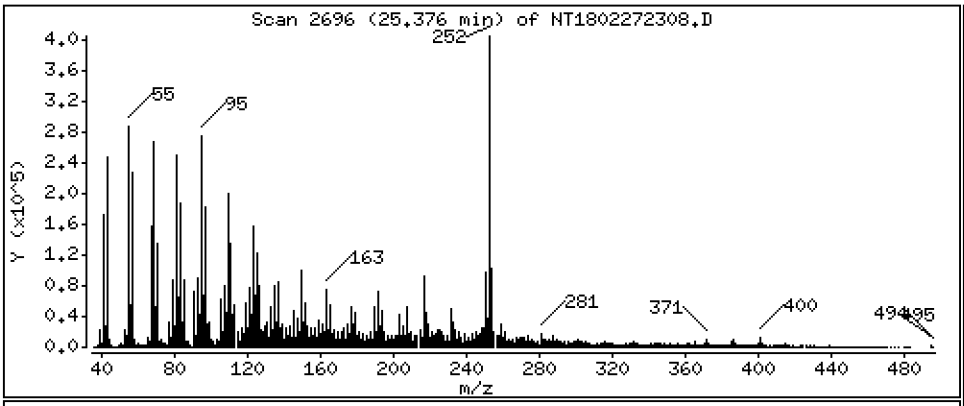
Operator: VTS

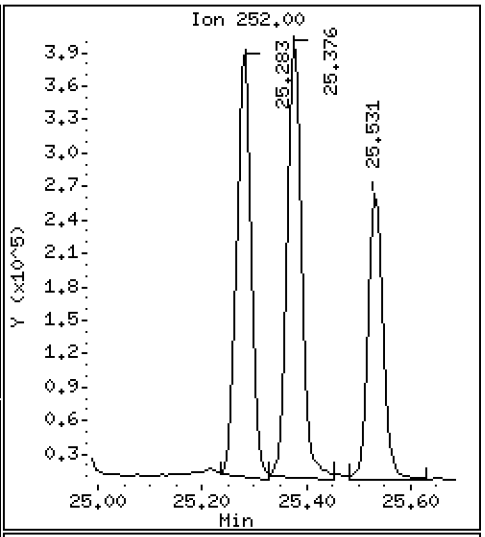
Column phase: ZB-5msi

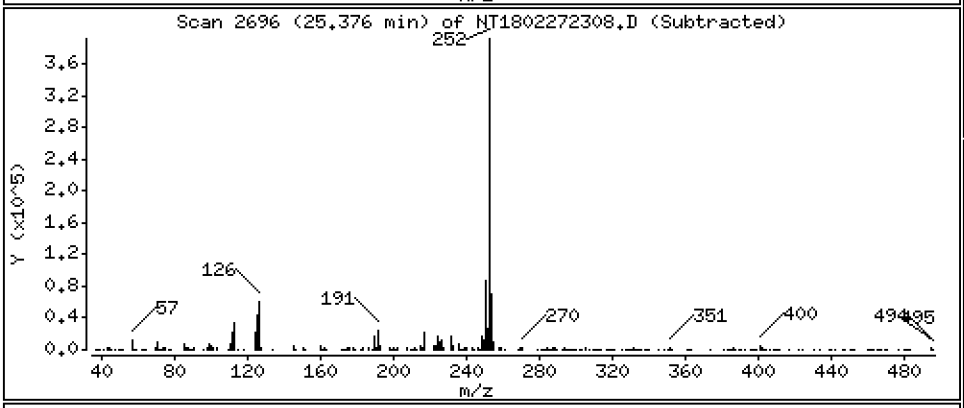
Column diameter: 0.25

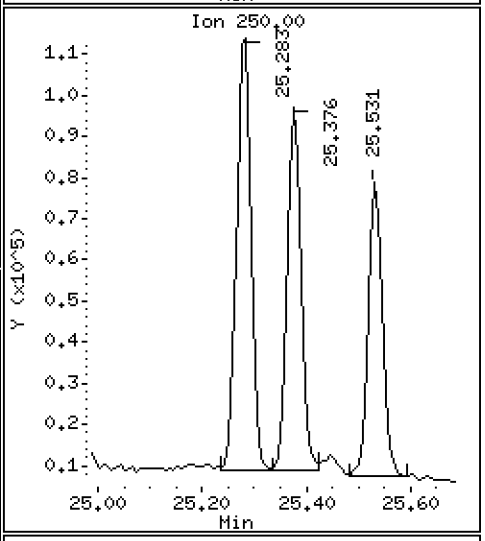
76 Benzo(a)pyrene

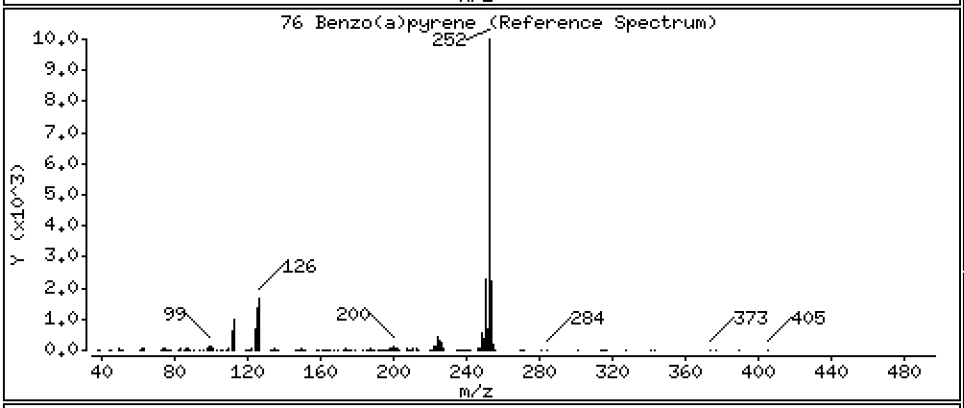
Concentration: 2.720 ug/mL

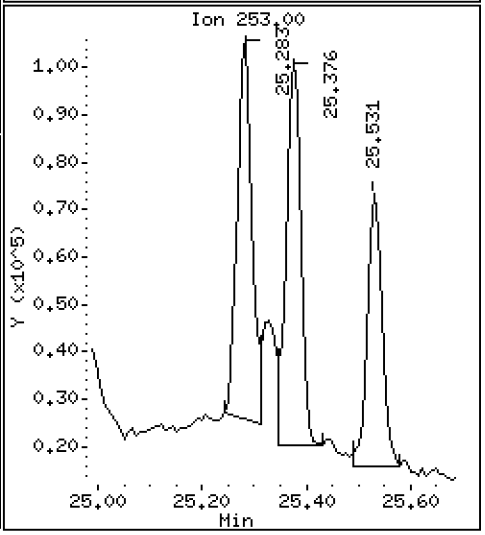


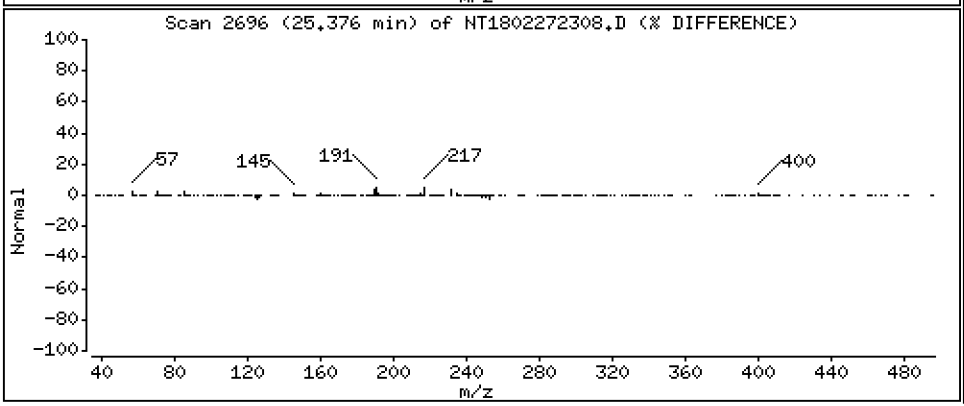












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272308.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

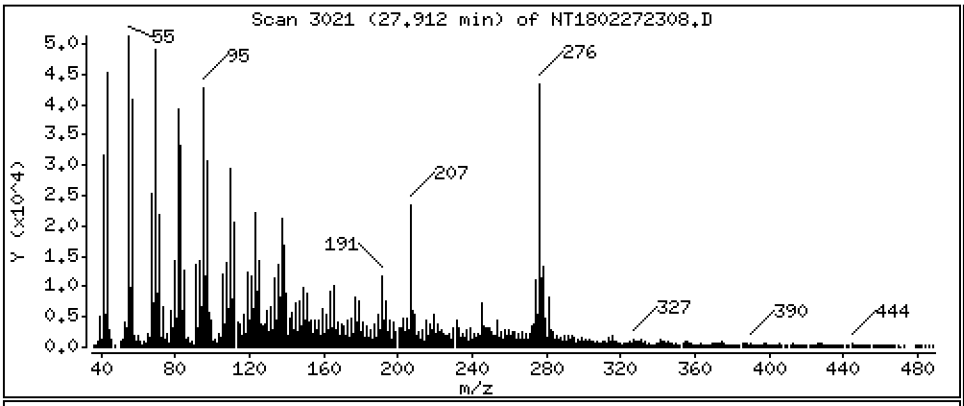
Operator: VTS

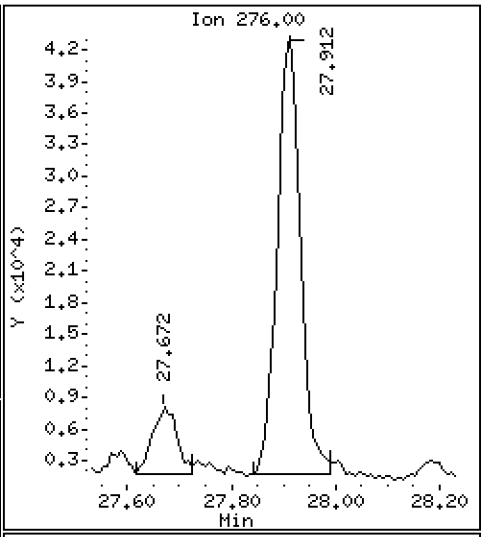
Column phase: ZB-5msi

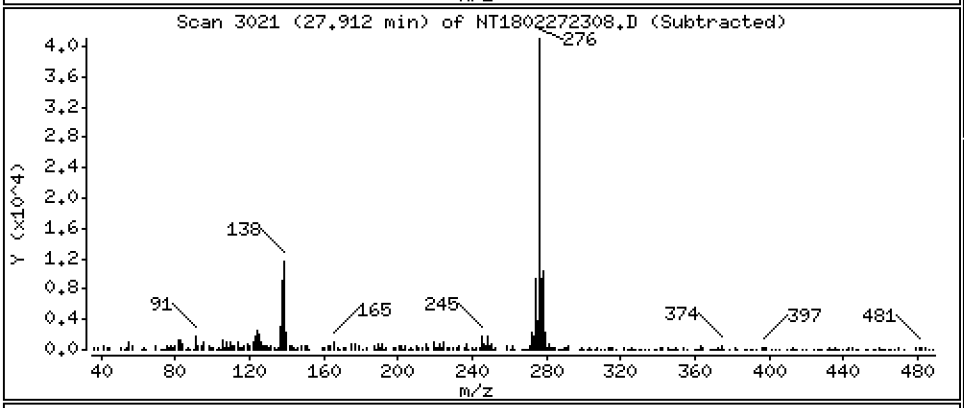
Column diameter: 0.25

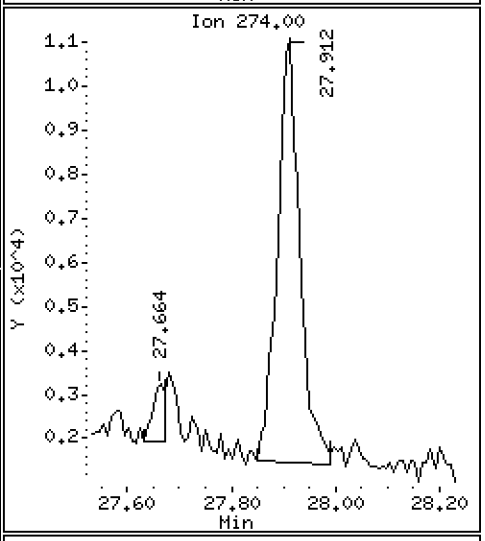
78 Indeno(1,2,3-cd)pyrene

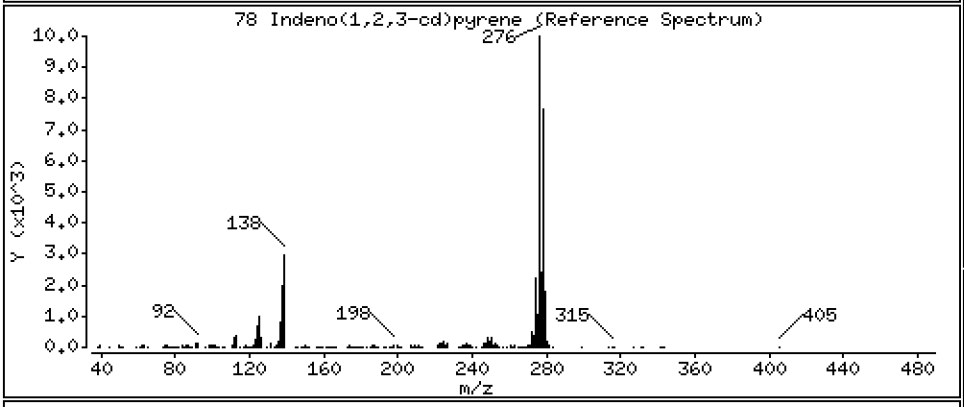
Concentration: 0.3596 ug/mL

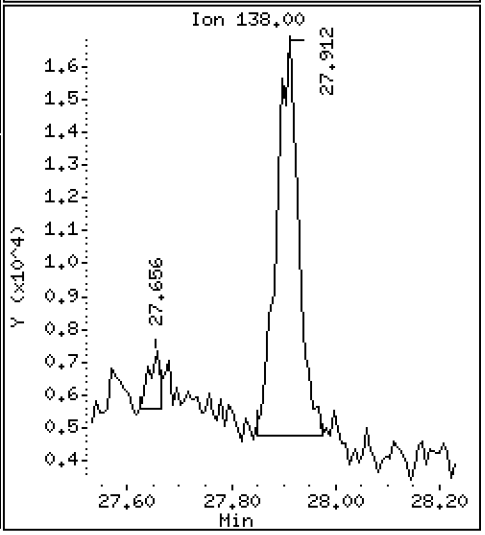


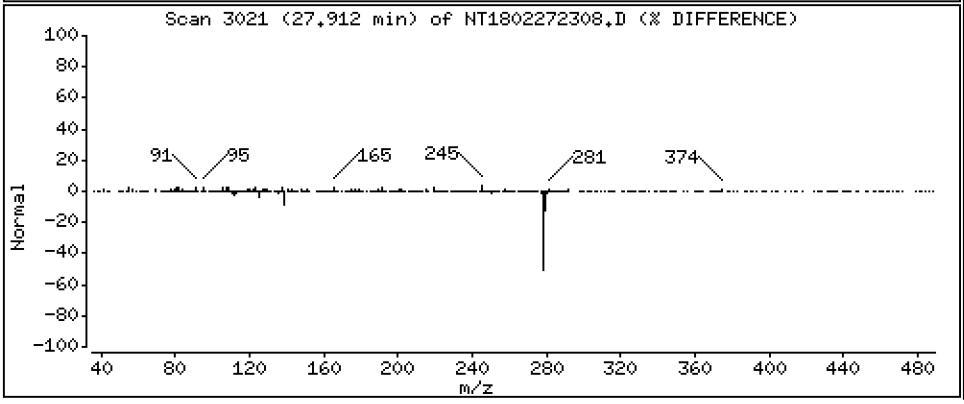












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

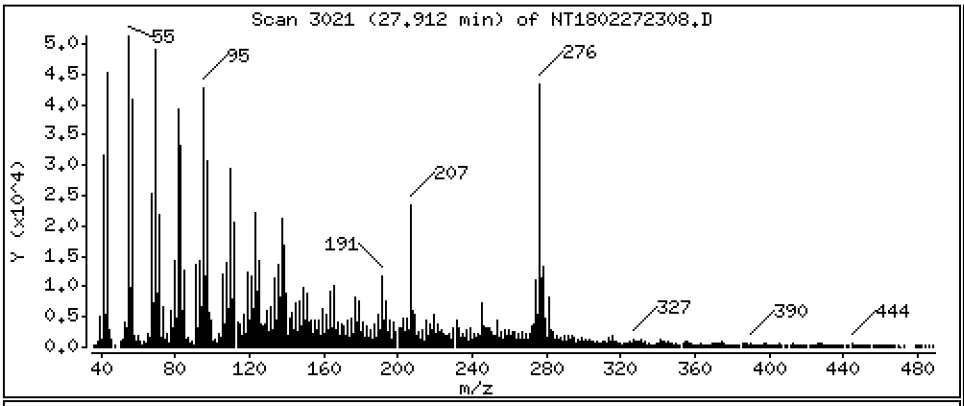
Operator: VTS

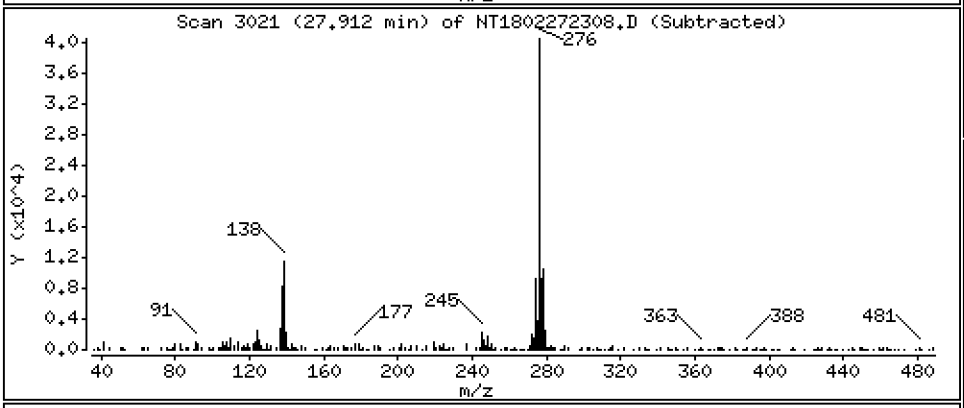
Column phase: ZB-5msi

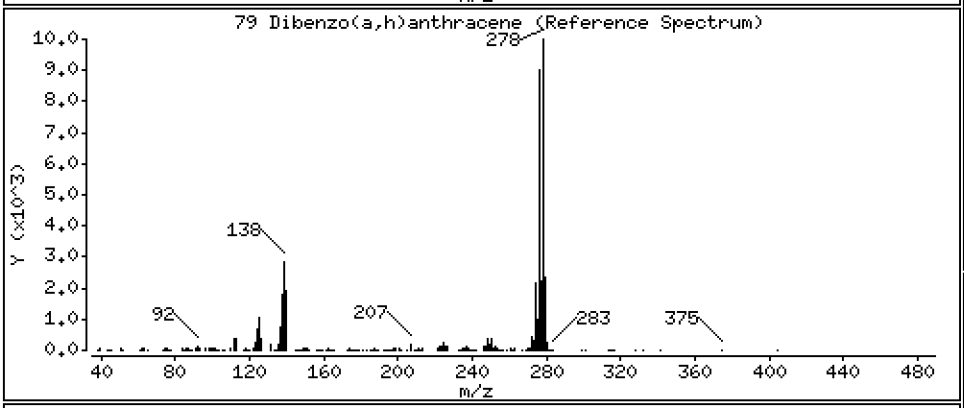
Column diameter: 0.25

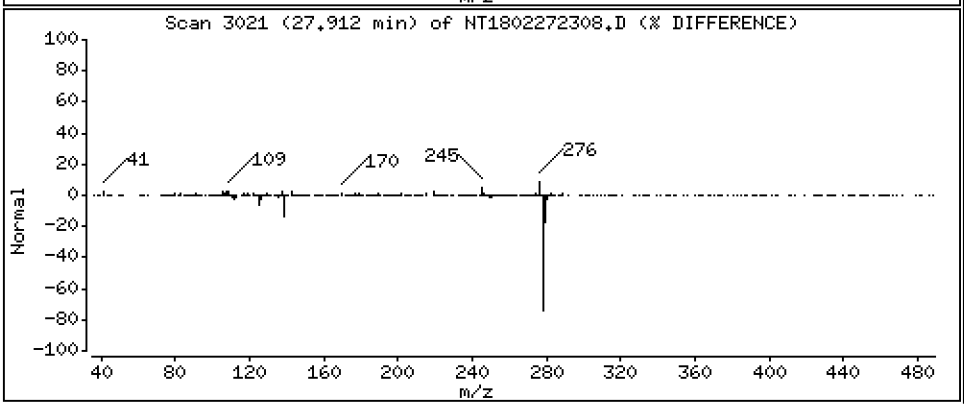
79 Dibenzo(a,h)anthracene

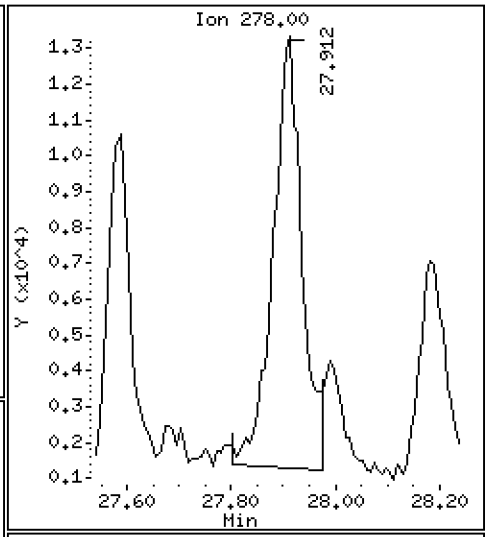
Concentration: 0.1535 ug/mL

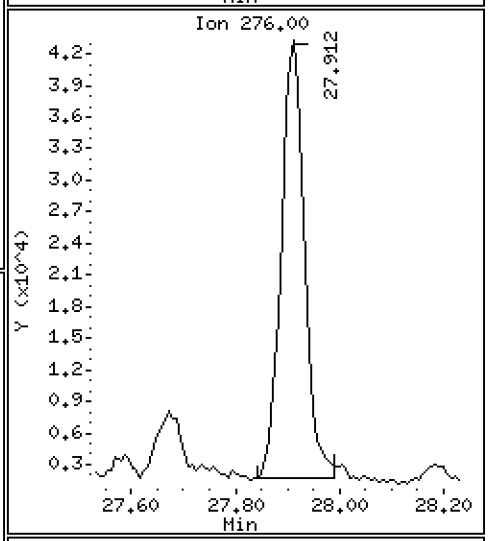


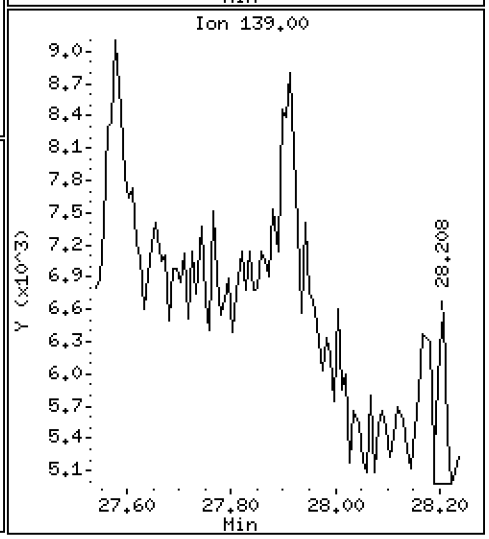












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

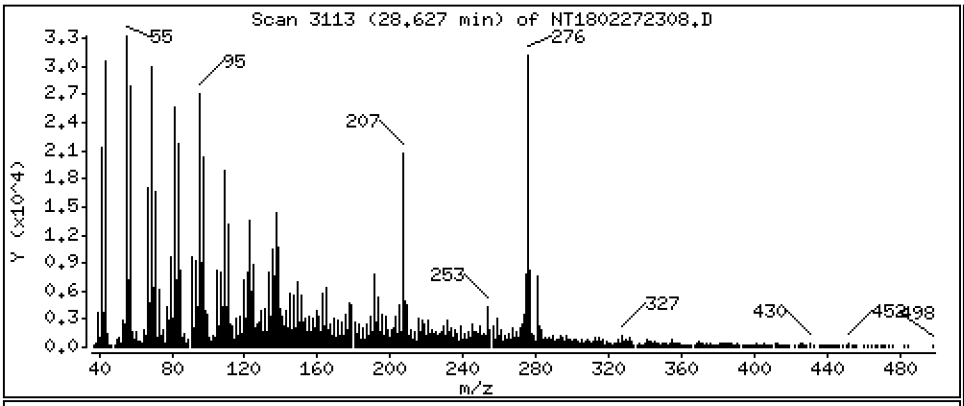
Operator: VTS

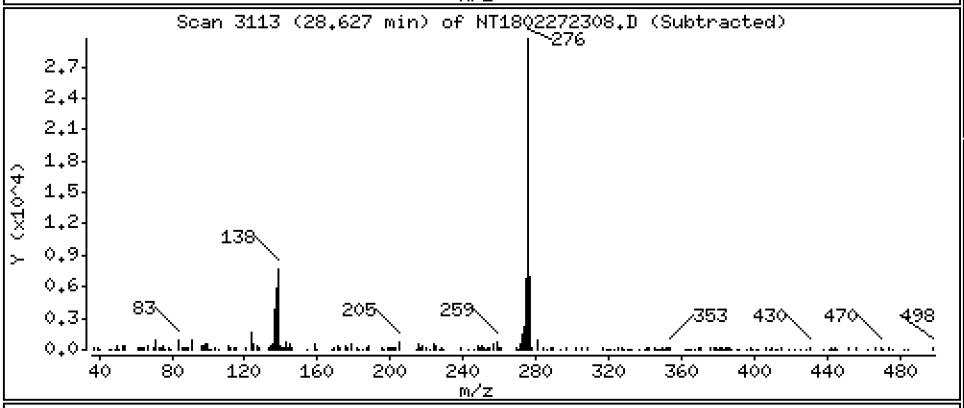
Column phase: ZB-5msi

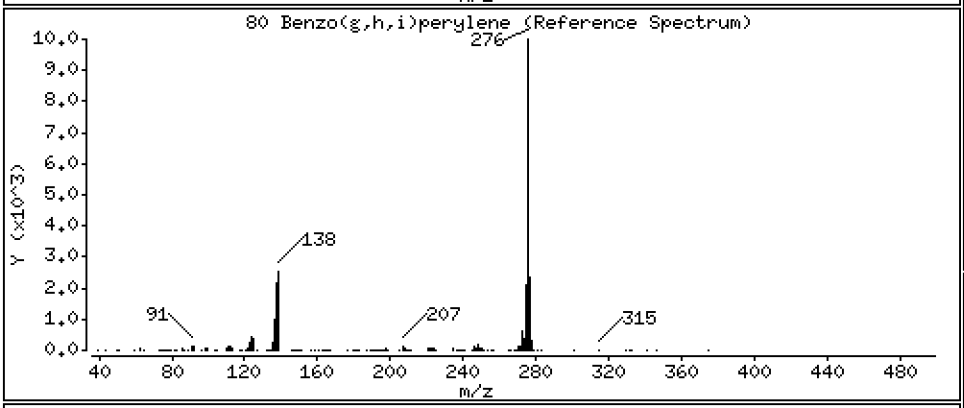
Column diameter: 0.25

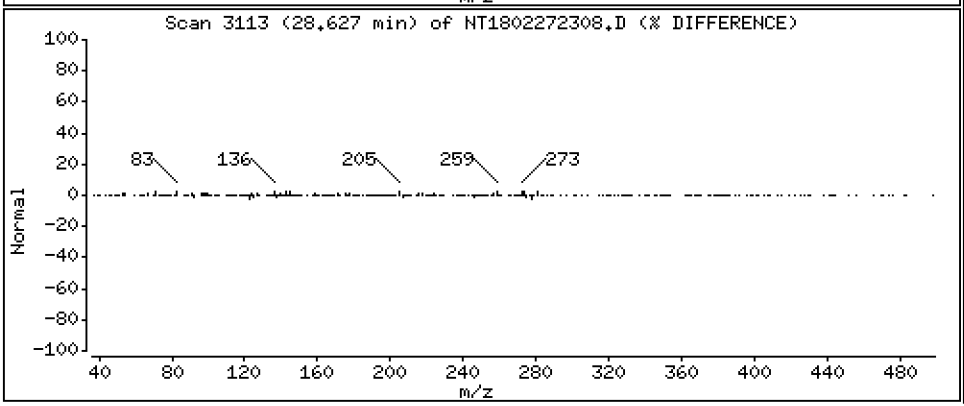
80 Benzo(g,h,i)perylene

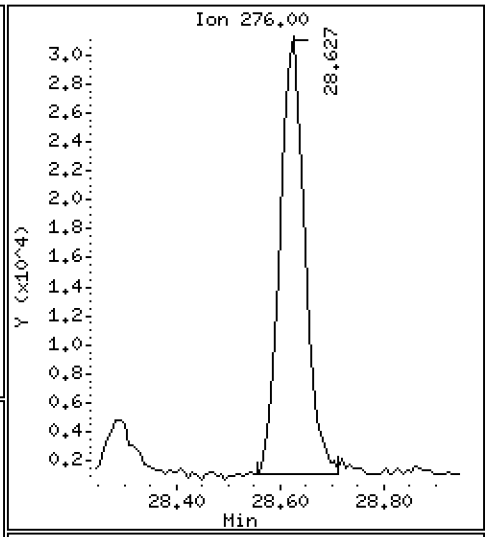
Concentration: 0.3487 ug/mL

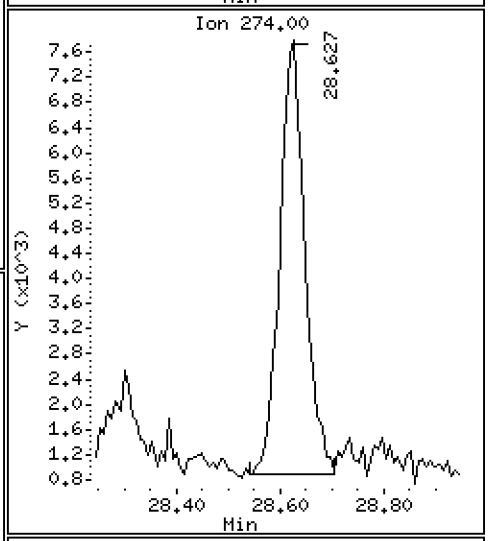


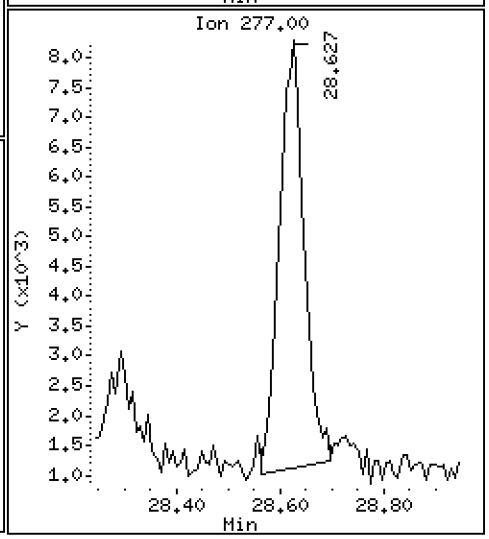












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

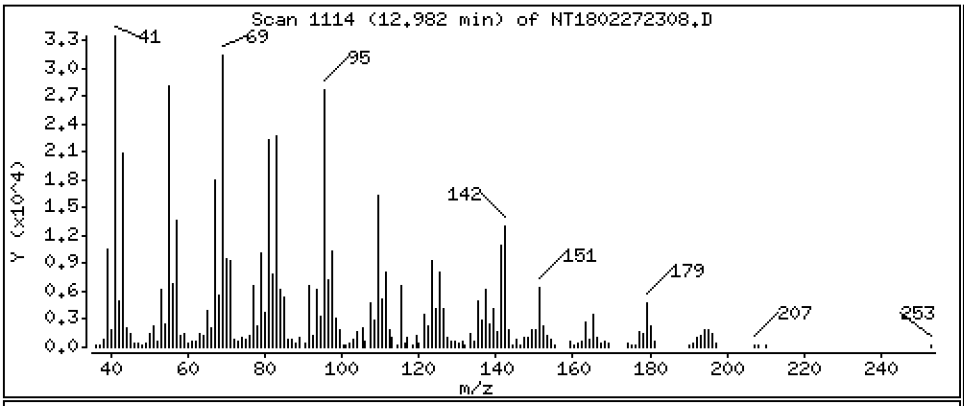
Operator: VTS

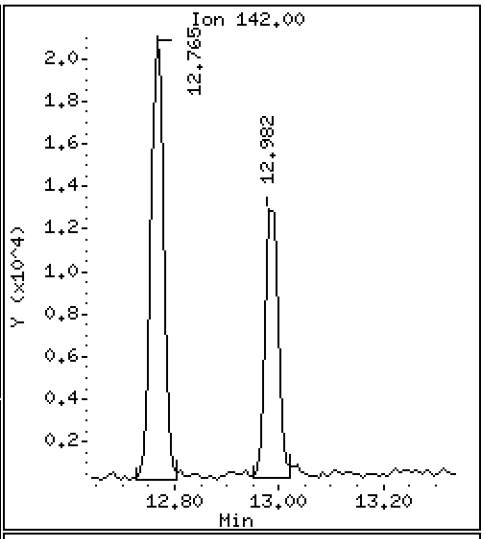
Column phase: ZB-5msi

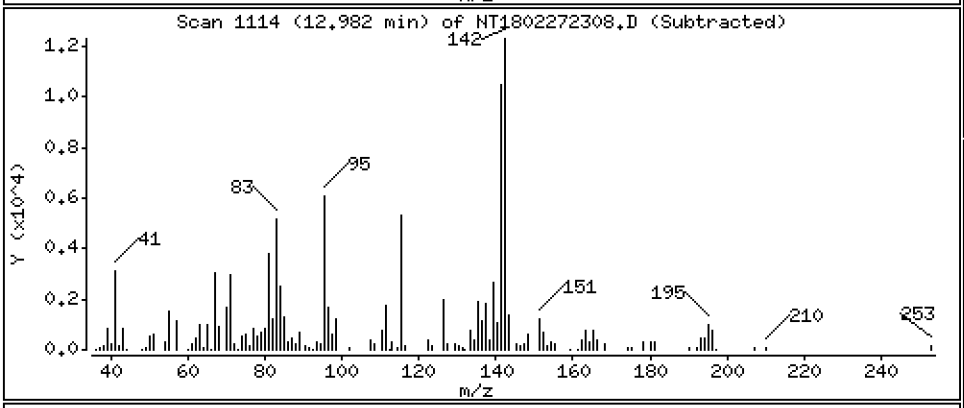
Column diameter: 0.25

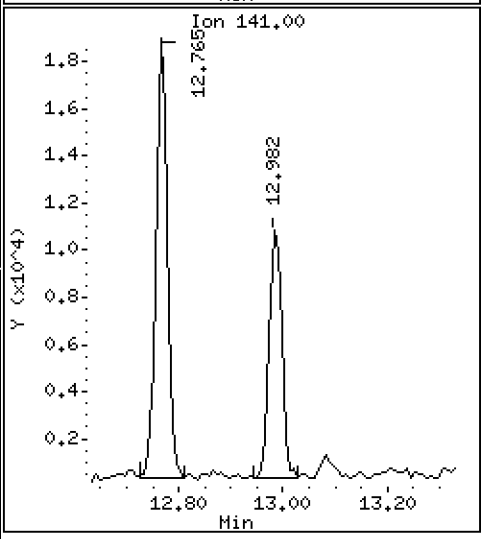
105 1-methylnaphthalene

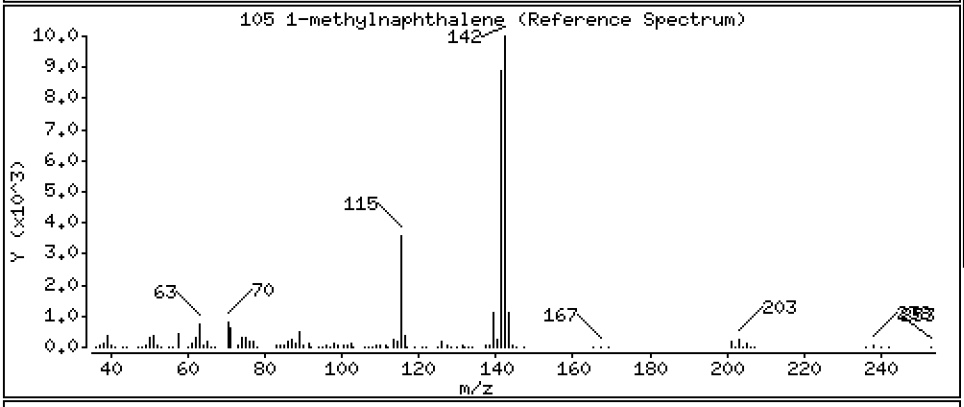
Concentration: 0.1169 ug/mL

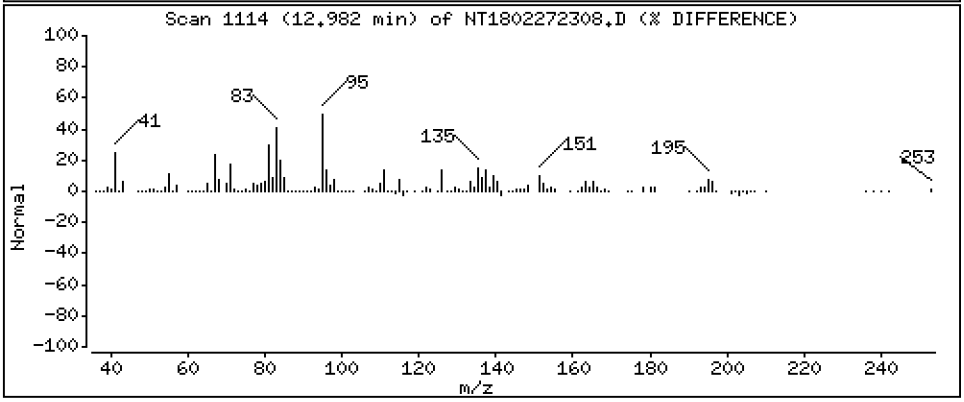












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

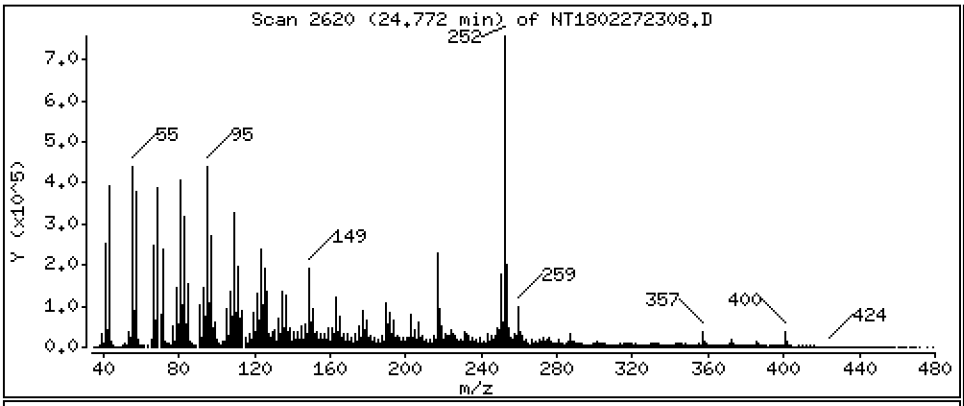
Operator: VTS

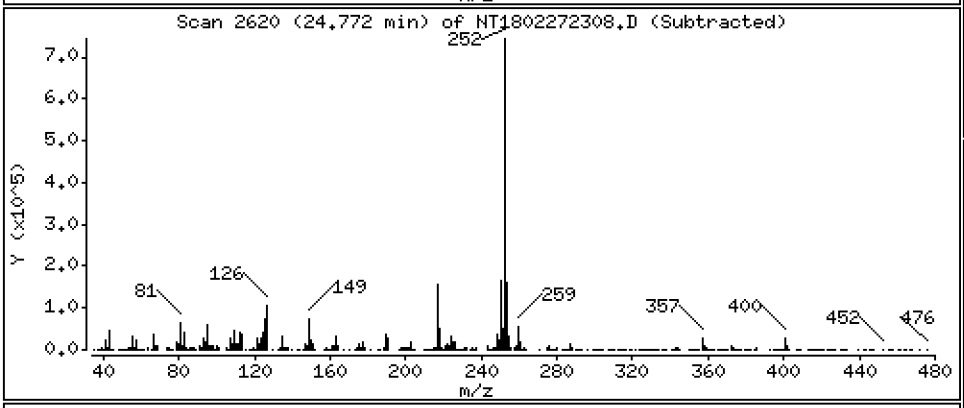
Column phase: ZB-5msi

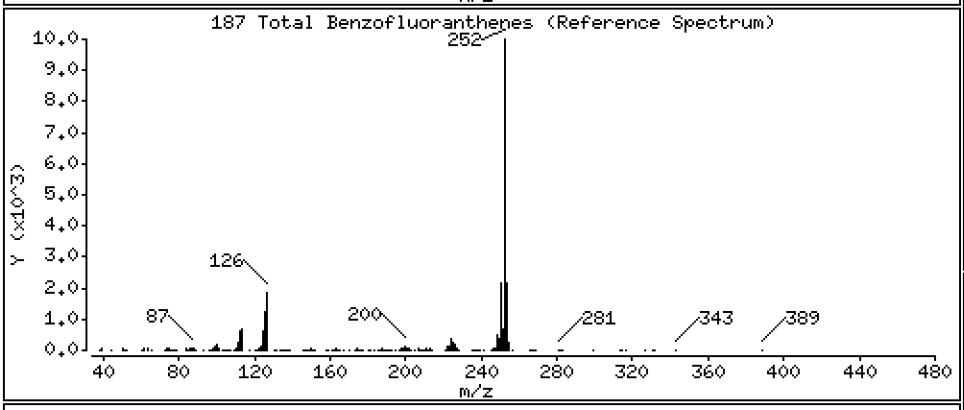
Column diameter: 0.25

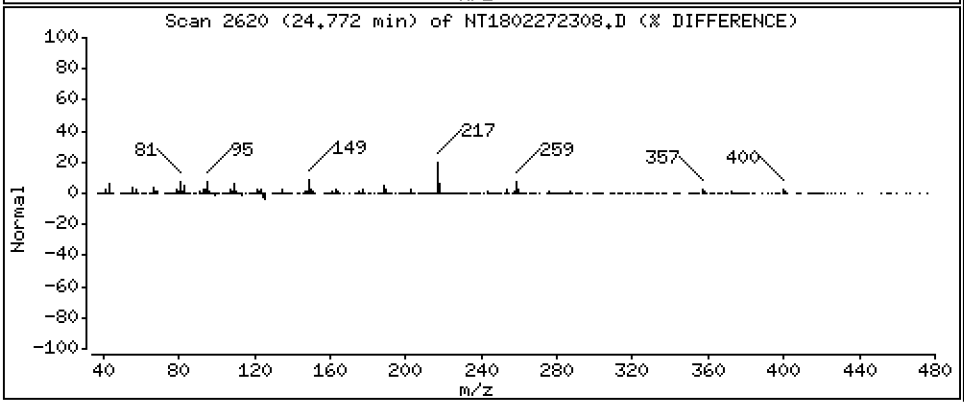
187 Total Benzofluoranthenes

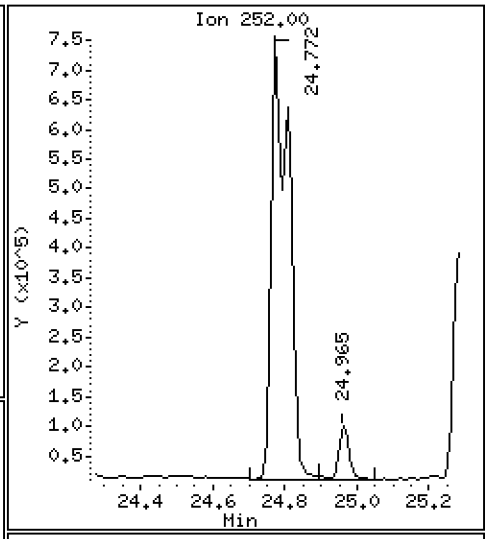
Concentration: 7.888 ug/mL

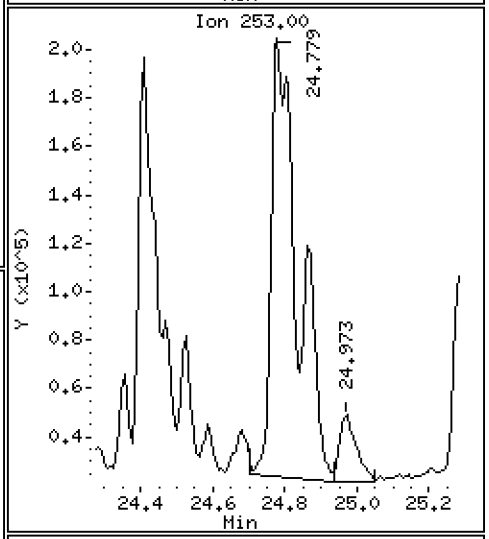


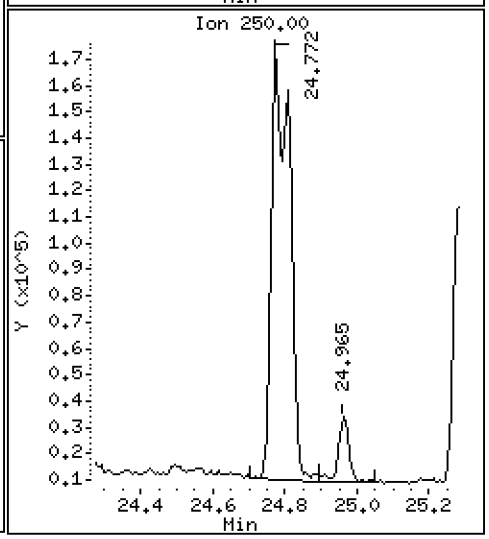












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230227.b\NT1802272308.D
Lab Smp Id: 23A0134-13
Inj Date : 27-FEB-2023 21:51
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-13
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230227.b\ABN.m
Meth Date : 24-Mar-2023 10:19 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.743	6.728	(0.758)	428429	5.16964	5.170
$	2 Phenol-d5	99	8.288	8.288	(0.932)	560479	5.23304	5.233
	3 Phenol	94	8.311	8.304	(0.935)	19712	0.17689	0.1769
$	5 2-Chlorophenol-d4	132	8.543	8.543	(0.961)	509411	5.46576	5.466
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.891	8.891	(1.000)	242907	4.00000	
	9 1,4-Dichlorobenzene	146	8.922	8.922	(1.003)	5881	0.05701	0.05701
$	10 1,2-Dichlorobenzene-d4	152	9.248	9.248	(1.040)	202227	3.06072	3.061
	12 1,2-Dichlorobenzene	146	9.271	9.271	(1.043)	2781	0.02778	0.02778
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	9.411	9.396	(1.058)	4345	0.05041	0.05041
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.667	9.667	(1.087)	8735	0.09723	0.09723
$	18 Nitrobenzene-d5	82	9.970	9.970	(0.879)	340882	3.35902	3.359
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.701	10.693	(0.944)	3701	0.04048	0.04048
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.342	11.342	(1.000)	952232	4.00000	
	28 Naphthalene	128	11.380	11.388	(1.003)	65755	0.22464	0.2246
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.765	12.765	(1.125)	33765	0.16975	0.1698
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.546	13.546	(0.908)	769766	3.28760	3.288
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	14.615	14.607	(0.979)	40072	0.13007	0.1301
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	14.924	14.924	(1.000)	555342	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	14.986	14.986	(1.004)	45393	0.23281	0.2328
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.310	15.310	(1.026)	50781	0.17994	0.1799
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	15.883	15.898	(1.064)	71188	0.34575	0.3457
	49 Fluorene	166	16.014	16.014	(1.073)	47953	0.21204	0.2120
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	16.546	16.546	(1.109)	185580	6.43986	6.440
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	17.937	17.929	(1.000)	1209774	4.00000	
	60 Phenanthrene	178	17.983	17.975	(1.003)	476664	1.25266	1.253
	61 Anthracene	178	18.076	18.068	(1.008)	272163	0.75054	0.7505
	62 Carbazole	167	18.409	18.401	(1.026)	108272	0.32584	0.3258
	63 Di-n-butylphthalate	149	19.229	19.213	(1.072)	76783	0.20876	0.2088
	64 Fluoranthene	202	20.413	20.358	(0.888)	1416788	2.81438	2.814
	65 Pyrene	202	20.823	20.776	(0.906)	5722479	10.6584	10.66
$	66 Terphenyl-d14	244	21.101	21.070	(0.918)	1592017	3.69700	3.697
	67 Butylbenzylphthalate	149	22.015	21.999	(0.958)	117966	0.57865	0.5786
	68 Benzo(a)anthracene	228	22.960	22.929	(0.999)	1420714	2.73887	2.739
*	69 Chrysene-d12	240	22.991	22.960	(1.000)	1436831	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.029	23.006	(1.002)	1821304	3.37657	3.377
	72 bis(2-Ethylhexyl)phthalate	149	23.045	23.029	(0.959)	1285839	4.69400	4.694
*	134 Di-n-octylphthalate-d4	153	24.020	23.997	(1.000)	1908006	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	24.771	24.740	(0.972)	1540161	4.85587	4.856
	75 Benzo(k)fluoranthene	252	24.810	24.779	(0.974)	1235137	3.43612	3.436(M)
	76 Benzo(a)pyrene	252	25.375	25.336	(0.996)	799879	2.72038	2.720
*	77 Perylene-d12	264	25.484	25.445	(1.000)	972187	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.912	27.881	(1.095)	132742	0.35962	0.3596
	79 Dibenzo(a,h)anthracene	278	27.912	27.889	(1.095)	47266	0.15354	0.1535(M)
	80 Benzo(g,h,i)perylene	276	28.626	28.595	(1.123)	103197	0.34873	0.3487
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	142	12.981	12.989	(1.145)	21057	0.11695	0.1169
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.771	24.779	(0.972)	2529388	7.88760	7.888
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272308.D
Lab Smp Id: 23A0134-13
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230227.b\ABN.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:03
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	269759	134880	539518	242907	-9.95
27 Naphthalene-d8	1037039	518520	2074078	952232	-8.18
42 Acenaphthene-d10	556159	278080	1112318	555342	-0.15
59 Phenanthrene-d10	1021294	510647	2042588	1209774	18.46
69 Chrysene-d12	922264	461132	1844528	1436831	55.79
134 Di-n-octylphthala	1611284	805642	3222568	1908006	18.42
77 Perylene-d12	948357	474179	1896714	972187	2.51

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.89	8.39	9.39	8.89	0.00
27 Naphthalene-d8	11.34	10.84	11.84	11.34	0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.92	0.00
59 Phenanthrene-d10	17.93	17.43	18.43	17.94	0.04
69 Chrysene-d12	22.96	22.46	23.46	22.99	0.13
134 Di-n-octylphthala	24.00	23.50	24.50	24.02	0.10
77 Perylene-d12	25.45	24.95	25.95	25.48	0.15

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272308.D

Lab ID: 23A0134-13
nt18.i, ABN.m, 27-FEB-2023 21:51

RT	CO-ELUTION COMPOUNDS
27.912	Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene
27.912	Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

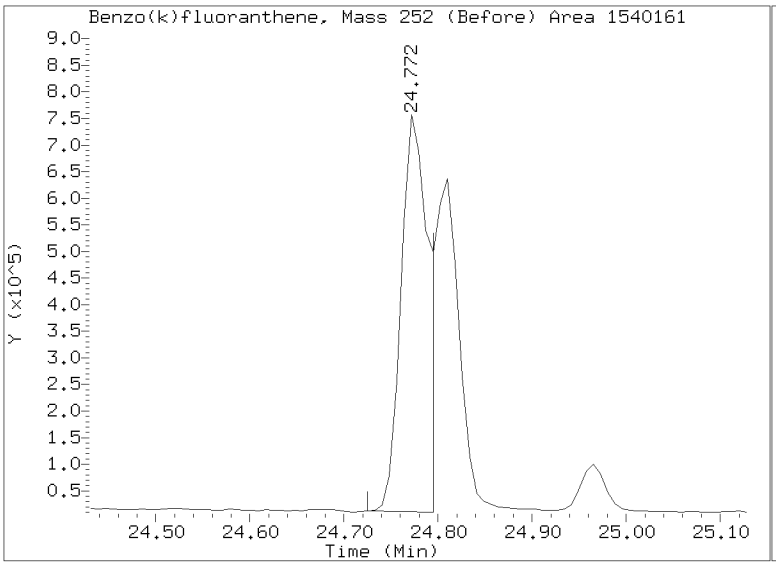
RRT check based on Ccal File: NT1802272302.D

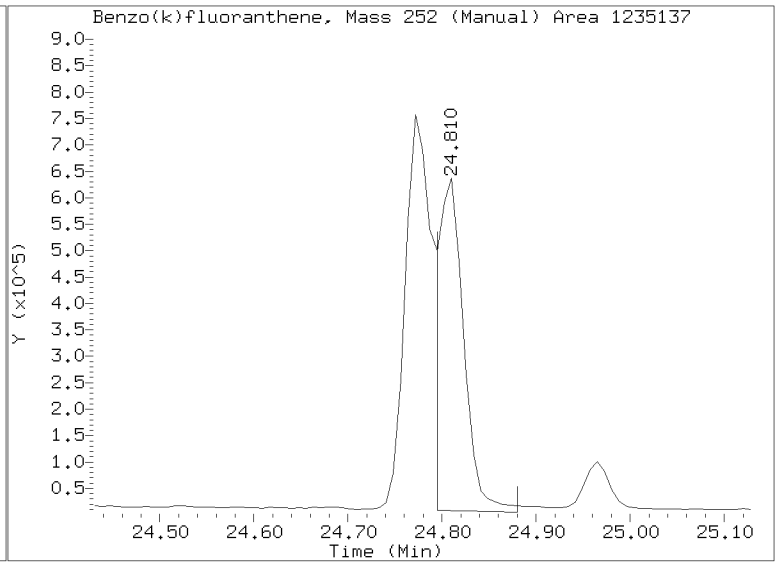
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

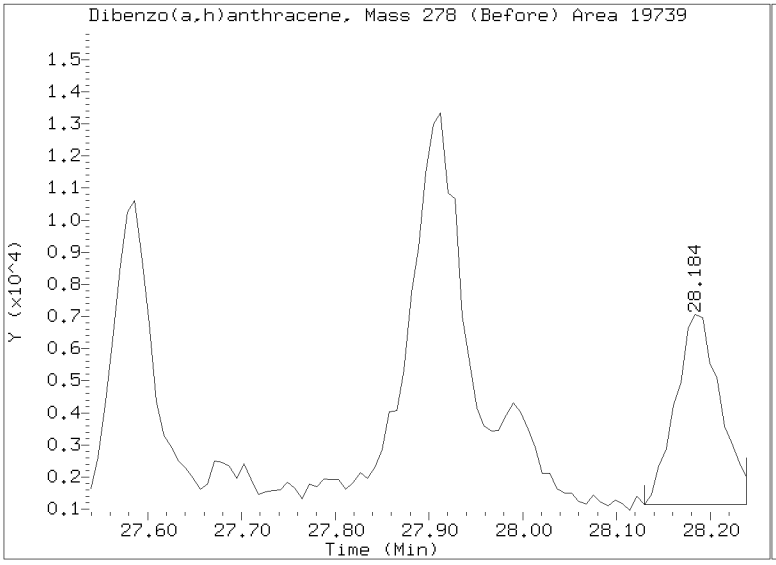
* Only compounds listed in the work order have been verified by the analyst *

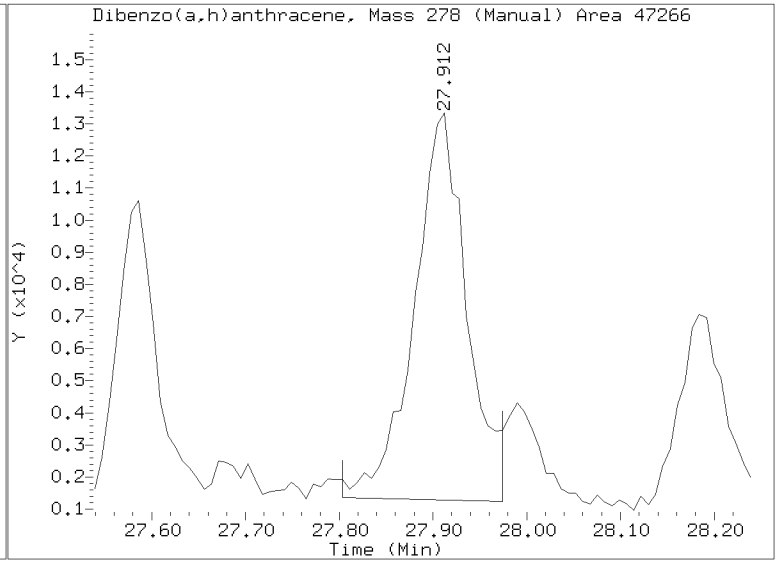
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230227.b/NT1802272308.D
Injection Date: 27-FEB-2023 21:51
Lab ID:23A0134-13 Client ID:
Report Date: 03/24/2023 10:41









APPROVED

By Deenay Dunmore at 10:44 am, Mar 24, 2023

LDW23-SC1249

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-15 C	SDG:	23A0134
Sampled:	01/06/23 13:46	Prepared:	01/19/23 13:35	File ID:	NT1802272311.D
% Solids:	50.09	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/27/23 23:53
Batch:	BLA0410	Sequence:	SLC0385	Initial/Final:	20.46 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	56.2		4.3	19.5
106-44-5	4-Methylphenol	1	19.5	U	7.2	19.5
91-20-3	Naphthalene	1	9.8	J	4.1	19.5
91-57-6	2-Methylnaphthalene	1	9.6	J	4.4	19.5
208-96-8	Acenaphthylene	1	19.5	U	6.1	19.5
131-11-3	Dimethylphthalate	1	19.5	U	4.3	19.5
83-32-9	Acenaphthene	1	5.9	J	5.1	19.5
132-64-9	Dibenzofuran	1	19.5	U	13.8	19.5
86-73-7	Fluorene	1	16.5	J	14.2	19.5
85-01-8	Phenanthrene	1	93.7		8.5	19.5
120-12-7	Anthracene	1	44.2		7.0	19.5
206-44-0	Fluoranthene	1	123		5.9	19.5
129-00-0	Pyrene	1	175		5.5	19.5
85-68-7	Butylbenzylphthalate	1	17.5	J	9.2	19.5
56-55-3	Benzo(a)anthracene	1	79.9		5.8	19.5
218-01-9	Chrysene	1	151		5.9	19.5
117-81-7	bis(2-Ethylhexyl)phthalate	1	134		5.3	48.8
	Benzofluoranthenes, Total	1	360		9.8	39.0
50-32-8	Benzo(a)pyrene	1	96.7		4.1	19.5
193-39-5	Indeno(1,2,3-cd)pyrene	1	20.1		14.3	19.5
53-70-3	Dibenzo(a,h)anthracene	1	19.5	U	16.8	19.5
191-24-2	Benzo(g,h,i)perylene	1	20.4		13.3	19.5

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	731.82	534	72.9	27 - 120	
Phenol-d5	731.82	530	72.5	29 - 120	
2-Chlorophenol-d4	731.82	550	75.2	31 - 120	
1,2-Dichlorobenzene-d4	487.88	319	65.4	32 - 120	
Nitrobenzene-d5	487.88	338	69.3	30 - 120	
2-Fluorobiphenyl	487.88	346	70.9	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1249

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-15 C	SDG:	23A0134
Sampled:	01/06/23 13:46	Prepared:	01/19/23 13:35	File ID:	NT1802272311.D
% Solids:	50.09	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/27/23 23:53
Batch:	BLA0410	Sequence:	SLC0385	Initial/Final:	20.46 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00023
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	731.82	643	87.8	24 - 134	
p-Terphenyl-d14	487.88	396	81.3	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

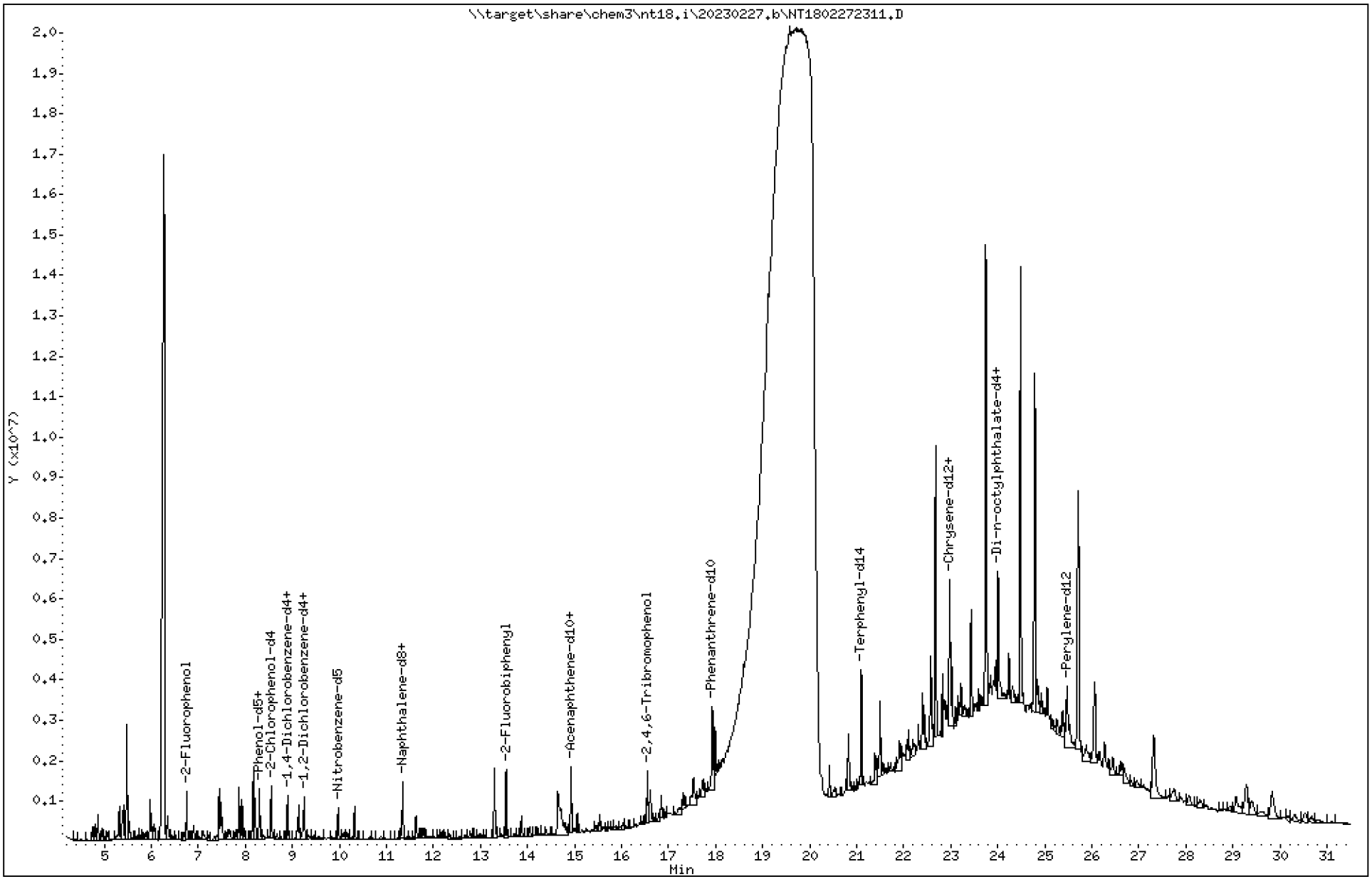
Instrument: nt18.i

Sample Info: 23A0134-15

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

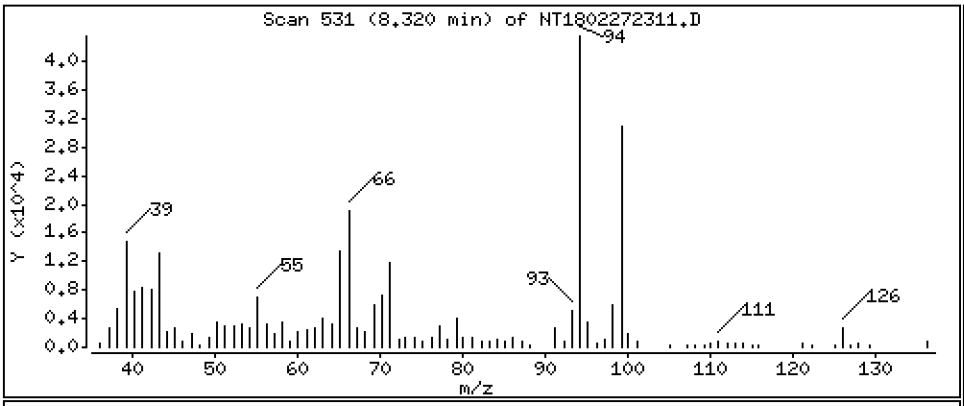
Operator: VTS

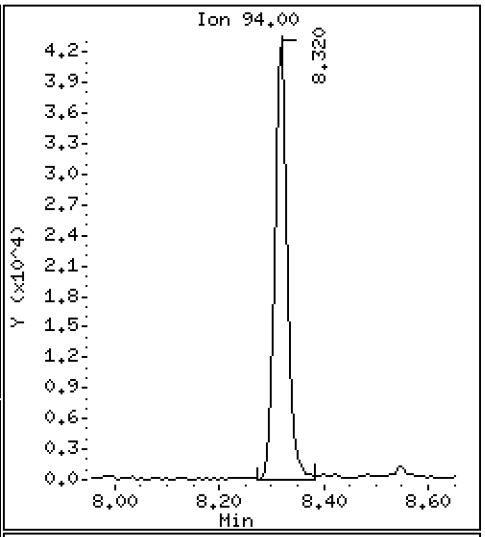
Column phase: ZB-5msi

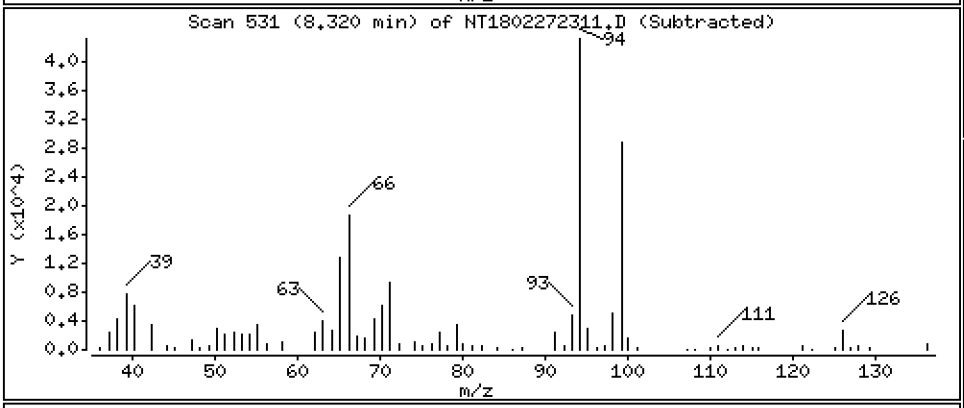
Column diameter: 0.25

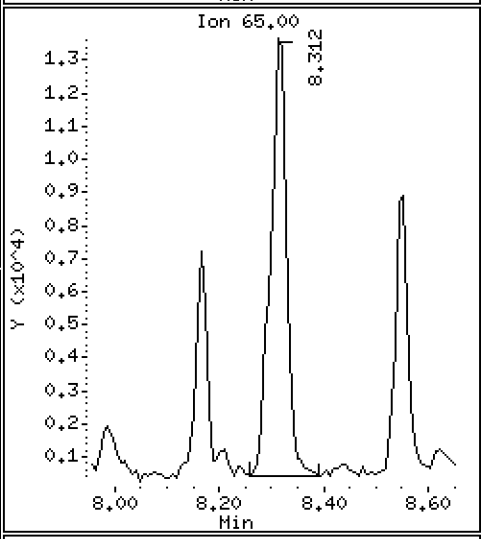
3 Phenol

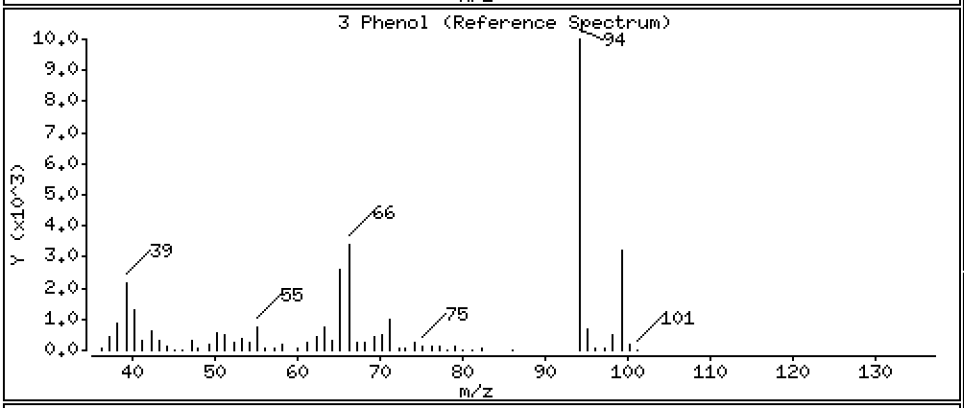
Concentration: 0.5755 ug/mL

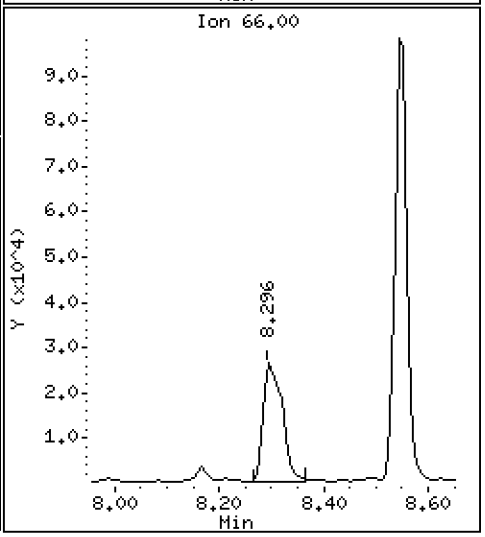


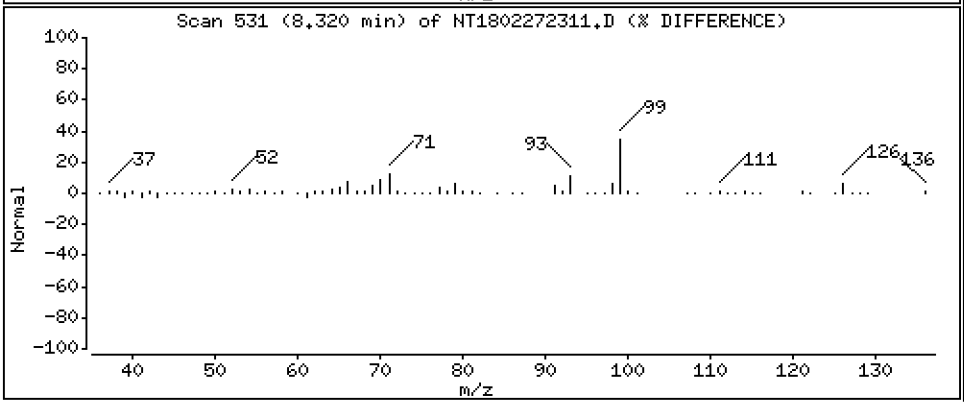












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

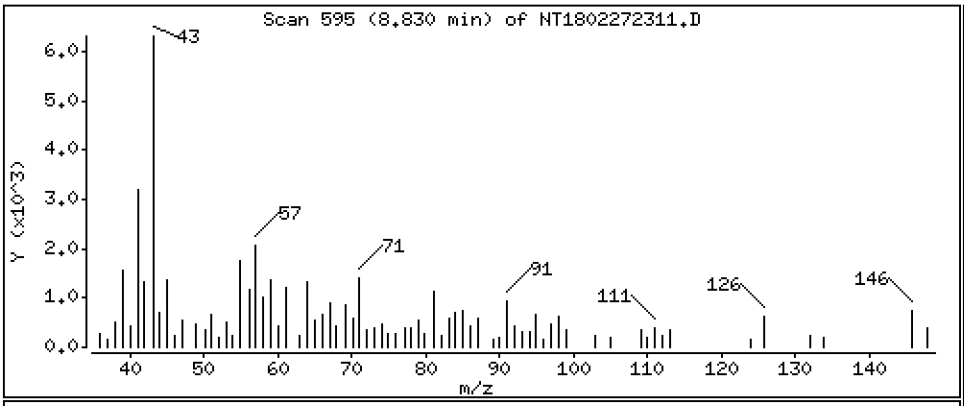
Operator: VTS

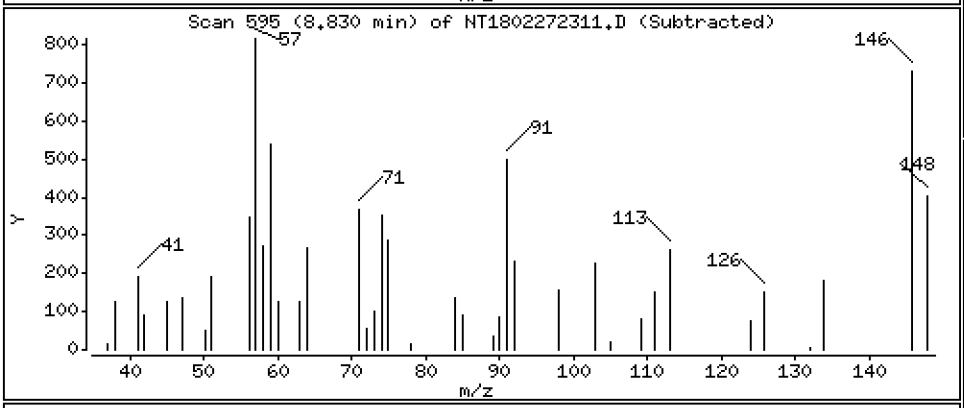
Column phase: ZB-5msi

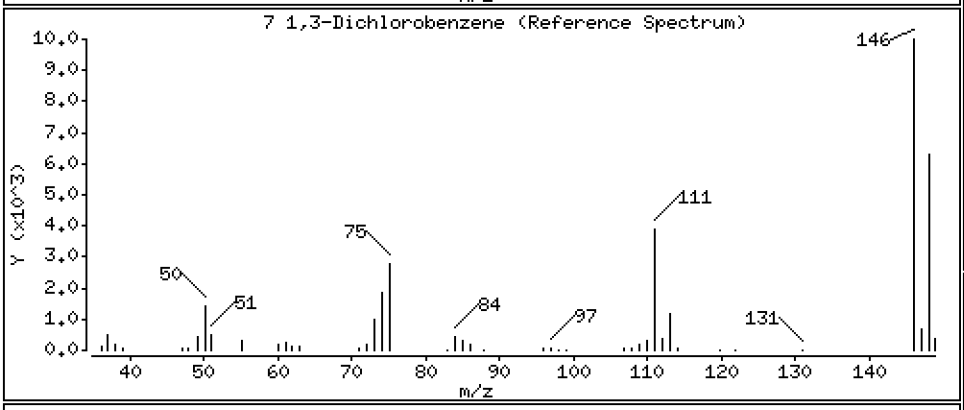
Column diameter: 0.25

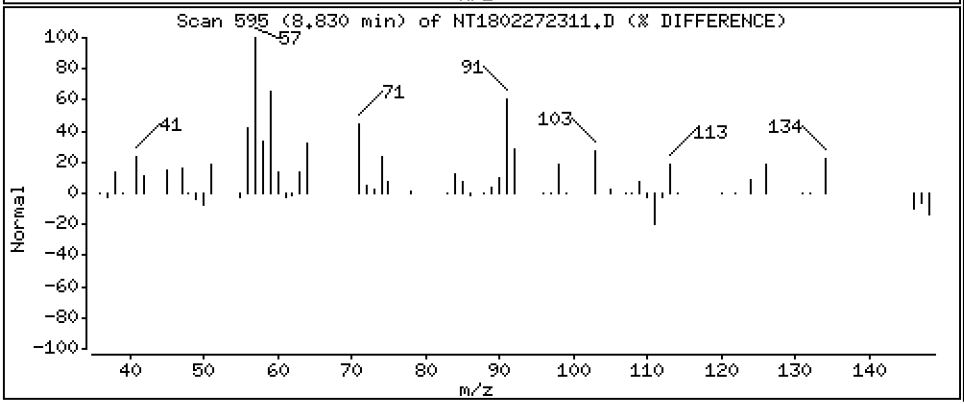
7 1,3-Dichlorobenzene

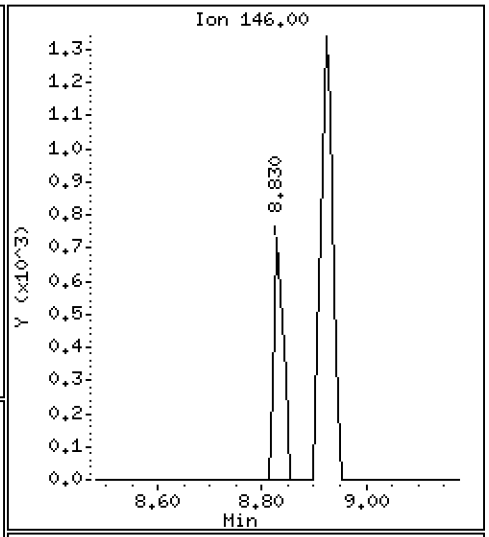
Concentration: 0.007616 ug/mL

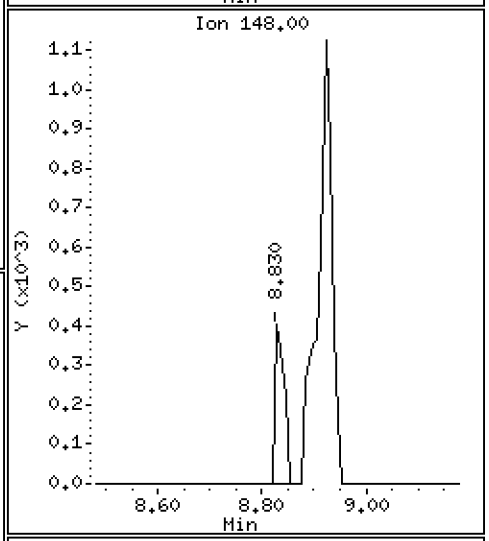


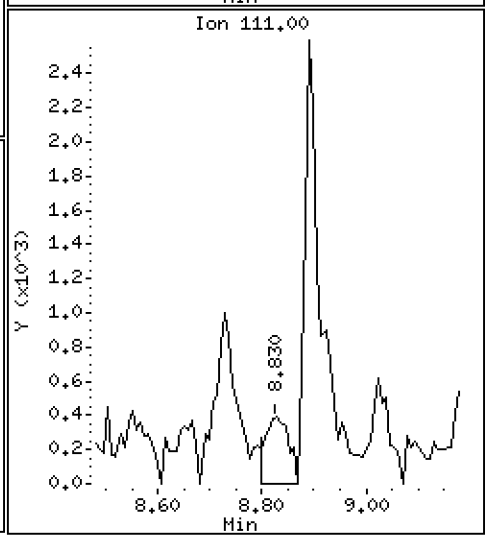












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

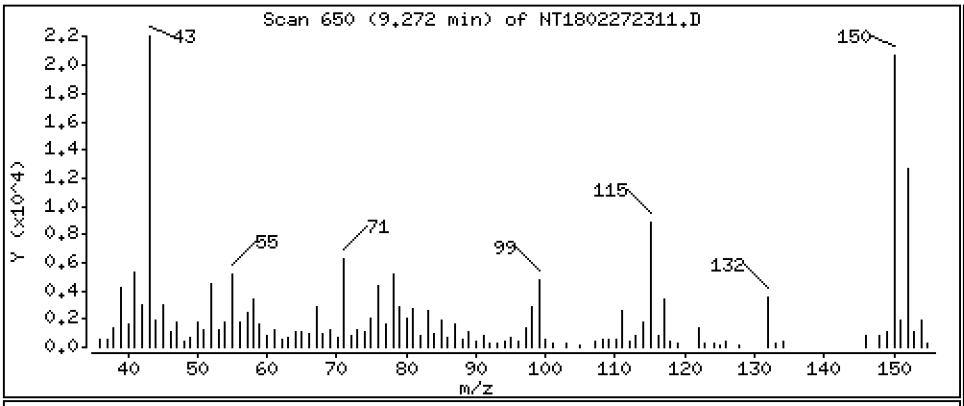
Operator: VTS

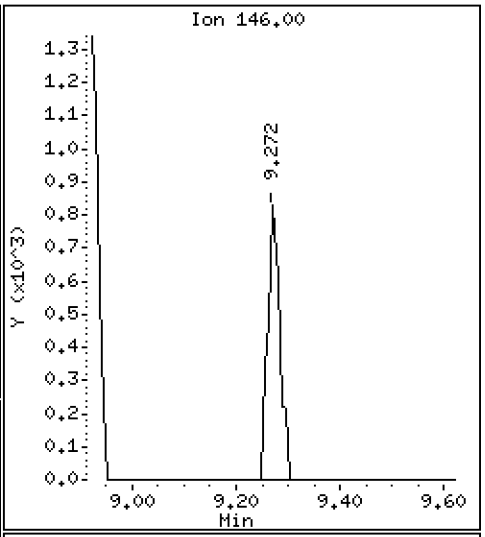
Column phase: ZB-5msi

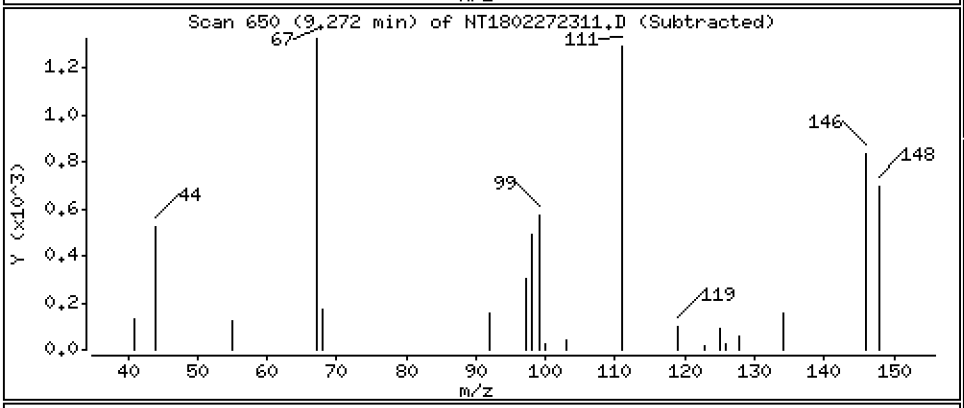
Column diameter: 0.25

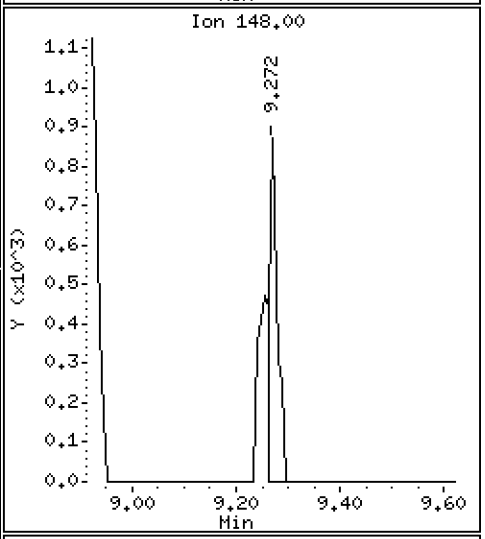
12 1,2-Dichlorobenzene

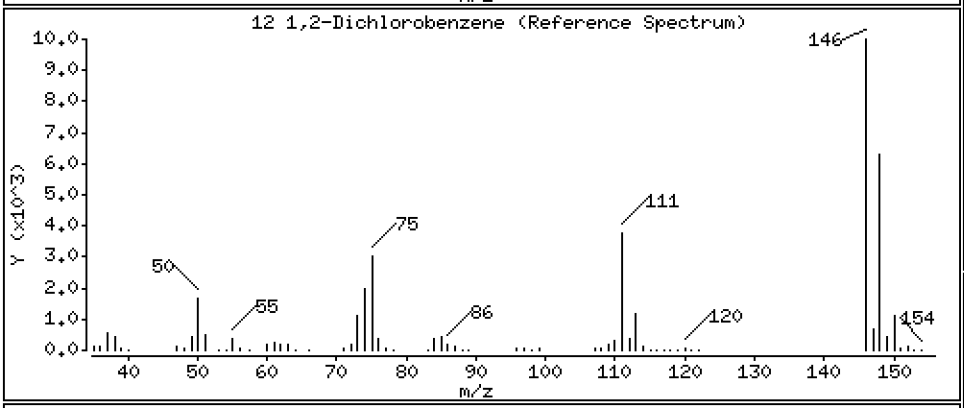
Concentration: 0.01098 ug/mL

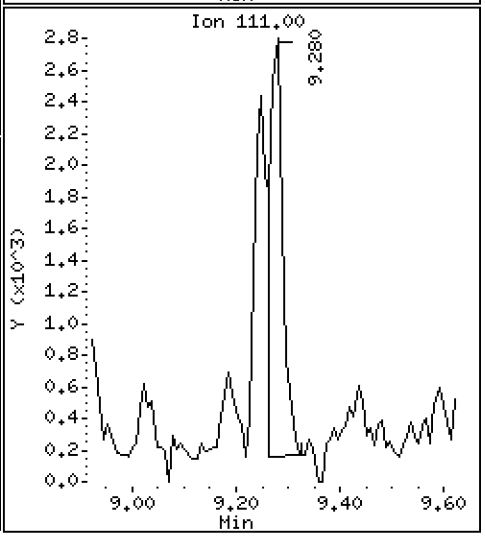


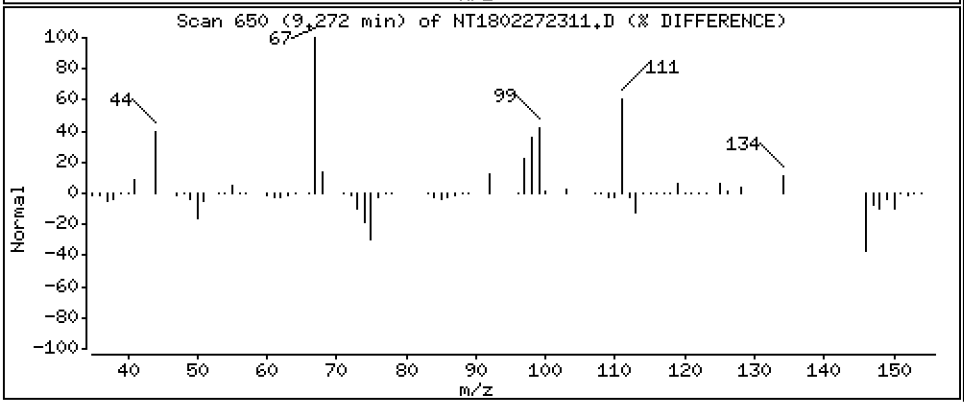












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

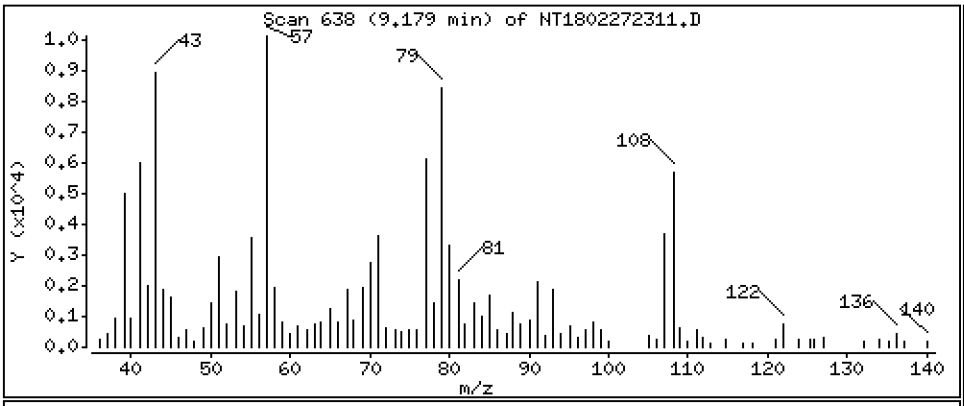
Operator: VTS

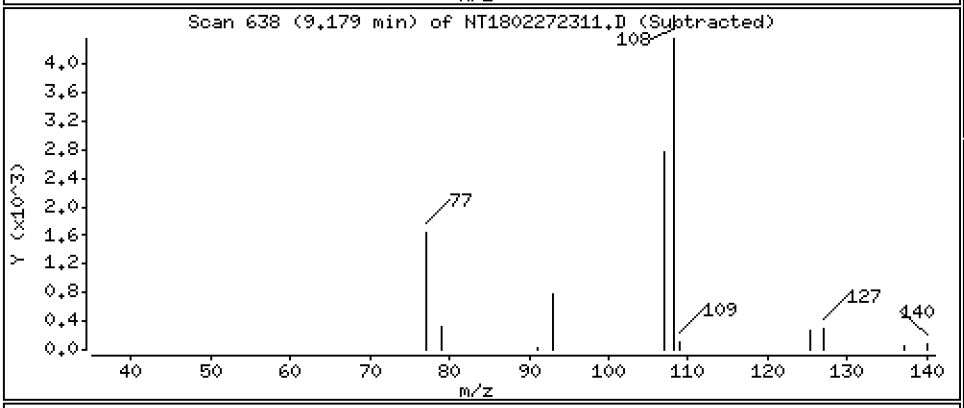
Column phase: ZB-5msi

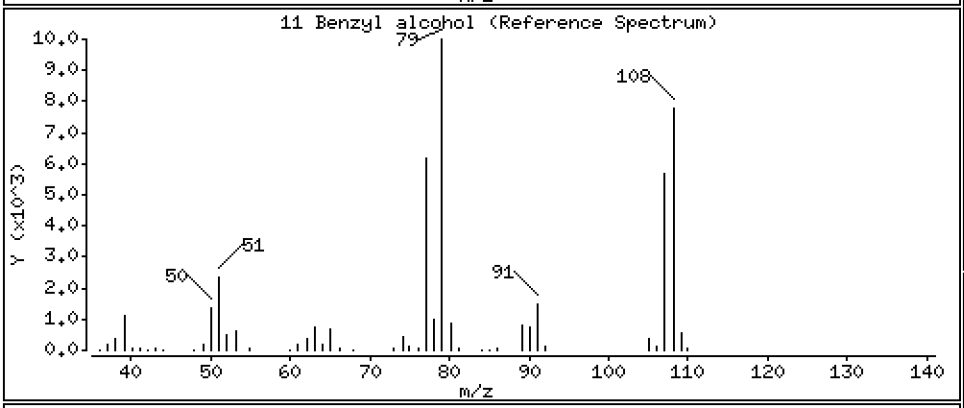
Column diameter: 0.25

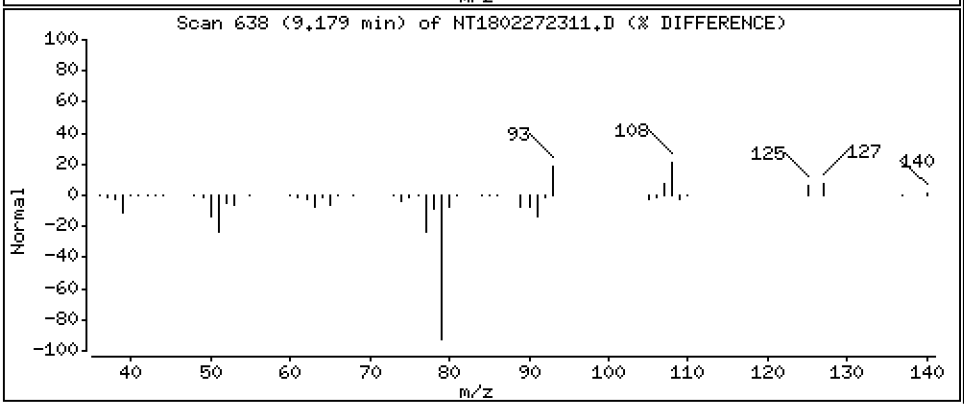
11 Benzyl alcohol

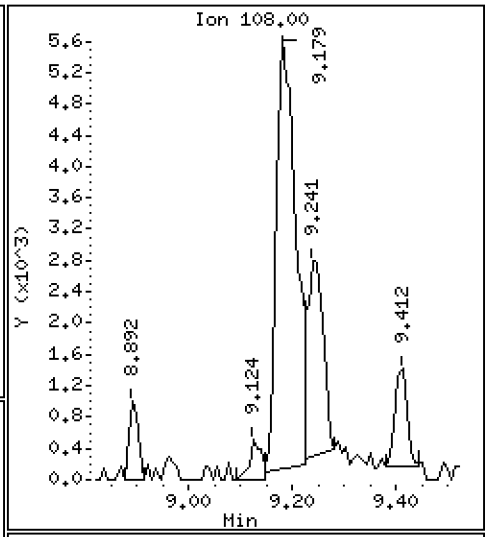
Concentration: 0.2380 ug/mL

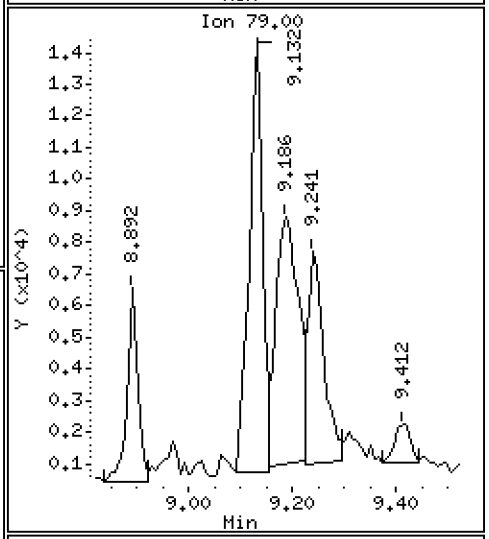


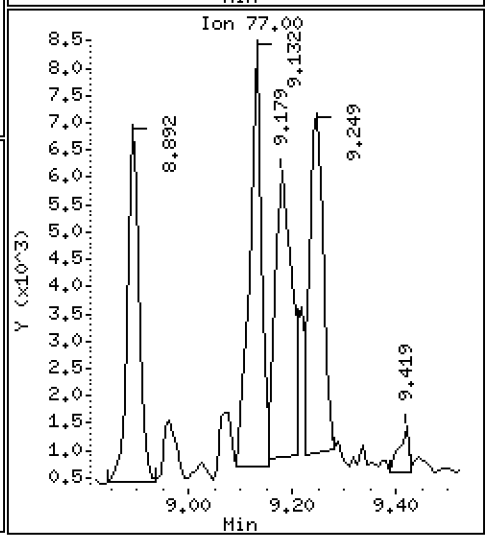












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

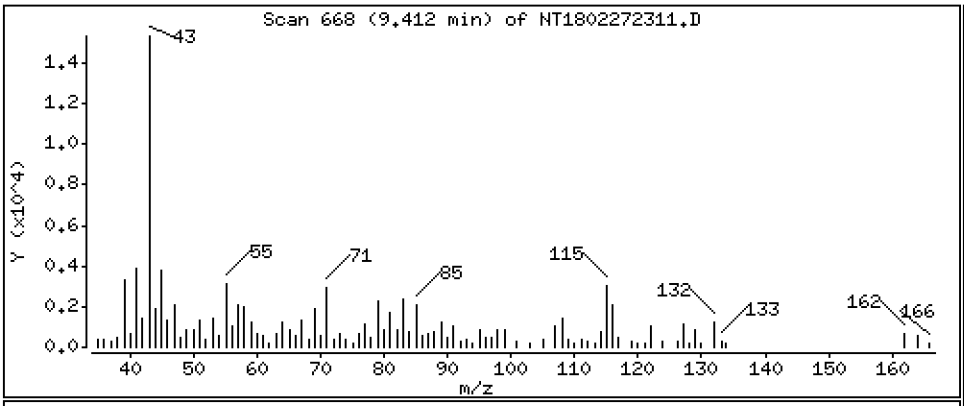
Operator: VTS

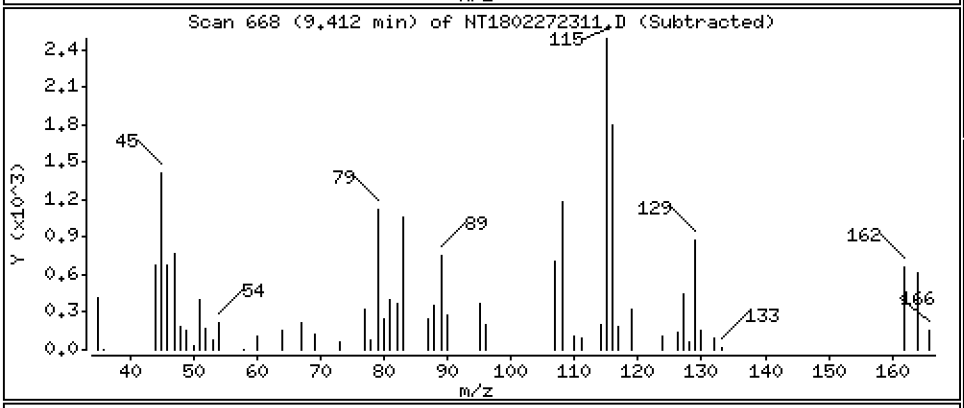
Column phase: ZB-5msi

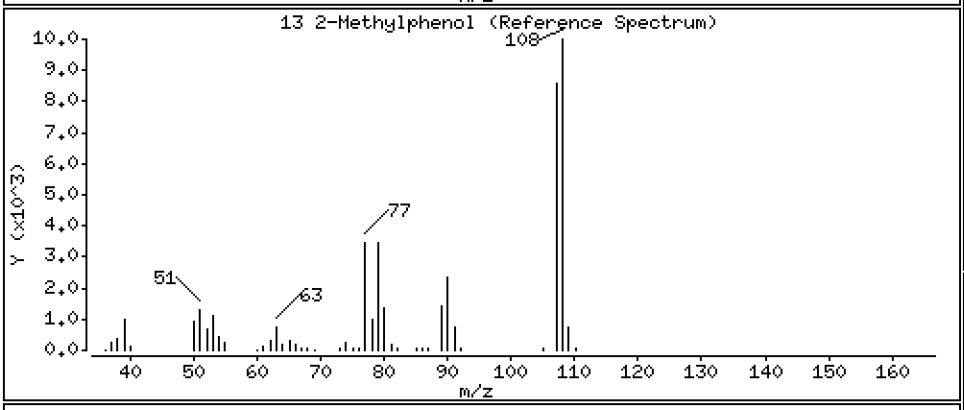
Column diameter: 0.25

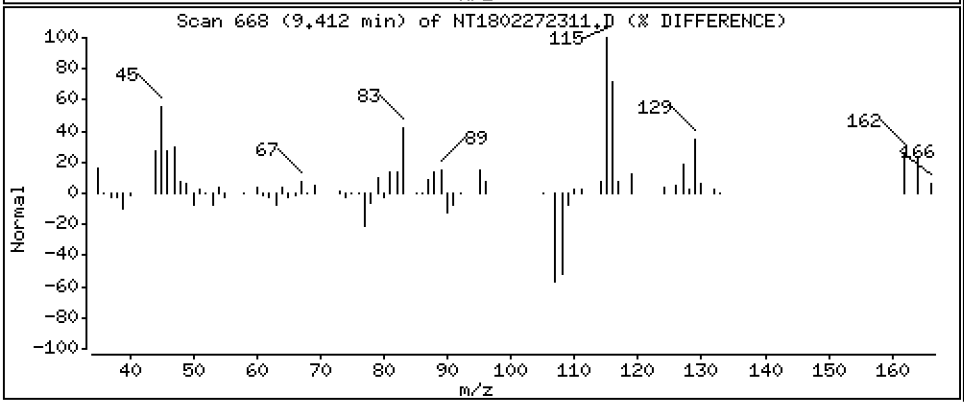
13 2-Methylphenol

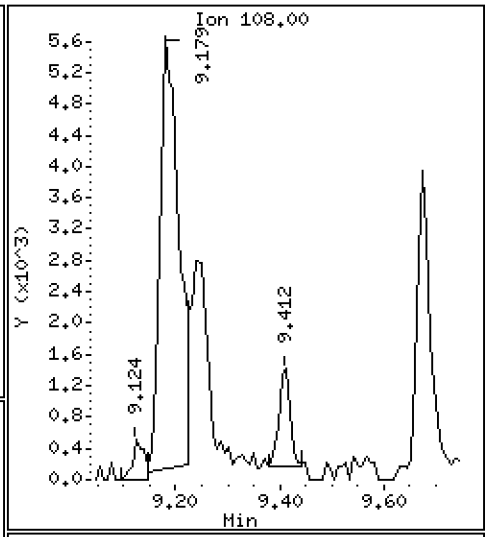
Concentration: 0.01962 ug/mL

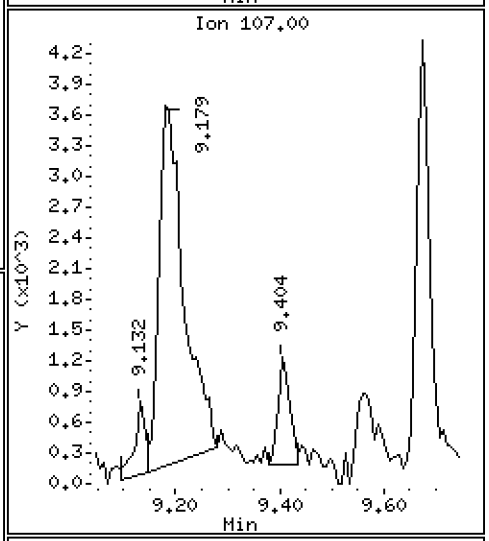


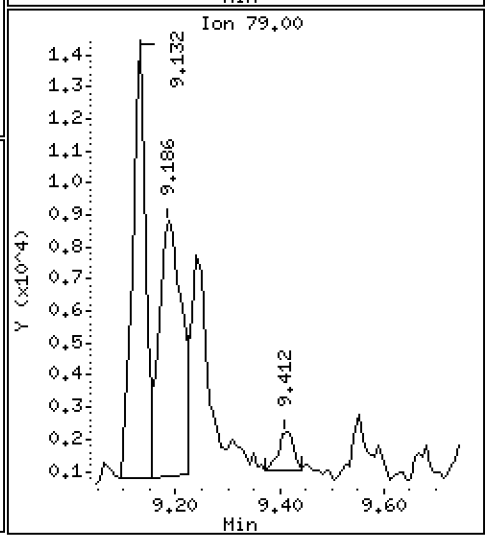












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

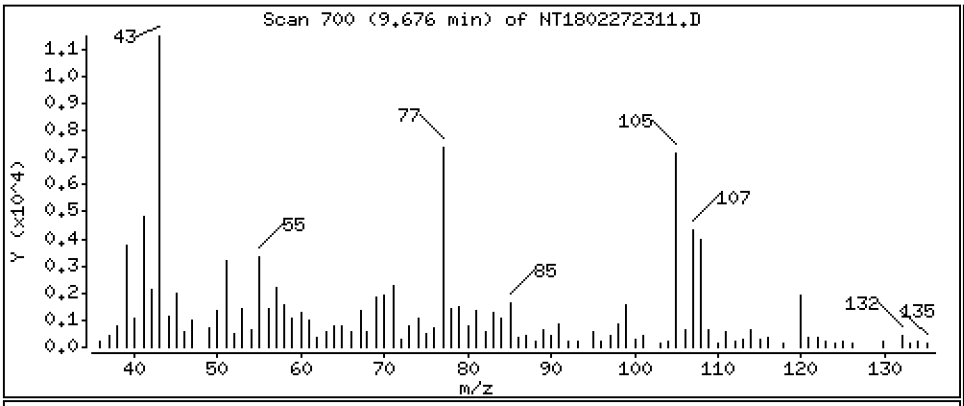
Operator: VTS

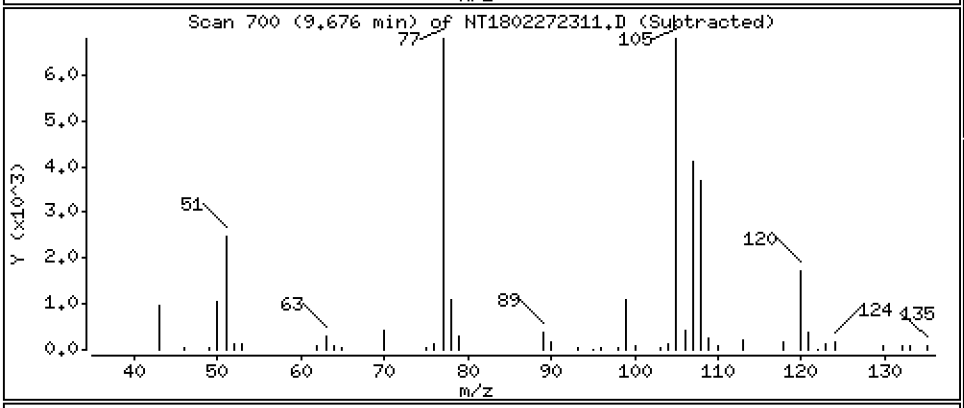
Column phase: ZB-5msi

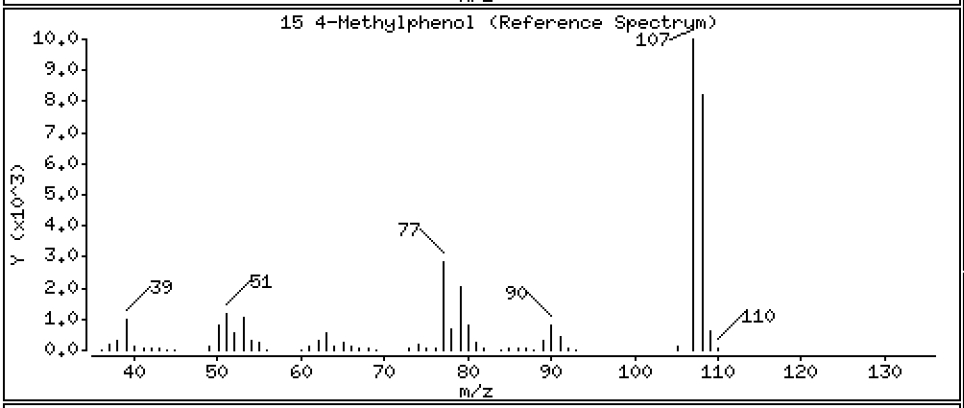
Column diameter: 0.25

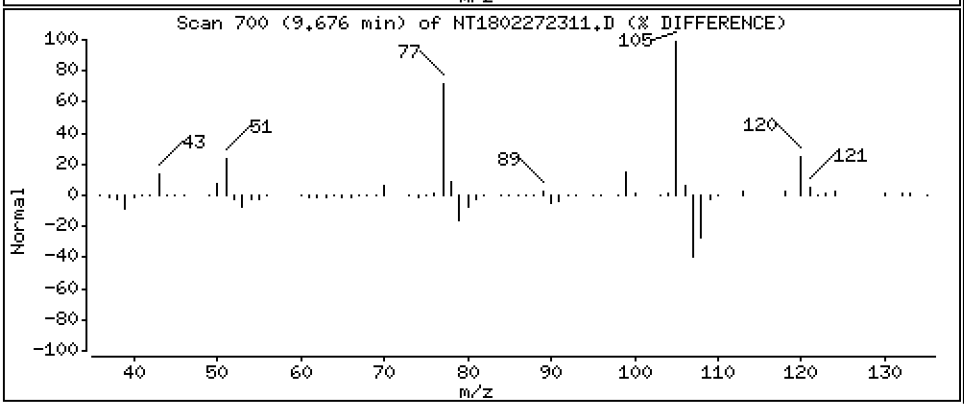
15 4-Methylphenol

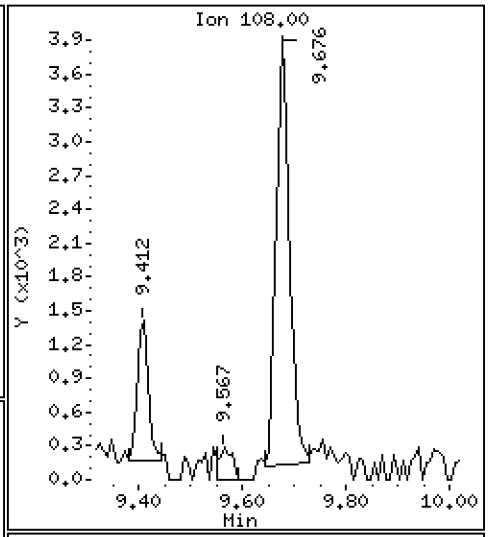
Concentration: 0.06566 ug/mL

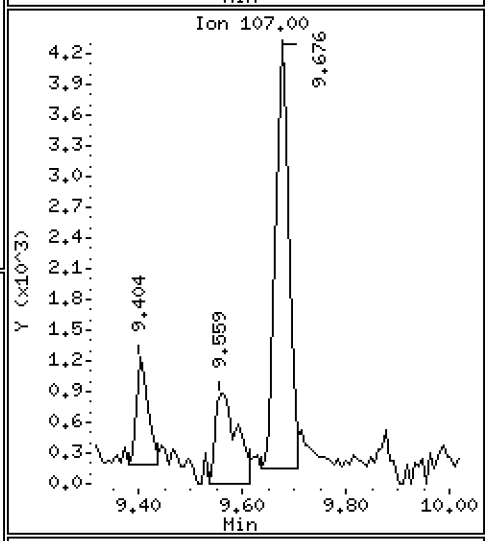


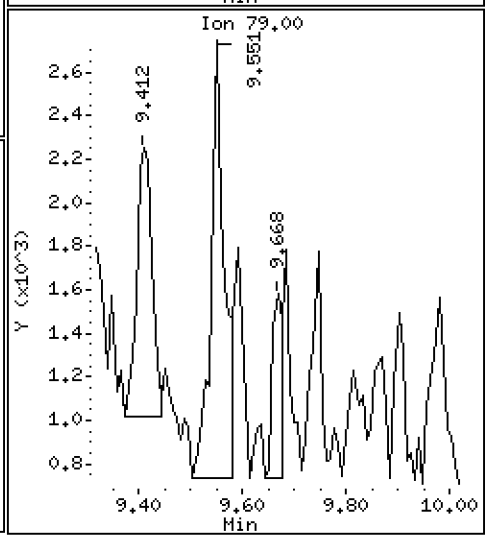












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

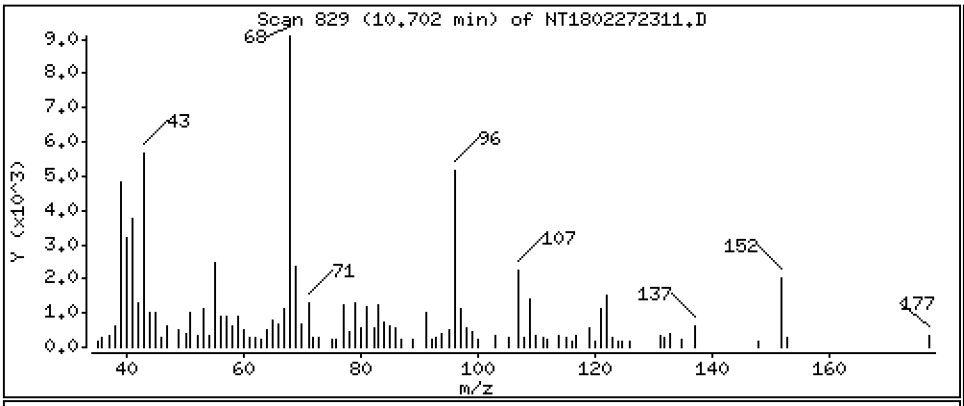
Operator: VTS

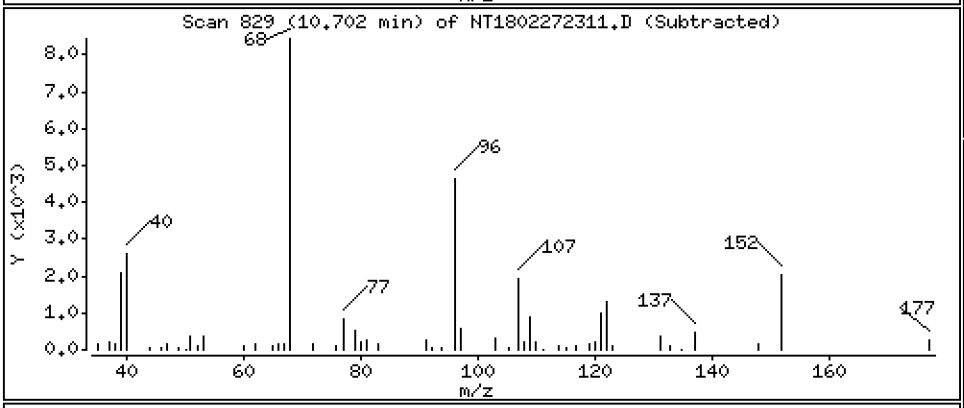
Column phase: ZB-5msi

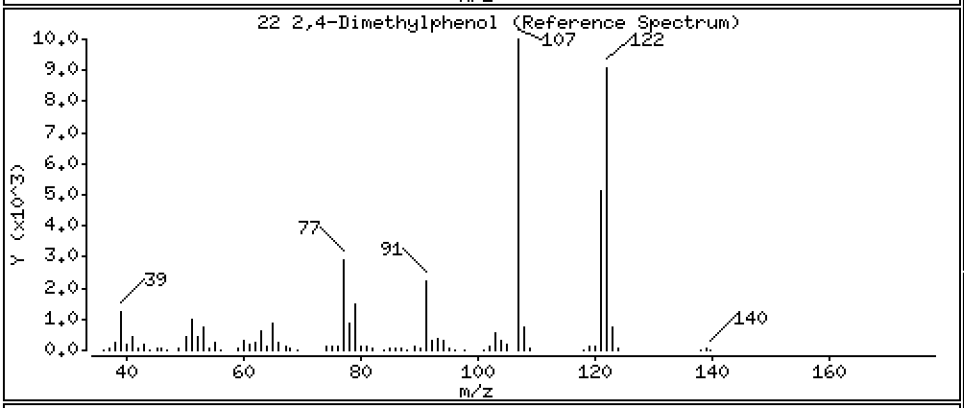
Column diameter: 0.25

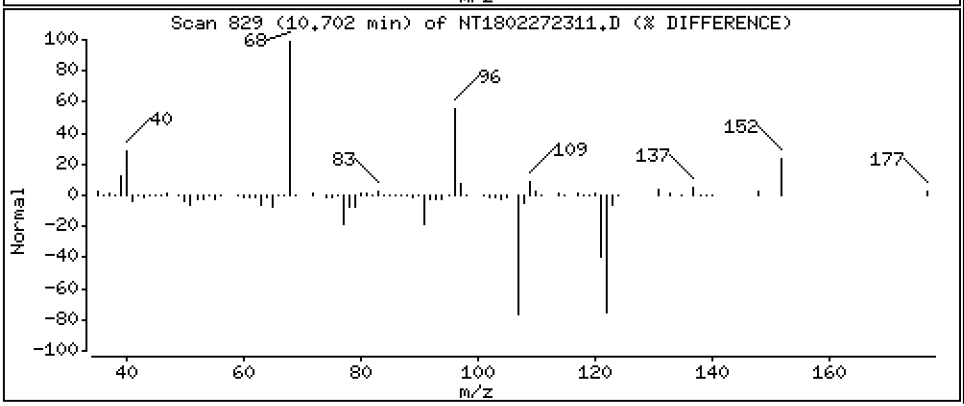
22 2,4-Dimethylphenol

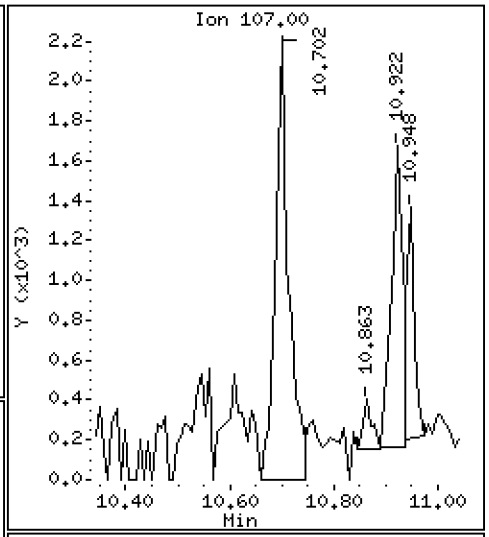
Concentration: 0.04053 ug/mL

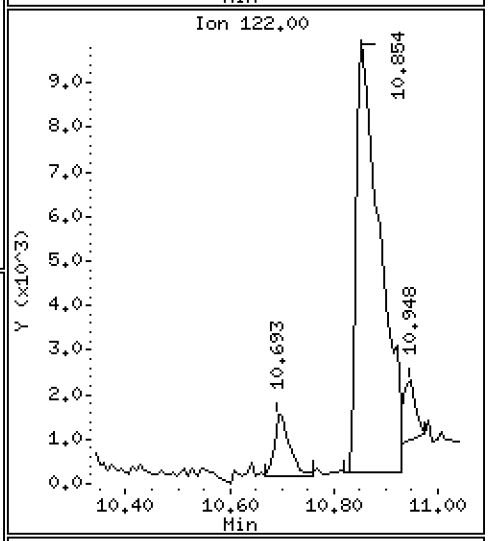


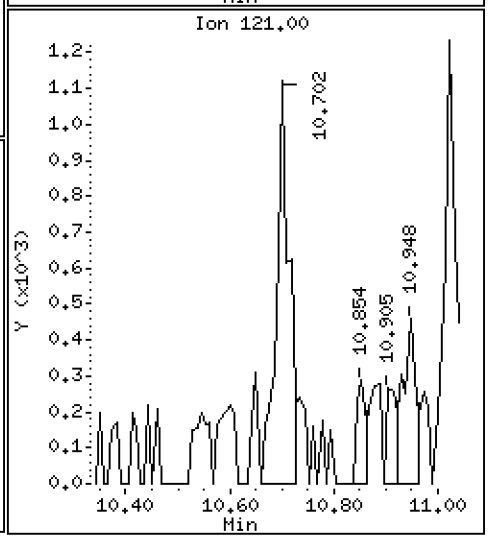












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

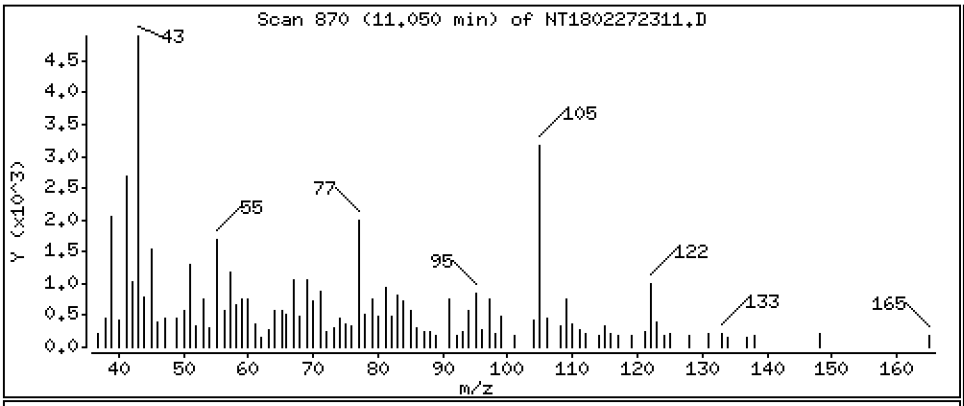
Operator: VTS

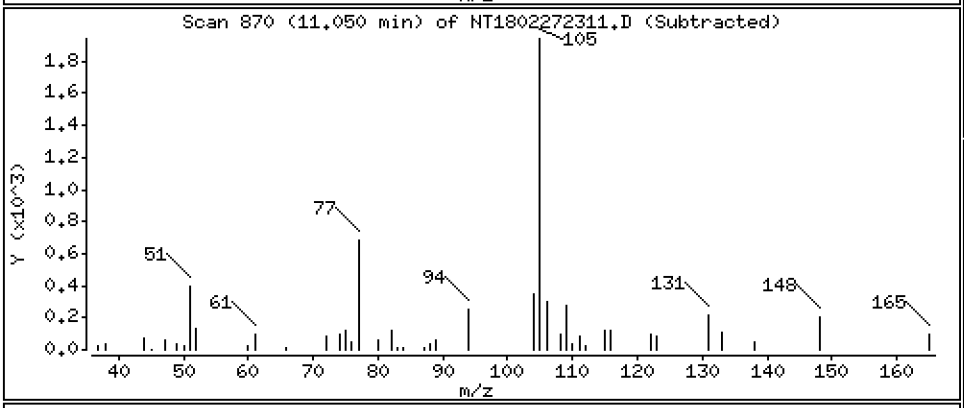
Column phase: ZB-5msi

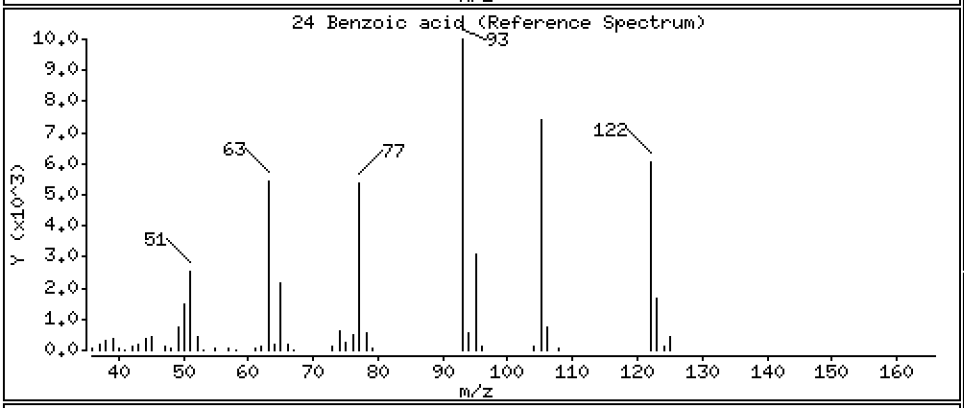
Column diameter: 0.25

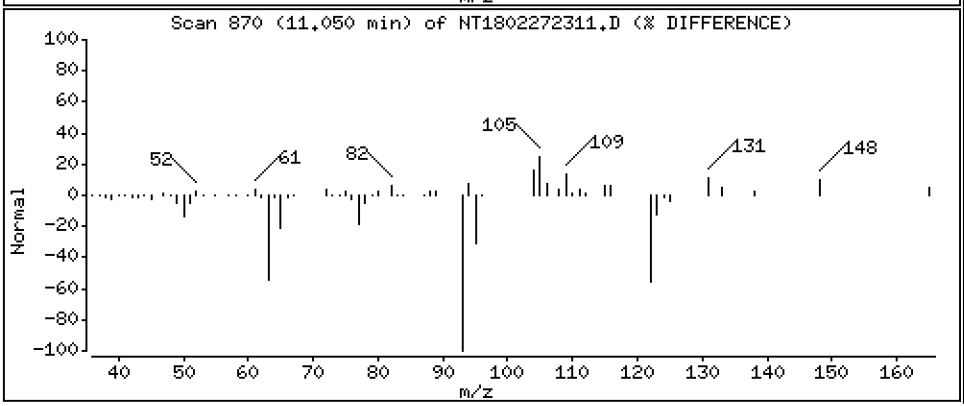
24 Benzoic acid

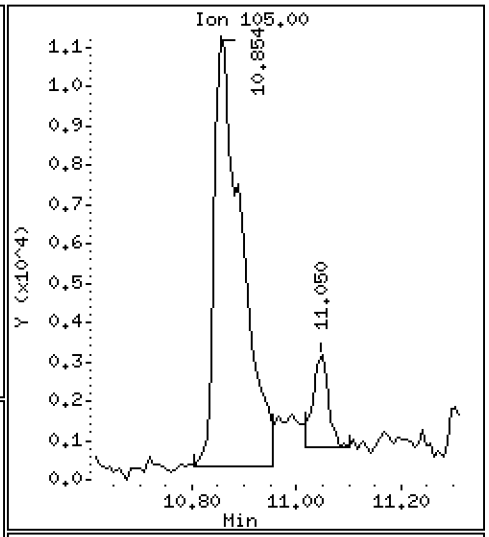
Concentration: 0.1321 ug/mL

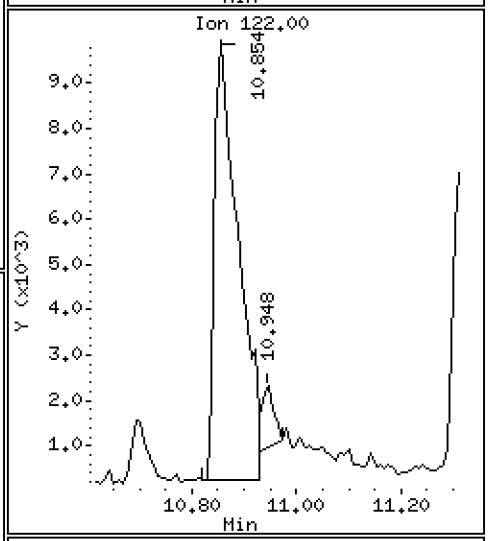


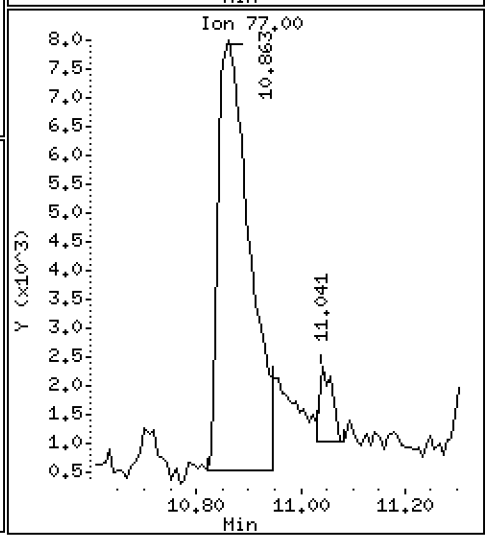












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

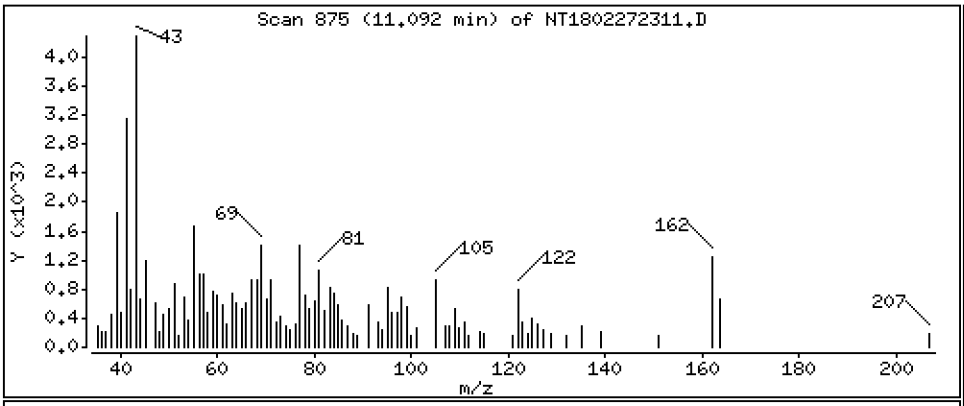
Operator: VTS

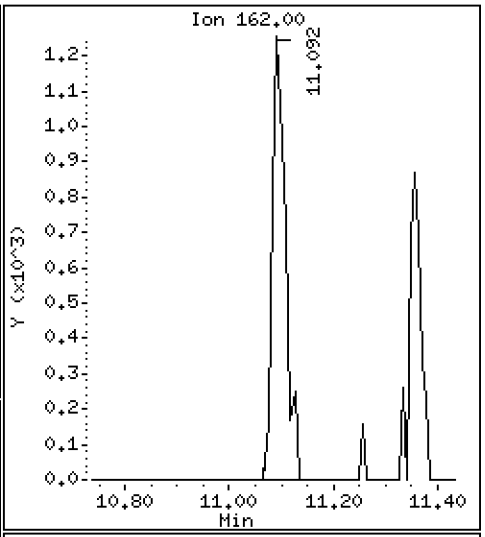
Column phase: ZB-5msi

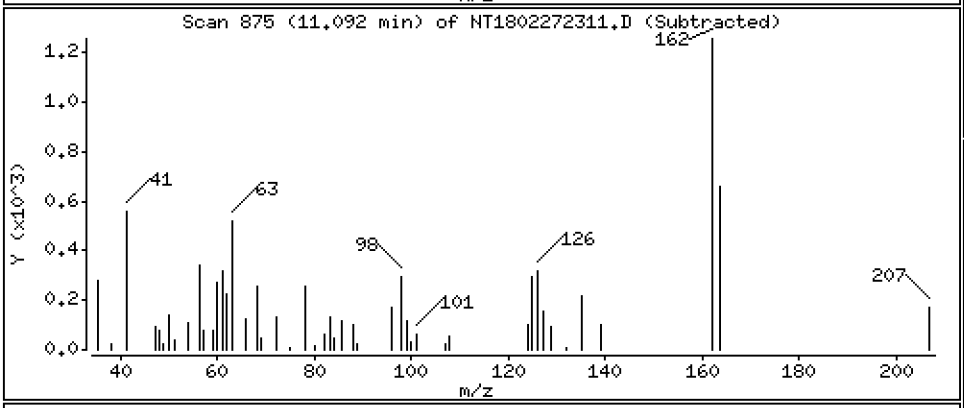
Column diameter: 0.25

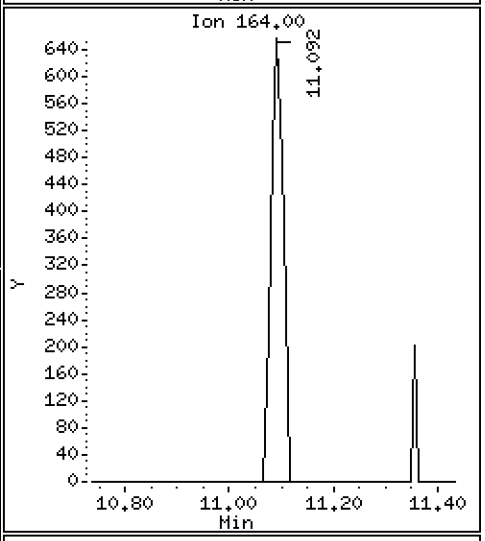
25 2,4-Dichlorophenol

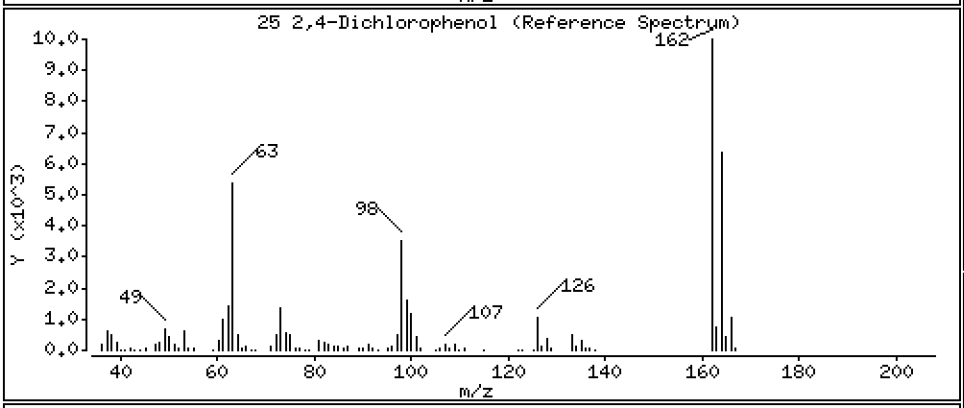
Concentration: 0.02472 ug/mL

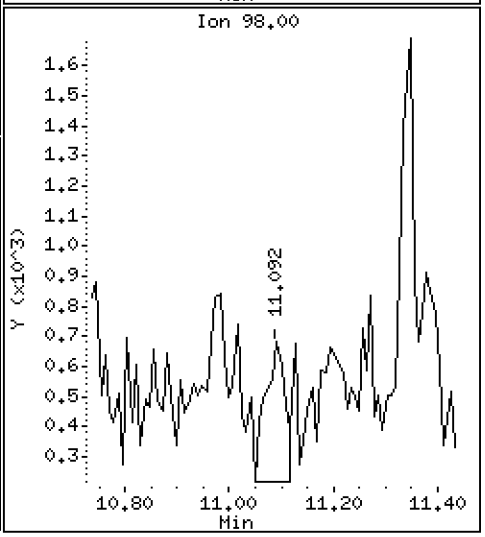


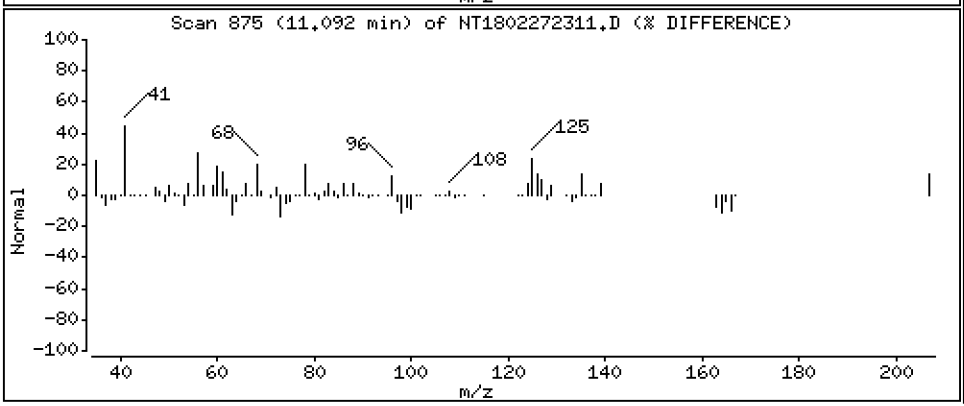












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

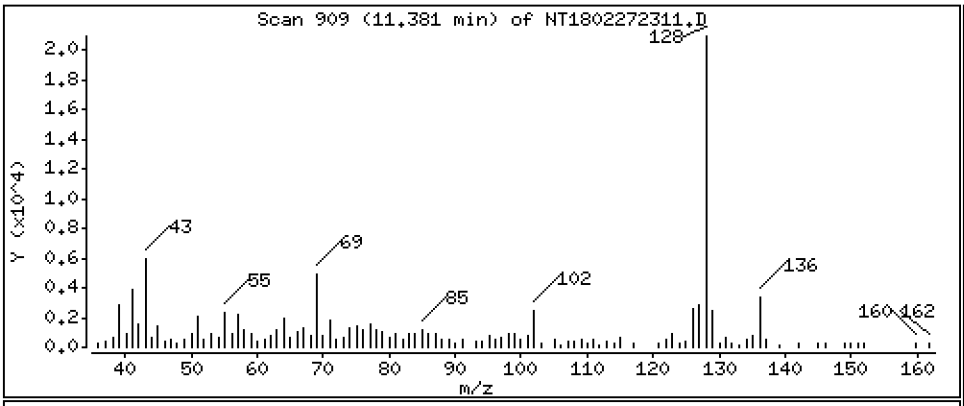
Operator: VTS

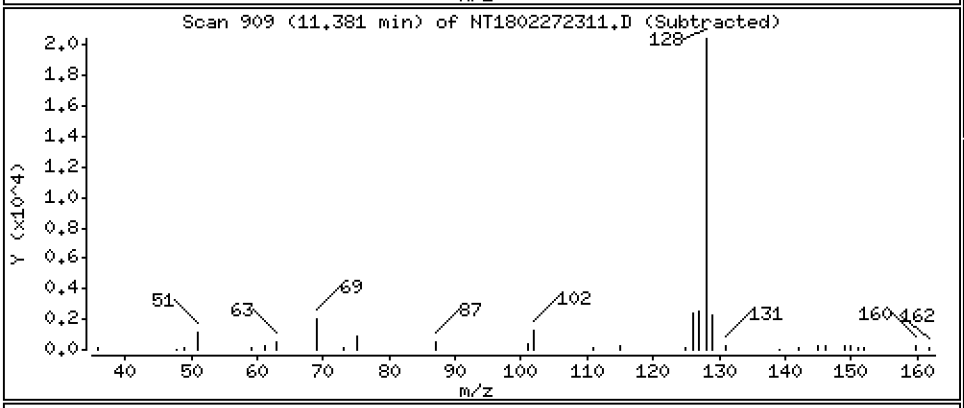
Column phase: ZB-5msi

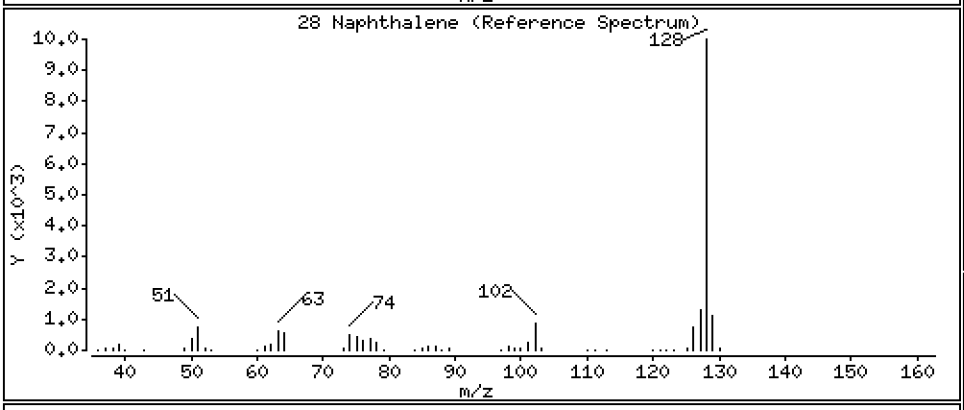
Column diameter: 0.25

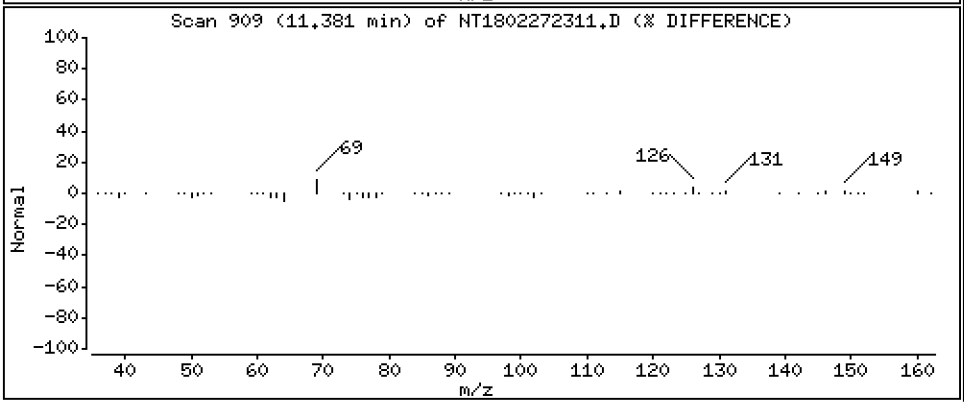
28 Naphthalene

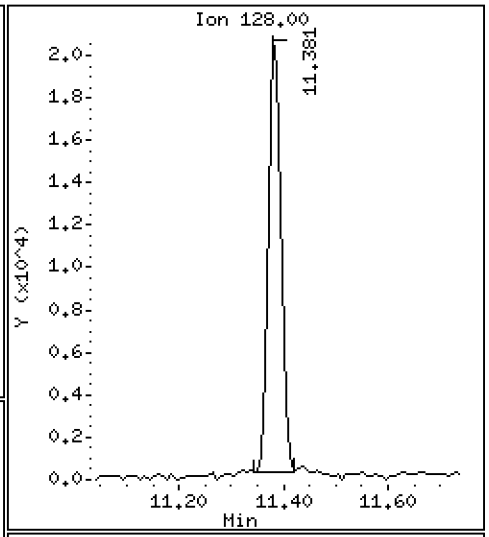
Concentration: 0.1009 ug/mL

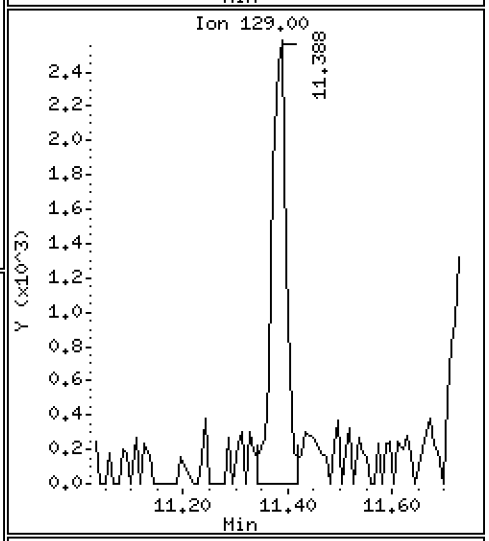


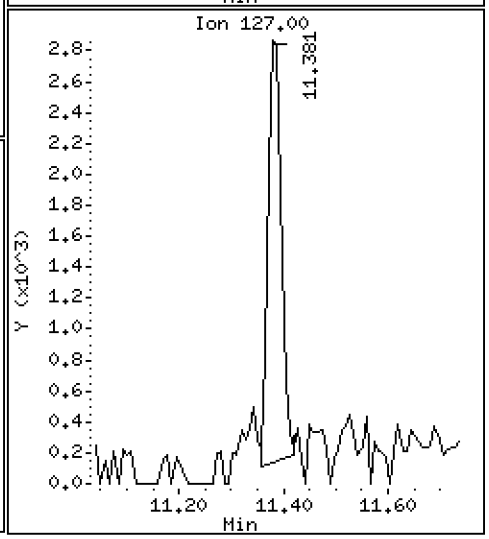












Date : 27-FEB-2023 23:53

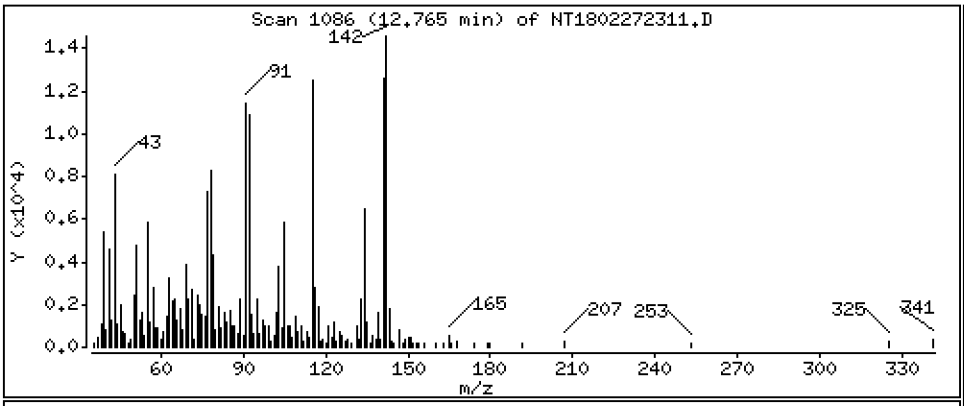
Client ID: Instrument: nt18.i

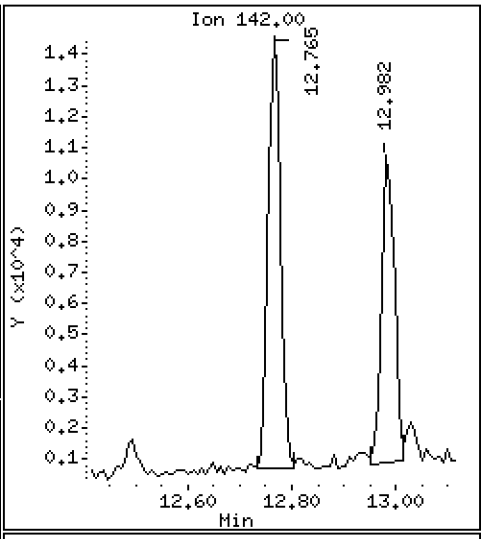
Sample Info: 23A0134-15

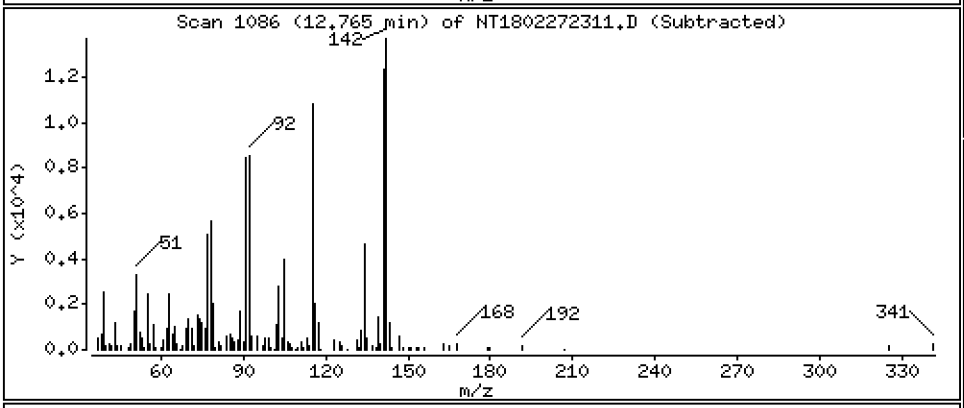
Operator: VTS

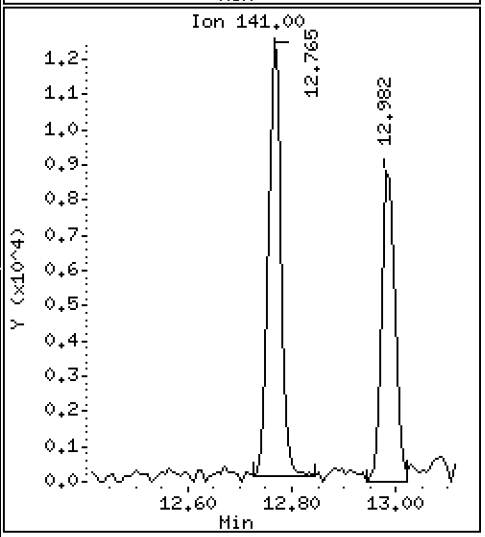
Column phase: ZB-5msi Column diameter: 0.25

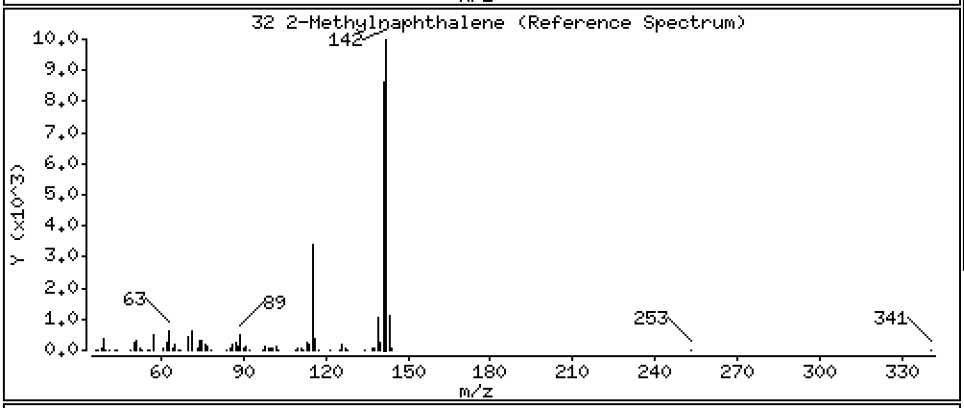
32 2-Methylnaphthalene Concentration: 0.09803 ug/mL

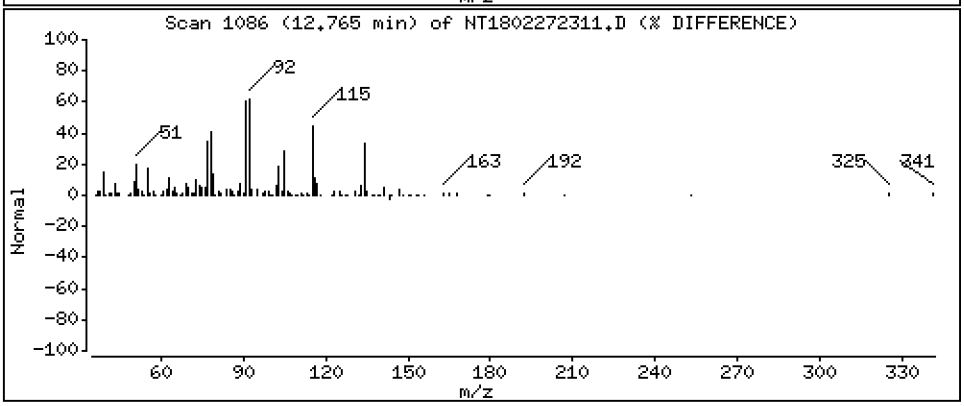












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

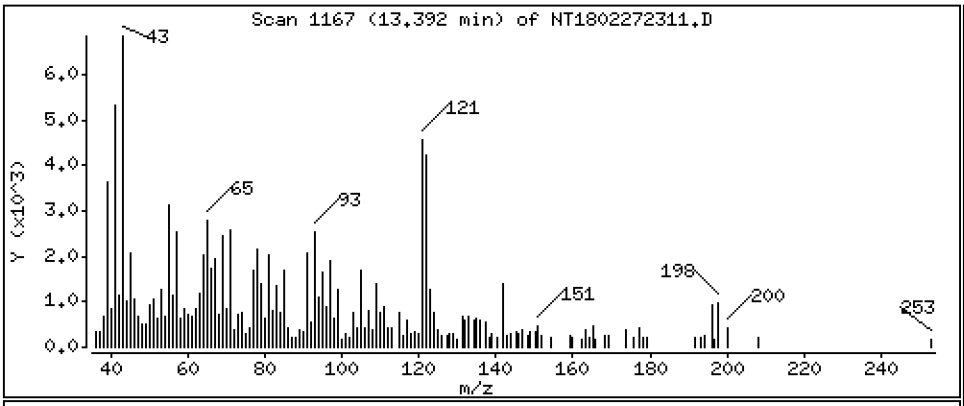
Operator: VTS

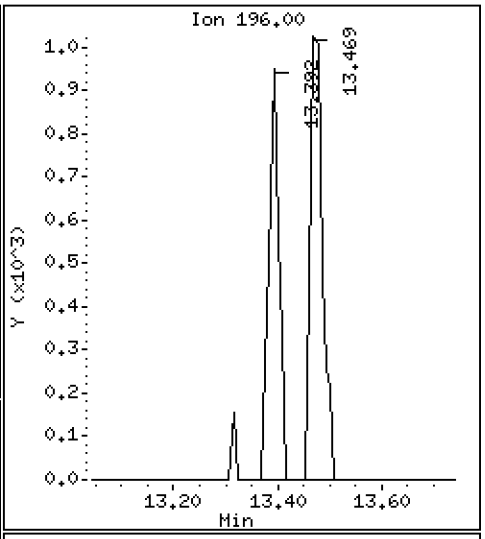
Column phase: ZB-5msi

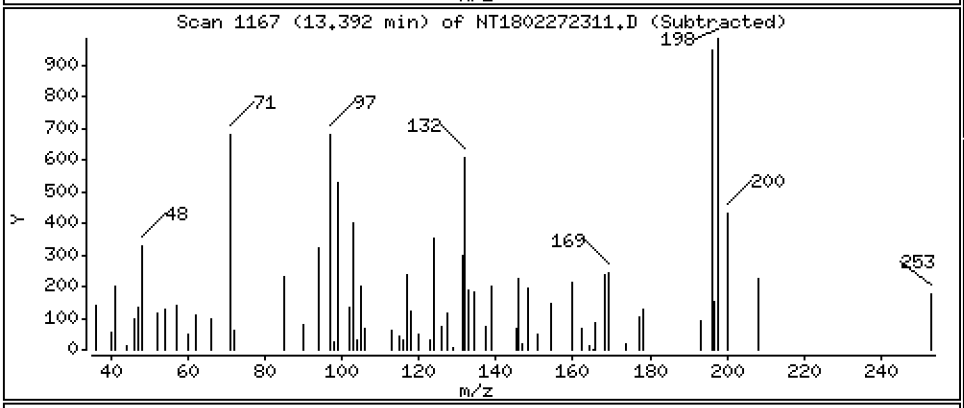
Column diameter: 0.25

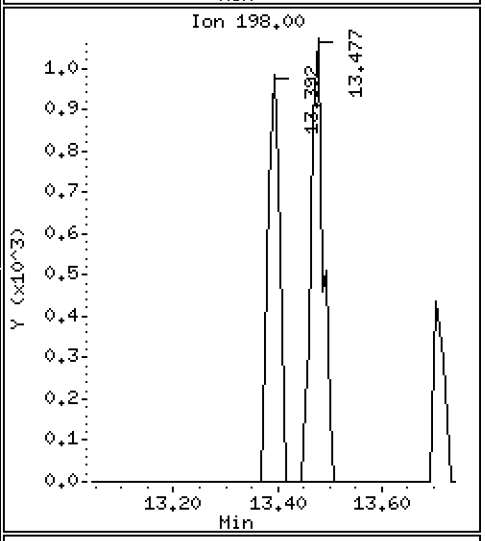
34 2,4,6-Trichlorophenol

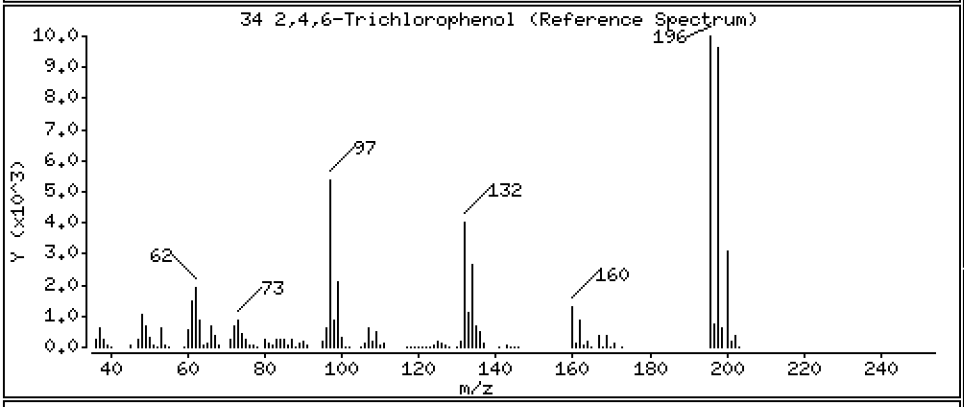
Concentration: 0.02183 ug/mL

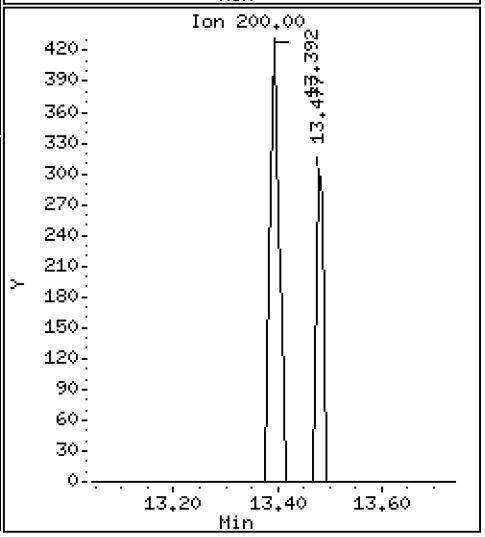


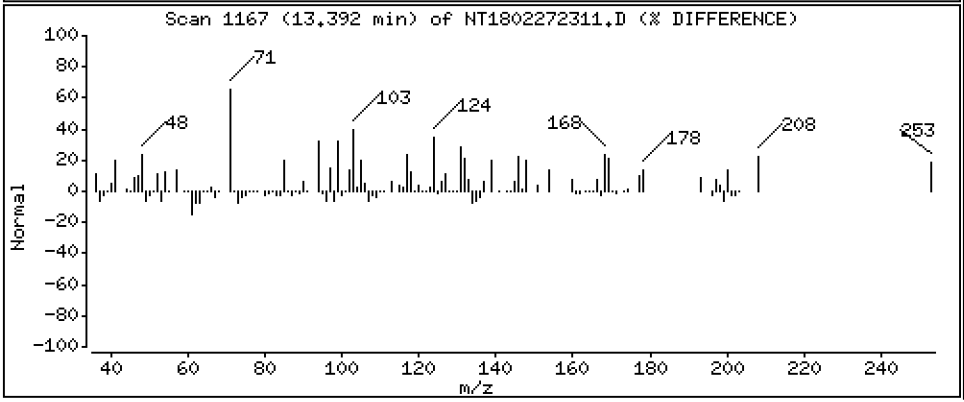












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

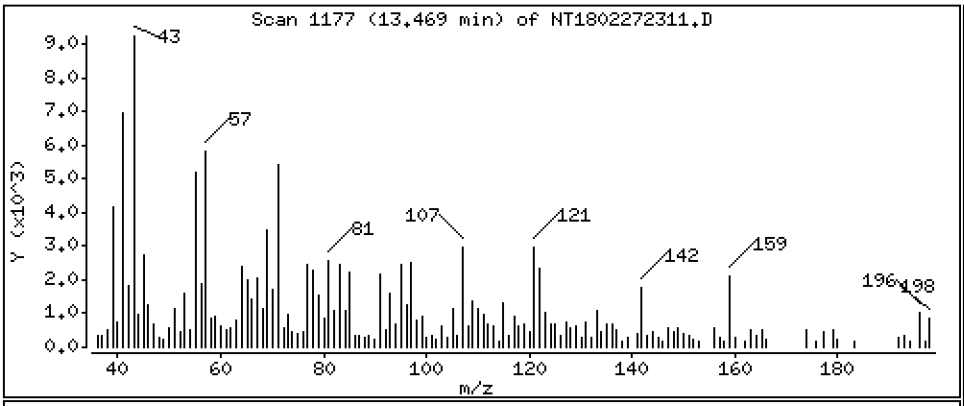
Operator: VTS

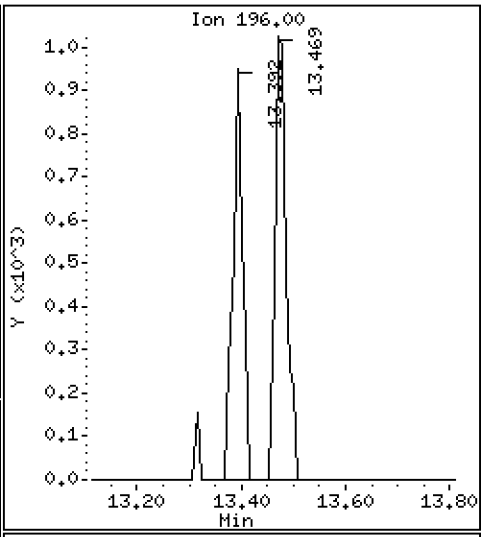
Column phase: ZB-5msi

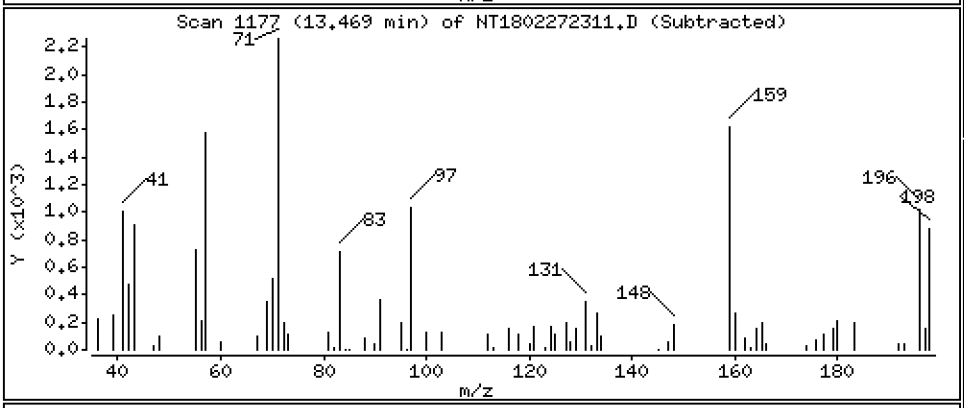
Column diameter: 0.25

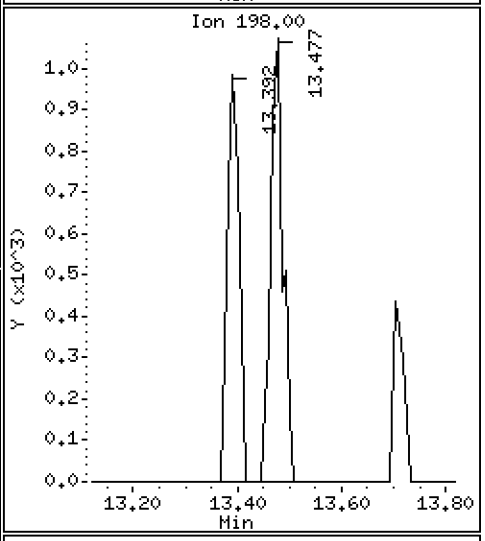
35 2,4,5-Trichlorophenol

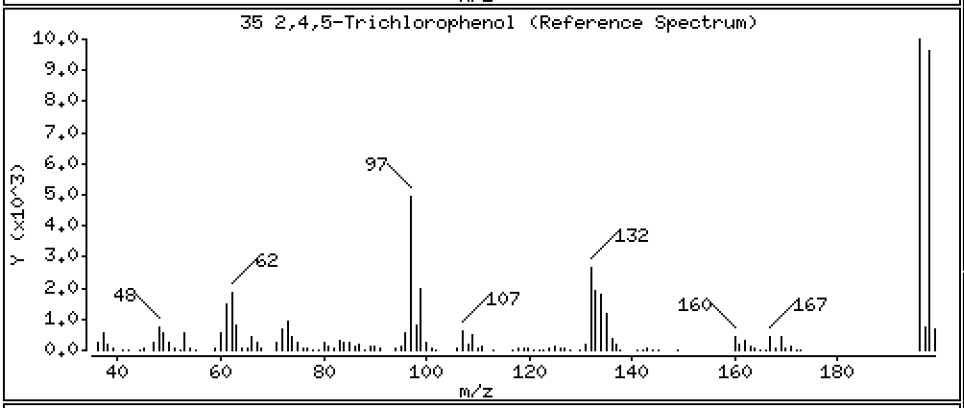
Concentration: 0.02613 ug/mL

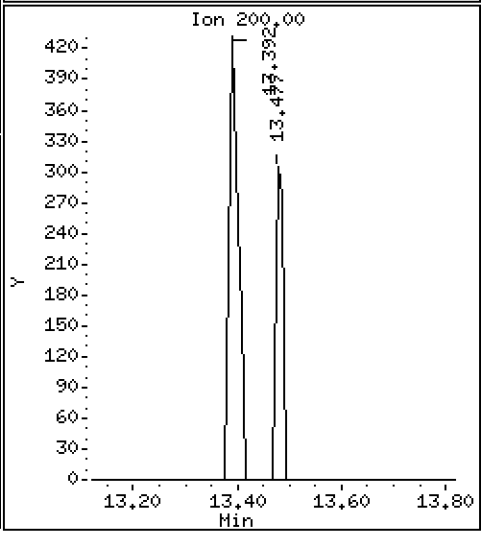


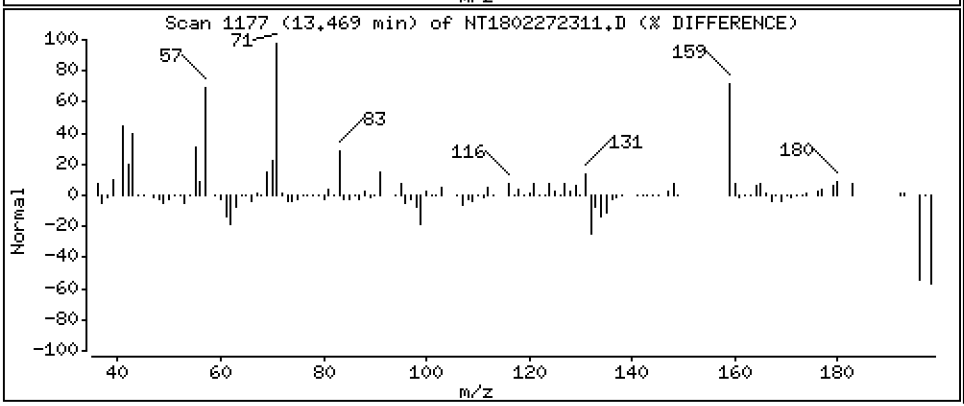












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

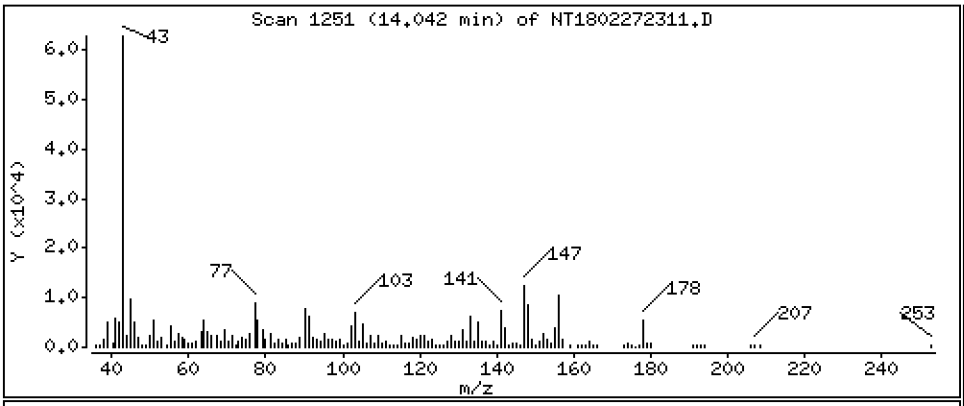
Operator: VTS

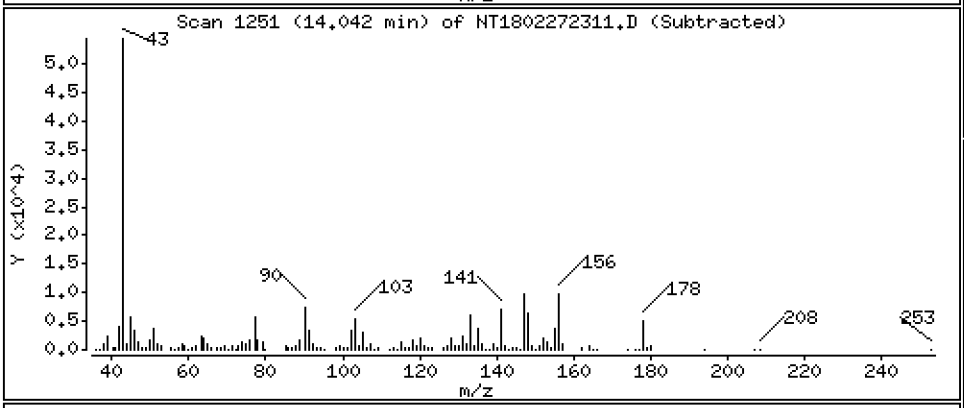
Column phase: ZB-5msi

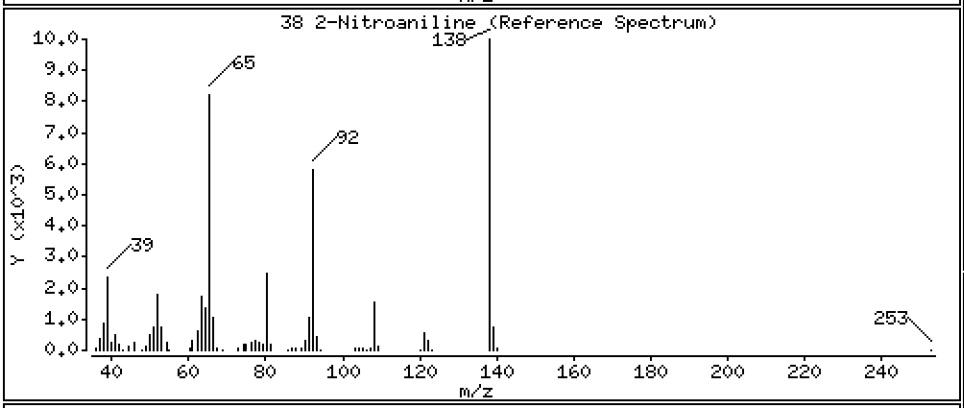
Column diameter: 0.25

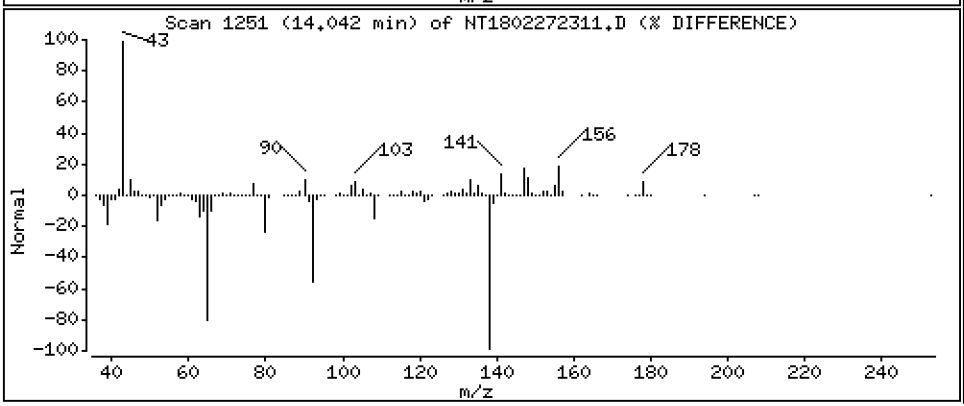
38 2-Nitroaniline

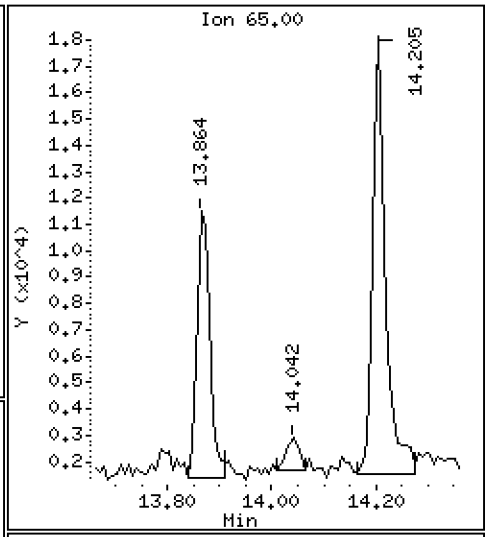
Concentration: 0.03669 ug/mL

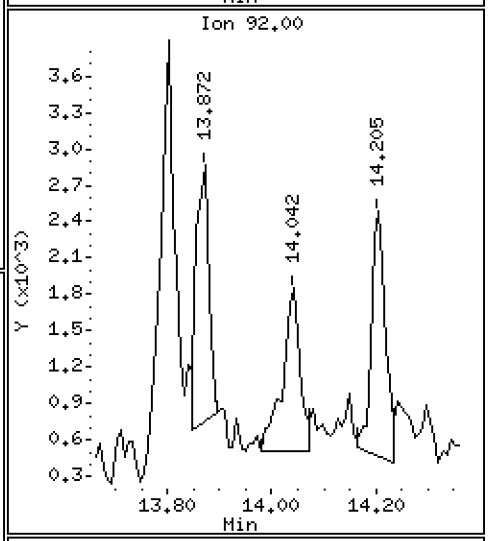


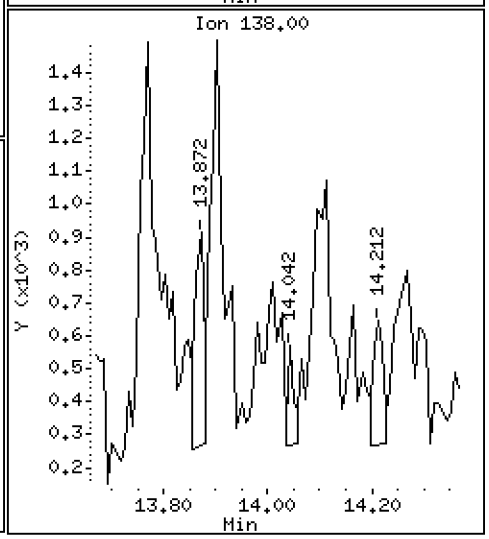












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

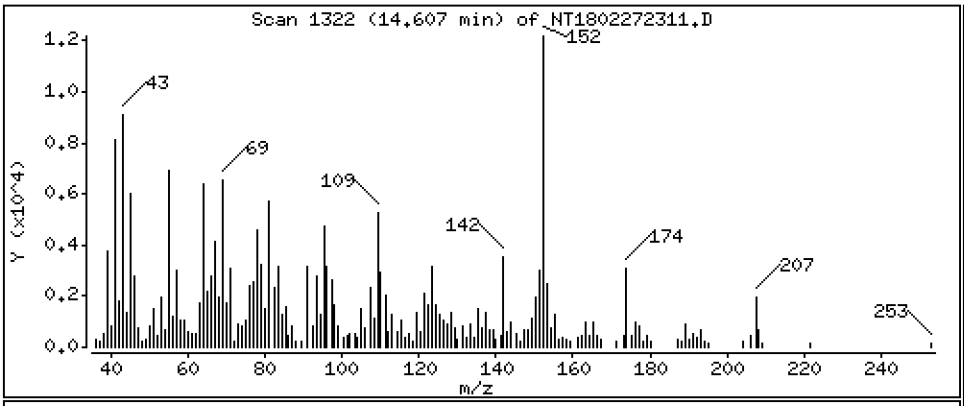
Operator: VTS

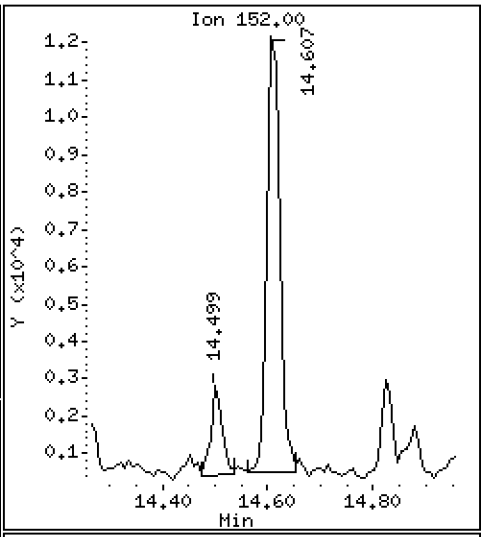
Column phase: ZB-5msi

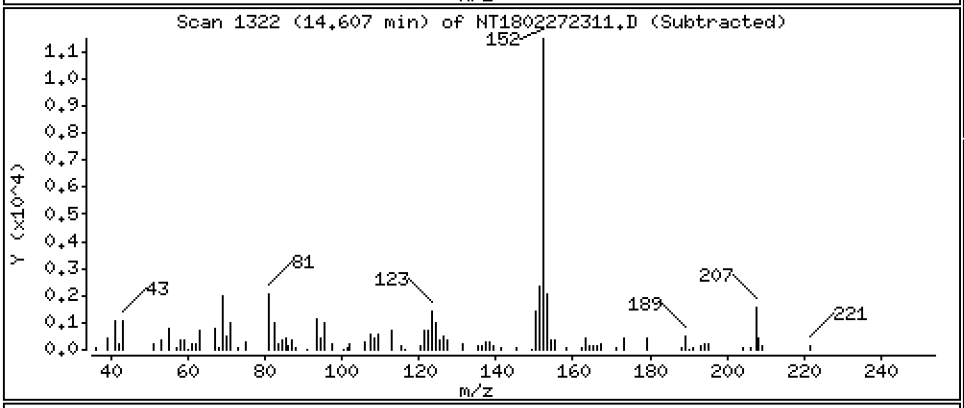
Column diameter: 0.25

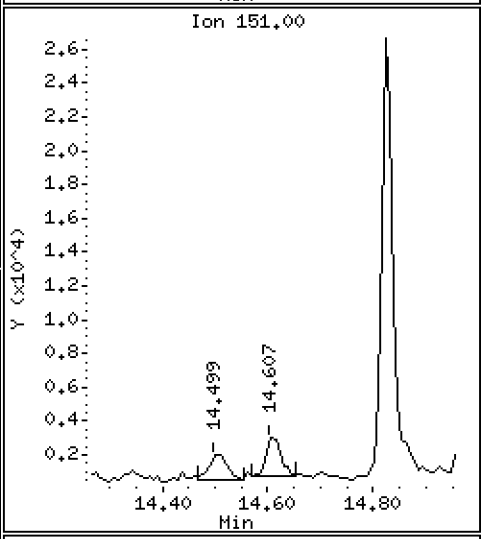
40 Acenaphthylene

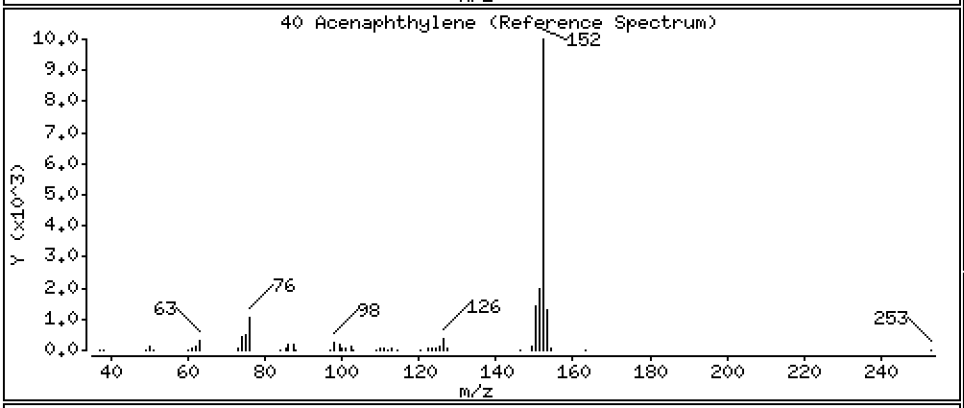
Concentration: 0.05992 ug/mL

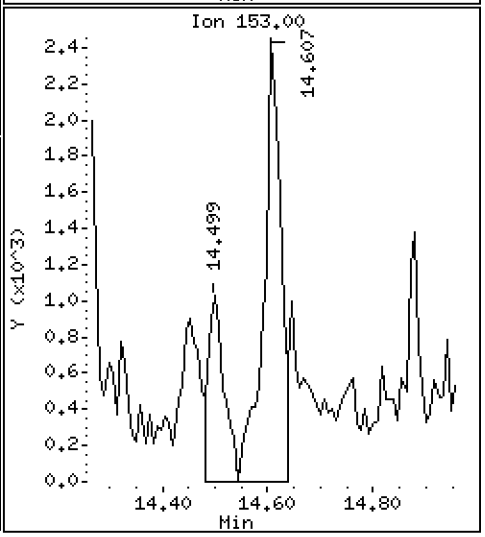


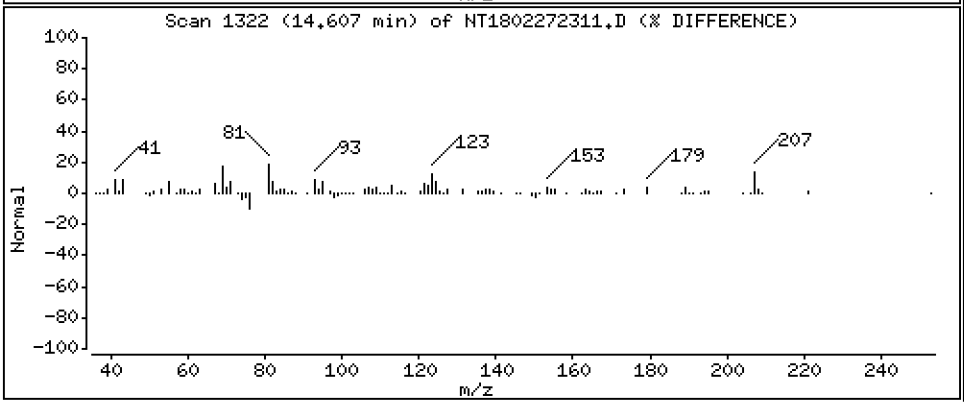












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

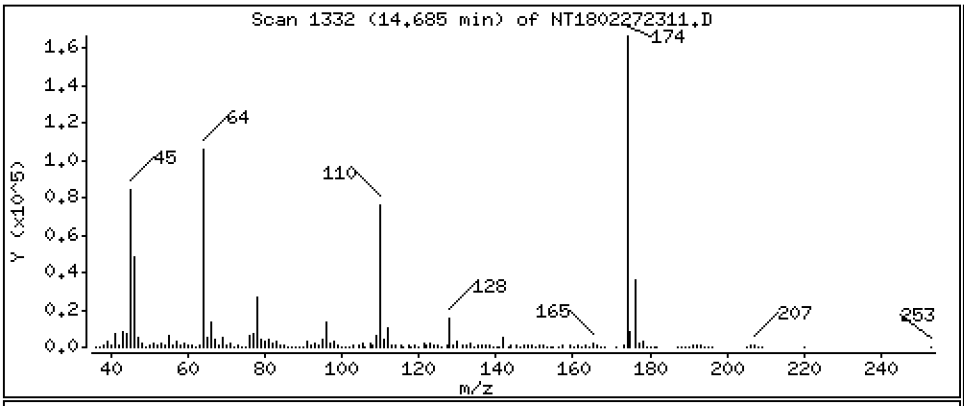
Operator: VTS

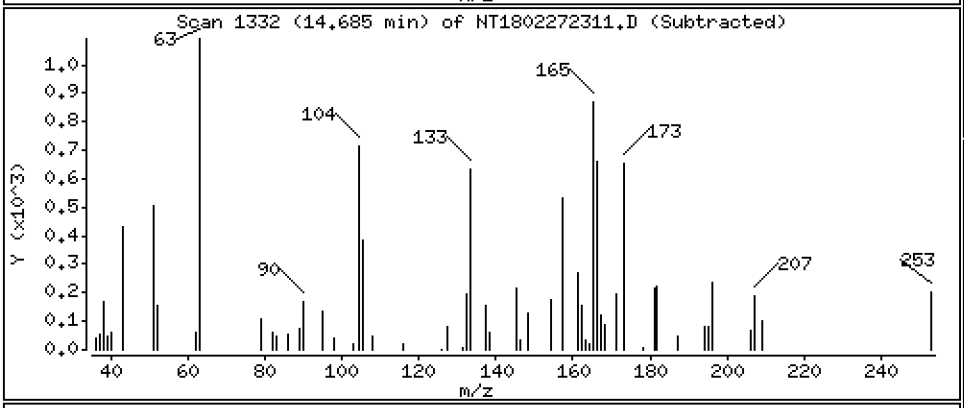
Column phase: ZB-5msi

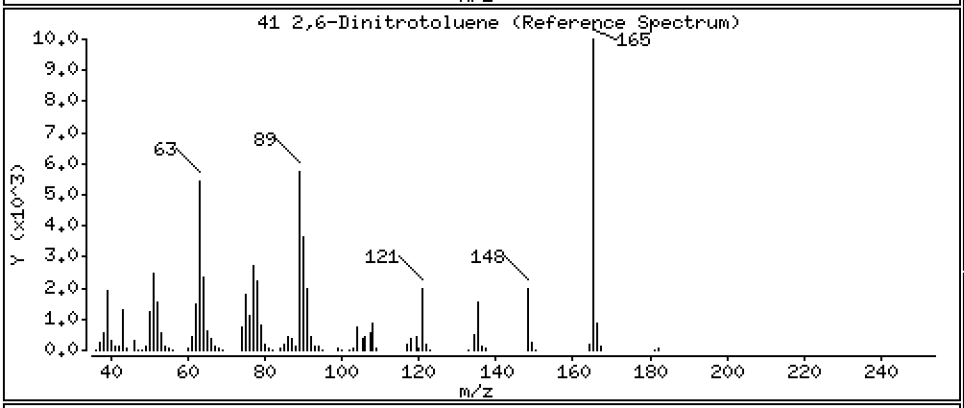
Column diameter: 0.25

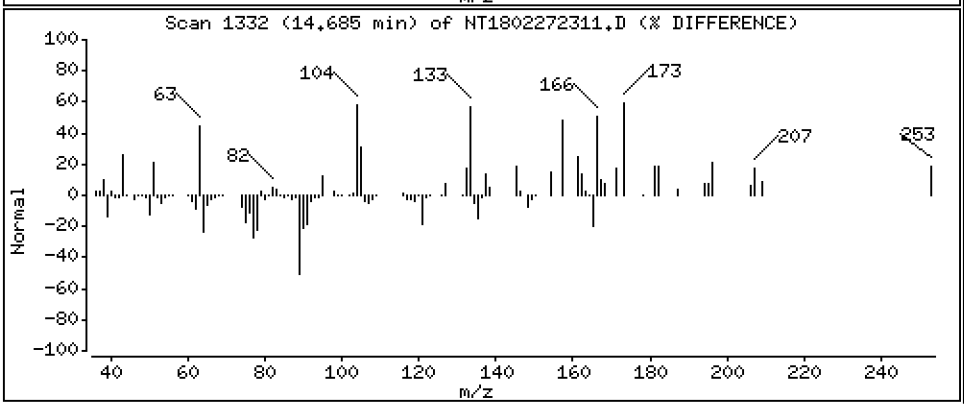
41 2,6-Dinitrotoluene

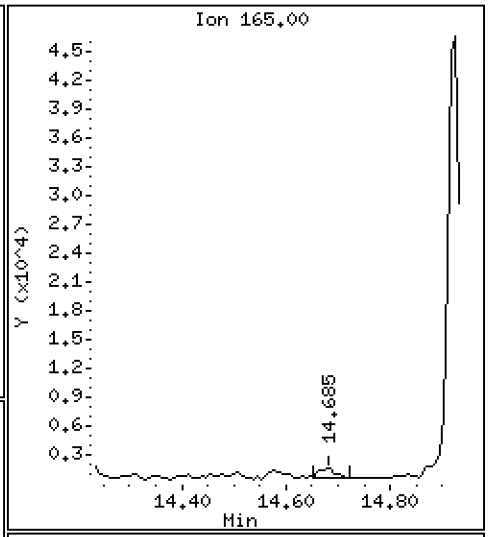
Concentration: 0.05390 ug/mL

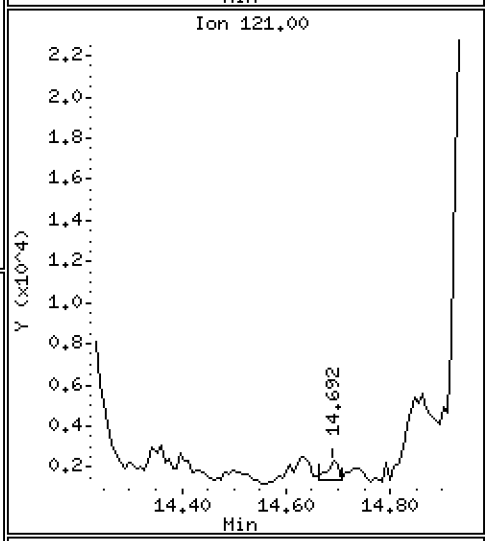


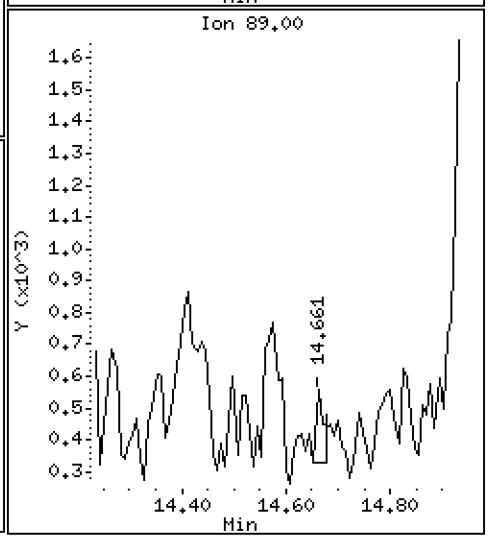












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

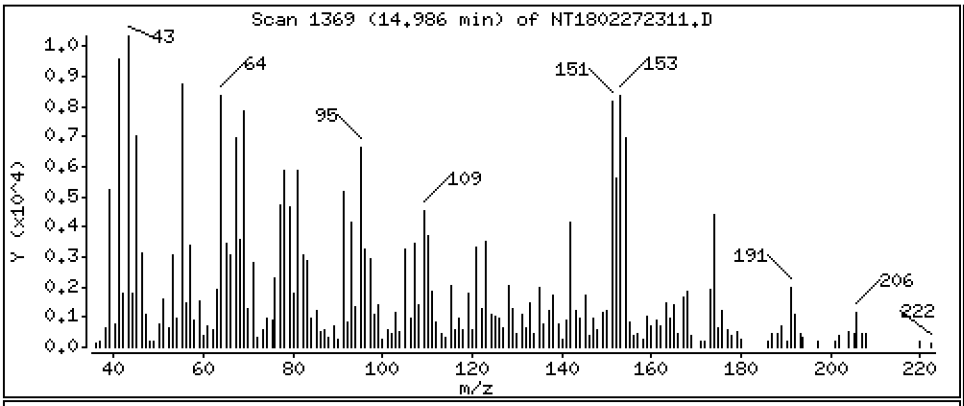
Operator: VTS

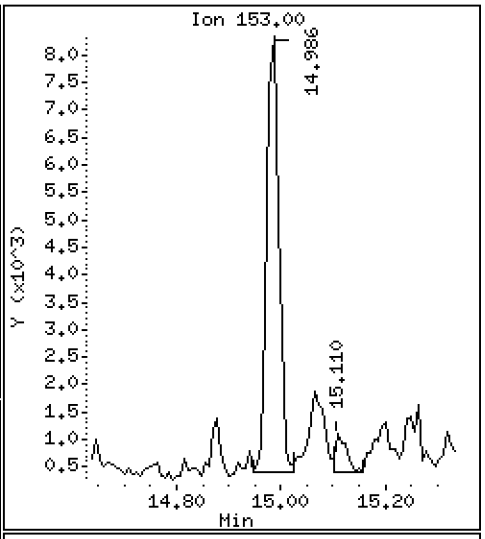
Column phase: ZB-5msi

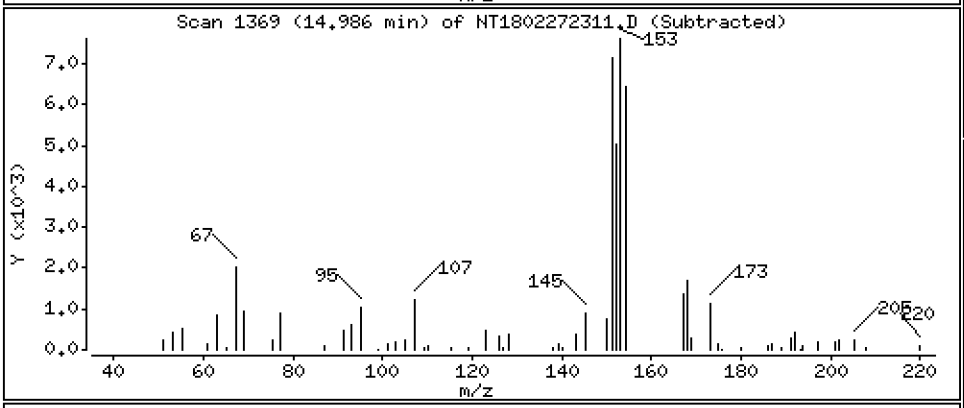
Column diameter: 0.25

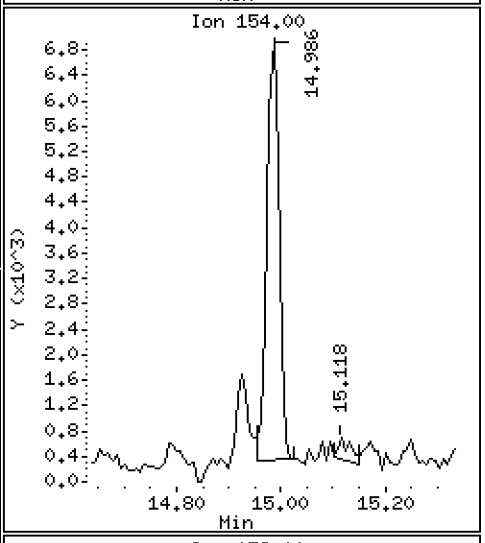
44 Acenaphthene

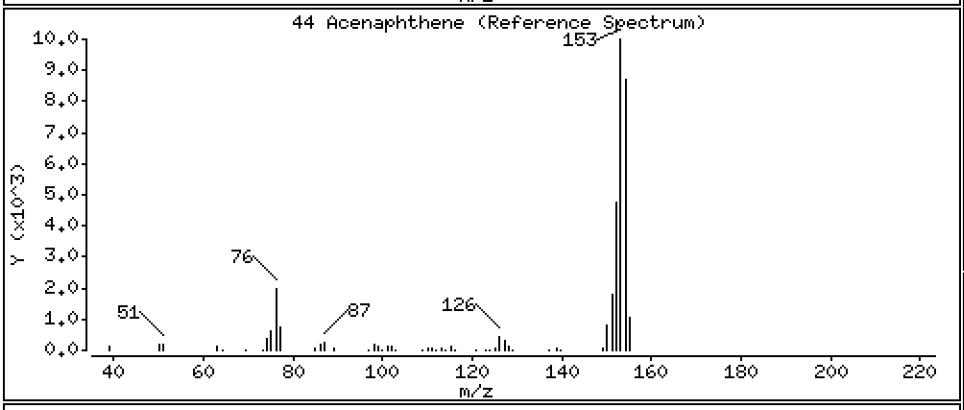
Concentration: 0.06042 ug/mL

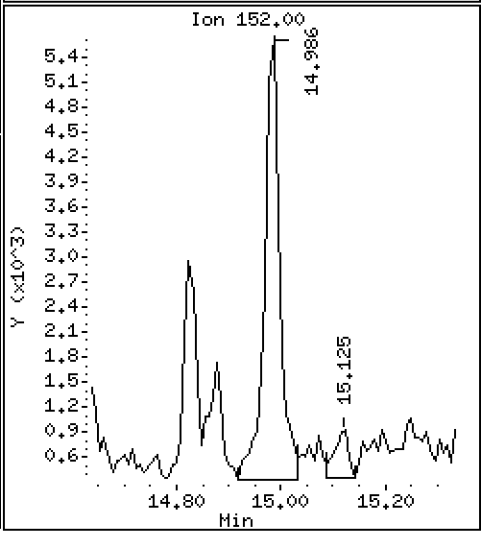


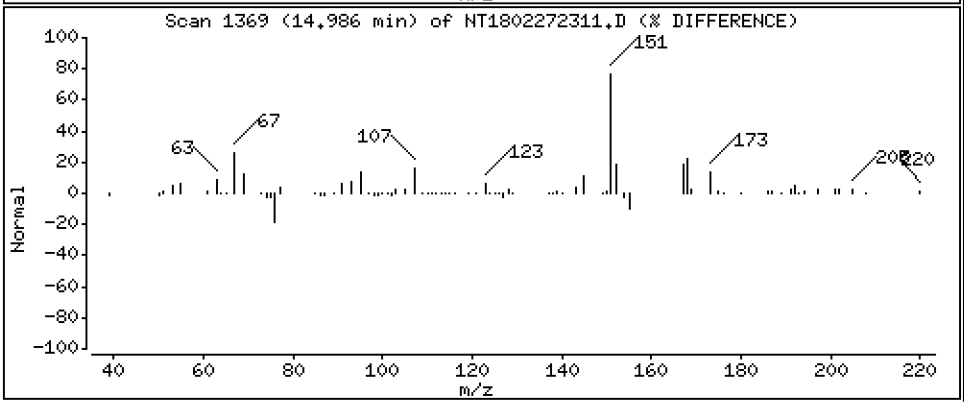












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

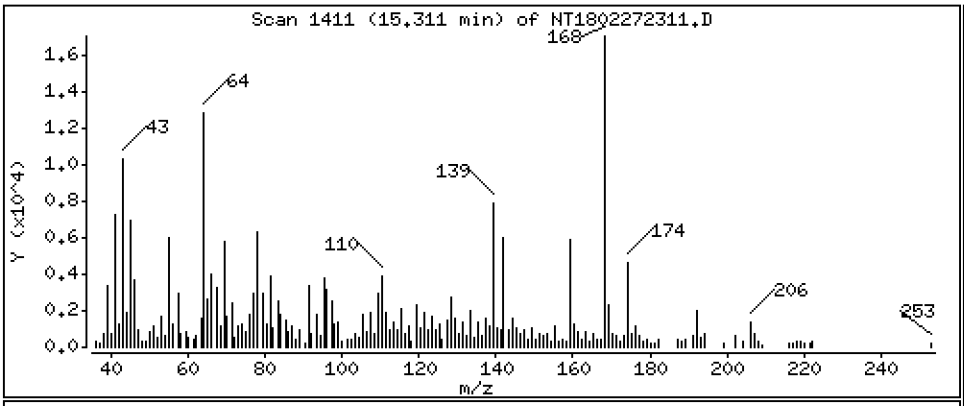
Operator: VTS

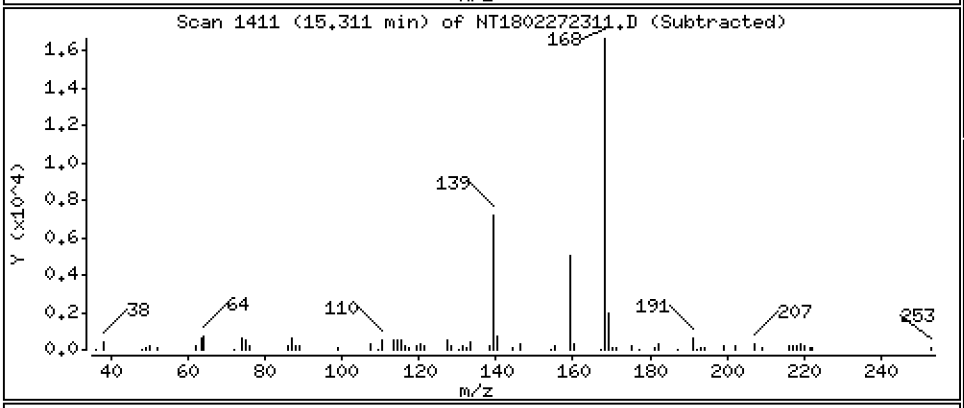
Column phase: ZB-5msi

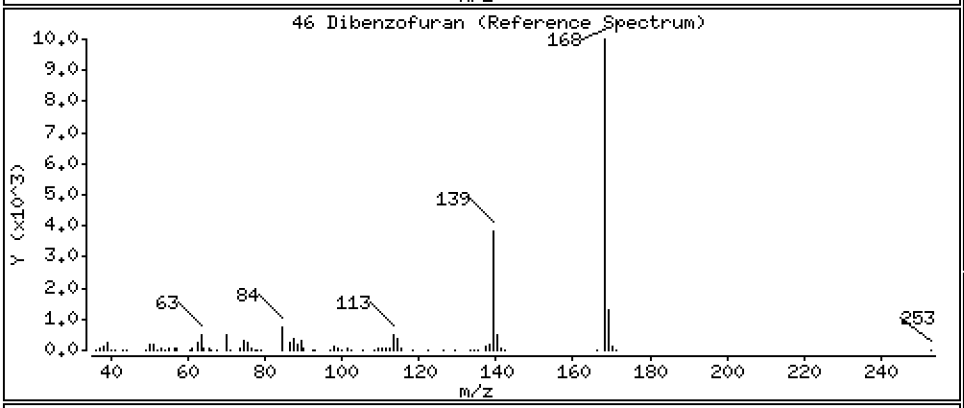
Column diameter: 0.25

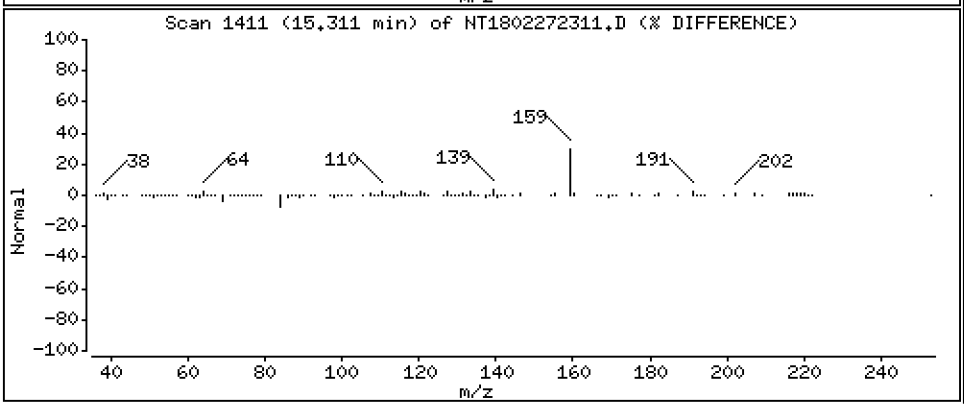
46 Dibenzofuran

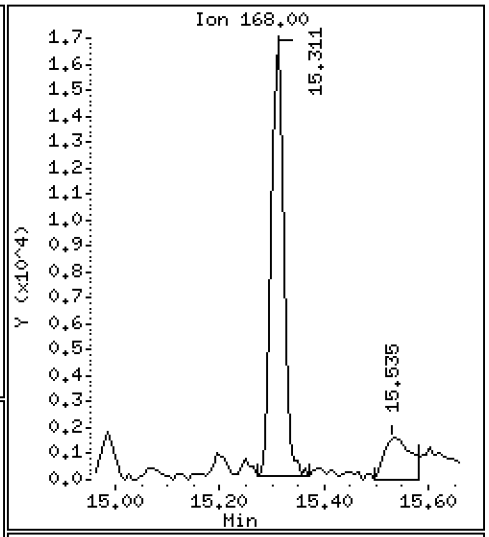
Concentration: 0.09045 ug/mL

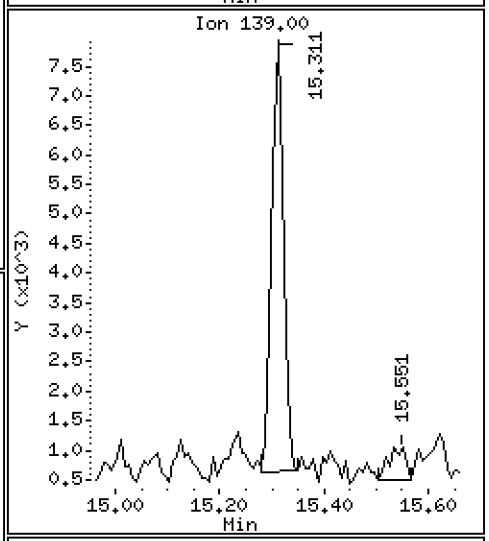


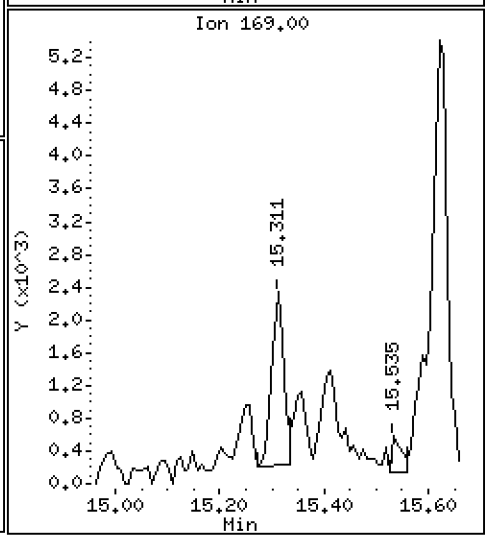












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

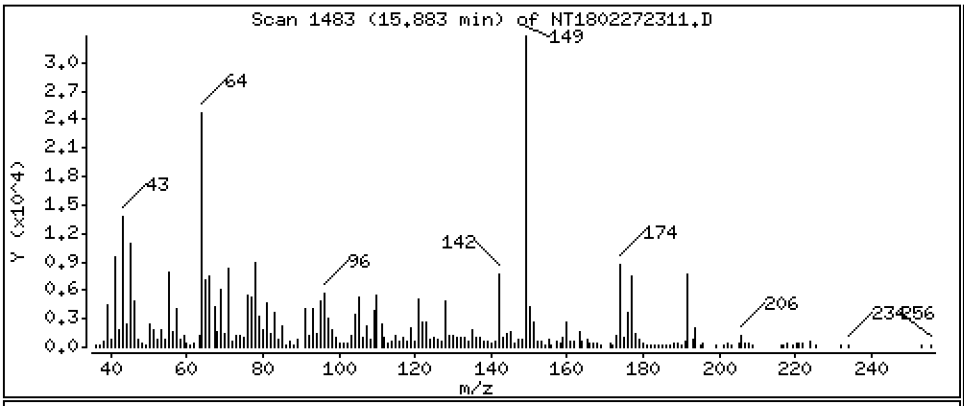
Operator: VTS

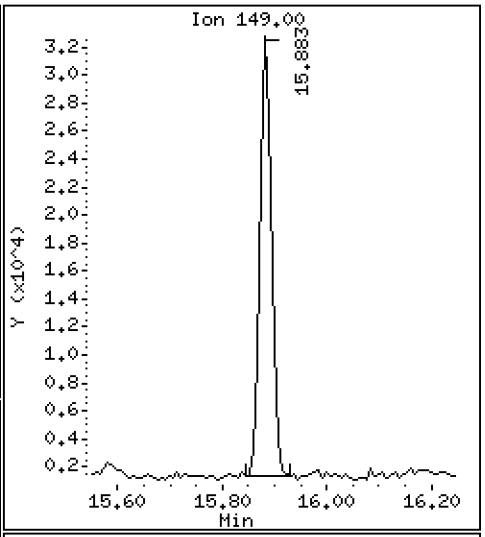
Column phase: ZB-5msi

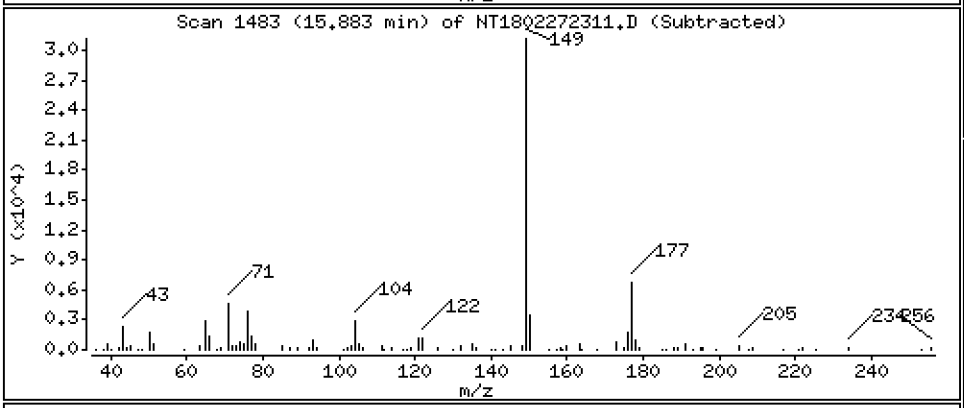
Column diameter: 0.25

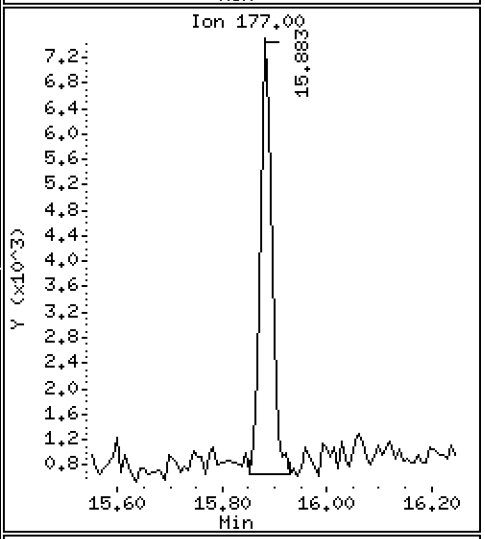
50 Diethylphthalate

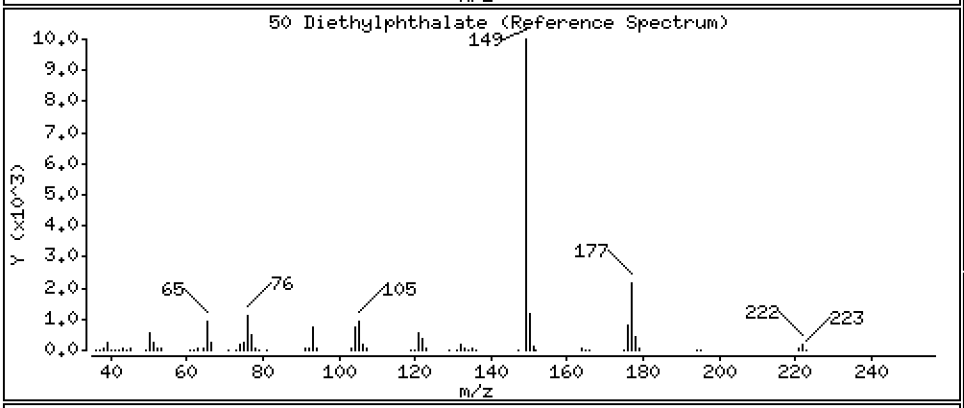
Concentration: 0.2193 ug/mL

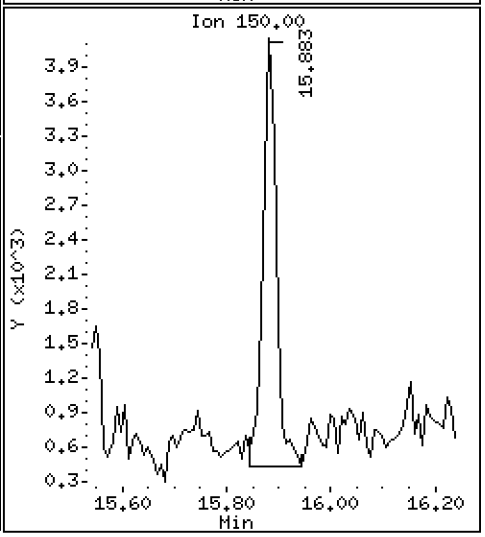


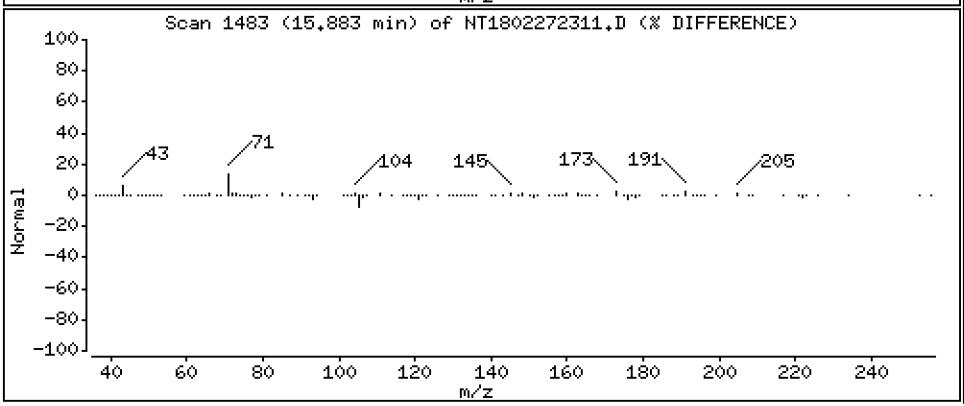












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

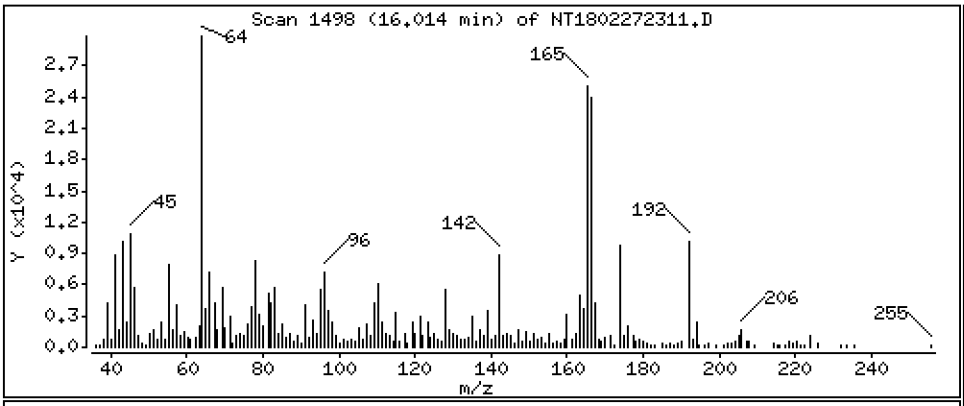
Operator: VTS

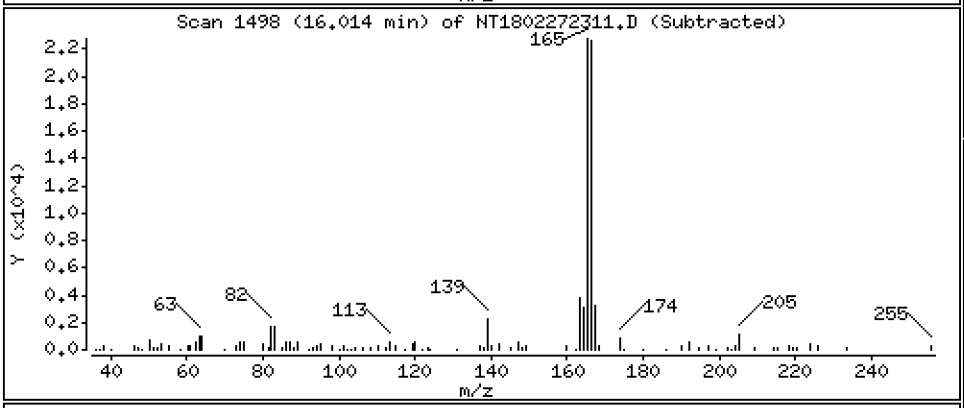
Column phase: ZB-5msi

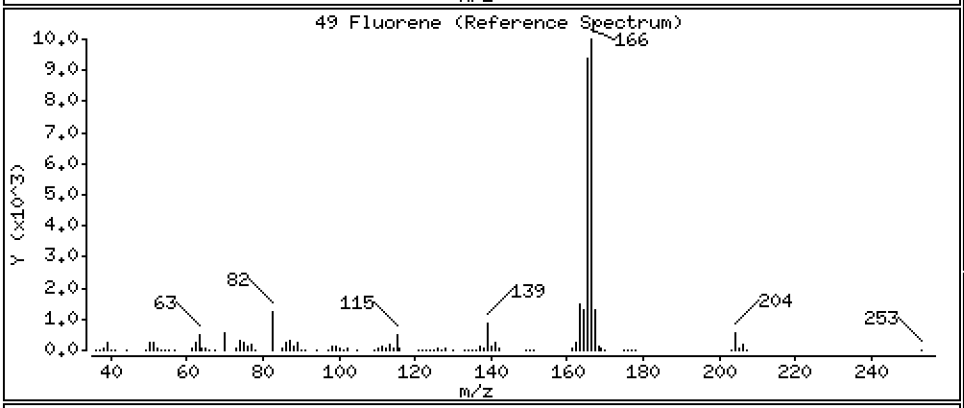
Column diameter: 0.25

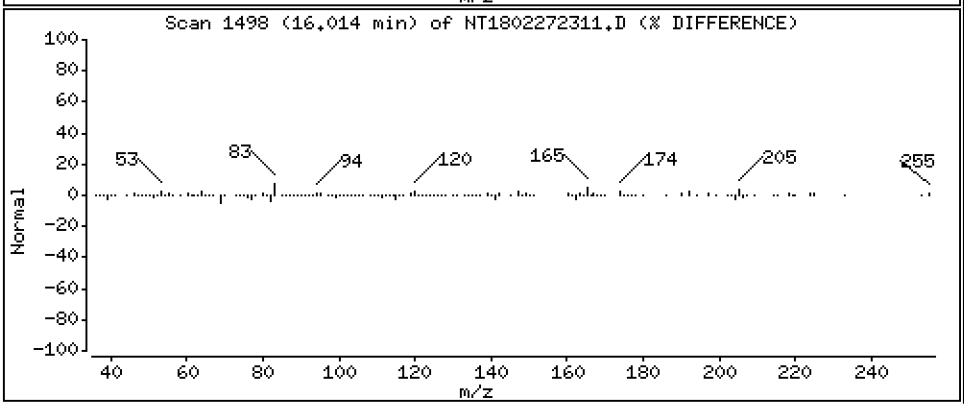
49 Fluorene

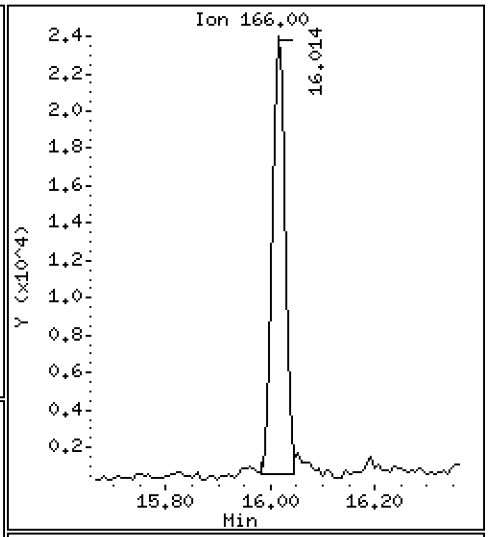
Concentration: 0.1693 ug/mL

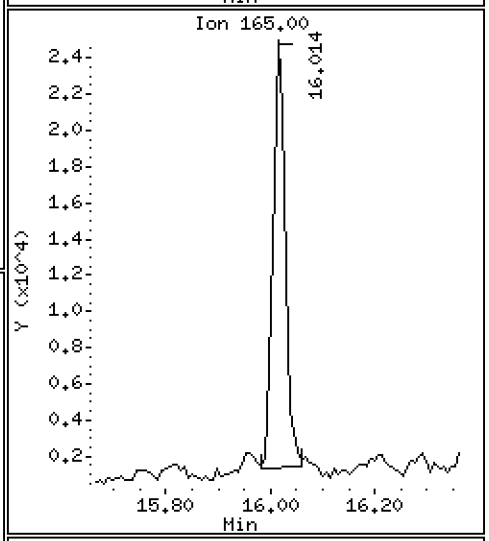


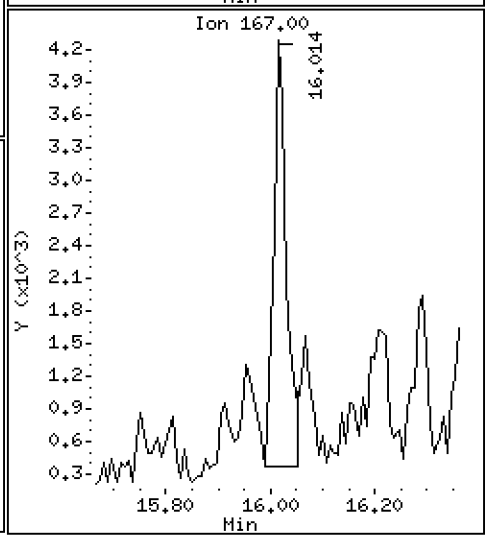












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

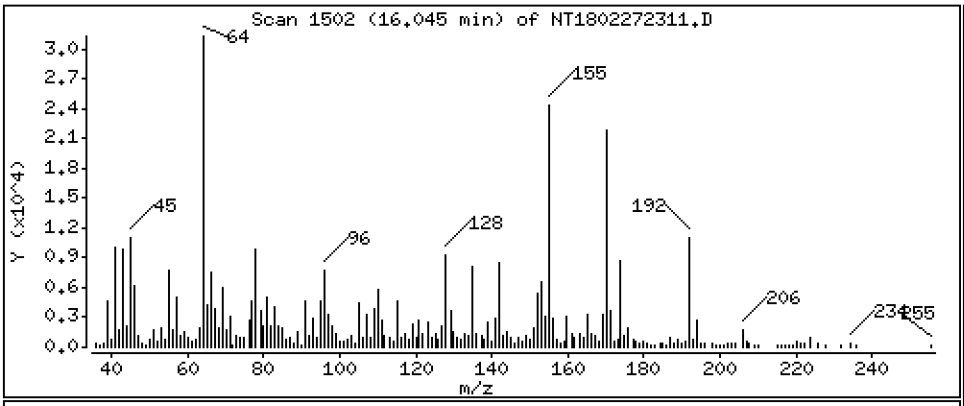
Operator: VTS

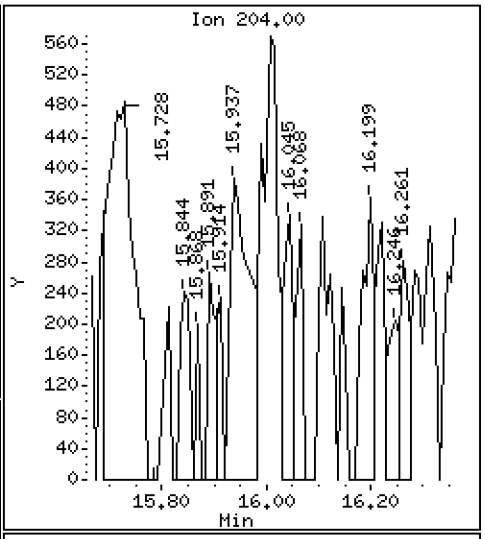
Column phase: ZB-5msi

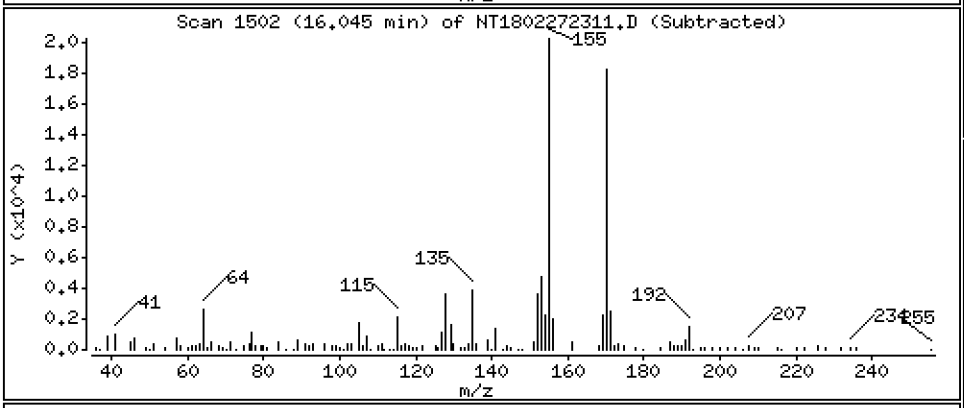
Column diameter: 0.25

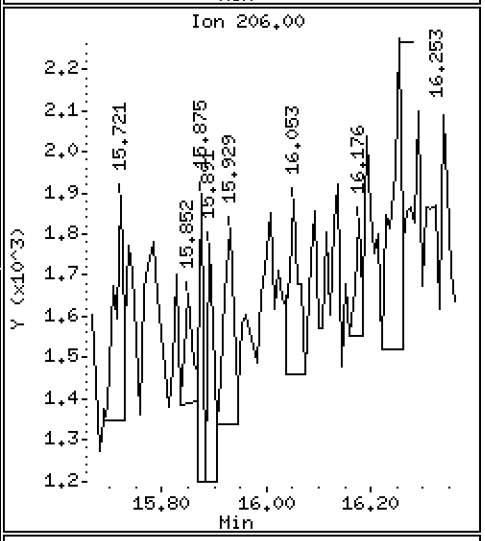
51 4-Chlorophenyl-phenylether

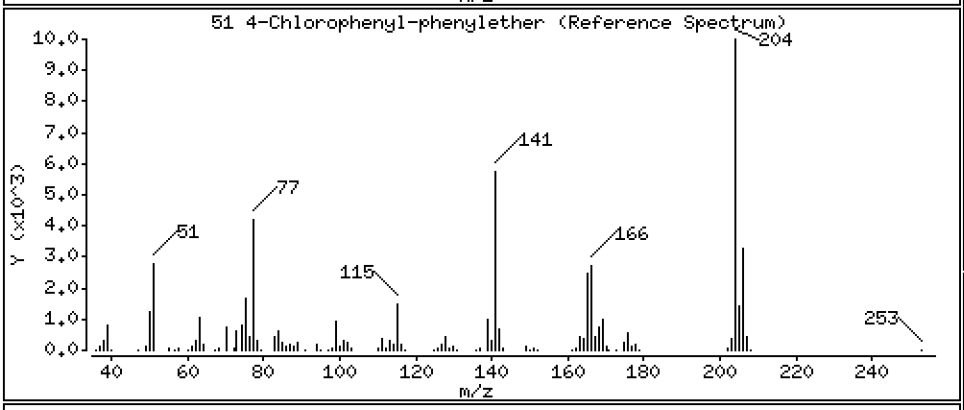
Concentration: 0.004590 ug/mL

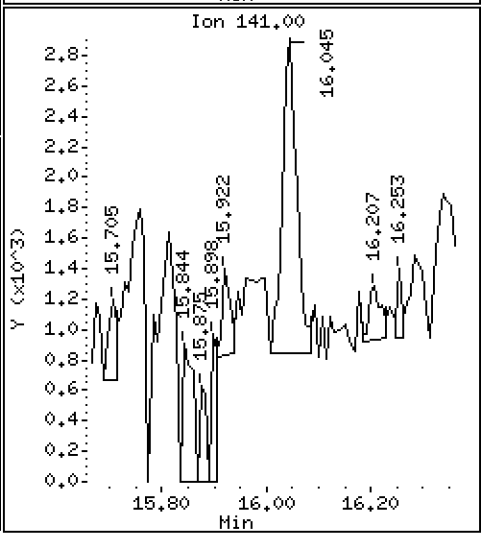


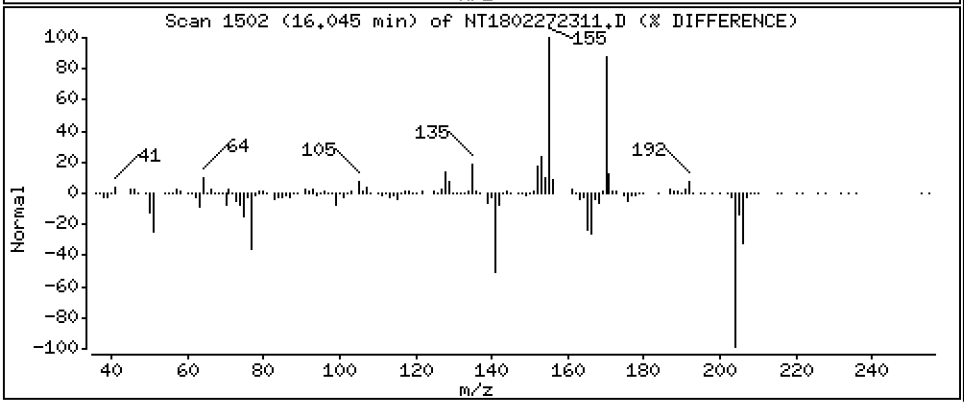












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

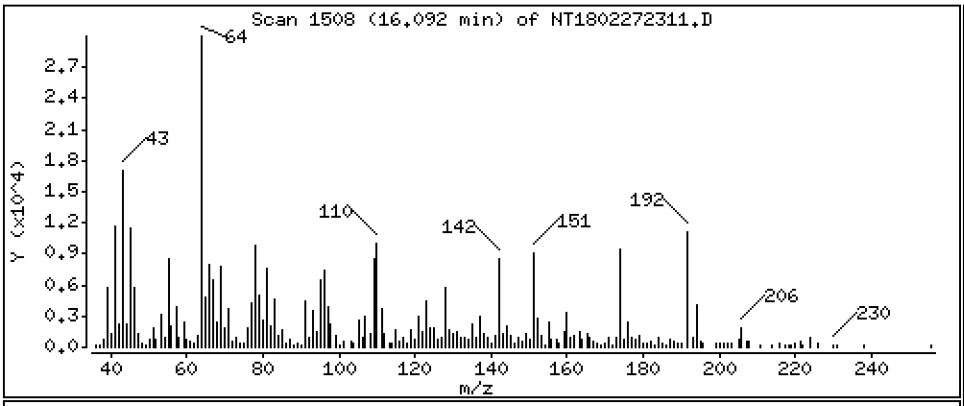
Operator: VTS

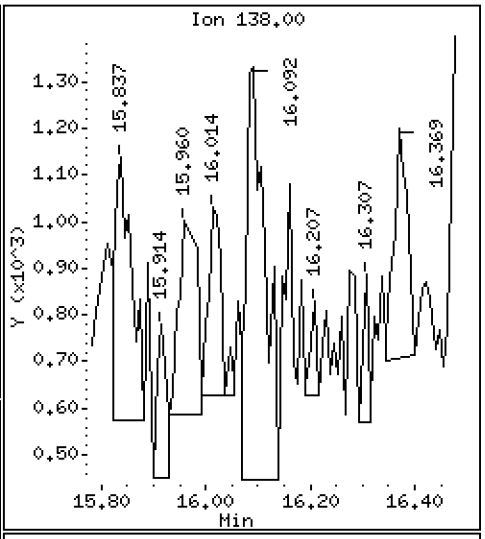
Column phase: ZB-5msi

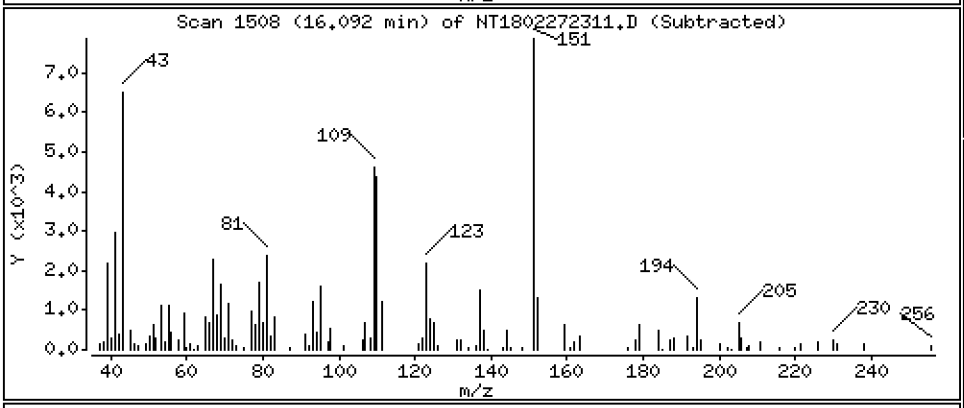
Column diameter: 0.25

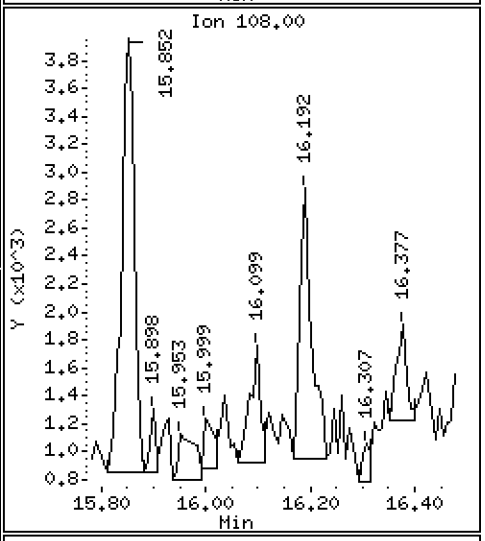
52 4-Nitroaniline

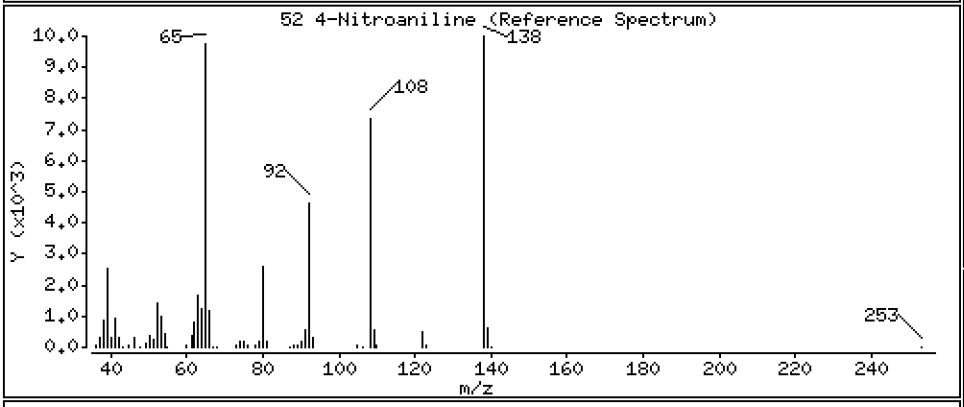
Concentration: 0.04305 ug/mL

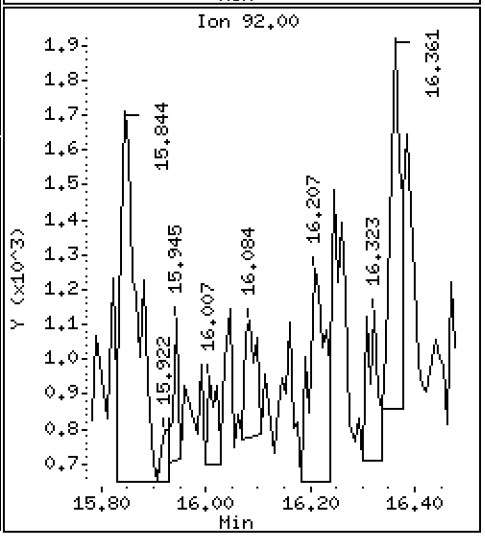


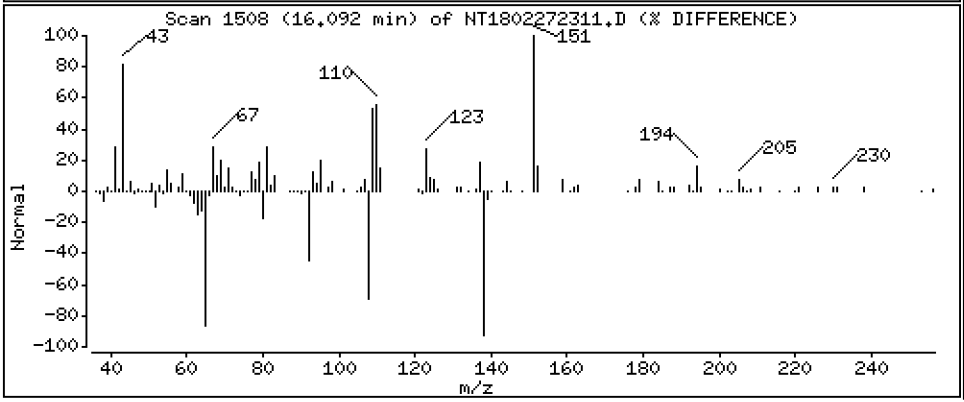












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

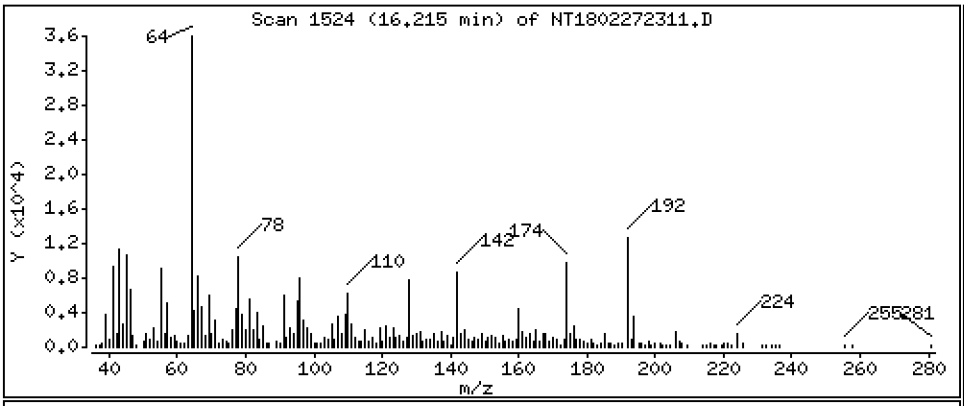
Operator: VTS

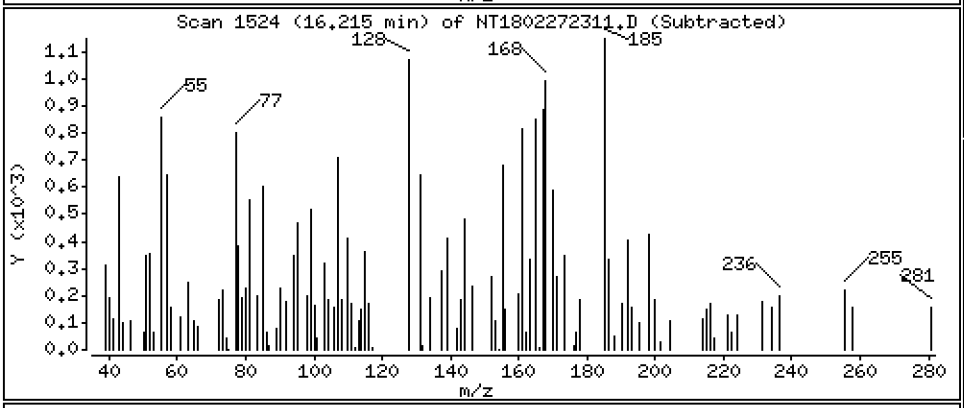
Column phase: ZB-5msi

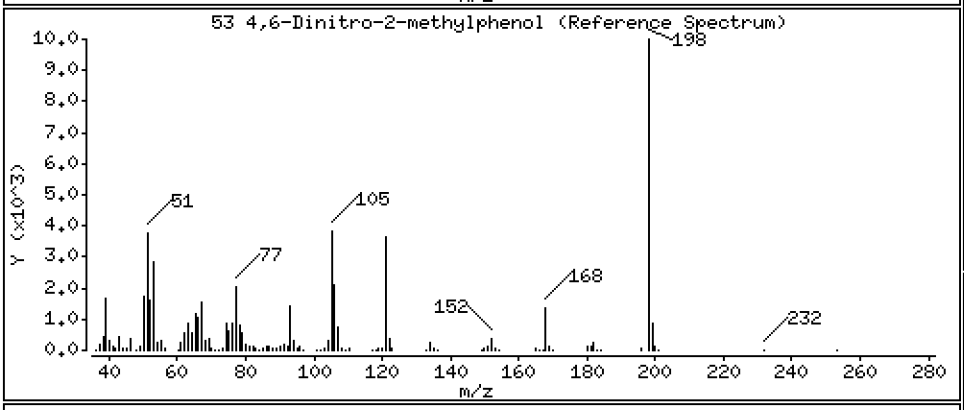
Column diameter: 0.25

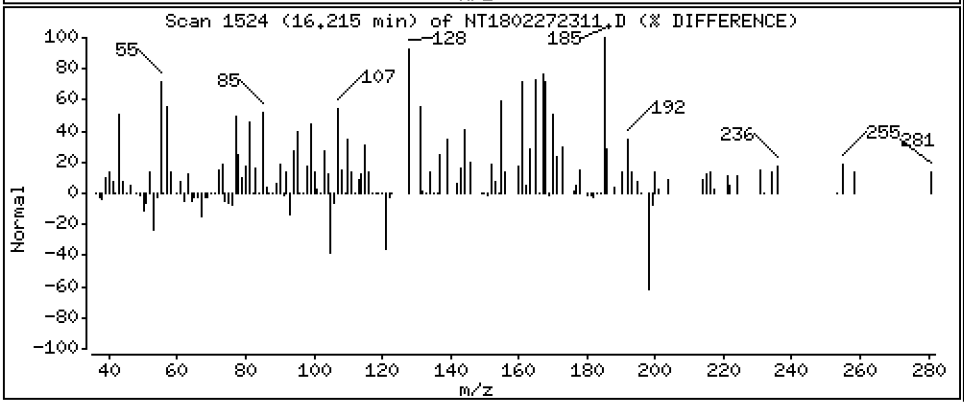
53 4,6-Dinitro-2-methylphenol

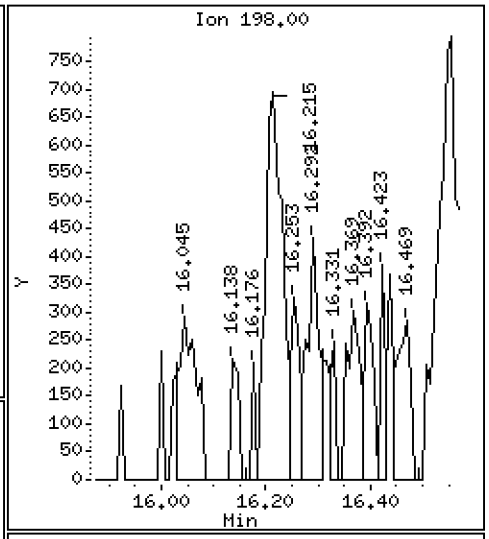
Concentration: 0.03684 ug/mL

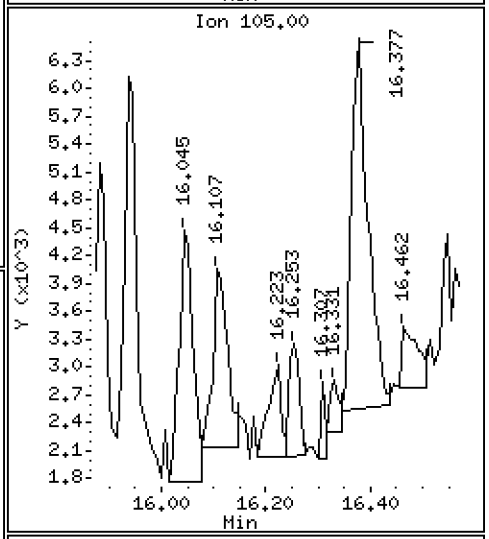


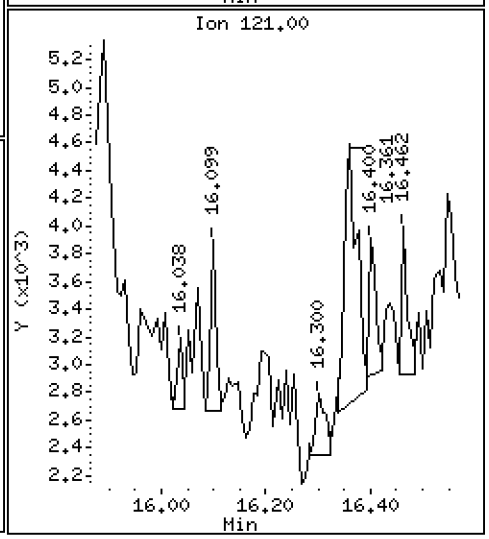












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

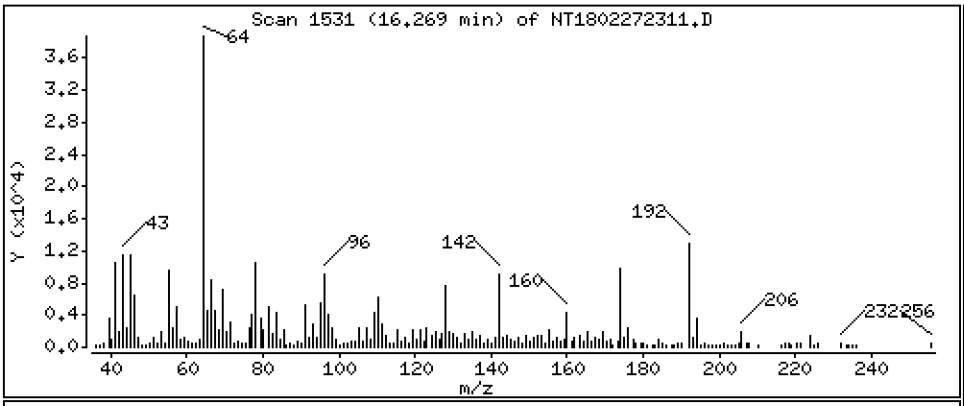
Operator: VTS

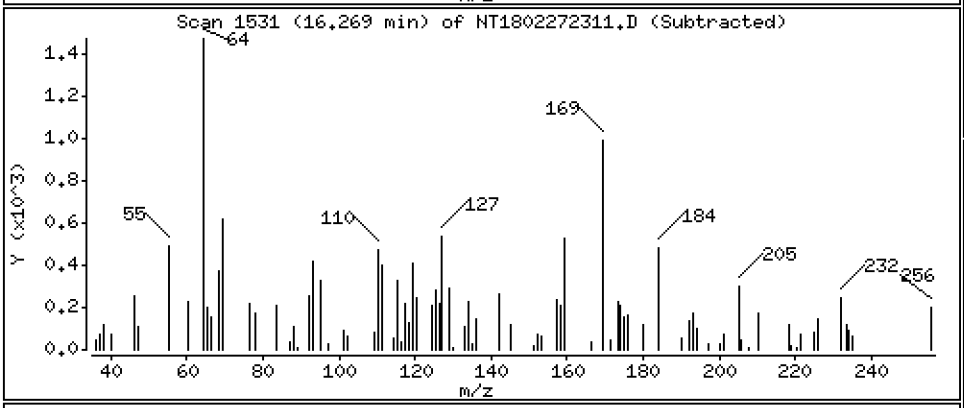
Column phase: ZB-5msi

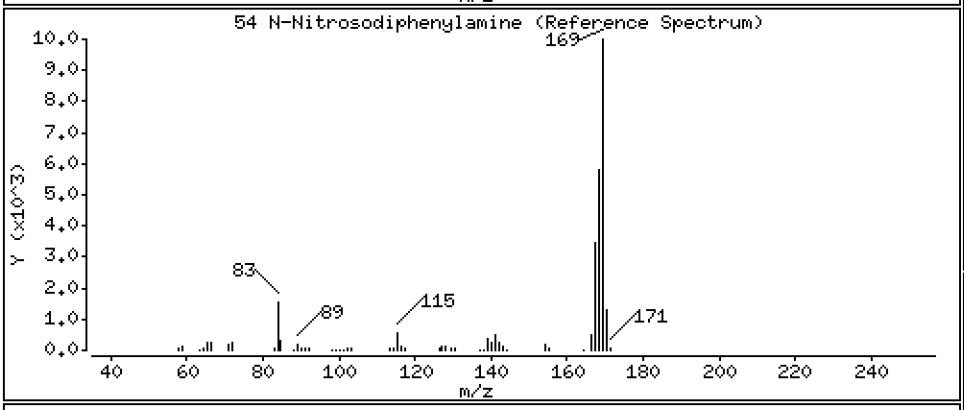
Column diameter: 0.25

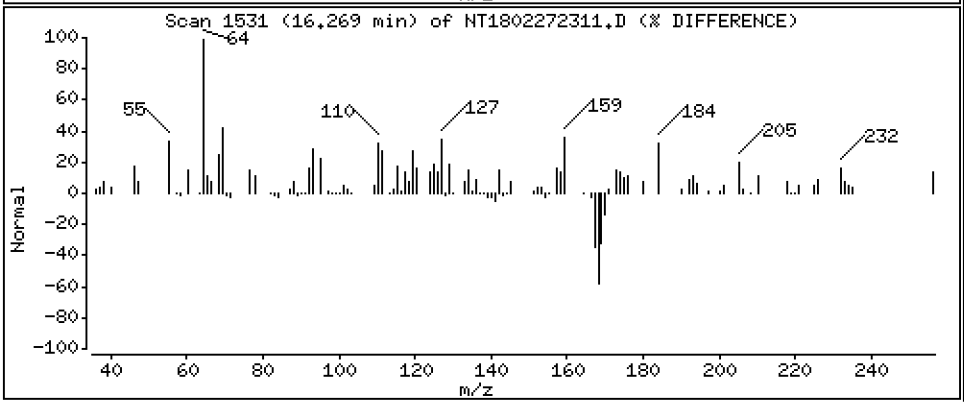
54 N-Nitrosodiphenylamine

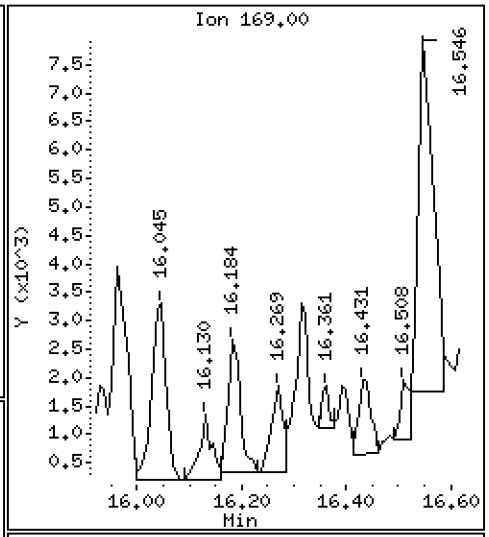
Concentration: 0.01289 ug/mL

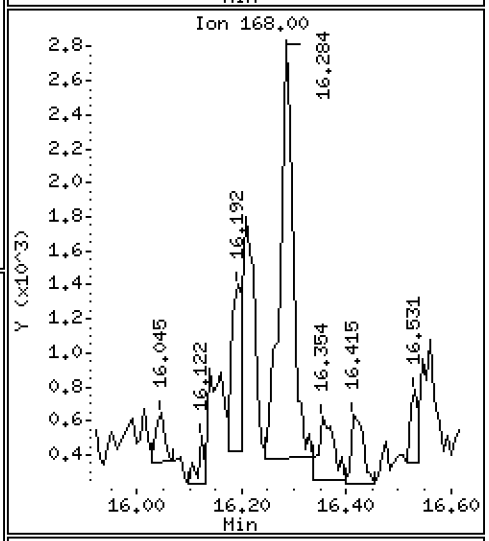


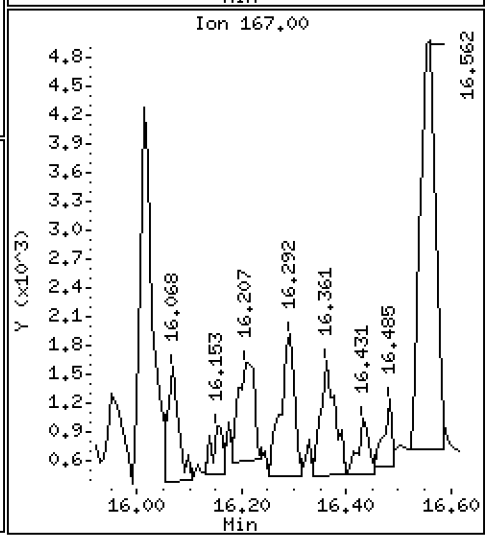












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

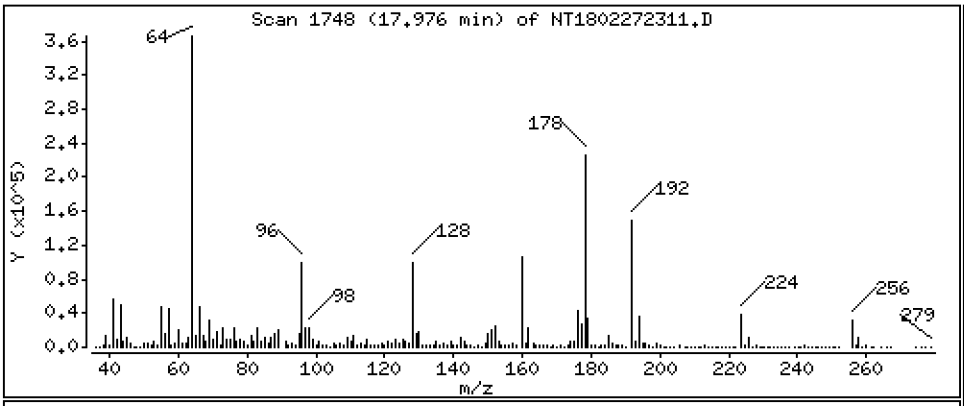
Operator: VTS

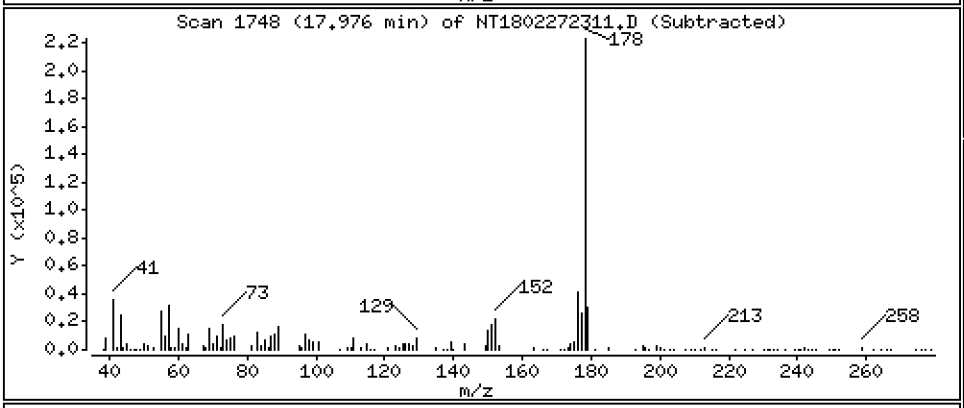
Column phase: ZB-5msi

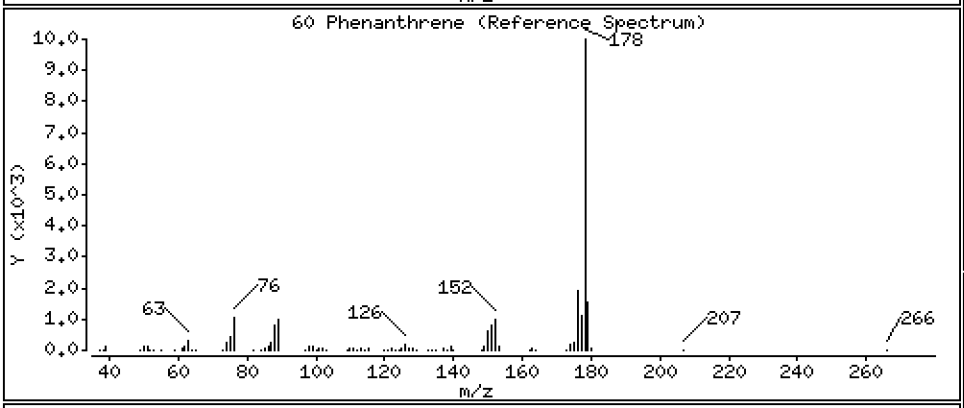
Column diameter: 0.25

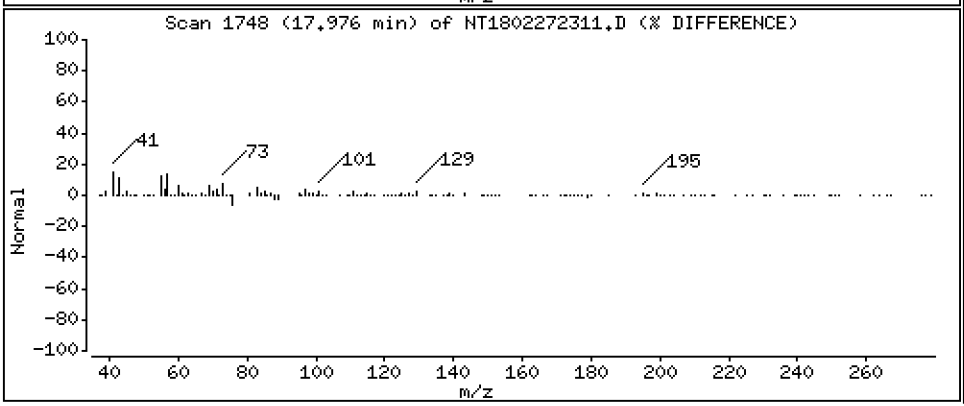
60 Phenanthrene

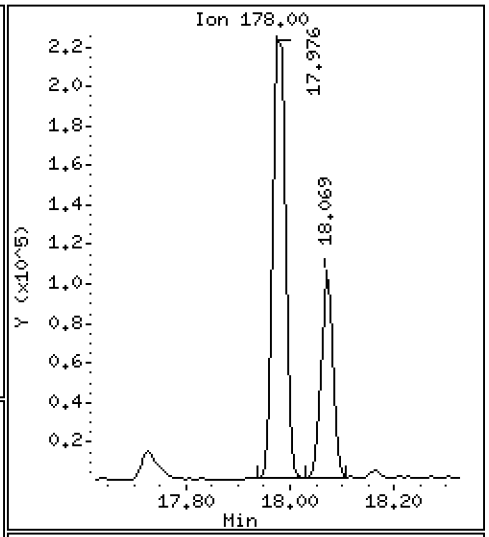
Concentration: 0.9599 ug/mL

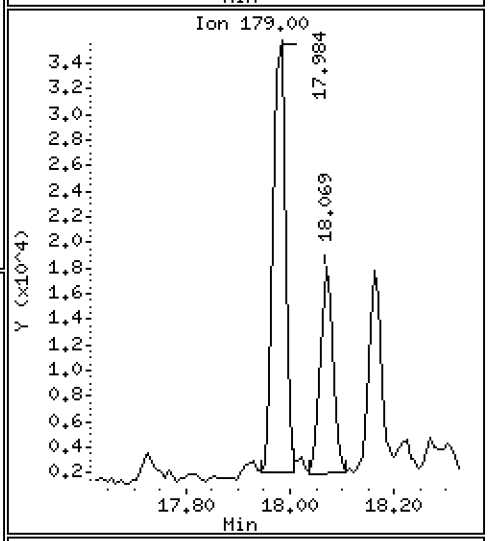


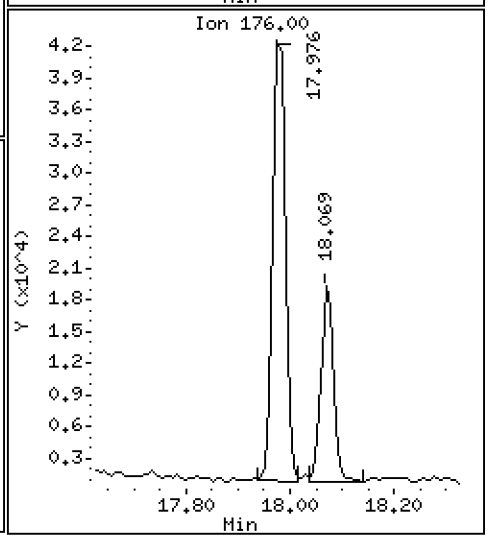












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

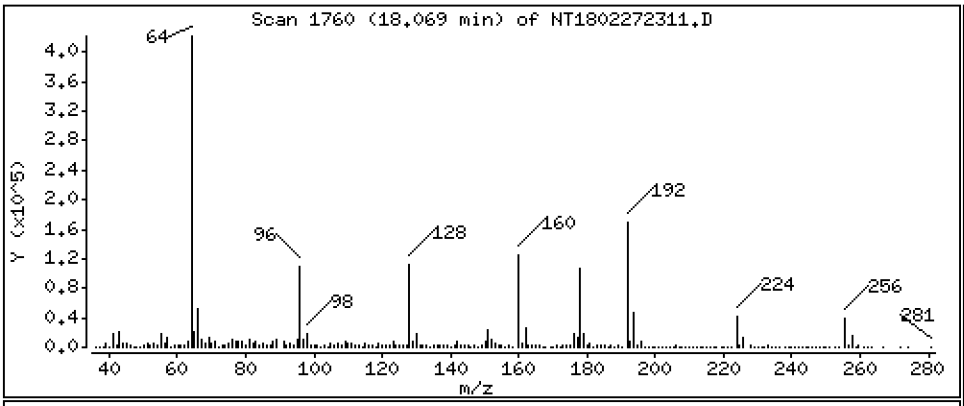
Operator: VTS

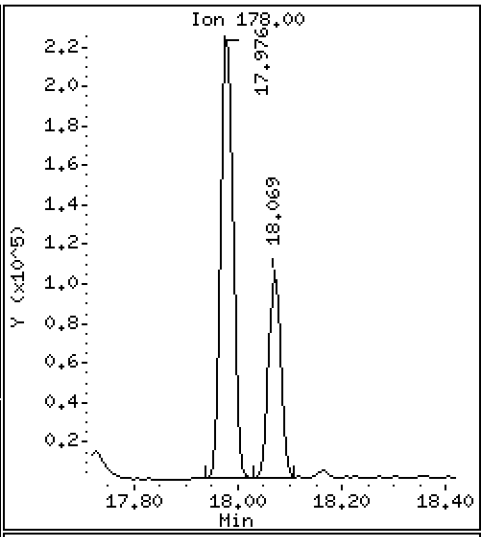
Column phase: ZB-5msi

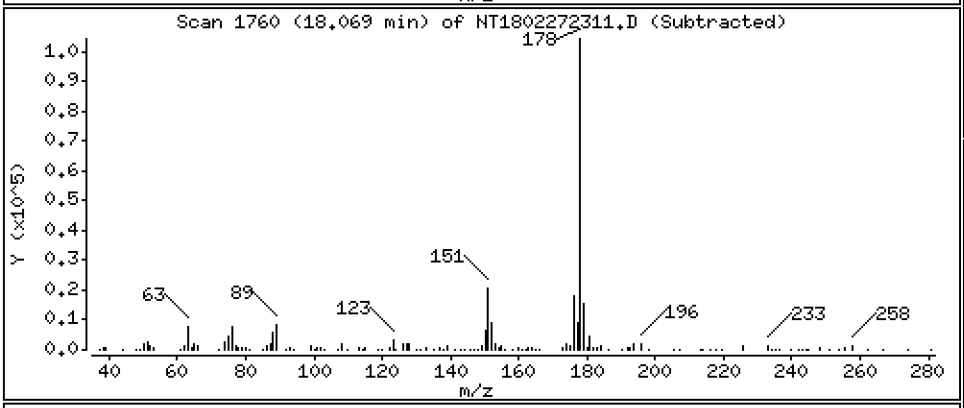
Column diameter: 0.25

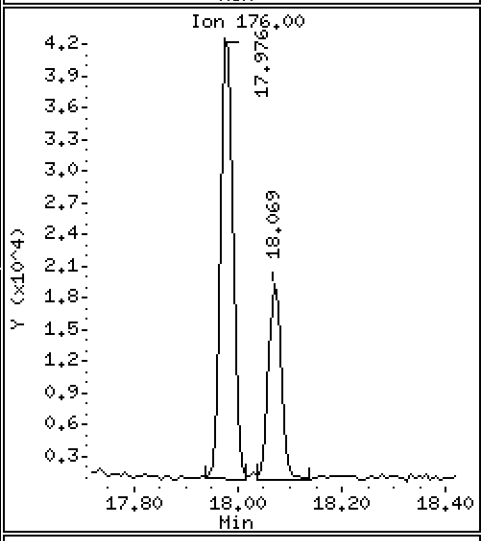
61 Anthracene

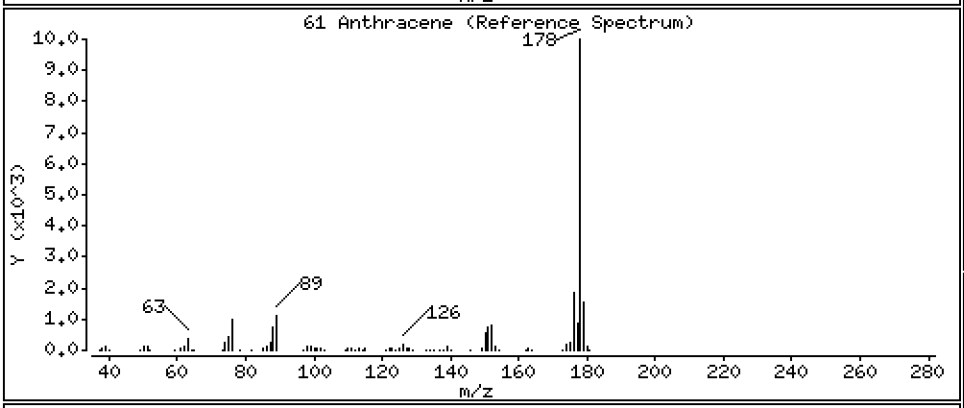
Concentration: 0.4534 ug/mL

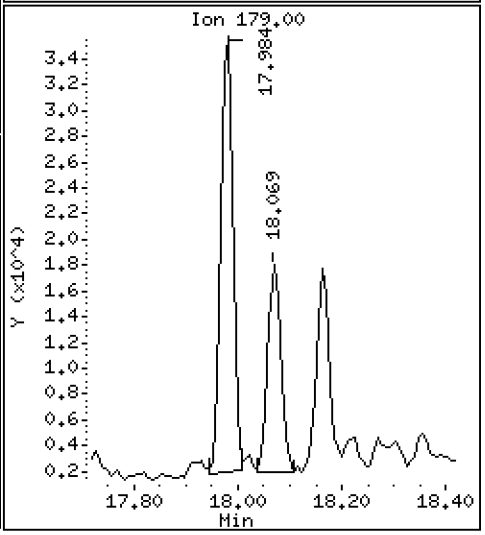


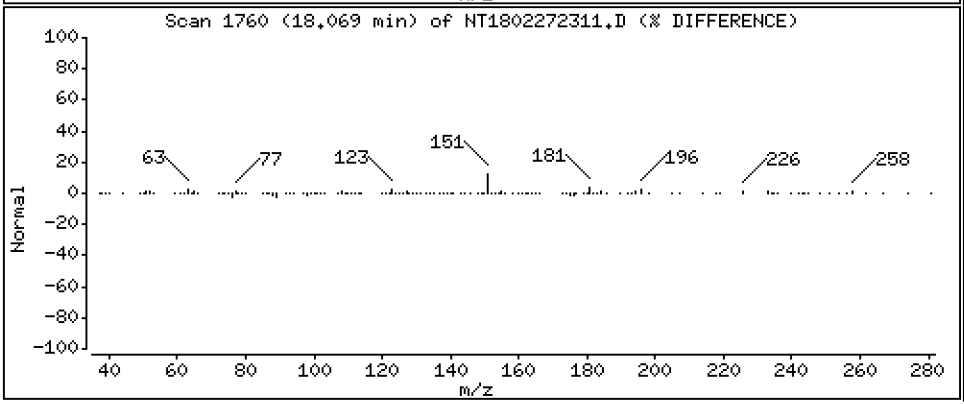












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

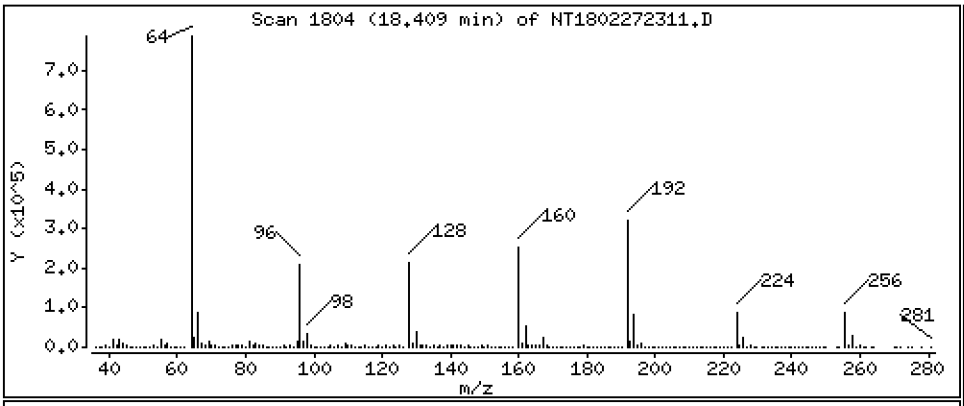
Operator: VTS

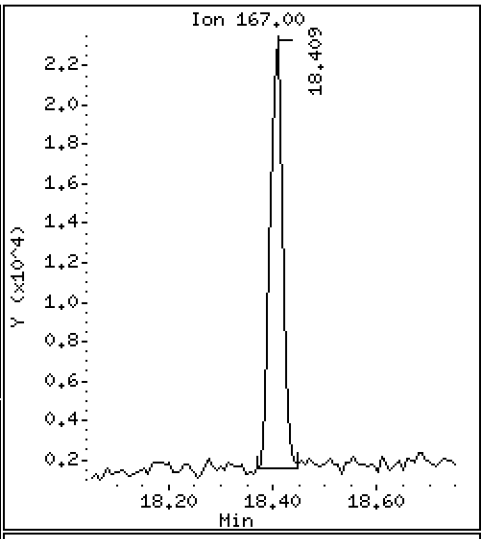
Column phase: ZB-5msi

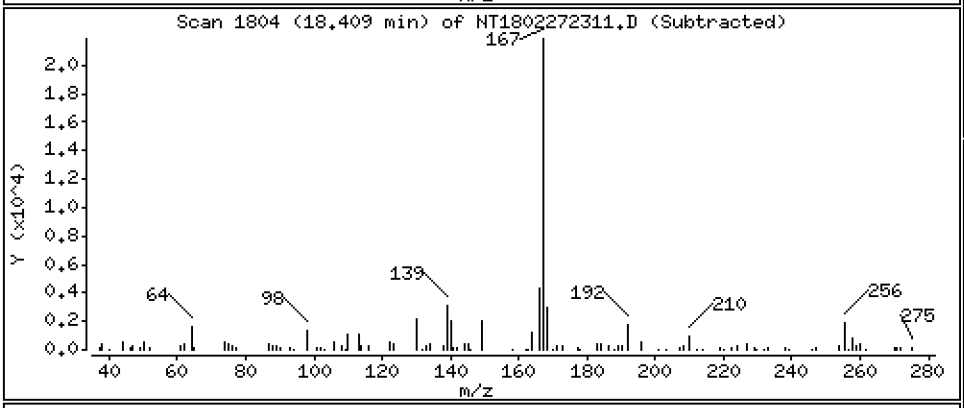
Column diameter: 0.25

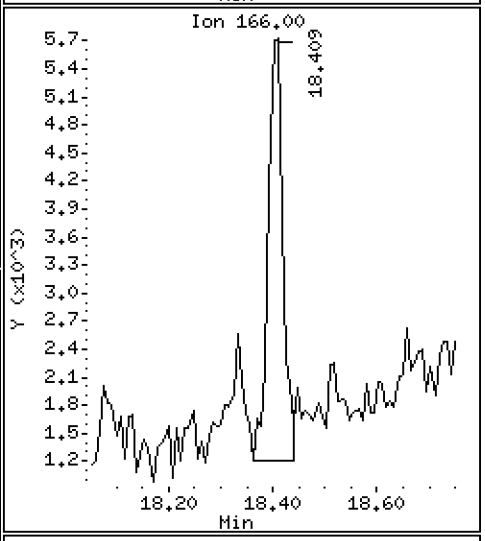
62 Carbazole

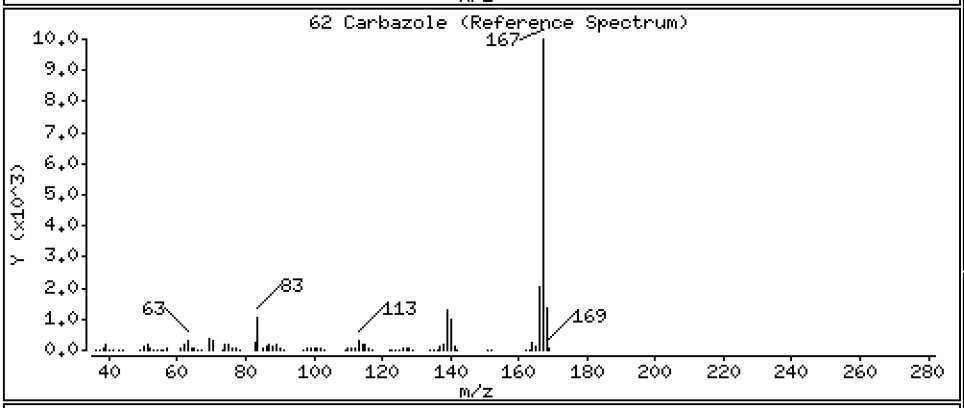
Concentration: 0.1075 ug/mL

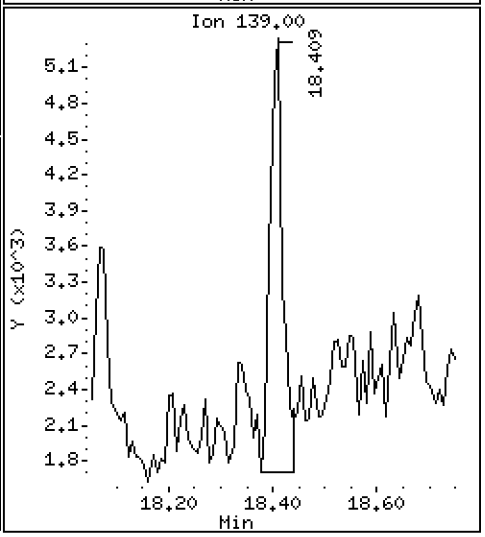


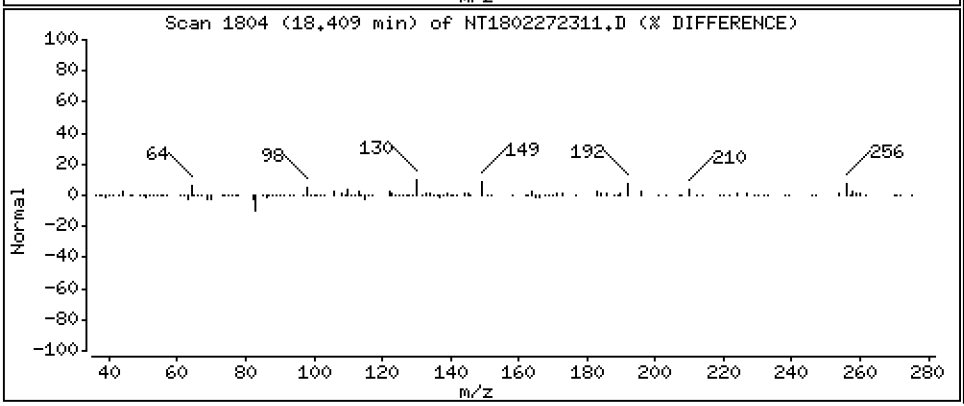












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

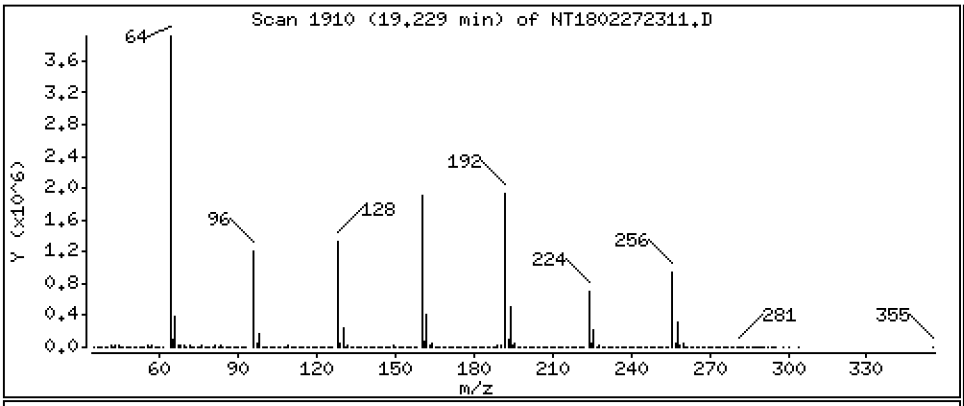
Operator: VTS

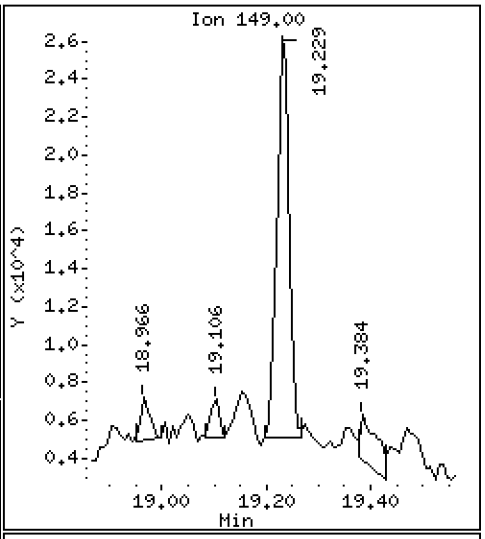
Column phase: ZB-5msi

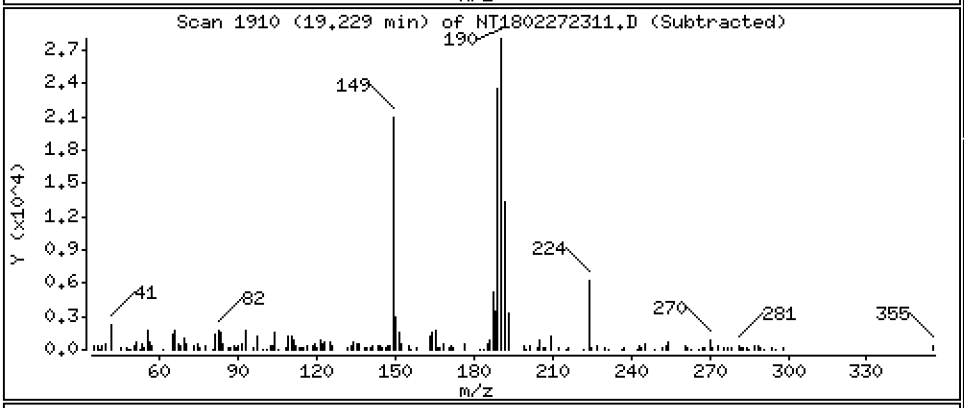
Column diameter: 0.25

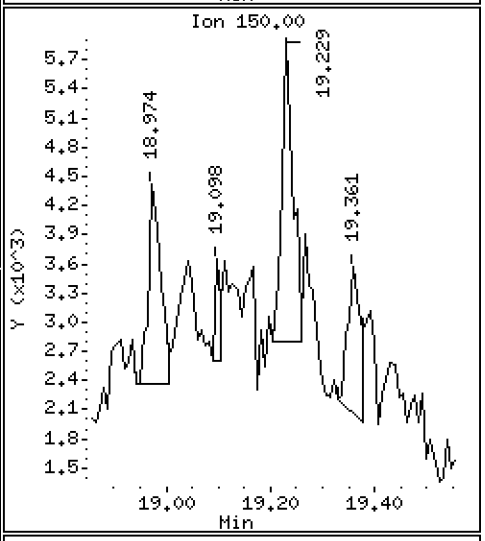
63 Di-n-butylphthalate

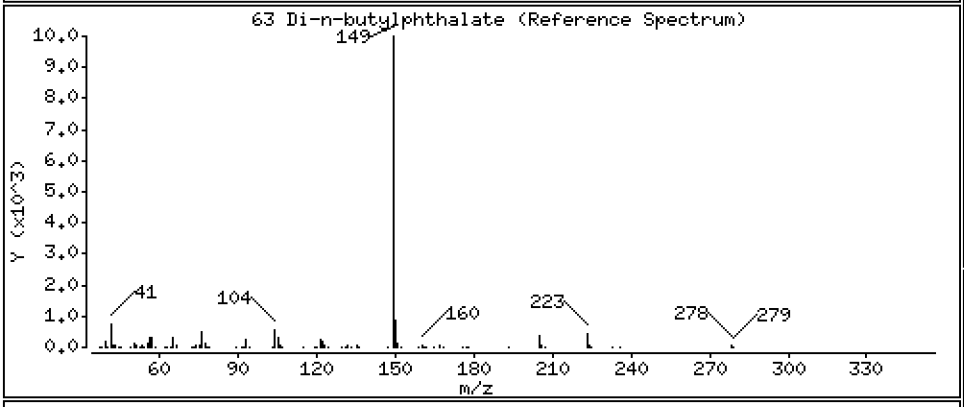
Concentration: 0.09457 ug/mL

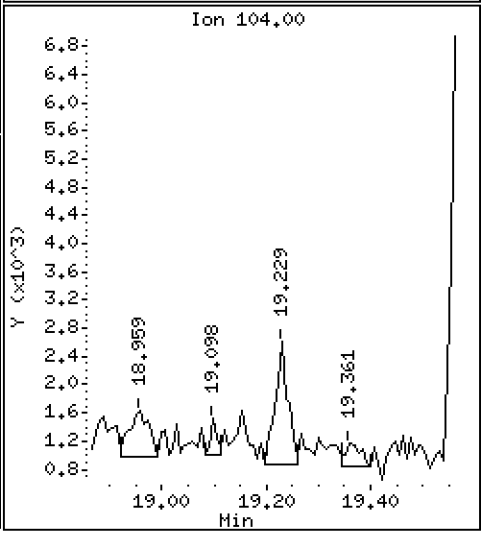


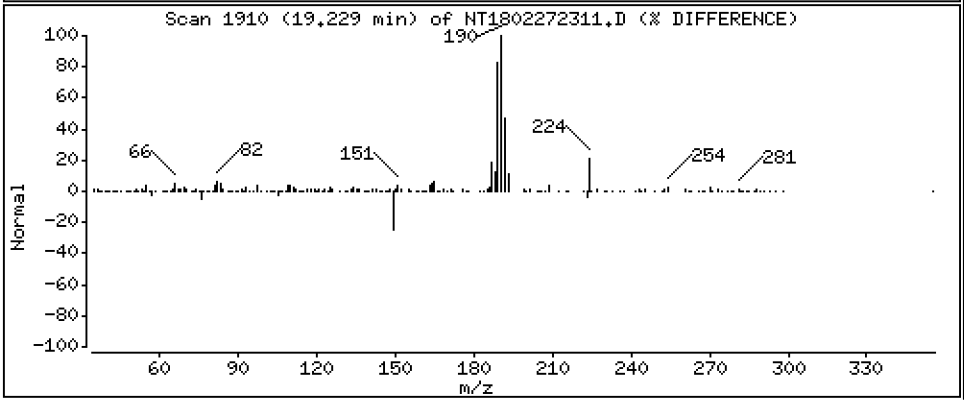












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

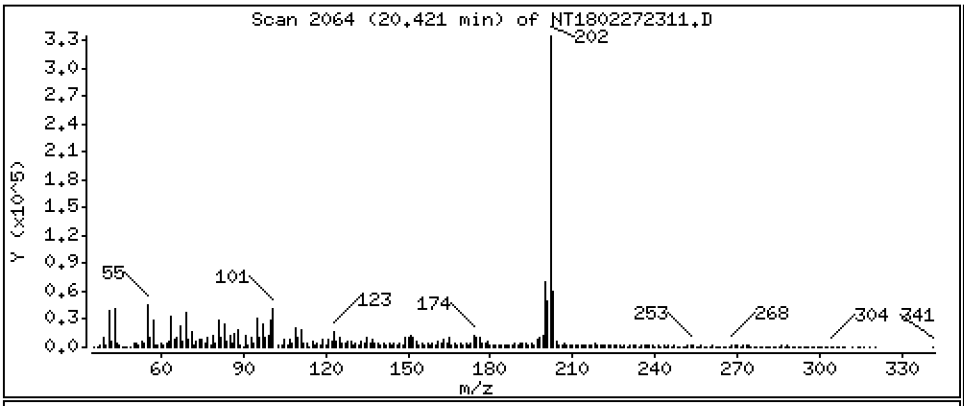
Operator: VTS

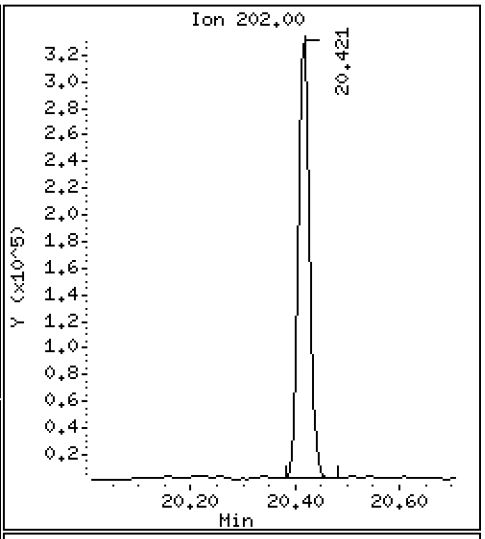
Column phase: ZB-5msi

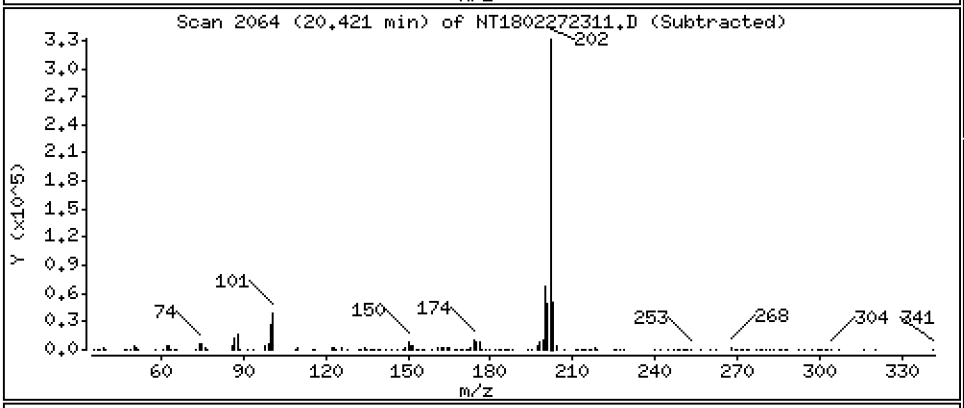
Column diameter: 0.25

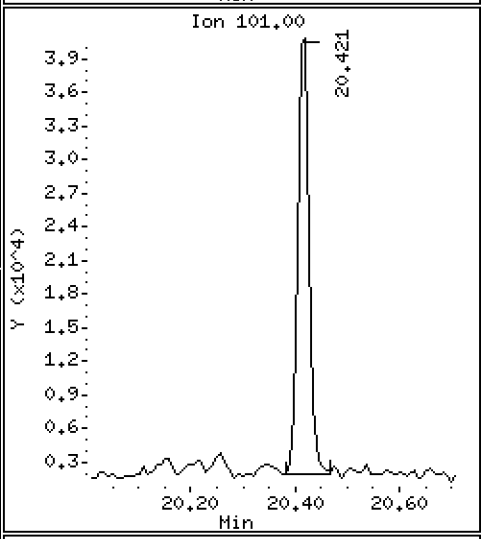
64 Fluoranthene

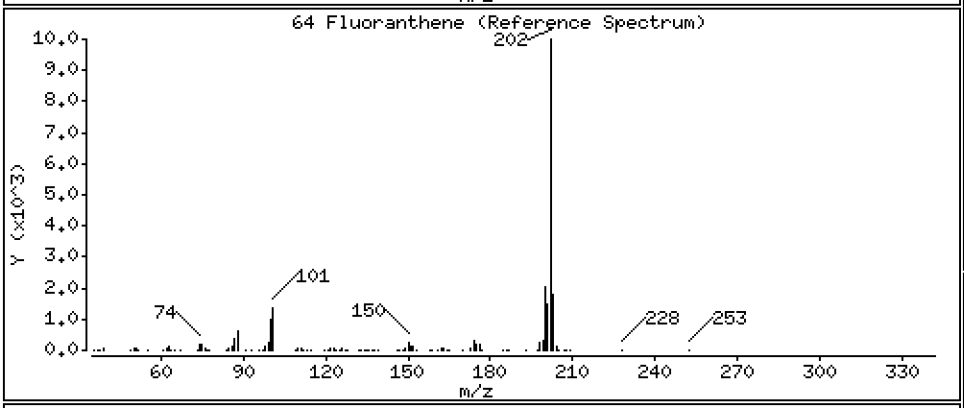
Concentration: 1.265 ug/mL

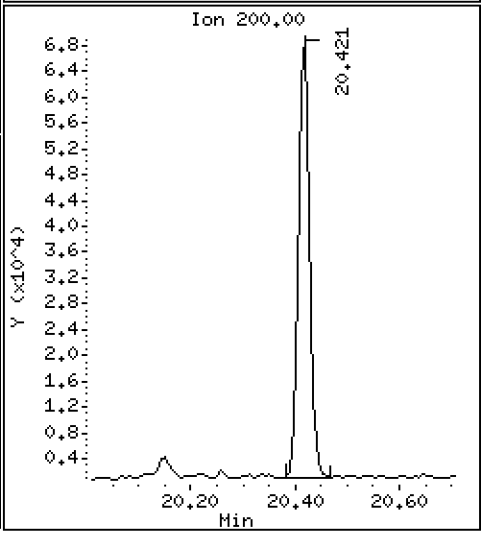


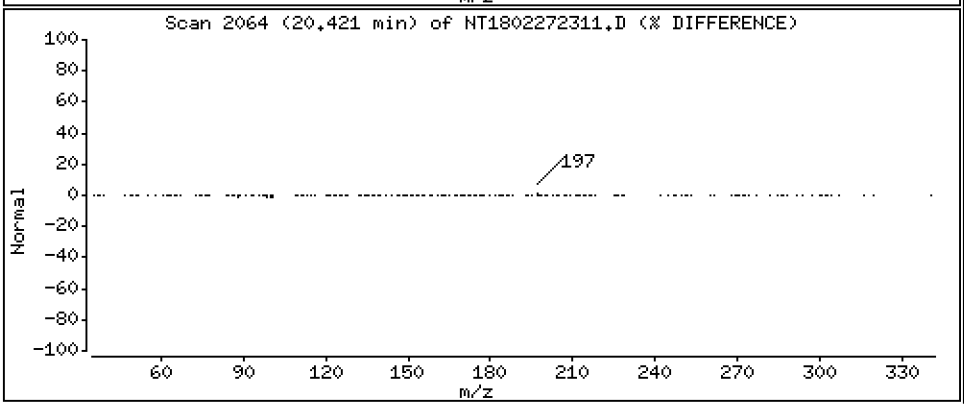












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

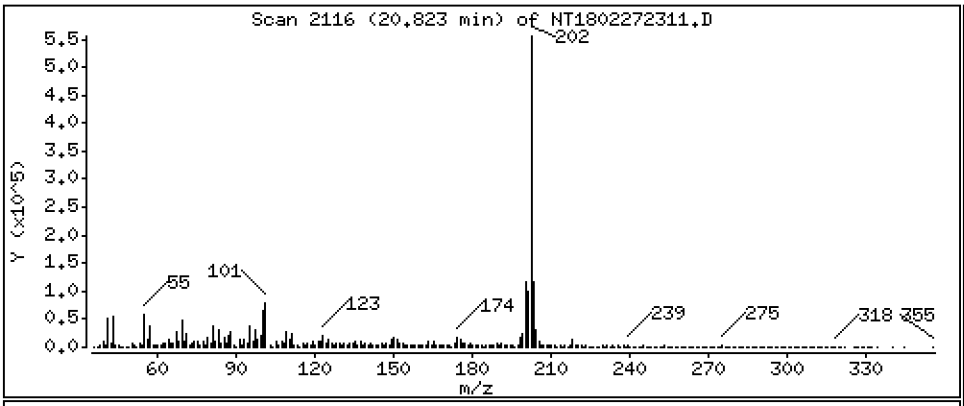
Operator: VTS

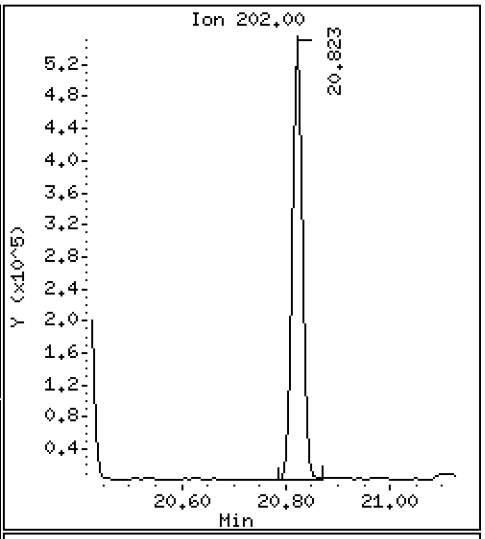
Column phase: ZB-5msi

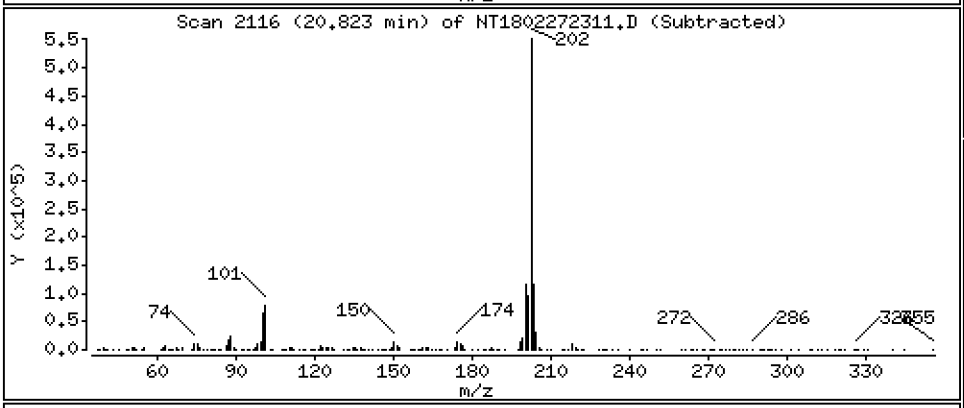
Column diameter: 0.25

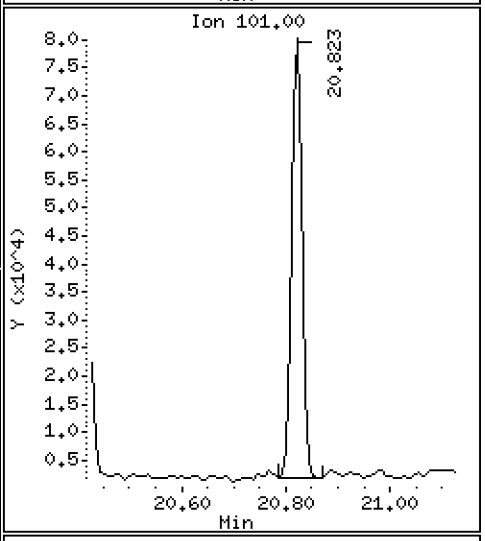
65 Pyrene

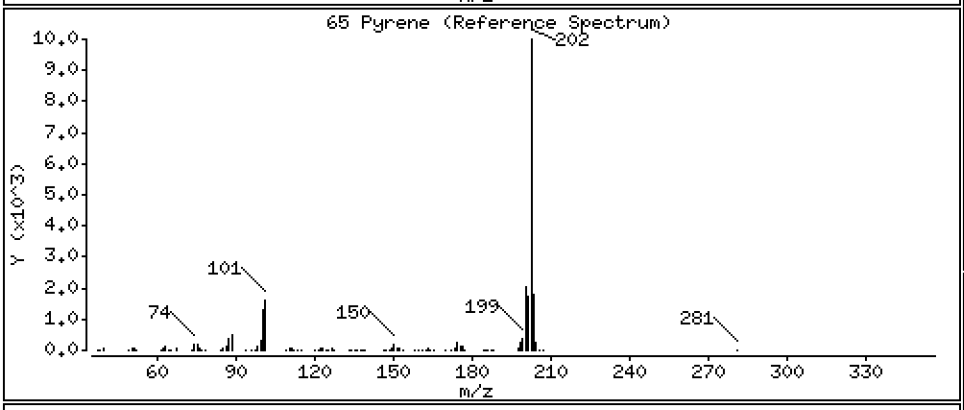
Concentration: 1.798 ug/mL

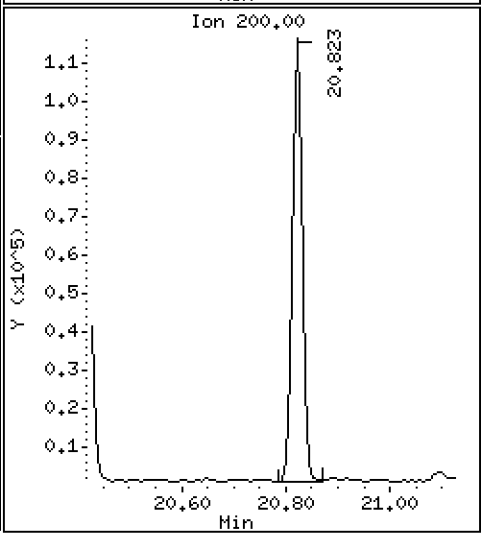


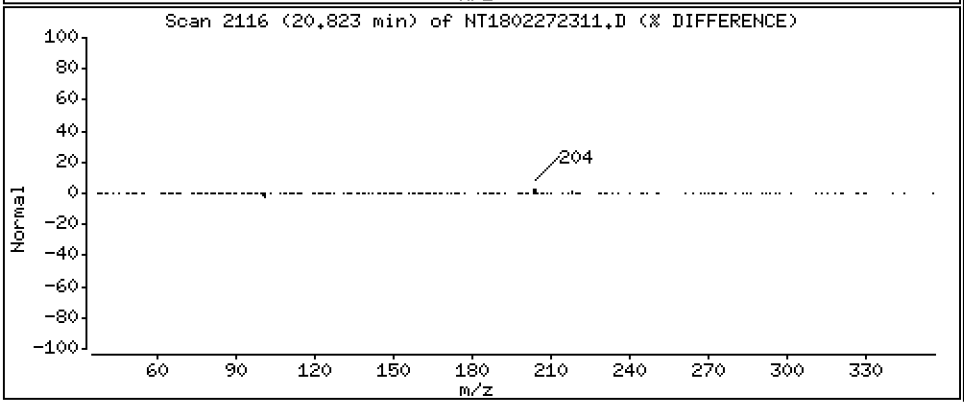












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

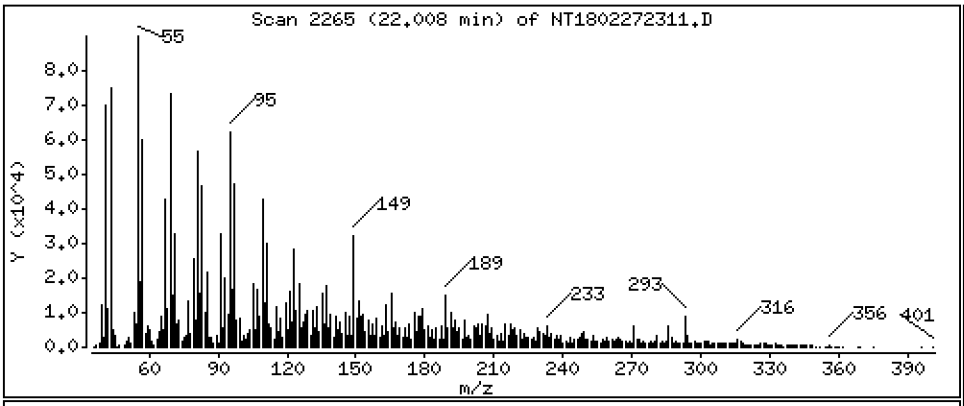
Operator: VTS

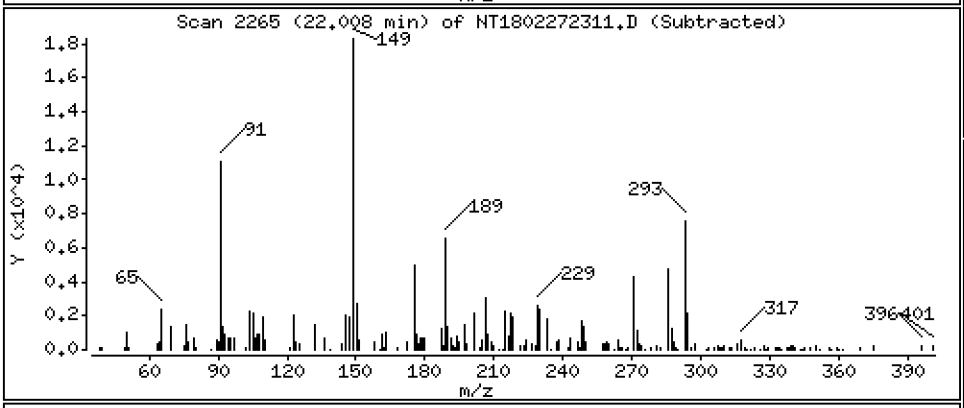
Column phase: ZB-5msi

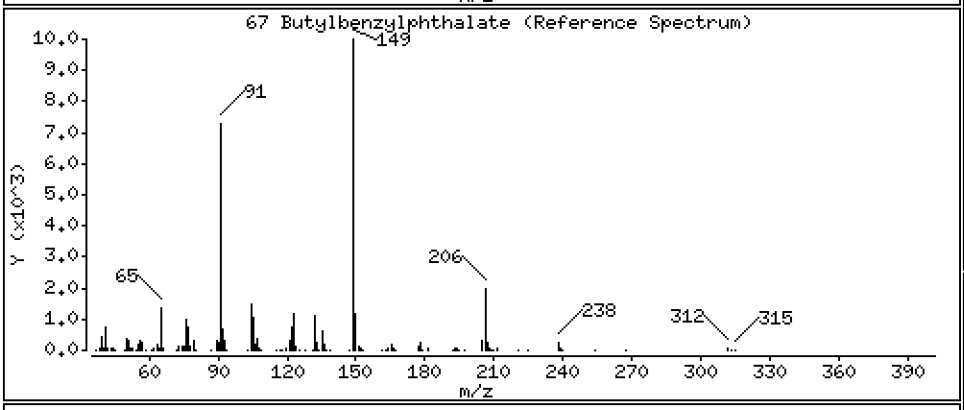
Column diameter: 0.25

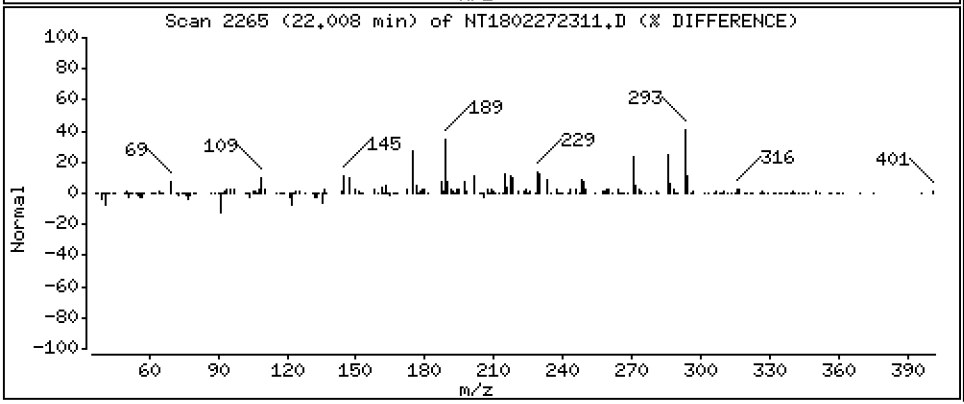
67 Butylbenzylphthalate

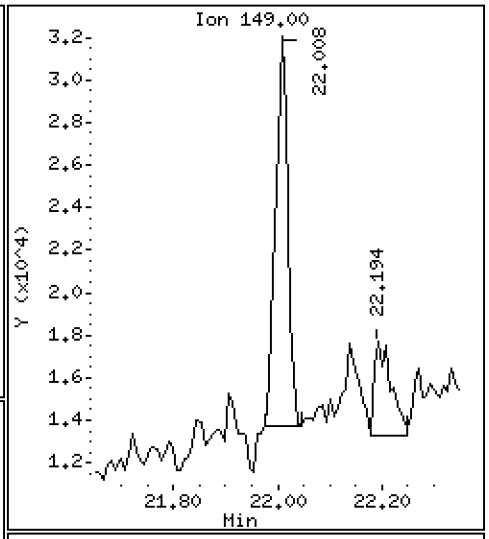
Concentration: 0.1790 ug/mL

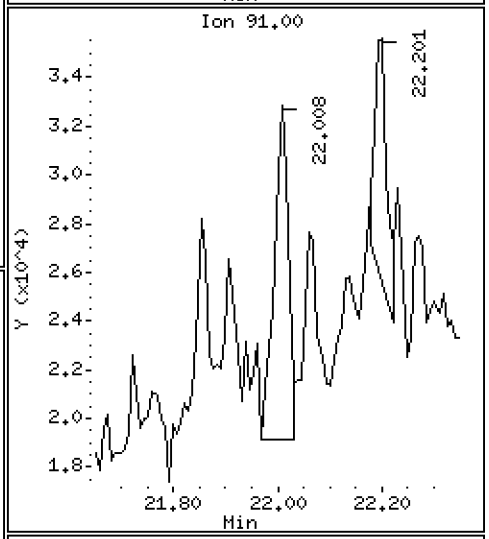


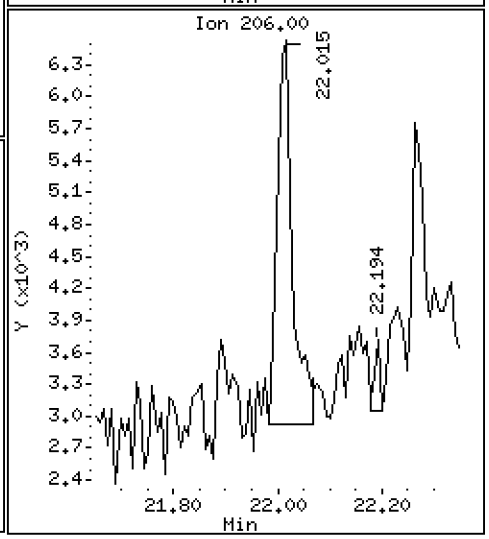












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

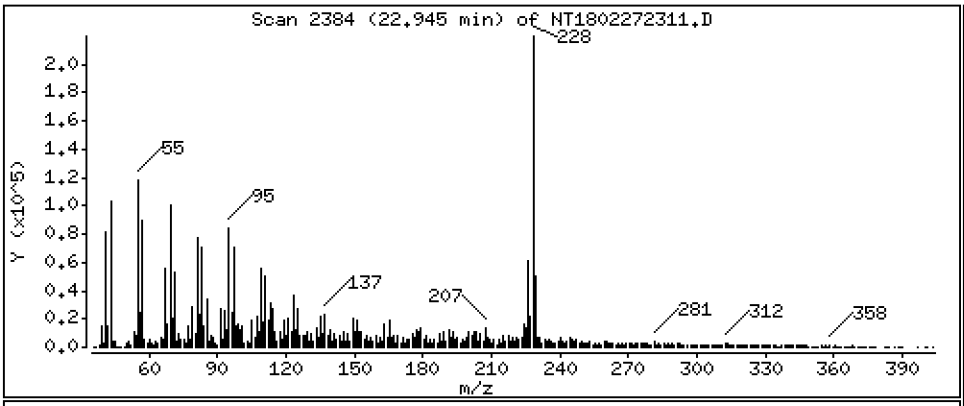
Operator: VTS

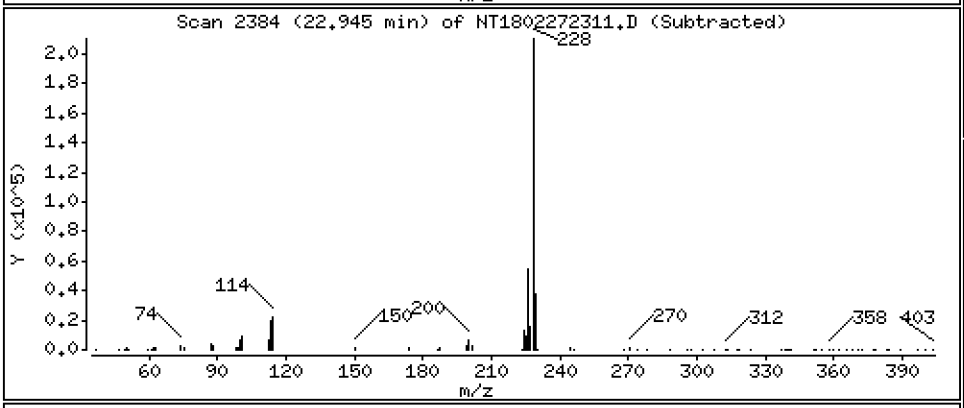
Column phase: ZB-5msi

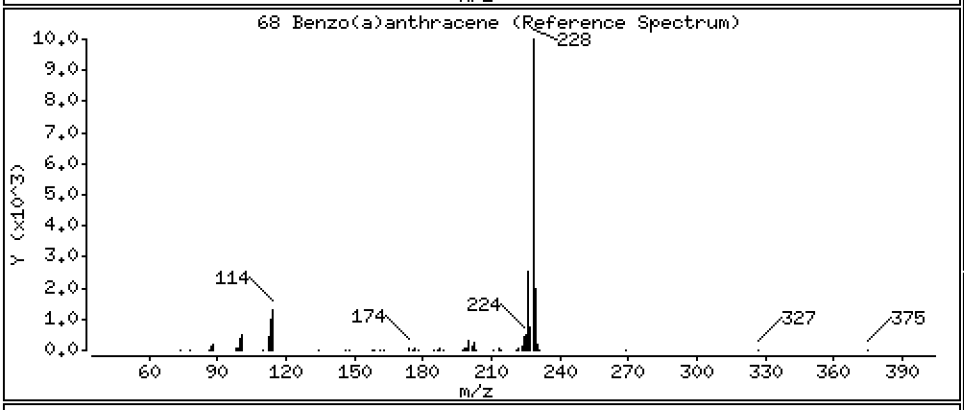
Column diameter: 0.25

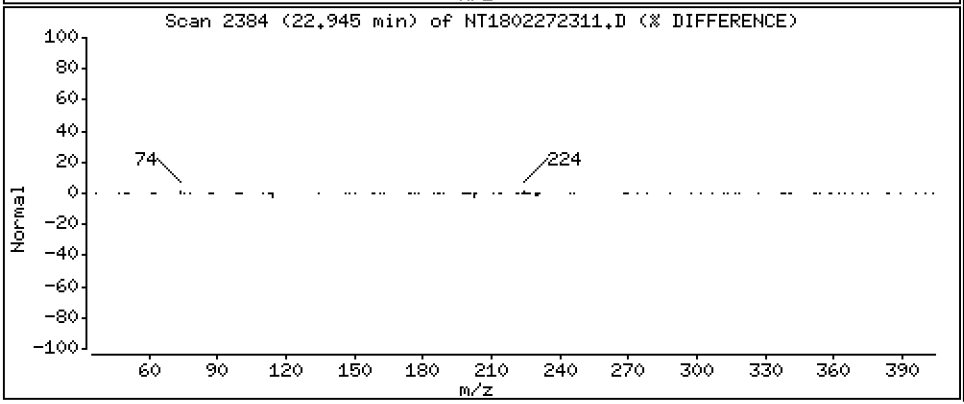
68 Benzo(a)anthracene

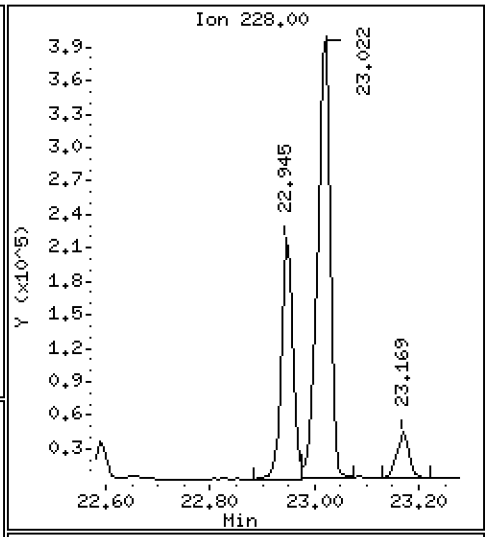
Concentration: 0.8190 ug/mL

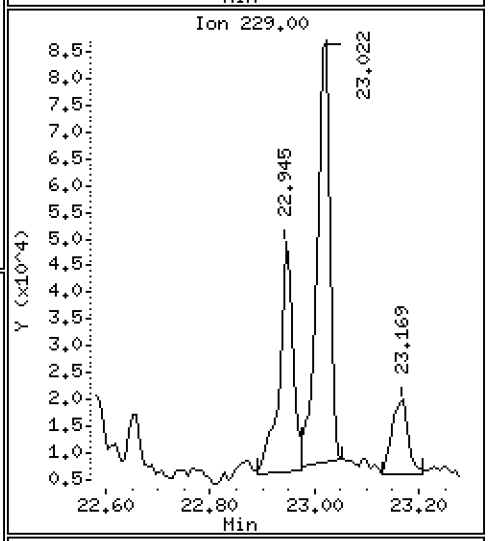


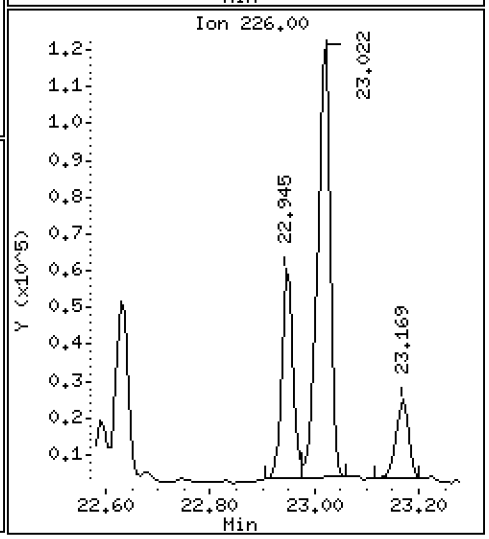












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

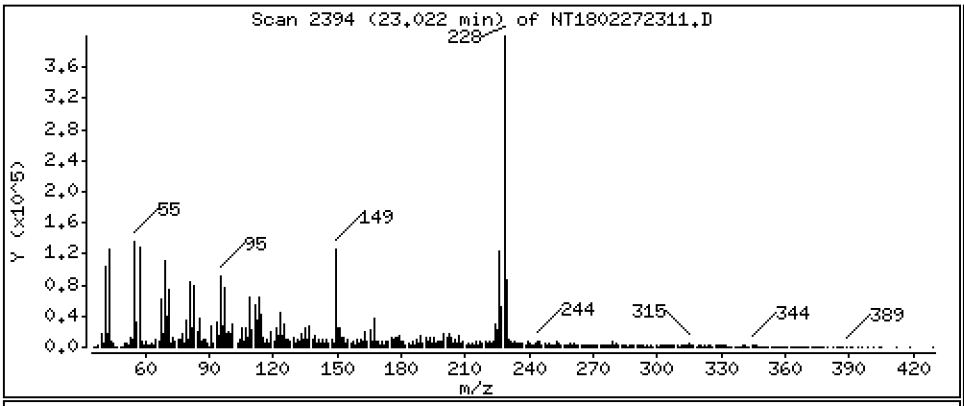
Operator: VTS

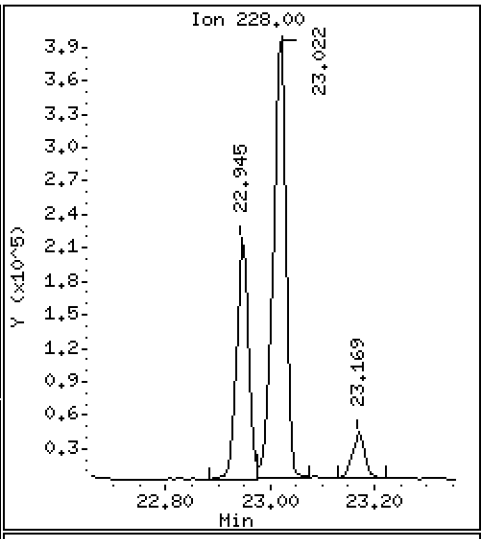
Column phase: ZB-5msi

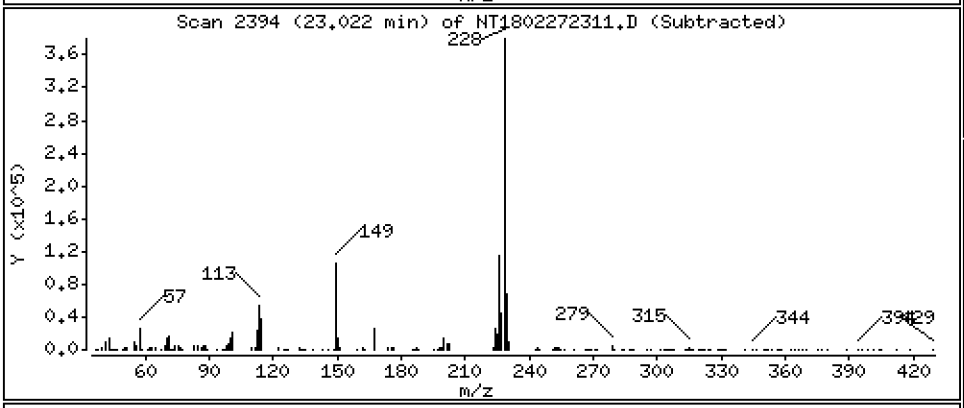
Column diameter: 0.25

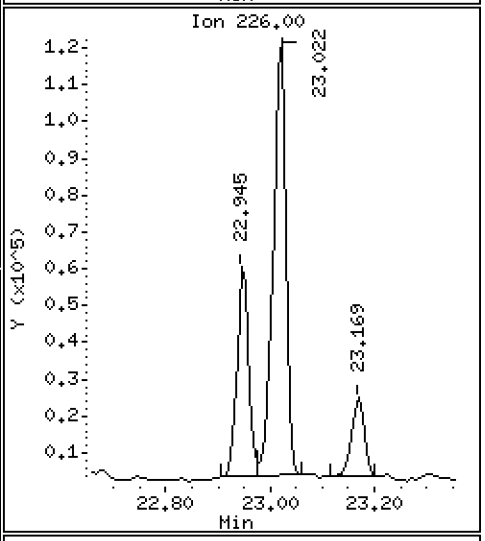
71 Chrysene

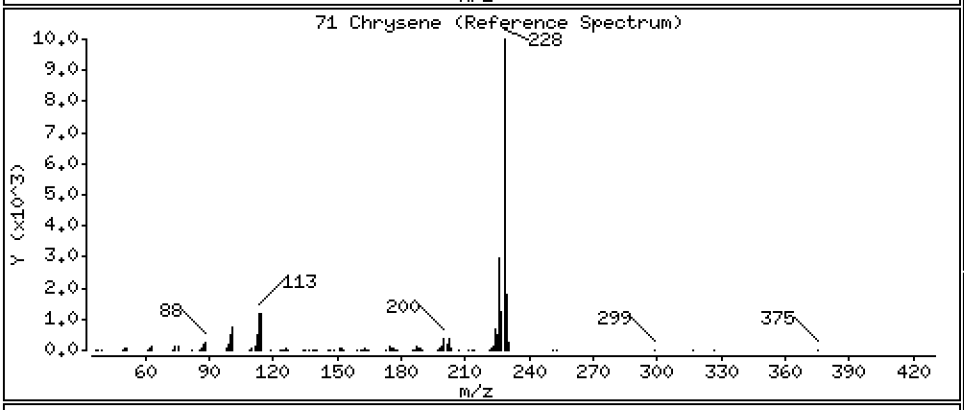
Concentration: 1.546 ug/mL

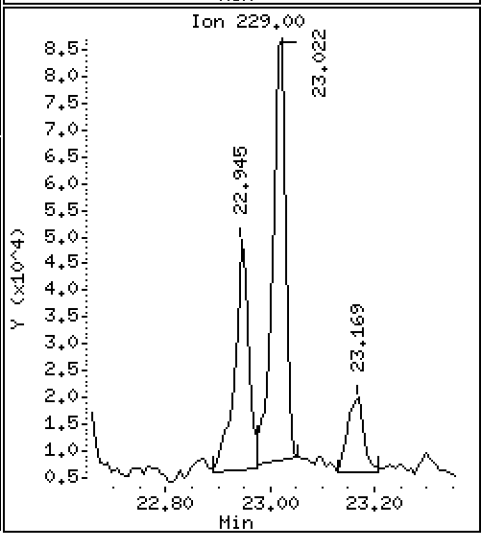


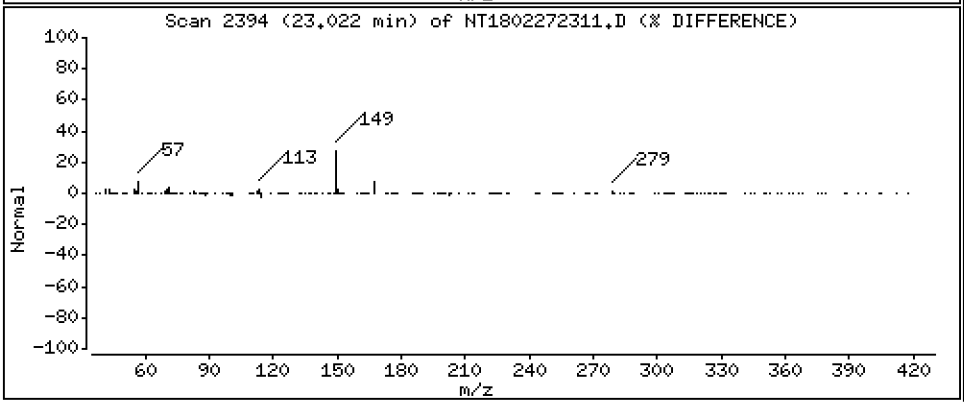












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

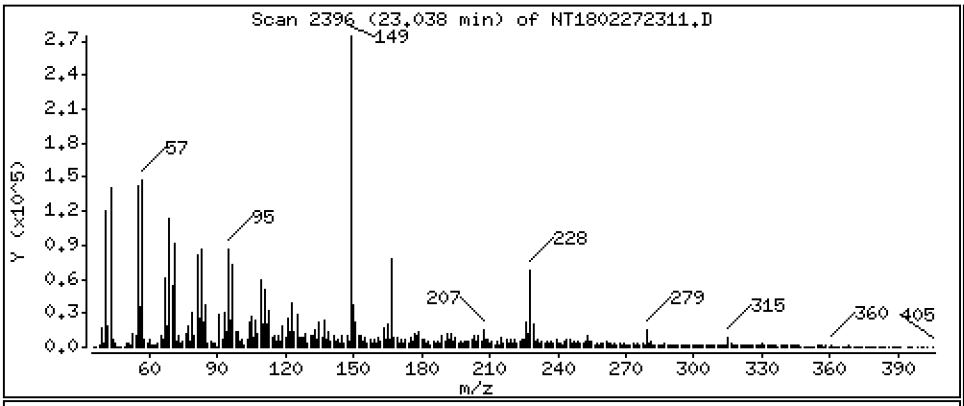
Operator: VTS

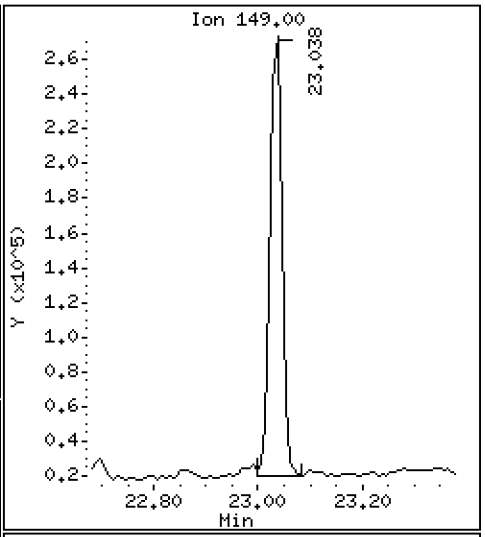
Column phase: ZB-5msi

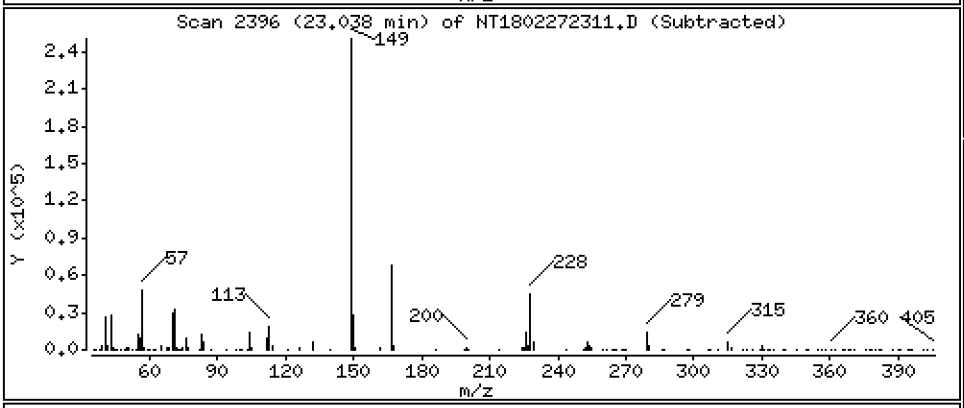
Column diameter: 0.25

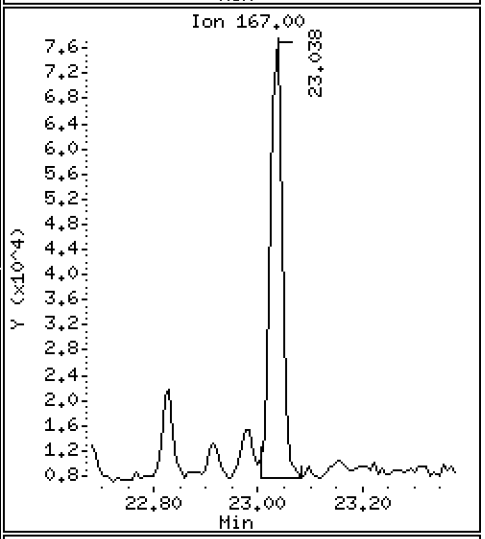
72 bis(2-Ethylhexyl)phthalate

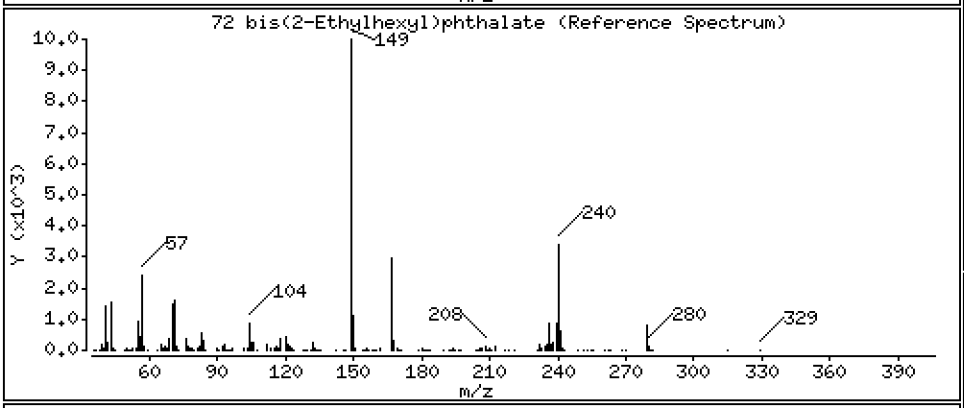
Concentration: 1.373 ug/mL

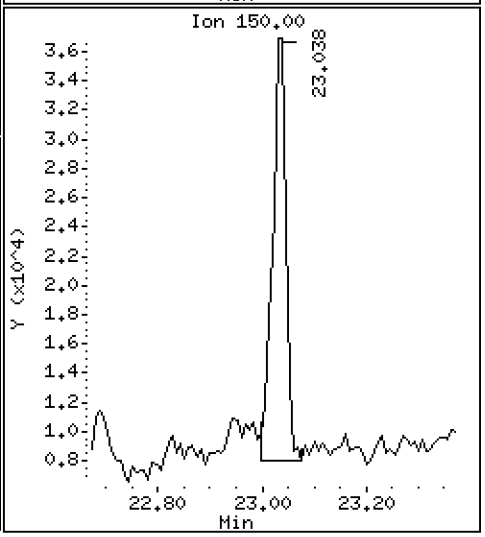


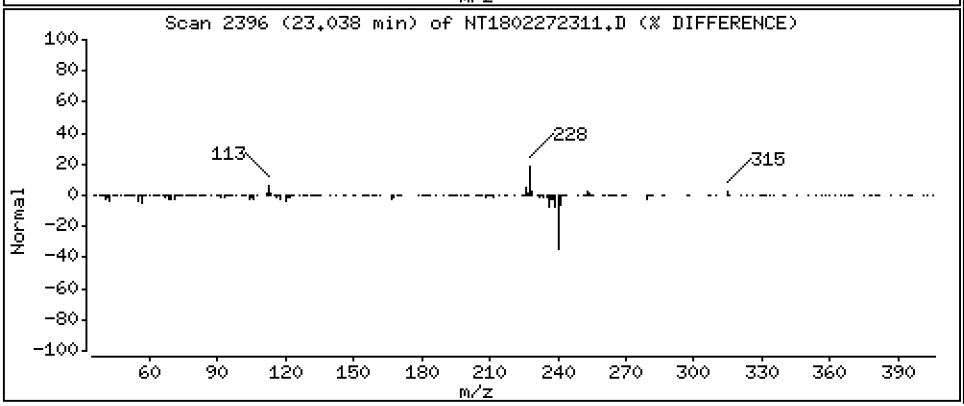












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

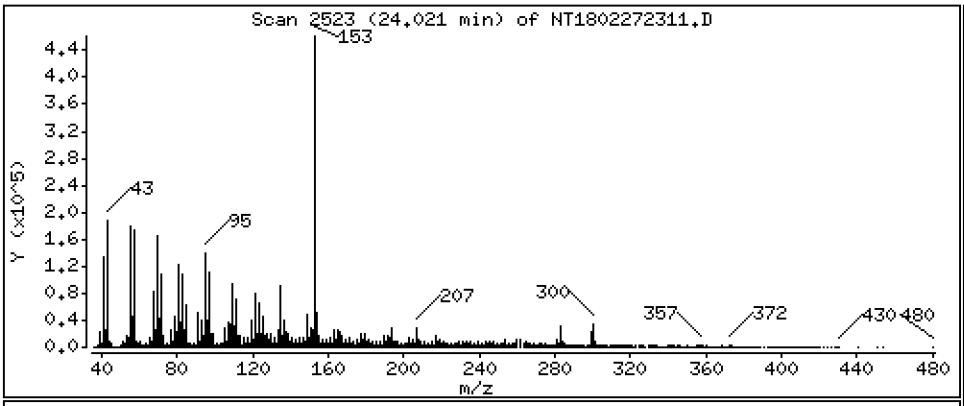
Operator: VTS

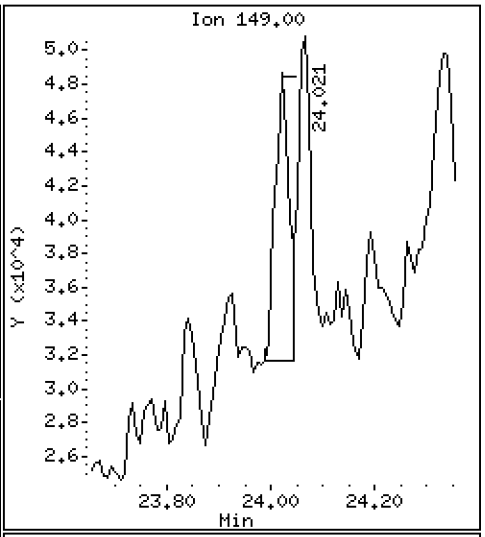
Column phase: ZB-5msi

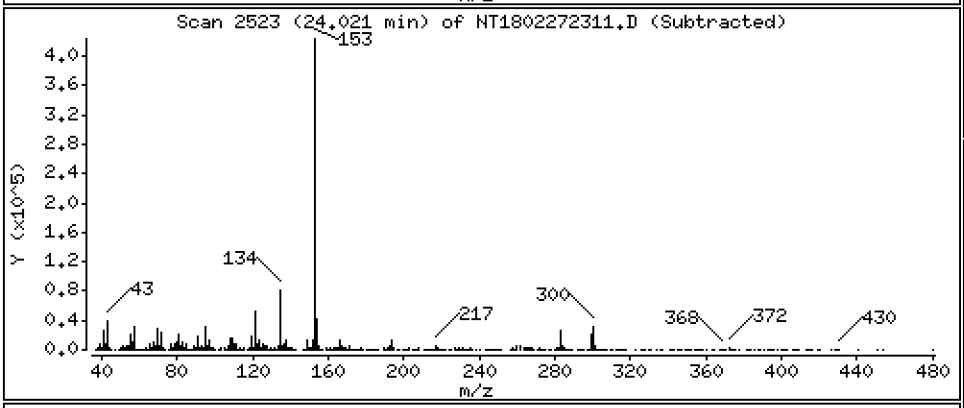
Column diameter: 0.25

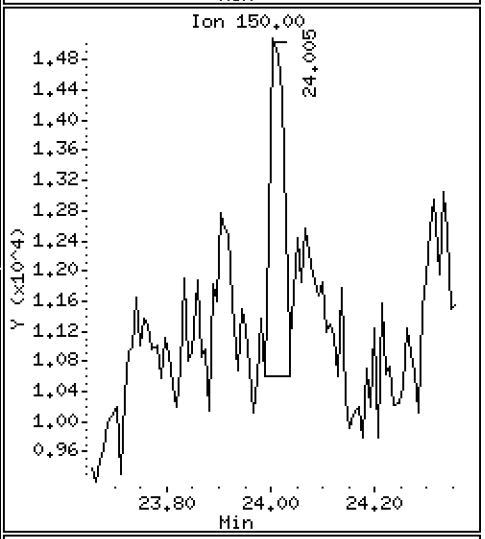
73 Di-n-octylphthalate

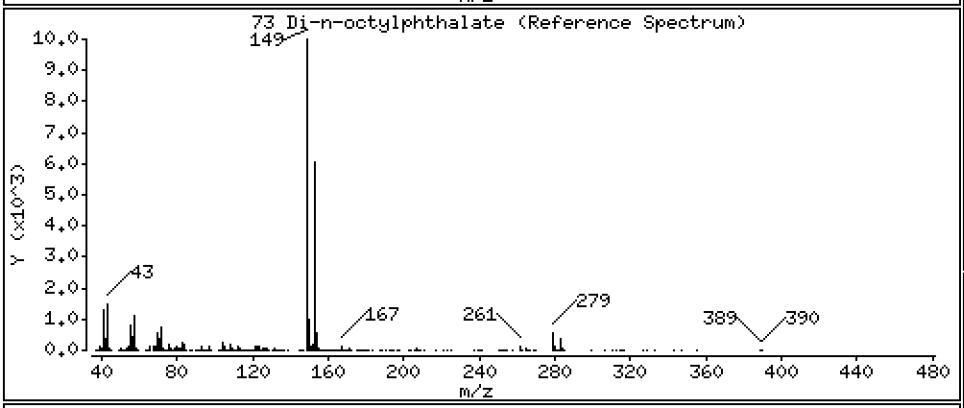
Concentration: 0.05771 ug/mL

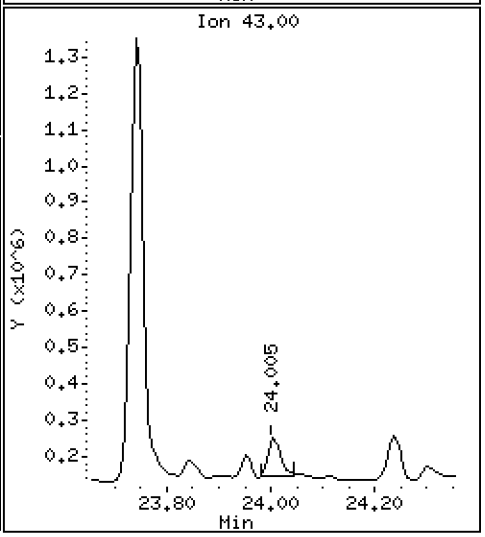


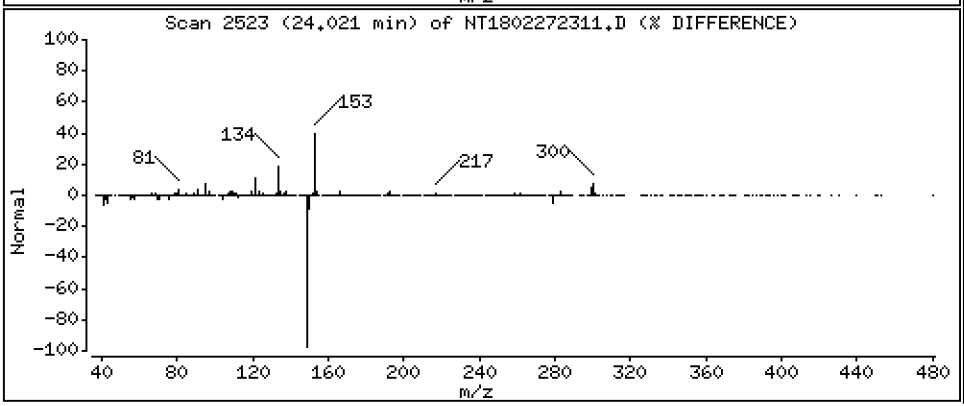












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

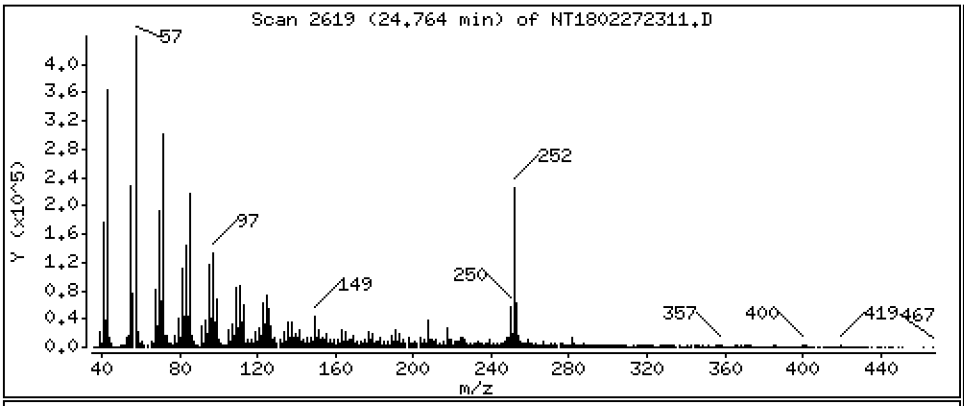
Operator: VTS

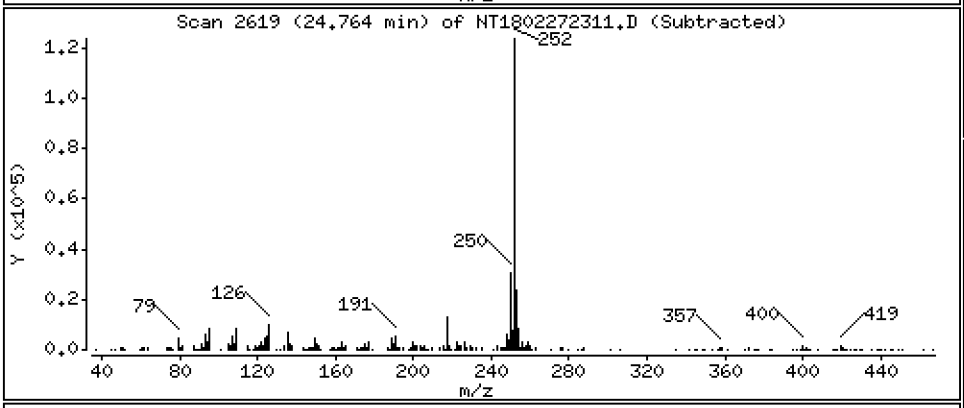
Column phase: ZB-5msi

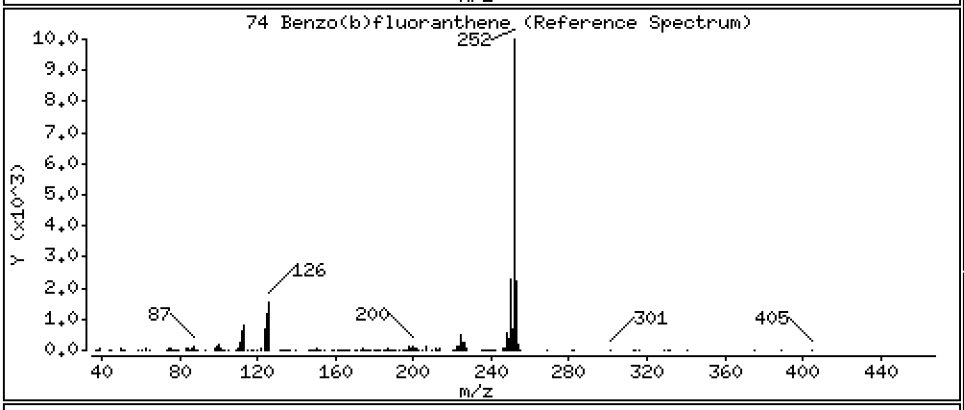
Column diameter: 0.25

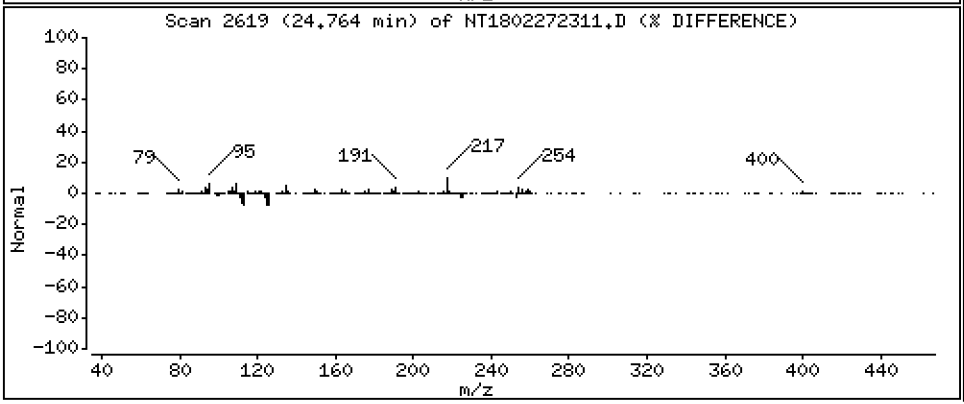
74 Benzo(b)fluoranthene

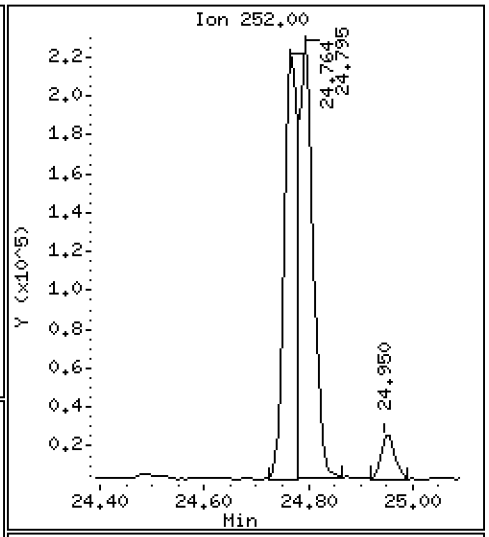
Concentration: 1.940 ug/mL

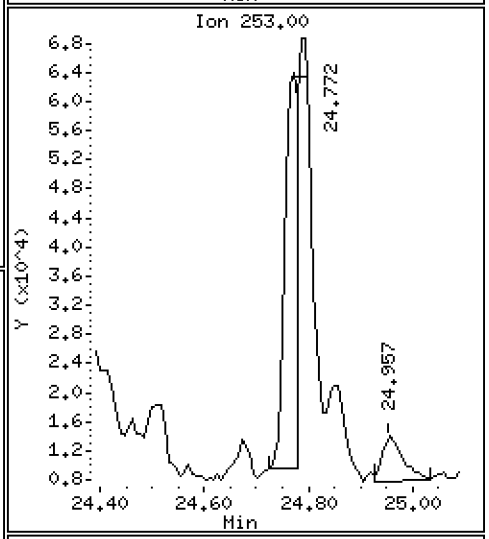


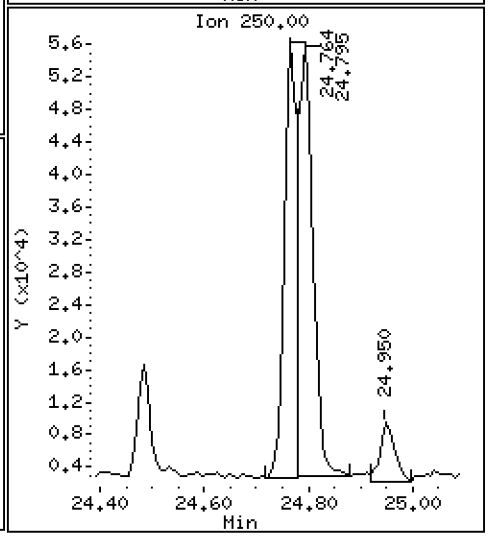












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

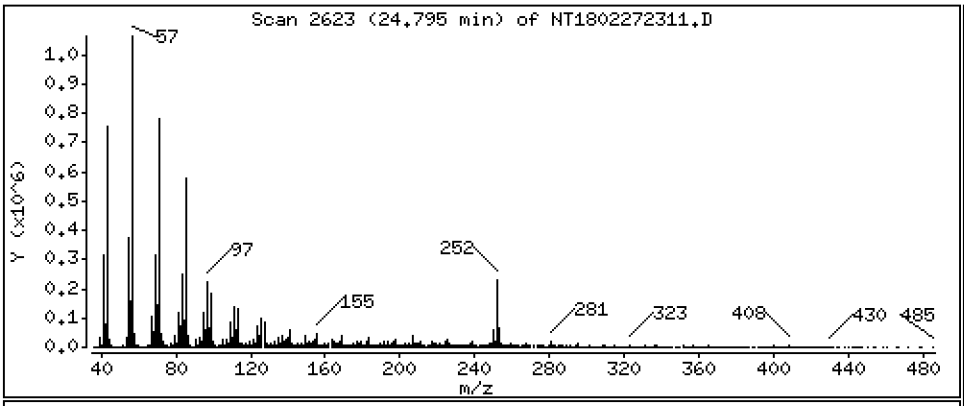
Operator: VTS

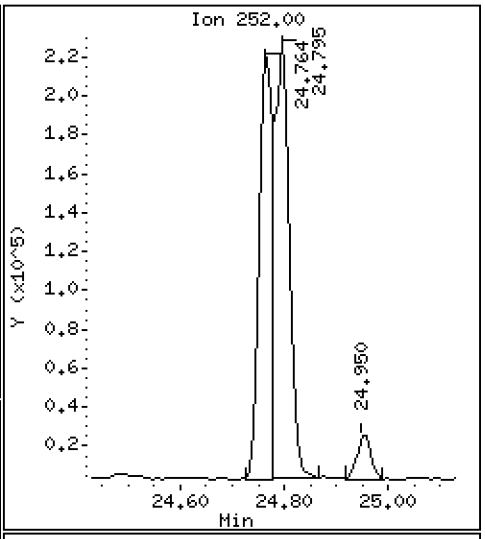
Column phase: ZB-5msi

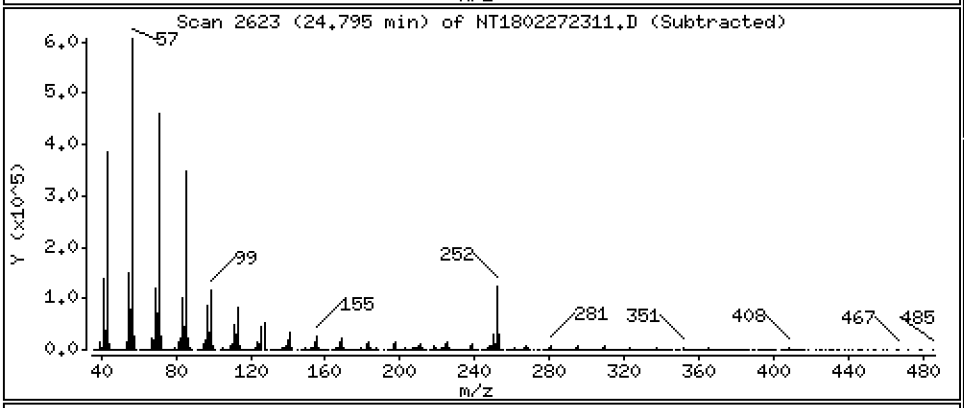
Column diameter: 0.25

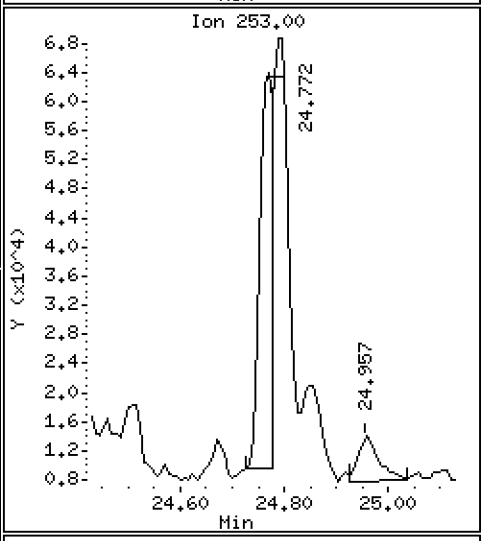
75 Benzo(k)fluoranthene

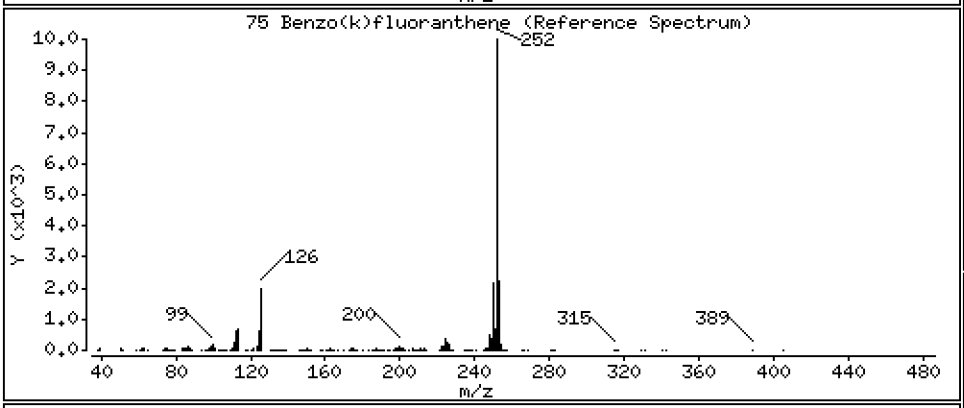
Concentration: 1.903 ug/mL

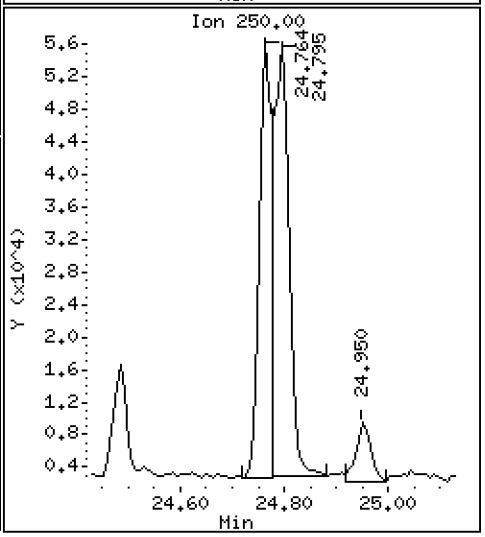


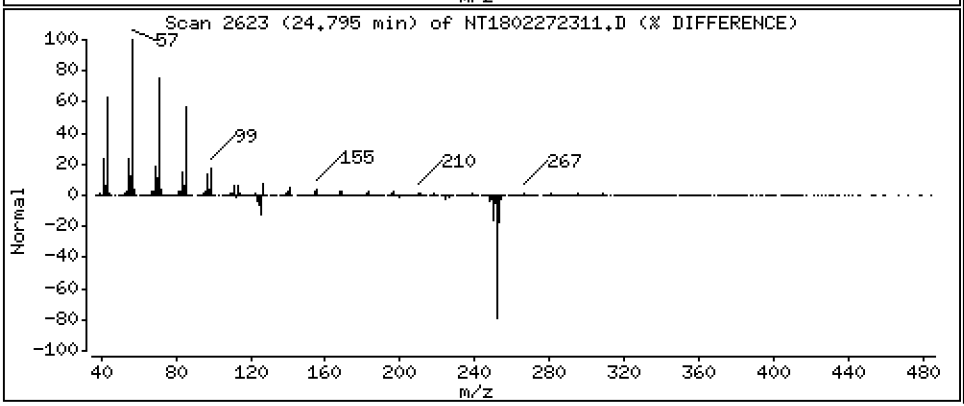












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

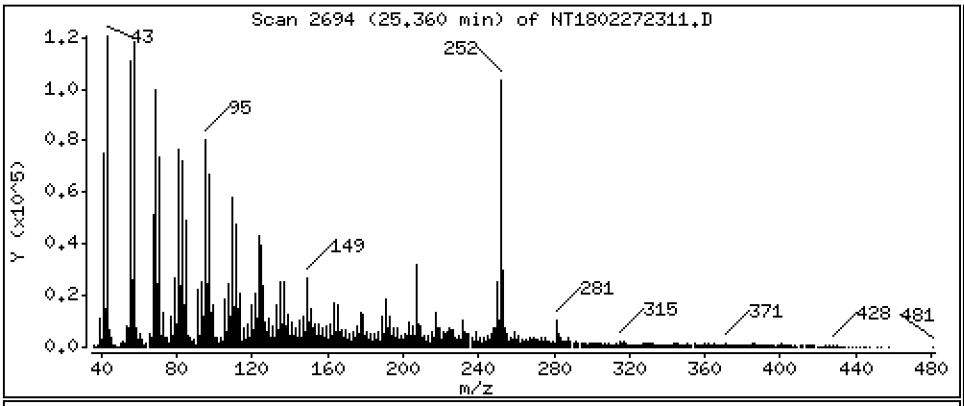
Operator: VTS

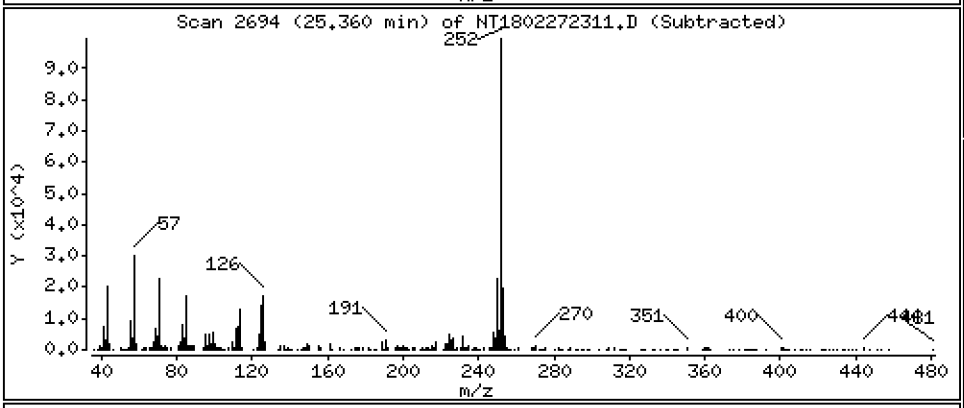
Column phase: ZB-5msi

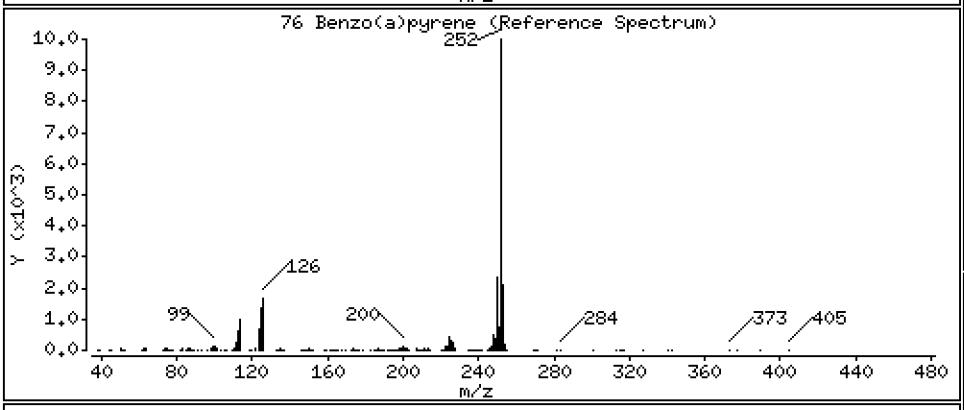
Column diameter: 0.25

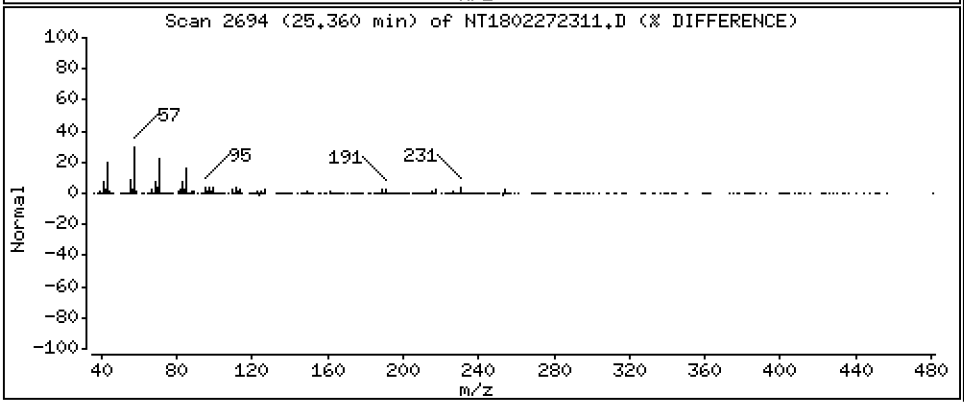
76 Benzo(a)pyrene

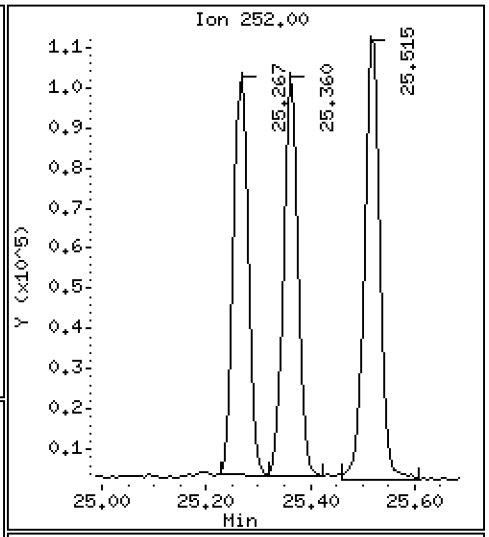
Concentration: 0.9909 ug/mL

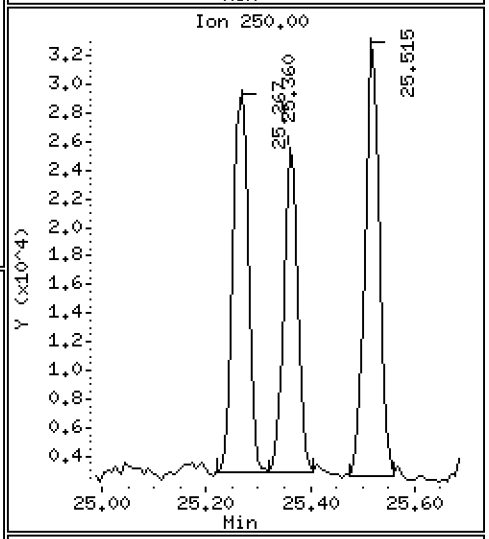


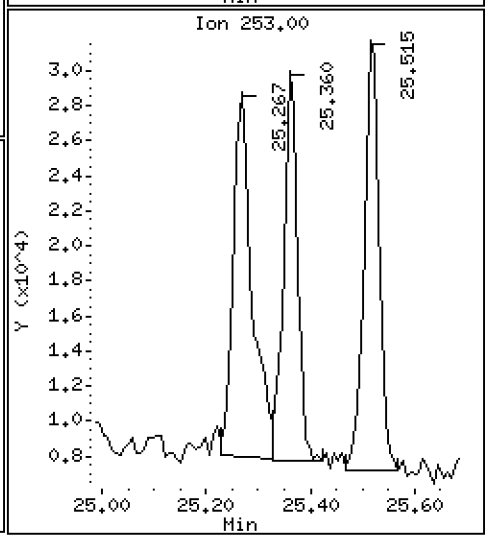












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

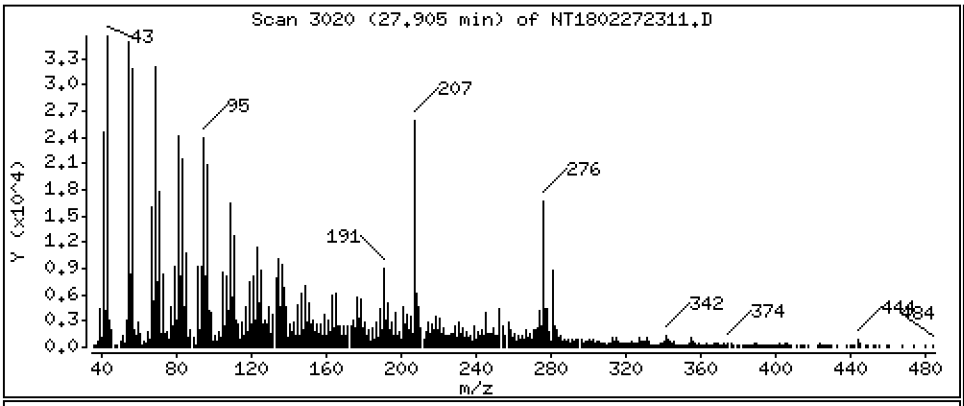
Operator: VTS

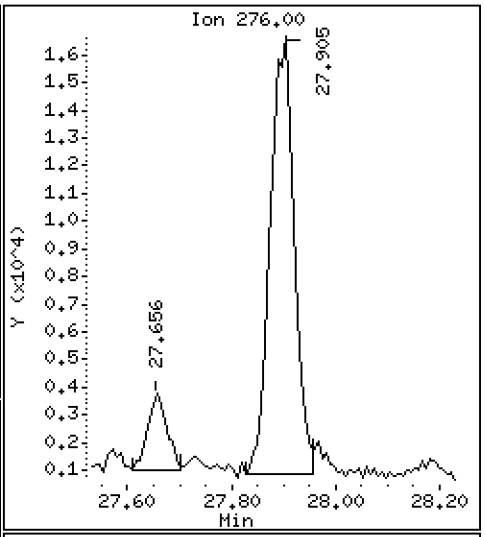
Column phase: ZB-5msi

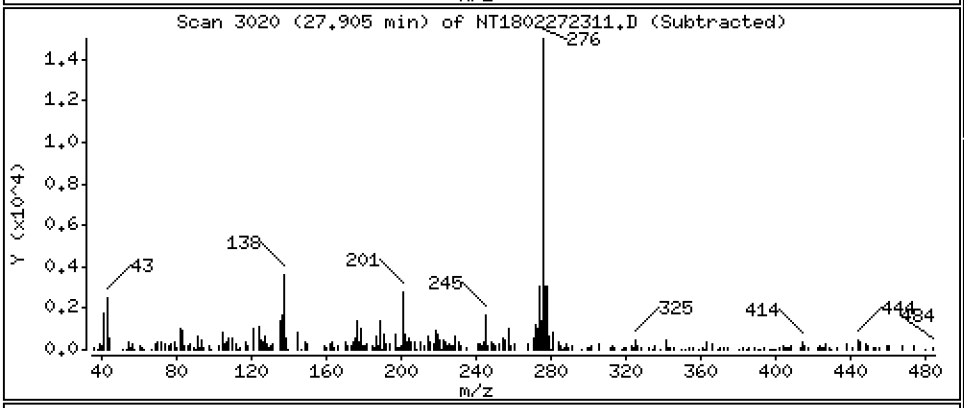
Column diameter: 0.25

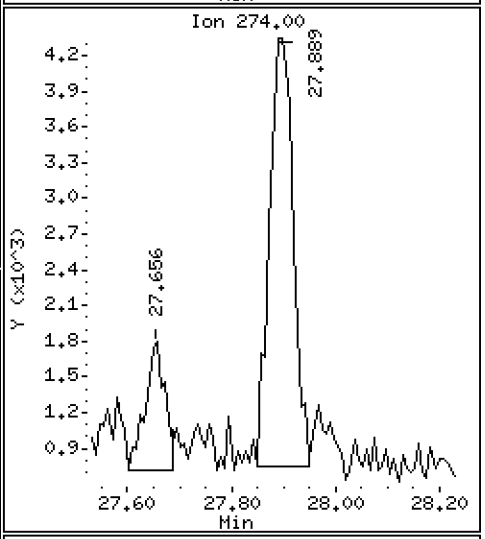
78 Indeno(1,2,3-cd)pyrene

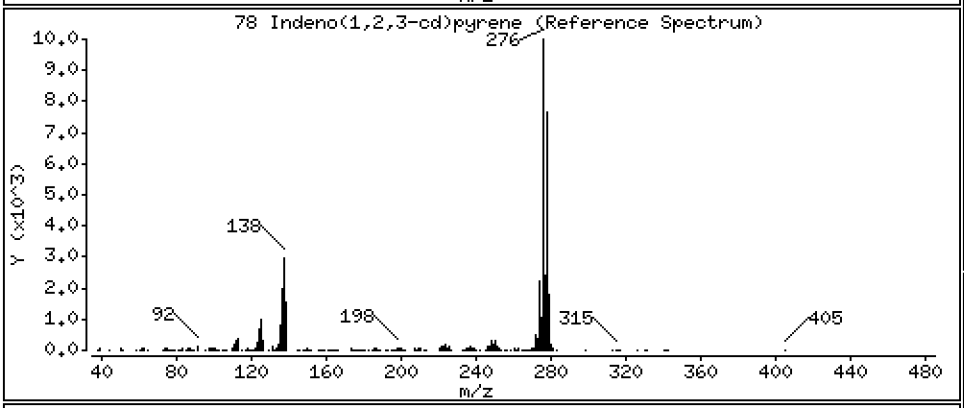
Concentration: 0.2059 ug/mL

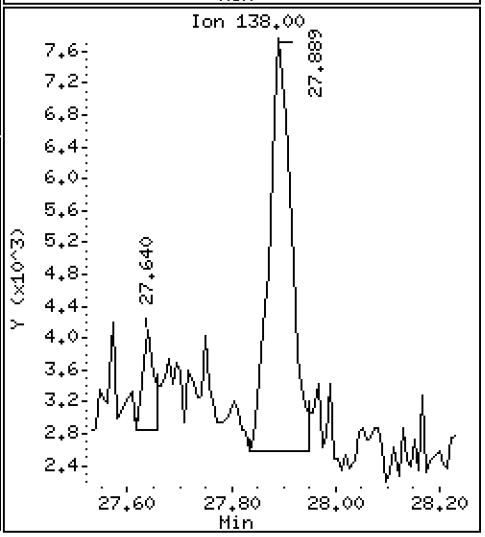


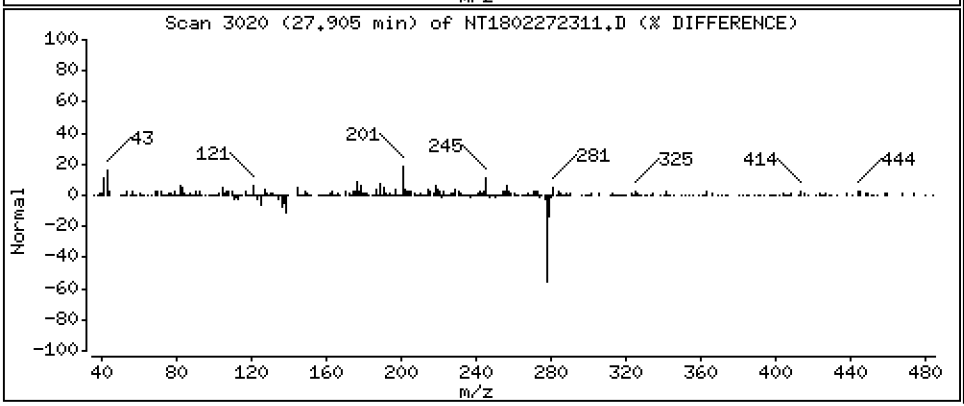












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

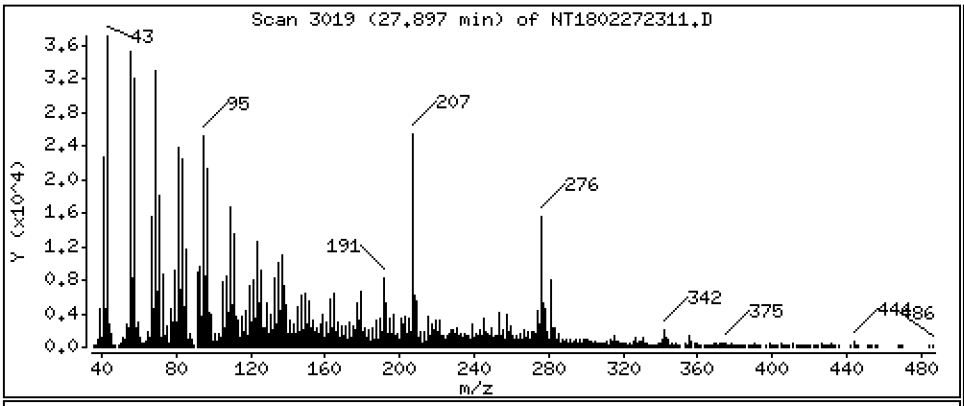
Operator: VTS

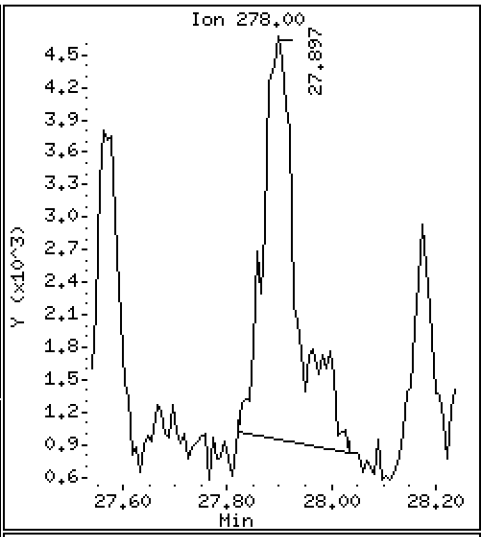
Column phase: ZB-5msi

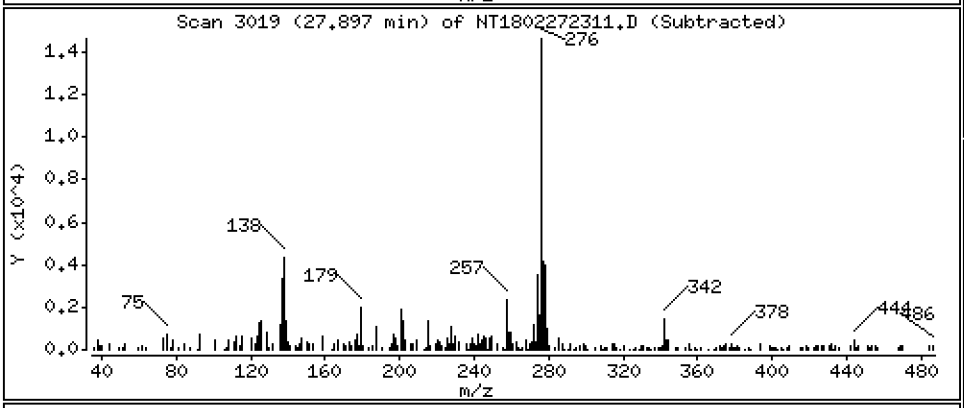
Column diameter: 0.25

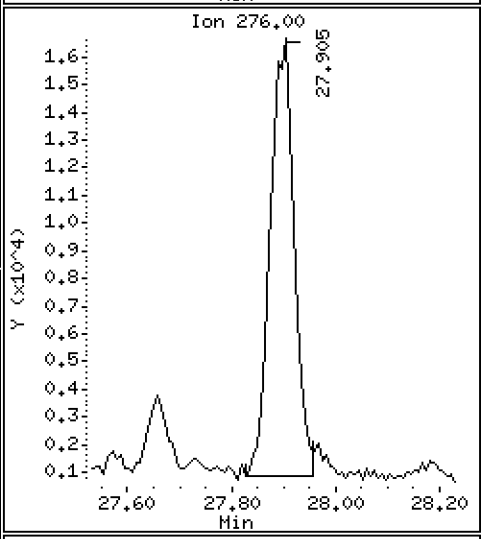
79 Dibenzo(a,h)anthracene

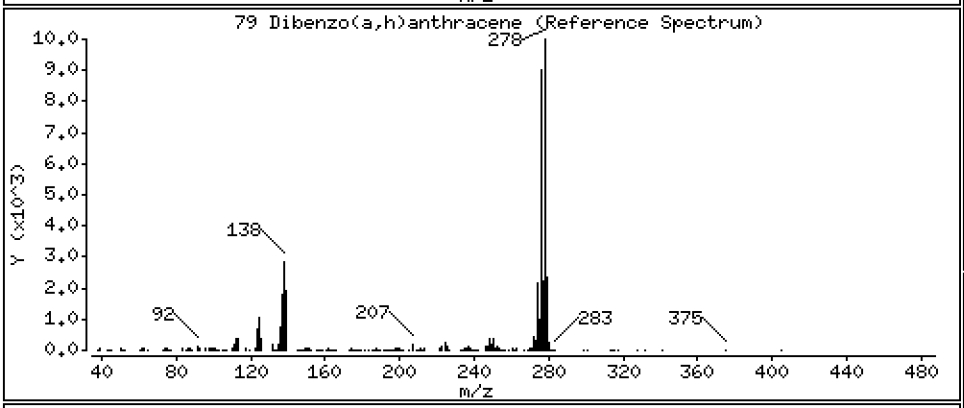
Concentration: 0.08166 ug/mL

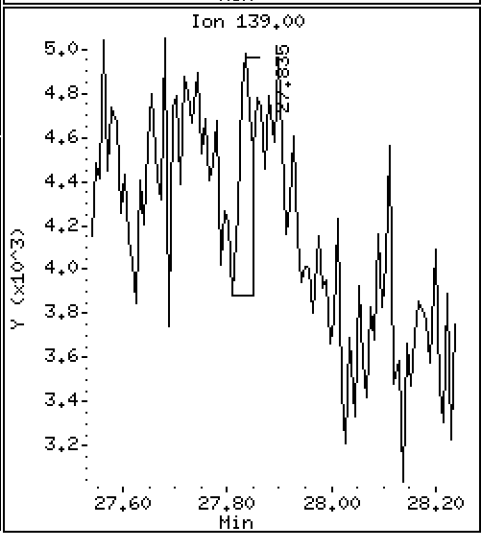


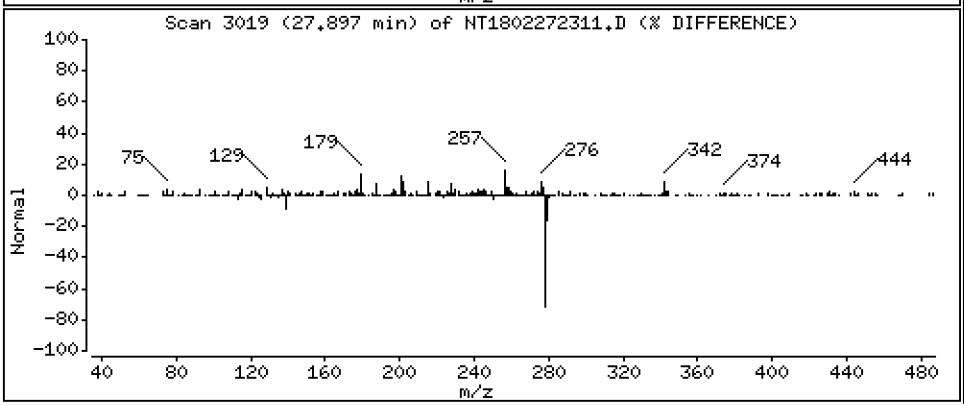












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

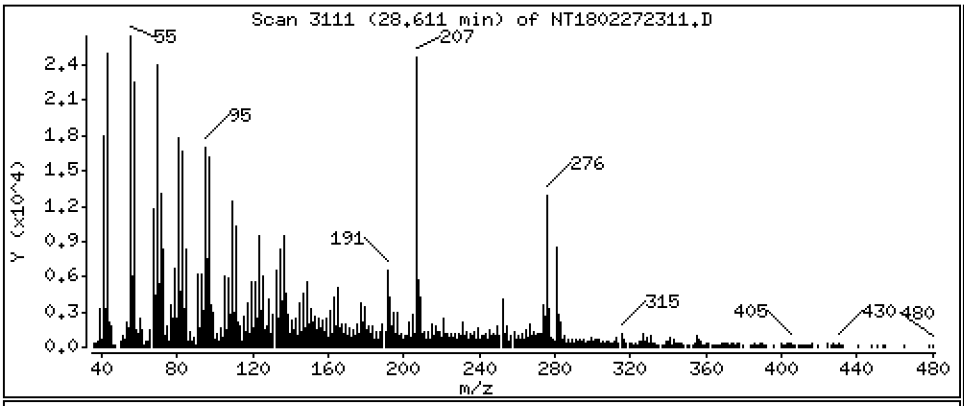
Operator: VTS

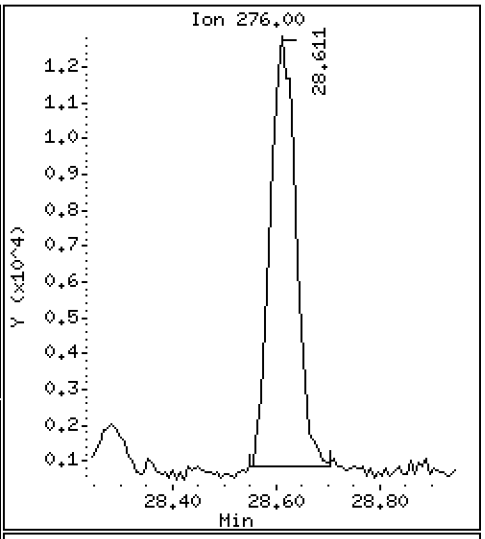
Column phase: ZB-5msi

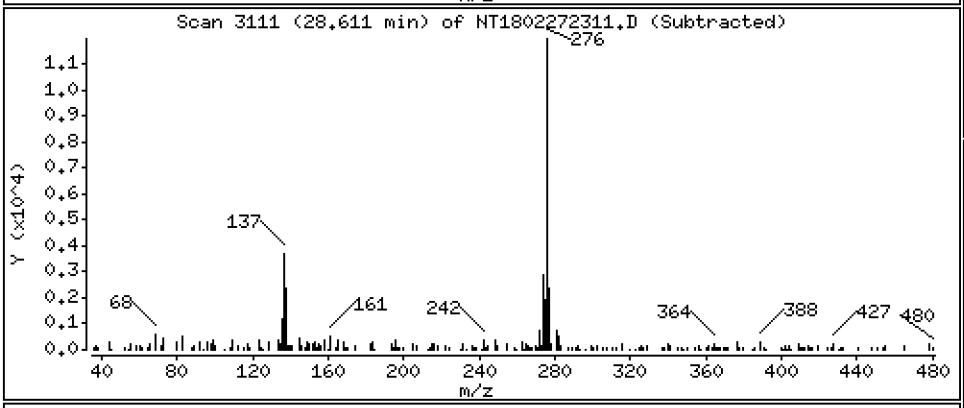
Column diameter: 0.25

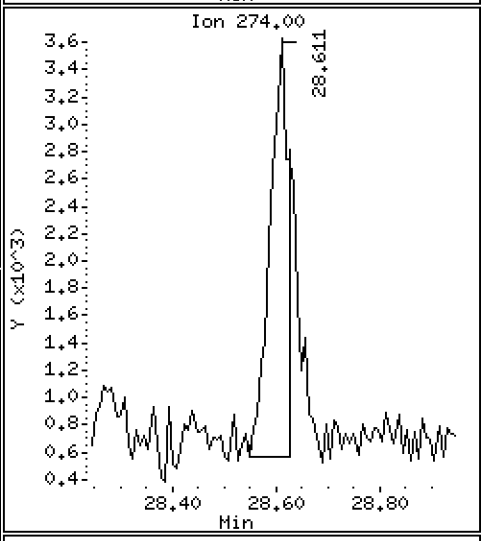
80 Benzo(g,h,i)perylene

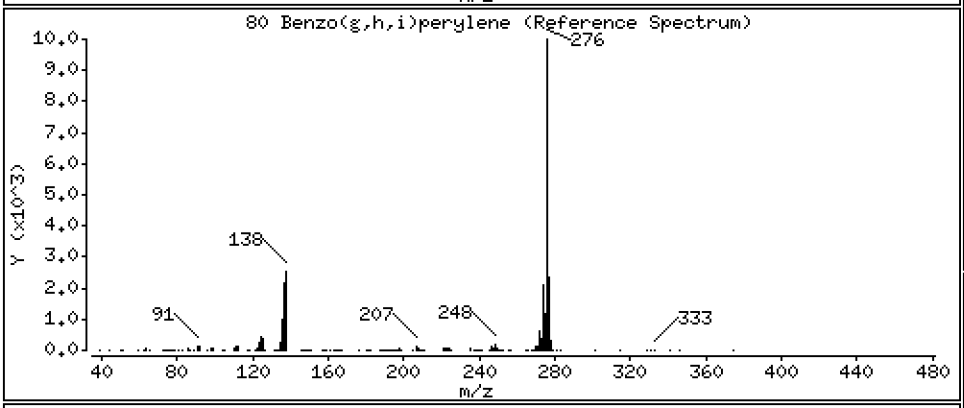
Concentration: 0.2092 ug/mL

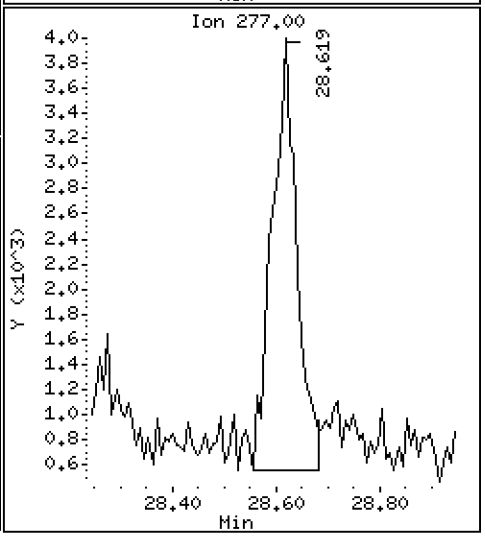


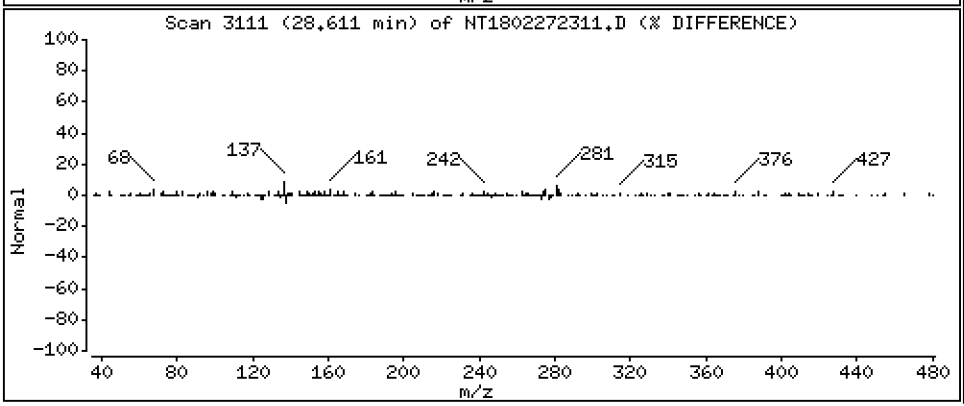












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

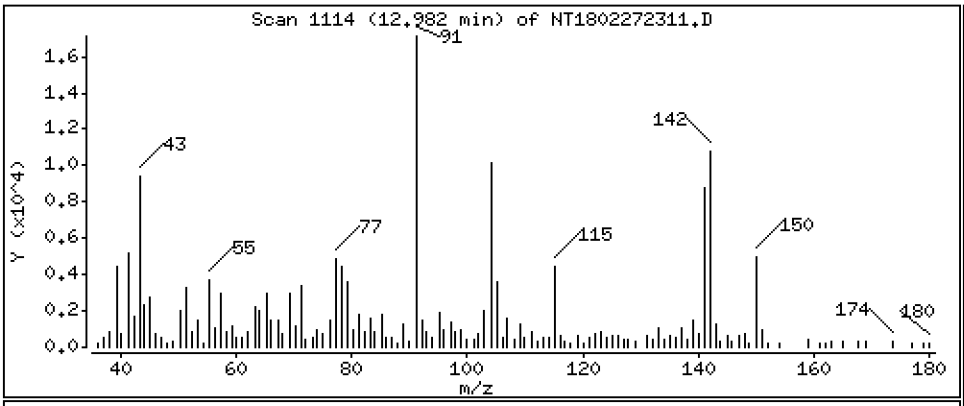
Operator: VTS

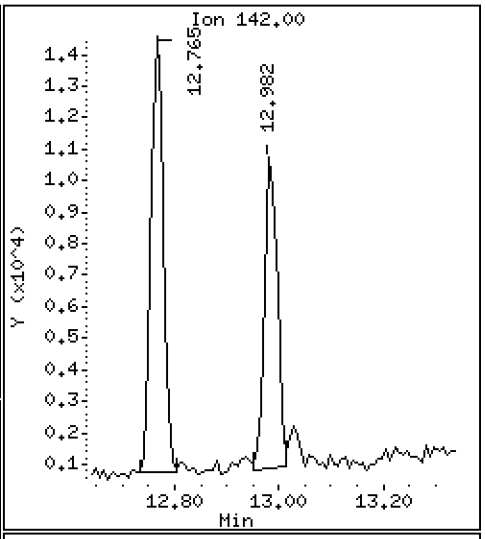
Column phase: ZB-5msi

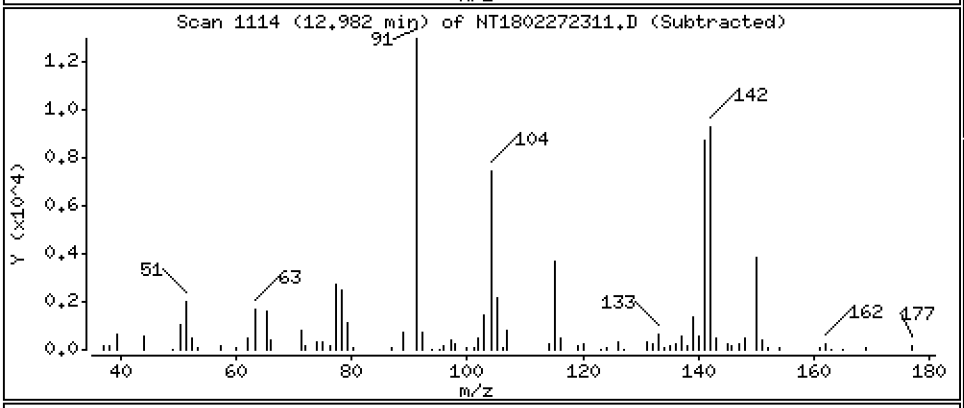
Column diameter: 0.25

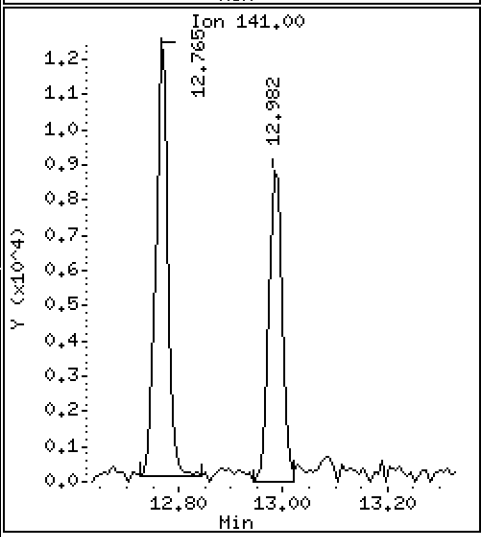
105 1-methylnaphthalene

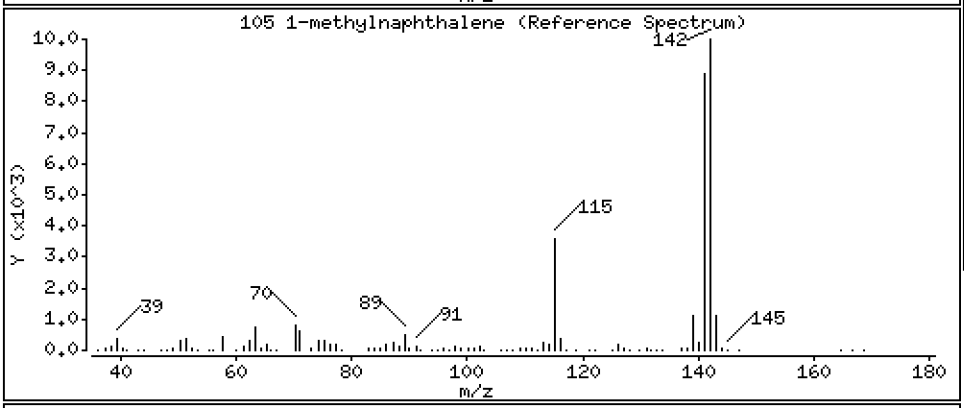
Concentration: 0.08196 ug/mL

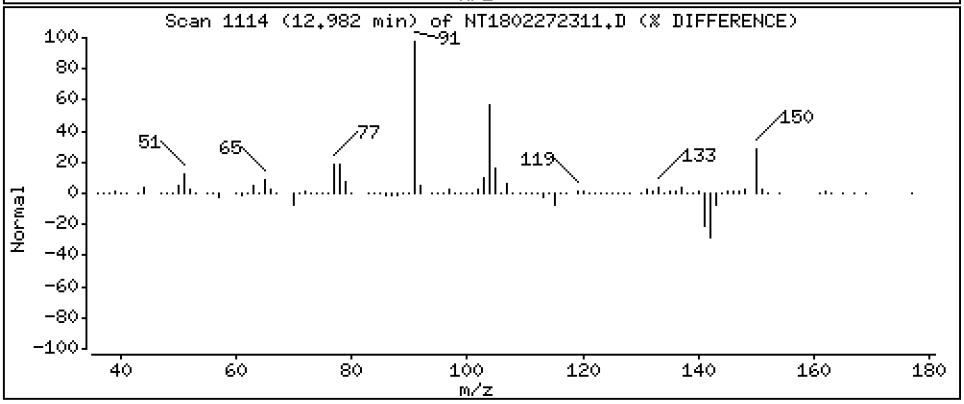












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

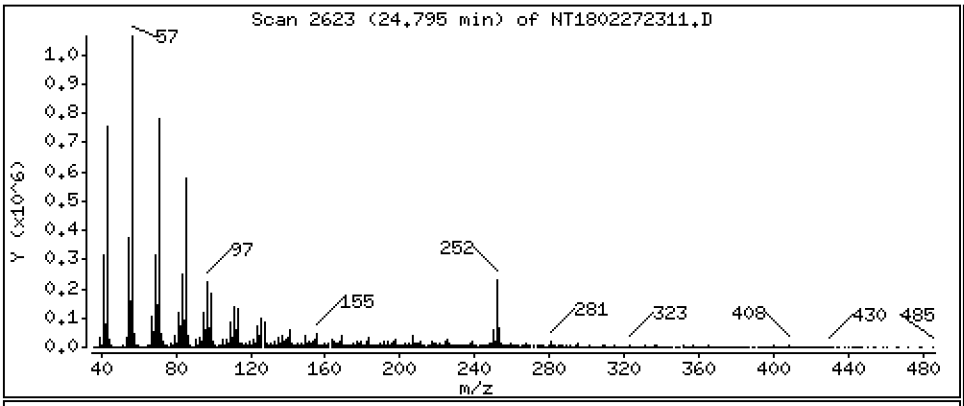
Operator: VTS

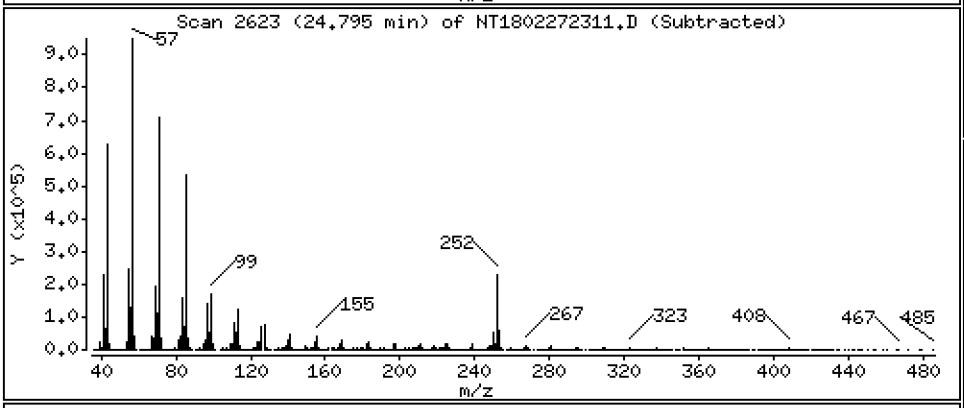
Column phase: ZB-5msi

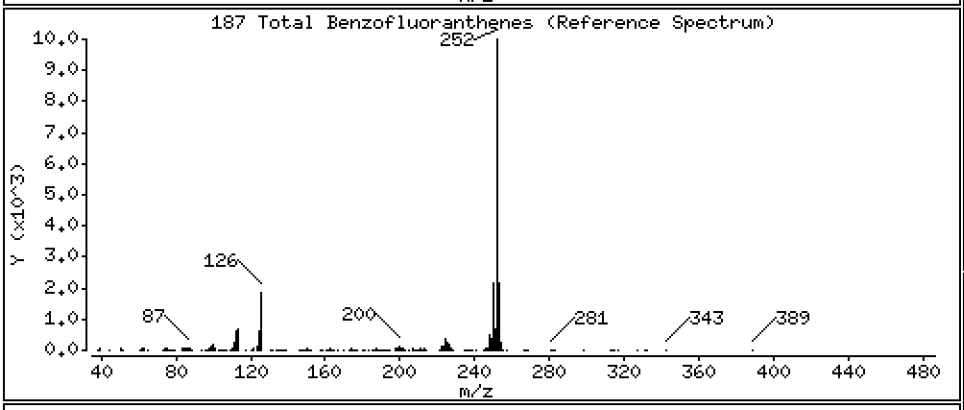
Column diameter: 0.25

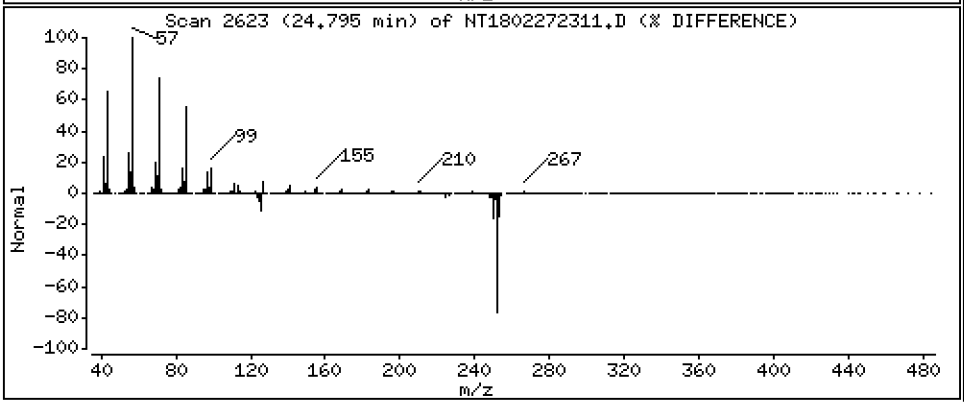
187 Total Benzofluoranthenes

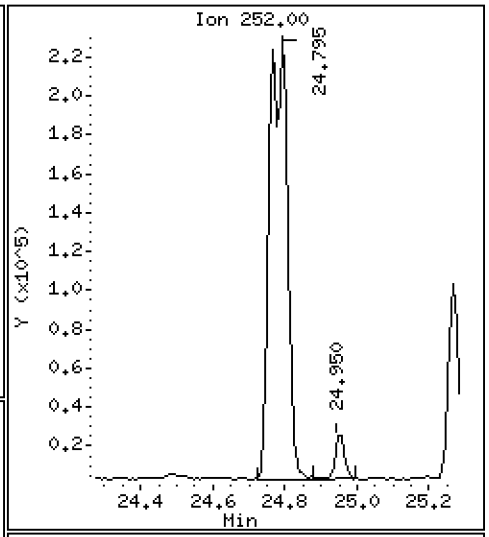
Concentration: 3.691 ug/mL

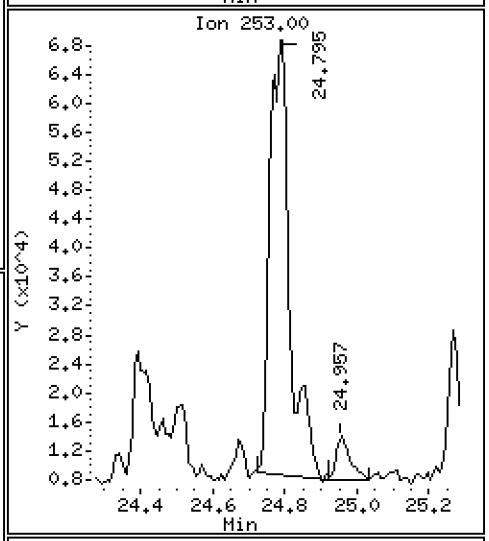


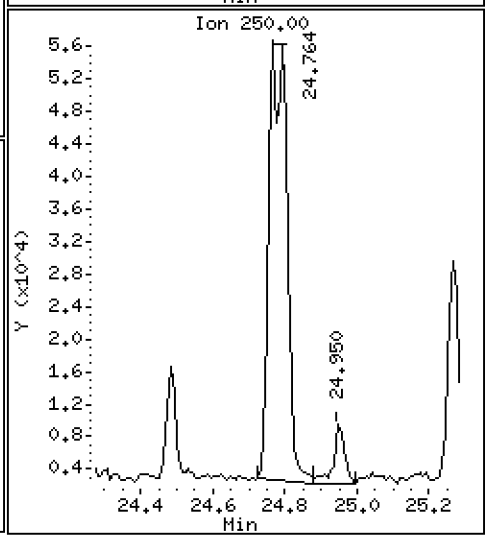












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230227.b\NT1802272311.D
Lab Smp Id: 23A0134-15
Inj Date : 27-FEB-2023 23:53
Operator : VTS Inst ID: nt18.i
Smp Info : 23A0134-15
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230227.b\ABN.m
Meth Date : 24-Mar-2023 10:19 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.751	6.728	(0.759)	515051	5.46880	5.469
$	2 Phenol-d5	99	8.296	8.288	(0.933)	661436	5.43429	5.434
	3 Phenol	94	8.319	8.304	(0.936)	72886	0.57554	0.5755
$	5 2-Chlorophenol-d4	132	8.551	8.543	(0.962)	597103	5.63757	5.638
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	8.829	8.829	(0.993)	876	0.00762	0.007616
*	8 1,4-Dichlorobenzene-d4	152	8.891	8.891	(1.000)	276045	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.248	9.248	(1.040)	245421	3.26856	3.269
	12 1,2-Dichlorobenzene	146	9.271	9.271	(1.043)	1249	0.01098	0.01098
	11 Benzyl alcohol	108	9.178	9.170	(1.032)	14330	0.23798	0.2380
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	9.411	9.396	(1.058)	1922	0.01962	0.01962
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.675	9.667	(1.088)	6704	0.06566	0.06566
$	18 Nitrobenzene-d5	82	9.970	9.970	(0.879)	389526	3.46448	3.464
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.701	10.693	(0.944)	4105	0.04053	0.04053
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	11.049	10.964	(0.974)	5070	0.13207	0.1321
	25 2,4-Dichlorophenol	162	11.092	11.083	(0.978)	2195	0.02472	0.02472
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.342	11.342	(1.000)	1054994	4.00000	
	28 Naphthalene	128	11.380	11.388	(1.003)	32718	0.10089	0.1009
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.765	12.765	(1.125)	21603	0.09803	0.09803
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.392	13.392	(0.897)	1215	0.02183	0.02183
35	2,4,5-Trichlorophenol	196	13.469	13.461	(0.903)	1585	0.02613	0.02613
$ 36	2-Fluorobiphenyl	172	13.546	13.546	(0.908)	860679	3.54726	3.547
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	14.042	14.011	(0.941)	2177	0.03669	0.03669
39	Dimethylphthalate	163	Compound Not Detected.					
40	Acenaphthylene	152	14.607	14.607	(0.979)	19128	0.05992	0.05992
41	2,6-Dinitrotoluene	165	14.684	14.584	(0.984)	2516	0.05390	0.05390
* 42	Acenaphthene-d10	164	14.924	14.924	(1.000)	575479	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	14.986	14.986	(1.004)	12208	0.06042	0.06042
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.310	15.310	(1.026)	26451	0.09045	0.09045
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	15.882	15.898	(1.064)	46792	0.21931	0.2193
49	Fluorene	166	16.014	16.014	(1.073)	39672	0.16928	0.1693
51	4-Chlorophenyl-phenylether	204	16.045	16.014	(1.075)	490	0.00459	0.004590
52	4-Nitroaniline	138	16.091	16.130	(1.078)	2287	0.04305	0.04305
53	4,6-Dinitro-2-methylphenol	198	16.214	16.222	(0.904)	1552	0.03684	0.03684
54	N-Nitrosodiphenylamine	169	16.268	16.268	(0.907)	2295	0.01289	0.01289
$ 55	2,4,6-Tribromophenol	330	16.546	16.546	(1.109)	196908	6.58707	6.587
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	17.929	17.929	(1.000)	1183309	4.00000	
60	Phenanthrene	178	17.975	17.975	(1.003)	357264	0.95988	0.9599
61	Anthracene	178	18.068	18.068	(1.008)	160805	0.45337	0.4534
62	Carbazole	167	18.409	18.401	(1.027)	34945	0.10752	0.1075
63	Di-n-butylphthalate	149	19.229	19.213	(1.072)	34024	0.09457	0.09457
64	Fluoranthene	202	20.420	20.358	(0.889)	512871	1.26473	1.265
65	Pyrene	202	20.823	20.776	(0.906)	777673	1.79812	1.798
$ 66	Terphenyl-d14	244	21.094	21.070	(0.918)	1409512	4.06335	4.063
67	Butylbenzylphthalate	149	22.007	21.999	(0.958)	29396	0.17900	0.1790
68	Benzo(a)anthracene	228	22.944	22.929	(0.999)	342231	0.81903	0.8190
* 69	Chrysene-d12	240	22.975	22.960	(1.000)	1157424	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.022	23.006	(1.002)	671695	1.54589	1.546
72	bis(2-Ethylhexyl)phthalate	149	23.037	23.029	(0.960)	382276	1.37275	1.373
* 134	Di-n-octylphthalate-d4	153	24.005	23.997	(1.000)	1939637	4.00000	
73	Di-n-octylphthalate	149	24.020	24.005	(1.001)	31193	0.05771	0.05771
74	Benzo(b)fluoranthene	252	24.763	24.740	(0.972)	414429	1.94005	1.940
75	Benzo(k)fluoranthene	252	24.794	24.779	(0.974)	460643	1.90273	1.903
76	Benzo(a)pyrene	252	25.360	25.336	(0.996)	196226	0.99089	0.9909
* 77	Perylene-d12	264	25.468	25.445	(1.000)	654770	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.904	27.881	(1.096)	51183	0.20588	0.2059
79	Dibenzo(a,h)anthracene	278	27.896	27.889	(1.095)	16931	0.08166	0.08166(M)
80	Benzo(g,h,i)perylene	276	28.611	28.595	(1.123)	41698	0.20922	0.2092
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	12.981	12.989	(1.145)	16350	0.08196	0.08196
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.794	24.779	(0.974)	797178	3.69101	3.691
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272311.D
Lab Smp Id: 23A0134-15
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230227.b\ABN.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:03
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	269759	134880	539518	276045	2.33
27 Naphthalene-d8	1037039	518520	2074078	1054994	1.73
42 Acenaphthene-d10	556159	278080	1112318	575479	3.47
59 Phenanthrene-d10	1021294	510647	2042588	1183309	15.86
69 Chrysene-d12	922264	461132	1844528	1157424	25.50
134 Di-n-octylphthala	1611284	805642	3222568	1939637	20.38
77 Perylene-d12	948357	474179	1896714	654770	-30.96

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.89	8.39	9.39	8.89	-0.00
27 Naphthalene-d8	11.34	10.84	11.84	11.34	-0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.92	-0.00
59 Phenanthrene-d10	17.93	17.43	18.43	17.93	0.00
69 Chrysene-d12	22.96	22.46	23.46	22.98	0.07
134 Di-n-octylphthala	24.00	23.50	24.50	24.01	0.03
77 Perylene-d12	25.45	24.95	25.95	25.47	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272311.D

Lab ID: 23A0134-15
nt18.i, ABN.m, 27-FEB-2023 23:53

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.974	0.967	0.0075	Benzoic acid
0.984	0.977	0.0068	2,6-Dinitrotoluene

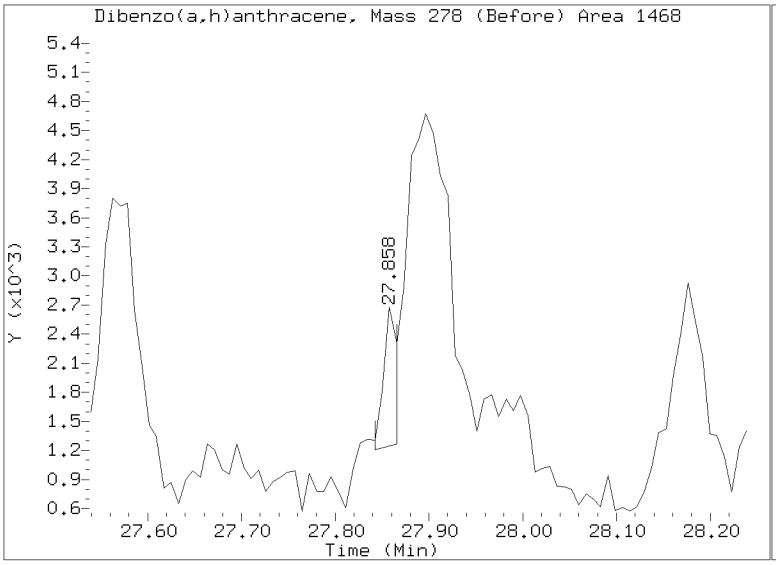
RRT check based on Ccal File: NT1802272302.D

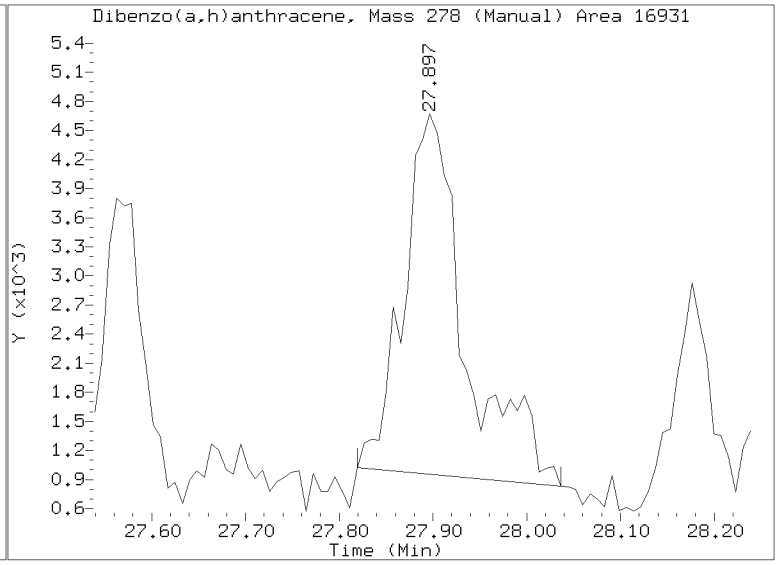
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230227.b/NT1802272311.D
Injection Date: 27-FEB-2023 23:53
Lab ID:23A0134-15 Client ID:
Report Date: 03/24/2023 10:42





APPROVED

By Deenay Dunmore at 10:44 am, Mar 24, 2023

PREPARATION BATCH SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Batch: BLA0410 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1205	23A0134-01	NT1802262310.D	01/19/23 13:35	
LDW23-SS1188	23A0134-02	NT1802262311.D	01/19/23 13:35	
LDW23-SS1179	23A0134-03	NT1802262312.D	01/19/23 13:35	
LDW23-SS1242	23A0134-04	NT1802262313.D	01/19/23 13:35	
LDW23-SS1173	23A0134-05	NT1802262314.D	01/19/23 13:35	
LDW23-SS1160	23A0134-06	NT1802262315.D	01/19/23 13:35	
LDW23-SS1152	23A0134-07	NT1802262316.D	01/19/23 13:35	
LDW23-SS1131	23A0134-08	NT1802262317.D	01/19/23 13:35	
LDW23-SS1129	23A0134-09	NT1802262318.D	01/19/23 13:35	
LDW23-SS1124	23A0134-10	NT1802262319.D	01/19/23 13:35	
LDW23-SS1123	23A0134-11	NT1802262320.D	01/19/23 13:35	
LDW23-SS1116	23A0134-12	NT1802272307.D	01/19/23 13:35	
LDW23-IT1210	23A0134-13	NT1802272308.D	01/19/23 13:35	
LDW23-SC1249	23A0134-15	NT1802272311.D	01/19/23 13:35	
Blank	BLA0410-BLK1	NT1802262306.D	01/19/23 13:35	
LCS	BLA0410-BS1	NT1802262307.D	01/19/23 13:35	
LCS Dup	BLA0410-BSD1	NT1802262308.D	01/19/23 13:35	
LDW23-IT1210	BLA0410-MS1	NT1802272309.D	01/19/23 13:35	
LDW23-IT1210	BLA0410-MSD1	NT1802272310.D	01/19/23 13:35	
Reference	BLA0410-SRM1	NT1802262309.D	01/19/23 13:35	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0410

Prepared using: EPA 3546 (Microwave)

8270E SVOC (20ug/kg solid or 0.2ug/L low H2O Sepf) in Solid (Version:AOC4 List)

Matrix: Solid Date Prepared: 1/19/23 Balance ID: B139298002 Set Up By: CR 1/17/23

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
39	Benzidine Spike
QLS 14	QLS Spike (Freezer)

Analysis: 8270E SVOC (20ug/kg solid or 0.2ug/L low H2O Sepf)

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 (2) 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0134-01 C	57.4	(17.43) 17.47	(1:1)	1mL	1	0.5	
23A0134-02 C	46.6	(21.48) 21.59	(1:1)	1mL	1	0.5	
23A0134-03 C	47.3	(21.13) 21.38	(1:1)	1mL	1	0.5	
23A0134-04 C	46.4	(21.57) 21.64	(1:1)	1mL	1	0.5	
23A0134-05 C	47.2	(21.20) 21.82	(1:1)	1mL	1	0.5	
23A0134-06 C	40.3	(24.83) 25.07	(1:1)	1mL	1	0.5	
23A0134-07 C	43.7	(22.90) 23.28	(1:1)	1mL	1	0.5	
23A0134-08 C	54.7	(18.27) 18.68	(1:1)	1mL	1	0.5	
23A0134-09 C	48.0	(20.82) 21.37	(1:1)	1mL	1	0.5	
23A0134-10 C	48.5	(20.64) 20.64	(1:1)	1mL	1	0.5	
23A0134-11 C	52.0	(19.25) 19.28	(1:1)	1mL	1	0.5	
23A0134-12 C	58.8	(17.00) 17.14	(1:1)	1mL	1	0.5	
23A0134-13 C	55.5	(18.02) 18.02	(1:1)	1mL	1	0.5	
23A0134-15 C	50.1	(19.96) 20.46	(1:1)	1mL	1	0.5	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 (2) 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0410-BLK1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0410-BS1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0410-BSD1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0410-MS1	55.5	(18.02) 18.02	(1:1)	1mL	1	0.5	Use 23A0134-13
BLA0410-MSD1	55.5	(18.02) 18.02	(1:1)	1mL	1	0.5	Use 23A0134-13
BLA0410-SRM1	100.0	~~(10.00)~~ (1.00) 1.00	(1:1)	1mL	1	0.5	Use K003477

CR 1/19/23 — Client ID verified By / Date

JWC 2/2/23 — Preparation Reviewed By / Date

CR 1/19/23 13:35 — Extraction Date and Time

Printed: 1/17/2023 10:17:34AM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0410

Prepared using: EPA 3546 (Microwave)

8270E SVOC (20ug/kg solid or 0.2ug/L low H2O Sepf) in Solid (Version:AOC4 List)

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps

Microwave
1 2 3
CR / 1/19/23
Analyst/Date

Pre-GPC KD
100°C
Exchange to Hexane
(add 10 mL to KD)
0 2 4 5 6
LJ 1/24/23
Analyst/Date

TurboVap
Pre GPC
1 2 3 4 5
TWC 1/24/23
Analyst/Date

Post GPC KD
80-85°C
0 2 4 5 6
TWC 1/26/23
Analyst/Date

TurboVap
1 2 3 4 5
TWC 2/2/23
Analyst/Date

Water Wash
TWC 2/2/23
Analyst/Date

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: CR Date: 1/19/23	
Anhydrous Sodium Sulfate	L000092
1:1 Methylene Chloride/Acetone	L000281
Methylene Chloride	K005942
Pre-Deactivated Glass Wool	K010195
Pre GPC KD Analyst: LJ Date: 1/24/23	
Pre-Deactivated Glass Wool	
Anhydrous Sodium Sulfate	L000453
Methylene Chloride	K005942
Hexane	K009310
GPC Filter Prep Analyst: TWC Date: 1/24/23	
Methylene Chloride	L000808
GPC Analyst: TWC Date: 1/24/23	
Methylene Chloride	L000808
GPC Calibration File	CLA0166
Post GPC KD Analyst: TWC Date: 1/26/23	
Methylene Chloride	L000308
Vialing Analyst: TWC Date: 2/2/23	
Methylene Chloride	L000308

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 100/150µg/mL	A K010466 Exp Date: 5/9/23	50µL	CR	CT
Full List Spike (Freezer) 100µg/mL	7 K011369 (V) Exp K011297 Date: 8/31/23	50µL	CR	CT
Base Spike 200µg/mL	56 K011369 (V) Exp K003759 Date: 4/19/23	50µL	CR	CT
Acid Spike 100/200µg/mL	38 K011369 (V) Exp K003760 Date: 4/19/23	50µL	CR	CT

MANUALLY ENTER EXPIRATION DATES!

(V) indicates a virtual standard combining two or more physical standards. In these cases the Standard ID refers to the virtual standard, not the parent standards.

If a Standard ID is missing, but should be present, check the standard definition in Element LIMS to be sure Standard Info 6 has the correct letter or number designator matching the vial designator inthe Standard ID column. If it is correct, check the batch and bench sheet in Element LIMS to be sure the correct standards are selected for surrogate(s) and spike(s).

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0410

Prepared using: EPA 3546 (Microwave)

8270E SVOC (20ug/kg solid or 0.2ug/L low H2O Sepf) in Solid (Version:AOC4 List)

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessel. 3. Add DCM ONLY to the vessels (until solvent is 3 inches above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 10-15 min in Refridgerator 05. Re-homogenize while cool. 7. Decant DCM into Erlenmeyer flask with a funnel containing pre-deactivated glasswool. 8. Rinse with DCM 9. Microwave a 2nd time using 1:1 DCM/ACE. 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with DCM. 11. KD: Add 10 mL Hexane directly to extract in the KD. 12. GPC REQUIRED 100°C water bath (CLP) KD to 5mL. 13. Vialers to take 1:5 Split Pre- GPC. 14. (After GPC): KD at 80°C. 15. TurboVap to 1mL in DCM. 16. WATER WASH REQUIRED: 16a. Vial 1mL of all extracts in 2mL amber vials in DCM. 16b. Add ~0.5mL DI water and vortex for ~5 seconds each. 16c. Centrifuge extracts for 5 minutes at 1500-2000rpm. 16d. Transfer and vial 0.5mL to new 2mL amber vials (Avoiding collecting water in syringe and cleaning syringe with Acetone and DCM between each vial). 17. Archive water wahed vials and deliever new vials to GC Department for analysis. A. Need Total Solids Y /(N) B. Archive/Freeze (Y)/ N	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SVOA Extraction Batch: BLA0418

Total Solids Batch: BLA0362 Work Order(s): 23A0134 01-16

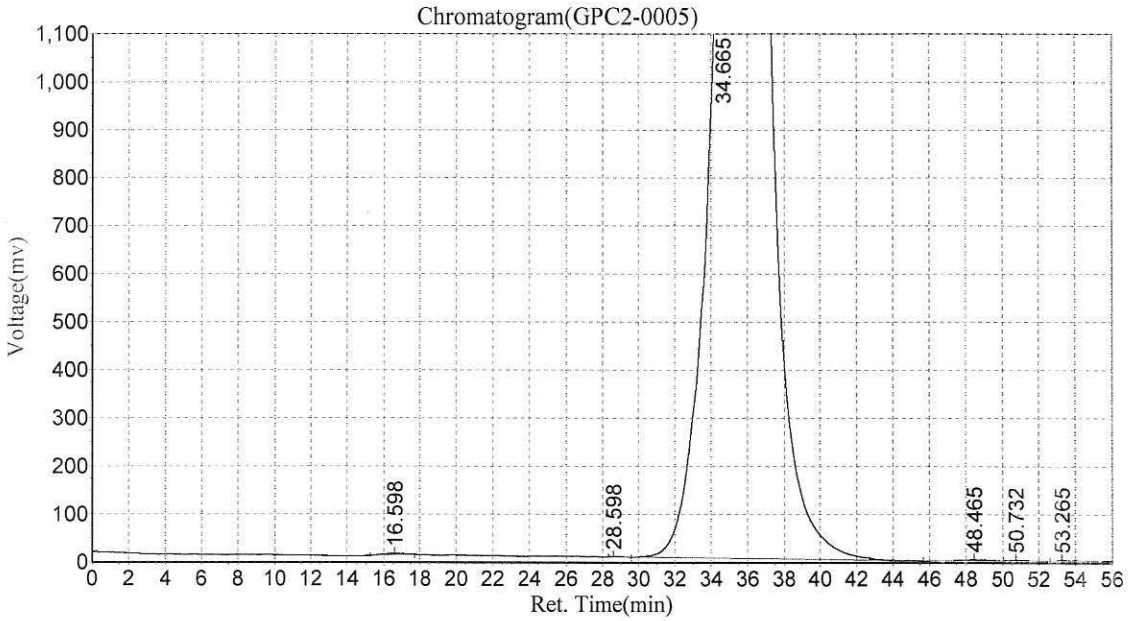
Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-16	CR 1/16/23
☒ Standing Water Decanted (Not shared)= 01-16	CR 1/16/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen =01-16	CR 1/16/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☒ Other Notes/Comments= (Note problems, concerns, corrective actions).	
A bit of SRM1 spilled while pouring it to KD	LS 1/24/23
☒ Share Samples Y / (N)	CR 1/16/23
☒ Multiple Jars Y / (N)	CR 1/16/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

-Blk

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-24,11:17:16 PM
Data File:c:\n2000\data\gpc2\012423\GPC2-0005
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-24,11:17:17 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.598	3175.660	269942.906	0.0744
2		28.598	2156.396	135603.375	0.0374
3		34.665	1366038.500	361591264.000	99.6893
4		48.465	2872.257	400753.969	0.1105
5		50.732	1925.703	165146.563	0.0455
6		53.265	1894.554	155337.969	0.0428
Total			1378063.069	362718048.781	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

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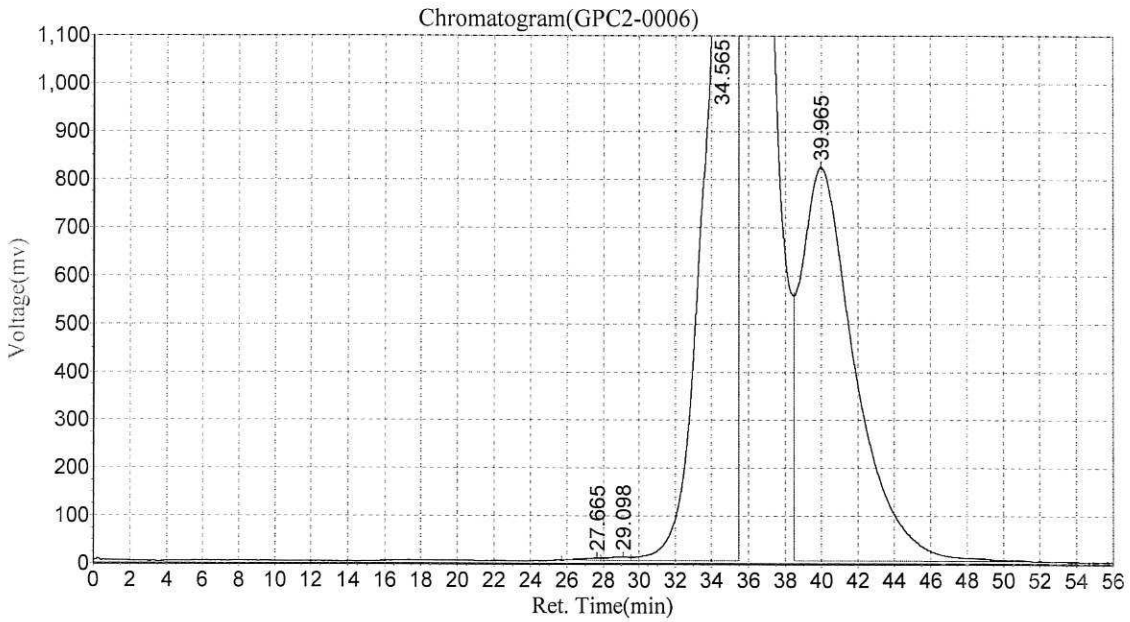
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,12:14:58 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		27.665	5980.925	498743.813	0.1411
2		29.098	7867.149	718788.563	0.2033
3		34.565	1368221.000	182126816.000	51.5177
4		39.965	819447.250	170178800.000	48.1380
Total			2201516.324	353523148.375	100.000

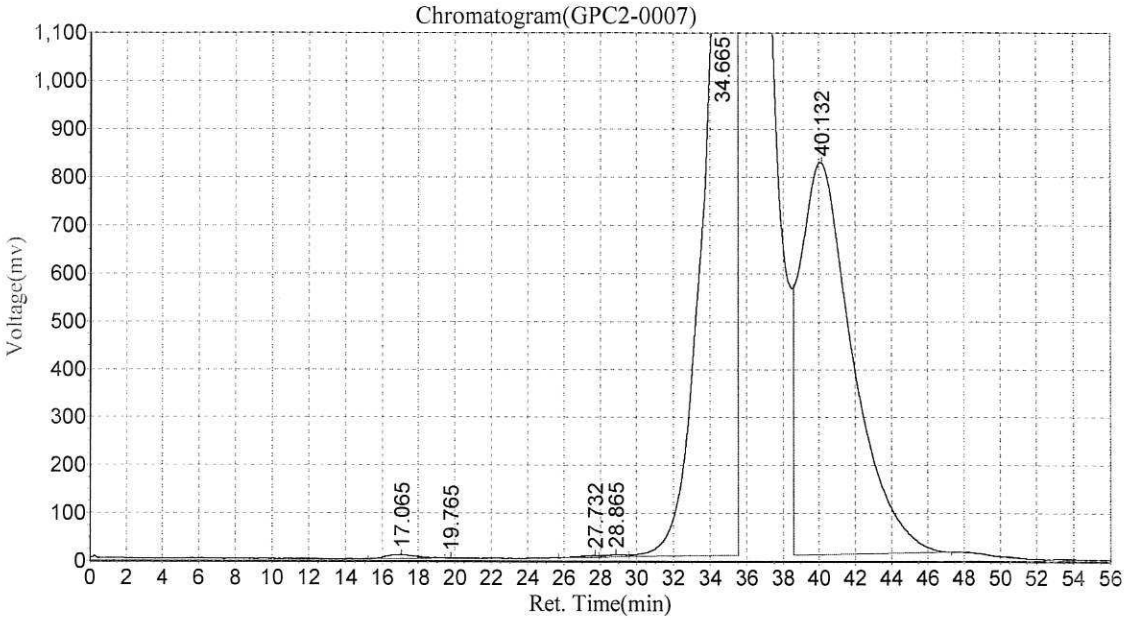
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,1:12:40 AM
Data File:c:\n2000\data\gpc2\012423\GPC2-0007
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,1:12:41 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.065	8486.873	992203.813	0.2897
2		19.765	2324.800	202842.953	0.0592
3		27.732	3875.198	320051.938	0.0935
4		28.865	5050.425	432694.625	0.1263
5		34.665	1361825.000	176113440.000	51.4245
6		40.132	814670.500	164408720.000	48.0068
Total			2196232.796	342469953.328	100.000

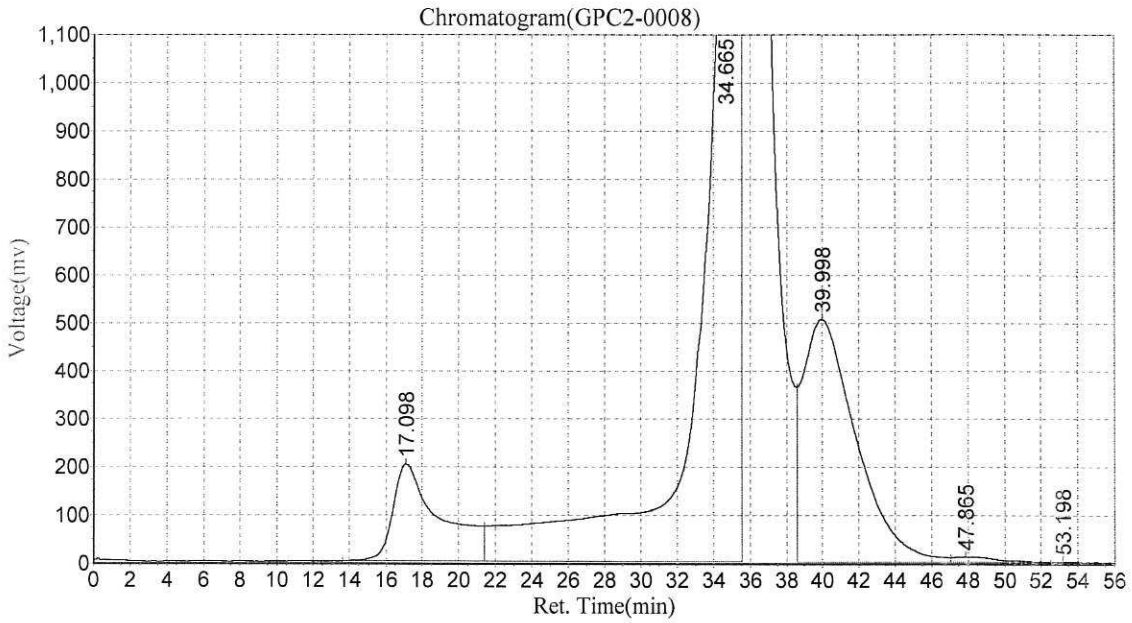
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,2:10:22 AM
Data File:c:\n2000\data\gpc2\012423\GPC2-0008
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,2:10:23 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.098	201255.922	36685976.000	9.8647
2		34.665	1370073.500	229975680.000	61.8394
3		39.998	504112.281	103088480.000	27.7200
4		47.865	11387.064	2033499.500	0.5468
5		53.198	1623.861	108287.430	0.0291
Total			2088452.629	371891922.930	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,3:08:05 AM
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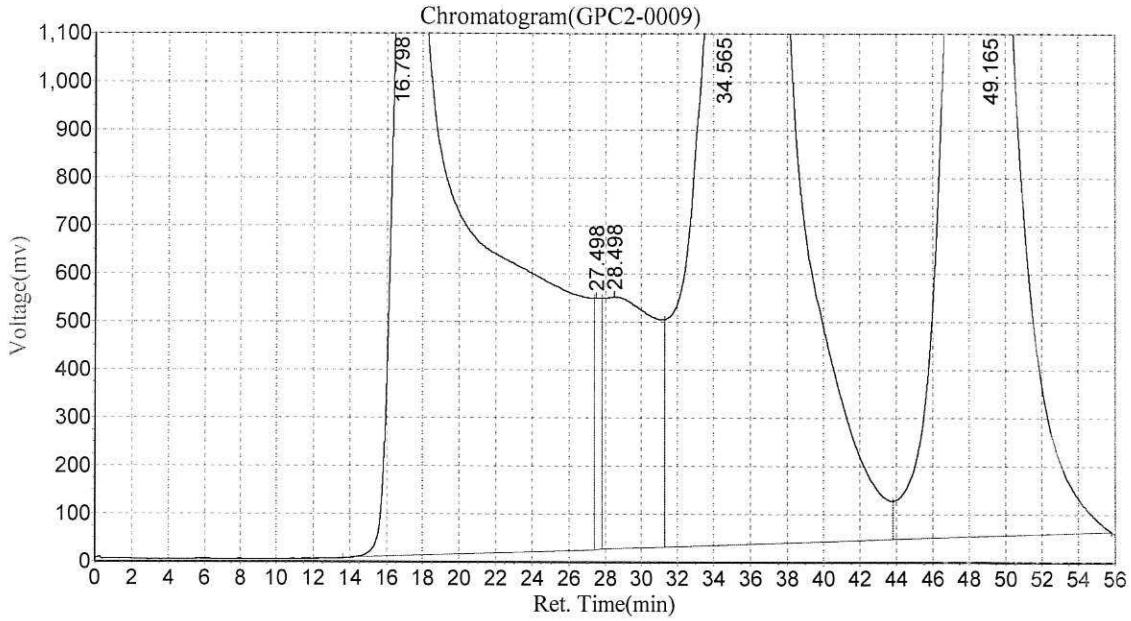
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-25,3:08:05 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.798	1366684.375	518114752.000	31.6220
2		27.498	522693.906	13583018.000	0.8290
3		28.498	523590.375	104461936.000	6.3756
4		34.565	1337585.625	575744000.000	35.1393
5		49.165	1321534.500	426560032.000	26.0341
Total			5072088.781	1638463738.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,4:05:47 AM
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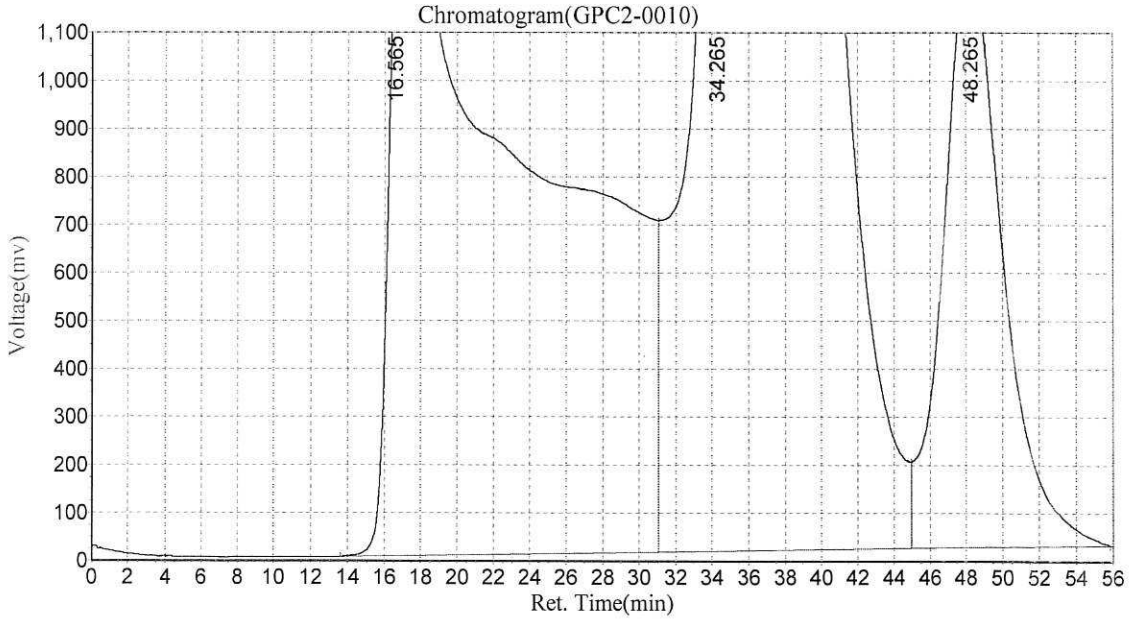
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-25,4:05:47 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.565	1368616.500	813045248.000	41.7932
2		34.265	1353241.000	854013440.000	43.8991
3		48.265	1249190.500	278344192.000	14.3078
Total			3971048.000	1945402880.000	100.000

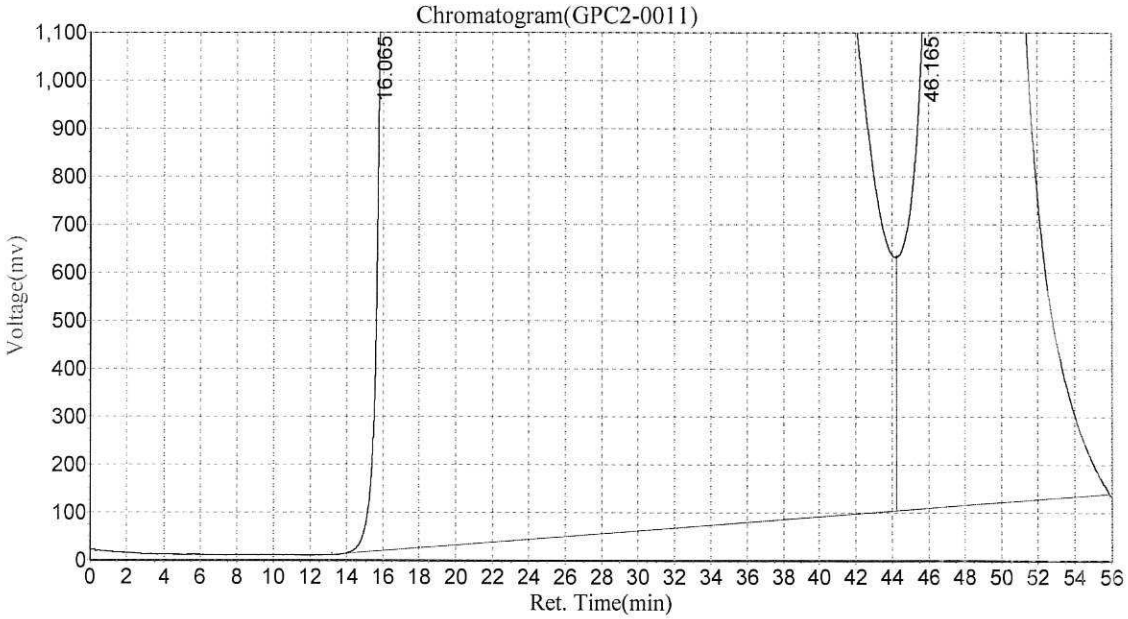
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,5:03:30 AM
Data File:c:\n2000\data\gpc2\012423\GPC2-0011
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,5:03:30 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.065	1359194.875	2175231744.000	79.4975
2		46.165	1264701.750	560994368.000	20.5025
Total			2623896.625	2736226112.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

-04

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,6:01:11 AM
Data File:c:\n2000\data\gpc2\012423\GPC2-0012
Method File:E:\GPC2_InHouse.mtd

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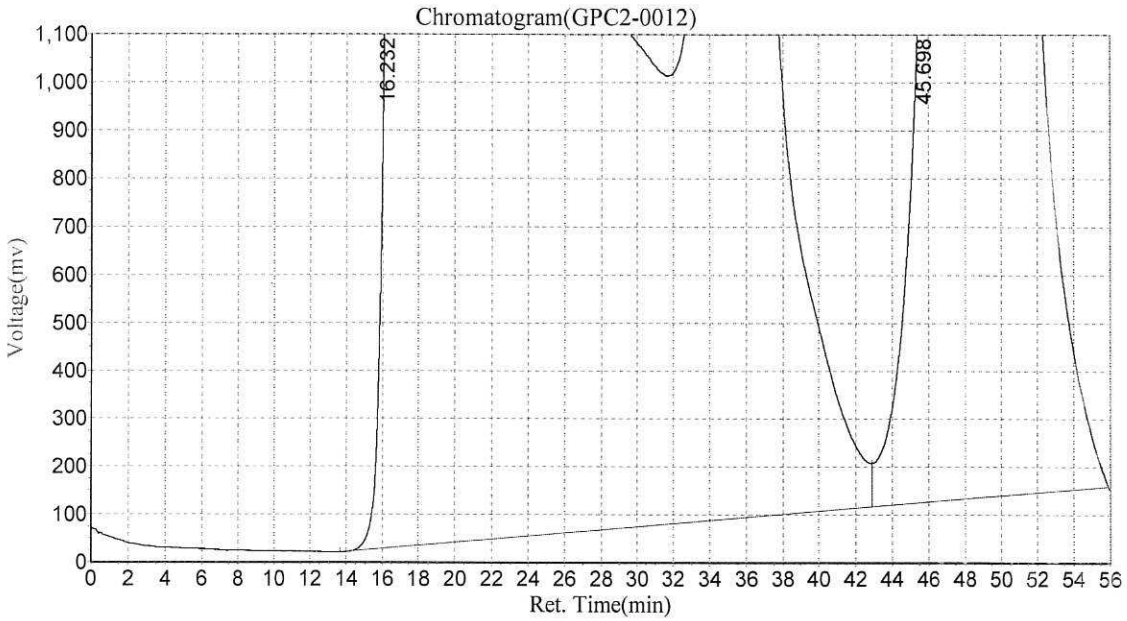

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.232	1349620.750	1715374592.000	73.1371
2		45.698	1250056.250	630048384.000	26.8629
Total			2599677.000	2345422976.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,6:58:55 AM
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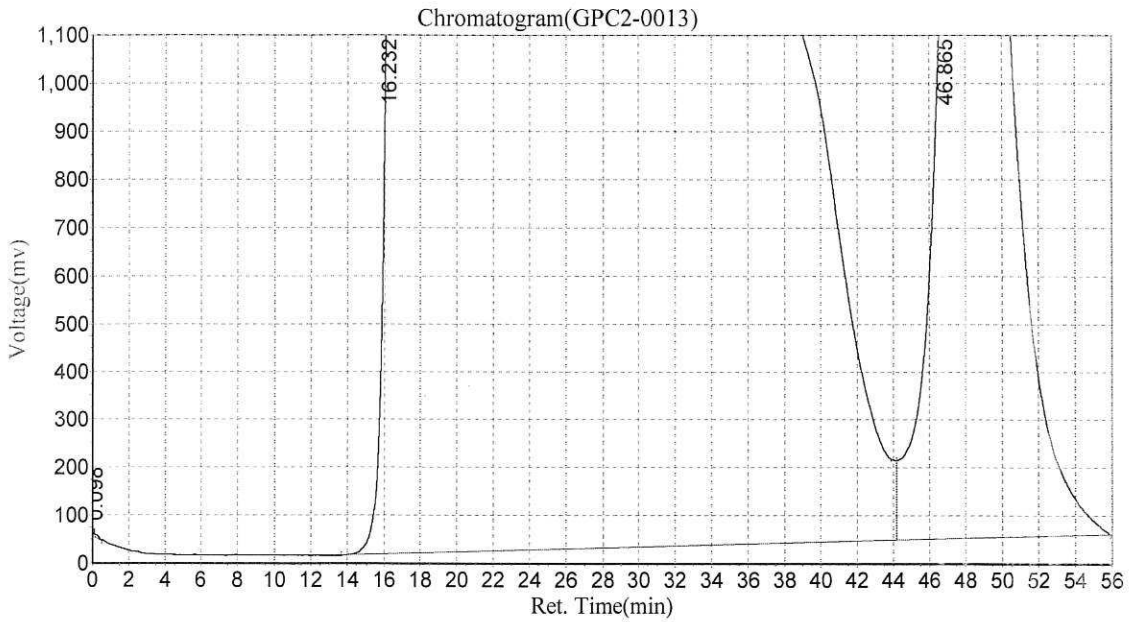

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		0.098	6719.571	134172.297	0.0055
2		16.232	1360139.125	2002314496.000	81.8702
3		46.865	1324983.250	443269440.000	18.1243
Total			2691841.946	2445718108.297	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,7:56:36 AM
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Method File:E:\GPC2_InHouse.mtd

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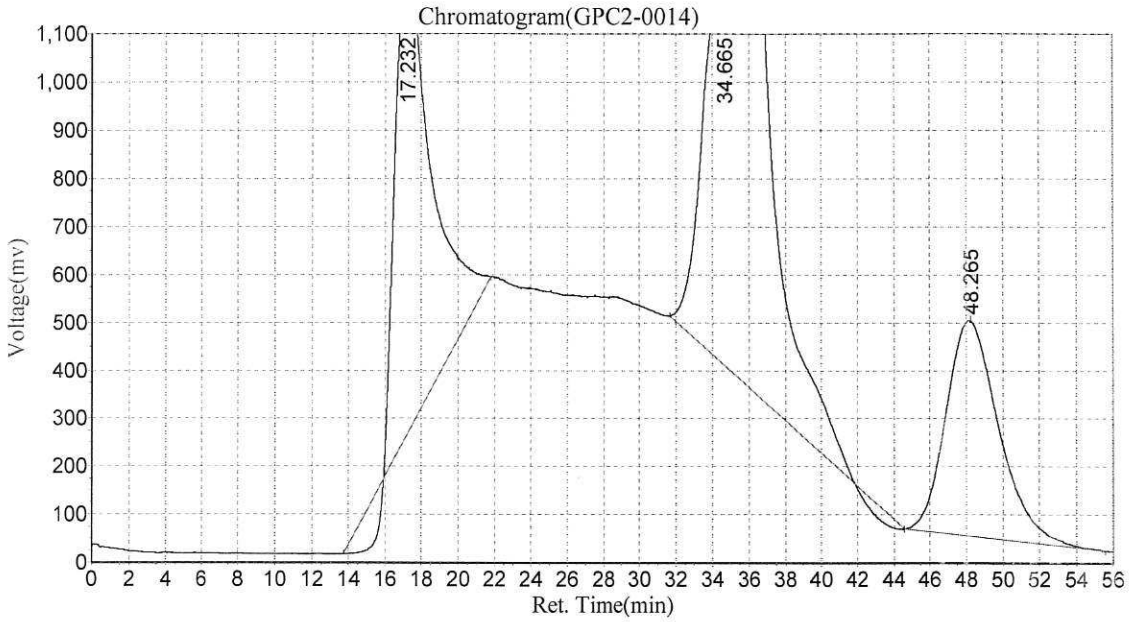
Date/Time2023-01-25,7:56:37 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.232	1008494.063	131179976.000	27.5192
2		34.665	962608.188	255311184.000	53.5598
3		48.265	448656.000	90193280.000	18.9210
Total			2419758.250	476684440.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,8:54:24 AM
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Analyst£°TWC
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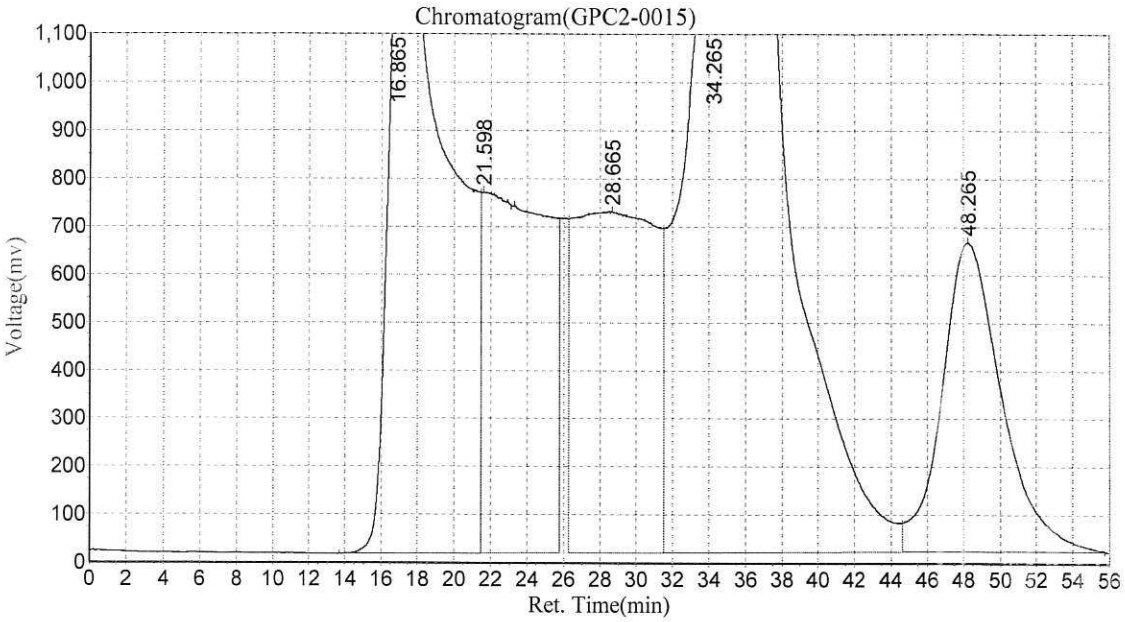

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.865	1359608.125	320657184.000	22.1946
2		21.598	752219.438	185884896.000	12.8662
3		28.665	710737.313	220850592.000	15.2864
4		34.265	1351754.125	571716672.000	39.5719
5		48.265	641938.875	145646448.000	10.0810
Total			4816257.875	1444755792.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,9:52:06 AM
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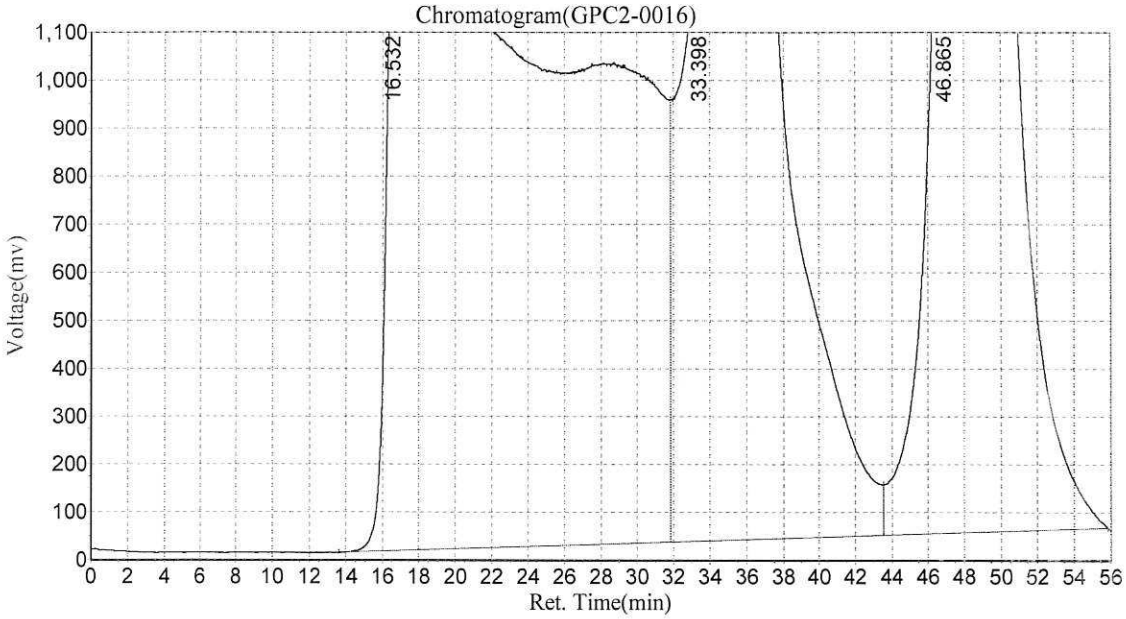
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,9:52:06 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.532	1360413.875	1034700416.000	48.9423
2		33.398	1333355.375	581002048.000	27.4820
3		46.865	1319582.750	498418720.000	23.5757
Total			4013352.000	2114121184.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,10:49:48 AM
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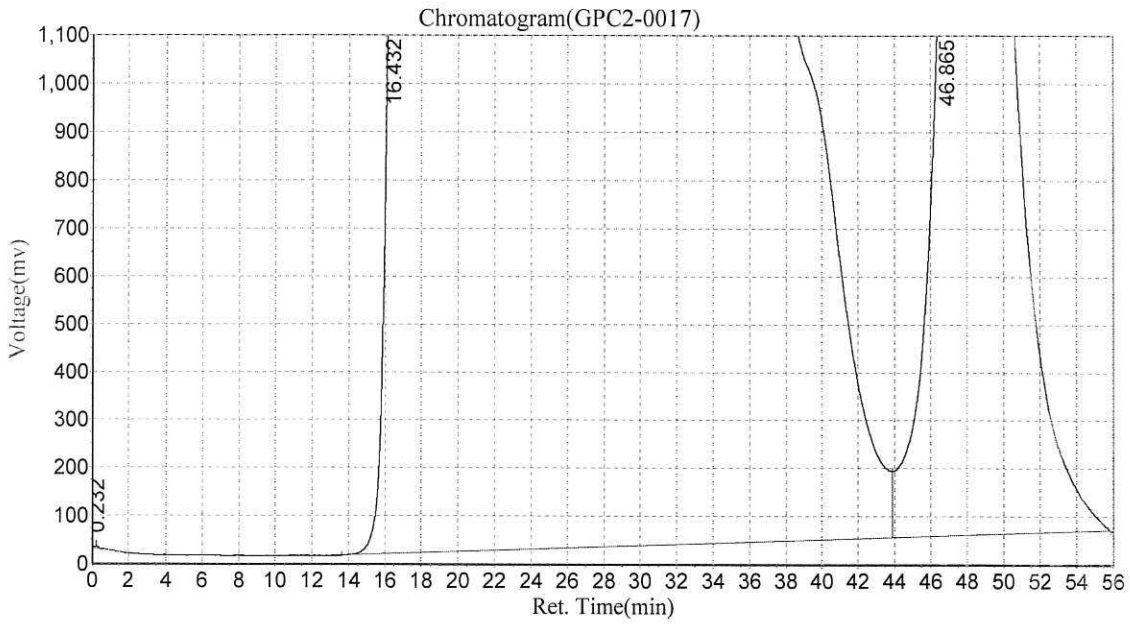

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		0.232	4673.300	110985.602	0.0046
2		16.432	1357745.375	1949109888.000	80.6883
3		46.865	1315891.875	466382464.000	19.3071
Total			2678310.550	2415603337.602	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,11:47:30 AM
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Method File:E:\GPC2_InHouse.mtd

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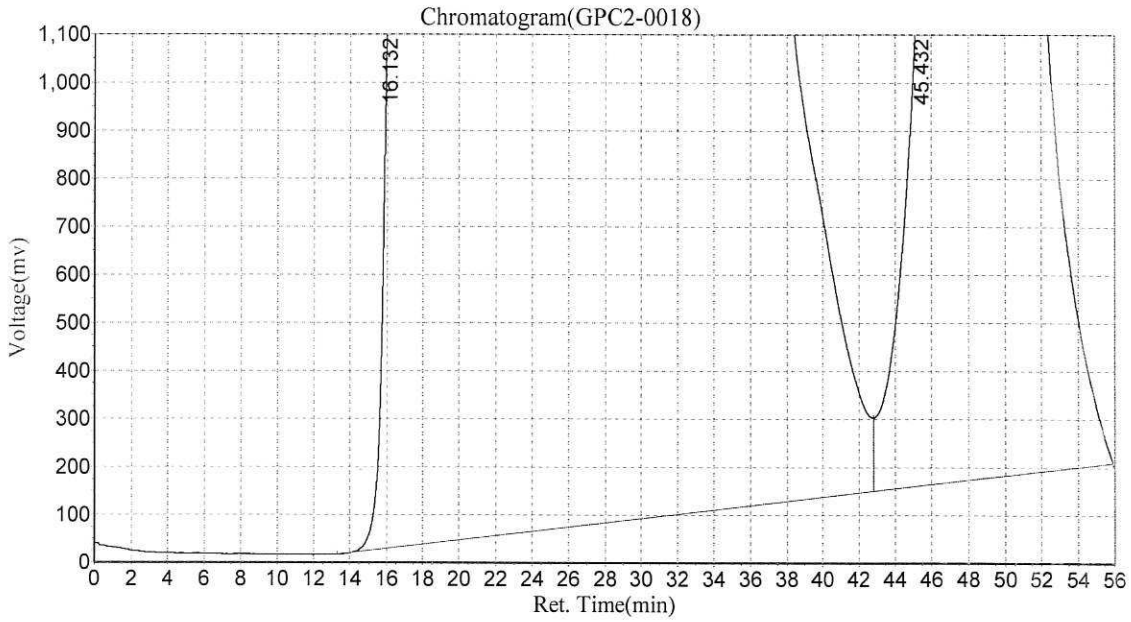

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.132	1349622.750	1862042880.000	74.4158
2		45.432	1212322.625	640172032.000	25.5842
Total			2561945.375	2502214912.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,12:45:13 PM
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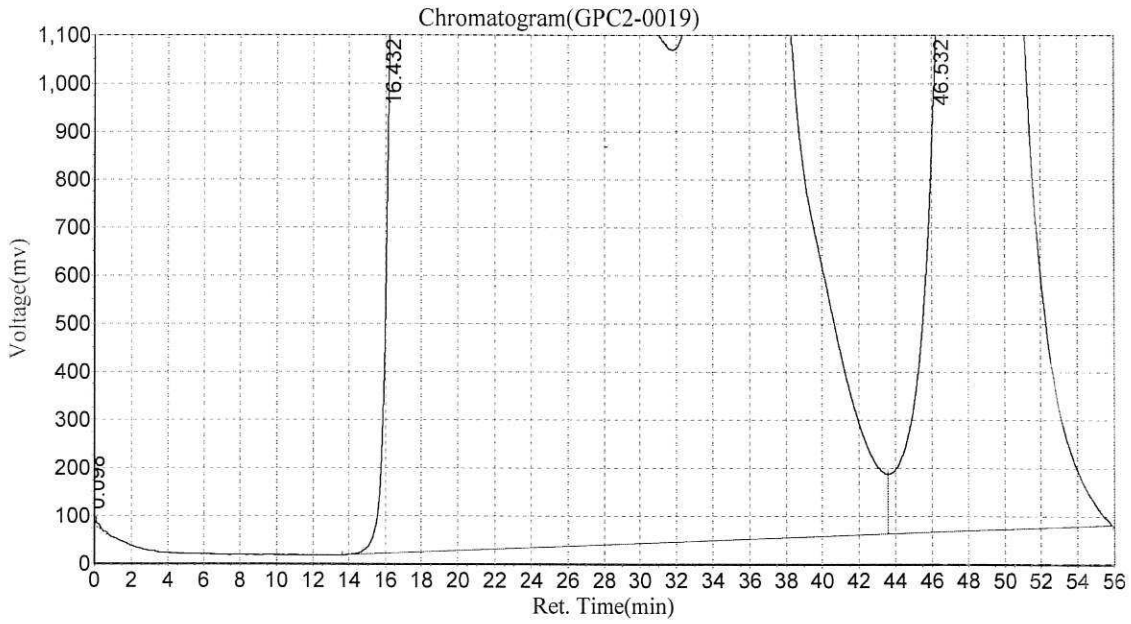
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,12:45:14 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		0.098	8875.842	122297.797	0.0052
2		16.432	1356638.375	1841350528.000	78.2571
3		46.532	1308904.875	511477504.000	21.7377
Total			2674419.092	2352950329.797	100.000

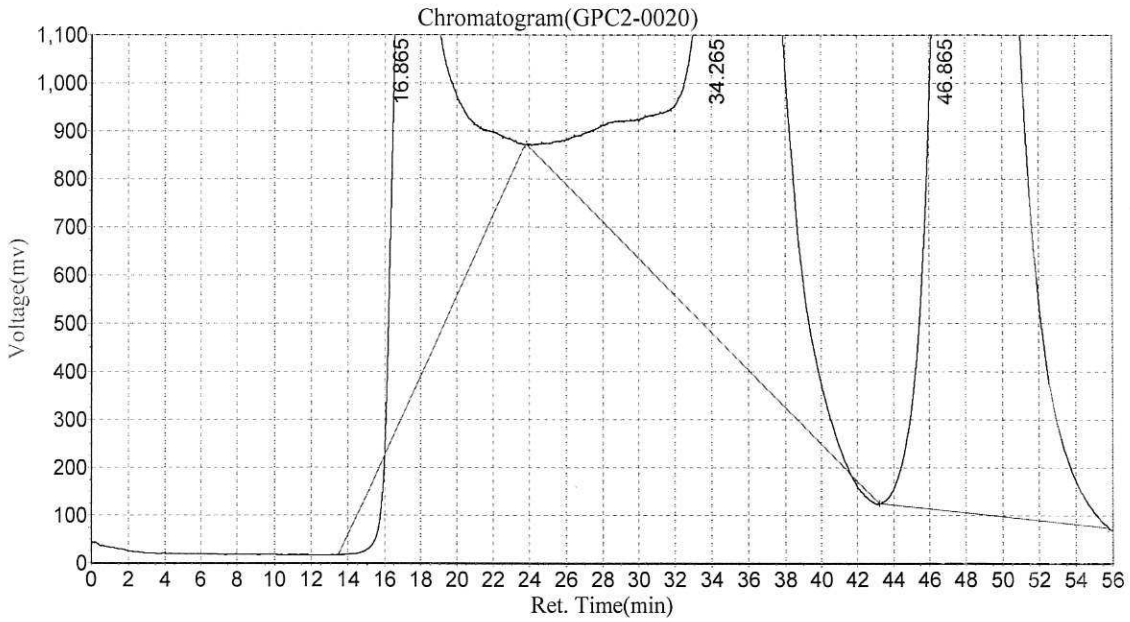
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,1:42:55 PM
Data File:c:\n2000\data\gpc2\012423\GPC2-0020
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,1:42:55 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.865	1081893.875	213574816.000	18.8280
2		34.265	904029.500	440646752.000	38.8459
3		46.865	1265849.625	480123488.000	42.3260
Total			3251773.000	1134345056.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,2:40:38 PM
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Method File:E:\GPC2_InHouse.mtd

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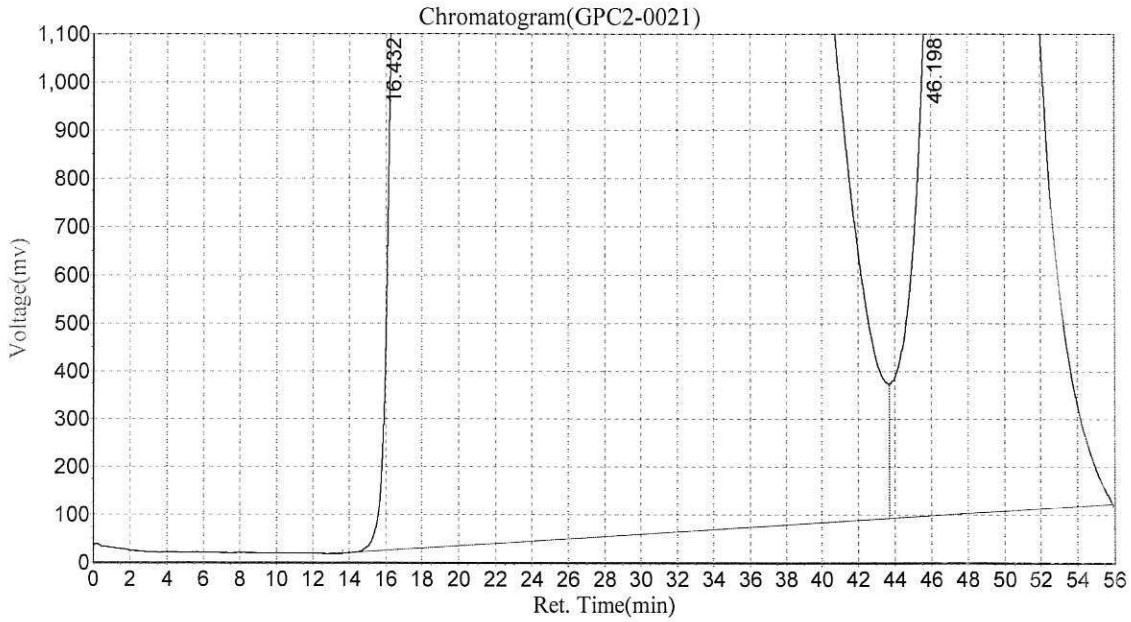
Date/Time2023-01-25,2:40:39 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.432	1353109.500	2046517632.000	77.0507
2		46.198	1277647.250	609547264.000	22.9493
Total			2630756.750	2656064896.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

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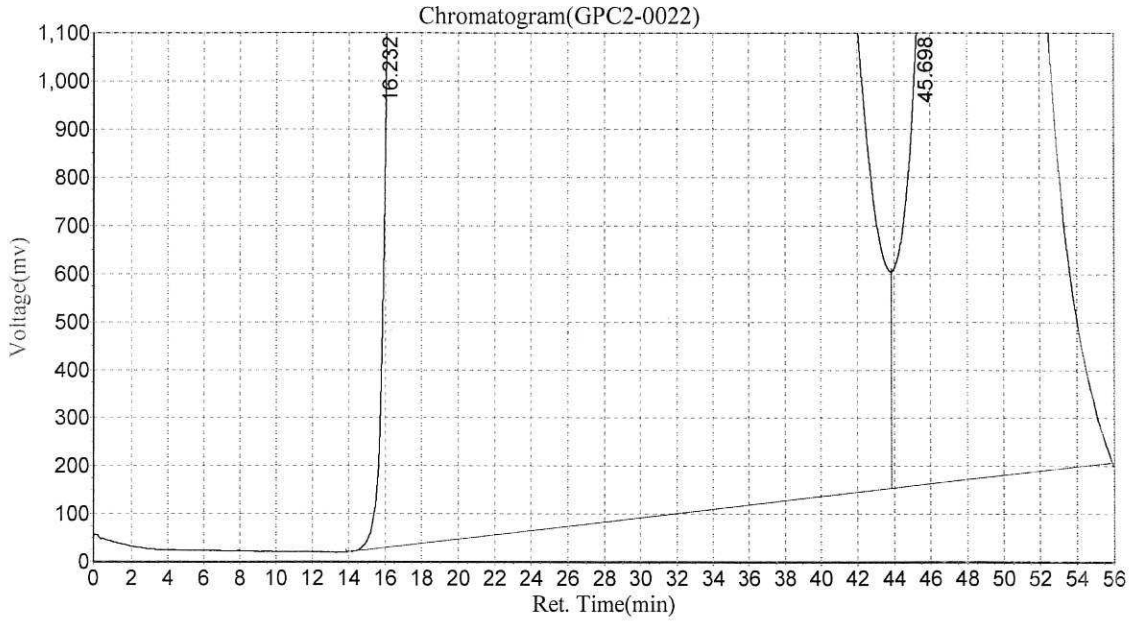

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.232	1348525.750	2085791872.000	76.7697
2		45.698	1214064.500	631155072.000	23.2303
Total			2562590.250	2716946944.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

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Analyst£°TWC
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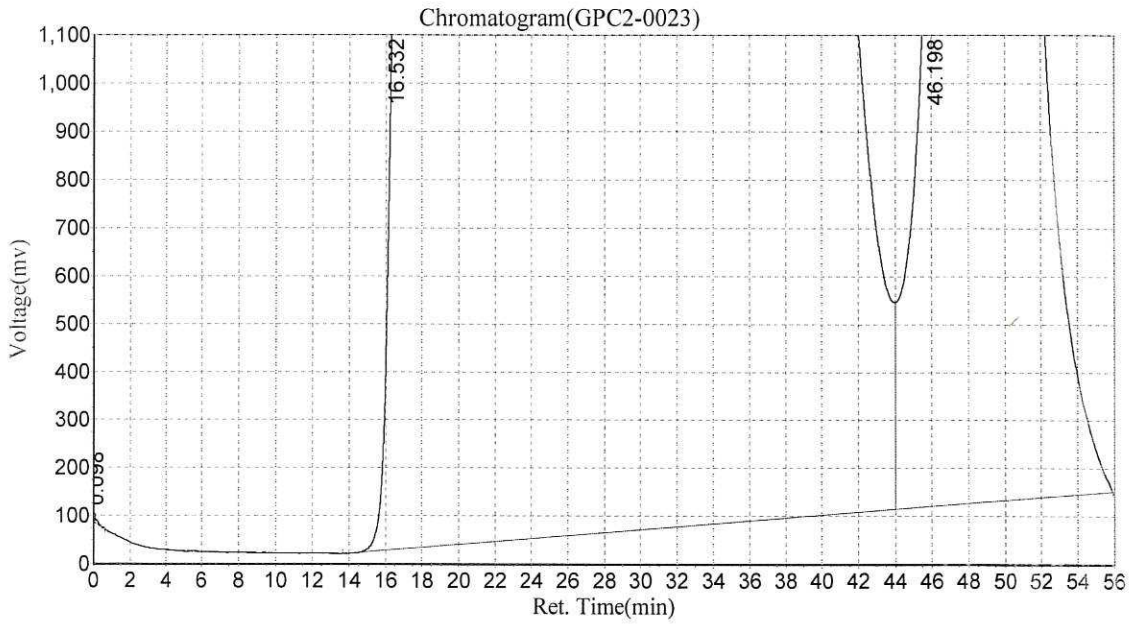

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		0.098	8319.111	110071.602	0.0040
2		16.532	1348669.500	2102572800.000	77.2178
3		46.198	1255150.375	620230592.000	22.7782
Total			2612138.986	2722913463.602	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

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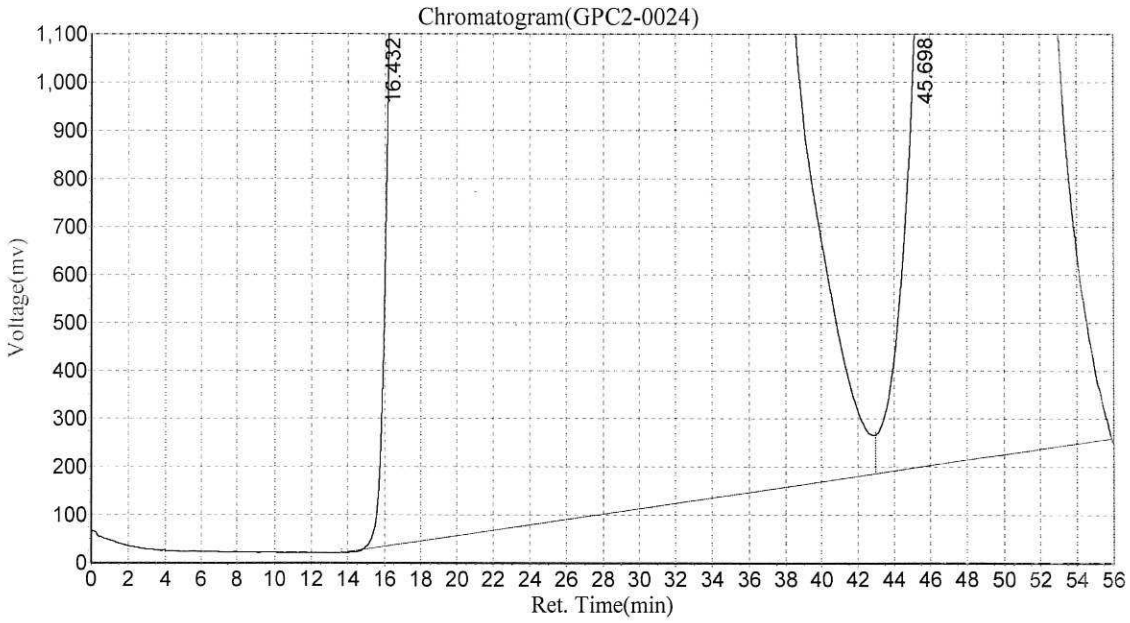
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,5:33:45 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.432	1342360.625	1806267648.000	73.9294
2		45.698	1173892.500	636965184.000	26.0706
Total			2516253.125	2443232832.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0008	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1179	23A0134-03	NT1802262312.D	01/24/2023	
LDW23-SC1249	23A0134-15	NT1802272311.D	01/24/2023	
LDW23-SS1116	23A0134-12	NT1802272307.D	01/24/2023	
LDW23-SS1123	23A0134-11	NT1802262320.D	01/24/2023	
LDW23-SS1124	23A0134-10	NT1802262319.D	01/24/2023	
LDW23-SS1129	23A0134-09	NT1802262318.D	01/24/2023	
LDW23-SS1131	23A0134-08	NT1802262317.D	01/24/2023	
LDW23-SS1152	23A0134-07	NT1802262316.D	01/24/2023	
LDW23-IT1210	23A0134-13	NT1802272308.D	01/24/2023	
LDW23-SS1173	23A0134-05	NT1802262314.D	01/24/2023	
Reference	BLA0410-SRM1	NT1802262309.D	01/24/2023	
LDW23-SS1188	23A0134-02	NT1802262311.D	01/24/2023	
LDW23-SS1205	23A0134-01	NT1802262310.D	01/24/2023	
LDW23-SS1242	23A0134-04	NT1802262313.D	01/24/2023	
Blank	BLA0410-BLK1	NT1802262306.D	01/24/2023	
LCS	BLA0410-BS1	NT1802262307.D	01/24/2023	
LCS Dup	BLA0410-BSD1	NT1802262308.D	01/24/2023	
Matrix Spike	BLA0410-MS1	NT1802272309.D	01/24/2023	
Matrix Spike Dup	BLA0410-MSD1	NT1802272310.D	01/24/2023	
LDW23-SS1160	23A0134-06	NT1802262315.D	01/24/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0008

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0166-GPC1** **Printed: 2/2/2023 10:54:12AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0134-01	C	LDW23-SS1205	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-01	C	LDW23-SS1205	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-02	C	LDW23-SS1188	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-02	C	LDW23-SS1188	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-03	C	LDW23-SS1179	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-03	C	LDW23-SS1179	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-04	C	LDW23-SS1242	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-04	C	LDW23-SS1242	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-05	C	LDW23-SS1173	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-05	C	LDW23-SS1173	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-06	C	LDW23-SS1160	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-06	C	LDW23-SS1160	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-07	C	LDW23-SS1152	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-07	C	LDW23-SS1152	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-08	C	LDW23-SS1131	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-08	C	LDW23-SS1131	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-09	C	LDW23-SS1129	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-09	C	LDW23-SS1129	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-10	C	LDW23-SS1124	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-10	C	LDW23-SS1124	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-11	C	LDW23-SS1123	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-11	C	LDW23-SS1123	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0008

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0166-GPC1** **Printed: 2/2/2023 10:54:12AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0134-12	C	LDW23-SS1116	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-12	C	LDW23-SS1116	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-13	C	LDW23-IT1210	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-13	C	LDW23-IT1210	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-15	C	LDW23-SC1249	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-15	C	LDW23-SC1249	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
BLA0410-BLK1	-	Blank	-	1	1	-	1/24/2023	TWC	
BLA0410-BLK2	-	Blank	-	1	1	-	1/24/2023	TWC	
BLA0410-BS1	-	LCS	-	1	1	-	1/24/2023	TWC	
BLA0410-BS2	-	LCS	-	1	1	-	1/24/2023	TWC	
BLA0410-BSD1	-	LCS Dup	-	1	1	-	1/24/2023	TWC	
BLA0410-BSD2	-	LCS Dup	-	1	1	-	1/24/2023	TWC	
BLA0410-MS1	-	Matrix Spike	-	1	1	-	1/24/2023	TWC	
BLA0410-MS2	-	Matrix Spike	-	1	1	-	1/24/2023	TWC	
BLA0410-MSD1	-	Matrix Spike Dup	-	1	1	-	1/24/2023	TWC	
BLA0410-MSD2	-	Matrix Spike Dup	-	1	1	-	1/24/2023	TWC	
BLA0410-SRM1	-	Reference	-	1	1	-	1/24/2023	TWC	
BLA0410-SRM2	-	Reference	-	1	1	-	1/24/2023	TWC	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8270E

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0410-BLK1	File ID:	NT1802262306.D
Sampled:	N/A	Prepared:	01/19/23 13:35	Analyzed:	02/26/23 15:11
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BLA0410	Sequence:	SLC0111	Calibration:	GC00023
Instrument:	NT18	Column:	ZB-5MS	Cleanups:	GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
108-95-2	Phenol	1	20.0	U	4.4	20.0
106-44-5	4-Methylphenol	1	20.0	U	7.4	20.0
91-20-3	Naphthalene	1	20.0	U	4.2	20.0
91-57-6	2-Methylnaphthalene	1	20.0	U	4.5	20.0
208-96-8	Acenaphthylene	1	20.0	U	6.2	20.0
131-11-3	Dimethylphthalate	1	20.0	U	4.4	20.0
83-32-9	Acenaphthene	1	20.0	U	5.2	20.0
132-64-9	Dibenzofuran	1	20.0	U	14.1	20.0
86-73-7	Fluorene	1	20.0	U	14.6	20.0
85-01-8	Phenanthrene	1	20.0	U	8.7	20.0
120-12-7	Anthracene	1	20.0	U	7.2	20.0
206-44-0	Fluoranthene	1	20.0	U	6.1	20.0
129-00-0	Pyrene	1	20.0	U	5.7	20.0
85-68-7	Butylbenzylphthalate	1	20.0	U	9.4	20.0
56-55-3	Benzo(a)anthracene	1	20.0	U	6.0	20.0
218-01-9	Chrysene	1	20.0	U	6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	50.0	U	5.5	50.0
	Benzofluoranthenes, Total	1	40.0	U	10.0	40.0
50-32-8	Benzo(a)pyrene	1	20.0	U	4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	20.0	U	14.7	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.0	U	17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	20.0	U	13.6	20.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	402	53.6	27 - 120	
Phenol-d5	750.00	452	60.3	29 - 120	
2-Chlorophenol-d4	750.00	443	59.1	31 - 120	
1,2-Dichlorobenzene-d4	500.00	296	59.2	32 - 120	
Nitrobenzene-d5	500.00	333	66.5	30 - 120	
2-Fluorobiphenyl	500.00	318	63.6	35 - 120	
2,4,6-Tribromophenol	750.00	314	41.8	24 - 134	
p-Terphenyl-d14	500.00	420	84.0	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262306.D

Date : 26-FEB-2023 15:11

Client ID:

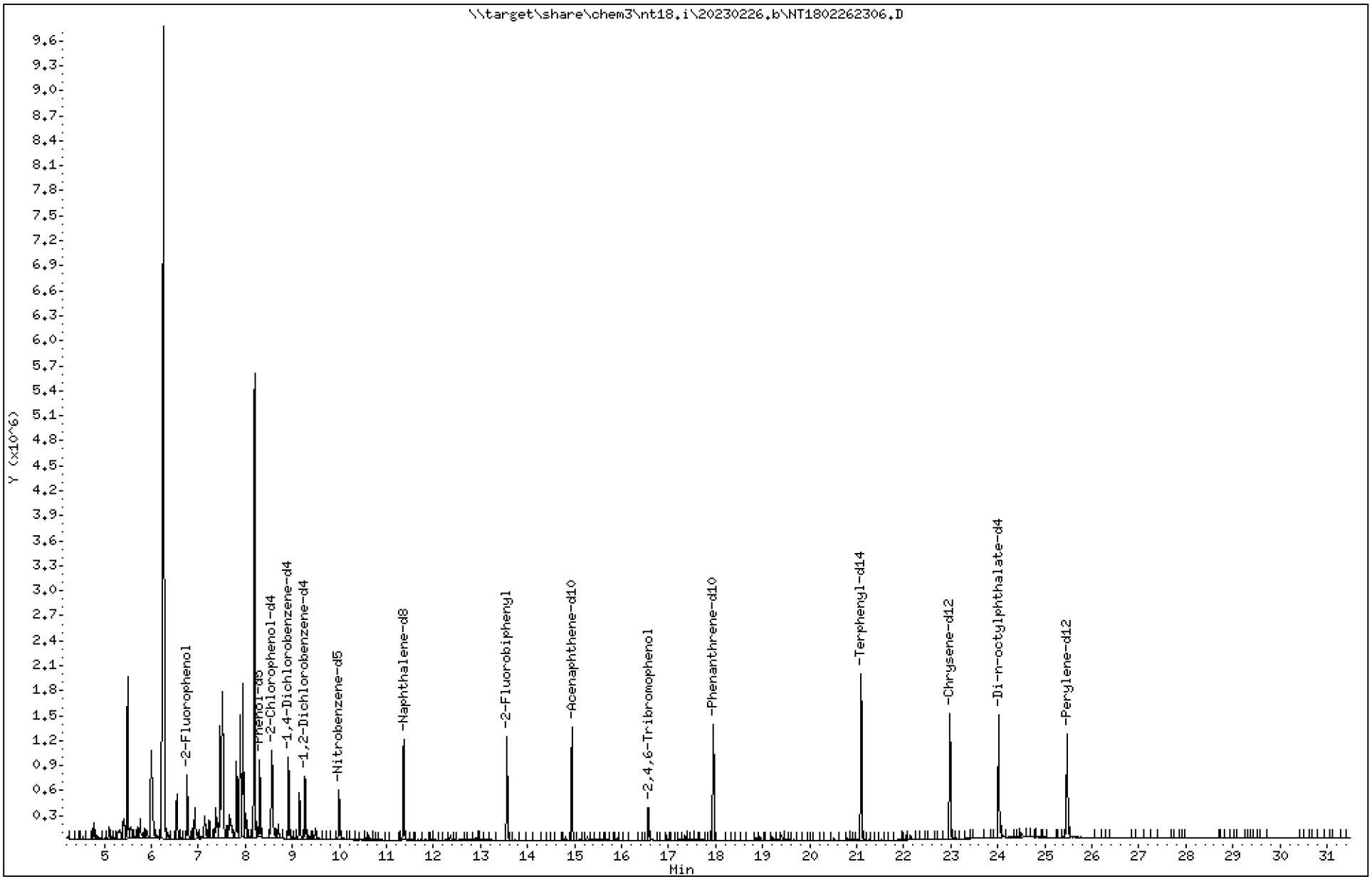
Instrument: nt18.i

Sample Info: BLA0410-BLK1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 15:11

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BLK1

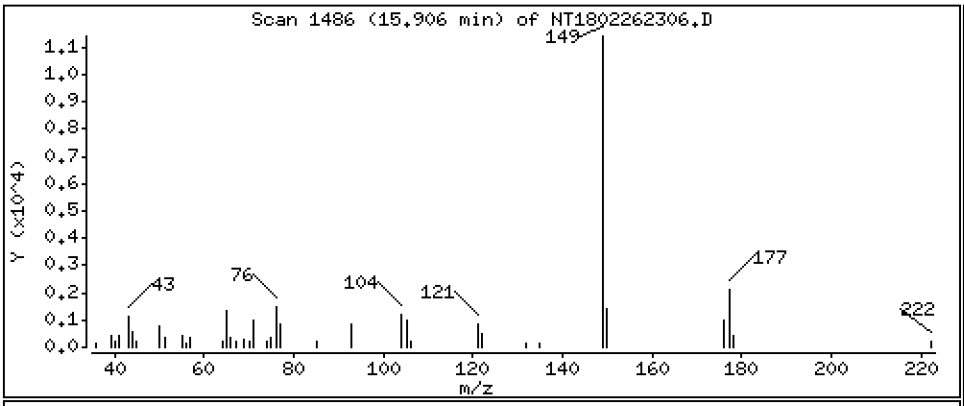
Operator: VTS

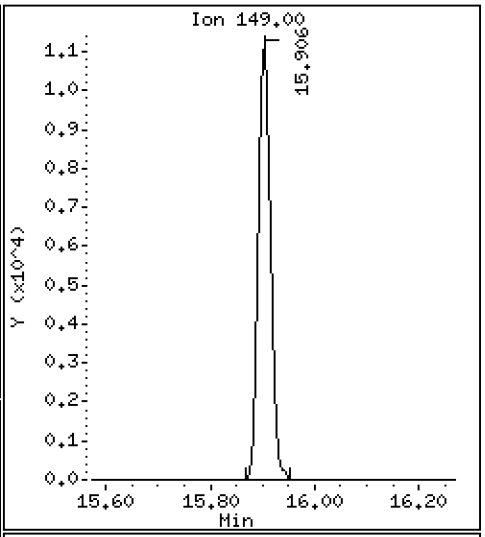
Column phase: ZB-5msi

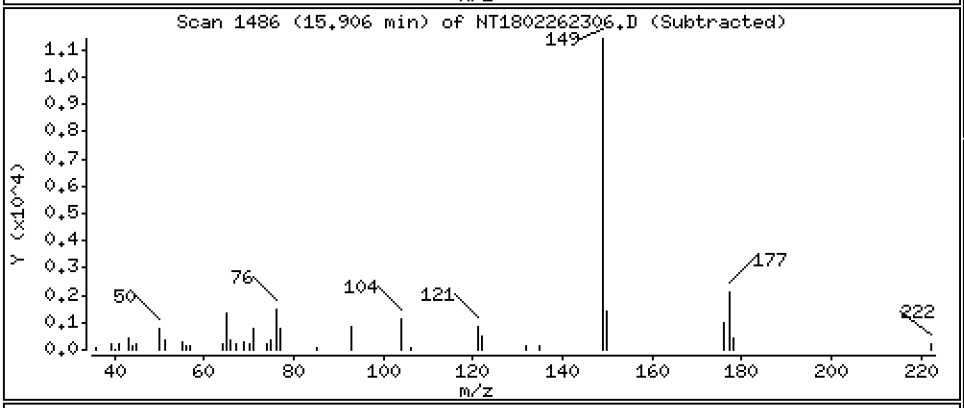
Column diameter: 0.25

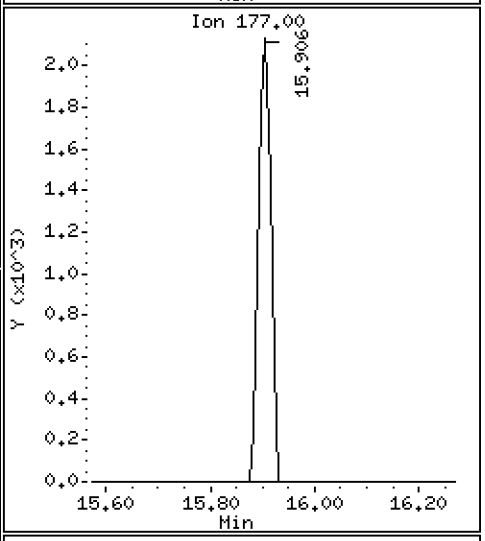
50 Diethylphthalate

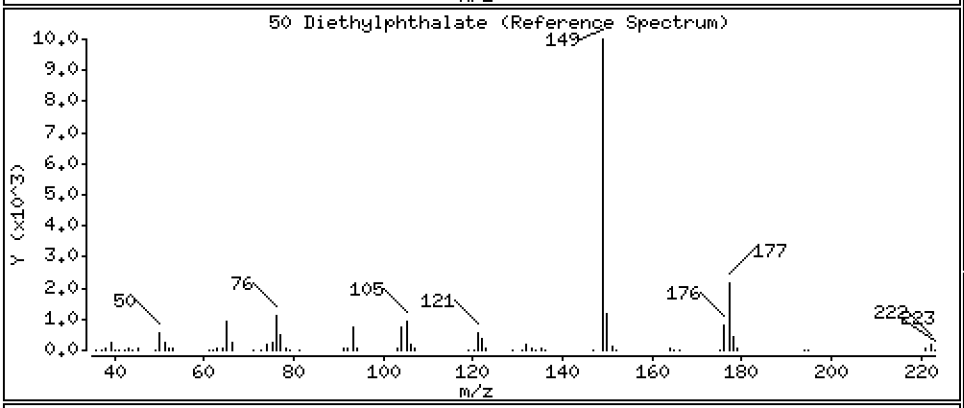
Concentration: 0.09675 ug/mL

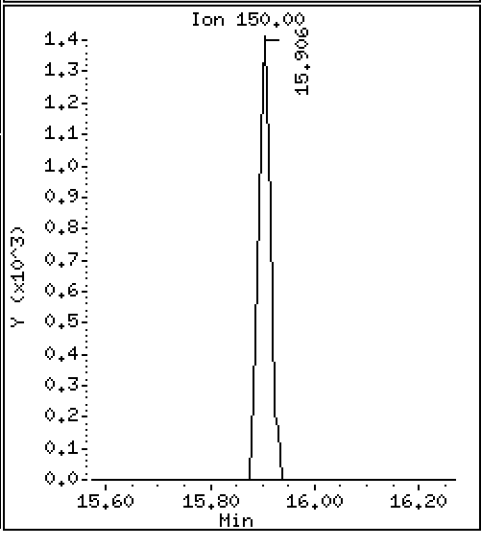


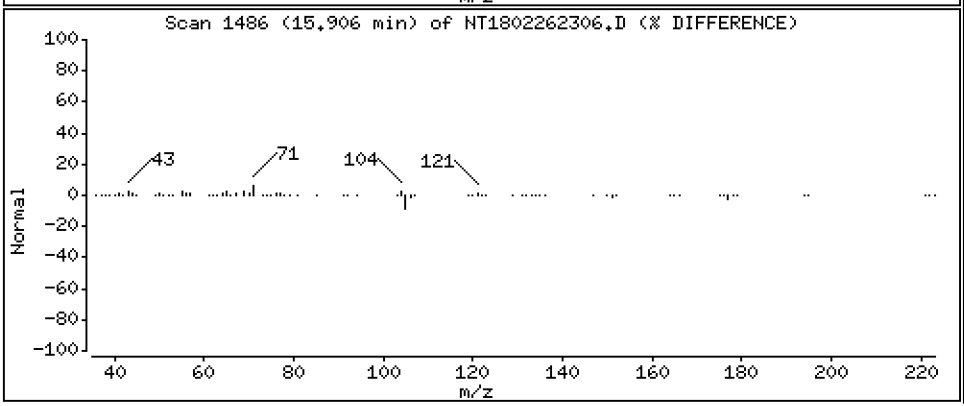












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262306.D
Lab Smp Id: BLA0410-BLK1
Inj Date : 26-FEB-2023 15:11
Operator : VTS Inst ID: nt18.i
Smp Info : BLA0410-BLK1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.759	6.743	(0.758)	335483	4.02114	4.021
$	2 Phenol-d5	99	8.304	8.296	(0.931)	487759	4.52374	4.524
	3 Phenol	94	Compound Not Detected.					
$	5 2-Chlorophenol-d4	132	8.566	8.559	(0.961)	415562	4.42910	4.429
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	244536	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.272	(1.039)	196798	2.95871	2.959
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	Compound Not Detected.					
$	18 Nitrobenzene-d5	82	9.993	9.993	(0.879)	325032	3.32549	3.325
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	917111	4.00000	
	28 Naphthalene	128	Compound Not Detected.					
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	13.562	13.570	(0.908)	653094	3.17986	3.180
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
40	Acenaphthylene	152	Compound Not Detected.					
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	14.939	14.947	(1.000)	487134	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	Compound Not Detected.					
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	Compound Not Detected.					
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	15.906	15.921	(1.065)	17474	0.09675	0.09675
49	Fluorene	166	Compound Not Detected.					
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	77592	3.13869	3.139
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	17.945	17.952	(1.000)	894181	4.00000	
60	Phenanthrene	178	Compound Not Detected.					
61	Anthracene	178	Compound Not Detected.					
62	Carbazole	167	Compound Not Detected.					
63	Di-n-butylphthalate	149	Compound Not Detected.					
64	Fluoranthene	202	Compound Not Detected.					
65	Pyrene	202	Compound Not Detected.					
$ 66	Terphenyl-d14	244	21.094	21.094	(0.918)	1001760	4.20000	4.200
67	Butylbenzylphthalate	149	Compound Not Detected.					
68	Benzo(a)anthracene	228	Compound Not Detected.					
* 69	Chrysene-d12	240	22.983	22.983	(1.000)	795833	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	Compound Not Detected.					
72	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
* 134	Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	1184006	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	Compound Not Detected.					
75	Benzo(k)fluoranthene	252	Compound Not Detected.					
76	Benzo(a)pyrene	252	Compound Not Detected.					
* 77	Perylene-d12	264	25.468	25.476	(1.000)	843260	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	Compound Not Detected.					
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	Compound Not Detected.					
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262306.D
Lab Smp Id: BLA0410-BLK1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	244536	0.17
27 Naphthalene-d8	943164	471582	1886328	917111	-2.76
42 Acenaphthene-d10	501893	250947	1003786	487134	-2.94
59 Phenanthrene-d10	896502	448251	1793004	894181	-0.26
69 Chrysene-d12	842481	421241	1684962	795833	-5.54
134 Di-n-octylphthala	1278043	639022	2556086	1184006	-7.36
77 Perylene-d12	915681	457841	1831362	843260	-7.91

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.94	-0.05
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.04
69 Chrysene-d12	22.98	22.48	23.48	22.98	-0.00
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	-0.00
77 Perylene-d12	25.48	24.98	25.98	25.47	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262306.D

Lab ID: BLA0410-BLK1
nt18.i, ABN.m, 26-FEB-2023 15:11

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1802262302.D

On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

LCS / LCS DUPLICATE RECOVERY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/26/23 15:52
Batch:	BLA0410	Laboratory ID:	BLA0410-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Phenol	500	327		65.4	34 - 120
4-Methylphenol	500	314		62.8	29 - 120
Naphthalene	500	329		65.8	43 - 120
2-Methylnaphthalene	500	314		62.8	43 - 120
Acenaphthylene	500	340		68.0	42 - 120
Dimethylphthalate	500	392		78.3	43 - 120
Acenaphthene	500	349		69.9	45 - 120
Dibenzofuran	500	338		67.5	43 - 120
Fluorene	500	363		72.5	45 - 120
Phenanthrene	500	362		72.3	49 - 120
Anthracene	500	310		62.1	45 - 120
Fluoranthene	500	412		82.4	53 - 145
Pyrene	500	388		77.5	52 - 134
Butylbenzylphthalate	500	499		99.7	45 - 132
Benzo(a)anthracene	500	390		78.1	49 - 120
Chrysene	500	390		77.9	47 - 120
bis(2-Ethylhexyl)phthalate	500	455		91.1	34 - 130
Benzofluoranthenes, Total	1000	829		82.9	30 - 160
Benzo(a)pyrene	500	384		76.7	42 - 120
Indeno(1,2,3-cd)pyrene	500	416		83.2	42 - 163
Dibenzo(a,h)anthracene	500	421		84.2	30 - 133
Benzo(g,h,i)perylene	500	412		82.4	46 - 148

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	500	340		68.0	3.85	30	34 - 120
4-Methylphenol	500	328		65.5	4.19	30	29 - 120
Naphthalene	500	349		69.8	5.83	30	43 - 120
2-Methylnaphthalene	500	329		65.7	4.45	30	43 - 120
Acenaphthylene	500	357		71.5	5.06	30	42 - 120
Dimethylphthalate	500	408		81.6	4.07	30	43 - 120
Acenaphthene	500	367		73.4	4.84	30	45 - 120

* Indicates values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/26/23 16:32
Batch:	BLA0410	Laboratory ID:	BLA0410-BSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS Dup
Initial/Final:	10 g / 1 mL		

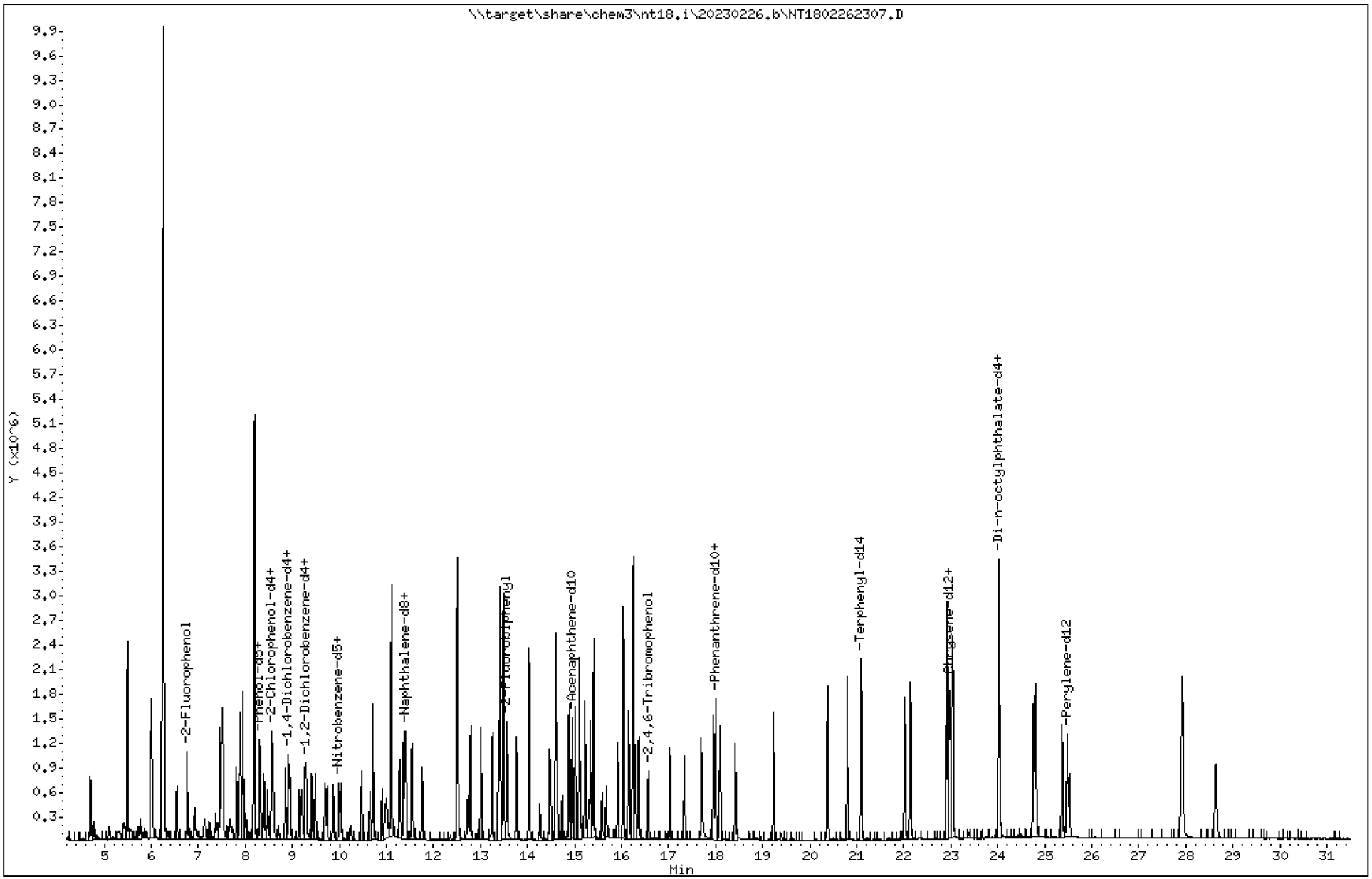
COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dibenzofuran	500	354		70.7	4.65	30	43 - 120
Fluorene	500	381		76.2	4.93	30	45 - 120
Phenanthrene	500	372		74.4	2.87	30	49 - 120
Anthracene	500	328		65.6	5.54	30	45 - 120
Fluoranthene	500	425		84.9	3.09	30	53 - 145
Pyrene	500	405		80.9	4.33	30	52 - 134
Butylbenzylphthalate	500	508		102	1.93	30	45 - 132
Benzo(a)anthracene	500	397		79.4	1.69	30	49 - 120
Chrysene	500	405		81.0	3.86	30	47 - 120
bis(2-Ethylhexyl)phthalate	500	476		95.2	4.39	30	34 - 130
Benzofluoranthenes, Total	1000	851		85.1	2.65	30	30 - 160
Benzo(a)pyrene	500	411		82.2	6.87	30	42 - 120
Indeno(1,2,3-cd)pyrene	500	432		86.3	3.65	30	42 - 163
Dibenzo(a,h)anthracene	500	438		87.6	3.86	30	30 - 133
Benzo(g,h,i)perylene	500	424		84.7	2.80	30	46 - 148

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262307.D
Date : 26-FEB-2023 15:52
Client ID:
Sample Info: BLA0410-BS1

Instrument: nt18.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

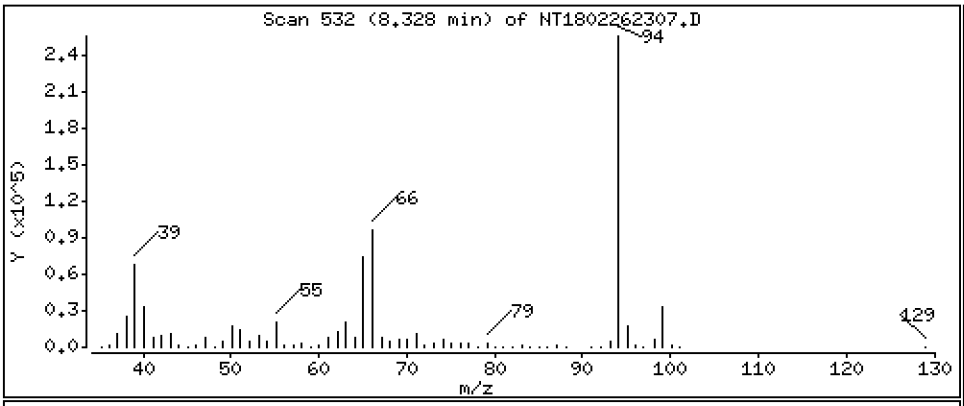
Operator: VTS

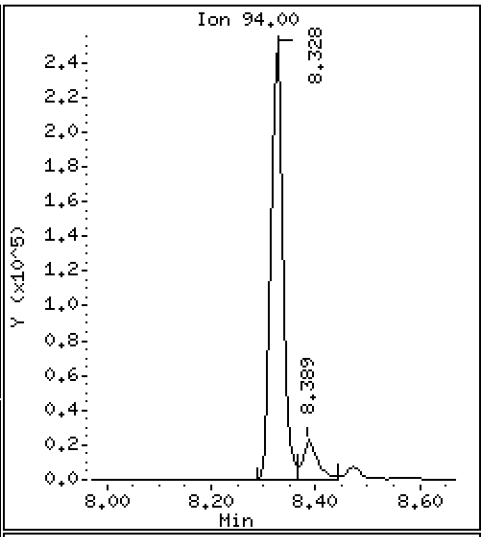
Column phase: ZB-5msi

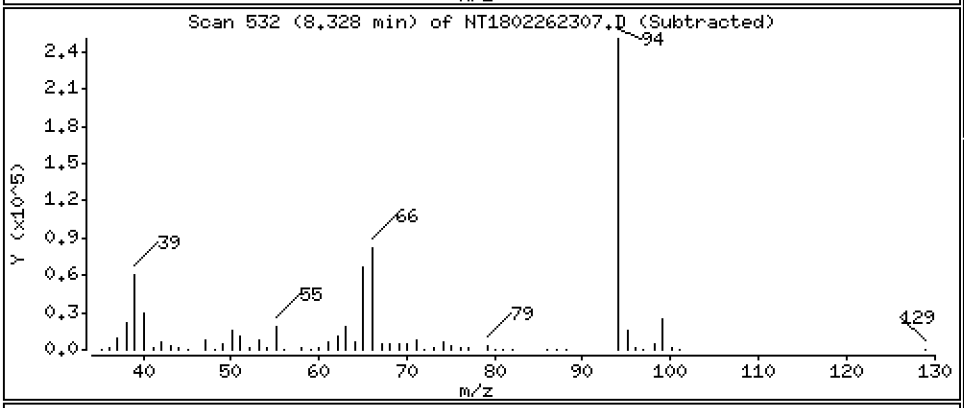
Column diameter: 0.25

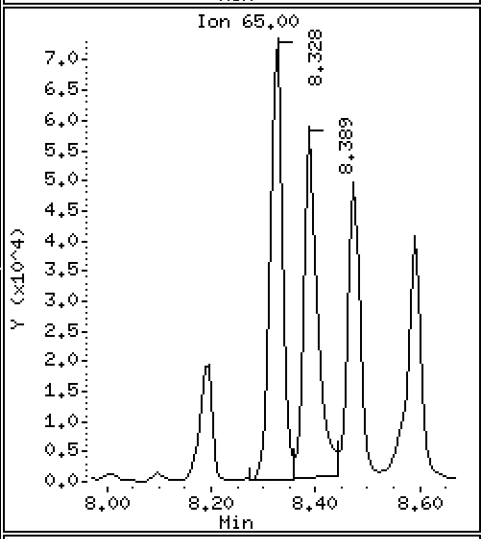
3 Phenol

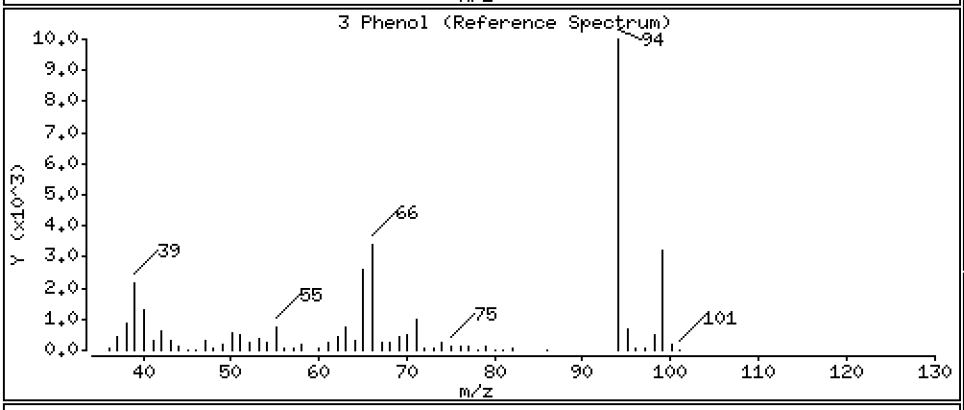
Concentration: 3.271 ug/mL

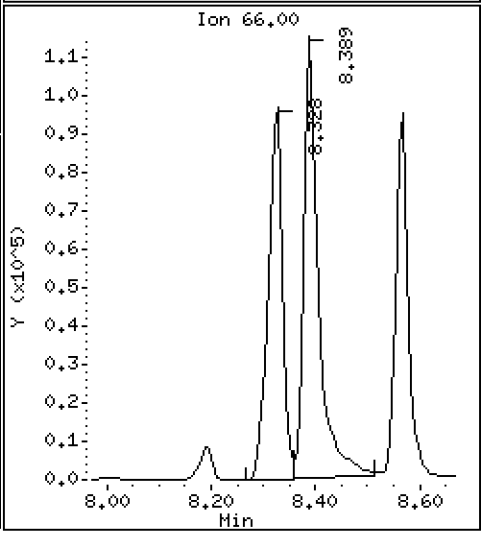


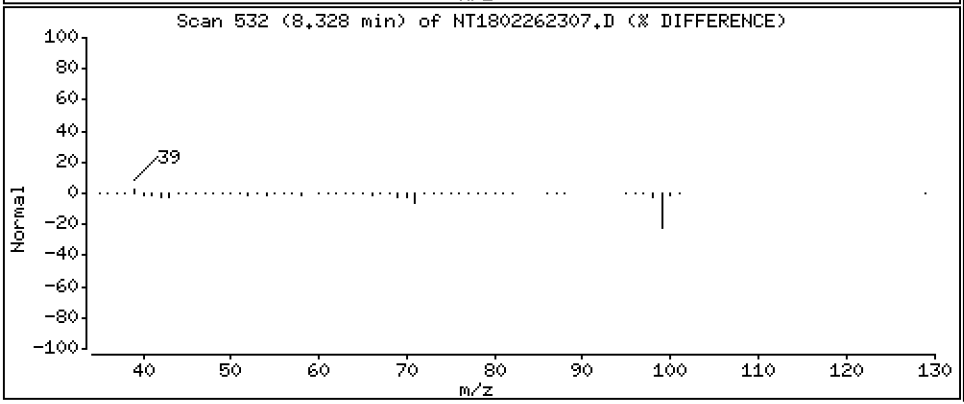












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

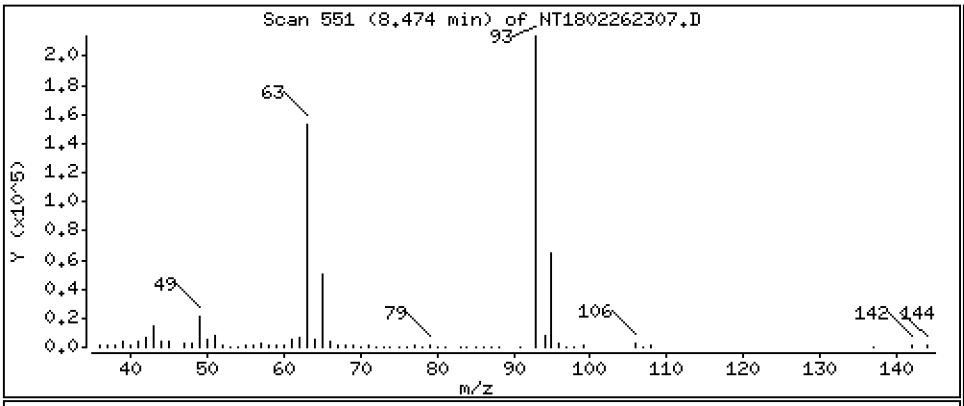
Operator: VTS

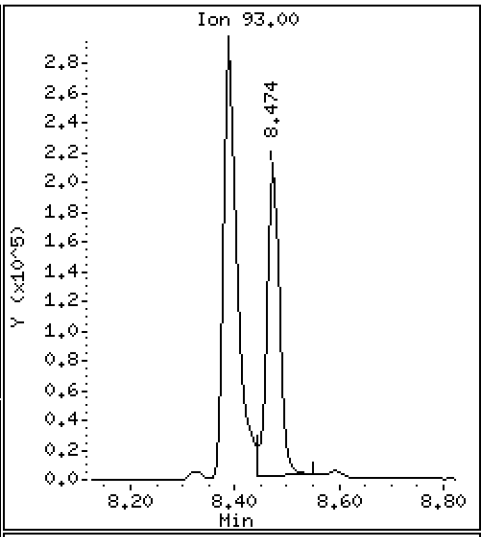
Column phase: ZB-5msi

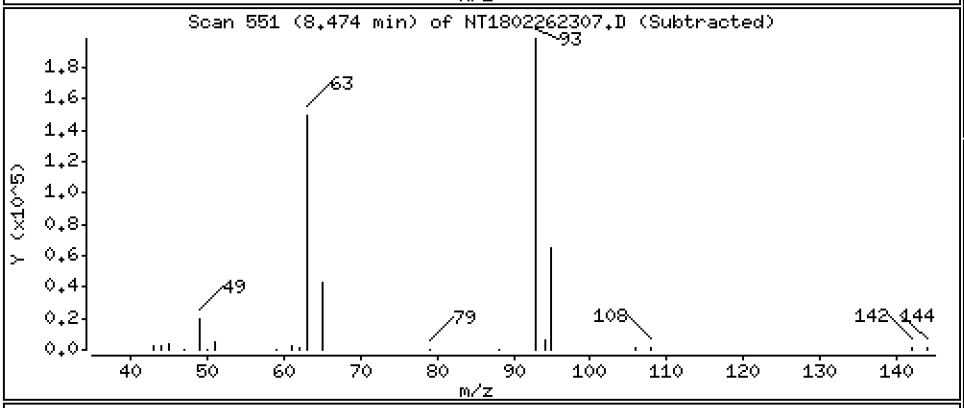
Column diameter: 0.25

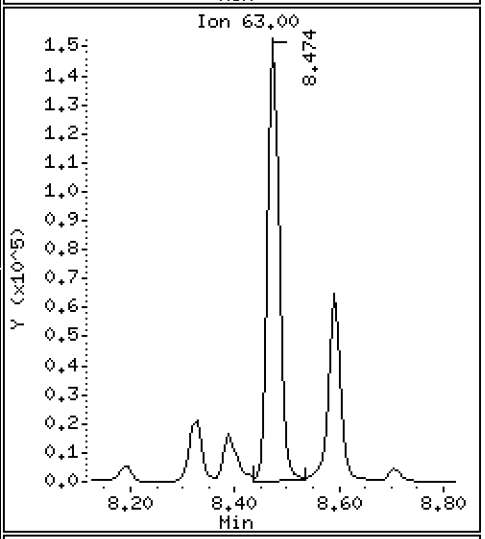
4 Bis(2-Chloroethyl)ether

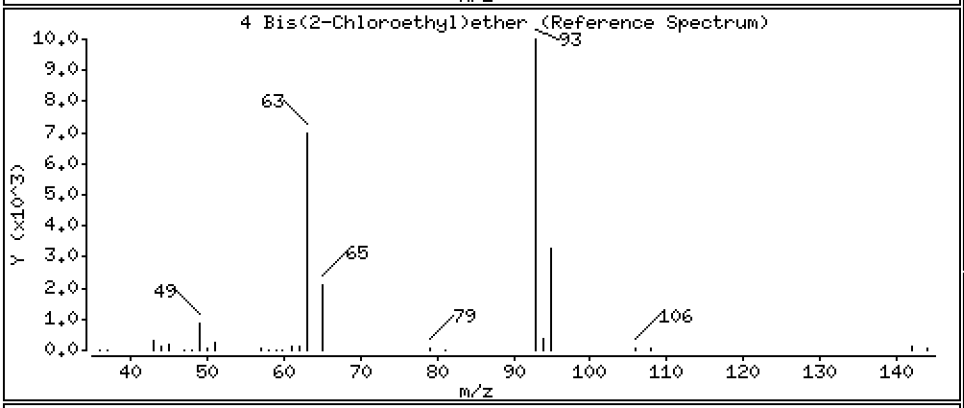
Concentration: 4.156 ug/mL

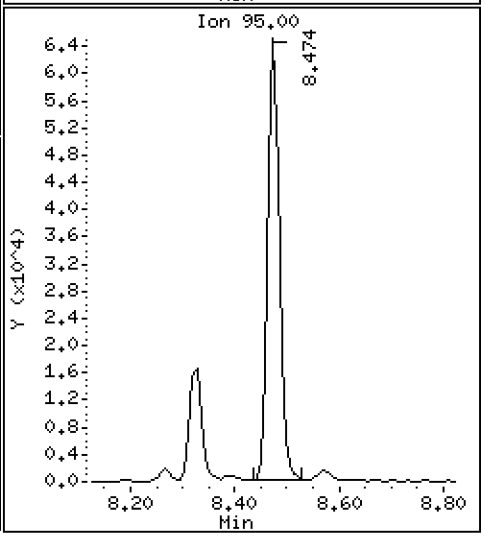


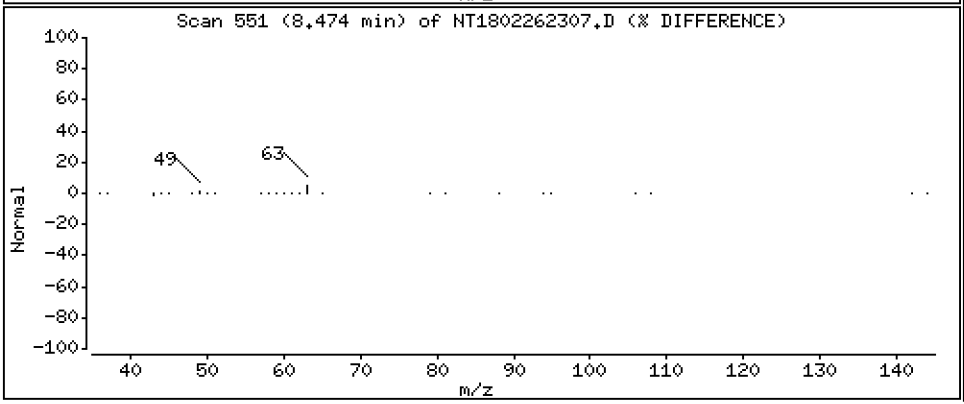












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

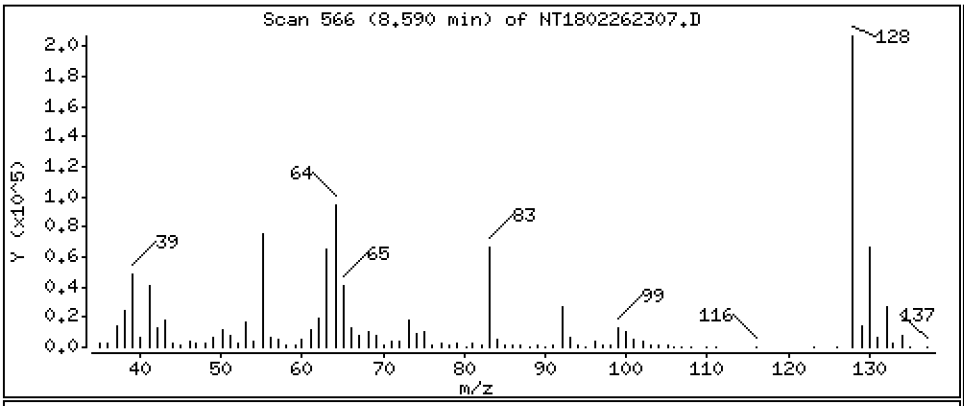
Operator: VTS

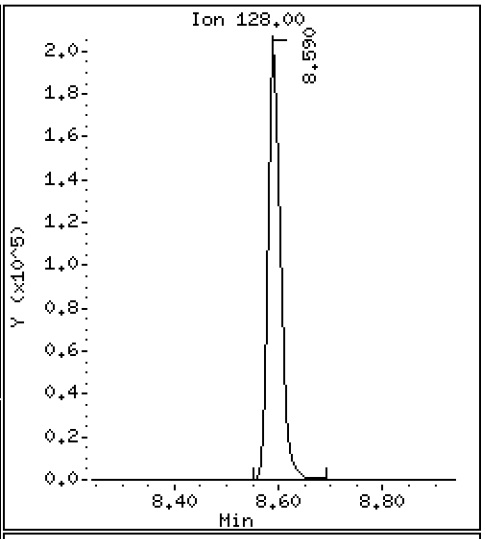
Column phase: ZB-5msi

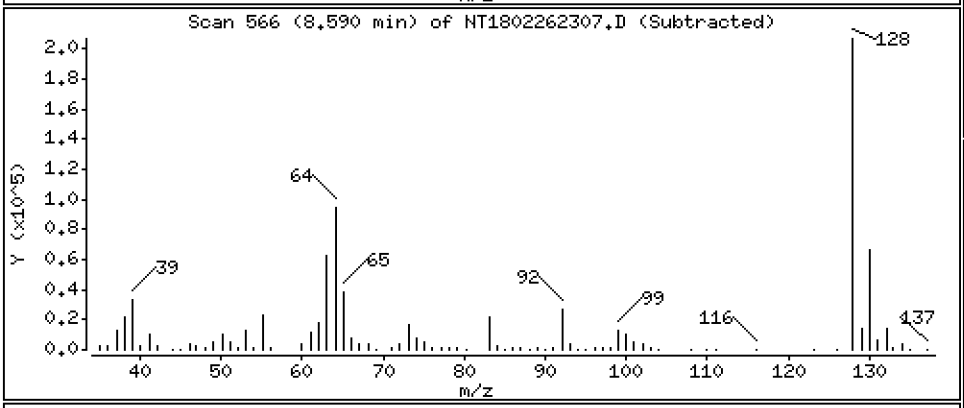
Column diameter: 0.25

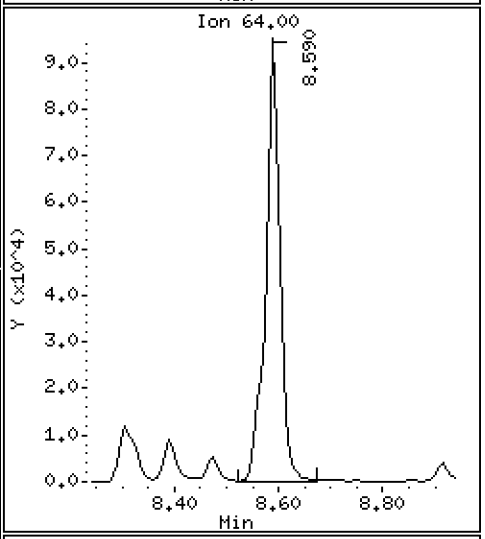
6 2-Chlorophenol

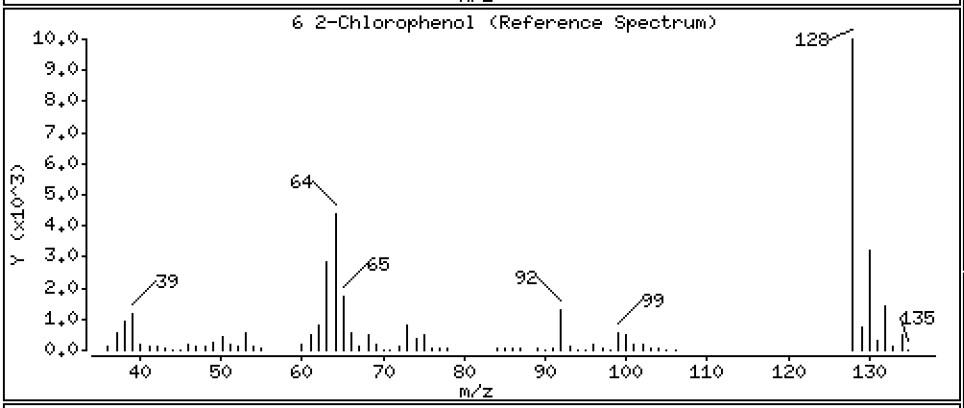
Concentration: 3.213 ug/mL

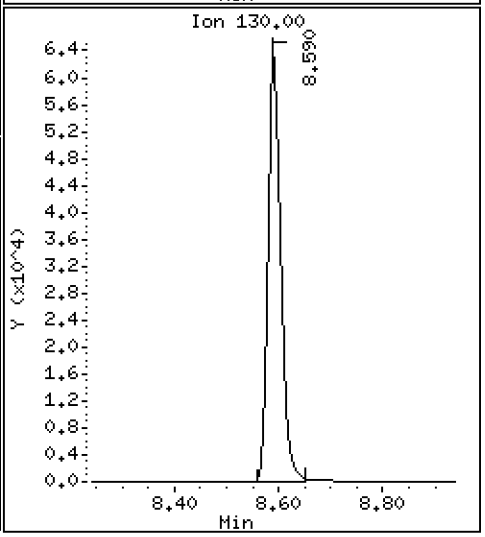


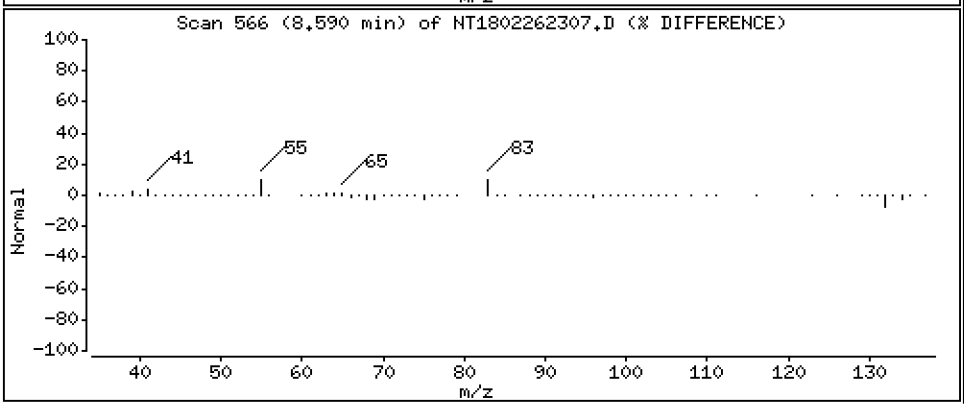












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262307.D

Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

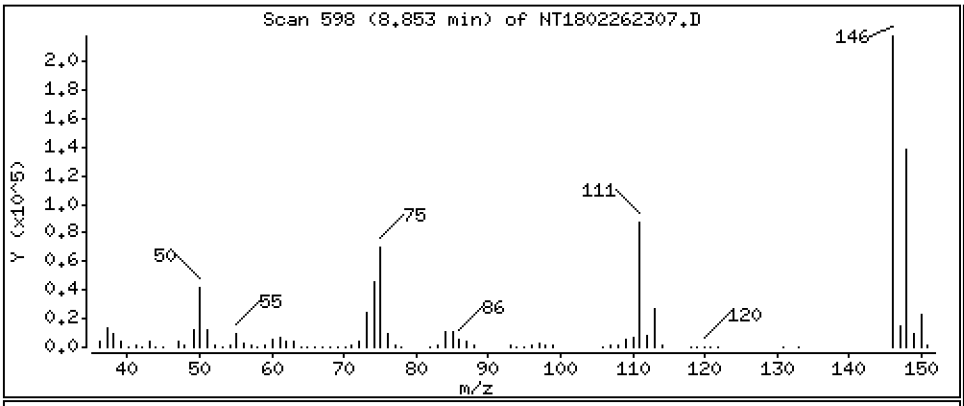
Operator: VTS

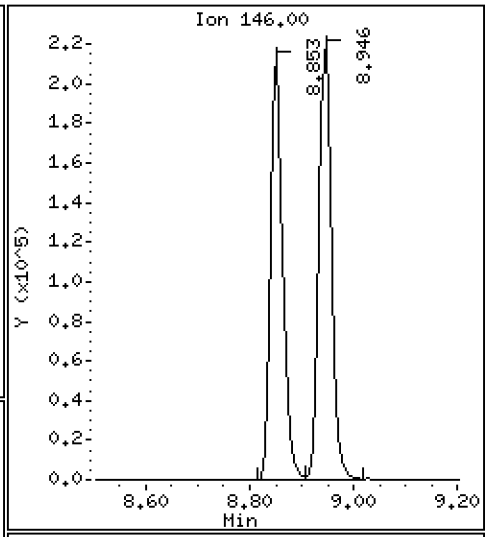
Column phase: ZB-5msi

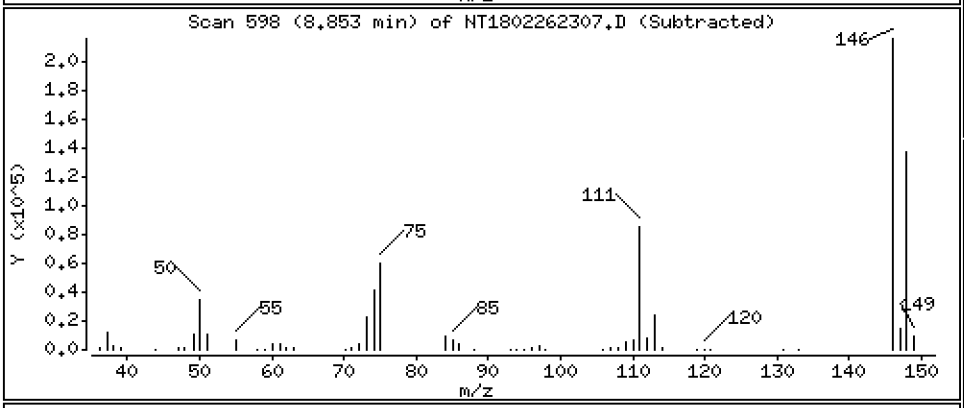
Column diameter: 0.25

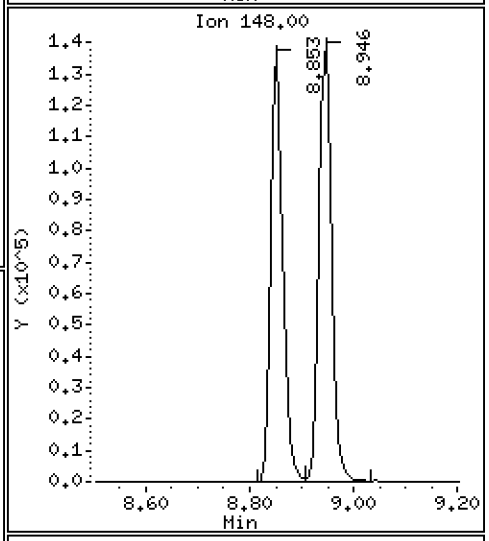
7 1,3-Dichlorobenzene

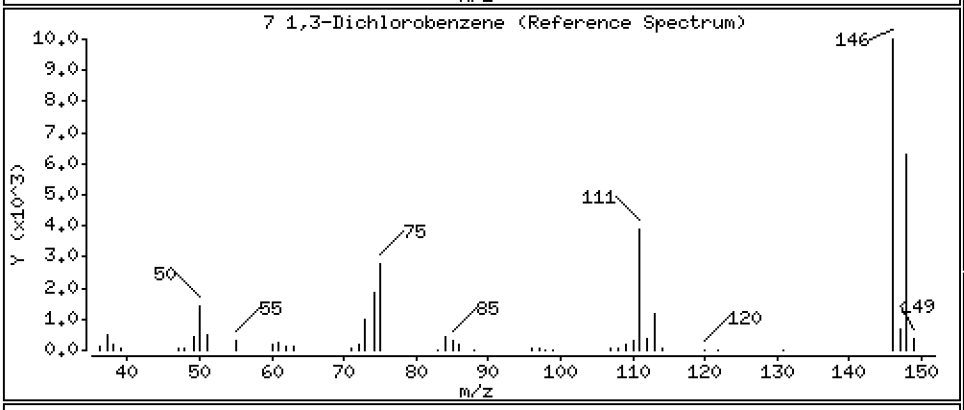
Concentration: 3.190 ug/mL

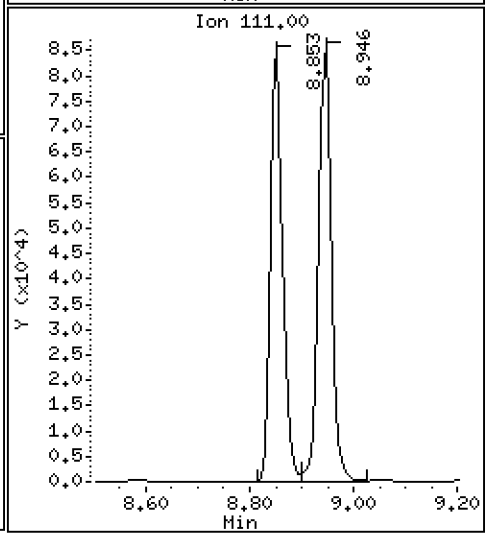


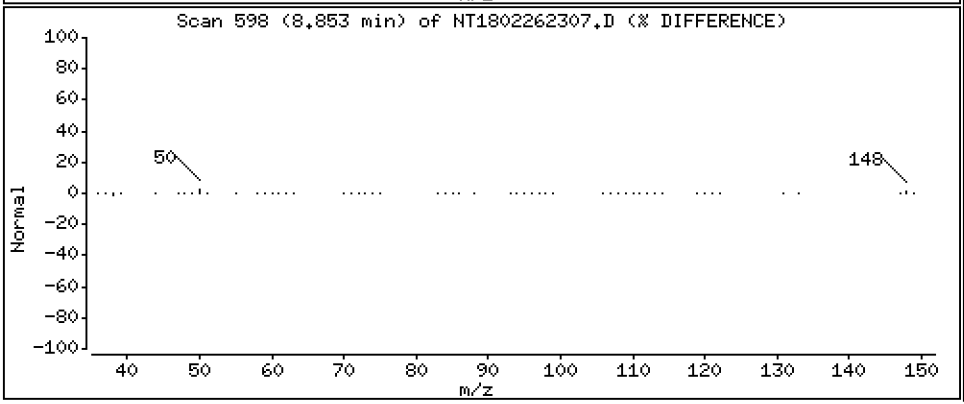












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

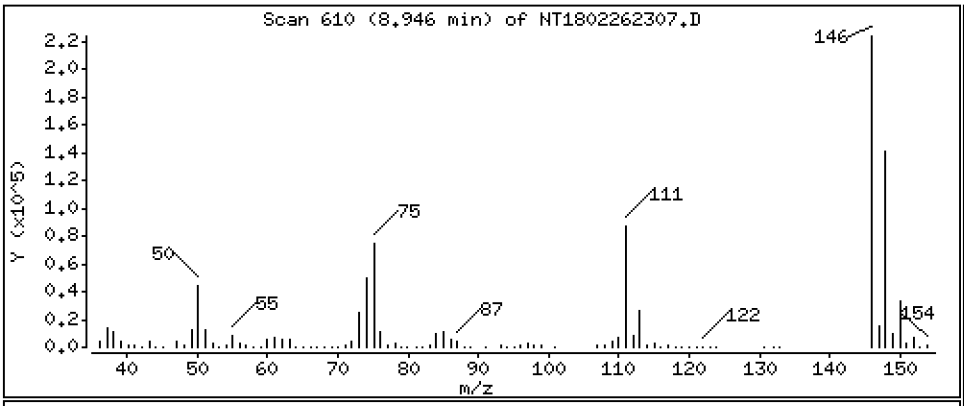
Operator: VTS

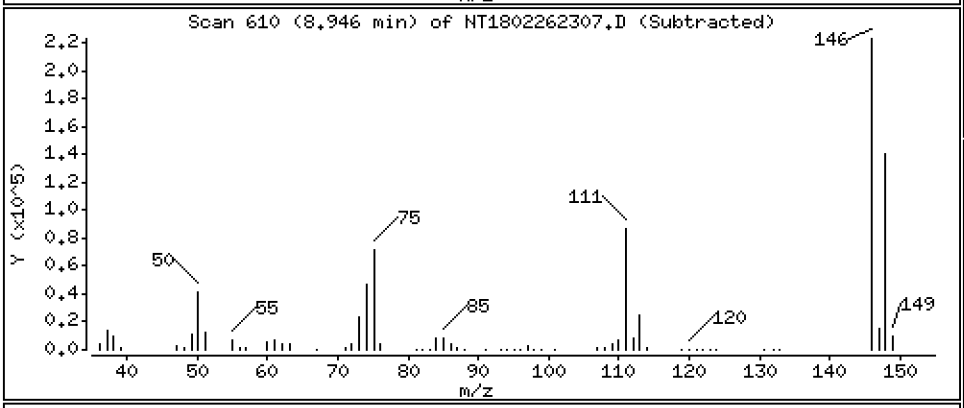
Column phase: ZB-5msi

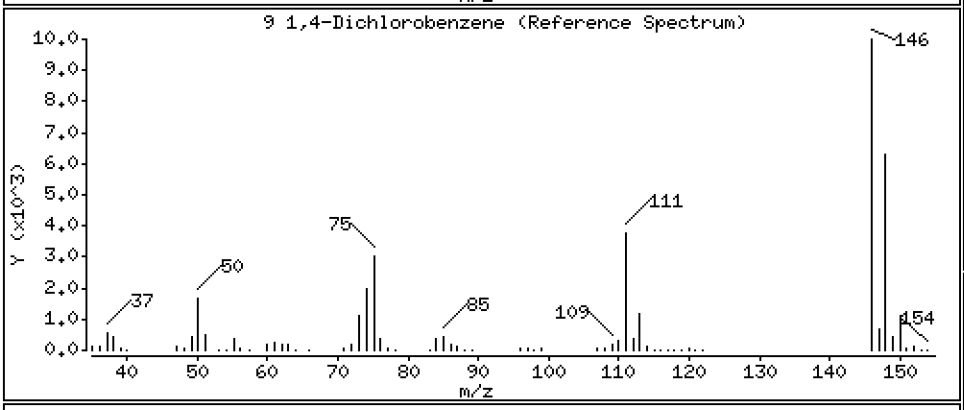
Column diameter: 0.25

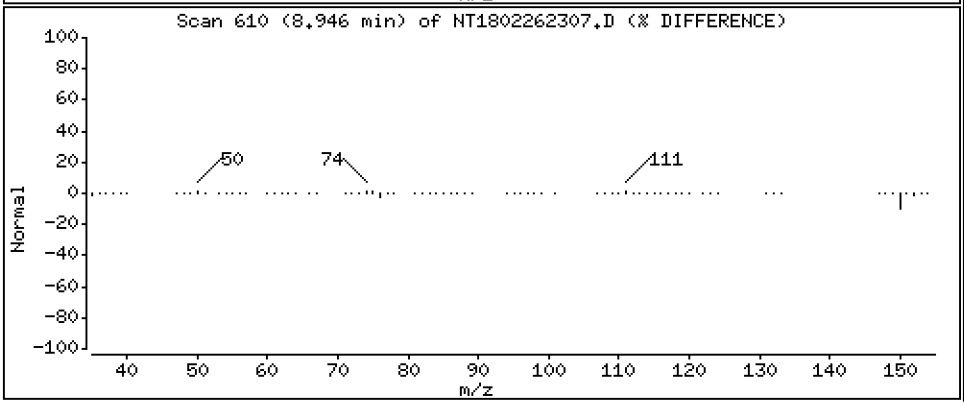
9 1,4-Dichlorobenzene

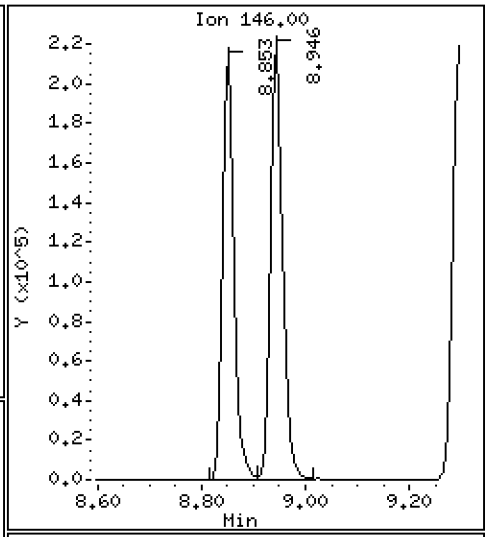
Concentration: 3.207 ug/mL

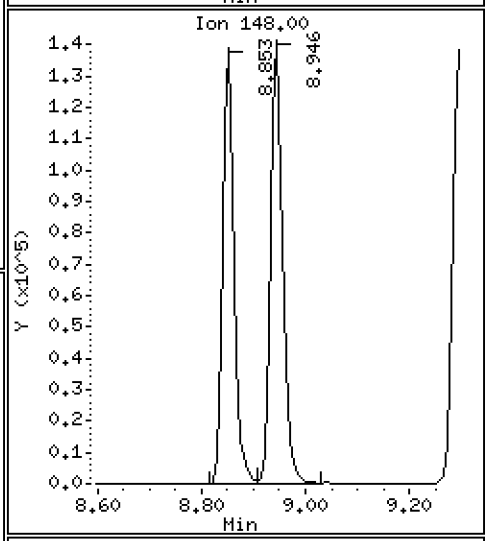


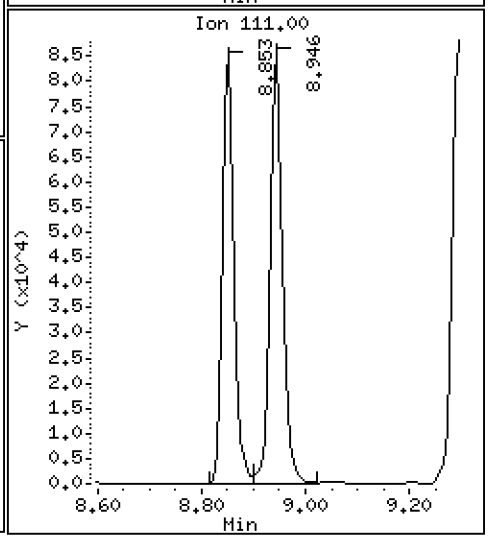












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

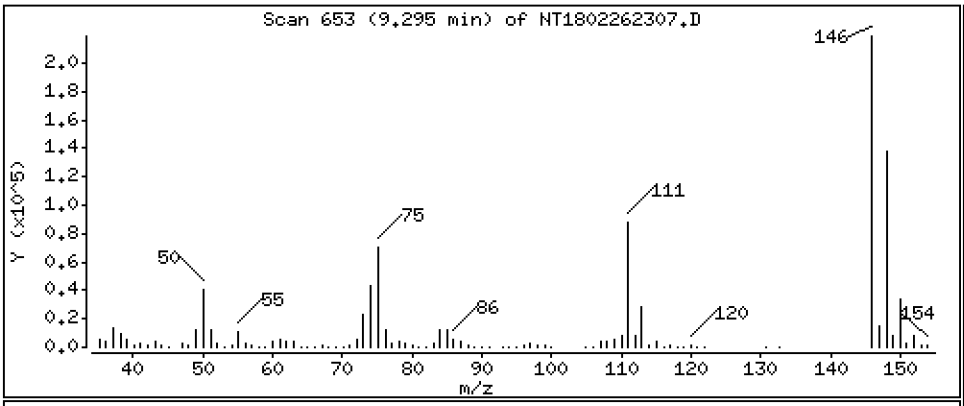
Operator: VTS

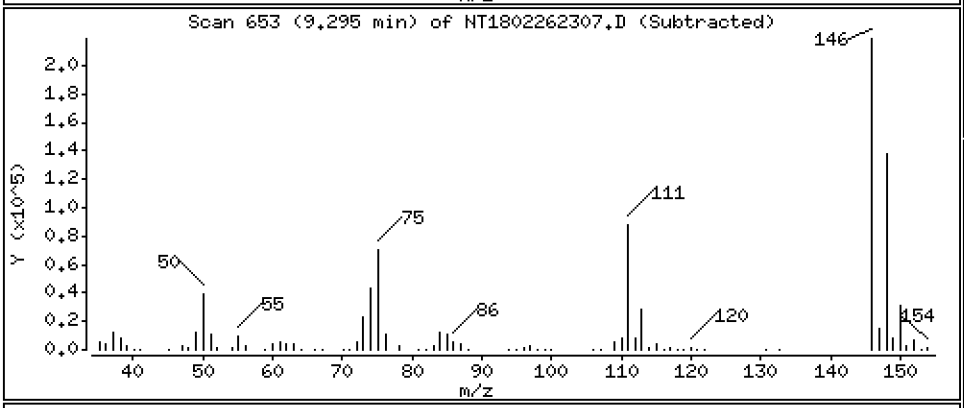
Column phase: ZB-5msi

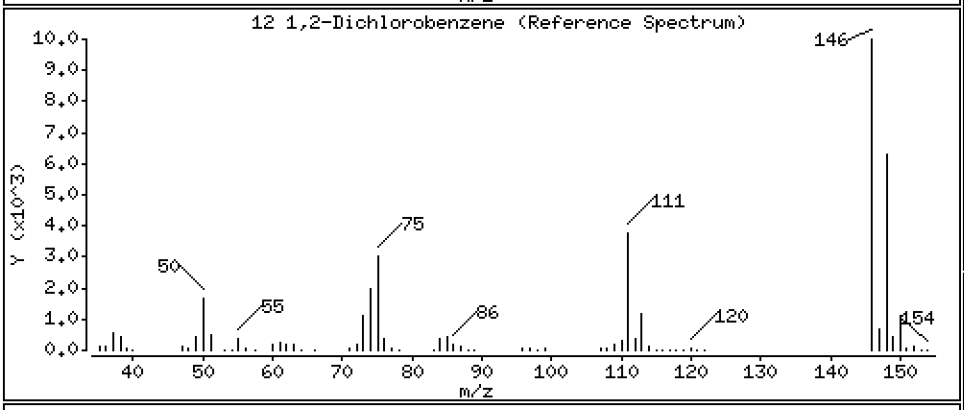
Column diameter: 0.25

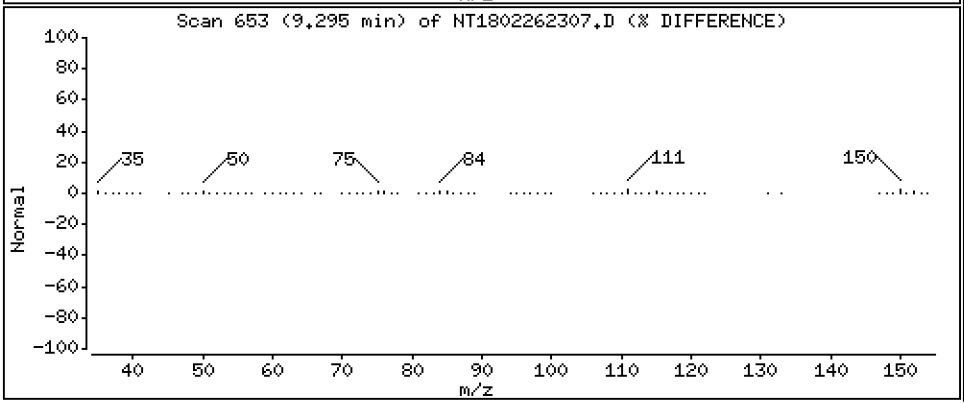
12 1,2-Dichlorobenzene

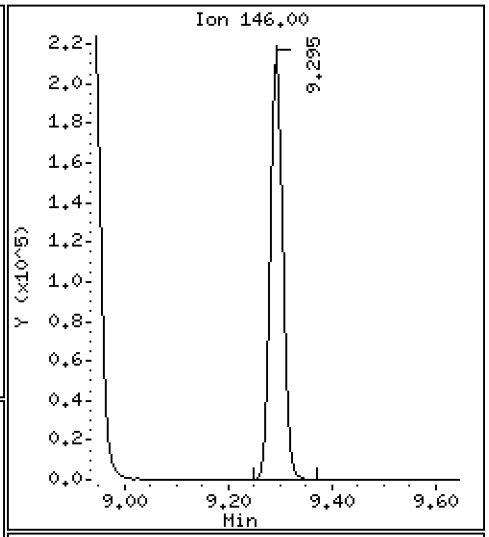
Concentration: 3.209 ug/mL

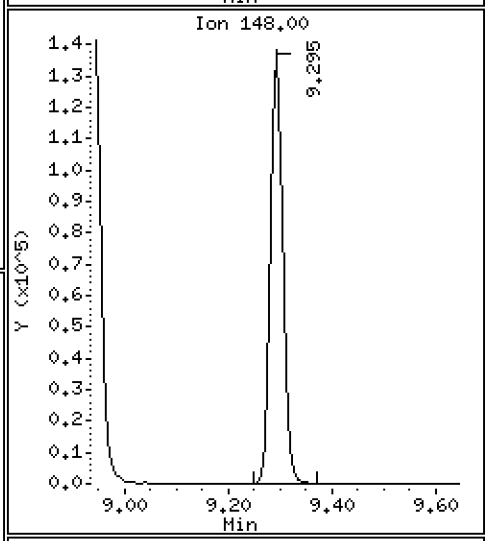


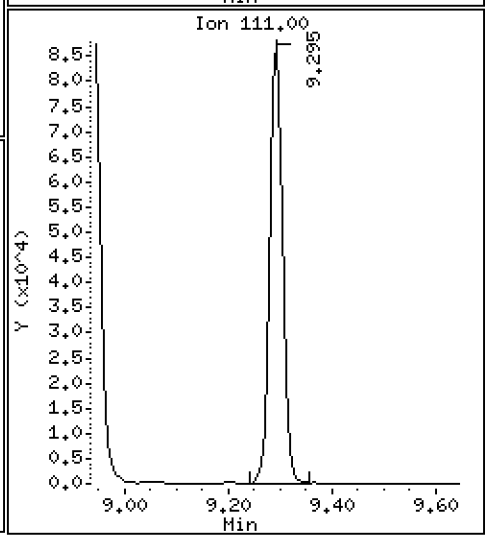












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

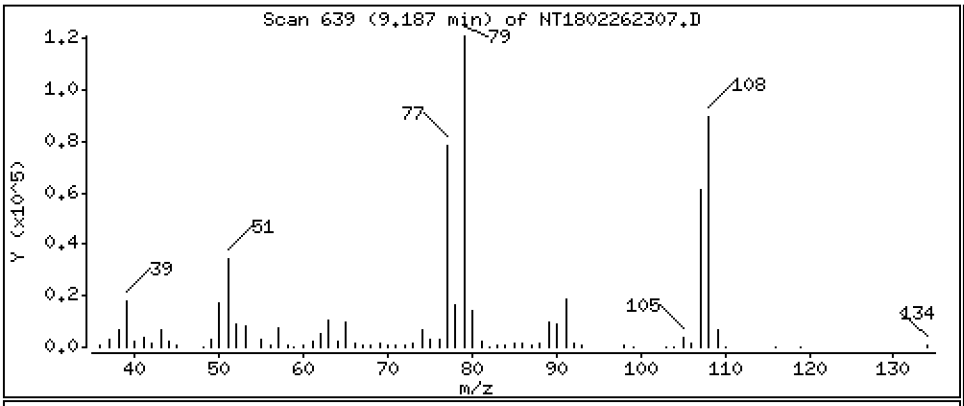
Operator: VTS

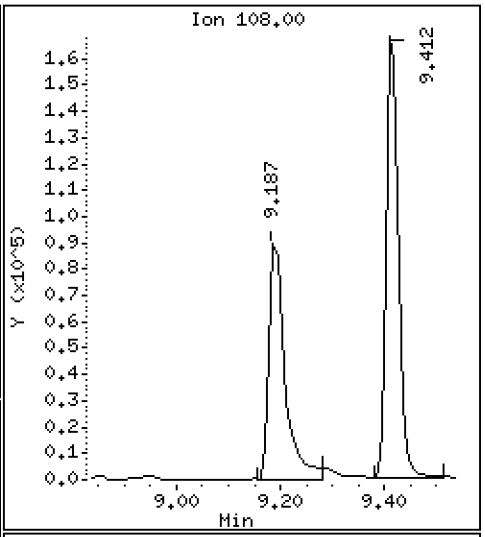
Column phase: ZB-5msi

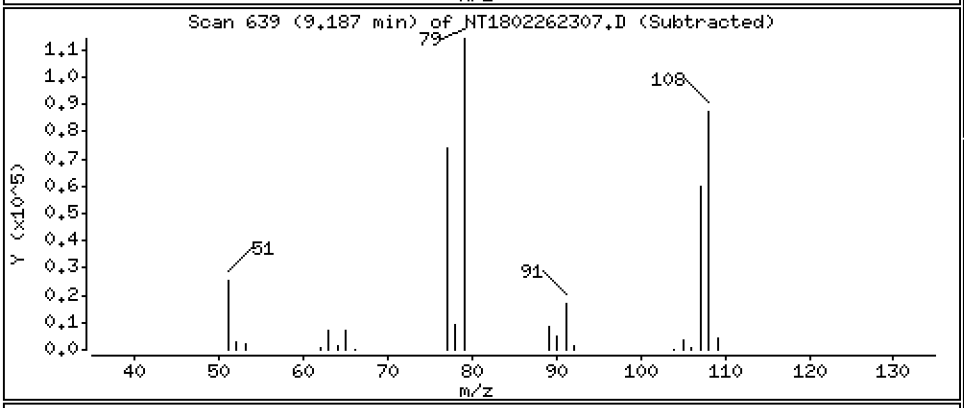
Column diameter: 0.25

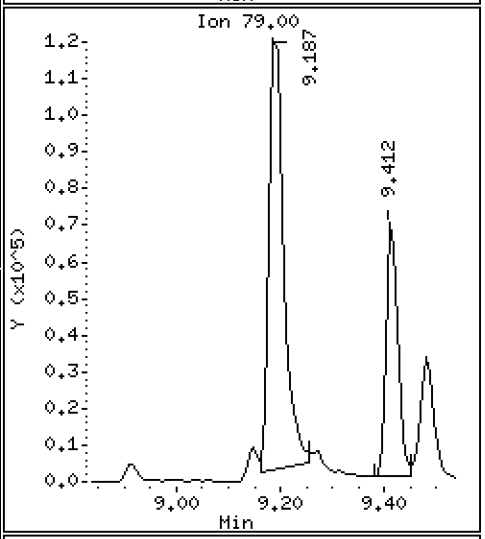
11 Benzyl alcohol

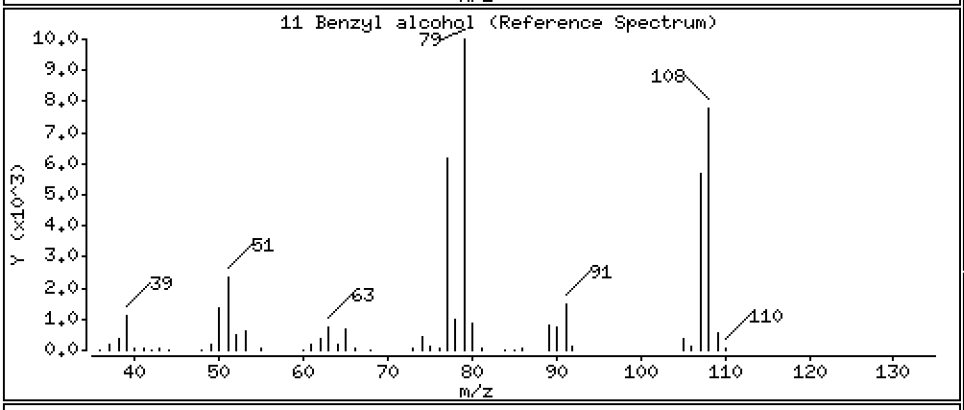
Concentration: 3.298 ug/mL

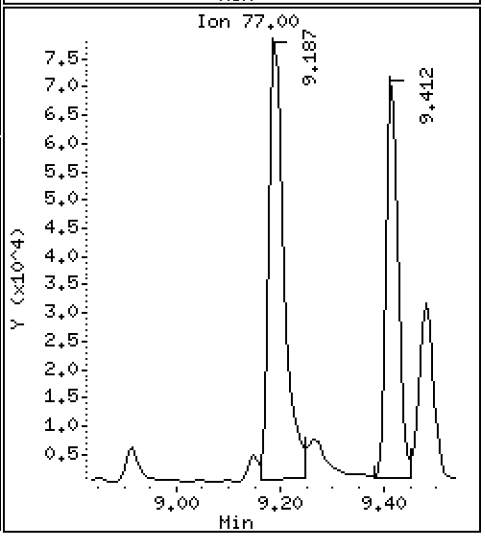


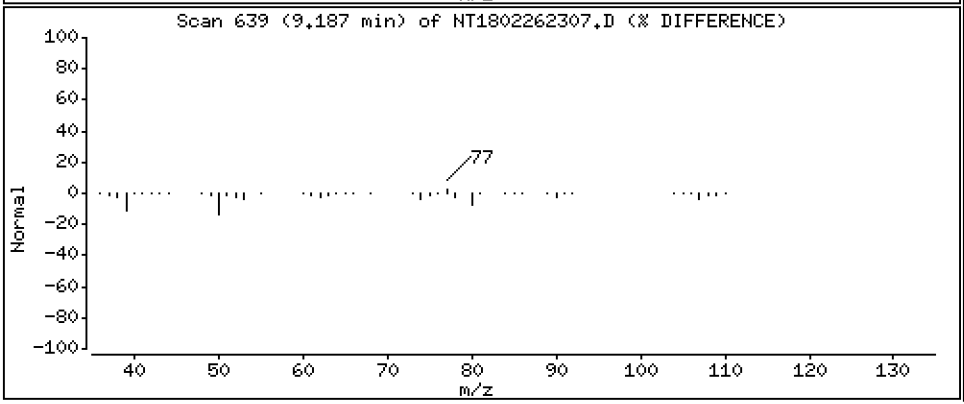












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

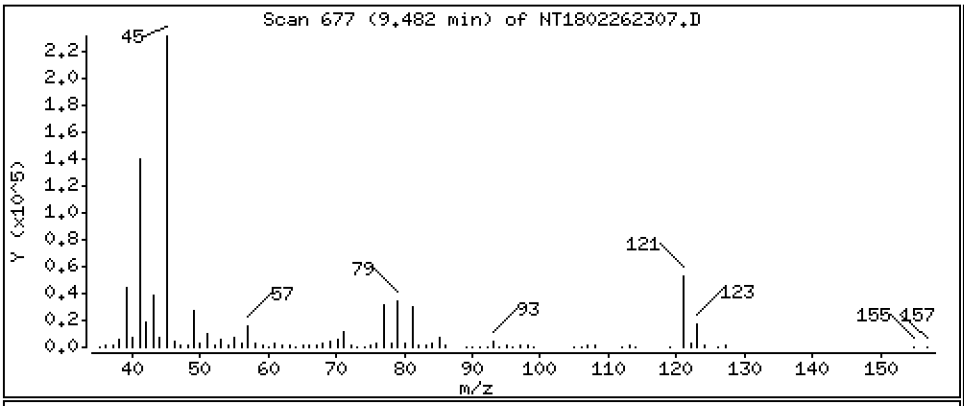
Operator: VTS

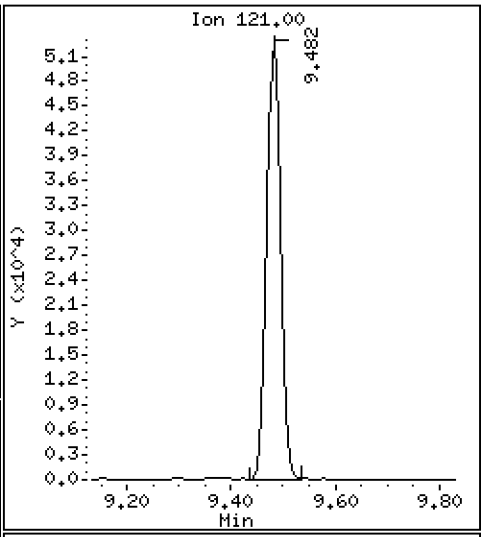
Column phase: ZB-5msi

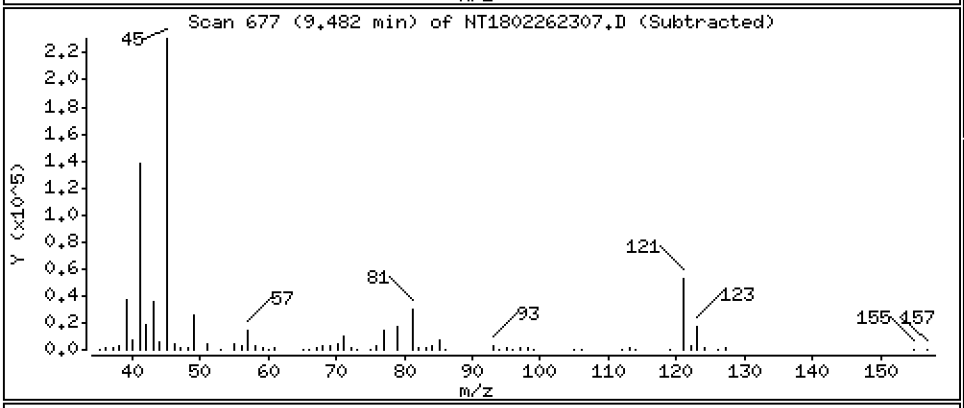
Column diameter: 0.25

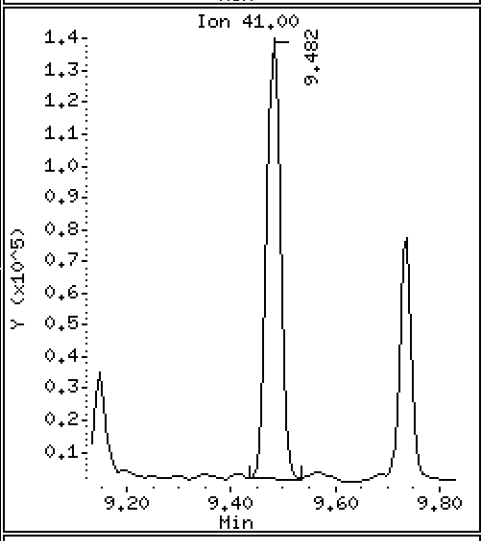
14 2,2'-oxybis(1-Chloropropane)

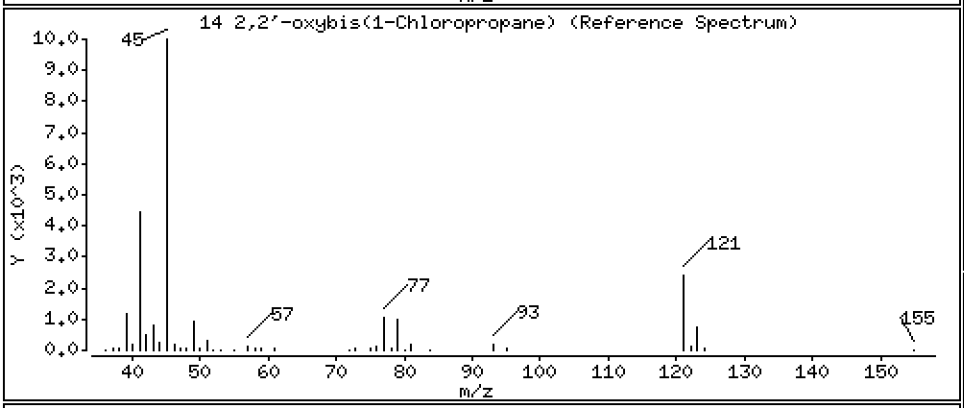
Concentration: 3.817 ug/mL

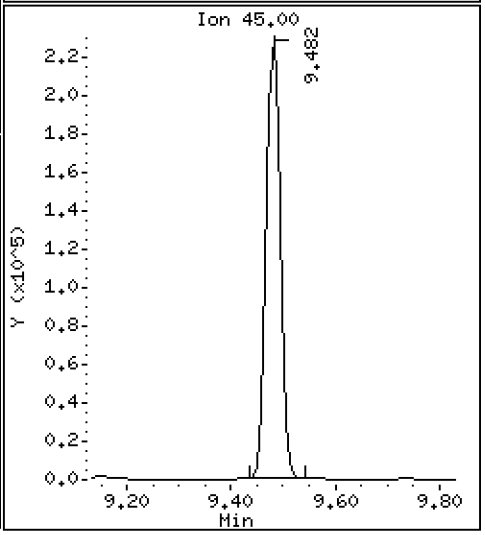


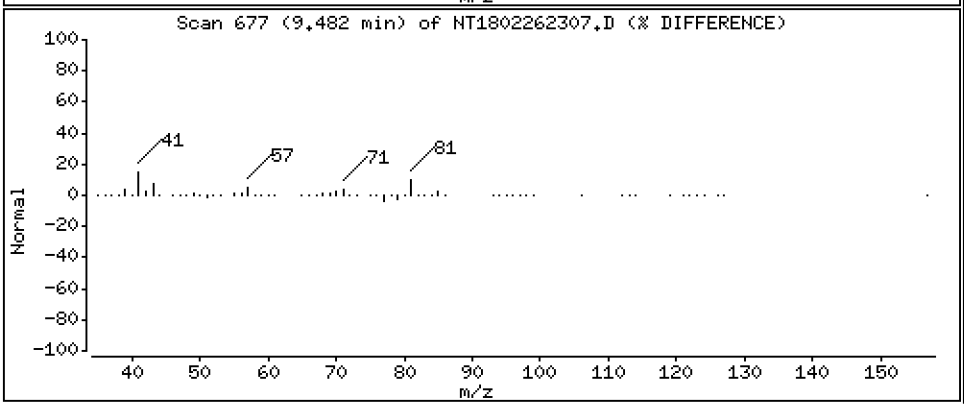












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

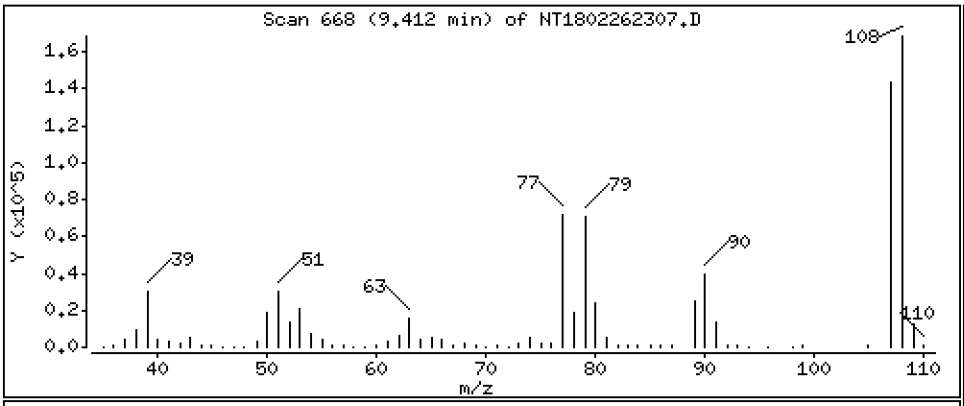
Operator: VTS

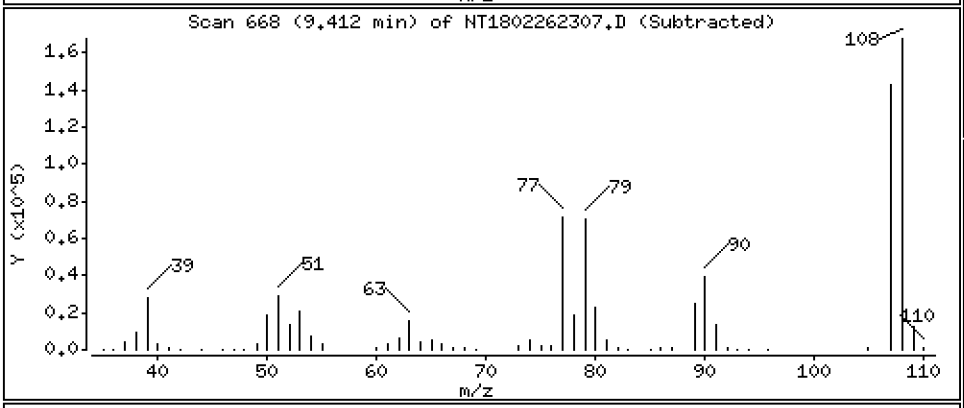
Column phase: ZB-5msi

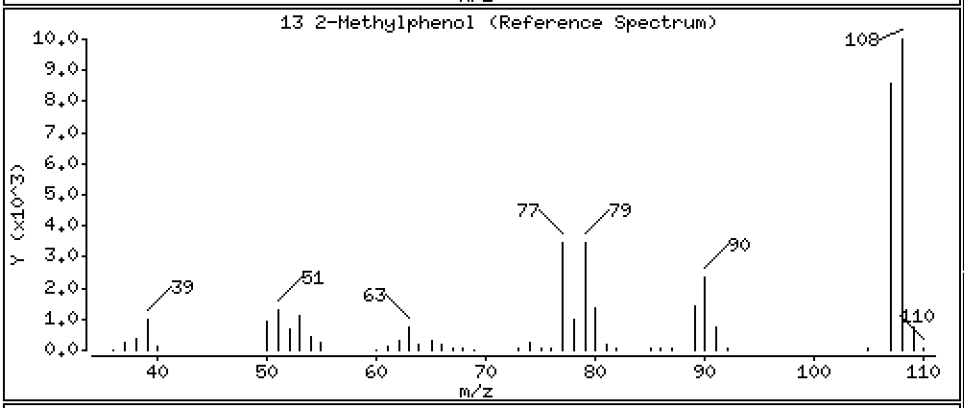
Column diameter: 0.25

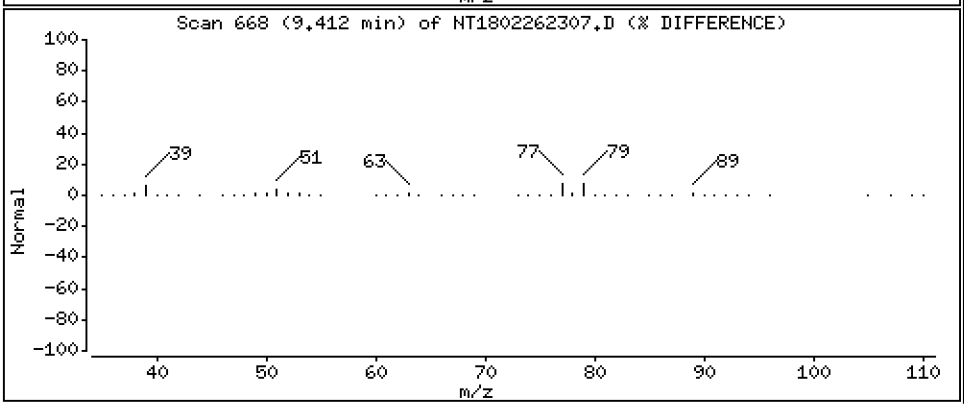
13 2-Methylphenol

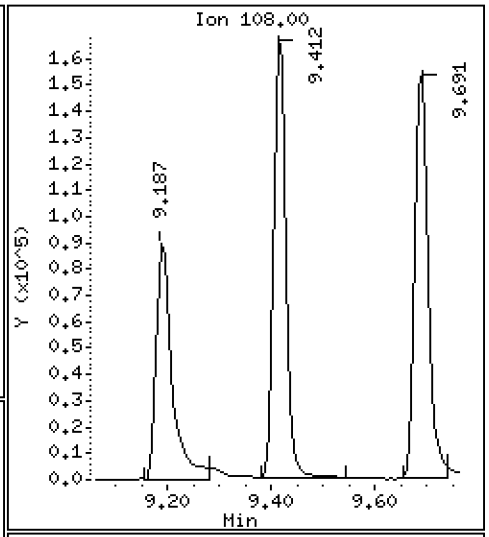
Concentration: 2.858 ug/mL

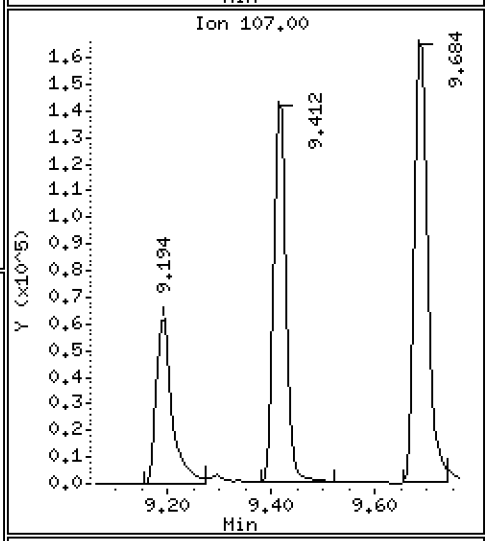


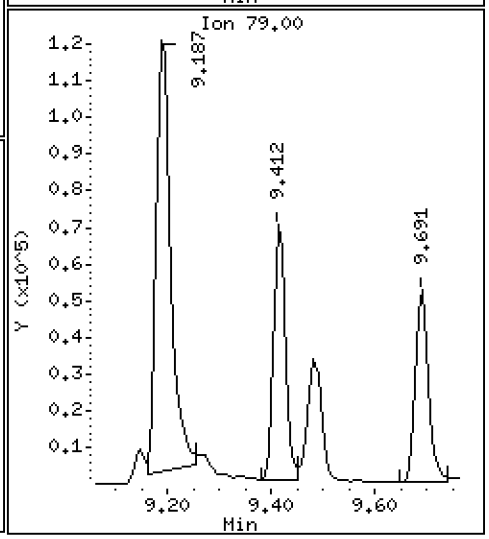












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

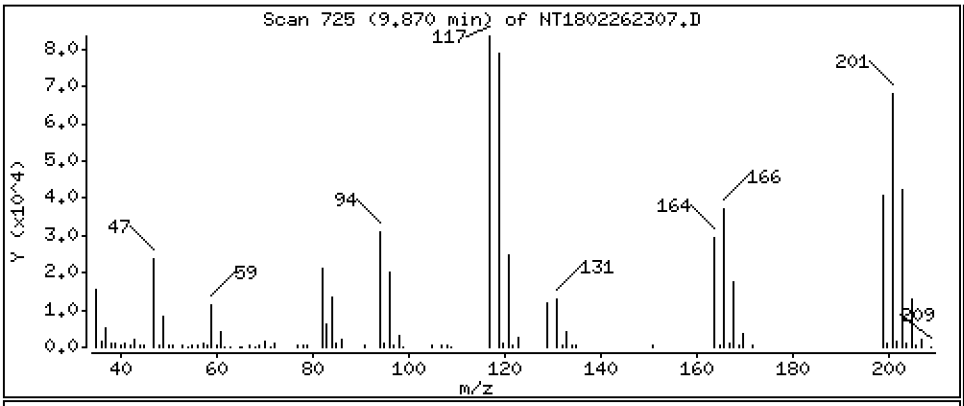
Operator: VTS

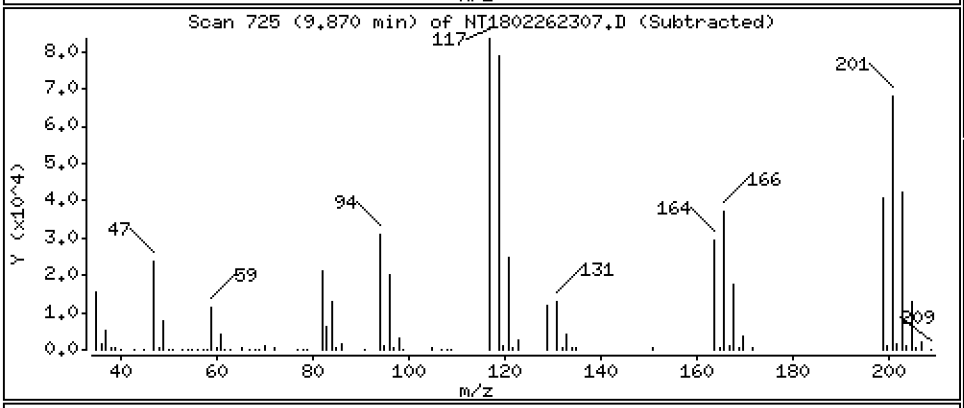
Column phase: ZB-5msi

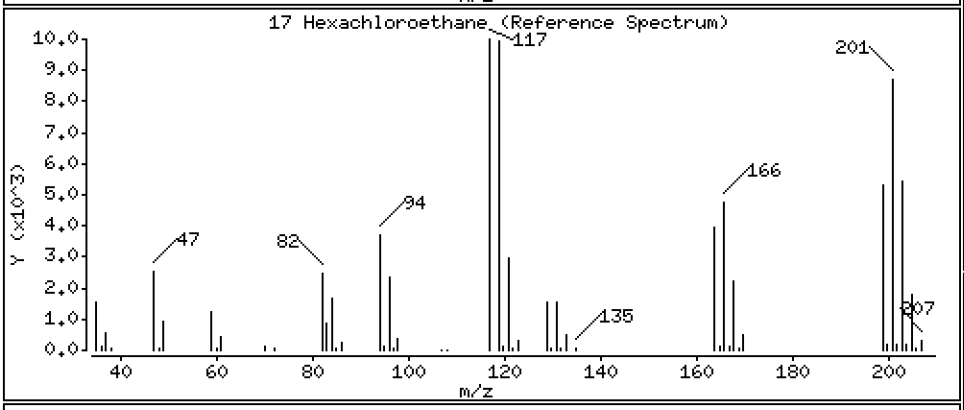
Column diameter: 0.25

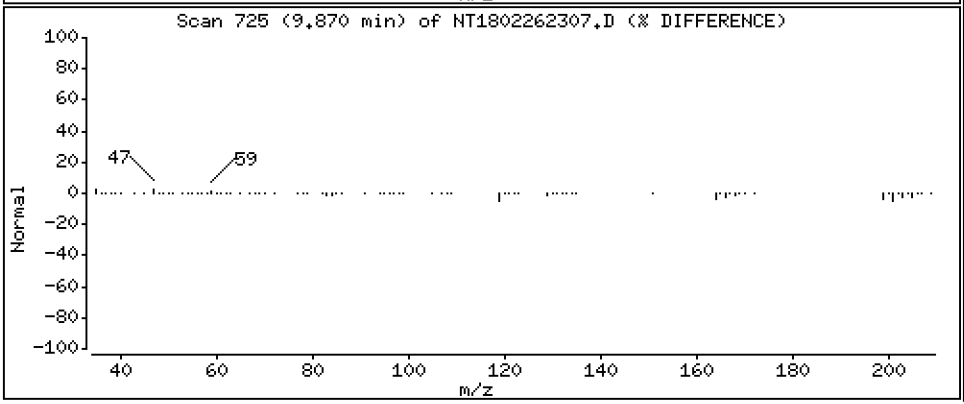
17 Hexachloroethane

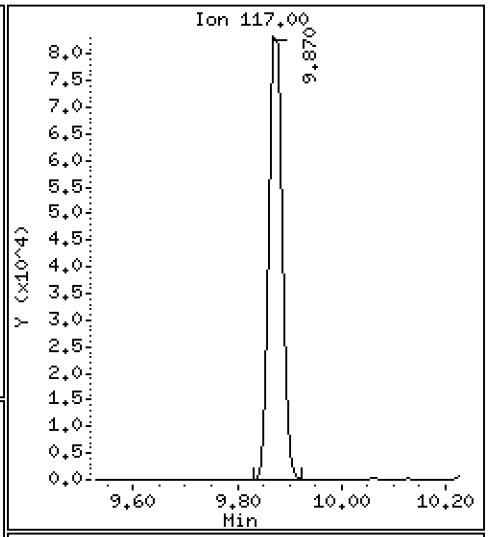
Concentration: 3.347 ug/mL

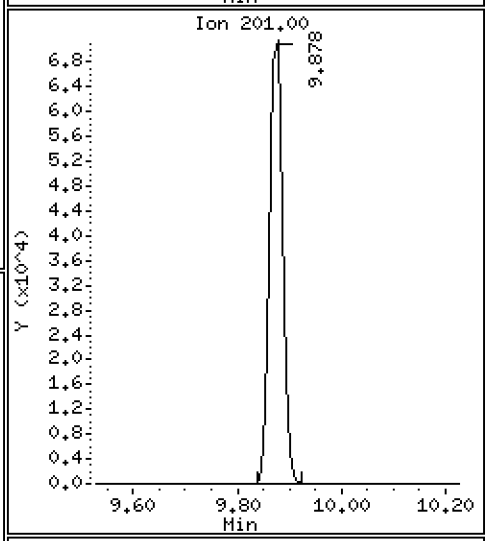


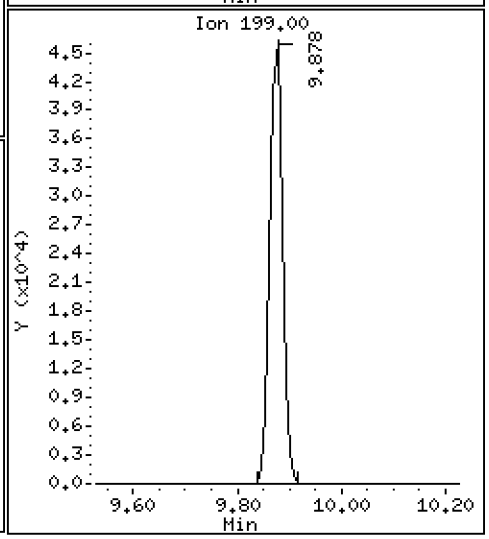












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

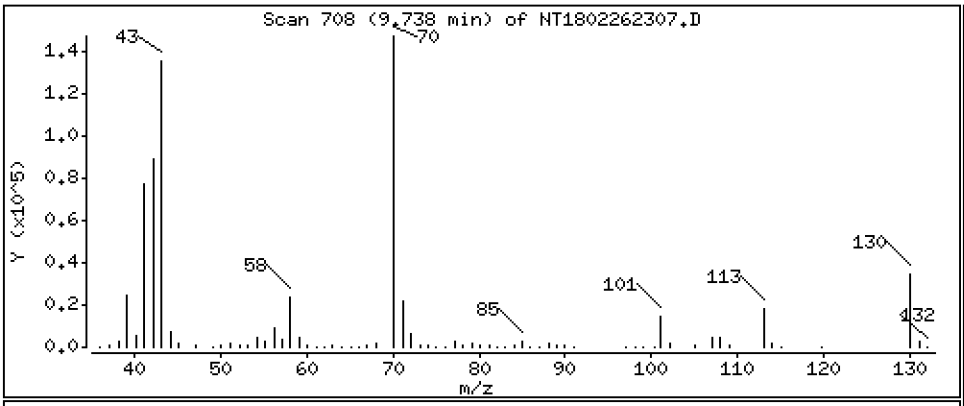
Operator: VTS

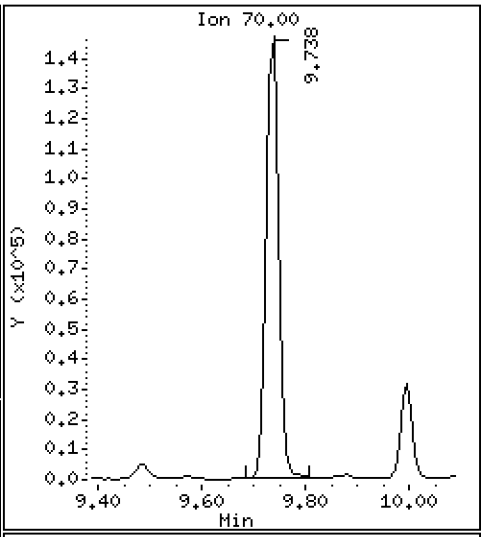
Column phase: ZB-5msi

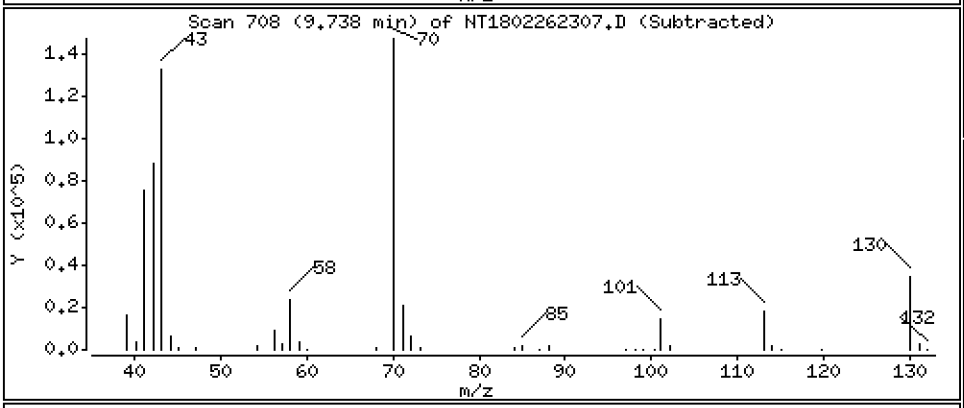
Column diameter: 0.25

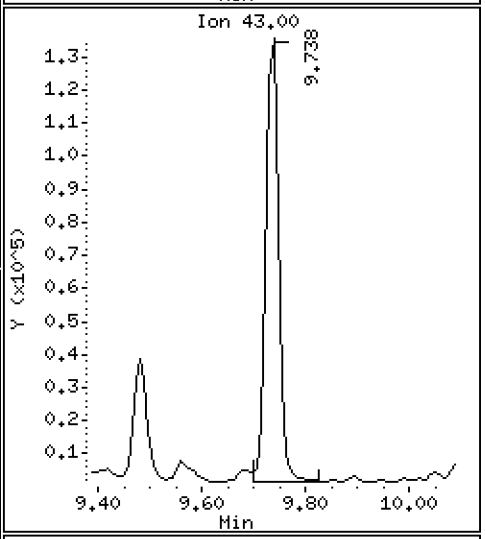
16 N-Nitroso-di-n-propylamine

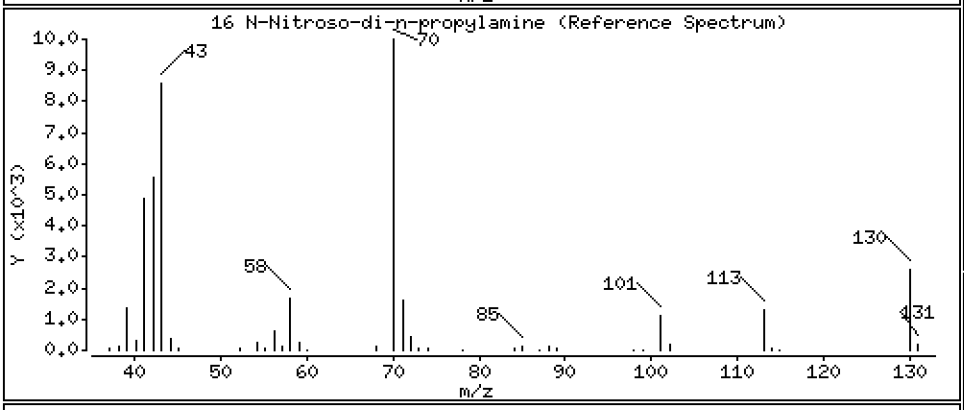
Concentration: 3.477 ug/mL

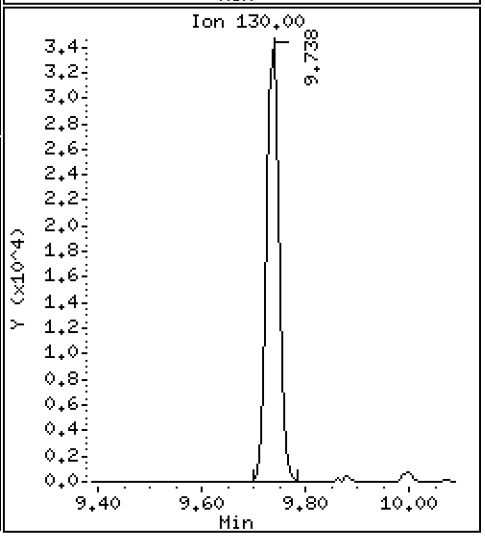


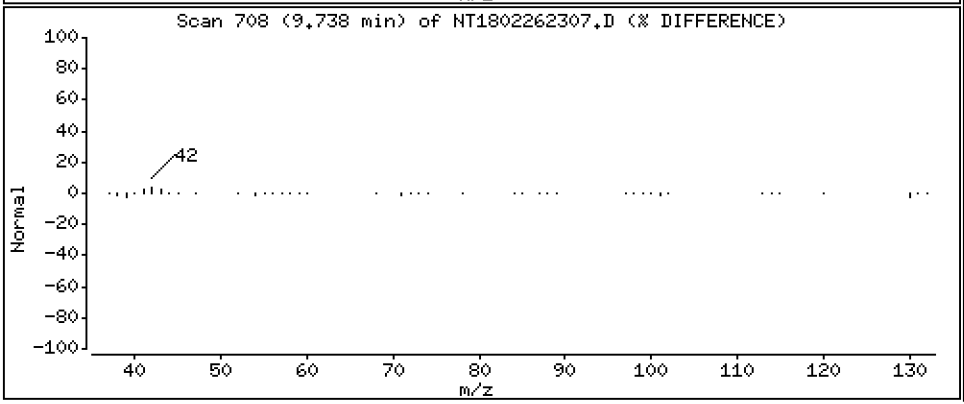












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

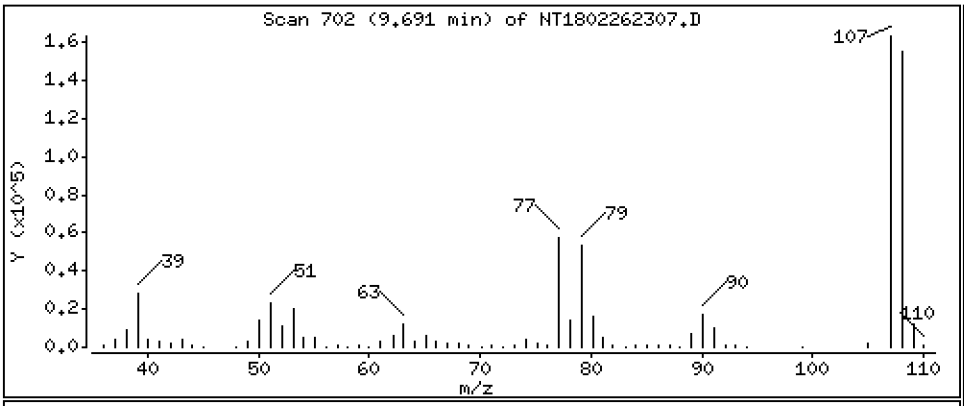
Operator: VTS

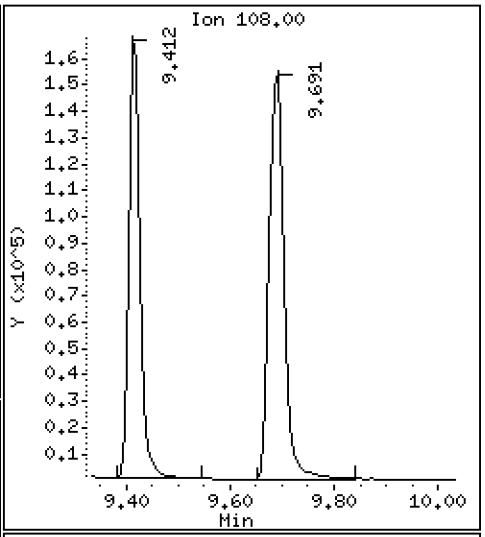
Column phase: ZB-5msi

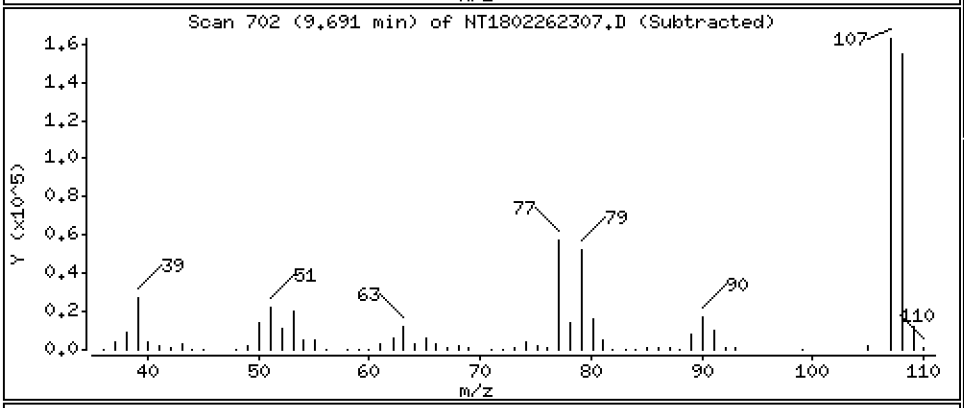
Column diameter: 0.25

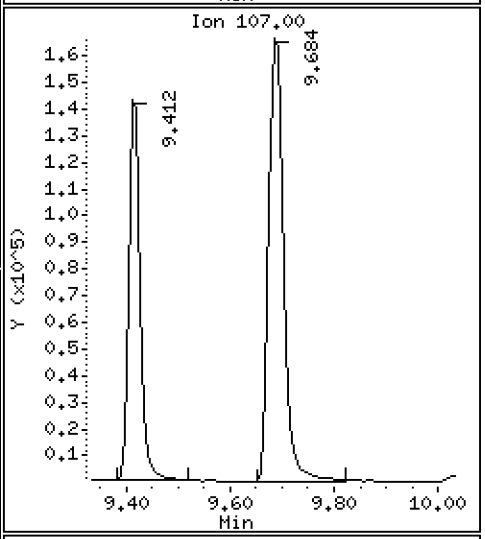
15 4-Methylphenol

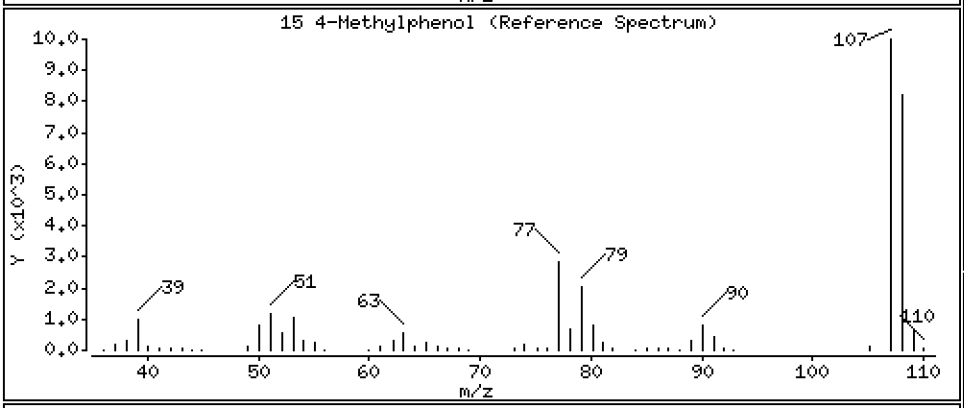
Concentration: 3.142 ug/mL

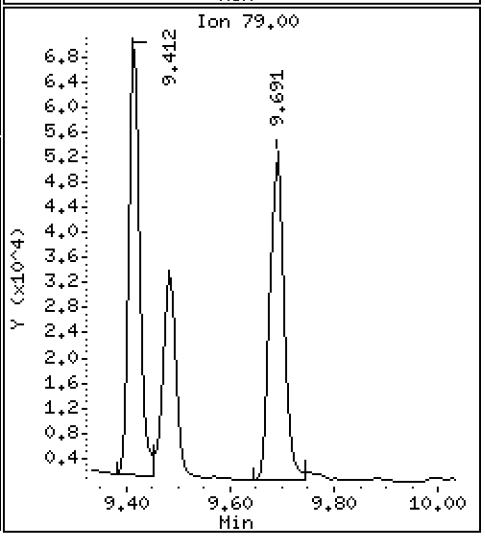


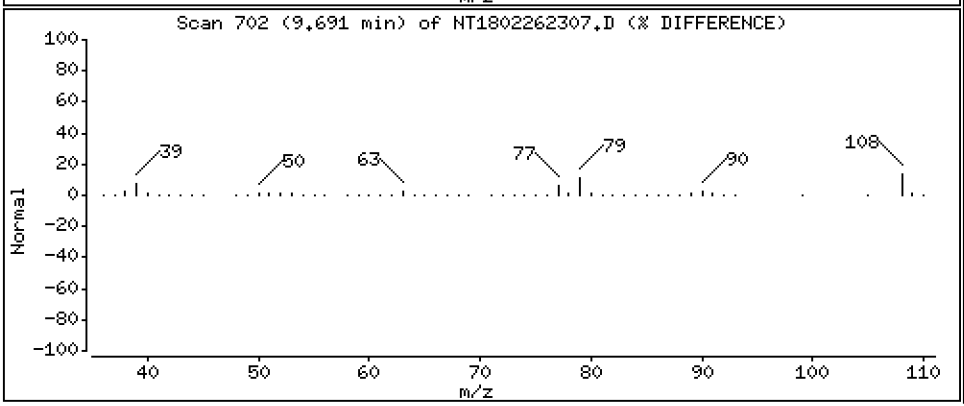












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

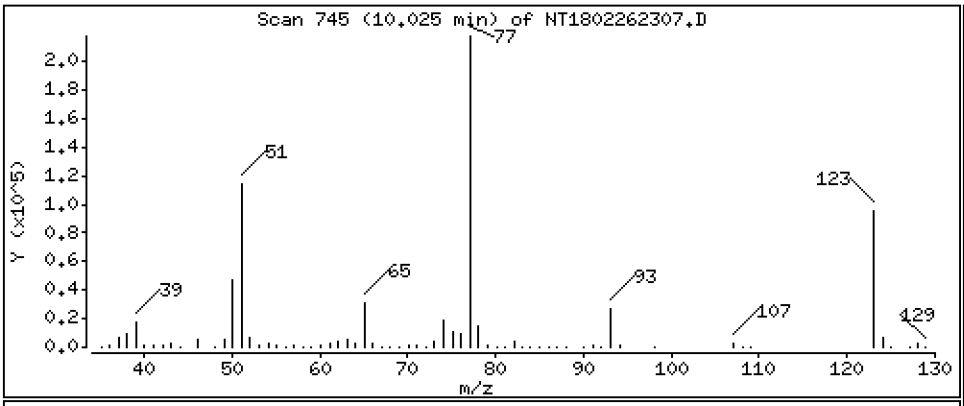
Operator: VTS

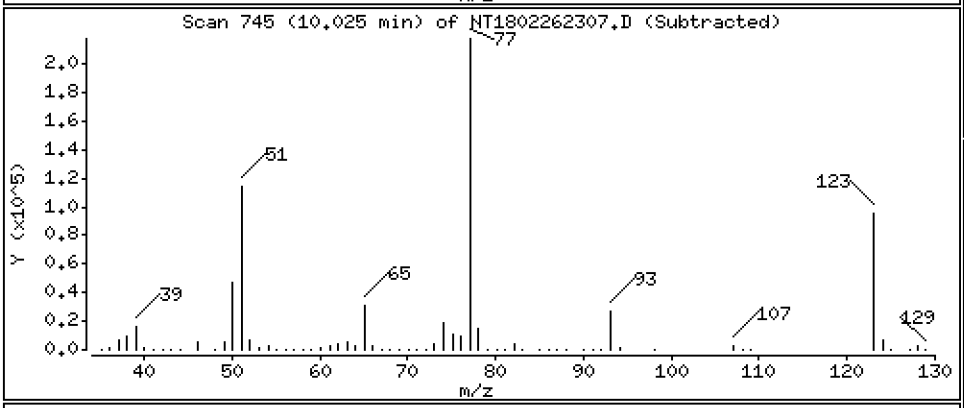
Column phase: ZB-5msi

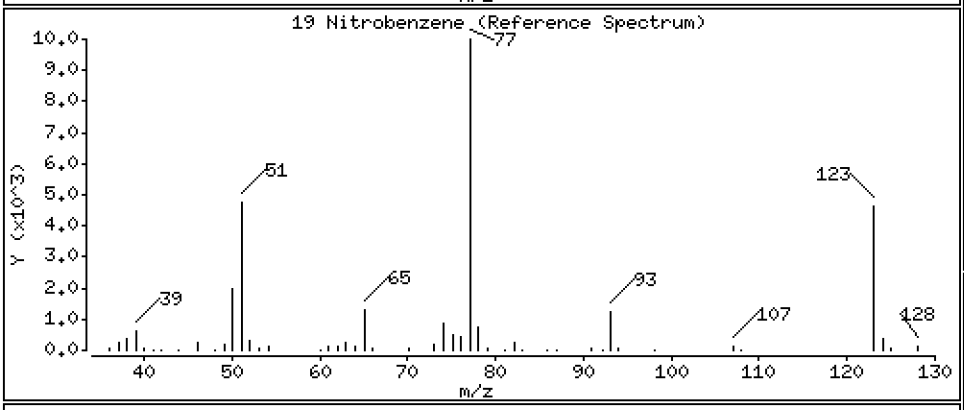
Column diameter: 0.25

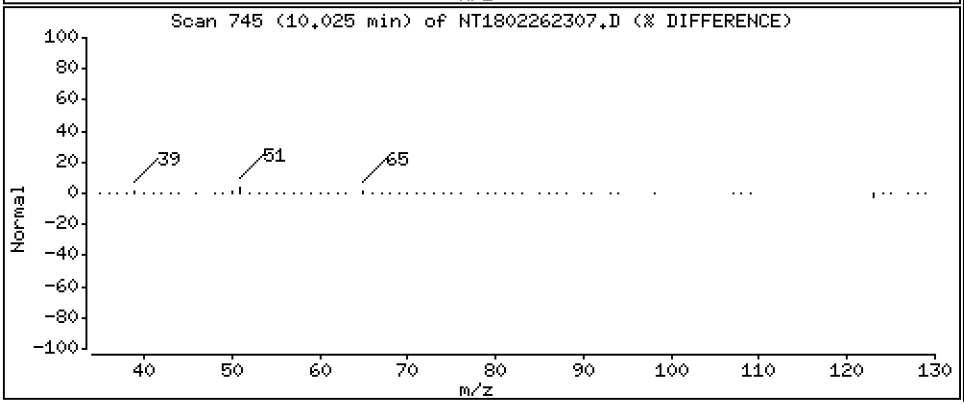
19 Nitrobenzene

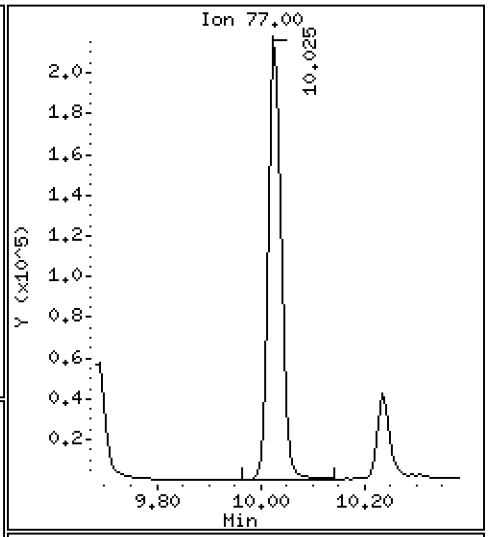
Concentration: 3.596 ug/mL

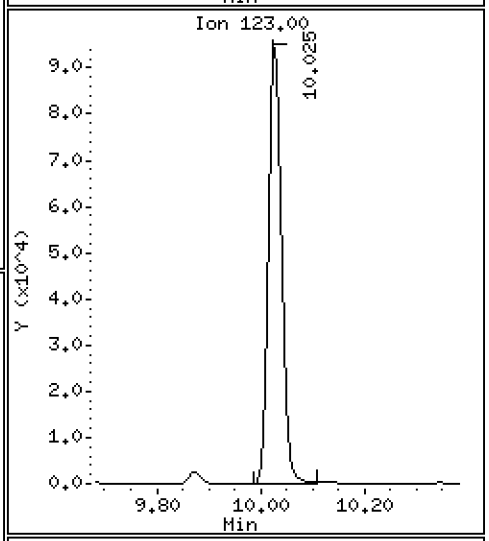


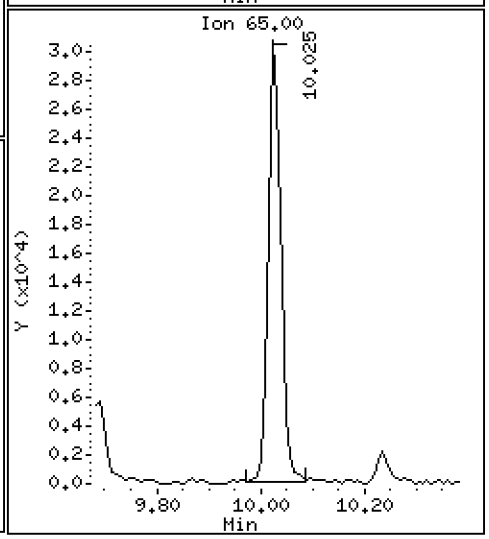












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

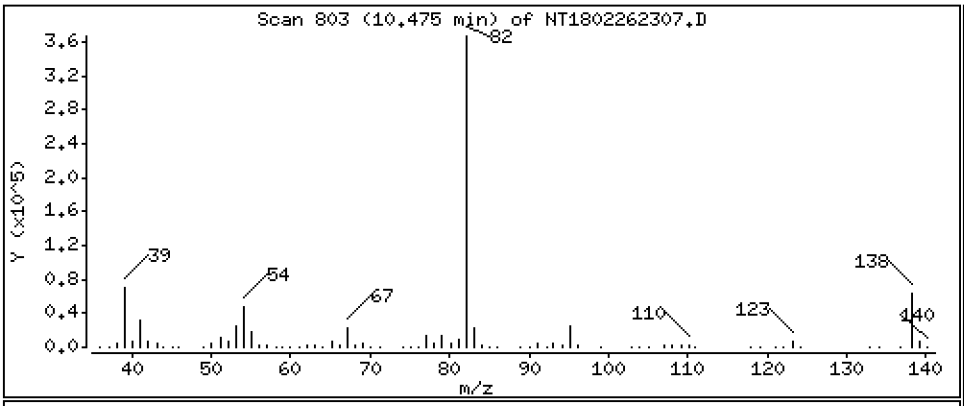
Operator: VTS

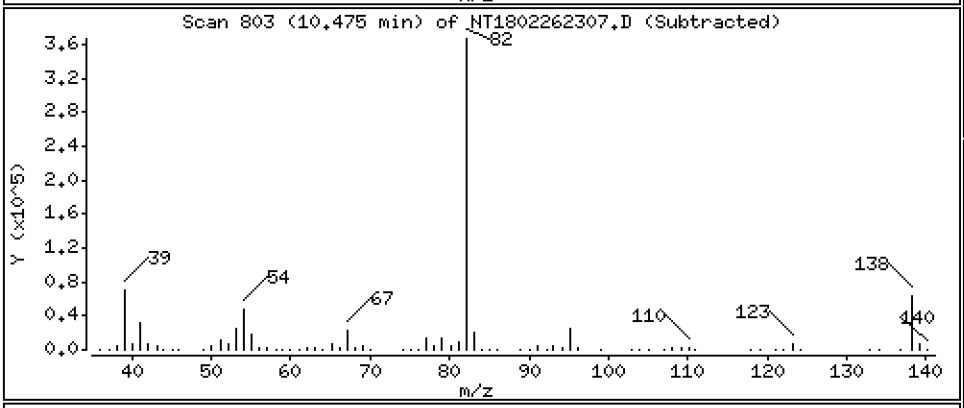
Column phase: ZB-5msi

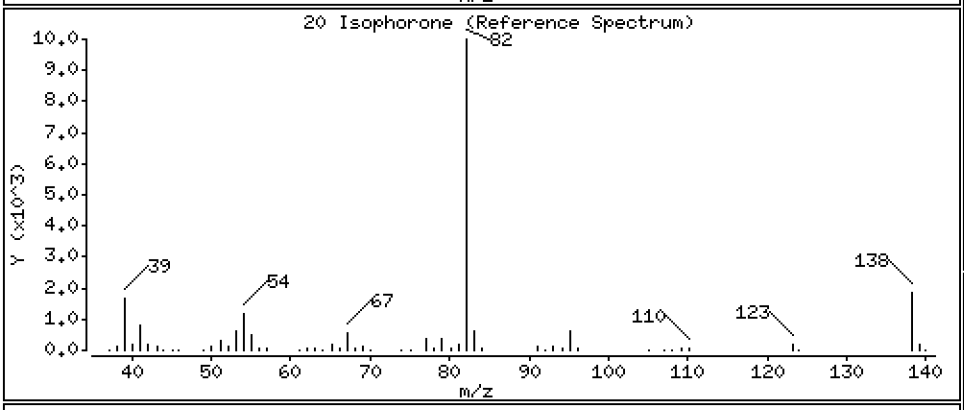
Column diameter: 0.25

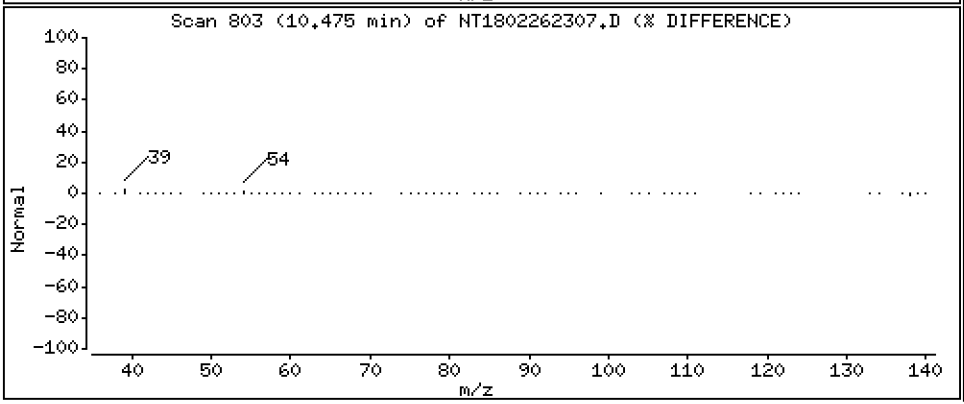
20 Isophorone

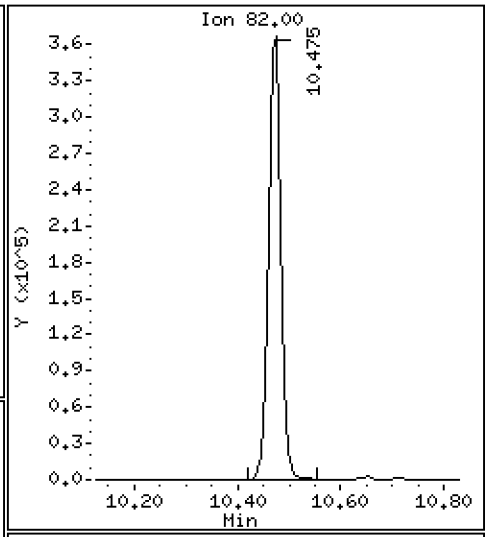
Concentration: 4.928 ug/mL

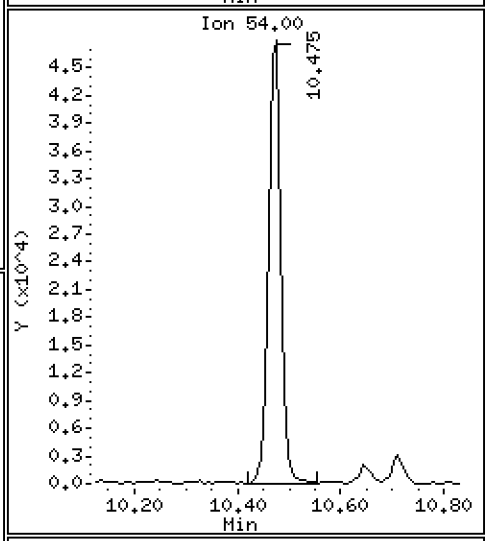


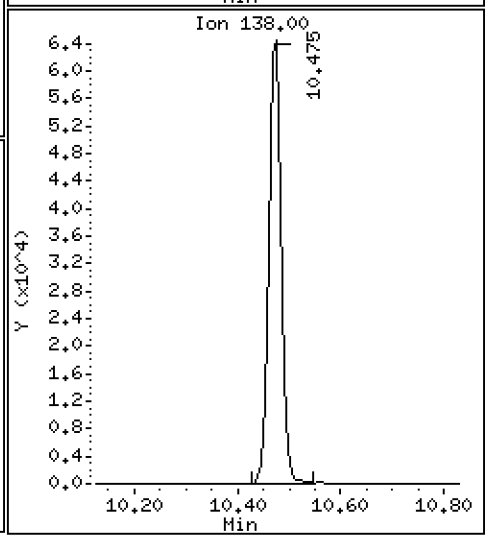












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

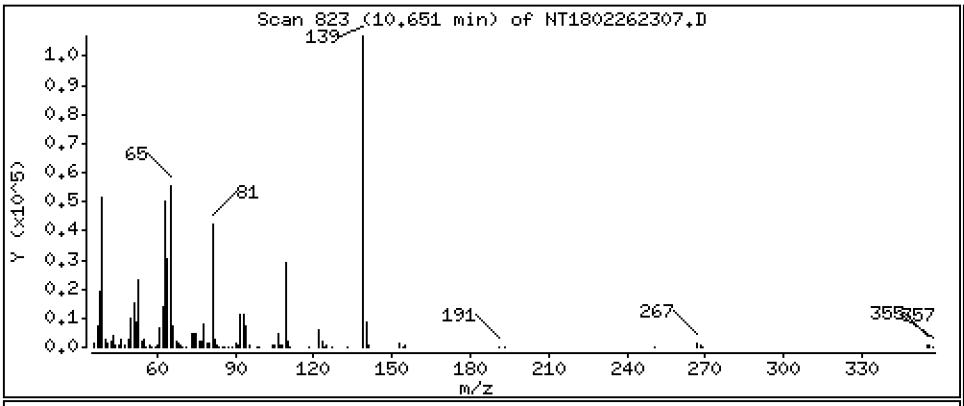
Operator: VTS

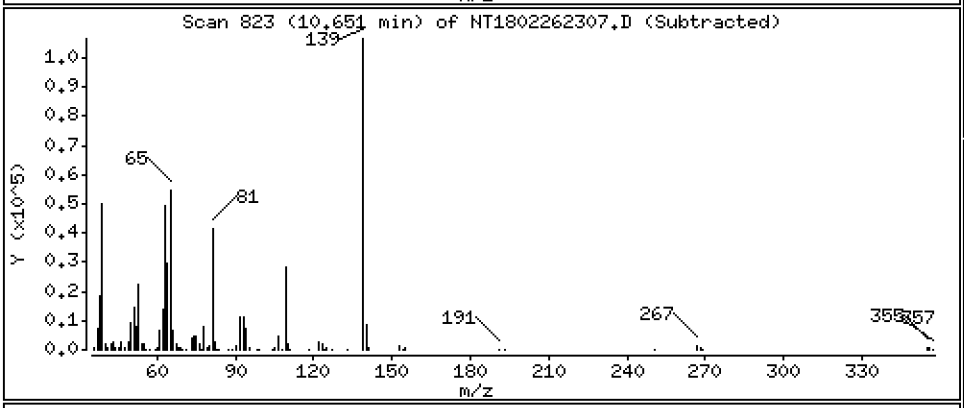
Column phase: ZB-5msi

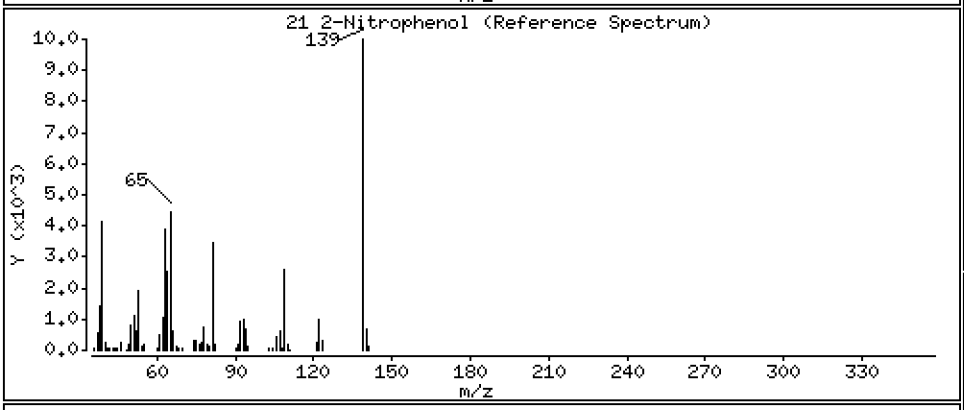
Column diameter: 0.25

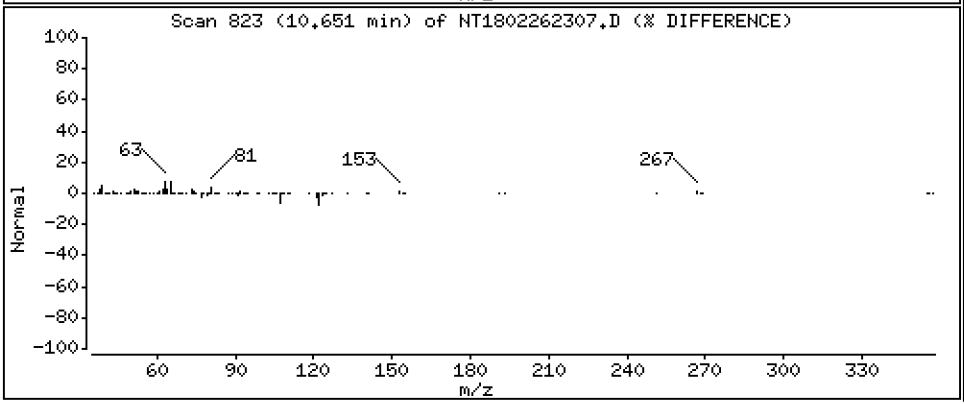
21 2-Nitrophenol

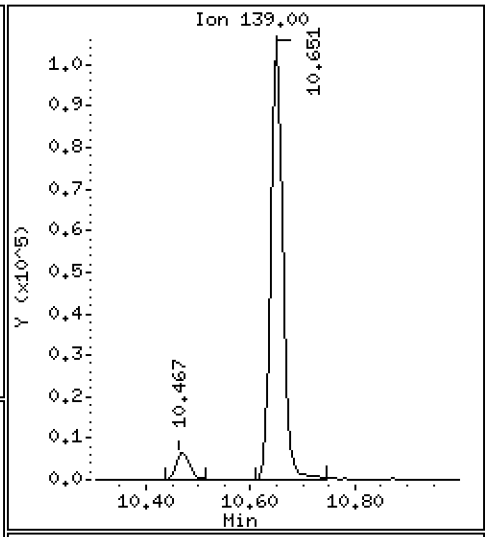
Concentration: 3.411 ug/mL

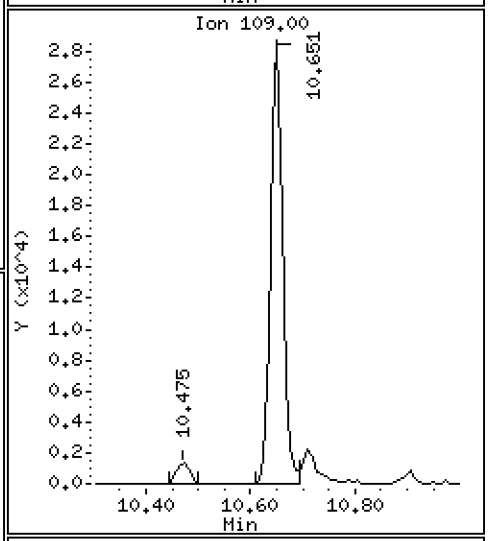


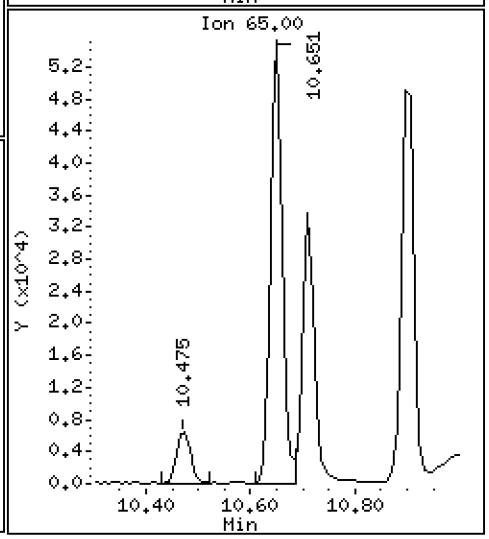












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

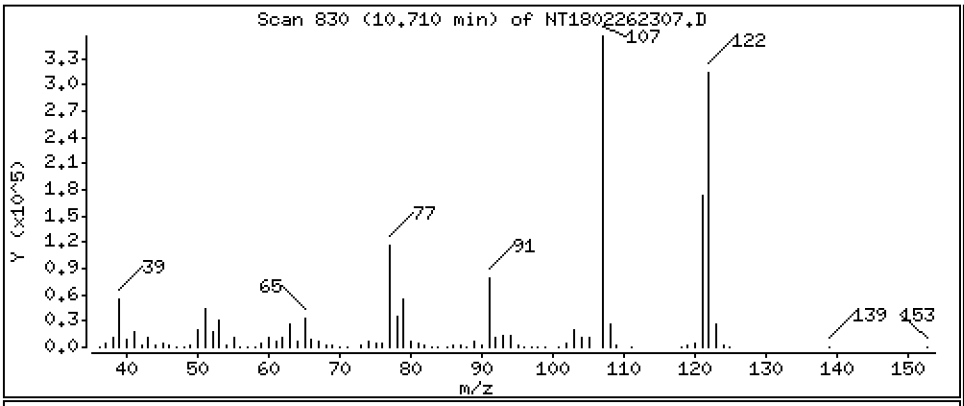
Operator: VTS

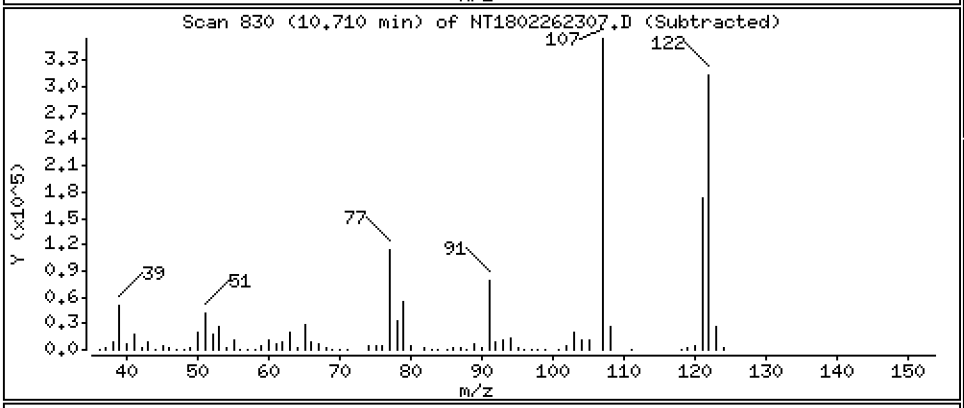
Column phase: ZB-5msi

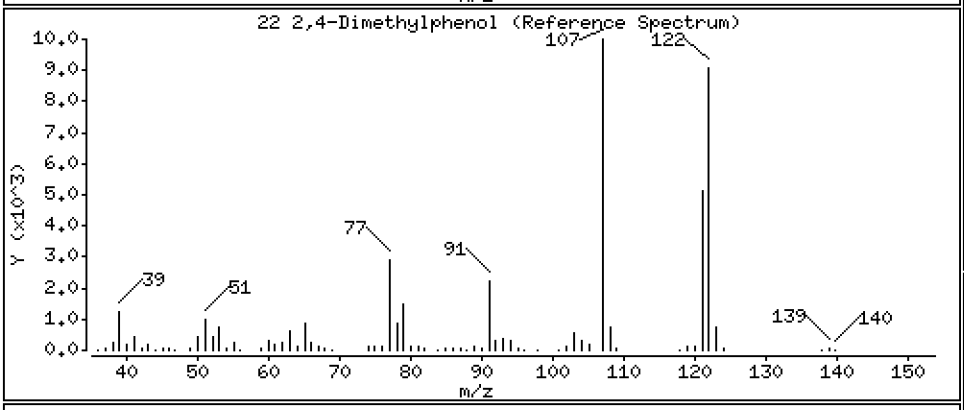
Column diameter: 0.25

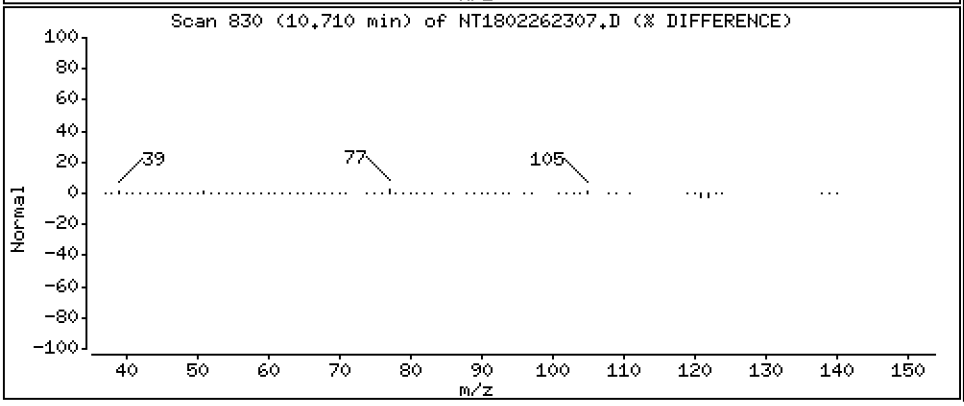
22 2,4-Dimethylphenol

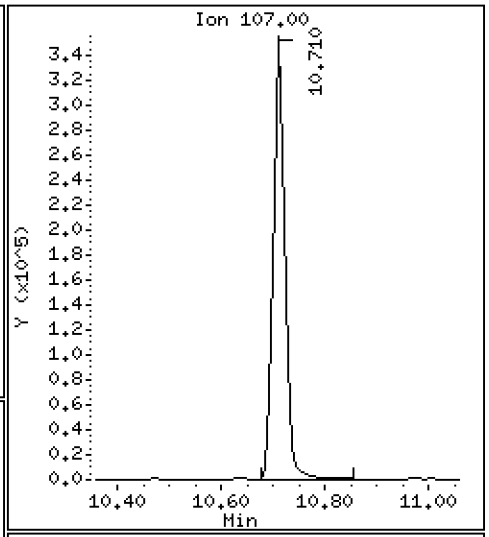
Concentration: 5.757 ug/mL

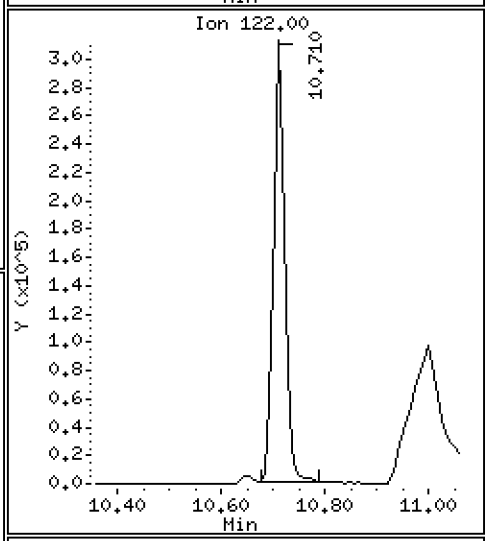


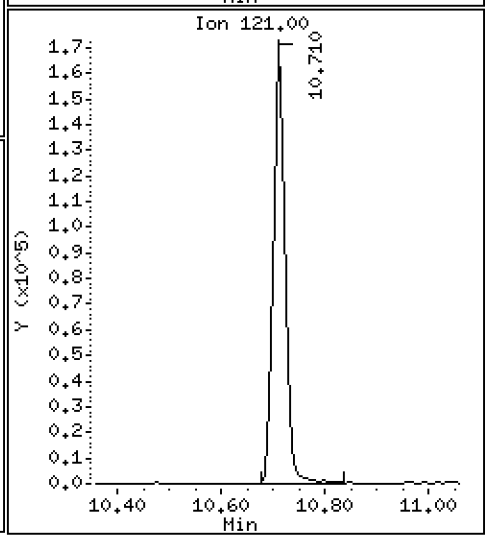












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

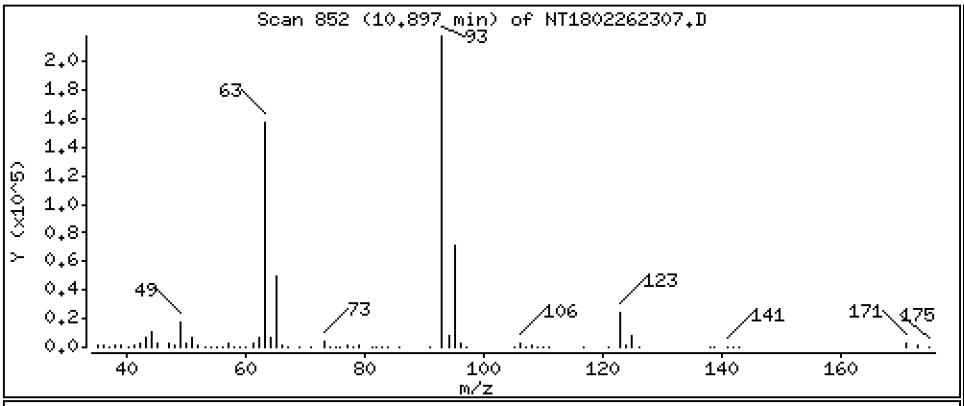
Operator: VTS

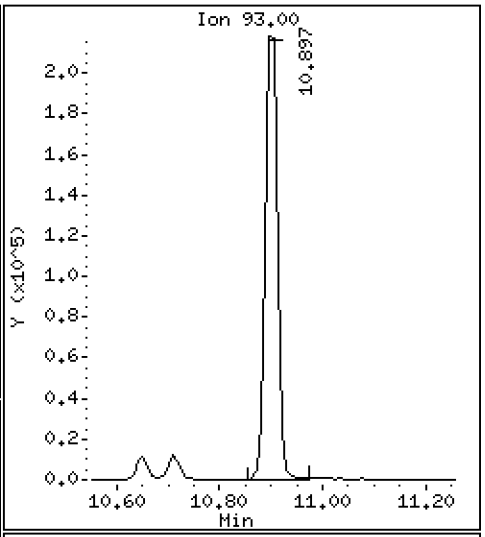
Column phase: ZB-5msi

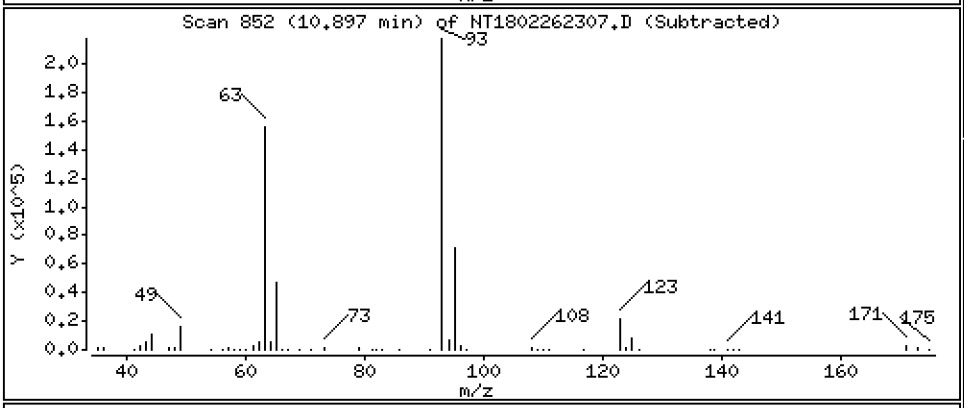
Column diameter: 0.25

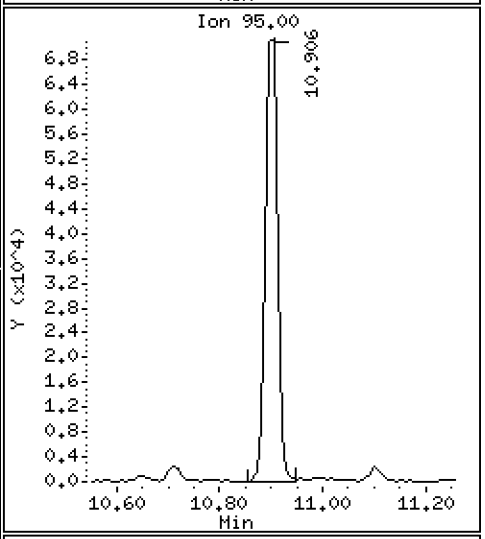
23 Bis(2-Chloroethoxy)methane

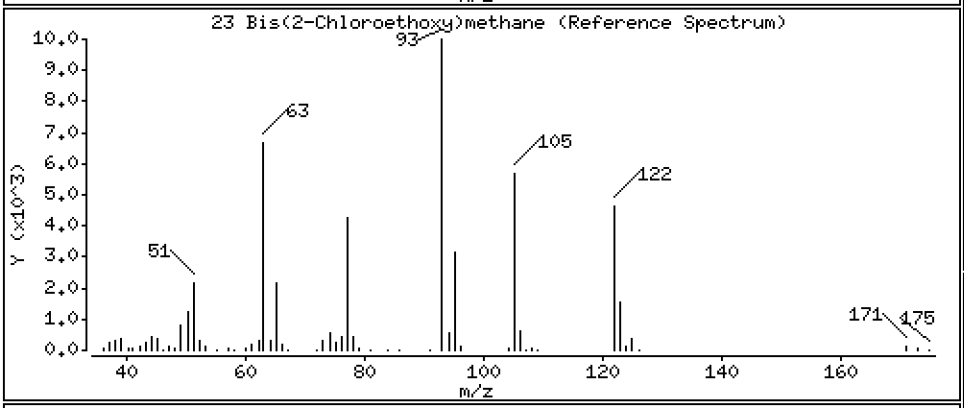
Concentration: 4.146 ug/mL

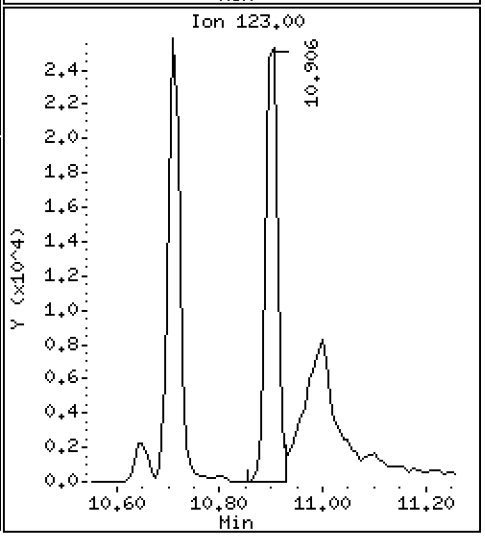


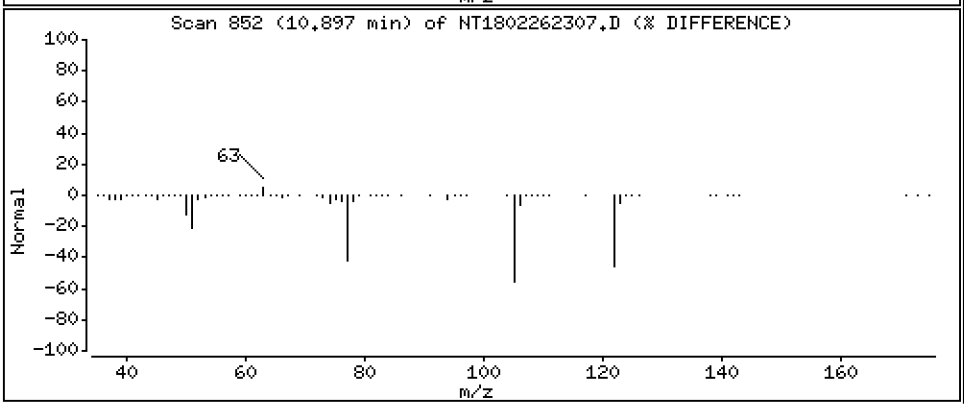












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

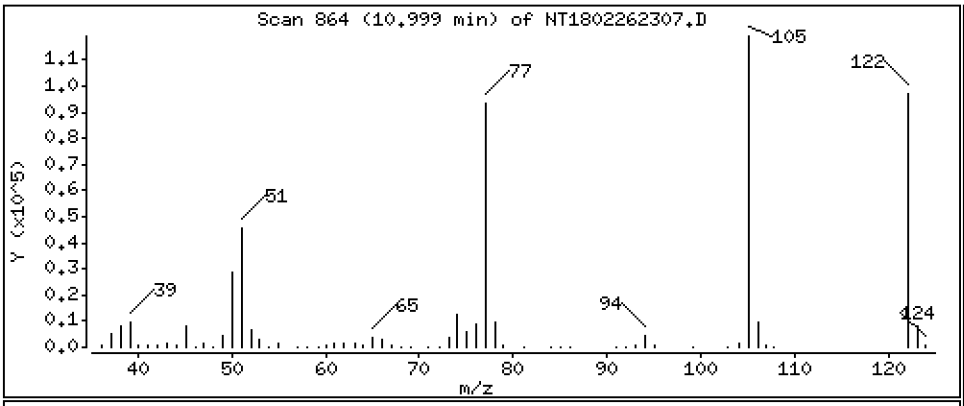
Operator: VTS

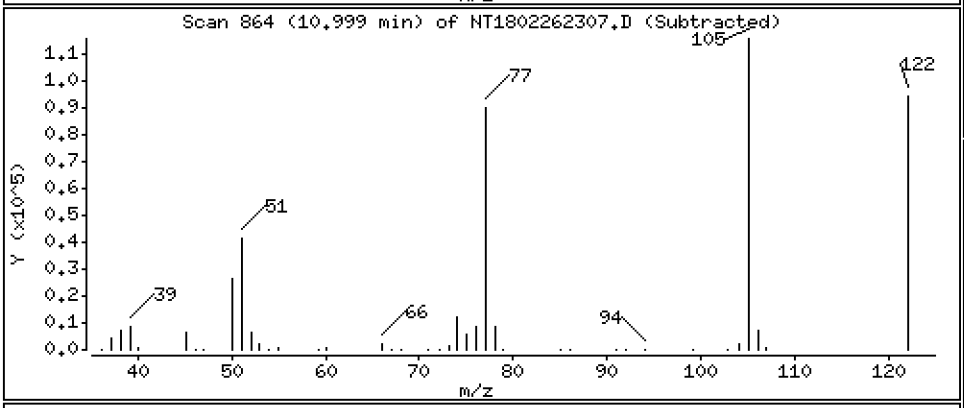
Column phase: ZB-5msi

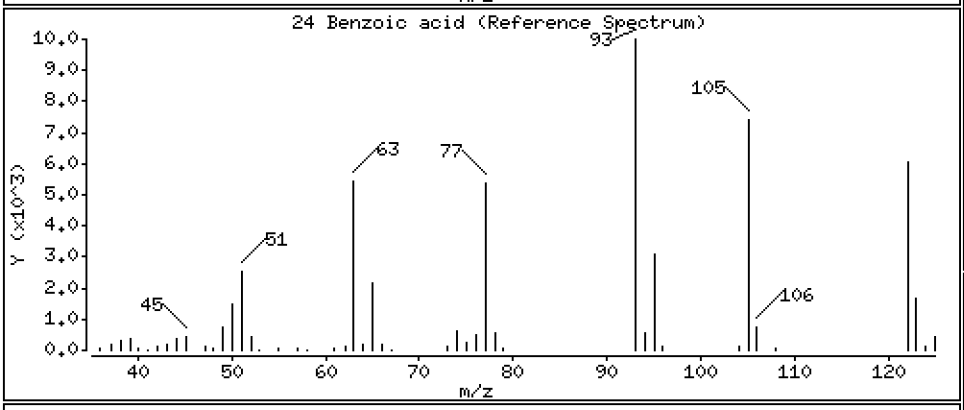
Column diameter: 0.25

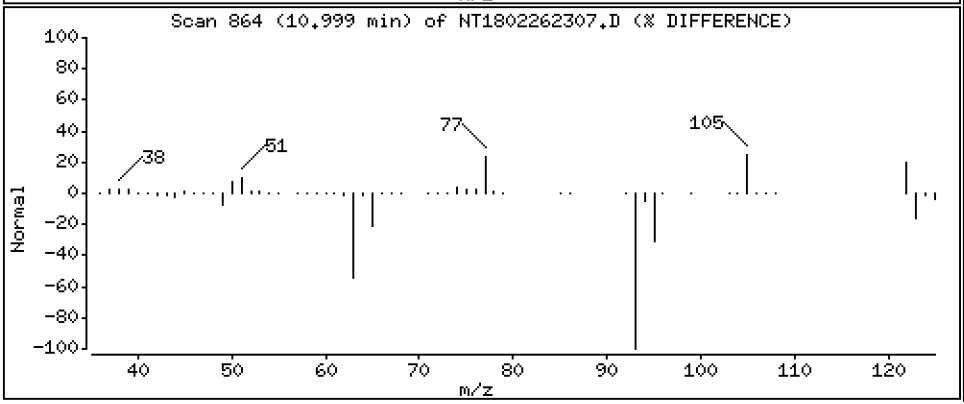
24 Benzoic acid

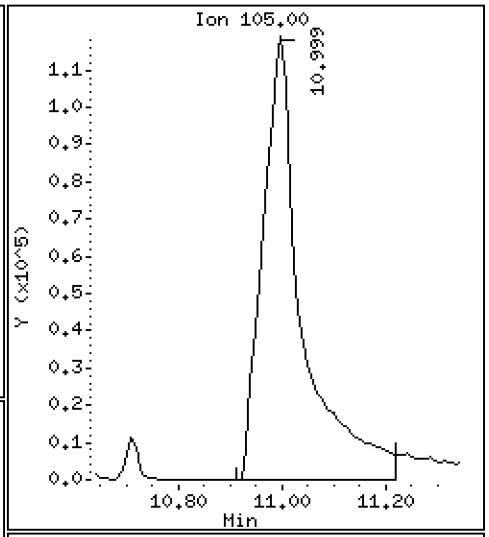
Concentration: 17.51 ug/mL

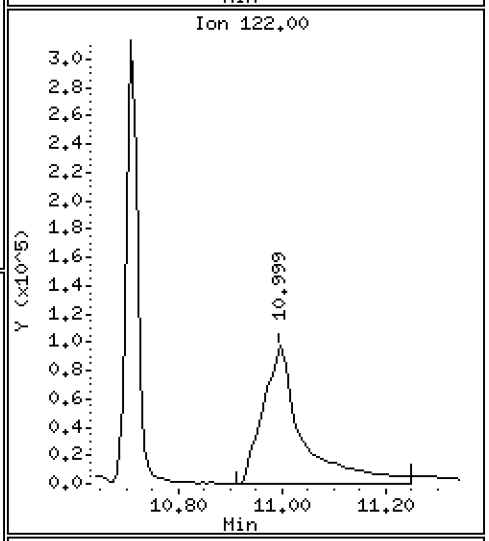


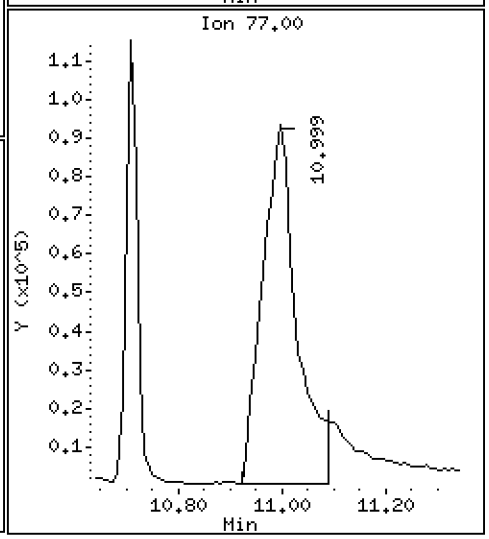












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262307.D

Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

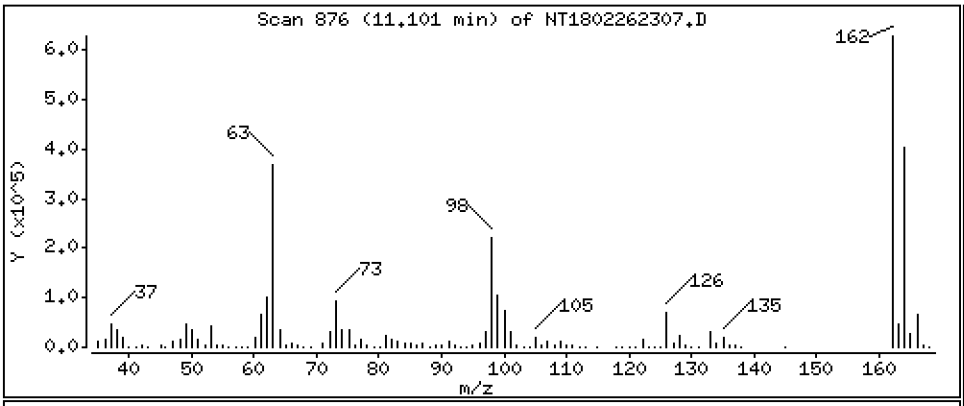
Operator: VTS

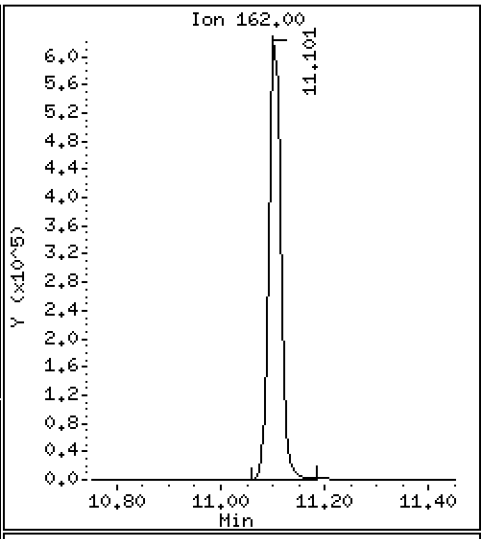
Column phase: ZB-5msi

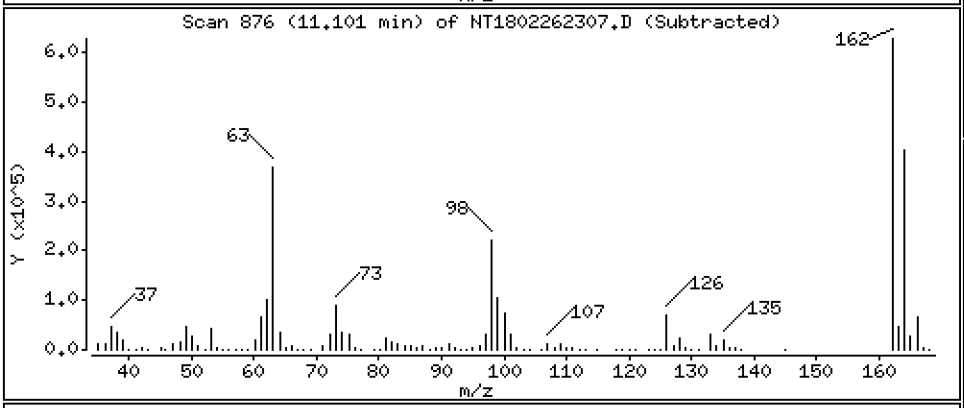
Column diameter: 0.25

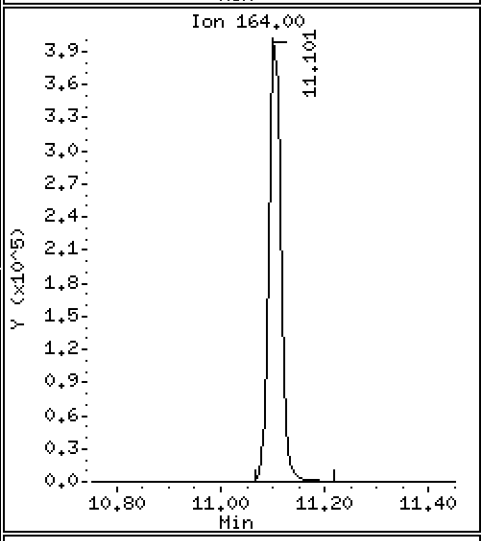
25 2,4-Dichlorophenol

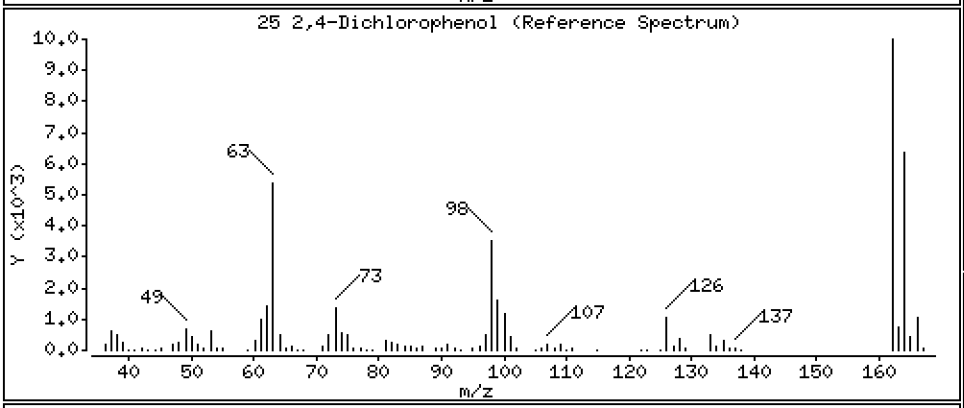
Concentration: 12.12 ug/mL

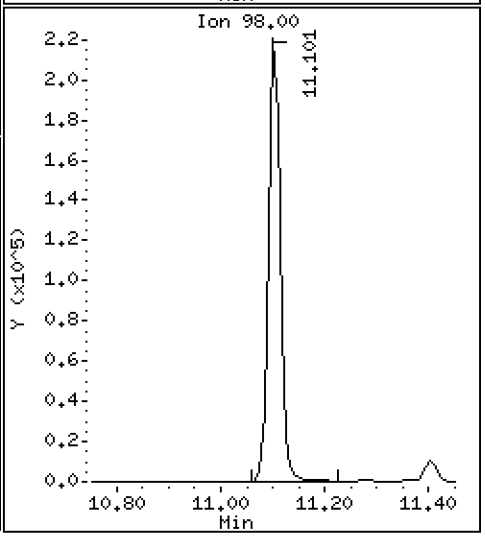


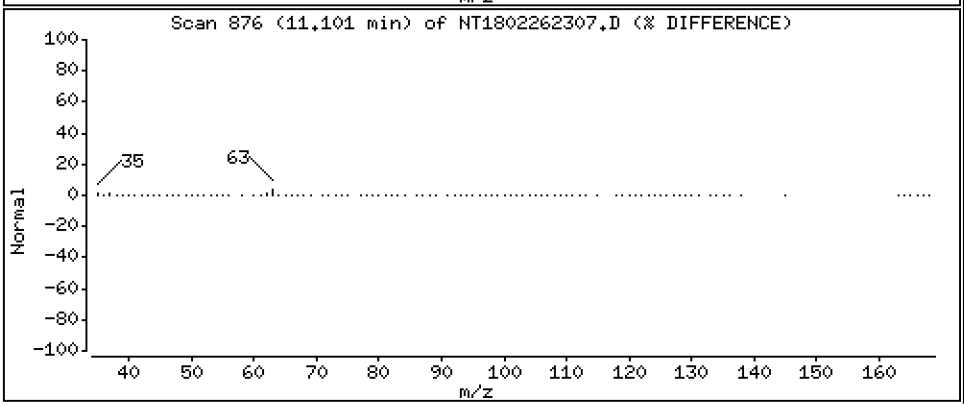












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

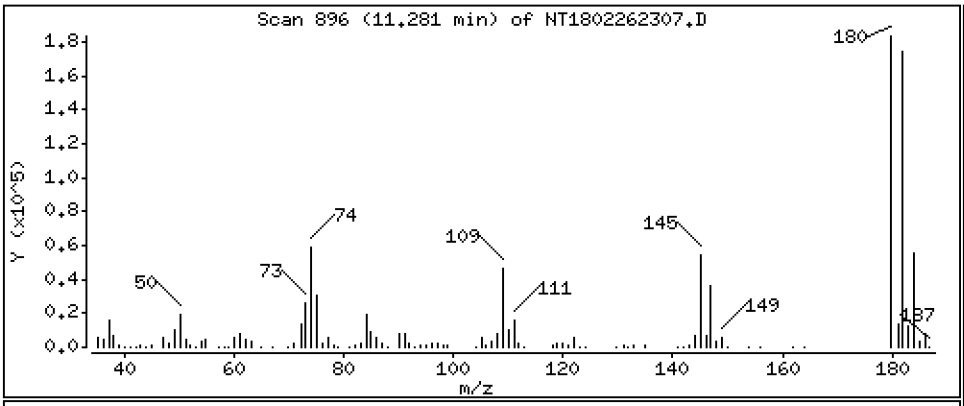
Operator: VTS

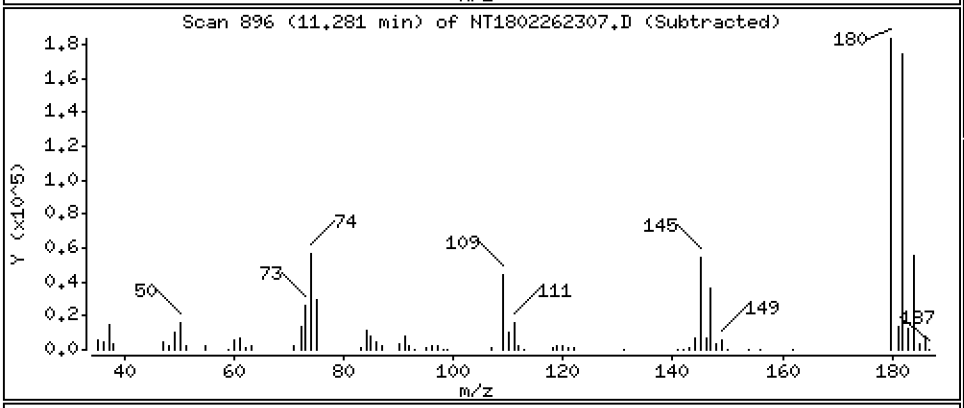
Column phase: ZB-5msi

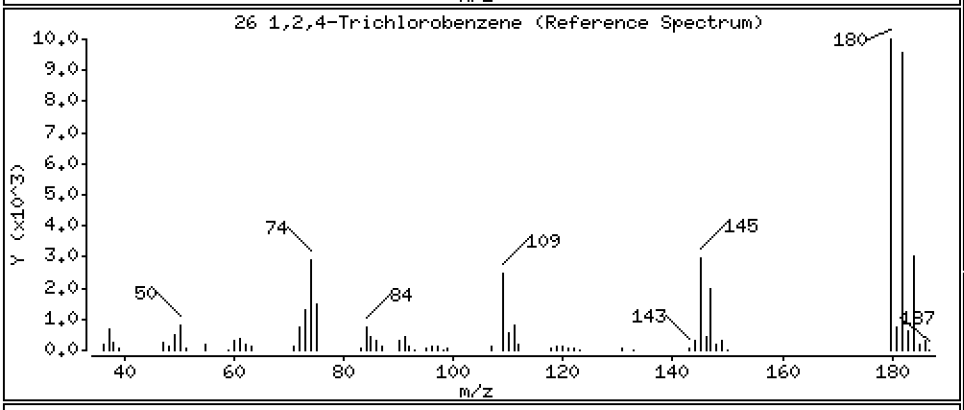
Column diameter: 0.25

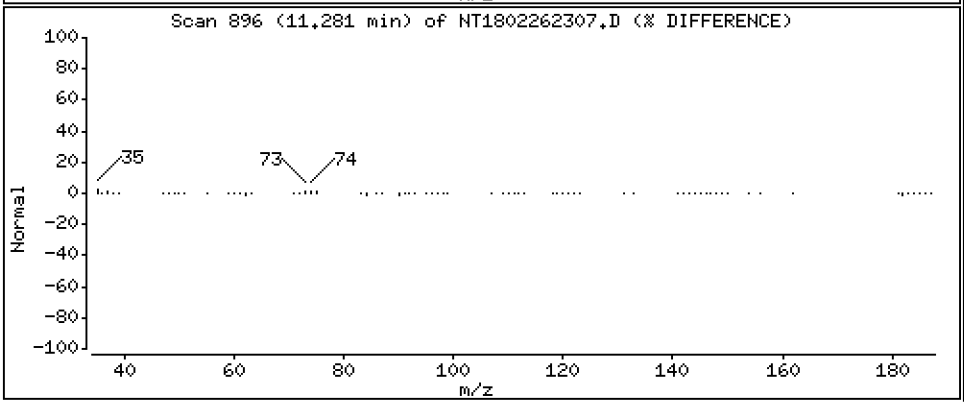
26 1,2,4-Trichlorobenzene

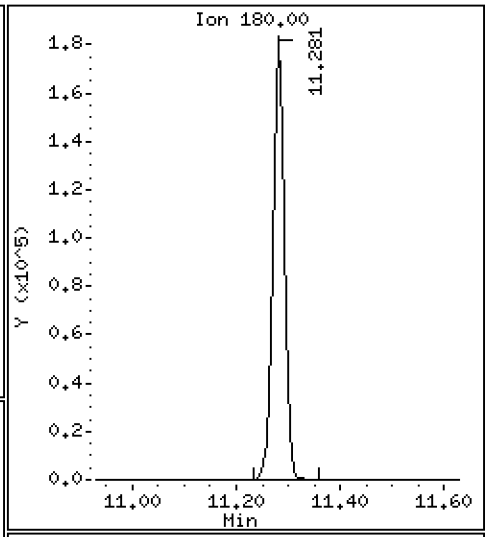
Concentration: 3.242 ug/mL

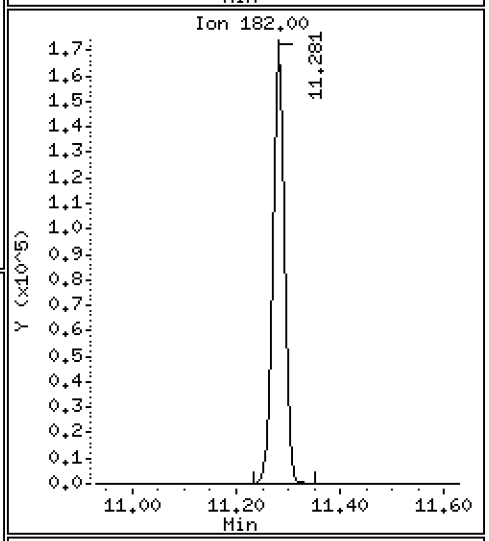


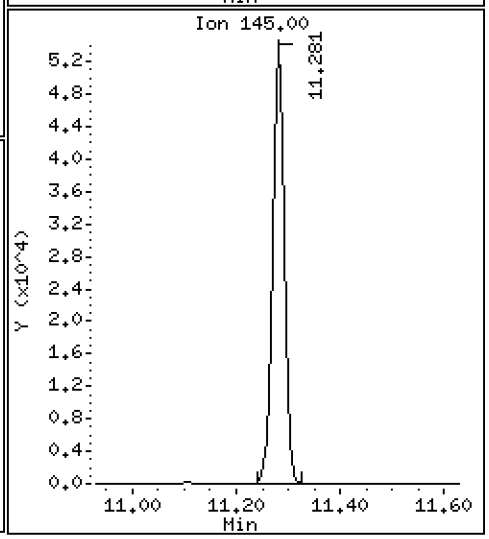












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

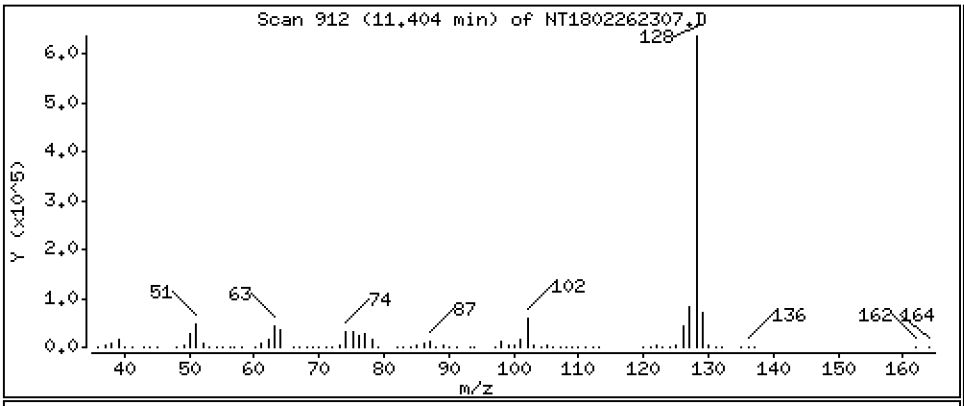
Operator: VTS

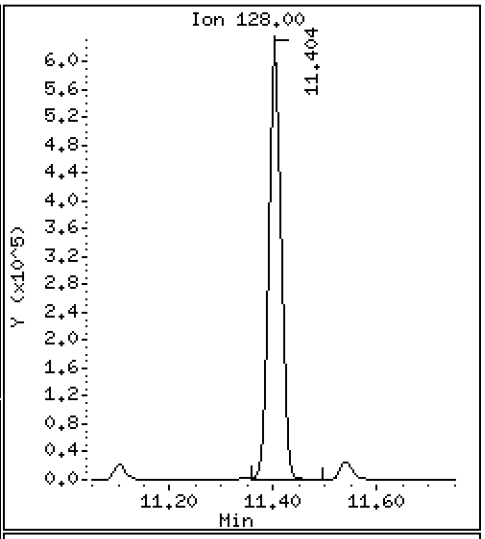
Column phase: ZB-5msi

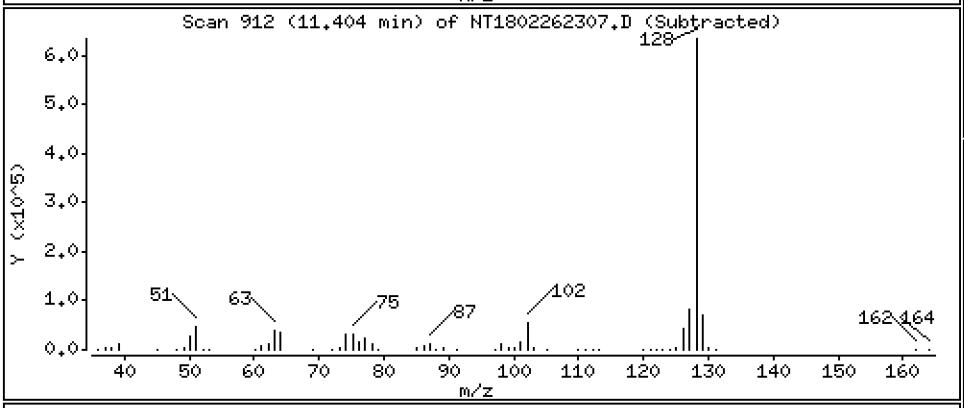
Column diameter: 0.25

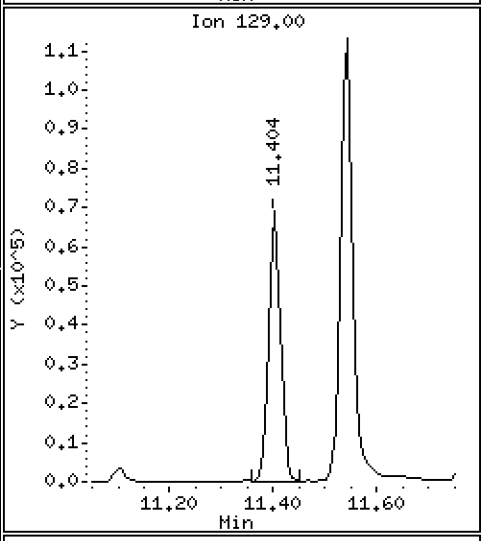
28 Naphthalene

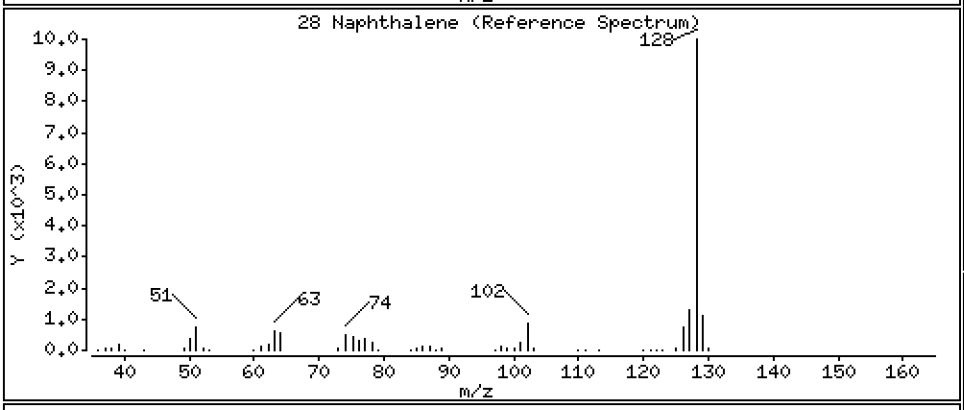
Concentration: 3.292 ug/mL

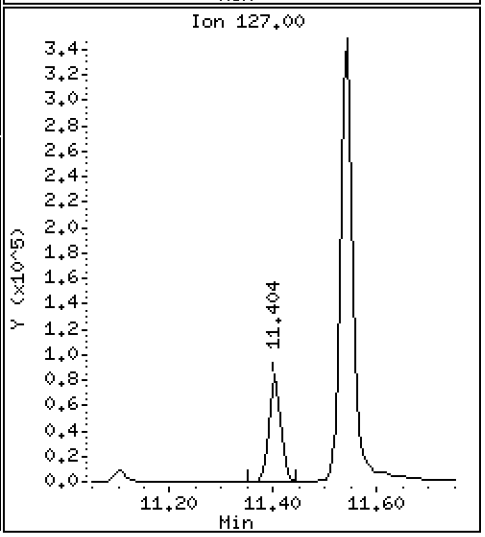


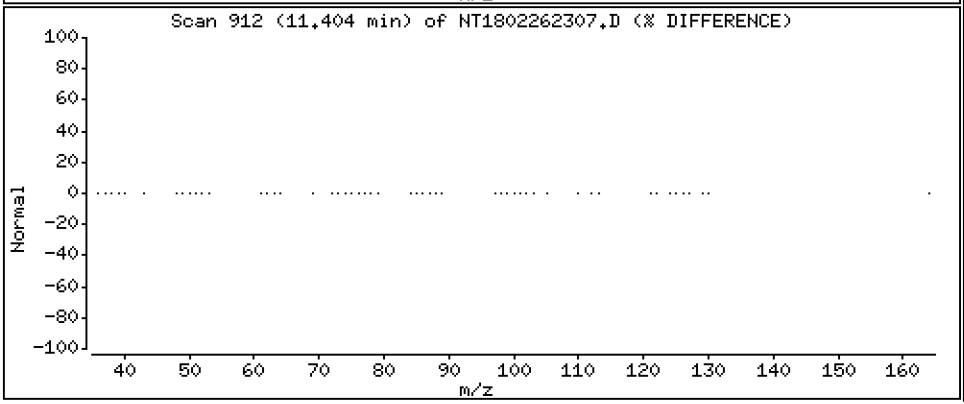












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

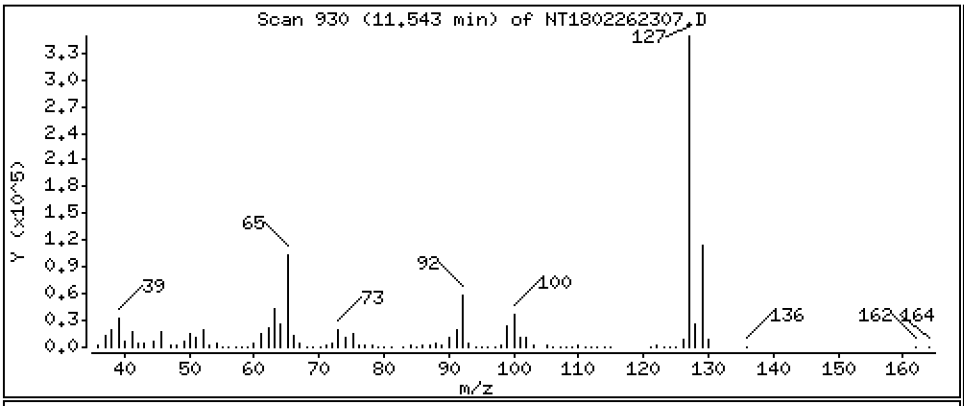
Operator: VTS

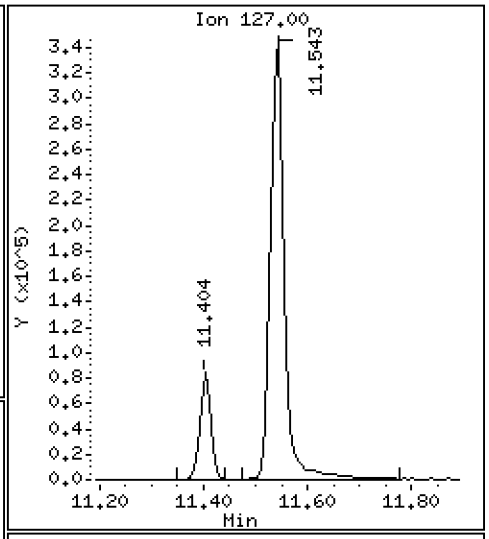
Column phase: ZB-5msi

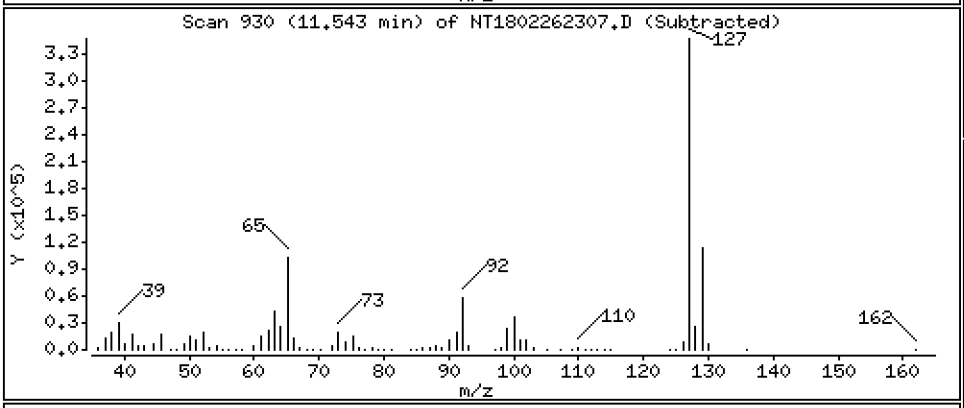
Column diameter: 0.25

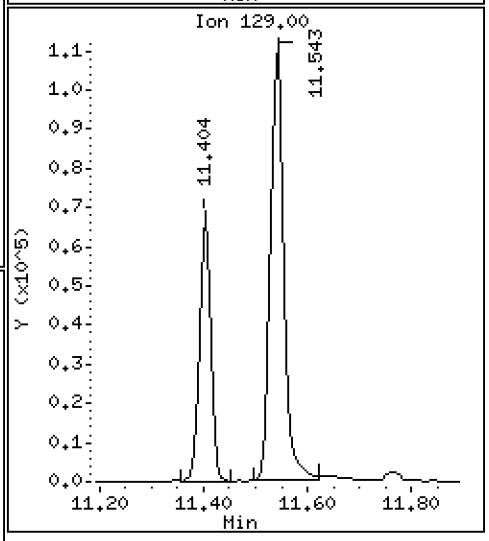
29 4-Chloroaniline

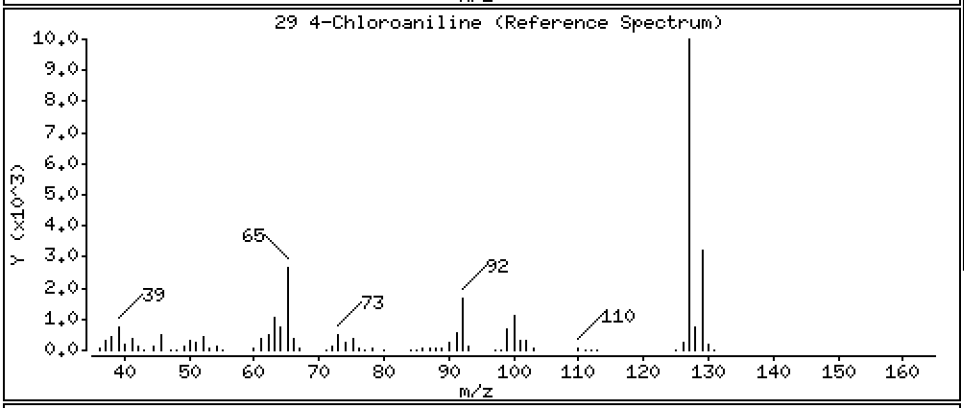
Concentration: 5.404 ug/mL

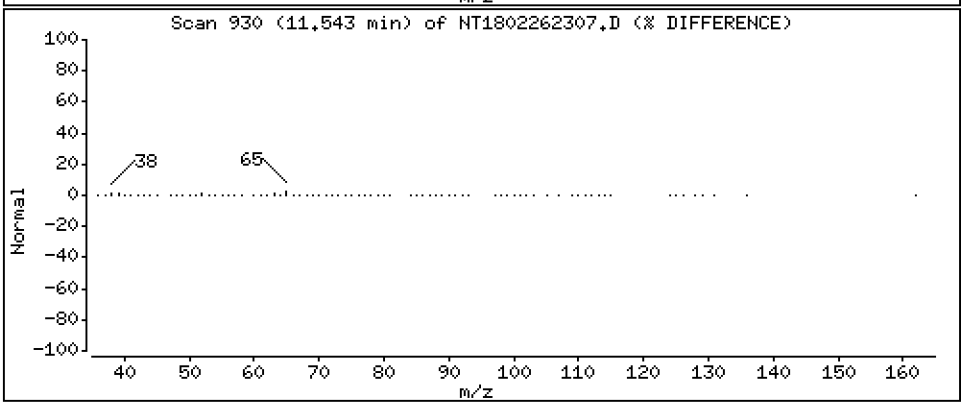












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

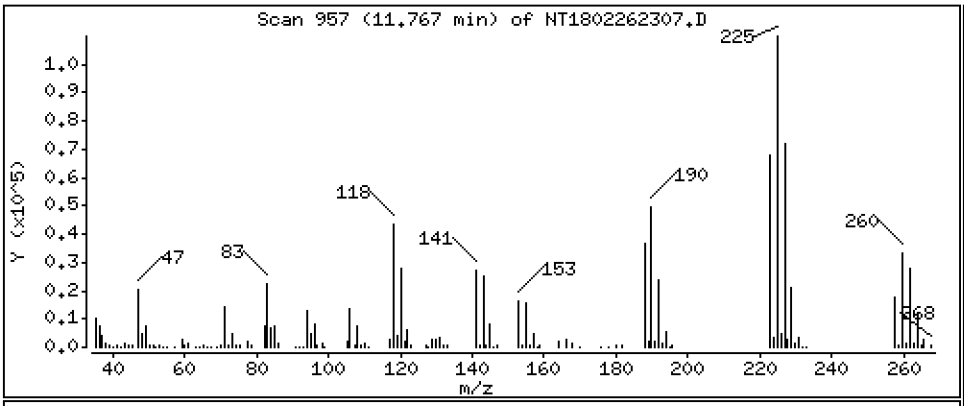
Operator: VTS

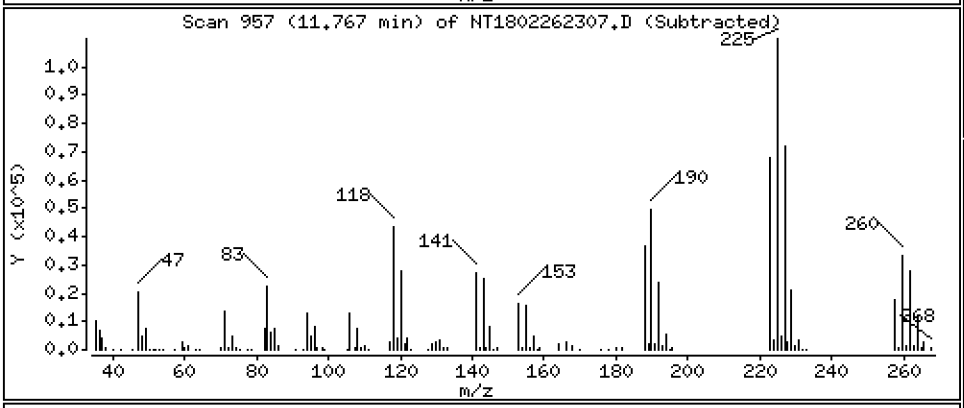
Column phase: ZB-5msi

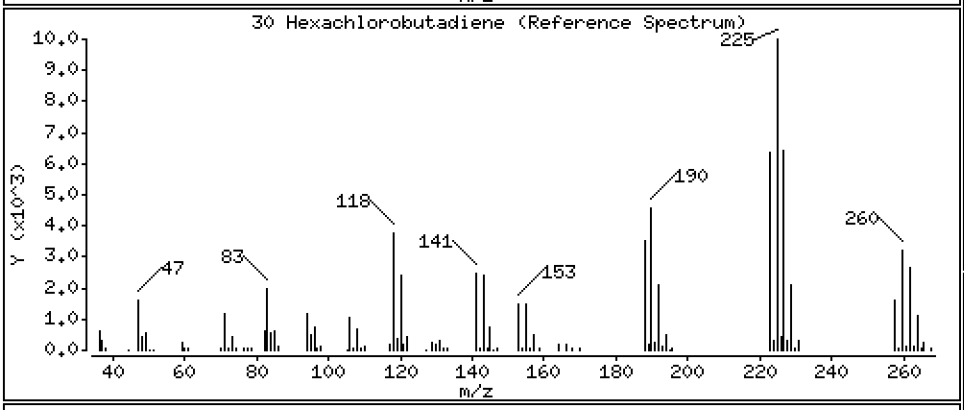
Column diameter: 0.25

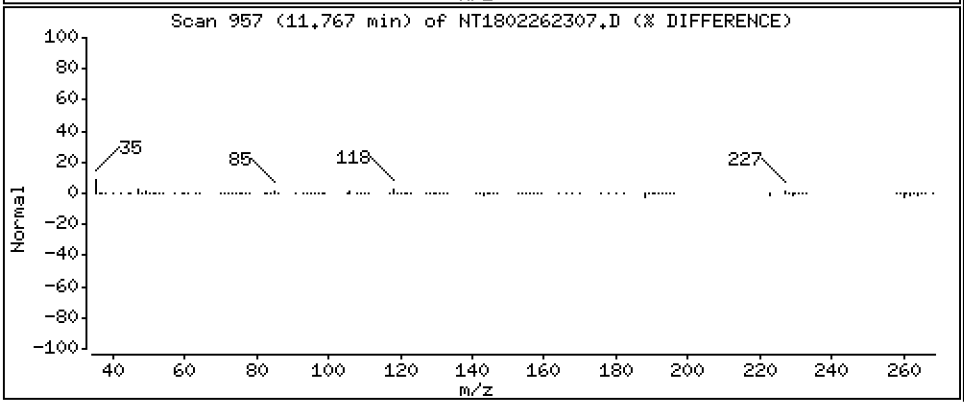
30 Hexachlorobutadiene

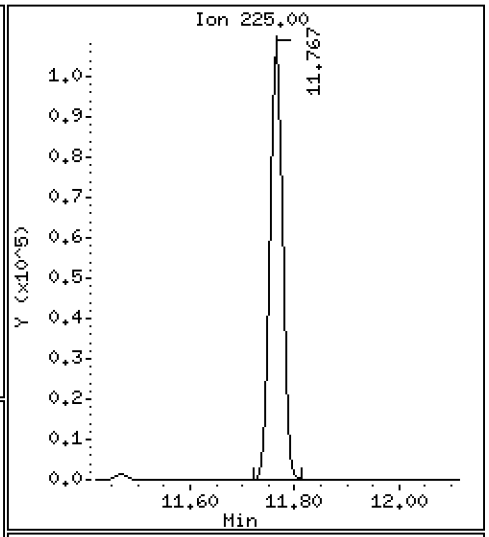
Concentration: 3.306 ug/mL

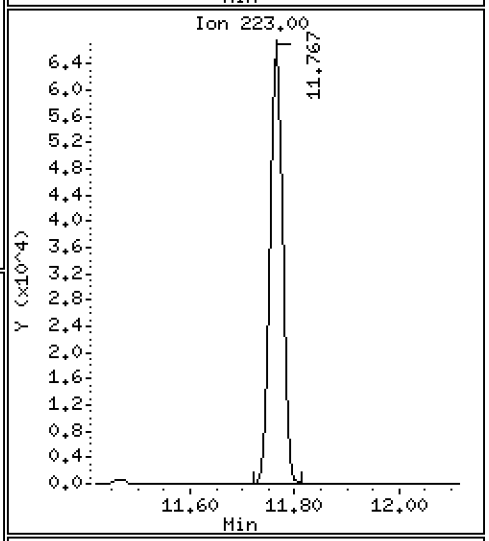


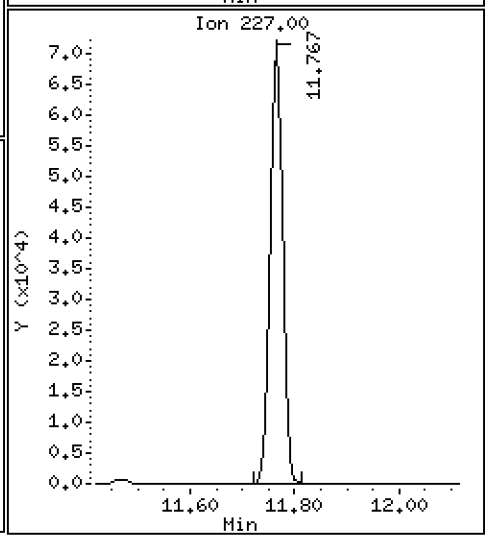












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

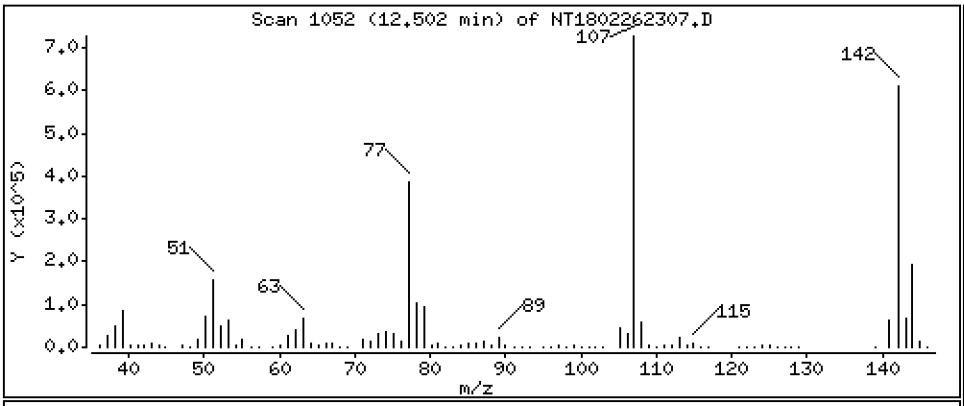
Operator: VTS

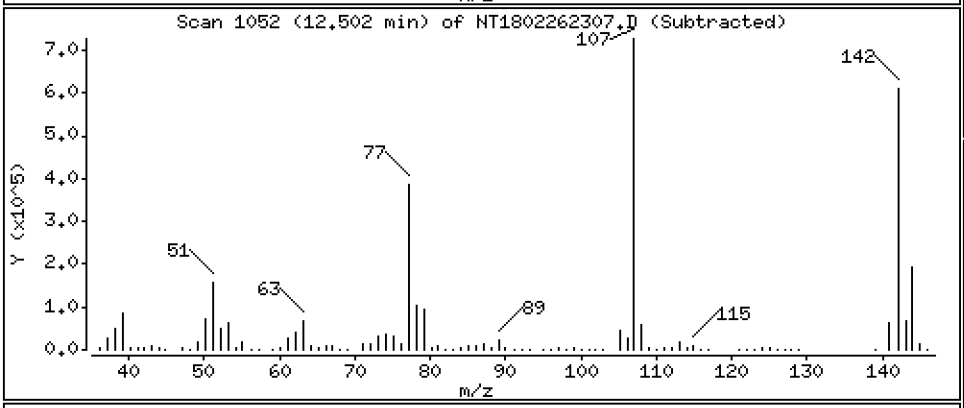
Column phase: ZB-5msi

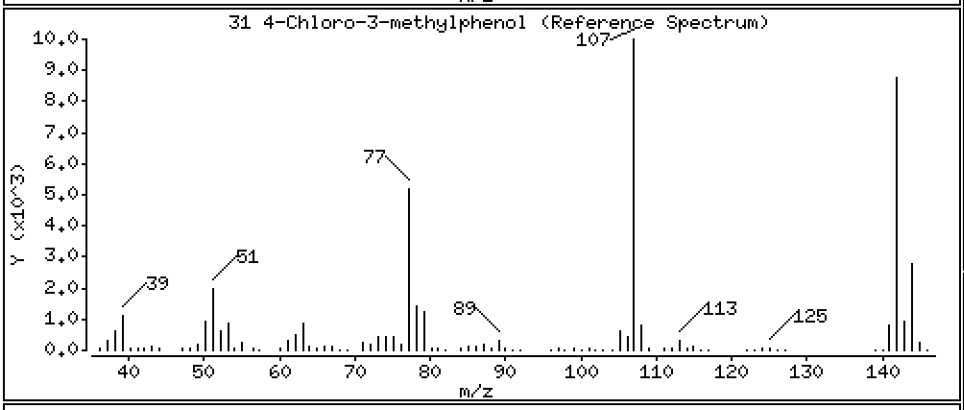
Column diameter: 0.25

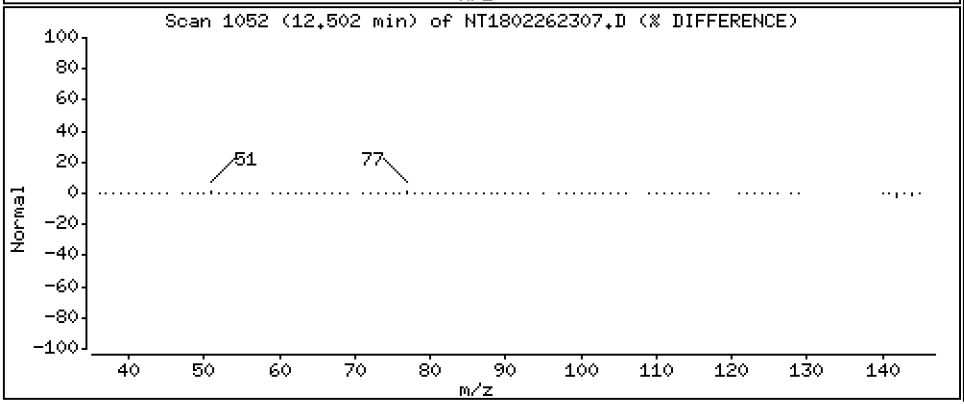
31 4-Chloro-3-methylphenol

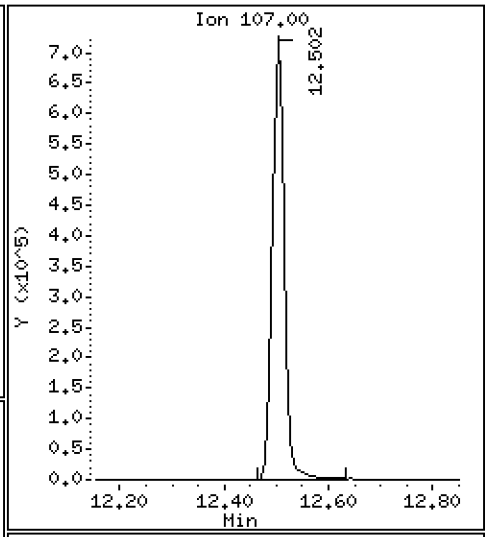
Concentration: 13.68 ug/mL

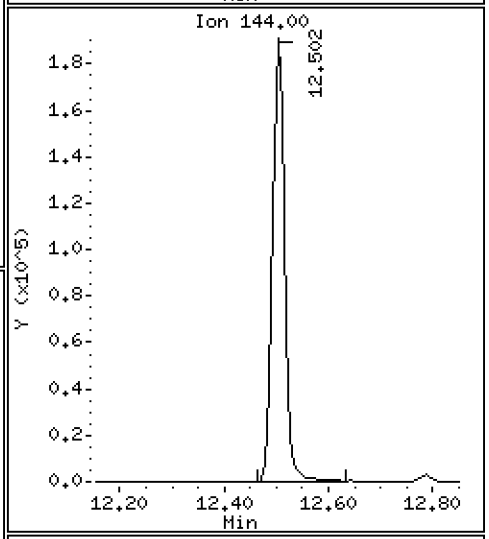


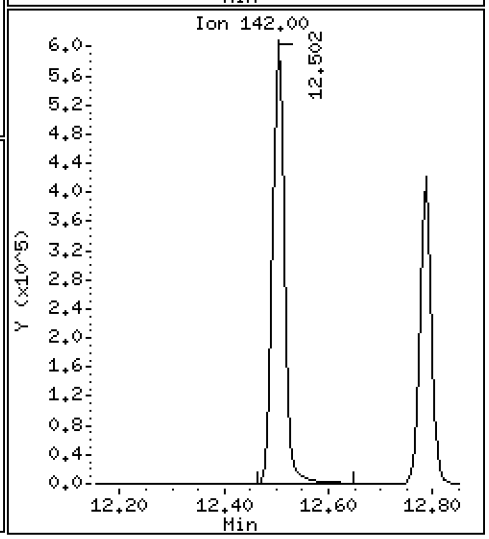












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

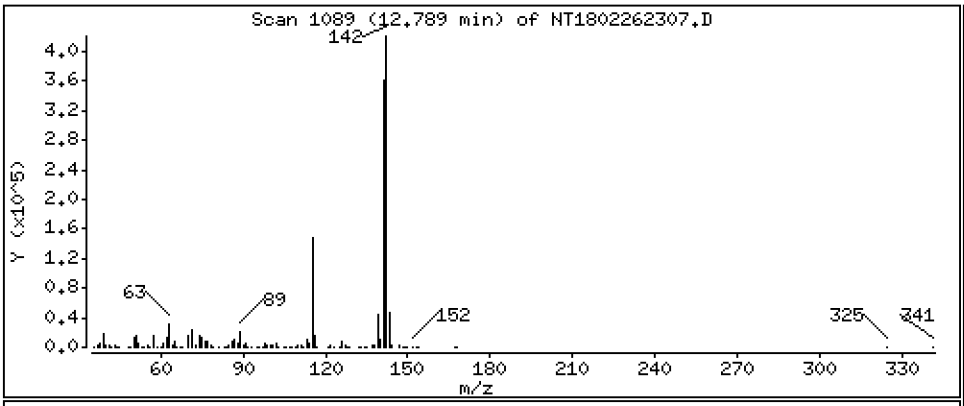
Operator: VTS

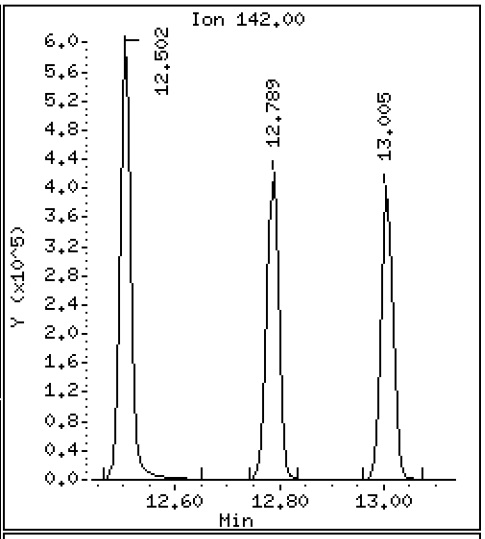
Column phase: ZB-5msi

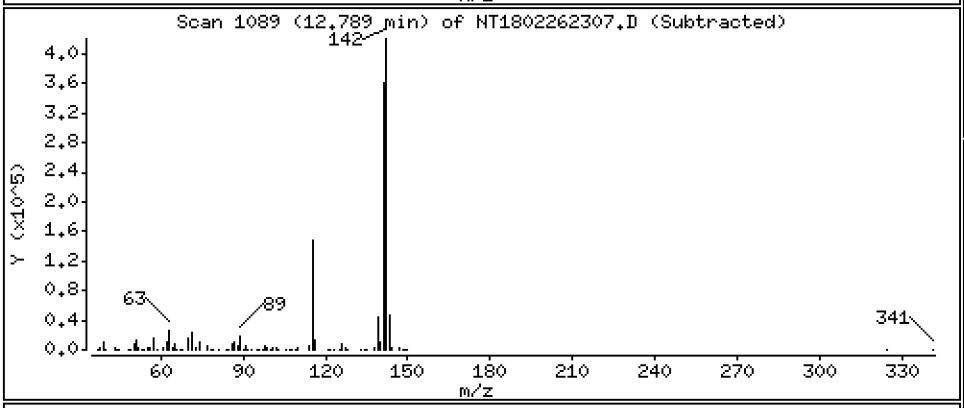
Column diameter: 0.25

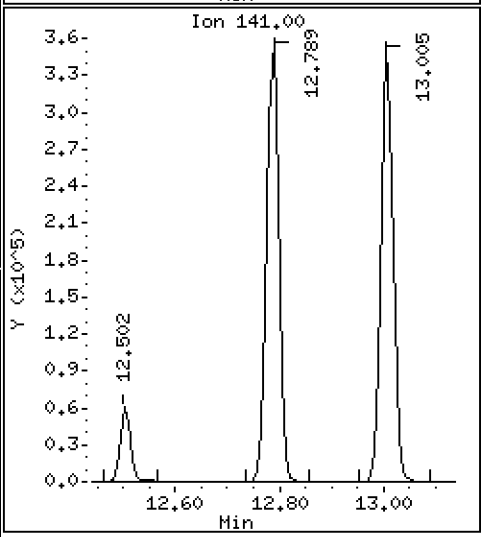
32 2-Methylnaphthalene

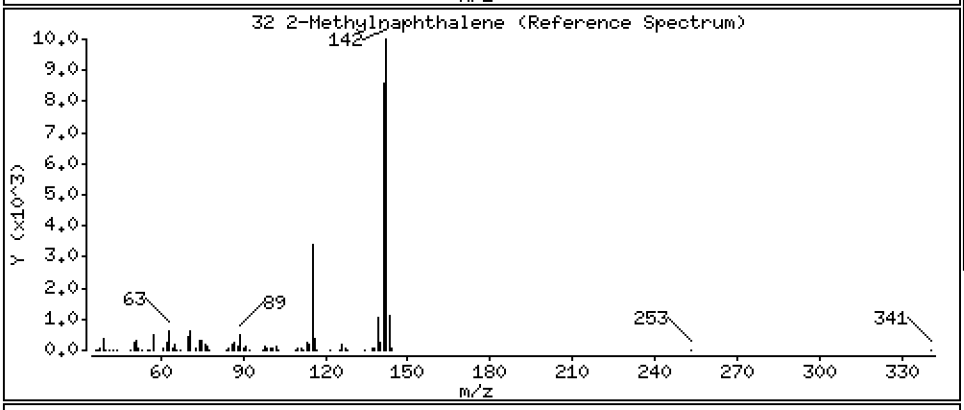
Concentration: 3.142 ug/mL

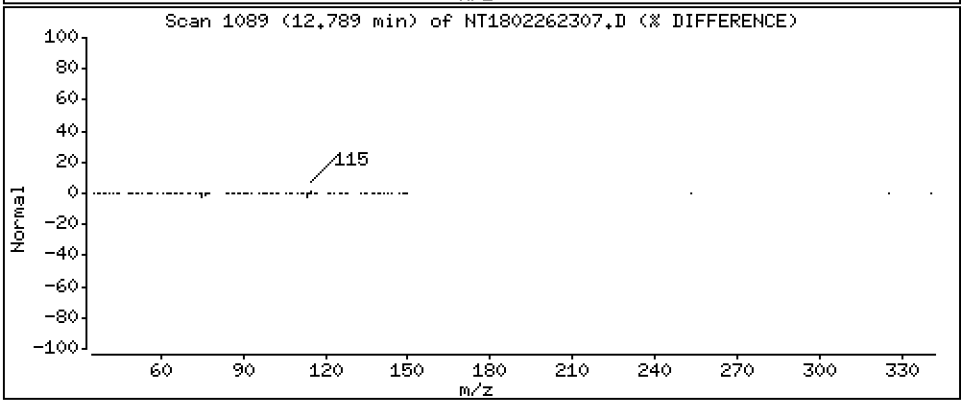












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262307.D

Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

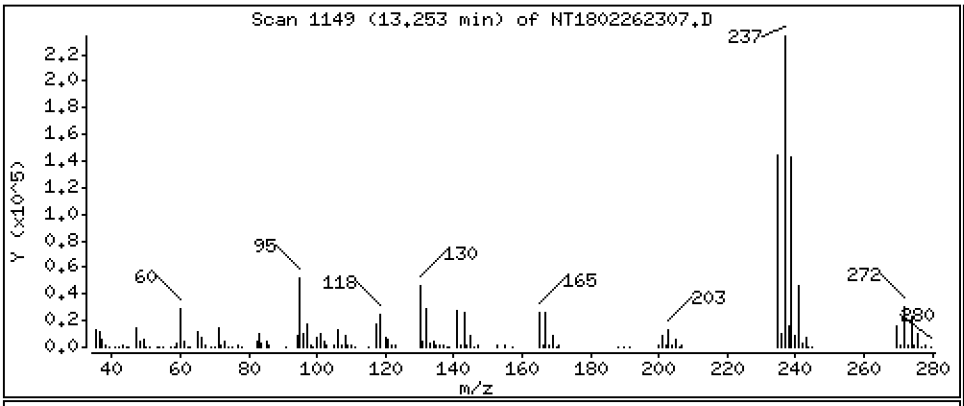
Operator: VTS

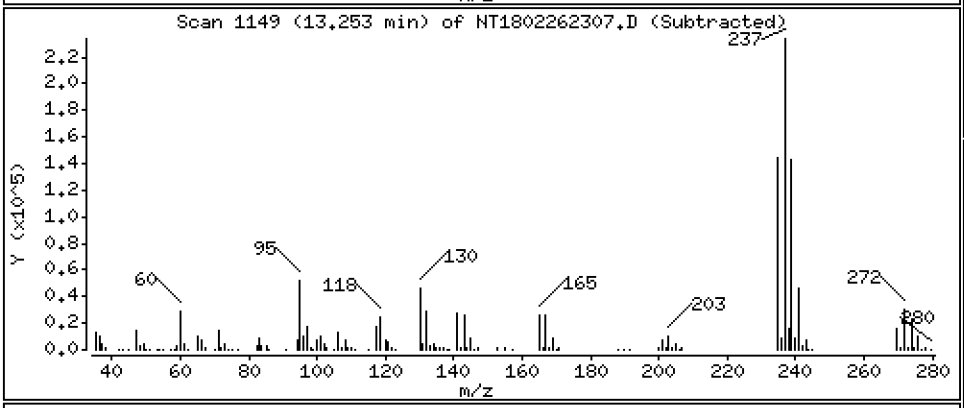
Column phase: ZB-5msi

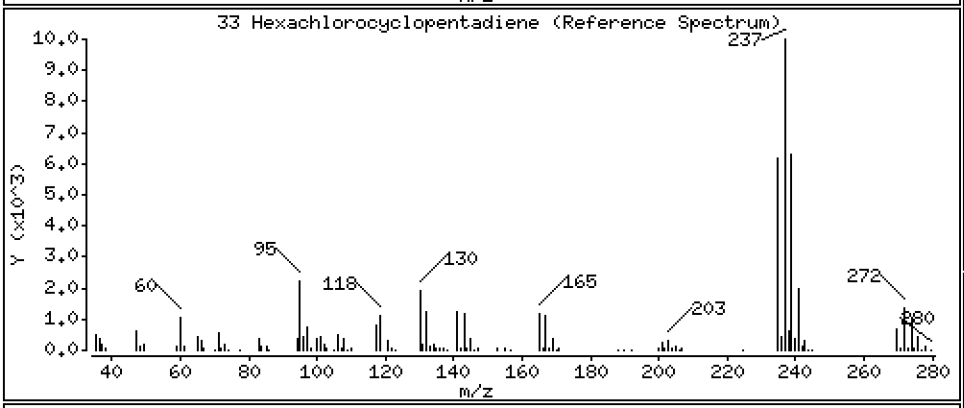
Column diameter: 0.25

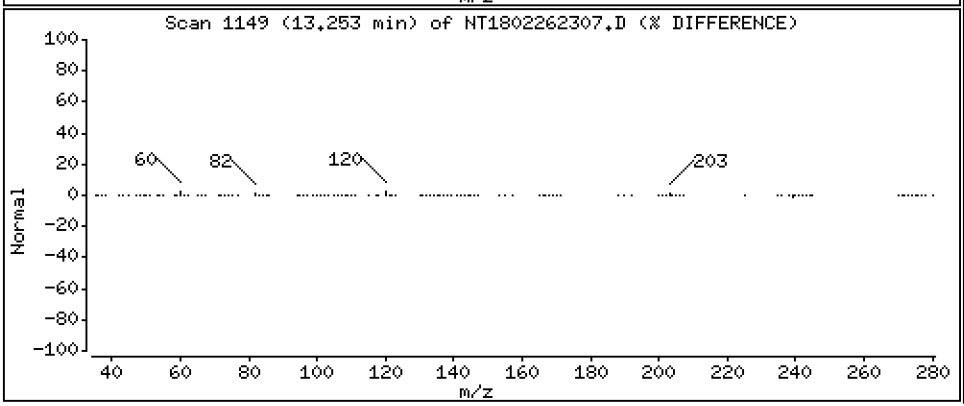
33 Hexachlorocyclopentadiene

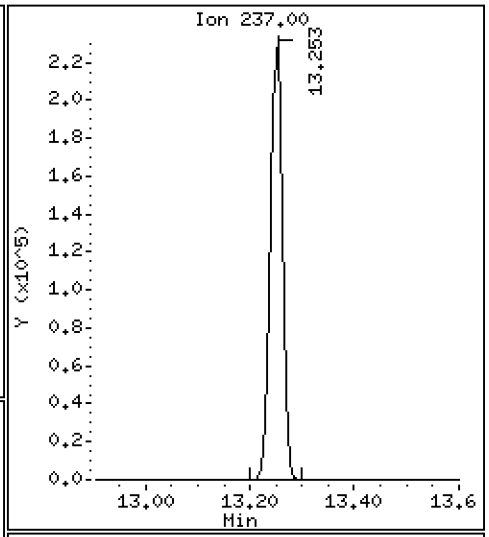
Concentration: 9.478 ug/mL

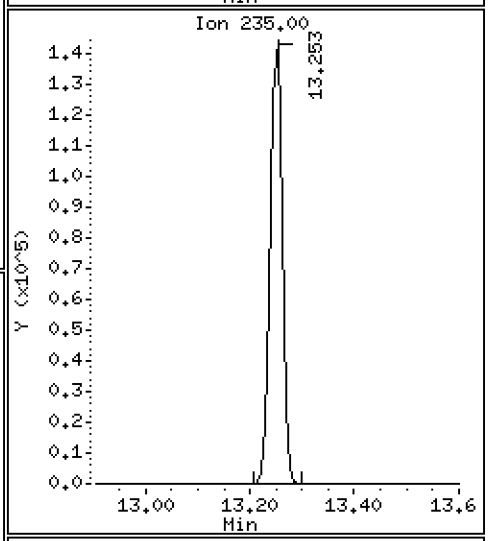


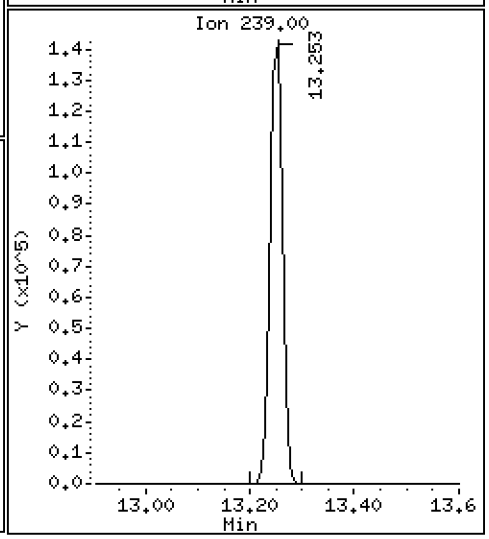












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

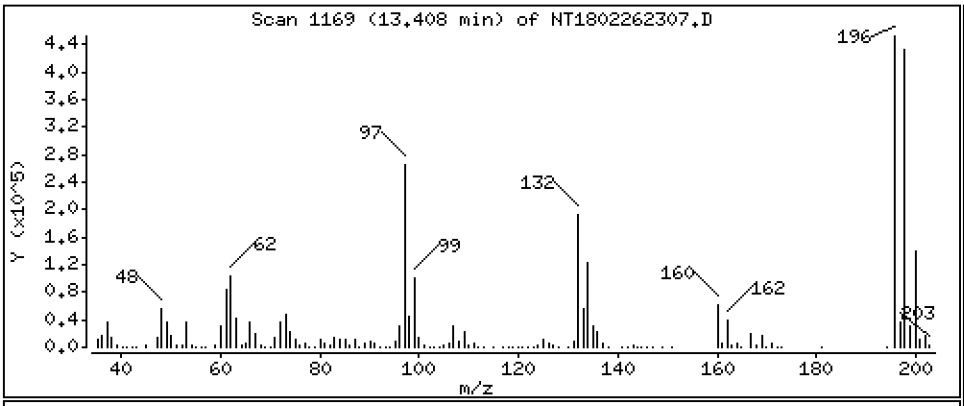
Operator: VTS

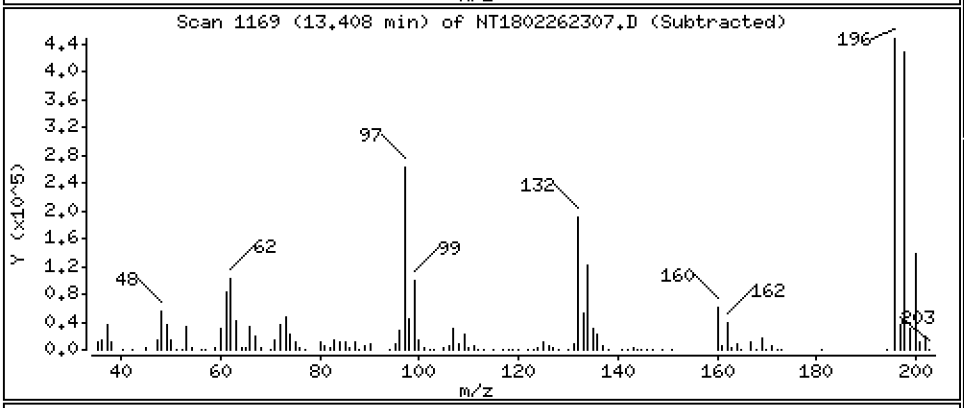
Column phase: ZB-5msi

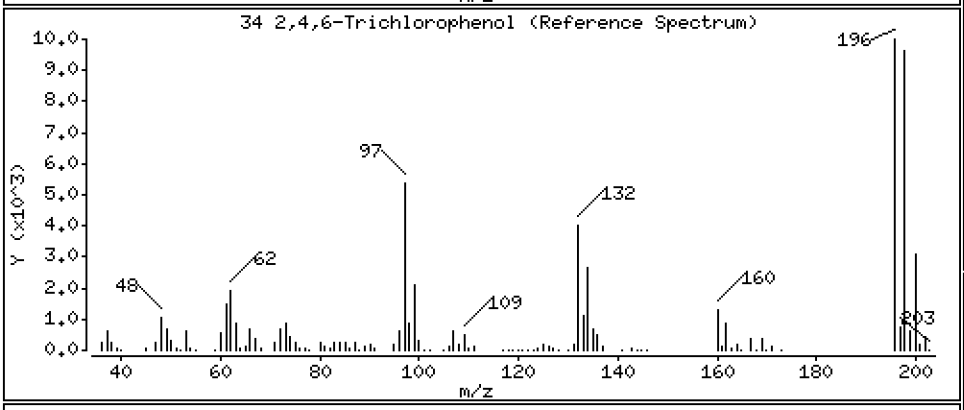
Column diameter: 0.25

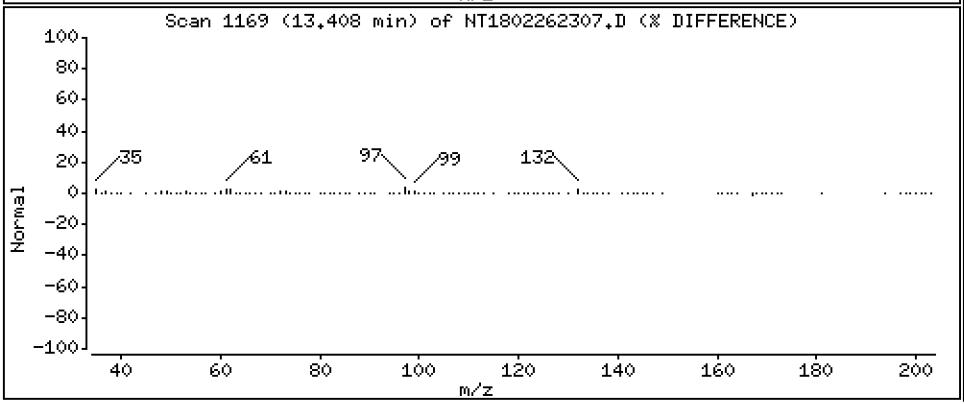
34 2,4,6-Trichlorophenol

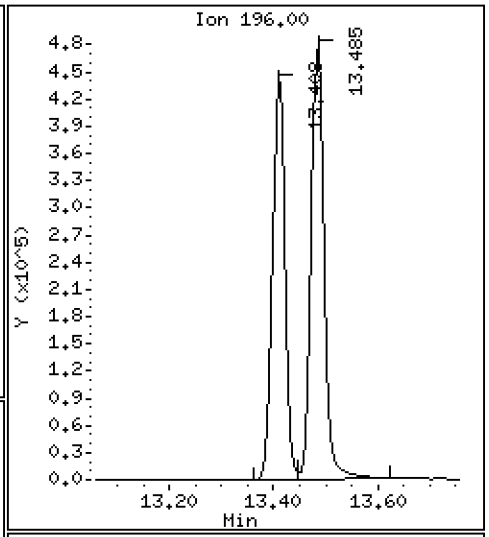
Concentration: 13.83 ug/mL

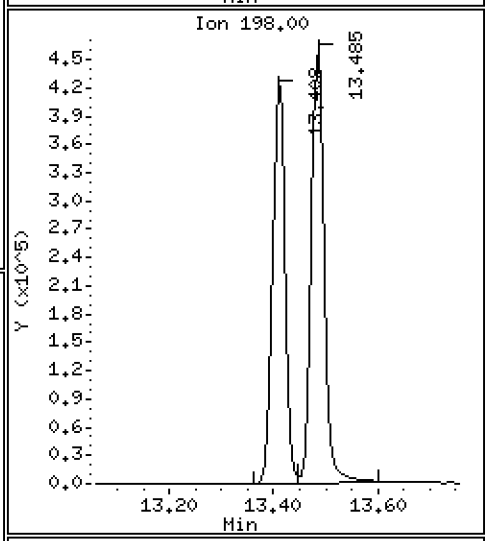


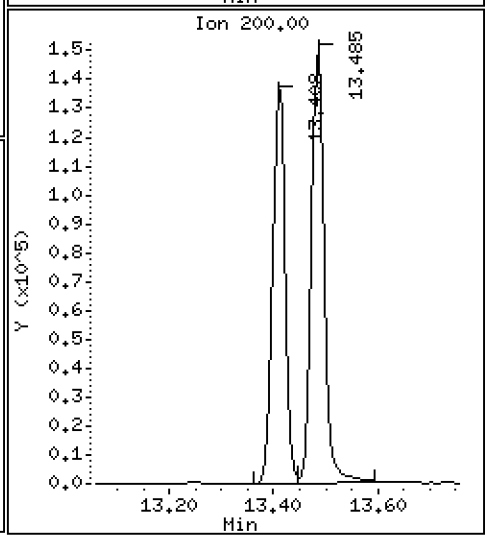












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

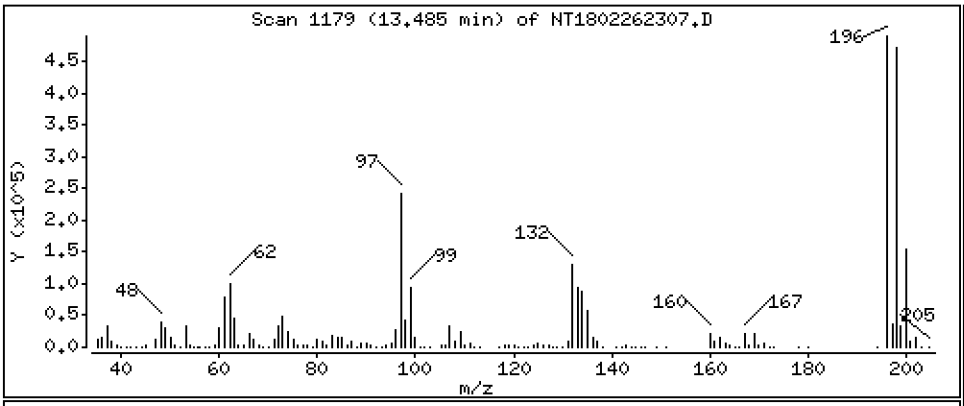
Operator: VTS

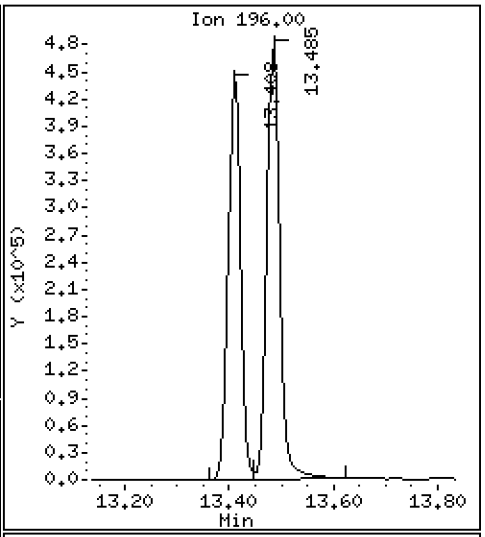
Column phase: ZB-5msi

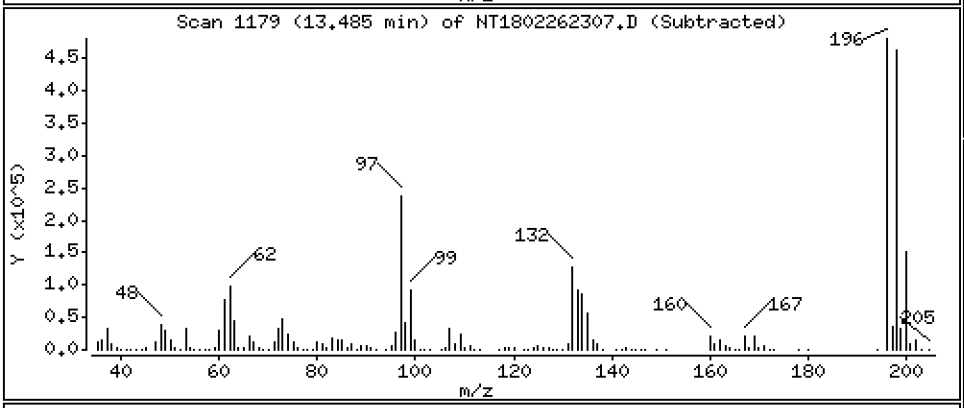
Column diameter: 0.25

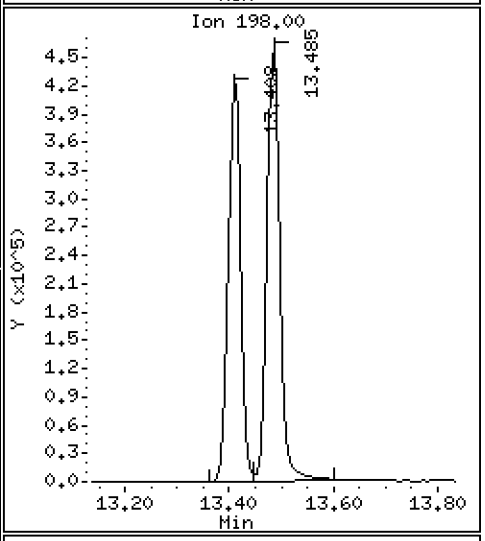
35 2,4,5-Trichlorophenol

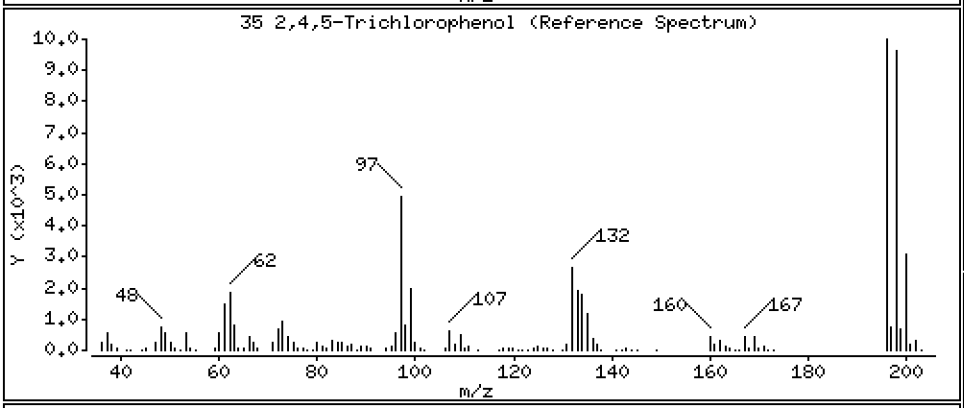
Concentration: 14.22 ug/mL

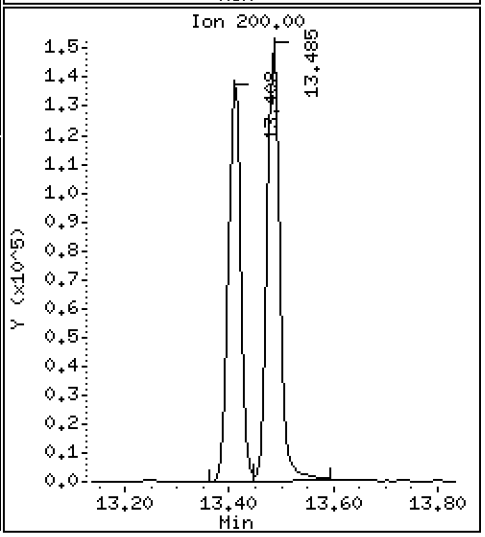


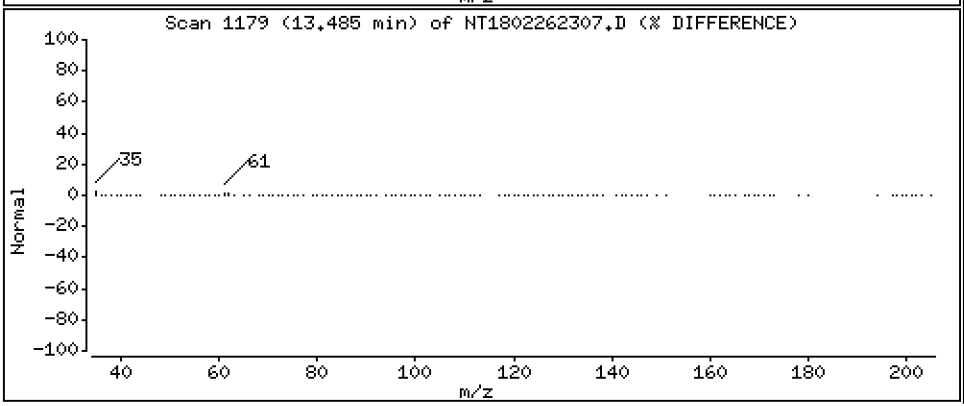












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

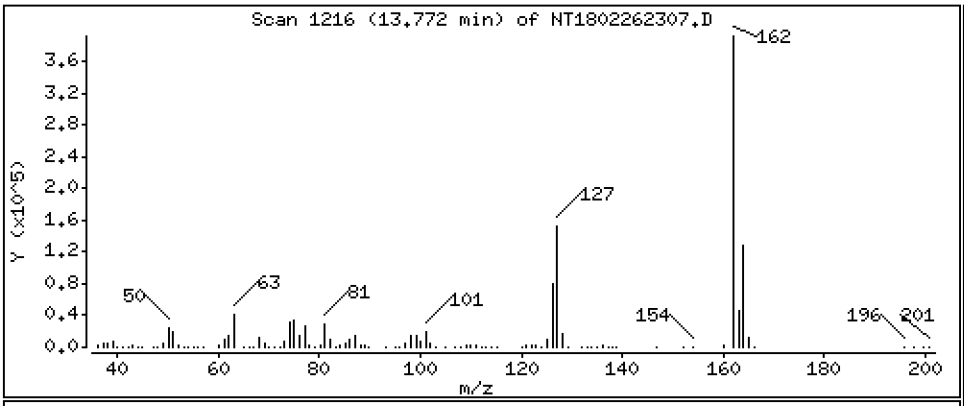
Operator: VTS

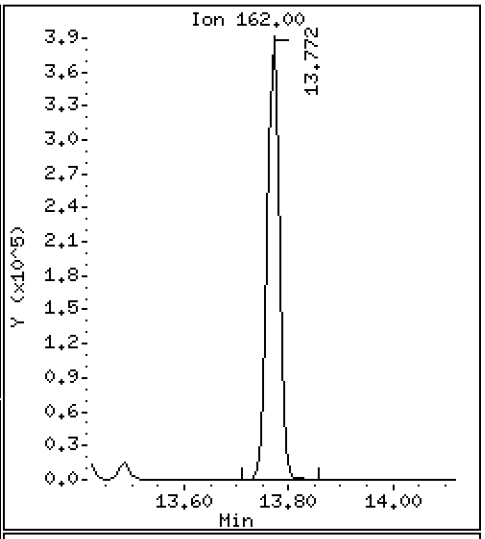
Column phase: ZB-5msi

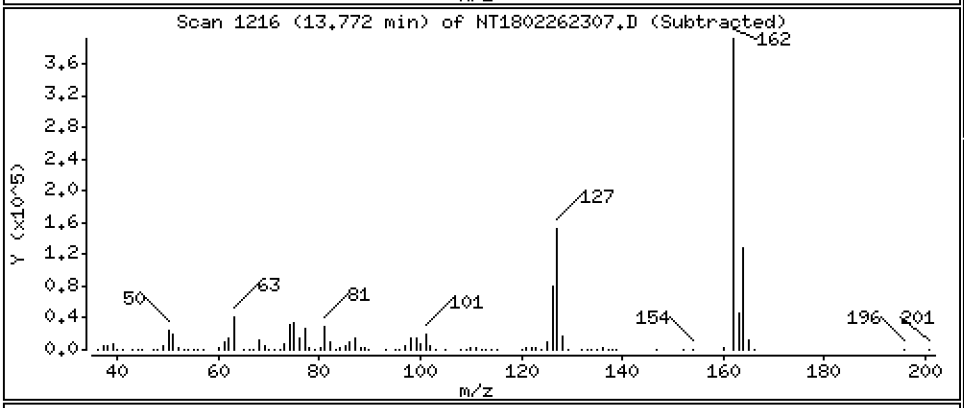
Column diameter: 0.25

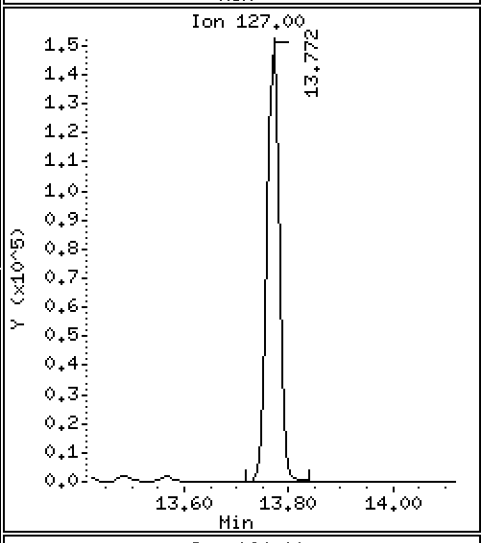
37 2-Chloronaphthalene

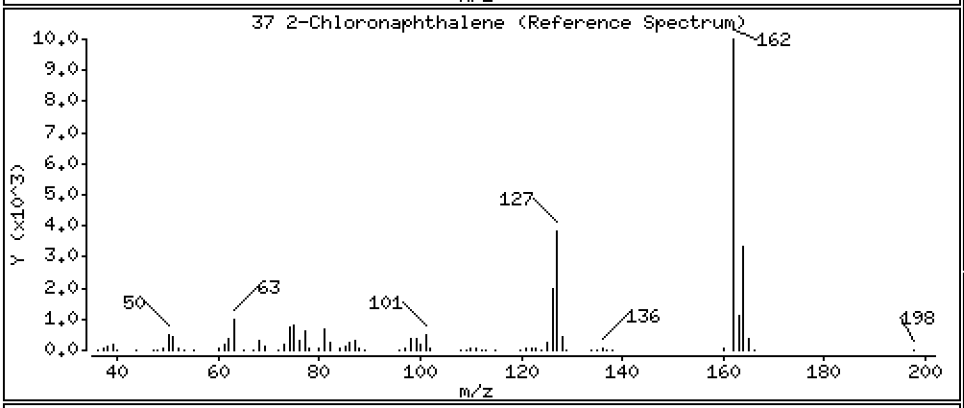
Concentration: 3.476 ug/mL

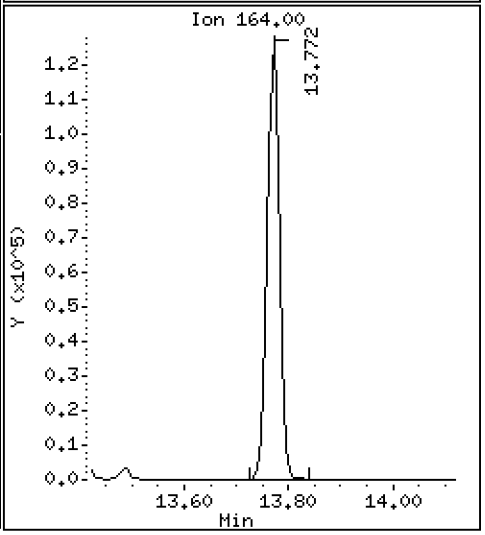


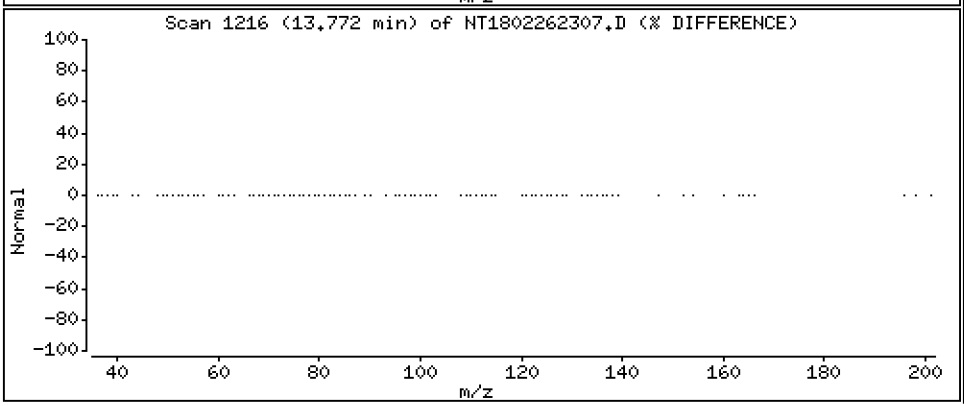












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

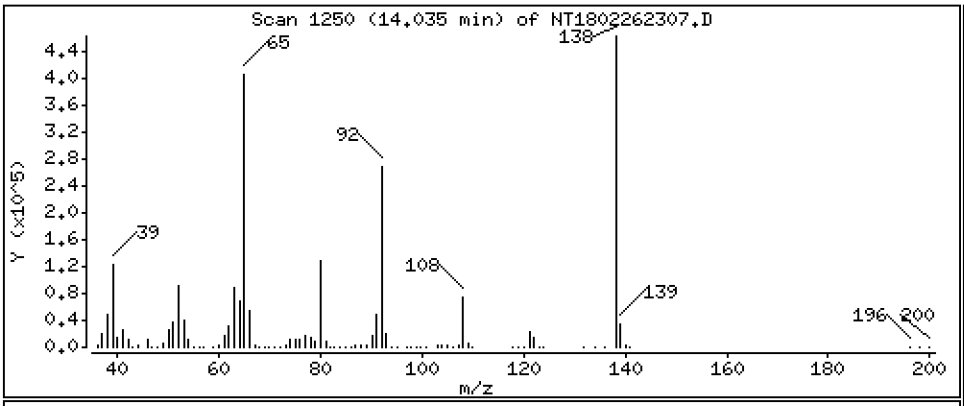
Operator: VTS

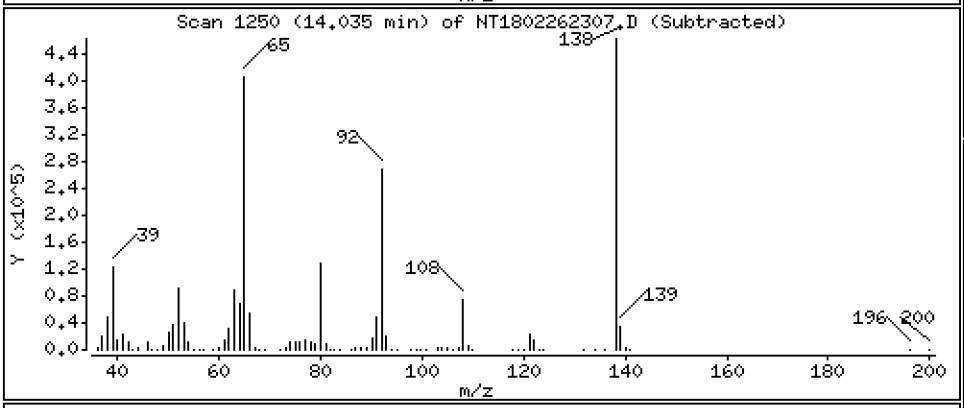
Column phase: ZB-5msi

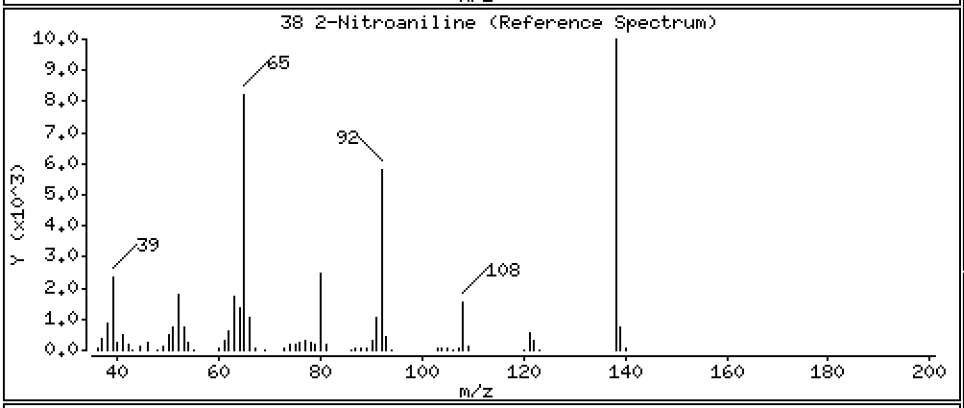
Column diameter: 0.25

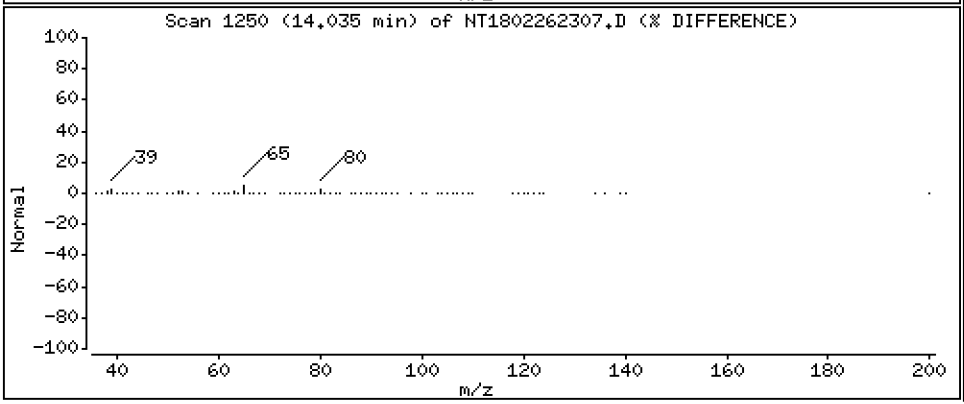
38 2-Nitroaniline

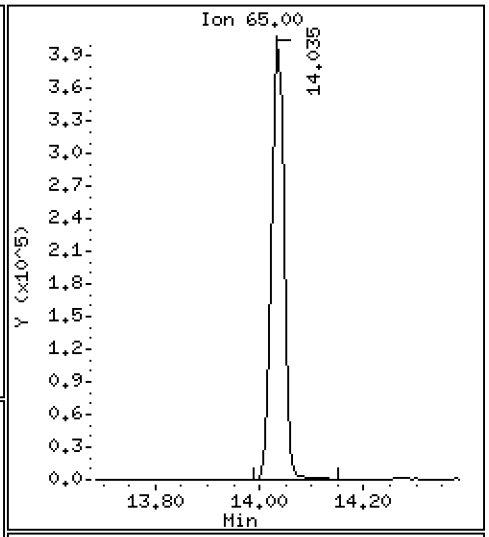
Concentration: 11.82 ug/mL

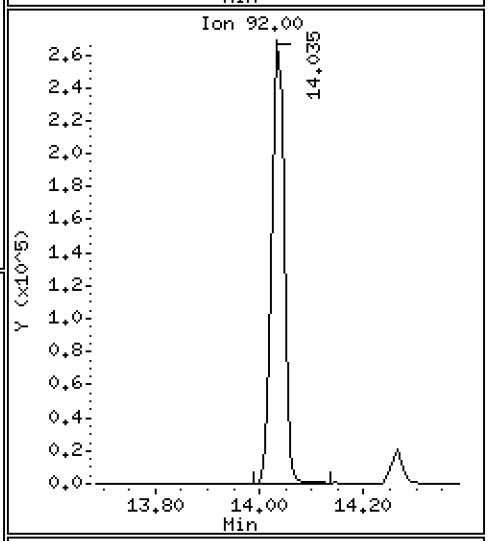


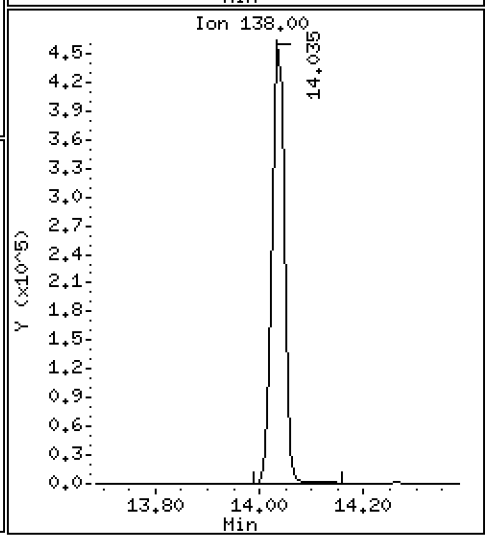












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

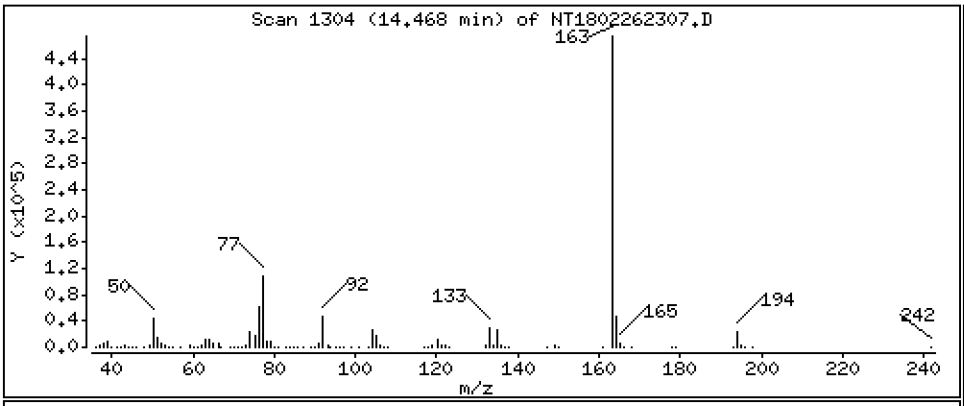
Operator: VTS

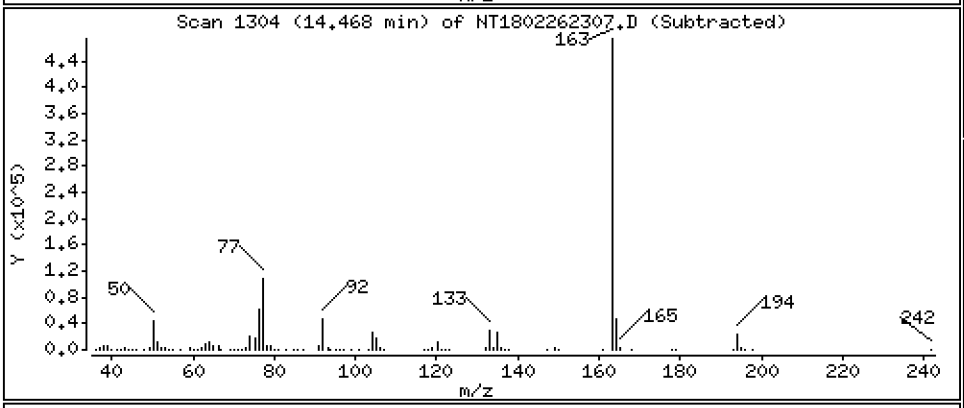
Column phase: ZB-5msi

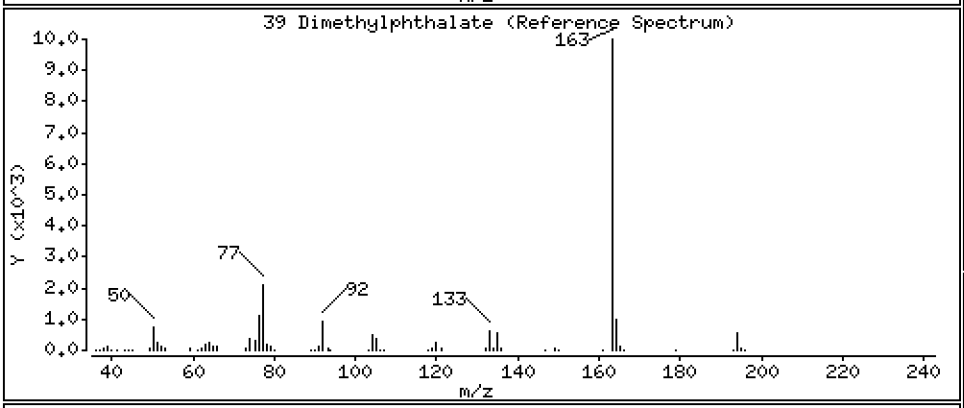
Column diameter: 0.25

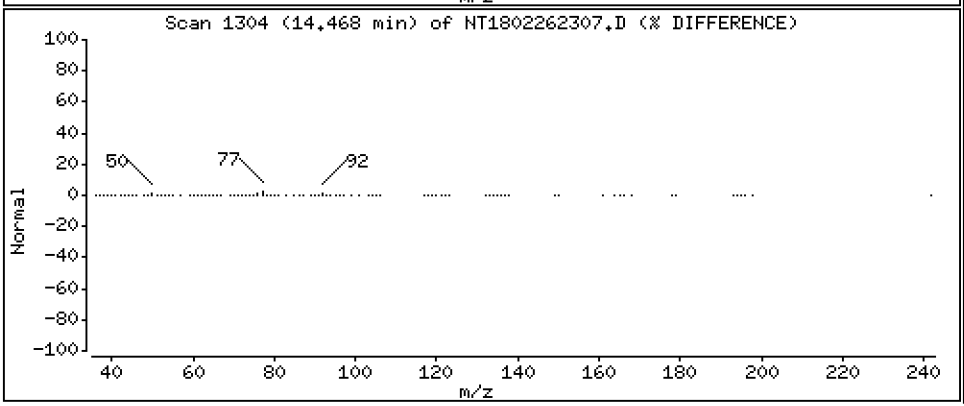
39 Dimethylphthalate

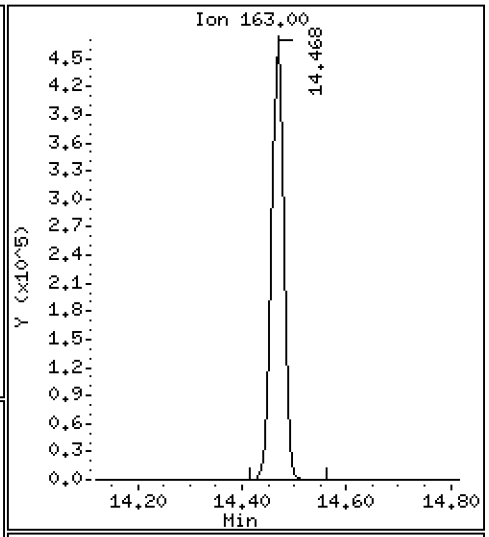
Concentration: 3.917 ug/mL

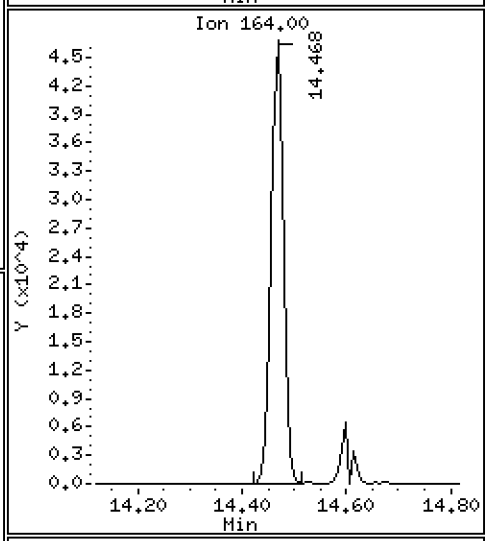


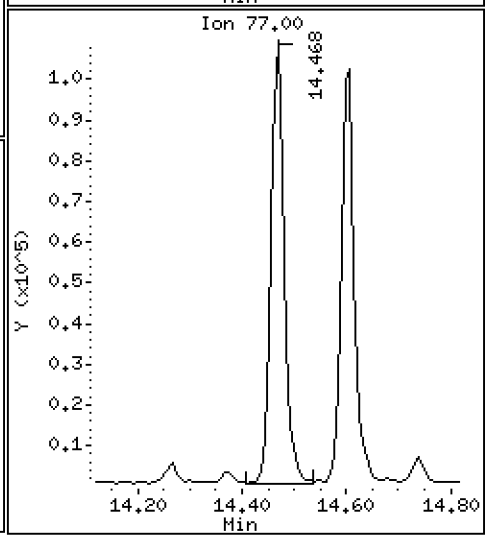












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

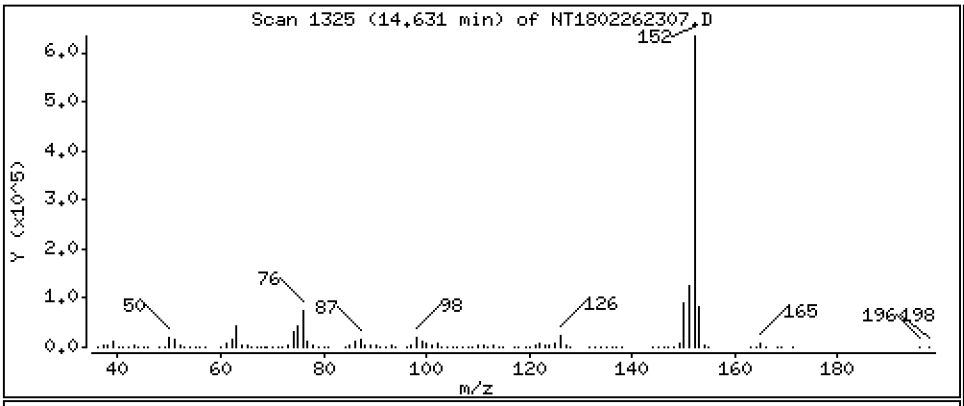
Operator: VTS

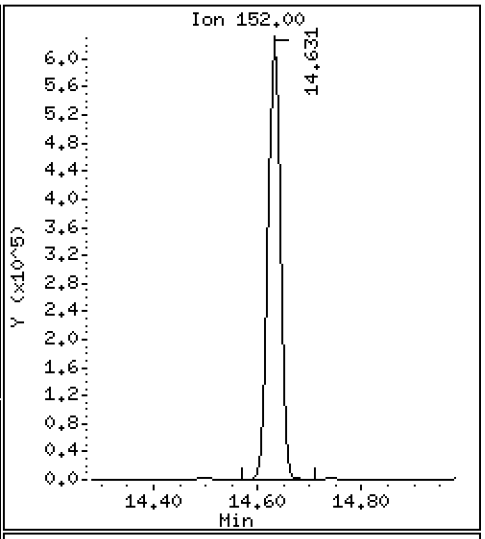
Column phase: ZB-5msi

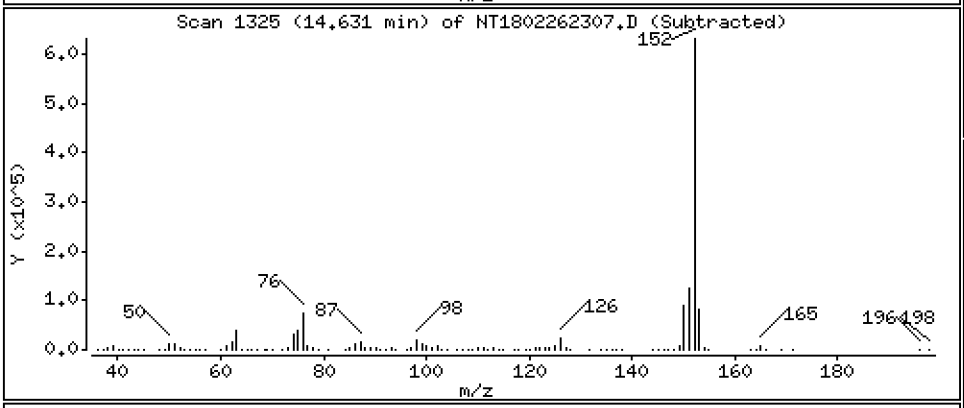
Column diameter: 0.25

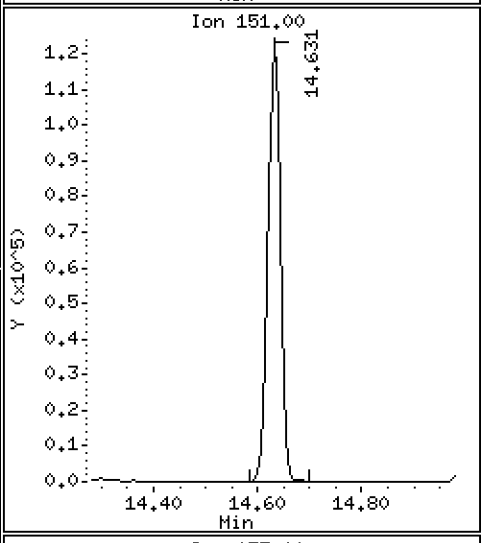
40 Acenaphthylene

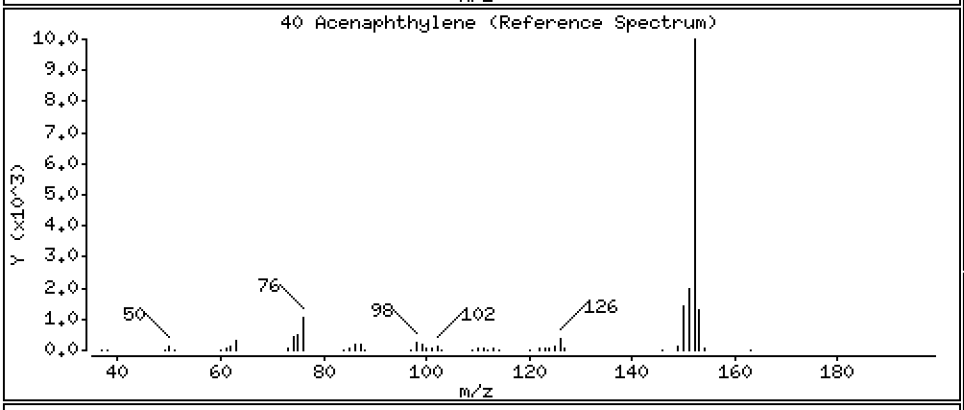
Concentration: 3.398 ug/mL

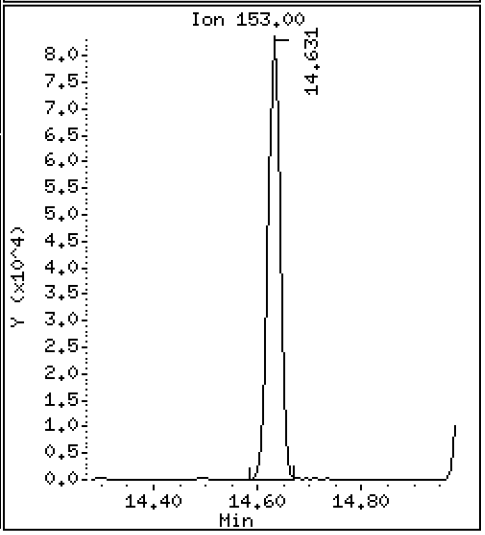


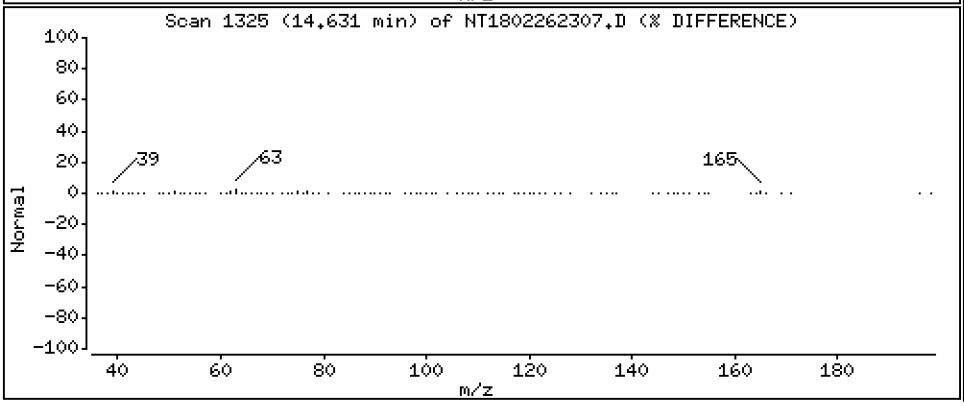












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262307.D

Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

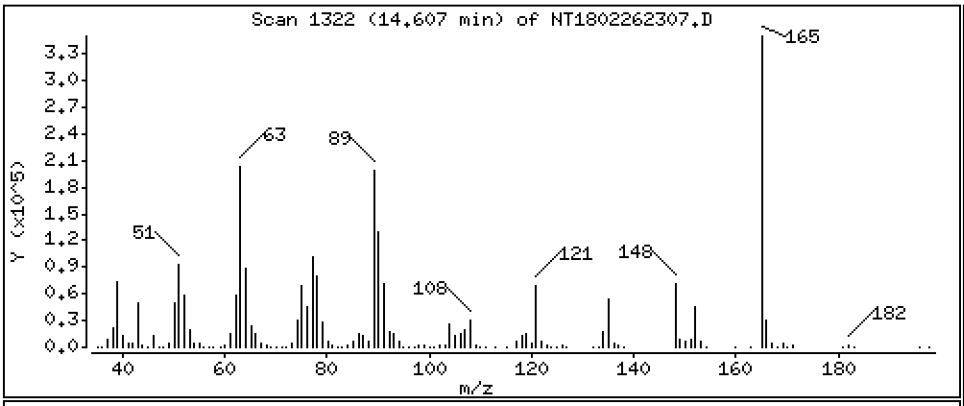
Operator: VTS

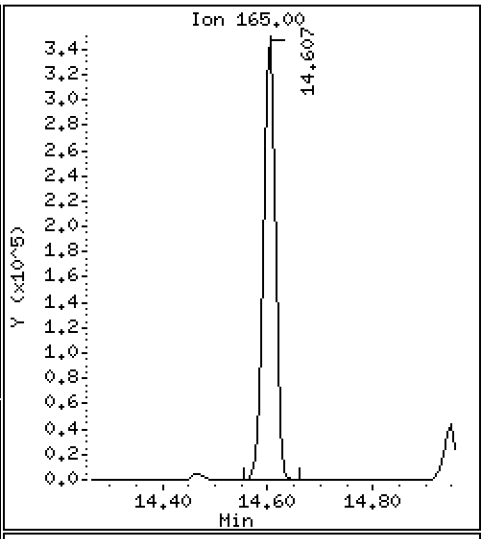
Column phase: ZB-5msi

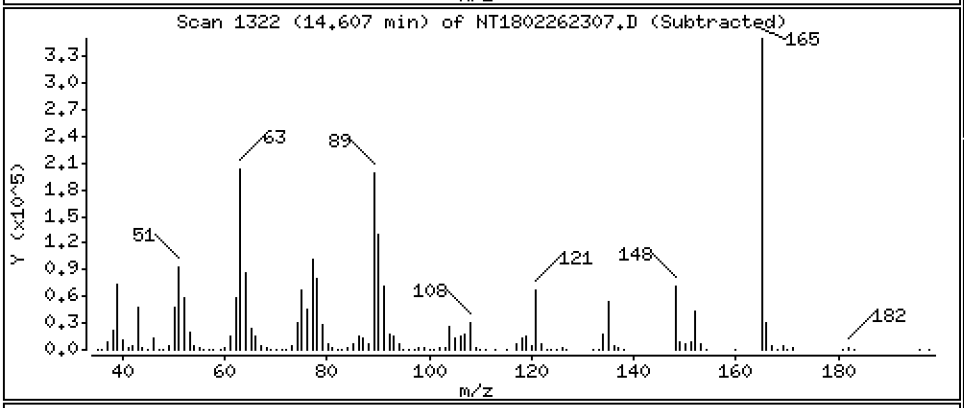
Column diameter: 0.25

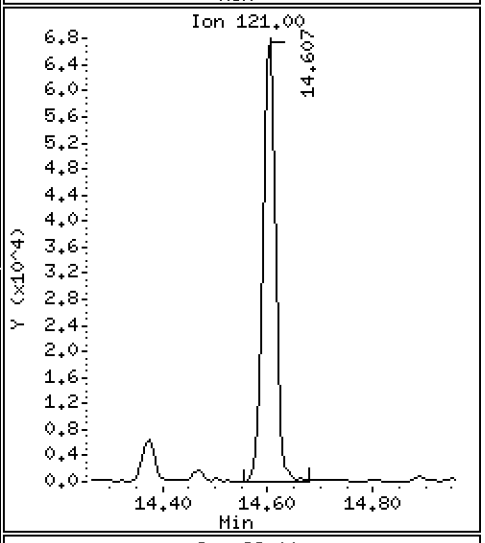
41 2,6-Dinitrotoluene

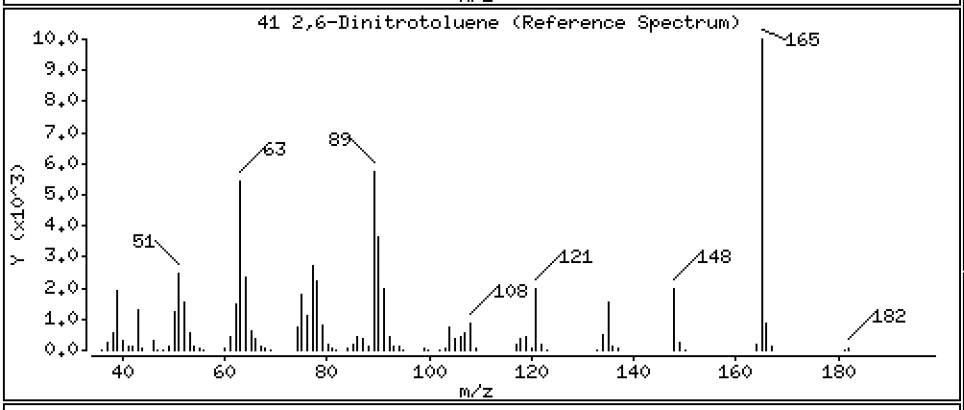
Concentration: 12.53 ug/mL

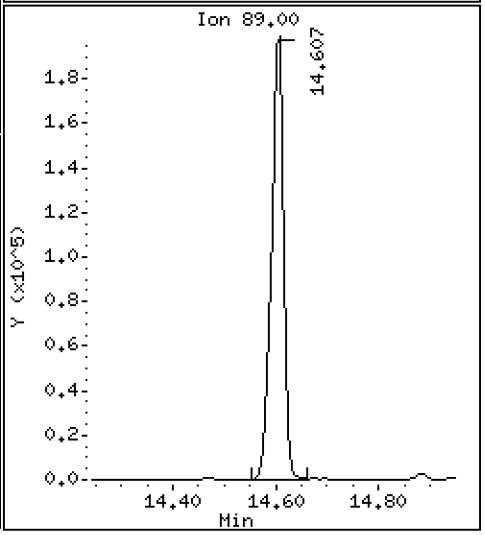


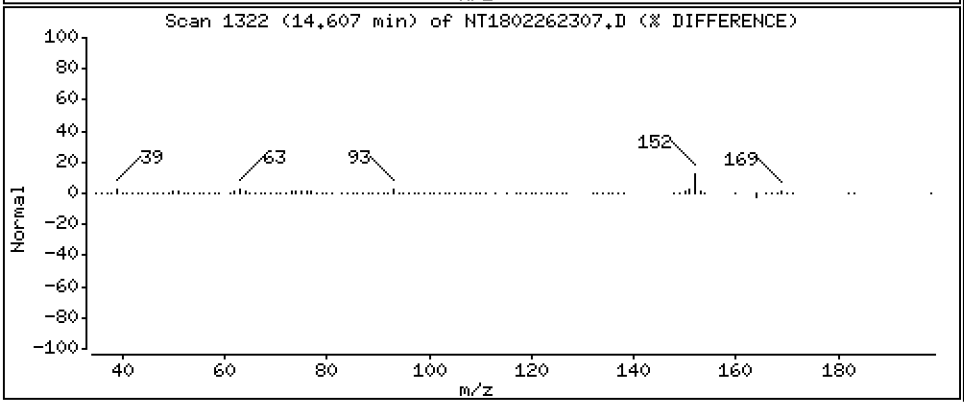












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

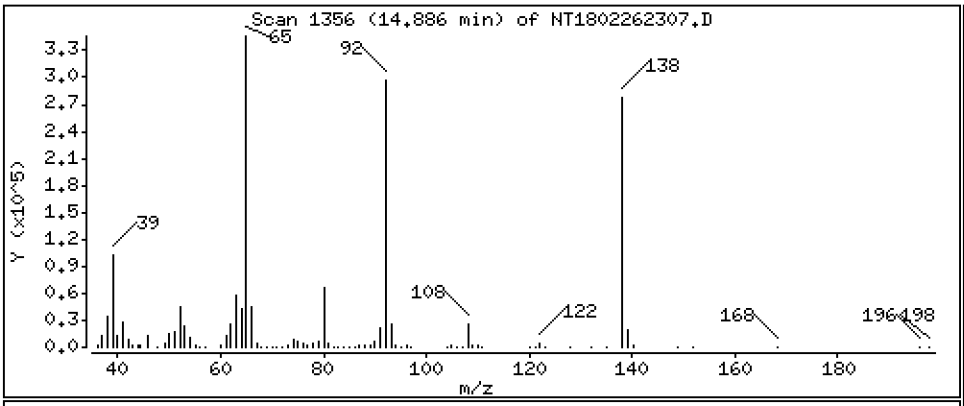
Operator: VTS

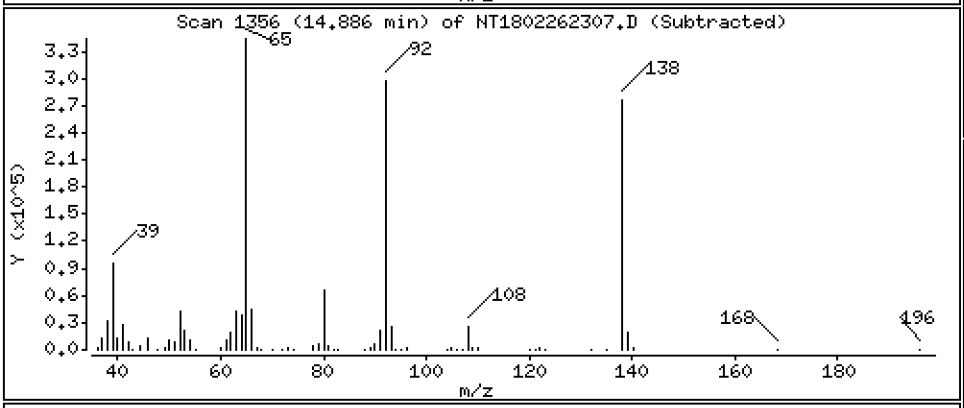
Column phase: ZB-5msi

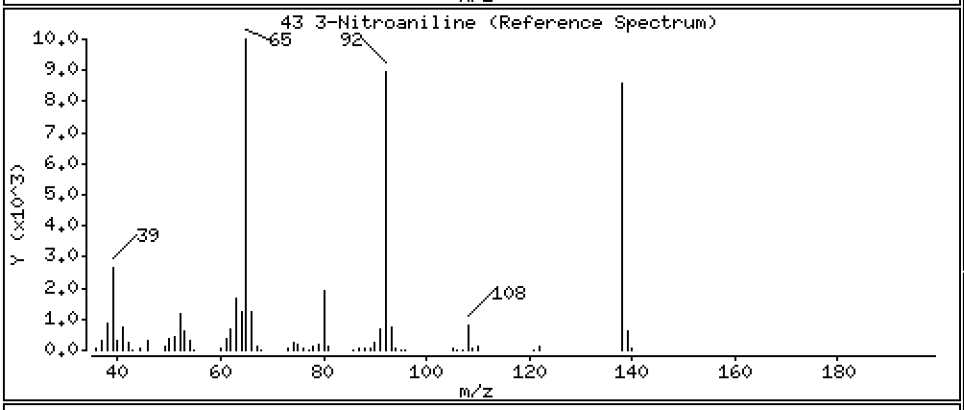
Column diameter: 0.25

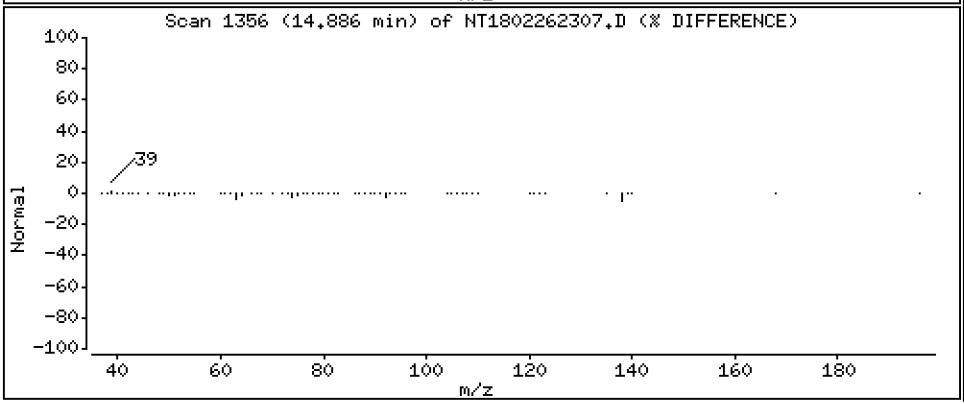
43 3-Nitroaniline

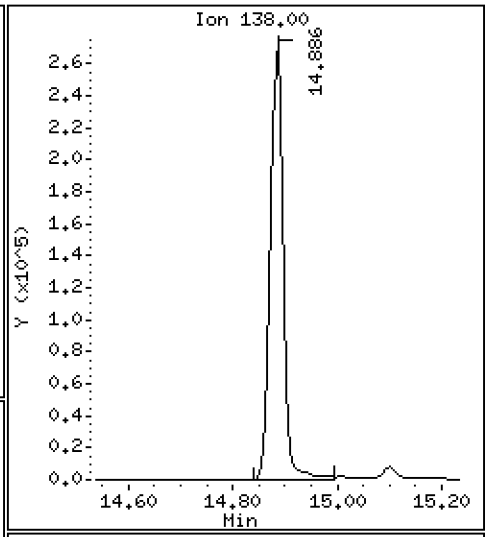
Concentration: 8.751 ug/mL

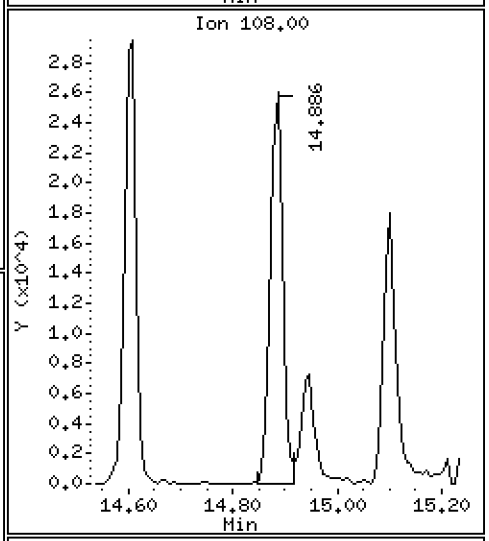


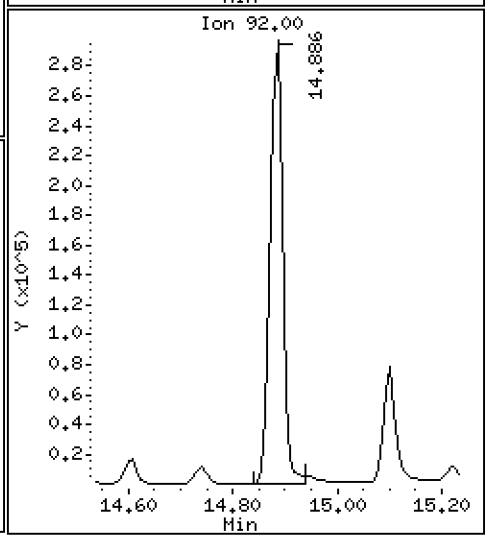












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

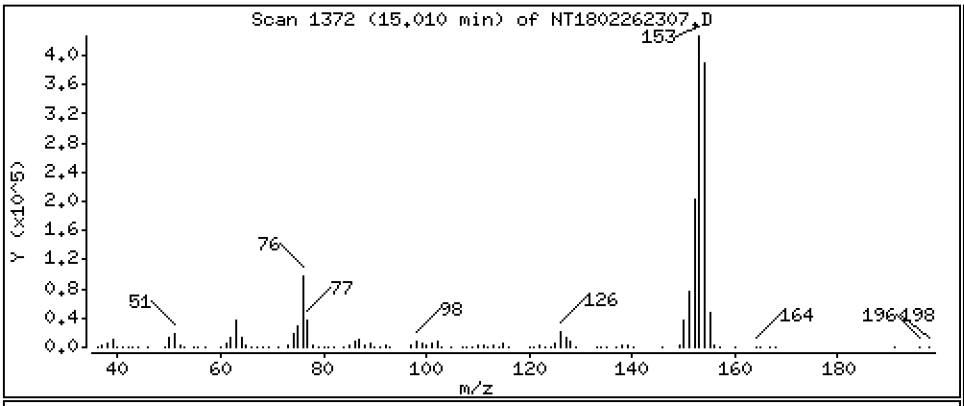
Operator: VTS

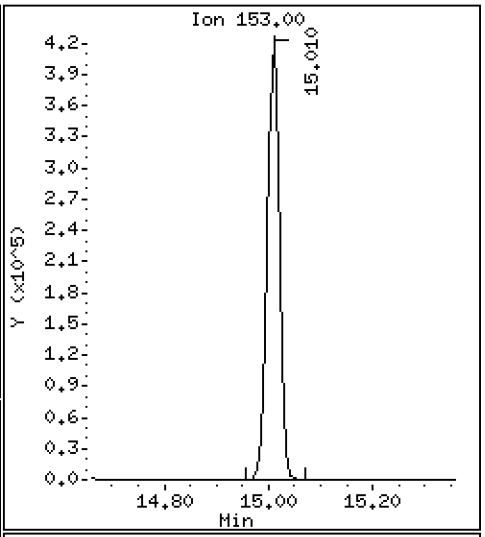
Column phase: ZB-5msi

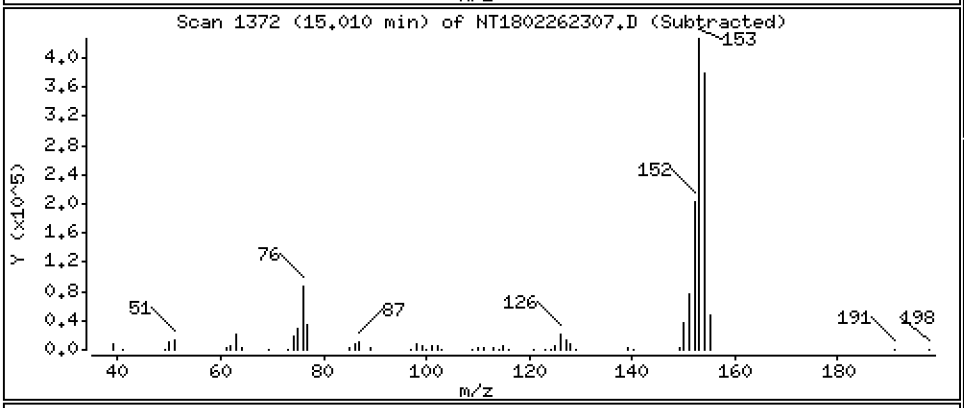
Column diameter: 0.25

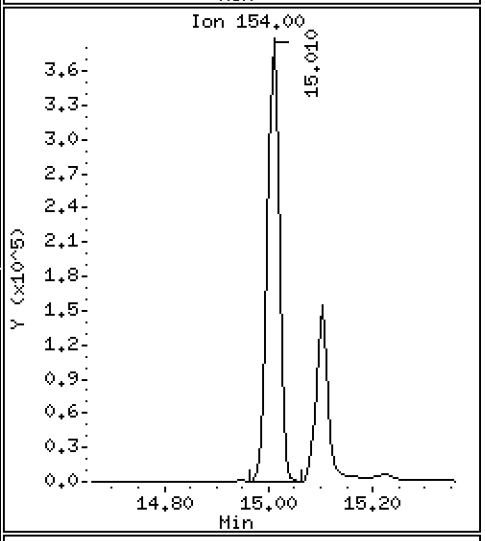
44 Acenaphthene

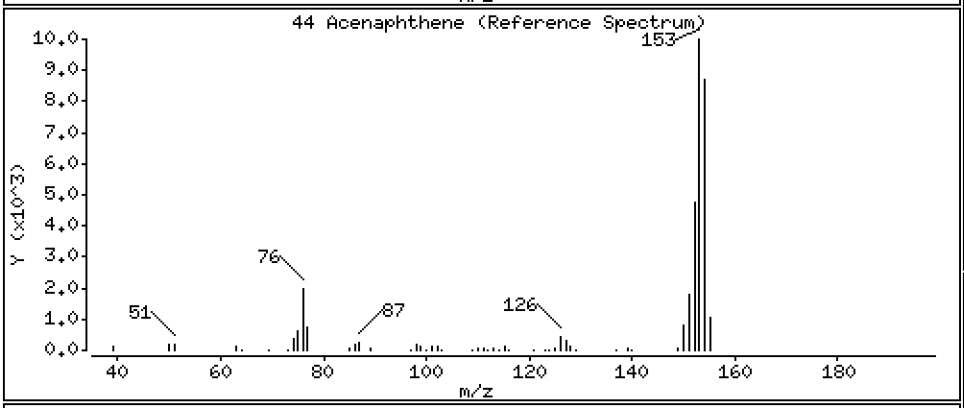
Concentration: 3.494 ug/mL

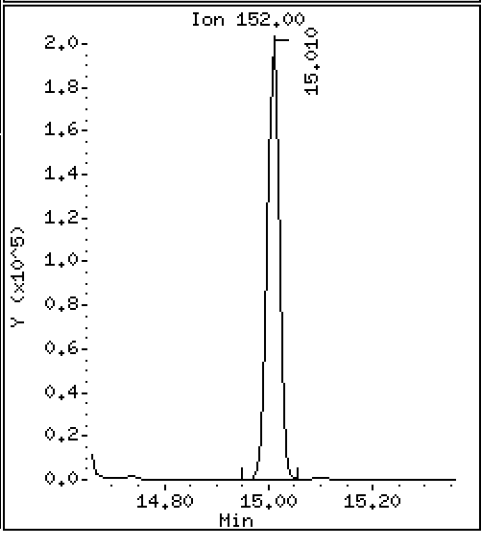


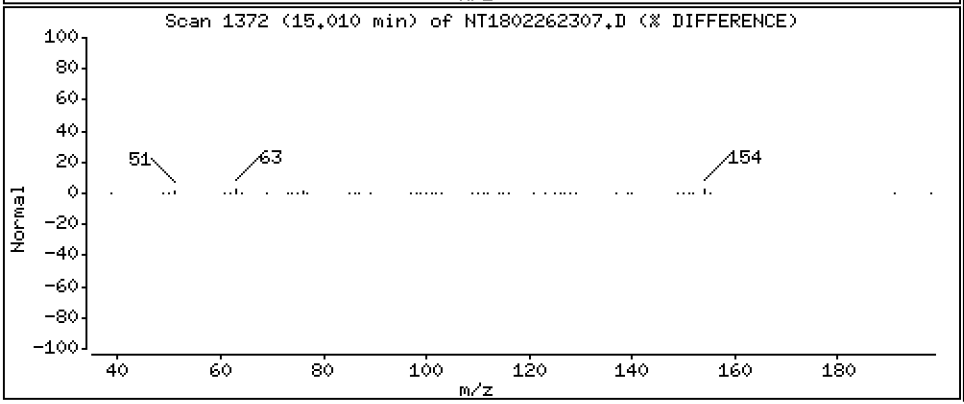












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

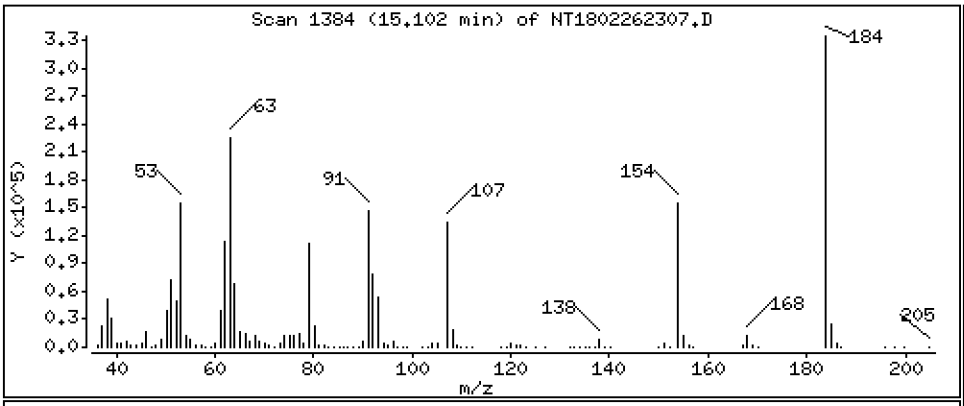
Operator: VTS

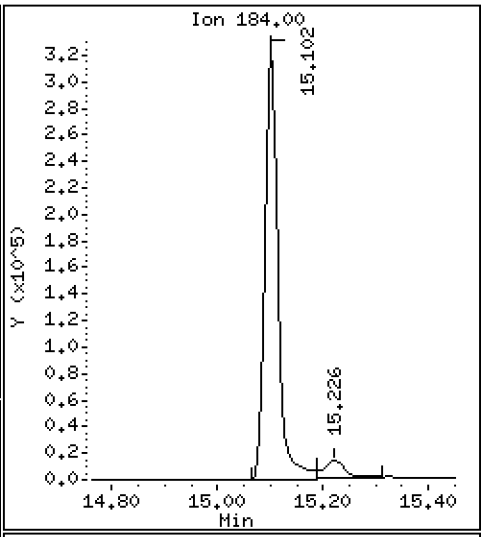
Column phase: ZB-5msi

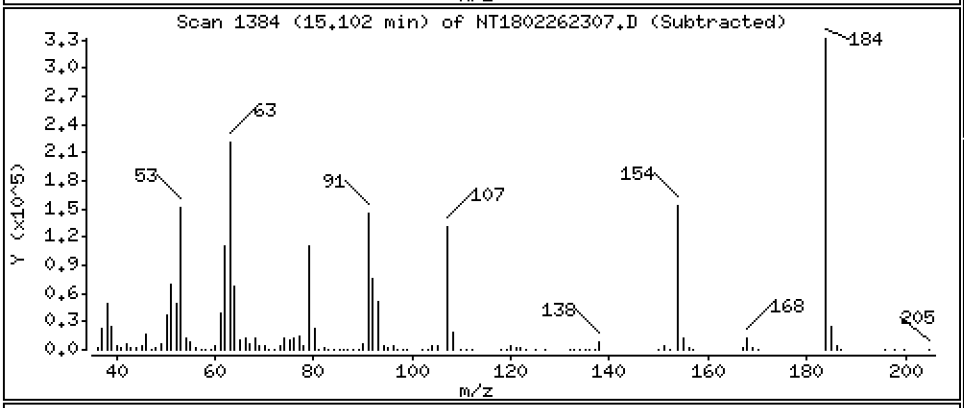
Column diameter: 0.25

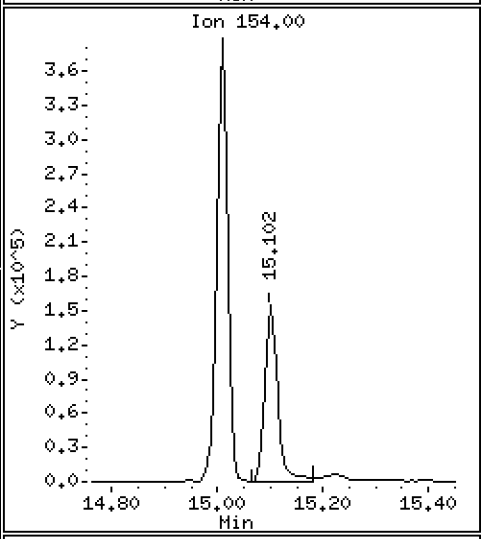
45 2,4-Dinitrophenol

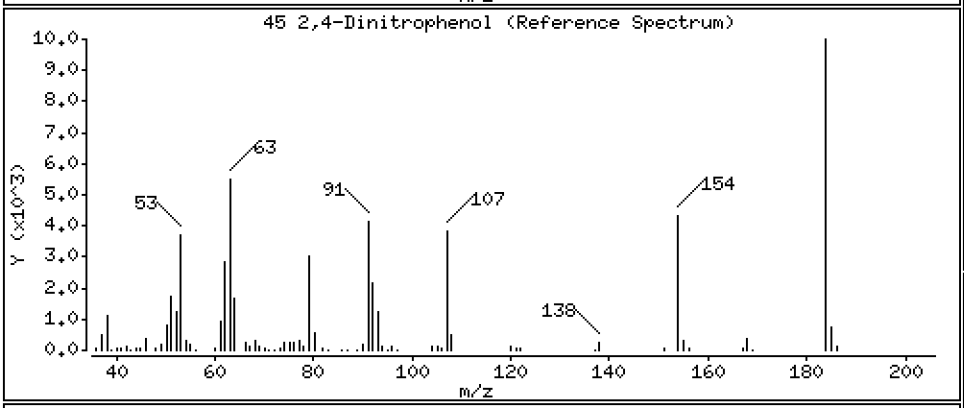
Concentration: 25.44 ug/mL

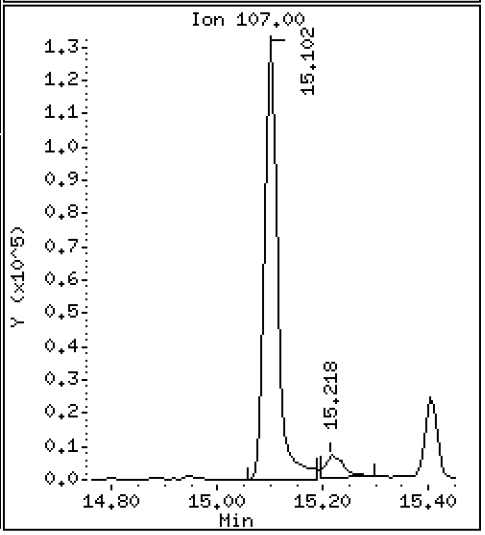


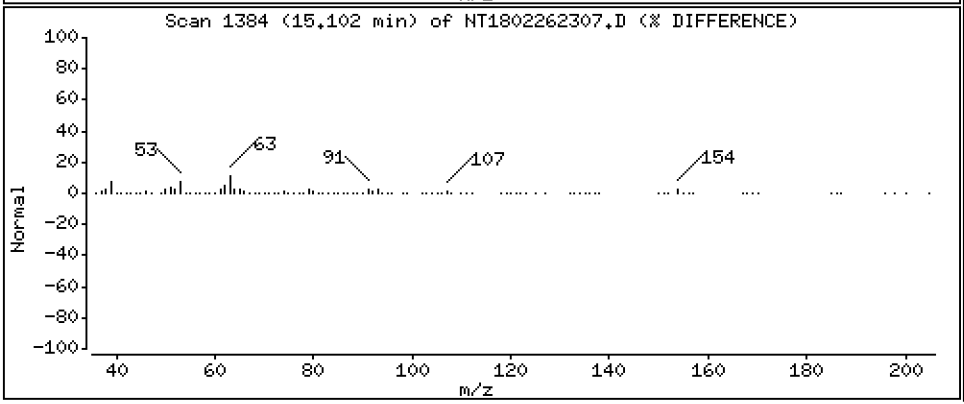












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

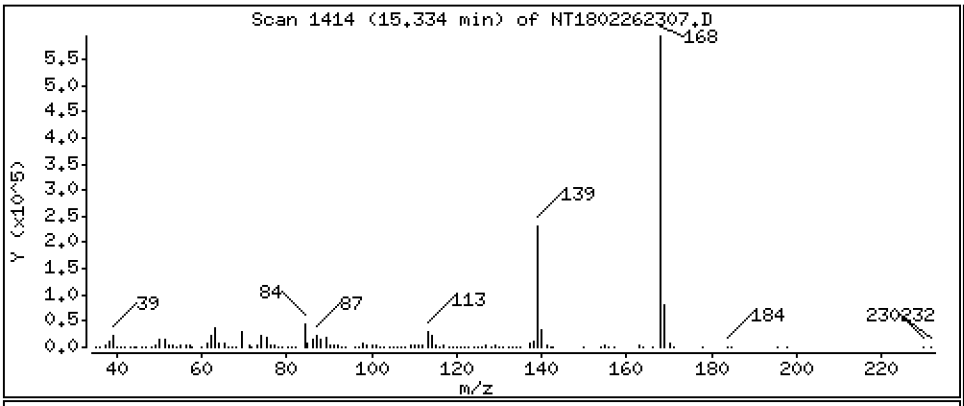
Operator: VTS

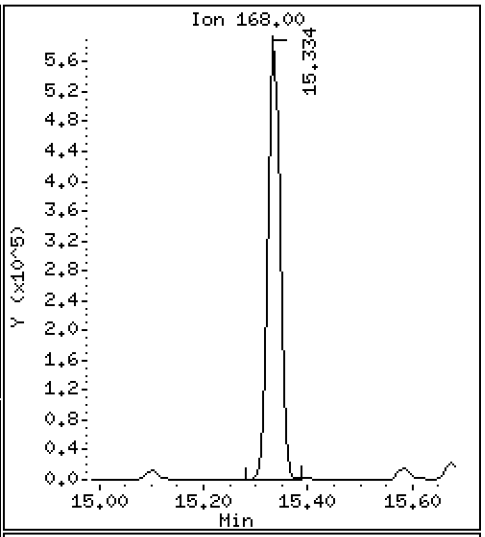
Column phase: ZB-5msi

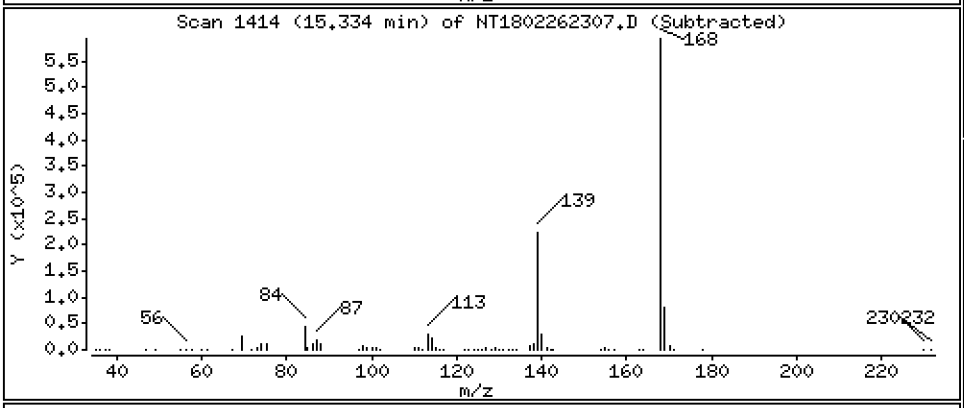
Column diameter: 0.25

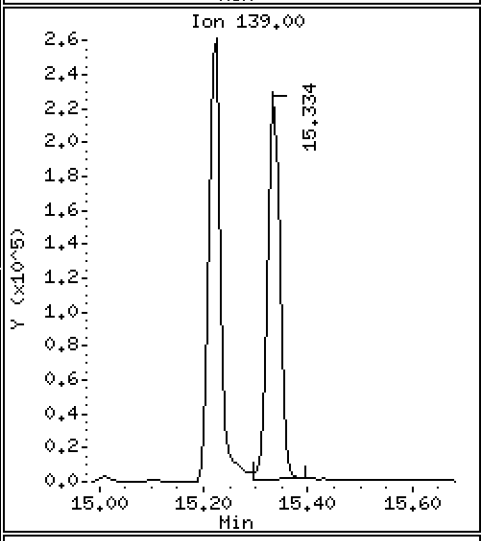
46 Dibenzofuran

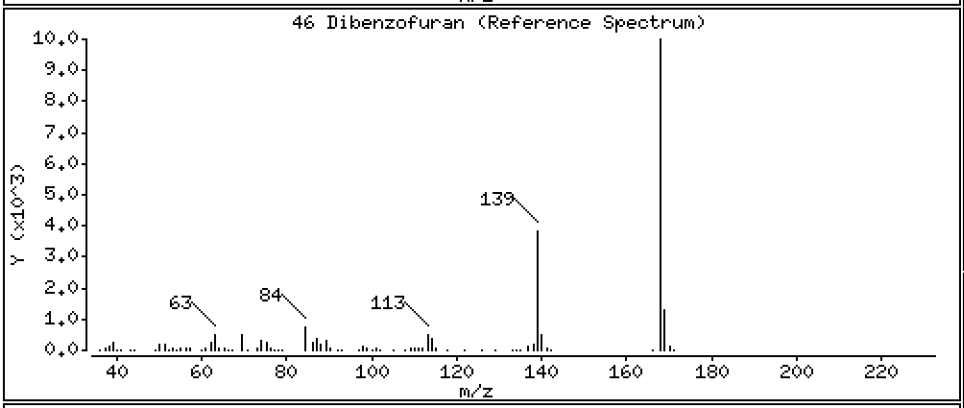
Concentration: 3.377 ug/mL

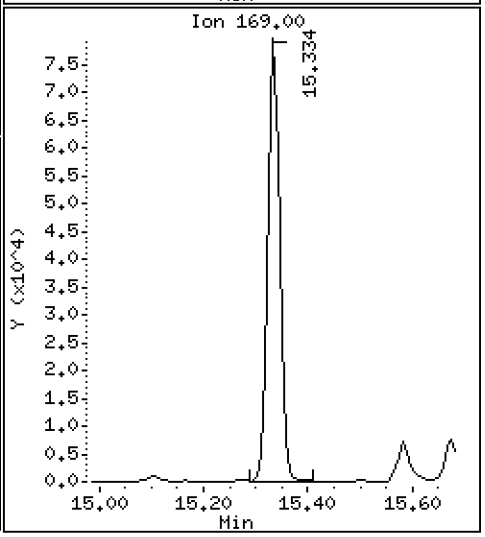


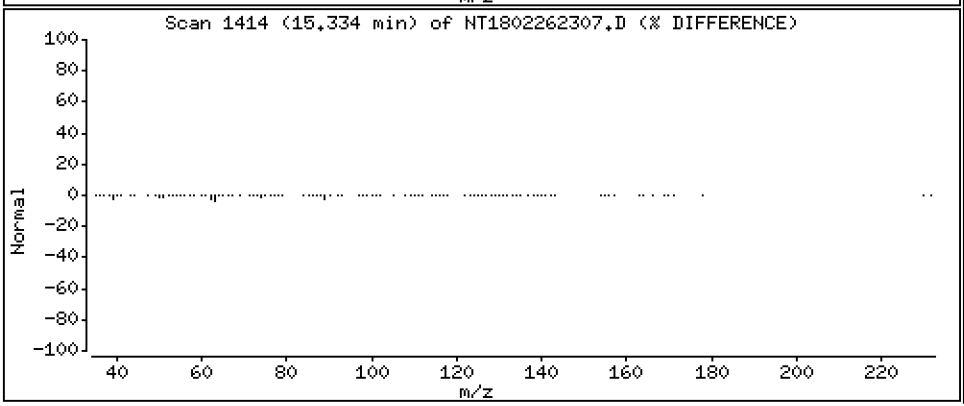












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

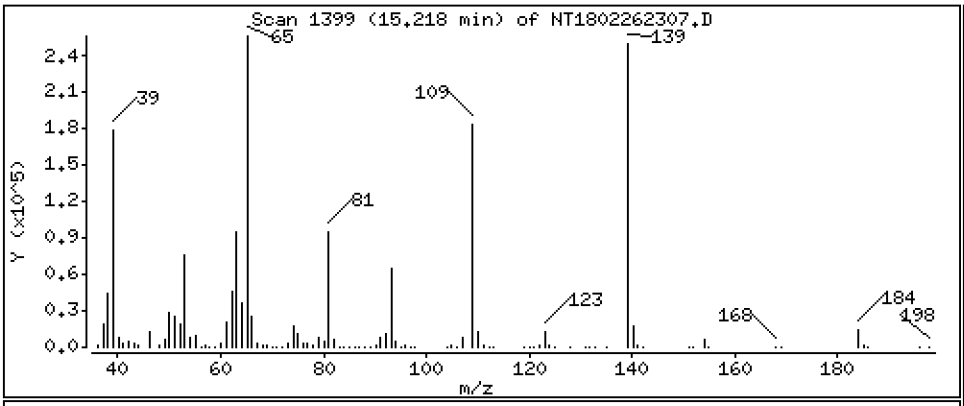
Operator: VTS

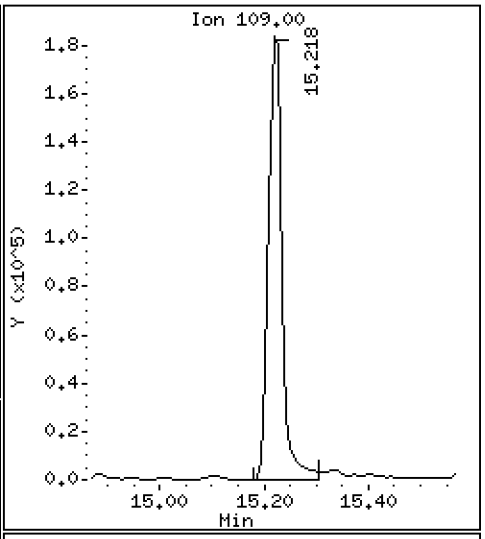
Column phase: ZB-5msi

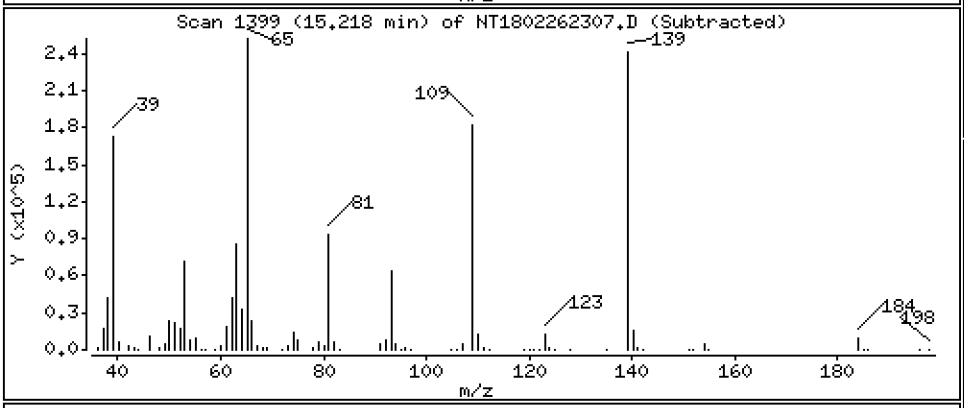
Column diameter: 0.25

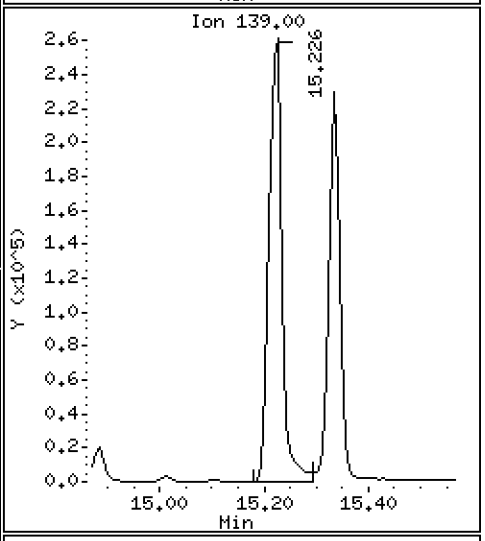
47 4-Nitrophenol

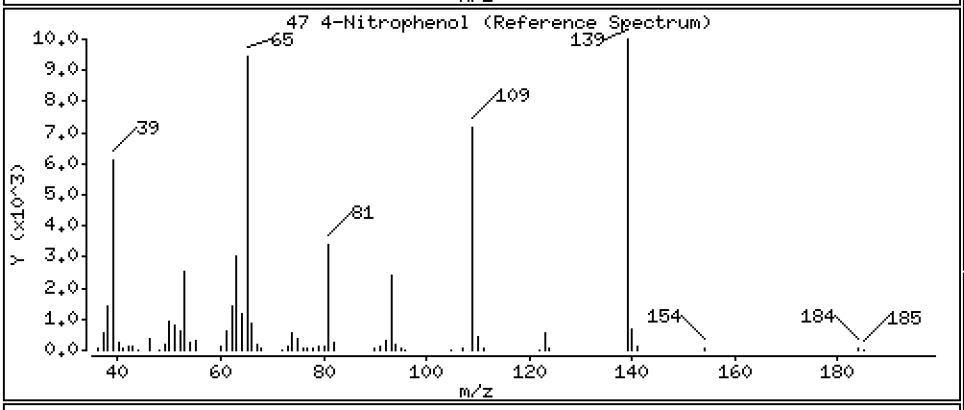
Concentration: 15.68 ug/mL

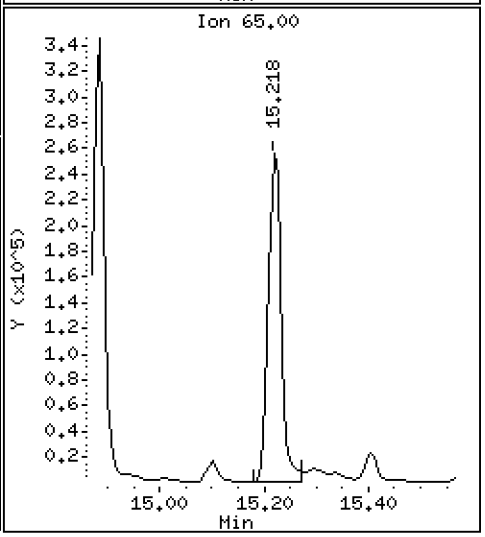


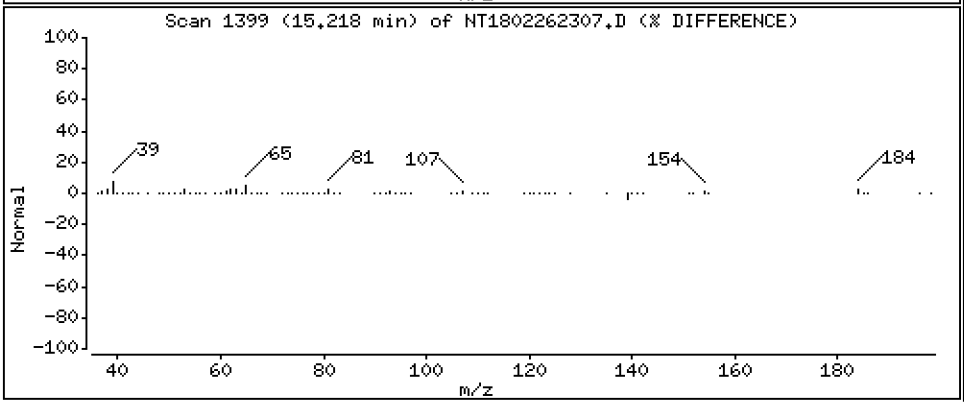












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

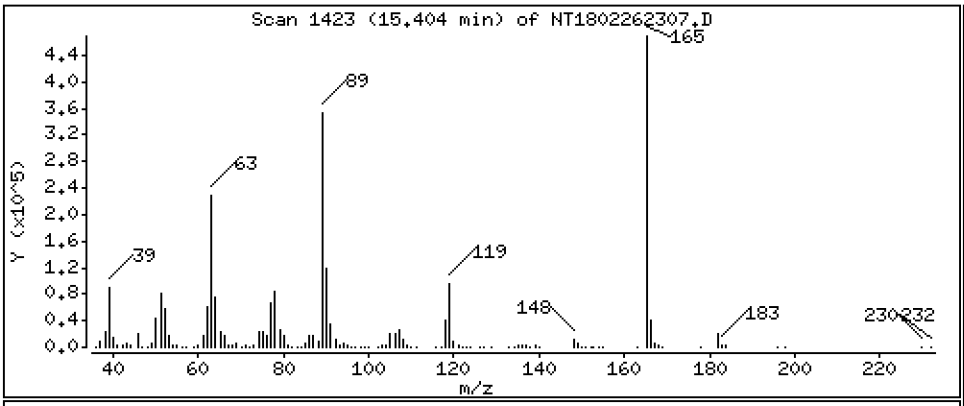
Operator: VTS

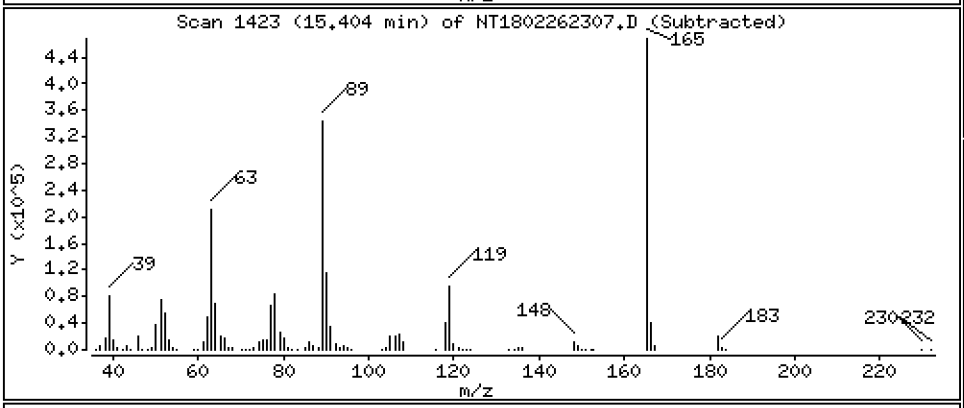
Column phase: ZB-5msi

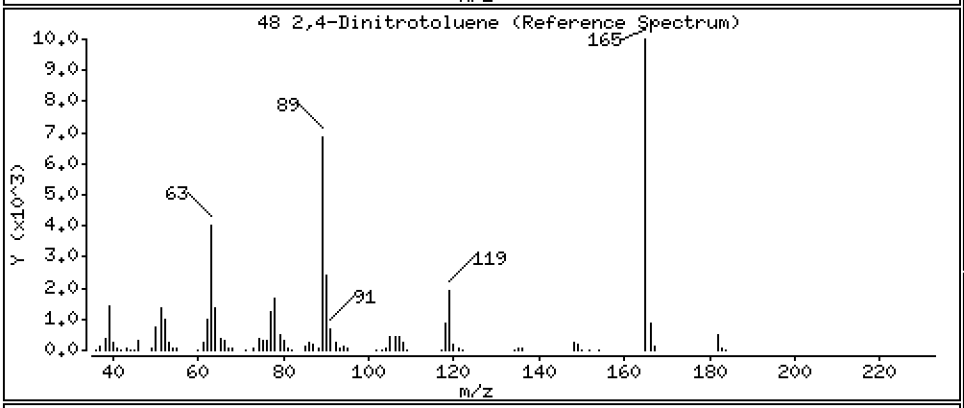
Column diameter: 0.25

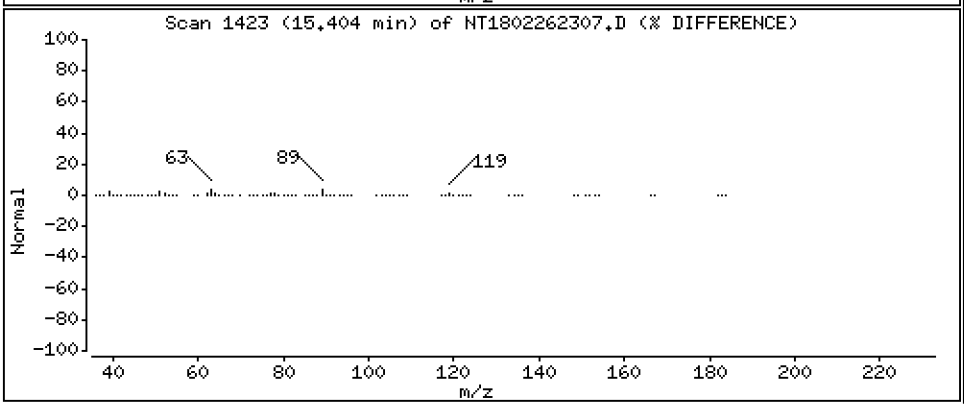
48 2,4-Dinitrotoluene

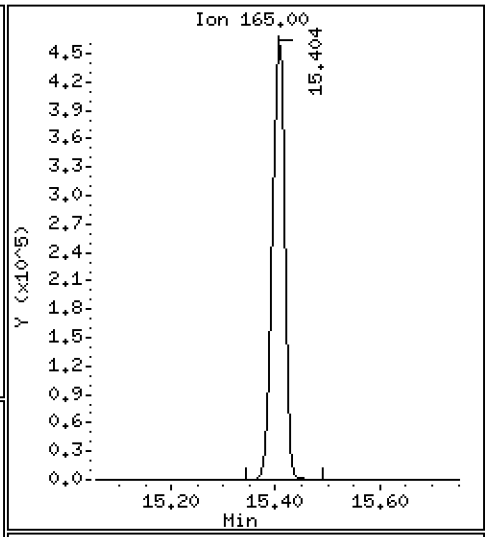
Concentration: 12.58 ug/mL

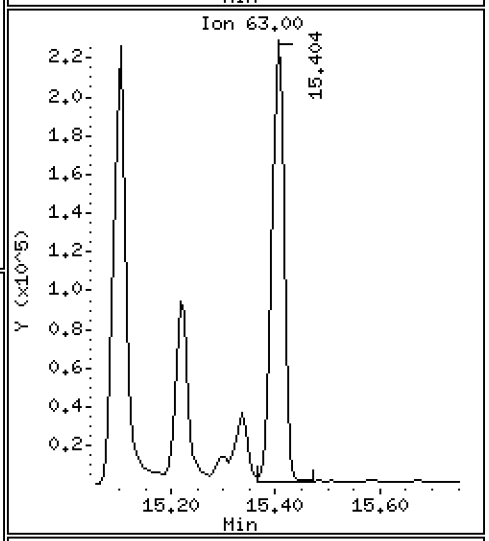


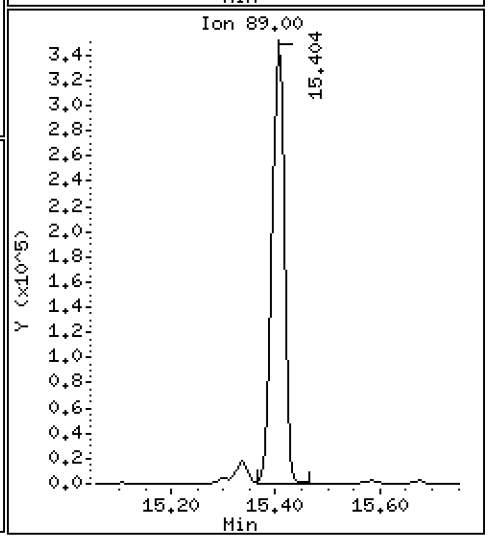












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

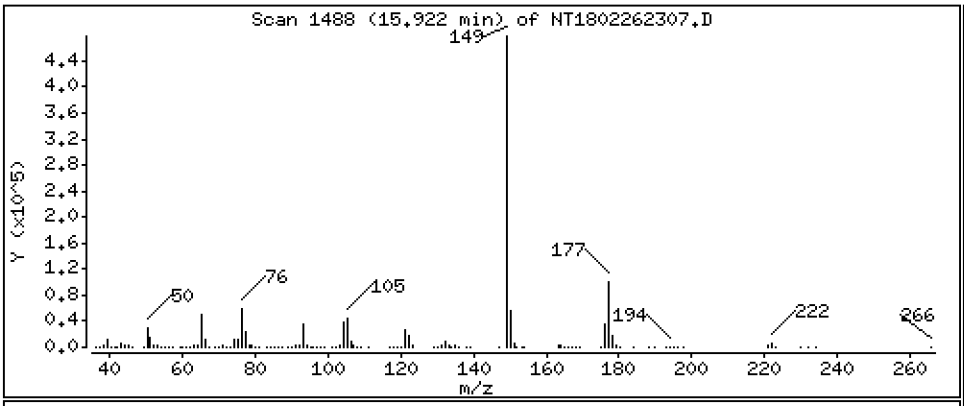
Operator: VTS

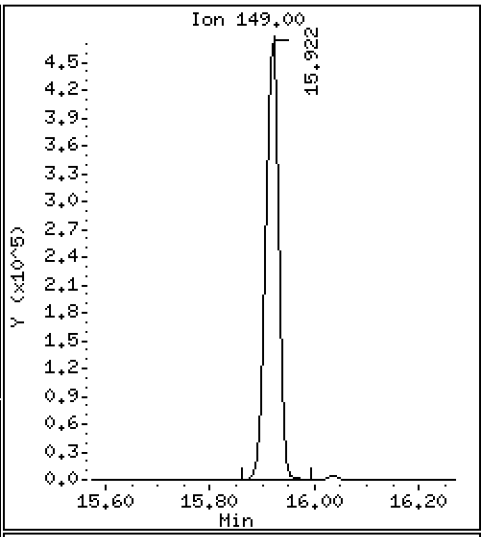
Column phase: ZB-5msi

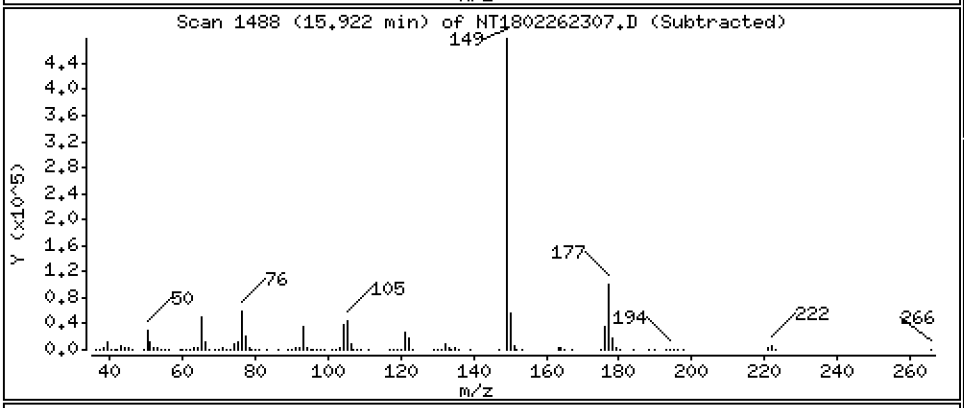
Column diameter: 0.25

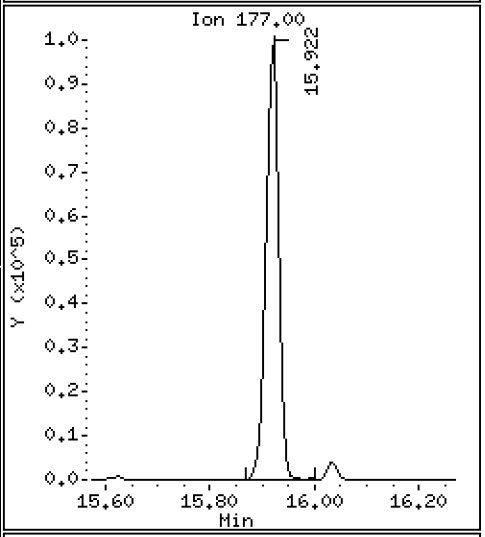
50 Diethylphthalate

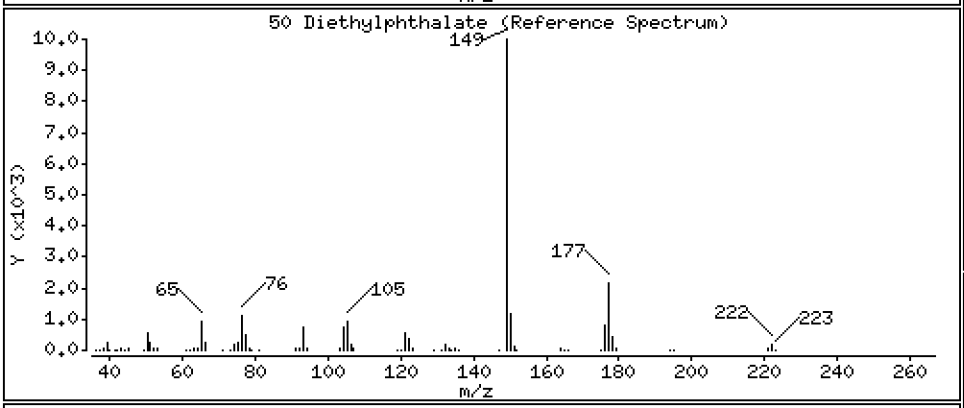
Concentration: 4.654 ug/mL

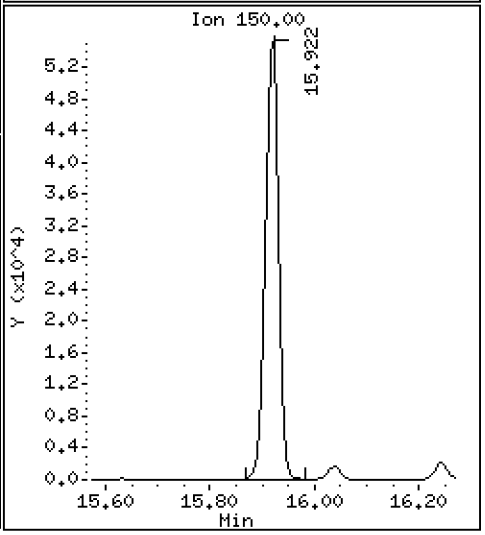


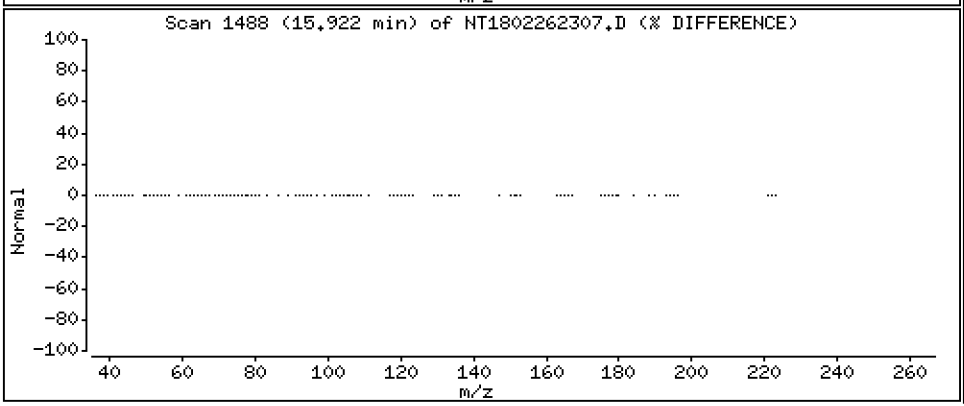












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

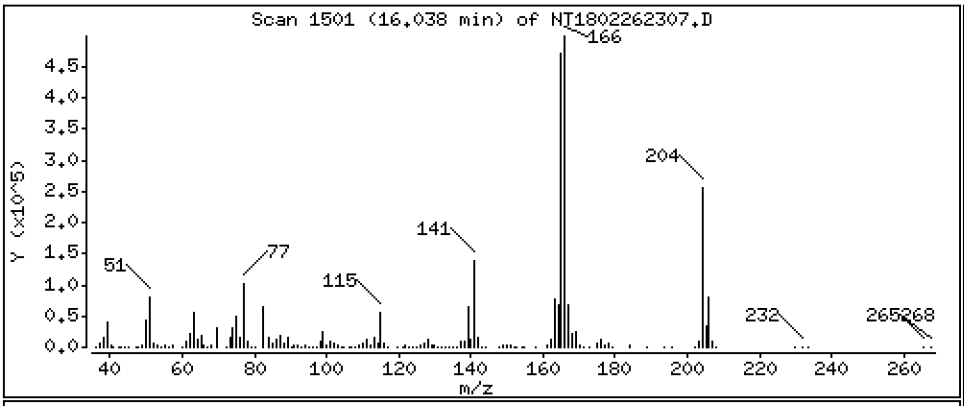
Operator: VTS

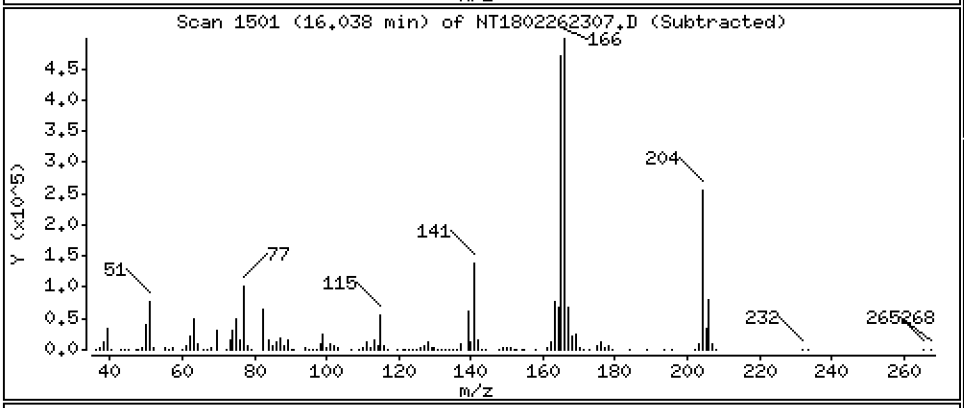
Column phase: ZB-5msi

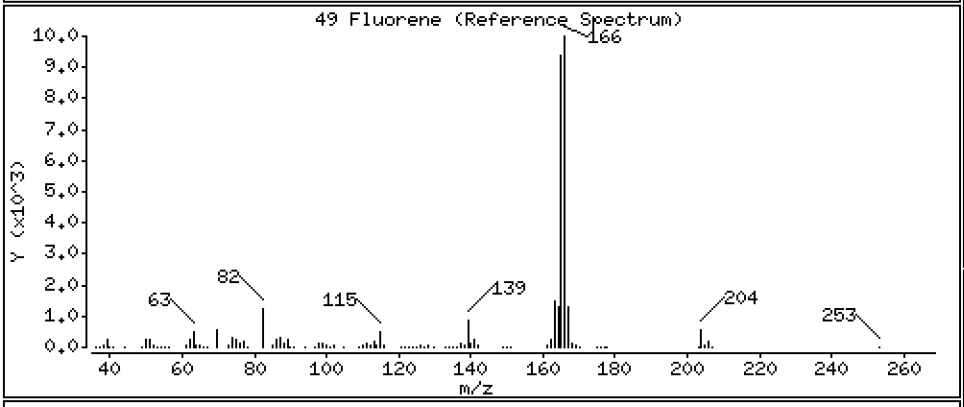
Column diameter: 0.25

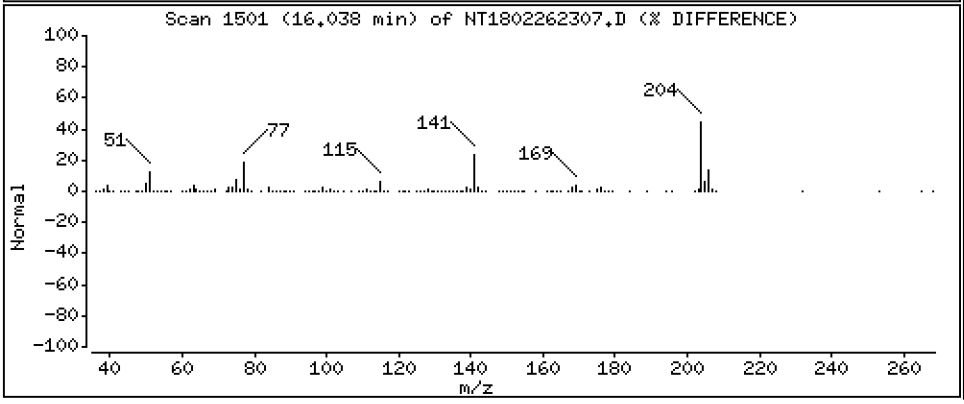
49 Fluorene

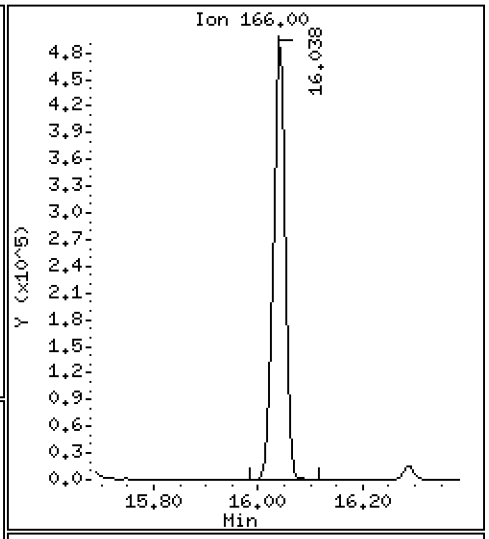
Concentration: 3.627 ug/mL

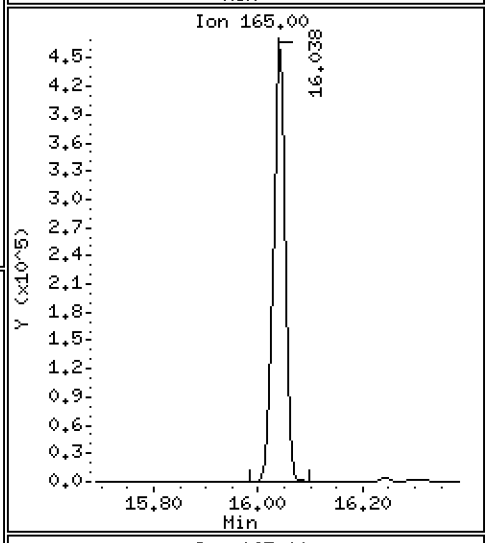


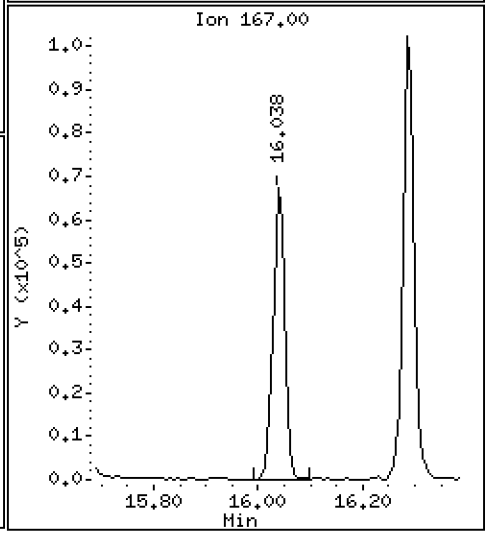












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

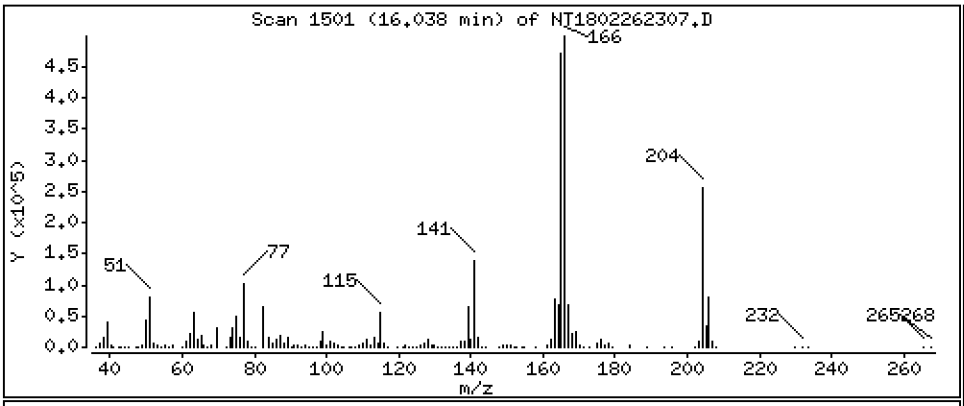
Operator: VTS

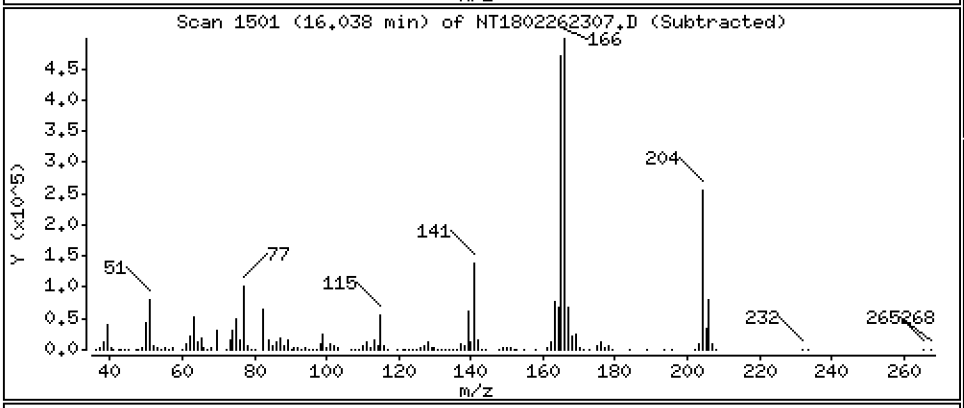
Column phase: ZB-5msi

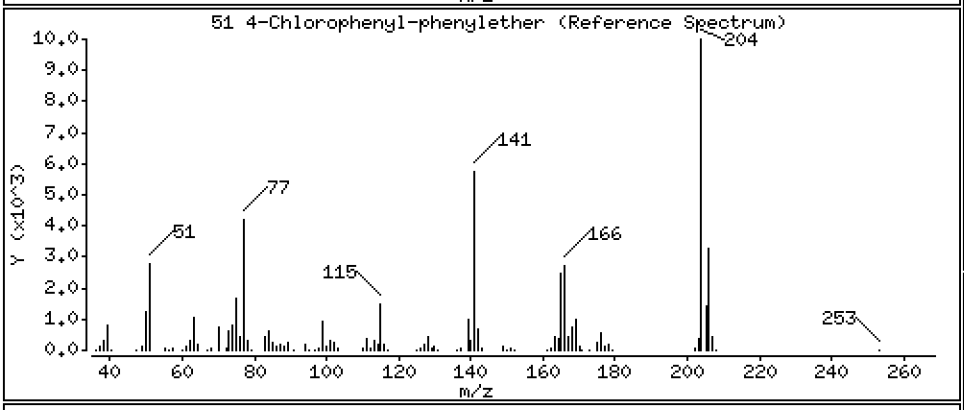
Column diameter: 0.25

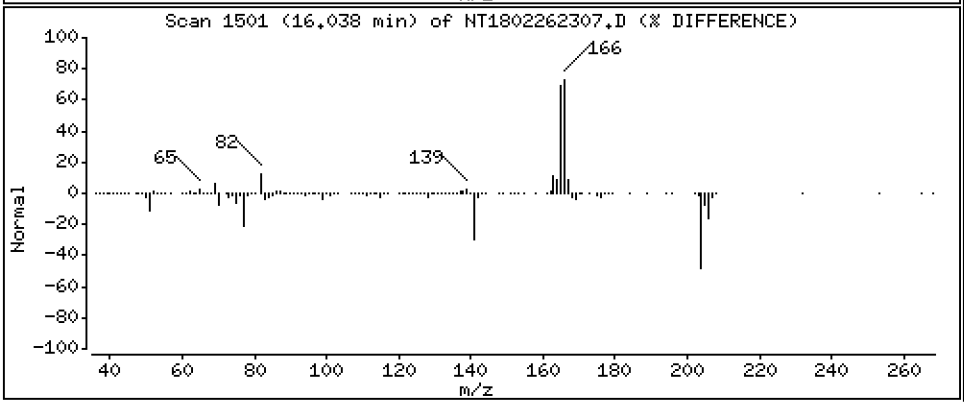
51 4-Chlorophenyl-phenylether

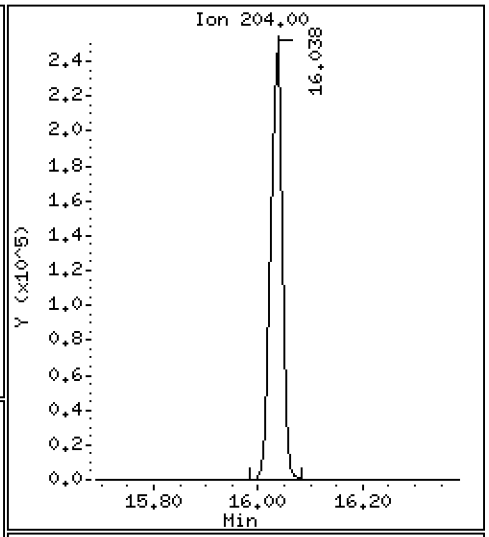
Concentration: 3.810 ug/mL

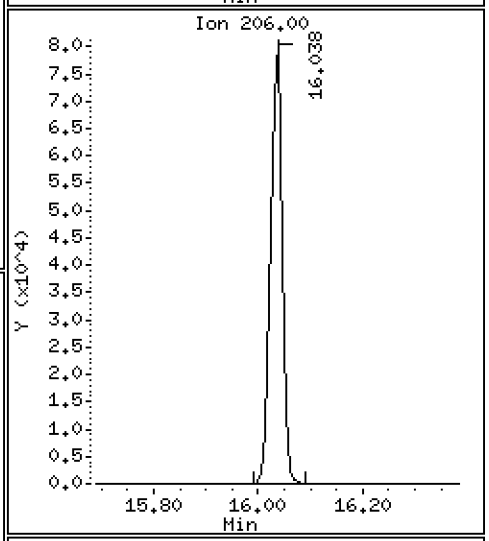


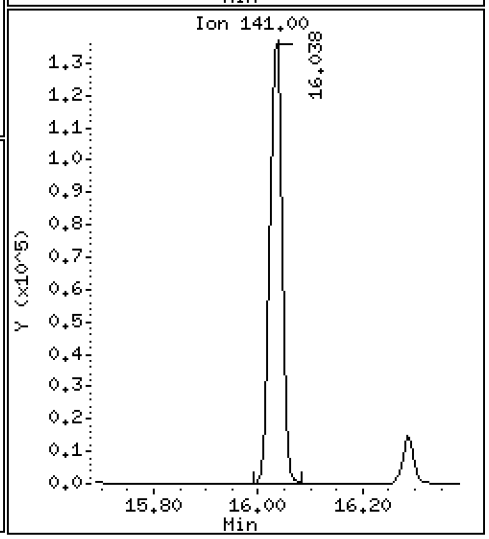












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

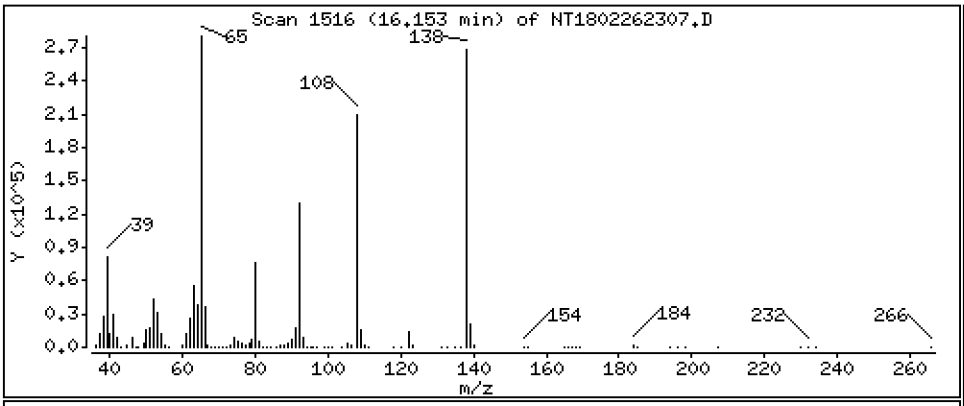
Operator: VTS

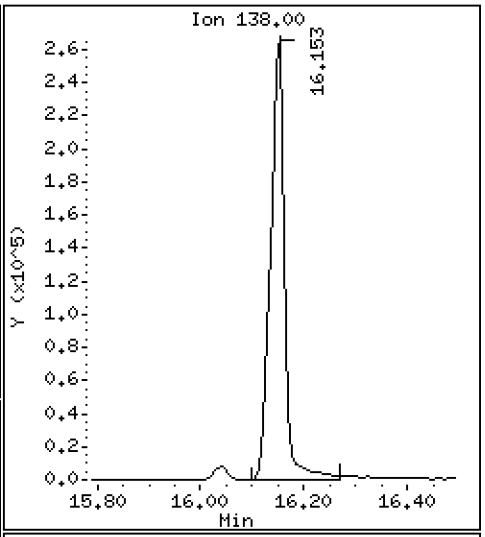
Column phase: ZB-5msi

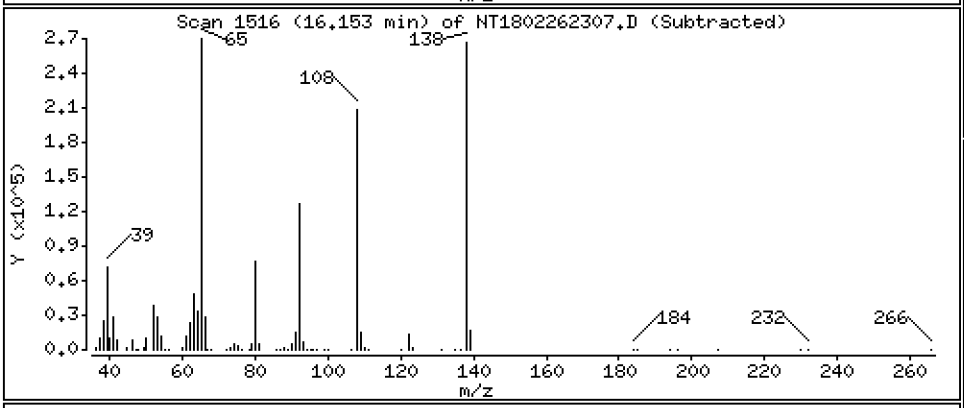
Column diameter: 0.25

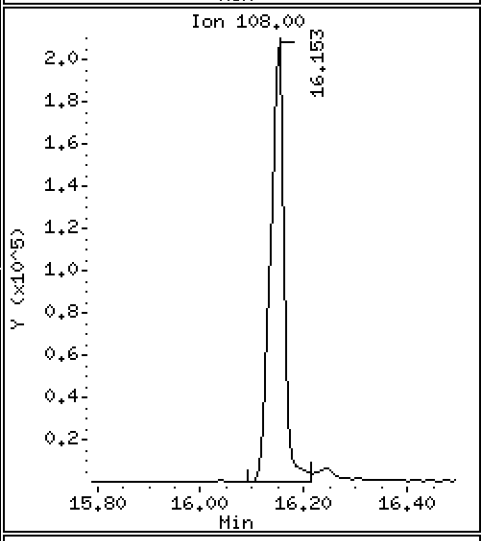
52 4-Nitroaniline

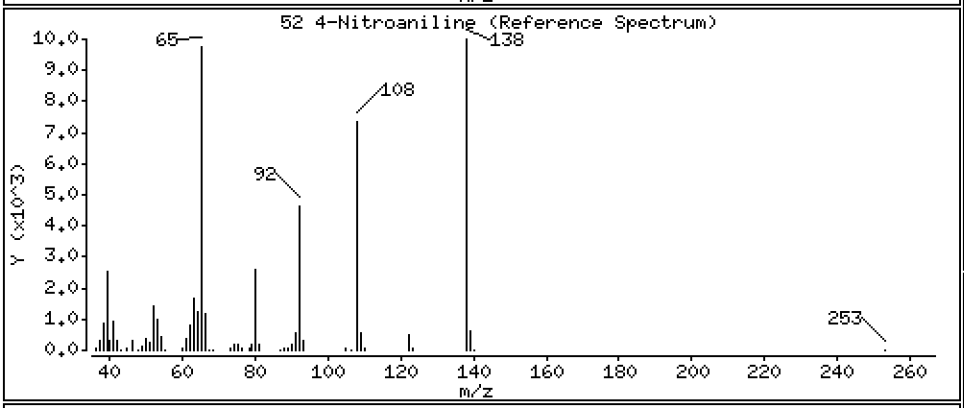
Concentration: 10.15 ug/mL

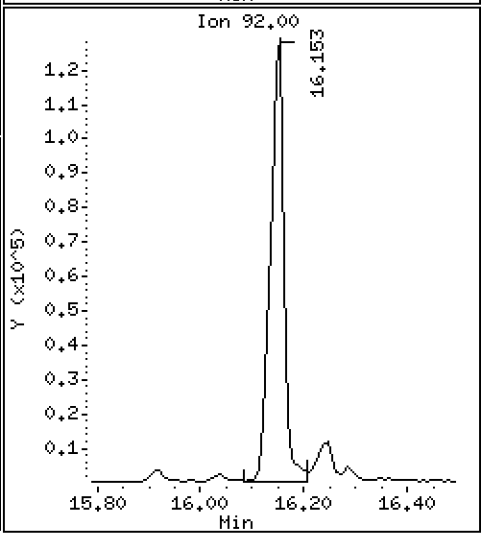


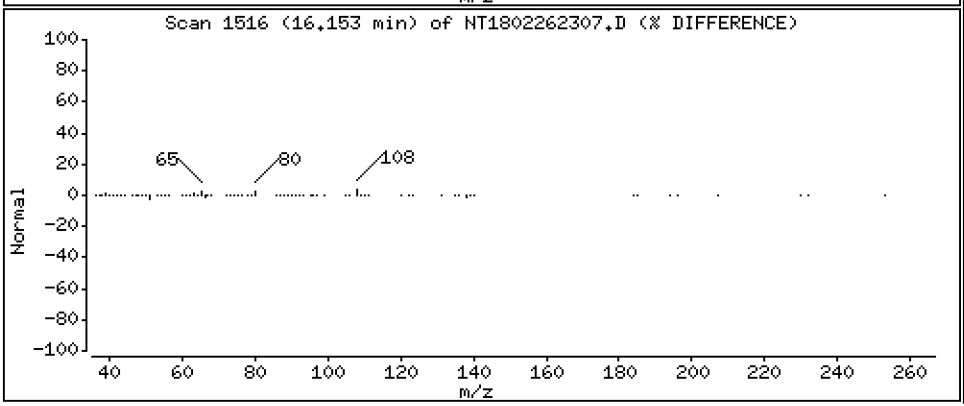












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

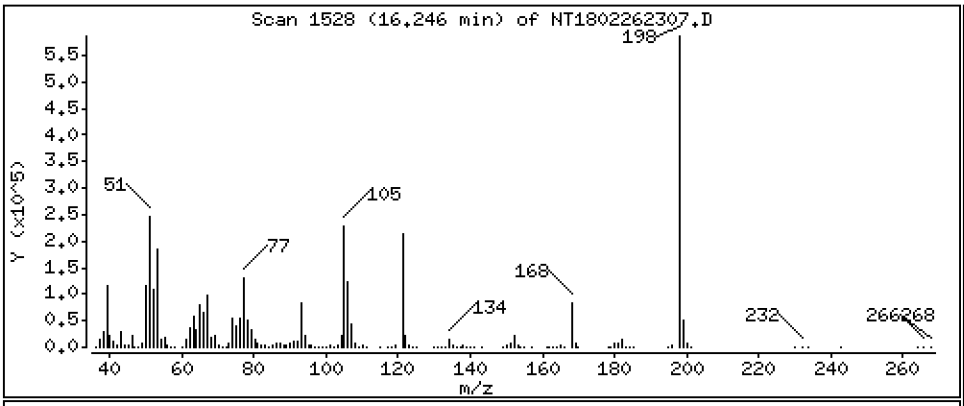
Operator: VTS

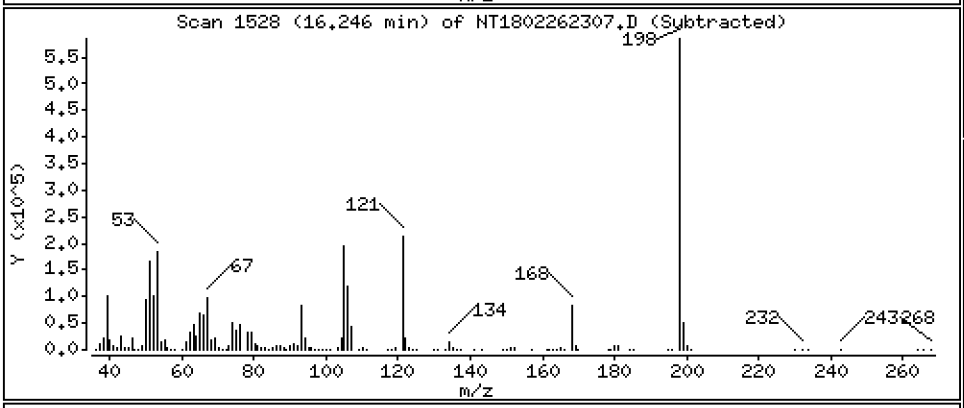
Column phase: ZB-5msi

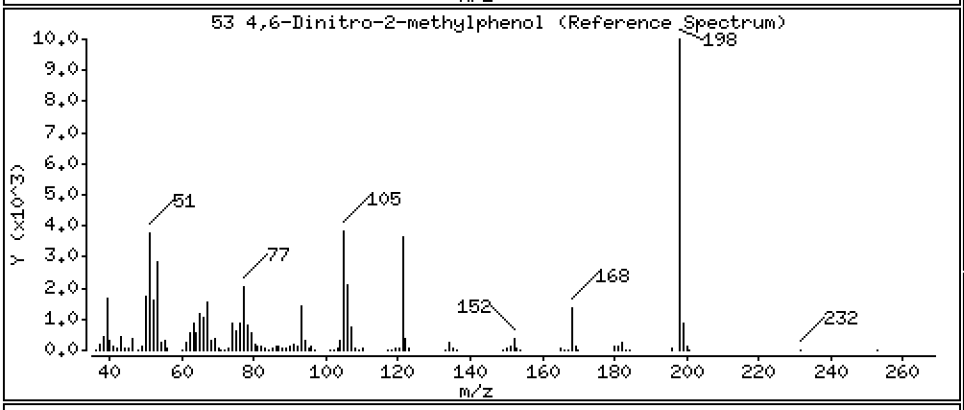
Column diameter: 0.25

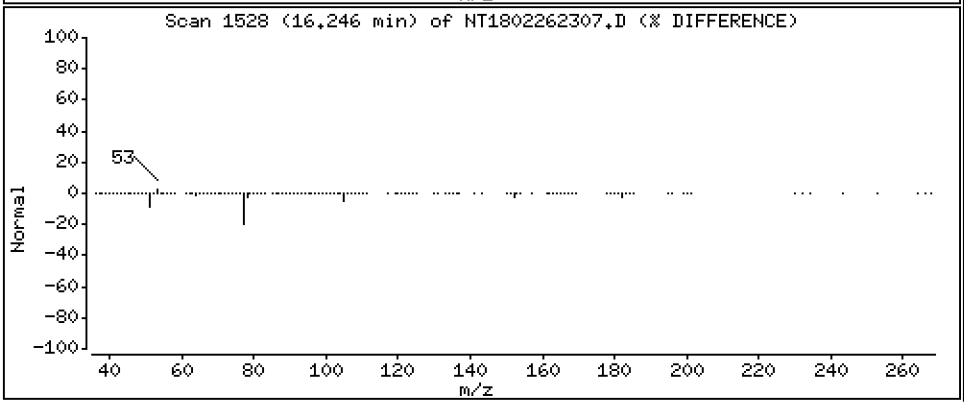
53 4,6-Dinitro-2-methylphenol

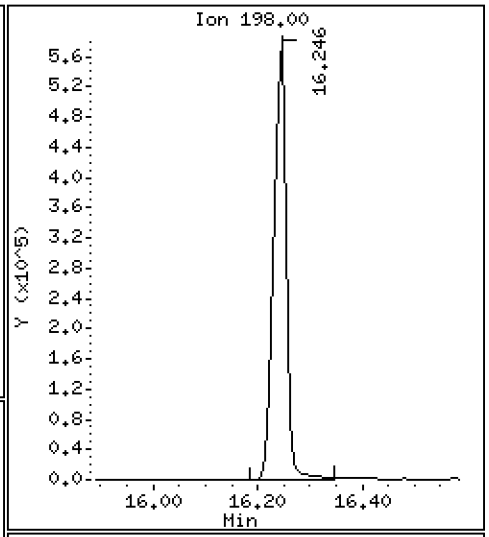
Concentration: 27.02 ug/mL

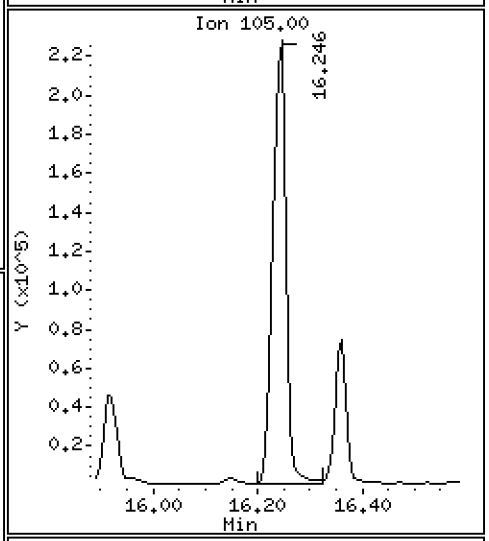


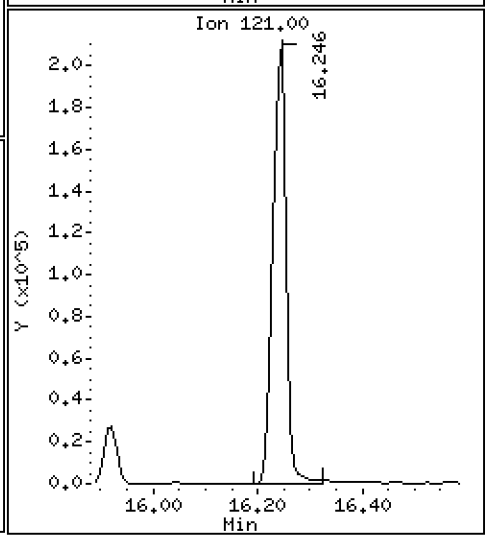












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

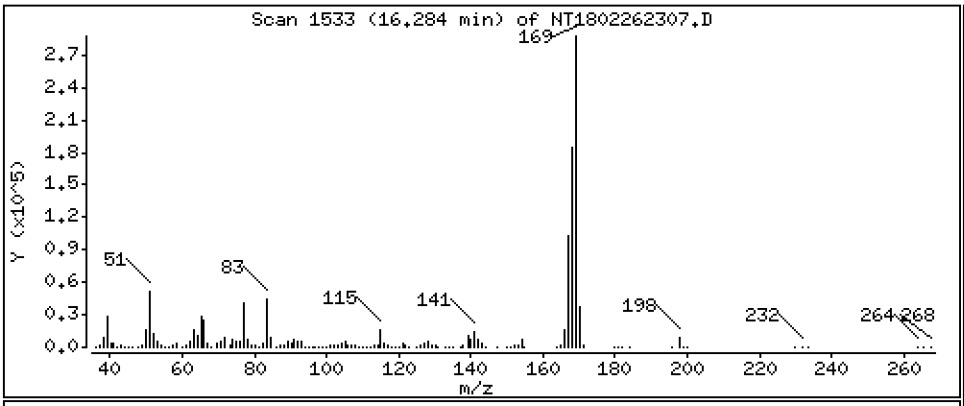
Operator: VTS

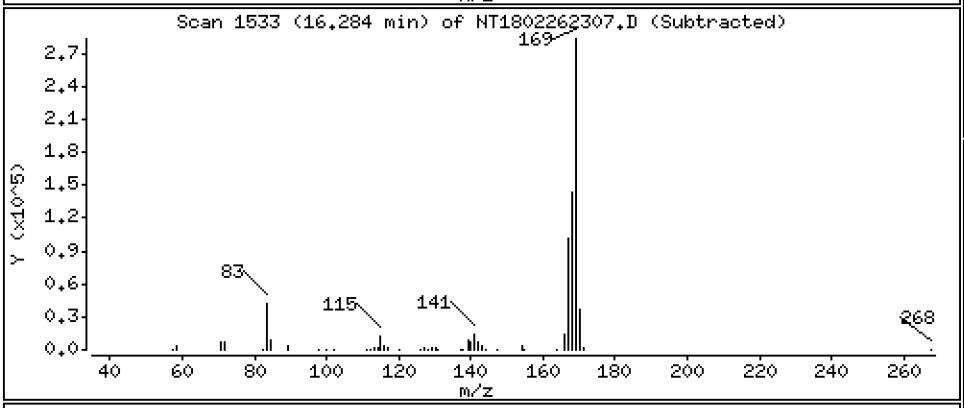
Column phase: ZB-5msi

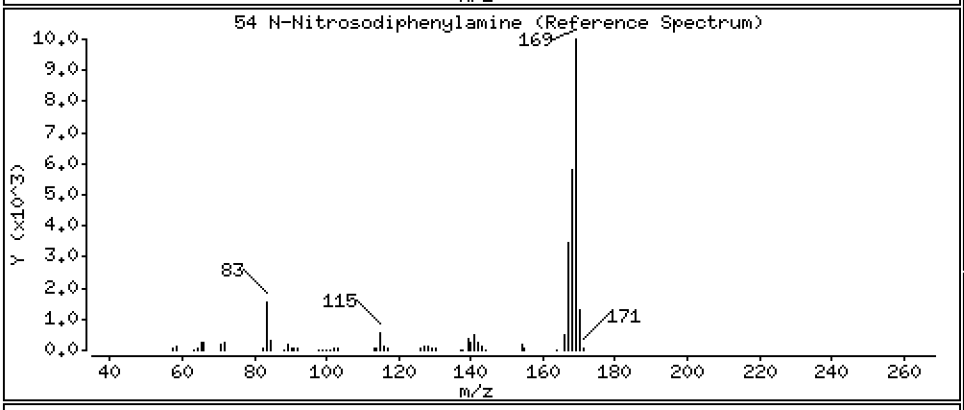
Column diameter: 0.25

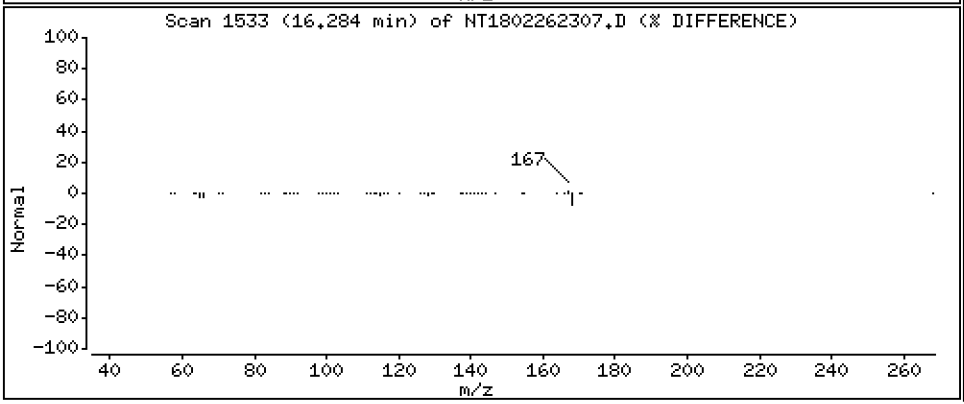
54 N-Nitrosodiphenylamine

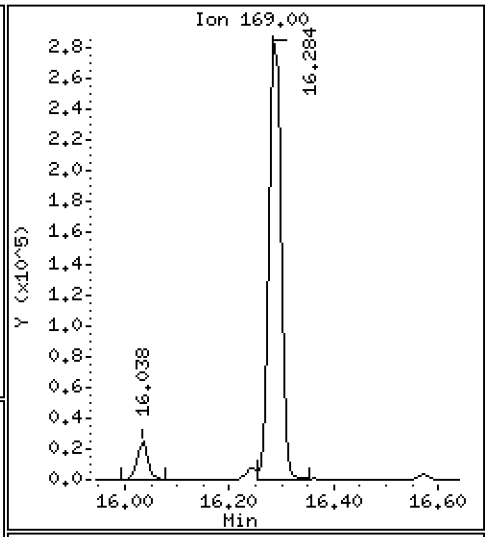
Concentration: 3.034 ug/mL

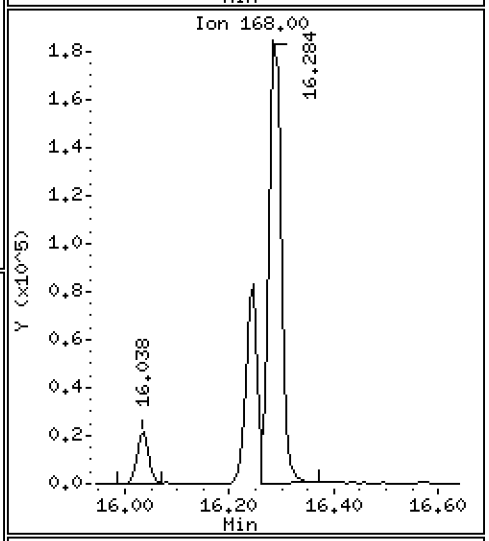


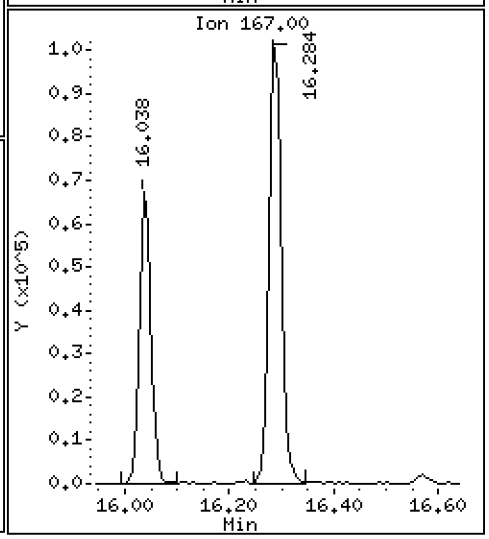












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

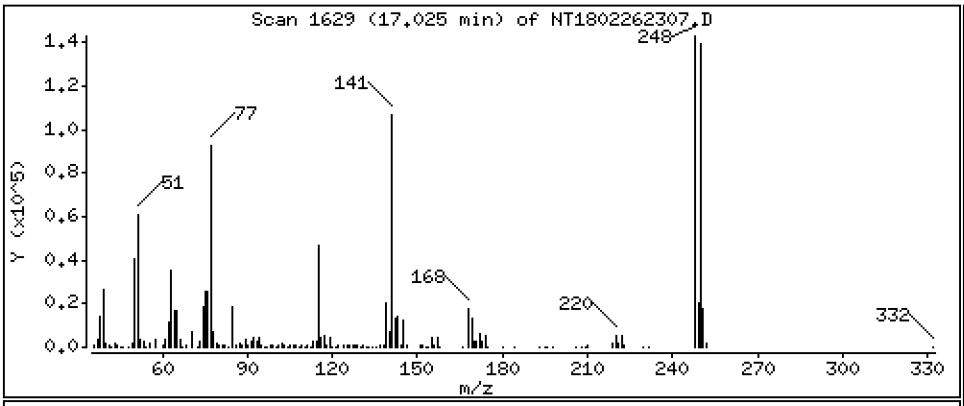
Operator: VTS

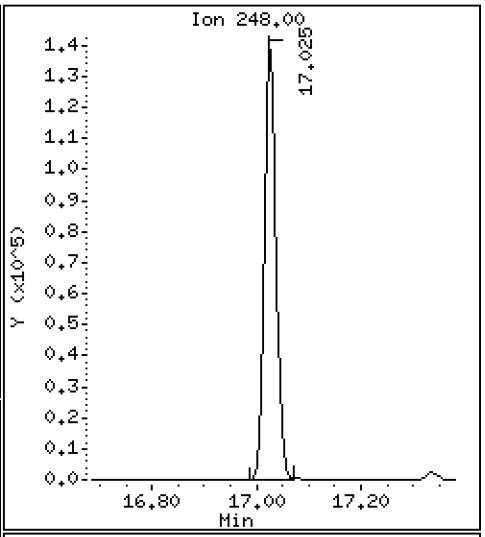
Column phase: ZB-5msi

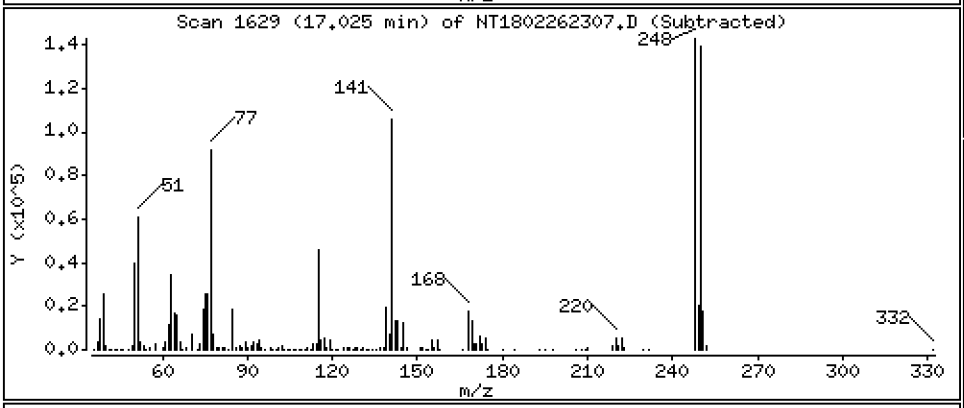
Column diameter: 0.25

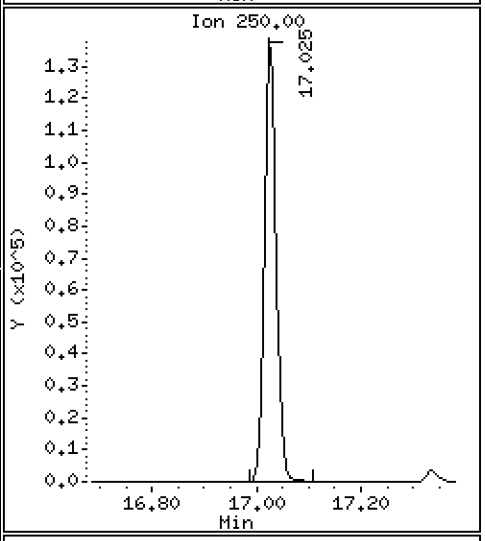
56 4-Bromophenyl-phenylether

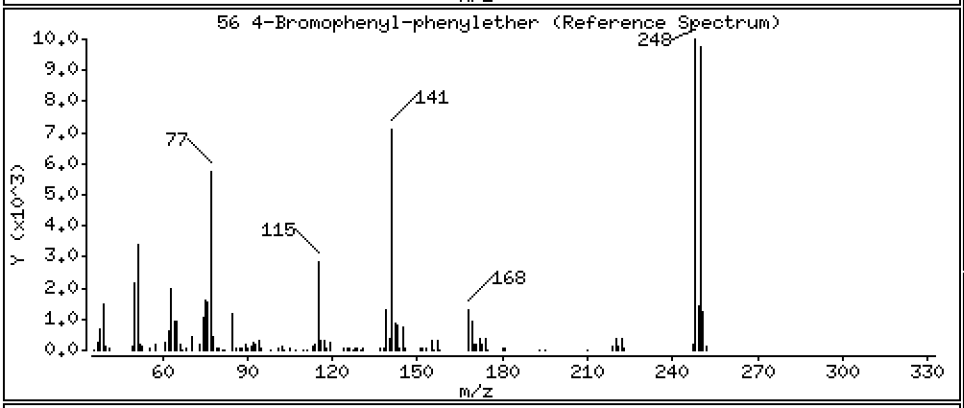
Concentration: 3.862 ug/mL

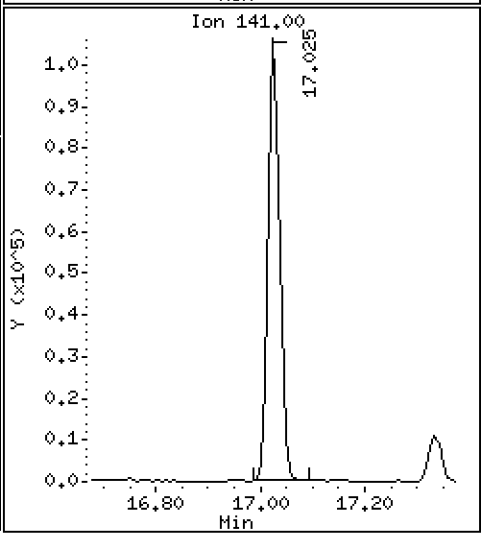


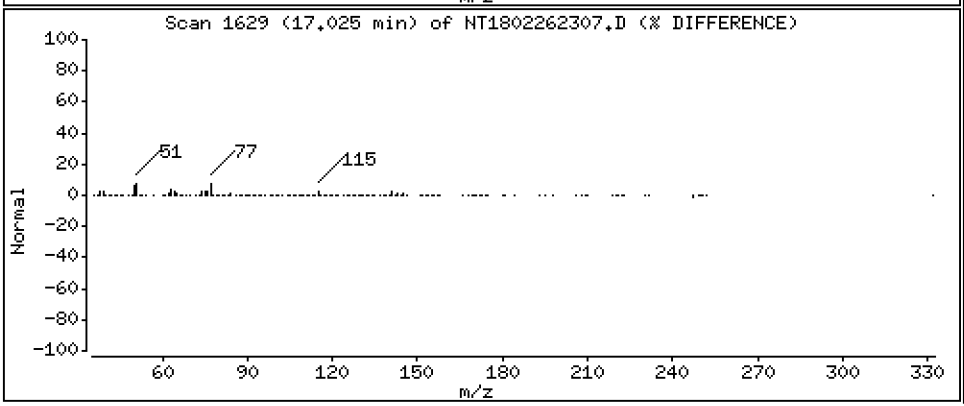












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262307.D

Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

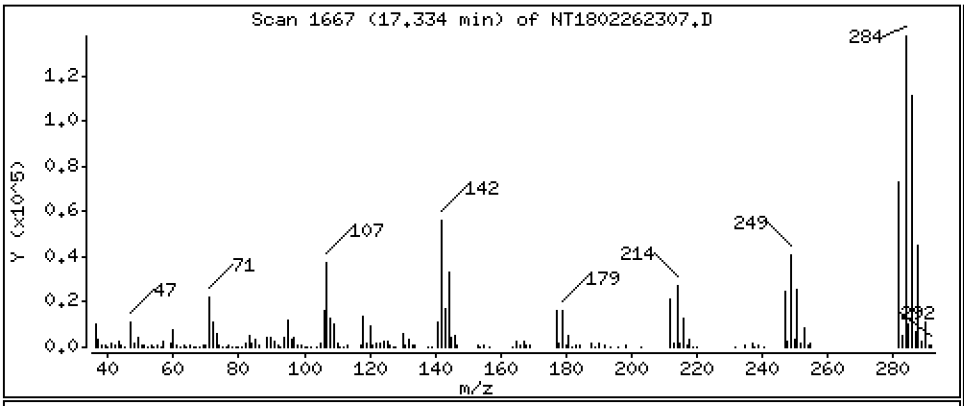
Operator: VTS

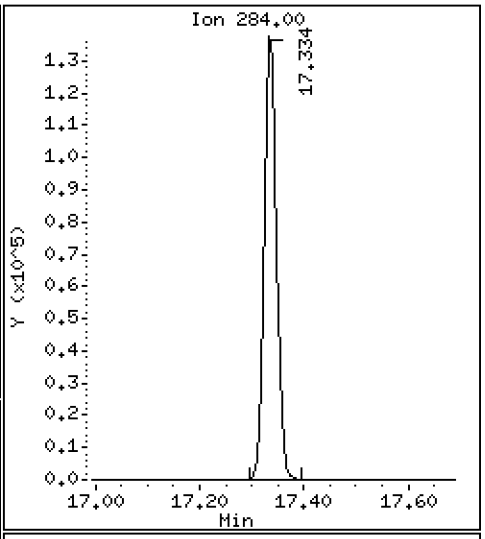
Column phase: ZB-5msi

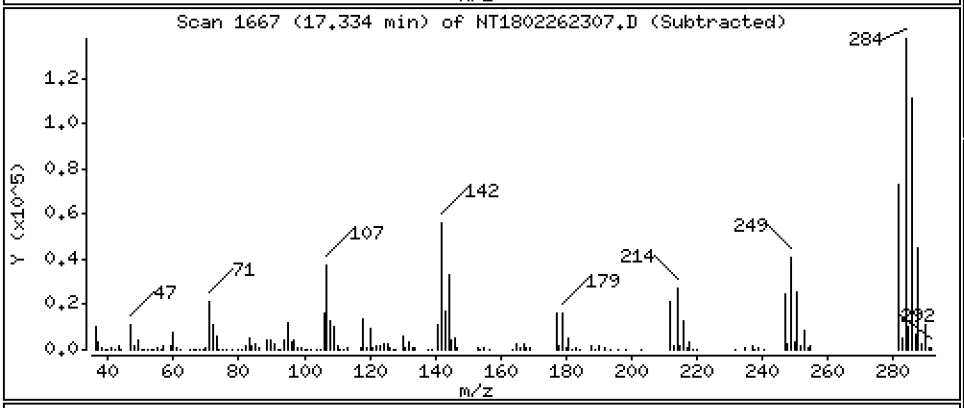
Column diameter: 0.25

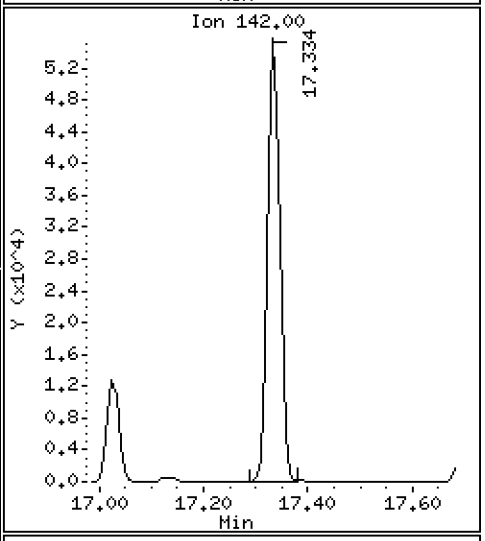
57 Hexachlorobenzene

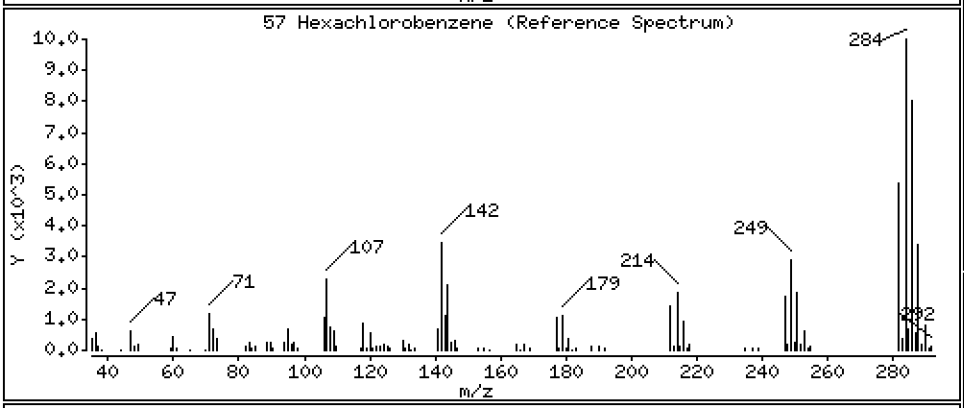
Concentration: 3.479 ug/mL

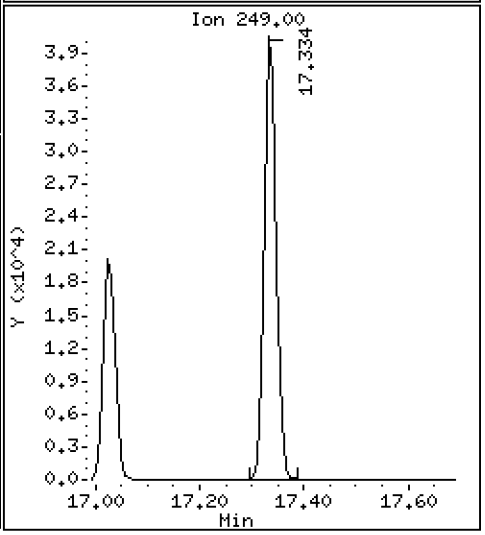


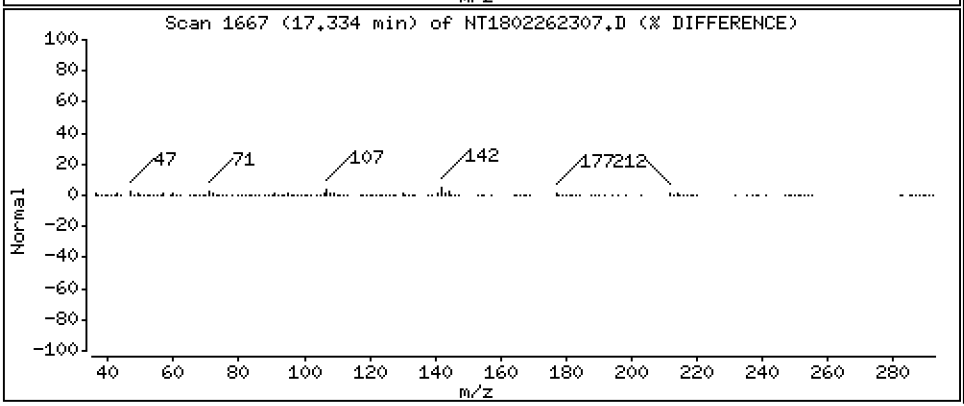












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

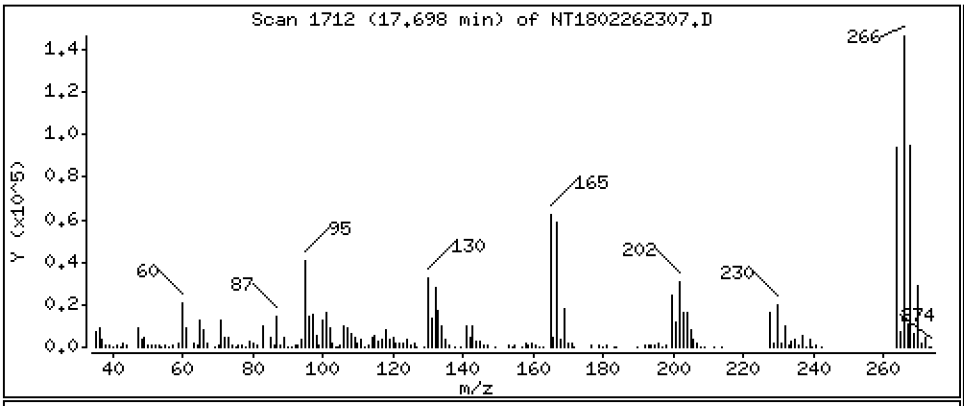
Operator: VTS

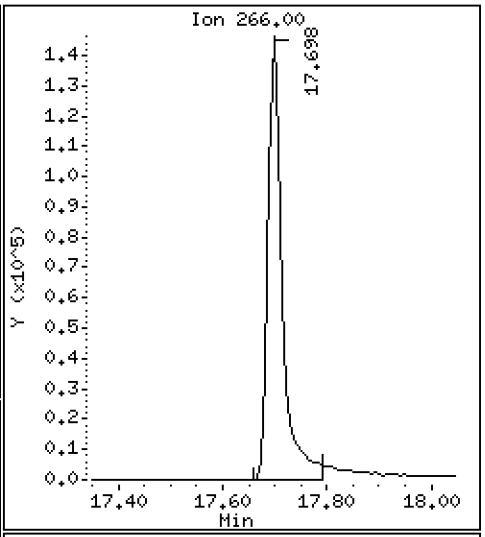
Column phase: ZB-5msi

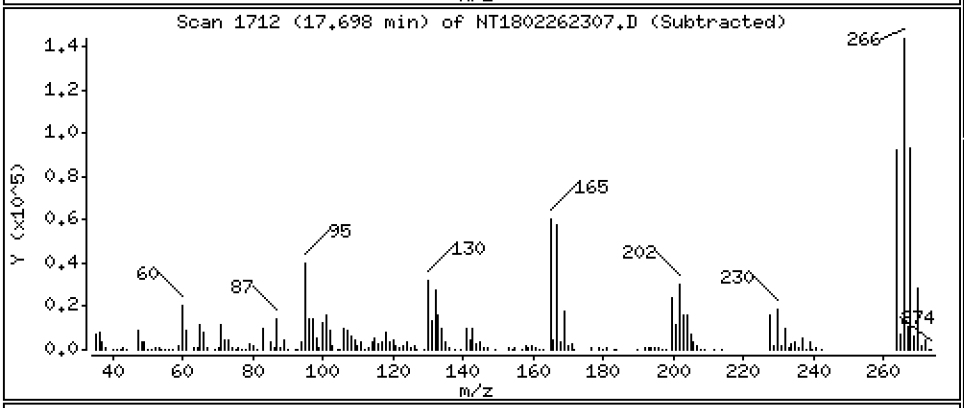
Column diameter: 0.25

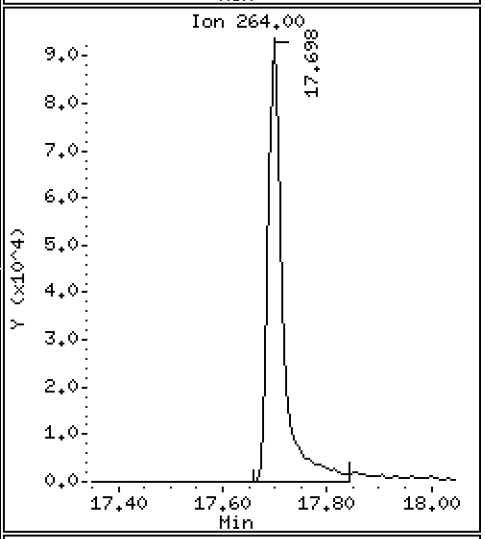
58 Pentachlorophenol

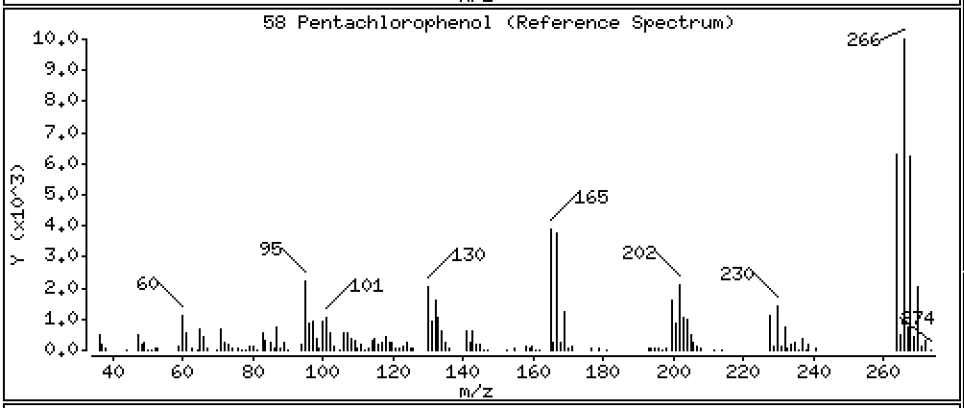
Concentration: 14.19 ug/mL

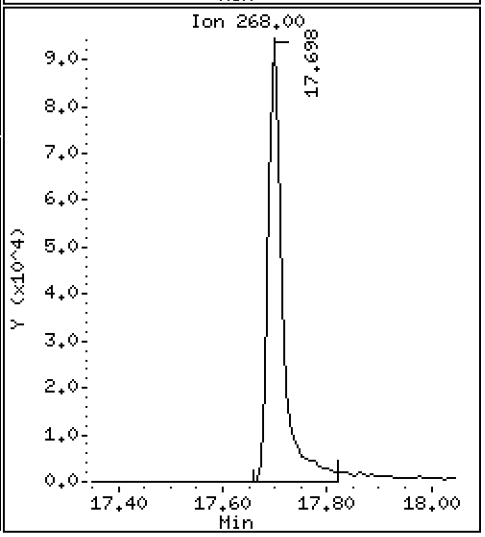


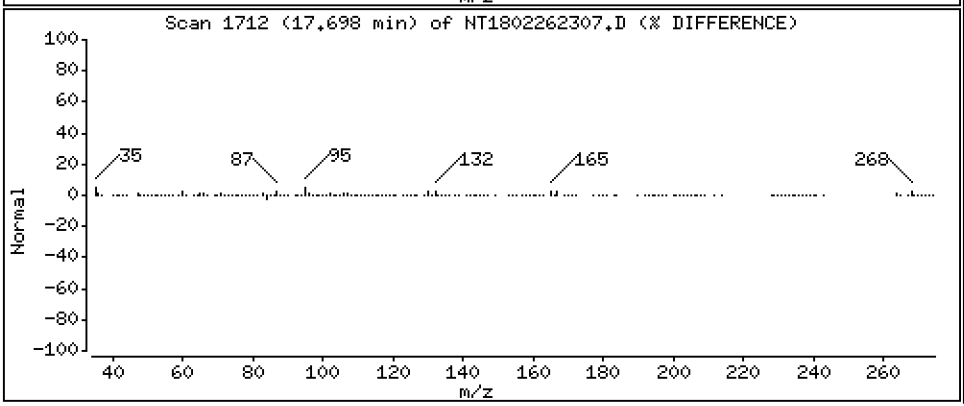












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

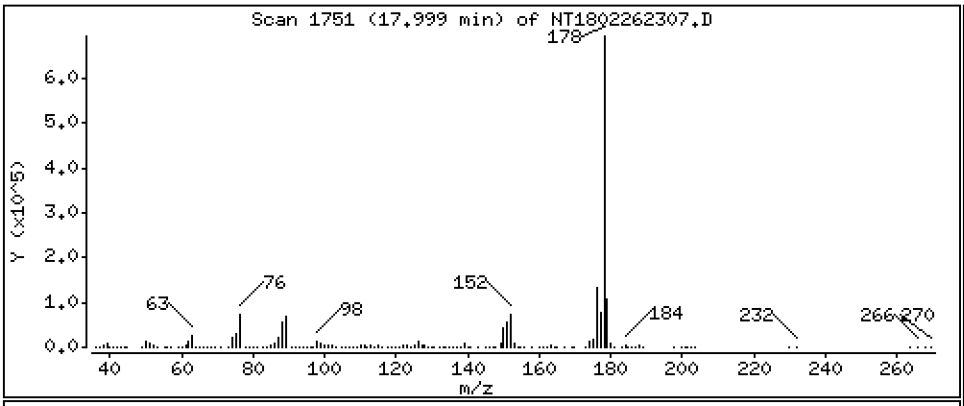
Operator: VTS

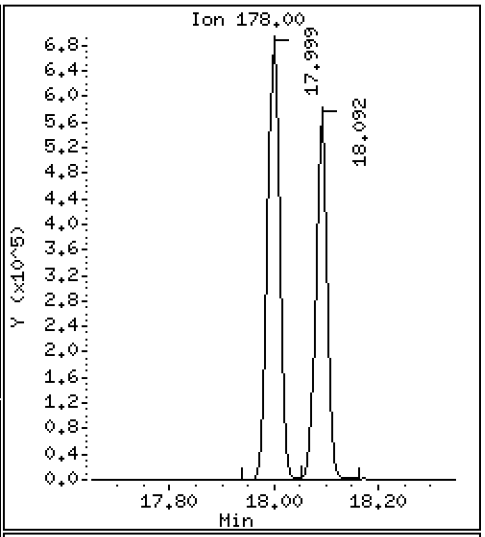
Column phase: ZB-5msi

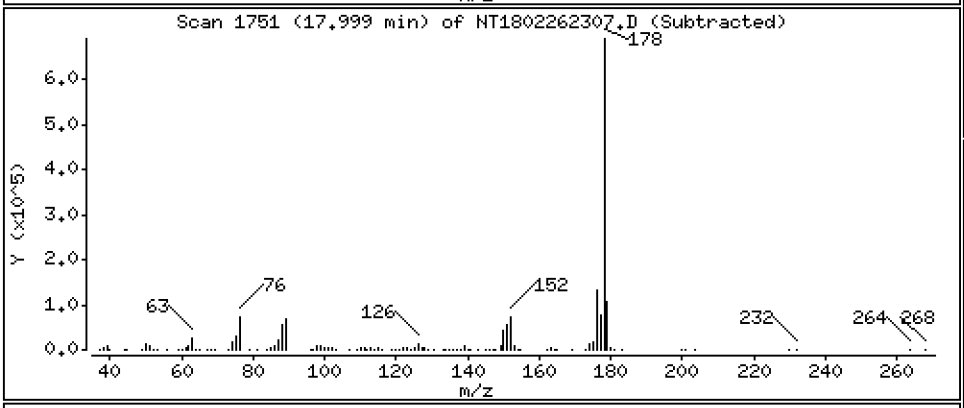
Column diameter: 0.25

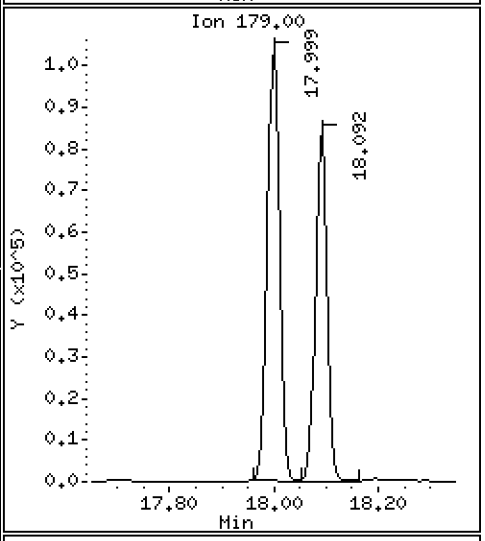
60 Phenanthrene

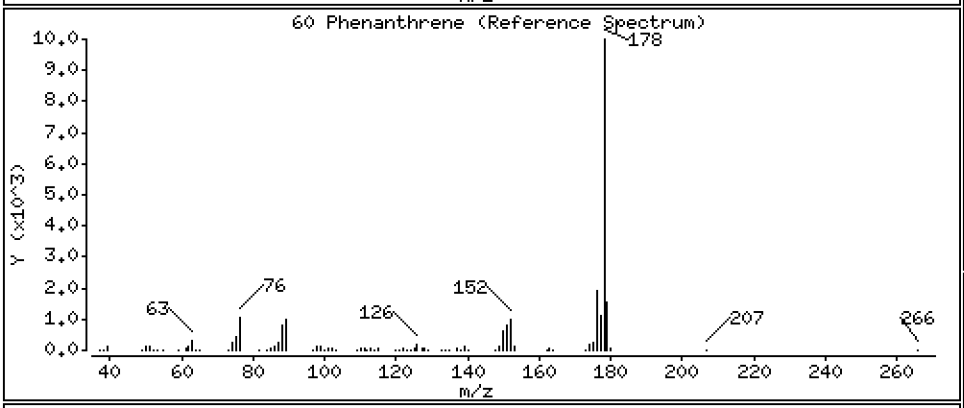
Concentration: 3.615 ug/mL

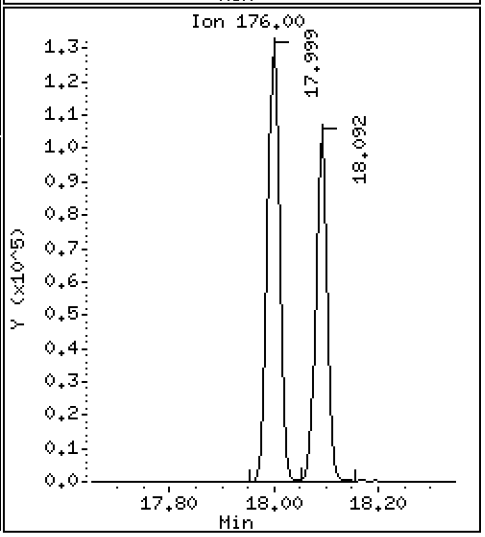


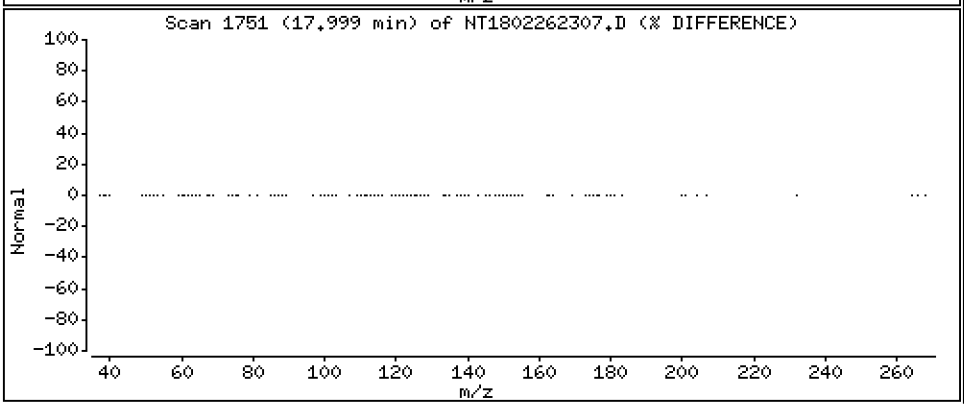












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

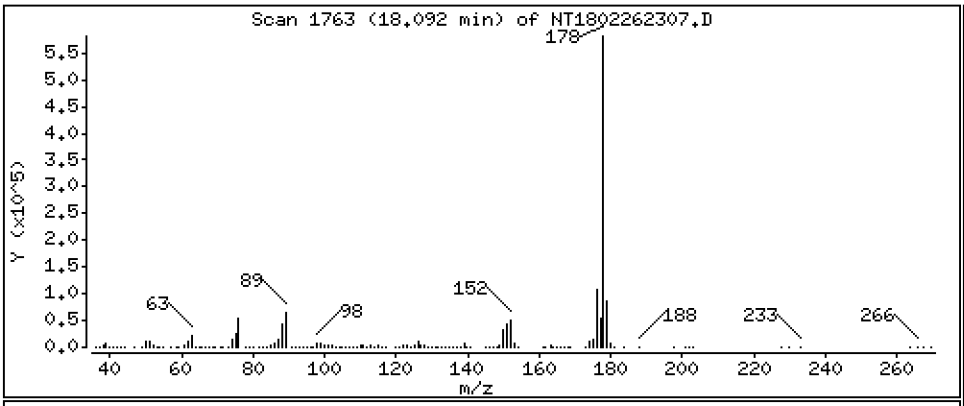
Operator: VTS

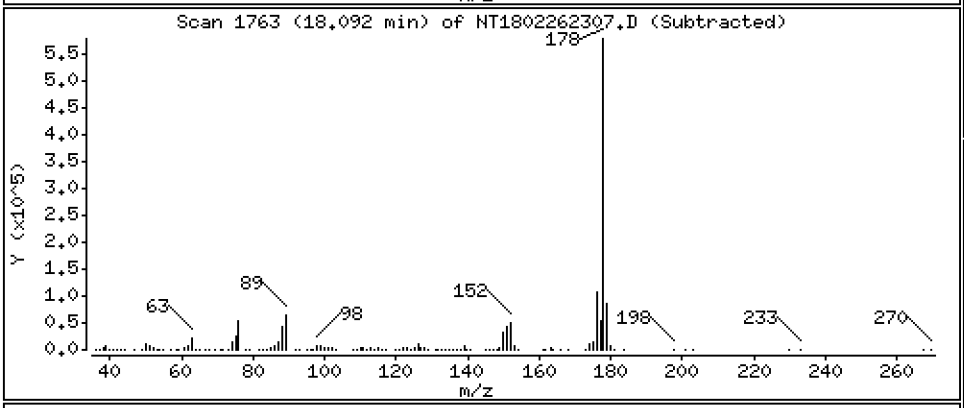
Column phase: ZB-5msi

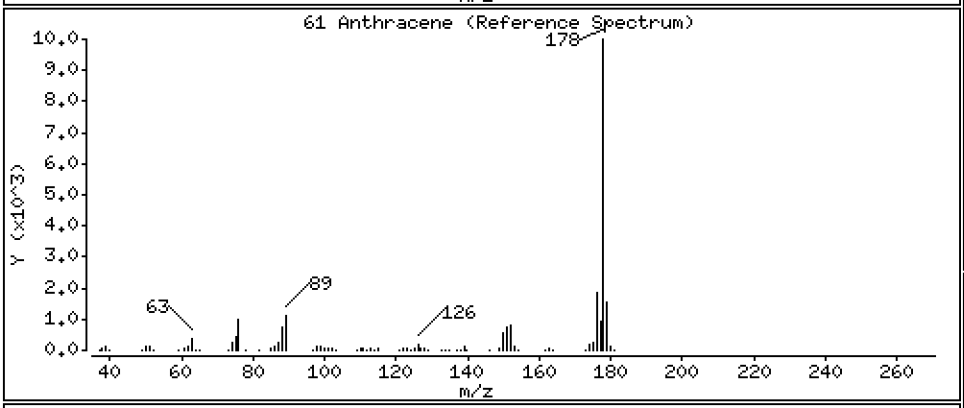
Column diameter: 0.25

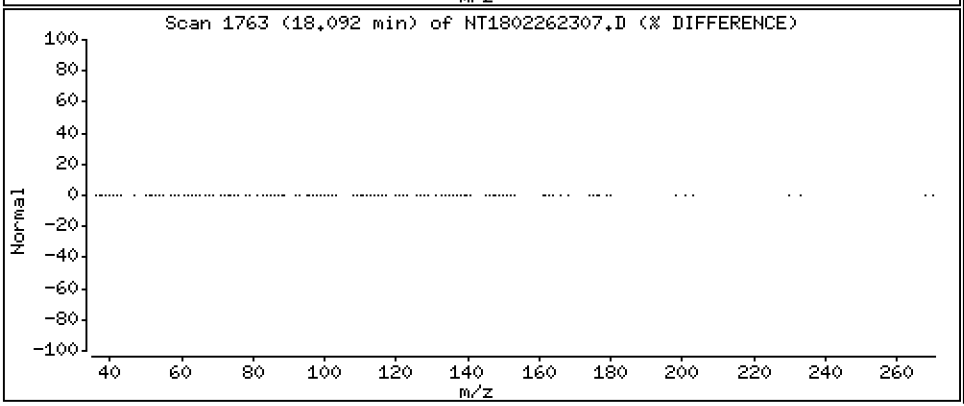
61 Anthracene

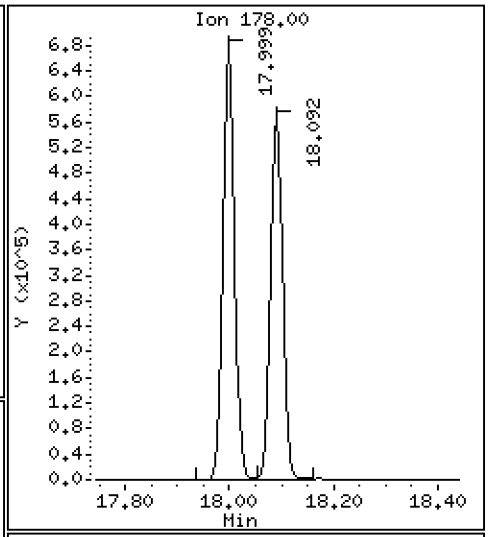
Concentration: 3.104 ug/mL

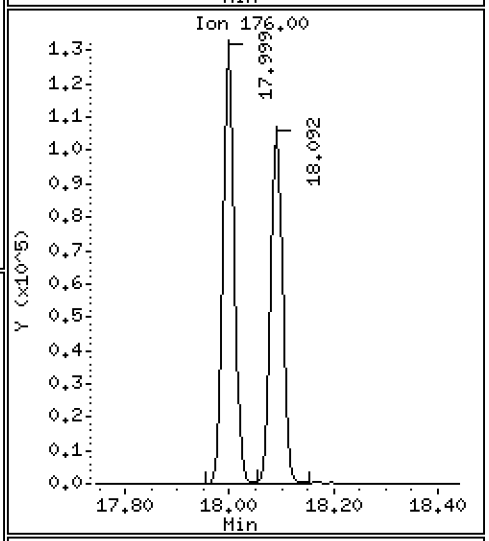


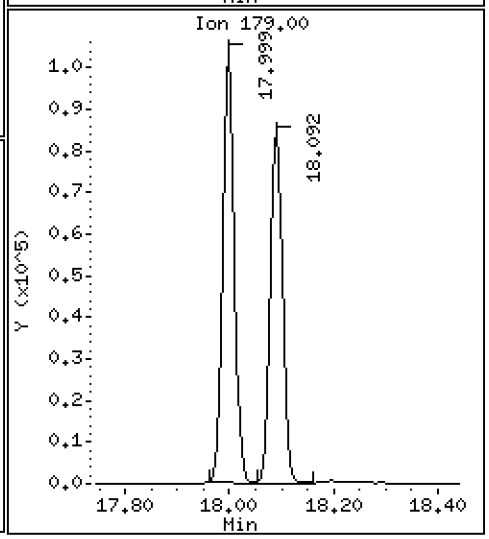












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

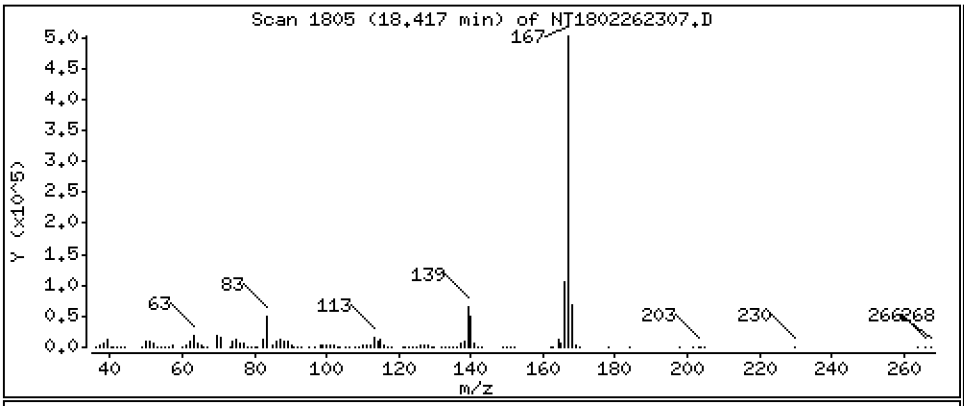
Operator: VTS

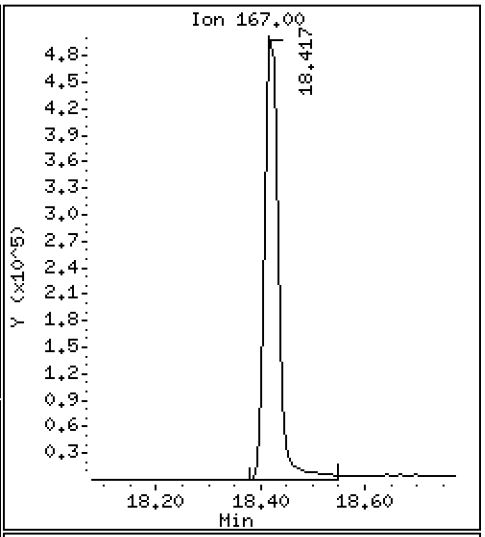
Column phase: ZB-5msi

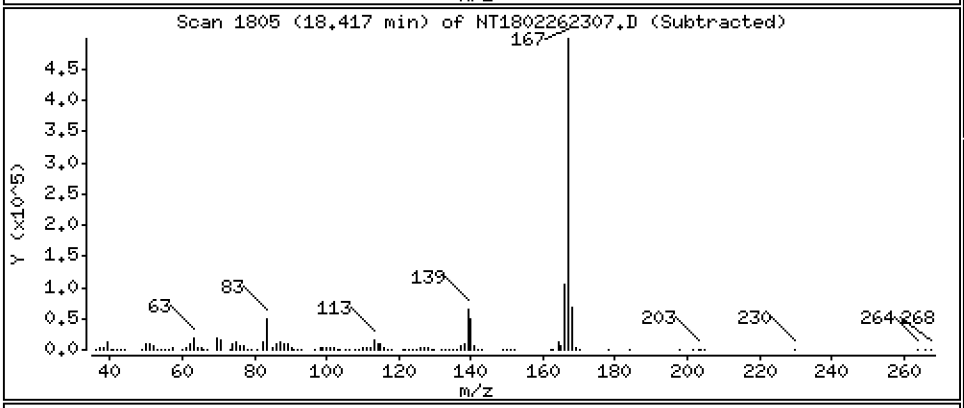
Column diameter: 0.25

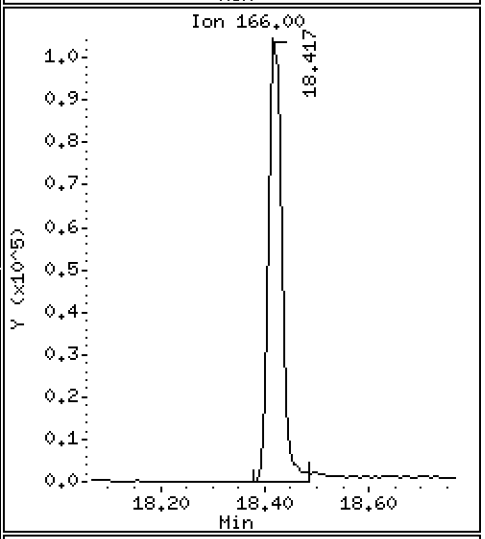
62 Carbazole

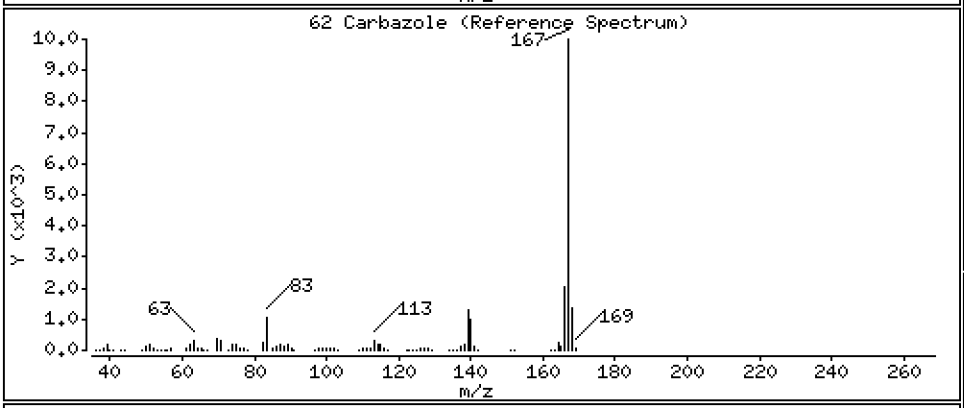
Concentration: 3.453 ug/mL

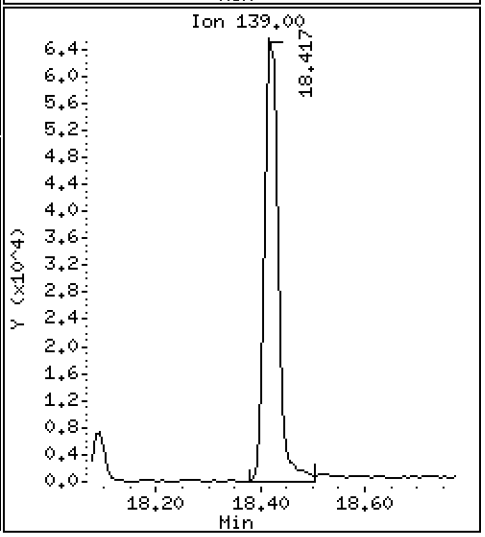


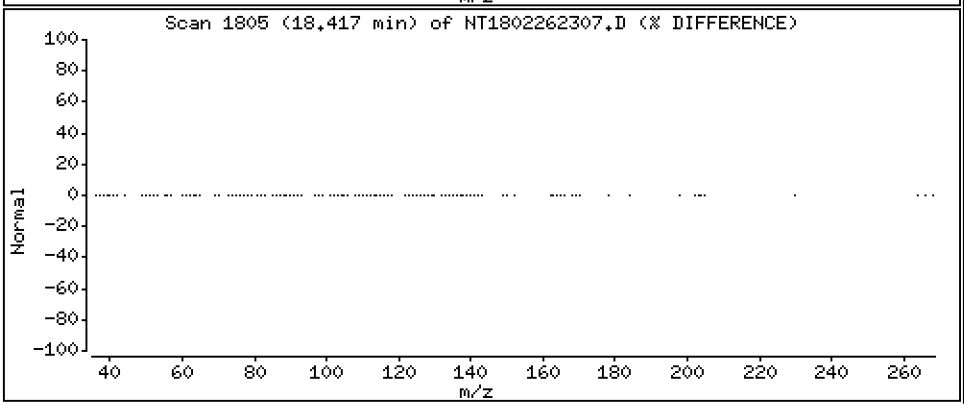












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

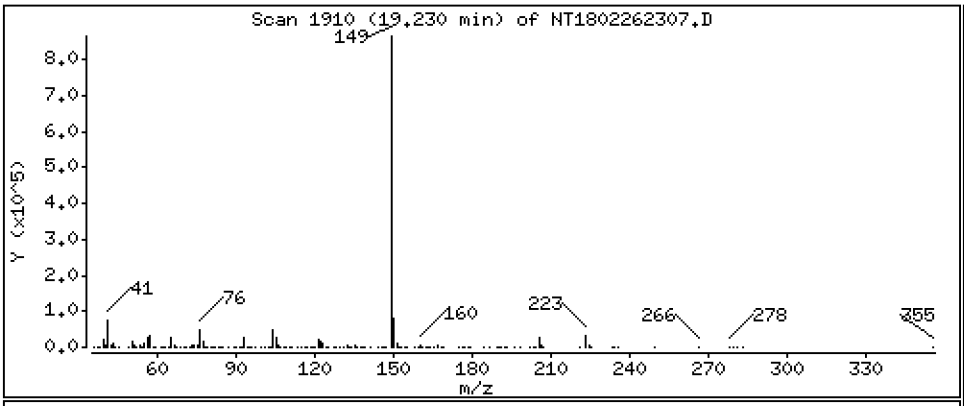
Operator: VTS

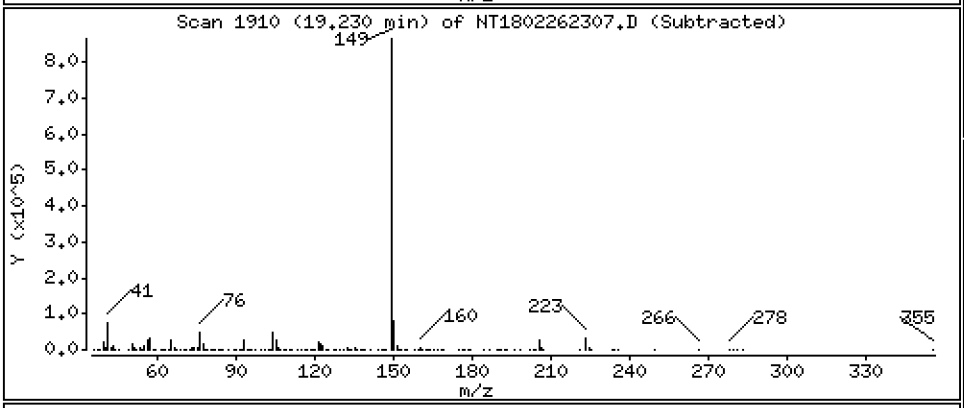
Column phase: ZB-5msi

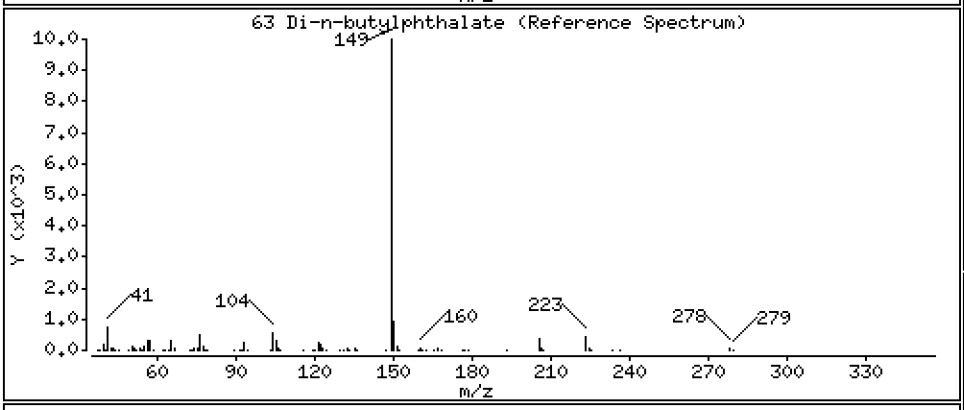
Column diameter: 0.25

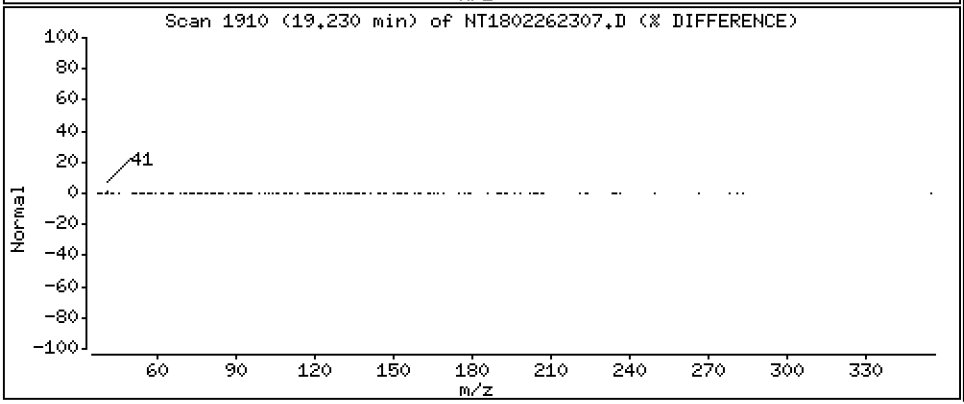
63 Di-n-butylphthalate

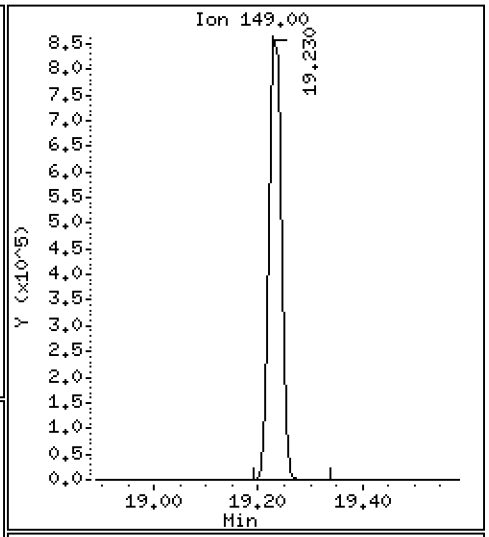
Concentration: 4.713 ug/mL

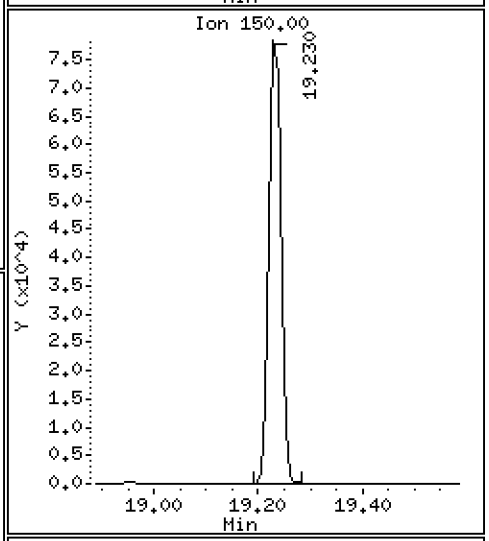


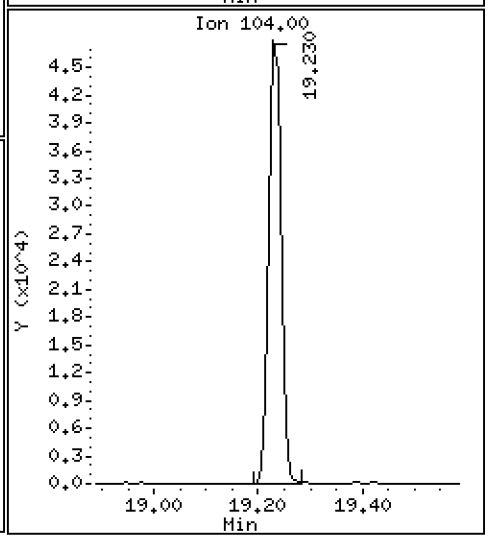












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

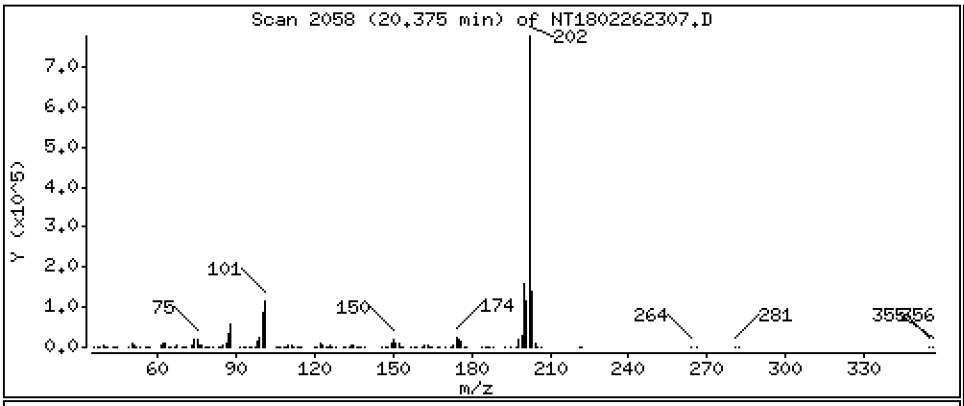
Operator: VTS

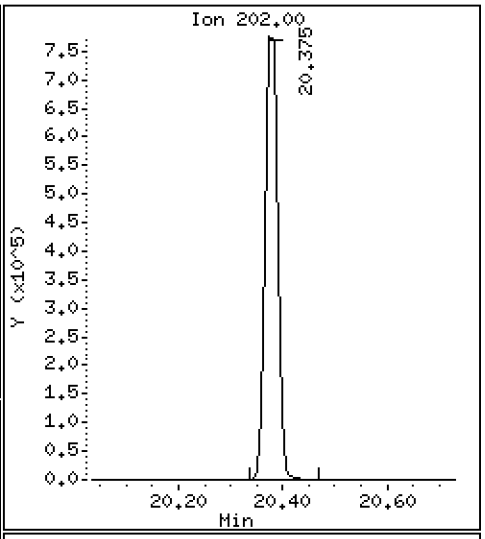
Column phase: ZB-5msi

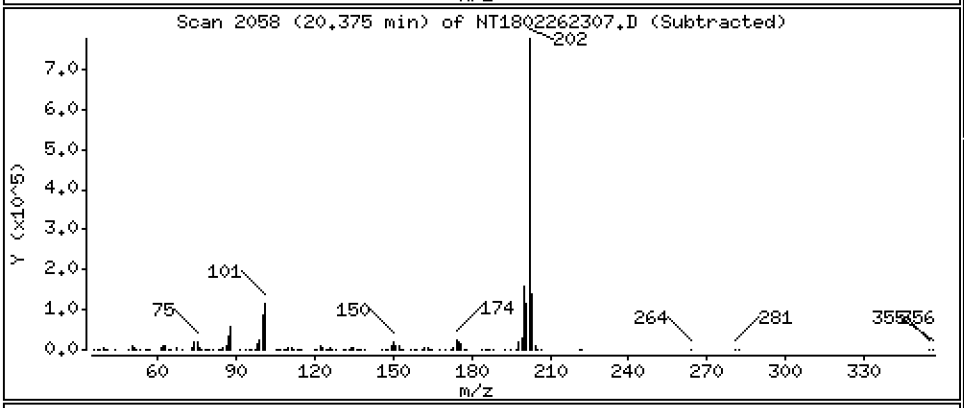
Column diameter: 0.25

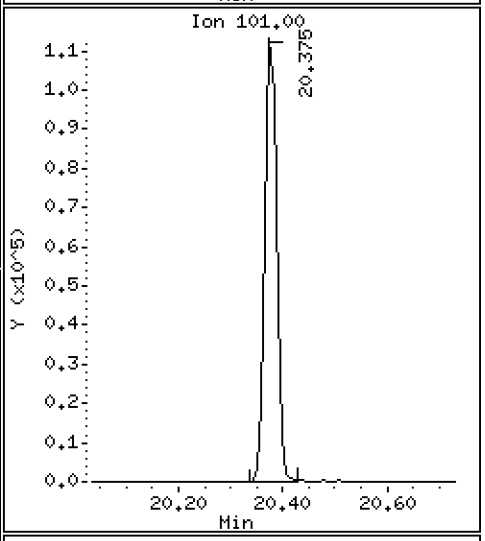
64 Fluoranthene

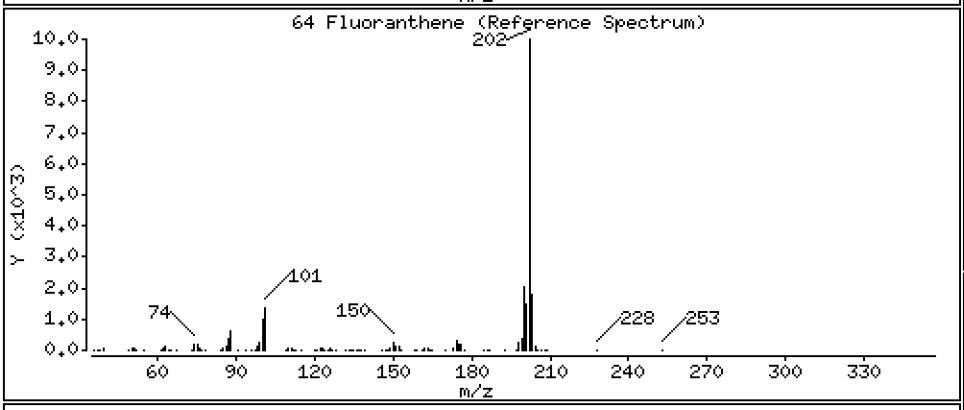
Concentration: 4.118 ug/mL

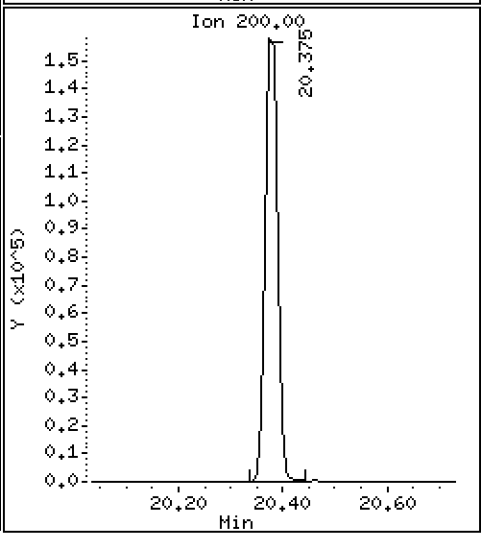


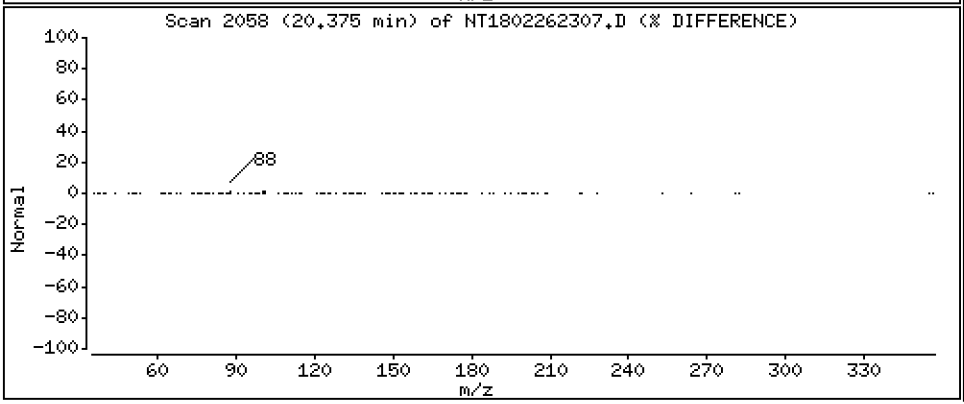












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

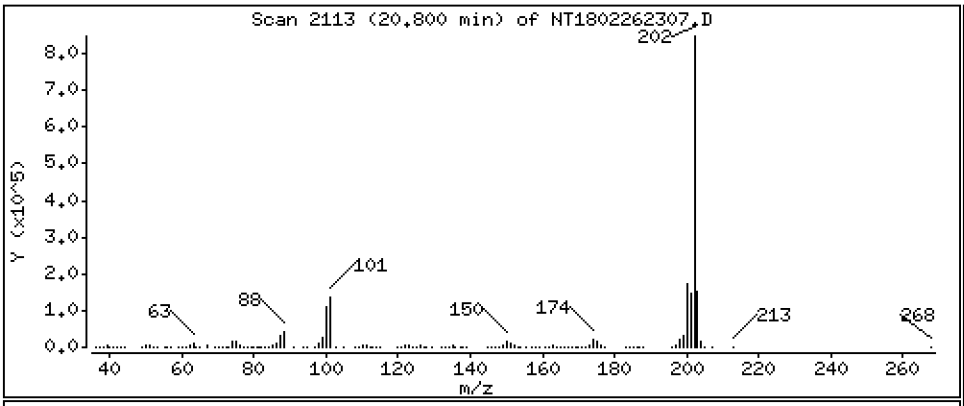
Operator: VTS

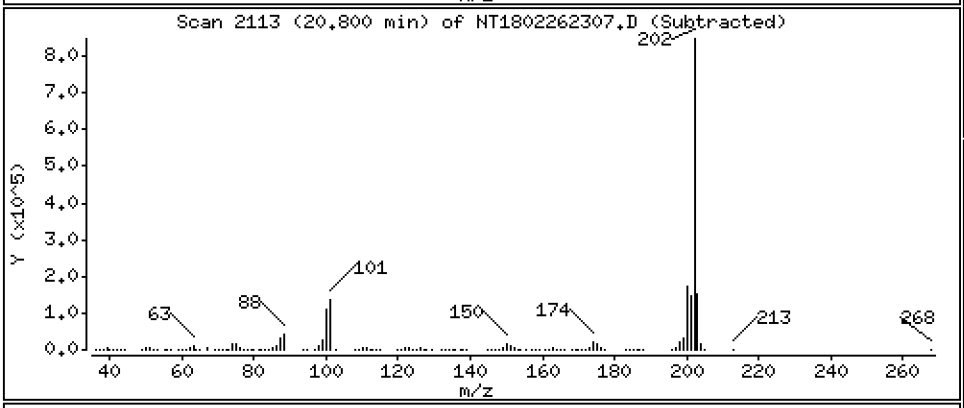
Column phase: ZB-5msi

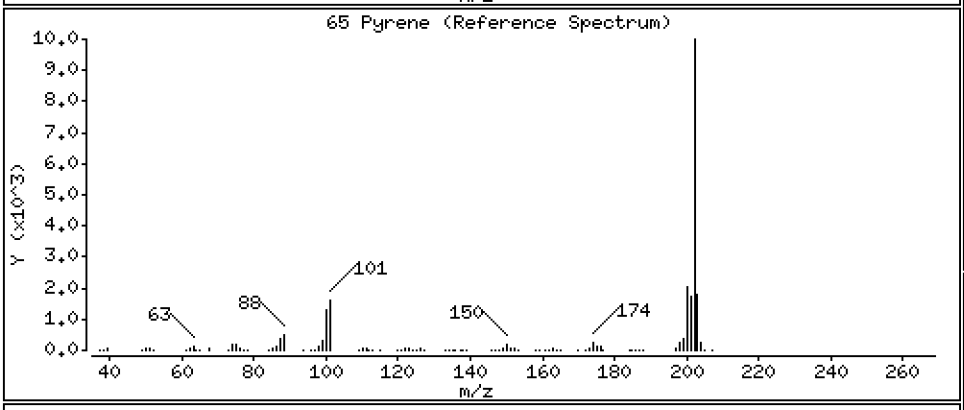
Column diameter: 0.25

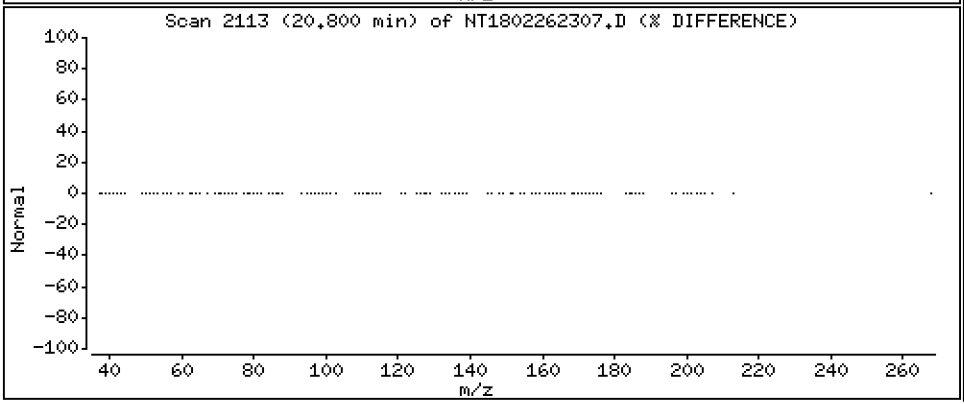
65 Pyrene

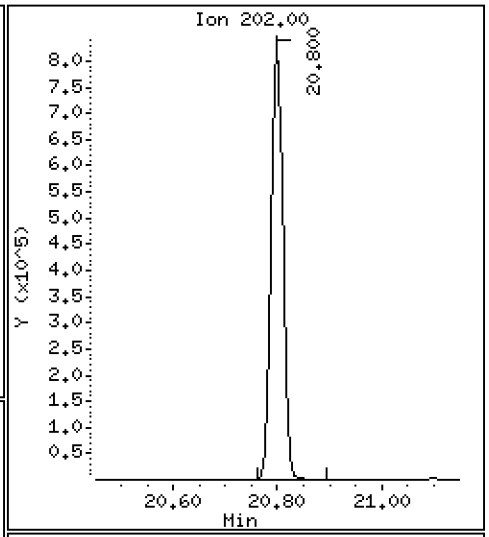
Concentration: 3.875 ug/mL

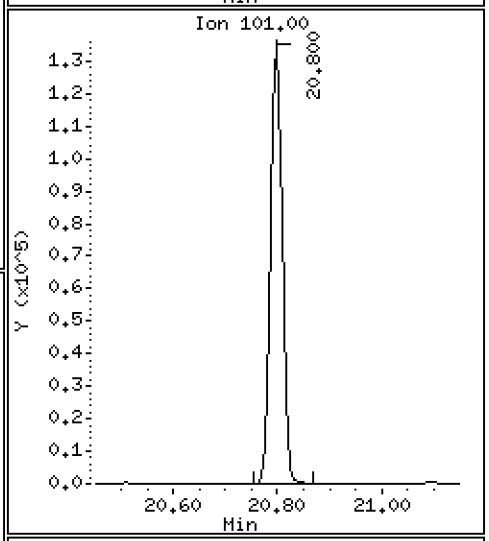


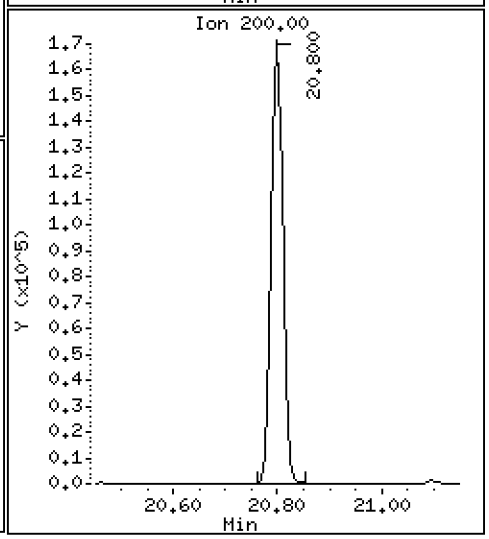












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

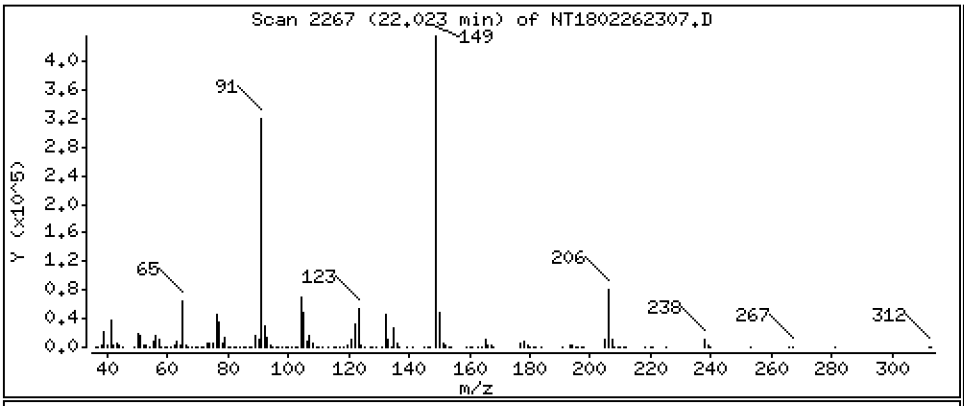
Operator: VTS

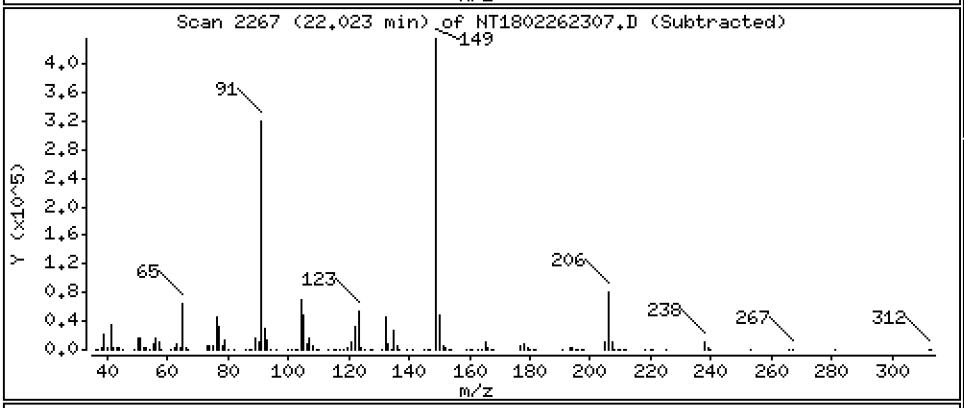
Column phase: ZB-5msi

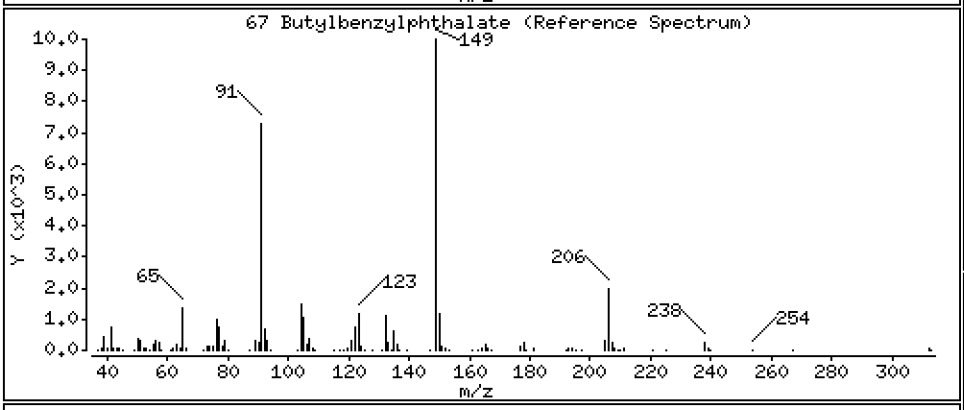
Column diameter: 0.25

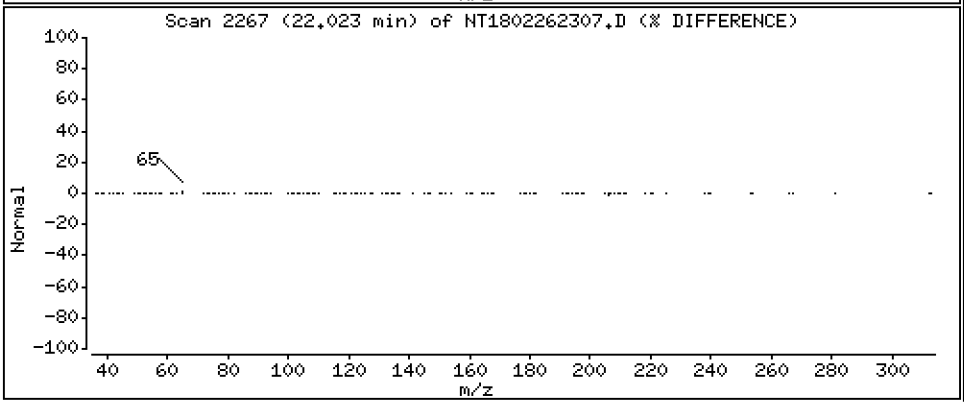
67 Butylbenzylphthalate

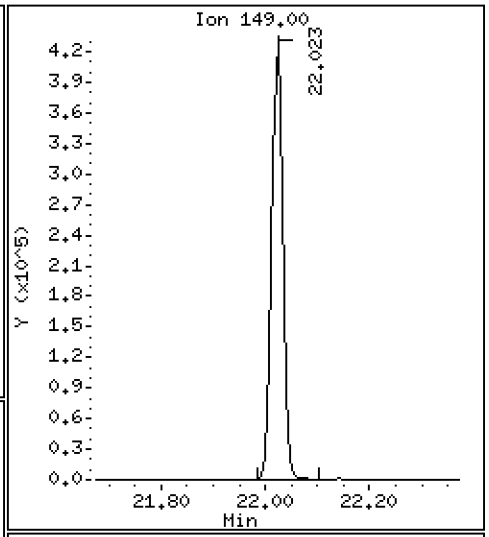
Concentration: 4.987 ug/mL

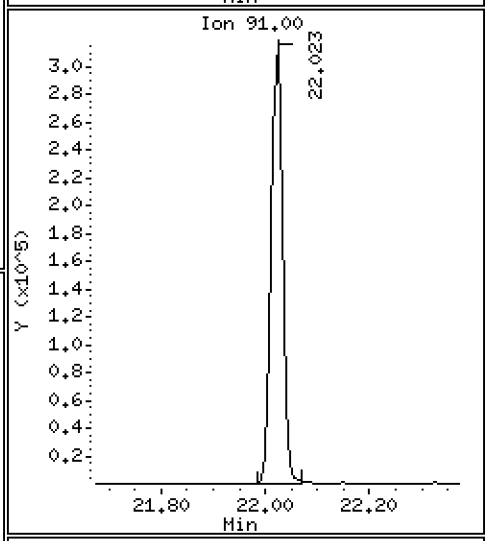


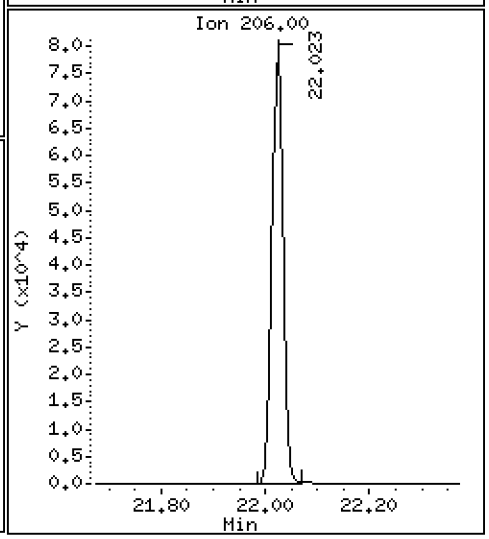












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

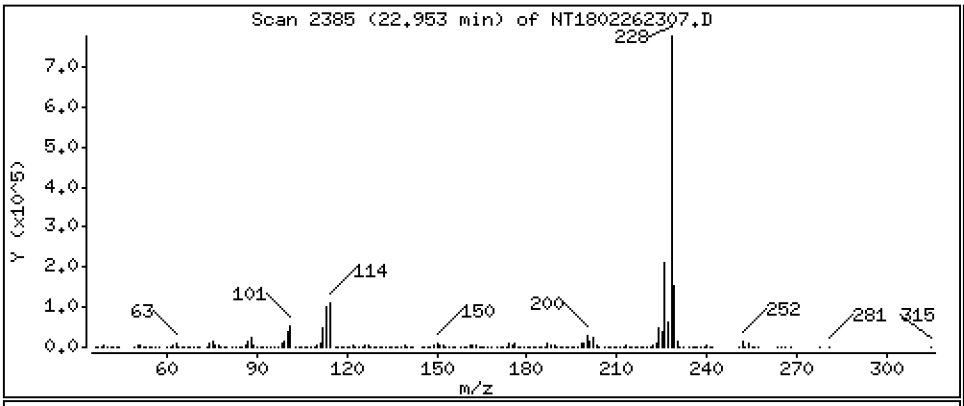
Operator: VTS

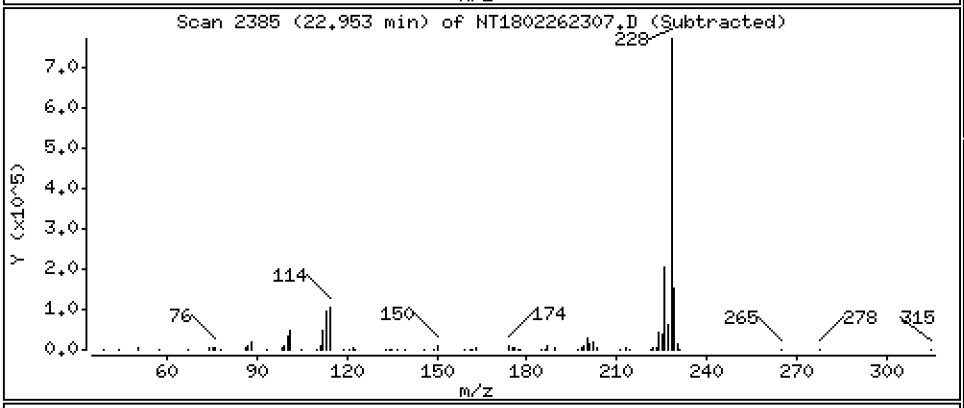
Column phase: ZB-5msi

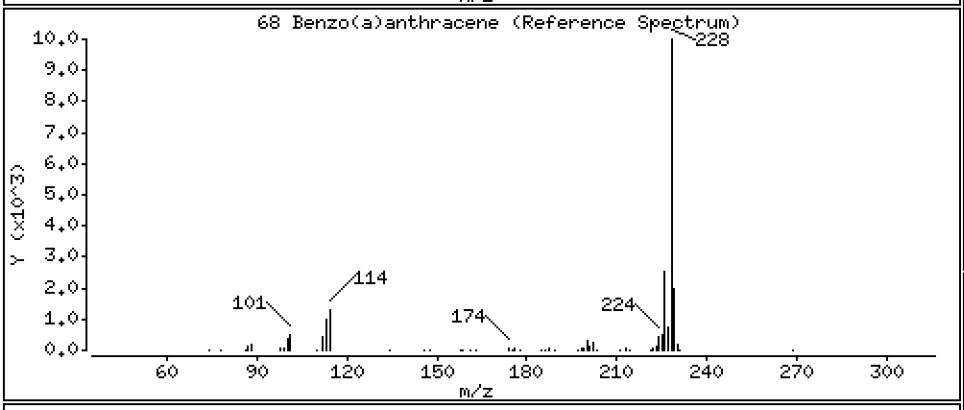
Column diameter: 0.25

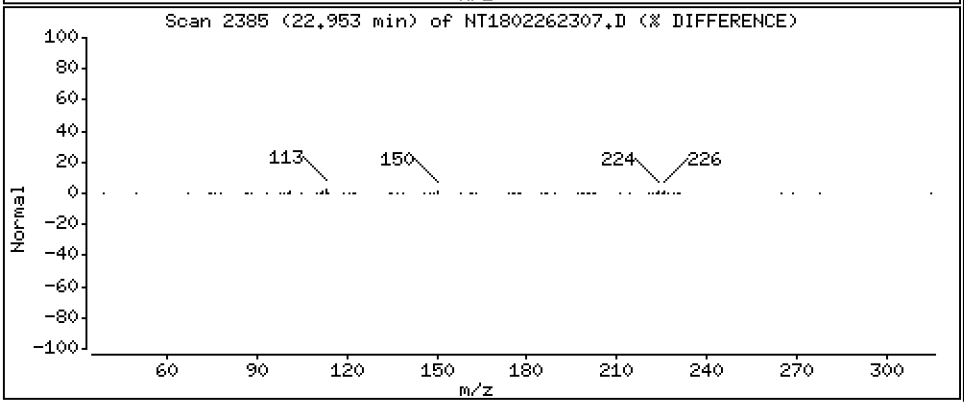
68 Benzo(a)anthracene

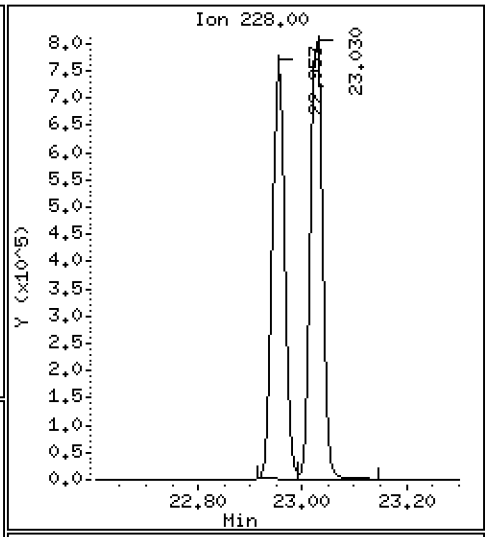
Concentration: 3.903 ug/mL

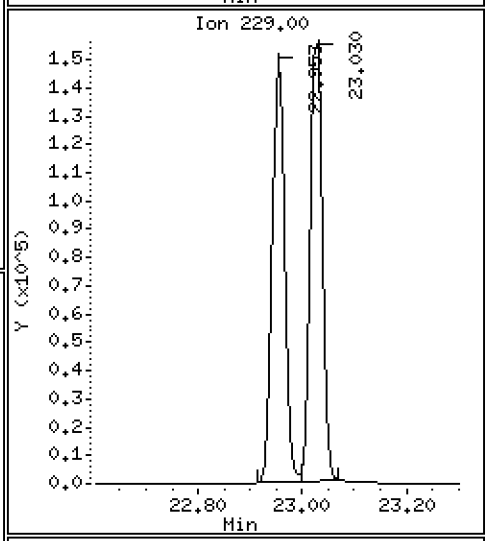


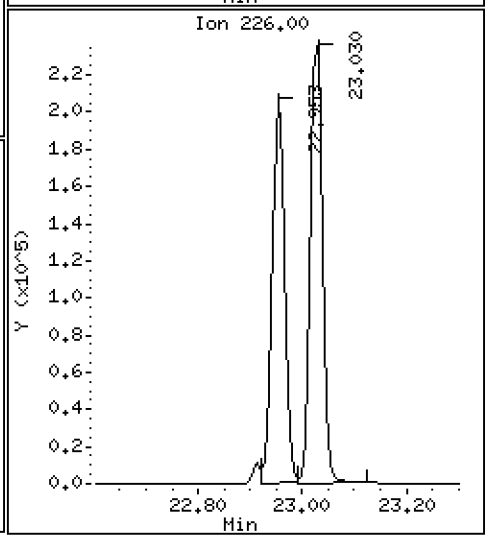












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

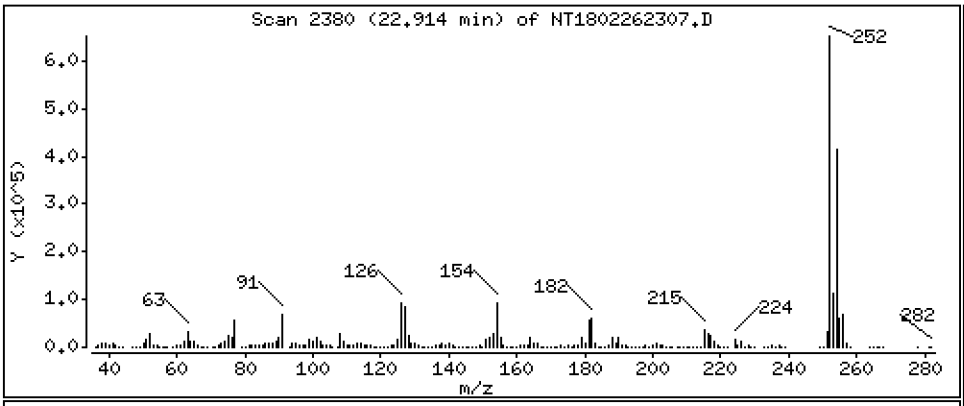
Operator: VTS

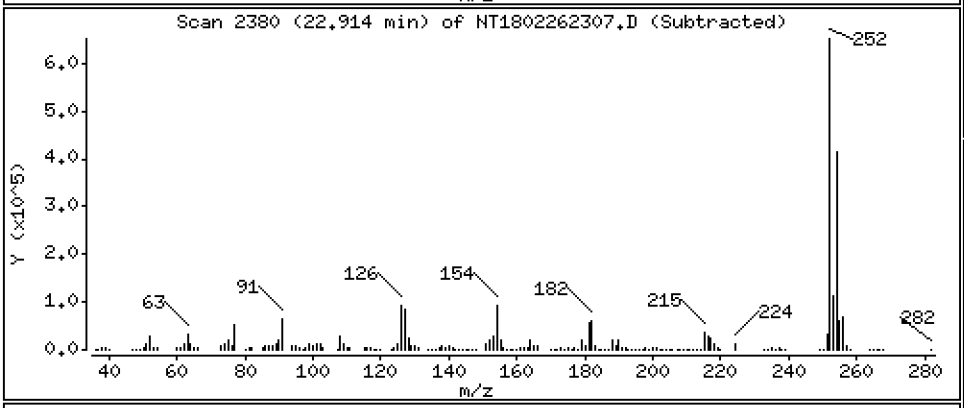
Column phase: ZB-5msi

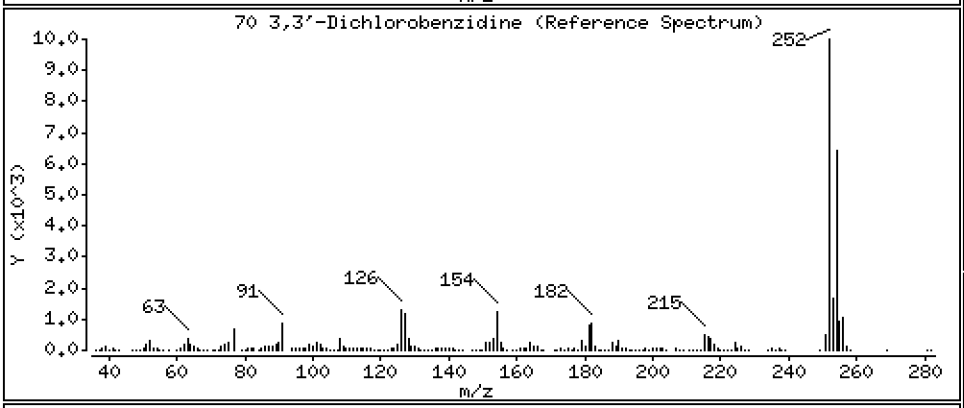
Column diameter: 0.25

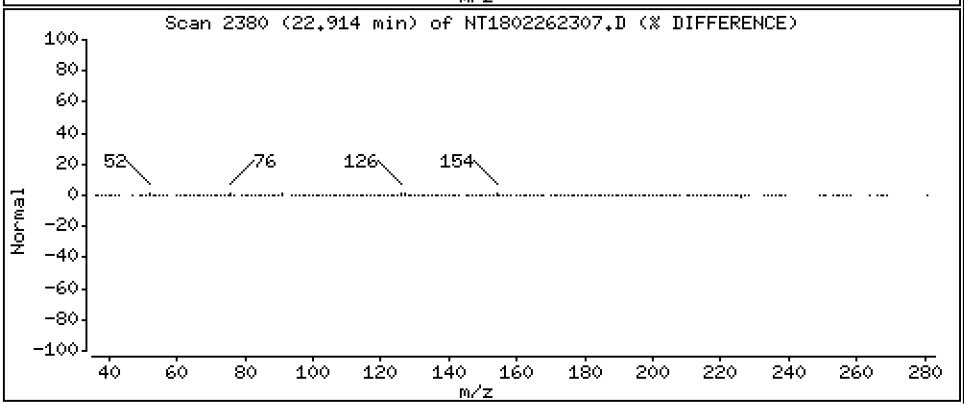
70 3,3'-Dichlorobenzidine

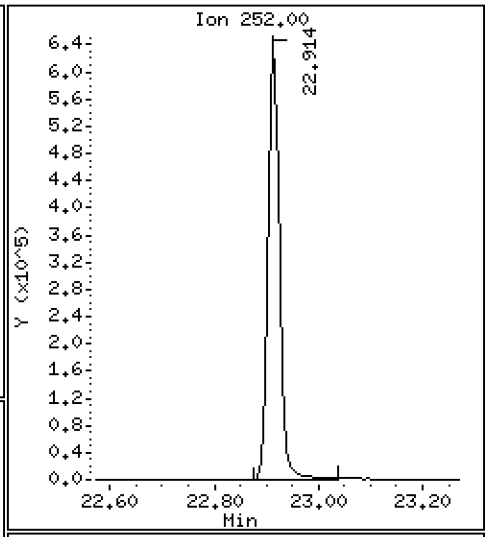
Concentration: 8.122 ug/mL

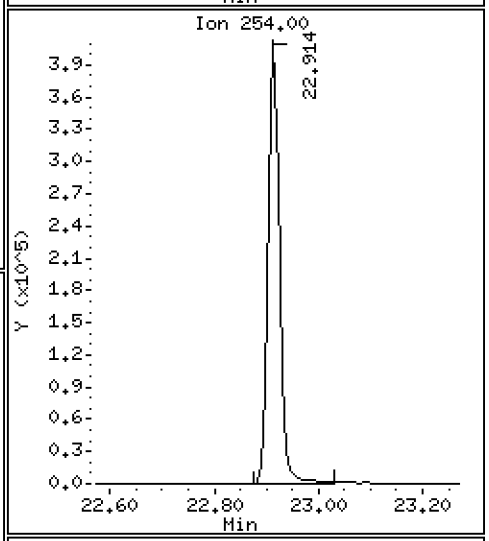


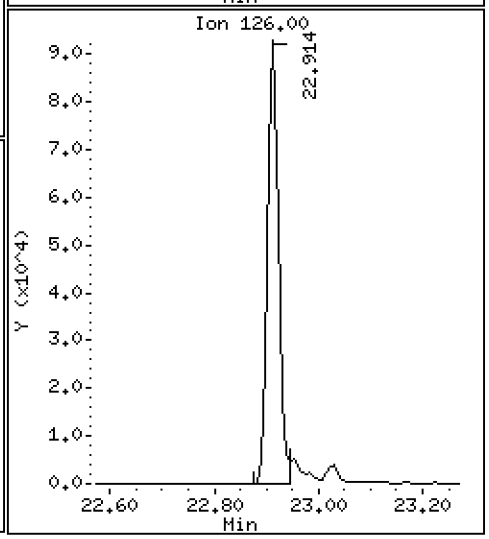












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

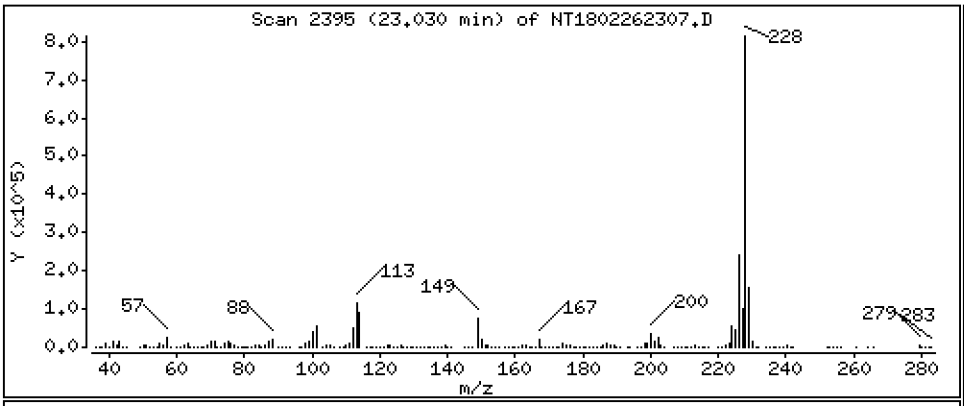
Operator: VTS

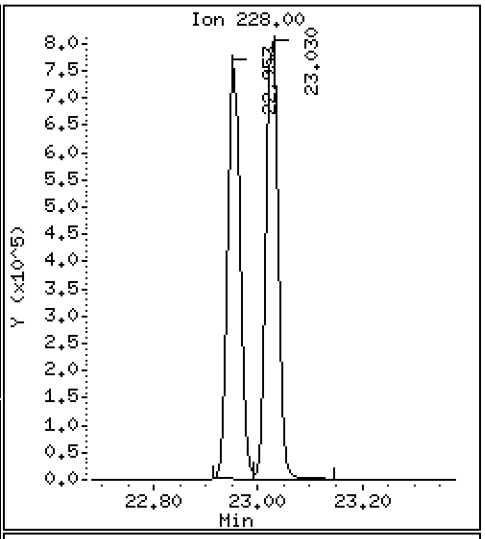
Column phase: ZB-5msi

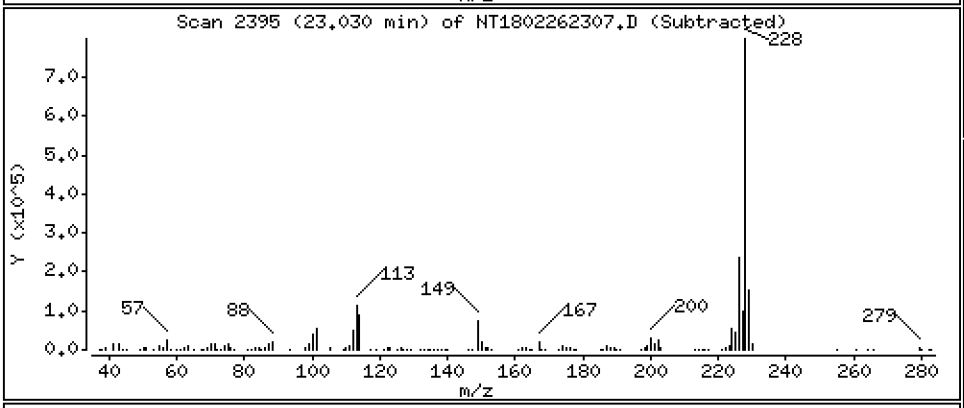
Column diameter: 0.25

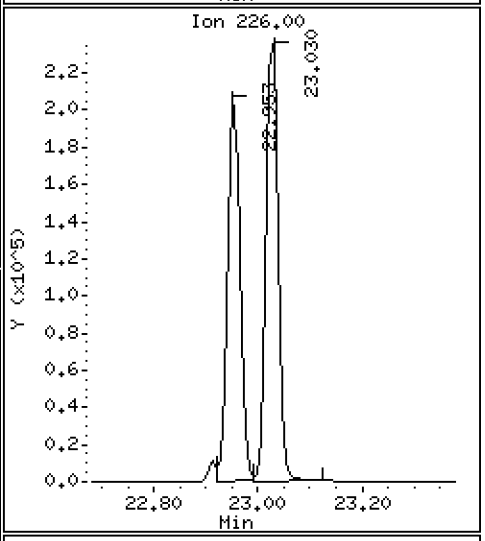
71 Chrysene

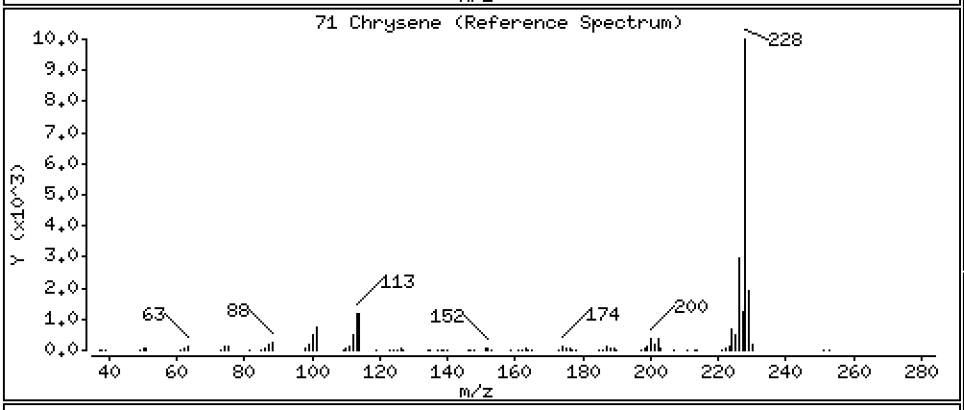
Concentration: 3.896 ug/mL

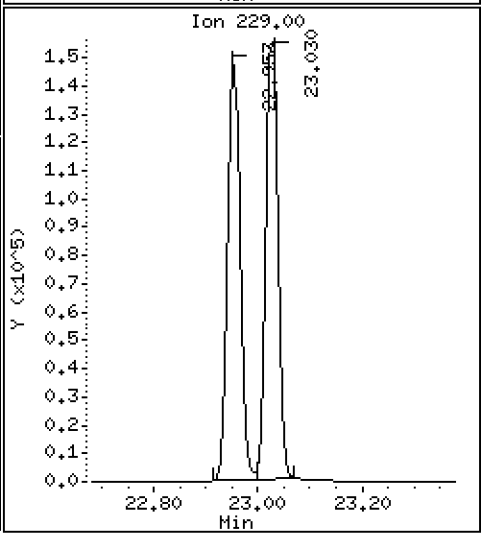


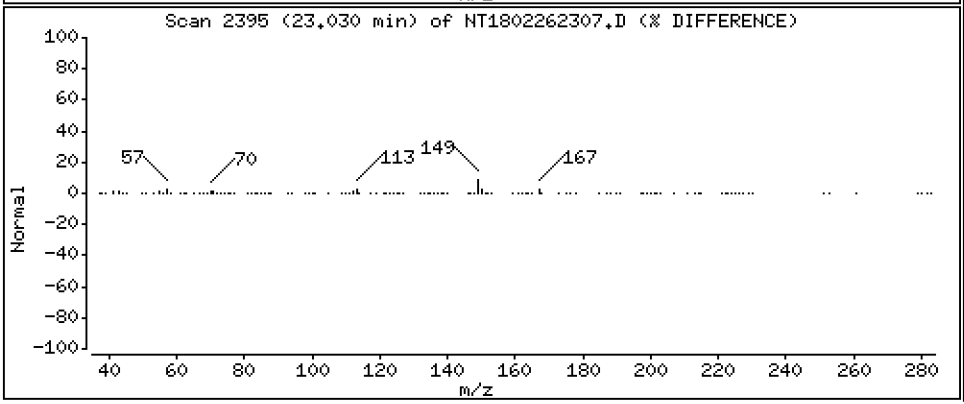












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

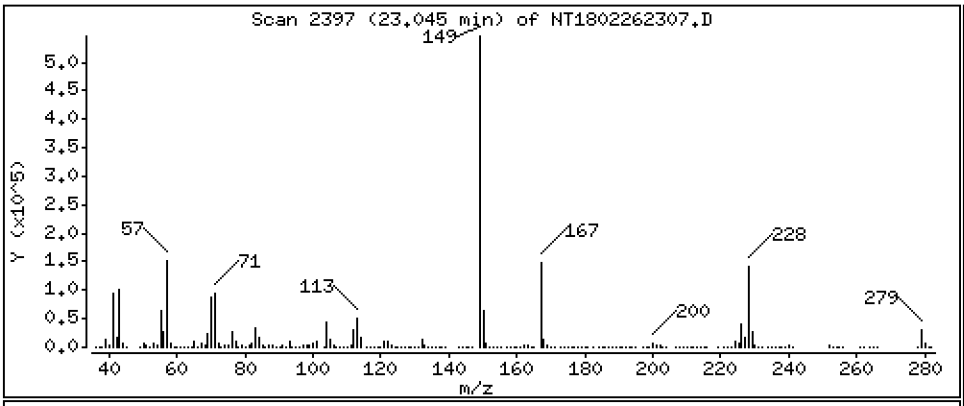
Operator: VTS

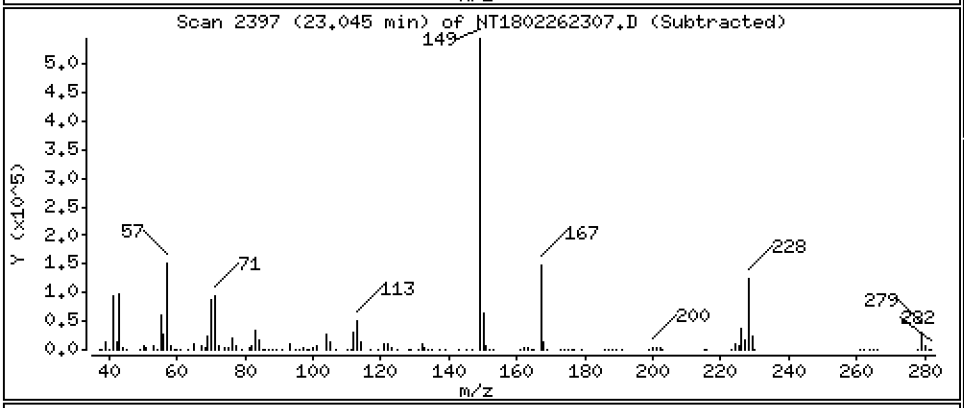
Column phase: ZB-5msi

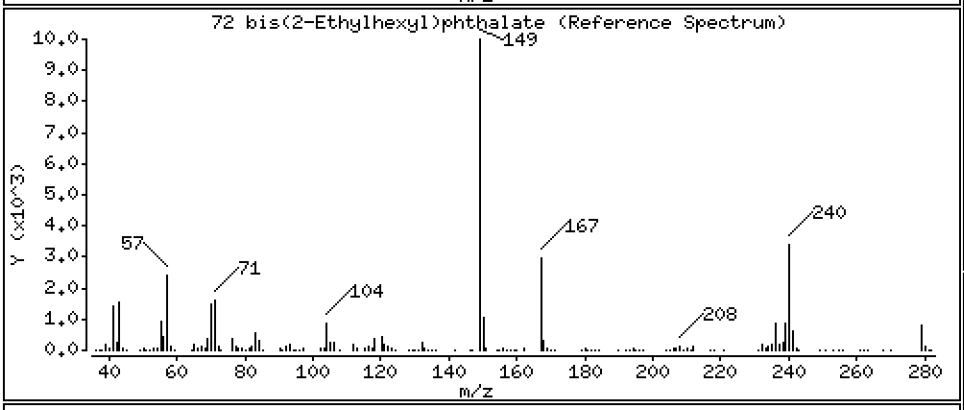
Column diameter: 0.25

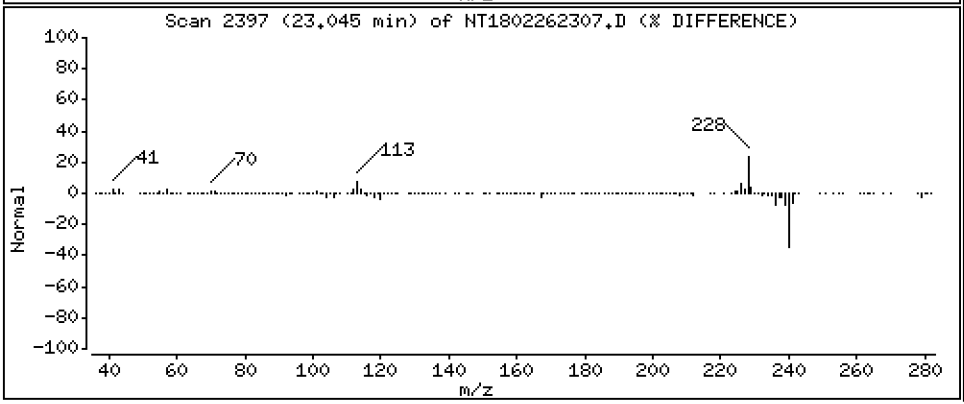
72 bis(2-Ethylhexyl)phthalate

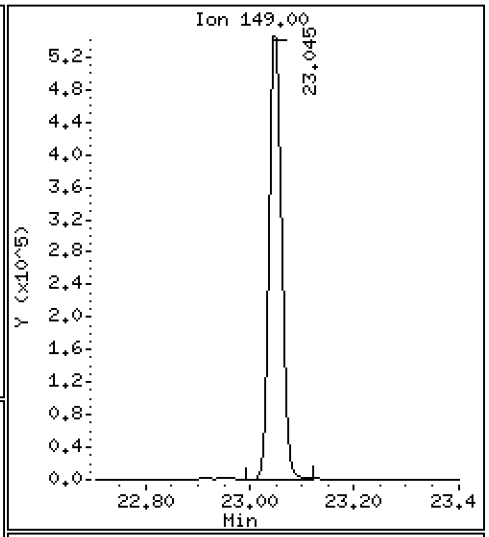
Concentration: 4.555 ug/mL

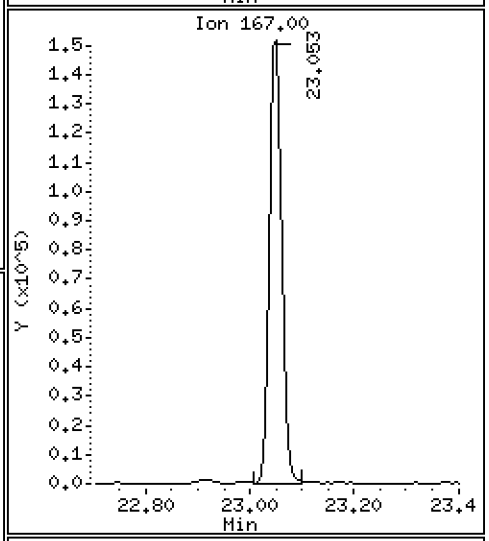


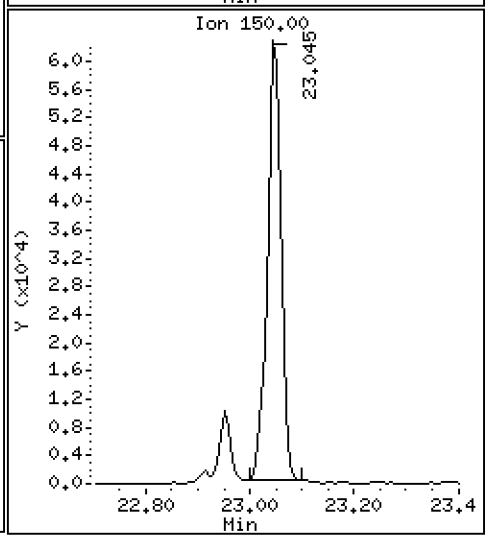












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

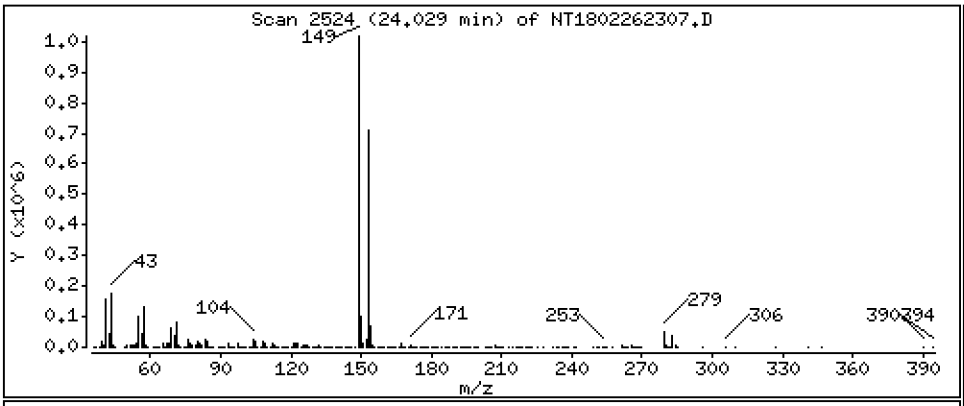
Operator: VTS

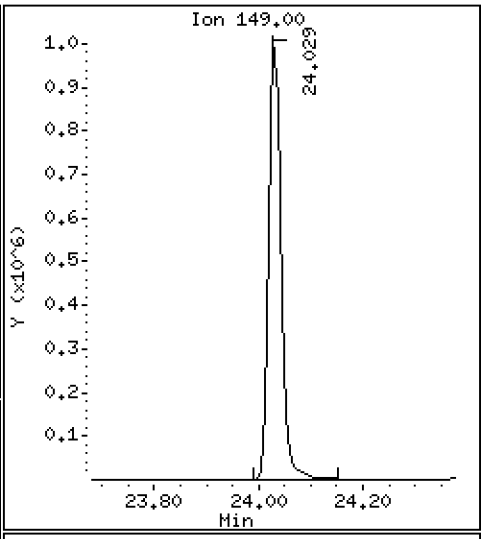
Column phase: ZB-5msi

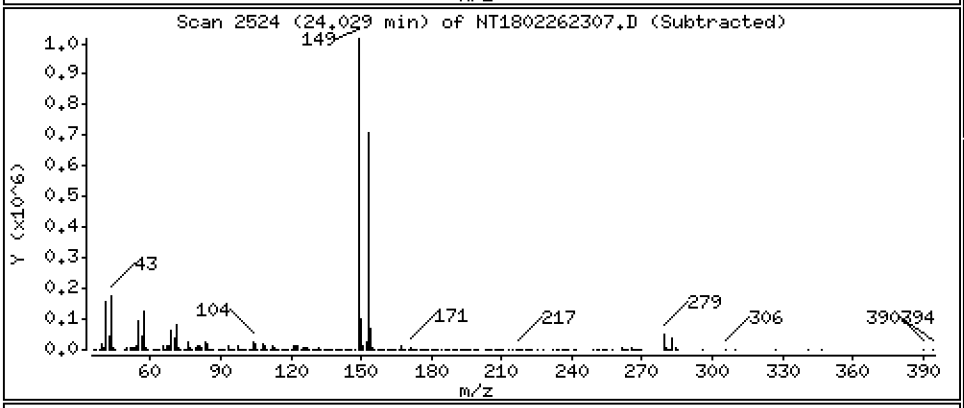
Column diameter: 0.25

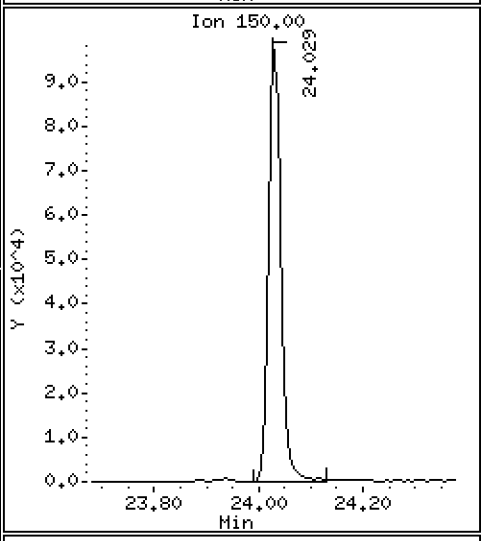
73 Di-n-octylphthalate

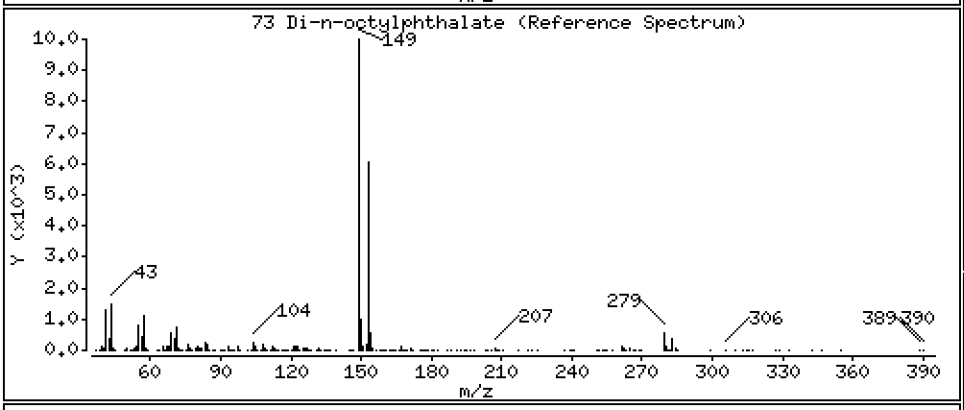
Concentration: 4.178 ug/mL

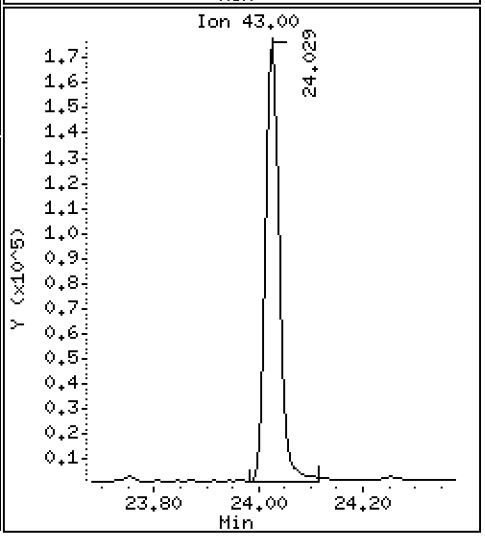


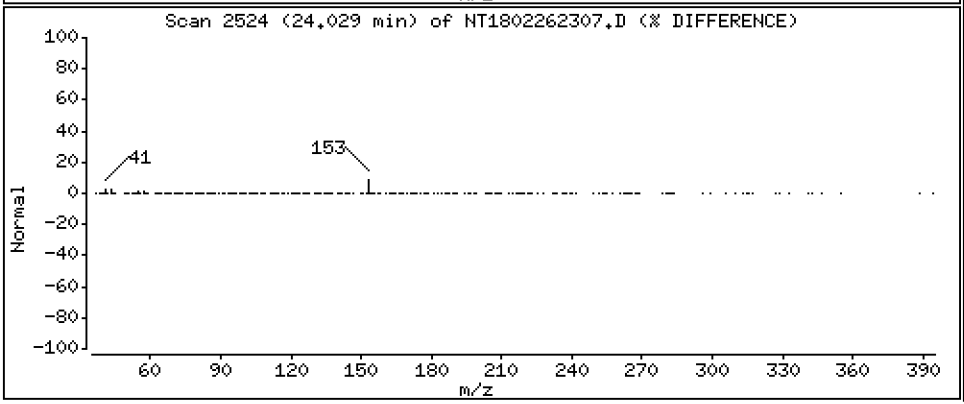












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262307.D

Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

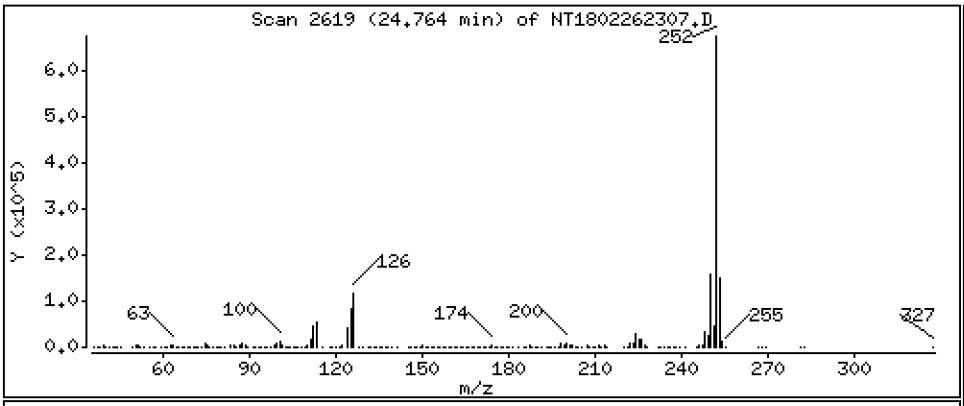
Operator: VTS

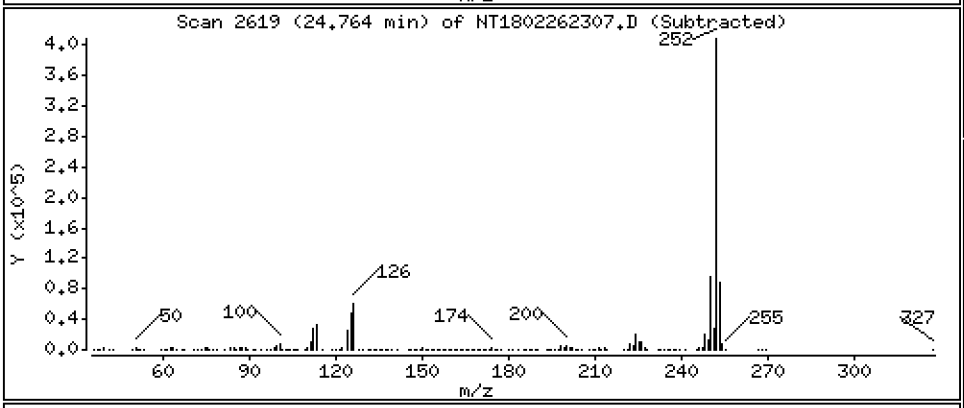
Column phase: ZB-5msi

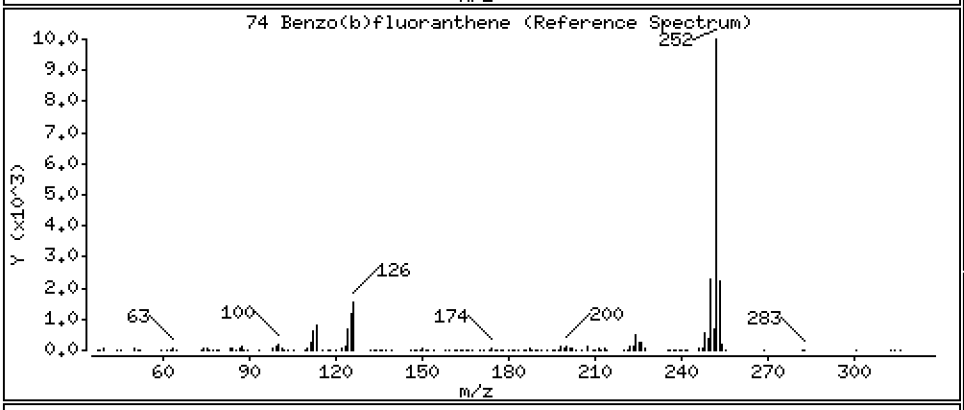
Column diameter: 0.25

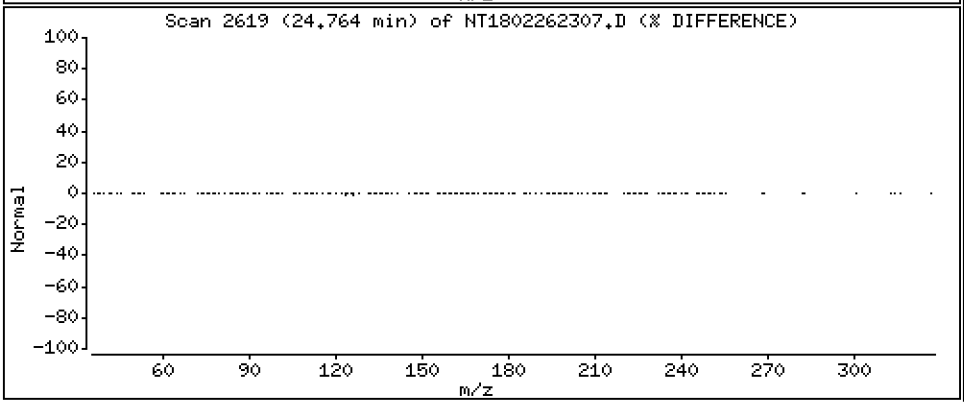
74 Benzo(b)fluoranthene

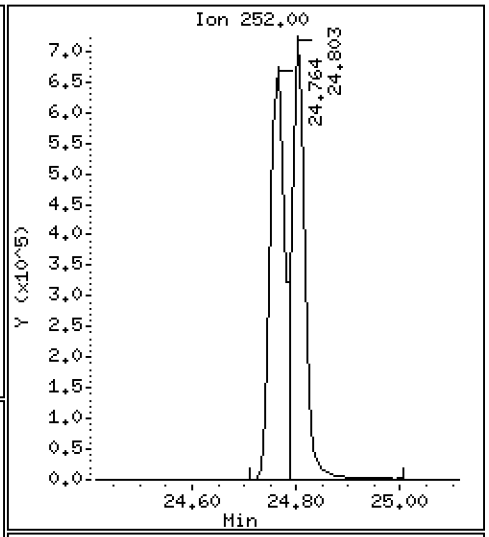
Concentration: 4.483 ug/mL

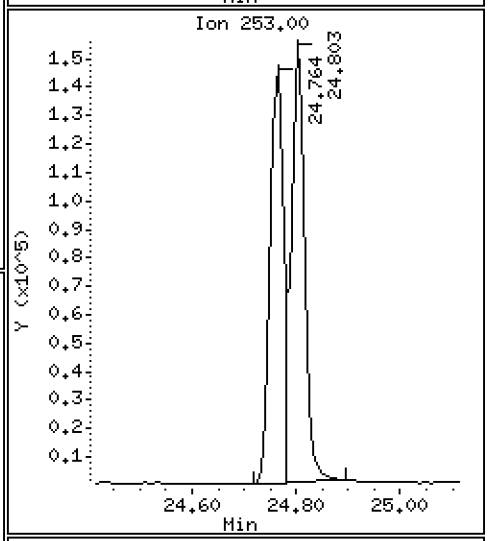


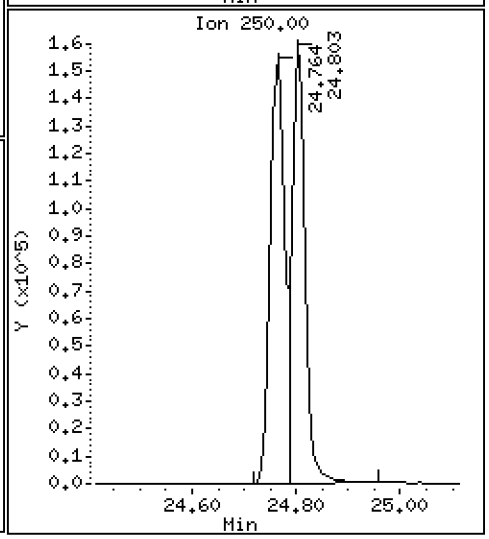












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

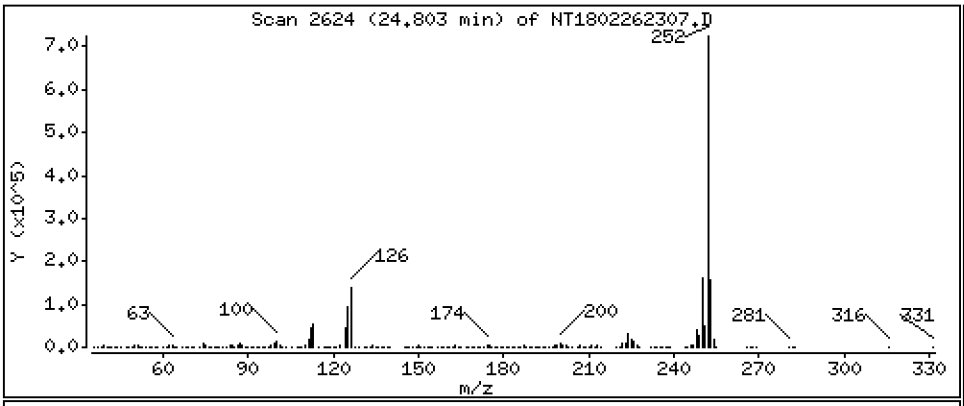
Operator: VTS

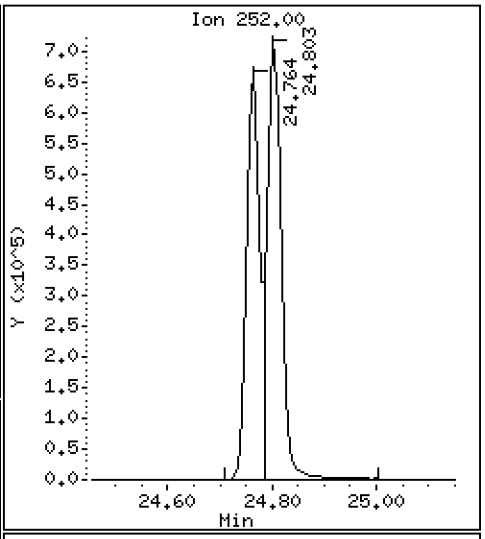
Column phase: ZB-5msi

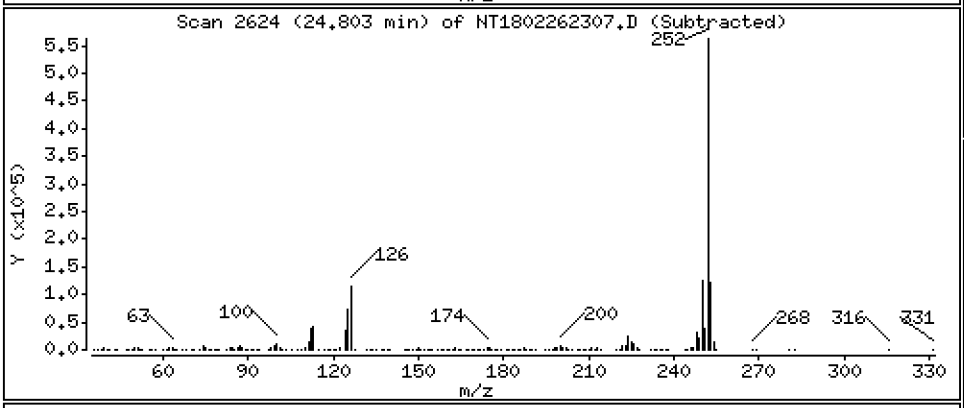
Column diameter: 0.25

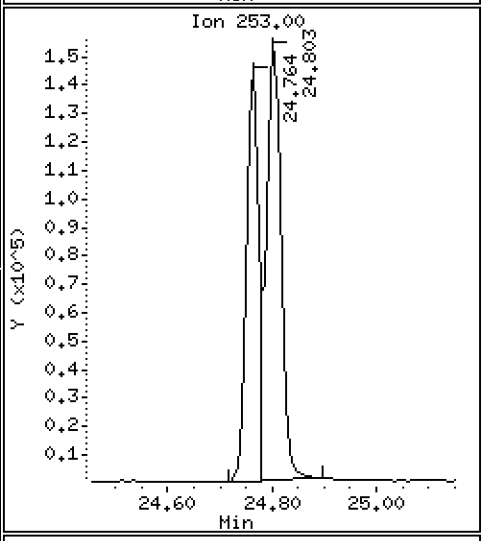
75 Benzo(k)fluoranthene

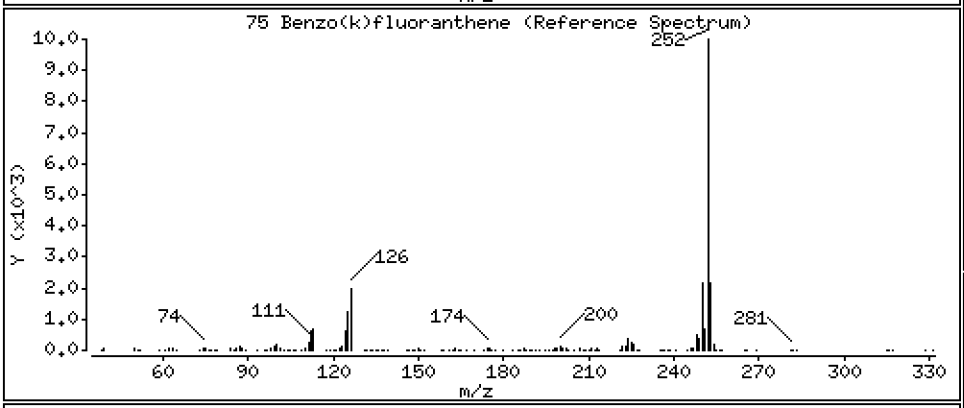
Concentration: 3.914 ug/mL

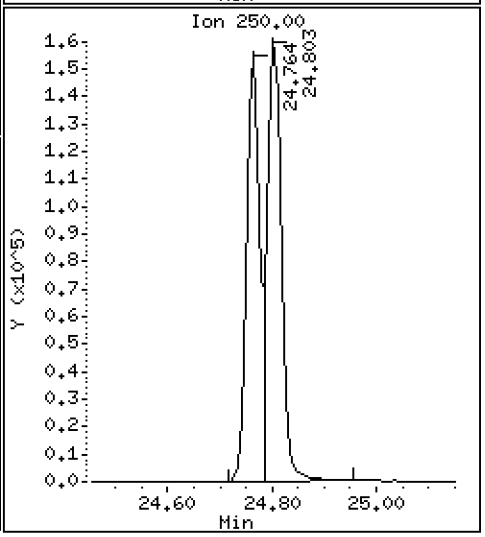


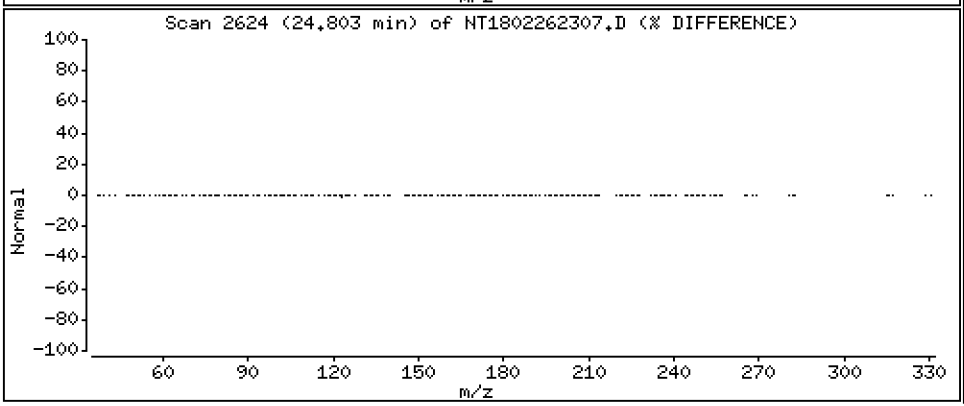












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

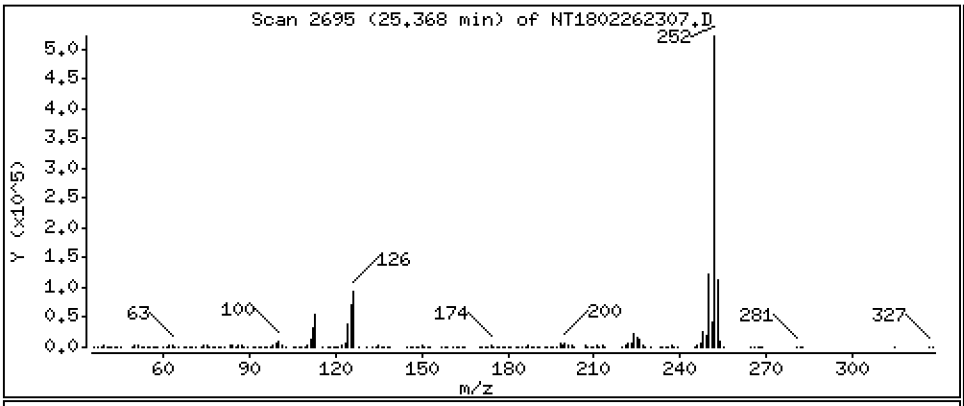
Operator: VTS

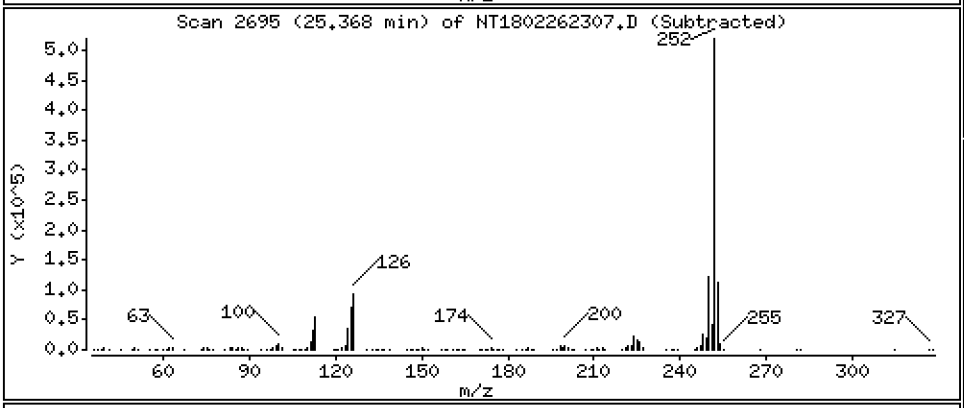
Column phase: ZB-5msi

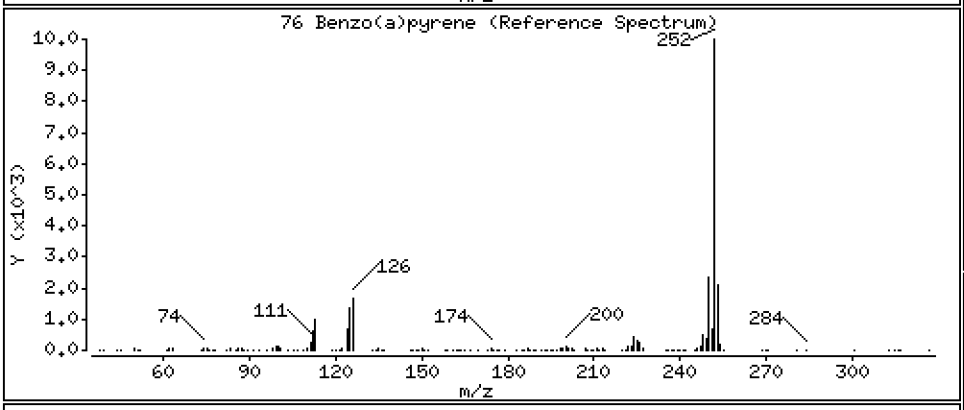
Column diameter: 0.25

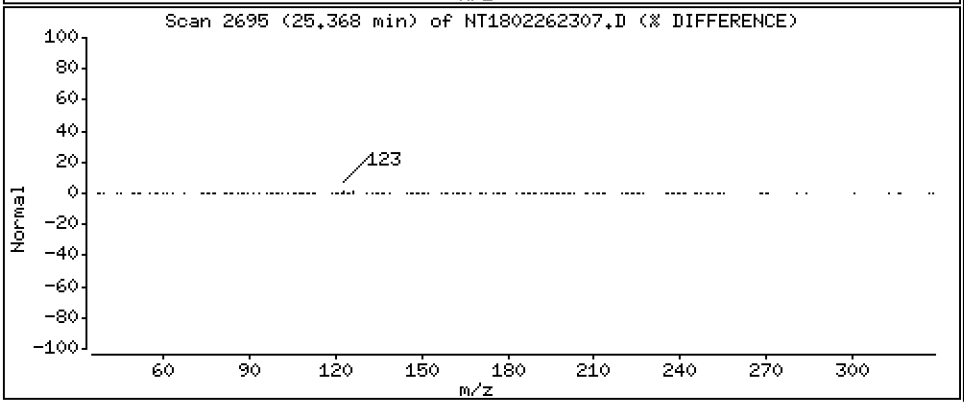
76 Benzo(a)pyrene

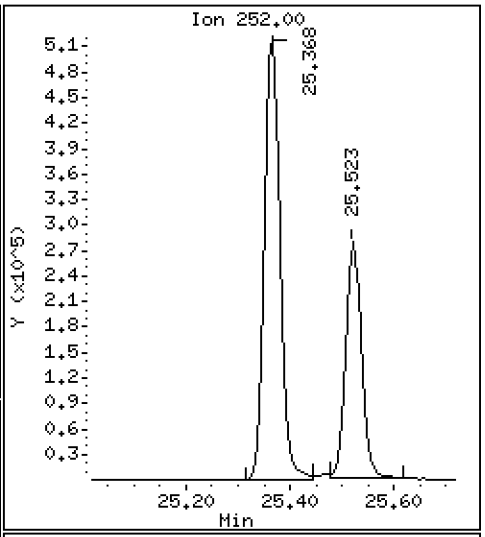
Concentration: 3.835 ug/mL

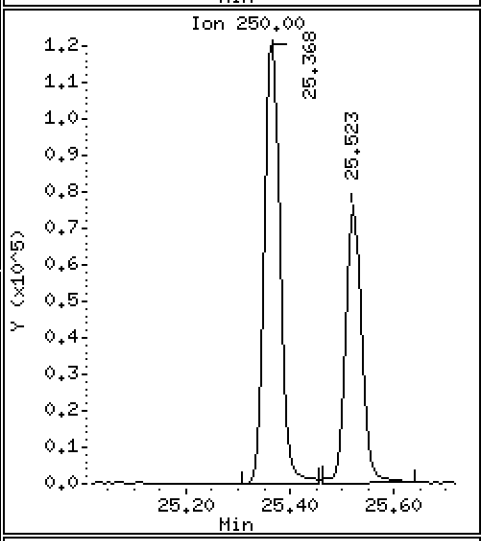


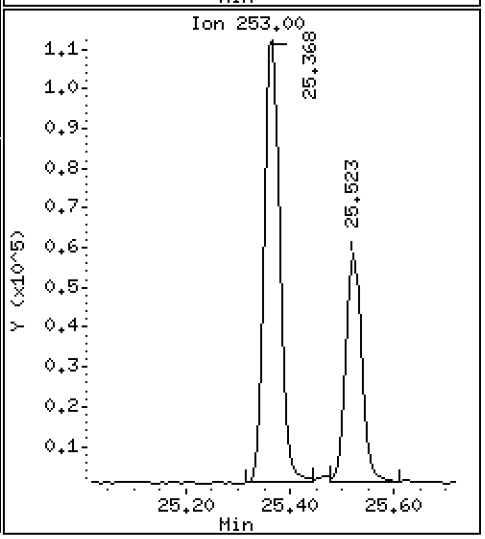












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

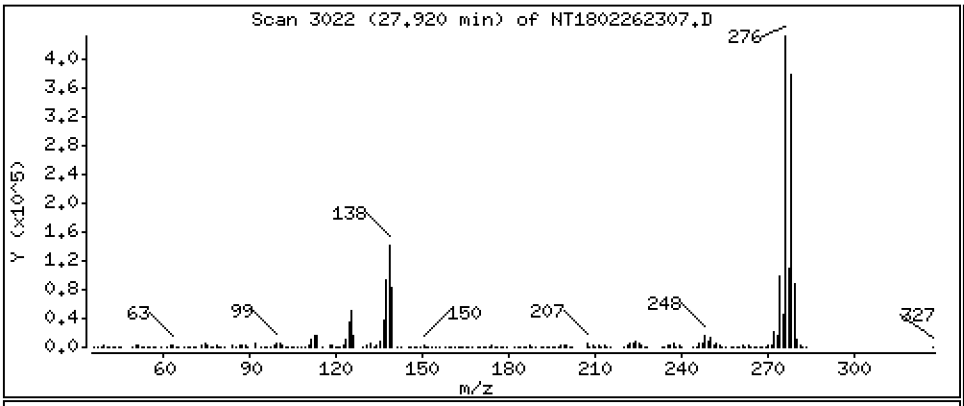
Operator: VTS

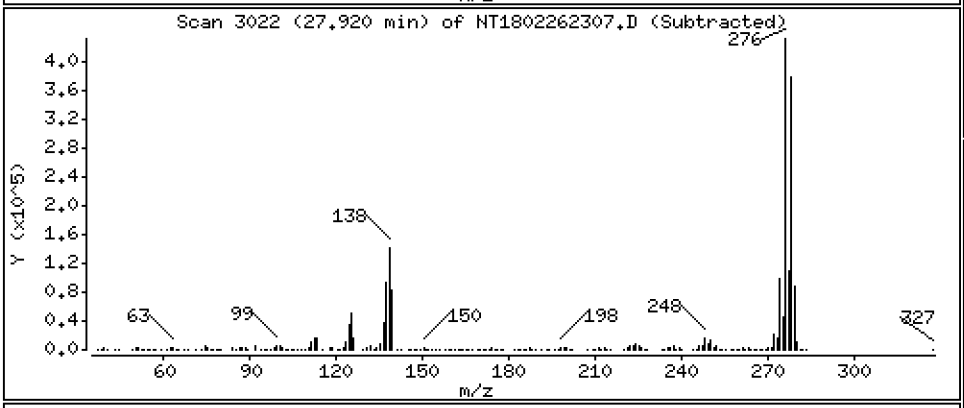
Column phase: ZB-5msi

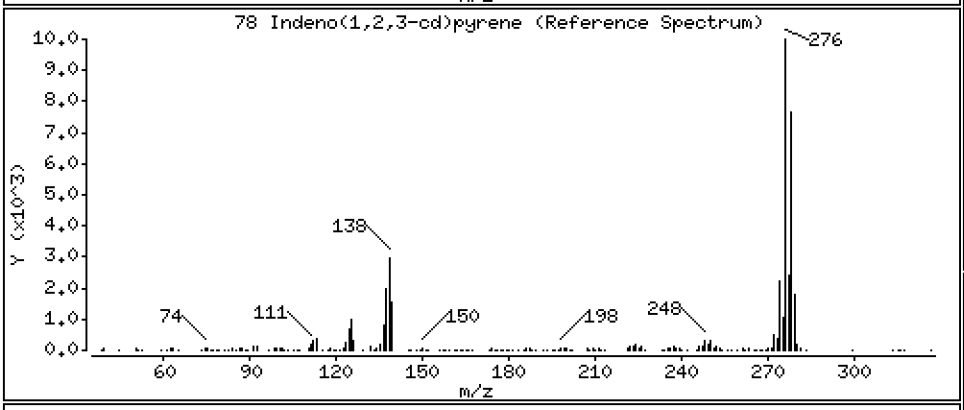
Column diameter: 0.25

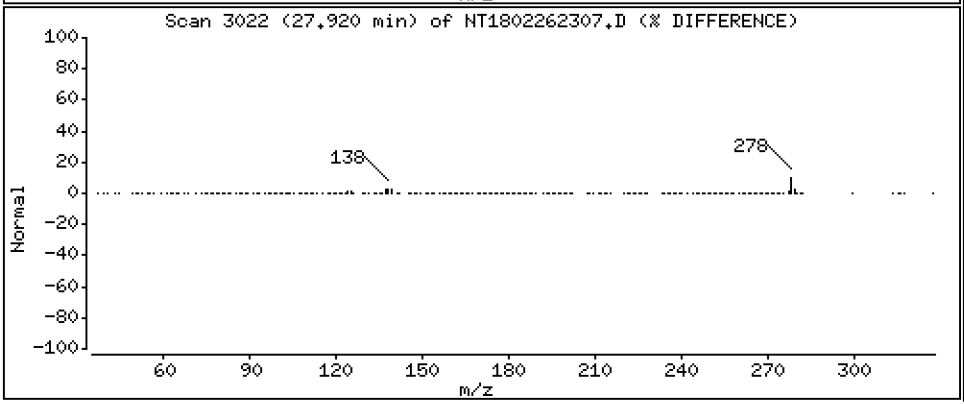
78 Indeno(1,2,3-cd)pyrene

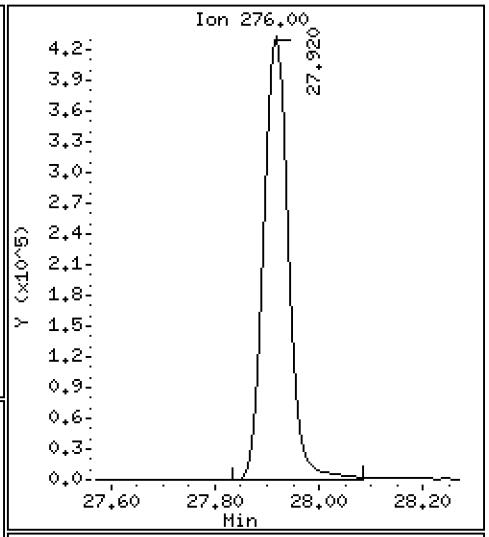
Concentration: 4.162 ug/mL

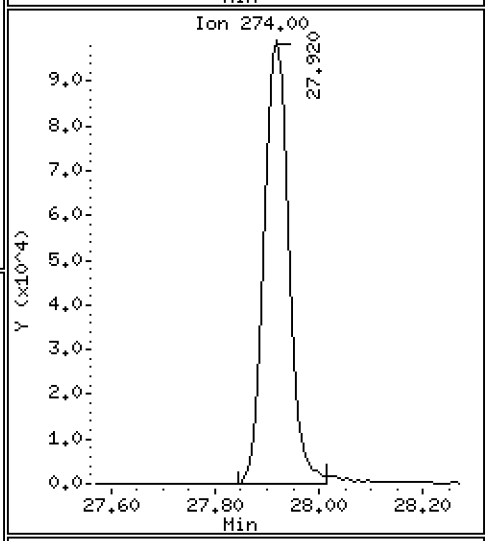


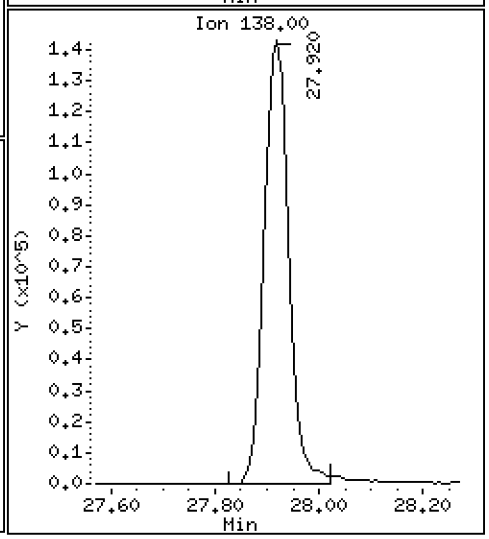












Date : 26-FEB-2023 15:52

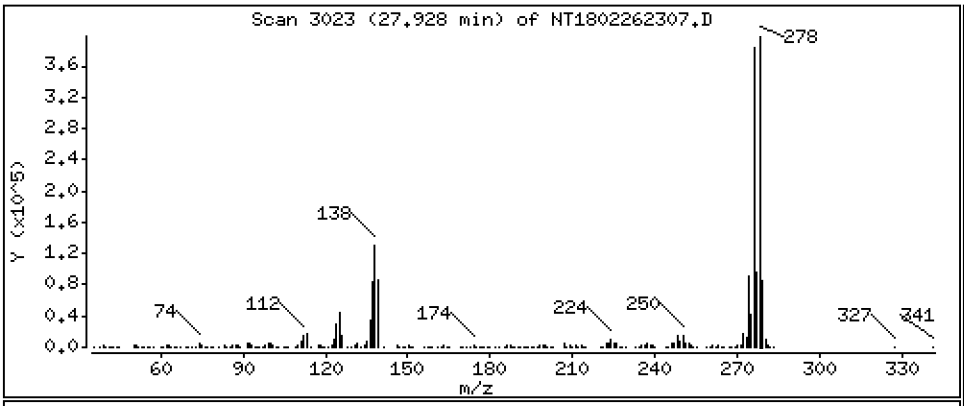
Client ID: Instrument: nt18.i

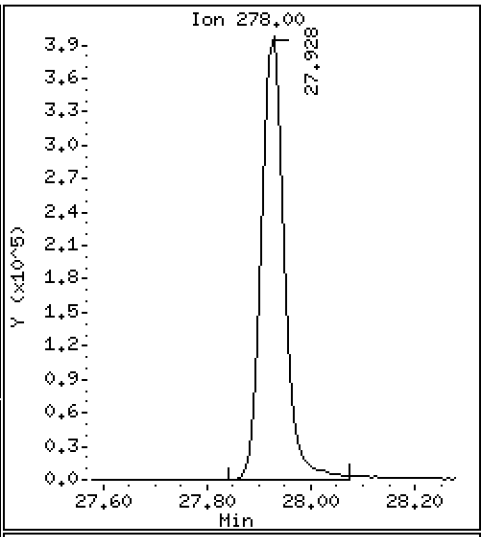
Sample Info: BLA0410-BS1

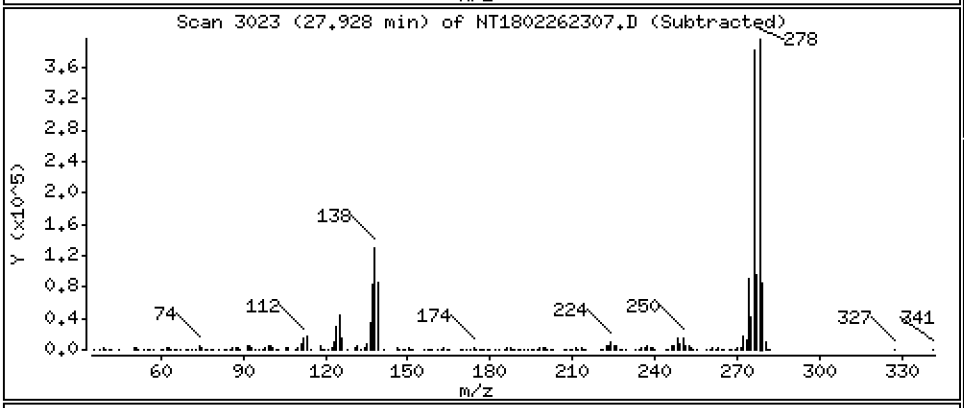
Operator: VTS

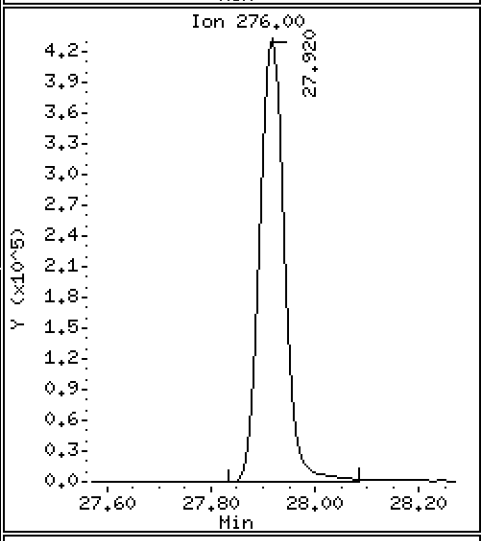
Column phase: ZB-5msi Column diameter: 0.25

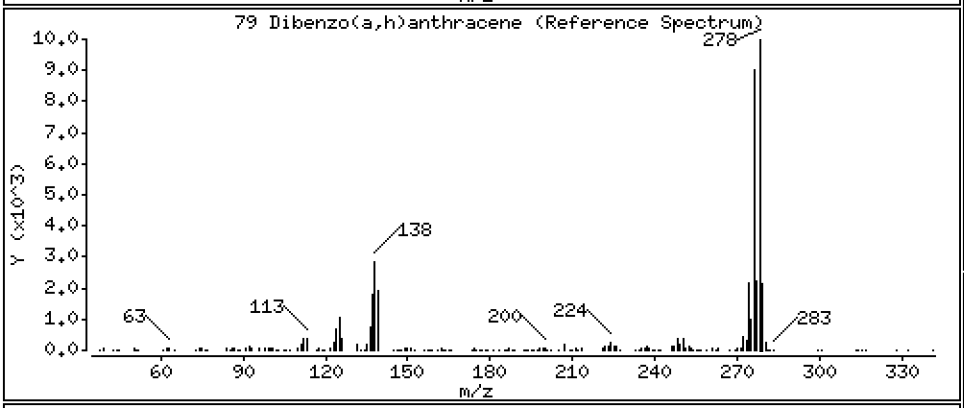
79 Dibenzo(a,h)anthracene Concentration: 4.212 ug/mL

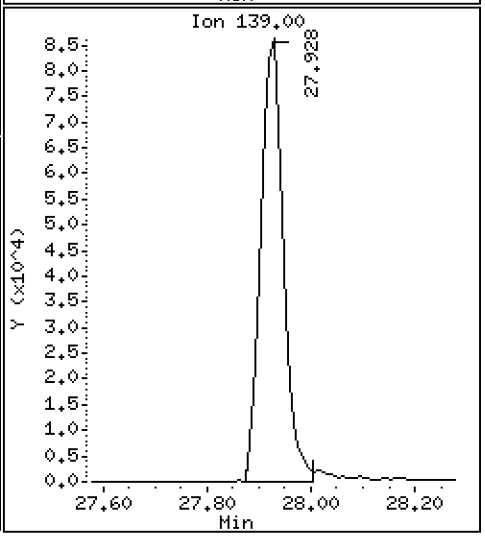


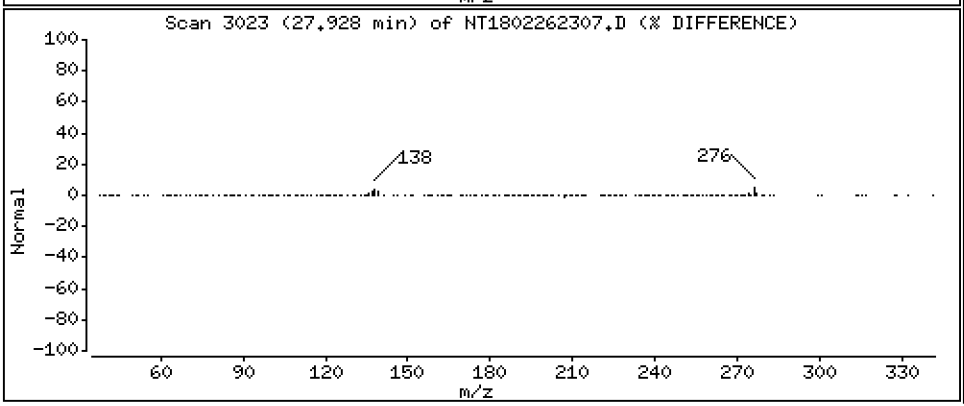












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

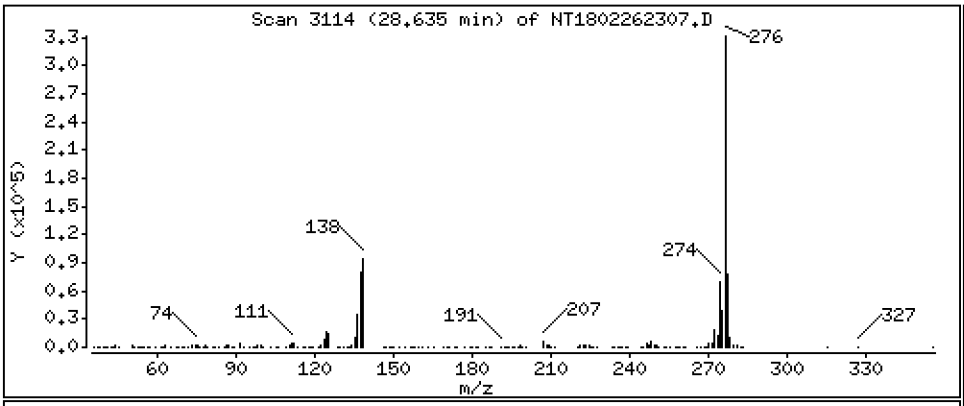
Operator: VTS

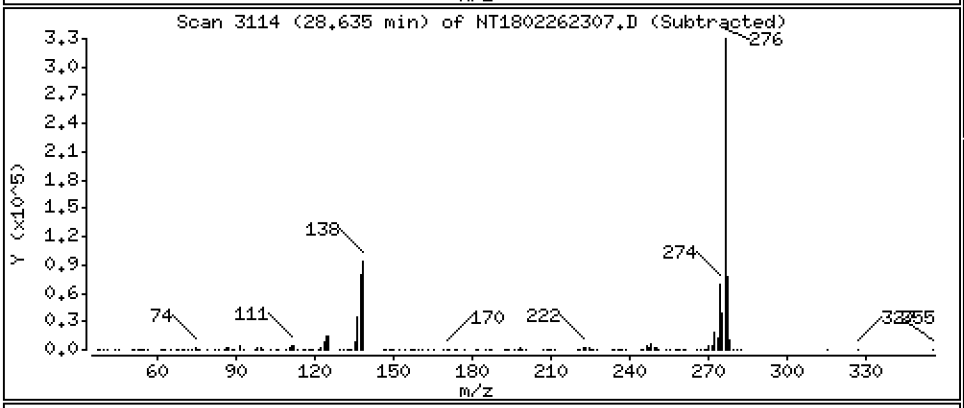
Column phase: ZB-5msi

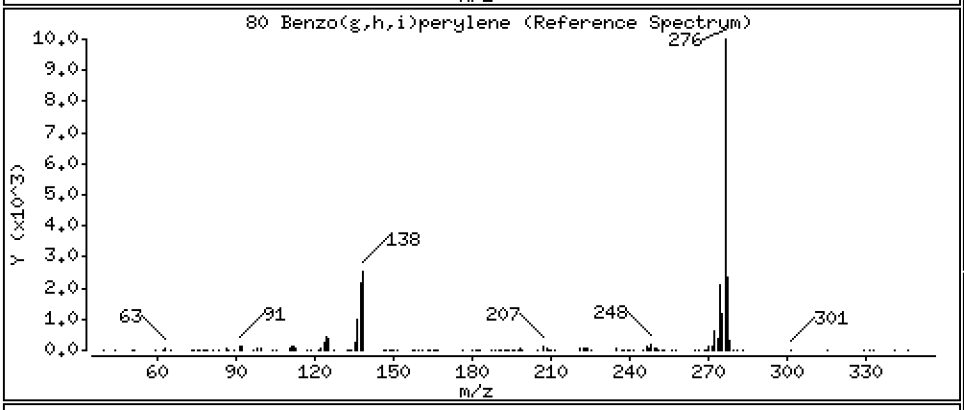
Column diameter: 0.25

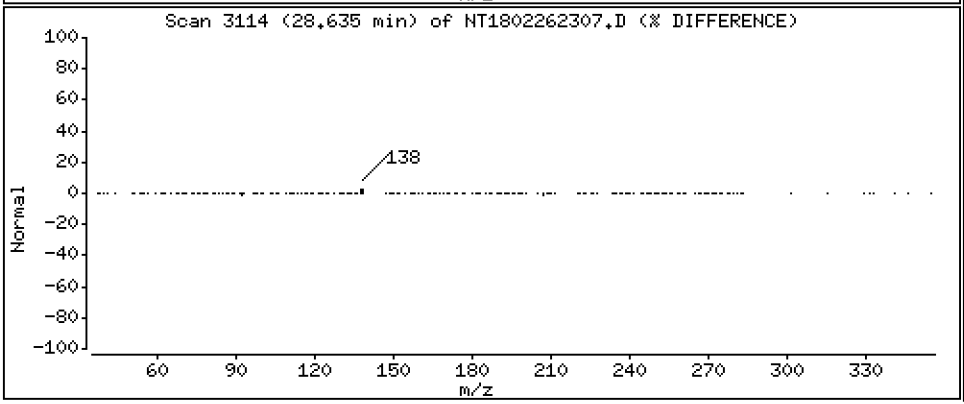
80 Benzo(g,h,i)perylene

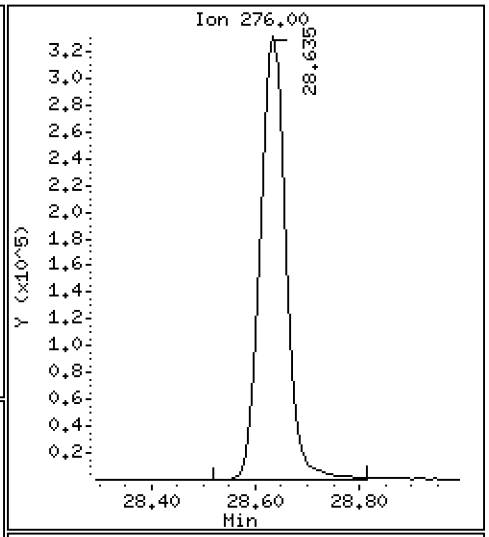
Concentration: 4.120 ug/mL

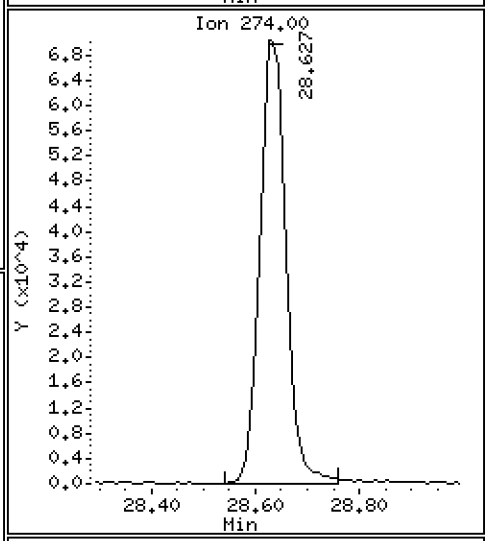


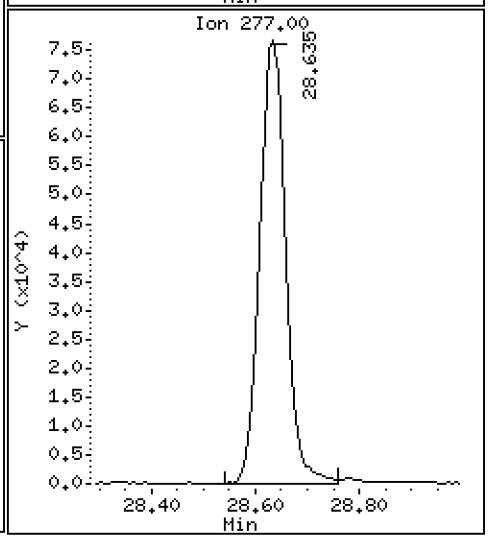












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

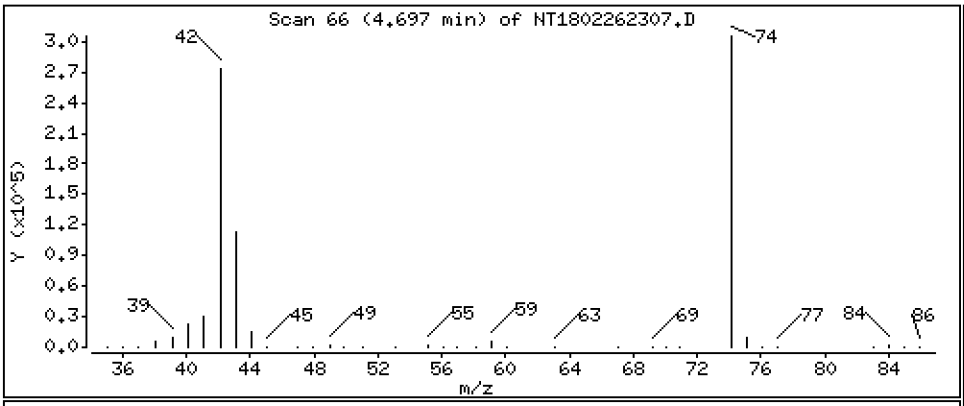
Operator: VTS

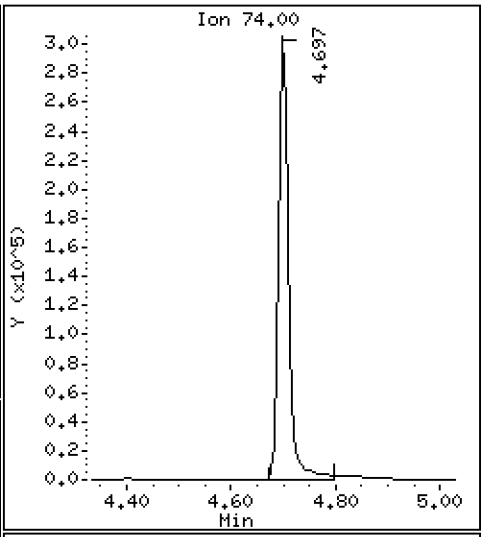
Column phase: ZB-5msi

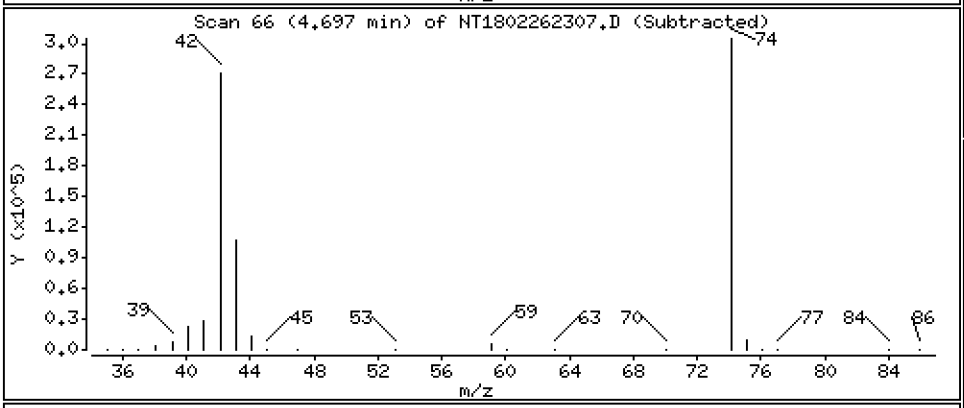
Column diameter: 0.25

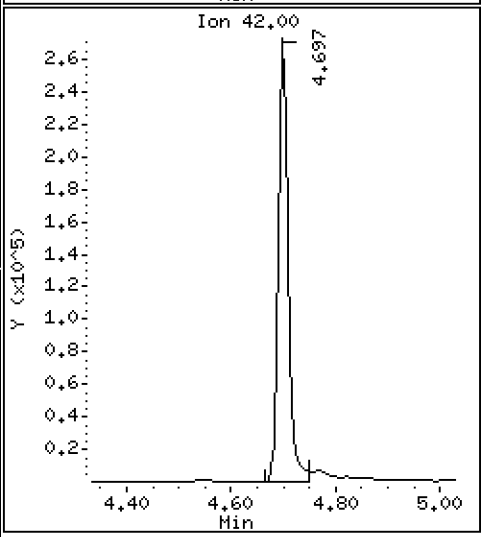
90 N-Nitrosodimethylamine

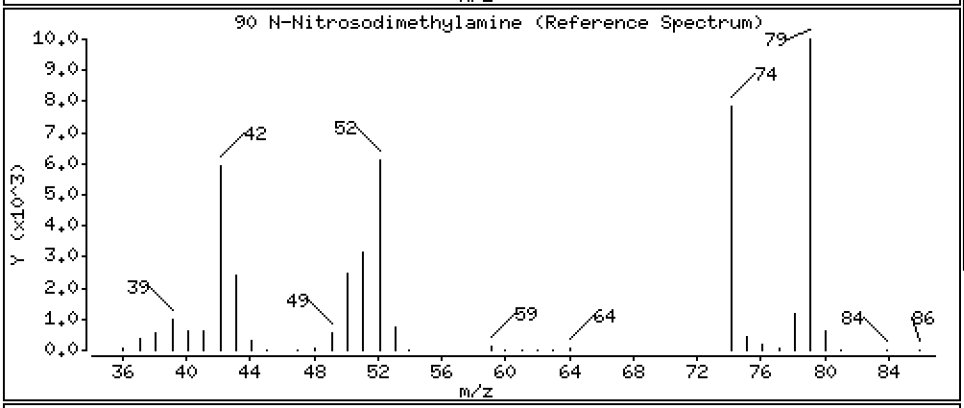
Concentration: 8.317 ug/mL

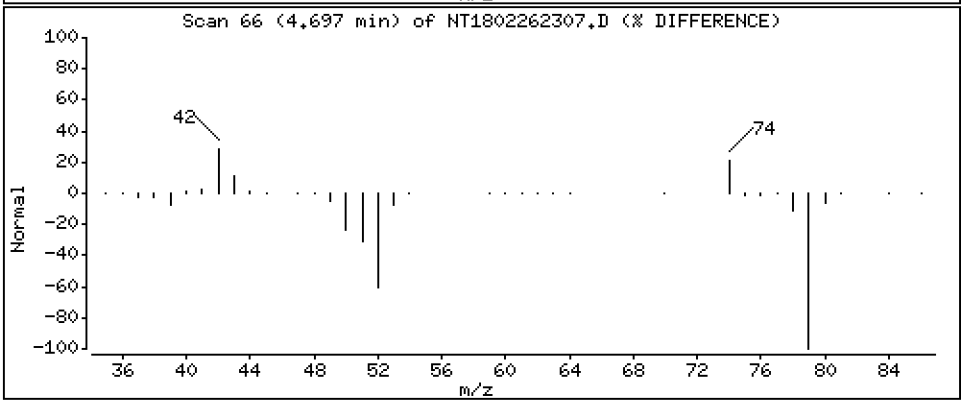












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

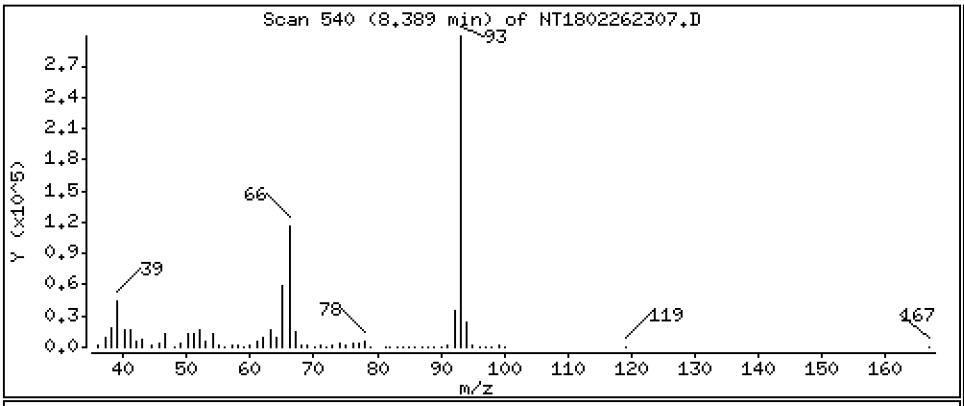
Operator: VTS

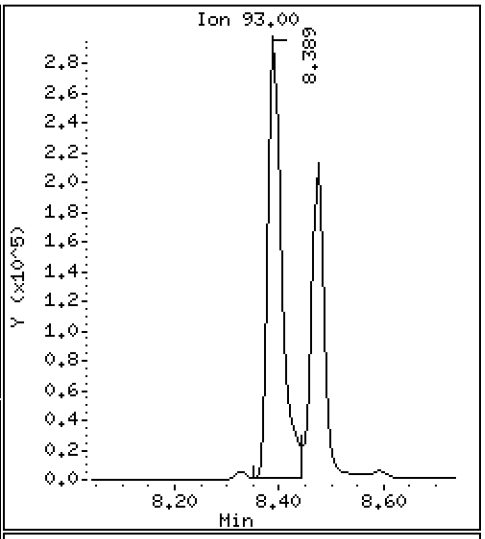
Column phase: ZB-5msi

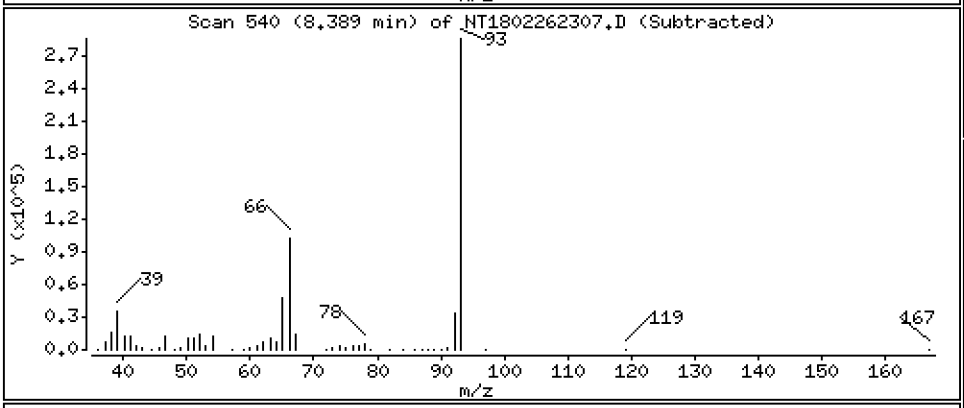
Column diameter: 0.25

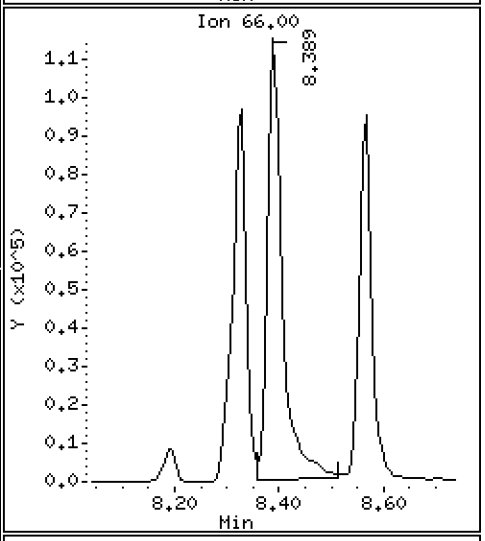
91 Aniline

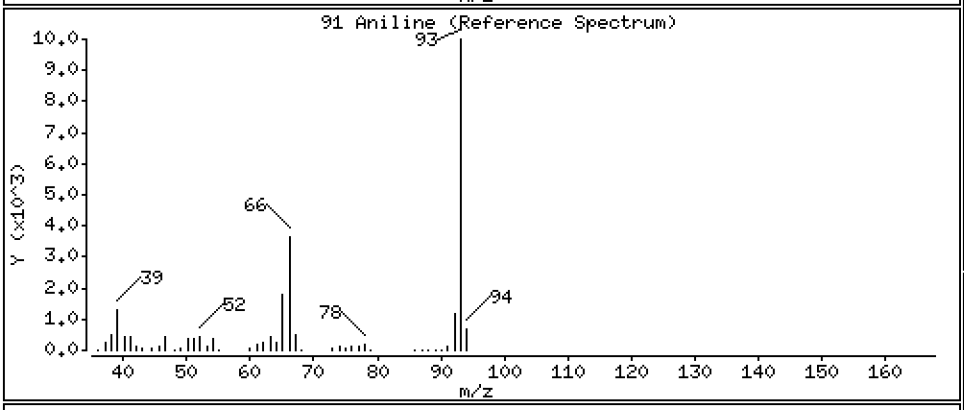
Concentration: 3.924 ug/mL

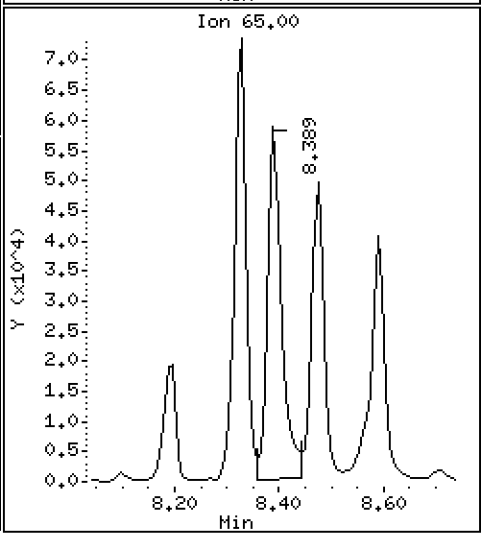


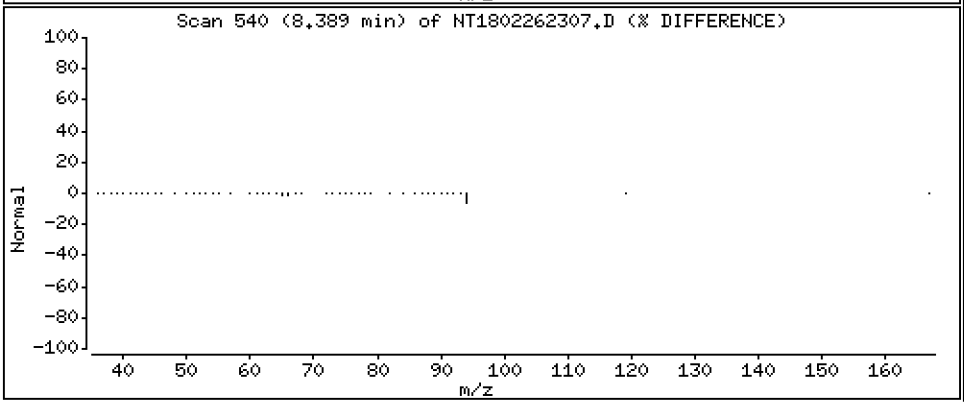












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

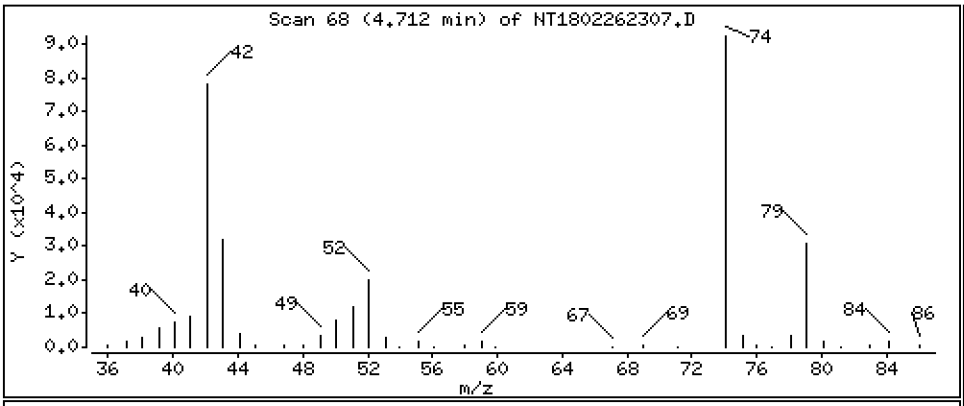
Operator: VTS

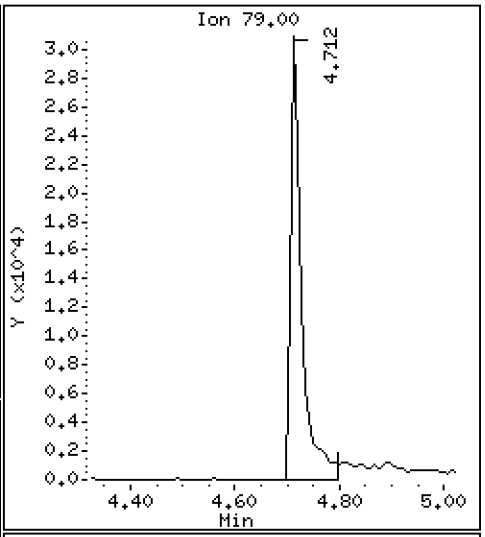
Column phase: ZB-5msi

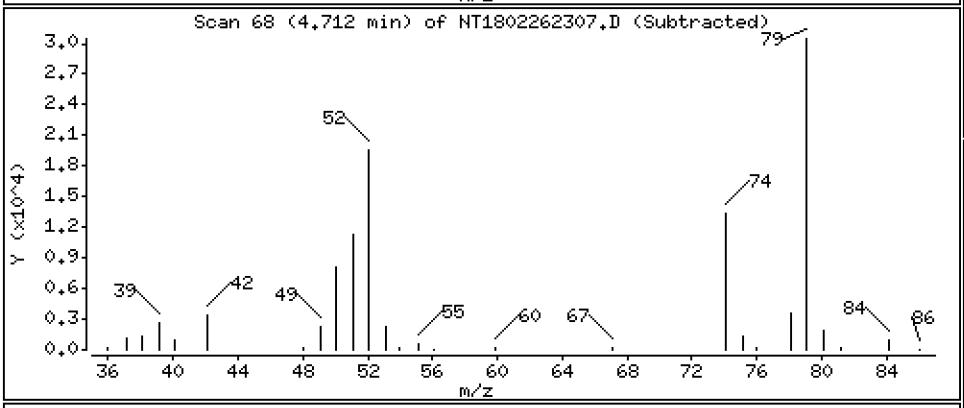
Column diameter: 0.25

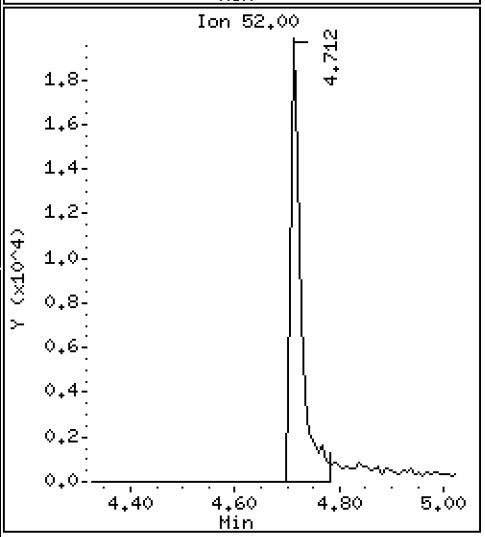
103 Pyridine

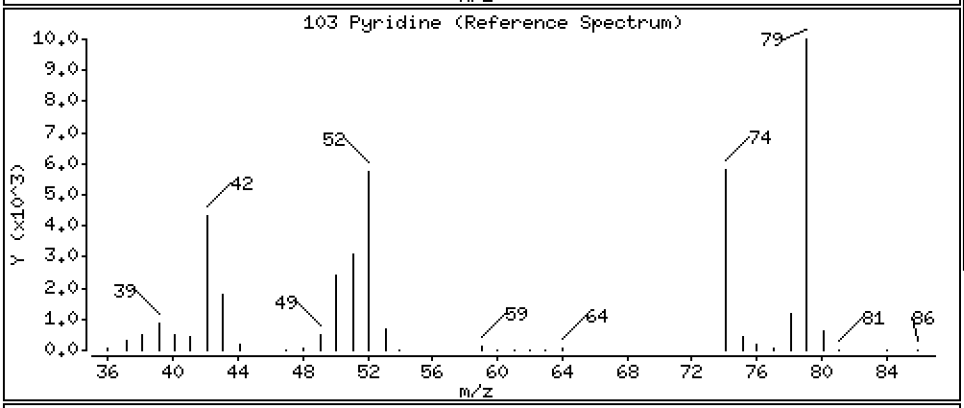
Concentration: 0.5479 ug/mL

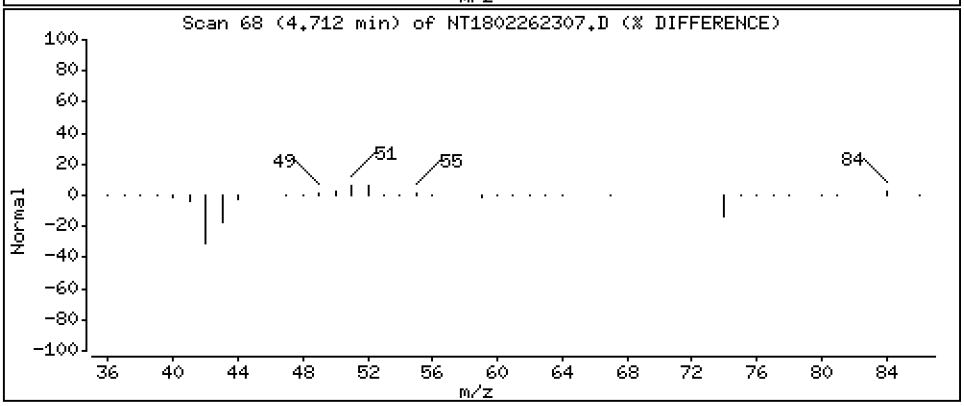












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

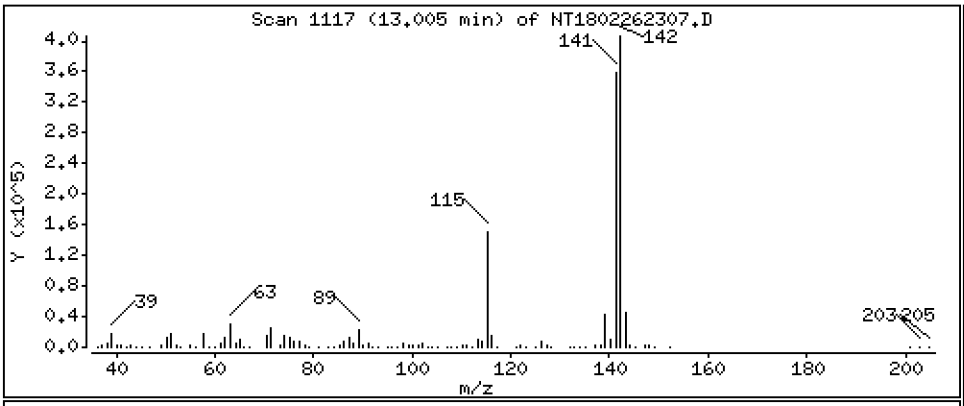
Operator: VTS

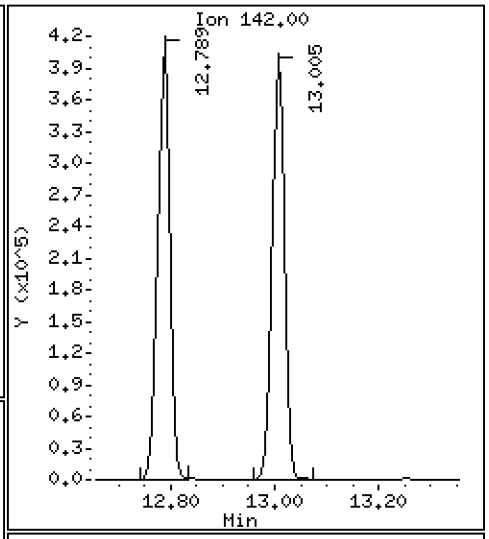
Column phase: ZB-5msi

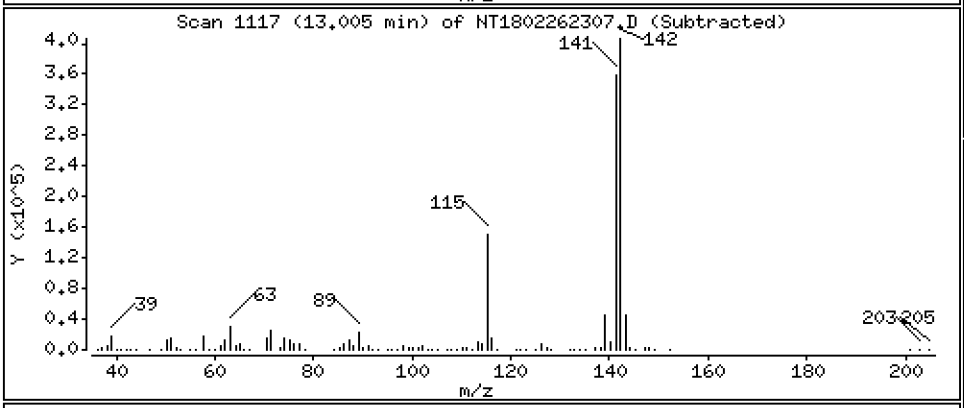
Column diameter: 0.25

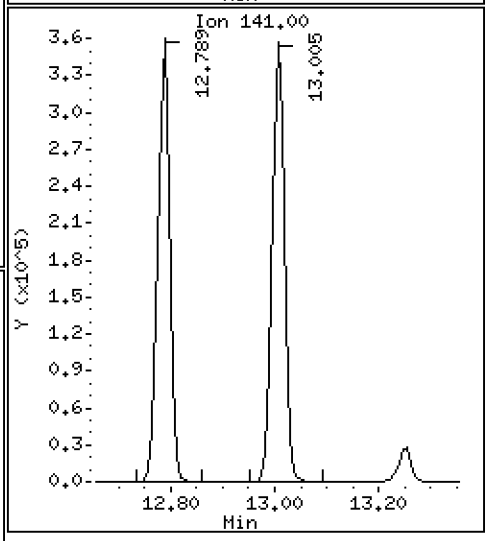
105 1-methylnaphthalene

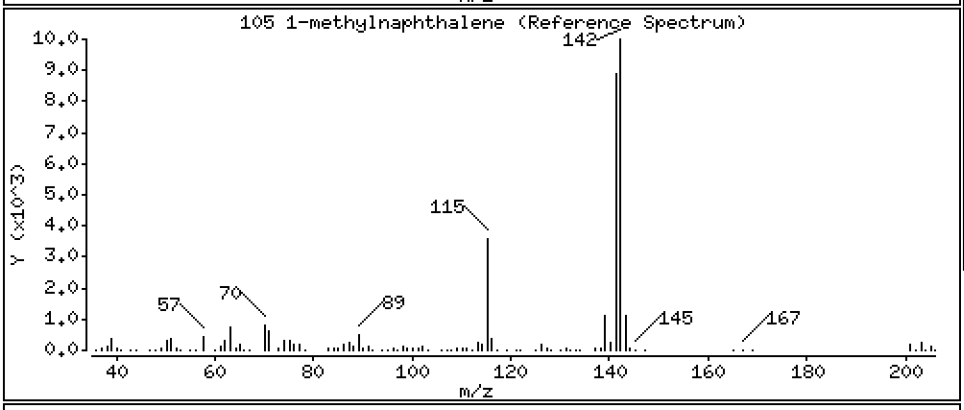
Concentration: 3.349 ug/mL

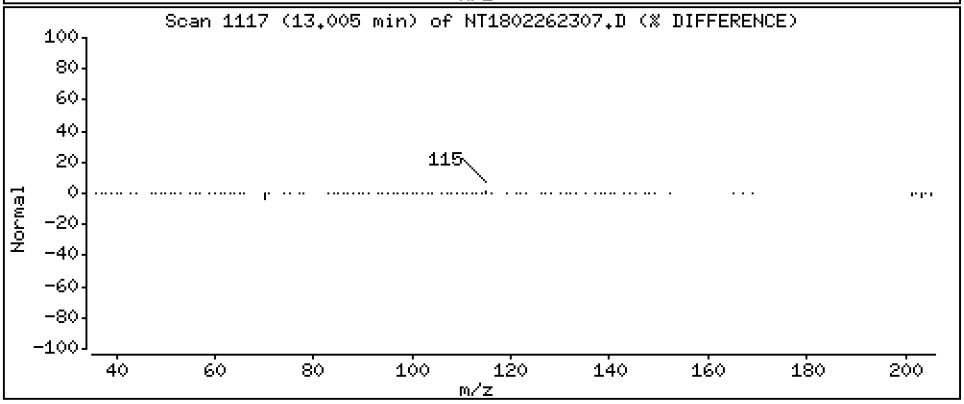












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

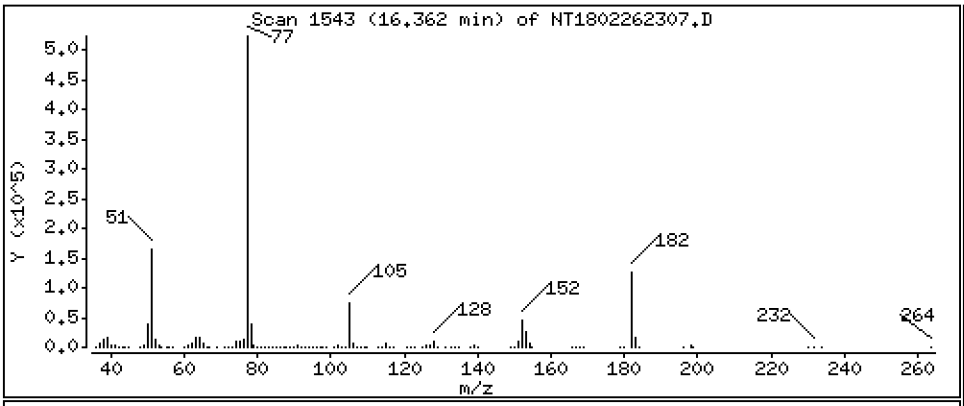
Operator: VTS

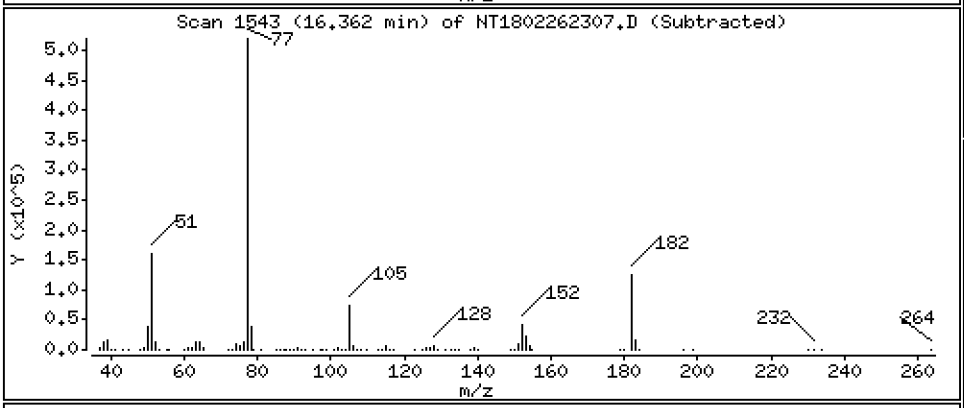
Column phase: ZB-5msi

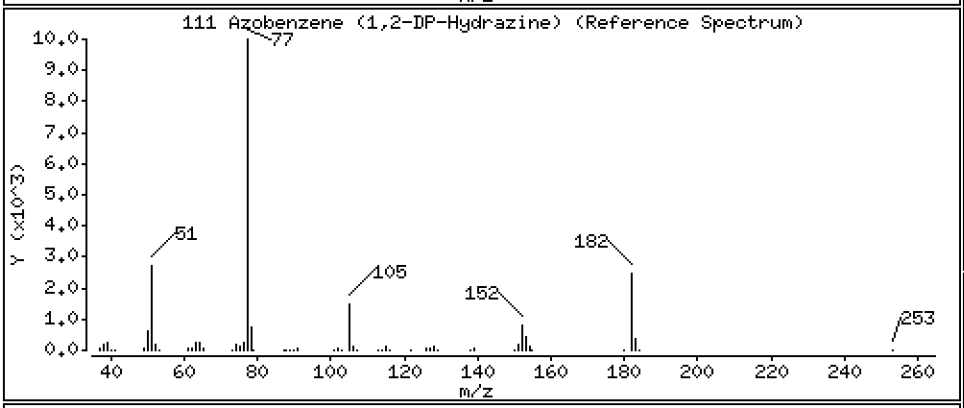
Column diameter: 0.25

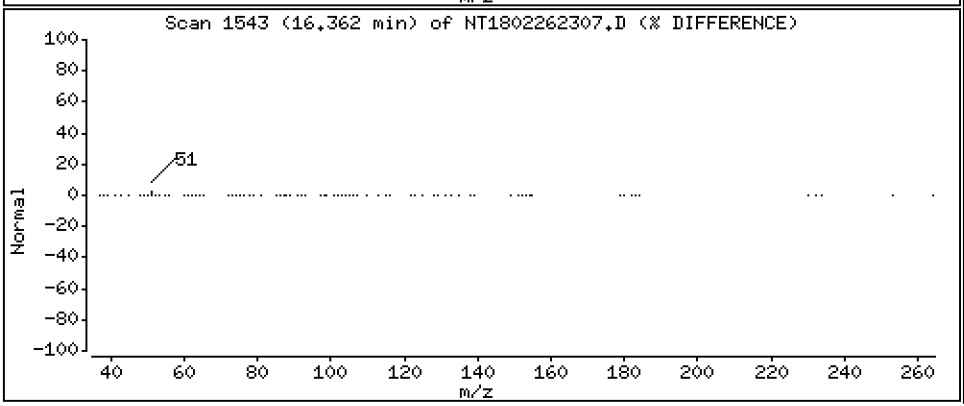
111 Azobenzene (1,2-DP-Hydrazine)

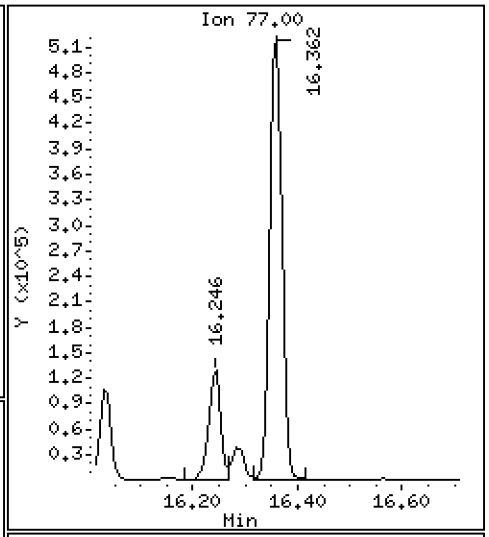
Concentration: 3.752 ug/mL

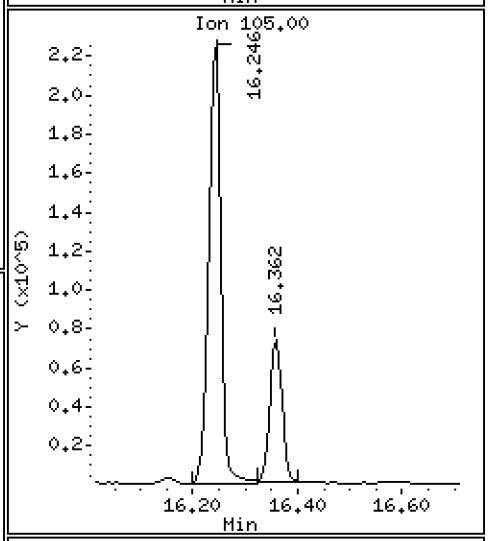


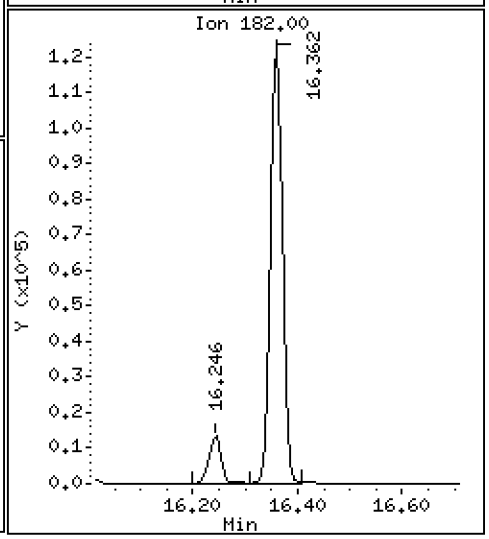












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

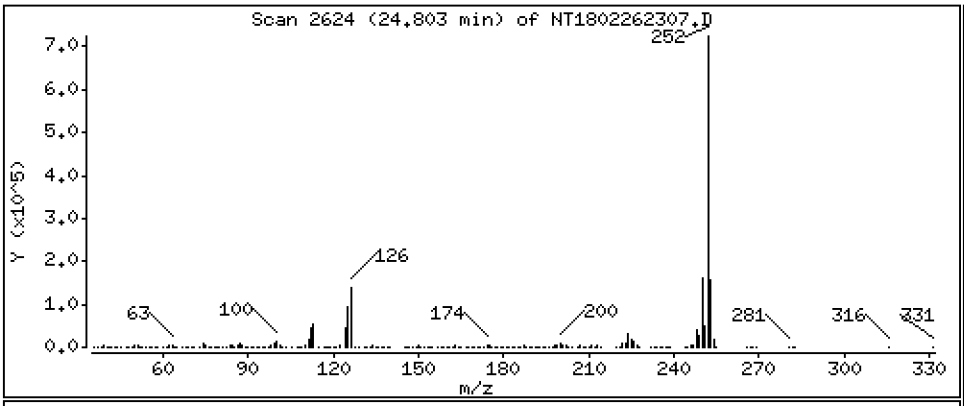
Operator: VTS

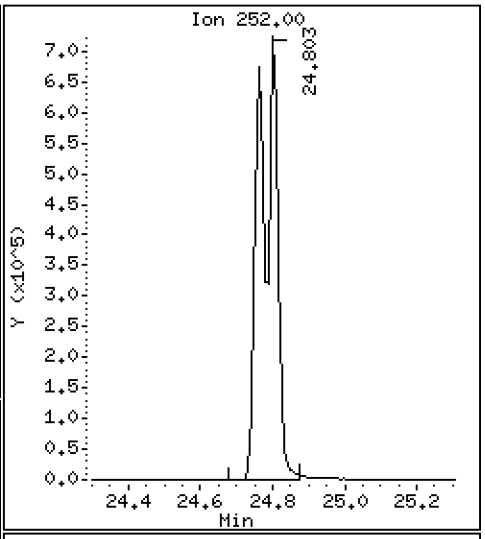
Column phase: ZB-5msi

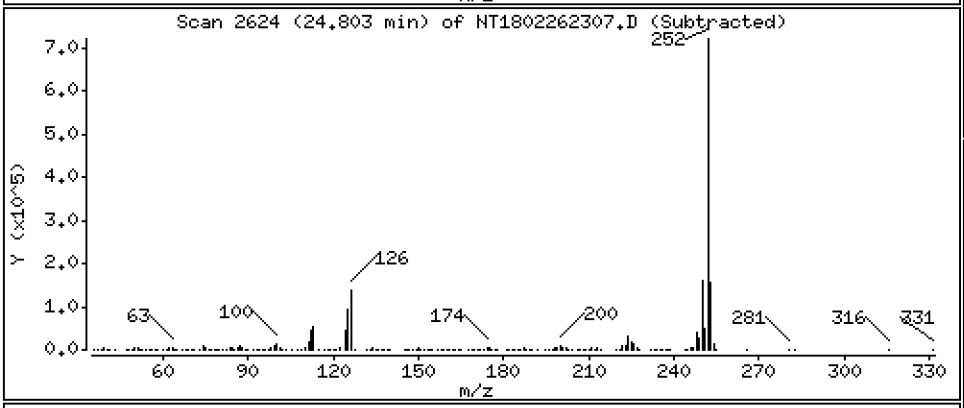
Column diameter: 0.25

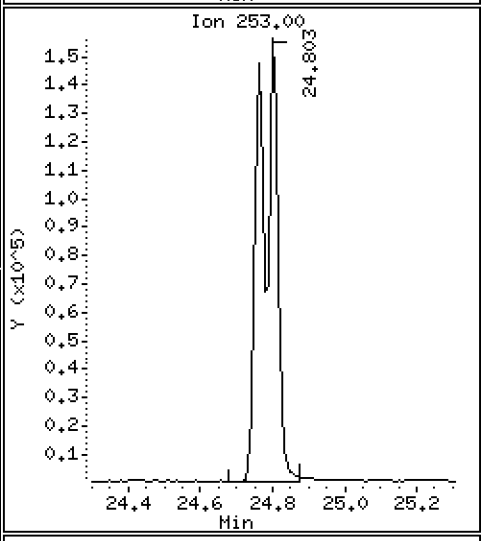
187 Total Benzofluoranthenes

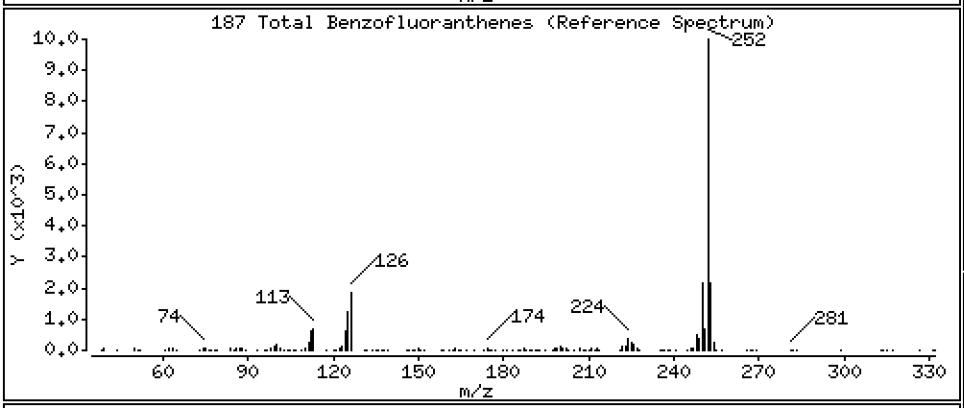
Concentration: 8.286 ug/mL

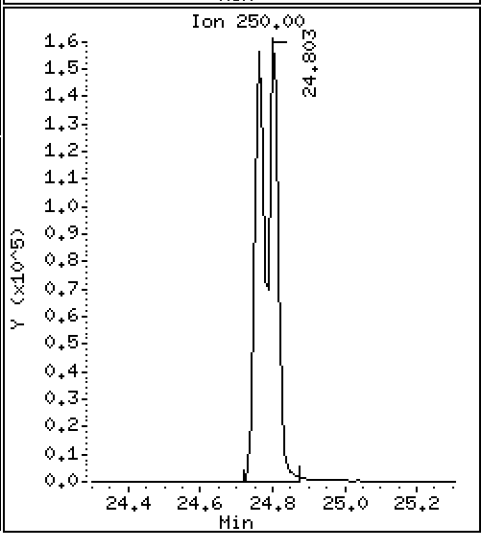


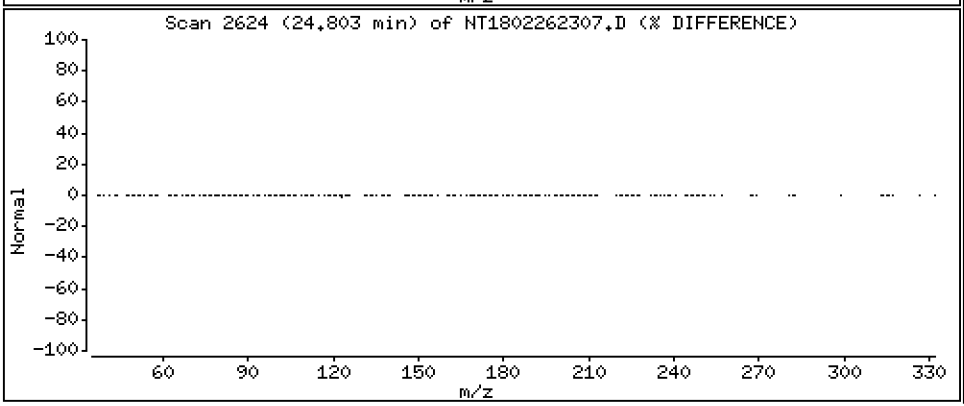












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262307.D

Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS1

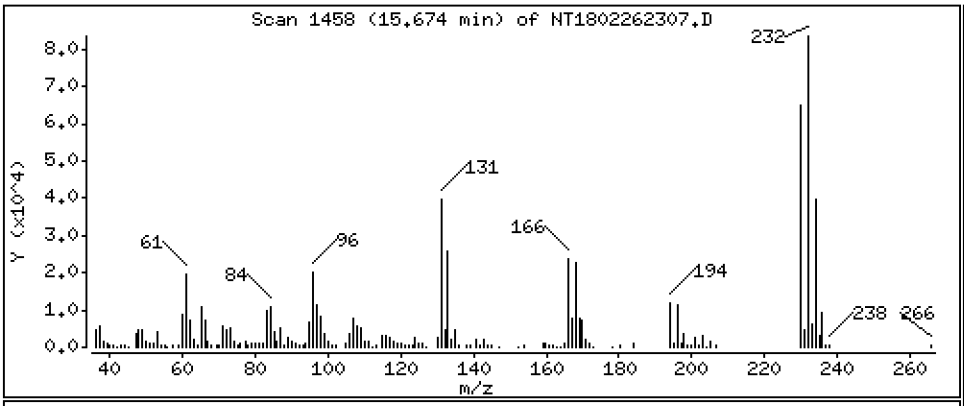
Operator: VTS

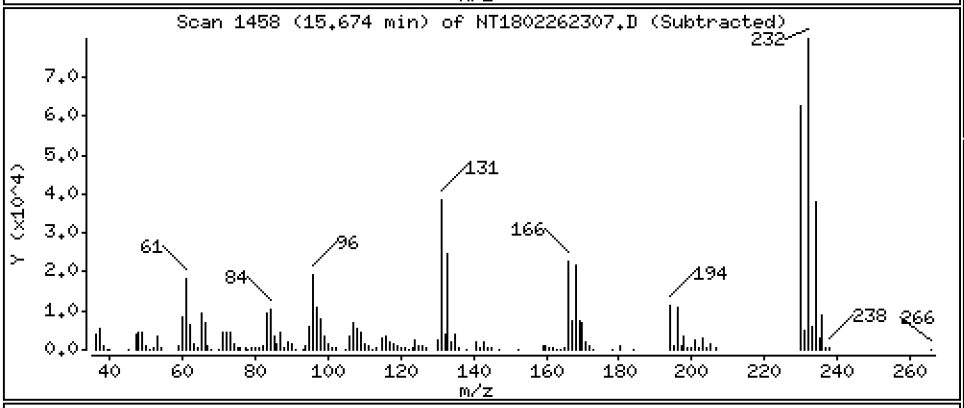
Column phase: ZB-5msi

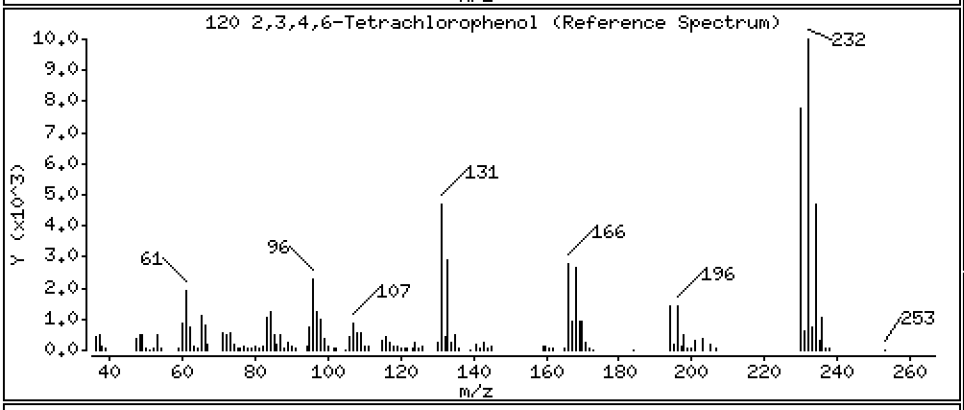
Column diameter: 0.25

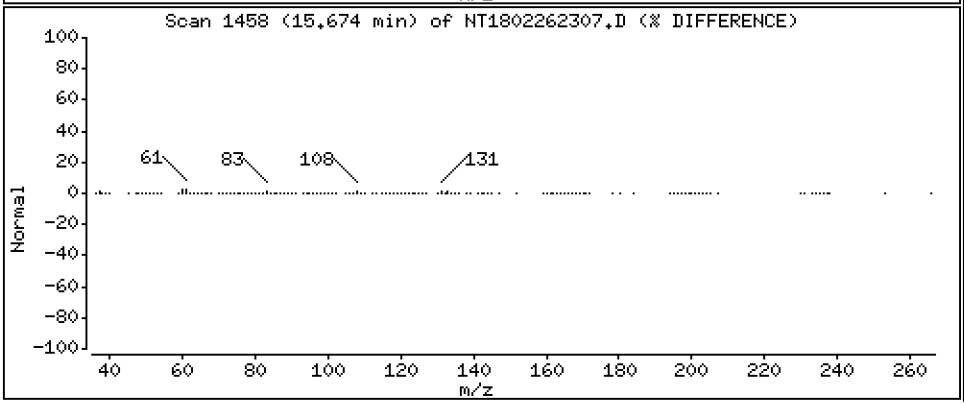
120 2,3,4,6-Tetrachlorophenol

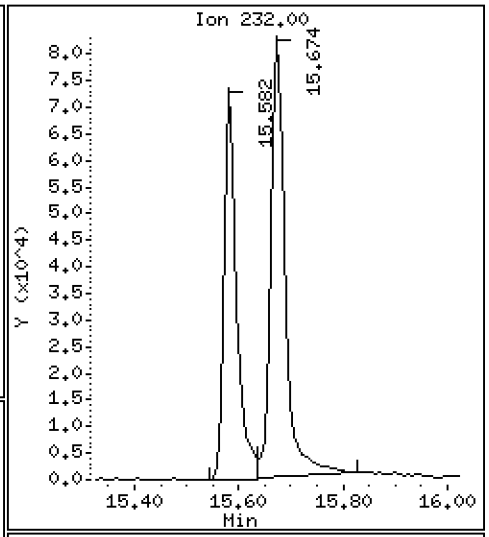
Concentration: 3.202 ug/mL

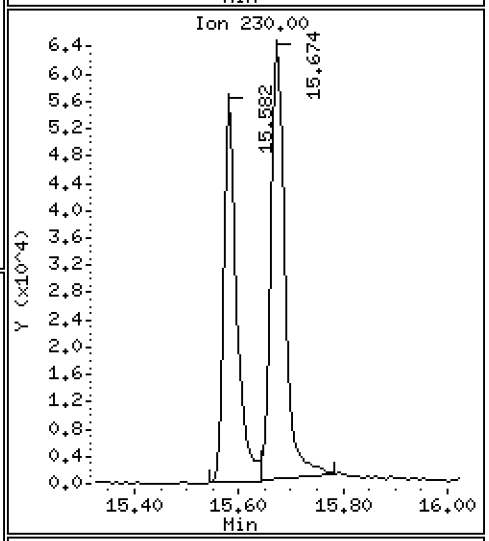


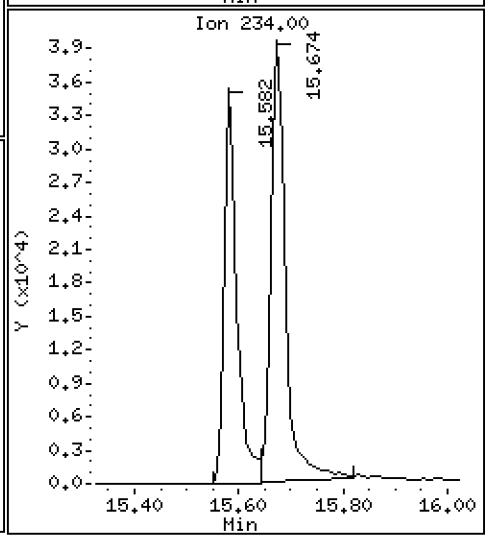












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262307.D
Lab Smp Id: BLA0410-BS1
Inj Date : 26-FEB-2023 15:52
Operator : VTS Inst ID: nt18.i
Smp Info : BLA0410-BS1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.759	6.743	(0.758)	443936	5.06041	5.060
$	2 Phenol-d5	99	8.304	8.296	(0.931)	589330	5.19801	5.198
	3 Phenol	94	8.327	8.319	(0.934)	385847	3.27093	3.271
$	5 2-Chlorophenol-d4	132	8.566	8.559	(0.961)	510974	5.17923	5.179
	4 Bis(2-Chloroethyl)ether	93	8.474	8.474	(0.951)	332929	4.15556	4.156
	6 2-Chlorophenol	128	8.590	8.590	(0.964)	325421	3.21265	3.213
	7 1,3-Dichlorobenzene	146	8.853	8.853	(0.993)	341761	3.18999	3.190
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	257132	4.00000	
	9 1,4-Dichlorobenzene	146	8.946	8.946	(1.003)	350272	3.20741	3.207
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.272	(1.039)	218718	3.12718	3.127
	12 1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	340066	3.20868	3.209
	11 Benzyl alcohol	108	9.186	9.186	(1.030)	185000	3.29835	3.298
	14 2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	94796	3.81673	3.817
	13 2-Methylphenol	108	9.411	9.411	(1.056)	260766	2.85782	2.858
	17 Hexachloroethane	117	9.869	9.877	(1.107)	141488	3.34696	3.347
	16 N-Nitroso-di-n-propylamine	70	9.737	9.737	(1.092)	233224	3.47709	3.477
	15 4-Methylphenol	108	9.691	9.683	(1.087)	298784	3.14166	3.142
$	18 Nitrobenzene-d5	82	9.993	9.993	(0.879)	363403	3.47280	3.473
	19 Nitrobenzene	77	10.025	10.032	(0.882)	362217	3.59594	3.596
	20 Isophorone	82	10.475	10.475	(0.922)	633232	4.92751	4.928
	21 2-Nitrophenol	139	10.650	10.650	(0.937)	168740	3.41089	3.411
	22 2,4-Dimethylphenol	107	10.710	10.710	(0.942)	542689	5.75694	5.757
	23 Bis(2-Chloroethoxy)methane	93	10.897	10.905	(0.959)	364830	4.14580	4.146
	24 Benzoic acid	105	10.998	10.990	(0.968)	658386	17.5125	17.51
	25 2,4-Dichlorophenol	162	11.100	11.100	(0.977)	1001991	12.1231	12.12
	26 1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	289385	3.24172	3.242
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	981883	4.00000	
	28 Naphthalene	128	11.404	11.403	(1.003)	993757	3.29241	3.292
	29 4-Chloroaniline	127	11.542	11.542	(1.016)	650065	5.40425	5.404
	30 Hexachlorobutadiene	225	11.767	11.767	(1.035)	172961	3.30557	3.306
	31 4-Chloro-3-methylphenol	107	12.502	12.502	(1.100)	1082083	13.6786	13.68
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	644489	3.14233	3.142
	33 Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	351273	9.47755	9.478

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	699005	13.8277	13.83
35	2,4,5-Trichlorophenol	196	13.485	13.485	(0.902)	783058	14.2152	14.22
$ 36	2-Fluorobiphenyl	172	13.562	13.570	(0.907)	749547	3.40158	3.402
37	2-Chloronaphthalene	162	13.771	13.771	(0.921)	598563	3.47634	3.476
38	2-Nitroaniline	65	14.034	14.034	(0.939)	637179	11.8246	11.82
39	Dimethylphthalate	163	14.468	14.468	(0.968)	724437	3.91744	3.917
40	Acenaphthylene	152	14.630	14.630	(0.979)	985049	3.39758	3.398
41	2,6-Dinitrotoluene	165	14.607	14.607	(0.977)	531152	12.5287	12.53
* 42	Acenaphthene-d10	164	14.947	14.947	(1.000)	522636	4.00000	
43	3-Nitroaniline	138	14.885	14.885	(0.996)	438825	8.75054	8.751
44	Acenaphthene	153	15.009	15.009	(1.004)	641202	3.49443	3.494
45	2,4-Dinitrophenol	184	15.102	15.102	(1.010)	533768	25.4373	25.44
46	Dibenzofuran	168	15.334	15.334	(1.026)	896810	3.37671	3.377
47	4-Nitrophenol	109	15.218	15.218	(1.018)	317070	15.6848	15.68
48	2,4-Dinitrotoluene	165	15.403	15.403	(1.031)	729116	12.5818	12.58
50	Diethylphthalate	149	15.921	15.921	(1.065)	901796	4.65396	4.654
49	Fluorene	166	16.037	16.037	(1.073)	771865	3.62662	3.627
51	4-Chlorophenyl-phenylether	204	16.037	16.037	(1.073)	369328	3.80970	3.810
52	4-Nitroaniline	138	16.153	16.145	(1.081)	489732	10.1510	10.15
53	4,6-Dinitro-2-methylphenol	198	16.245	16.238	(0.905)	933561	27.0176	27.02
54	N-Nitrosodiphenylamine	169	16.284	16.292	(0.907)	425683	3.03430	3.034
$ 55	2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	145817	5.41489	5.415
56	4-Bromophenyl-phenylether	248	17.024	17.032	(0.948)	217407	3.86169	3.862
57	Hexachlorobenzene	284	17.333	17.341	(0.966)	226183	3.47934	3.479
58	Pentachlorophenol	266	17.697	17.697	(0.986)	266779	14.1929	14.19
* 59	Phenanthrene-d10	188	17.952	17.952	(1.000)	932364	4.00000	
60	Phenanthrene	178	17.999	17.999	(1.003)	1060280	3.61543	3.615
61	Anthracene	178	18.092	18.092	(1.008)	867484	3.10402	3.104
62	Carbazole	167	18.417	18.424	(1.026)	884258	3.45292	3.453
63	Di-n-butylphthalate	149	19.229	19.237	(1.071)	1335888	4.71270	4.713
64	Fluoranthene	202	20.374	20.382	(0.886)	1221018	4.11758	4.118
65	Pyrene	202	20.800	20.800	(0.905)	1225532	3.87505	3.875
$ 66	Terphenyl-d14	244	21.094	21.094	(0.918)	1060059	4.17902	4.179
67	Butylbenzylphthalate	149	22.023	22.023	(0.958)	598845	4.98673	4.987
68	Benzo(a)anthracene	228	22.952	22.952	(0.999)	1192473	3.90262	3.903
* 69	Chrysene-d12	240	22.983	22.983	(1.000)	846375	4.00000	
70	3,3'-Dichlorobenzidine	252	22.913	22.921	(0.997)	913183	8.12177	8.122
71	Chrysene	228	23.029	23.029	(1.002)	1237899	3.89603	3.896
72	bis(2-Ethylhexyl)phthalate	149	23.045	23.053	(0.959)	874419	4.55467	4.555
* 134	Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	1337207	4.00000	
73	Di-n-octylphthalate	149	24.028	24.028	(1.000)	1556744	4.17793	4.178
74	Benzo(b)fluoranthene	252	24.764	24.764	(0.972)	1317967	4.48295	4.483
75	Benzo(k)fluoranthene	252	24.802	24.802	(0.974)	1304195	3.91430	3.914(H)
76	Benzo(a)pyrene	252	25.368	25.368	(0.996)	1045305	3.83537	3.835
* 77	Perylene-d12	264	25.468	25.476	(1.000)	901138	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.920	27.920	(1.096)	1424163	4.16249	4.162
79	Dibenzo(a,h)anthracene	278	27.928	27.927	(1.097)	1202014	4.21247	4.212
80	Benzo(g,h,i)perylene	276	28.634	28.642	(1.124)	1130098	4.11996	4.120
90	N-Nitrosodimethylamine	74	4.696	4.681	(0.527)	428354	8.31741	8.317
91	Aniline	93	8.389	8.389	(0.941)	526886	3.92412	3.924
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	4.712	4.673	(0.529)	47009	0.54791	0.5479
105	1-methylnaphthalene	142	13.005	13.005	(1.144)	621870	3.34941	3.349
111	Azobenzene (1,2-DP-Hydrazine)	77	16.361	16.361	(1.095)	800768	3.75163	3.752

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.802	24.802	(0.974)	2462914	8.28585	8.286
120 2,3,4,6-Tetrachlorophenol	232	15.674	15.674	(1.049)	164078	3.20205	3.202

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262307.D
Lab Smp Id: BLA0410-BS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	257132	5.33
27 Naphthalene-d8	943164	471582	1886328	981883	4.11
42 Acenaphthene-d10	501893	250947	1003786	522636	4.13
59 Phenanthrene-d10	896502	448251	1793004	932364	4.00
69 Chrysene-d12	842481	421241	1684962	846375	0.46
134 Di-n-octylphthala	1278043	639022	2556086	1337207	4.63
77 Perylene-d12	915681	457841	1831362	901138	-1.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	0.00
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.48	24.98	25.98	25.47	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262307.D

Lab ID: BLA0410-BS1
nt18.i, ABN.m, 26-FEB-2023 15:52

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

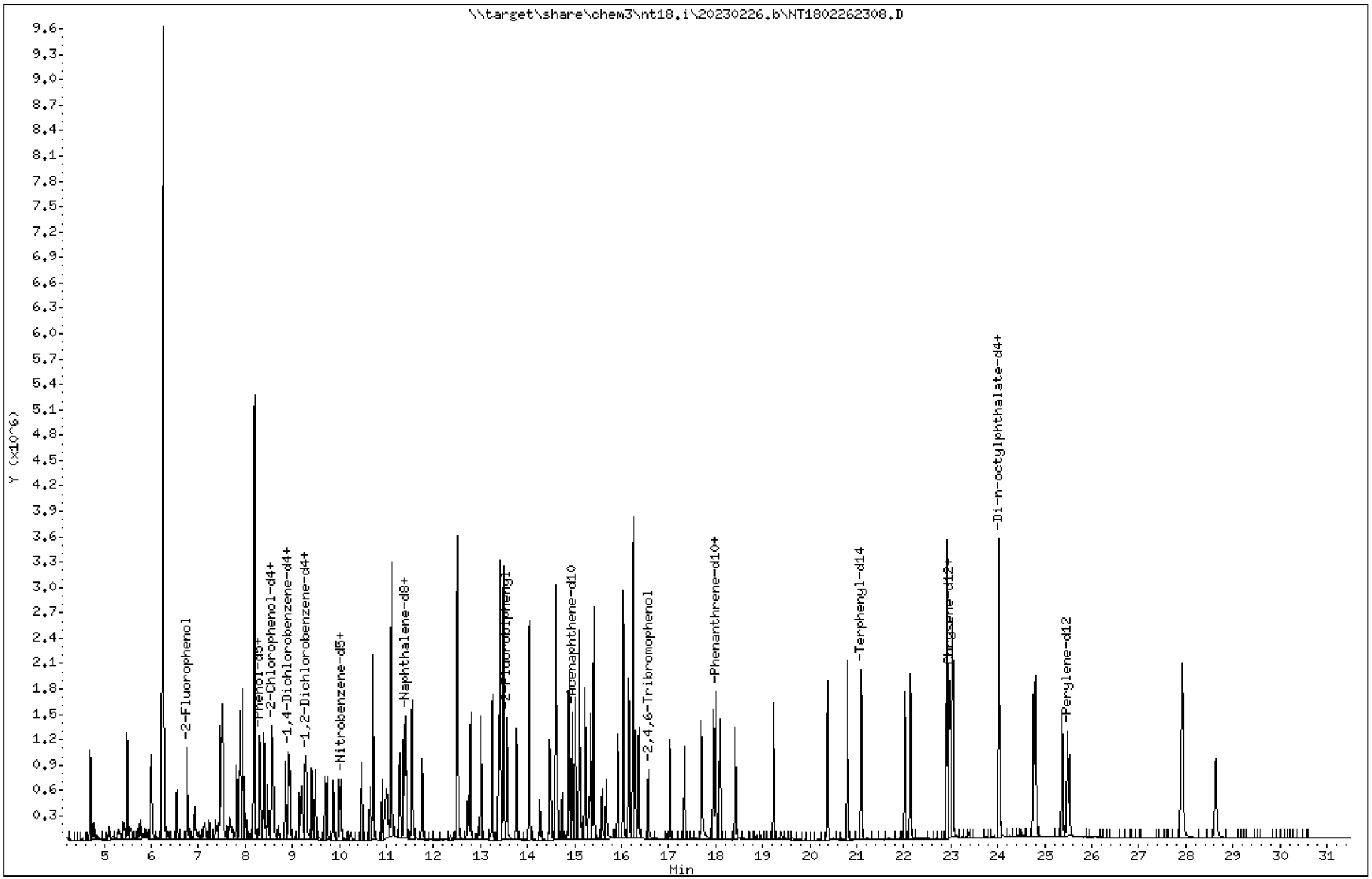
RRT check based on Ccal File: NT1802262302.D

On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D
Date : 26-FEB-2023 16:32
Client ID:
Sample Info: BLA0410-BSD1

Instrument: nt18.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

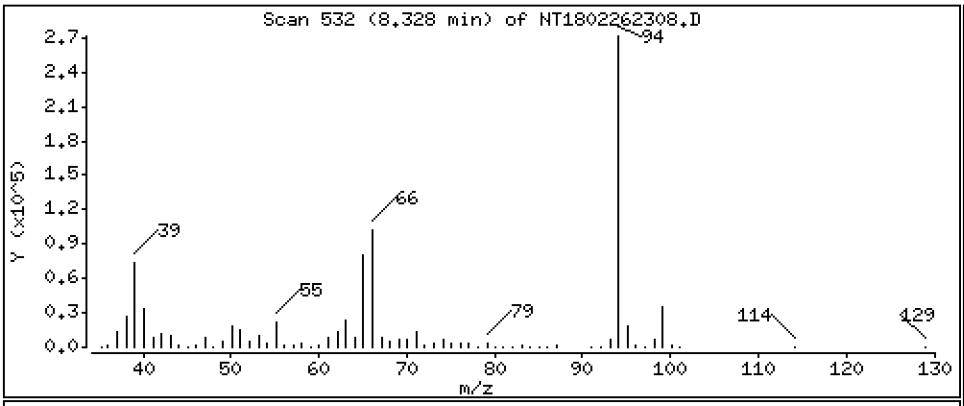
Operator: VTS

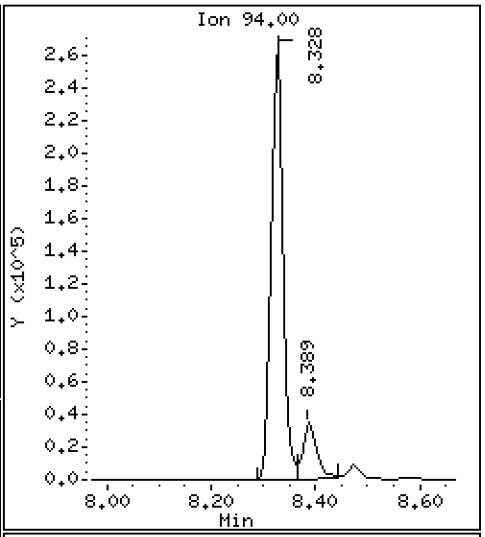
Column phase: ZB-5msi

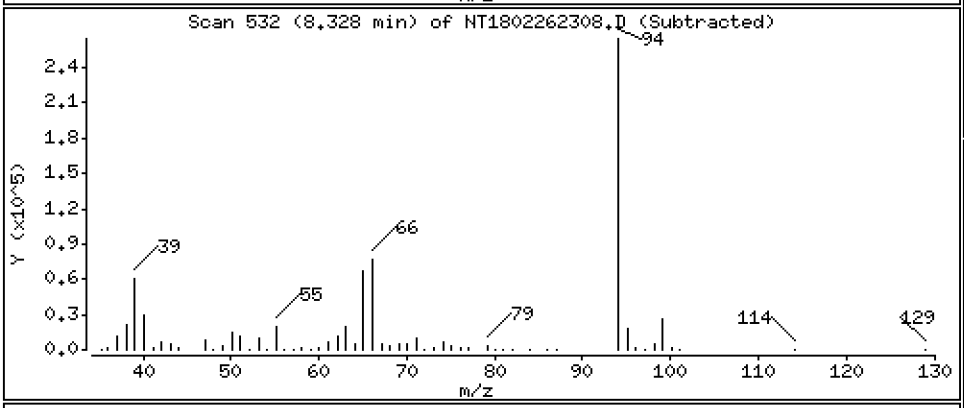
Column diameter: 0.25

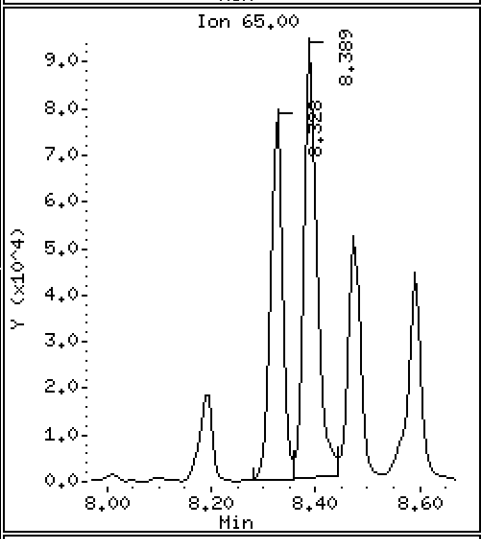
3 Phenol

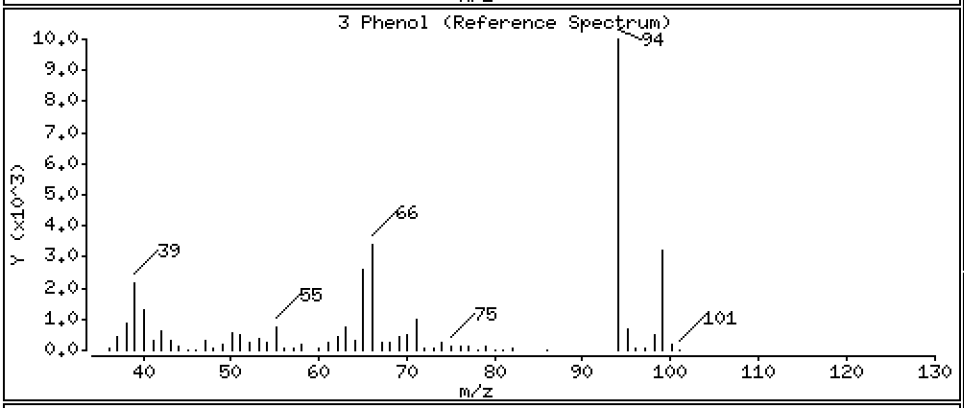
Concentration: 3.399 ug/mL

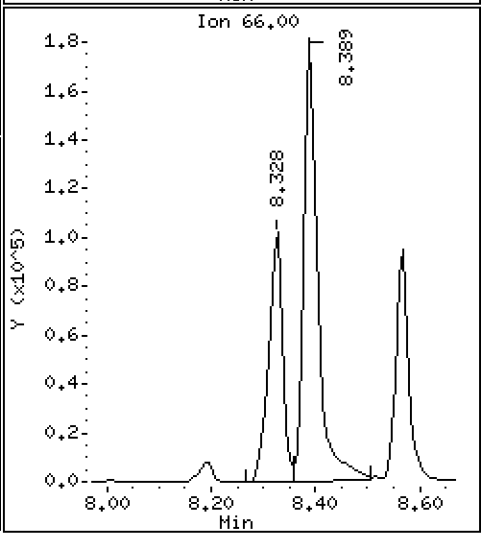


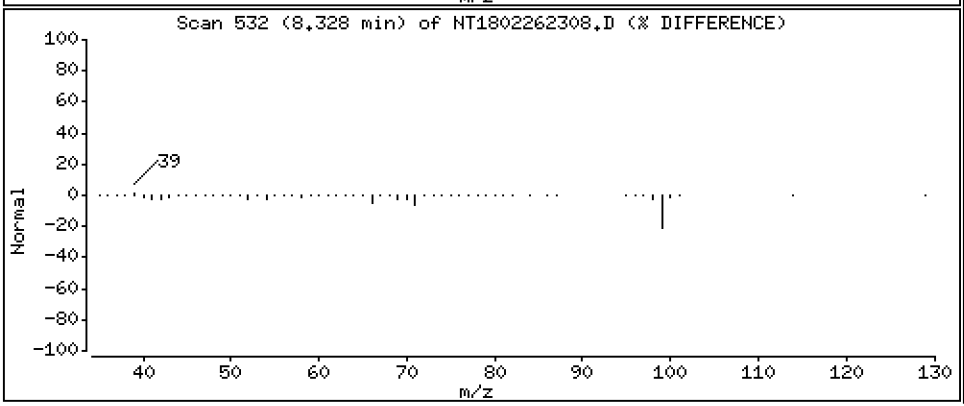












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

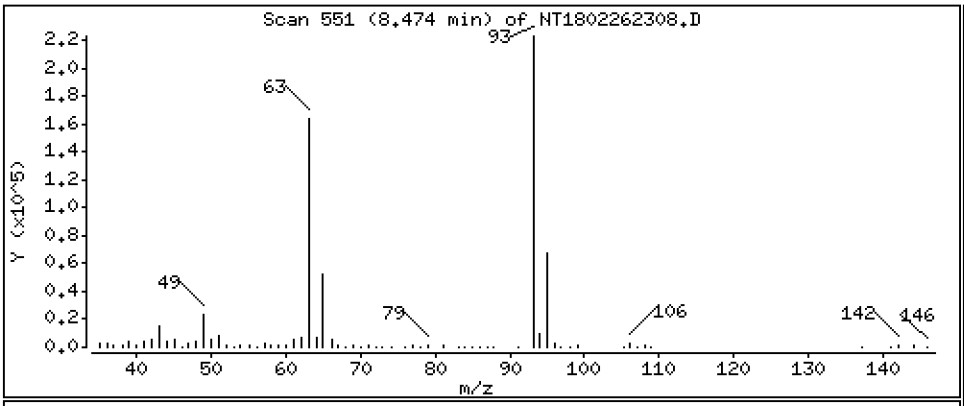
Operator: VTS

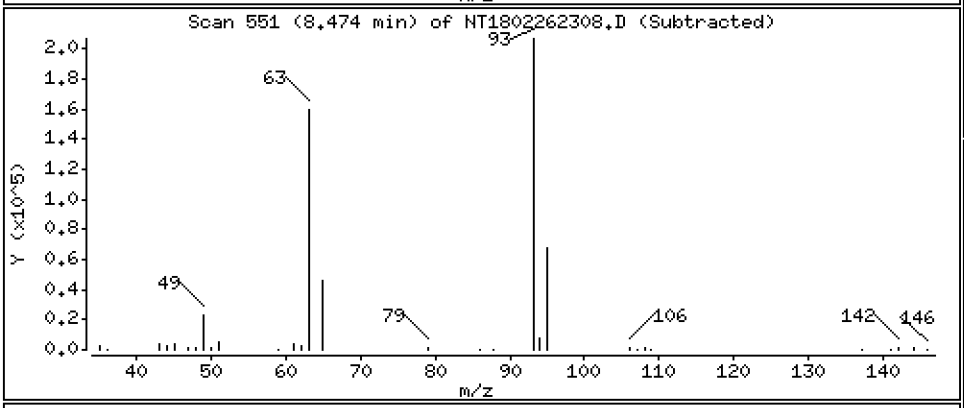
Column phase: ZB-5msi

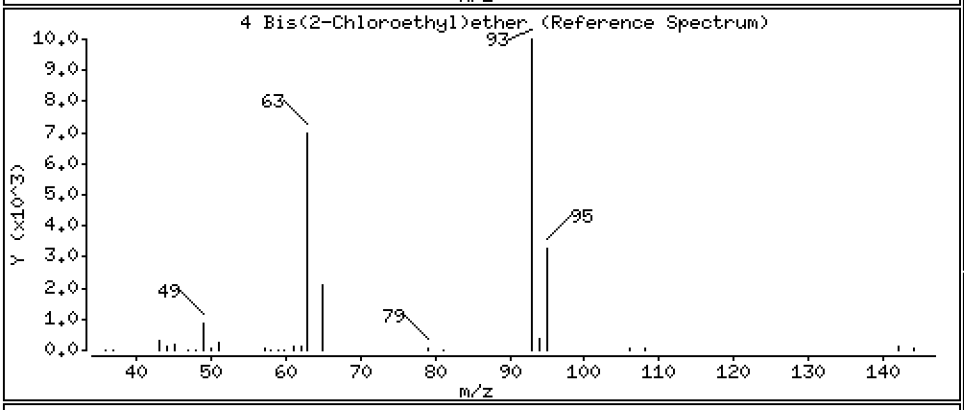
Column diameter: 0.25

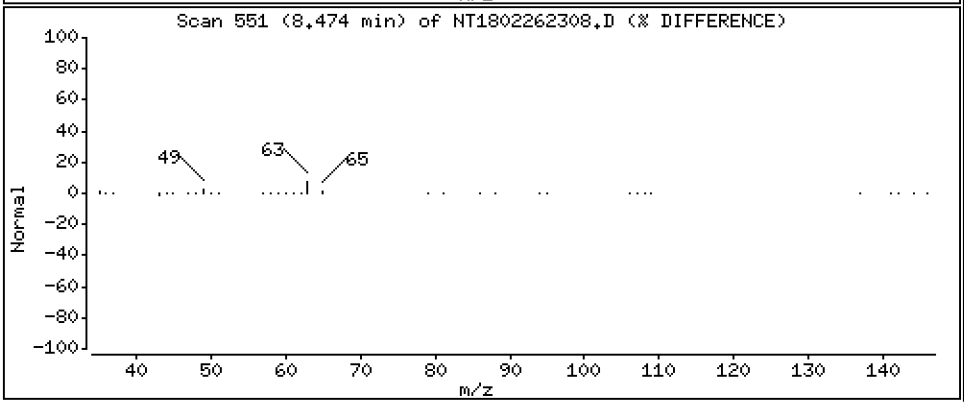
4 Bis(2-Chloroethyl)ether

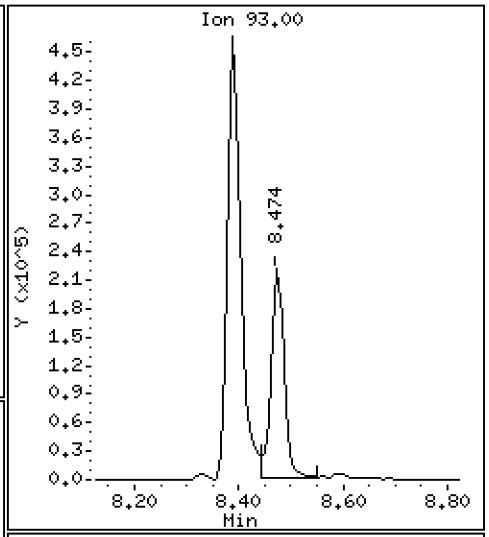
Concentration: 4.418 ug/mL

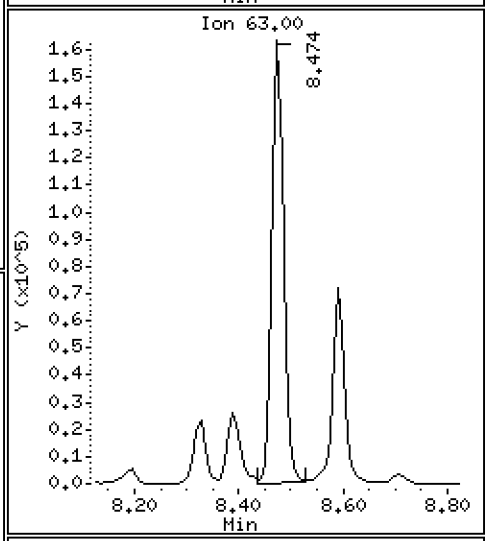


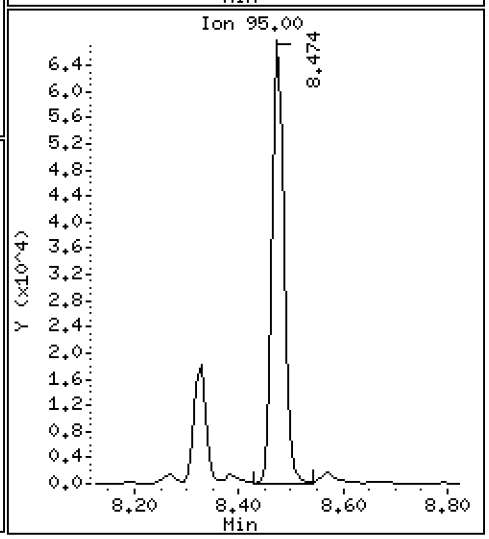












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

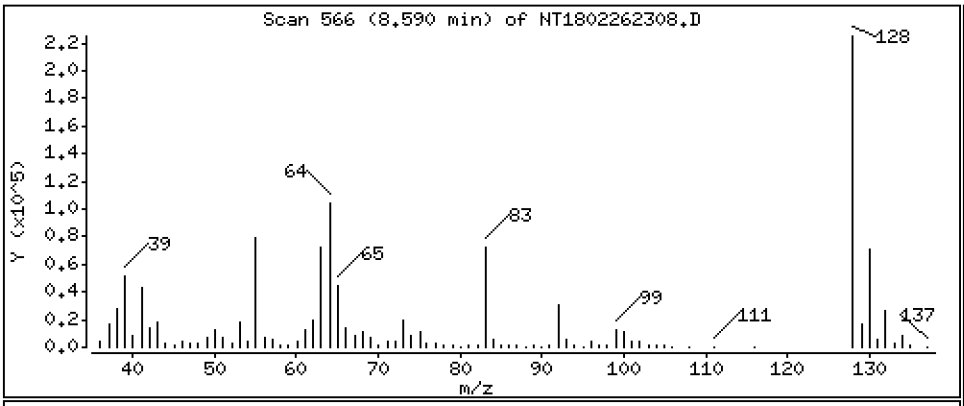
Operator: VTS

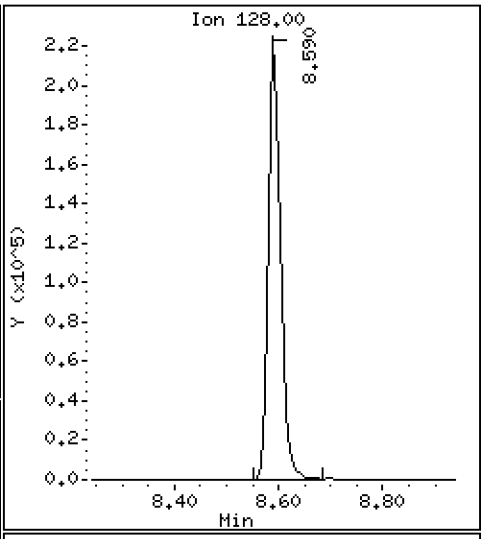
Column phase: ZB-5msi

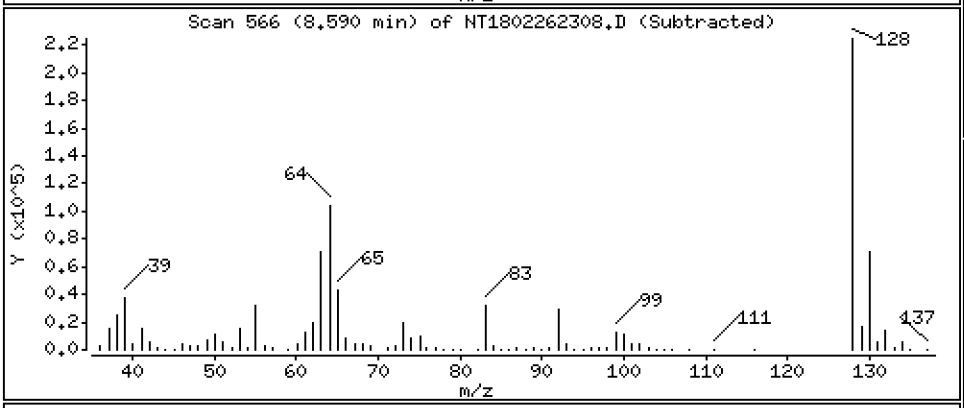
Column diameter: 0.25

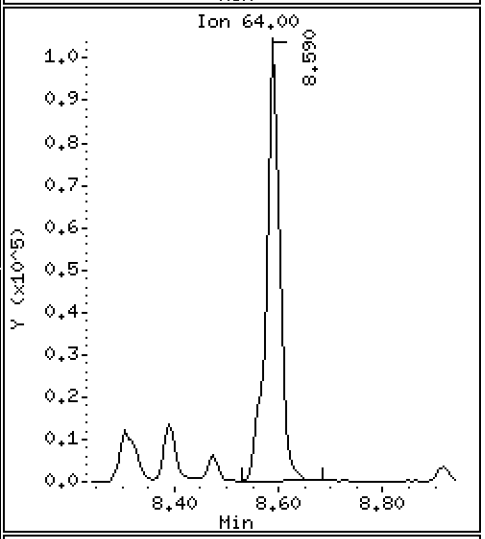
6 2-Chlorophenol

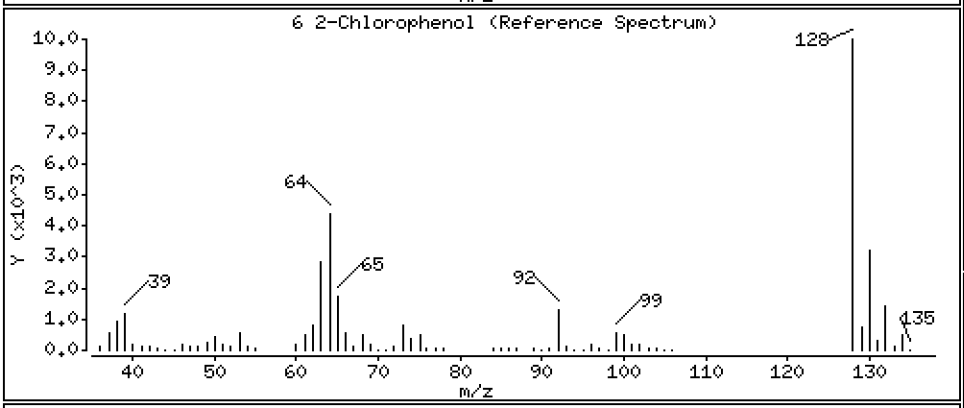
Concentration: 3.404 ug/mL

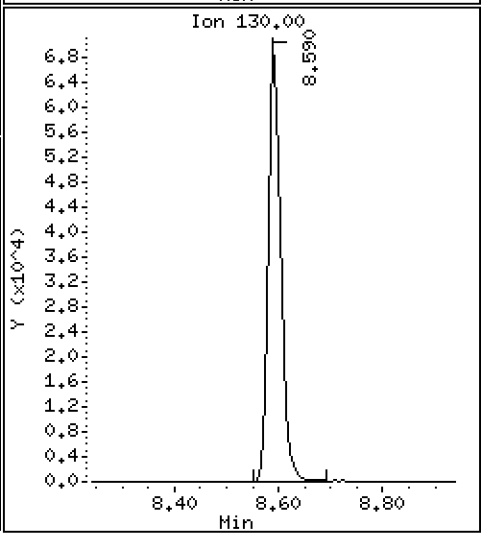


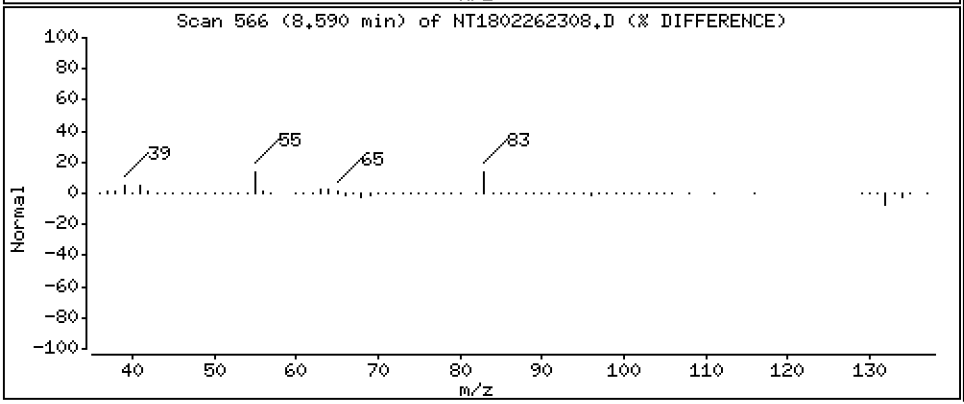












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

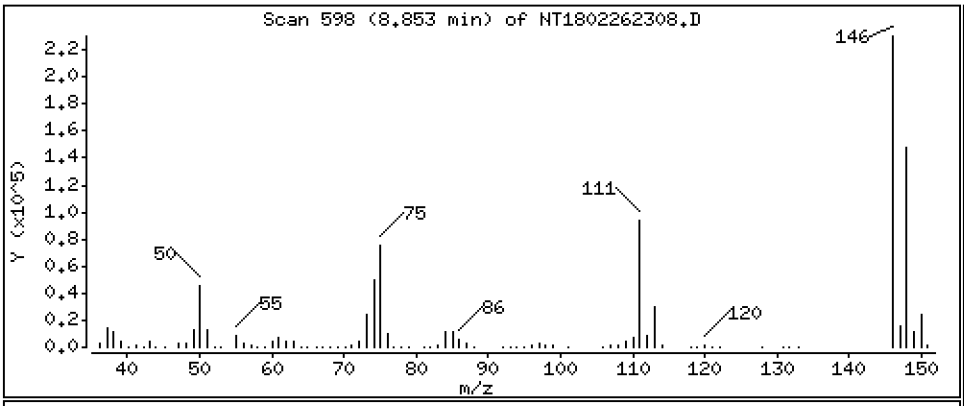
Operator: VTS

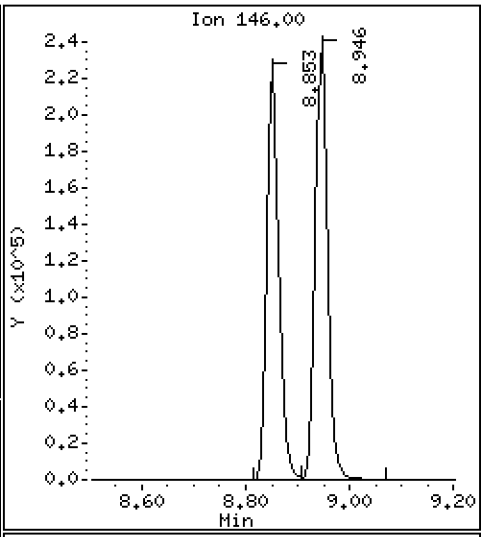
Column phase: ZB-5msi

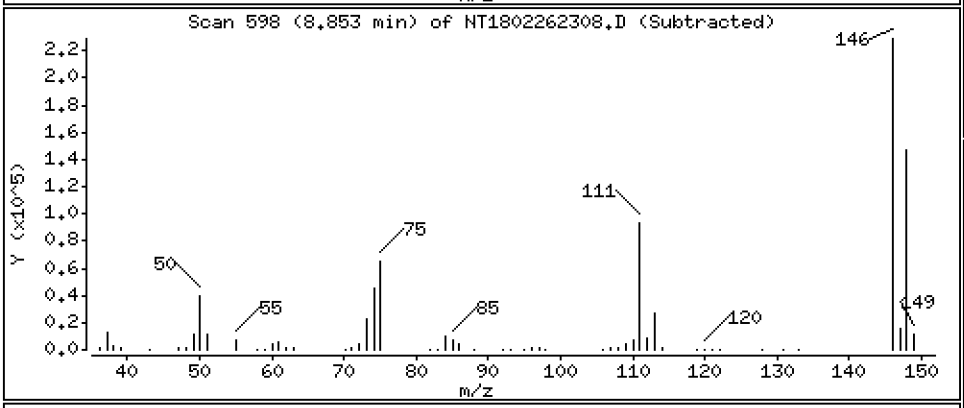
Column diameter: 0.25

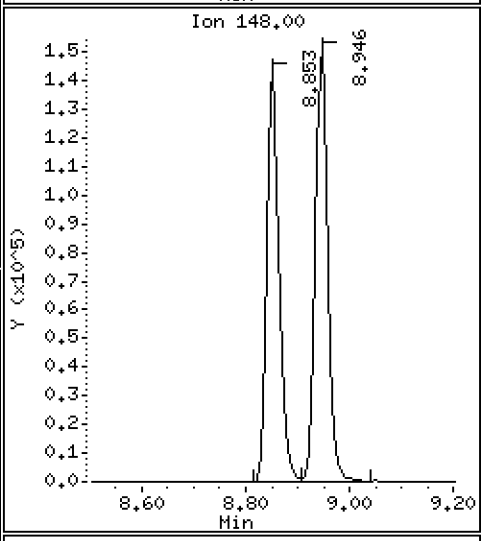
7 1,3-Dichlorobenzene

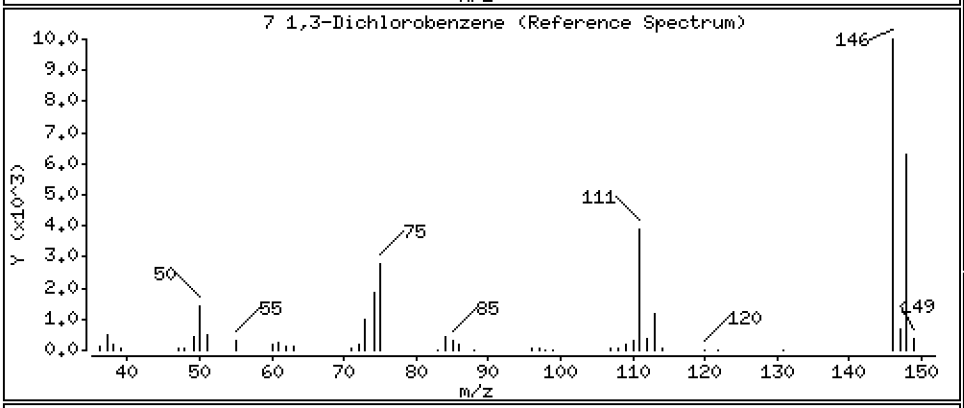
Concentration: 3.297 ug/mL

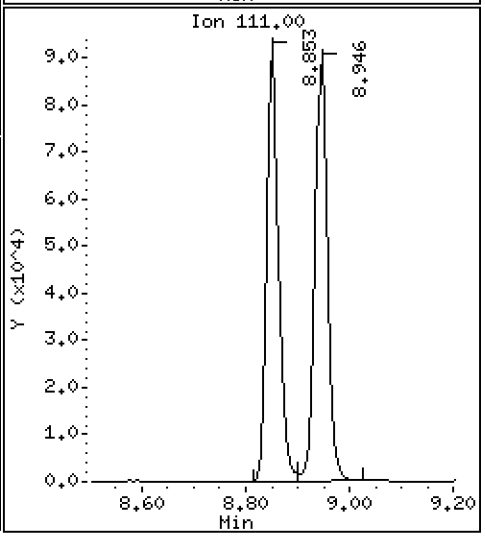


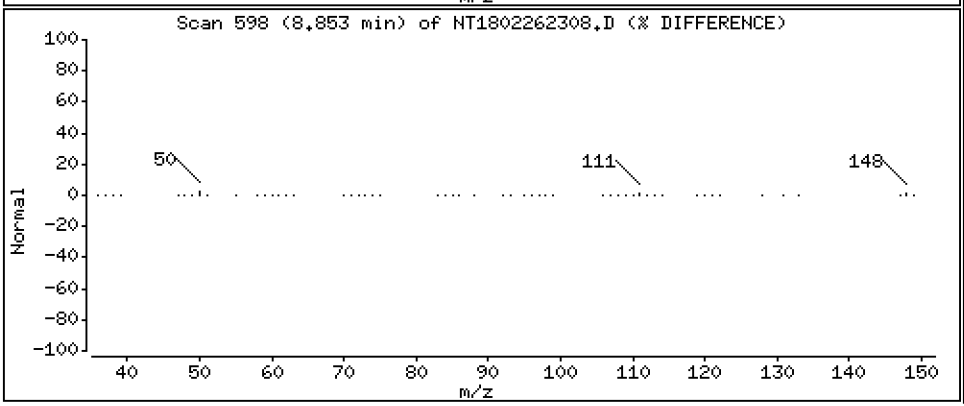












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

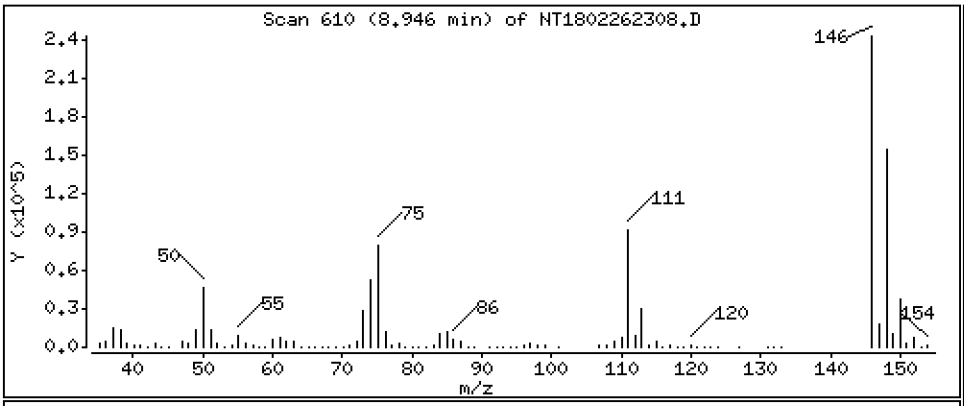
Operator: VTS

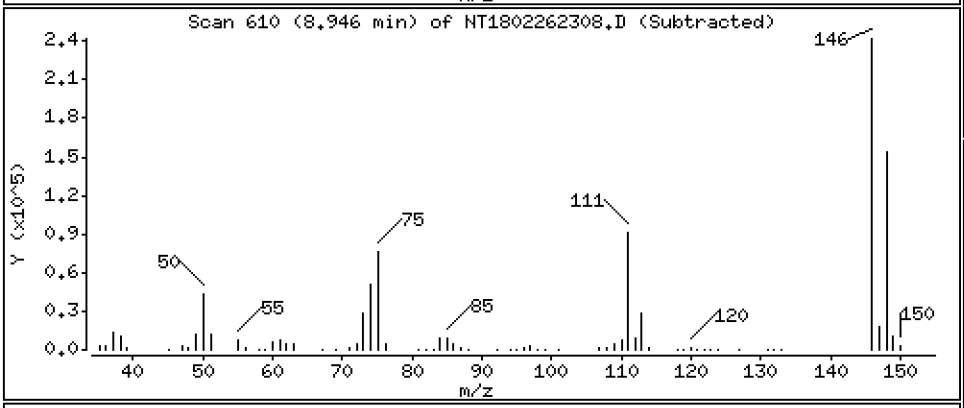
Column phase: ZB-5msi

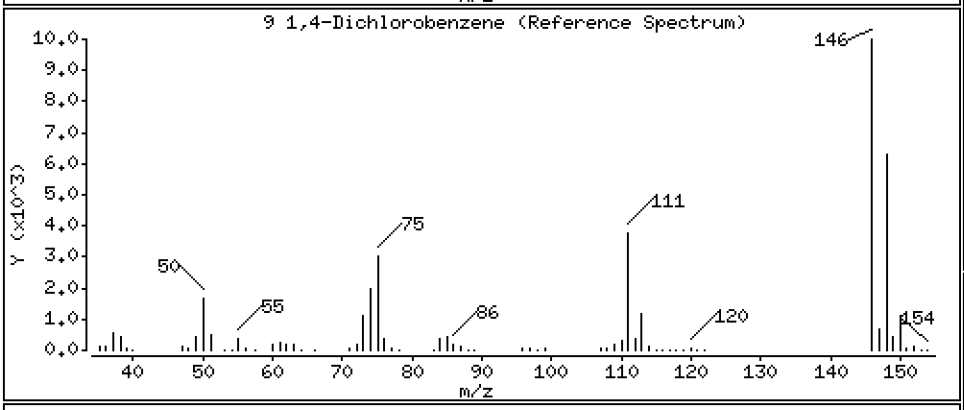
Column diameter: 0.25

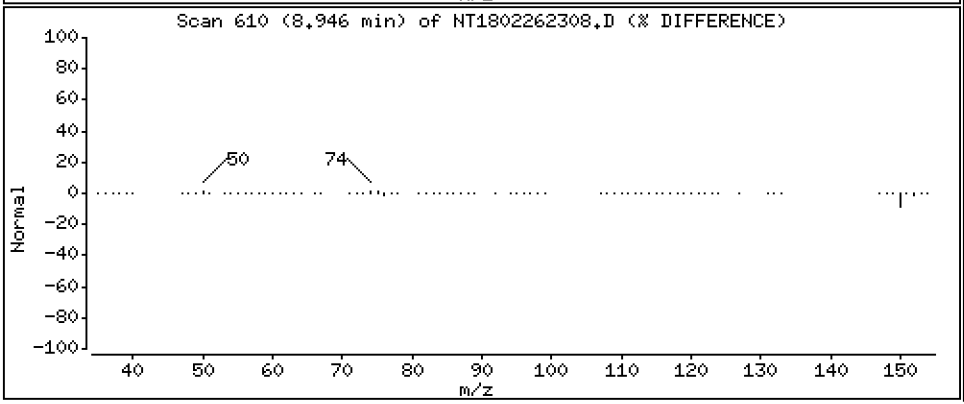
9 1,4-Dichlorobenzene

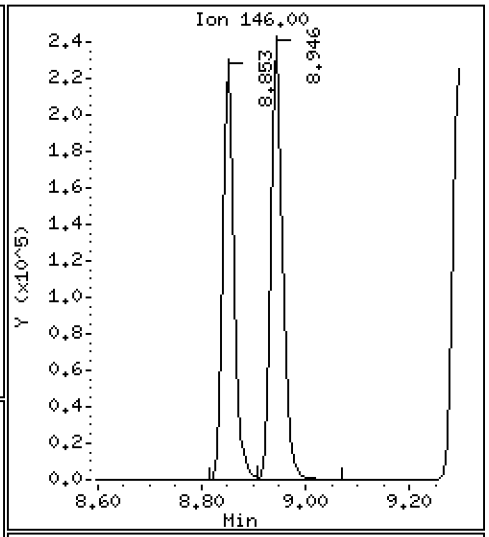
Concentration: 3.370 ug/mL

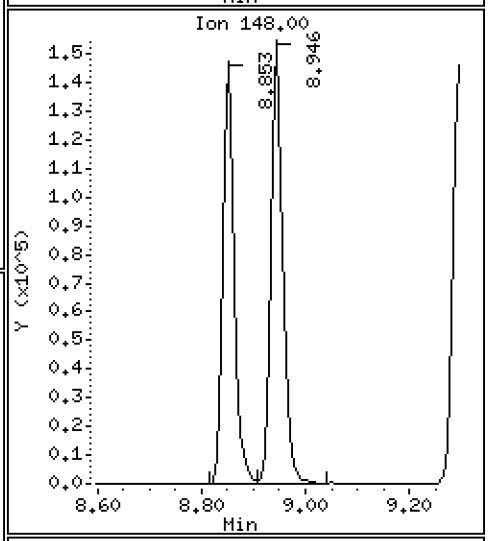


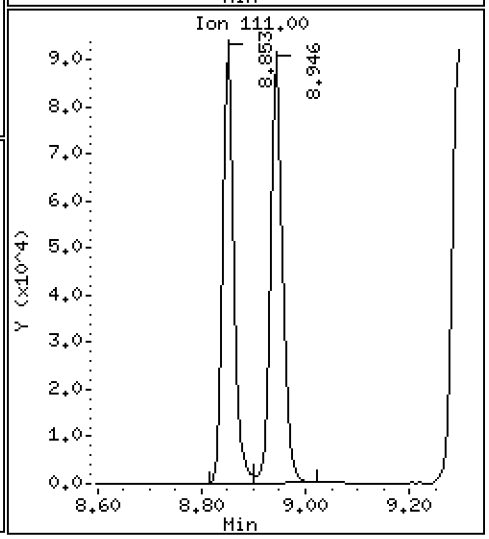












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

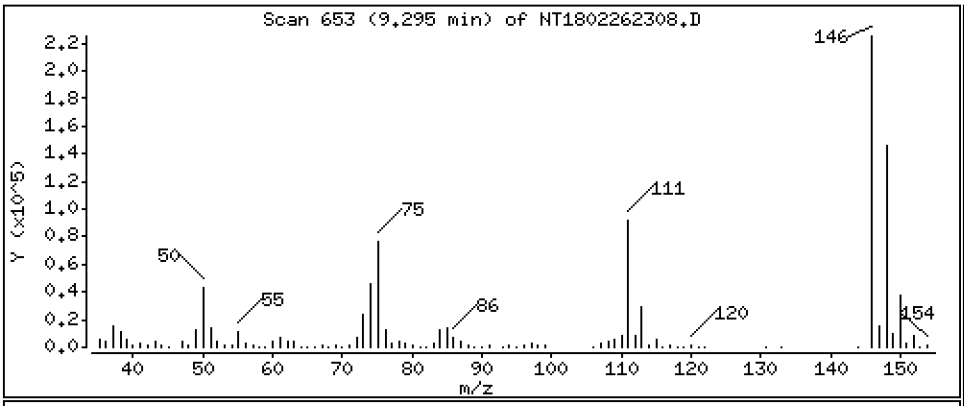
Operator: VTS

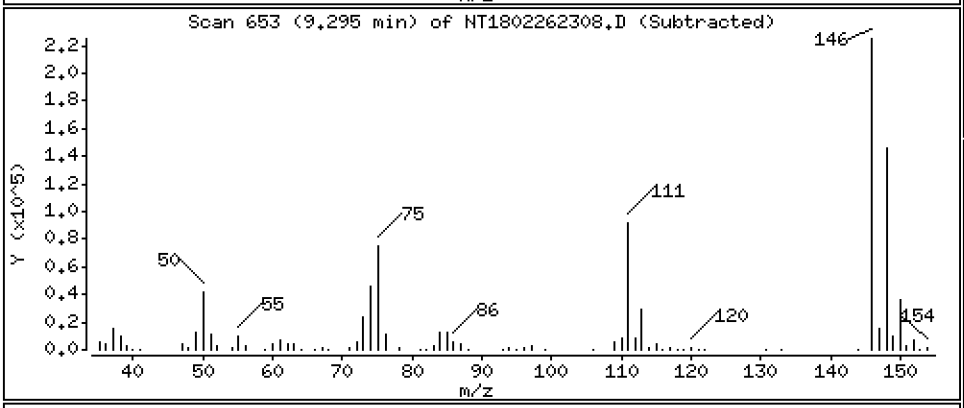
Column phase: ZB-5msi

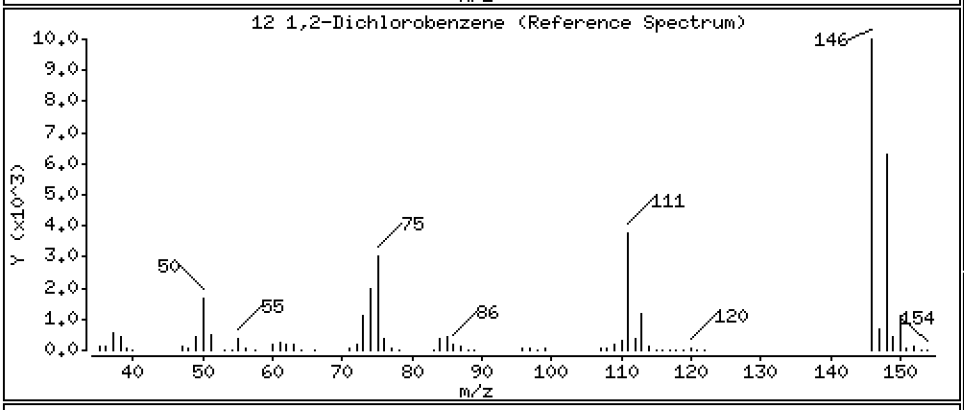
Column diameter: 0.25

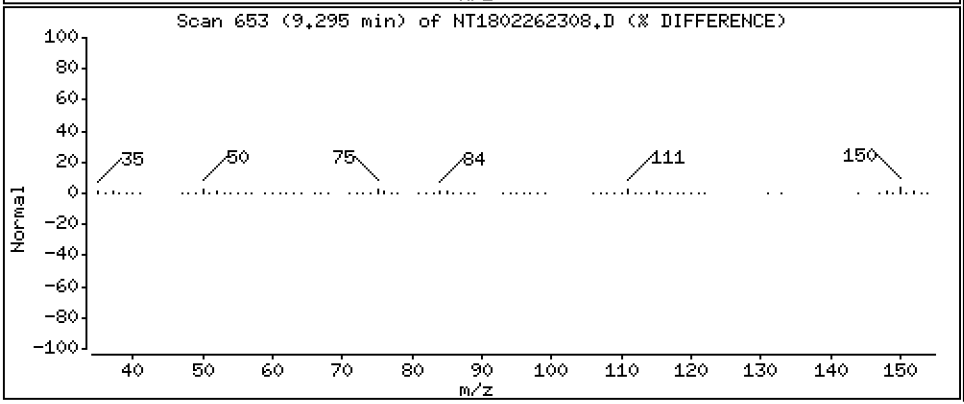
12 1,2-Dichlorobenzene

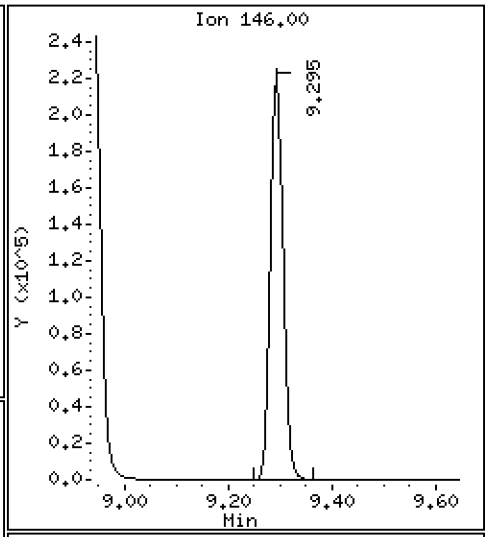
Concentration: 3.343 ug/mL

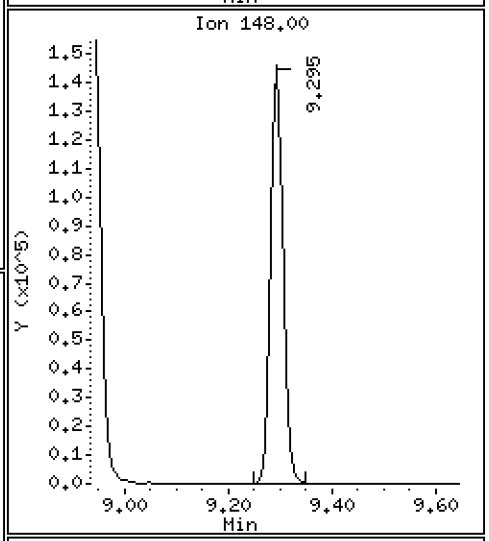


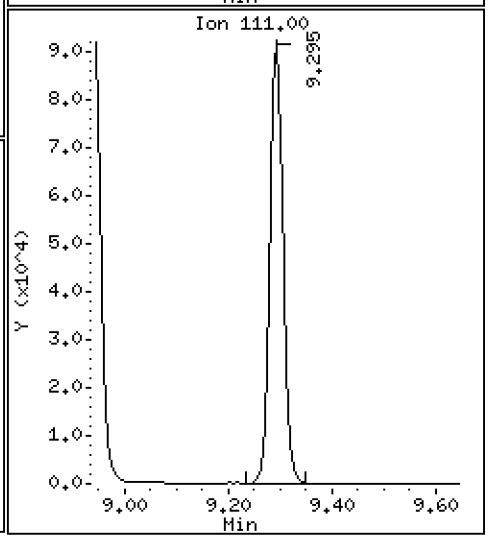












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

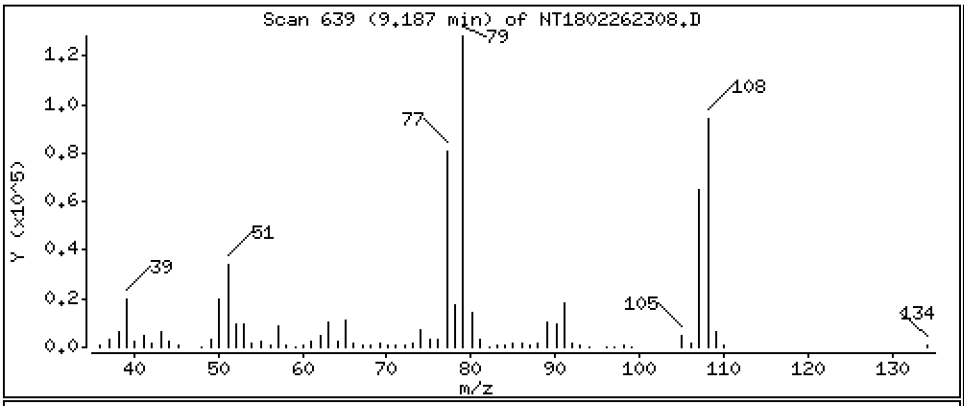
Operator: VTS

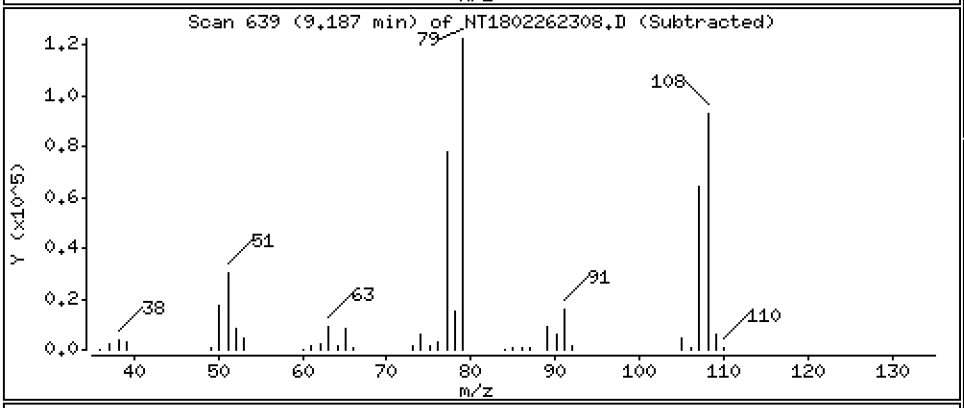
Column phase: ZB-5msi

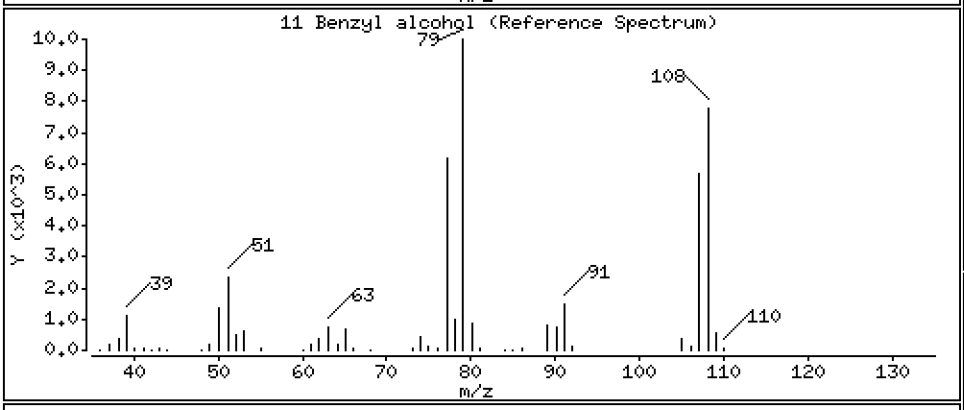
Column diameter: 0.25

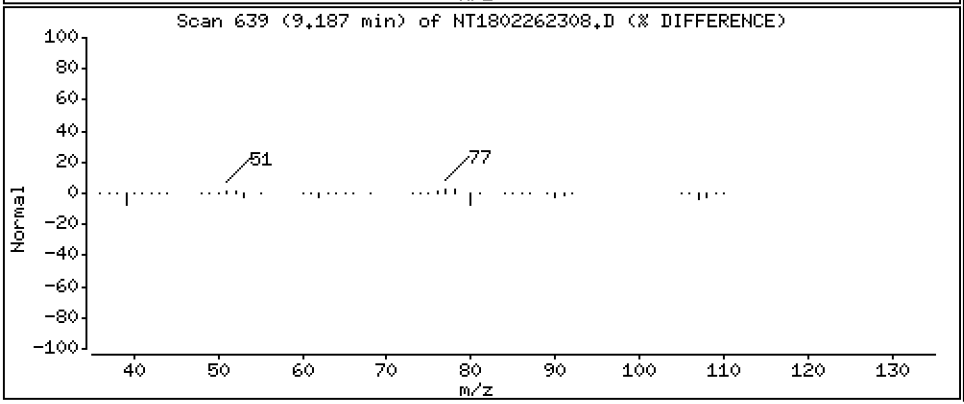
11 Benzyl alcohol

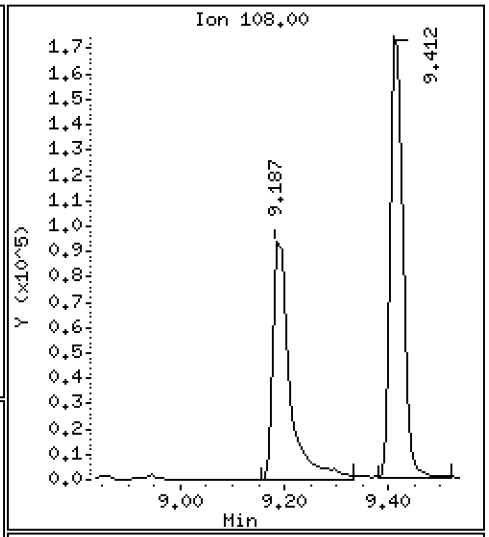
Concentration: 3.575 ug/mL

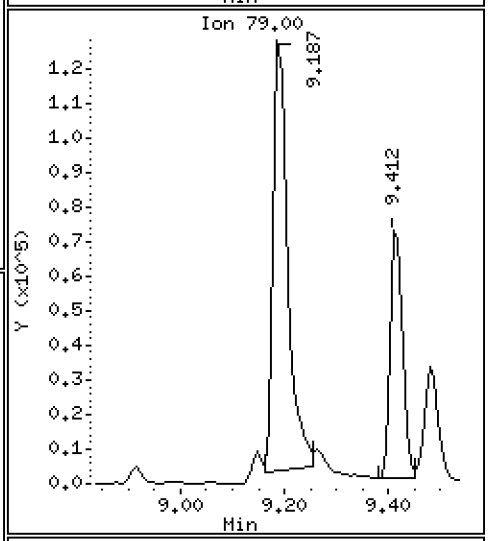


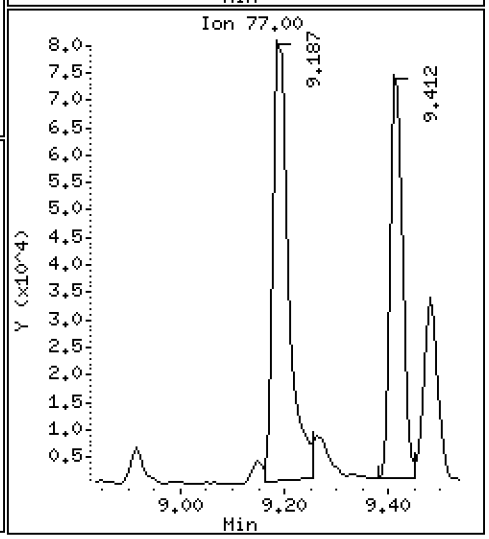












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

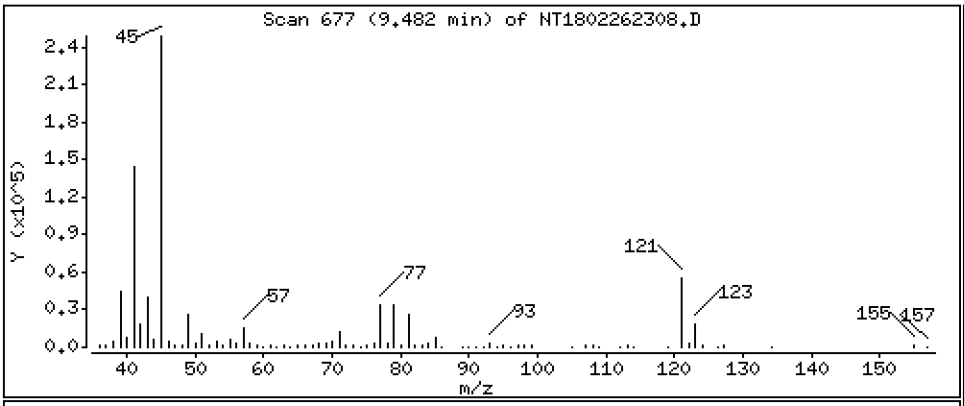
Operator: VTS

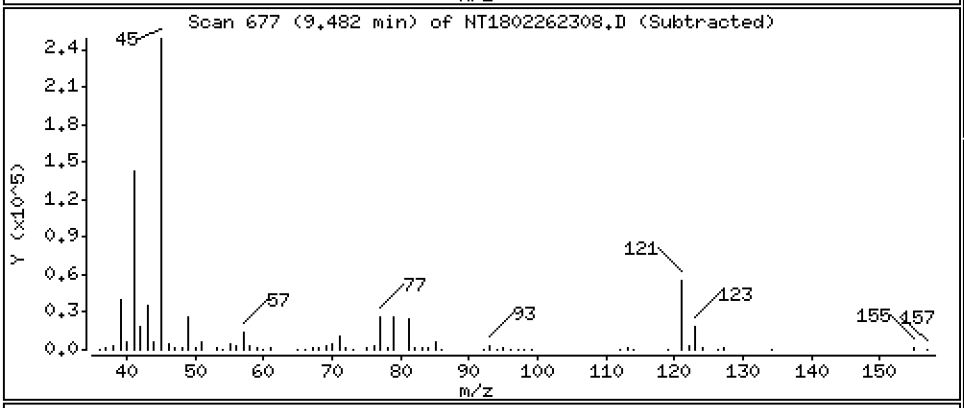
Column phase: ZB-5msi

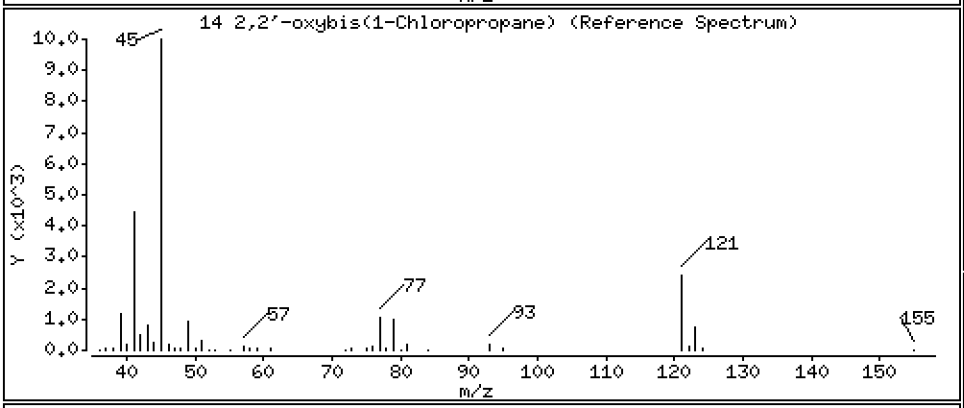
Column diameter: 0.25

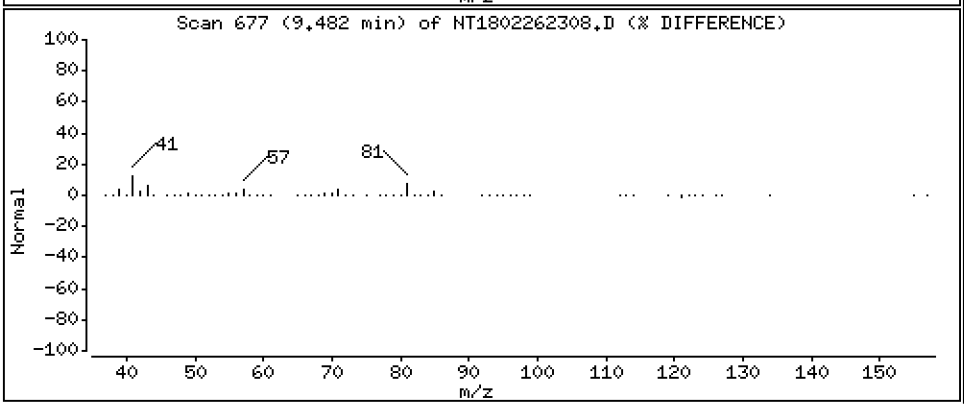
14 2,2'-oxybis(1-Chloropropane)

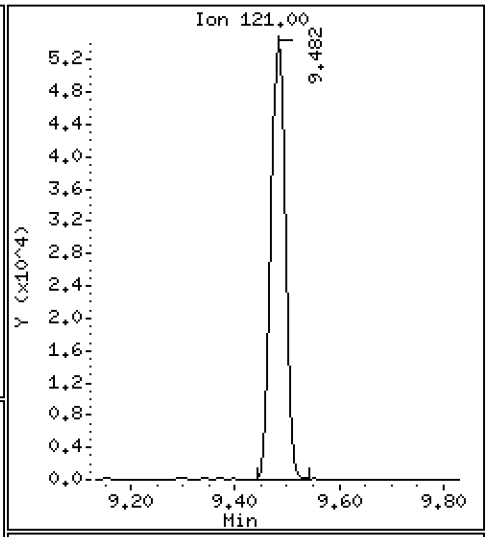
Concentration: 4.030 ug/mL

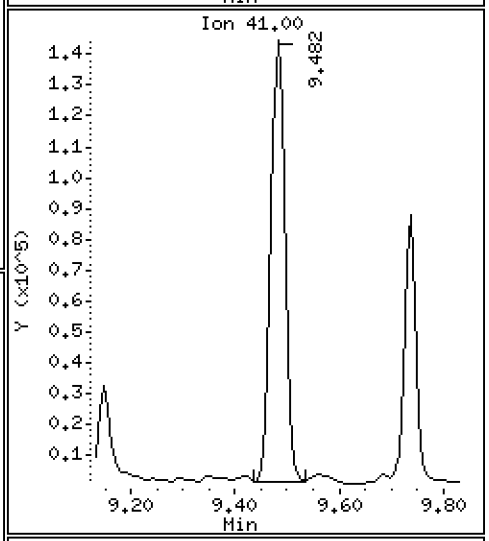


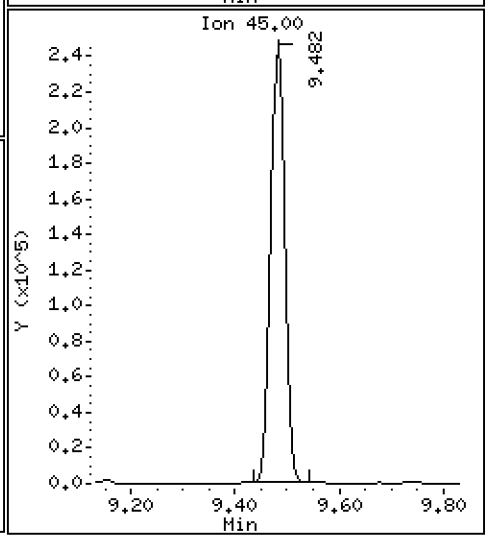












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

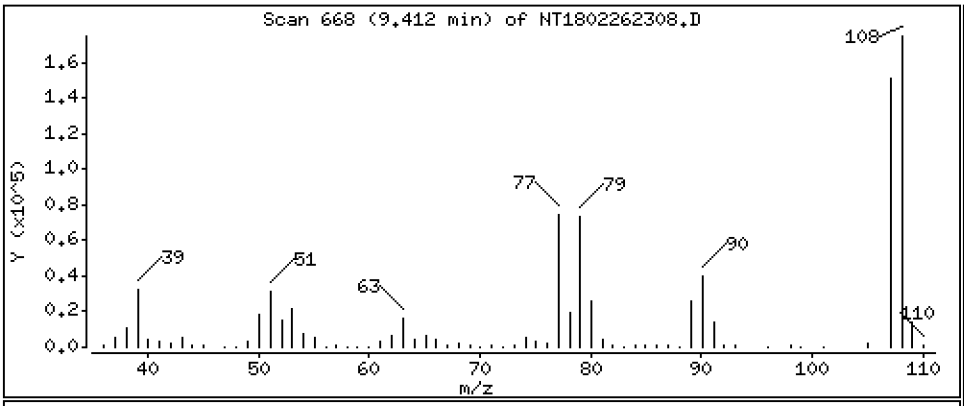
Operator: VTS

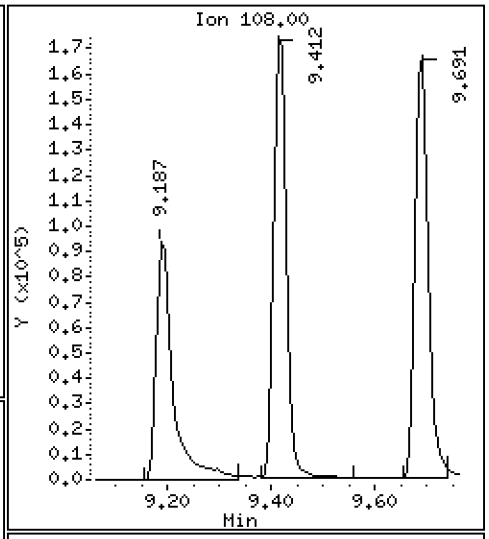
Column phase: ZB-5msi

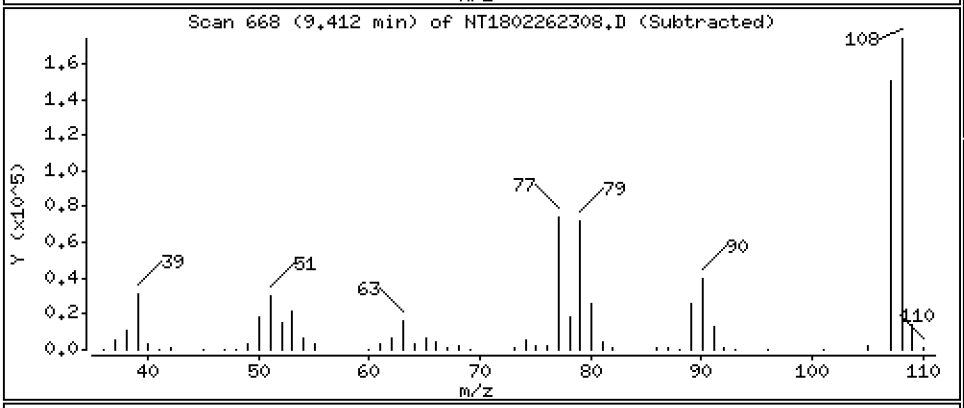
Column diameter: 0.25

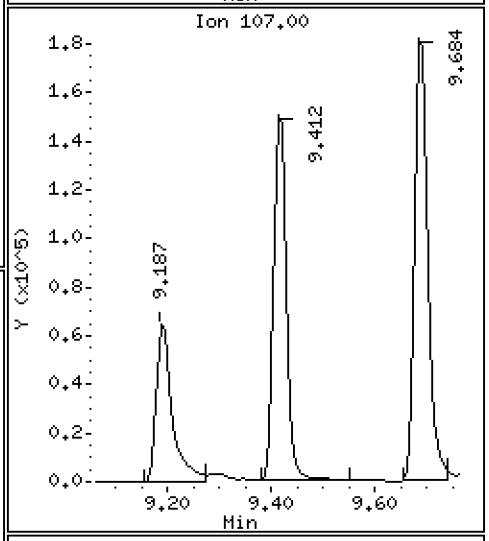
13 2-Methylphenol

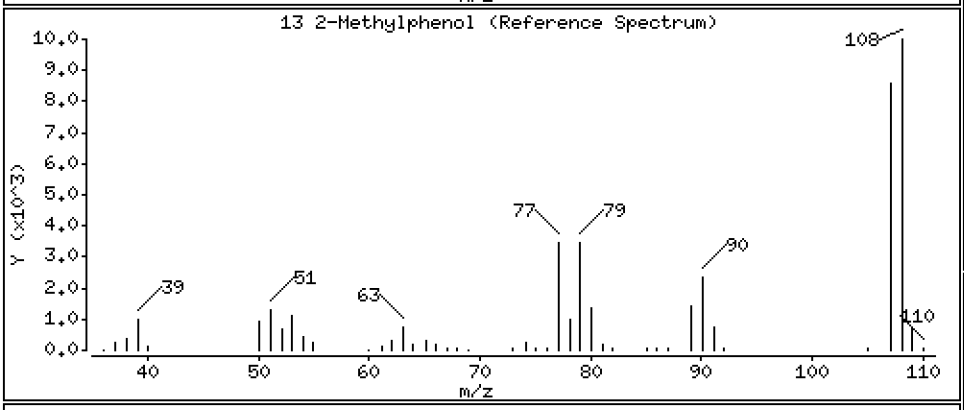
Concentration: 3.085 ug/mL

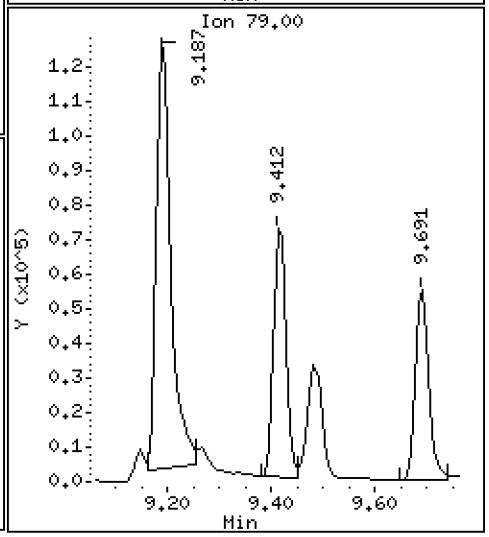


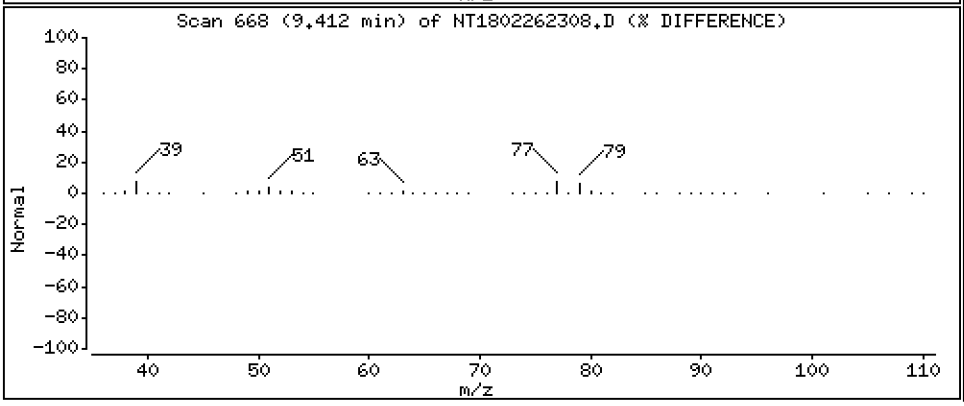












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

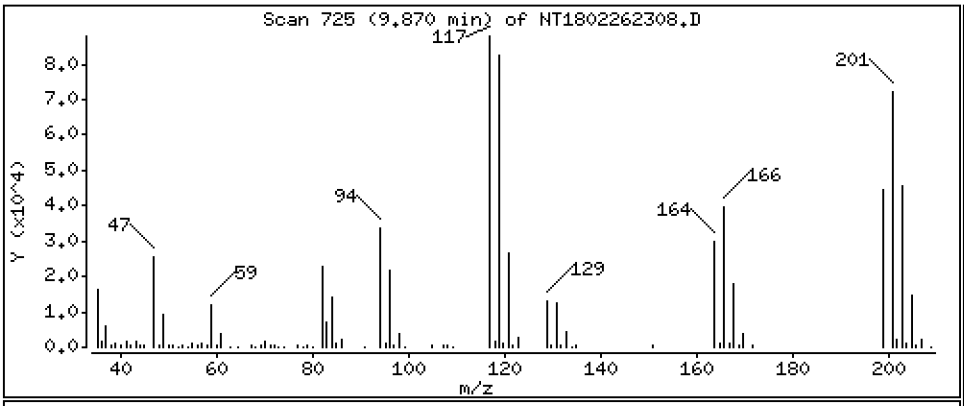
Operator: VTS

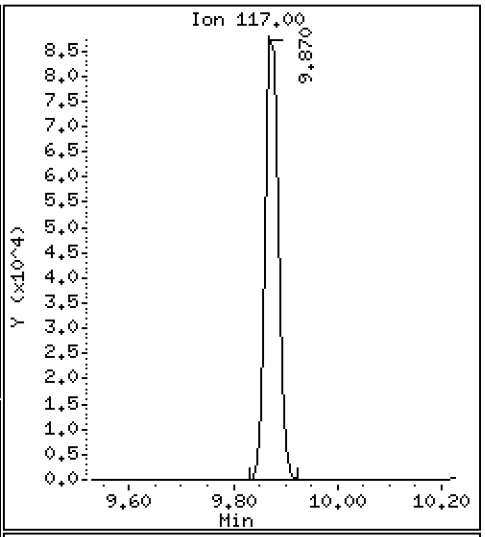
Column phase: ZB-5msi

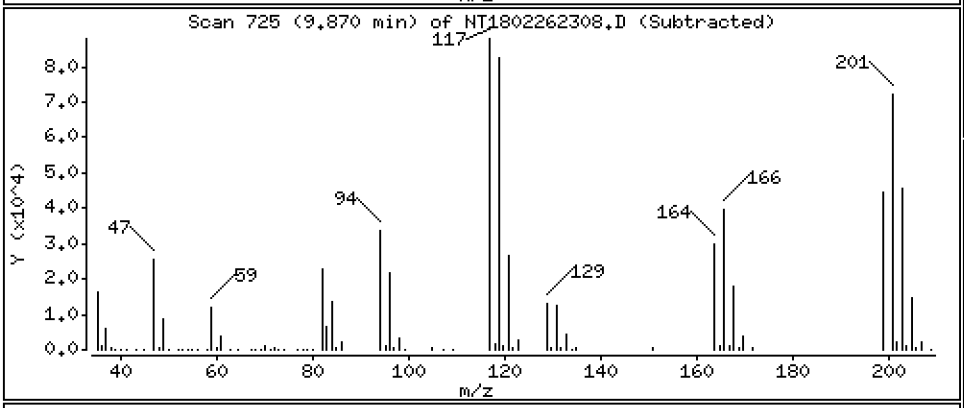
Column diameter: 0.25

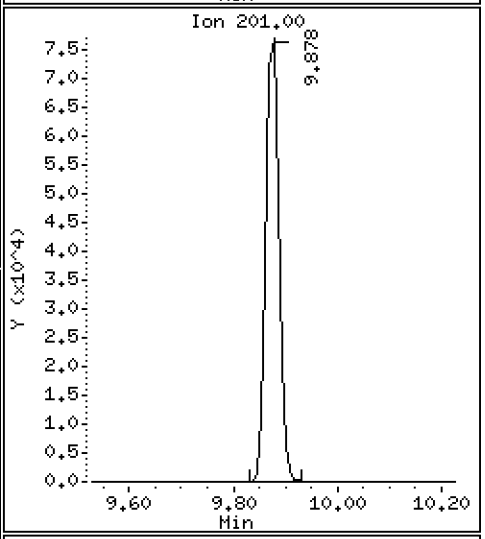
17 Hexachloroethane

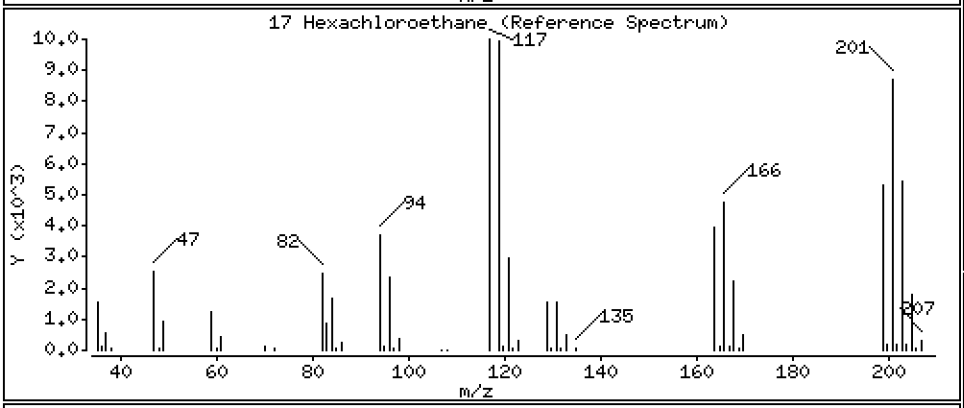
Concentration: 3.452 ug/mL

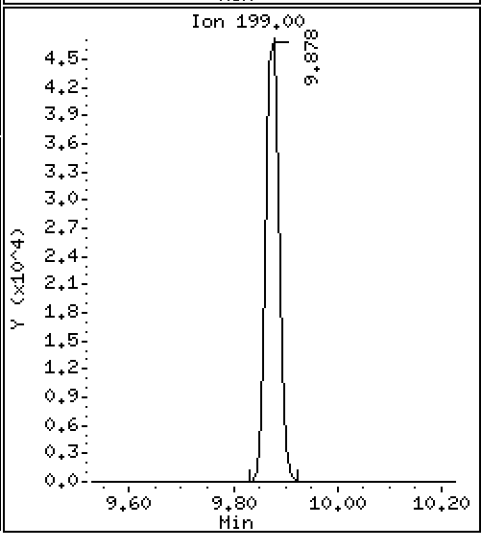


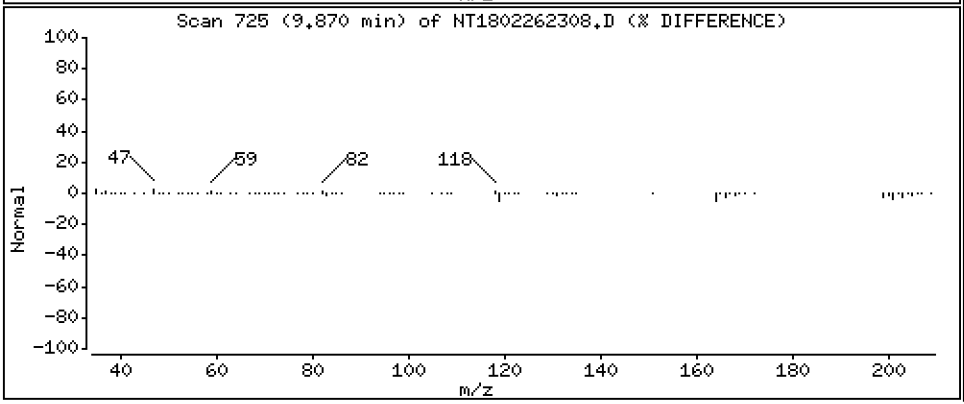












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

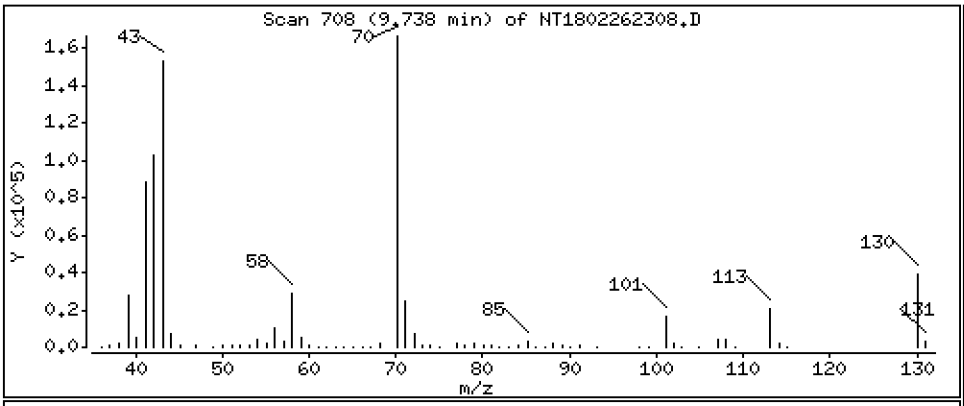
Operator: VTS

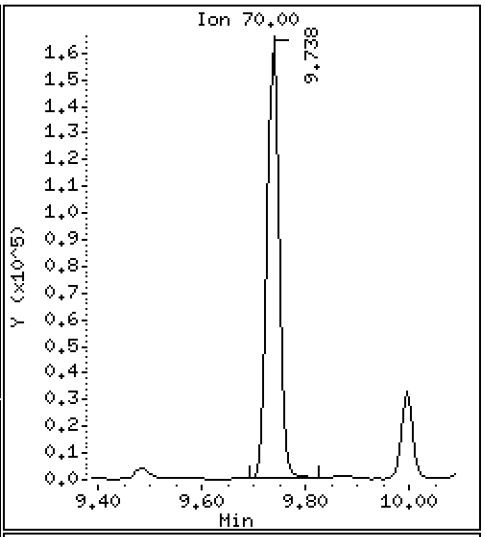
Column phase: ZB-5msi

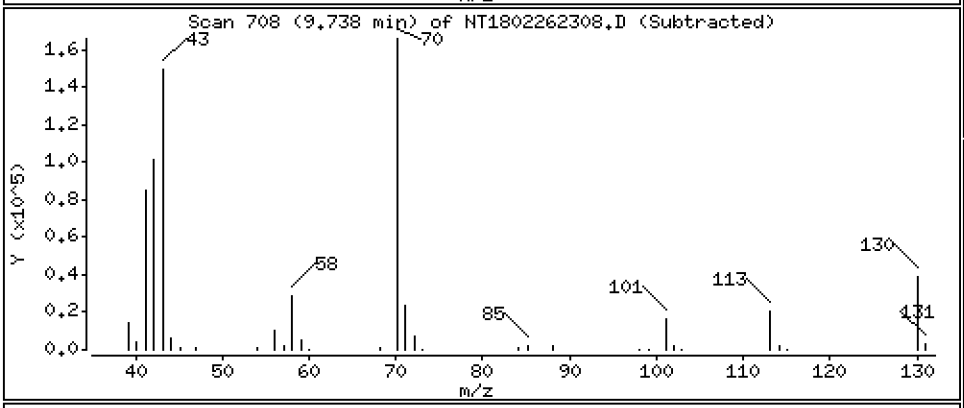
Column diameter: 0.25

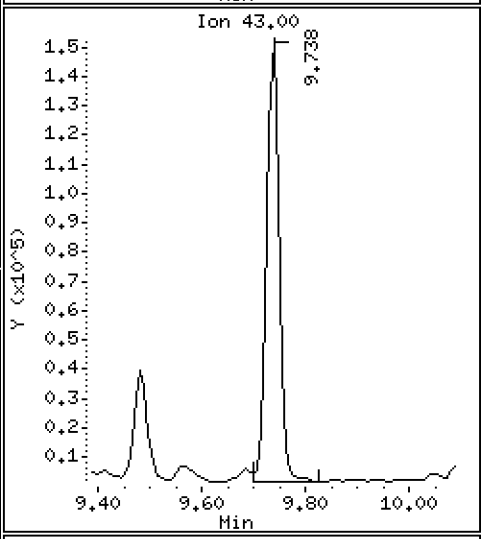
16 N-Nitroso-di-n-propylamine

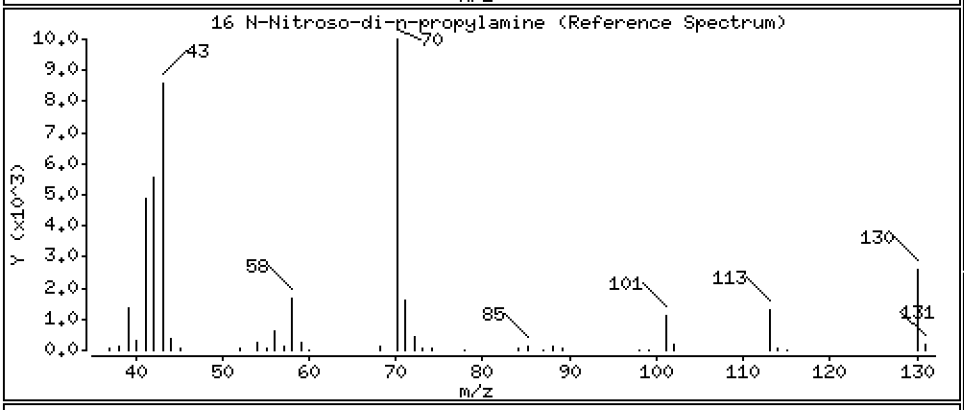
Concentration: 3.689 ug/mL

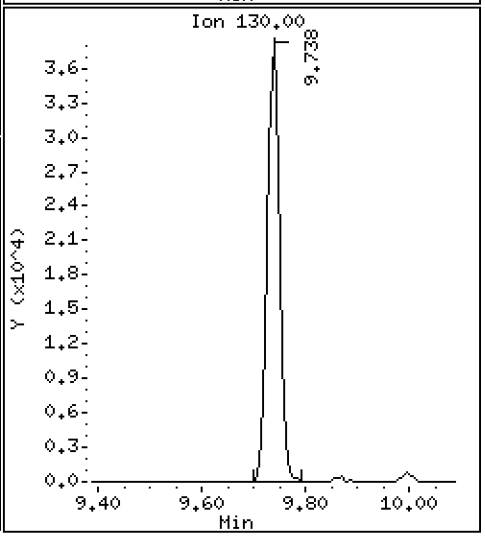


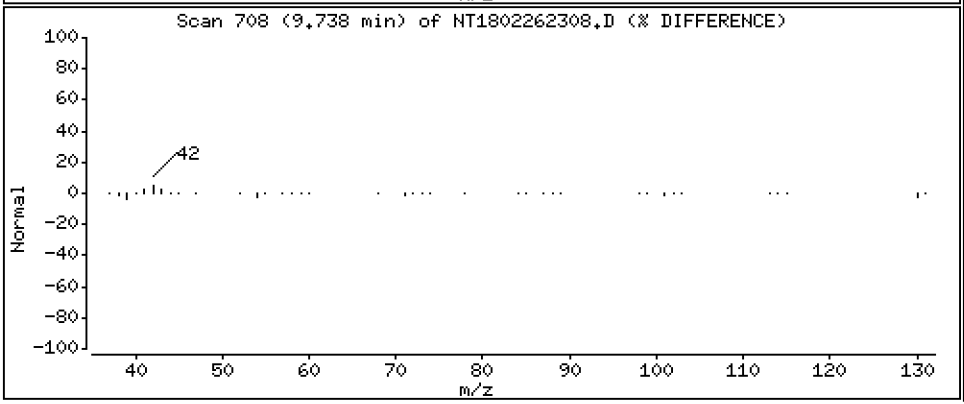












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

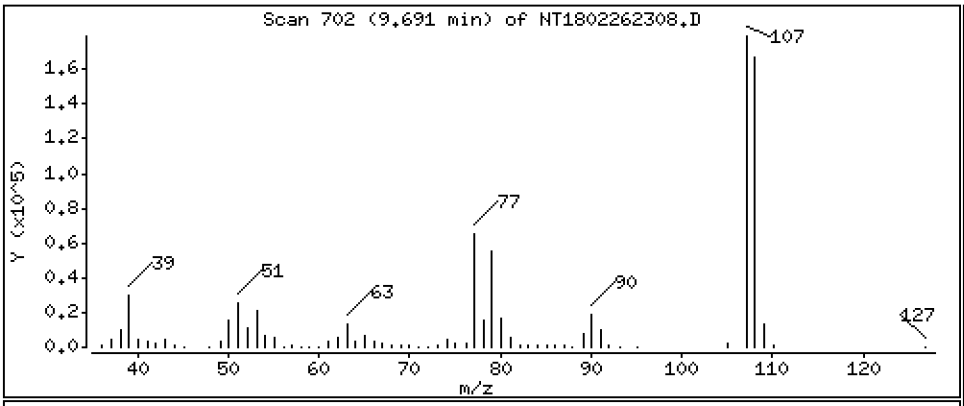
Operator: VTS

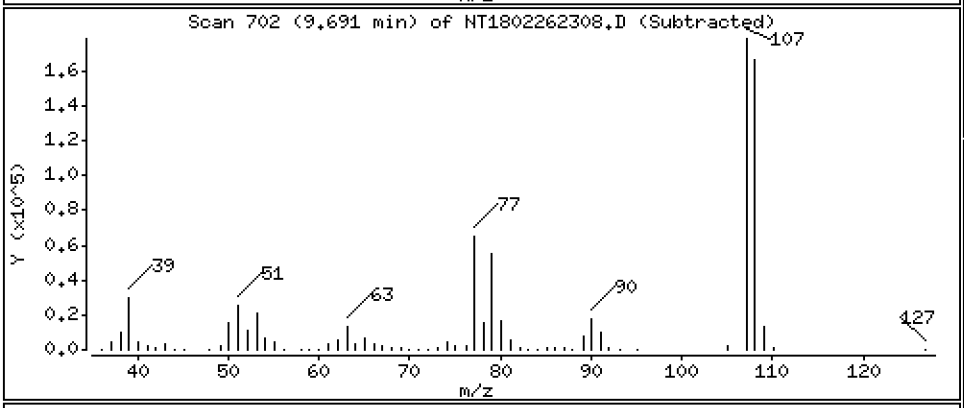
Column phase: ZB-5msi

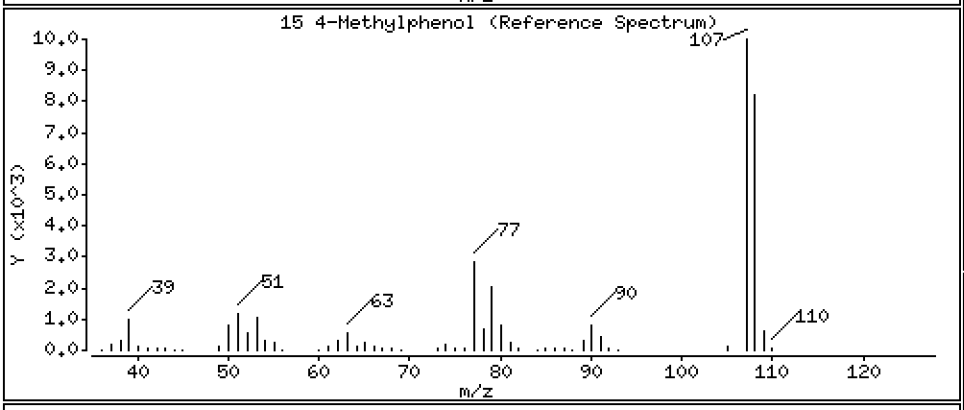
Column diameter: 0.25

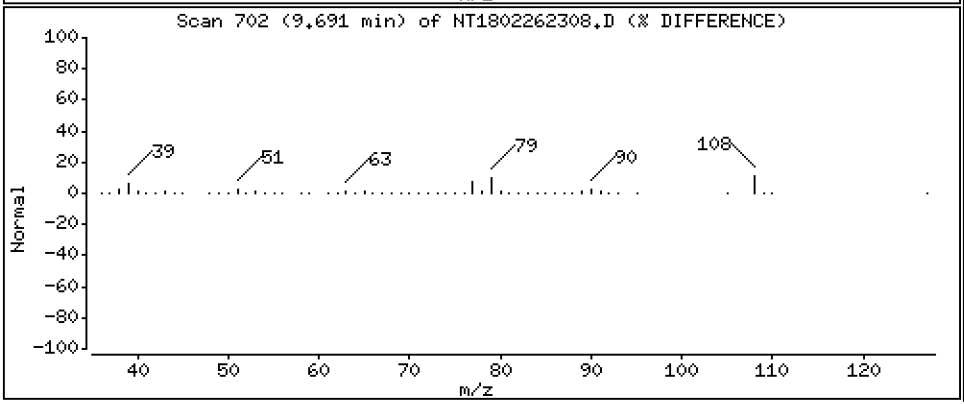
15 4-Methylphenol

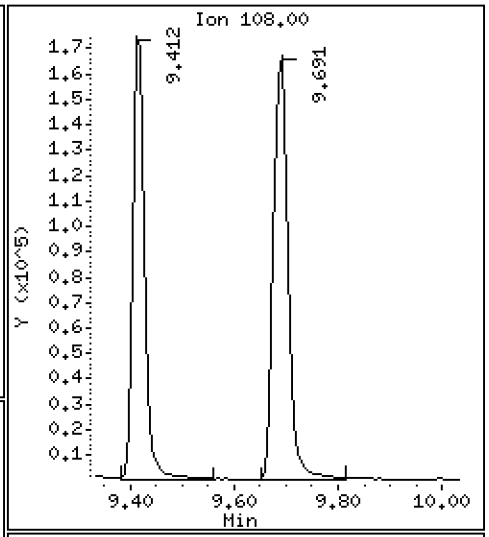
Concentration: 3.276 ug/mL

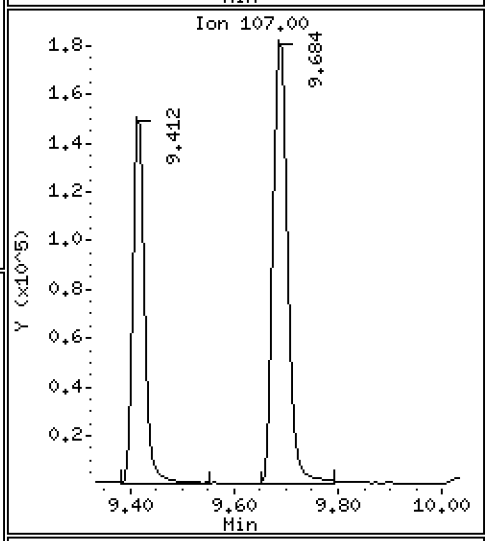


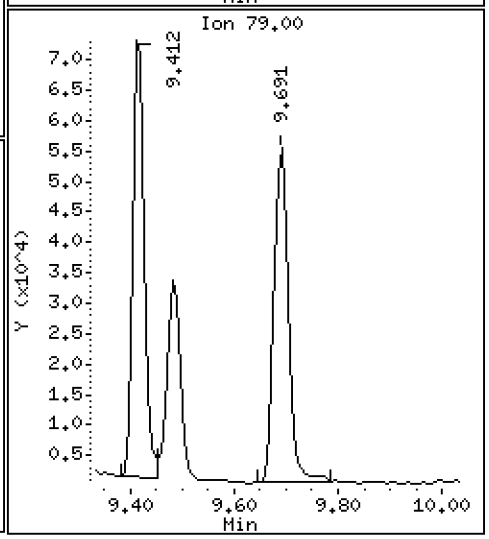












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

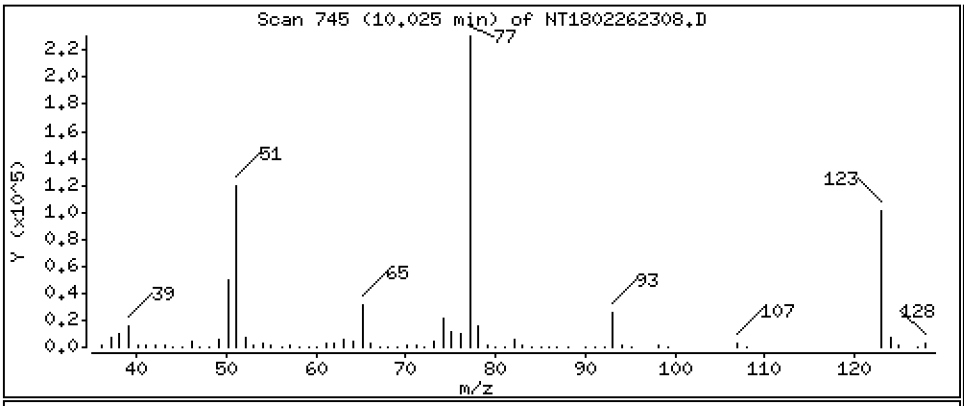
Operator: VTS

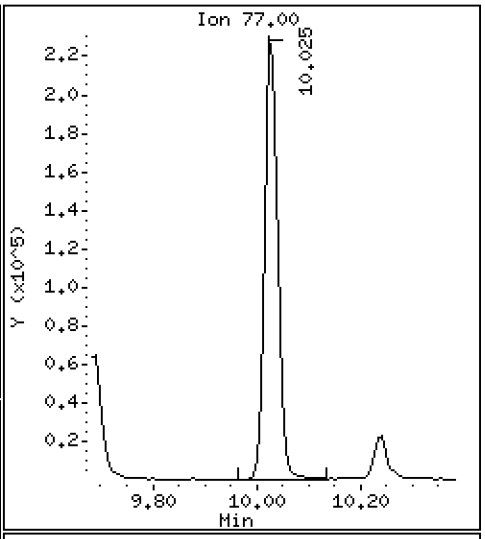
Column phase: ZB-5msi

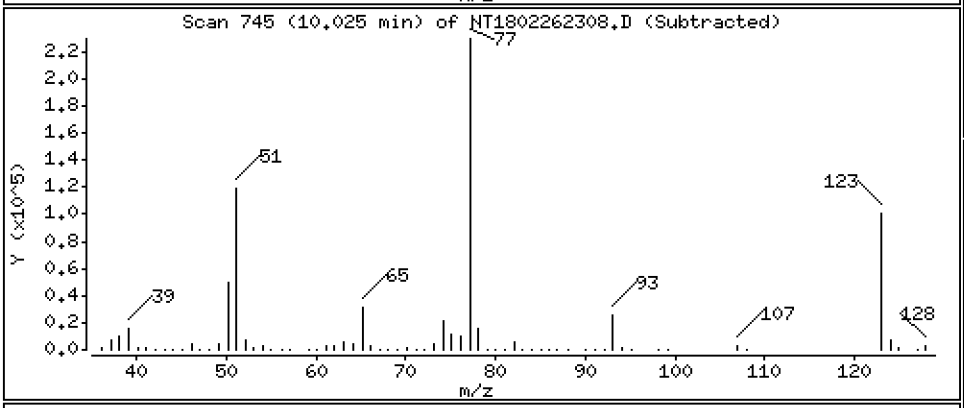
Column diameter: 0.25

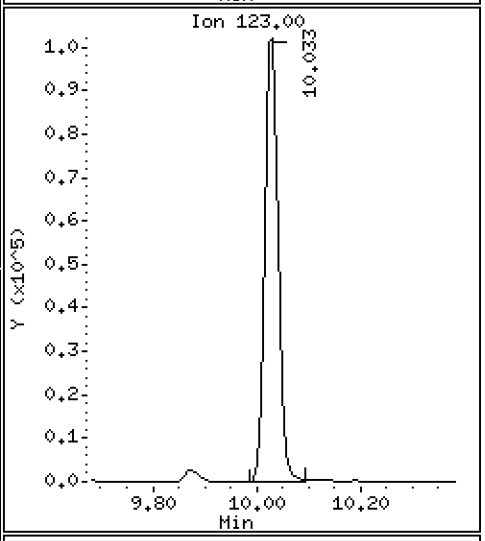
19 Nitrobenzene

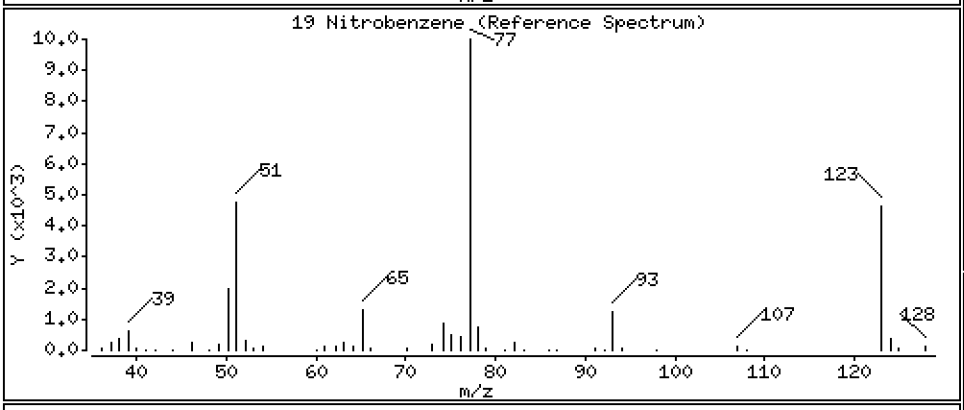
Concentration: 3.758 ug/mL

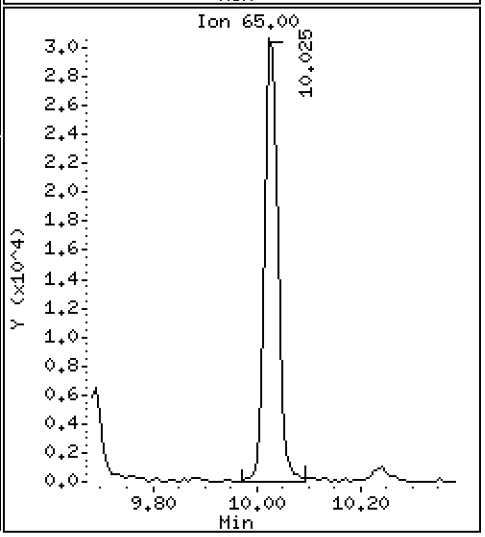


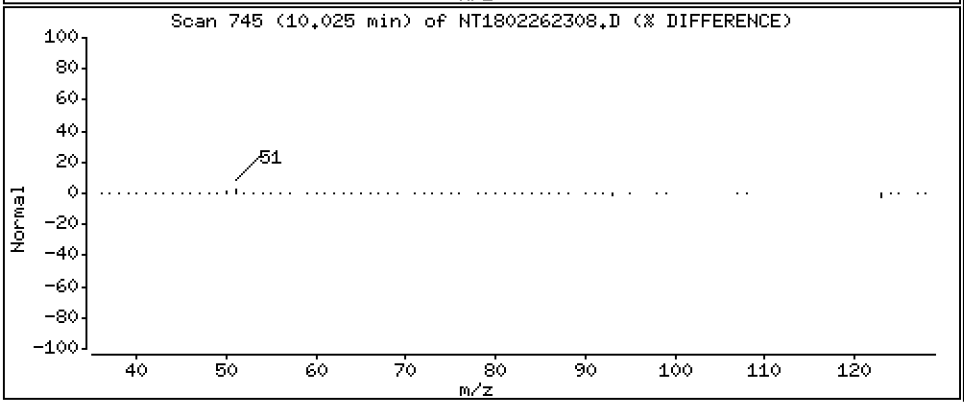












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

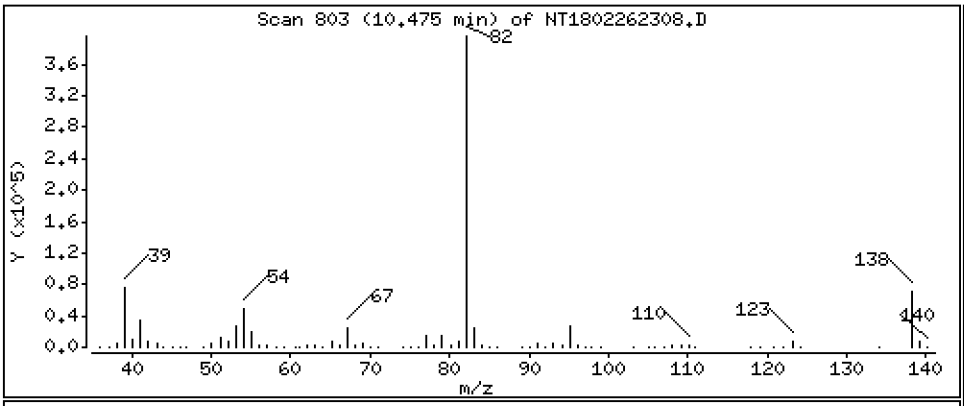
Operator: VTS

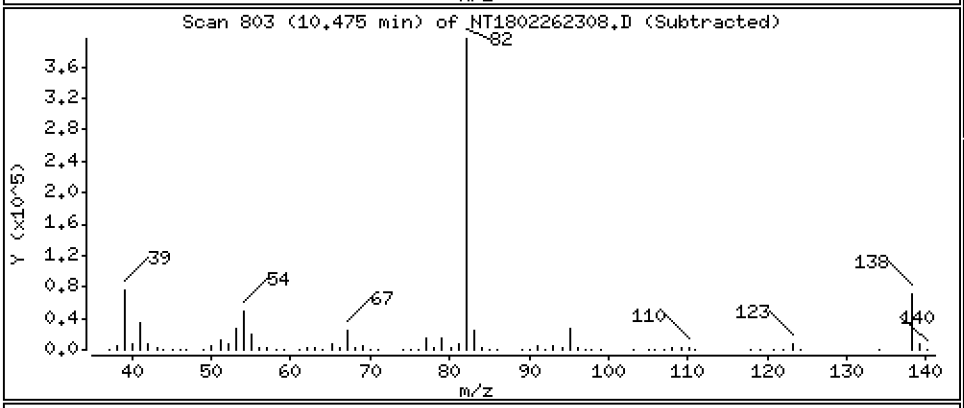
Column phase: ZB-5msi

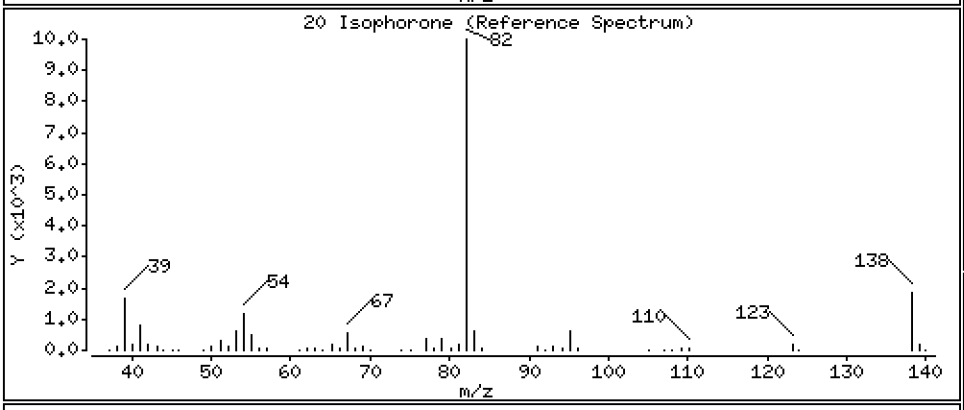
Column diameter: 0.25

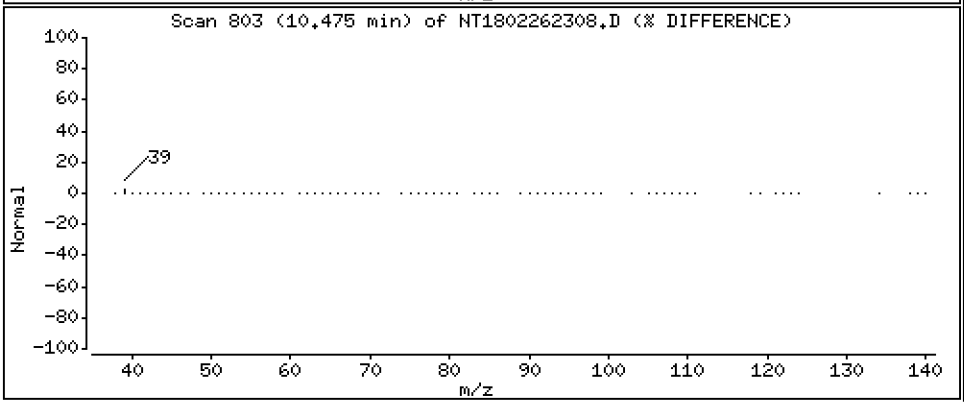
20 Isophorone

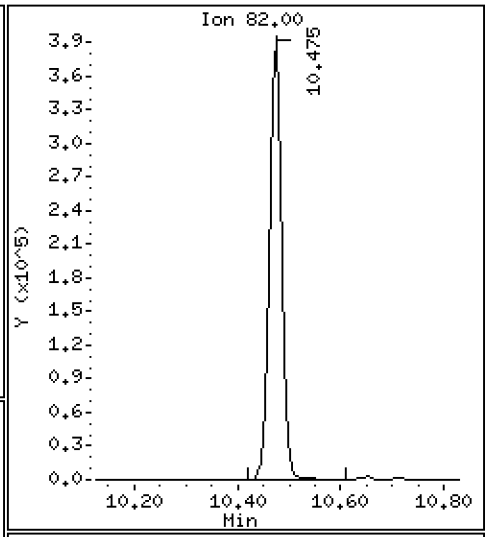
Concentration: 5.663 ug/mL

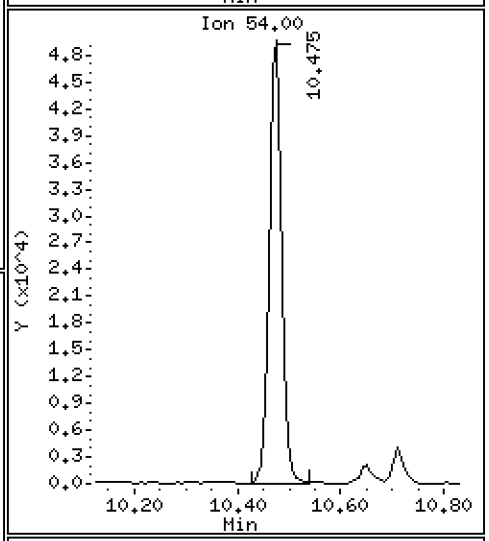


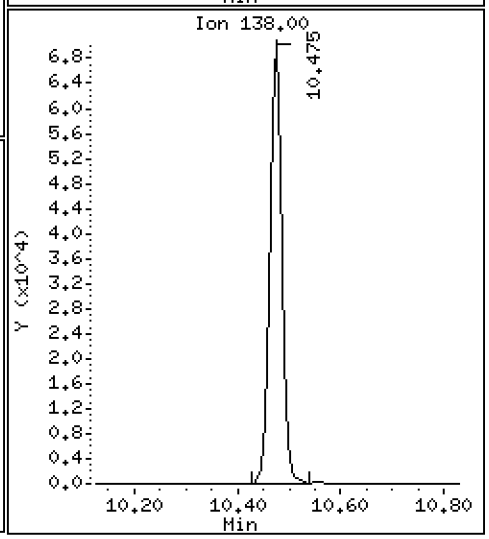












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

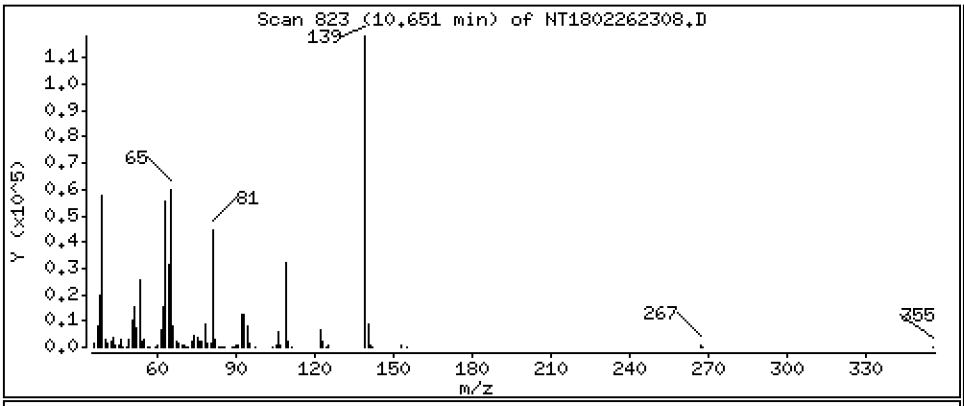
Operator: VTS

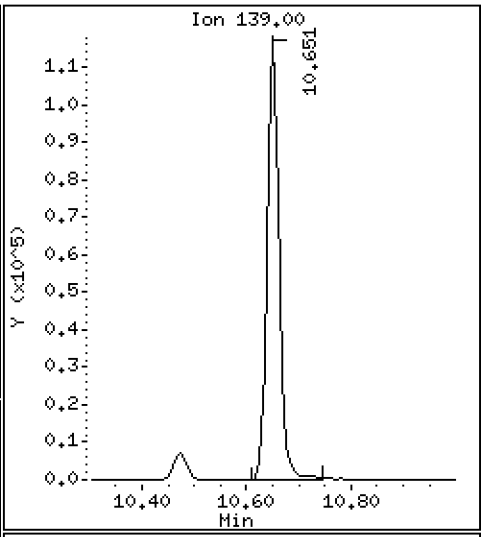
Column phase: ZB-5msi

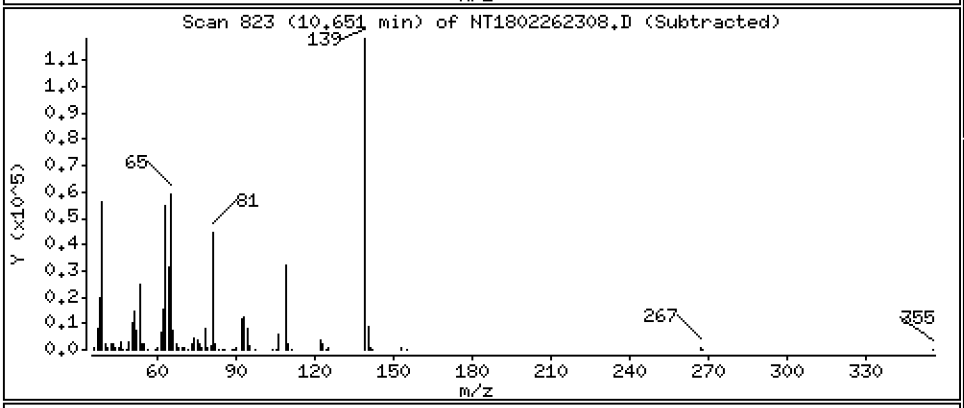
Column diameter: 0.25

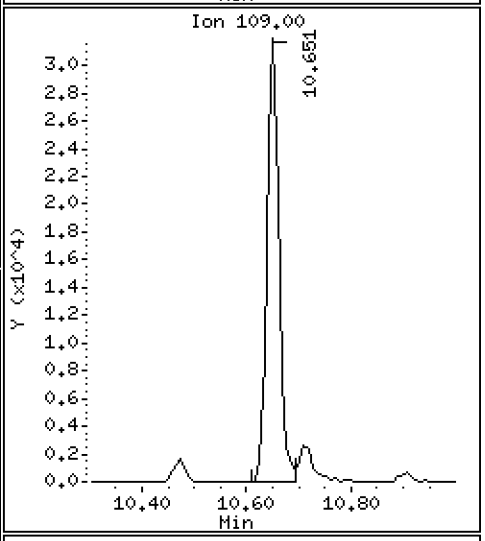
21 2-Nitrophenol

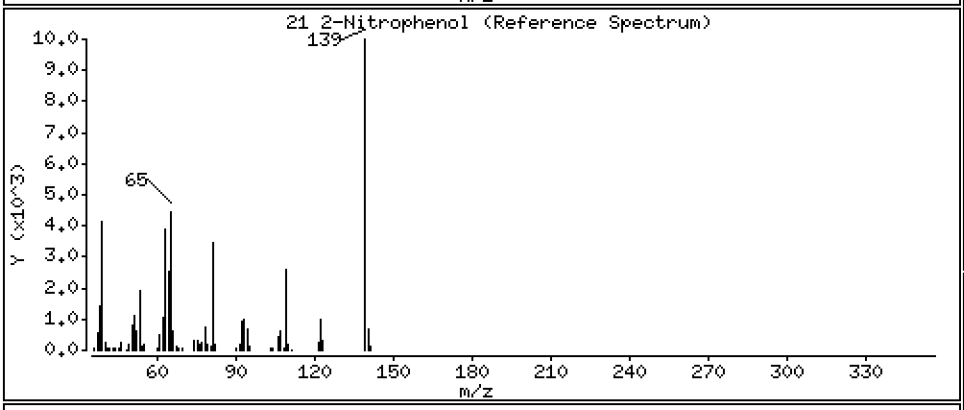
Concentration: 3.678 ug/mL

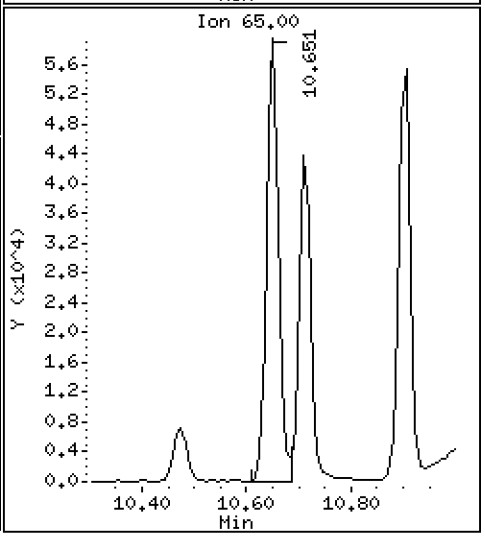


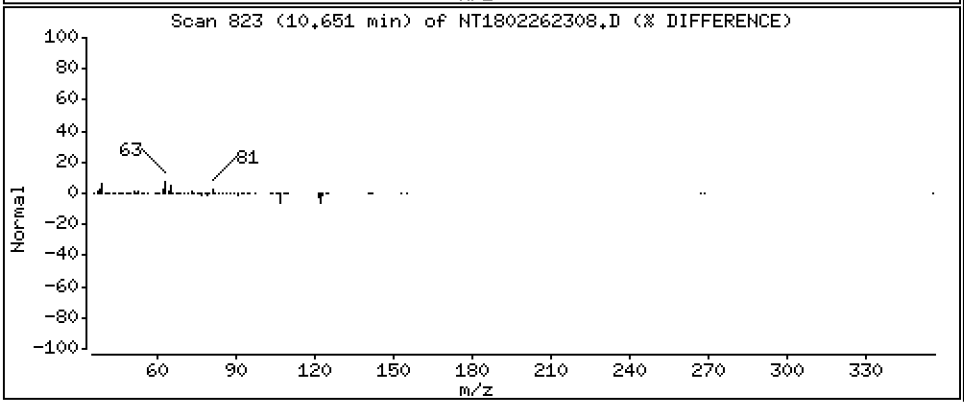












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

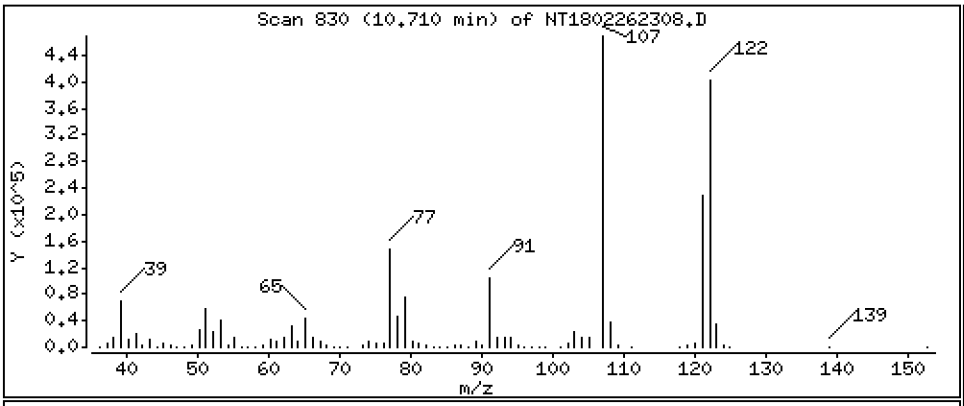
Operator: VTS

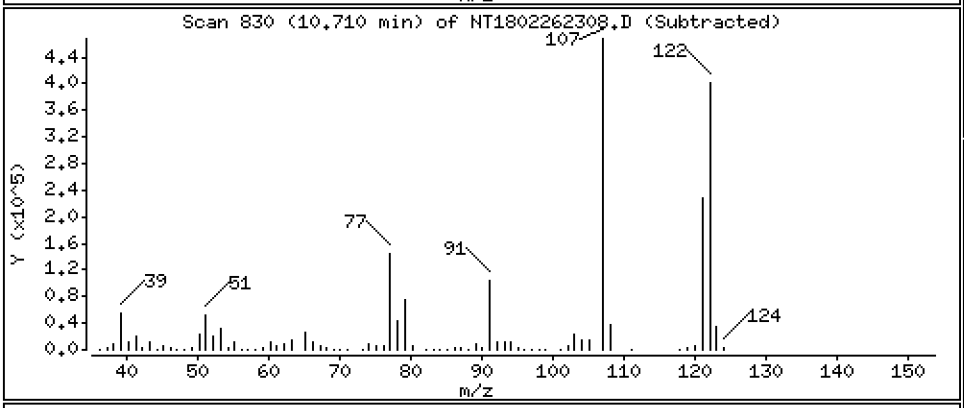
Column phase: ZB-5msi

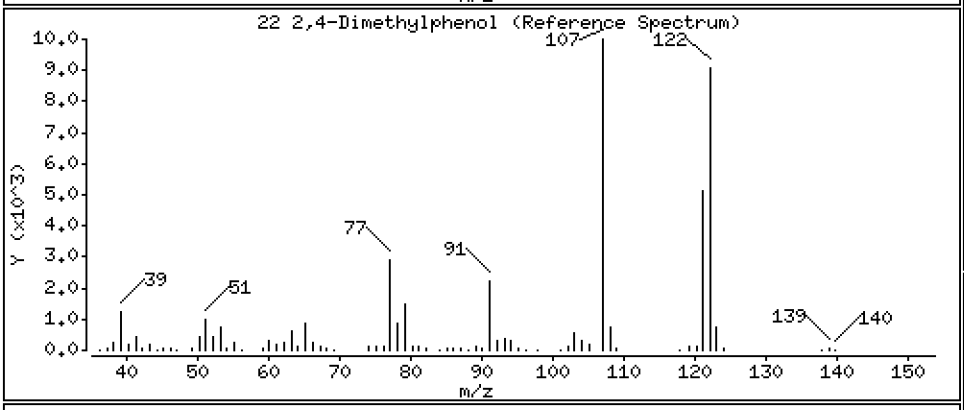
Column diameter: 0.25

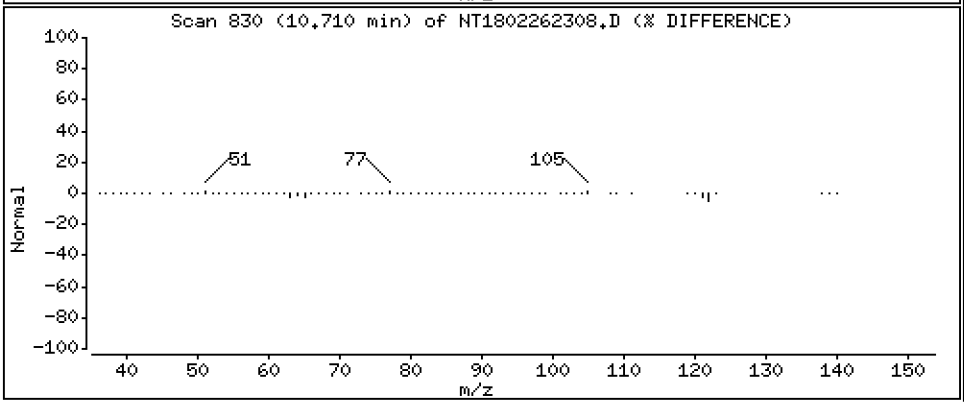
22 2,4-Dimethylphenol

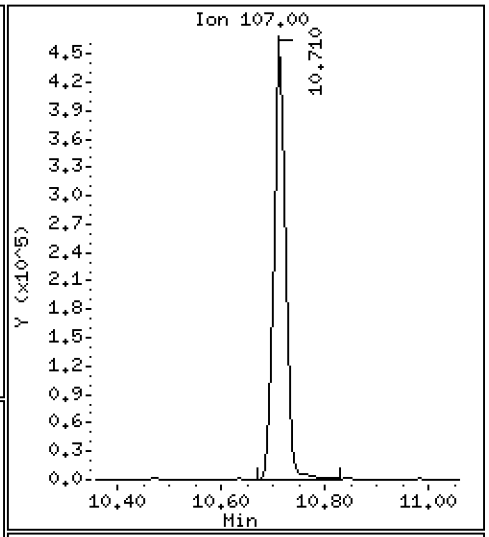
Concentration: 7.515 ug/mL

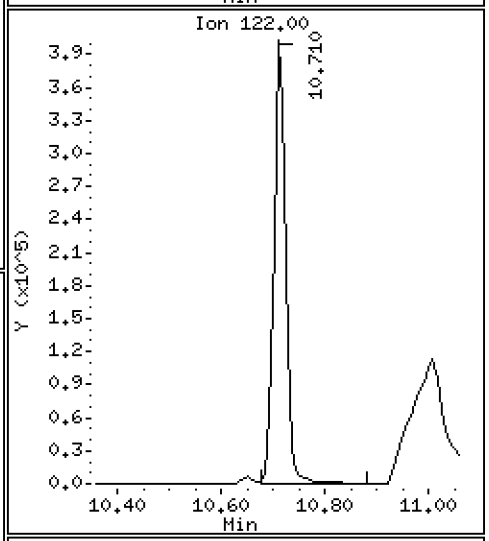


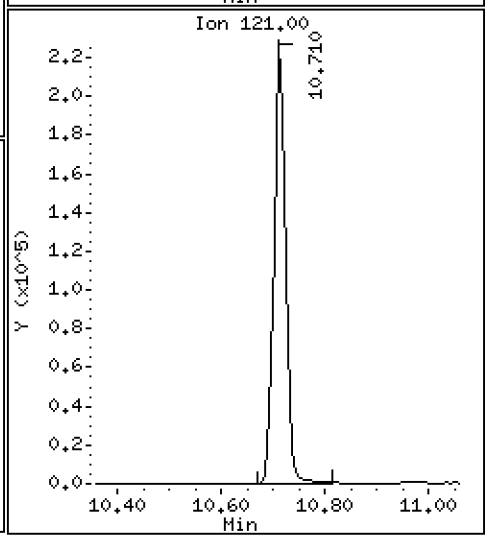












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

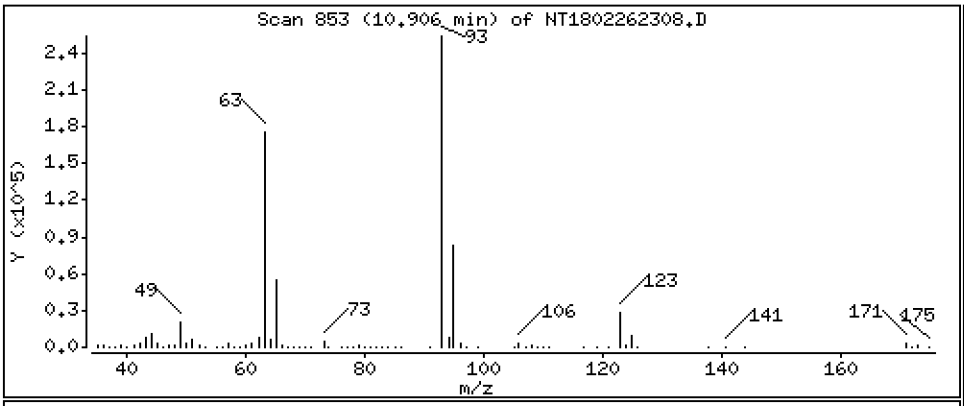
Operator: VTS

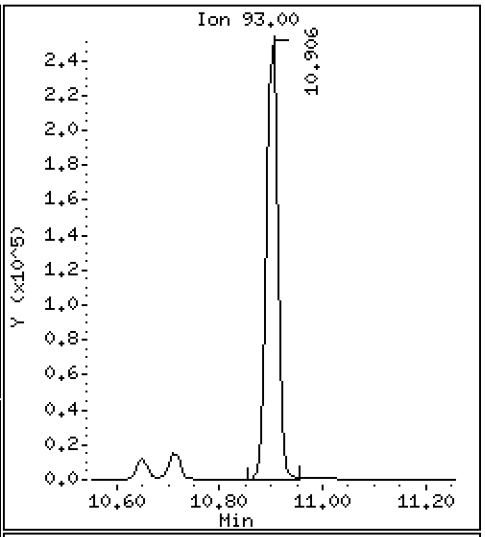
Column phase: ZB-5msi

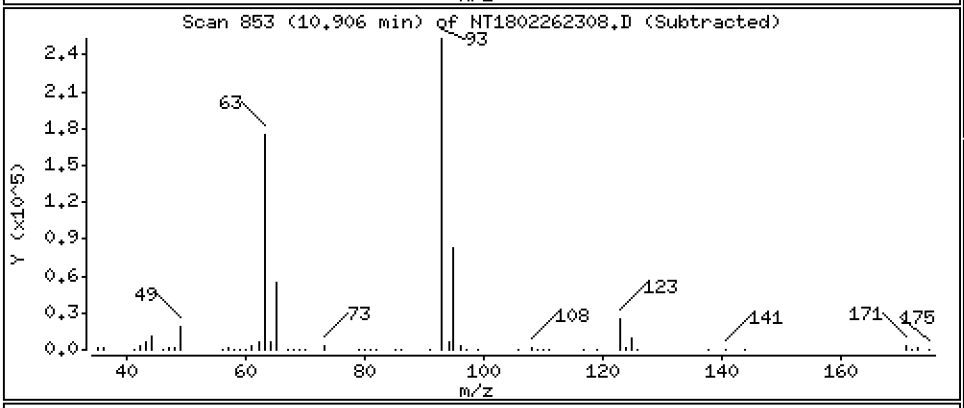
Column diameter: 0.25

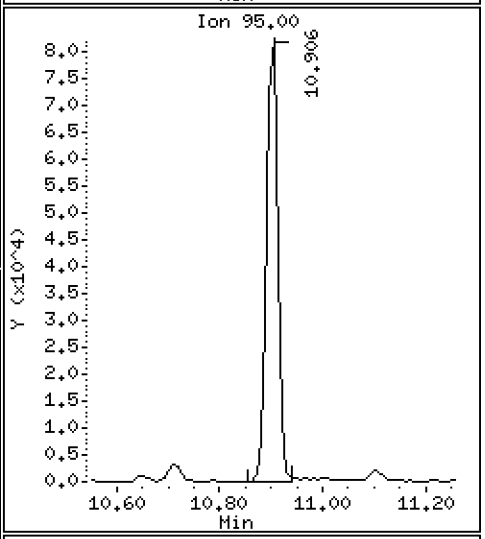
23 Bis(2-Chloroethoxy)methane

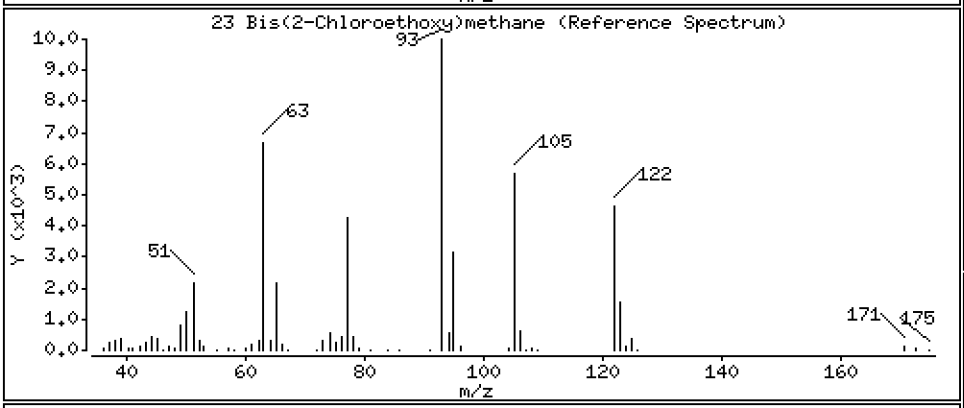
Concentration: 4.384 ug/mL

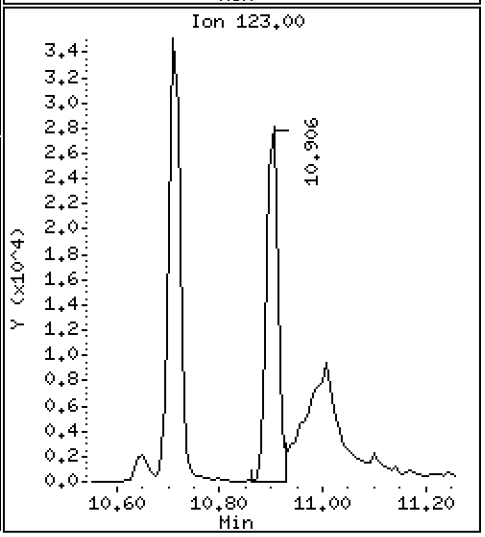


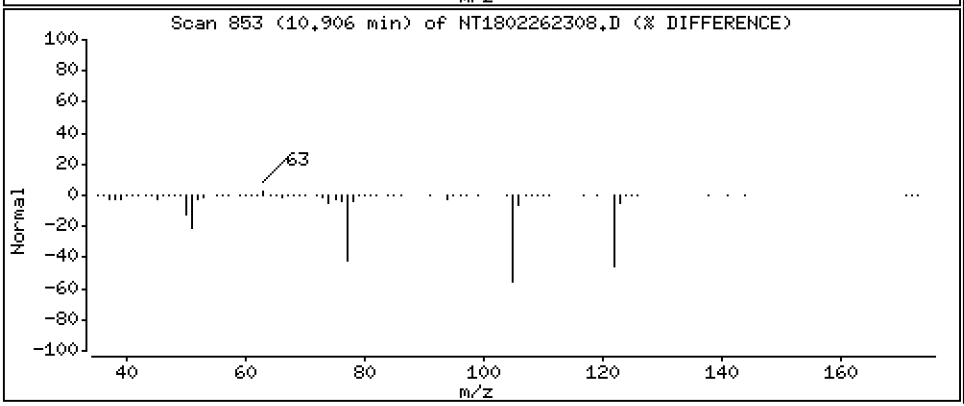












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

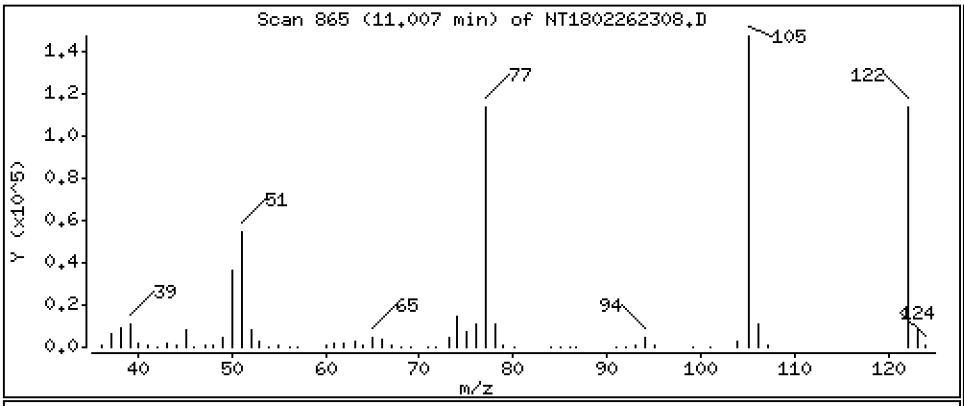
Operator: VTS

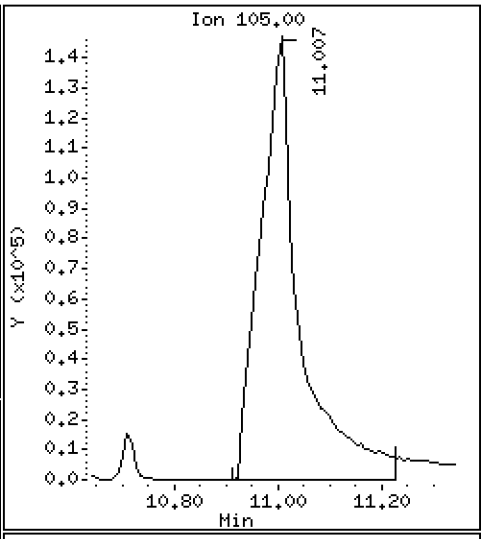
Column phase: ZB-5msi

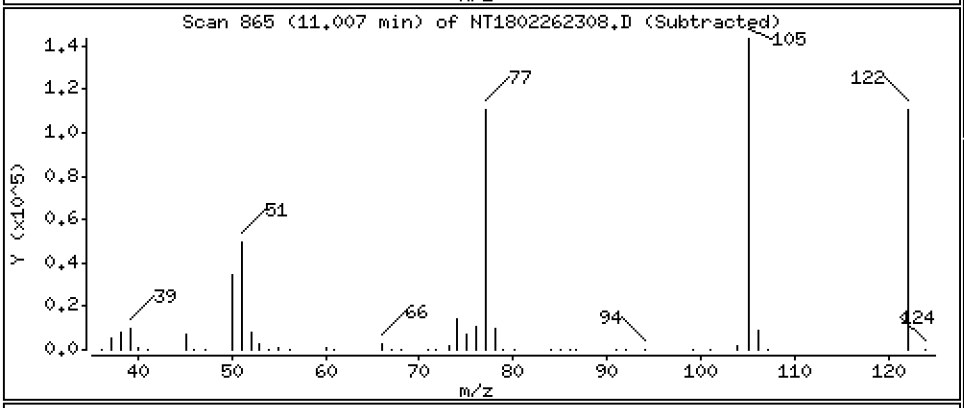
Column diameter: 0.25

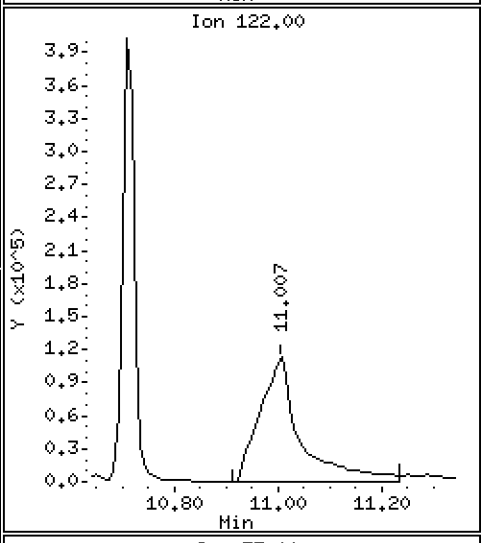
24 Benzoic acid

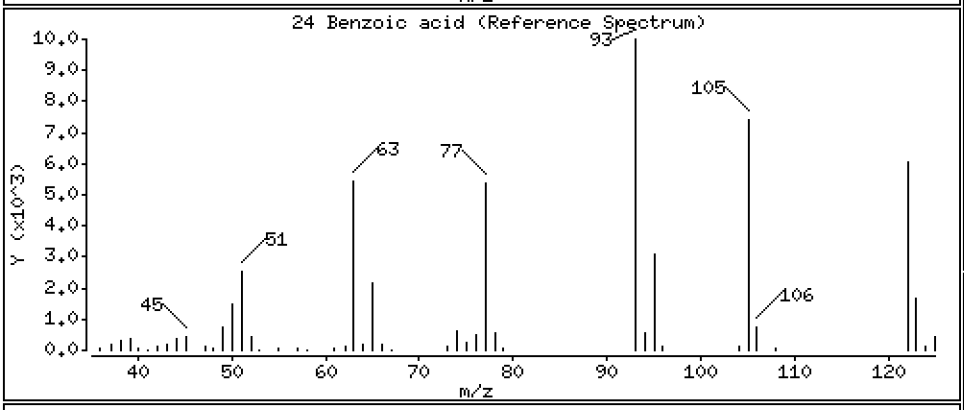
Concentration: 20.88 ug/mL

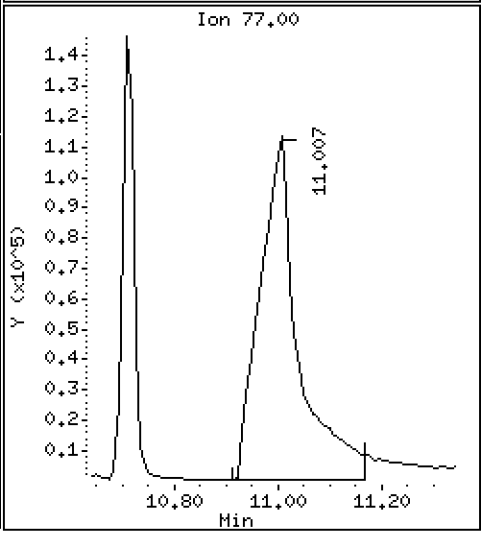


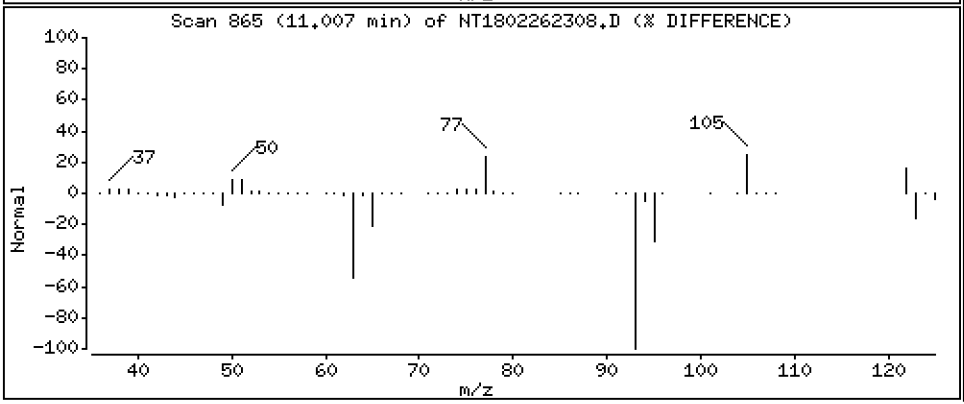












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

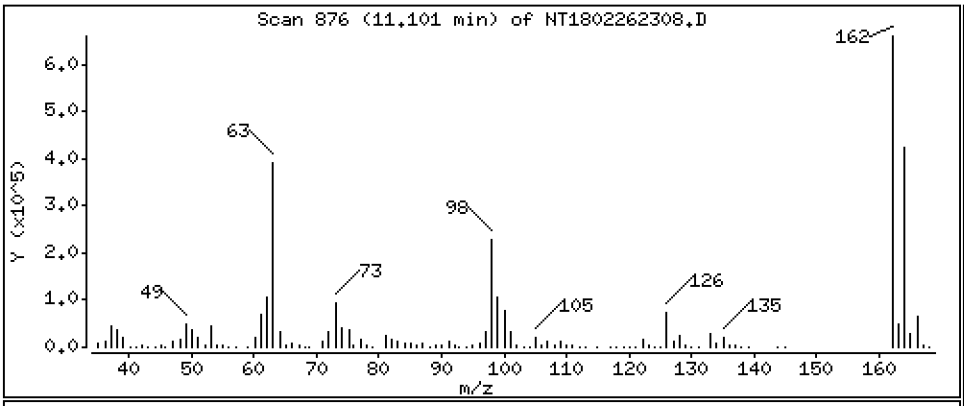
Operator: VTS

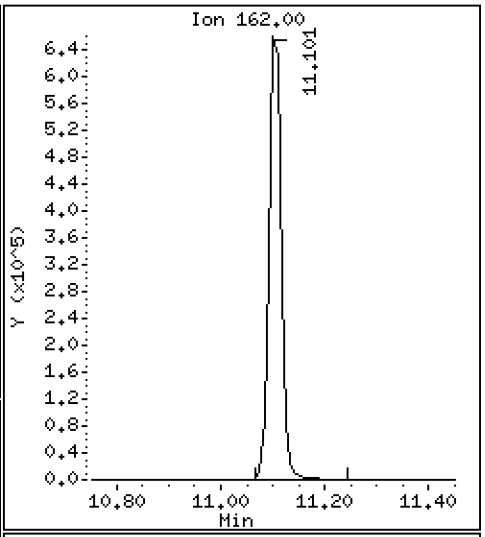
Column phase: ZB-5msi

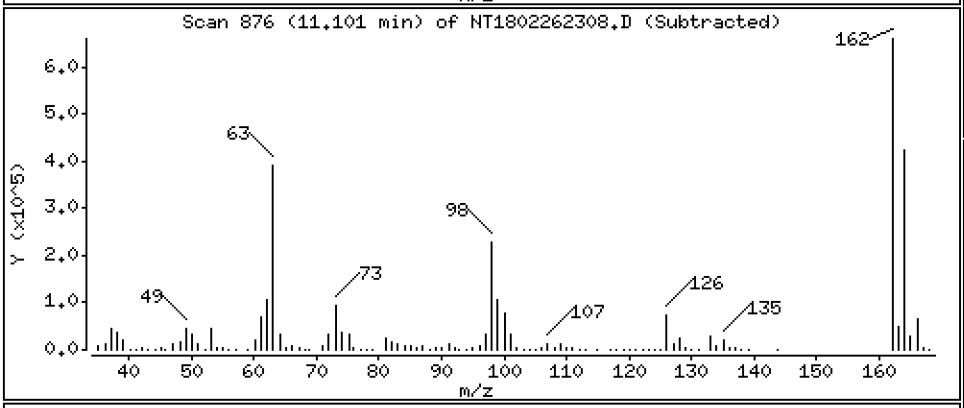
Column diameter: 0.25

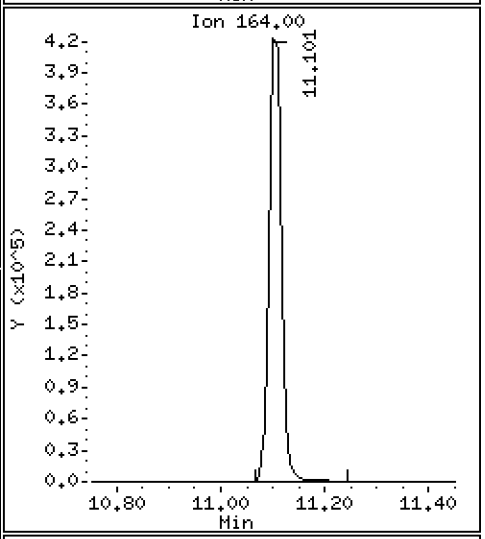
25 2,4-Dichlorophenol

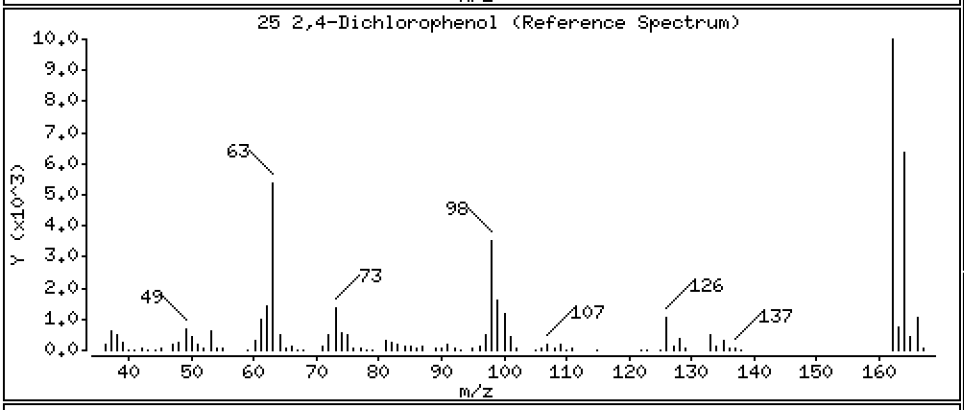
Concentration: 14.02 ug/mL

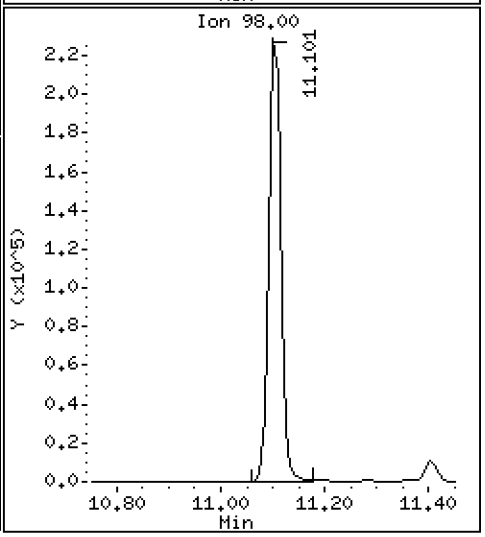


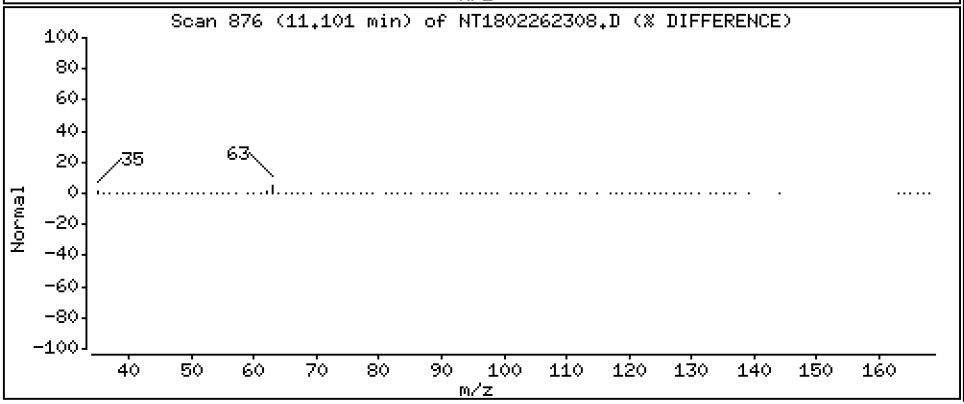












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

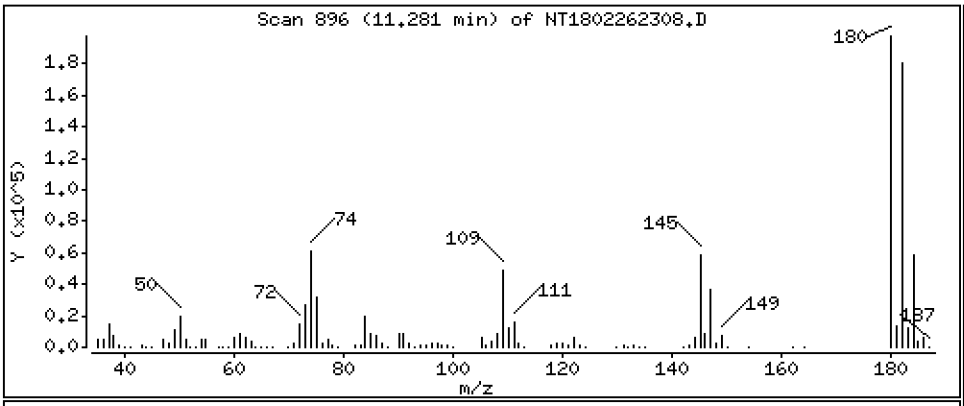
Operator: VTS

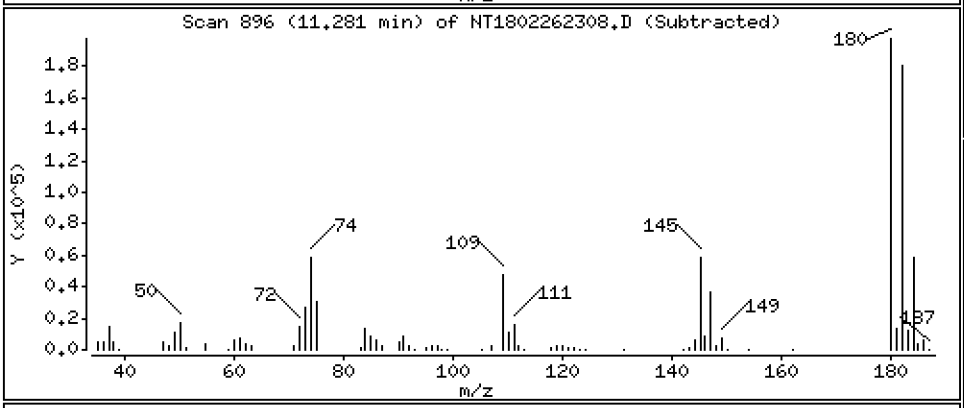
Column phase: ZB-5msi

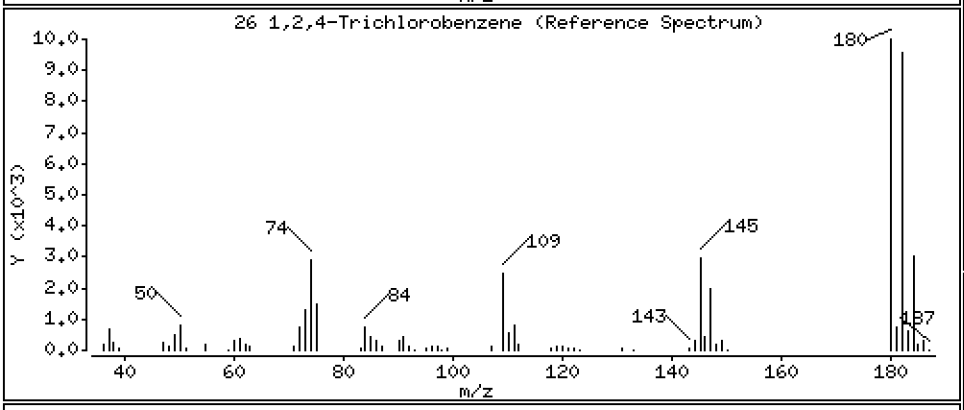
Column diameter: 0.25

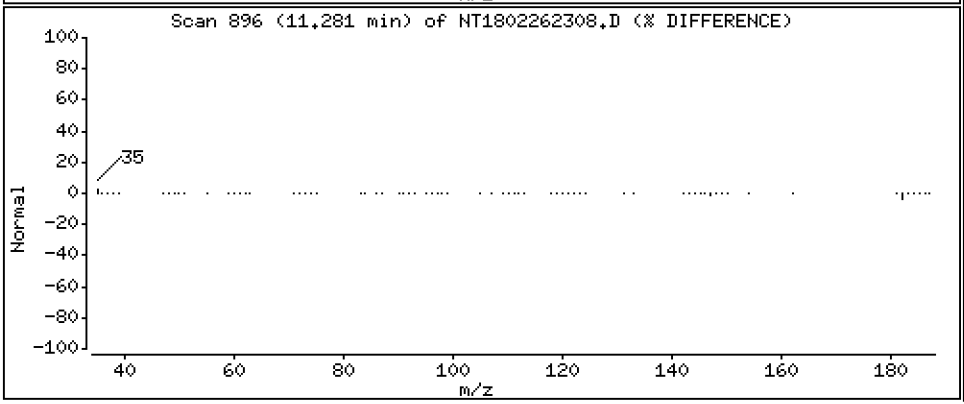
26 1,2,4-Trichlorobenzene

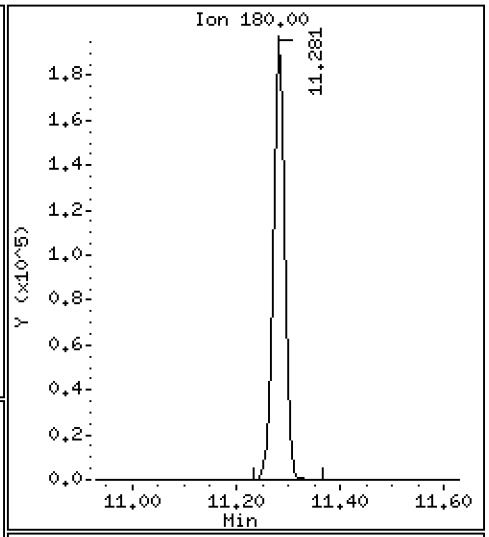
Concentration: 3.417 ug/mL

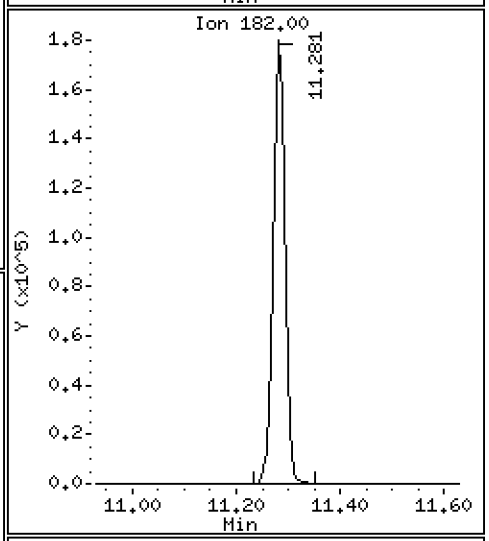


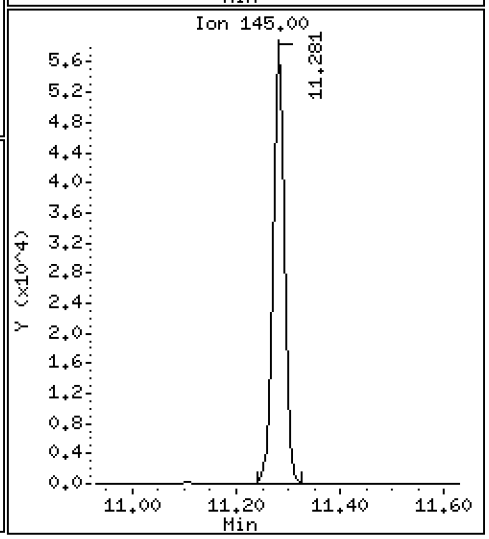












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

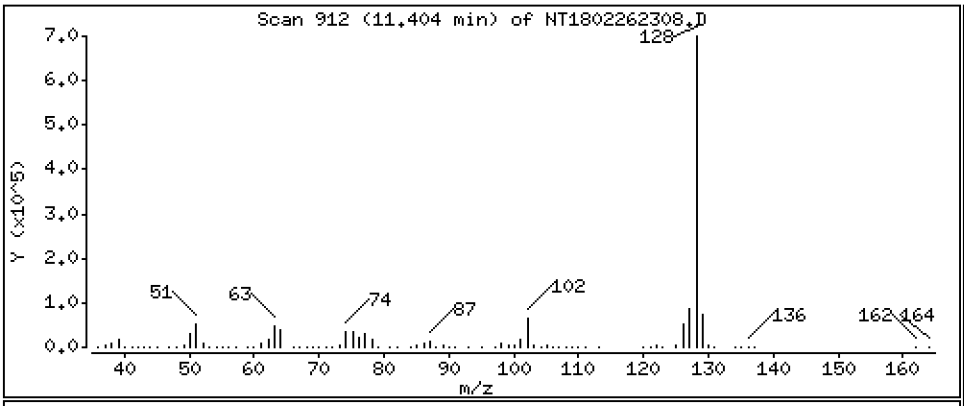
Operator: VTS

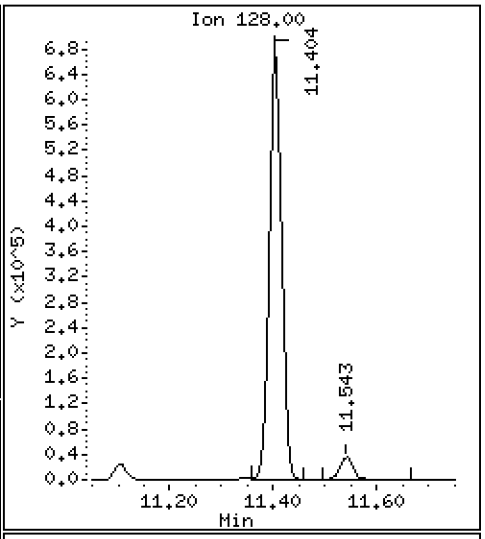
Column phase: ZB-5msi

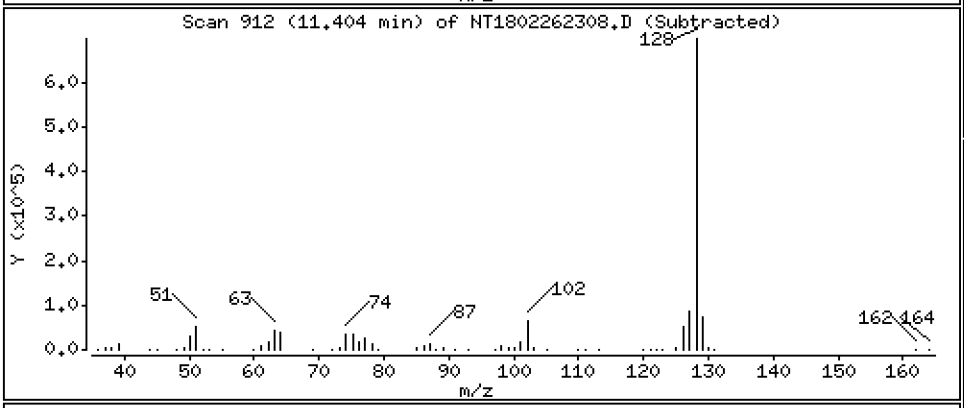
Column diameter: 0.25

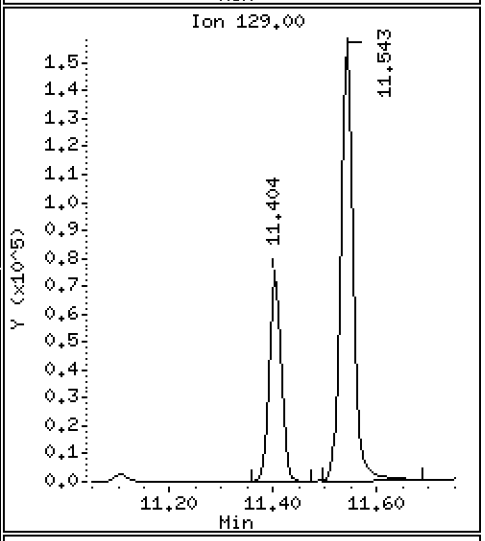
28 Naphthalene

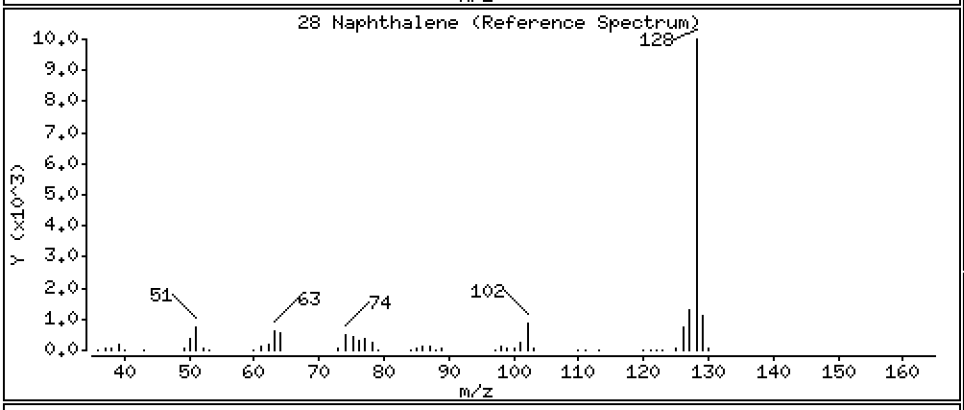
Concentration: 3.490 ug/mL

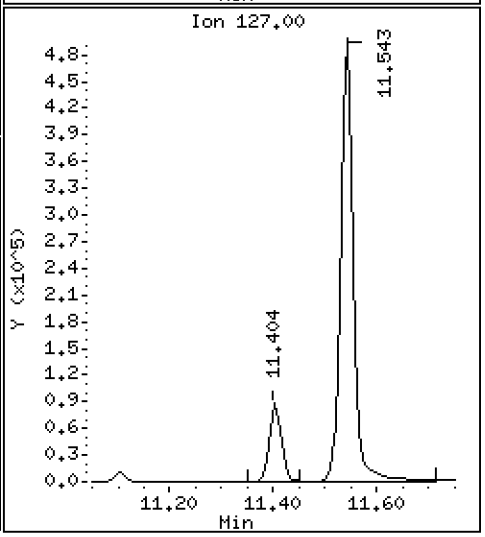


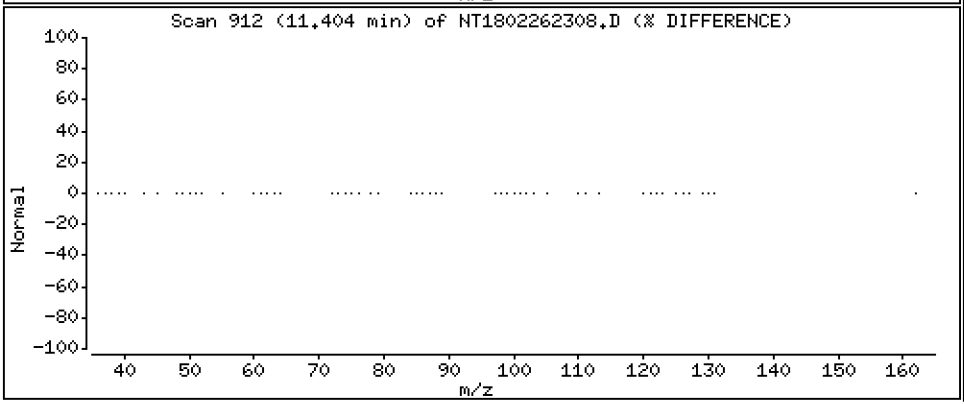












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

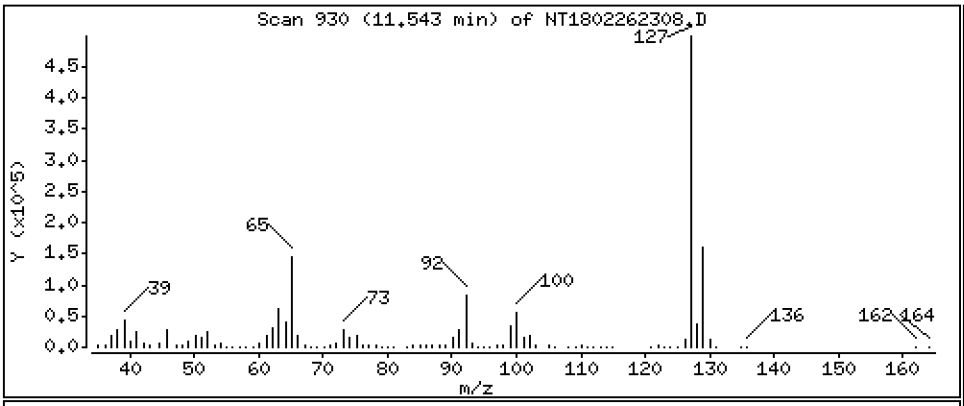
Operator: VTS

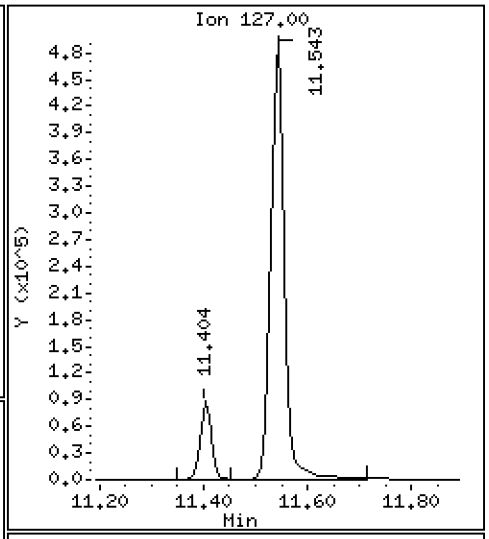
Column phase: ZB-5msi

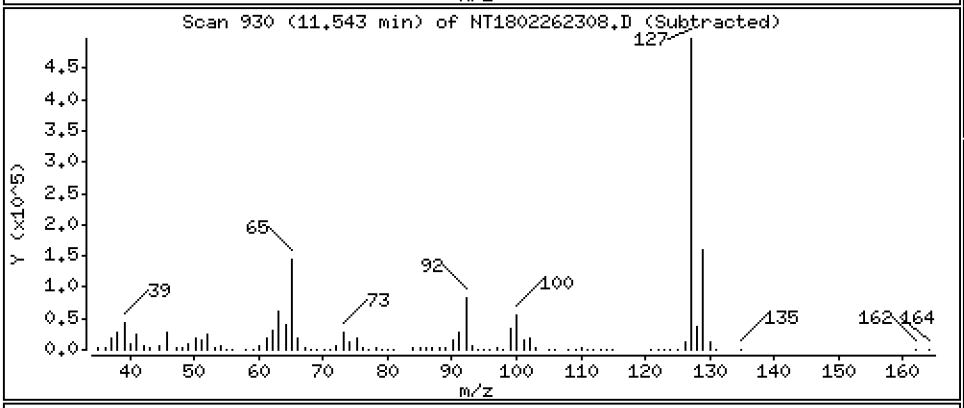
Column diameter: 0.25

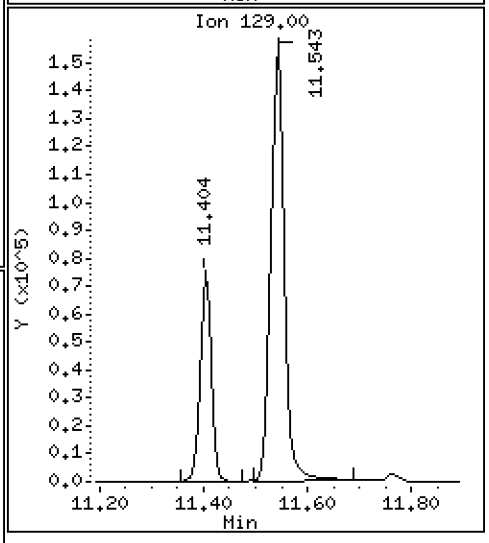
29 4-Chloroaniline

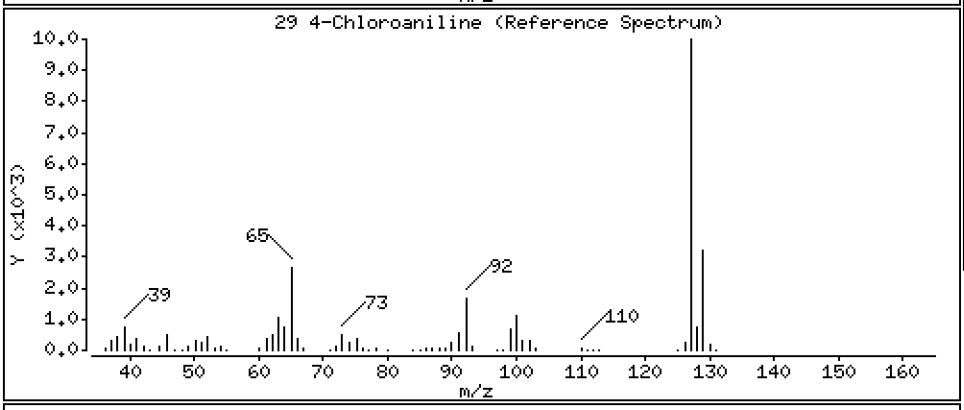
Concentration: 7.468 ug/mL

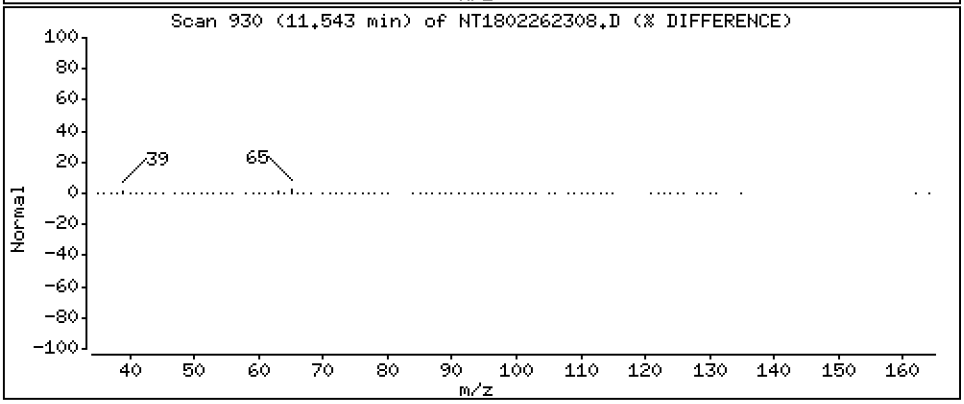












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

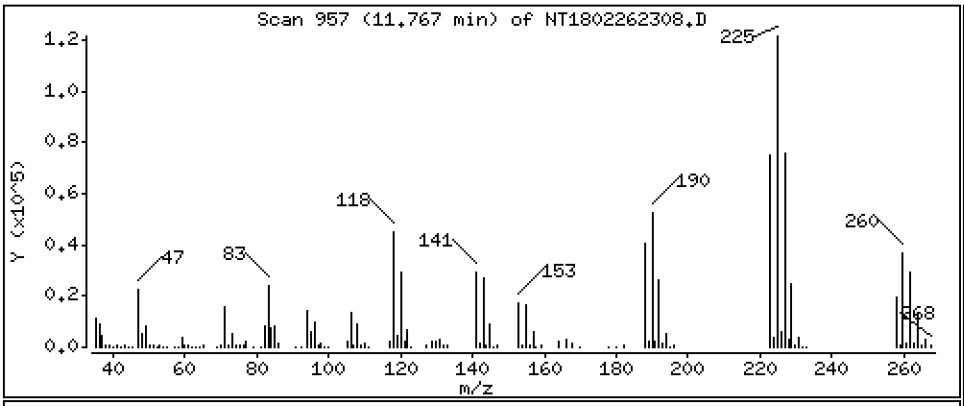
Operator: VTS

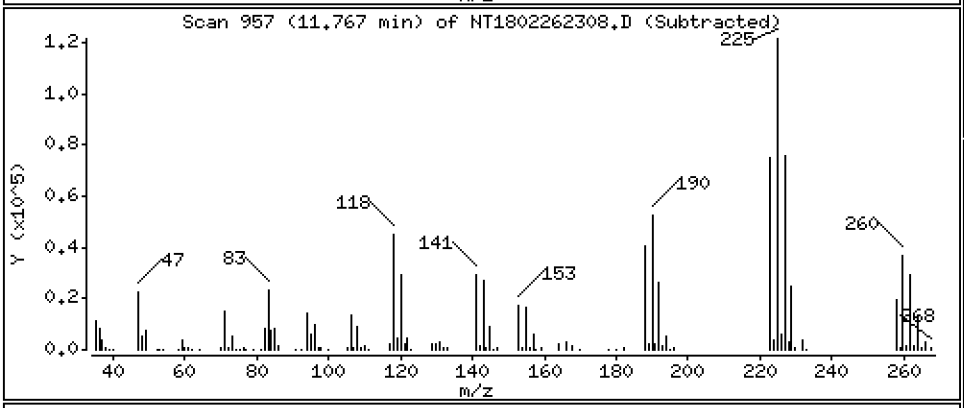
Column phase: ZB-5msi

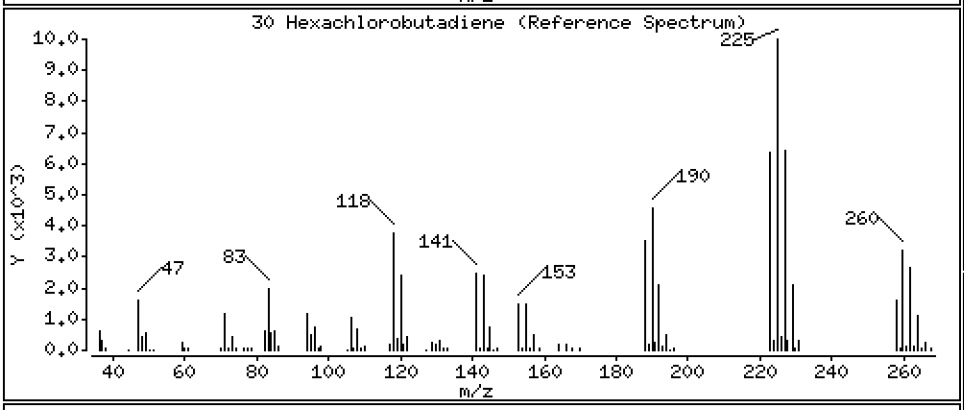
Column diameter: 0.25

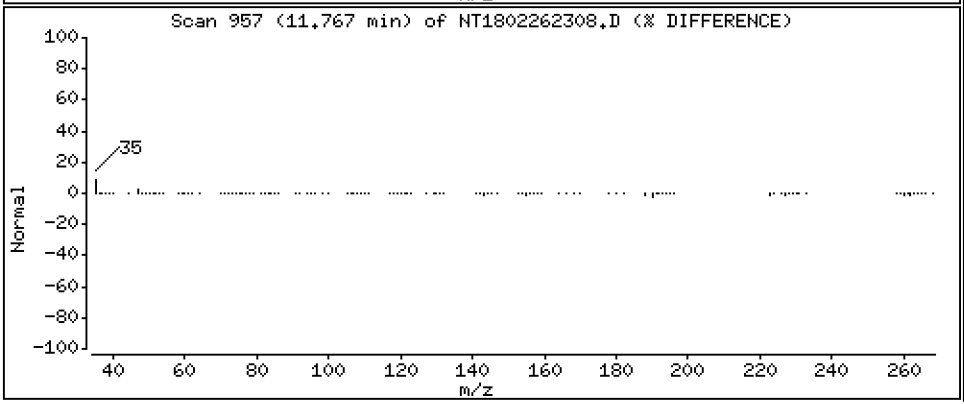
30 Hexachlorobutadiene

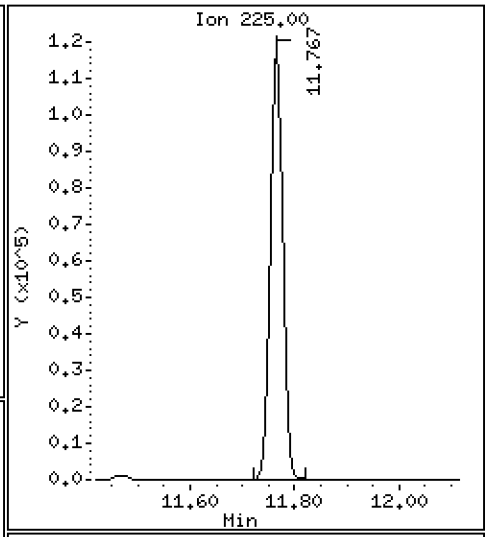
Concentration: 3.477 ug/mL

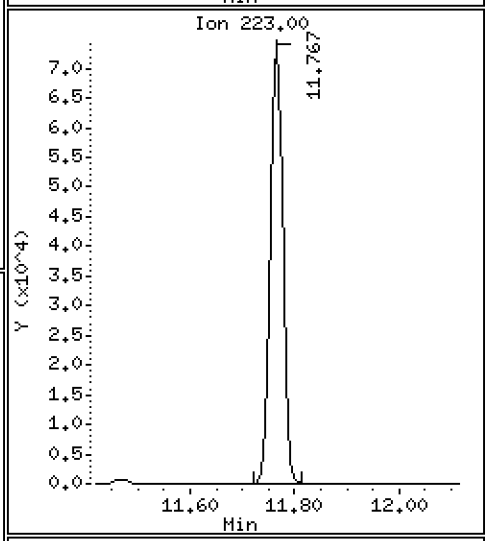


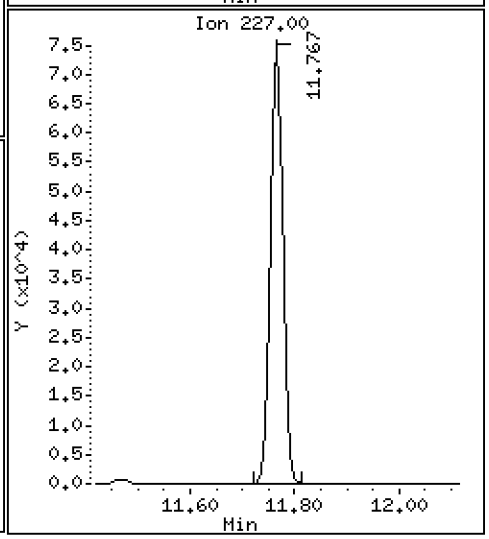












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

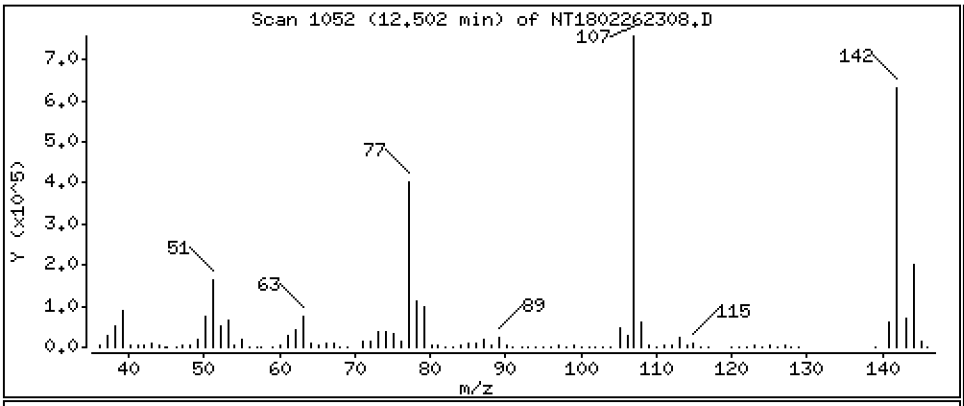
Operator: VTS

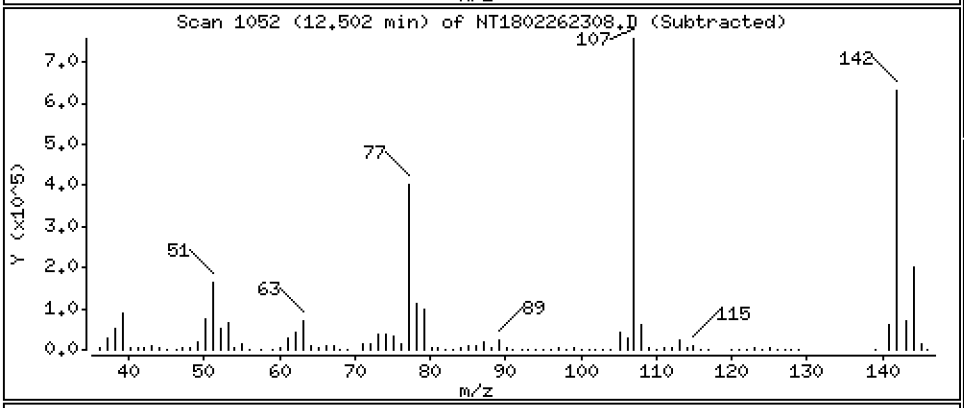
Column phase: ZB-5msi

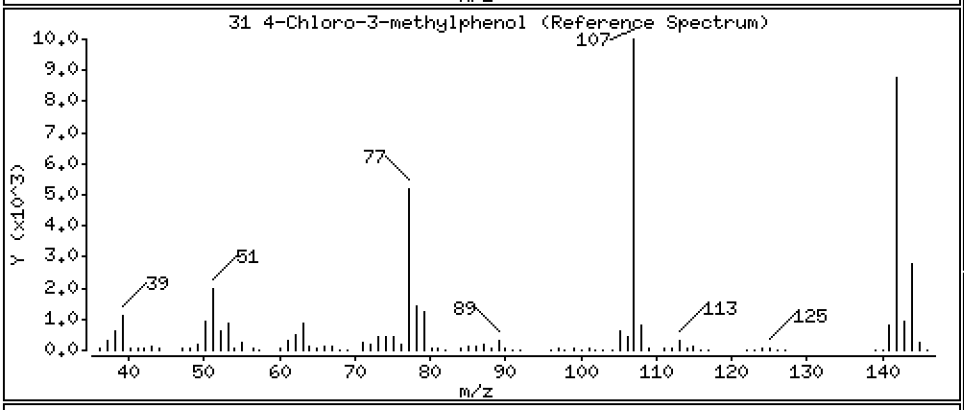
Column diameter: 0.25

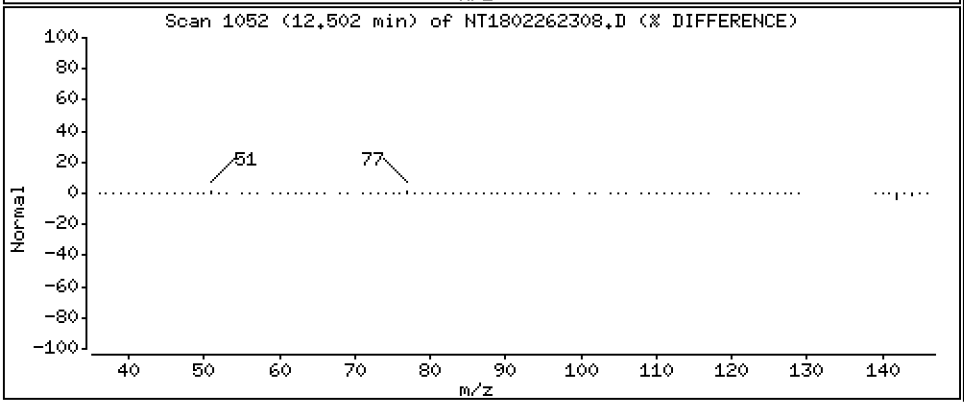
31 4-Chloro-3-methylphenol

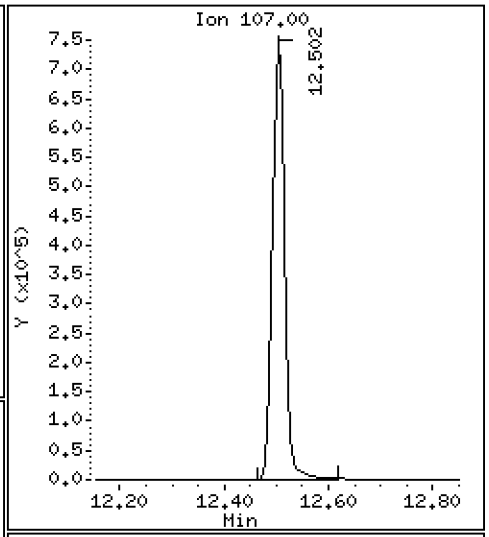
Concentration: 14.23 ug/mL

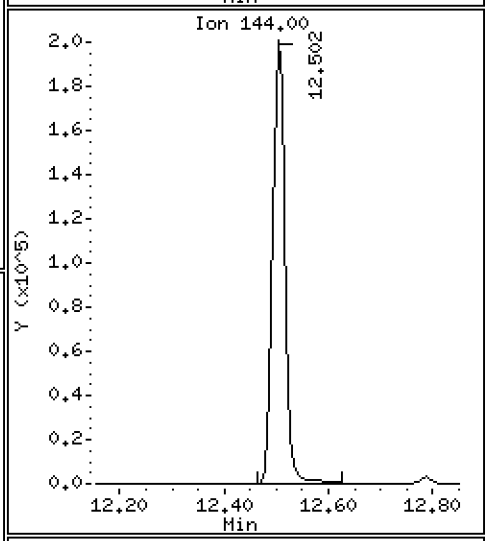


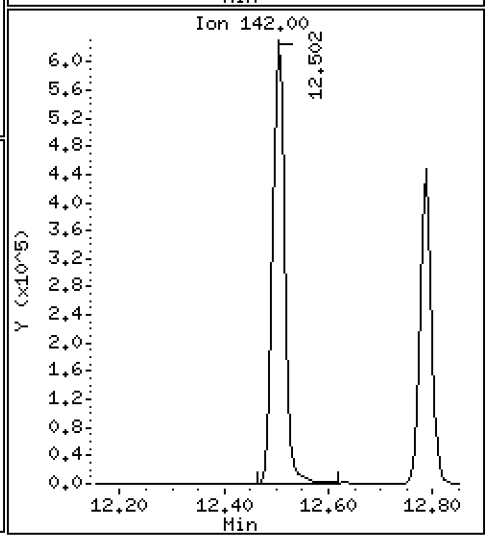












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

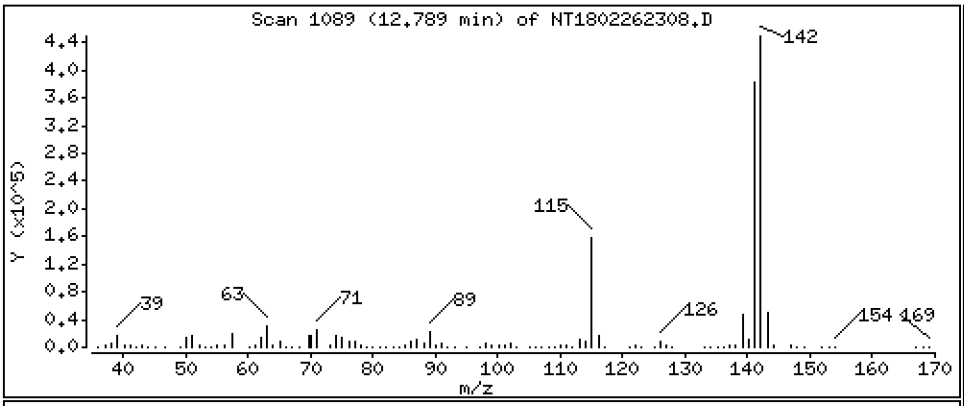
Operator: VTS

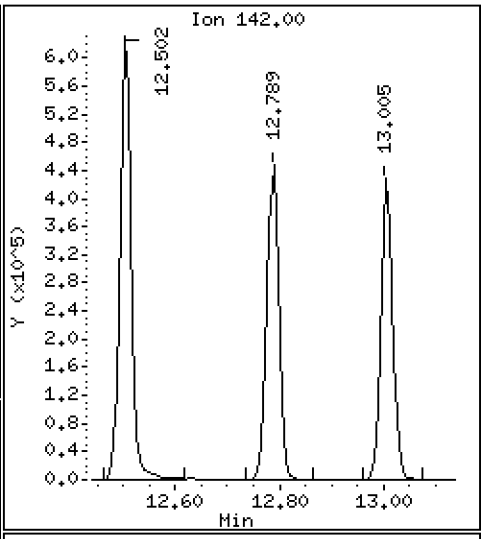
Column phase: ZB-5msi

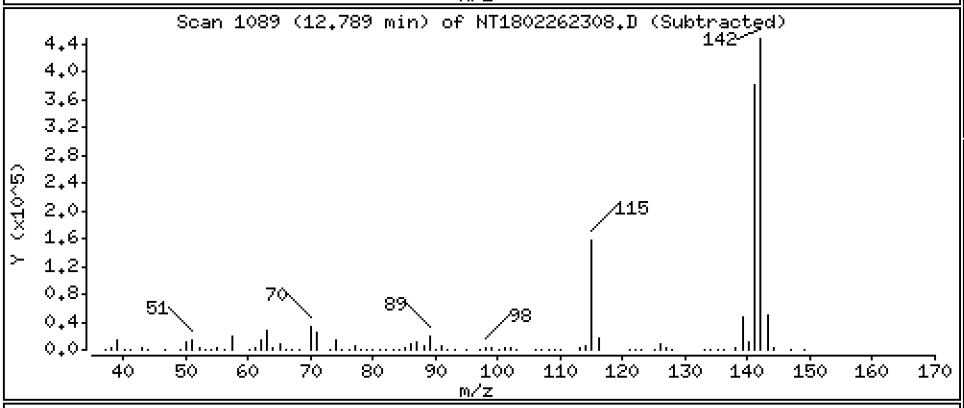
Column diameter: 0.25

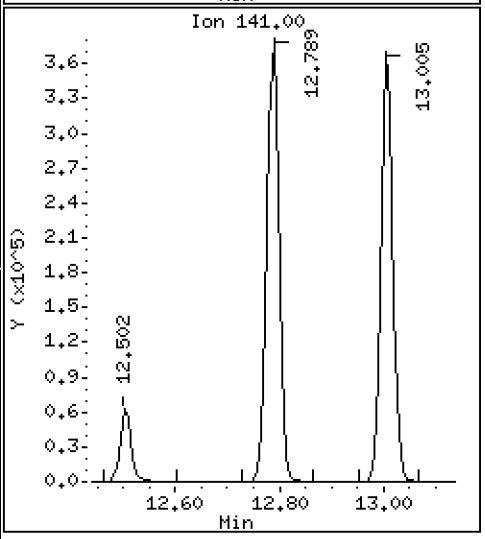
32 2-Methylnaphthalene

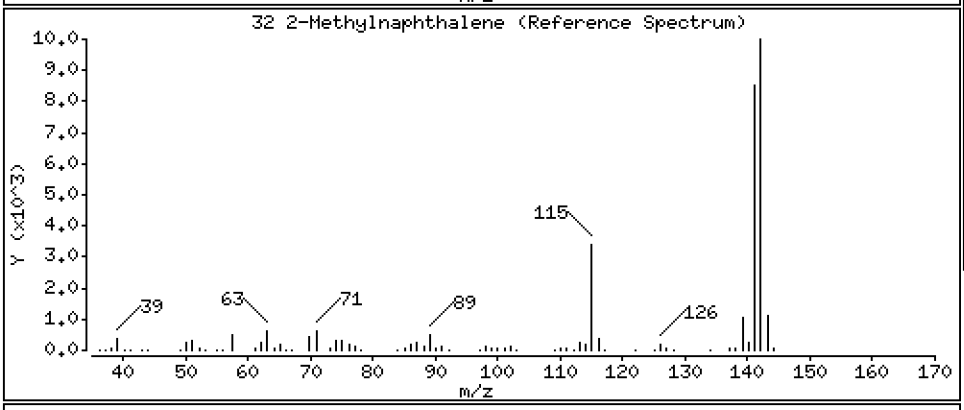
Concentration: 3.285 ug/mL

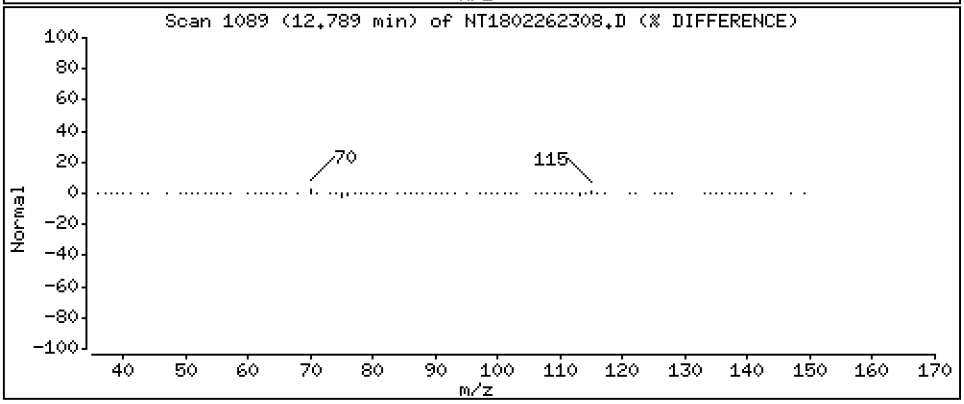












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

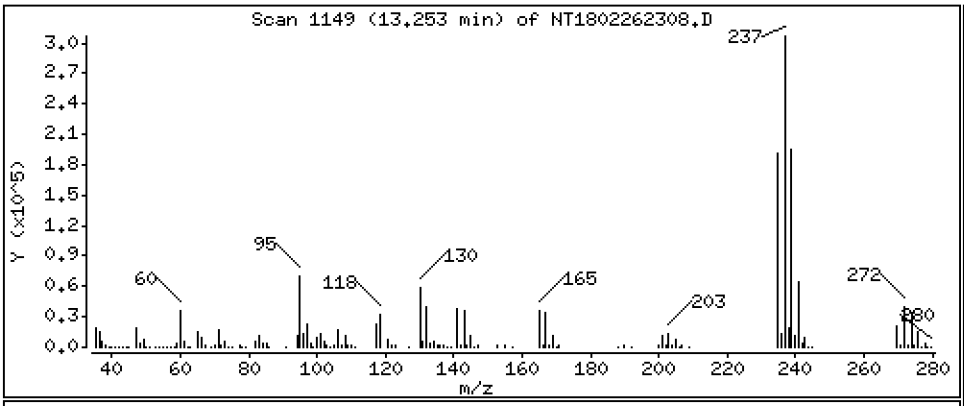
Operator: VTS

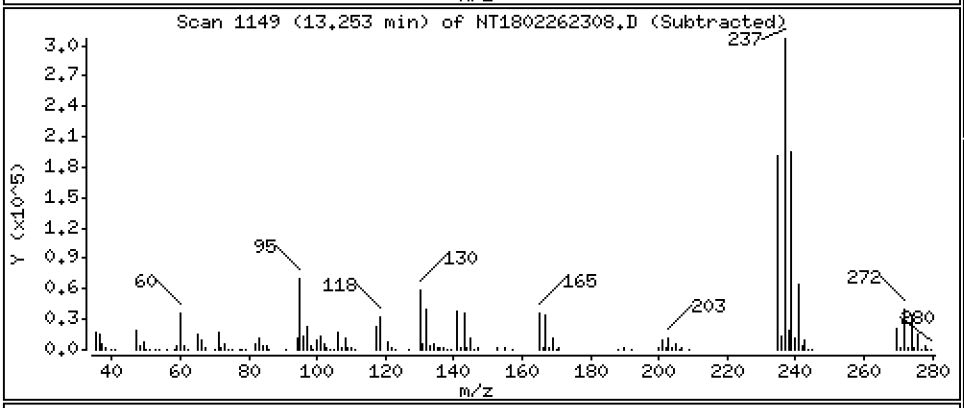
Column phase: ZB-5msi

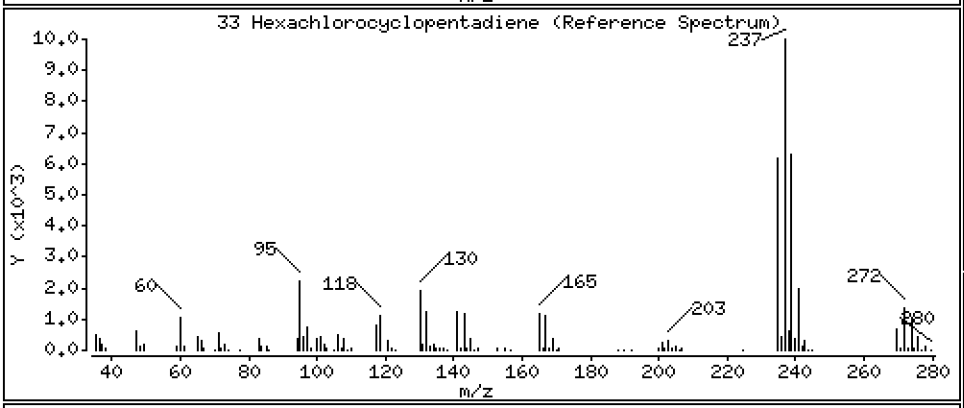
Column diameter: 0.25

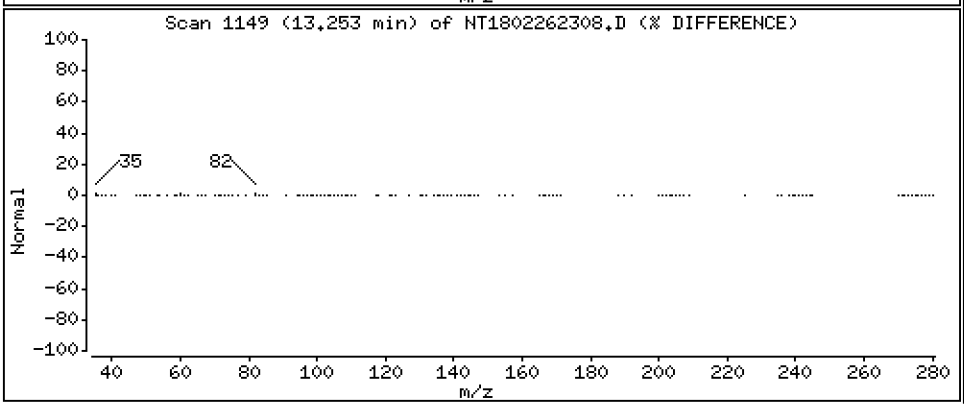
33 Hexachlorocyclopentadiene

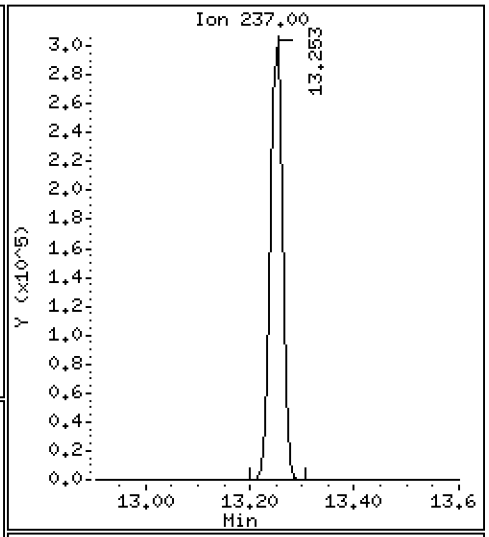
Concentration: 12.39 ug/mL

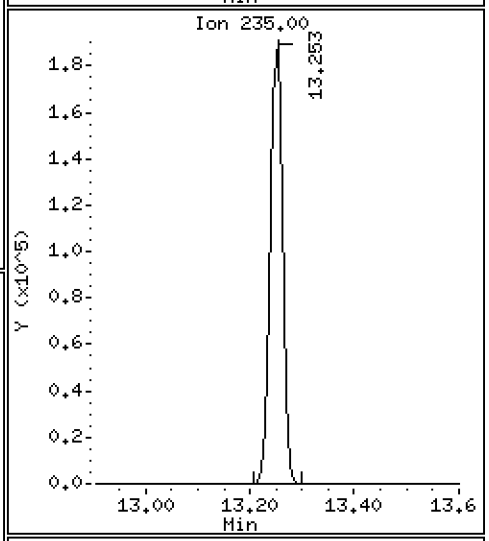


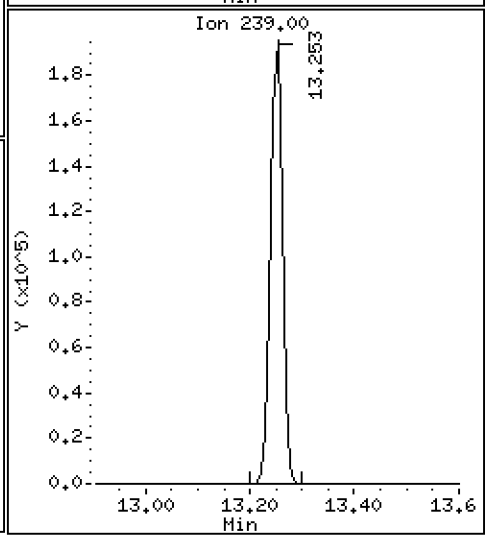












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

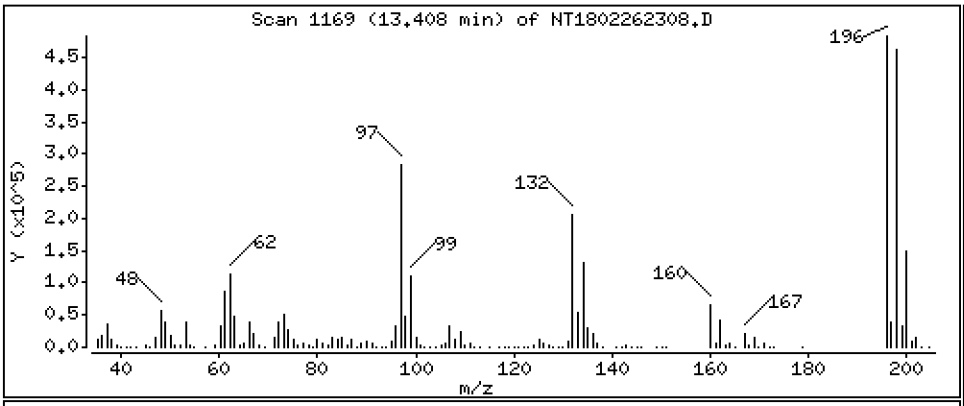
Operator: VTS

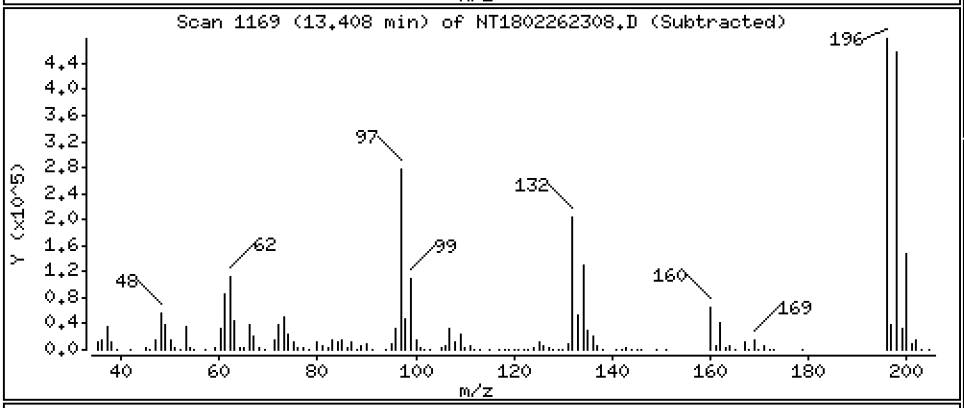
Column phase: ZB-5msi

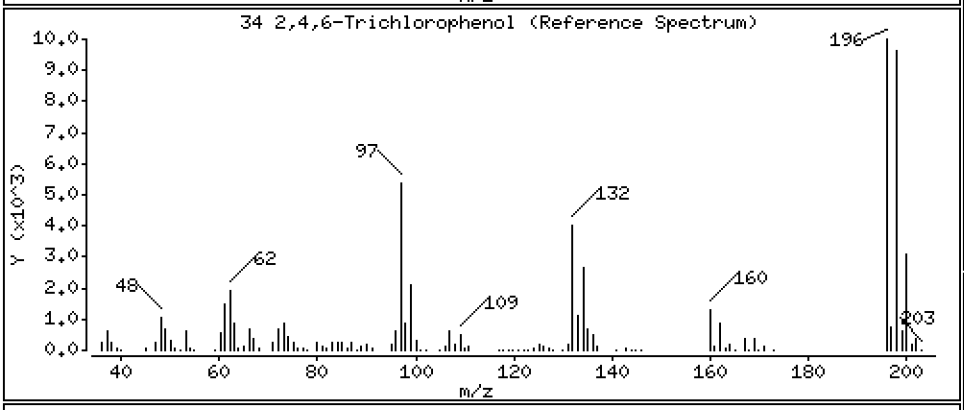
Column diameter: 0.25

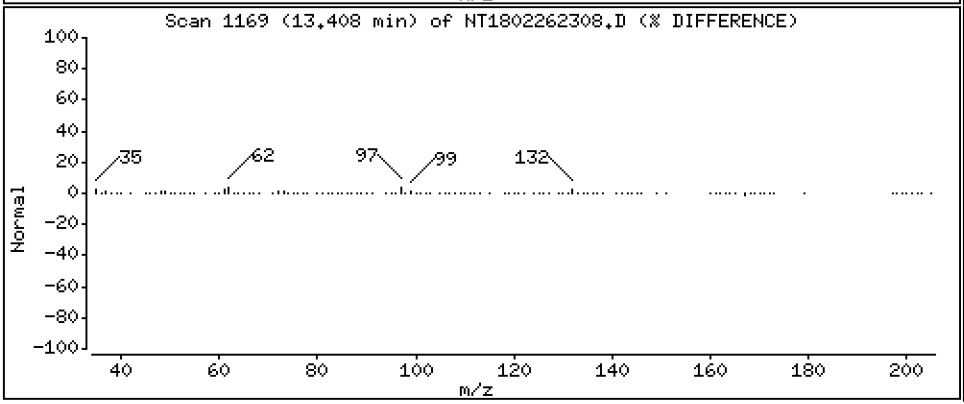
34 2,4,6-Trichlorophenol

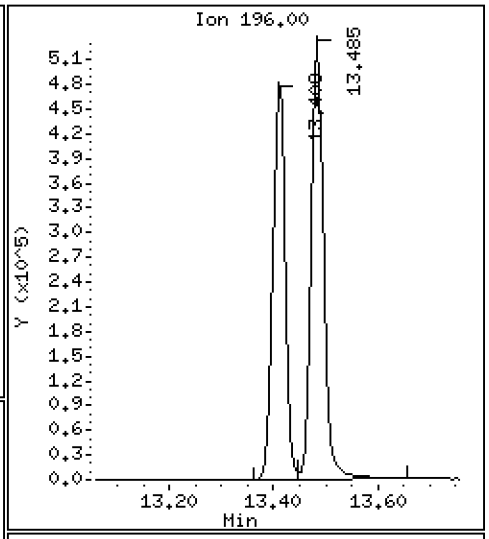
Concentration: 14.79 ug/mL

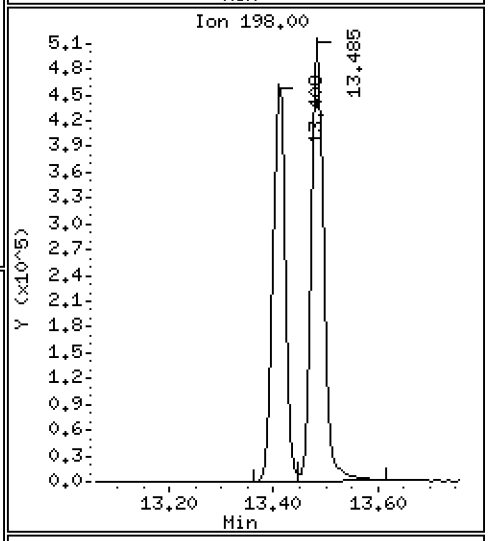


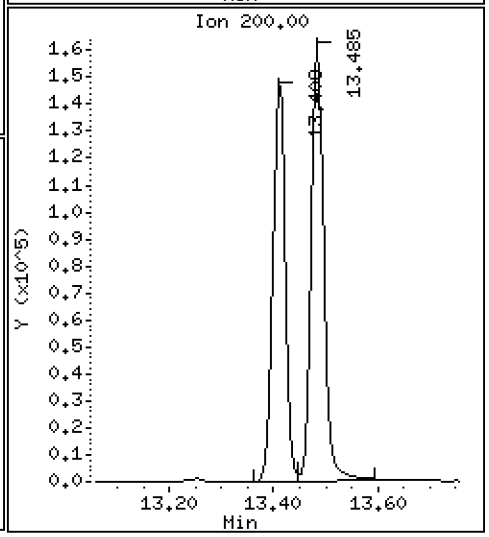












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

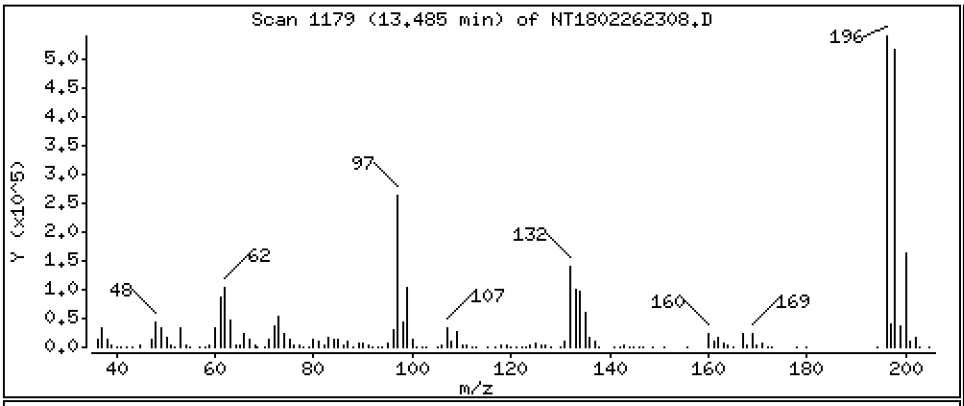
Operator: VTS

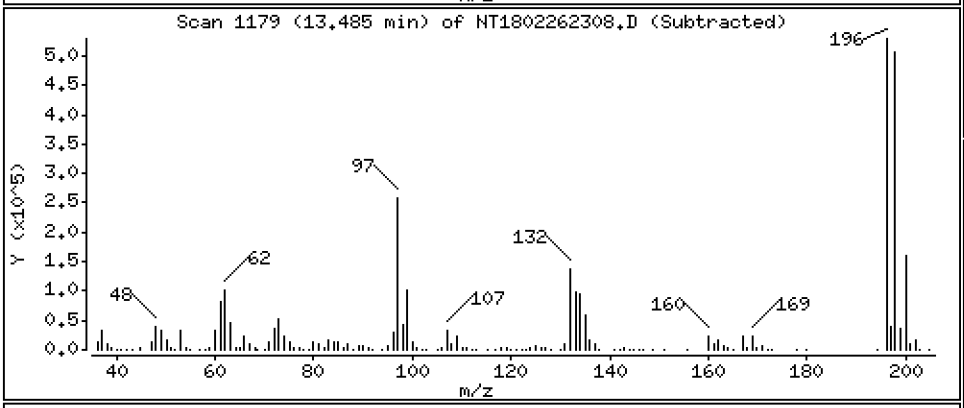
Column phase: ZB-5msi

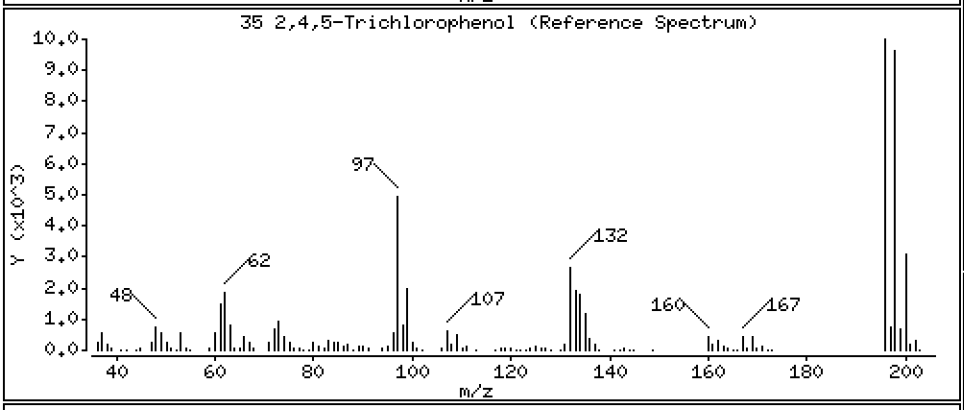
Column diameter: 0.25

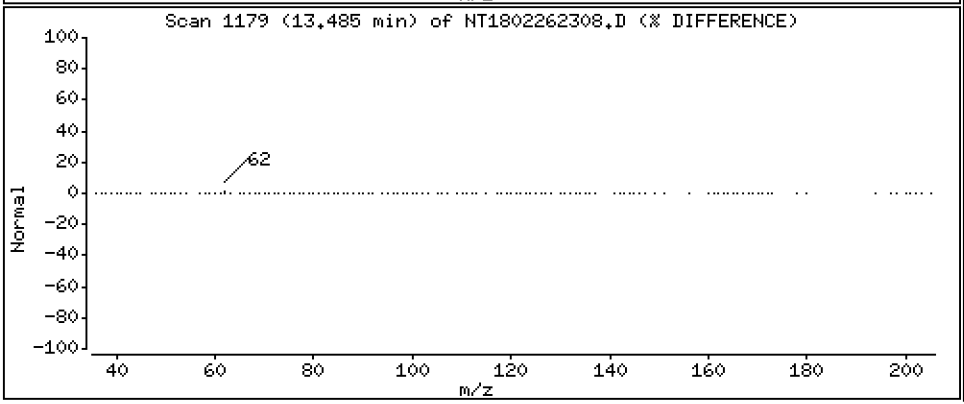
35 2,4,5-Trichlorophenol

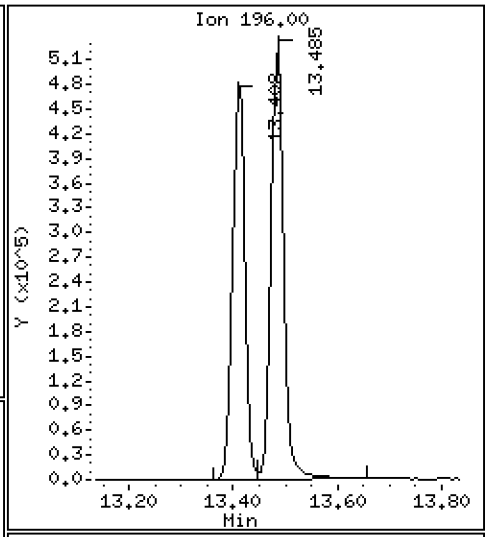
Concentration: 15.27 ug/mL

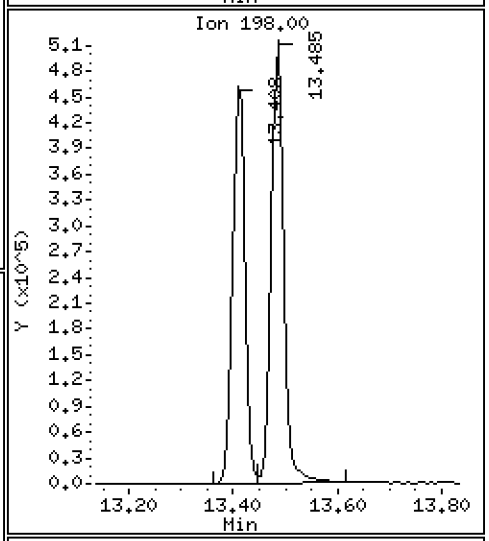


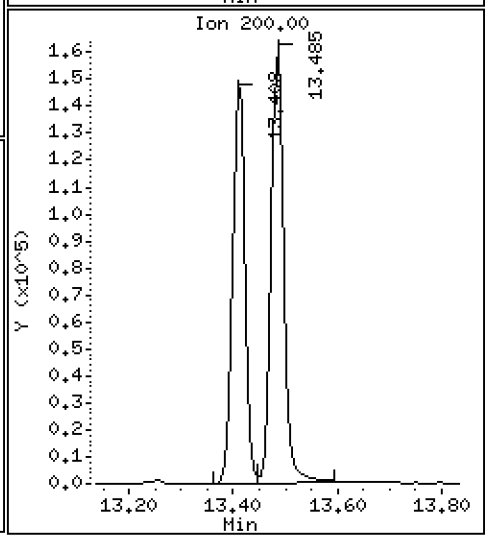












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

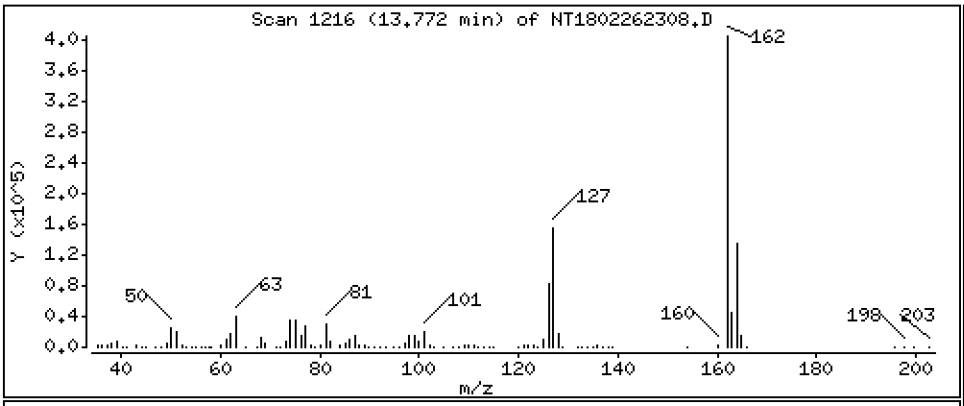
Operator: VTS

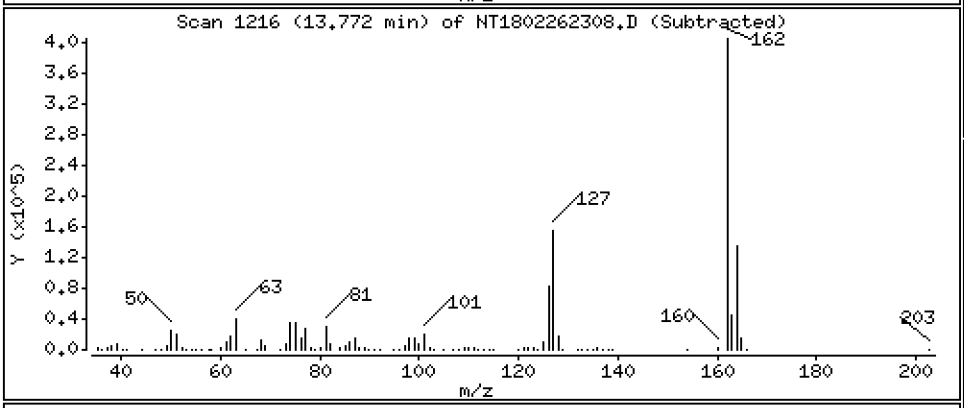
Column phase: ZB-5msi

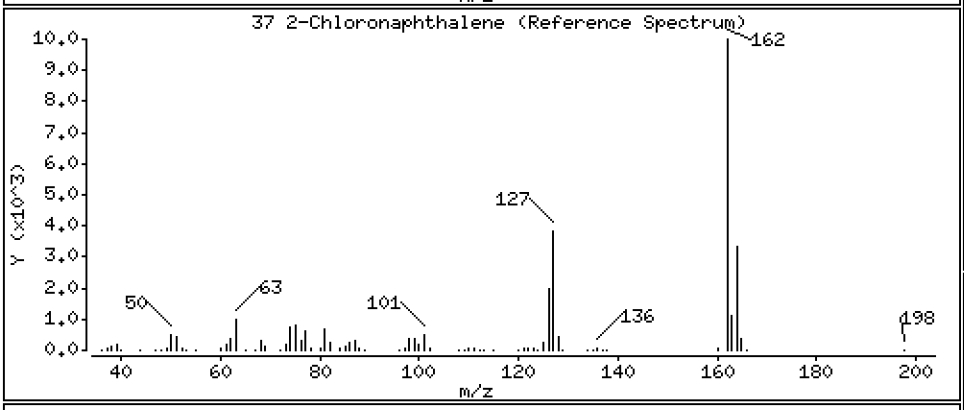
Column diameter: 0.25

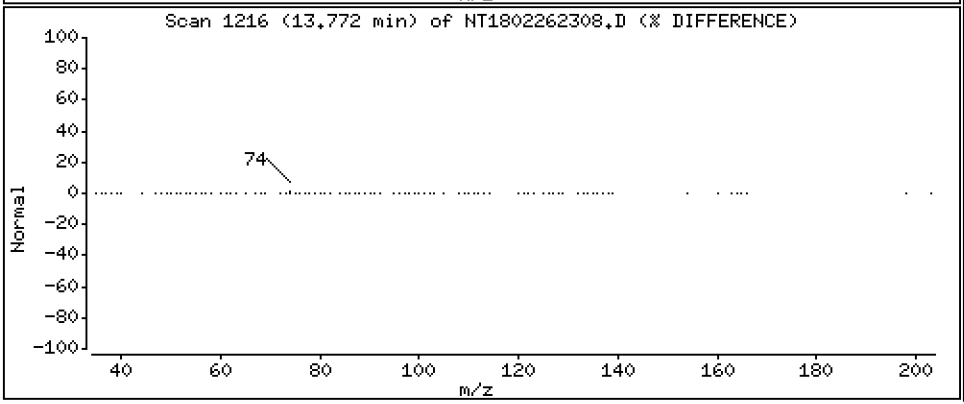
37 2-Chloronaphthalene

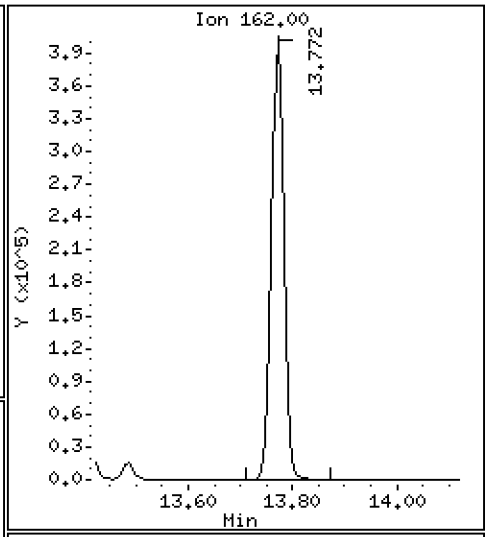
Concentration: 3.694 ug/mL

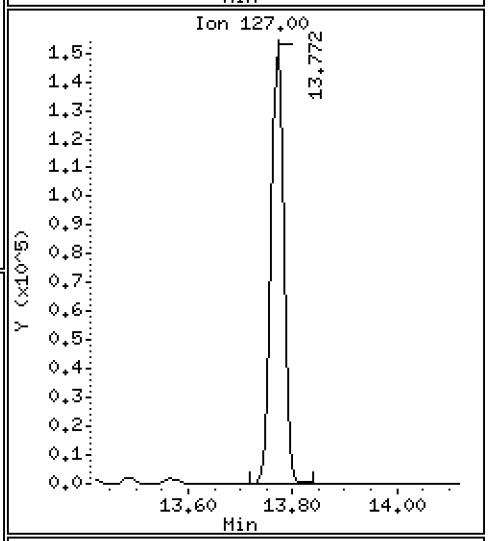


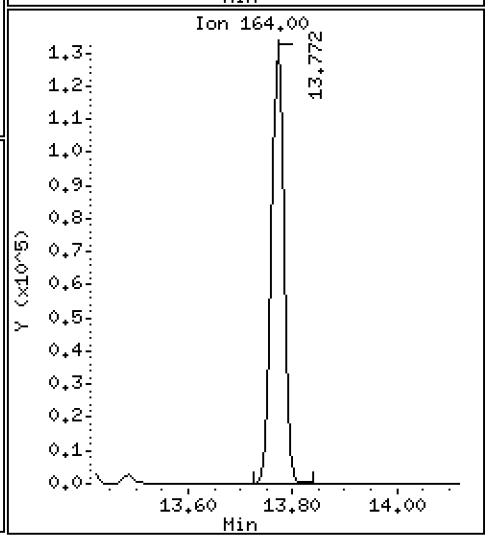












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

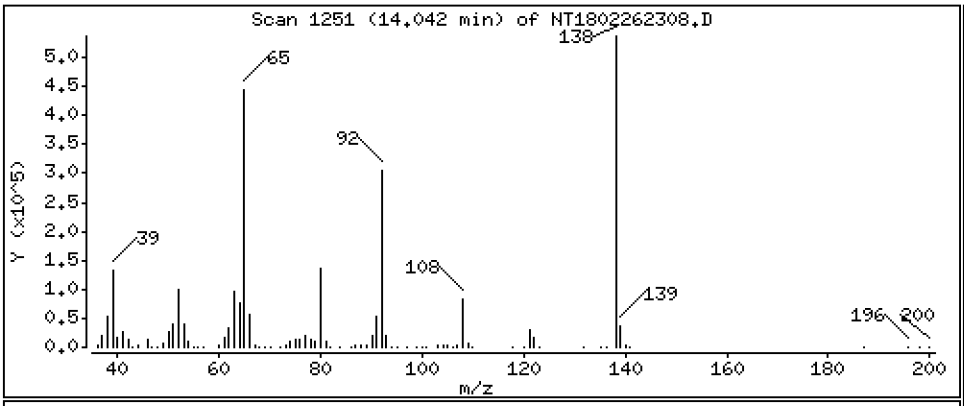
Operator: VTS

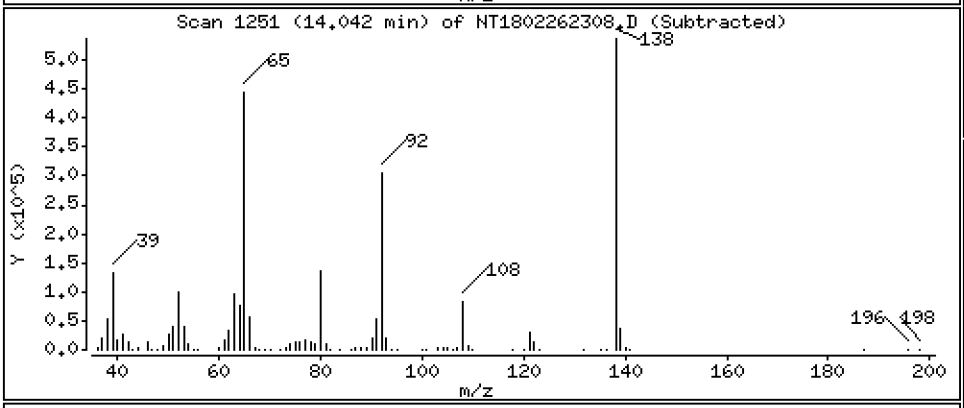
Column phase: ZB-5msi

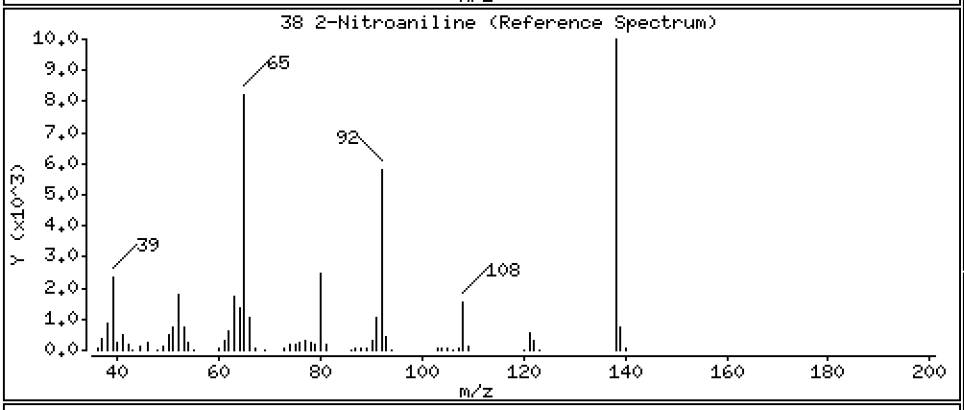
Column diameter: 0.25

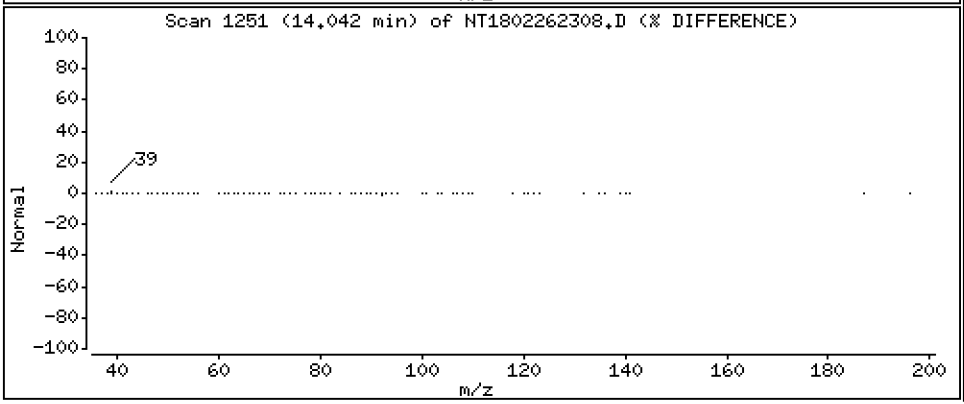
38 2-Nitroaniline

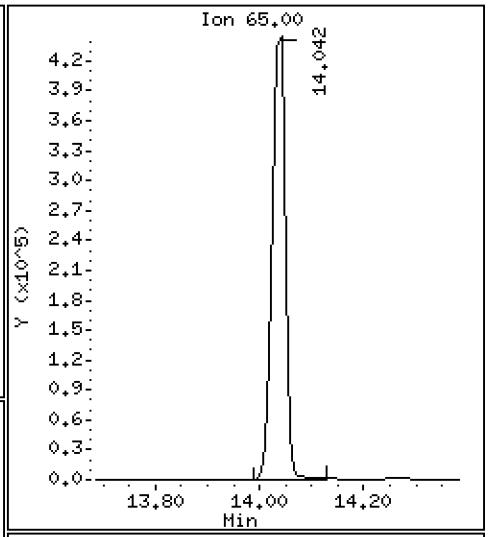
Concentration: 13.66 ug/mL

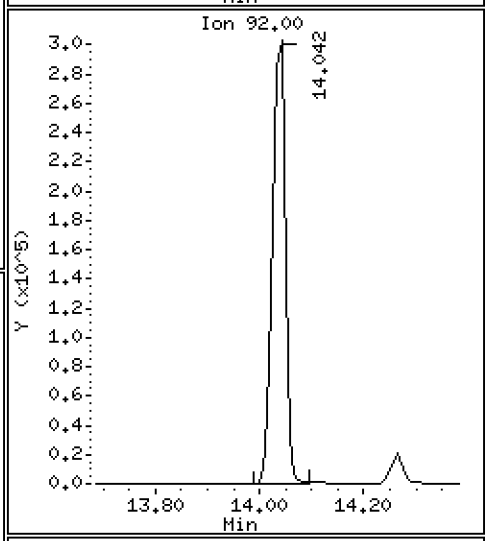


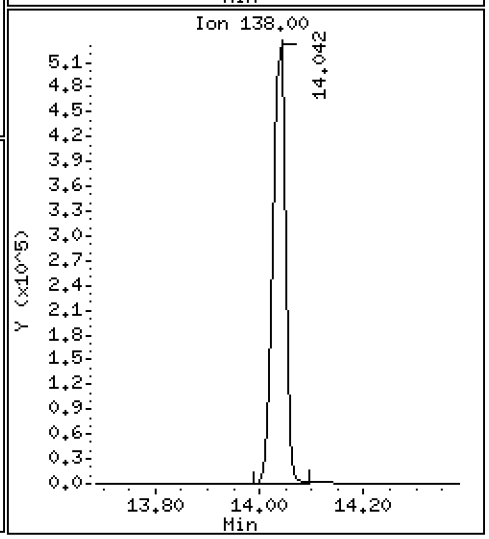












Date : 26-FEB-2023 16:32

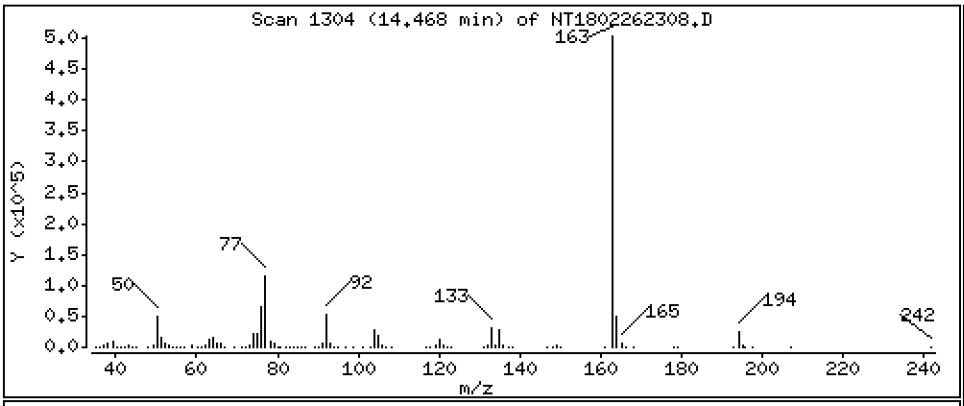
Client ID: Instrument: nt18.i

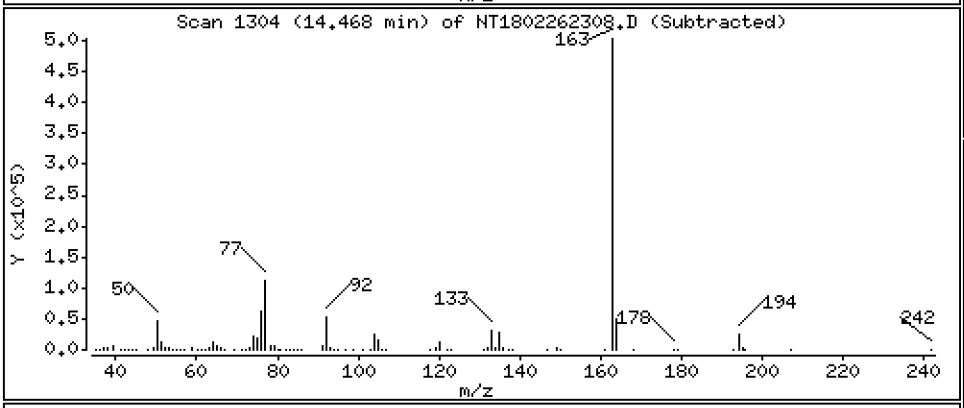
Sample Info: BLA0410-BSD1

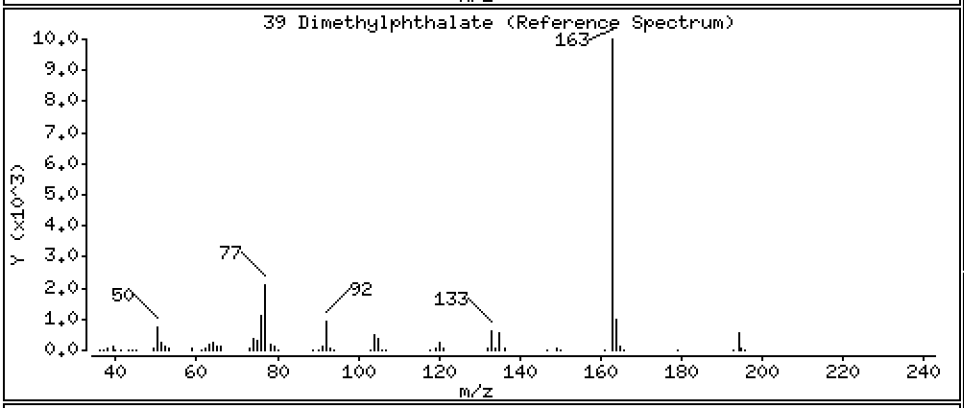
Operator: VTS

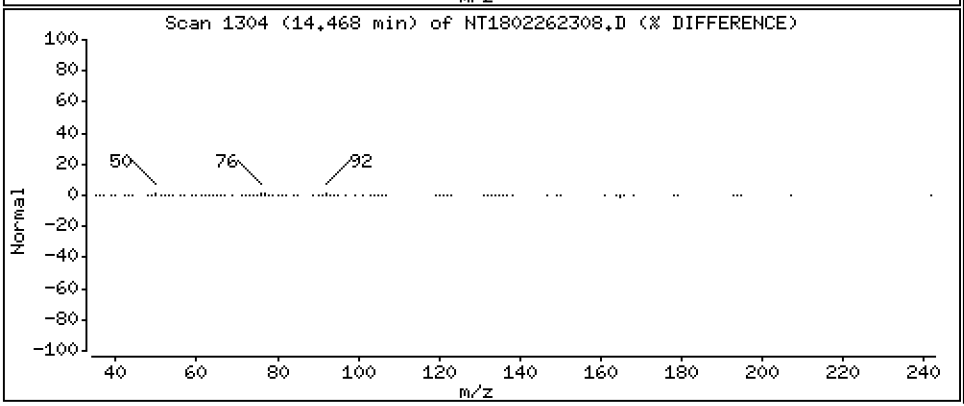
Column phase: ZB-5msi Column diameter: 0.25

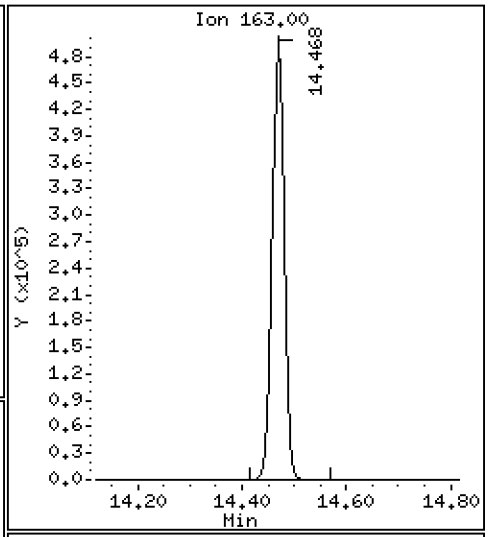
39 Dimethylphthalate Concentration: 4.080 ug/mL

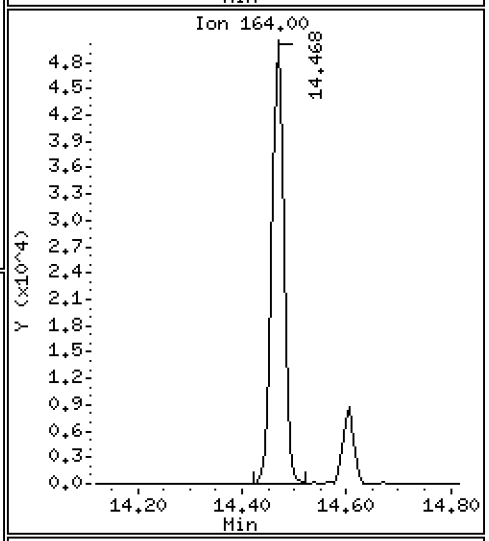


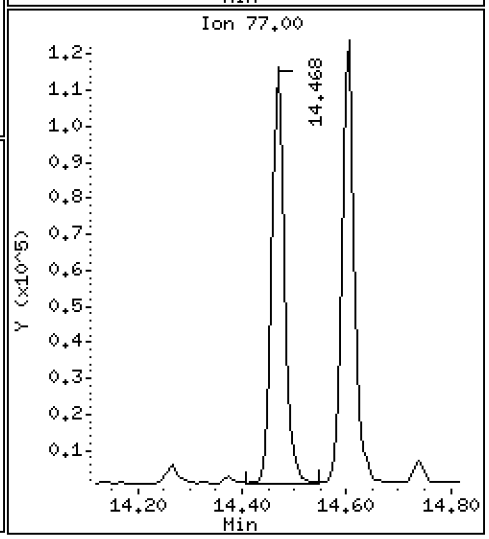












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

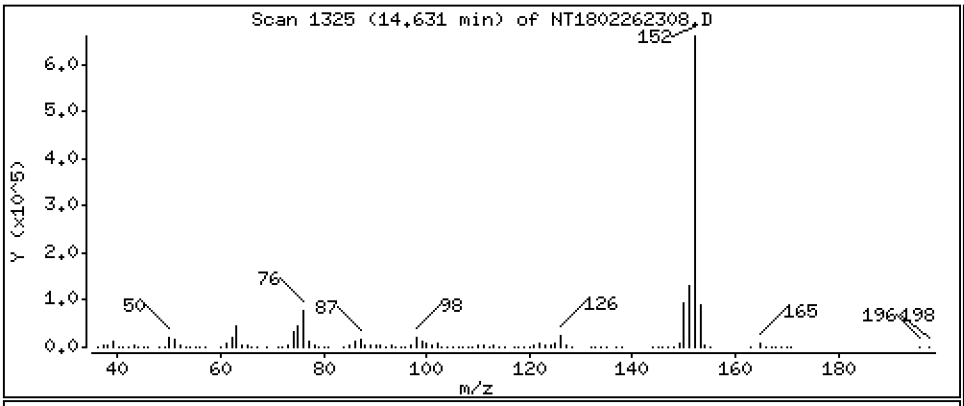
Operator: VTS

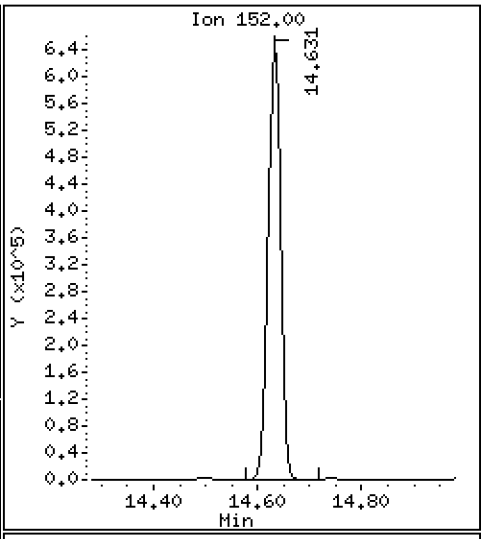
Column phase: ZB-5msi

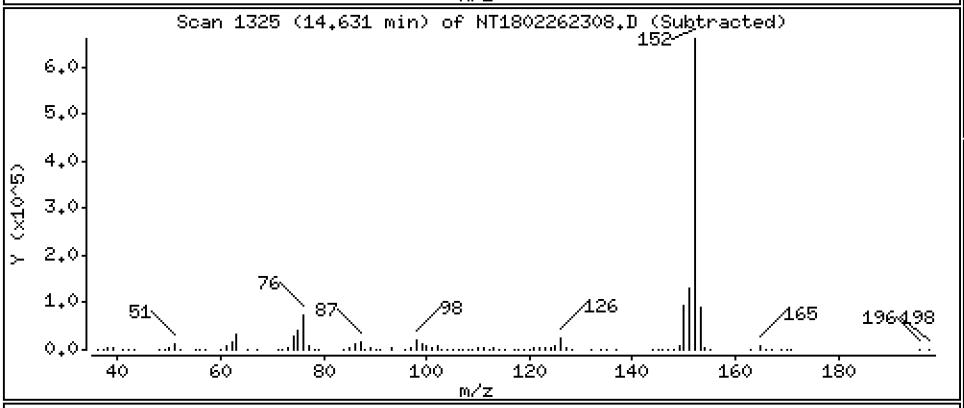
Column diameter: 0.25

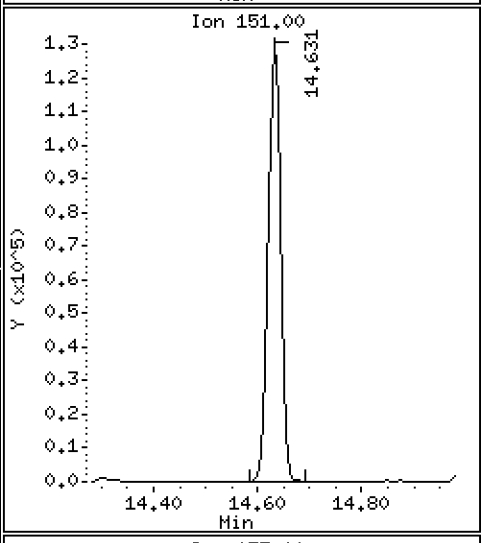
40 Acenaphthylene

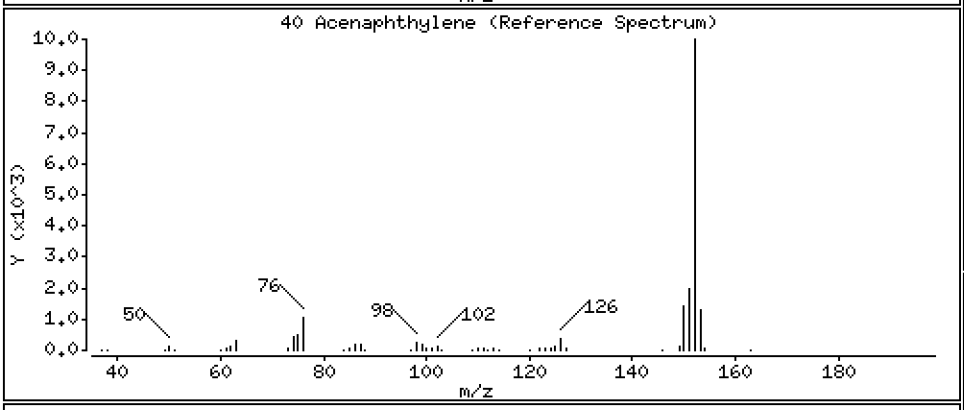
Concentration: 3.574 ug/mL

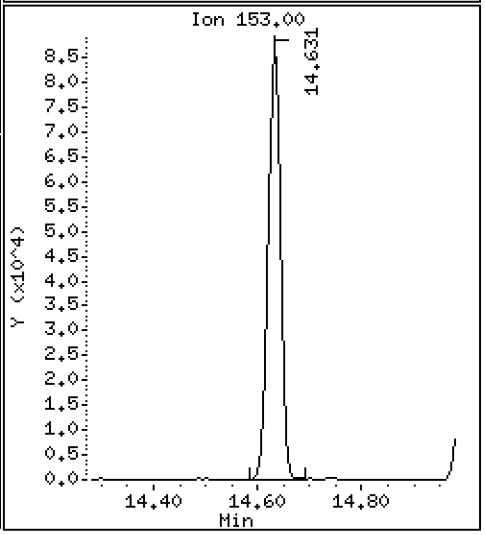


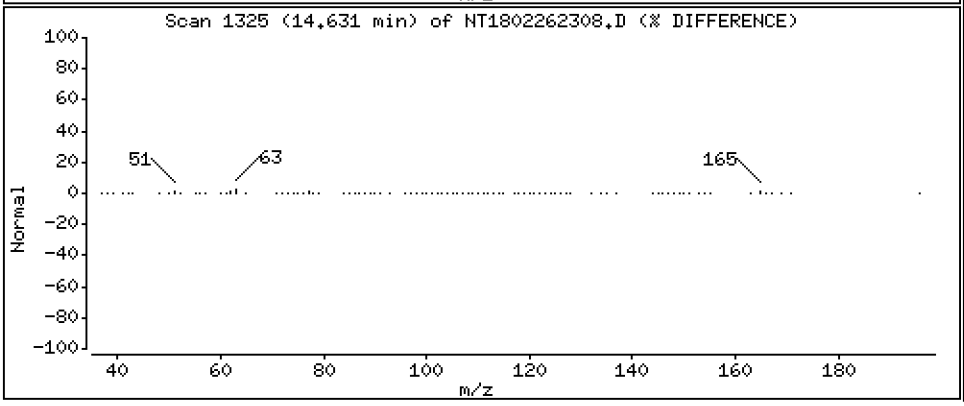












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

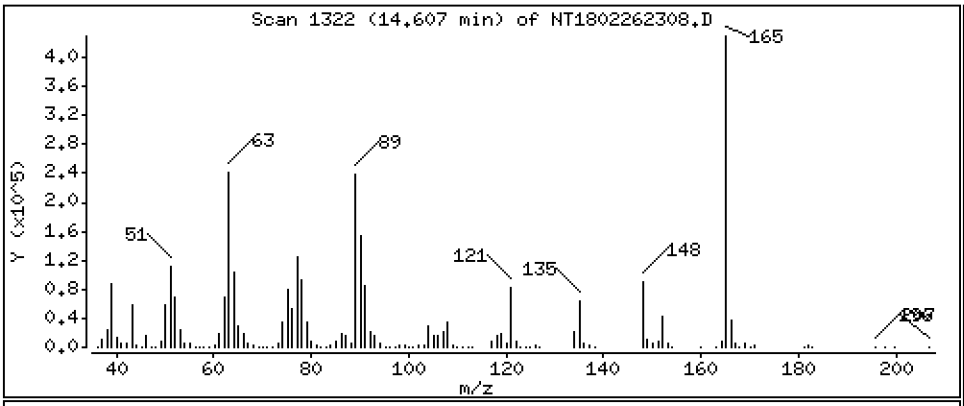
Operator: VTS

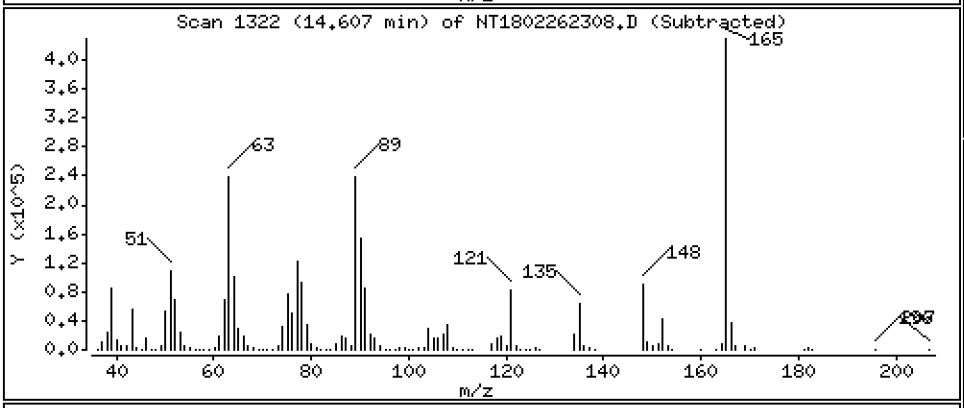
Column phase: ZB-5msi

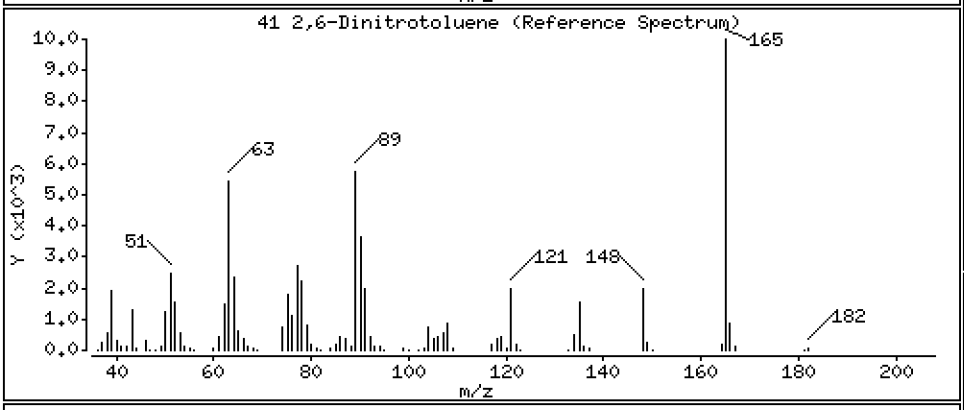
Column diameter: 0.25

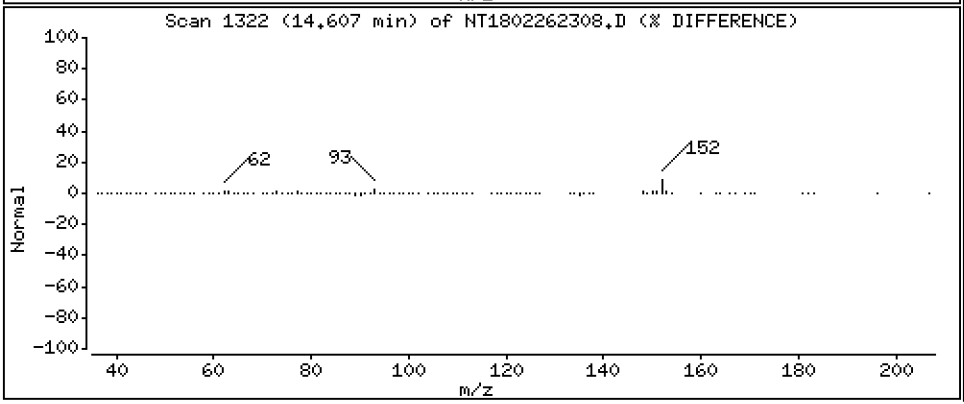
41 2,6-Dinitrotoluene

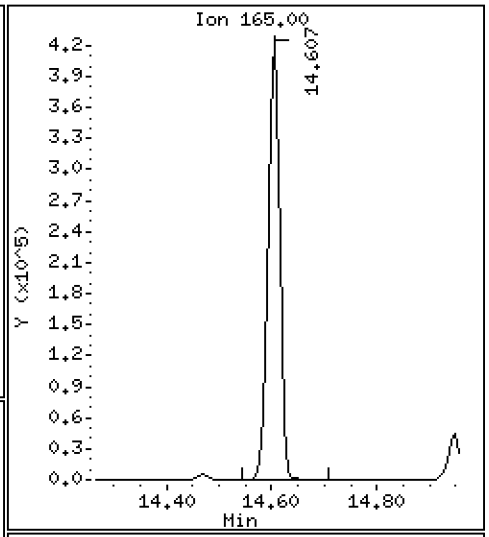
Concentration: 14.73 ug/mL

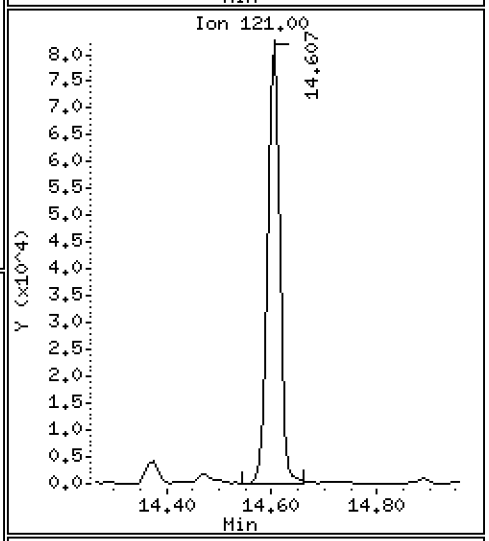


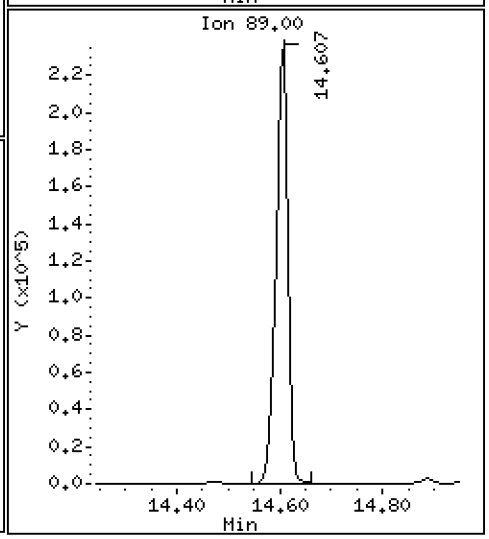












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

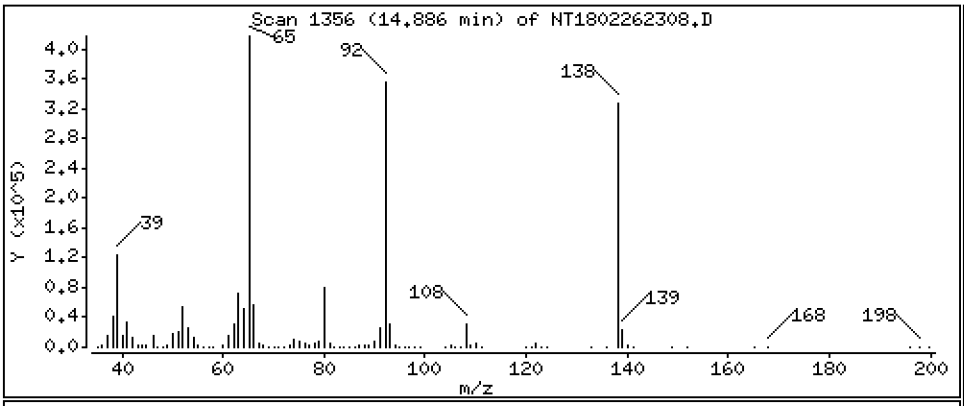
Operator: VTS

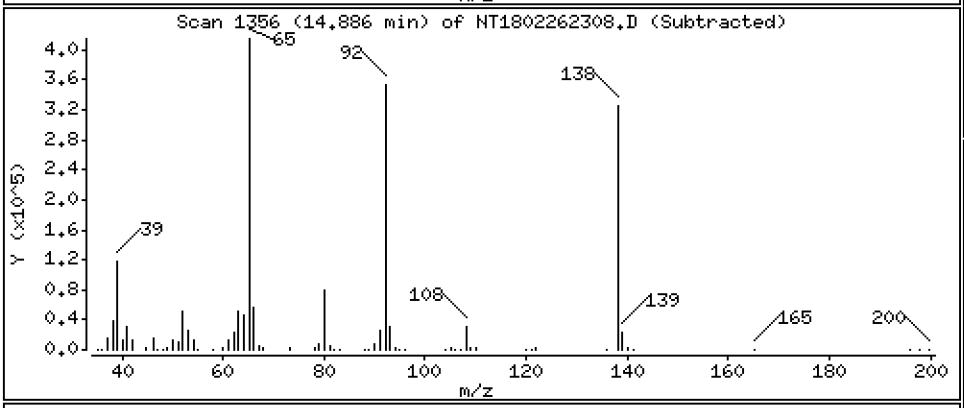
Column phase: ZB-5msi

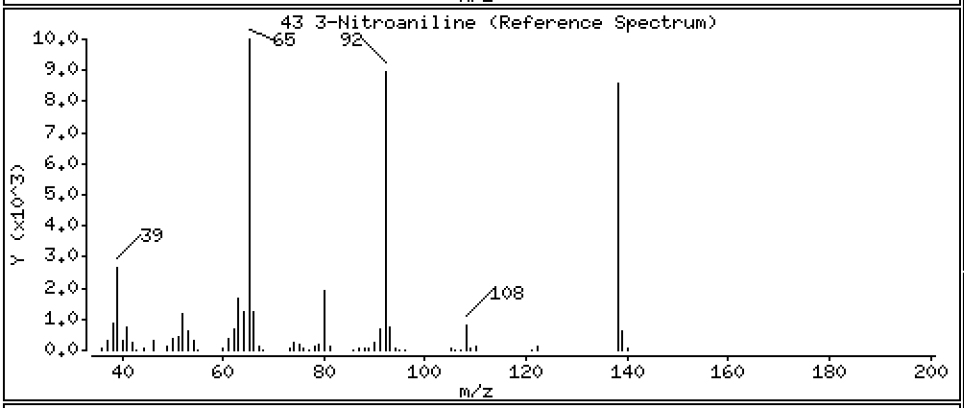
Column diameter: 0.25

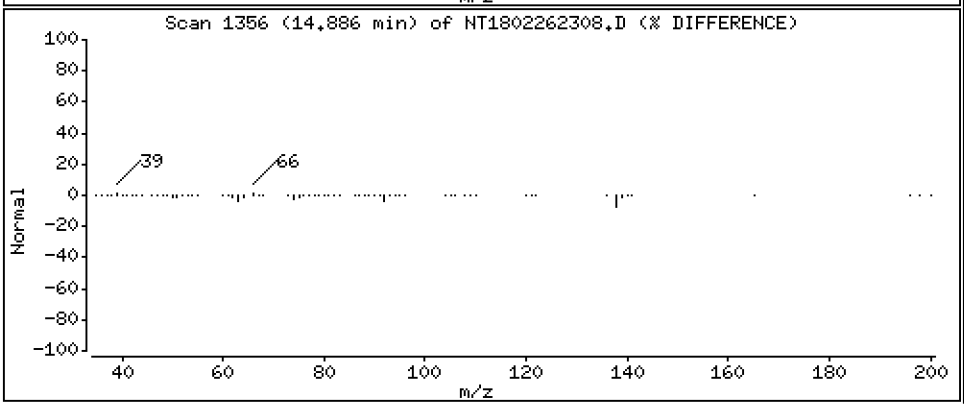
43 3-Nitroaniline

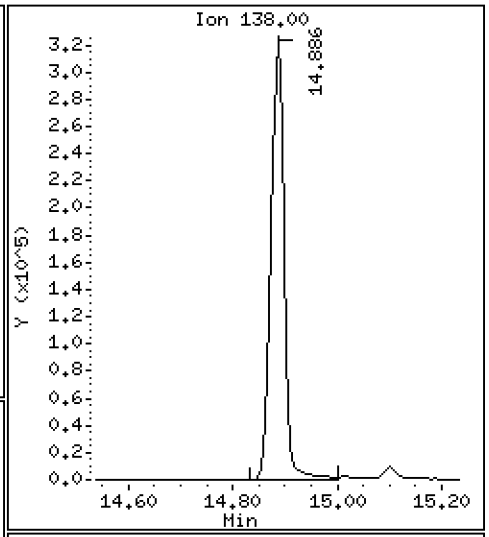
Concentration: 10.74 ug/mL

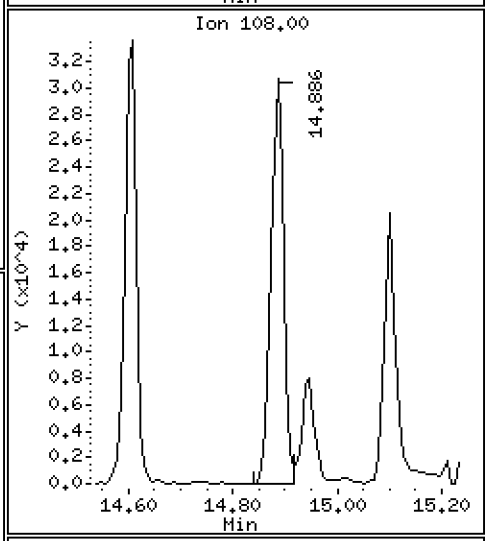


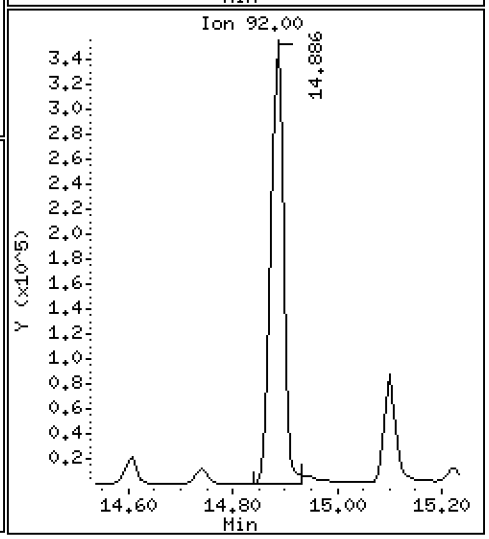












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

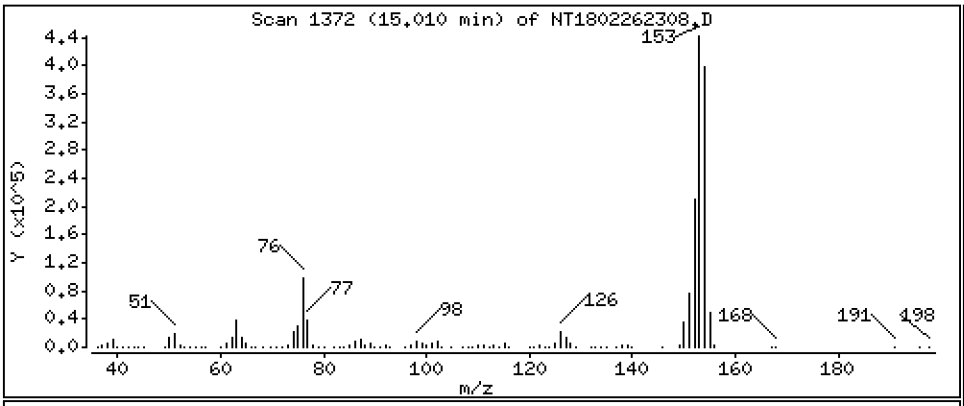
Operator: VTS

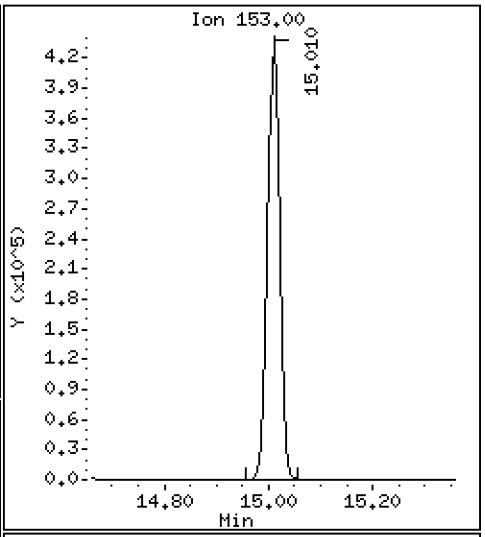
Column phase: ZB-5msi

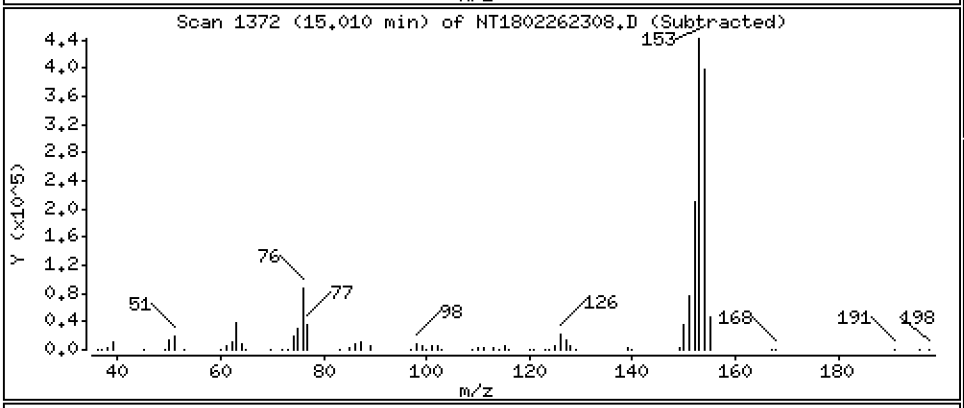
Column diameter: 0.25

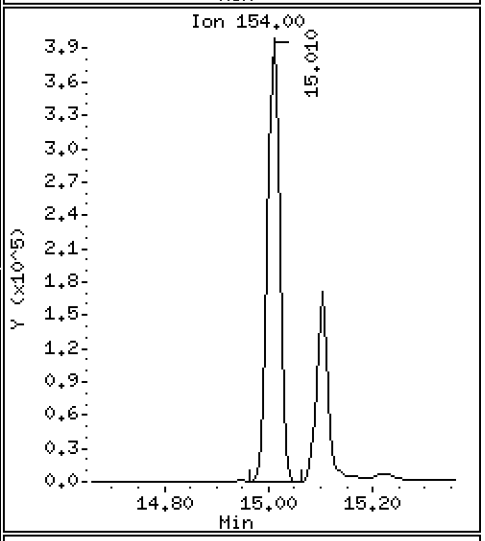
44 Acenaphthene

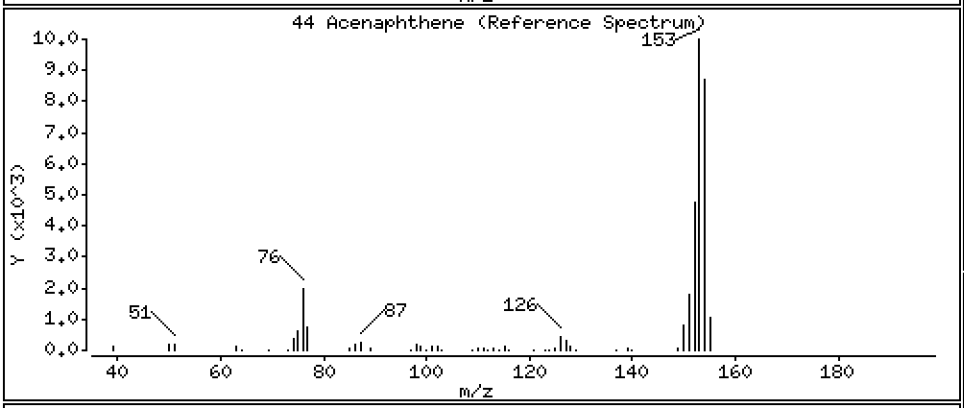
Concentration: 3.668 ug/mL

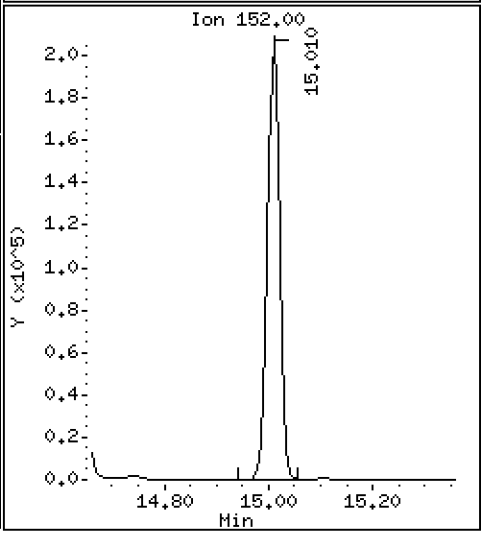


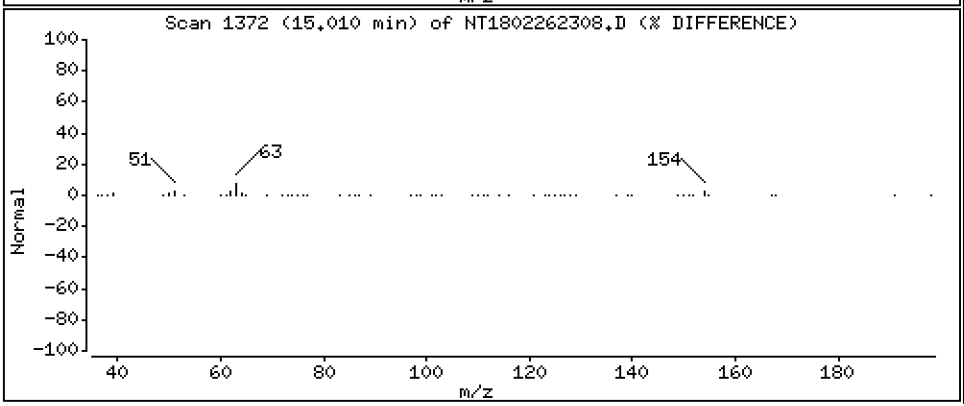












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

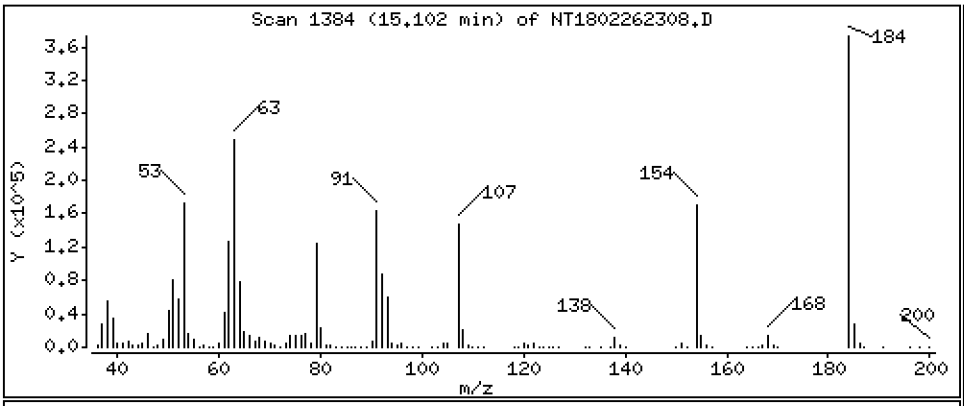
Operator: VTS

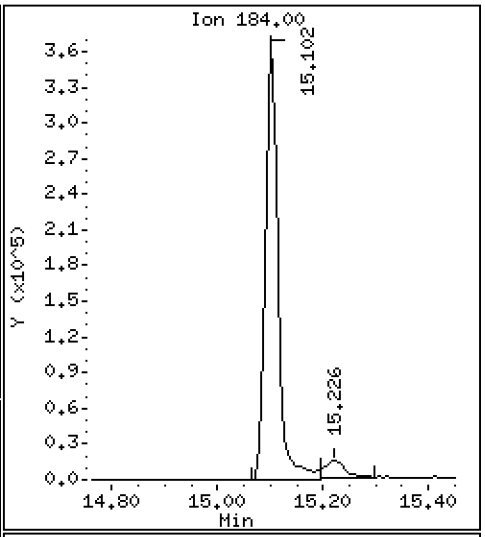
Column phase: ZB-5msi

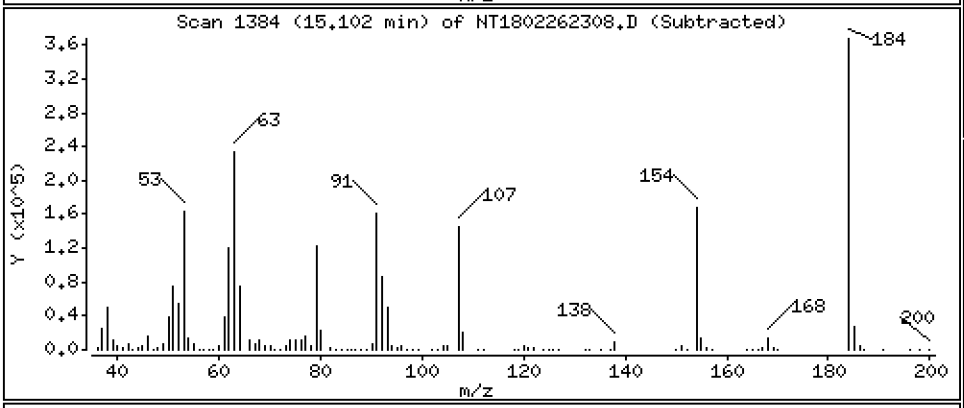
Column diameter: 0.25

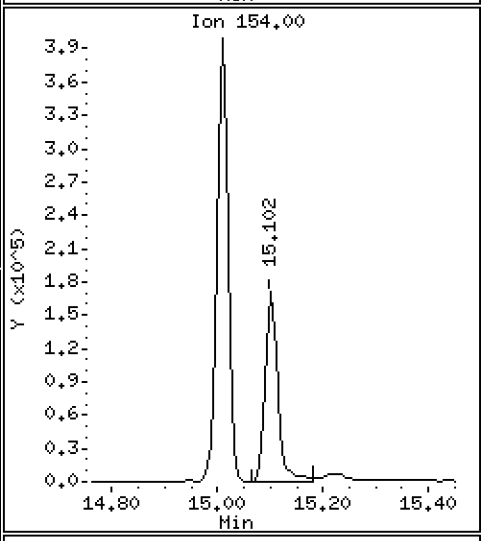
45 2,4-Dinitrophenol

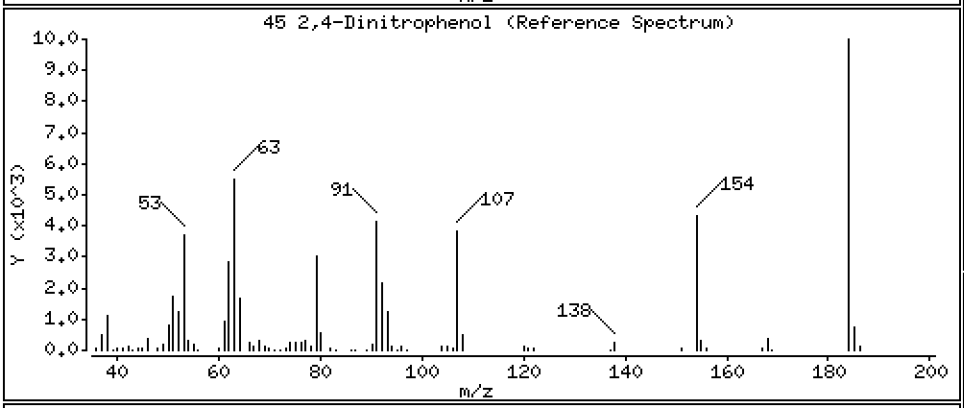
Concentration: 27.50 ug/mL

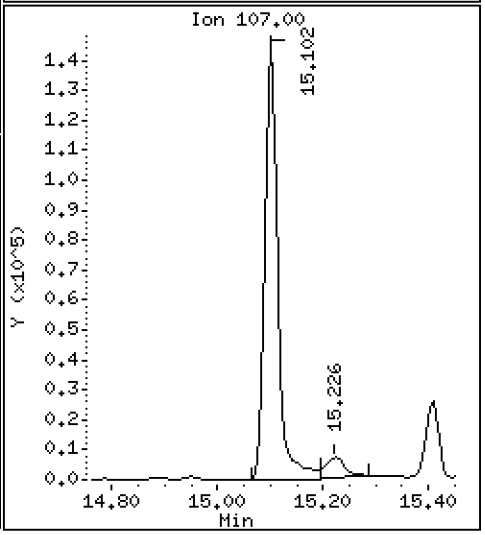


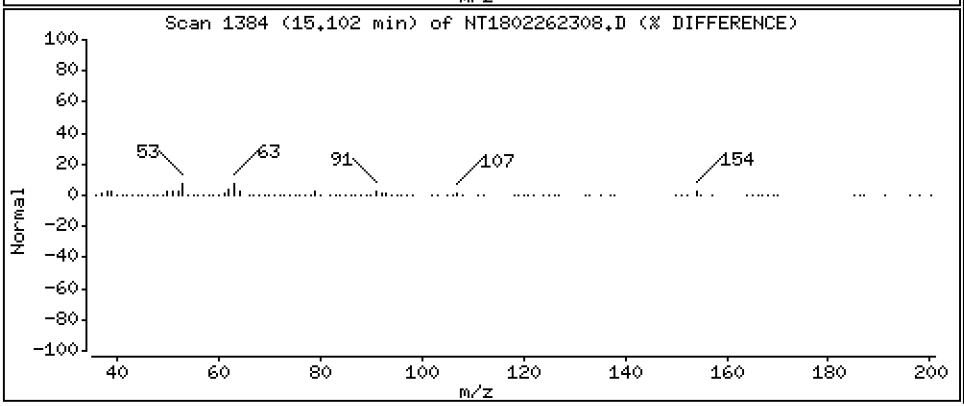












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

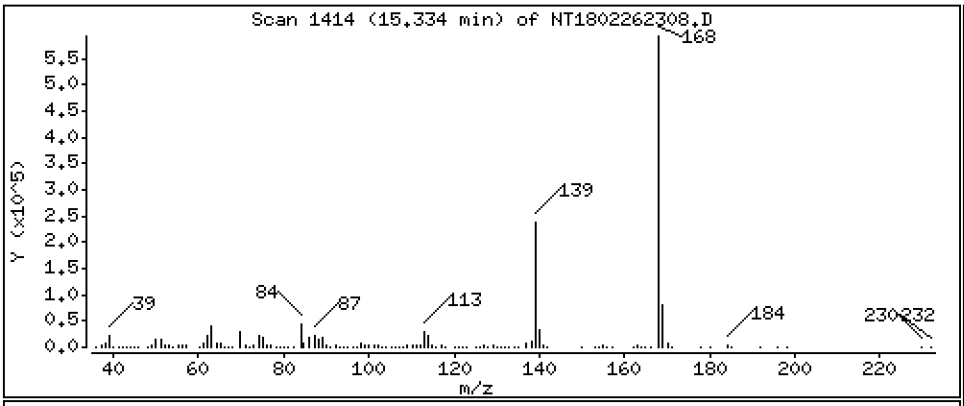
Operator: VTS

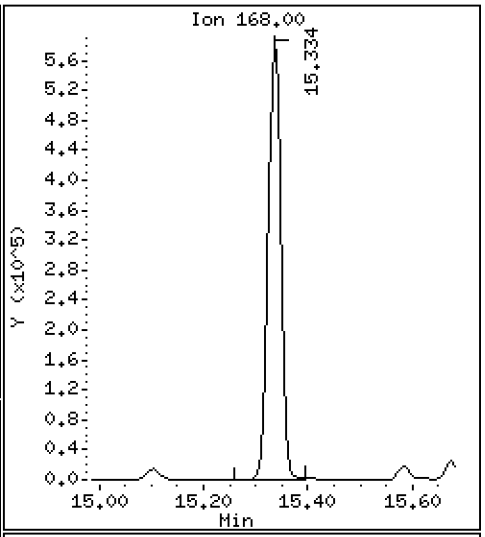
Column phase: ZB-5msi

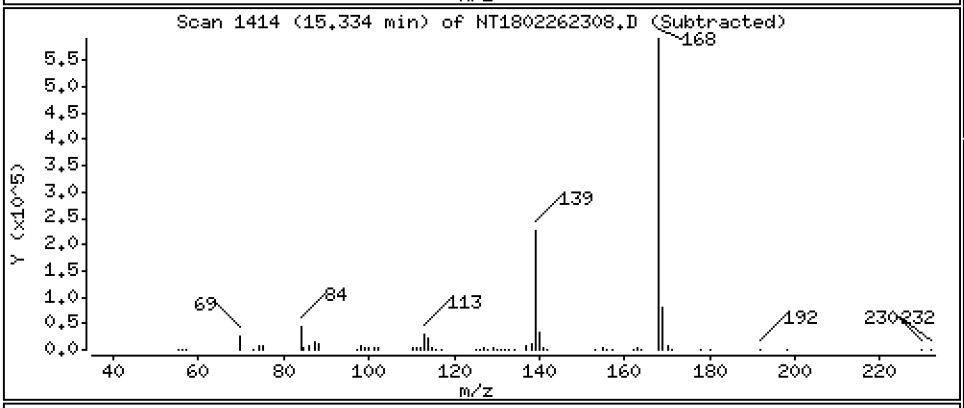
Column diameter: 0.25

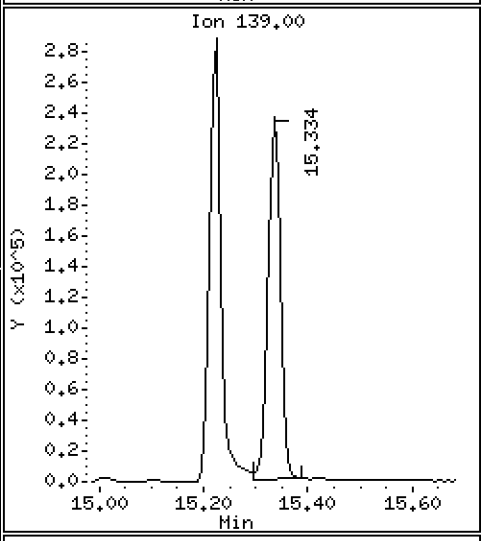
46 Dibenzofuran

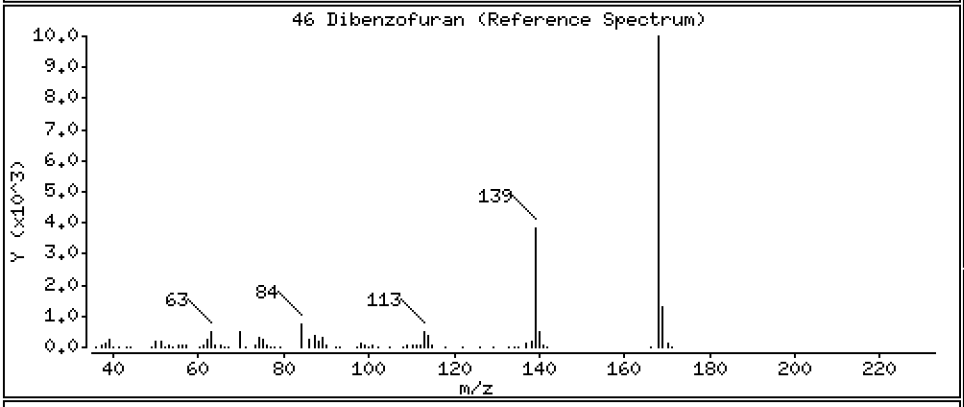
Concentration: 3.537 ug/mL

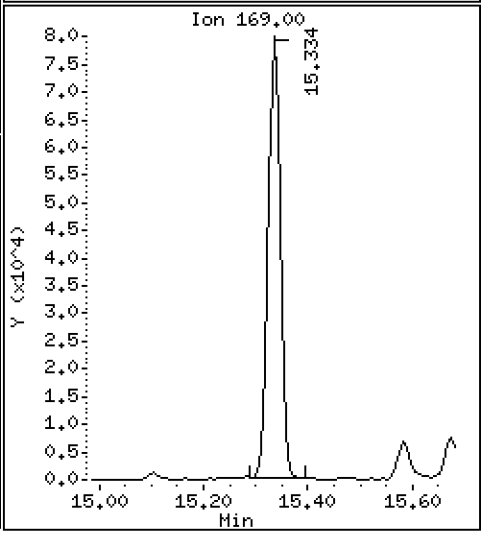


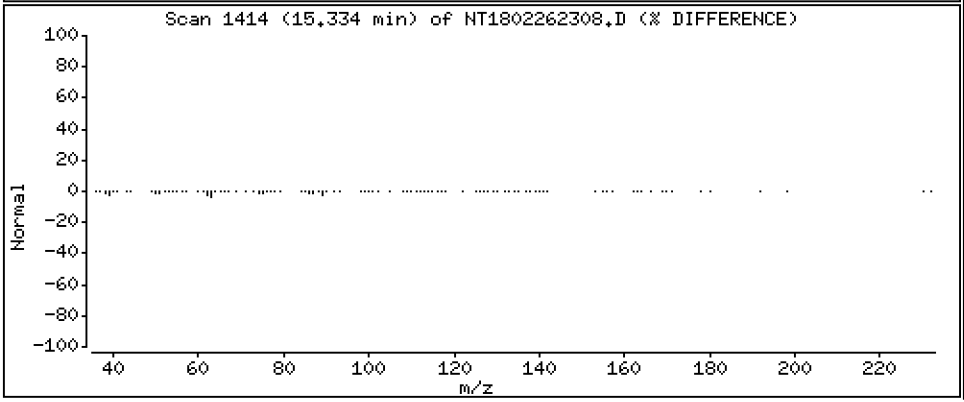












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

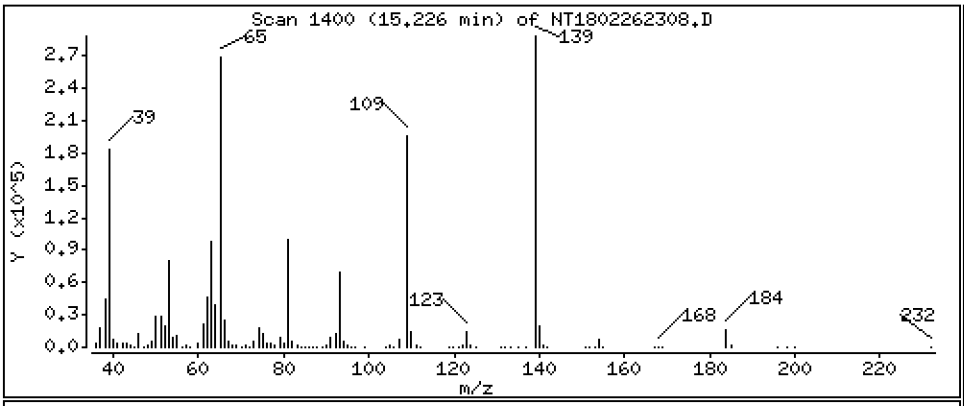
Operator: VTS

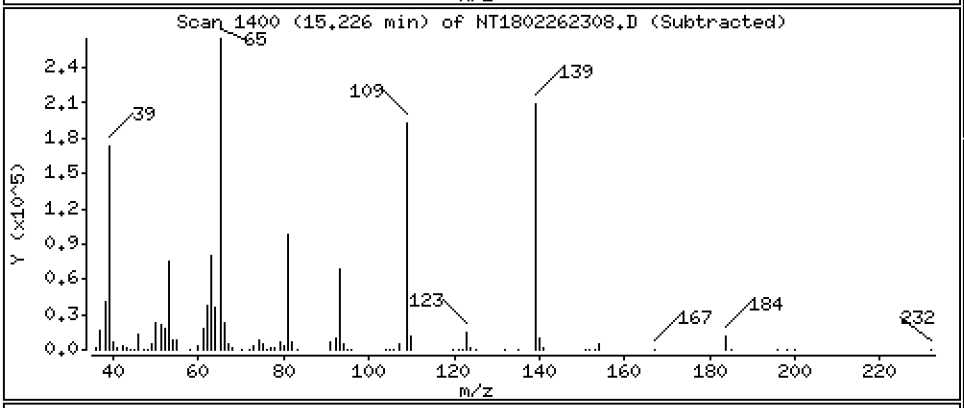
Column phase: ZB-5msi

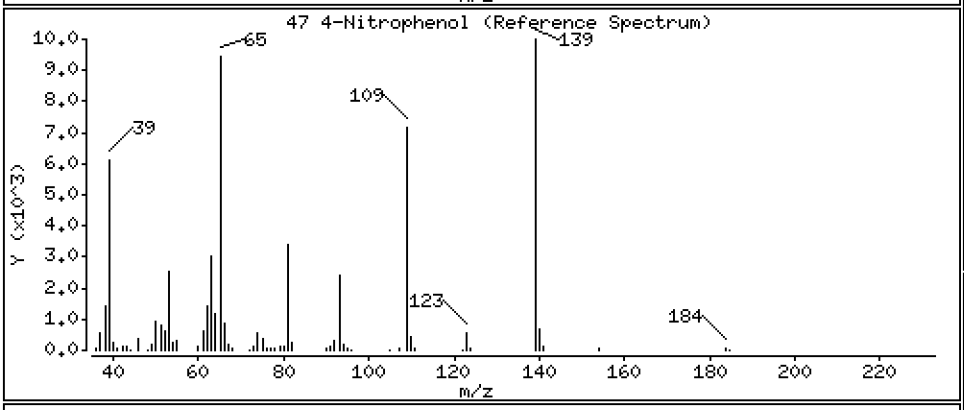
Column diameter: 0.25

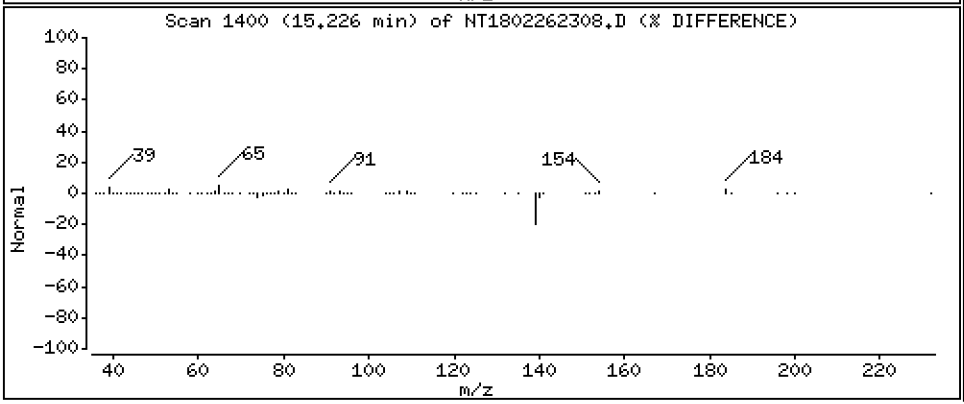
47 4-Nitrophenol

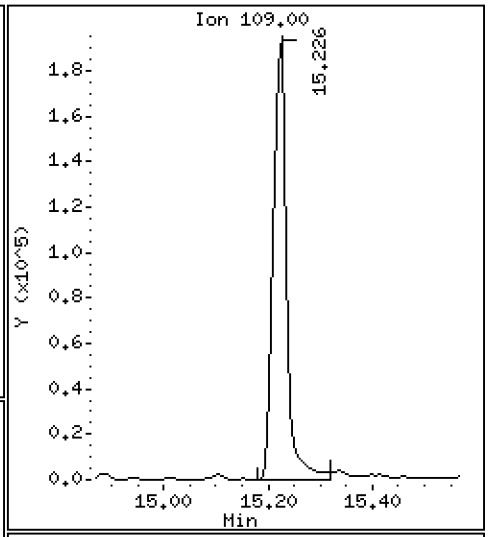
Concentration: 16.36 ug/mL

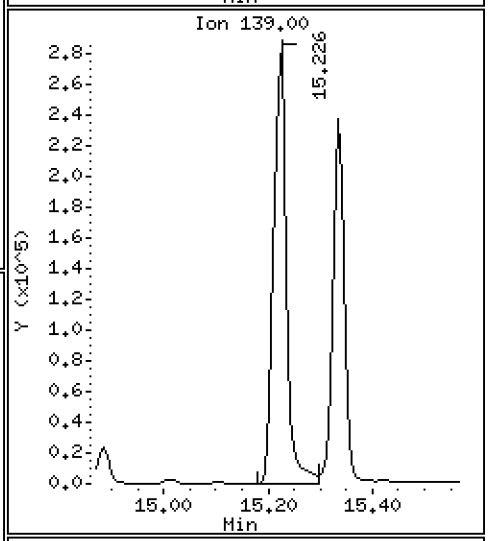


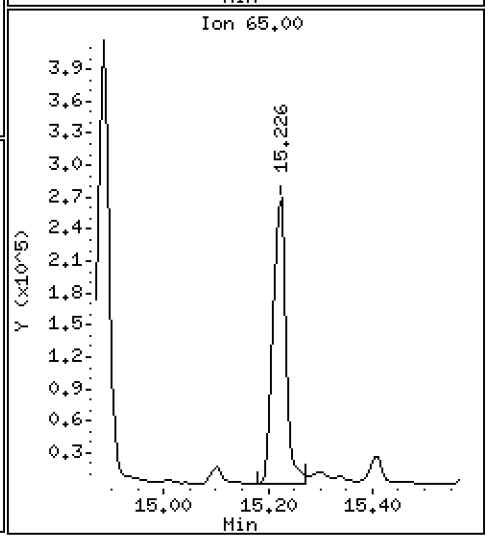












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

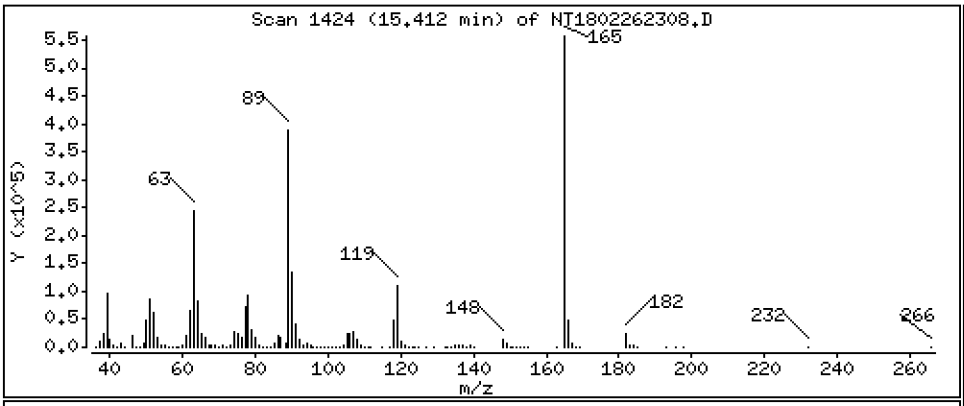
Operator: VTS

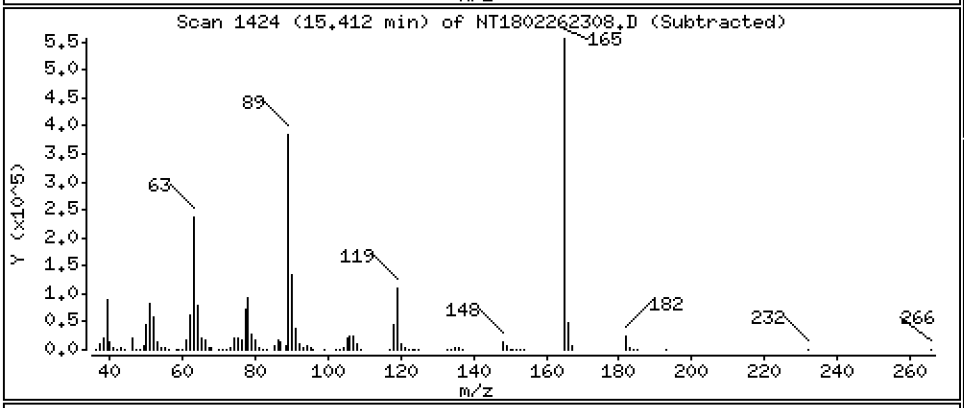
Column phase: ZB-5msi

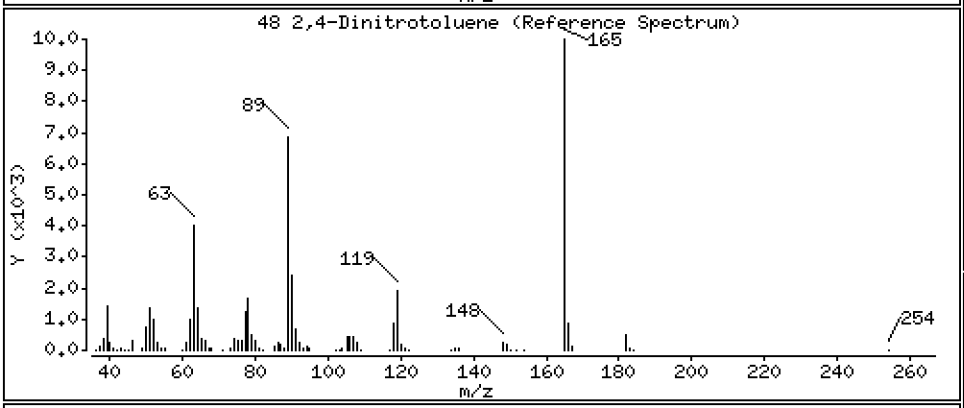
Column diameter: 0.25

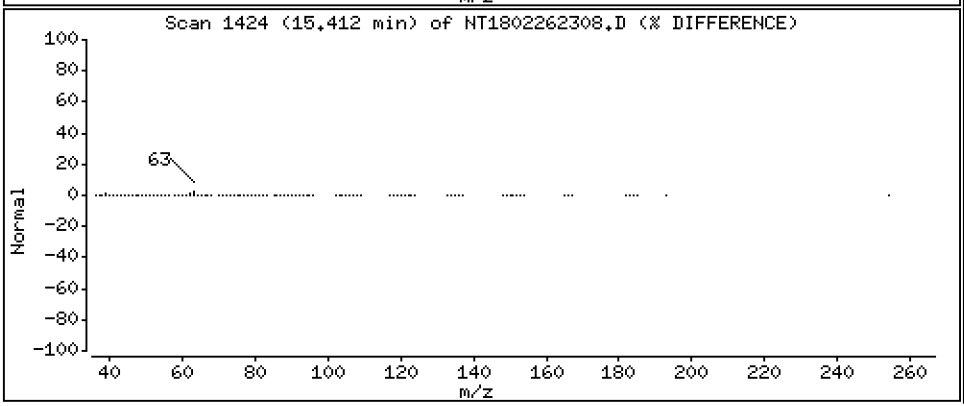
48 2,4-Dinitrotoluene

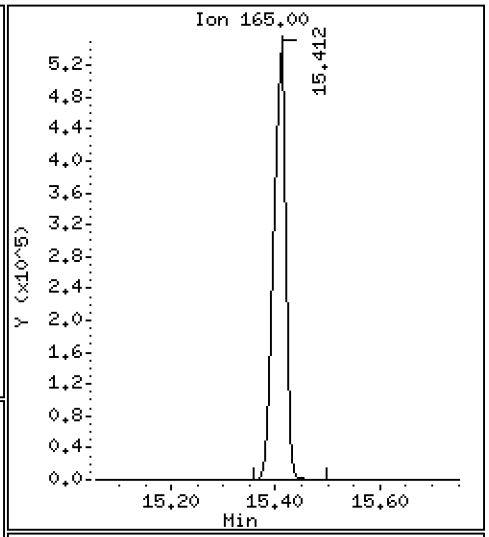
Concentration: 14.53 ug/mL

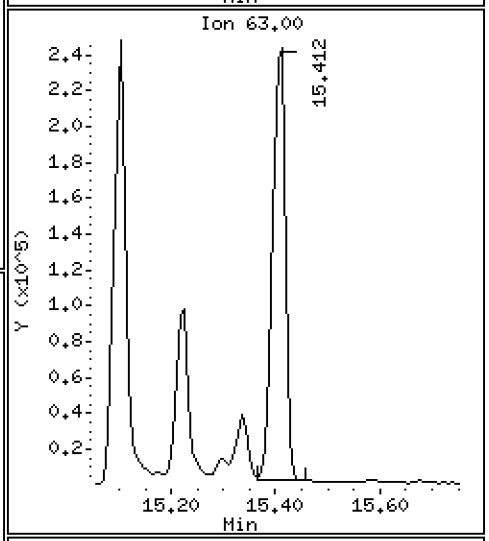


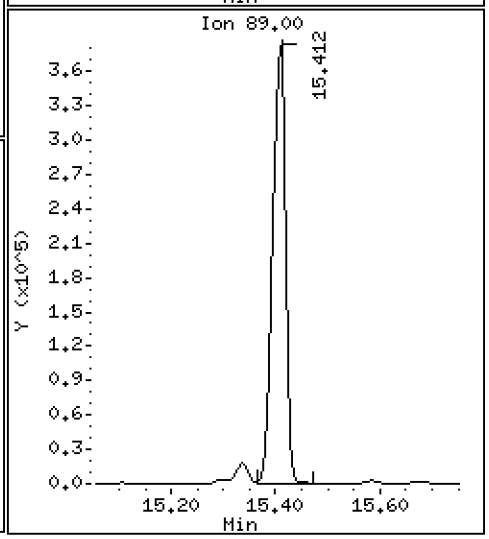












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

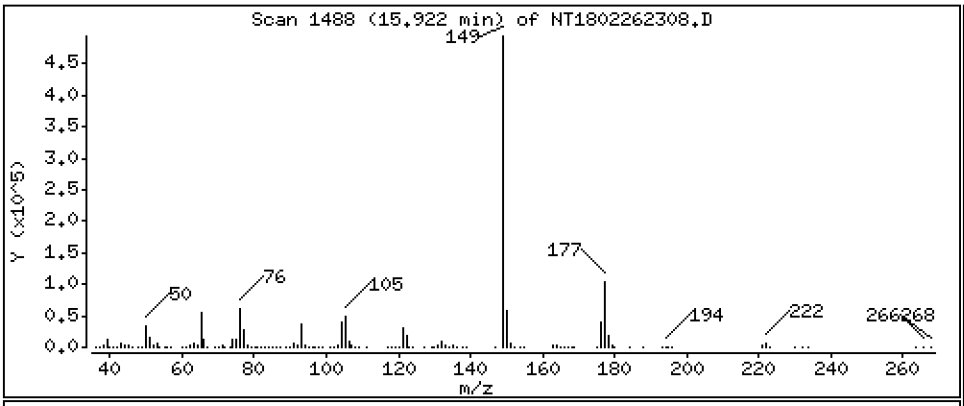
Operator: VTS

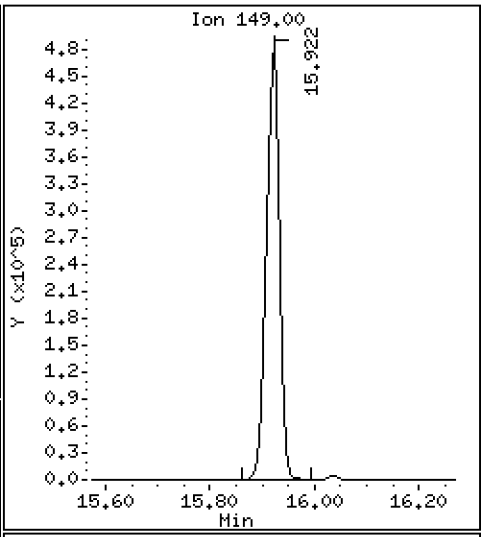
Column phase: ZB-5msi

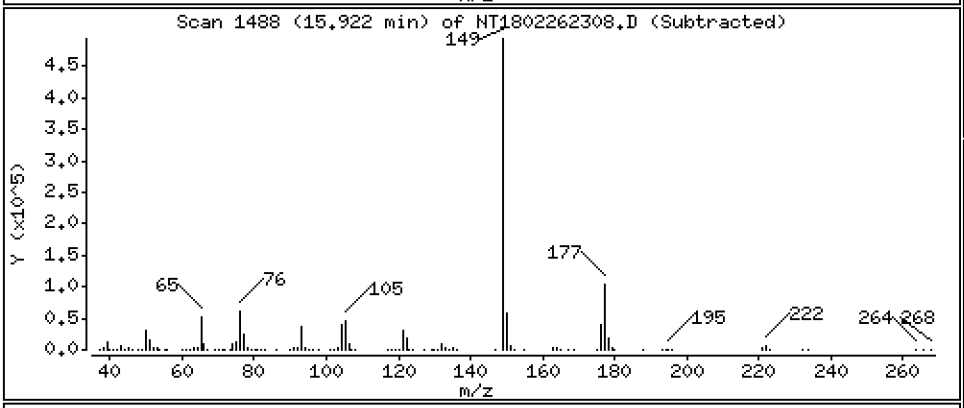
Column diameter: 0.25

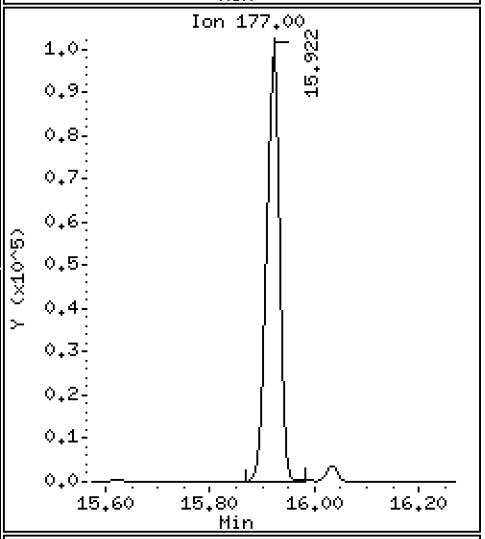
50 Diethylphthalate

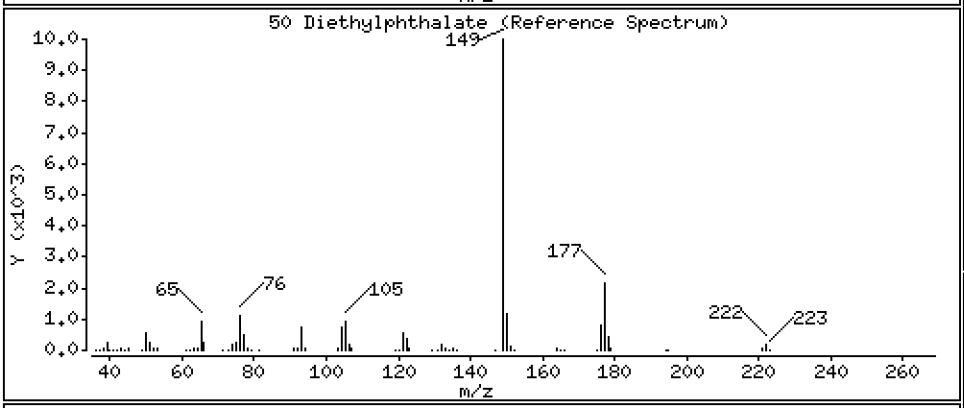
Concentration: 4.748 ug/mL

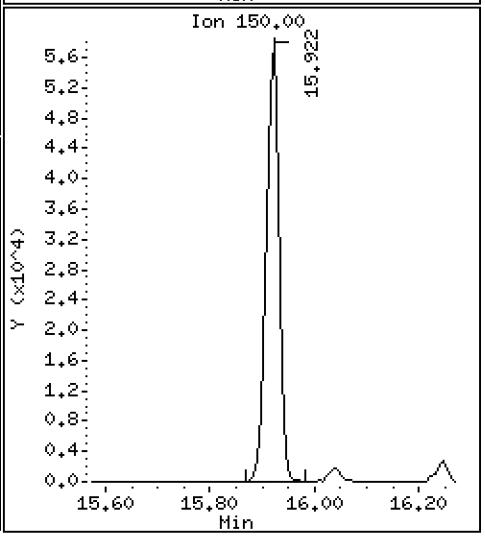


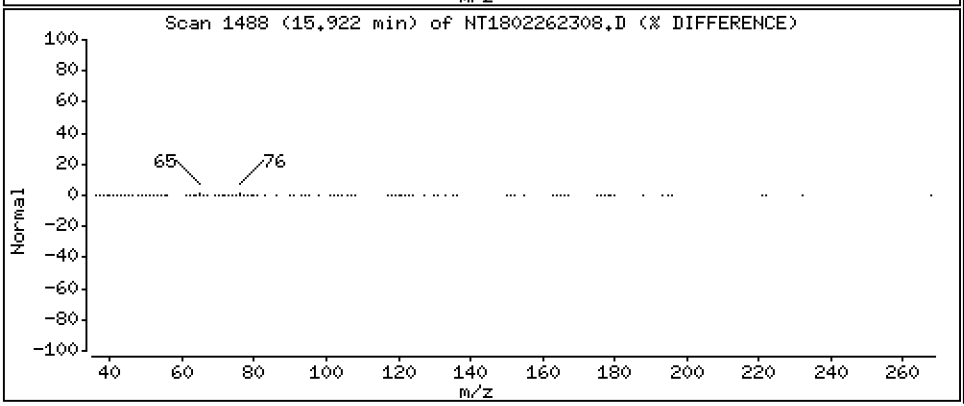












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

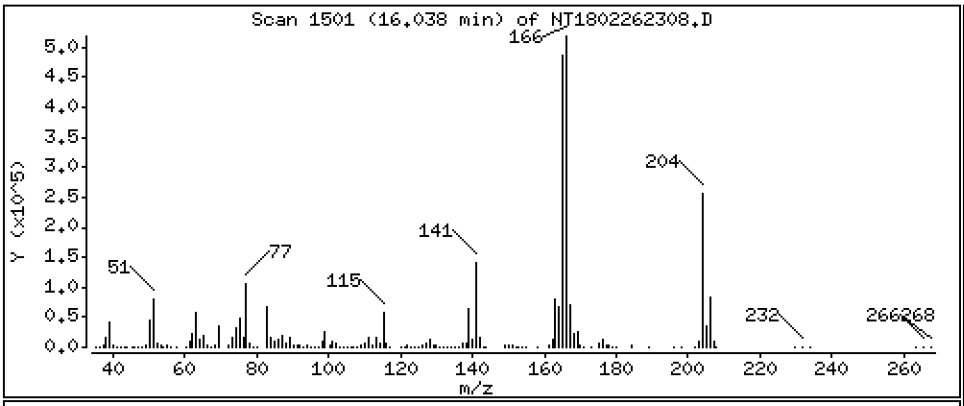
Operator: VTS

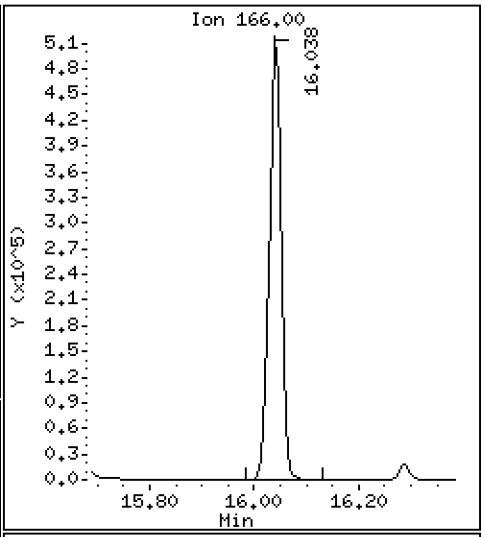
Column phase: ZB-5msi

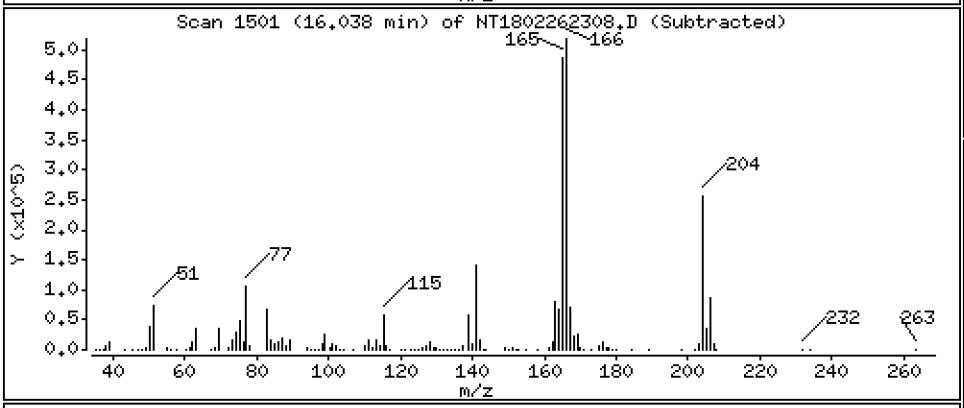
Column diameter: 0.25

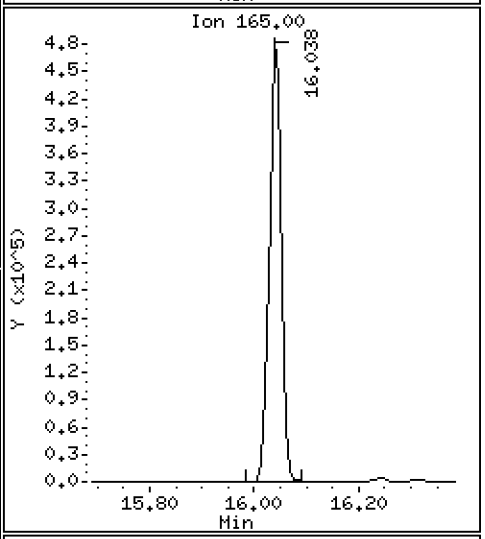
49 Fluorene

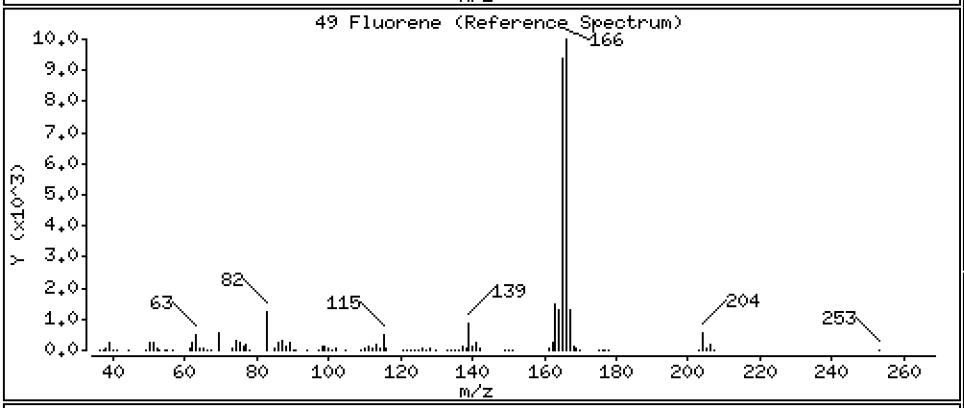
Concentration: 3.810 ug/mL

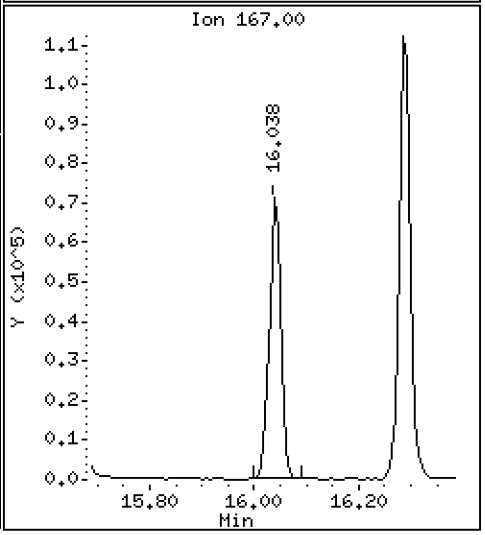


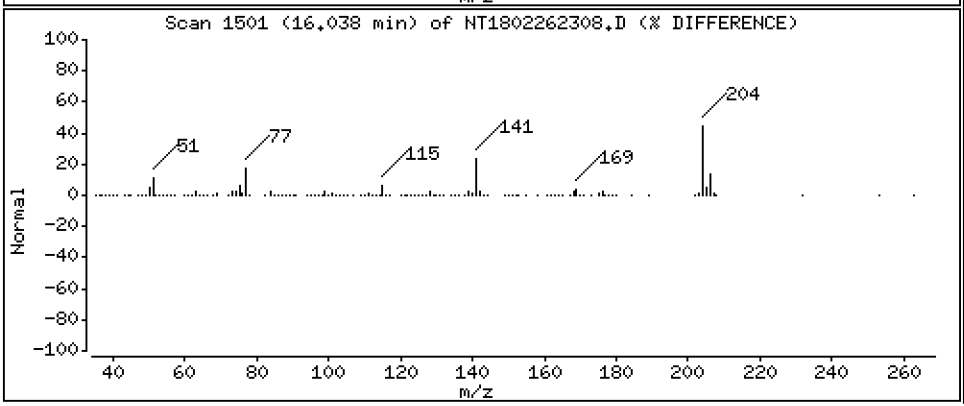












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

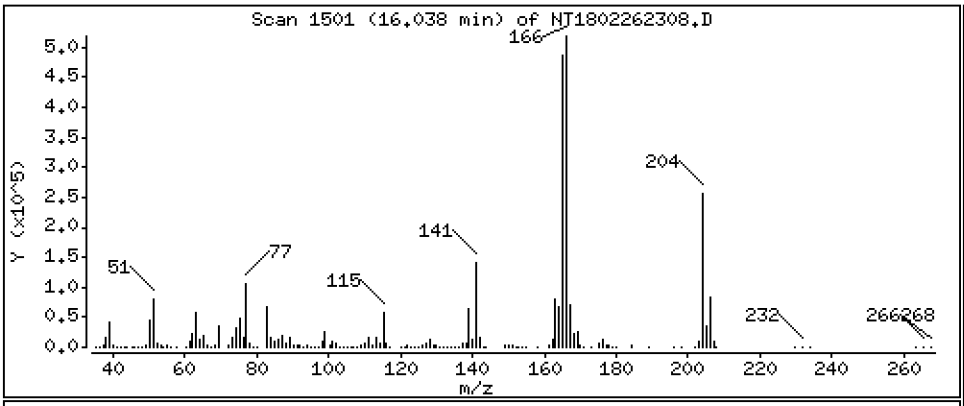
Operator: VTS

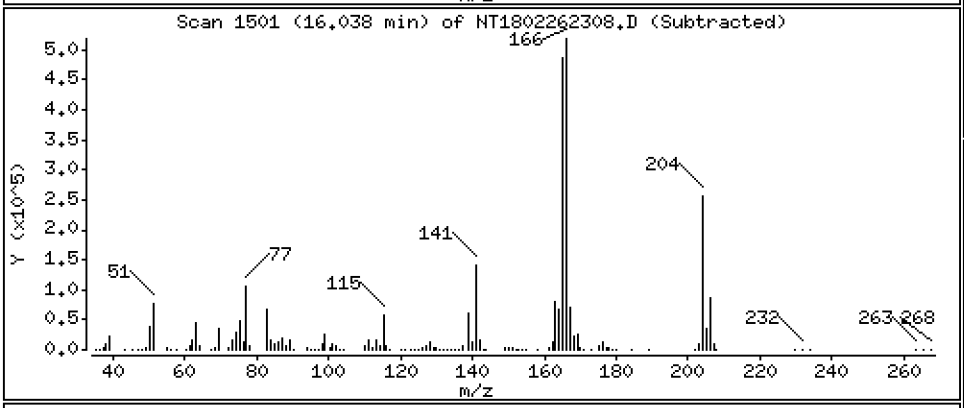
Column phase: ZB-5msi

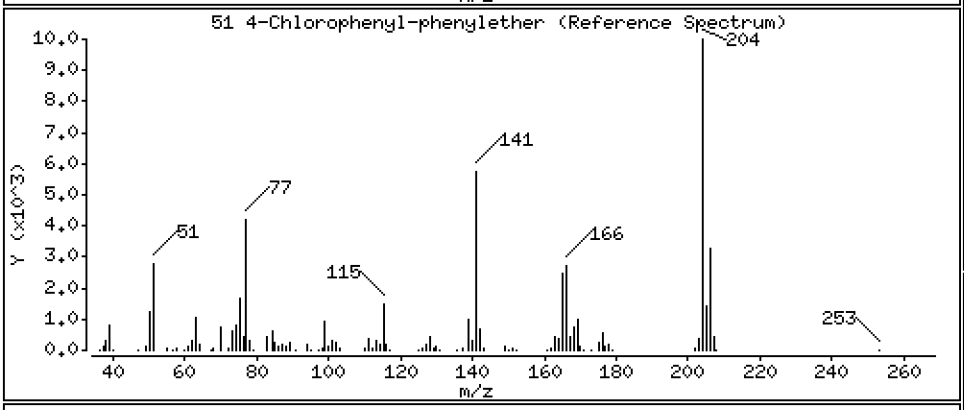
Column diameter: 0.25

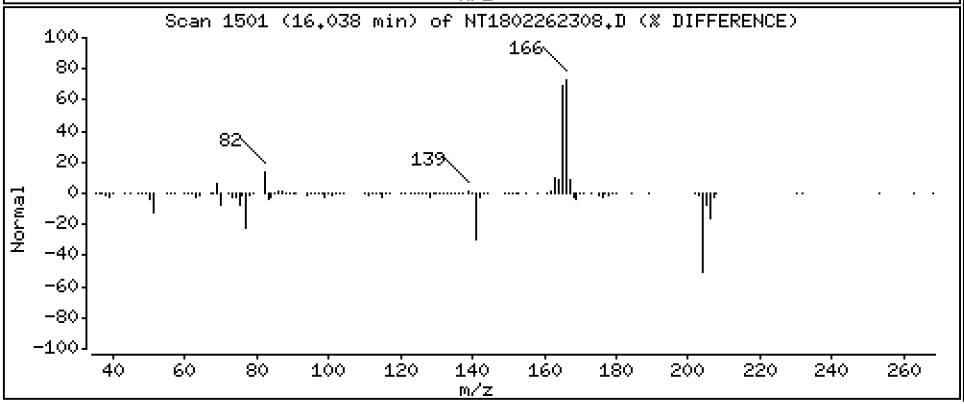
51 4-Chlorophenyl-phenylether

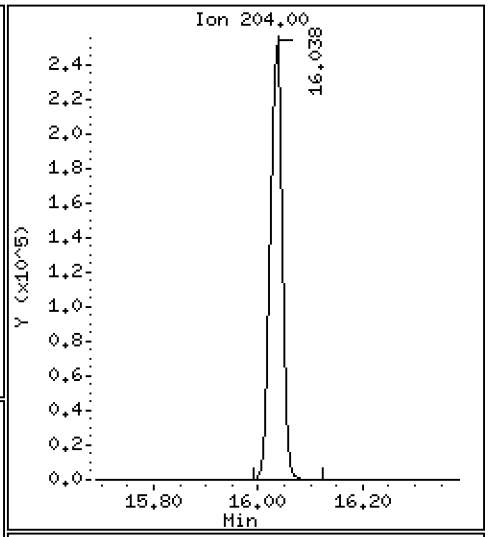
Concentration: 3.999 ug/mL

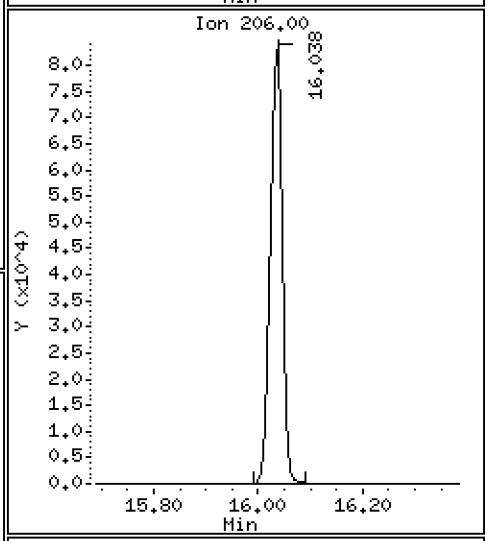


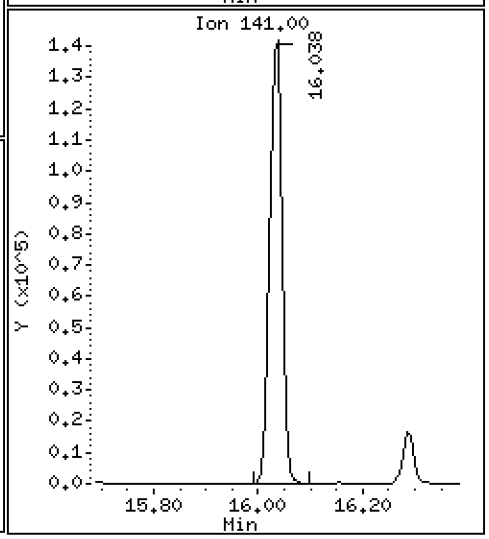












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

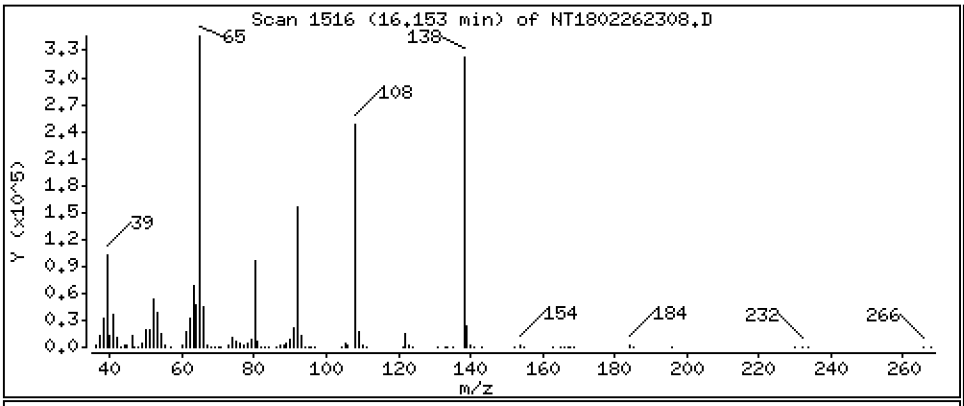
Operator: VTS

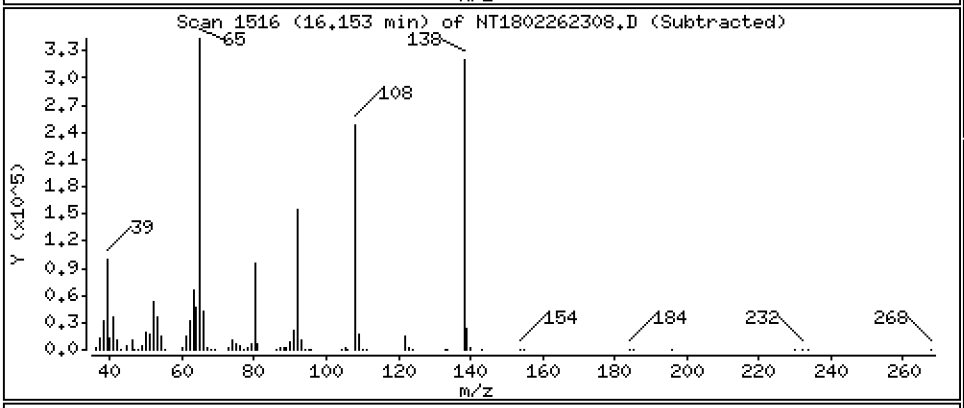
Column phase: ZB-5msi

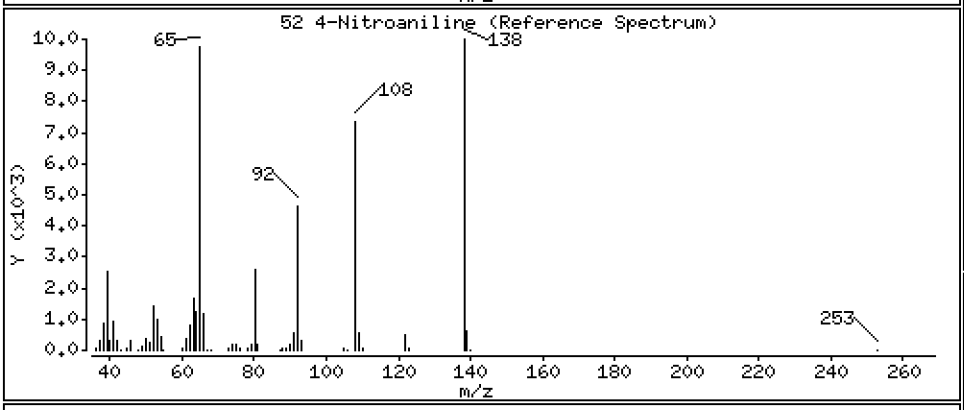
Column diameter: 0.25

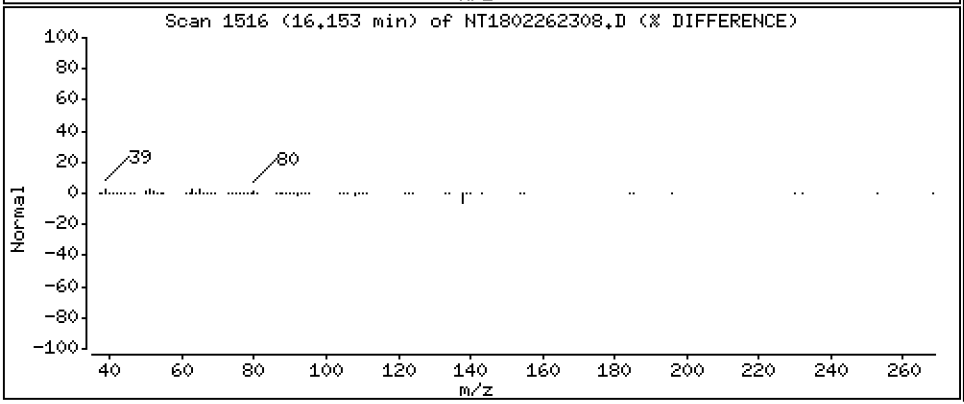
52 4-Nitroaniline

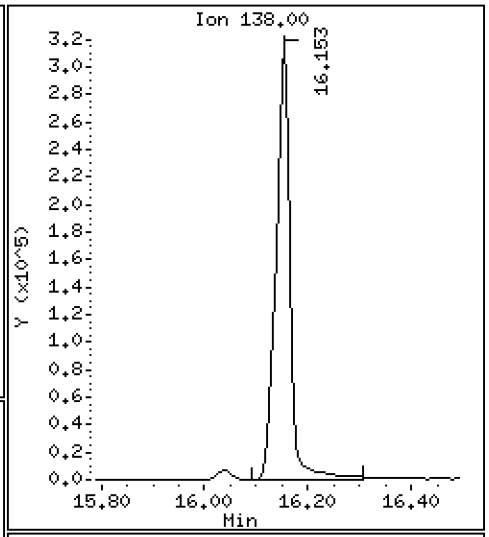
Concentration: 12.35 ug/mL

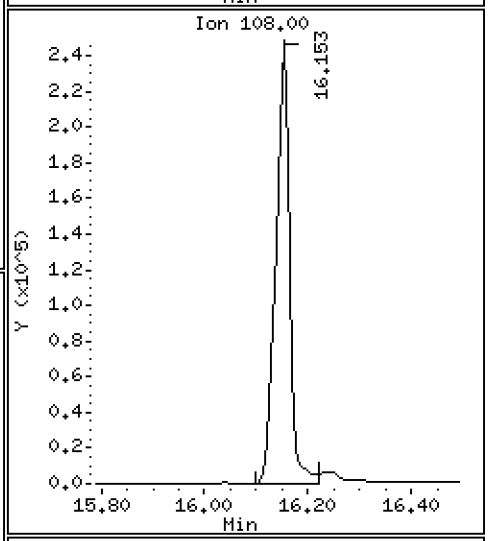


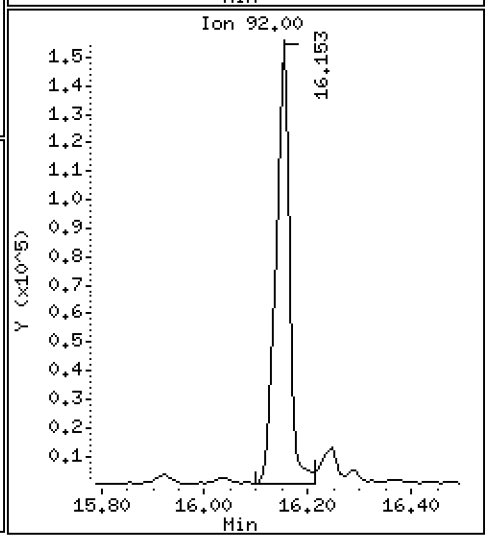












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

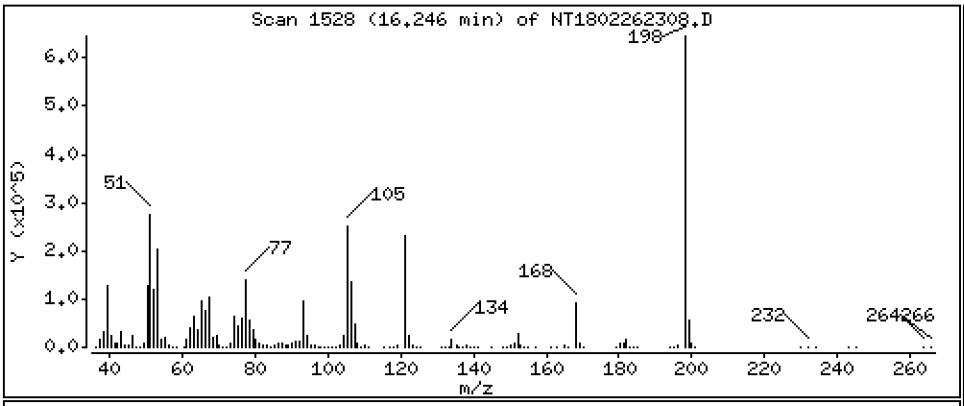
Operator: VTS

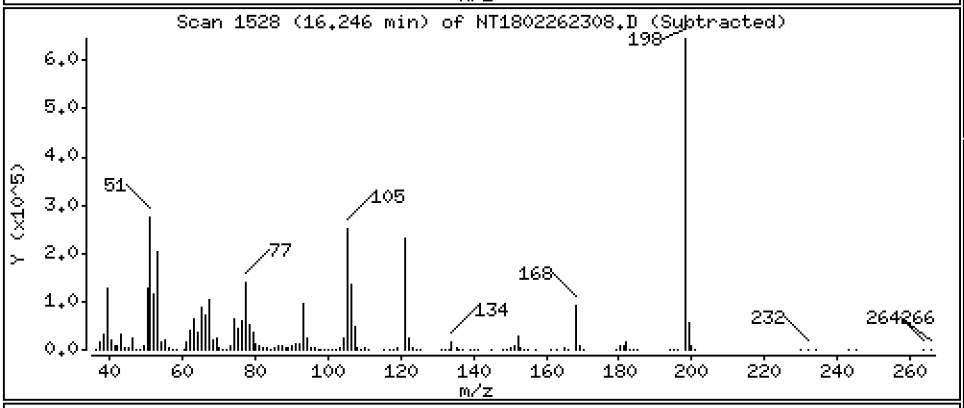
Column phase: ZB-5msi

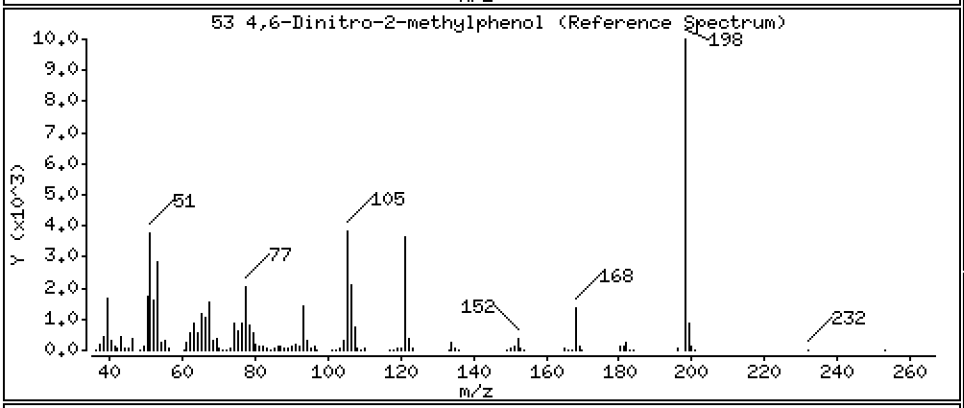
Column diameter: 0.25

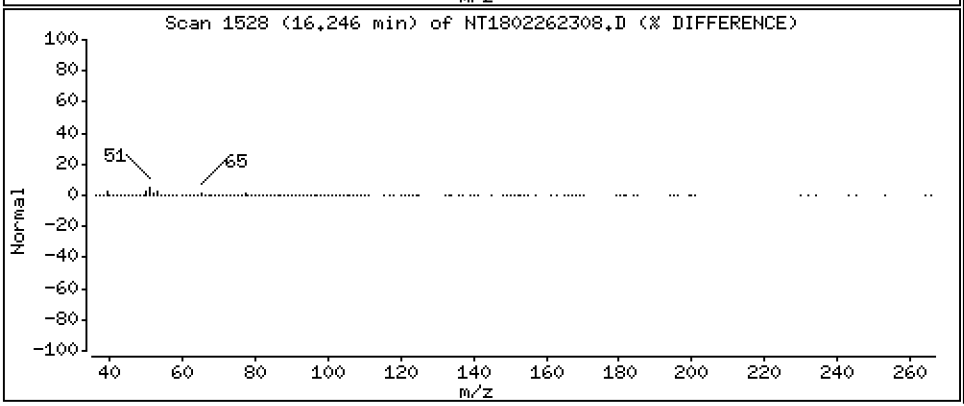
53 4,6-Dinitro-2-methylphenol

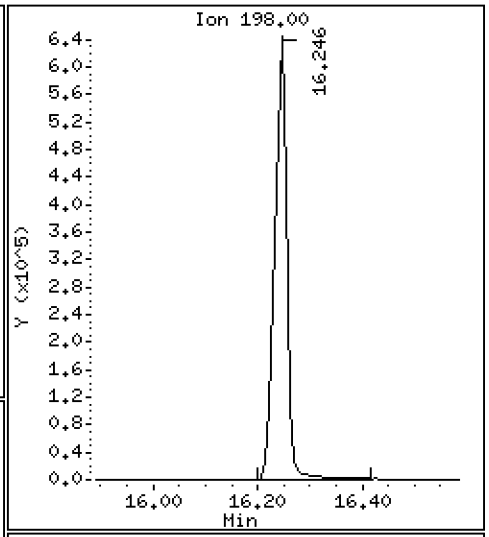
Concentration: 29.04 ug/mL

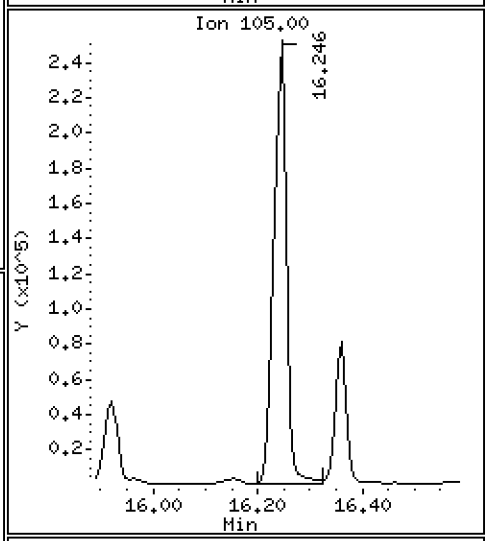


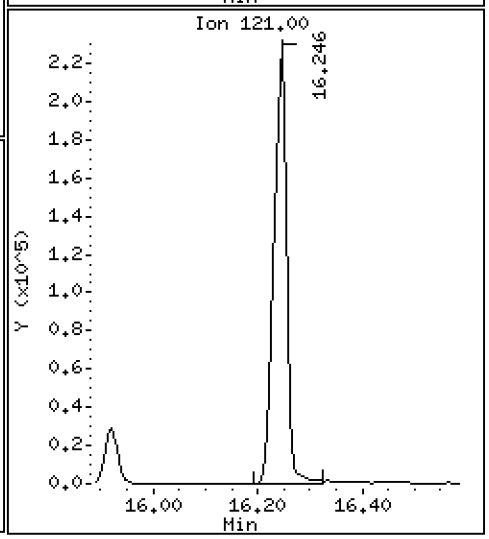












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

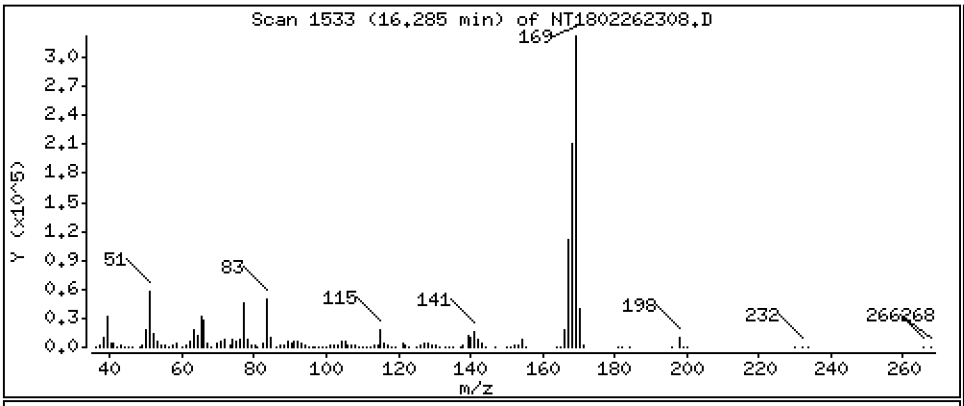
Operator: VTS

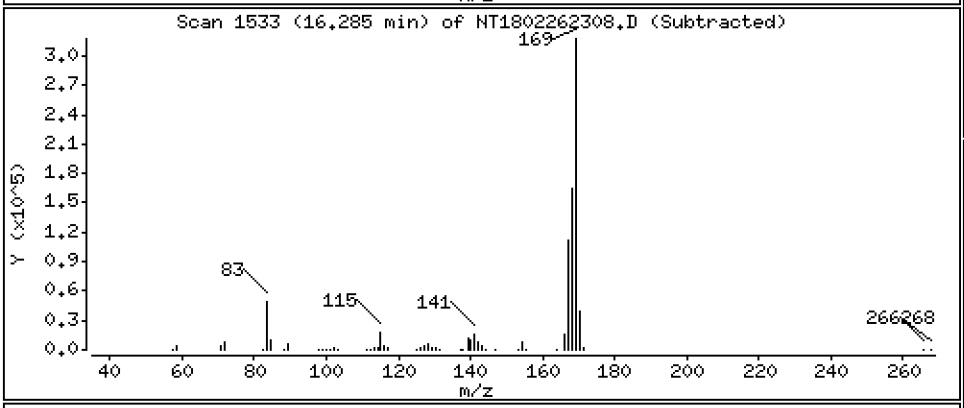
Column phase: ZB-5msi

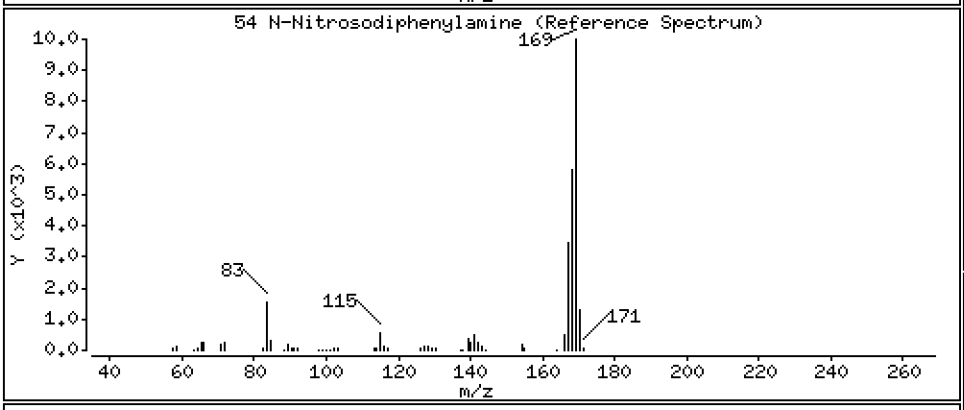
Column diameter: 0.25

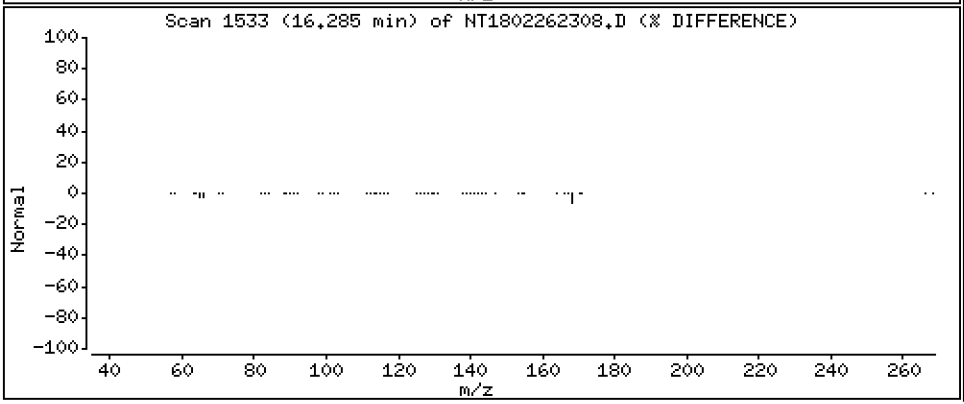
54 N-Nitrosodiphenylamine

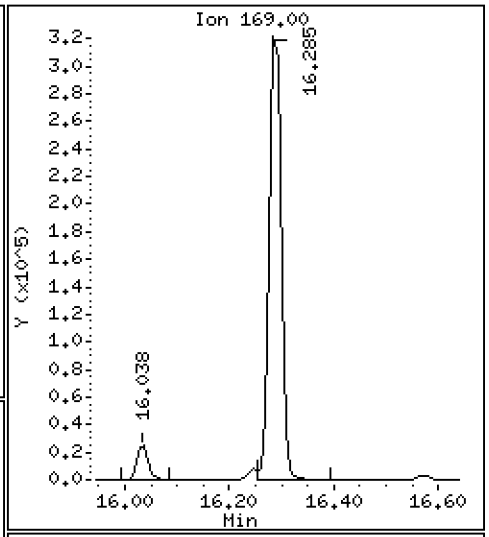
Concentration: 3.438 ug/mL

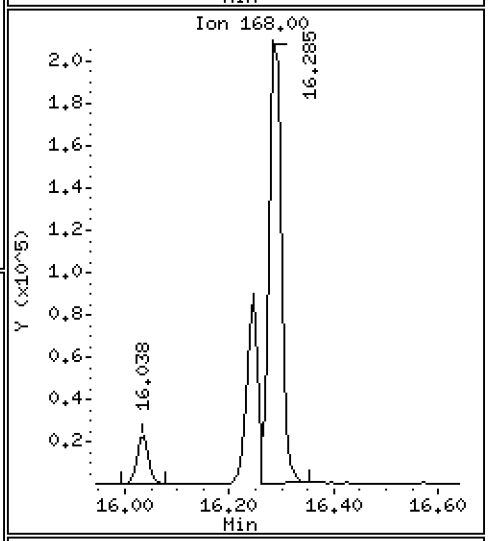


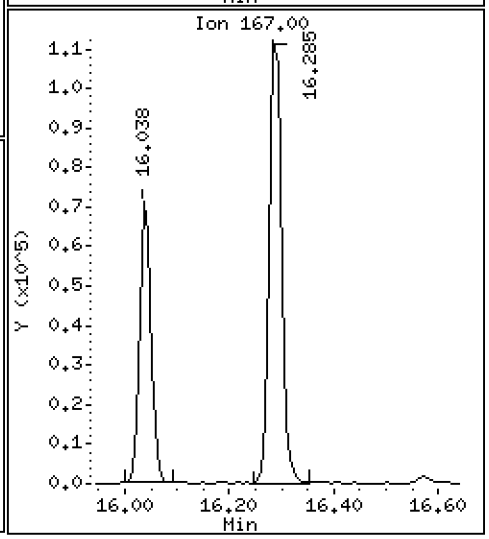












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

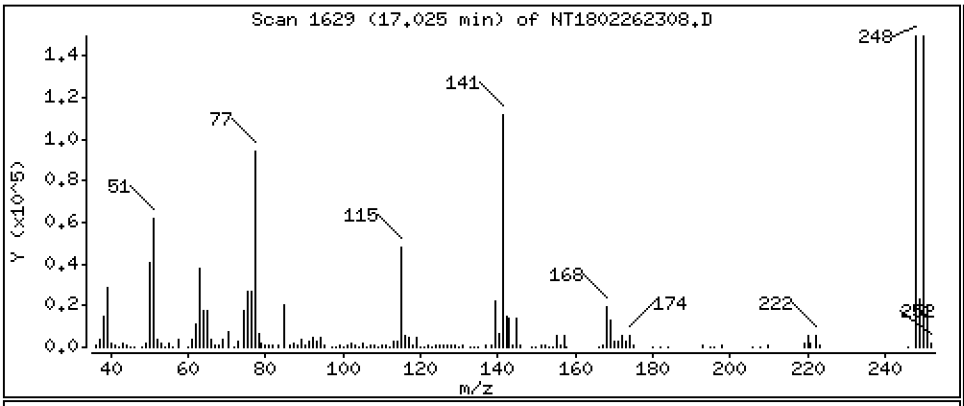
Operator: VTS

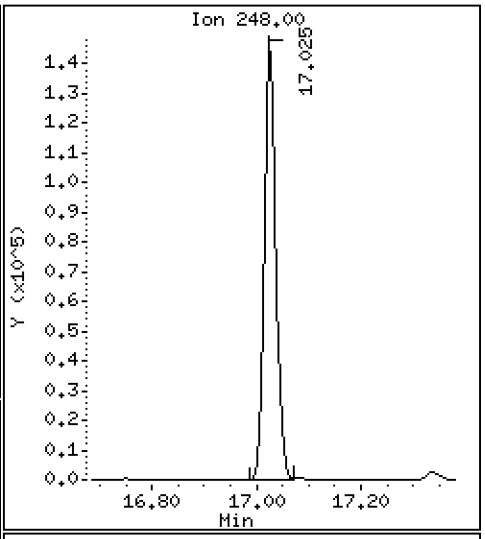
Column phase: ZB-5msi

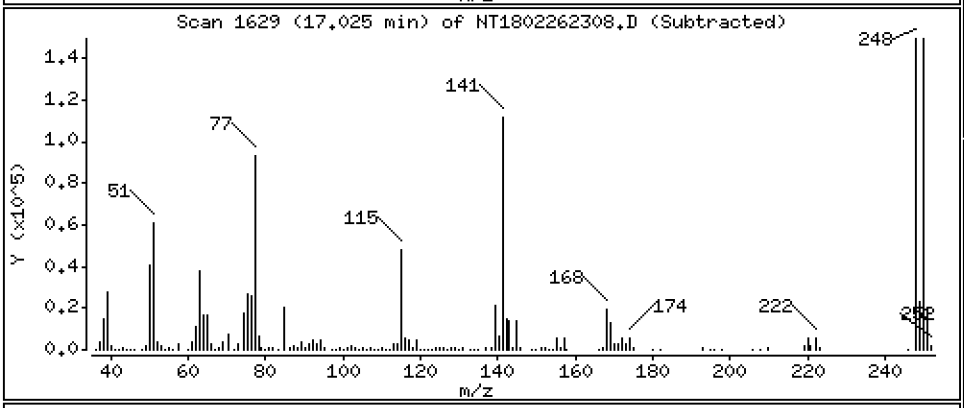
Column diameter: 0.25

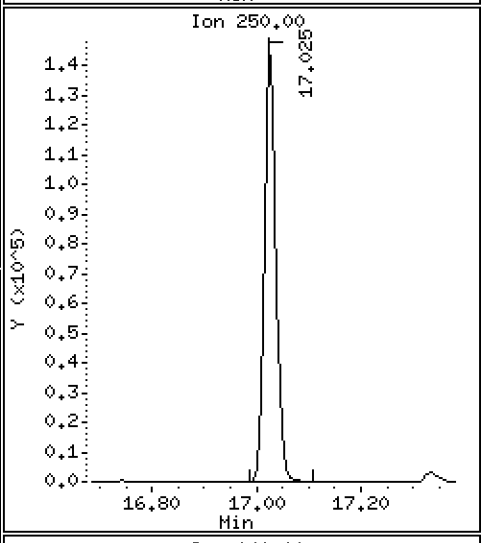
56 4-Bromophenyl-phenylether

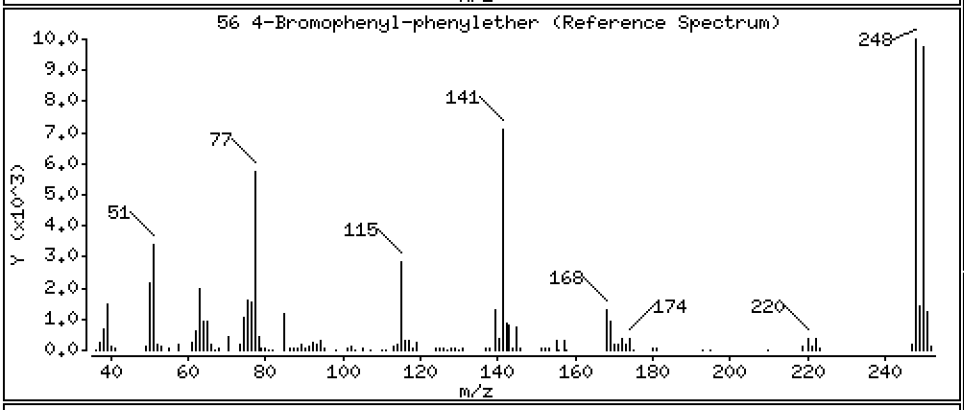
Concentration: 3.983 ug/mL

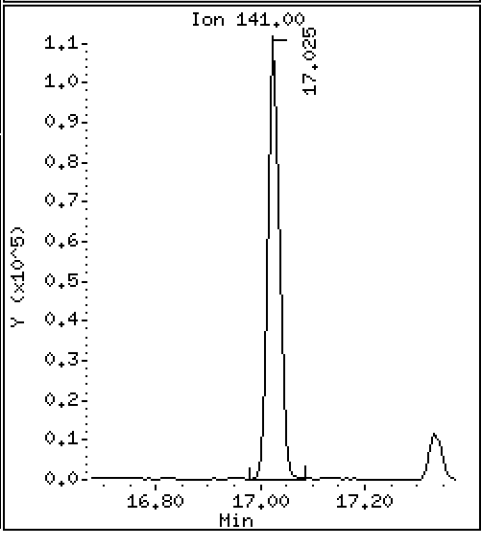


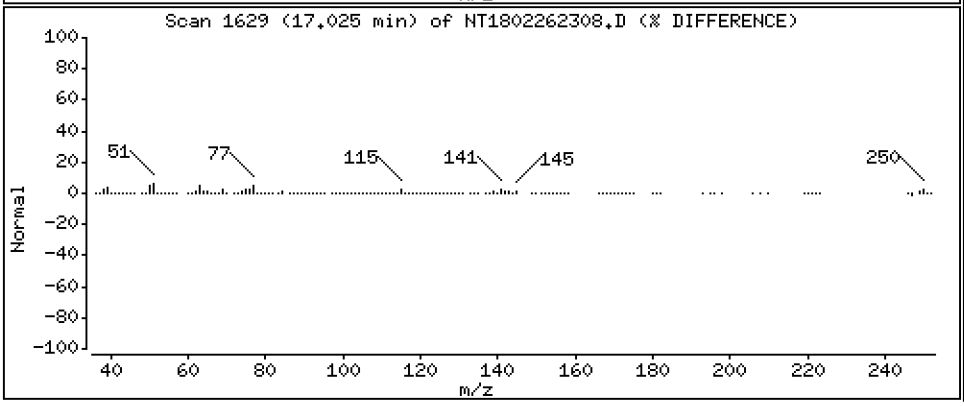












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

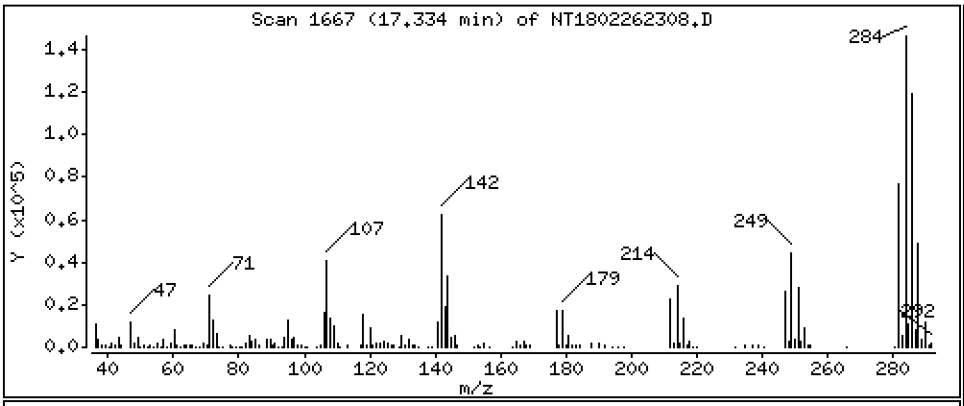
Operator: VTS

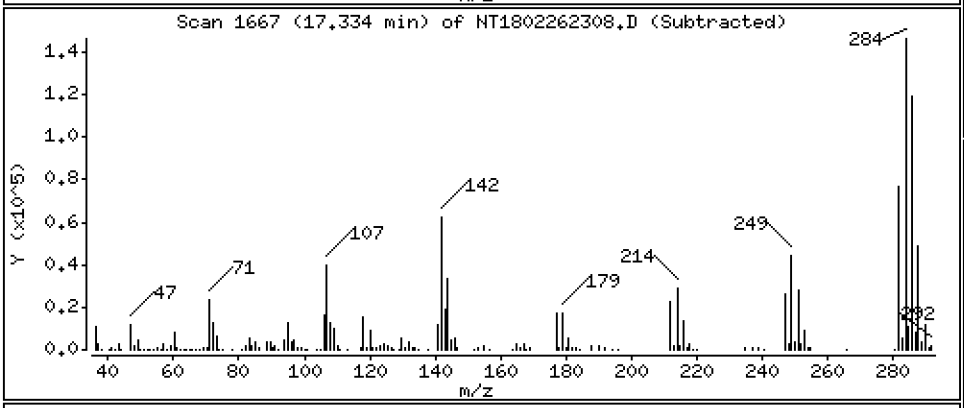
Column phase: ZB-5msi

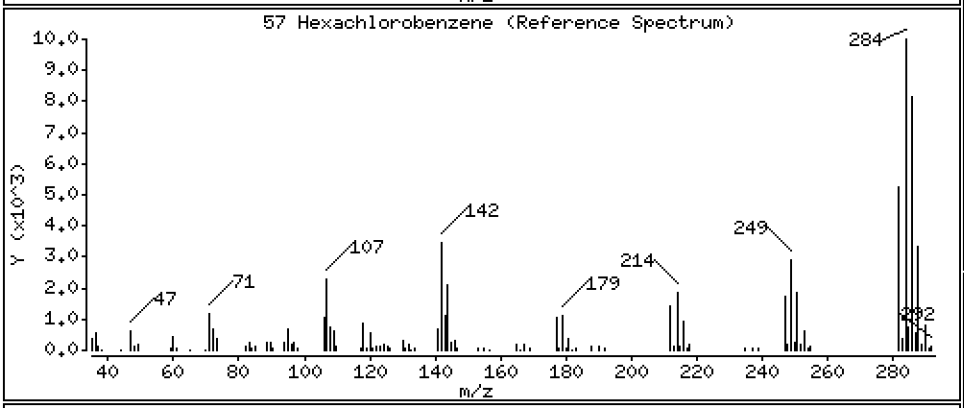
Column diameter: 0.25

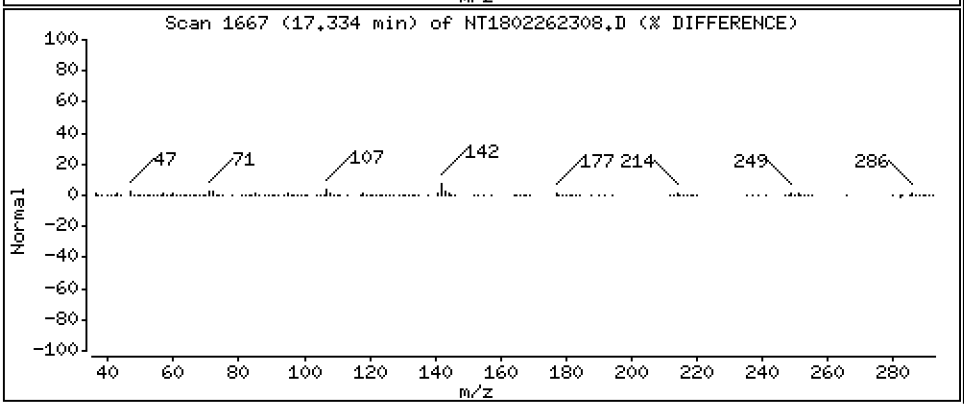
57 Hexachlorobenzene

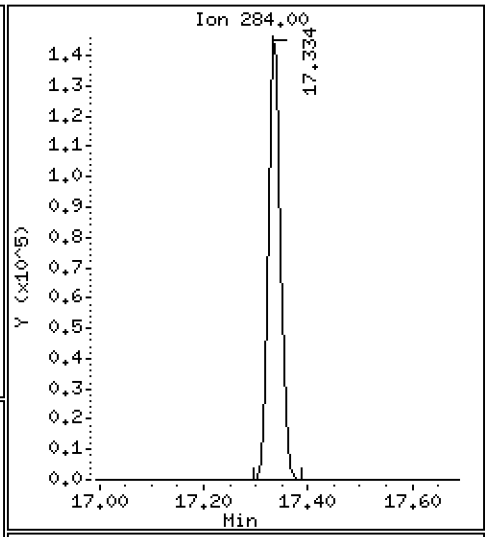
Concentration: 3.661 ug/mL

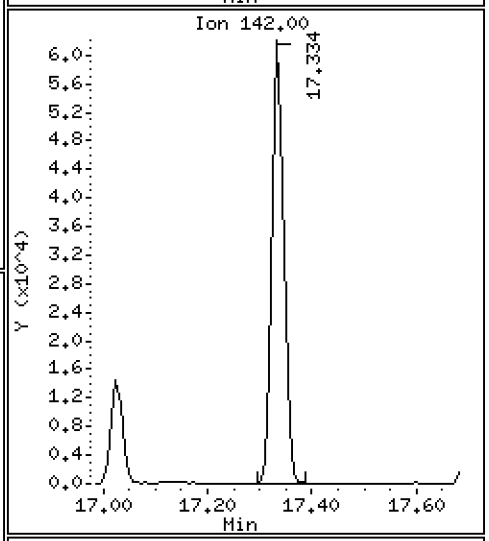


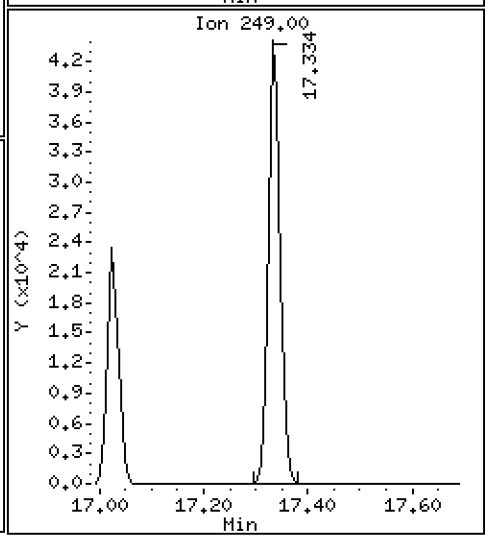












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

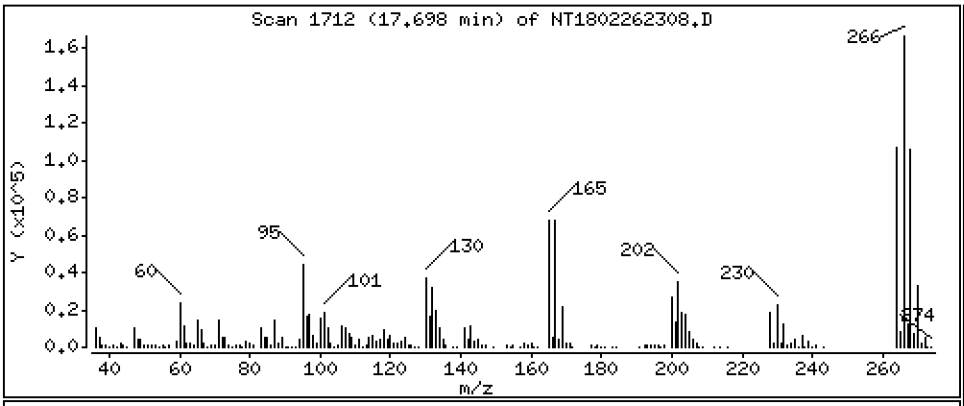
Operator: VTS

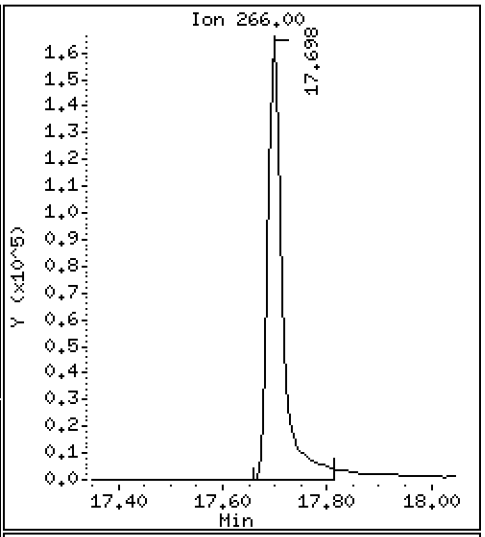
Column phase: ZB-5msi

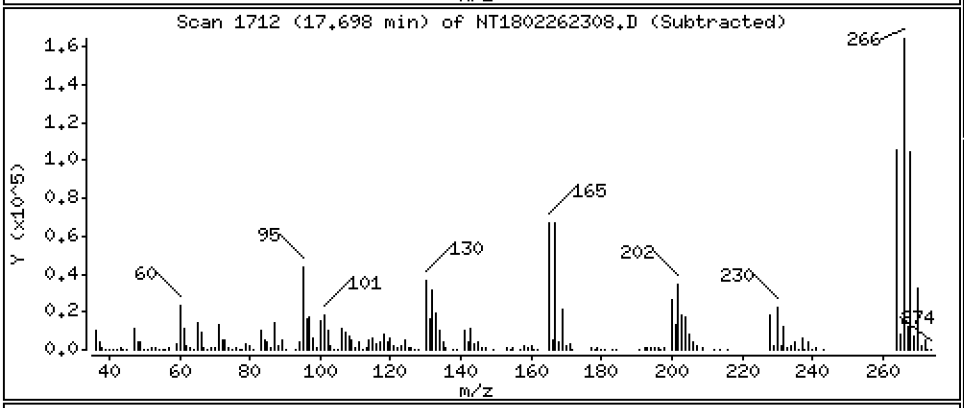
Column diameter: 0.25

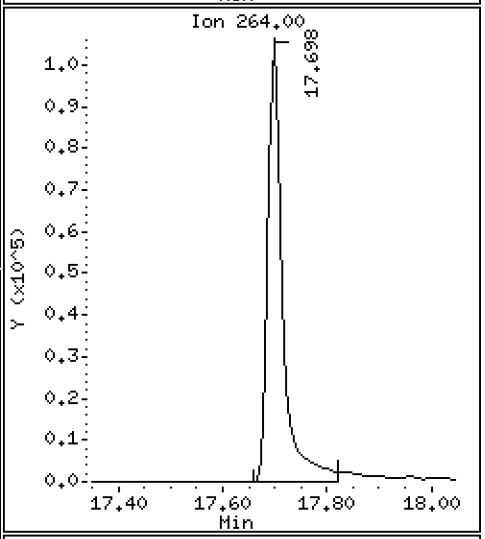
58 Pentachlorophenol

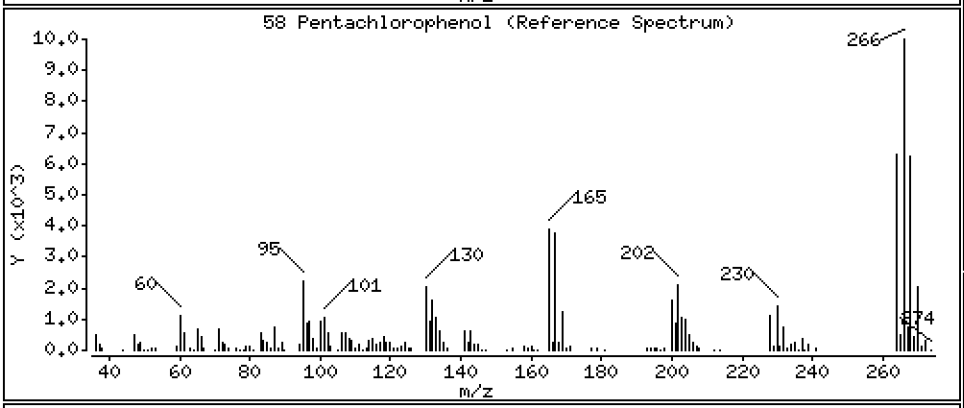
Concentration: 16.34 ug/mL

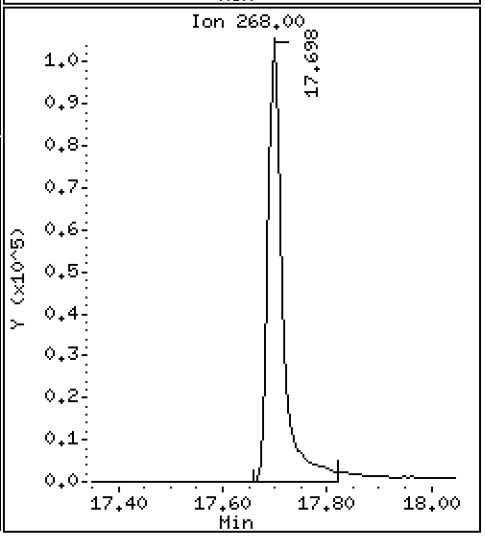


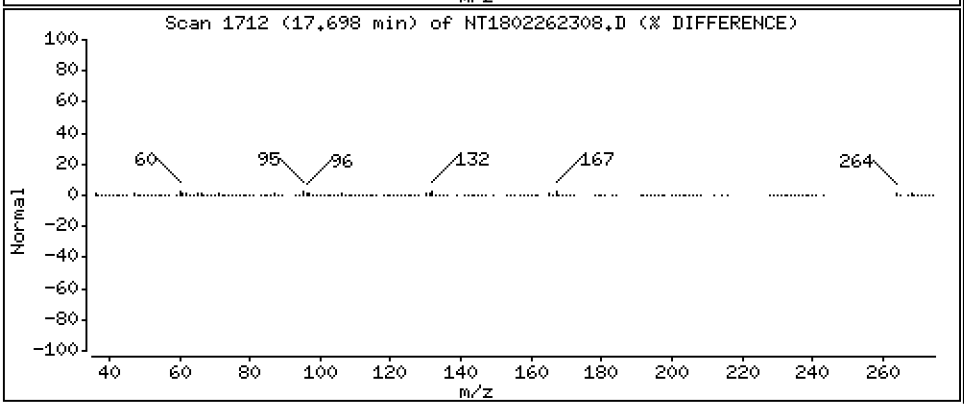












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

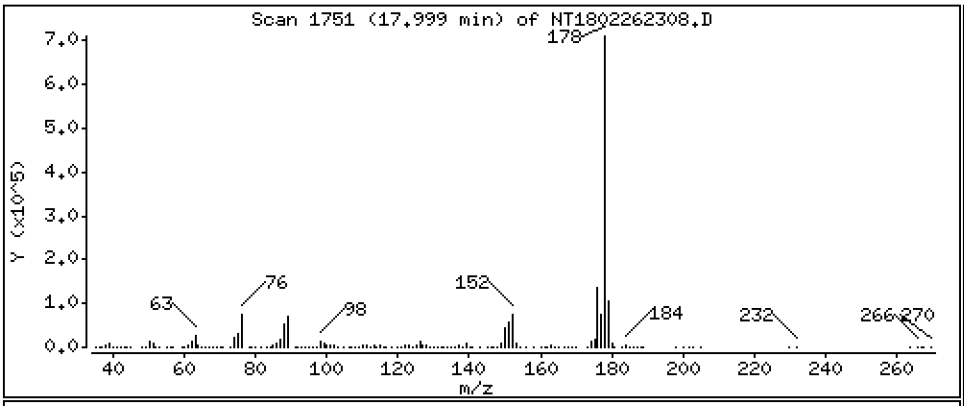
Operator: VTS

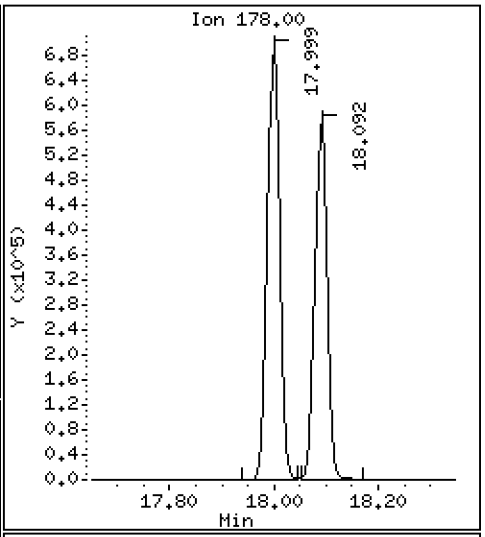
Column phase: ZB-5msi

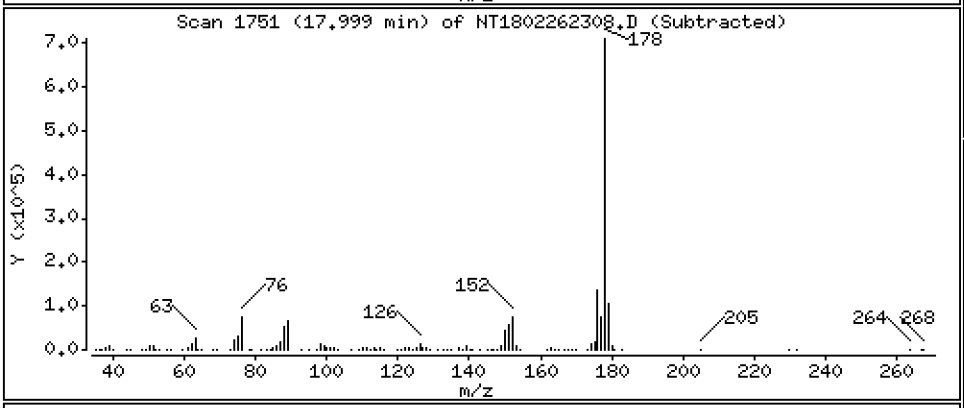
Column diameter: 0.25

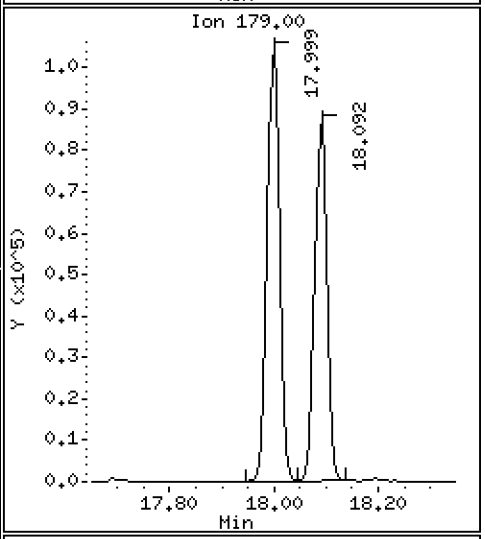
60 Phenanthrene

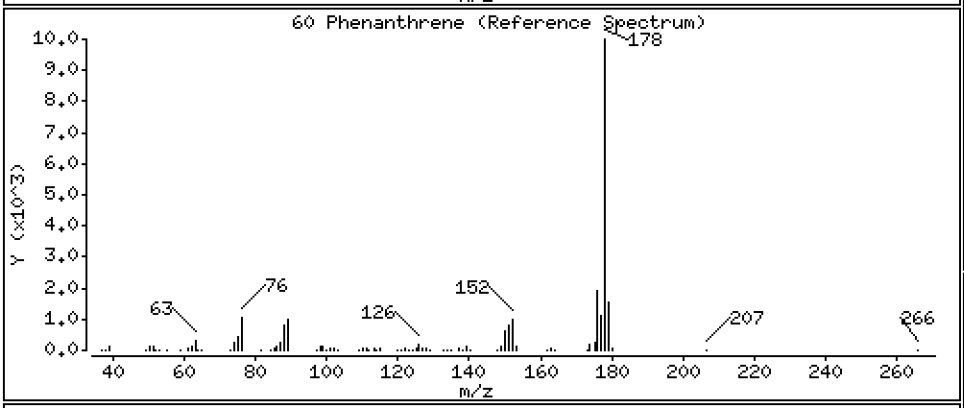
Concentration: 3.721 ug/mL

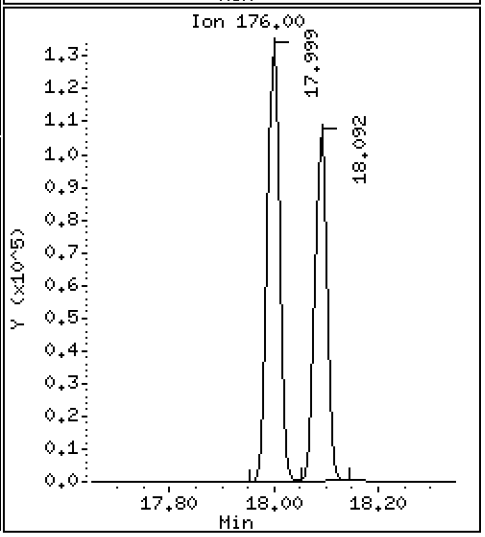


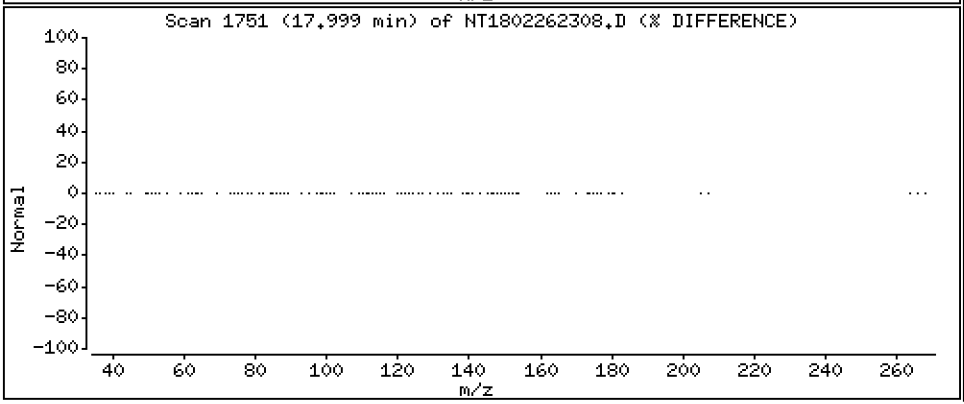












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

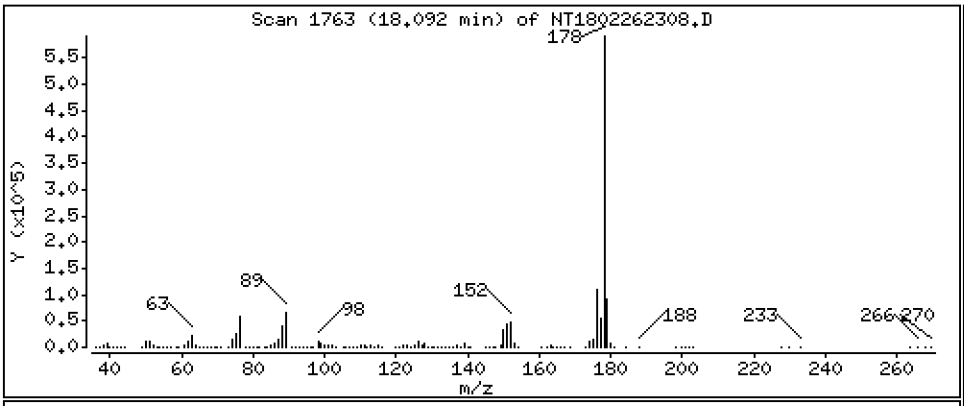
Operator: VTS

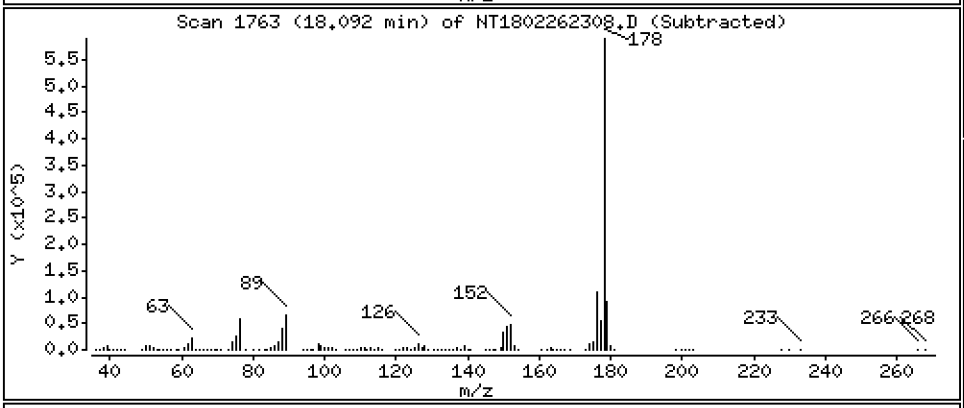
Column phase: ZB-5msi

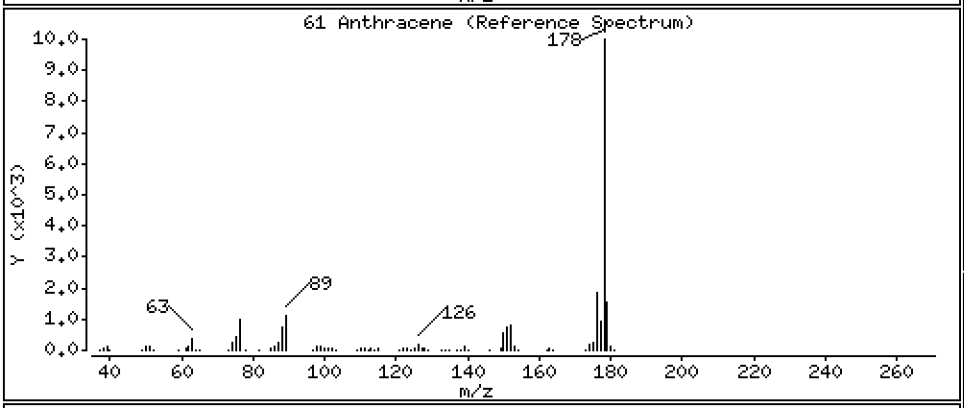
Column diameter: 0.25

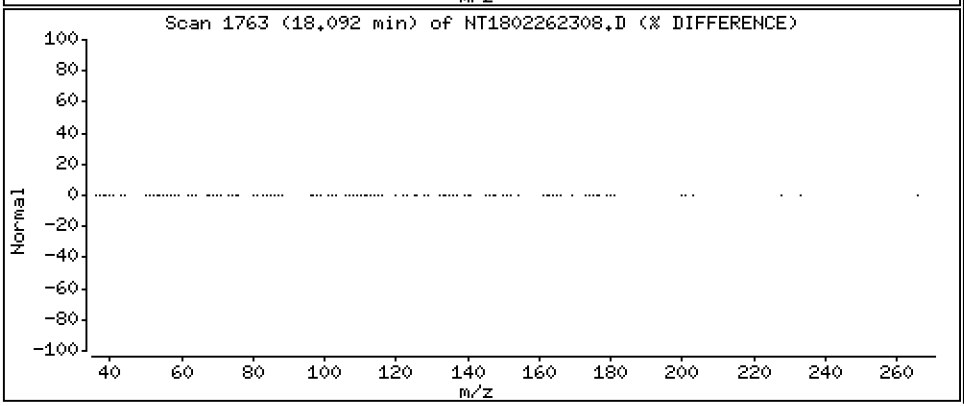
61 Anthracene

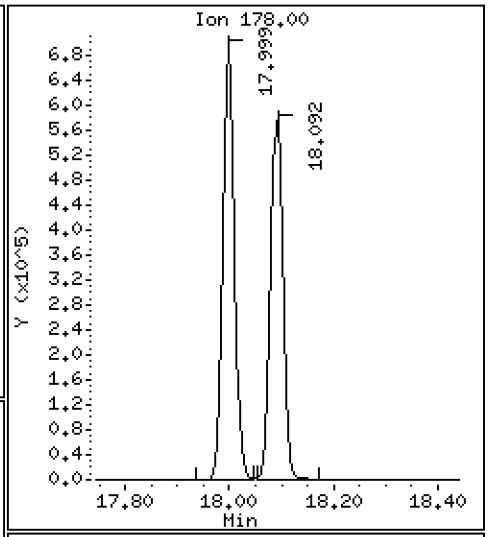
Concentration: 3.281 ug/mL

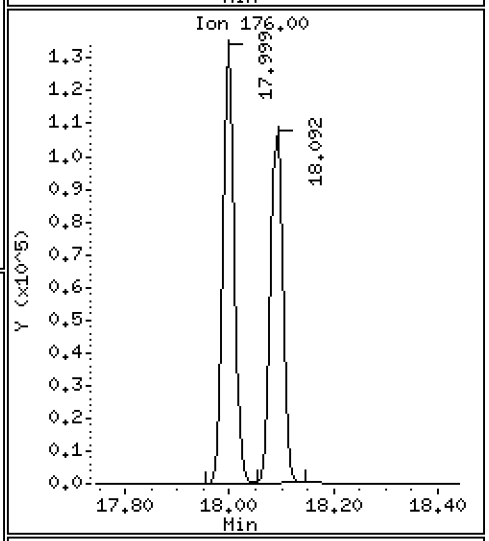


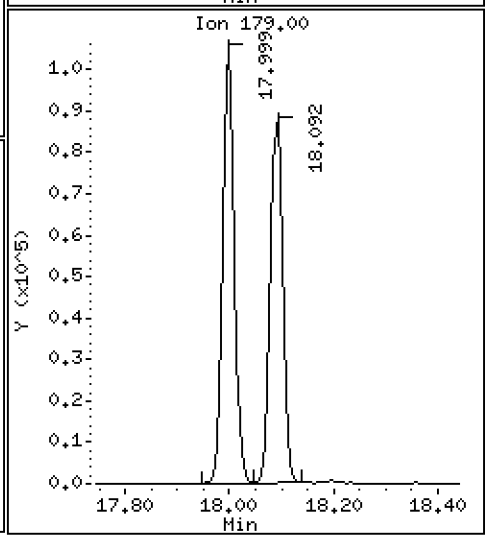












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

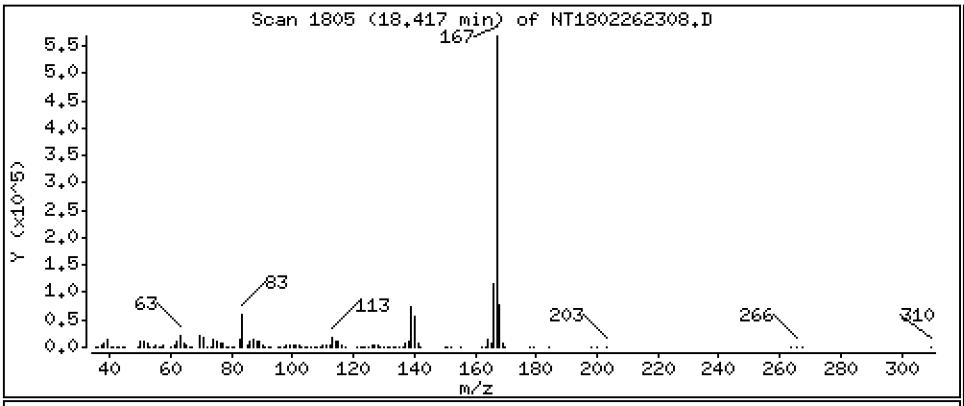
Operator: VTS

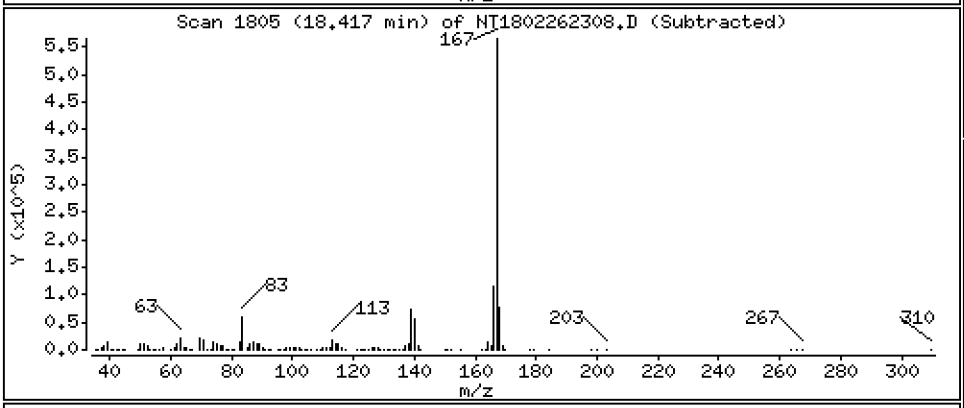
Column phase: ZB-5msi

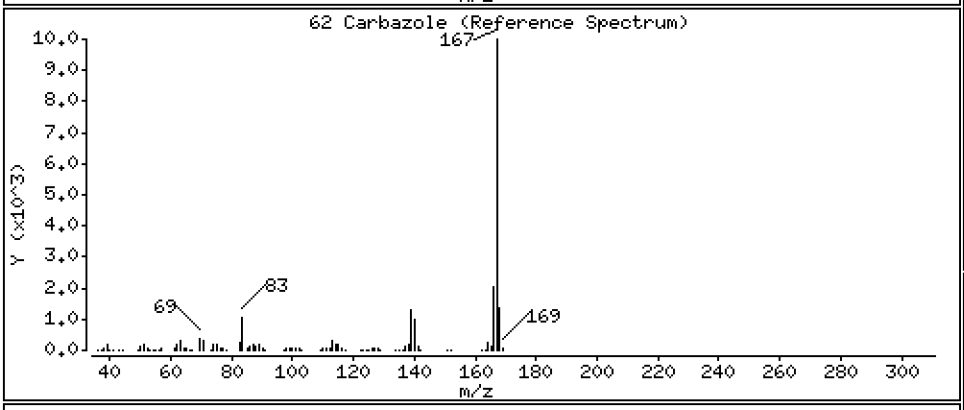
Column diameter: 0.25

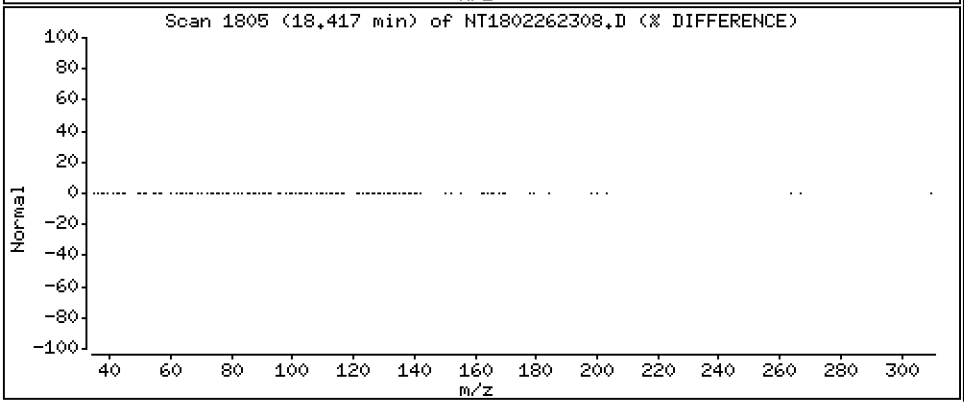
62 Carbazole

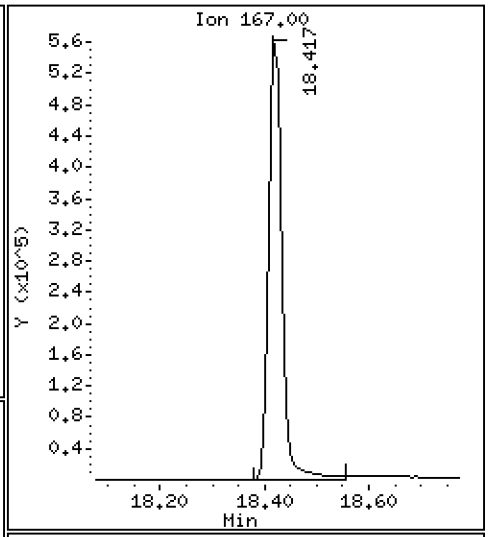
Concentration: 3.675 ug/mL

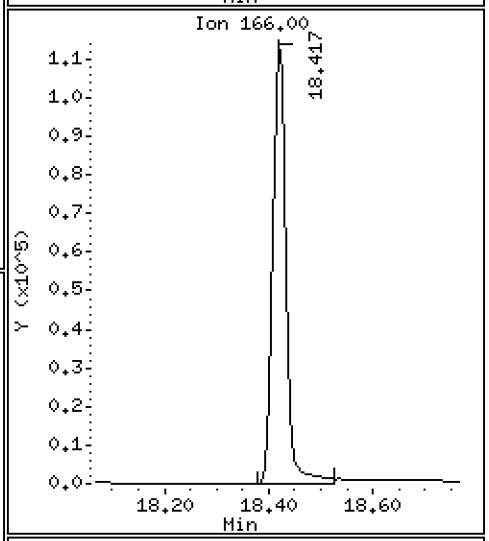


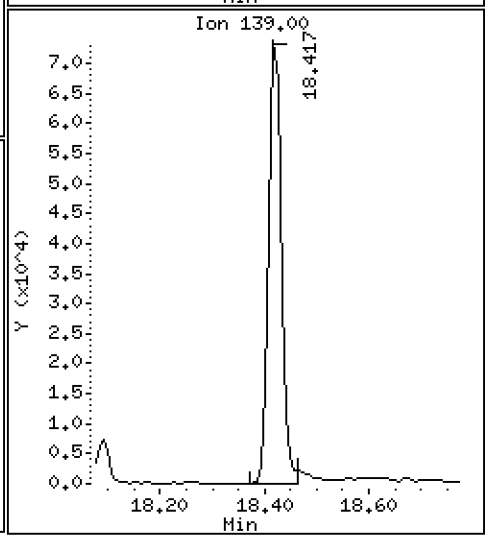












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

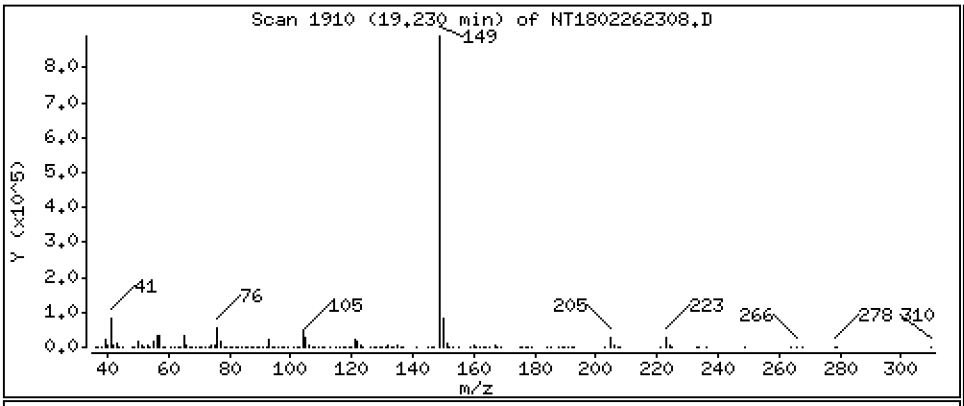
Operator: VTS

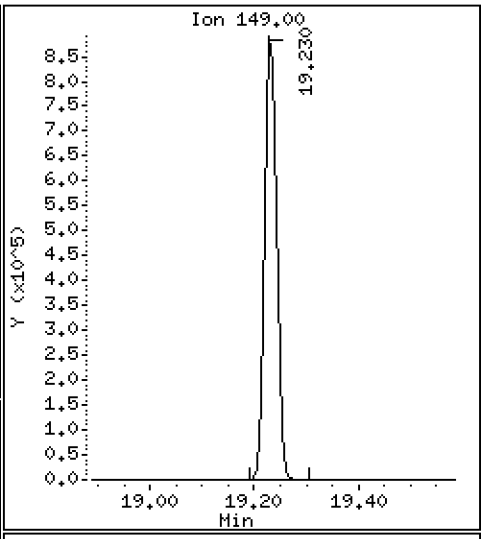
Column phase: ZB-5msi

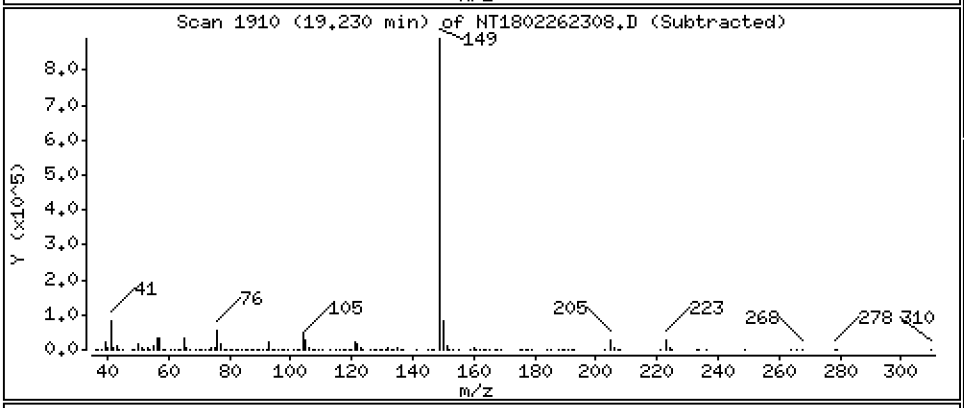
Column diameter: 0.25

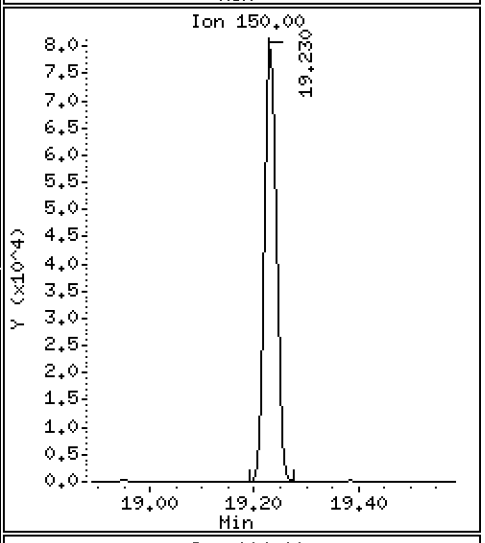
63 Di-n-butylphthalate

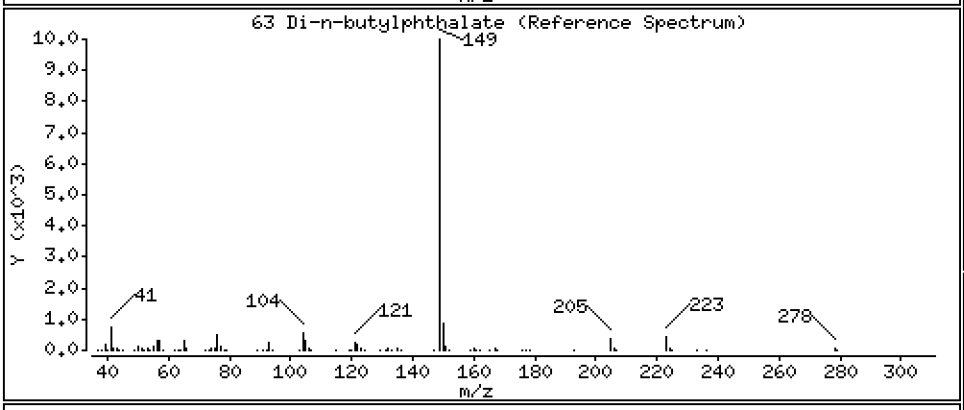
Concentration: 4.837 ug/mL

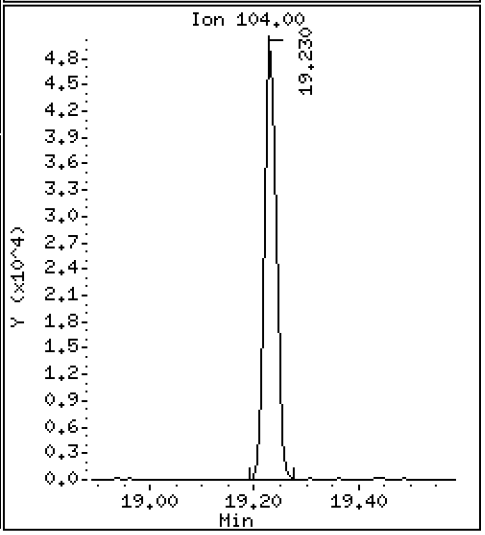


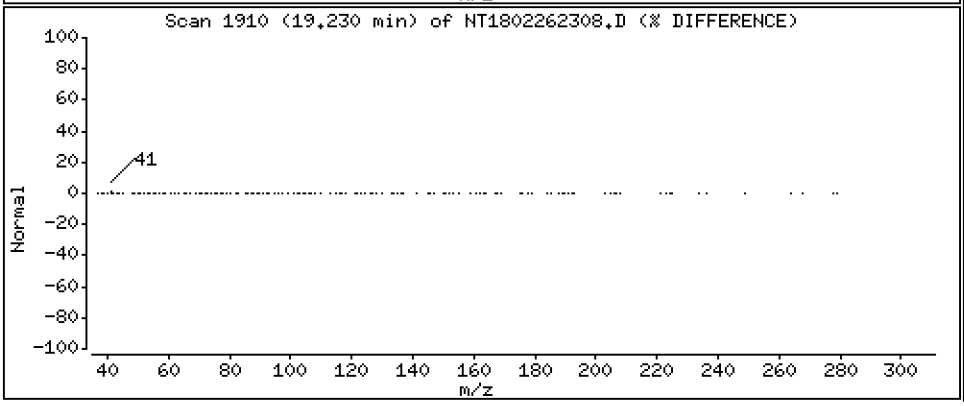












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

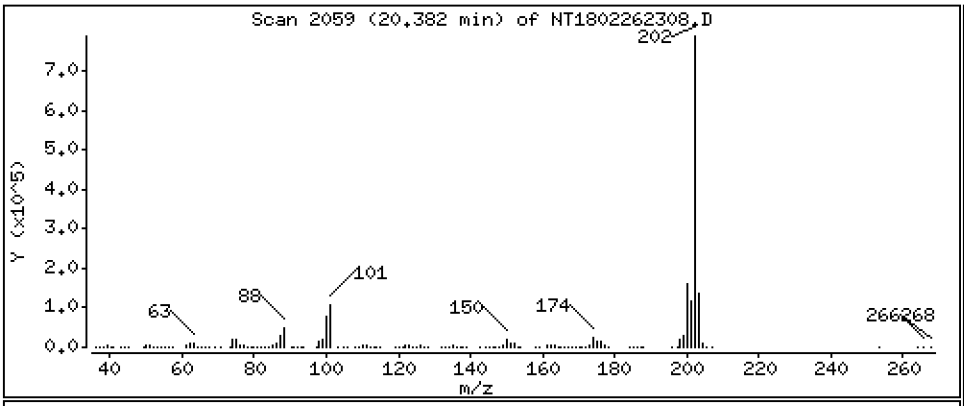
Operator: VTS

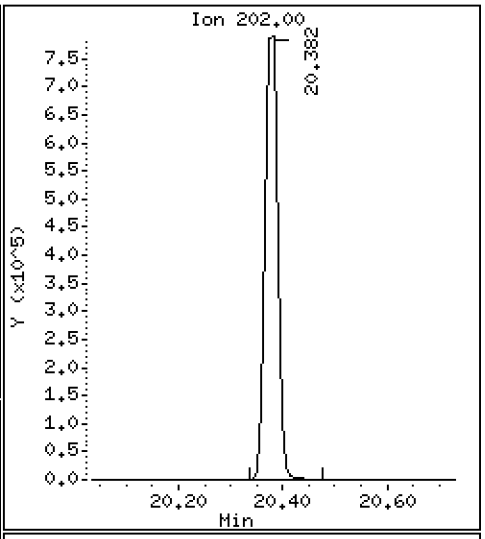
Column phase: ZB-5msi

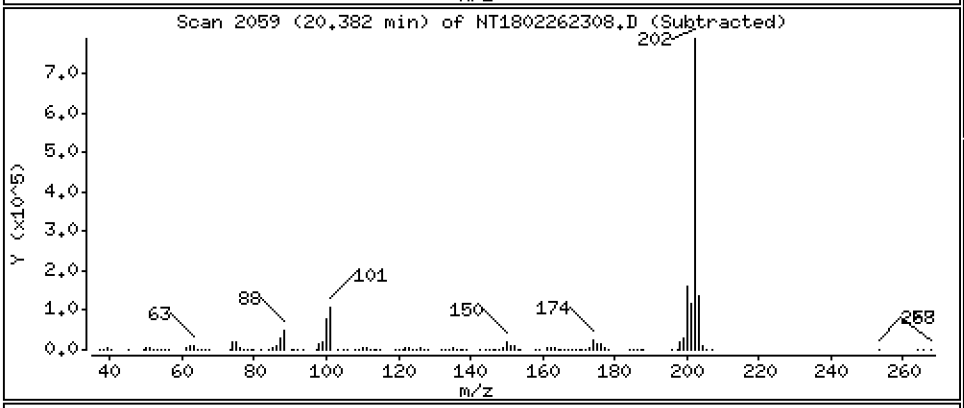
Column diameter: 0.25

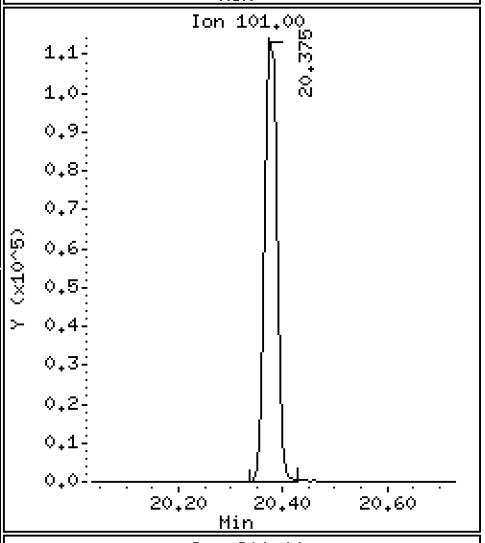
64 Fluoranthene

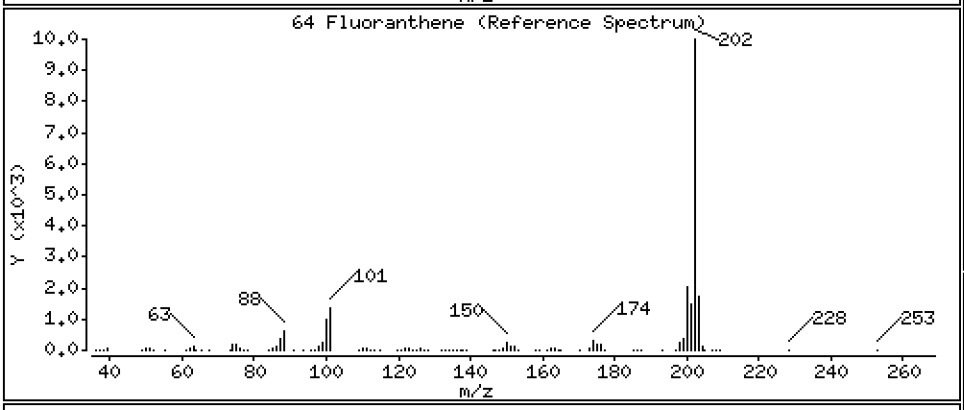
Concentration: 4.247 ug/mL

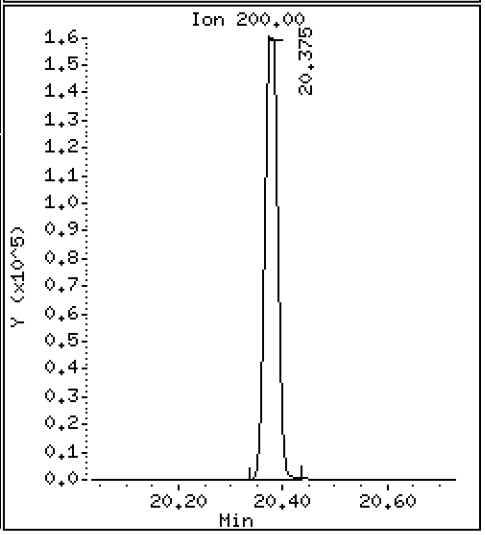


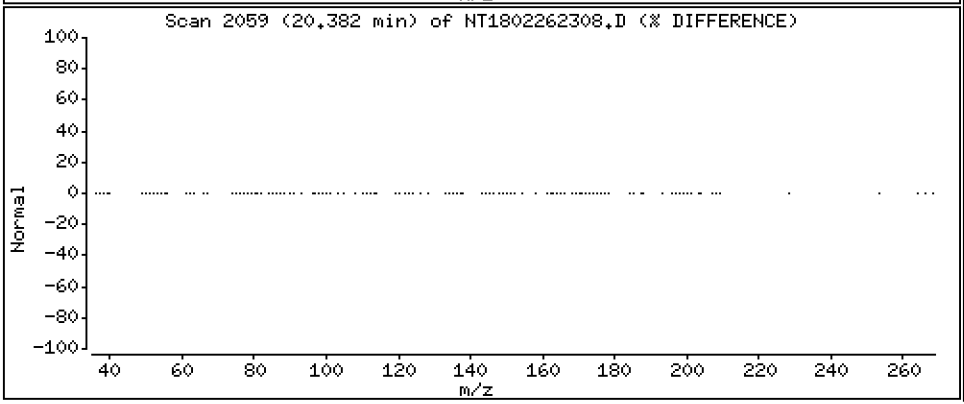












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

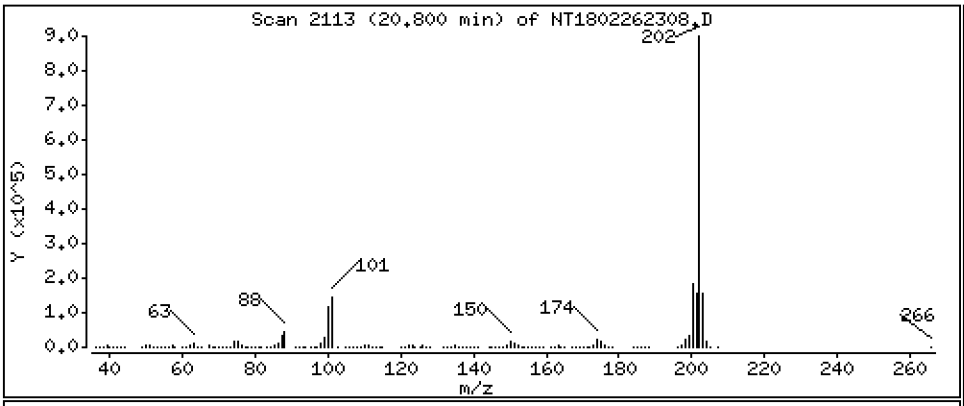
Operator: VTS

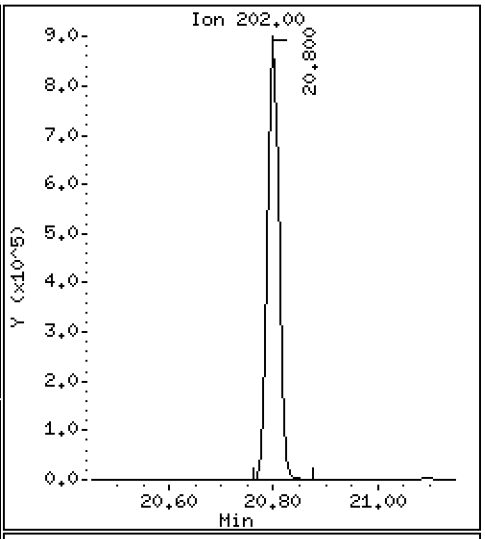
Column phase: ZB-5msi

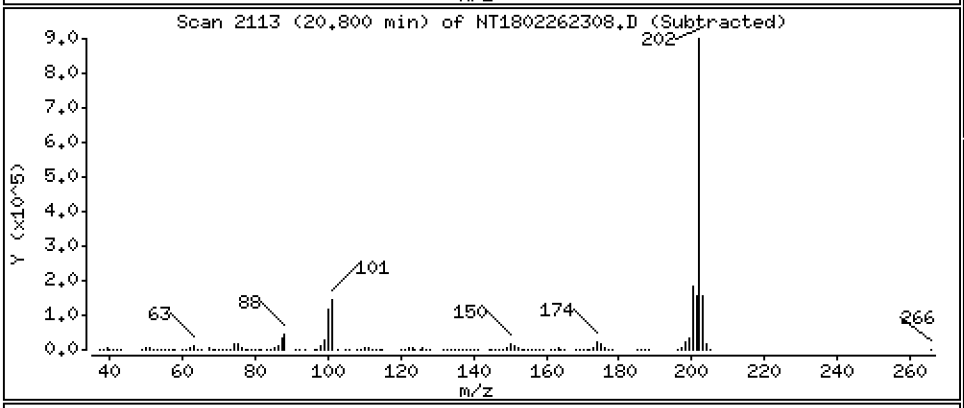
Column diameter: 0.25

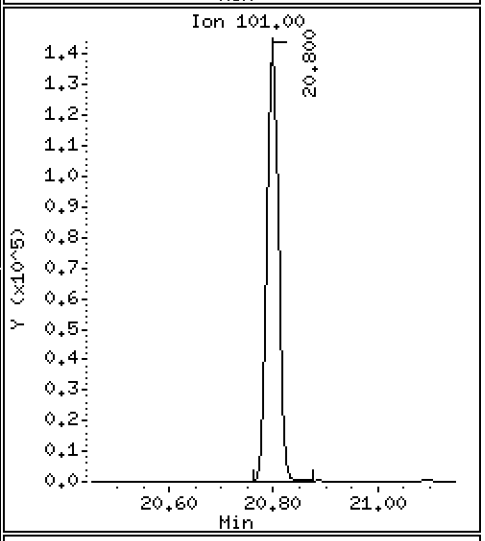
65 Pyrene

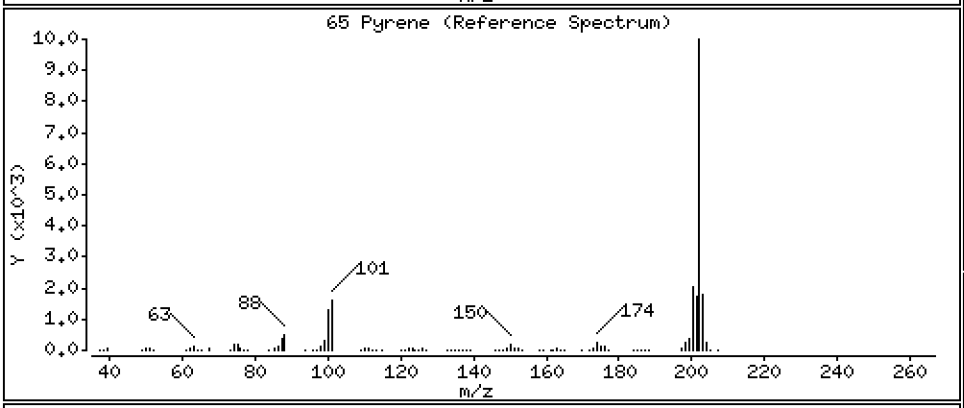
Concentration: 4.047 ug/mL

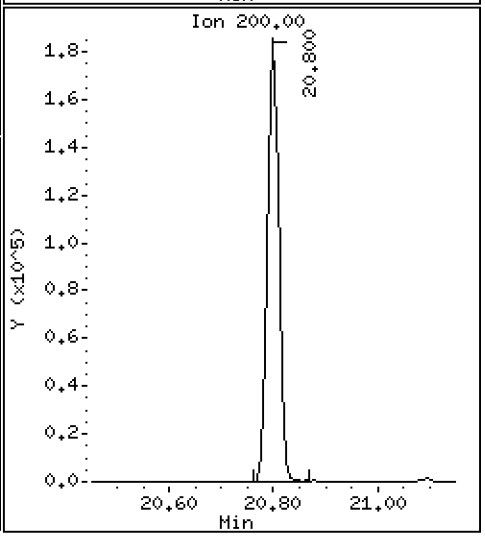


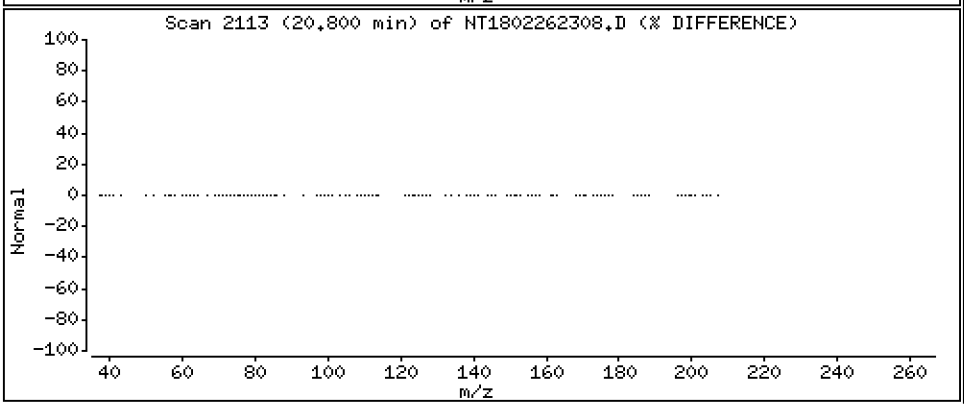












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

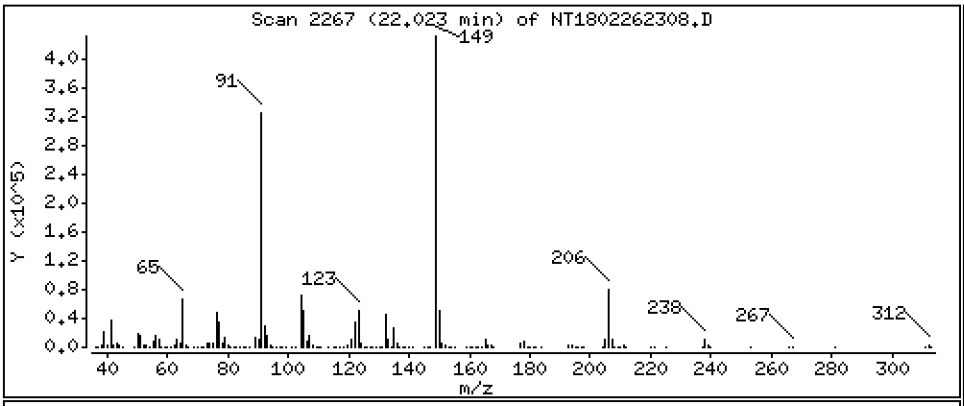
Operator: VTS

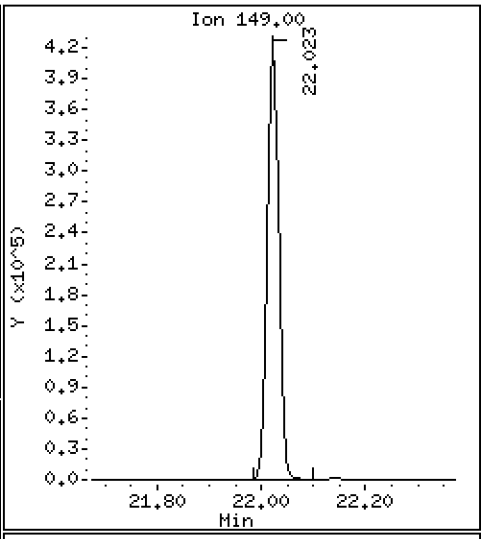
Column phase: ZB-5msi

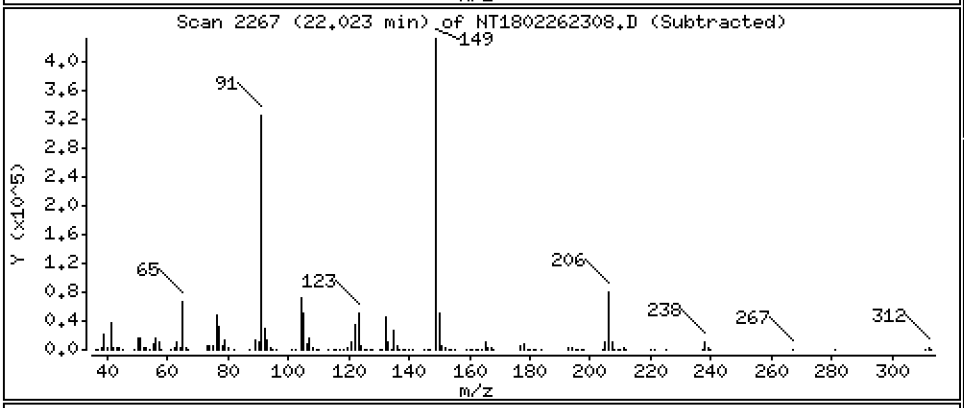
Column diameter: 0.25

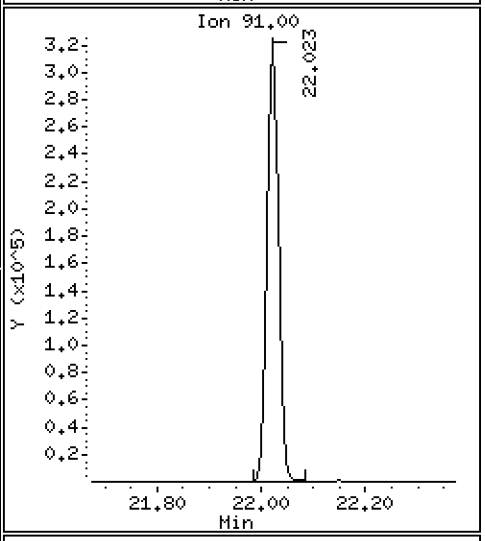
67 Butylbenzylphthalate

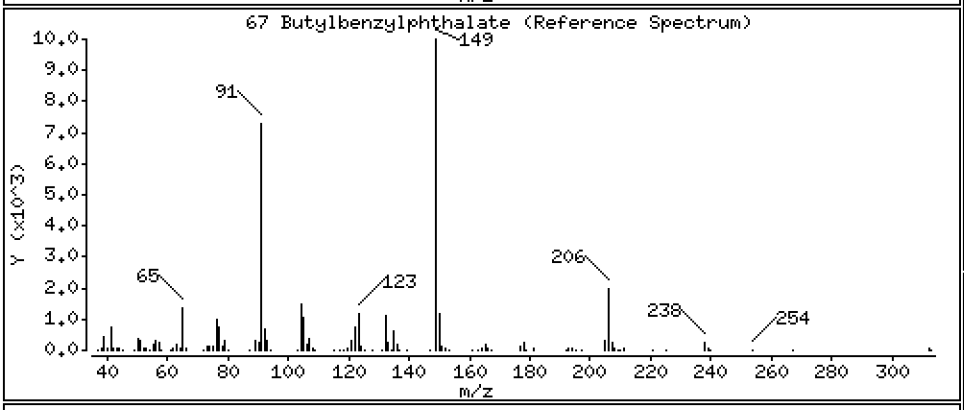
Concentration: 5.084 ug/mL

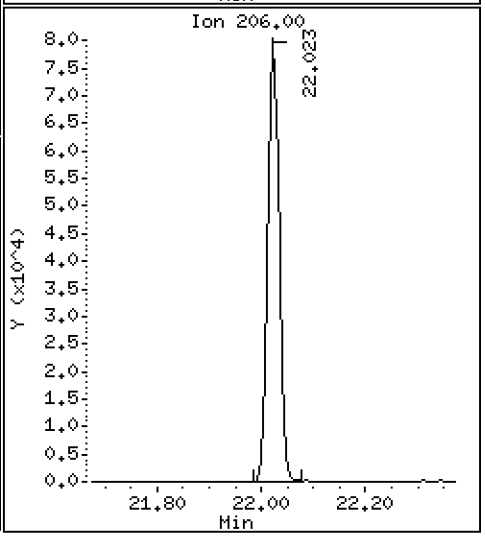


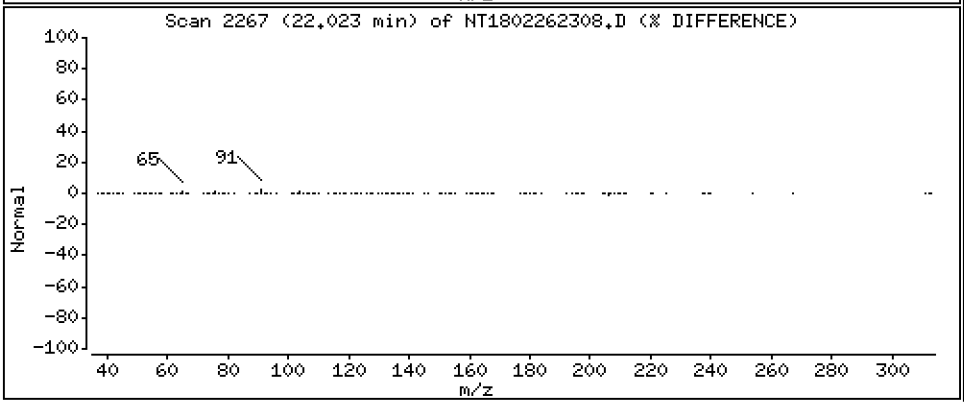












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

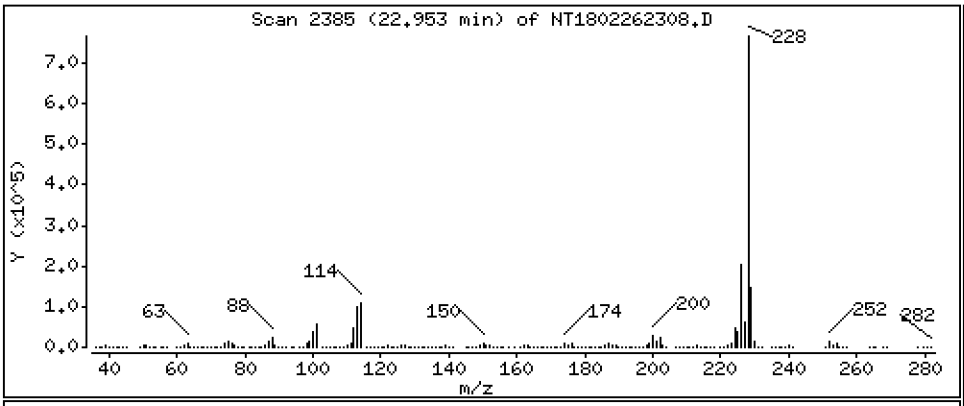
Operator: VTS

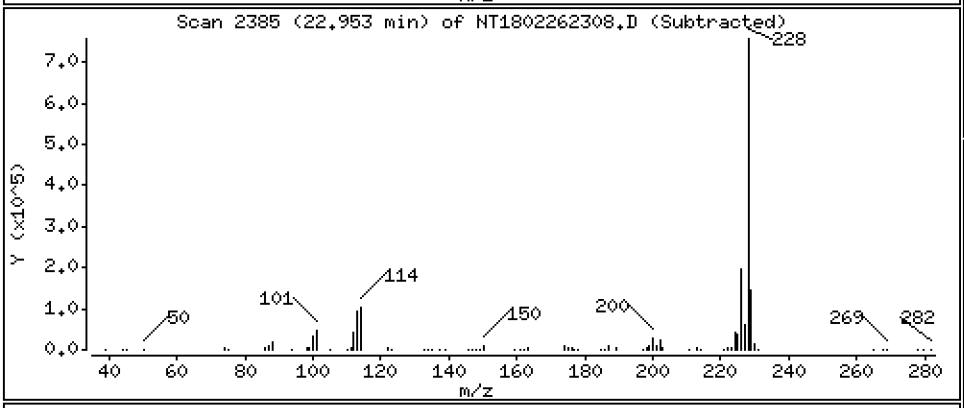
Column phase: ZB-5msi

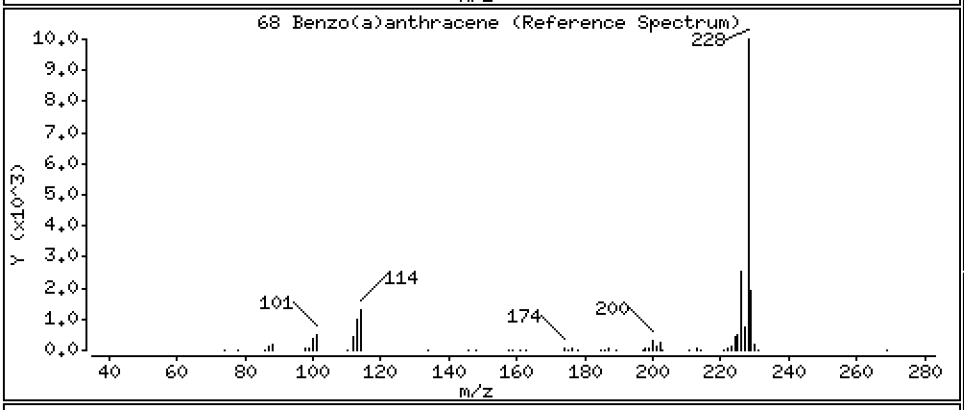
Column diameter: 0.25

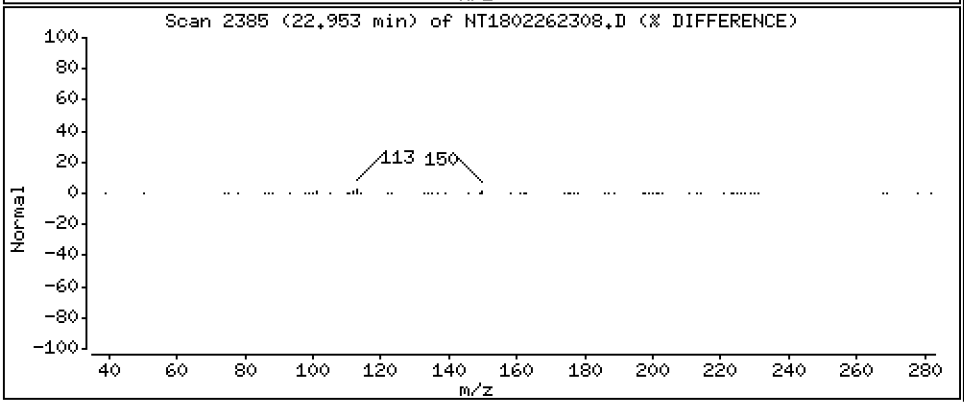
68 Benzo(a)anthracene

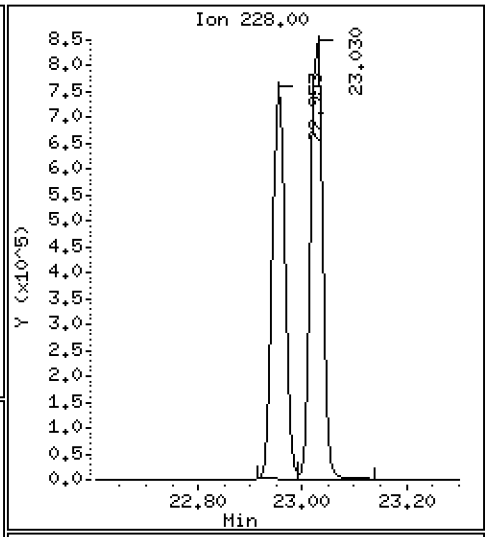
Concentration: 3.969 ug/mL

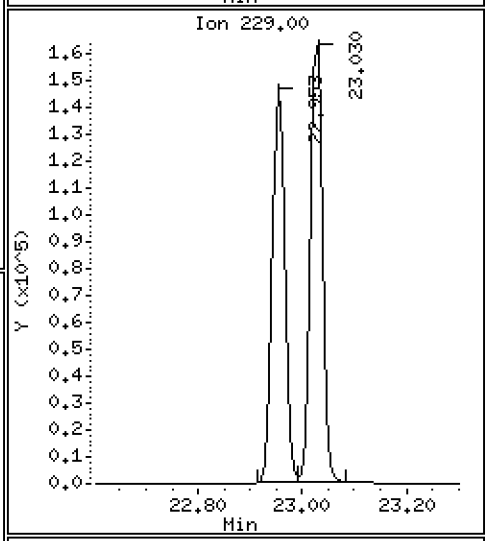


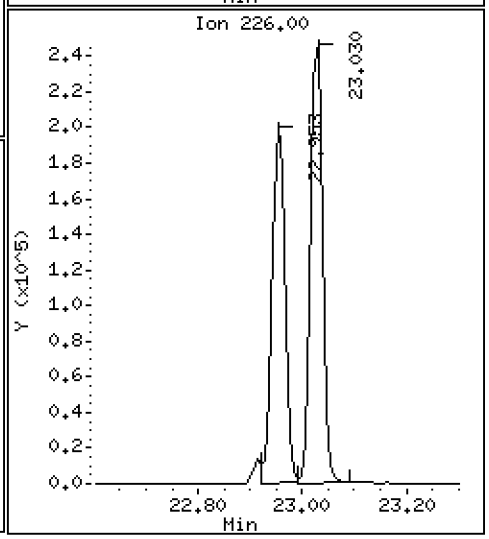












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

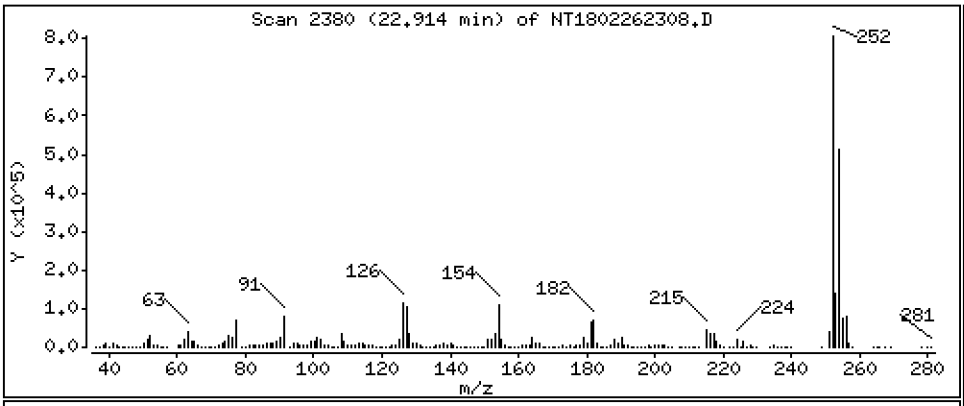
Operator: VTS

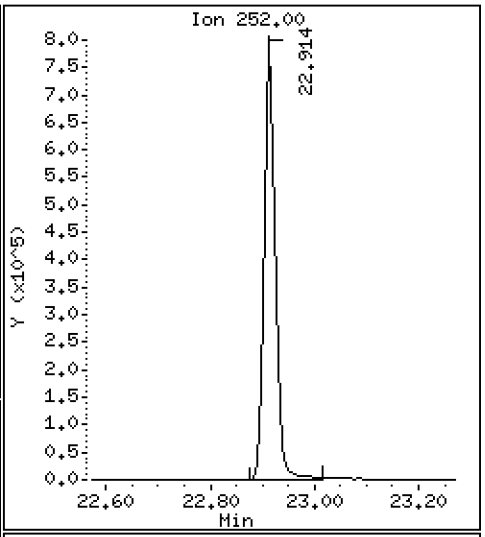
Column phase: ZB-5msi

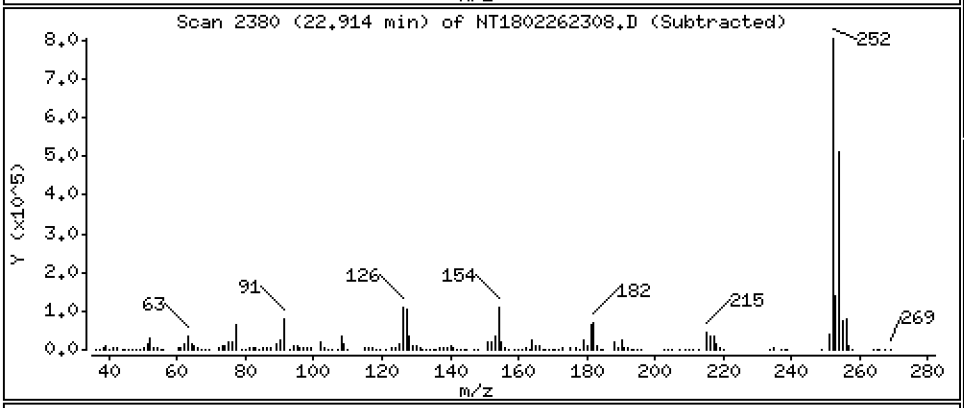
Column diameter: 0.25

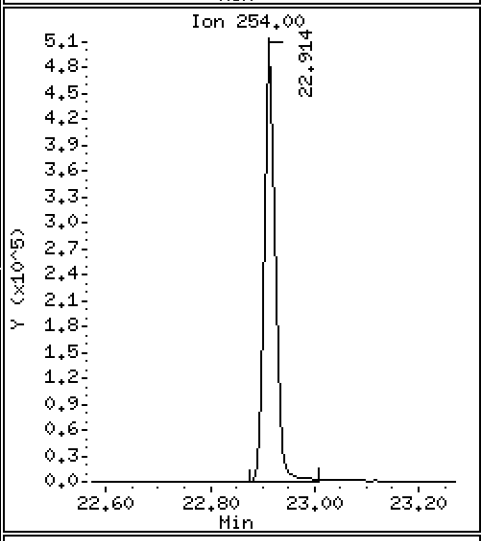
70 3,3'-Dichlorobenzidine

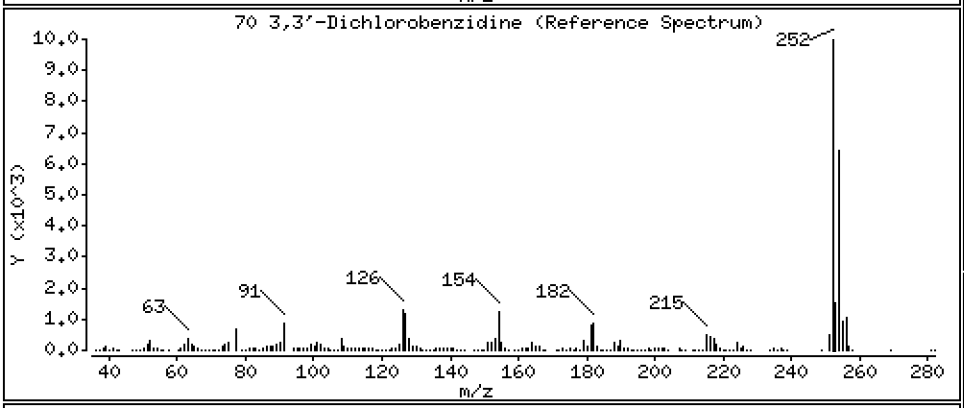
Concentration: 10.09 ug/mL

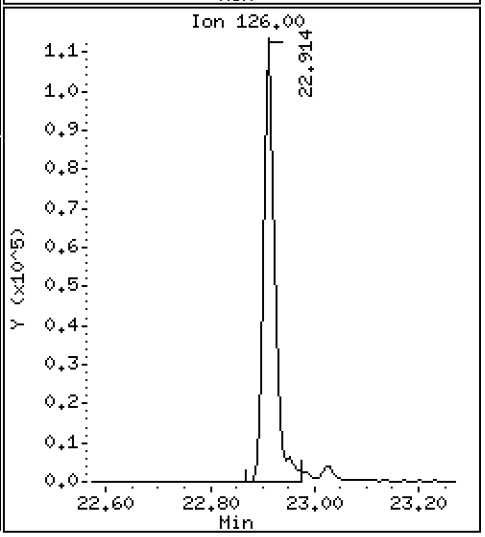


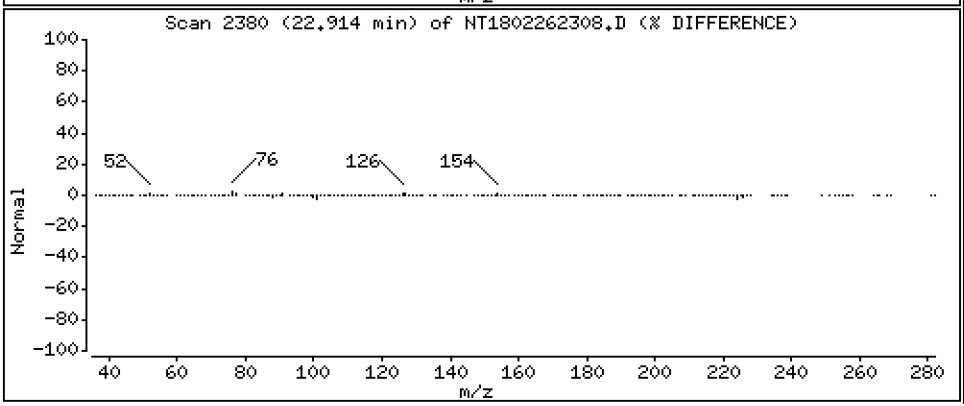












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

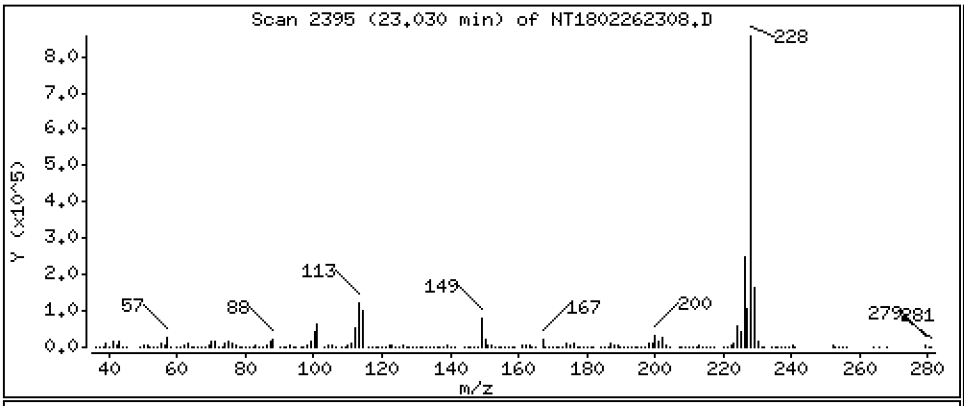
Operator: VTS

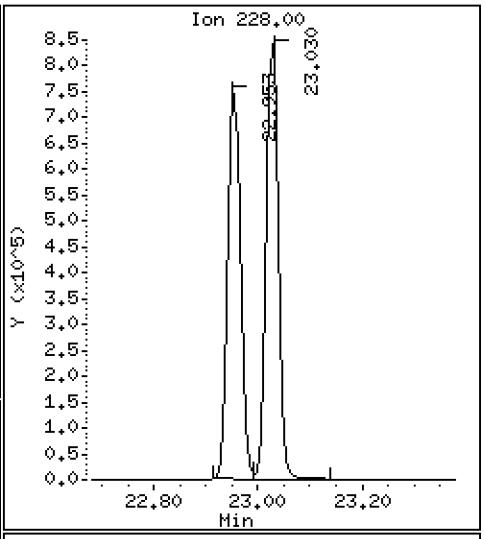
Column phase: ZB-5msi

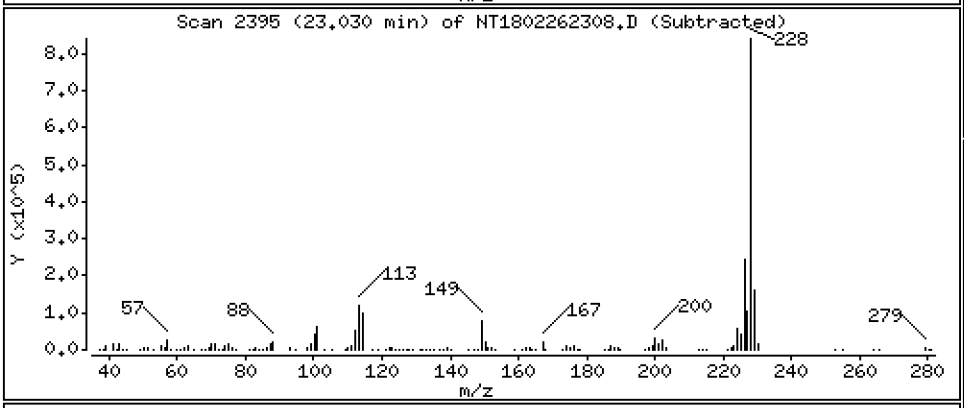
Column diameter: 0.25

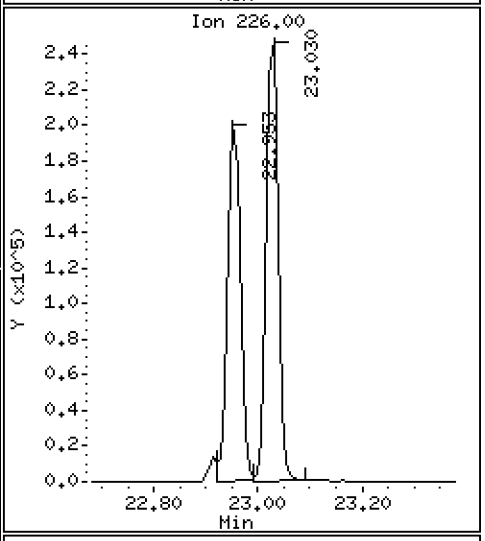
71 Chrysene

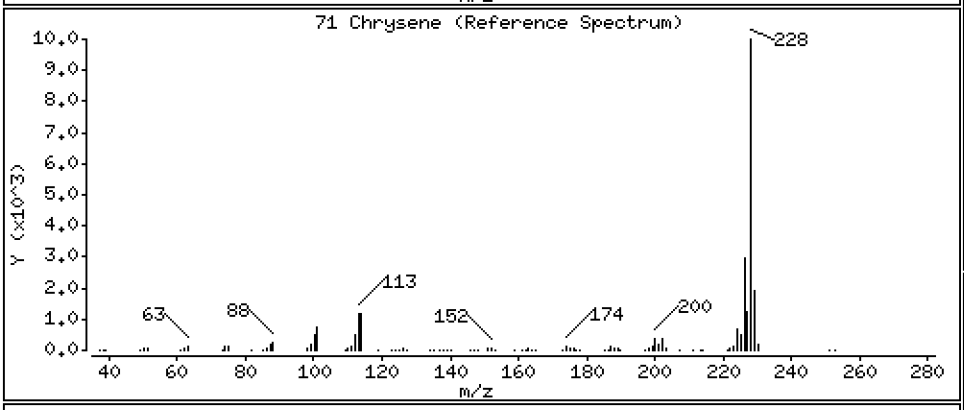
Concentration: 4.049 ug/mL

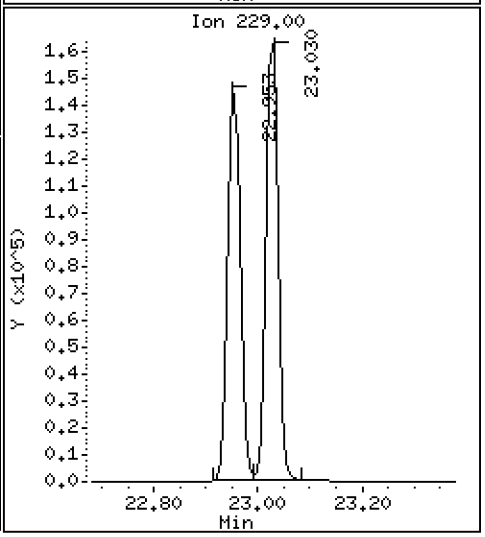


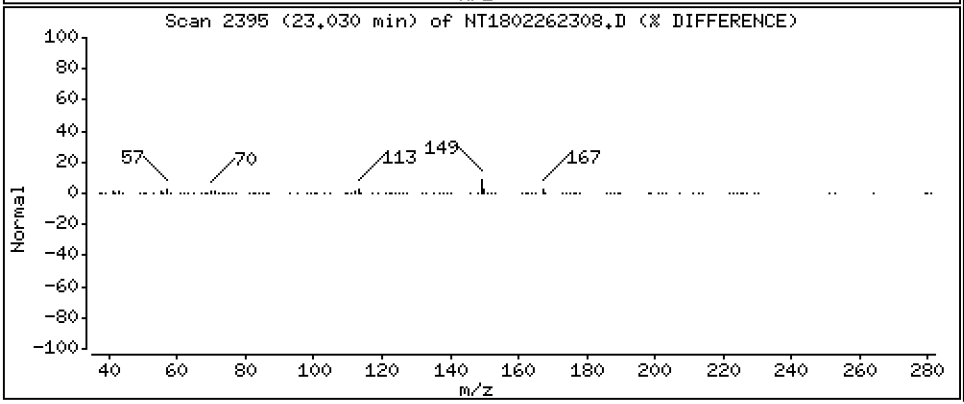












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

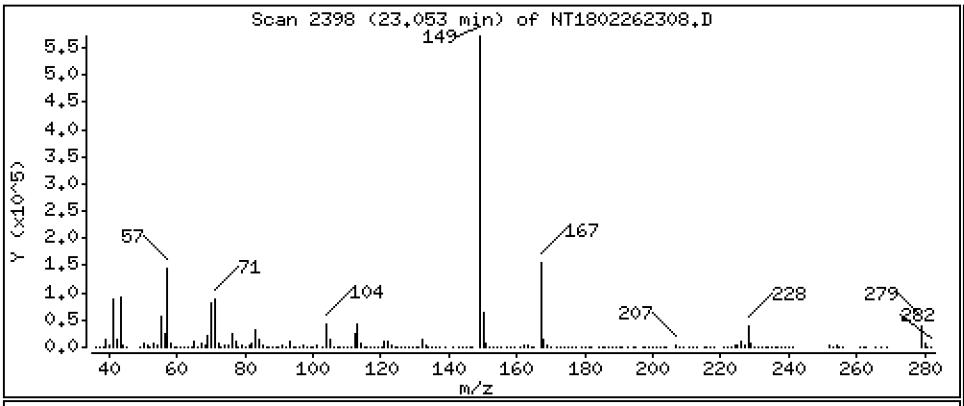
Operator: VTS

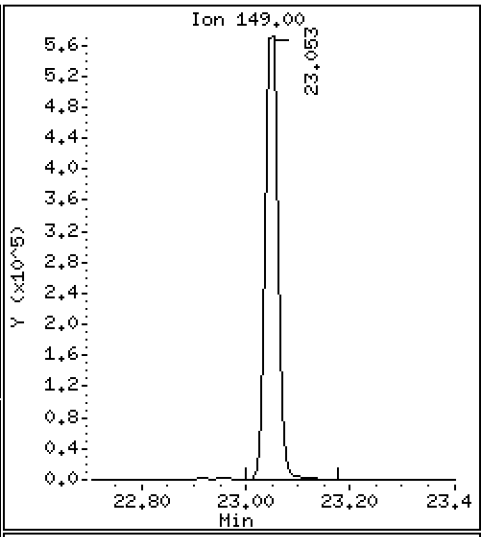
Column phase: ZB-5msi

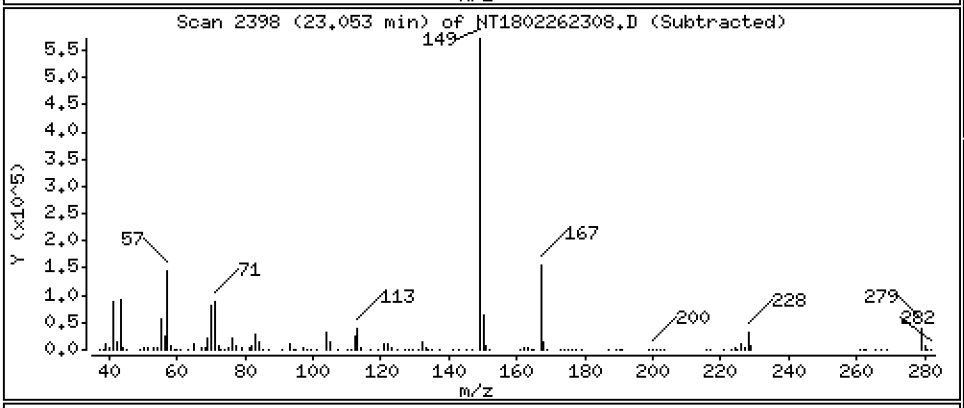
Column diameter: 0.25

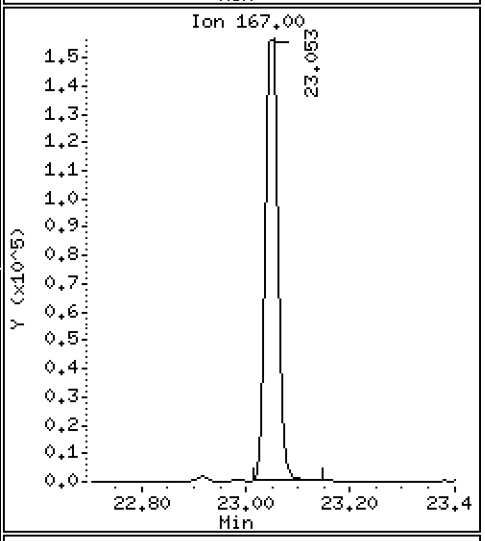
72 bis(2-Ethylhexyl)phthalate

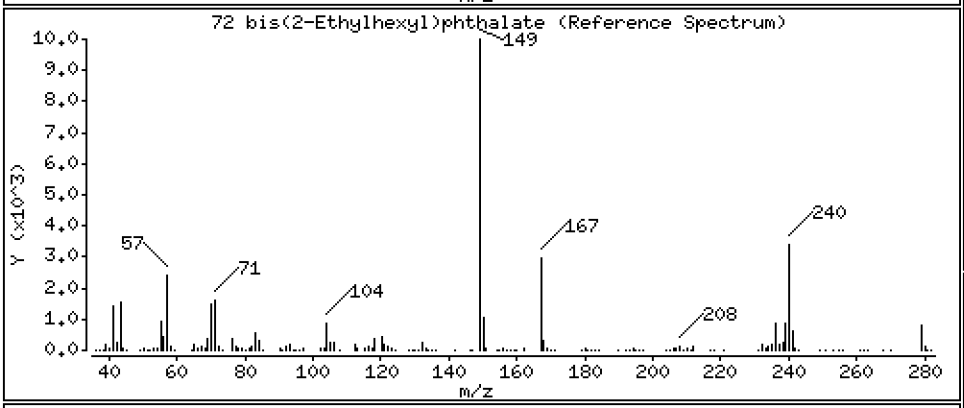
Concentration: 4.759 ug/mL

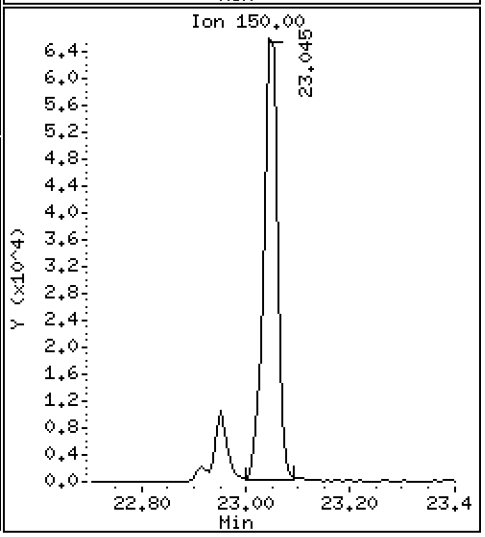


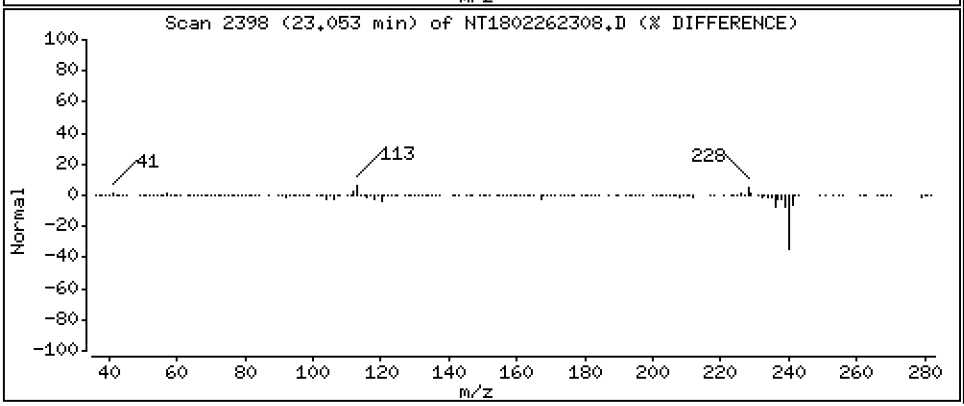












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

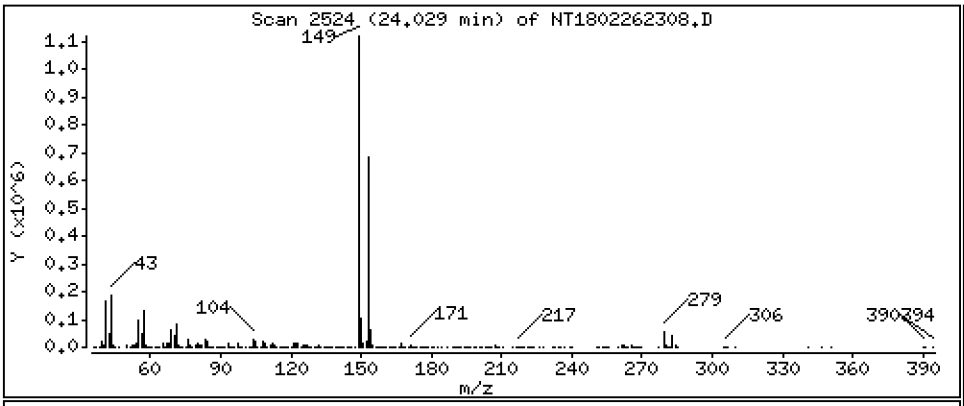
Operator: VTS

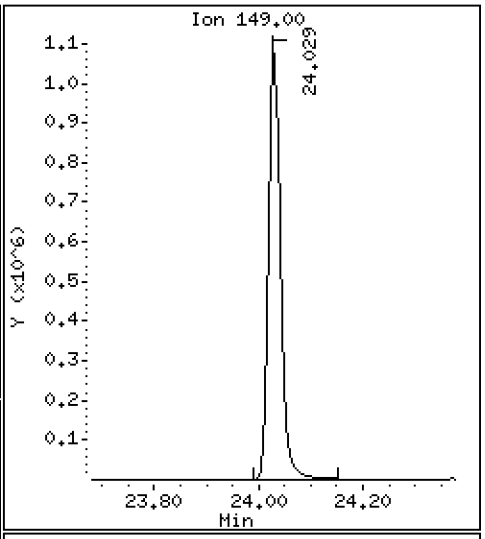
Column phase: ZB-5msi

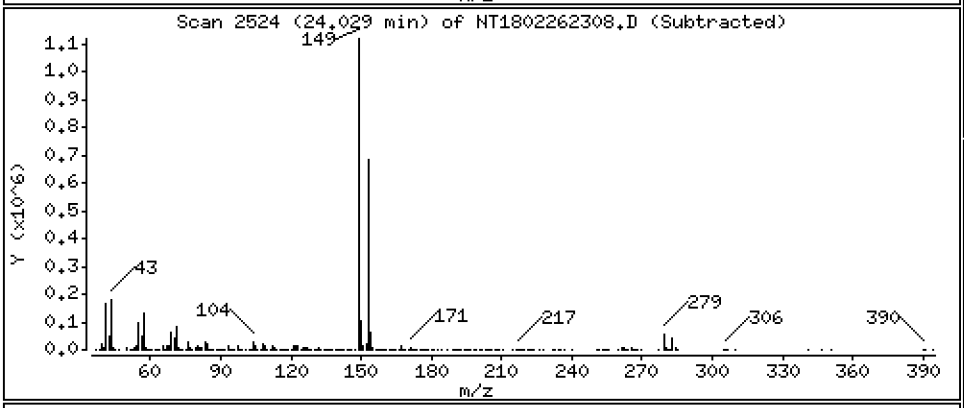
Column diameter: 0.25

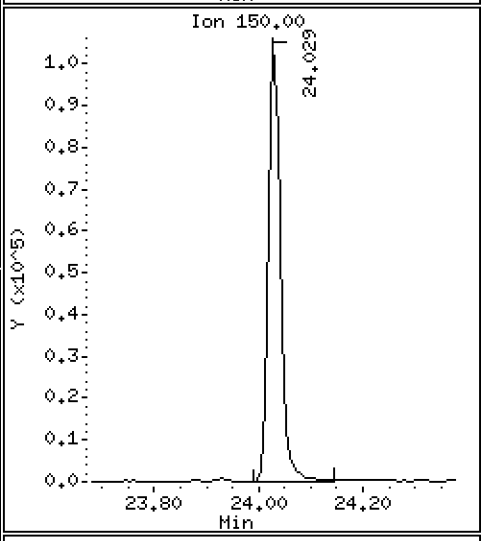
73 Di-n-octylphthalate

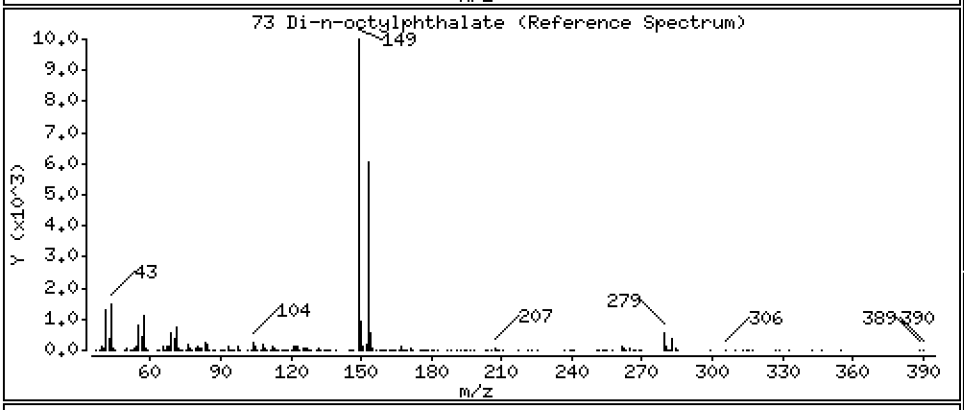
Concentration: 4.379 ug/mL

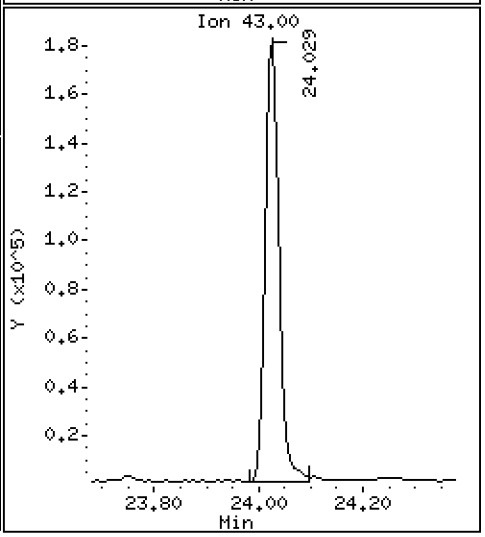


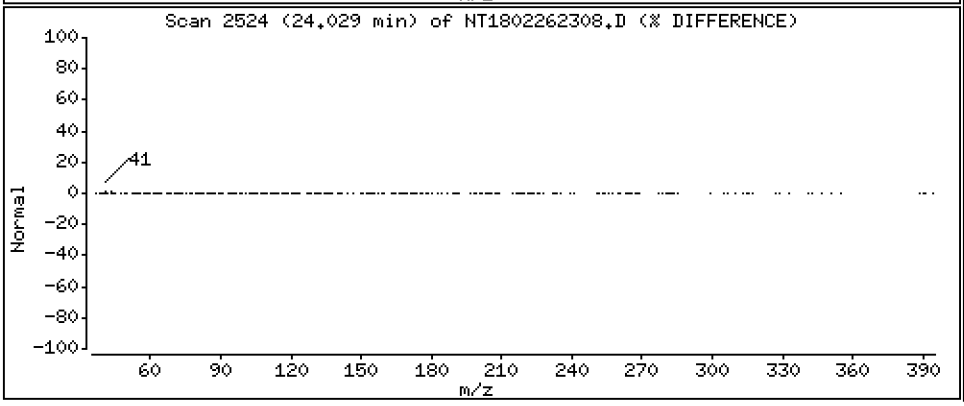












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

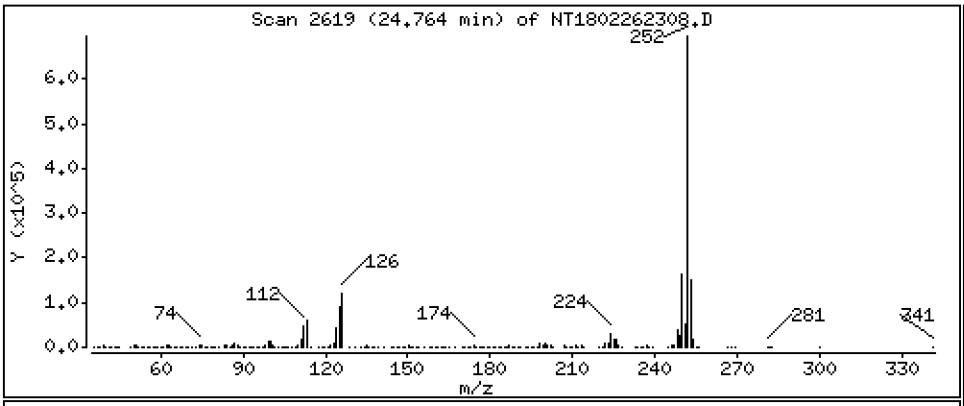
Operator: VTS

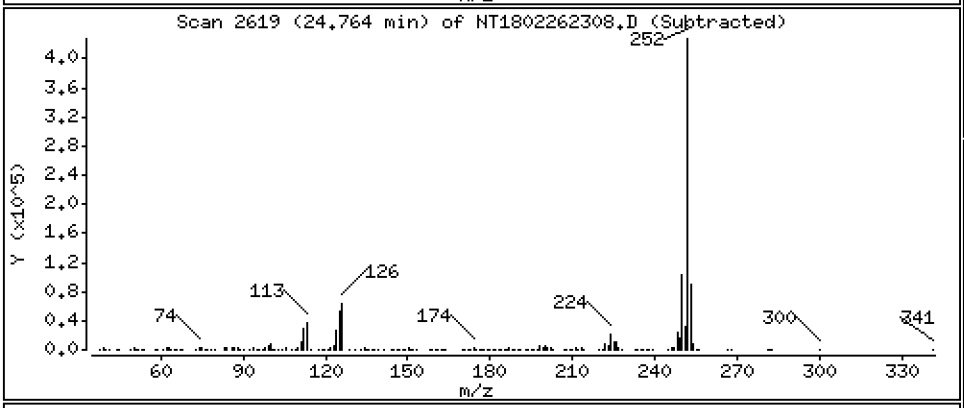
Column phase: ZB-5msi

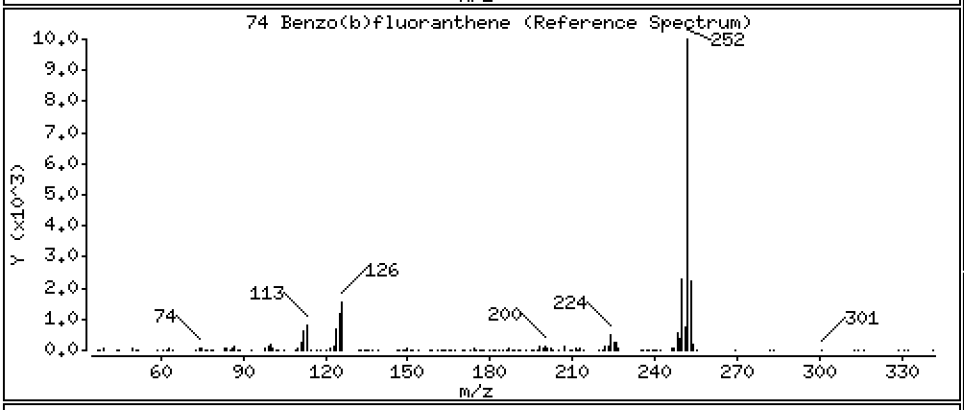
Column diameter: 0.25

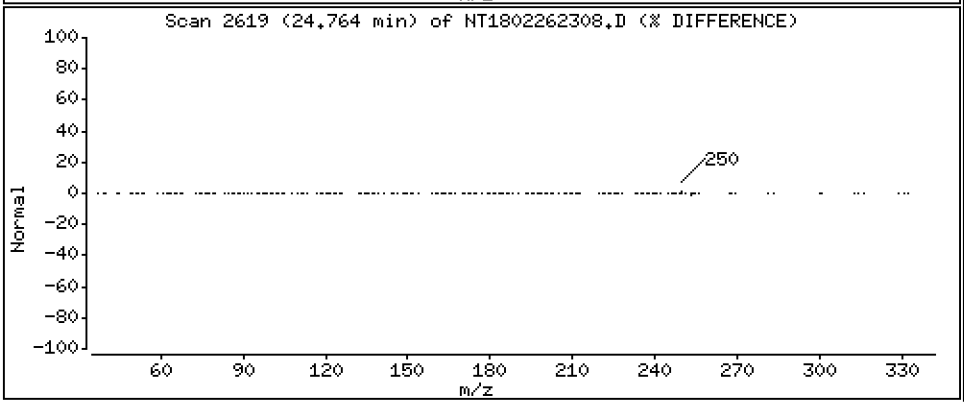
74 Benzo(b)fluoranthene

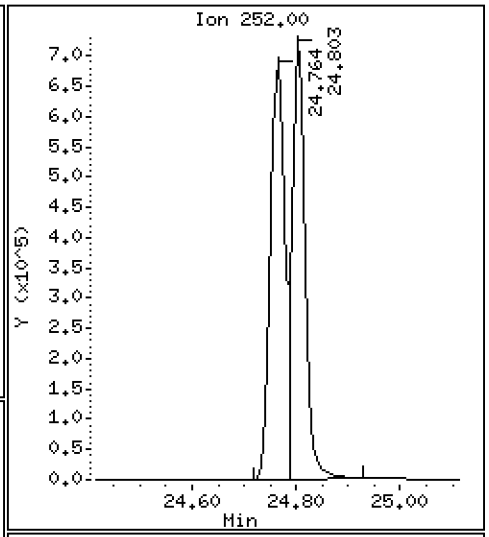
Concentration: 4.600 ug/mL

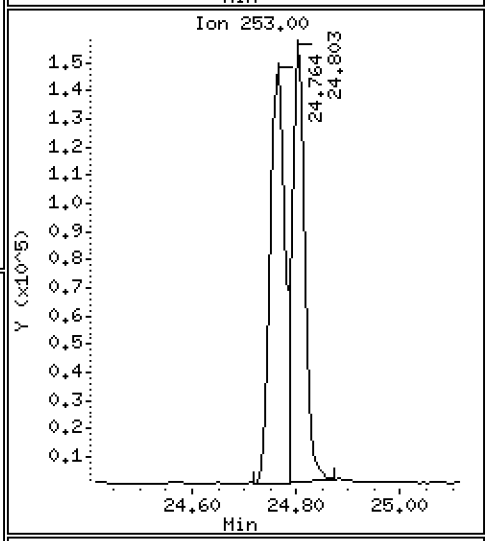


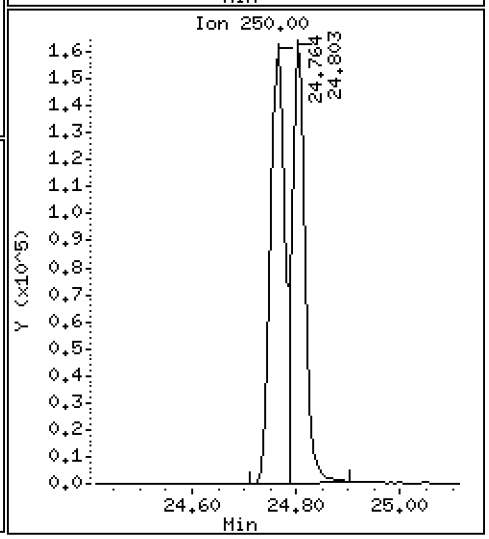












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

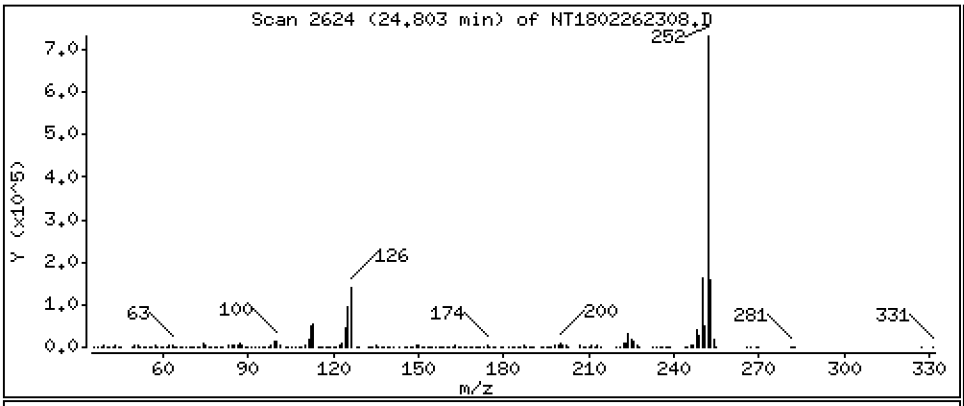
Operator: VTS

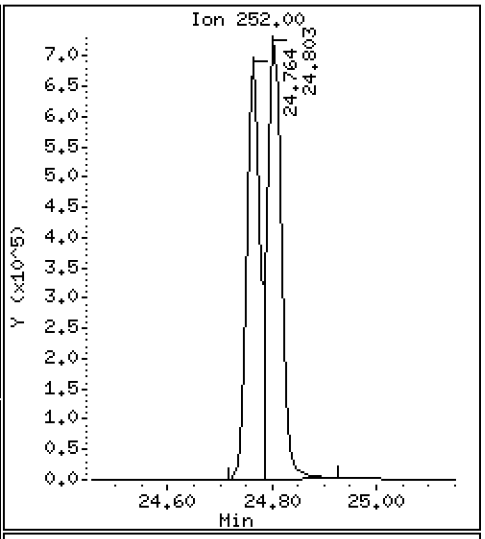
Column phase: ZB-5msi

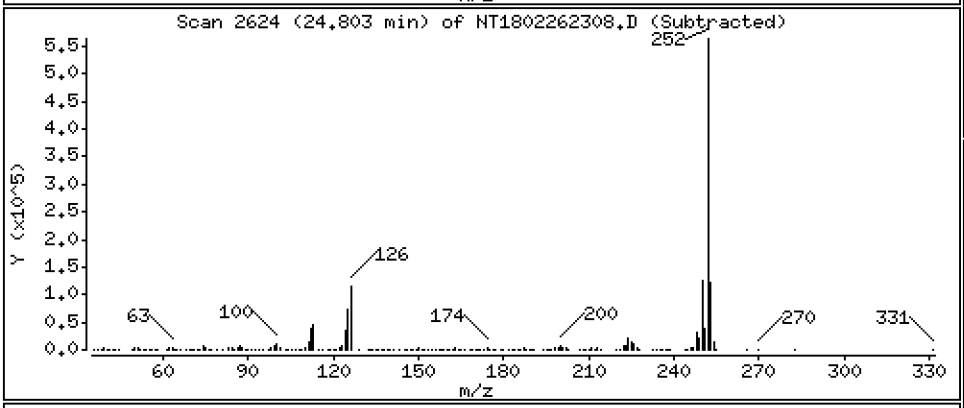
Column diameter: 0.25

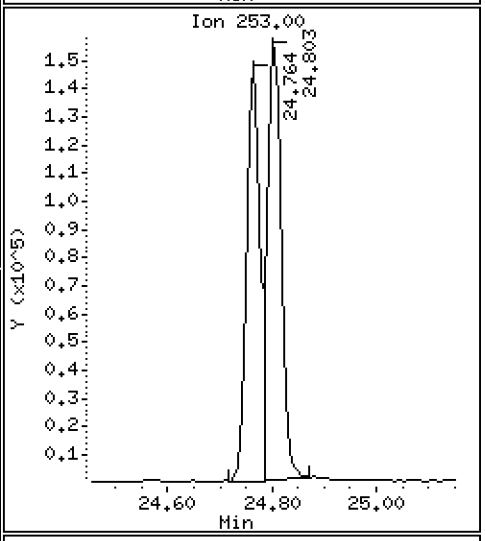
75 Benzo(k)fluoranthene

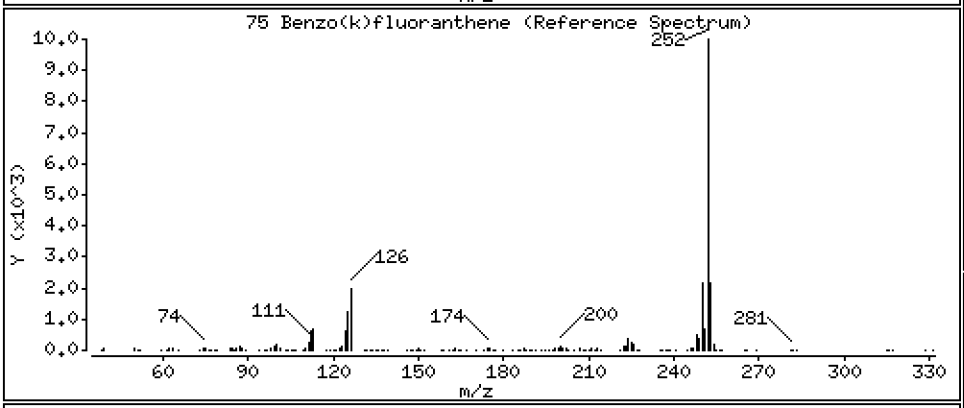
Concentration: 3.956 ug/mL

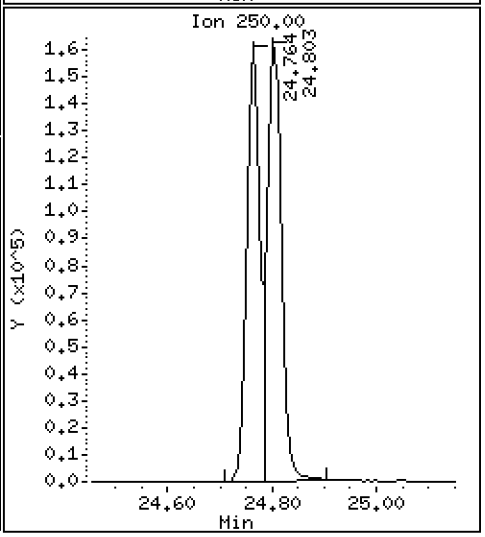


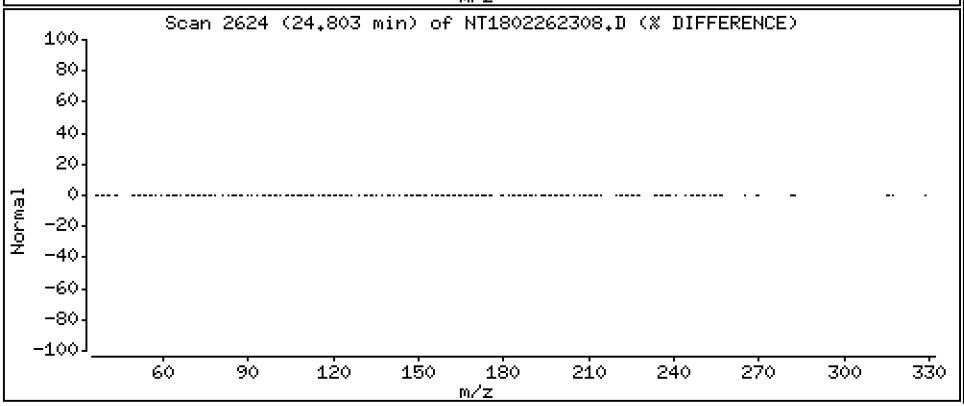












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

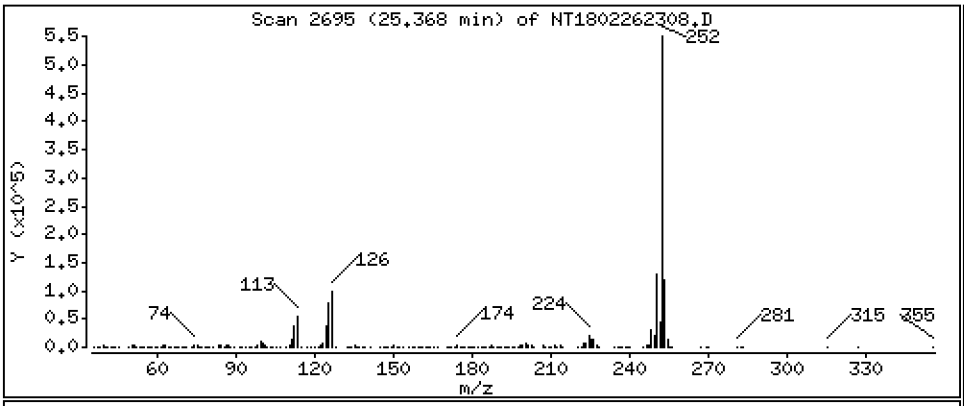
Operator: VTS

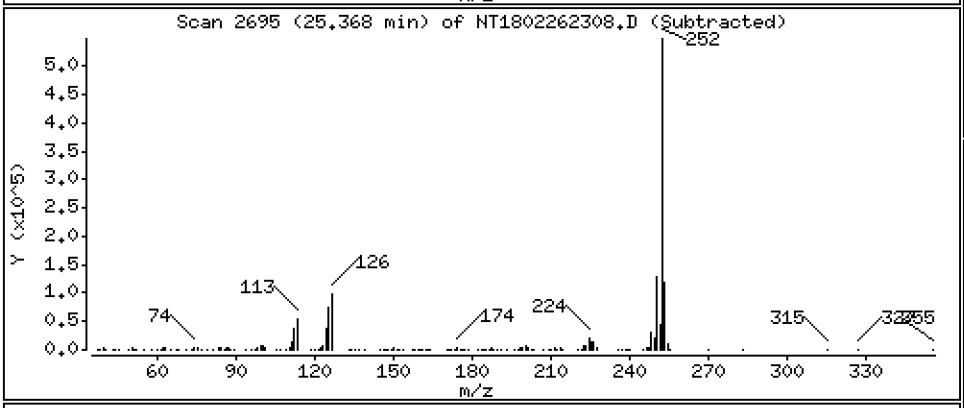
Column phase: ZB-5msi

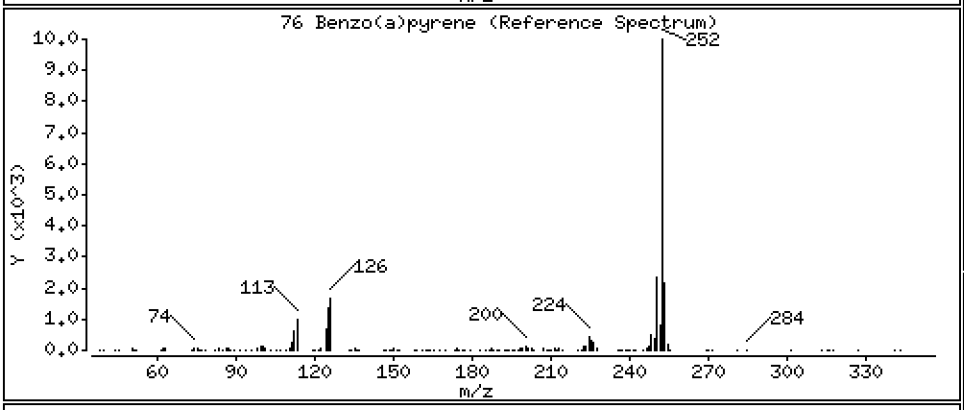
Column diameter: 0.25

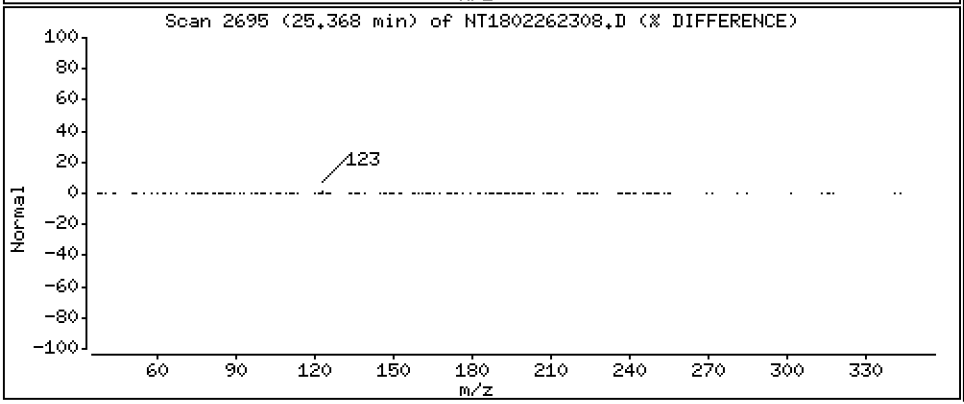
76 Benzo(a)pyrene

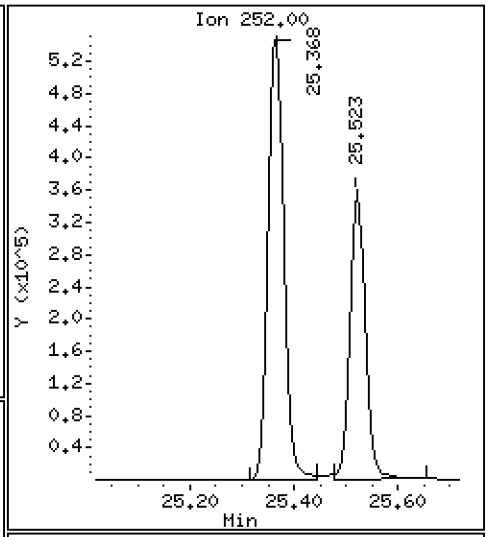
Concentration: 4.108 ug/mL

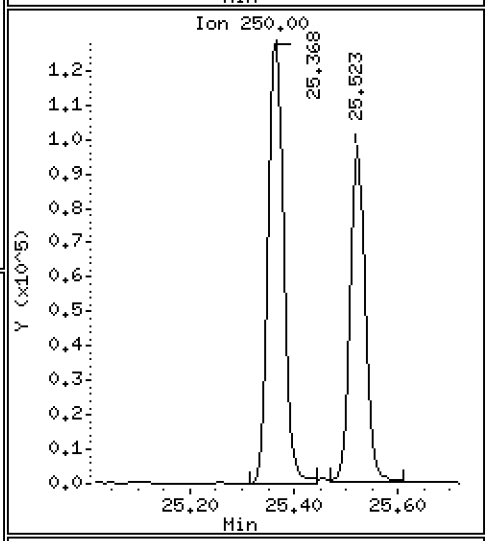


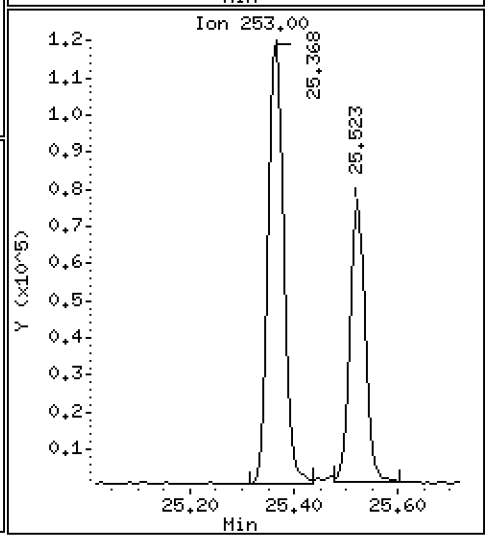












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

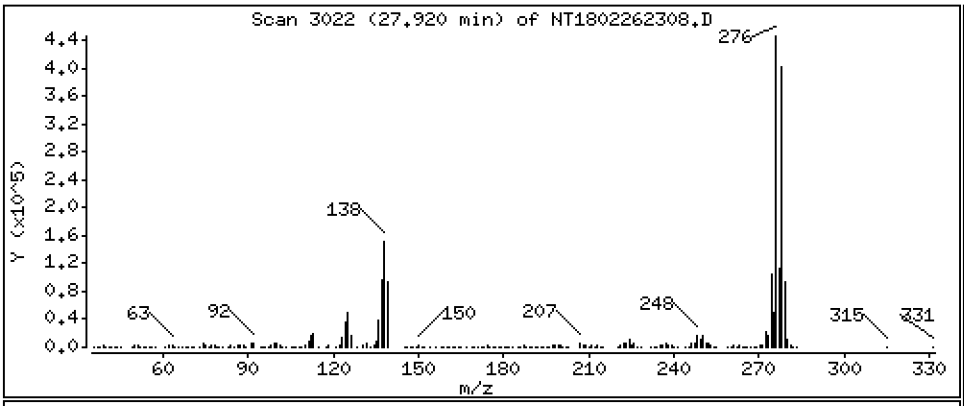
Operator: VTS

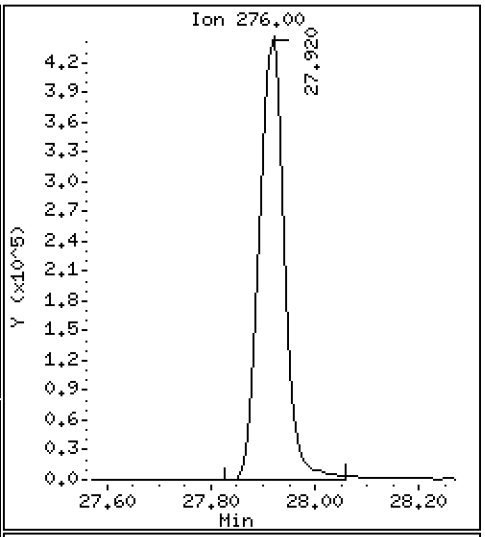
Column phase: ZB-5msi

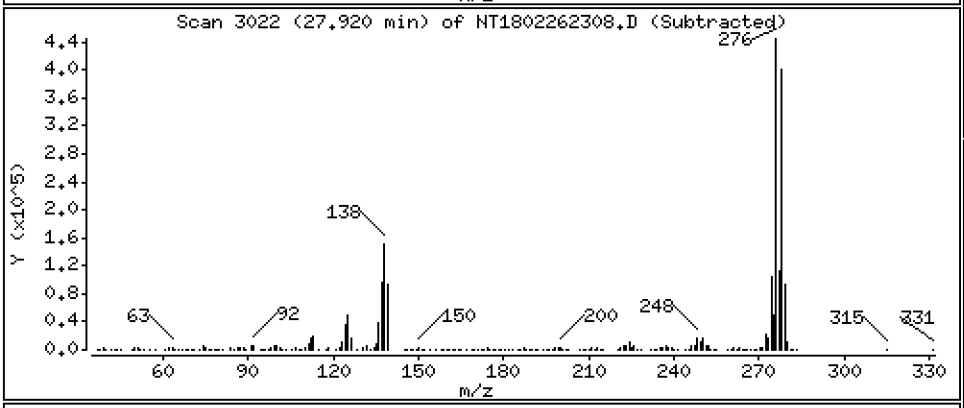
Column diameter: 0.25

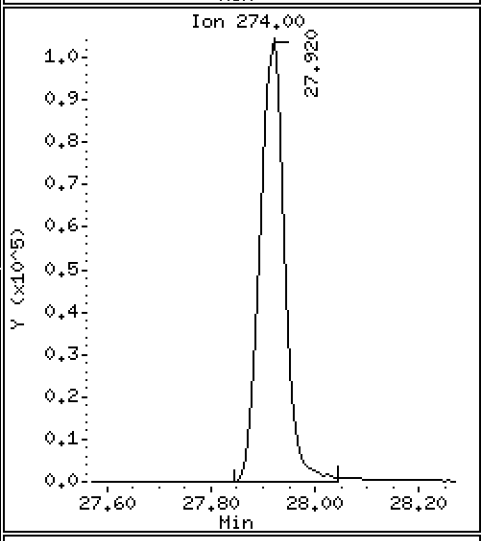
78 Indeno(1,2,3-cd)pyrene

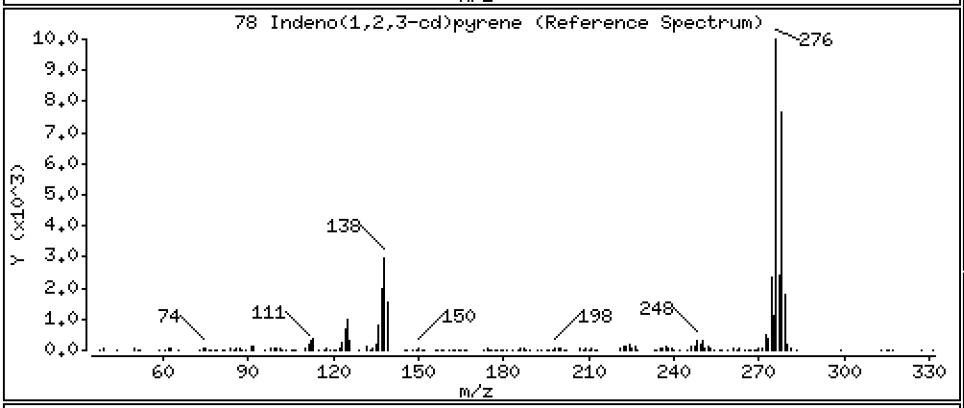
Concentration: 4.317 ug/mL

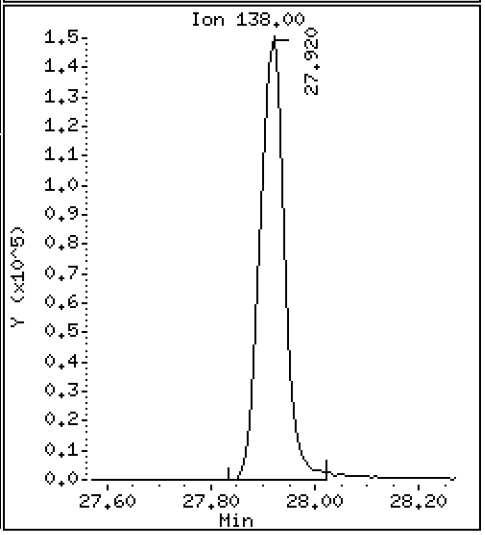


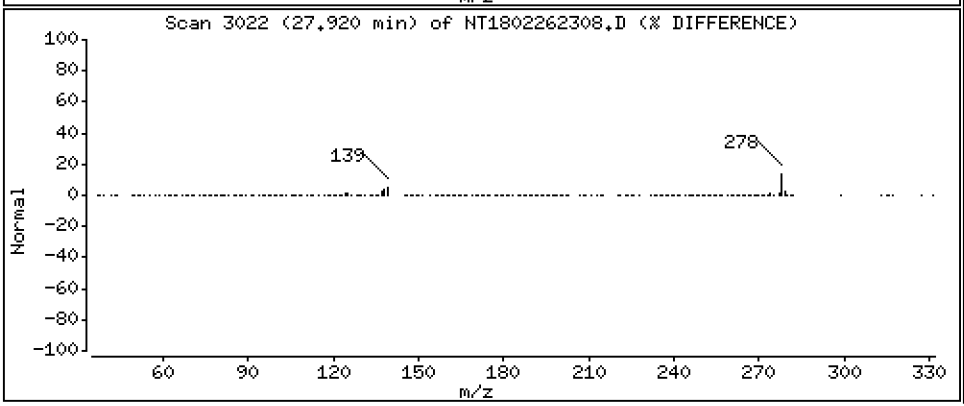












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

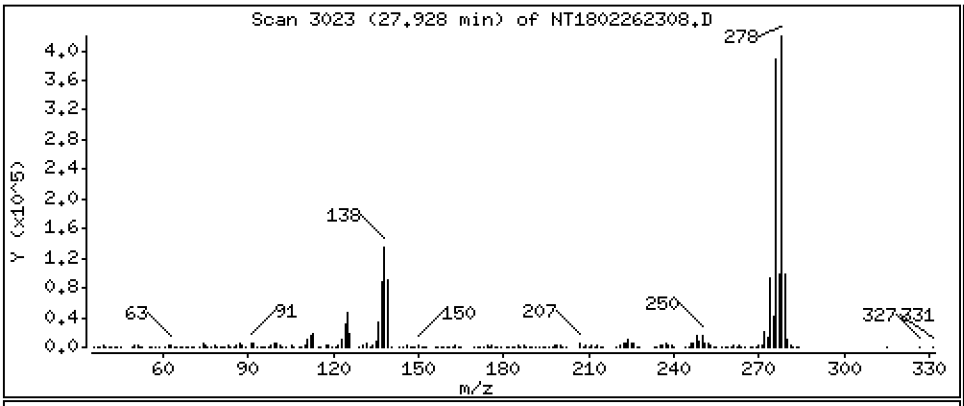
Operator: VTS

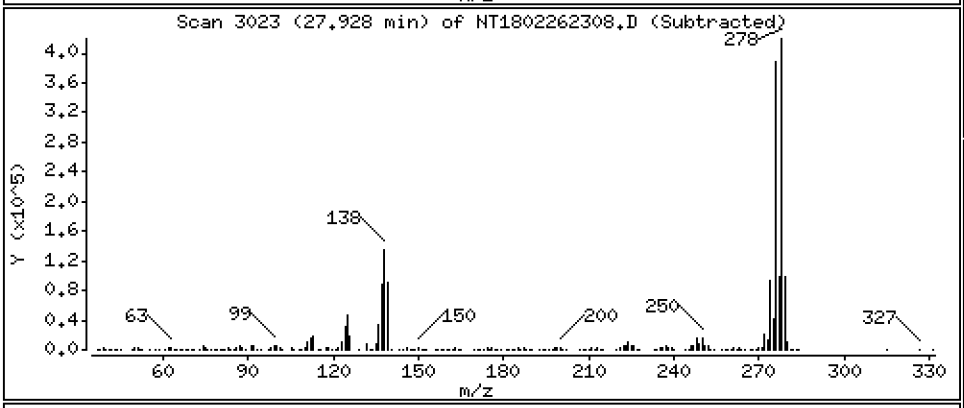
Column phase: ZB-5msi

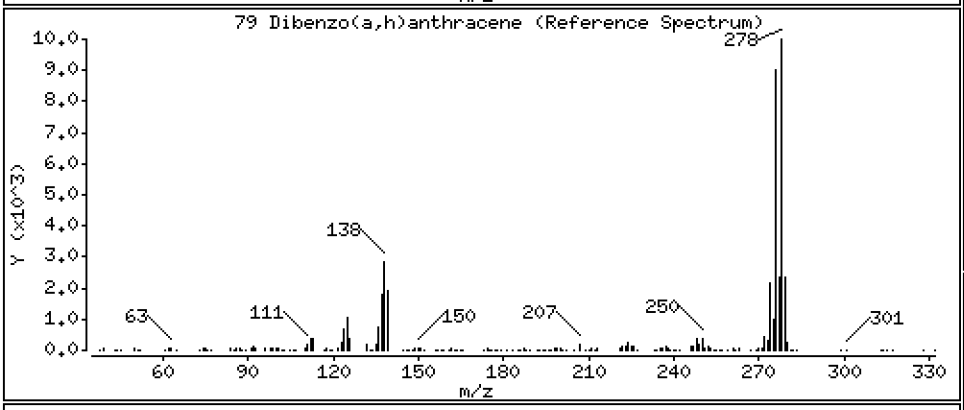
Column diameter: 0.25

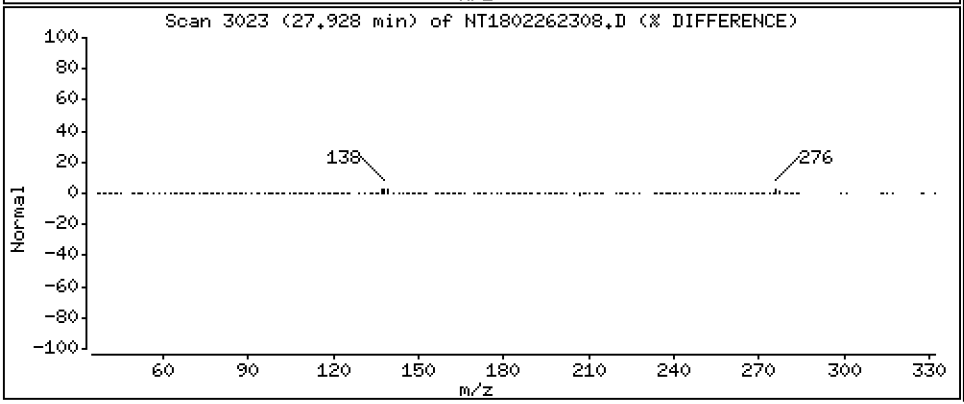
79 Dibenzo(a,h)anthracene

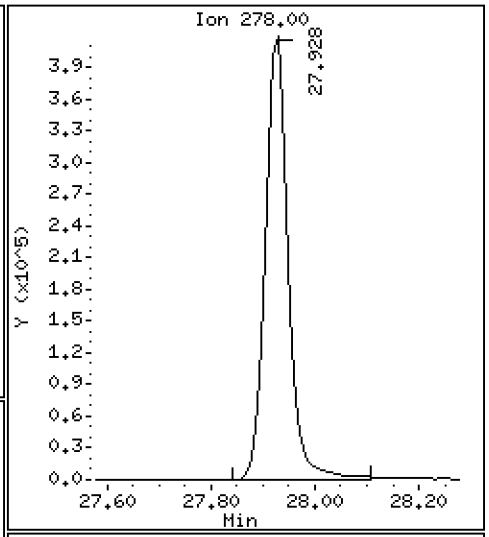
Concentration: 4.378 ug/mL

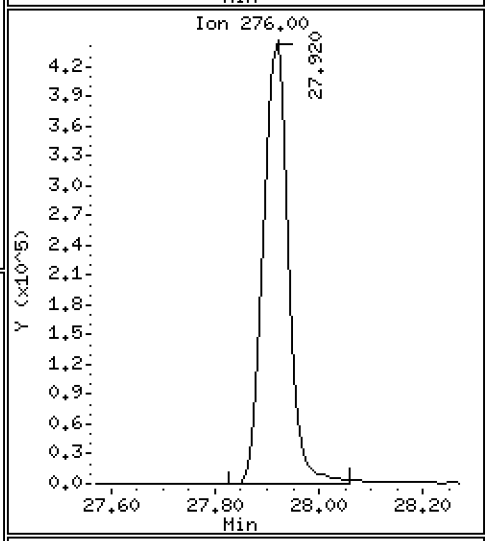


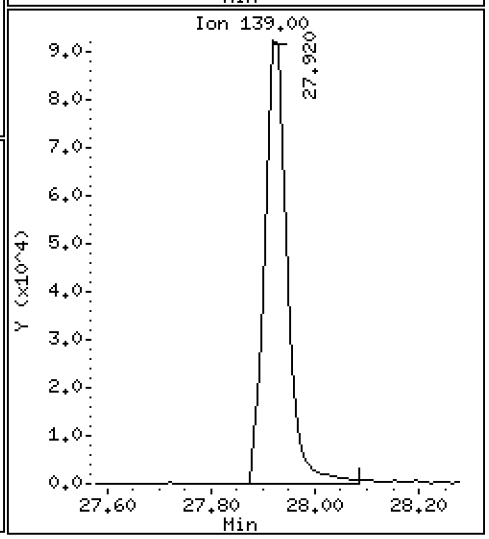












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

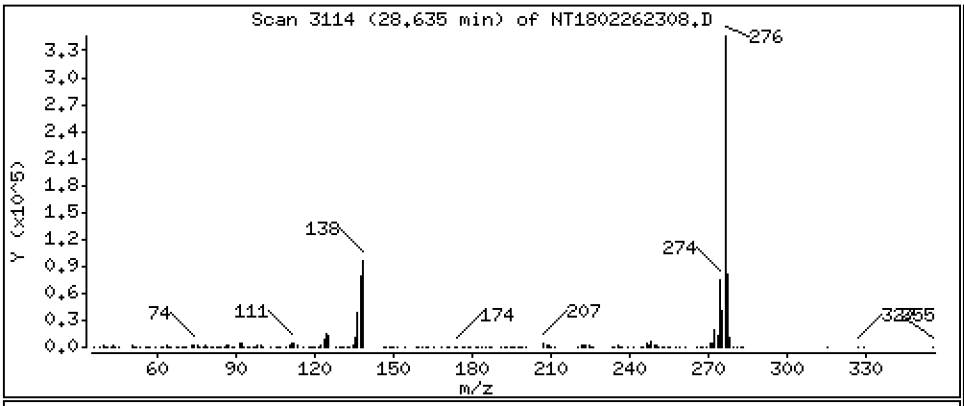
Operator: VTS

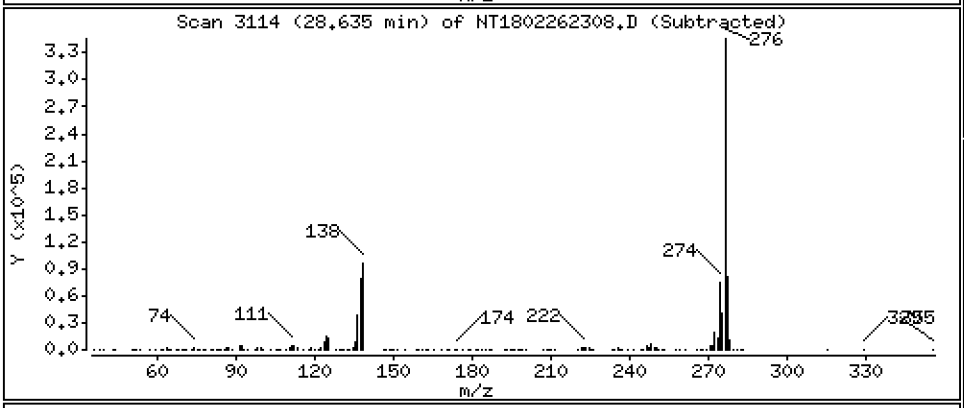
Column phase: ZB-5msi

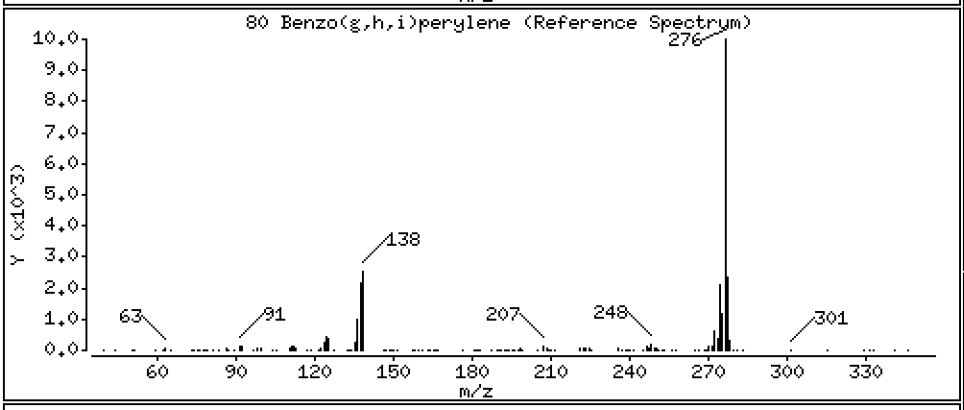
Column diameter: 0.25

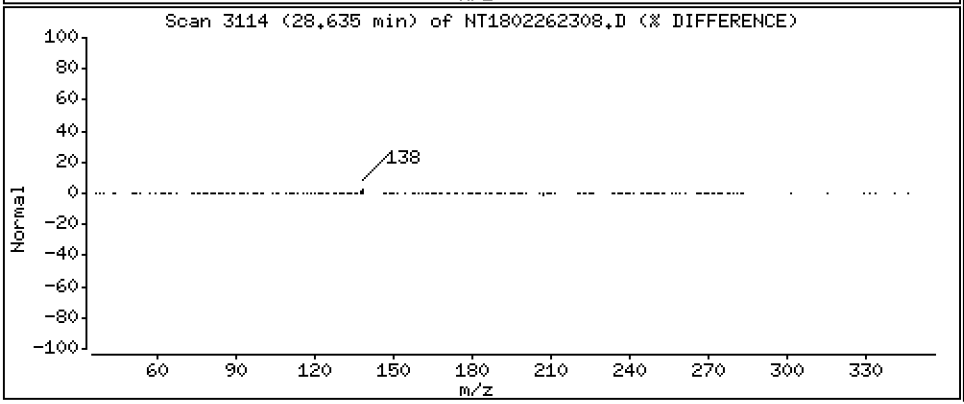
80 Benzo(g,h,i)perylene

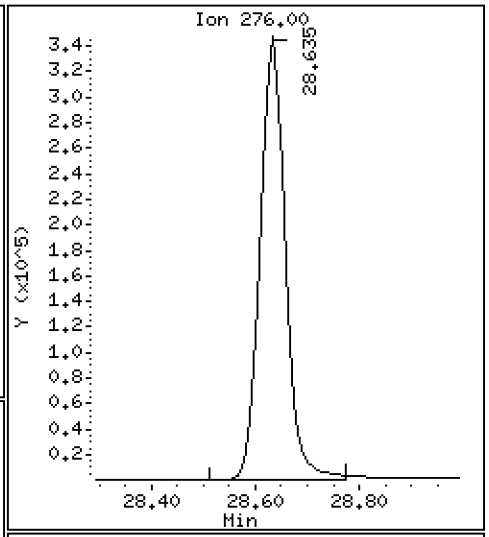
Concentration: 4.237 ug/mL

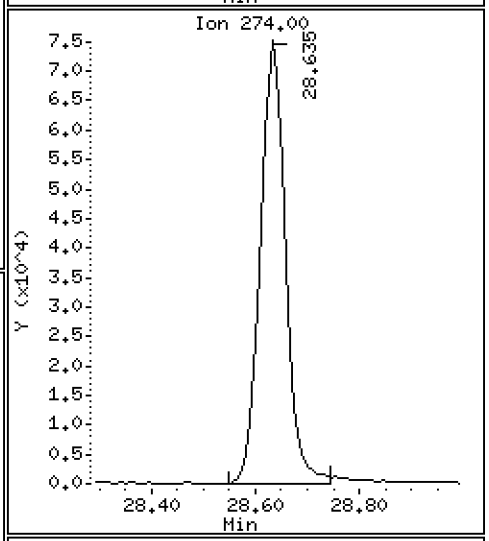


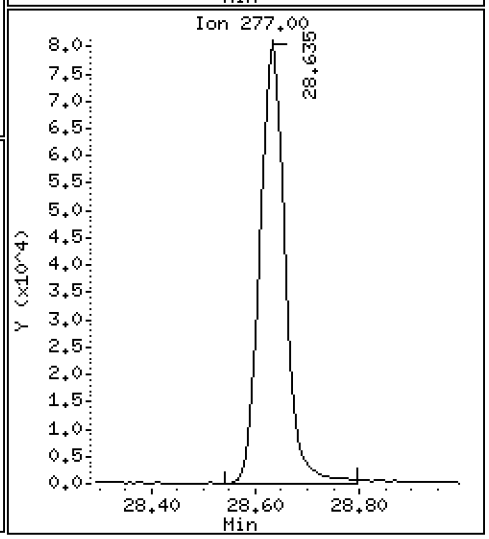












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

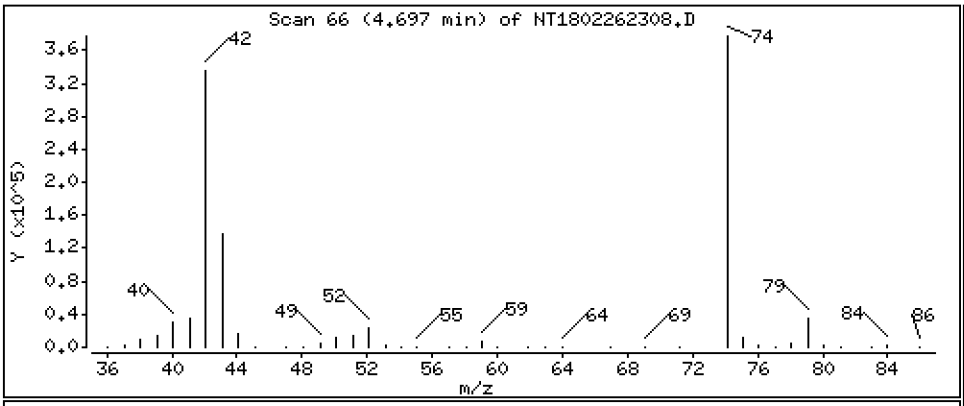
Operator: VTS

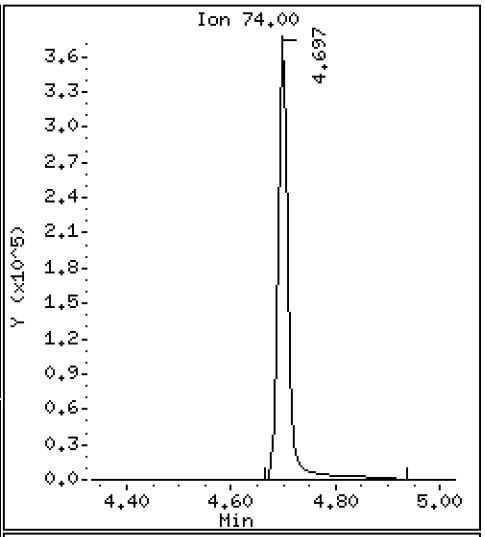
Column phase: ZB-5msi

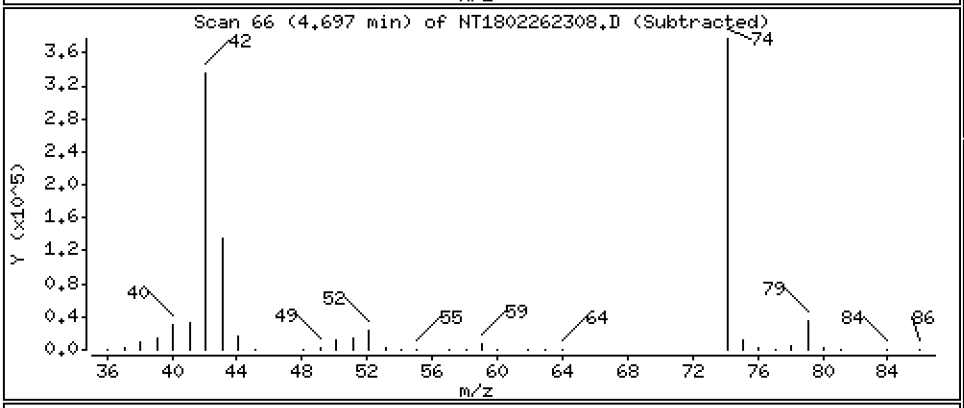
Column diameter: 0.25

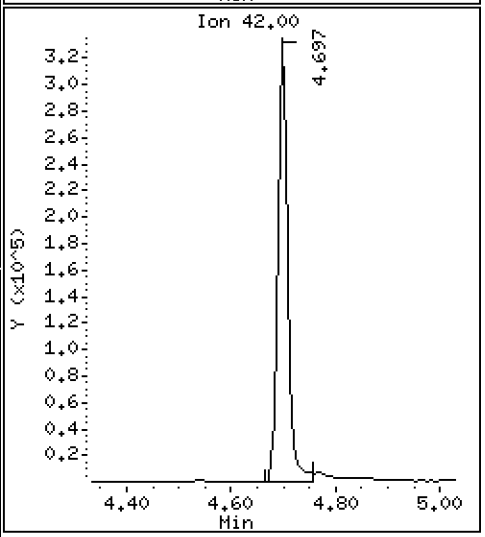
90 N-Nitrosodimethylamine

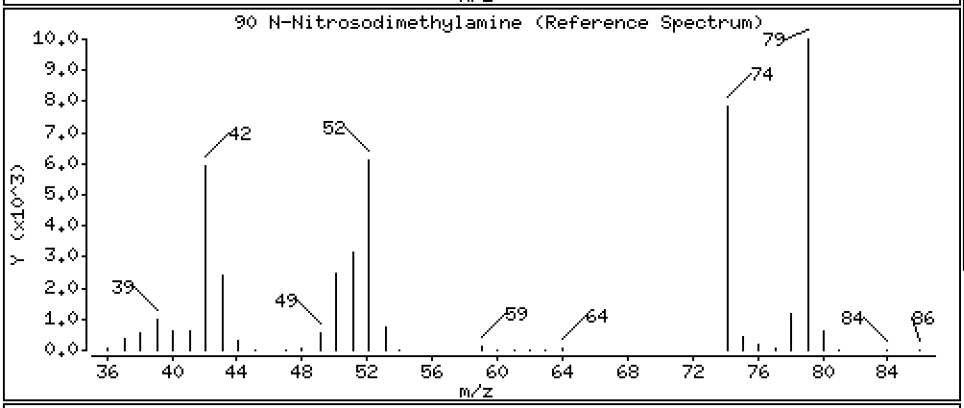
Concentration: 10.25 ug/mL

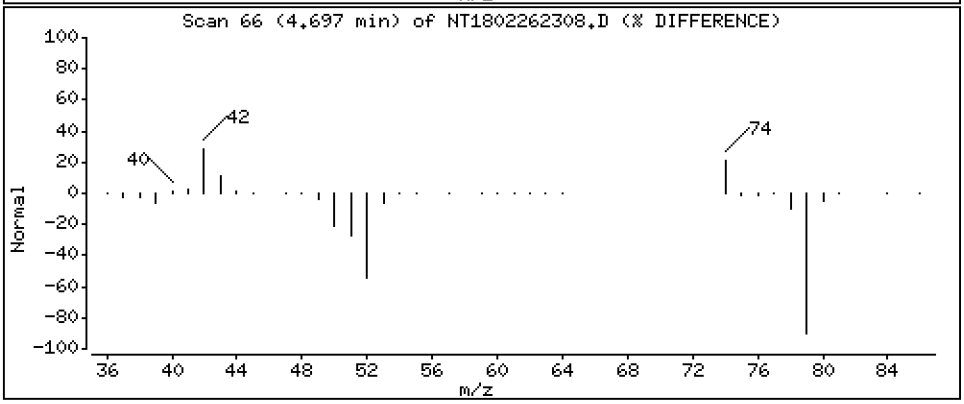












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

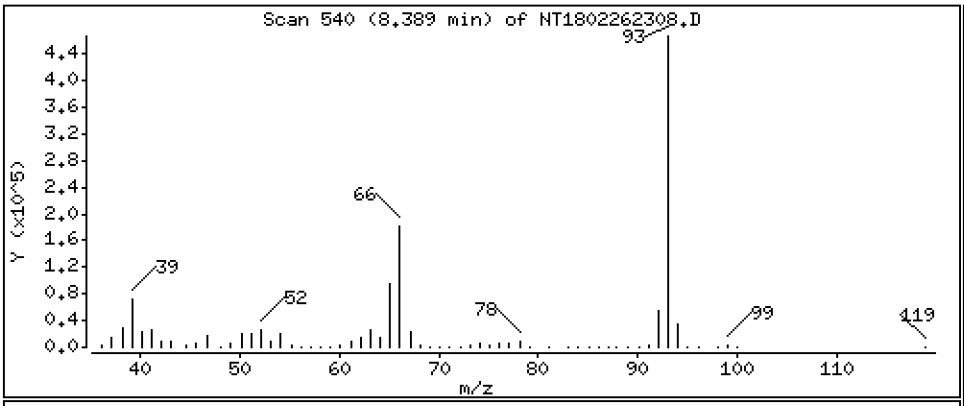
Operator: VTS

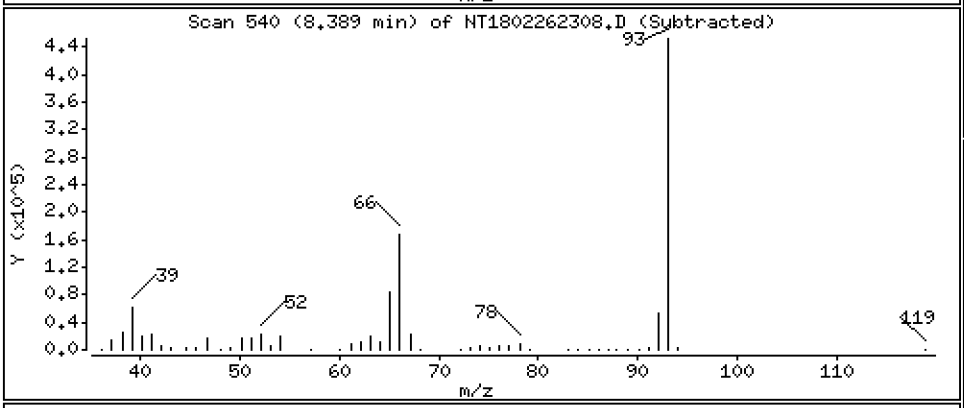
Column phase: ZB-5msi

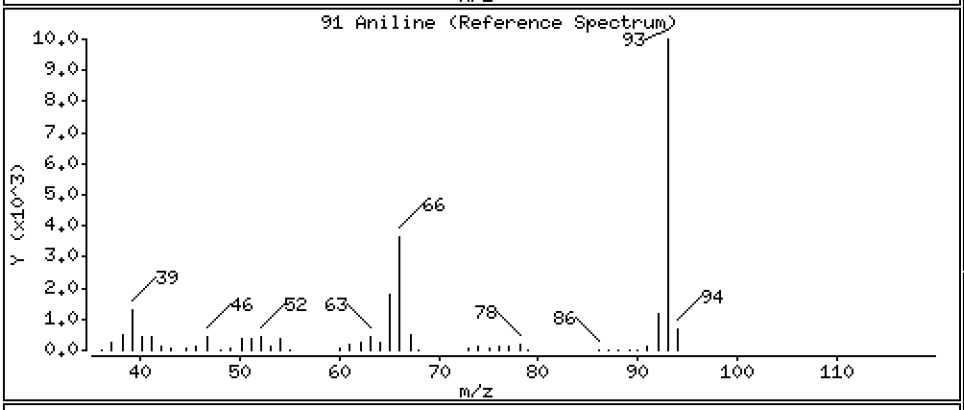
Column diameter: 0.25

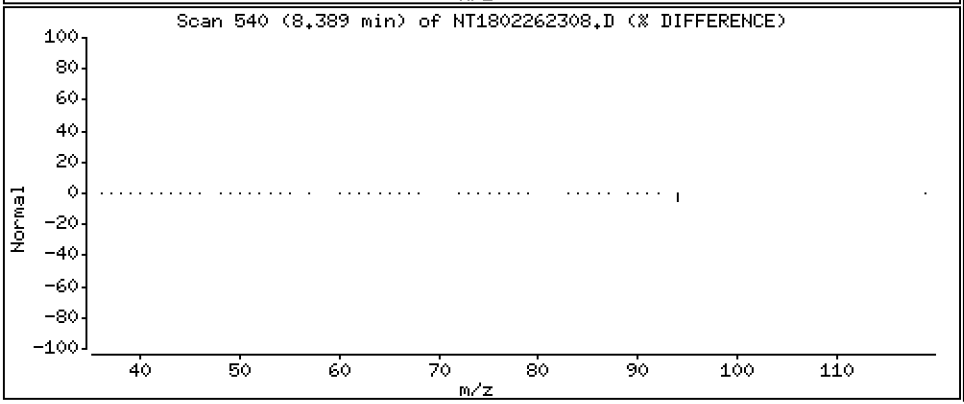
91 Aniline

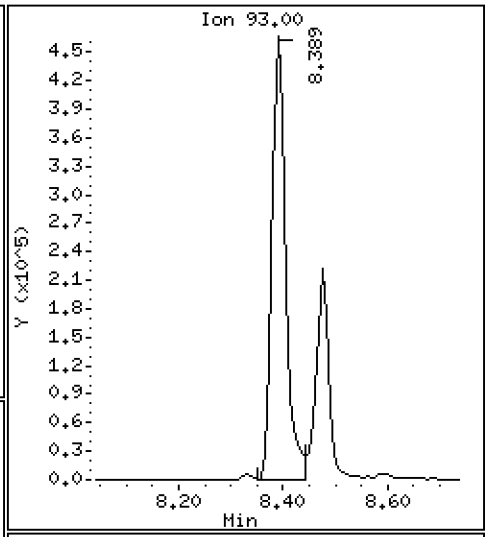
Concentration: 5.979 ug/mL

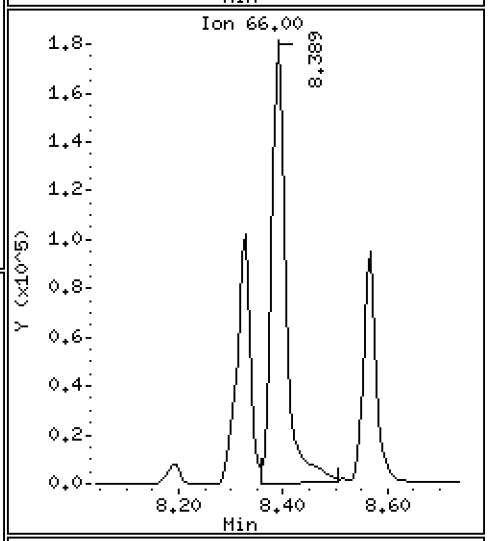


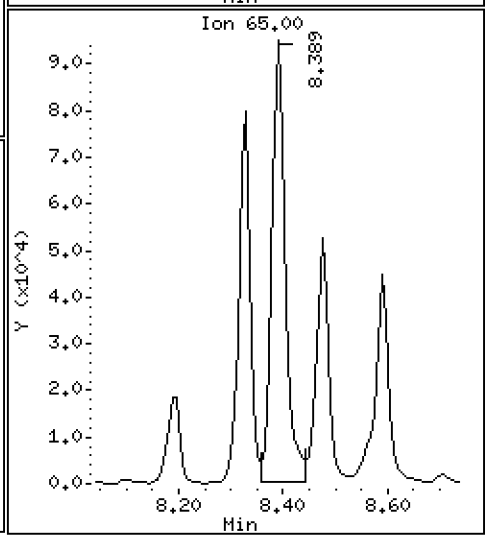












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

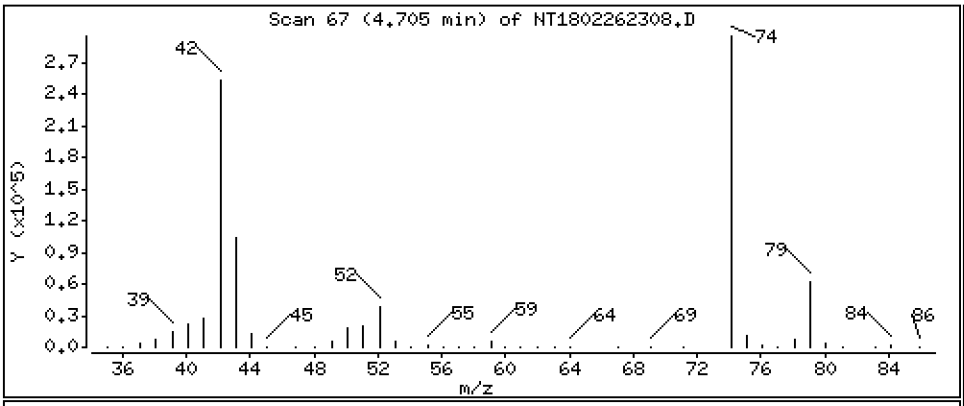
Operator: VTS

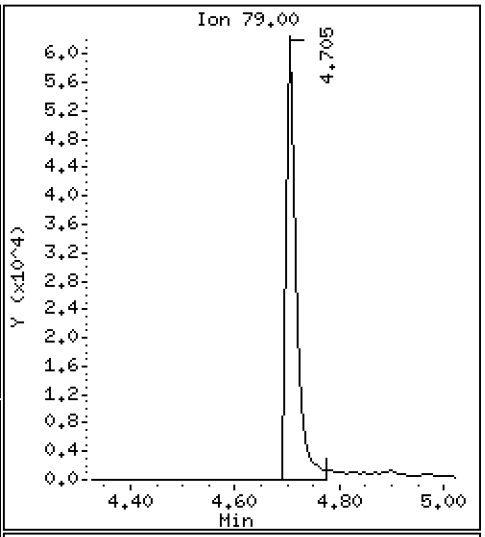
Column phase: ZB-5msi

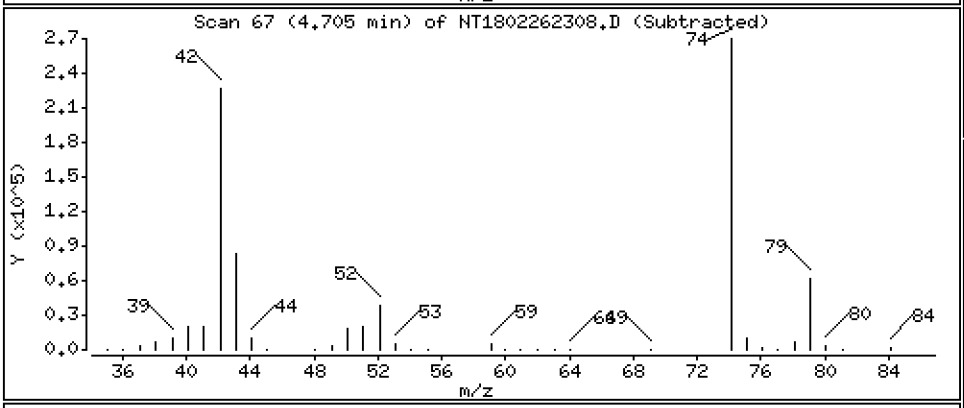
Column diameter: 0.25

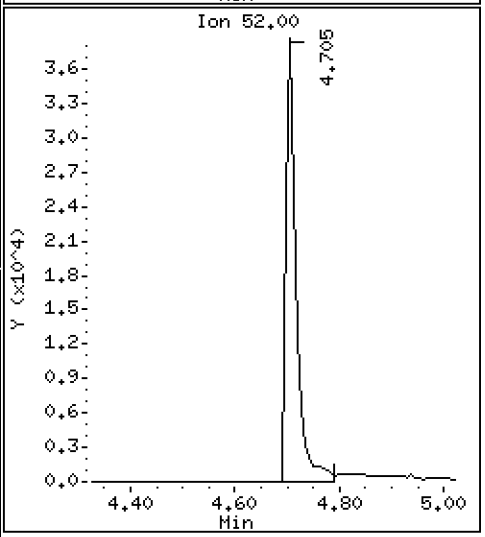
103 Pyridine

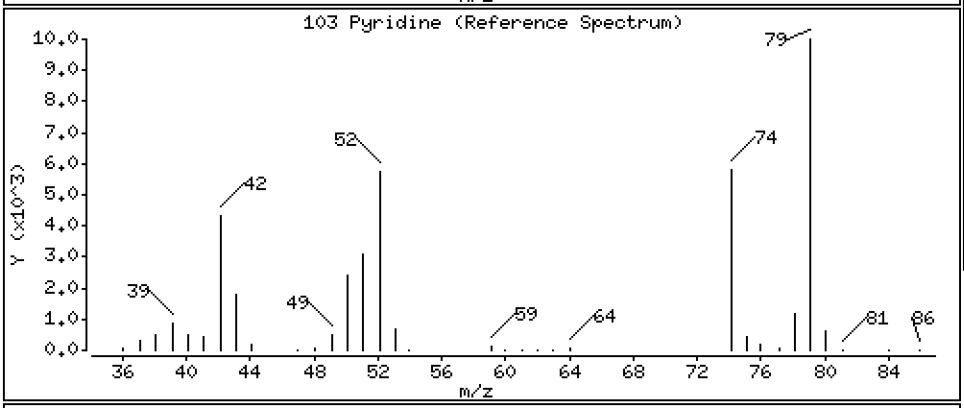
Concentration: 1.002 ug/mL

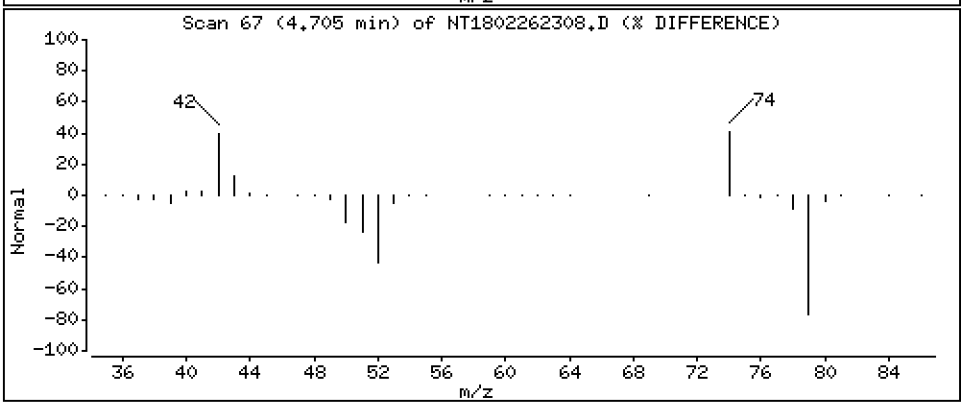












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

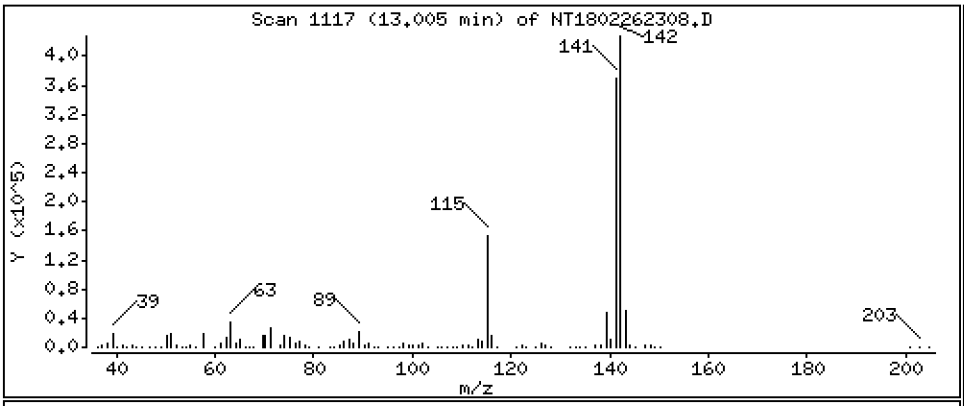
Operator: VTS

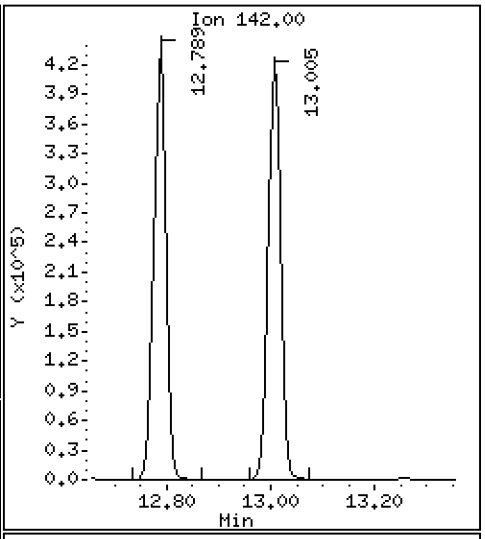
Column phase: ZB-5msi

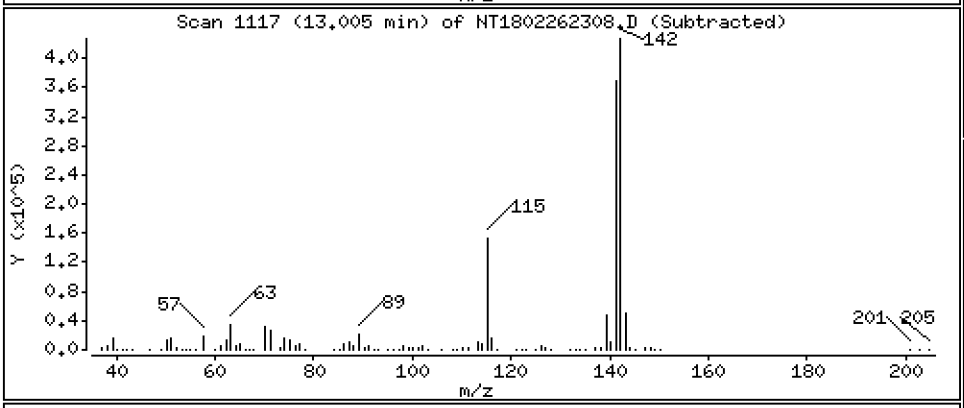
Column diameter: 0.25

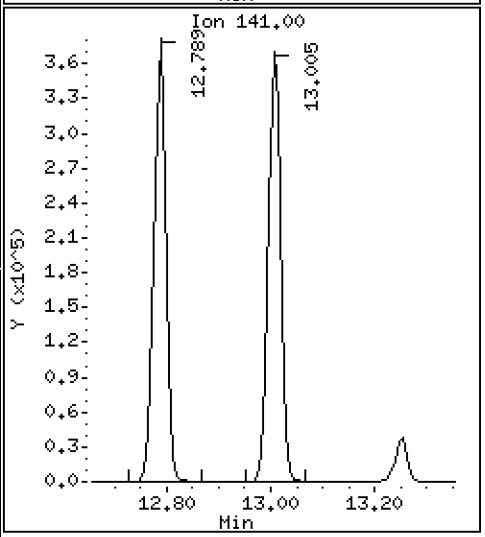
105 1-methylnaphthalene

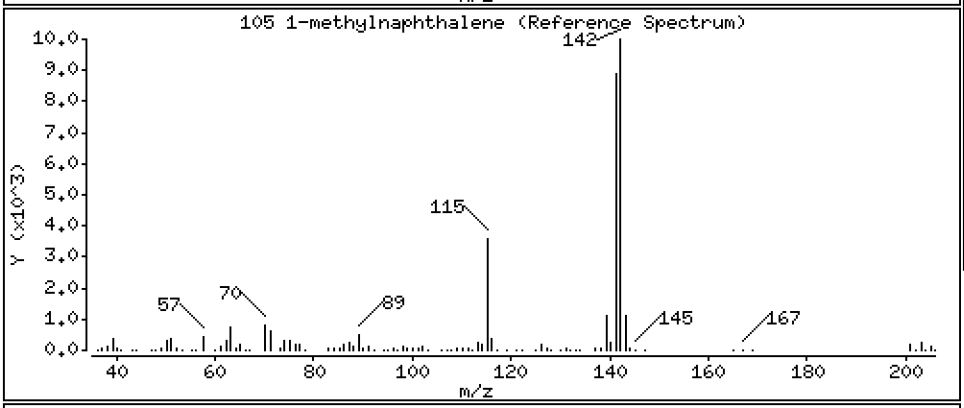
Concentration: 3.543 ug/mL

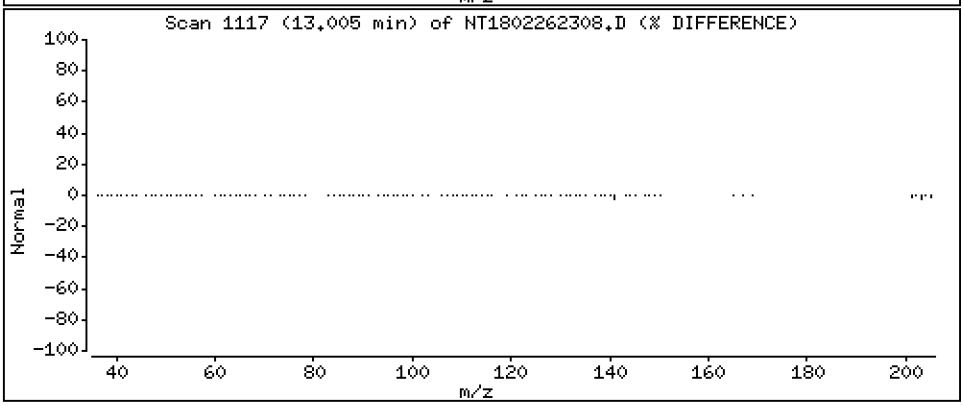












Date : 26-FEB-2023 16:32

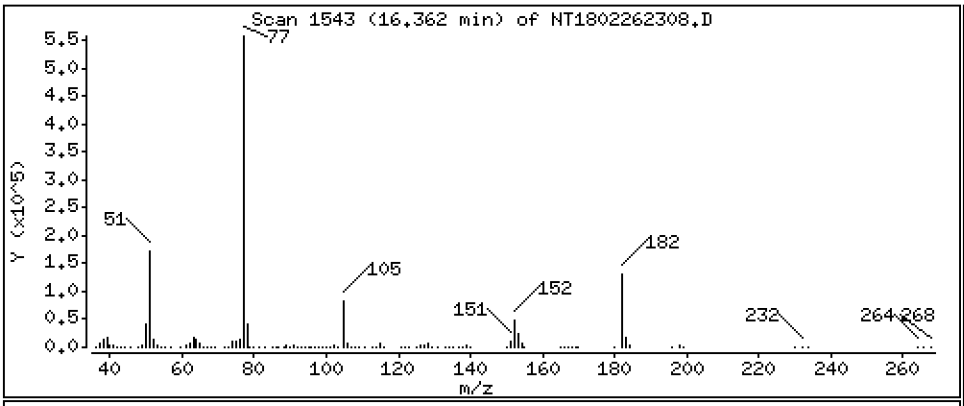
Client ID: Instrument: nt18.i

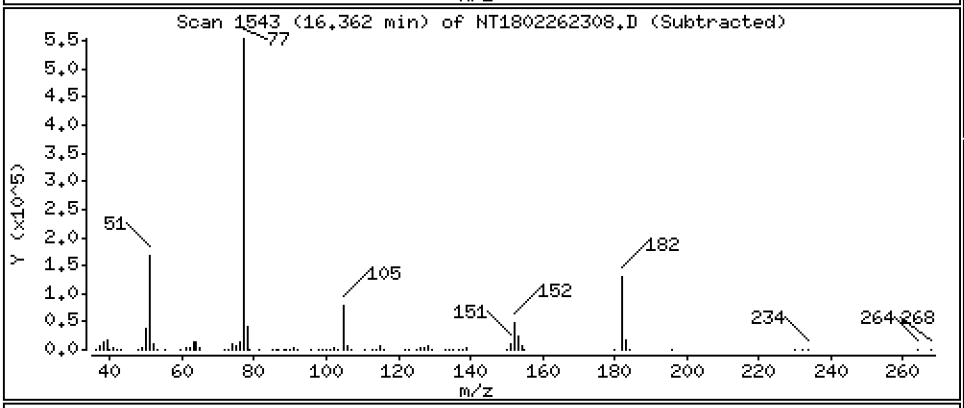
Sample Info: BLA0410-BSD1

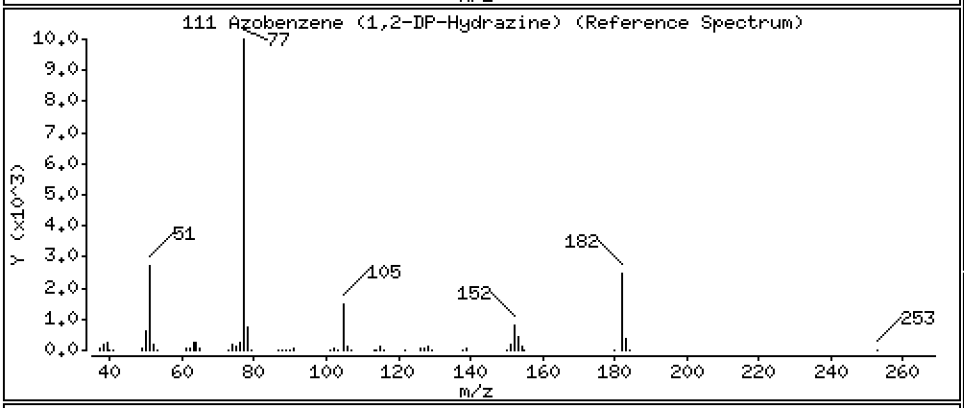
Operator: VTS

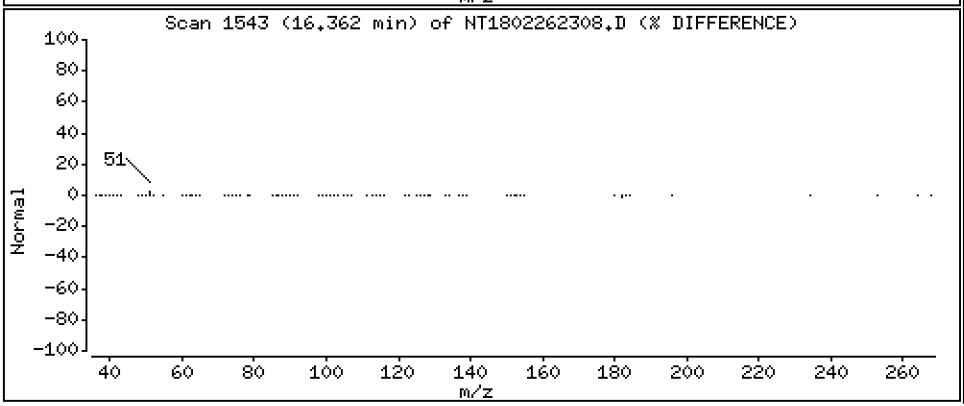
Column phase: ZB-5msi Column diameter: 0.25

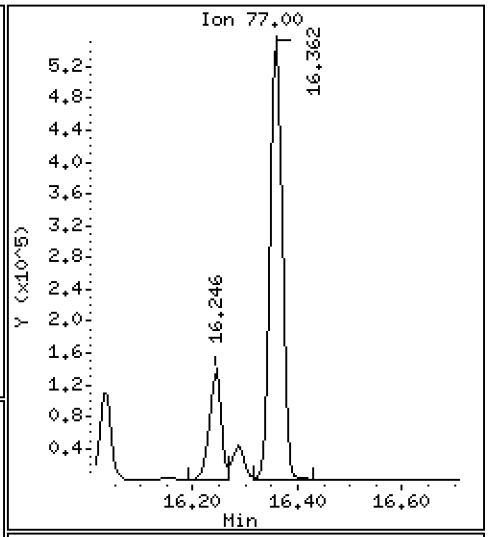
111 Azobenzene (1,2-DP-Hydrazine) Concentration: 3.961 ug/mL

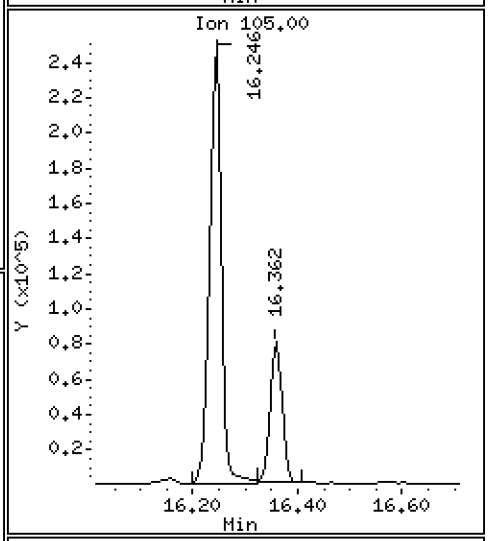


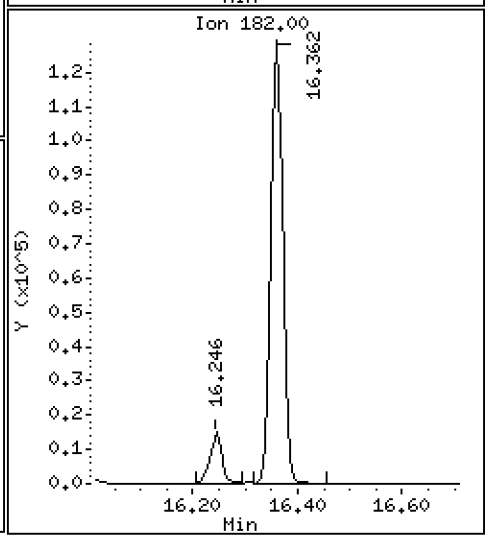












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

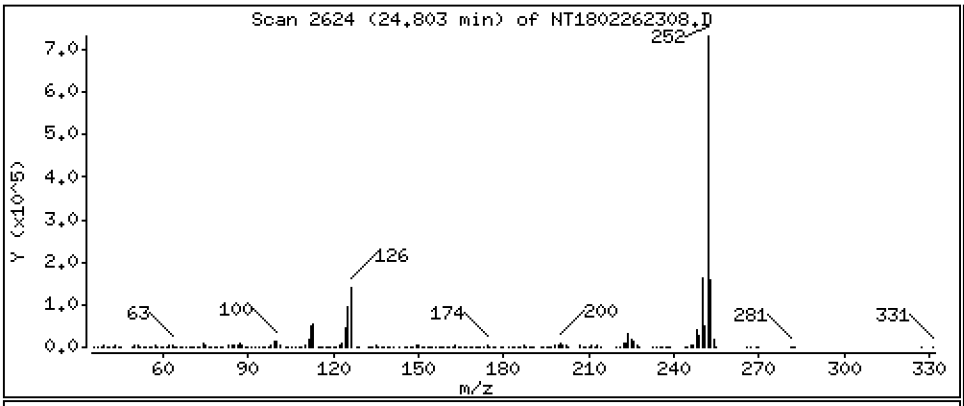
Operator: VTS

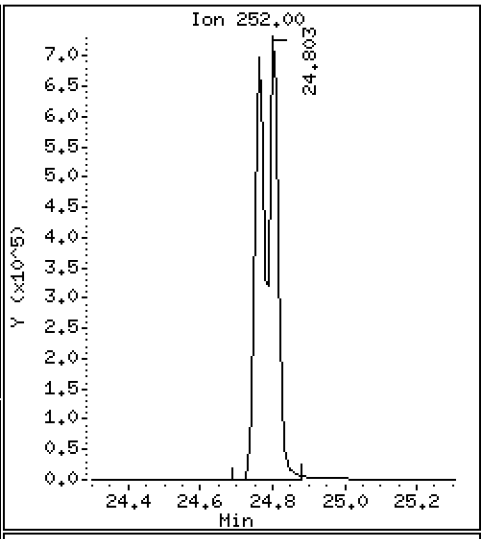
Column phase: ZB-5msi

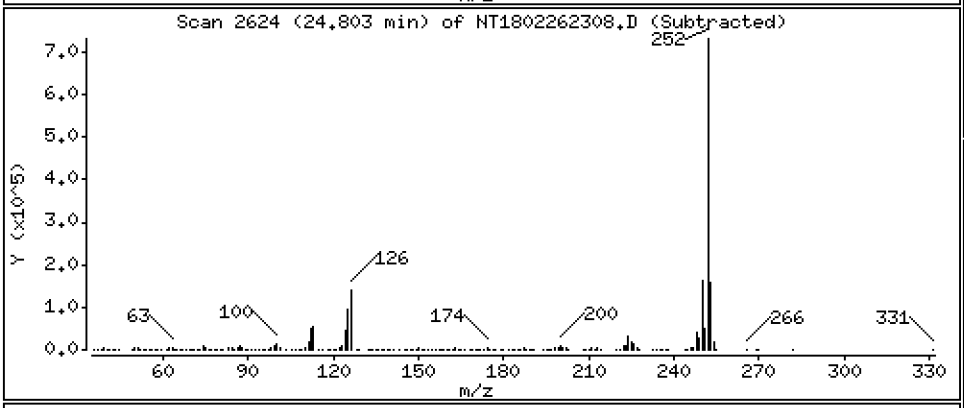
Column diameter: 0.25

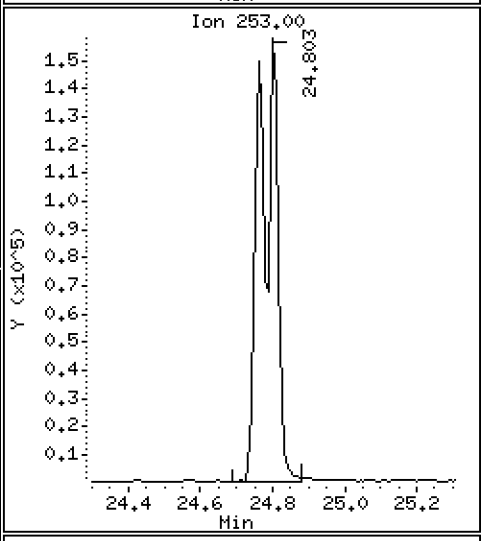
187 Total Benzofluoranthenes

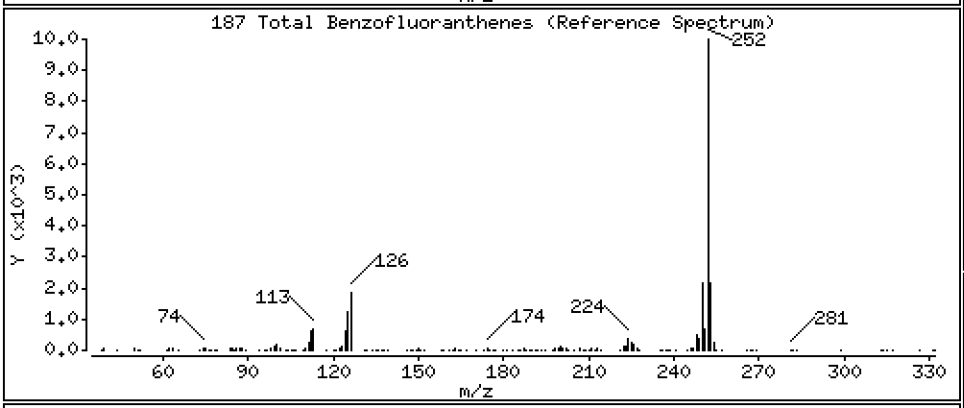
Concentration: 8.508 ug/mL

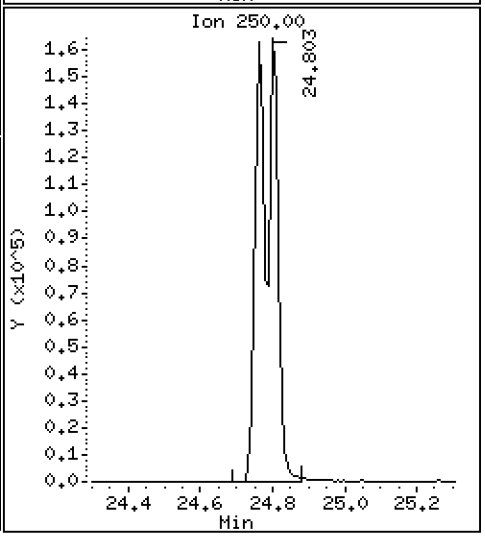


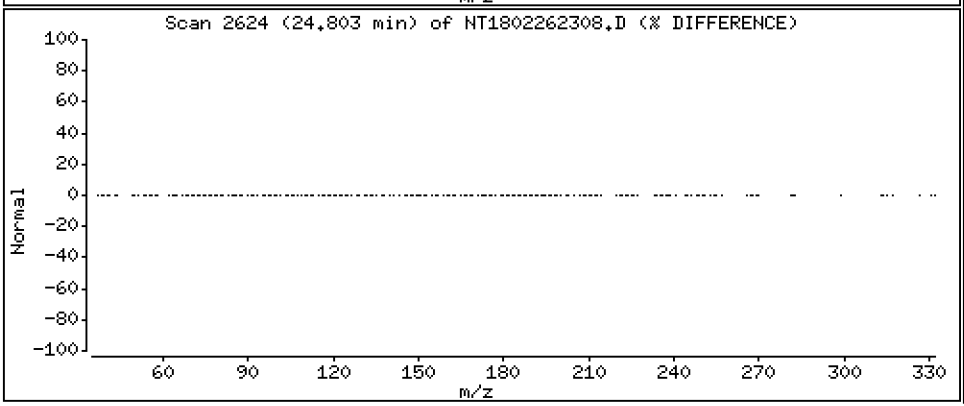












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD1

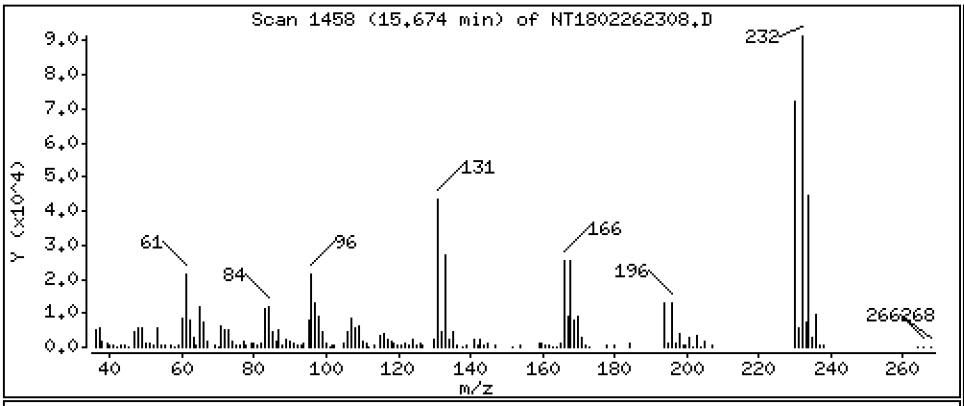
Operator: VTS

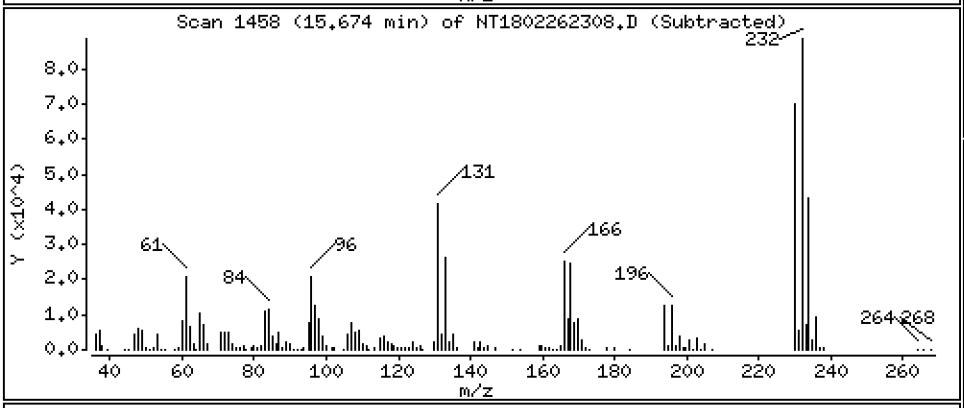
Column phase: ZB-5msi

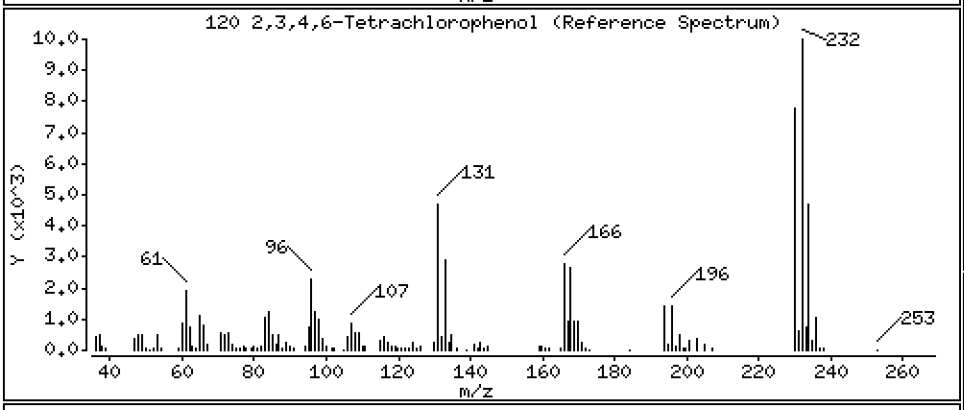
Column diameter: 0.25

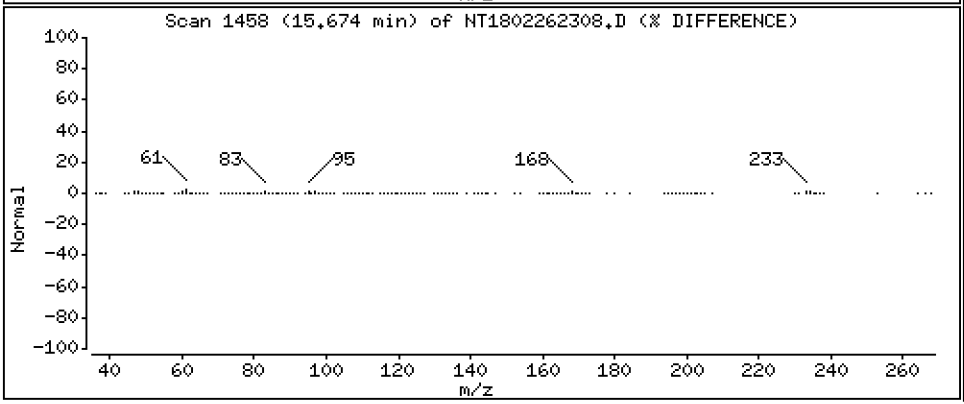
120 2,3,4,6-Tetrachlorophenol

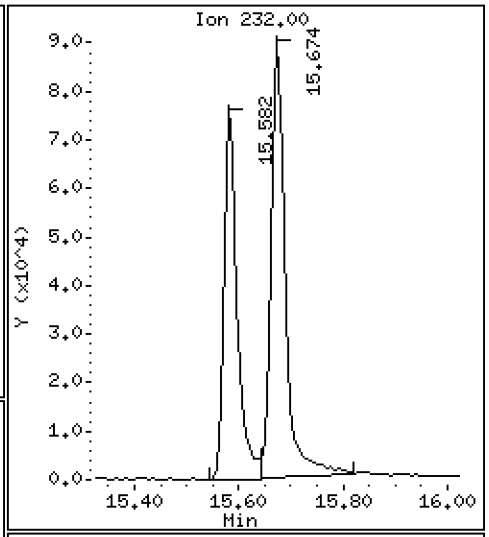
Concentration: 3.409 ug/mL

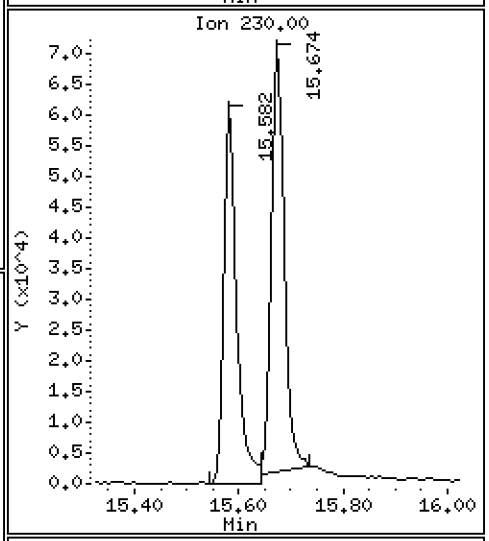


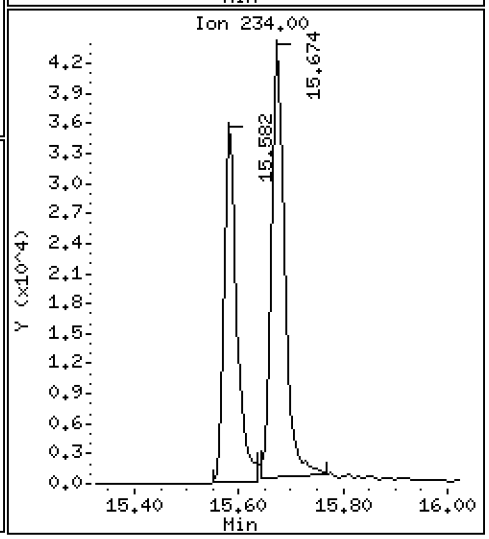












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262308.D
Lab Smp Id: BLA0410-BSD1
Inj Date : 26-FEB-2023 16:32
Operator : VTS Inst ID: nt18.i
Smp Info : BLA0410-BSD1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.759	6.743	(0.758)	453316	5.10033	5.100
$	2 Phenol-d5	99	8.304	8.296	(0.931)	596213	5.19053	5.191
	3 Phenol	94	8.327	8.319	(0.934)	406253	3.39926	3.399
$	5 2-Chlorophenol-d4	132	8.566	8.559	(0.961)	515169	5.15404	5.154
	4 Bis(2-Chloroethyl)ether	93	8.474	8.474	(0.951)	358579	4.41768	4.418
	6 2-Chlorophenol	128	8.590	8.590	(0.964)	349317	3.40384	3.404
	7 1,3-Dichlorobenzene	146	8.853	8.853	(0.993)	357910	3.29741	3.297
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	260510	4.00000	
	9 1,4-Dichlorobenzene	146	8.946	8.946	(1.003)	372889	3.37024	3.370
$	10 1,2-Dichlorobenzene-d4	152	9.272	9.272	(1.040)	218940	3.08976	3.090
	12 1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	358967	3.34310	3.343
	11 Benzyl alcohol	108	9.186	9.186	(1.030)	203130	3.57463	3.575
	14 2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	101415	4.03028	4.030
	13 2-Methylphenol	108	9.411	9.411	(1.056)	285219	3.08528	3.085
	17 Hexachloroethane	117	9.869	9.877	(1.107)	147829	3.45162	3.452
	16 N-Nitroso-di-n-propylamine	70	9.737	9.737	(1.092)	250722	3.68949	3.689
	15 4-Methylphenol	108	9.691	9.683	(1.087)	315655	3.27602	3.276
$	18 Nitrobenzene-d5	82	9.993	9.993	(0.879)	370644	3.48538	3.485
	19 Nitrobenzene	77	10.025	10.032	(0.882)	384702	3.75811	3.758
	20 Isophorone	82	10.475	10.475	(0.922)	739574	5.66302	5.663
	21 2-Nitrophenol	139	10.650	10.650	(0.937)	184932	3.67844	3.678
	22 2,4-Dimethylphenol	107	10.710	10.710	(0.942)	719923	7.51500	7.515
	23 Bis(2-Chloroethoxy)methane	93	10.905	10.905	(0.960)	392058	4.38400	4.384
	24 Benzoic acid	105	11.007	10.990	(0.968)	806461	20.8801	20.88
	25 2,4-Dichlorophenol	162	11.100	11.100	(0.977)	1177572	14.0197	14.02
	26 1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	310024	3.41741	3.417
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	997833	4.00000	
	28 Naphthalene	128	11.404	11.403	(1.003)	1070545	3.49013	3.490
	29 4-Chloroaniline	127	11.542	11.542	(1.016)	912950	7.46840	7.468
	30 Hexachlorobutadiene	225	11.767	11.767	(1.035)	184868	3.47666	3.477
	31 4-Chloro-3-methylphenol	107	12.502	12.502	(1.100)	1143895	14.2288	14.23
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	684759	3.28531	3.285
	33 Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	467160	12.3932	12.39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	747889	14.7891	14.79
35	2,4,5-Trichlorophenol	196	13.485	13.485	(0.902)	841577	15.2717	15.27
$ 36	2-Fluorobiphenyl	172	13.570	13.570	(0.908)	758035	3.43878	3.439
37	2-Chloronaphthalene	162	13.771	13.771	(0.921)	636312	3.69417	3.694
38	2-Nitroaniline	65	14.042	14.034	(0.939)	736543	13.6633	13.66
39	Dimethylphthalate	163	14.468	14.468	(0.968)	754797	4.08005	4.080
40	Acenaphthylene	152	14.630	14.630	(0.979)	1036543	3.57382	3.574
41	2,6-Dinitrotoluene	165	14.607	14.607	(0.977)	624504	14.7250	14.73
* 42	Acenaphthene-d10	164	14.947	14.947	(1.000)	522836	4.00000	
43	3-Nitroaniline	138	14.885	14.885	(0.996)	538835	10.7407	10.74
44	Acenaphthene	153	15.009	15.009	(1.004)	673256	3.66771	3.668
45	2,4-Dinitrophenol	184	15.102	15.102	(1.010)	580580	27.5029	27.50
46	Dibenzofuran	168	15.334	15.334	(1.026)	939857	3.53743	3.537
47	4-Nitrophenol	109	15.226	15.218	(1.019)	330867	16.3611	16.36
48	2,4-Dinitrotoluene	165	15.411	15.403	(1.031)	842187	14.5274	14.53
50	Diethylphthalate	149	15.921	15.921	(1.065)	920335	4.74782	4.748
49	Fluorene	166	16.037	16.037	(1.073)	811195	3.80996	3.810
51	4-Chlorophenyl-phenylether	204	16.037	16.037	(1.073)	387820	3.99891	3.999
52	4-Nitroaniline	138	16.153	16.145	(1.081)	596164	12.3524	12.35
53	4,6-Dinitro-2-methylphenol	198	16.245	16.238	(0.905)	1006921	29.0447	29.04
54	N-Nitrosodiphenylamine	169	16.284	16.292	(0.907)	482311	3.43771	3.438
$ 55	2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	151589	5.61921	5.619
56	4-Bromophenyl-phenylether	248	17.024	17.032	(0.948)	224240	3.98278	3.983
57	Hexachlorobenzene	284	17.333	17.341	(0.966)	237984	3.66063	3.661
58	Pentachlorophenol	266	17.697	17.697	(0.986)	312868	16.3400	16.34
* 59	Phenanthrene-d10	188	17.952	17.952	(1.000)	932428	4.00000	
60	Phenanthrene	178	17.999	17.999	(1.003)	1091278	3.72087	3.721
61	Anthracene	178	18.092	18.092	(1.008)	916991	3.28094	3.281
62	Carbazole	167	18.417	18.424	(1.026)	941314	3.67547	3.675
63	Di-n-butylphthalate	149	19.229	19.237	(1.071)	1371085	4.83653	4.837
64	Fluoranthene	202	20.382	20.382	(0.887)	1260420	4.24675	4.247
65	Pyrene	202	20.800	20.800	(0.905)	1280947	4.04673	4.047
$ 66	Terphenyl-d14	244	21.094	21.094	(0.918)	1031998	4.06485	4.065
67	Butylbenzylphthalate	149	22.023	22.023	(0.958)	611065	5.08405	5.084
68	Benzo(a)anthracene	228	22.952	22.952	(0.999)	1213855	3.96913	3.969
* 69	Chrysene-d12	240	22.983	22.983	(1.000)	847114	4.00000	
70	3,3'-Dichlorobenzidine	252	22.913	22.921	(0.997)	1135866	10.0935	10.09
71	Chrysene	228	23.029	23.029	(1.002)	1287774	4.04946	4.049
72	bis(2-Ethylhexyl)phthalate	149	23.053	23.053	(0.960)	915344	4.75894	4.759
* 134	Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	1339708	4.00000	
73	Di-n-octylphthalate	149	24.028	24.028	(1.000)	1634804	4.37923	4.379
74	Benzo(b)fluoranthene	252	24.764	24.764	(0.972)	1354640	4.60010	4.600
75	Benzo(k)fluoranthene	252	24.802	24.802	(0.974)	1320361	3.95628	3.956(H)
76	Benzo(a)pyrene	252	25.368	25.368	(0.996)	1121518	4.10822	4.108
* 77	Perylene-d12	264	25.476	25.476	(1.000)	902626	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.920	27.920	(1.096)	1479563	4.31728	4.317
79	Dibenzo(a,h)anthracene	278	27.928	27.927	(1.096)	1251425	4.37840	4.378
80	Benzo(g,h,i)perylene	276	28.634	28.642	(1.124)	1164058	4.23677	4.237
90	N-Nitrosodimethylamine	74	4.696	4.681	(0.527)	534907	10.2517	10.25
91	Aniline	93	8.389	8.389	(0.941)	813333	5.97896	5.979
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	4.704	4.673	(0.528)	87102	1.00205	1.002
105	1-methylnaphthalene	142	13.005	13.005	(1.144)	668522	3.54313	3.543
111	Azobenzene (1,2-DP-Hydrazine)	77	16.361	16.361	(1.095)	845869	3.96142	3.961

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.802	24.802	(0.974)	2533194	8.50824	8.508
120 2,3,4,6-Tetrachlorophenol	232	15.674	15.674	(1.049)	175023	3.40865	3.409

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262308.D
Lab Smp Id: BLA0410-BSD1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	260510	6.71
27 Naphthalene-d8	943164	471582	1886328	997833	5.80
42 Acenaphthene-d10	501893	250947	1003786	522836	4.17
59 Phenanthrene-d10	896502	448251	1793004	932428	4.01
69 Chrysene-d12	842481	421241	1684962	847114	0.55
134 Di-n-octylphthala	1278043	639022	2556086	1339708	4.82
77 Perylene-d12	915681	457841	1831362	902626	-1.43

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	0.00
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.48	24.98	25.98	25.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262308.D

Lab ID: BLA0410-BSD1
nt18.i, ABN.m, 26-FEB-2023 16:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1802262302.D

On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-IT1210

MS / MS DUPLICATE RECOVERY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/27/23 22:32
Batch:	BLA0410	Laboratory ID:	BLA0410-MS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike
Initial/Final:	18.02 g / 1 mL	Source Sample:	LDW23-IT1210

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #		QC LIMITS REC.
Phenol	500	17.7	J	319		60.2		34 - 120
4-Methylphenol	500	9.7	J	339		65.8		29 - 120
Naphthalene	500	22.5		355		66.6		43 - 120
2-Methylnaphthalene	500	17.0	J	353		67.2		43 - 120
Acenaphthylene	500	13.0	J	378		73.0		42 - 120
Dimethylphthalate	500	ND	U	403		80.6		43 - 120
Acenaphthene	500	23.3		402		75.8		45 - 120
Dibenzofuran	500	18.0	J	384		73.1		43 - 120
Fluorene	500	21.2		435		82.7		45 - 120
Phenanthrene	500	125		470		69.0		49 - 120
Anthracene	500	75.1		416		68.2		45 - 120
Fluoranthene	500	281		713		86.3		53 - 145
Pyrene	500	1070		1590		104		52 - 134
Butylbenzylphthalate	500	57.9		550		98.5		45 - 132
Benzo(a)anthracene	500	274		655		76.2		49 - 120
Chrysene	500	338		558		44.0	*	47 - 120
bis(2-Ethylhexyl)phthalate	500	469		1140		135	*	34 - 130
Benzofluoranthenes, Total	1000	789		1880		109		30 - 160
Benzo(a)pyrene	500	272		714		88.3		42 - 120
Indeno(1,2,3-cd)pyrene	500	36.0		146		22.0	*	42 - 163
Dibenzo(a,h)anthracene	500	ND	U	131		26.3	*	30 - 133
Benzo(g,h,i)perylene	500	34.9		120		17.1	*	46 - 148

* Values outside of QC limits

MS / MS DUPLICATE RECOVERY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/27/23 23:12
Batch:	BLA0410	Laboratory ID:	BLA0410-MSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike Dup
Initial/Final:	18.02 g / 1 mL	Source Sample:	LDW23-IT1210

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	500	315		59.6	1.07	30	34 - 120
4-Methylphenol	500	341		66.3	0.772	30	29 - 120
Naphthalene	500	366		68.6	2.83	30	43 - 120
2-Methylnaphthalene	500	357		68.0	1.16	30	43 - 120
Acenaphthylene	500	383		74.0	1.31	30	42 - 120
Dimethylphthalate	500	411		82.1	1.92	30	43 - 120
Acenaphthene	500	415		78.4	3.15	30	45 - 120
Dibenzofuran	500	390		74.3	1.54	30	43 - 120
Fluorene	500	497		95.2	13.4	30	45 - 120
Phenanthrene	500	498		74.6	5.74	30	49 - 120
Anthracene	500	455		75.9	8.82	30	45 - 120
Fluoranthene	500	715		86.7	0.249	30	53 - 145
Pyrene	500	1490		84.8	6.32	30	52 - 134
Butylbenzylphthalate	500	543		97.1	1.26	30	45 - 132
Benzo(a)anthracene	500	698		84.9	6.37	30	49 - 120
Chrysene	500	665		65.4	17.5	30	47 - 120
bis(2-Ethylhexyl)phthalate	500	1010		107	12.8	30	34 - 130
Benzofluoranthenes, Total	1000	2040		125	8.29	30	30 - 160
Benzo(a)pyrene	500	760		97.6	6.30	30	42 - 120
Indeno(1,2,3-cd)pyrene	500	149		22.5 *	1.70	30	42 - 163
Dibenzo(a,h)anthracene	500	128		25.6 *	2.56	30	30 - 133
Benzo(g,h,i)perylene	500	123		17.6 *	1.97	30	46 - 148

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272309.D

Page 1

Date : 27-FEB-2023 22:32

Client ID:

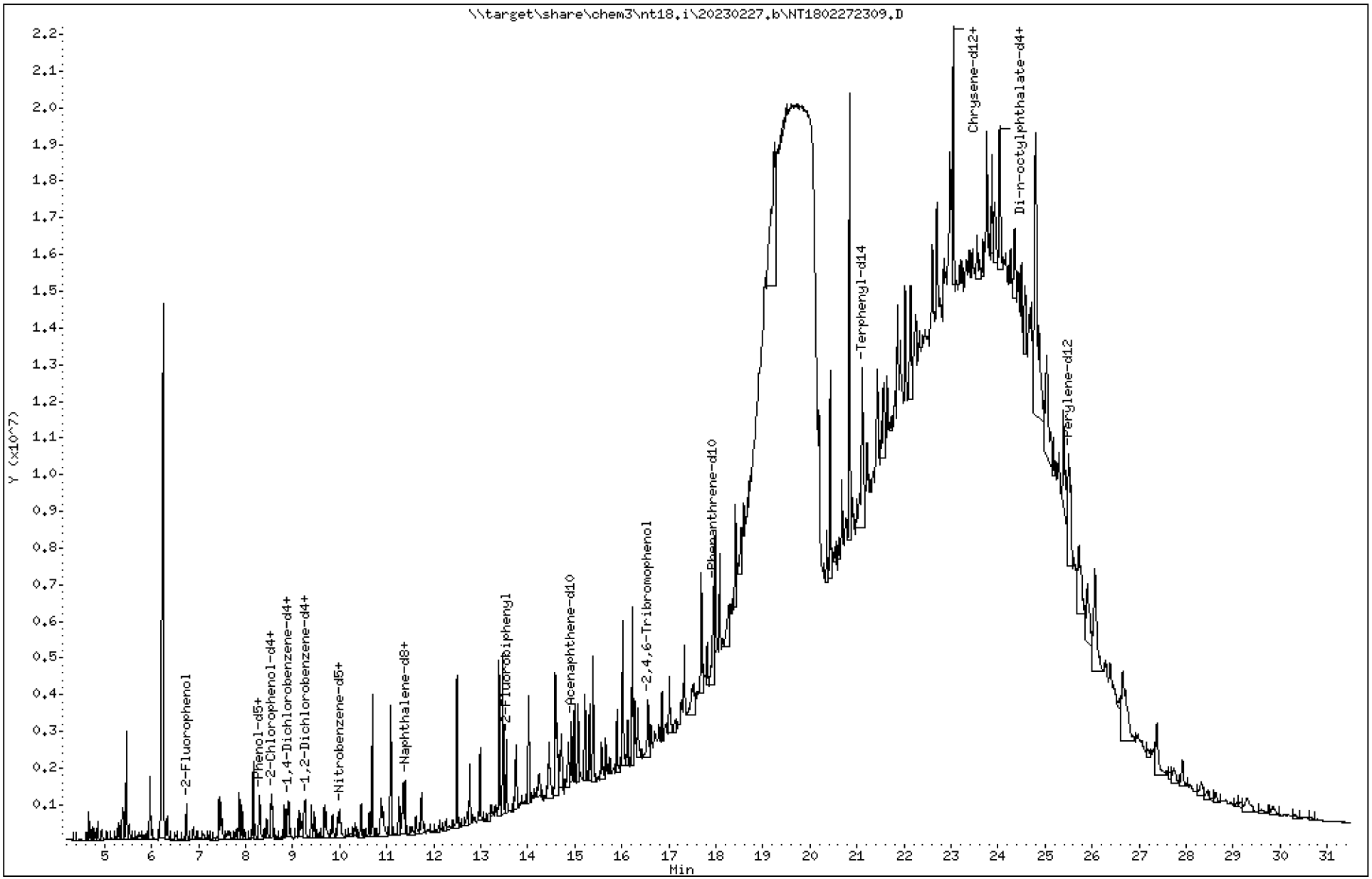
Instrument: nt18.i

Sample Info: BLA0410-MS1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

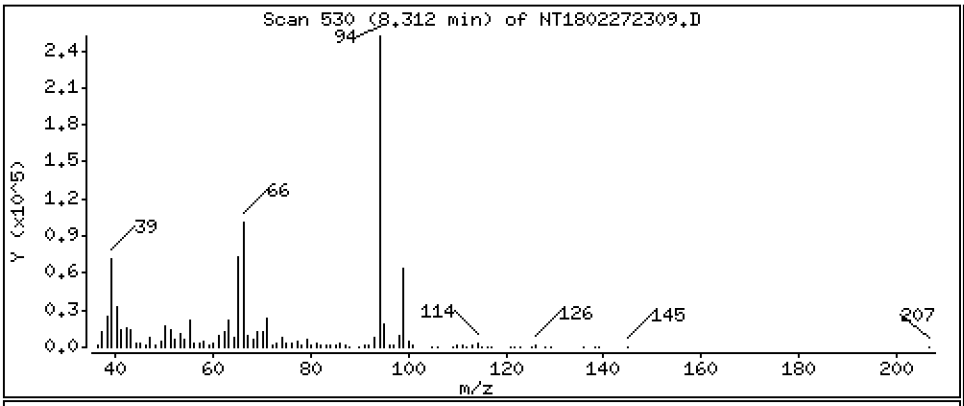
Operator: VTS

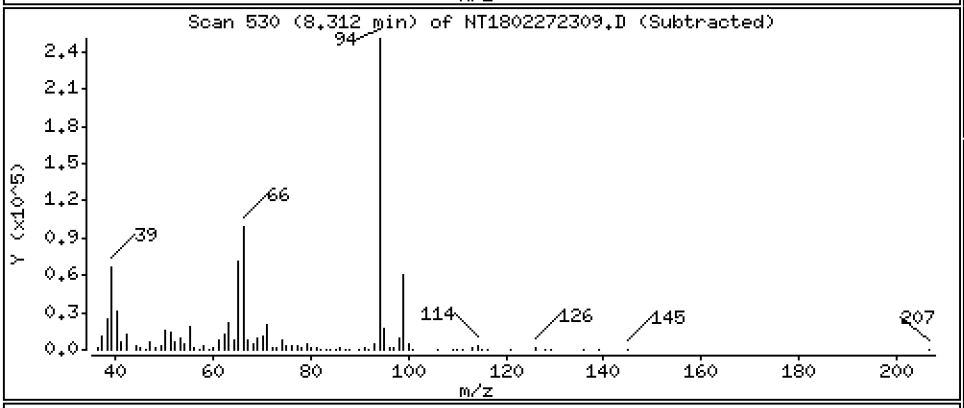
Column phase: ZB-5msi

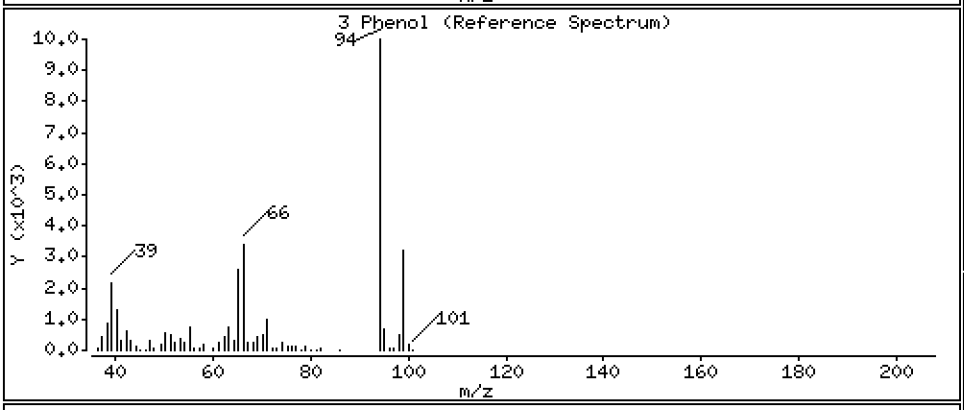
Column diameter: 0.25

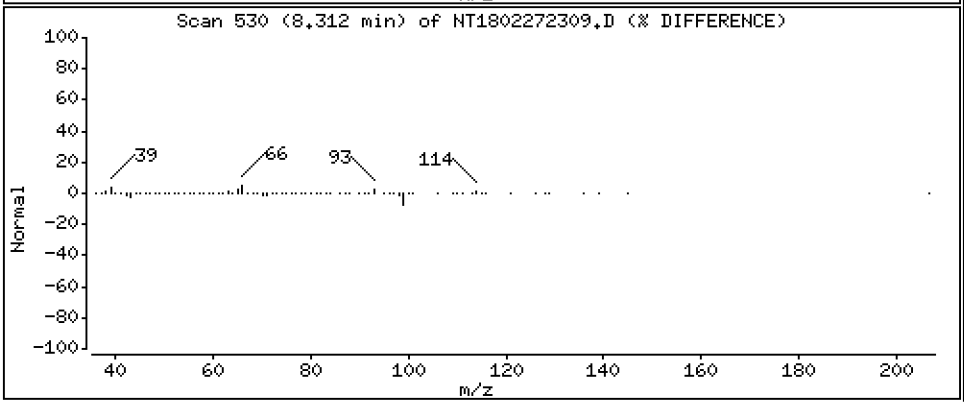
3 Phenol

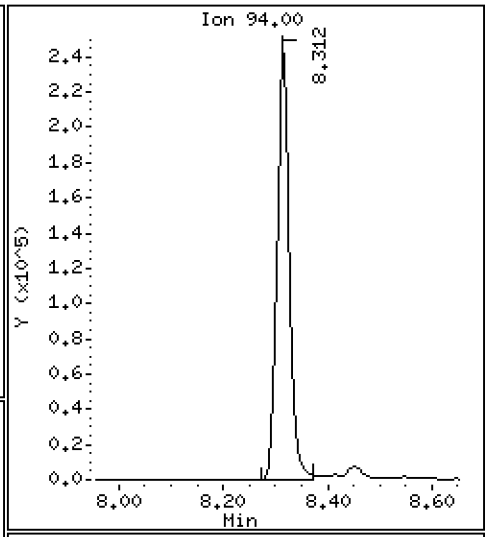
Concentration: 3.189 ug/mL

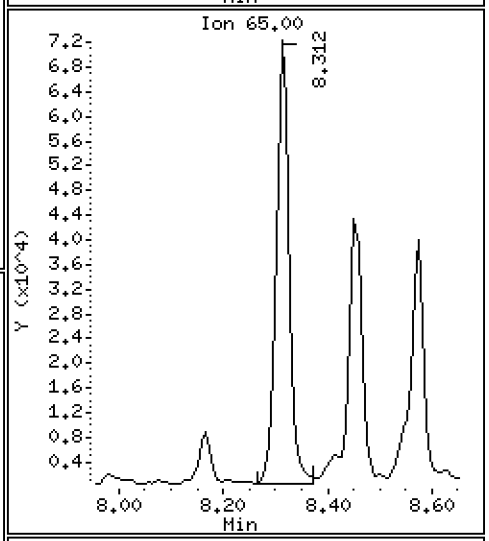


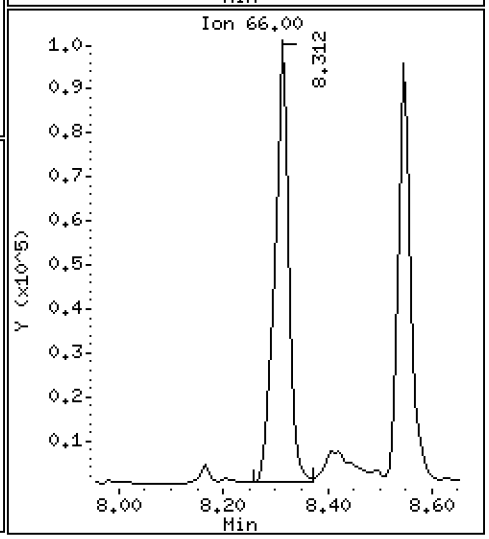












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

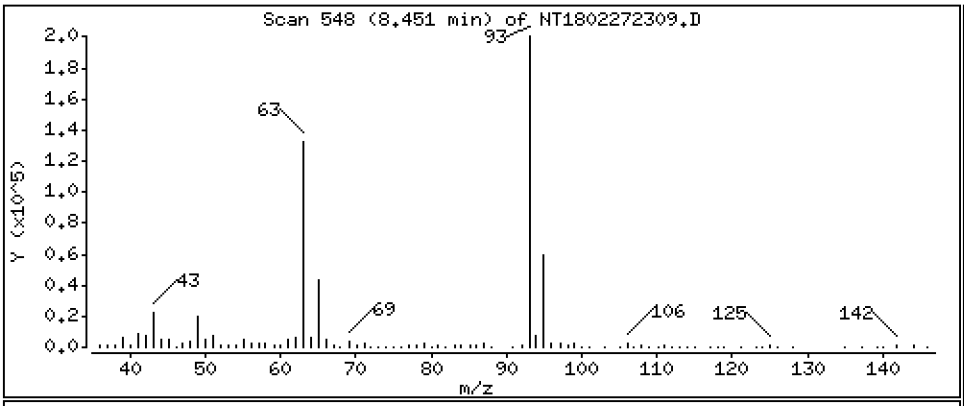
Operator: VTS

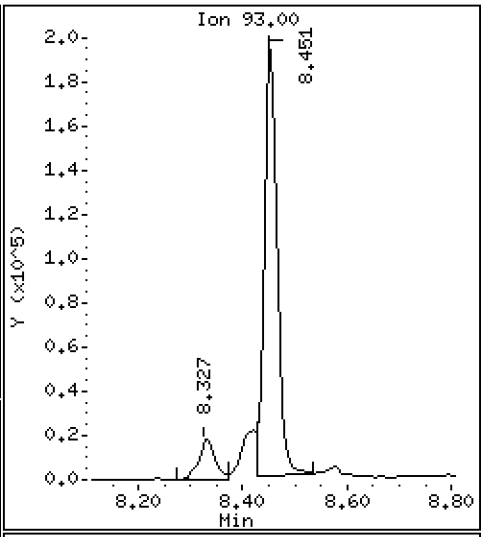
Column phase: ZB-5msi

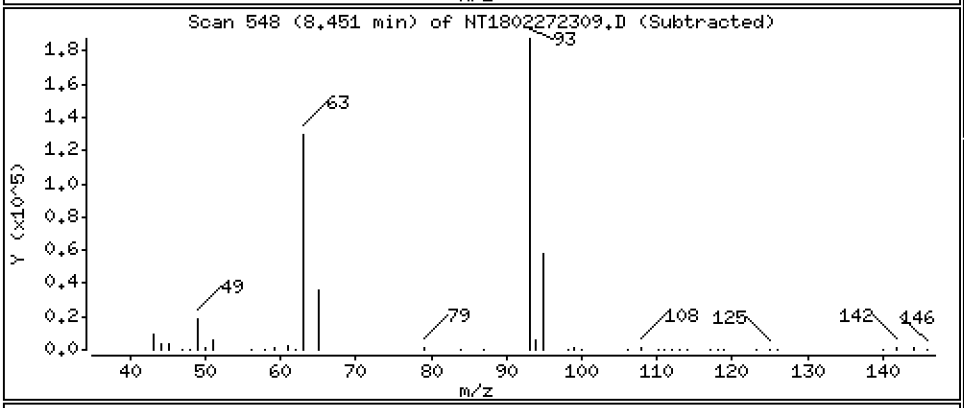
Column diameter: 0.25

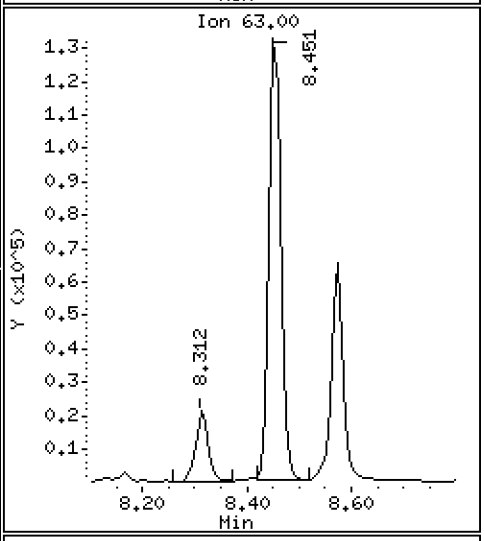
4 Bis(2-Chloroethyl)ether

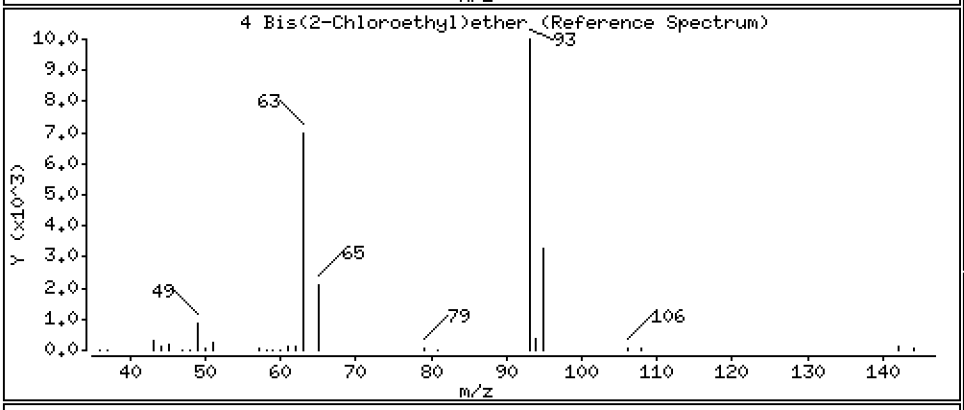
Concentration: 3.792 ug/mL

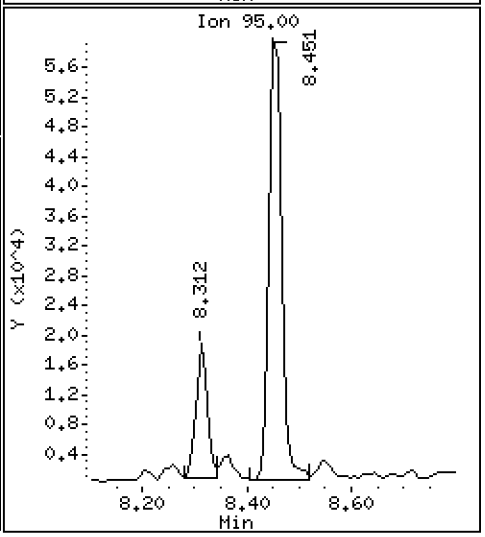


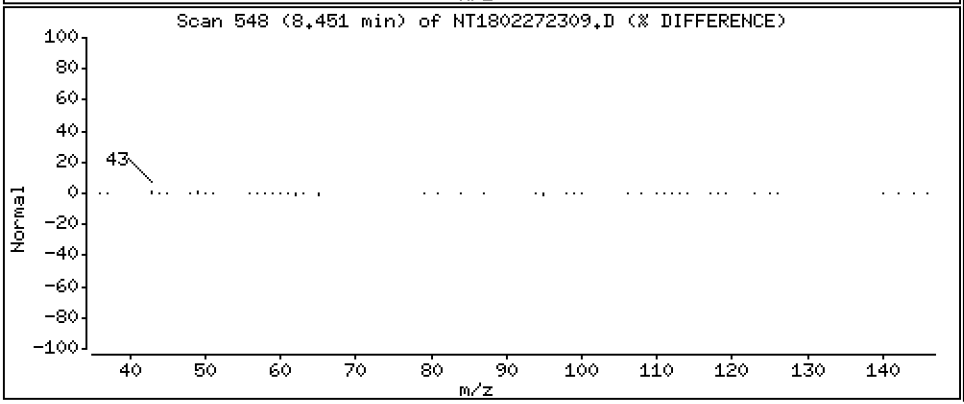












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

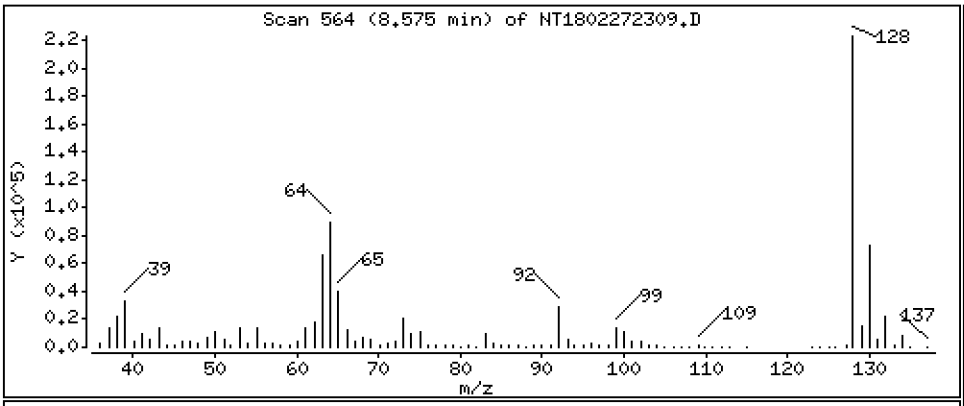
Operator: VTS

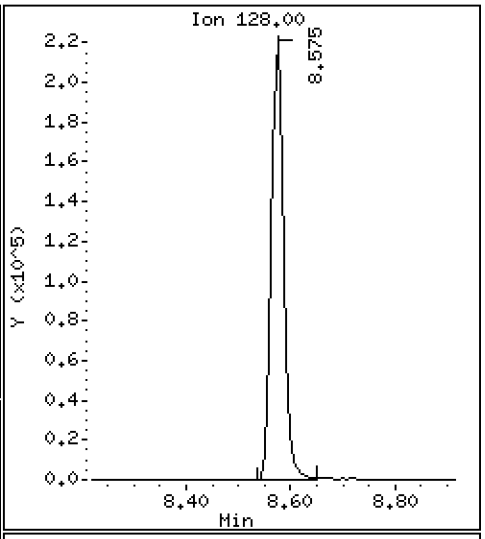
Column phase: ZB-5msi

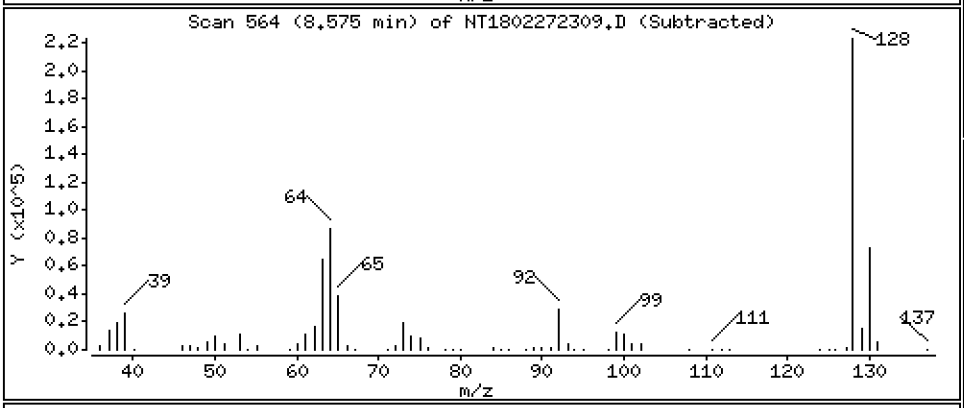
Column diameter: 0.25

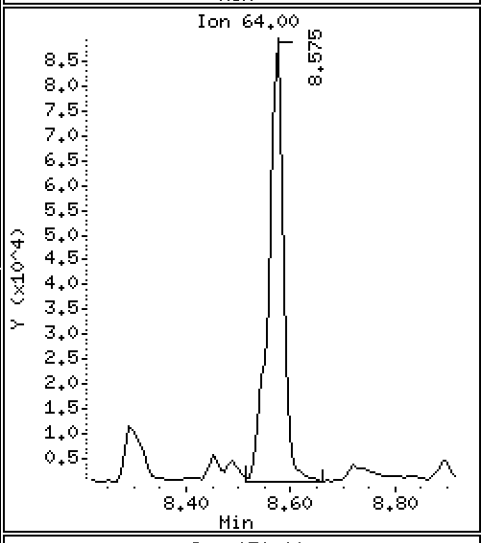
6 2-Chlorophenol

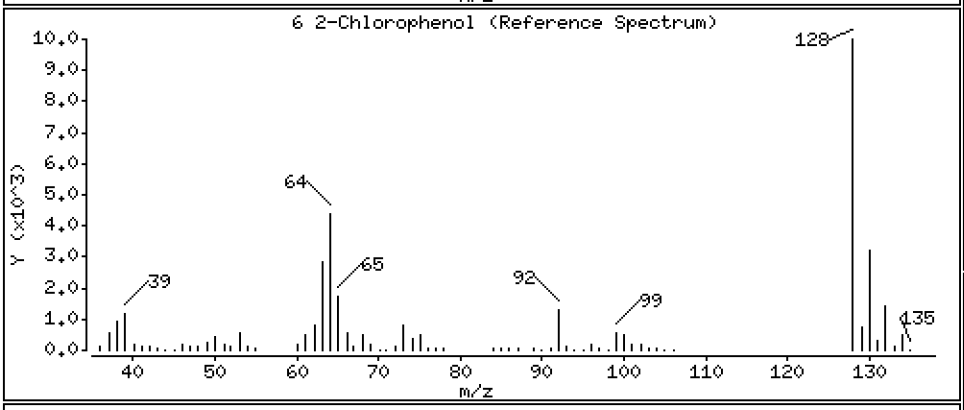
Concentration: 3.204 ug/mL

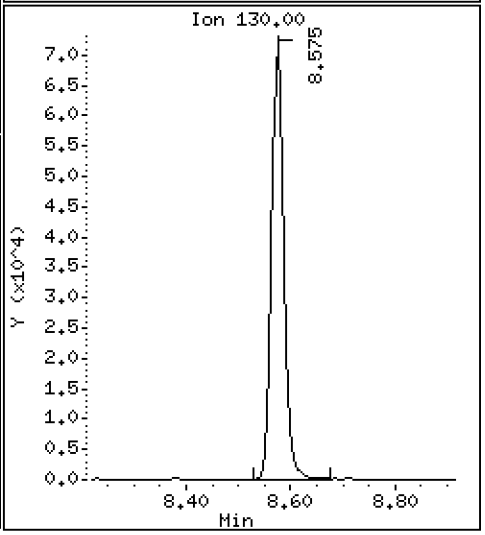


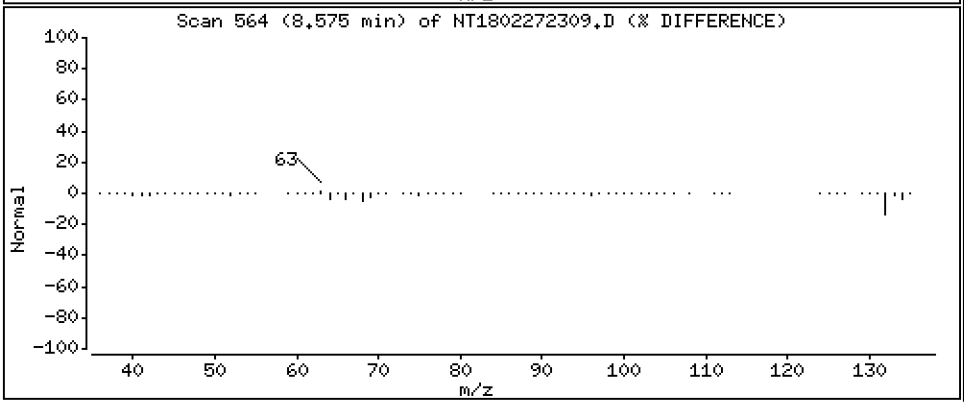












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

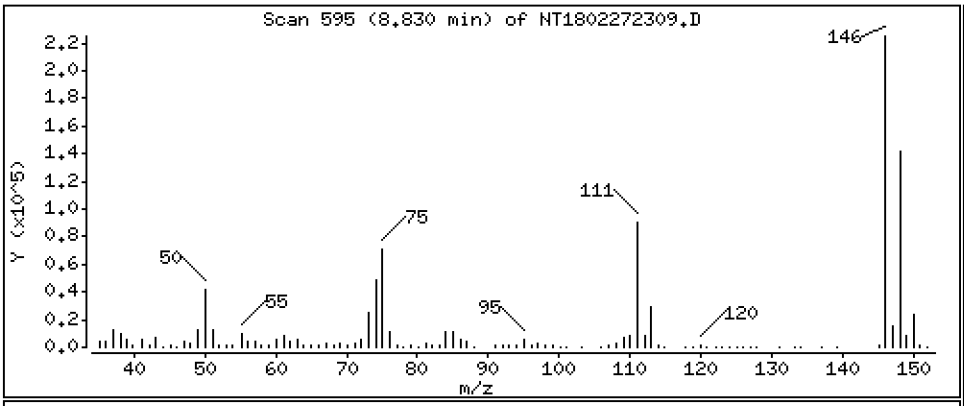
Operator: VTS

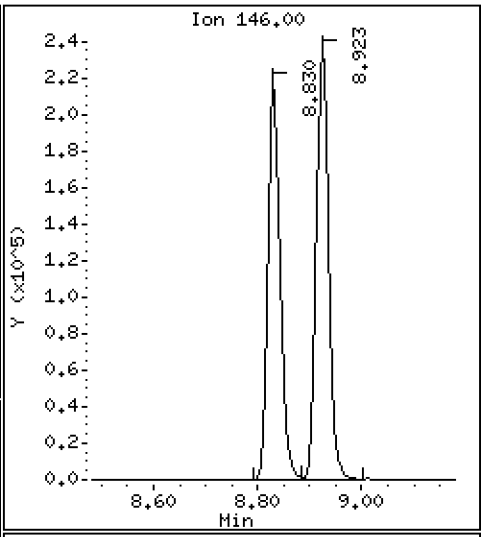
Column phase: ZB-5msi

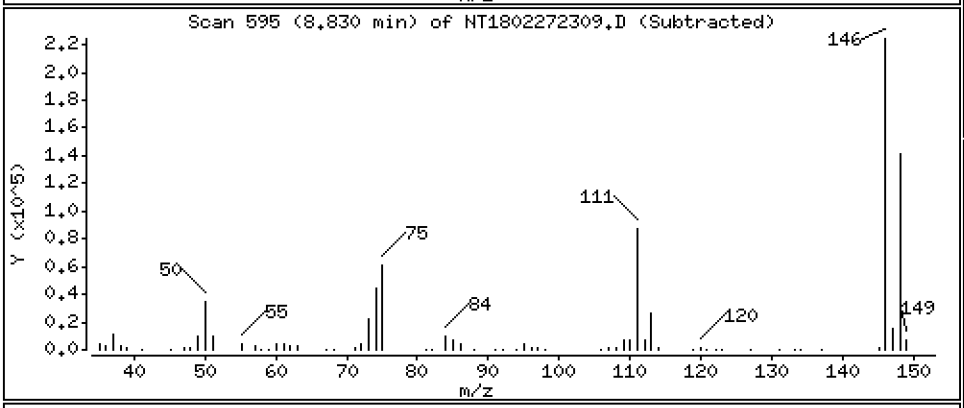
Column diameter: 0.25

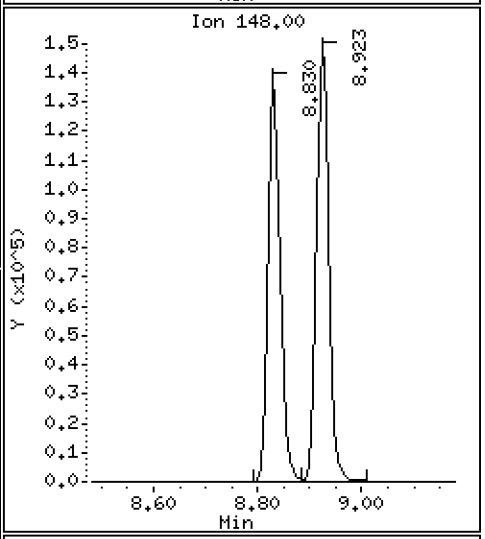
7 1,3-Dichlorobenzene

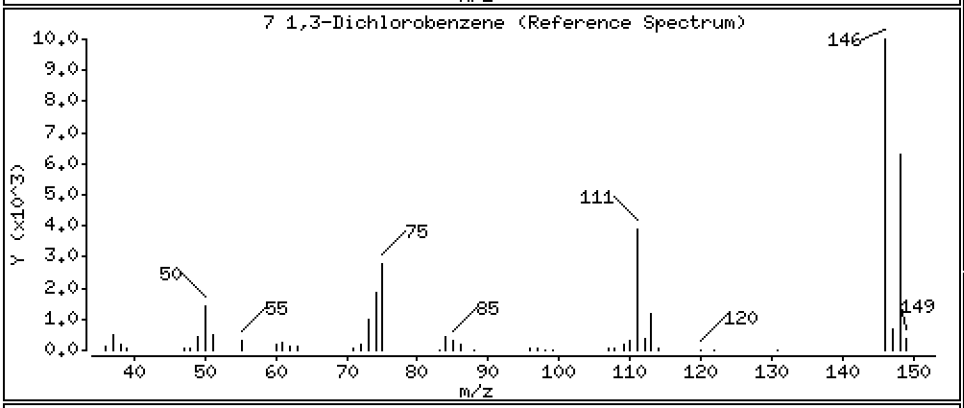
Concentration: 3.051 ug/mL

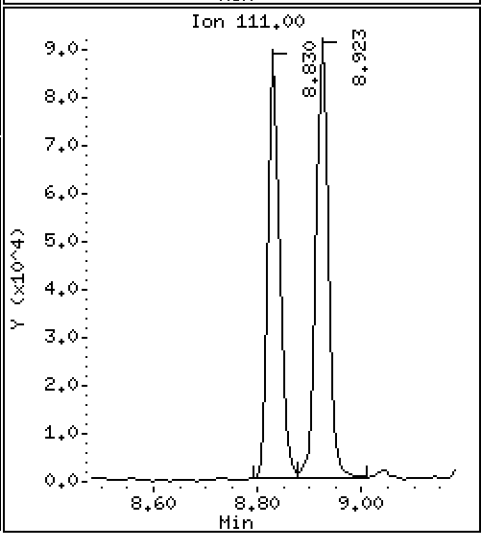


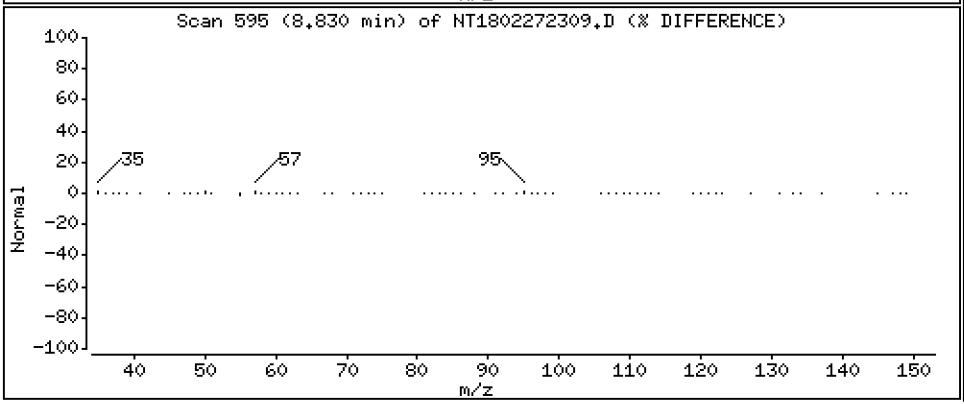












Date : 27-FEB-2023 22:32

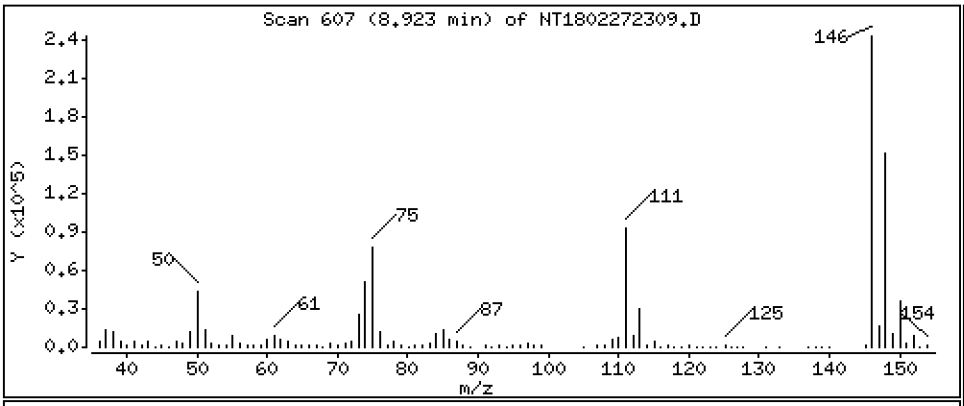
Client ID: Instrument: nt18.i

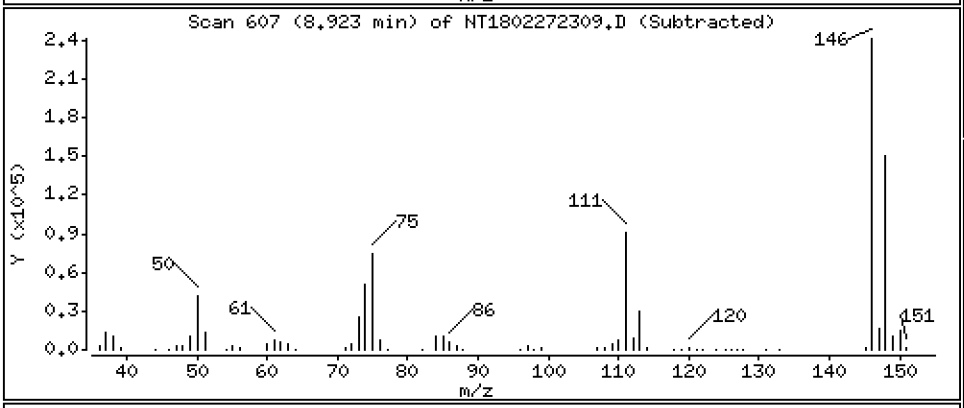
Sample Info: BLA0410-MS1

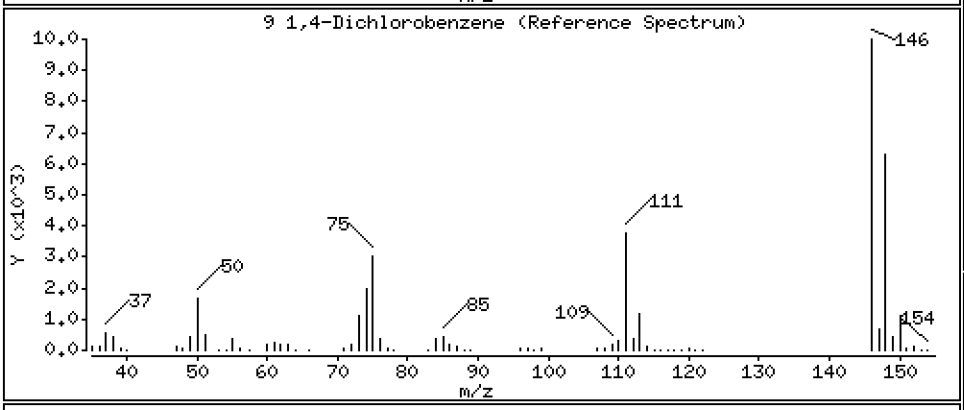
Operator: VTS

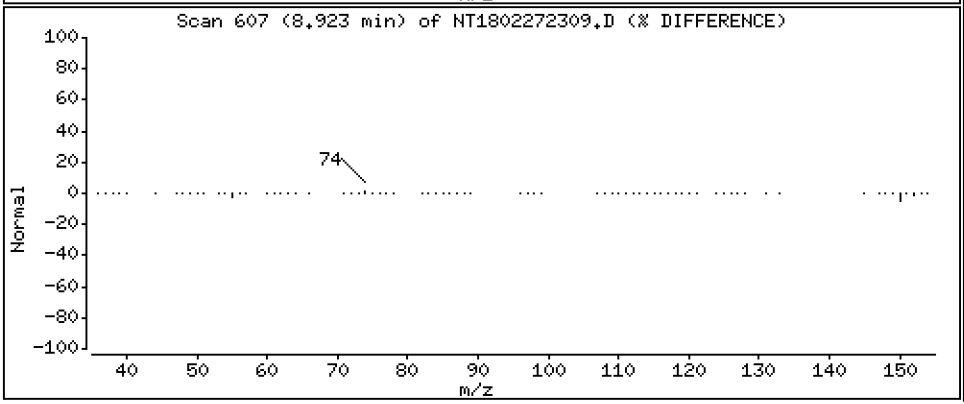
Column phase: ZB-5msi Column diameter: 0.25

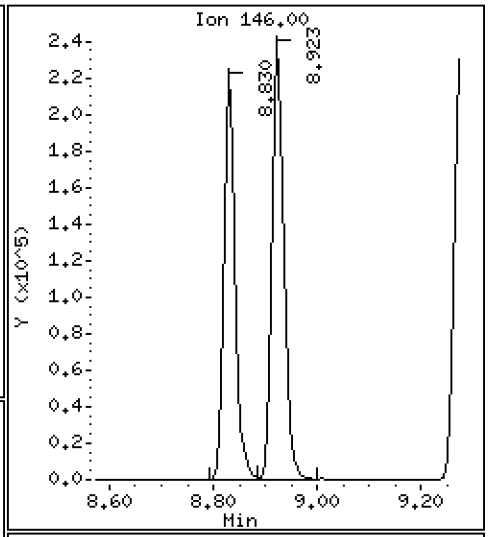
9 1,4-Dichlorobenzene Concentration: 3.218 ug/mL

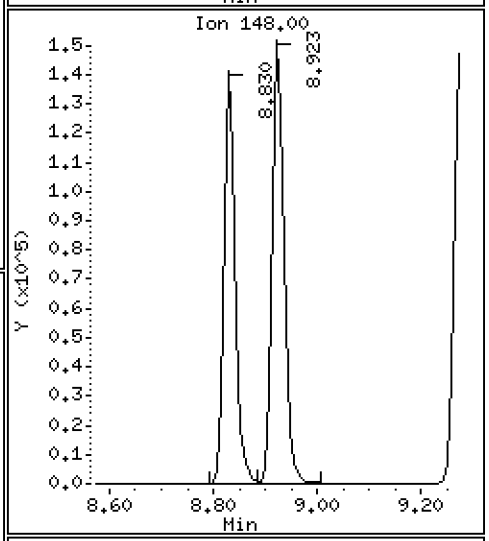


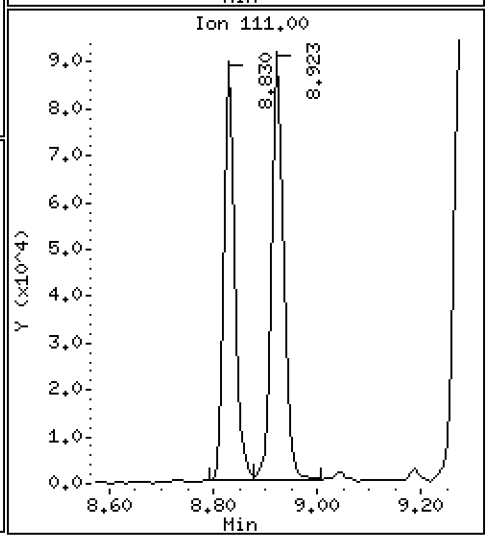












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

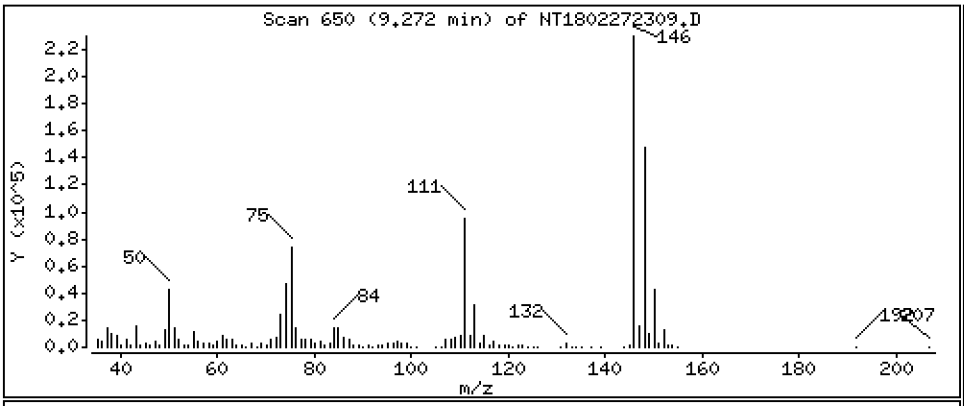
Operator: VTS

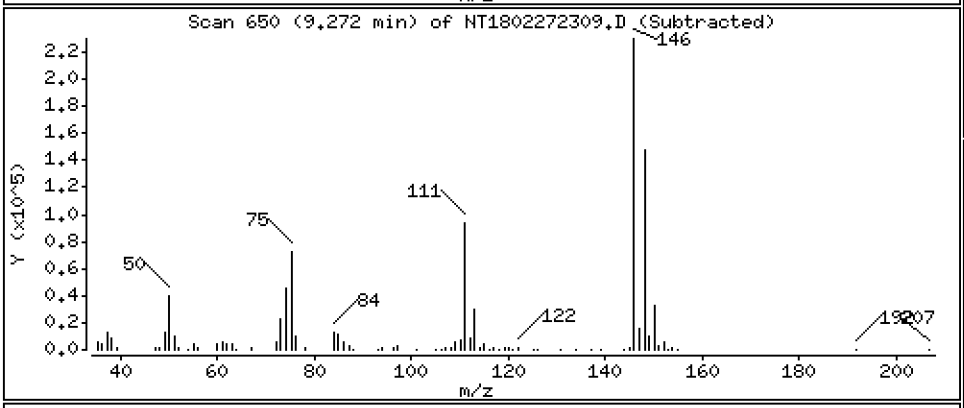
Column phase: ZB-5msi

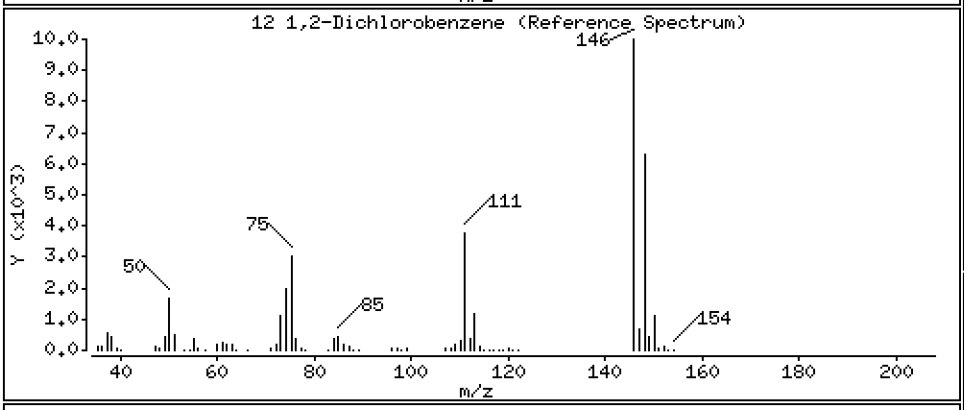
Column diameter: 0.25

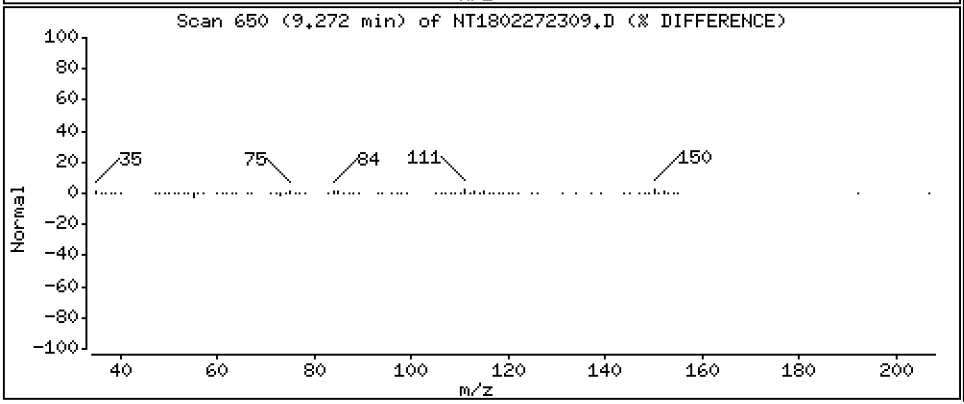
12 1,2-Dichlorobenzene

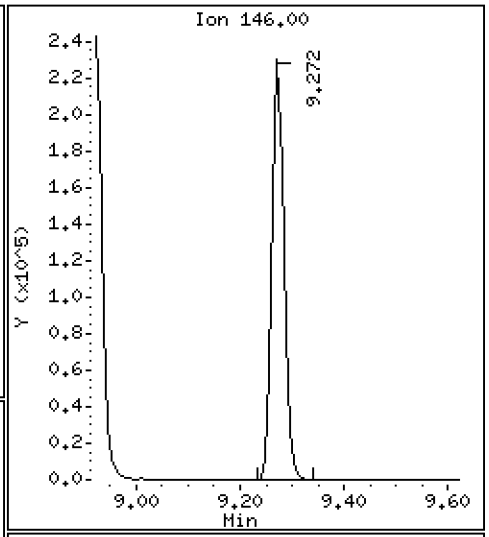
Concentration: 3.136 ug/mL

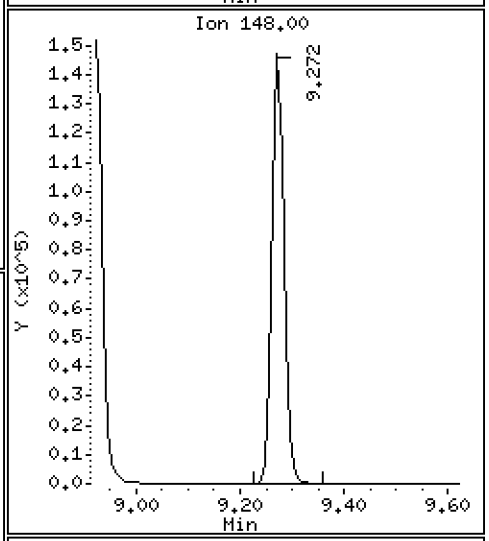


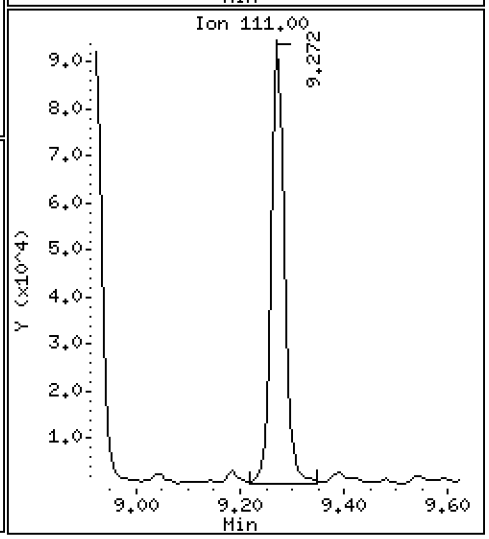












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

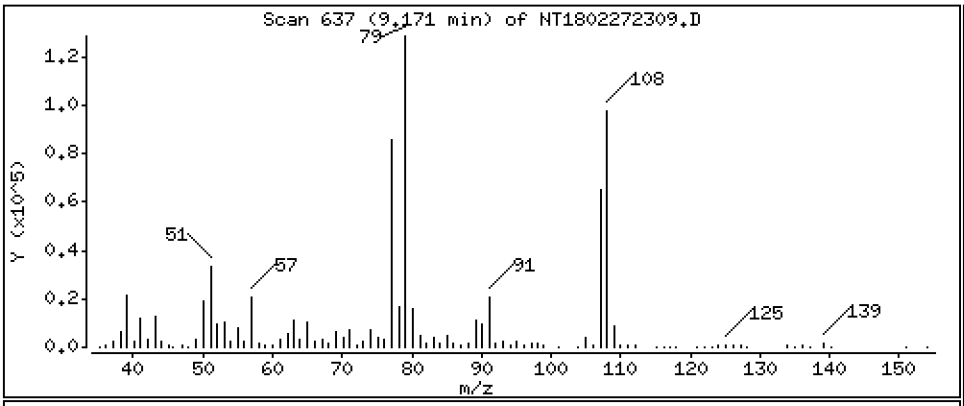
Operator: VTS

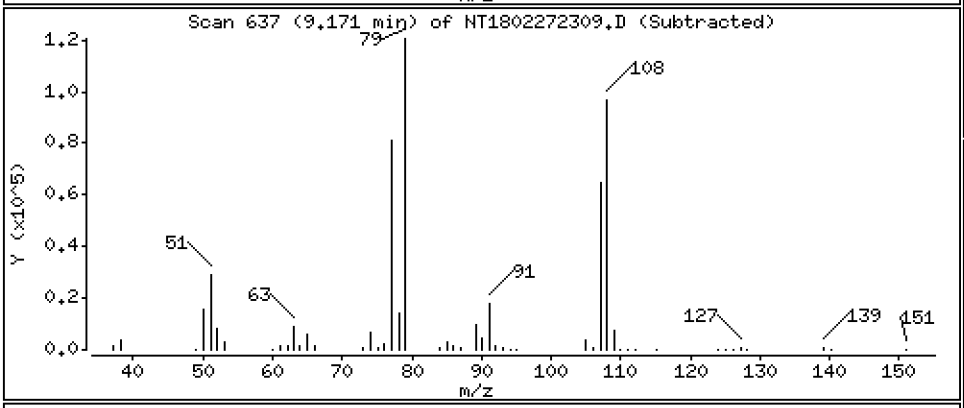
Column phase: ZB-5msi

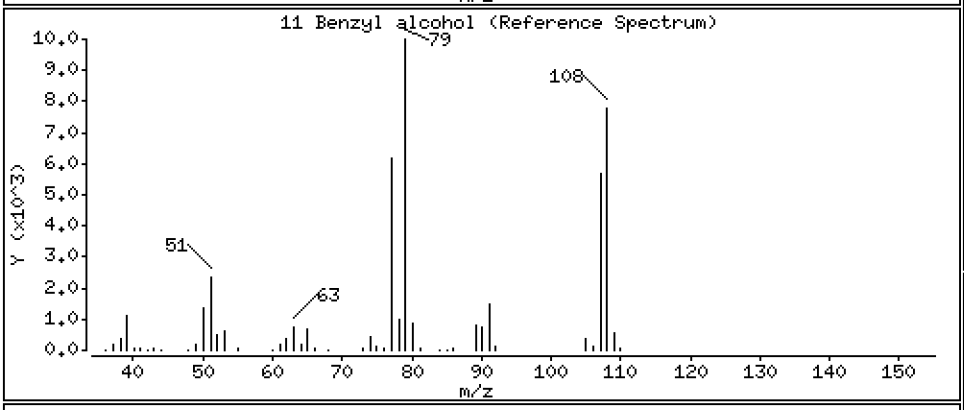
Column diameter: 0.25

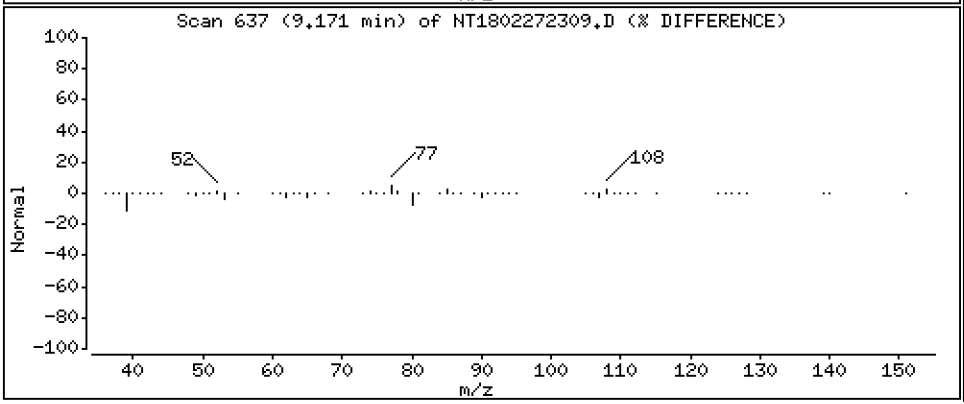
11 Benzyl alcohol

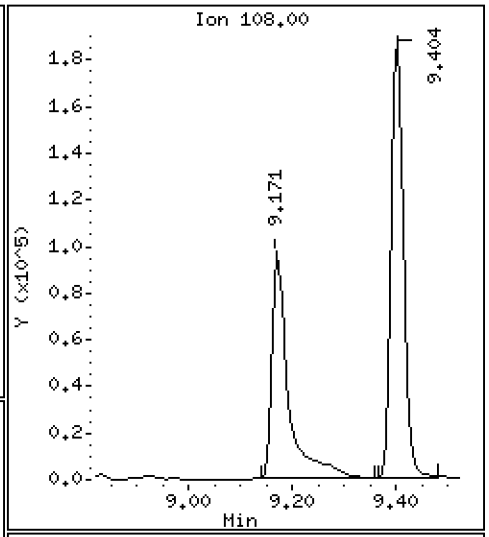
Concentration: 3.458 ug/mL

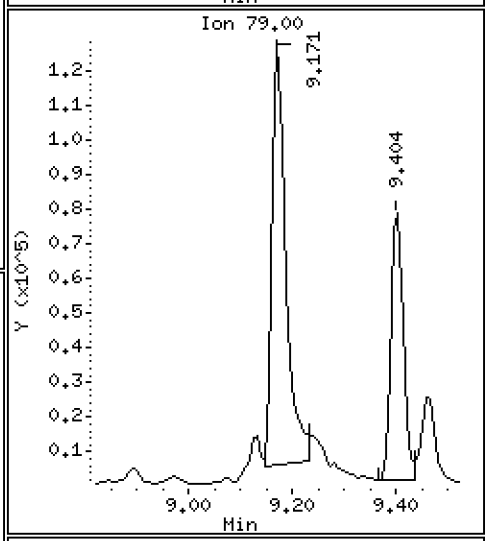


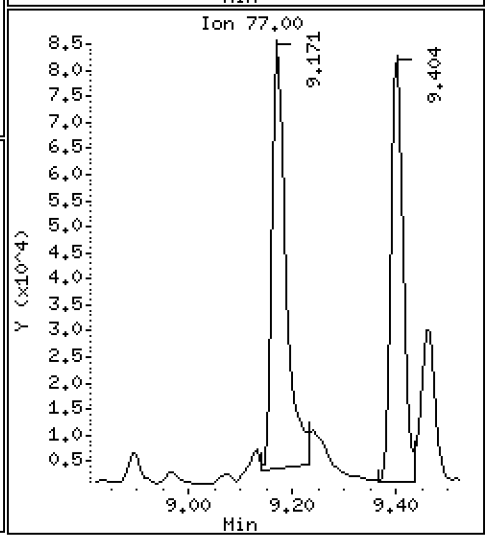












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

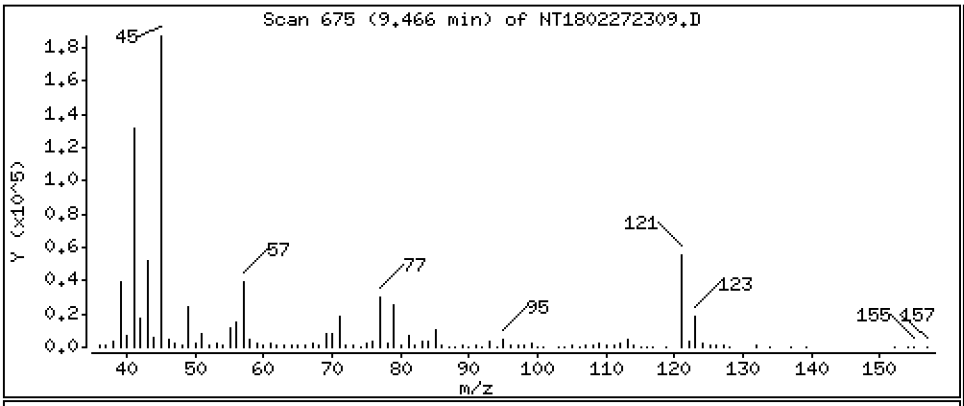
Operator: VTS

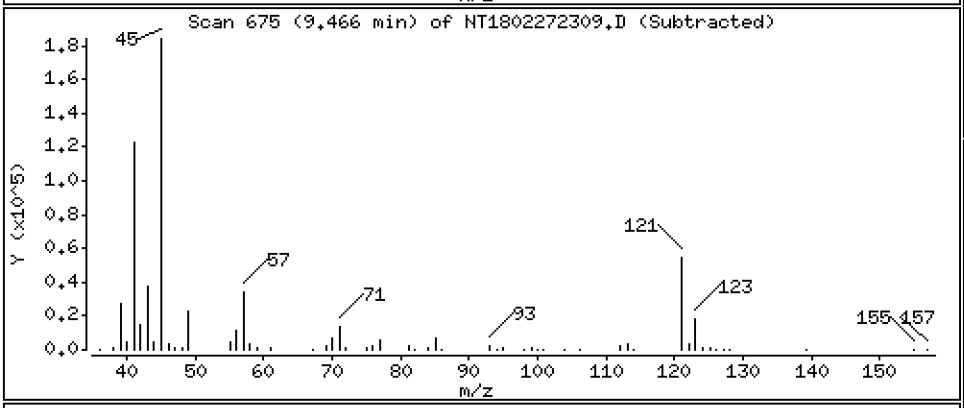
Column phase: ZB-5msi

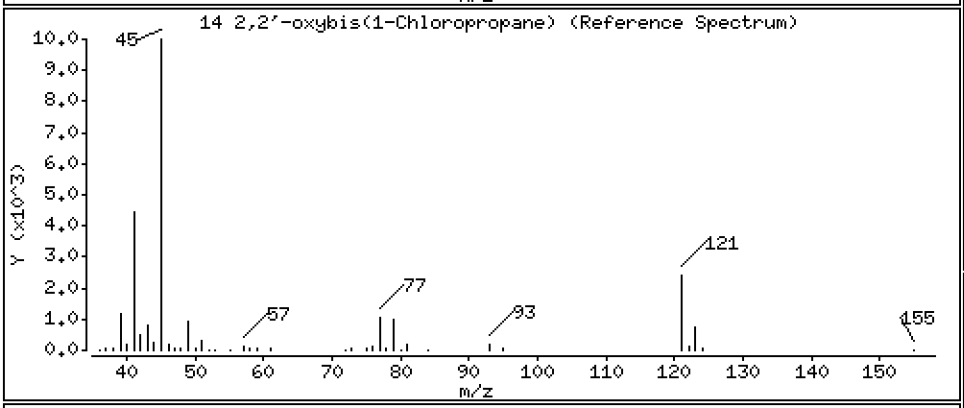
Column diameter: 0.25

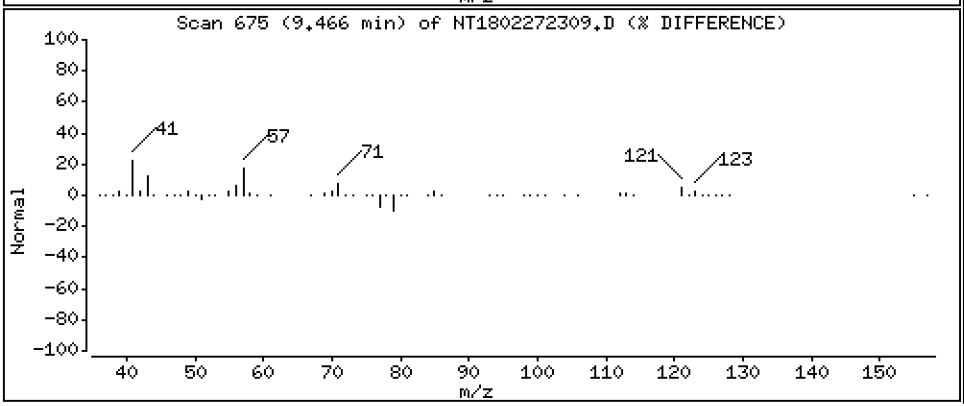
14 2,2'-oxybis(1-Chloropropane)

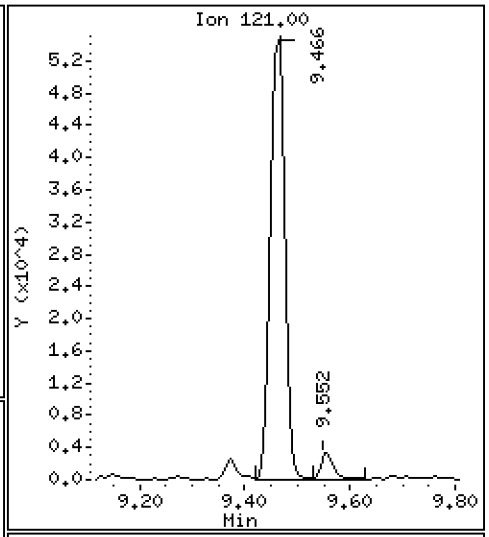
Concentration: 3.891 ug/mL

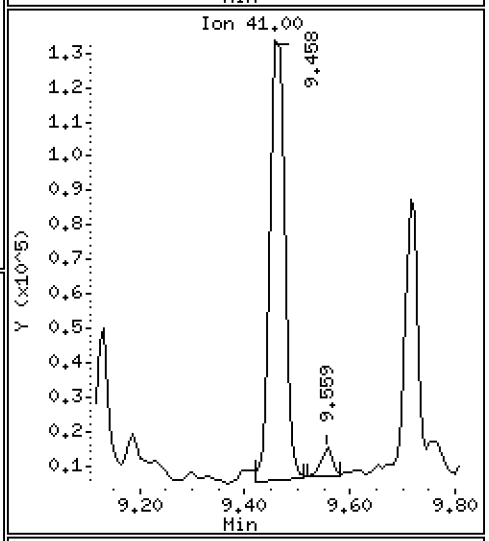


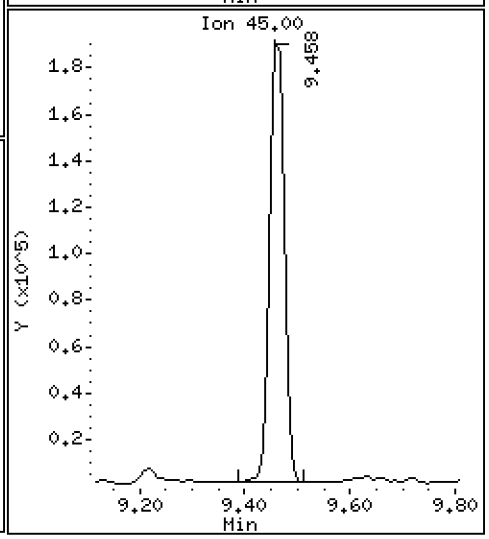












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

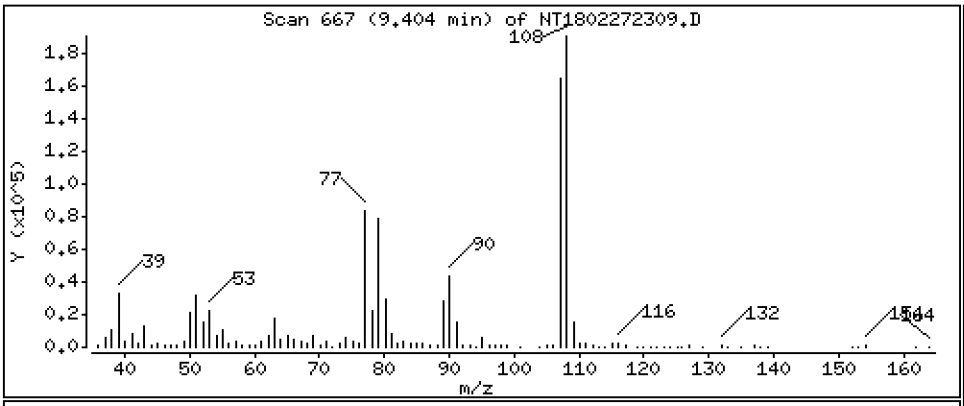
Operator: VTS

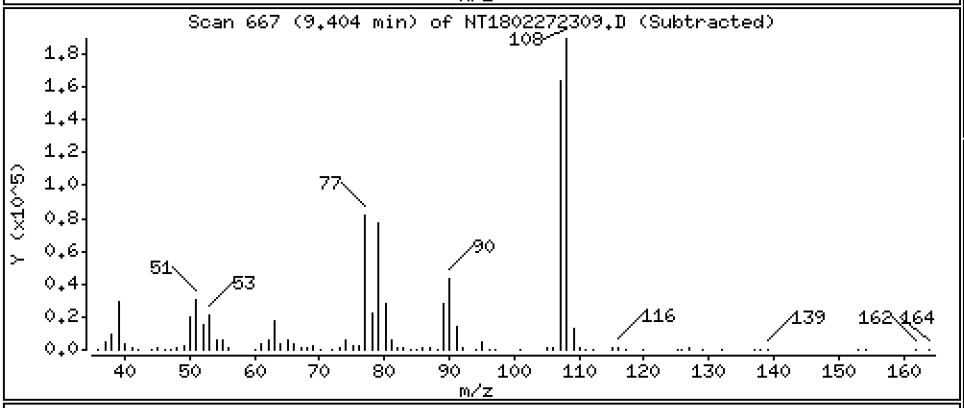
Column phase: ZB-5msi

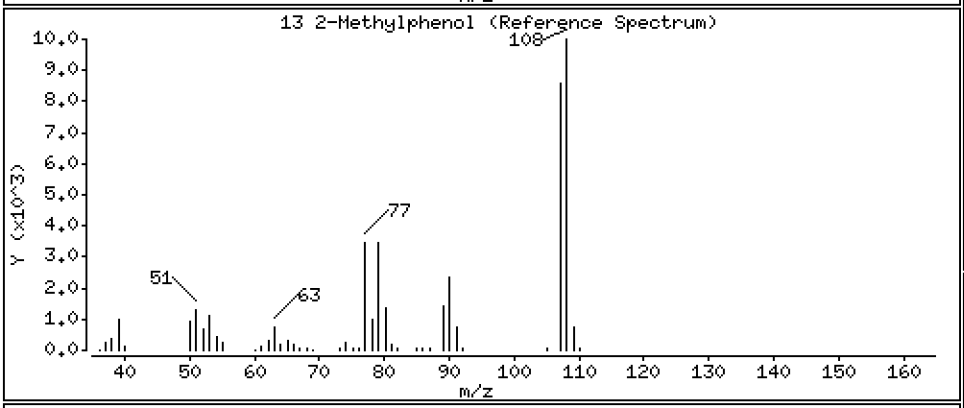
Column diameter: 0.25

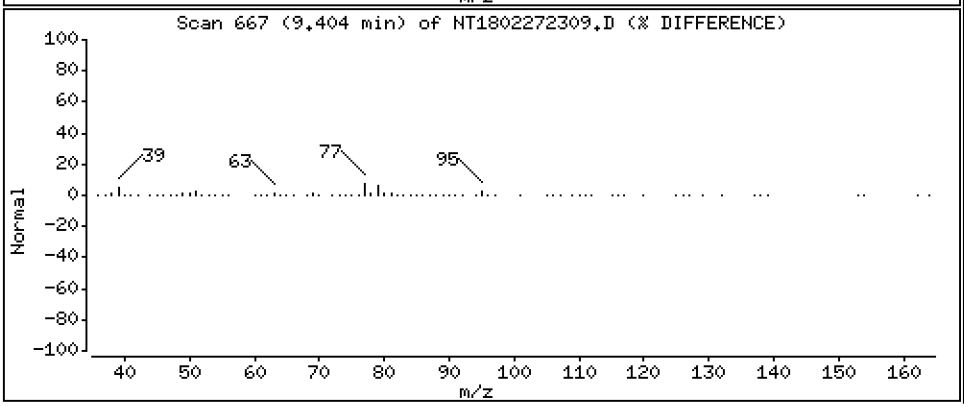
13 2-Methylphenol

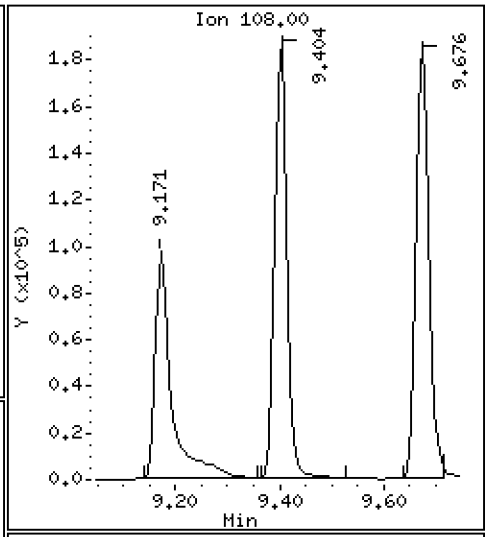
Concentration: 3.101 ug/mL

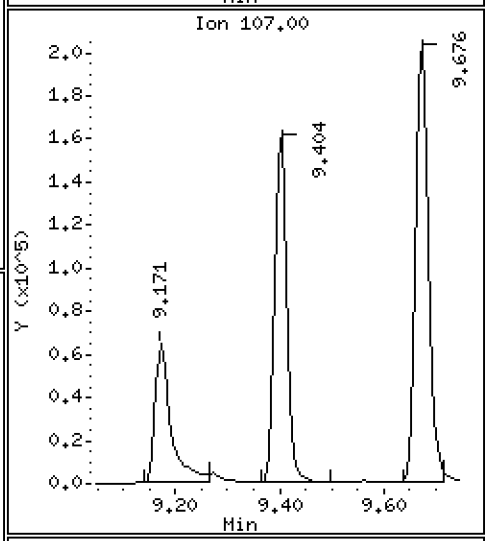


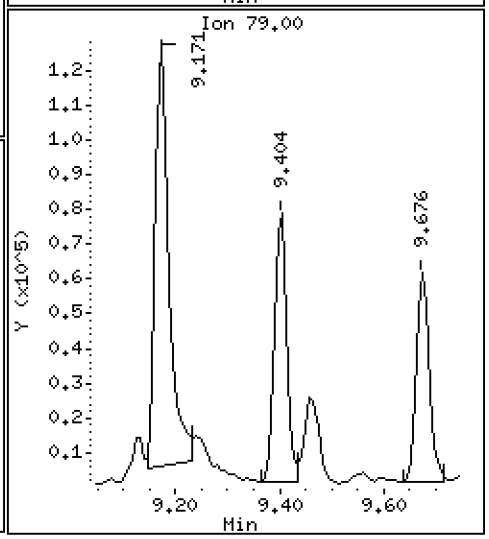












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

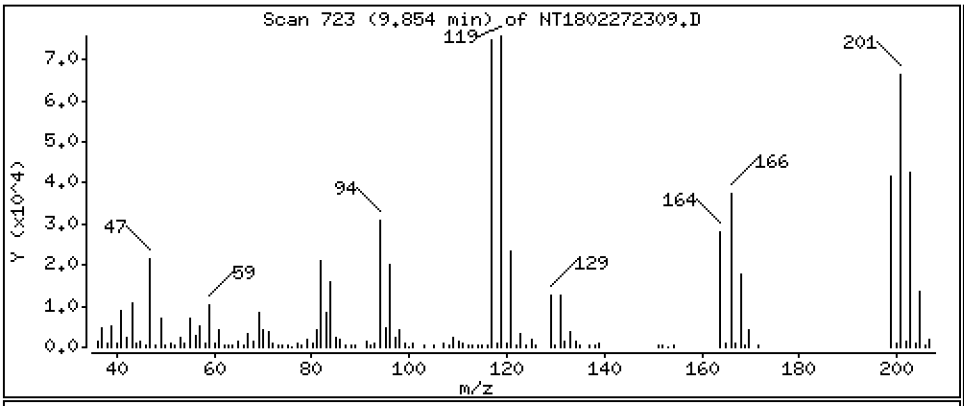
Operator: VTS

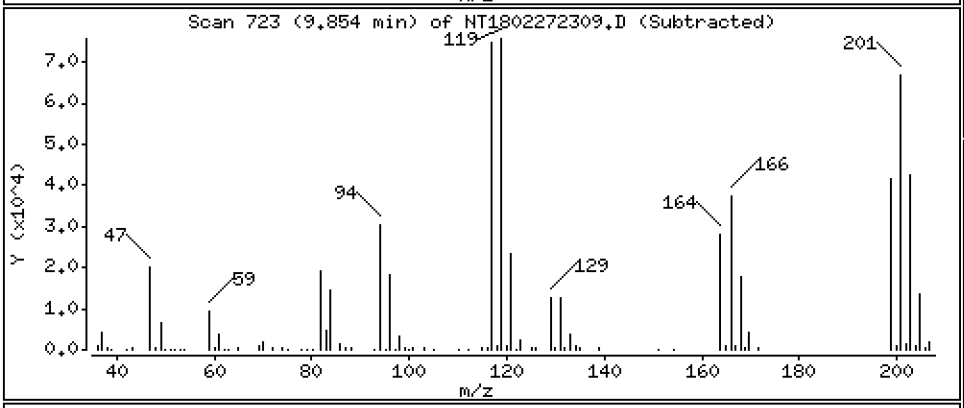
Column phase: ZB-5msi

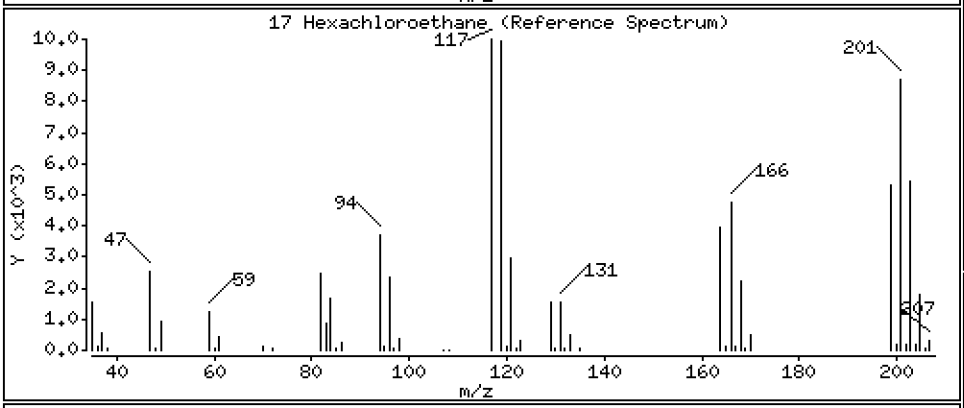
Column diameter: 0.25

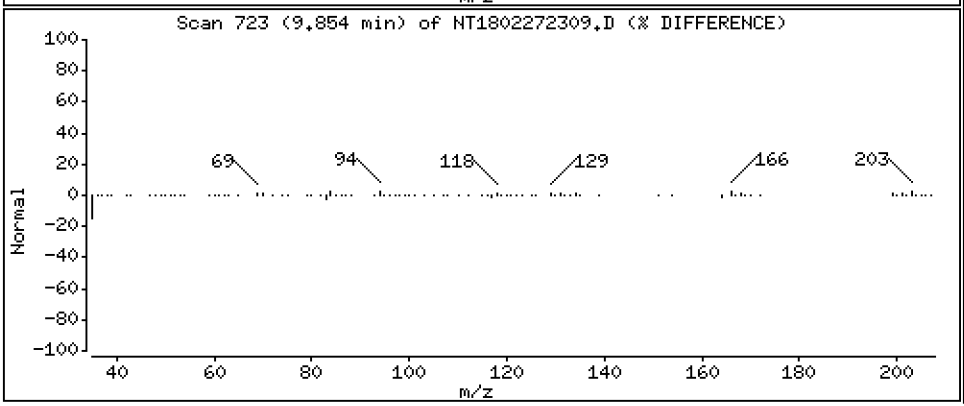
17 Hexachloroethane

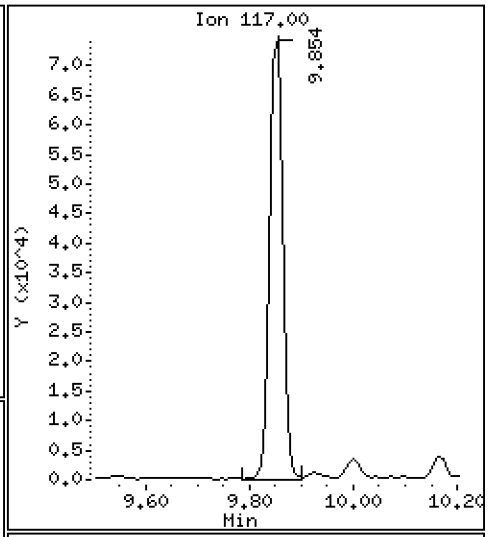
Concentration: 2.812 ug/mL

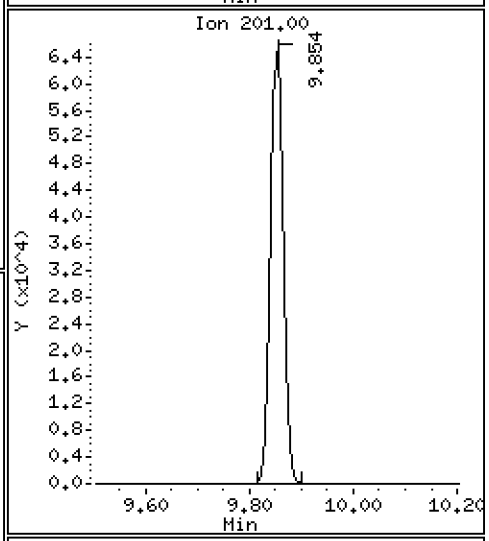


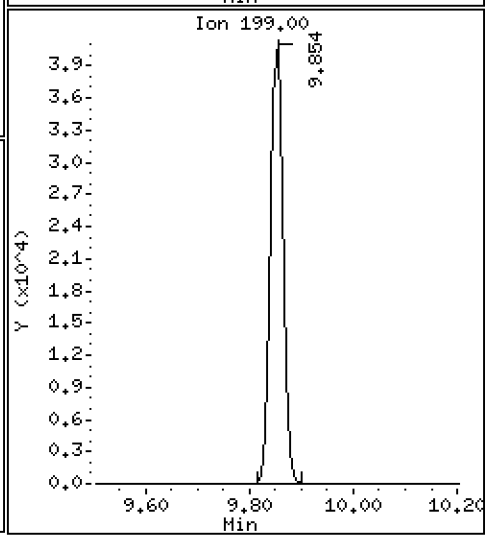












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

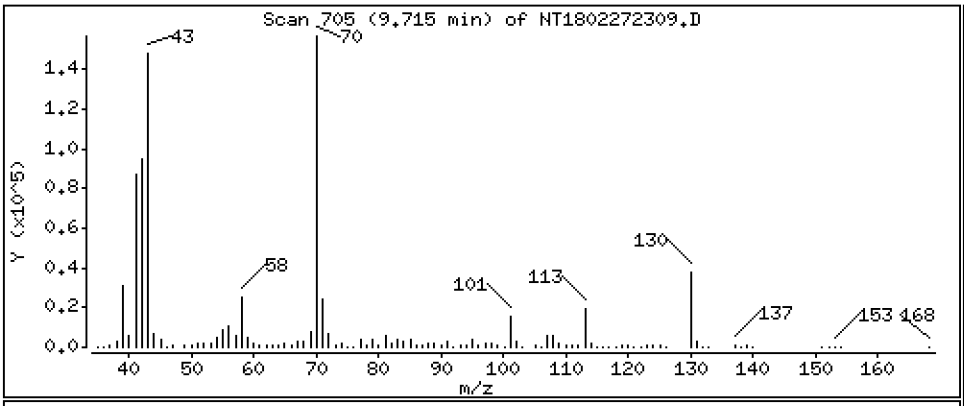
Operator: VTS

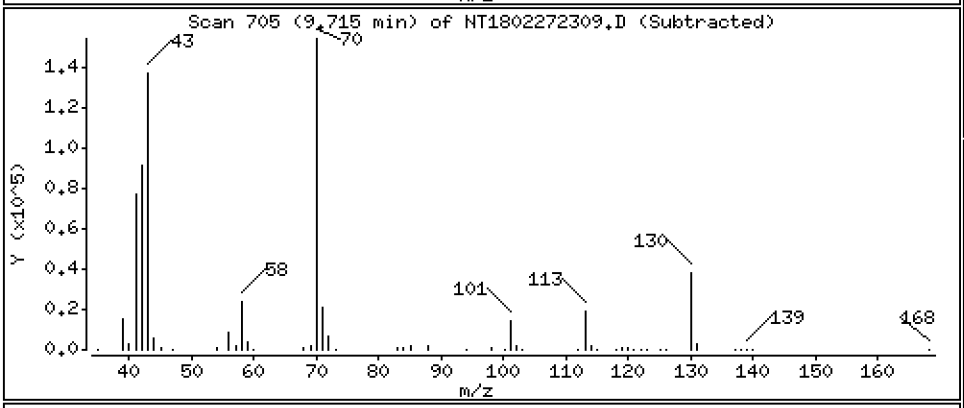
Column phase: ZB-5msi

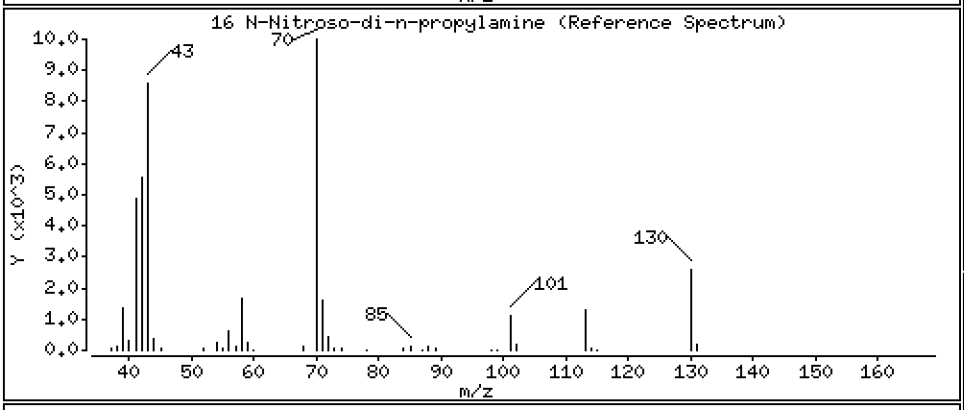
Column diameter: 0.25

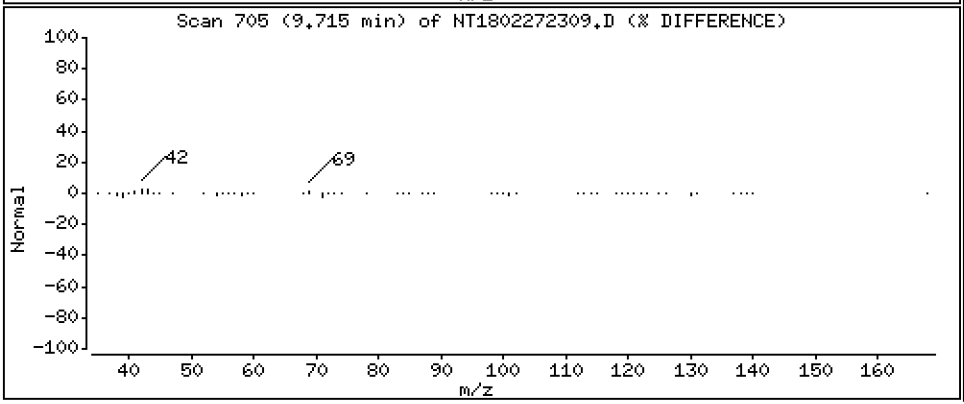
16 N-Nitroso-di-n-propylamine

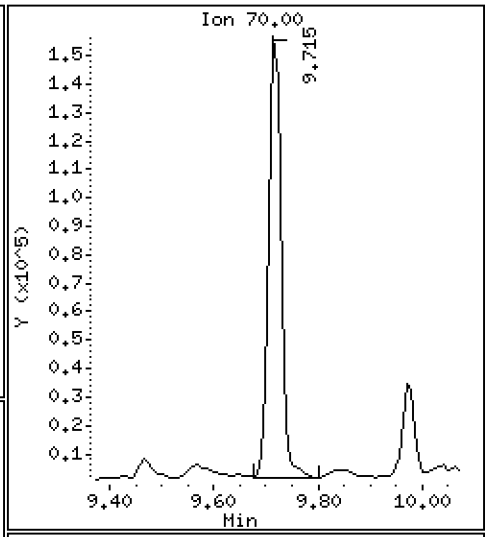
Concentration: 3.496 ug/mL

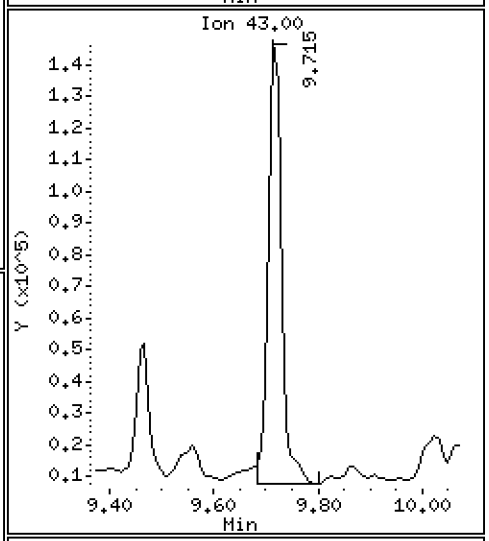


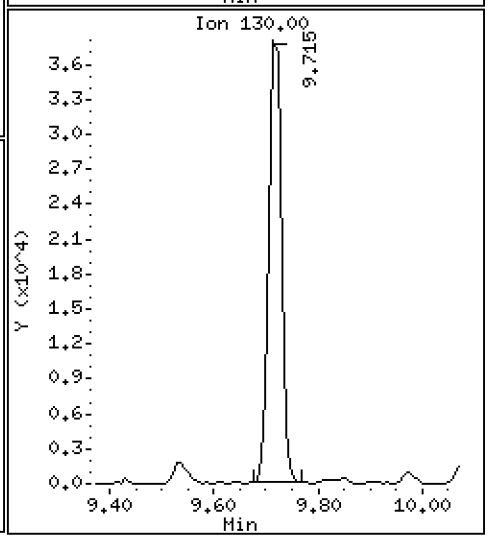












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

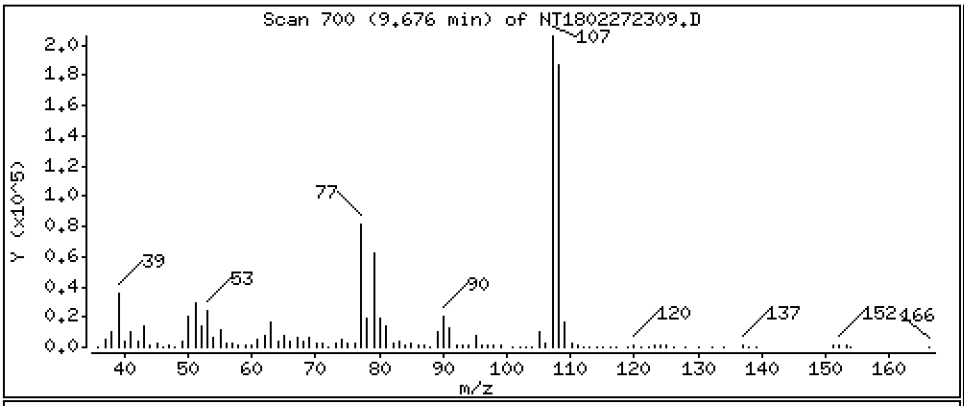
Operator: VTS

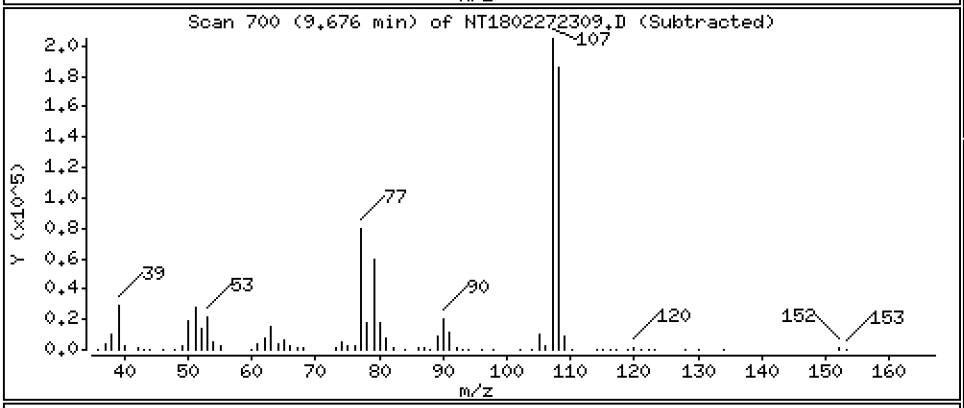
Column phase: ZB-5msi

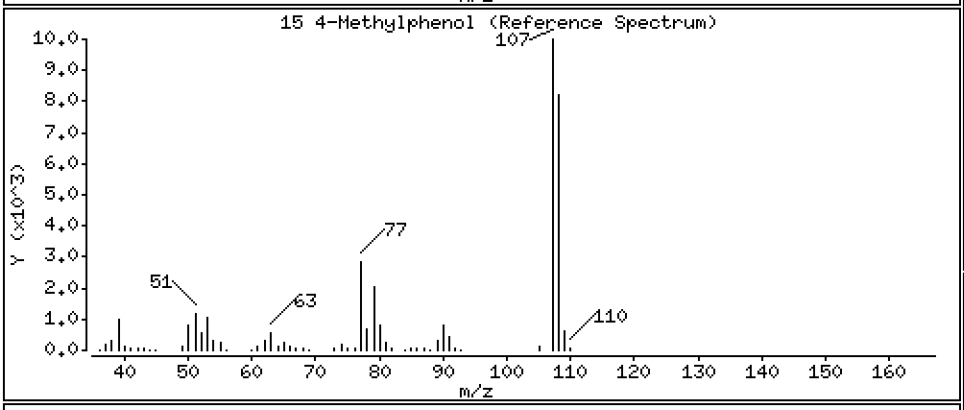
Column diameter: 0.25

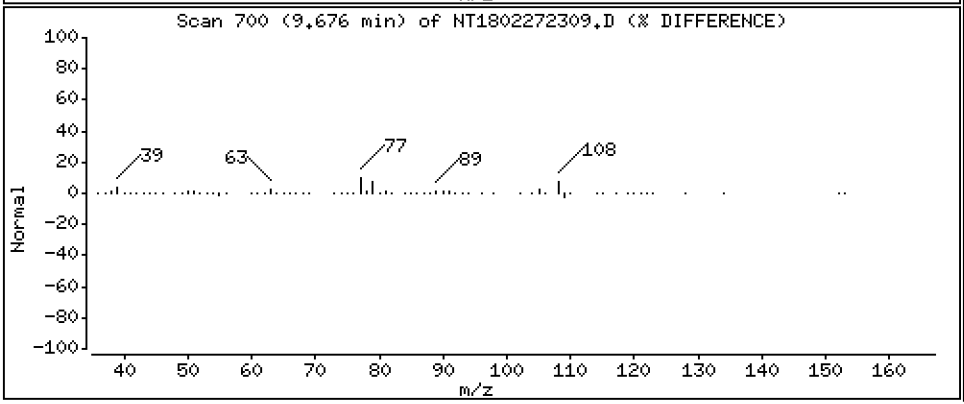
15 4-Methylphenol

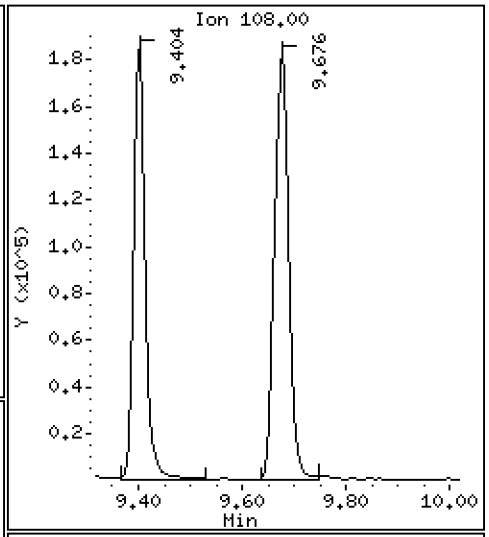
Concentration: 3.387 ug/mL

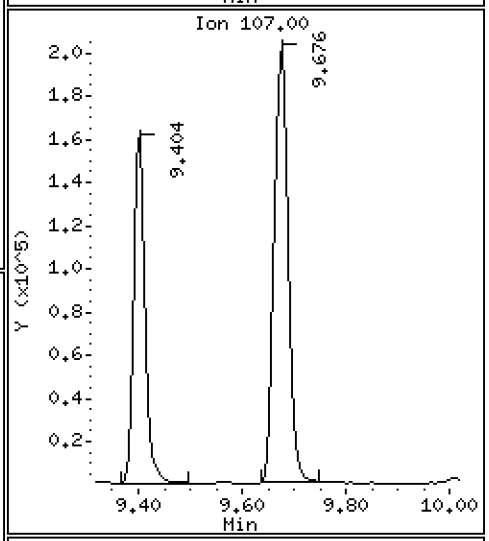


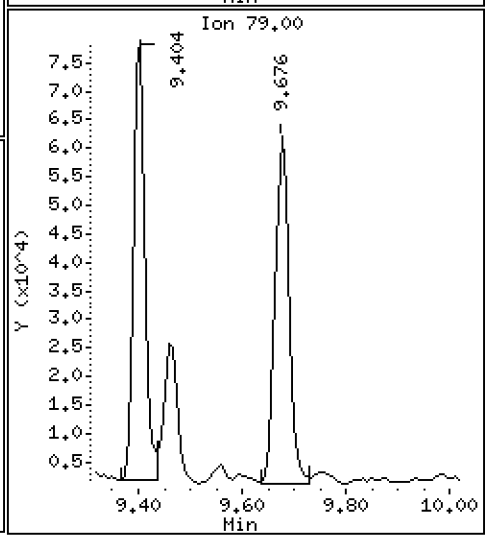












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

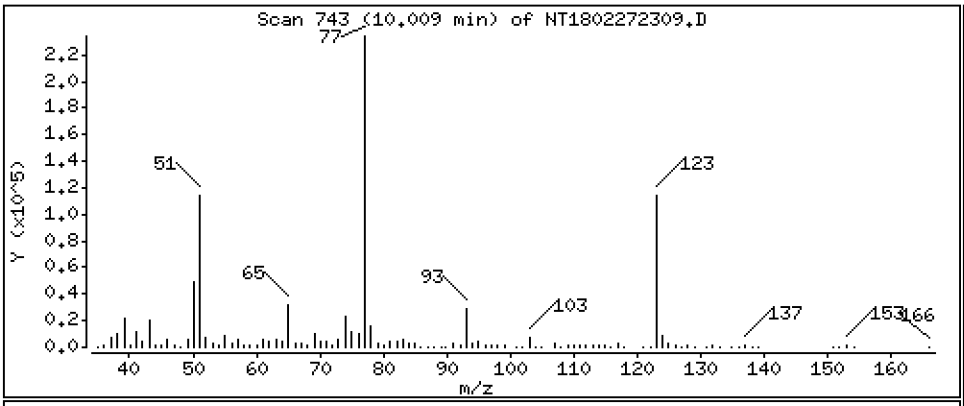
Operator: VTS

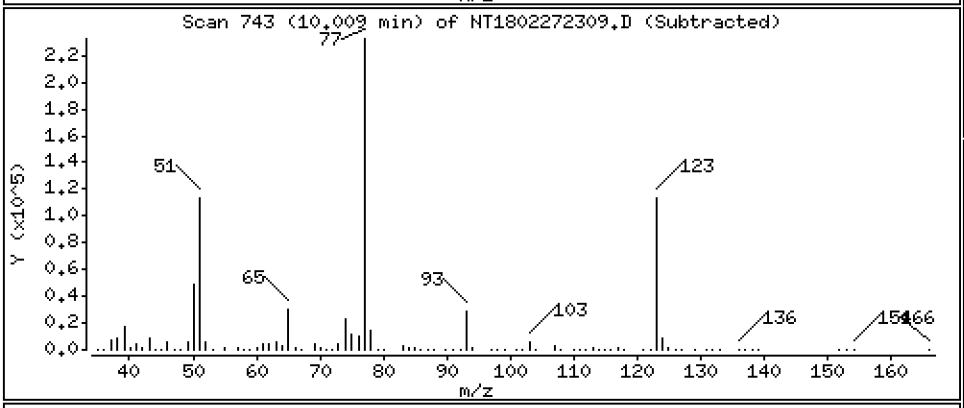
Column phase: ZB-5msi

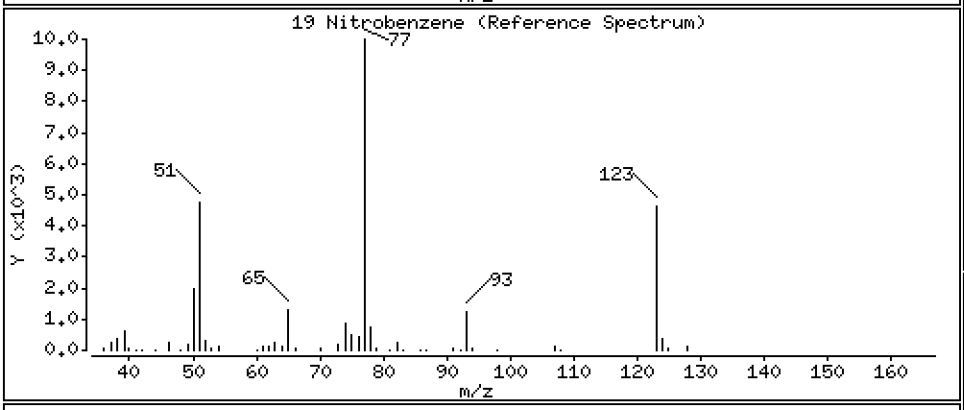
Column diameter: 0.25

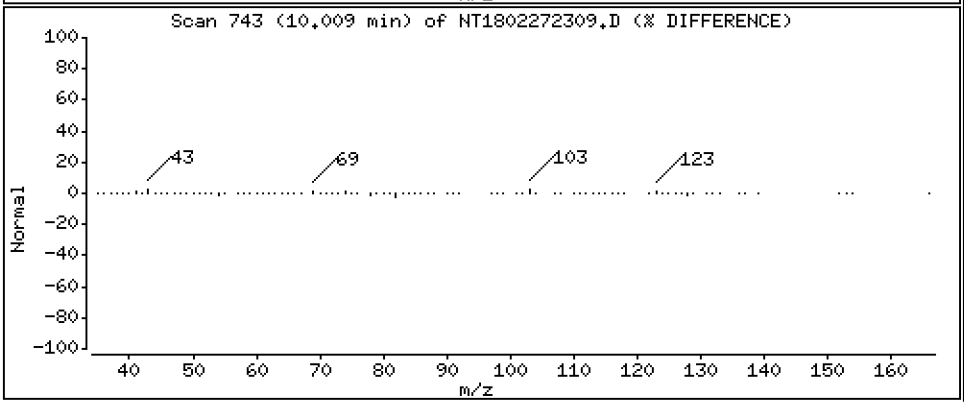
19 Nitrobenzene

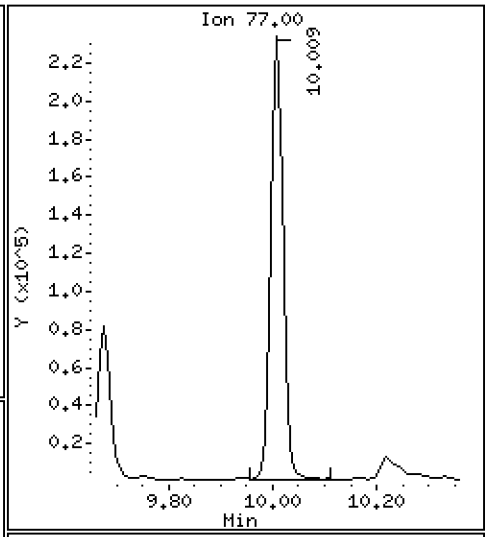
Concentration: 3.287 ug/mL

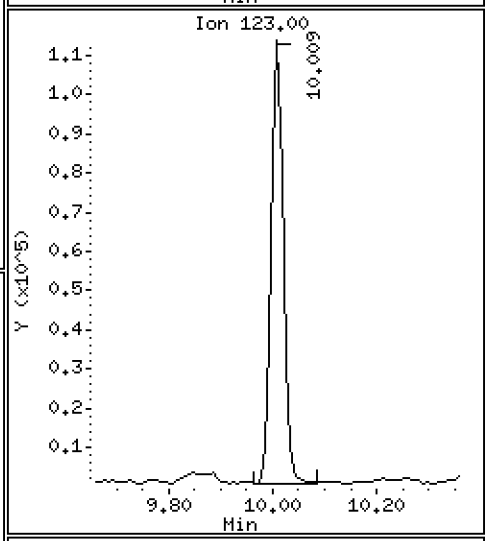


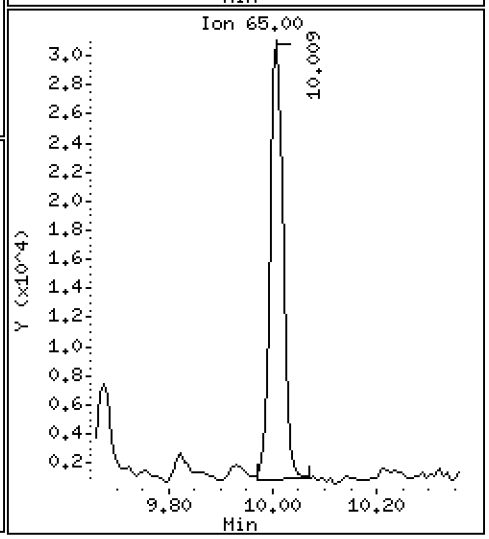












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

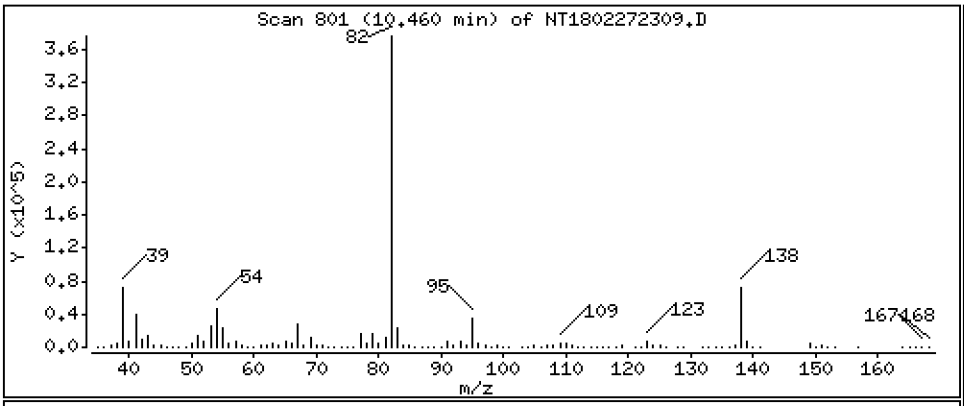
Operator: VTS

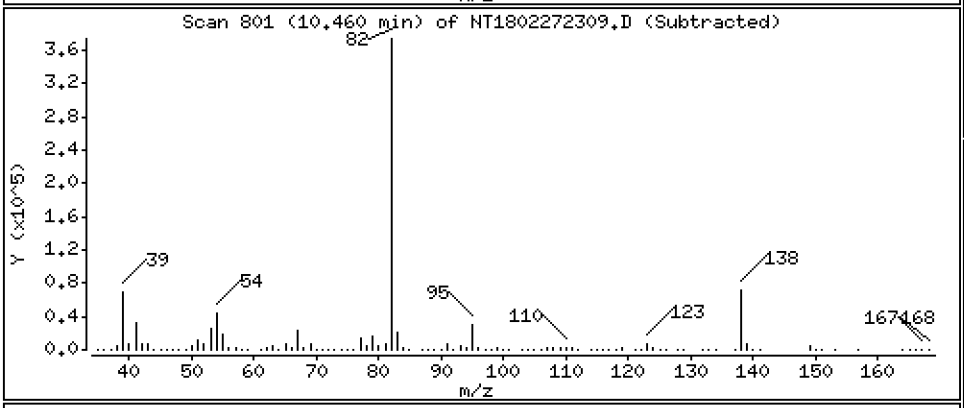
Column phase: ZB-5msi

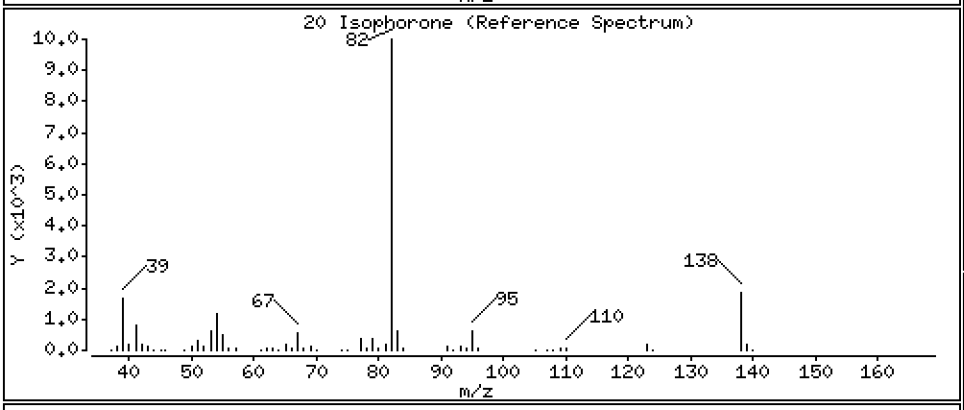
Column diameter: 0.25

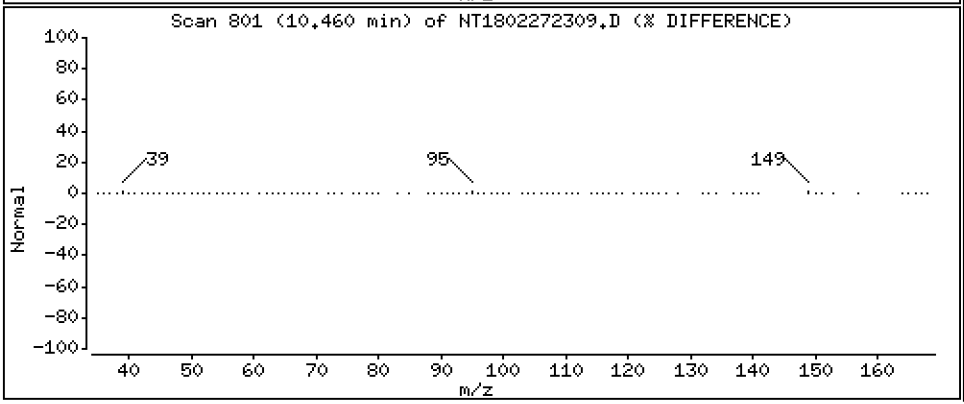
20 Isophorone

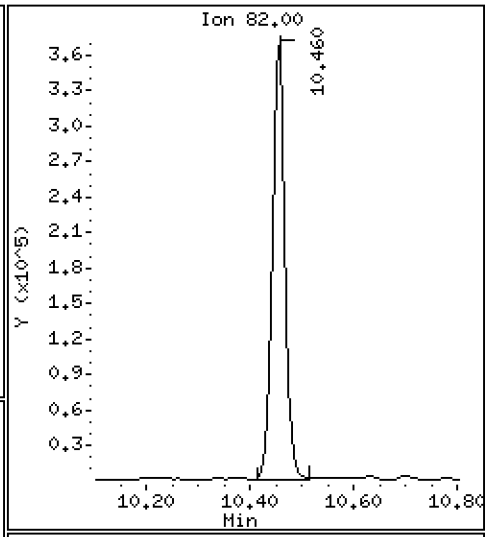
Concentration: 4.531 ug/mL

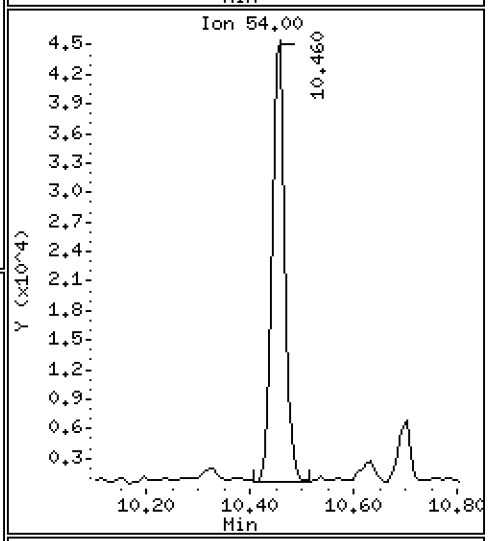


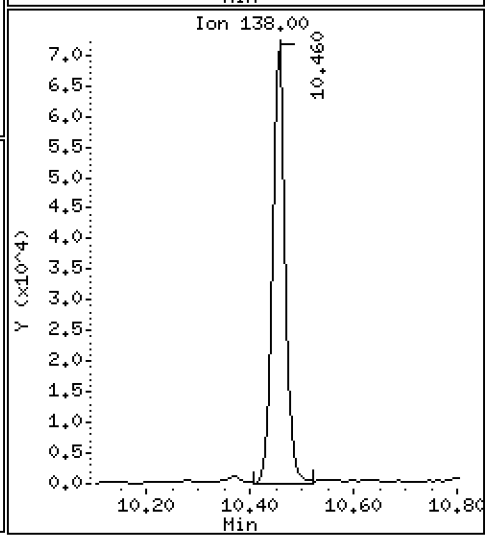












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

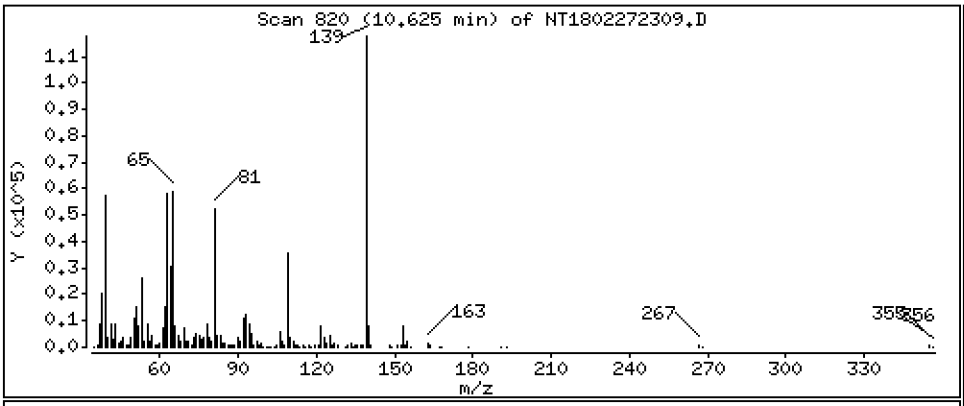
Operator: VTS

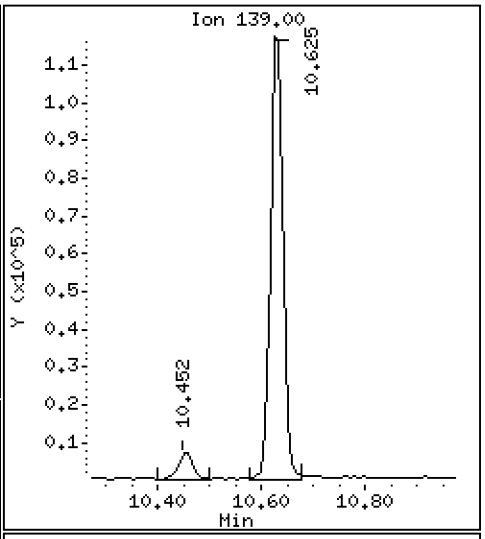
Column phase: ZB-5msi

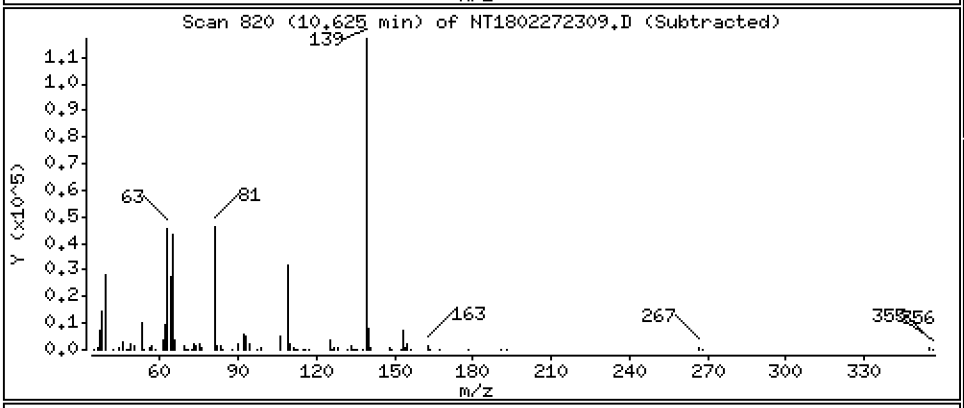
Column diameter: 0.25

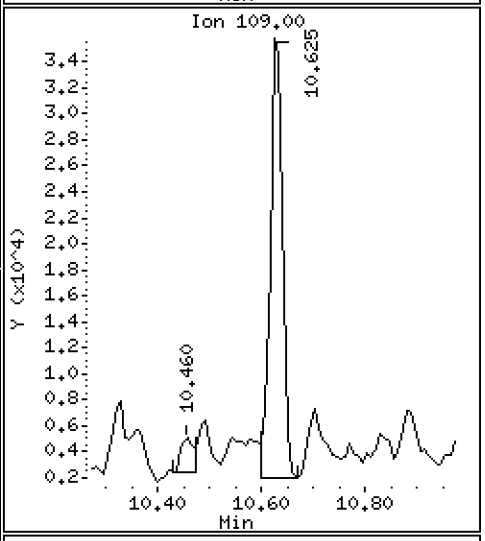
21 2-Nitrophenol

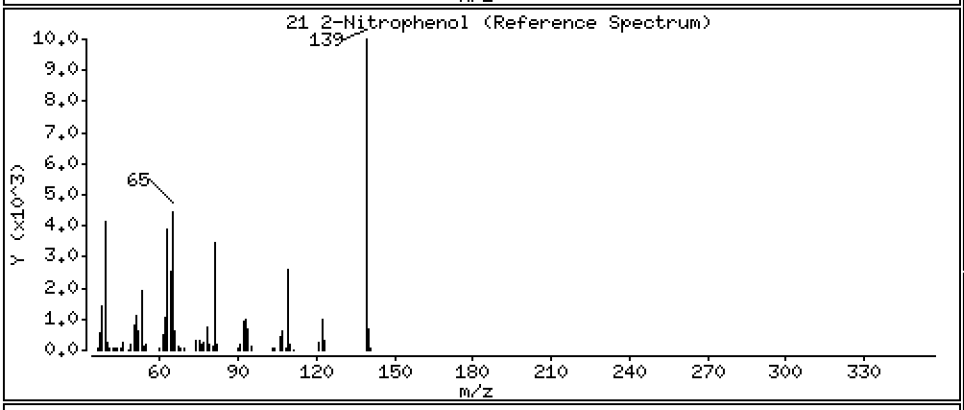
Concentration: 4.276 ug/mL

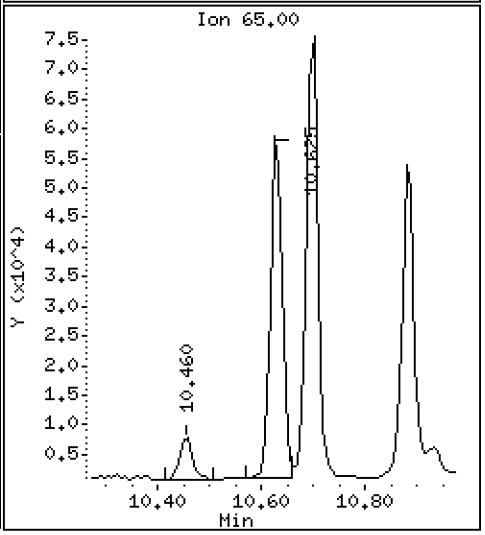


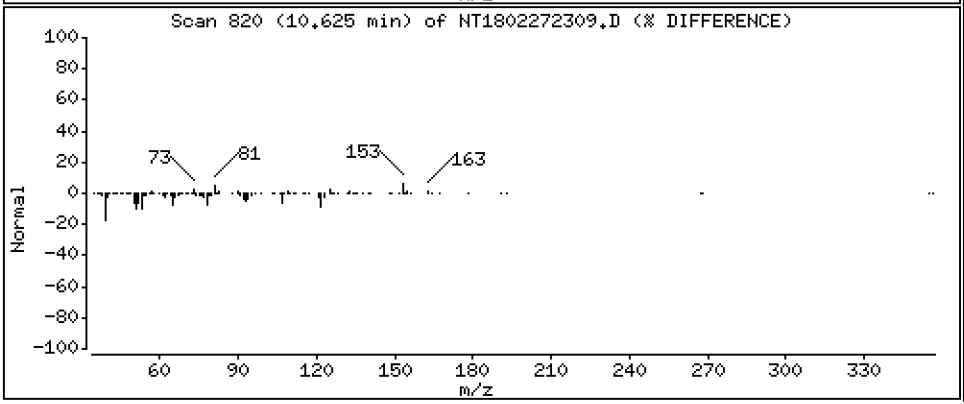












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

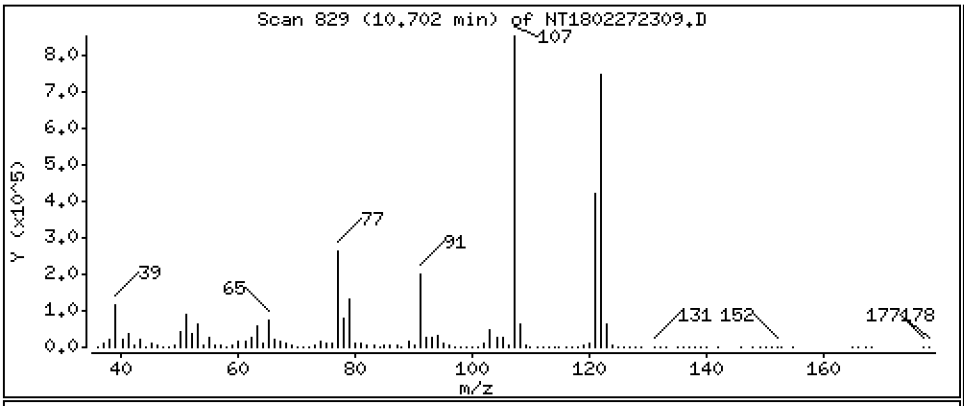
Operator: VTS

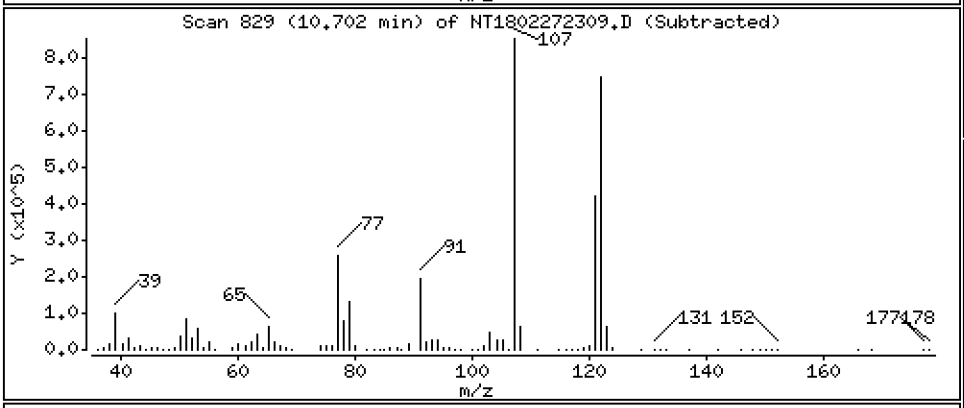
Column phase: ZB-5msi

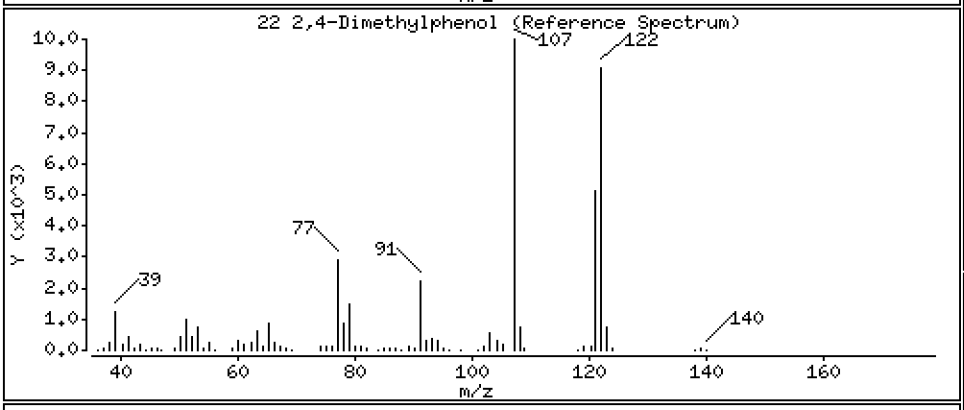
Column diameter: 0.25

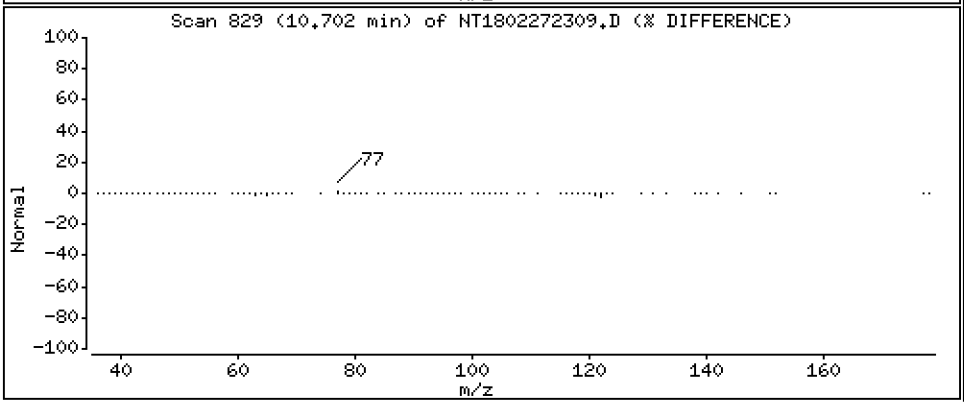
22 2,4-Dimethylphenol

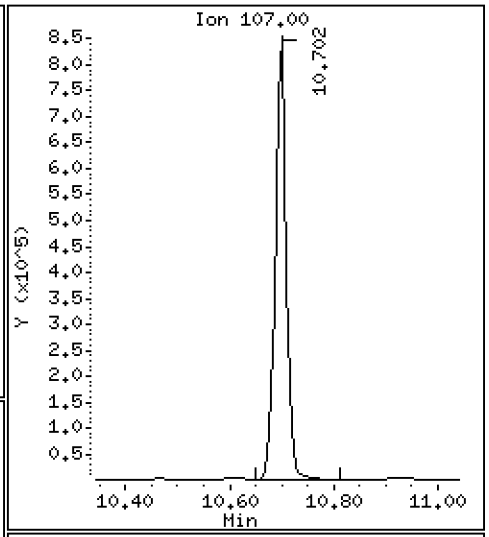
Concentration: 12.68 ug/mL

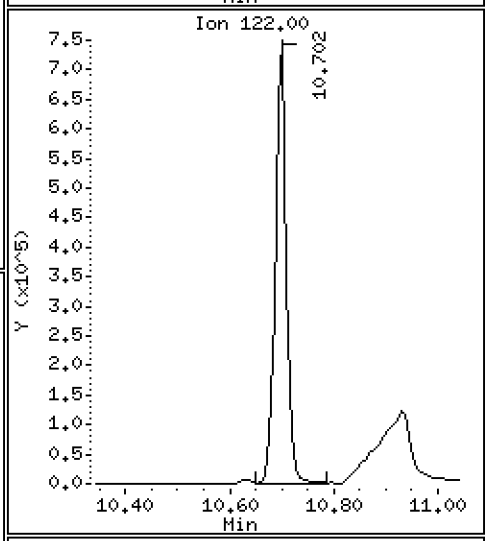


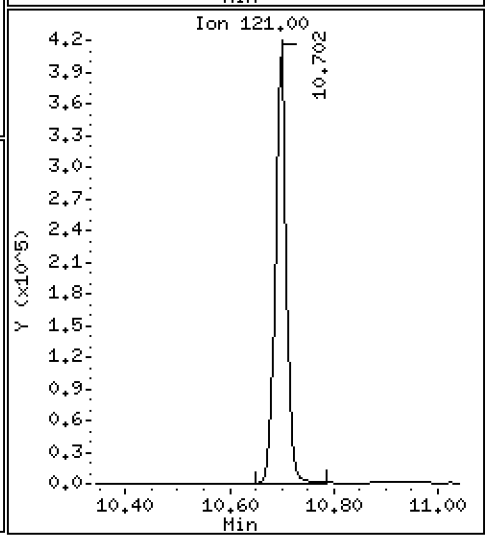












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272309.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

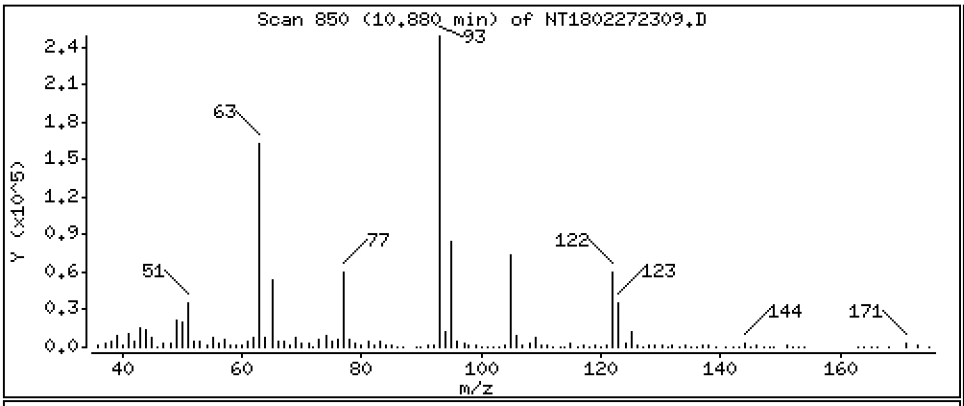
Operator: VTS

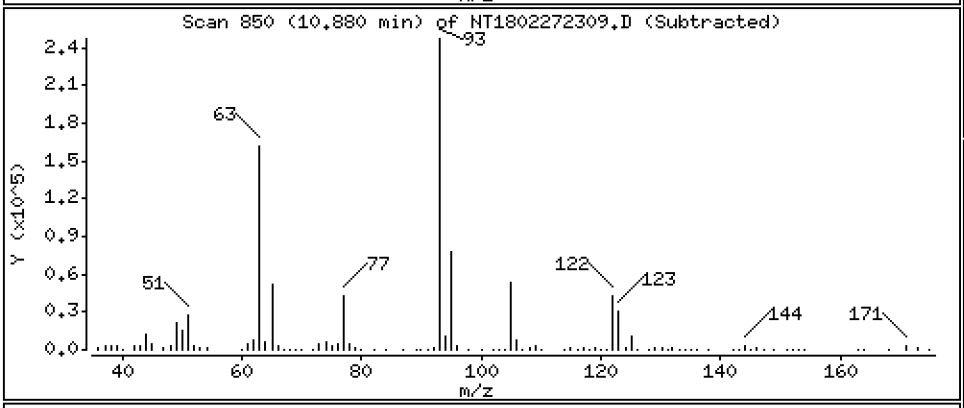
Column phase: ZB-5msi

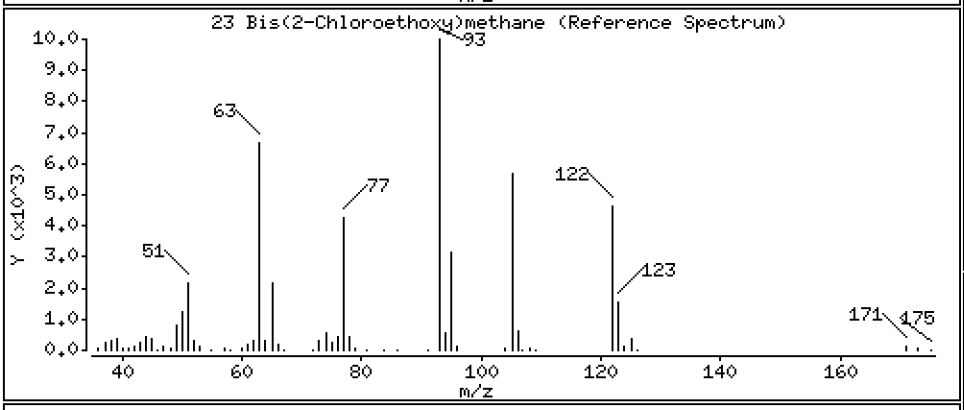
Column diameter: 0.25

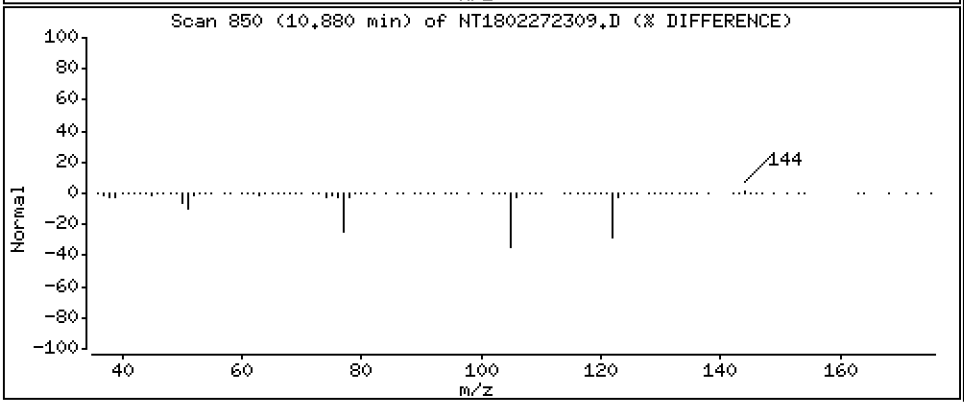
23 Bis(2-Chloroethoxy)methane

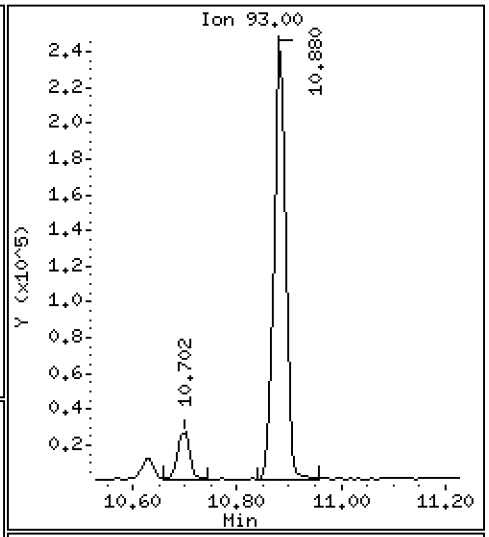
Concentration: 3.988 ug/mL

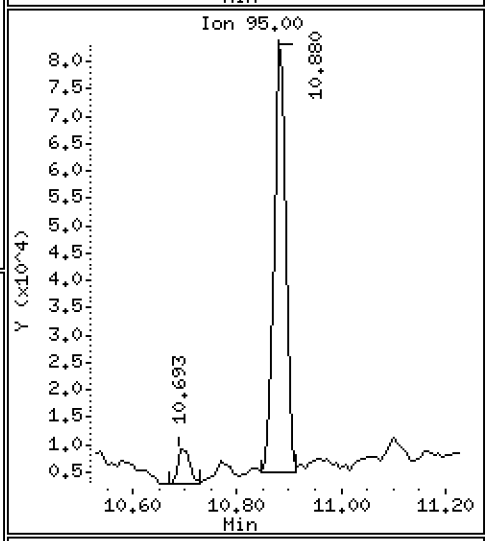


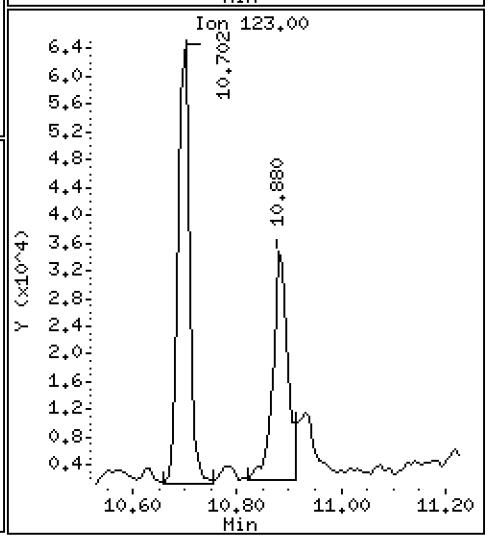












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

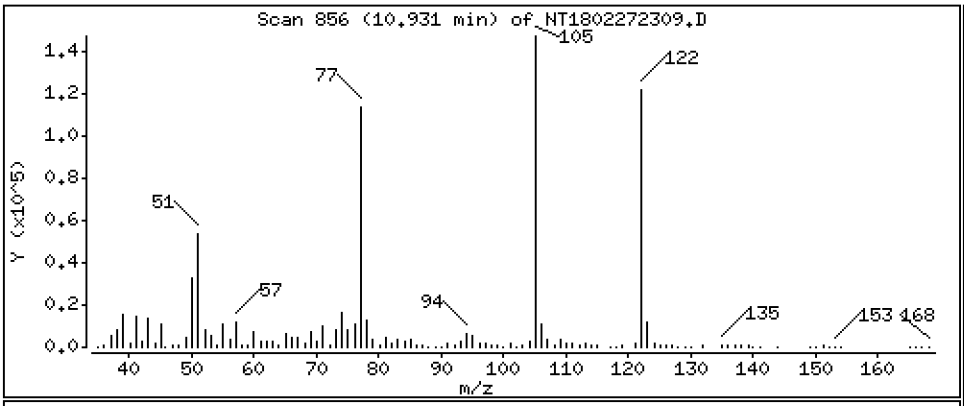
Operator: VTS

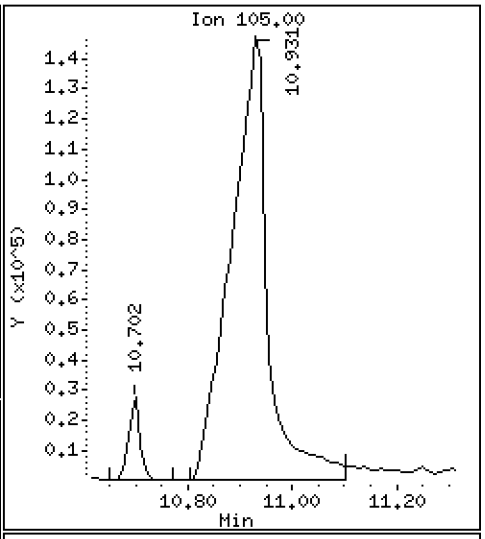
Column phase: ZB-5msi

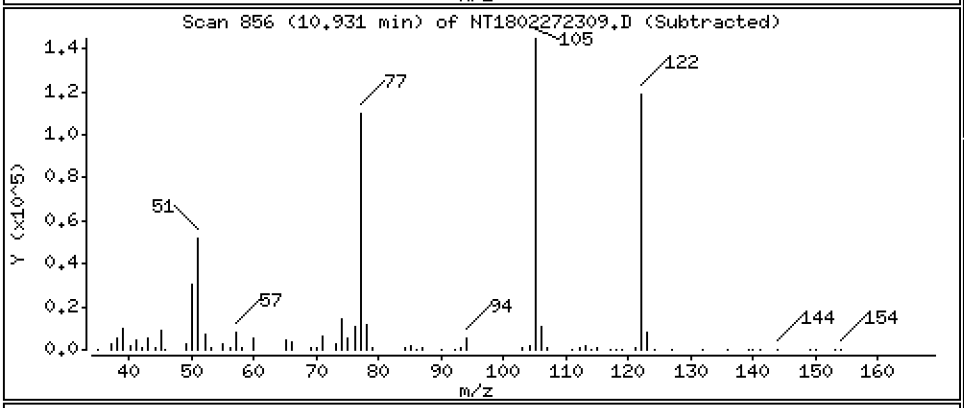
Column diameter: 0.25

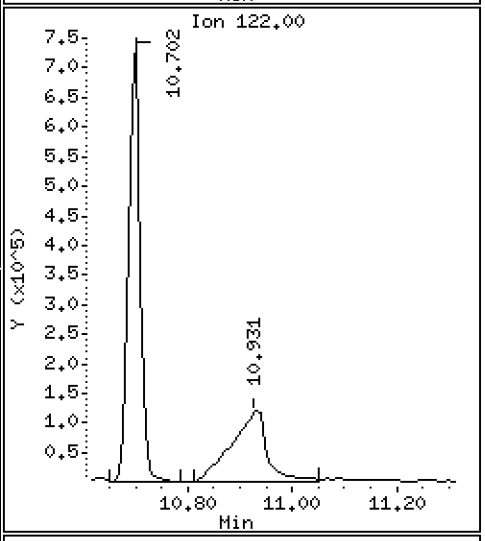
24 Benzoic acid

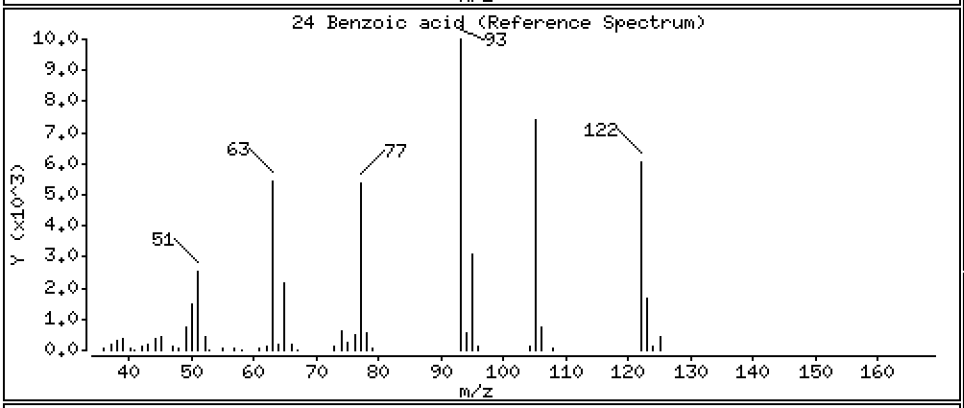
Concentration: 17.63 ug/mL

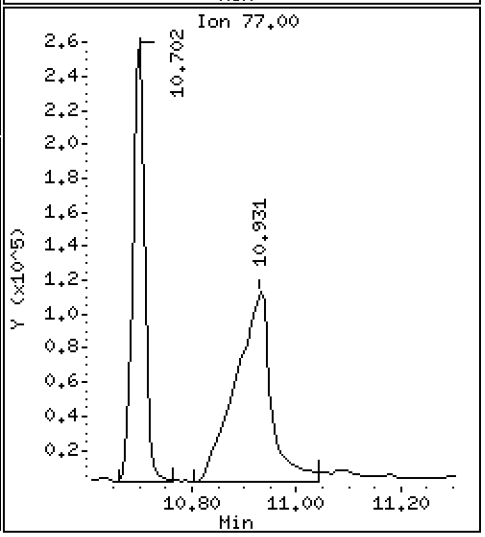


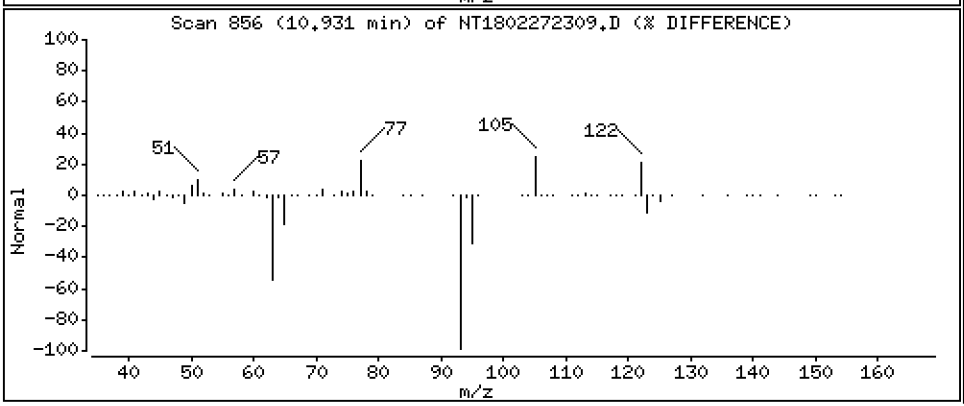












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

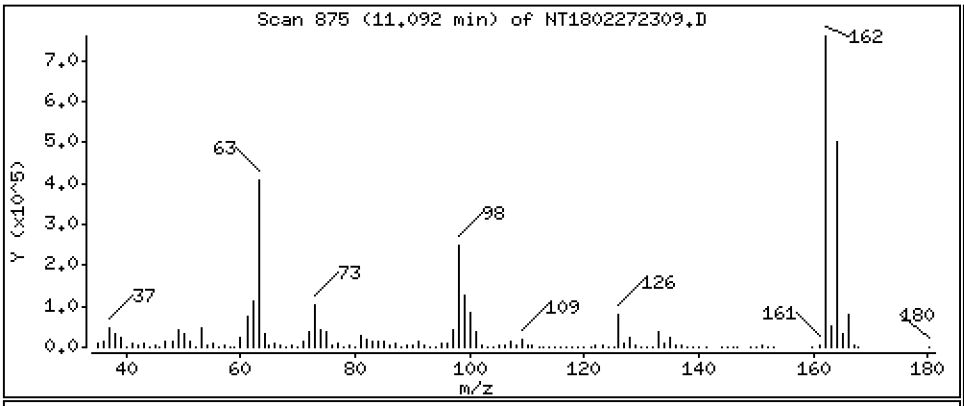
Operator: VTS

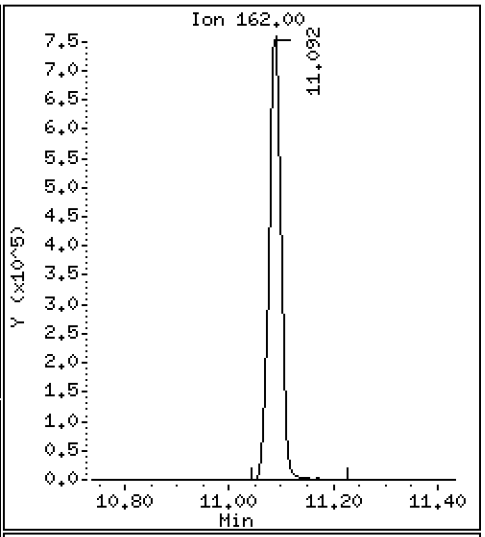
Column phase: ZB-5msi

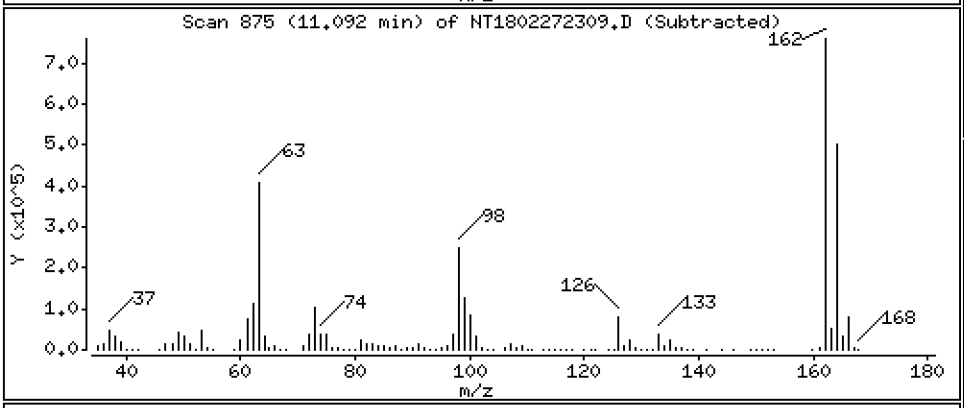
Column diameter: 0.25

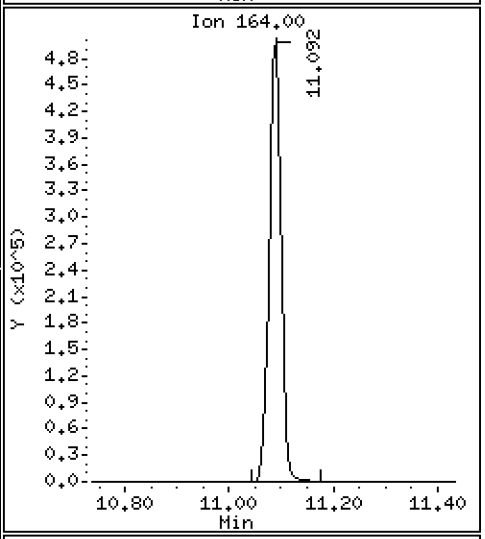
25 2,4-Dichlorophenol

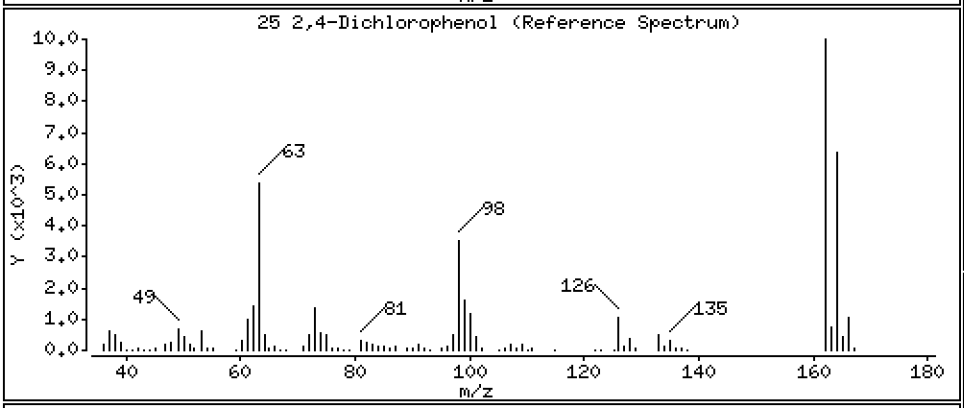
Concentration: 14.79 ug/mL

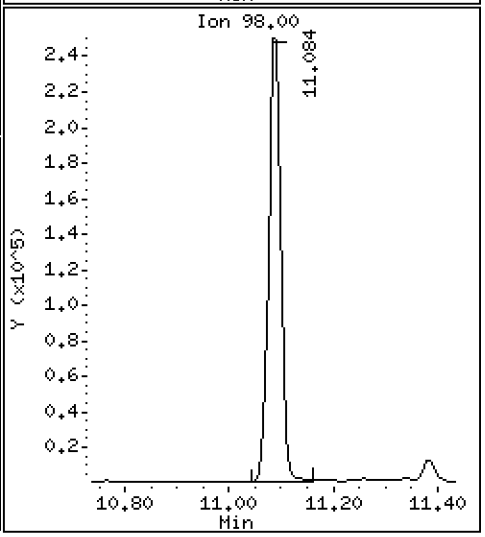


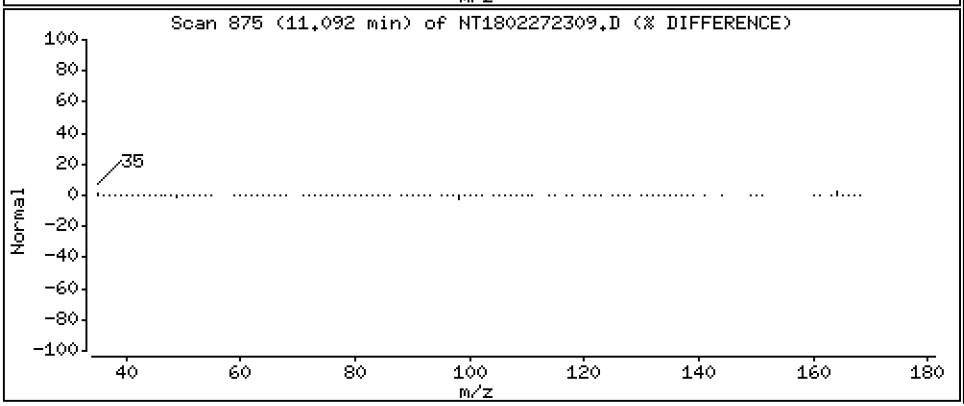












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

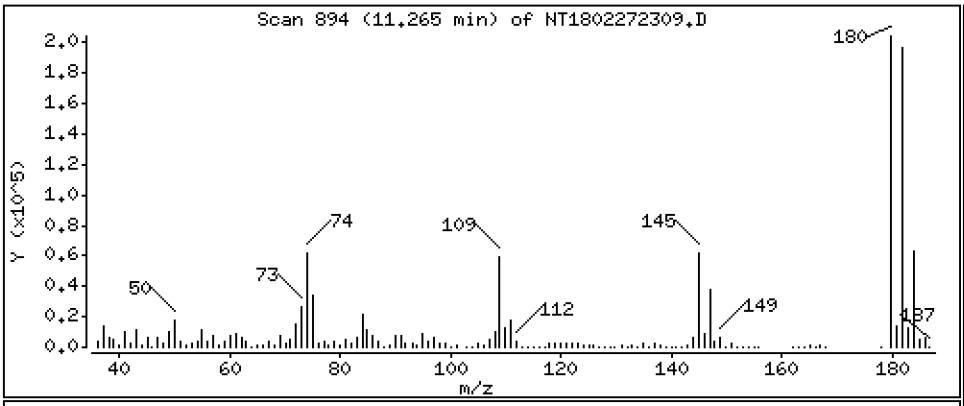
Operator: VTS

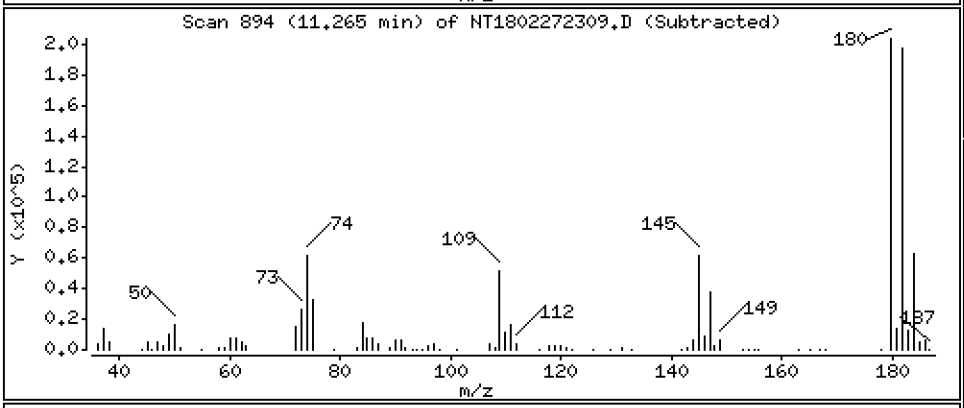
Column phase: ZB-5msi

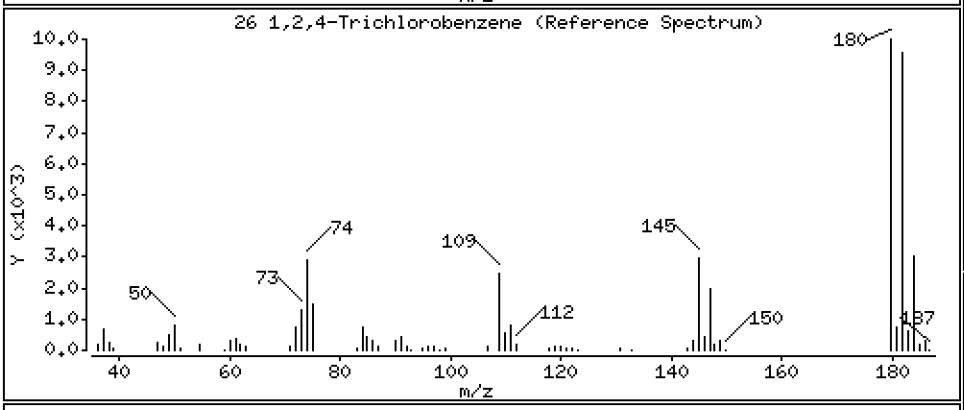
Column diameter: 0.25

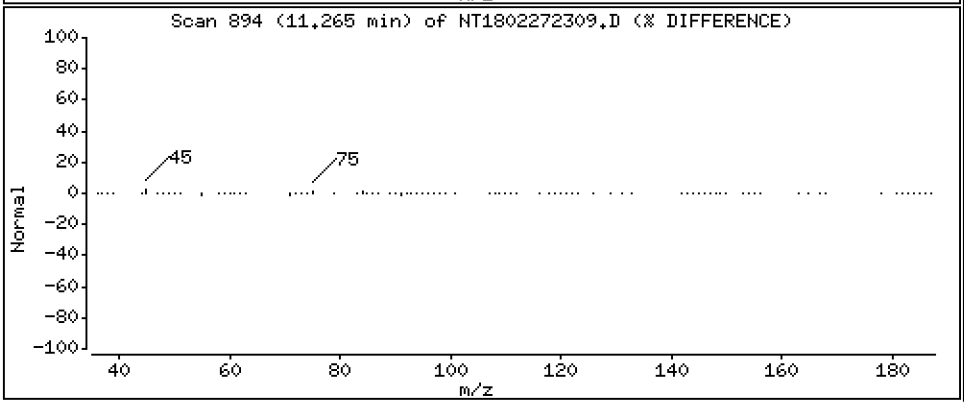
26 1,2,4-Trichlorobenzene

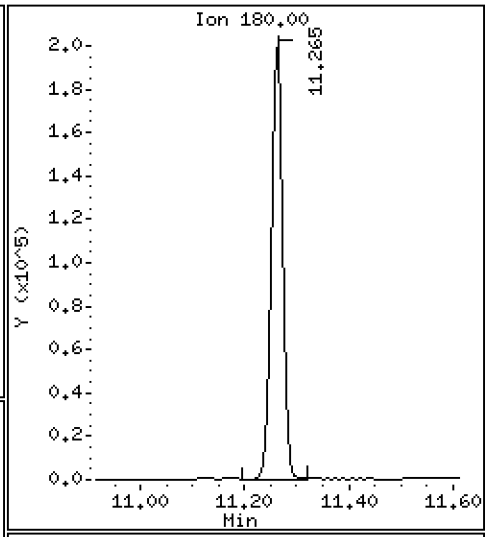
Concentration: 3.781 ug/mL

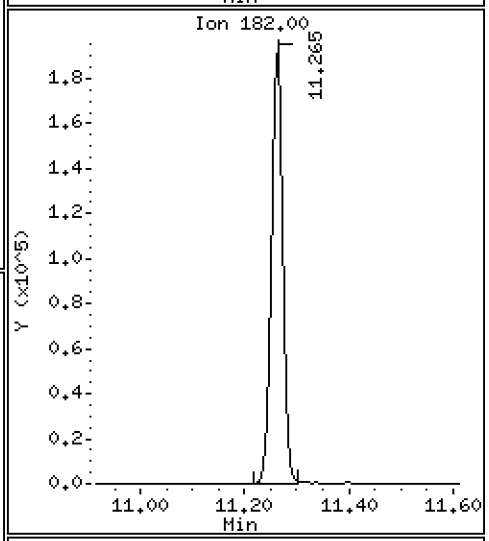


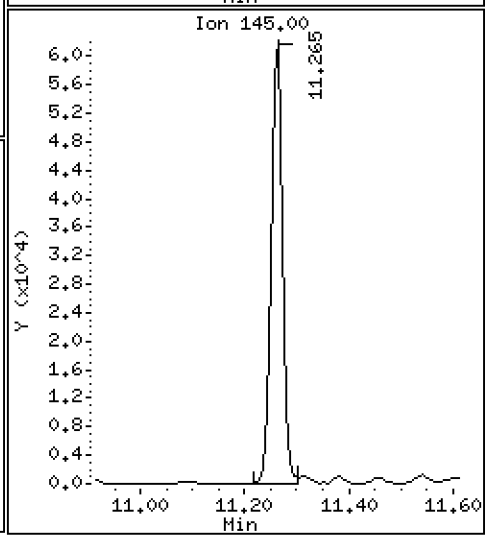












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

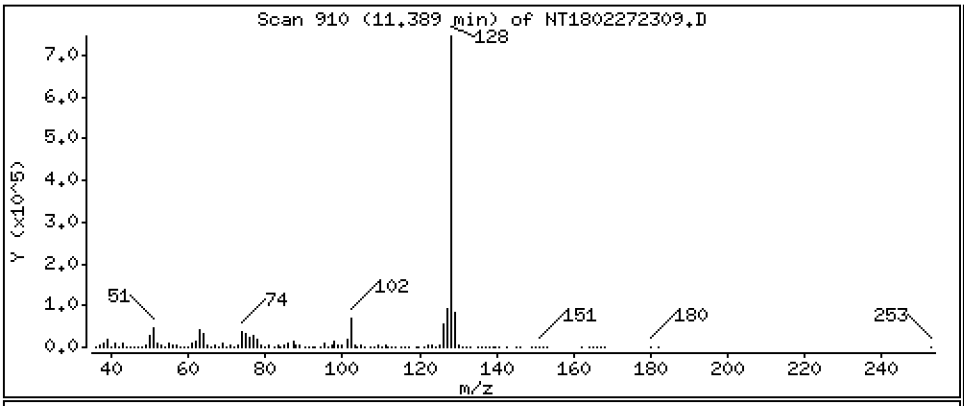
Operator: VTS

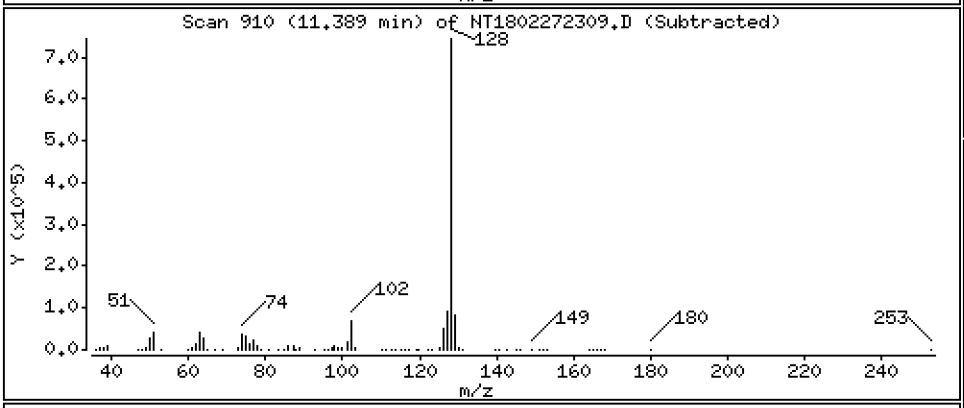
Column phase: ZB-5msi

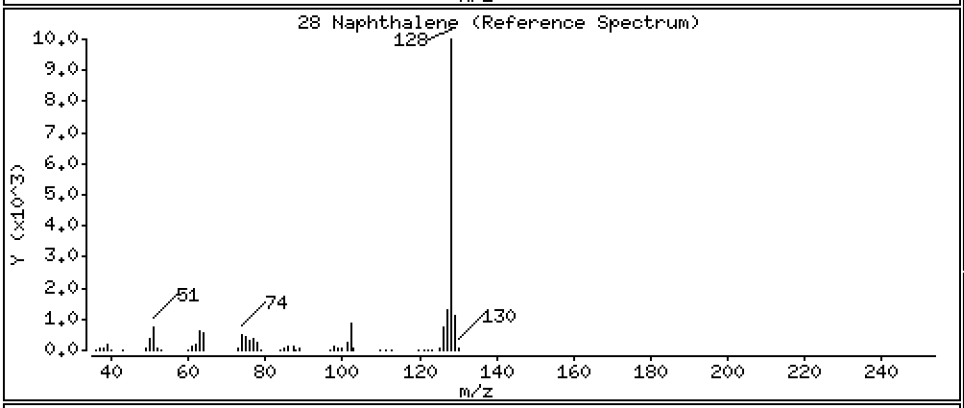
Column diameter: 0.25

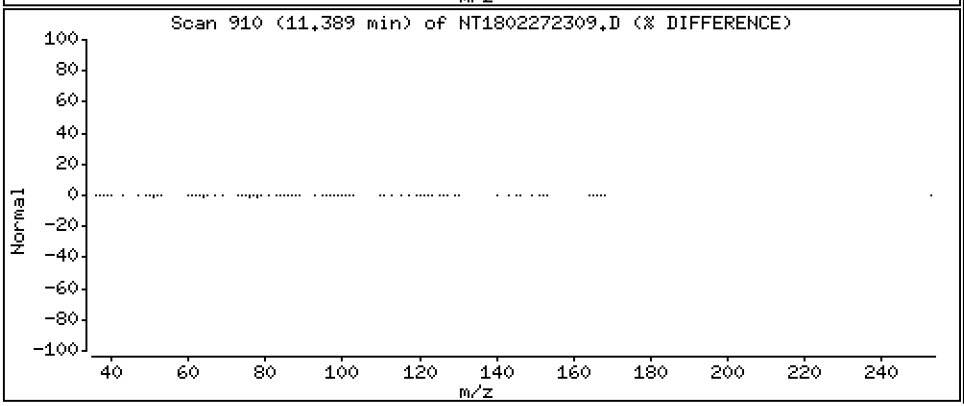
28 Naphthalene

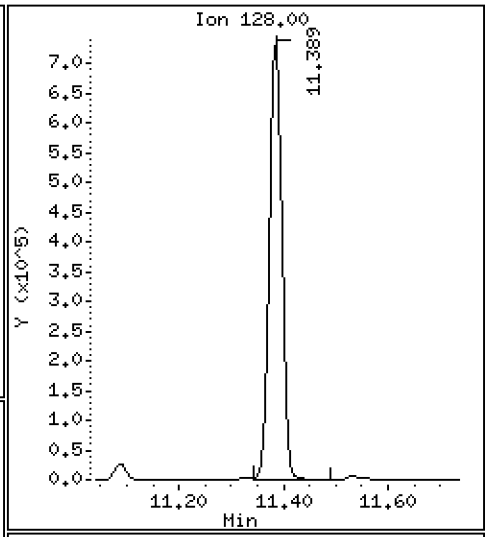
Concentration: 3.553 ug/mL

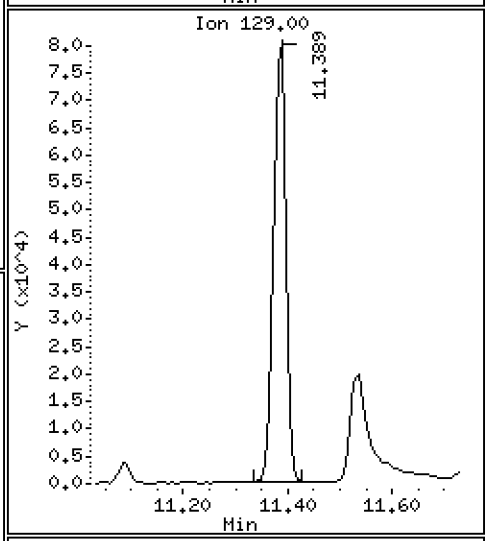


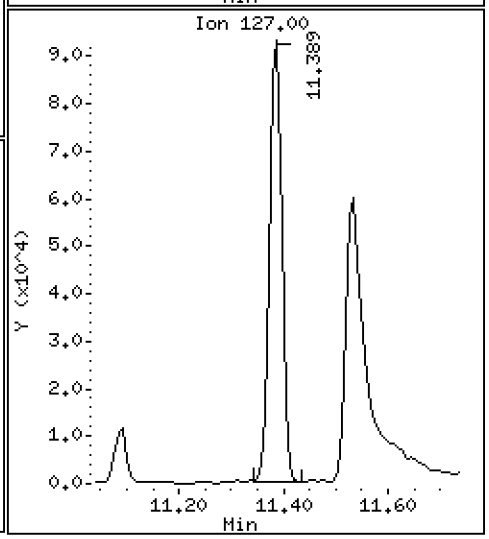












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

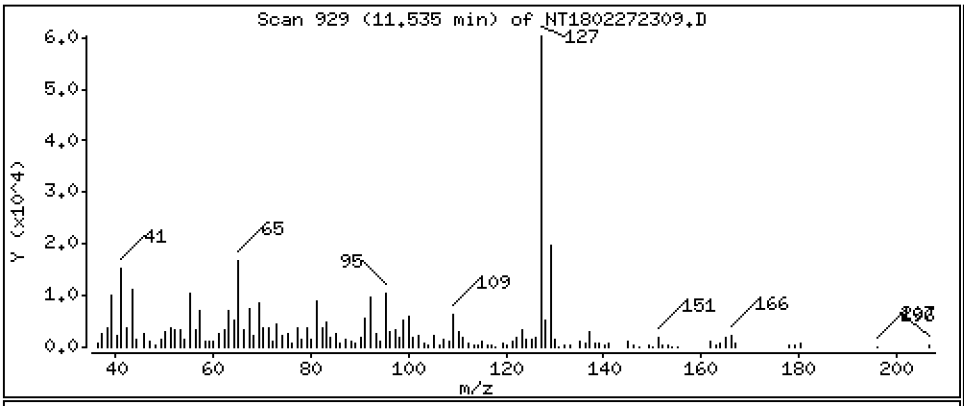
Operator: VTS

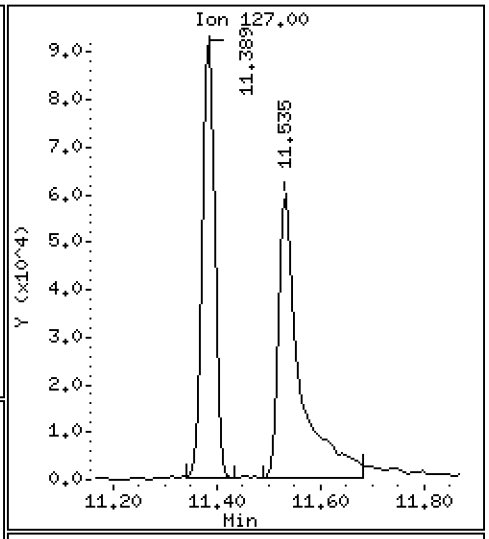
Column phase: ZB-5msi

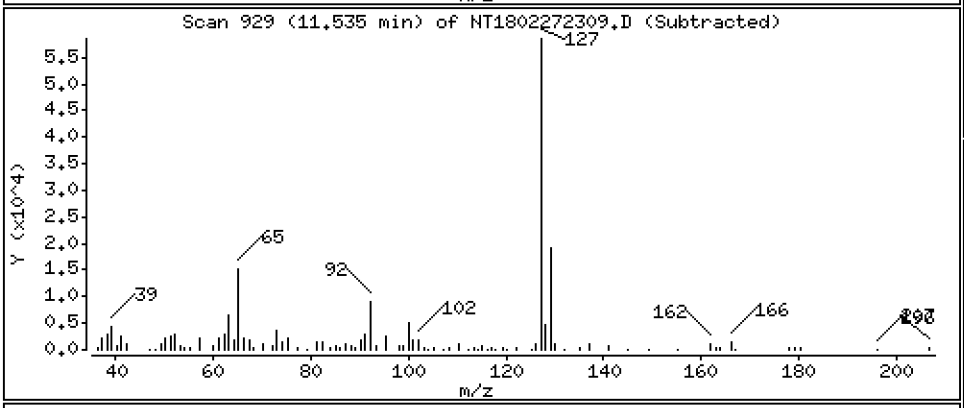
Column diameter: 0.25

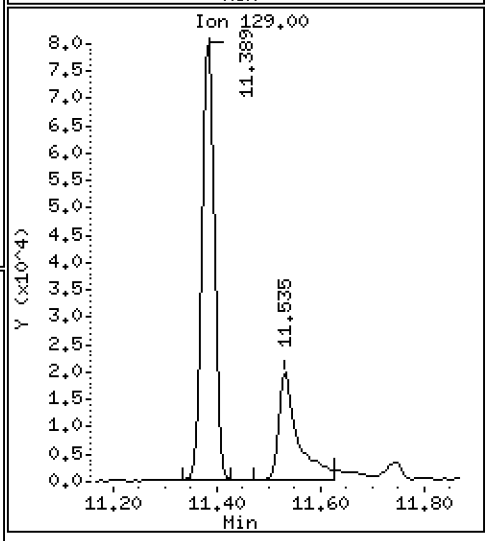
29 4-Chloroaniline

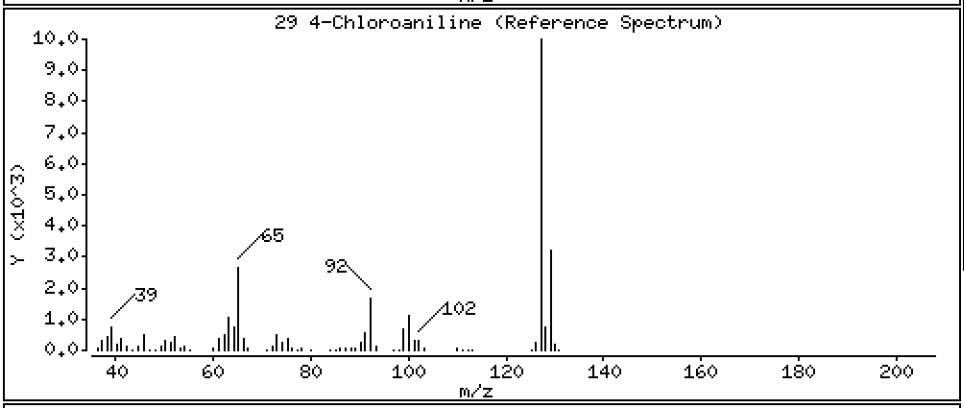
Concentration: 1.415 ug/mL

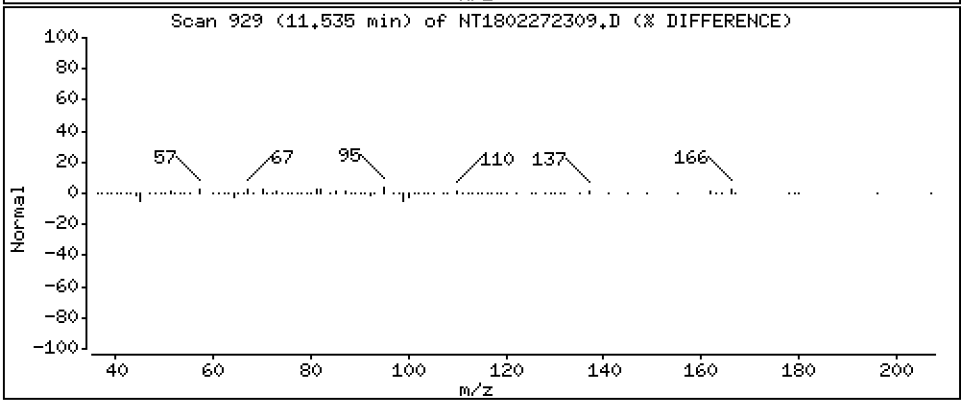












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

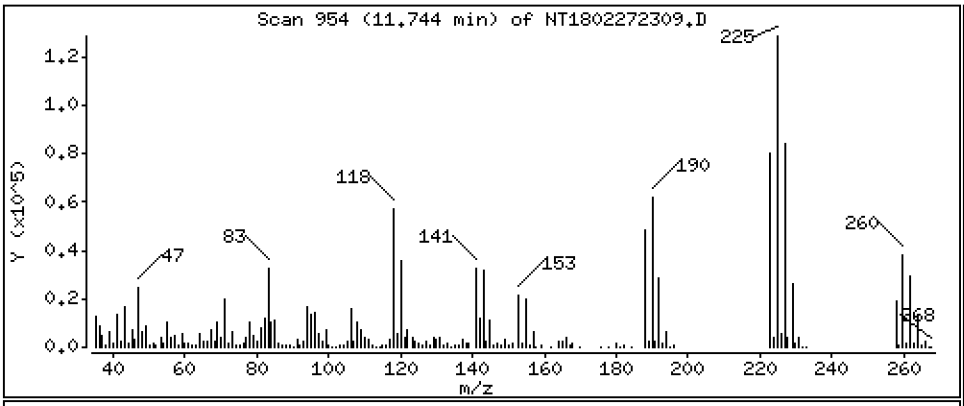
Operator: VTS

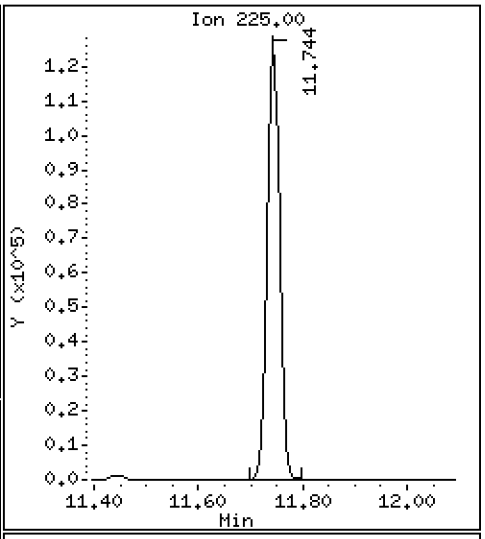
Column phase: ZB-5msi

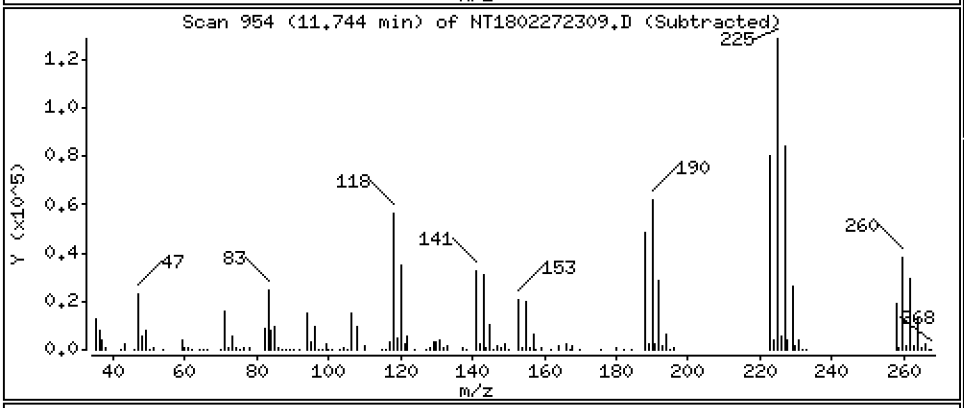
Column diameter: 0.25

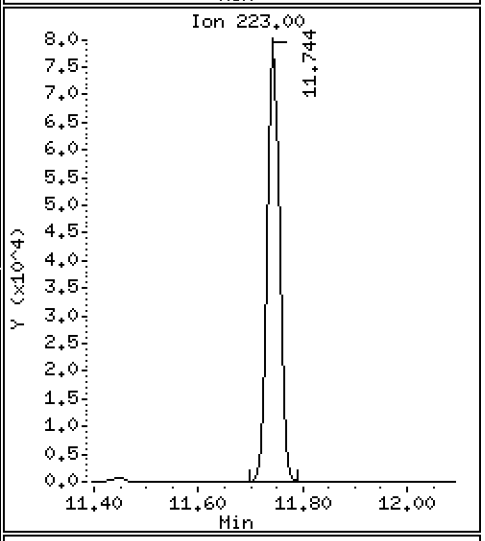
30 Hexachlorobutadiene

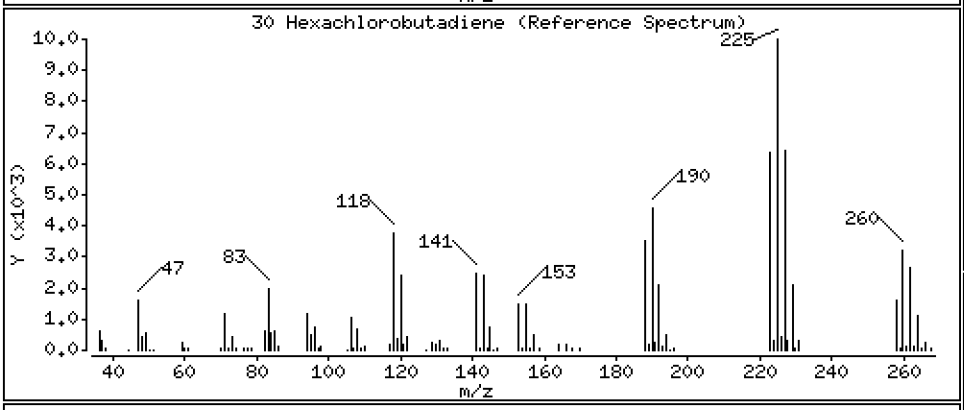
Concentration: 3.460 ug/mL

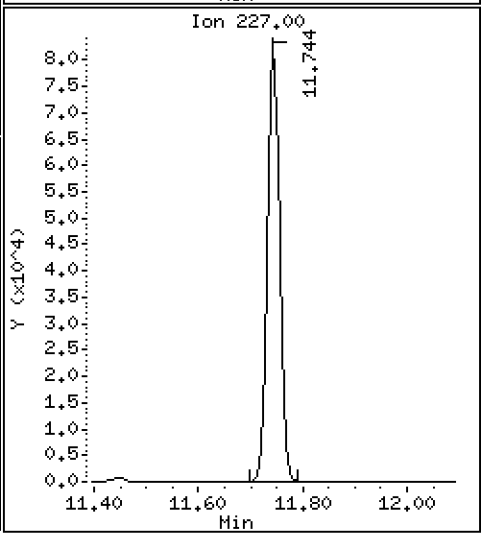


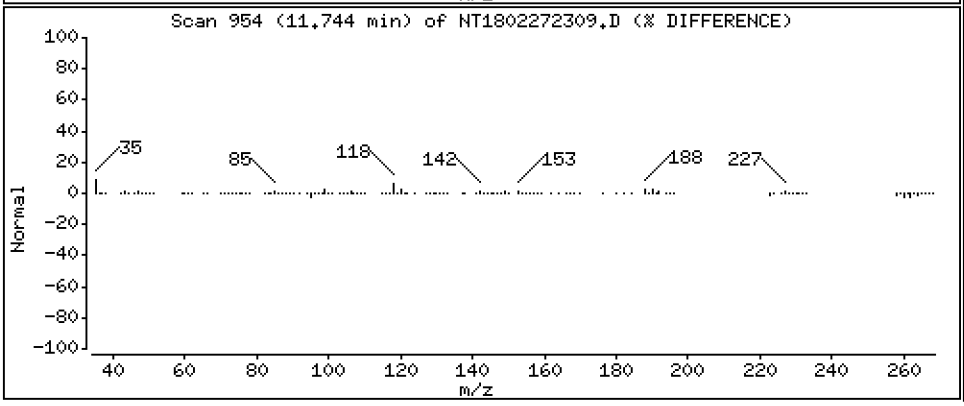












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272309.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

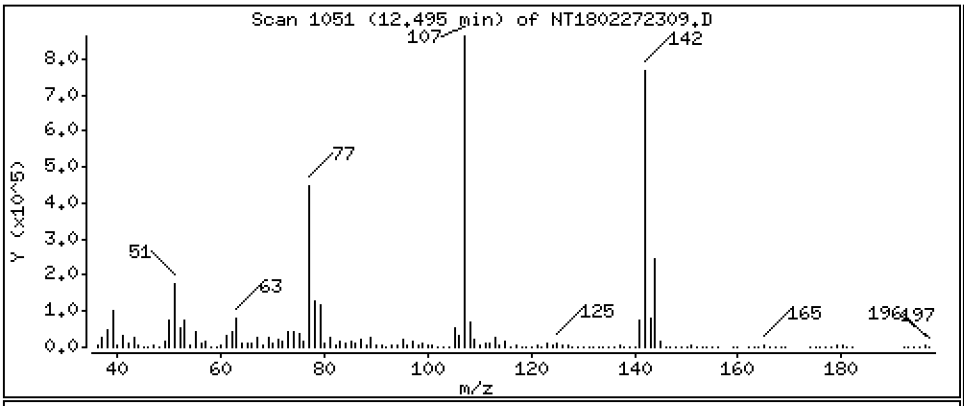
Operator: VTS

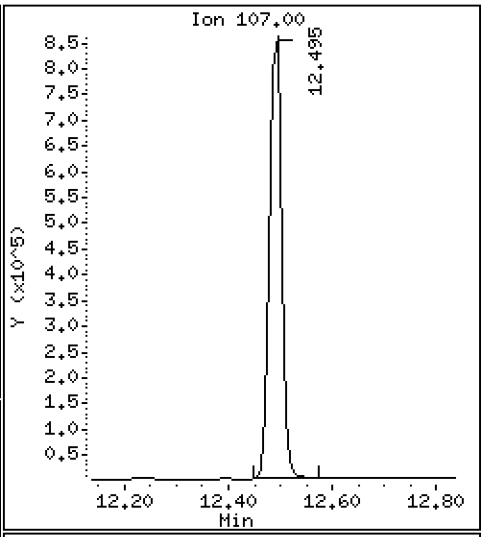
Column phase: ZB-5msi

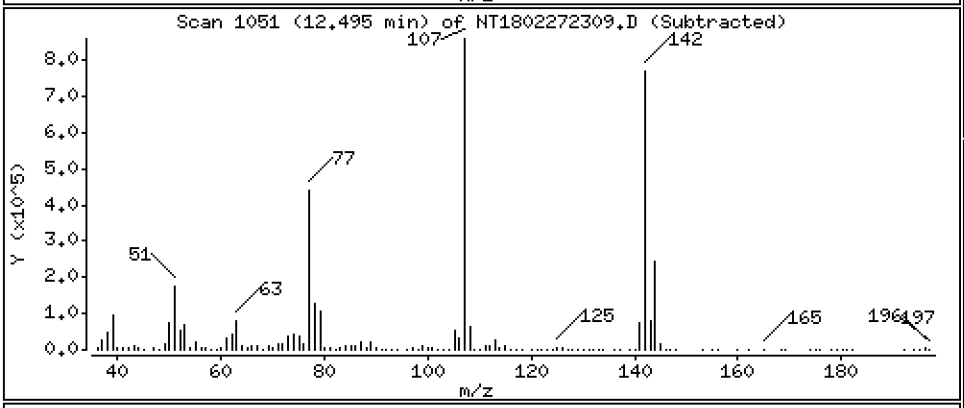
Column diameter: 0.25

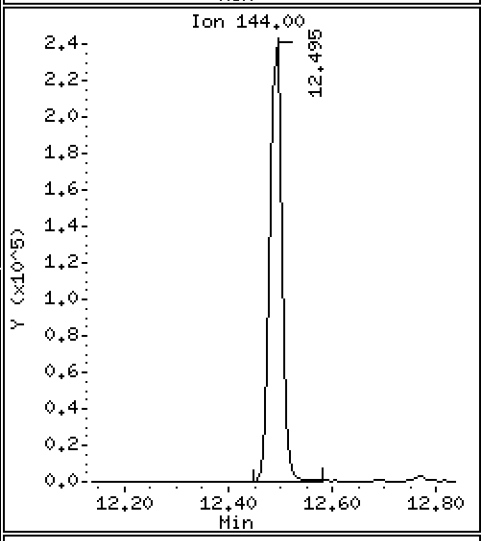
31 4-Chloro-3-methylphenol

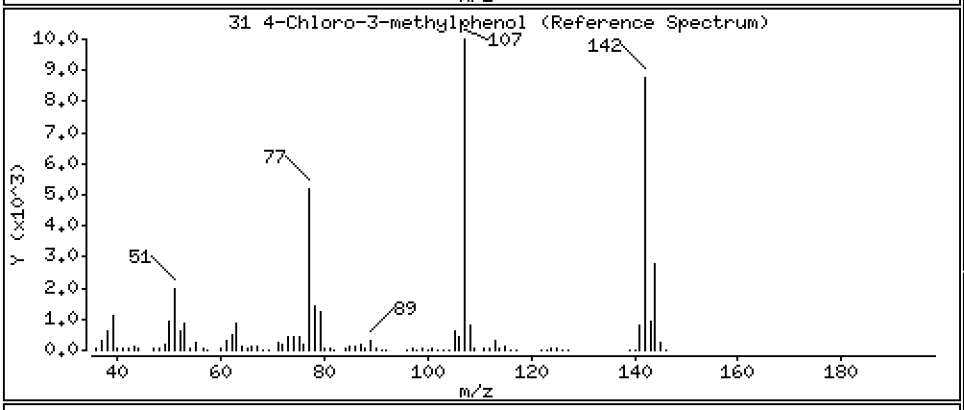
Concentration: 15.17 ug/mL

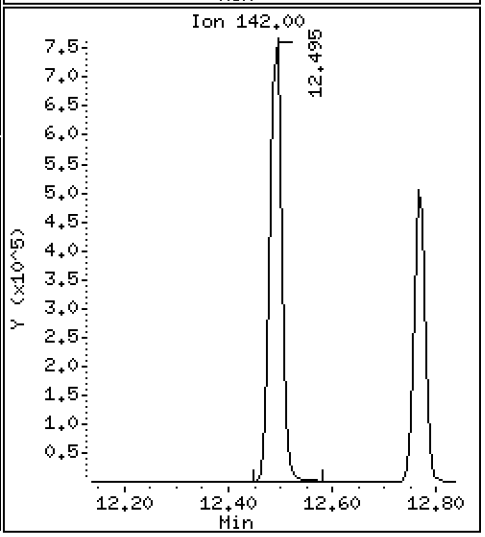


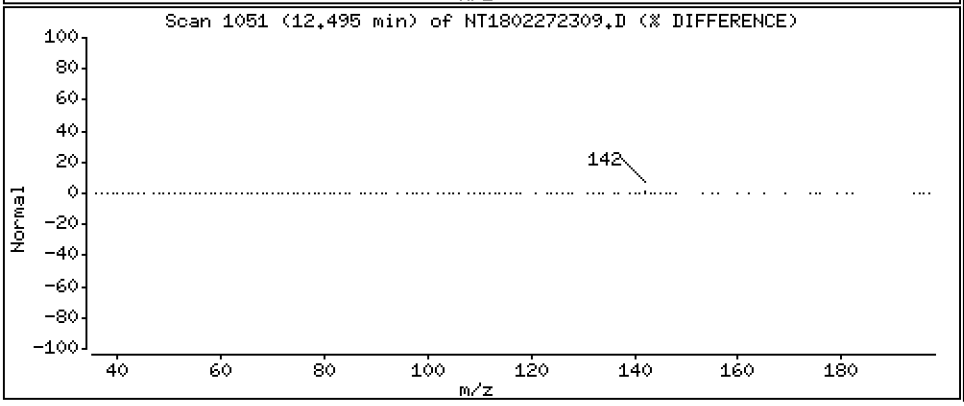












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

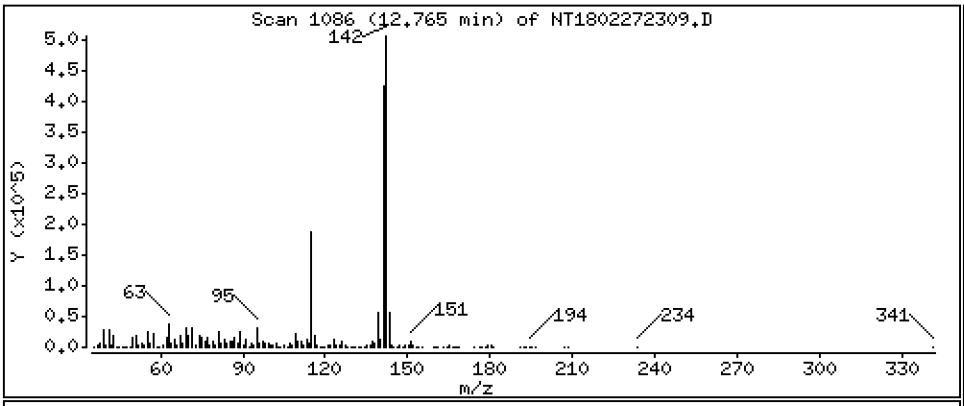
Operator: VTS

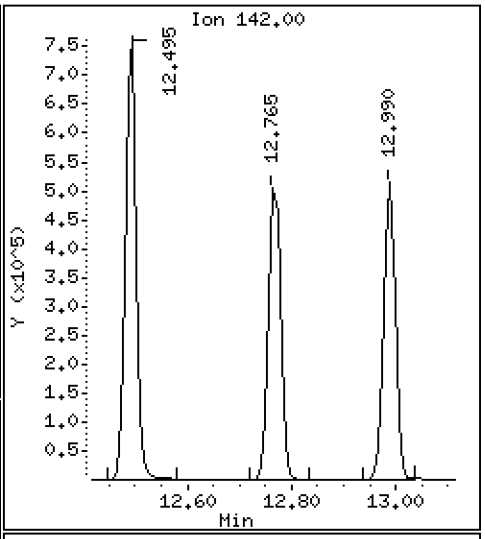
Column phase: ZB-5msi

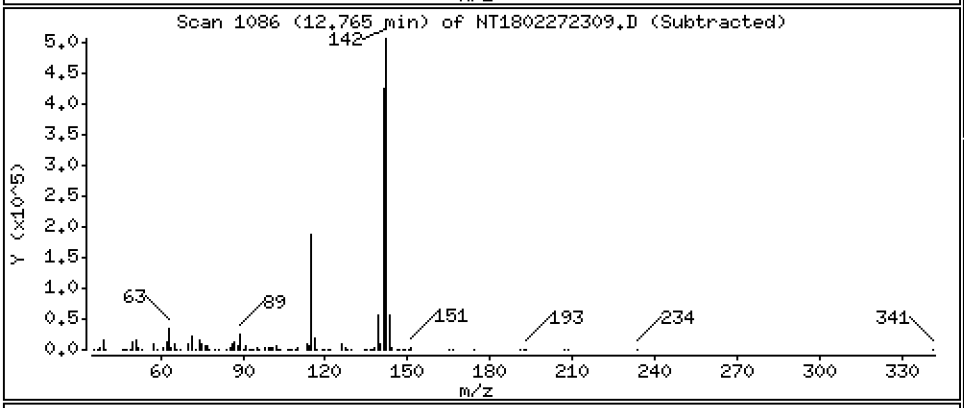
Column diameter: 0.25

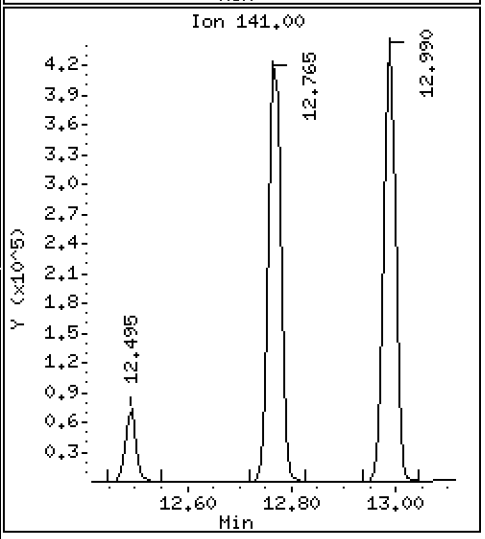
32 2-Methylnaphthalene

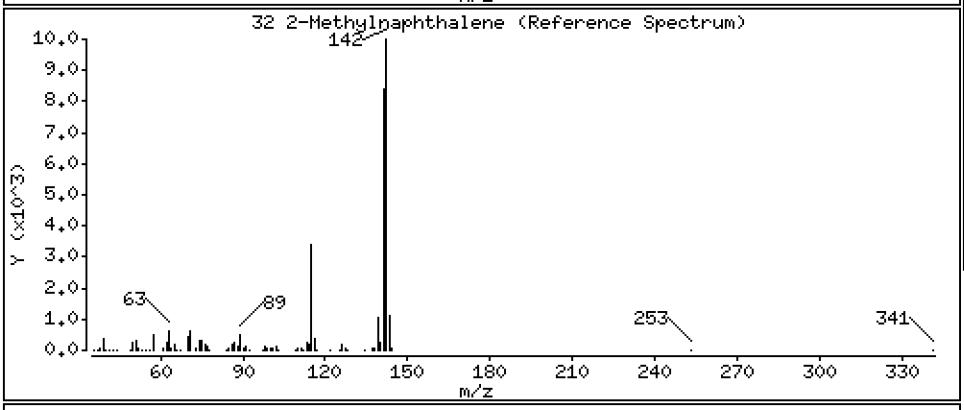
Concentration: 3.529 ug/mL

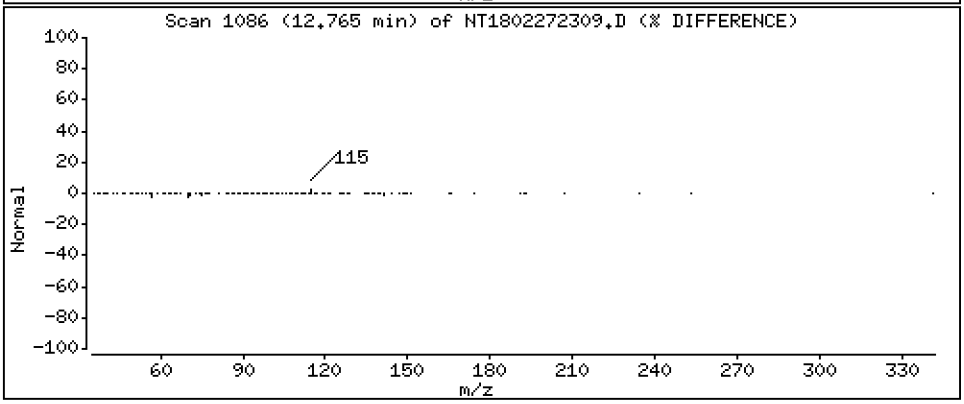












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

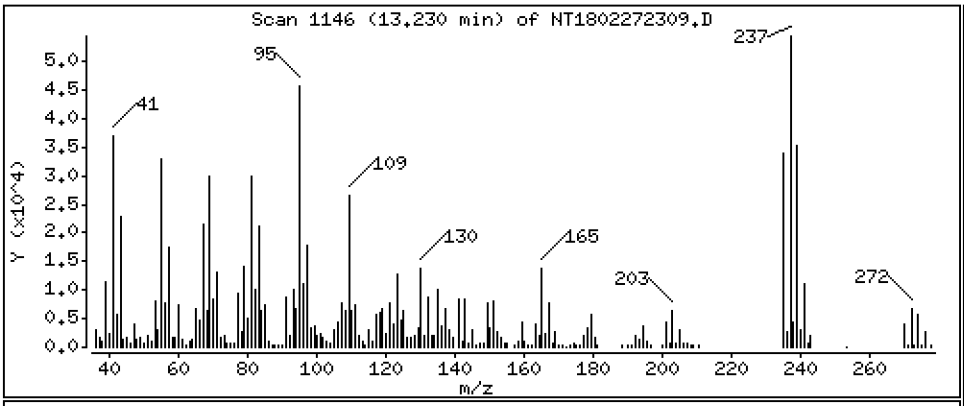
Operator: VTS

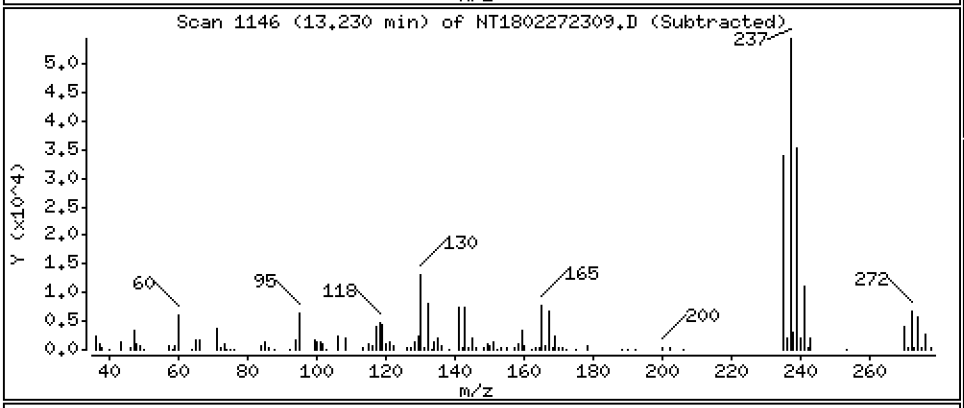
Column phase: ZB-5msi

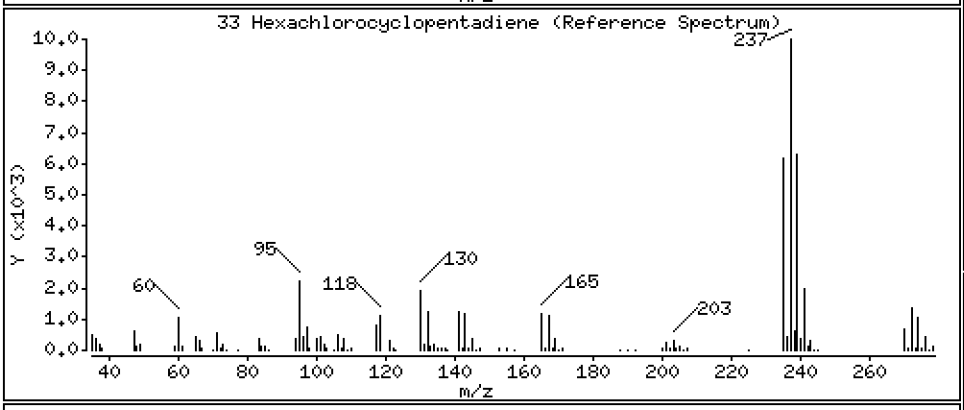
Column diameter: 0.25

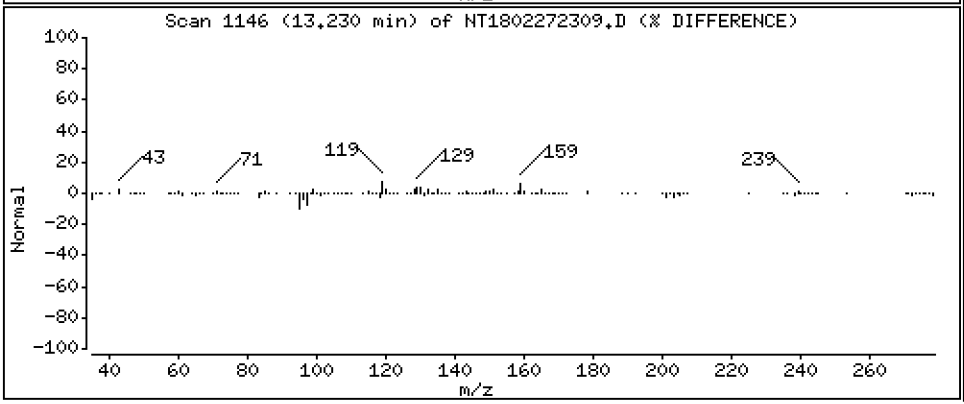
33 Hexachlorocyclopentadiene

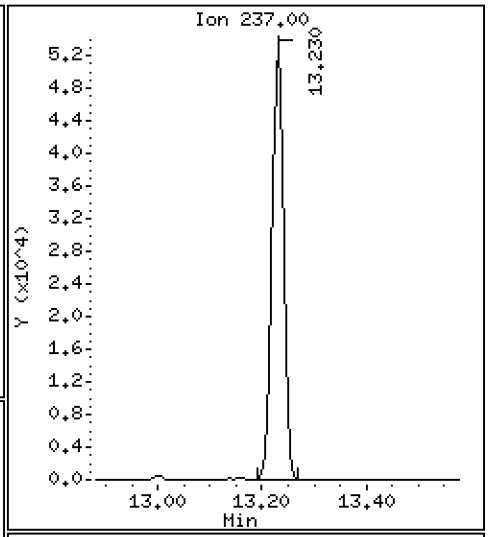
Concentration: 1.830 ug/mL

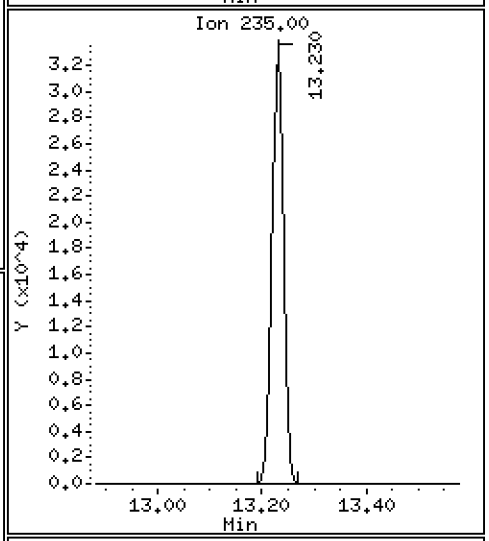


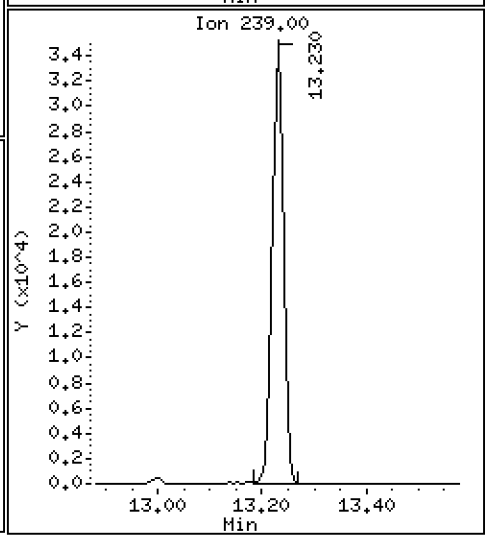












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

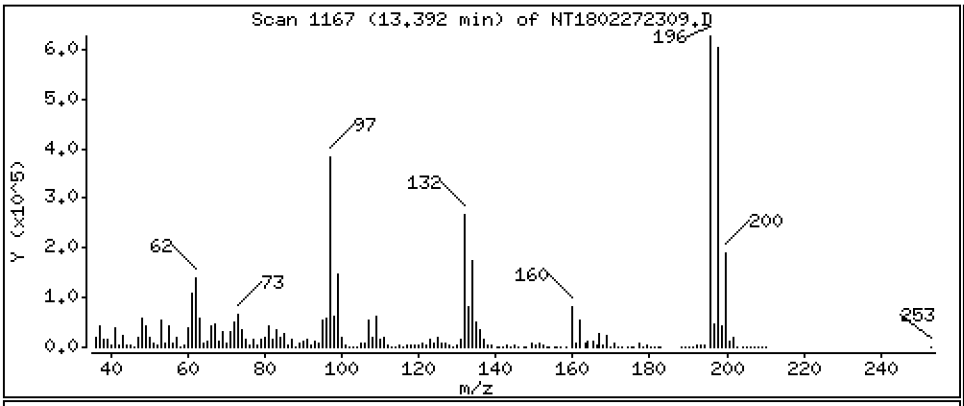
Operator: VTS

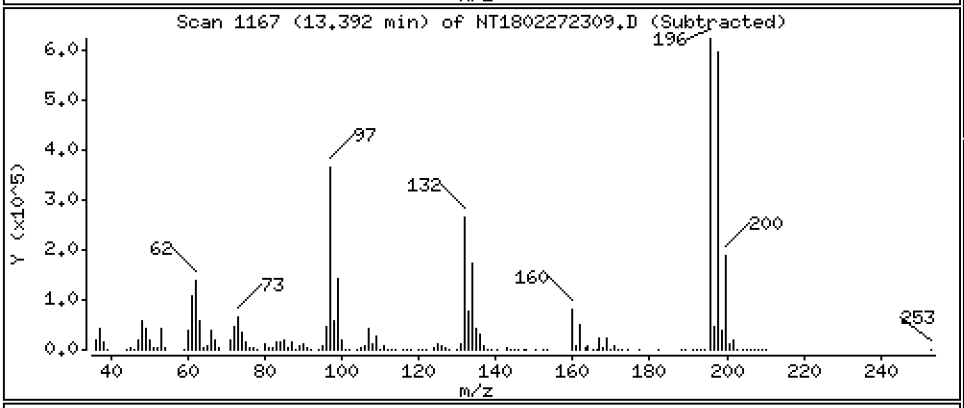
Column phase: ZB-5msi

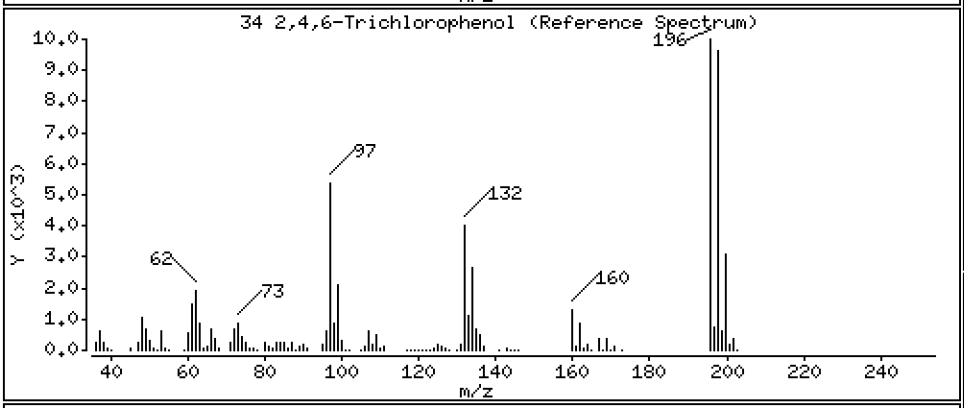
Column diameter: 0.25

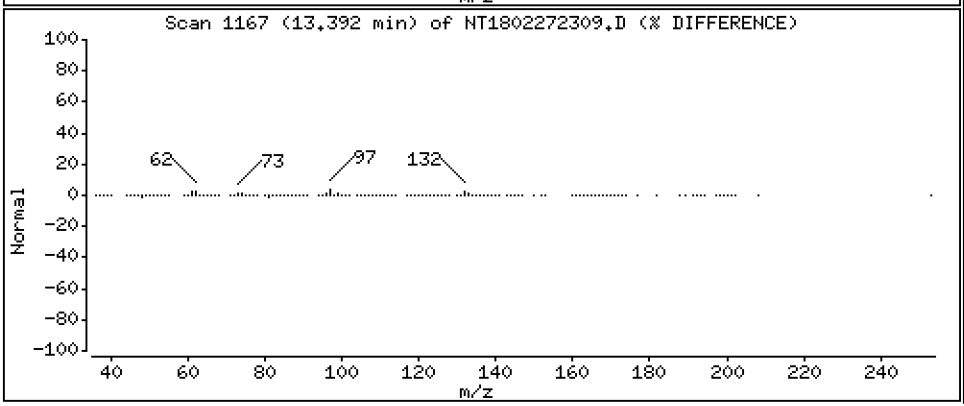
34 2,4,6-Trichlorophenol

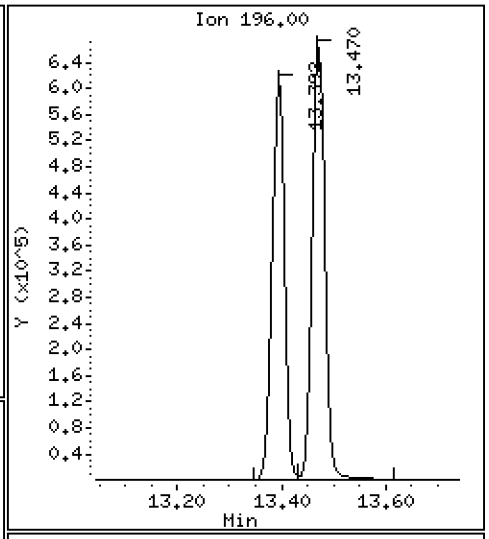
Concentration: 15.82 ug/mL

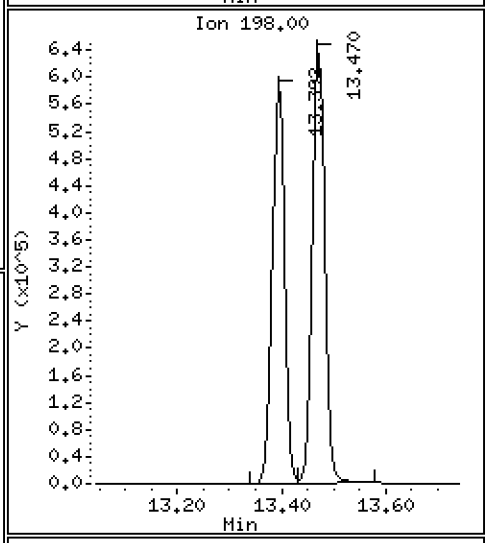


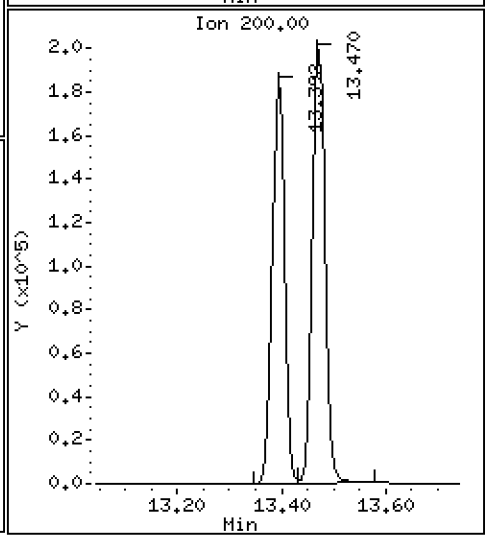












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

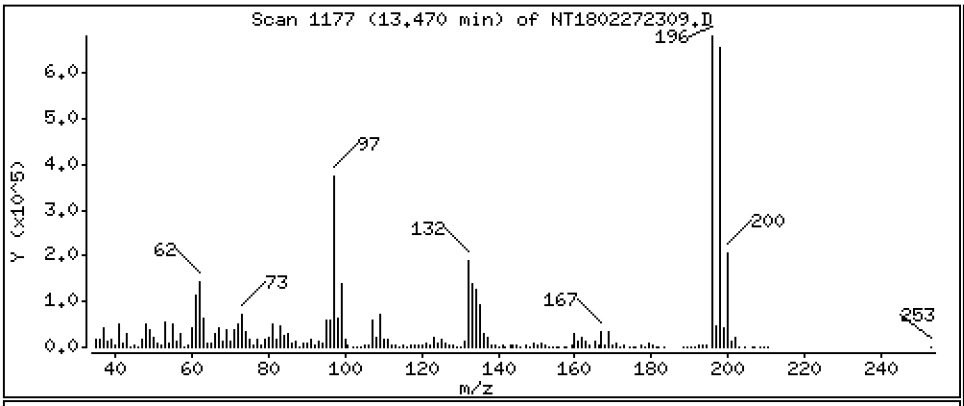
Operator: VTS

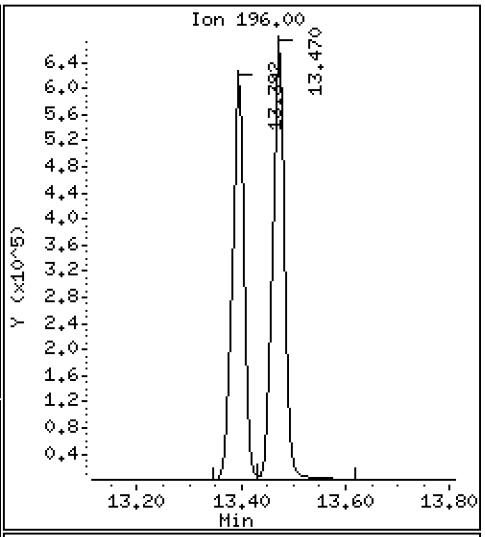
Column phase: ZB-5msi

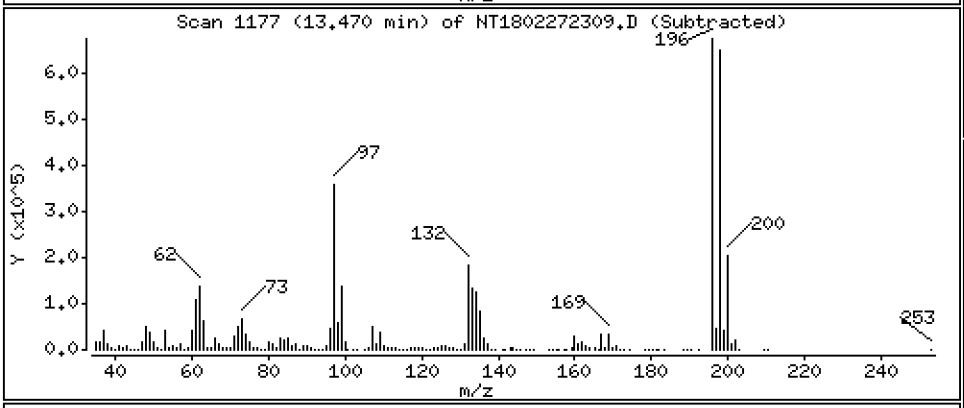
Column diameter: 0.25

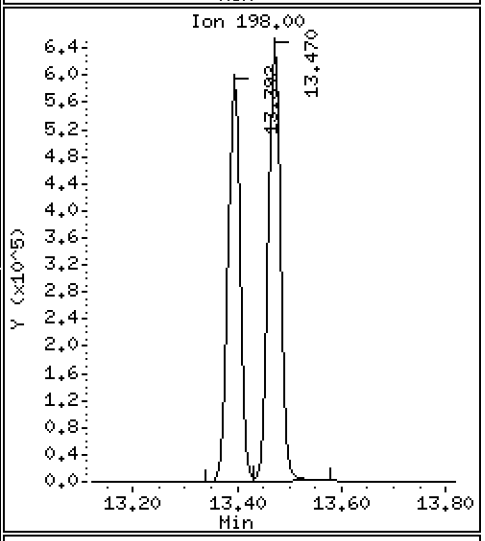
35 2,4,5-Trichlorophenol

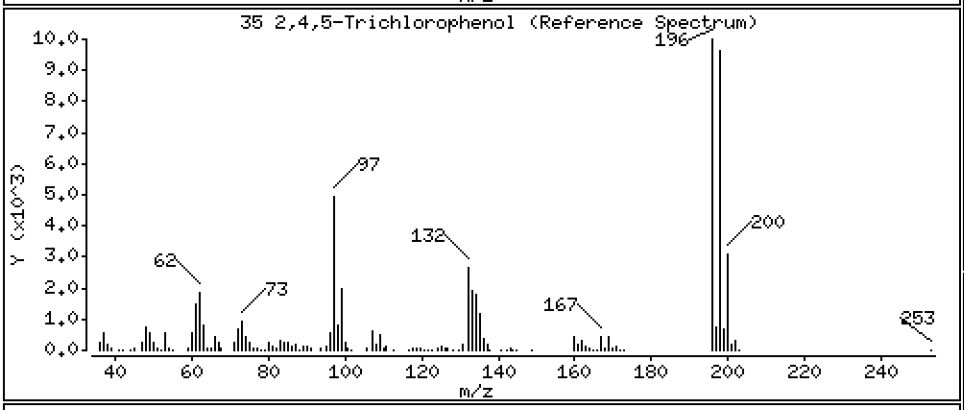
Concentration: 16.06 ug/mL

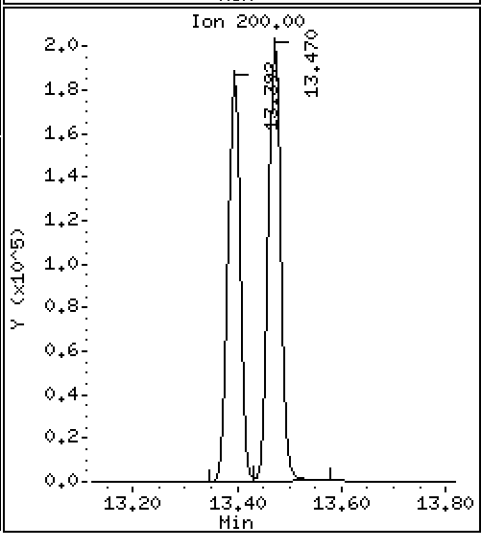


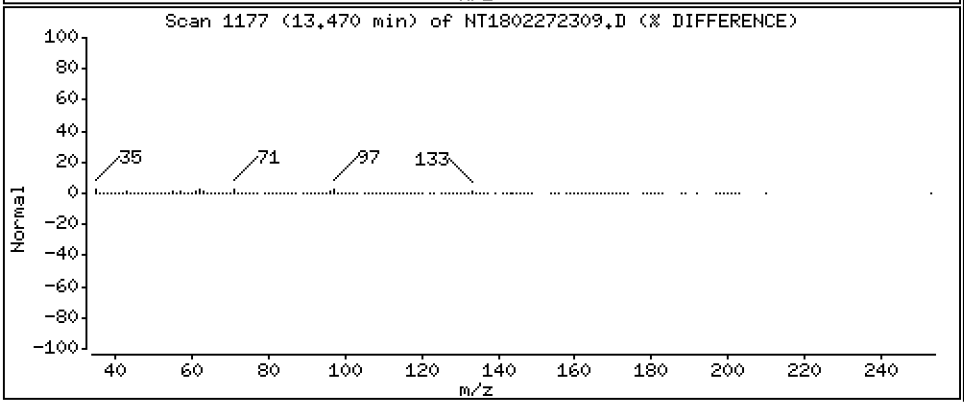












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

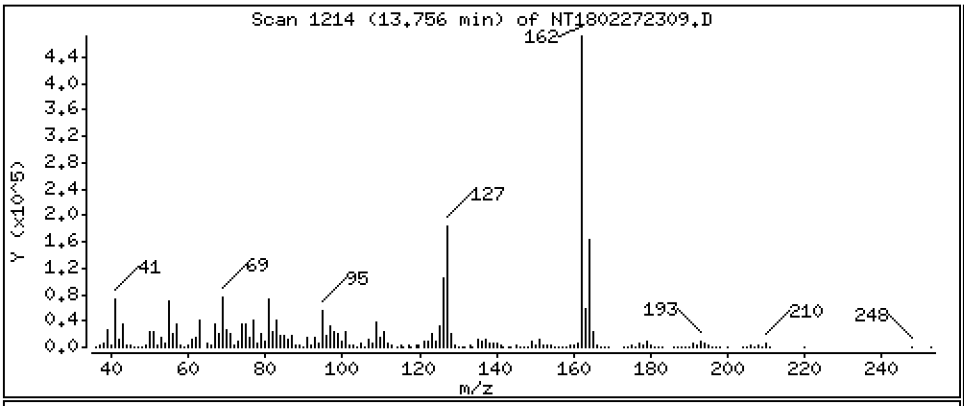
Operator: VTS

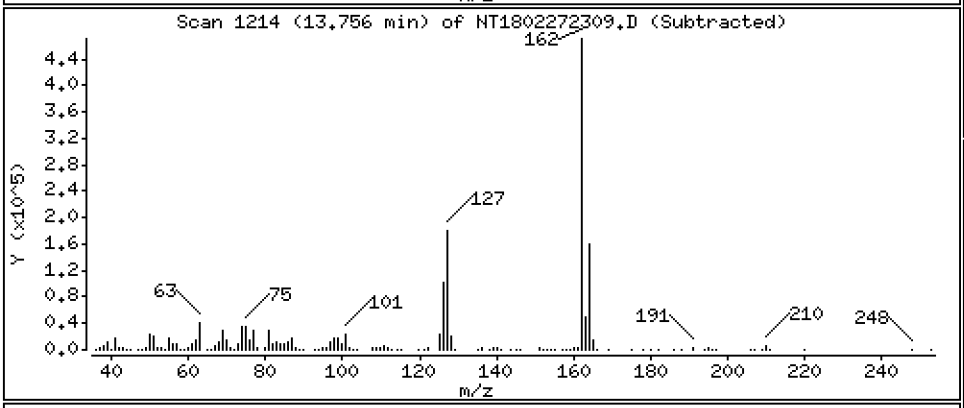
Column phase: ZB-5msi

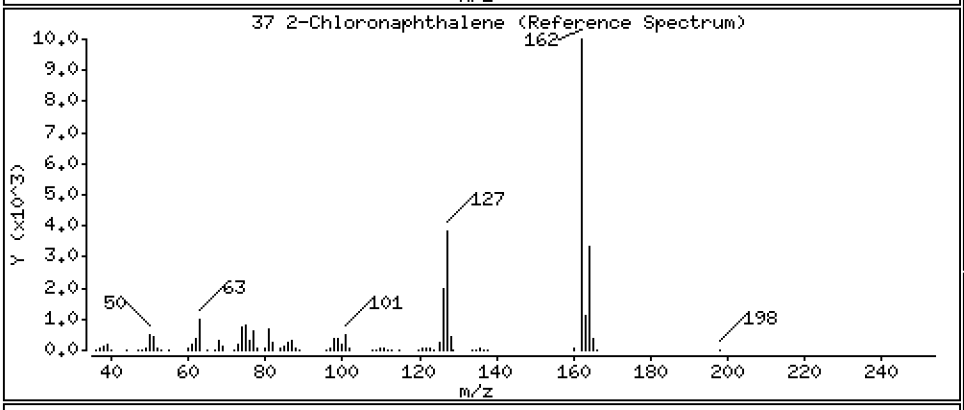
Column diameter: 0.25

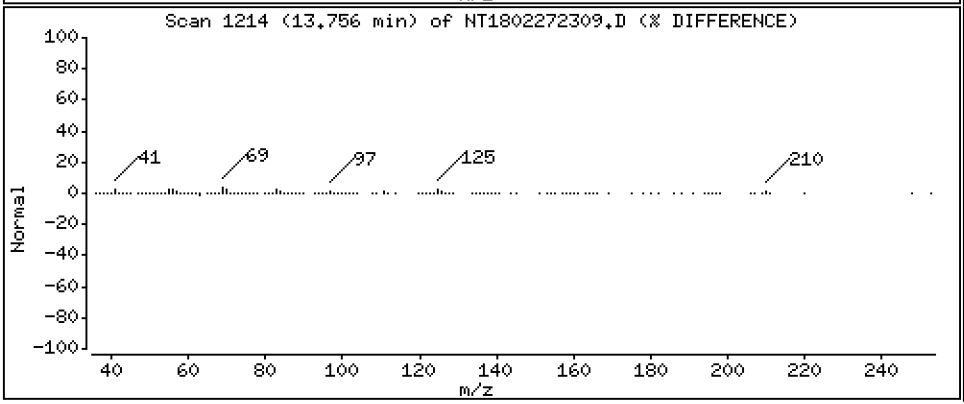
37 2-Chloronaphthalene

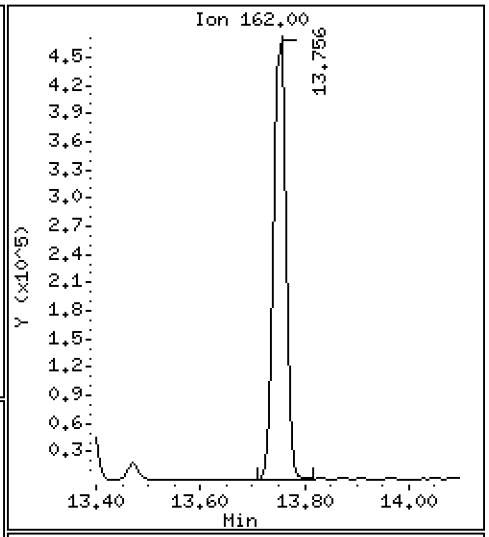
Concentration: 3.543 ug/mL

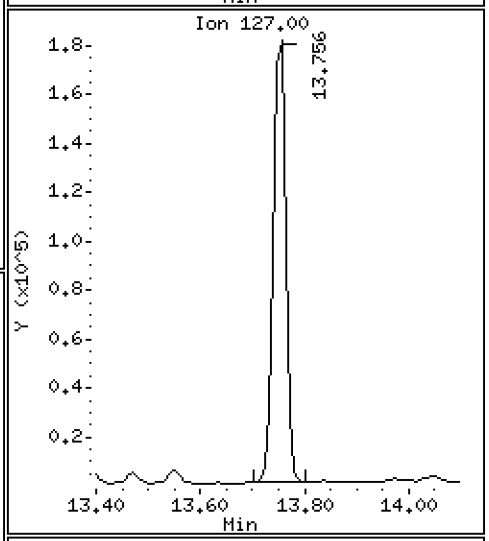


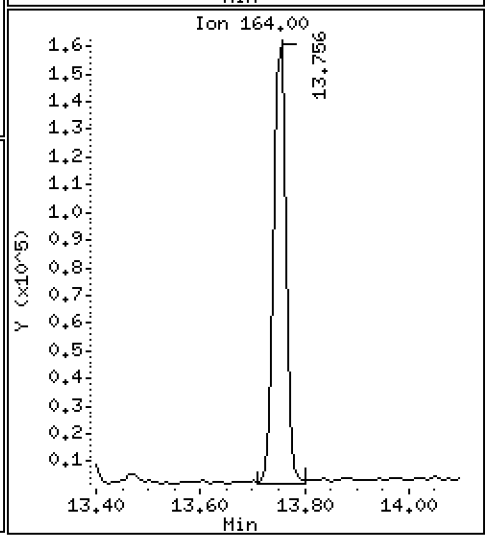












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

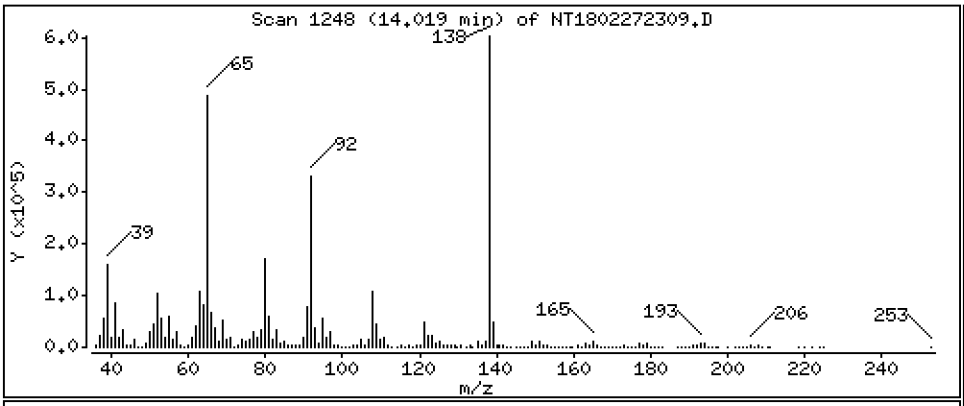
Operator: VTS

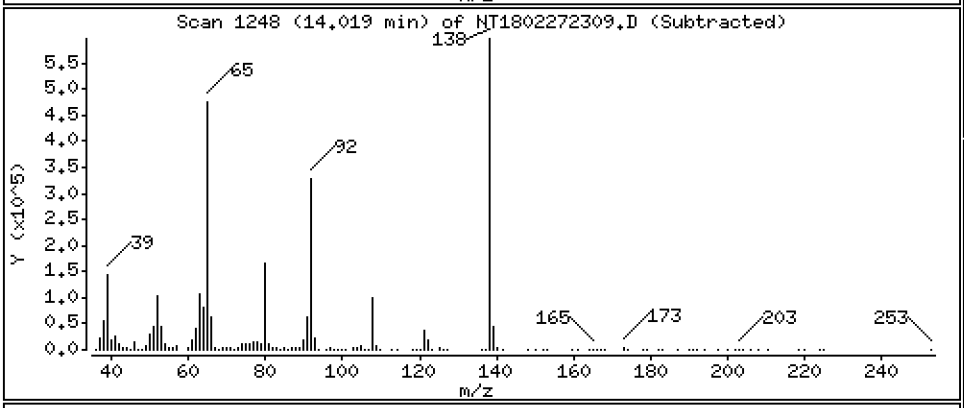
Column phase: ZB-5msi

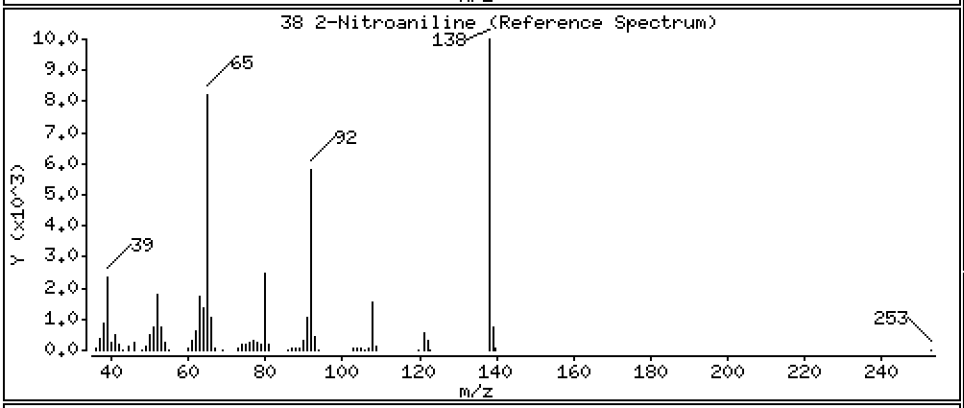
Column diameter: 0.25

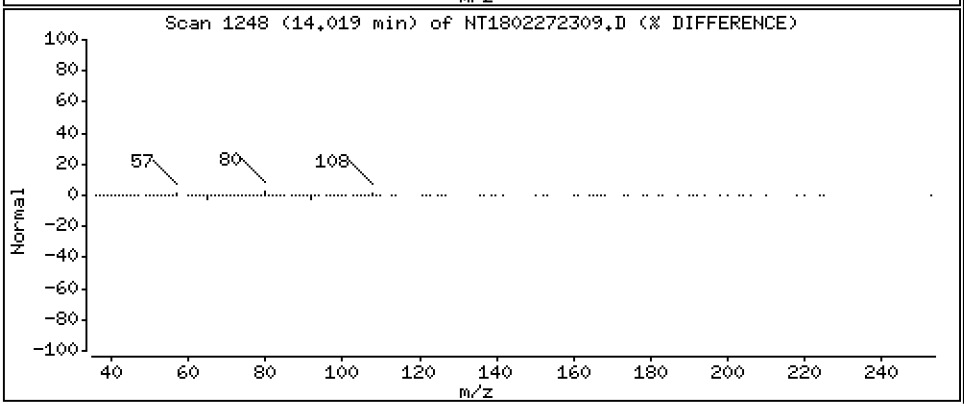
38 2-Nitroaniline

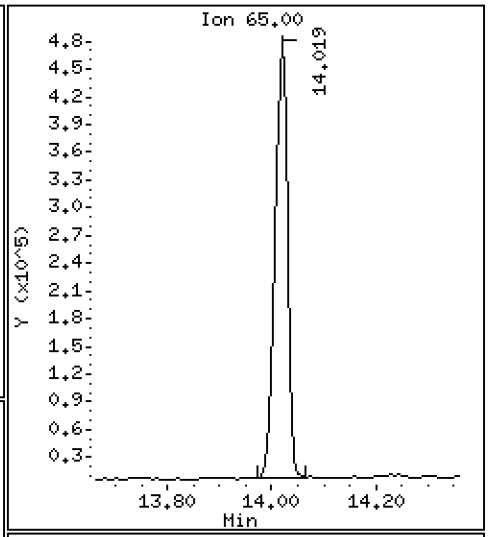
Concentration: 11.58 ug/mL

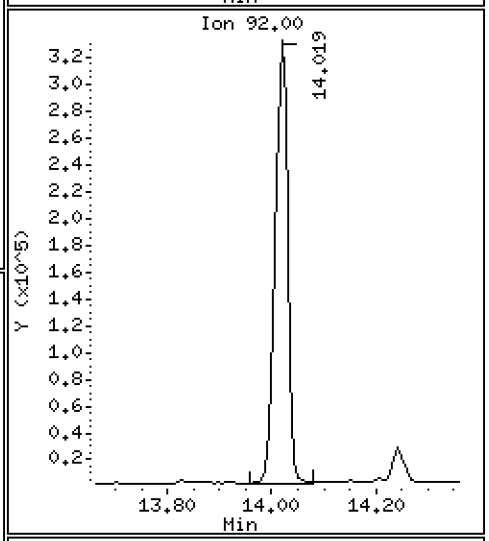


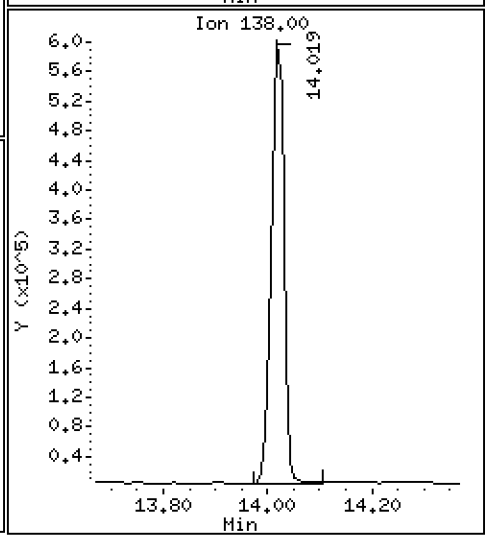












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272309.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

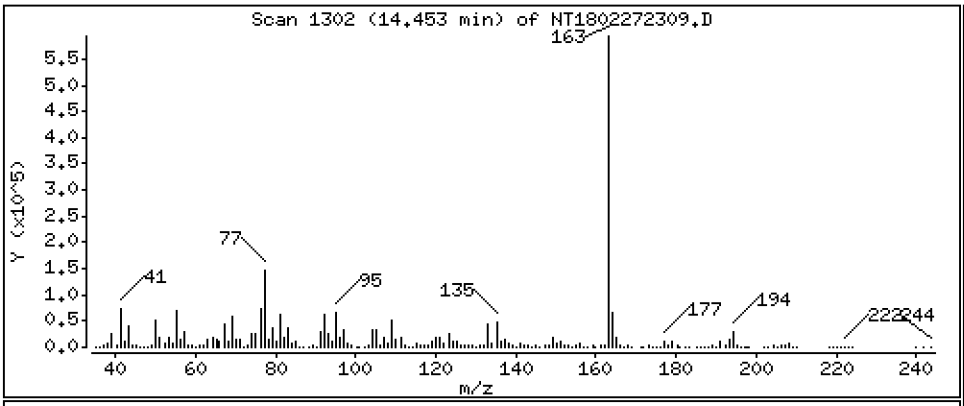
Operator: VTS

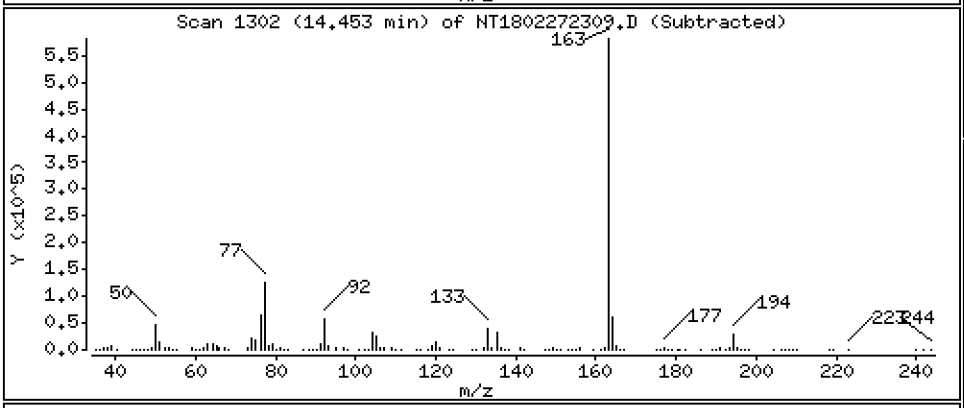
Column phase: ZB-5msi

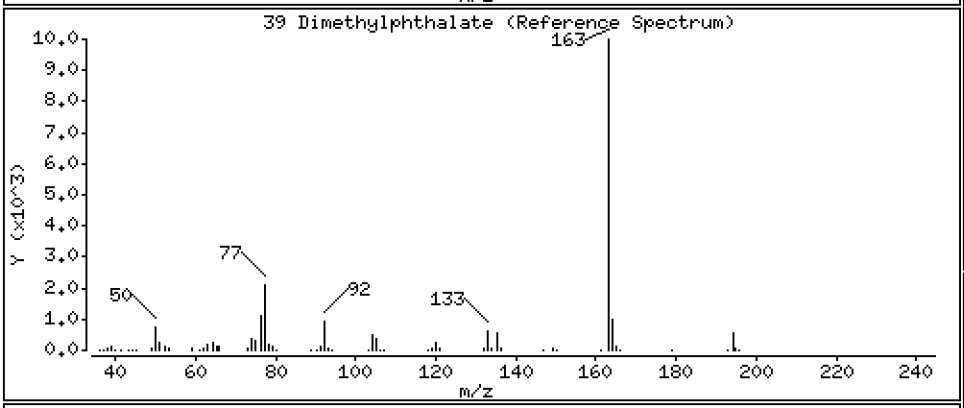
Column diameter: 0.25

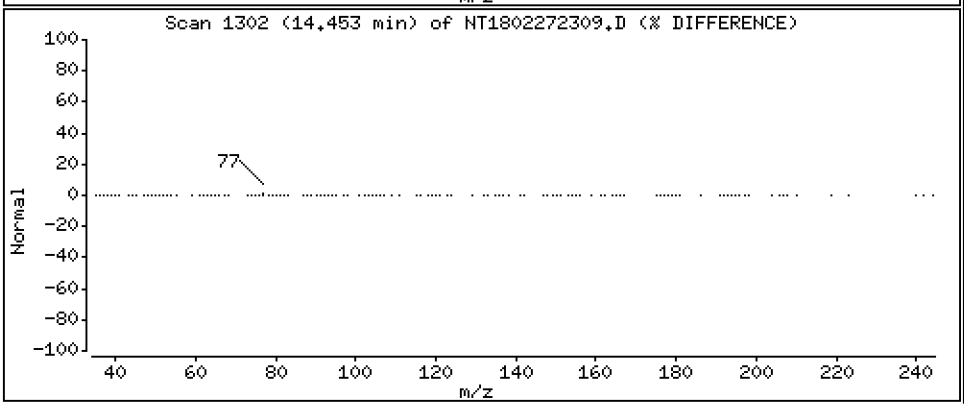
39 Dimethylphthalate

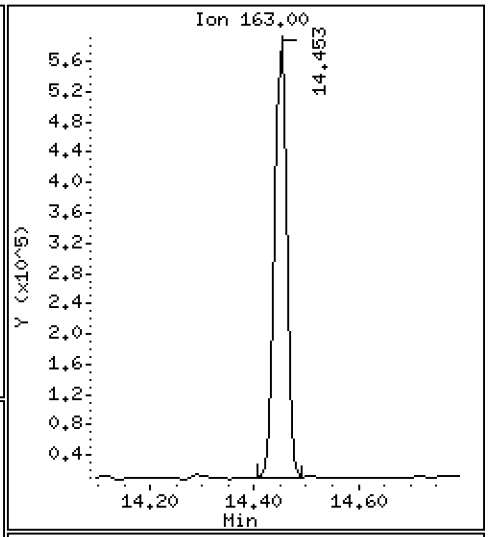
Concentration: 4.028 ug/mL

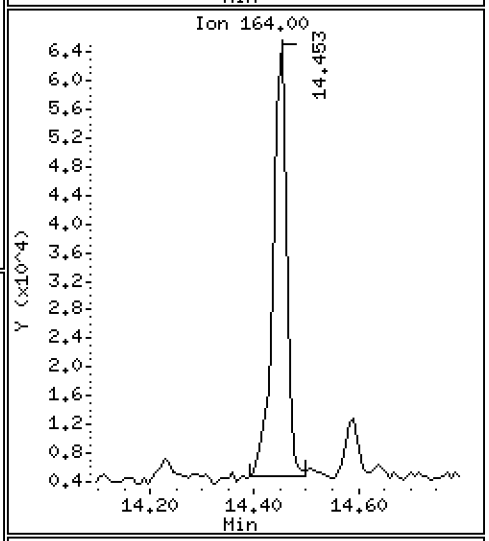


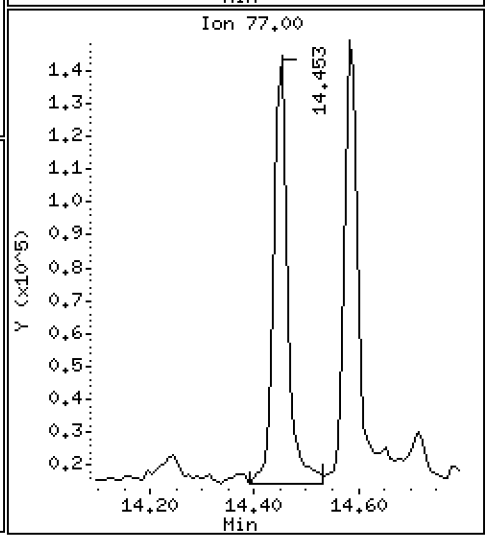












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

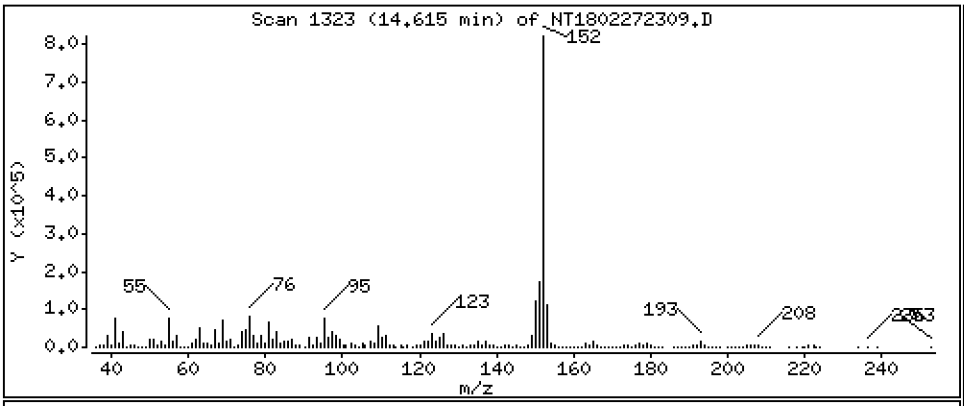
Operator: VTS

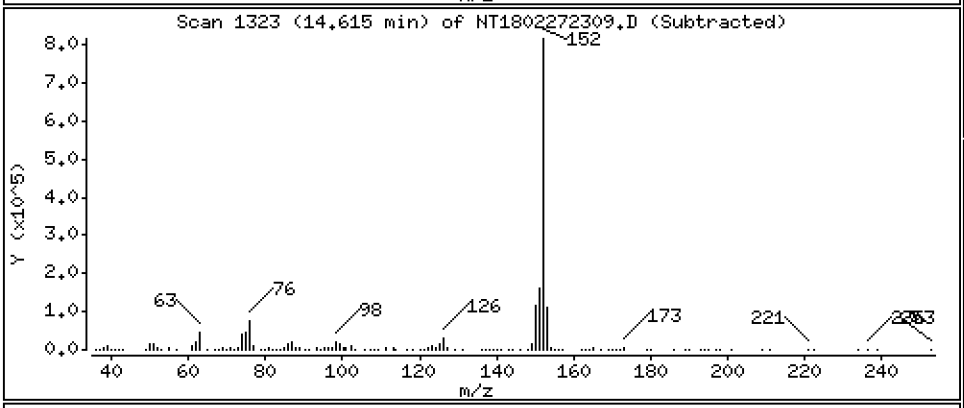
Column phase: ZB-5msi

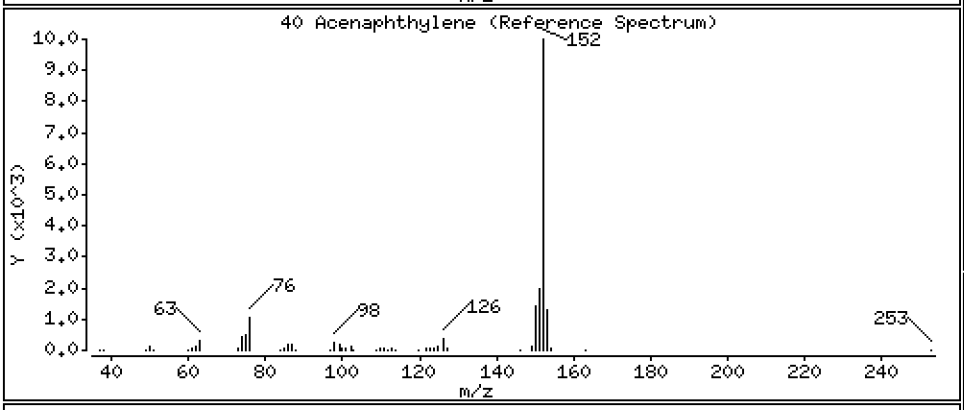
Column diameter: 0.25

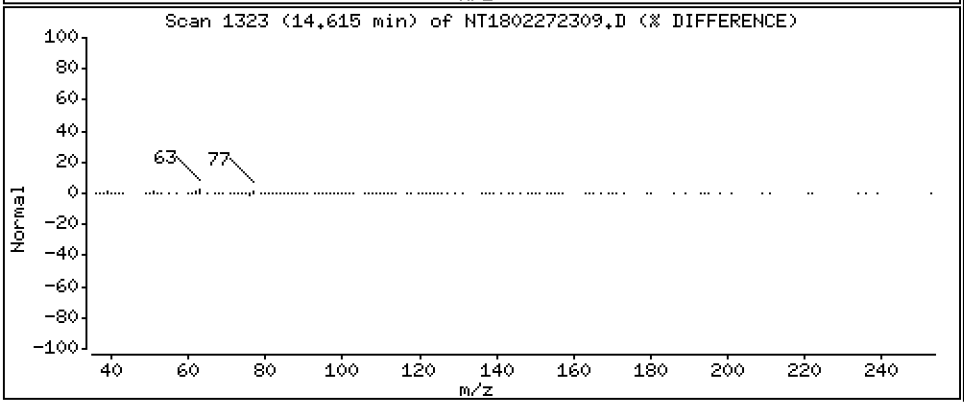
40 Acenaphthylene

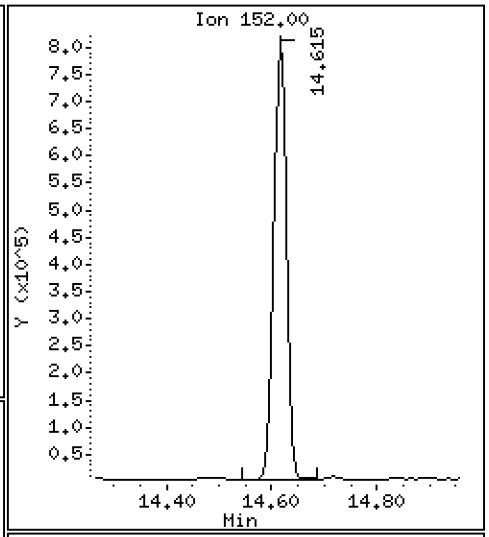
Concentration: 3.779 ug/mL

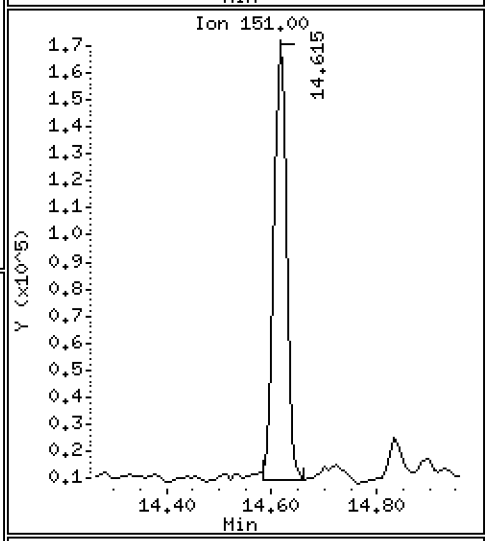


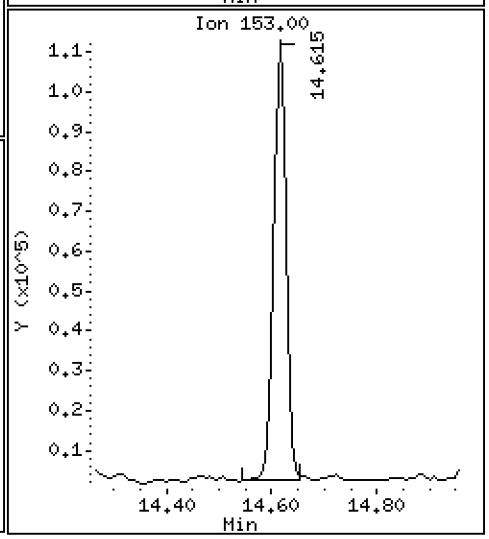












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

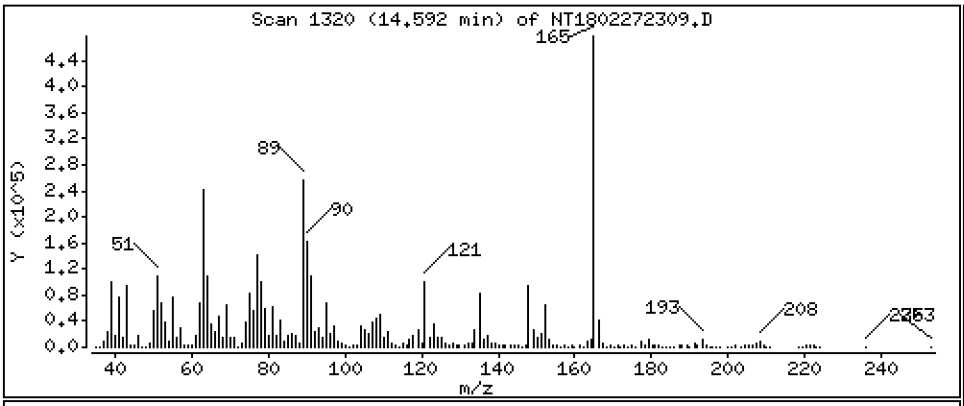
Operator: VTS

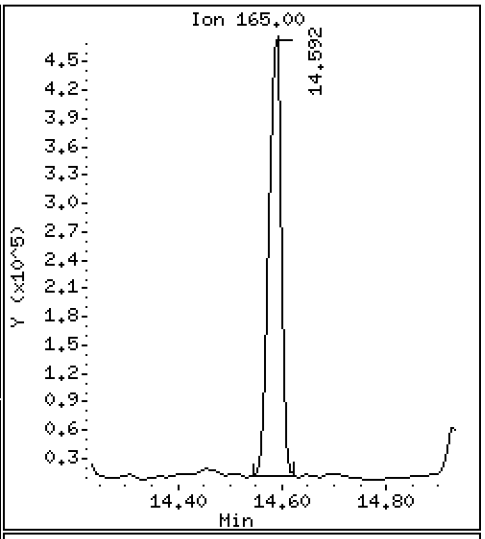
Column phase: ZB-5msi

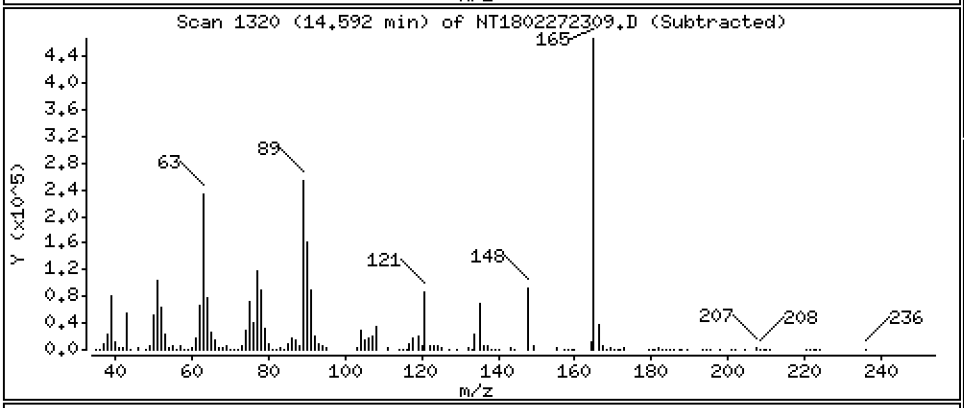
Column diameter: 0.25

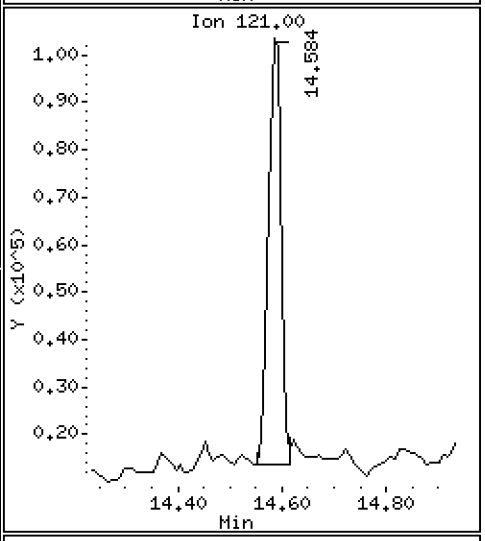
41 2,6-Dinitrotoluene

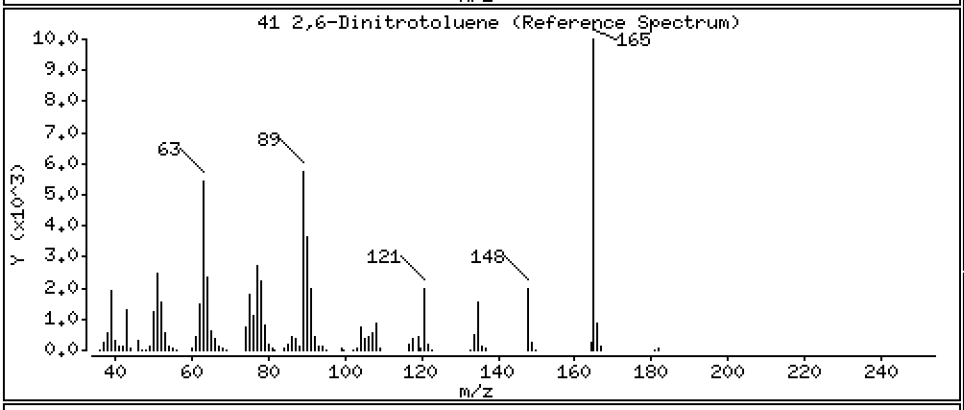
Concentration: 14.46 ug/mL

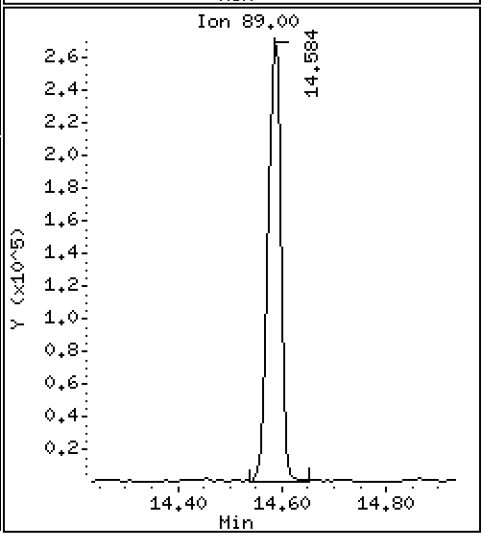


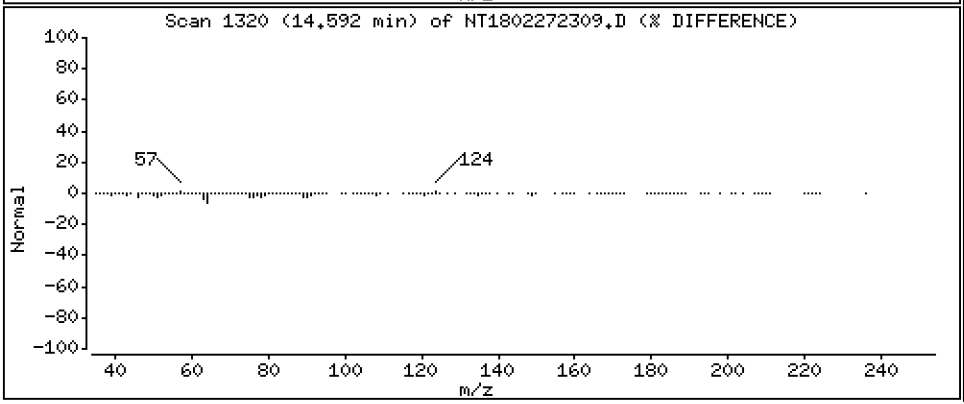












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

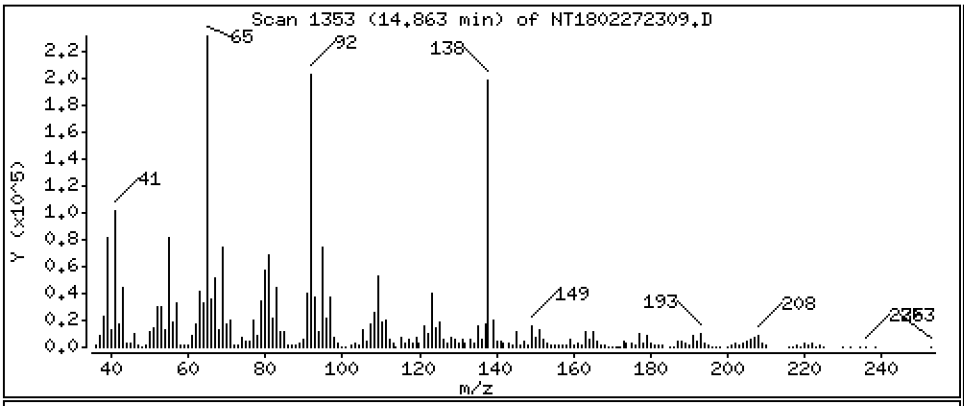
Operator: VTS

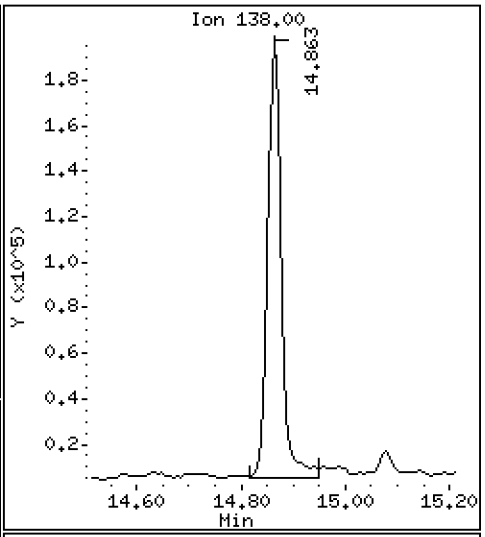
Column phase: ZB-5msi

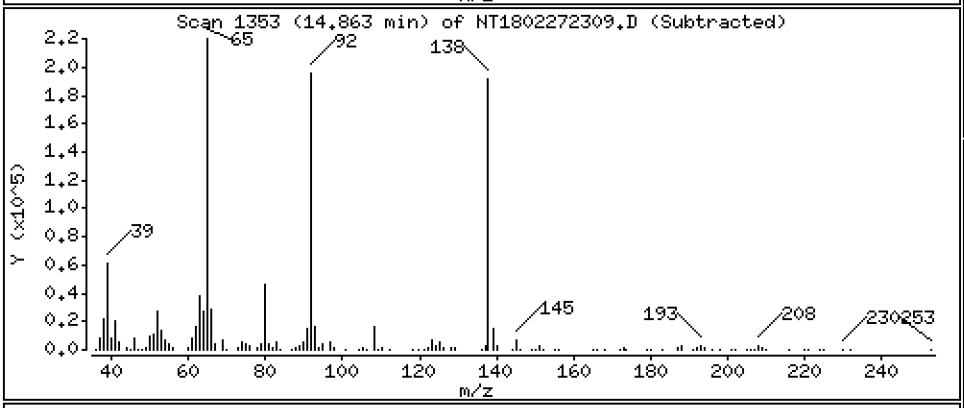
Column diameter: 0.25

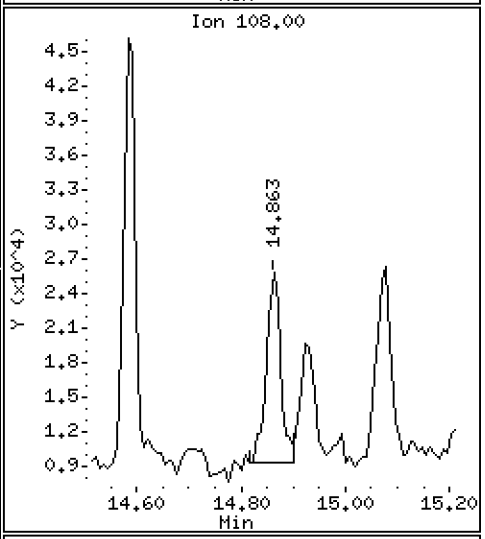
43 3-Nitroaniline

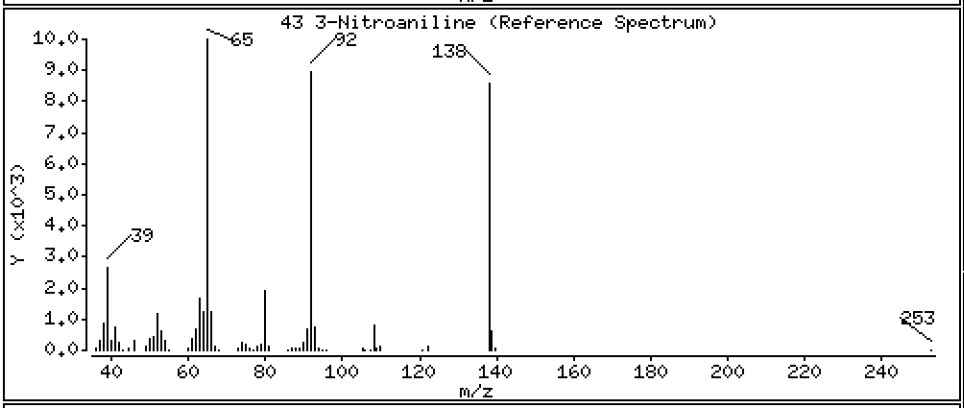
Concentration: 5.584 ug/mL

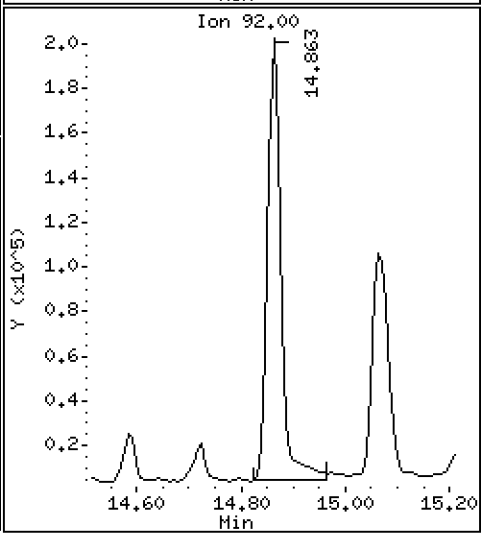


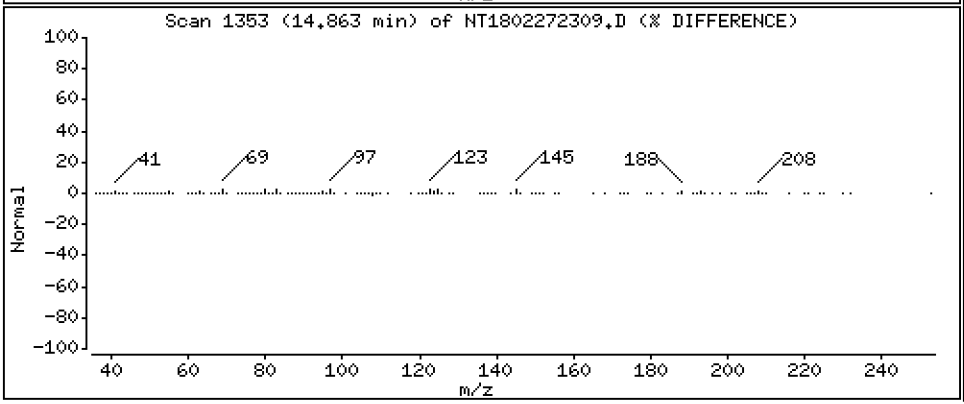












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

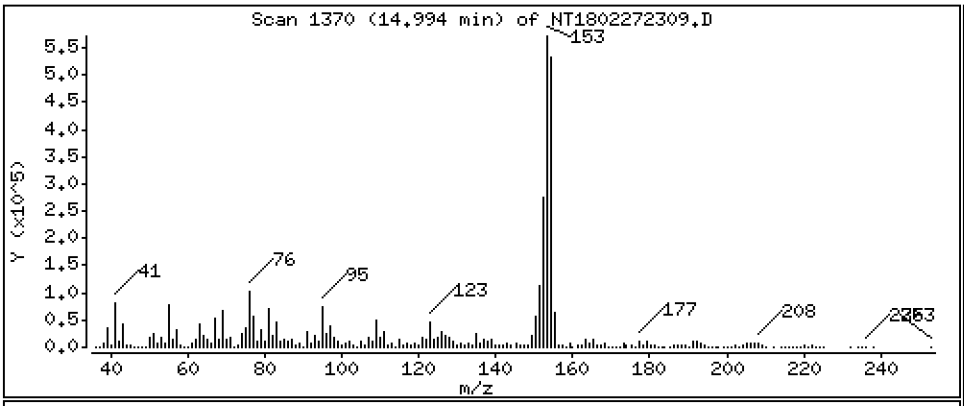
Operator: VTS

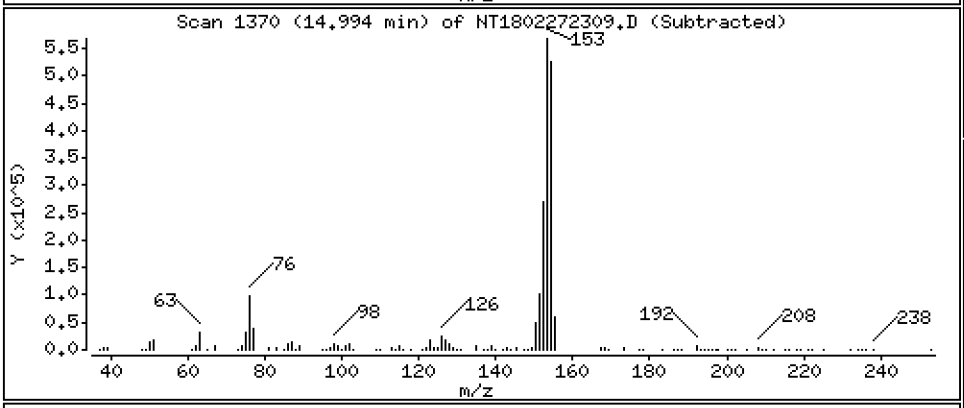
Column phase: ZB-5msi

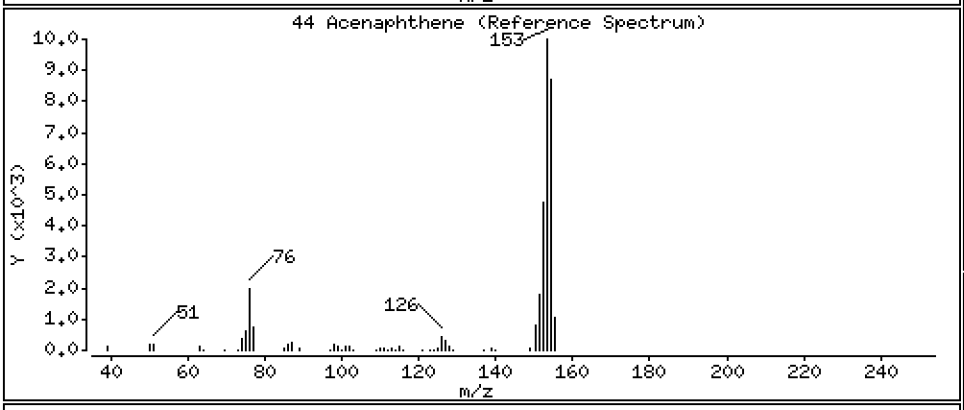
Column diameter: 0.25

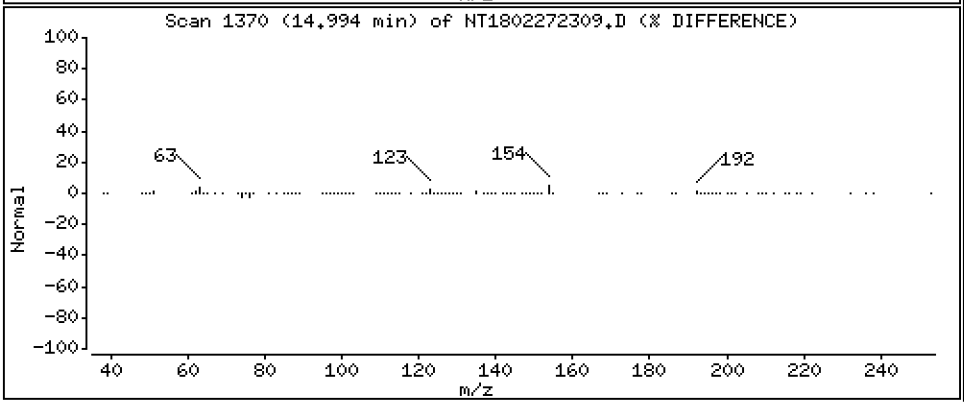
44 Acenaphthene

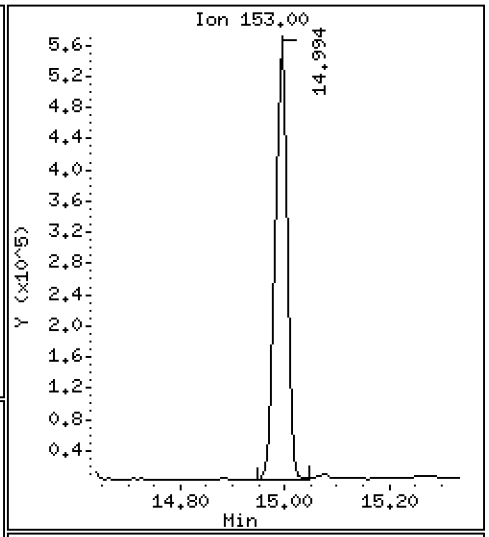
Concentration: 4.023 ug/mL

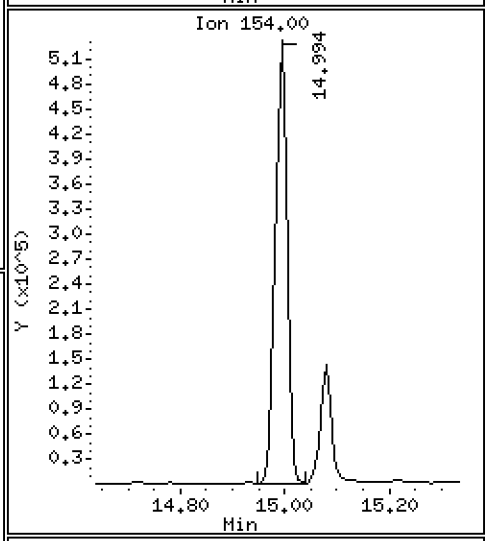


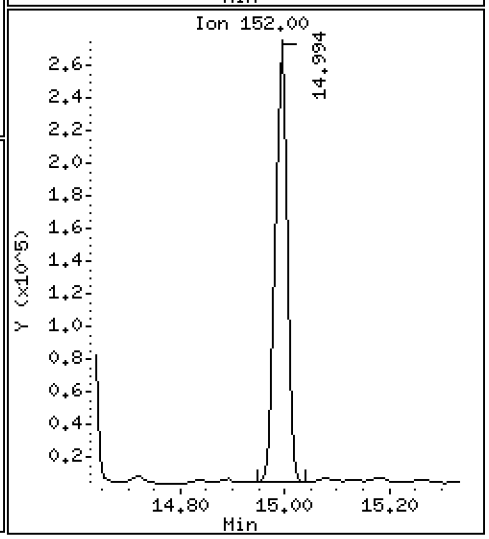












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

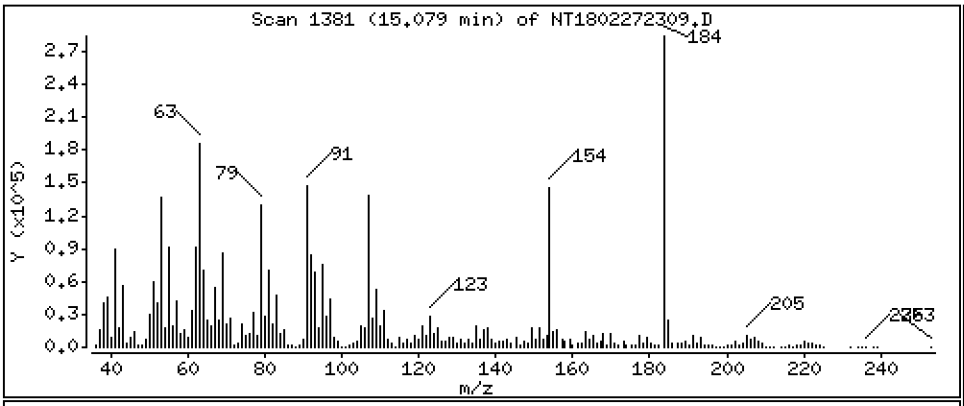
Operator: VTS

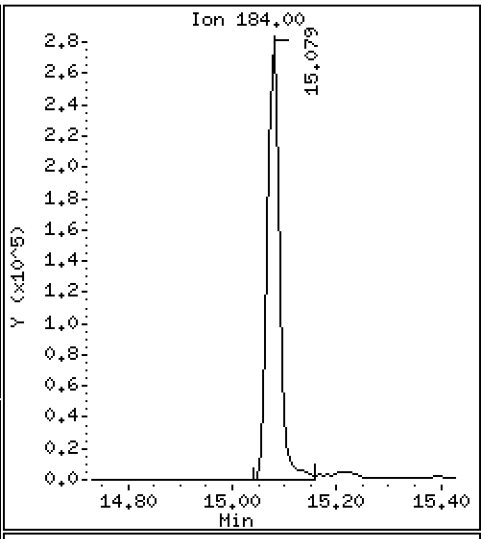
Column phase: ZB-5msi

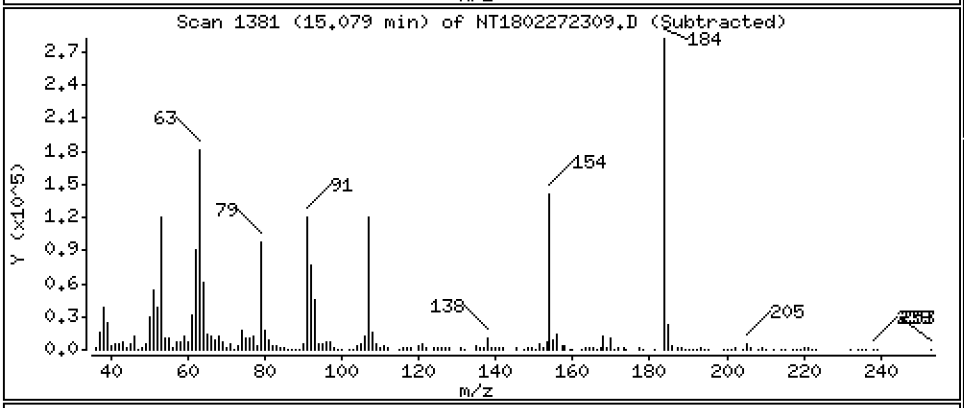
Column diameter: 0.25

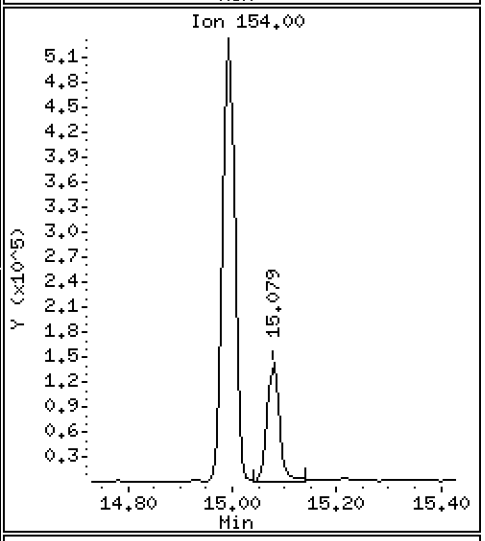
45 2,4-Dinitrophenol

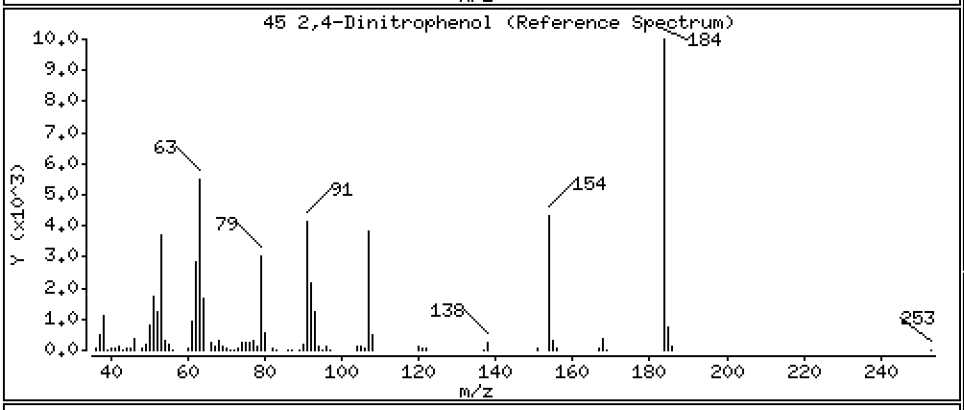
Concentration: 17.68 ug/mL

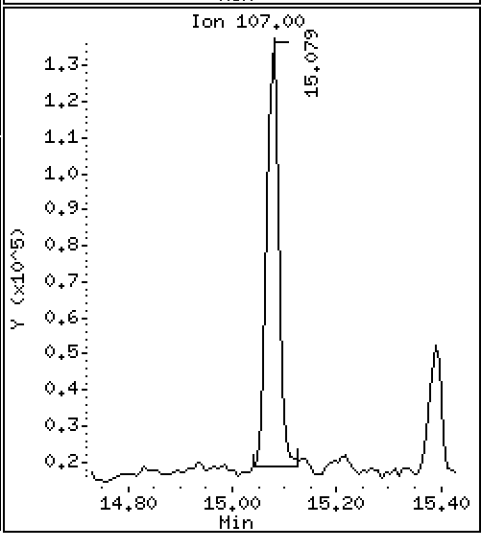


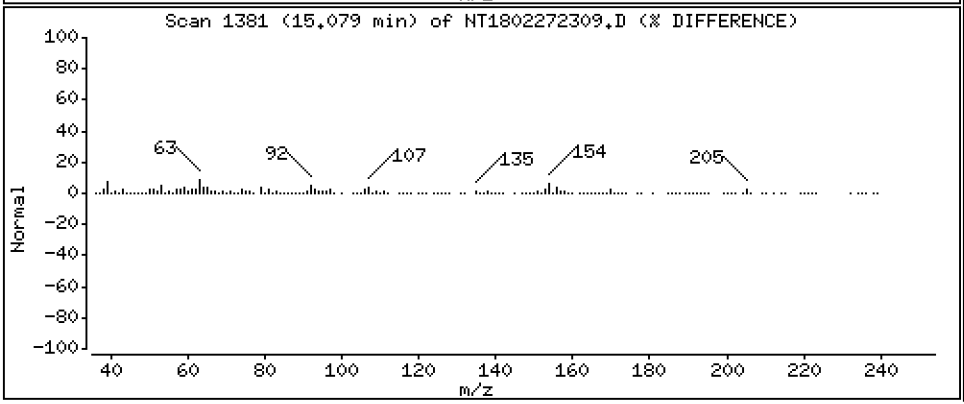












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

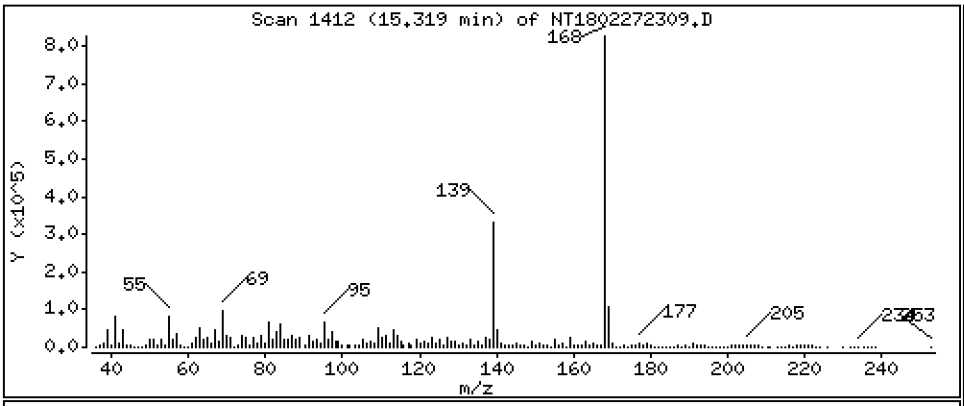
Operator: VTS

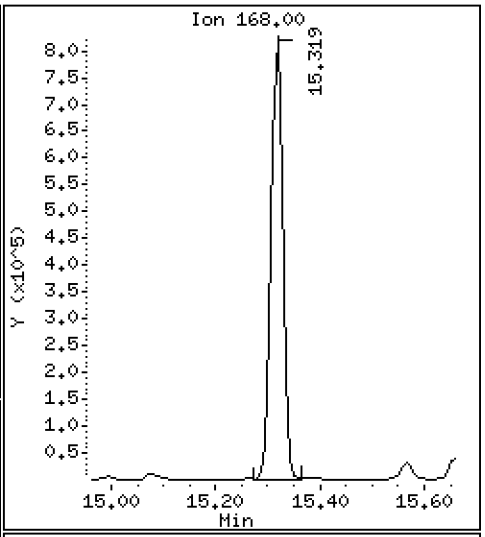
Column phase: ZB-5msi

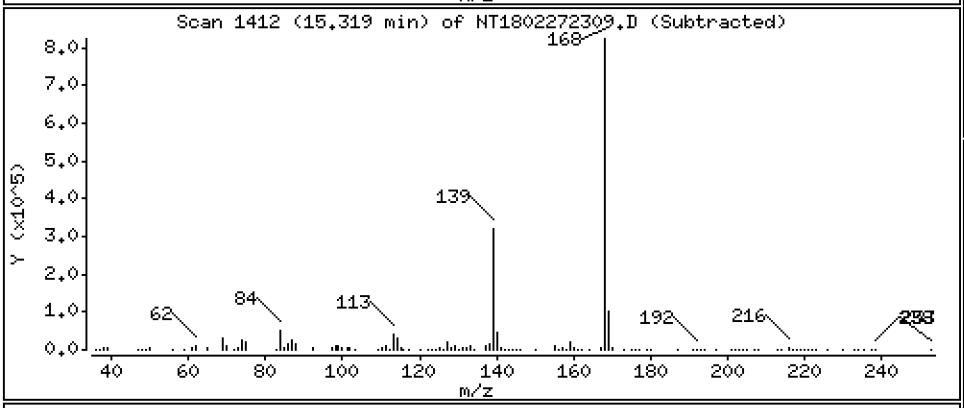
Column diameter: 0.25

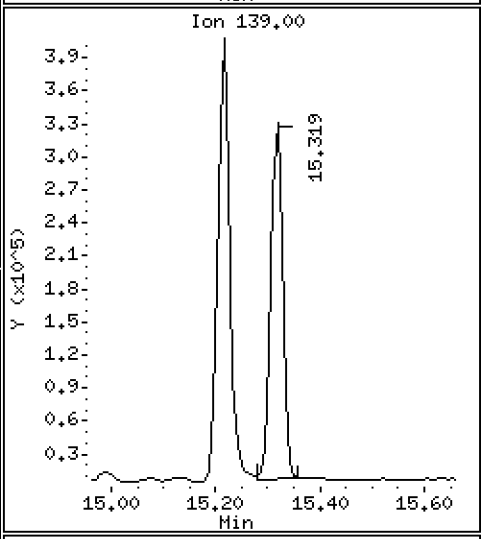
46 Dibenzofuran

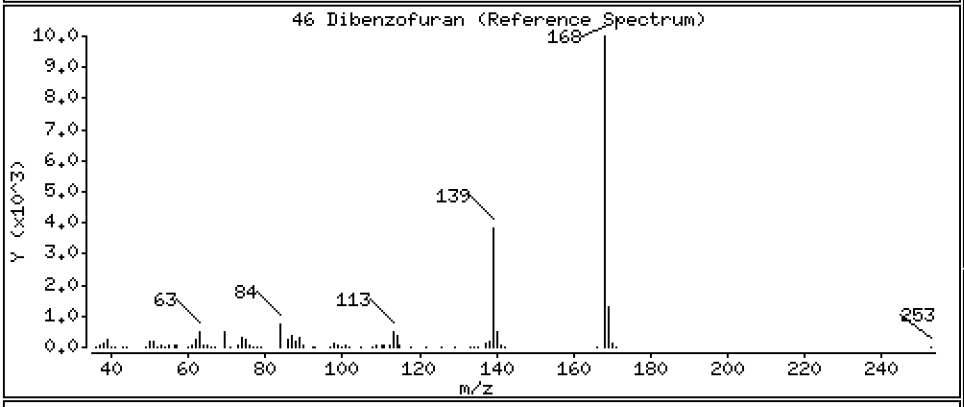
Concentration: 3.836 ug/mL

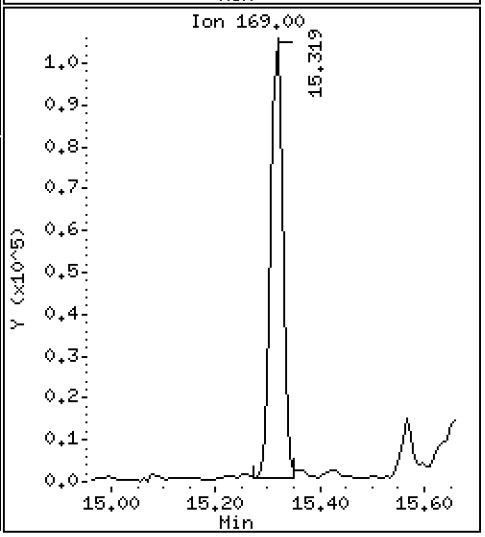


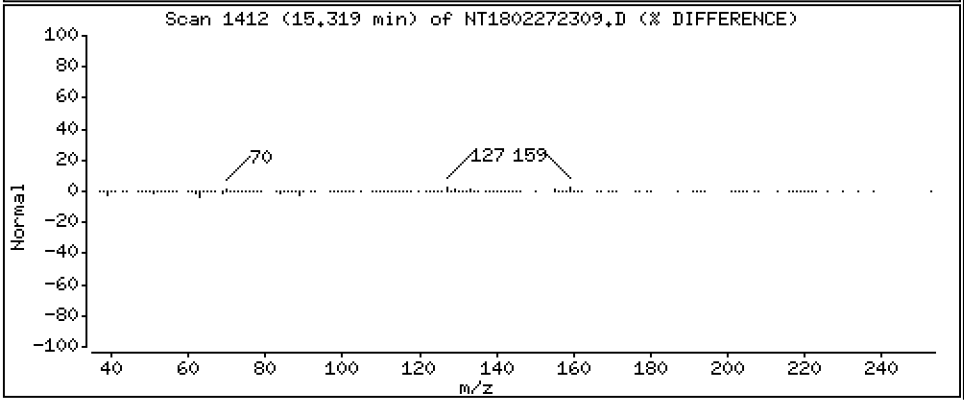












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272309.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

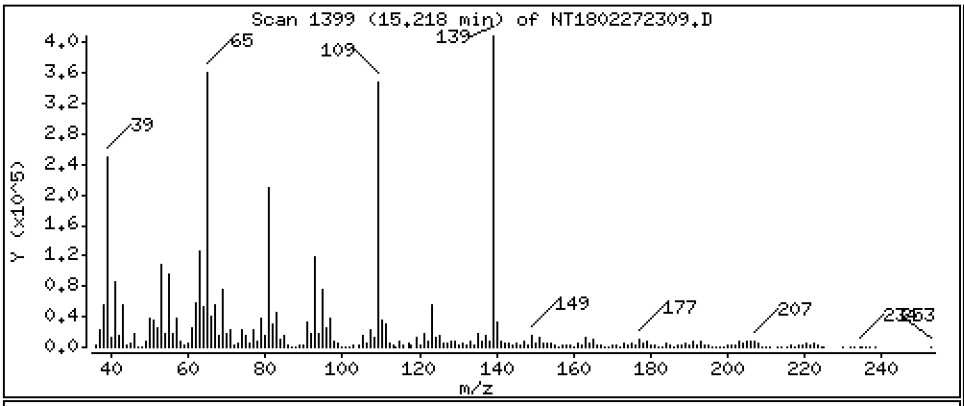
Operator: VTS

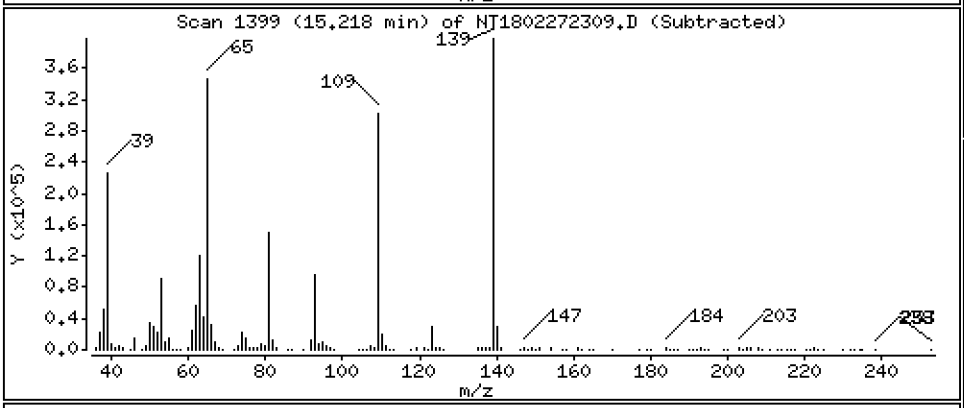
Column phase: ZB-5msi

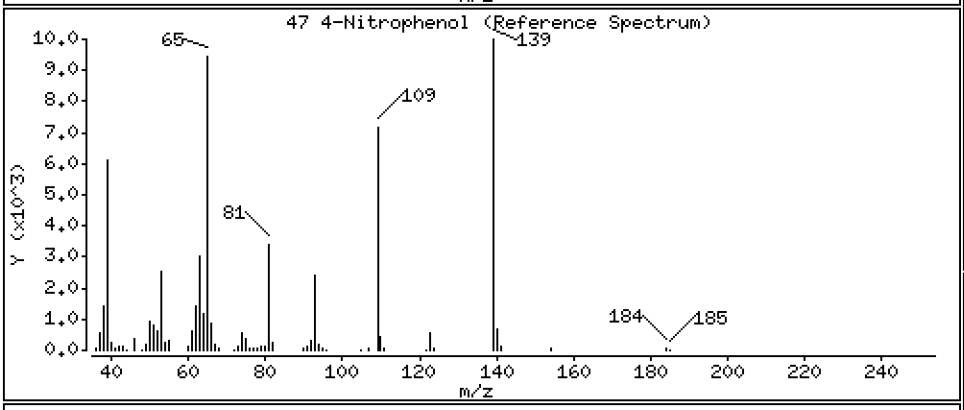
Column diameter: 0.25

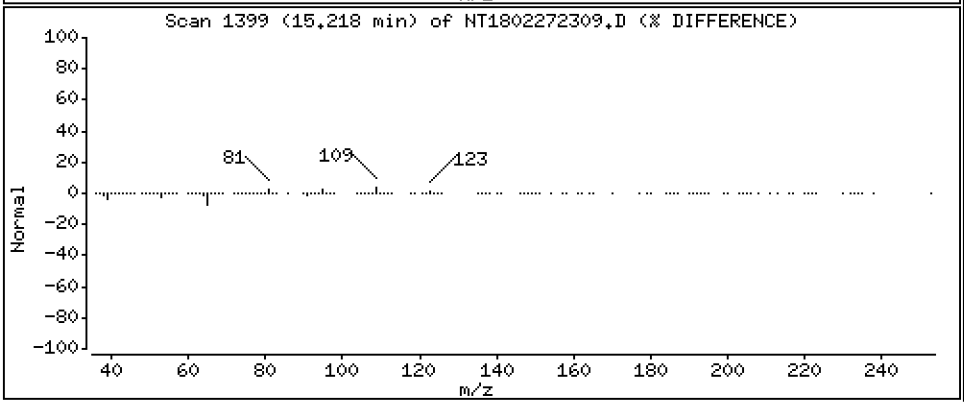
47 4-Nitrophenol

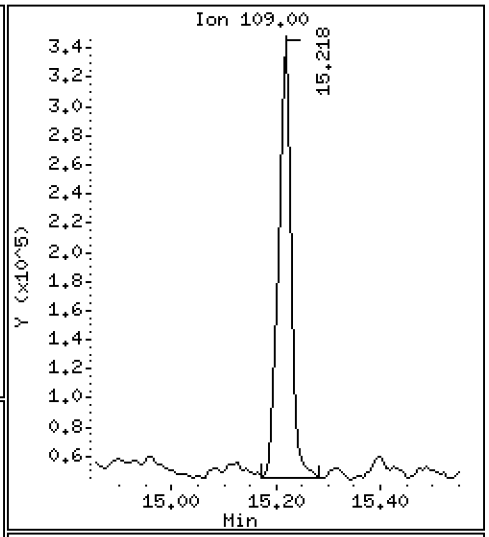
Concentration: 21.18 ug/mL

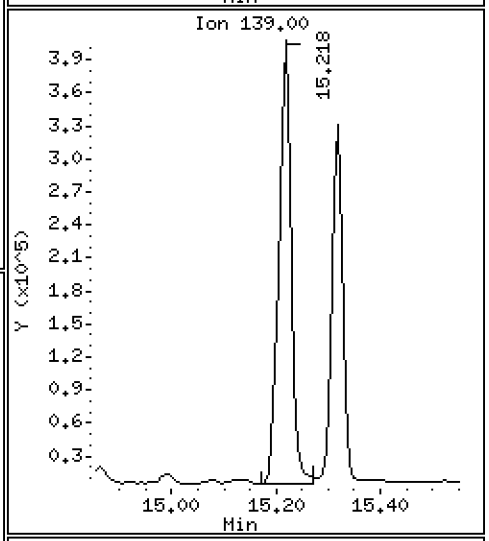


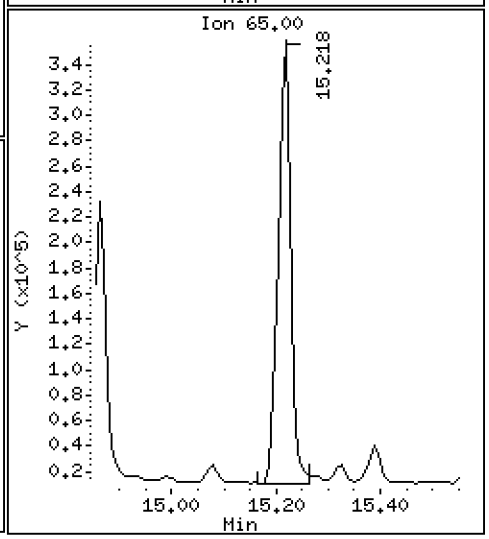












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

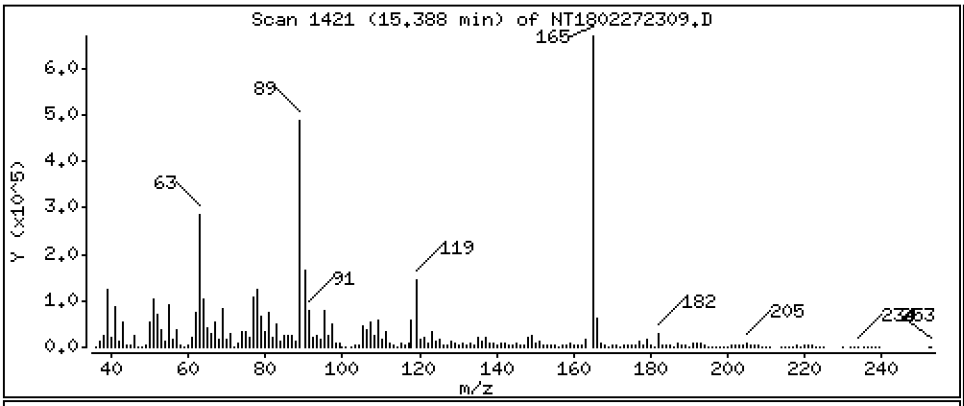
Operator: VTS

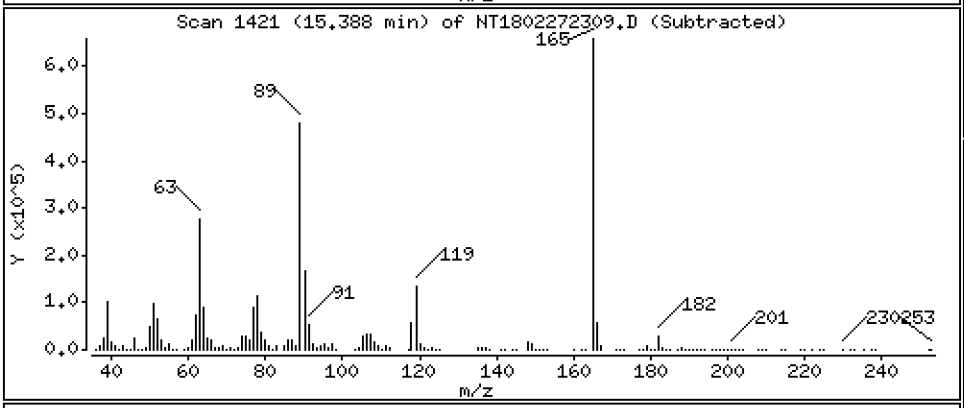
Column phase: ZB-5msi

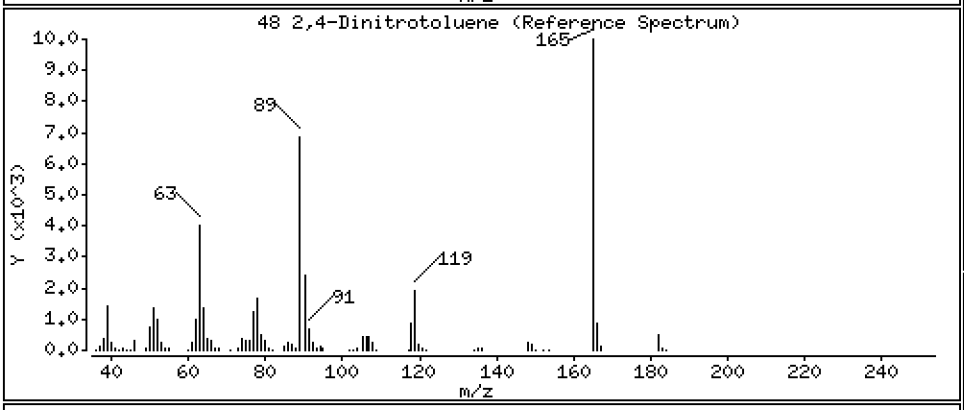
Column diameter: 0.25

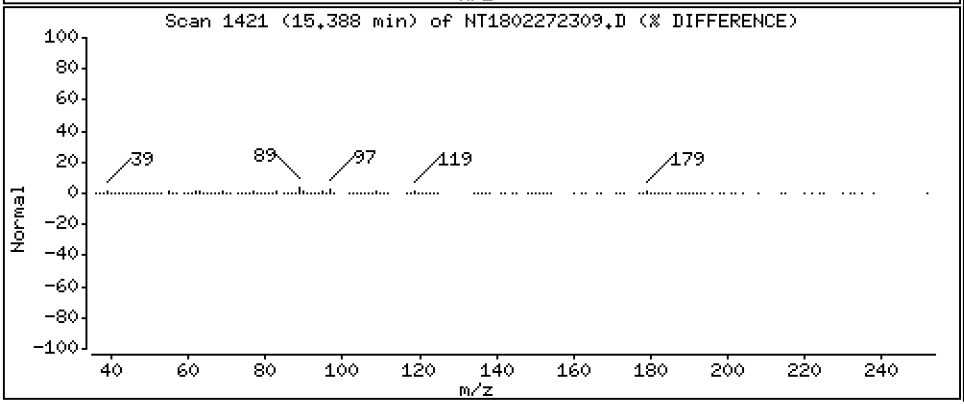
48 2,4-Dinitrotoluene

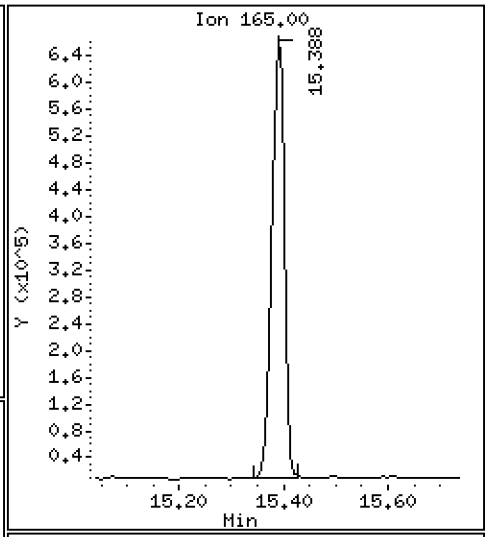
Concentration: 14.96 ug/mL

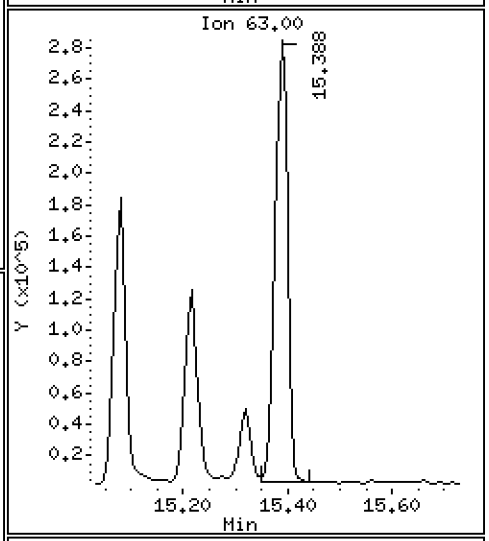


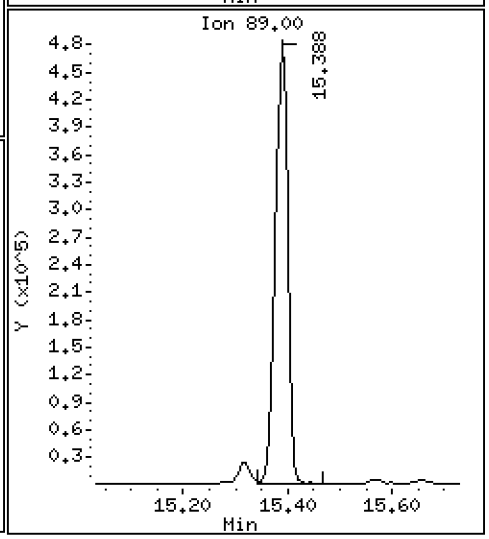












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

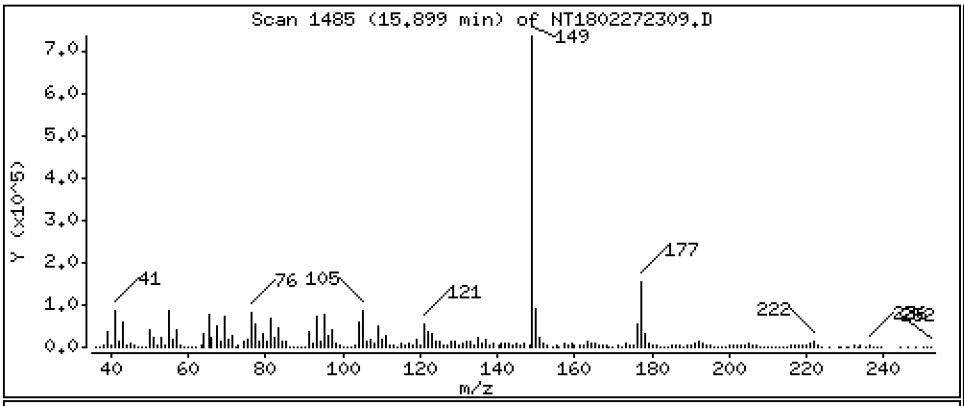
Operator: VTS

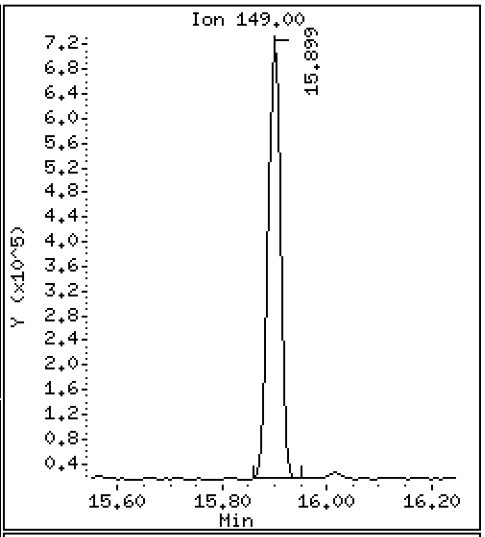
Column phase: ZB-5msi

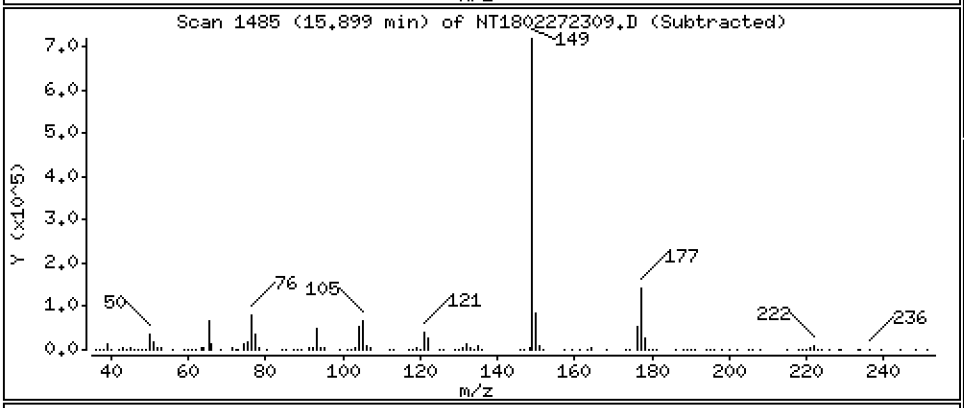
Column diameter: 0.25

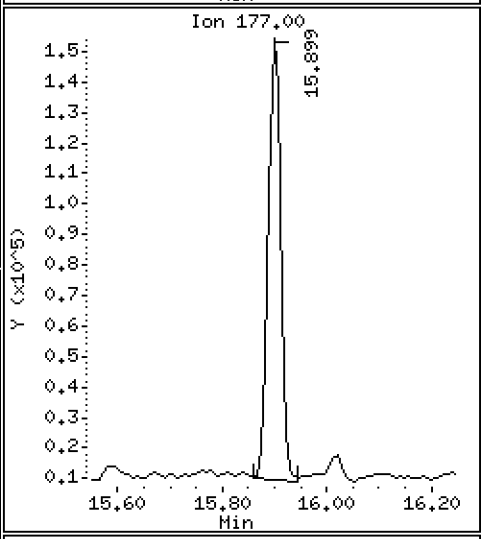
50 Diethylphthalate

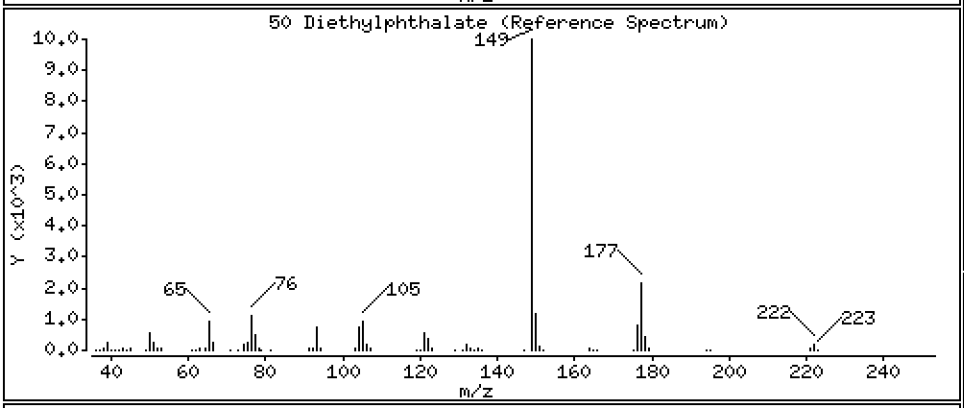
Concentration: 4.862 ug/mL

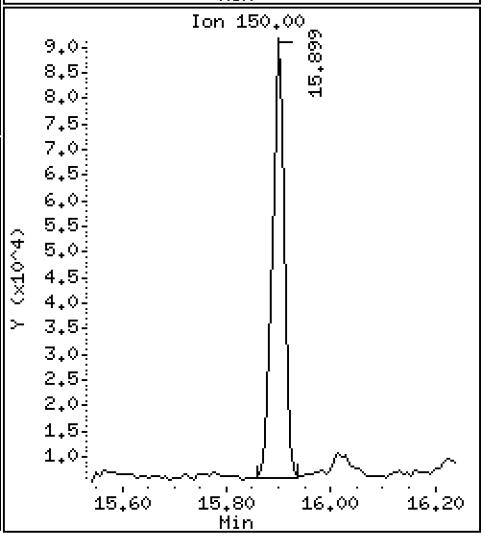


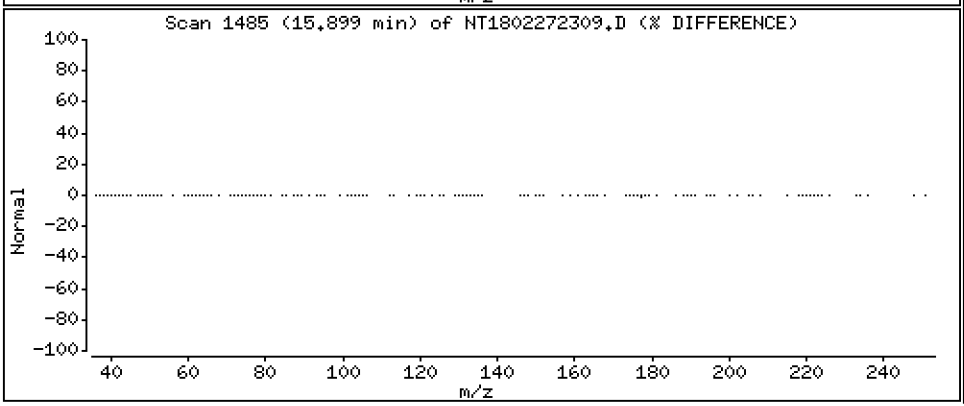












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

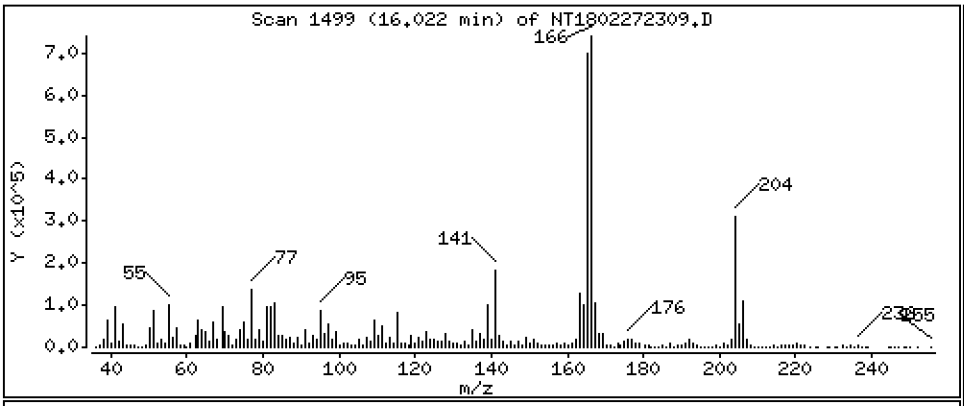
Operator: VTS

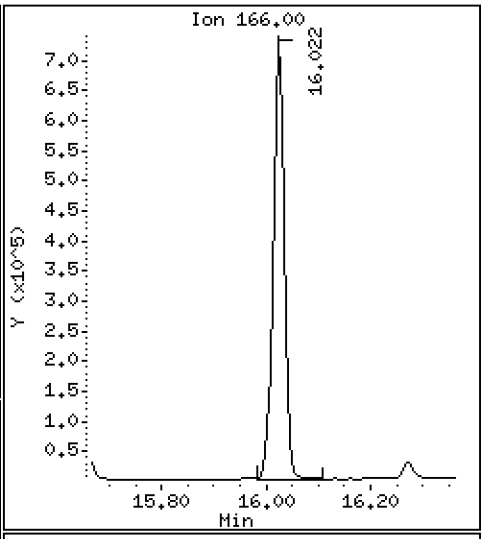
Column phase: ZB-5msi

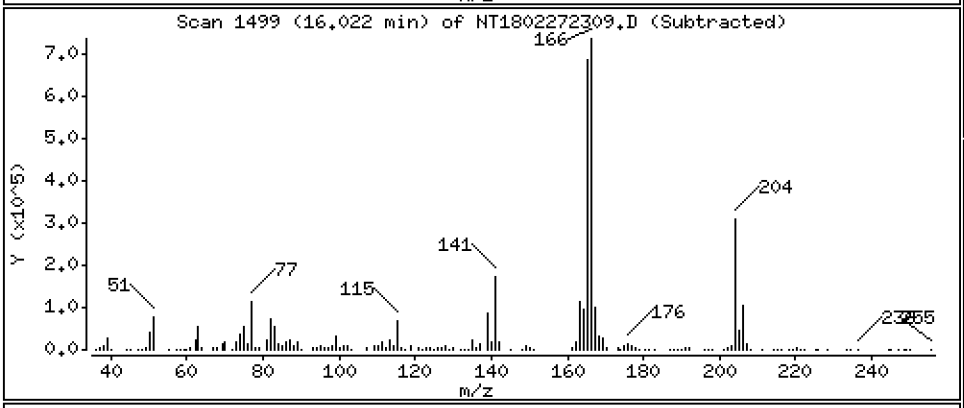
Column diameter: 0.25

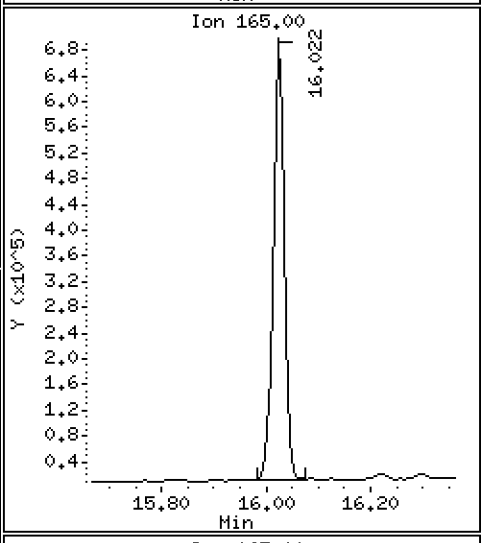
49 Fluorene

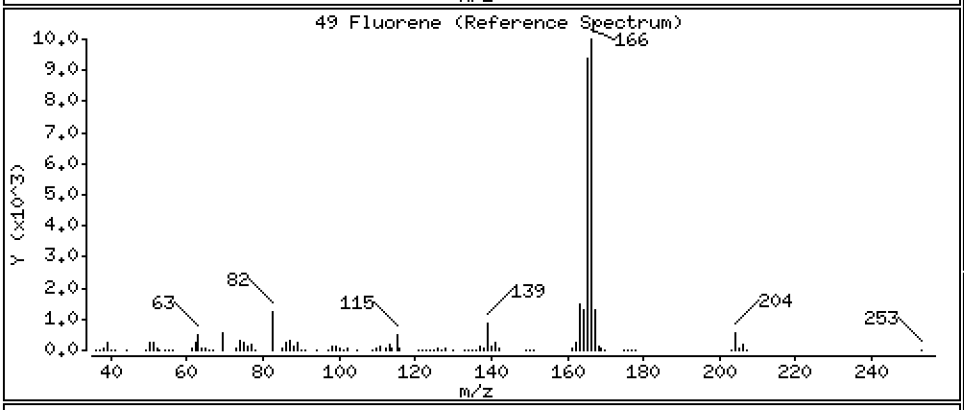
Concentration: 4.348 ug/mL

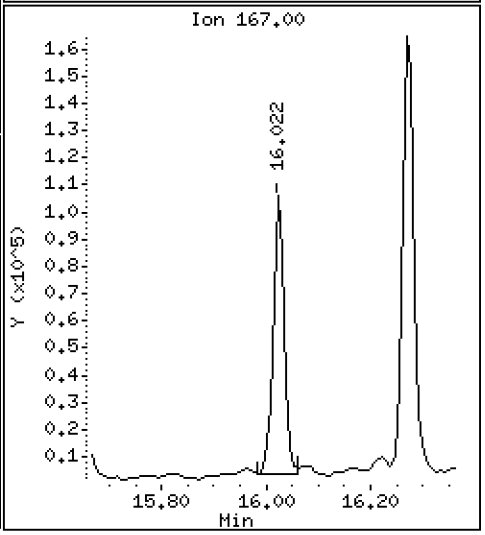


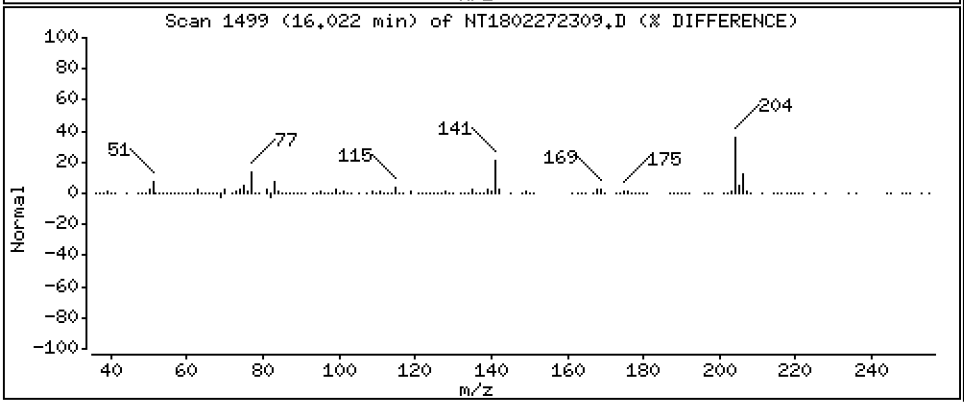












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

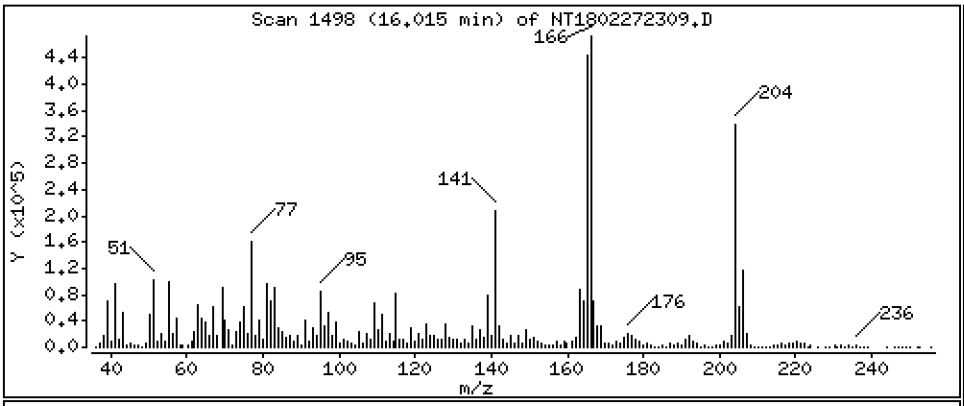
Operator: VTS

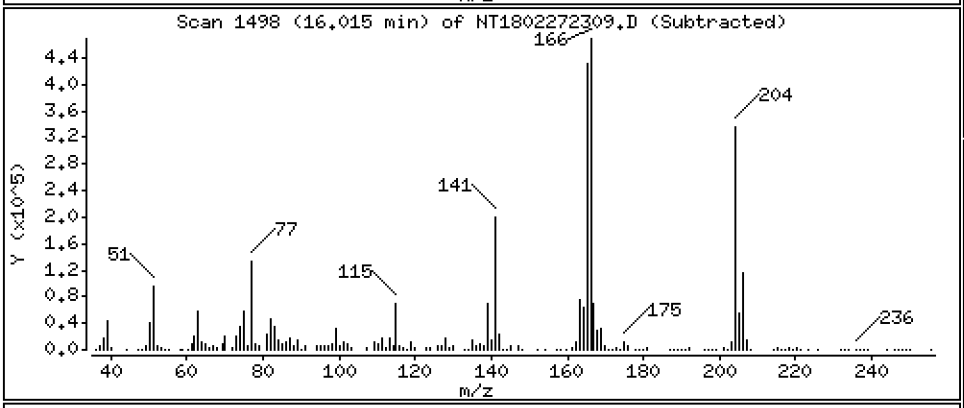
Column phase: ZB-5msi

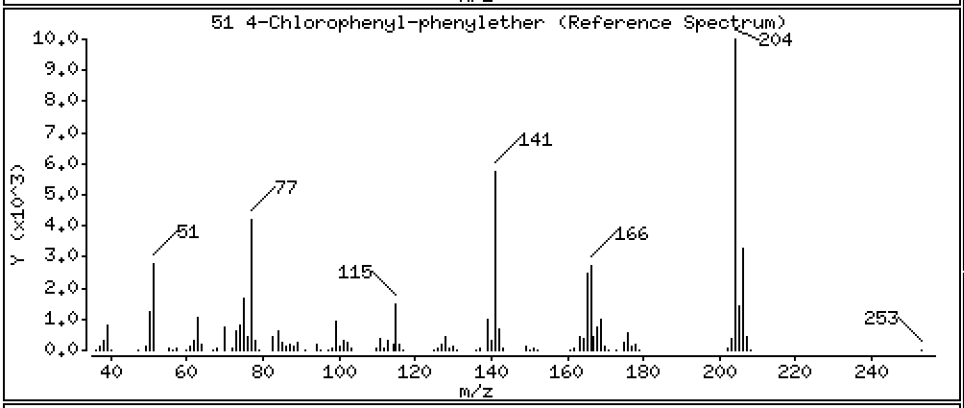
Column diameter: 0.25

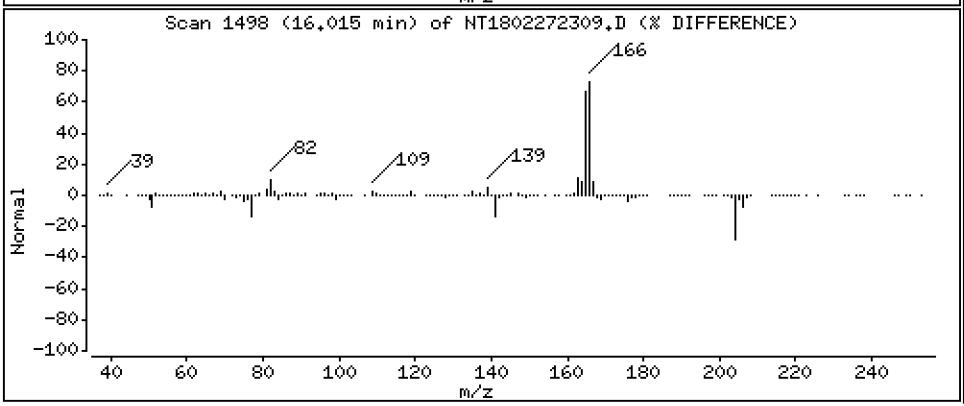
51 4-Chlorophenyl-phenylether

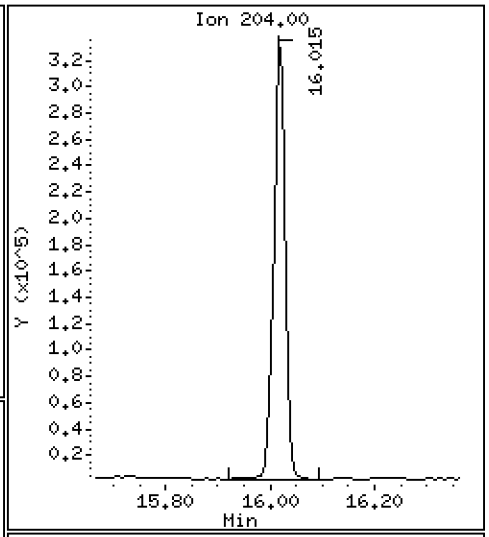
Concentration: 4.865 ug/mL

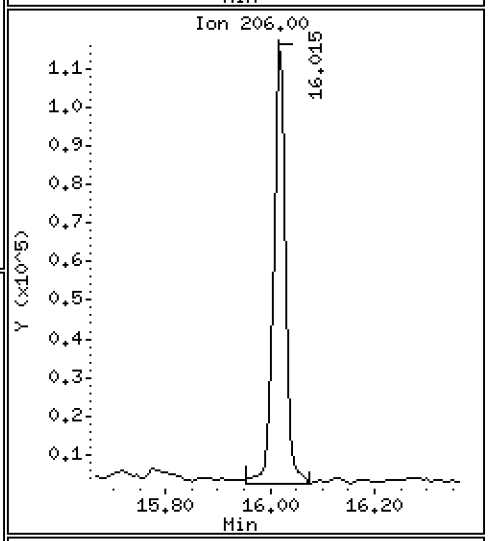


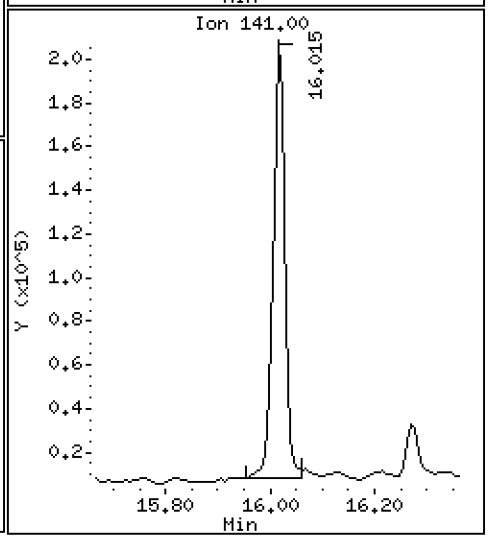












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

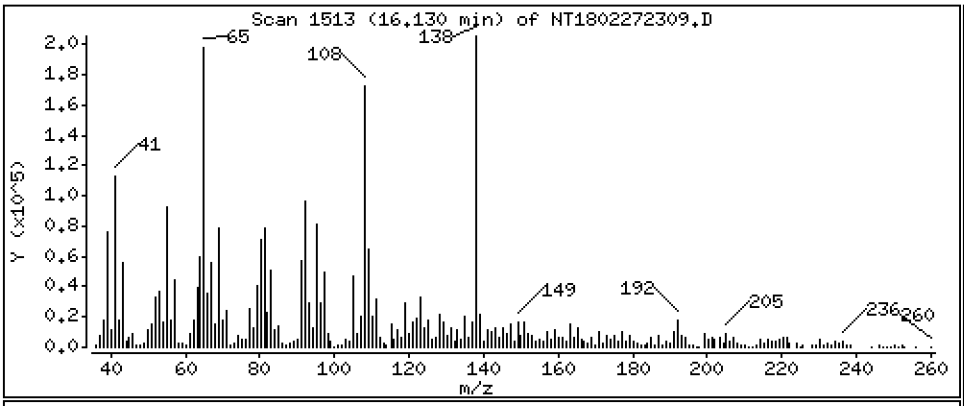
Operator: VTS

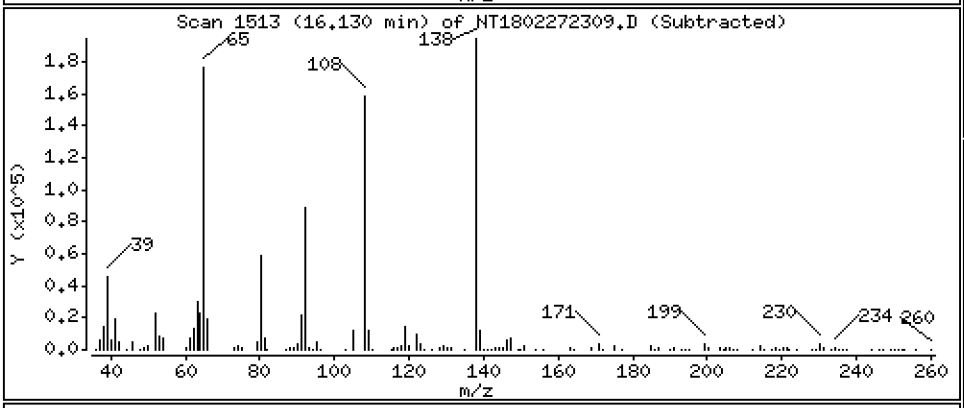
Column phase: ZB-5msi

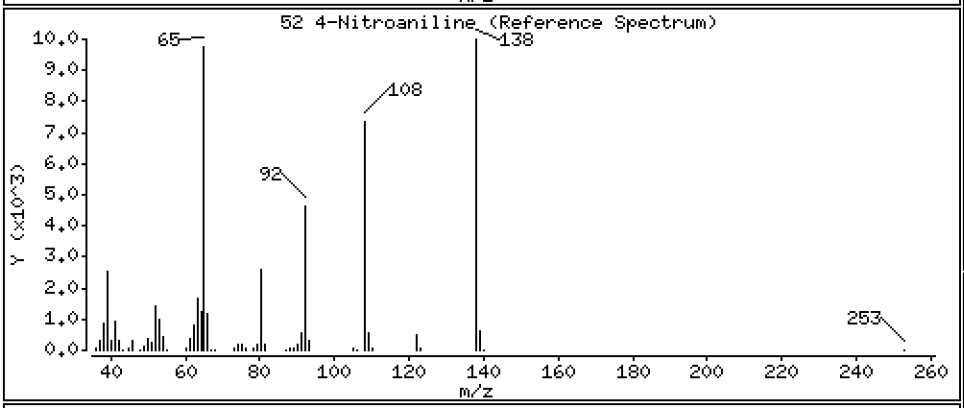
Column diameter: 0.25

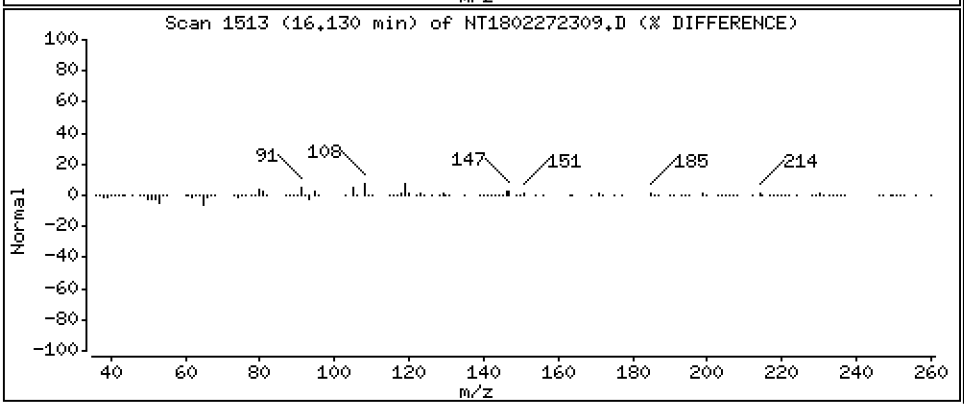
52 4-Nitroaniline

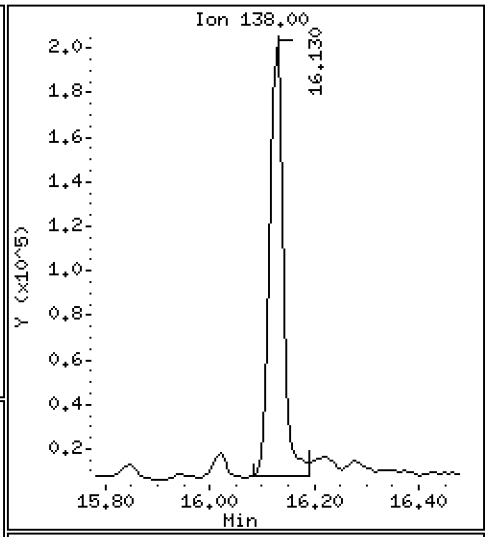
Concentration: 5.912 ug/mL

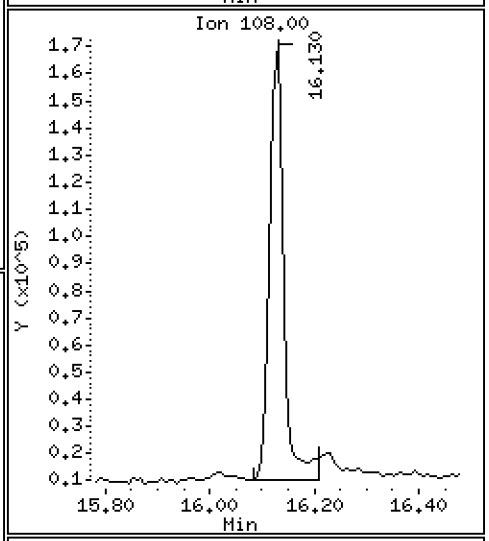


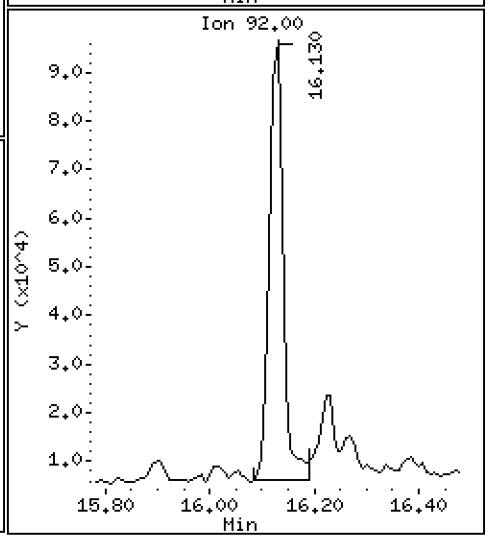












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

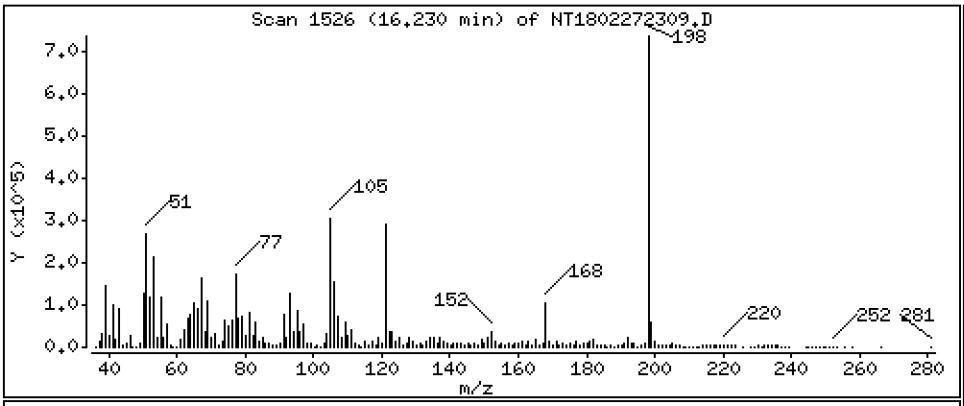
Operator: VTS

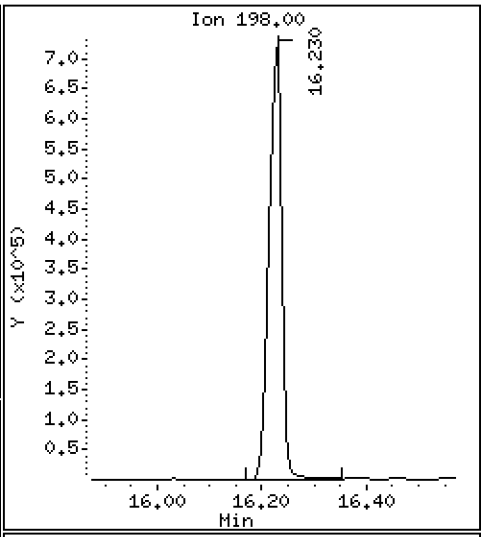
Column phase: ZB-5msi

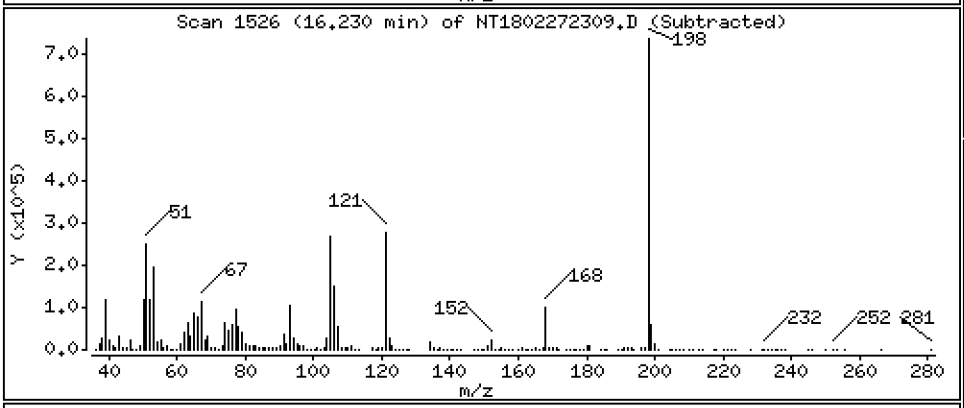
Column diameter: 0.25

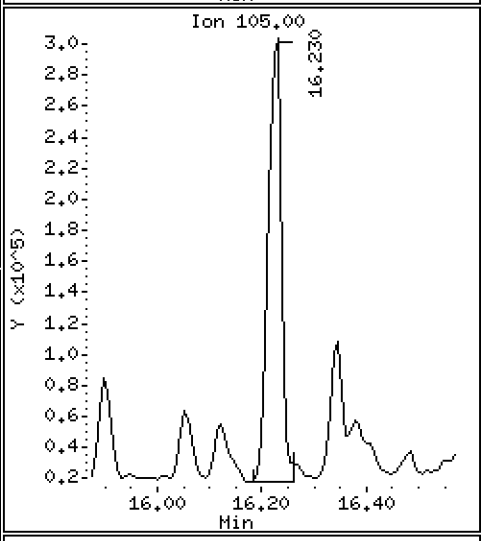
53 4,6-Dinitro-2-methylphenol

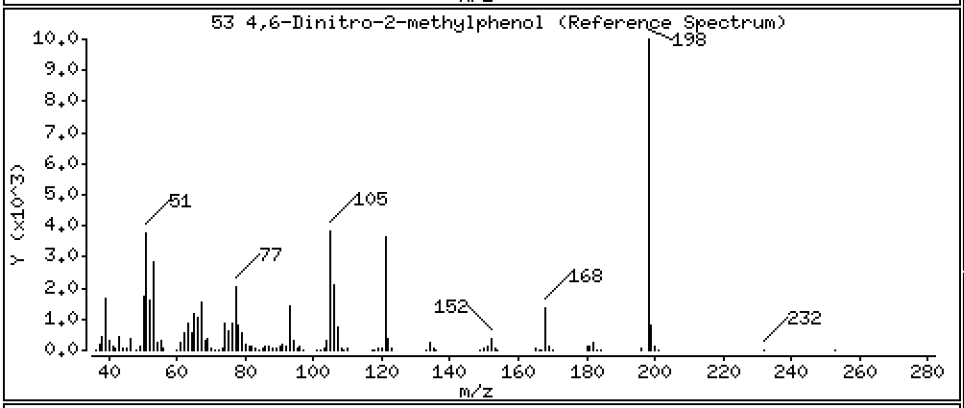
Concentration: 23.04 ug/mL

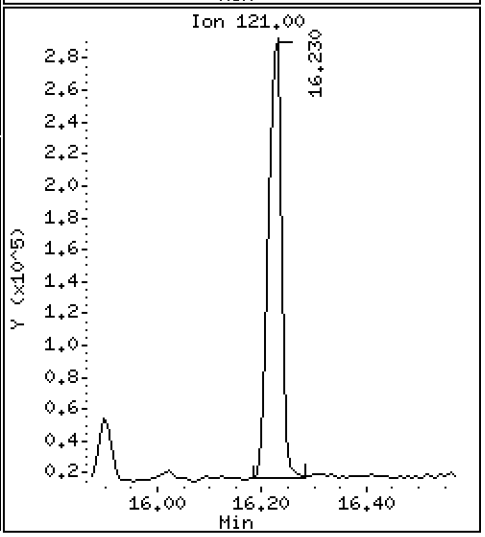


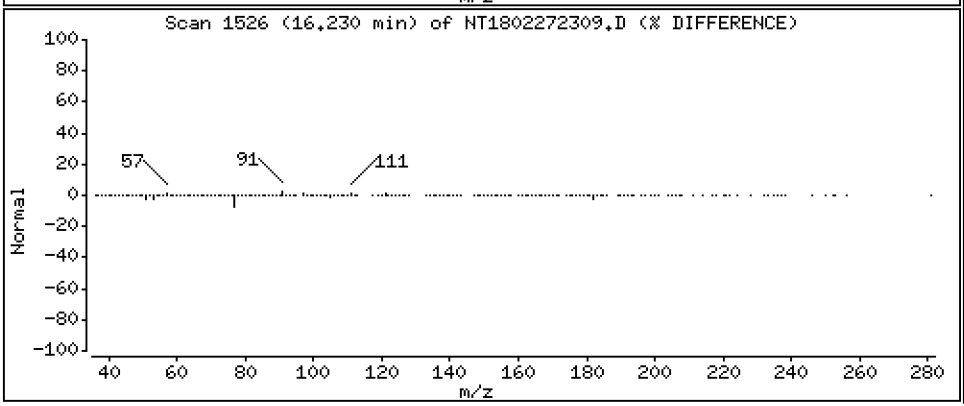












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272309.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

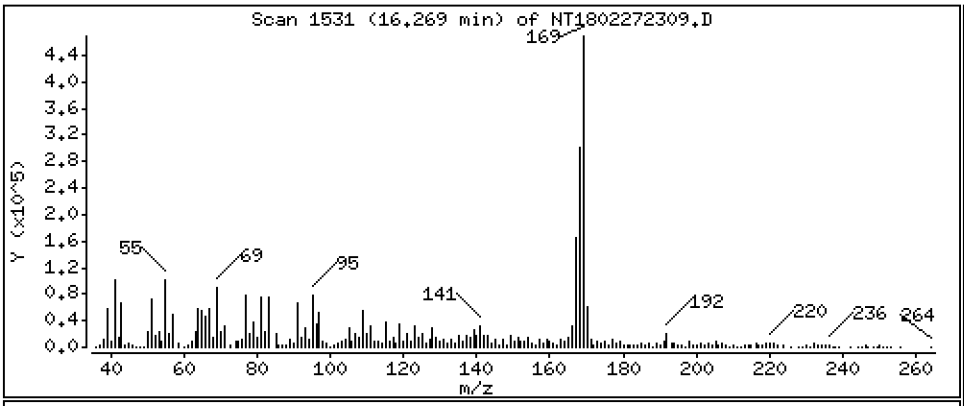
Operator: VTS

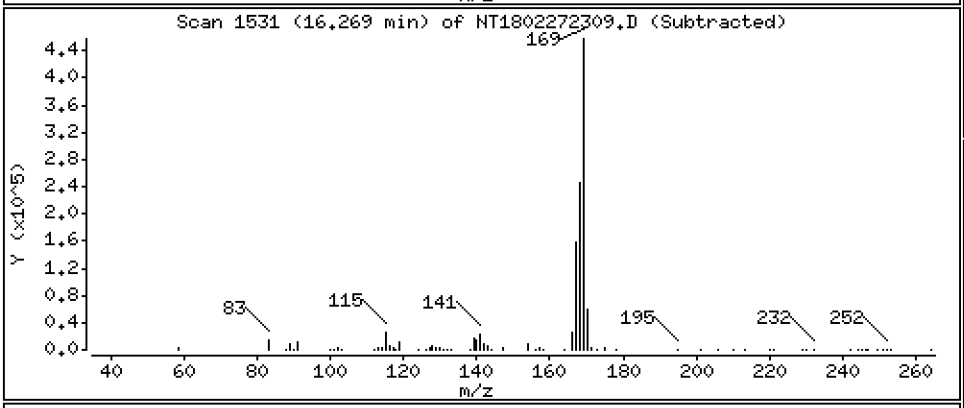
Column phase: ZB-5msi

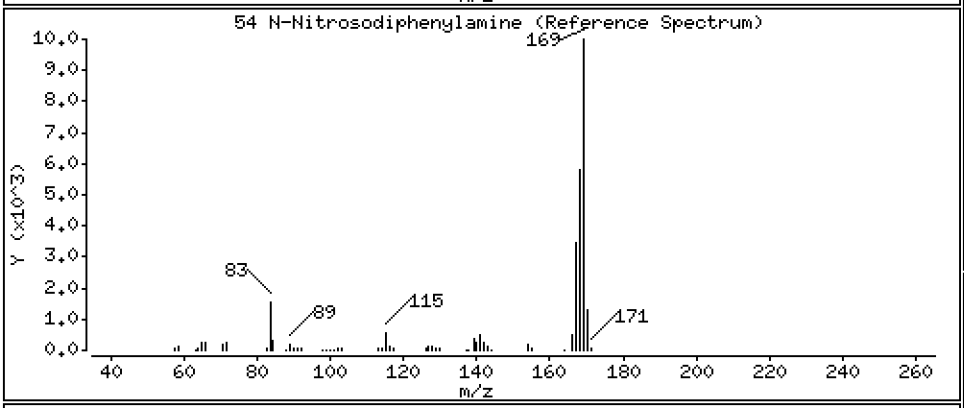
Column diameter: 0.25

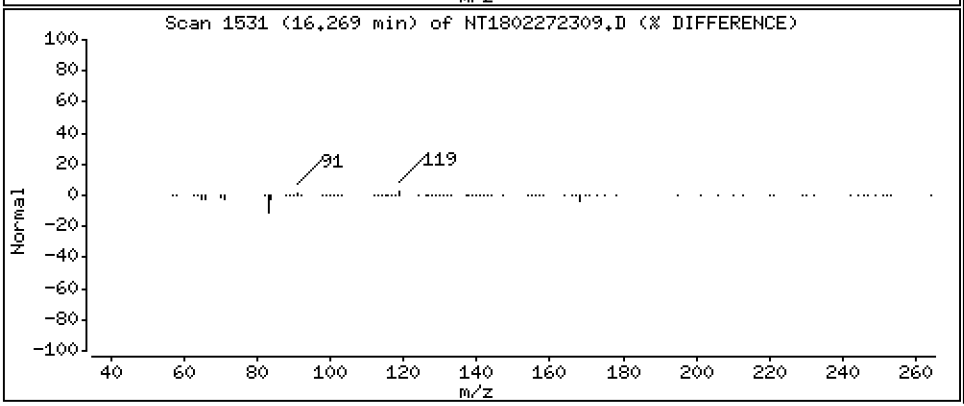
54 N-Nitrosodiphenylamine

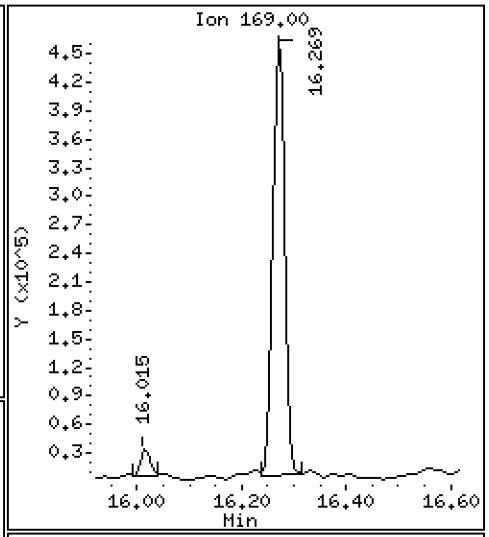
Concentration: 3.244 ug/mL

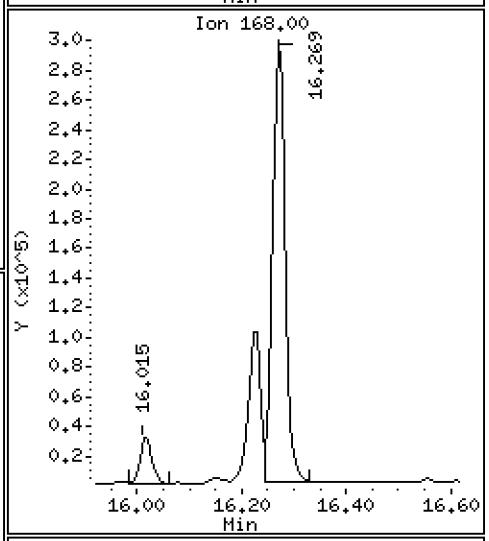


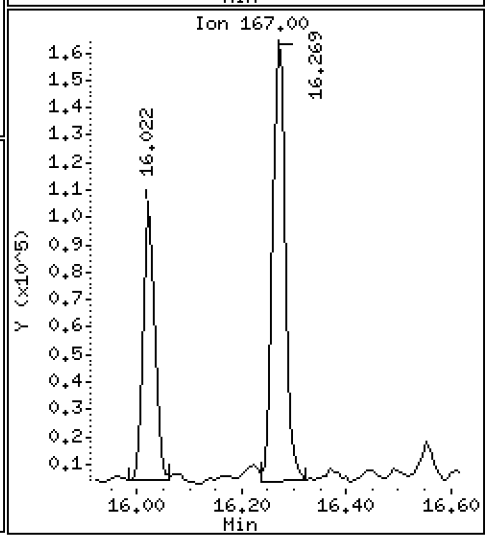












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

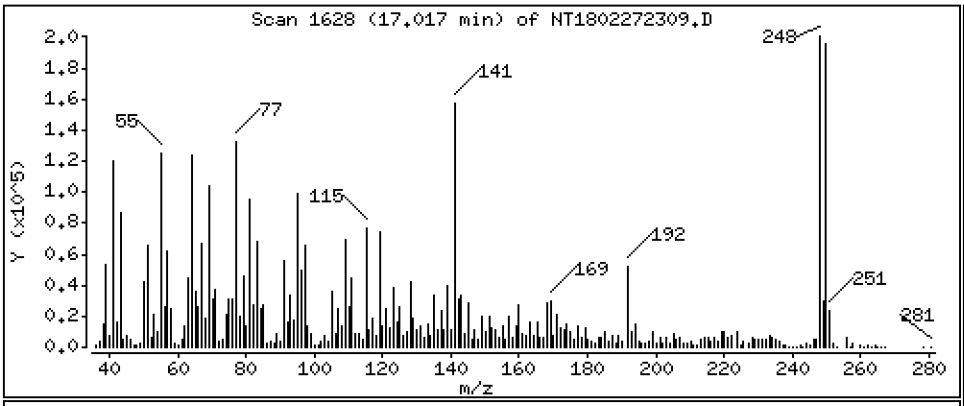
Operator: VTS

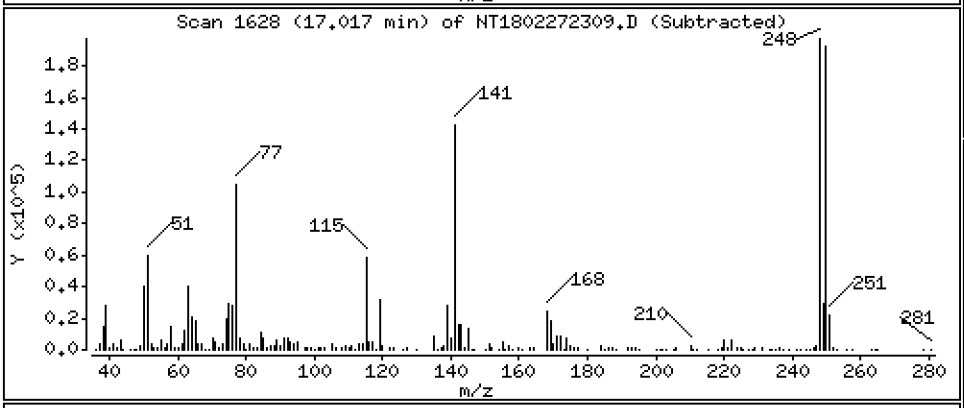
Column phase: ZB-5msi

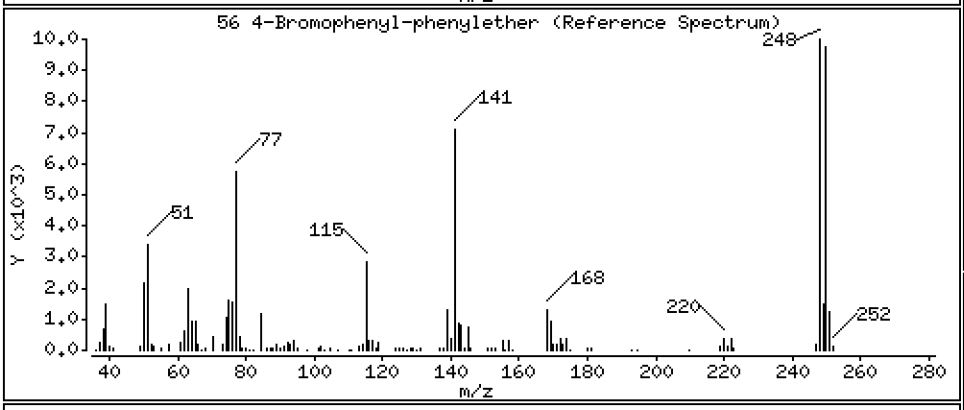
Column diameter: 0.25

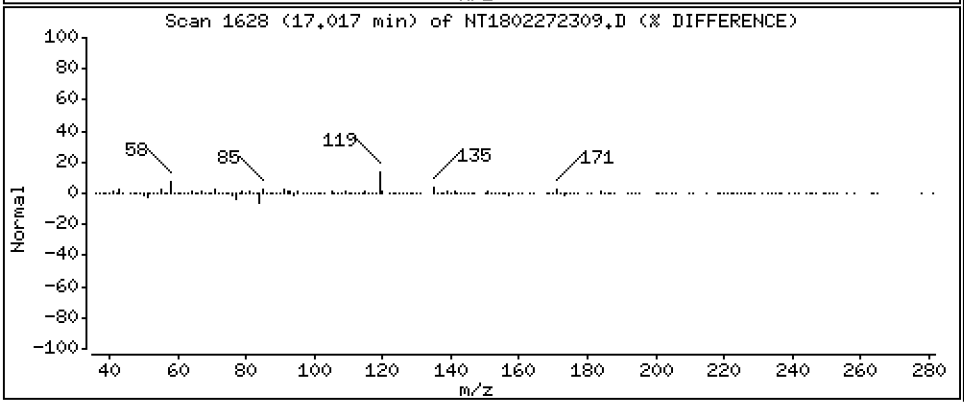
56 4-Bromophenyl-phenylether

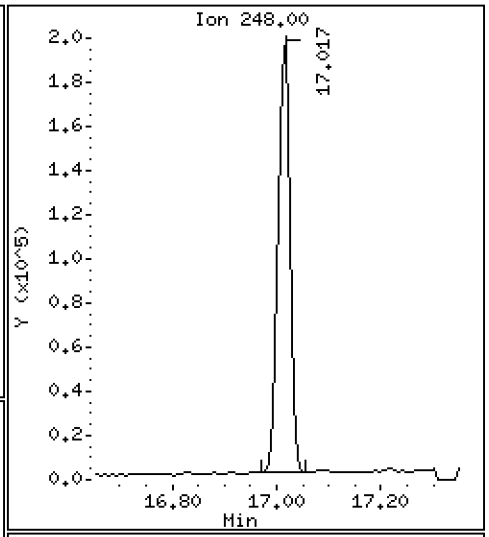
Concentration: 3.540 ug/mL

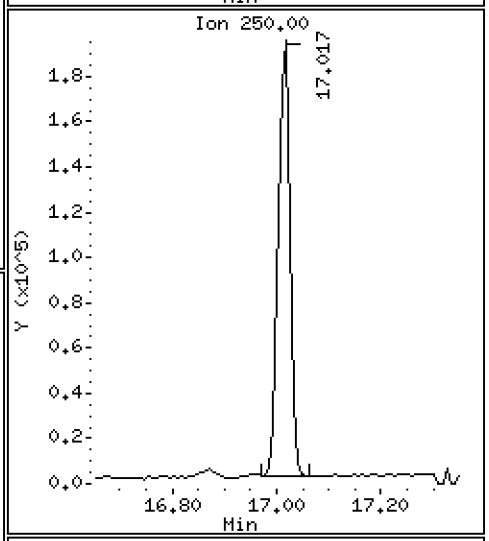


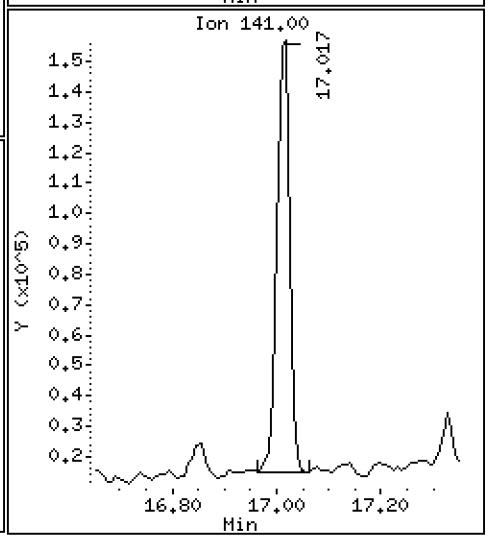












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

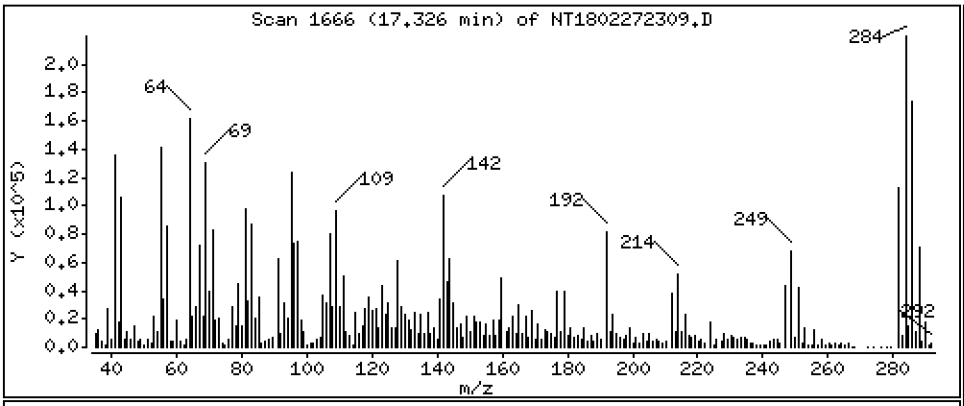
Operator: VTS

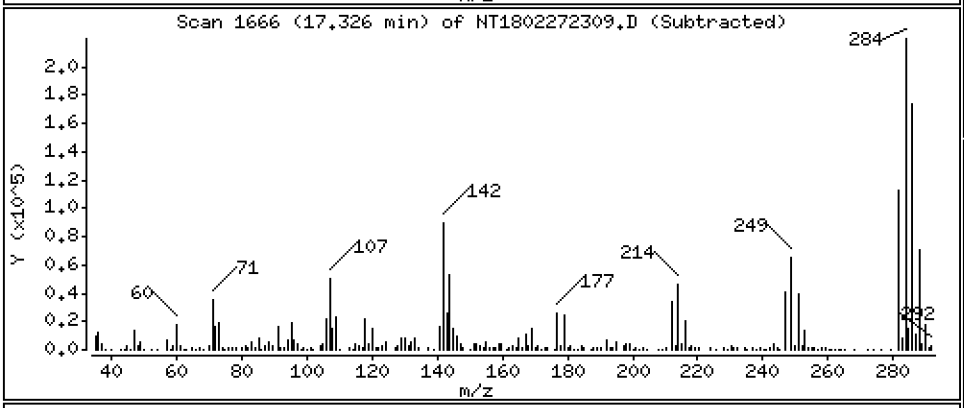
Column phase: ZB-5msi

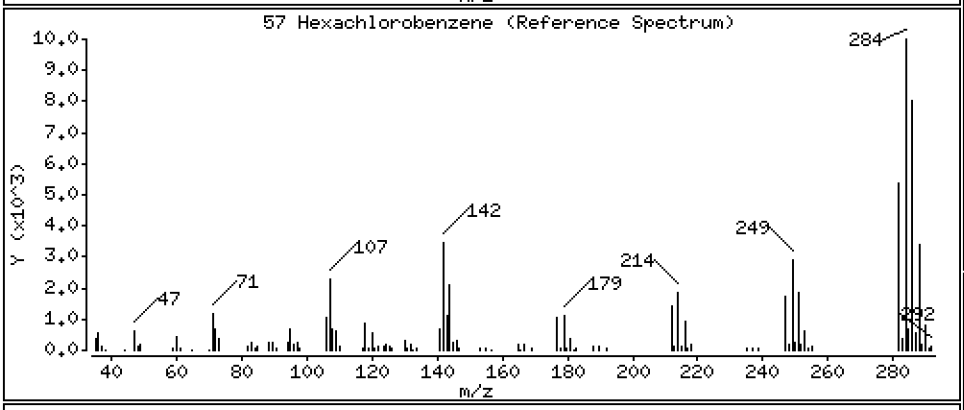
Column diameter: 0.25

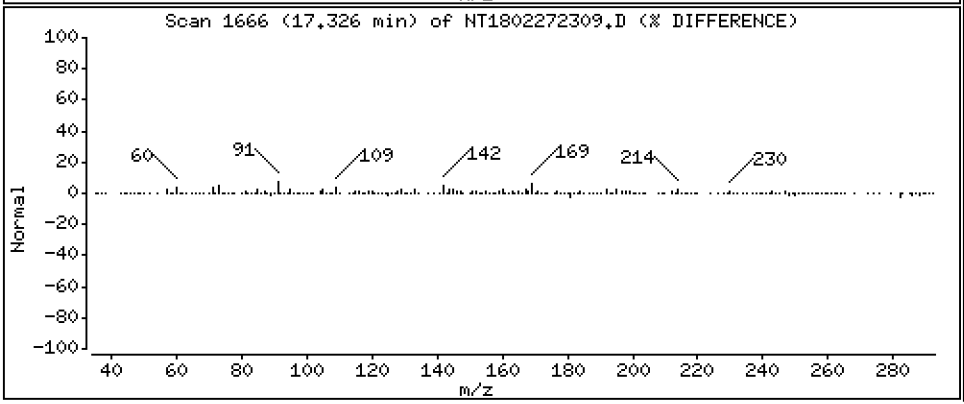
57 Hexachlorobenzene

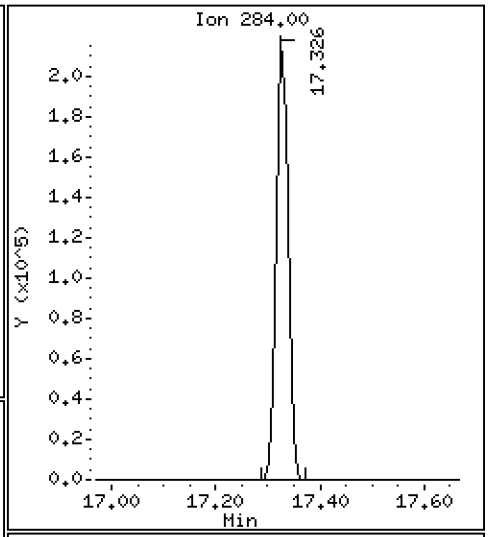
Concentration: 3.315 ug/mL

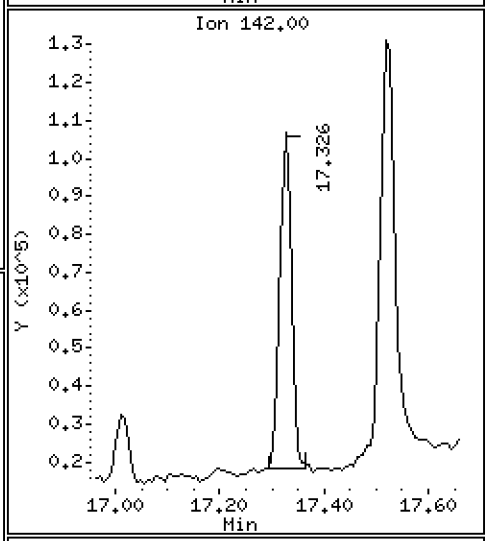


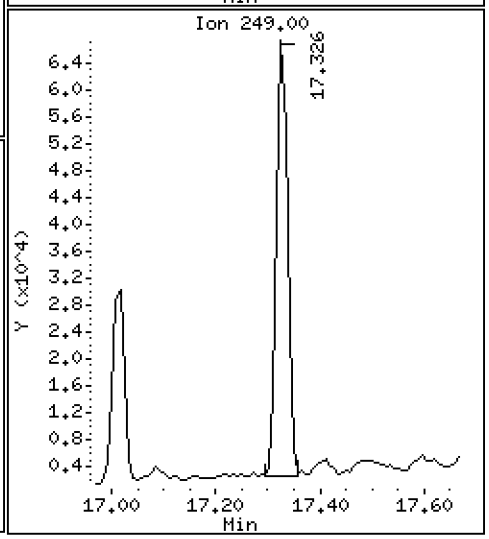












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

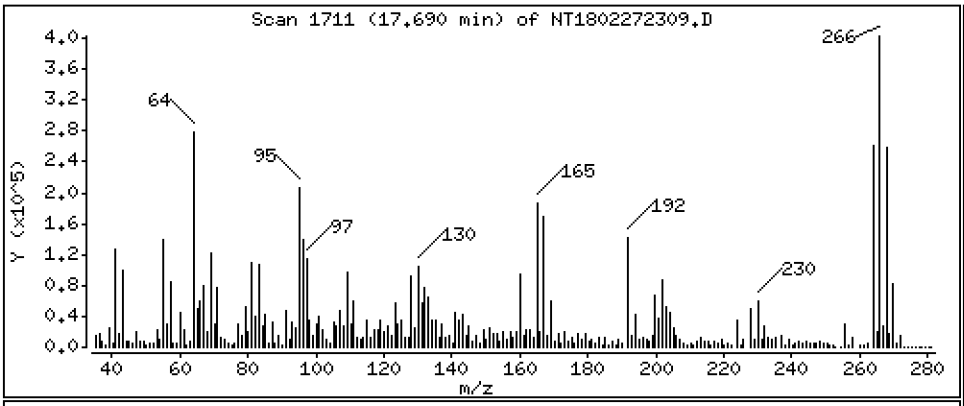
Operator: VTS

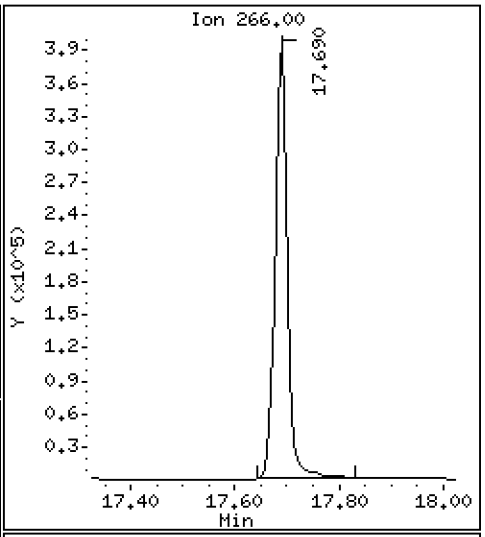
Column phase: ZB-5msi

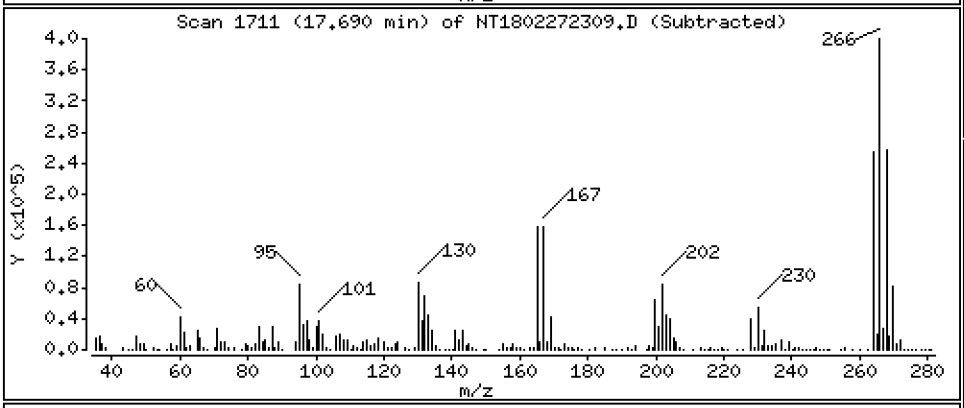
Column diameter: 0.25

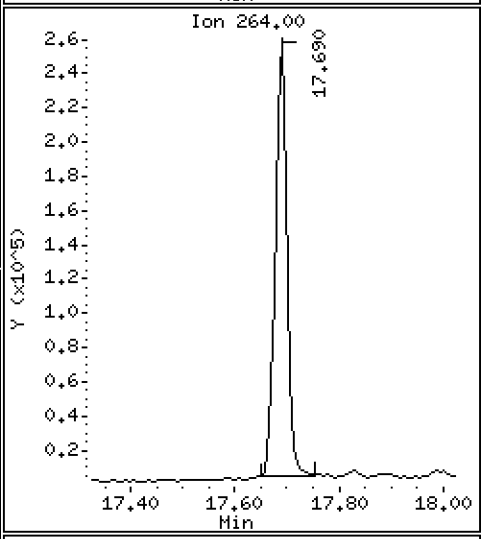
58 Pentachlorophenol

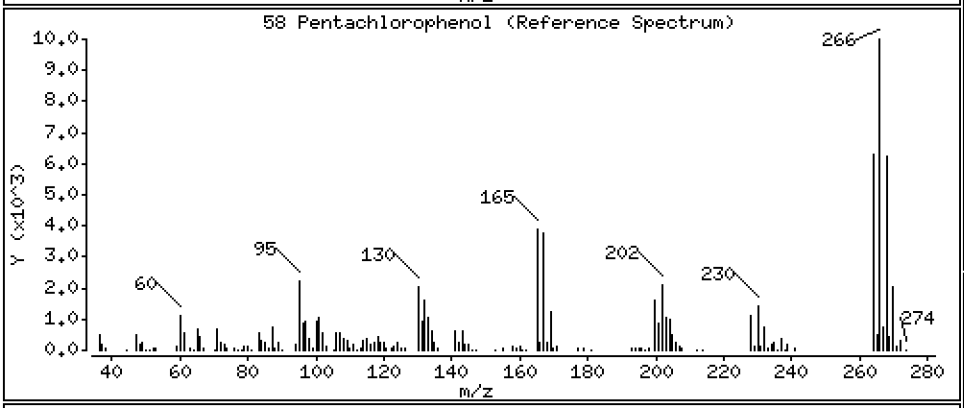
Concentration: 21.62 ug/mL

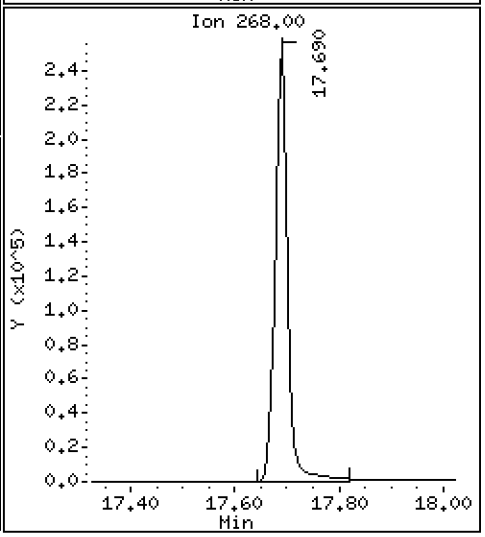


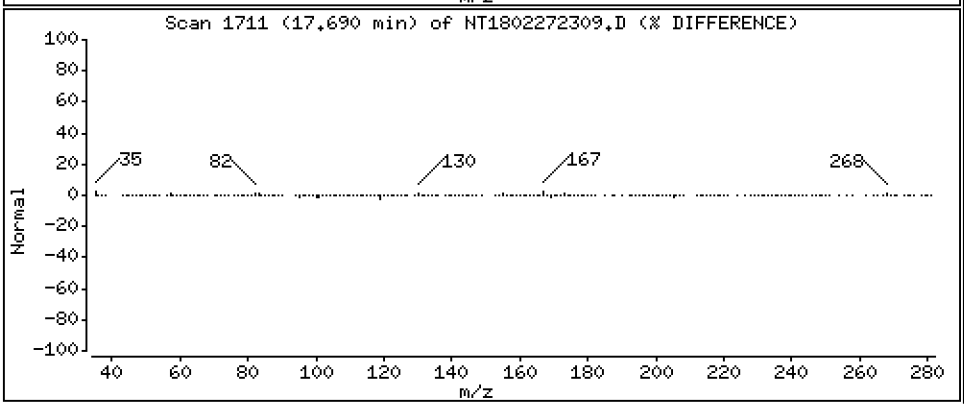












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

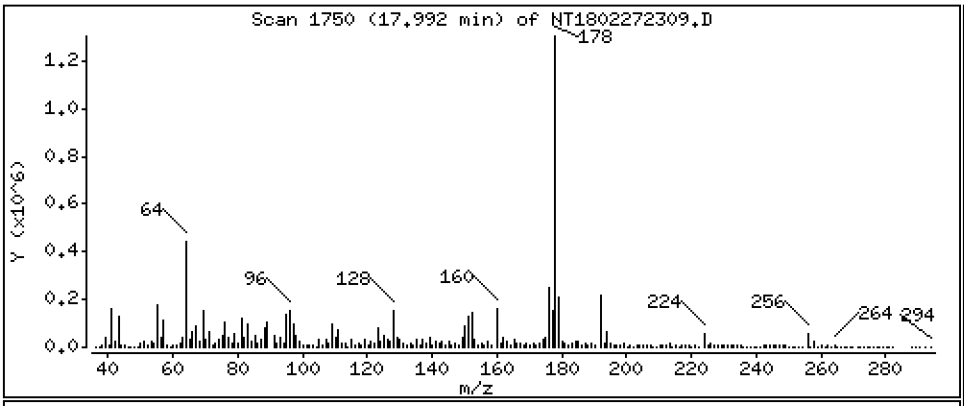
Operator: VTS

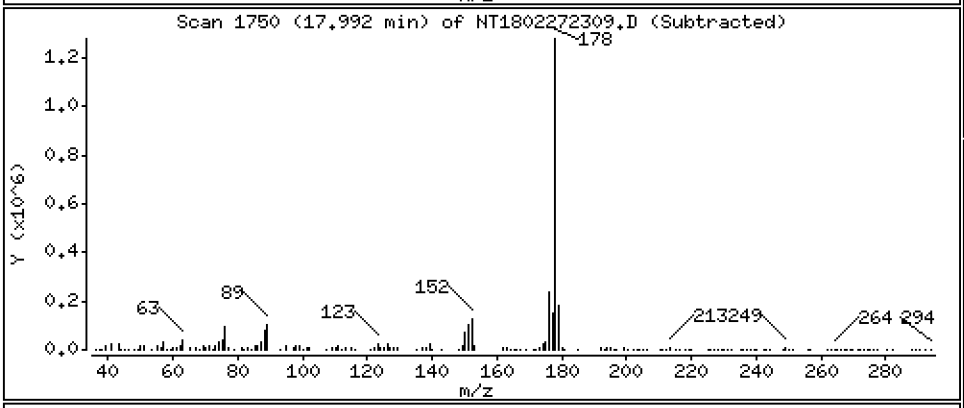
Column phase: ZB-5msi

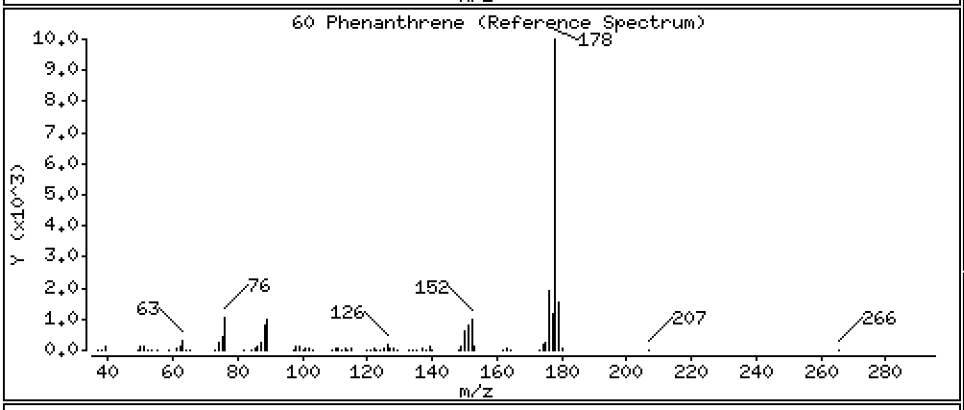
Column diameter: 0.25

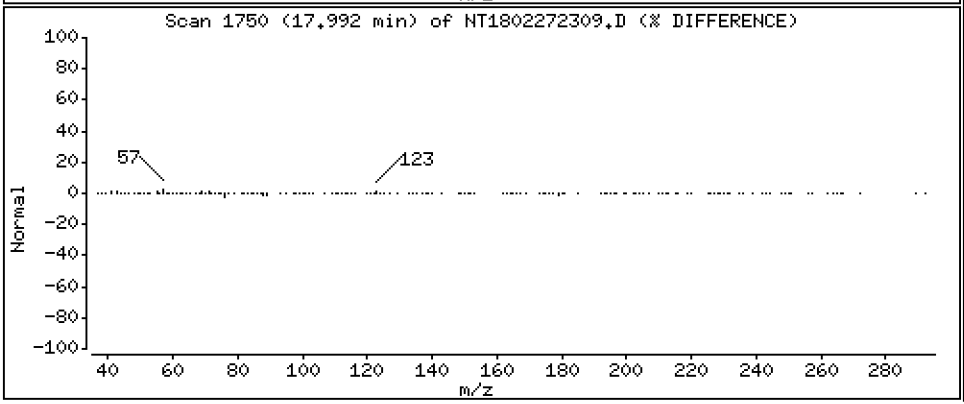
60 Phenanthrene

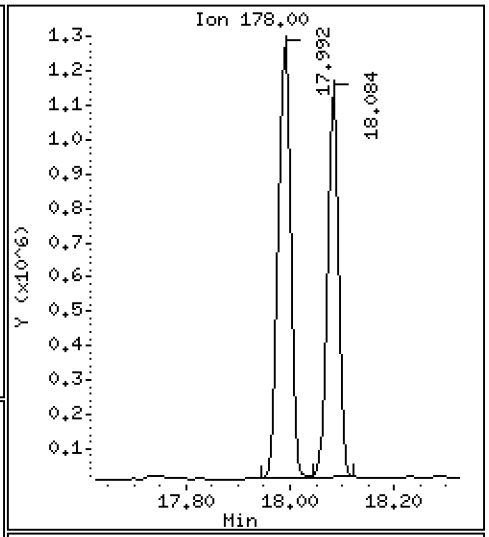
Concentration: 4.703 ug/mL

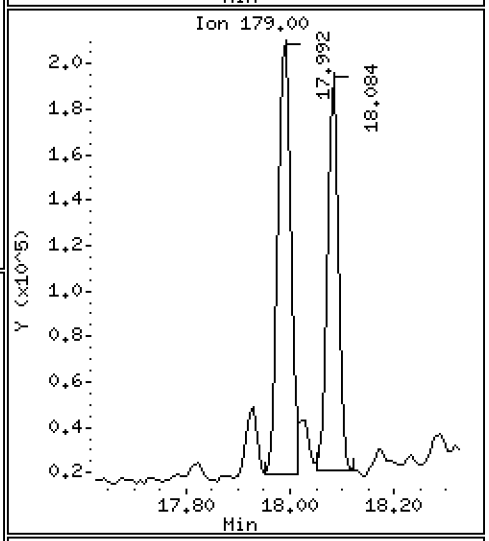


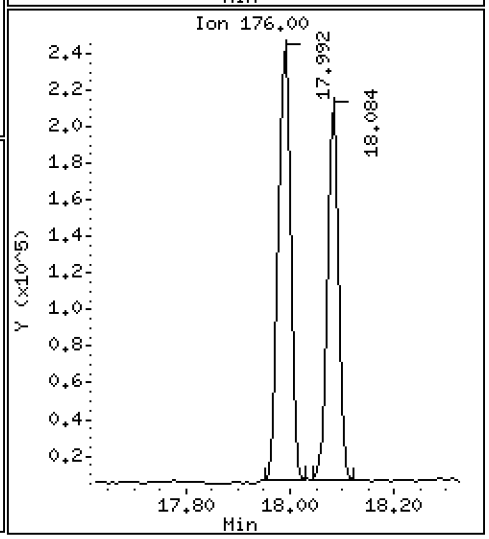












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

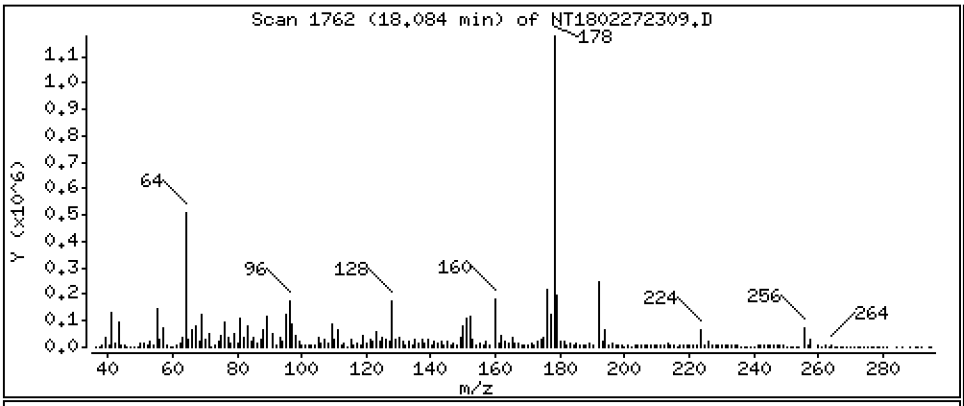
Operator: VTS

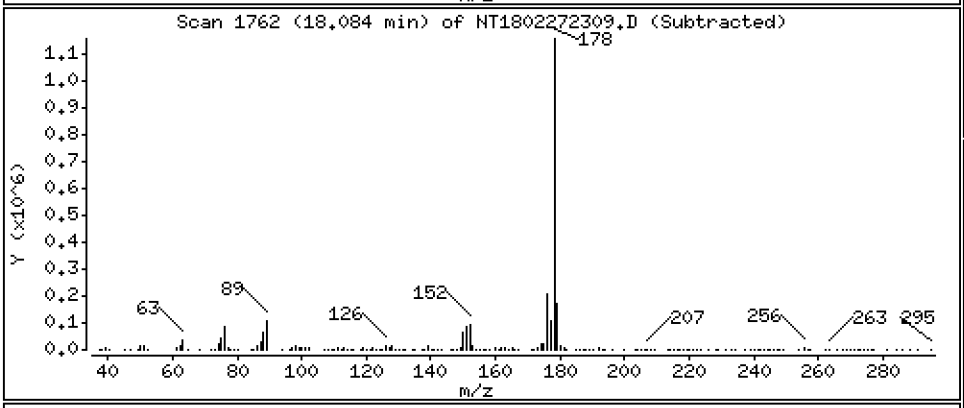
Column phase: ZB-5msi

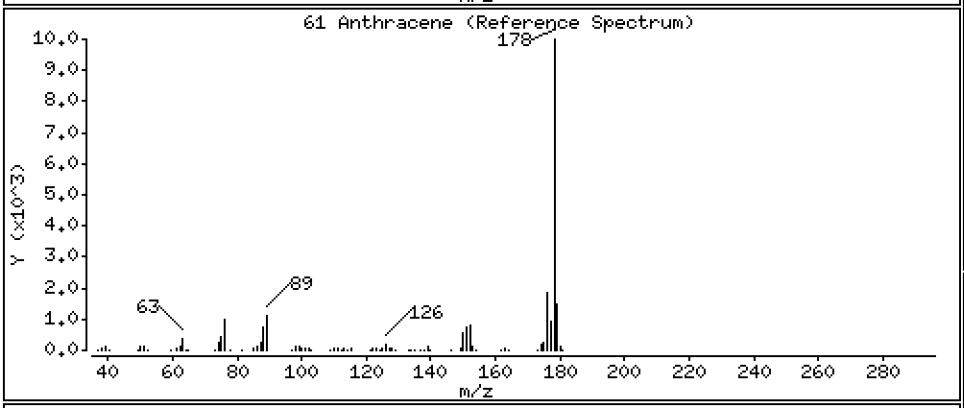
Column diameter: 0.25

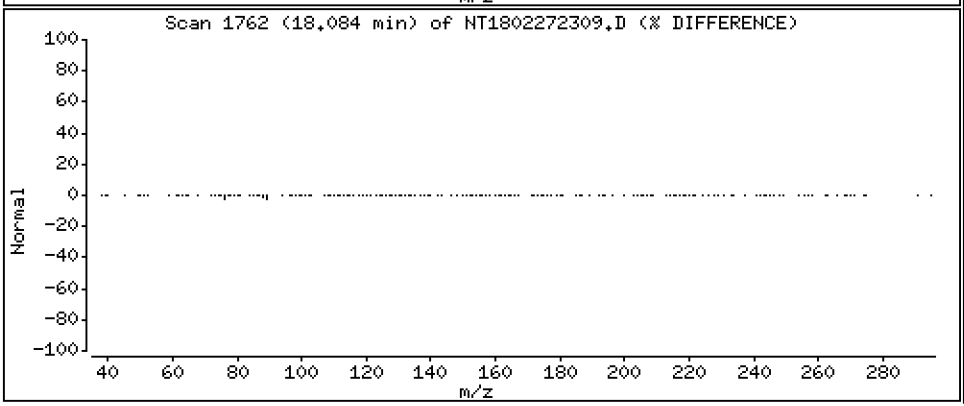
61 Anthracene

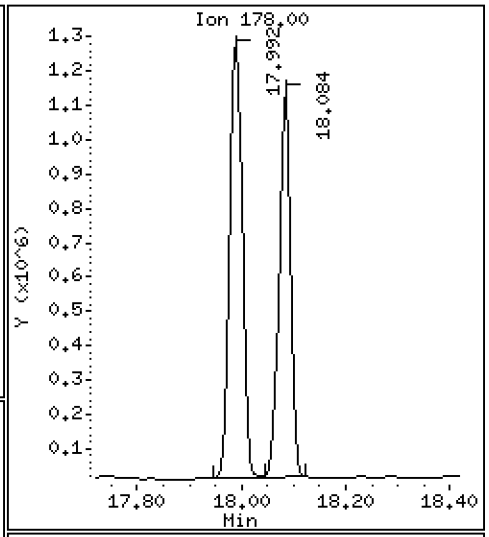
Concentration: 4.161 ug/mL

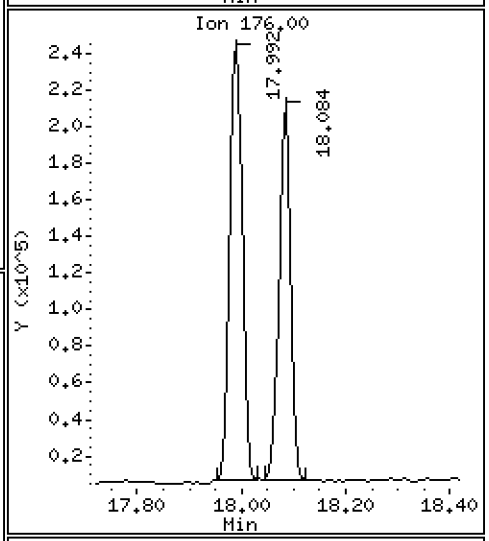


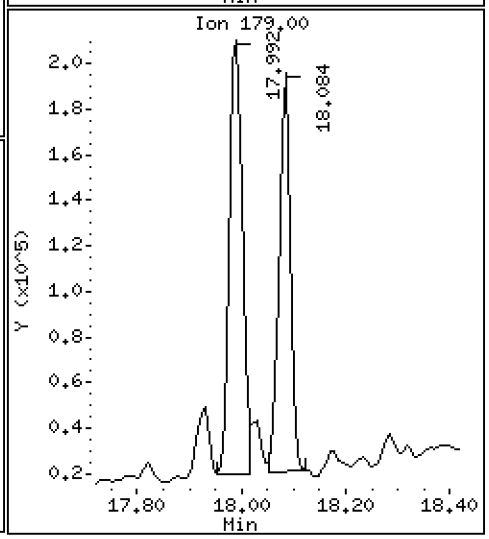












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

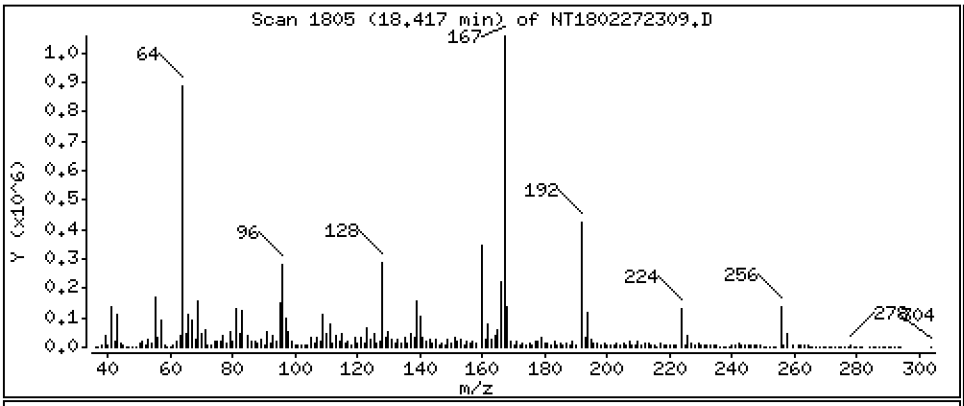
Operator: VTS

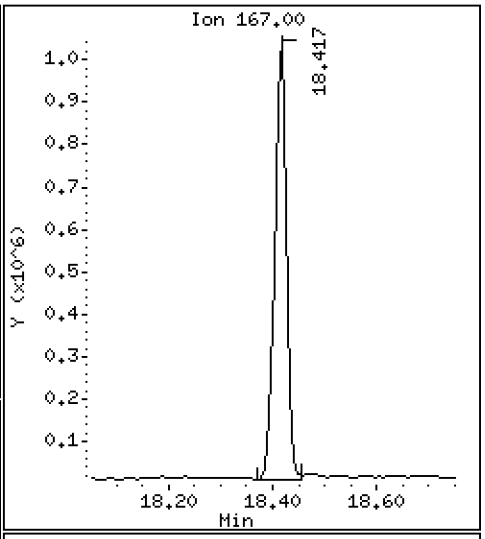
Column phase: ZB-5msi

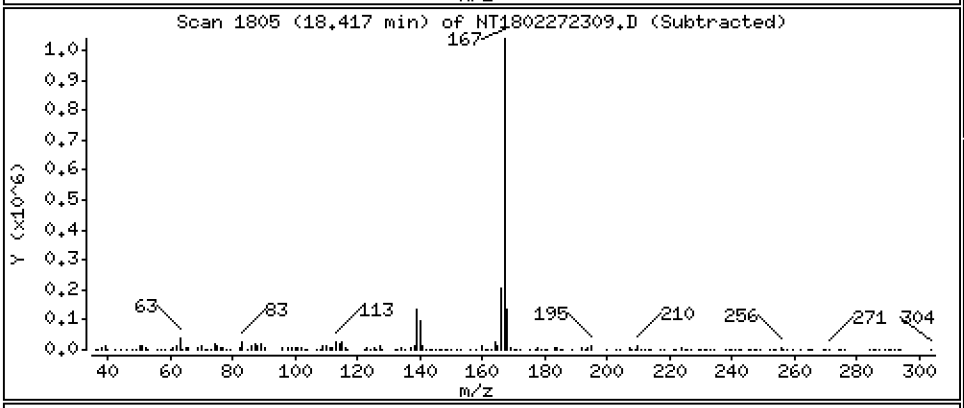
Column diameter: 0.25

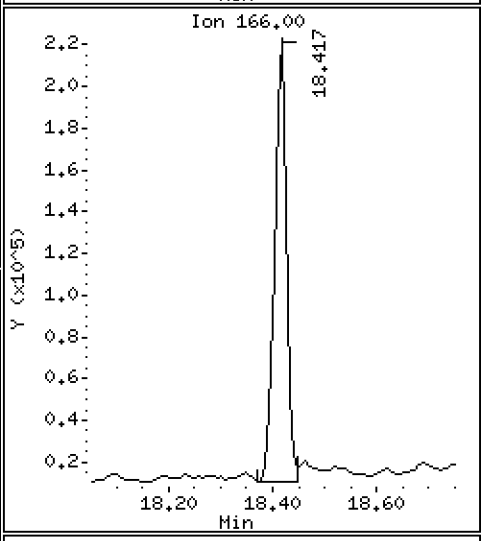
62 Carbazole

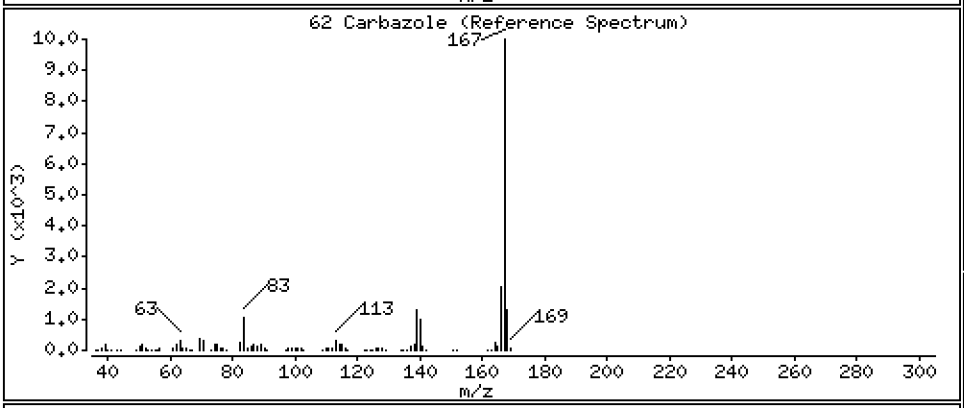
Concentration: 4.254 ug/mL

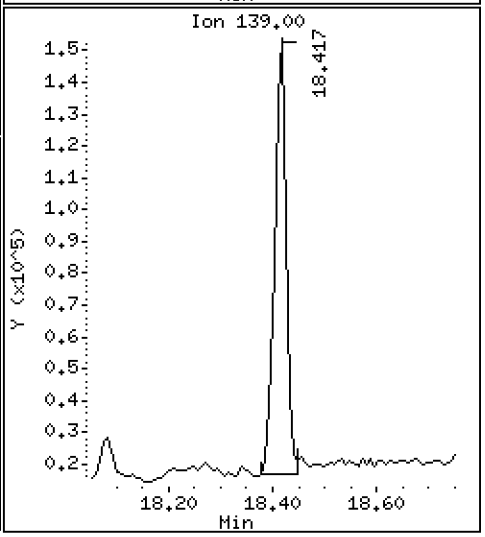


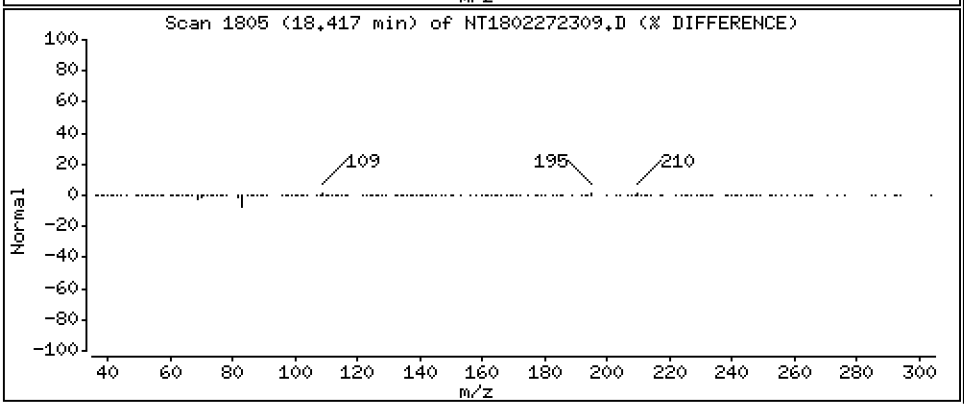












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272309.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

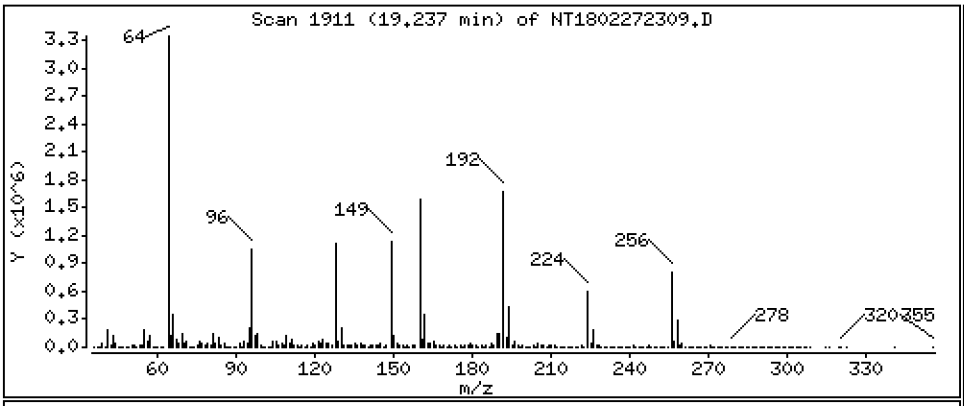
Operator: VTS

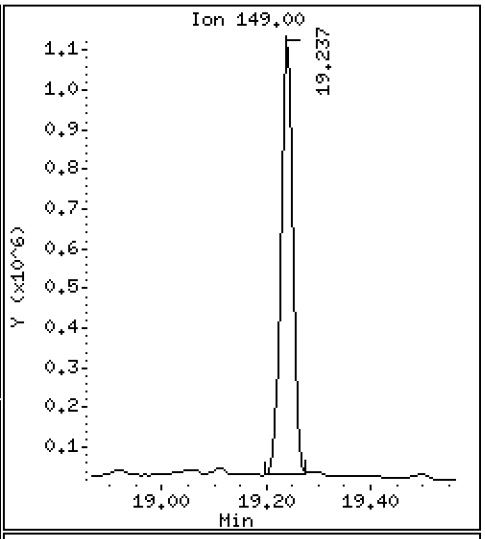
Column phase: ZB-5msi

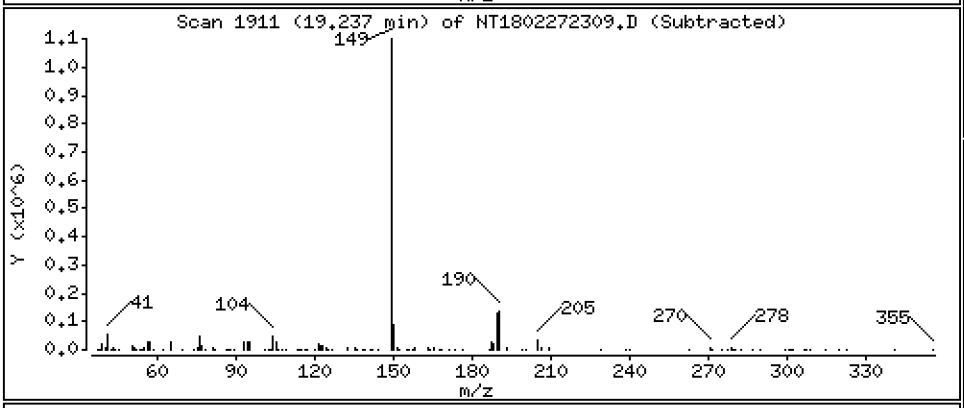
Column diameter: 0.25

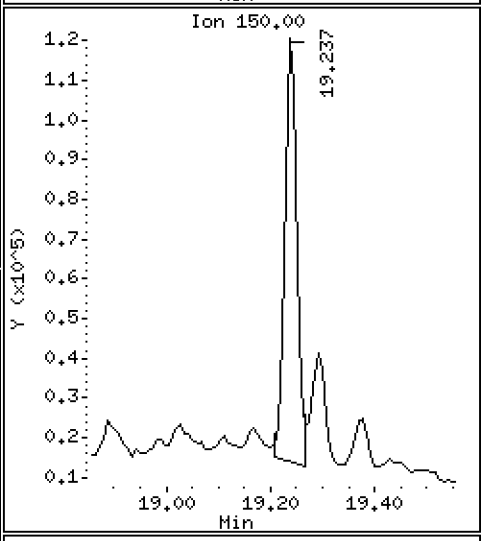
63 Di-n-butylphthalate

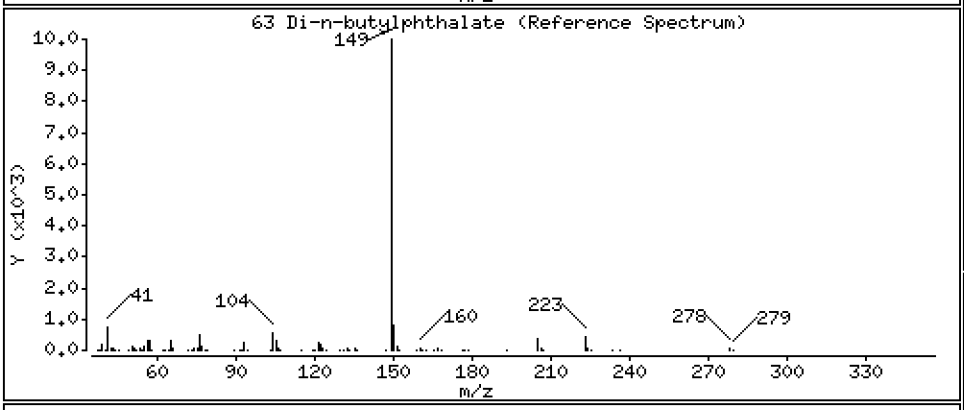
Concentration: 4.202 ug/mL

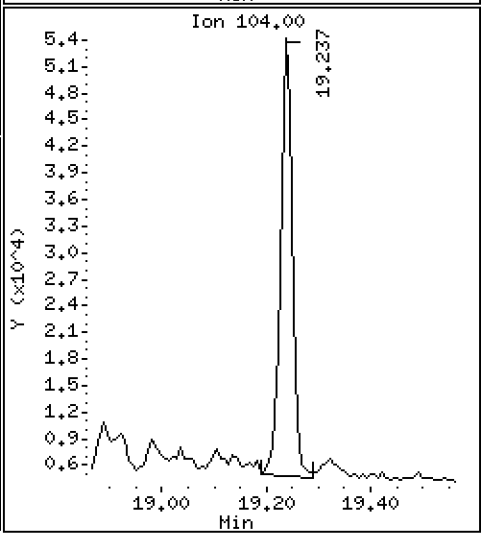


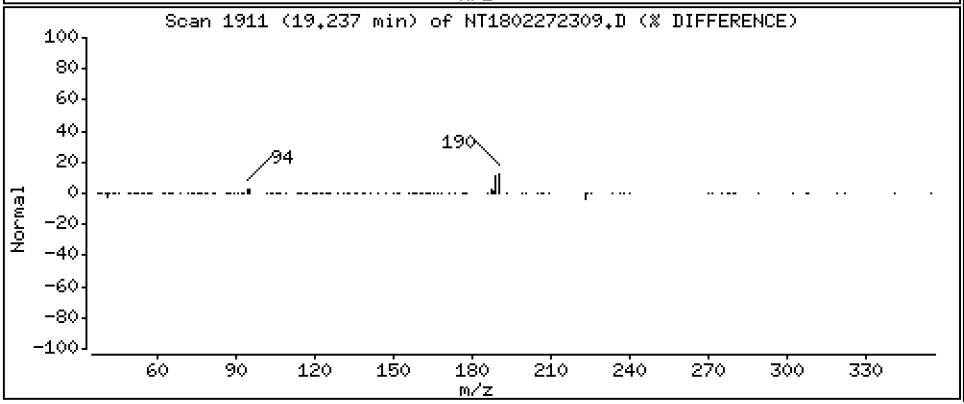












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

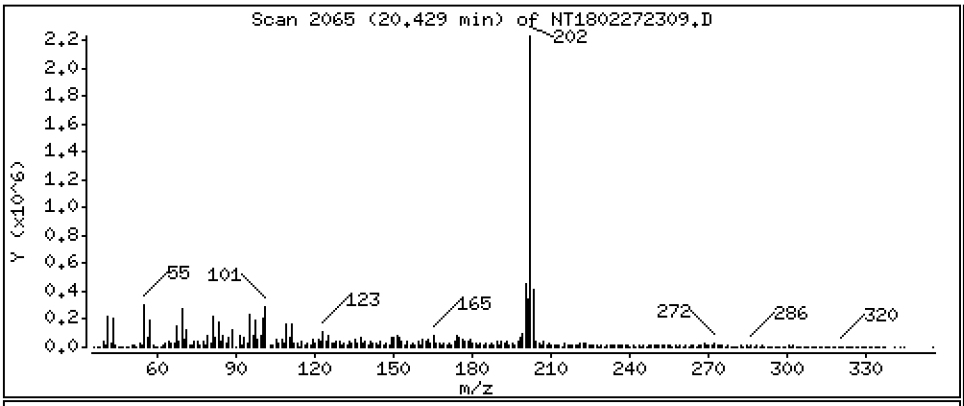
Operator: VTS

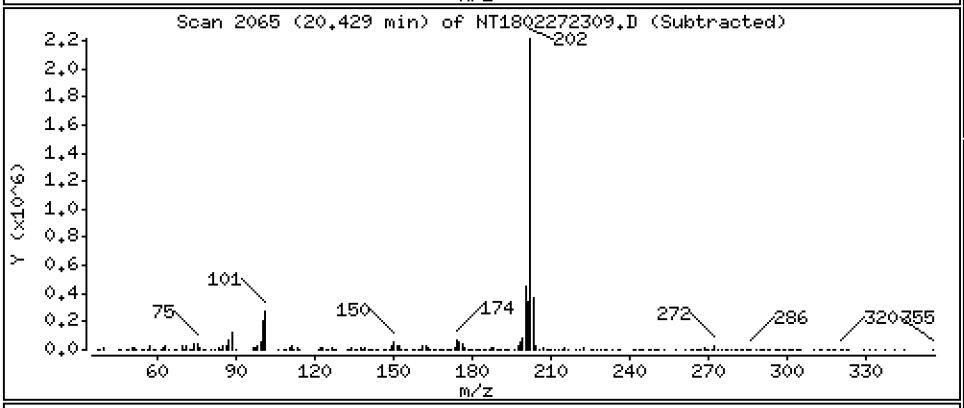
Column phase: ZB-5msi

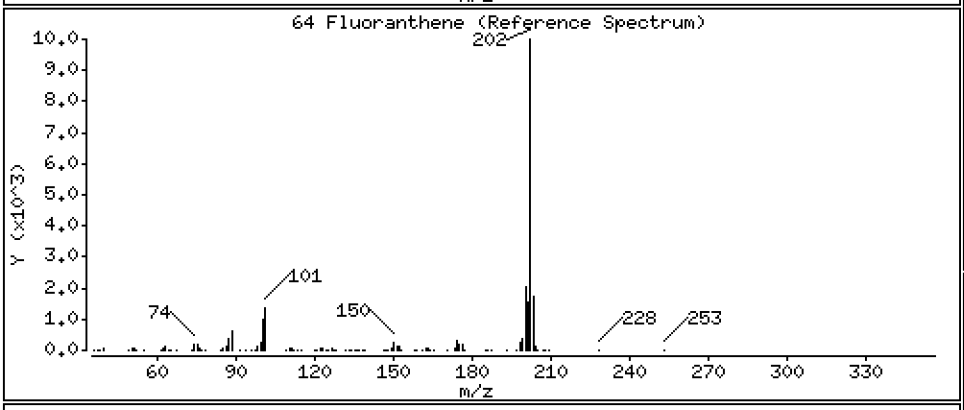
Column diameter: 0.25

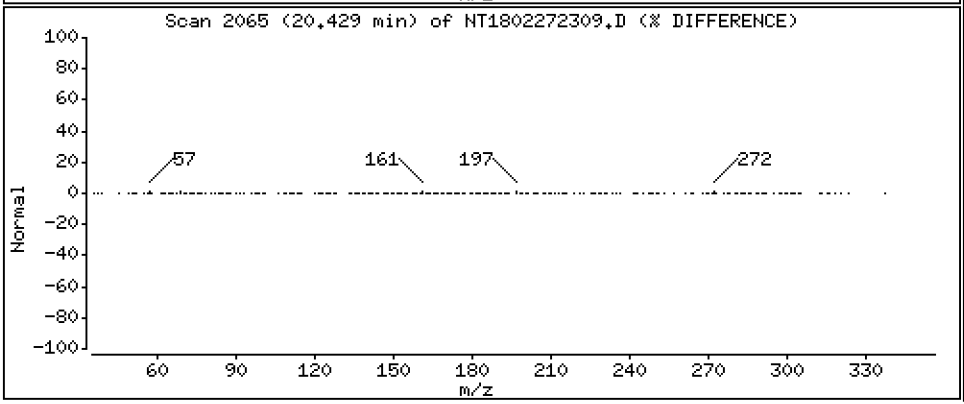
64 Fluoranthene

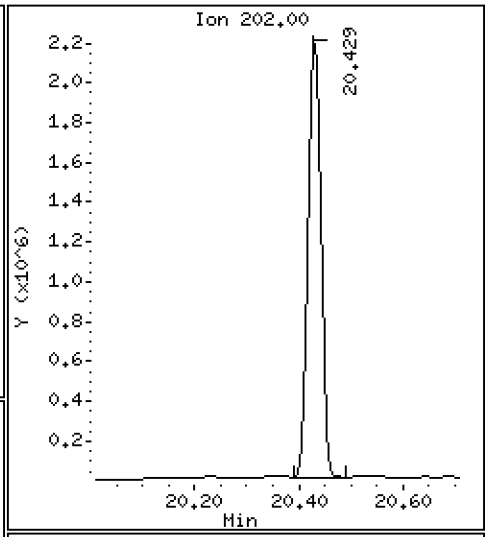
Concentration: 7.131 ug/mL

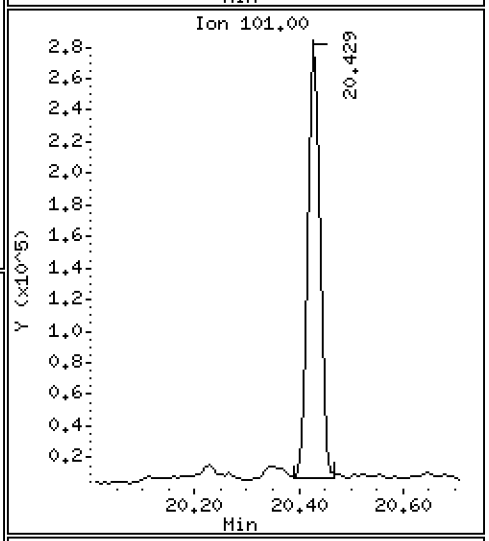


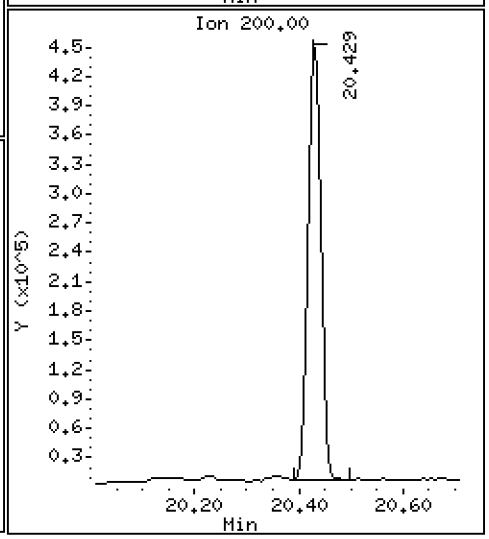












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

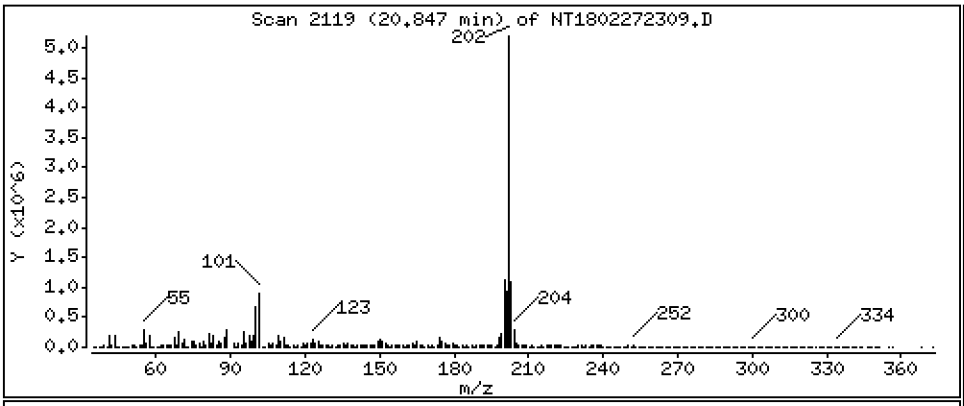
Operator: VTS

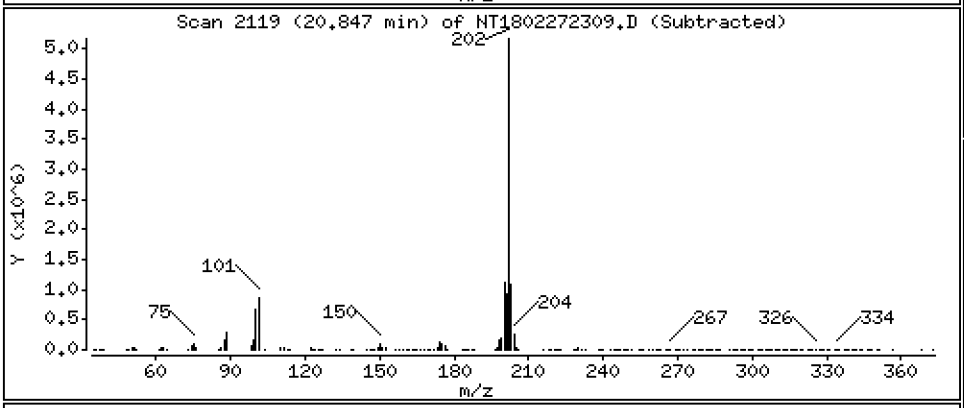
Column phase: ZB-5msi

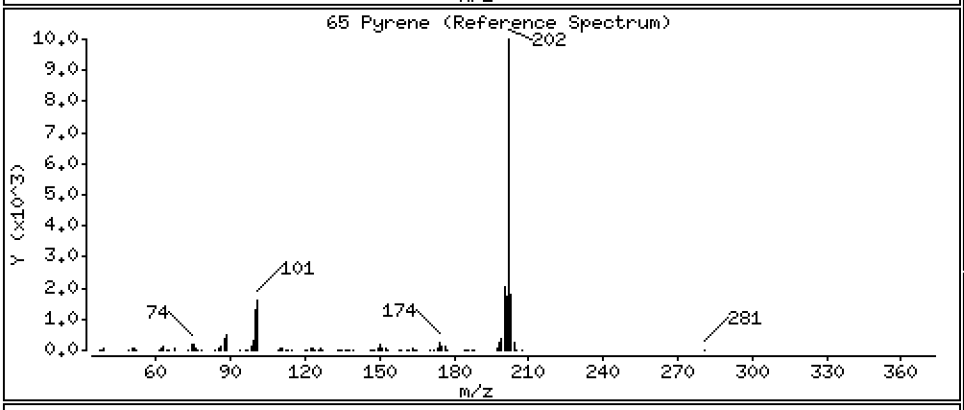
Column diameter: 0.25

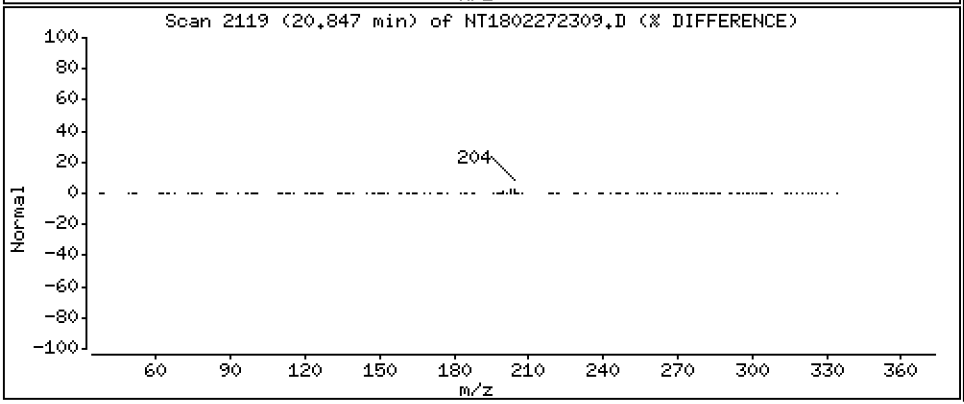
65 Pyrene

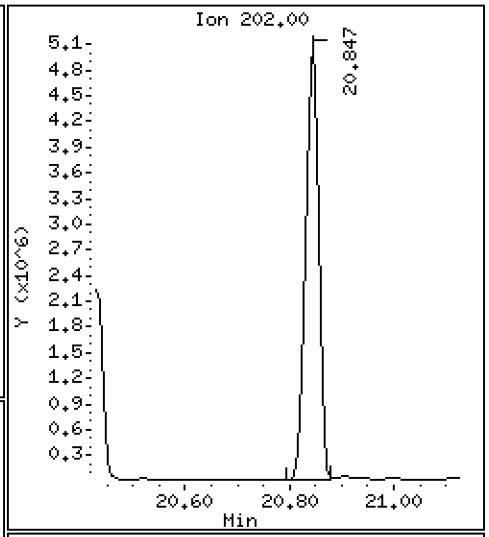
Concentration: 15.87 ug/mL

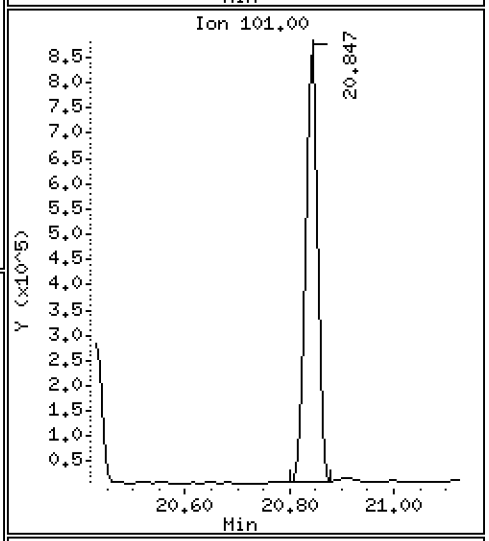


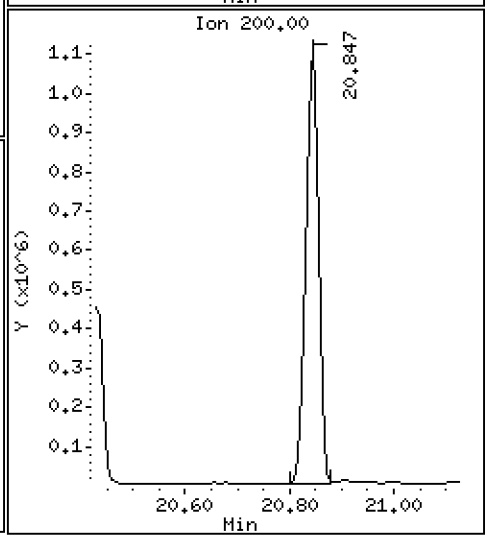












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

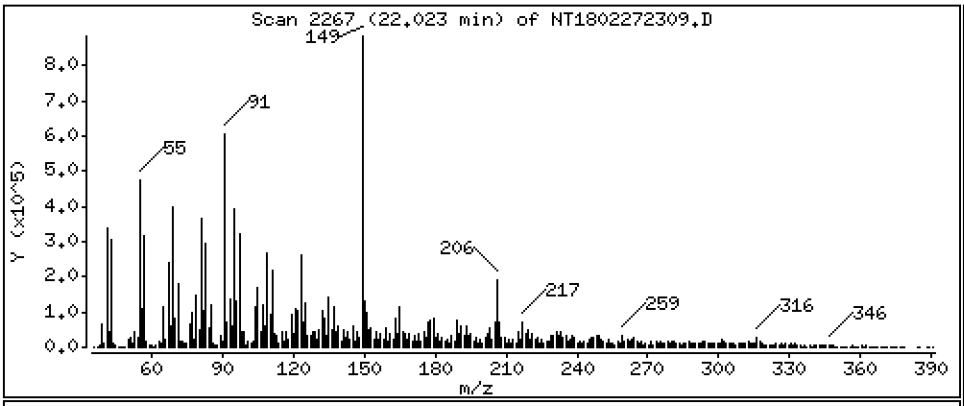
Operator: VTS

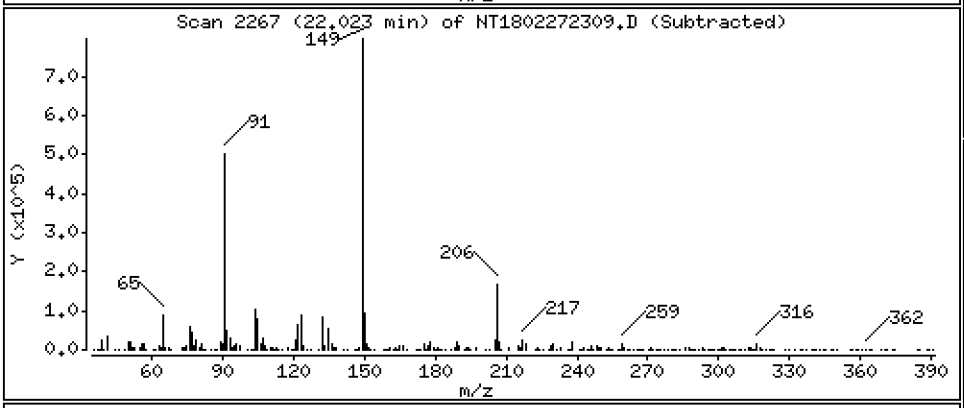
Column phase: ZB-5msi

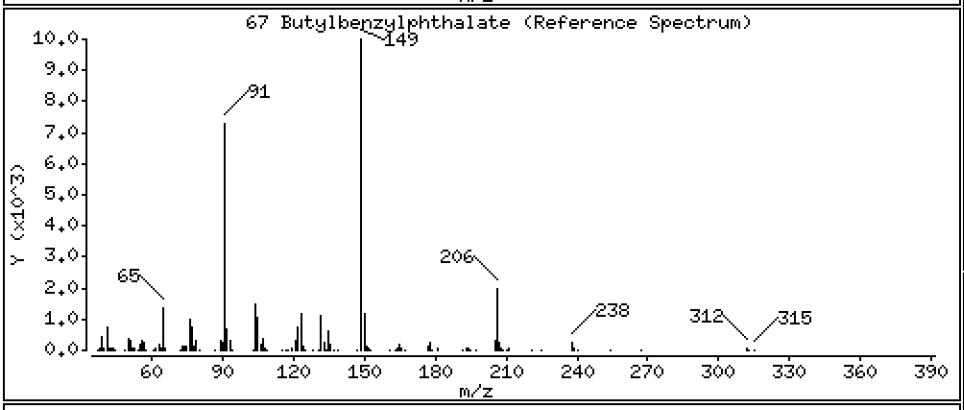
Column diameter: 0.25

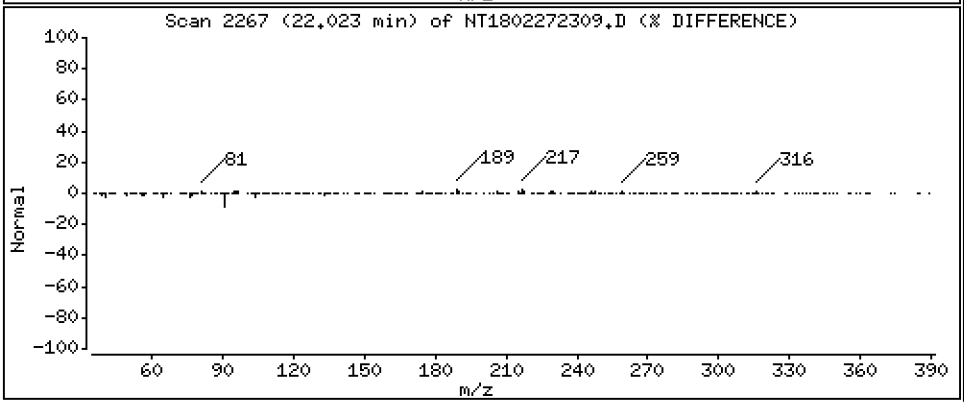
67 Butylbenzylphthalate

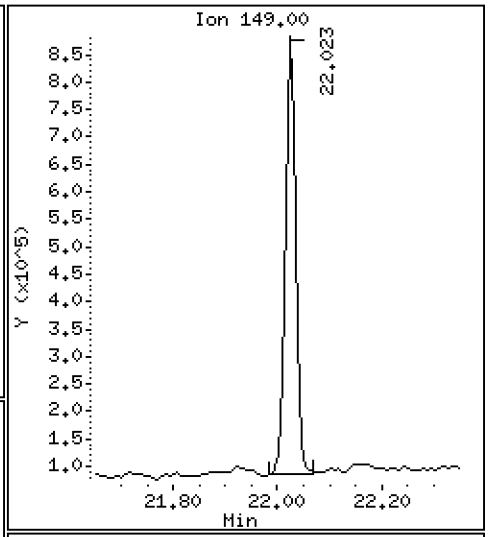
Concentration: 5.502 ug/mL

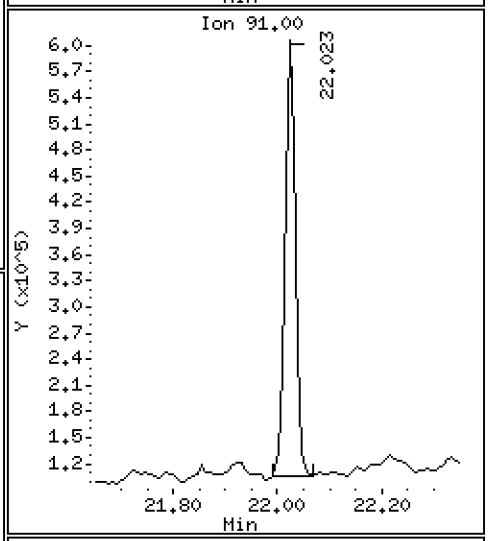


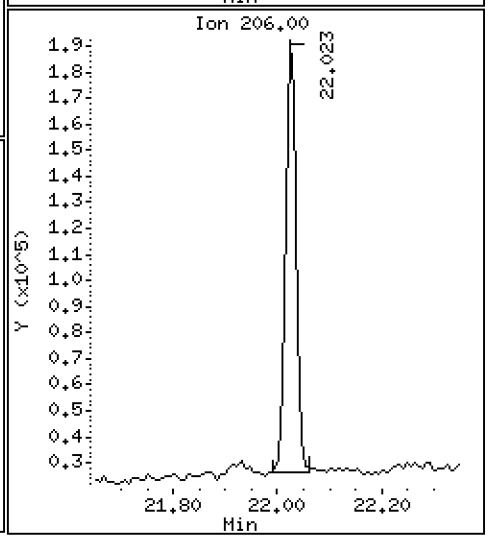












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

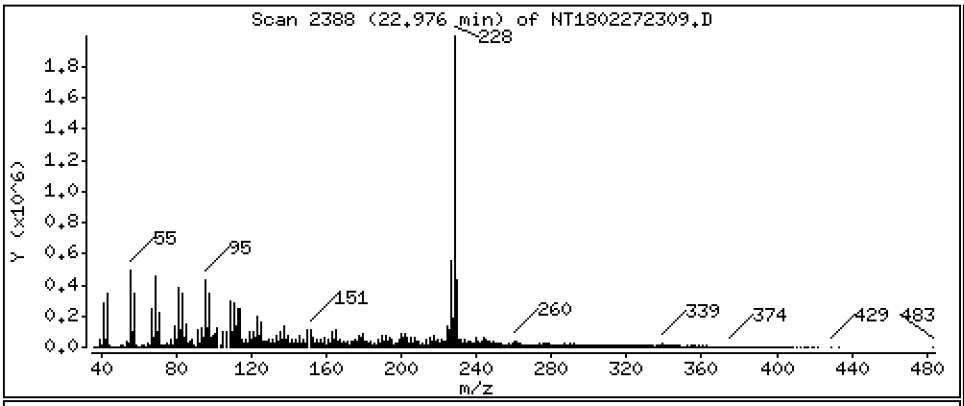
Operator: VTS

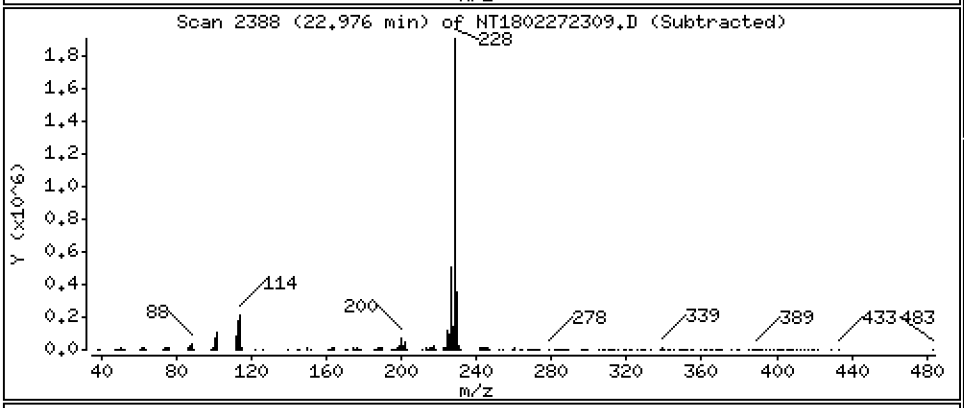
Column phase: ZB-5msi

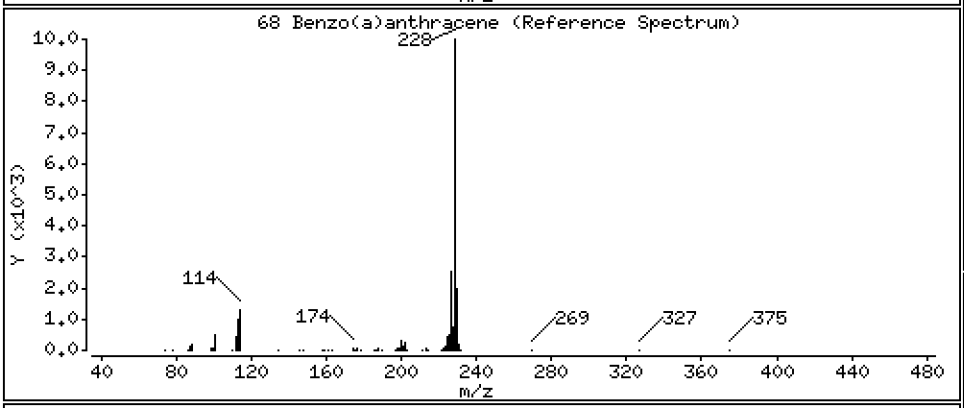
Column diameter: 0.25

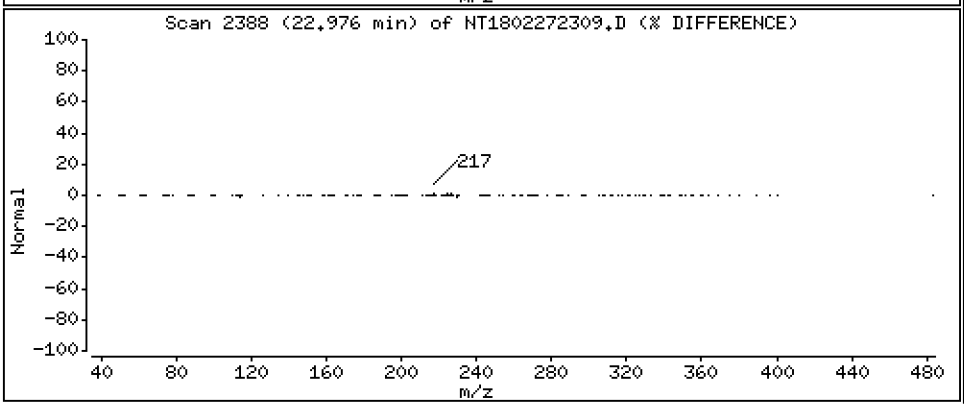
68 Benzo(a)anthracene

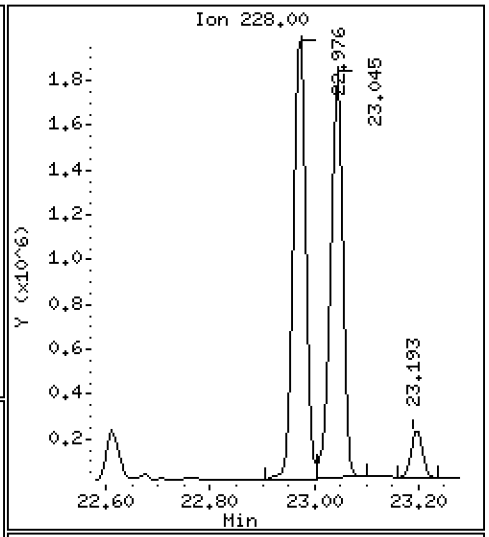
Concentration: 6.551 ug/mL

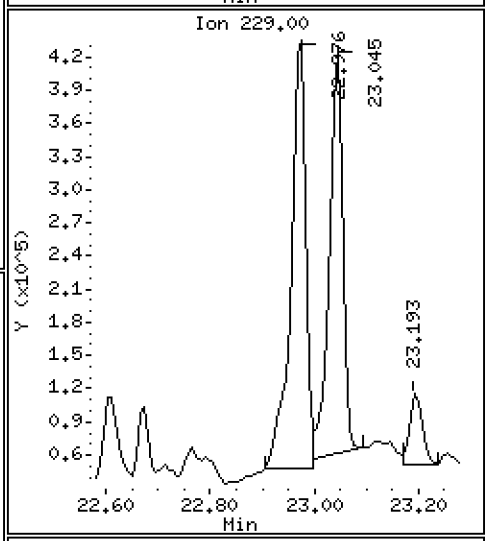


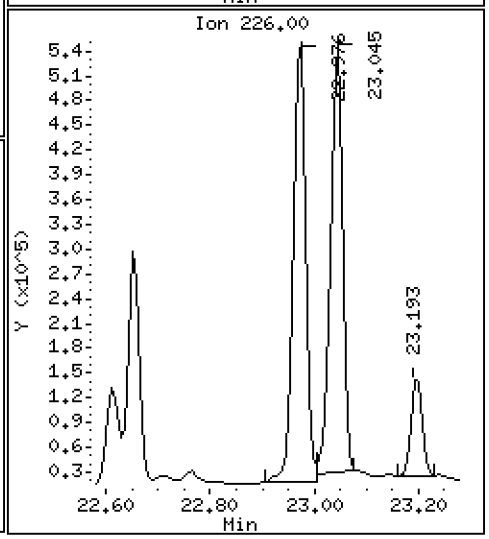












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

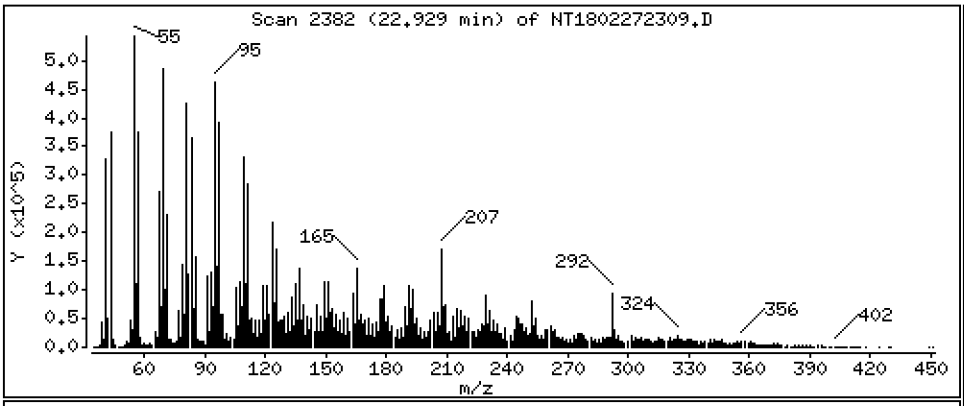
Operator: VTS

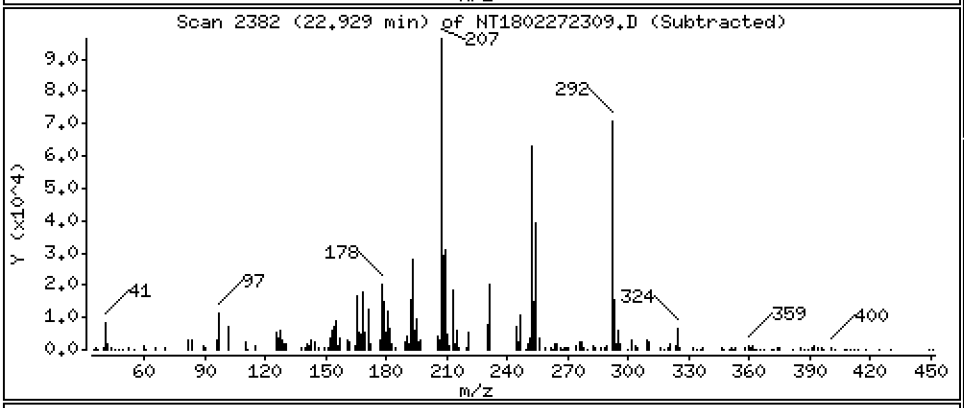
Column phase: ZB-5msi

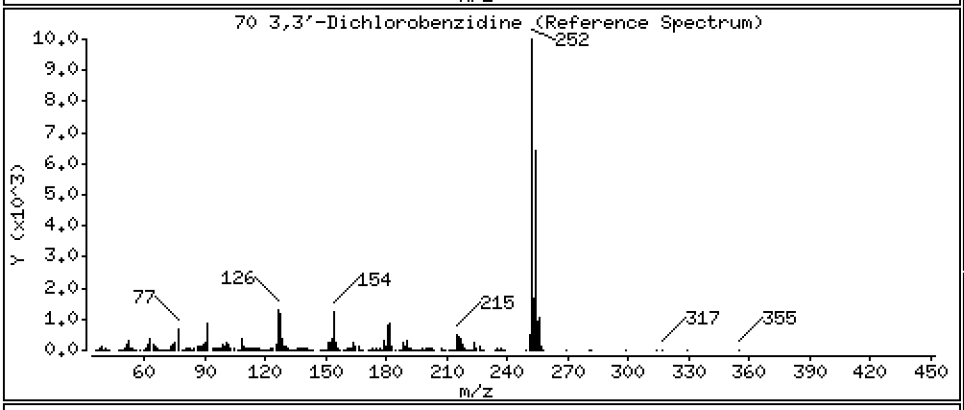
Column diameter: 0.25

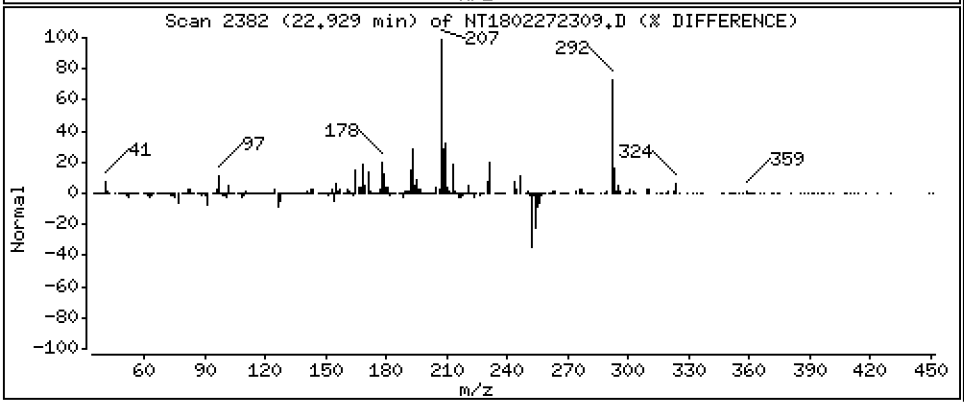
70 3,3'-Dichlorobenzidine

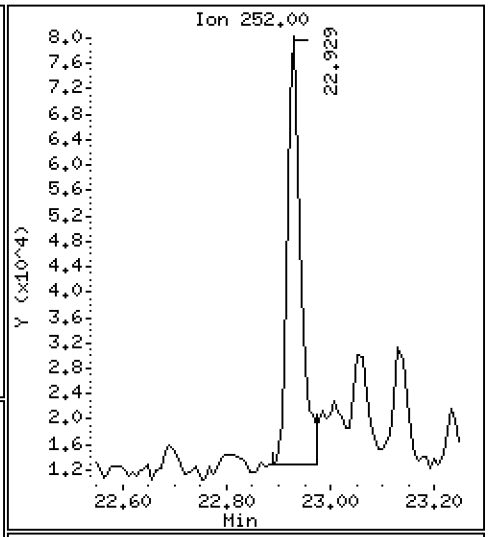
Concentration: 0.6447 ug/mL

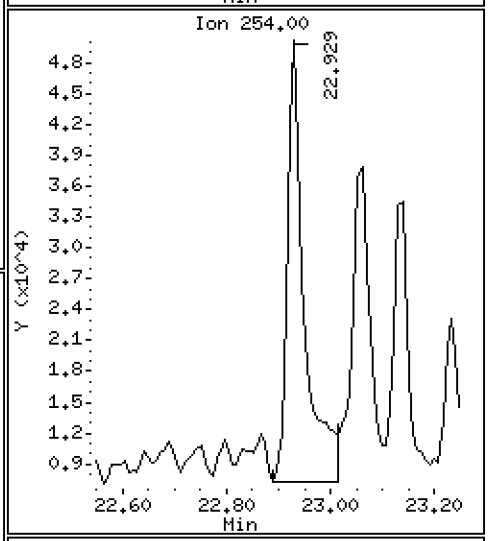


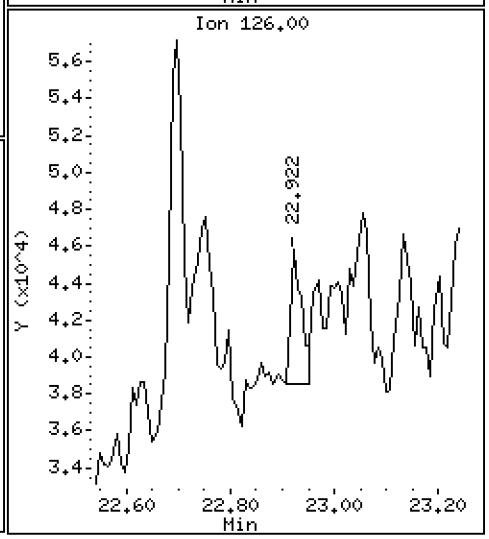












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

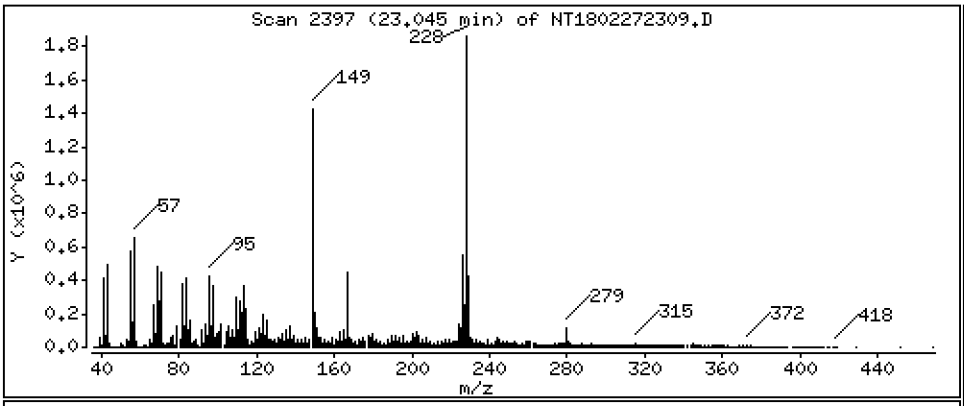
Operator: VTS

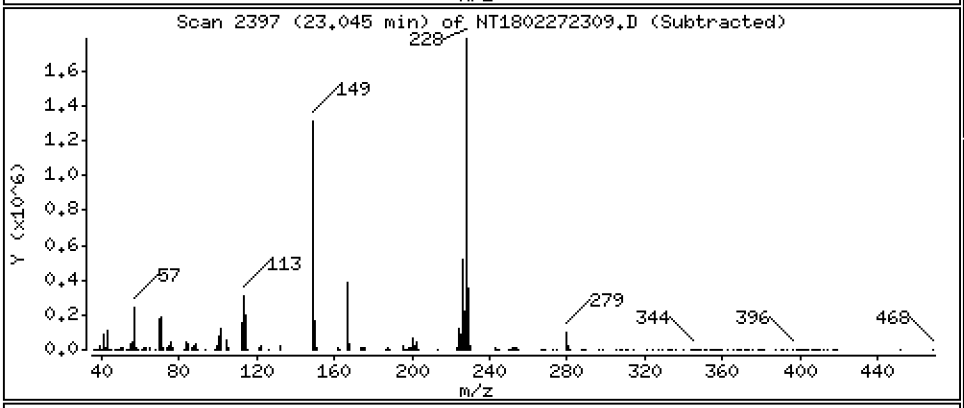
Column phase: ZB-5msi

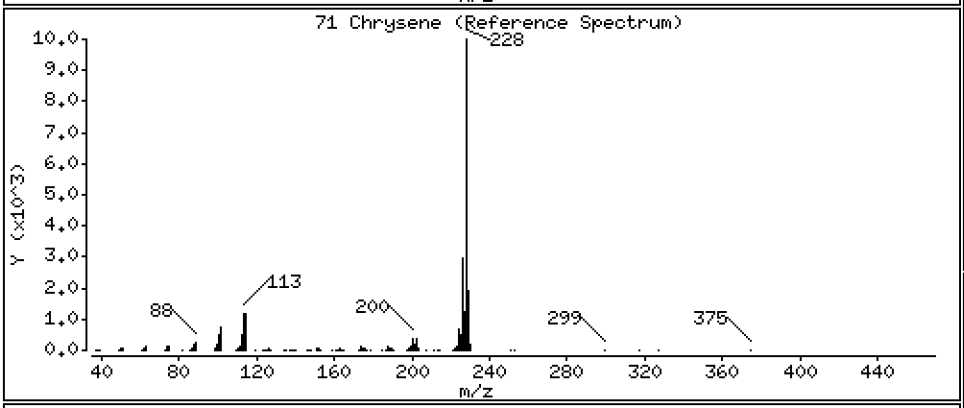
Column diameter: 0.25

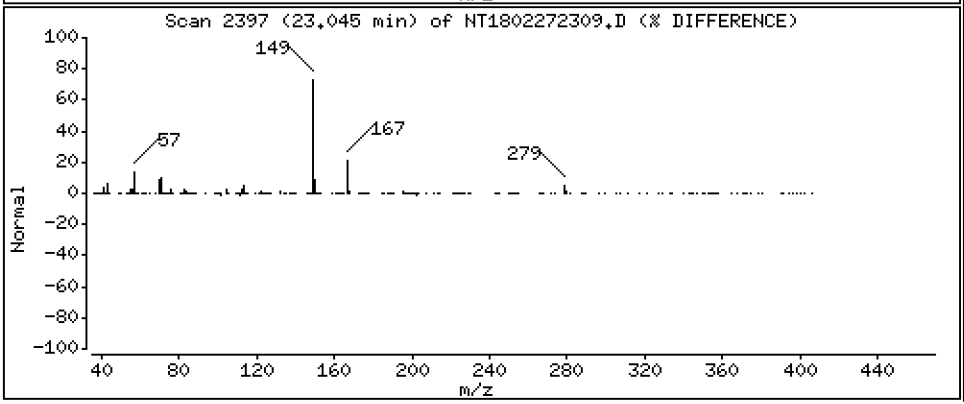
71 Chrysene

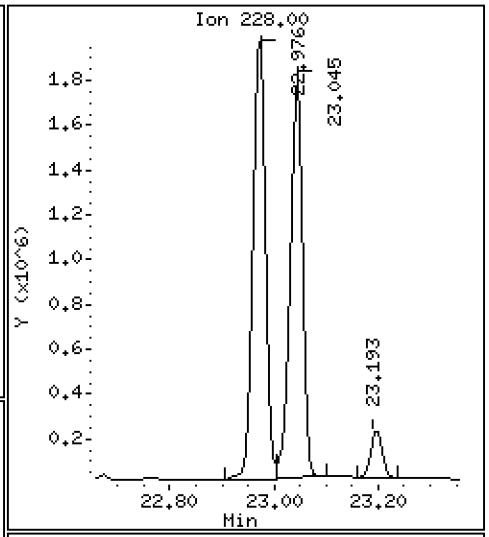
Concentration: 5.578 ug/mL

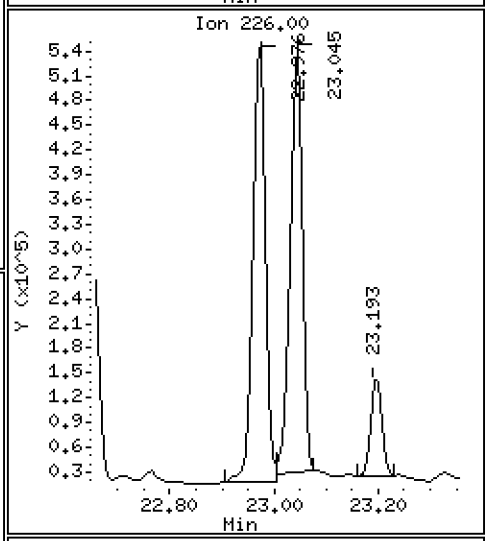


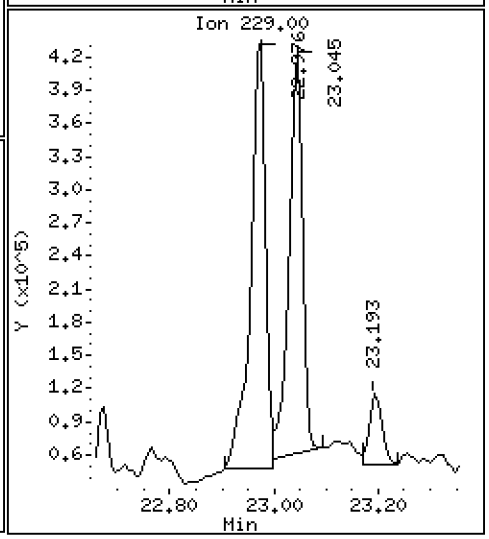












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272309.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

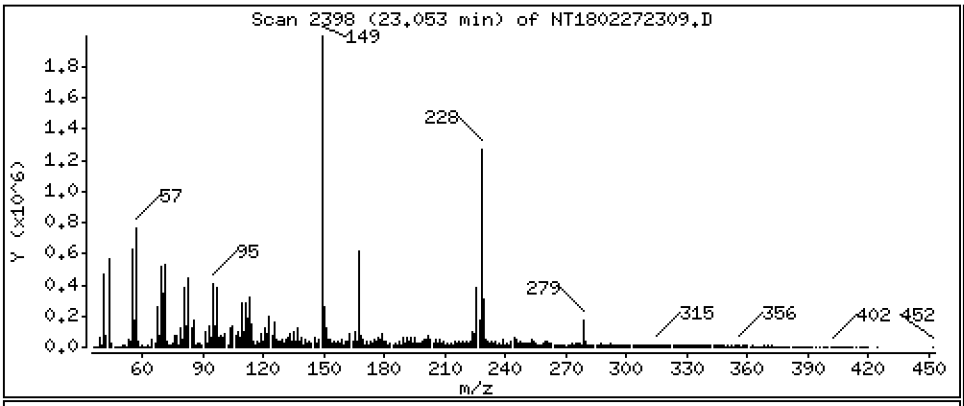
Operator: VTS

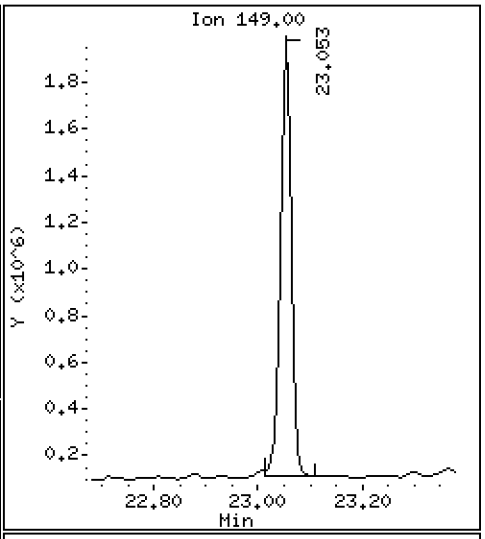
Column phase: ZB-5msi

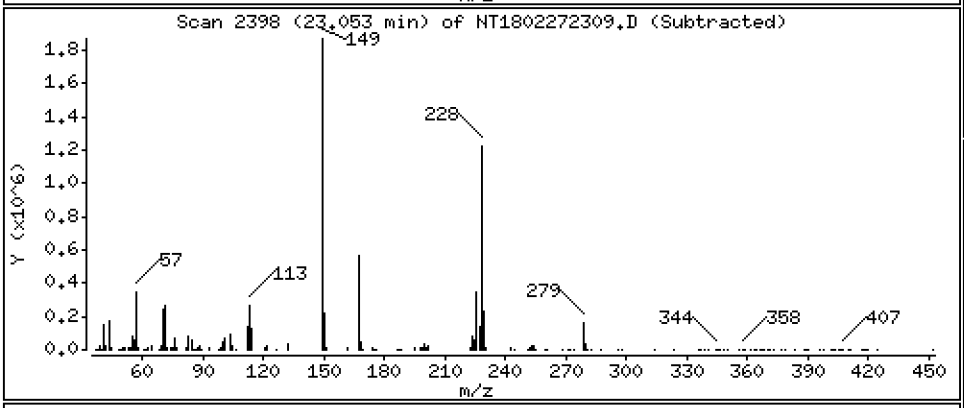
Column diameter: 0.25

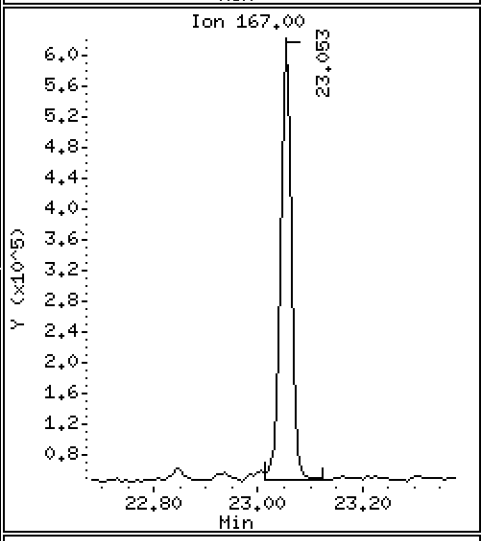
72 bis(2-Ethylhexyl)phthalate

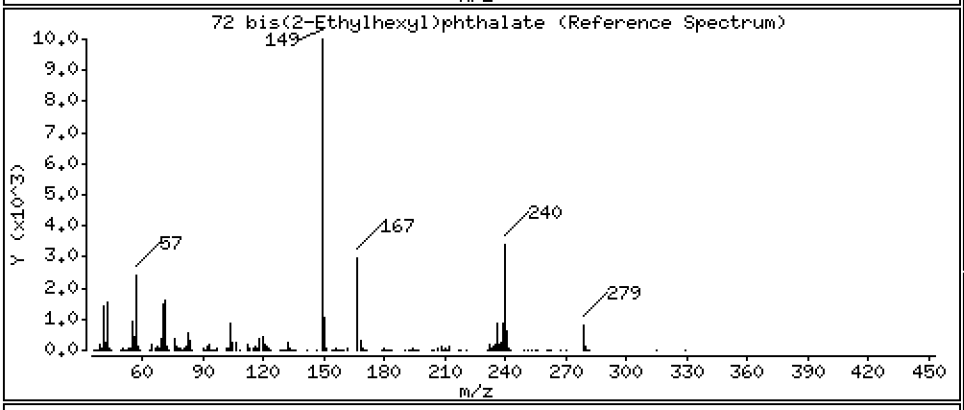
Concentration: 11.43 ug/mL

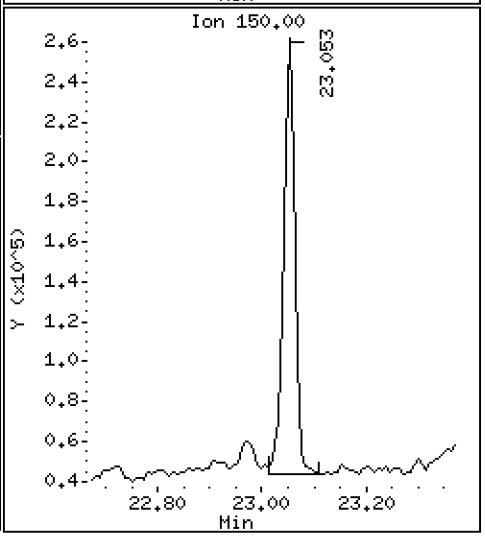


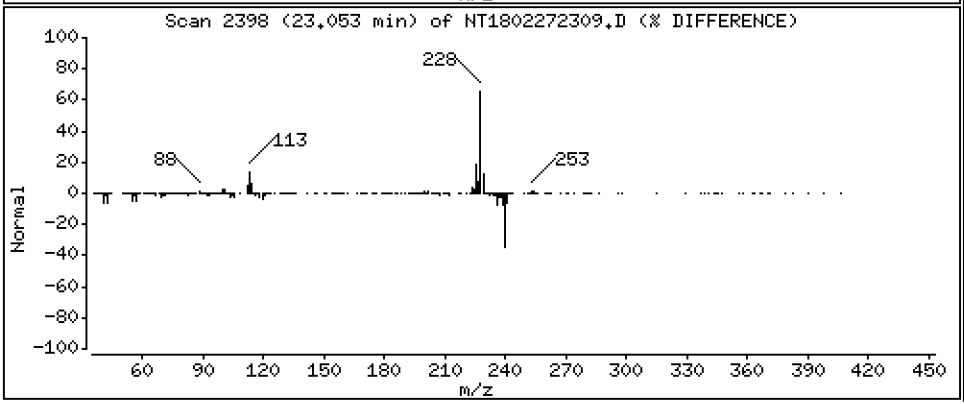












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

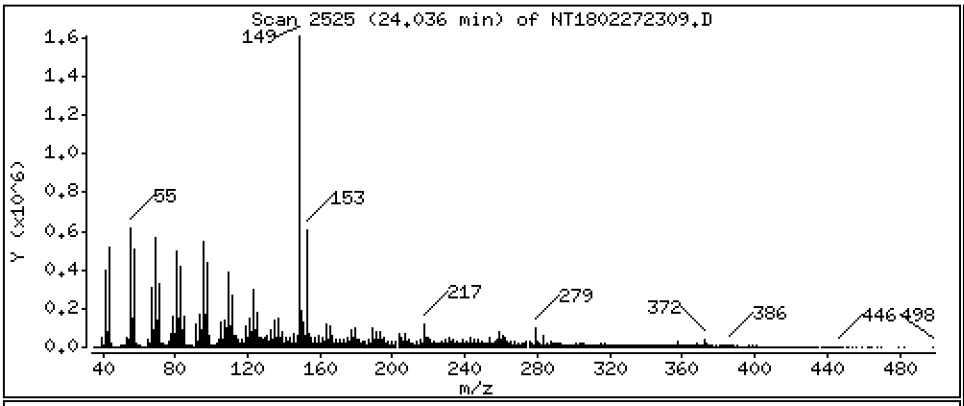
Operator: VTS

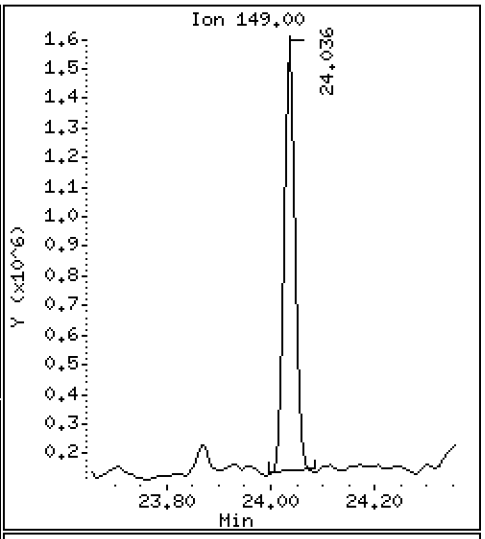
Column phase: ZB-5msi

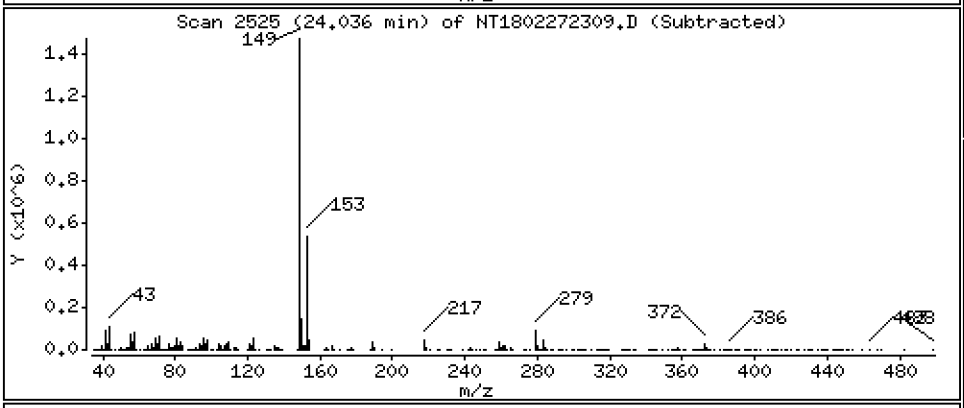
Column diameter: 0.25

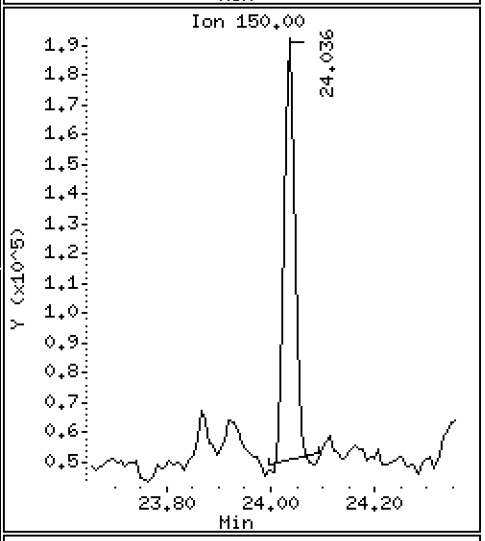
73 Di-n-octylphthalate

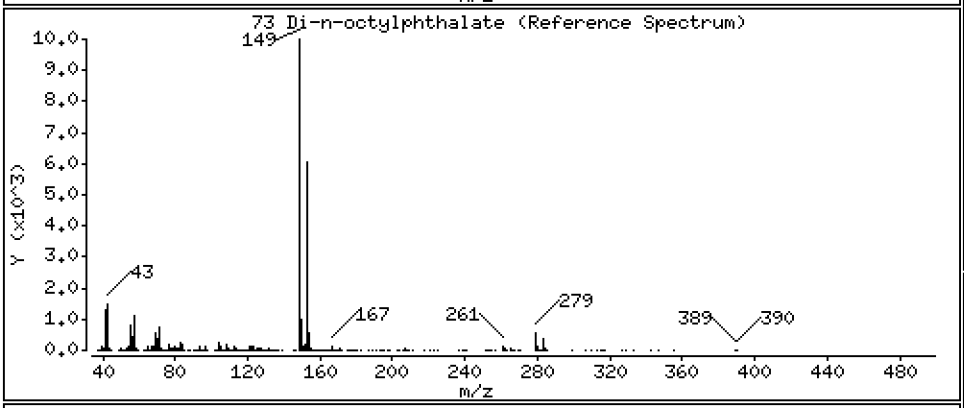
Concentration: 4.522 ug/mL

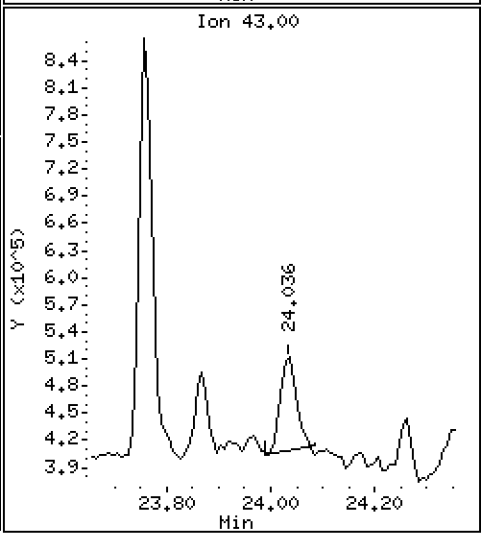


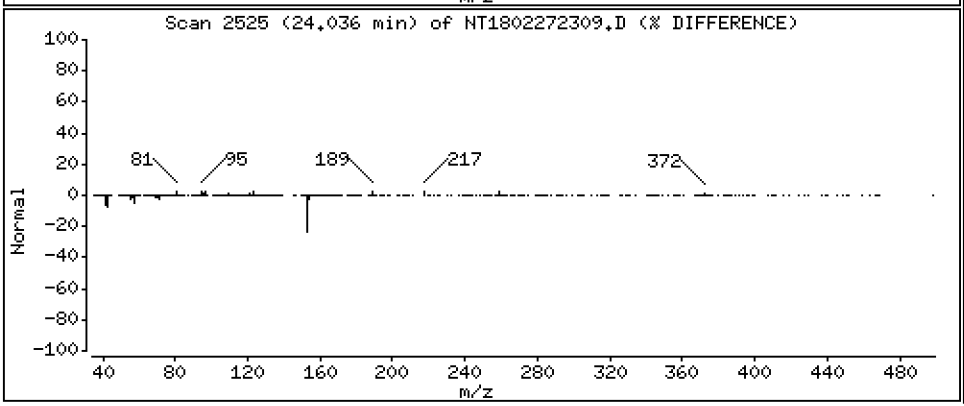












Date : 27-FEB-2023 22:32

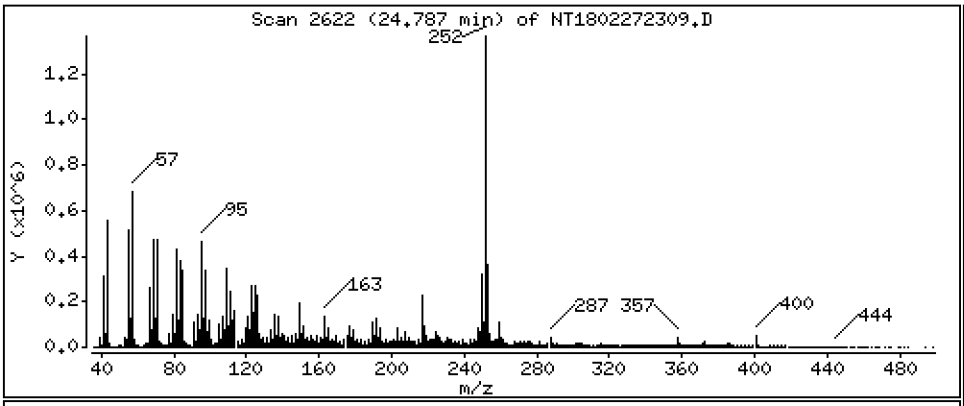
Client ID: Instrument: nt18.i

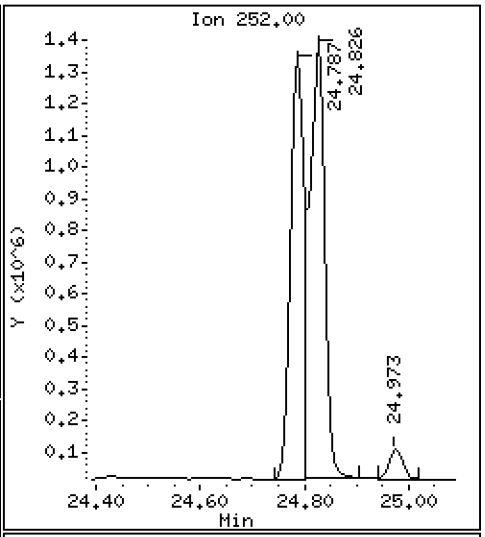
Sample Info: BLA0410-MS1

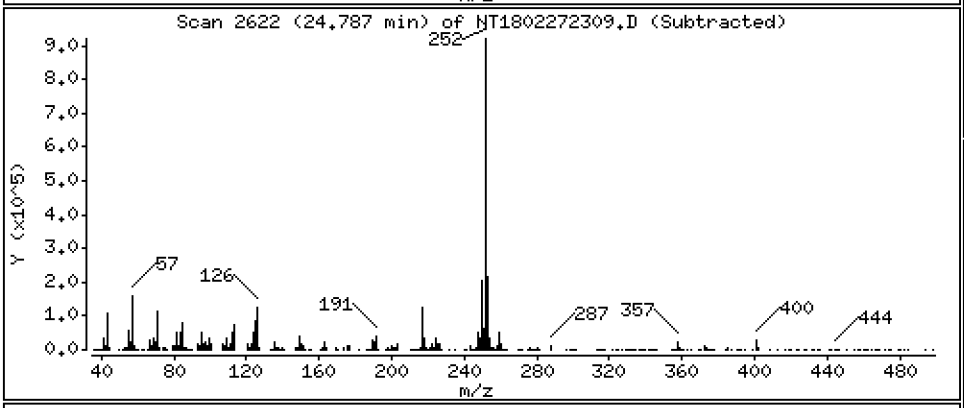
Operator: VTS

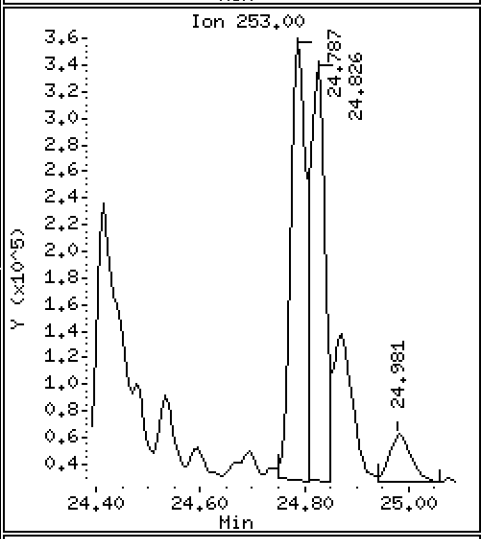
Column phase: ZB-5msi Column diameter: 0.25

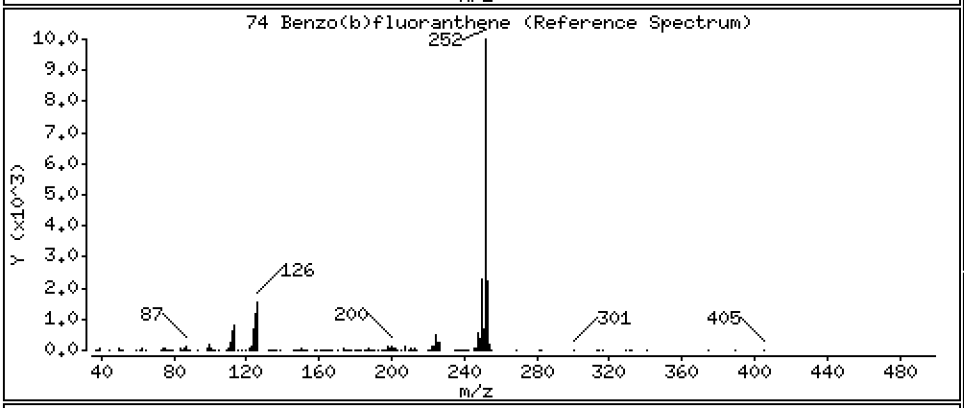
74 Benzo(b)fluoranthene Concentration: 9.524 ug/mL

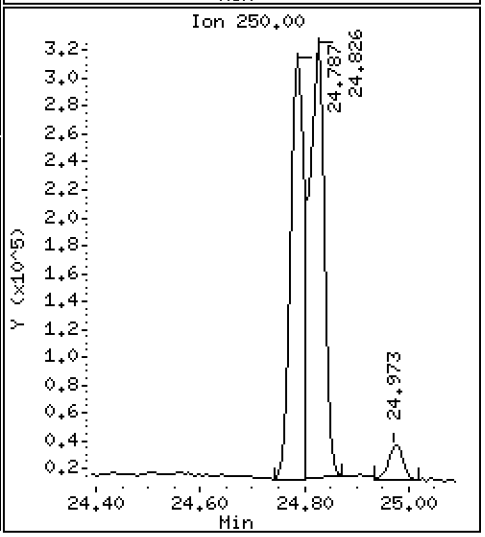


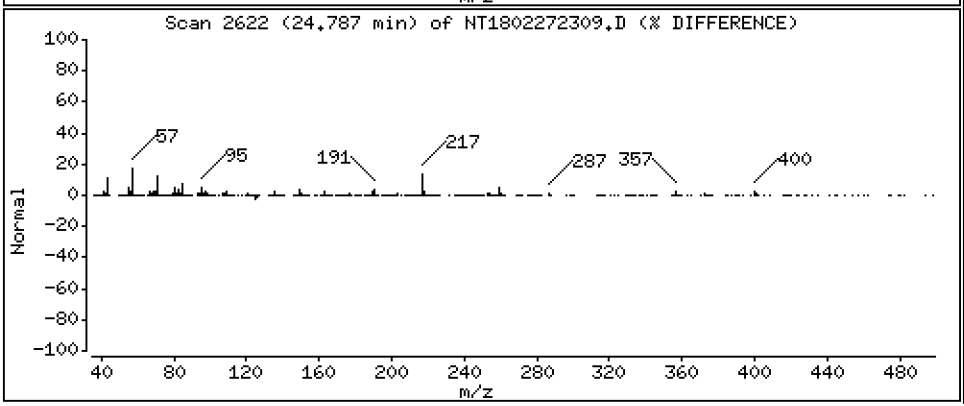












Date : 27-FEB-2023 22:32

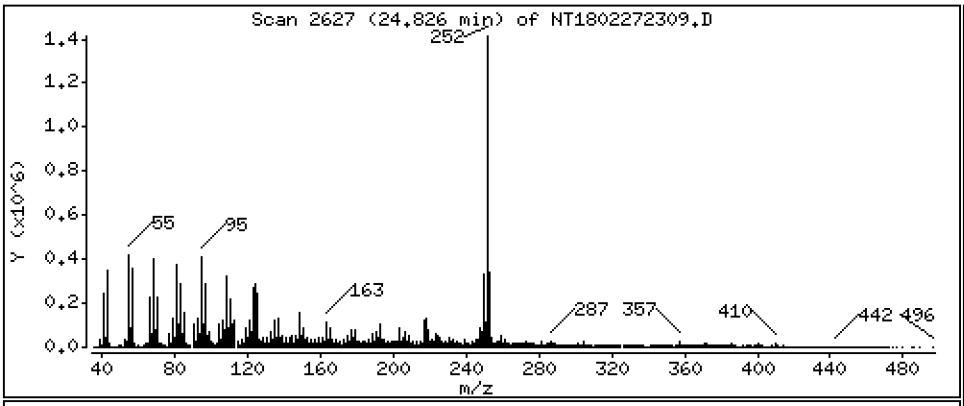
Client ID: Instrument: nt18.i

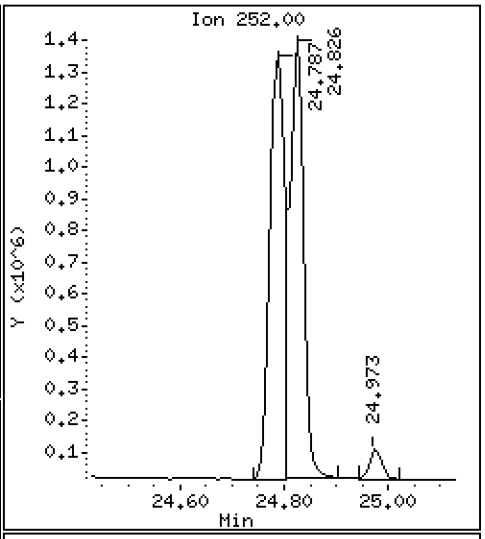
Sample Info: BLA0410-MS1

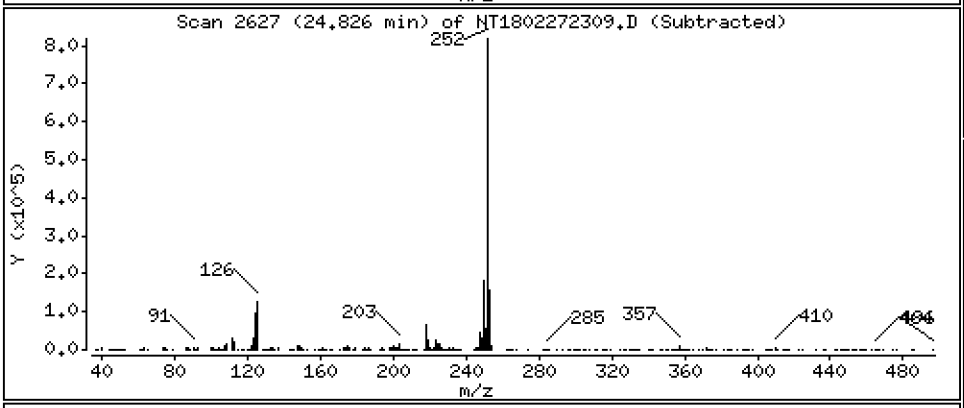
Operator: VTS

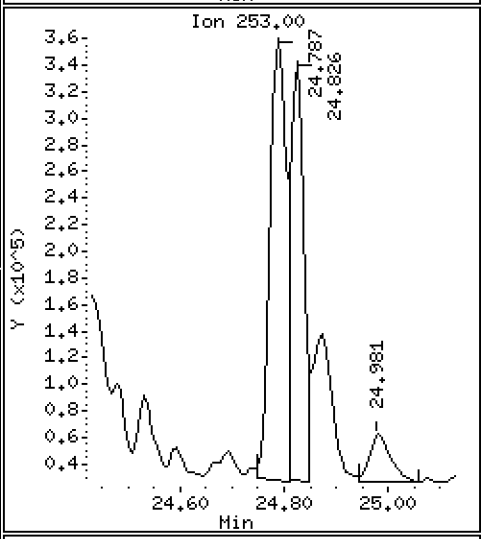
Column phase: ZB-5msi Column diameter: 0.25

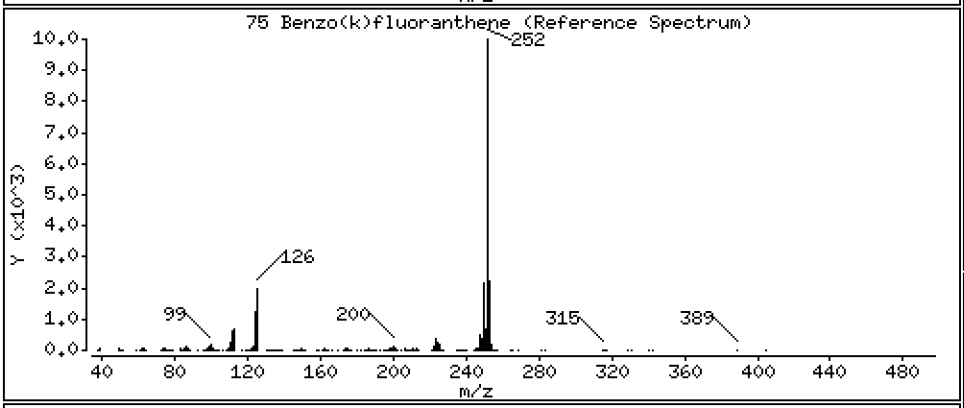
75 Benzo(k)fluoranthene Concentration: 9.475 ug/mL

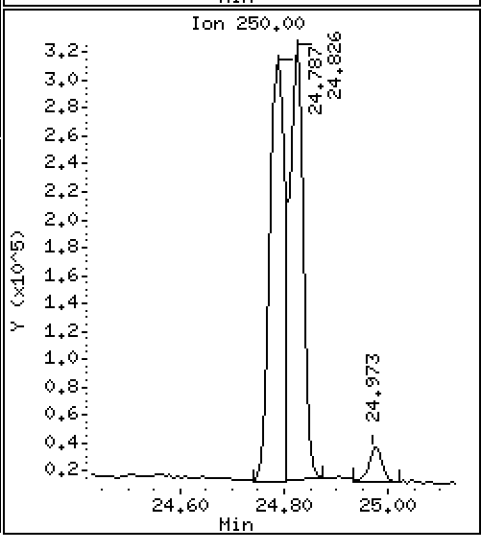


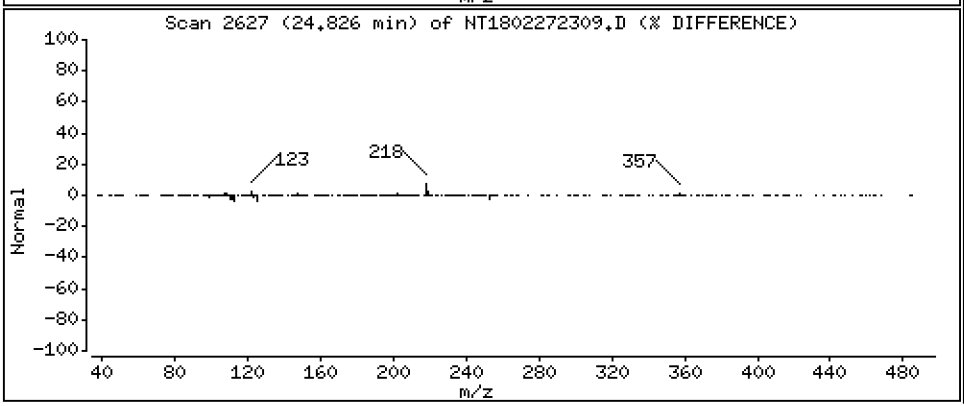












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

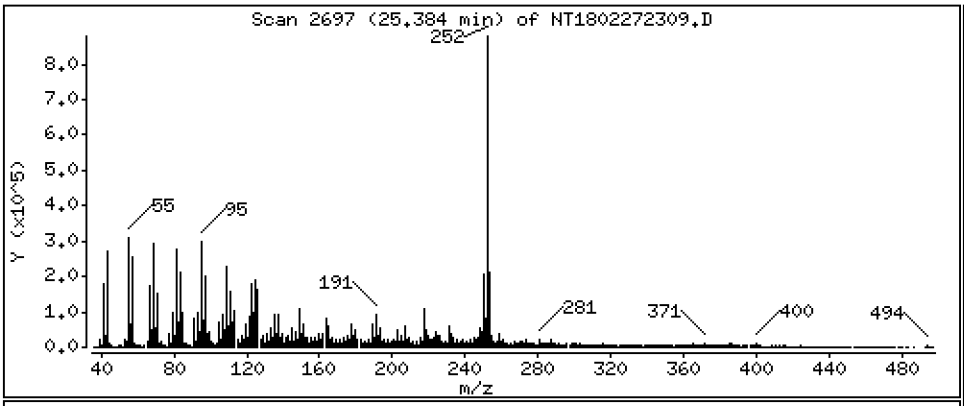
Operator: VTS

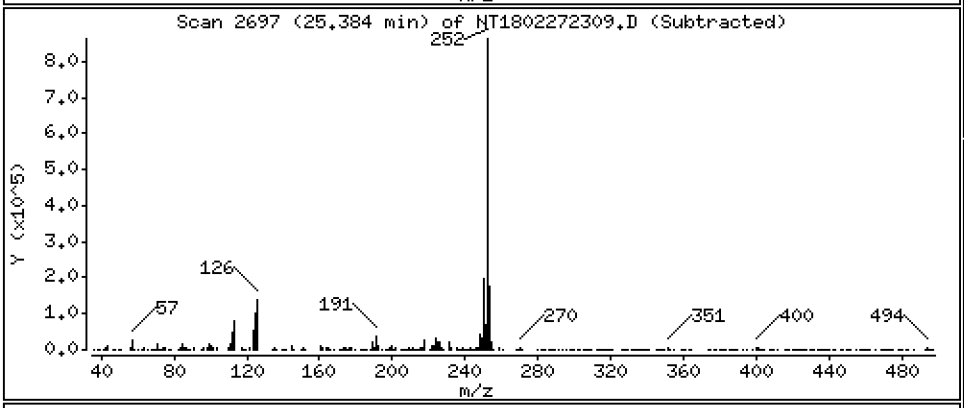
Column phase: ZB-5msi

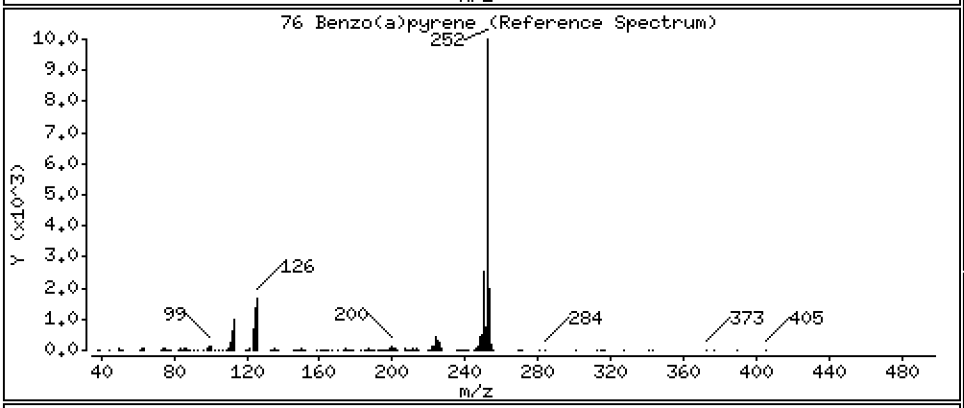
Column diameter: 0.25

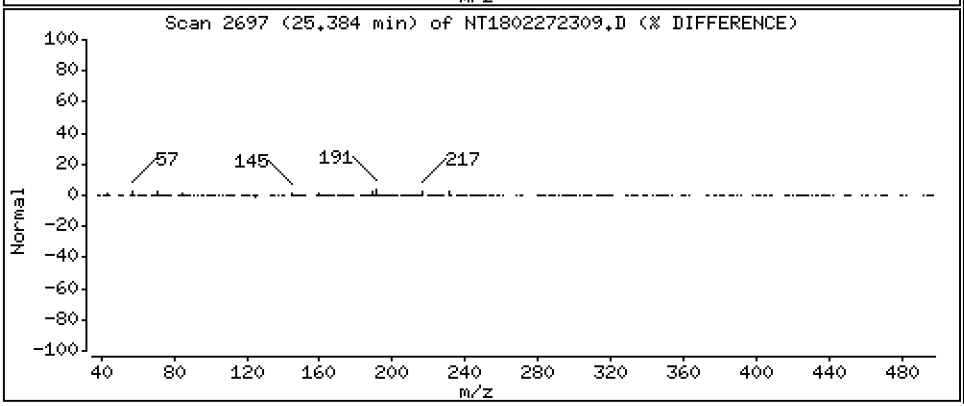
76 Benzo(a)pyrene

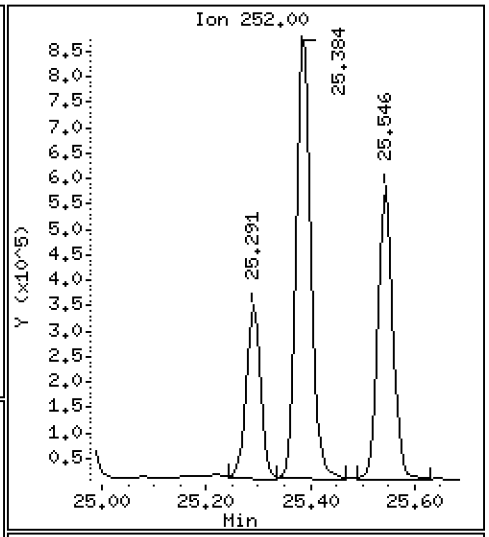
Concentration: 7.135 ug/mL

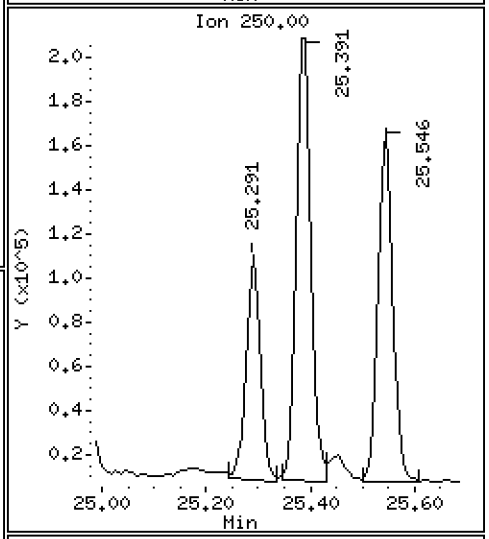


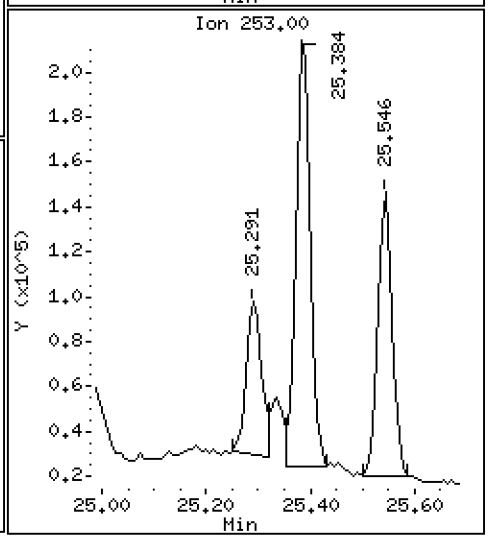












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

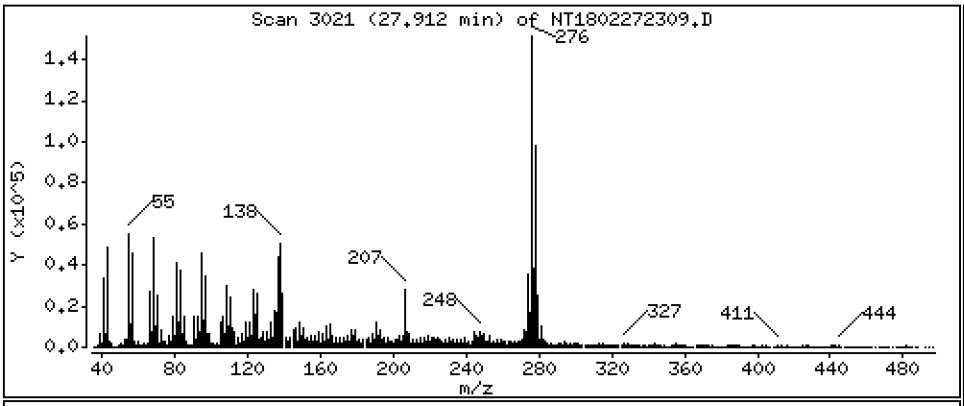
Operator: VTS

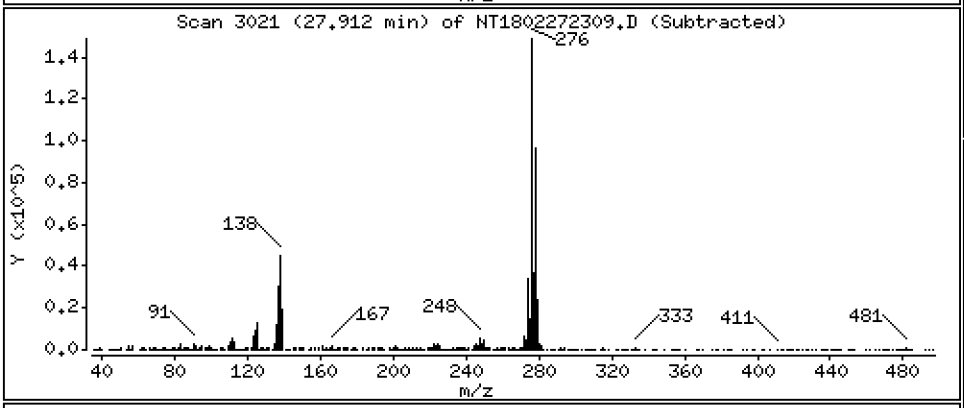
Column phase: ZB-5msi

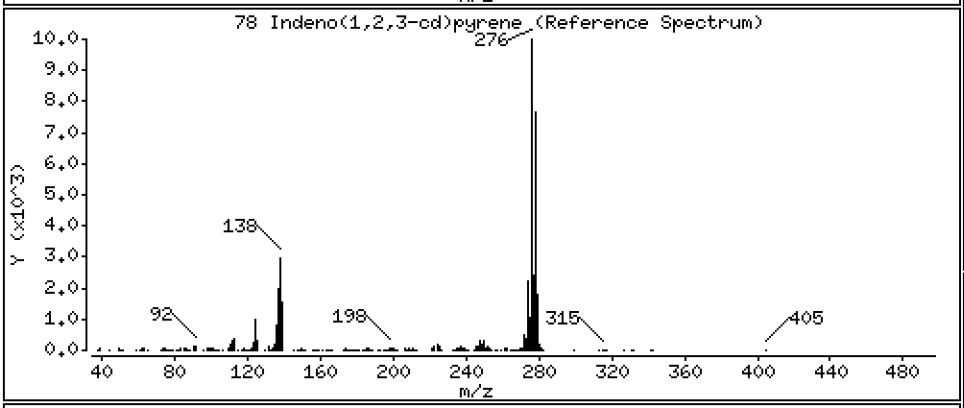
Column diameter: 0.25

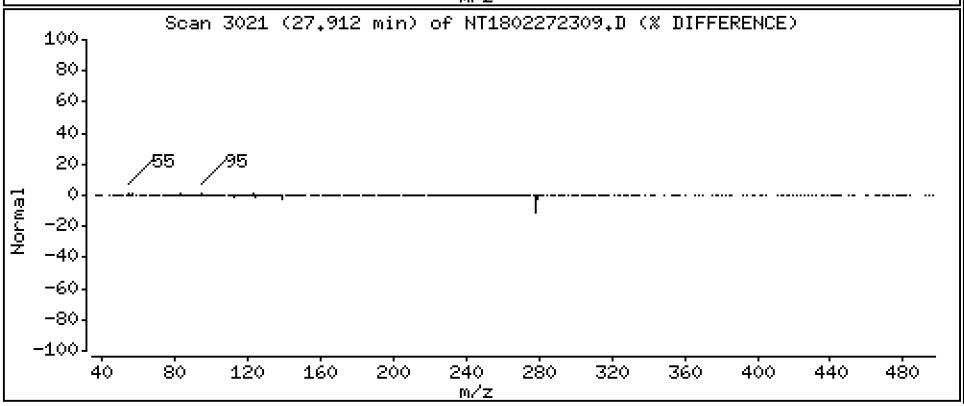
78 Indeno(1,2,3-cd)pyrene

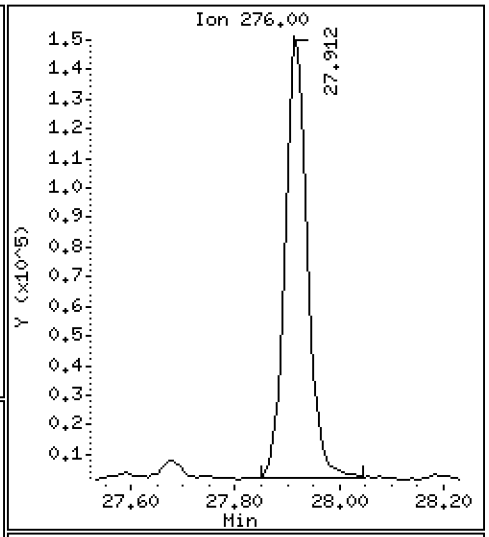
Concentration: 1.460 ug/mL

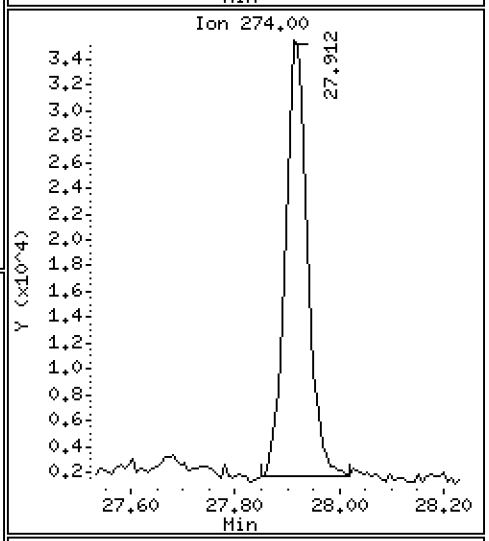


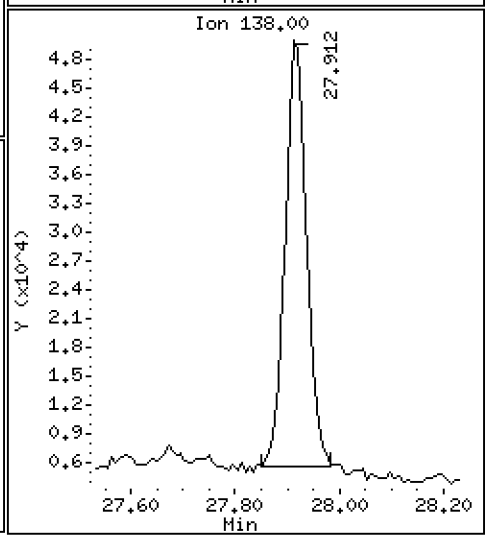












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

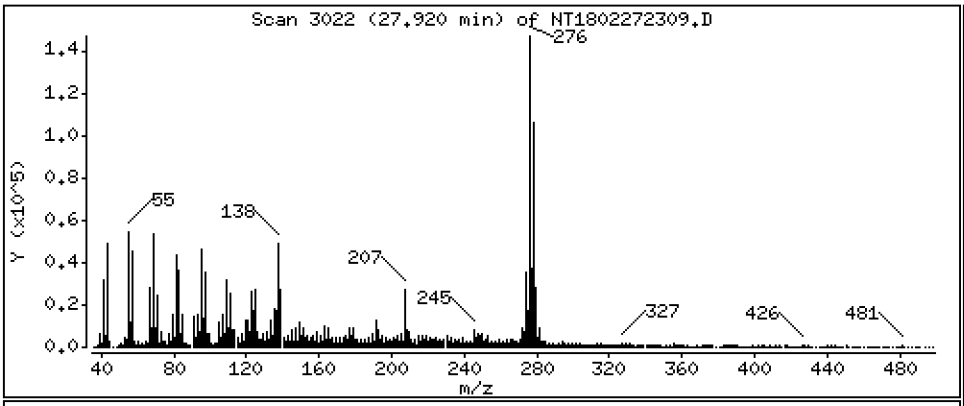
Operator: VTS

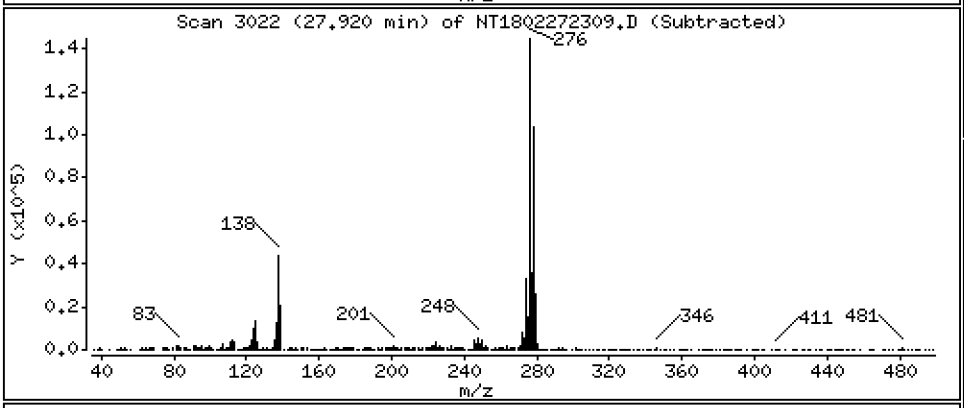
Column phase: ZB-5msi

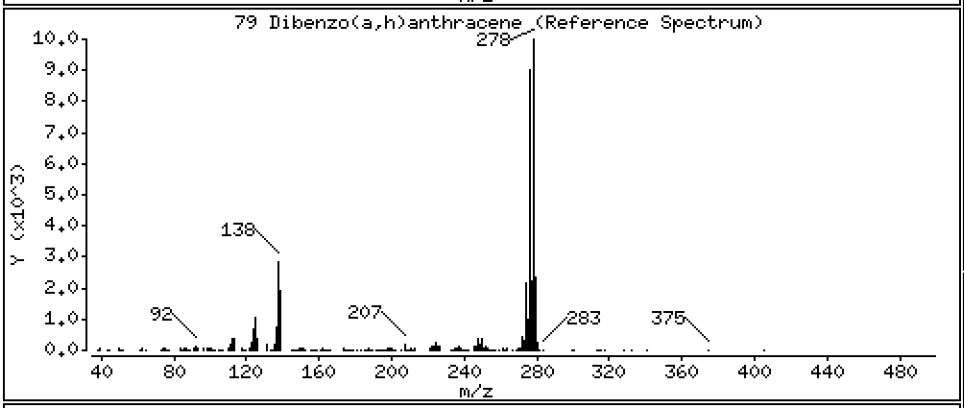
Column diameter: 0.25

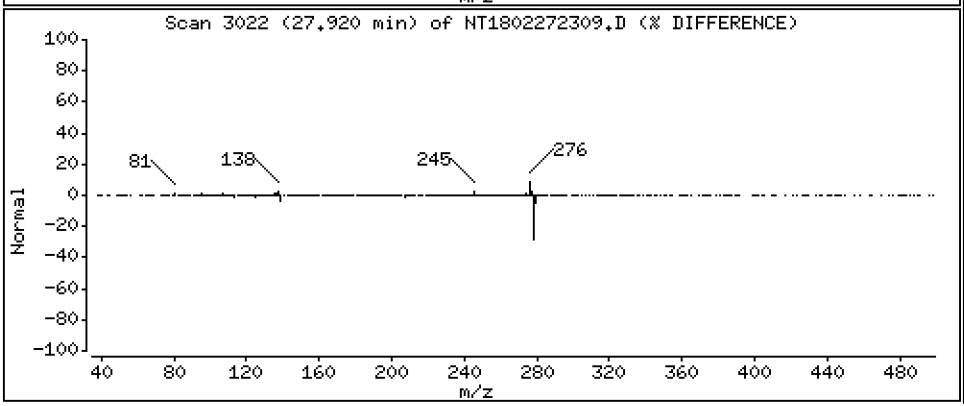
79 Dibenzo(a,h)anthracene

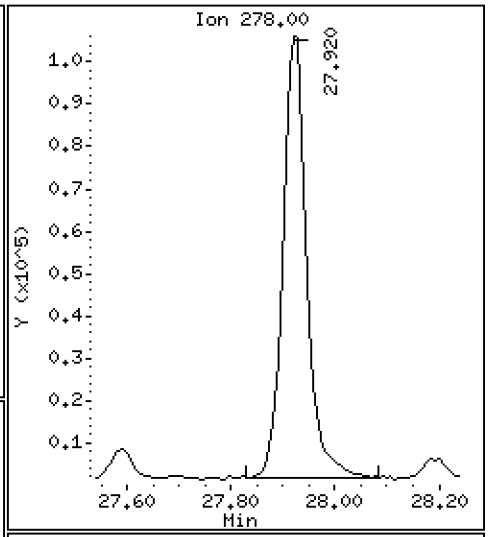
Concentration: 1.313 ug/mL

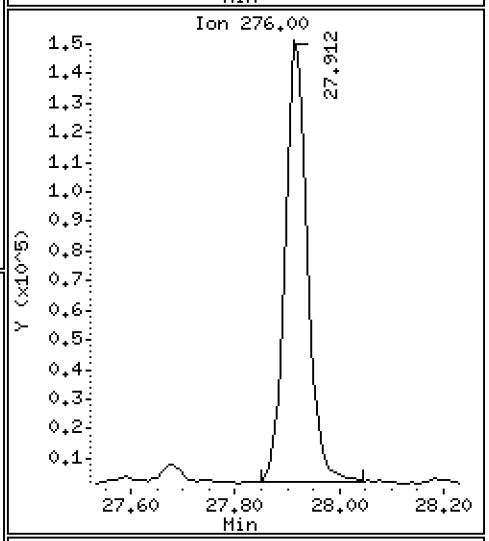


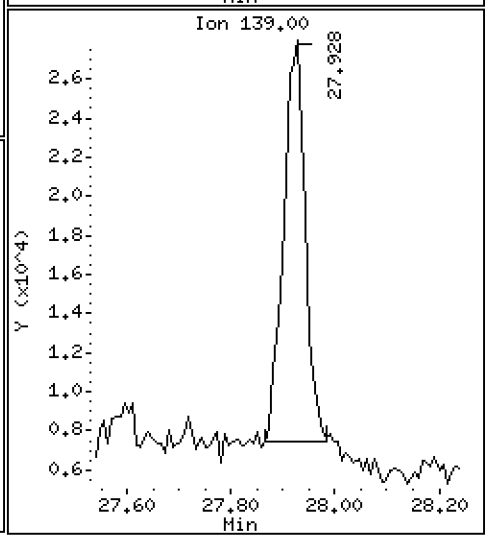












Date : 27-FEB-2023 22:32

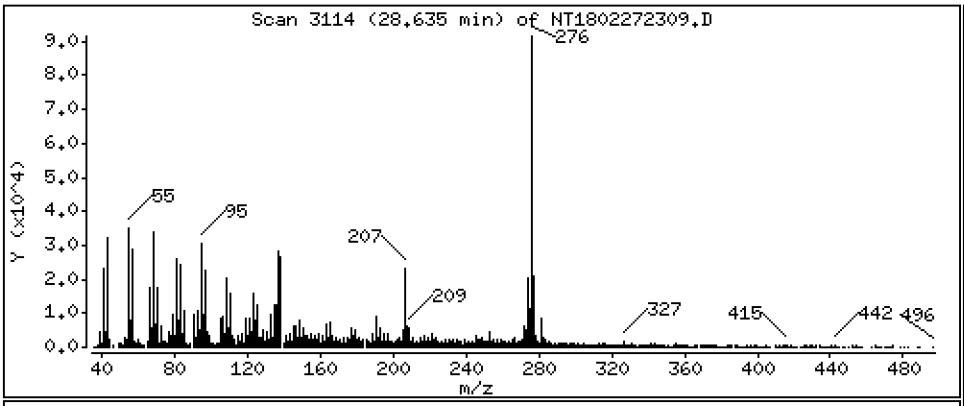
Client ID: Instrument: nt18.i

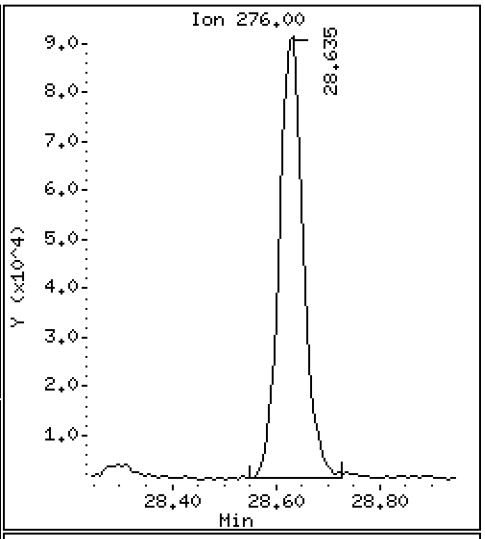
Sample Info: BLA0410-MS1

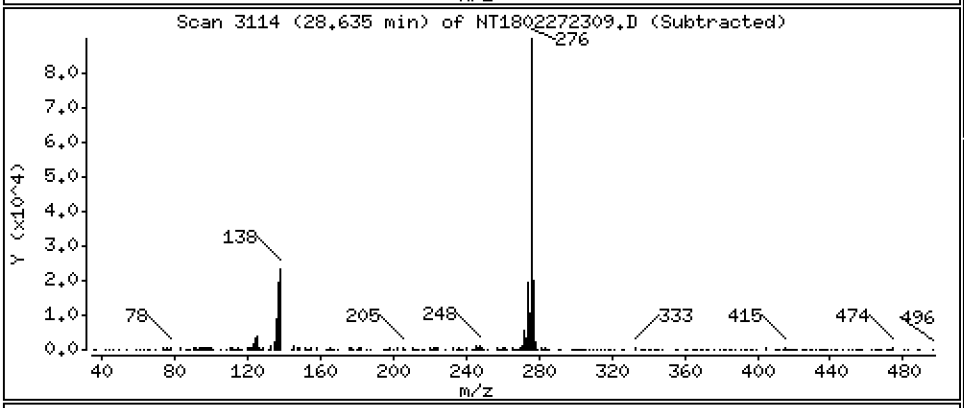
Operator: VTS

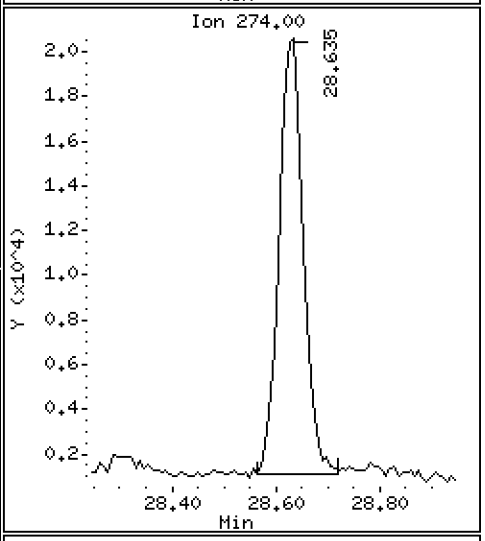
Column phase: ZB-5msi Column diameter: 0.25

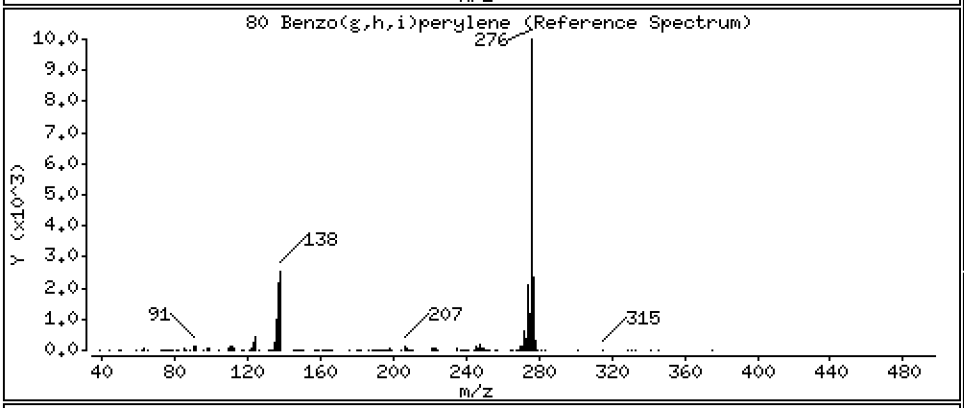
80 Benzo(g,h,i)perylene Concentration: 1.204 ug/mL

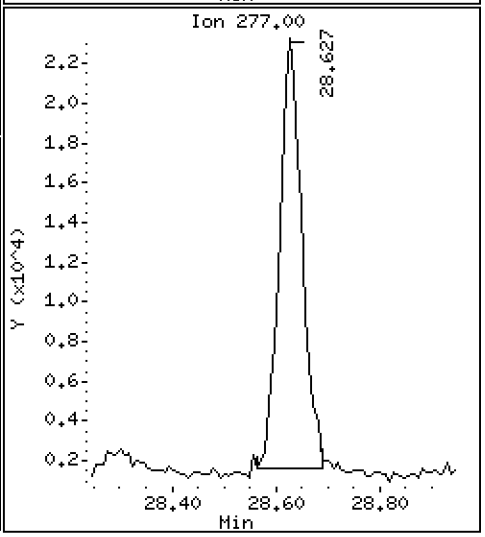


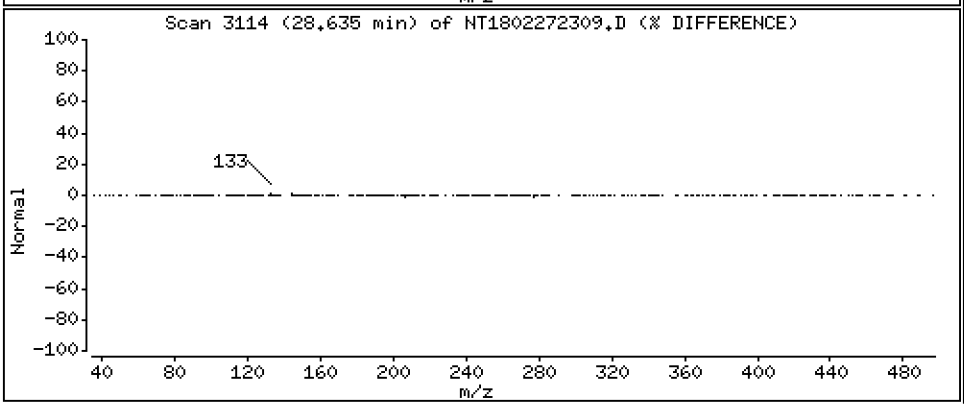












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272309.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

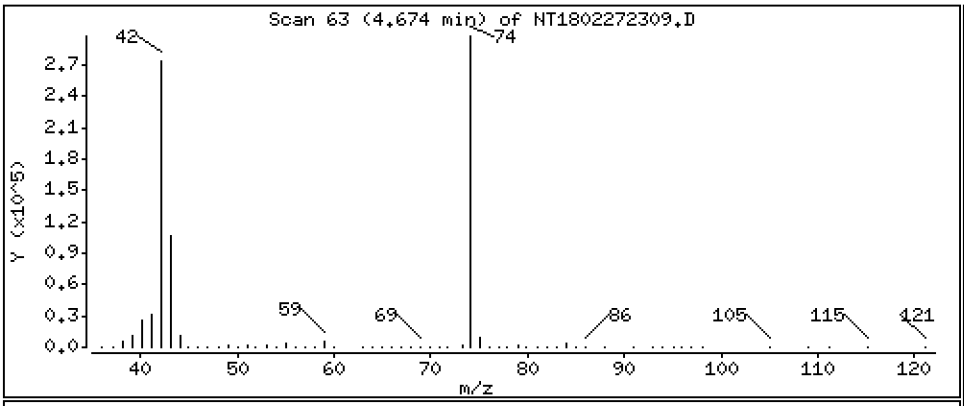
Operator: VTS

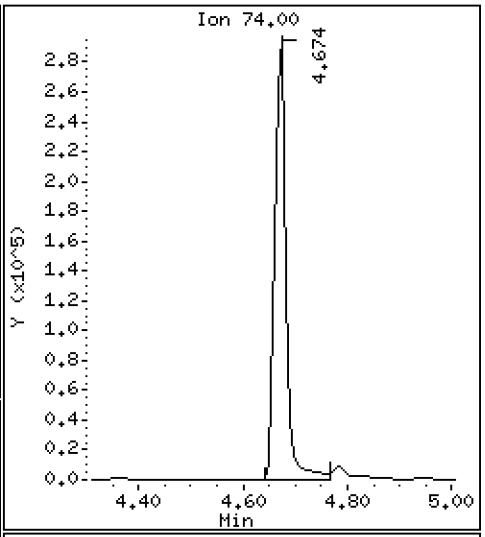
Column phase: ZB-5msi

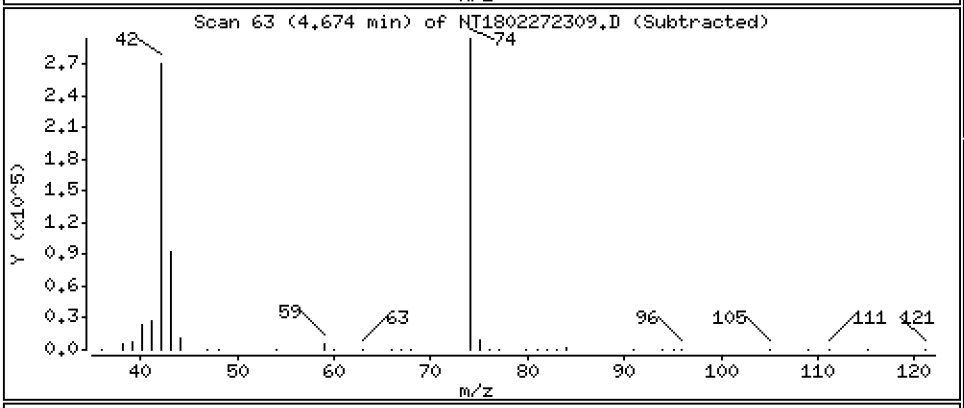
Column diameter: 0.25

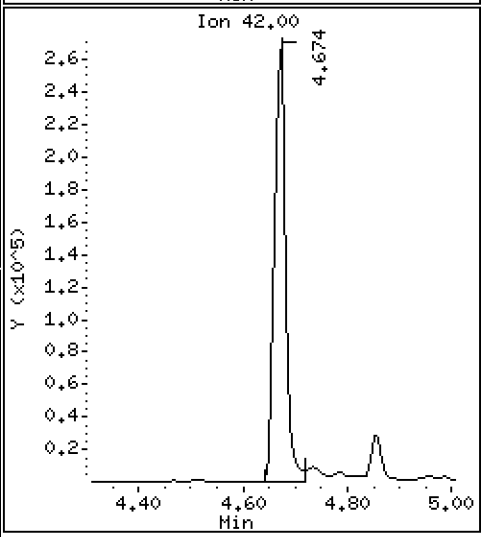
90 N-Nitrosodimethylamine

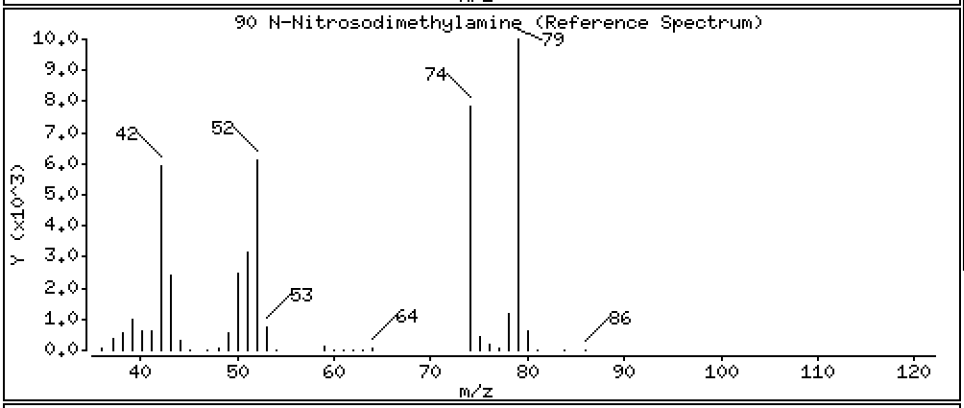
Concentration: 7.785 ug/mL

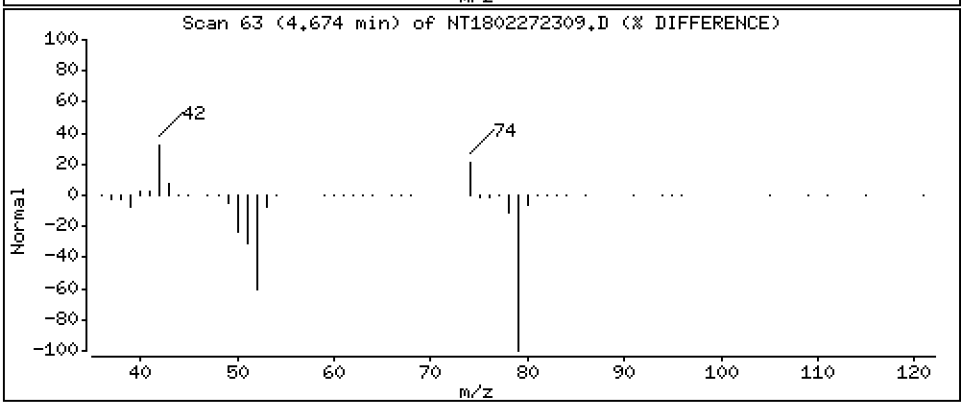












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272309.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

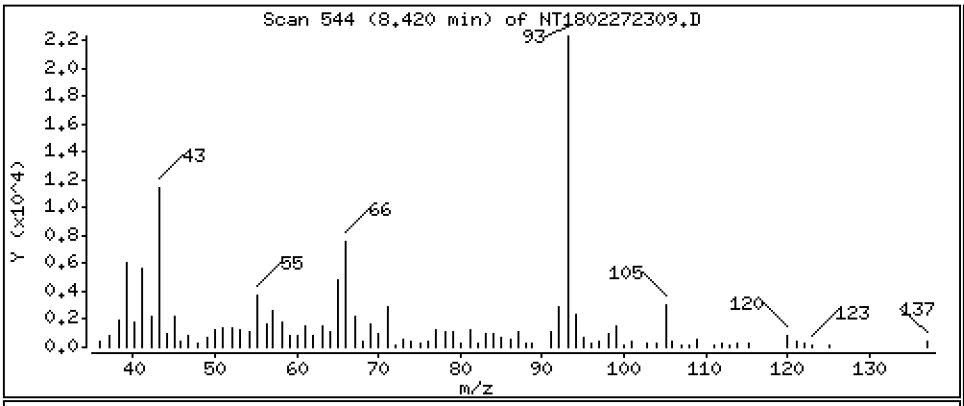
Operator: VTS

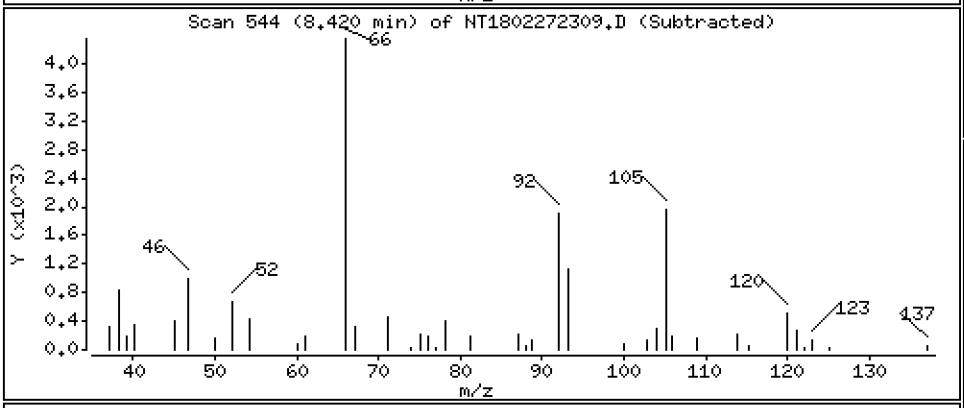
Column phase: ZB-5msi

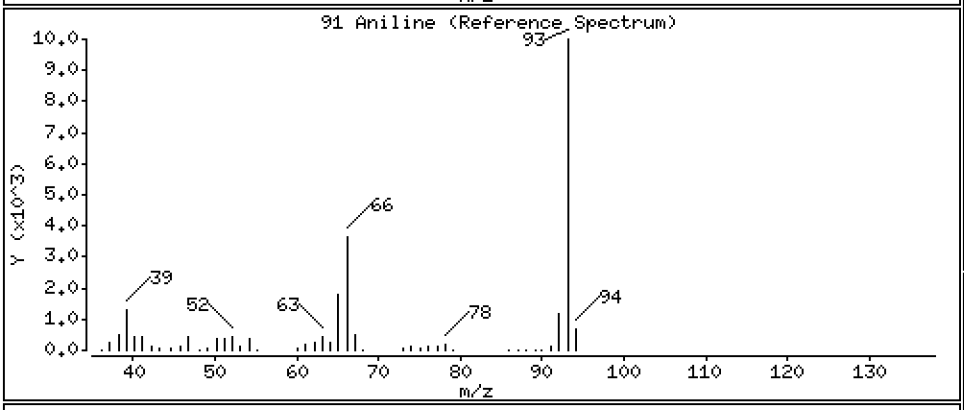
Column diameter: 0.25

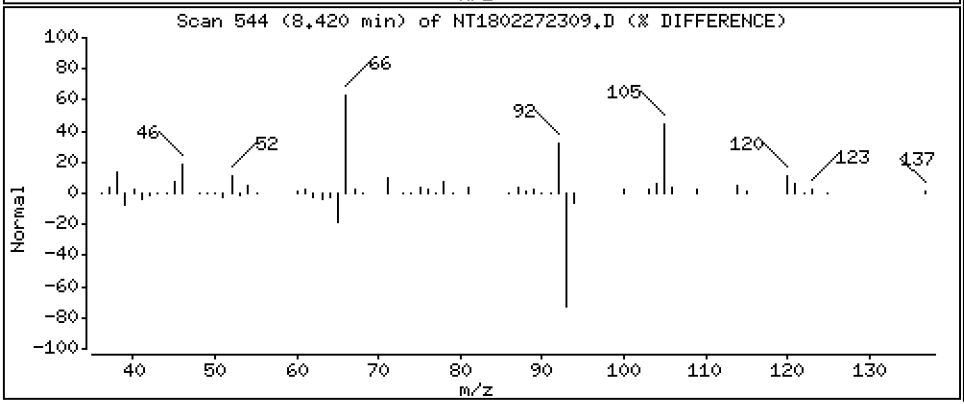
91 Aniline

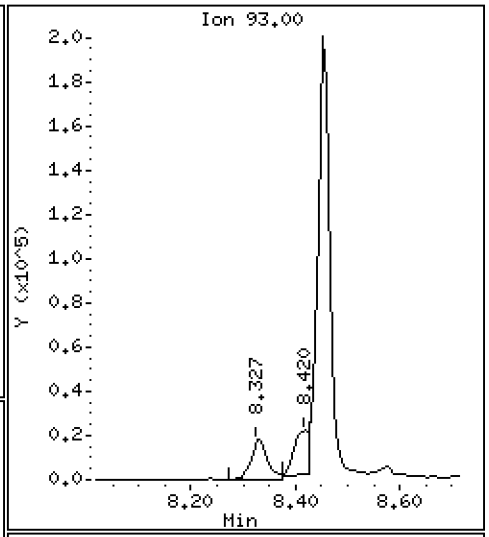
Concentration: 0.3133 ug/mL

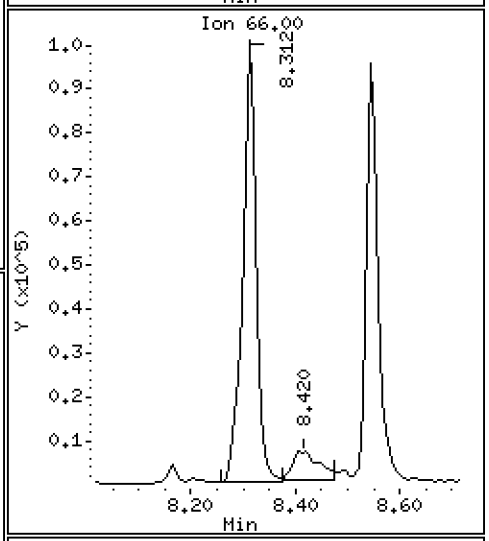


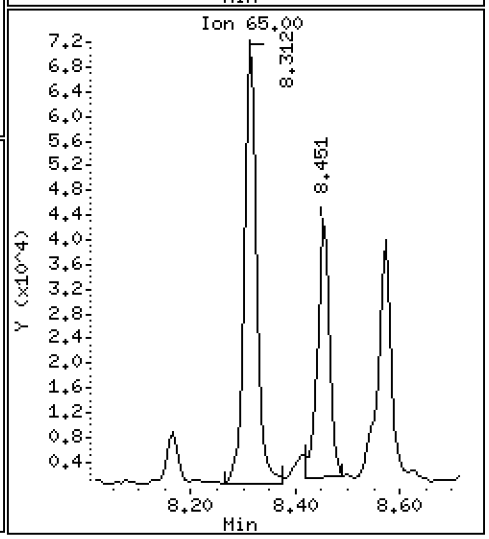












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272309.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

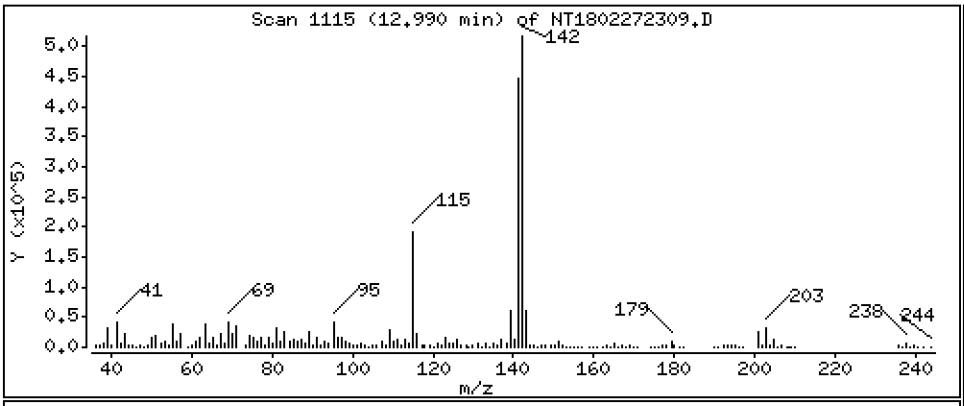
Operator: VTS

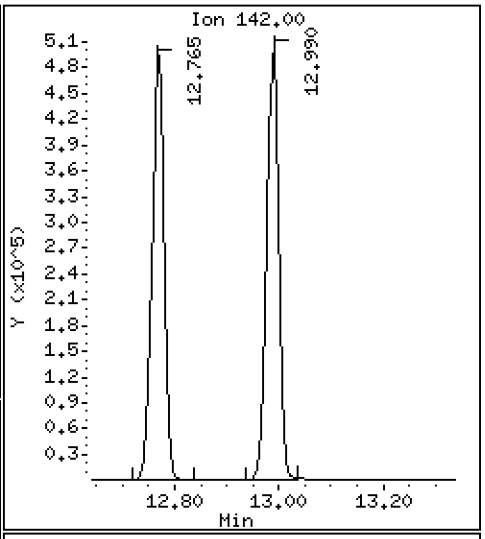
Column phase: ZB-5msi

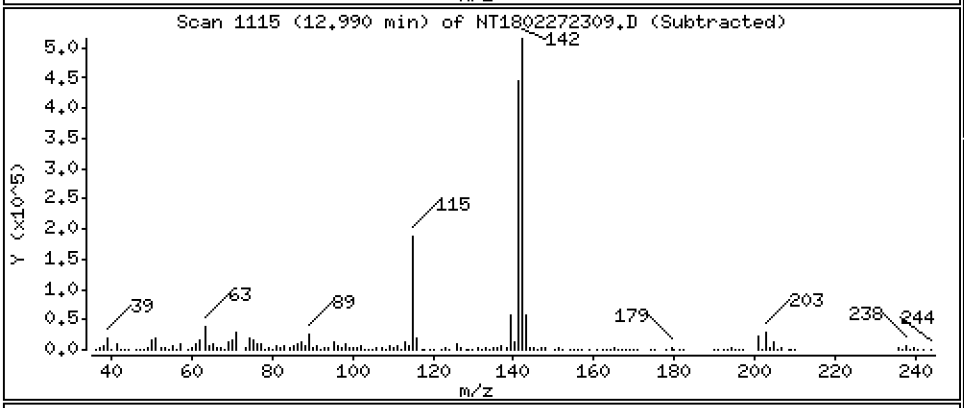
Column diameter: 0.25

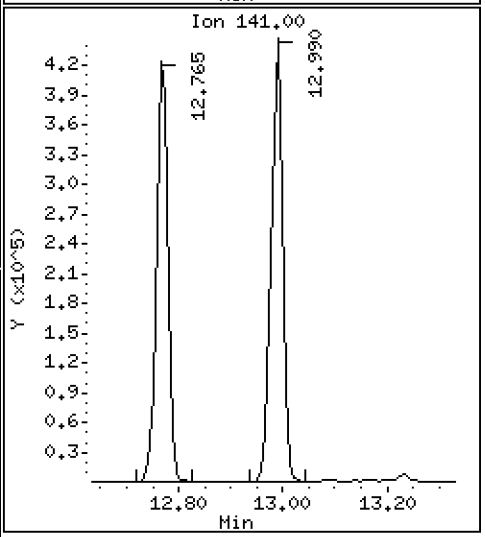
105 1-methylnaphthalene

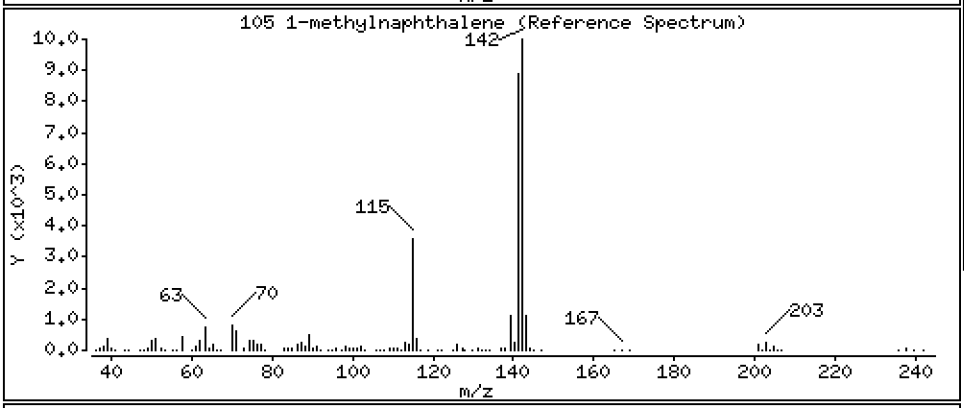
Concentration: 3.736 ug/mL

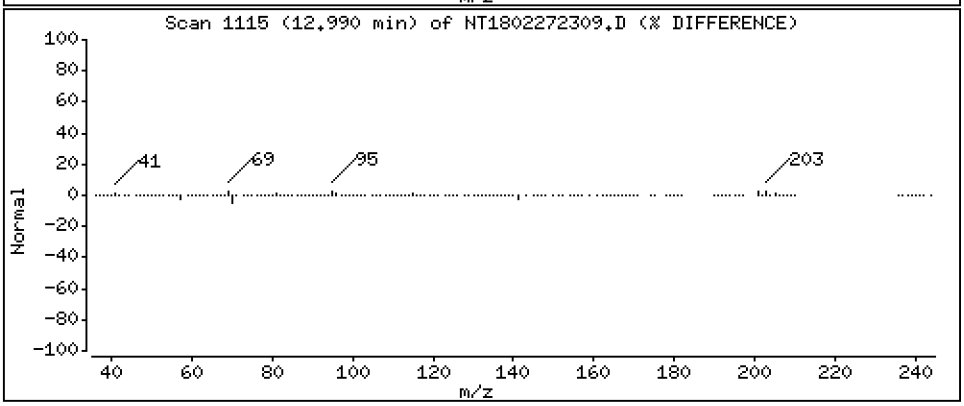












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

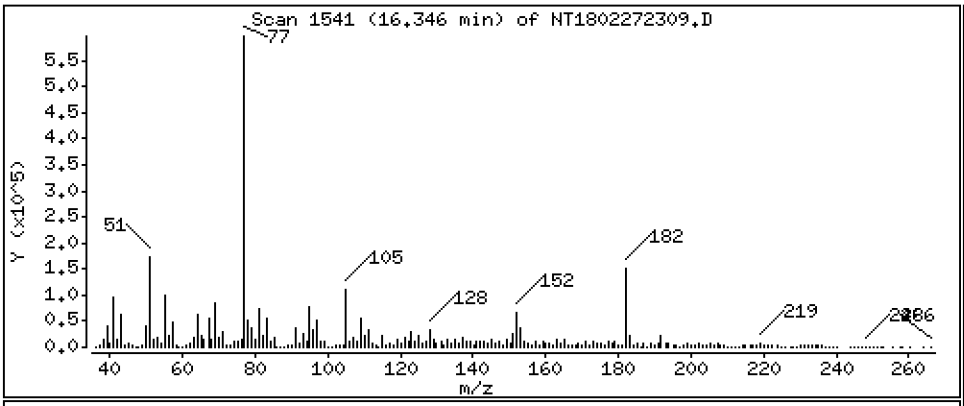
Operator: VTS

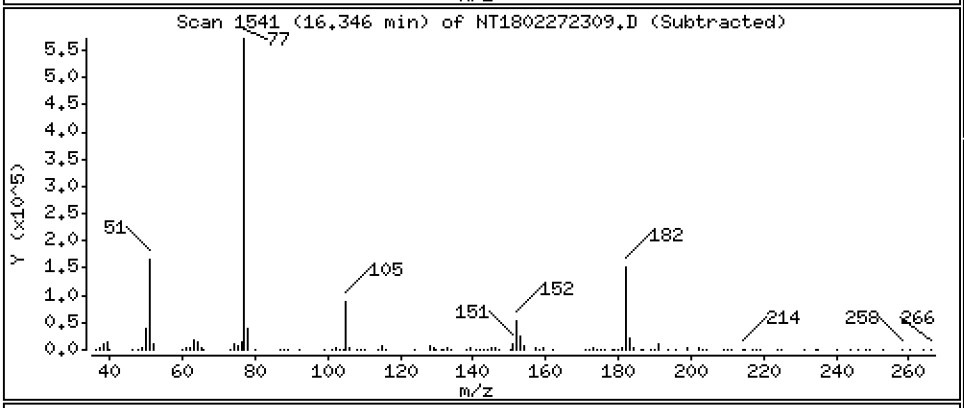
Column phase: ZB-5msi

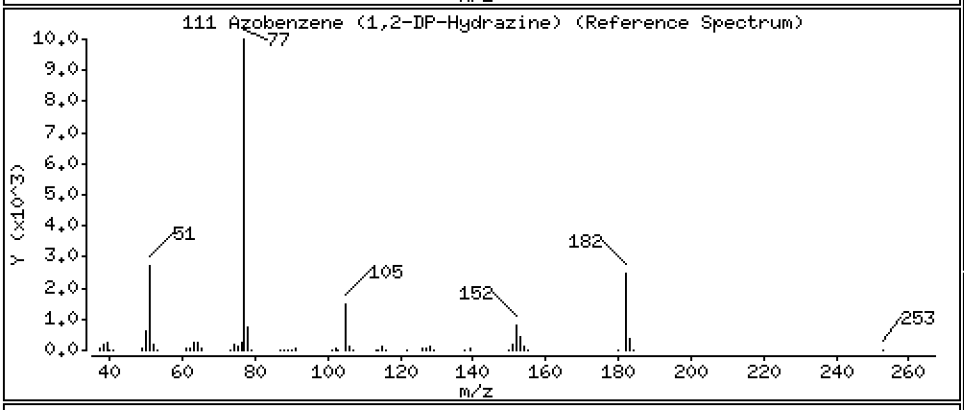
Column diameter: 0.25

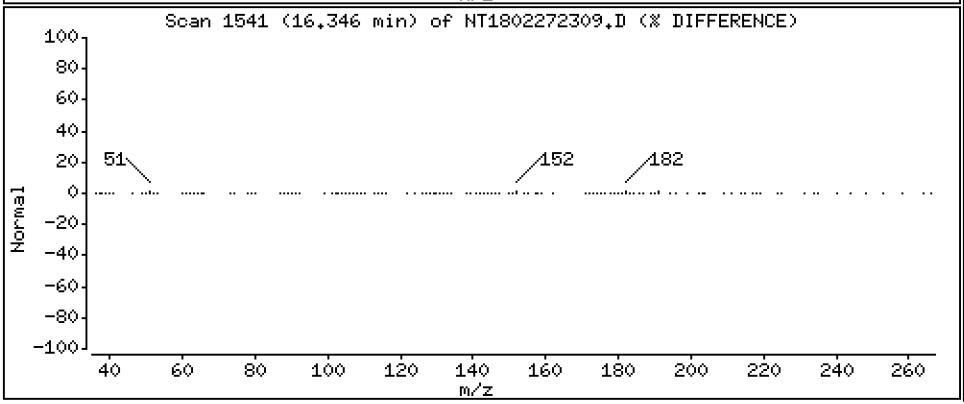
111 Azobenzene (1,2-DP-Hydrazine)

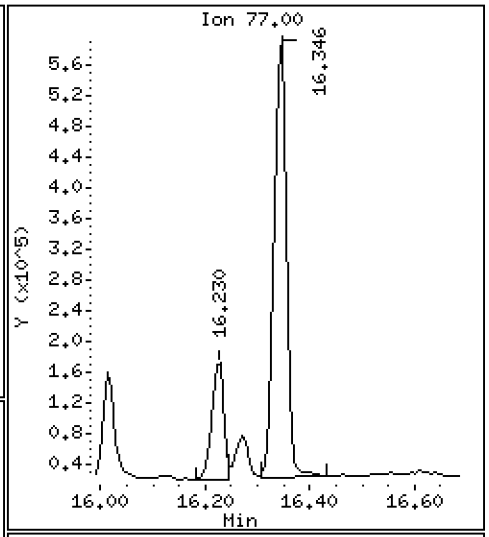
Concentration: 3.579 ug/mL

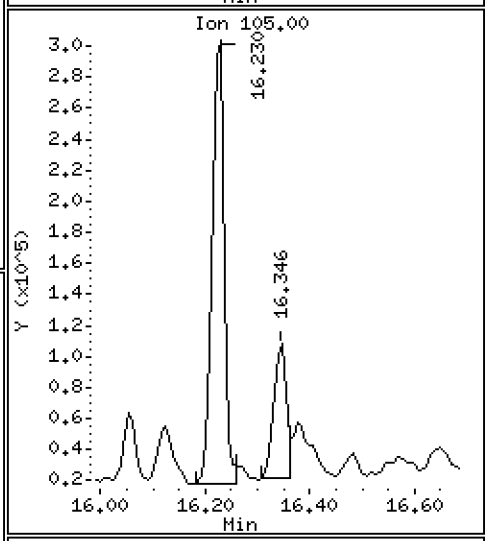


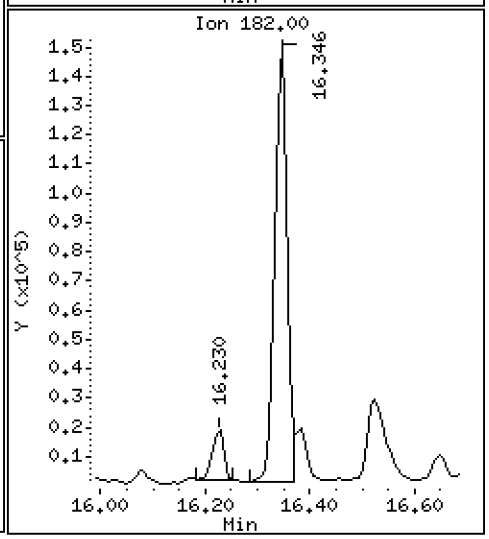












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

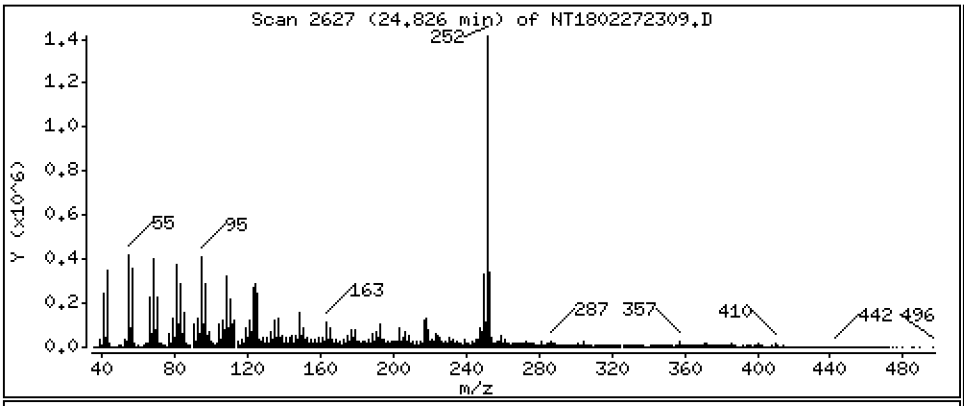
Operator: VTS

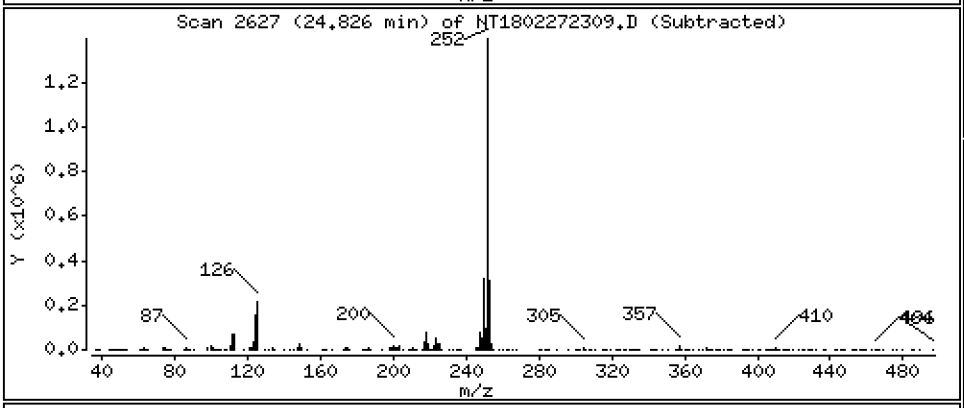
Column phase: ZB-5msi

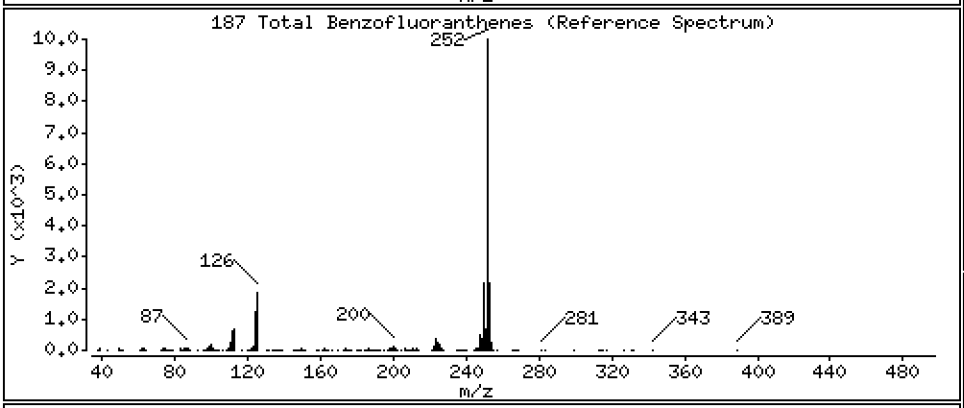
Column diameter: 0.25

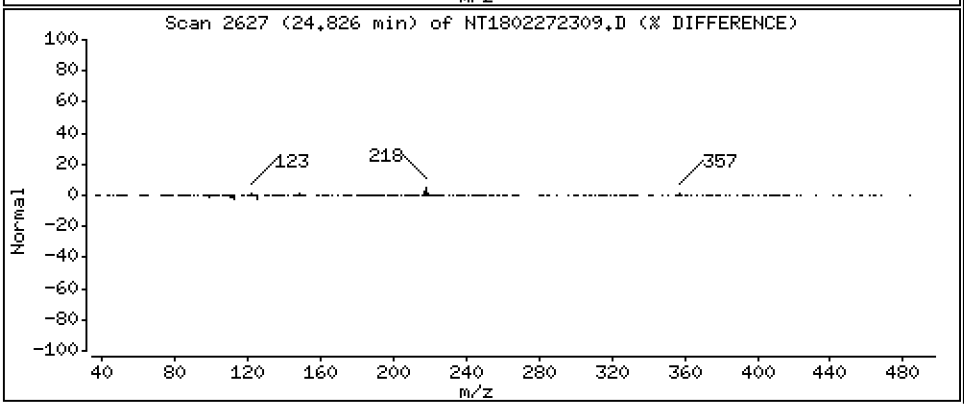
187 Total Benzofluoranthenes

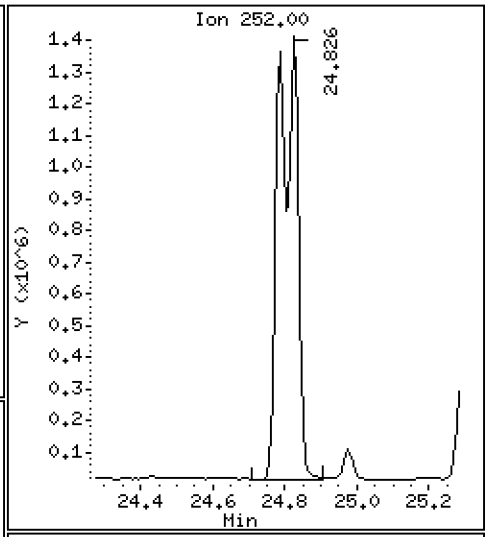
Concentration: 18.75 ug/mL

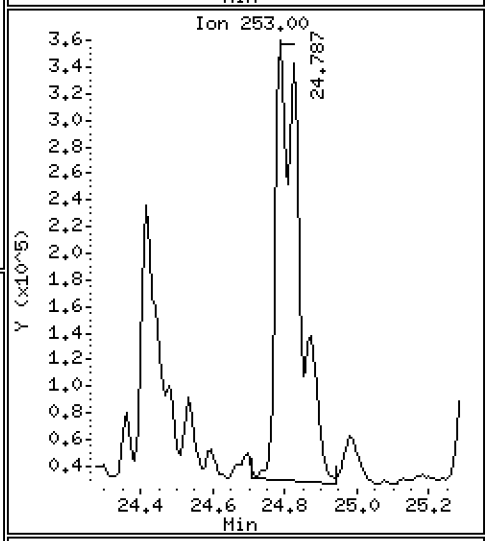


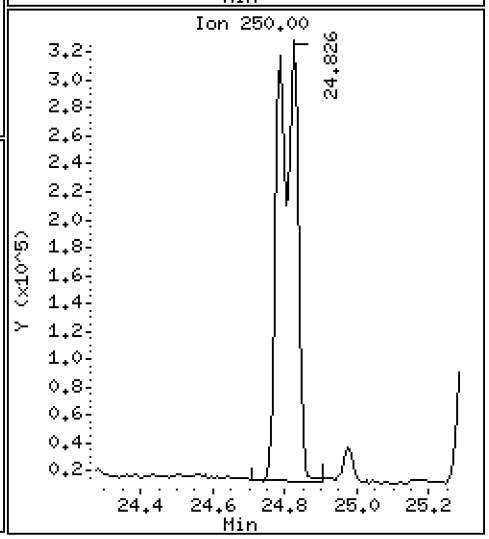












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272309.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS1

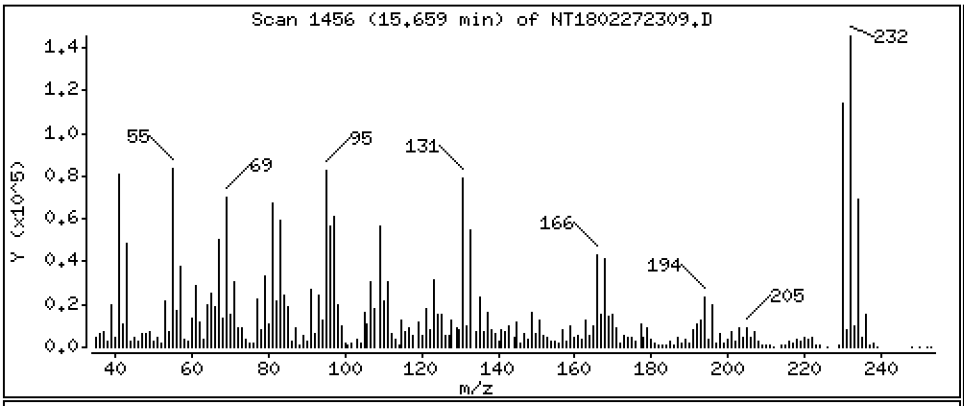
Operator: VTS

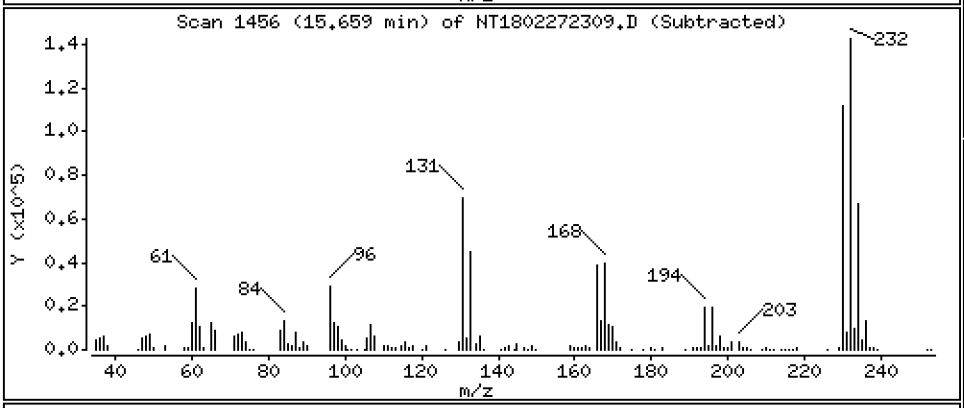
Column phase: ZB-5msi

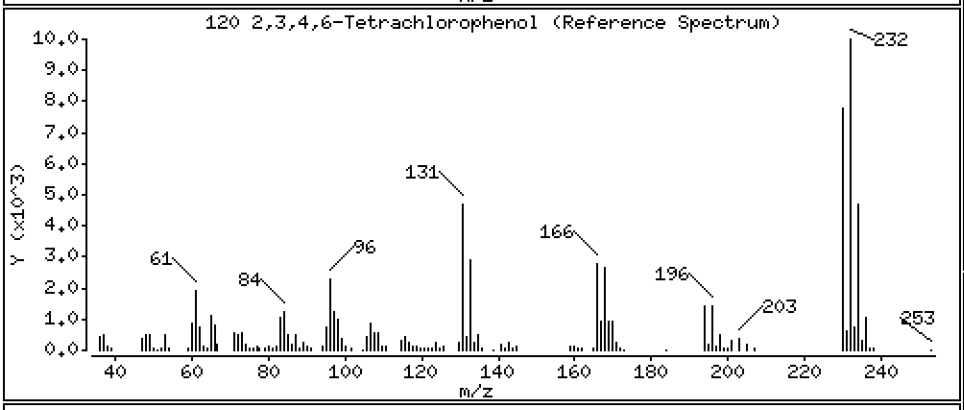
Column diameter: 0.25

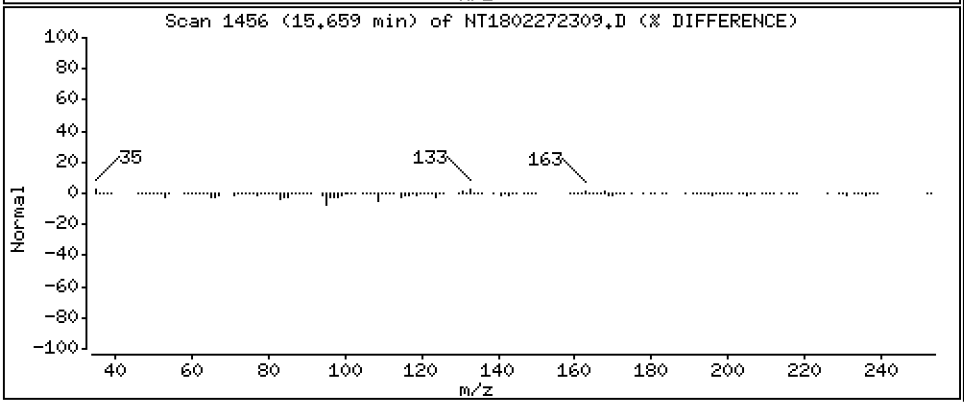
120 2,3,4,6-Tetrachlorophenol

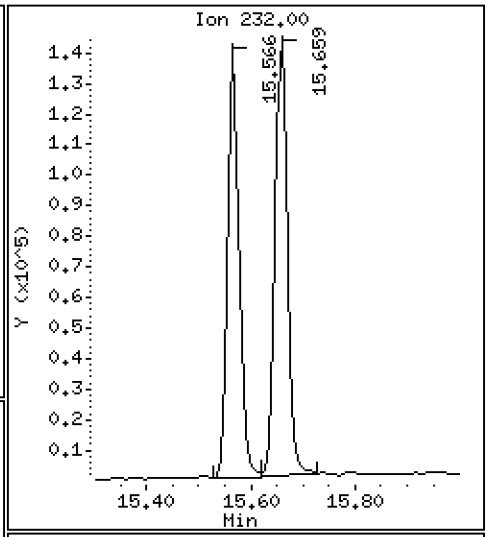
Concentration: 3.649 ug/mL

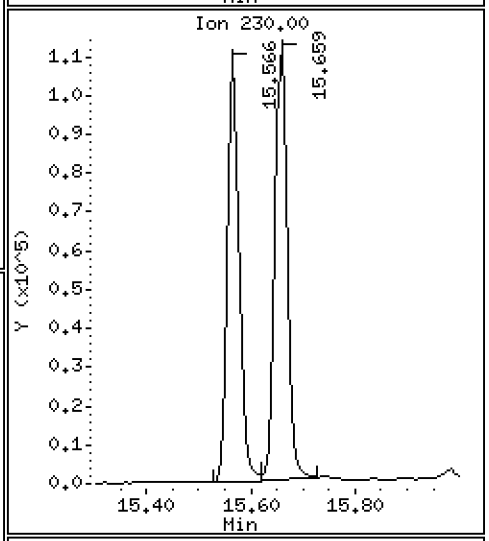


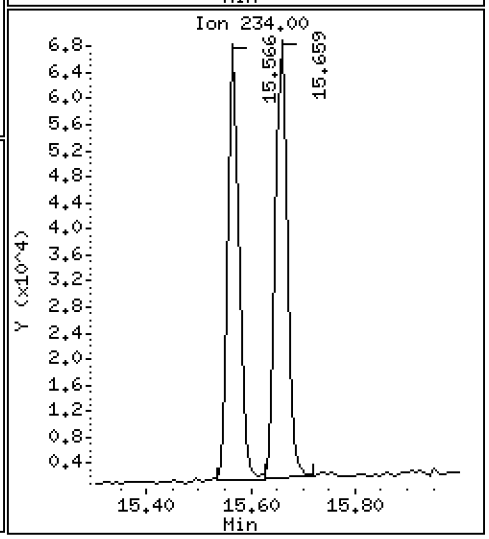












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230227.b\NT1802272309.D
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Inj Date : 27-FEB-2023 22:32
Operator : VTS Inst ID: nt18.i
Smp Info : BLA0410-MS1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230227.b\ABN.m
Meth Date : 24-Mar-2023 10:19 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.751	6.728	(0.759)	457675	4.97218	4.972
$	2 Phenol-d5	99	8.288	8.288	(0.932)	618879	5.20246	5.202
	3 Phenol	94	8.312	8.304	(0.935)	394674	3.18873	3.189
$	5 2-Chlorophenol-d4	132	8.543	8.543	(0.961)	553144	5.34353	5.344
	4 Bis(2-Chloroethyl)ether	93	8.451	8.458	(0.950)	318720	3.79150	3.792
	6 2-Chlorophenol	128	8.574	8.566	(0.964)	340487	3.20363	3.204
	7 1,3-Dichlorobenzene	146	8.829	8.829	(0.993)	342922	3.05061	3.051
*	8 1,4-Dichlorobenzene-d4	152	8.891	8.891	(1.000)	269794	4.00000	
	9 1,4-Dichlorobenzene	146	8.922	8.922	(1.003)	368714	3.21783	3.218
$	10 1,2-Dichlorobenzene-d4	152	9.248	9.248	(1.040)	218435	2.97656	2.977
	12 1,2-Dichlorobenzene	146	9.272	9.271	(1.043)	348774	3.13640	3.136
	11 Benzyl alcohol	108	9.171	9.170	(1.031)	203502	3.45794	3.458
	14 2,2'-oxybis(1-Chloropropane)	121	9.466	9.458	(1.065)	101400	3.89102	3.891
	13 2-Methylphenol	108	9.404	9.396	(1.058)	296932	3.10145	3.101
	17 Hexachloroethane	117	9.854	9.854	(1.108)	124710	2.81162	2.812
	16 N-Nitroso-di-n-propylamine	70	9.714	9.722	(1.093)	246056	3.49623	3.496
	15 4-Methylphenol	108	9.675	9.667	(1.088)	337992	3.38713	3.387
$	18 Nitrobenzene-d5	82	9.970	9.970	(0.879)	371333	3.25293	3.253
	19 Nitrobenzene	77	10.009	10.009	(0.882)	361221	3.28728	3.287
	20 Isophorone	82	10.459	10.451	(0.922)	635262	4.53145	4.531
	21 2-Nitrophenol	139	10.625	10.625	(0.937)	230774	4.27619	4.276
	22 2,4-Dimethylphenol	107	10.701	10.693	(0.944)	1304255	12.6830	12.68
	23 Bis(2-Chloroethoxy)methane	93	10.880	10.879	(0.959)	382860	3.98821	3.988
	24 Benzoic acid	105	10.930	10.964	(0.964)	723358	17.6310	17.63
	25 2,4-Dichlorophenol	162	11.092	11.083	(0.978)	1333594	14.7908	14.79
	26 1,2,4-Trichlorobenzene	180	11.265	11.264	(0.993)	368223	3.78121	3.781
*	27 Naphthalene-d8	136	11.342	11.342	(1.000)	1071124	4.00000	
	28 Naphthalene	128	11.388	11.388	(1.004)	1169999	3.55336	3.553
	29 4-Chloroaniline	127	11.535	11.519	(1.017)	185710	1.41525	1.415
	30 Hexachlorobutadiene	225	11.743	11.743	(1.035)	197500	3.46008	3.460
	31 4-Chloro-3-methylphenol	107	12.494	12.486	(1.102)	1309338	15.1723	15.17
	32 2-Methylnaphthalene	142	12.765	12.765	(1.125)	789512	3.52871	3.529
	33 Hexachlorocyclopentadiene	237	13.229	13.229	(0.886)	77337	1.82969	1.830

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	13.392	13.392	(0.897)	948975	15.8211	15.82
	35 2,4,5-Trichlorophenol	196	13.469	13.461	(0.902)	1049715	16.0599	16.06
$	36 2-Fluorobiphenyl	172	13.547	13.546	(0.907)	877820	3.35736	3.357
	37 2-Chloronaphthalene	162	13.755	13.748	(0.921)	723857	3.54304	3.543
	38 2-Nitroaniline	65	14.019	14.011	(0.939)	740580	11.5826	11.58
	39 Dimethylphthalate	163	14.452	14.444	(0.968)	883815	4.02785	4.028
	40 Acenaphthylene	152	14.615	14.607	(0.979)	1300059	3.77907	3.779
	41 2,6-Dinitrotoluene	165	14.591	14.584	(0.977)	727391	14.4599	14.46
*	42 Acenaphthene-d10	164	14.932	14.924	(1.000)	620139	4.00000	
	43 3-Nitroaniline	138	14.862	14.862	(0.995)	332254	5.58372	5.584
	44 Acenaphthene	153	14.994	14.986	(1.004)	876000	4.02342	4.023
	45 2,4-Dinitrophenol	184	15.079	15.079	(1.010)	431277	17.6755	17.68
	46 Dibenzofuran	168	15.318	15.310	(1.026)	1208967	3.83634	3.836
	47 4-Nitrophenol	109	15.218	15.202	(1.019)	508004	21.1789	21.18
	48 2,4-Dinitrotoluene	165	15.388	15.388	(1.031)	1028931	14.9638	14.96
	50 Diethylphthalate	149	15.898	15.898	(1.065)	1117778	4.86161	4.862
	49 Fluorene	166	16.022	16.014	(1.073)	1098065	4.34810	4.348
	51 4-Chlorophenyl-phenylether	204	16.014	16.014	(1.072)	559660	4.86533	4.865
	52 4-Nitroaniline	138	16.130	16.130	(1.080)	338428	5.91192	5.912
	53 4,6-Dinitro-2-methylphenol	198	16.230	16.222	(0.904)	1183729	23.0368	23.04
	54 N-Nitrosodiphenylamine	169	16.269	16.268	(0.907)	680989	3.24387	3.244
$	55 2,4,6-Tribromophenol	330	16.554	16.546	(1.109)	220836	6.84318	6.843
	56 4-Bromophenyl-phenylether	248	17.016	17.001	(0.948)	298252	3.54029	3.540
	57 Hexachlorobenzene	284	17.325	17.318	(0.965)	322466	3.31492	3.315
	58 Pentachlorophenol	266	17.689	17.674	(0.986)	651619	21.6184	21.62
*	59 Phenanthrene-d10	188	17.945	17.929	(1.000)	1395191	4.00000	
	60 Phenanthrene	178	17.991	17.975	(1.003)	2063726	4.70266	4.703
	61 Anthracene	178	18.084	18.068	(1.008)	1740194	4.16114	4.161
	62 Carbazole	167	18.417	18.401	(1.026)	1630120	4.25382	4.254
	63 Di-n-butylphthalate	149	19.237	19.213	(1.072)	1782520	4.20229	4.202
	64 Fluoranthene	202	20.428	20.358	(0.888)	3682553	7.13050	7.131
	65 Pyrene	202	20.846	20.776	(0.906)	8740792	15.8692	15.87
$	66 Terphenyl-d14	244	21.109	21.070	(0.918)	1875827	4.24609	4.246
	67 Butylbenzylphthalate	149	22.023	21.999	(0.958)	1150744	5.50214	5.502
	68 Benzo(a)anthracene	228	22.975	22.929	(0.999)	3486341	6.55132	6.551
*	69 Chrysene-d12	240	22.998	22.960	(1.000)	1474048	4.00000	
	70 3,3'-Dichlorobenzidine	252	22.929	22.898	(0.997)	126246	0.64471	0.6447
	71 Chrysene	228	23.045	23.006	(1.002)	3086710	5.57807	5.578
	72 bis(2-Ethylhexyl)phthalate	149	23.053	23.029	(0.960)	2836523	11.4308	11.43
*	134 Di-n-octylphthalate-d4	153	24.020	23.997	(1.000)	1728411	4.00000	
	73 Di-n-octylphthalate	149	24.036	24.005	(1.001)	2177674	4.52156	4.522(M)
	74 Benzo(b)fluoranthene	252	24.787	24.740	(0.972)	2554645	9.52428	9.524
	75 Benzo(k)fluoranthene	252	24.826	24.779	(0.974)	2880321	9.47532	9.475
	76 Benzo(a)pyrene	252	25.383	25.336	(0.996)	1774123	7.13493	7.135
*	77 Perylene-d12	264	25.491	25.445	(1.000)	822147	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.912	27.881	(1.095)	455813	1.46023	1.460
	79 Dibenzo(a,h)anthracene	278	27.920	27.889	(1.095)	341714	1.31260	1.313
	80 Benzo(g,h,i)perylene	276	28.634	28.595	(1.123)	301285	1.20392	1.204
	90 N-Nitrosodimethylamine	74	4.673	4.658	(0.526)	420653	7.78455	7.785
	91 Aniline	93	8.420	8.365	(0.947)	44141	0.31332	0.3133(H)
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	142	12.989	12.989	(1.145)	756767	3.73638	3.736
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.346	16.338	(1.095)	906455	3.57907	3.579

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.826	24.779	(0.974)	5085425	18.7524	18.75
120 2,3,4,6-Tetrachlorophenol	232	15.658	15.651	(1.049)	222679	3.64919	3.649

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272309.D
Lab Smp Id: BLA0410-MS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230227.b\ABN.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:03
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	269759	134880	539518	269794	0.01
27 Naphthalene-d8	1037039	518520	2074078	1071124	3.29
42 Acenaphthene-d10	556159	278080	1112318	620139	11.50
59 Phenanthrene-d10	1021294	510647	2042588	1395191	36.61
69 Chrysene-d12	922264	461132	1844528	1474048	59.83
134 Di-n-octylphthala	1611284	805642	3222568	1728411	7.27
77 Perylene-d12	948357	474179	1896714	822147	-13.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.89	8.39	9.39	8.89	0.00
27 Naphthalene-d8	11.34	10.84	11.84	11.34	0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.93	0.05
59 Phenanthrene-d10	17.93	17.43	18.43	17.95	0.09
69 Chrysene-d12	22.96	22.46	23.46	23.00	0.17
134 Di-n-octylphthala	24.00	23.50	24.50	24.02	0.10
77 Perylene-d12	25.45	24.95	25.95	25.49	0.18

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272309.D

Lab ID: BLA0410-MS1
nt18.i, ABN.m, 27-FEB-2023 22:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.947	0.941	0.0061	Aniline

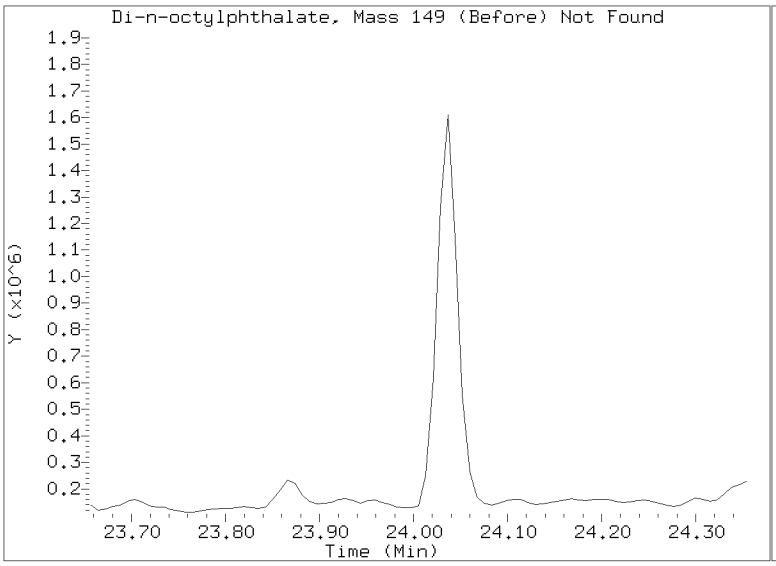
RRT check based on Ccal File: NT1802272302.D

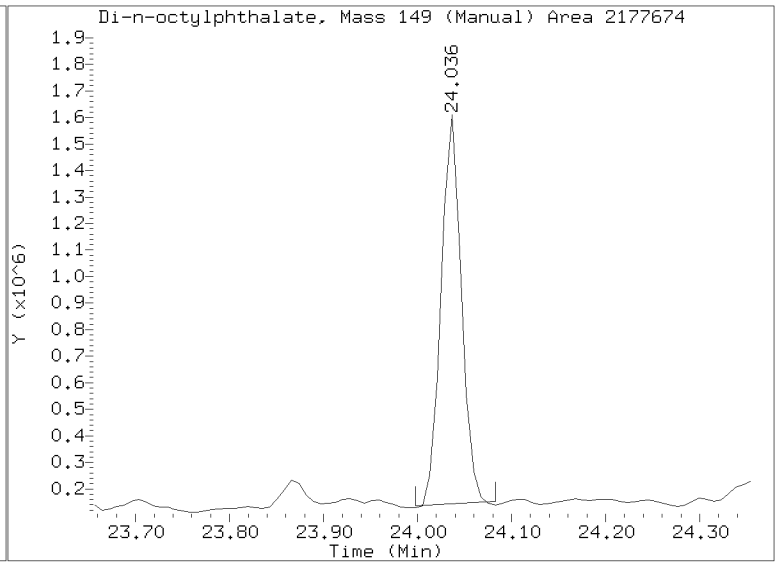
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230227.b/NT1802272309.D
Injection Date: 27-FEB-2023 22:32
Lab ID:BLA0410-MS1 Client ID:
Report Date: 03/24/2023 10:41





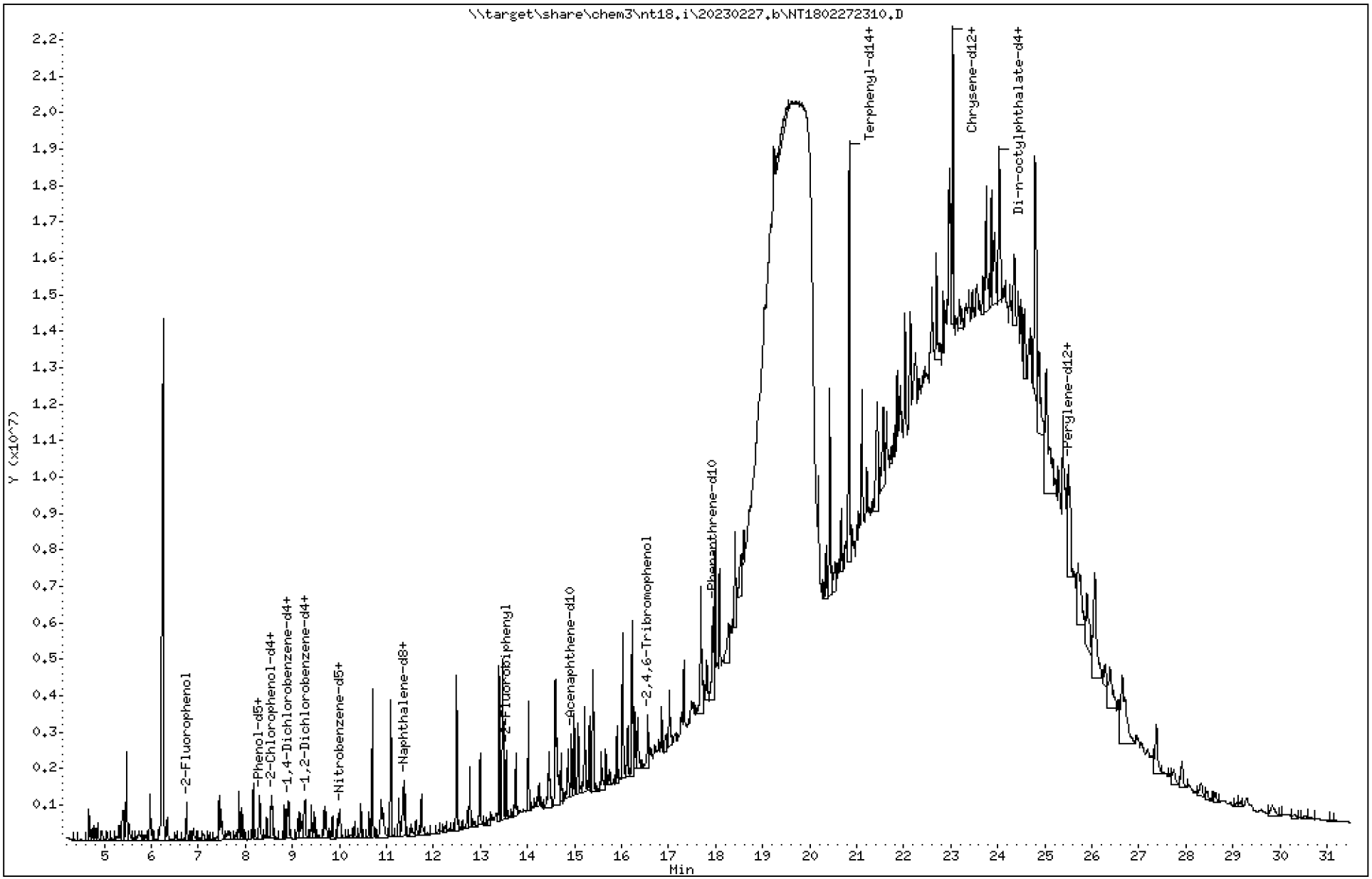
APPROVED

By Deenay Dunmore at 10:45 am, Mar 24, 2023

Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D
Date : 27-FEB-2023 23:12
Client ID:
Sample Info: BLA0410-MSD1

Instrument: nt18.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

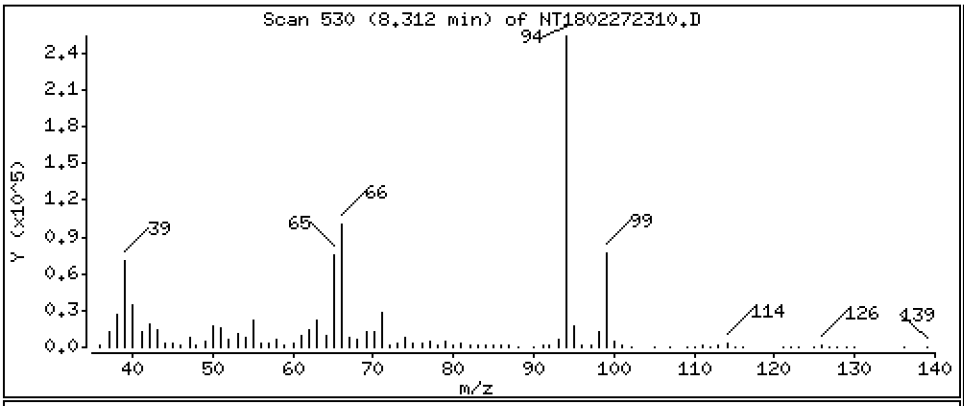
Operator: VTS

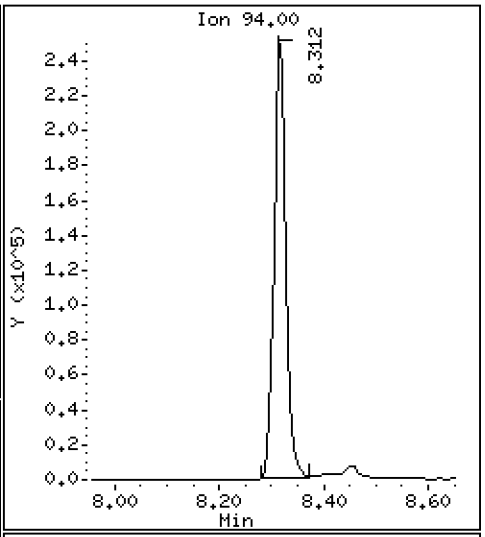
Column phase: ZB-5msi

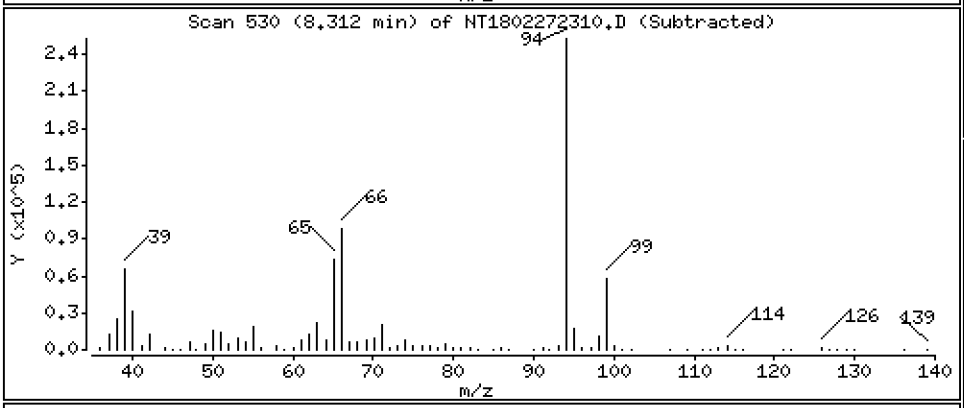
Column diameter: 0.25

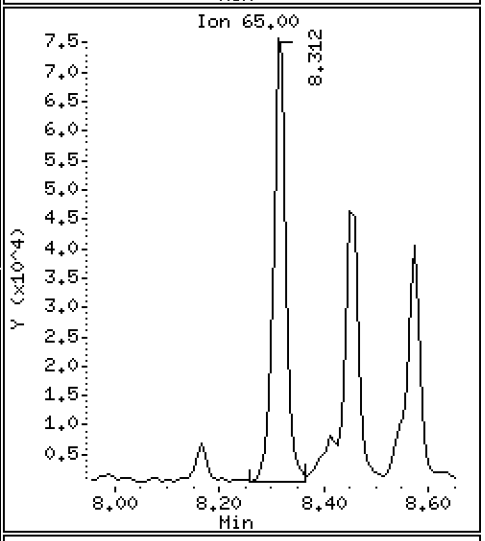
3 Phenol

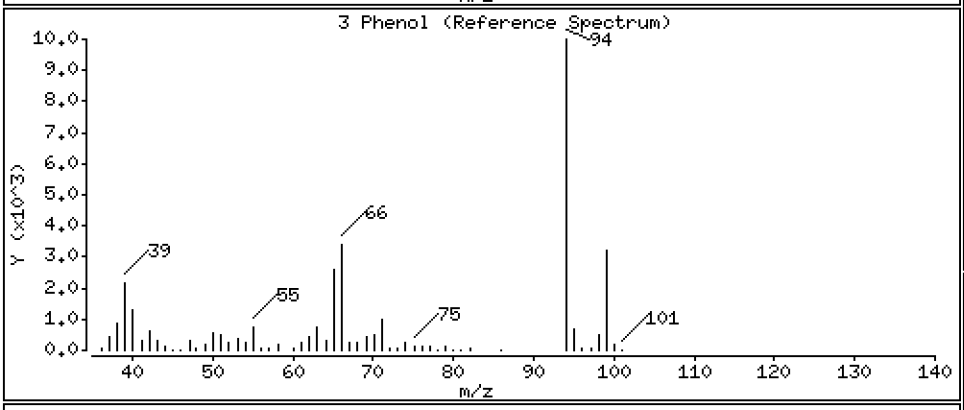
Concentration: 3.155 ug/mL

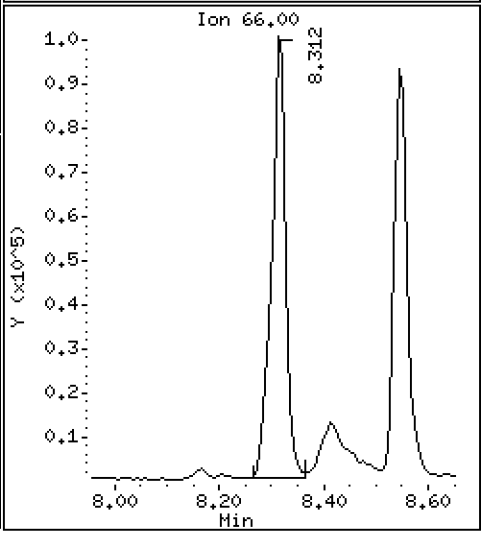


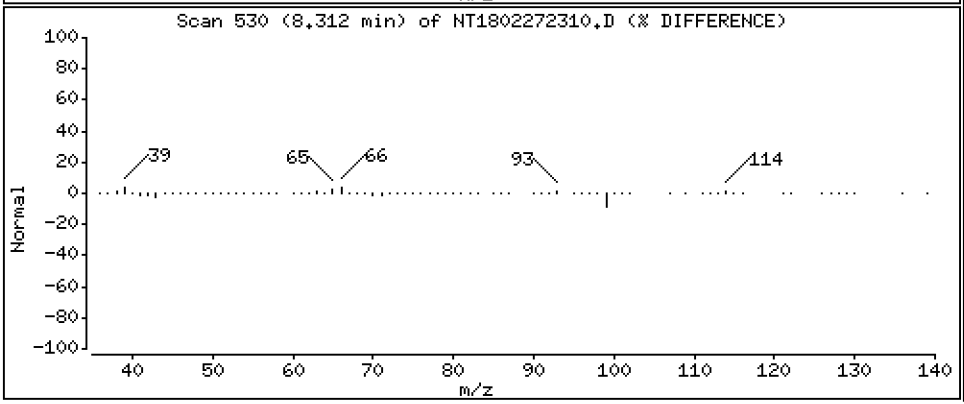












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

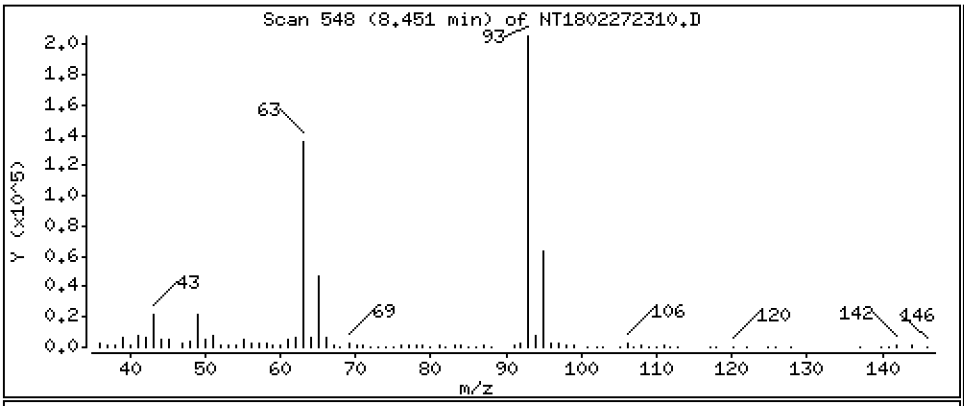
Operator: VTS

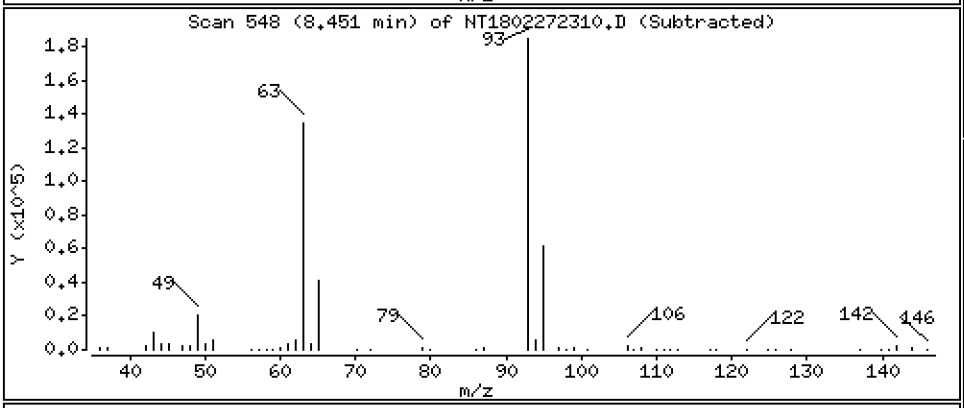
Column phase: ZB-5msi

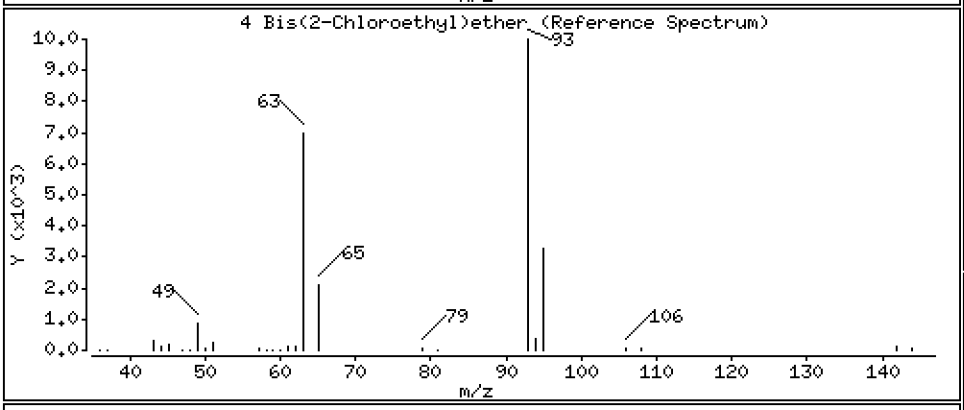
Column diameter: 0.25

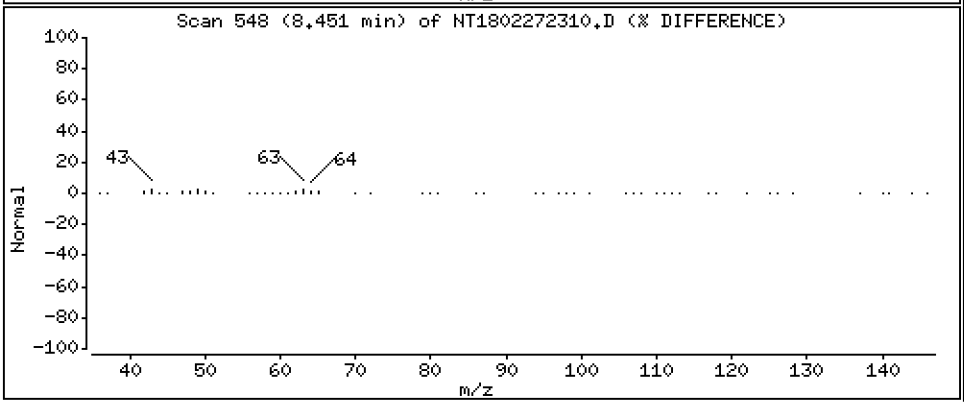
4 Bis(2-Chloroethyl)ether

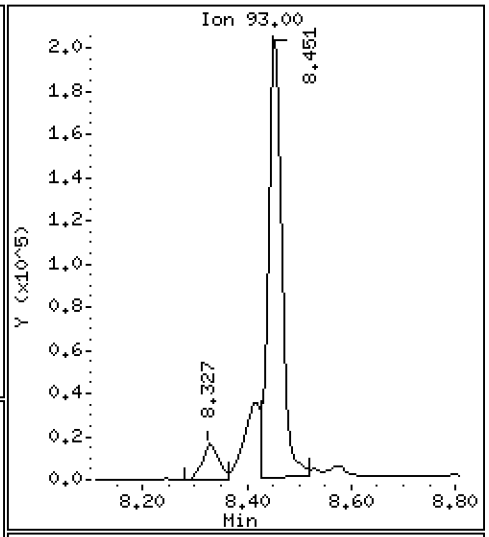
Concentration: 4.194 ug/mL

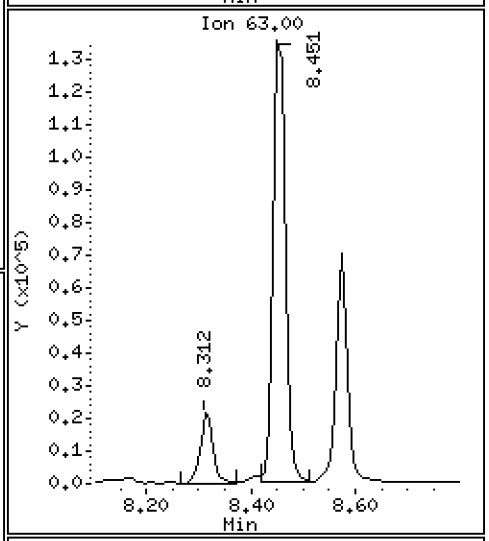


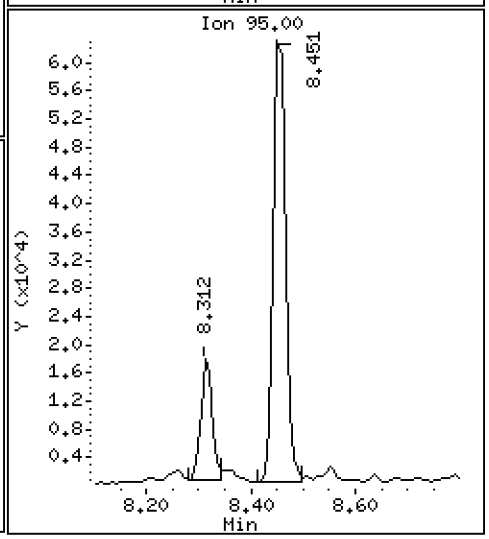












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

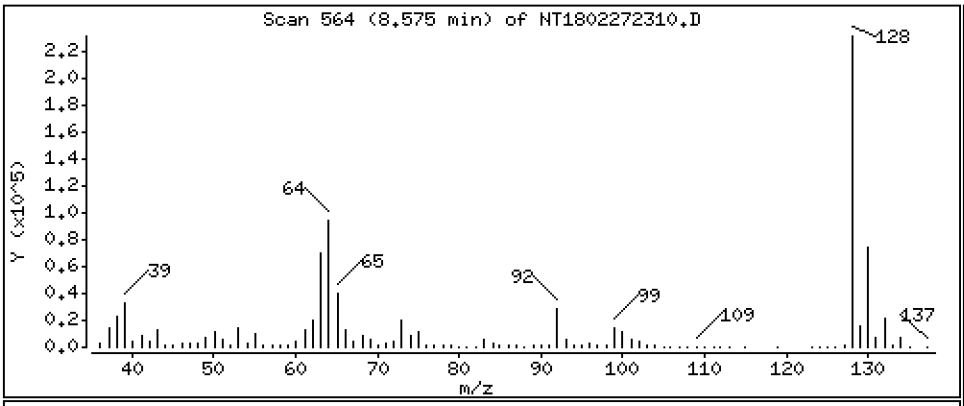
Operator: VTS

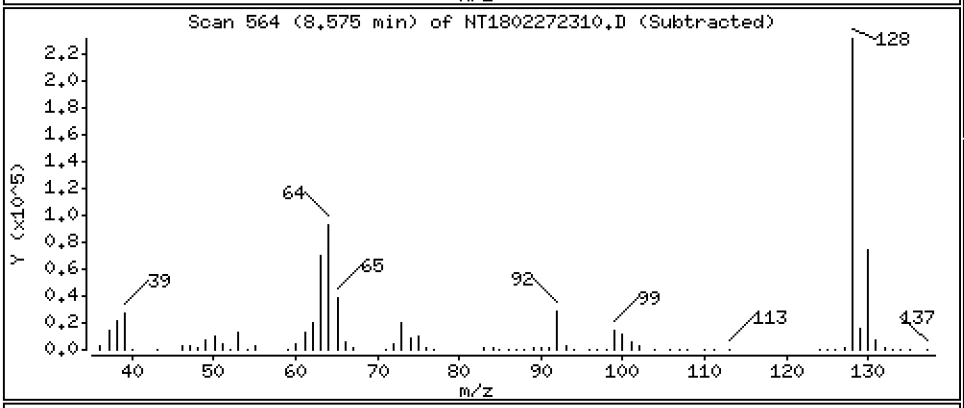
Column phase: ZB-5msi

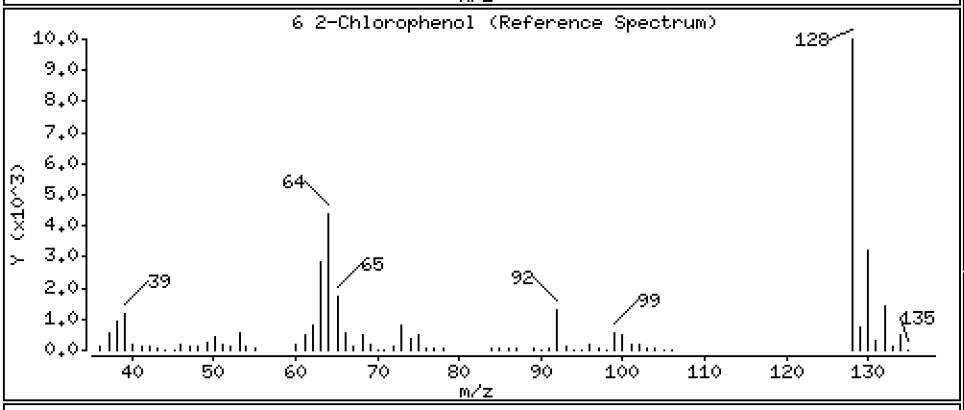
Column diameter: 0.25

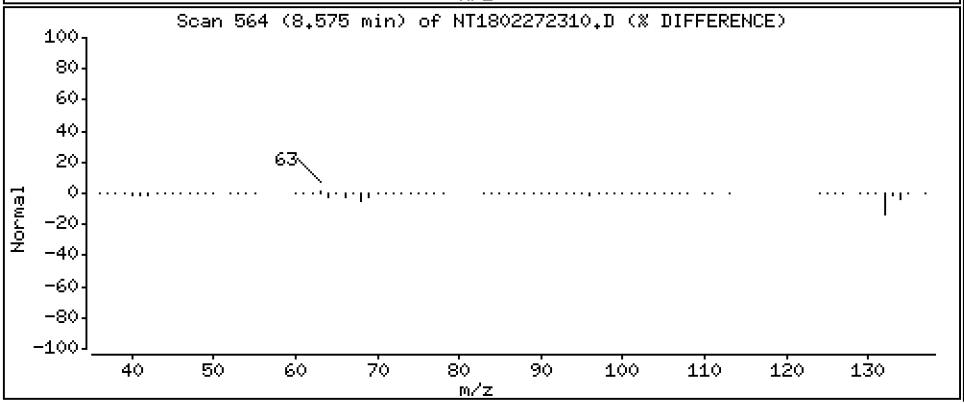
6 2-Chlorophenol

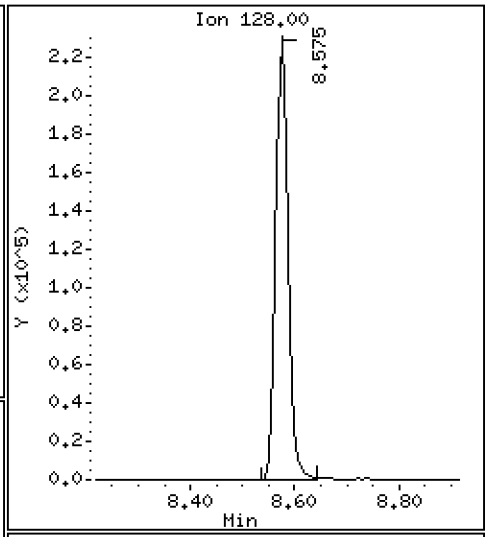
Concentration: 3.318 ug/mL

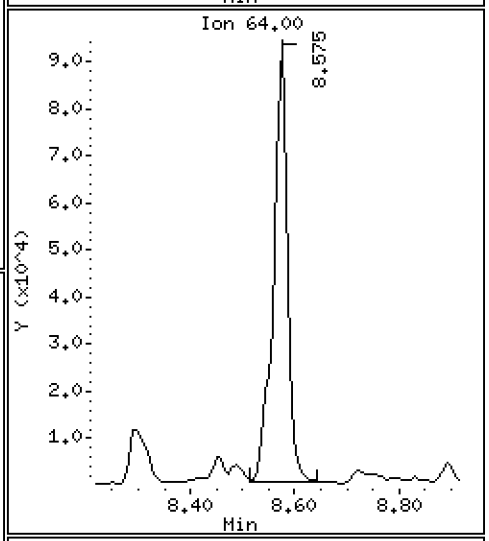


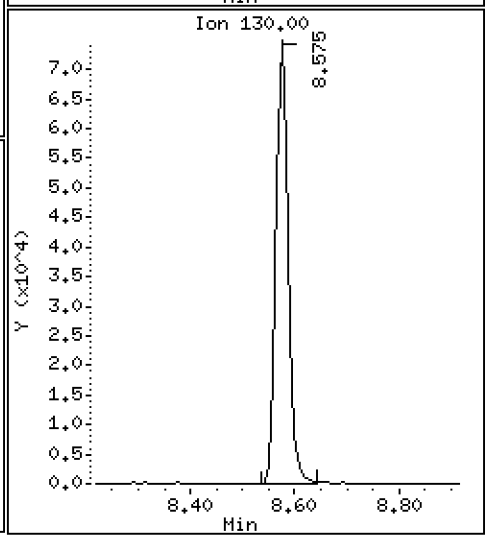












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

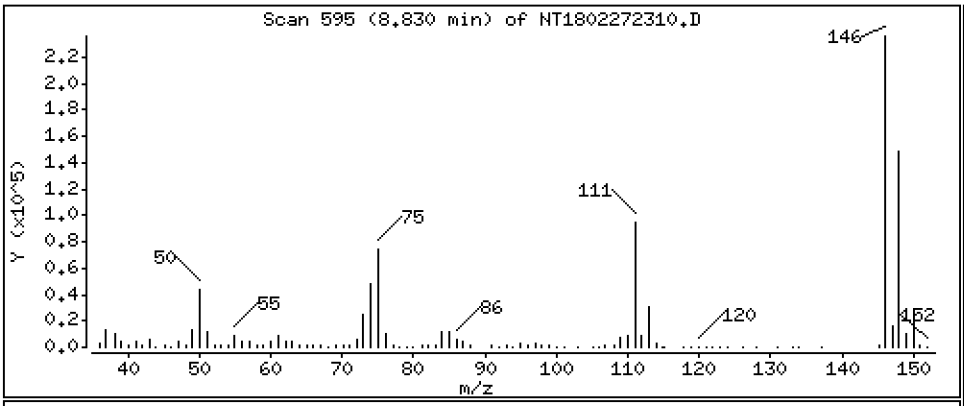
Operator: VTS

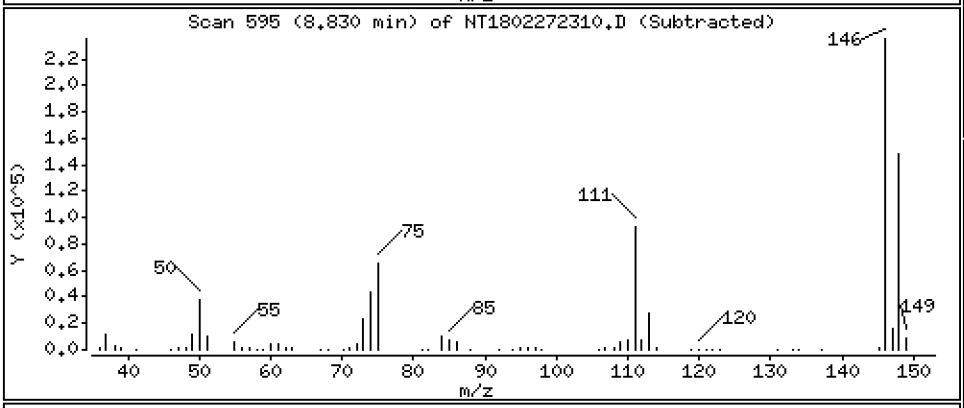
Column phase: ZB-5msi

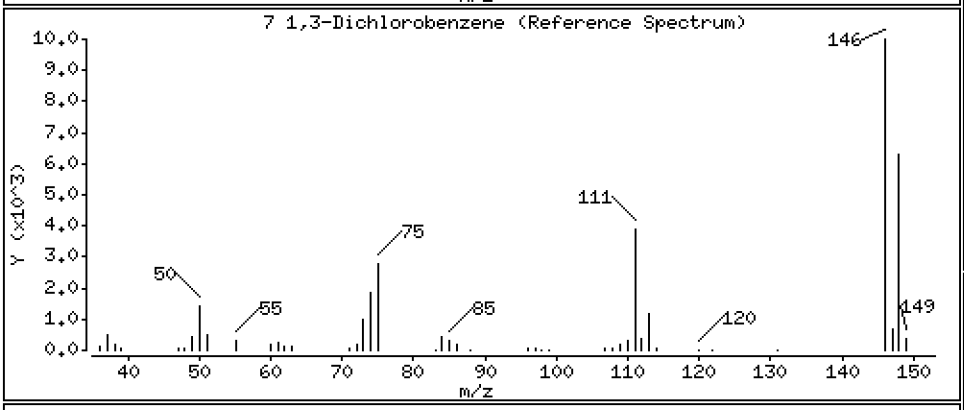
Column diameter: 0.25

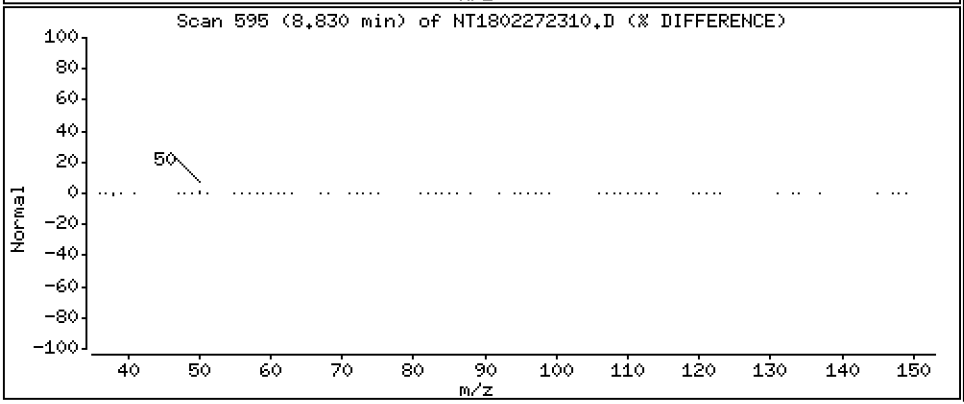
7 1,3-Dichlorobenzene

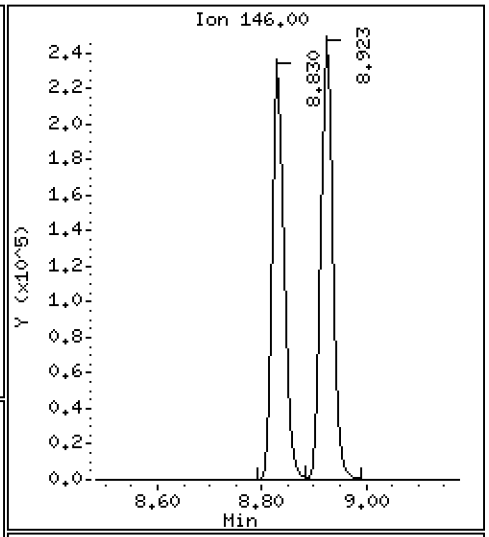
Concentration: 3.165 ug/mL

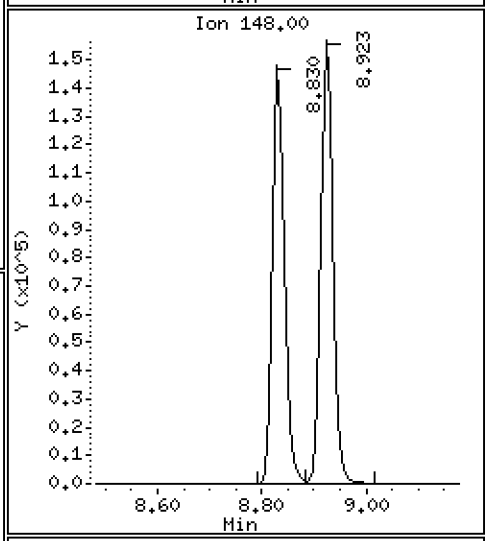


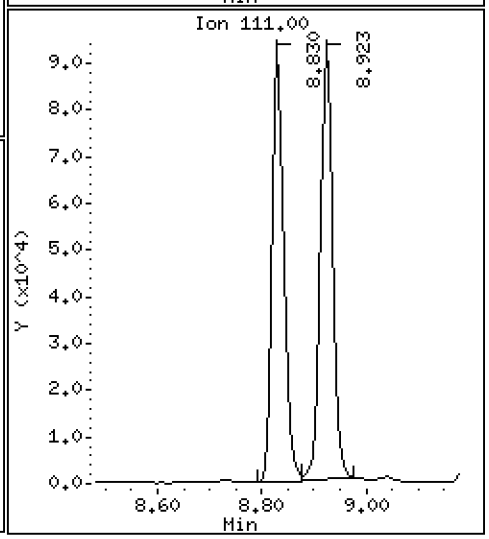












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

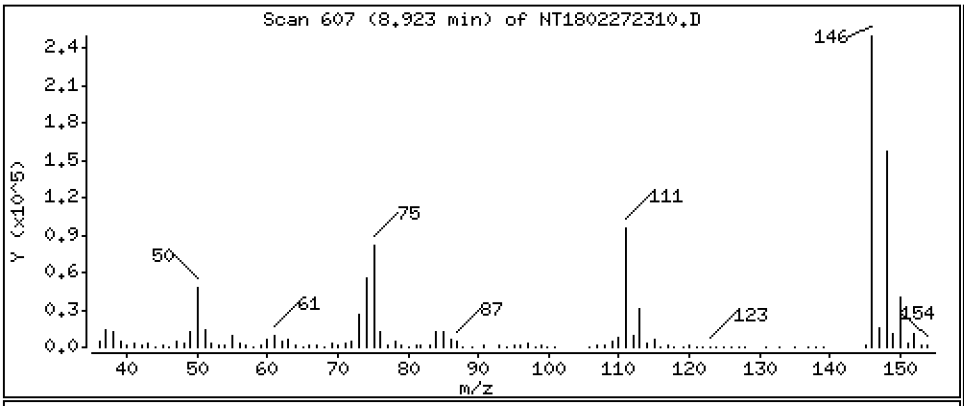
Operator: VTS

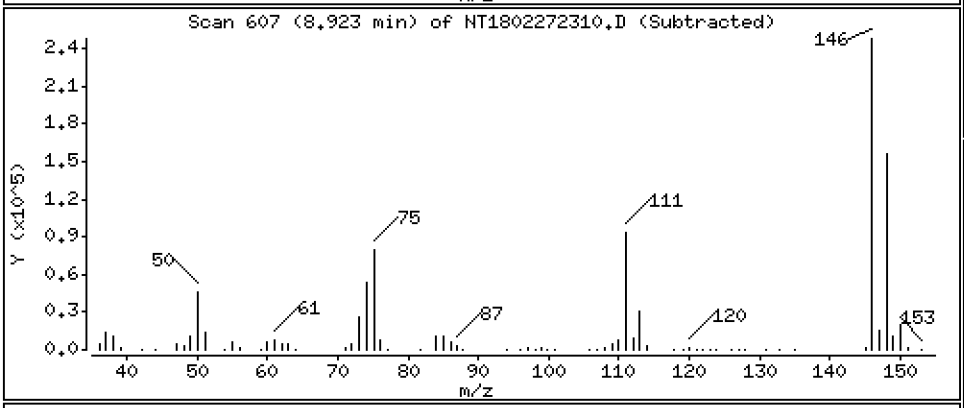
Column phase: ZB-5msi

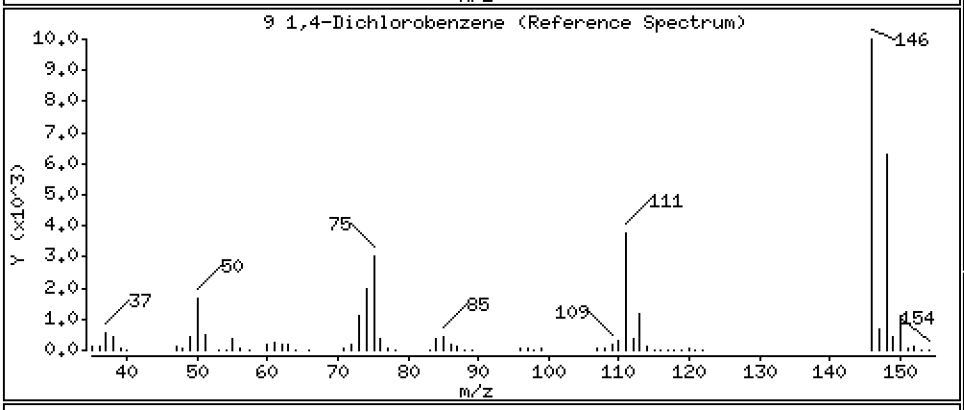
Column diameter: 0.25

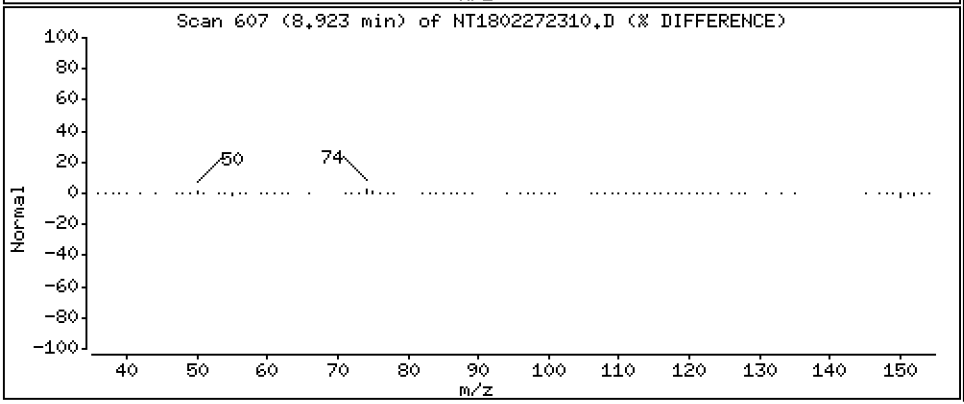
9 1,4-Dichlorobenzene

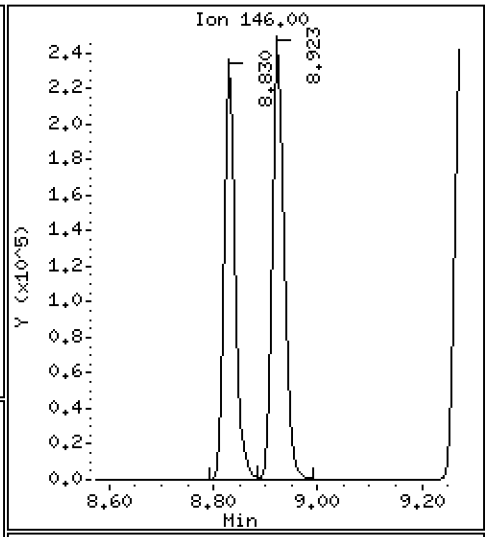
Concentration: 3.242 ug/mL

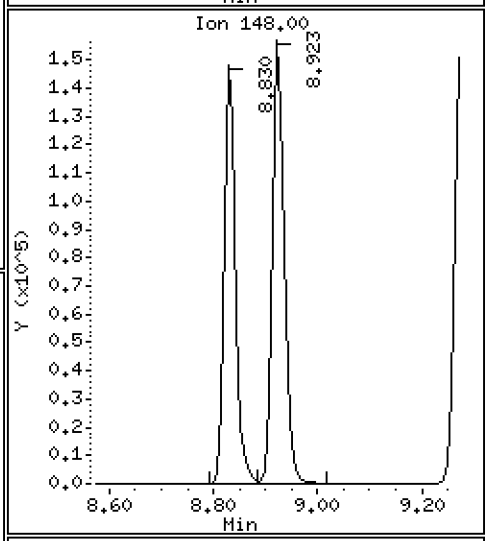


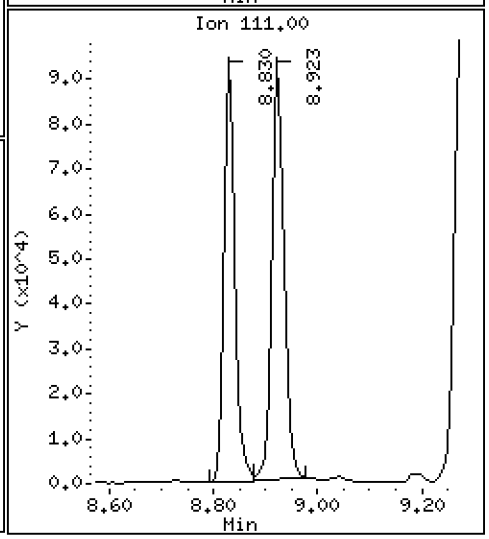












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

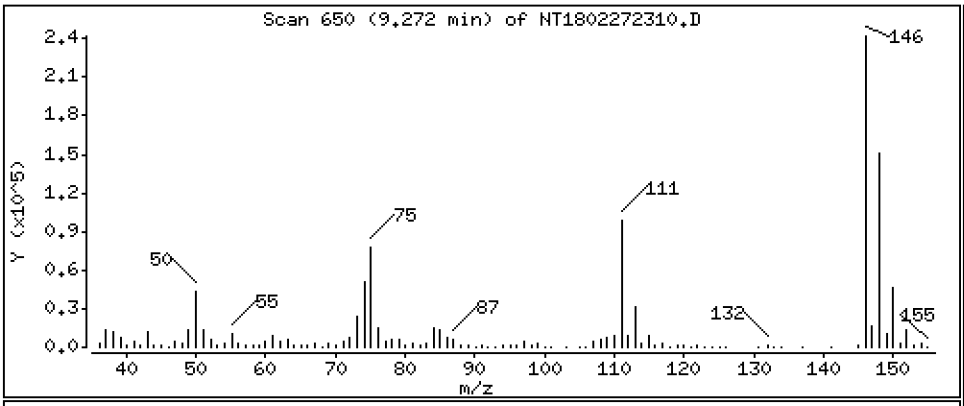
Operator: VTS

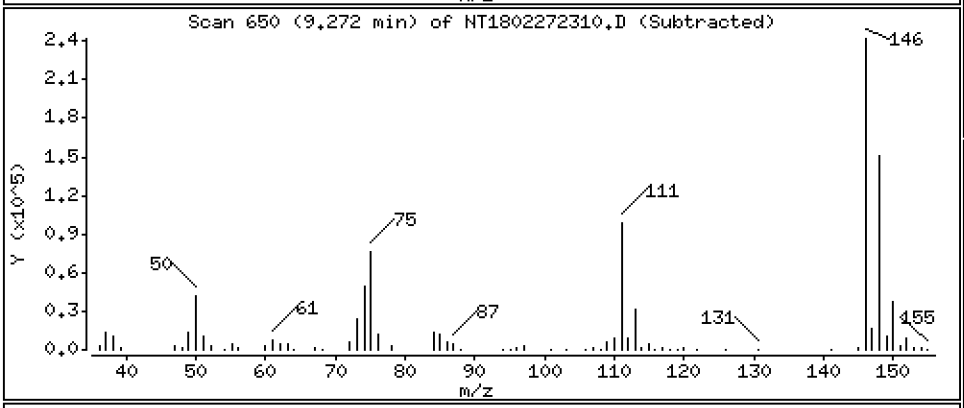
Column phase: ZB-5msi

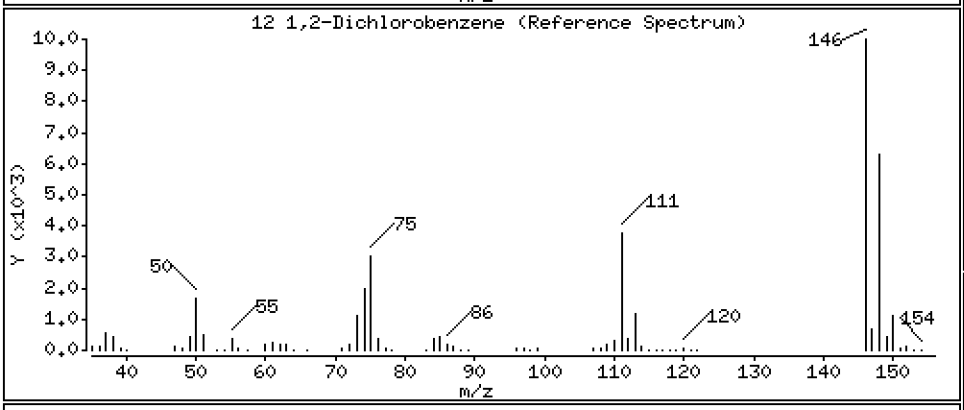
Column diameter: 0.25

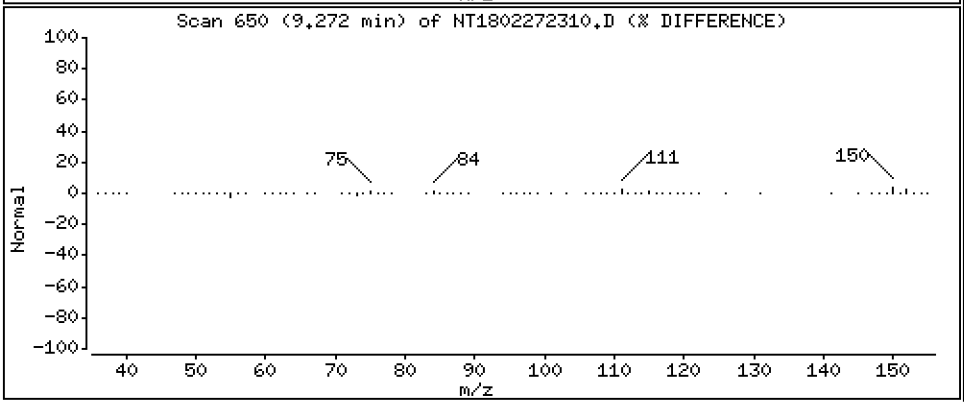
12 1,2-Dichlorobenzene

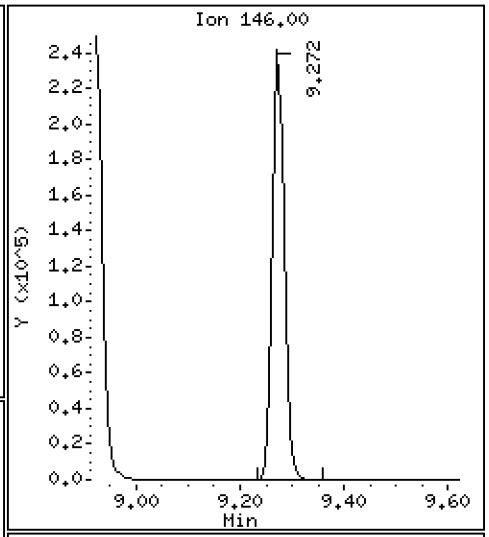
Concentration: 3.229 ug/mL

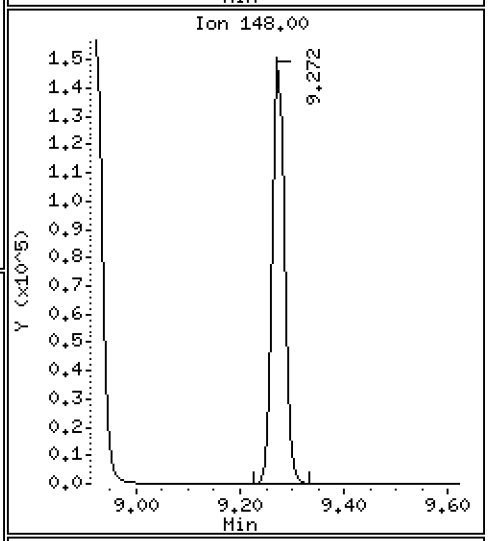


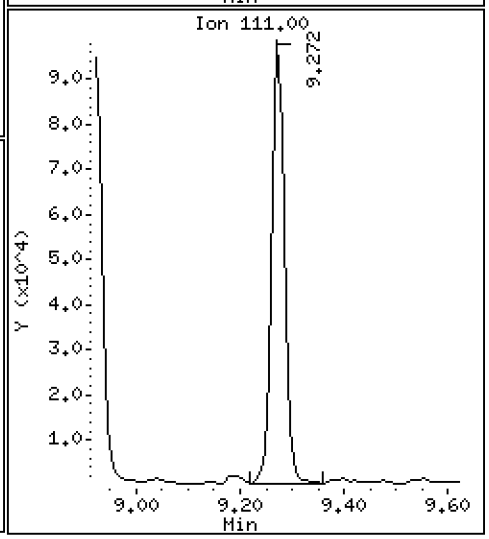












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

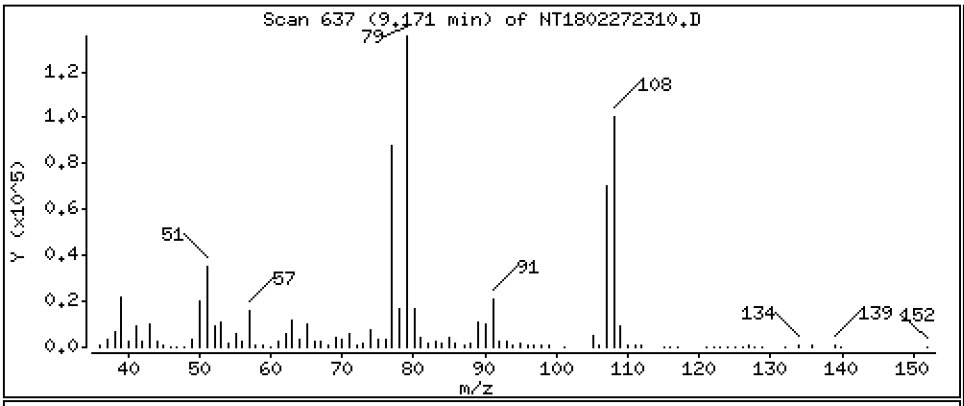
Operator: VTS

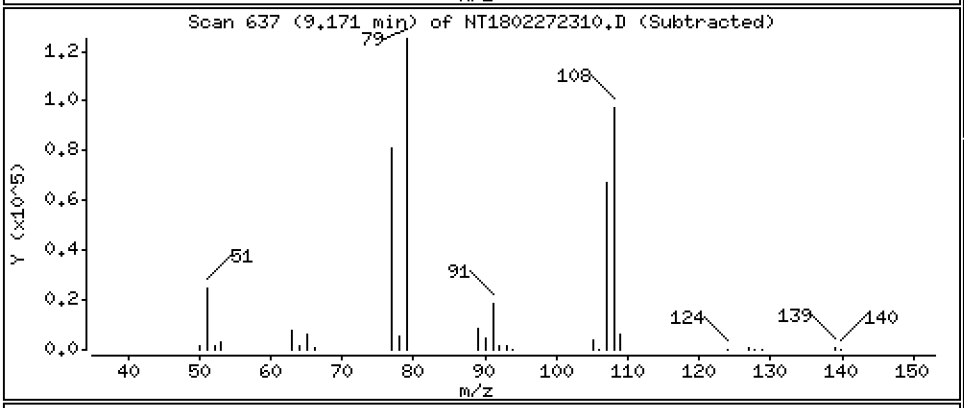
Column phase: ZB-5msi

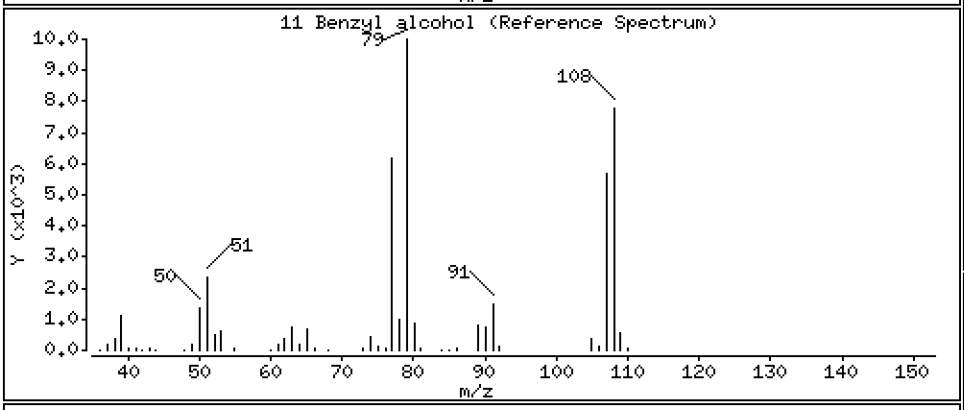
Column diameter: 0.25

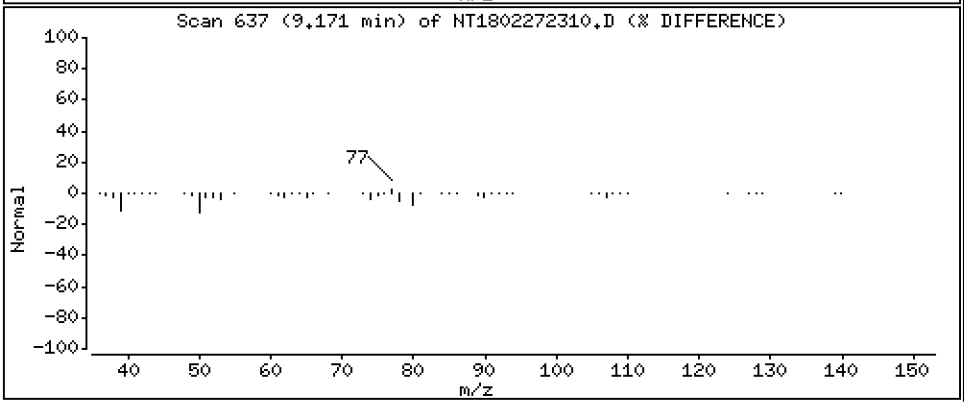
11 Benzyl alcohol

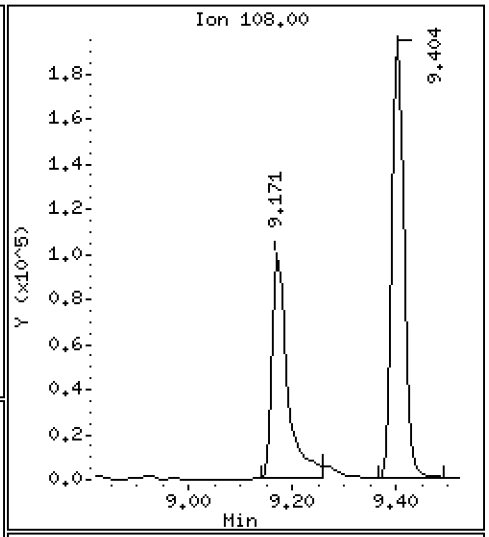
Concentration: 3.330 ug/mL

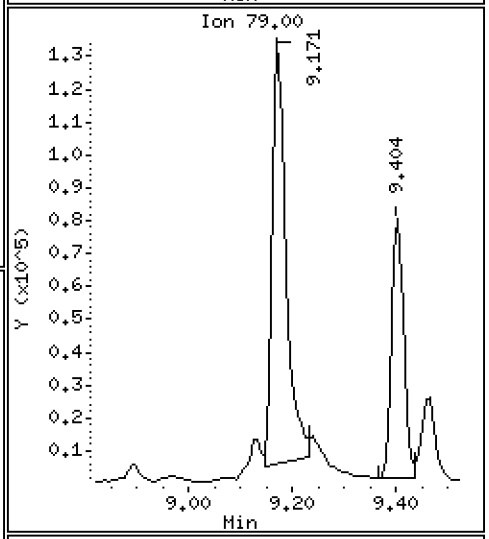


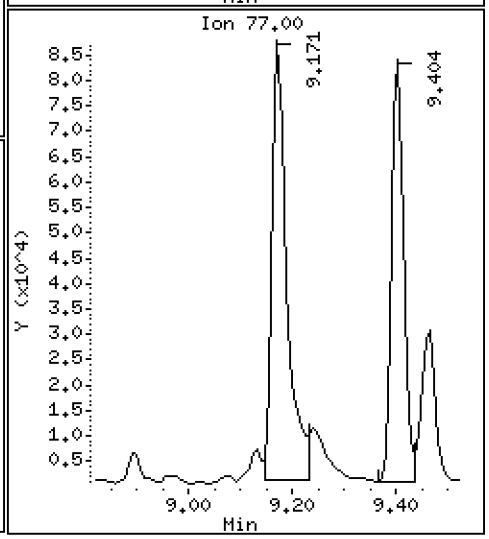












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

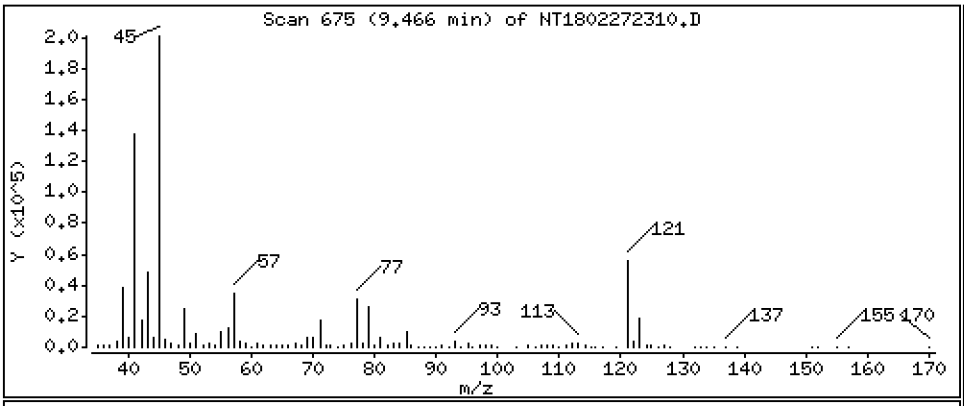
Operator: VTS

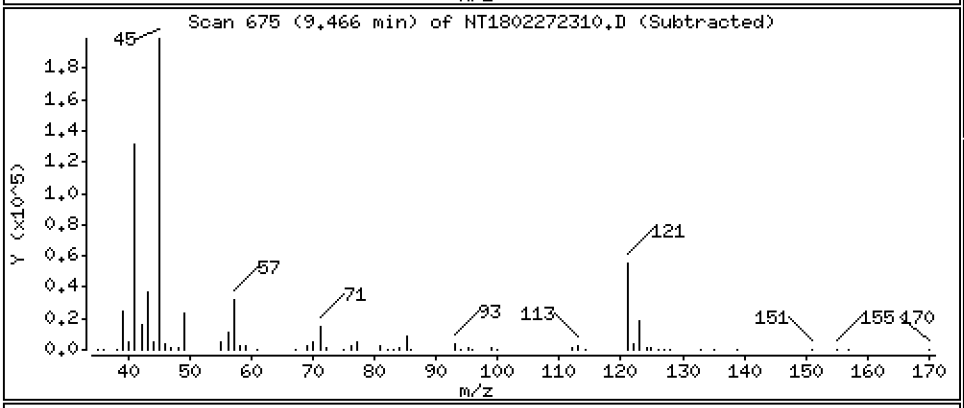
Column phase: ZB-5msi

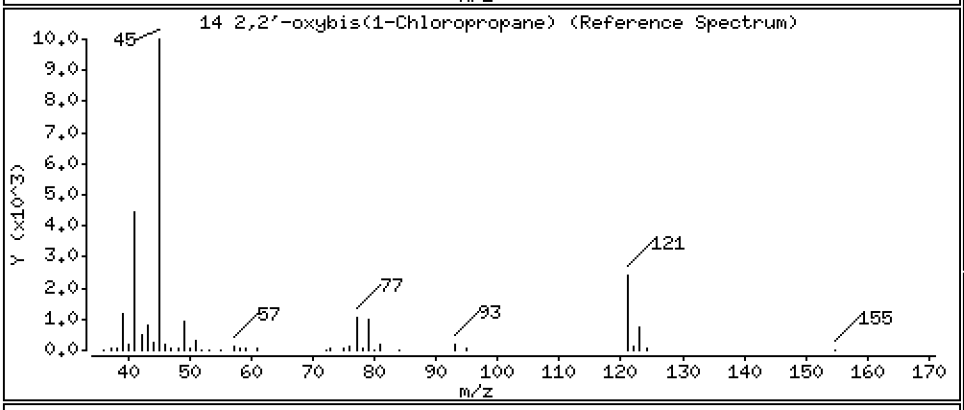
Column diameter: 0.25

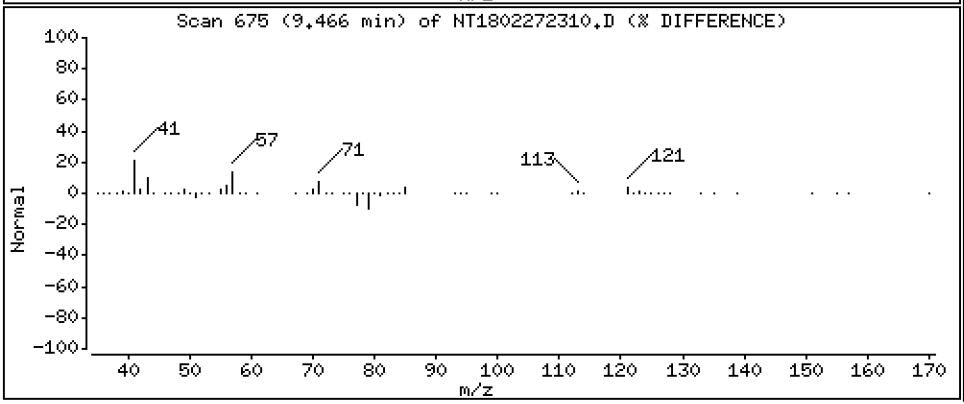
14 2,2'-oxybis(1-Chloropropane)

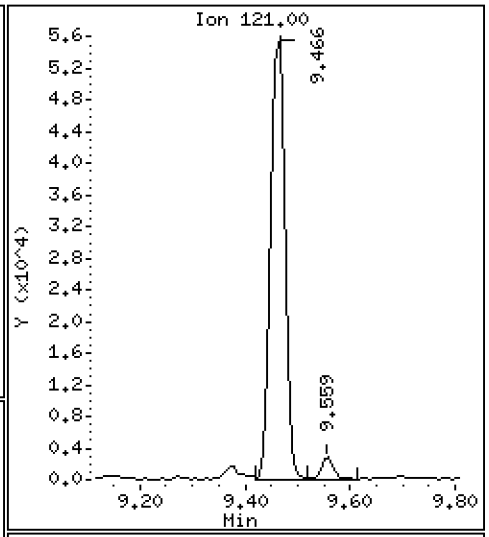
Concentration: 3.897 ug/mL

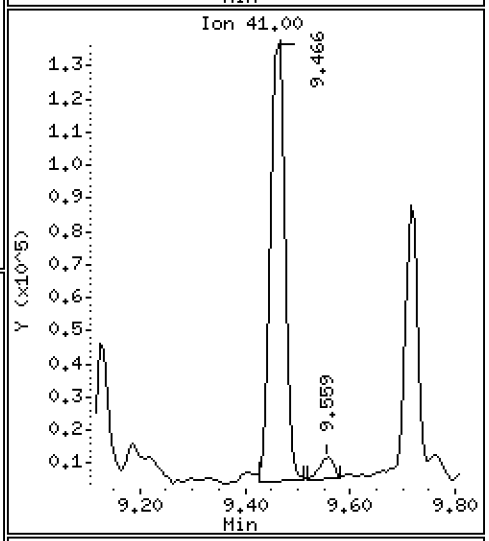


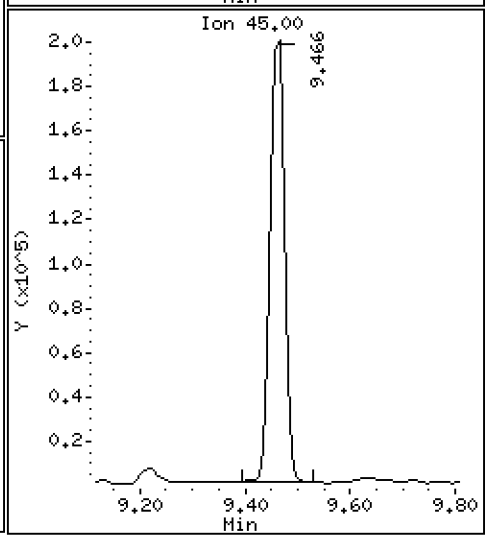












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

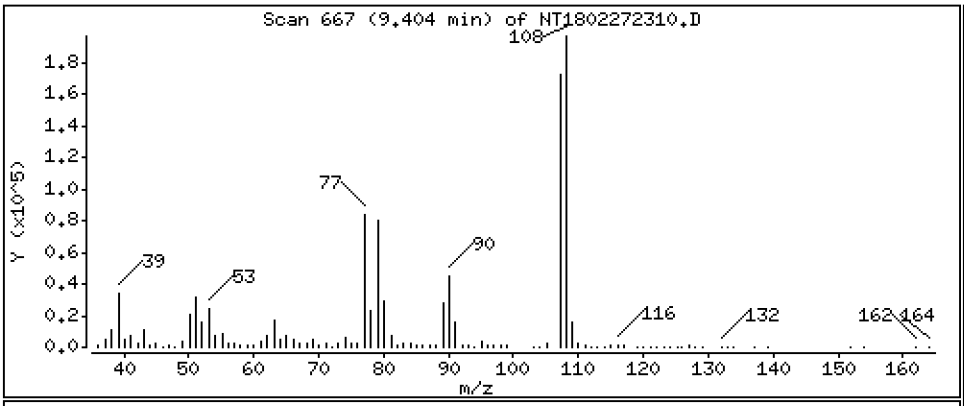
Operator: VTS

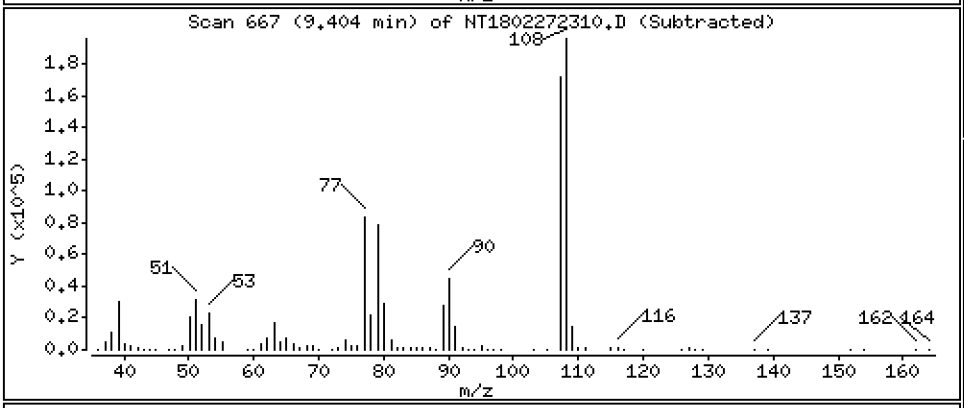
Column phase: ZB-5msi

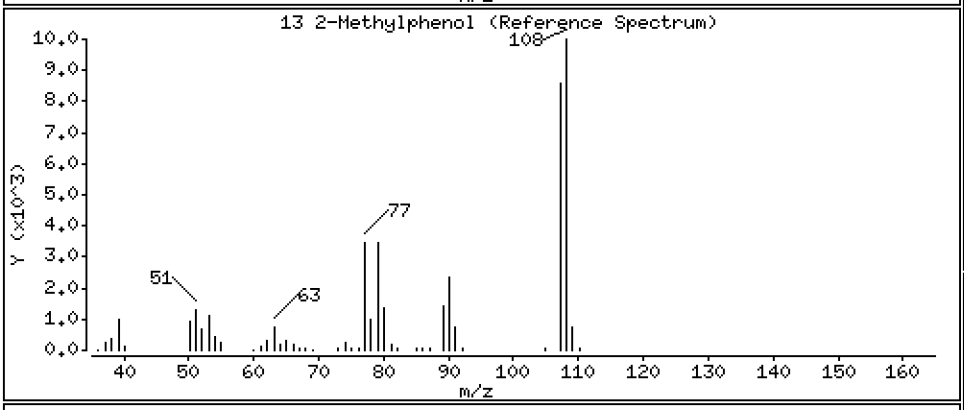
Column diameter: 0.25

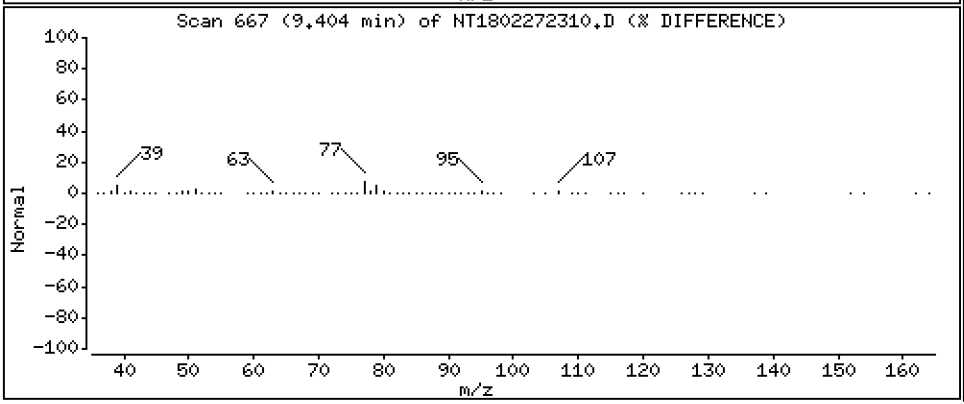
13 2-Methylphenol

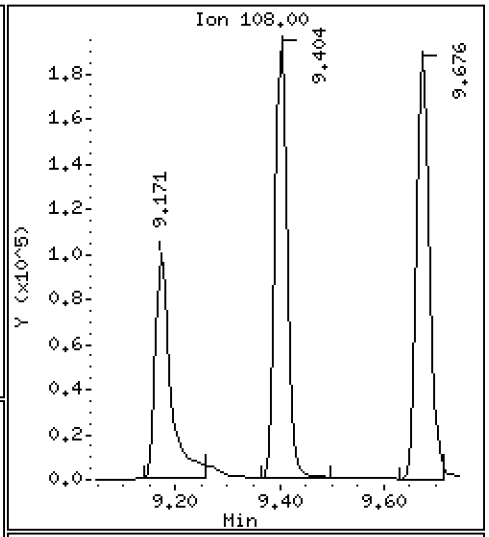
Concentration: 3.094 ug/mL

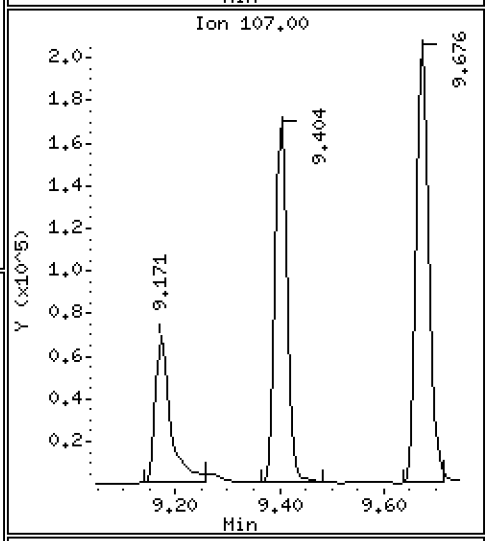


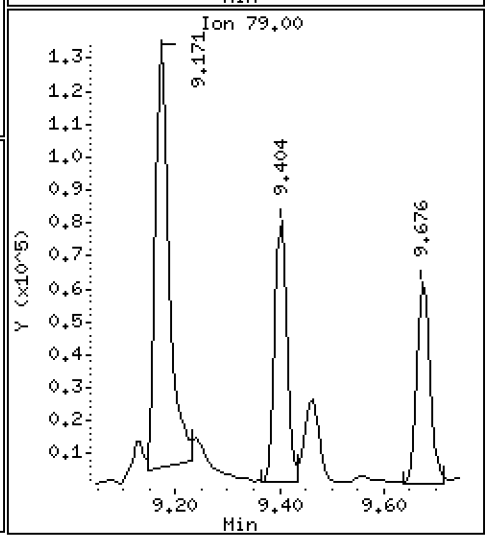












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

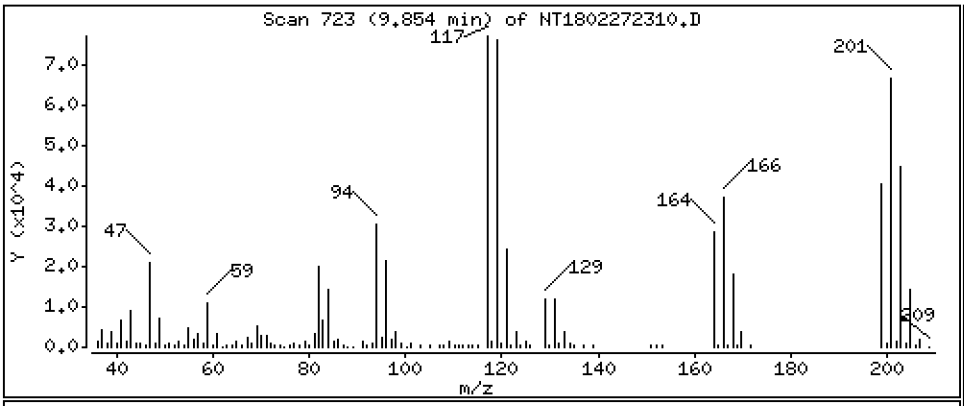
Operator: VTS

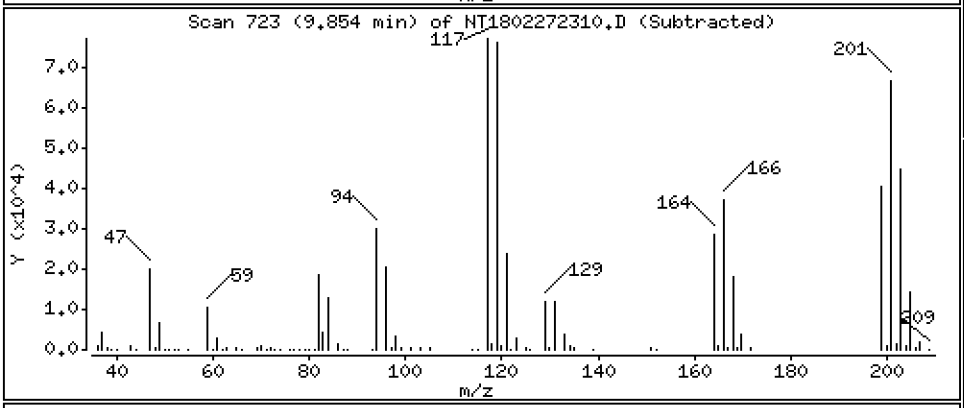
Column phase: ZB-5msi

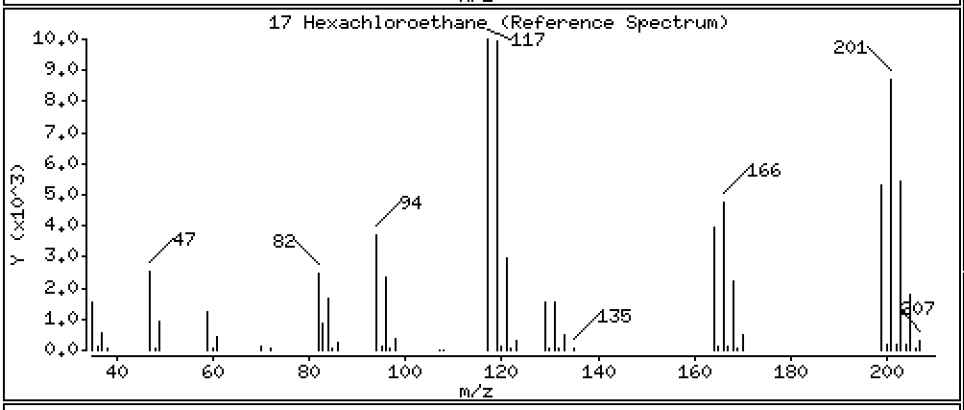
Column diameter: 0.25

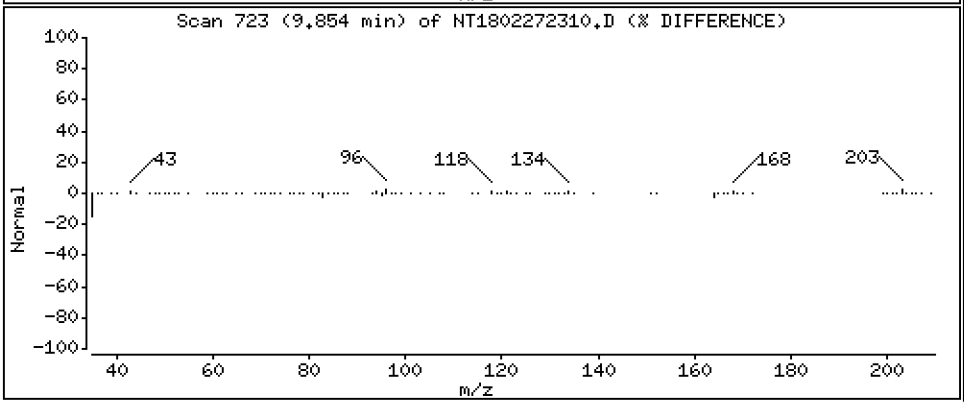
17 Hexachloroethane

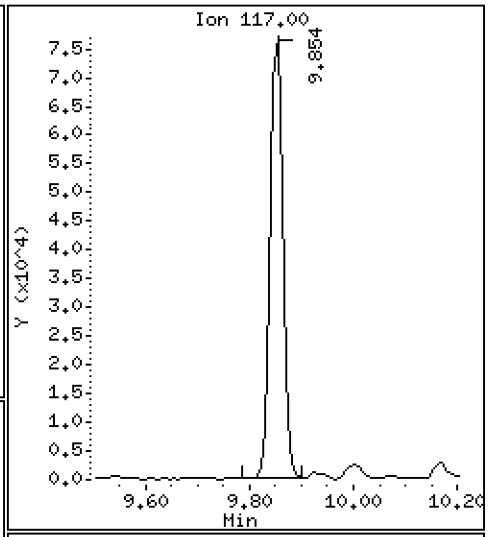
Concentration: 2.761 ug/mL

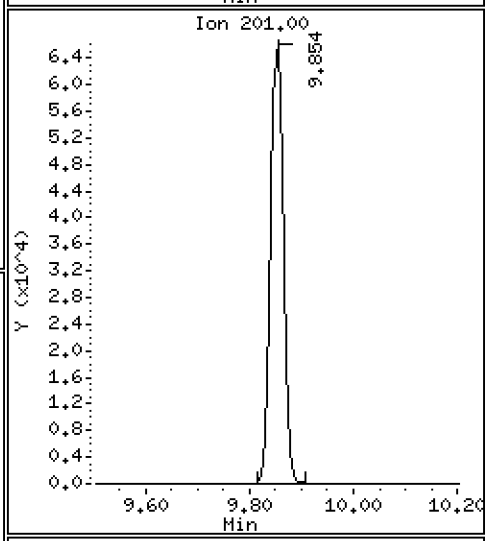


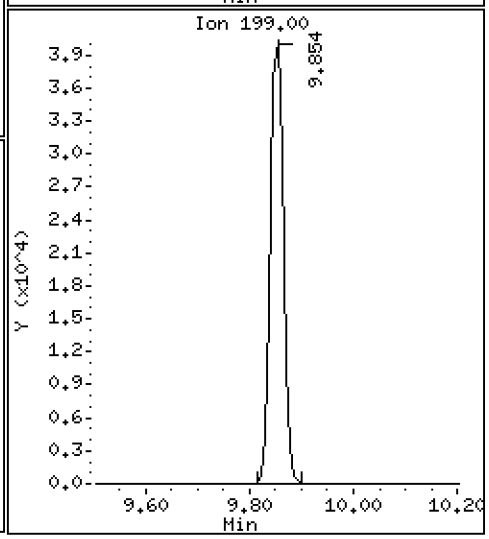












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

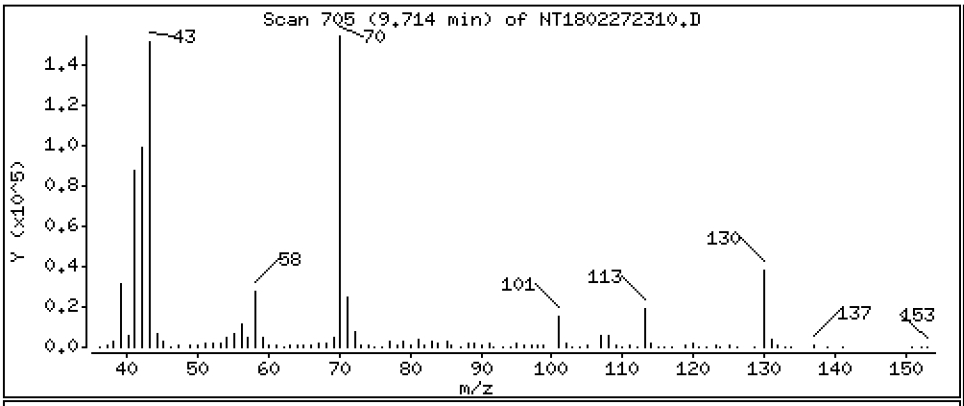
Operator: VTS

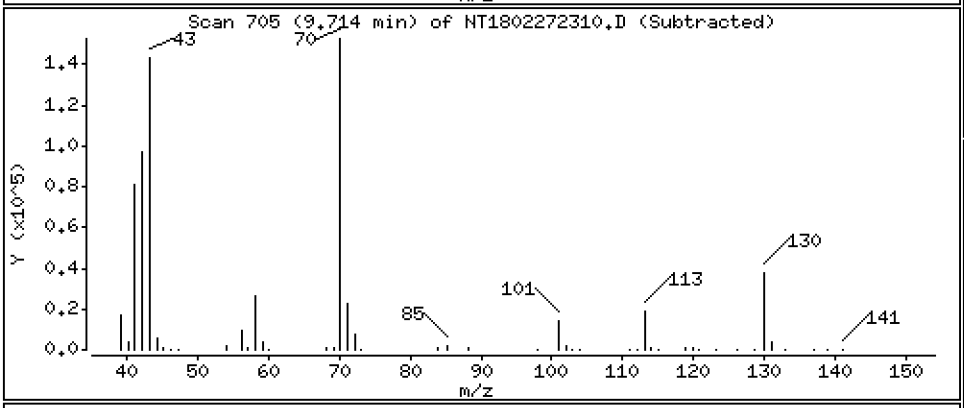
Column phase: ZB-5msi

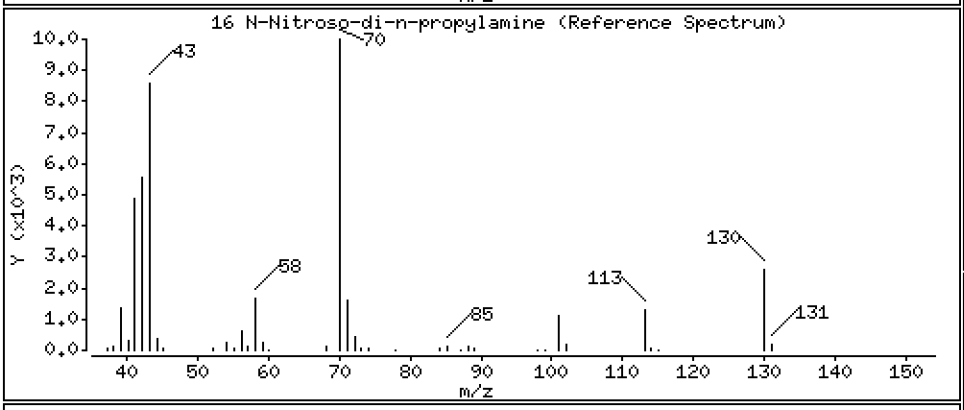
Column diameter: 0.25

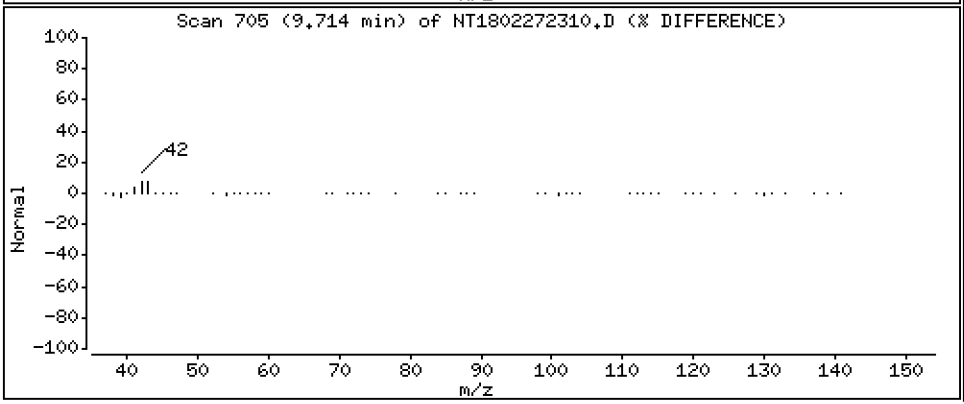
16 N-Nitroso-di-n-propylamine

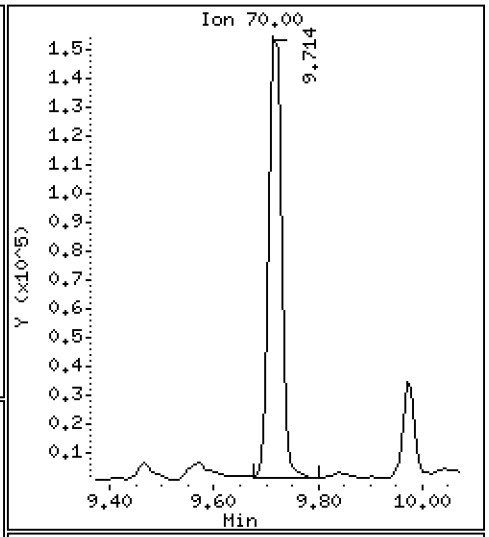
Concentration: 3.496 ug/mL

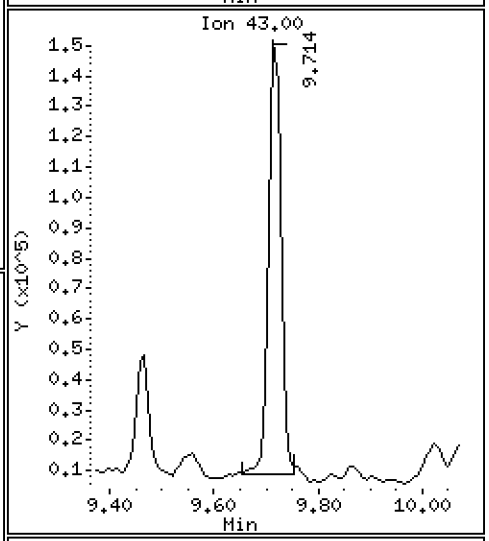


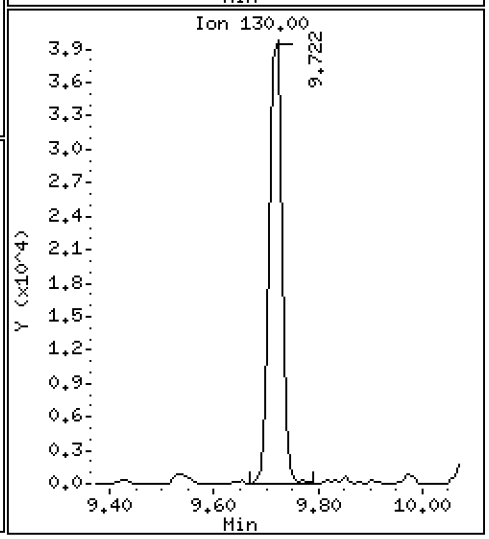












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

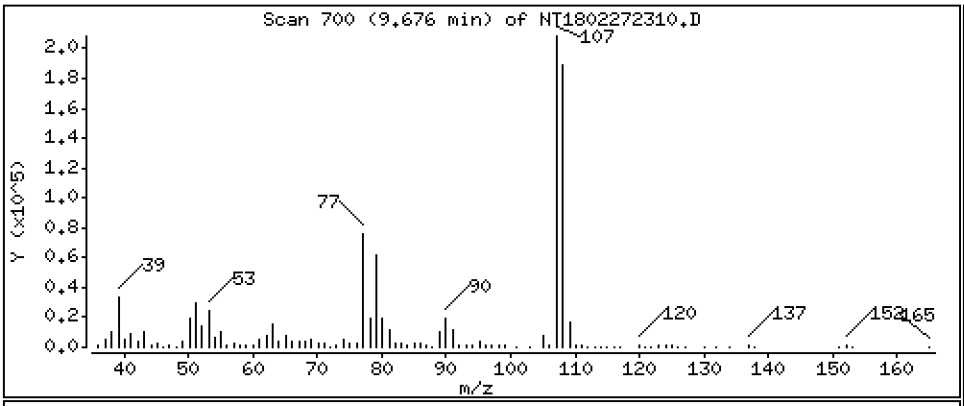
Operator: VTS

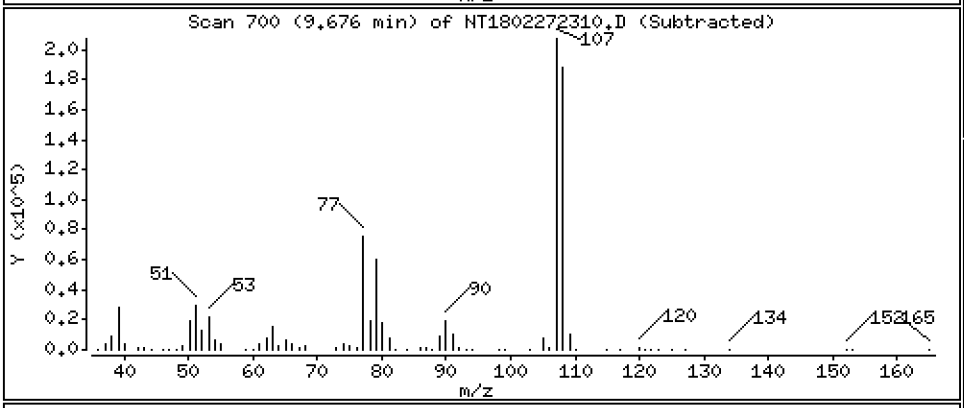
Column phase: ZB-5msi

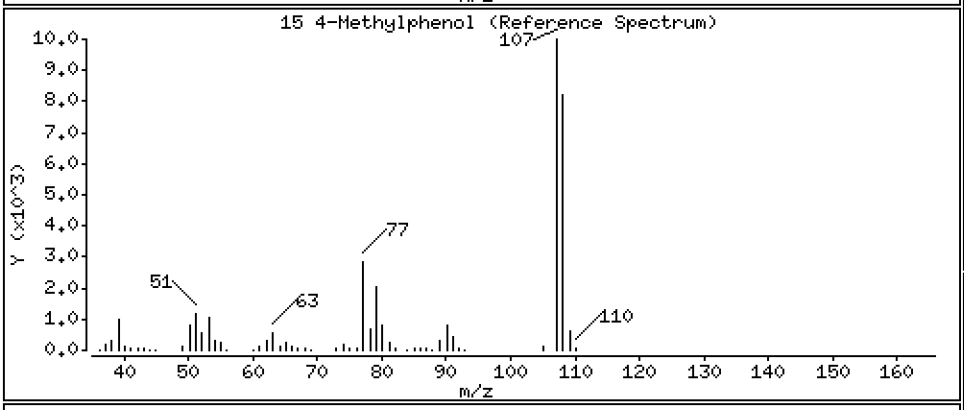
Column diameter: 0.25

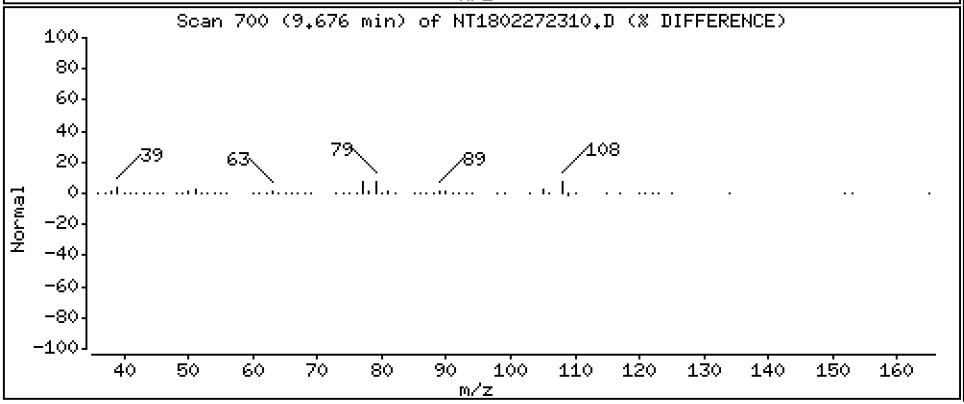
15 4-Methylphenol

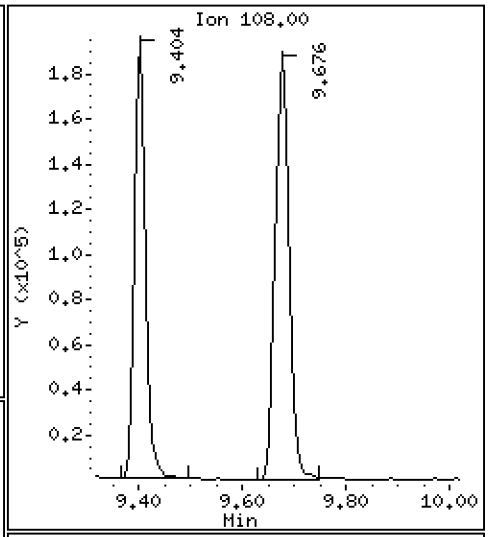
Concentration: 3.413 ug/mL

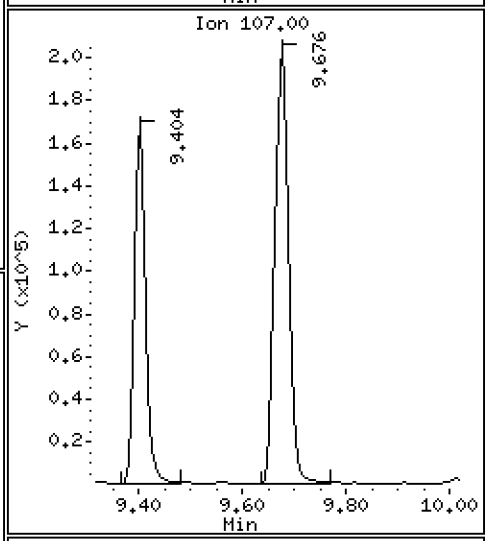


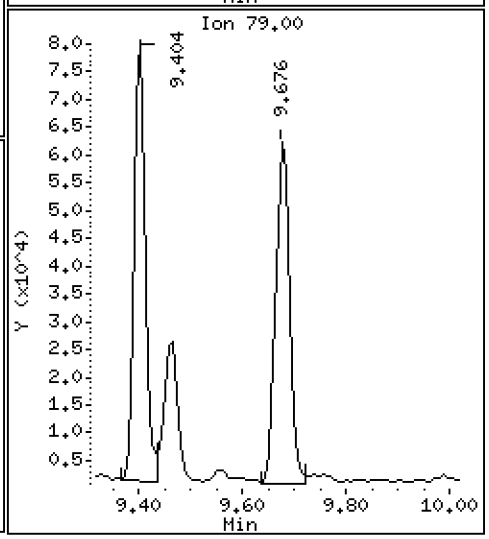












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

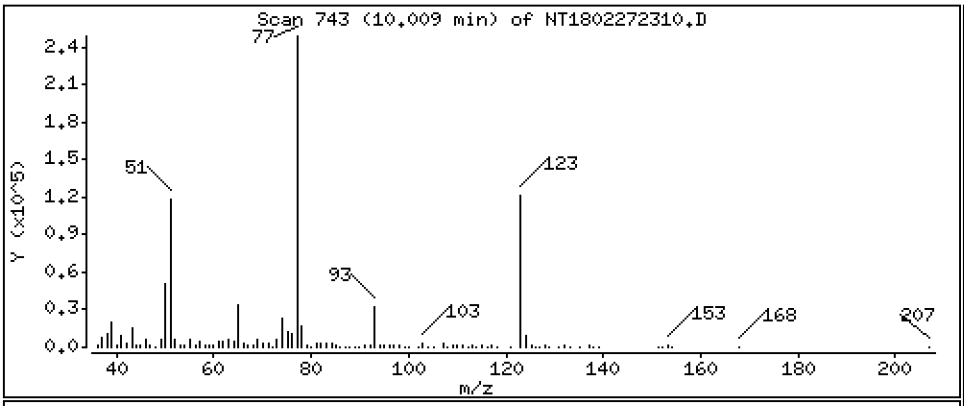
Operator: VTS

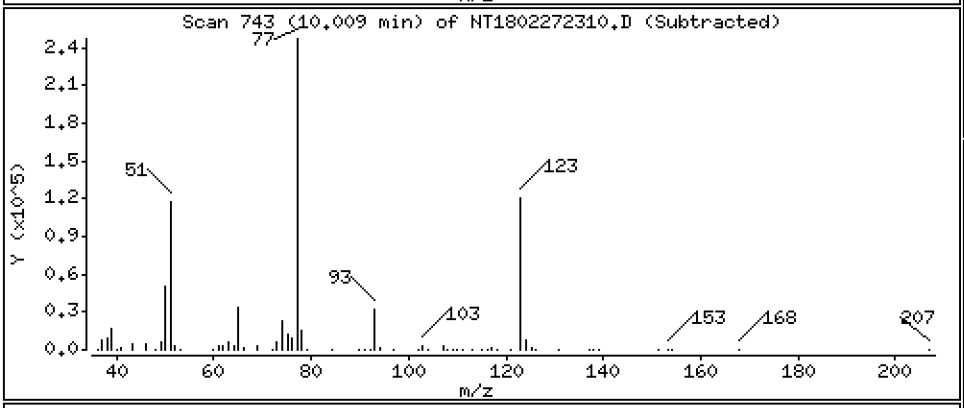
Column phase: ZB-5msi

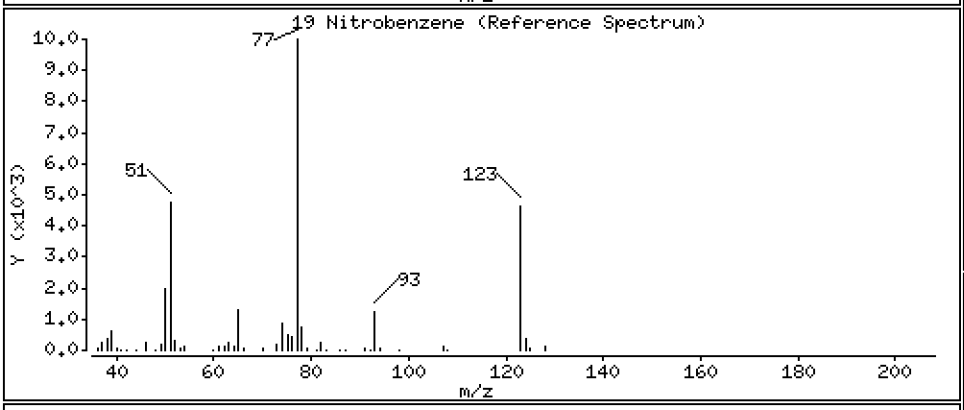
Column diameter: 0.25

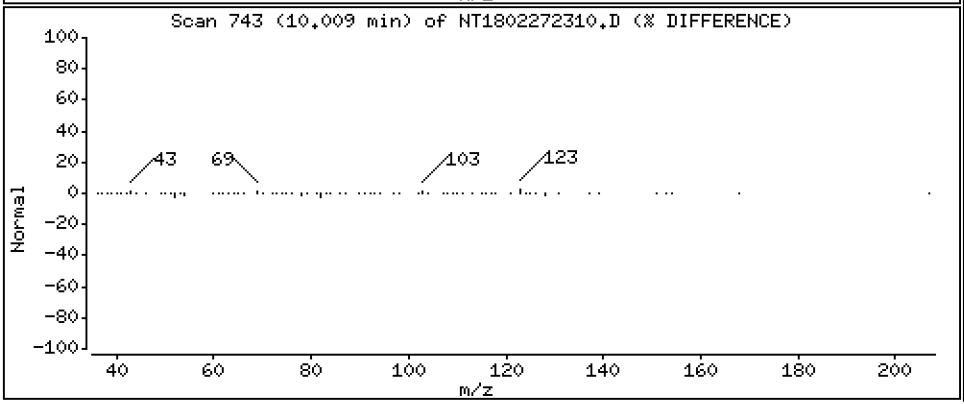
19 Nitrobenzene

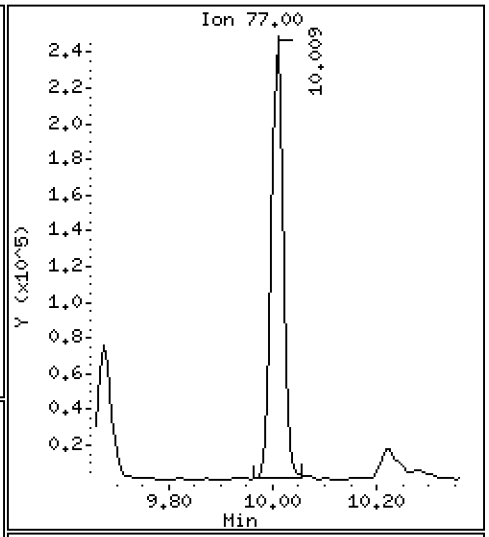
Concentration: 3.370 ug/mL

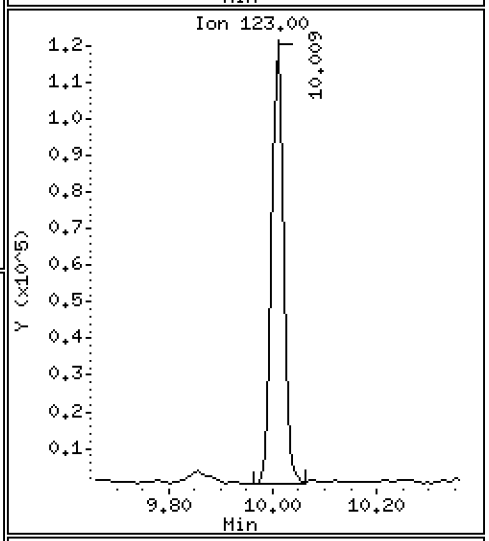


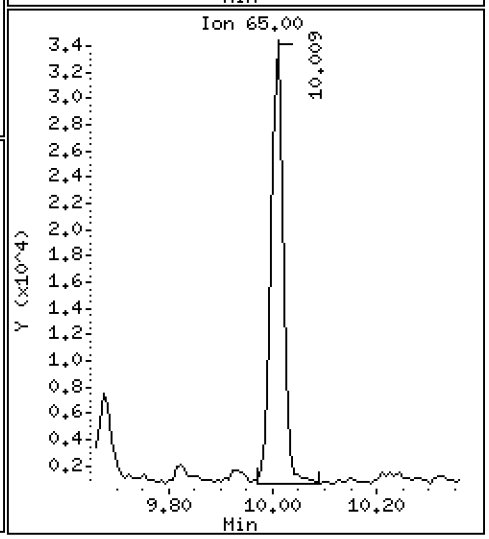












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

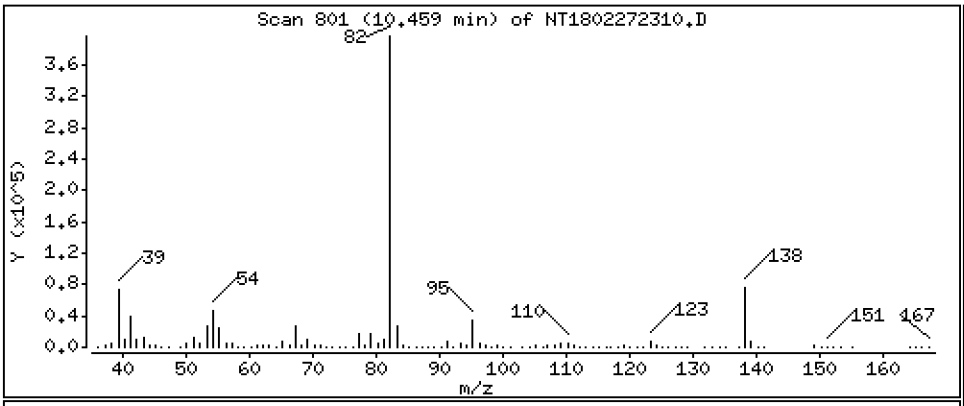
Operator: VTS

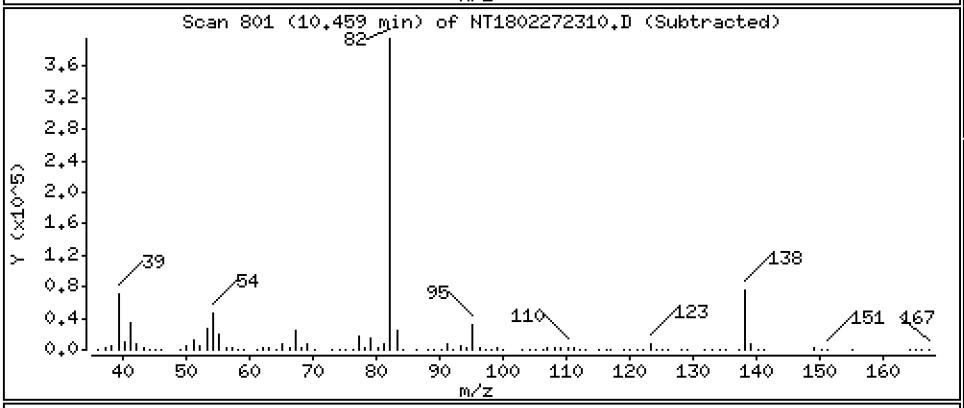
Column phase: ZB-5msi

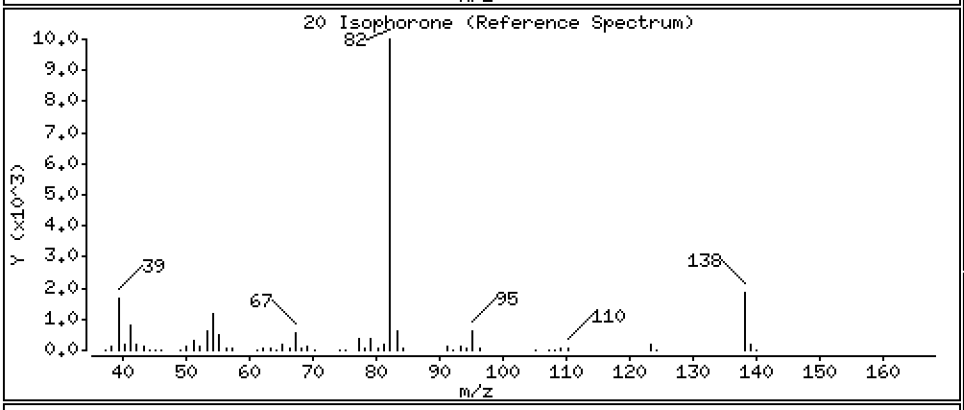
Column diameter: 0.25

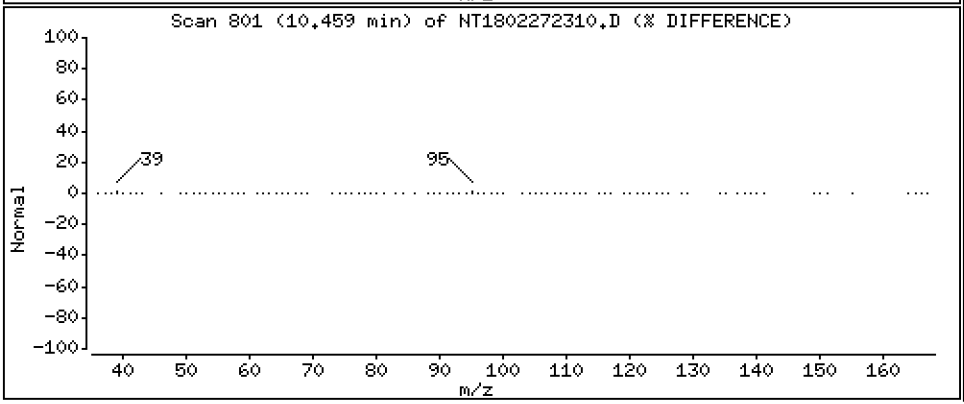
20 Isophorone

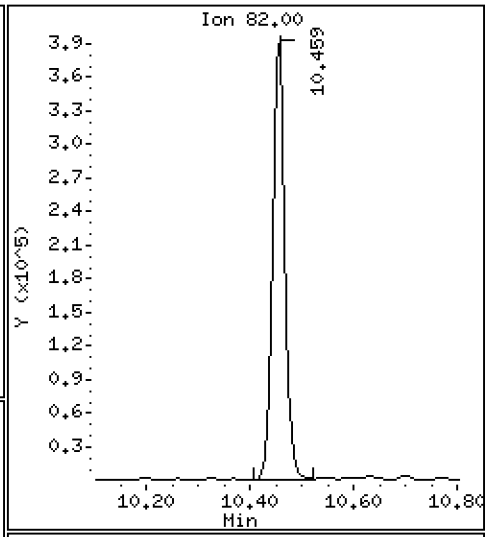
Concentration: 4.750 ug/mL

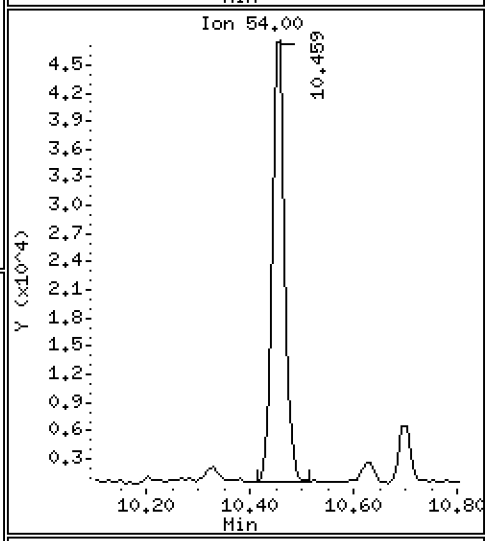


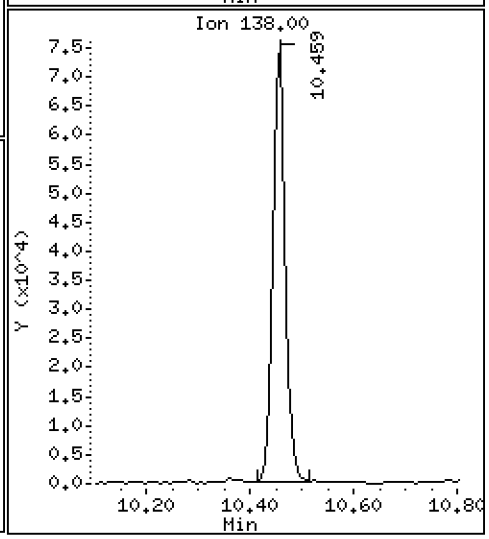












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

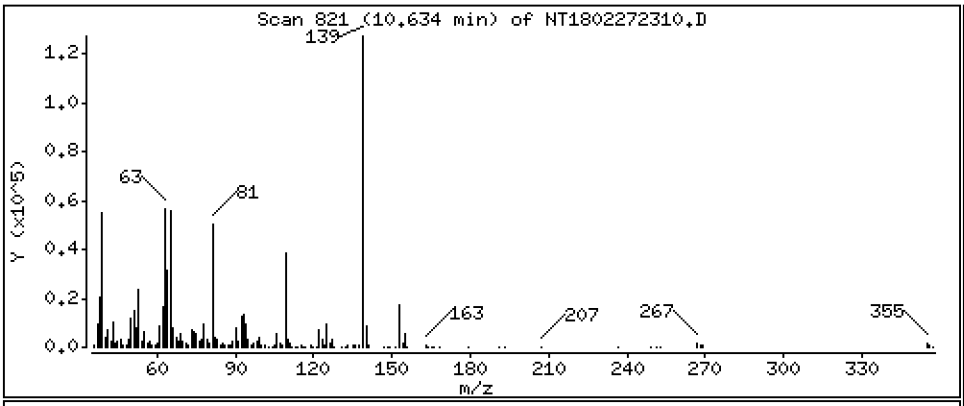
Operator: VTS

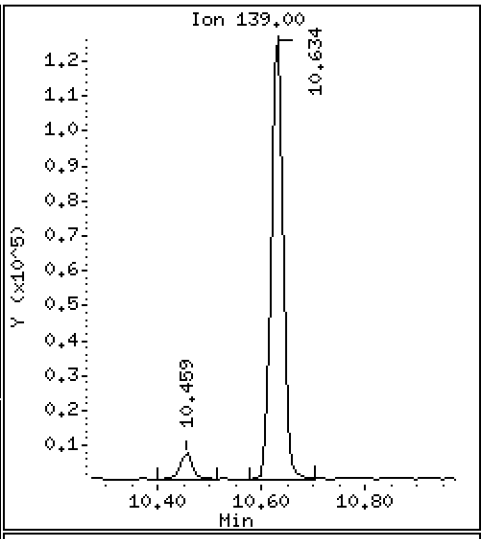
Column phase: ZB-5msi

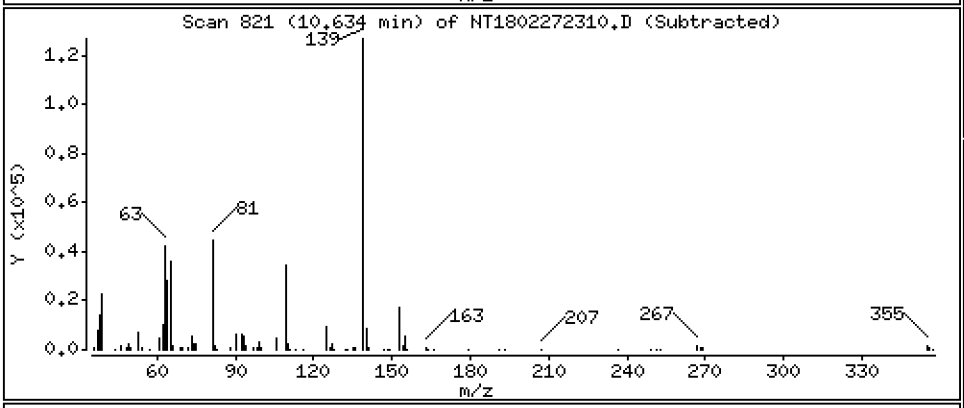
Column diameter: 0.25

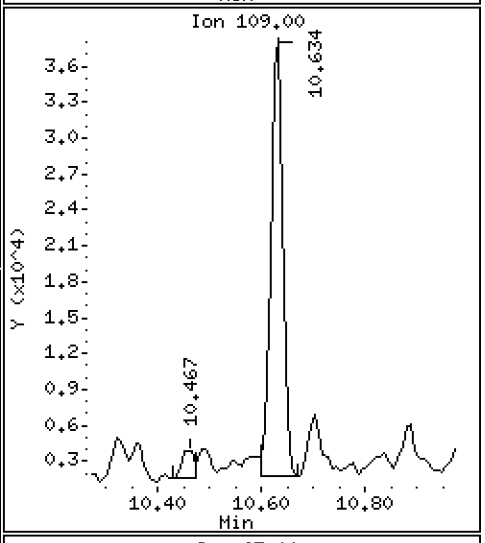
21 2-Nitrophenol

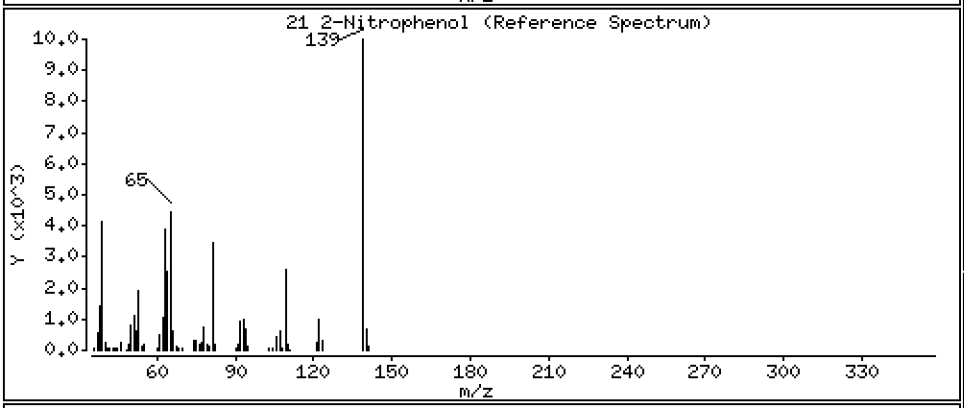
Concentration: 4.277 ug/mL

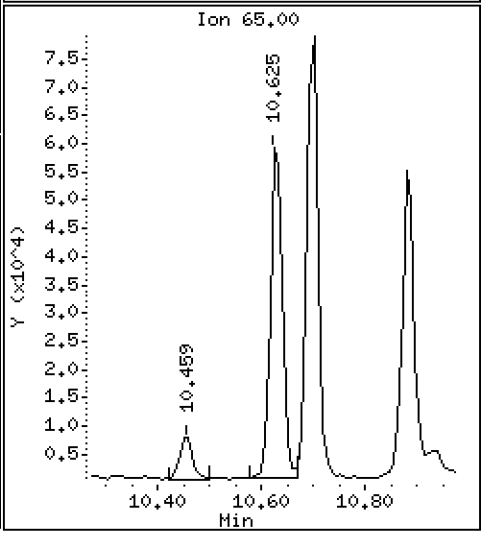


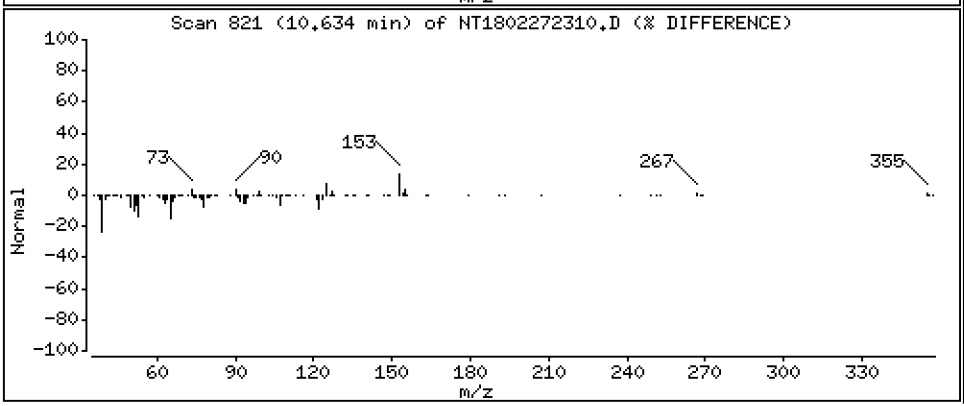












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

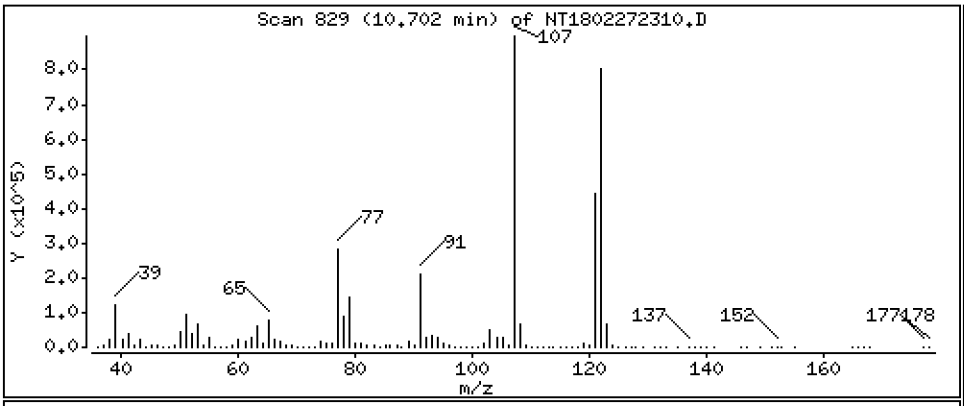
Operator: VTS

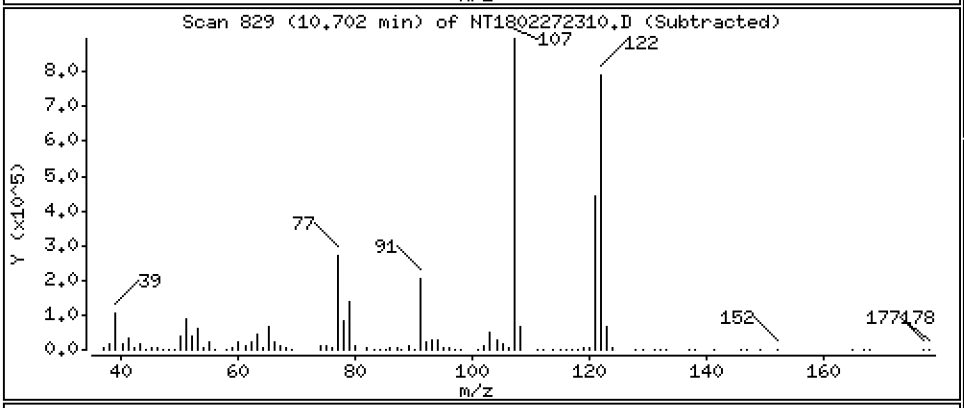
Column phase: ZB-5msi

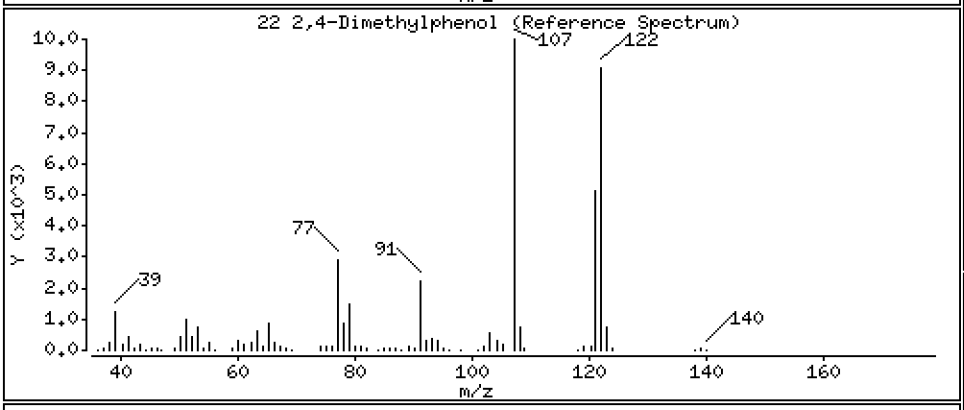
Column diameter: 0.25

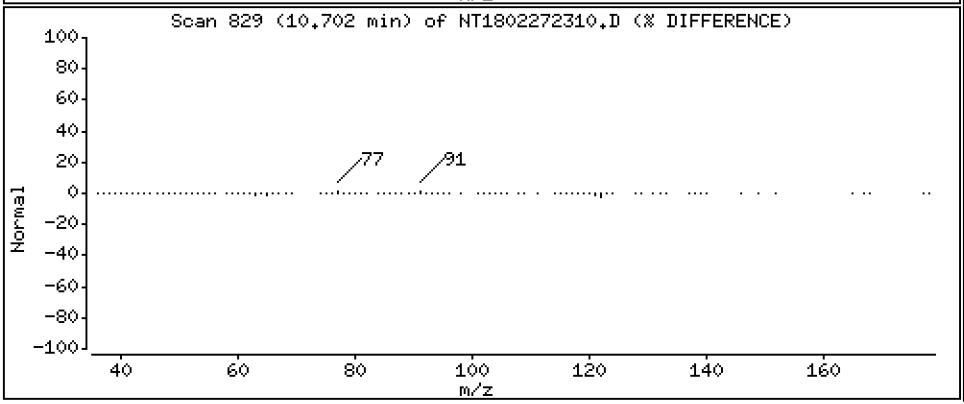
22 2,4-Dimethylphenol

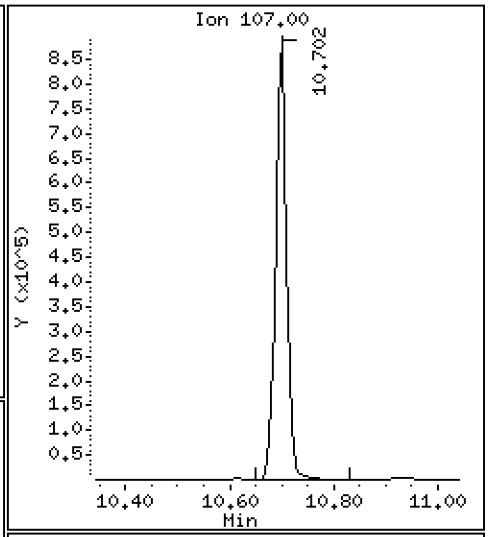
Concentration: 13.39 ug/mL

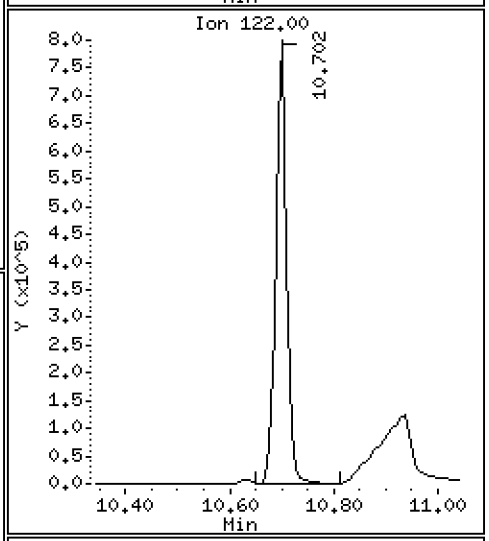


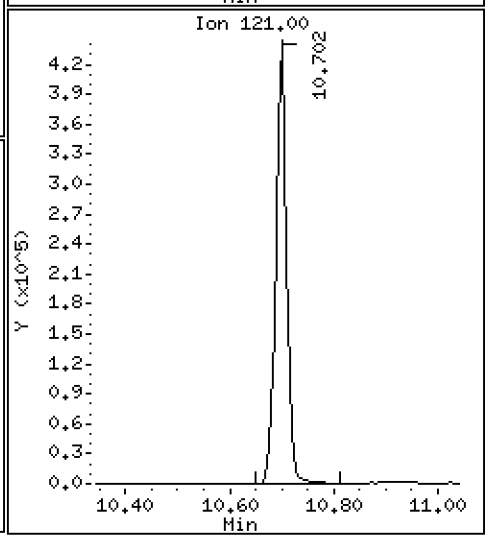












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

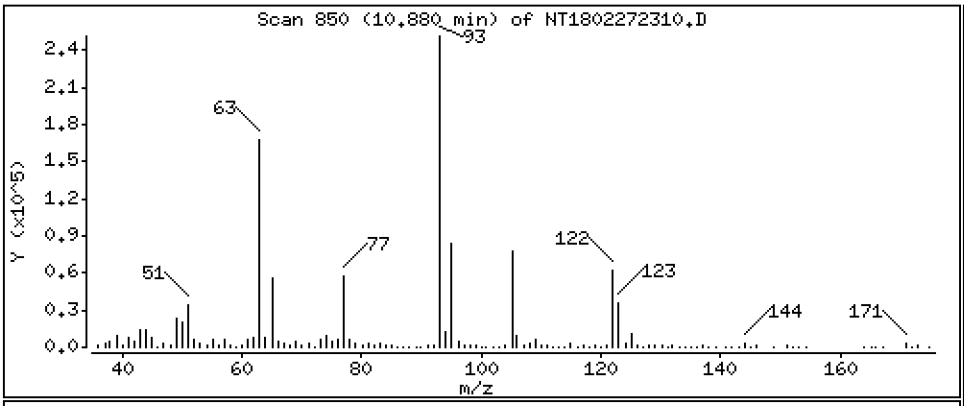
Operator: VTS

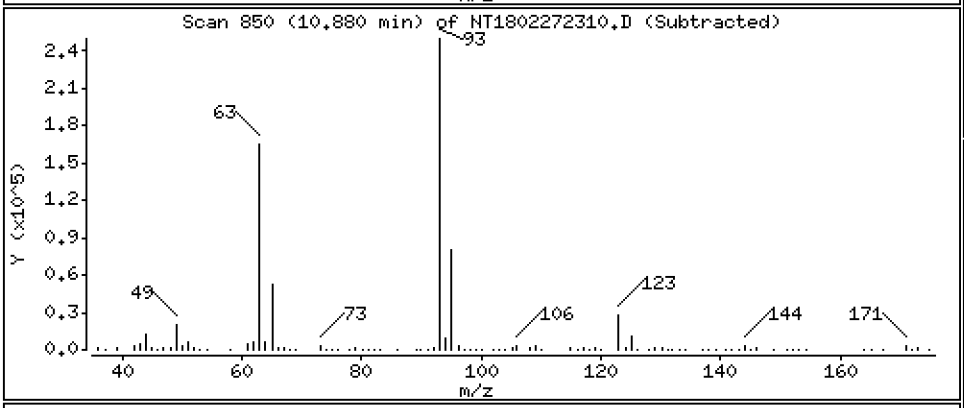
Column phase: ZB-5msi

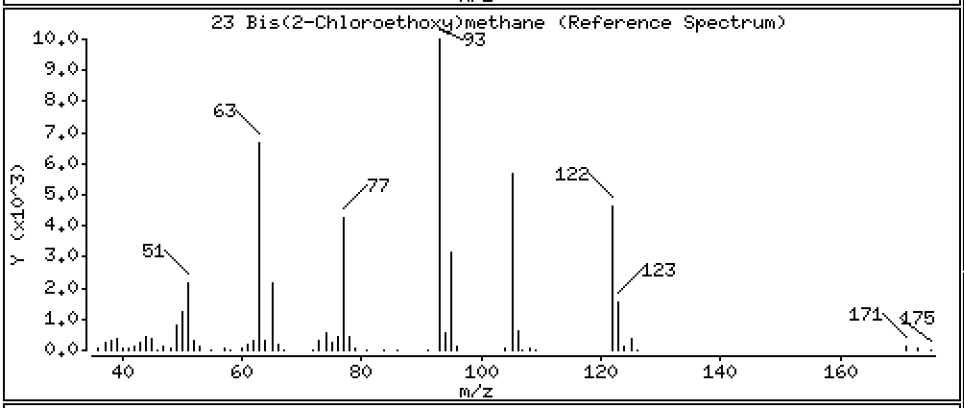
Column diameter: 0.25

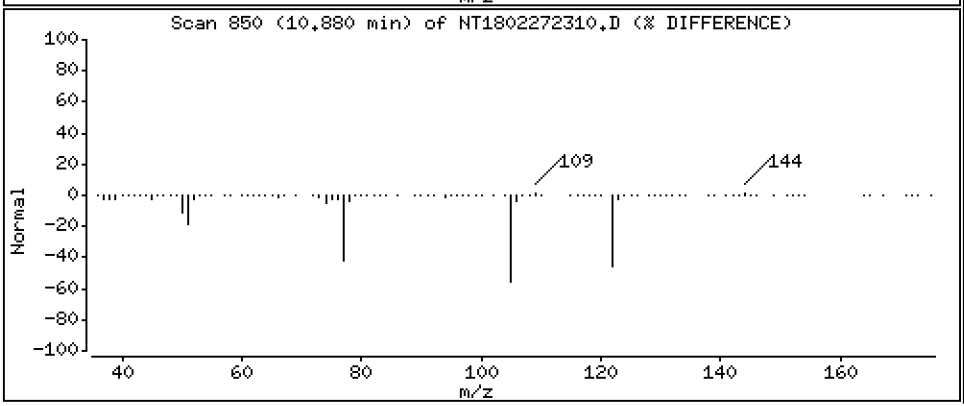
23 Bis(2-Chloroethoxy)methane

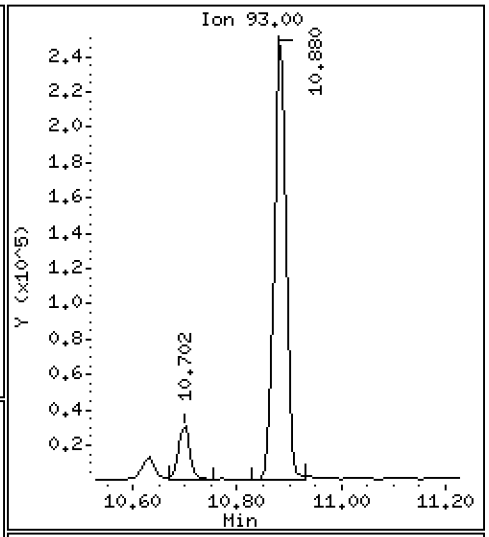
Concentration: 4.142 ug/mL

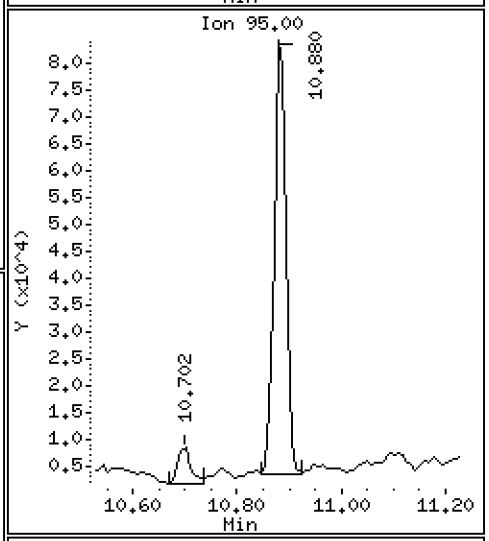


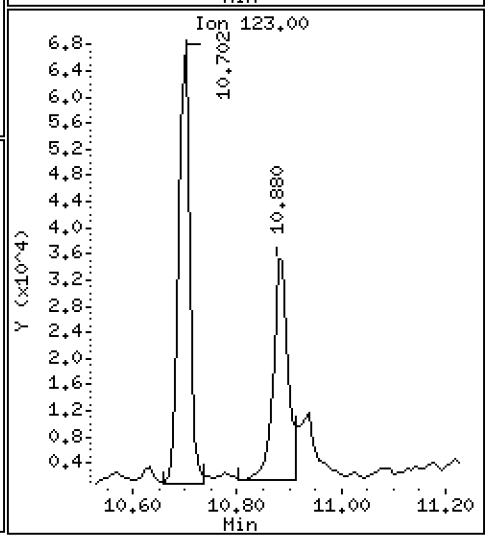












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

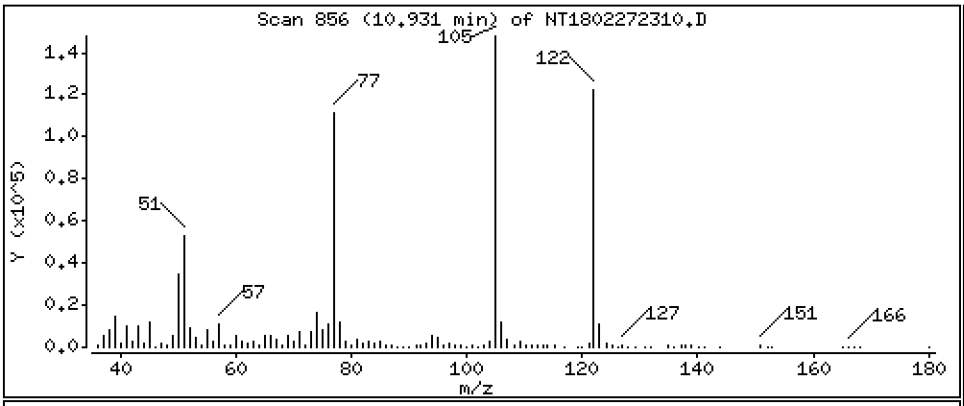
Operator: VTS

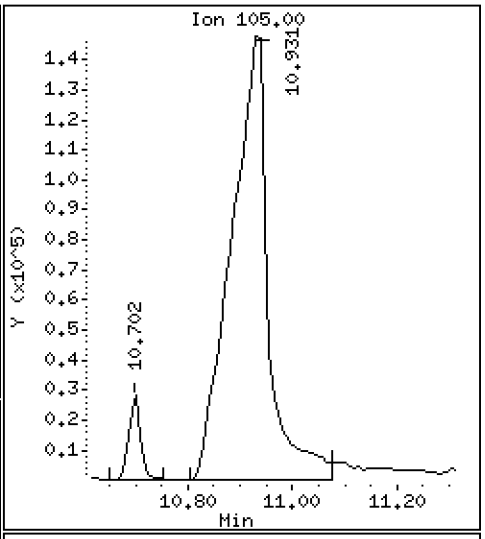
Column phase: ZB-5msi

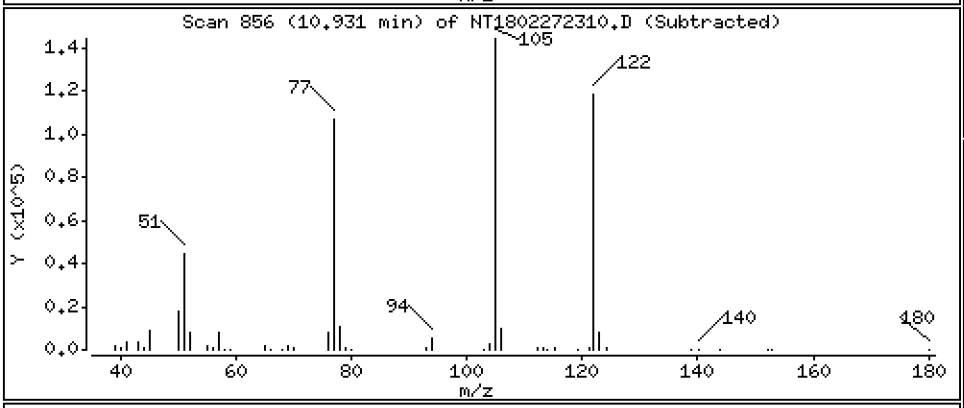
Column diameter: 0.25

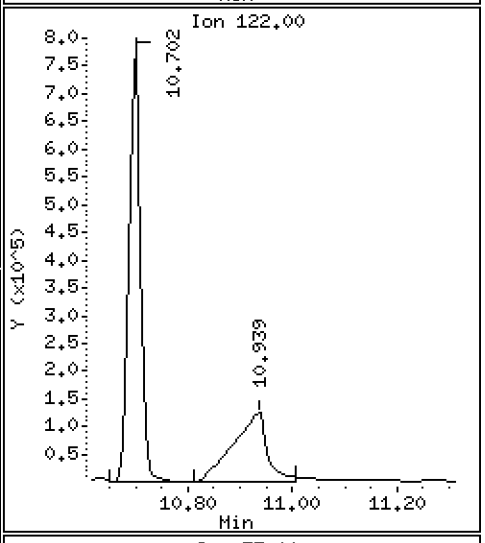
24 Benzoic acid

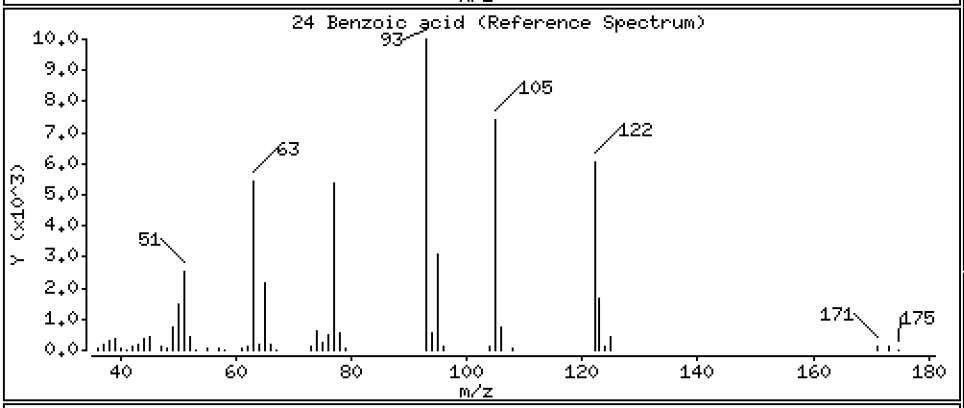
Concentration: 17.95 ug/mL

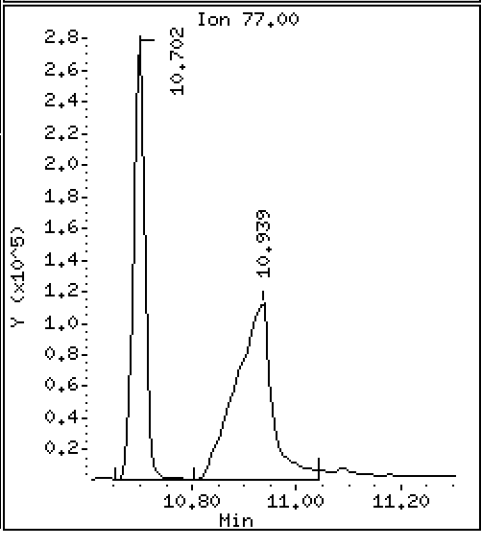


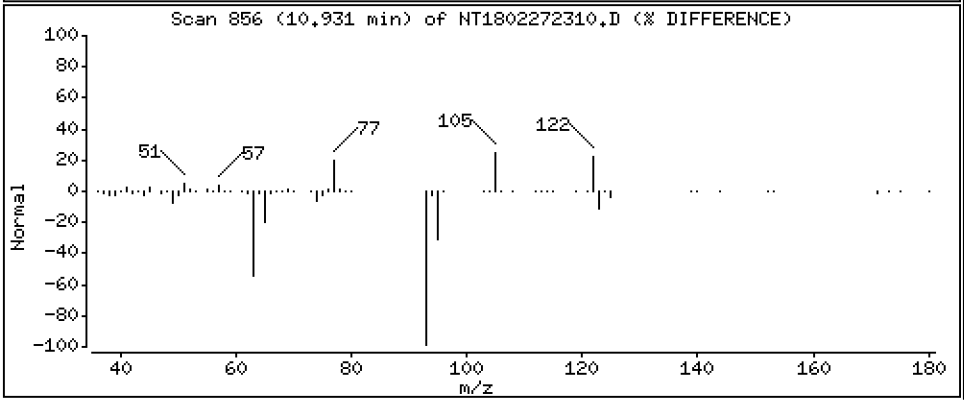












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

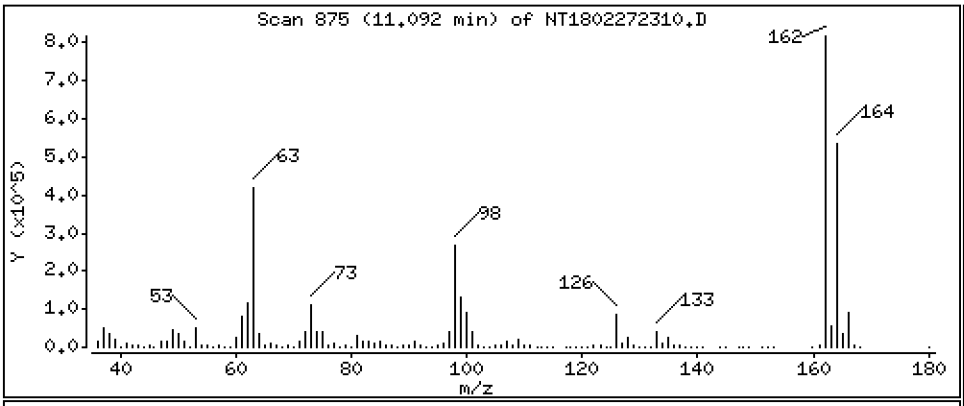
Operator: VTS

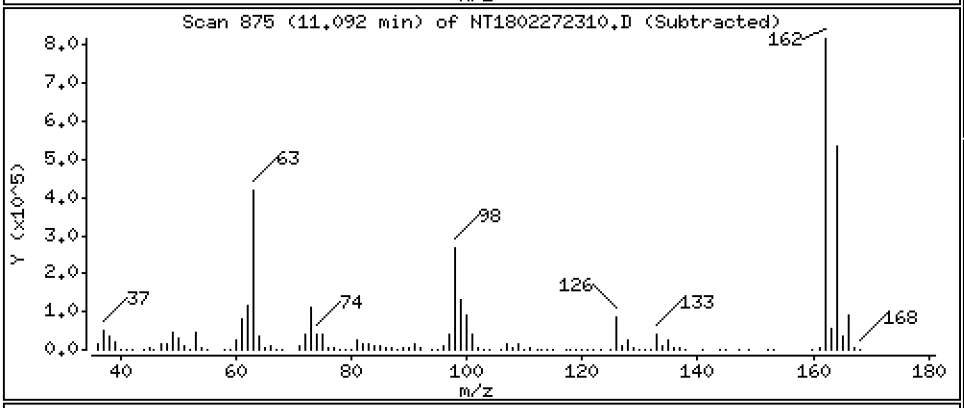
Column phase: ZB-5msi

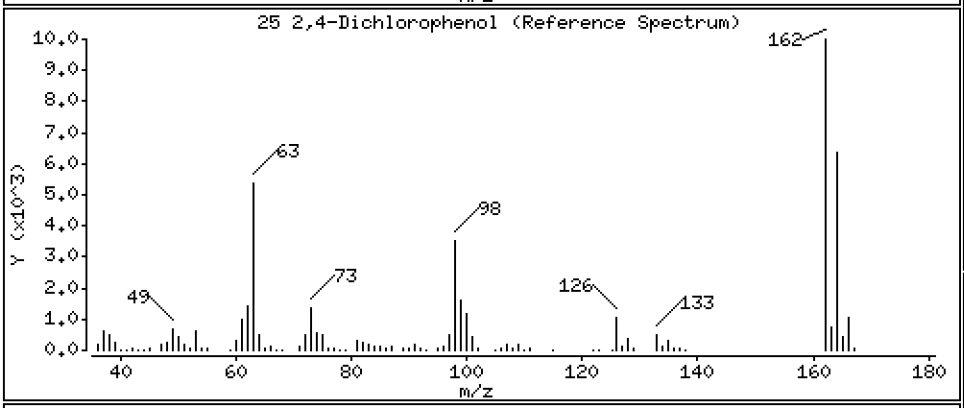
Column diameter: 0.25

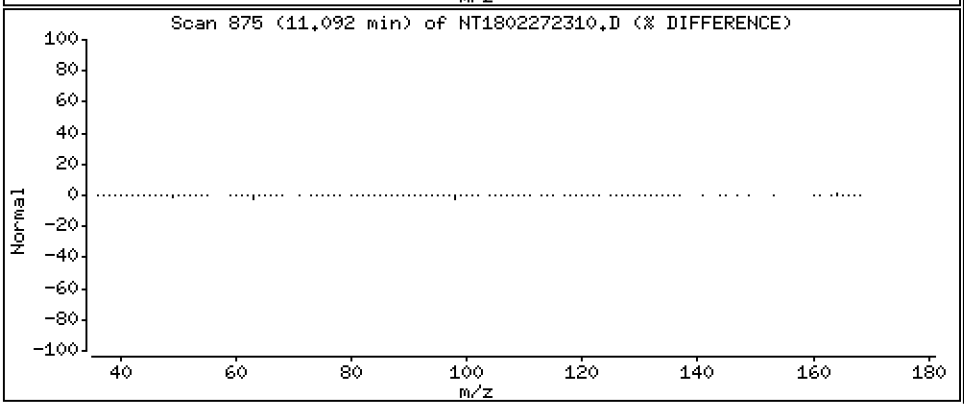
25 2,4-Dichlorophenol

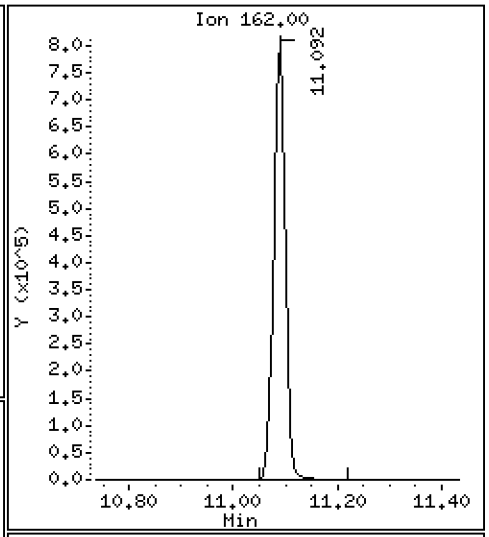
Concentration: 15.29 ug/mL

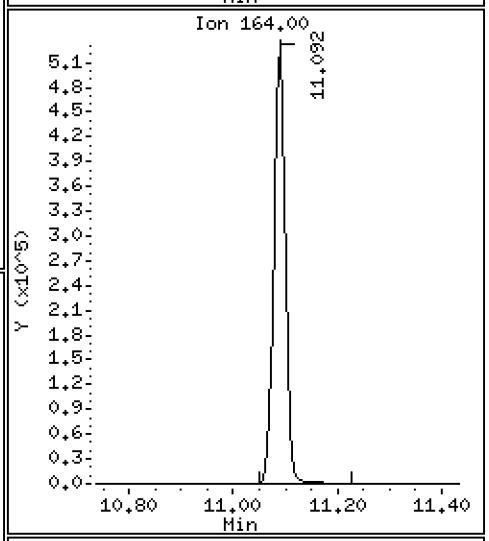


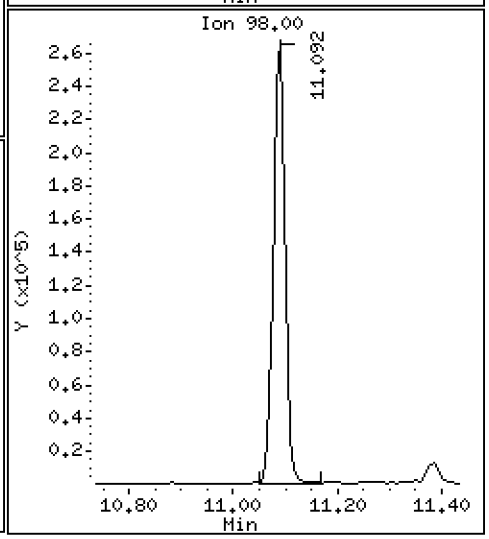












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

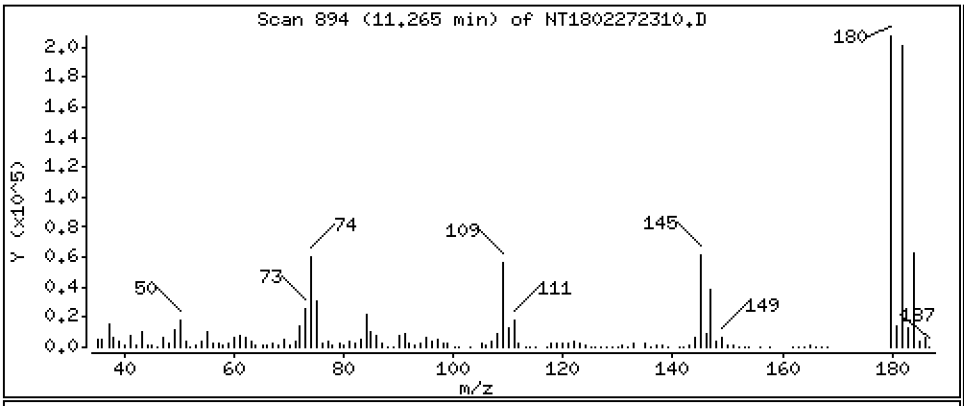
Operator: VTS

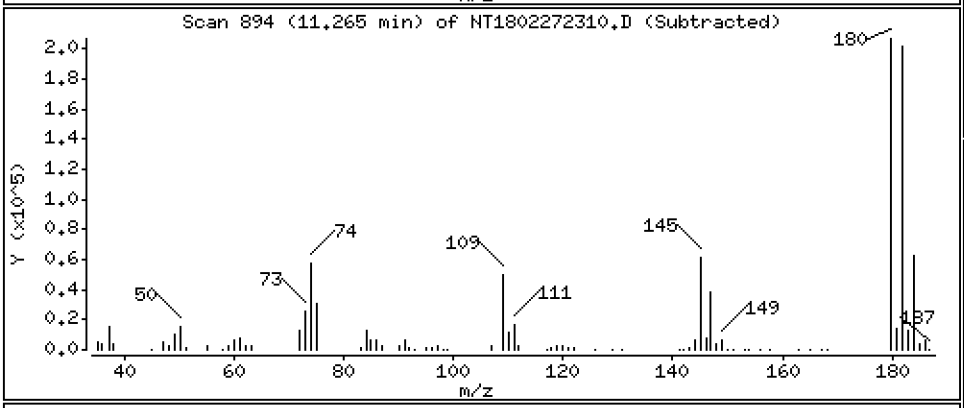
Column phase: ZB-5msi

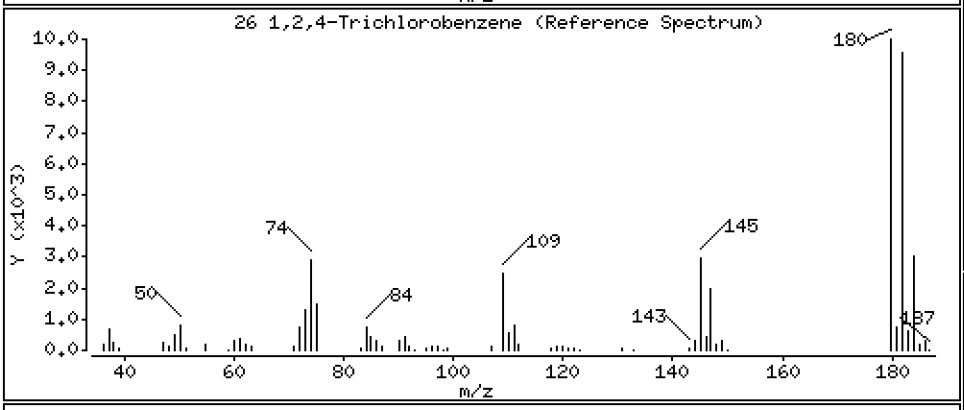
Column diameter: 0.25

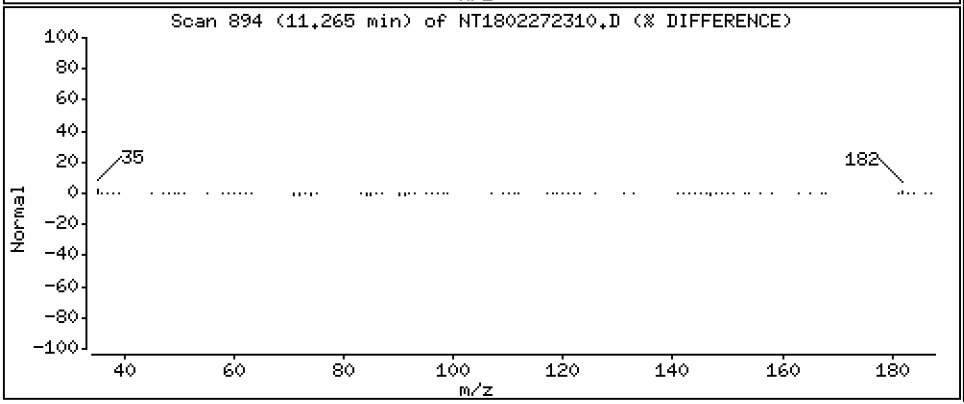
26 1,2,4-Trichlorobenzene

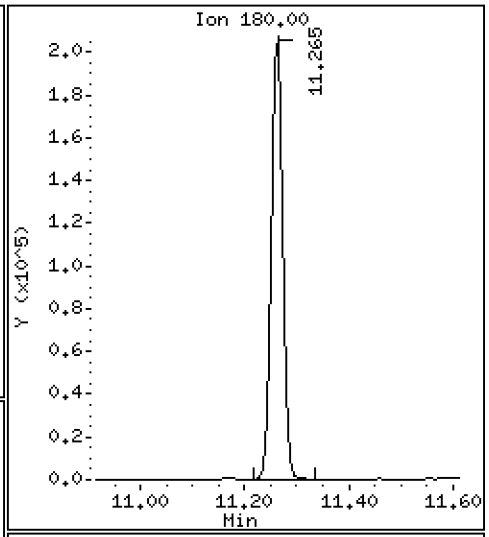
Concentration: 3.436 ug/mL

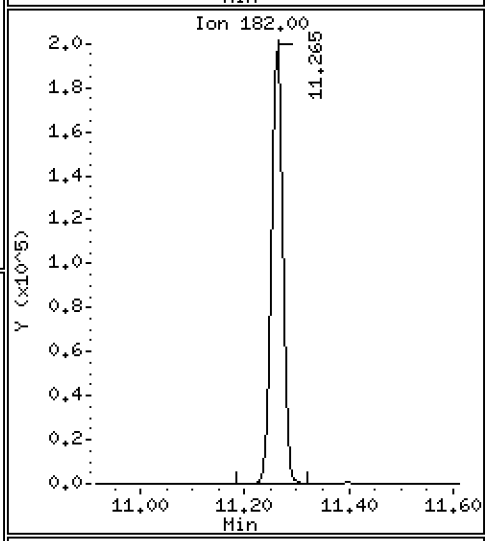


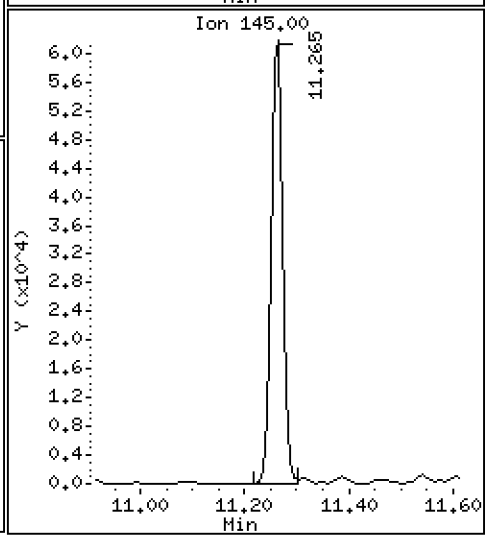












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

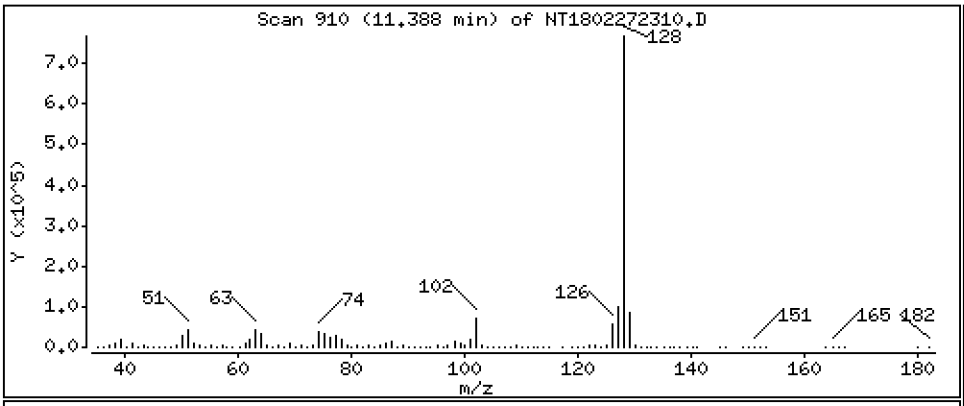
Operator: VTS

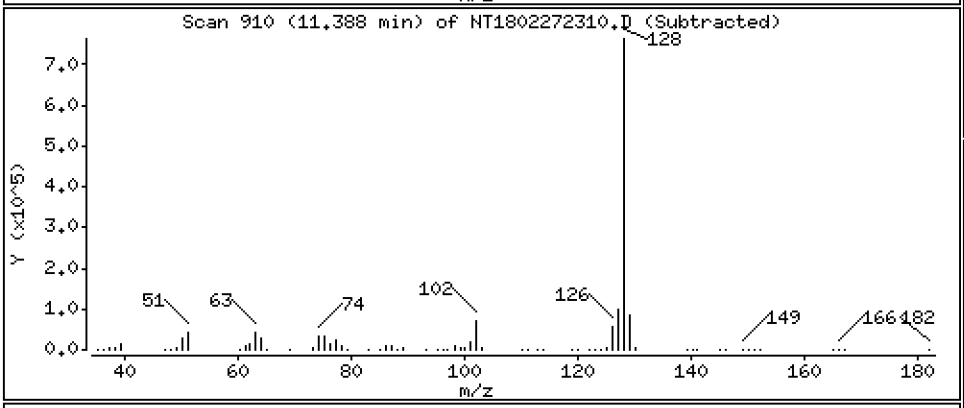
Column phase: ZB-5msi

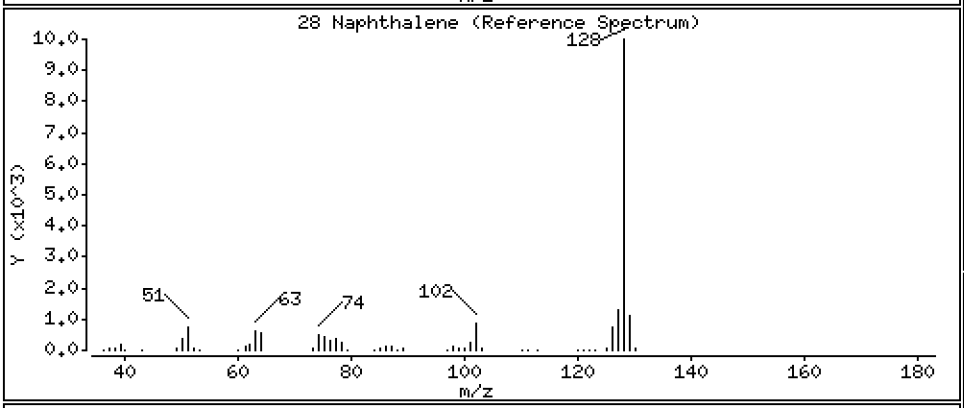
Column diameter: 0.25

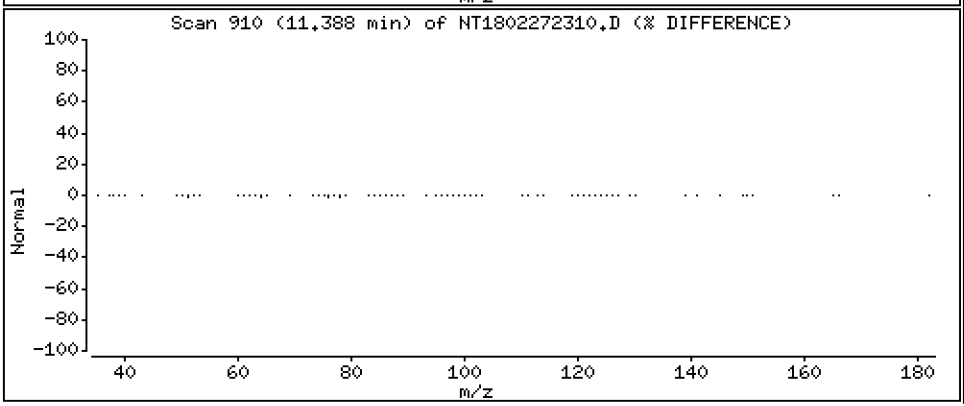
28 Naphthalene

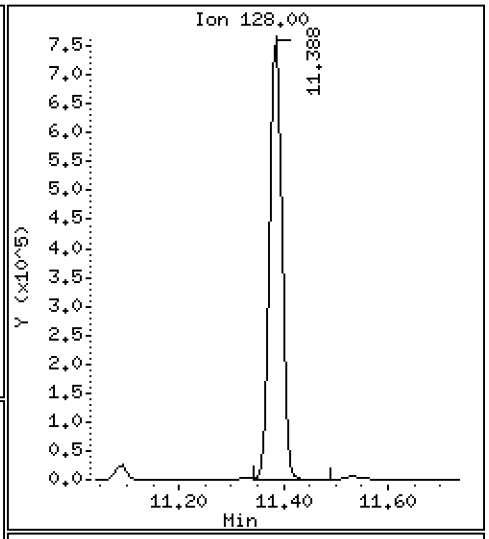
Concentration: 3.655 ug/mL

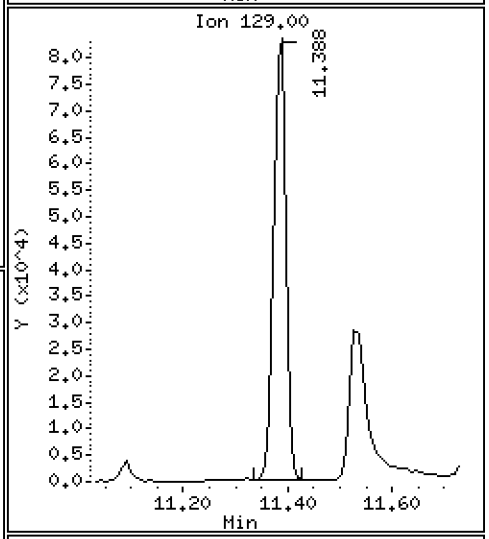


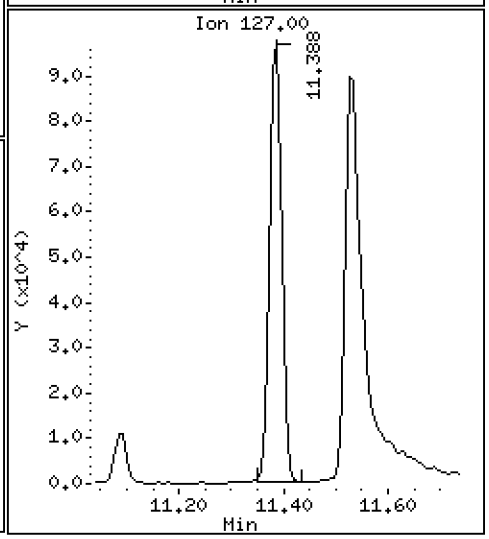












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

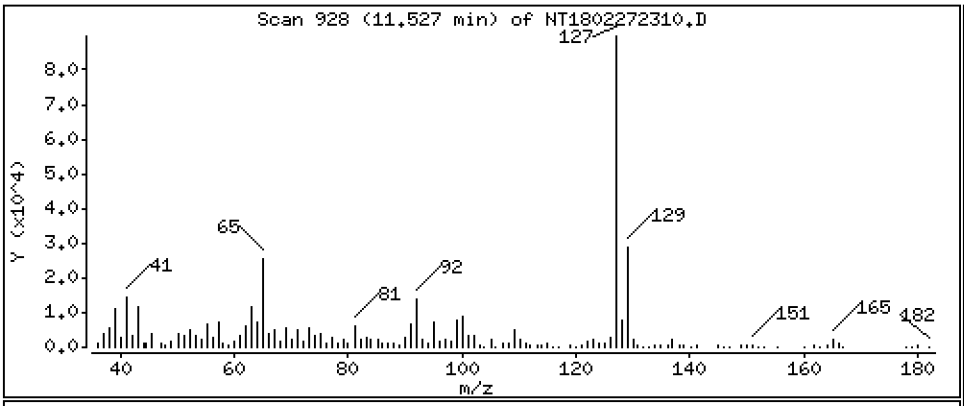
Operator: VTS

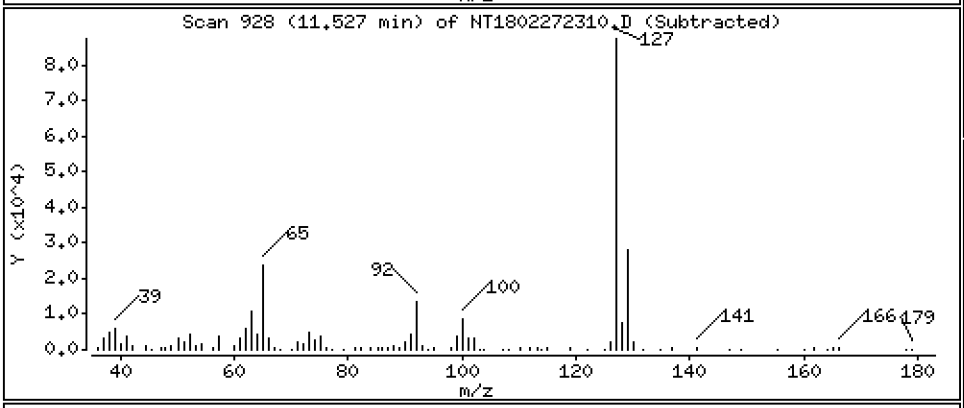
Column phase: ZB-5msi

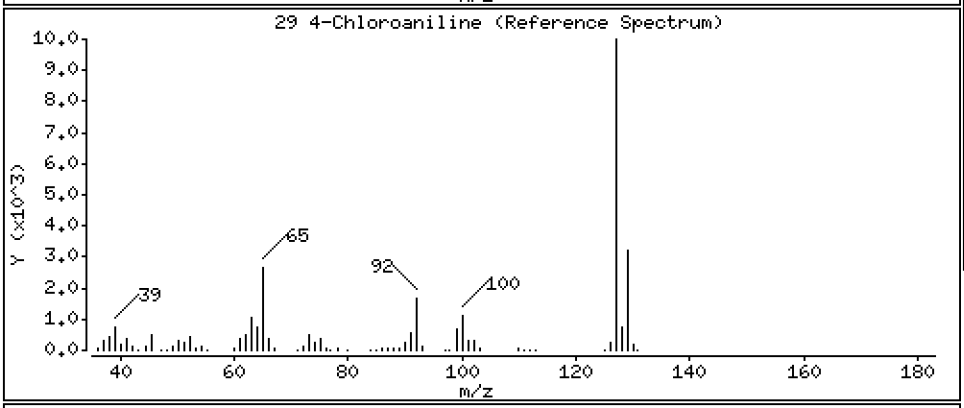
Column diameter: 0.25

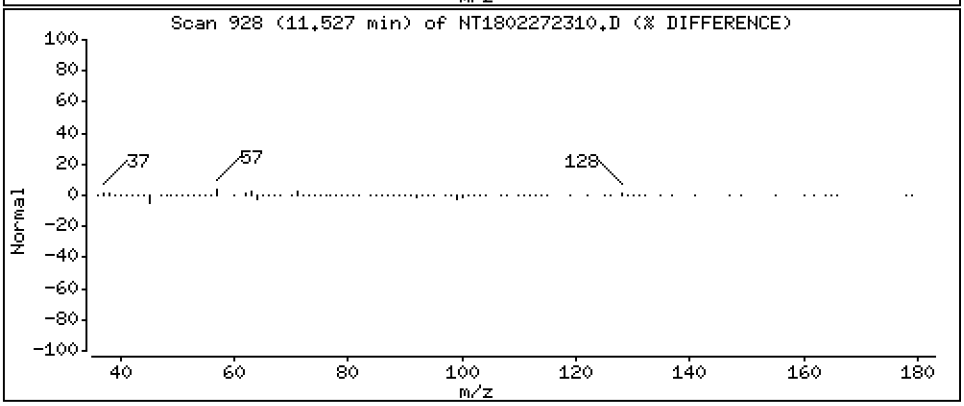
29 4-Chloroaniline

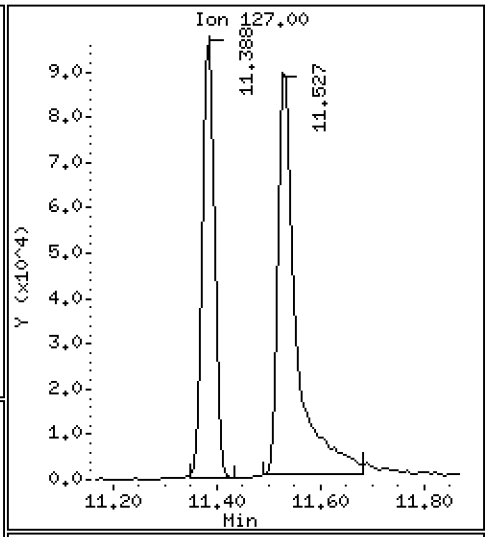
Concentration: 1.860 ug/mL

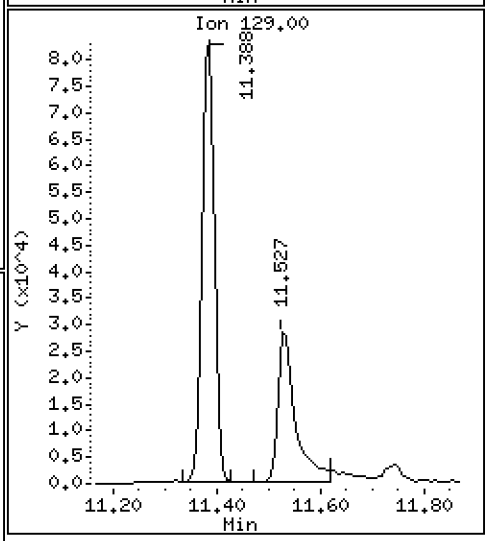












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

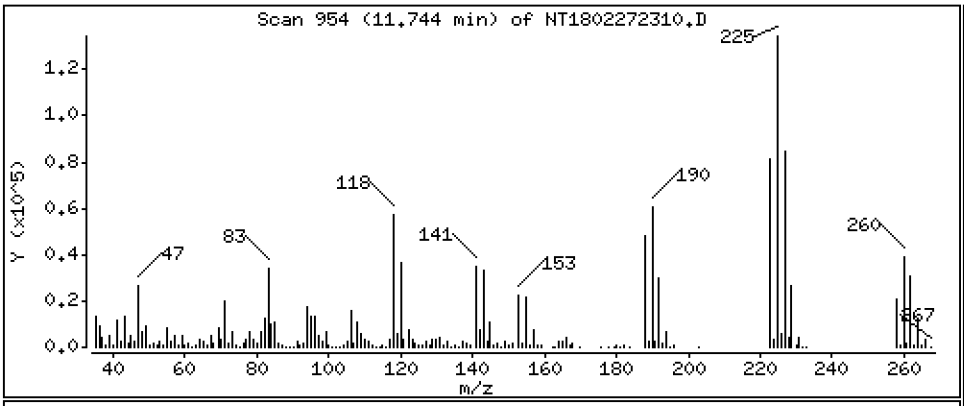
Operator: VTS

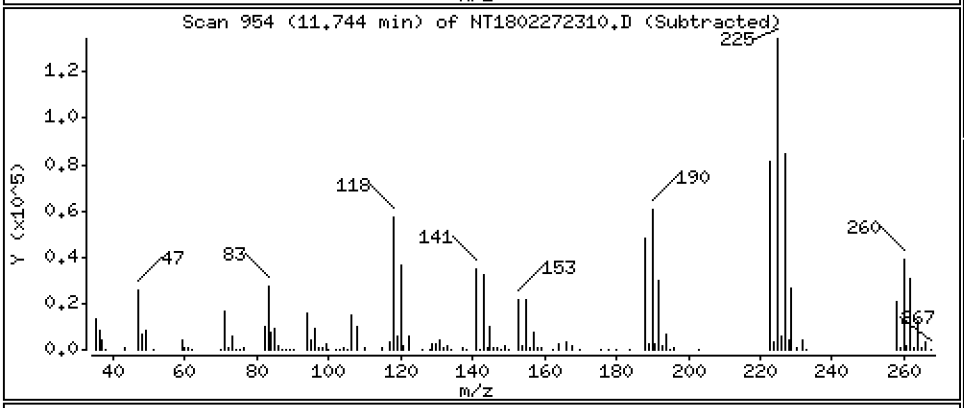
Column phase: ZB-5msi

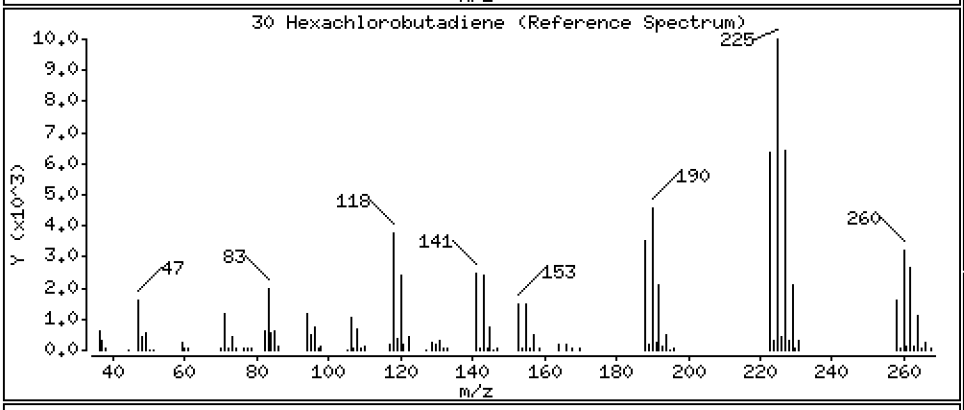
Column diameter: 0.25

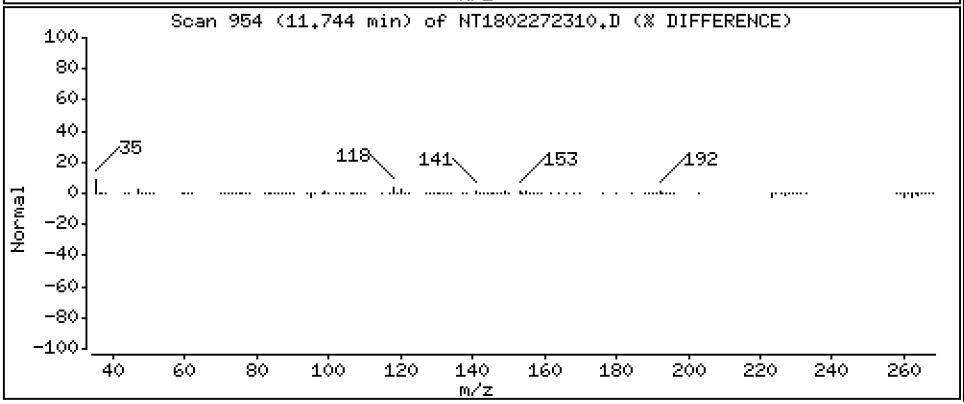
30 Hexachlorobutadiene

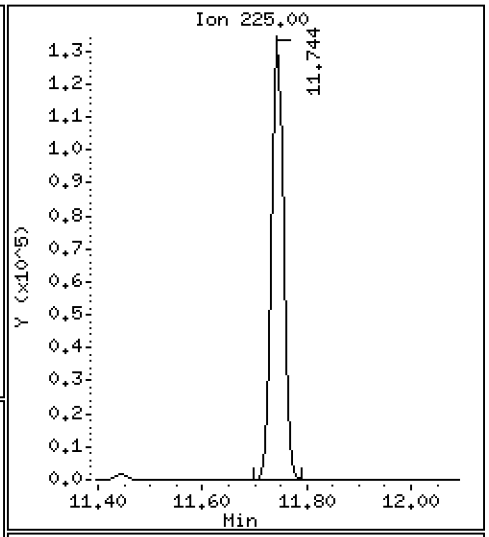
Concentration: 3.563 ug/mL

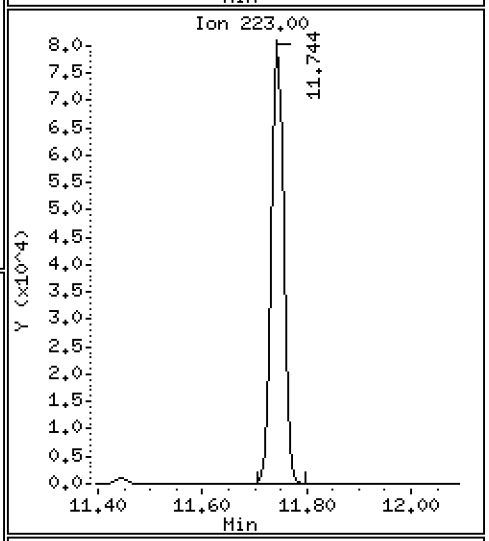


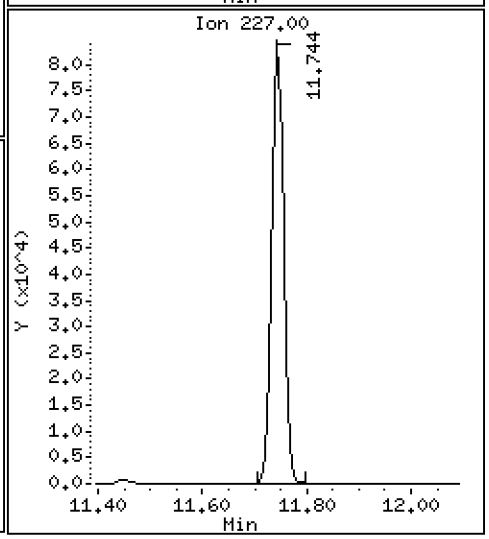












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

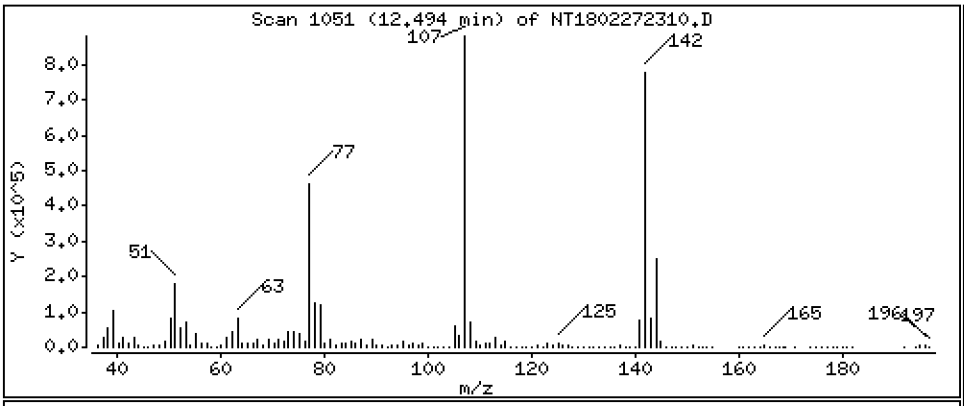
Operator: VTS

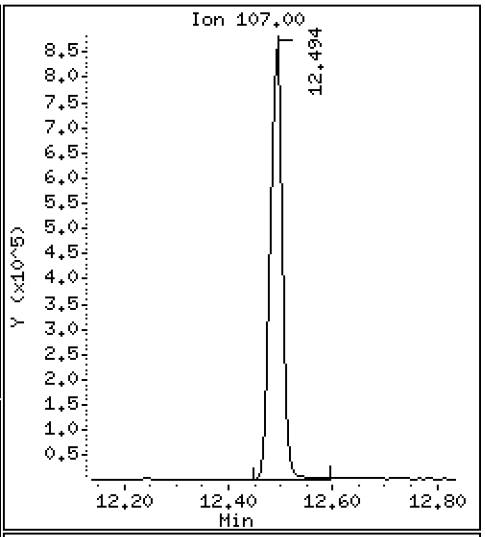
Column phase: ZB-5msi

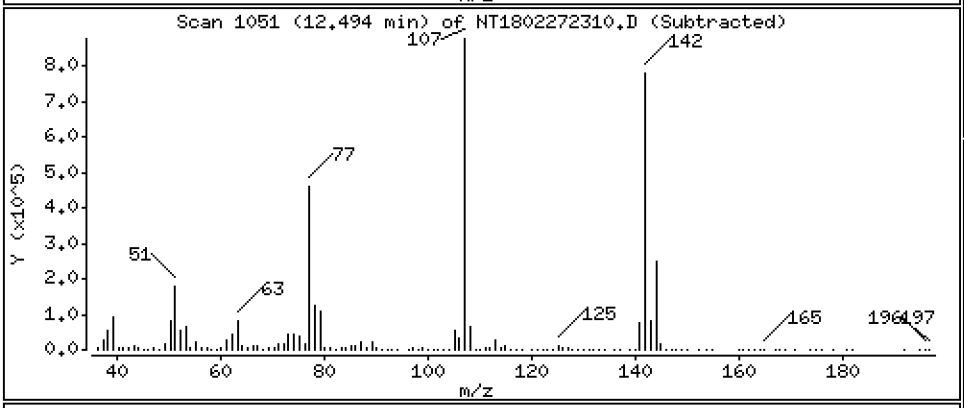
Column diameter: 0.25

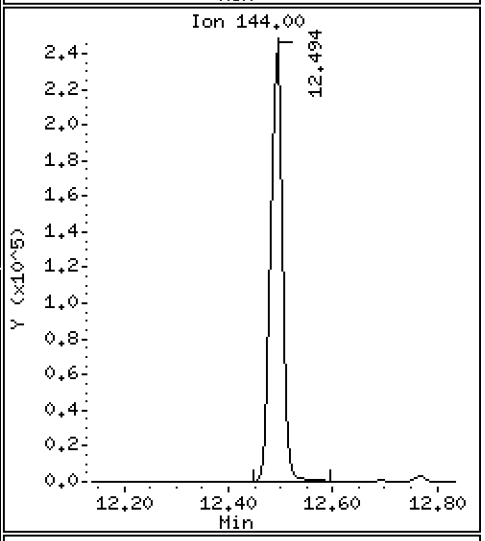
31 4-Chloro-3-methylphenol

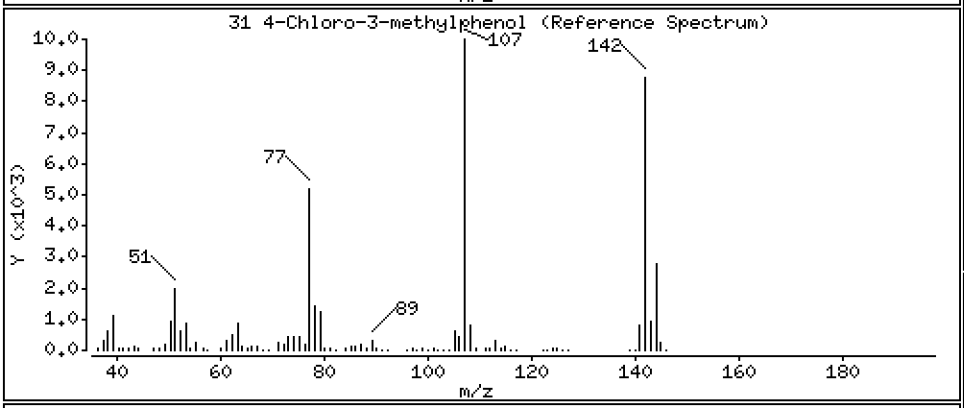
Concentration: 15.63 ug/mL

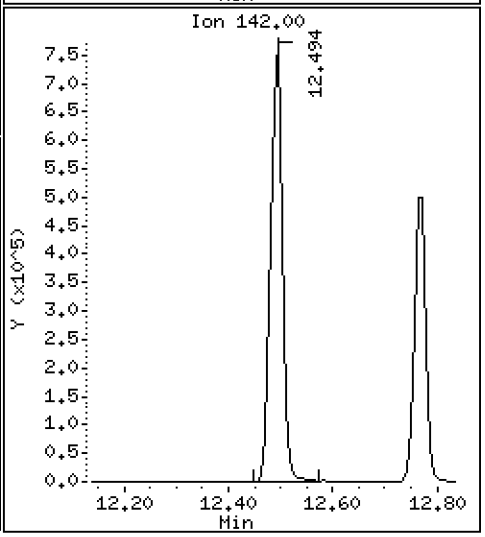


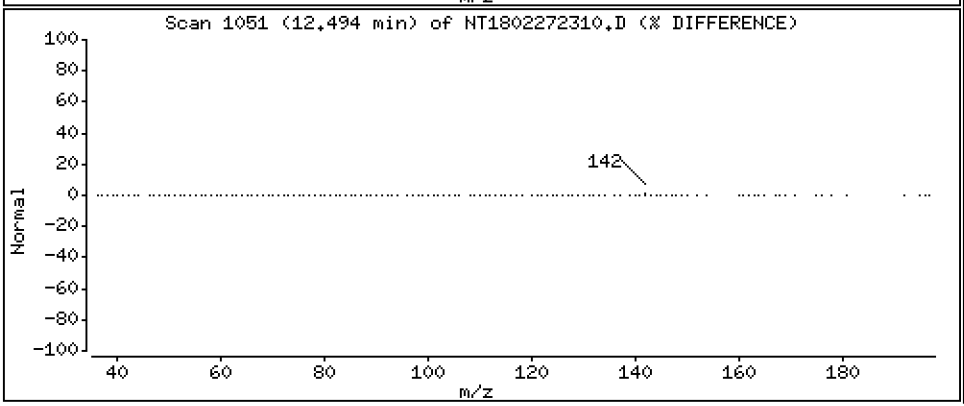












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

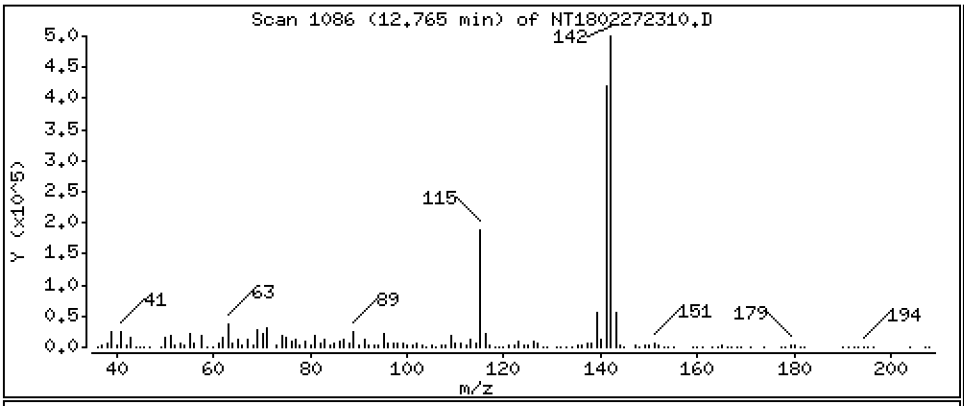
Operator: VTS

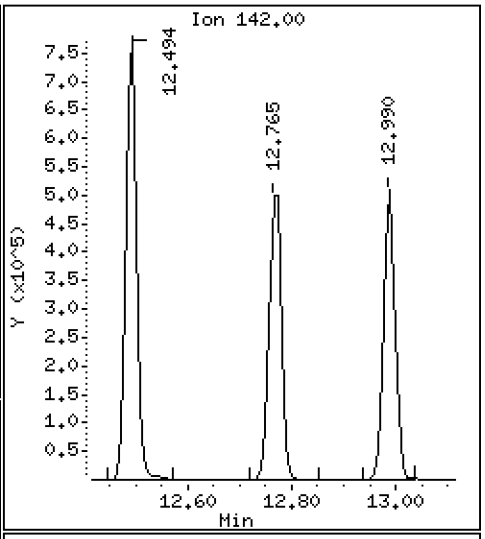
Column phase: ZB-5msi

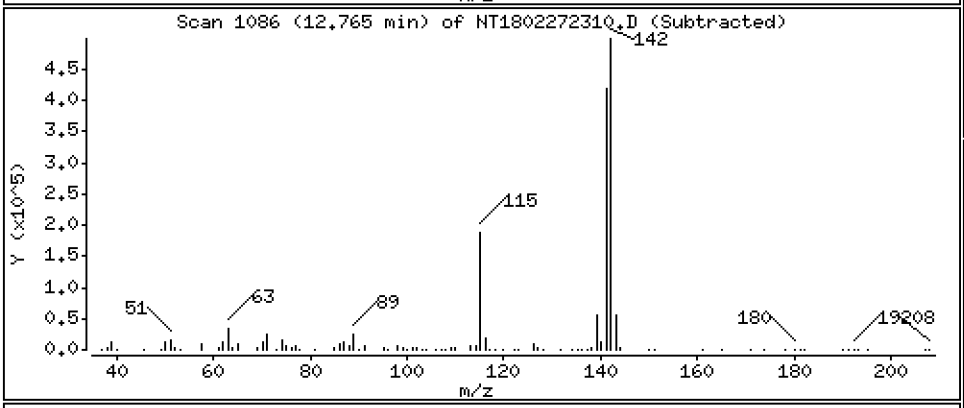
Column diameter: 0.25

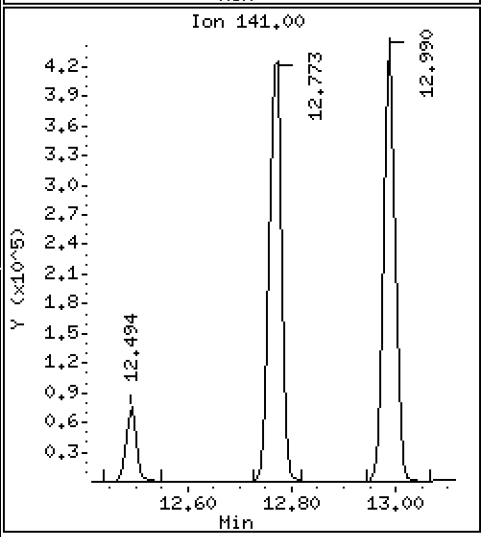
32 2-Methylnaphthalene

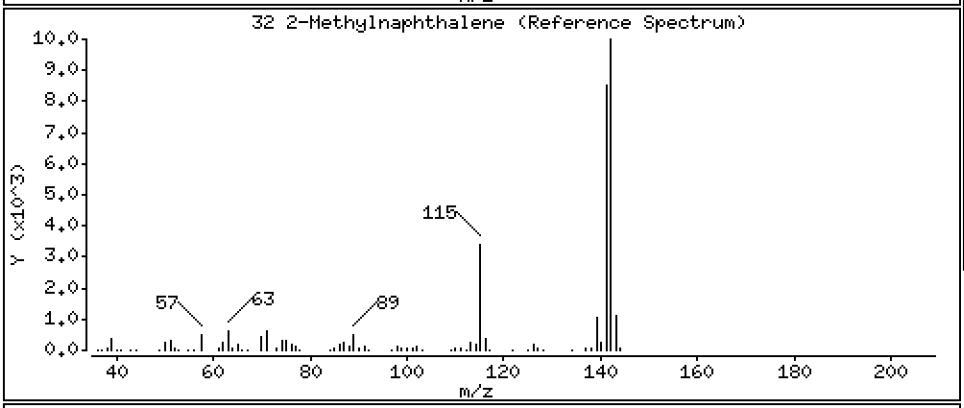
Concentration: 3.570 ug/mL

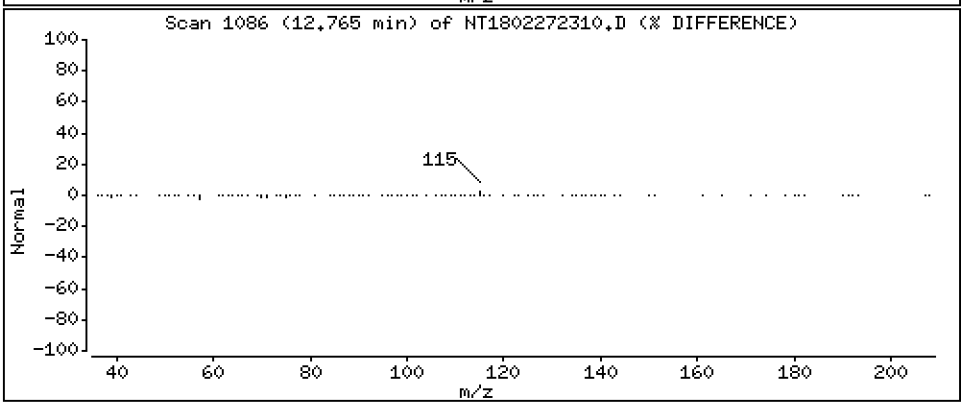












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

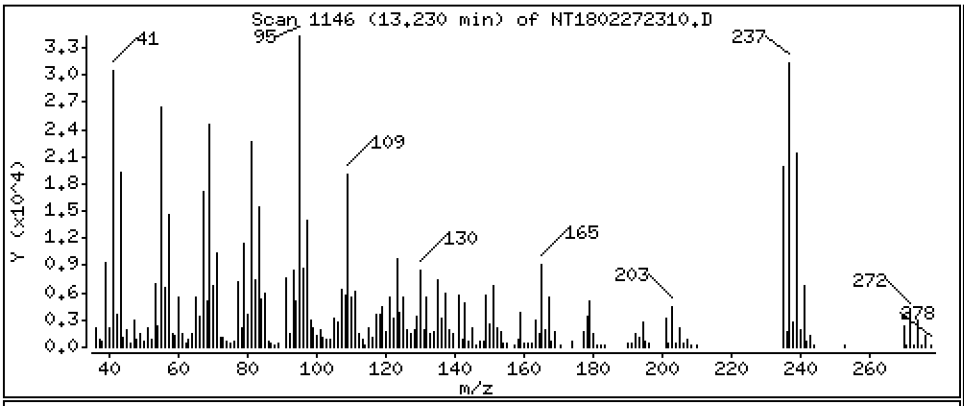
Operator: VTS

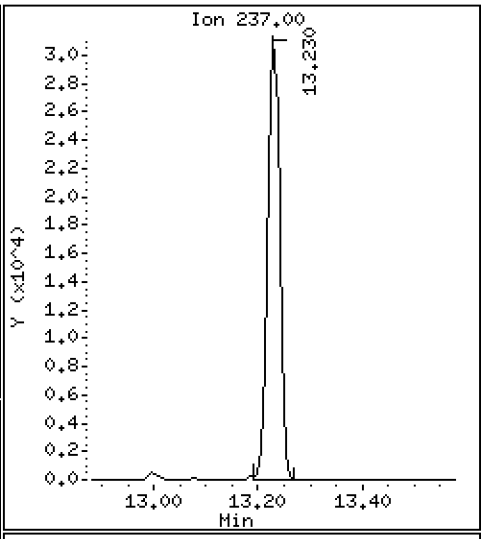
Column phase: ZB-5msi

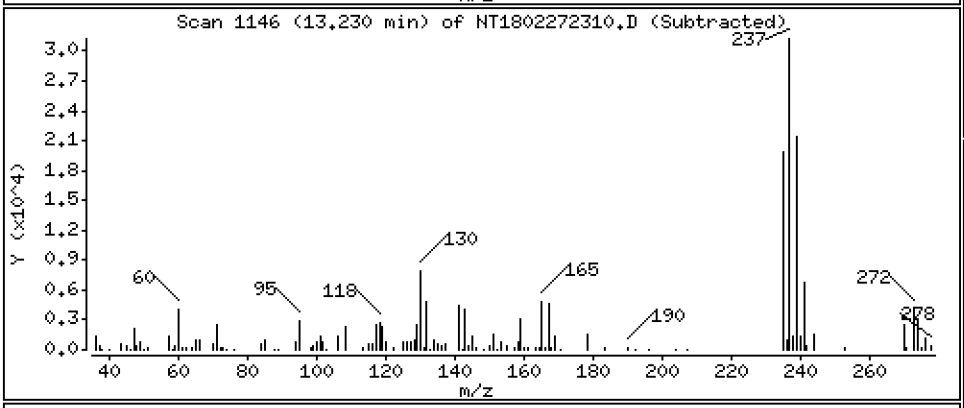
Column diameter: 0.25

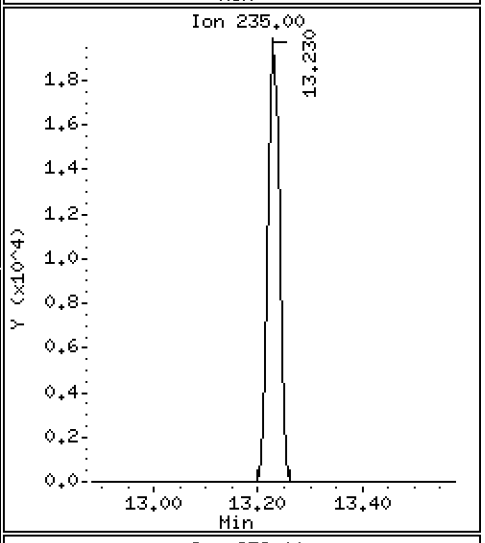
33 Hexachlorocyclopentadiene

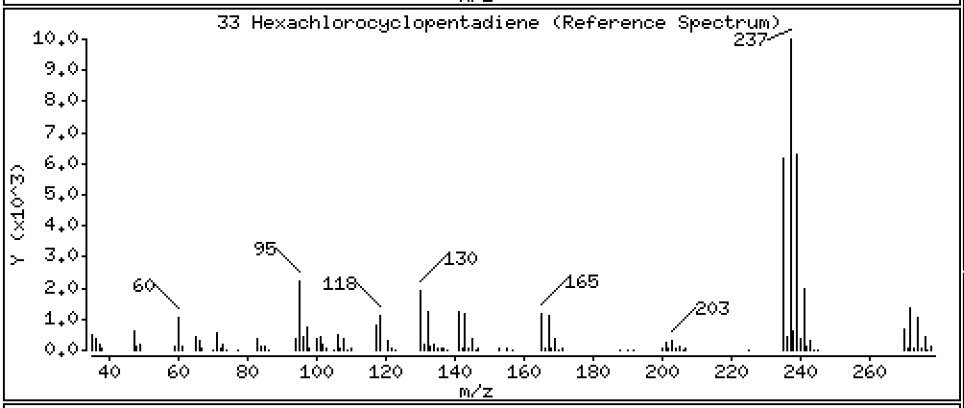
Concentration: 1.138 ug/mL

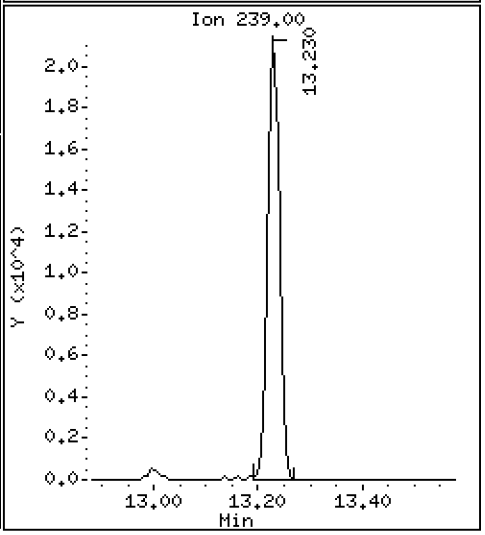


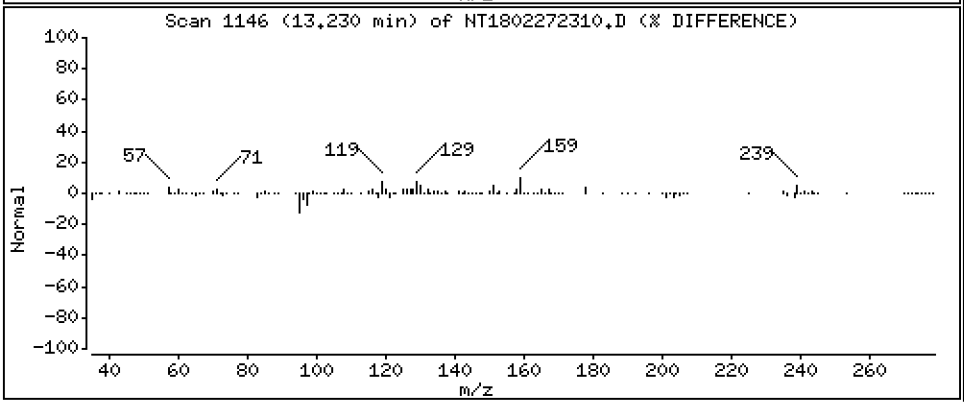












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

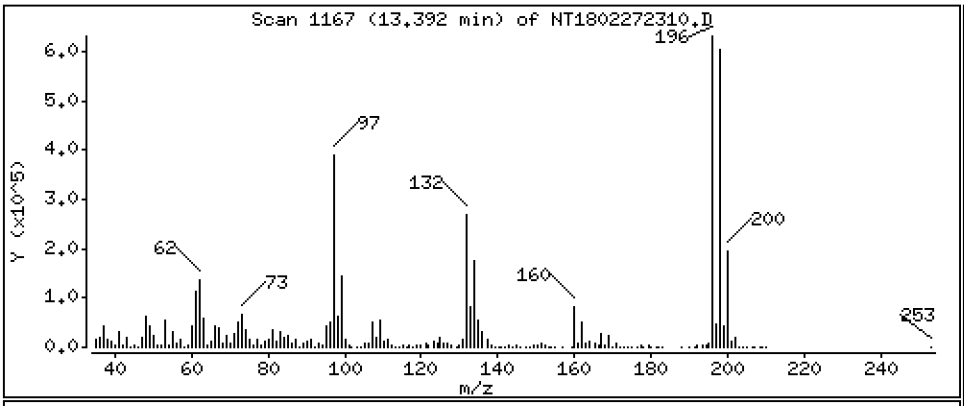
Operator: VTS

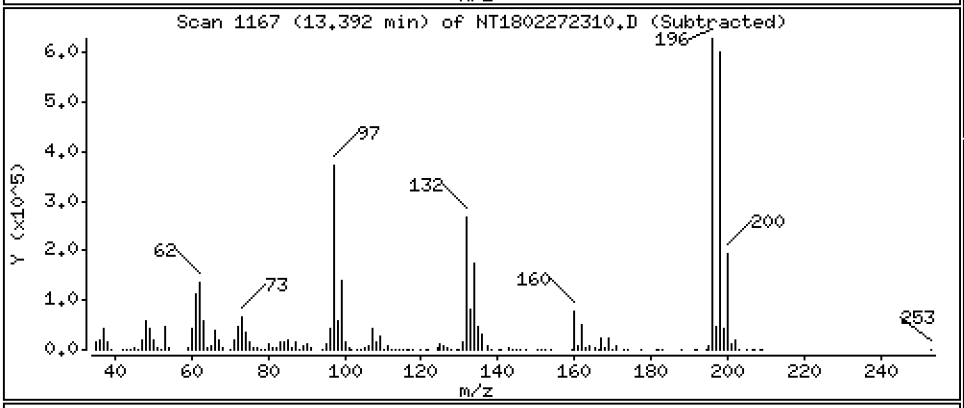
Column phase: ZB-5msi

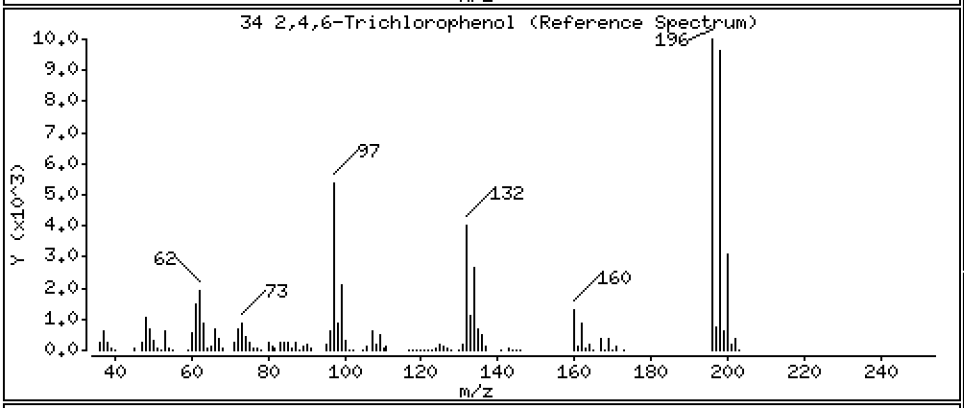
Column diameter: 0.25

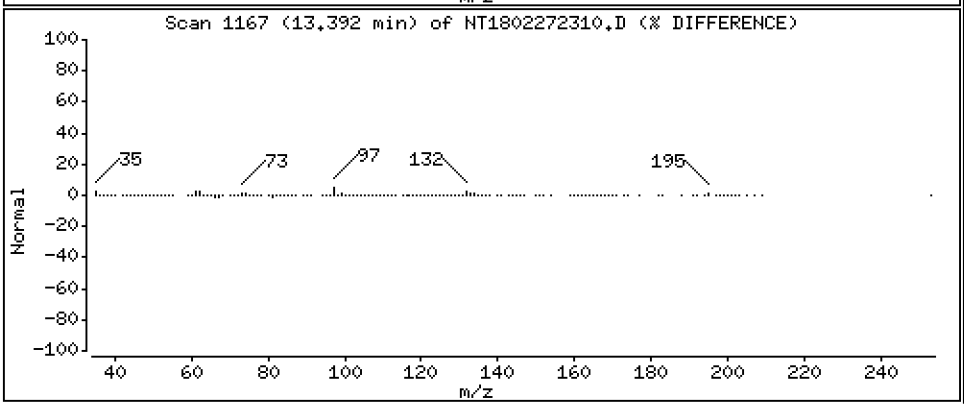
34 2,4,6-Trichlorophenol

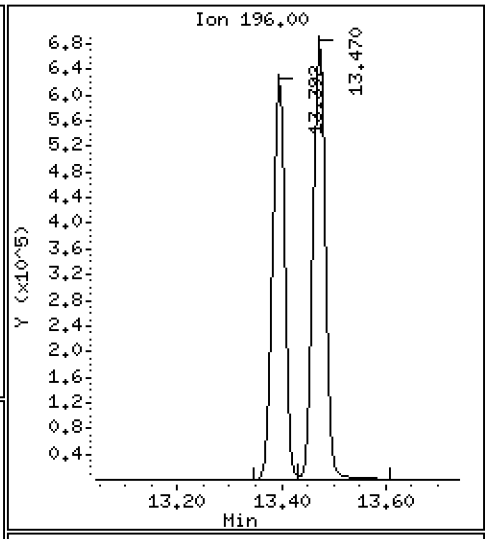
Concentration: 16.29 ug/mL

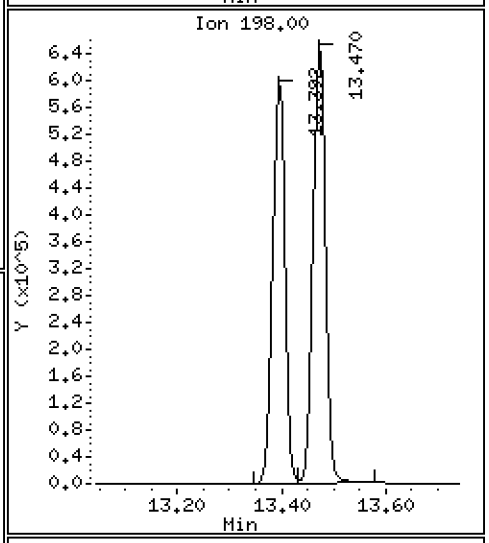


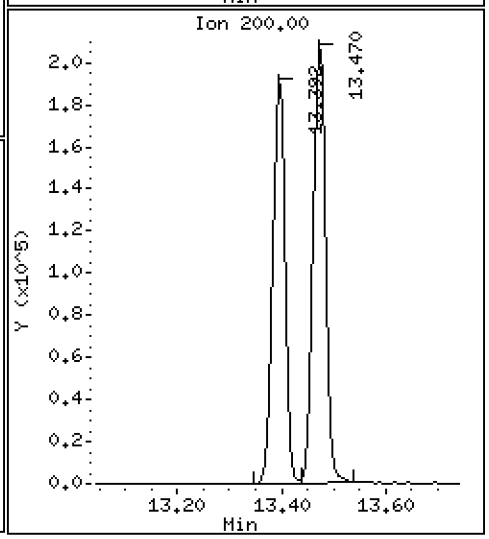












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

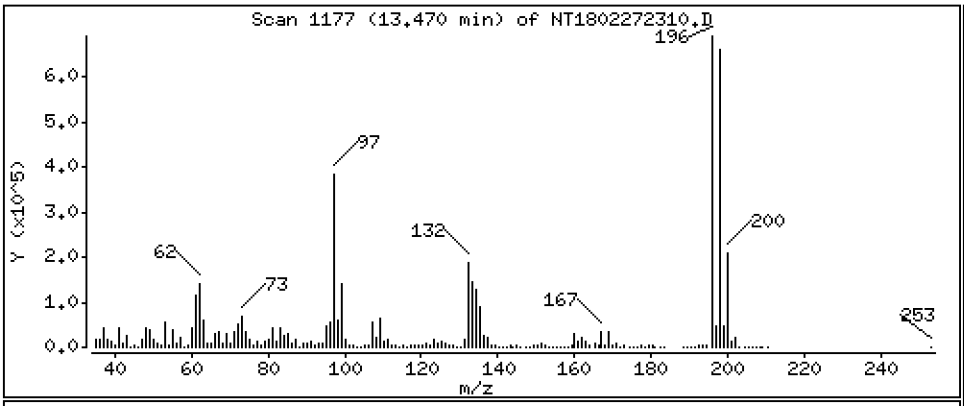
Operator: VTS

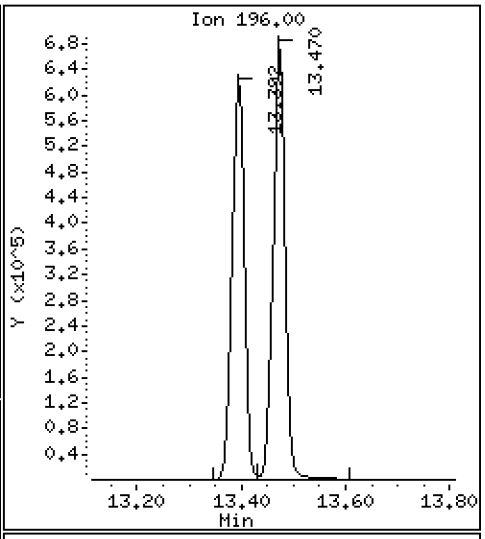
Column phase: ZB-5msi

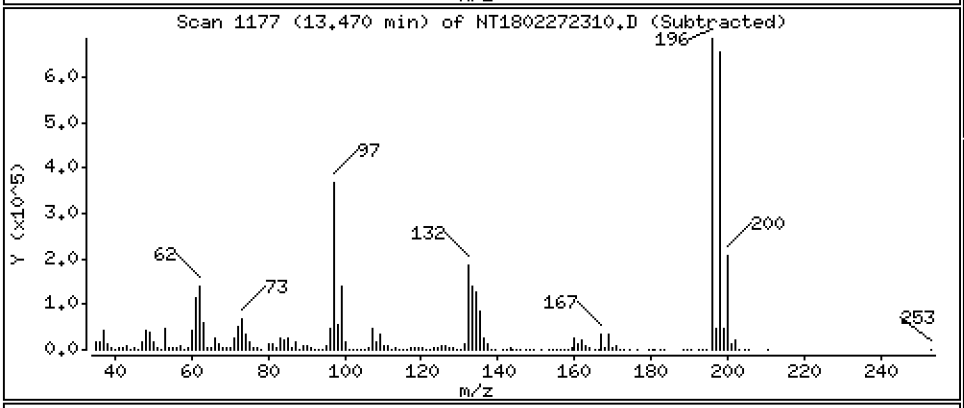
Column diameter: 0.25

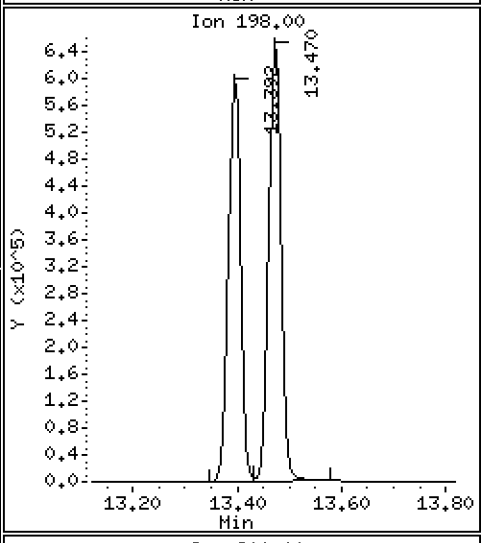
35 2,4,5-Trichlorophenol

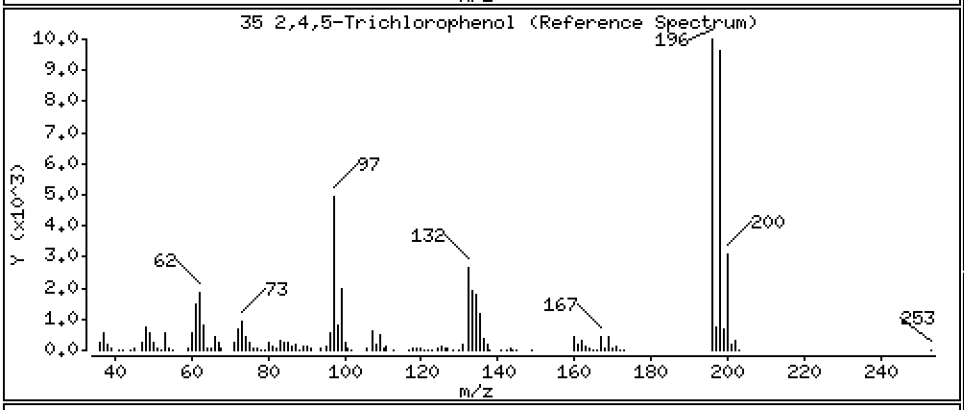
Concentration: 16.65 ug/mL

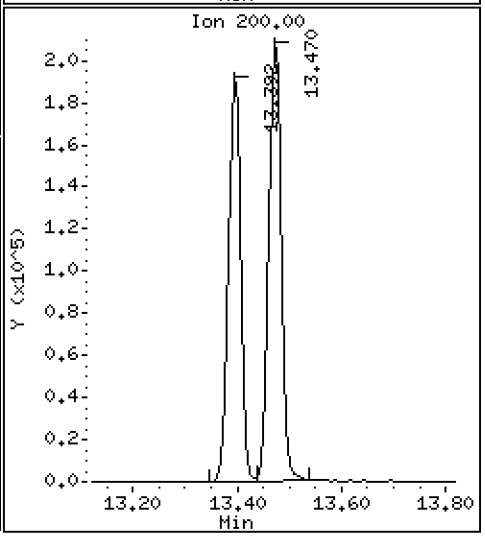


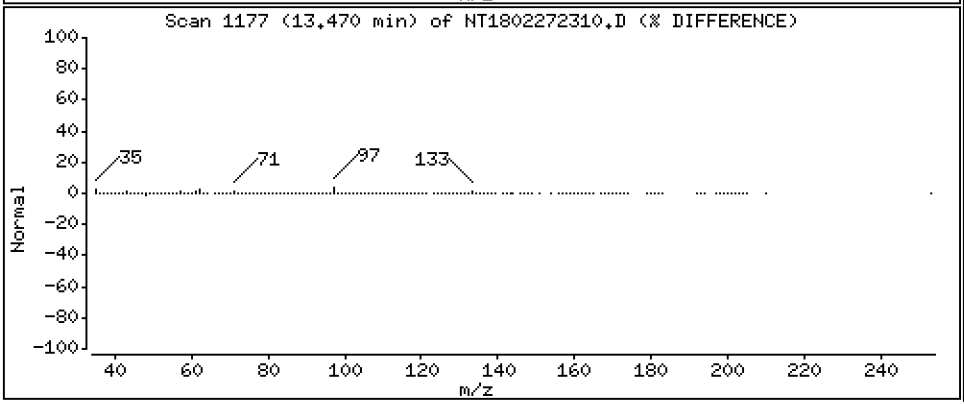












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

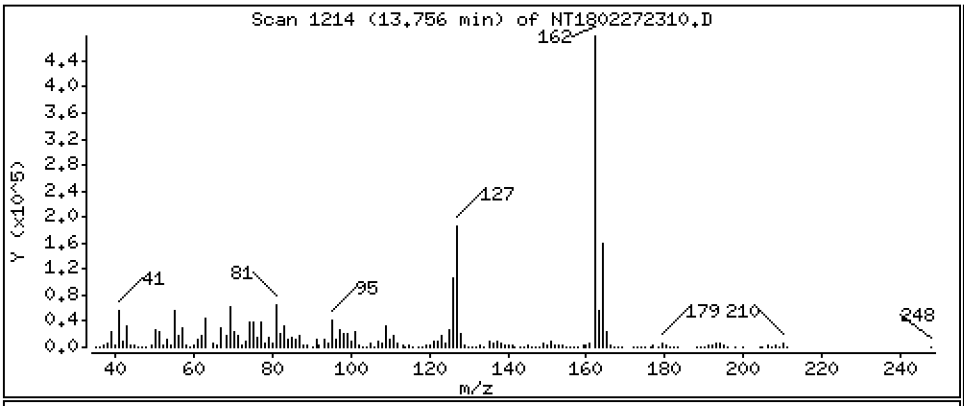
Operator: VTS

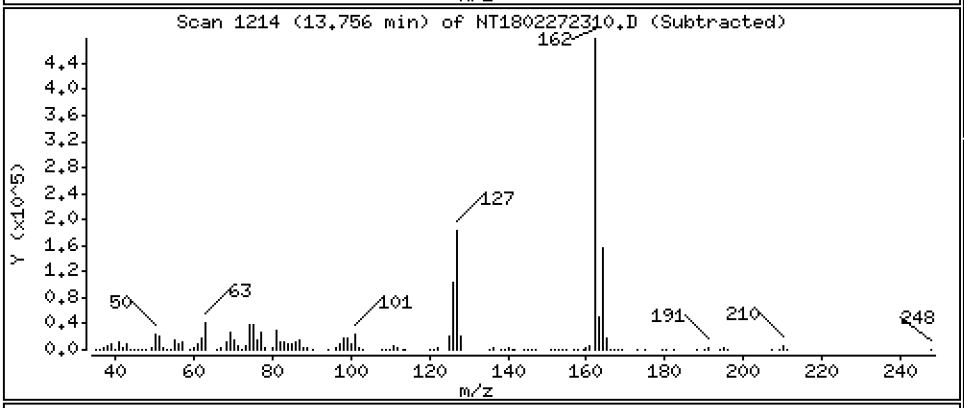
Column phase: ZB-5msi

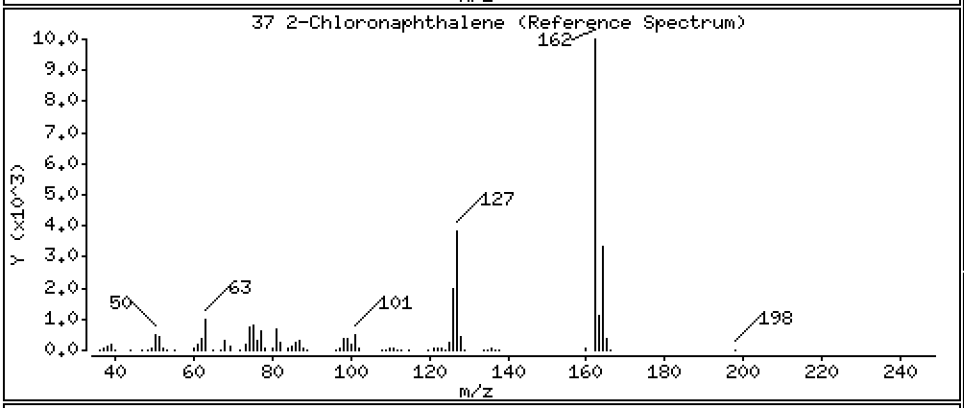
Column diameter: 0.25

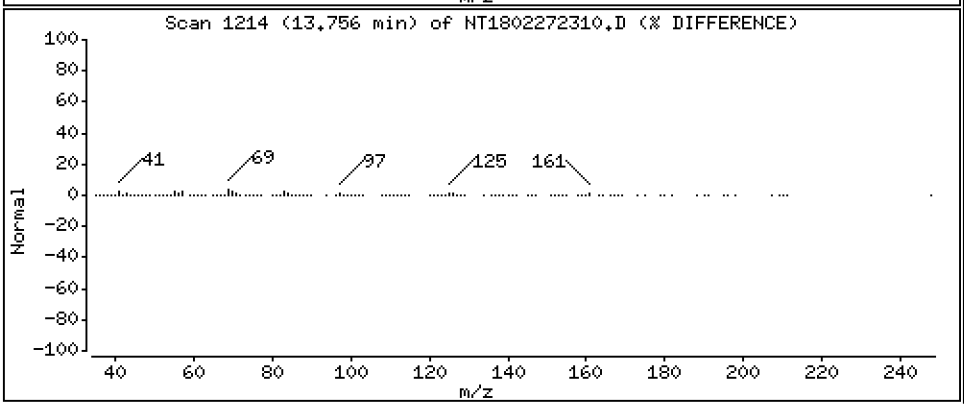
37 2-Chloronaphthalene

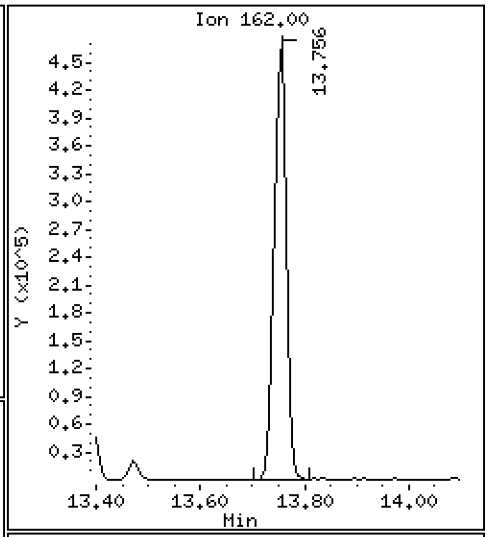
Concentration: 3.637 ug/mL

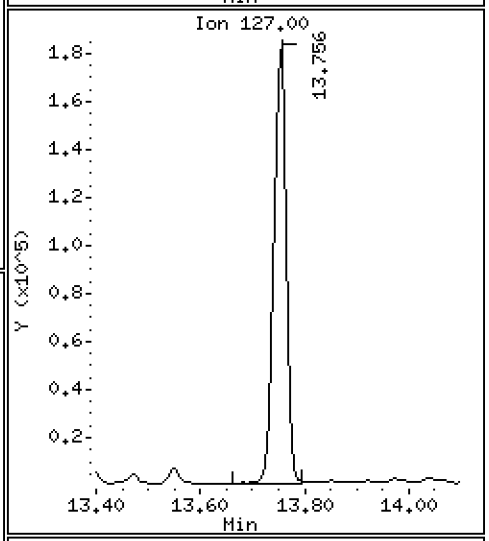


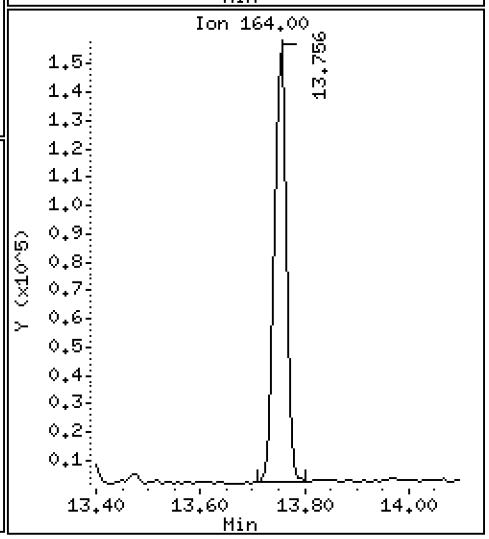












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

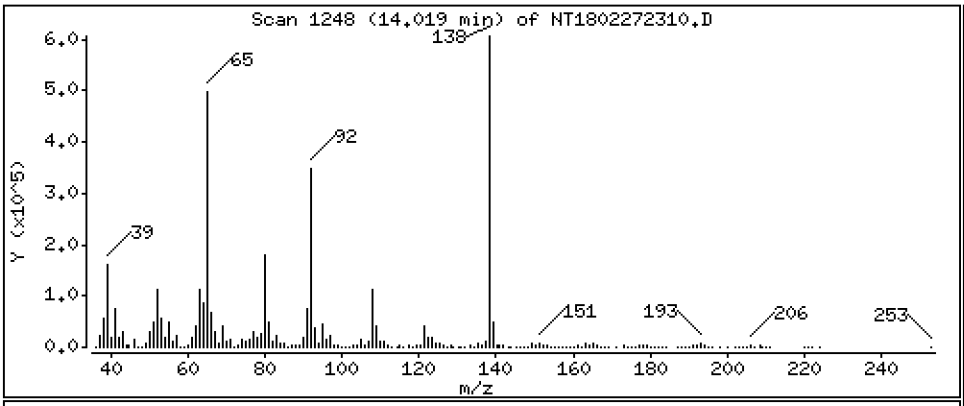
Operator: VTS

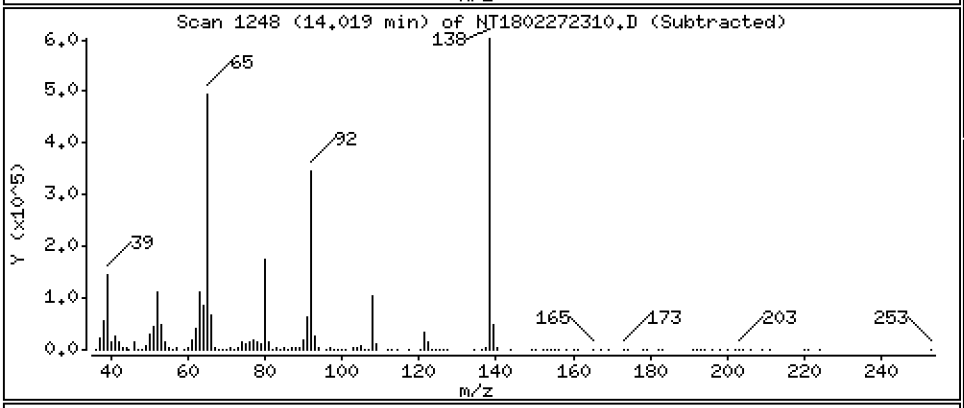
Column phase: ZB-5msi

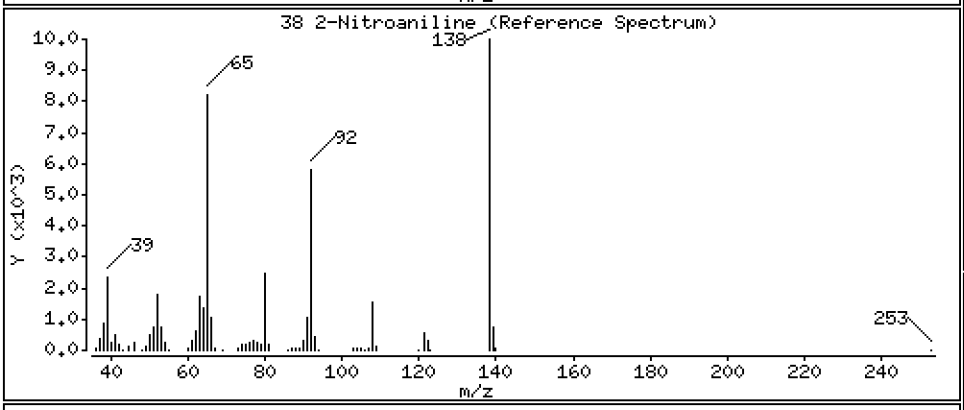
Column diameter: 0.25

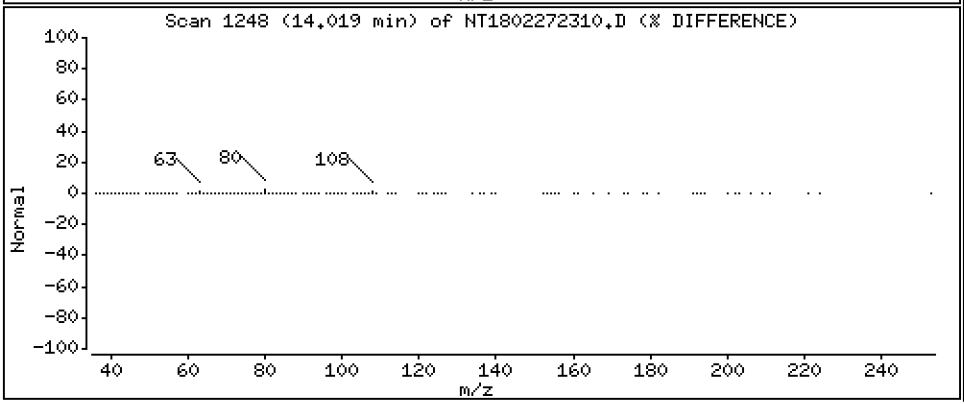
38 2-Nitroaniline

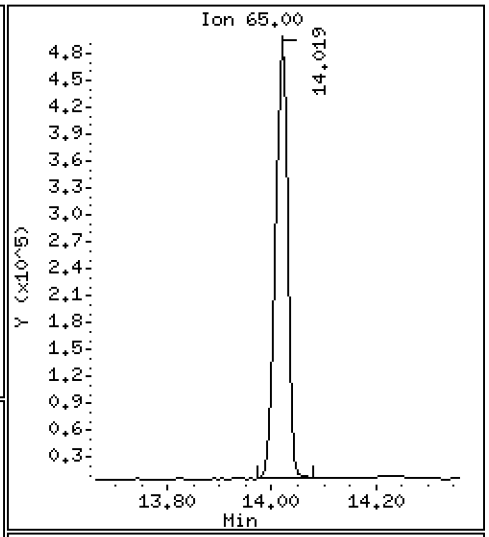
Concentration: 11.87 ug/mL

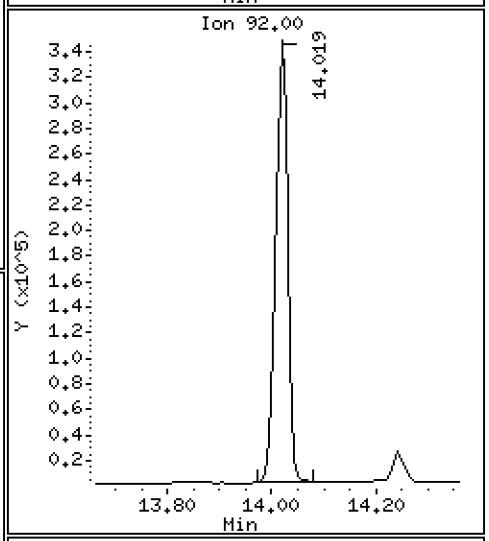


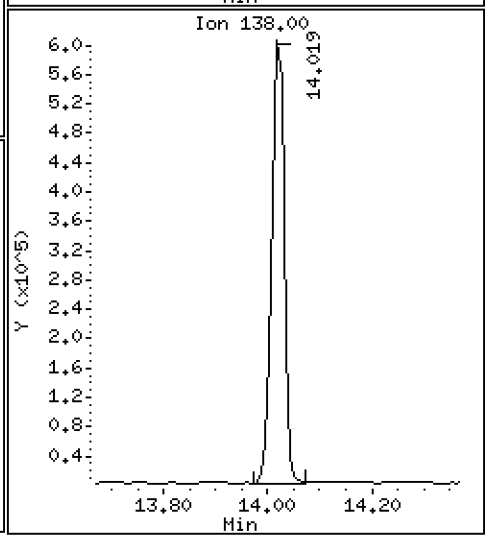












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

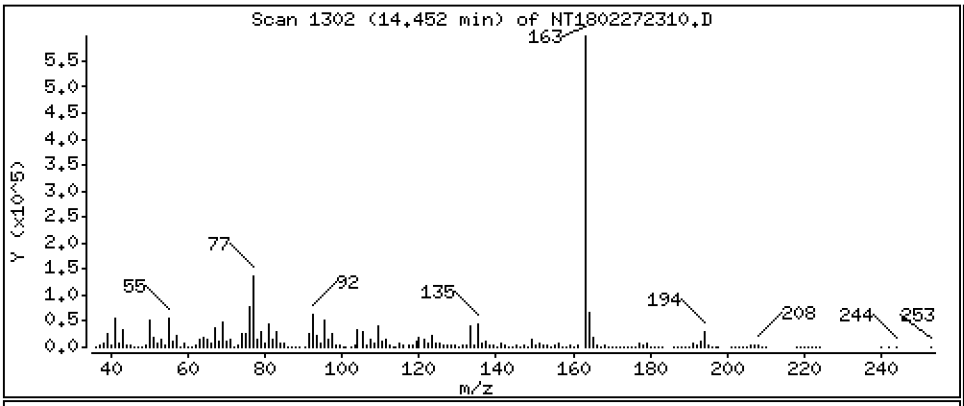
Operator: VTS

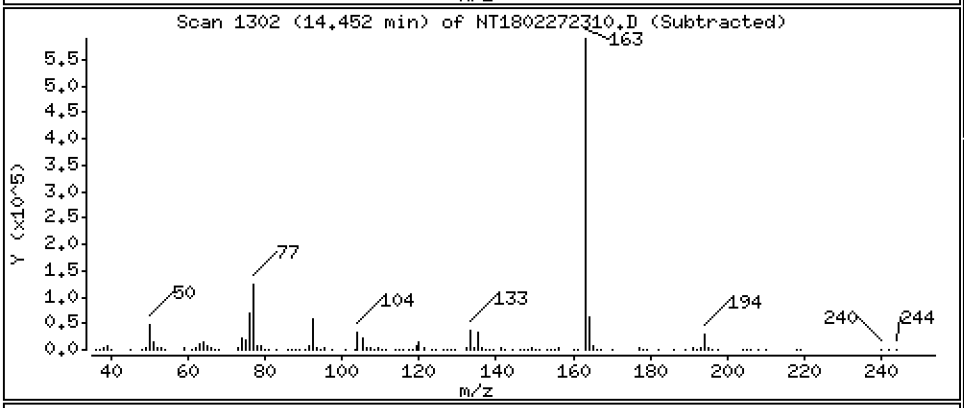
Column phase: ZB-5msi

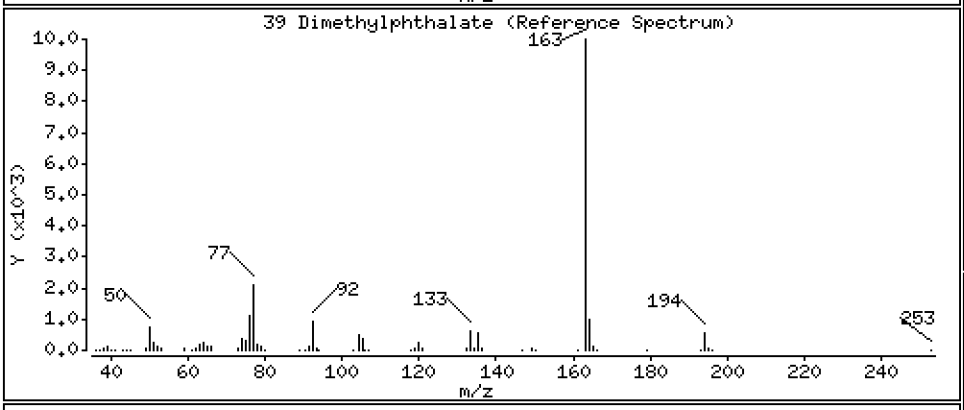
Column diameter: 0.25

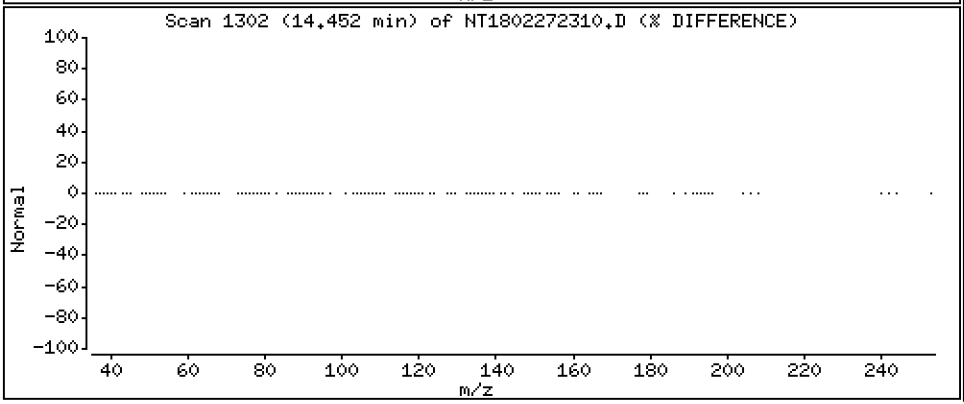
39 Dimethylphthalate

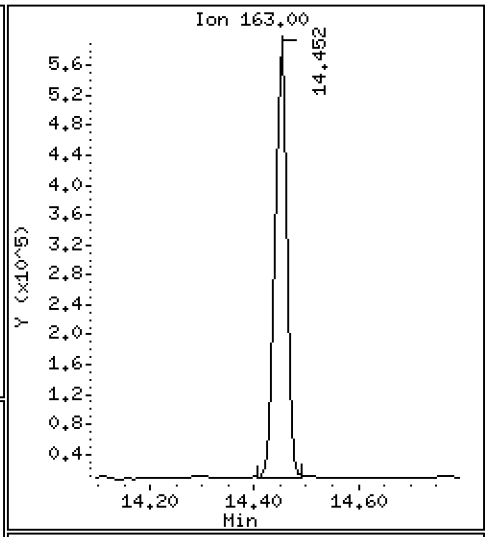
Concentration: 4.106 ug/mL

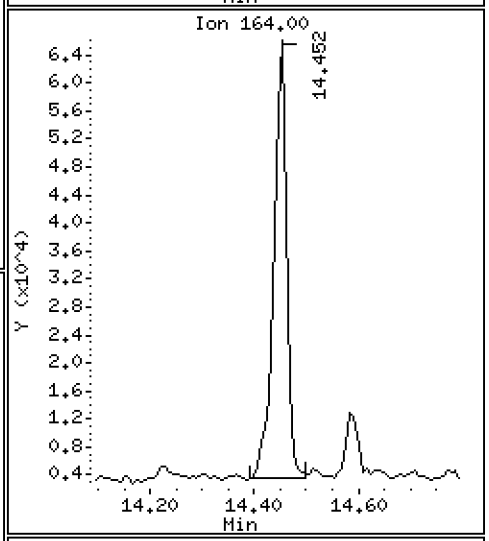


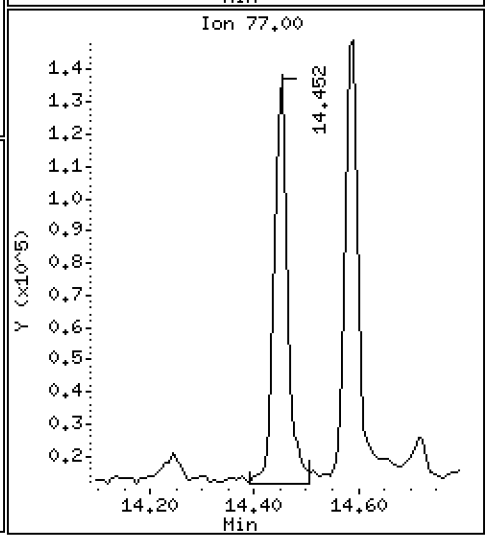












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

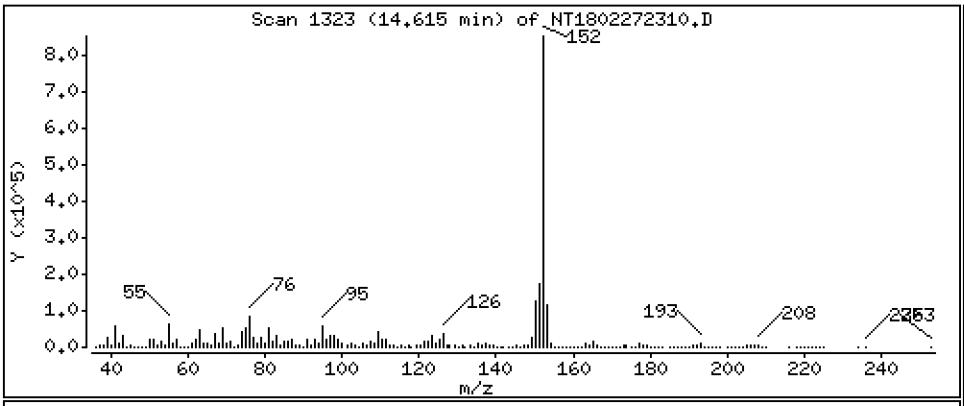
Operator: VTS

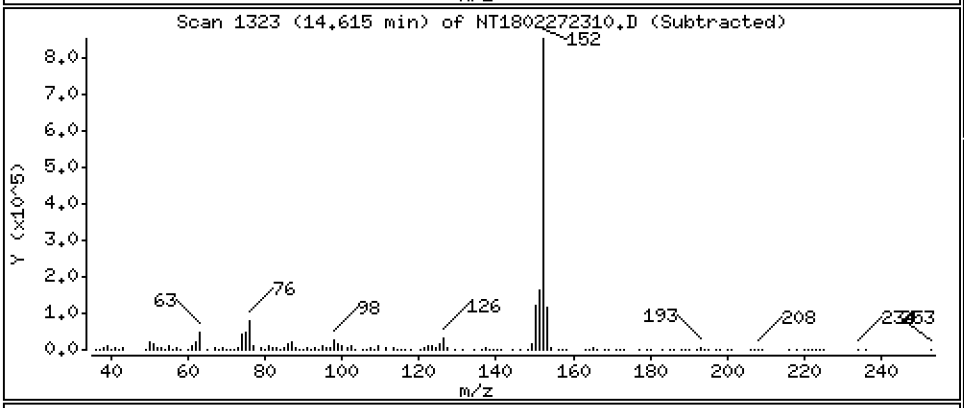
Column phase: ZB-5msi

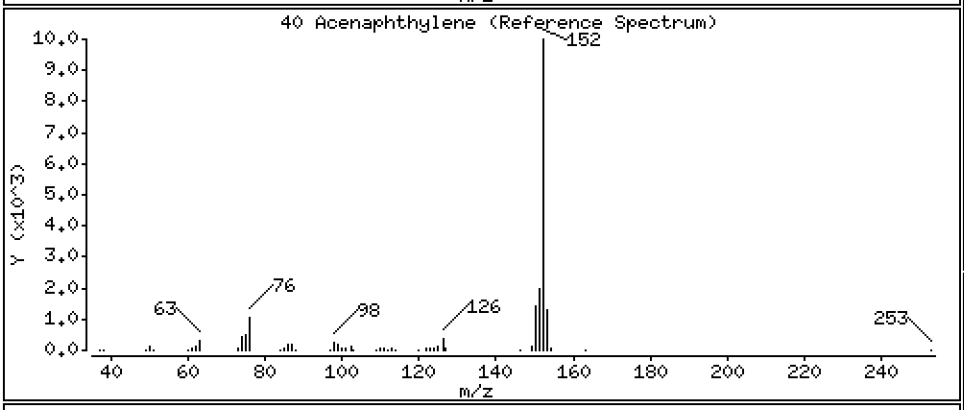
Column diameter: 0.25

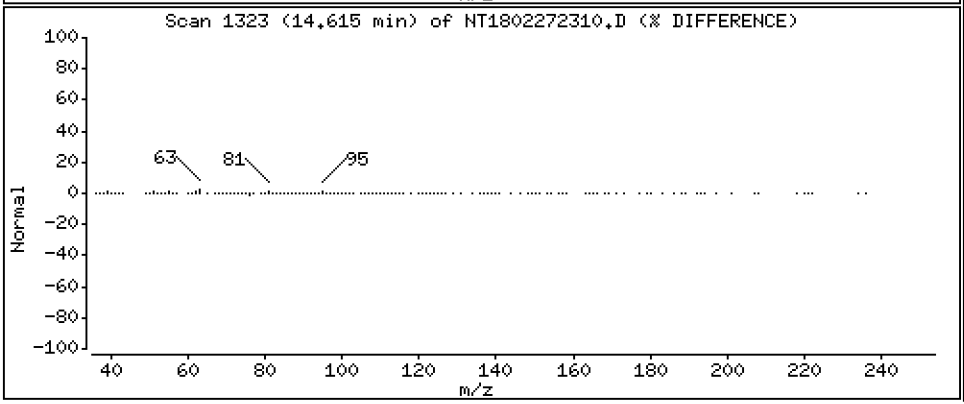
40 Acenaphthylene

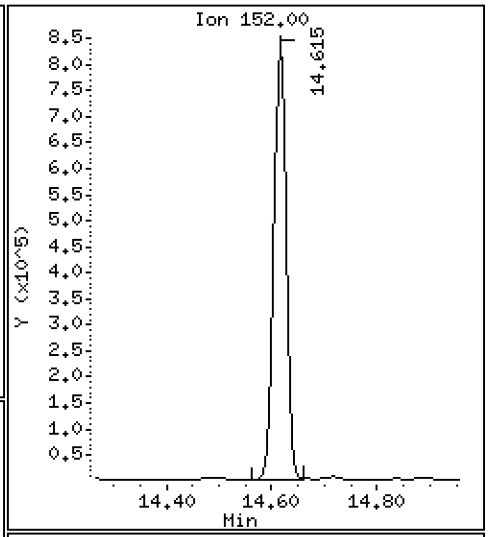
Concentration: 3.829 ug/mL

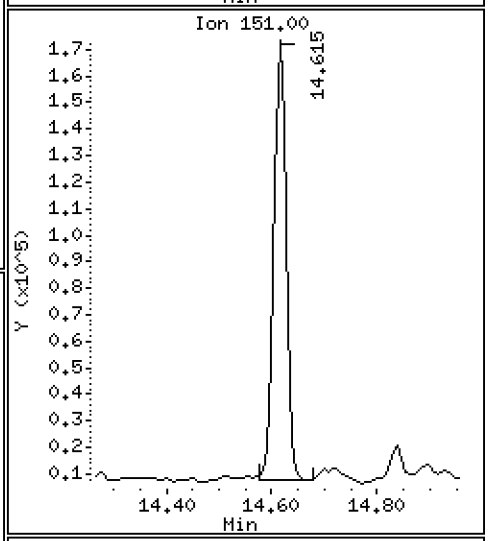


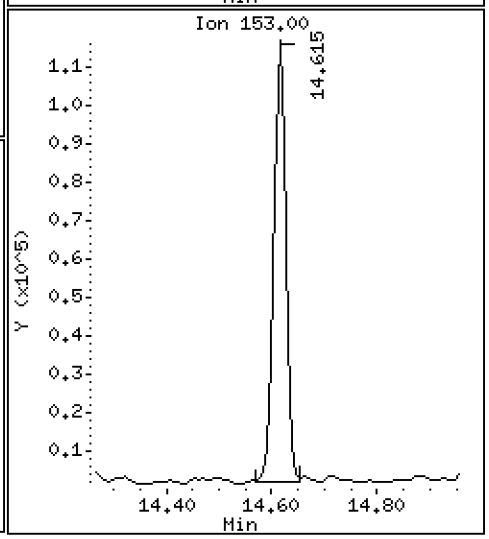












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

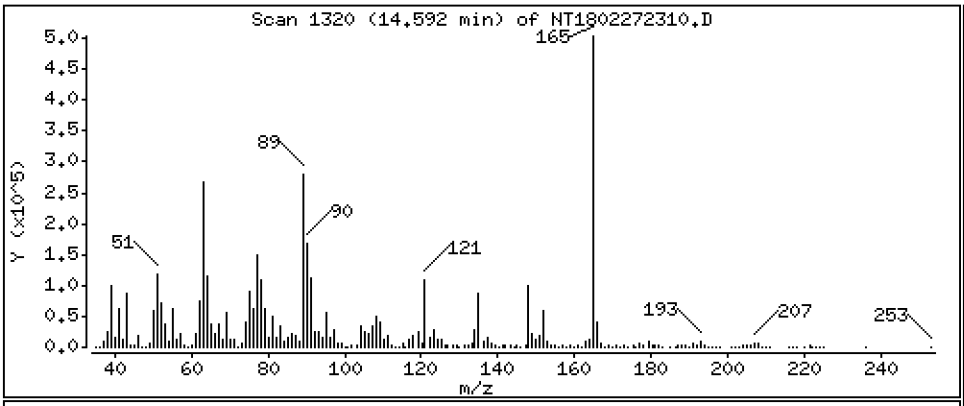
Operator: VTS

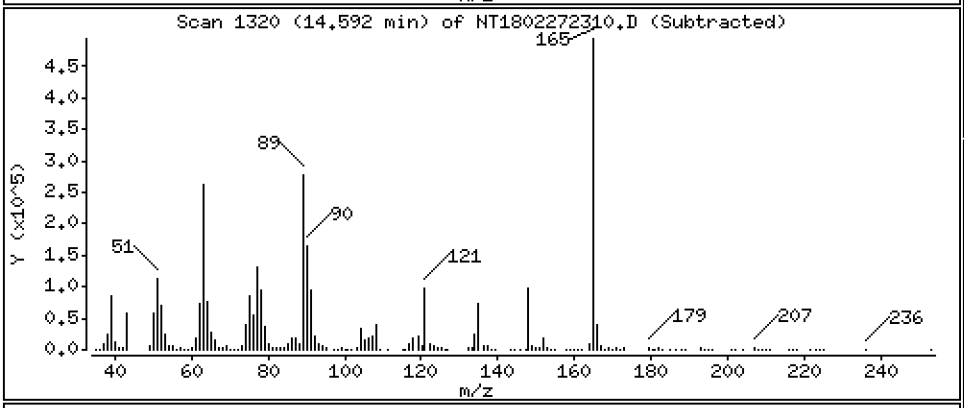
Column phase: ZB-5msi

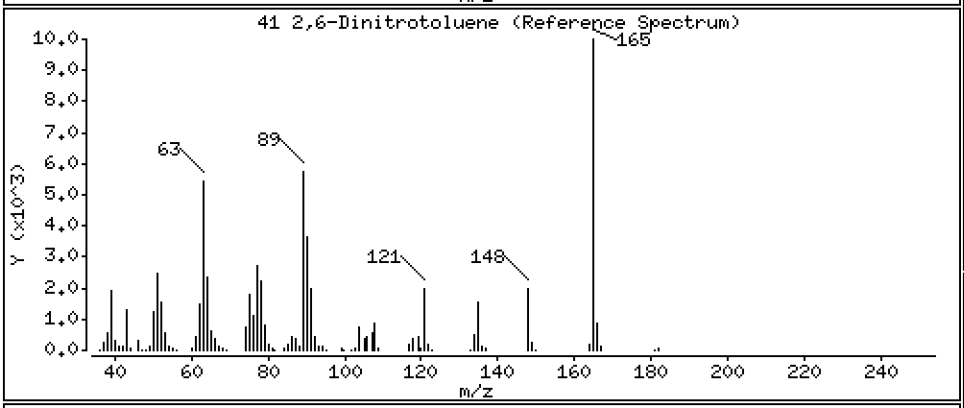
Column diameter: 0.25

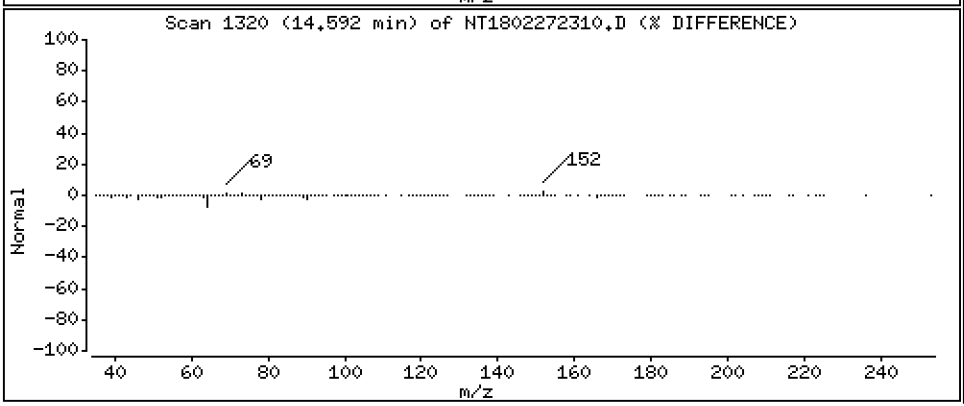
41 2,6-Dinitrotoluene

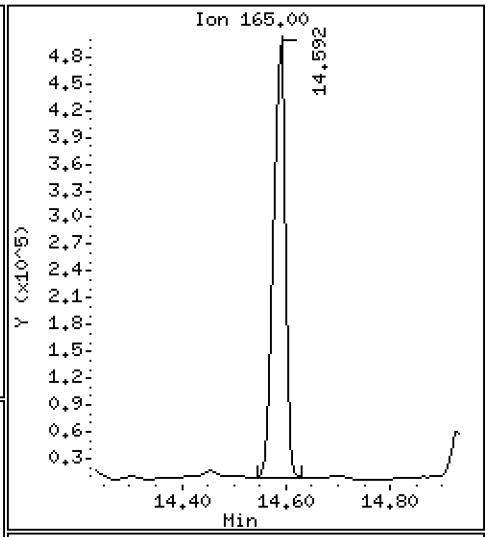
Concentration: 14.93 ug/mL

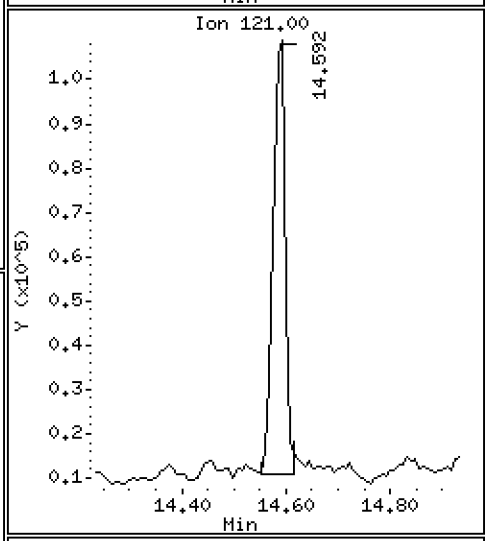


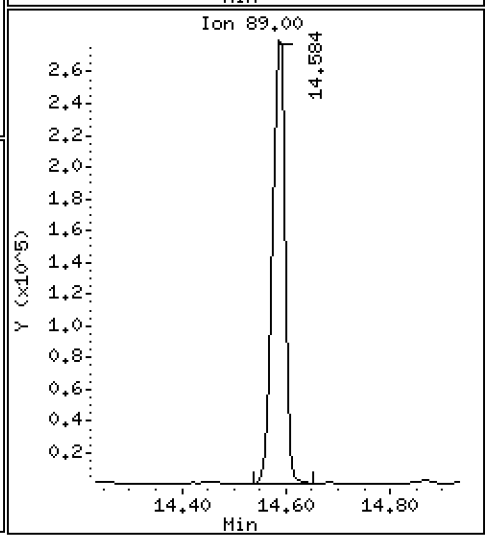












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

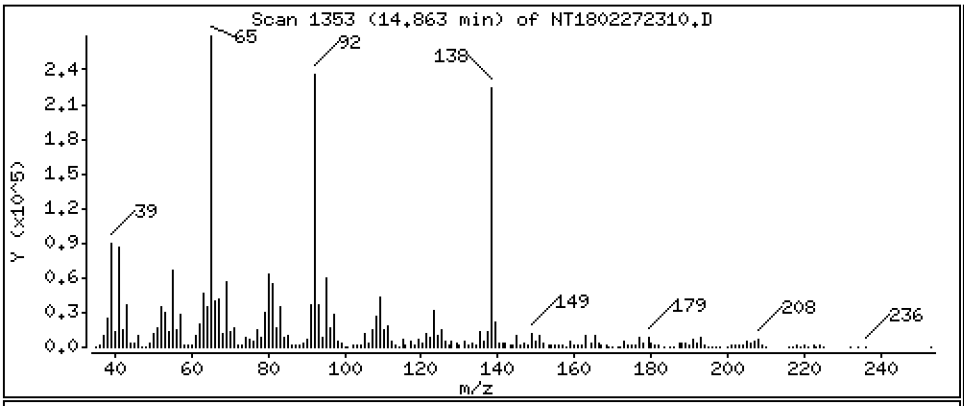
Operator: VTS

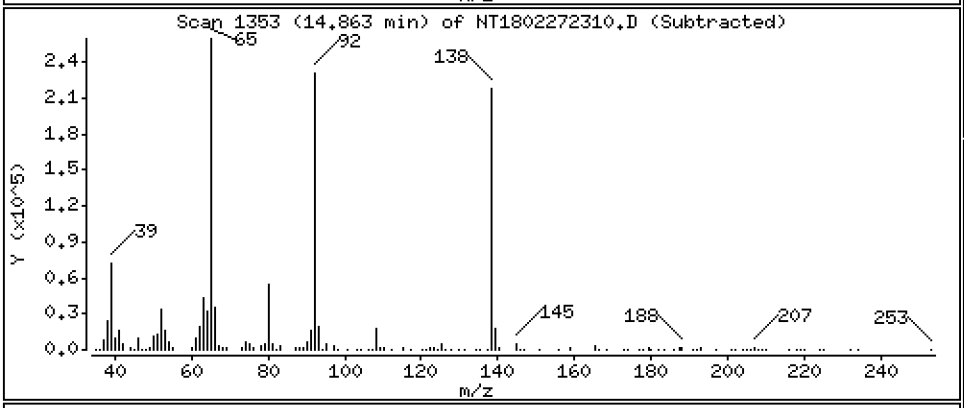
Column phase: ZB-5msi

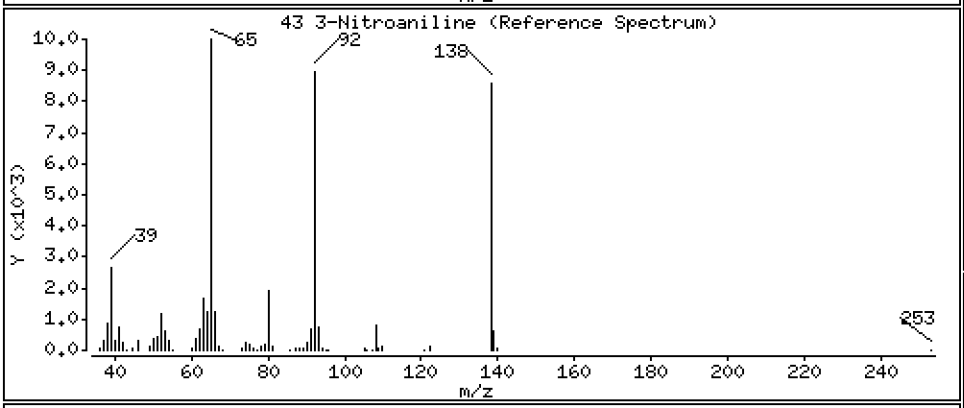
Column diameter: 0.25

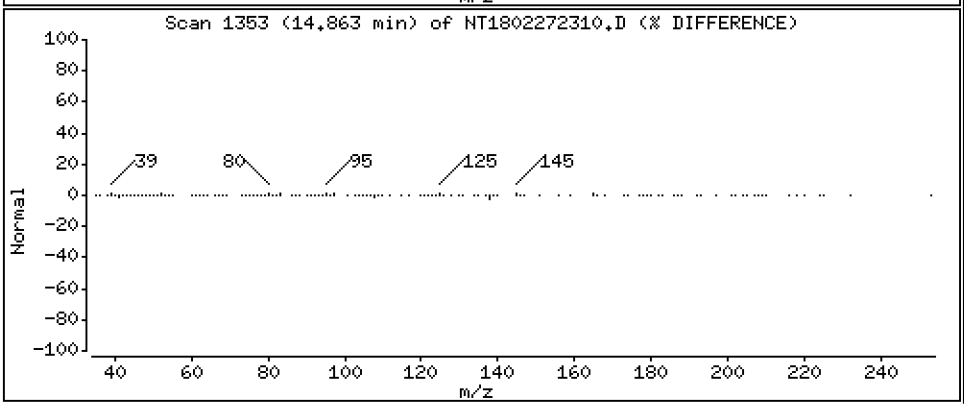
43 3-Nitroaniline

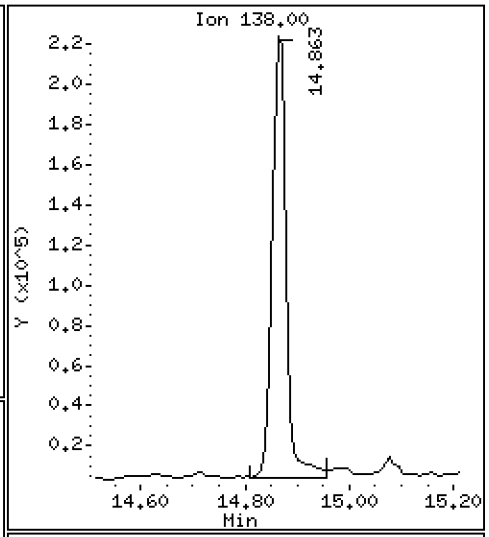
Concentration: 6.701 ug/mL

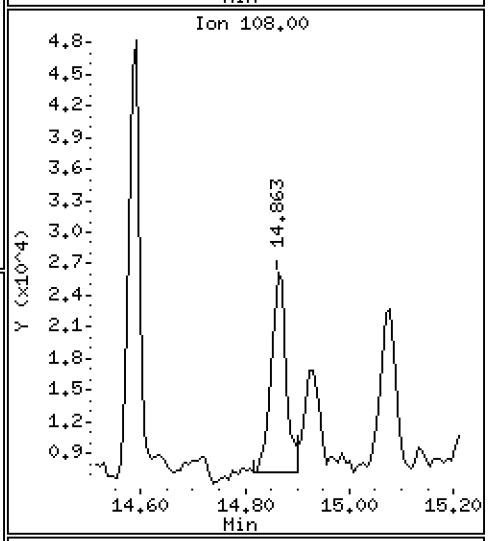


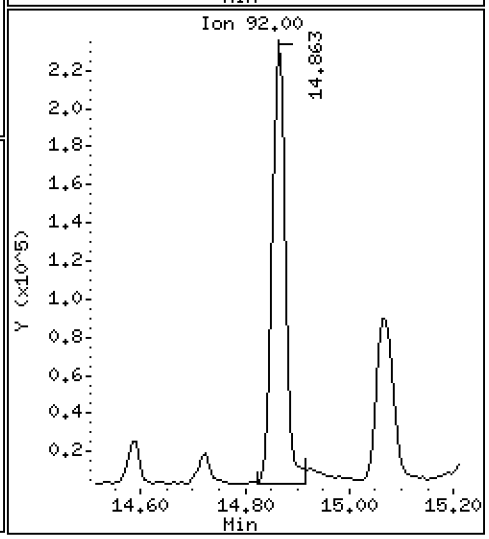












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

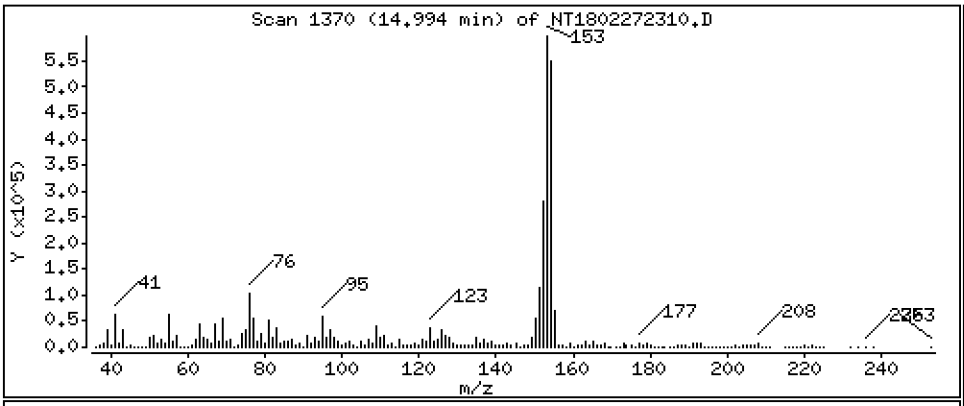
Operator: VTS

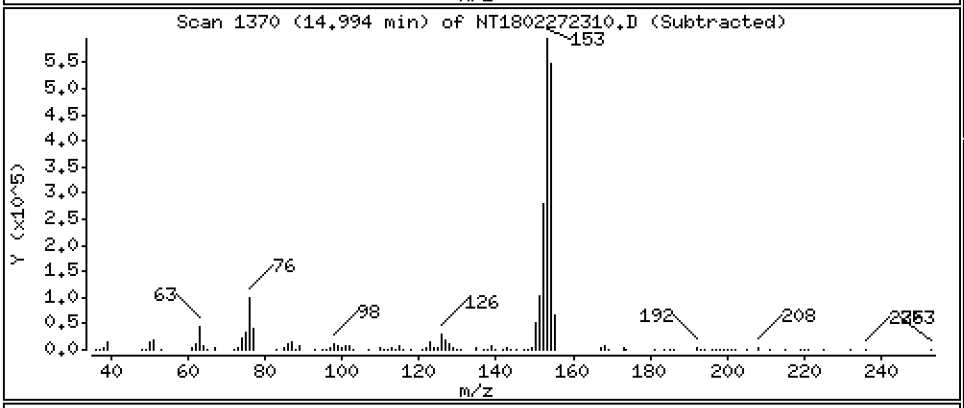
Column phase: ZB-5msi

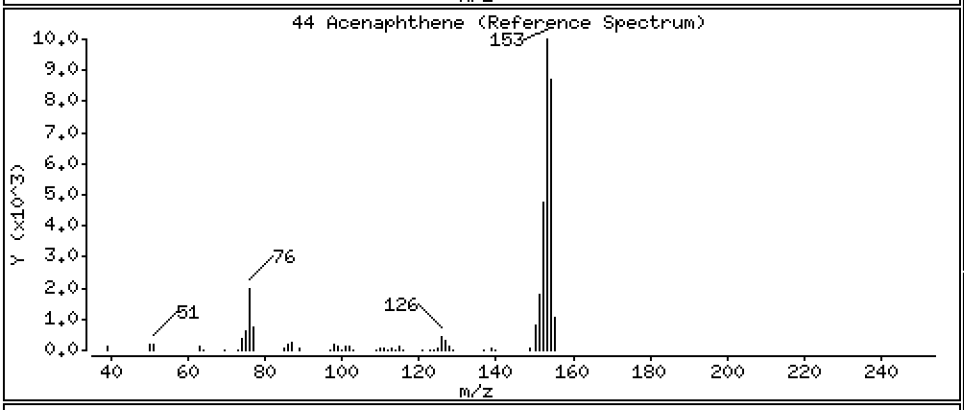
Column diameter: 0.25

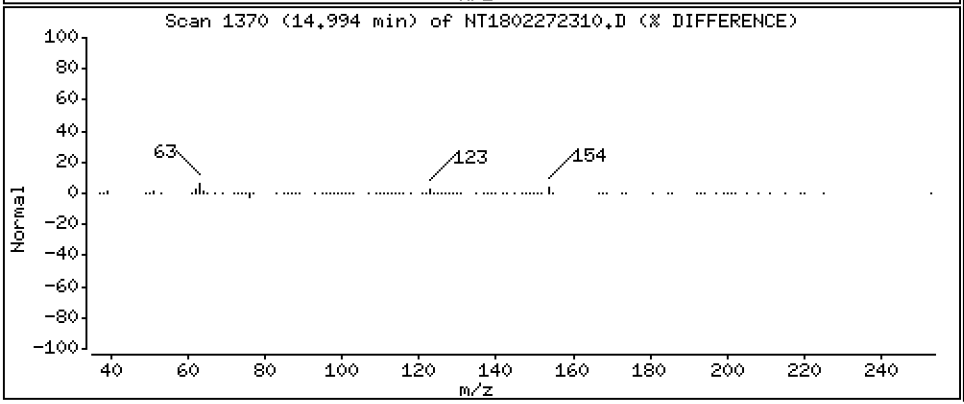
44 Acenaphthene

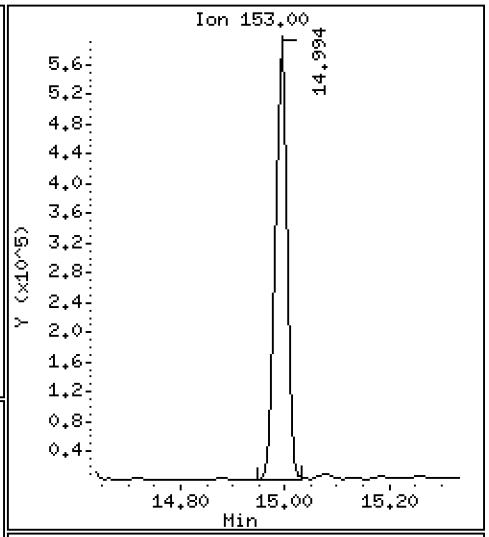
Concentration: 4.152 ug/mL

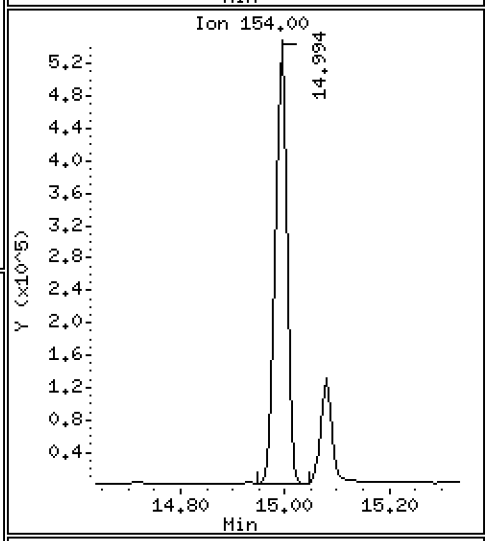


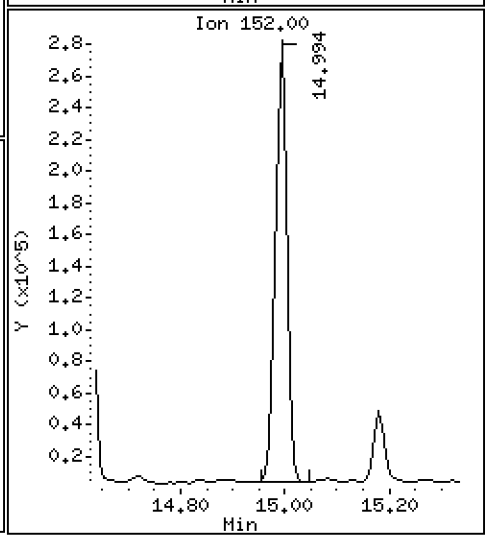












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

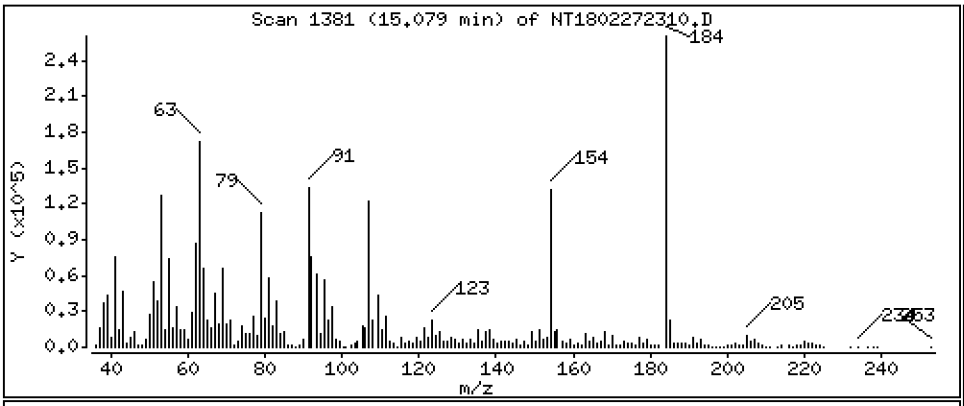
Operator: VTS

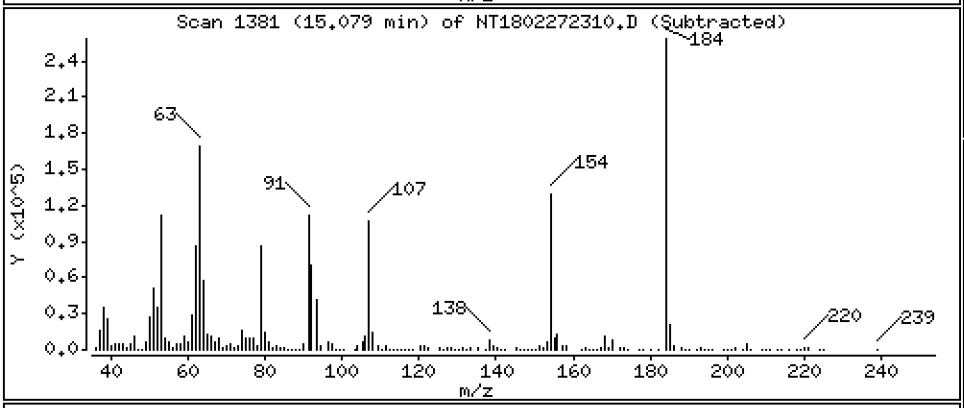
Column phase: ZB-5msi

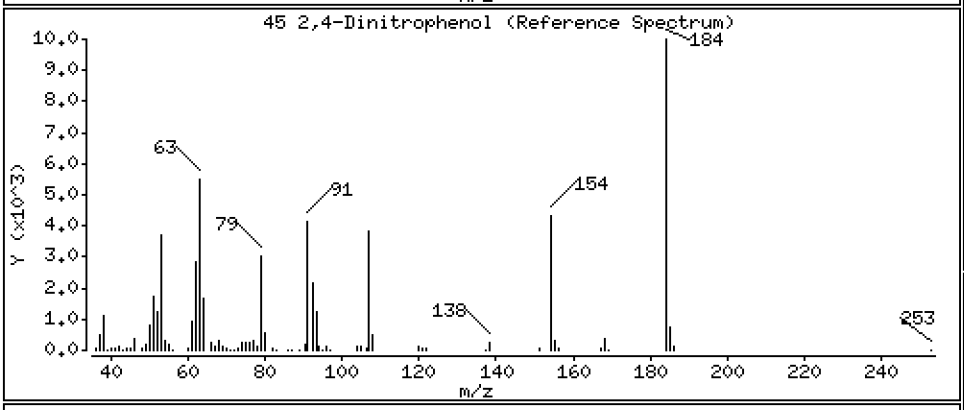
Column diameter: 0.25

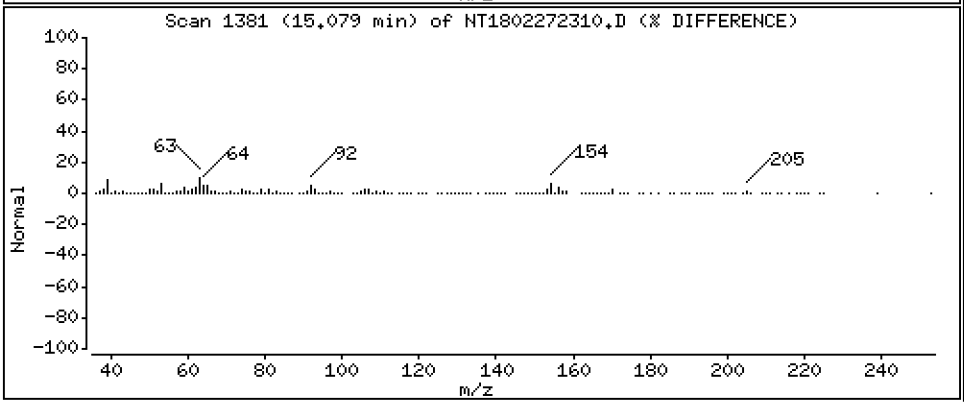
45 2,4-Dinitrophenol

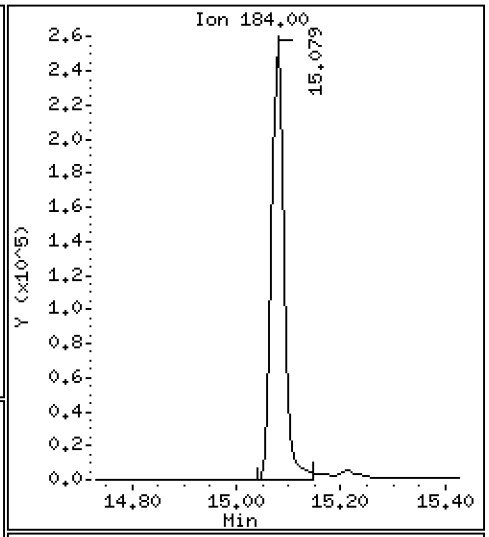
Concentration: 16.82 ug/mL

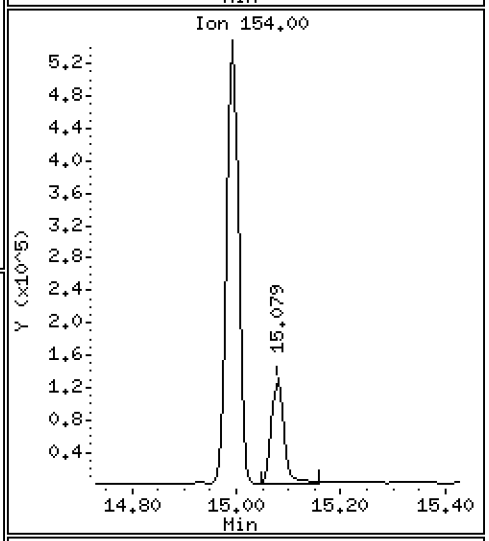


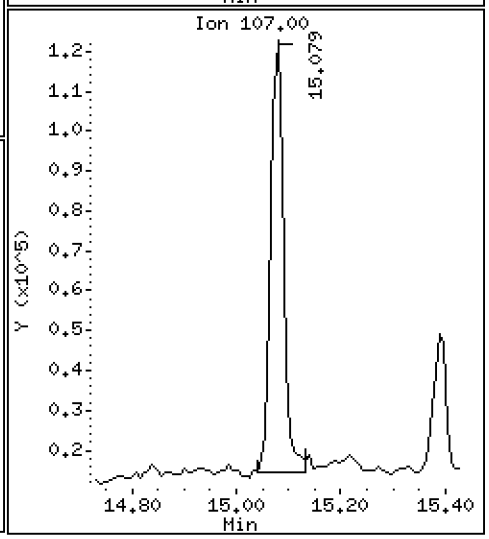












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

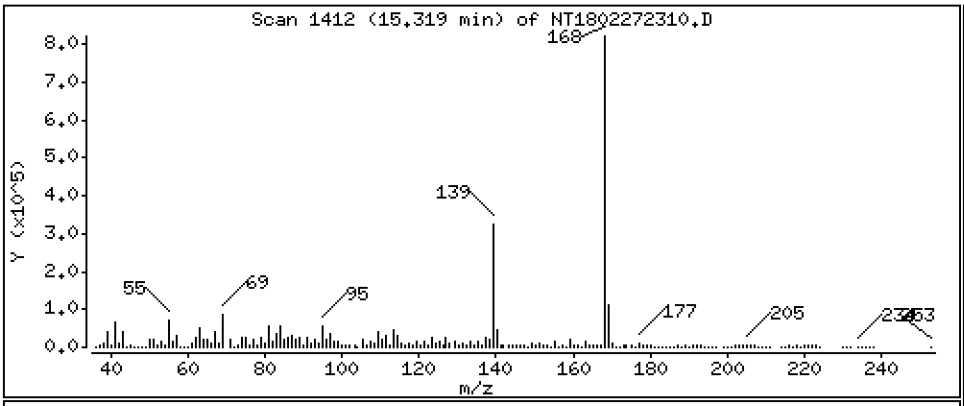
Operator: VTS

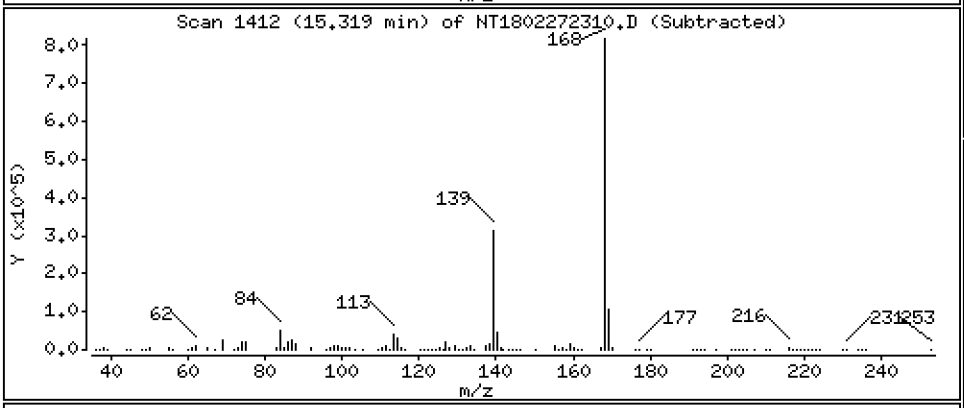
Column phase: ZB-5msi

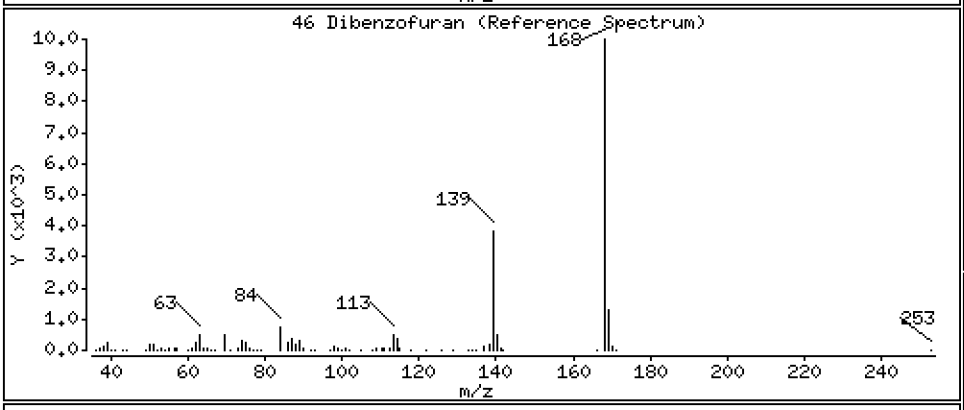
Column diameter: 0.25

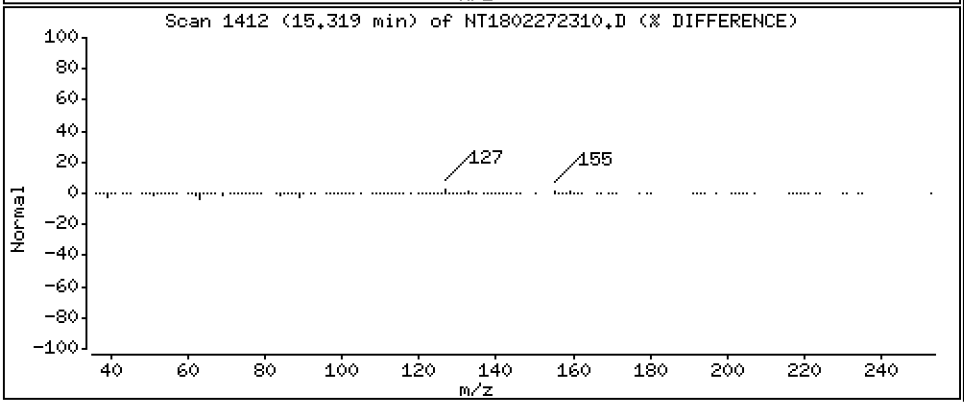
46 Dibenzofuran

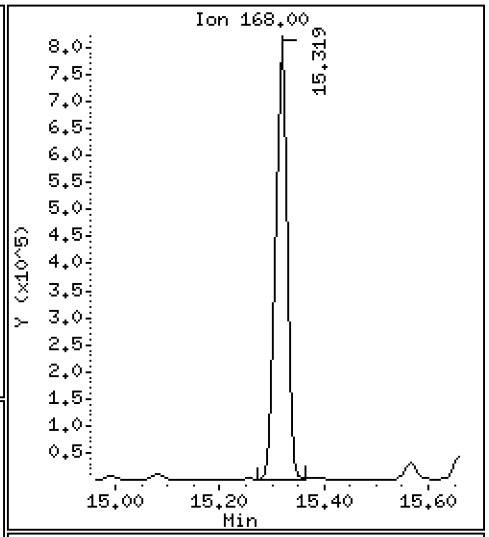
Concentration: 3.896 ug/mL

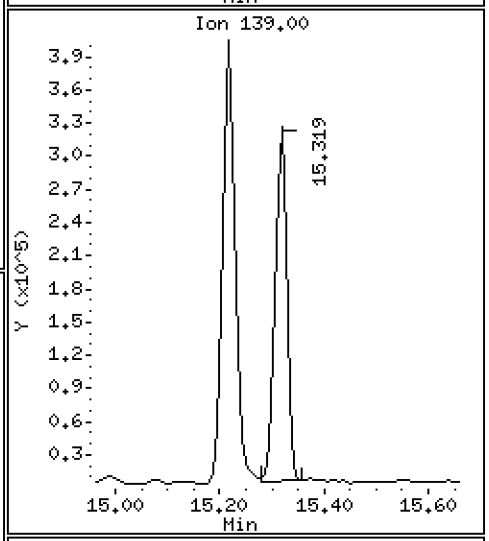


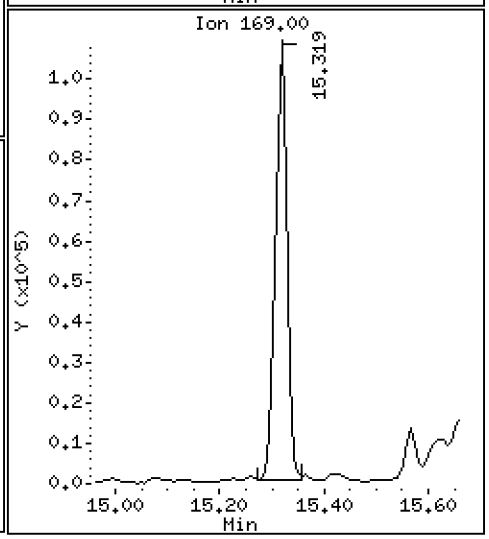












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

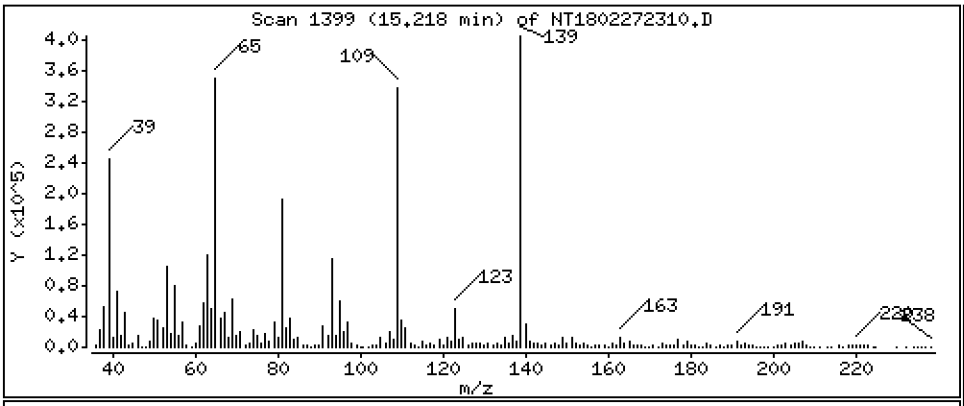
Operator: VTS

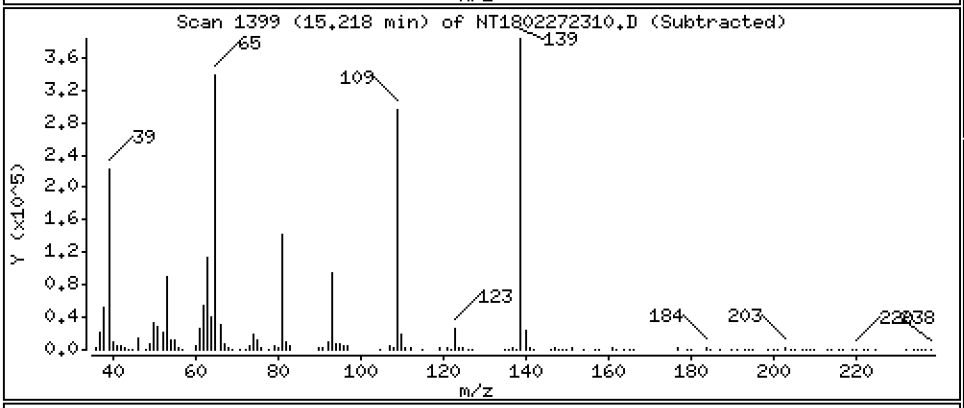
Column phase: ZB-5msi

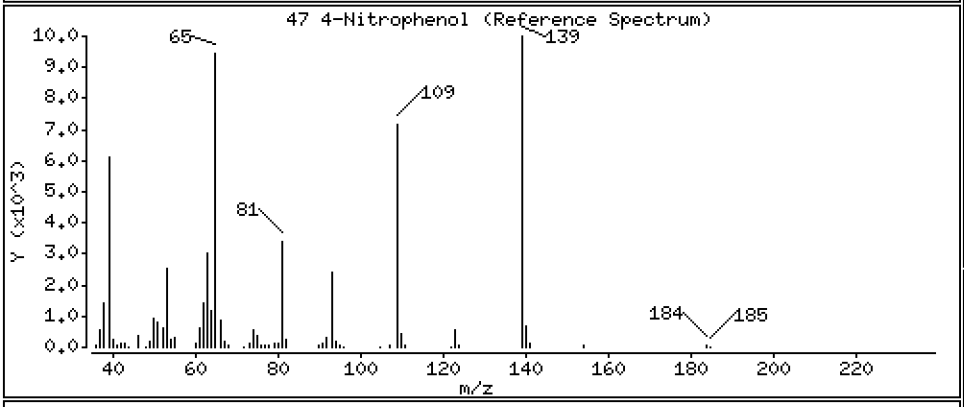
Column diameter: 0.25

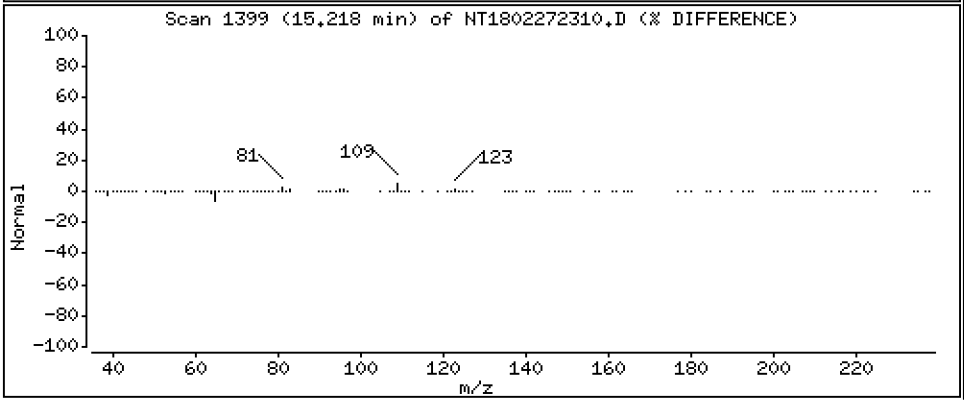
47 4-Nitrophenol

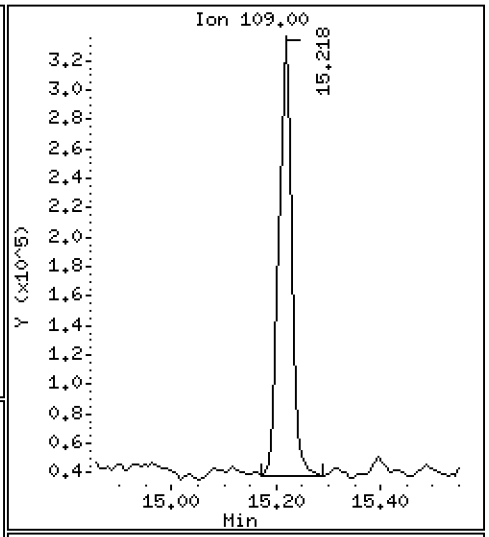
Concentration: 21.03 ug/mL

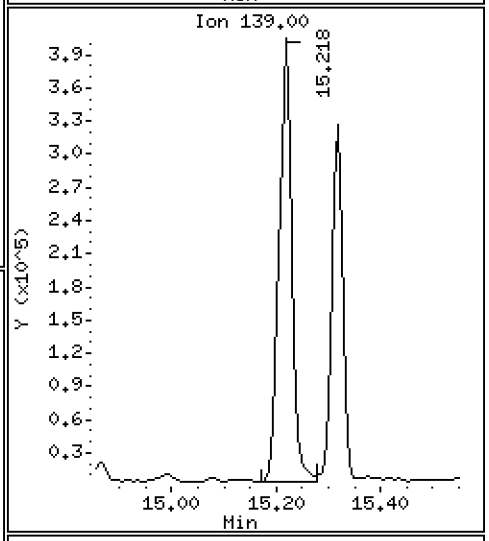


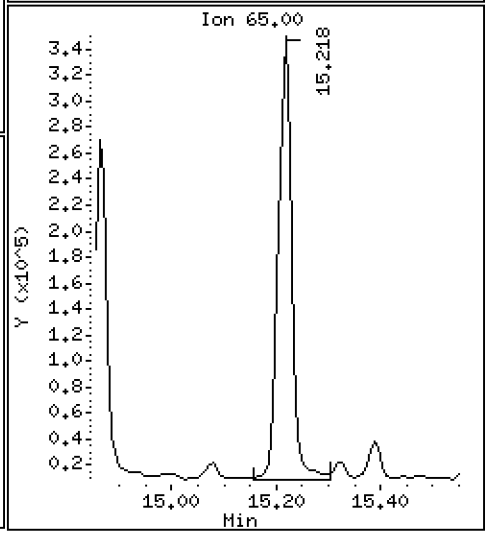












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

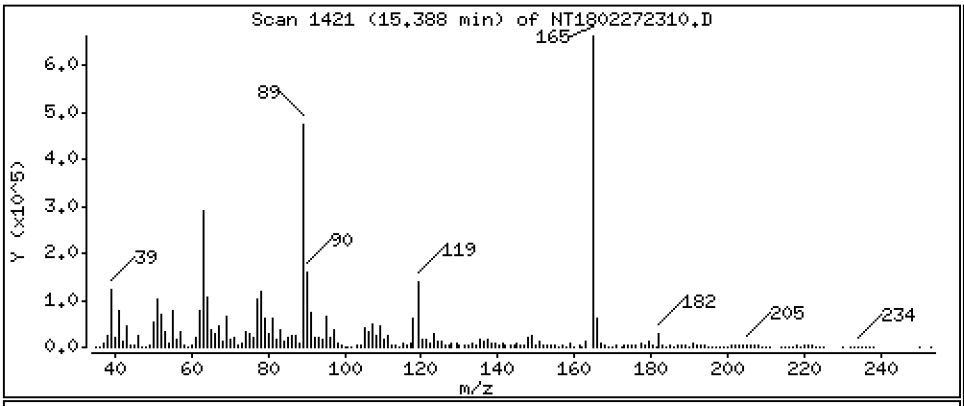
Operator: VTS

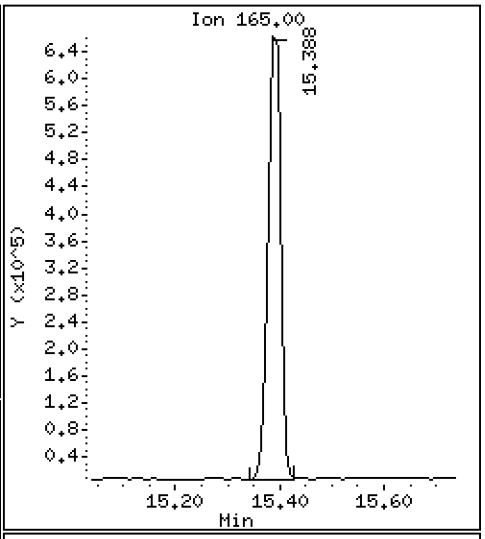
Column phase: ZB-5msi

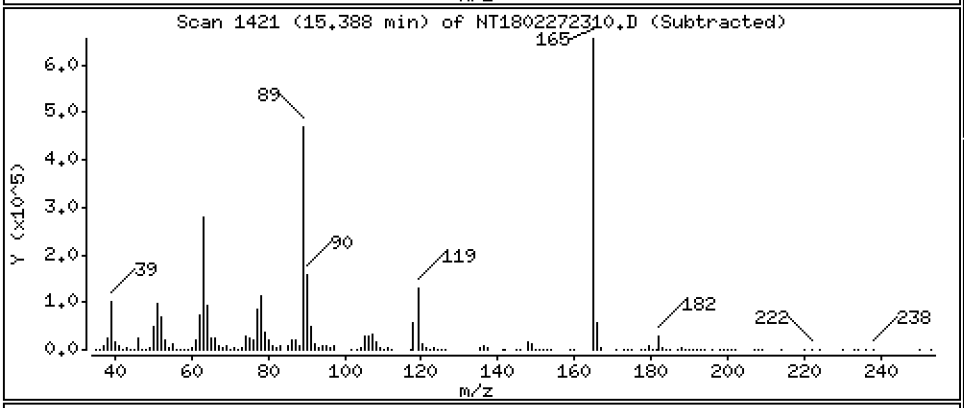
Column diameter: 0.25

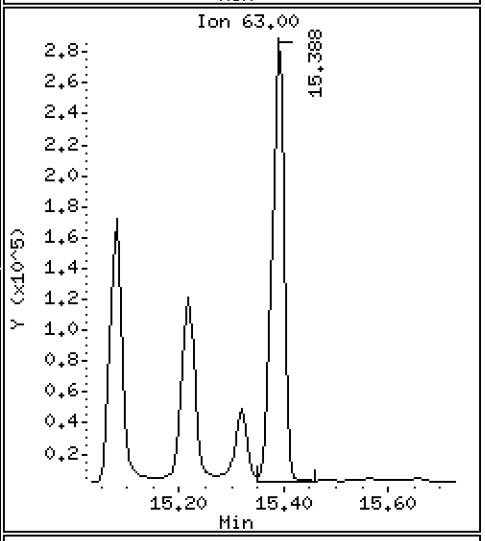
48 2,4-Dinitrotoluene

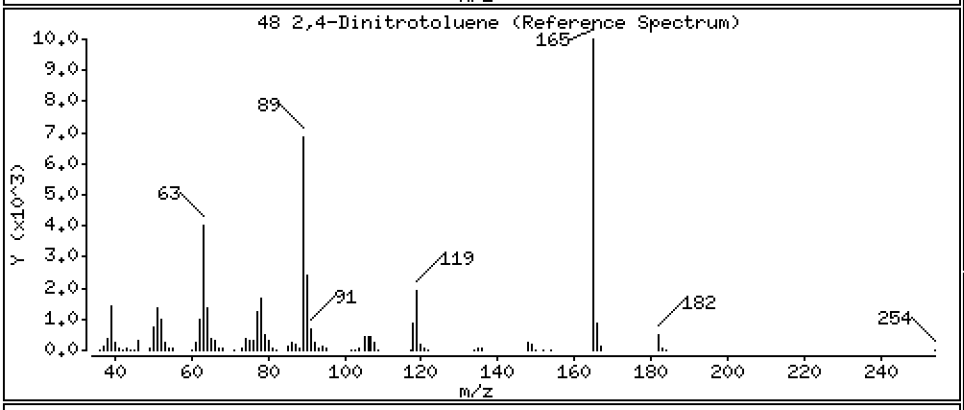
Concentration: 15.38 ug/mL

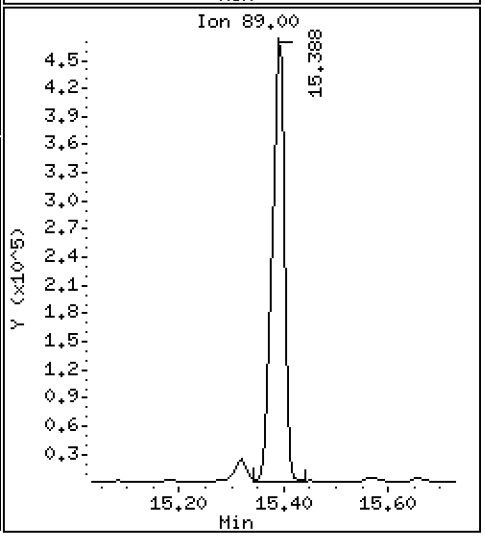


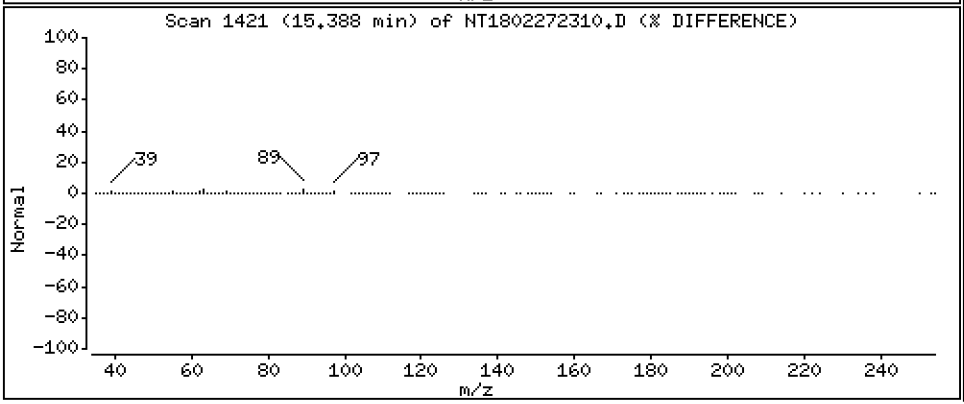












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

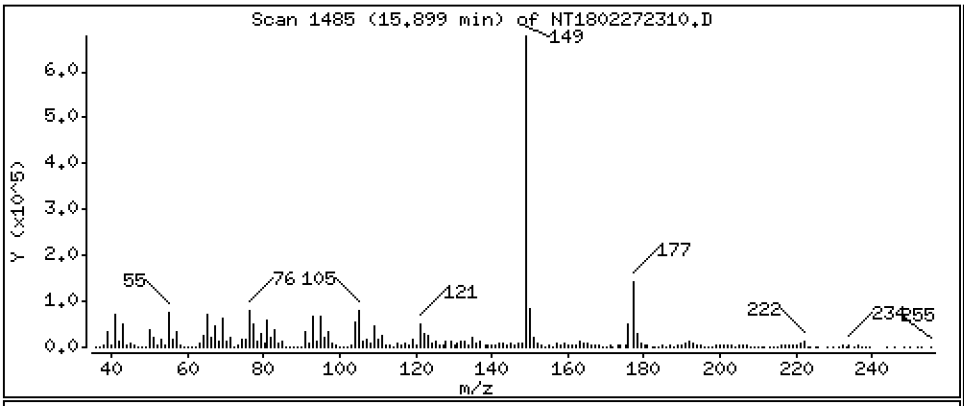
Operator: VTS

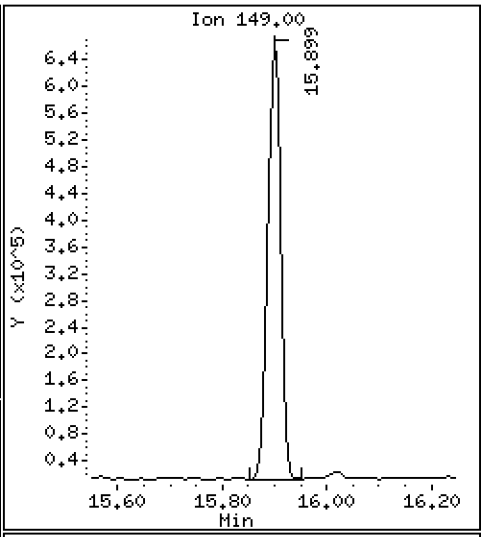
Column phase: ZB-5msi

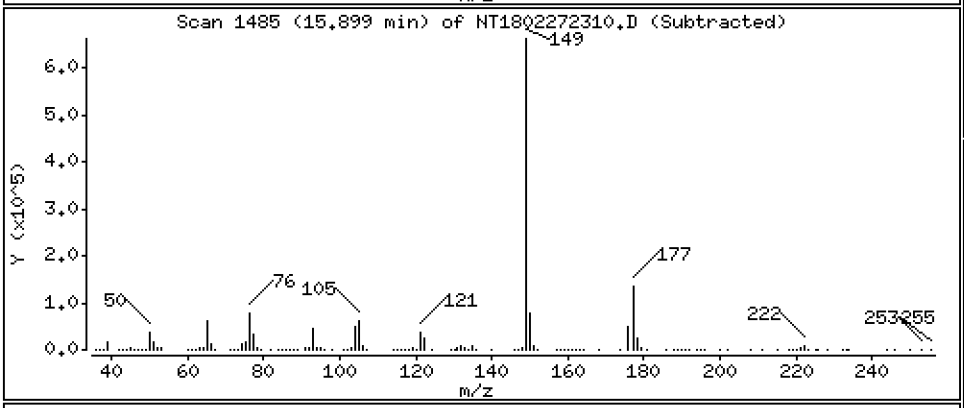
Column diameter: 0.25

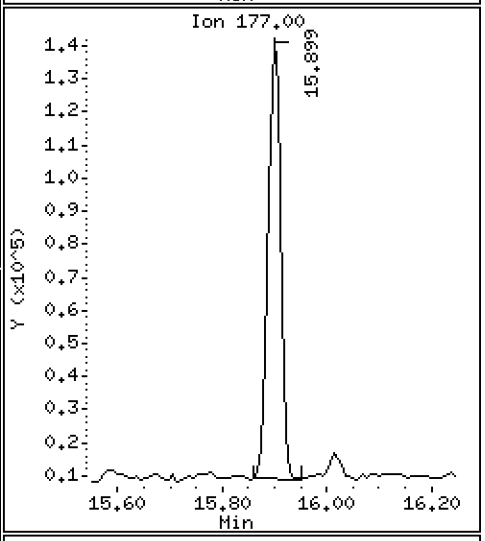
50 Diethylphthalate

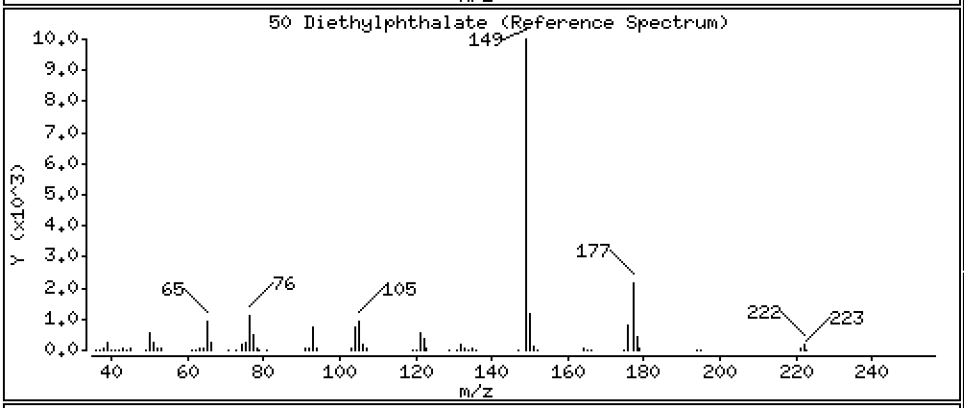
Concentration: 4.722 ug/mL

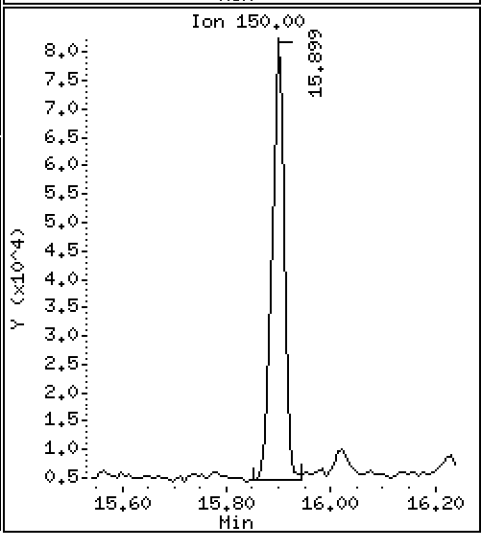


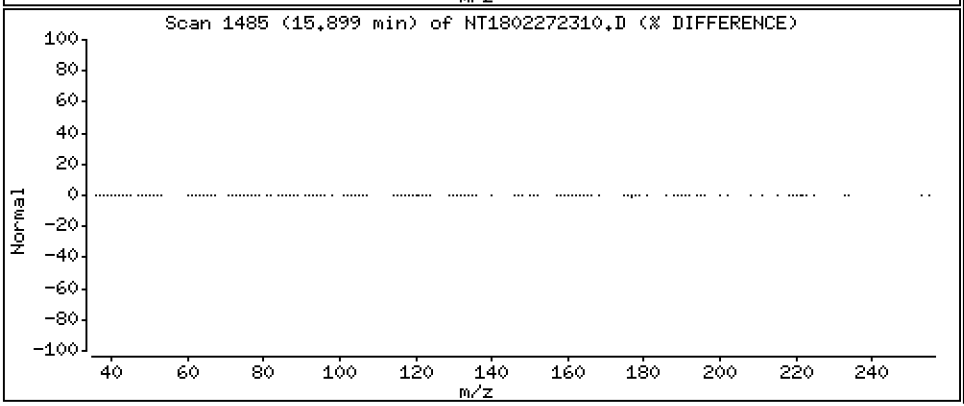












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

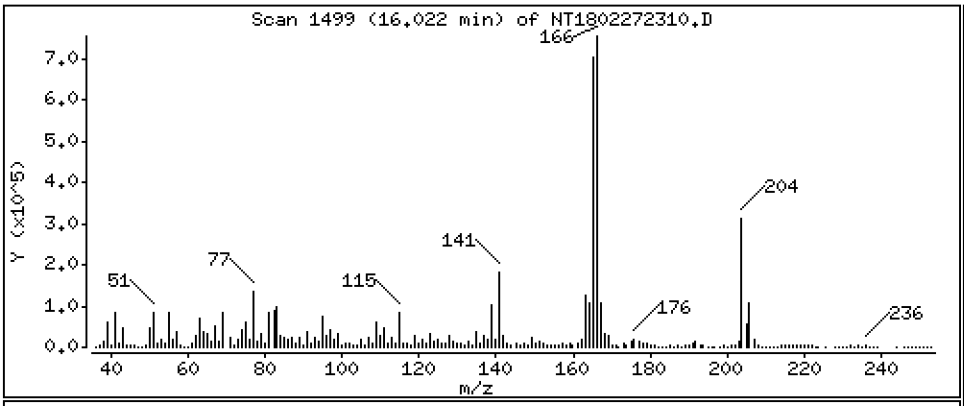
Operator: VTS

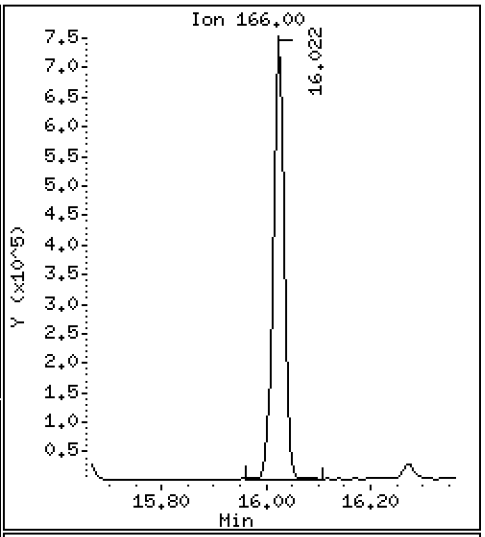
Column phase: ZB-5msi

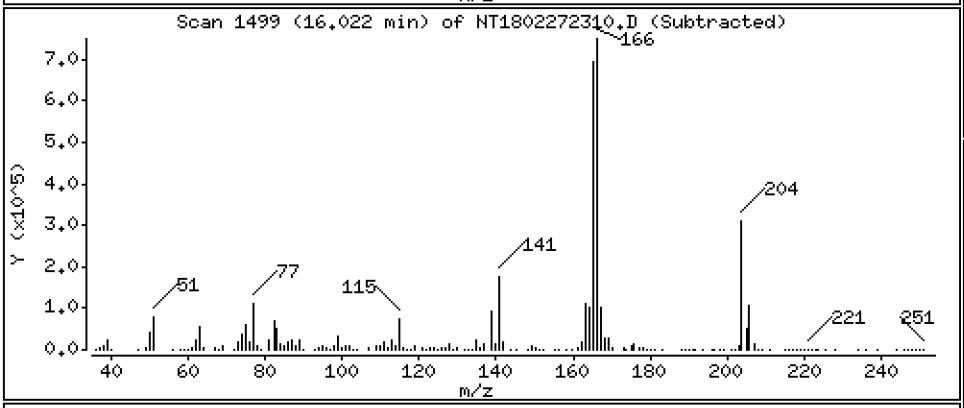
Column diameter: 0.25

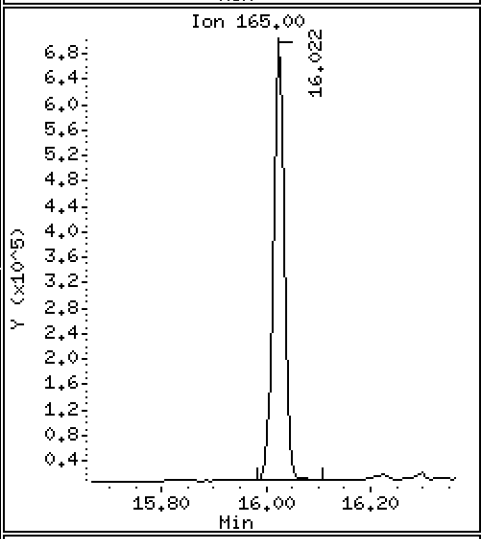
49 Fluorene

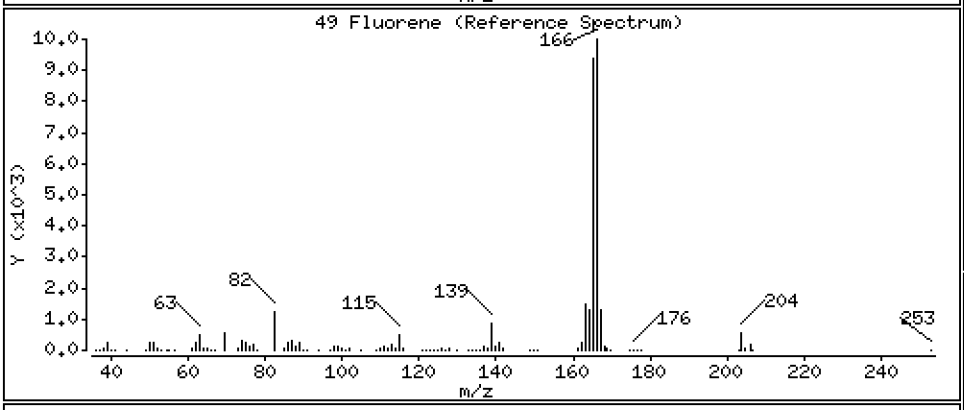
Concentration: 4.974 ug/mL

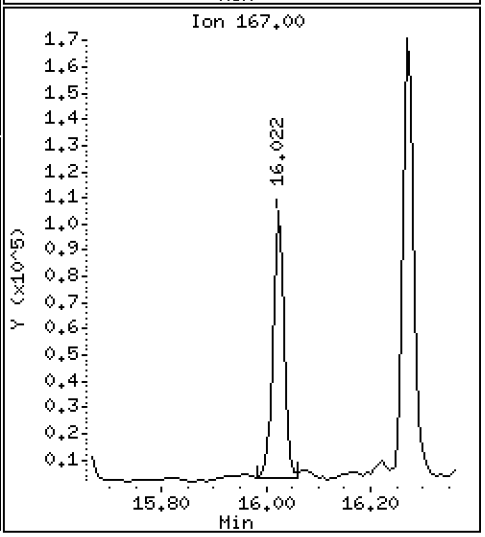


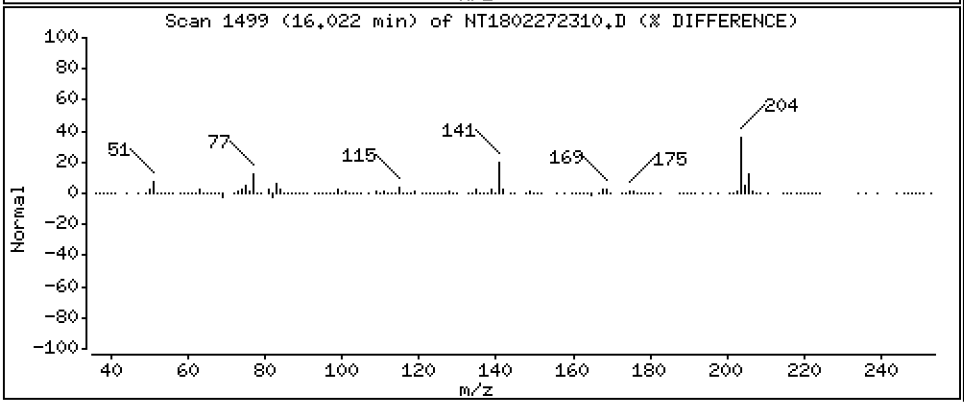












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

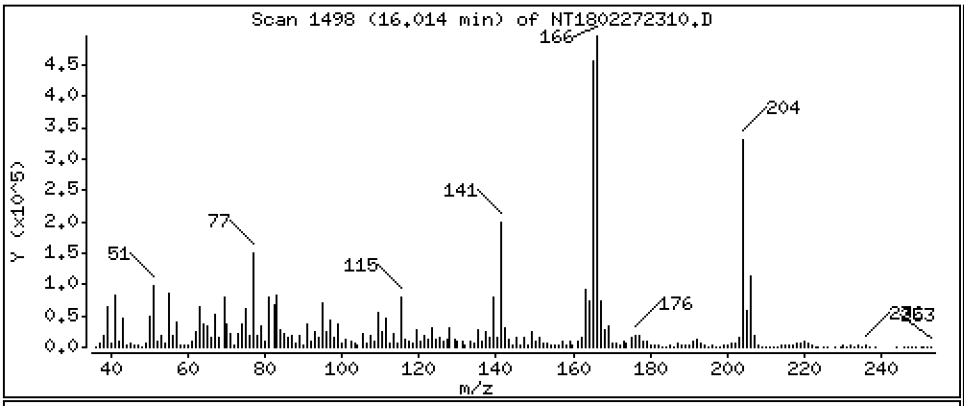
Operator: VTS

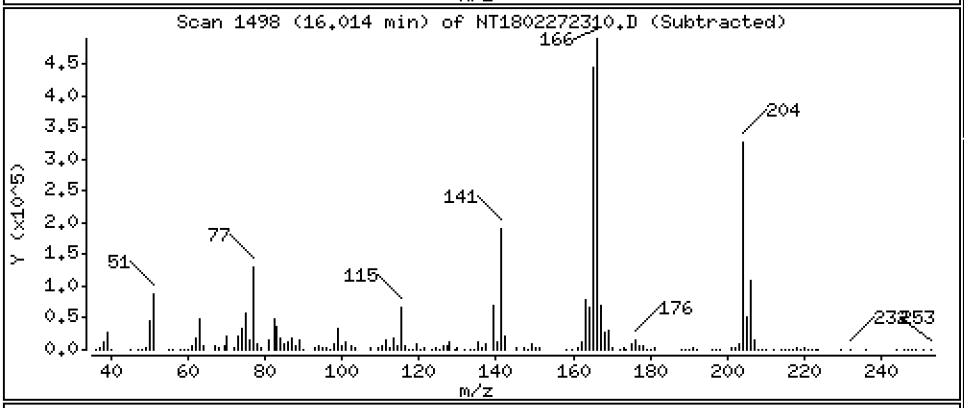
Column phase: ZB-5msi

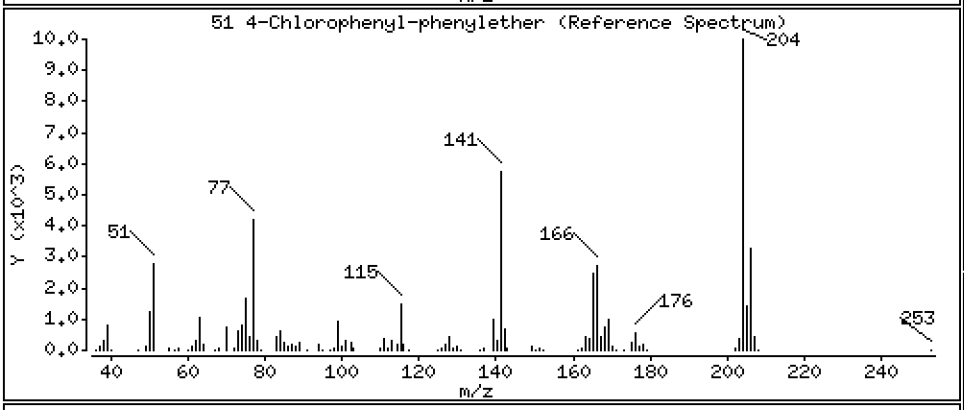
Column diameter: 0.25

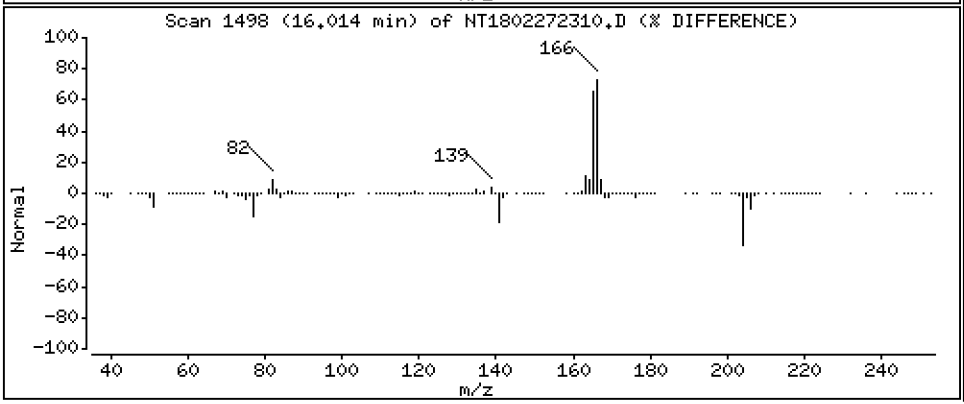
51 4-Chlorophenyl-phenylether

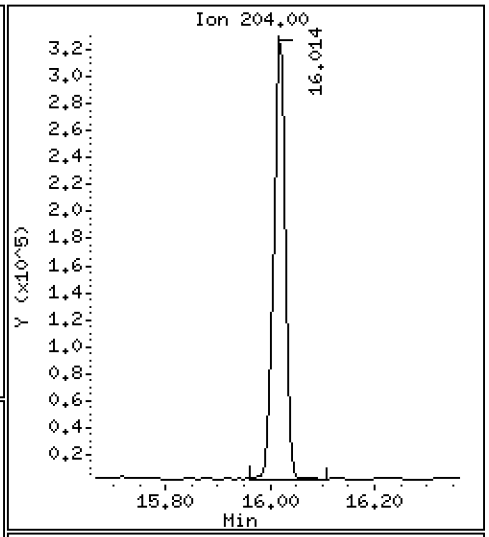
Concentration: 4.983 ug/mL

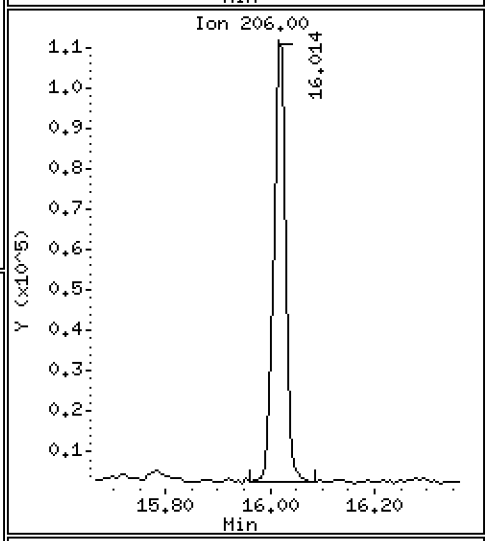


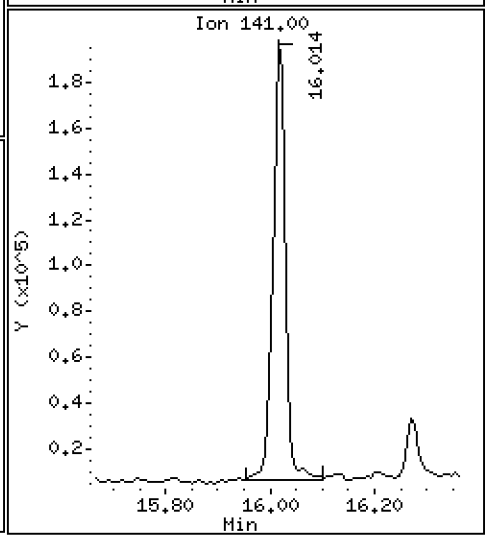












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

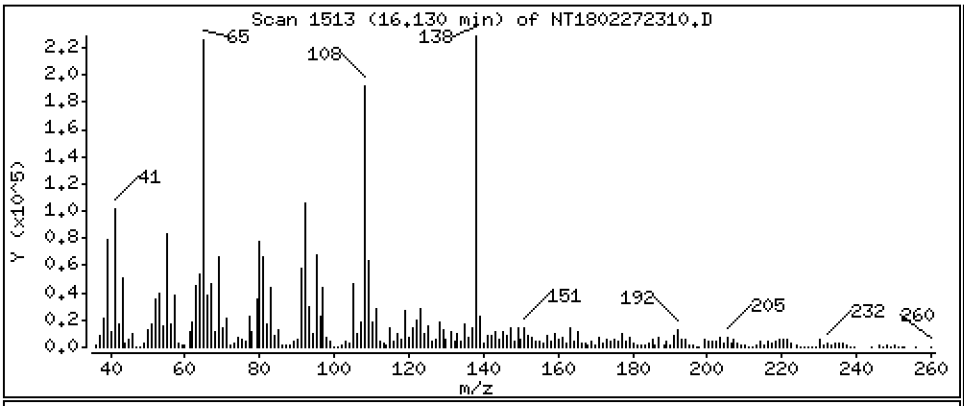
Operator: VTS

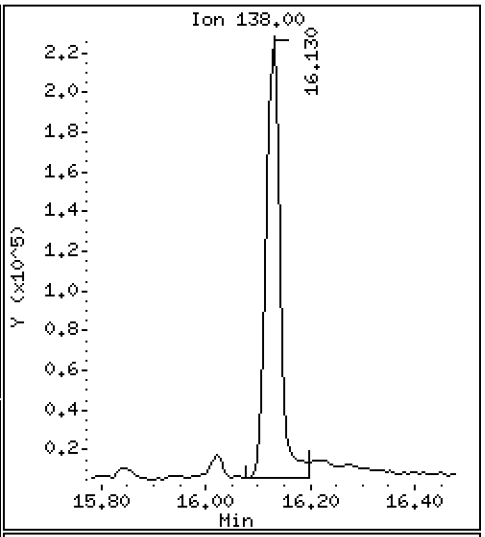
Column phase: ZB-5msi

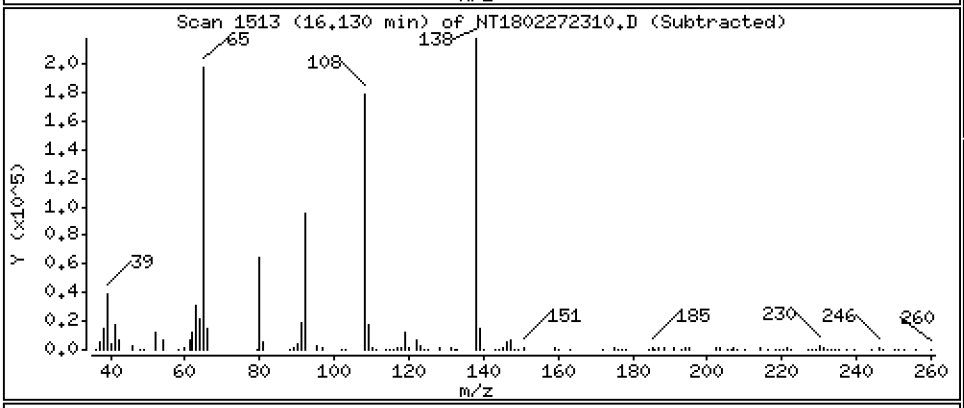
Column diameter: 0.25

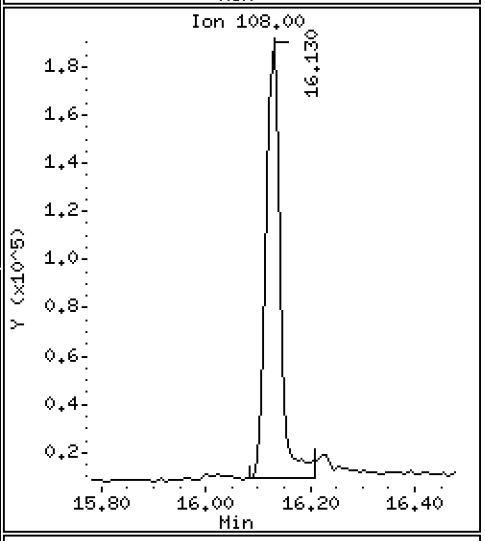
52 4-Nitroaniline

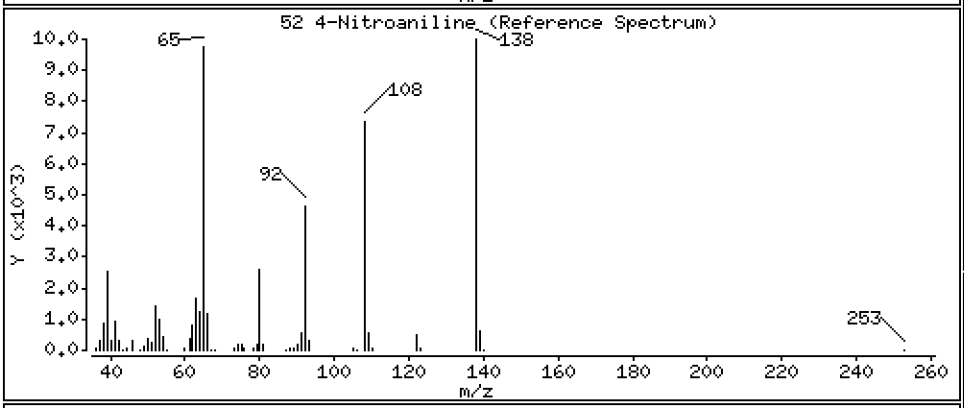
Concentration: 7.011 ug/mL

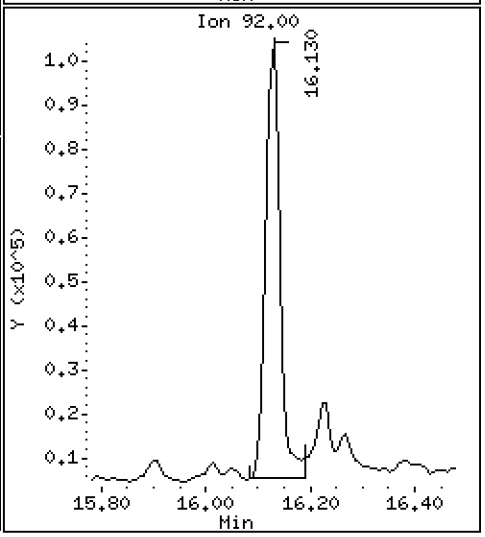


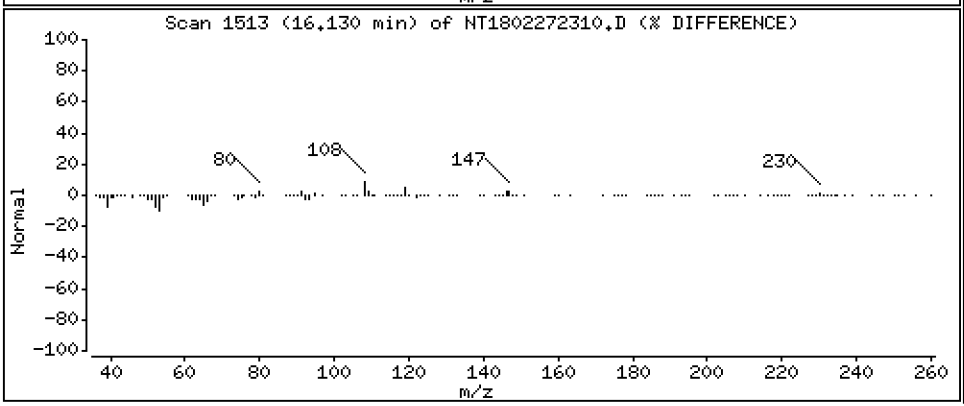












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

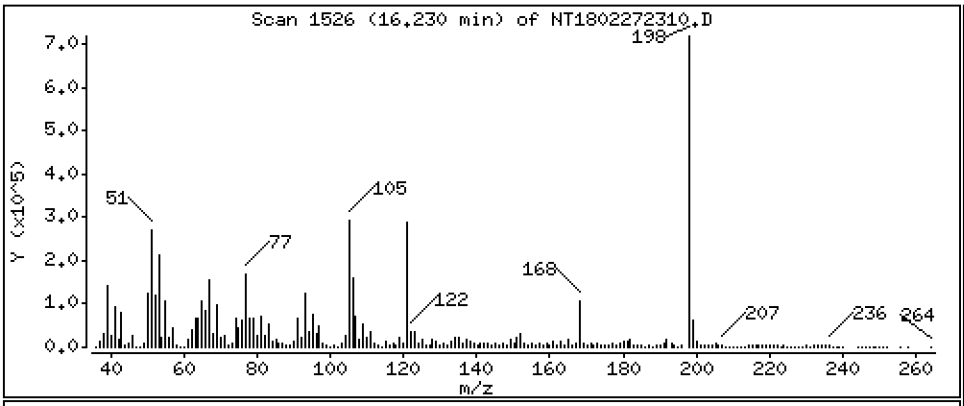
Operator: VTS

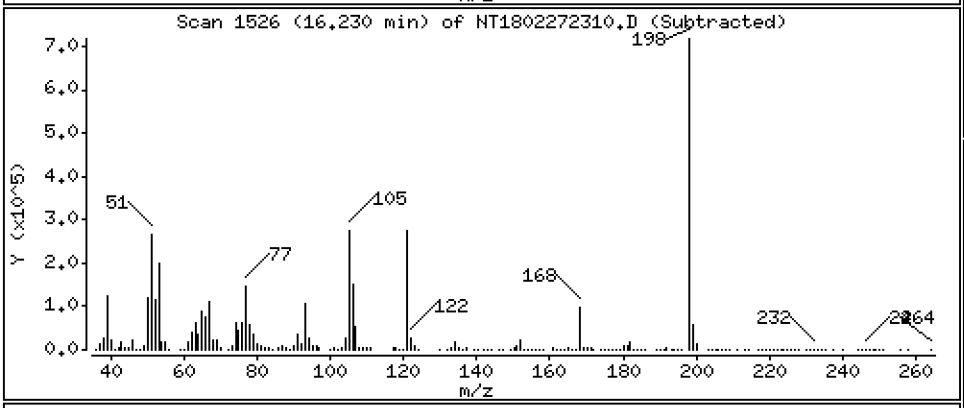
Column phase: ZB-5msi

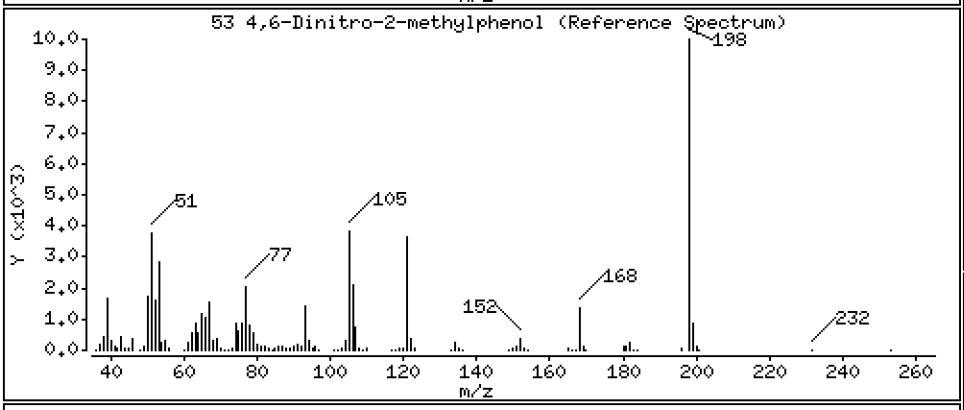
Column diameter: 0.25

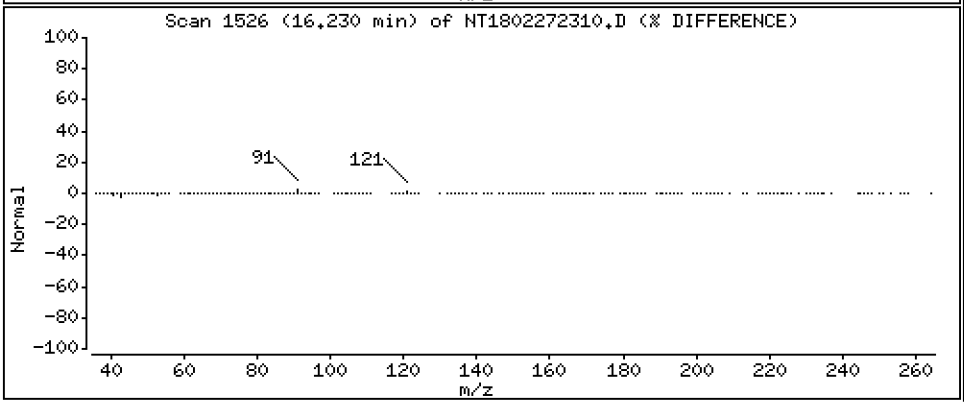
53 4,6-Dinitro-2-methylphenol

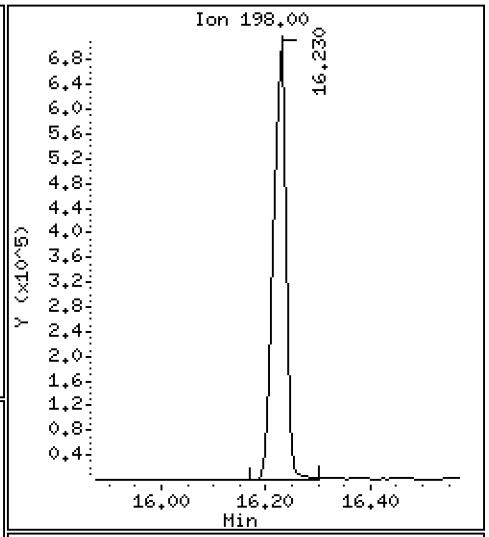
Concentration: 22.94 ug/mL

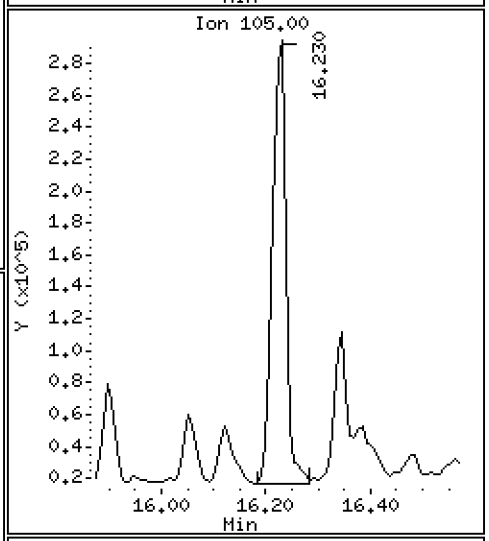


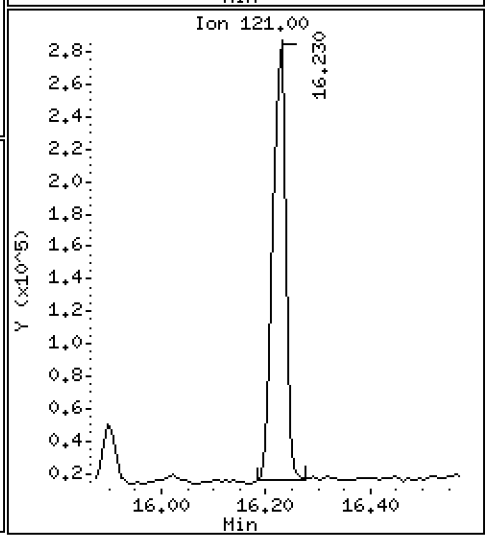












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

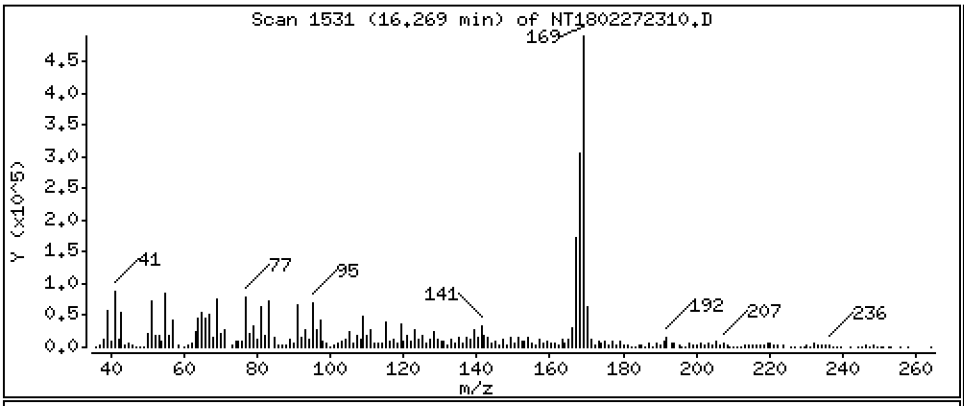
Operator: VTS

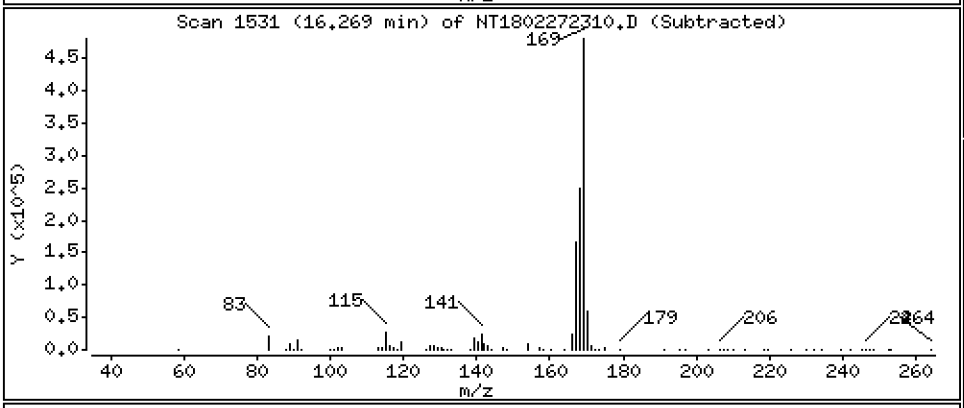
Column phase: ZB-5msi

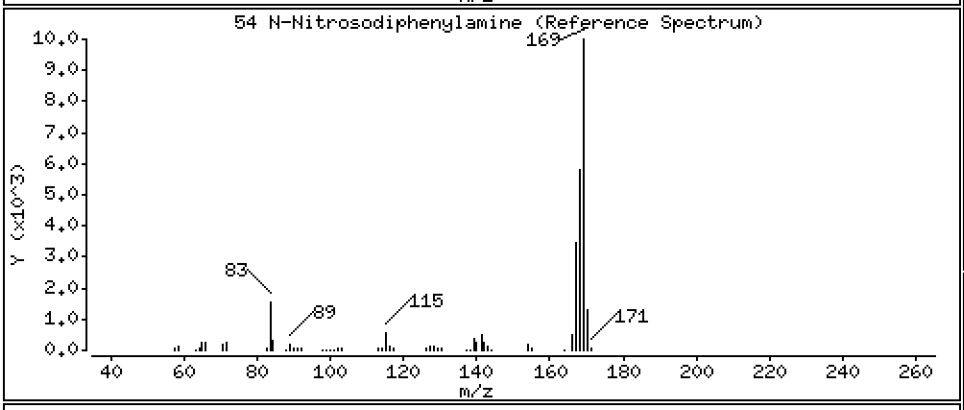
Column diameter: 0.25

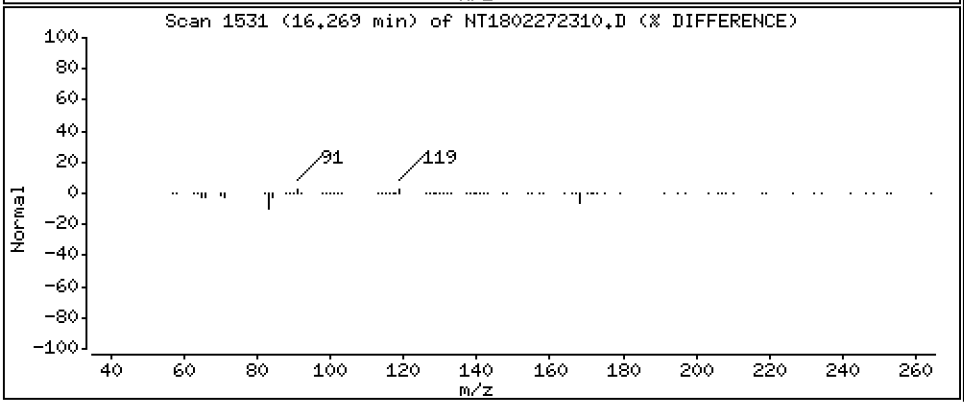
54 N-Nitrosodiphenylamine

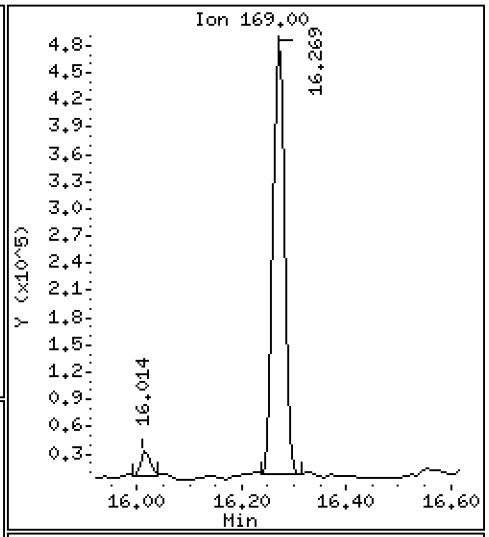
Concentration: 3.411 ug/mL

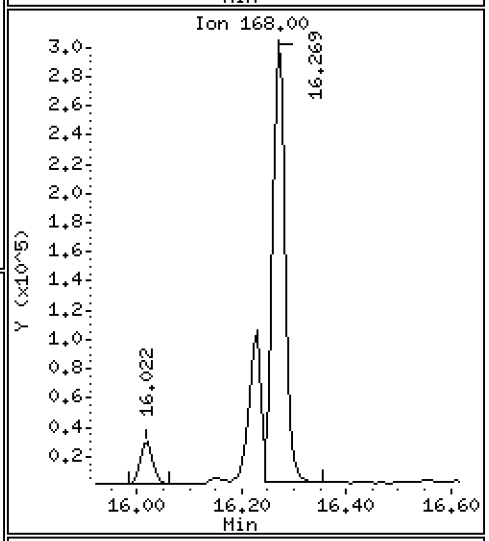


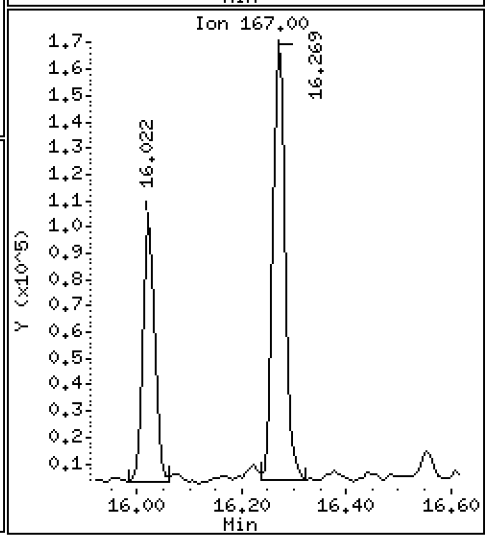












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

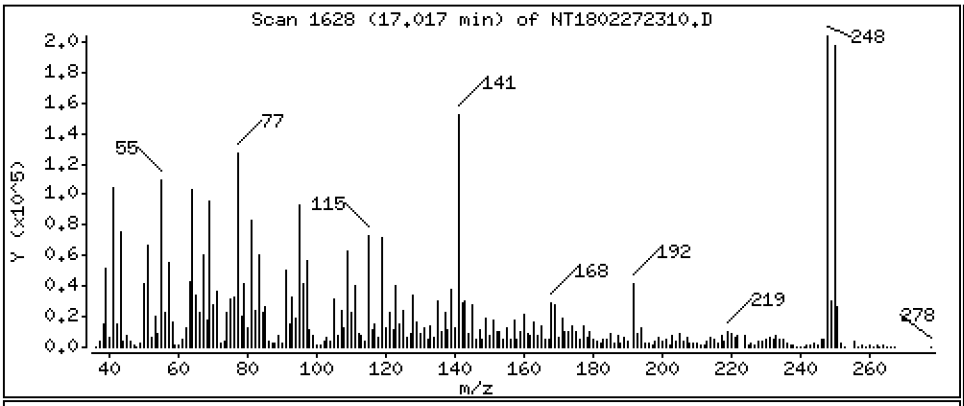
Operator: VTS

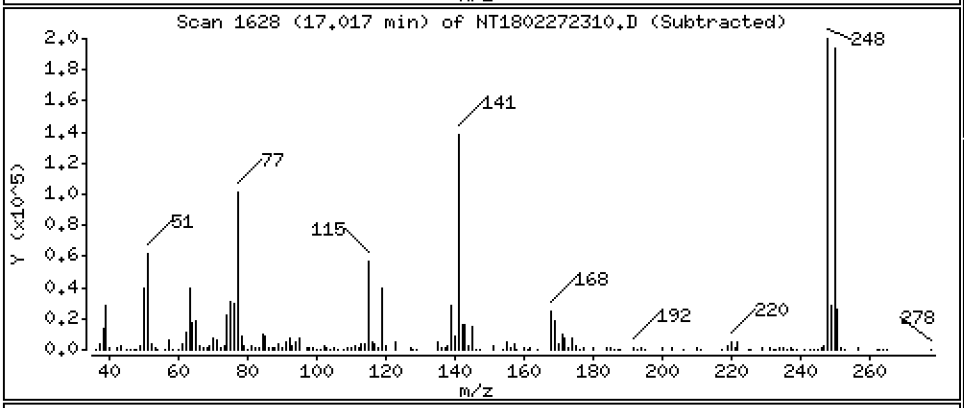
Column phase: ZB-5msi

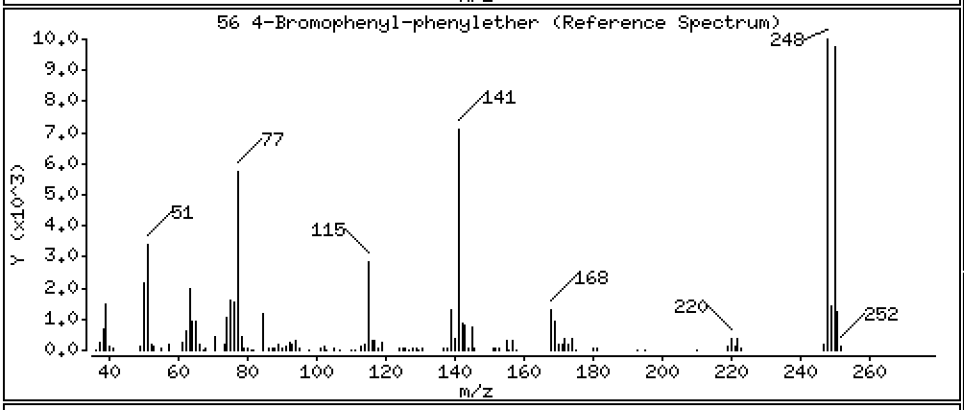
Column diameter: 0.25

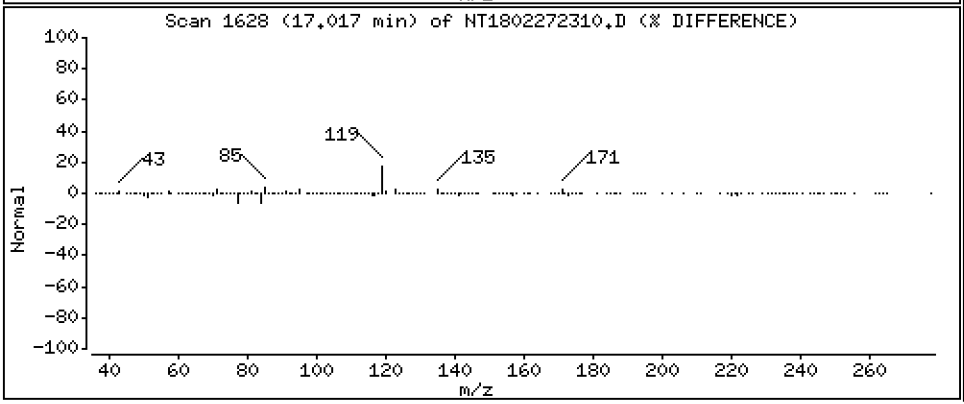
56 4-Bromophenyl-phenylether

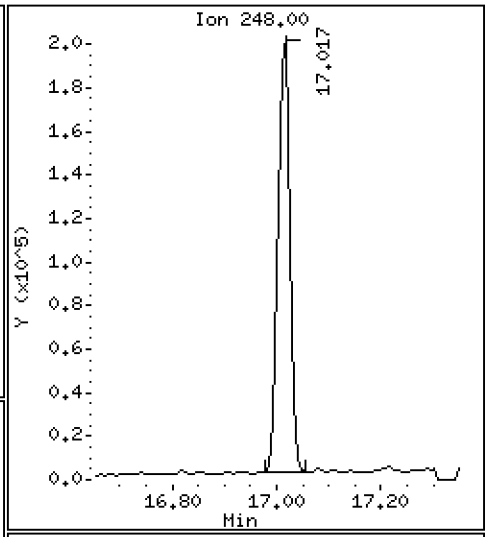
Concentration: 3.683 ug/mL

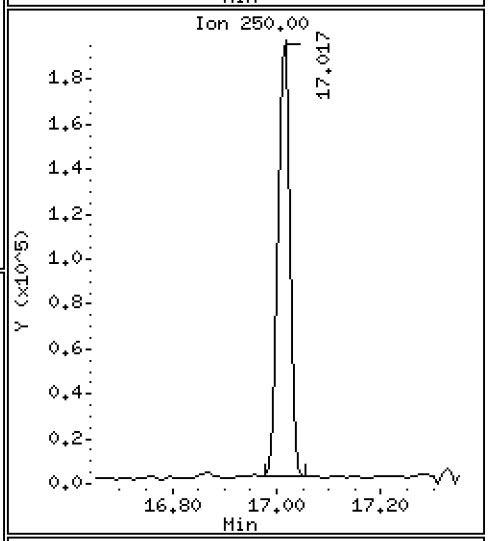


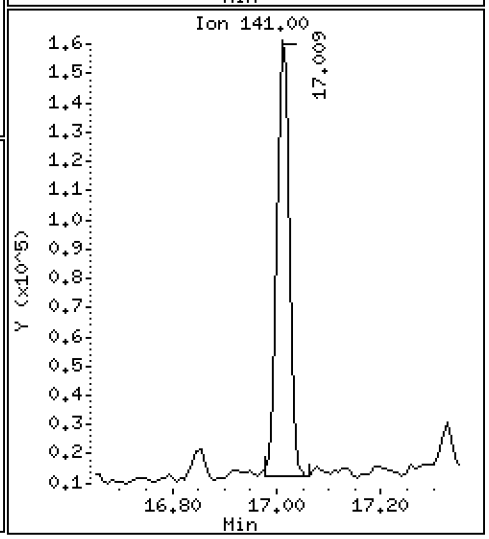












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

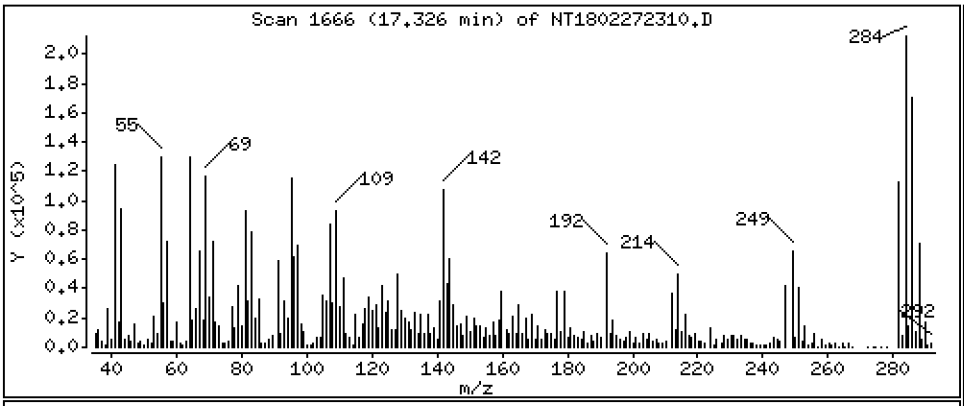
Operator: VTS

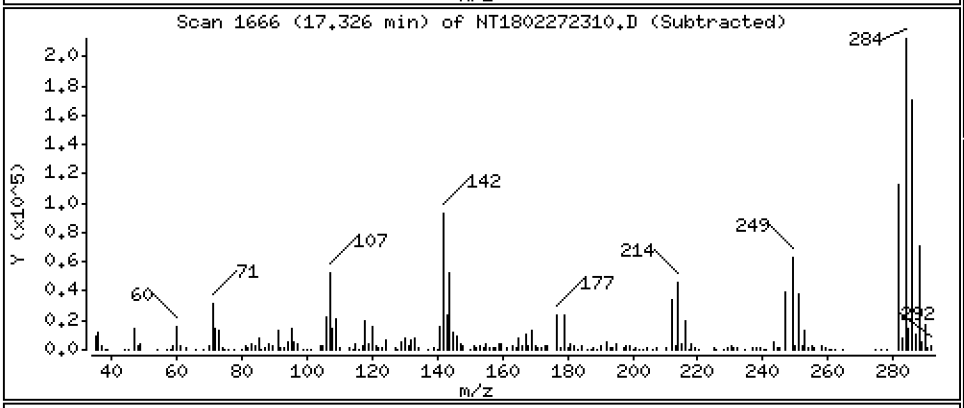
Column phase: ZB-5msi

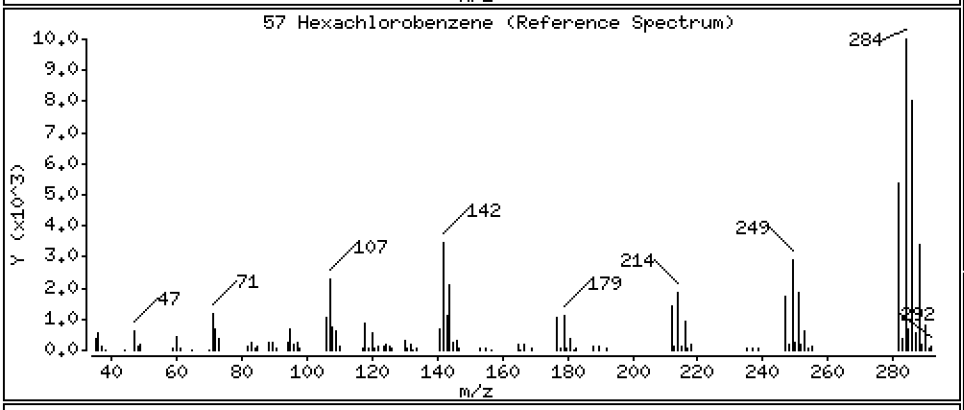
Column diameter: 0.25

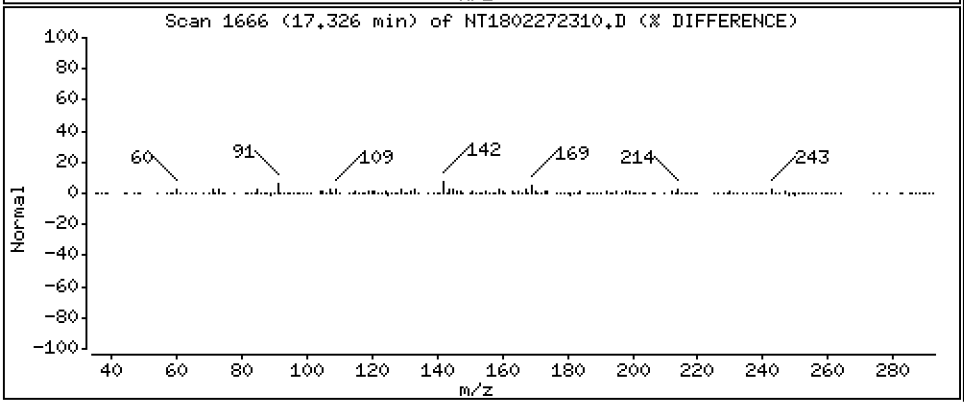
57 Hexachlorobenzene

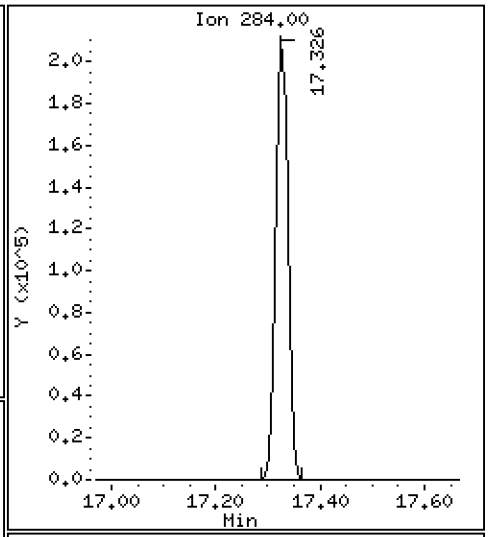
Concentration: 3.423 ug/mL

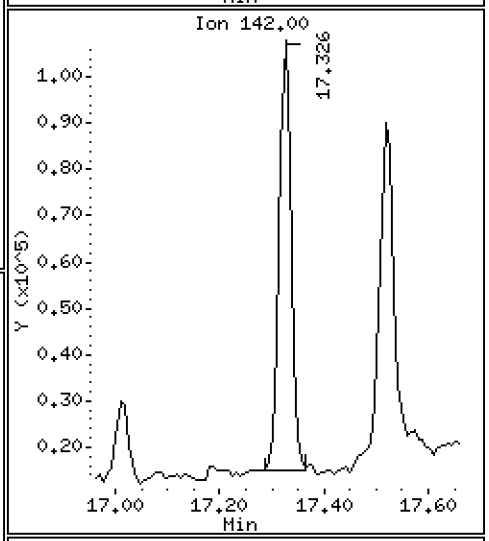


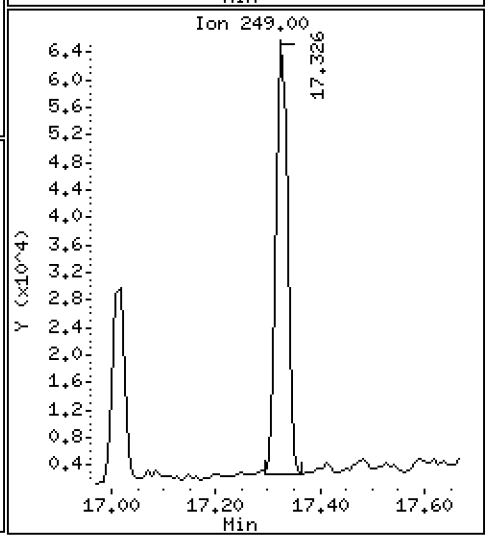












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

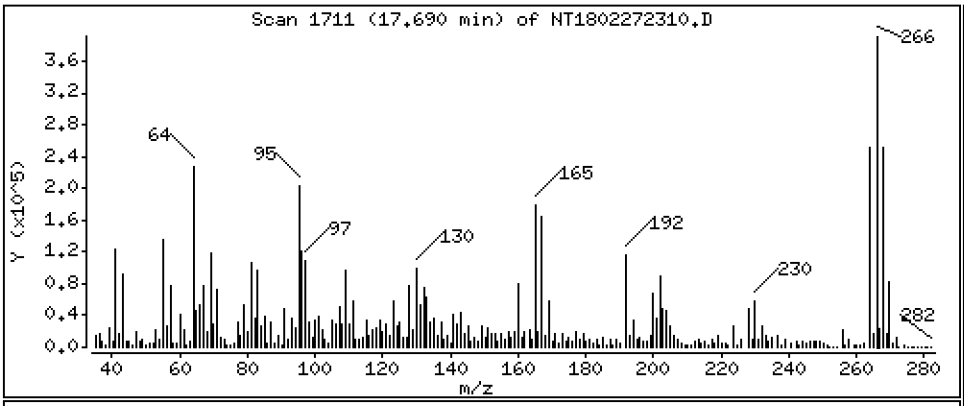
Operator: VTS

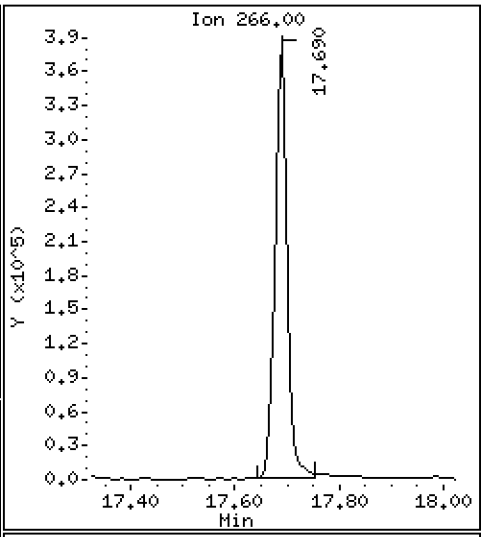
Column phase: ZB-5msi

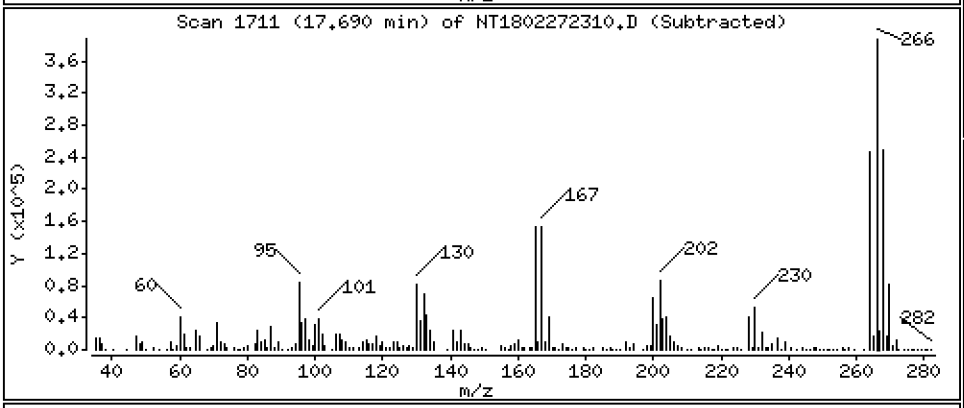
Column diameter: 0.25

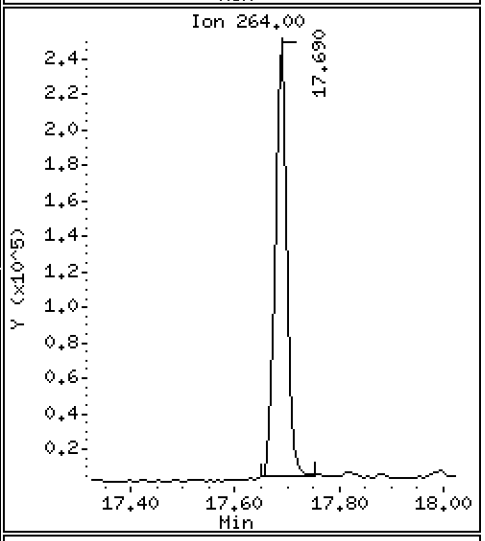
58 Pentachlorophenol

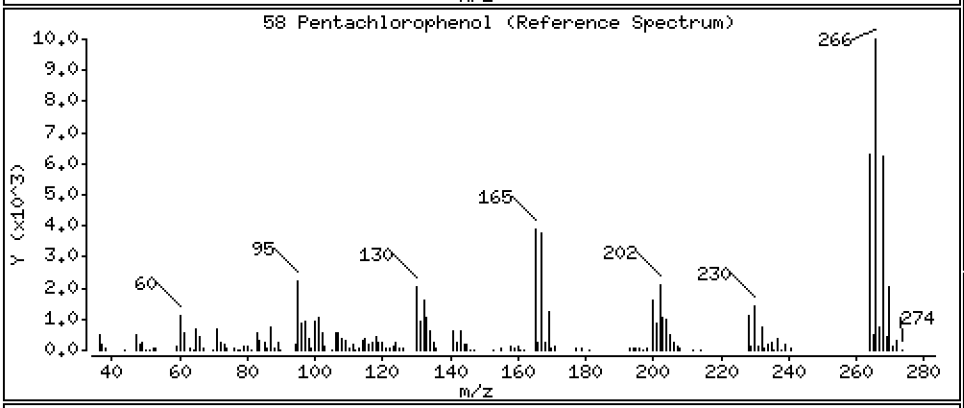
Concentration: 21.43 ug/mL

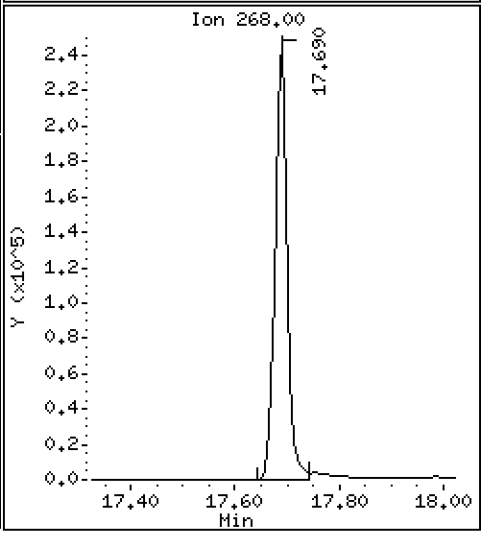


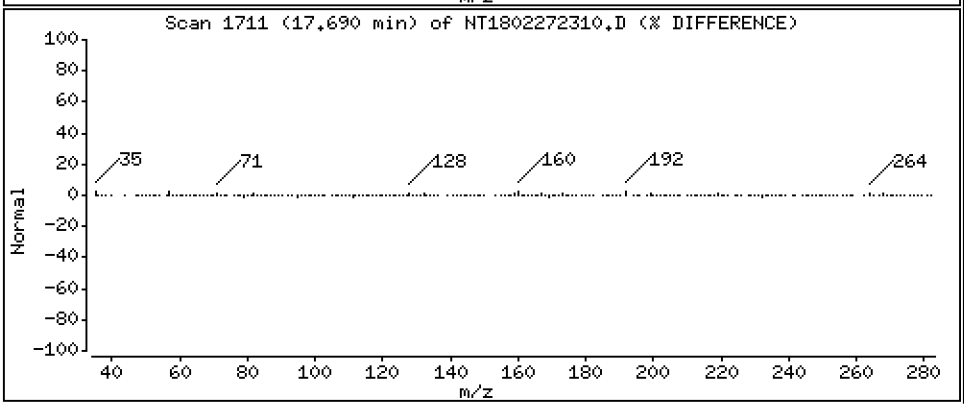












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

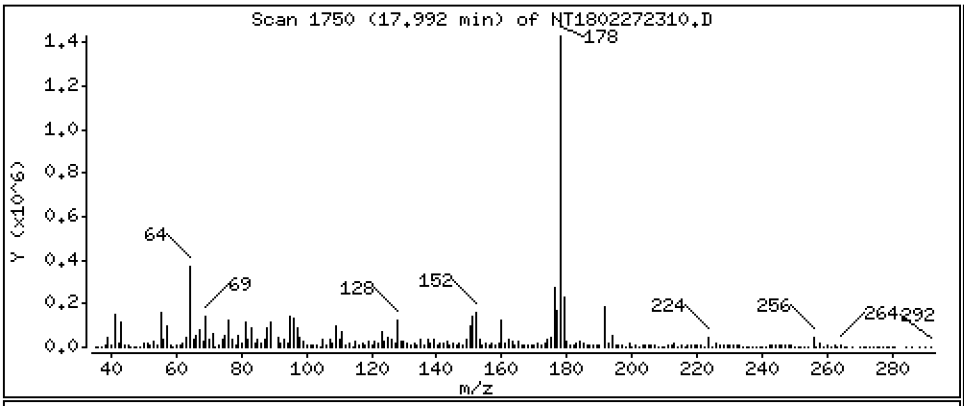
Operator: VTS

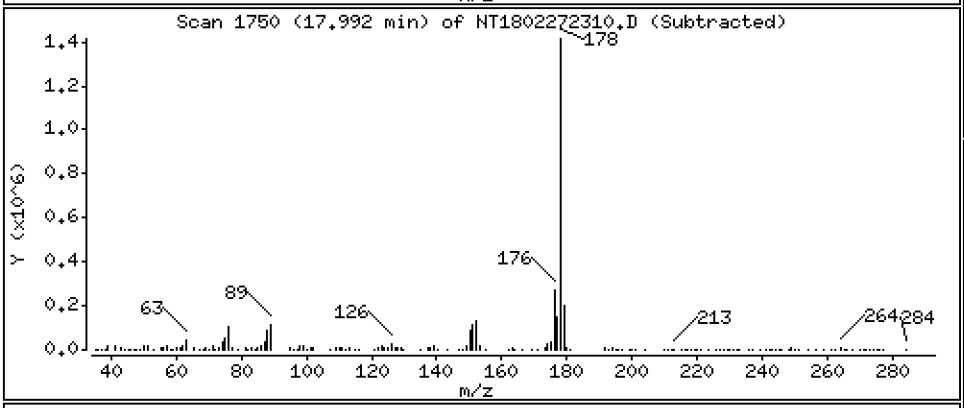
Column phase: ZB-5msi

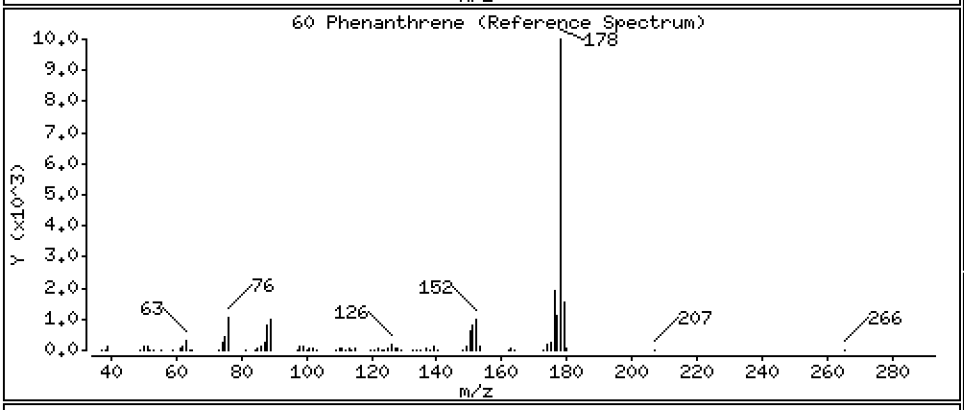
Column diameter: 0.25

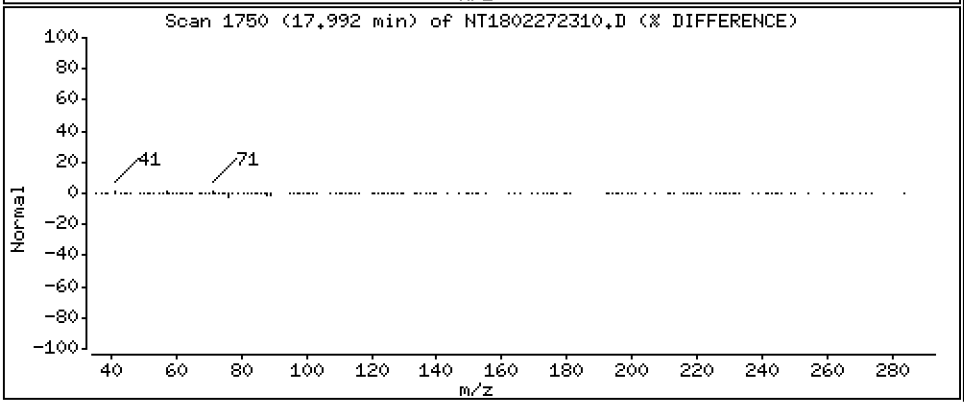
60 Phenanthrene

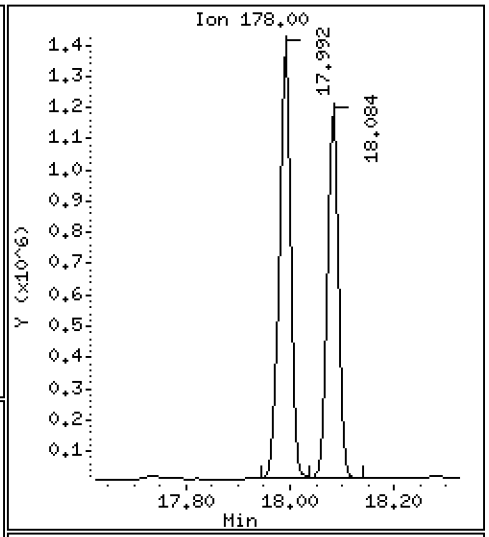
Concentration: 4.981 ug/mL

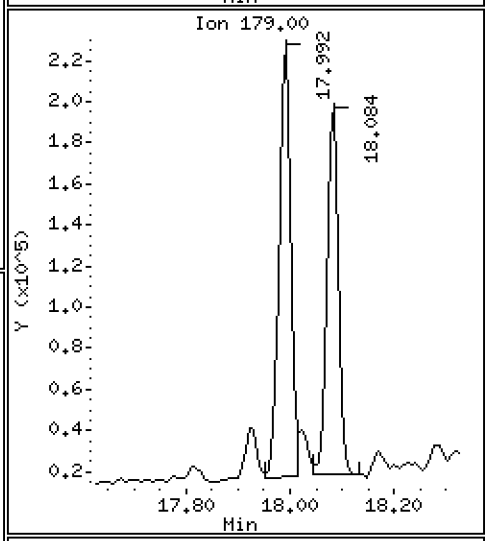


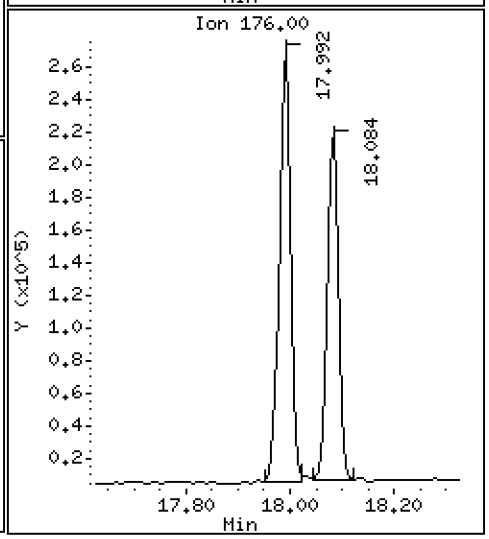












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

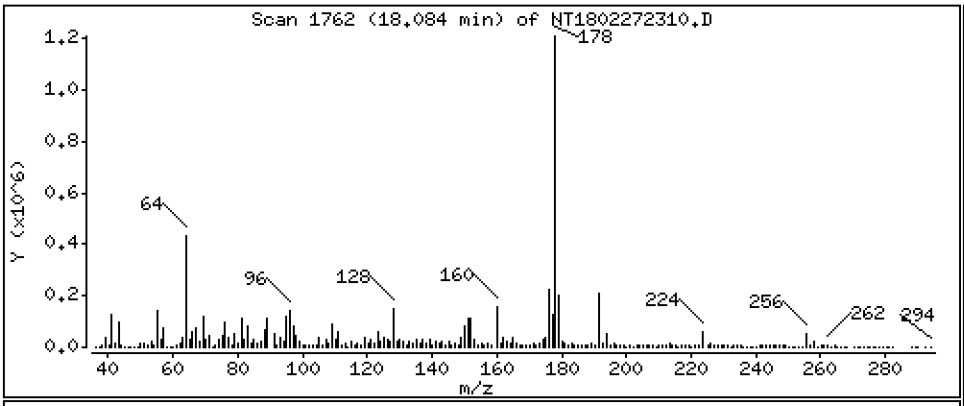
Operator: VTS

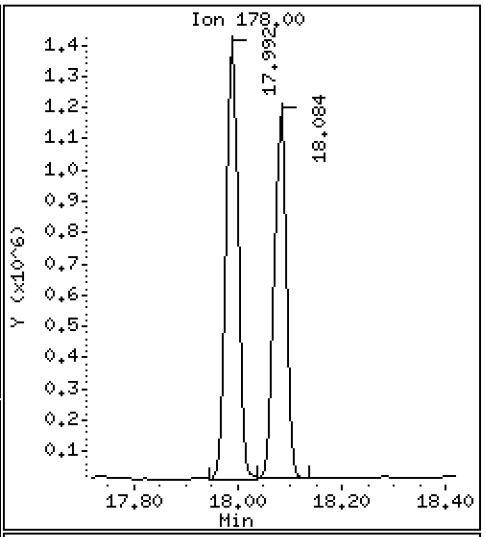
Column phase: ZB-5msi

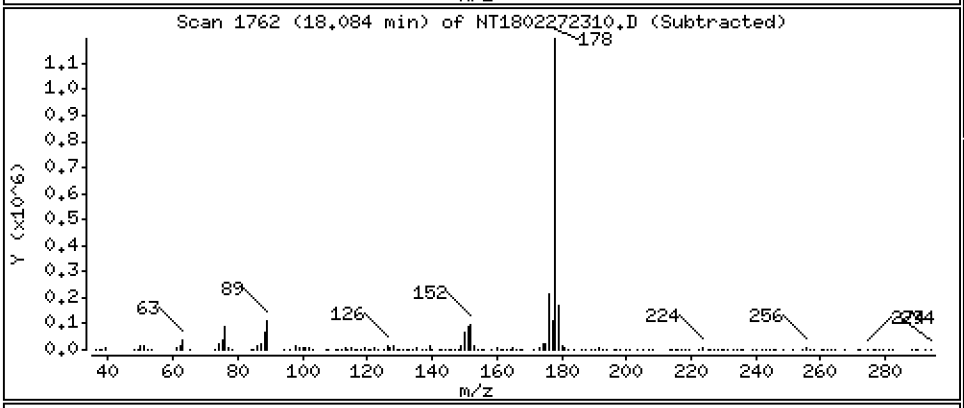
Column diameter: 0.25

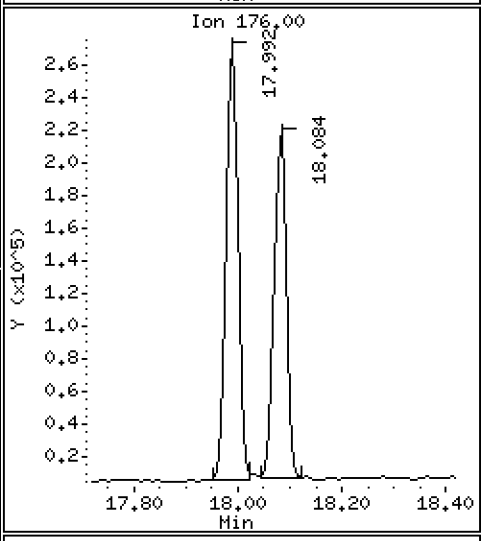
61 Anthracene

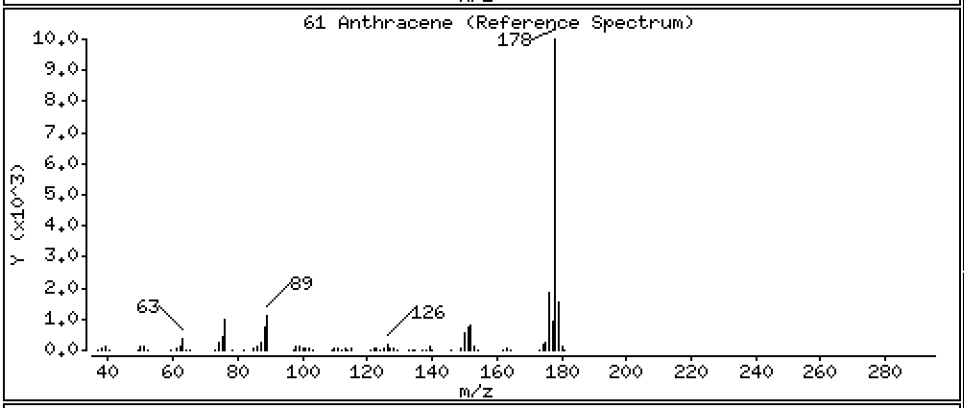
Concentration: 4.545 ug/mL

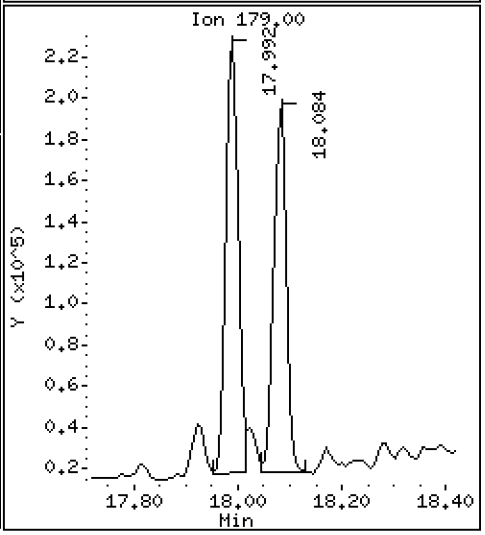


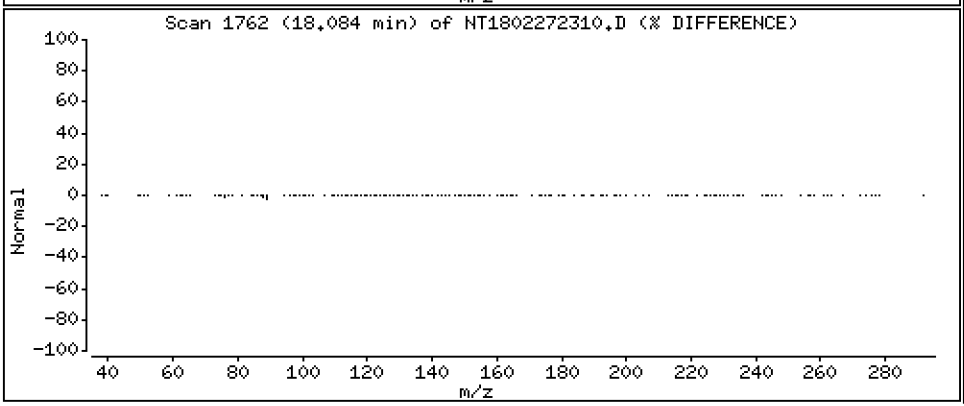












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

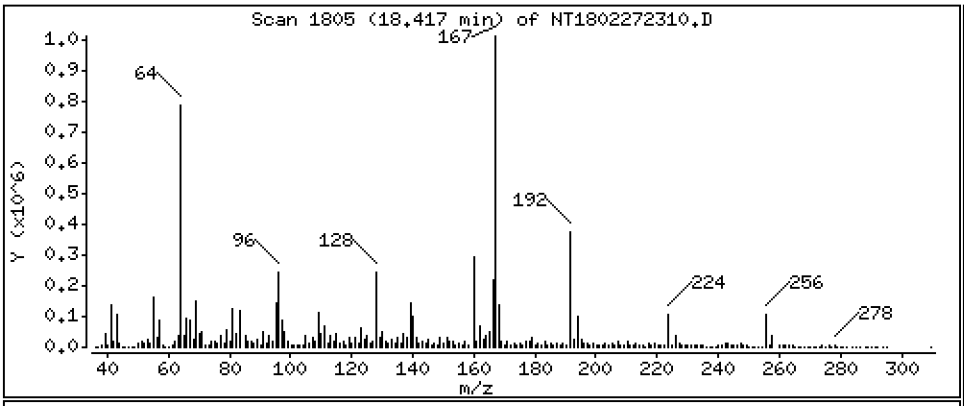
Operator: VTS

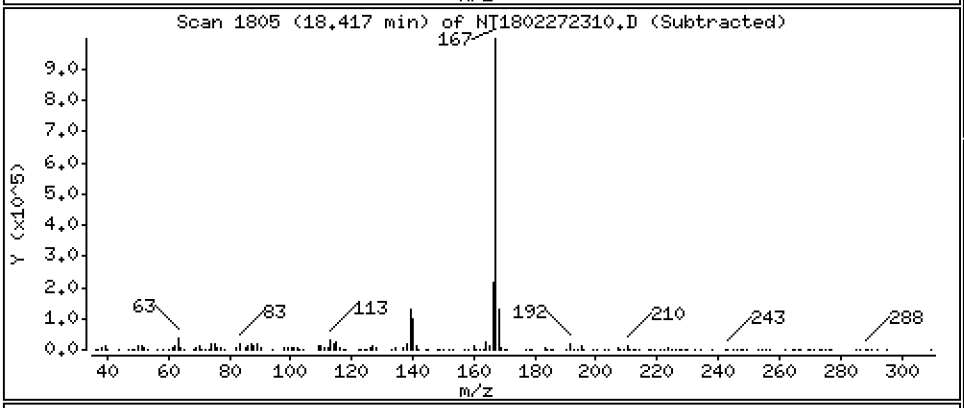
Column phase: ZB-5msi

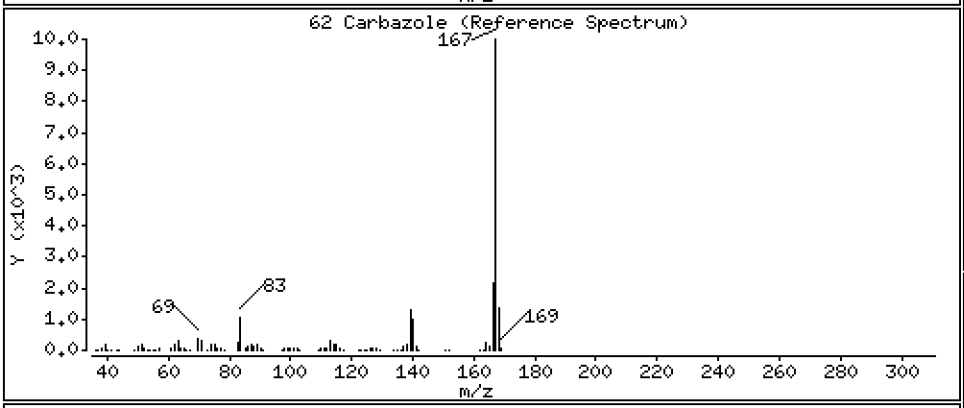
Column diameter: 0.25

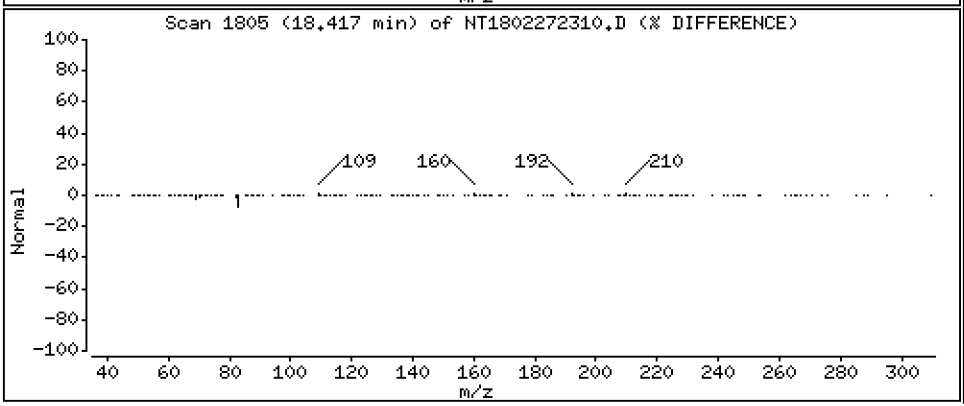
62 Carbazole

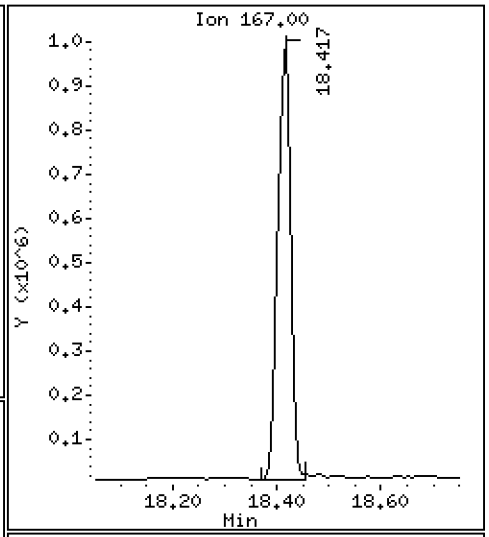
Concentration: 4.406 ug/mL

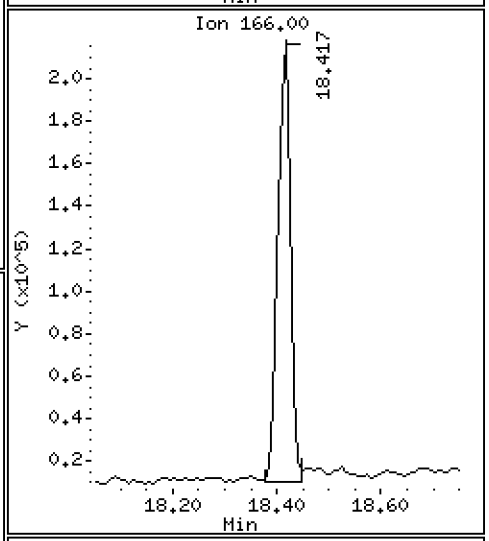


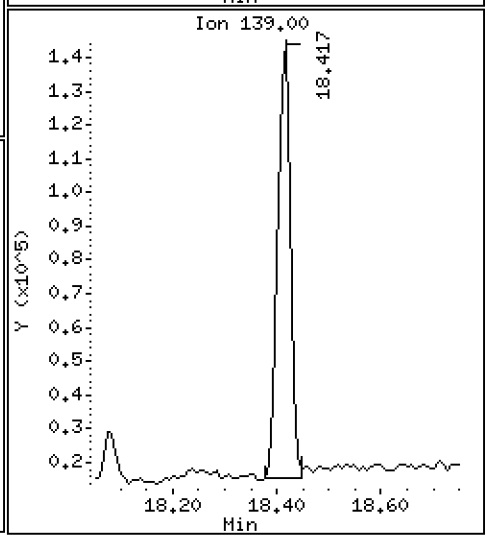












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

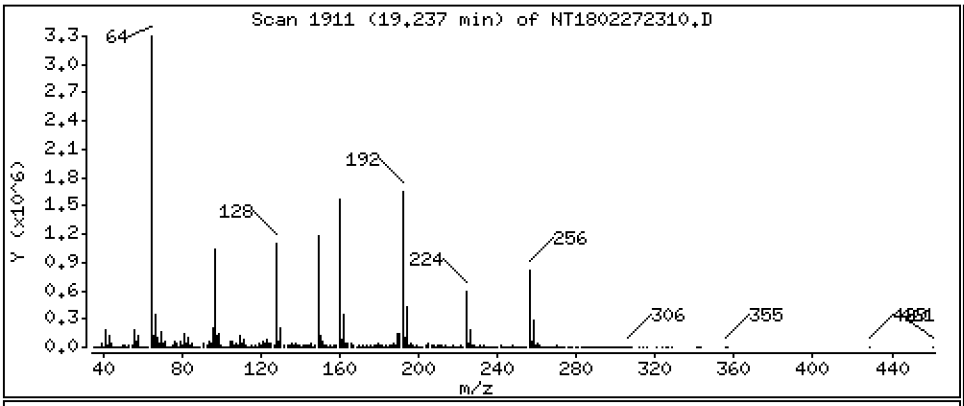
Operator: VTS

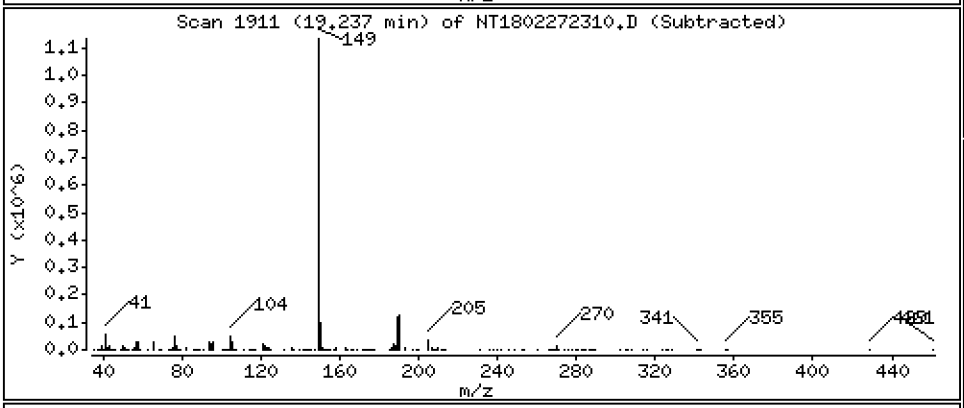
Column phase: ZB-5msi

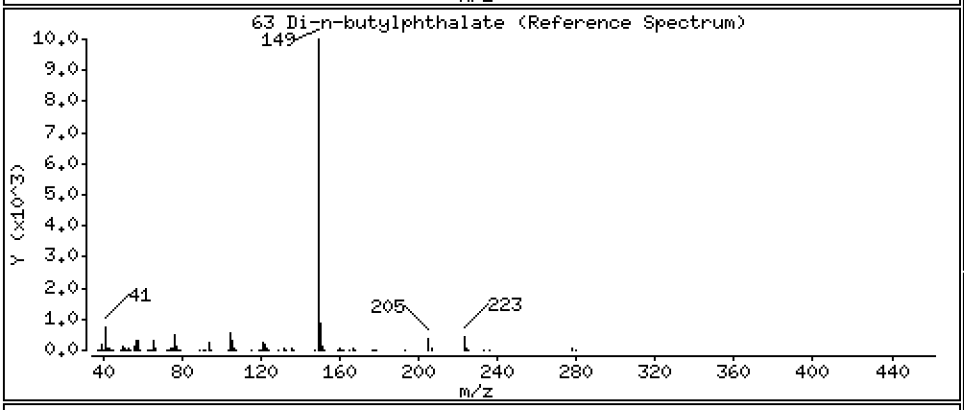
Column diameter: 0.25

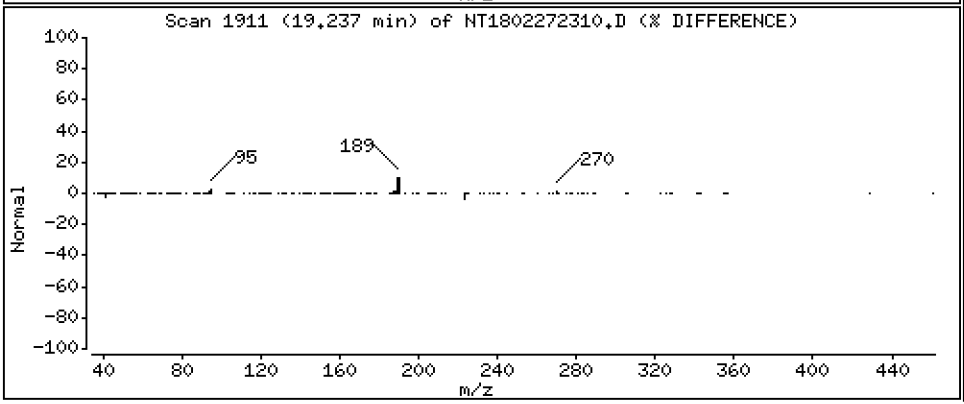
63 Di-n-butylphthalate

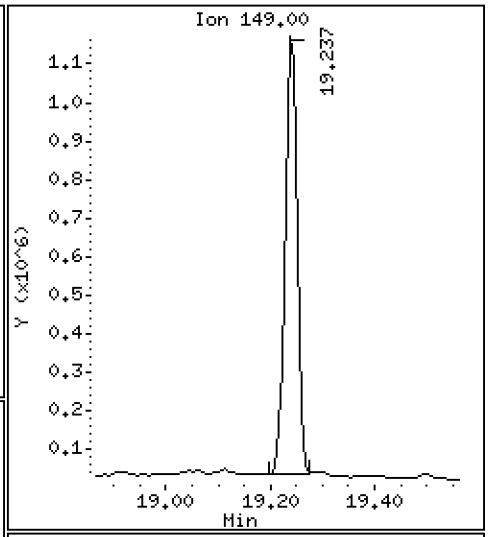
Concentration: 4.559 ug/mL

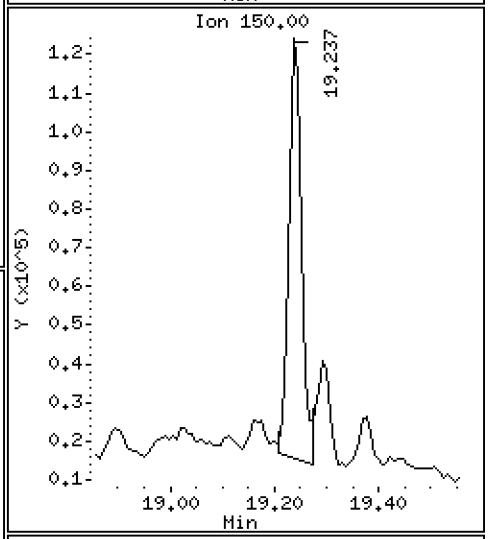


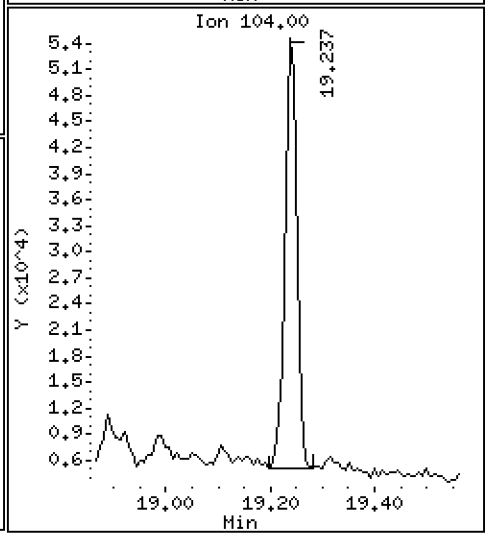












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

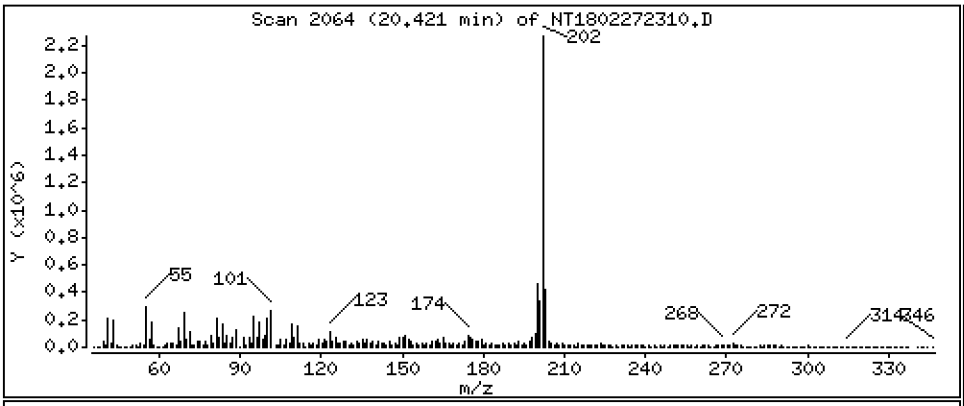
Operator: VTS

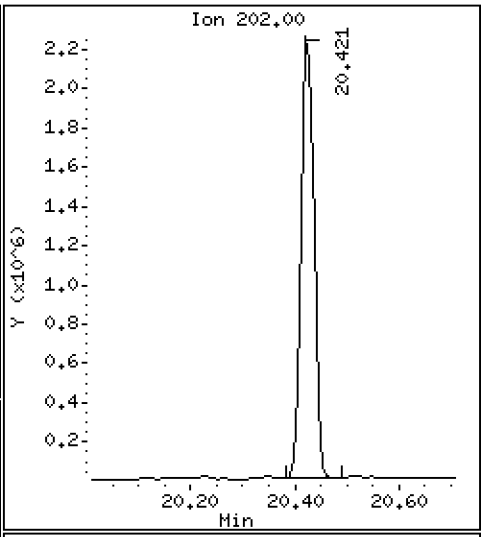
Column phase: ZB-5msi

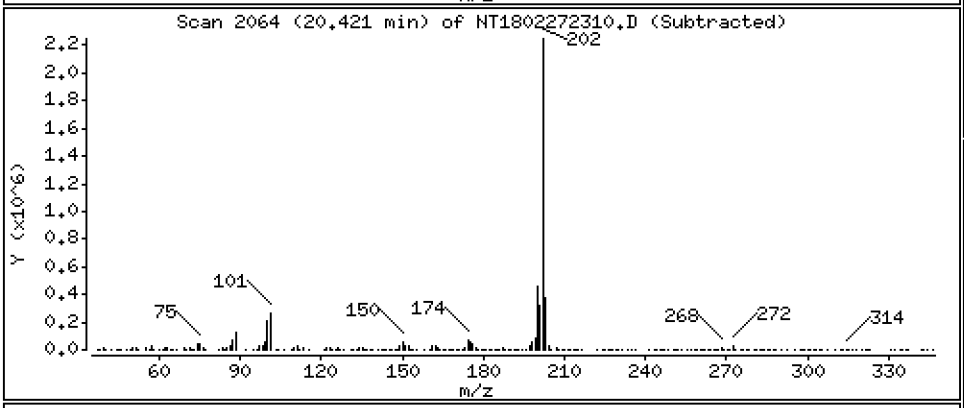
Column diameter: 0.25

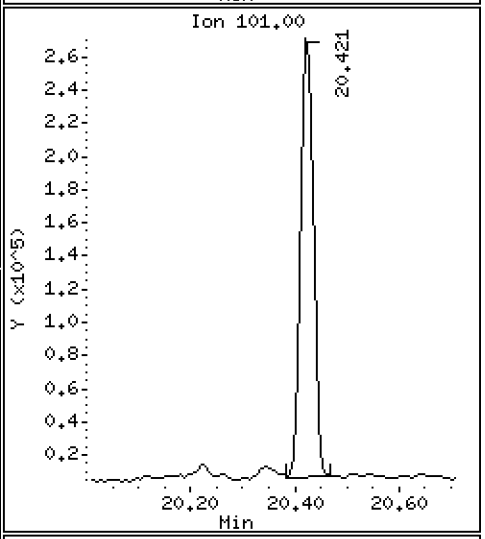
64 Fluoranthene

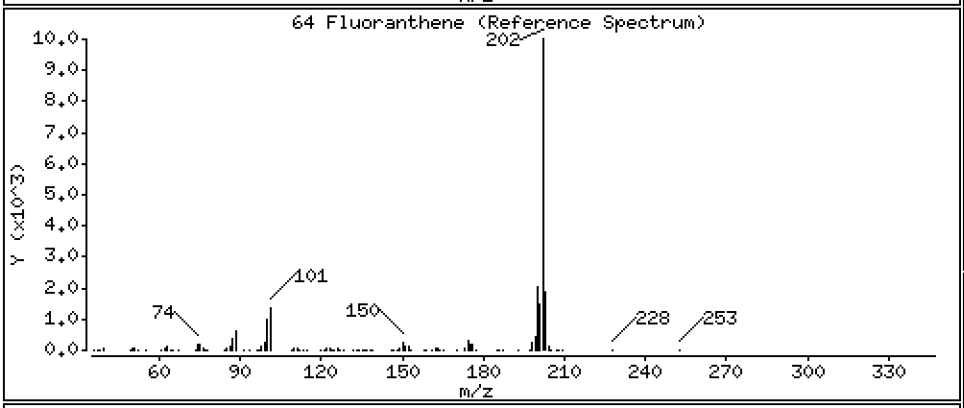
Concentration: 7.148 ug/mL

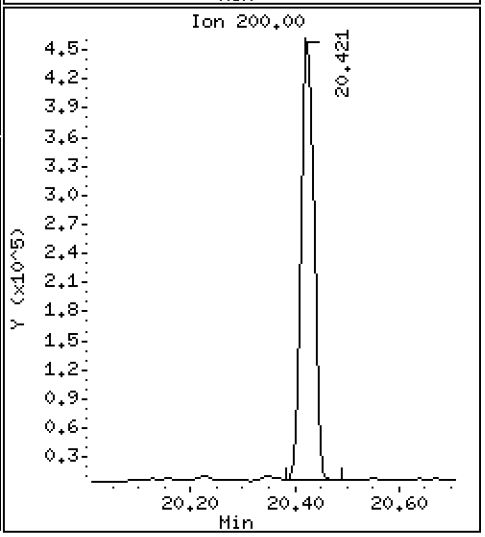


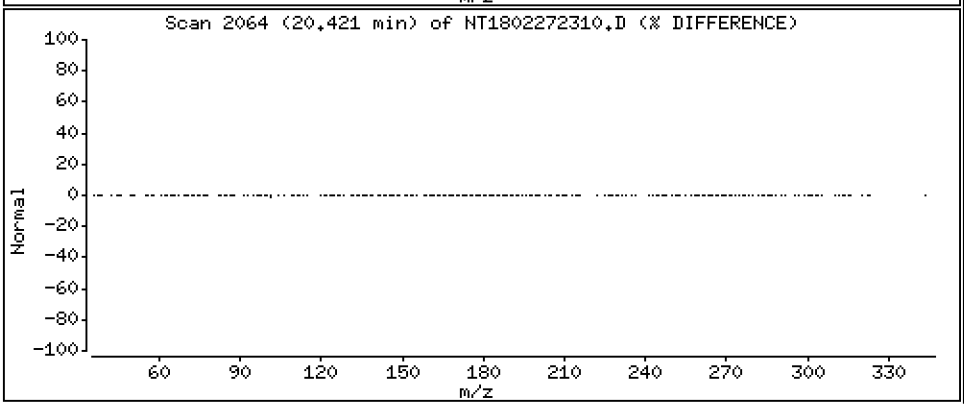












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

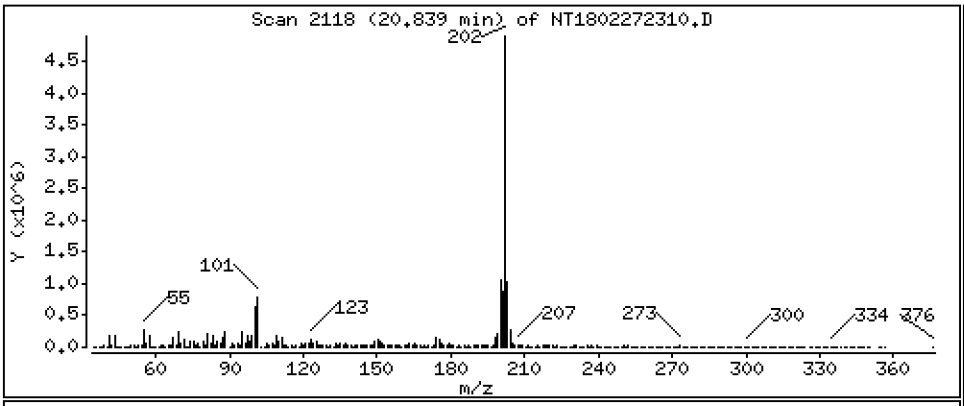
Operator: VTS

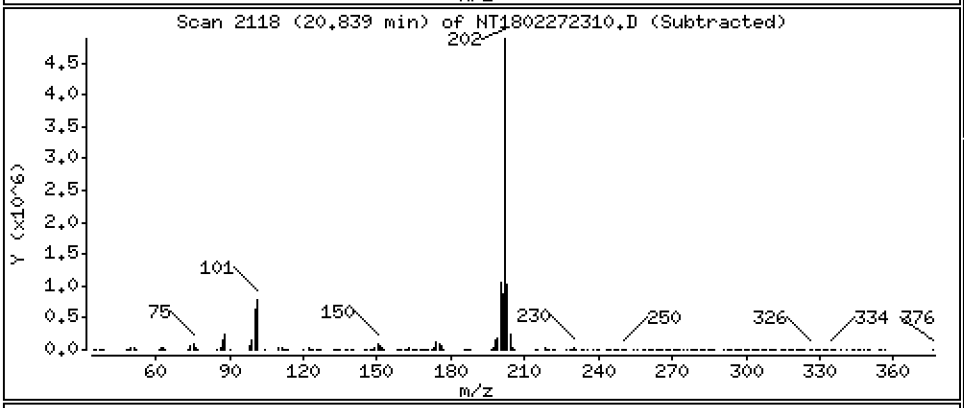
Column phase: ZB-5msi

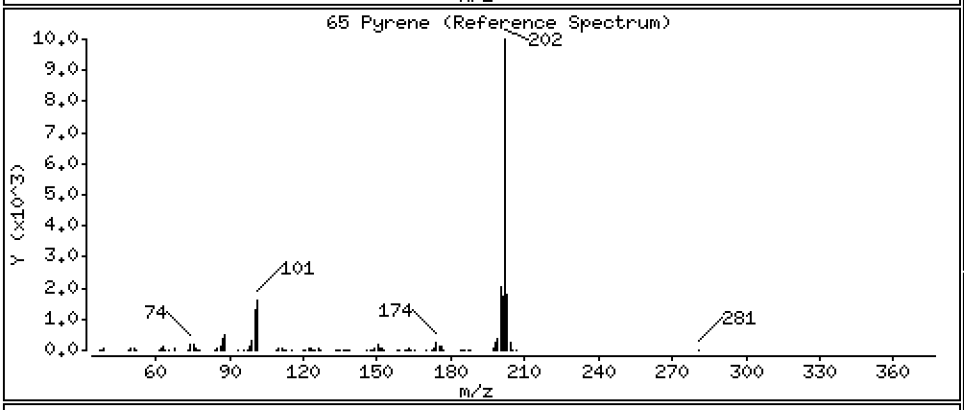
Column diameter: 0.25

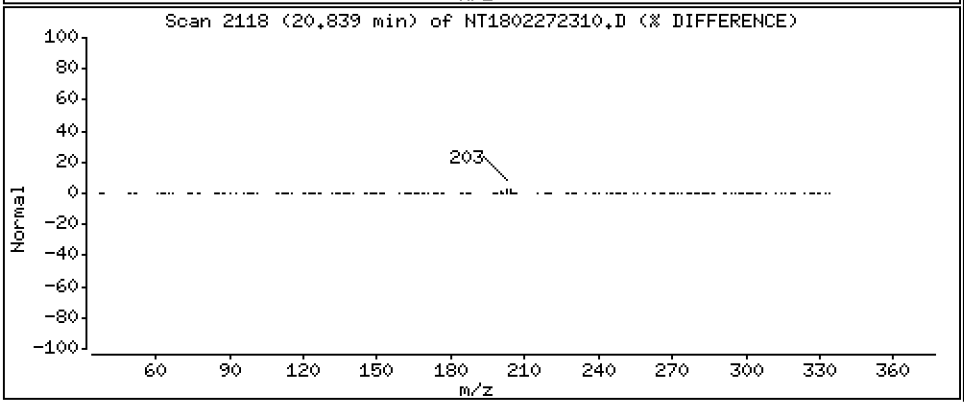
65 Pyrene

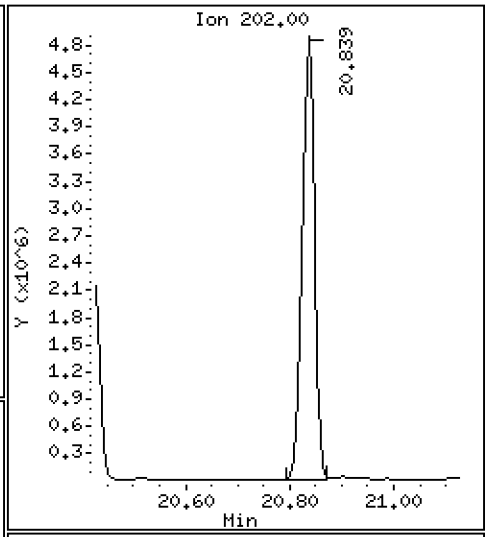
Concentration: 14.90 ug/mL

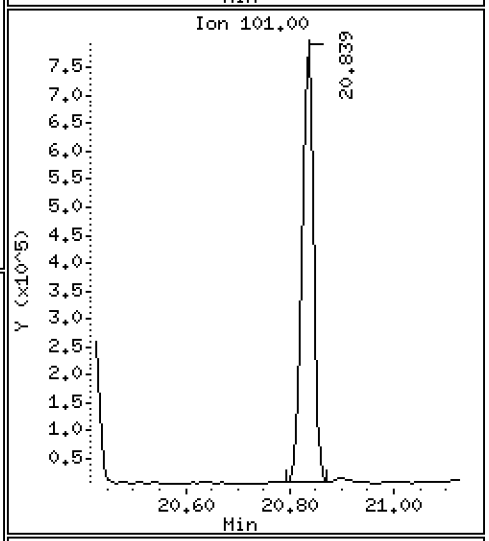


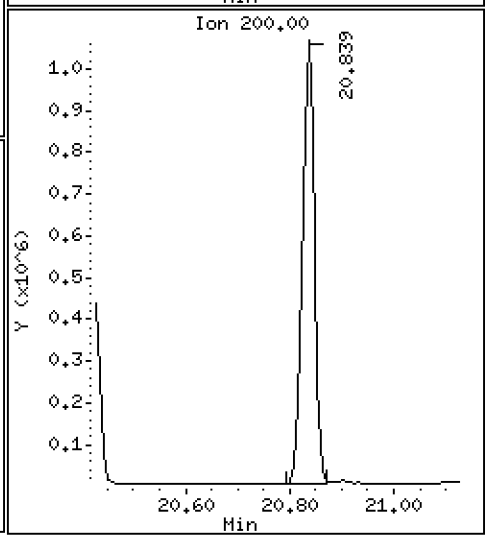












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

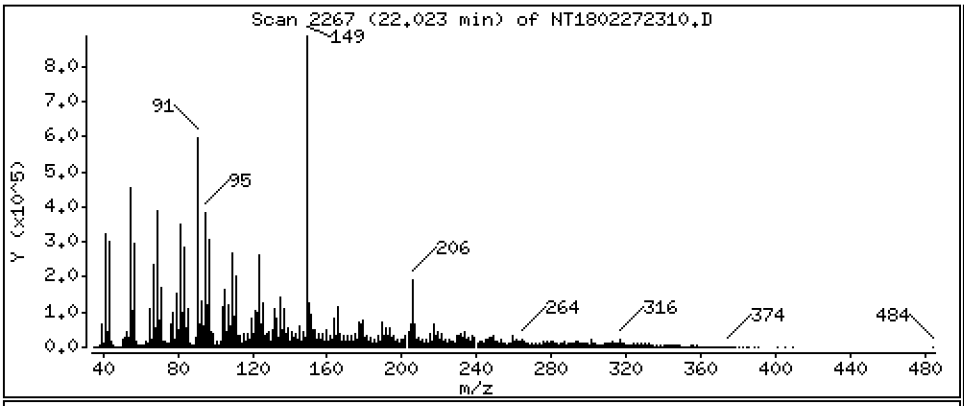
Operator: VTS

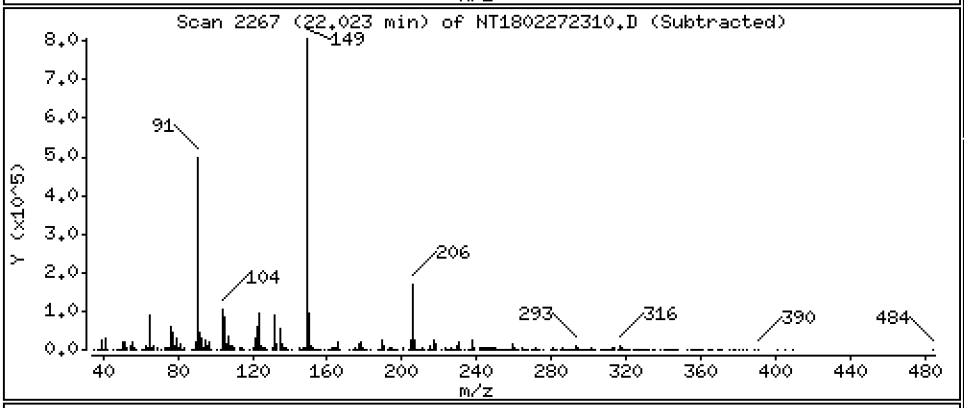
Column phase: ZB-5msi

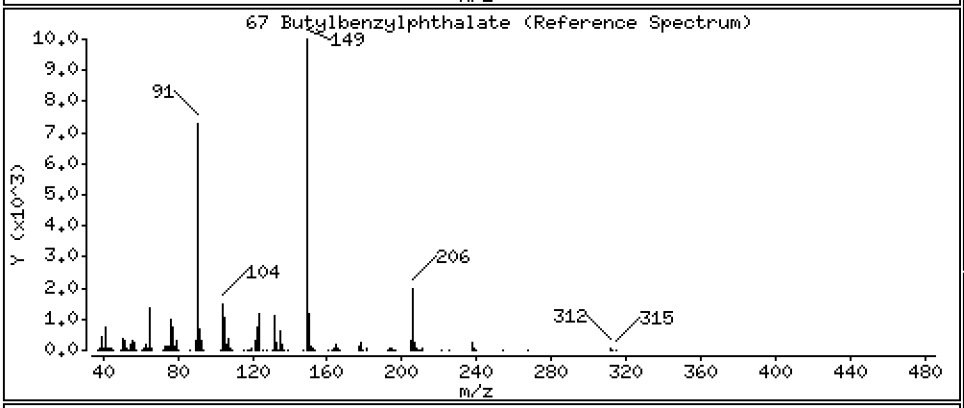
Column diameter: 0.25

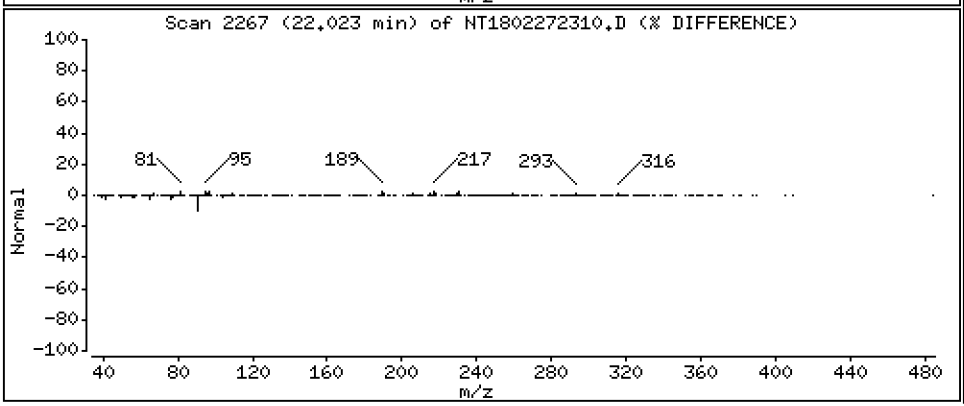
67 Butylbenzylphthalate

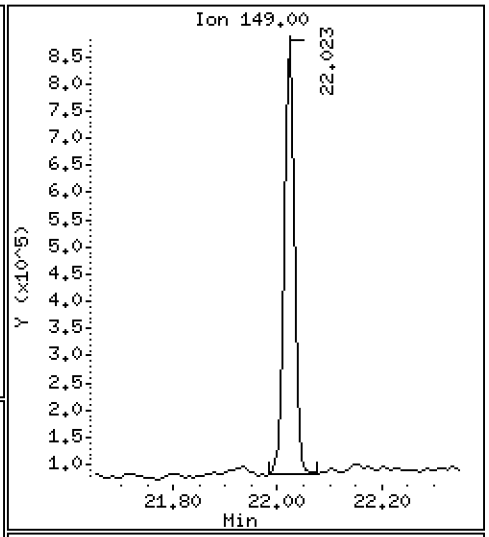
Concentration: 5.433 ug/mL

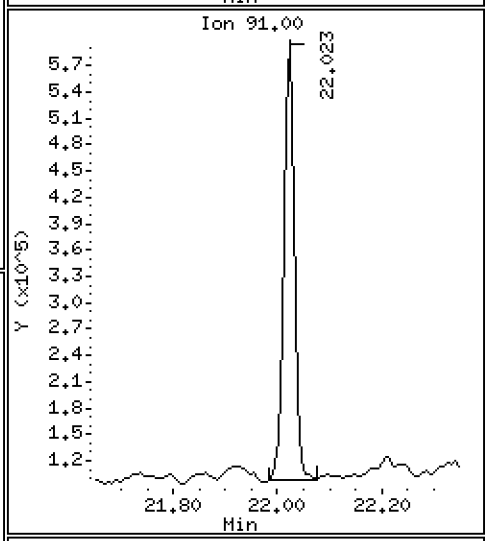


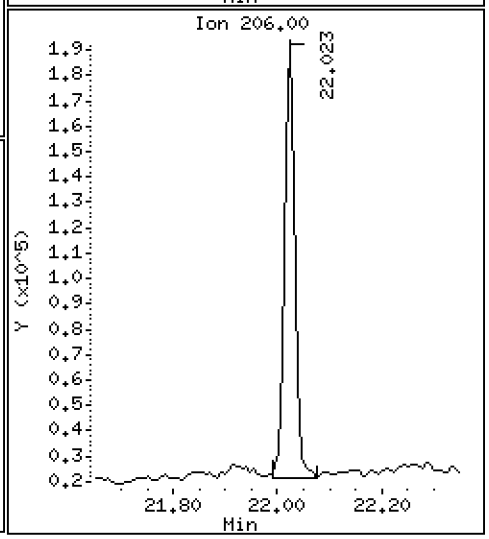












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

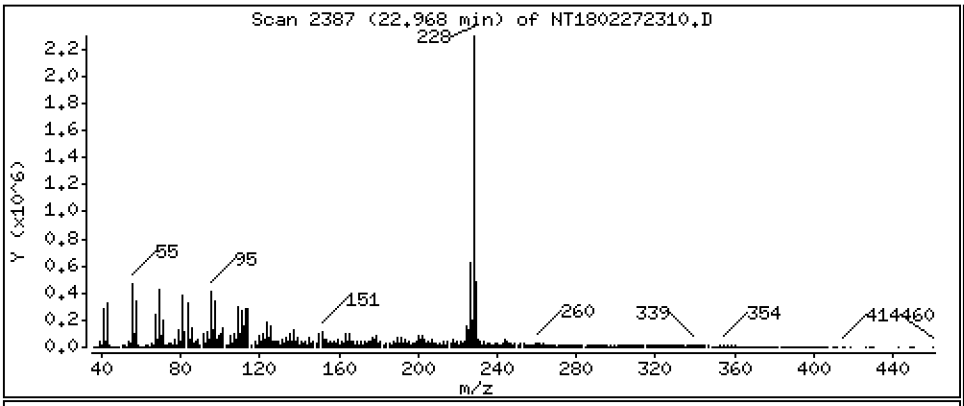
Operator: VTS

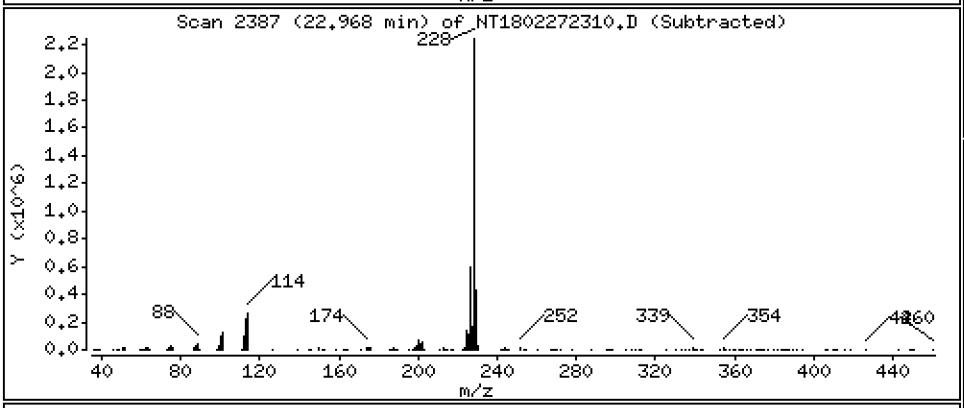
Column phase: ZB-5msi

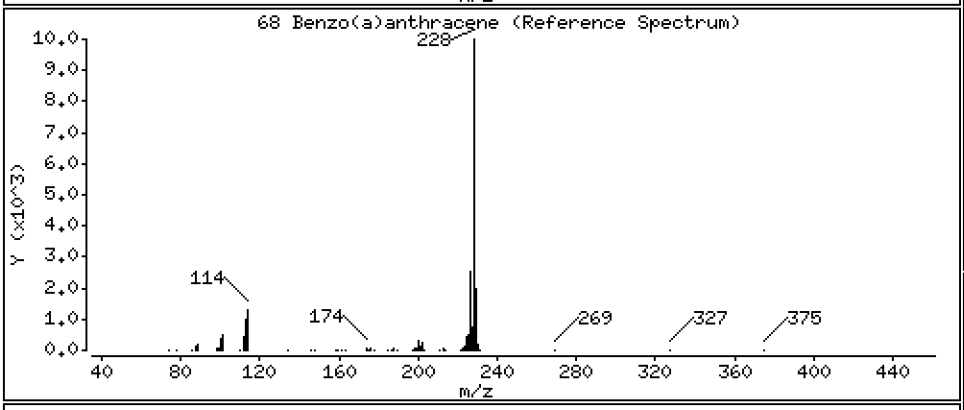
Column diameter: 0.25

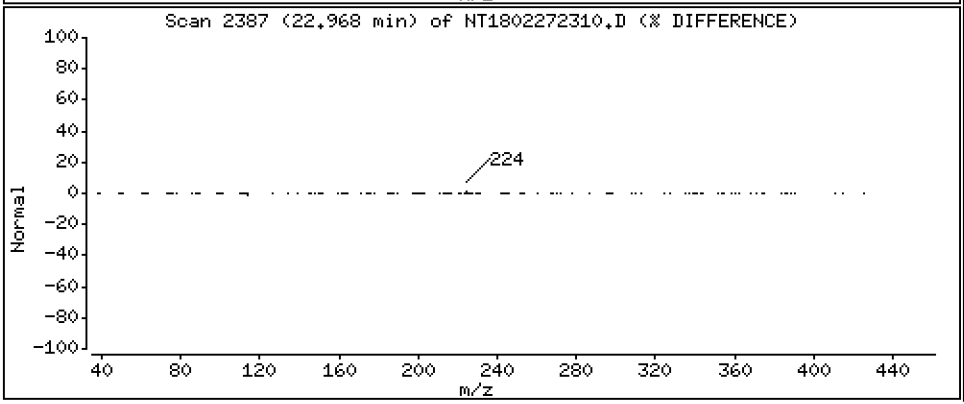
68 Benzo(a)anthracene

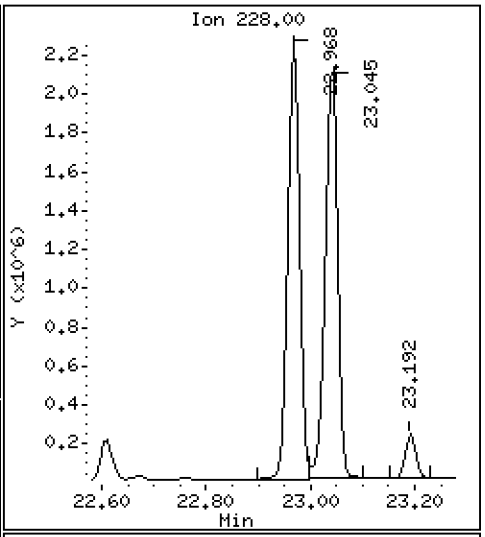
Concentration: 6.982 ug/mL

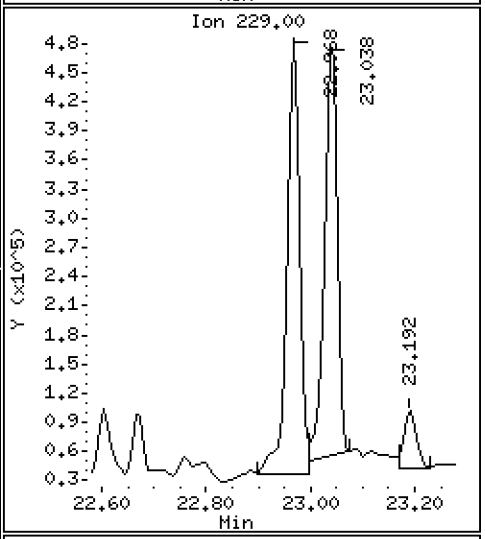


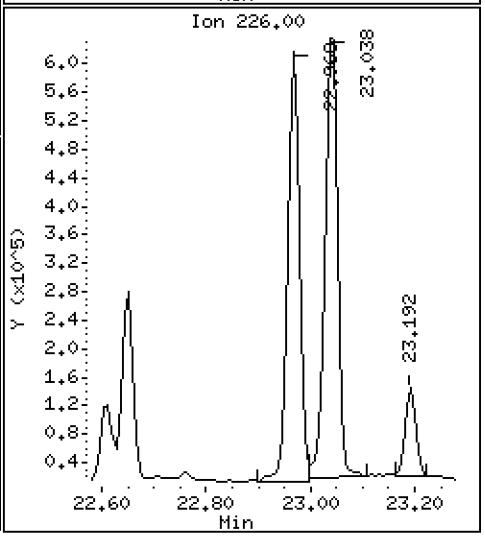












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

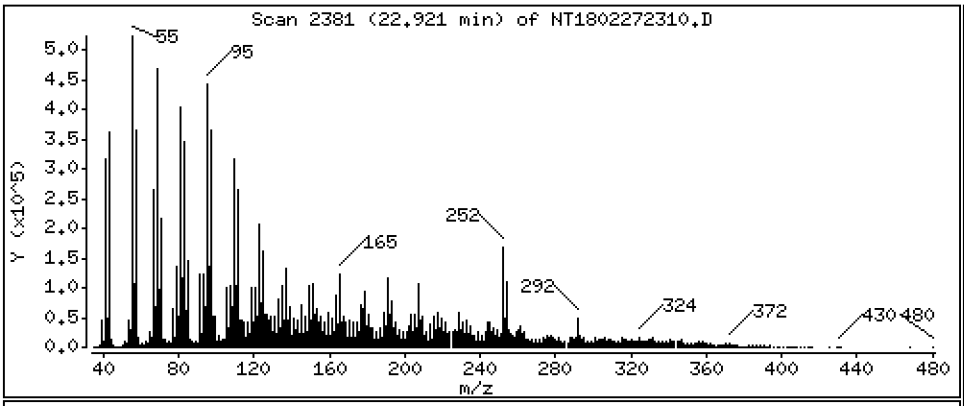
Operator: VTS

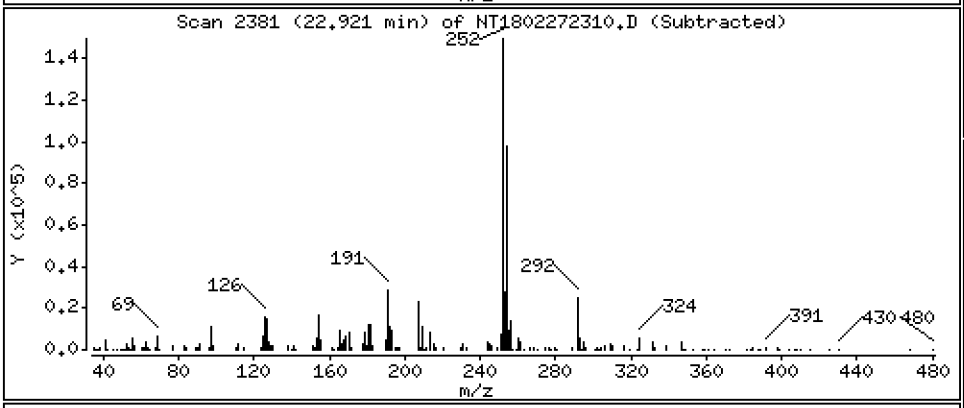
Column phase: ZB-5msi

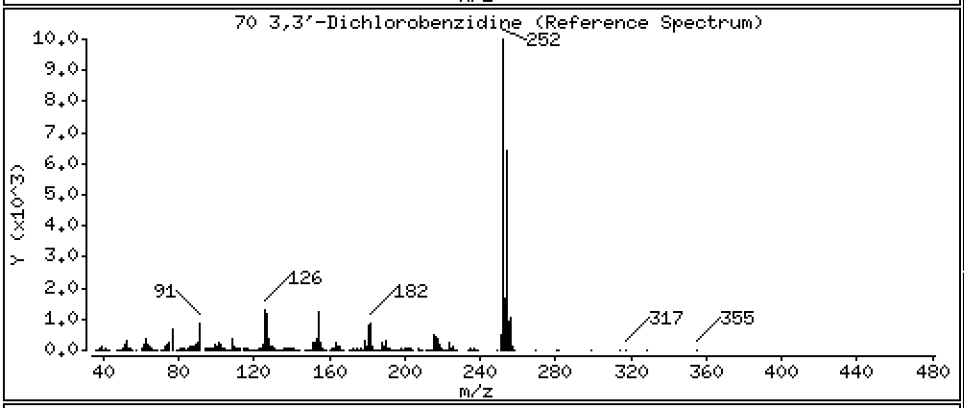
Column diameter: 0.25

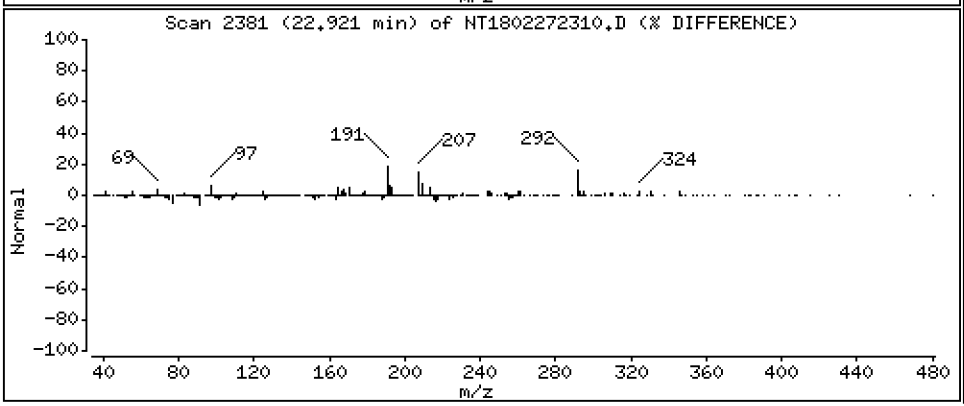
70 3,3'-Dichlorobenzidine

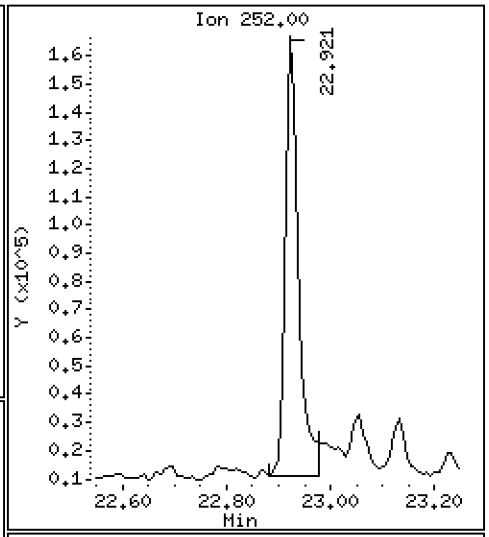
Concentration: 1.459 ug/mL

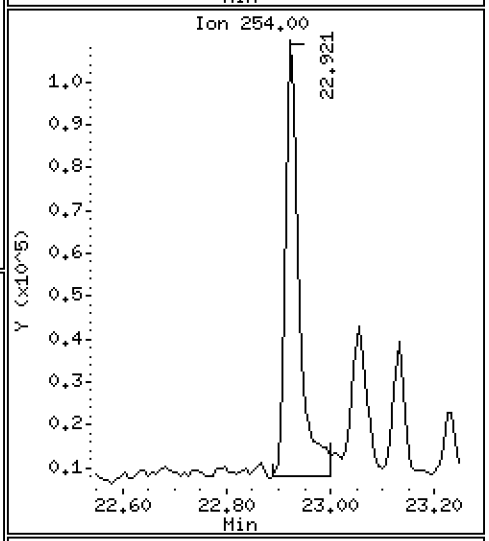


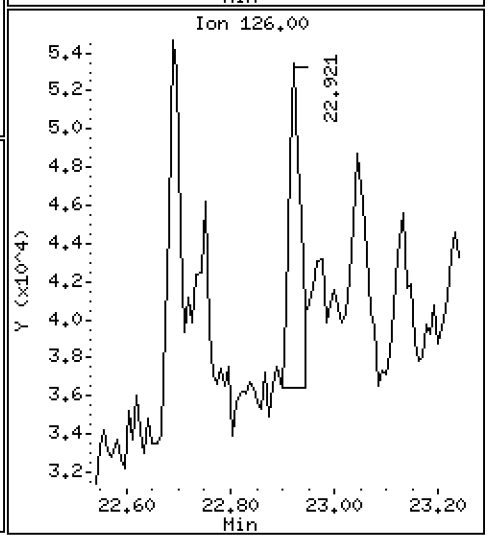












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

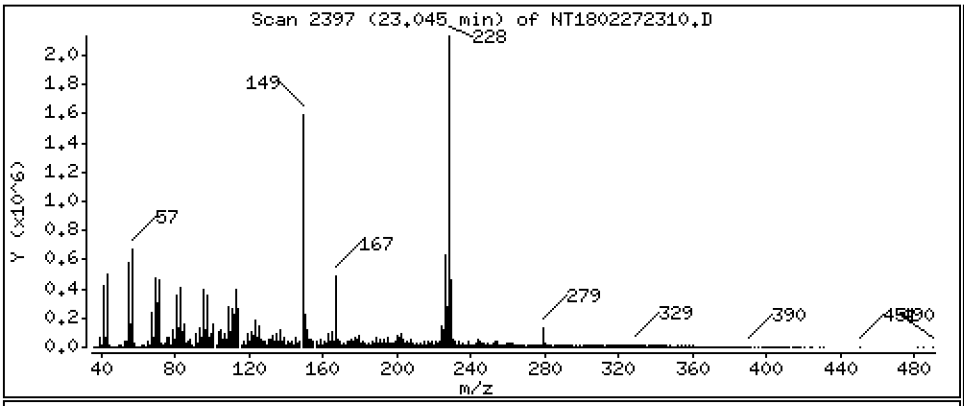
Operator: VTS

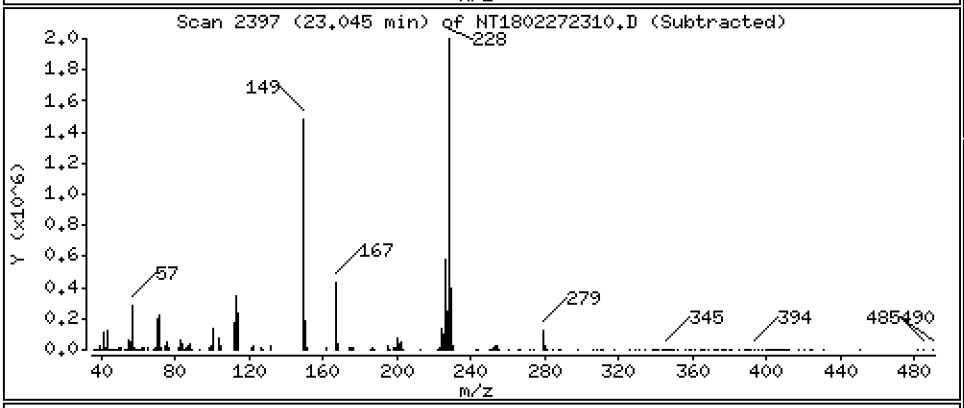
Column phase: ZB-5msi

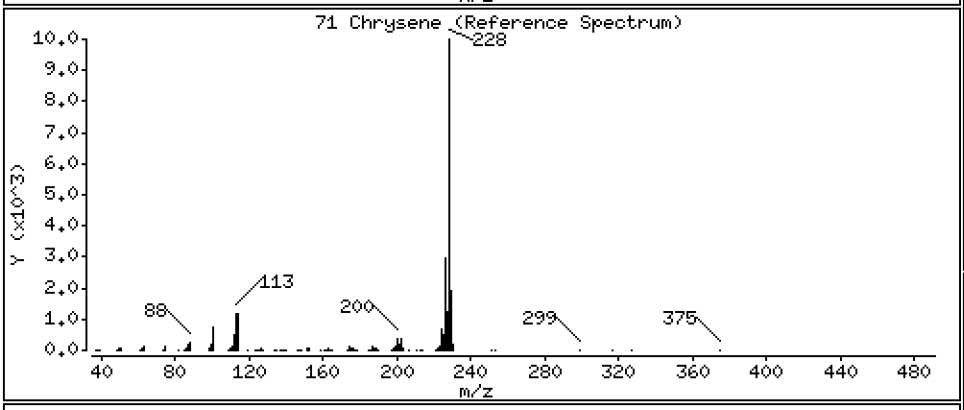
Column diameter: 0.25

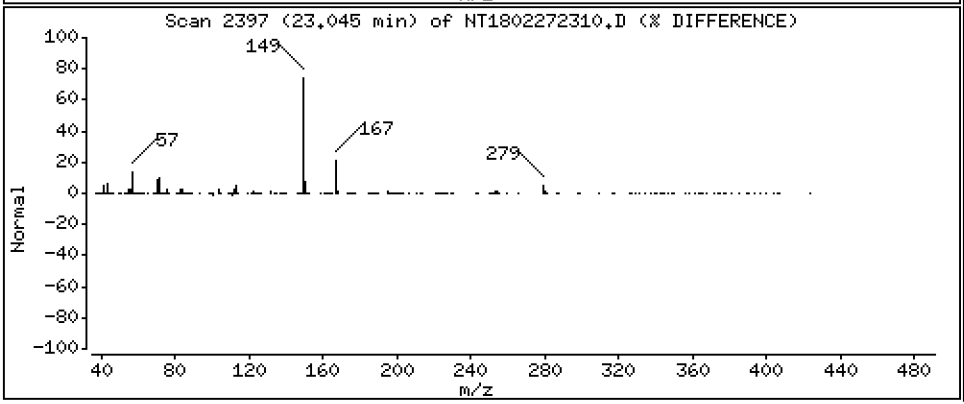
71 Chrysene

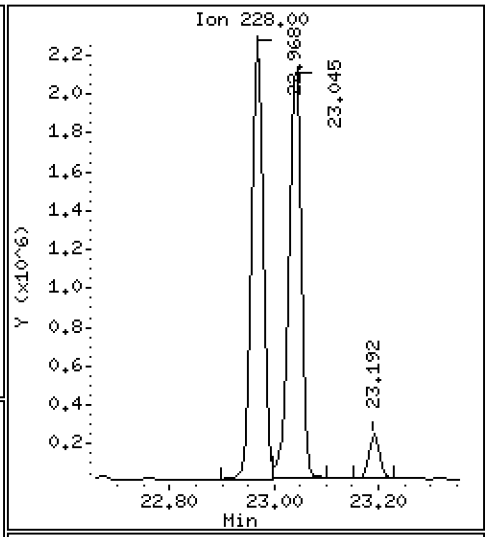
Concentration: 6.646 ug/mL

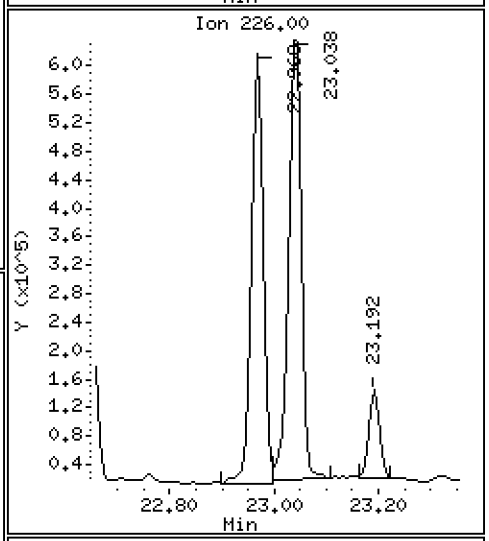


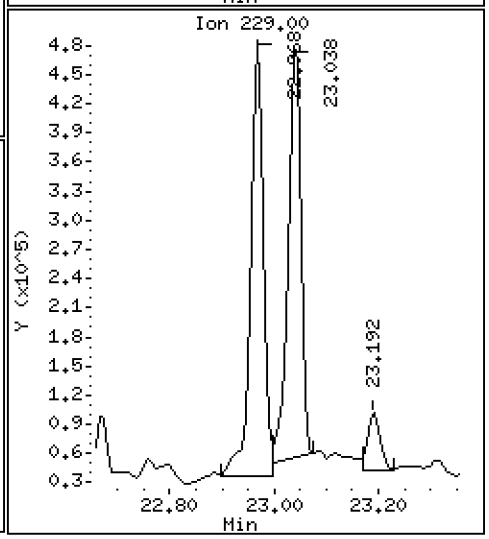












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

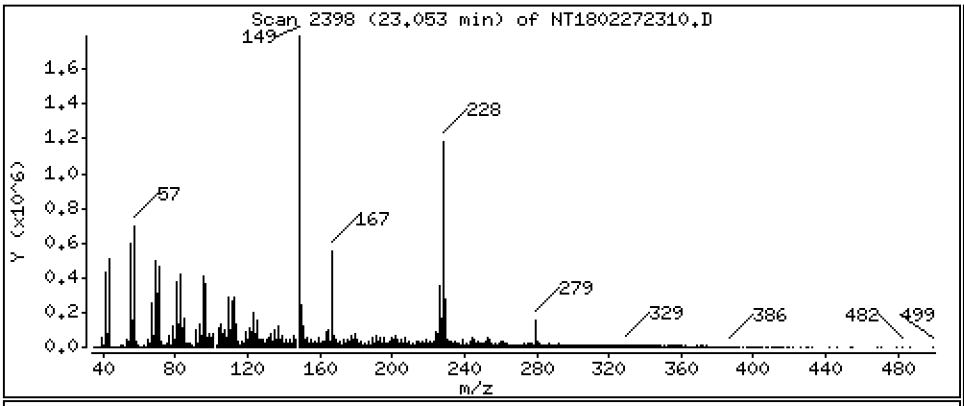
Operator: VTS

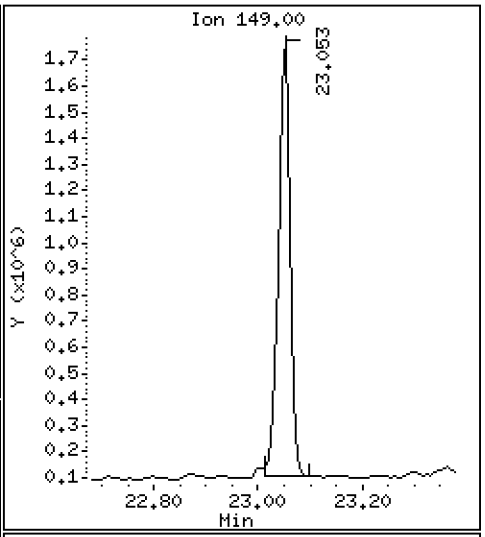
Column phase: ZB-5msi

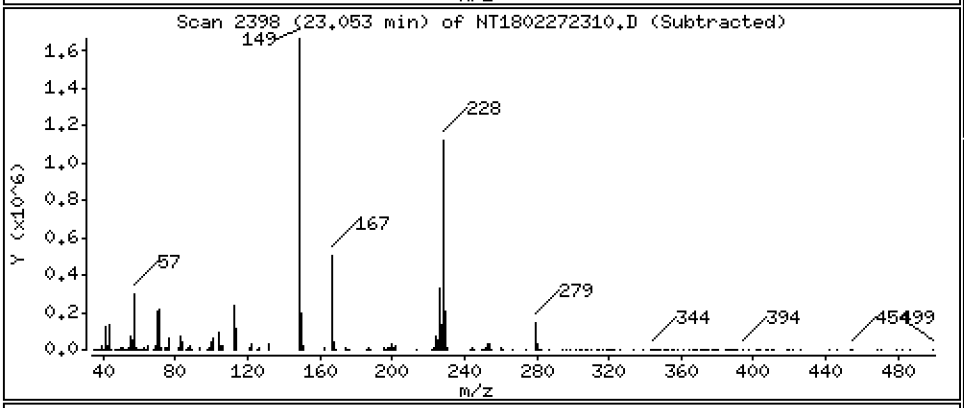
Column diameter: 0.25

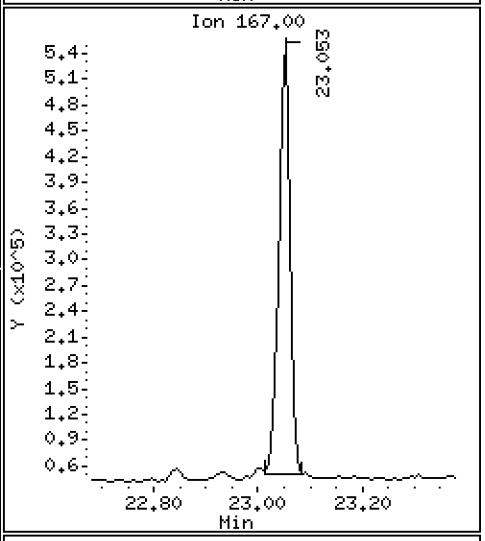
72 bis(2-Ethylhexyl)phthalate

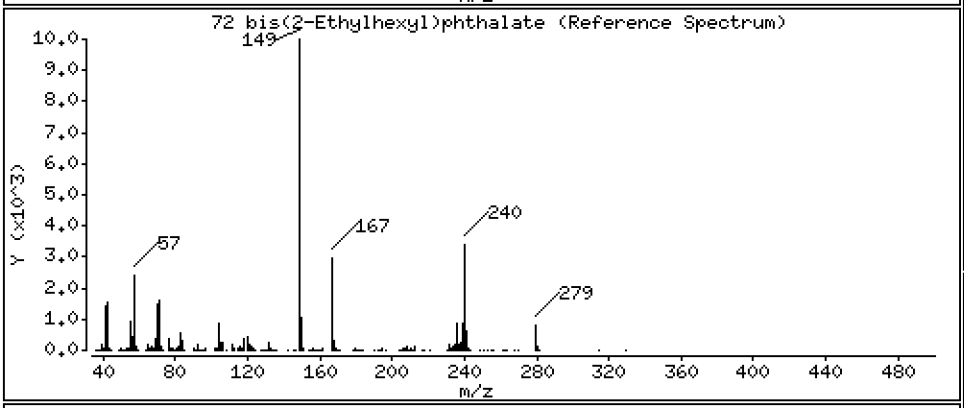
Concentration: 10.06 ug/mL

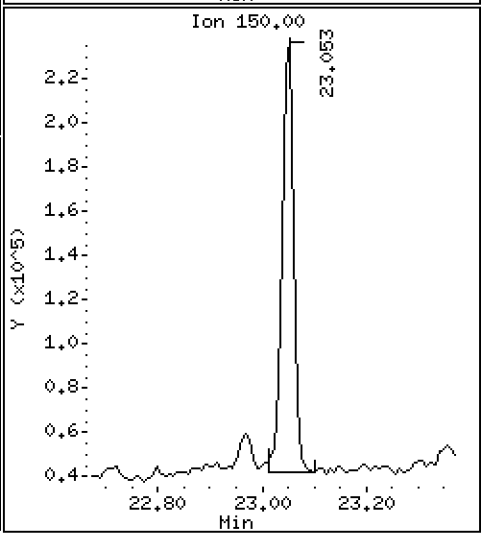


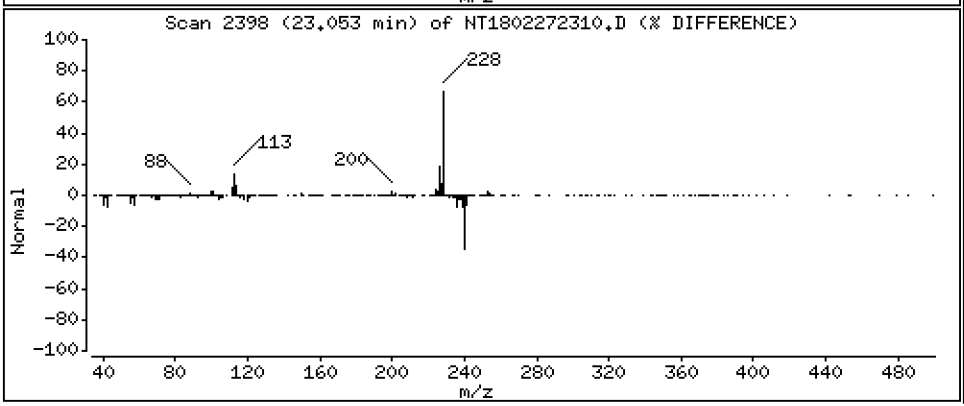












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

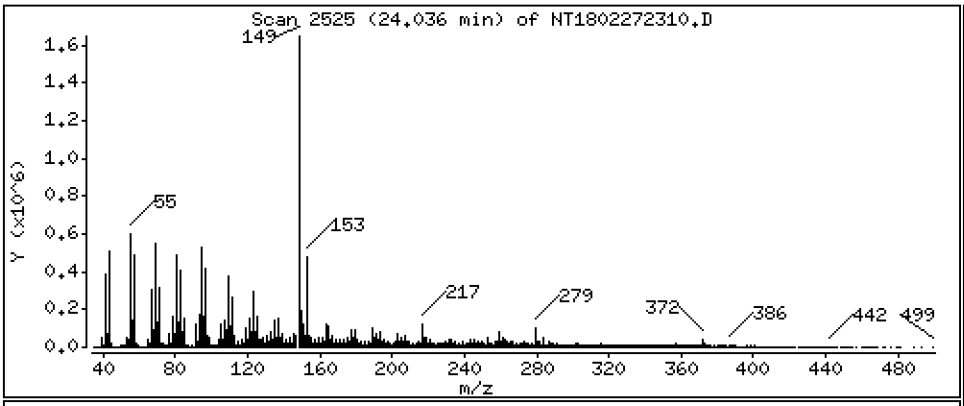
Operator: VTS

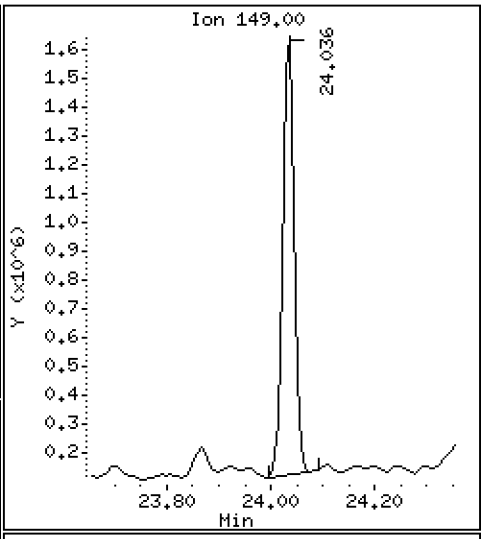
Column phase: ZB-5msi

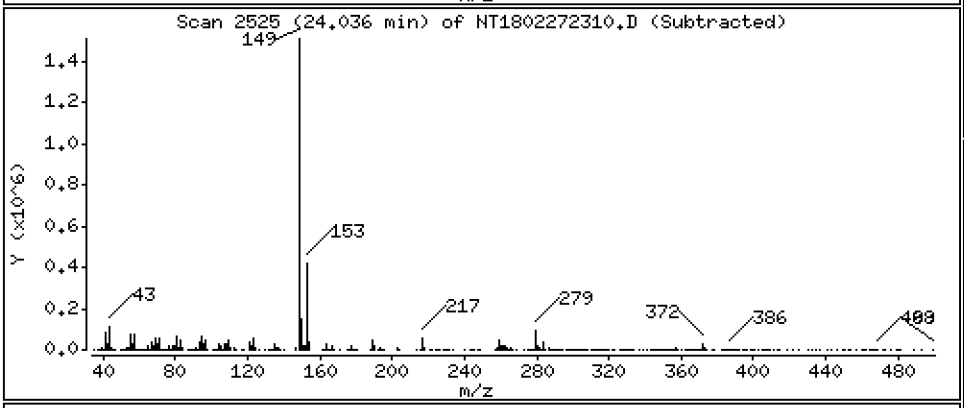
Column diameter: 0.25

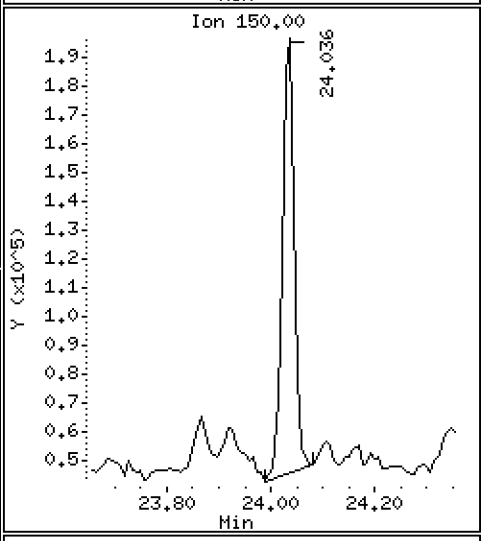
73 Di-n-octylphthalate

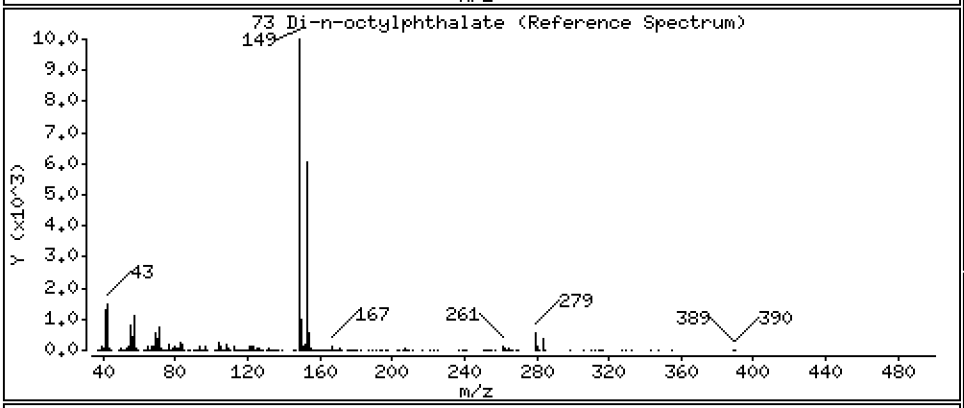
Concentration: 4.766 ug/mL

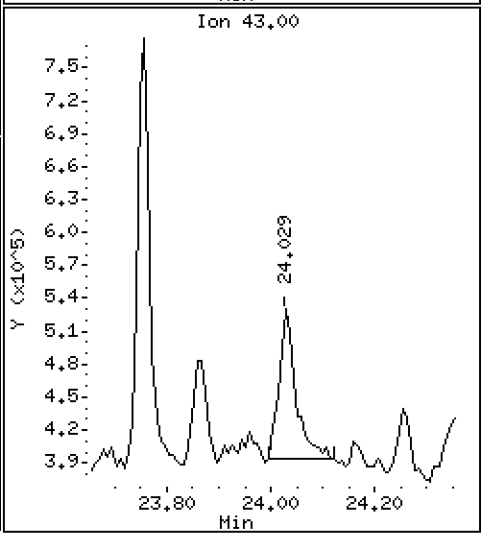


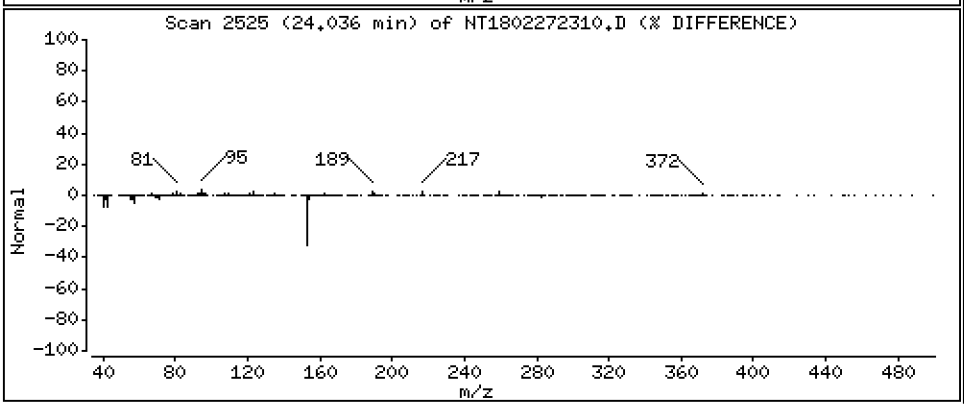












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

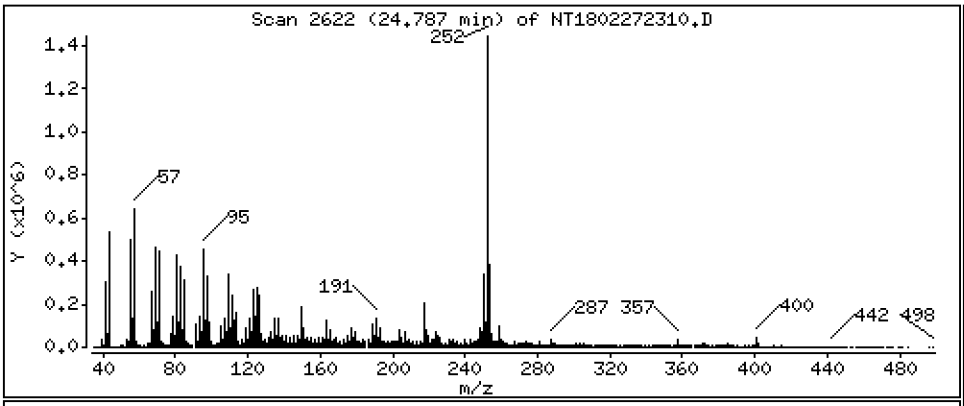
Operator: VTS

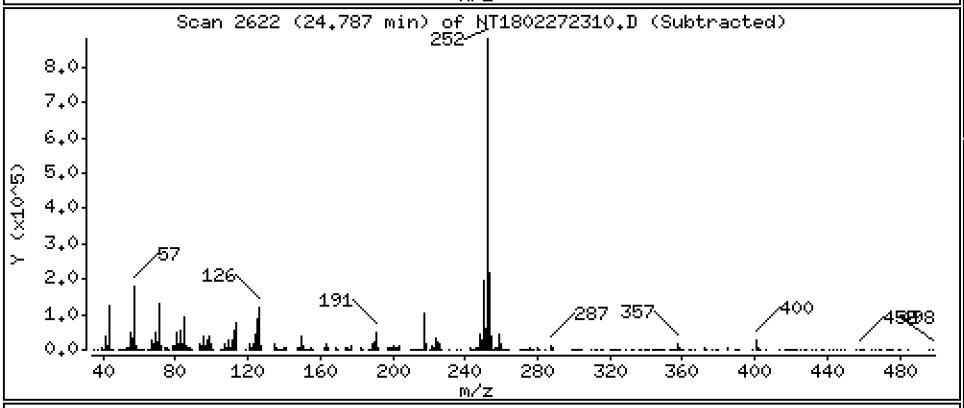
Column phase: ZB-5msi

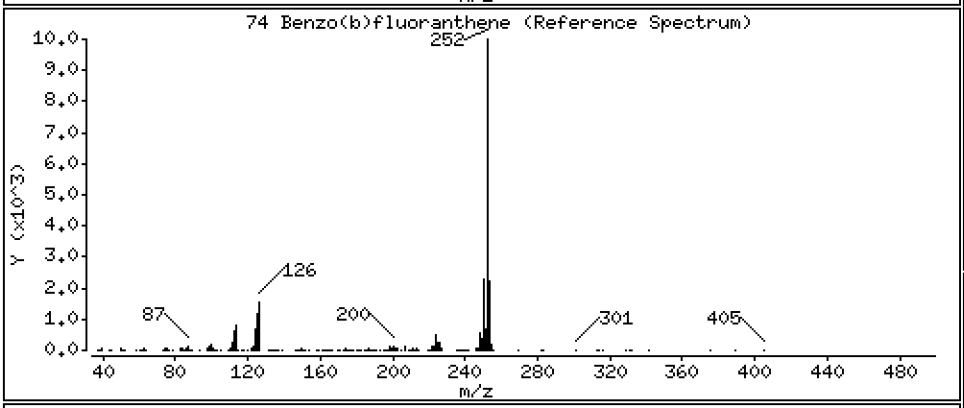
Column diameter: 0.25

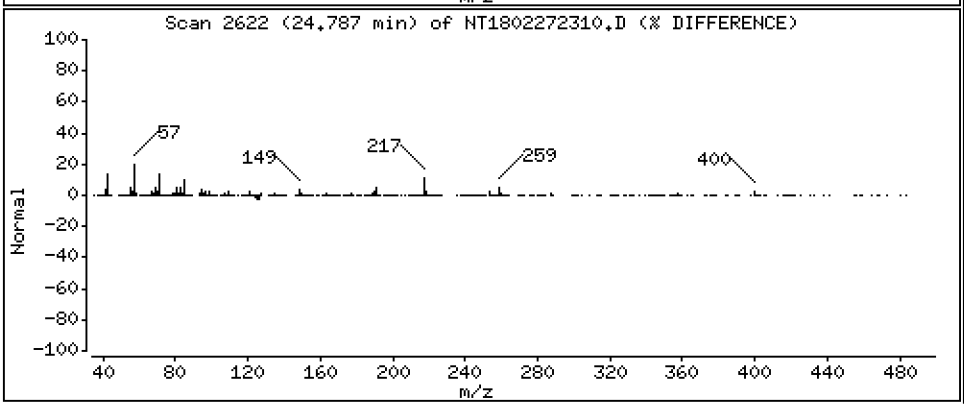
74 Benzo(b)fluoranthene

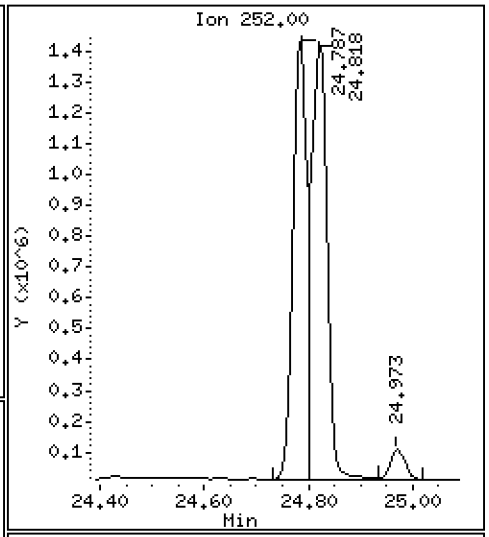
Concentration: 11.10 ug/mL

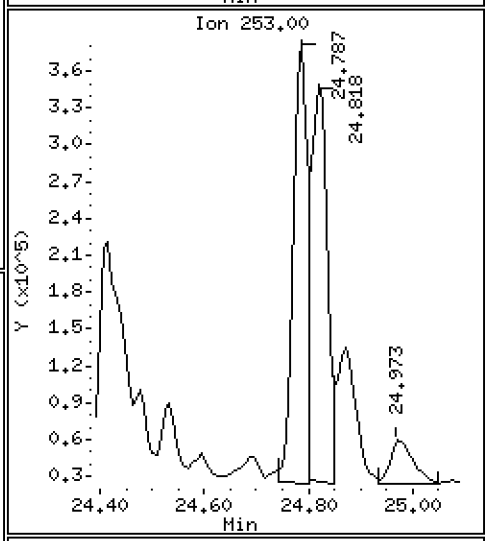


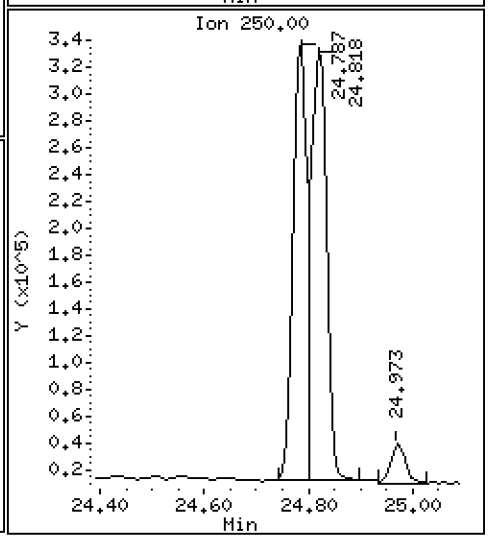












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

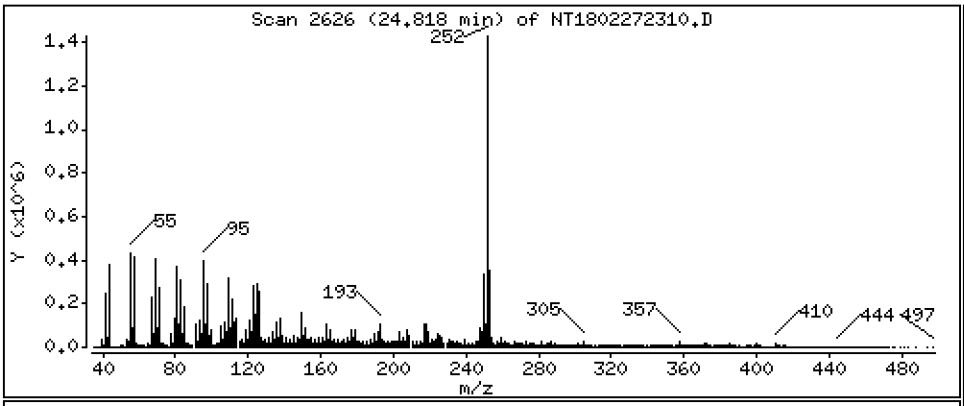
Operator: VTS

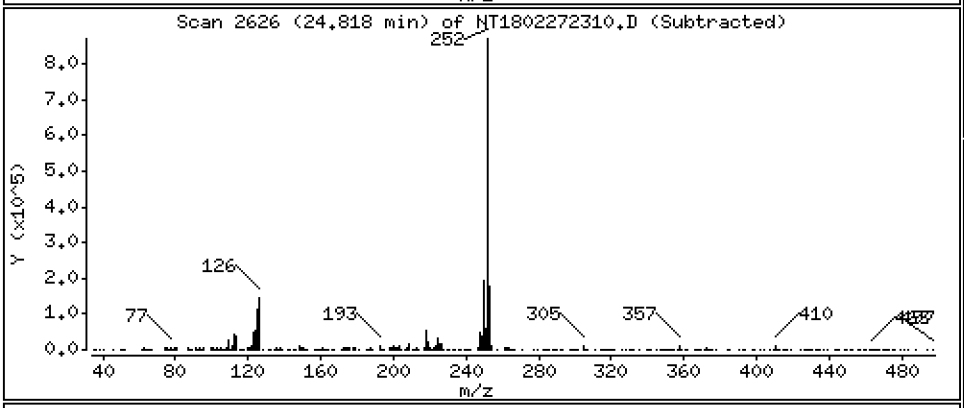
Column phase: ZB-5msi

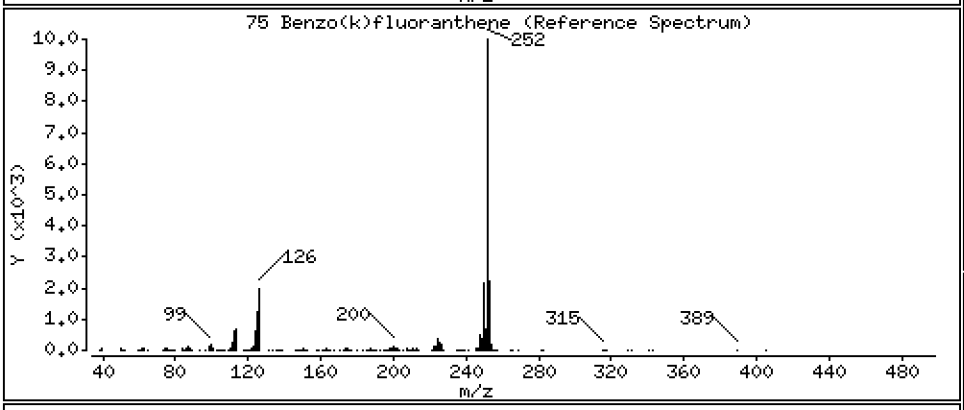
Column diameter: 0.25

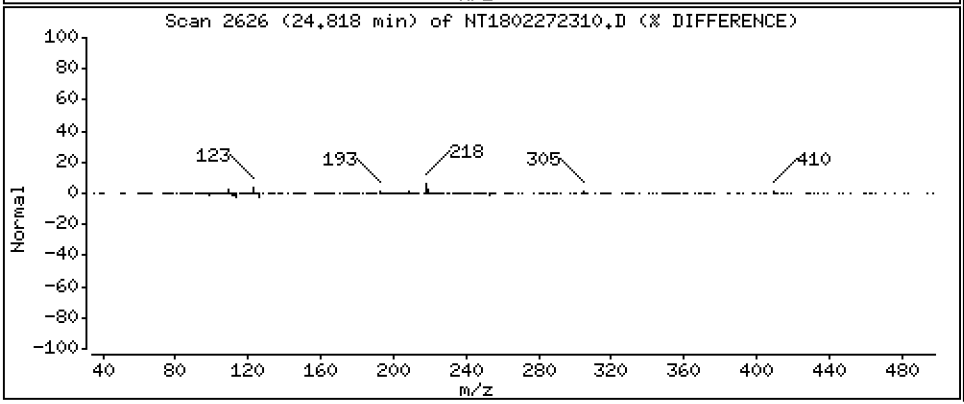
75 Benzo(k)fluoranthene

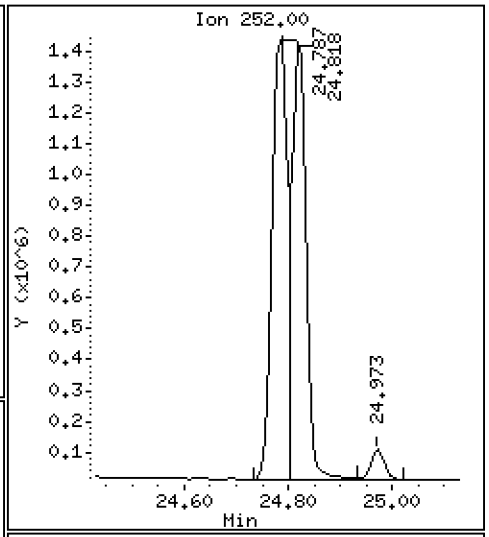
Concentration: 9.818 ug/mL

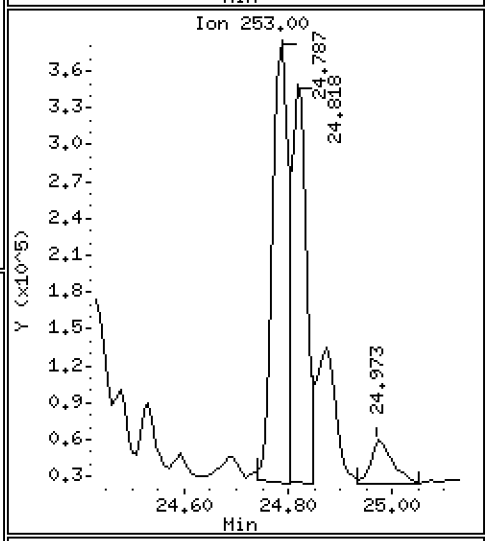


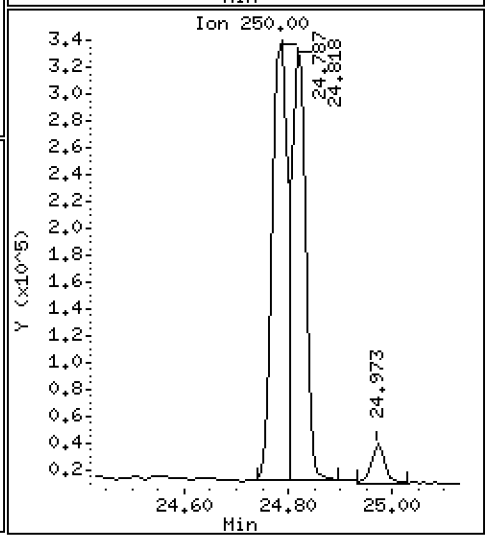












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

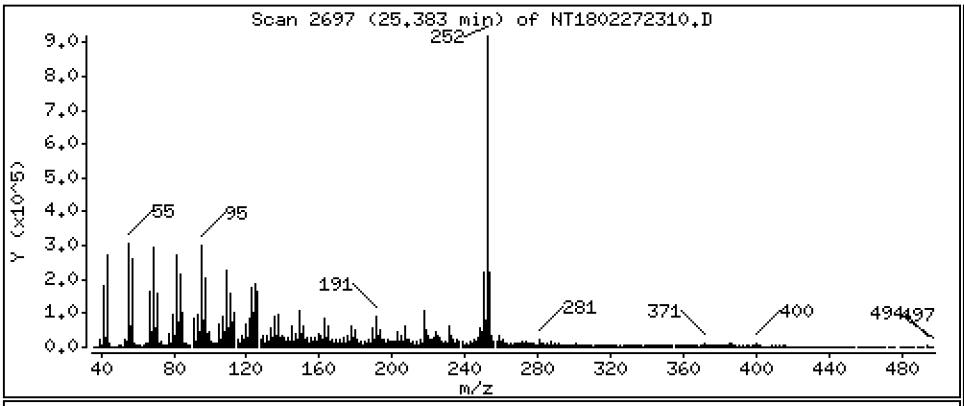
Operator: VTS

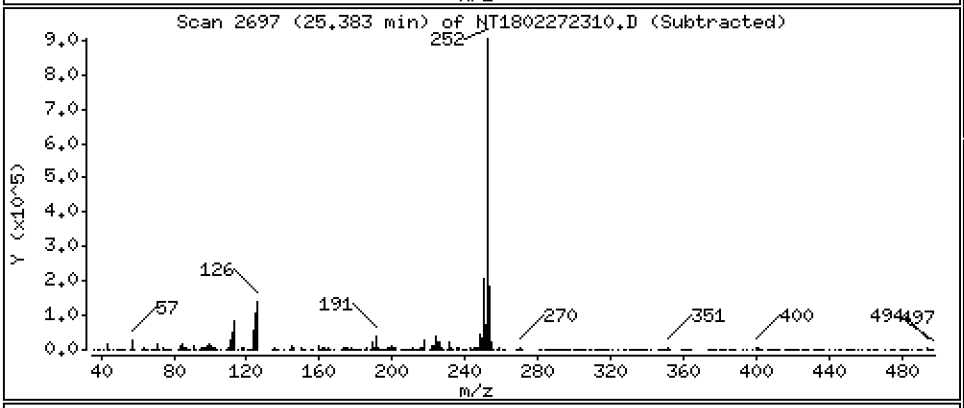
Column phase: ZB-5msi

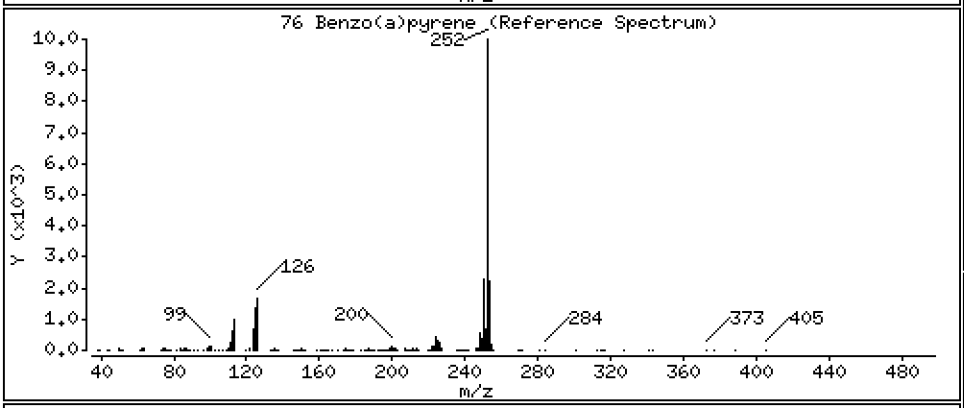
Column diameter: 0.25

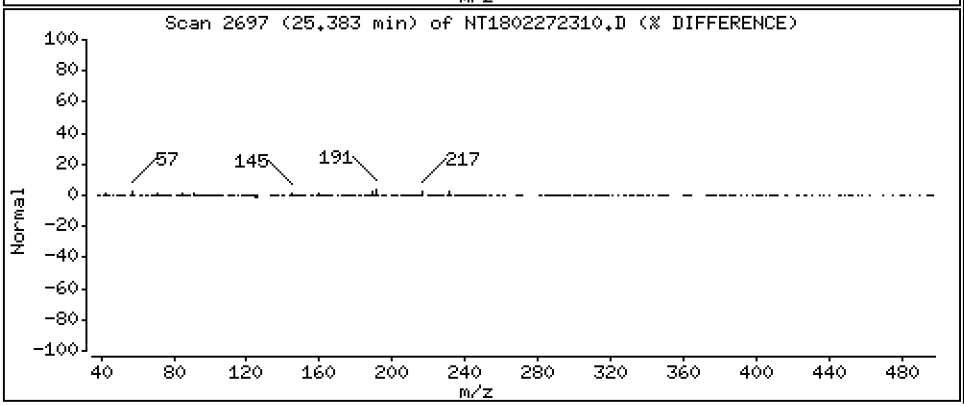
76 Benzo(a)pyrene

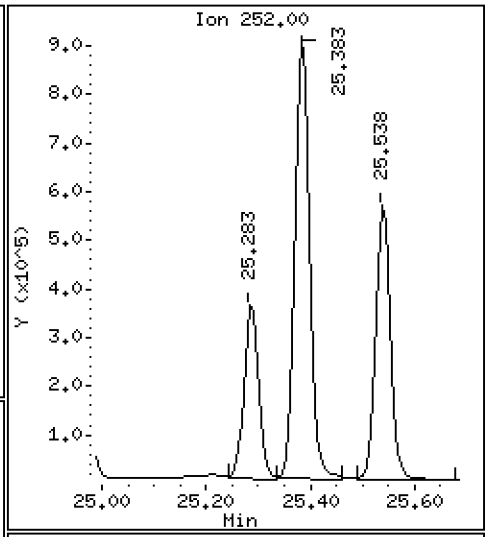
Concentration: 7.599 ug/mL

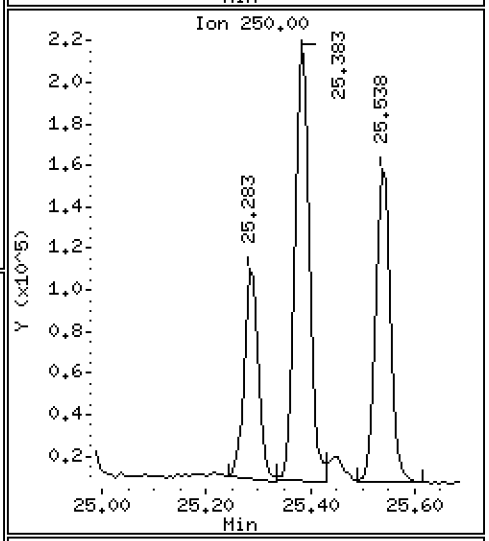


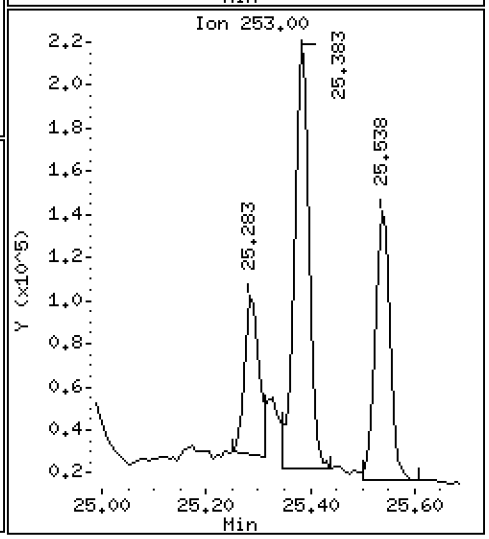












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

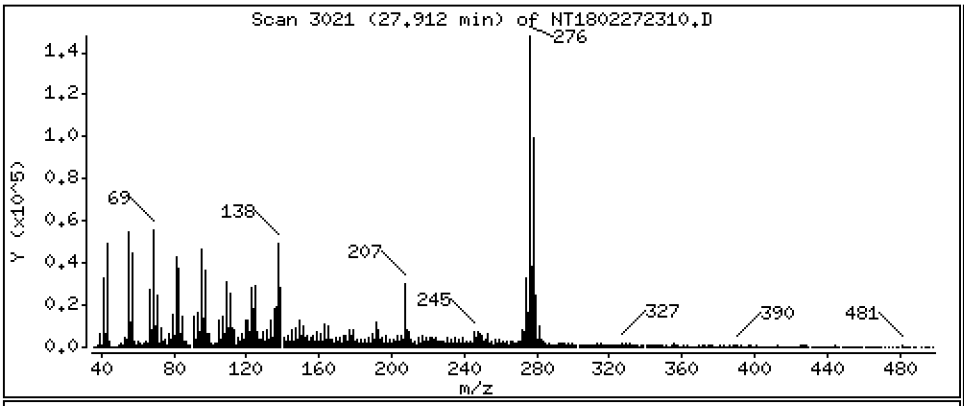
Operator: VTS

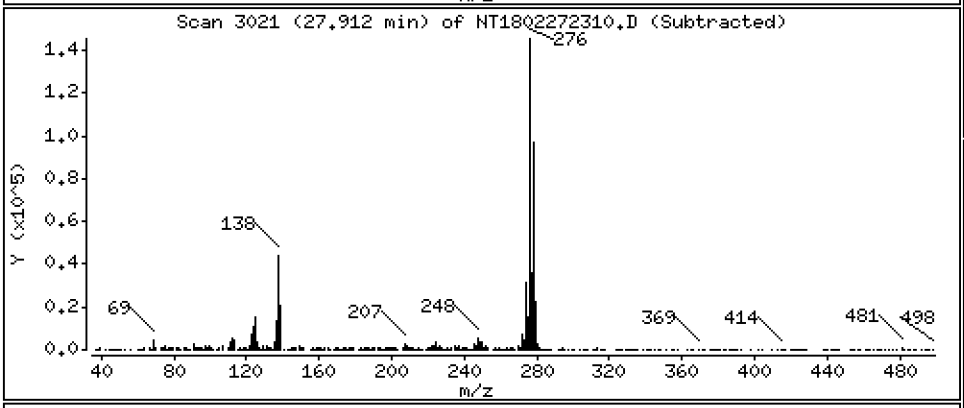
Column phase: ZB-5msi

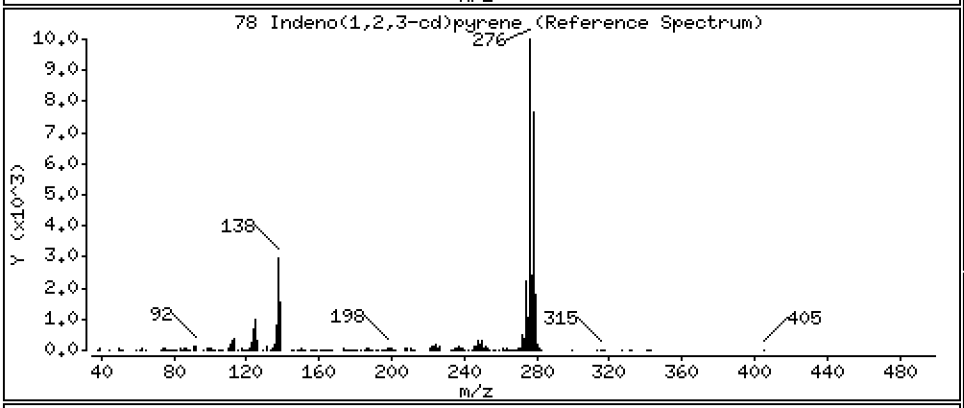
Column diameter: 0.25

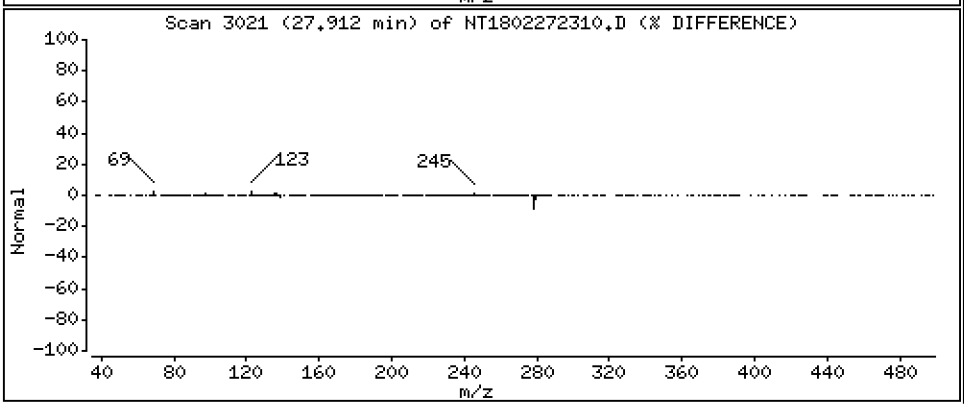
78 Indeno(1,2,3-cd)pyrene

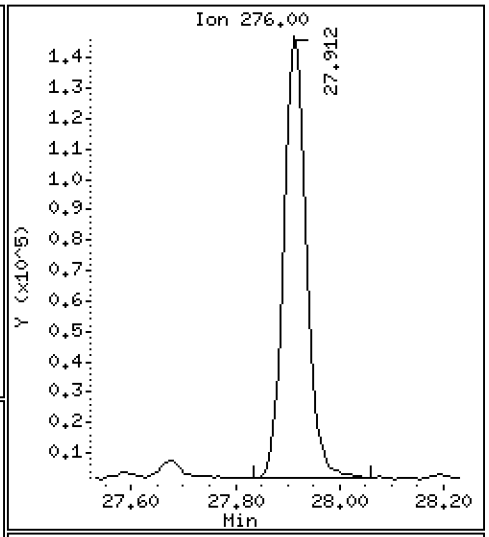
Concentration: 1.485 ug/mL

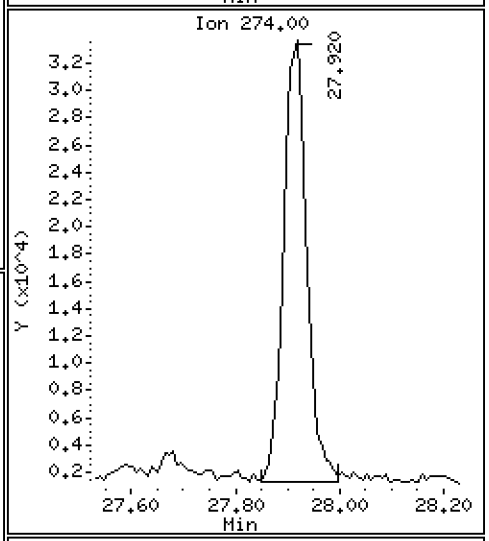


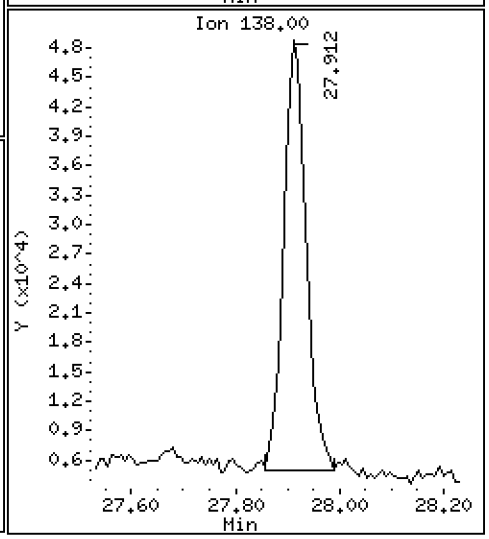












Date : 27-FEB-2023 23:12

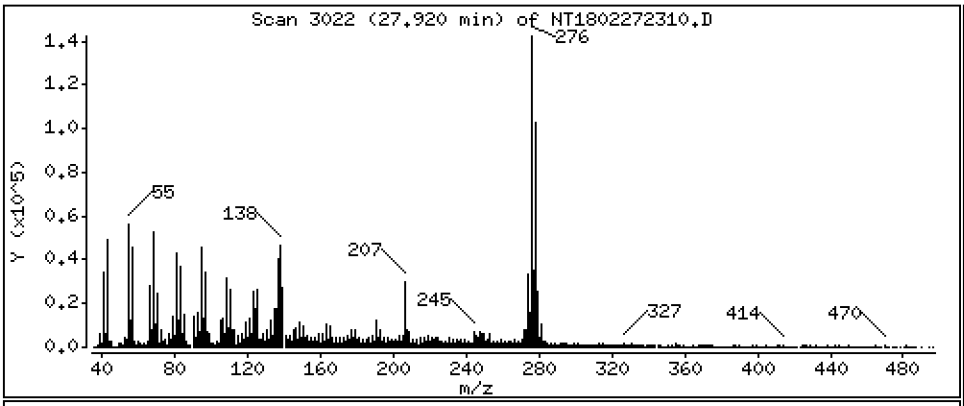
Client ID: Instrument: nt18.i

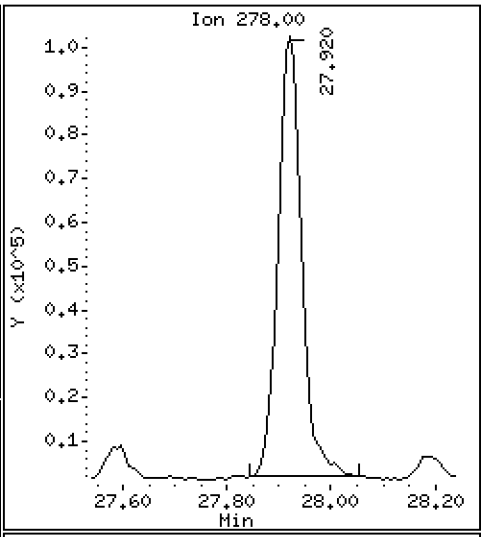
Sample Info: BLA0410-MSD1

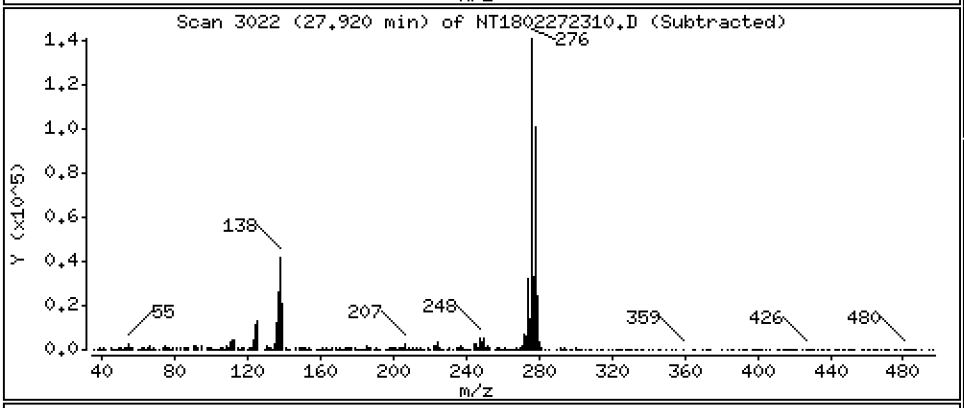
Operator: VTS

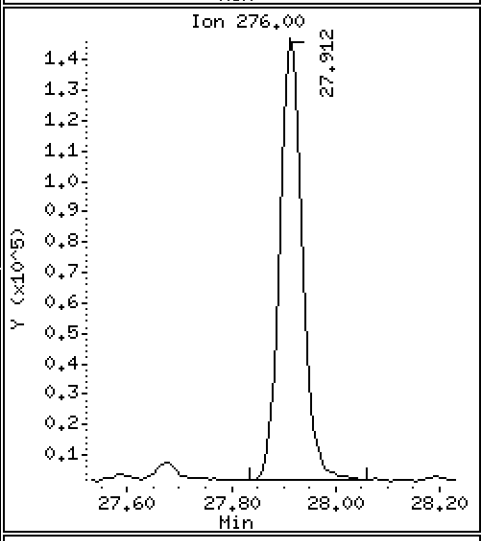
Column phase: ZB-5msi Column diameter: 0.25

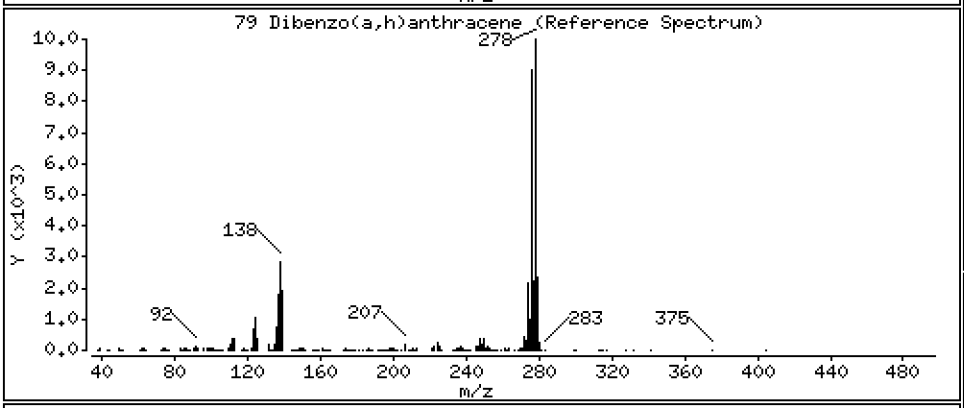
79 Dibenzo(a,h)anthracene Concentration: 1.279 ug/mL

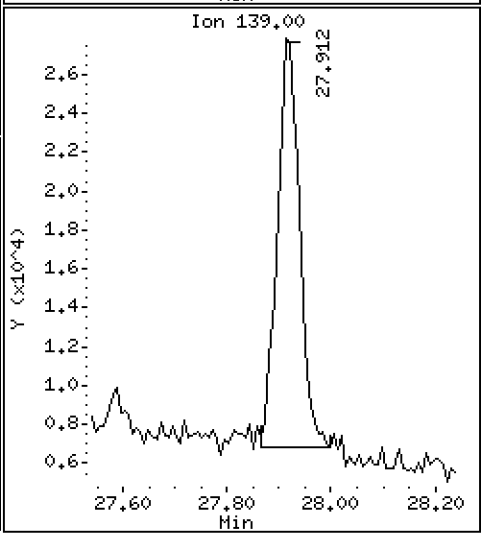


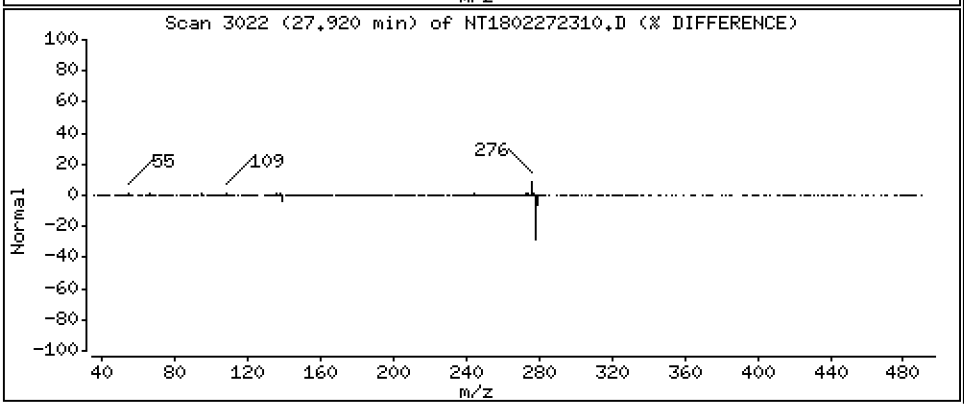












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

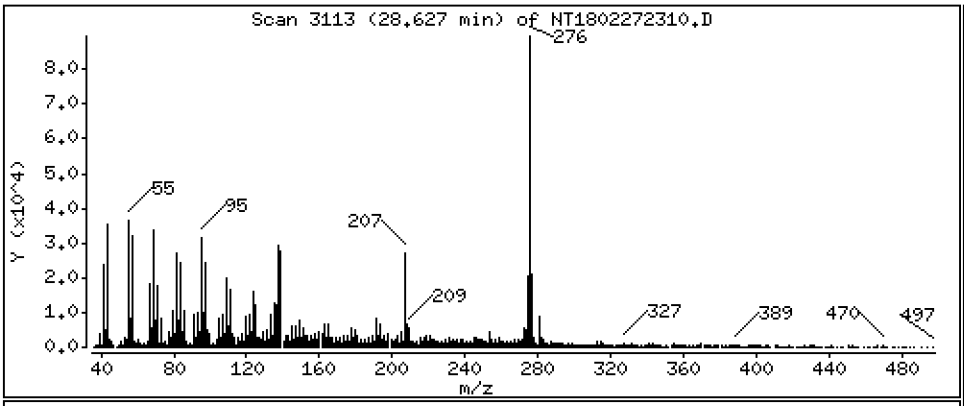
Operator: VTS

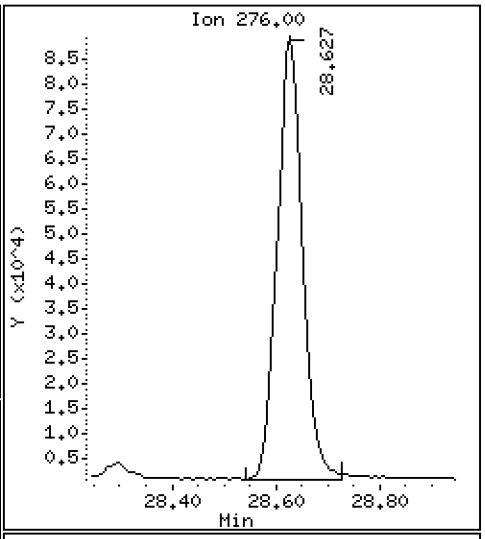
Column phase: ZB-5msi

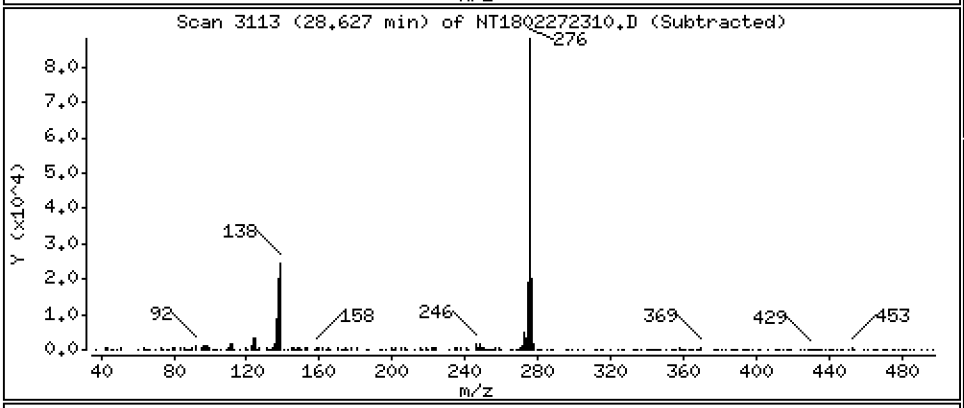
Column diameter: 0.25

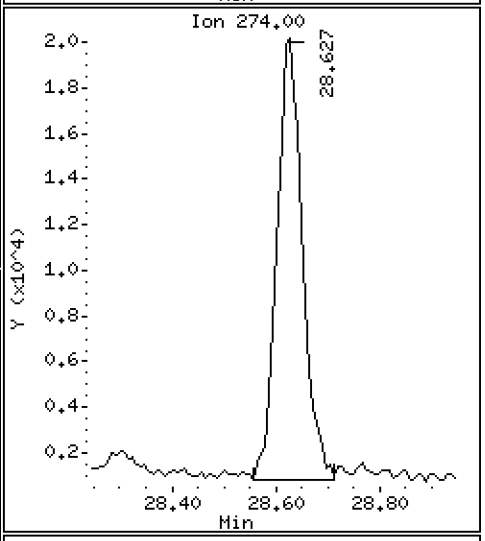
80 Benzo(g,h,i)perylene

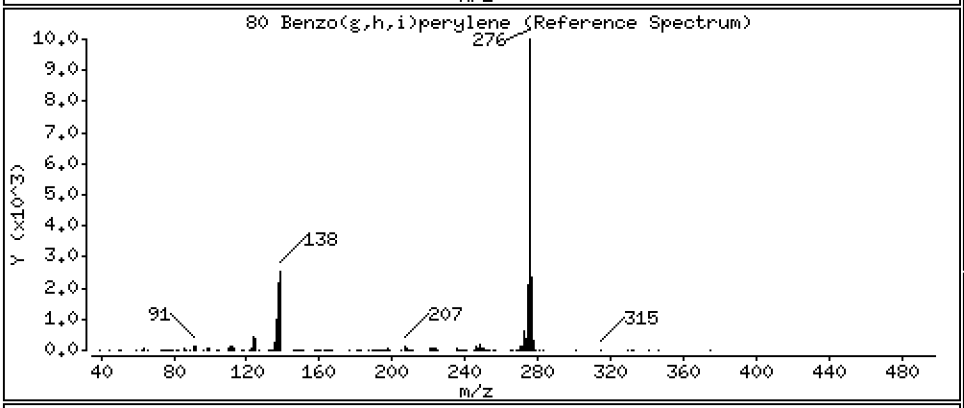
Concentration: 1.228 ug/mL

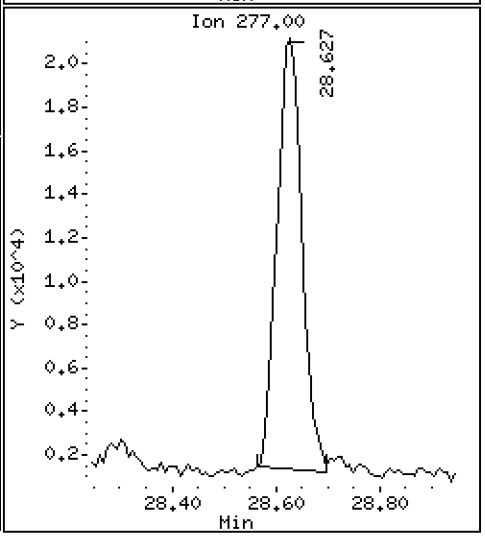


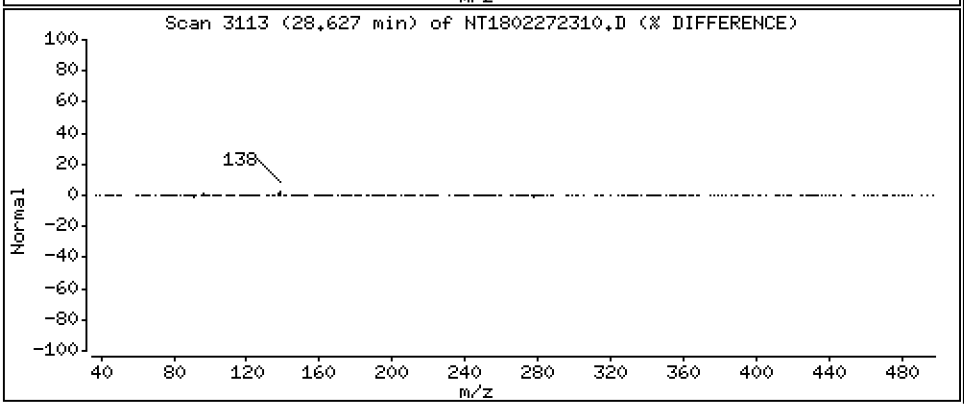












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

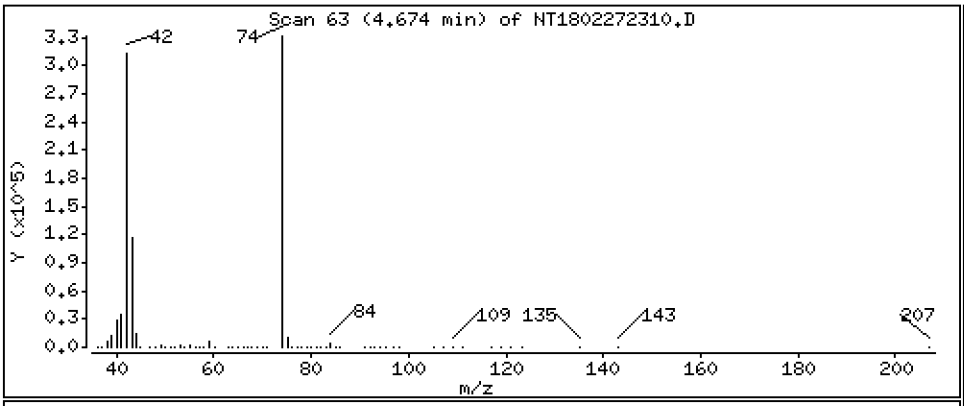
Operator: VTS

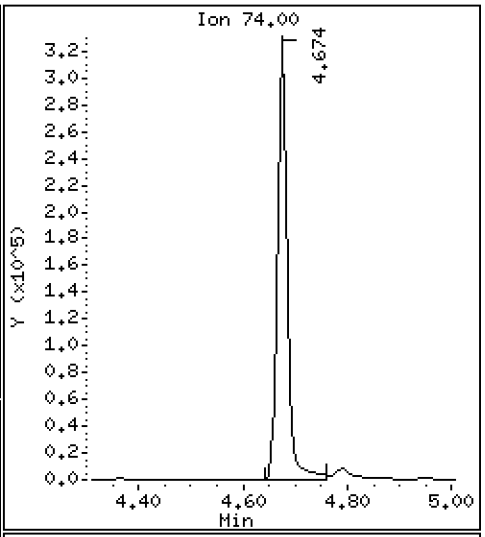
Column phase: ZB-5msi

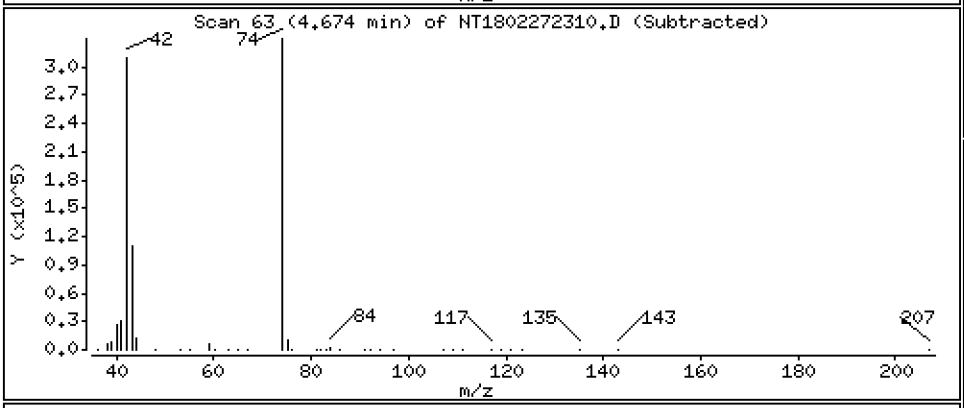
Column diameter: 0.25

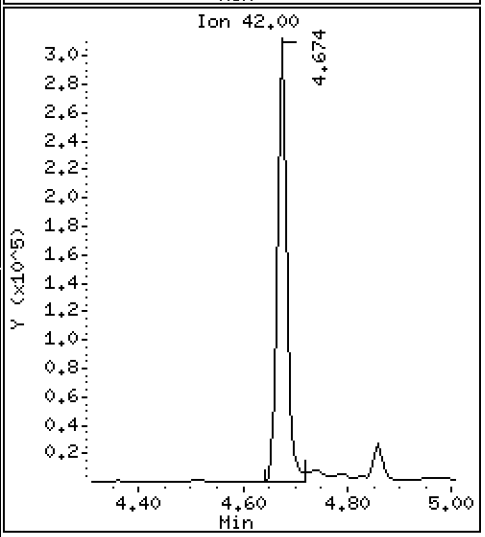
90 N-Nitrosodimethylamine

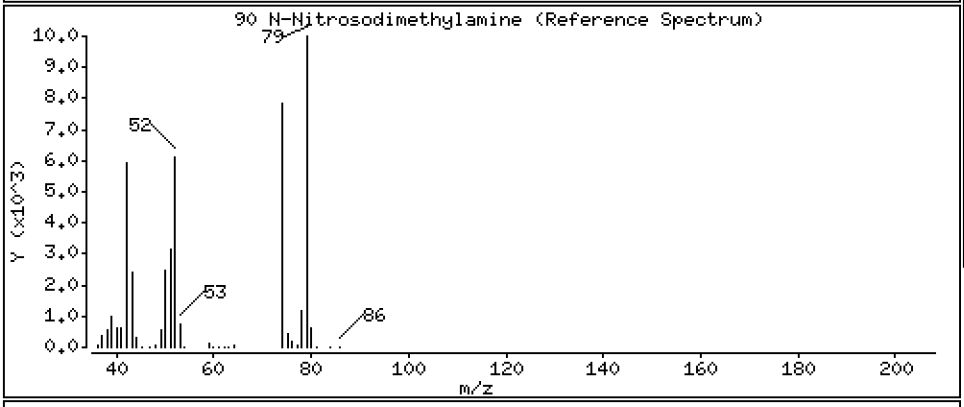
Concentration: 8.096 ug/mL

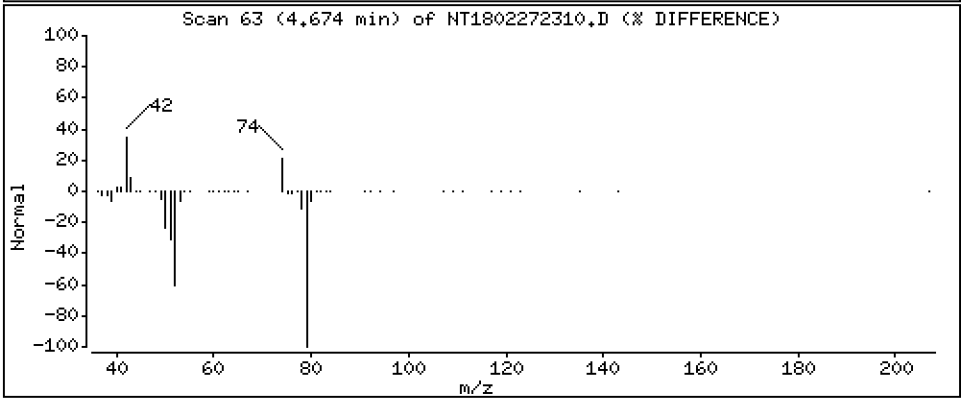












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

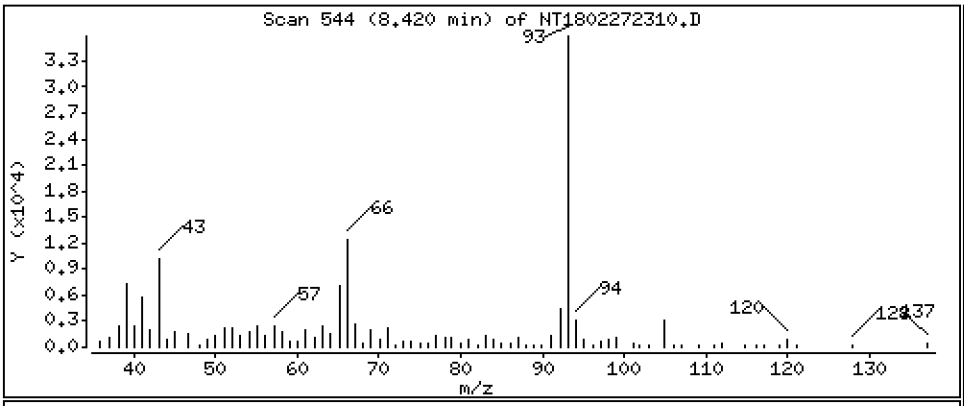
Operator: VTS

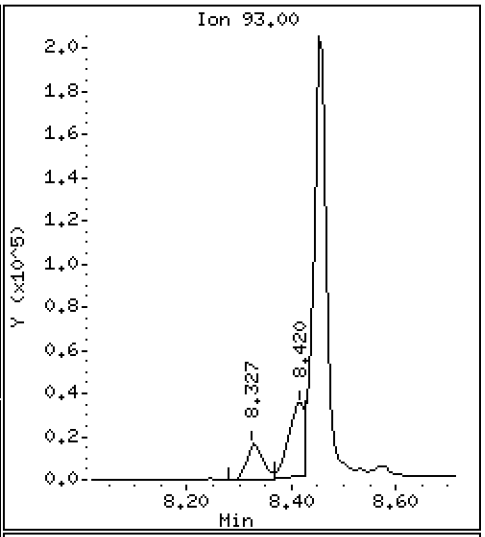
Column phase: ZB-5msi

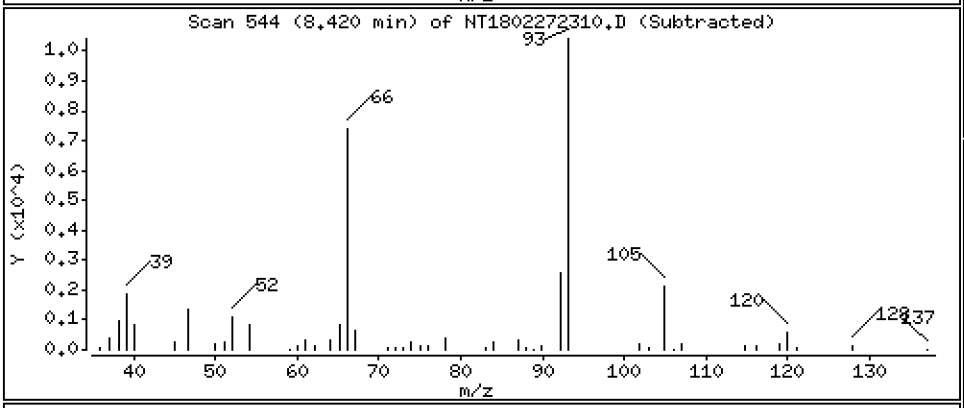
Column diameter: 0.25

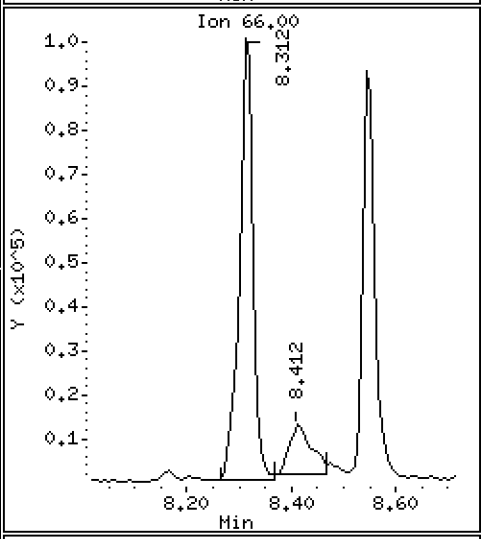
91 Aniline

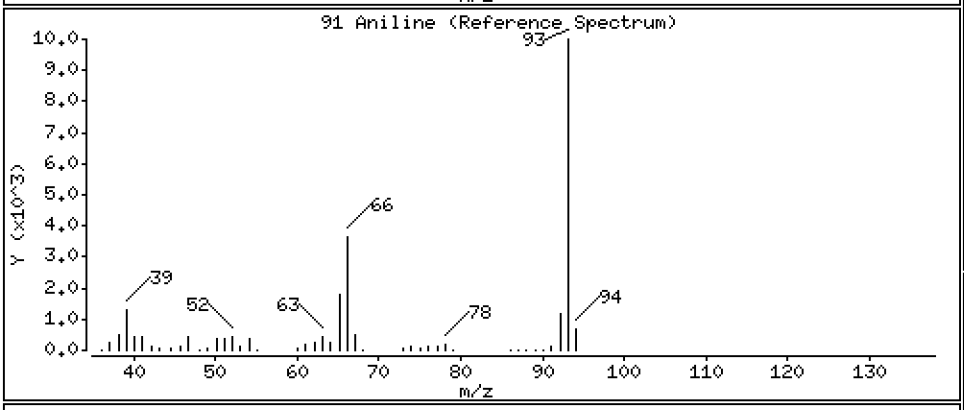
Concentration: 0.5682 ug/mL

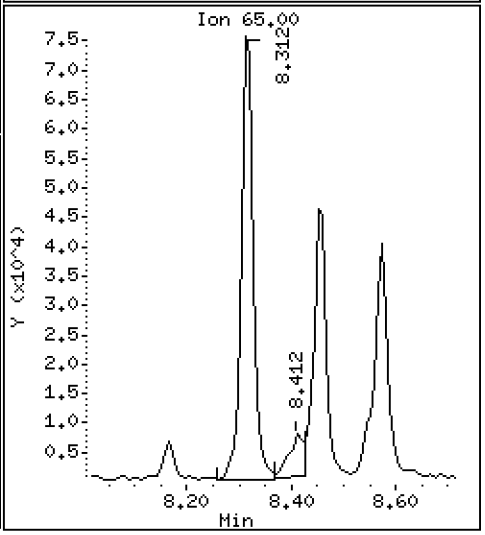


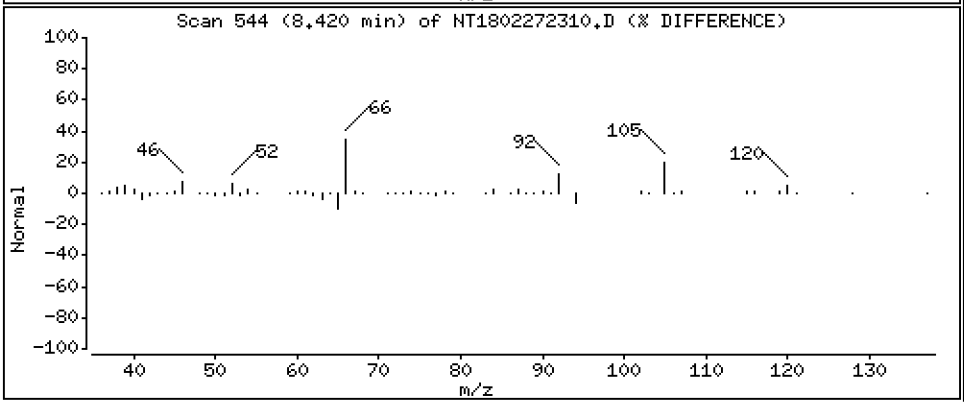












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

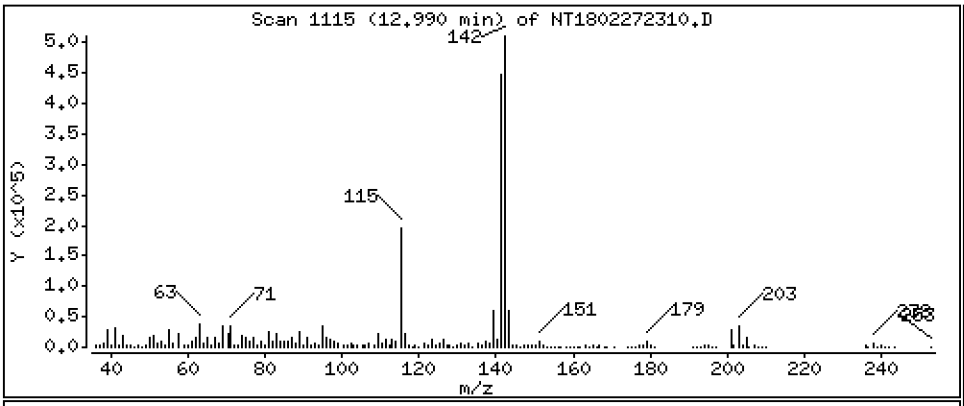
Operator: VTS

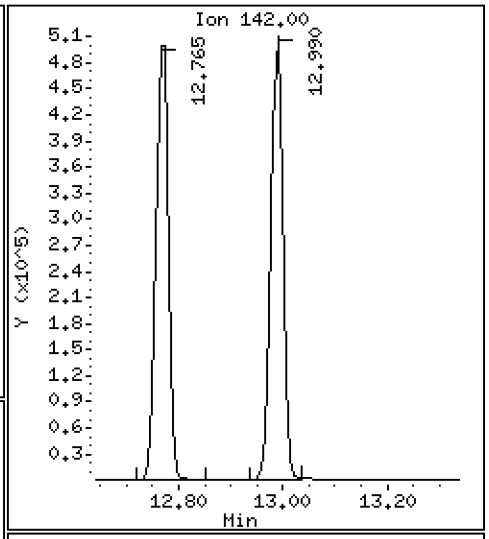
Column phase: ZB-5msi

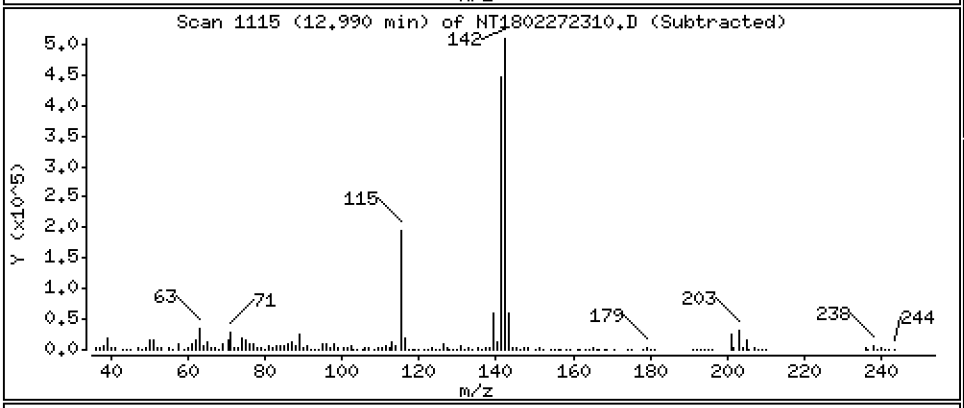
Column diameter: 0.25

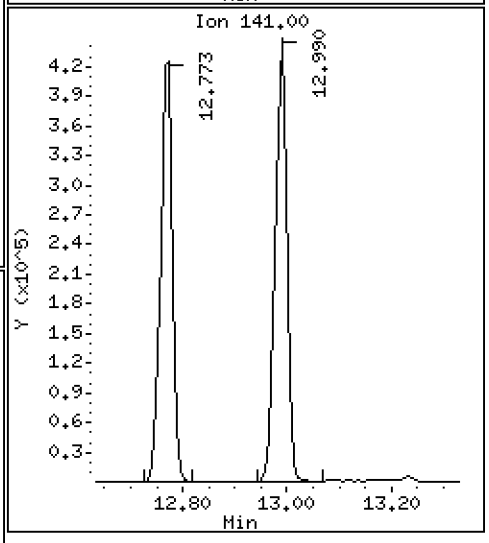
105 1-methylnaphthalene

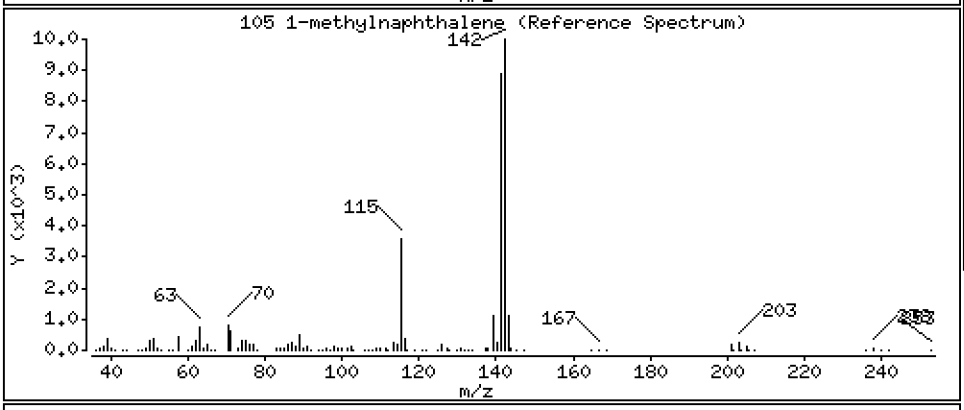
Concentration: 3.818 ug/mL

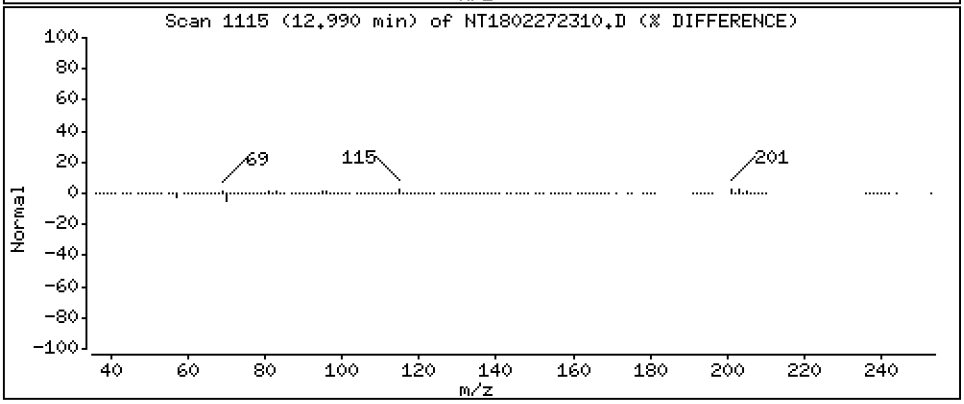












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

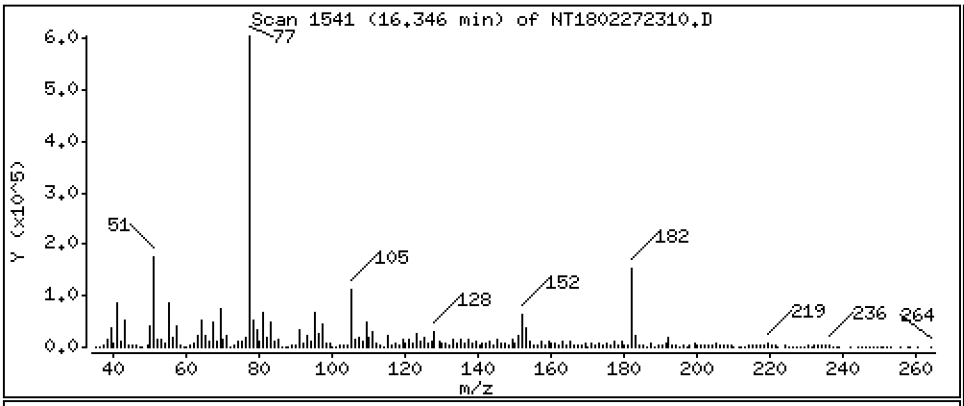
Operator: VTS

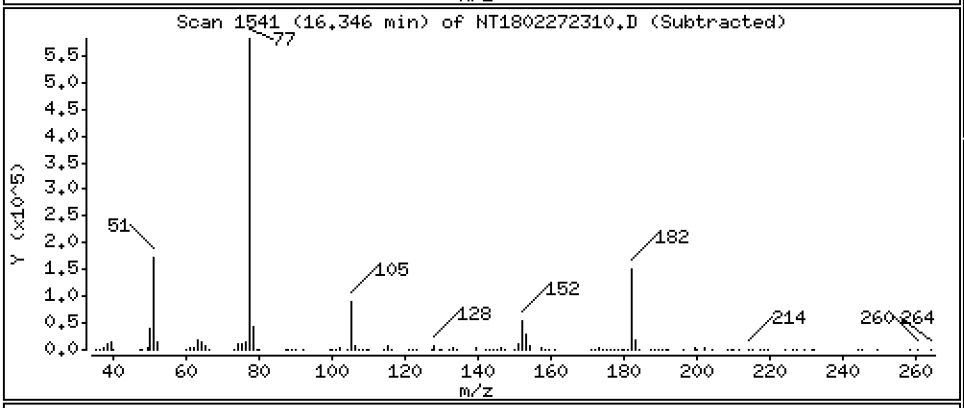
Column phase: ZB-5msi

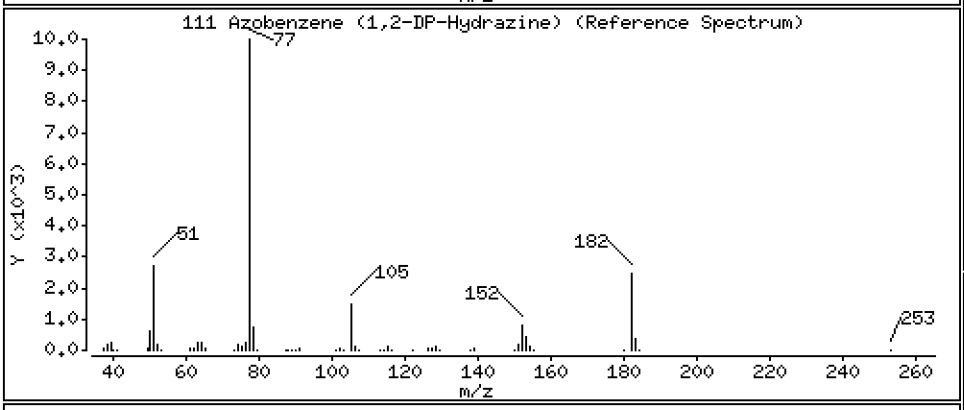
Column diameter: 0.25

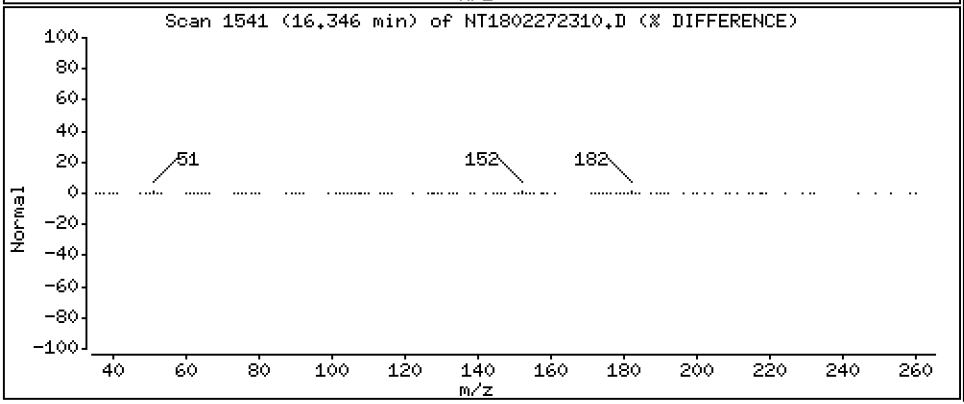
111 Azobenzene (1,2-DP-Hydrazine)

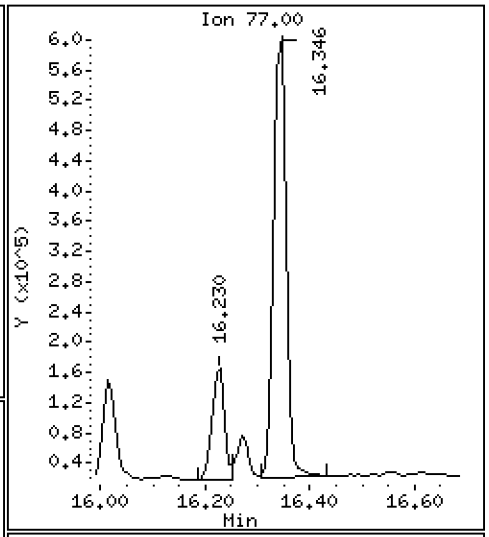
Concentration: 3.668 ug/mL

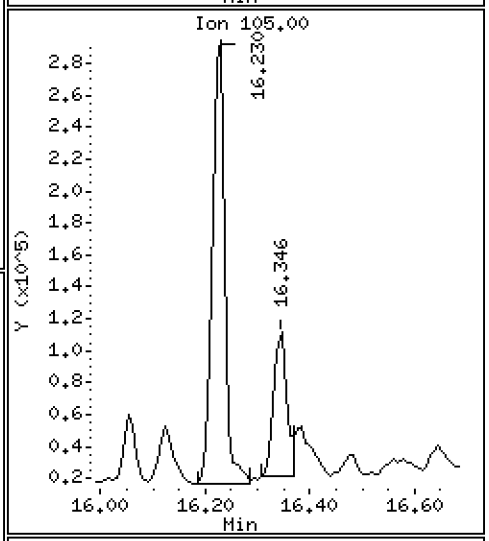


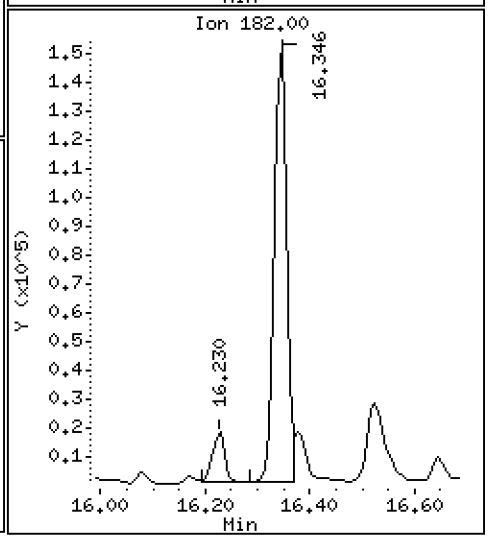












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

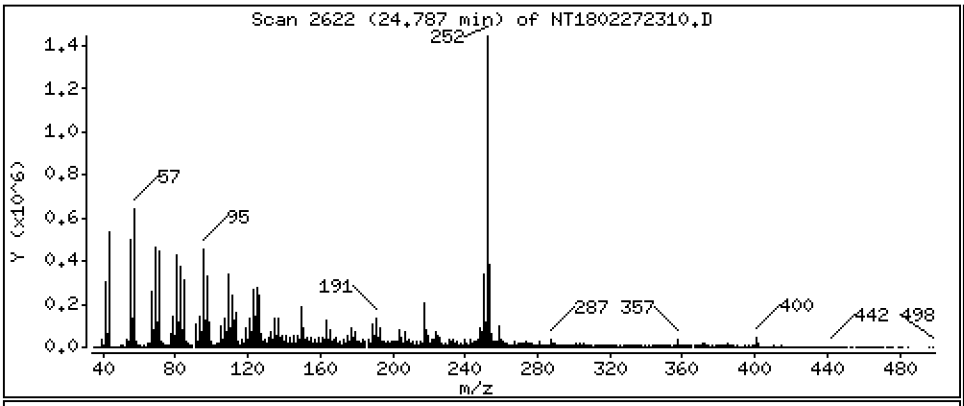
Operator: VTS

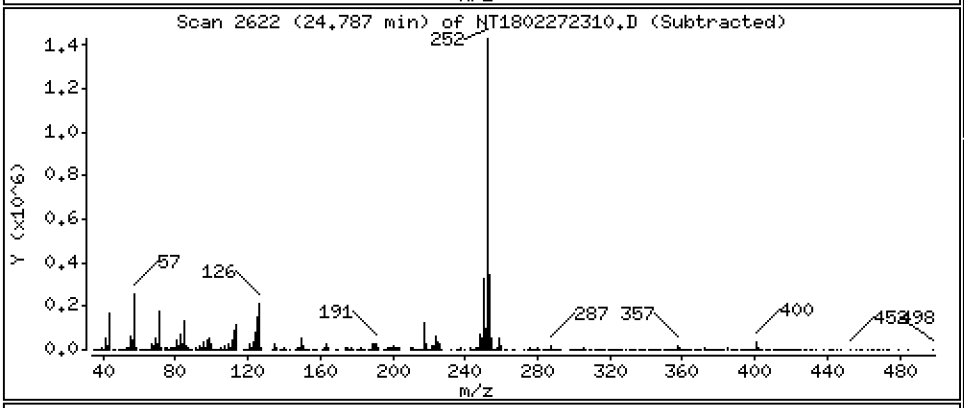
Column phase: ZB-5msi

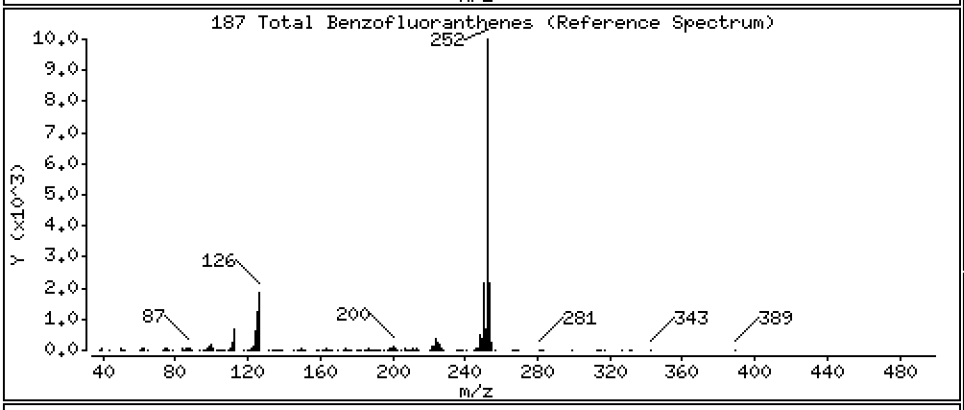
Column diameter: 0.25

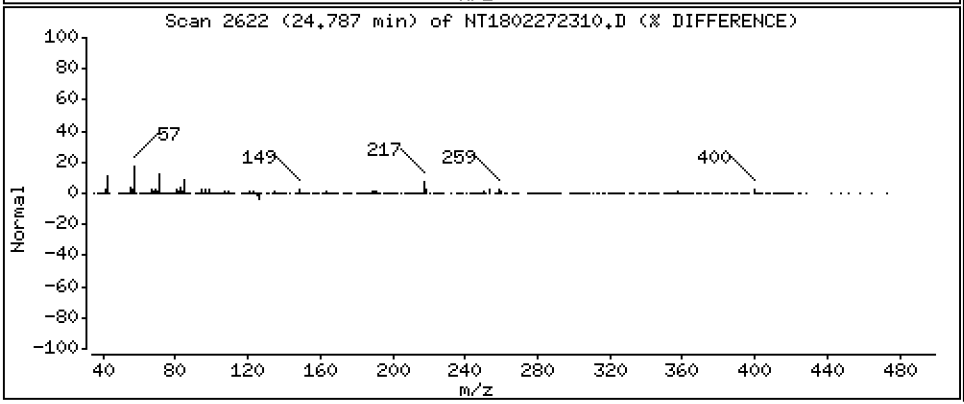
187 Total Benzofluoranthenes

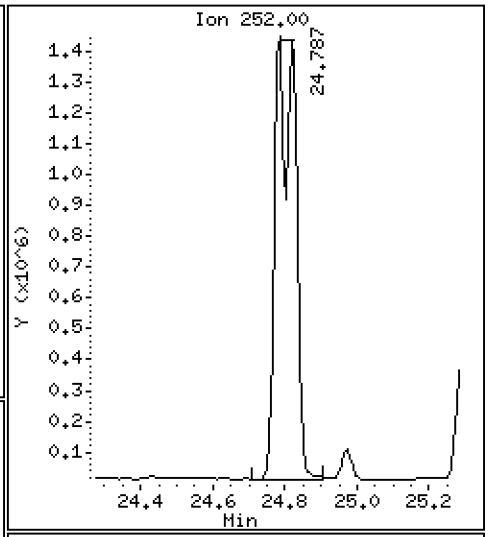
Concentration: 20.37 ug/mL

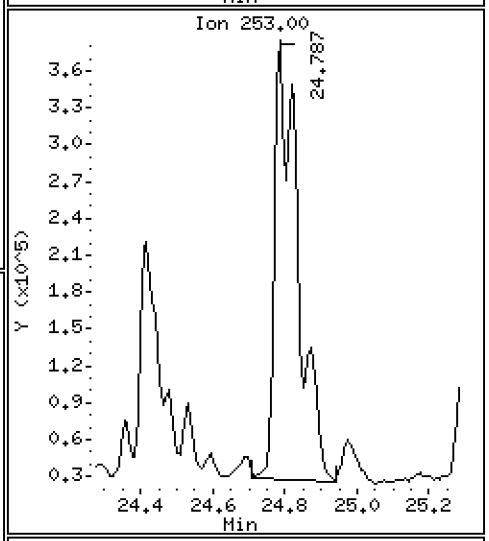


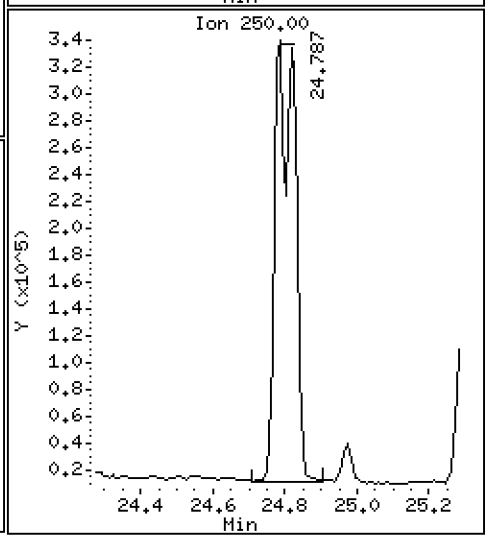












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD1

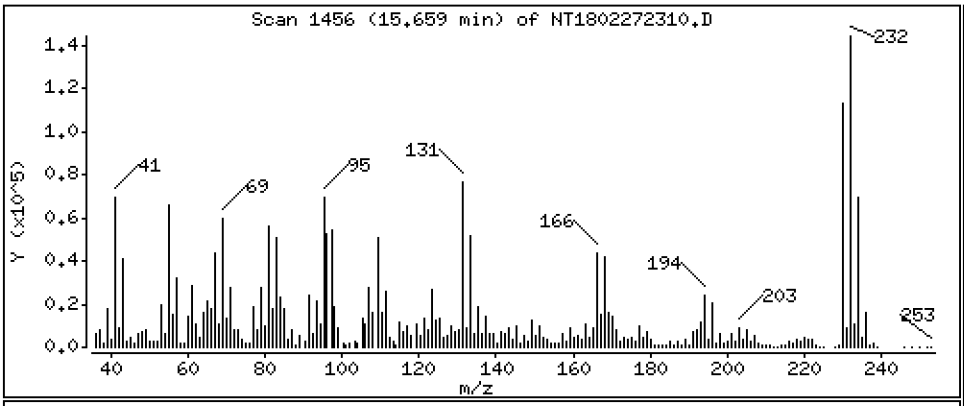
Operator: VTS

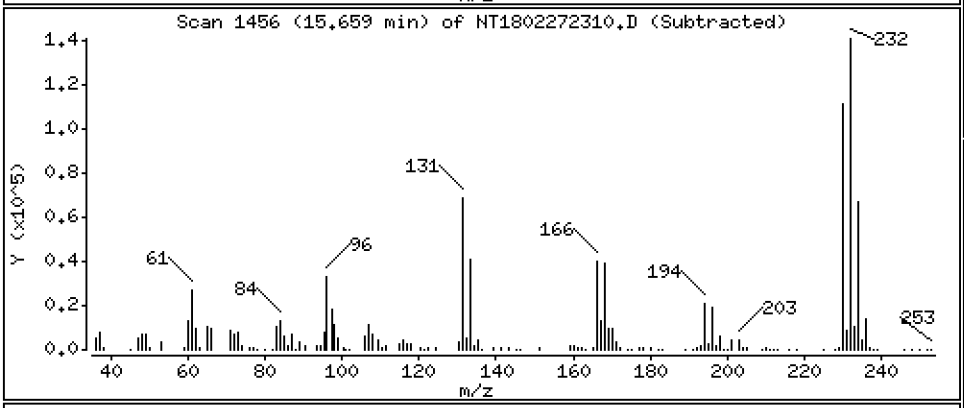
Column phase: ZB-5msi

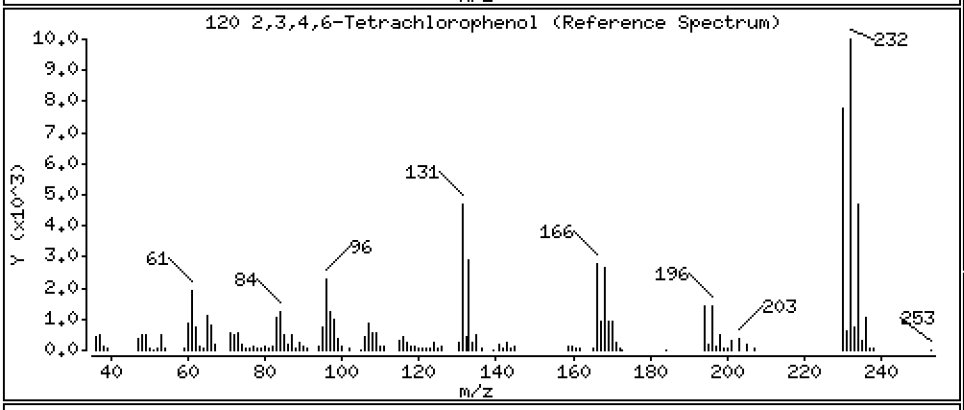
Column diameter: 0.25

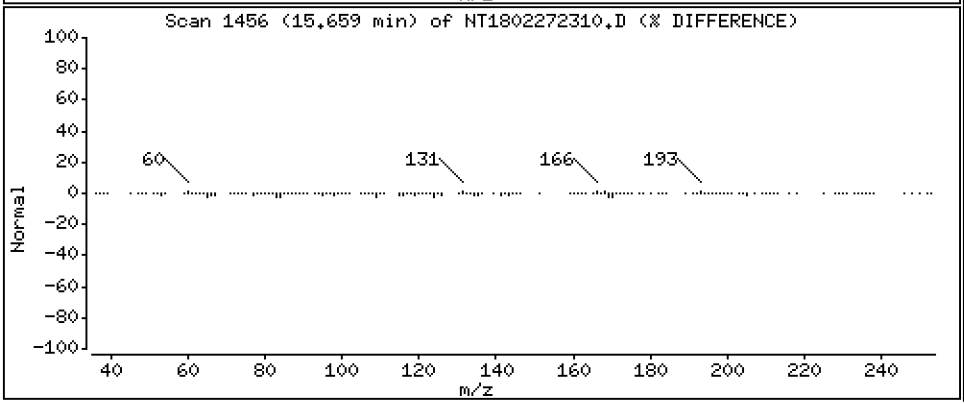
120 2,3,4,6-Tetrachlorophenol

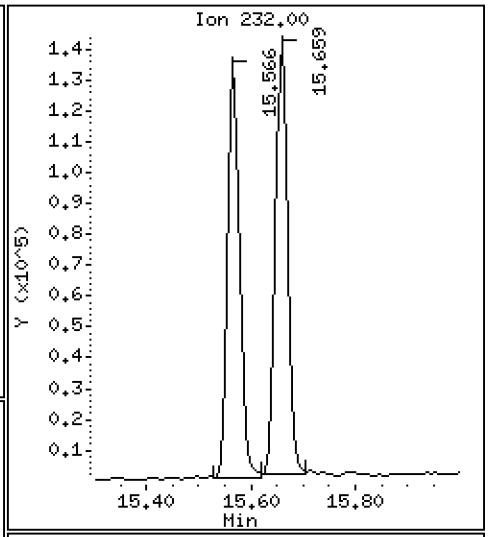
Concentration: 3.600 ug/mL

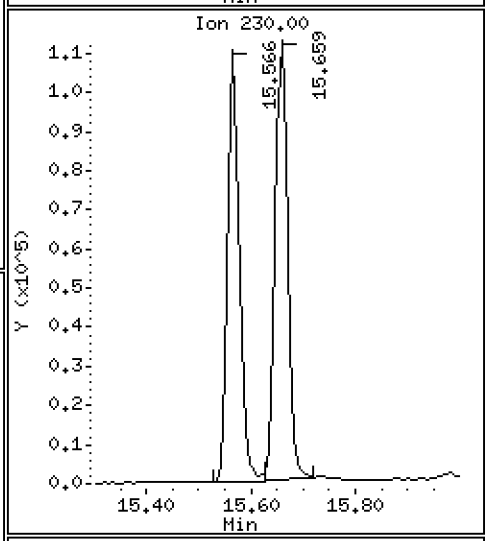


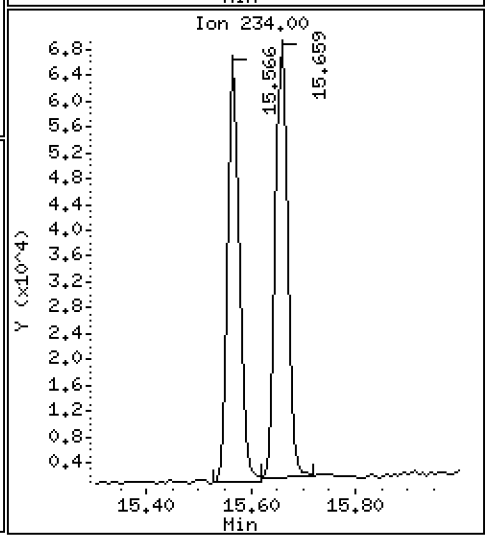












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230227.b\NT1802272310.D
Lab Smp Id: BLA0410-MSD1
Inj Date : 27-FEB-2023 23:12
Operator : VTS Inst ID: nt18.i
Smp Info : BLA0410-MSD1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230227.b\ABN.m
Meth Date : 24-Mar-2023 10:19 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.751	6.728	(0.759)	458157	4.92381	4.924
$	2 Phenol-d5	99	8.296	8.288	(0.933)	607475	5.05160	5.052
	3 Phenol	94	8.311	8.304	(0.935)	394720	3.15476	3.155
$	5 2-Chlorophenol-d4	132	8.543	8.543	(0.961)	546142	5.21908	5.219
	4 Bis(2-Chloroethyl)ether	93	8.450	8.458	(0.950)	356398	4.19406	4.194
	6 2-Chlorophenol	128	8.574	8.566	(0.964)	356518	3.31834	3.318
	7 1,3-Dichlorobenzene	146	8.829	8.829	(0.993)	359676	3.16519	3.165
*	8 1,4-Dichlorobenzene-d4	152	8.891	8.891	(1.000)	272731	4.00000	
	9 1,4-Dichlorobenzene	146	8.922	8.922	(1.003)	375558	3.24226	3.242
$	10 1,2-Dichlorobenzene-d4	152	9.248	9.248	(1.040)	224255	3.02295	3.023
	12 1,2-Dichlorobenzene	146	9.271	9.271	(1.043)	363028	3.22943	3.229
	11 Benzyl alcohol	108	9.171	9.170	(1.031)	198127	3.33035	3.330
	14 2,2'-oxybis(1-Chloropropane)	121	9.466	9.458	(1.065)	102650	3.89657	3.897
	13 2-Methylphenol	108	9.403	9.396	(1.058)	299429	3.09386	3.094
	17 Hexachloroethane	117	9.854	9.854	(1.108)	123810	2.76127	2.761
	16 N-Nitroso-di-n-propylamine	70	9.714	9.722	(1.093)	248730	3.49617	3.496
	15 4-Methylphenol	108	9.675	9.667	(1.088)	344320	3.41339	3.413
$	18 Nitrobenzene-d5	82	9.970	9.970	(0.878)	367029	3.24696	3.247
	19 Nitrobenzene	77	10.009	10.009	(0.882)	366668	3.36978	3.370
	20 Isophorone	82	10.459	10.451	(0.922)	659331	4.74956	4.750
	21 2-Nitrophenol	139	10.633	10.625	(0.937)	228560	4.27696	4.277
	22 2,4-Dimethylphenol	107	10.701	10.693	(0.943)	1363231	13.3874	13.39
	23 Bis(2-Chloroethoxy)methane	93	10.879	10.879	(0.959)	393747	4.14210	4.142
	24 Benzoic acid	105	10.930	10.964	(0.963)	729823	17.9462	17.95
	25 2,4-Dichlorophenol	162	11.092	11.083	(0.977)	1365100	15.2897	15.29
	26 1,2,4-Trichlorobenzene	180	11.264	11.264	(0.993)	331298	3.43561	3.436
*	27 Naphthalene-d8	136	11.349	11.342	(1.000)	1060656	4.00000	
	28 Naphthalene	128	11.388	11.388	(1.003)	1191825	3.65537	3.655
	29 4-Chloroaniline	127	11.527	11.519	(1.016)	241695	1.86008	1.860
	30 Hexachlorobutadiene	225	11.743	11.743	(1.035)	201415	3.56349	3.563
	31 4-Chloro-3-methylphenol	107	12.494	12.486	(1.101)	1335734	15.6309	15.63
	32 2-Methylnaphthalene	142	12.765	12.765	(1.125)	790955	3.57005	3.570
	33 Hexachlorocyclopentadiene	237	13.229	13.229	(0.886)	47293	1.13814	1.138

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.392	13.392	(0.897)	963557	16.2857	16.29
	35	2,4,5-Trichlorophenol	196	13.469	13.461	(0.903)	1073581	16.6515	16.65
$	36	2-Fluorobiphenyl	172	13.546	13.546	(0.908)	855804	3.31828	3.318
	37	2-Chloronaphthalene	162	13.755	13.748	(0.922)	732910	3.63681	3.637
	38	2-Nitroaniline	65	14.019	14.011	(0.939)	748653	11.8703	11.87
	39	Dimethylphthalate	163	14.452	14.444	(0.968)	888706	4.10599	4.106
	40	Acenaphthylene	152	14.615	14.607	(0.979)	1299310	3.82897	3.829
	41	2,6-Dinitrotoluene	165	14.591	14.584	(0.978)	740714	14.9278	14.93
*	42	Acenaphthene-d10	164	14.924	14.924	(1.000)	611705	4.00000	
	43	3-Nitroaniline	138	14.862	14.862	(0.996)	393286	6.70053	6.701
	44	Acenaphthene	153	14.994	14.986	(1.005)	891730	4.15214	4.152
	45	2,4-Dinitrophenol	184	15.079	15.079	(1.010)	404075	16.8249	16.82
	46	Dibenzofuran	168	15.318	15.310	(1.026)	1211030	3.89587	3.896
	47	4-Nitrophenol	109	15.218	15.202	(1.020)	497531	21.0282	21.03
	48	2,4-Dinitrotoluene	165	15.388	15.388	(1.031)	1042965	15.3770	15.38
	50	Diethylphthalate	149	15.898	15.898	(1.065)	1070915	4.72200	4.722
	49	Fluorene	166	16.022	16.014	(1.074)	1238954	4.97363	4.974
	51	4-Chlorophenyl-phenylether	204	16.014	16.014	(1.073)	565424	4.98322	4.983
	52	4-Nitroaniline	138	16.130	16.130	(1.081)	395906	7.01135	7.011
	53	4,6-Dinitro-2-methylphenol	198	16.230	16.222	(0.904)	1146878	22.9384	22.94
	54	N-Nitrosodiphenylamine	169	16.268	16.268	(0.907)	696817	3.41076	3.411
$	55	2,4,6-Tribromophenol	330	16.554	16.546	(1.109)	212686	6.68876	6.689
	56	4-Bromophenyl-phenylether	248	17.016	17.001	(0.948)	301989	3.68346	3.683
	57	Hexachlorobenzene	284	17.325	17.318	(0.965)	324039	3.42291	3.423
	58	Pentachlorophenol	266	17.689	17.674	(0.986)	627315	21.4283	21.43
*	59	Phenanthrene-d10	188	17.945	17.929	(1.000)	1357765	4.00000	
	60	Phenanthrene	178	17.991	17.975	(1.003)	2127049	4.98056	4.981
	61	Anthracene	178	18.084	18.068	(1.008)	1849750	4.54503	4.545
	62	Carbazole	167	18.417	18.401	(1.026)	1643131	4.40596	4.406
	63	Di-n-butylphthalate	149	19.237	19.213	(1.072)	1881803	4.55863	4.559
	64	Fluoranthene	202	20.420	20.358	(0.888)	3705111	7.14827	7.148
	65	Pyrene	202	20.838	20.776	(0.906)	8235212	14.8973	14.90
$	66	Terphenyl-d14	244	21.109	21.070	(0.918)	1856626	4.18744	4.187
	67	Butylbenzylphthalate	149	22.023	21.999	(0.958)	1140433	5.43314	5.433
	68	Benzo(a)anthracene	228	22.967	22.929	(0.999)	3729083	6.98215	6.982
*	69	Chrysene-d12	240	22.998	22.960	(1.000)	1479392	4.00000	
	70	3,3'-Dichlorobenzidine	252	22.921	22.898	(0.997)	286671	1.45867	1.459
	71	Chrysene	228	23.045	23.006	(1.002)	3690982	6.64597	6.646
	72	bis(2-Ethylhexyl)phthalate	149	23.053	23.029	(0.960)	2618620	10.0575	10.06
*	134	Di-n-octylphthalate-d4	153	24.020	23.997	(1.000)	1813504	4.00000	
	73	Di-n-octylphthalate	149	24.036	24.005	(1.001)	2408415	4.76601	4.766(M)
	74	Benzo(b)fluoranthene	252	24.787	24.740	(0.972)	2932298	11.1036	11.10
	75	Benzo(k)fluoranthene	252	24.818	24.779	(0.974)	2938573	9.81848	9.818
	76	Benzo(a)pyrene	252	25.383	25.336	(0.996)	1860422	7.59928	7.599
*	77	Perylene-d12	264	25.491	25.445	(1.000)	809459	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	27.912	27.881	(1.095)	456494	1.48534	1.485
	79	Dibenzo(a,h)anthracene	278	27.920	27.889	(1.095)	327931	1.27940	1.279
	80	Benzo(g,h,i)perylene	276	28.627	28.595	(1.123)	302547	1.22791	1.228
	90	N-Nitrosodimethylamine	74	4.673	4.658	(0.526)	442236	8.09583	8.096
	91	Aniline	93	8.420	8.365	(0.947)	80919	0.56820	0.5682(H)
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	12.989	12.989	(1.144)	765827	3.81843	3.818
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.346	16.338	(1.095)	916286	3.66777	3.668

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.787	24.779	(0.972)	5440115	20.3748	20.37
120 2,3,4,6-Tetrachlorophenol	232	15.658	15.651	(1.049)	216606	3.60004	3.600

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272310.D
Lab Smp Id: BLA0410-MSD1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230227.b\ABN.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:03
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	269759	134880	539518	272731	1.10
27 Naphthalene-d8	1037039	518520	2074078	1060656	2.28
42 Acenaphthene-d10	556159	278080	1112318	611705	9.99
59 Phenanthrene-d10	1021294	510647	2042588	1357765	32.95
69 Chrysene-d12	922264	461132	1844528	1479392	60.41
134 Di-n-octylphthala	1611284	805642	3222568	1813504	12.55
77 Perylene-d12	948357	474179	1896714	809459	-14.65

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.89	8.39	9.39	8.89	0.00
27 Naphthalene-d8	11.34	10.84	11.84	11.35	0.07
42 Acenaphthene-d10	14.92	14.42	15.42	14.92	0.00
59 Phenanthrene-d10	17.93	17.43	18.43	17.95	0.09
69 Chrysene-d12	22.96	22.46	23.46	23.00	0.17
134 Di-n-octylphthala	24.00	23.50	24.50	24.02	0.10
77 Perylene-d12	25.45	24.95	25.95	25.49	0.18

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272310.D

Lab ID: BLA0410-MSD1
nt18.i, ABN.m, 27-FEB-2023 23:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.947	0.941	0.0061	Aniline

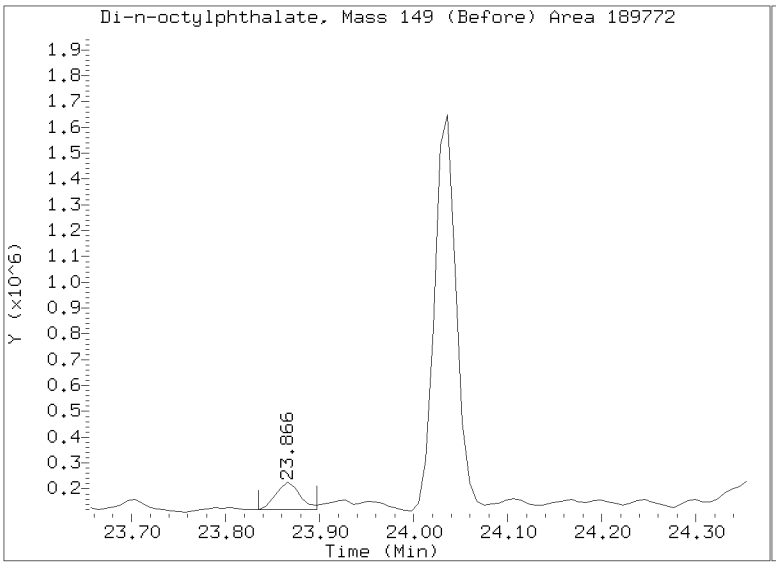
RRT check based on Ccal File: NT1802272302.D

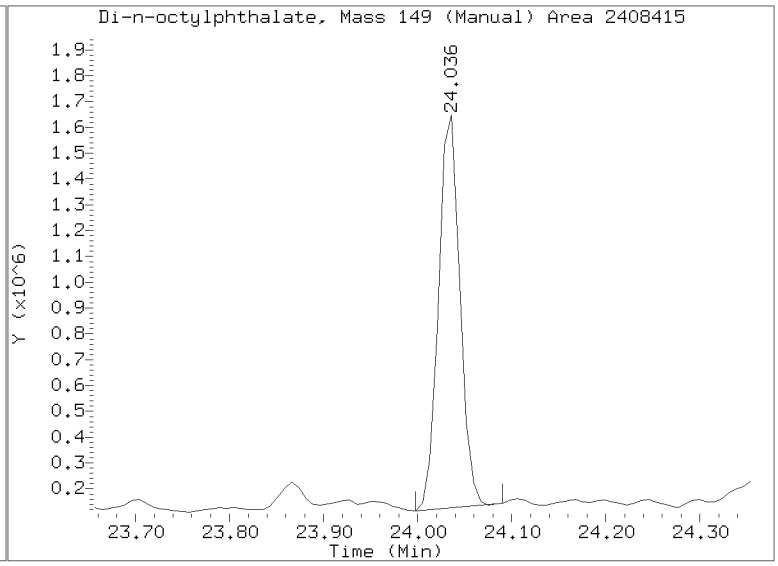
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230227.b/NT1802272310.D
Injection Date: 27-FEB-2023 23:12
Lab ID:BLA0410-MSD1 Client ID:
Report Date: 03/24/2023 10:41





APPROVED

By Deenay Dunmore at 10:44 am, Mar 24, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E

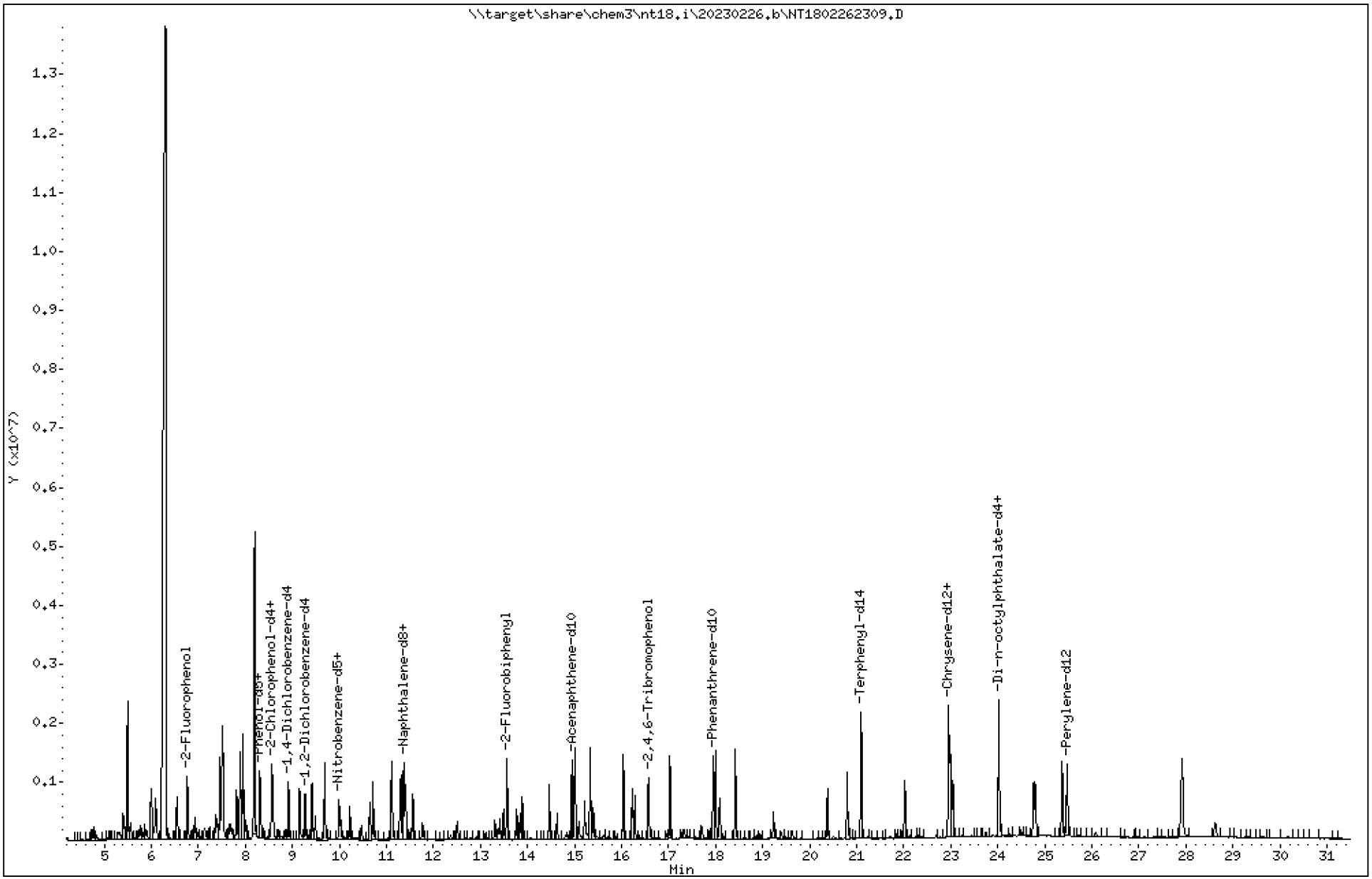
Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0410-SRM1
Batch: BLA0410
Initial/Final: 1 g / 1 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 02/26/2023 17:12
Standard ID: K003477
Expires: 01/31/2024
Standard Lot#: CRM 143 (LRAC8918)
Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Phenol	2660.0	1890	43.9	200		71.2	26 - 174
4-Methylphenol	6617.0	4690	73.9	200		70.9	40 - 160
Naphthalene	4458.0	2380	42.4	200		53.3	25 - 175
Acenaphthylene	1948.0	1120	62.4	200		57.2	37 - 167
Dimethylphthalate	4537.0	3290	43.9	200		72.5	41 - 159
Acenaphthene	5489.0	3610	52.2	200		65.8	41 - 159
Dibenzofuran	6130.0	4040	141	200		65.9	45 - 155
Fluorene	3724.0	2390	146	200		64.1	44 - 156
Phenanthrene	5052.0	3390	87.2	200		67.1	46 - 154
Anthracene	2866.0	1640	71.9	200		57.4	42 - 158
Fluoranthene	2497.0	1840	60.9	200		73.8	39 - 161
Pyrene	2964.0	2260	56.8	200		76.3	38 - 162
Butylbenzylphthalate	3511.0	3000	94.1	200		85.6	36 - 164
Benzo(a)anthracene	5751.0	4310	59.6	200		75.0	49 - 151
Chrysene	1477.0	1010	60.6	200		68.1	45 - 155
bis(2-Ethylhexyl)phthalate	2905.0	2170	54.6	500		74.8	26 - 174
Benzofluoranthenes, Total	6534.0	4350	100	400		66.5	40 - 160
Benzo(a)pyrene	5902.0	3870	42.3	200		65.5	43 - 157
Indeno(1,2,3-cd)pyrene	3914.0	3220	147	200		82.2	22 - 178
Dibenzo(a,h)anthracene	3420.0	2900	172	200		84.8	37 - 163
Benzo(g,h,i)perylene	1380.0	1230	136	200		89.0	35 - 165

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262309.D
Date : 26-FEB-2023 17:12
Client ID:
Sample Info: BLA0410-SRM1

Instrument: nt18.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

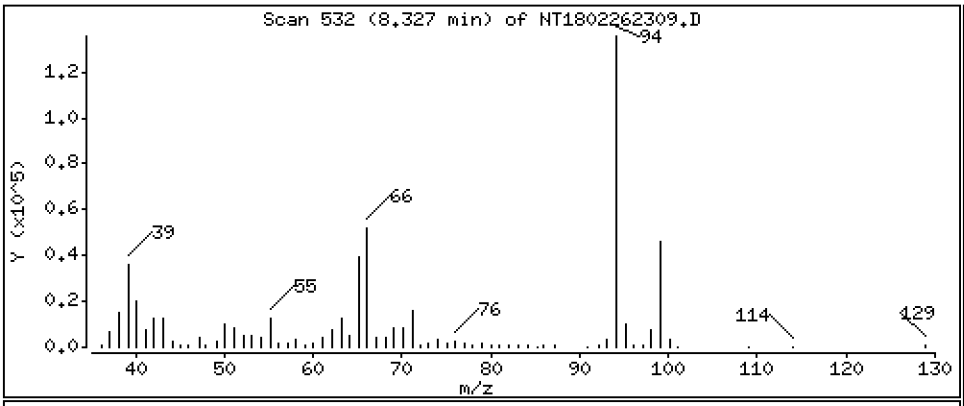
Operator: VTS

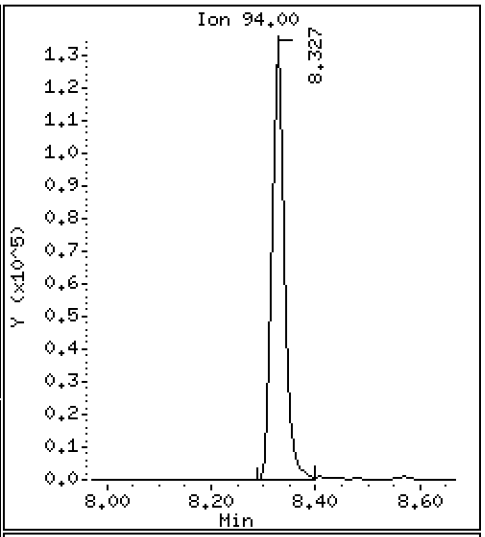
Column phase: ZB-5msi

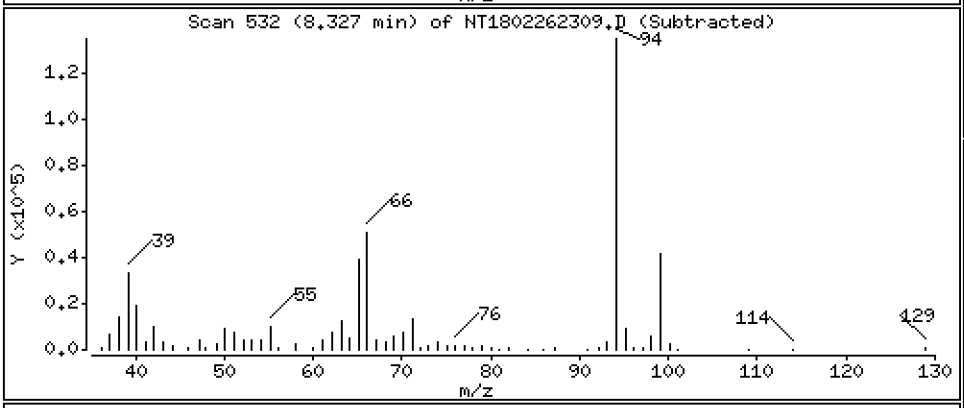
Column diameter: 0.25

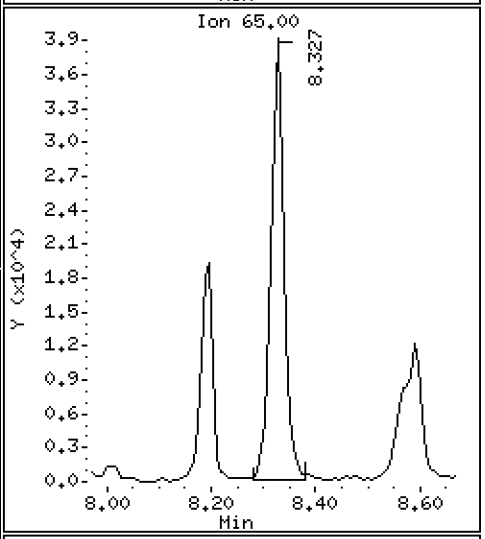
3 Phenol

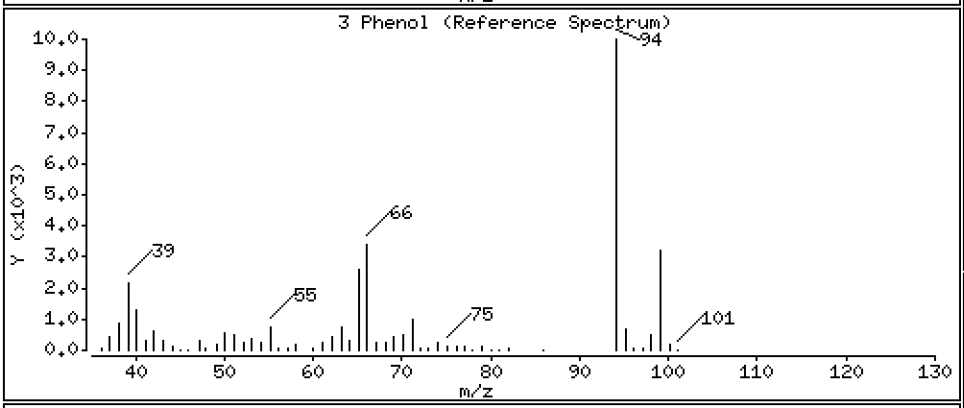
Concentration: 1.894 ug/mL

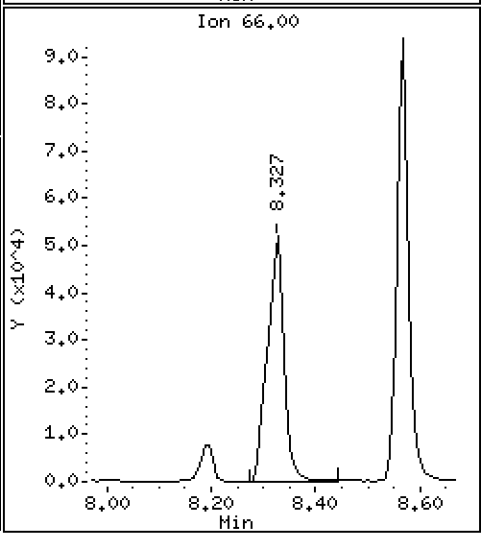


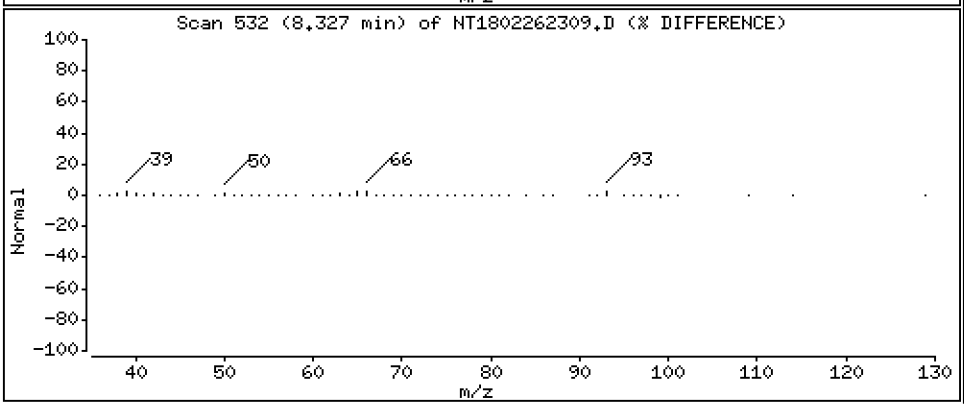












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

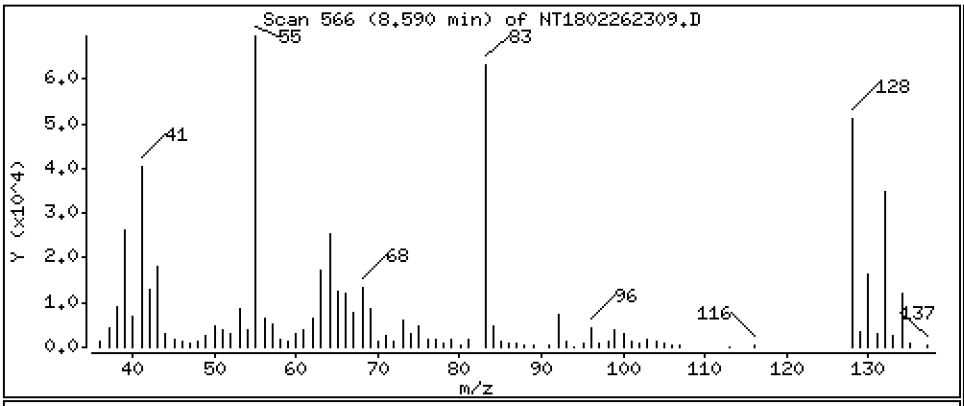
Operator: VTS

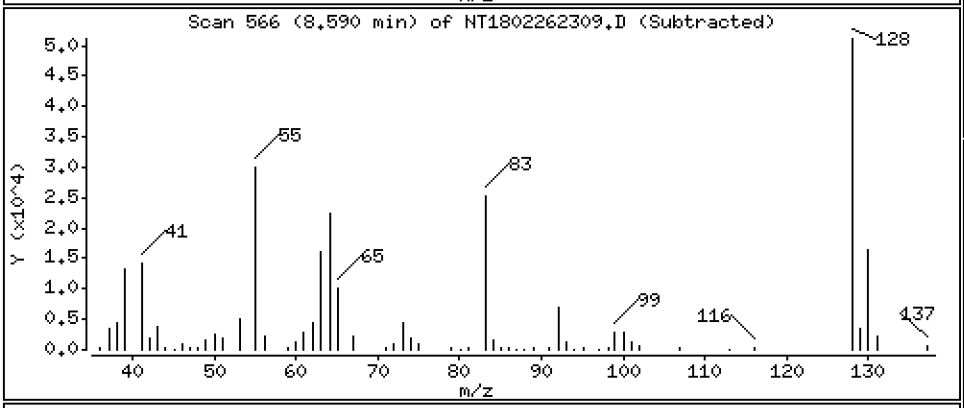
Column phase: ZB-5msi

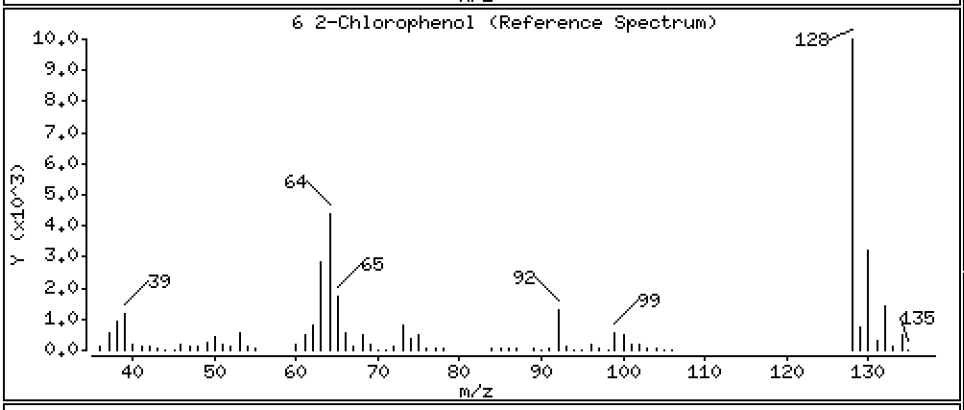
Column diameter: 0.25

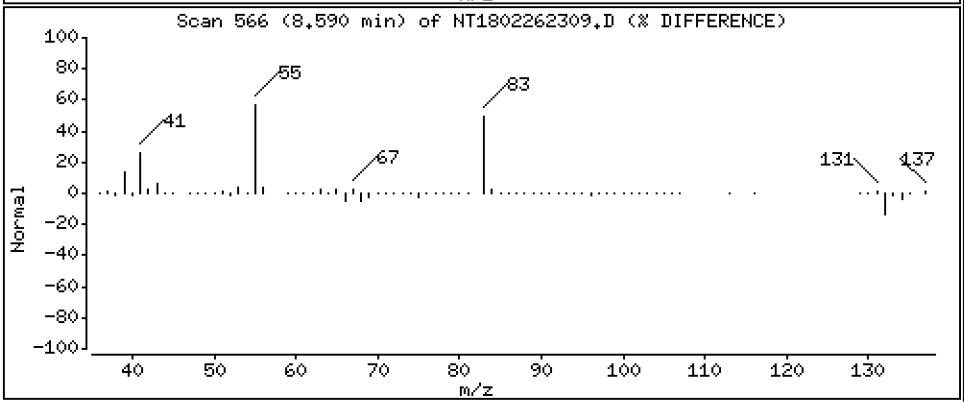
6 2-Chlorophenol

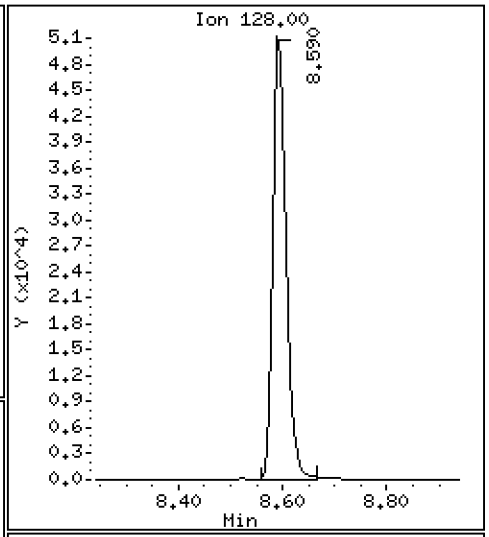
Concentration: 0.8785 ug/mL

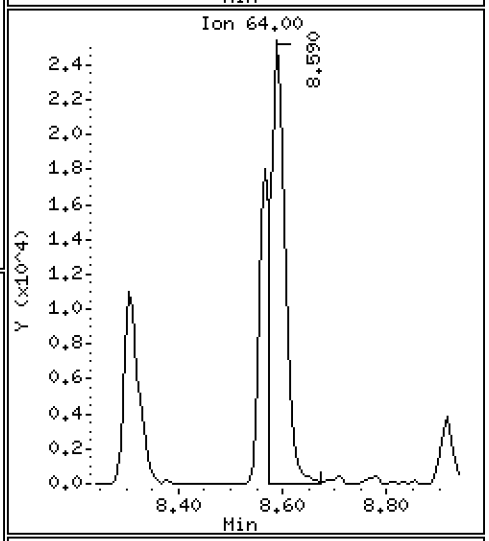


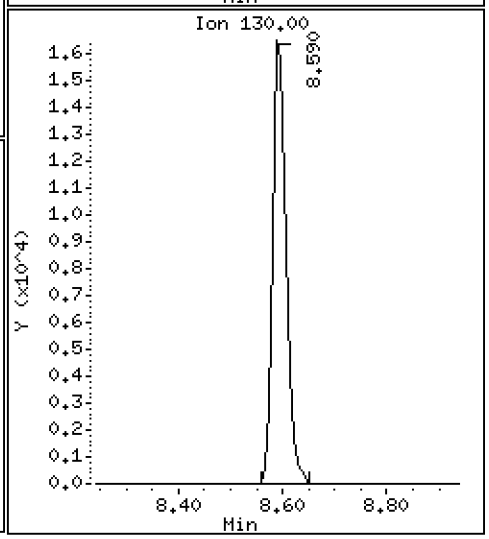












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

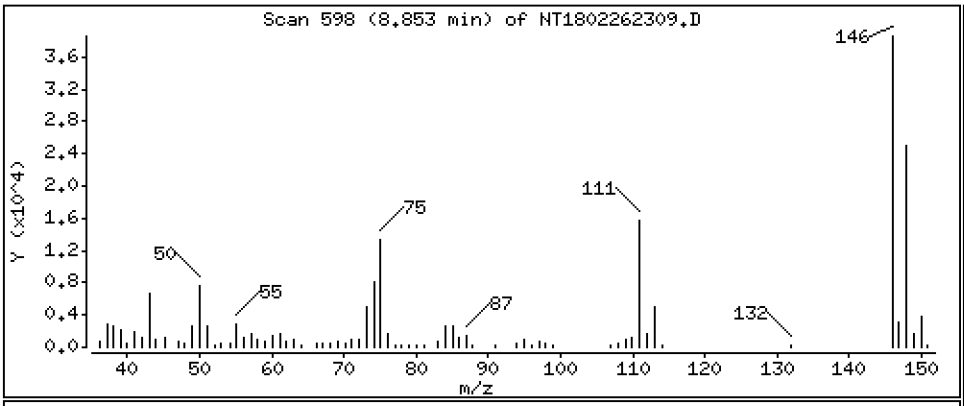
Operator: VTS

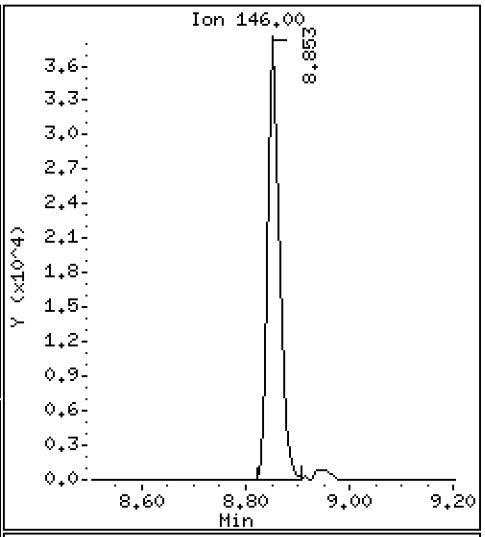
Column phase: ZB-5msi

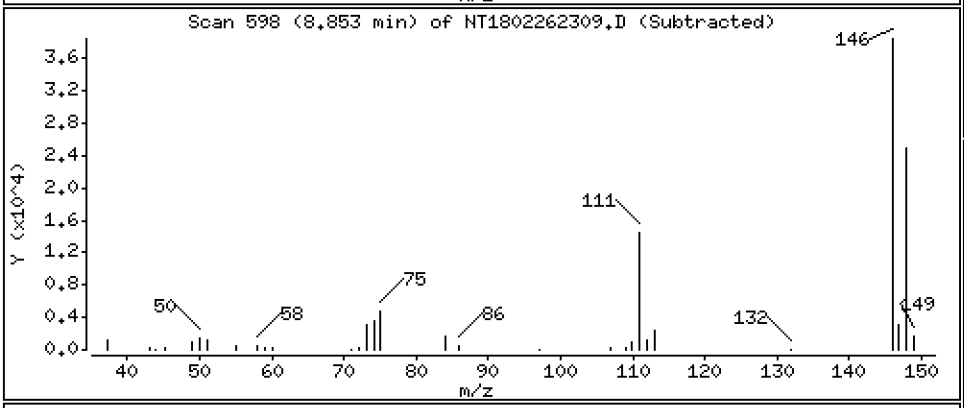
Column diameter: 0.25

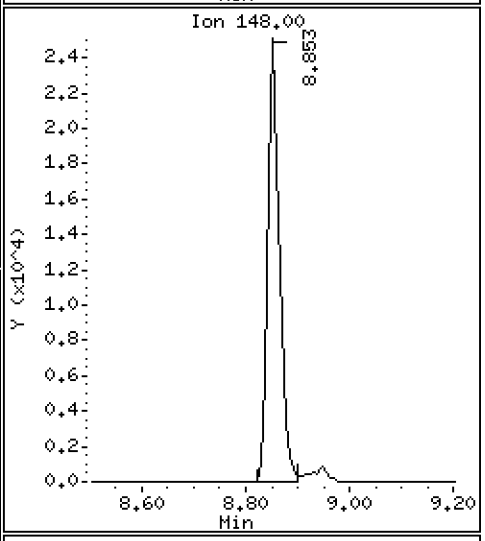
7 1,3-Dichlorobenzene

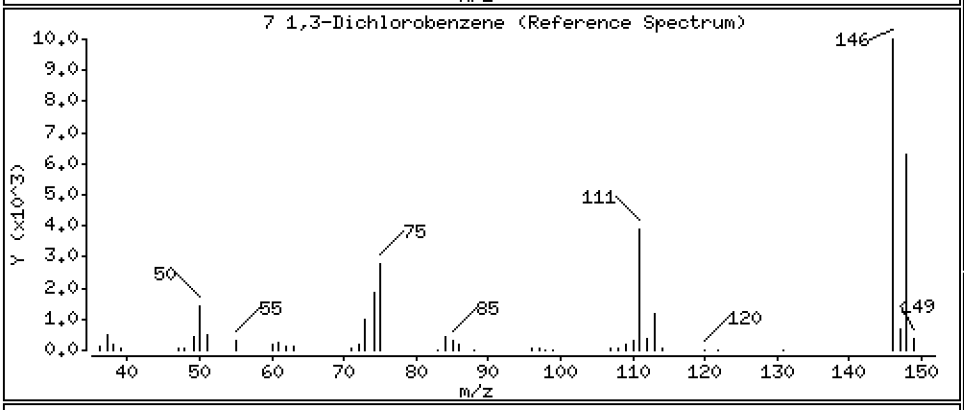
Concentration: 0.5660 ug/mL

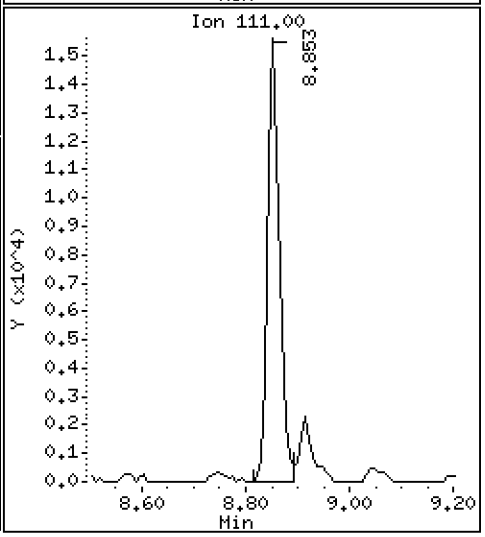


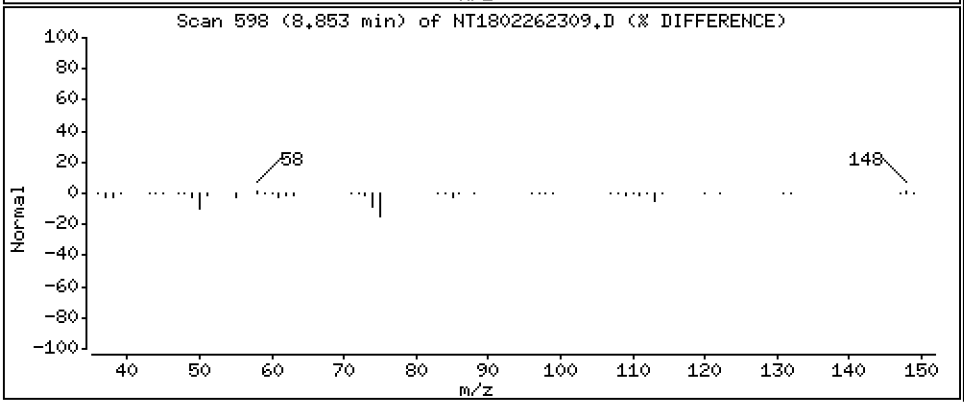












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

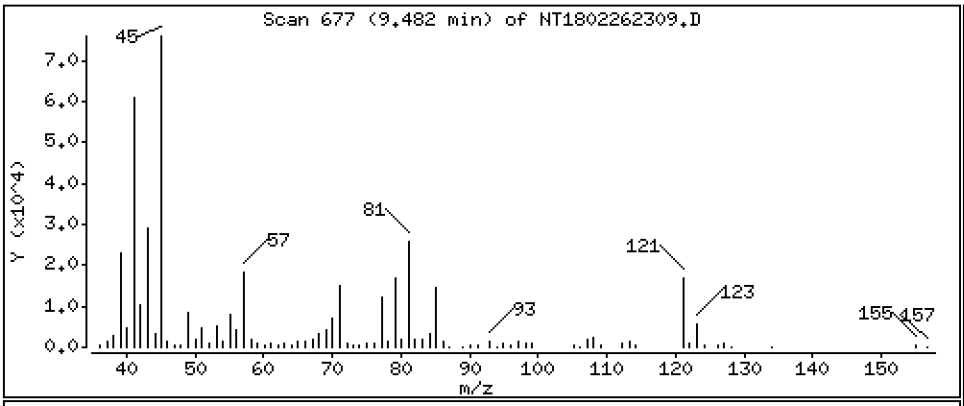
Operator: VTS

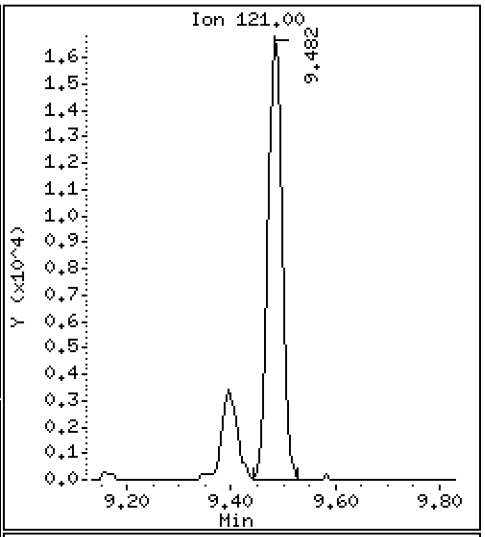
Column phase: ZB-5msi

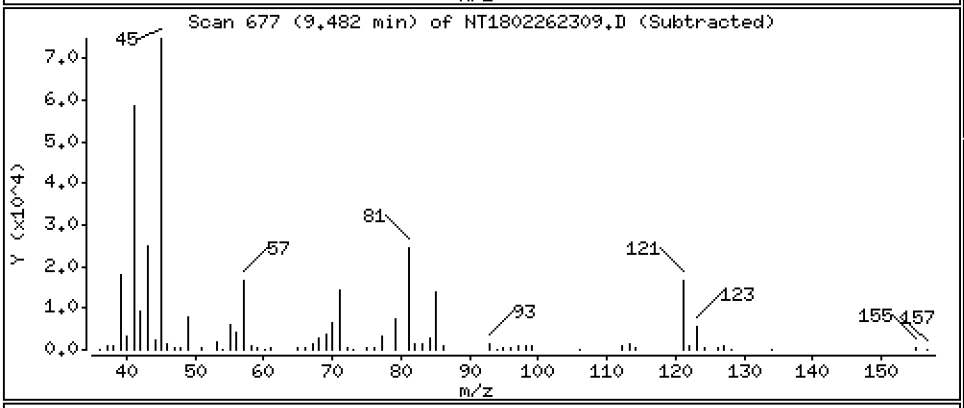
Column diameter: 0.25

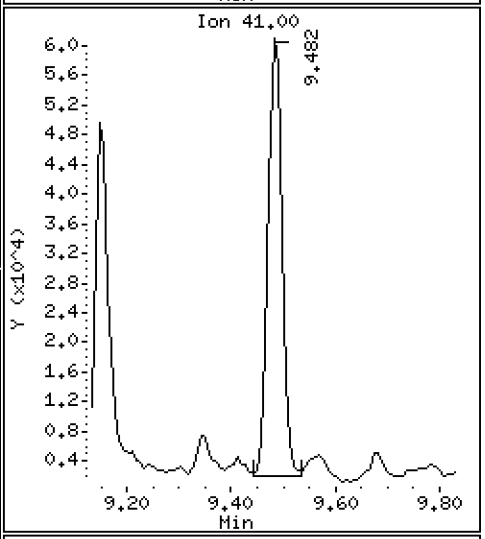
14 2,2'-oxybis(1-Chloropropane)

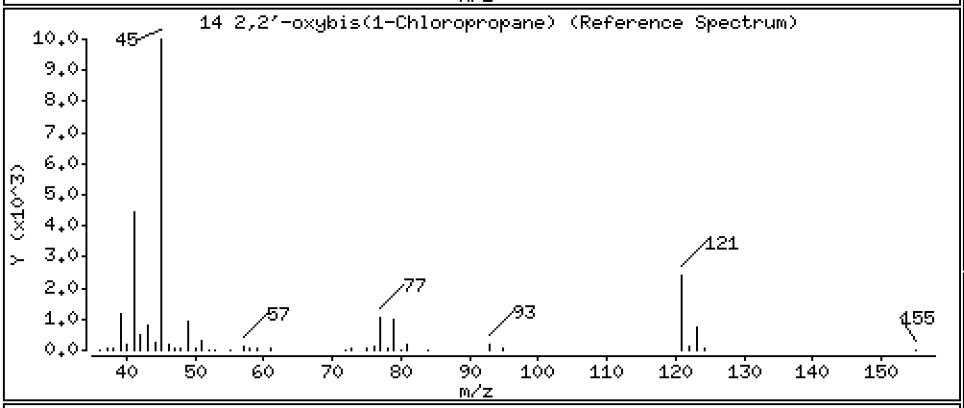
Concentration: 1.260 ug/mL

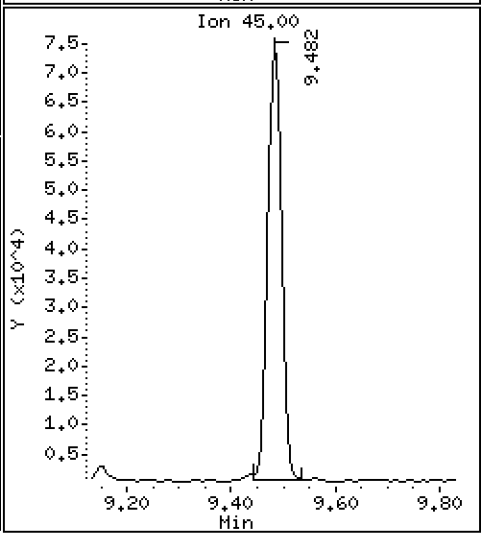


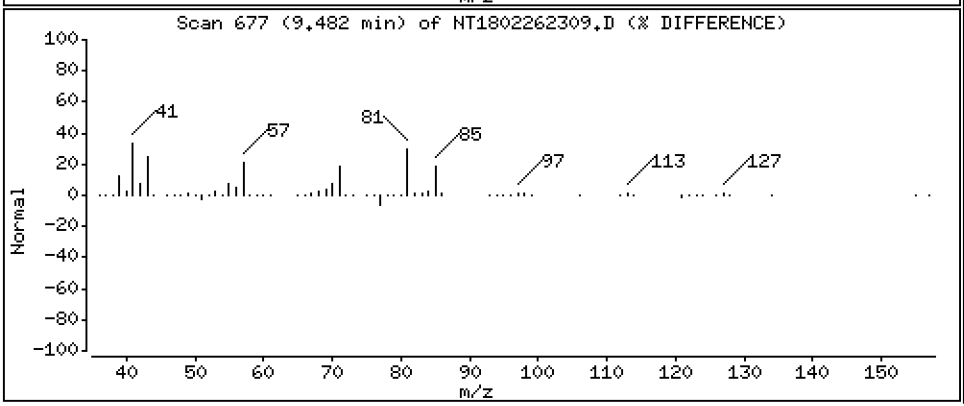












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

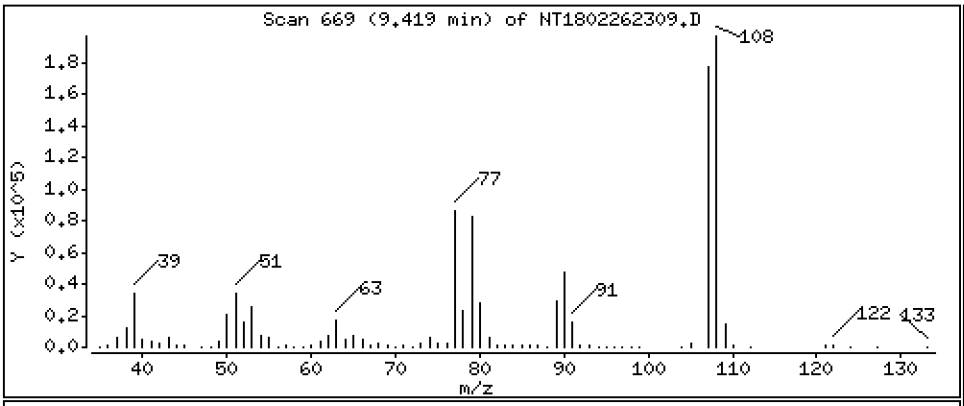
Operator: VTS

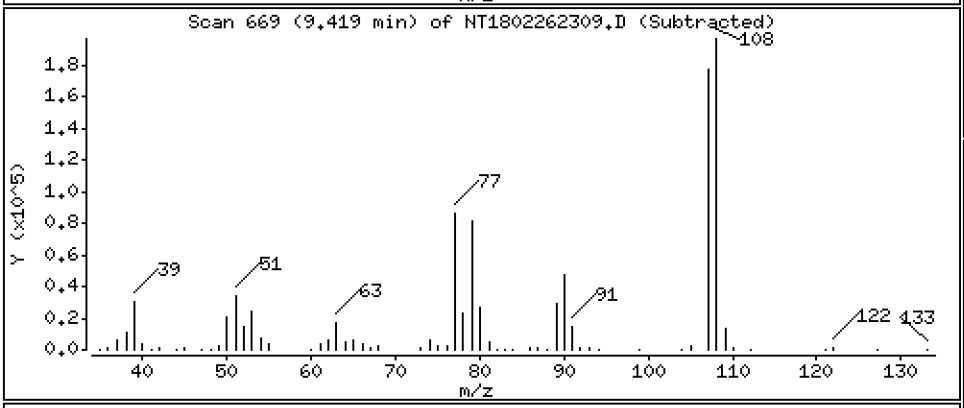
Column phase: ZB-5msi

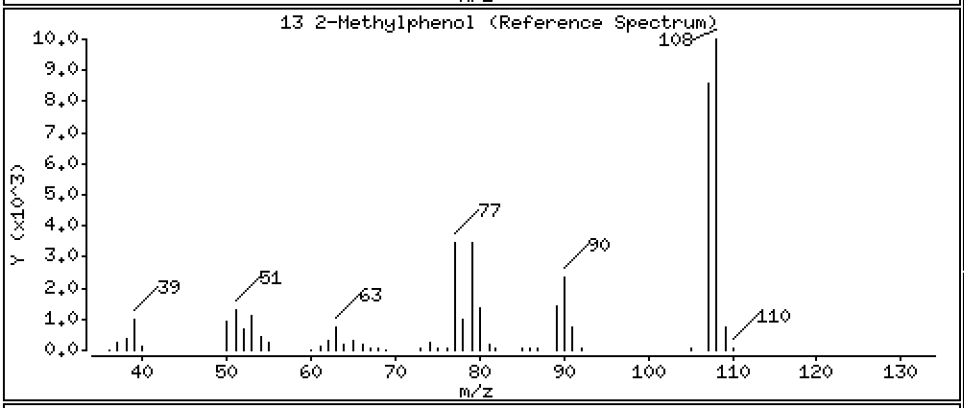
Column diameter: 0.25

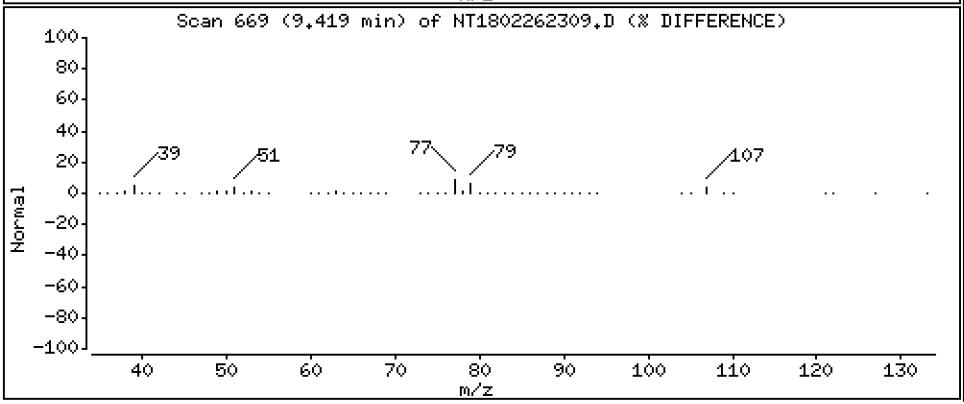
13 2-Methylphenol

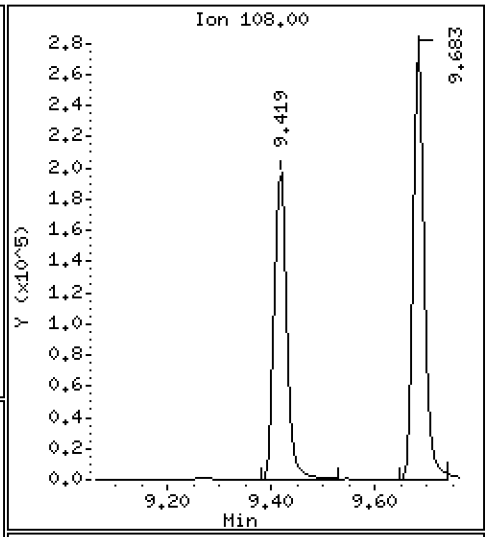
Concentration: 3.621 ug/mL

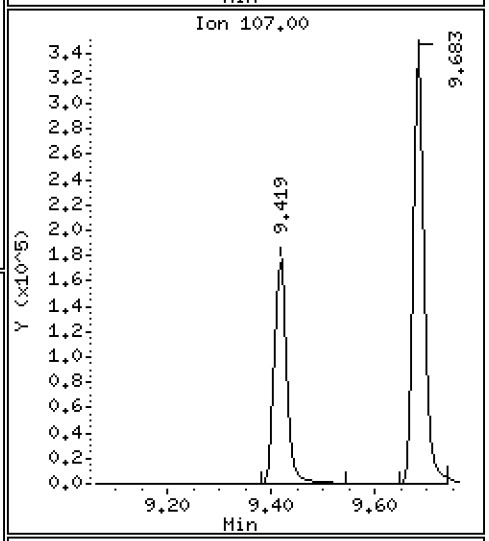


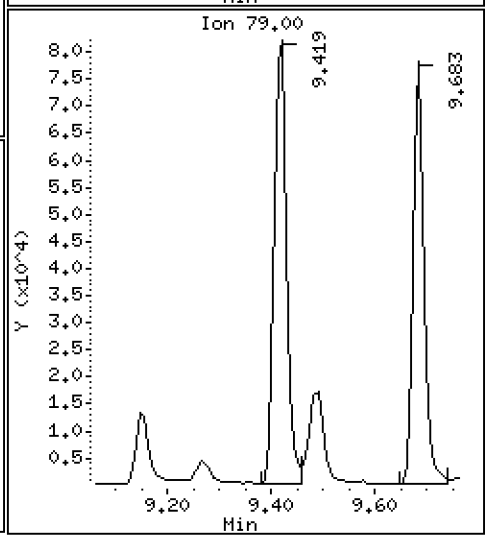












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

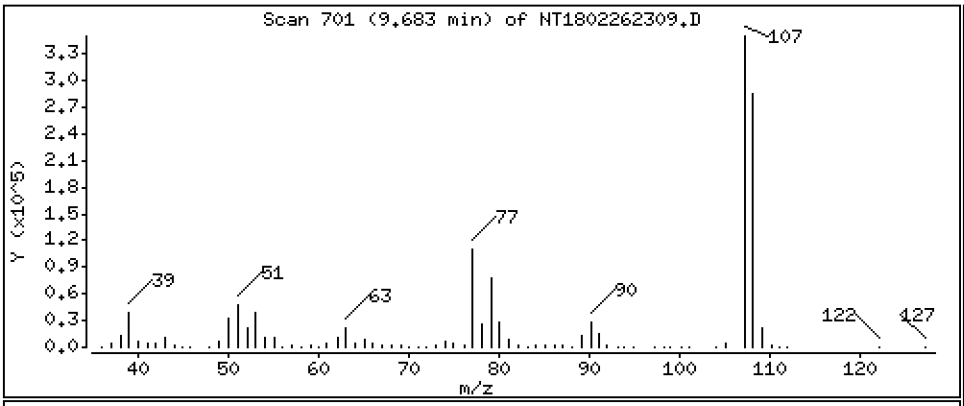
Operator: VTS

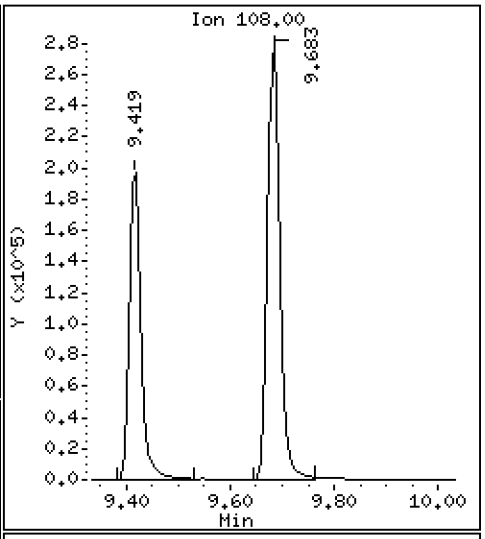
Column phase: ZB-5msi

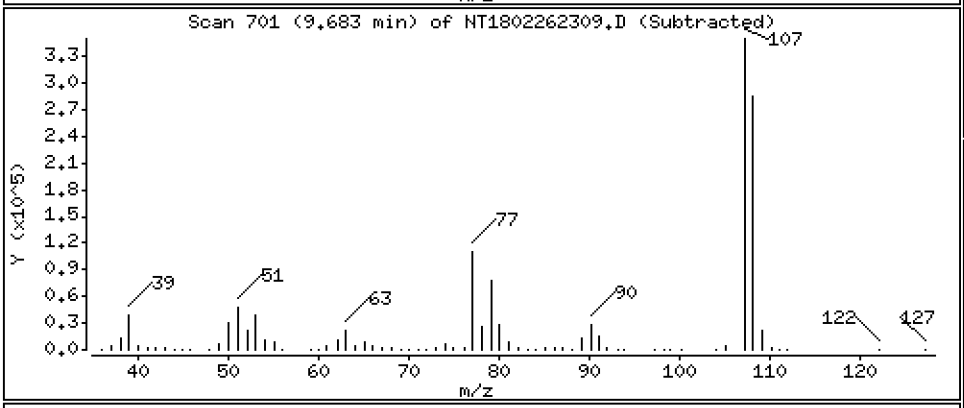
Column diameter: 0.25

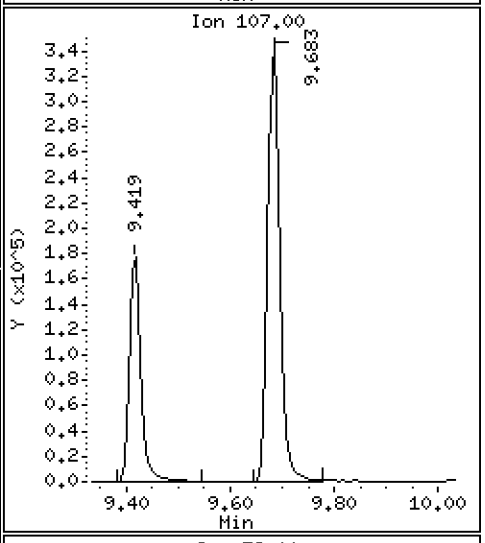
15 4-Methylphenol

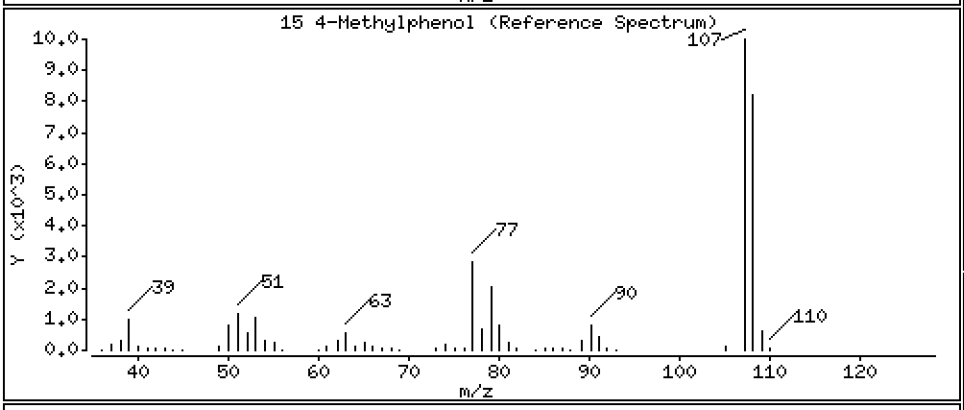
Concentration: 4.689 ug/mL

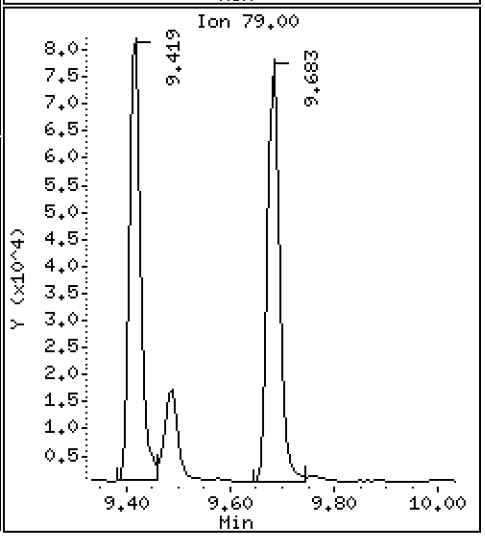


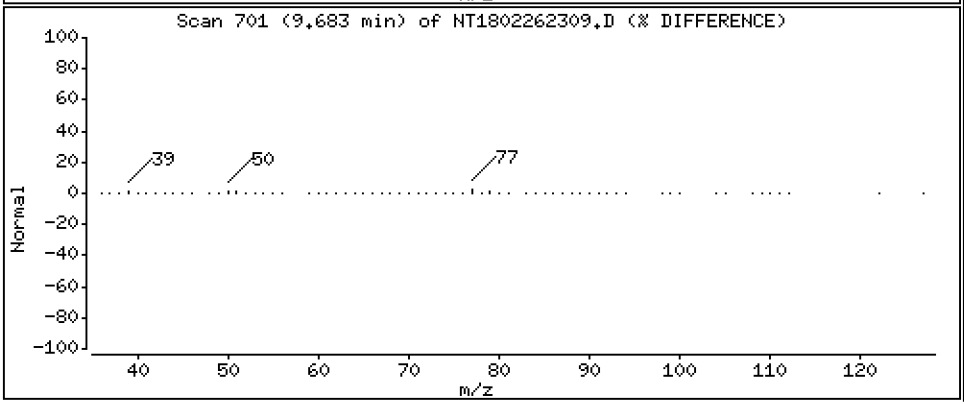












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

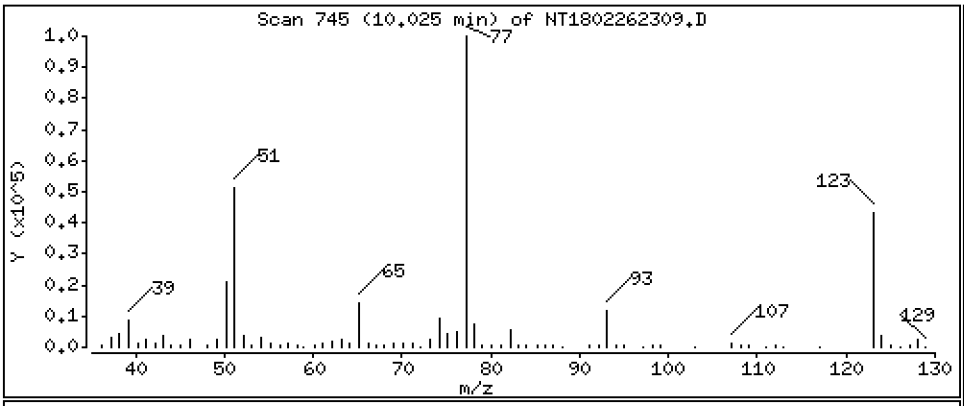
Operator: VTS

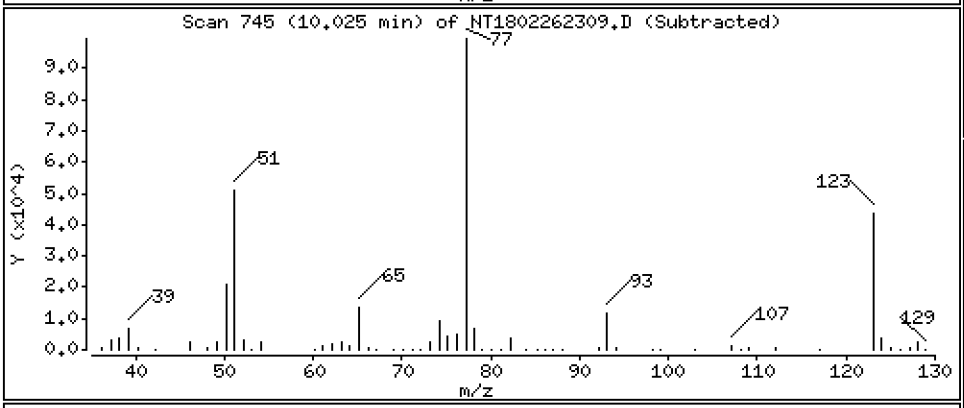
Column phase: ZB-5msi

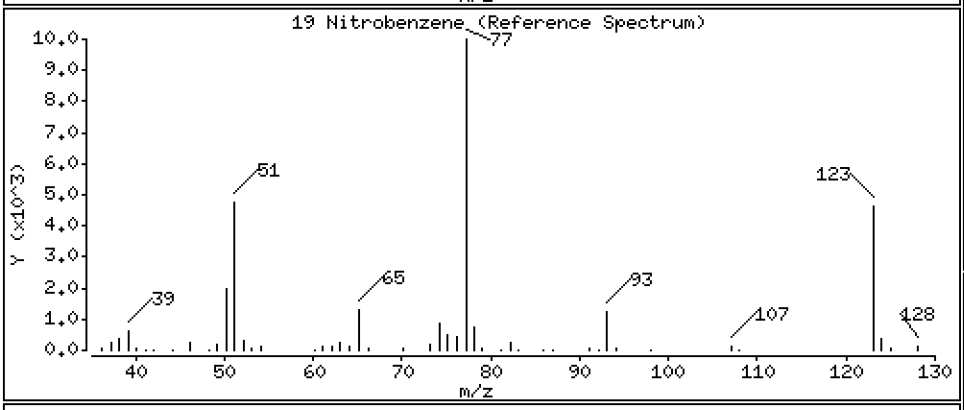
Column diameter: 0.25

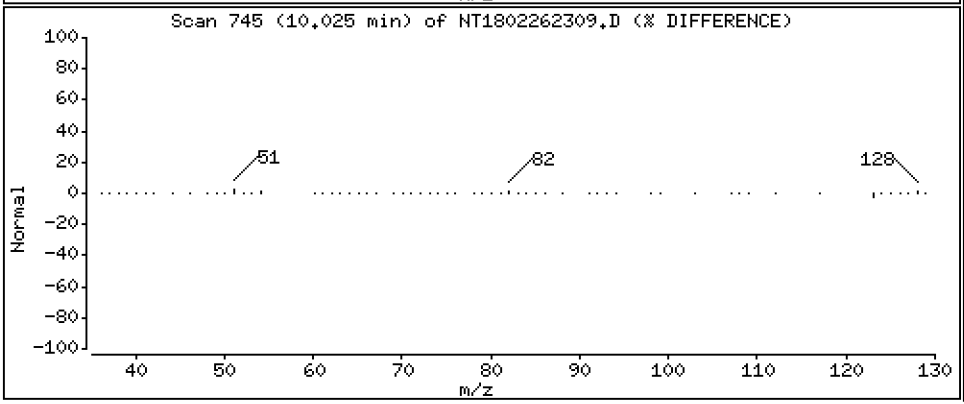
19 Nitrobenzene

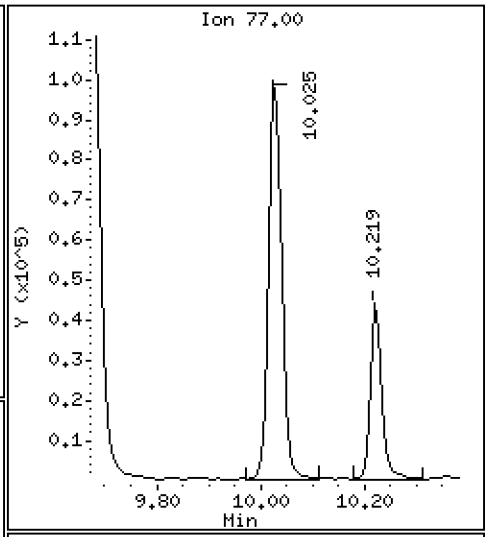
Concentration: 1.711 ug/mL

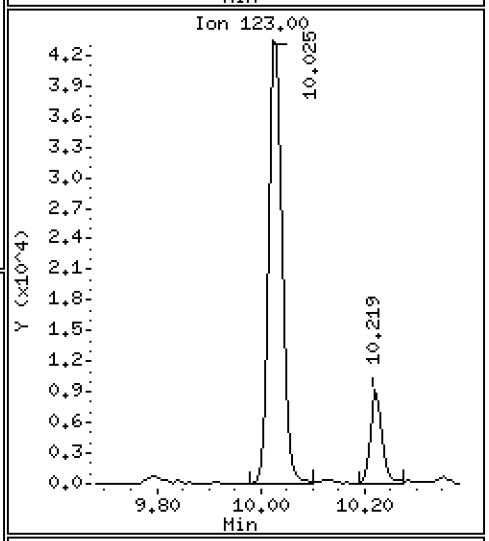


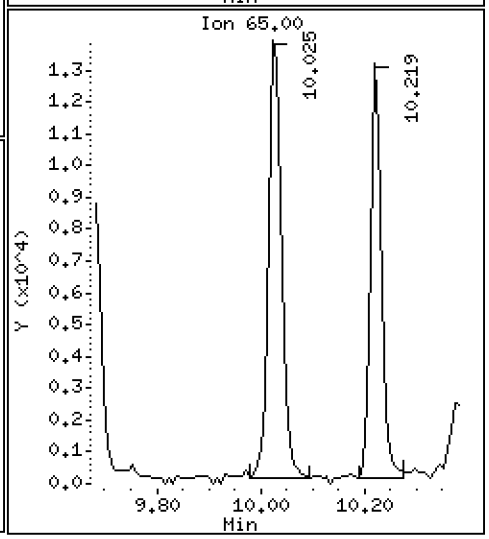












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

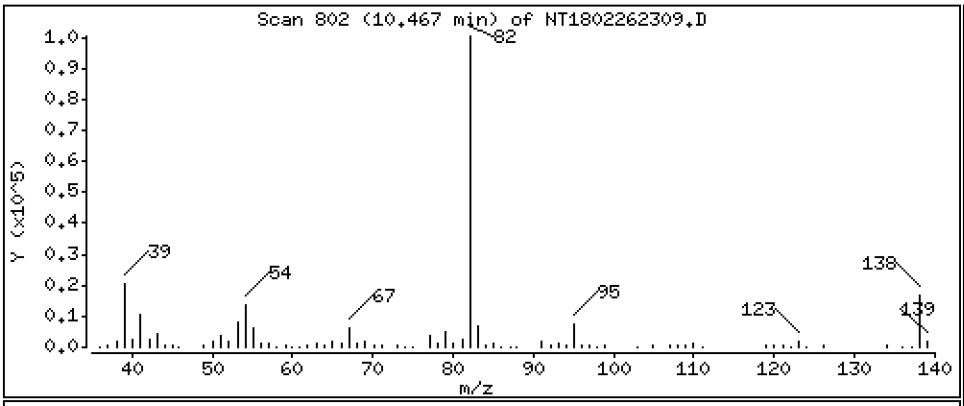
Operator: VTS

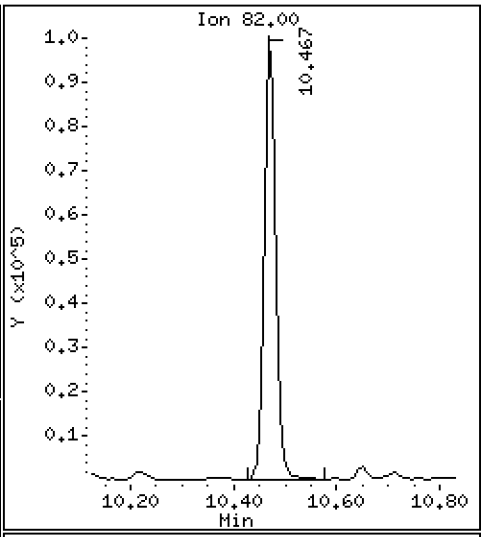
Column phase: ZB-5msi

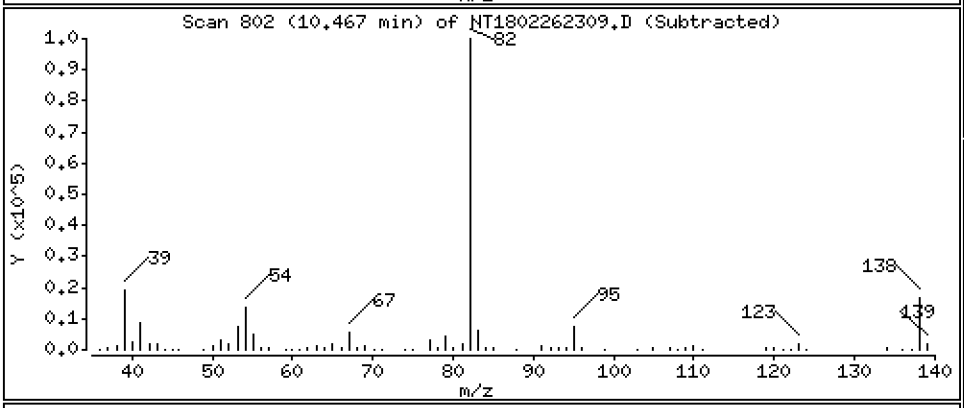
Column diameter: 0.25

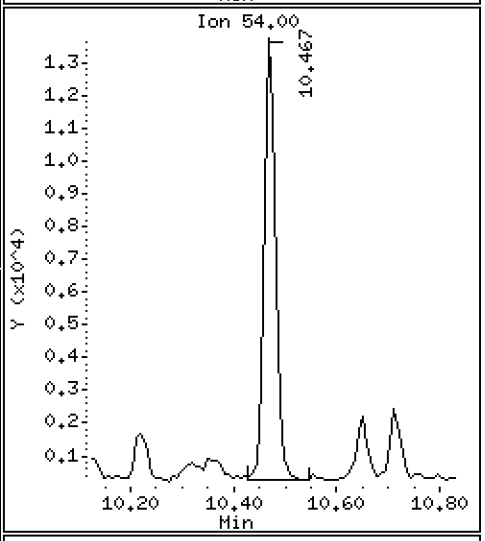
20 Isophorone

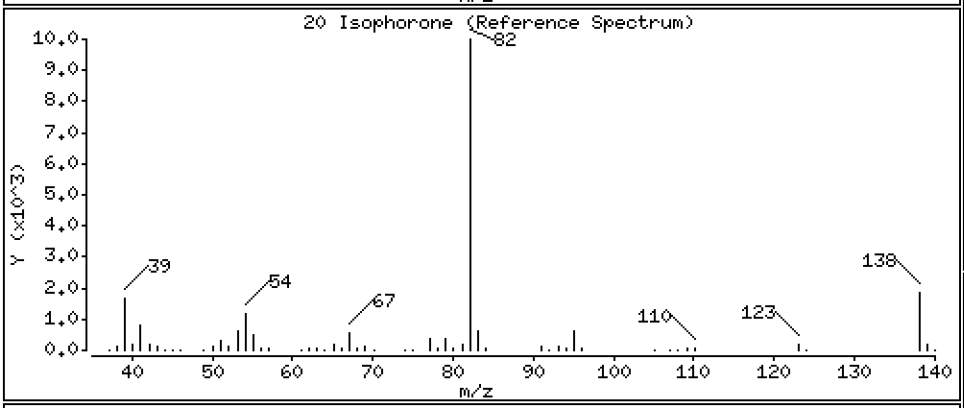
Concentration: 1.288 ug/mL

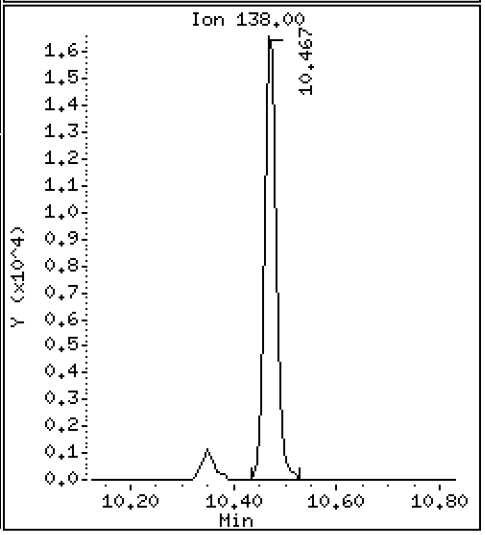


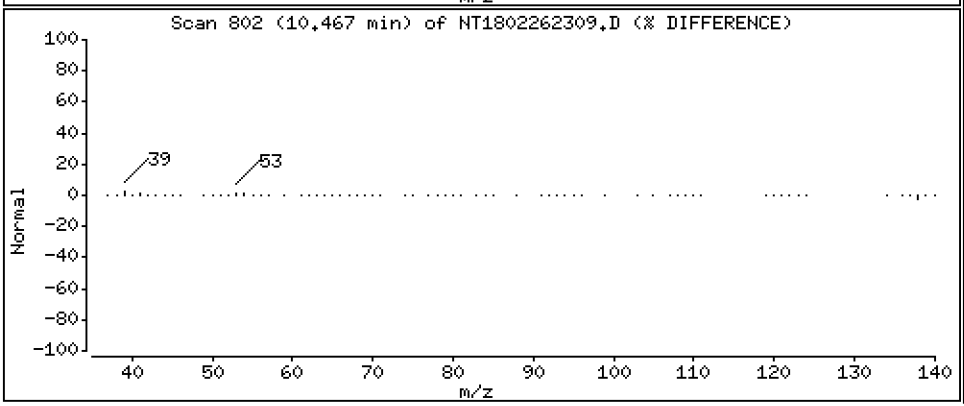












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

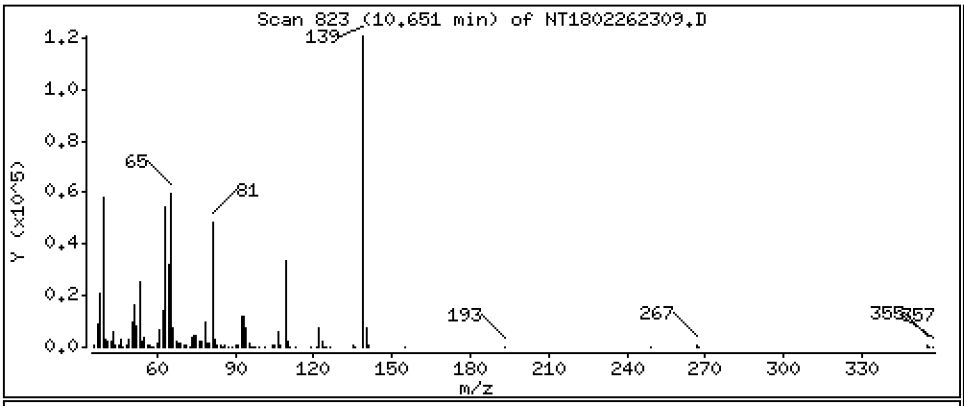
Operator: VTS

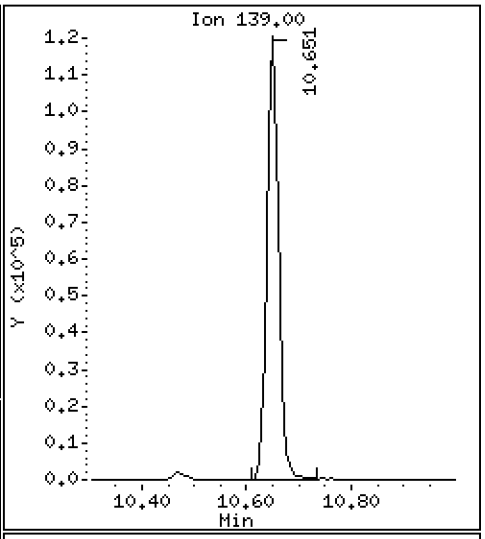
Column phase: ZB-5msi

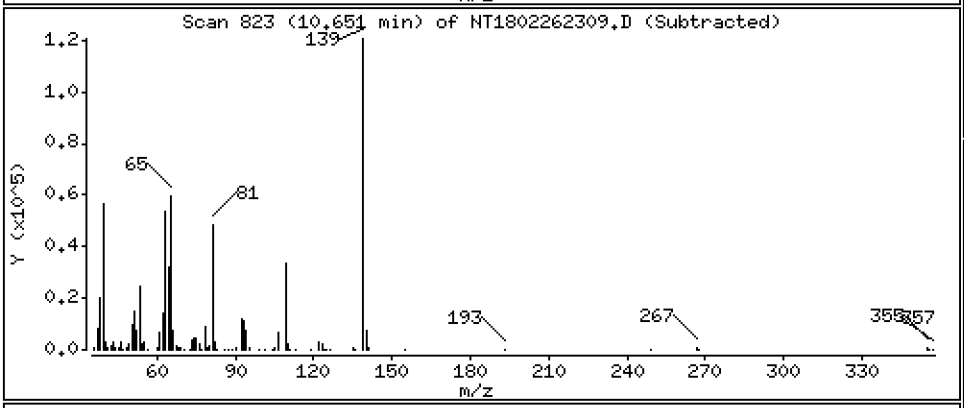
Column diameter: 0.25

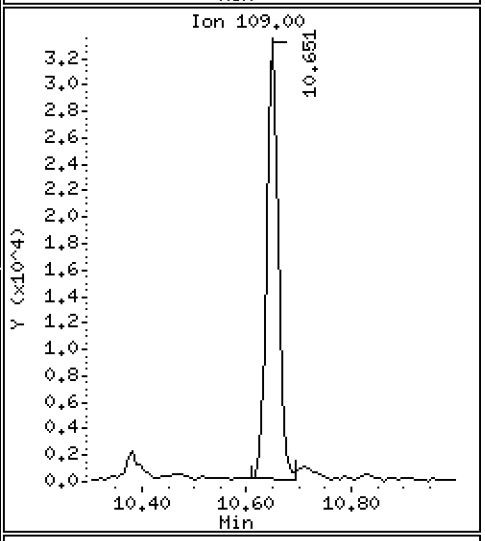
21 2-Nitrophenol

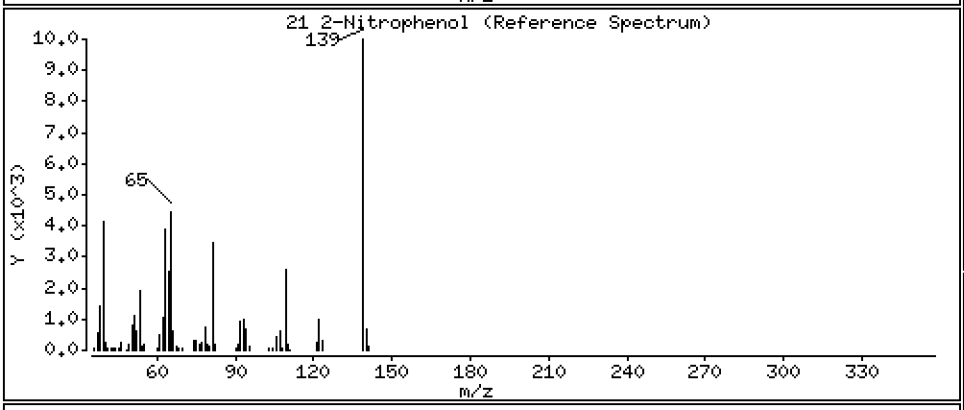
Concentration: 3.916 ug/mL

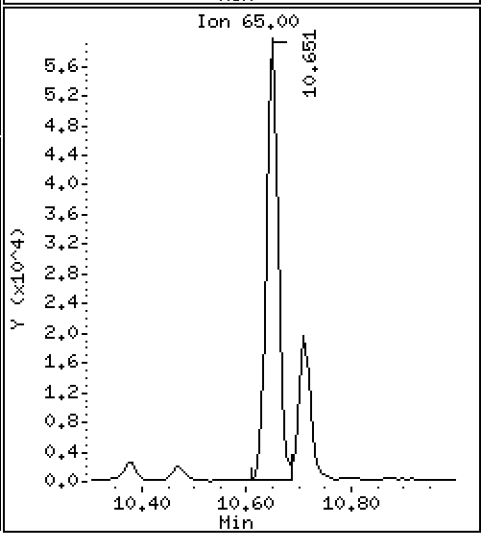


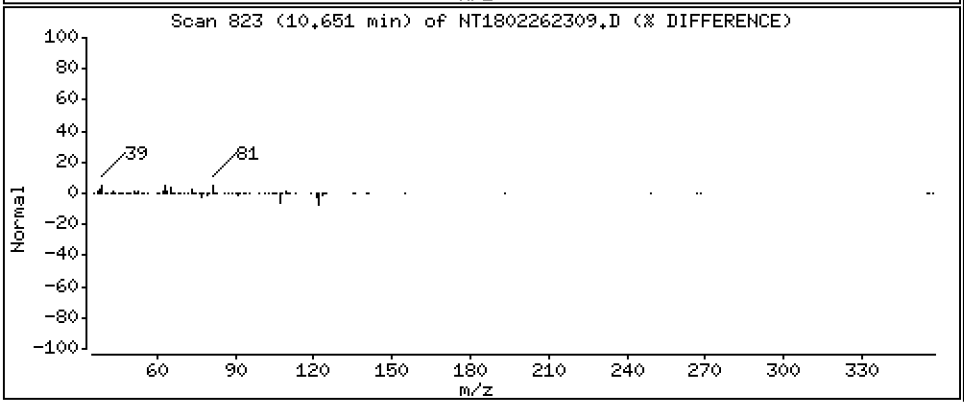












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

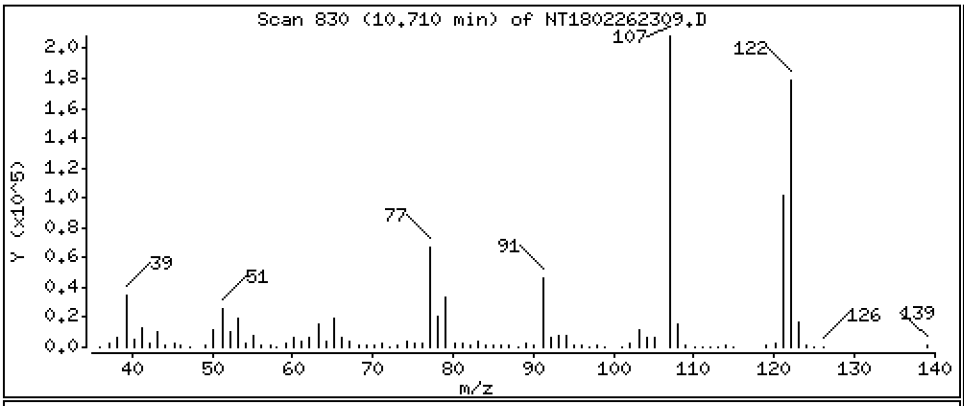
Operator: VTS

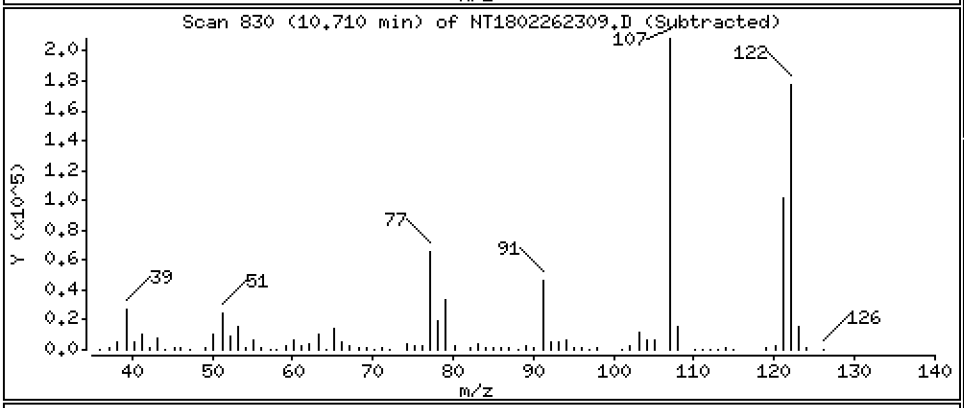
Column phase: ZB-5msi

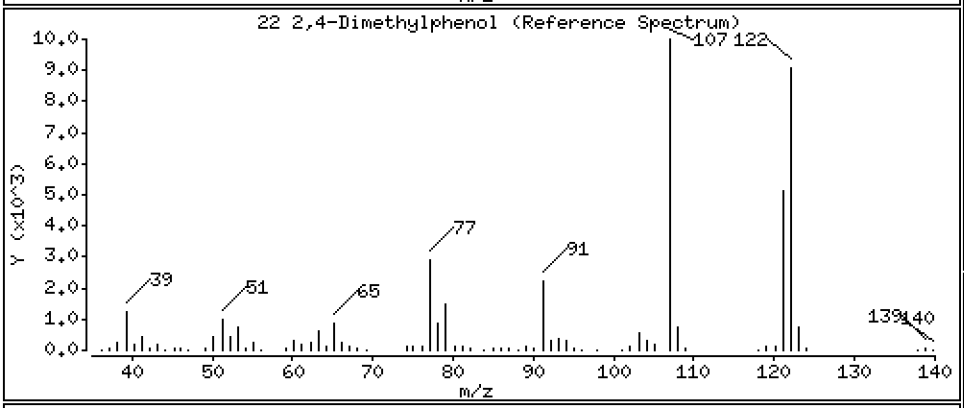
Column diameter: 0.25

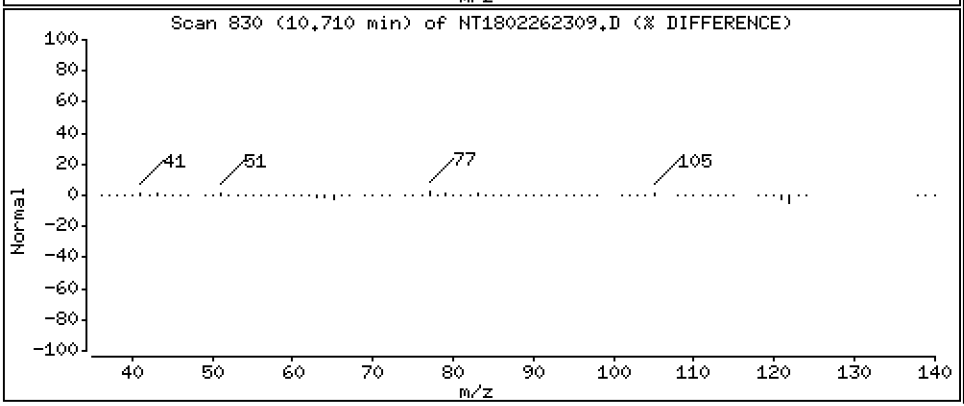
22 2,4-Dimethylphenol

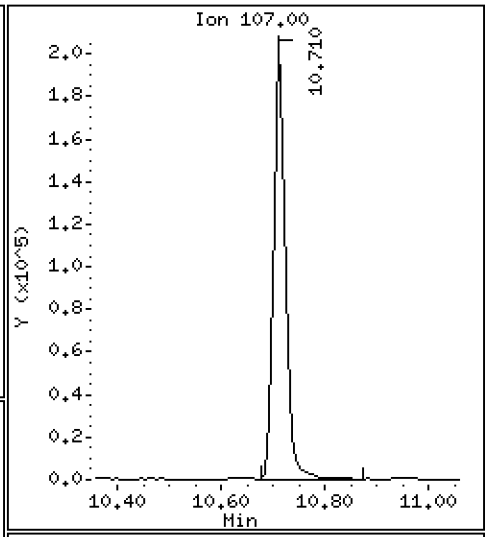
Concentration: 3.519 ug/mL

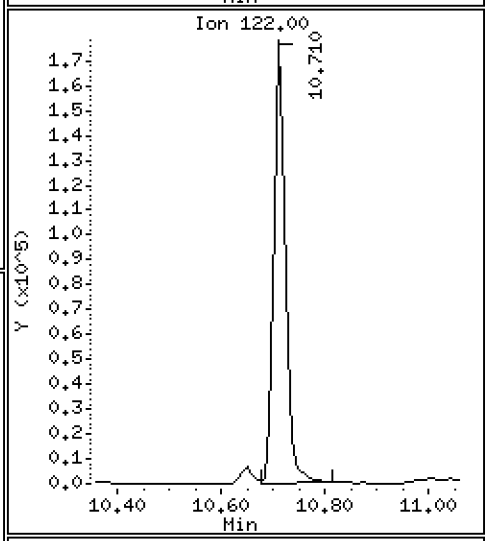


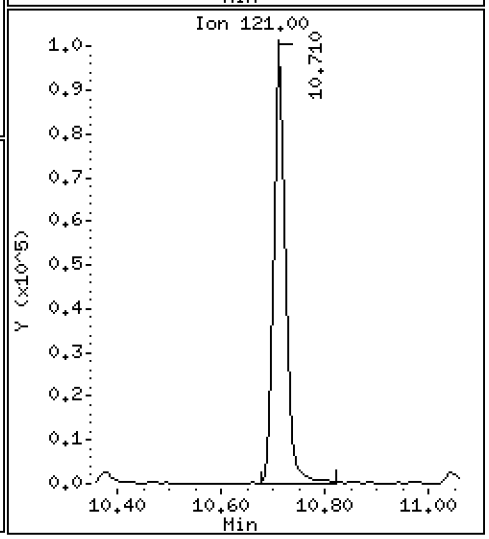












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

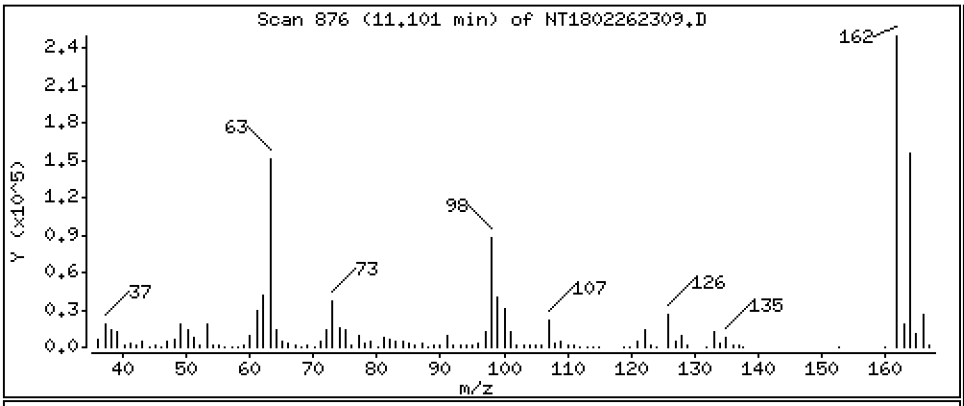
Operator: VTS

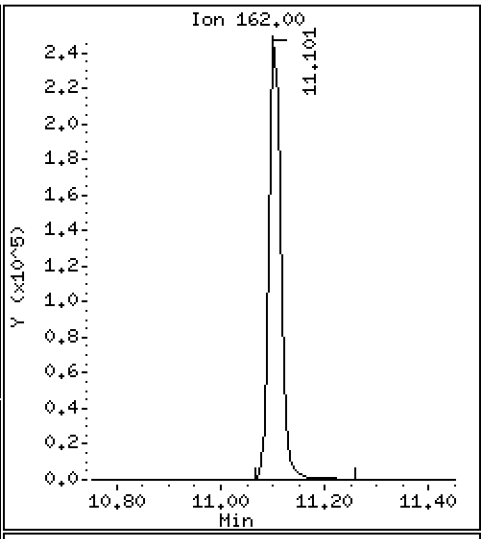
Column phase: ZB-5msi

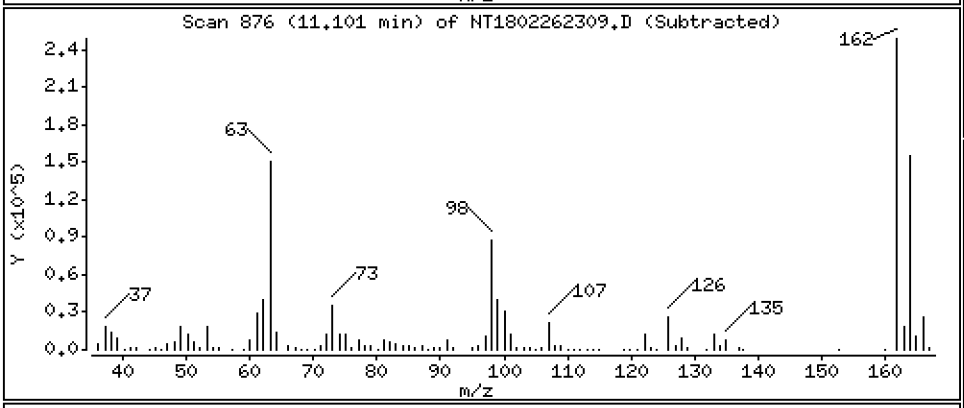
Column diameter: 0.25

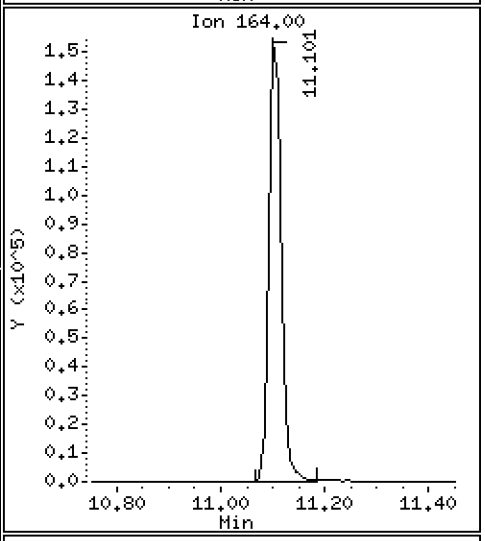
25 2,4-Dichlorophenol

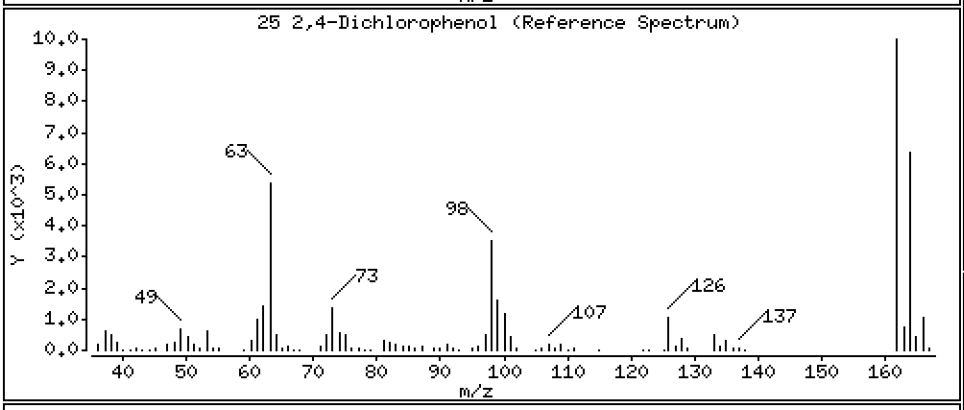
Concentration: 5.365 ug/mL

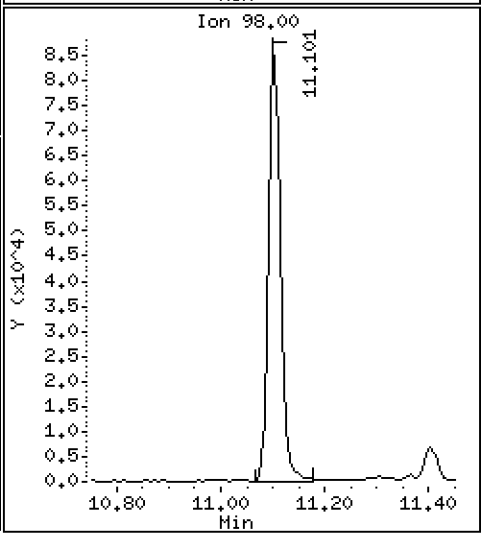


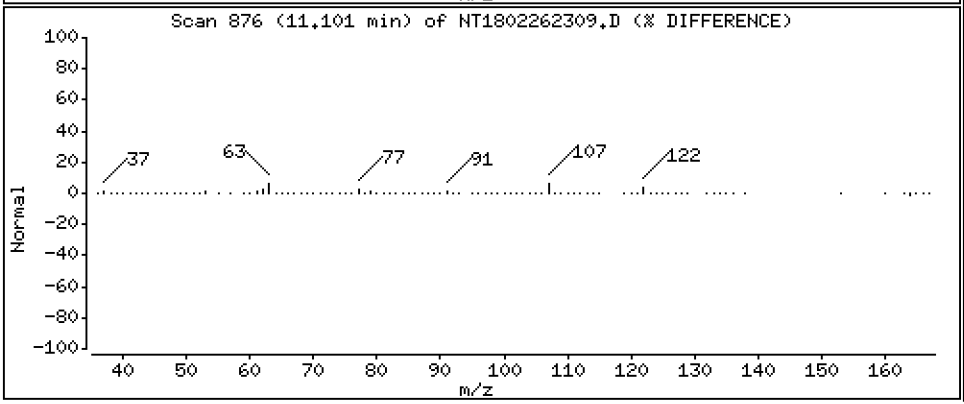












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

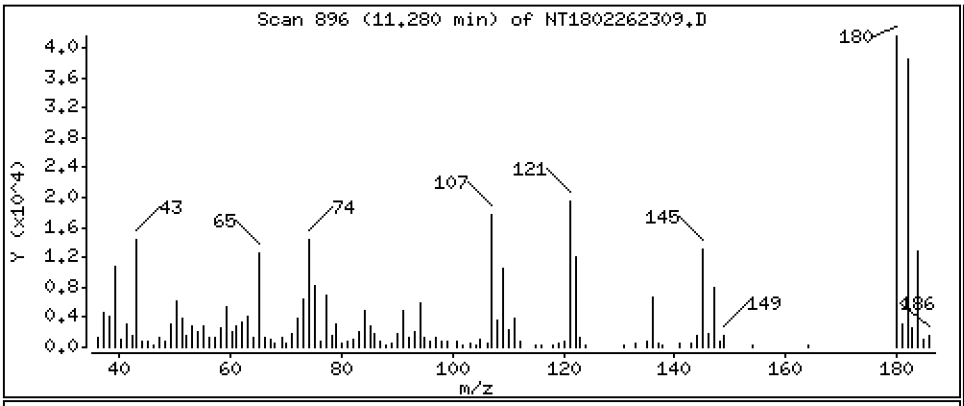
Operator: VTS

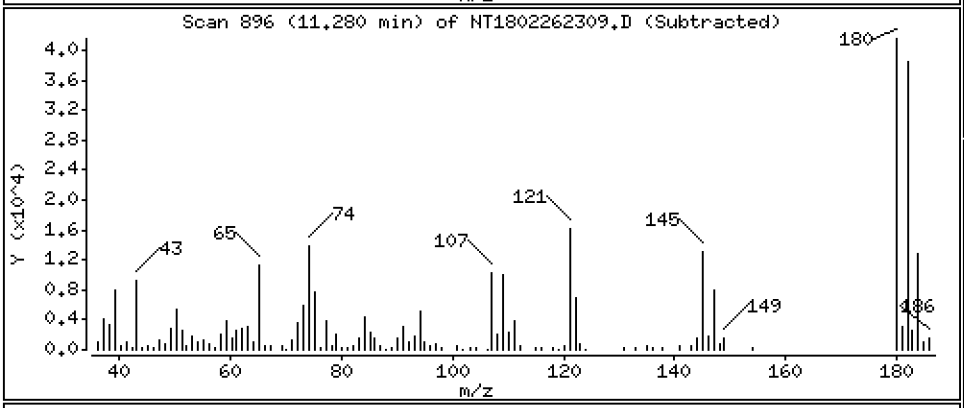
Column phase: ZB-5msi

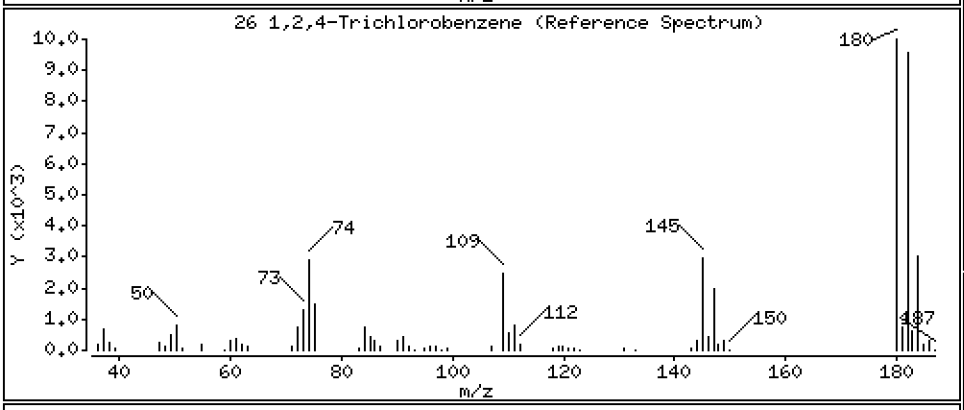
Column diameter: 0.25

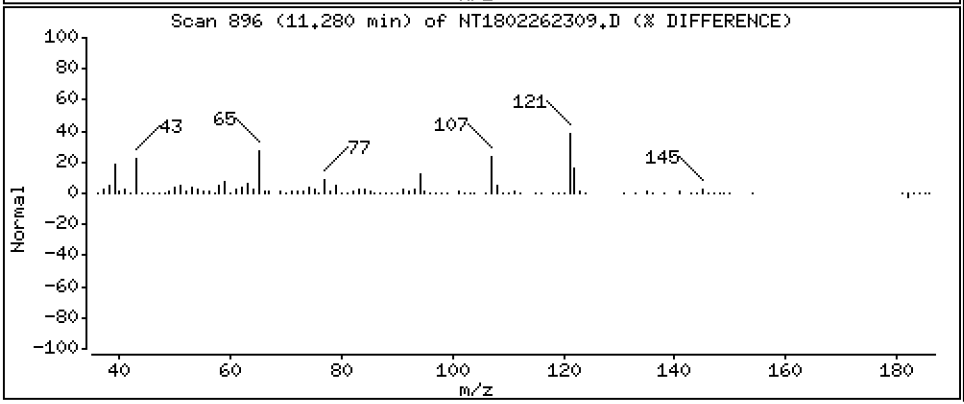
26 1,2,4-Trichlorobenzene

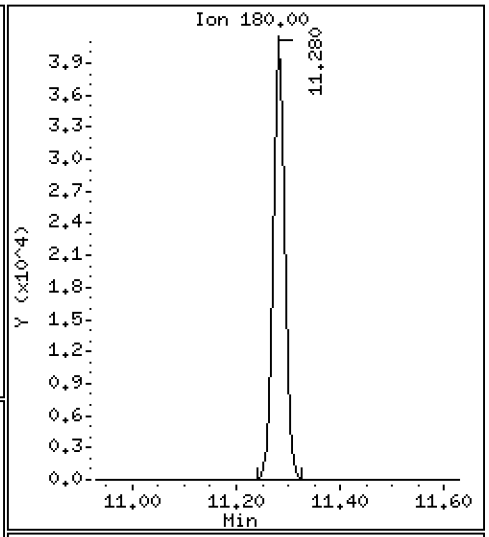
Concentration: 0.7689 ug/mL

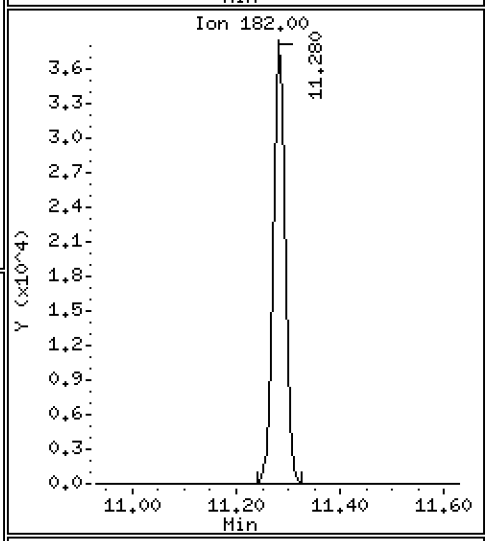


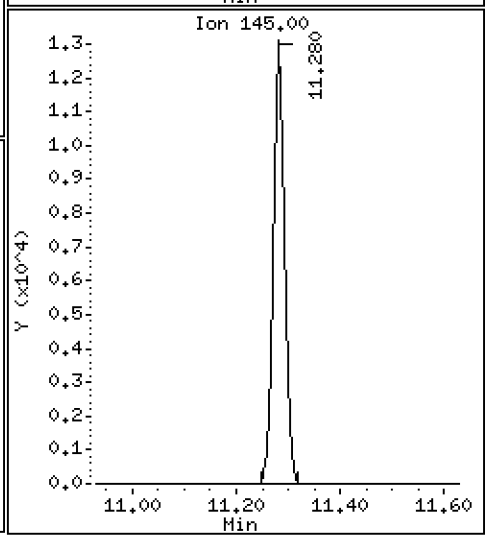












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

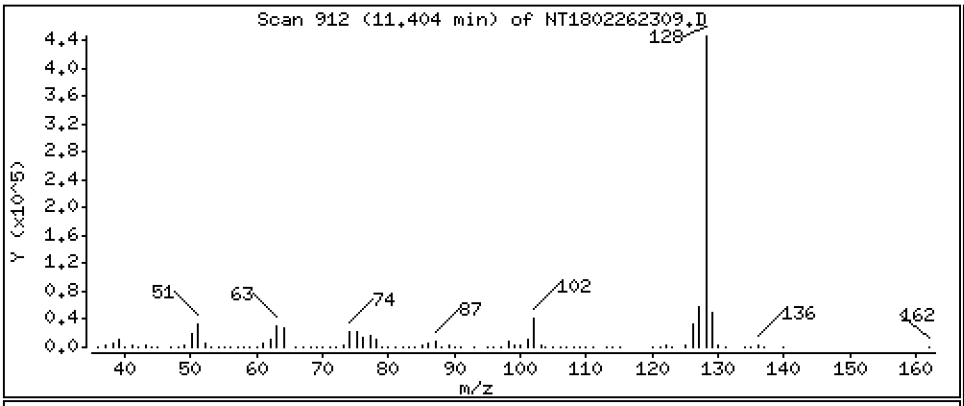
Operator: VTS

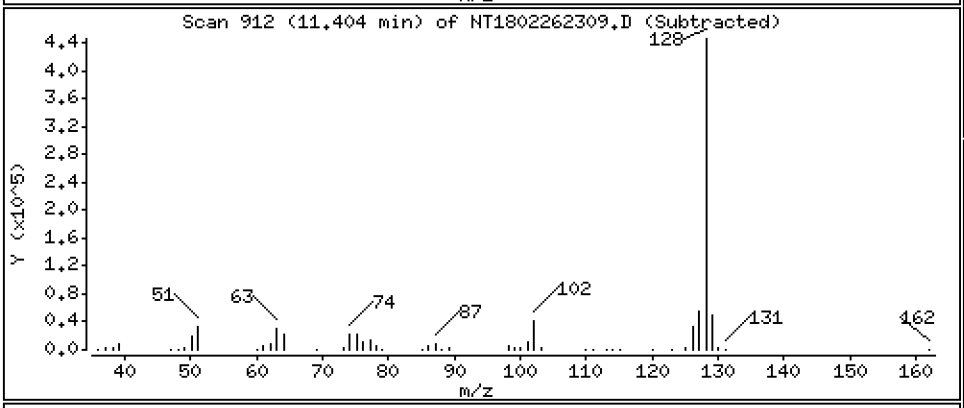
Column phase: ZB-5msi

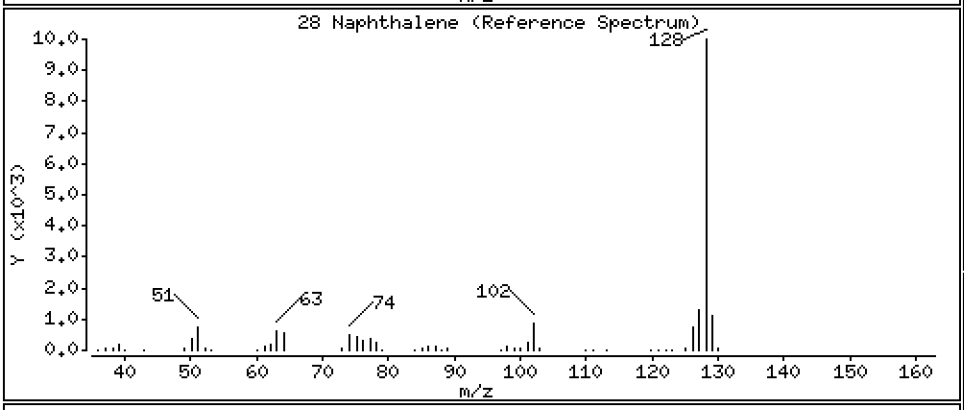
Column diameter: 0.25

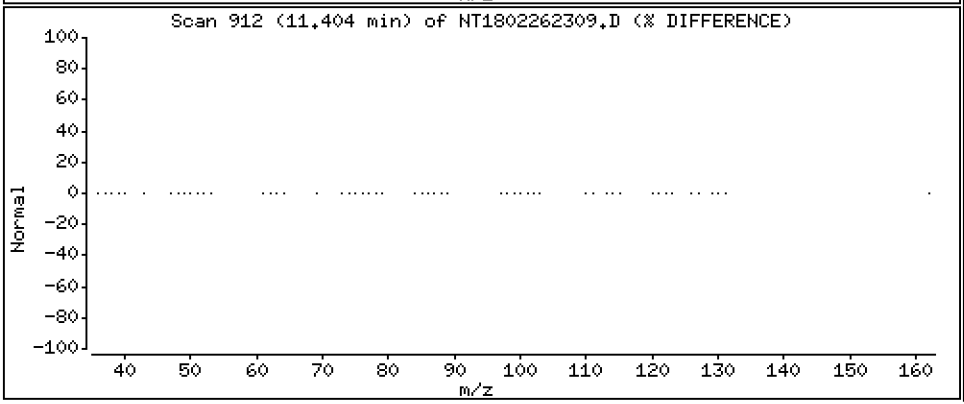
28 Naphthalene

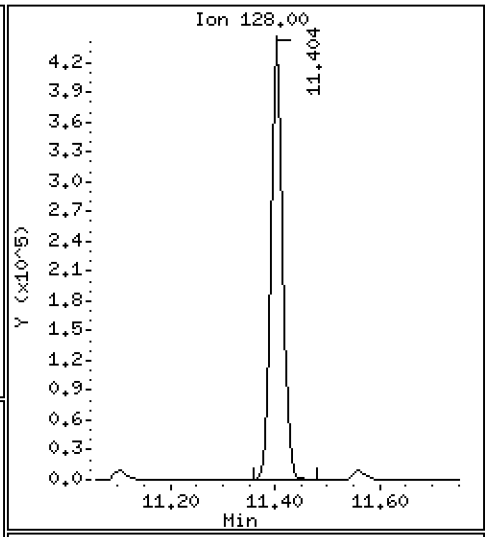
Concentration: 2.375 ug/mL

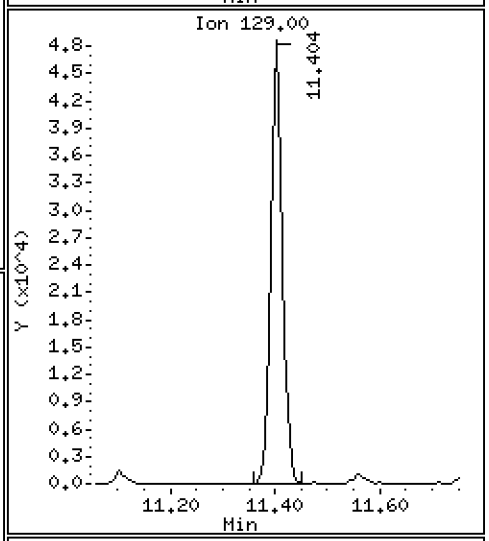


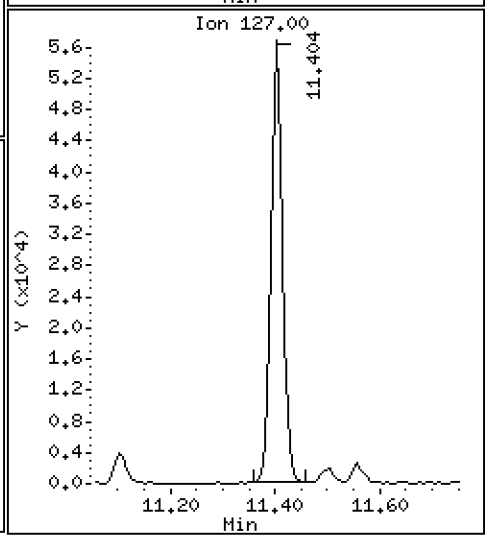












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

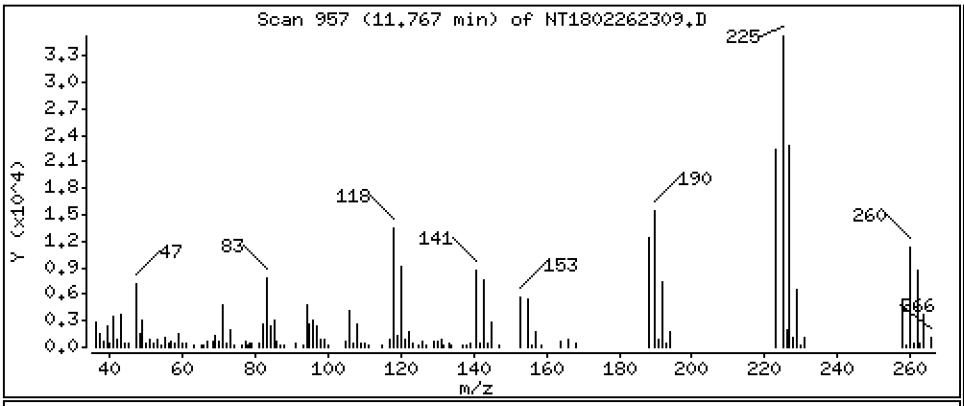
Operator: VTS

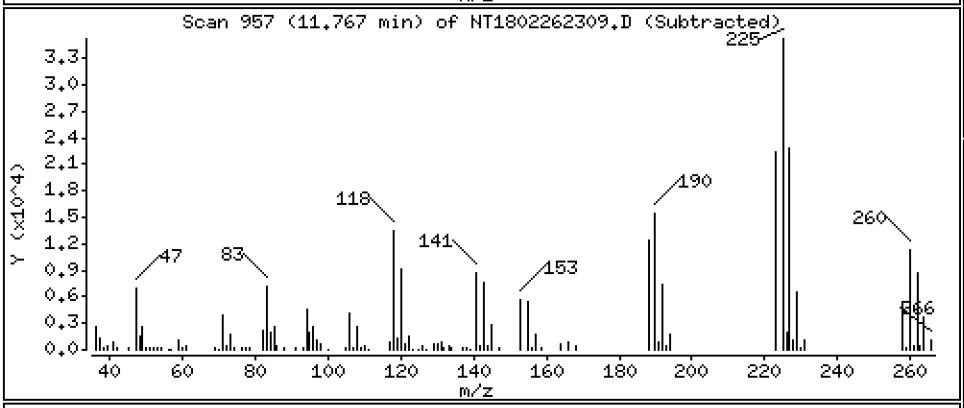
Column phase: ZB-5msi

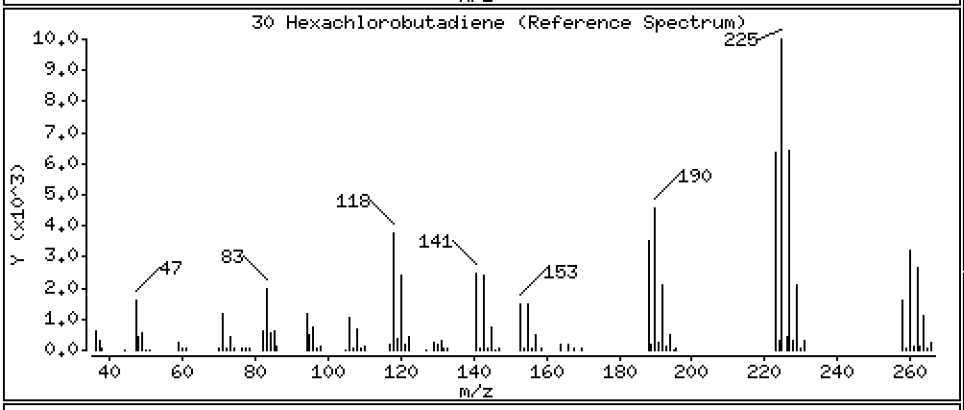
Column diameter: 0.25

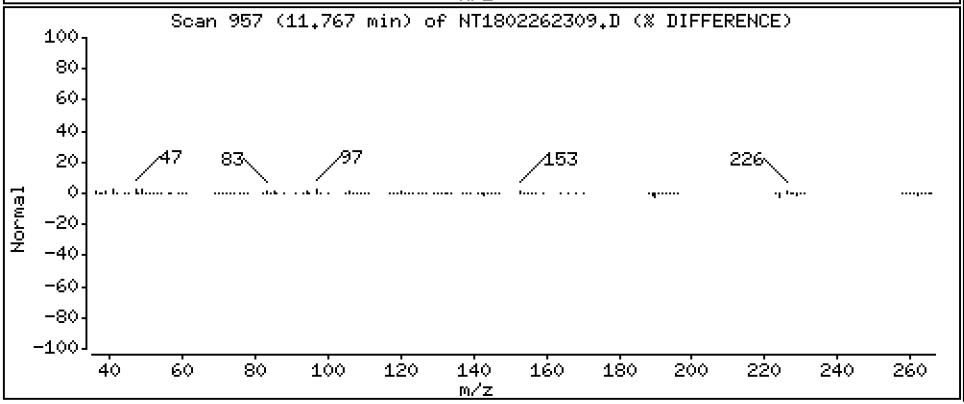
30 Hexachlorobutadiene

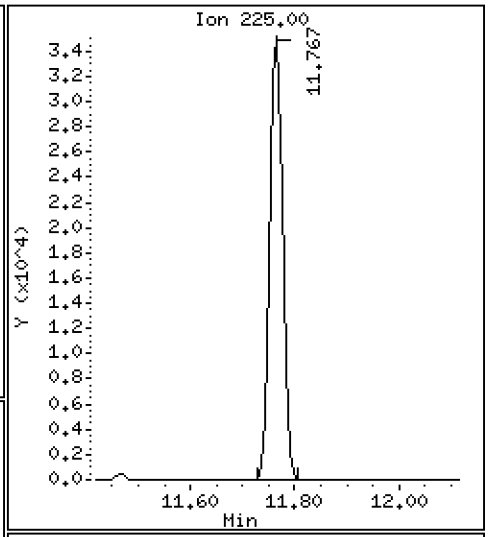
Concentration: 1.141 ug/mL

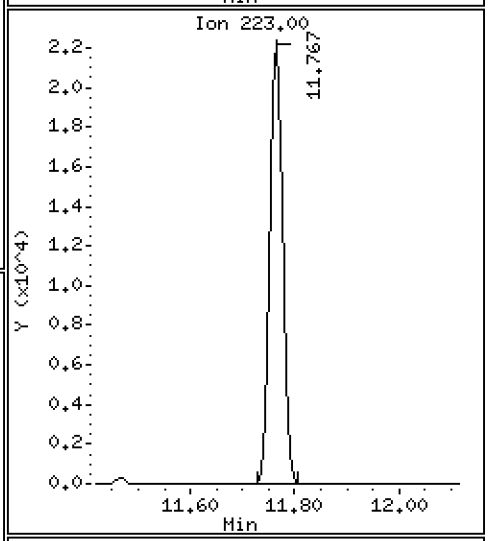


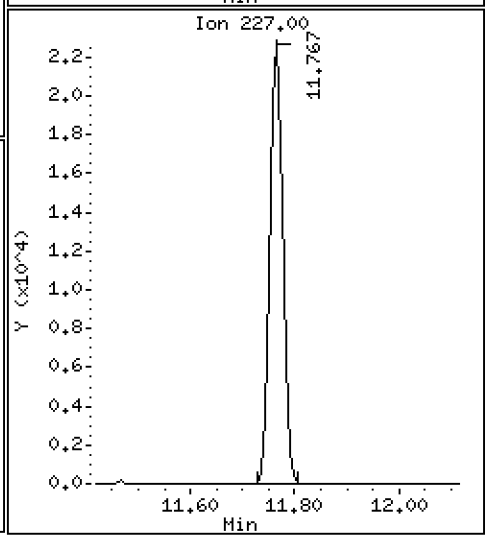












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

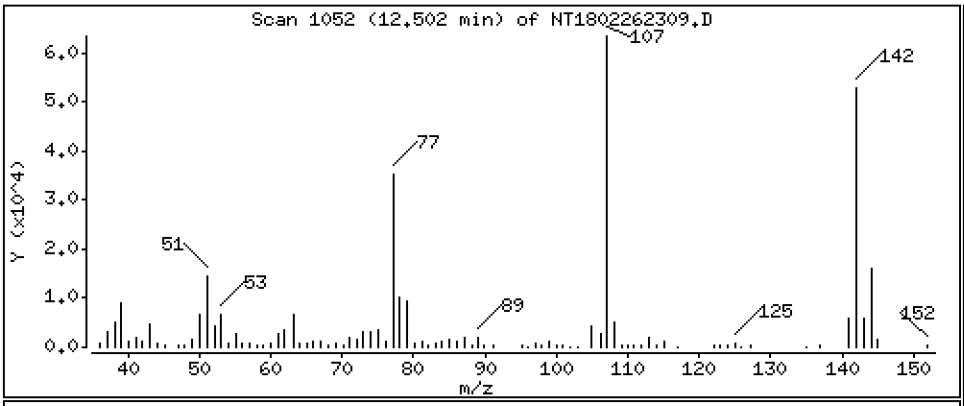
Operator: VTS

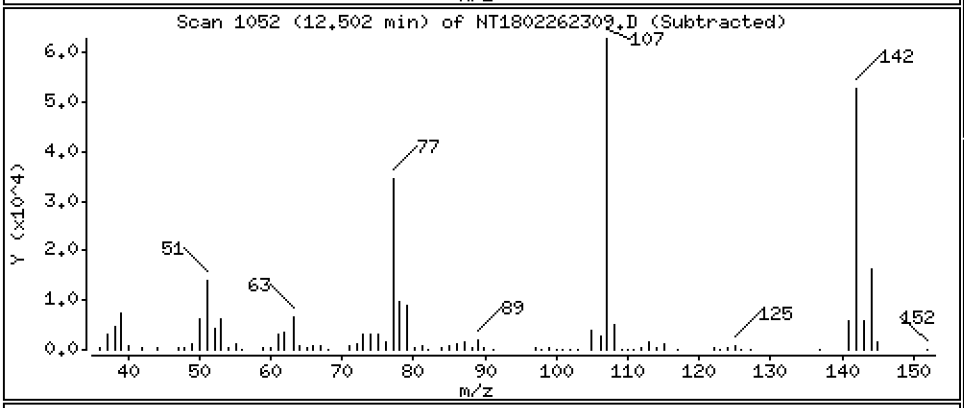
Column phase: ZB-5msi

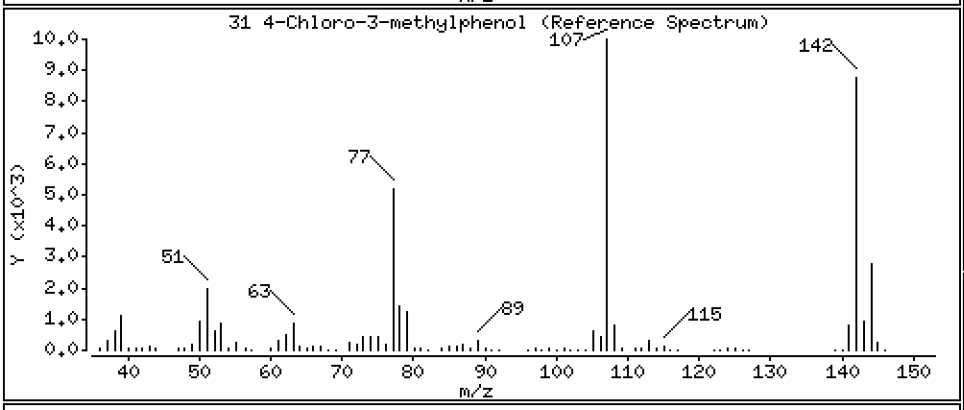
Column diameter: 0.25

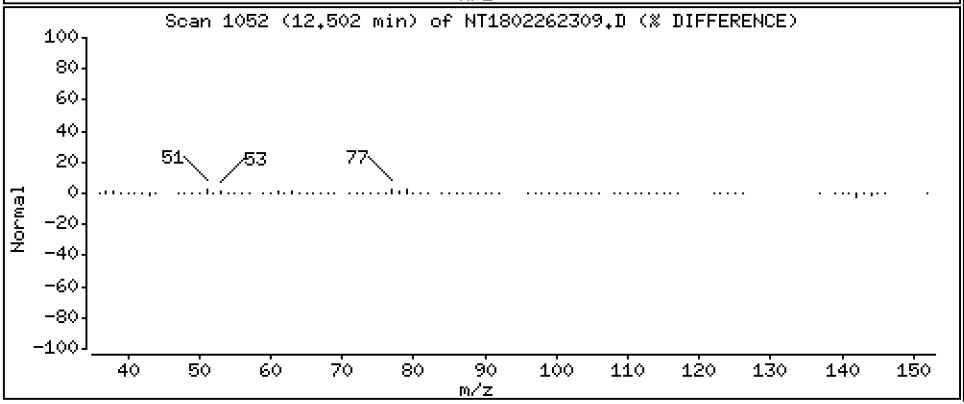
31 4-Chloro-3-methylphenol

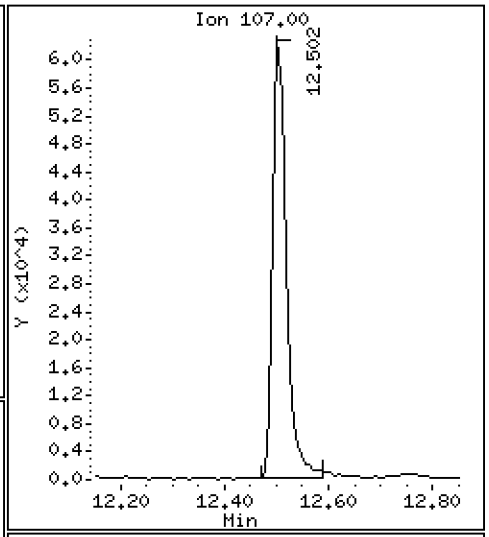
Concentration: 1.416 ug/mL

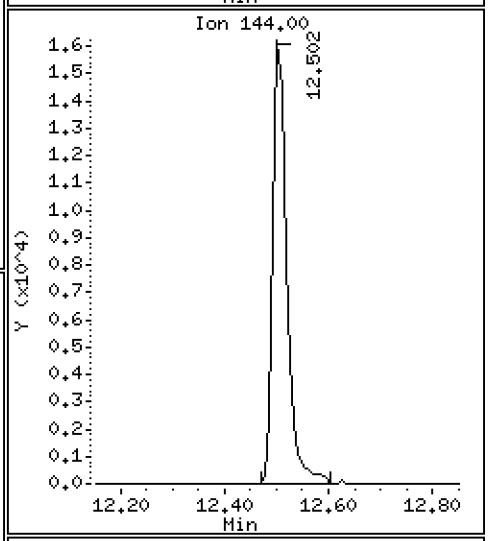


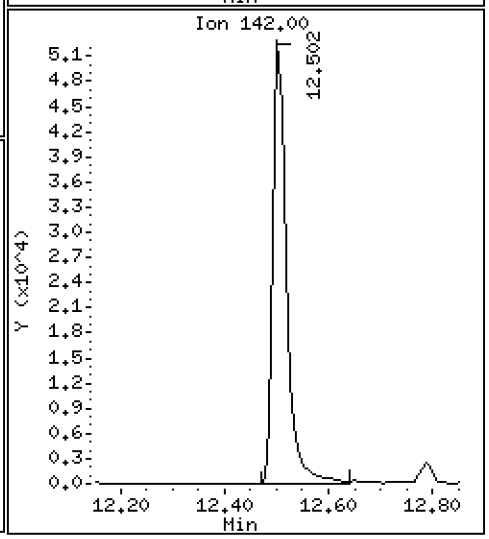












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

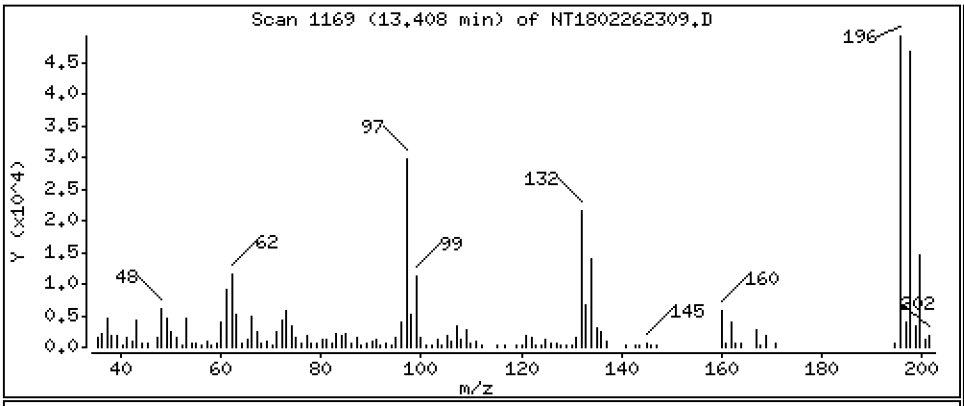
Operator: VTS

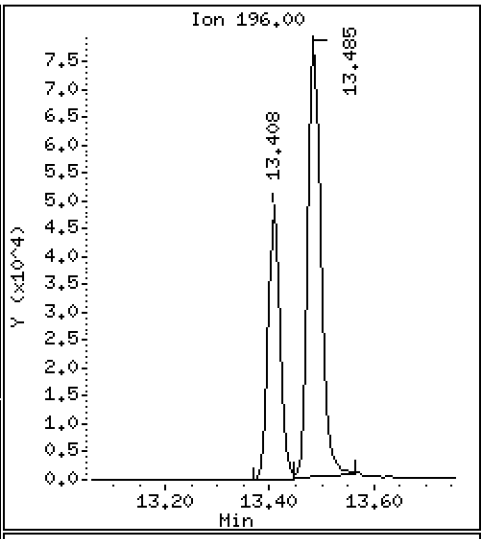
Column phase: ZB-5msi

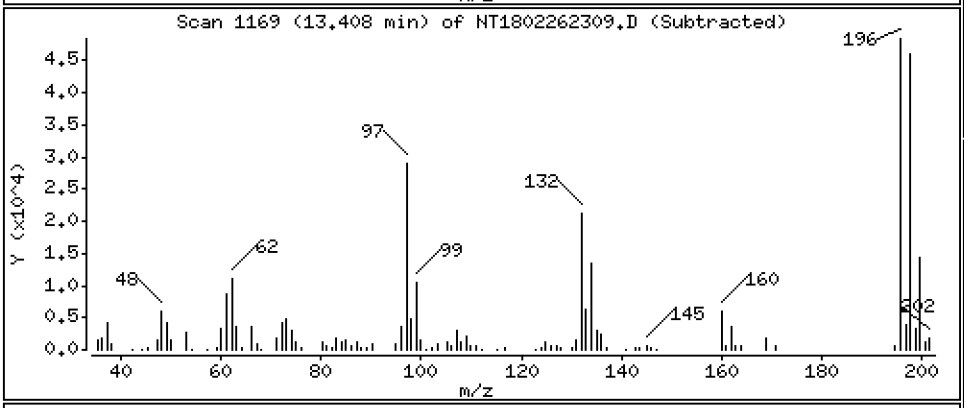
Column diameter: 0.25

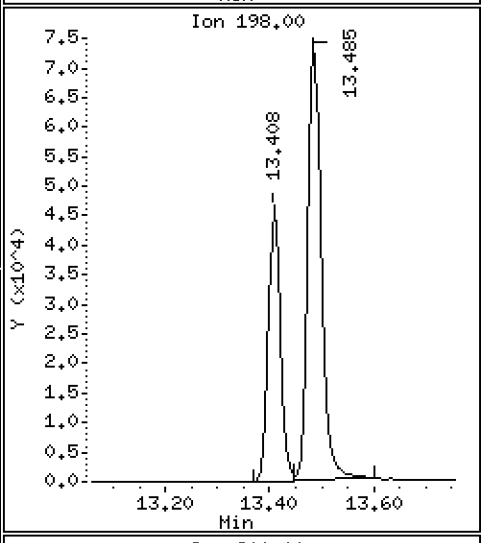
34 2,4,6-Trichlorophenol

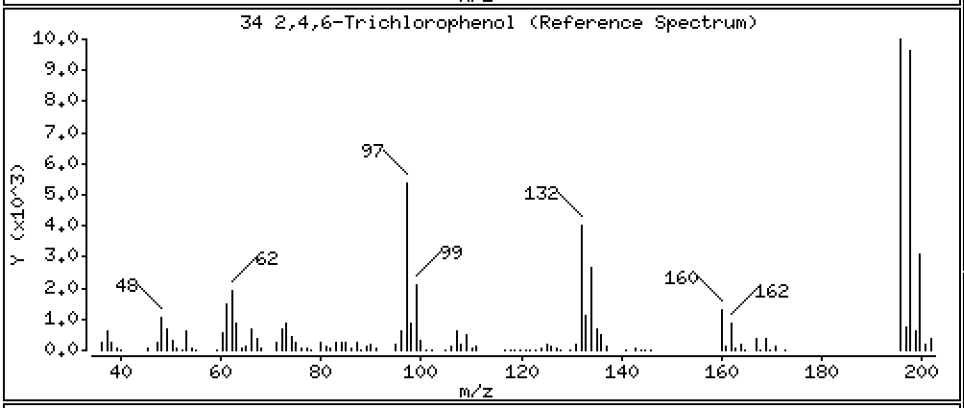
Concentration: 1.505 ug/mL

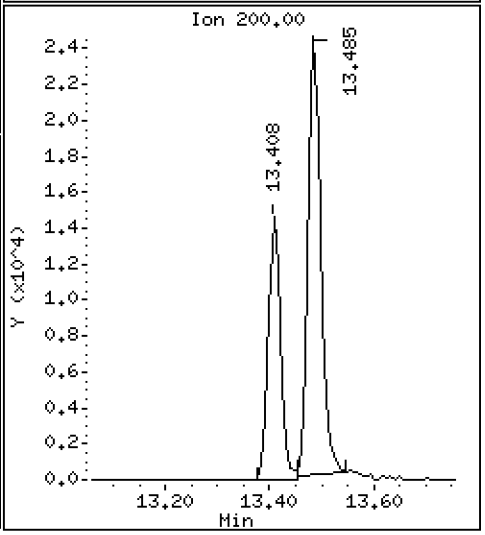


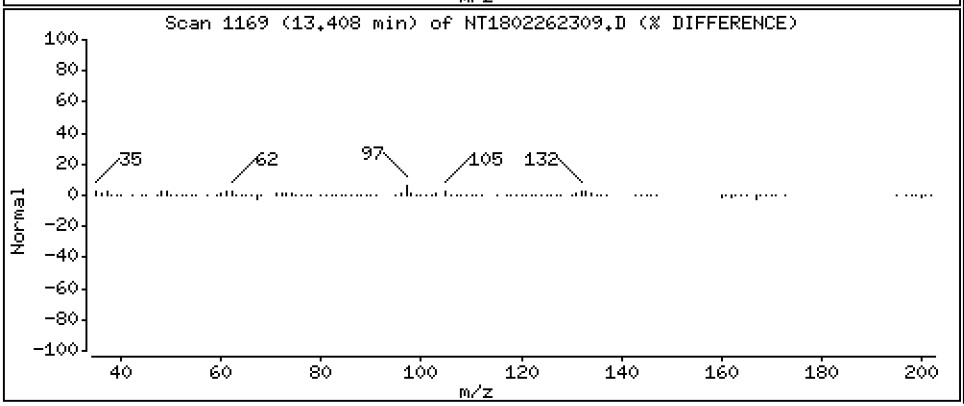












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

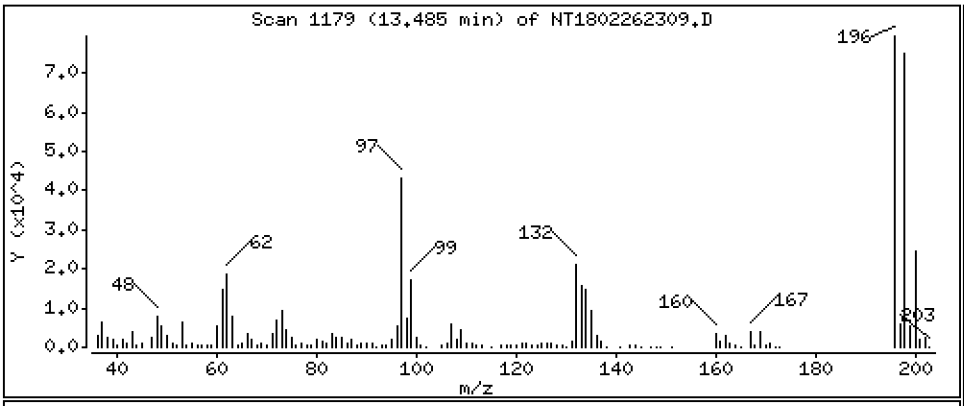
Operator: VTS

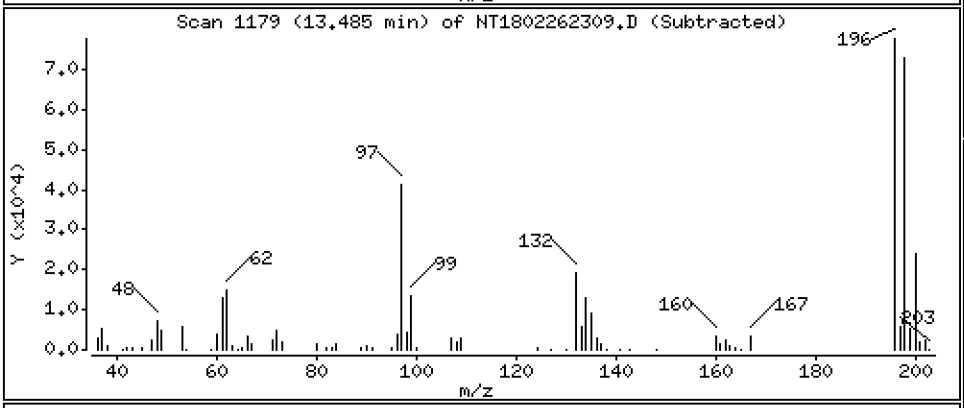
Column phase: ZB-5msi

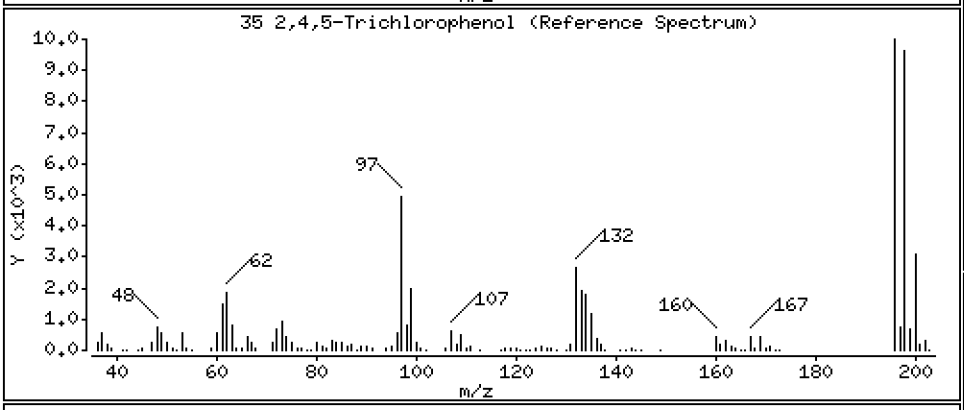
Column diameter: 0.25

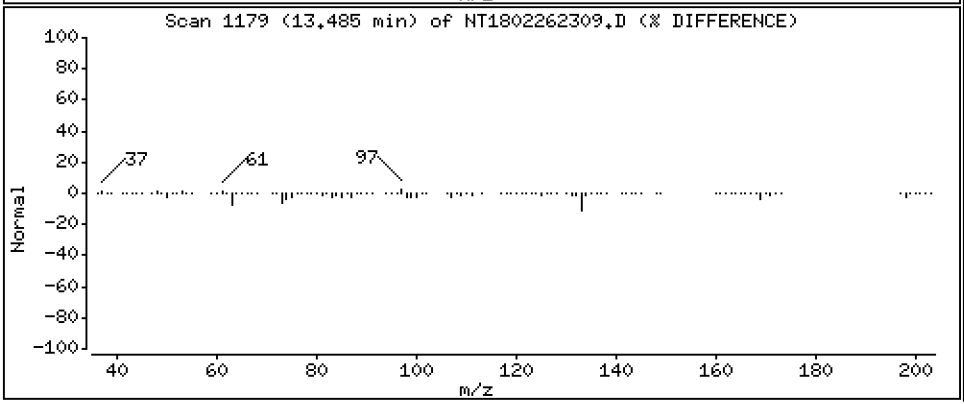
35 2,4,5-Trichlorophenol

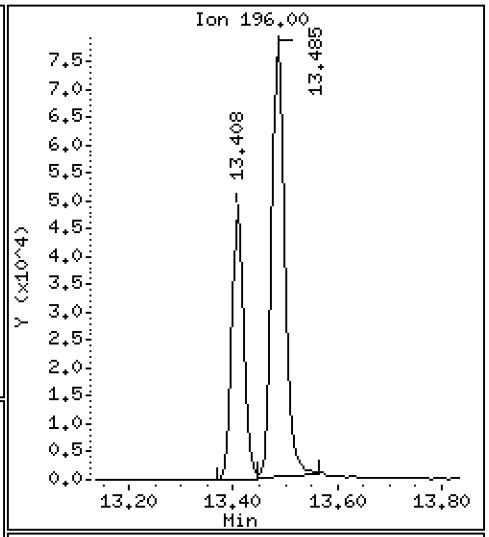
Concentration: 2.435 ug/mL

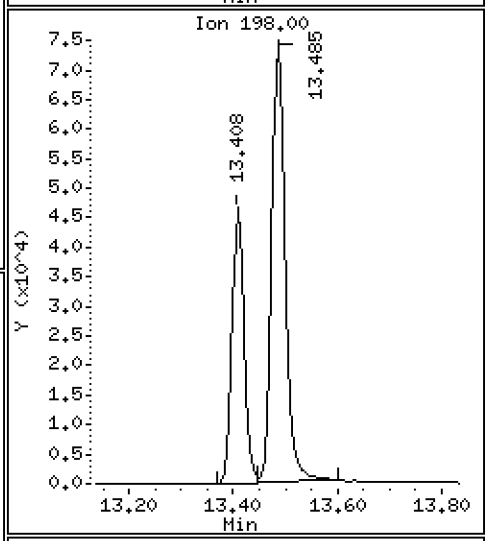


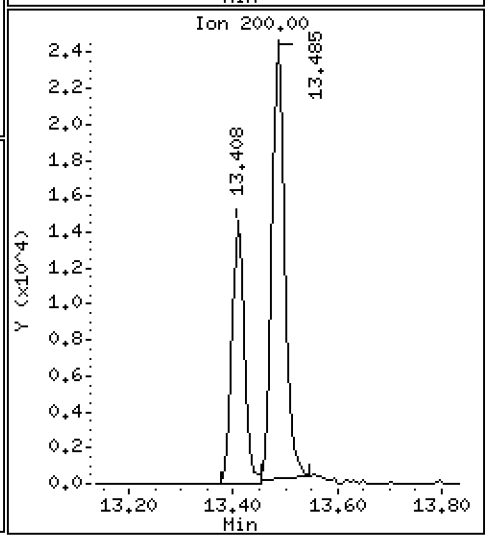












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

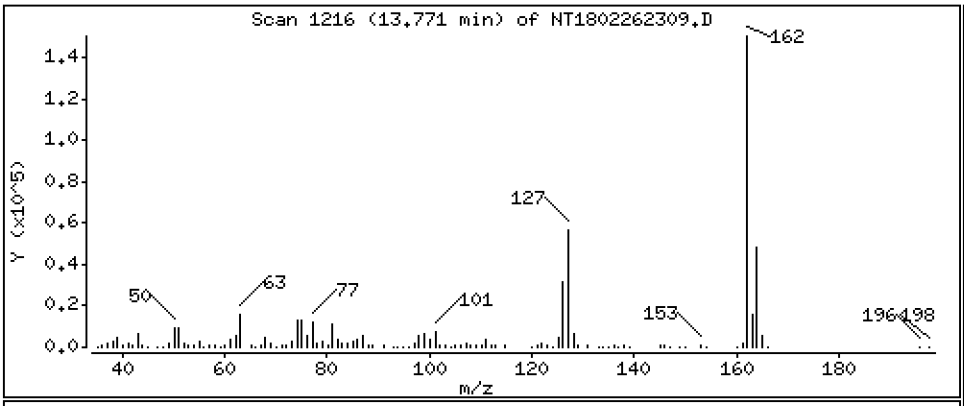
Operator: VTS

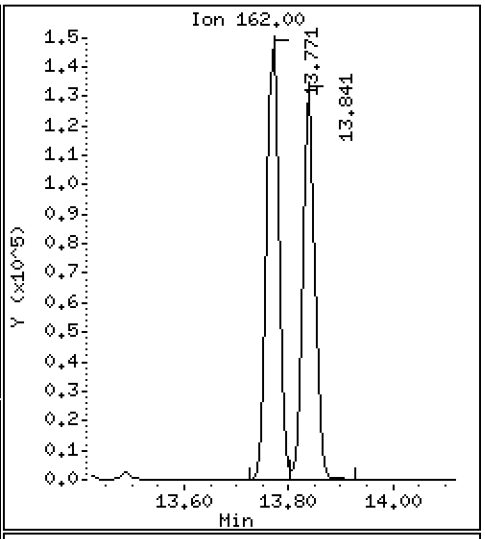
Column phase: ZB-5msi

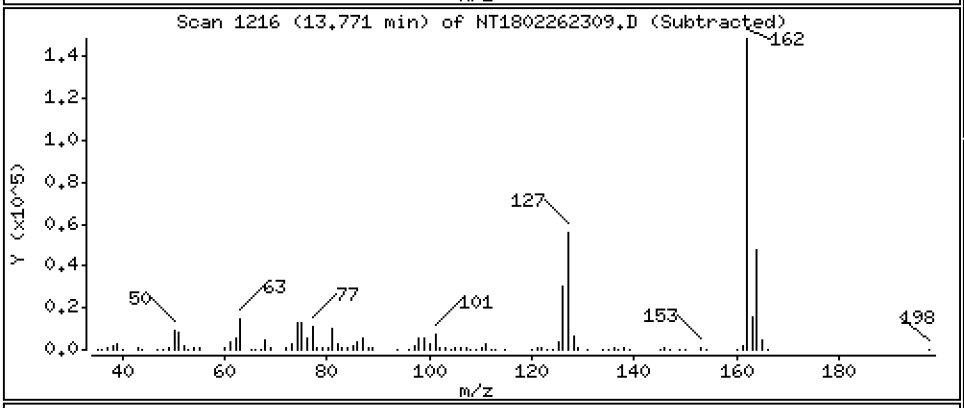
Column diameter: 0.25

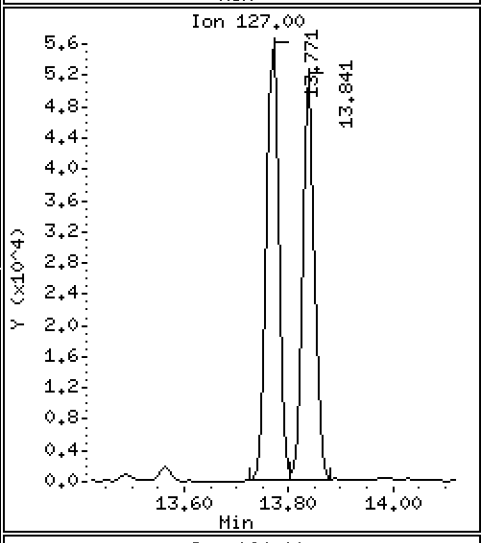
37 2-Chloronaphthalene

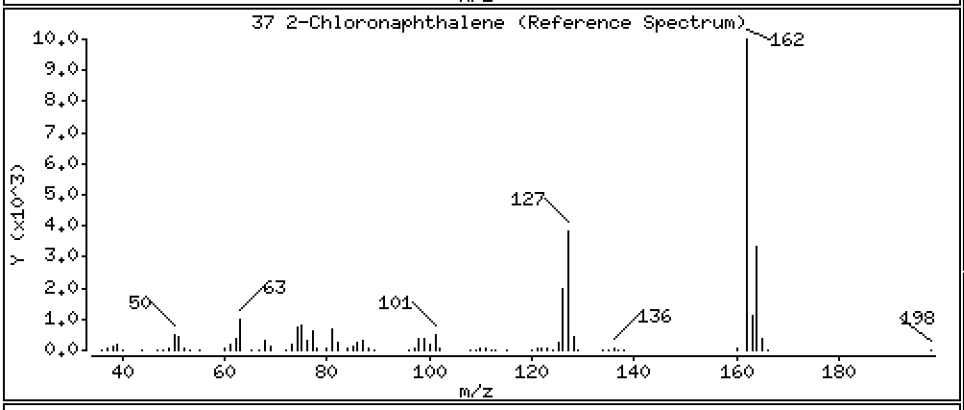
Concentration: 1.403 ug/mL

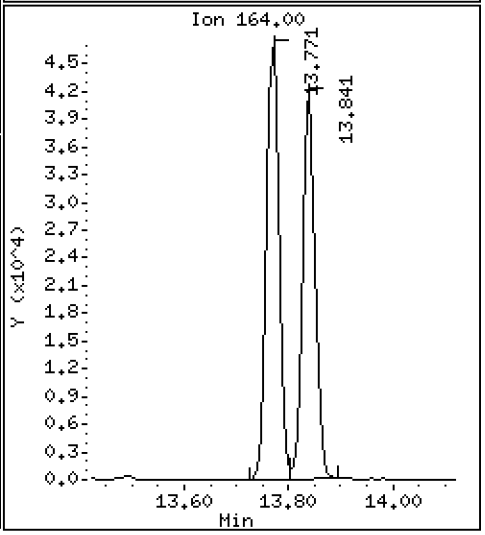


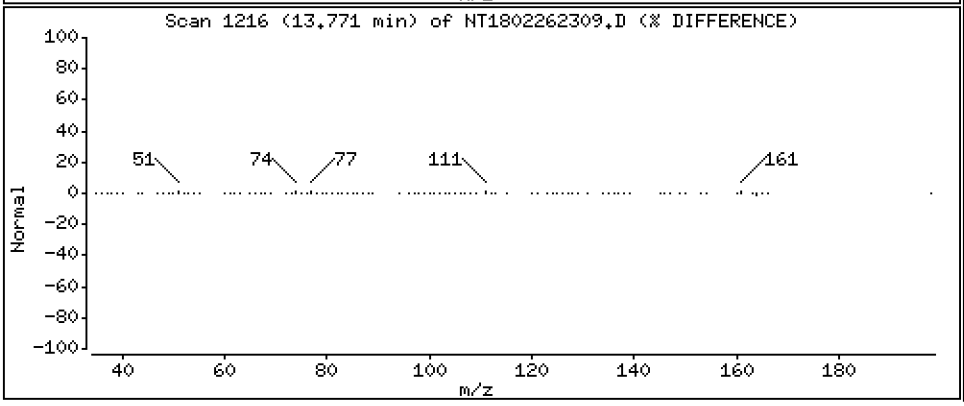












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

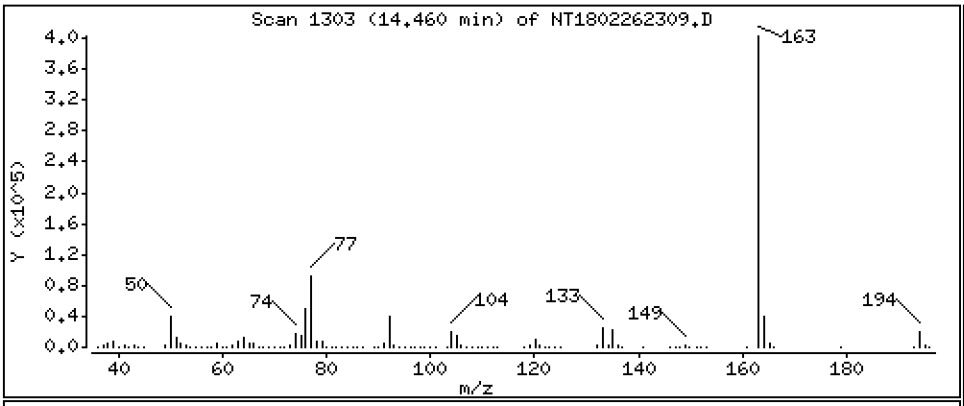
Operator: VTS

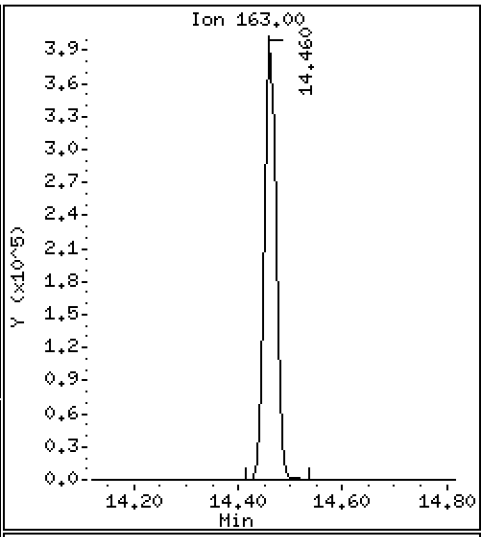
Column phase: ZB-5msi

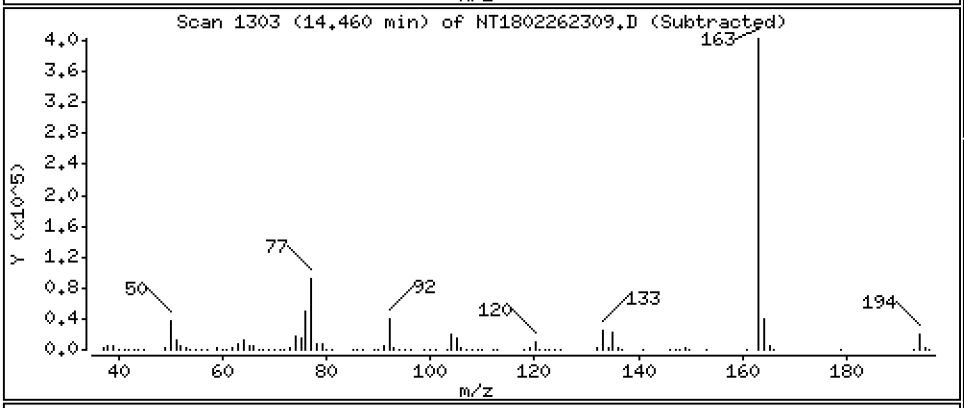
Column diameter: 0.25

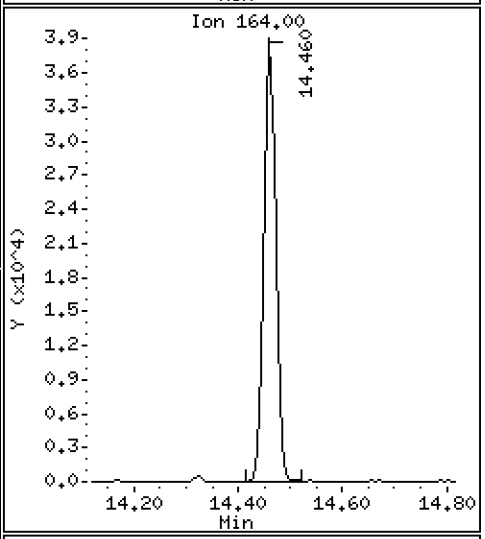
39 Dimethylphthalate

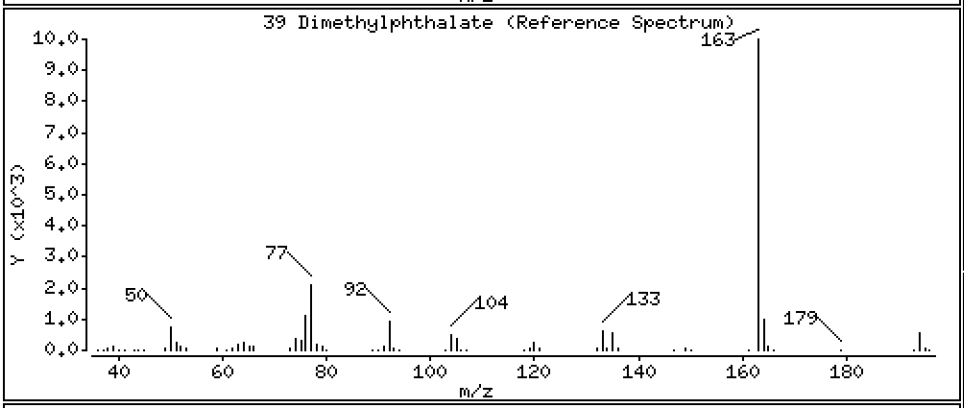
Concentration: 3.287 ug/mL

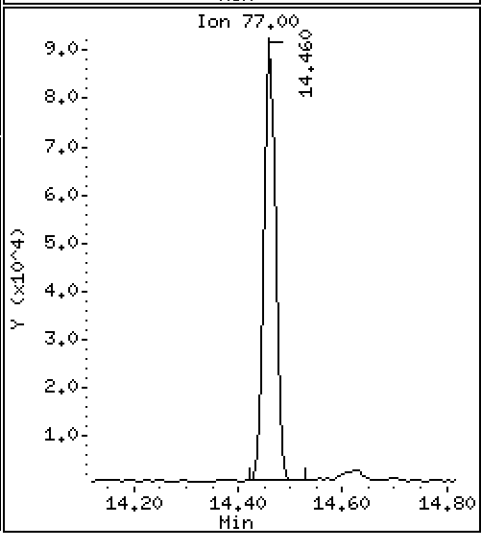


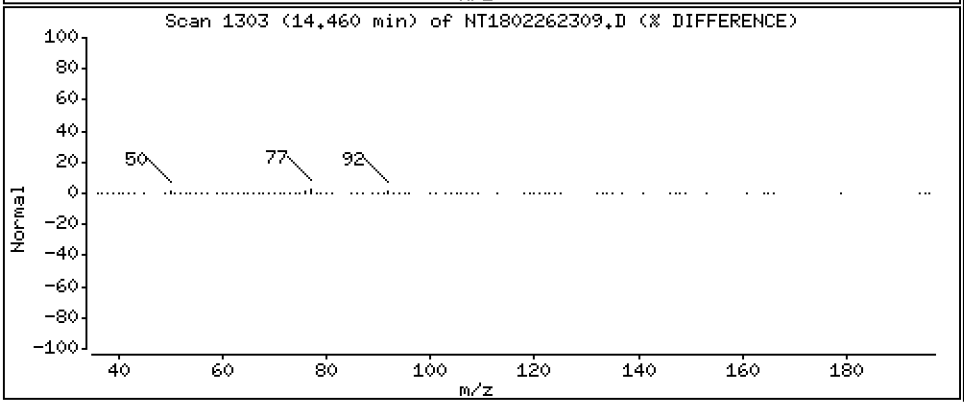












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

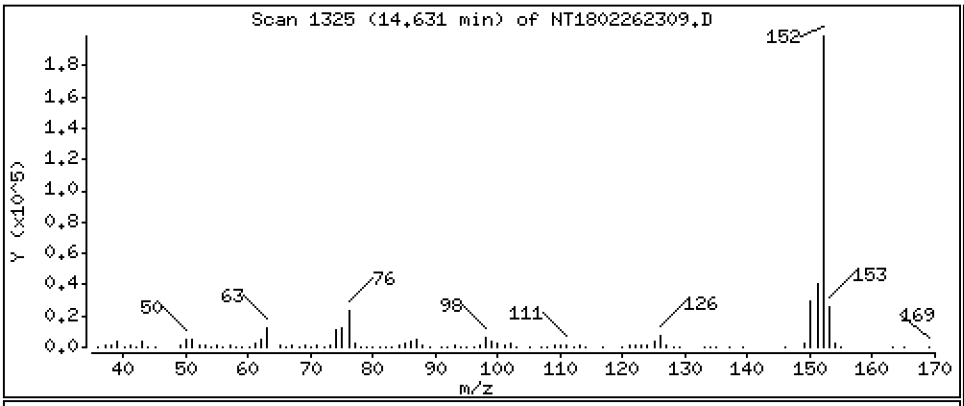
Operator: VTS

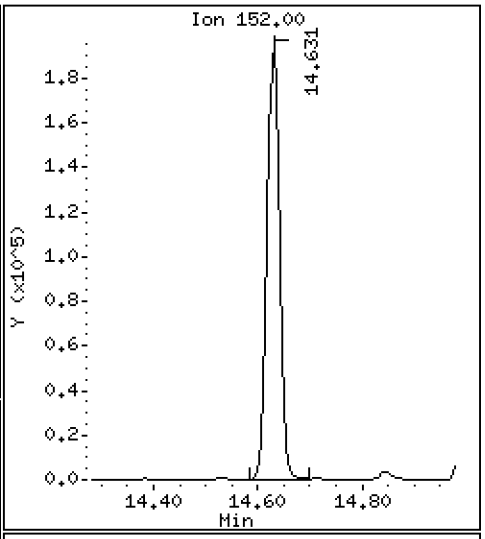
Column phase: ZB-5msi

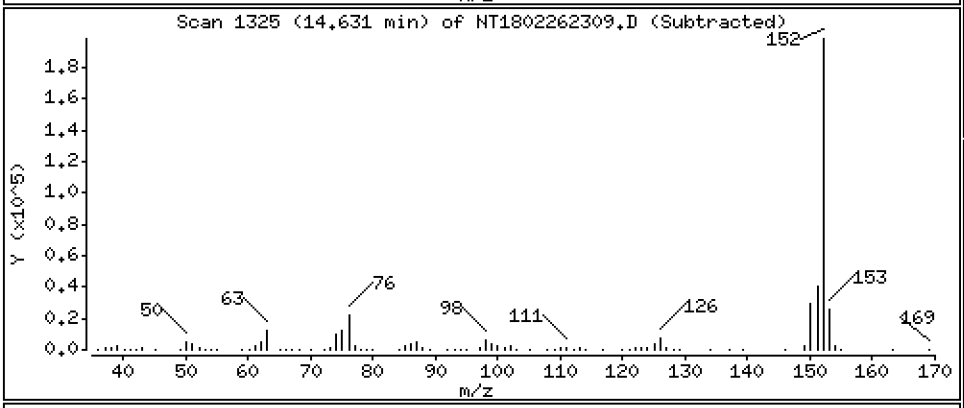
Column diameter: 0.25

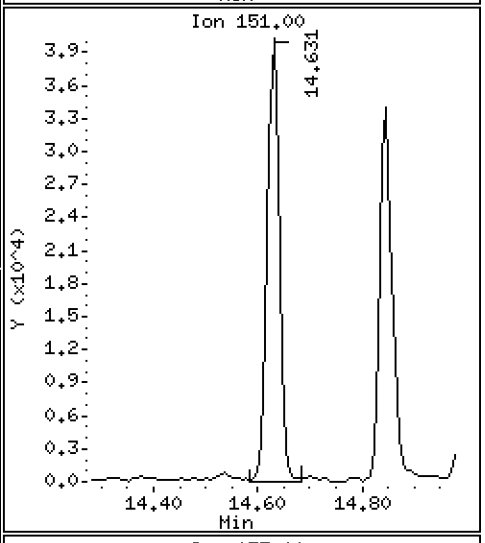
40 Acenaphthylene

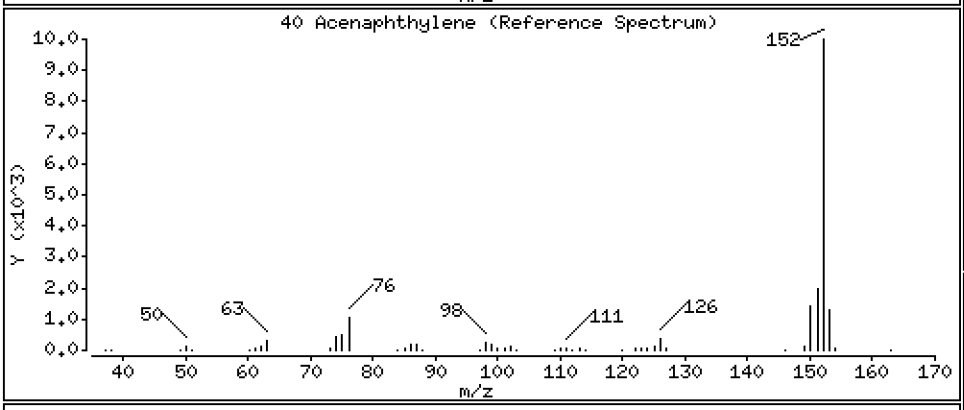
Concentration: 1.115 ug/mL

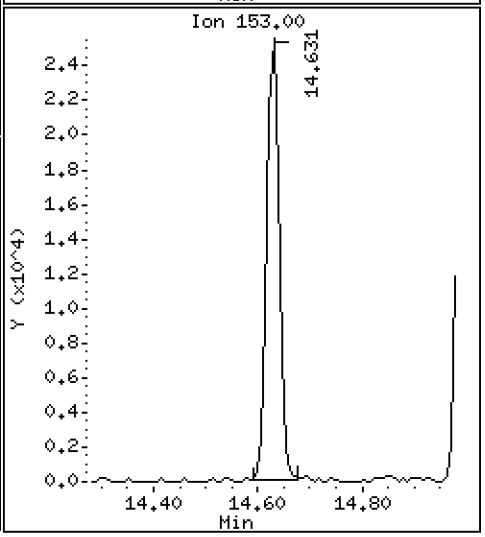


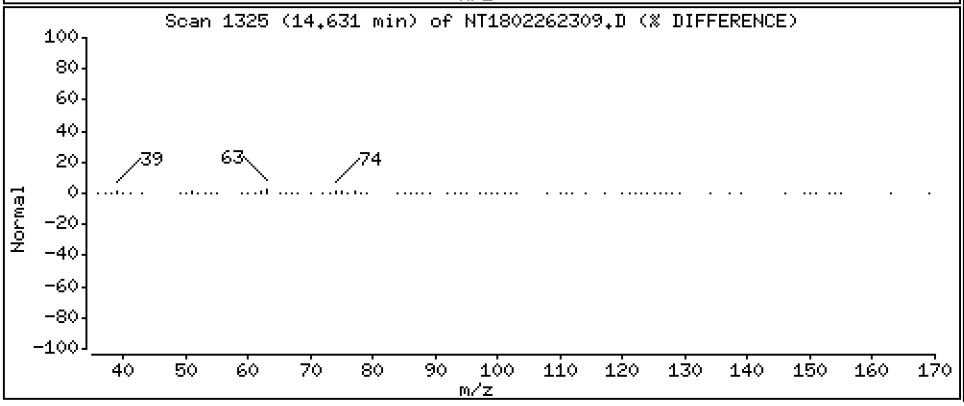












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

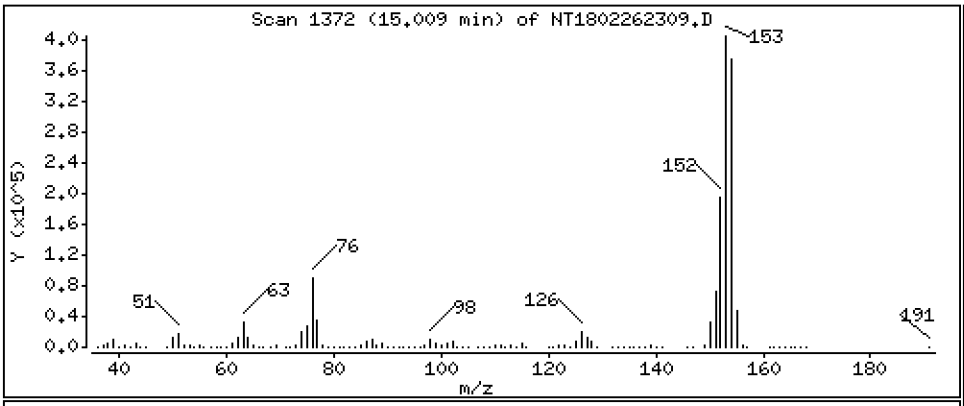
Operator: VTS

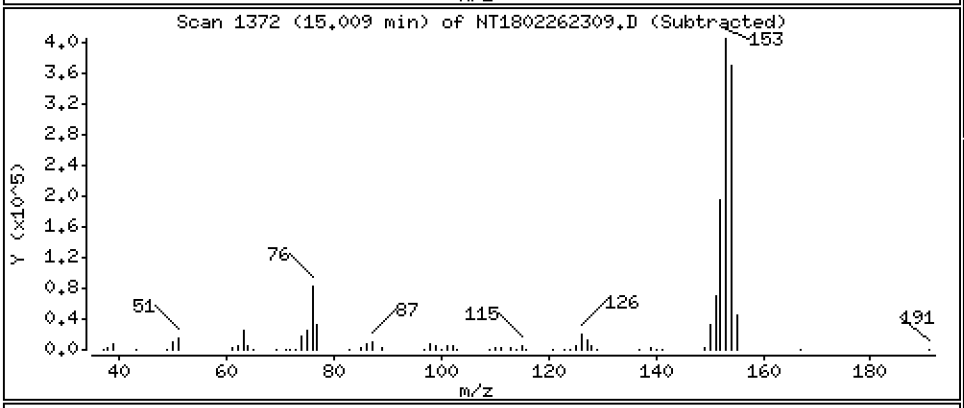
Column phase: ZB-5msi

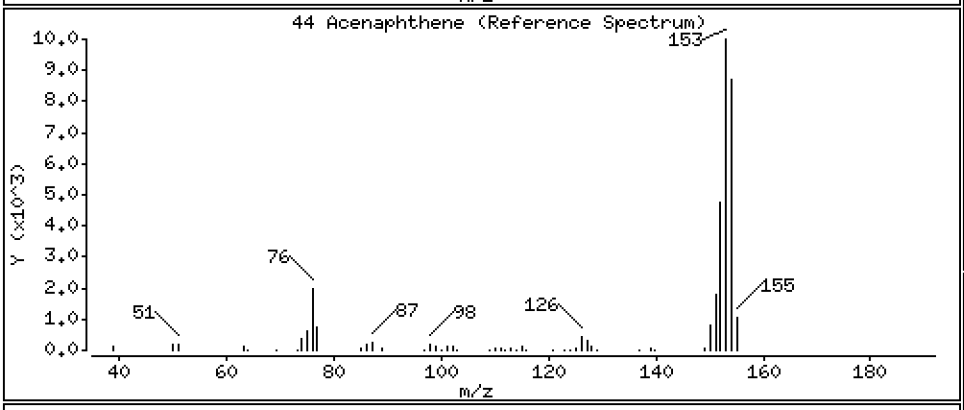
Column diameter: 0.25

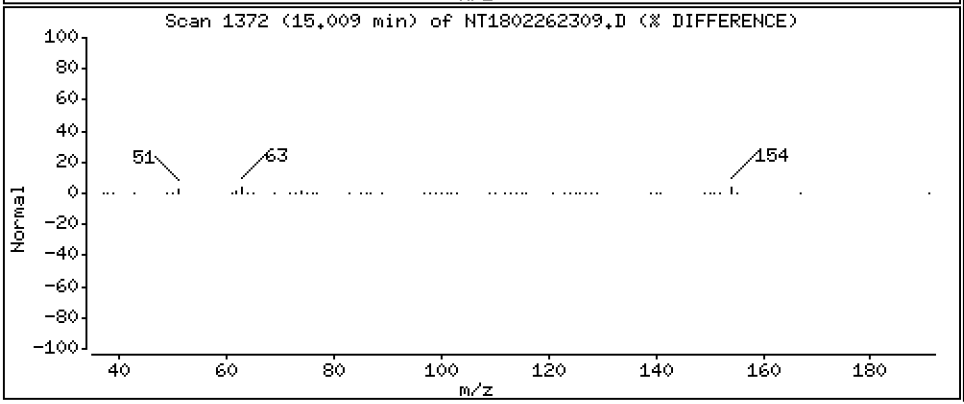
44 Acenaphthene

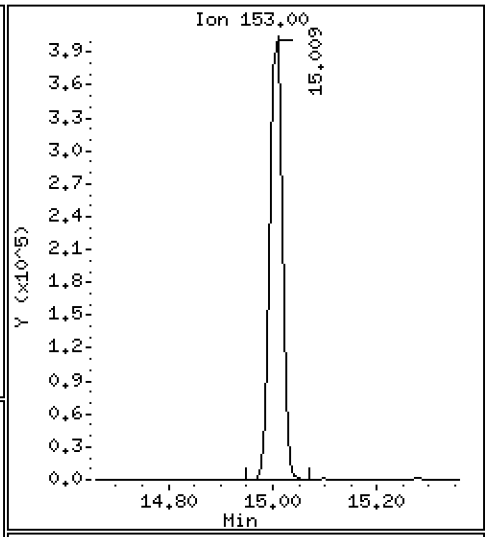
Concentration: 3.610 ug/mL

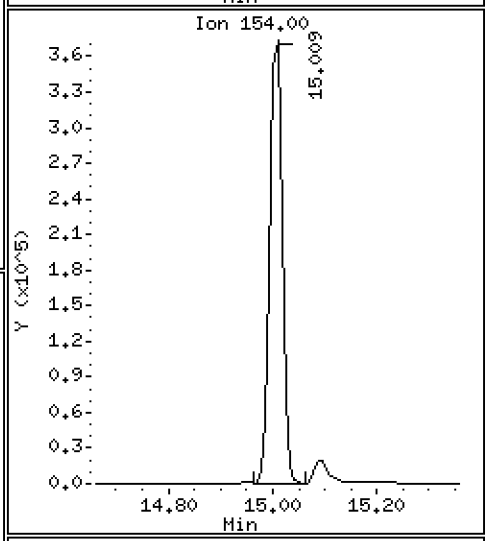


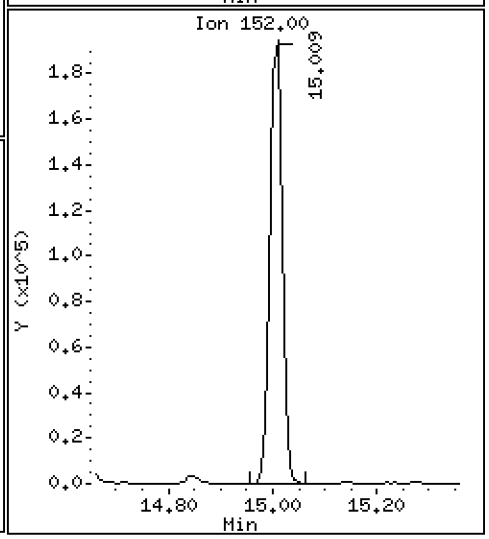












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

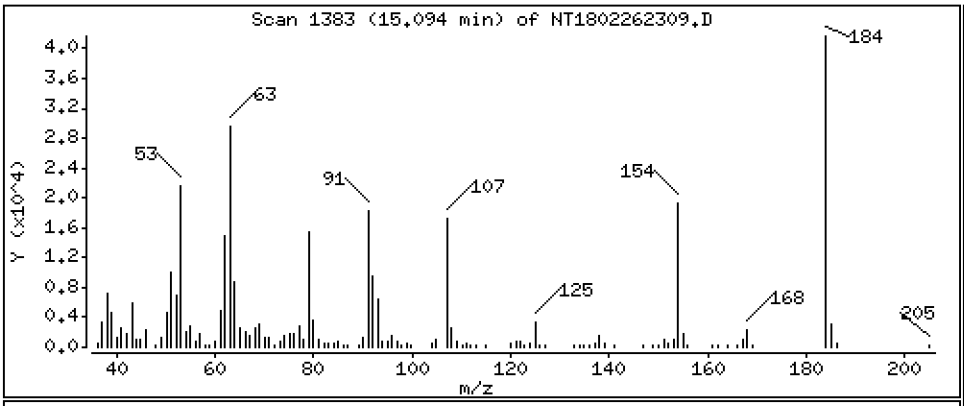
Operator: VTS

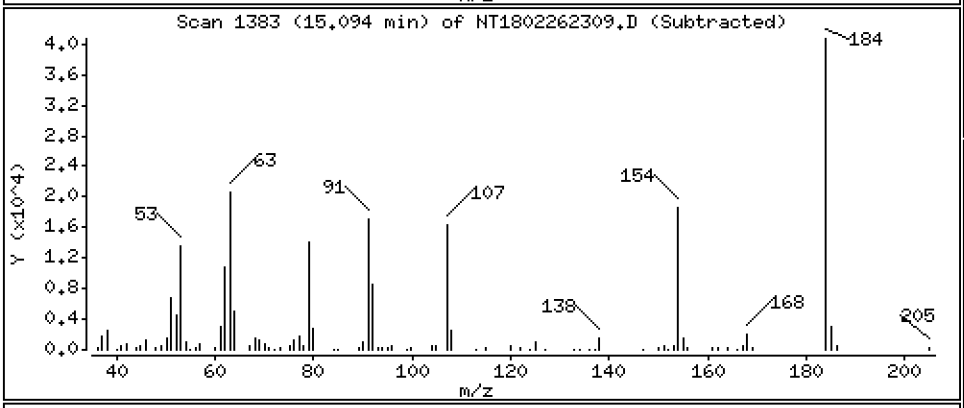
Column phase: ZB-5msi

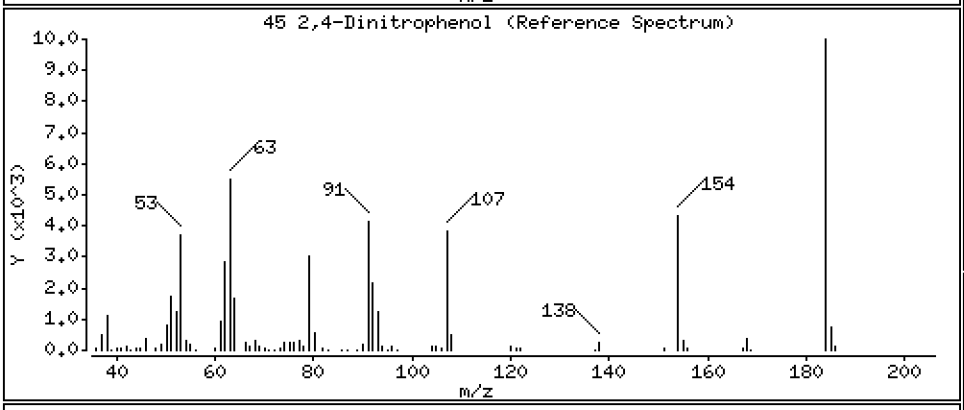
Column diameter: 0.25

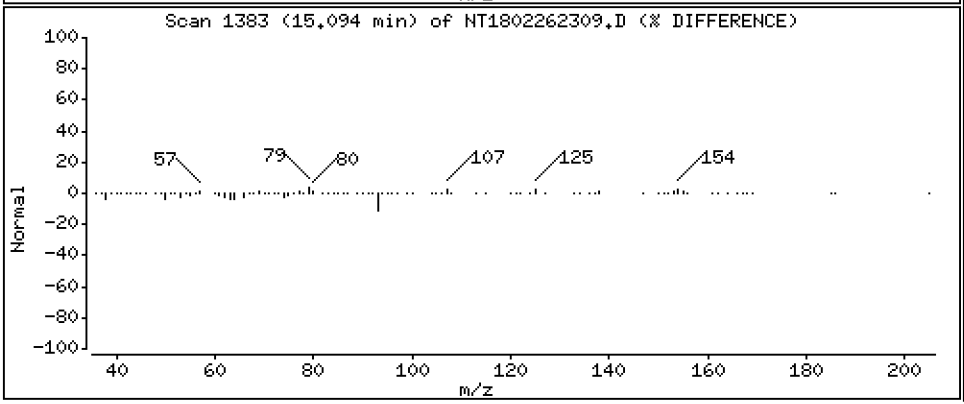
45 2,4-Dinitrophenol

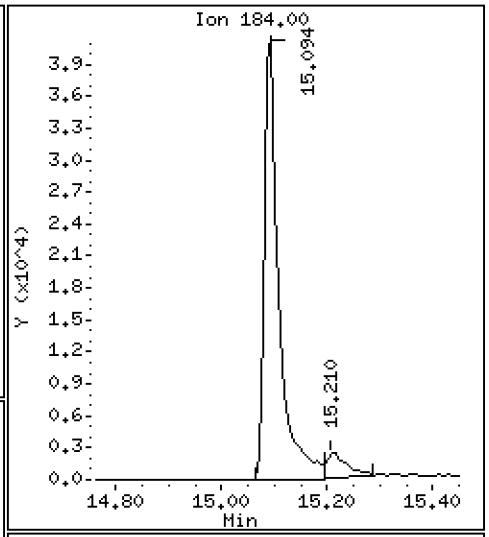
Concentration: 4.188 ug/mL

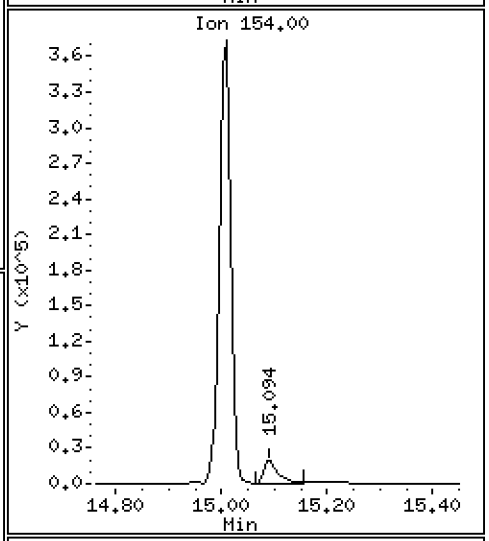


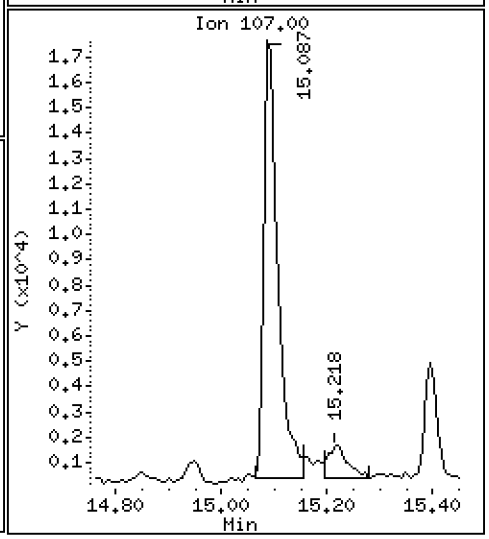












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

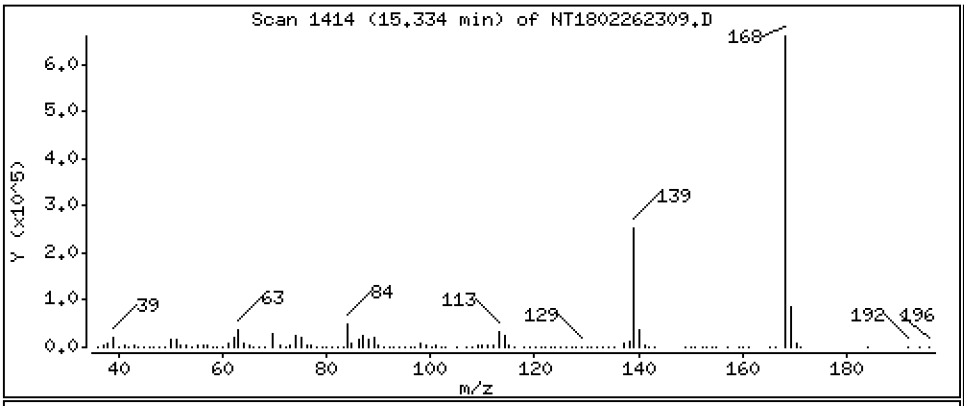
Operator: VTS

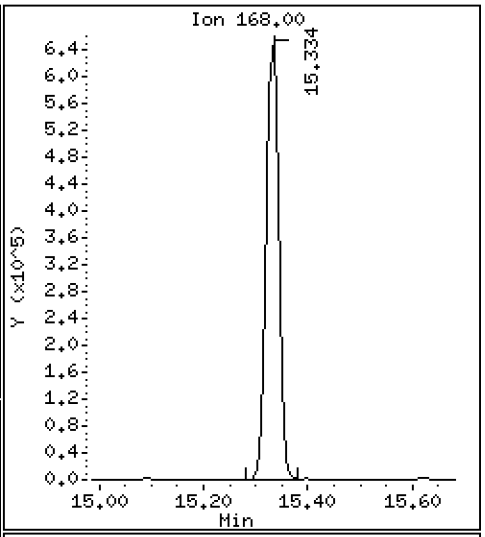
Column phase: ZB-5msi

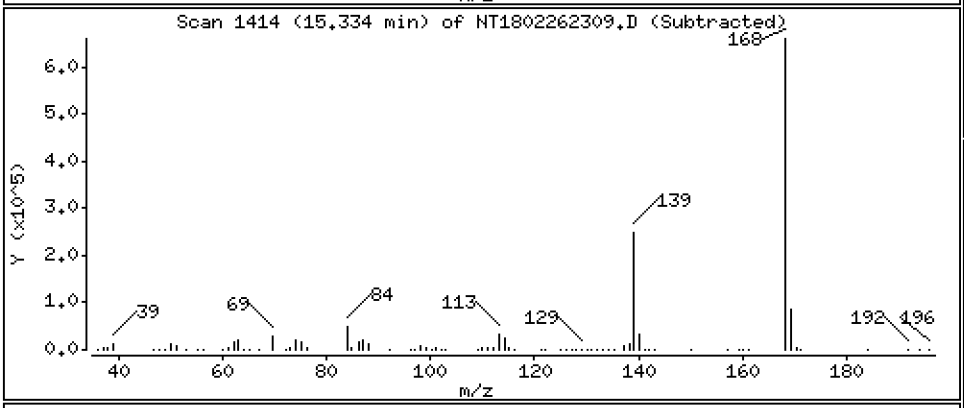
Column diameter: 0.25

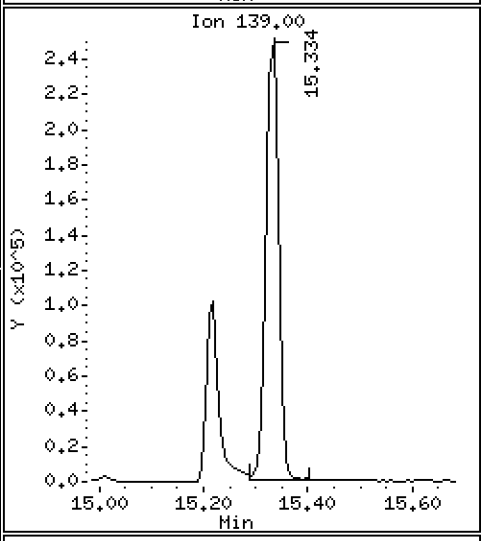
46 Dibenzofuran

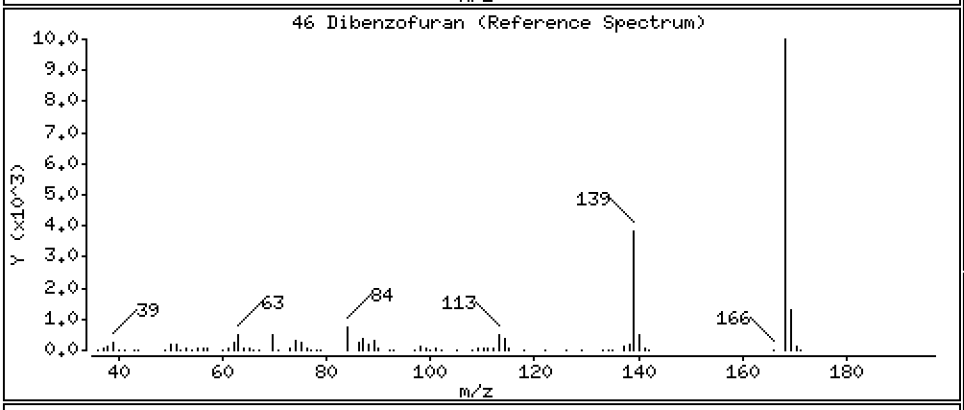
Concentration: 4.038 ug/mL

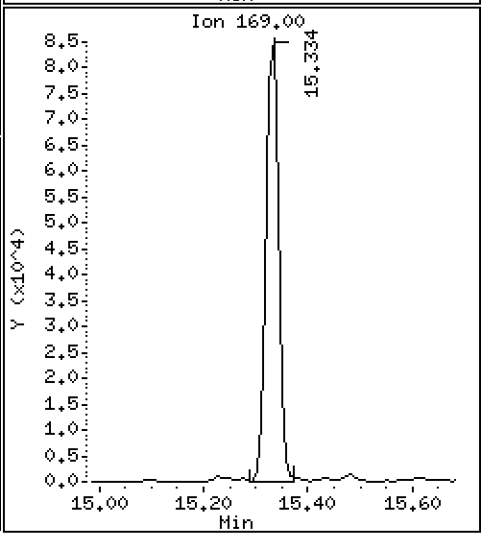


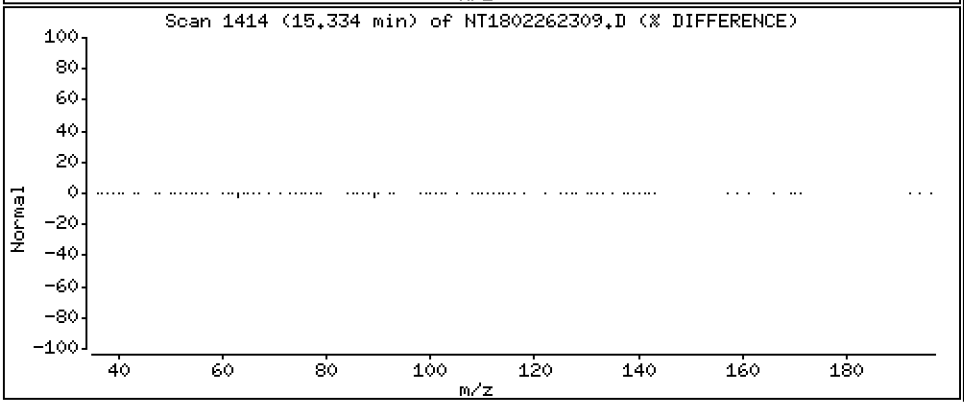












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

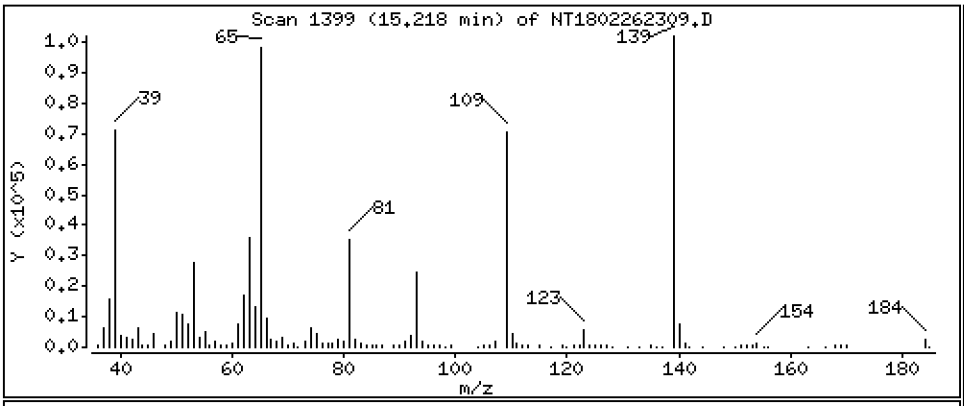
Operator: VTS

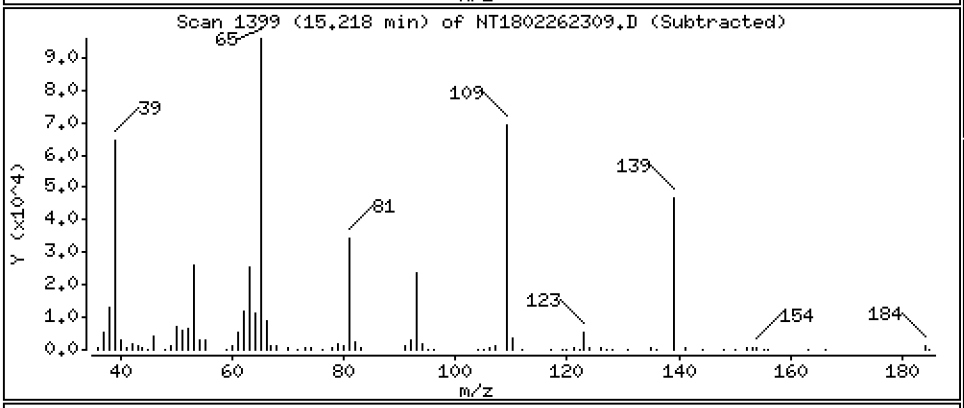
Column phase: ZB-5msi

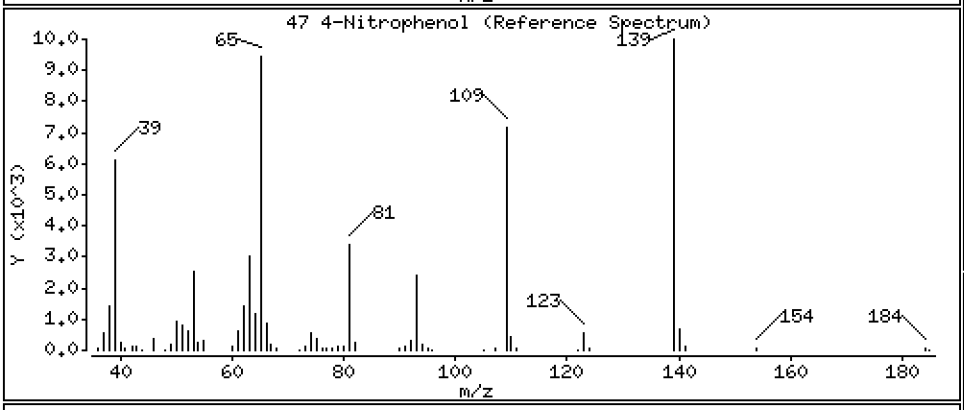
Column diameter: 0.25

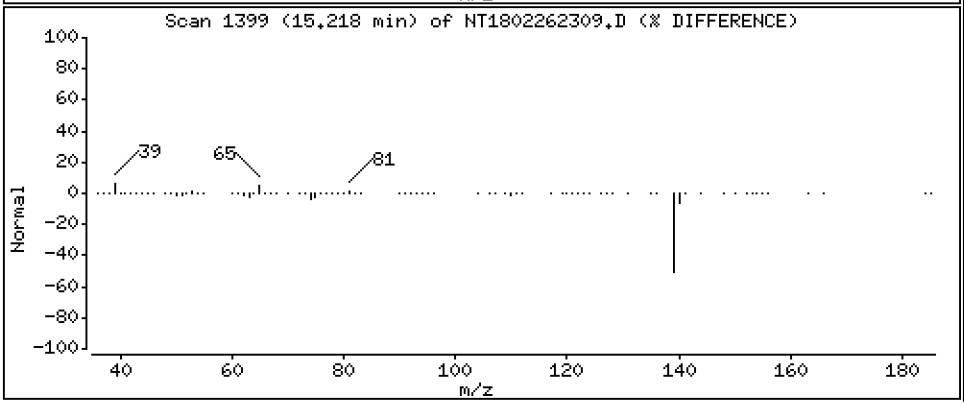
47 4-Nitrophenol

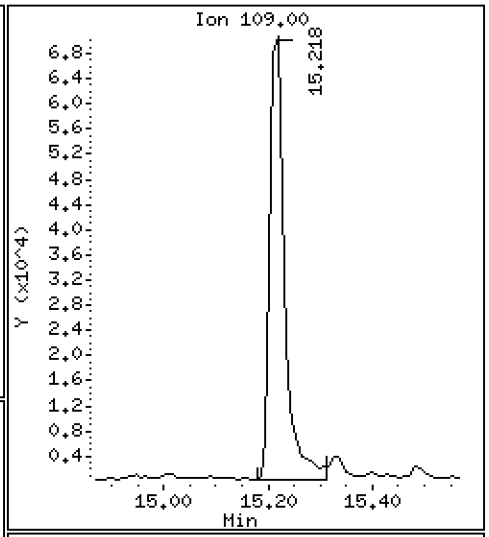
Concentration: 6.906 ug/mL

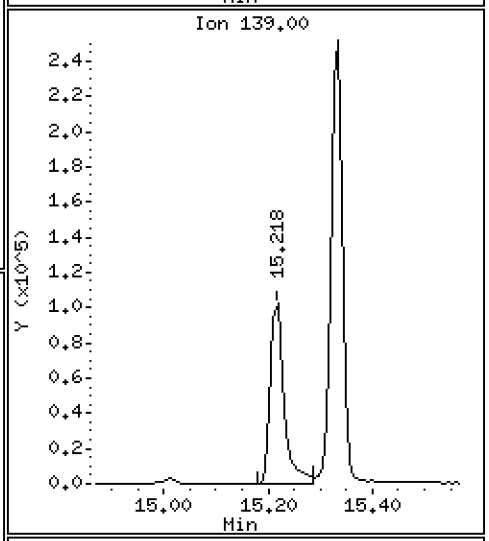


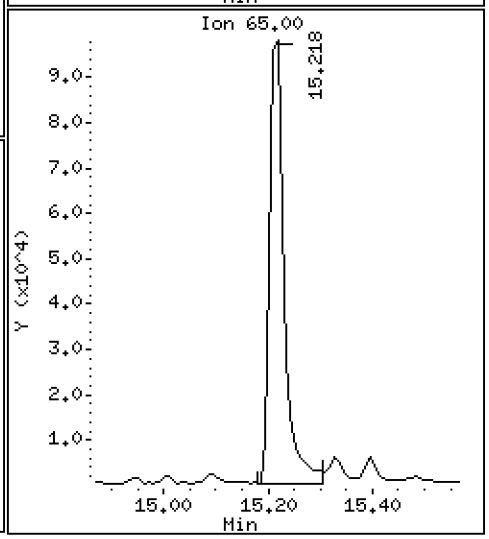












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

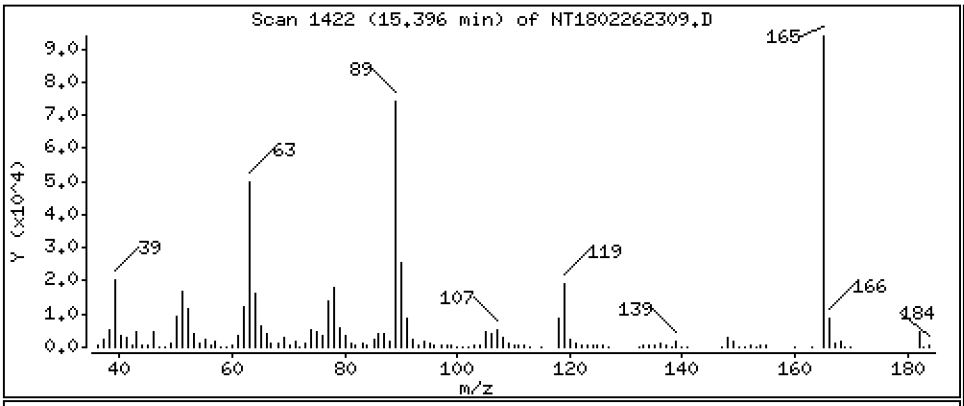
Operator: VTS

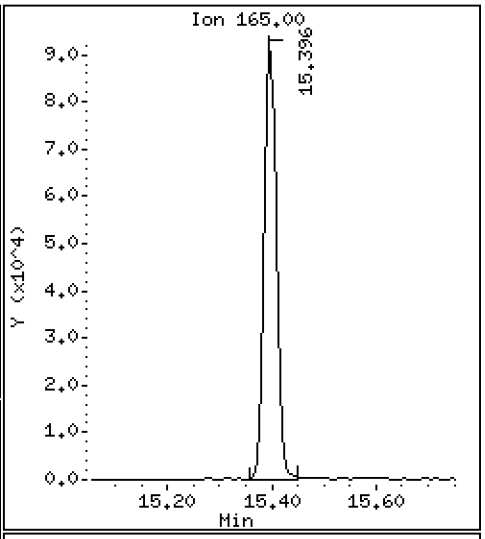
Column phase: ZB-5msi

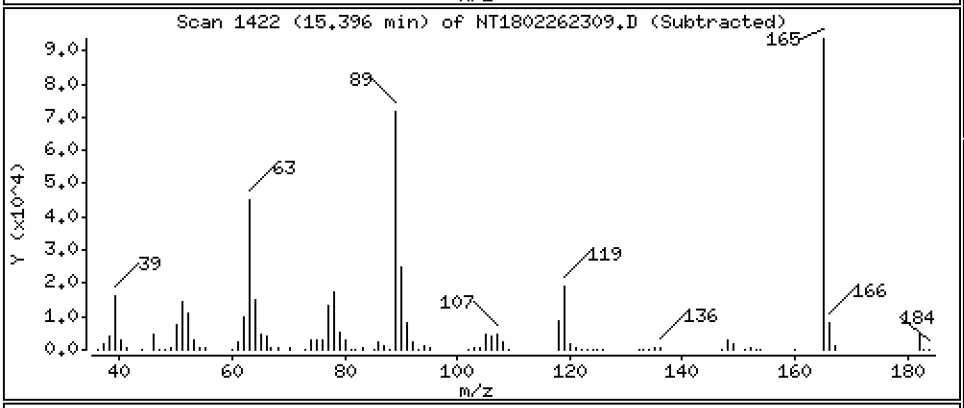
Column diameter: 0.25

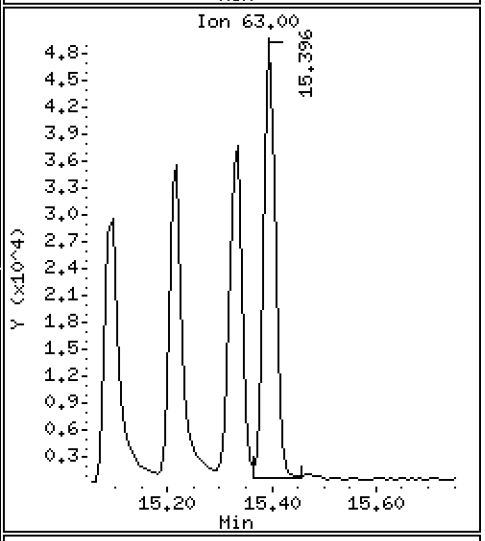
48 2,4-Dinitrotoluene

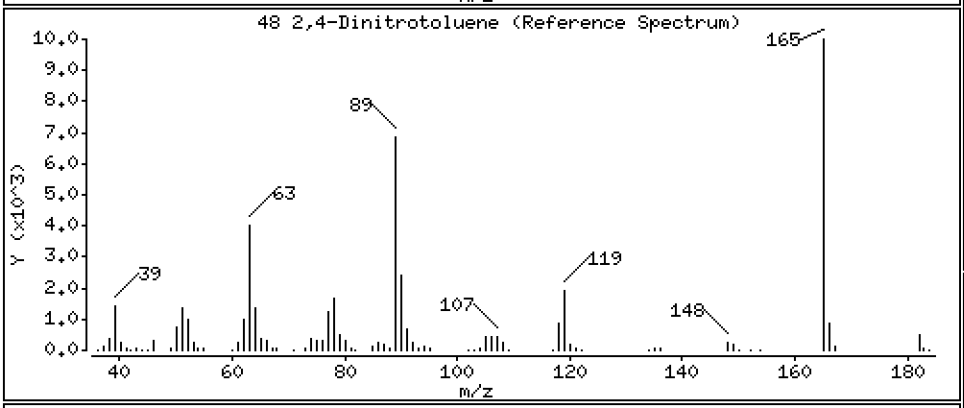
Concentration: 2.544 ug/mL

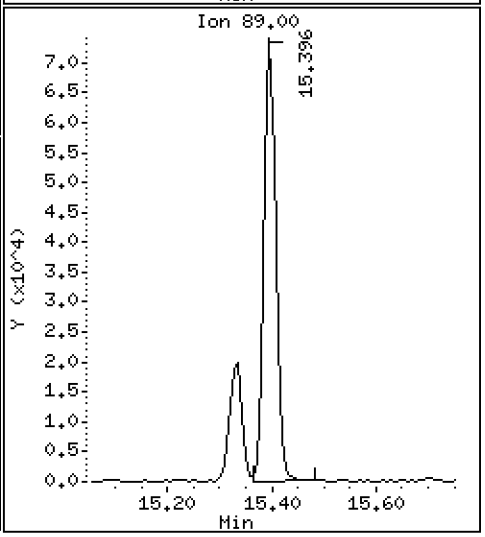


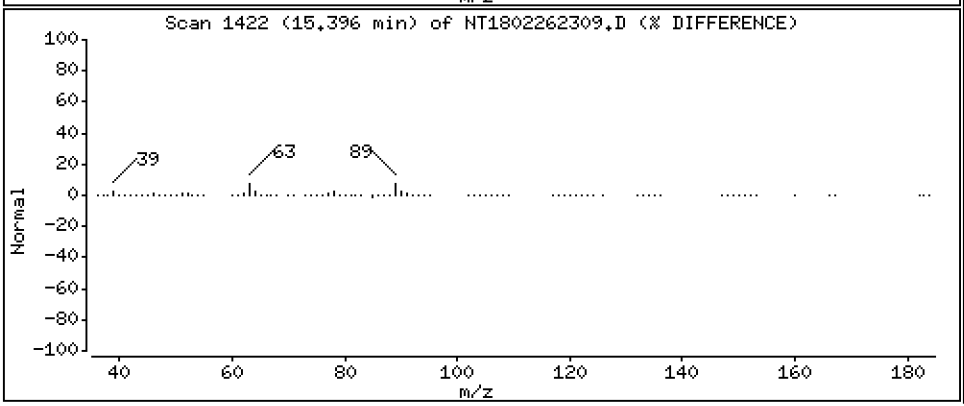












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

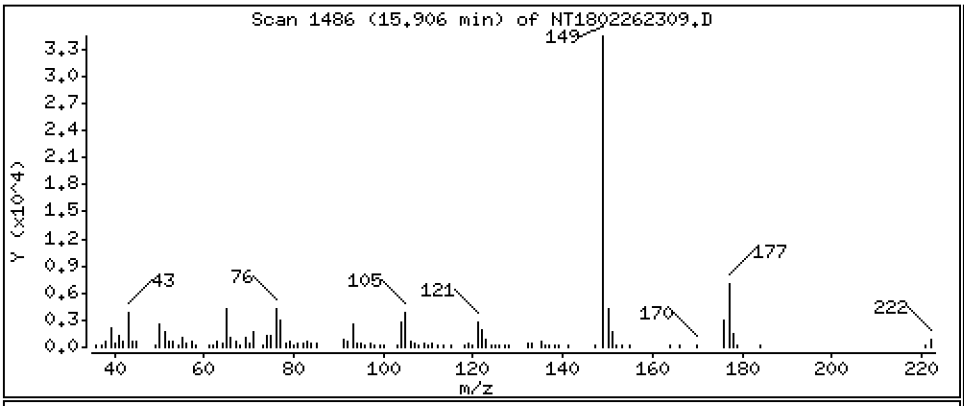
Operator: VTS

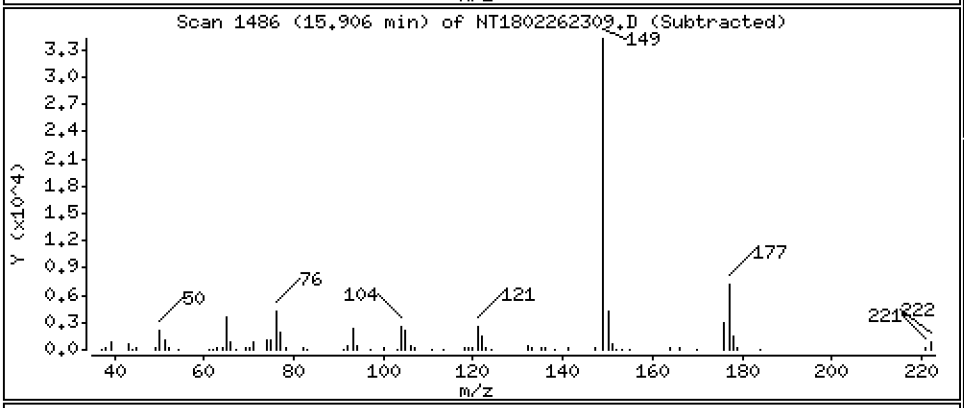
Column phase: ZB-5msi

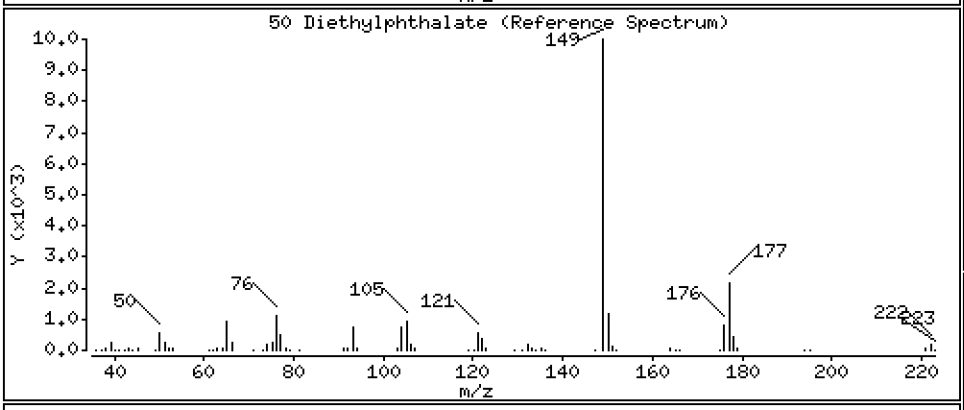
Column diameter: 0.25

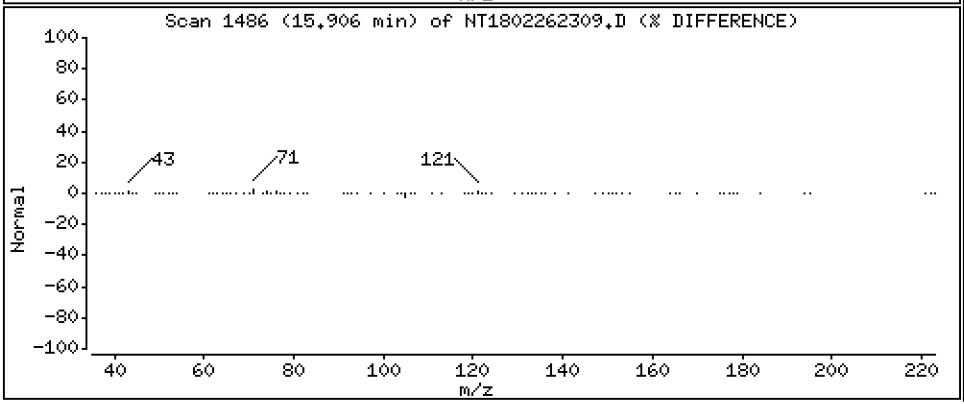
50 Diethylphthalate

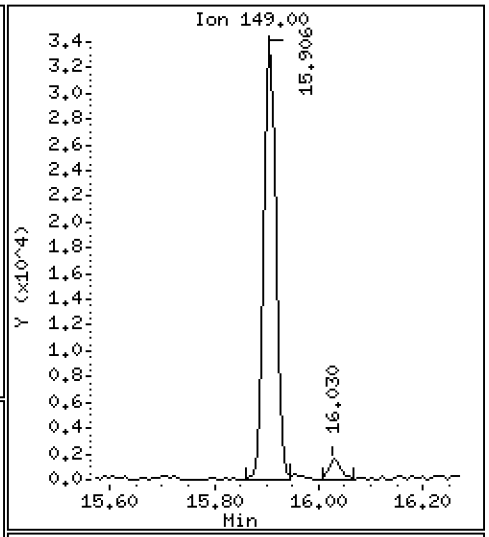
Concentration: 0.2790 ug/mL

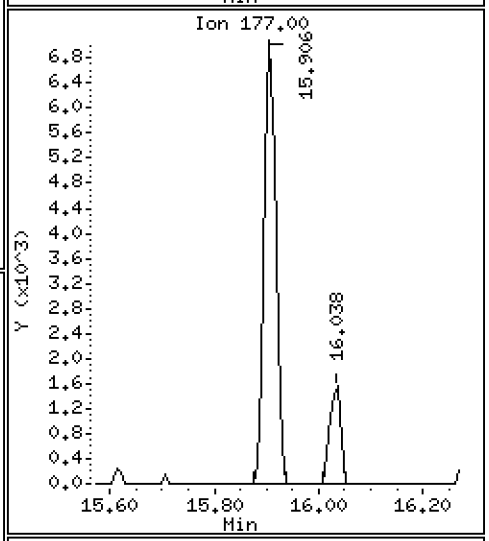


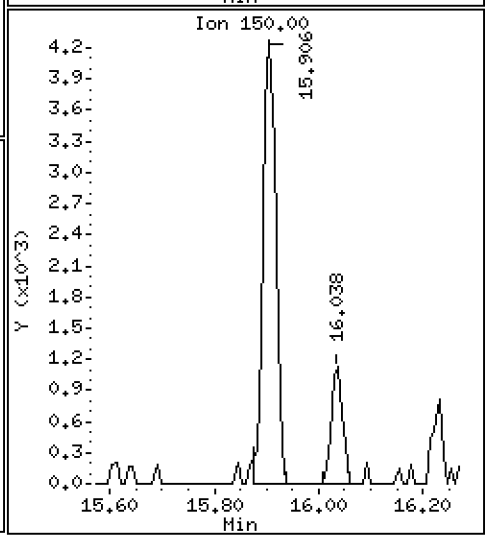












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

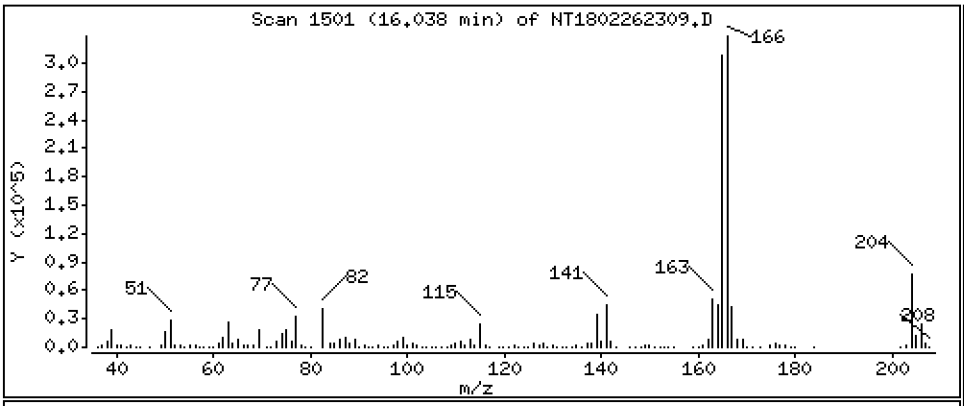
Operator: VTS

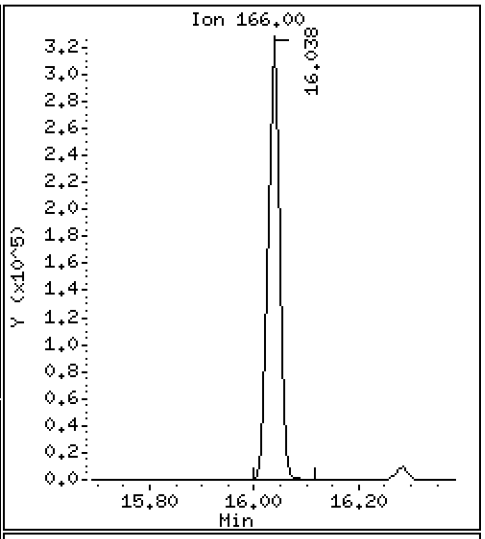
Column phase: ZB-5msi

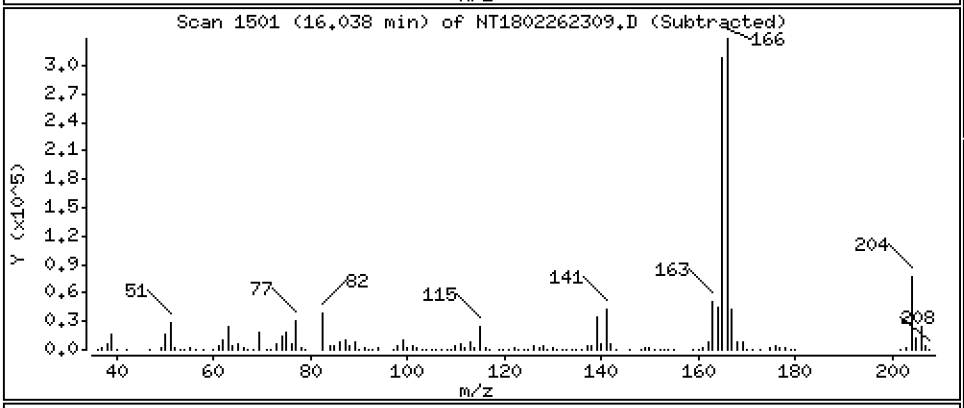
Column diameter: 0.25

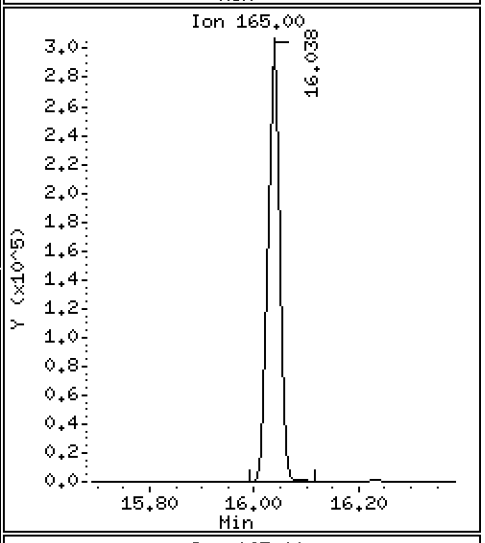
49 Fluorene

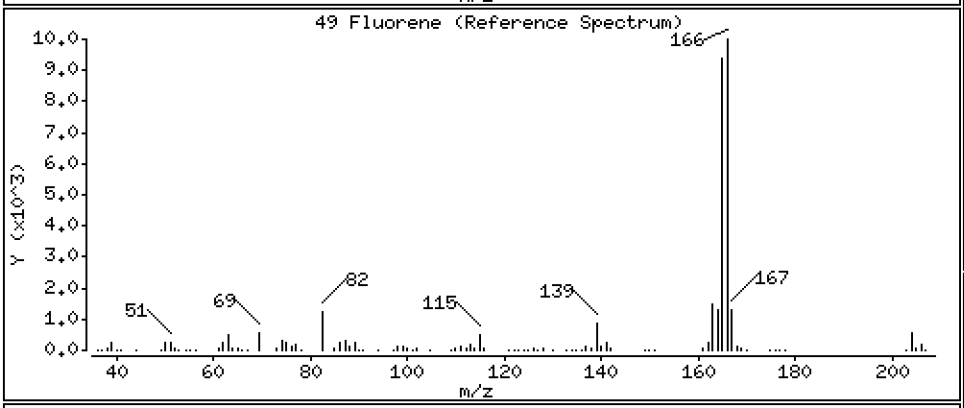
Concentration: 2.386 ug/mL

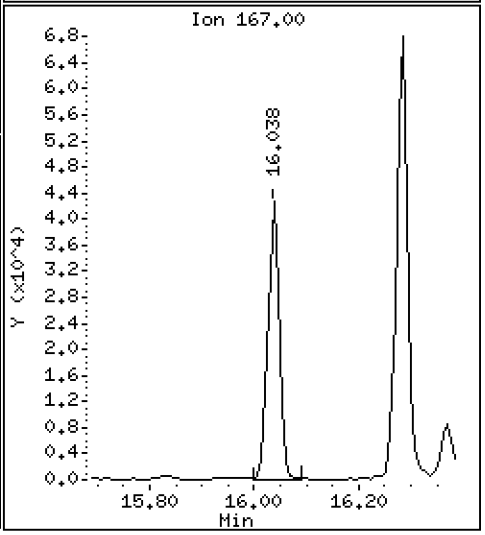


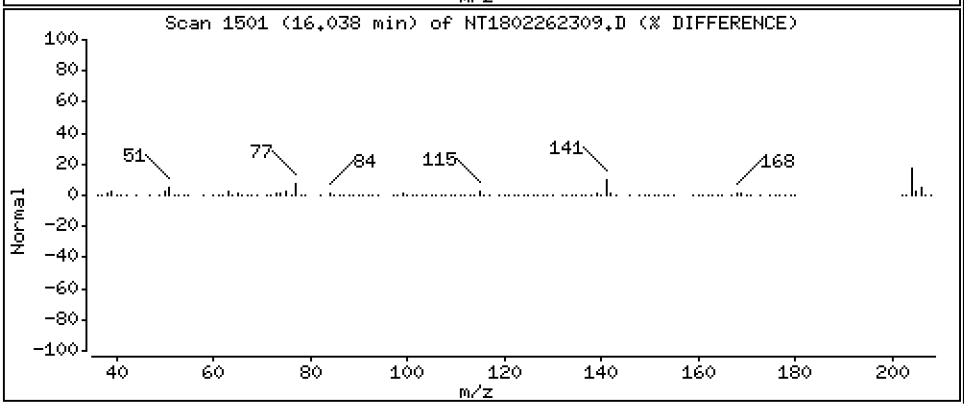












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

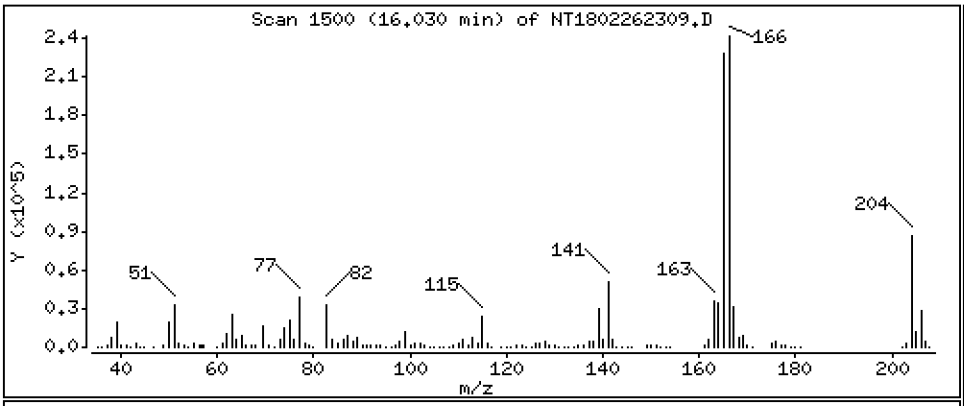
Operator: VTS

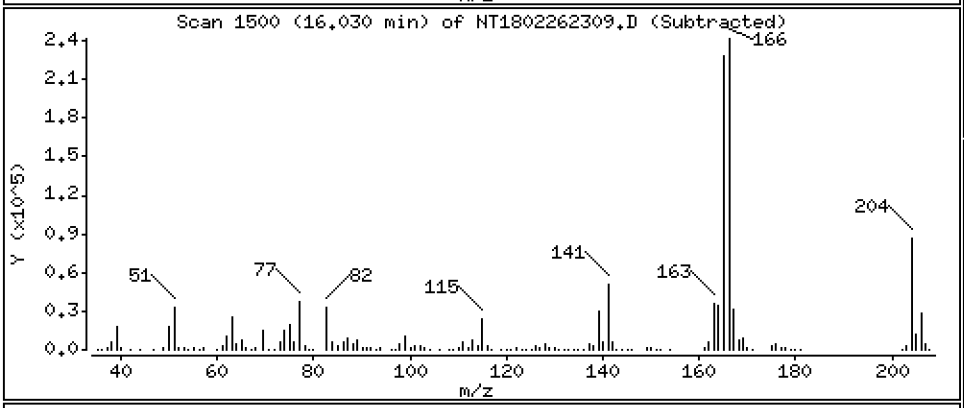
Column phase: ZB-5msi

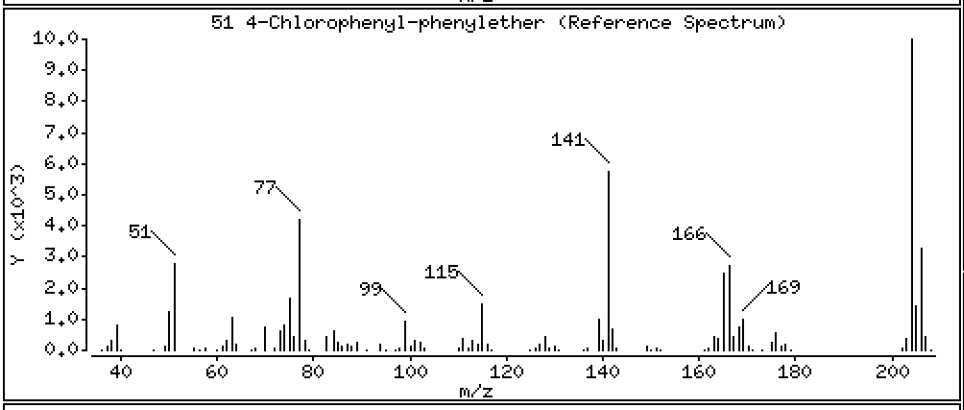
Column diameter: 0.25

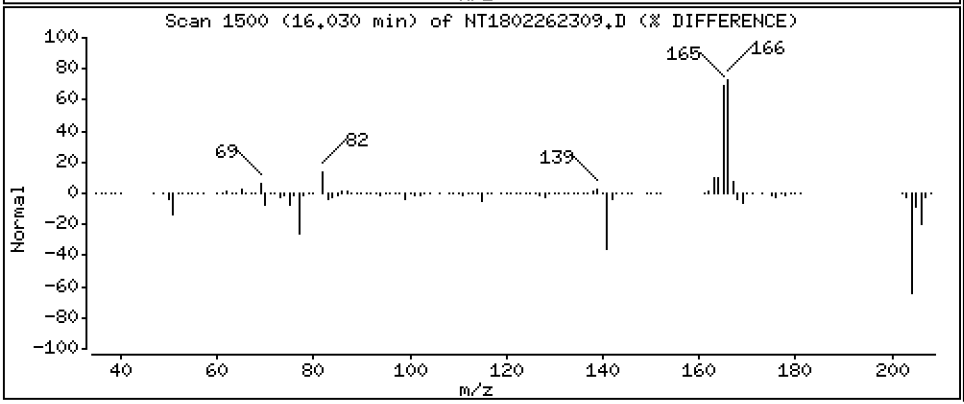
51 4-Chlorophenyl-phenylether

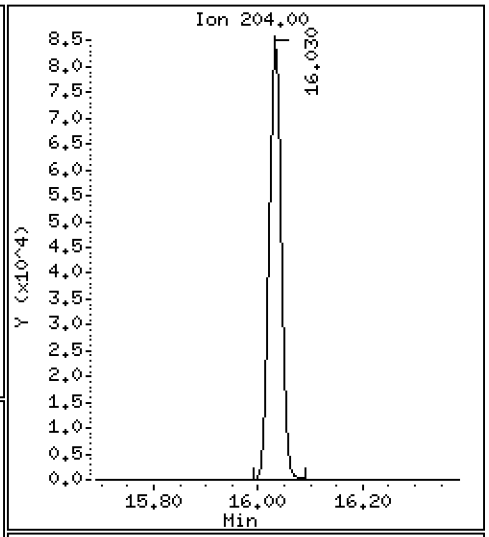
Concentration: 1.383 ug/mL

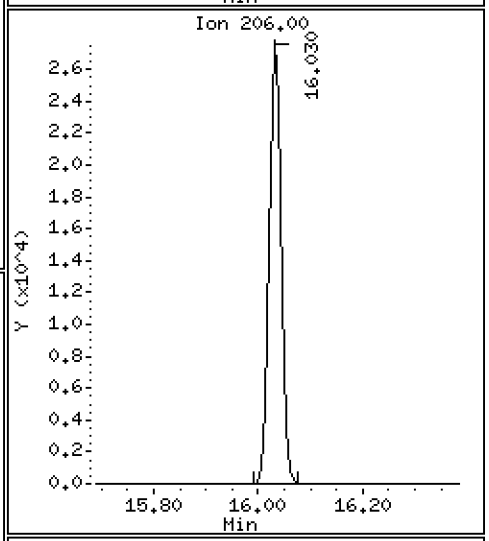


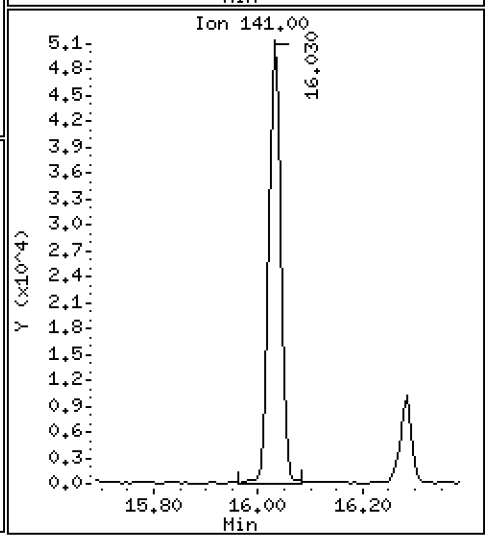












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

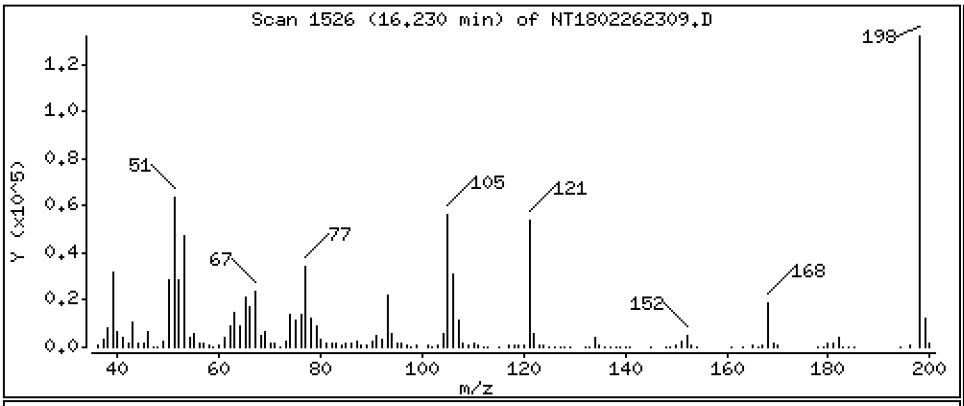
Operator: VTS

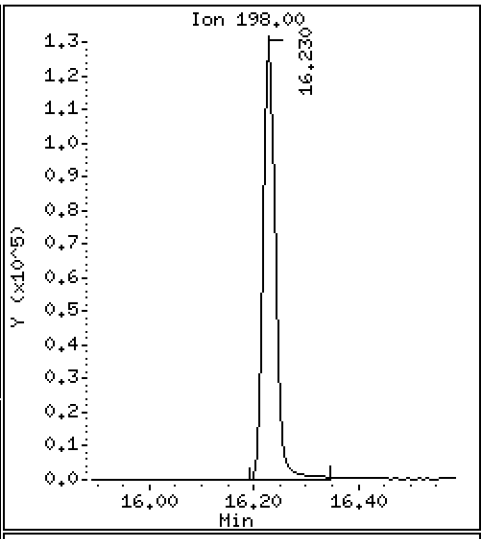
Column phase: ZB-5msi

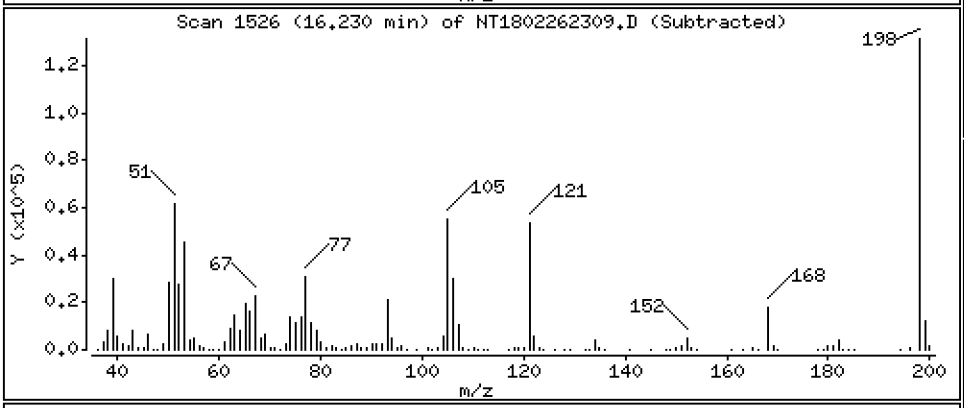
Column diameter: 0.25

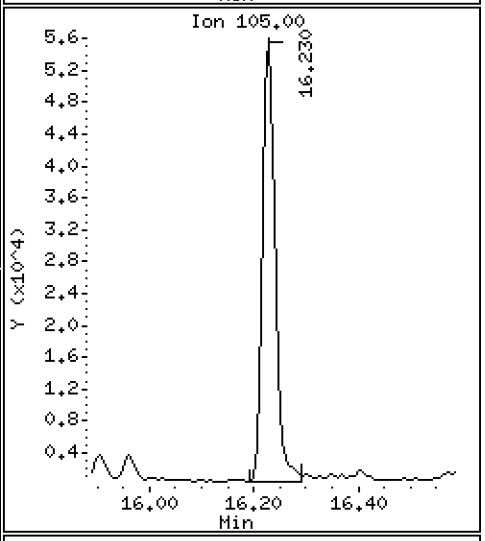
53 4,6-Dinitro-2-methylphenol

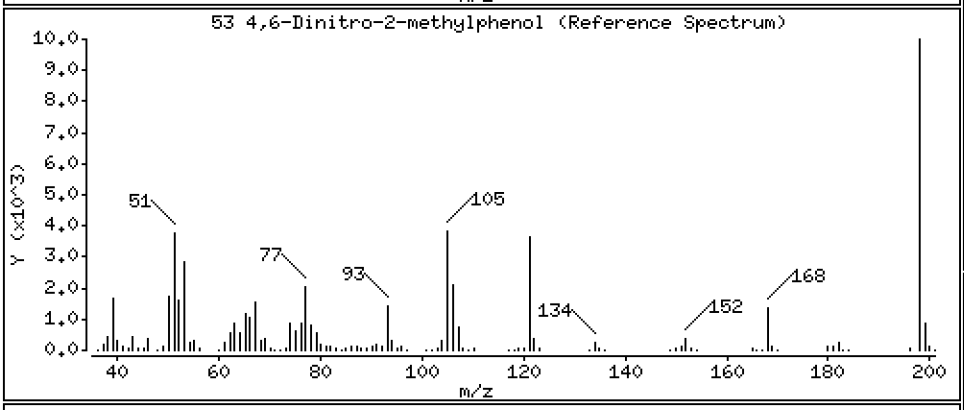
Concentration: 6.287 ug/mL

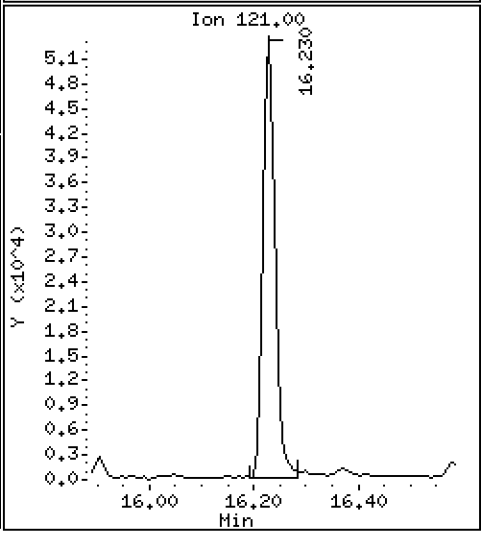


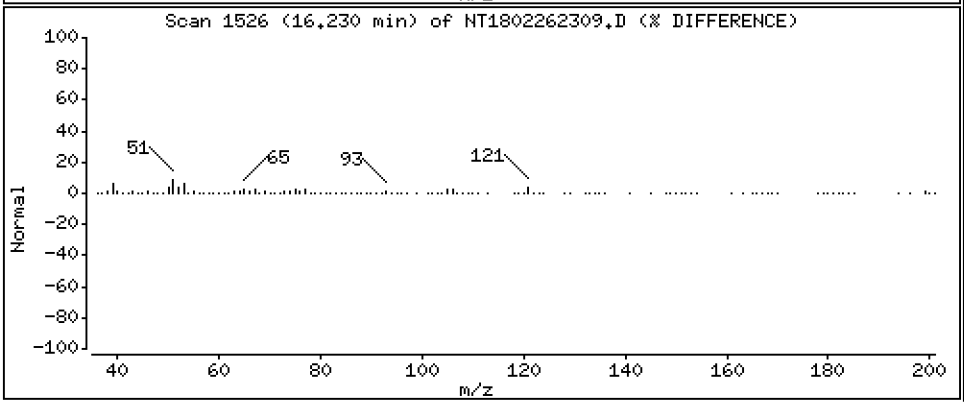












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

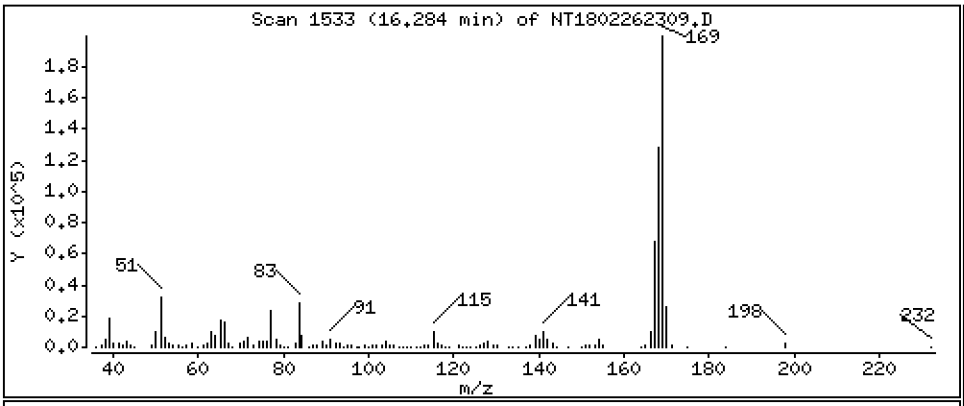
Operator: VTS

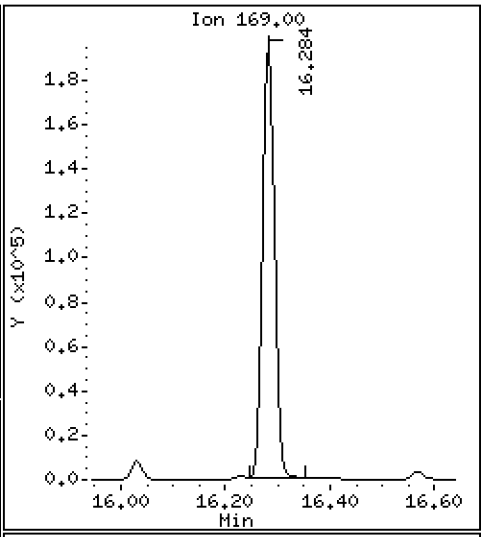
Column phase: ZB-5msi

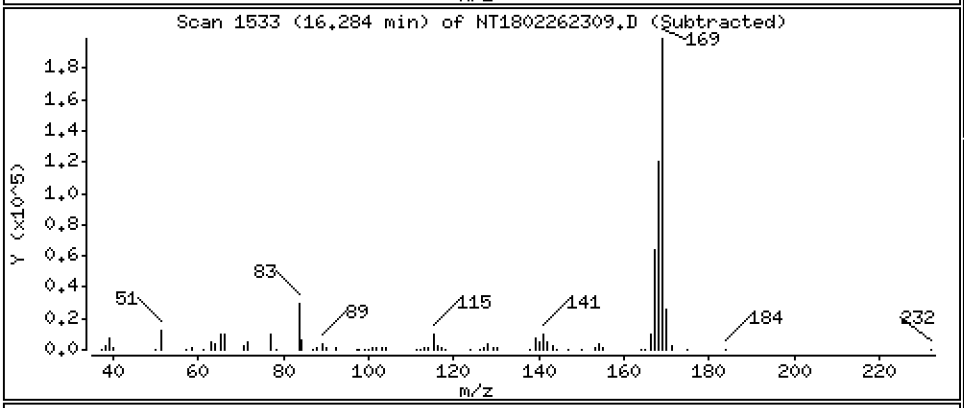
Column diameter: 0.25

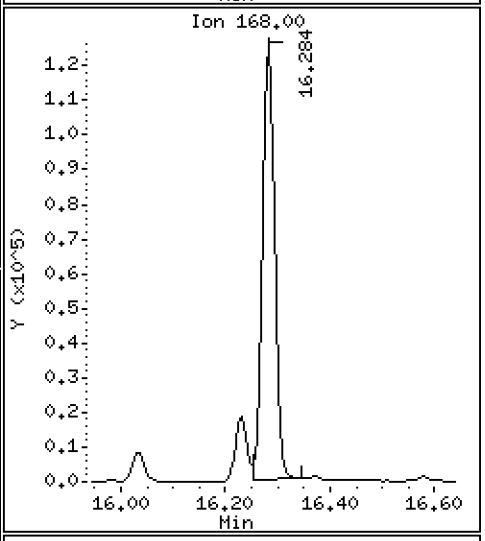
54 N-Nitrosodiphenylamine

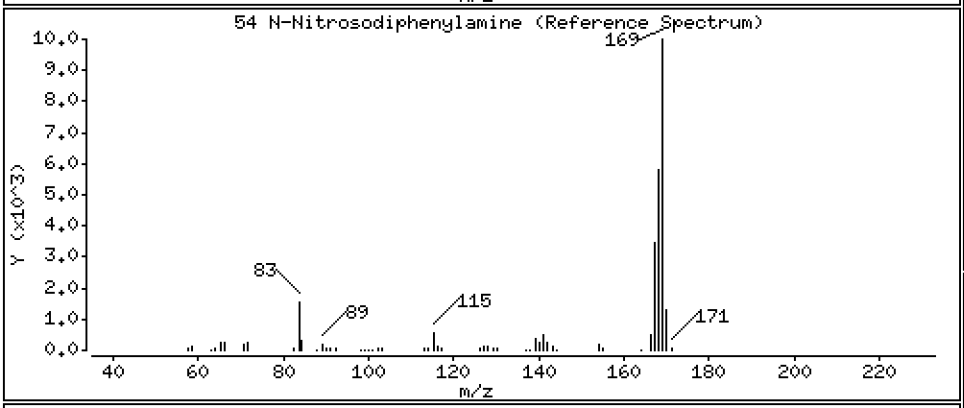
Concentration: 2.174 ug/mL

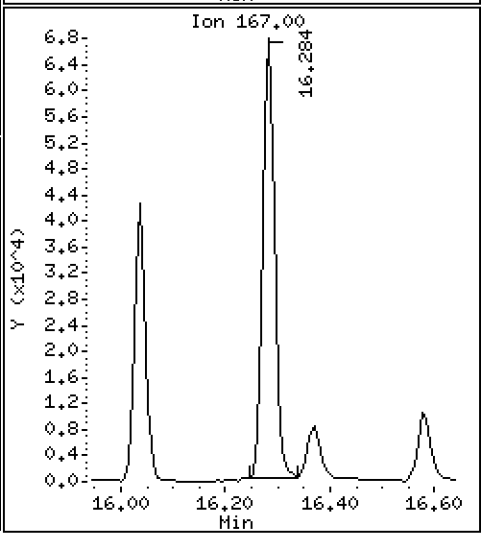


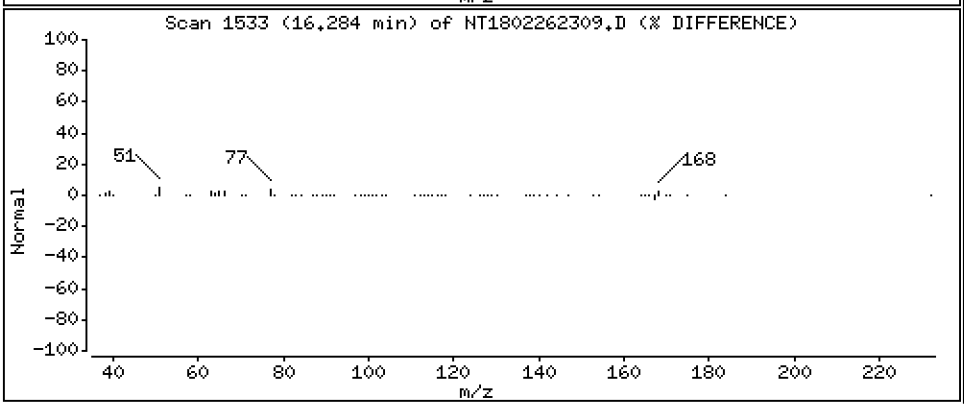












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

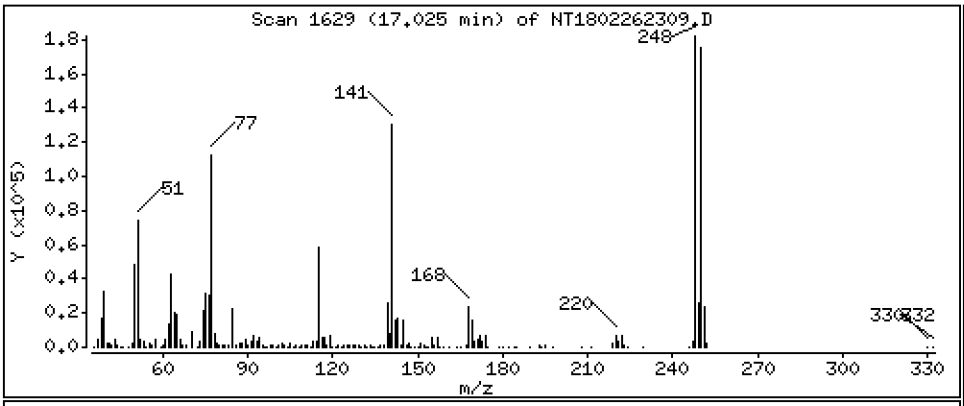
Operator: VTS

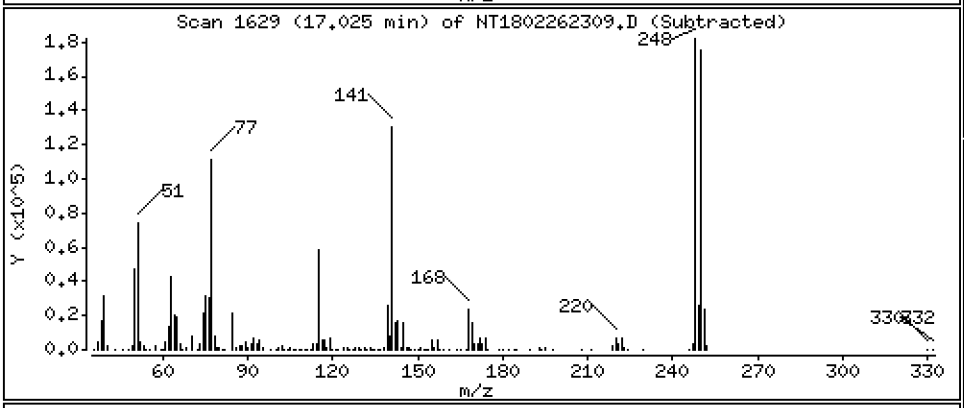
Column phase: ZB-5msi

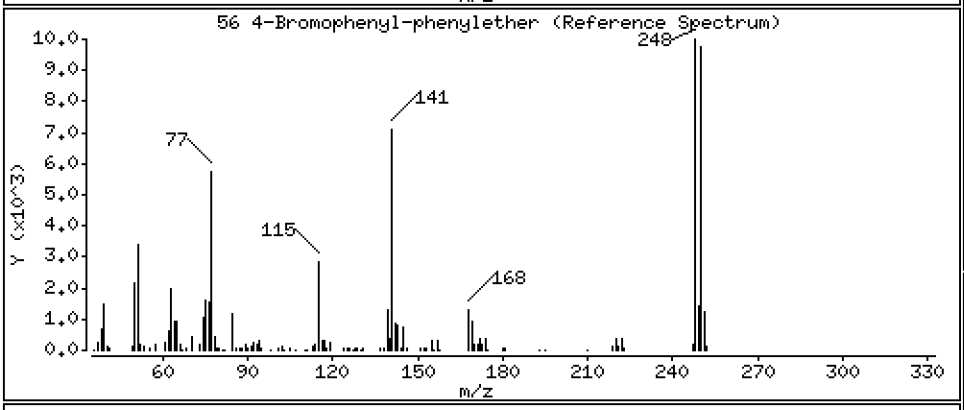
Column diameter: 0.25

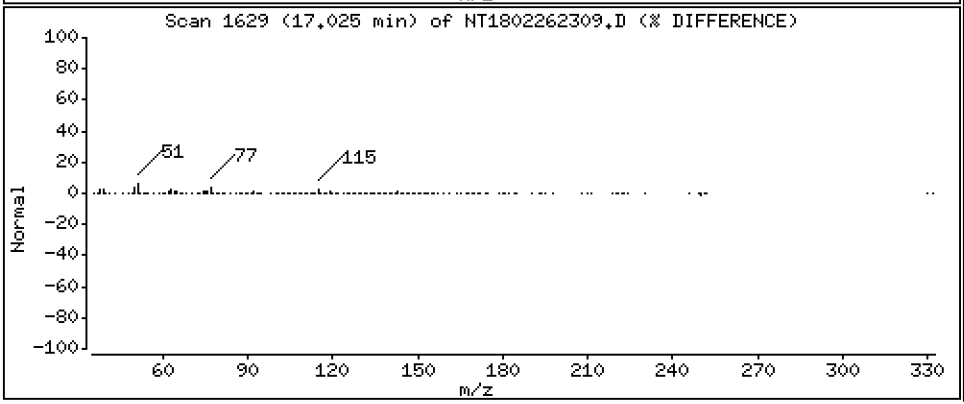
56 4-Bromophenyl-phenylether

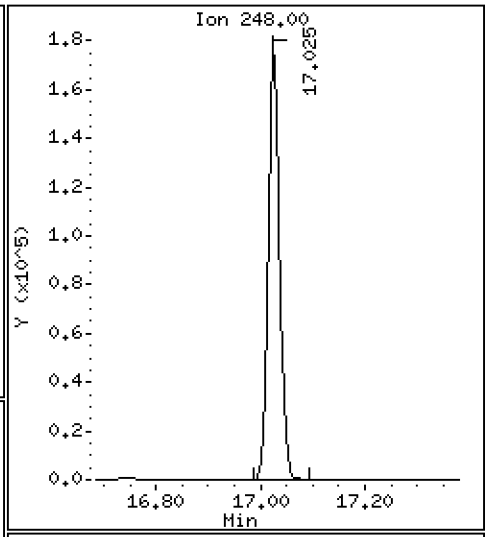
Concentration: 4.939 ug/mL

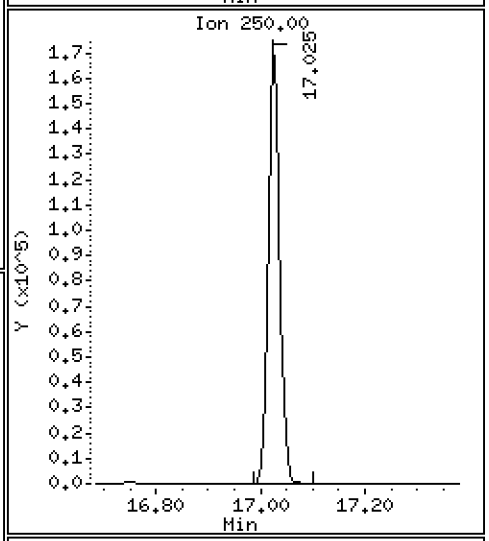


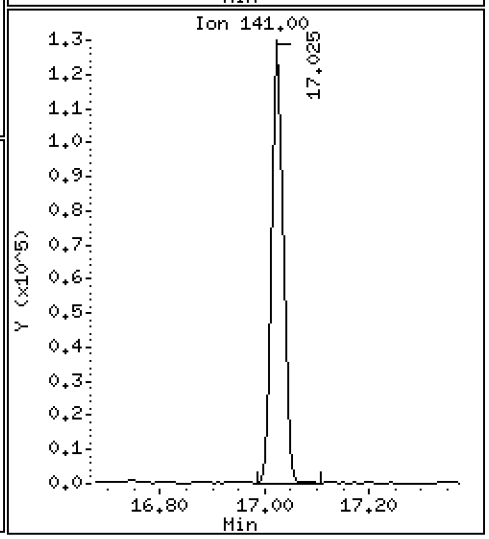












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

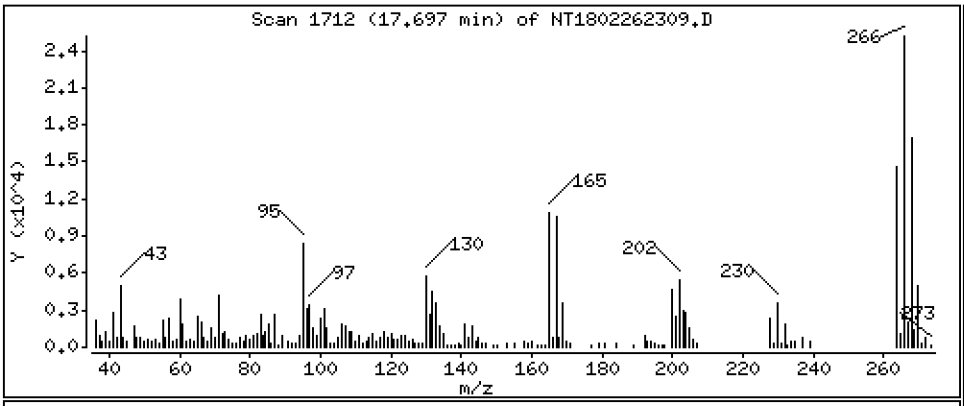
Operator: VTS

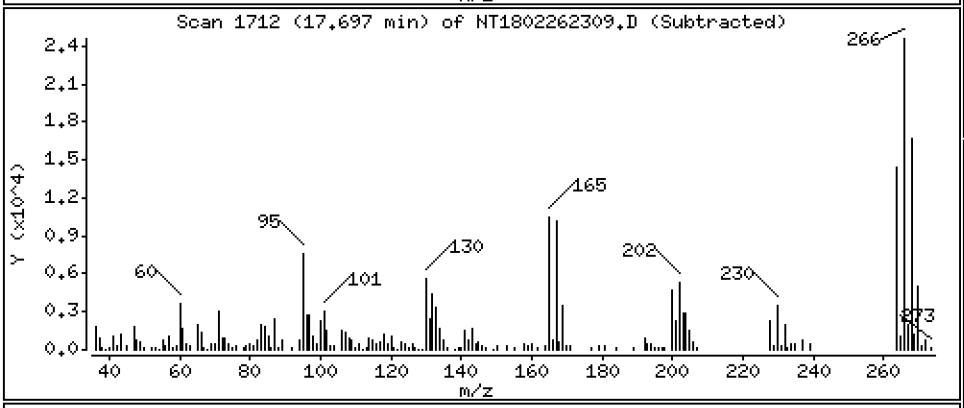
Column phase: ZB-5msi

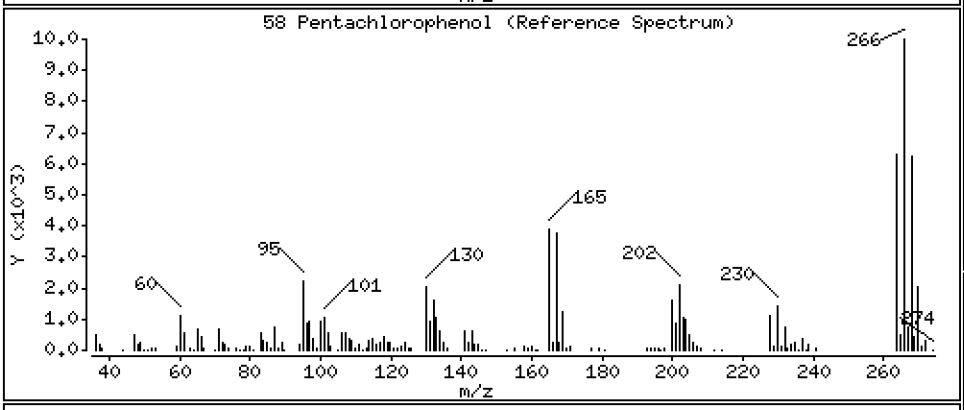
Column diameter: 0.25

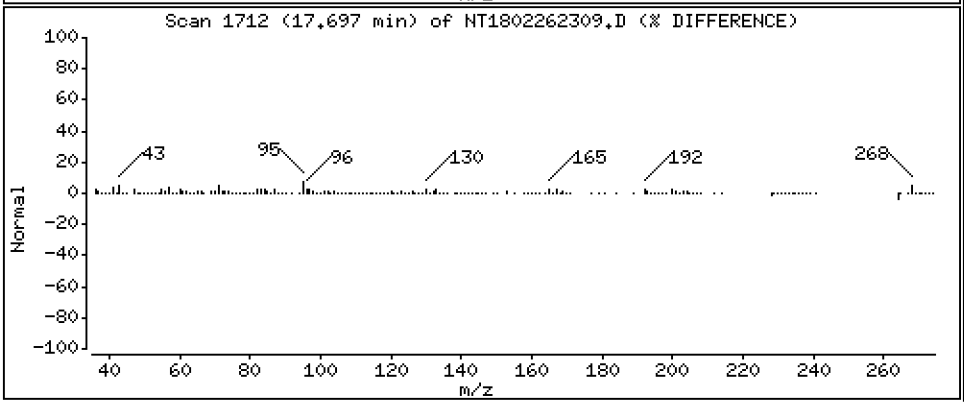
58 Pentachlorophenol

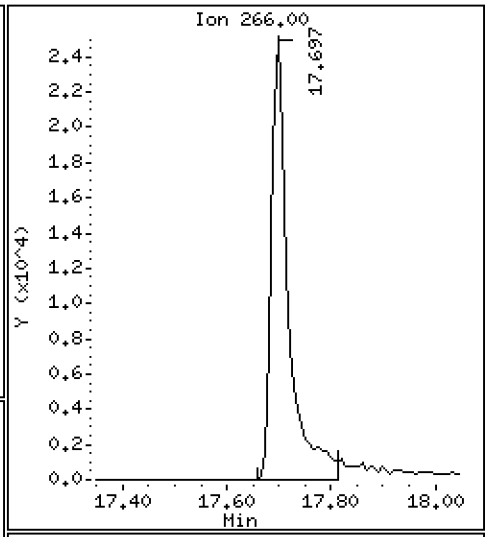
Concentration: 3.313 ug/mL

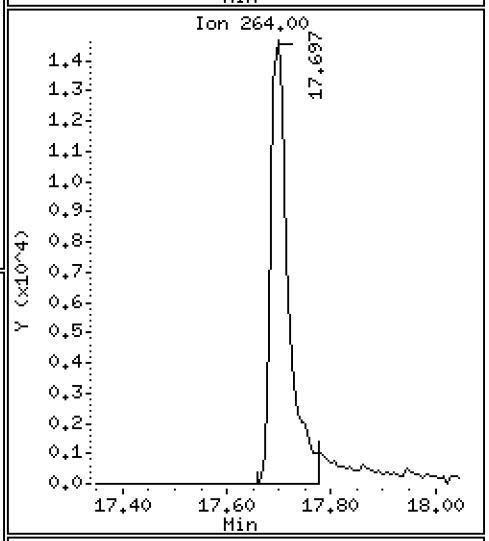


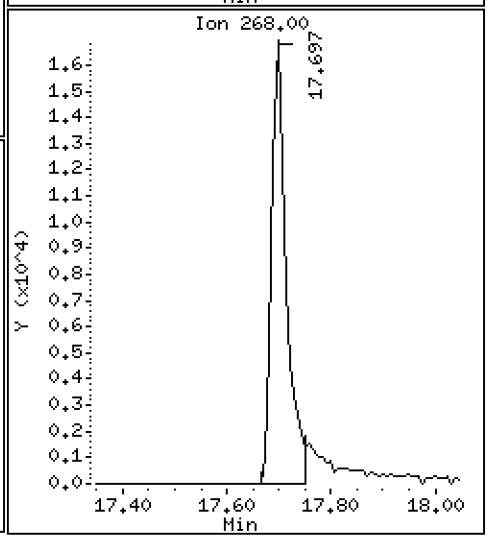












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

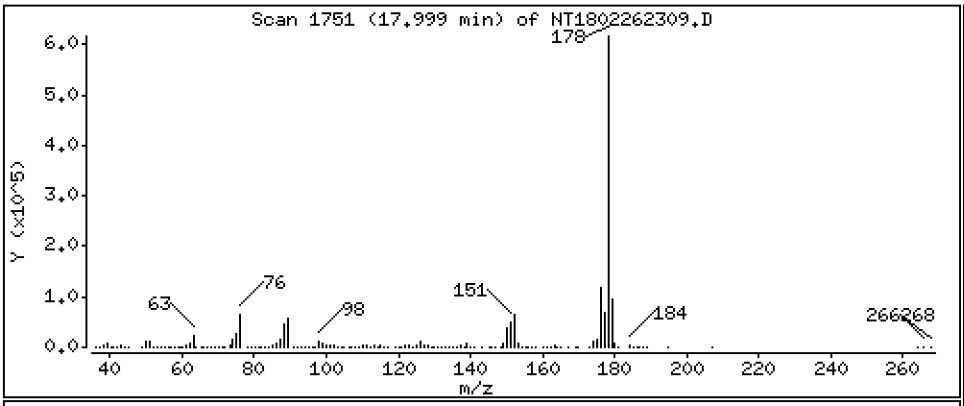
Operator: VTS

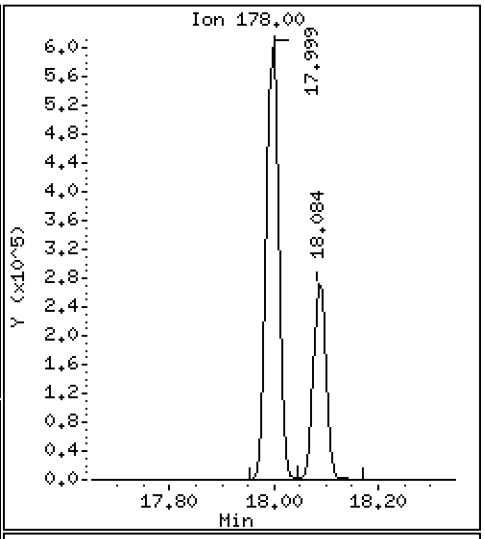
Column phase: ZB-5msi

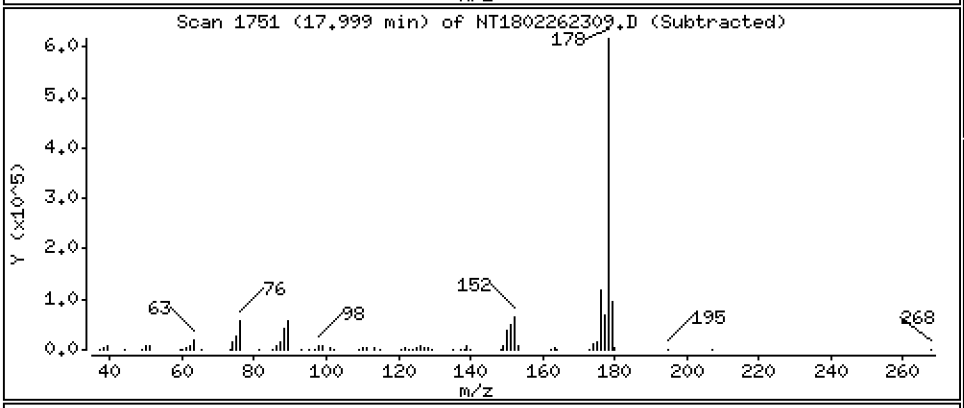
Column diameter: 0.25

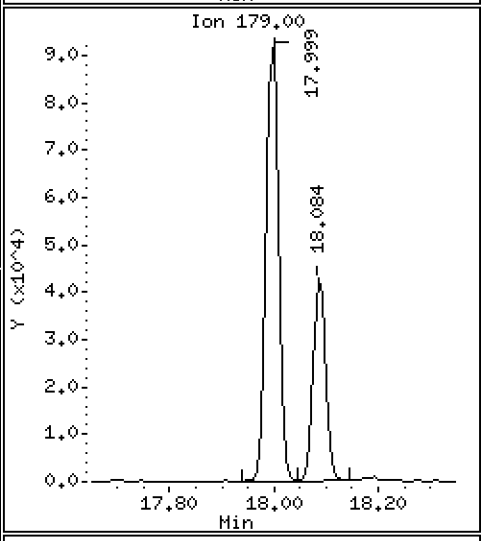
60 Phenanthrene

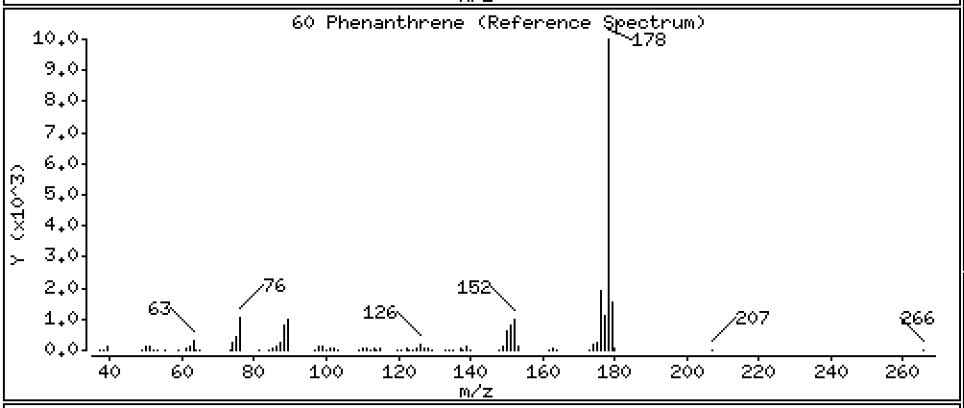
Concentration: 3.389 ug/mL

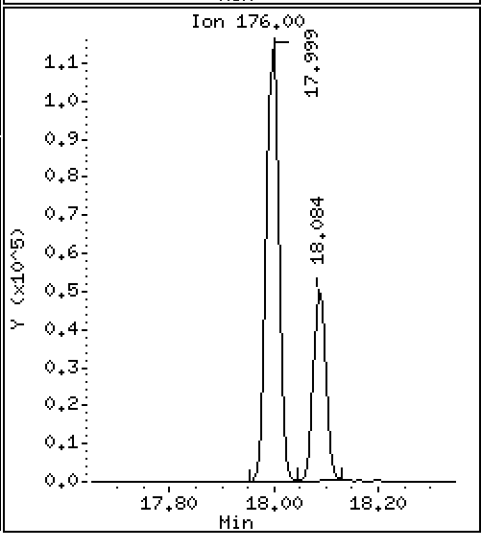


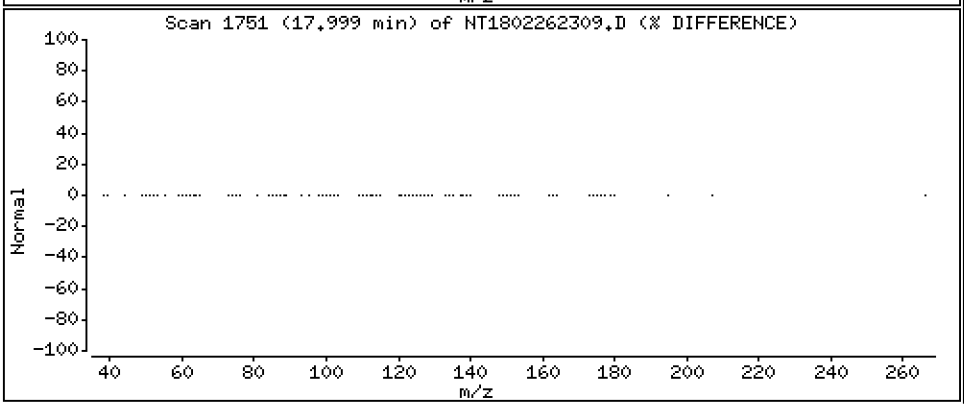












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

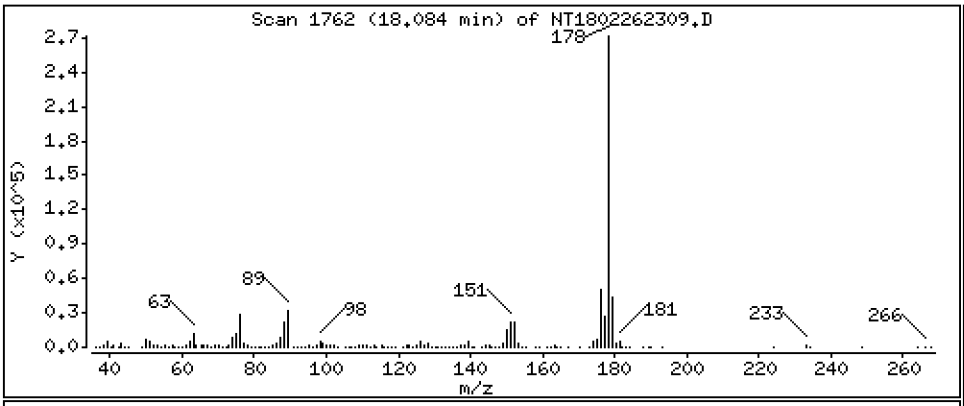
Operator: VTS

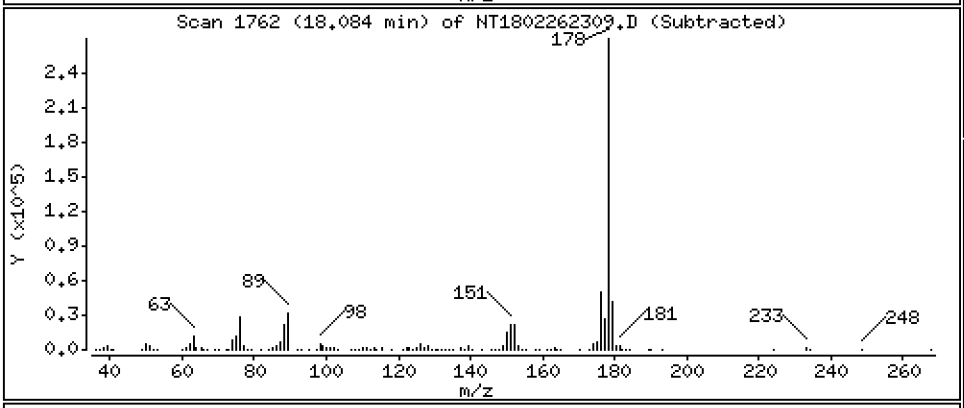
Column phase: ZB-5msi

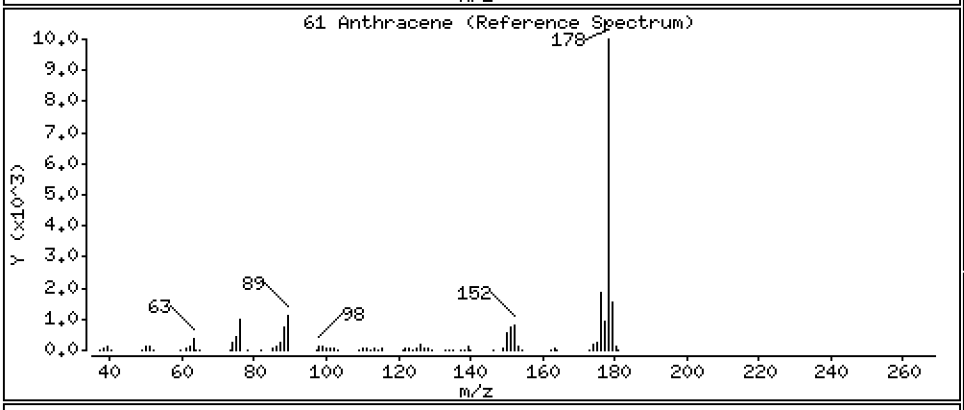
Column diameter: 0.25

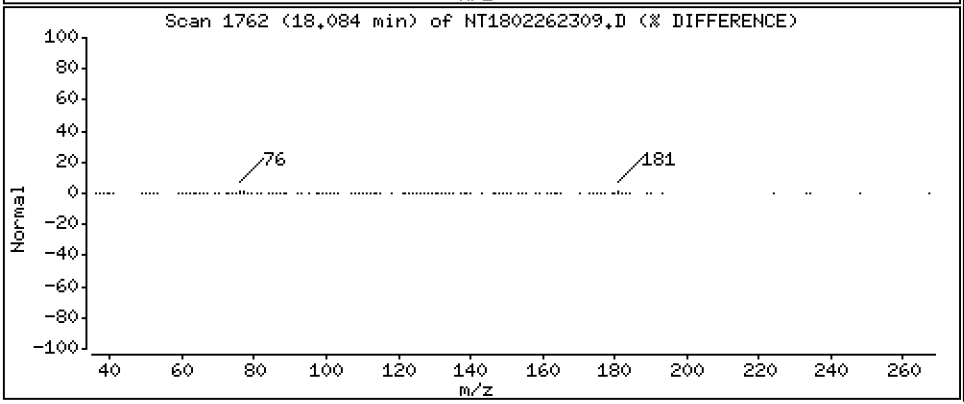
61 Anthracene

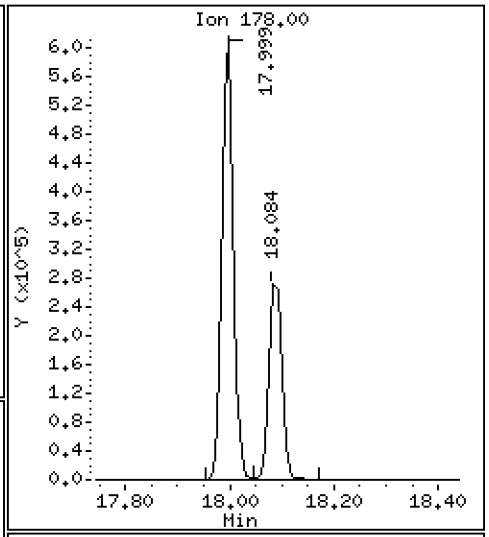
Concentration: 1.645 ug/mL

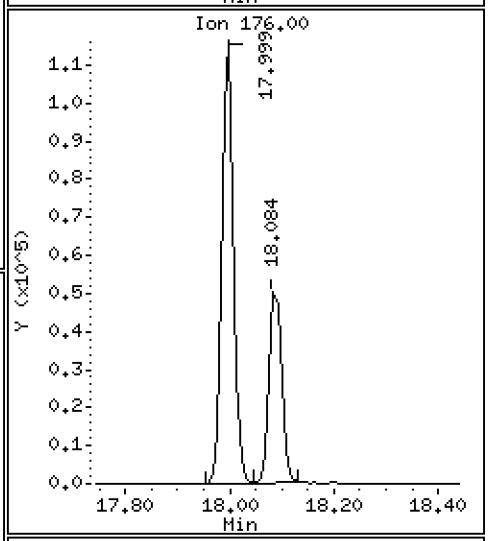


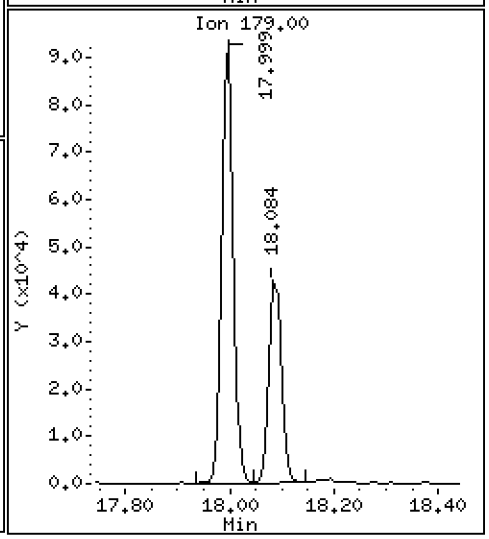












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

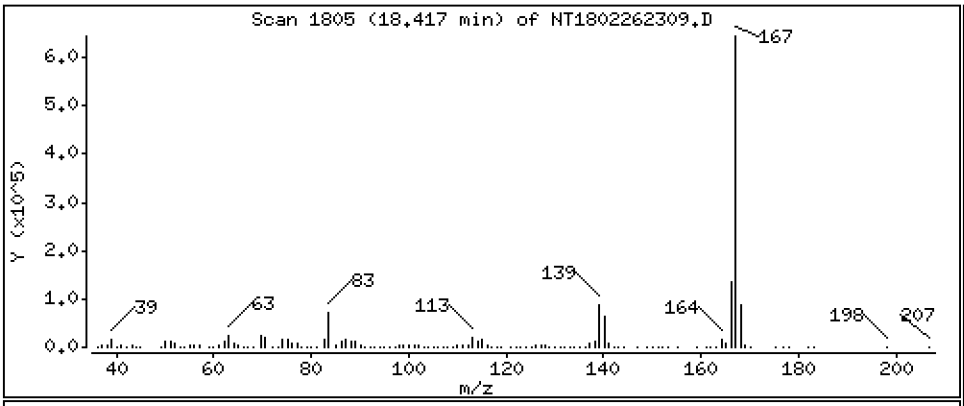
Operator: VTS

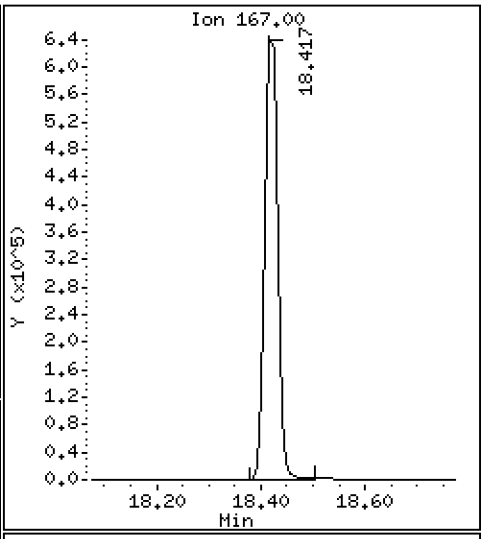
Column phase: ZB-5msi

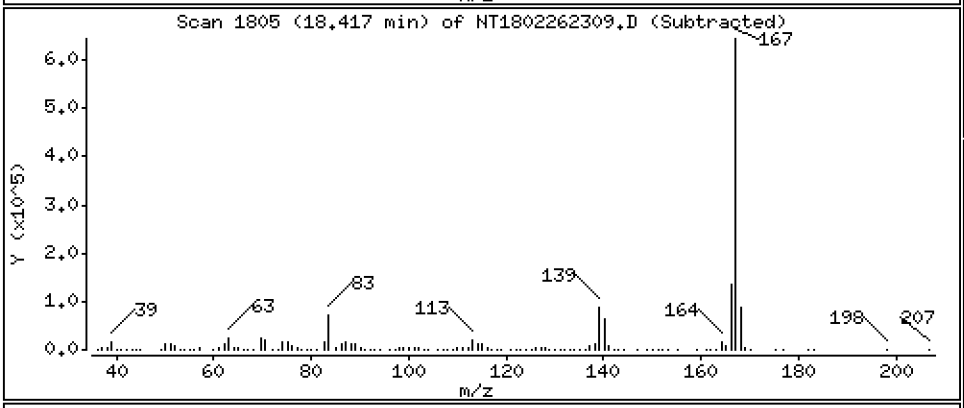
Column diameter: 0.25

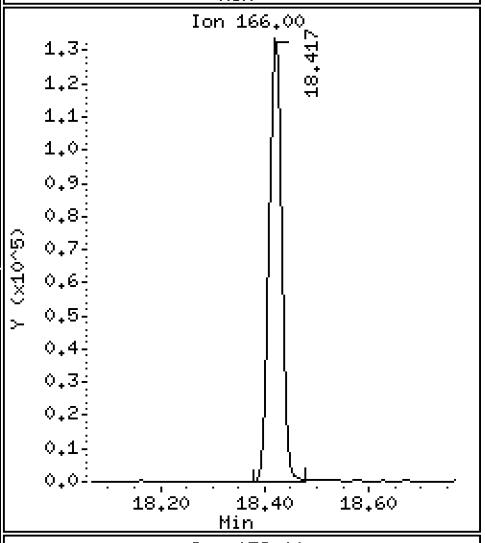
62 Carbazole

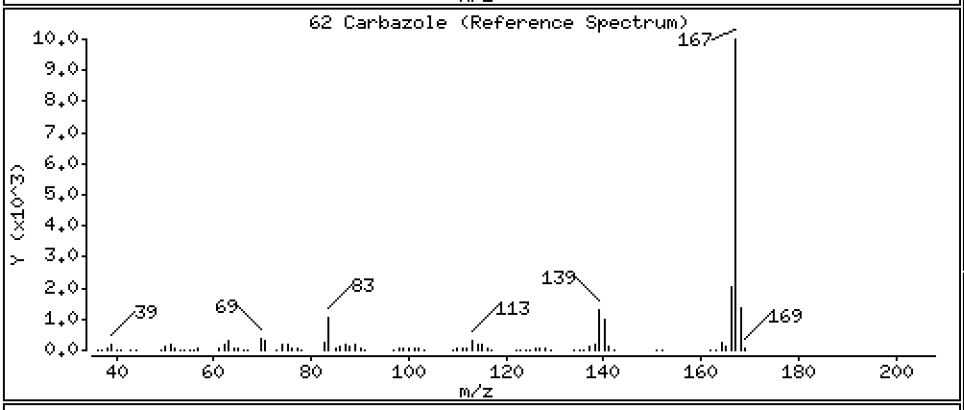
Concentration: 4.229 ug/mL

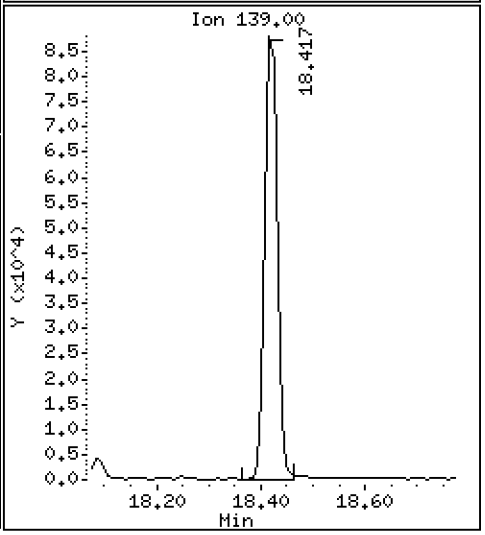


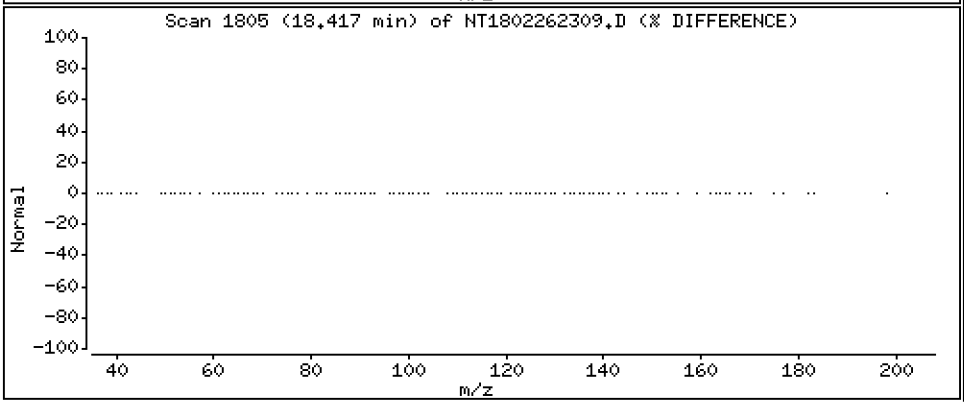












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

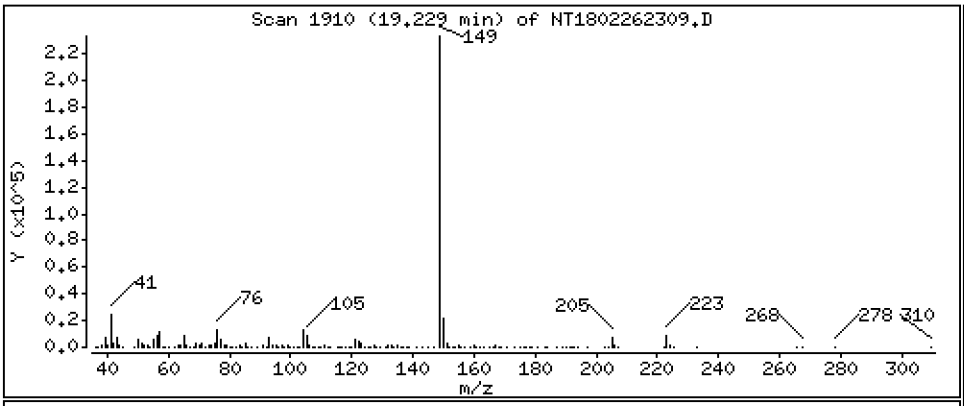
Operator: VTS

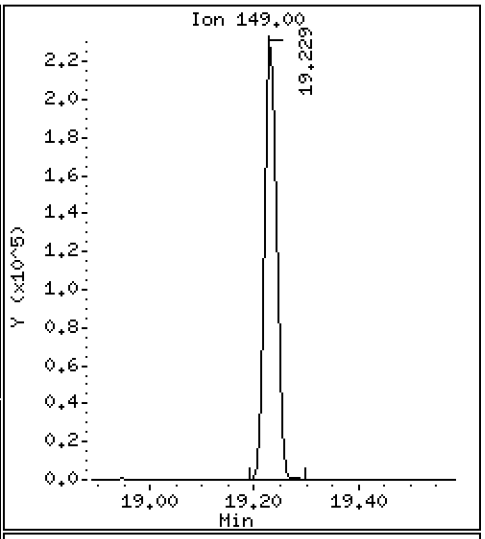
Column phase: ZB-5msi

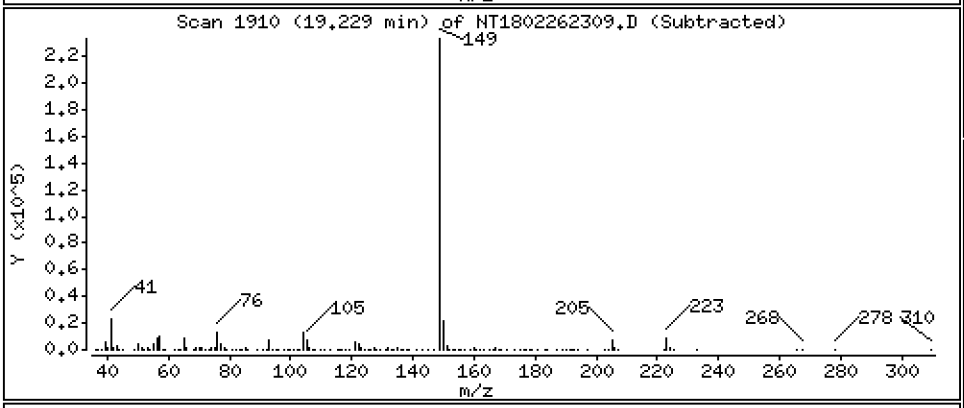
Column diameter: 0.25

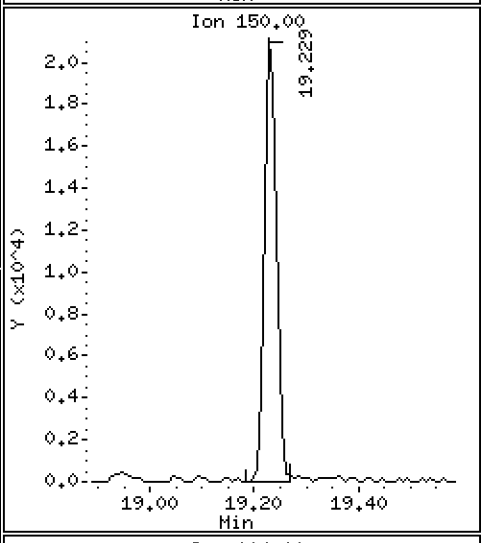
63 Di-n-butylphthalate

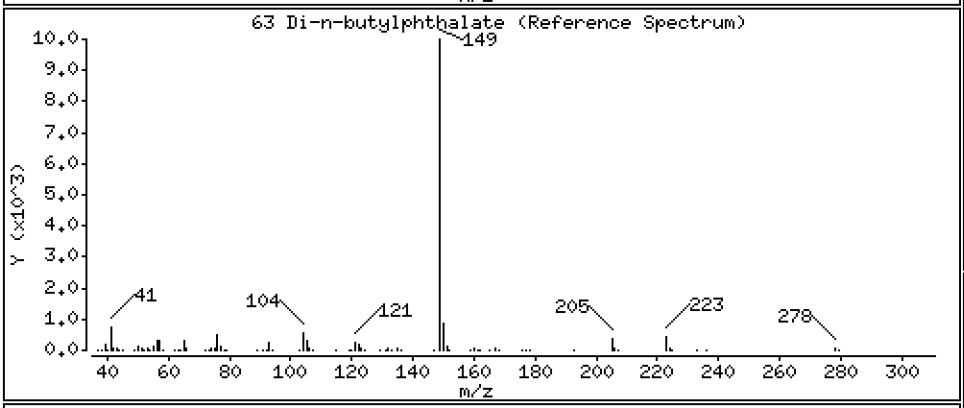
Concentration: 1.310 ug/mL

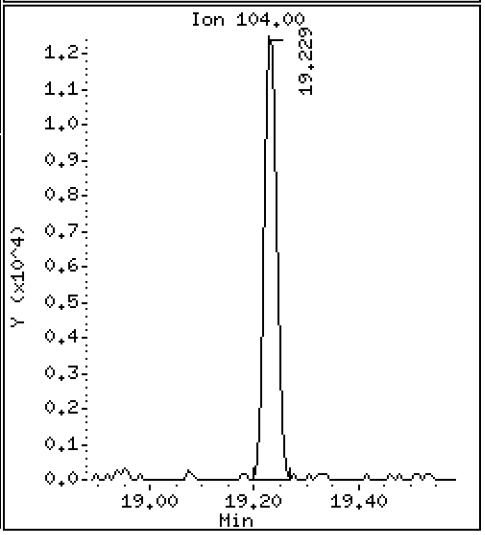


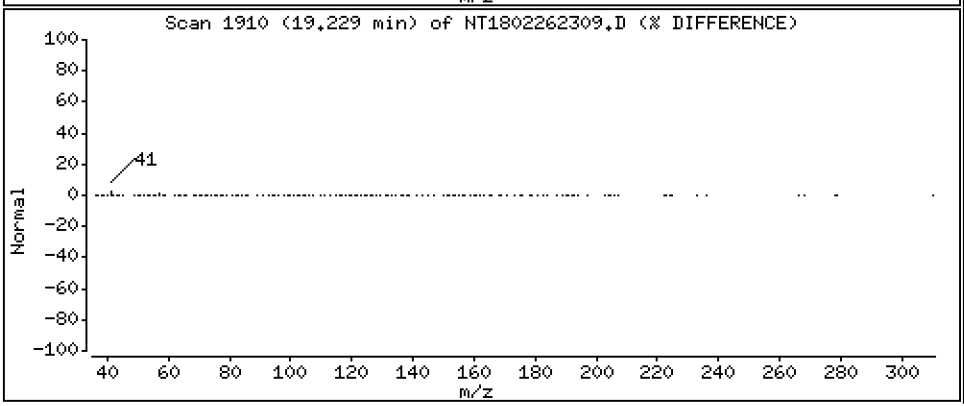












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262309.D

Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

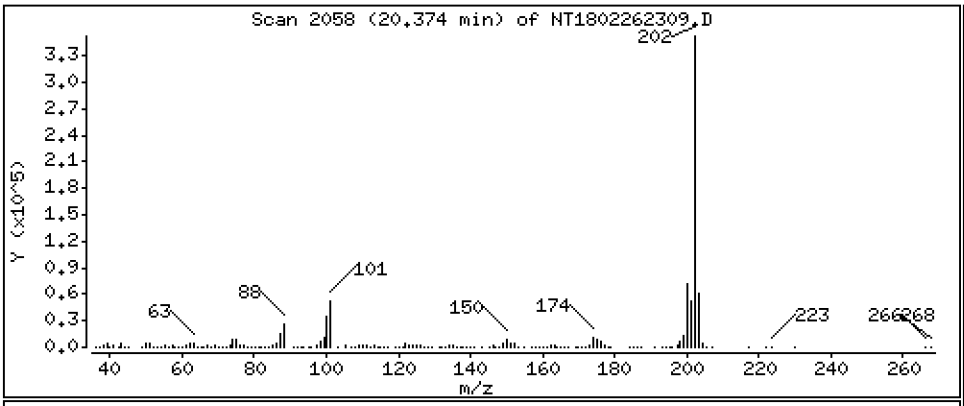
Operator: VTS

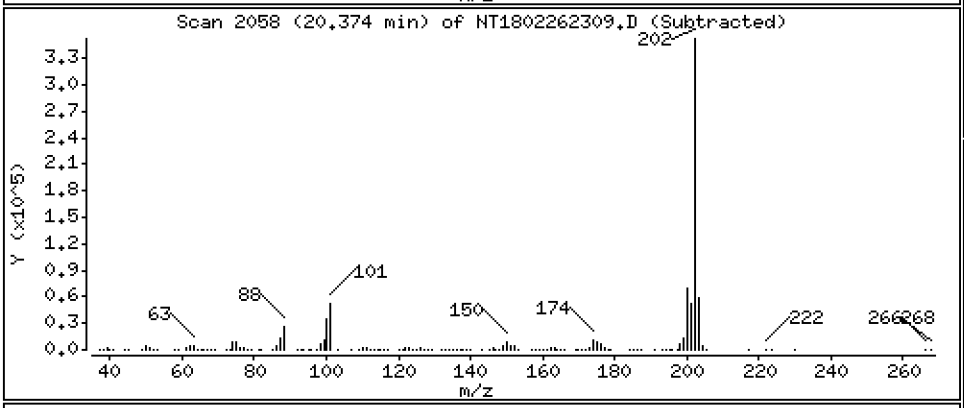
Column phase: ZB-5msi

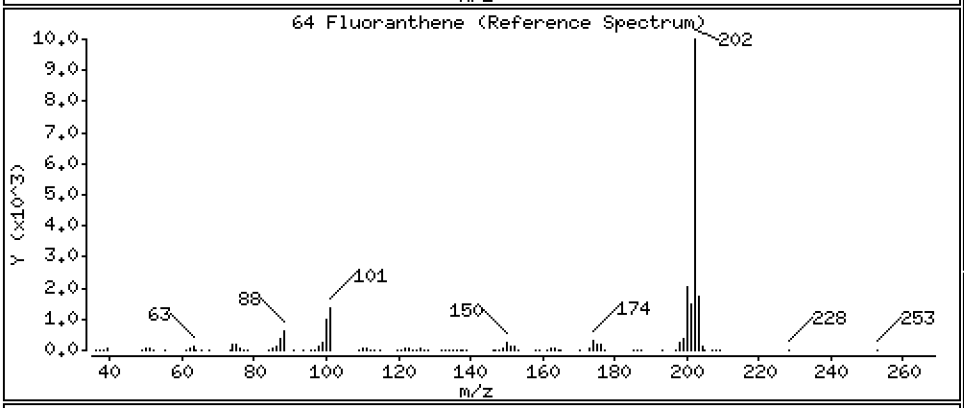
Column diameter: 0.25

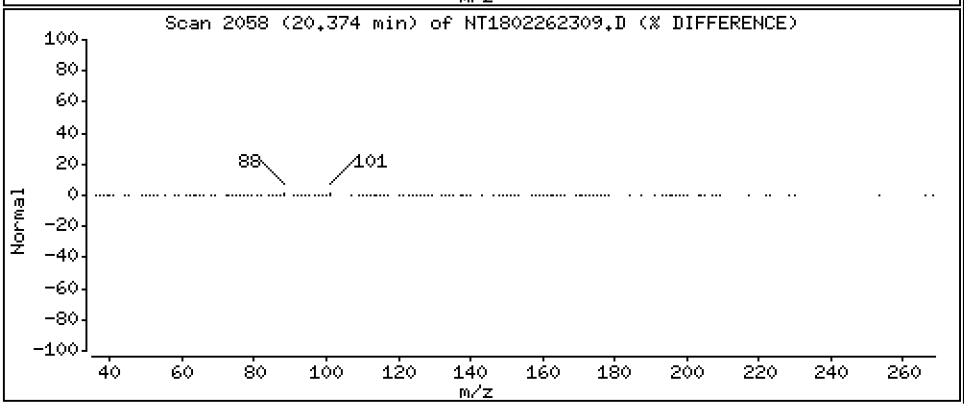
64 Fluoranthene

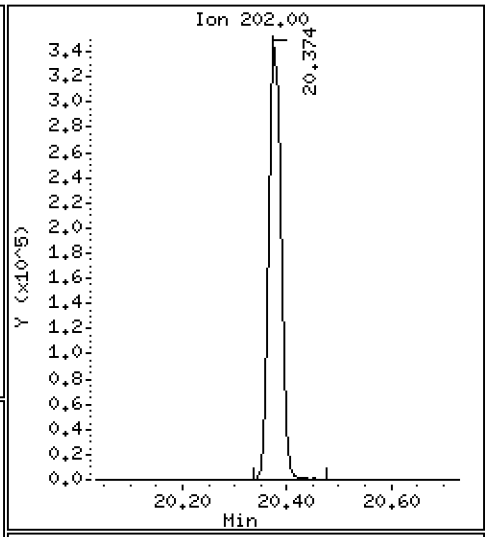
Concentration: 1.844 ug/mL

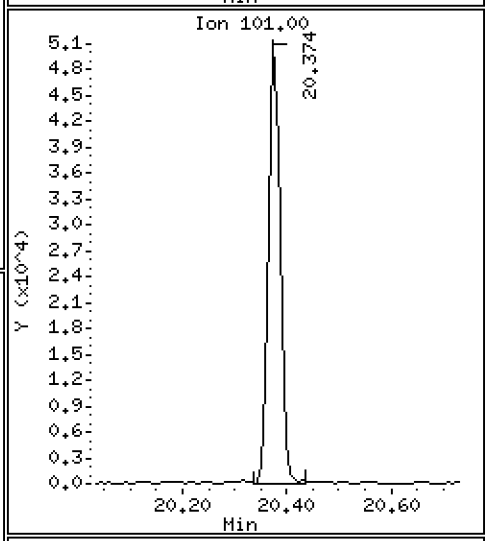


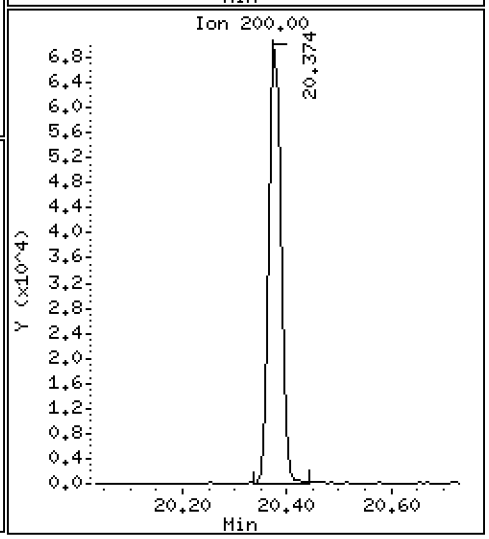












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

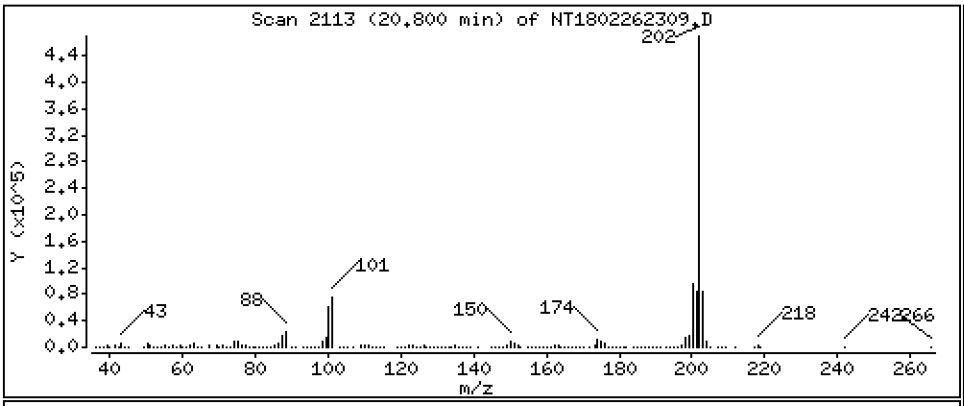
Operator: VTS

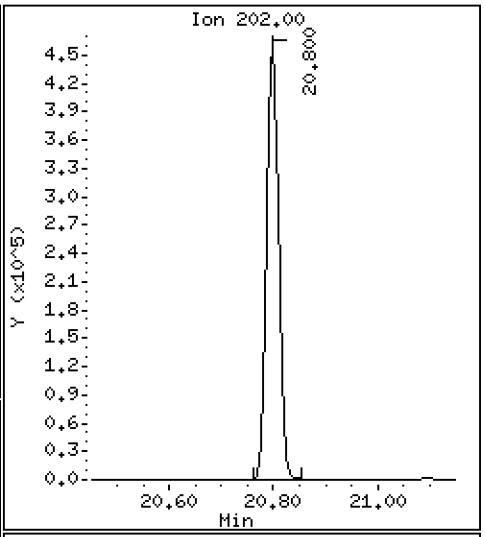
Column phase: ZB-5msi

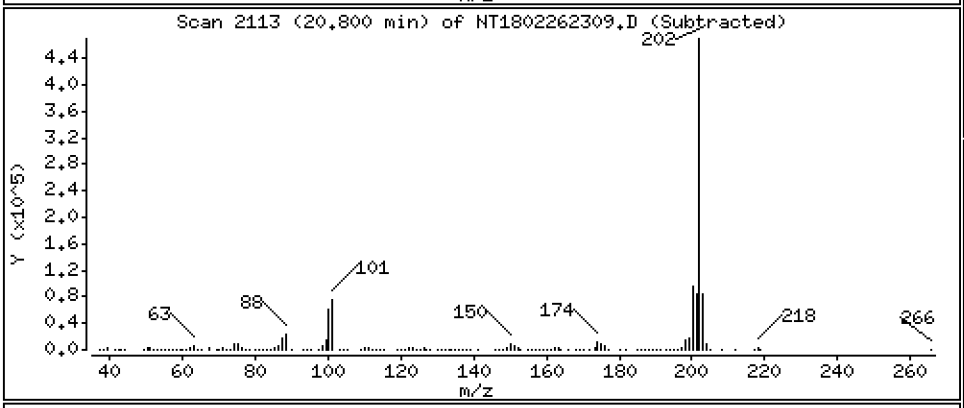
Column diameter: 0.25

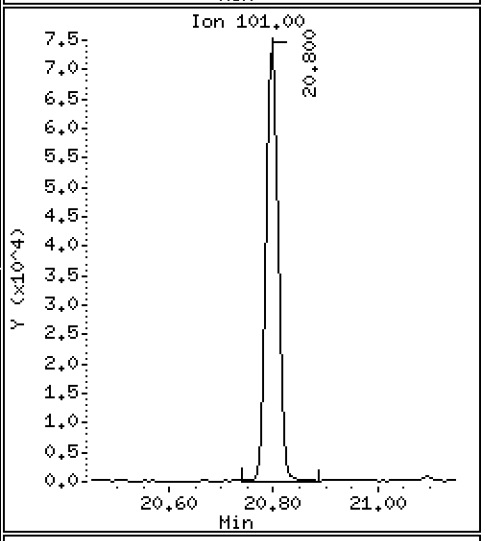
65 Pyrene

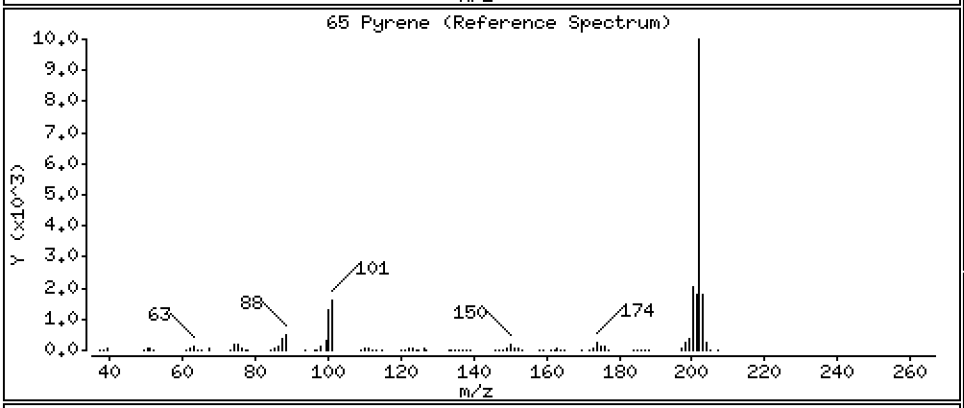
Concentration: 2.262 ug/mL

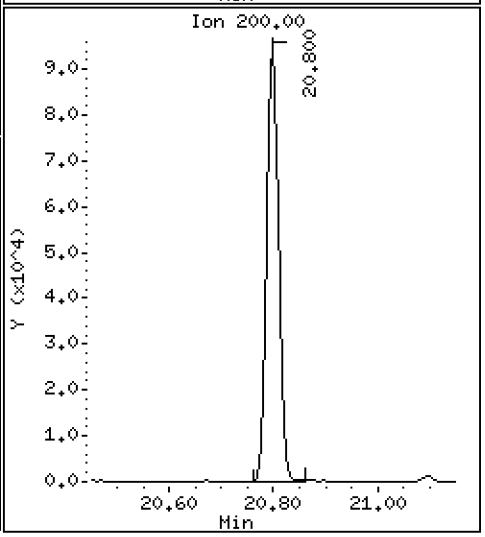


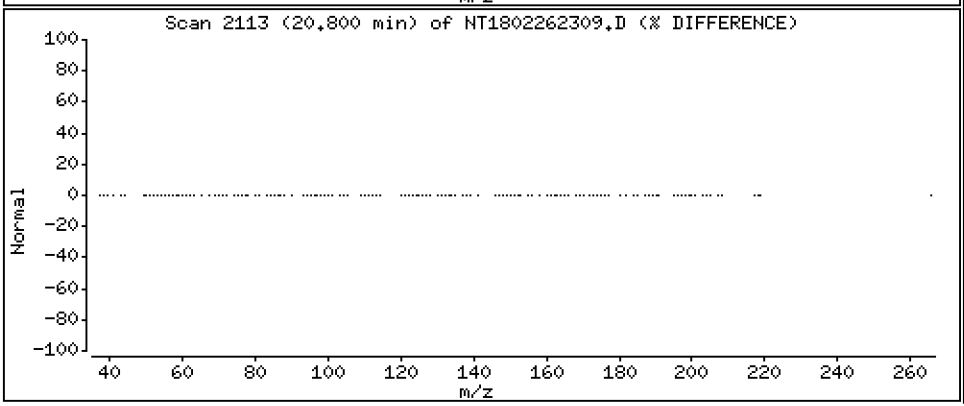












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

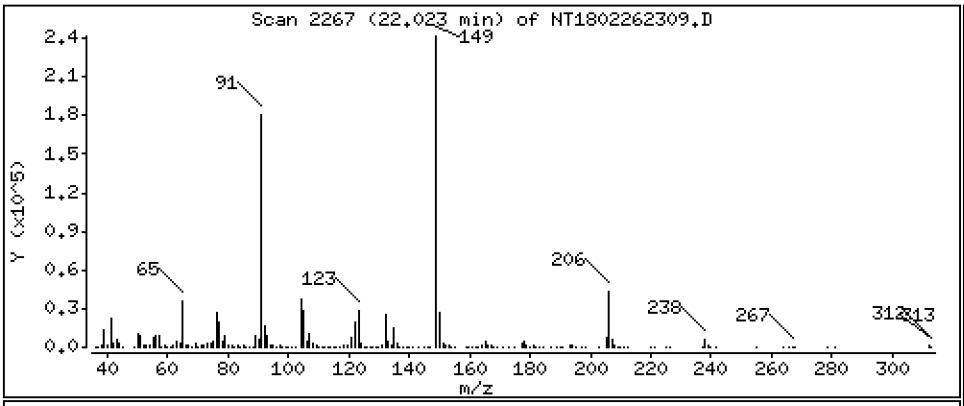
Operator: VTS

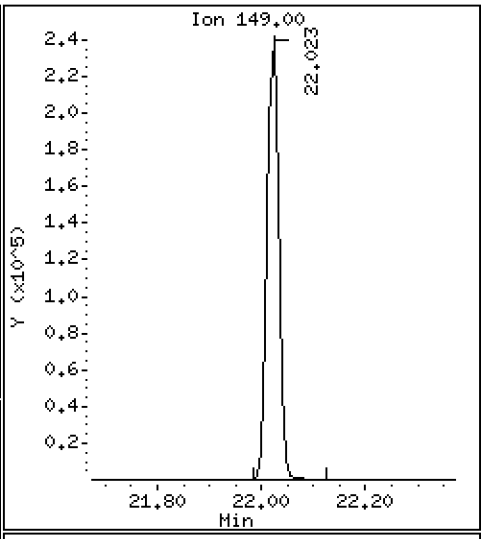
Column phase: ZB-5msi

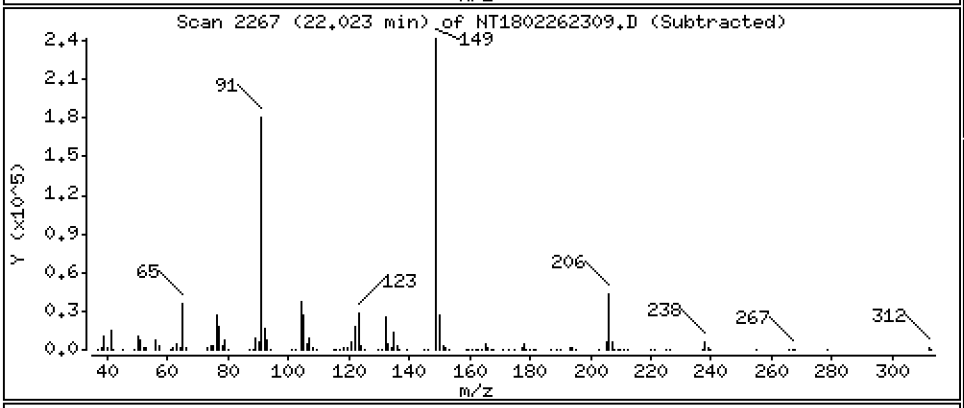
Column diameter: 0.25

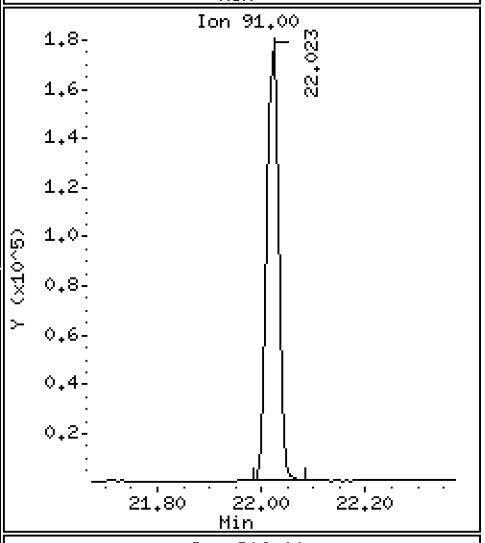
67 Butylbenzylphthalate

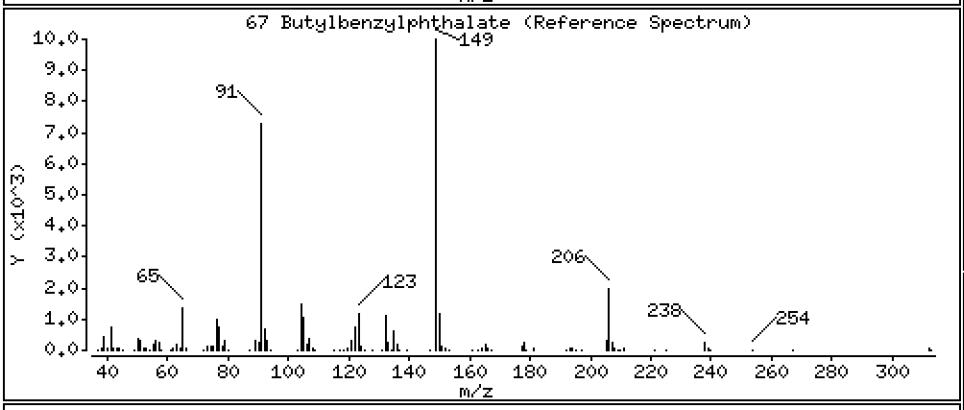
Concentration: 3.005 ug/mL

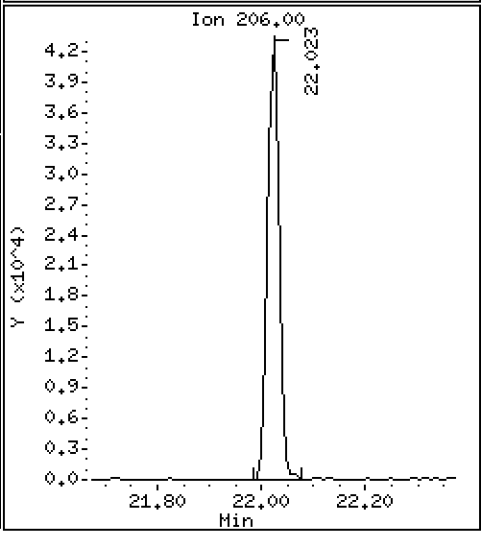


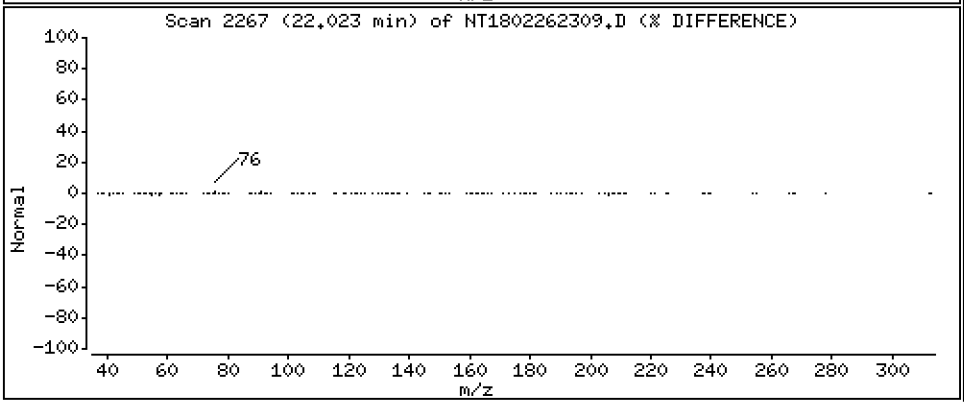












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

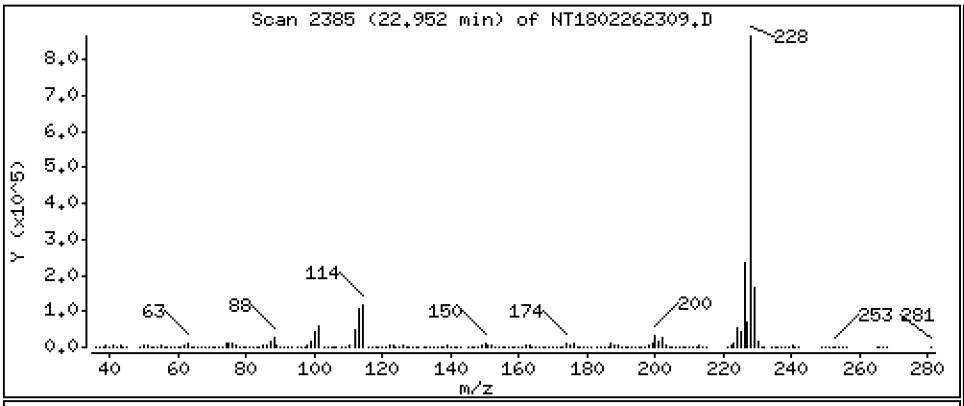
Operator: VTS

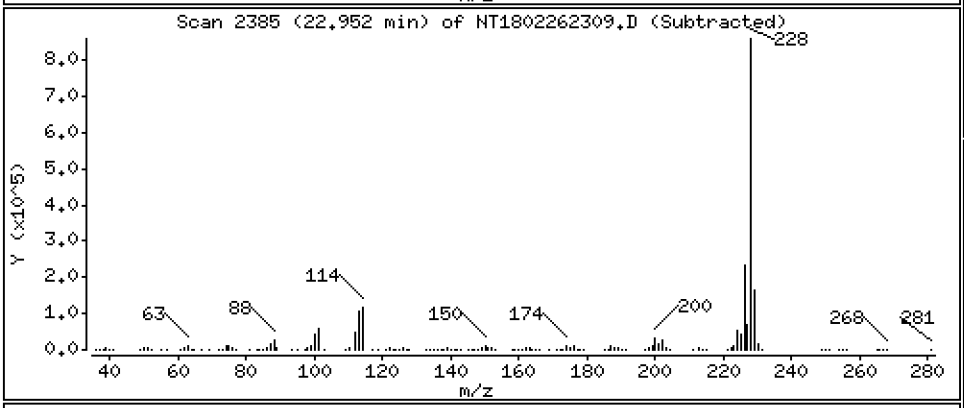
Column phase: ZB-5msi

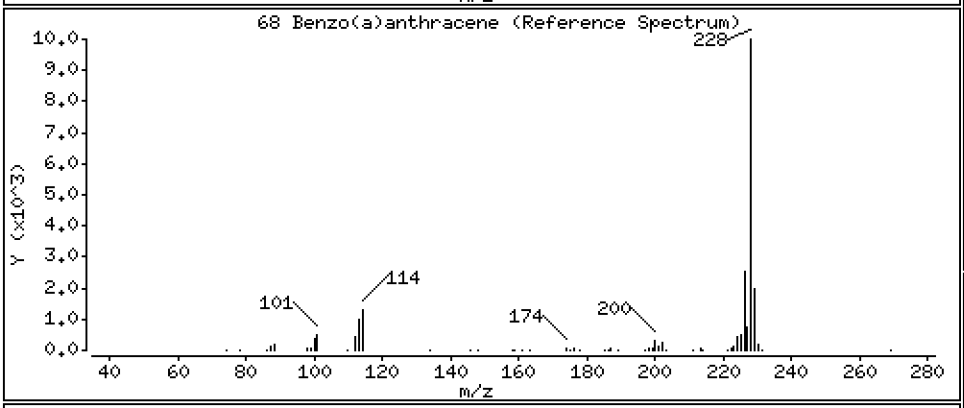
Column diameter: 0.25

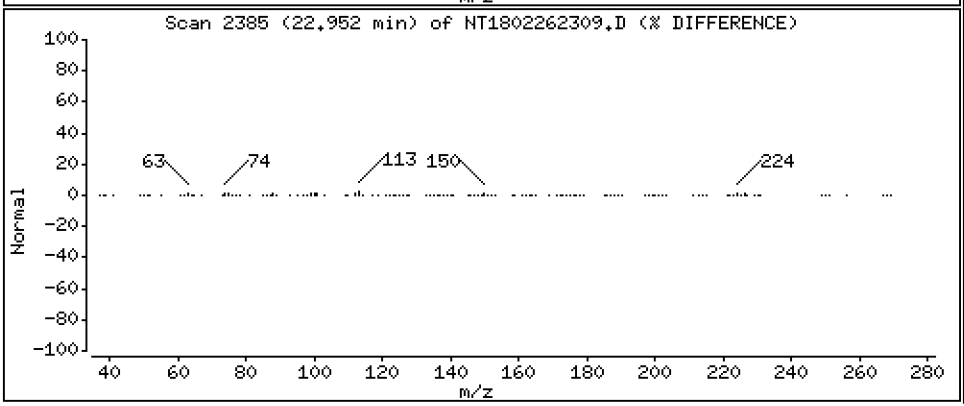
68 Benzo(a)anthracene

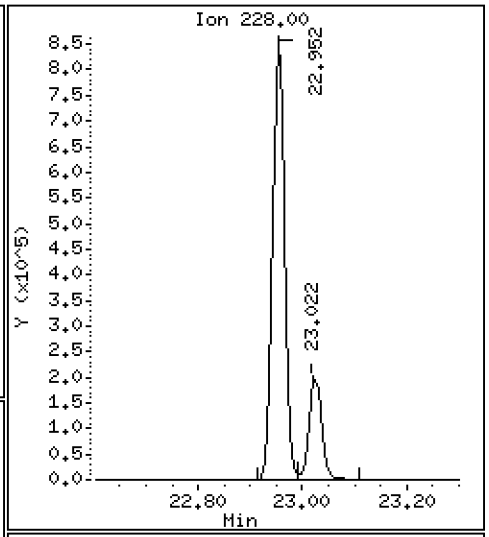
Concentration: 4.313 ug/mL

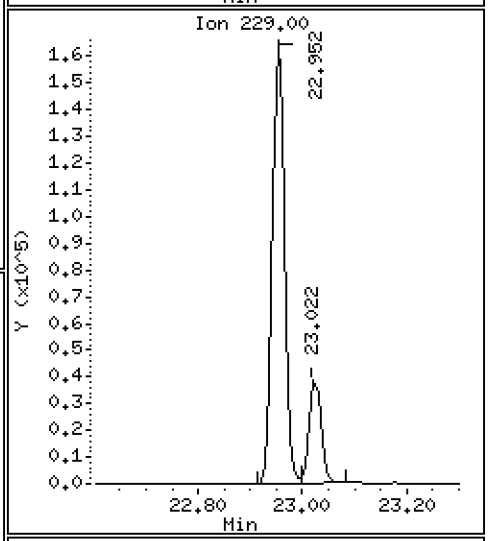


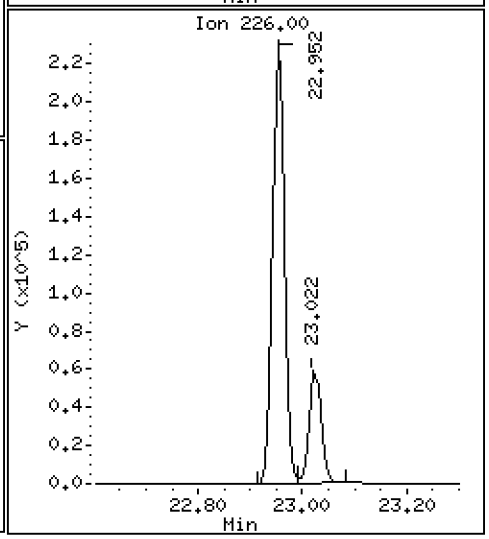












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

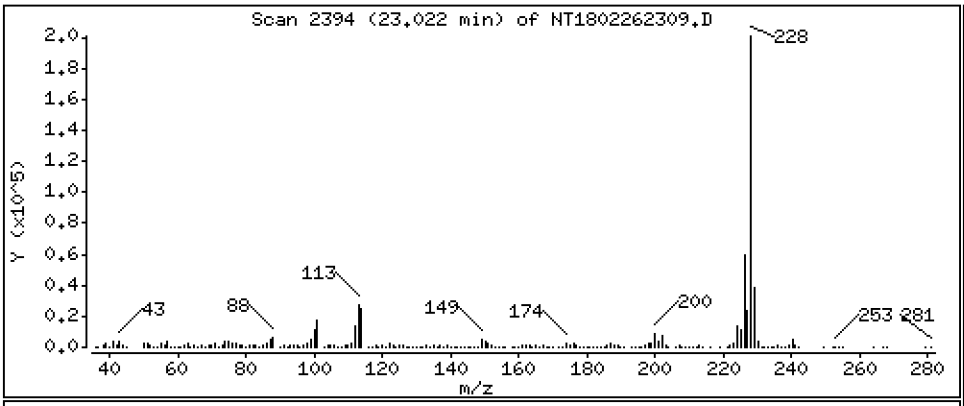
Operator: VTS

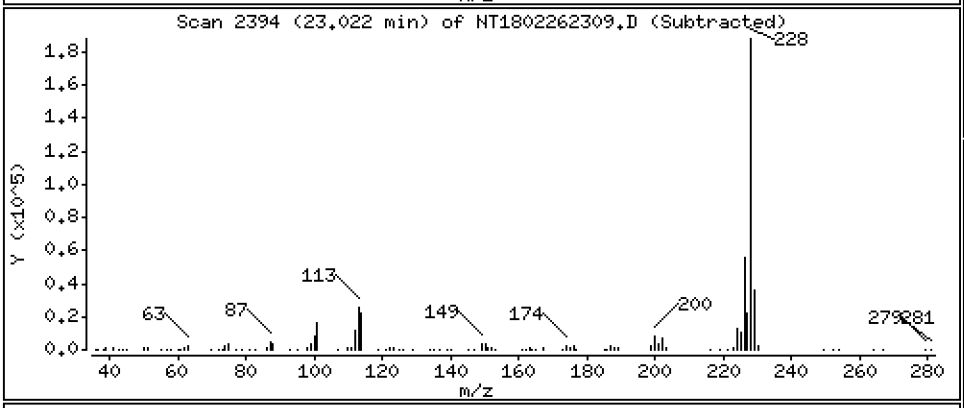
Column phase: ZB-5msi

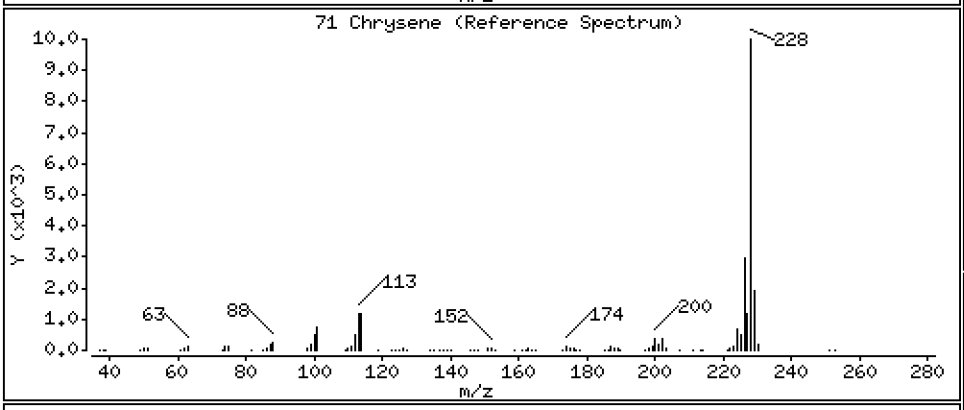
Column diameter: 0.25

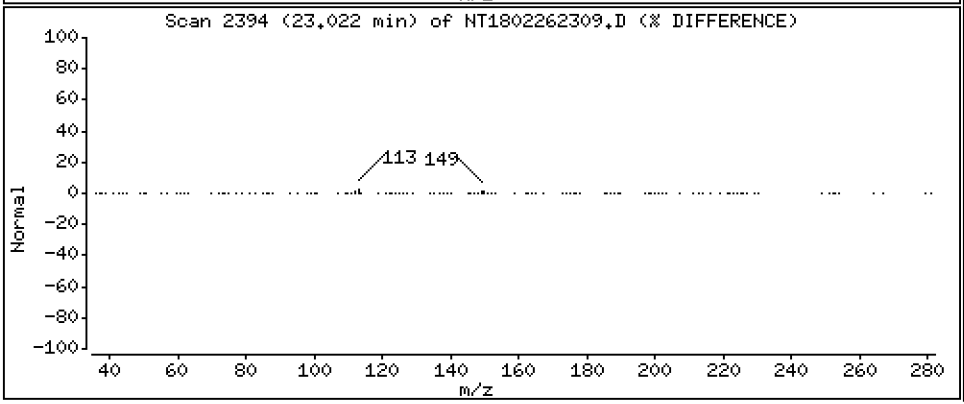
71 Chrysene

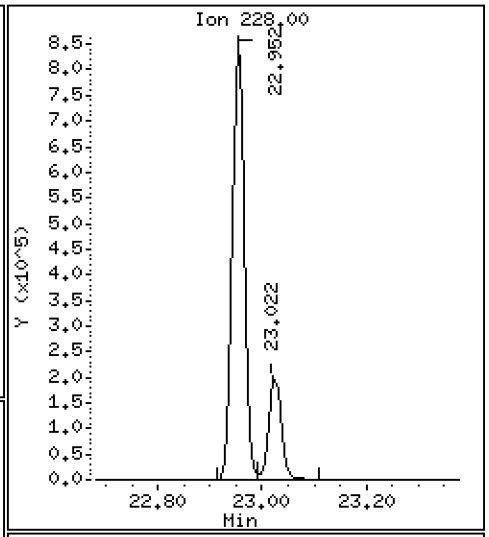
Concentration: 1.005 ug/mL

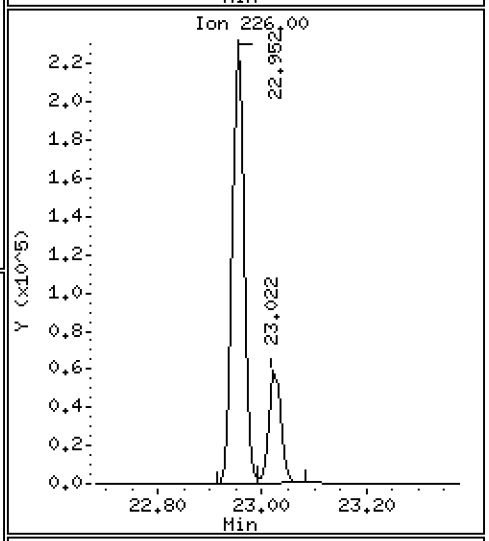


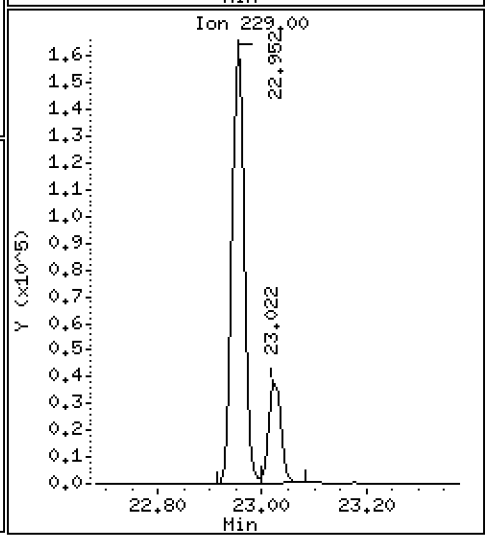












Date : 26-FEB-2023 17:12

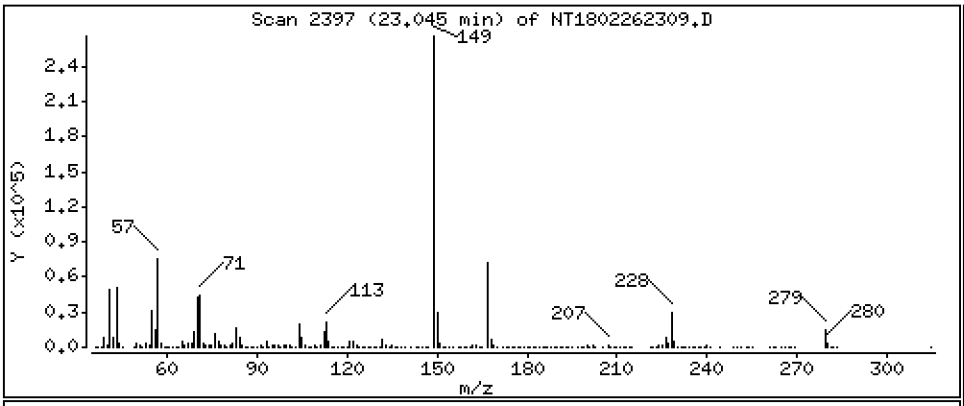
Client ID: Instrument: nt18.i

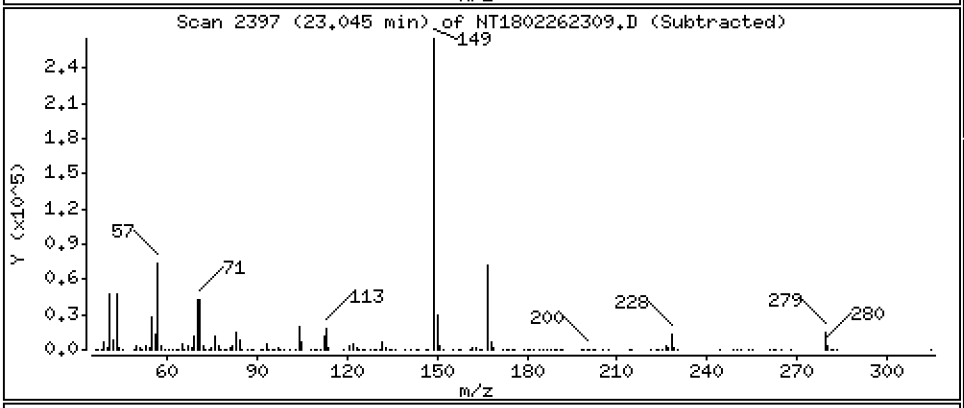
Sample Info: BLA0410-SRM1

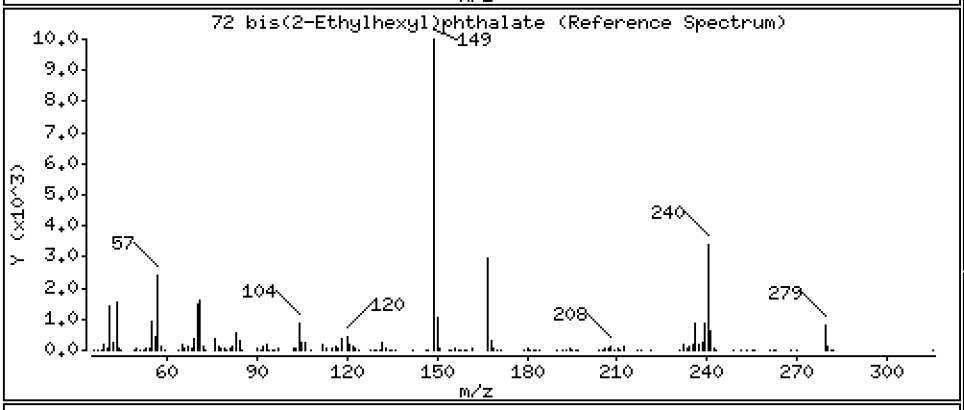
Operator: VTS

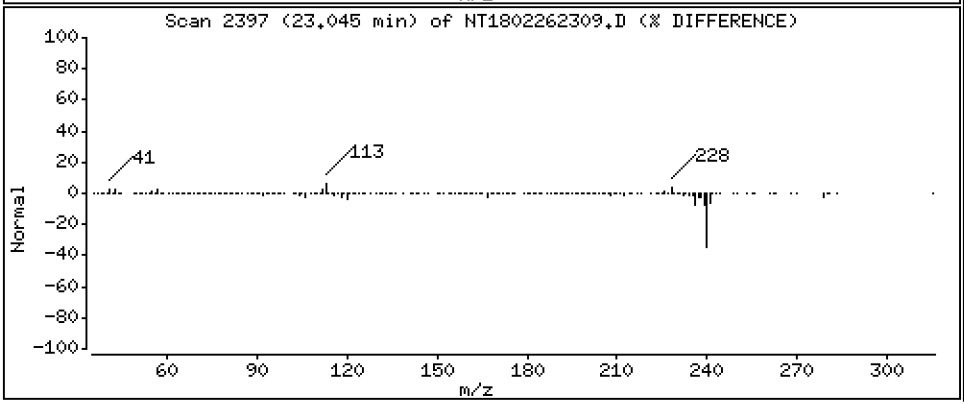
Column phase: ZB-5msi Column diameter: 0.25

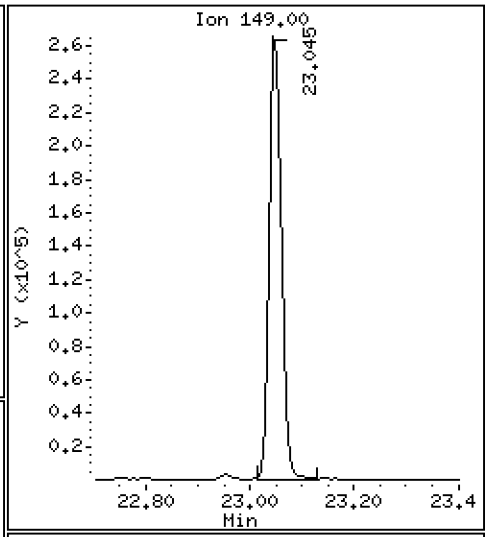
72 bis(2-Ethylhexyl)phthalate Concentration: 2.173 ug/mL

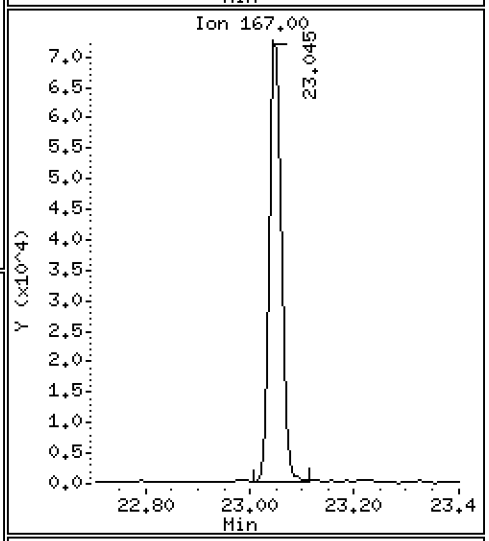


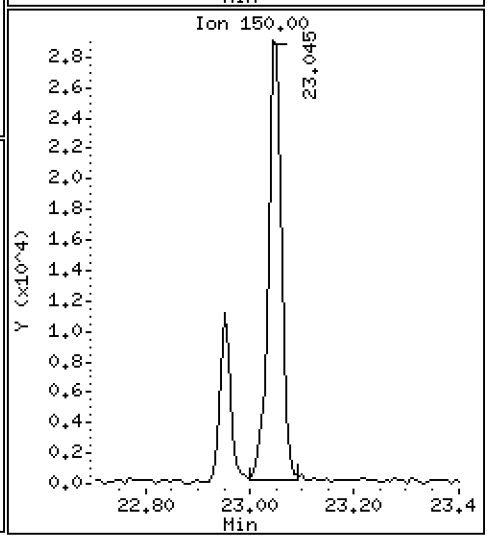












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262309.D

Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

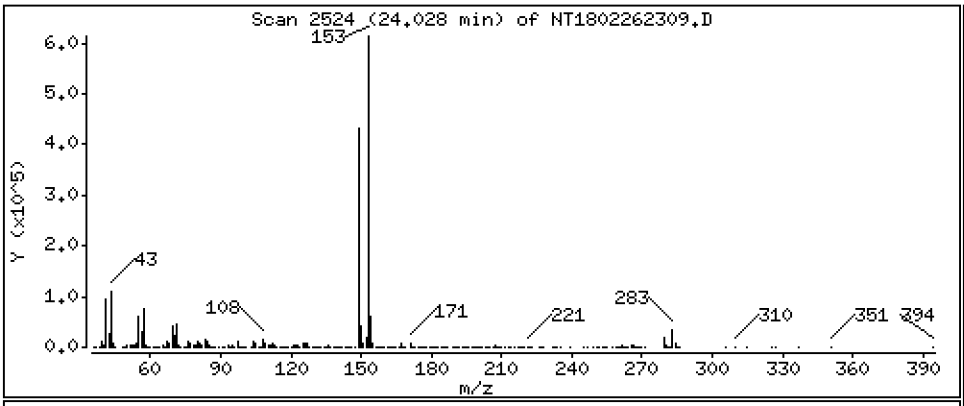
Operator: VTS

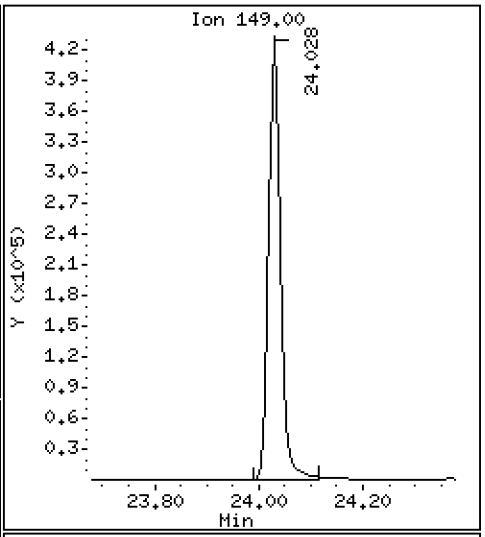
Column phase: ZB-5msi

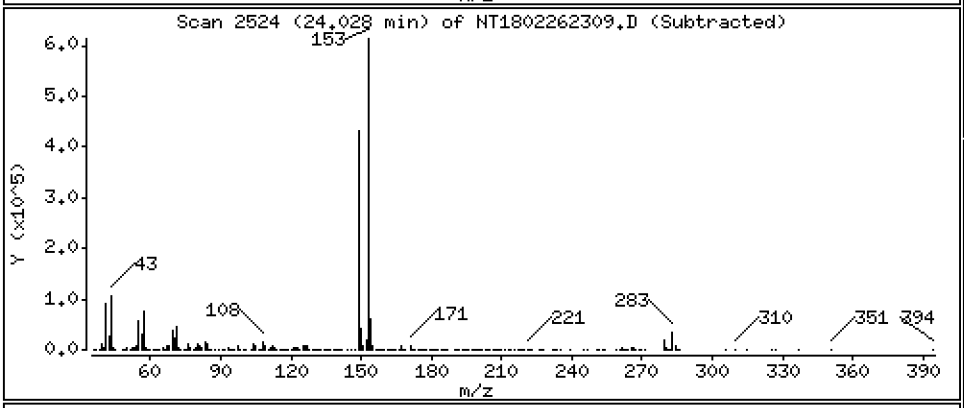
Column diameter: 0.25

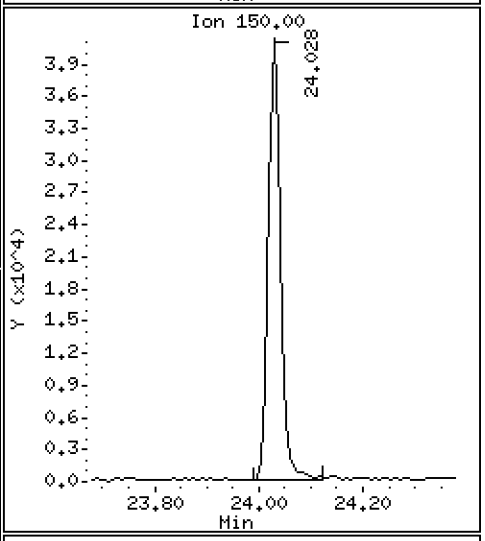
73 Di-n-octylphthalate

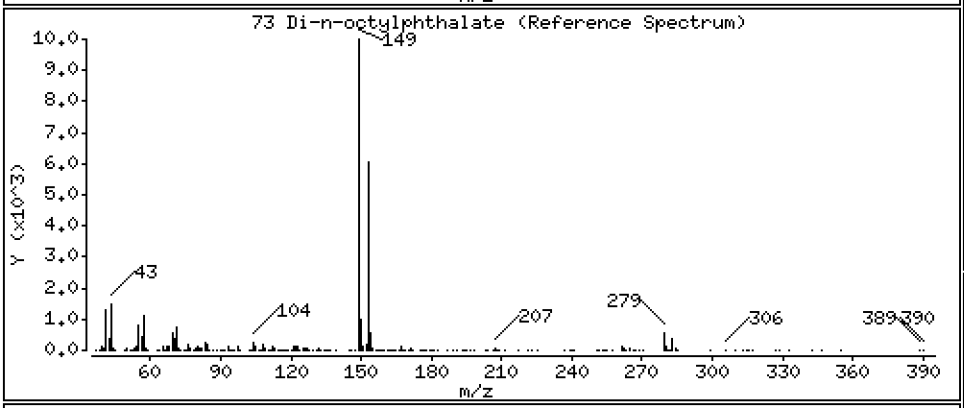
Concentration: 1.748 ug/mL

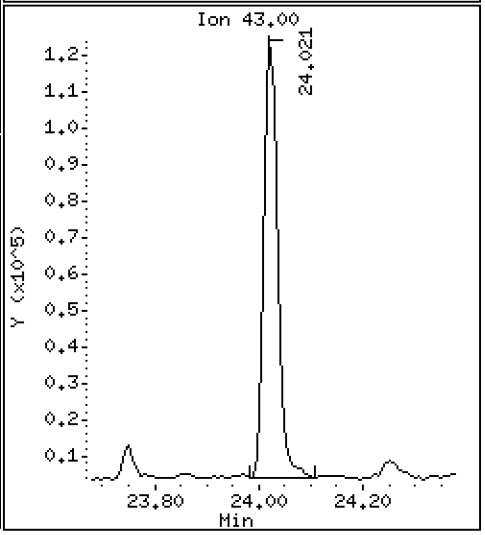


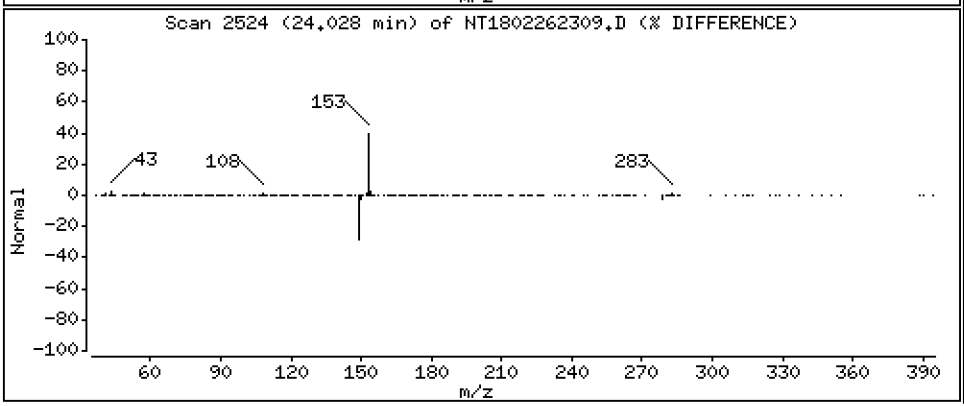












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

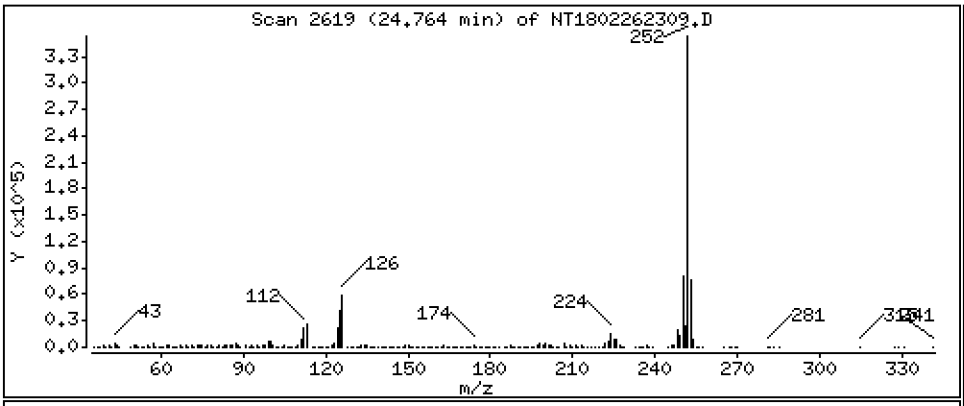
Operator: VTS

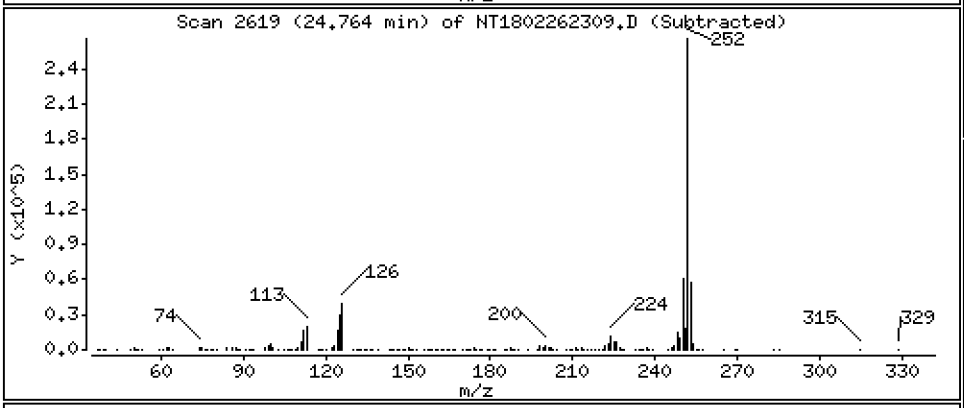
Column phase: ZB-5msi

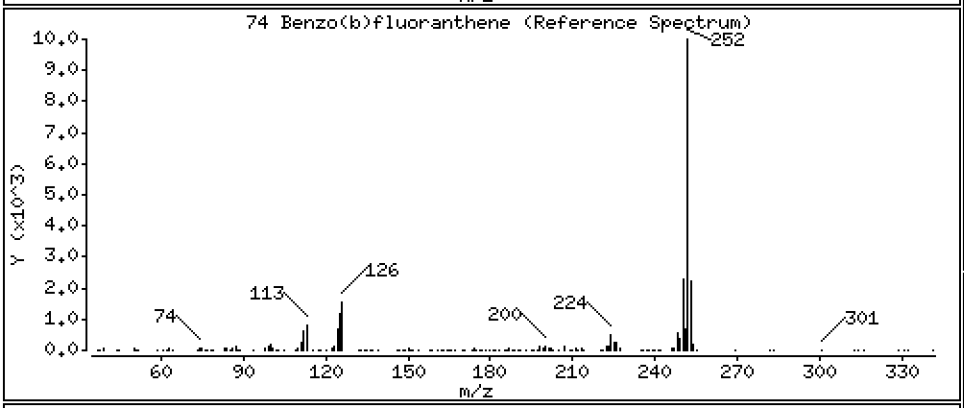
Column diameter: 0.25

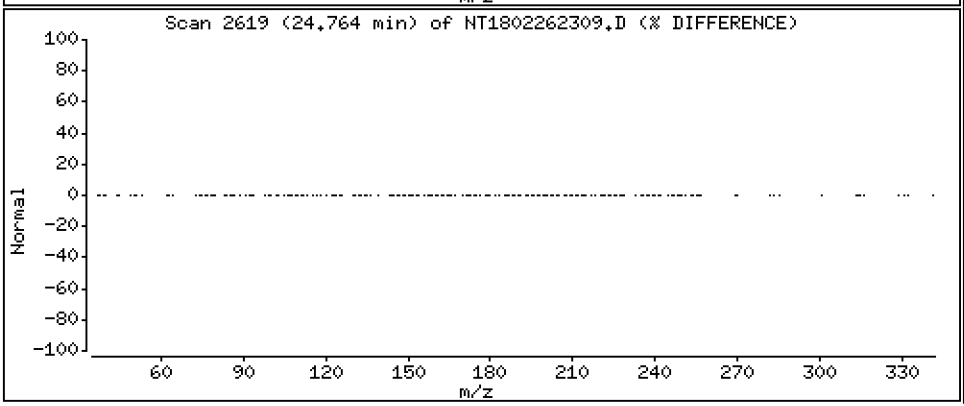
74 Benzo(b)fluoranthene

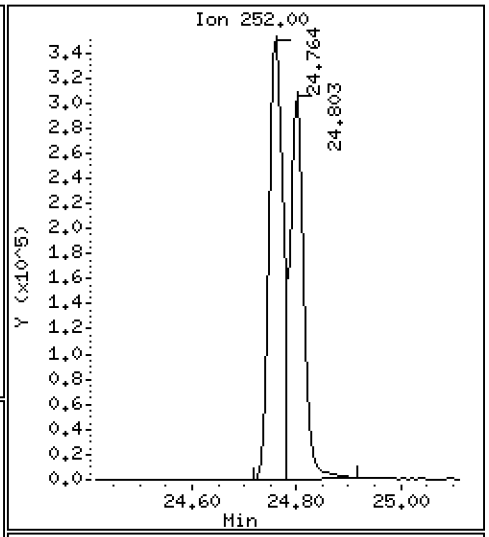
Concentration: 2.338 ug/mL

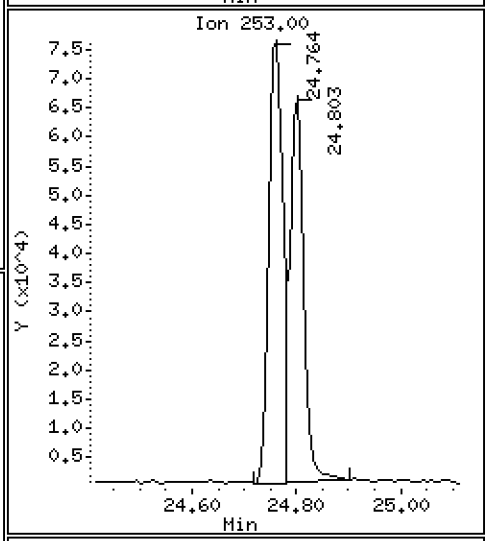


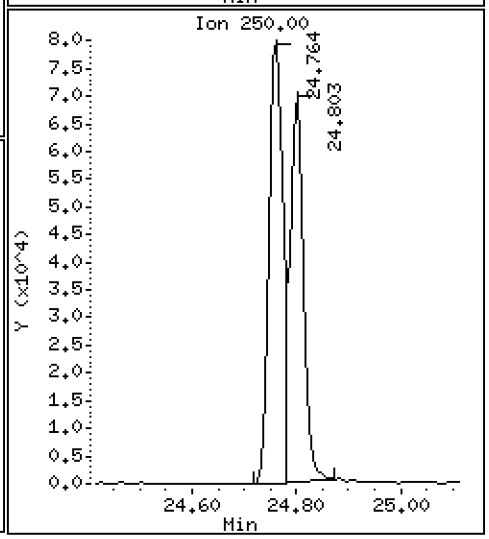












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

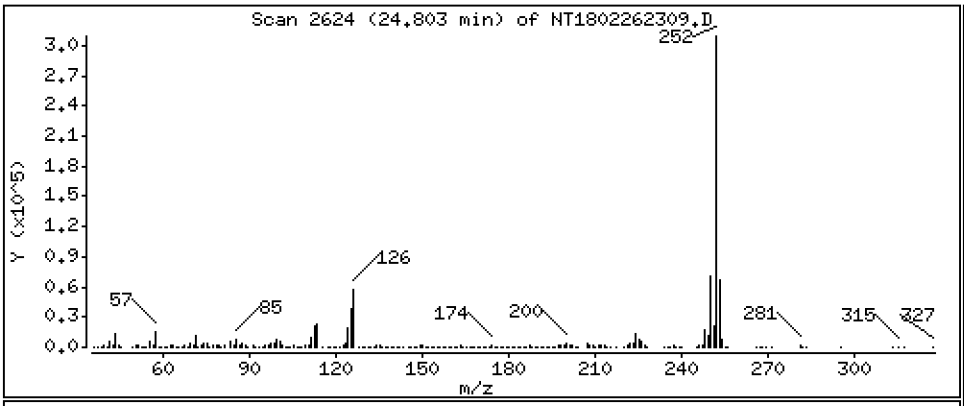
Operator: VTS

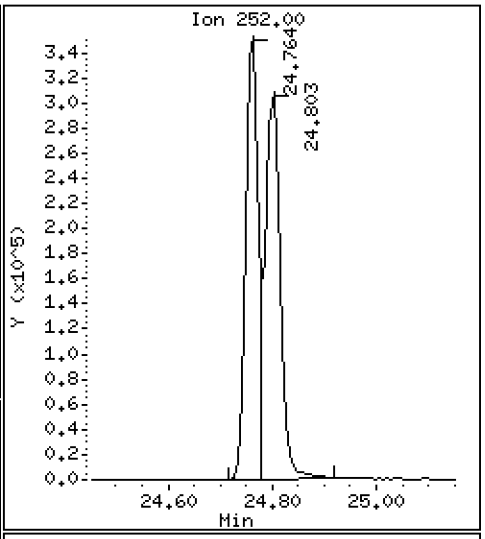
Column phase: ZB-5msi

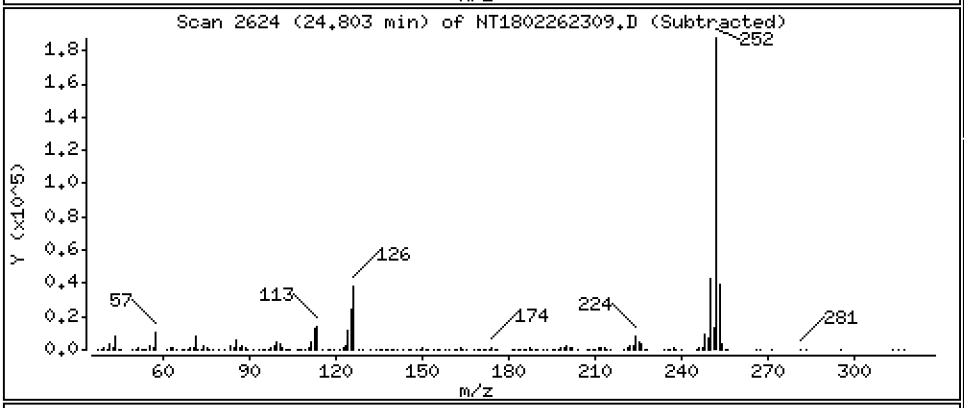
Column diameter: 0.25

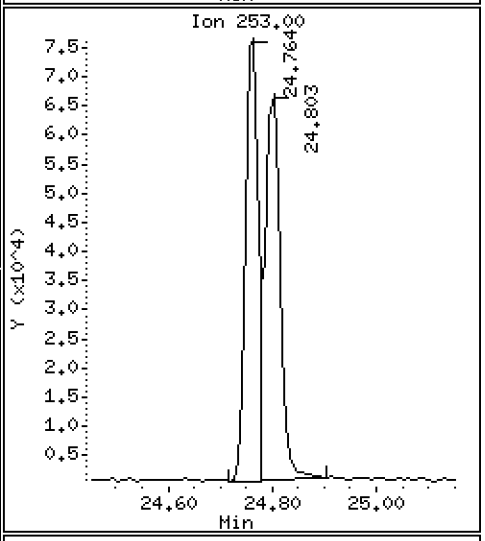
75 Benzo(k)fluoranthene

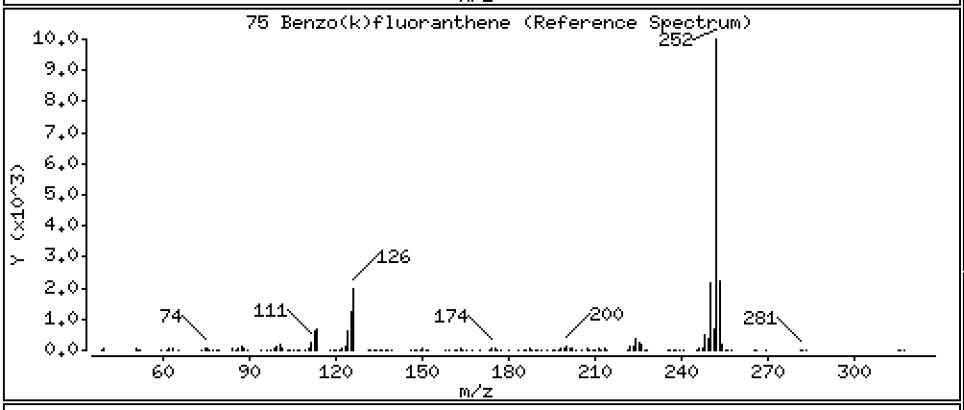
Concentration: 2.034 ug/mL

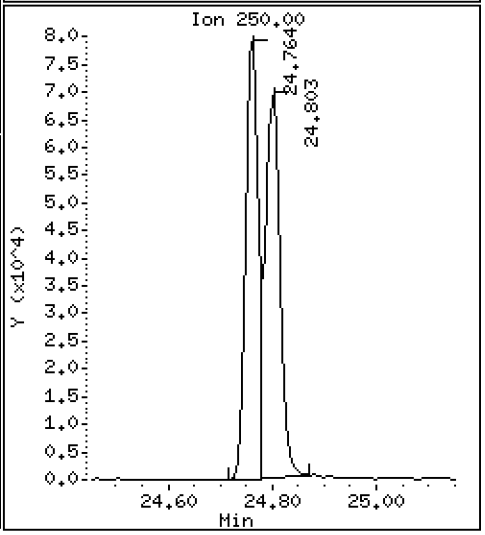


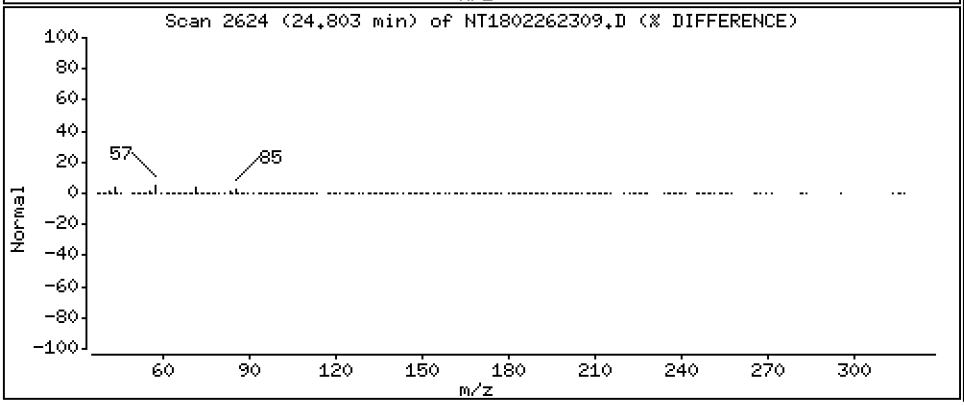












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

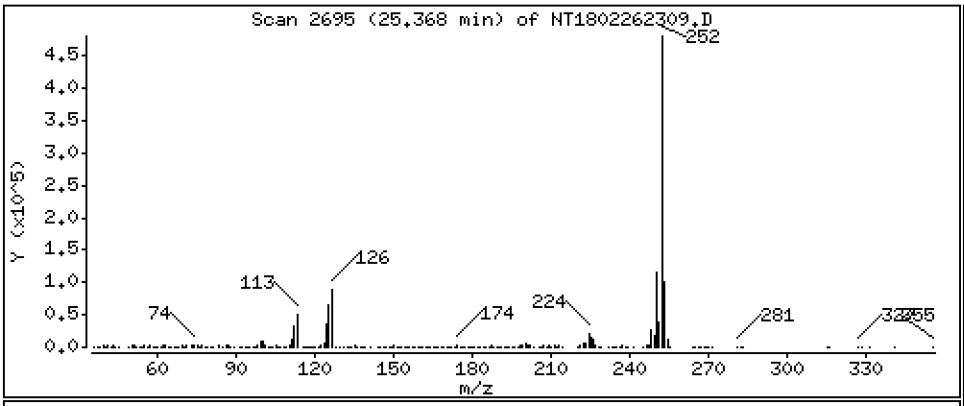
Operator: VTS

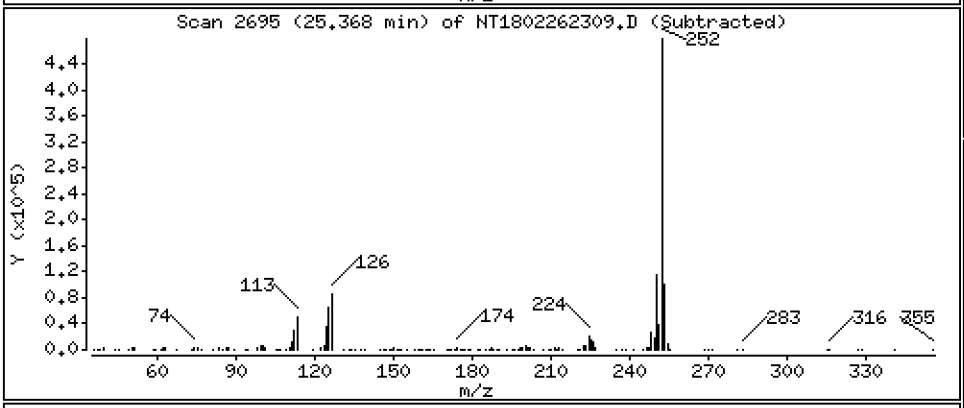
Column phase: ZB-5msi

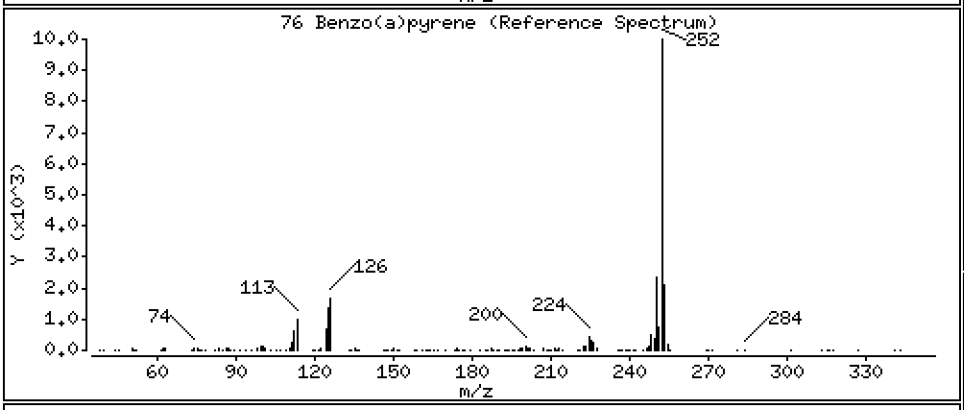
Column diameter: 0.25

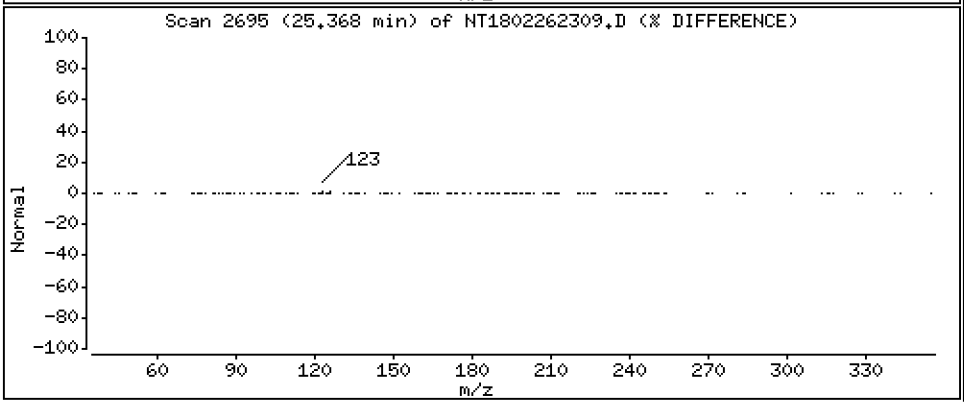
76 Benzo(a)pyrene

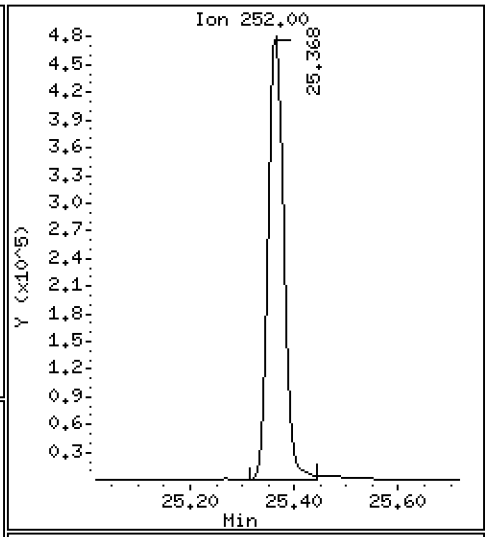
Concentration: 3.867 ug/mL

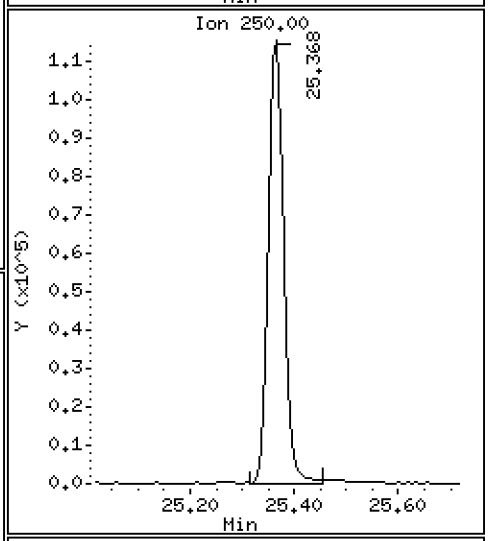


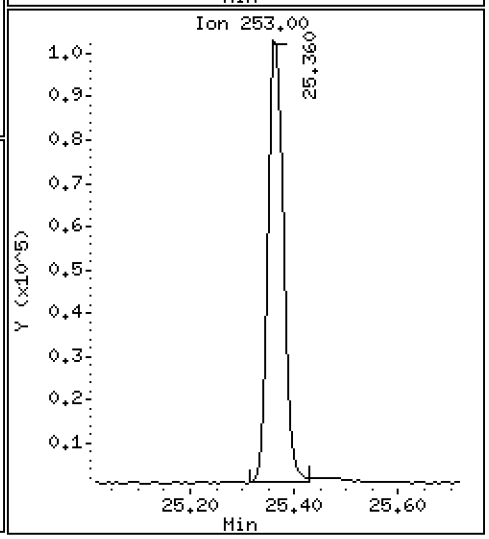












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

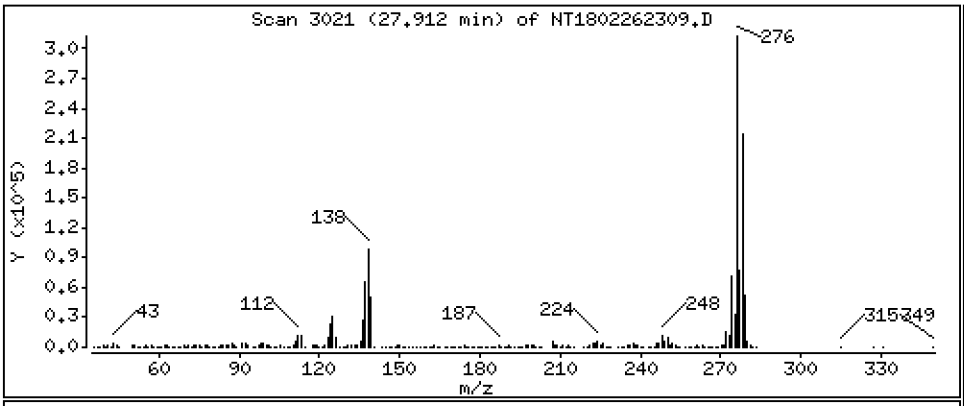
Operator: VTS

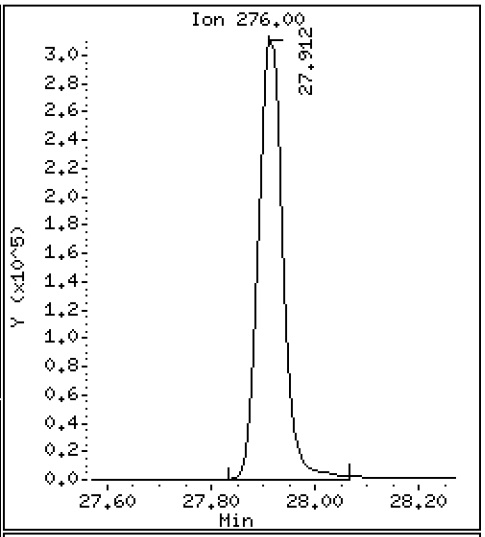
Column phase: ZB-5msi

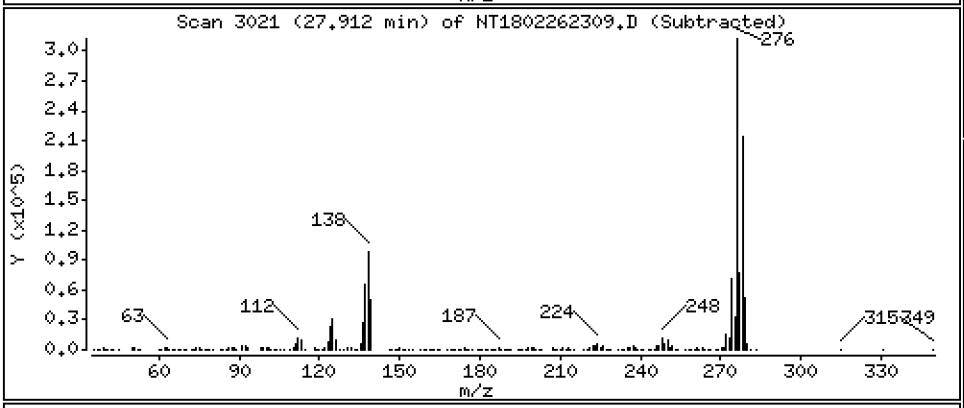
Column diameter: 0.25

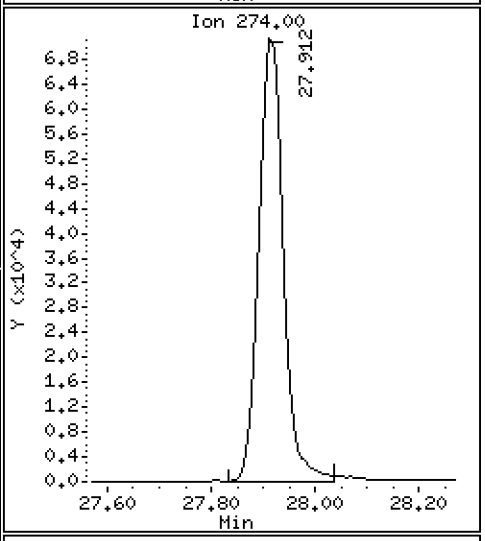
78 Indeno(1,2,3-cd)pyrene

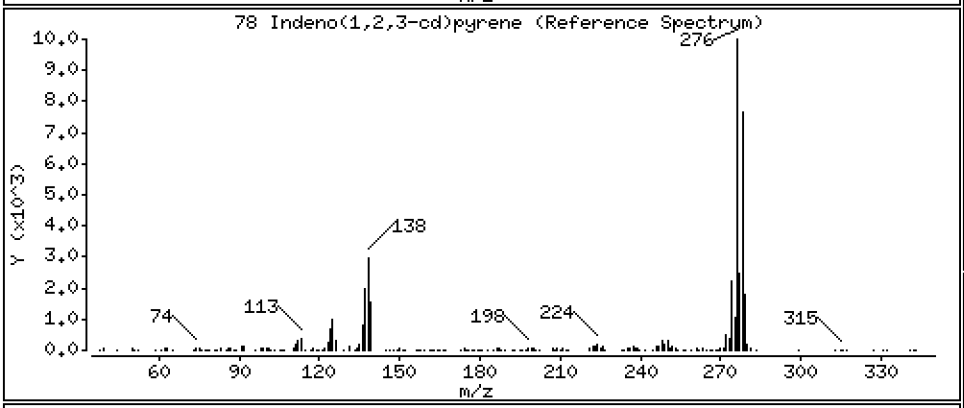
Concentration: 3.216 ug/mL

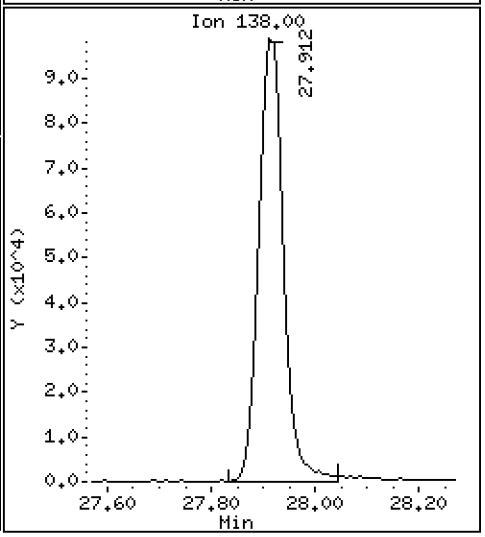


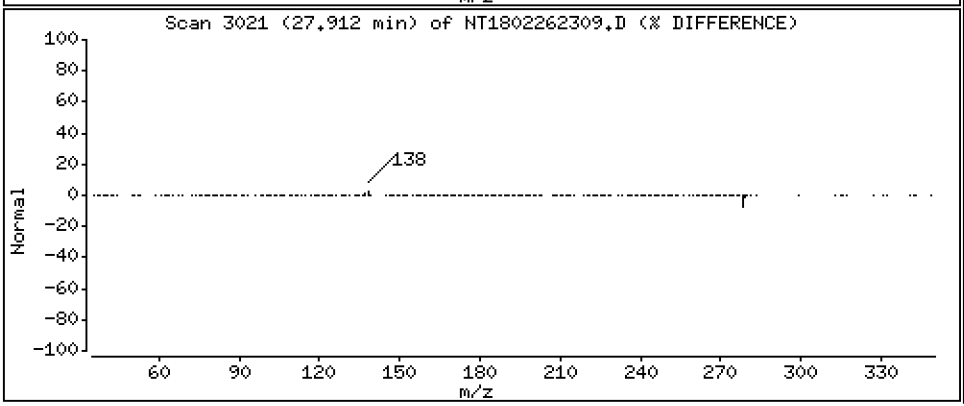












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

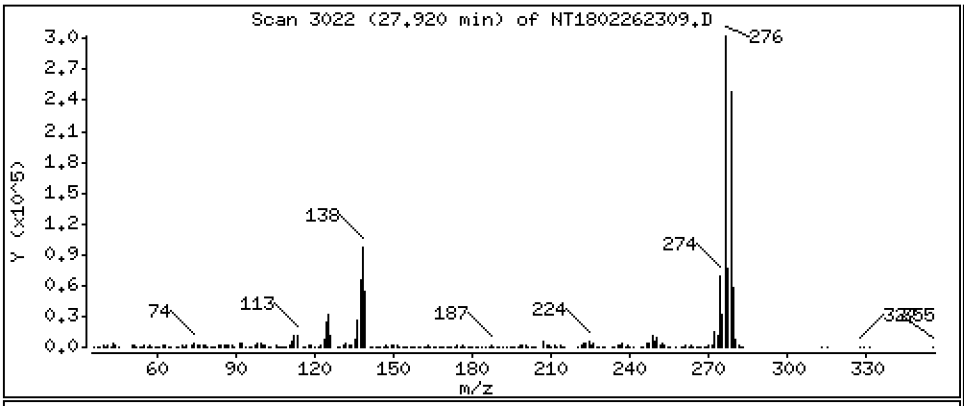
Operator: VTS

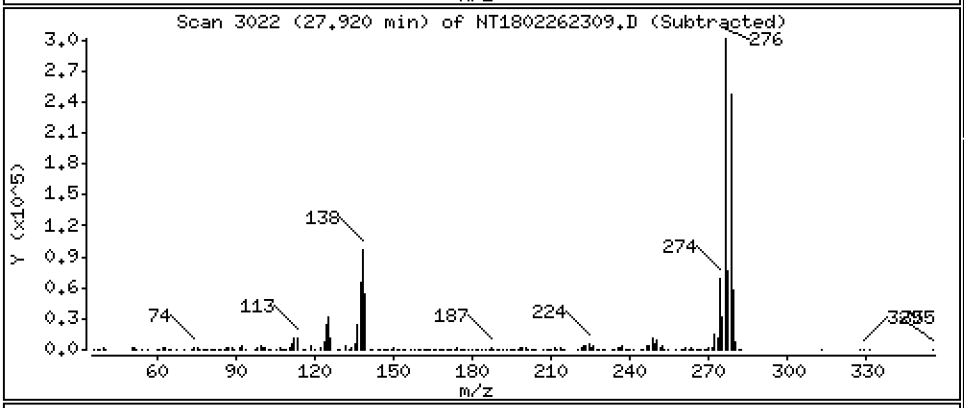
Column phase: ZB-5msi

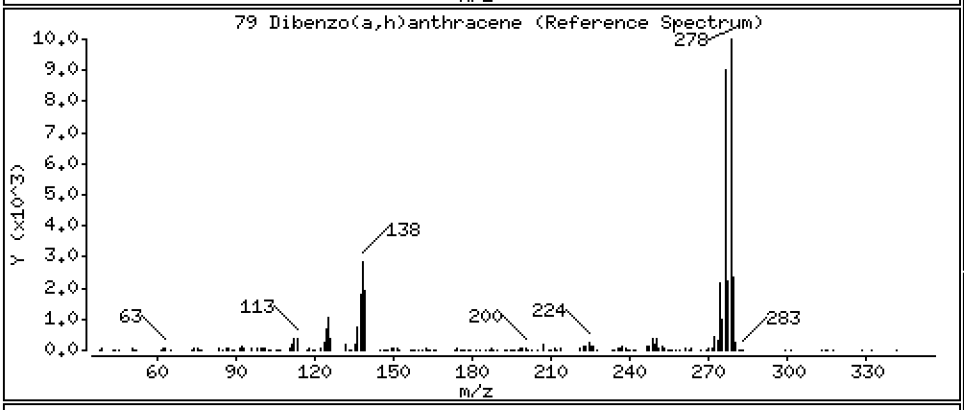
Column diameter: 0.25

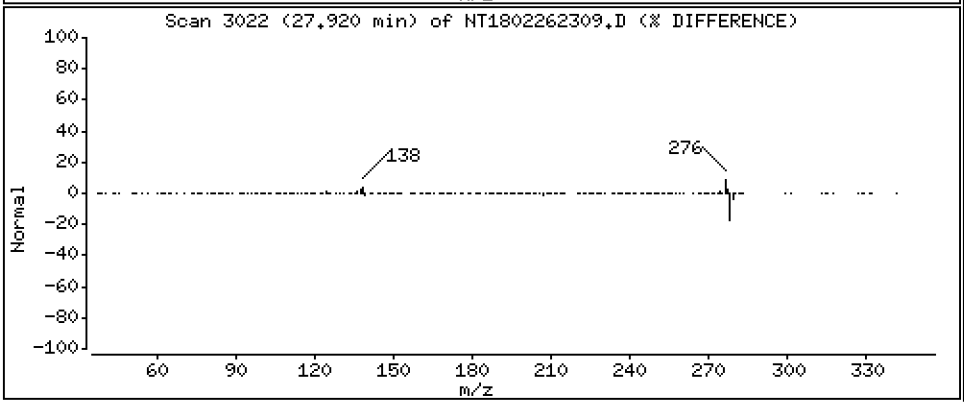
79 Dibenzo(a,h)anthracene

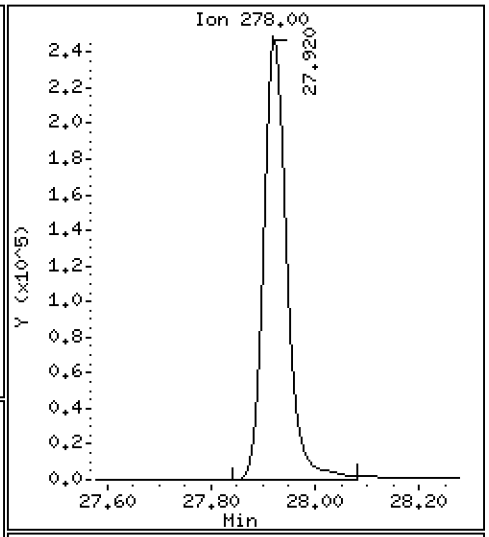
Concentration: 2.900 ug/mL

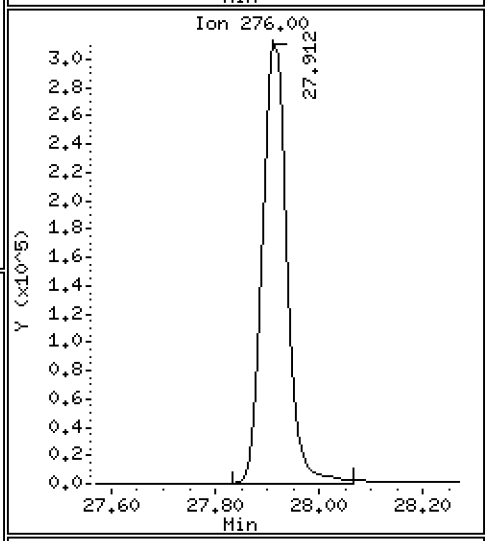


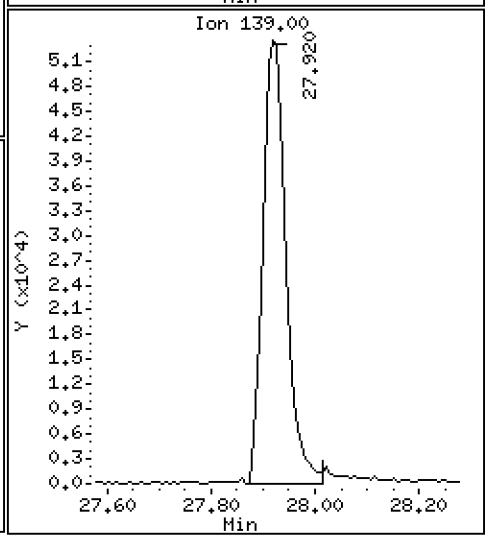












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

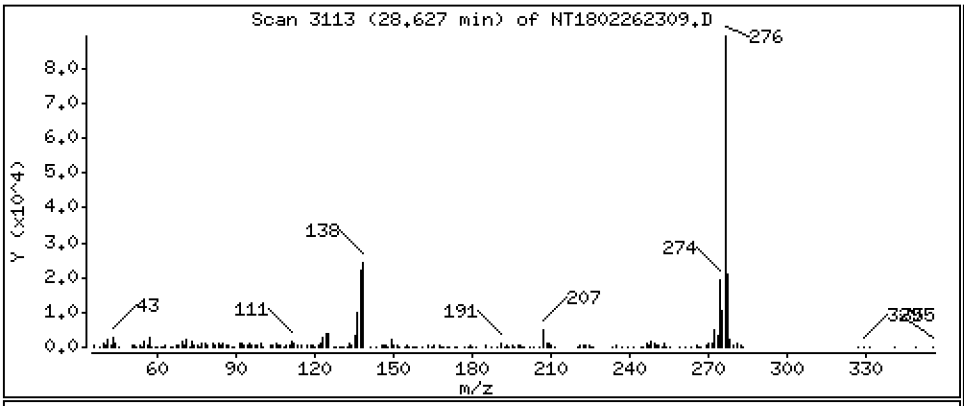
Operator: VTS

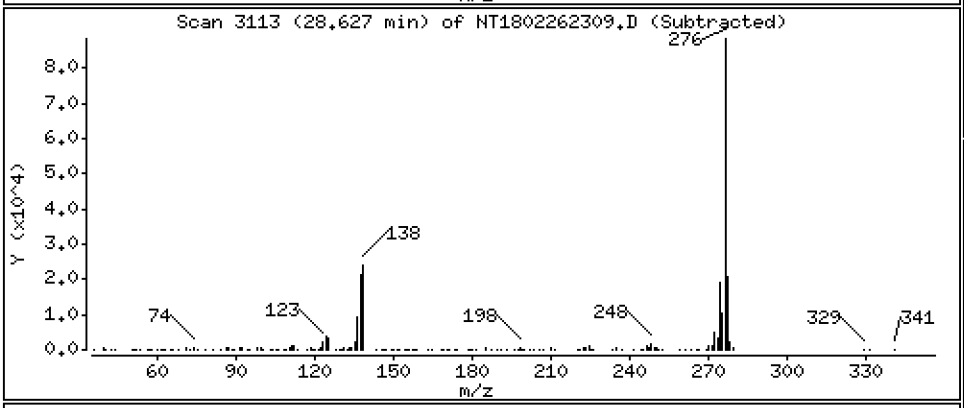
Column phase: ZB-5msi

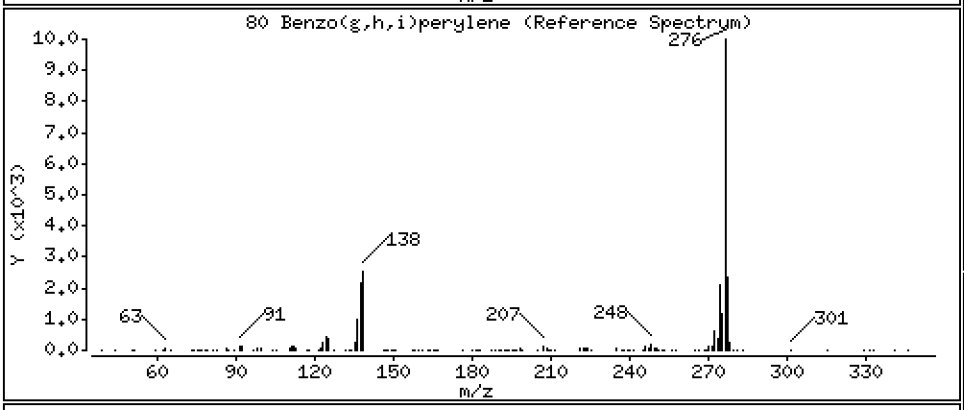
Column diameter: 0.25

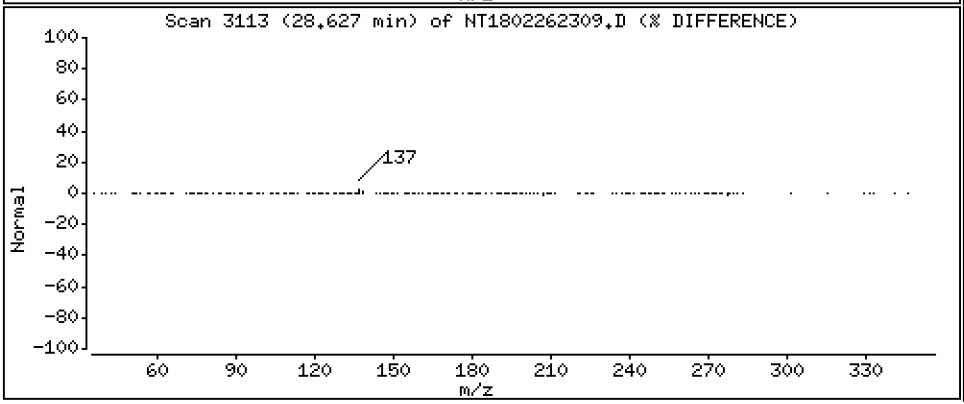
80 Benzo(g,h,i)perylene

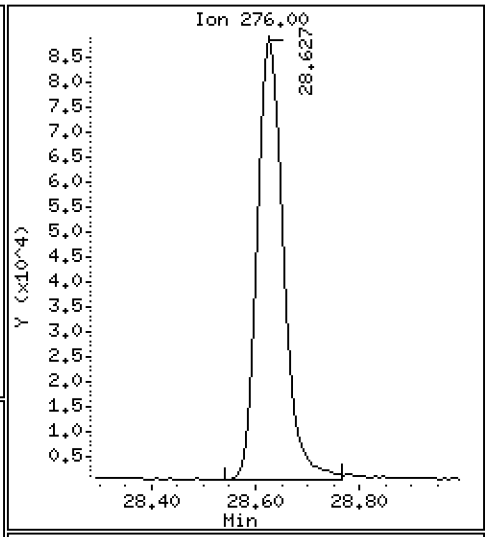
Concentration: 1.228 ug/mL

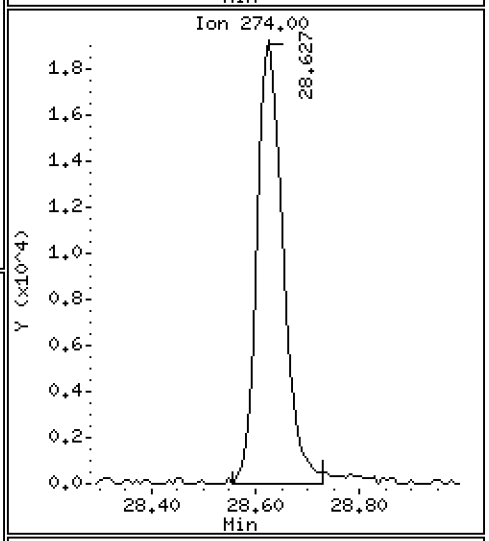


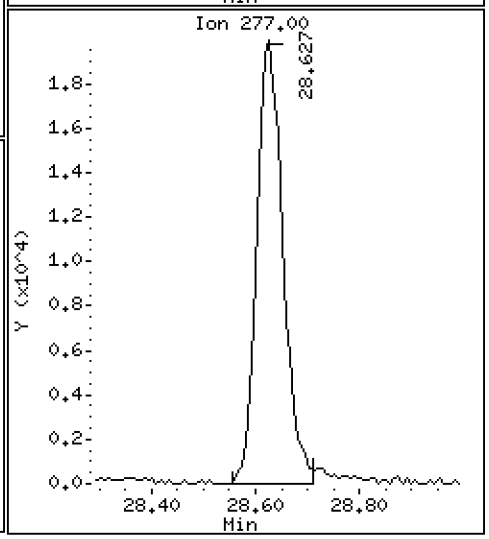












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

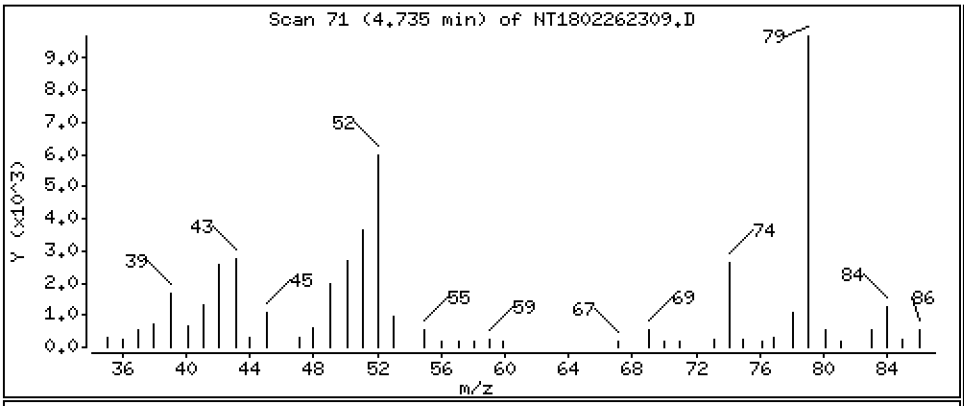
Operator: VTS

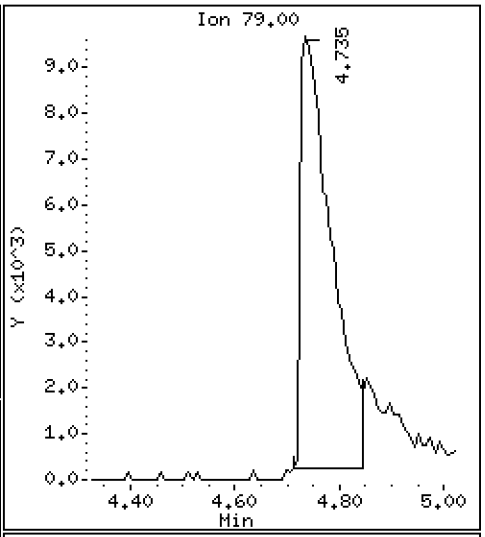
Column phase: ZB-5msi

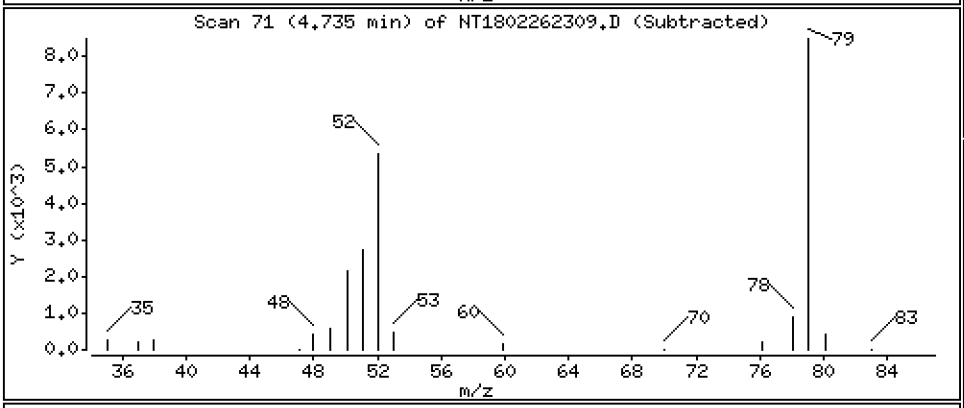
Column diameter: 0.25

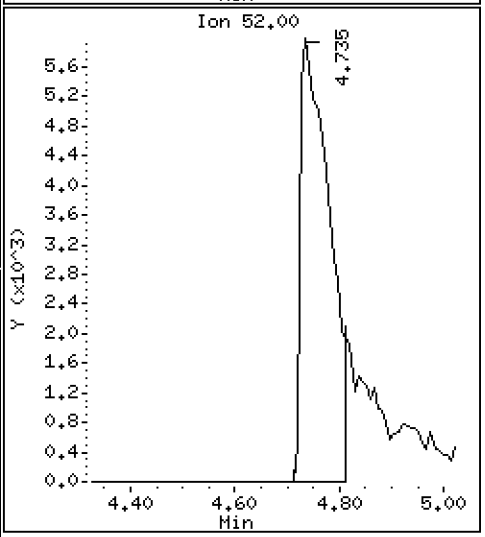
103 Pyridine

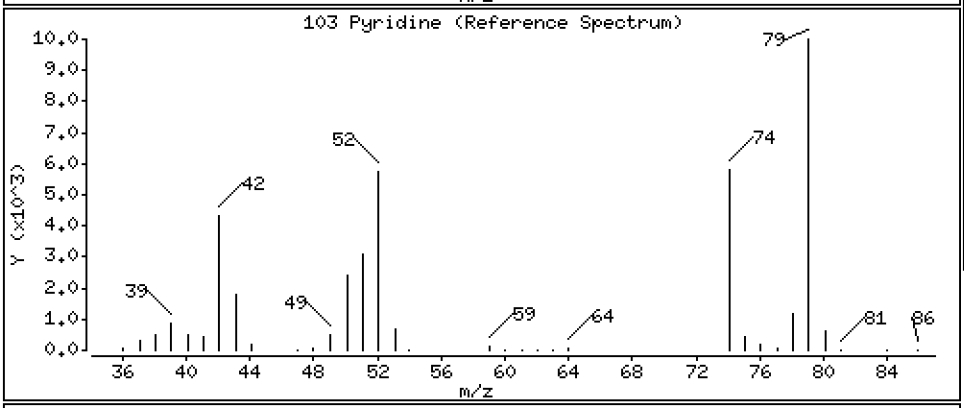
Concentration: 0.4632 ug/mL

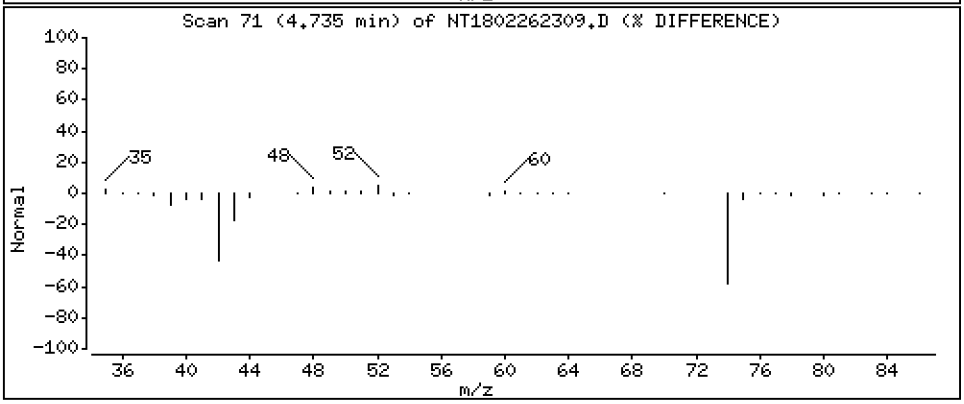












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262309.D

Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

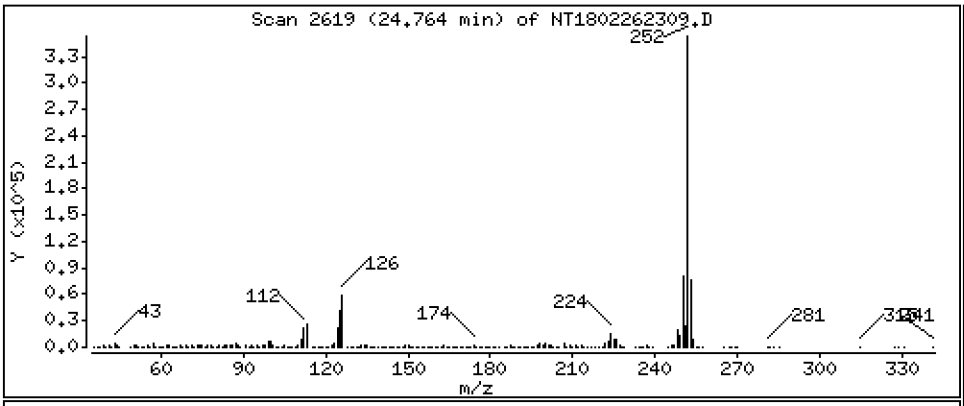
Operator: VTS

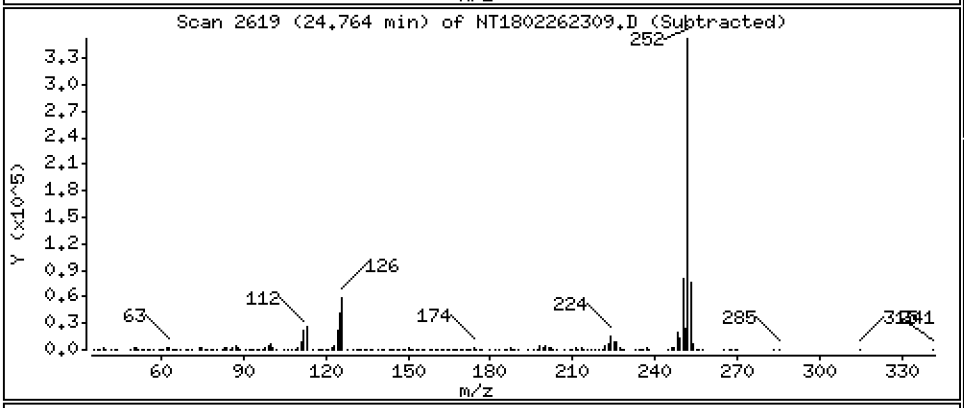
Column phase: ZB-5msi

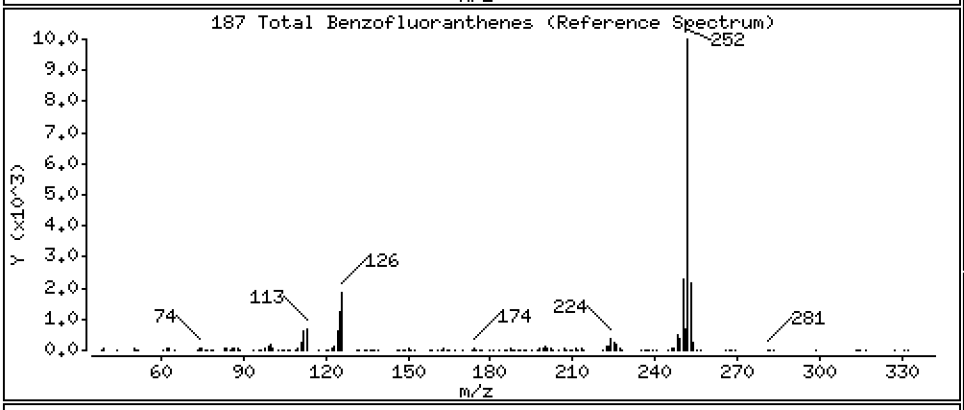
Column diameter: 0.25

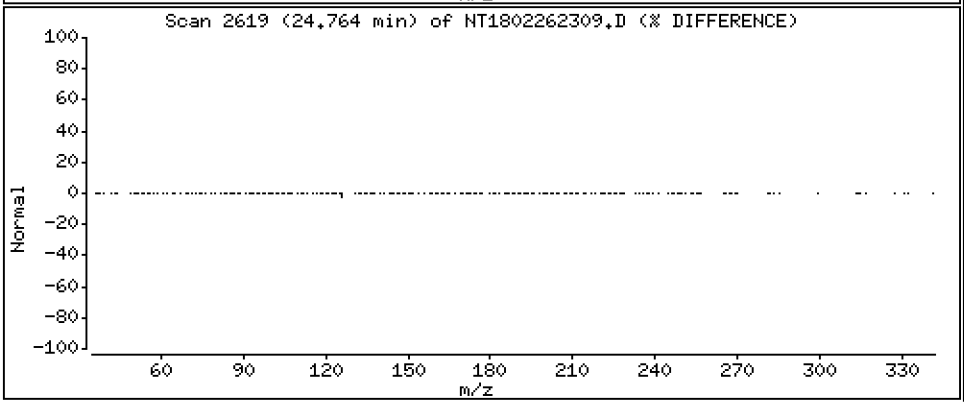
187 Total Benzofluoranthenes

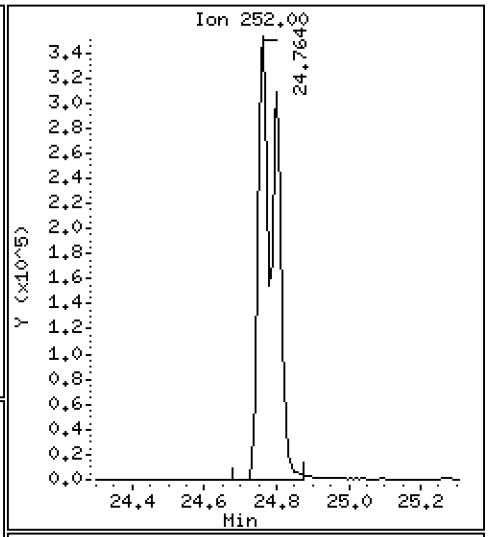
Concentration: 4.346 ug/mL

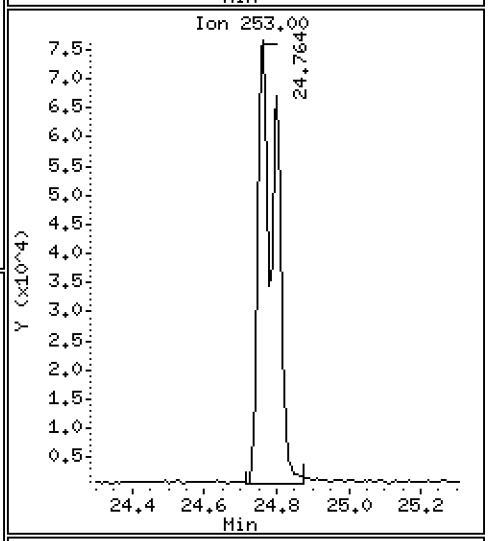


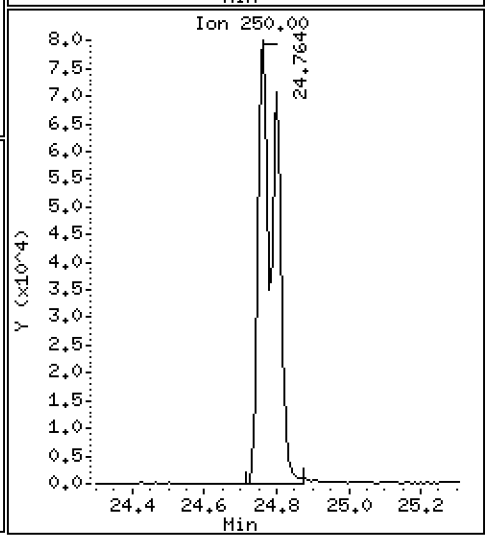












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262309.D

Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM1

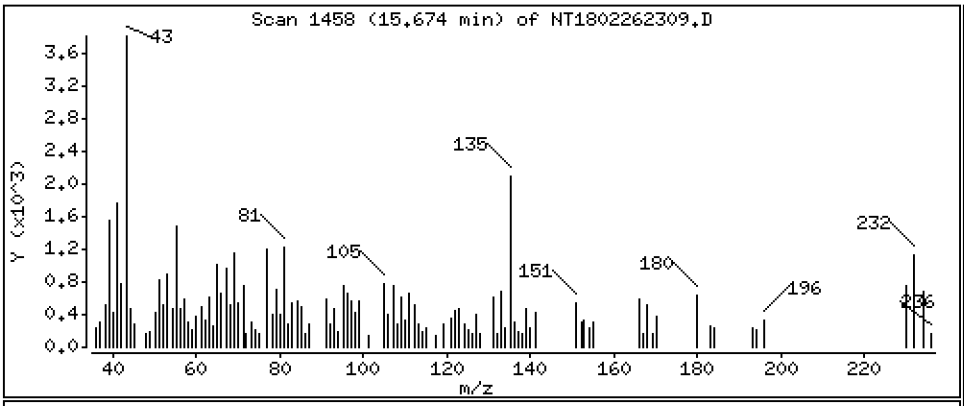
Operator: VTS

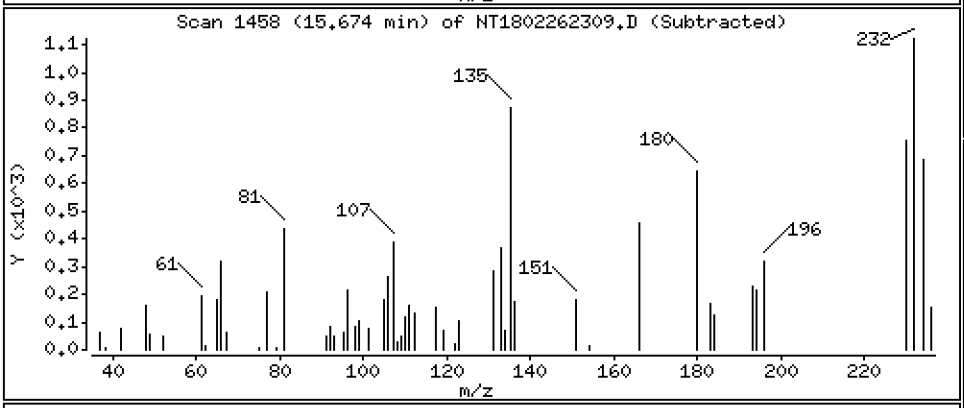
Column phase: ZB-5msi

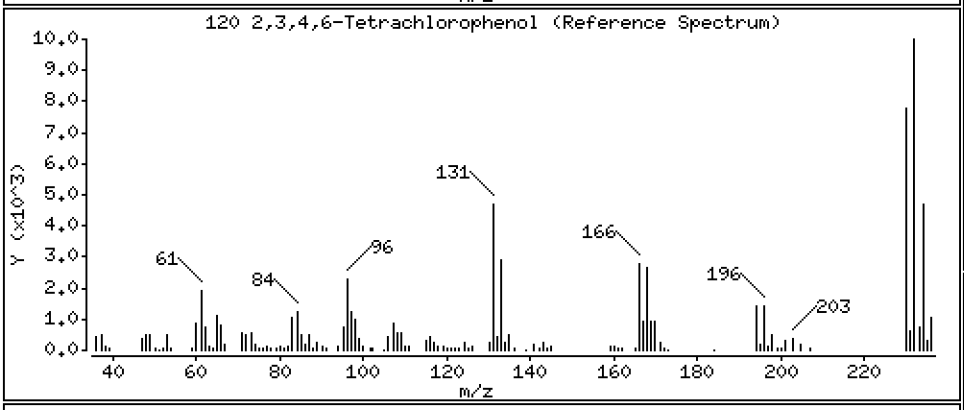
Column diameter: 0.25

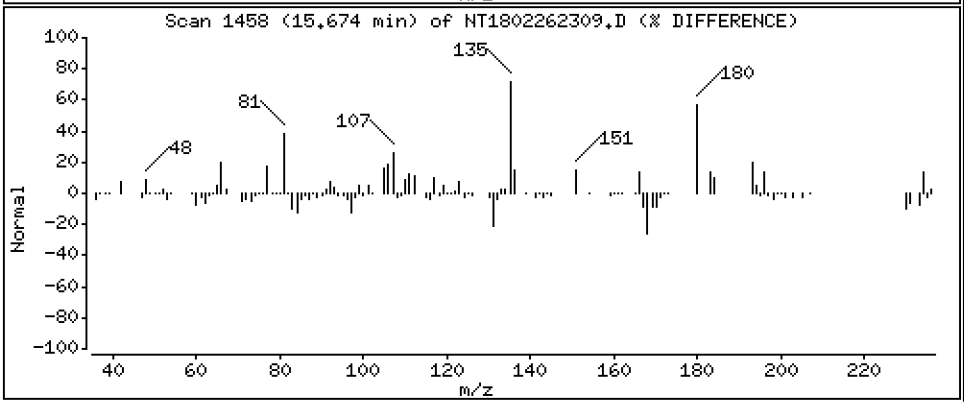
120 2,3,4,6-Tetrachlorophenol

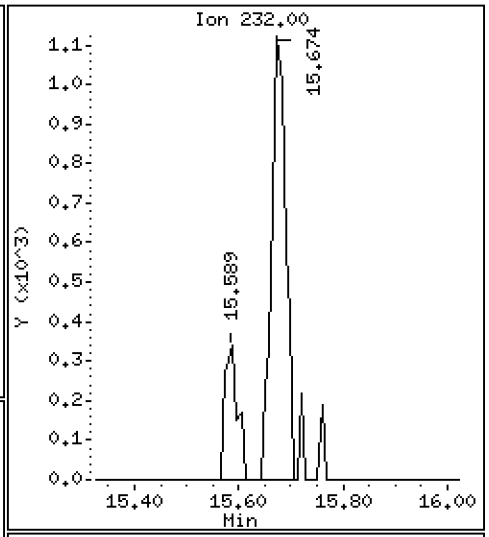
Concentration: 0.04243 ug/mL

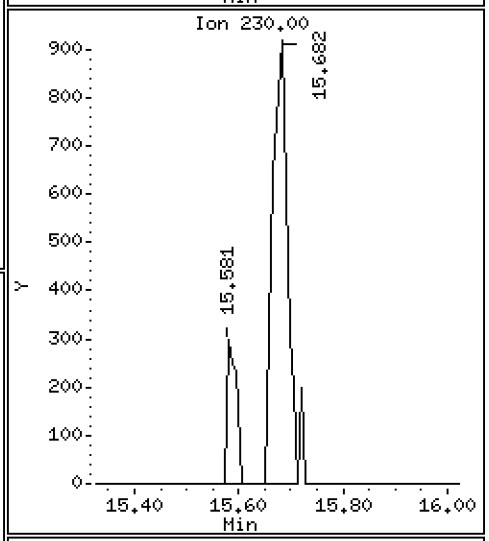


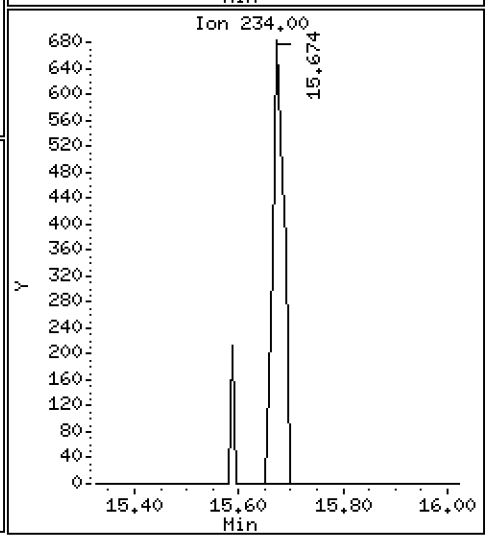












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262309.D
Lab Smp Id: BLA0410-SRM1
Inj Date : 26-FEB-2023 17:12
Operator : VTS Inst ID: nt18.i
Smp Info : BLA0410-SRM1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.766	6.743	(0.759)	443270	5.18916	5.189
$	2 Phenol-d5	99	8.304	8.296	(0.931)	581647	5.26868	5.269
	3 Phenol	94	8.327	8.319	(0.934)	217506	1.89361	1.894
$	5 2-Chlorophenol-d4	132	8.566	8.559	(0.961)	498491	5.18904	5.189
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	8.589	8.590	(0.964)	86645	0.87847	0.8785
	7 1,3-Dichlorobenzene	146	8.852	8.853	(0.993)	59041	0.56596	0.5660
*	8 1,4-Dichlorobenzene-d4	152	8.914	8.915	(1.000)	250376	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.271	9.272	(1.040)	201032	2.95187	2.952
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	30483	1.26044	1.260
	13 2-Methylphenol	108	9.419	9.411	(1.057)	321690	3.62064	3.621
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.683	9.683	(1.086)	434244	4.68921	4.689
$	18 Nitrobenzene-d5	82	9.993	9.993	(0.879)	347727	3.43986	3.440
	19 Nitrobenzene	77	10.024	10.032	(0.882)	166505	1.71112	1.711
	20 Isophorone	82	10.467	10.475	(0.921)	159900	1.28802	1.288
	21 2-Nitrophenol	139	10.650	10.650	(0.937)	187154	3.91615	3.916
	22 2,4-Dimethylphenol	107	10.710	10.710	(0.942)	320455	3.51899	3.519
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	11.100	11.100	(0.977)	428342	5.36475	5.365
	26 1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	66304	0.76887	0.7689
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	948526	4.00000	
	28 Naphthalene	128	11.403	11.403	(1.003)	692610	2.37538	2.375
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	11.766	11.767	(1.035)	57675	1.14103	1.141
	31 4-Chloro-3-methylphenol	107	12.502	12.502	(1.100)	108184	1.41564	1.416
	32 2-Methylnaphthalene	142	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	72950	1.50457	1.505
35	2,4,5-Trichlorophenol	196	13.484	13.485	(0.903)	128635	2.43464	2.435
$ 36	2-Fluorobiphenyl	172	13.562	13.570	(0.908)	711130	3.36470	3.365
37	2-Chloronaphthalene	162	13.771	13.771	(0.922)	231720	1.40311	1.403
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	14.460	14.468	(0.968)	583099	3.28745	3.287
40	Acenaphthylene	152	14.630	14.630	(0.979)	310066	1.11502	1.115
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	14.939	14.947	(1.000)	501284	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	15.009	15.009	(1.005)	635363	3.61010	3.610
45	2,4-Dinitrophenol	184	15.094	15.102	(1.010)	79971	4.18820	4.188
46	Dibenzofuran	168	15.334	15.334	(1.026)	1028653	4.03810	4.038
47	4-Nitrophenol	109	15.218	15.218	(1.019)	133906	6.90622	6.906
48	2,4-Dinitrotoluene	165	15.395	15.403	(1.031)	141406	2.54407	2.544
50	Diethylphthalate	149	15.906	15.921	(1.065)	51861	0.27904	0.2790
49	Fluorene	166	16.037	16.037	(1.073)	486978	2.38553	2.386
51	4-Chlorophenyl-phenylether	204	16.029	16.037	(1.073)	128620	1.38325	1.383
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	16.230	16.238	(0.904)	202730	6.28654	6.287
54	N-Nitrosodiphenylamine	169	16.284	16.292	(0.907)	293632	2.17353	2.174
$ 55	2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	162161	6.24260	6.243
56	4-Bromophenyl-phenylether	248	17.024	17.032	(0.948)	267763	4.93906	4.939
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	17.697	17.697	(0.986)	55374	3.31294	3.313
* 59	Phenanthrene-d10	188	17.952	17.952	(1.000)	897833	4.00000	
60	Phenanthrene	178	17.999	17.999	(1.003)	957022	3.38884	3.389
61	Anthracene	178	18.084	18.092	(1.007)	442646	1.64479	1.645
62	Carbazole	167	18.417	18.424	(1.026)	1042906	4.22905	4.229
63	Di-n-butylphthalate	149	19.229	19.237	(1.071)	357714	1.31046	1.310
64	Fluoranthene	202	20.374	20.382	(0.886)	532524	1.84364	1.844
65	Pyrene	202	20.799	20.800	(0.905)	696876	2.26217	2.262
$ 66	Terphenyl-d14	244	21.094	21.094	(0.918)	1084692	4.39003	4.390
67	Butylbenzylphthalate	149	22.023	22.023	(0.958)	351449	3.00455	3.005
68	Benzo(a)anthracene	228	22.952	22.952	(0.999)	1283710	4.31311	4.313
* 69	Chrysene-d12	240	22.983	22.983	(1.000)	824416	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.022	23.029	(1.002)	311126	1.00529	1.005
72	bis(2-Ethylhexyl)phthalate	149	23.045	23.053	(0.959)	410318	2.17261	2.173
* 134	Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	1315452	4.00000	
73	Di-n-octylphthalate	149	24.028	24.028	(1.000)	640894	1.74845	1.748
74	Benzo(b)fluoranthene	252	24.763	24.764	(0.972)	632249	2.33778	2.338
75	Benzo(k)fluoranthene	252	24.802	24.802	(0.974)	623279	2.03353	2.034(H)
76	Benzo(a)pyrene	252	25.367	25.368	(0.996)	969541	3.86711	3.867
* 77	Perylene-d12	264	25.468	25.476	(1.000)	828963	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.912	27.920	(1.096)	1012271	3.21622	3.216
79	Dibenzo(a,h)anthracene	278	27.920	27.927	(1.096)	761108	2.89954	2.900
80	Benzo(g,h,i)perylene	276	28.626	28.642	(1.124)	309880	1.22808	1.228
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	4.735	4.673	(0.531)	38697	0.46320	0.4632
105	1-methylnaphthalene	142	Compound Not Detected.					
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.763	24.802	(0.972)	1188410	4.34621	4.346
120 2,3,4,6-Tetrachlorophenol	232	15.674	15.674	(1.049)	2035	0.04243	0.04243

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262309.D
Lab Smp Id: BLA0410-SRM1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	250376	2.56
27 Naphthalene-d8	943164	471582	1886328	948526	0.57
42 Acenaphthene-d10	501893	250947	1003786	501284	-0.12
59 Phenanthrene-d10	896502	448251	1793004	897833	0.15
69 Chrysene-d12	842481	421241	1684962	824416	-2.14
134 Di-n-octylphthala	1278043	639022	2556086	1315452	2.93
77 Perylene-d12	915681	457841	1831362	828963	-9.47

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.91	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.94	-0.05
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	-0.00
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	-0.00
77 Perylene-d12	25.48	24.98	25.98	25.47	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262309.D

Lab ID: BLA0410-SRM1
nt18.i, ABN.m, 26-FEB-2023 17:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.531	0.524	0.0069	Pyridine

RRT check based on Ccal File: NT1802262302.D

On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E

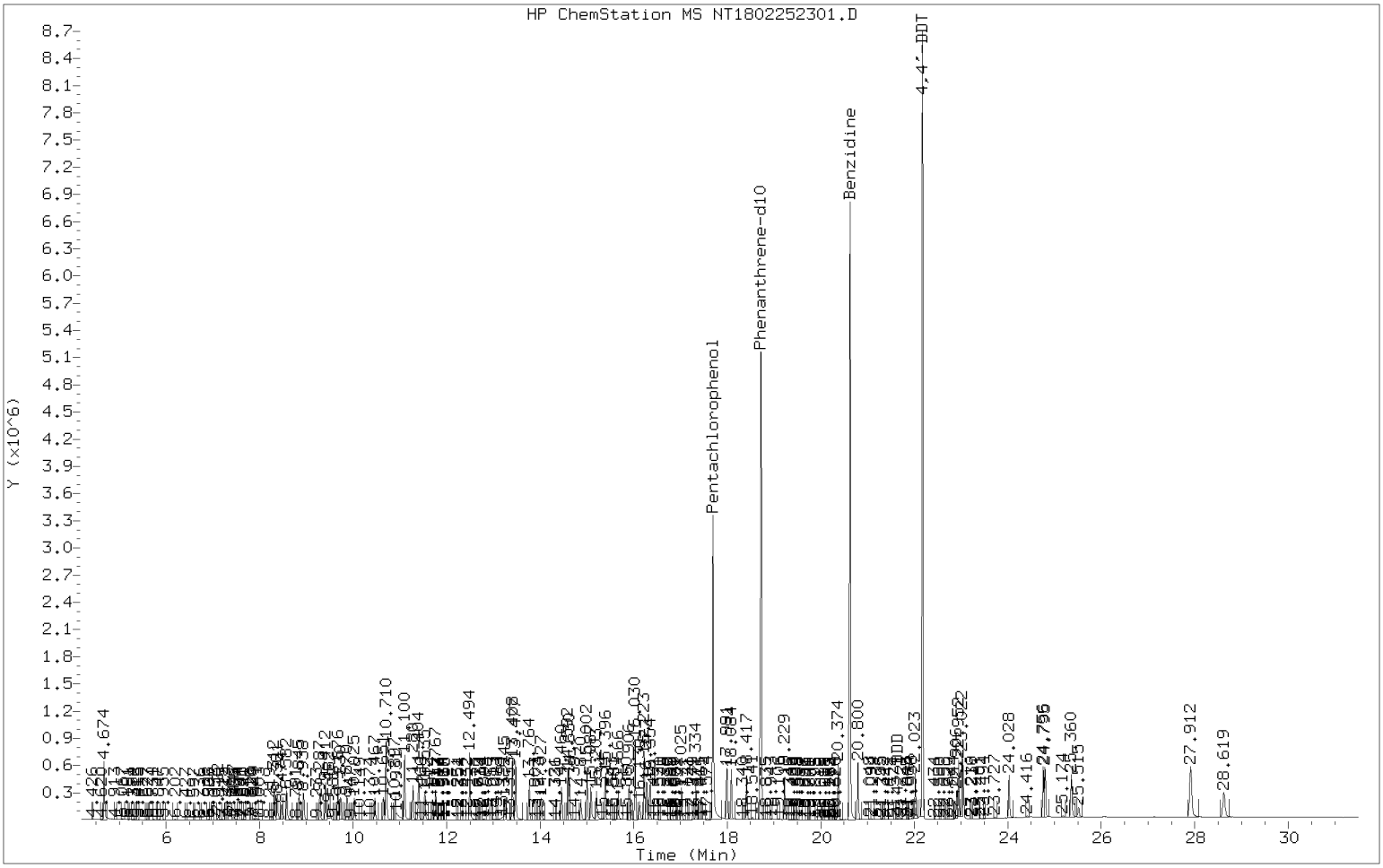
Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	NT1802252301.D	Injection Date:	02/25/23
Instrument ID:	NT18	Injection Time:	20:42
Sequence:	SLC0099	Lab Sample ID:	SLC0099-TUN1

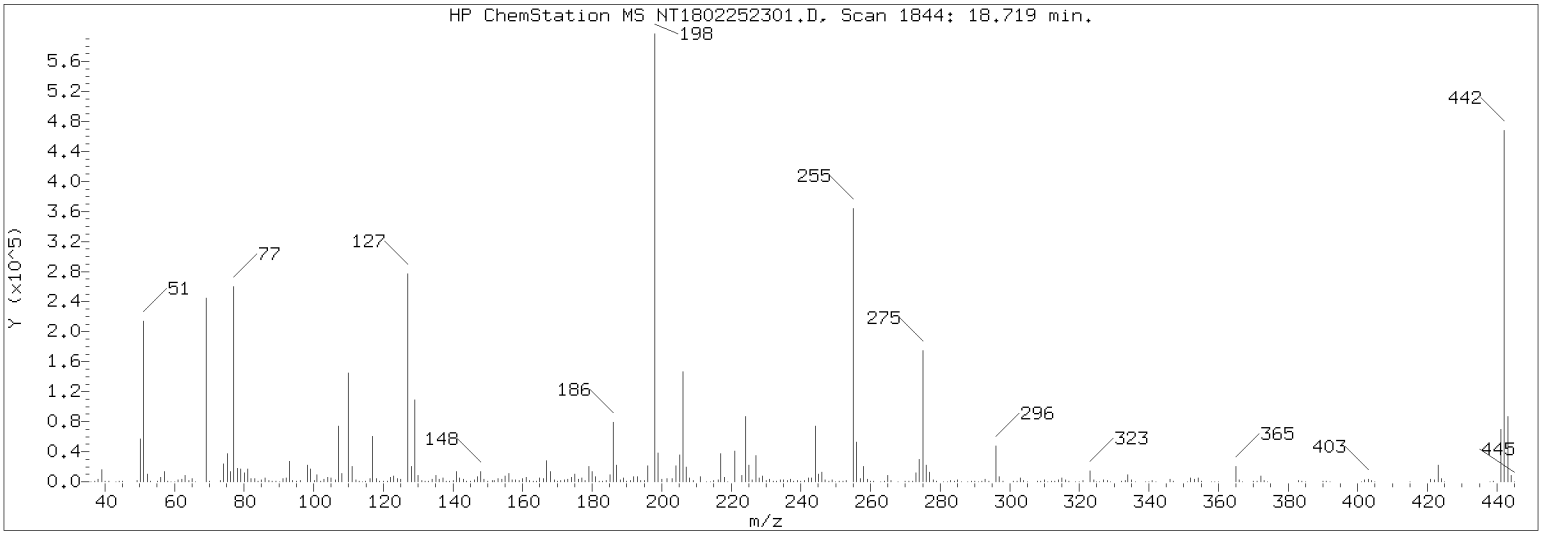
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	0	PASS
69	Less than 100% of 198	41.2	PASS
70	Less than 2% of 69	0.5	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.63	PASS
365	1 - 100% of 198	3.7	PASS
441	Less than 150% of 443	80.5	PASS
442	1 - 200% of 198	80.5	PASS
443	15 - 24% of 442	18.9	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of		
4,4'-DDT	Less than 200% of		

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLC0099-TUN1	NT1802252301.D	02/25/2023	20:42
Cal Standard	SLC0099-CAL7	NT1802252302.D	02/25/2023	21:23
Cal Standard	SLC0099-CAL6	NT1802252303.D	02/25/2023	22:03
Cal Standard	SLC0099-CAL5	NT1802252304.D	02/25/2023	22:43
Cal Standard	SLC0099-CAL4	NT1802252305.D	02/25/2023	23:24
Cal Standard	SLC0099-CAL3	NT1802252306.D	02/26/2023	0:04
Cal Standard	SLC0099-CAL2	NT1802252307.D	02/26/2023	0:44
Cal Standard	SLC0099-CAL1	NT1802252308.D	02/26/2023	1:24
Initial Cal Blank	SLC0099-ICB1	NT1802252311.D	02/26/2023	3:26
Secondary Cal Check	SLC0099-SCV1	NT1802252312.D	02/26/2023	4:06

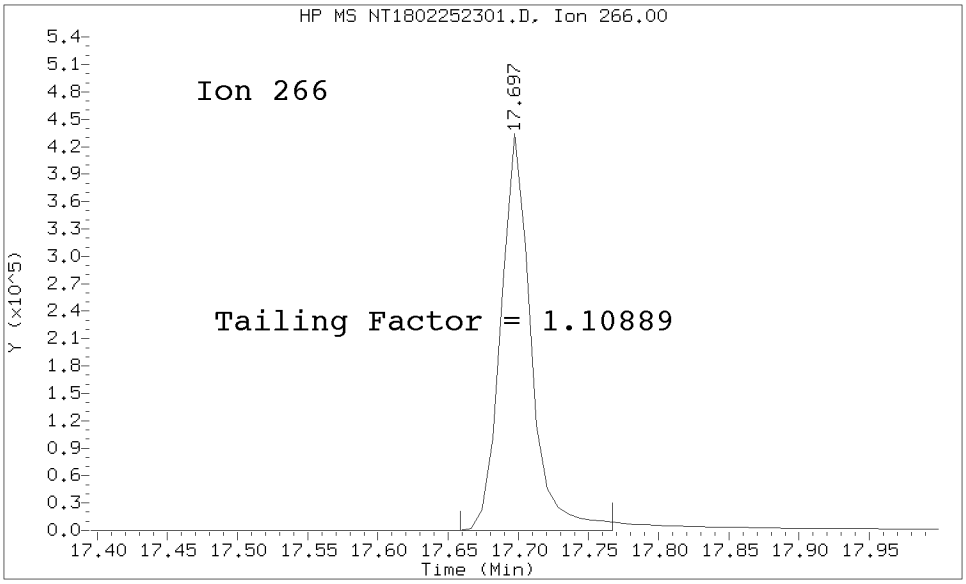
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230225.b/NT1802252301.D/NT1802252301.D
Method Used: \20230225.b\DFTPP8270E.m Inst: nt18
Injection Date: 25-FEB-2023 20:42 Operator: VTS
Sample Info: SLC0099-TUN1 SLC0099-TUN1
Report Date: 03/08/2023 15:05



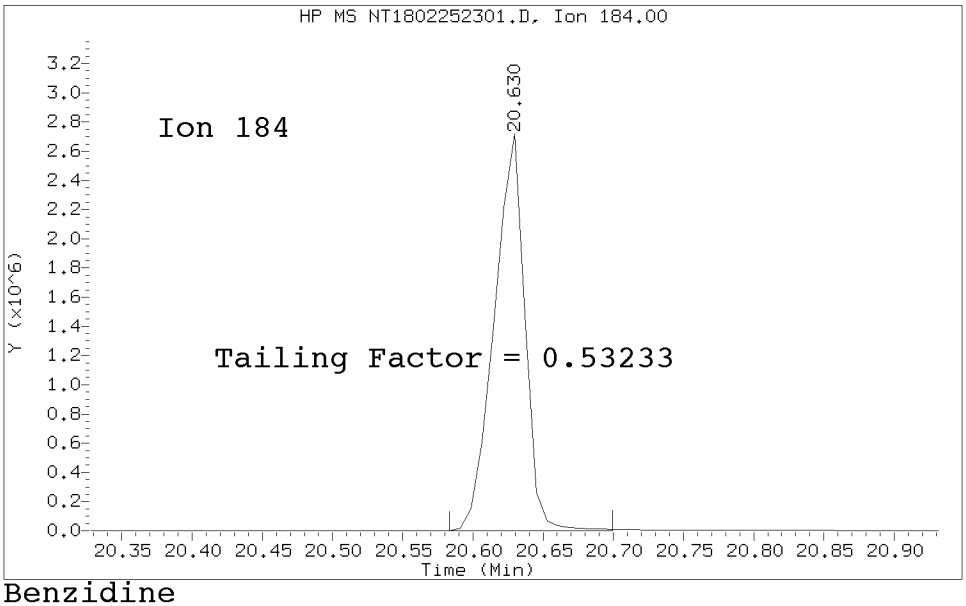


Datafile Analyzed: /20230225.b/NT1802252301.D/NT1802252301.D
Method Used: \20230225.b\DFTPP8270E.m\sw846ddt.m Inst: nt18
Injection Date: 25-FEB-2023 20:42 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 03/08/2023 15:05



Pentachlorophenol
==========
 Exp. RT = 17.697
Found RT = 17.697

Tail Factor = 1.109 Maximum Allowed = 2.0



Benzidine
=========
 Exp. RT = 20.630
Found RT = 20.630

Tail Factor = 0.532 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.1088871	2.000	PASS
Benzidine	0.5323326	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	2570944			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	4286	0.2	20.0	PASS
4,4-DDD + DDE	4286	0.2	20.0	PASS

Tuning Sample, nt18.i/20230225.b/NT1802252301.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	41.17
70	Less than 2.00% of mass 69	0.21 (0.50)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.63
365	1.00 - 100.00% of mass 198	3.70
441	Less than 150.00% of mass 443	12.29 (80.53)
442	Less than 200.00% of mass 198	80.53
443	15.00 - 24.00% of mass 442	15.26 (18.95)

Data File: NT1802252301.D
Spectrum: Avg. Scans 1843-1845 (18.72), Background Scan 1838
Location of Maximum: 198.00
Number of points: 323

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	220	127.00	242176	210.00	608	299.00	72
37.00	967	128.00	18392	211.00	5556	301.00	577
38.00	2785	129.00	96032	213.00	351	302.00	747
39.00	15166	130.00	8031	214.00	66	303.00	4907
40.00	725	131.00	1607	215.00	1396	304.00	1293
41.00	438	132.00	1034	216.00	2830	305.00	132
43.00	117	133.00	332	217.00	33656	308.00	545
45.00	414	134.00	2677	218.00	4658	309.00	434
48.00	70	135.00	7544	219.00	379	310.00	1105
49.00	1824	136.00	2933	221.00	34584	311.00	223
50.00	51088	137.00	3930	223.00	7904	312.00	111
51.00	187520	138.00	1034	224.00	76560	313.00	506
52.00	9471	139.00	573	225.00	19064	314.00	2103
53.00	517	140.00	1188	226.00	2136	315.00	4587
55.00	1003	141.00	11908	227.00	30976	316.00	2629
56.00	5693	142.00	3963	228.00	4600	317.00	476
57.00	12450	143.00	2682	229.00	6368	319.00	51
58.00	594	144.00	879	230.00	1131	320.00	142
59.00	116	145.00	620	231.00	2856	321.00	1493
60.00	306	146.00	2281	232.00	514	322.00	473
61.00	2536	147.00	5711	233.00	607	323.00	13155
62.00	2844	148.00	13401	234.00	1942	324.00	2624
63.00	7649	149.00	2648	235.00	2285	325.00	217
64.00	1188	150.00	799	236.00	1377	326.00	330
65.00	3947	151.00	2003	237.00	2608	327.00	2589
66.00	374	152.00	431	238.00	396	328.00	1447
67.00	156	153.00	3992	239.00	1277	329.00	179
69.00	215360	154.00	2809	240.00	977	332.00	1079
70.00	1077	155.00	6572	241.00	1835	333.00	1407
71.00	119	156.00	10087	242.00	4428	334.00	8469
73.00	1722	157.00	2167	243.00	4996	335.00	2223
74.00	21360	158.00	2291	244.00	65768	336.00	252
75.00	32760	159.00	1645	245.00	8615	339.00	174
76.00	11667	160.00	3868	246.00	11846	340.00	236
77.00	227136	161.00	5423	247.00	2483	341.00	1666
78.00	15427	162.00	1602	248.00	563	342.00	409
79.00	15397	163.00	449	249.00	2360	346.00	3398
80.00	10911	164.00	742	250.00	444	347.00	545
81.00	15377	165.00	4059	251.00	531	351.00	284
82.00	3815	166.00	3568	252.00	527	352.00	4094
83.00	3427	167.00	24600	253.00	1289	353.00	2881
84.00	399	168.00	12104	255.00	323392	354.00	4506
85.00	2535	169.00	2188	256.00	46232	355.00	899
86.00	4534	170.00	789	257.00	3793	358.00	50
87.00	2011	171.00	1123	258.00	18128	359.00	217
88.00	945	172.00	2241	259.00	2864	360.00	57
89.00	447	173.00	2799	260.00	541	365.00	19352
90.00	108	174.00	5195	261.00	486	366.00	2645
91.00	3668	175.00	9152	263.00	168	367.00	222

92.00	4027	176.00	3473	264.00	450	370.00	396
93.00	24888	177.00	4425	265.00	7366	371.00	1012
94.00	1863	178.00	1648	266.00	1155	372.00	6575
95.00	521	179.00	17864	267.00	55	373.00	1696
96.00	1194	180.00	11878	268.00	133	374.00	80
98.00	19456	181.00	6026	269.00	52	383.00	1730
99.00	15353	182.00	945	270.00	429	384.00	494
100.00	1355	183.00	556	271.00	651	385.00	136
101.00	8334	184.00	1650	272.00	1019	390.00	844
102.00	590	185.00	8888	273.00	10416	391.00	488
103.00	3238	186.00	70416	274.00	26248	392.00	390
104.00	5358	187.00	19576	275.00	154752	397.00	52
105.00	4920	188.00	2032	276.00	19848	401.00	364
106.00	2328	189.00	4603	277.00	11801	402.00	2598
107.00	65456	190.00	638	278.00	2016	403.00	3311
108.00	10450	191.00	2013	279.00	504	404.00	1346
110.00	127944	192.00	5979	281.00	67	405.00	136
111.00	17976	193.00	6294	282.00	292	415.00	133
112.00	2498	194.00	1387	283.00	1383	421.00	2859
113.00	766	195.00	1119	284.00	925	422.00	3020
114.00	175	196.00	18912	285.00	2369	423.00	20976
115.00	408	198.00	523072	286.00	372	424.00	4215
116.00	3902	199.00	34704	288.00	120	425.00	431
117.00	54672	200.00	2675	289.00	626	437.00	115
118.00	3817	201.00	3359	290.00	396	438.00	243
119.00	488	203.00	3637	291.00	280	439.00	450
120.00	868	204.00	18208	292.00	638	441.00	64280
121.00	541	205.00	31632	293.00	2603	442.00	421248
122.00	4779	206.00	131200	294.00	693	443.00	79824
123.00	6547	207.00	17288	296.00	43712	444.00	7170
124.00	3236	208.00	4403	297.00	6035	445.00	374
125.00	2841	209.00	1300	298.00	407		

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00023	Instrument:	NT18
Calibration Date:	02/25/2023	Column (1):	ZB-5MS

Calibration Comments: 625.1/8270E ICAL

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Phenol	0.2	1.880661	0.5	1.987922	1	1.743409	2.5	1.847366	5	1.80101	10	1.814675
bis(2-chloroethyl) ether	0.2	1.369164	0.5	1.388128	1	1.198344	2.5	1.257162	5	1.185007	10	1.170268
2-Chlorophenol	0.2	1.635362	0.5	1.736893	1	1.501263	2.5	1.59351	5	1.516579	10	1.536529
1,3-Dichlorobenzene	0.2	1.854486	0.5	1.879878	1	1.566359	2.5	1.676633	5	1.560159	10	1.576531
1,4-Dichlorobenzene	0.2	1.981015	0.5	1.917617	1	1.629705	2.5	1.648726	5	1.568275	10	1.586891
1,2-Dichlorobenzene	0.2	1.906526	0.5	1.838807	1	1.552096	2.5	1.627931	5	1.526272	10	1.549646
Benzyl Alcohol	0.2	0.7447948	0.5	0.8822777	1	0.8083682	2.5	0.9025234	5	0.9182461	10	0.9297164
2,2'-Oxybis(1-chloropropane)	0.2	0.4235574	0.5	0.4587246	1	0.3727942	2.5	0.3852652	5	0.3551213	10	0.3569717
2-Methylphenol	0.2	1.438792	0.5	1.590575	1	1.355731	2.5	1.455813	5	1.3646	10	1.374121
Hexachloroethane	0.2	0.7098259	0.5	0.761476	1	0.6277986	2.5	0.6490127	5	0.6202189	10	0.6239141
N-Nitroso-di-n-Propylamine	0.2	1.085793	0.5	1.149053	1	0.9891749	2.5	1.052723	5	1.012613	10	1.01337
4-Methylphenol	0.2	1.524765	0.5	1.590575	1	1.397518	2.5	1.511364	5	1.440096	10	1.454255
Nitrobenzene	0.2	0.4243194	0.5	0.4653349	1	0.3928938	2.5	0.4113848	5	0.3981927	10	0.3990937
Isophorone	0.2	0.4894933	0.5	0.549427	1	0.4810375	2.5	0.5153436	5	0.5487753	10	0.5577421
2-Nitrophenol	0.2	0.1724017	0.5	0.2079552	1	0.1940134	2.5	0.2053122	5	0.2058636	10	0.2150391
2,4-Dimethylphenol			1	0.4298822	2	0.3618672	5	0.3949231	10	0.3786588	20	0.3833959
Bis(2-Chloroethoxy)methane	0.2	0.3855067	0.5	0.3927283	1	0.3370913	2.5	0.361654	5	0.3479608	10	0.3488076
2,4-Dichlorophenol			1	0.3346872	2	0.328035	5	0.3507491	10	0.3137023	20	0.3572216
1,2,4-Trichlorobenzene	0.2	0.4124892	0.5	0.4067101	1	0.3405315	2.5	0.3525848	5	0.3411093	10	0.3442391
Naphthalene	0.2	1.42178	0.5	1.38612	1	1.155664	2.5	1.218556	5	1.155063	10	1.159095
Benzoic acid			2	1.224539E-02	4	3.925622E-02	10	6.104389E-02	20	0.1305165	40	0.1784171
4-Chloroaniline			1	0.5280819	2	0.4435933	5	0.5255113	10	0.5118018	20	0.4818897
Hexachlorobutadiene	0.2	0.2380348	0.5	0.2395225	1	0.198031	2.5	0.2081669	5	0.1981575	10	0.2045325
4-Chloro-3-Methylphenol			1	0.3333283	2	0.2989313	5	0.3315527	10	0.3254577	20	0.3315038
2-Methylnaphthalene	0.2	0.9324492	0.5	0.9278916	1	0.7819609	2.5	0.8366662	5	0.8008595	10	0.8129107
Hexachlorocyclopentadiene			1	9.511136E-02	2	0.1269103	5	0.178191	10	0.265463	20	0.3178578
2,4,6-Trichlorophenol			1	0.3680855	2	0.3383293	5	0.3791423	10	0.4026701	20	0.4130479

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00023	Instrument:	NT18
Calibration Date:	02/25/2023	Column (1):	ZB-5MS

Calibration Comments: 625.1/8270E ICAL

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4,5-Trichlorophenol			1	0.390177	2	0.3567494	5	0.409744	10	0.4432557	20	0.4636702
2-Chloronaphthalene	0.2	1.461274	0.5	1.415818	1	1.207955	2.5	1.312923	5	1.268551	10	1.285096
2-Nitroaniline			1	0.4211994	2	0.3930185	5	0.4238456	10	0.4213469	20	0.4141315
Acenaphthylene	0.2	2.198903	0.5	2.40599	1	2.032359	2.5	2.267629	5	2.187146	10	2.237983
Dimethylphthalate	0.2	1.441906	0.5	1.523836	1	1.303756	2.5	1.426778	5	1.383231	10	1.406378
2,6-Dinitrotoluene			1	0.3203508	2	0.2854299	5	0.3263608	10	0.3285344	20	0.341232
Acenaphthene	0.2	1.552477	0.5	1.547124	1	1.313424	2.5	1.426334	5	1.346162	10	1.34278
3-Nitroaniline			1	0.3832057	2	0.3375794	5	0.3844548	10	0.391092	20	0.4026826
2,4-Dinitrophenol			2	3.707987E-02	4	6.162072E-02	10	0.103083	20	0.1504852	40	0.1749595
Dibenzofuran	0.2	2.225213	0.5	2.235174	1	1.906895	2.5	2.065694	5	1.948337	10	1.955946
4-Nitrophenol			1	0.1425917	2	0.1240404	5	0.1513827	10	0.1663655	20	0.1714068
2,4-Dinitrotoluene			1	0.4458722	2	0.3996331	5	0.4504762	10	0.4491928	20	0.4556074
Fluorene	0.2	1.593074	0.5	1.728604	1	1.490252	2.5	1.625852	5	1.623462	10	1.788239
4-Chlorophenylphenyl ether	0.2	0.7746038	0.5	0.7609098	1	0.6646433	2.5	0.7185268	5	0.744229	10	0.7730292
Diethyl phthalate	0.2	1.37168	0.5	1.501264	1	1.303971	2.5	1.59361	5	1.527969	10	1.529039
4-Nitroaniline			1	0.3473034	2	0.3275861	5	0.3683752	10	0.3844365	20	0.3942561
4,6-Dinitro-2-methylphenol			2	9.510979E-02	4	0.1011993	10	0.1257988	20	0.1429355	40	0.1553172
N-Nitrosodiphenylamine	0.2	0.6267176	0.5	0.6405201	1	0.5500671	2.5	0.5923767	5	0.5668271	10	0.6006503
4-Bromophenyl phenyl ether	0.2	0.2368042	0.5	0.2490382	1	0.2164127	2.5	0.2378041	5	0.2353474	10	0.248924
Hexachlorobenzene	0.2	0.2902348	0.5	0.2992439	1	0.248284	2.5	0.26906	5	0.2609425	10	0.2788579
Pentachlorophenol			1	1.837453E-02	2	3.057017E-02	5	4.313681E-02	10	7.185841E-02	20	8.935512E-02
Phenanthrene	0.2	1.398964	0.5	1.376782	1	1.157472	2.5	1.246514	5	1.174729	10	1.235427
Anthracene	0.2	1.118467	0.5	1.26752	1	1.102475	2.5	1.22143	5	1.190077	10	1.249845
Carbazole	0.2	1.076393	0.5	1.157124	1	1.0149	2.5	1.121663	5	1.075602	10	1.115904
Di-n-Butylphthalate	0.2	0.9637966	0.5	1.20336	1	1.116537	2.5	1.291449	5	1.278034	10	1.329658
Fluoranthene	0.2	1.354998	0.5	1.500241	1	1.331482	2.5	1.46964	5	1.394567	10	1.424131
Pyrene	0.2	1.528343	0.5	1.65391	1	1.415992	2.5	1.563634	5	1.457401	10	1.467991

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00023	Instrument:	NT18
Calibration Date:	02/25/2023	Column (1):	ZB-5MS

Calibration Comments: 625.1/8270E ICAL

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Butylbenzylphthalate	0.2	0.4072148	0.5	0.5517349	1	0.5410221	2.5	0.6144016	5	0.6155254	10	0.6291673
Benzo(a)anthracene	0.2	1.514928	0.5	1.542932	1	1.356937	2.5	1.45976	5	1.416688	10	1.440611
3,3'-Dichlorobenzidine	0.6	0.4450329	1.5	0.5379361	3	0.4877664	7.5	0.5448745	15	0.5956347	30	0.6089686
Chrysene	0.2	1.675462	0.5	1.603043	1	1.410672	2.5	1.495534	5	1.460738	10	1.509162
bis(2-Ethylhexyl)phthalate	0.2	0.4796103	0.5	0.5875118	1	0.5500424	2.5	0.6233169	5	0.5943251	10	0.6184707
Di-n-Octylphthalate	0.2	1.288493	0.5	1.269341	1	1.052787	2.5	1.126773	5	1.046685	10	1.037422
Benzofluoranthenes, Total	0.4	1.298585	1	1.398453	2	1.210822	5	1.37169	10	1.278147	20	1.338583
Benzo(a)pyrene	0.2	1.113198	0.5	1.246829	1	1.095643	2.5	1.266407	5	1.215654	10	1.270304
Indeno(1,2,3-cd)pyrene	0.2	1.287748	0.5	1.469161	1	1.297405	2.5	1.519649	5	1.550508	10	1.704694
Dibenzo(a,h)anthracene	0.2	1.062372	0.5	1.167164	1	1.07138	2.5	1.268478	5	1.292375	10	1.439048
Benzo(g,h,i)perylene	0.2	1.101082	0.5	1.230557	1	1.096927	2.5	1.248325	5	1.230317	10	1.286801
1-Methylnaphthalene	0.2	0.8168755	0.5	0.8523054	1	0.709024	2.5	0.7692802	5	0.7253363	10	0.7275296
2-Fluorophenol	0.3	1.262189	0.75	1.473502	1.5	1.27926	3.75	1.415825	7.5	1.384047	15	1.394802
Phenol-d5	0.3	1.759477	0.75	1.948153	1.5	1.703483	3.75	1.800529	7.5	1.746112	15	1.744466
2-Chlorophenol-d4	0.3	1.561458	0.75	1.689129	1.5	1.435875	3.75	1.576909	7.5	1.496503	15	1.505554
1,2-Dichlorobenzene-d4	0.2	1.242842	0.5	1.216139	1	1.038895	2.5	1.077265	5	1.021465	10	1.010493
Nitrobenzene-d5	0.2	0.4392556	0.5	0.4523899	1	0.4037156	2.5	0.4386639	5	0.4229418	10	0.4234606
2-Fluorobiphenyl	0.2	1.865931	0.5	1.861398	1	1.557827	2.5	1.672735	5	1.616402	10	1.630251
2,4,6-Tribromophenol			0.75	0.1658043	1.5	0.1633043	3.75	0.1802817	7.5	0.2038526	15	0.2267057
p-Terphenyl-d14	0.2	1.189538	0.5	1.27662	1	1.102572	2.5	1.220538	5	1.176854	10	1.225502

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00023	Instrument:	NT18
Calibration Date:	02/25/2023	Column (1):	ZB-5MS

Calibration Comments: 625.1/8270E ICAL

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Phenol	20	1.770306										
bis(2-chloroethyl) ether	20	1.156091										
2-Chlorophenol	20	1.510083										
1,3-Dichlorobenzene	20	1.552301										
1,4-Dichlorobenzene	20	1.559702										
1,2-Dichlorobenzene	20	1.539587										
Benzyl Alcohol	20	0.9217658										
2,2'-Oxybis(1-chloropropane)	20	0.3521479										
2-Methylphenol	20	1.356498										
Hexachloroethane	20	0.6110704										
N-Nitroso-di-n-Propylamine	20	1.001249										
4-Methylphenol	20	1.437609										
Nitrobenzene	20	0.3812481										
Isophorone	20	0.5228416										
2-Nitrophenol	20	0.2101586										
2,4-Dimethylphenol	40	0.3554221										
Bis(2-Chloroethoxy)methane	20	0.3357116										
2,4-Dichlorophenol	40	0.3358445										
1,2,4-Trichlorobenzene	20	0.3479831										
Naphthalene	20	1.110964										
Benzoic acid	80	0.211639										
4-Chloroaniline	40	0.4492933										
Hexachlorobutadiene	20	0.2056613										
4-Chloro-3-Methylphenol	40	0.3128473										
2-Methylnaphthalene	20	0.7559906										
Hexachlorocyclopentadiene	40	0.3610937										
2,4,6-Trichlorophenol	40	0.4200781										

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00023	Instrument:	NT18
Calibration Date:	02/25/2023	Column (1):	ZB-5MS

Calibration Comments: 625.1/8270E ICAL

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4,5-Trichlorophenol	40	0.4660021										
2-Chloronaphthalene	20	1.272947										
2-Nitroaniline	40	0.4009637										
Acenaphthylene	20	2.202702										
Dimethylphthalate	20	1.421447										
2,6-Dinitrotoluene	40	0.3449057										
Acenaphthene	20	1.302239										
3-Nitroaniline	40	0.4038501										
2,4-Dinitrophenol	80	0.1954707										
Dibenzofuran	20	1.891467										
4-Nitrophenol	40	0.1725097										
2,4-Dinitrotoluene	40	0.4603493										
Fluorene	20	1.55296										
4-Chlorophenylphenyl ether	20	0.7578029										
Diethyl phthalate	20	1.553599										
4-Nitroaniline	40	0.3934815										
4,6-Dinitro-2-methylphenol	80	0.1630098										
N-Nitrosodiphenylamine	20	0.6359332										
4-Bromophenyl phenyl ether	20	0.2663793										
Hexachlorobenzene	20	0.3056251										
Pentachlorophenol	40	0.1248457										
Phenanthrene	20	1.217214										
Anthracene	20	1.243042										
Carbazole	20	1.129092										
Di-n-Butylphthalate	20	1.329977										
Fluoranthene	20	1.33508										
Pyrene	20	1.375404										

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00023	Instrument:	NT18
Calibration Date:	02/25/2023	Column (1):	ZB-5MS

Calibration Comments: 625.1/8270E ICAL

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Butylbenzylphthalate	20	0.6137072										
Benzo(a)anthracene	20	1.376666										
3,3'-Dichlorobenzidine	60	0.4994402										
Chrysene	20	1.356743										
bis(2-Ethylhexyl)phthalate	20	0.5666873										
Di-n-Octylphthalate	20	0.9806743										
Benzofluoranthenes, Total	40	1.339612										
Benzo(a)pyrene	20	1.260383										
Indeno(1,2,3-cd)pyrene	20	1.801823										
Dibenzo(a,h)anthracene	20	1.565421										
Benzo(g,h,i)perylene	20	1.328936										
1-Methylnaphthalene	20	0.6942018										
2-Fluorophenol	30	1.343299										
Phenol-d5	30	1.643691										
2-Chlorophenol-d4	30	1.477817										
1,2-Dichlorobenzene-d4	20	1.009024										
Nitrobenzene-d5	20	0.403625										
2-Fluorobiphenyl	20	1.600759										
2,4,6-Tribromophenol	30	0.2625321										
p-Terphenyl-d14	20	1.200085										

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00023	Instrument:	NT18
Calibration Date:	02/25/2023	Column (1):	ZB-5MS

Calibration Comments: 625.1/8270E ICAL

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Phenol	1.83505	4.4			RSD (15)	
bis(2-chloroethyl) ether	1.246309	7.7			RSD (15)	
2-Chlorophenol	1.575746	5.5			RSD (15)	
1,3-Dichlorobenzene	1.666621	8.6			RSD (15)	
1,4-Dichlorobenzene	1.698847	10.3			RSD (15)	
1,2-Dichlorobenzene	1.648695	9.6			RSD (15)	
Benzyl Alcohol	0.8725275	8.0			RSD (15)	
2,2'-Oxybis(1-chloropropane)	0.3863689	10.5			RSD (15)	
2-Methylphenol	1.419447	6.0			RSD (15)	
Hexachloroethane	0.6576166	8.6			RSD (15)	
N-Nitroso-di-n-Propylamine	1.043425	5.5			RSD (15)	
4-Methylphenol	1.479455	4.5			RSD (15)	
Nitrobenzene	0.4103525	6.8			RSD (15)	
Isophorone	0.5235229	5.8			RSD (15)	
2-Nitrophenol	0.2015348	7.1			RSD (15)	
2,4-Dimethylphenol	0.3840249	6.9			RSD (15)	
Bis(2-Chloroethoxy)methane	0.3584943	6.3			RSD (15)	
2,4-Dichlorophenol	0.3367066	4.7			RSD (15)	
1,2,4-Trichlorobenzene	0.3636639	8.7			RSD (15)	
Naphthalene	1.229606	10.0			RSD (15)	
Benzoic acid	0.1055197	76.1		0.9863	QCOD (0.99)	*
4-Chloroaniline	0.4900285	7.7			RSD (15)	
Hexachlorobutadiene	0.2131581	8.4			RSD (15)	
4-Chloro-3-Methylphenol	0.3222702	4.2			RSD (15)	
2-Methylnaphthalene	0.8355327	8.3			RSD (15)	
Hexachlorocyclopentadiene	0.2241045	47.8		0.9948	QCOD (0.99)	
2,4,6-Trichlorophenol	0.3868922	8.0			RSD (15)	
2,4,5-Trichlorophenol	0.4215997	10.4			RSD (15)	
2-Chloronaphthalene	1.317795	6.8			RSD (15)	
2-Nitroaniline	0.4124176	3.1			RSD (15)	

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00023	Instrument:	NT18
Calibration Date:	02/25/2023	Column (1):	ZB-5MS

Calibration Comments: 625.1/8270E ICAL

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Acenaphthylene	2.218959	5.0			RSD (15)	
Dimethylphthalate	1.415333	4.7			RSD (15)	
2,6-Dinitrotoluene	0.3244689	6.6			RSD (15)	
Acenaphthene	1.404363	7.6			RSD (15)	
3-Nitroaniline	0.3838108	6.3			RSD (15)	
2,4-Dinitrophenol	0.1204498	52.8		0.9950	QCOD (0.99)	
Dibenzofuran	2.032675	7.2			RSD (15)	
4-Nitrophenol	0.1547161	12.4			RSD (15)	
2,4-Dinitrotoluene	0.4435218	5.0			RSD (15)	
Fluorene	1.62892	6.2			RSD (15)	
4-Chlorophenylphenyl ether	0.7419635	5.3			RSD (15)	
Diethyl phthalate	1.483019	7.1			RSD (15)	
4-Nitroaniline	0.3692398	7.3			RSD (15)	
4,6-Dinitro-2-methylphenol	0.1305617	21.6		0.9990	QCOD (0.99)	
N-Nitrosodiphenylamine	0.6018703	5.8			RSD (15)	
4-Bromophenyl phenyl ether	0.24153	6.4			RSD (15)	
Hexachlorobenzene	0.2788926	7.5			RSD (15)	
Pentachlorophenol	6.302346E-02	63.6		0.9932	QCOD (0.99)	
Phenanthrene	1.258157	7.5			RSD (15)	
Anthracene	1.198979	5.4			RSD (15)	
Carbazole	1.098668	4.3			RSD (15)	
Di-n-Butylphthalate	1.216116	11.1			RSD (15)	
Fluoranthene	1.401448	4.7			RSD (15)	
Pyrene	1.494668	6.3			RSD (15)	
Butylbenzylphthalate	0.567539	13.9			RSD (15)	
Benzo(a)anthracene	1.444075	4.7			RSD (15)	
3,3'-Dichlorobenzidine	0.5313791	11.1			RSD (15)	
Chrysene	1.501622	7.3			RSD (15)	
bis(2-Ethylhexyl)phthalate	0.5742806	8.6			RSD (15)	
Di-n-Octylphthalate	1.114596	10.8			RSD (15)	

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00023	Instrument:	NT18
Calibration Date:	02/25/2023	Column (1):	ZB-5MS

Calibration Comments: 625.1/8270E ICAL

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Benzofluoranthenes, Total	1.319413	4.8			RSD (15)	
Benzo(a)pyrene	1.209774	6.1			RSD (15)	
Indeno(1,2,3-cd)pyrene	1.518713	12.6			RSD (15)	
Dibenzo(a,h)anthracene	1.266605	14.7			RSD (15)	
Benzo(g,h,i)perylene	1.217564	7.2			RSD (15)	
1-Methylnaphthalene	0.7563647	7.8			RSD (15)	
2-Fluorophenol	1.364703	5.5			RSD (15)	
Phenol-d5	1.763702	5.4			RSD (15)	
2-Chlorophenol-d4	1.534749	5.4			RSD (15)	
1,2-Dichlorobenzene-d4	1.088018	9.2			RSD (15)	
Nitrobenzene-d5	0.4262932	4.3			RSD (15)	
2-Fluorobiphenyl	1.686472	7.5			RSD (15)	
2,4,6-Tribromophenol	0.2004134	19.4		0.9994	QCOD (0.99)	
p-Terphenyl-d14	1.198816	4.4			RSD (15)	

ANALYSIS SEQUENCE

SLC0099

Instrument ID: NT18
Calibration ID: GC00023
MS EM Level: 1153 EV

GCMS Description: Agilent 6890N/5975
GCMS Column ID: L001046

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0099-TUN1	MS Tune	QC		1	K004775		02/25/2023 20:42	NT1802252301.D	VTS	
SLC0099-CAL7	ABN 20	QC		2	K011111	K010831	02/25/2023 21:23	NT1802252302.D	VTS	
SLC0099-CAL6	ABN 10	QC		3	K011110	K010831	02/25/2023 22:03	NT1802252303.D	VTS	
SLC0099-CAL5	ABN 5	QC		4	K011109	K010831	02/25/2023 22:43	NT1802252304.D	VTS	
SLC0099-CAL4	ABN 2.5	QC		5	K011108	K010831	02/25/2023 23:24	NT1802252305.D	VTS	
SLC0099-CAL3	ABN 1.0	QC		6	K011107	K010831	02/26/2023 00:04	NT1802252306.D	VTS	
SLC0099-CAL2	ABN 0.5	QC		7	K011106	K010831	02/26/2023 00:44	NT1802252307.D	VTS	
SLC0099-CAL1	ABN 0.2	QC		8	K011105	K010831	02/26/2023 01:24	NT1802252308.D	VTS	
SLC0099-ICB1	Initial Cal Blank	QC		9	K005156	K010831	02/26/2023 03:26	NT1802252311.D	VTS	
SLC0099-SCV1	SCV 5.0	QC		10	L002576	K010831	02/26/2023 04:06	NT1802252312.D	VTS	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230225.b

	Time	Filename	LabID	ClientId	DF														
1	2042	NT1802252301.D	SLC0099-TUN1		1	NO ISTDS FOUND													
2	2123	NT1802252302.D	SLC0099-CAL7		1	8.92	227200	11.37	879826	14.95	460093	17.96	797797	22.99	801796	25.48	822041	24.03	1234737
3	2203	NT1802252303.D	SLC0099-CAL6		1	8.92	198251	11.37	749393	14.95	400878	17.95	703042	22.98	658368	25.48	698677	24.02	1034200
4	2243	NT1802252304.D	SLC0099-CAL5		1	8.91	213108	11.37	806946	14.94	424249	17.95	758987	22.98	685237	25.47	762553	24.02	1075410
5	2324	NT1802252305.D	SLC0099-CAL4		1	8.92	134104	11.37	513388	14.94	270155	17.95	481445	22.98	424314	25.47	458969	24.02	618169
6	0004	NT1802252306.D	SLC0099-CAL3		1	8.91	219306	11.37	838313	14.94	448096	17.95	796201	22.98	700696	25.47	784566	24.02	1033193
7	0044	NT1802252307.D	SLC0099-CAL2		1	8.92	208805	11.37	794748	14.94	424597	17.95	755611	22.98	667306	25.47	735979	24.02	935988
8	0124	NT1802252308.D	SLC0099-CAL1		1	8.92	193315	11.37	740480	14.94	397571	17.95	704464	22.98	629152	25.47	703181	24.02	865119
9	0205	NT1802252309.D			1	8.92	193634	11.37	746108	14.94	393280	17.95	714005	22.98	627812	25.47	697200	24.02	848270
10	0245	NT1802252310.D			1	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
11	0326	NT1802252311.D	SLC0099-ICB1		1	8.92	195957	11.37	721335	14.94	373490	17.95	681936	22.98	584972	25.47	668327	24.02	770361
12	0406	NT1802252312.D	SLC0099-SCV1		1	8.92	196803	11.37	751242	14.94	398556	17.95	714786	22.98	645093	25.47	719540	24.02	989444

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230225.b

Instrument: nt18.i Date: 25-FEB-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
2042	NT1802252301.D	SLC0099-TUN1	1	NO MANUAL INTEGRATION
2123	NT1802252302.D	SLC0099-CAL7	1	Benzoic acid, Fluoranthene,
2203	NT1802252303.D	SLC0099-CAL6	1	2,2'-oxybis(1-Chloropropane), Benzoic acid, Fluoranthene,
2243	NT1802252304.D	SLC0099-CAL5	1	2,2'-oxybis(1-Chloropropane), Benzoic acid, Fluoranthene,
2324	NT1802252305.D	SLC0099-CAL4	1	Benzoic acid, Fluoranthene,
0004	NT1802252306.D	SLC0099-CAL3	1	Benzoic acid, Pentachlorophenol, Fluoranthene,
0044	NT1802252307.D	SLC0099-CAL2	1	2,2'-oxybis(1-Chloropropane), Benzoic acid, 4-Nitrophenol, Pentachlorophenol, Fluoranthene,
0124	NT1802252308.D	SLC0099-CAL1	1	4-Nitrophenol, Fluoranthene, 2,3,4,6-Tetrachlorophenol,
0205	NT1802252309.D		1	NO MANUAL INTEGRATION
0245	NT1802252310.D		1	NO MANUAL INTEGRATION
0326	NT1802252311.D	SLC0099-ICB1	1	NO MANUAL INTEGRATION
0406	NT1802252312.D	SLC0099-SCV1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 09-Mar-2023 07:33

NT1802252301.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252302.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252303.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252304.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252305.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252306.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252307.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252308.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252309.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252310.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252311.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252312.D	Data Locked	van, 09-Mar-2023 07:33

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-FEB-2023 21:23
End Cal Date : 26-FEB-2023 01:24
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Last Edit : 08-Mar-2023 14:49 van

Calibration File Names:
Level 1: \\target\share\chem3\nt18.i\20230225.b\NT1802252308.D
Level 2: \\target\share\chem3\nt18.i\20230225.b\NT1802252307.D
Level 3: \\target\share\chem3\nt18.i\20230225.b\NT1802252306.D
Level 4: \\target\share\chem3\nt18.i\20230225.b\NT1802252305.D
Level 5: \\target\share\chem3\nt18.i\20230225.b\NT1802252304.D
Level 6: \\target\share\chem3\nt18.i\20230225.b\NT1802252303.D
Level 7: \\target\share\chem3\nt18.i\20230225.b\NT1802252302.D

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	20.0000 Level 7											
186 Carbaryl	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
179 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
180 n-Octadecane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Last Edit : 08-Mar-2023 14:49 van

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
170 N,N-Dimethylaniline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
171 2,3-Dimethylaniline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
172 2,4-Dimethylaniline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
173 2,5-Dimethylaniline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
174 2,6-Dimethylaniline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
175 3,4-Dimethylaniline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
176 3,5-Dimethylaniline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	20.0000 Level 7											
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
168 Pentachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
148 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
149 TCMX	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
150 DCBP	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
138 Chlorobenzilate	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
139 Isodrin	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
140 Diallate A	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
141 Diallate B	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
142 1,2-Dibromo-3-Chloropropane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
135 2,3,5,6-Tetrachlorophenol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	20.0000 Level 7											
136 2,3,4,5-tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
133 Butylatedhydroxytoluene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
132 3,6-Dimethylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	20.0000 Level 7											
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	20.0000 Level 7											
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
120 2,3,4,6-Tetrachlorophenol	3418	14254	30384	55238	211333	424991						
	1074544						QUAD	0.000e+000	2.61390	-0.20398	0.99951	
178 2-Benzyl-4-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
117 Butyl Diphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
116 Dibutyl Phenyl Phosphate	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
115 Tributyl Phosphate	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
114 Beta-Pinene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
113 Diphenyl Oxide	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
112 Biphenyl	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
111 Azobenzene (1,2-DP-Hydrazine)	1.64645 / 1.58595	1.76749	1.56082	1.67864	1.59490	1.60099	AVRG		1.63361		4.34647	
110 Tetrachloroguaiacol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	20.0000 Level 7											
109 3,4,5-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
181 3,4,6-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
108 4,5,6-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
184 3,4-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
107 4,5-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
182 4,6-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
185 4-Chloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	20.0000 Level 7											
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
105 1-methylnaphthalene	0.81688	0.85231	0.70902	0.76928	0.72534	0.72753						
	0.69420						AVRG		0.75636		7.80916	
151 1,2,4,5-Tetrachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
156 Methyl Parathion	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
157 Ethyl Parathion	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
158 Ethion	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
159 4-Nonylphenol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
160 Tetraethyl Tin	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
161 1,2,3-Trichloronaphthalene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
162 1,2,3,4-Tetrachloronapthalene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-

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163 1,2,3,5,8-Pentachloronaphthal	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
164 1,2,3,4,6,7-Hexachloronaphtha	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
165 1,2,3,4,5,6,7-Heptachloronaph	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
166 Octachloronaphthalene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
167 2,2',4,4',5-Pentabromobipheny	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
3 Phenol	1.88066 / 1.77031	1.98792	1.74341	1.84737	1.80101	1.81468	AVRG		1.83505		4.43639	
4 Bis(2-Chloroethyl)ether	1.36916 / 1.15609	1.38813	1.19834	1.25716	1.18501	1.17027	AVRG		1.24631		7.70330	

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
6 2-Chlorophenol	1.63536	1.73689	1.50126	1.59351	1.51658	1.53653					
	1.51008						AVRG		1.57575		5.47983
7 1,3-Dichlorobenzene	1.85449	1.87988	1.56636	1.67663	1.56016	1.57653					
	1.55230						AVRG		1.66662		8.60642
9 1,4-Dichlorobenzene	1.98102	1.91762	1.62970	1.64873	1.56828	1.58689					
	1.55970						AVRG		1.69885		10.30016
11 Benzyl alcohol	0.74479	0.88228	0.80837	0.90252	0.91825	0.92972					
	0.92177						AVRG		0.87253		7.99699
12 1,2-Dichlorobenzene	1.90653	1.83881	1.55210	1.62793	1.52627	1.54965					
	1.53959						AVRG		1.64869		9.56092
13 2-Methylphenol	1.43879	1.59057	1.35573	1.45581	1.36460	1.37412					
	1.35650						AVRG		1.41945		6.03752
14 2,2'-oxybis(1-Chloropropane)	0.42356	0.45872	0.37279	0.38527	0.35512	0.35697					
	0.35215						AVRG		0.38637		10.46836

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	20.0000 Level 7										
15 4-Methylphenol	1.52477	1.59057	1.39752	1.51136	1.44010	1.45426					
	1.43761						AVRG		1.47945		4.45528
16 N-Nitroso-di-n-propylamine	1.08579	1.14905	0.98917	1.05272	1.01261	1.01337					
	1.00125						AVRG		1.04343		5.47946
17 Hexachloroethane	0.70983	0.76148	0.62780	0.64901	0.62022	0.62391					
	0.61107						AVRG		0.65762		8.59684
19 Nitrobenzene	0.42432	0.46533	0.39289	0.41138	0.39819	0.39909					
	0.38125						AVRG		0.41035		6.78099
20 Isophorone	0.48949	0.54943	0.48104	0.51534	0.54878	0.55774					
	0.52284						AVRG		0.52352		5.78850
21 2-Nitrophenol	0.17240	0.20796	0.19401	0.20531	0.20586	0.21504					
	0.21016						AVRG		0.20153		7.12249
22 2,4-Dimethylphenol	+++++	0.42988	0.36187	0.39492	0.37866	0.38340					
	0.35542						AVRG		0.38402		6.94827

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	20.0000 Level 7										
23 Bis(2-Chloroethoxy)methane	0.38551	0.39273	0.33709	0.36165	0.34796	0.34881					
	0.33571						AVRG		0.35849		6.33389
24 Benzoic acid	+++++	4866	32909	78348	526599	1337045					
	3724110						QUAD	0.000e+000	6.87307	-0.51265	0.99451
25 2,4-Dichlorophenol	+++++	0.33469	0.32803	0.35075	0.31370	0.35722					
	0.33584						AVRG		0.33671		4.65302
26 1,2,4-Trichlorobenzene	0.41249	0.40671	0.34053	0.35258	0.34111	0.34424					
	0.34798						AVRG		0.36366		8.71490
28 Naphthalene	1.42178	1.38612	1.15566	1.21856	1.15506	1.15910					
	1.11096						AVRG		1.22961		10.04979
29 4-Chloroaniline	+++++	0.52808	0.44359	0.52551	0.51180	0.48189					
	0.44929						AVRG		0.49003		7.66987
30 Hexachlorobutadiene	0.23803	0.23952	0.19803	0.20817	0.19816	0.20453					
	0.20566						AVRG		0.21316		8.39934

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-FEB-2023 21:23
End Cal Date : 26-FEB-2023 01:24
Quant Method : ISTD
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Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Last Edit : 08-Mar-2023 14:49 van

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	20.0000 Level 7										
31 4-Chloro-3-methylphenol	+++++	0.33333	0.29893	0.33155	0.32546	0.33150					
	0.31285						AVRG		0.32227		4.24862
32 2-Methylnaphthalene	0.93245	0.92789	0.78196	0.83667	0.80086	0.81291					
	0.75599						AVRG		0.83553		8.29701
33 Hexachlorocyclopentadiene	+++++	10096	28434	60174	281556	637111					
	1661367						QUAD	0.000e+000	3.70041	-0.26060	0.99775
34 2,4,6-Trichlorophenol	+++++	0.36809	0.33833	0.37914	0.40267	0.41305					
	0.42008						AVRG		0.38689		8.01380
35 2,4,5-Trichlorophenol	+++++	0.39018	0.35675	0.40974	0.44326	0.46367					
	0.46600						AVRG		0.42160		10.36286
37 2-Chloronaphthalene	1.46127	1.41582	1.20796	1.31292	1.26855	1.28510					
	1.27295						AVRG		1.31779		6.77234
38 2-Nitroaniline	+++++	0.42120	0.39302	0.42385	0.42135	0.41413					
	0.40096						AVRG		0.41242		3.06305

ARI Labs, Inc.

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Last Edit : 08-Mar-2023 14:49 van

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
39 Dimethylphthalate	1.44191	1.52384	1.30376	1.42678	1.38323	1.40638					
	1.42145						AVRG		1.41533		4.66958
40 Acenaphthylene	2.19890	2.40599	2.03236	2.26763	2.18715	2.23798					
	2.20270						AVRG		2.21896		5.01192
41 2,6-Dinitrotoluene	+++++	0.32035	0.28543	0.32636	0.32853	0.34123					
	0.34491						AVRG		0.32447		6.55201
43 3-Nitroaniline	+++++	0.38321	0.33758	0.38445	0.39109	0.40268					
	0.40385						AVRG		0.38381		6.32739
44 Acenaphthene	1.55248	1.54712	1.31342	1.42633	1.34616	1.34278					
	1.30224						AVRG		1.40436		7.61835
45 2,4-Dinitrophenol	+++++	7872	27612	69621	319216	701374					
	1798694						QUAD	0.000e+000	6.62556	-0.39055	0.99810
46 Dibenzofuran	2.22521	2.23517	1.90689	2.06569	1.94834	1.95595					
	1.89147						AVRG		2.03268		7.18353

ARI Labs, Inc.

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	20.0000 Level 7										
47 4-Nitrophenol	+++++	0.14259	0.12404	0.15138	0.16637	0.17141					
	0.17251						AVRG		0.15472		12.36535
48 2,4-Dinitrotoluene	+++++	0.44587	0.39963	0.45048	0.44919	0.45561					
	0.46035						AVRG		0.44352		4.98228
49 Fluorene	1.59307	1.72860	1.49025	1.62585	1.62346	1.78824					
	1.55296						AVRG		1.62892		6.22248
50 Diethylphthalate	1.37168	1.50126	1.30397	1.59361	1.52797	1.52904					
	1.55360						AVRG		1.48302		7.07950
51 4-Chlorophenyl-phenylether	0.77460	0.76091	0.66464	0.71853	0.74423	0.77303					
	0.75780						AVRG		0.74196		5.26988
52 4-Nitroaniline	+++++	0.34730	0.32759	0.36838	0.38444	0.39426					
	0.39348						AVRG		0.36924		7.32876
53 4,6-Dinitro-2-methylphenol	+++++	35933	80575	151413	542431	1091945					
	2600974						QUAD	0.000e+000	7.02279	-0.27670	0.99951

ARI Labs, Inc.

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
54 N-Nitrosodiphenylamine	0.62672	0.64052	0.55007	0.59238	0.56683	0.60065					
	0.63593						AVRG		0.60187		5.78534
56 4-Bromophenyl-phenylether	0.23680	0.24904	0.21641	0.23780	0.23535	0.24892					
	0.26638						AVRG		0.24153		6.40037
57 Hexachlorobenzene	0.29023	0.29924	0.24828	0.26906	0.26094	0.27886					
	0.30563						AVRG		0.27889		7.48299
58 Pentachlorophenol	+++++	3471	12170	25960	136349	314102					
	996015						QUAD	0.000e+000	13.71153	-4.58122	0.99738
60 Phenanthrene	1.39896	1.37678	1.15747	1.24651	1.17473	1.23543					
	1.21721						AVRG		1.25816		7.49299
61 Anthracene	1.11847	1.26752	1.10248	1.22143	1.19008	1.24984					
	1.24304						AVRG		1.19898		5.44848
62 Carbazole	1.07639	1.15712	1.01490	1.12166	1.07560	1.11590					
	1.12909						AVRG		1.09867		4.27145

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
63 Di-n-butylphthalate	0.96380	1.20336	1.11654	1.29145	1.27803	1.32966					
	1.32998						AVRG		1.21612		11.08866
64 Fluoranthene	1.35500	1.50024	1.33148	1.46964	1.39457	1.42413					
	1.33508						AVRG		1.40145		4.73579
65 Pyrene	1.52834	1.65391	1.41599	1.56363	1.45740	1.46799					
	1.37540						AVRG		1.49467		6.33316
67 Butylbenzylphthalate	0.40721	0.55173	0.54102	0.61440	0.61553	0.62917					
	0.61371						AVRG		0.56754		13.85251
68 Benzo(a)anthracene	1.51493	1.54293	1.35694	1.45976	1.41669	1.44061					
	1.37667						AVRG		1.44407		4.72533
70 3,3'-Dichlorobenzidine	0.44503	0.53794	0.48777	0.54487	0.59563	0.60897					
	0.49944						AVRG		0.53138		11.06747
71 Chrysene	1.67546	1.60304	1.41067	1.49553	1.46074	1.50916					
	1.35674						AVRG		1.50162		7.27141

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
72 bis(2-Ethylhexyl)phthalate	0.47961	0.58751	0.55004	0.62332	0.59433	0.61847					
	0.56669						AVRG		0.57428		8.57253
73 Di-n-octylphthalate	1.28849	1.26934	1.05279	1.12677	1.04668	1.03742					
	0.98067						AVRG		1.11460		10.78228
74 Benzo(b)fluoranthene	1.22748	1.37050	1.19989	1.36882	1.21977	1.33037					
	1.41814						AVRG		1.30500		6.71890
75 Benzo(k)fluoranthene	1.54111	1.55660	1.34983	1.52126	1.49368	1.48659					
	1.40367						AVRG		1.47896		5.11205
187 Total Benzofluoranthenes	1.29858	1.39845	1.21082	1.37169	1.27815	1.33858					
	1.33961						AVRG		1.31941		4.76183
76 Benzo(a)pyrene	1.11320	1.24683	1.09564	1.26641	1.21565	1.27030					
	1.26038						AVRG		1.20977		6.14812
78 Indeno(1,2,3-cd)pyrene	1.28775	1.46916	1.29741	1.51965	1.55051	1.70469					
	1.80182						AVRG		1.51871		12.62355

ARI Labs, Inc.

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	20.0000 Level 7											
79 Dibenzo(a,h)anthracene	1.06237	1.16716	1.07138	1.26848	1.29238	1.43905						
	1.56542						AVRG		1.26661		14.74957	
80 Benzo(g,h,i)perylene	1.10108	1.23056	1.09693	1.24832	1.23032	1.28680						
	1.32894						AVRG		1.21756		7.23784	
90 N-Nitrosodimethylamine	0.80449	0.89279	0.74013	0.82526	0.79566	0.80820						
	0.74157						AVRG		0.80116		6.51452	
91 Aniline	+++++	2.35410	1.99471	2.12738	2.06532	2.05293						
	1.93782						AVRG		2.08871		6.94984	
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
93 Benzidine	+++++	0.74610	0.69246	0.67649	0.65186	0.68988						
	0.65151						AVRG		0.68472		5.10295	
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

ARI Labs, Inc.

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
97 Caffeine	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
98 Retene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
99 Perylene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
100 3-beta-Coprostanol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
101 Cholesterol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
102 beta-Sitosterol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
103 Pyridine	1.37863 / 1.23391	1.48546	1.25553	1.34936	1.36272	1.27709	AVRG		1.33467		6.51770	

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	20.0000 Level 7											
188 2,6-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
189 N-Nitrosomethylethylamine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
$ 1 2-Fluorophenol	1.26219	1.47350	1.27926	1.41582	1.38405	1.39480						
	1.34330						AVRG		1.36470		5.51591	
$ 137 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
$ 2 Phenol-d5	1.75948	1.94815	1.70348	1.80053	1.74611	1.74447						
	1.64369						AVRG		1.76370		5.38414	
$ 5 2-Chlorophenol-d4	1.56146	1.68913	1.43587	1.57691	1.49650	1.50555						
	1.47782						AVRG		1.53475		5.42911	
$ 10 1,2-Dichlorobenzene-d4	1.24284	1.21614	1.03890	1.07727	1.02147	1.01049						
	1.00902						AVRG		1.08802		9.15986	

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
$ 18 Nitrobenzene-d5	0.43926	0.45239	0.40372	0.43866	0.42294	0.42346						
	0.40363						AVRG		0.42629		4.33069	
$ 36 2-Fluorobiphenyl	1.86593	1.86140	1.55783	1.67273	1.61640	1.63025						
	1.60076						AVRG		1.68647		7.45961	
$ 55 2,4,6-Tribromophenol	3746	13200	27441	45660	162158	340805						
	905919						QUAD	0.000e+000	5.02512	-0.62049	0.99968	
$ 66 Terphenyl-d14	1.18954	1.27662	1.10257	1.22054	1.17685	1.22550						
	1.20009						AVRG		1.19882		4.44931	
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
$ 88 Dibenz(a,h)anthracene-d14	+++++ / +++++	+++++	+++++	+++++	+++++	+++++ / +++++	AVRG		0.000e+000		0.000e+000	<-
$ 89 Diphenyl-d10	+++++ / +++++	+++++	+++++	+++++	+++++	+++++ / +++++	AVRG		0.000e+000		0.000e+000	<-
$ 95 D10-1-methylnaphthalene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++ / +++++	AVRG		0.000e+000		0.000e+000	<-

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Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Batch File: \\target\share\chem3\nt18.i\20230225.b
Inst ID: nt18.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	NT1802252302	NT1802252303	NT1802252304	NT1802252305	NT1802252306	NT1802252307	NT1802252308
INJ.DATE:	25-FEB-2023	25-FEB-2023	25-FEB-2023	25-FEB-2023	26-FEB-2023	26-FEB-2023	26-FEB-2023
INJ.TIME:	21:23	22:03	22:43	23:24	00:04	00:44	01:24

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	6.744	6.744	6.736	6.736	6.736	6.744	6.744	6.744	3.744-9.744	6.740	0.004
186 Carbaryl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.785	15.785-21.785	+++++	+++++
179 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.921	5.921-11.921	+++++	+++++
180 n-Octadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.908	14.908-20.908	+++++	+++++
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.871	17.871-23.871	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.829	17.829-23.829	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.506	21.506-27.506	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.196	16.196-22.196	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.572	18.572-24.572	+++++	+++++
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.736	5.736-11.736	+++++	+++++
168 Pentachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.842	12.842-18.842	+++++	+++++
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.212	44.212-50.212	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.746	44.746-50.746	+++++	+++++
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.216	45.216-51.216	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Batch File: \\target\share\chem3\nt18.i\20230225.b
Inst ID: nt18.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
148 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.281	44.281-50.281	+++++	+++++
149 TCMX	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.387	40.387-46.387	+++++	+++++
150 DCBP	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.989	47.989-53.989	+++++	+++++
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	67.733	64.733-70.733	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.067	62.067-68.067	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.917	46.917-52.917	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.672	13.672-19.672	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.317	36.317-42.317	+++++	+++++
$ 137 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.445	0.000-5.445	+++++	+++++
* 134 Di-n-octylphthalate-d4	24.029	24.021	24.021	24.021	24.021	24.021	24.021	24.021	21.021-27.021	24.022	0.003
133 Butylatedhydroxytoluen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.539	13.539-19.539	+++++	+++++
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.450	62.450-68.450	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	64.400	61.400-67.400	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	62.100	59.100-65.100	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.912	51.912-57.912	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.212	51.212-57.212	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	57.650	54.650-60.650	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.750	53.750-59.750	+++++	+++++
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.260	9.260-15.260	+++++	+++++
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.166	49.166-55.166	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Batch File: \\target\share\chem3\nt18.i\20230225.b
Inst ID: nt18.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.617	47.617-53.617	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.381	8.381-14.381	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.467	40.467-46.467	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.697	0.000-5.697	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.500	51.500-57.500	+++++	+++++
120 2,3,4,6-Tetrachlorophe	15.682	15.674	15.674	15.667	15.674	15.674	15.674	15.674	12.674-18.674	15.674	0.004
178 2-Benzyl-4-Chloropheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.963	15.963-21.963	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.069	44.069-50.069	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.215	18.215-24.215	+++++	+++++
117 Butyl Diphenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.541	14.541-20.541	+++++	+++++
116 Dibutyl Phenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.747	15.747-21.747	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.049	14.049-20.049	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.950	45.950-51.950	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.341	11.341-17.341	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.526	12.526-18.526	+++++	+++++
111 Azobenzene (1,2-DP-Hyd	16.377	16.362	16.354	16.354	16.354	16.354	16.354	16.354	13.354-19.354	16.358	0.009
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.874	14.874-20.874	+++++	+++++
109 3,4,5-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.070	12.070-18.070	+++++	+++++
181 3,4,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.232	12.232-18.232	+++++	+++++
108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.374	13.374-19.374	+++++	+++++
184 3,4-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.739	10.739-16.739	+++++	+++++
107 4,5-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.160	11.160-17.160	+++++	+++++
182 4,6-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.160	11.160-17.160	+++++	+++++
185 4-Chloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.737	8.737-14.737	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Batch File: \\target\share\chem3\nt18.i\20230225.b
Inst ID: nt18.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	6.750-12.750	+++++	+++++
	105 1-methylnaphthalene	13.013	13.005	13.005	13.005	13.005	13.005	13.005	13.005	10.005-16.005	13.006	0.003
	151 1,2,4,5-Tetrachloroben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.499	8.499-14.499	+++++	+++++
	152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.943	27.943-33.943	+++++	+++++
	153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	28.456	25.456-31.456	+++++	+++++
	154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.930	23.930-29.930	+++++	+++++
	155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.054	26.054-32.054	+++++	+++++
	156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.586	23.586-29.586	+++++	+++++
	157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.276	24.276-30.276	+++++	+++++
	158 Ethion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.808	21.808-27.808	+++++	+++++
	159 4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.109	23.109-29.109	+++++	+++++
	160 Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.115	18.115-24.115	+++++	+++++
	161 1,2,3-Trichloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.246	33.246-39.246	+++++	+++++
	162 1,2,3,4-Tetrachloronap	+++++	+++++	+++++	+++++	+++++	+++++	+++++	37.506	34.506-40.506	+++++	+++++
	163 1,2,3,5,8-Pentachloron	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.893	35.893-41.893	+++++	+++++
	164 1,2,3,4,6,7-Hexachloro	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.681	36.681-42.681	+++++	+++++
	165 1,2,3,4,5,6,7-Heptachl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	41.123	38.123-44.123	+++++	+++++
	166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.253	39.253-45.253	+++++	+++++
	167 2,2',4,4',5-Pentabromo	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.033	39.033-45.033	+++++	+++++
$	2 Phenol-d5	8.320	8.304	8.296	8.289	8.289	8.297	8.297	8.297	5.297-11.297	8.299	0.011
	3 Phenol	8.335	8.327	8.320	8.312	8.312	8.312	8.320	8.320	5.320-11.320	8.320	0.009
	4 Bis(2-Chloroethyl)ethe	8.490	8.482	8.474	8.474	8.466	8.474	8.474	8.474	5.474-11.474	8.476	0.007
$	5 2-Chlorophenol-d4	8.567	8.559	8.559	8.559	8.559	8.559	8.559	8.559	5.559-11.559	8.560	0.003

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Batch File: \\target\share\chem3\nt18.i\20230225.b
Inst ID: nt18.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	6 2-Chlorophenol	8.598	8.590	8.582	8.582	8.582	8.582	8.590	8.590	5.590-11.590	8.587	0.006
	7 1,3-Dichlorobenzene	8.853	8.853	8.845	8.845	8.845	8.853	8.853	8.853	5.853-11.853	8.850	0.004
*	8 1,4-Dichlorobenzene-d4	8.915	8.915	8.915	8.915	8.907	8.915	8.915	8.915	5.915-11.915	8.914	0.003
	9 1,4-Dichlorobenzene	8.946	8.946	8.946	8.938	8.938	8.938	8.938	8.938	5.938-11.938	8.942	0.004
$	10 1,2-Dichlorobenzene-d4	9.272	9.272	9.264	9.264	9.264	9.264	9.264	9.264	6.264-12.264	9.266	0.004
	11 Benzyl alcohol	9.202	9.187	9.186	9.187	9.187	9.187	9.202	9.202	6.202-12.202	9.191	0.008
	12 1,2-Dichlorobenzene	9.295	9.295	9.295	9.287	9.287	9.295	9.295	9.295	6.295-12.295	9.293	0.004
	13 2-Methylphenol	9.420	9.412	9.412	9.412	9.412	9.412	9.420	9.420	6.420-12.420	9.414	0.004
	14 2,2'-oxybis(1-Chloropr	9.489	9.482	9.482	9.482	9.482	9.482	9.482	9.482	6.482-12.482	9.483	0.003
	15 4-Methylphenol	9.699	9.684	9.676	9.676	9.676	9.676	9.684	9.684	6.684-12.684	9.681	0.009
	16 N-Nitroso-di-n-propyla	9.761	9.746	9.738	9.730	9.730	9.730	9.738	9.738	6.738-12.738	9.739	0.011
	17 Hexachloroethane	9.878	9.878	9.870	9.870	9.870	9.870	9.878	9.878	6.878-12.878	9.873	0.004
$	18 Nitrobenzene-d5	10.002	9.994	9.994	9.994	9.994	9.994	10.002	10.002	7.002-13.002	9.996	0.004
	19 Nitrobenzene	10.040	10.033	10.025	10.025	10.025	10.025	10.033	10.033	7.033-13.033	10.029	0.006
	20 Isophorone	10.498	10.483	10.475	10.467	10.467	10.467	10.467	10.467	7.467-13.467	10.475	0.012
	21 2-Nitrophenol	10.659	10.651	10.651	10.651	10.651	10.651	10.659	10.659	7.659-13.659	10.653	0.004
	22 2,4-Dimethylphenol	10.727	10.719	10.710	10.710	10.710	10.710	10.710	10.710	7.710-13.710	10.714	0.007
	23 Bis(2-Chloroethoxy)met	10.914	10.905	10.897	10.897	10.897	10.897	10.905	10.905	7.905-13.905	10.902	0.007
	24 Benzoic acid	11.143	11.041	10.982	10.948	10.990	11.092	+++++	11.092	8.092-14.092	11.033	0.074
	25 2,4-Dichlorophenol	11.109	11.101	11.100	11.101	11.101	11.101	11.101	11.101	8.101-14.101	11.102	0.003
	26 1,2,4-Trichlorobenzene	11.288	11.280	11.280	11.280	11.280	11.281	11.280	11.280	8.280-14.280	11.281	0.003
*	27 Naphthalene-d8	11.373	11.365	11.365	11.365	11.365	11.365	11.365	11.365	8.365-14.365	11.366	0.003
	28 Naphthalene	11.412	11.404	11.404	11.404	11.404	11.404	11.404	11.404	8.404-14.404	11.405	0.003
	29 4-Chloroaniline	11.551	11.543	11.535	11.535	11.535	11.535	11.543	11.543	8.543-14.543	11.540	0.006

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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Inst ID: nt18.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	30 Hexachlorobutadiene	11.767	11.767	11.767	11.767	11.767	11.767	11.767	11.767	8.767-14.767	11.767	0.000
	31 4-Chloro-3-methylpheno	12.510	12.502	12.502	12.494	12.494	12.502	12.502	12.502	9.502-15.502	12.501	0.005
	32 2-Methylnaphthalene	12.796	12.789	12.788	12.789	12.788	12.789	12.789	12.789	9.789-15.789	12.790	0.003
	33 Hexachlorocyclopentadi	13.253	13.253	13.253	13.253	13.253	13.253	13.253	13.253	10.253-16.253	13.253	0.000
	34 2,4,6-Trichlorophenol	13.415	13.408	13.408	13.408	13.408	13.408	13.408	13.408	10.408-16.408	13.409	0.003
	35 2,4,5-Trichlorophenol	13.493	13.485	13.477	13.477	13.477	13.485	13.485	13.485	10.485-16.485	13.483	0.006
$	36 2-Fluorobiphenyl	13.578	13.570	13.562	13.562	13.562	13.563	13.562	13.562	10.562-16.562	13.566	0.006
	37 2-Chloronaphthalene	13.779	13.771	13.771	13.771	13.771	13.772	13.771	13.771	10.771-16.771	13.772	0.003
	38 2-Nitroaniline	14.058	14.042	14.034	14.027	14.027	14.027	14.035	14.035	11.035-17.035	14.036	0.011
	39 Dimethylphthalate	14.484	14.468	14.468	14.460	14.460	14.460	14.460	14.460	11.460-17.460	14.466	0.009
	40 Acenaphthylene	14.638	14.631	14.630	14.631	14.630	14.631	14.631	14.631	11.631-17.631	14.632	0.003
	41 2,6-Dinitrotoluene	14.623	14.607	14.599	14.592	14.592	14.592	14.592	14.592	11.592-17.592	14.600	0.012
*	42 Acenaphthene-d10	14.948	14.948	14.940	14.940	14.940	14.940	14.940	14.940	11.940-17.940	14.942	0.004
	43 3-Nitroaniline	14.909	14.894	14.878	14.870	14.870	14.871	14.878	14.878	11.878-17.878	14.881	0.015
	44 Acenaphthene	15.017	15.010	15.009	15.002	15.002	15.002	15.002	15.002	12.002-18.002	15.006	0.006
	45 2,4-Dinitrophenol	15.126	15.102	15.094	15.087	15.094	15.095	+++++	15.095	12.095-18.095	15.100	0.014
	46 Dibenzofuran	15.350	15.342	15.334	15.326	15.326	15.327	15.334	15.334	12.334-18.334	15.334	0.009
	47 4-Nitrophenol	15.249	15.226	15.210	15.203	15.210	15.211	15.218	15.218	12.218-18.218	15.218	0.015
	48 2,4-Dinitrotoluene	15.427	15.412	15.404	15.396	15.396	15.396	15.396	15.396	12.396-18.396	15.404	0.012
	49 Fluorene	16.053	16.045	16.038	16.038	16.038	16.038	16.038	16.038	13.038-19.038	16.041	0.006
	50 Diethylphthalate	15.937	15.922	15.914	15.906	15.906	15.906	15.906	15.906	12.906-18.906	15.914	0.012
	51 4-Chlorophenyl-phenyle	16.045	16.038	16.030	16.030	16.030	16.030	16.030	16.030	13.030-19.030	16.033	0.006
	52 4-Nitroaniline	16.207	16.161	16.145	16.130	16.122	16.123	16.130	16.130	13.130-19.130	16.146	0.031
	53 4,6-Dinitro-2-methylph	16.277	16.254	16.238	16.230	16.223	16.223	16.230	16.230	13.230-19.230	16.239	0.020

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Inst ID: nt18.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	54 N-Nitrosodiphenylamine	16.308	16.292	16.284	16.277	16.277	16.277	16.277	16.277	13.277-19.277	16.284	0.012
$	55 2,4,6-Tribromophenol	16.585	16.570	16.570	16.570	16.570	16.562	16.570	16.570	13.570-19.570	16.571	0.007
	56 4-Bromophenyl-phenylet	17.032	17.032	17.025	17.025	17.025	17.025	17.025	17.025	14.025-20.025	17.027	0.004
	57 Hexachlorobenzene	17.349	17.341	17.334	17.334	17.334	17.334	17.334	17.334	14.334-20.334	17.337	0.006
	58 Pentachlorophenol	17.705	17.698	17.697	17.698	17.697	17.698	+++++	17.698	14.698-20.698	17.699	0.003
*	59 Phenanthrene-d10	17.961	17.953	17.953	17.945	17.945	17.945	17.945	17.945	14.945-20.945	17.950	0.006
	60 Phenanthrene	18.015	17.999	17.999	17.992	17.991	17.992	17.992	17.992	14.992-20.992	17.997	0.009
	61 Anthracene	18.108	18.092	18.092	18.084	18.084	18.085	18.084	18.084	15.084-21.084	18.090	0.009
	62 Carbazole	18.433	18.425	18.417	18.417	18.417	18.417	18.417	18.417	15.417-21.417	18.420	0.006
	63 Di-n-butylphthalate	19.237	19.230	19.229	19.229	19.229	19.230	19.230	19.230	16.230-22.230	19.231	0.003
	64 Fluoranthene	20.390	20.382	20.374	20.374	20.374	20.375	20.375	20.375	17.375-23.375	20.378	0.006
	65 Pyrene	20.808	20.800	20.800	20.792	20.792	20.800	20.800	20.800	17.800-23.800	20.799	0.005
$	66 Terphenyl-d14	21.102	21.094	21.094	21.094	21.094	21.094	21.094	21.094	18.094-24.094	21.095	0.003
	67 Butylbenzylphthalate	22.031	22.023	22.023	22.016	22.023	22.023	22.023	22.023	19.023-25.023	22.023	0.004
	68 Benzo(a)anthracene	22.968	22.953	22.952	22.952	22.952	22.953	22.953	22.953	19.953-25.953	22.955	0.006
*	69 Chrysene-d12	22.991	22.983	22.983	22.976	22.983	22.976	22.976	22.976	19.976-25.976	22.981	0.006
	70 3,3'-Dichlorobenzidine	22.937	22.922	22.914	22.914	22.914	22.906	22.906	22.906	19.906-25.906	22.916	0.011
	71 Chrysene	23.045	23.030	23.030	23.022	23.022	23.022	23.022	23.022	20.022-26.022	23.028	0.009
	72 bis(2-Ethylhexyl)phtha	23.053	23.045	23.053	23.045	23.045	23.045	23.045	23.045	20.045-26.045	23.048	0.004
	73 Di-n-octylphthalate	24.036	24.029	24.028	24.029	24.028	24.029	24.029	24.029	21.029-27.029	24.030	0.003
	74 Benzo(b)fluoranthene	24.780	24.772	24.764	24.756	24.756	24.756	24.756	24.756	21.756-27.756	24.763	0.009
	75 Benzo(k)fluoranthene	24.826	24.811	24.803	24.795	24.803	24.803	24.795	24.795	21.795-27.795	24.805	0.011
	187 Total Benzofluoranthen	24.826	24.811	24.803	24.795	24.803	24.756	24.795	24.795	21.795-27.795	24.798	0.021
	76 Benzo(a)pyrene	25.384	25.368	25.368	25.360	25.360	25.360	25.360	25.360	22.360-28.360	25.366	0.009

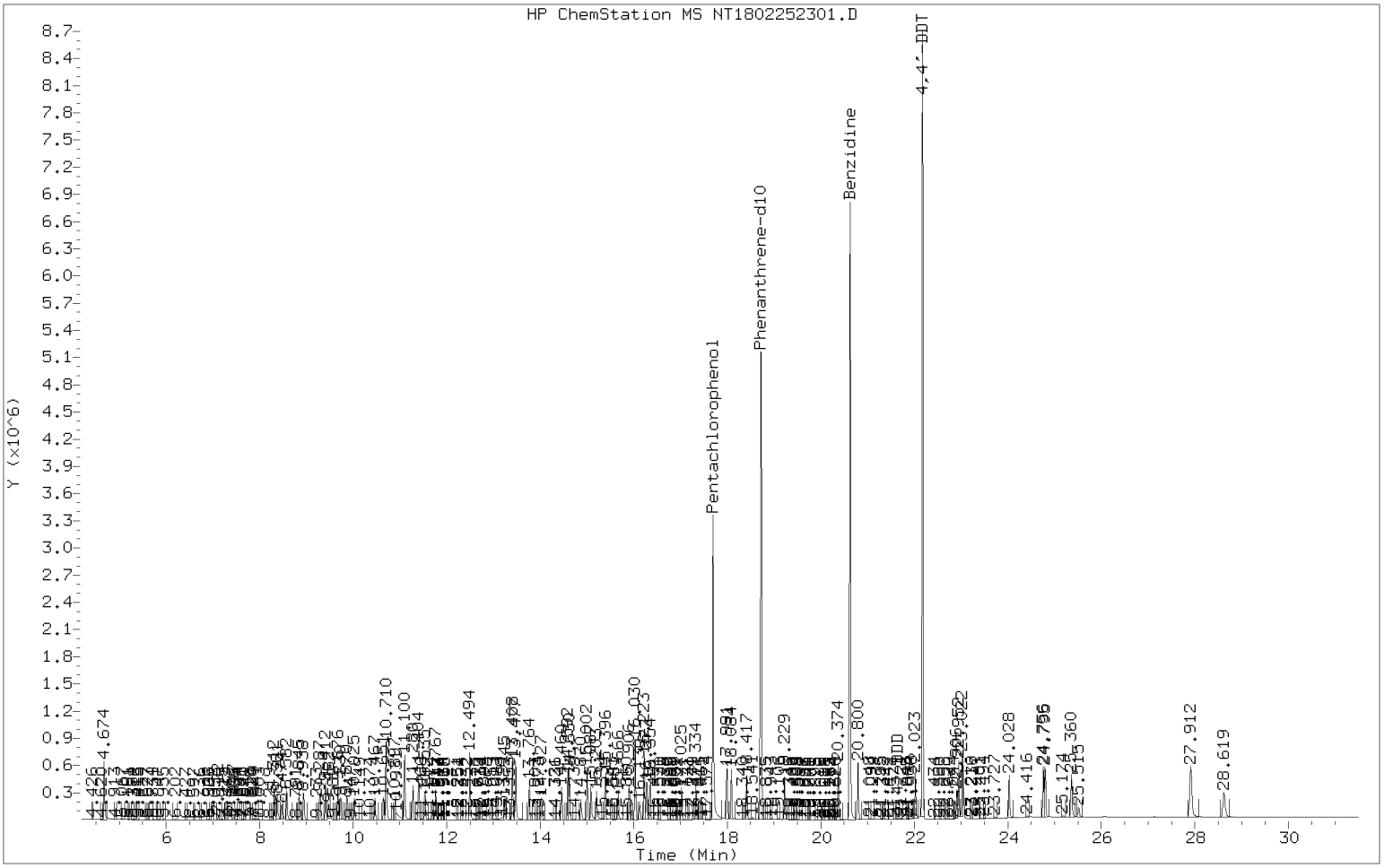
ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

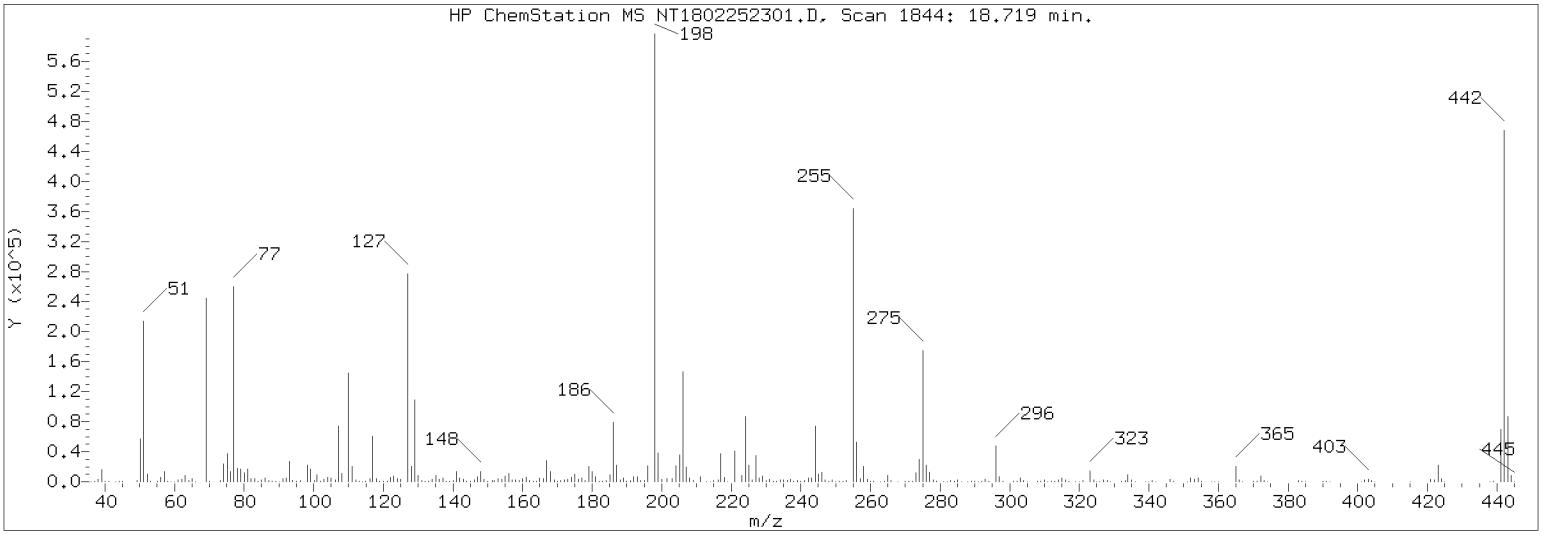
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Batch File: \\target\share\chem3\nt18.i\20230225.b
Inst ID: nt18.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
*	77 Perylene-d12	25.476	25.476	25.469	25.469	25.469	25.469	25.469	25.469	22.469-28.469	25.471	0.004
	78 Indeno(1,2,3-cd)pyrene	27.967	27.936	27.920	27.912	27.905	27.905	27.905	27.905	24.905-30.905	27.921	0.023
	79 Dibenzo(a,h)anthracene	27.975	27.944	27.928	27.912	27.920	27.913	27.920	27.920	24.920-30.920	27.930	0.022
	80 Benzo(g,h,i)perylene	28.689	28.650	28.635	28.627	28.619	28.619	28.619	28.619	25.619-31.619	28.637	0.026
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	51.633	48.633-54.633	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	63.533	60.533-66.533	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	60.273	57.273-63.273	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	78.600	75.600-81.600	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.841	47.841-53.841	+++++	+++++
	90 N-Nitrosodimethylamine	4.705	4.689	4.681	4.674	4.674	4.682	4.681	4.681	1.681-7.681	4.684	0.011
	91 Aniline	8.405	8.389	8.381	8.381	8.381	8.382	8.389	8.389	5.389-11.389	8.387	0.009
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.160	53.160-59.160	+++++	+++++
	93 Benzidine	20.638	20.622	20.614	20.614	20.614	20.614	20.614	20.614	17.614-23.614	20.619	0.009
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.075	49.075-55.075	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.250	46.250-52.250	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	61.202	58.202-64.202	+++++	+++++
	98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.248	15.248-21.248	+++++	+++++
	99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.094	23.094-29.094	+++++	+++++
	100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.411	22.411-28.411	+++++	+++++
	101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.023	23.023-29.023	+++++	+++++
	102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	79.550	76.550-82.550	+++++	+++++
	103 Pyridine	4.674	4.674	4.674	4.674	4.674	4.682	4.689	4.689	1.689-7.689	4.677	0.006
	188 2,6-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.874	8.874-14.874	+++++	+++++
	189 N-Nitrosomethylethylam	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.818	2.818-8.818	+++++	+++++

DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230225.b/NT1802252301.D/NT1802252301.D
Method Used: \20230225.b\DFTPP8270E.m Inst: nt18
Injection Date: 25-FEB-2023 20:42 Operator: VTS
Sample Info: SLC0099-TUN1 SLC0099-TUN1
Report Date: 03/08/2023 15:05





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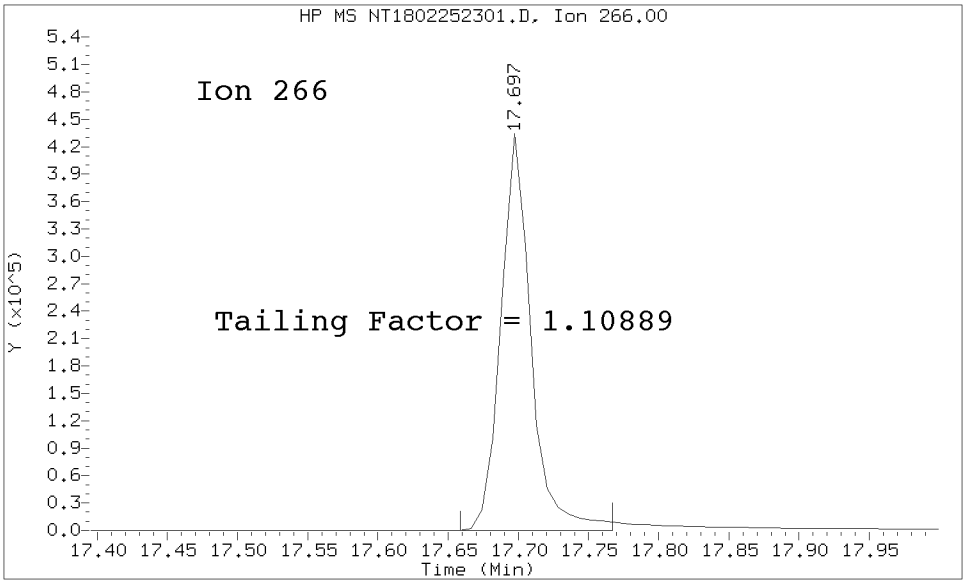
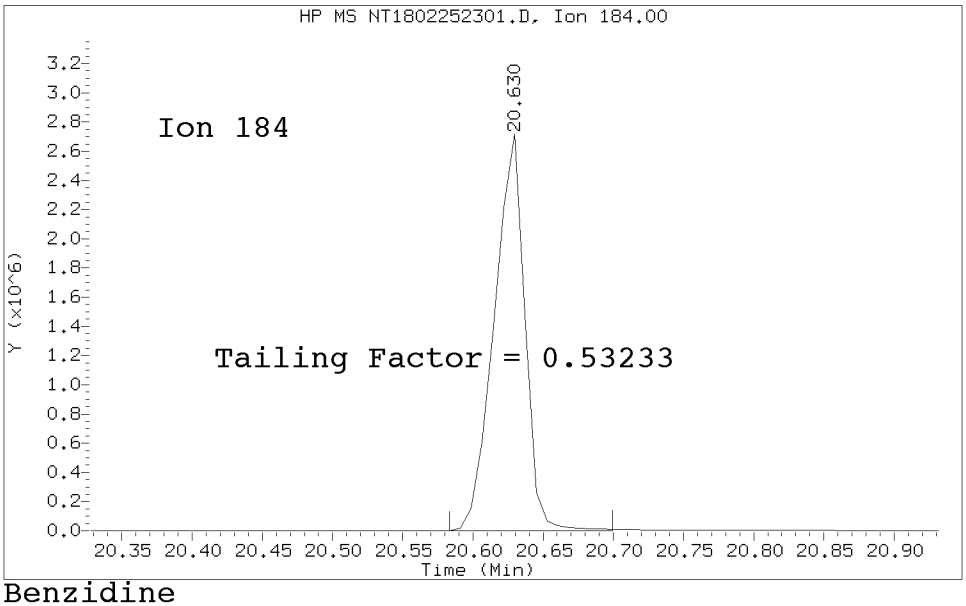
Method Used: \20230225.b\DFTPP8270E.m\sw846ddt.m Inst: nt18
Injection Date: 25-FEB-2023 20:42 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 03/08/2023 15:05



Pentachlorophenol
==========
 Exp. RT = 17.697
Found RT = 17.697

Tail Factor = 1.109 Maximum Allowed = 2.0



Benzidine
==========
 Exp. RT = 20.630
Found RT = 20.630

Tail Factor = 0.532 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.1088871	2.000	PASS
Benzidine	0.5323326	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	2570944			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	4286	0.2	20.0	PASS
4,4-DDD + DDE	4286	0.2	20.0	PASS

Tuning Sample, nt18.i/20230225.b/NT1802252301.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	41.17
70	Less than 2.00% of mass 69	0.21 (0.50)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.63
365	1.00 - 100.00% of mass 198	3.70
441	Less than 150.00% of mass 443	12.29 (80.53)
442	Less than 200.00% of mass 198	80.53
443	15.00 - 24.00% of mass 442	15.26 (18.95)

Data File: NT1802252301.D
Spectrum: Avg. Scans 1843-1845 (18.72), Background Scan 1838
Location of Maximum: 198.00
Number of points: 323

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	220	127.00	242176	210.00	608	299.00	72
37.00	967	128.00	18392	211.00	5556	301.00	577
38.00	2785	129.00	96032	213.00	351	302.00	747
39.00	15166	130.00	8031	214.00	66	303.00	4907
40.00	725	131.00	1607	215.00	1396	304.00	1293
41.00	438	132.00	1034	216.00	2830	305.00	132
43.00	117	133.00	332	217.00	33656	308.00	545
45.00	414	134.00	2677	218.00	4658	309.00	434
48.00	70	135.00	7544	219.00	379	310.00	1105
49.00	1824	136.00	2933	221.00	34584	311.00	223
50.00	51088	137.00	3930	223.00	7904	312.00	111
51.00	187520	138.00	1034	224.00	76560	313.00	506
52.00	9471	139.00	573	225.00	19064	314.00	2103
53.00	517	140.00	1188	226.00	2136	315.00	4587
55.00	1003	141.00	11908	227.00	30976	316.00	2629
56.00	5693	142.00	3963	228.00	4600	317.00	476
57.00	12450	143.00	2682	229.00	6368	319.00	51
58.00	594	144.00	879	230.00	1131	320.00	142
59.00	116	145.00	620	231.00	2856	321.00	1493
60.00	306	146.00	2281	232.00	514	322.00	473
61.00	2536	147.00	5711	233.00	607	323.00	13155
62.00	2844	148.00	13401	234.00	1942	324.00	2624
63.00	7649	149.00	2648	235.00	2285	325.00	217
64.00	1188	150.00	799	236.00	1377	326.00	330
65.00	3947	151.00	2003	237.00	2608	327.00	2589
66.00	374	152.00	431	238.00	396	328.00	1447
67.00	156	153.00	3992	239.00	1277	329.00	179
69.00	215360	154.00	2809	240.00	977	332.00	1079
70.00	1077	155.00	6572	241.00	1835	333.00	1407
71.00	119	156.00	10087	242.00	4428	334.00	8469
73.00	1722	157.00	2167	243.00	4996	335.00	2223
74.00	21360	158.00	2291	244.00	65768	336.00	252
75.00	32760	159.00	1645	245.00	8615	339.00	174
76.00	11667	160.00	3868	246.00	11846	340.00	236
77.00	227136	161.00	5423	247.00	2483	341.00	1666
78.00	15427	162.00	1602	248.00	563	342.00	409
79.00	15397	163.00	449	249.00	2360	346.00	3398
80.00	10911	164.00	742	250.00	444	347.00	545
81.00	15377	165.00	4059	251.00	531	351.00	284
82.00	3815	166.00	3568	252.00	527	352.00	4094
83.00	3427	167.00	24600	253.00	1289	353.00	2881
84.00	399	168.00	12104	255.00	323392	354.00	4506
85.00	2535	169.00	2188	256.00	46232	355.00	899
86.00	4534	170.00	789	257.00	3793	358.00	50
87.00	2011	171.00	1123	258.00	18128	359.00	217
88.00	945	172.00	2241	259.00	2864	360.00	57
89.00	447	173.00	2799	260.00	541	365.00	19352
90.00	108	174.00	5195	261.00	486	366.00	2645
91.00	3668	175.00	9152	263.00	168	367.00	222

92.00	4027	176.00	3473	264.00	450	370.00	396
93.00	24888	177.00	4425	265.00	7366	371.00	1012
94.00	1863	178.00	1648	266.00	1155	372.00	6575
95.00	521	179.00	17864	267.00	55	373.00	1696
96.00	1194	180.00	11878	268.00	133	374.00	80
98.00	19456	181.00	6026	269.00	52	383.00	1730
99.00	15353	182.00	945	270.00	429	384.00	494
100.00	1355	183.00	556	271.00	651	385.00	136
101.00	8334	184.00	1650	272.00	1019	390.00	844
102.00	590	185.00	8888	273.00	10416	391.00	488
103.00	3238	186.00	70416	274.00	26248	392.00	390
104.00	5358	187.00	19576	275.00	154752	397.00	52
105.00	4920	188.00	2032	276.00	19848	401.00	364
106.00	2328	189.00	4603	277.00	11801	402.00	2598
107.00	65456	190.00	638	278.00	2016	403.00	3311
108.00	10450	191.00	2013	279.00	504	404.00	1346
110.00	127944	192.00	5979	281.00	67	405.00	136
111.00	17976	193.00	6294	282.00	292	415.00	133
112.00	2498	194.00	1387	283.00	1383	421.00	2859
113.00	766	195.00	1119	284.00	925	422.00	3020
114.00	175	196.00	18912	285.00	2369	423.00	20976
115.00	408	198.00	523072	286.00	372	424.00	4215
116.00	3902	199.00	34704	288.00	120	425.00	431
117.00	54672	200.00	2675	289.00	626	437.00	115
118.00	3817	201.00	3359	290.00	396	438.00	243
119.00	488	203.00	3637	291.00	280	439.00	450
120.00	868	204.00	18208	292.00	638	441.00	64280
121.00	541	205.00	31632	293.00	2603	442.00	421248
122.00	4779	206.00	131200	294.00	693	443.00	79824
123.00	6547	207.00	17288	296.00	43712	444.00	7170
124.00	3236	208.00	4403	297.00	6035	445.00	374
125.00	2841	209.00	1300	298.00	407		

Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252302.D

Page 1

Date : 25-FEB-2023 21:23

Client ID:

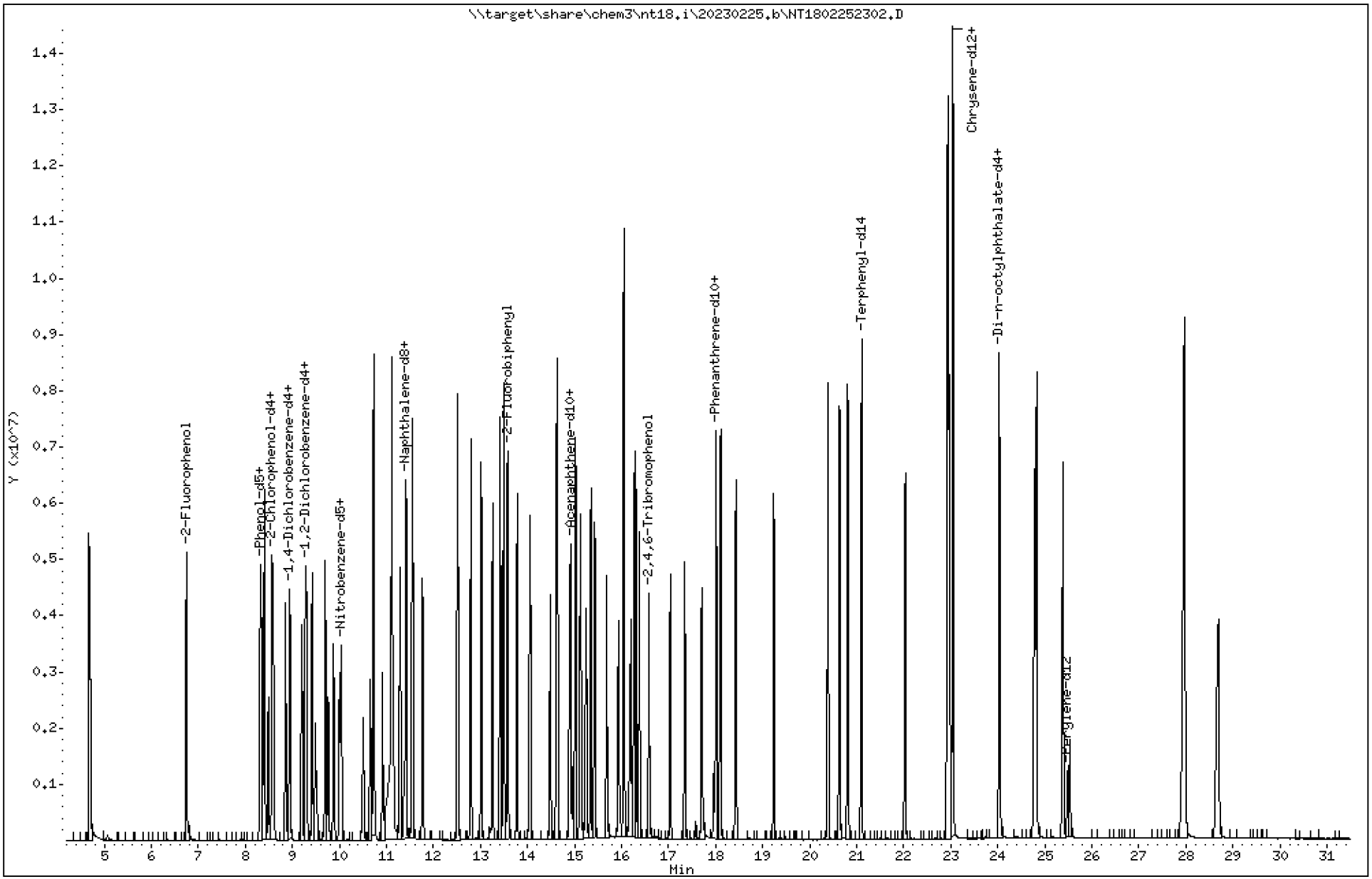
Instrument: nt18.i

Sample Info: SLC0099-CAL7

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Inj Date : 25-FEB-2023 21:23
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0099-CAL7
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Meth Date : 08-Mar-2023 14:50 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 2 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.743	6.743	(0.756)	2288981	30.0000	29.53
$	2 Phenol-d5	99	8.319	8.296	(0.933)	2800849	30.0000	27.96
	3 Phenol	94	8.335	8.319	(0.935)	2011068	20.0000	19.29
$	5 2-Chlorophenol-d4	132	8.566	8.559	(0.961)	2518200	30.0000	28.89
	4 Bis(2-Chloroethyl)ether	93	8.489	8.474	(0.952)	1313319	20.0000	18.55
	6 2-Chlorophenol	128	8.597	8.590	(0.964)	1715454	20.0000	19.17
	7 1,3-Dichlorobenzene	146	8.853	8.853	(0.993)	1763414	20.0000	18.63
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	227200	4.00000	
	9 1,4-Dichlorobenzene	146	8.946	8.938	(1.003)	1771822	20.0000	18.36
$	10 1,2-Dichlorobenzene-d4	152	9.272	9.264	(1.040)	1146251	20.0000	18.55
	12 1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	1748971	20.0000	18.68
	11 Benzyl alcohol	108	9.202	9.202	(1.032)	1047126	20.0000	21.13
	14 2,2'-oxybis(1-Chloropropane)	121	9.489	9.481	(1.064)	400040	20.0000	18.23
	13 2-Methylphenol	108	9.419	9.419	(1.057)	1540982	20.0000	19.11
	17 Hexachloroethane	117	9.877	9.877	(1.108)	694176	20.0000	18.58
	16 N-Nitroso-di-n-propylamine	70	9.761	9.737	(1.095)	1137419	20.0000	19.19
	15 4-Methylphenol	108	9.699	9.683	(1.088)	1633124	20.0000	19.43
$	18 Nitrobenzene-d5	82	10.001	10.001	(0.879)	1775599	20.0000	18.94
	19 Nitrobenzene	77	10.040	10.032	(0.883)	1677160	20.0000	18.58
	20 Isophorone	82	10.498	10.467	(0.923)	2300048	20.0000	19.97
	21 2-Nitrophenol	139	10.659	10.659	(0.937)	924515	20.0000	20.86
	22 2,4-Dimethylphenol	107	10.727	10.710	(0.943)	3127096	40.0000	37.02
	23 Bis(2-Chloroethoxy)methane	93	10.913	10.905	(0.960)	1476839	20.0000	18.73
	24 Benzoic acid	105	11.143	11.092	(0.980)	3724110	80.0000	79.63(M)
	25 2,4-Dichlorophenol	162	11.109	11.100	(0.977)	2954847	40.0000	39.90
	26 1,2,4-Trichlorobenzene	180	11.288	11.280	(0.993)	1530823	20.0000	19.14
*	27 Naphthalene-d8	136	11.373	11.365	(1.000)	879826	4.00000	
	28 Naphthalene	128	11.411	11.403	(1.003)	4887275	20.0000	18.07
	29 4-Chloroaniline	127	11.550	11.542	(1.016)	3952999	40.0000	36.67
	30 Hexachlorobutadiene	225	11.767	11.767	(1.035)	904731	20.0000	19.30
	31 4-Chloro-3-methylphenol	107	12.509	12.502	(1.100)	2752512	40.0000	38.83
	32 2-Methylnaphthalene	142	12.796	12.788	(1.125)	3325701	20.0000	18.10
	33 Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	1661367	40.0000	39.86

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.415	13.407	(0.897)	1932750	40.0000	43.43
	35	2,4,5-Trichlorophenol	196	13.492	13.485	(0.903)	2144043	40.0000	44.21
$	36	2-Fluorobiphenyl	172	13.577	13.562	(0.908)	3682491	20.0000	18.98
	37	2-Chloronaphthalene	162	13.779	13.771	(0.922)	2928369	20.0000	19.32
	38	2-Nitroaniline	65	14.057	14.034	(0.940)	1844806	40.0000	38.89
	39	Dimethylphthalate	163	14.483	14.460	(0.969)	3269989	20.0000	20.09
	40	Acenaphthylene	152	14.638	14.630	(0.979)	5067238	20.0000	19.85
	41	2,6-Dinitrotoluene	165	14.622	14.591	(0.978)	1586887	40.0000	42.52
*	42	Acenaphthene-d10	164	14.947	14.940	(1.000)	460093	4.00000	
	43	3-Nitroaniline	138	14.909	14.878	(0.997)	1858086	40.0000	42.09
	44	Acenaphthene	153	15.017	15.001	(1.005)	2995756	20.0000	18.55
	45	2,4-Dinitrophenol	184	15.125	15.094	(1.012)	1798694	80.0000	79.73
	46	Dibenzofuran	168	15.349	15.334	(1.027)	4351254	20.0000	18.61
	47	4-Nitrophenol	109	15.249	15.218	(1.020)	793705	40.0000	44.60
	48	2,4-Dinitrotoluene	165	15.427	15.396	(1.032)	2118035	40.0000	41.52
	50	Diethylphthalate	149	15.937	15.906	(1.066)	3574001	20.0000	20.95
	49	Fluorene	166	16.053	16.037	(1.074)	3572530	20.0000	19.07
	51	4-Chlorophenyl-phenylether	204	16.045	16.029	(1.073)	1743299	20.0000	20.43
	52	4-Nitroaniline	138	16.207	16.130	(1.084)	1810381	40.0000	42.63
	53	4,6-Dinitro-2-methylphenol	198	16.276	16.230	(0.906)	2600974	80.0000	79.82
	54	N-Nitrosodiphenylamine	169	16.307	16.276	(0.908)	2536728	20.0000	21.13
$	55	2,4,6-Tribromophenol	330	16.585	16.569	(1.110)	905919	30.0000	29.96
	56	4-Bromophenyl-phenylether	248	17.032	17.024	(0.948)	1062583	20.0000	22.06
	57	Hexachlorobenzene	284	17.349	17.333	(0.966)	1219134	20.0000	21.92
	58	Pentachlorophenol	266	17.705	17.697	(0.986)	996015	40.0000	39.91
*	59	Phenanthrene-d10	188	17.960	17.945	(1.000)	797797	4.00000	
	60	Phenanthrene	178	18.014	17.991	(1.003)	4855450	20.0000	19.35
	61	Anthracene	178	18.107	18.084	(1.008)	4958474	20.0000	20.73
	62	Carbazole	167	18.432	18.417	(1.026)	4503931	20.0000	20.55
	63	Di-n-butylphthalate	149	19.237	19.229	(1.071)	5305257	20.0000	21.87
	64	Fluoranthene	202	20.390	20.374	(0.887)	5352311	20.0000	19.05(M)
	65	Pyrene	202	20.807	20.800	(0.905)	5513966	20.0000	18.40
$	66	Terphenyl-d14	244	21.101	21.094	(0.918)	4811117	20.0000	20.02
	67	Butylbenzylphthalate	149	22.031	22.023	(0.958)	2460340	20.0000	21.63
	68	Benzo(a)anthracene	228	22.968	22.952	(0.999)	5519028	20.0000	19.07
*	69	Chrysene-d12	240	22.991	22.975	(1.000)	801796	4.00000	
	70	3,3'-Dichlorobenzidine	252	22.937	22.906	(0.998)	6006737	60.0000	56.39
	71	Chrysene	228	23.045	23.022	(1.002)	5439156	20.0000	18.07
	72	bis(2-Ethylhexyl)phthalate	149	23.053	23.045	(0.959)	3498549	20.0000	19.74
*	134	Di-n-octylphthalate-d4	153	24.028	24.020	(1.000)	1234737	4.00000	
	73	Di-n-octylphthalate	149	24.036	24.028	(1.000)	6054374	20.0000	17.60
	74	Benzo(b)fluoranthene	252	24.779	24.756	(0.973)	5828836	20.0000	21.73
	75	Benzo(k)fluoranthene	252	24.826	24.795	(0.974)	5769377	20.0000	18.98(H)
	76	Benzo(a)pyrene	252	25.383	25.360	(0.996)	5180432	20.0000	20.84
*	77	Perylene-d12	264	25.476	25.468	(1.000)	822041	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	27.966	27.904	(1.098)	7405860	20.0000	23.73
	79	Dibenzo(a,h)anthracene	278	27.974	27.920	(1.098)	6434201	20.0000	24.72
	80	Benzo(g,h,i)perylene	276	28.689	28.619	(1.126)	5462201	20.0000	21.83
	90	N-Nitrosodimethylamine	74	4.704	4.681	(0.528)	1684844	40.0000	37.02
	91	Aniline	93	8.404	8.389	(0.943)	4402719	40.0000	37.11
	93	Benzidine	184	20.637	20.614	(0.898)	5223760	40.0000	38.06
	103	Pyridine	79	4.673	4.689	(0.524)	2803451	40.0000	36.98
	105	1-methylnaphthalene	142	13.013	13.005	(1.144)	3053884	20.0000	18.36
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.376	16.353	(1.096)	3648414	20.0000	19.42

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	24.826	24.795	(0.974)	11012163	40.0000	40.61
120 2,3,4,6-Tetrachlorophenol	232	15.682	15.674	(1.049)	1074544	20.0000	19.97

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252302.D
Lab Smp Id: SLC0099-CAL7
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	227200	6.61
27 Naphthalene-d8	806946	403473	1613892	879826	9.03
42 Acenaphthene-d10	424249	212125	848498	460093	8.45
59 Phenanthrene-d10	758987	379494	1517974	797797	5.11
69 Chrysene-d12	685237	342619	1370474	801796	17.01
134 Di-n-octylphthala	1075410	537705	2150820	1234737	14.82
77 Perylene-d12	762553	381277	1525106	822041	7.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.07
42 Acenaphthene-d10	14.94	14.44	15.44	14.95	0.05
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
134 Di-n-octylphthala	24.02	23.52	24.52	24.03	0.03
77 Perylene-d12	25.47	24.97	25.97	25.48	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252302.D

Lab ID: SLC0099-CAL7
nt18.i, ABN.m, 25-FEB-2023 21:23

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.980	0.000	0.9798	Benzoic acid
1.012	0.000	1.0119	2,4-Dinitrophenol
0.986	0.000	0.9858	Pentachlorophenol

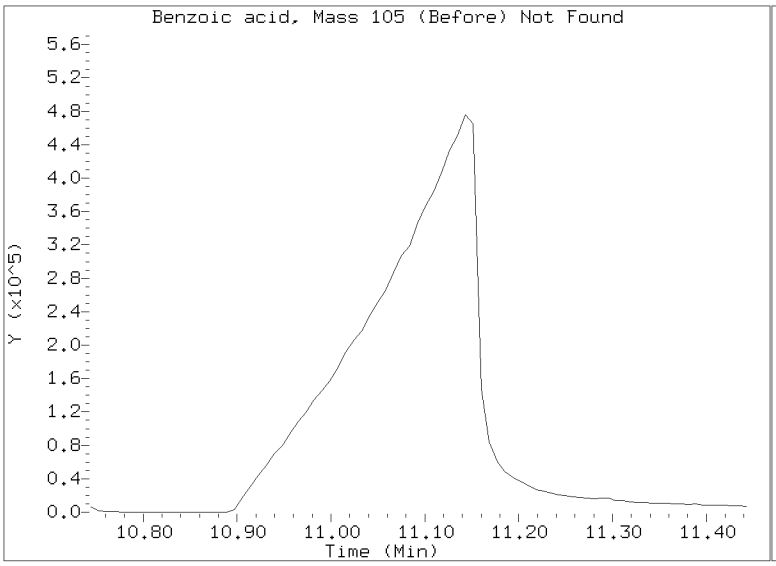
RRT check based on Ccal File: NT1802252308.D

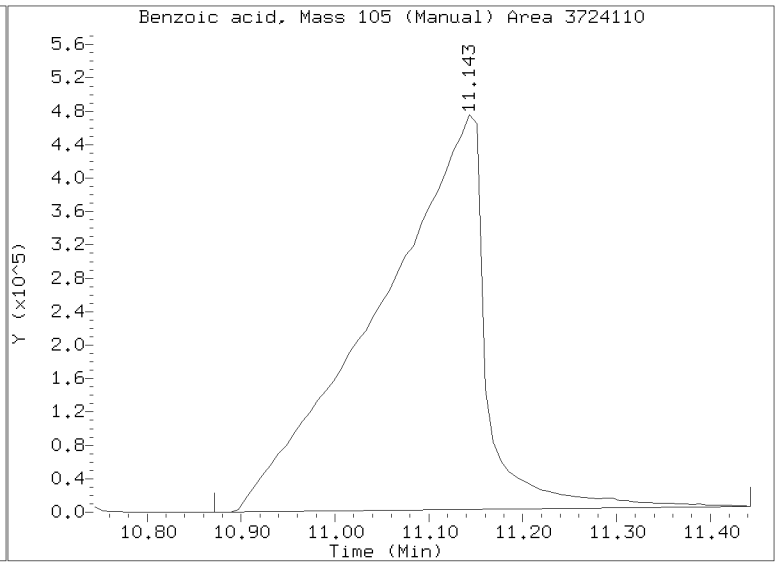
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

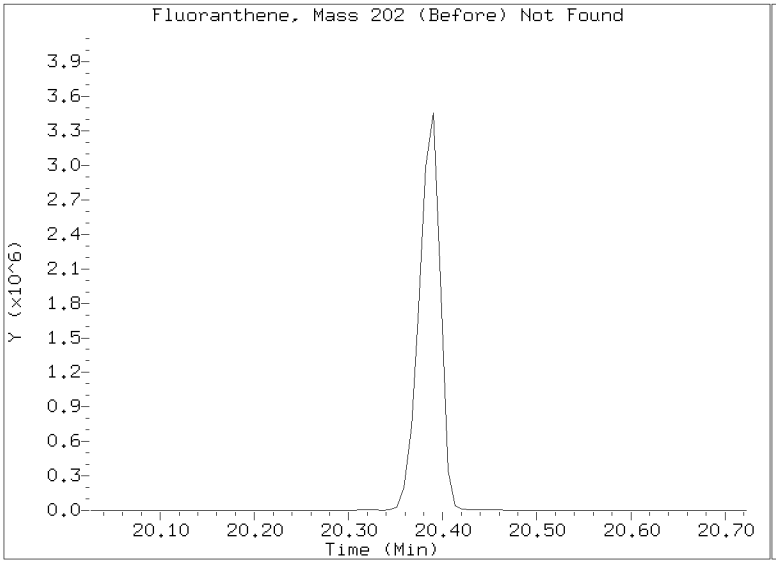
* Only compounds listed in the work order have been verified by the analyst *

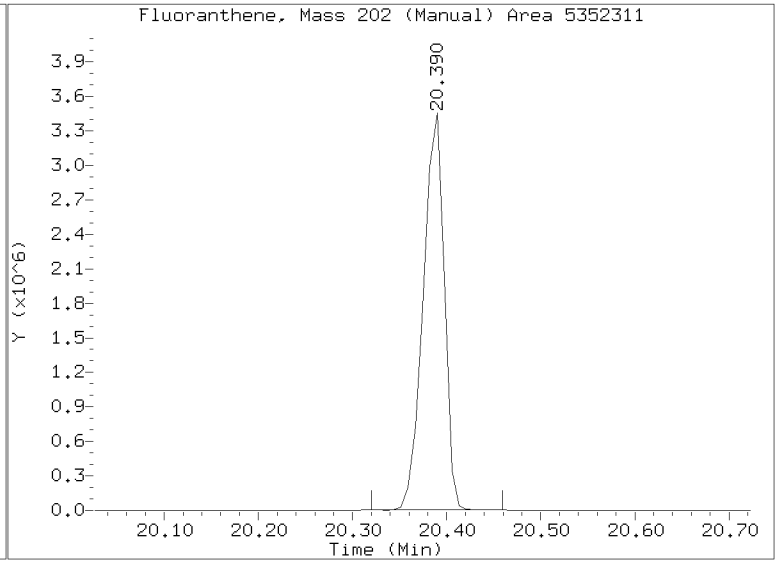
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230225.b/NT1802252302.D
Injection Date: 25-FEB-2023 21:23
Lab ID:SLC0099-CAL7 Client ID:
Report Date: 03/08/2023 15:04









Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252303.D

Date : 25-FEB-2023 22:03

Client ID:

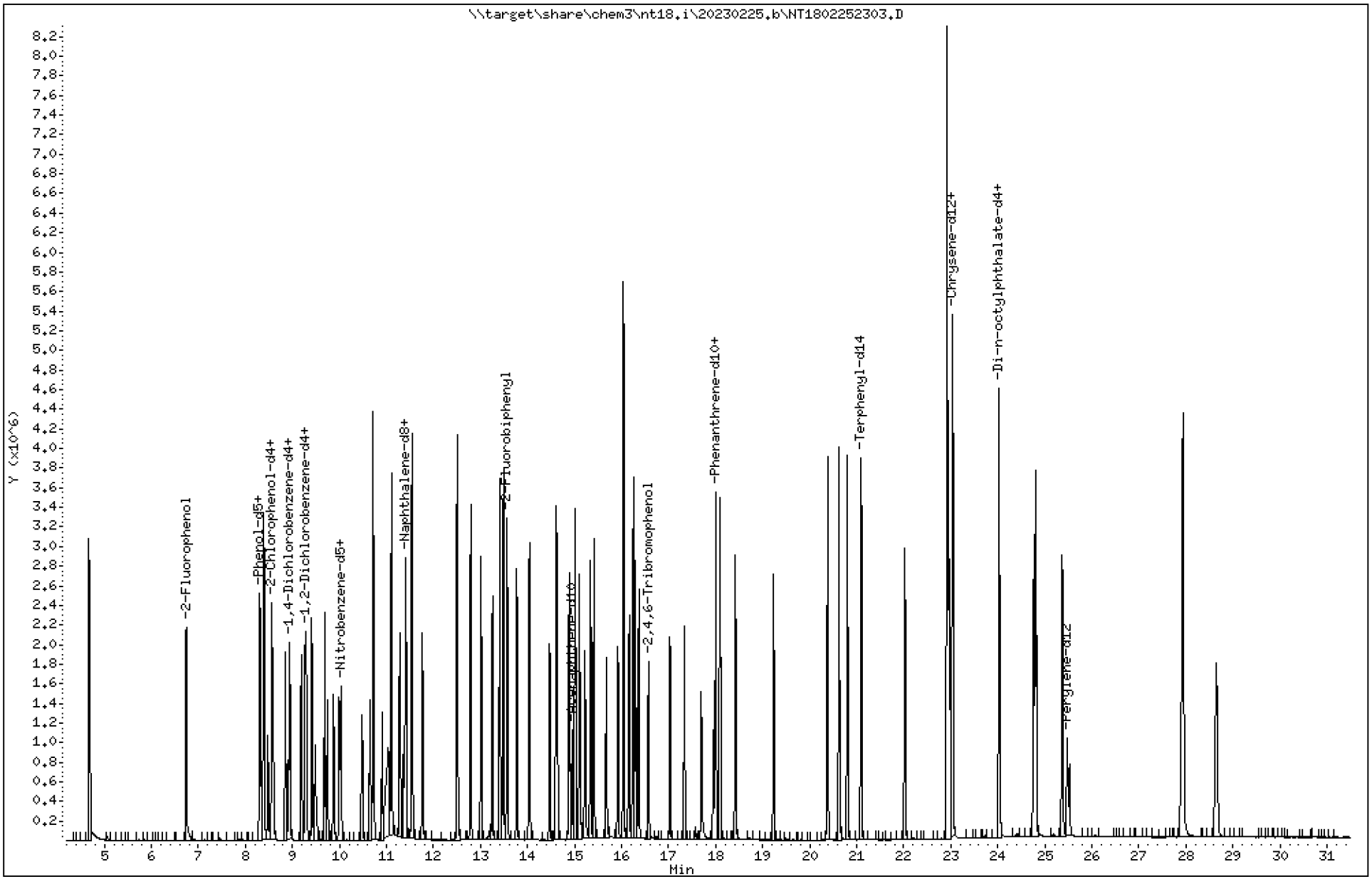
Sample Info: SLC0099-CAL6

Column phase: ZB-5msi

Instrument: nt18.i

Operator: VTS

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230225.b\NT1802252303.D
Lab Smp Id: SLC0099-CAL6
Inj Date : 25-FEB-2023 22:03
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0099-CAL6
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Meth Date : 08-Mar-2023 14:50 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 3 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							AMOUNTS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.743	6.743	(0.756)	1036953	15.0000	15.33
$	2 Phenol-d5	99	8.304	8.296	(0.931)	1296908	15.0000	14.84
	3 Phenol	94	8.327	8.319	(0.934)	899403	10.0000	9.889
$	5 2-Chlorophenol-d4	132	8.559	8.559	(0.960)	1119291	15.0000	14.71
	4 Bis(2-Chloroethyl)ether	93	8.481	8.474	(0.951)	580017	10.0000	9.390
	6 2-Chlorophenol	128	8.590	8.590	(0.964)	761546	10.0000	9.751
	7 1,3-Dichlorobenzene	146	8.853	8.853	(0.993)	781372	10.0000	9.459
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	198251	4.00000	
	9 1,4-Dichlorobenzene	146	8.946	8.938	(1.003)	786507	10.0000	9.341
$	10 1,2-Dichlorobenzene-d4	152	9.272	9.264	(1.040)	500828	10.0000	9.287
	12 1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	768047	10.0000	9.399
	11 Benzyl alcohol	108	9.186	9.202	(1.030)	460793	10.0000	10.66
	14 2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	176925	10.0000	9.239(M)
	13 2-Methylphenol	108	9.411	9.419	(1.056)	681052	10.0000	9.681
	17 Hexachloroethane	117	9.877	9.877	(1.108)	309229	10.0000	9.488
	16 N-Nitroso-di-n-propylamine	70	9.745	9.737	(1.093)	502254	10.0000	9.712
	15 4-Methylphenol	108	9.683	9.683	(1.086)	720769	10.0000	9.830
$	18 Nitrobenzene-d5	82	9.993	10.001	(0.879)	793346	10.0000	9.934
	19 Nitrobenzene	77	10.032	10.032	(0.883)	747695	10.0000	9.726
	20 Isophorone	82	10.482	10.467	(0.922)	1044920	10.0000	10.65
	21 2-Nitrophenol	139	10.650	10.659	(0.937)	402872	10.0000	10.67
	22 2,4-Dimethylphenol	107	10.718	10.710	(0.943)	1436571	20.0000	19.97
	23 Bis(2-Chloroethoxy)methane	93	10.905	10.905	(0.960)	653485	10.0000	9.730
	24 Benzoic acid	105	11.041	11.092	(0.971)	1337045	40.0000	42.52(M)
	25 2,4-Dichlorophenol	162	11.100	11.100	(0.977)	1338497	20.0000	21.22
	26 1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	644926	10.0000	9.466
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	749393	4.00000	
	28 Naphthalene	128	11.403	11.403	(1.003)	2171545	10.0000	9.427
	29 4-Chloroaniline	127	11.542	11.542	(1.016)	1805624	20.0000	19.67
	30 Hexachlorobutadiene	225	11.767	11.767	(1.035)	383188	10.0000	9.595
	31 4-Chloro-3-methylphenol	107	12.502	12.502	(1.100)	1242133	20.0000	20.57
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	1522974	10.0000	9.729
	33 Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	637111	20.0000	20.89

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	827909	20.0000	21.35
35	2,4,5-Trichlorophenol	196	13.485	13.485	(0.902)	929376	20.0000	22.00
$ 36	2-Fluorobiphenyl	172	13.570	13.562	(0.908)	1633829	10.0000	9.667
37	2-Chloronaphthalene	162	13.771	13.771	(0.921)	1287917	10.0000	9.752
38	2-Nitroaniline	65	14.042	14.034	(0.939)	830081	20.0000	20.08
39	Dimethylphthalate	163	14.468	14.460	(0.968)	1409465	10.0000	9.937
40	Acenaphthylene	152	14.630	14.630	(0.979)	2242895	10.0000	10.09
41	2,6-Dinitrotoluene	165	14.607	14.591	(0.977)	683962	20.0000	21.03
* 42	Acenaphthene-d10	164	14.947	14.940	(1.000)	400878	4.00000	
43	3-Nitroaniline	138	14.893	14.878	(0.996)	807133	20.0000	20.98
44	Acenaphthene	153	15.009	15.001	(1.004)	1345727	10.0000	9.561
45	2,4-Dinitrophenol	184	15.102	15.094	(1.010)	701374	40.0000	41.59
46	Dibenzofuran	168	15.341	15.334	(1.026)	1960239	10.0000	9.623
47	4-Nitrophenol	109	15.226	15.218	(1.019)	343566	20.0000	22.16
48	2,4-Dinitrotoluene	165	15.411	15.396	(1.031)	913215	20.0000	20.54
50	Diethylphthalate	149	15.921	15.906	(1.065)	1532395	10.0000	10.31
49	Fluorene	166	16.045	16.037	(1.073)	1792164	10.0000	10.98
51	4-Chlorophenyl-phenylether	204	16.037	16.029	(1.073)	774726	10.0000	10.42
52	4-Nitroaniline	138	16.161	16.130	(1.081)	790243	20.0000	21.36
53	4,6-Dinitro-2-methylphenol	198	16.253	16.230	(0.905)	1091945	40.0000	40.96
54	N-Nitrosodiphenylamine	169	16.292	16.276	(0.907)	1055706	10.0000	9.980
$ 55	2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	340805	15.0000	15.29
56	4-Bromophenyl-phenylether	248	17.032	17.024	(0.949)	437510	10.0000	10.31
57	Hexachlorobenzene	284	17.341	17.333	(0.966)	490122	10.0000	9.999
58	Pentachlorophenol	266	17.697	17.697	(0.986)	314102	20.0000	20.85
* 59	Phenanthrene-d10	188	17.952	17.945	(1.000)	703042	4.00000	
60	Phenanthrene	178	17.999	17.991	(1.003)	2171392	10.0000	9.819
61	Anthracene	178	18.092	18.084	(1.008)	2196733	10.0000	10.42
62	Carbazole	167	18.424	18.417	(1.026)	1961319	10.0000	10.16
63	Di-n-butylphthalate	149	19.229	19.229	(1.071)	2337013	10.0000	10.93
64	Fluoranthene	202	20.382	20.374	(0.887)	2344005	10.0000	10.16(M)
65	Pyrene	202	20.800	20.800	(0.905)	2416195	10.0000	9.822
$ 66	Terphenyl-d14	244	21.094	21.094	(0.918)	2017079	10.0000	10.22
67	Butylbenzylphthalate	149	22.023	22.023	(0.958)	1035559	10.0000	11.09
68	Benzo(a)anthracene	228	22.952	22.952	(0.999)	2371130	10.0000	9.976
* 69	Chrysene-d12	240	22.983	22.975	(1.000)	658368	4.00000	
70	3,3'-Dichlorobenzidine	252	22.921	22.906	(0.997)	3006941	30.0000	34.38
71	Chrysene	228	23.029	23.022	(1.002)	2483960	10.0000	10.05
72	bis(2-Ethylhexyl)phthalate	149	23.045	23.045	(0.959)	1599056	10.0000	10.77
* 134	Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	1034200	4.00000	
73	Di-n-octylphthalate	149	24.028	24.028	(1.000)	2682254	10.0000	9.308
74	Benzo(b)fluoranthene	252	24.771	24.756	(0.972)	2323749	10.0000	10.19
75	Benzo(k)fluoranthene	252	24.810	24.795	(0.974)	2596623	10.0000	10.05(H)
76	Benzo(a)pyrene	252	25.368	25.360	(0.996)	2218830	10.0000	10.50
* 77	Perylene-d12	264	25.476	25.468	(1.000)	698677	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.935	27.904	(1.097)	2977576	10.0000	11.22
79	Dibenzo(a,h)anthracene	278	27.943	27.920	(1.097)	2513575	10.0000	11.36
80	Benzo(g,h,i)perylene	276	28.650	28.619	(1.125)	2247646	10.0000	10.57
90	N-Nitrosodimethylamine	74	4.689	4.681	(0.526)	801136	20.0000	20.18
91	Aniline	93	8.389	8.389	(0.941)	2034975	20.0000	19.66
93	Benzidine	184	20.622	20.614	(0.897)	2270989	20.0000	20.15
103	Pyridine	79	4.673	4.689	(0.524)	1265921	20.0000	19.14
105	1-methylnaphthalene	142	13.005	13.005	(1.144)	1363014	10.0000	9.619
111	Azobenzene (1,2-DP-Hydrazine)	77	16.361	16.353	(1.095)	1604508	10.0000	9.800

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	24.810	24.795	(0.974)	4676185	20.0000	20.29
120 2,3,4,6-Tetrachlorophenol	232	15.674	15.674	(1.049)	424991	10.0000	10.17

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252303.D
Lab Smp Id: SLC0099-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	198251	-6.97
27 Naphthalene-d8	806946	403473	1613892	749393	-7.13
42 Acenaphthene-d10	424249	212125	848498	400878	-5.51
59 Phenanthrene-d10	758987	379494	1517974	703042	-7.37
69 Chrysene-d12	685237	342619	1370474	658368	-3.92
134 Di-n-octylphthala	1075410	537705	2150820	1034200	-3.83
77 Perylene-d12	762553	381277	1525106	698677	-8.38

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.94	14.44	15.44	14.95	0.05
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	0.00
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.47	24.97	25.97	25.48	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252303.D

Lab ID: SLC0099-CAL6
nt18.i, ABN.m, 25-FEB-2023 22:03

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.971	0.000	0.9715	Benzoic acid
1.010	0.000	1.0103	2,4-Dinitrophenol
0.986	0.000	0.9858	Pentachlorophenol

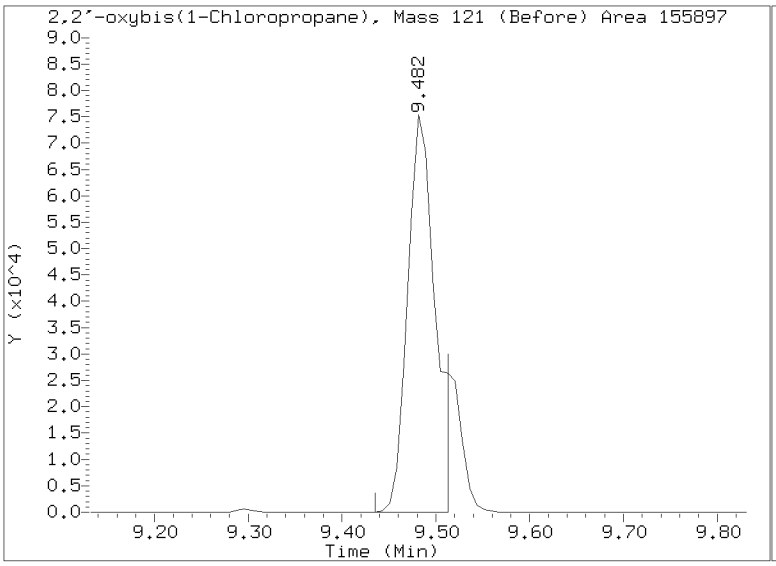
RRT check based on Ccal File: NT1802252308.D

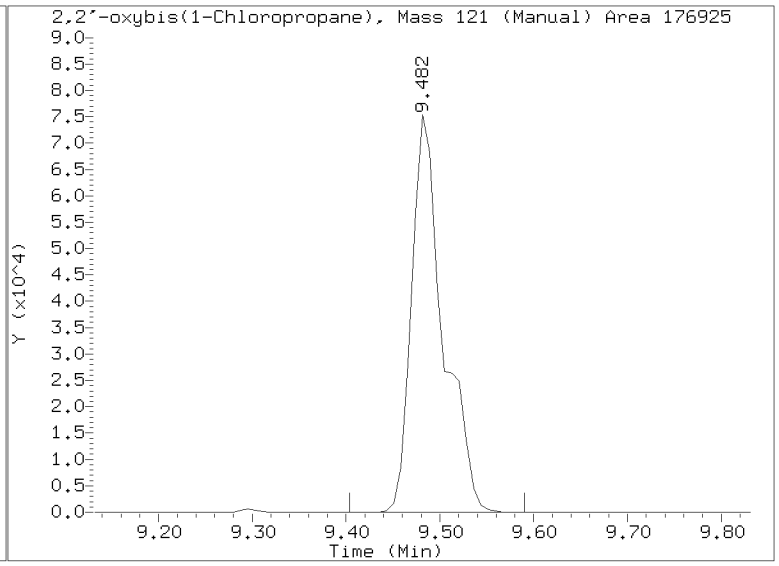
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

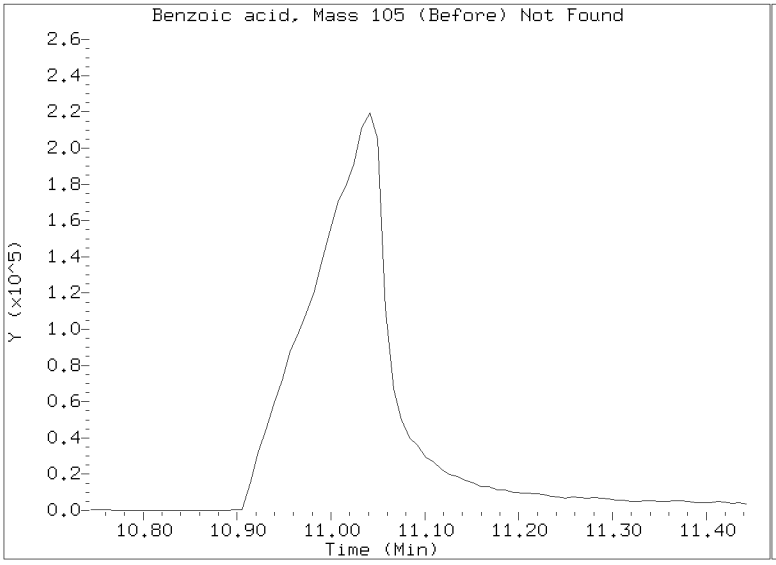
* Only compounds listed in the work order have been verified by the analyst *

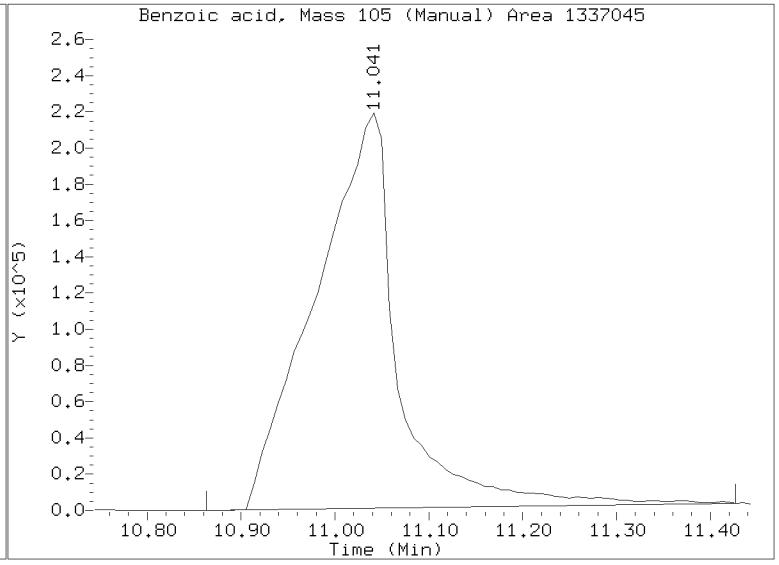
Quant Ion Manual Peak Adjustment Report

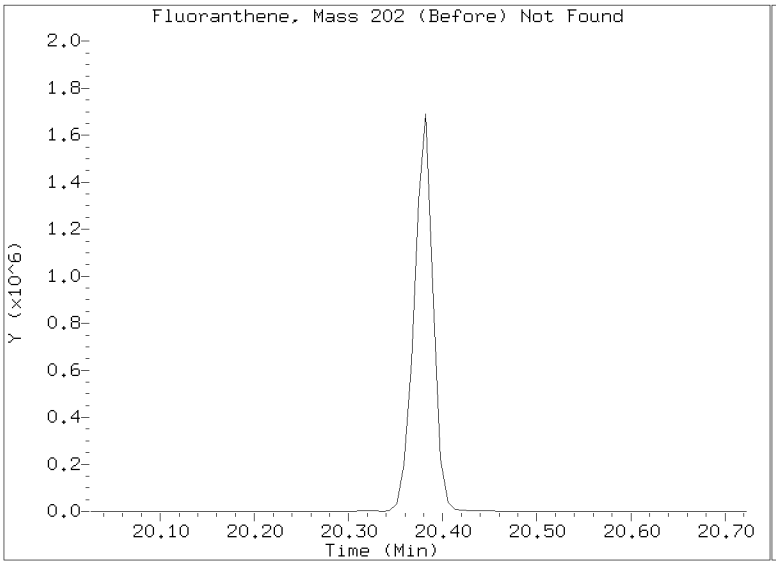
Datafile: //target/share/chem3/nt18.i/20230225.b/NT1802252303.D
Injection Date: 25-FEB-2023 22:03
Lab ID:SLC0099-CAL6 Client ID:
Report Date: 03/08/2023 15:04

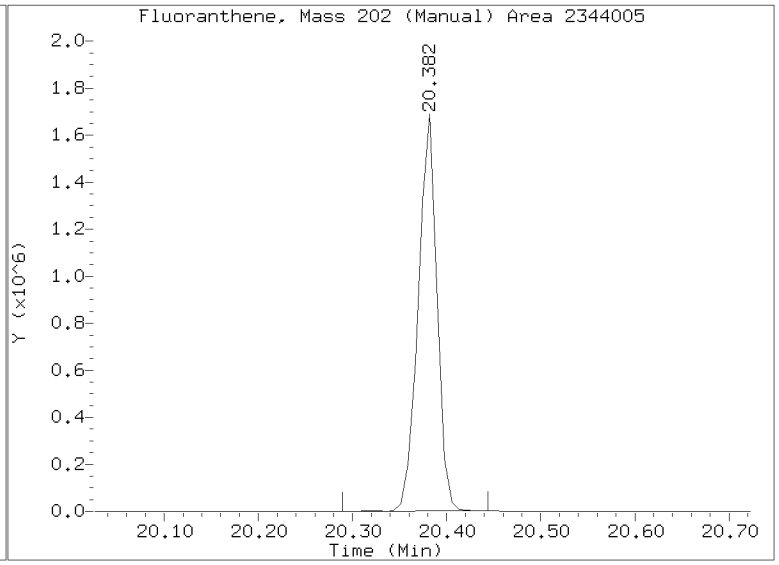












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252304.D

Date : 25-FEB-2023 22:43

Client ID:

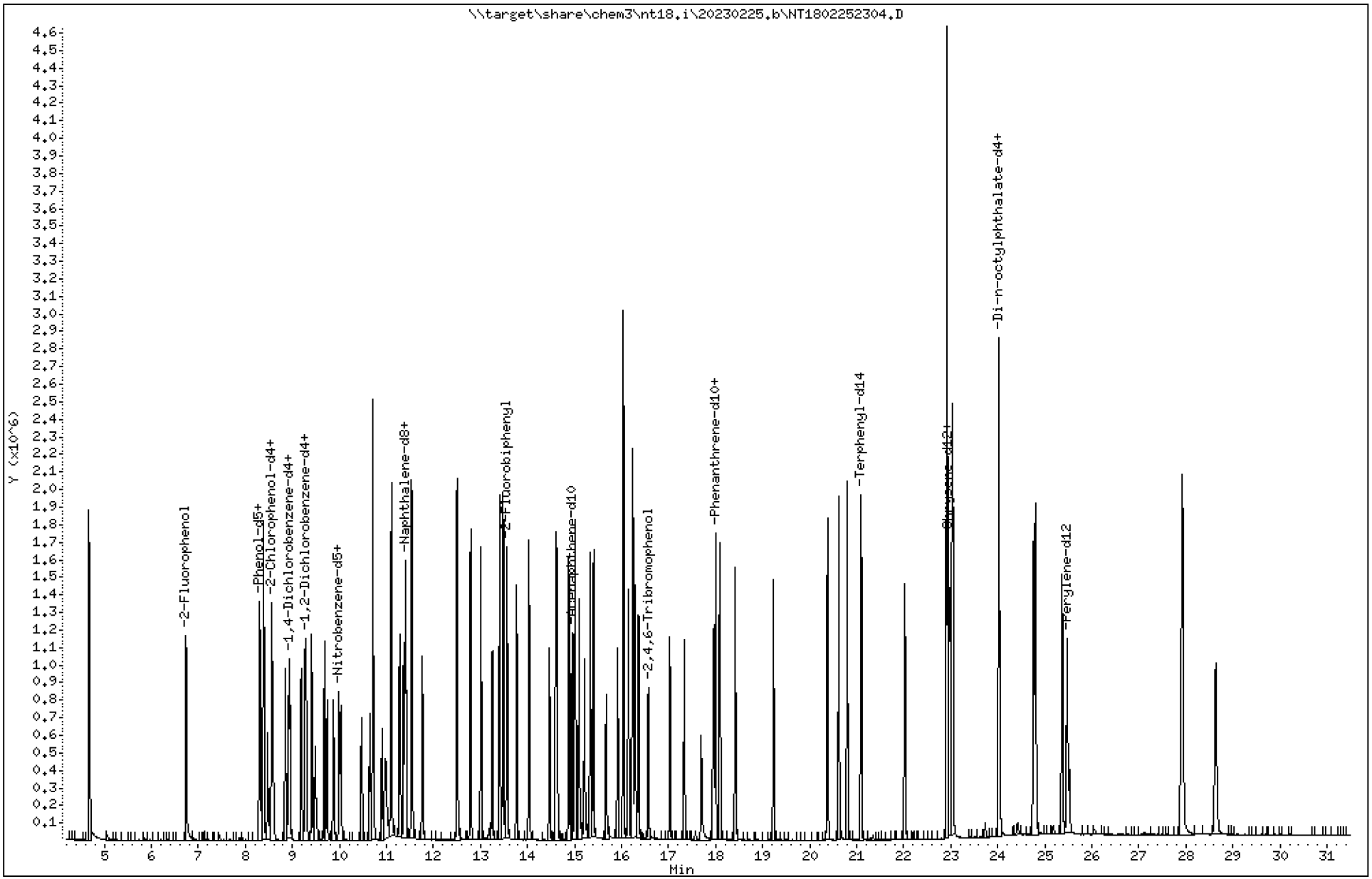
Instrument: nt18.i

Sample Info: SLC0099-CAL5

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Inj Date : 25-FEB-2023 22:43
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0099-CAL5
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Meth Date : 08-Mar-2023 14:50 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 4 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.735	6.743	(0.756)	553034	7.50000	7.606
$	2 Phenol-d5	99	8.296	8.296	(0.931)	697707	7.50000	7.425
	3 Phenol	94	8.319	8.319	(0.933)	479762	5.00000	4.907
$	5 2-Chlorophenol-d4	132	8.559	8.559	(0.960)	597969	7.50000	7.313
	4 Bis(2-Chloroethyl)ether	93	8.474	8.474	(0.951)	315668	5.00000	4.754
	6 2-Chlorophenol	128	8.582	8.590	(0.963)	403994	5.00000	4.812
	7 1,3-Dichlorobenzene	146	8.845	8.853	(0.992)	415603	5.00000	4.681
*	8 1,4-Dichlorobenzene-d4	152	8.914	8.915	(1.000)	213108	4.00000	
	9 1,4-Dichlorobenzene	146	8.945	8.938	(1.003)	417765	5.00000	4.616
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.264	(1.039)	272103	5.00000	4.694
	12 1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	406576	5.00000	4.629
	11 Benzyl alcohol	108	9.186	9.202	(1.030)	244607	5.00000	5.262
	14 2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	94599	5.00000	4.596(M)
	13 2-Methylphenol	108	9.411	9.419	(1.056)	363509	5.00000	4.807
	17 Hexachloroethane	117	9.869	9.877	(1.107)	165217	5.00000	4.716
	16 N-Nitroso-di-n-propylamine	70	9.737	9.737	(1.092)	269745	5.00000	4.852
	15 4-Methylphenol	108	9.675	9.683	(1.085)	383620	5.00000	4.867
$	18 Nitrobenzene-d5	82	9.993	10.001	(0.879)	426614	5.00000	4.961
	19 Nitrobenzene	77	10.024	10.032	(0.882)	401650	5.00000	4.852
	20 Isophorone	82	10.474	10.467	(0.922)	553540	5.00000	5.241
	21 2-Nitrophenol	139	10.650	10.659	(0.937)	207651	5.00000	5.107
	22 2,4-Dimethylphenol	107	10.710	10.710	(0.942)	763893	10.0000	9.860
	23 Bis(2-Chloroethoxy)methane	93	10.896	10.905	(0.959)	350982	5.00000	4.853
	24 Benzoic acid	105	10.981	11.092	(0.966)	526599	20.0000	17.07(M)
	25 2,4-Dichlorophenol	162	11.100	11.100	(0.977)	632852	10.0000	9.317
	26 1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	344071	5.00000	4.690
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	806946	4.00000	
	28 Naphthalene	128	11.403	11.403	(1.003)	1165092	5.00000	4.697
	29 4-Chloroaniline	127	11.535	11.542	(1.015)	1032491	10.0000	10.44
	30 Hexachlorobutadiene	225	11.766	11.767	(1.035)	199878	5.00000	4.648
	31 4-Chloro-3-methylphenol	107	12.502	12.502	(1.100)	656567	10.0000	10.10
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	807813	5.00000	4.793
	33 Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	281556	10.0000	9.364

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34 2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	427081	10.0000	10.41
	35 2,4,5-Trichlorophenol	196	13.477	13.485	(0.902)	470127	10.0000	10.51
$	36 2-Fluorobiphenyl	172	13.562	13.562	(0.908)	857196	5.00000	4.792
	37 2-Chloronaphthalene	162	13.771	13.771	(0.922)	672727	5.00000	4.813
	38 2-Nitroaniline	65	14.034	14.034	(0.939)	446890	10.0000	10.22
	39 Dimethylphthalate	163	14.467	14.460	(0.968)	733543	5.00000	4.887
	40 Acenaphthylene	152	14.630	14.630	(0.979)	1159868	5.00000	4.928
	41 2,6-Dinitrotoluene	165	14.599	14.591	(0.977)	348451	10.0000	10.13
*	42 Acenaphthene-d10	164	14.939	14.940	(1.000)	424249	4.00000	
	43 3-Nitroaniline	138	14.878	14.878	(0.996)	414801	10.0000	10.19
	44 Acenaphthene	153	15.009	15.001	(1.005)	713885	5.00000	4.793
	45 2,4-Dinitrophenol	184	15.094	15.094	(1.010)	319216	20.0000	19.06
	46 Dibenzofuran	168	15.334	15.334	(1.026)	1033225	5.00000	4.793
	47 4-Nitrophenol	109	15.210	15.218	(1.018)	176451	10.0000	10.75
	48 2,4-Dinitrotoluene	165	15.403	15.396	(1.031)	476424	10.0000	10.13
	50 Diethylphthalate	149	15.913	15.906	(1.065)	810299	5.00000	5.152
	49 Fluorene	166	16.037	16.037	(1.073)	860940	5.00000	4.983
	51 4-Chlorophenyl-phenylether	204	16.029	16.029	(1.073)	394673	5.00000	5.015
	52 4-Nitroaniline	138	16.145	16.130	(1.081)	407742	10.0000	10.41
	53 4,6-Dinitro-2-methylphenol	198	16.238	16.230	(0.904)	542431	20.0000	19.51
	54 N-Nitrosodiphenylamine	169	16.284	16.276	(0.907)	537768	5.00000	4.709
$	55 2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	162158	7.50000	7.320
	56 4-Bromophenyl-phenylether	248	17.024	17.024	(0.948)	223282	5.00000	4.872
	57 Hexachlorobenzene	284	17.333	17.333	(0.966)	247565	5.00000	4.678
	58 Pentachlorophenol	266	17.697	17.697	(0.986)	136349	10.0000	9.261
*	59 Phenanthrene-d10	188	17.952	17.945	(1.000)	758987	4.00000	
	60 Phenanthrene	178	17.999	17.991	(1.003)	1114505	5.00000	4.668
	61 Anthracene	178	18.092	18.084	(1.008)	1129066	5.00000	4.963
	62 Carbazole	167	18.416	18.417	(1.026)	1020460	5.00000	4.895
	63 Di-n-butylphthalate	149	19.229	19.229	(1.071)	1212514	5.00000	5.255
	64 Fluoranthene	202	20.374	20.374	(0.886)	1194511	5.00000	4.975(M)
	65 Pyrene	202	20.799	20.800	(0.905)	1248331	5.00000	4.875
$	66 Terphenyl-d14	244	21.094	21.094	(0.918)	1008030	5.00000	4.908
	67 Butylbenzylphthalate	149	22.023	22.023	(0.958)	527226	5.00000	5.423
	68 Benzo(a)anthracene	228	22.952	22.952	(0.999)	1213459	5.00000	4.905
*	69 Chrysene-d12	240	22.983	22.975	(1.000)	685237	4.00000	
	70 3,3'-Dichlorobenzidine	252	22.913	22.906	(0.997)	1530566	15.0000	16.81
	71 Chrysene	228	23.029	23.022	(1.002)	1251190	5.00000	4.864
	72 bis(2-Ethylhexyl)phthalate	149	23.052	23.045	(0.960)	798929	5.00000	5.175
*	134 Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	1075410	4.00000	
	73 Di-n-octylphthalate	149	24.028	24.028	(1.000)	1407019	5.00000	4.695
	74 Benzo(b)fluoranthene	252	24.763	24.756	(0.972)	1162673	5.00000	4.673
	75 Benzo(k)fluoranthene	252	24.802	24.795	(0.974)	1423763	5.00000	5.050(H)
	76 Benzo(a)pyrene	252	25.367	25.360	(0.996)	1158751	5.00000	5.024
*	77 Perylene-d12	264	25.468	25.468	(1.000)	762553	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.920	27.904	(1.096)	1477931	5.00000	5.105
	79 Dibenzo(a,h)anthracene	278	27.927	27.920	(1.097)	1231881	5.00000	5.102
	80 Benzo(g,h,i)perylene	276	28.634	28.619	(1.124)	1172727	5.00000	5.052
	90 N-Nitrosodimethylamine	74	4.681	4.681	(0.525)	423903	10.0000	9.931
	91 Aniline	93	8.381	8.389	(0.940)	1100341	10.0000	9.888
	93 Benzidine	184	20.614	20.614	(0.897)	1116703	10.0000	9.520
	103 Pyridine	79	4.673	4.689	(0.524)	726015	10.0000	10.21
	105 1-methylnaphthalene	142	13.005	13.005	(1.144)	731634	5.00000	4.795
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.353	16.353	(1.095)	845795	5.00000	4.882

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	24.802	24.795	(0.974)	2436638	10.0000	9.687
120 2,3,4,6-Tetrachlorophenol	232	15.674	15.674	(1.049)	211333	5.00000	5.006

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252304.D
Lab Smp Id: SLC0099-CAL5
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	213108	0.00
27 Naphthalene-d8	806946	403473	1613892	806946	0.00
42 Acenaphthene-d10	424249	212125	848498	424249	0.00
59 Phenanthrene-d10	758987	379494	1517974	758987	0.00
69 Chrysene-d12	685237	342619	1370474	685237	0.00
134 Di-n-octylphthala	1075410	537705	2150820	1075410	0.00
77 Perylene-d12	762553	381277	1525106	762553	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.94	14.44	15.44	14.94	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	0.00
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252304.D

Lab ID: SLC0099-CAL5
nt18.i, ABN.m, 25-FEB-2023 22:43

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.966	0.000	0.9663	Benzoic acid
1.010	0.000	1.0103	2,4-Dinitrophenol
0.986	0.000	0.9858	Pentachlorophenol

RRT check based on Ccal File: NT1802252308.D

On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

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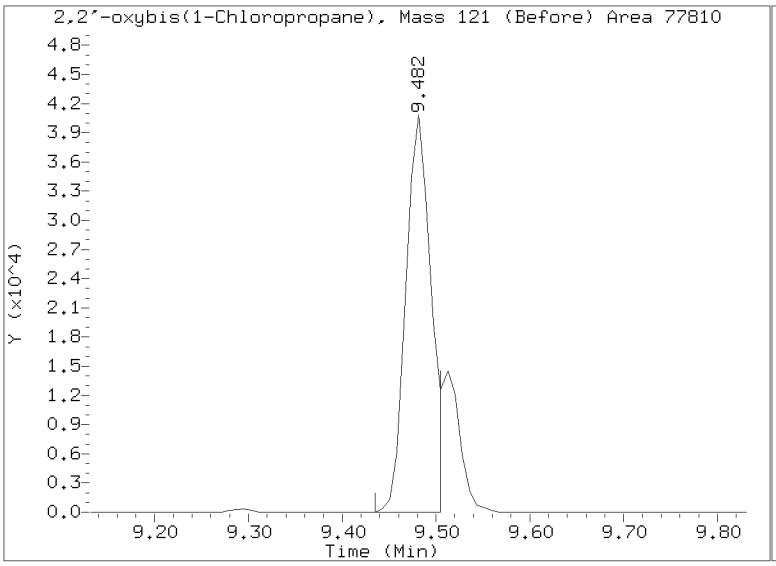
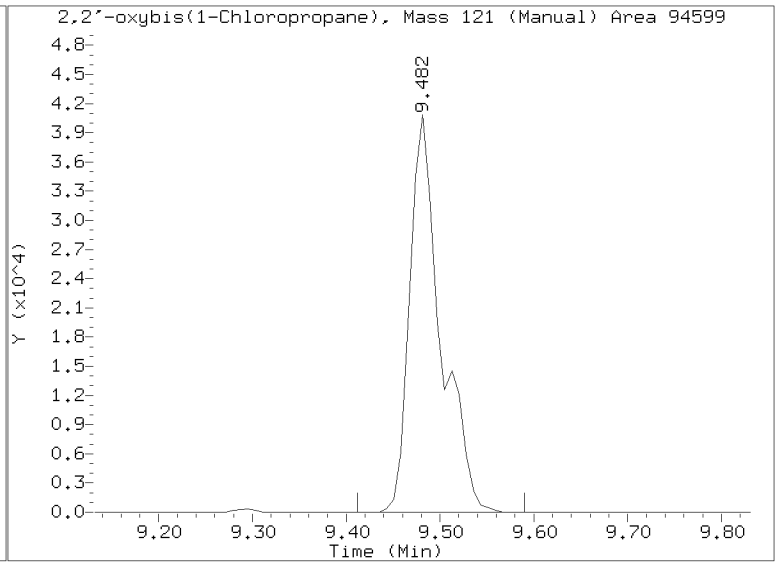
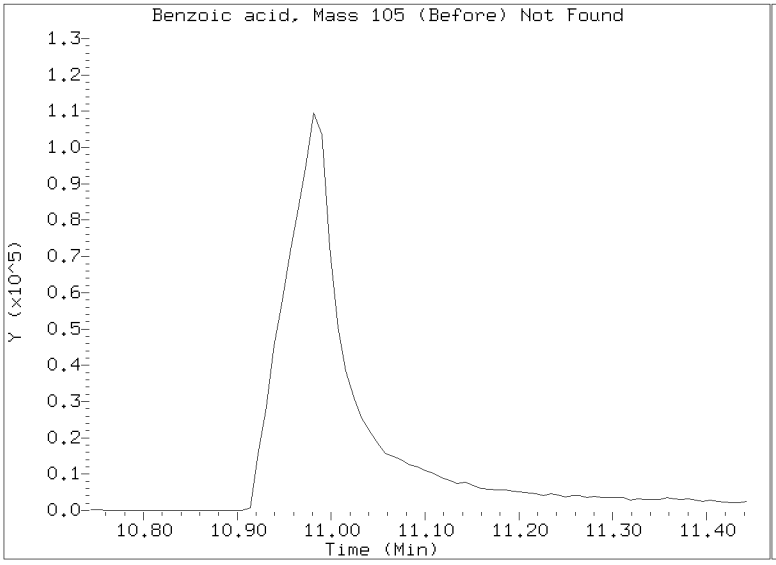
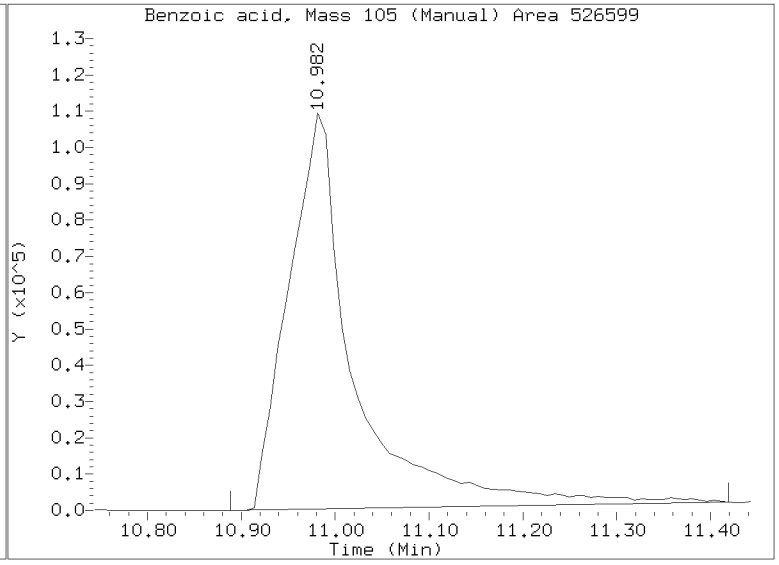
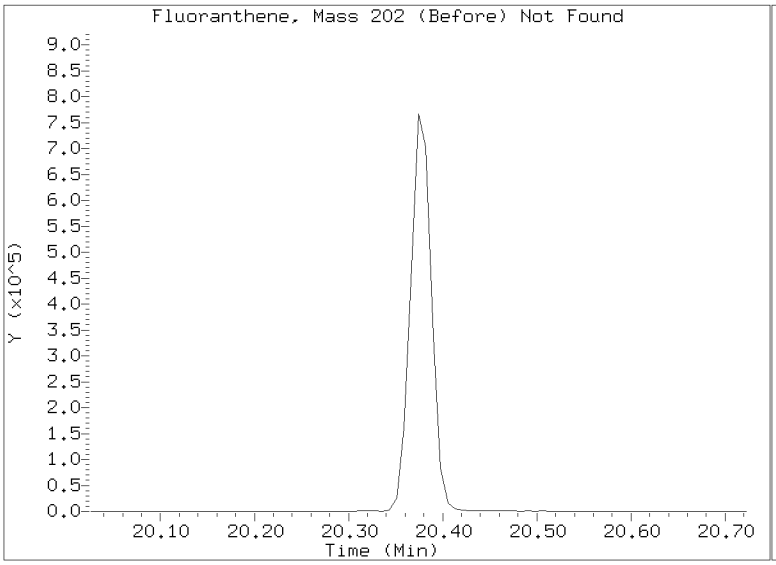
Injection Date: 25-FEB-2023 22:43
Lab ID:SLC0099-CAL5 Client ID:
Report Date: 03/08/2023 15:05

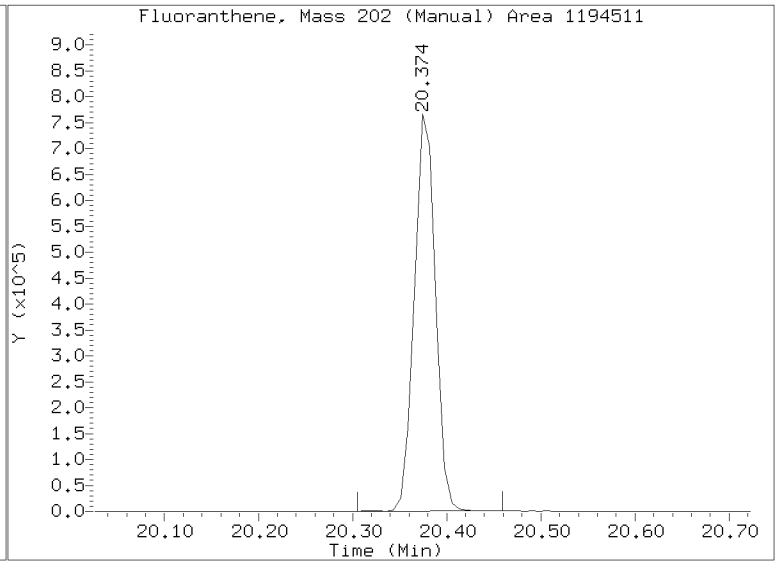












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Page 1

Date : 25-FEB-2023 23:24

Client ID:

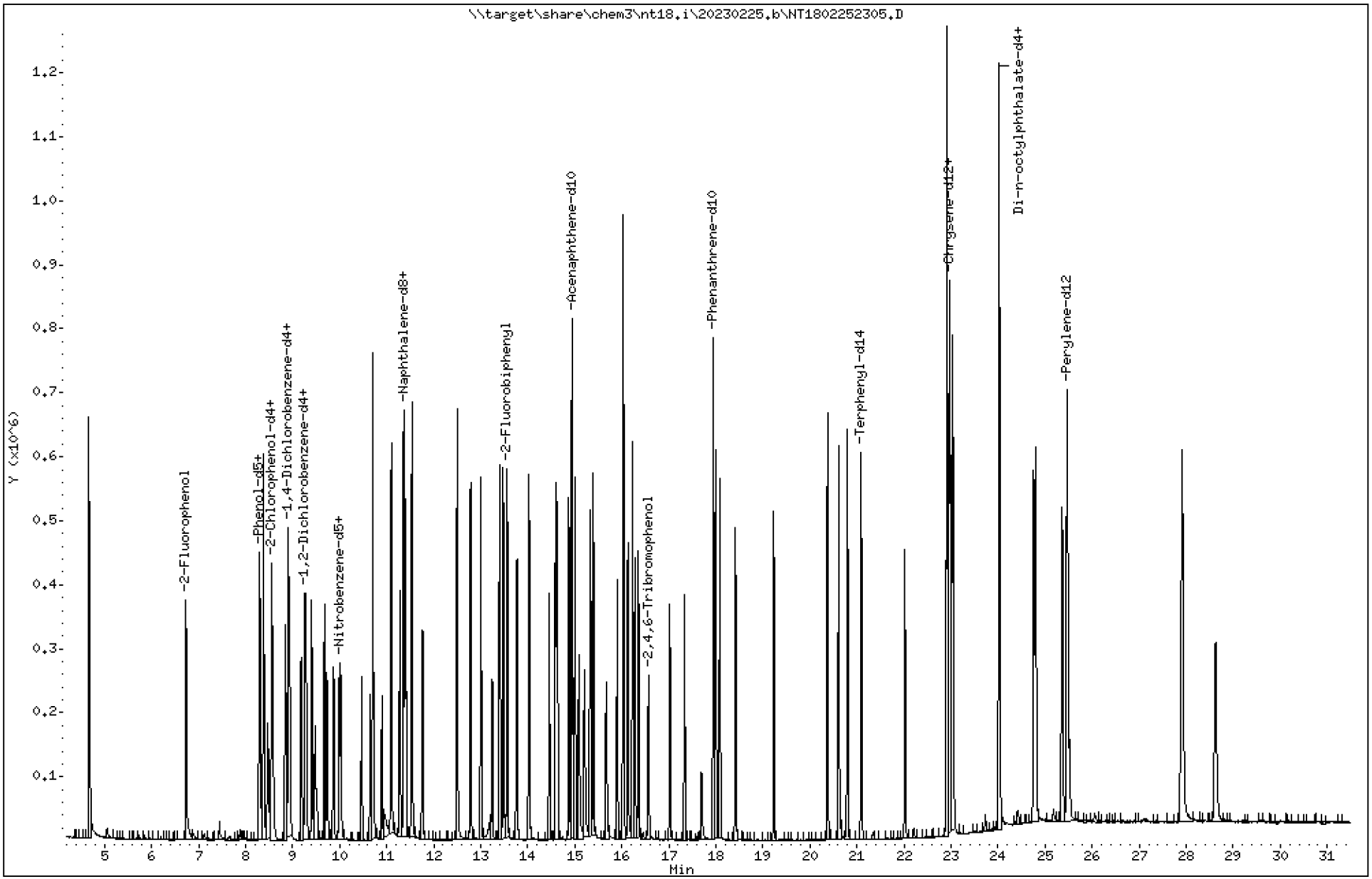
Instrument: nt18.i

Sample Info: SLC0099-CAL4

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230225.b\NT1802252305.D
Lab Smp Id: SLC0099-CAL4
Inj Date : 25-FEB-2023 23:24
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0099-CAL4
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Meth Date : 08-Mar-2023 14:50 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.735	6.743	(0.756)	178001	3.75000	3.890
$	2 Phenol-d5	99	8.288	8.296	(0.930)	226367	3.75000	3.828
	3 Phenol	94	8.311	8.319	(0.932)	154837	2.50000	2.517
$	5 2-Chlorophenol-d4	132	8.559	8.559	(0.960)	198253	3.75000	3.853
	4 Bis(2-Chloroethyl)ether	93	8.474	8.474	(0.951)	105369	2.50000	2.522
	6 2-Chlorophenol	128	8.582	8.590	(0.963)	133560	2.50000	2.528
	7 1,3-Dichlorobenzene	146	8.845	8.853	(0.992)	140527	2.50000	2.515
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	134104	4.00000	
	9 1,4-Dichlorobenzene	146	8.938	8.938	(1.003)	138188	2.50000	2.426
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.264	(1.039)	90291	2.50000	2.475
	12 1,2-Dichlorobenzene	146	9.287	9.295	(1.042)	136445	2.50000	2.469
	11 Benzyl alcohol	108	9.186	9.202	(1.030)	75645	2.50000	2.586
	14 2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	32291	2.50000	2.493
	13 2-Methylphenol	108	9.411	9.419	(1.056)	122019	2.50000	2.564
	17 Hexachloroethane	117	9.869	9.877	(1.107)	54397	2.50000	2.467
	16 N-Nitroso-di-n-propylamine	70	9.730	9.737	(1.091)	88234	2.50000	2.522
	15 4-Methylphenol	108	9.675	9.683	(1.085)	126675	2.50000	2.554
$	18 Nitrobenzene-d5	82	9.993	10.001	(0.879)	140753	2.50000	2.573
	19 Nitrobenzene	77	10.024	10.032	(0.882)	132000	2.50000	2.506
	20 Isophorone	82	10.467	10.467	(0.921)	165357	2.50000	2.461
	21 2-Nitrophenol	139	10.650	10.659	(0.937)	65878	2.50000	2.547
	22 2,4-Dimethylphenol	107	10.710	10.710	(0.942)	253436	5.00000	5.142
	23 Bis(2-Chloroethoxy)methane	93	10.896	10.905	(0.959)	116043	2.50000	2.522
	24 Benzoic acid	105	10.947	11.092	(0.963)	78348	10.0000	4.148(M)
	25 2,4-Dichlorophenol	162	11.100	11.100	(0.977)	225088	5.00000	5.209
	26 1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	113133	2.50000	2.424
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	513388	4.00000	
	28 Naphthalene	128	11.403	11.403	(1.003)	390995	2.50000	2.478
	29 4-Chloroaniline	127	11.535	11.542	(1.015)	337239	5.00000	5.362
	30 Hexachlorobutadiene	225	11.766	11.767	(1.035)	66794	2.50000	2.441
	31 4-Chloro-3-methylphenol	107	12.494	12.502	(1.099)	212769	5.00000	5.144
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	268459	2.50000	2.503
	33 Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	60174	5.00000	3.245

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34 2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	128034	5.00000	4.900
	35 2,4,5-Trichlorophenol	196	13.477	13.485	(0.902)	138368	5.00000	4.859
$	36 2-Fluorobiphenyl	172	13.562	13.562	(0.908)	282436	2.50000	2.480
	37 2-Chloronaphthalene	162	13.771	13.771	(0.922)	221683	2.50000	2.491
	38 2-Nitroaniline	65	14.026	14.034	(0.939)	143130	5.00000	5.139
	39 Dimethylphthalate	163	14.460	14.460	(0.968)	240907	2.50000	2.520
	40 Acenaphthylene	152	14.630	14.630	(0.979)	382882	2.50000	2.555
	41 2,6-Dinitrotoluene	165	14.591	14.591	(0.977)	110210	5.00000	5.029
*	42 Acenaphthene-d10	164	14.939	14.940	(1.000)	270155	4.00000	
	43 3-Nitroaniline	138	14.870	14.878	(0.995)	129828	5.00000	5.008
	44 Acenaphthene	153	15.001	15.001	(1.004)	240832	2.50000	2.539
	45 2,4-Dinitrophenol	184	15.086	15.094	(1.010)	69621	10.0000	6.726
	46 Dibenzofuran	168	15.326	15.334	(1.026)	348786	2.50000	2.541
	47 4-Nitrophenol	109	15.202	15.218	(1.018)	51121	5.00000	4.892
	48 2,4-Dinitrotoluene	165	15.396	15.396	(1.031)	152123	5.00000	5.078
	50 Diethylphthalate	149	15.906	15.906	(1.065)	269076	2.50000	2.686
	49 Fluorene	166	16.037	16.037	(1.073)	274520	2.50000	2.495
	51 4-Chlorophenyl-phenylether	204	16.029	16.029	(1.073)	121321	2.50000	2.421
	52 4-Nitroaniline	138	16.130	16.130	(1.080)	124398	5.00000	4.988
	53 4,6-Dinitro-2-methylphenol	198	16.230	16.230	(0.904)	151413	10.0000	8.725
	54 N-Nitrosodiphenylamine	169	16.276	16.276	(0.907)	178248	2.50000	2.461
$	55 2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	45660	3.75000	3.326
	56 4-Bromophenyl-phenylether	248	17.024	17.024	(0.949)	71556	2.50000	2.461
	57 Hexachlorobenzene	284	17.333	17.333	(0.966)	80961	2.50000	2.412
	58 Pentachlorophenol	266	17.697	17.697	(0.986)	25960	5.00000	2.904
*	59 Phenanthrene-d10	188	17.945	17.945	(1.000)	481445	4.00000	
	60 Phenanthrene	178	17.991	17.991	(1.003)	375080	2.50000	2.477
	61 Anthracene	178	18.084	18.084	(1.008)	367532	2.50000	2.547
	62 Carbazole	167	18.417	18.417	(1.026)	337512	2.50000	2.552
	63 Di-n-butylphthalate	149	19.229	19.229	(1.072)	388601	2.50000	2.655
	64 Fluoranthene	202	20.374	20.374	(0.887)	389743	2.50000	2.622(M)
	65 Pyrene	202	20.792	20.800	(0.905)	414670	2.50000	2.615
$	66 Terphenyl-d14	244	21.094	21.094	(0.918)	323682	2.50000	2.545
	67 Butylbenzylphthalate	149	22.015	22.023	(0.958)	162937	2.50000	2.706
	68 Benzo(a)anthracene	228	22.952	22.952	(0.999)	387123	2.50000	2.527
*	69 Chrysene-d12	240	22.975	22.975	(1.000)	424314	4.00000	
	70 3,3'-Dichlorobenzidine	252	22.913	22.906	(0.997)	433496	7.50000	7.690
	71 Chrysene	228	23.022	23.022	(1.002)	396610	2.50000	2.490
	72 bis(2-Ethylhexyl)phthalate	149	23.045	23.045	(0.959)	240822	2.50000	2.713
*	134 Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	618169	4.00000	
	73 Di-n-octylphthalate	149	24.028	24.028	(1.000)	435335	2.50000	2.527
	74 Benzo(b)fluoranthene	252	24.756	24.756	(0.972)	392655	2.50000	2.622
	75 Benzo(k)fluoranthene	252	24.794	24.795	(0.974)	436381	2.50000	2.571(H)
	76 Benzo(a)pyrene	252	25.360	25.360	(0.996)	363276	2.50000	2.617
*	77 Perylene-d12	264	25.468	25.468	(1.000)	458969	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.912	27.904	(1.096)	435920	2.50000	2.502
	79 Dibenzo(a,h)anthracene	278	27.912	27.920	(1.096)	363870	2.50000	2.504
	80 Benzo(g,h,i)perylene	276	28.627	28.619	(1.124)	358089	2.50000	2.563
	90 N-Nitrosodimethylamine	74	4.673	4.681	(0.524)	138338	5.00000	5.150
	91 Aniline	93	8.381	8.389	(0.940)	356613	5.00000	5.093
	93 Benzidine	184	20.614	20.614	(0.897)	358805	5.00000	4.940
	103 Pyridine	79	4.673	4.689	(0.524)	226194	5.00000	5.055
	105 1-methylnaphthalene	142	13.005	13.005	(1.144)	246837	2.50000	2.543
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.353	16.353	(1.095)	283433	2.50000	2.569

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	24.794	24.795	(0.974)	786954	5.00000	5.198
120 2,3,4,6-Tetrachlorophenol	232	15.666	15.674	(1.049)	55238	2.50000	2.104

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252305.D
Lab Smp Id: SLC0099-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	134104	-37.07
27 Naphthalene-d8	806946	403473	1613892	513388	-36.38
42 Acenaphthene-d10	424249	212125	848498	270155	-36.32
59 Phenanthrene-d10	758987	379494	1517974	481445	-36.57
69 Chrysene-d12	685237	342619	1370474	424314	-38.08
134 Di-n-octylphthala	1075410	537705	2150820	618169	-42.52
77 Perylene-d12	762553	381277	1525106	458969	-39.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.94	14.44	15.44	14.94	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.04
69 Chrysene-d12	22.98	22.48	23.48	22.98	-0.03
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252305.D

Lab ID: SLC0099-CAL4
nt18.i, ABN.m, 25-FEB-2023 23:24

RT	CO-ELUTION COMPOUNDS
27.912	Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene
27.912	Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.963	0.000	0.9633	Benzoic acid
1.010	0.000	1.0098	2,4-Dinitrophenol
0.986	0.000	0.9862	Pentachlorophenol

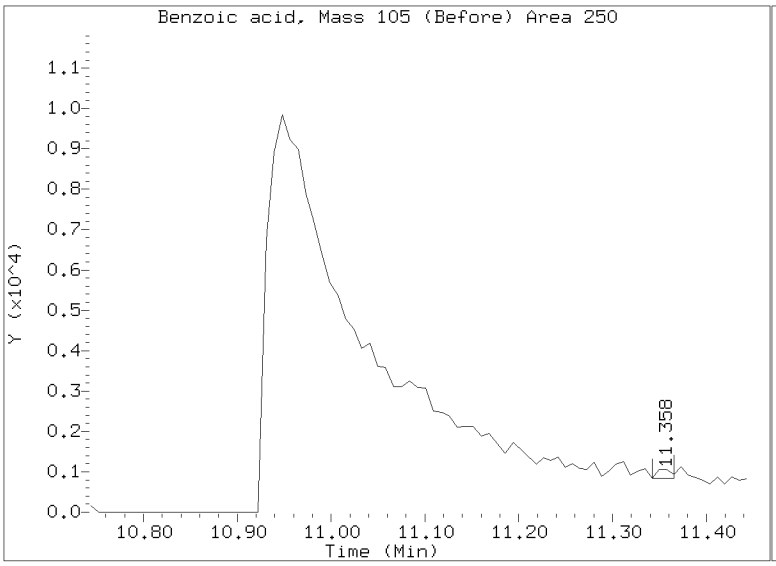
RRT check based on Ccal File: NT1802252308.D

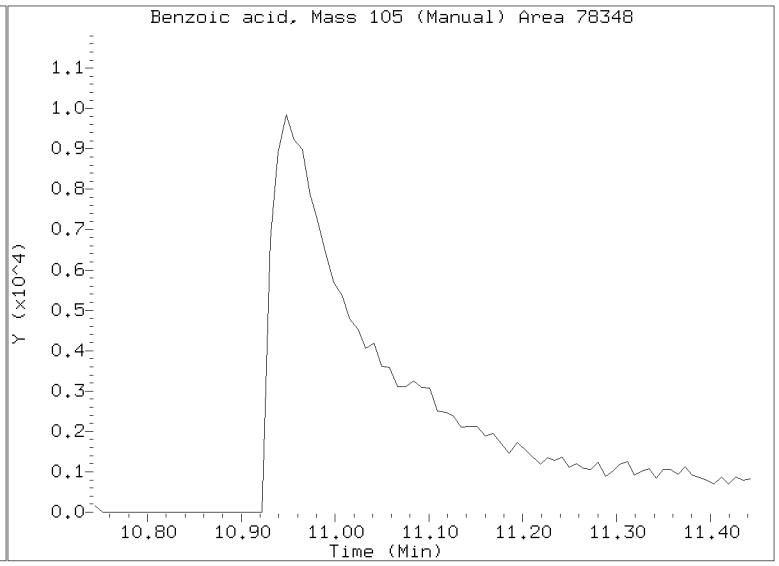
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

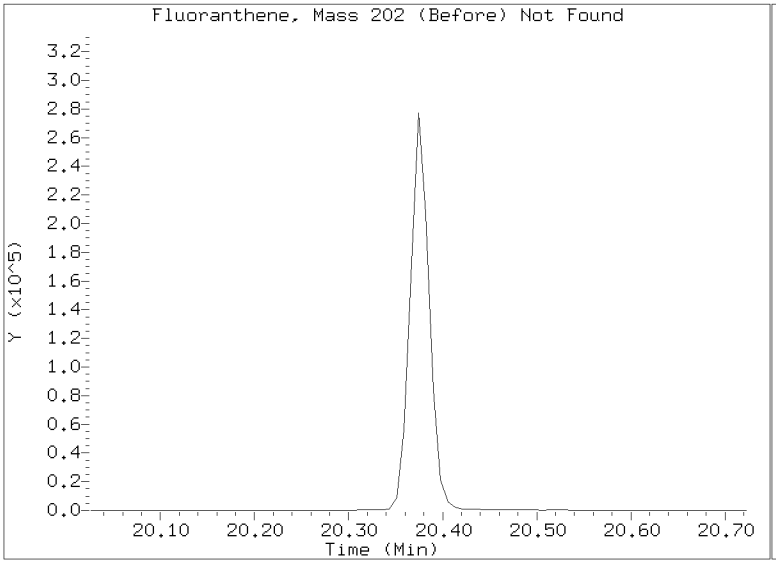
* Only compounds listed in the work order have been verified by the analyst *

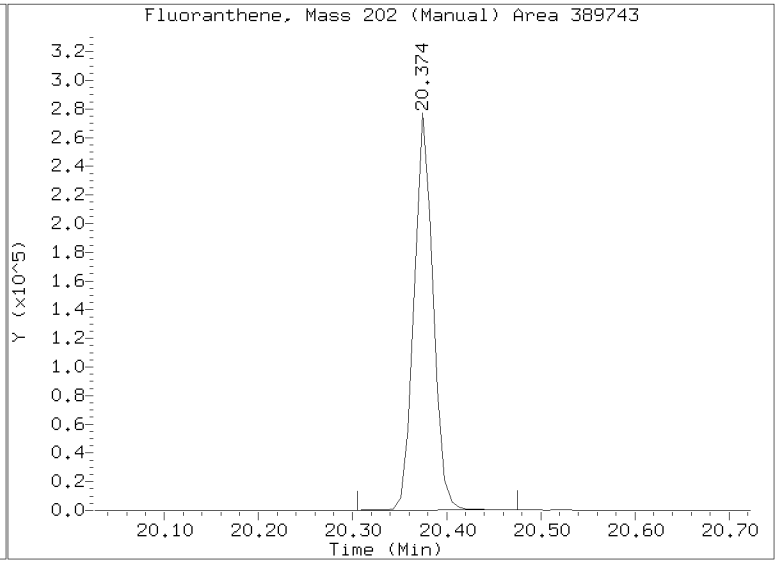
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230225.b/NT1802252305.D
Injection Date: 25-FEB-2023 23:24
Lab ID:SLC0099-CAL4 Client ID:
Report Date: 03/08/2023 15:05



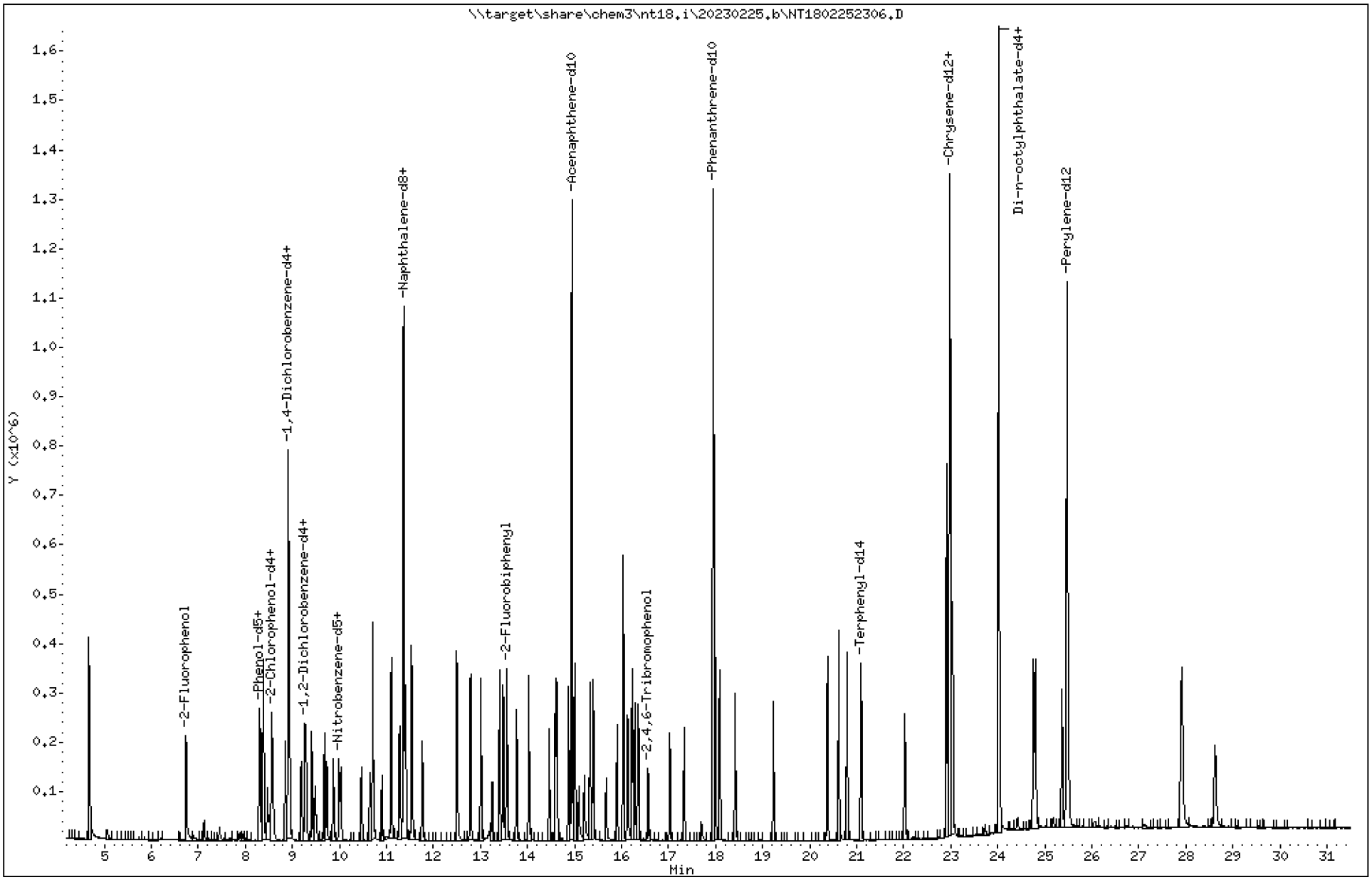






Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252306.D
Date : 26-FEB-2023 00:04
Client ID:
Sample Info: SLC0099-CAL3

Instrument: nt18.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230225.b\NT1802252306.D
Lab Smp Id: SLC0099-CAL3
Inj Date : 26-FEB-2023 00:04
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0099-CAL3
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Meth Date : 08-Mar-2023 14:50 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.735	6.743	(0.756)	105206	1.50000	1.406
$	2 Phenol-d5	99	8.288	8.296	(0.931)	140094	1.50000	1.449
	3 Phenol	94	8.311	8.319	(0.933)	95585	1.00000	0.9501
$	5 2-Chlorophenol-d4	132	8.559	8.559	(0.961)	118086	1.50000	1.403
	4 Bis(2-Chloroethyl)ether	93	8.466	8.474	(0.951)	65701	1.00000	0.9615
	6 2-Chlorophenol	128	8.582	8.590	(0.964)	82309	1.00000	0.9527
	7 1,3-Dichlorobenzene	146	8.845	8.853	(0.993)	85878	1.00000	0.9398
*	8 1,4-Dichlorobenzene-d4	152	8.907	8.915	(1.000)	219306	4.00000	
	9 1,4-Dichlorobenzene	146	8.938	8.938	(1.003)	89351	1.00000	0.9593
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.264	(1.040)	56959	1.00000	0.9549
	12 1,2-Dichlorobenzene	146	9.287	9.295	(1.043)	85096	1.00000	0.9414
	11 Benzyl alcohol	108	9.186	9.202	(1.031)	44320	1.00000	0.9265
	14 2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	20439	1.00000	0.9649
	13 2-Methylphenol	108	9.411	9.419	(1.057)	74330	1.00000	0.9551
	17 Hexachloroethane	117	9.869	9.877	(1.108)	34420	1.00000	0.9547
	16 N-Nitroso-di-n-propylamine	70	9.729	9.737	(1.092)	54233	1.00000	0.9480
	15 4-Methylphenol	108	9.675	9.683	(1.086)	76621	1.00000	0.9446
$	18 Nitrobenzene-d5	82	9.993	10.001	(0.879)	84610	1.00000	0.9470
	19 Nitrobenzene	77	10.024	10.032	(0.882)	82342	1.00000	0.9575
	20 Isophorone	82	10.467	10.467	(0.921)	100815	1.00000	0.9188
	21 2-Nitrophenol	139	10.650	10.659	(0.937)	40661	1.00000	0.9627
	22 2,4-Dimethylphenol	107	10.710	10.710	(0.942)	151679	2.00000	1.885
	23 Bis(2-Chloroethoxy)methane	93	10.896	10.905	(0.959)	70647	1.00000	0.9403
	24 Benzoic acid	105	10.990	11.092	(0.967)	32909	4.00000	1.076(M)
	25 2,4-Dichlorophenol	162	11.100	11.100	(0.977)	137498	2.00000	1.948
	26 1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	71368	1.00000	0.9364
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	838313	4.00000	
	28 Naphthalene	128	11.403	11.403	(1.003)	242202	1.00000	0.9399
	29 4-Chloroaniline	127	11.535	11.542	(1.015)	185935	2.00000	1.810
	30 Hexachlorobutadiene	225	11.766	11.767	(1.035)	41503	1.00000	0.9290
	31 4-Chloro-3-methylphenol	107	12.494	12.502	(1.099)	125299	2.00000	1.855
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	163882	1.00000	0.9359
	33 Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	28434	2.00000	0.9350

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	75802	2.00000	1.749
35	2,4,5-Trichlorophenol	196	13.477	13.485	(0.902)	79929	2.00000	1.692
$ 36	2-Fluorobiphenyl	172	13.562	13.562	(0.908)	174514	1.00000	0.9237
37	2-Chloronaphthalene	162	13.771	13.771	(0.922)	135320	1.00000	0.9166
38	2-Nitroaniline	65	14.026	14.034	(0.939)	88055	2.00000	1.906
39	Dimethylphthalate	163	14.460	14.460	(0.968)	146052	1.00000	0.9212
40	Acenaphthylene	152	14.630	14.630	(0.979)	227673	1.00000	0.9159
41	2,6-Dinitrotoluene	165	14.591	14.591	(0.977)	63950	2.00000	1.759
* 42	Acenaphthene-d10	164	14.939	14.940	(1.000)	448096	4.00000	
43	3-Nitroaniline	138	14.870	14.878	(0.995)	75634	2.00000	1.759
44	Acenaphthene	153	15.001	15.001	(1.004)	147135	1.00000	0.9352
45	2,4-Dinitrophenol	184	15.094	15.094	(1.010)	27612	4.00000	1.627
46	Dibenzofuran	168	15.326	15.334	(1.026)	213618	1.00000	0.9381
47	4-Nitrophenol	109	15.210	15.218	(1.018)	27791	2.00000	1.603
48	2,4-Dinitrotoluene	165	15.395	15.396	(1.031)	89537	2.00000	1.802
50	Diethylphthalate	149	15.906	15.906	(1.065)	146076	1.00000	0.8793
49	Fluorene	166	16.037	16.037	(1.073)	166944	1.00000	0.9149
51	4-Chlorophenyl-phenylether	204	16.029	16.029	(1.073)	74456	1.00000	0.8958
52	4-Nitroaniline	138	16.122	16.130	(1.079)	73395	2.00000	1.774
53	4,6-Dinitro-2-methylphenol	198	16.222	16.230	(0.904)	80575	4.00000	2.831
54	N-Nitrosodiphenylamine	169	16.276	16.276	(0.907)	109491	1.00000	0.9139
$ 55	2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	27441	1.50000	1.222
56	4-Bromophenyl-phenylether	248	17.024	17.024	(0.949)	43077	1.00000	0.8960
57	Hexachlorobenzene	284	17.333	17.333	(0.966)	49421	1.00000	0.8902
58	Pentachlorophenol	266	17.697	17.697	(0.986)	12170	2.00000	0.8340(M)
* 59	Phenanthrene-d10	188	17.945	17.945	(1.000)	796201	4.00000	
60	Phenanthrene	178	17.991	17.991	(1.003)	230395	1.00000	0.9200
61	Anthracene	178	18.084	18.084	(1.008)	219448	1.00000	0.9195
62	Carbazole	167	18.416	18.417	(1.026)	202016	1.00000	0.9238
63	Di-n-butylphthalate	149	19.229	19.229	(1.072)	222247	1.00000	0.9181
64	Fluoranthene	202	20.374	20.374	(0.886)	233241	1.00000	0.9501(M)
65	Pyrene	202	20.792	20.800	(0.905)	248045	1.00000	0.9474
$ 66	Terphenyl-d14	244	21.094	21.094	(0.918)	193142	1.00000	0.9197
67	Butylbenzylphthalate	149	22.023	22.023	(0.958)	94773	1.00000	0.9533
68	Benzo(a)anthracene	228	22.952	22.952	(0.999)	237700	1.00000	0.9397
* 69	Chrysene-d12	240	22.983	22.975	(1.000)	700696	4.00000	
70	3,3'-Dichlorobenzidine	252	22.913	22.906	(0.997)	256332	3.00000	2.754
71	Chrysene	228	23.022	23.022	(1.002)	247113	1.00000	0.9394
72	bis(2-Ethylhexyl)phthalate	149	23.045	23.045	(0.959)	142075	1.00000	0.9578
* 134	Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	1033193	4.00000	
73	Di-n-octylphthalate	149	24.028	24.028	(1.000)	271933	1.00000	0.9445
74	Benzo(b)fluoranthene	252	24.756	24.756	(0.972)	235349	1.00000	0.9195
75	Benzo(k)fluoranthene	252	24.802	24.795	(0.974)	264758	1.00000	0.9127(H)
76	Benzo(a)pyrene	252	25.360	25.360	(0.996)	214901	1.00000	0.9057
* 77	Perylene-d12	264	25.468	25.468	(1.000)	784566	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.904	27.904	(1.096)	254475	1.00000	0.8543
79	Dibenzo(a,h)anthracene	278	27.920	27.920	(1.096)	210142	1.00000	0.8459
80	Benzo(g,h,i)perylene	276	28.619	28.619	(1.124)	215153	1.00000	0.9009
90	N-Nitrosodimethylamine	74	4.673	4.681	(0.525)	81158	2.00000	1.848
91	Aniline	93	8.381	8.389	(0.941)	218726	2.00000	1.910
93	Benzidine	184	20.614	20.614	(0.897)	242603	2.00000	2.023
103	Pyridine	79	4.673	4.689	(0.525)	137673	2.00000	1.881
105	1-methylnaphthalene	142	13.005	13.005	(1.144)	148596	1.00000	0.9374
111	Azobenzene (1,2-DP-Hydrazine)	77	16.353	16.353	(1.095)	174849	1.00000	0.9554

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	24.802	24.795	(0.974)	474985	2.00000	1.835
120 2,3,4,6-Tetrachlorophenol	232	15.674	15.674	(1.049)	30384	1.00000	0.7052

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252306.D
Lab Smp Id: SLC0099-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	219306	2.91
27 Naphthalene-d8	806946	403473	1613892	838313	3.89
42 Acenaphthene-d10	424249	212125	848498	448096	5.62
59 Phenanthrene-d10	758987	379494	1517974	796201	4.90
69 Chrysene-d12	685237	342619	1370474	700696	2.26
134 Di-n-octylphthala	1075410	537705	2150820	1033193	-3.93
77 Perylene-d12	762553	381277	1525106	784566	2.89

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	-0.09
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.94	14.44	15.44	14.94	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.04
69 Chrysene-d12	22.98	22.48	23.48	22.98	0.00
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252306.D

Lab ID: SLC0099-CAL3
nt18.i, ABN.m, 26-FEB-2023 00:04

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.967	0.000	0.9670	Benzoic acid
1.010	0.000	1.0103	2,4-Dinitrophenol
0.986	0.000	0.9862	Pentachlorophenol

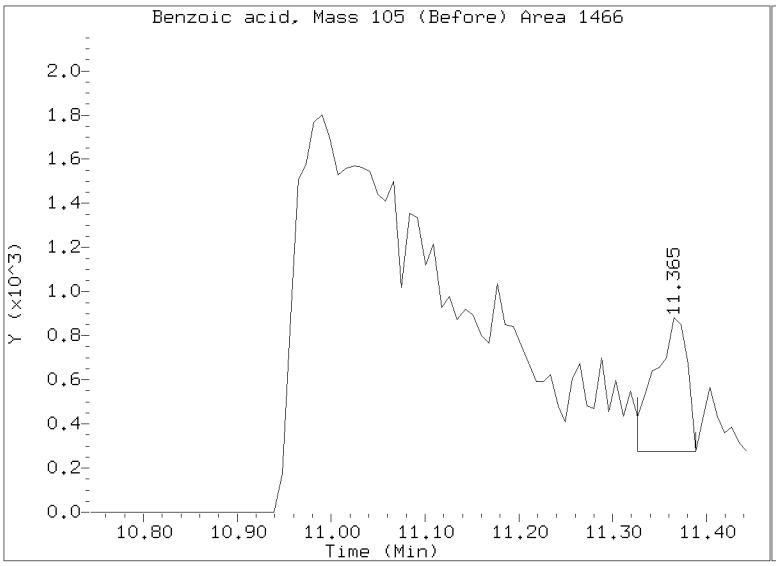
RRT check based on Ccal File: NT1802252308.D

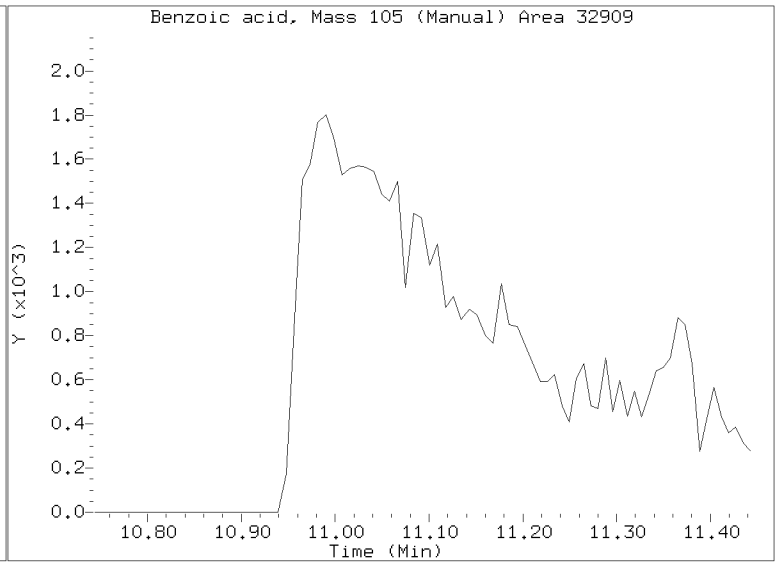
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

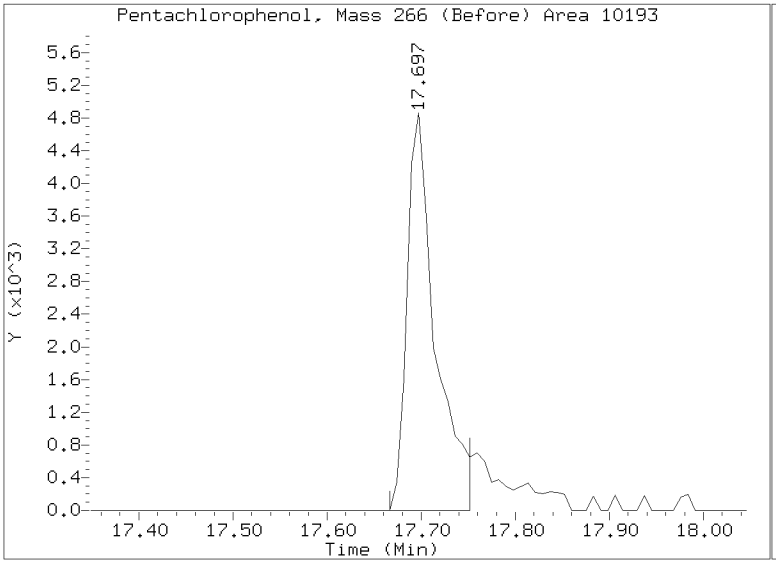
* Only compounds listed in the work order have been verified by the analyst *

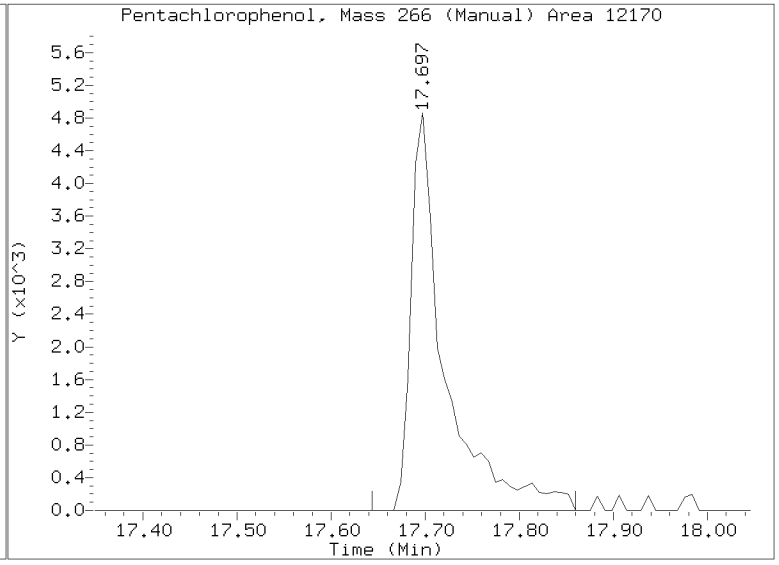
Quant Ion Manual Peak Adjustment Report

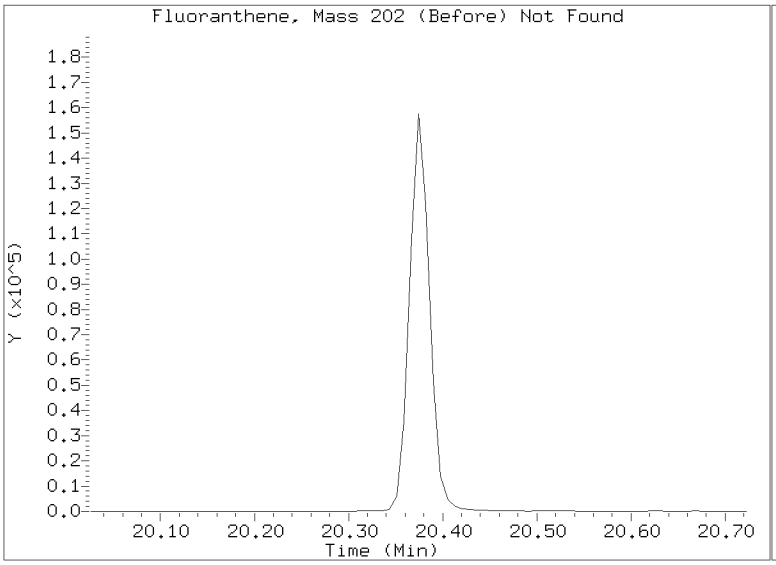
Datafile: //target/share/chem3/nt18.i/20230225.b/NT1802252306.D
Injection Date: 26-FEB-2023 00:04
Lab ID:SLC0099-CAL3 Client ID:
Report Date: 03/08/2023 15:05

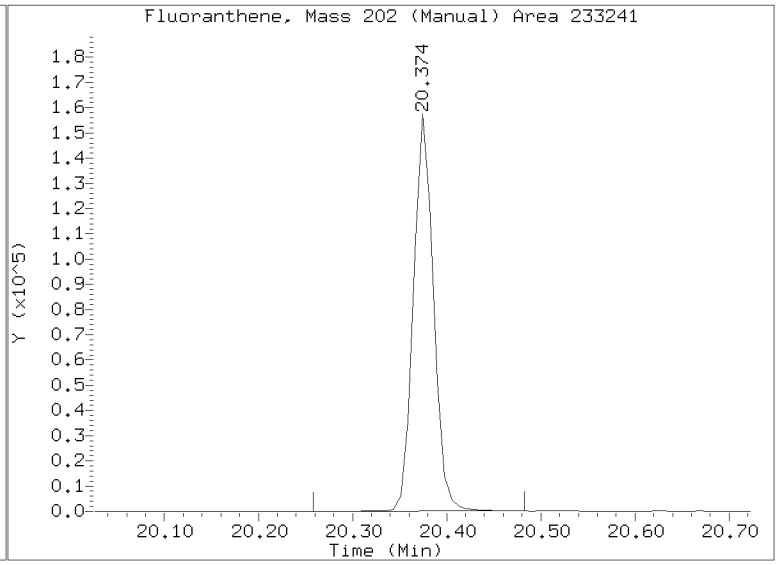












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252307.D

Date : 26-FEB-2023 00:44

Client ID:

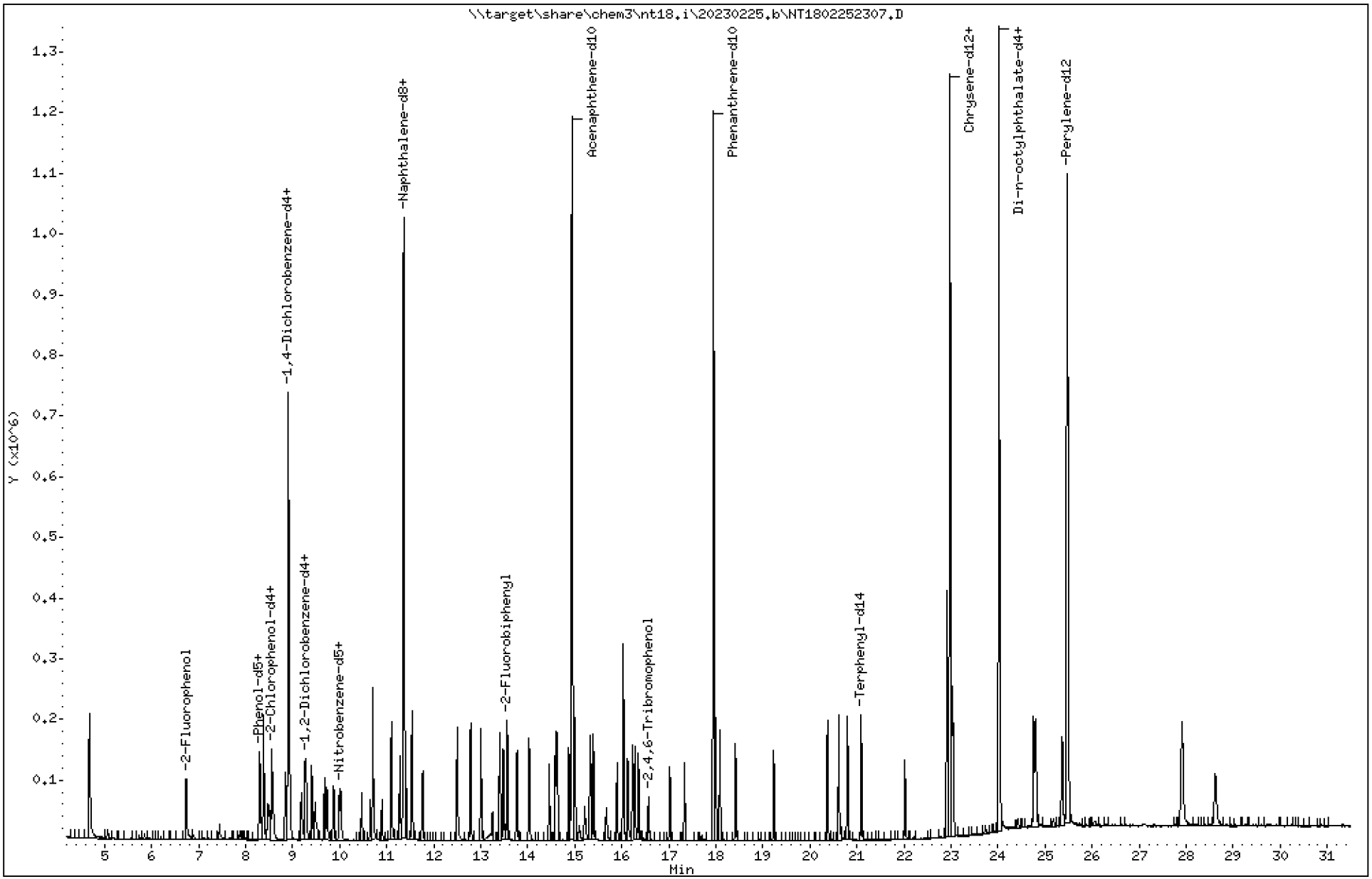
Instrument: nt18.i

Sample Info: SLC0099-CAL2

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230225.b\NT1802252307.D
Lab Smp Id: SLC0099-CAL2
Inj Date : 26-FEB-2023 00:44
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0099-CAL2
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Meth Date : 08-Mar-2023 14:50 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.743	6.743	(0.756)	57689	0.75000	0.8098
$	2 Phenol-d5	99	8.296	8.296	(0.931)	76272	0.75000	0.8284
	3 Phenol	94	8.312	8.319	(0.932)	51886	0.50000	0.5417
$	5 2-Chlorophenol-d4	132	8.559	8.559	(0.960)	66131	0.75000	0.8254
	4 Bis(2-Chloroethyl)ether	93	8.474	8.474	(0.951)	36231	0.50000	0.5569
	6 2-Chlorophenol	128	8.582	8.590	(0.963)	45334	0.50000	0.5511
	7 1,3-Dichlorobenzene	146	8.853	8.853	(0.993)	49066	0.50000	0.5640
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	208805	4.00000	
	9 1,4-Dichlorobenzene	146	8.938	8.938	(1.003)	50051	0.50000	0.5644
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.264	(1.039)	31742	0.50000	0.5589
	12 1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	47994	0.50000	0.5577
	11 Benzyl alcohol	108	9.186	9.202	(1.030)	23028	0.50000	0.5056
	14 2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	11973	0.50000	0.5936(M)
	13 2-Methylphenol	108	9.411	9.419	(1.056)	41515	0.50000	0.5603
	17 Hexachloroethane	117	9.869	9.877	(1.107)	19875	0.50000	0.5790
	16 N-Nitroso-di-n-propylamine	70	9.730	9.737	(1.091)	29991	0.50000	0.5506
	15 4-Methylphenol	108	9.675	9.683	(1.085)	41515	0.50000	0.5376
$	18 Nitrobenzene-d5	82	9.994	10.001	(0.879)	44942	0.50000	0.5306
	19 Nitrobenzene	77	10.025	10.032	(0.882)	46228	0.50000	0.5670
	20 Isophorone	82	10.467	10.467	(0.921)	54582	0.50000	0.5247
	21 2-Nitrophenol	139	10.650	10.659	(0.937)	20659	0.50000	0.5159
	22 2,4-Dimethylphenol	107	10.710	10.710	(0.942)	85412	1.00000	1.119
	23 Bis(2-Chloroethoxy)methane	93	10.897	10.905	(0.959)	39015	0.50000	0.5477
	24 Benzoic acid	105	11.092	11.092	(0.976)	4866	2.00000	0.1683(M)
	25 2,4-Dichlorophenol	162	11.100	11.100	(0.977)	66498	1.00000	0.9940
	26 1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	40404	0.50000	0.5592
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	794748	4.00000	
	28 Naphthalene	128	11.404	11.403	(1.003)	137702	0.50000	0.5636
	29 4-Chloroaniline	127	11.535	11.542	(1.015)	104923	1.00000	1.078
	30 Hexachlorobutadiene	225	11.767	11.767	(1.035)	23795	0.50000	0.5618
	31 4-Chloro-3-methylphenol	107	12.502	12.502	(1.100)	66228	1.00000	1.034
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	92180	0.50000	0.5553
	33 Hexachlorocyclopentadiene	237	13.253	13.252	(0.887)	10096	1.00000	0.3514

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	39072	1.00000	0.9514
	35	2,4,5-Trichlorophenol	196	13.485	13.485	(0.903)	41417	1.00000	0.9255
$	36	2-Fluorobiphenyl	172	13.562	13.562	(0.908)	98793	0.50000	0.5519
	37	2-Chloronaphthalene	162	13.771	13.771	(0.922)	75144	0.50000	0.5372
	38	2-Nitroaniline	65	14.026	14.034	(0.939)	44710	1.00000	1.021
	39	Dimethylphthalate	163	14.460	14.460	(0.968)	80877	0.50000	0.5383
	40	Acenaphthylene	152	14.630	14.630	(0.979)	127697	0.50000	0.5421
	41	2,6-Dinitrotoluene	165	14.591	14.591	(0.977)	34005	1.00000	0.9873
*	42	Acenaphthene-d10	164	14.940	14.940	(1.000)	424597	4.00000	
	43	3-Nitroaniline	138	14.870	14.878	(0.995)	40677	1.00000	0.9984
	44	Acenaphthene	153	15.001	15.001	(1.004)	82113	0.50000	0.5508
	45	2,4-Dinitrophenol	184	15.094	15.094	(1.010)	7872	2.00000	0.4908
	46	Dibenzofuran	168	15.326	15.334	(1.026)	118631	0.50000	0.5498
	47	4-Nitrophenol	109	15.210	15.218	(1.018)	15136	1.00000	0.9216(M)
	48	2,4-Dinitrotoluene	165	15.396	15.396	(1.031)	47329	1.00000	1.005
	50	Diethylphthalate	149	15.906	15.906	(1.065)	79679	0.50000	0.5062
	49	Fluorene	166	16.037	16.037	(1.073)	91745	0.50000	0.5306
	51	4-Chlorophenyl-phenylether	204	16.030	16.029	(1.073)	40385	0.50000	0.5128
	52	4-Nitroaniline	138	16.122	16.130	(1.079)	36866	1.00000	0.9406
	53	4,6-Dinitro-2-methylphenol	198	16.222	16.230	(0.904)	35933	2.00000	1.333
	54	N-Nitrosodiphenylamine	169	16.276	16.276	(0.907)	60498	0.50000	0.5321
$	55	2,4,6-Tribromophenol	330	16.562	16.569	(1.109)	13200	0.75000	0.6225
	56	4-Bromophenyl-phenylether	248	17.024	17.024	(0.949)	23522	0.50000	0.5155
	57	Hexachlorobenzene	284	17.333	17.333	(0.966)	28264	0.50000	0.5365
	58	Pentachlorophenol	266	17.697	17.697	(0.986)	3471	1.00000	0.2516(M)
*	59	Phenanthrene-d10	188	17.945	17.945	(1.000)	755611	4.00000	
	60	Phenanthrene	178	17.991	17.991	(1.003)	130039	0.50000	0.5471
	61	Anthracene	178	18.084	18.084	(1.008)	119719	0.50000	0.5286
	62	Carbazole	167	18.417	18.417	(1.026)	109292	0.50000	0.5266
	63	Di-n-butylphthalate	149	19.229	19.229	(1.072)	113659	0.50000	0.4948
	64	Fluoranthene	202	20.374	20.374	(0.887)	125140	0.50000	0.5352(M)
	65	Pyrene	202	20.800	20.800	(0.905)	137958	0.50000	0.5533
$	66	Terphenyl-d14	244	21.094	21.094	(0.918)	106487	0.50000	0.5325
	67	Butylbenzylphthalate	149	22.023	22.023	(0.959)	46022	0.50000	0.4861
	68	Benzo(a)anthracene	228	22.952	22.952	(0.999)	128701	0.50000	0.5342
*	69	Chrysene-d12	240	22.975	22.975	(1.000)	667306	4.00000	
	70	3,3'-Dichlorobenzidine	252	22.906	22.906	(0.997)	134613	1.50000	1.519
	71	Chrysene	228	23.022	23.022	(1.002)	133715	0.50000	0.5338
	72	bis(2-Ethylhexyl)phthalate	149	23.045	23.045	(0.959)	68738	0.50000	0.5115
*	134	Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	935988	4.00000	
	73	Di-n-octylphthalate	149	24.028	24.028	(1.000)	148511	0.50000	0.5694
	74	Benzo(b)fluoranthene	252	24.756	24.756	(0.972)	126082	0.50000	0.5251
	75	Benzo(k)fluoranthene	252	24.802	24.795	(0.974)	143203	0.50000	0.5262(H)
	76	Benzo(a)pyrene	252	25.360	25.360	(0.996)	114705	0.50000	0.5153
*	77	Perylene-d12	264	25.468	25.468	(1.000)	735979	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	27.904	27.904	(1.096)	135159	0.50000	0.4837
	79	Dibenzo(a,h)anthracene	278	27.912	27.920	(1.096)	107376	0.50000	0.4607
	80	Benzo(g,h,i)perylene	276	28.619	28.619	(1.124)	113208	0.50000	0.5053
	90	N-Nitrosodimethylamine	74	4.681	4.681	(0.525)	46605	1.00000	1.114
	91	Aniline	93	8.381	8.389	(0.940)	122887	1.00000	1.127
	93	Benzidine	184	20.614	20.614	(0.897)	124469	1.00000	1.090
	103	Pyridine	79	4.681	4.689	(0.525)	77543	1.00000	1.113
	105	1-methylnaphthalene	142	13.005	13.005	(1.144)	84671	0.50000	0.5634
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.353	16.353	(1.095)	93809	0.50000	0.5410

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	24.756	24.795	(0.972)	257308	1.00000	1.060
120 2,3,4,6-Tetrachlorophenol	232	15.674	15.674	(1.049)	14254	0.50000	0.3501

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252307.D
Lab Smp Id: SLC0099-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	208805	-2.02
27 Naphthalene-d8	806946	403473	1613892	794748	-1.51
42 Acenaphthene-d10	424249	212125	848498	424597	0.08
59 Phenanthrene-d10	758987	379494	1517974	755611	-0.44
69 Chrysene-d12	685237	342619	1370474	667306	-2.62
134 Di-n-octylphthala	1075410	537705	2150820	935988	-12.96
77 Perylene-d12	762553	381277	1525106	735979	-3.48

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.94	14.44	15.44	14.94	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.04
69 Chrysene-d12	22.98	22.48	23.48	22.98	-0.03
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252307.D

Lab ID: SLC0099-CAL2
nt18.i, ABN.m, 26-FEB-2023 00:44

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.976	0.000	0.9759	Benzoic acid
1.010	0.000	1.0103	2,4-Dinitrophenol
0.986	0.000	0.9862	Pentachlorophenol

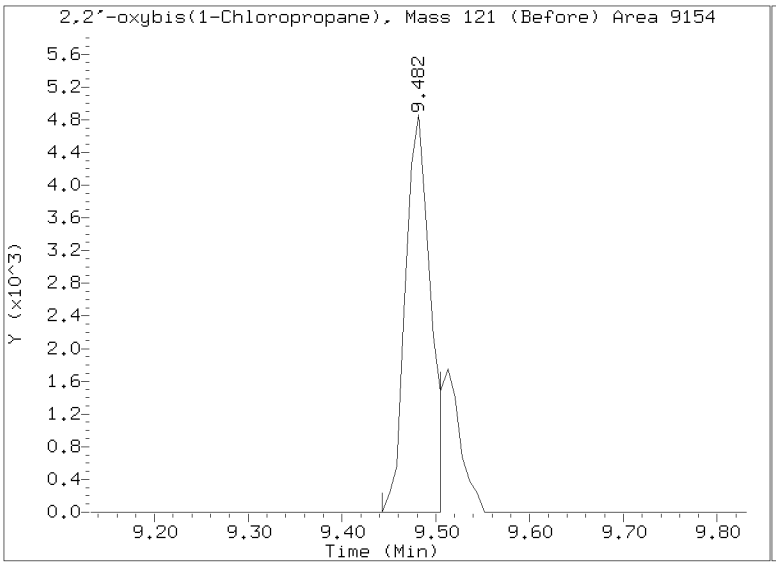
RRT check based on Ccal File: NT1802252308.D

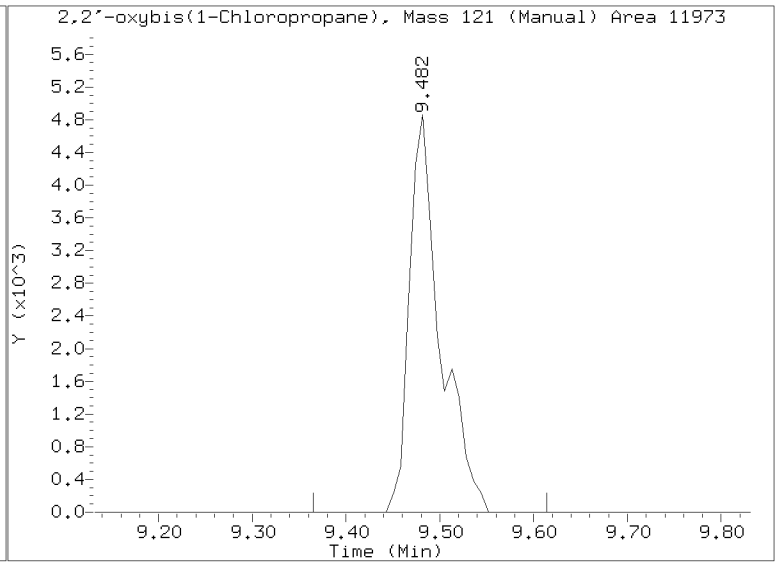
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

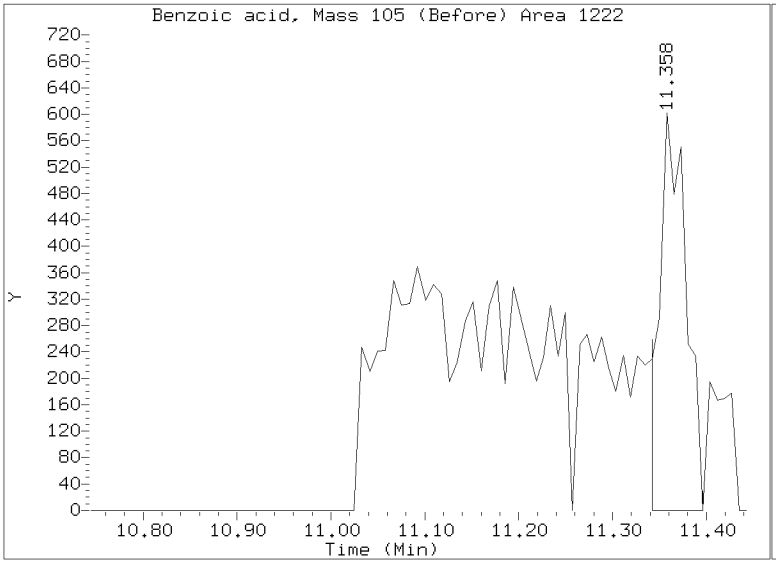
* Only compounds listed in the work order have been verified by the analyst *

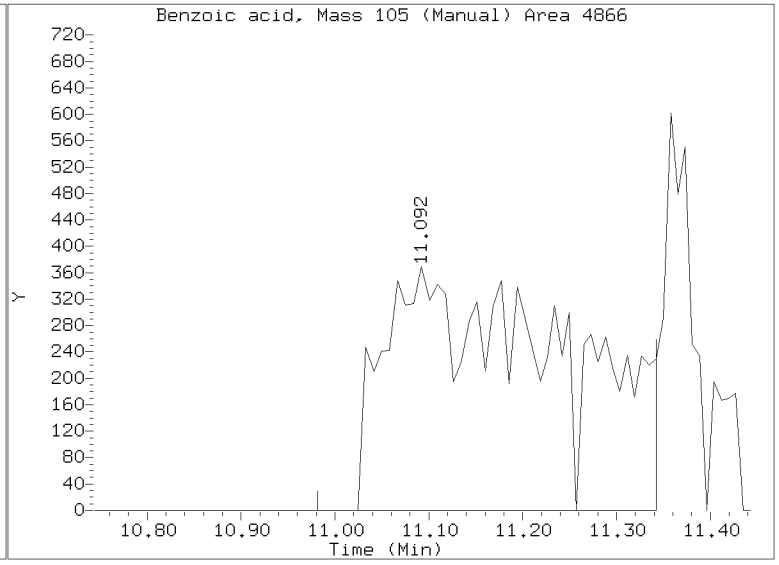
Quant Ion Manual Peak Adjustment Report

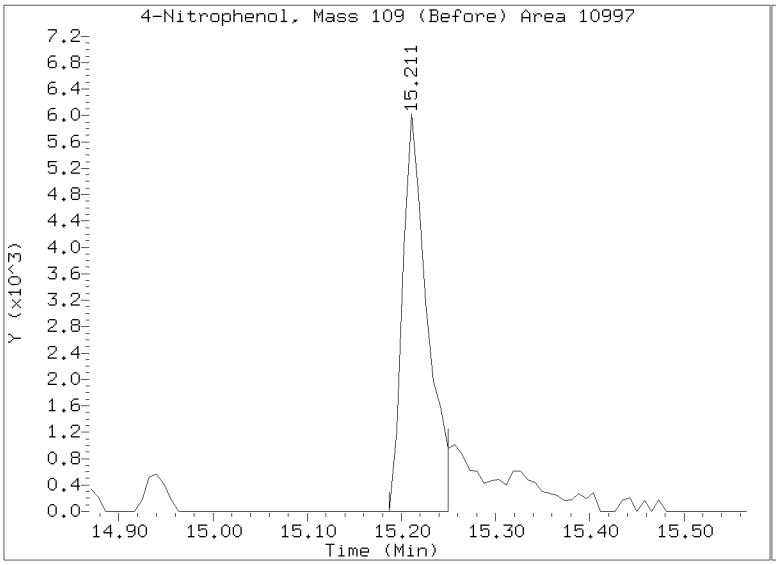
Datafile: //target/share/chem3/nt18.i/20230225.b/NT1802252307.D
Injection Date: 26-FEB-2023 00:44
Lab ID:SLC0099-CAL2 Client ID:
Report Date: 03/08/2023 15:05

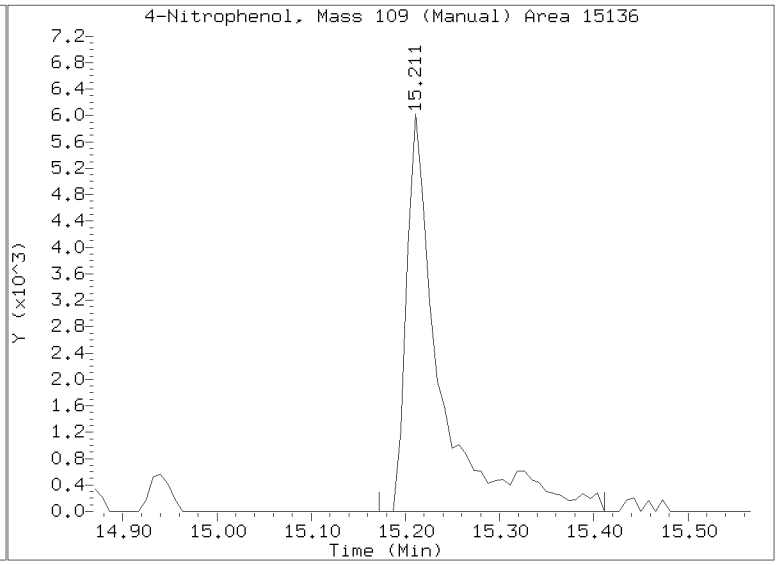






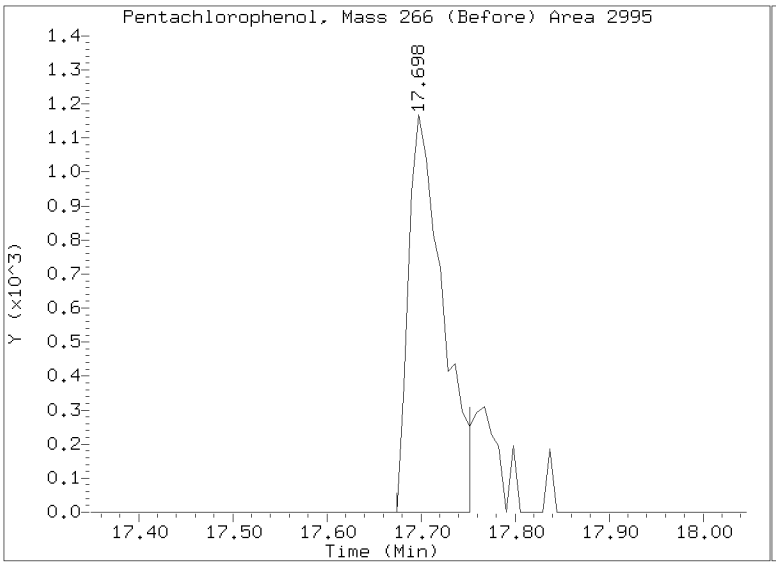


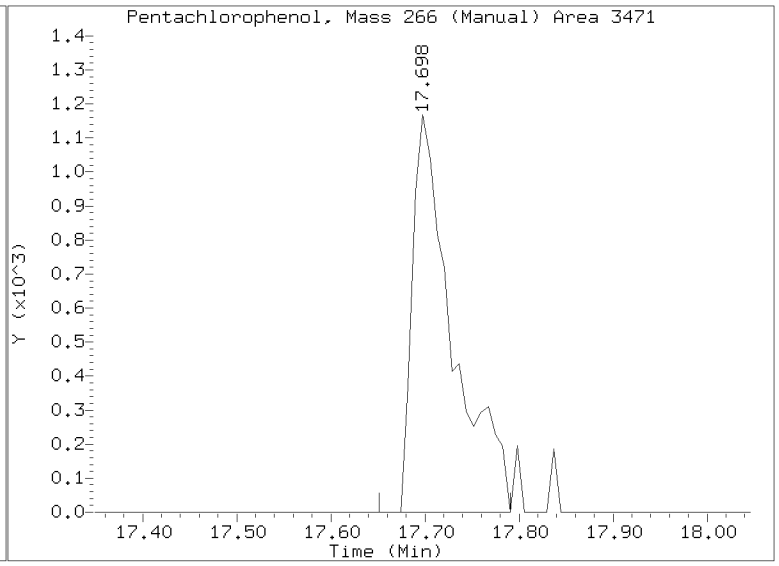


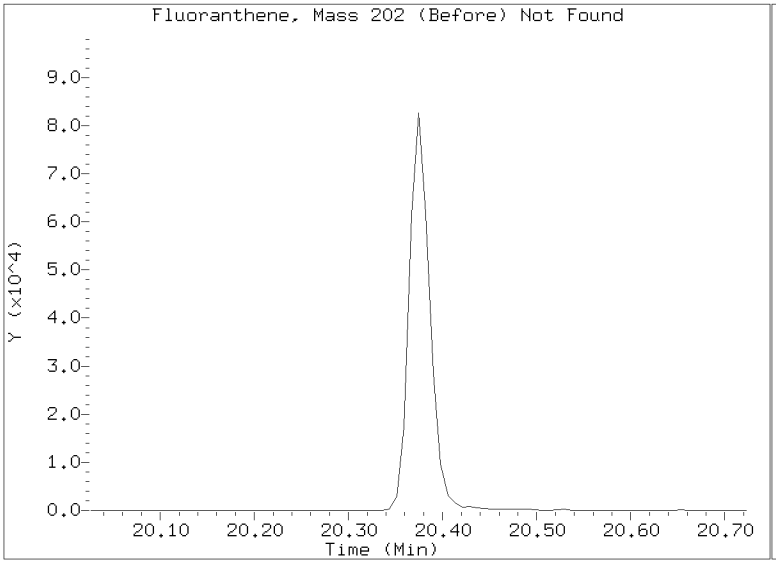


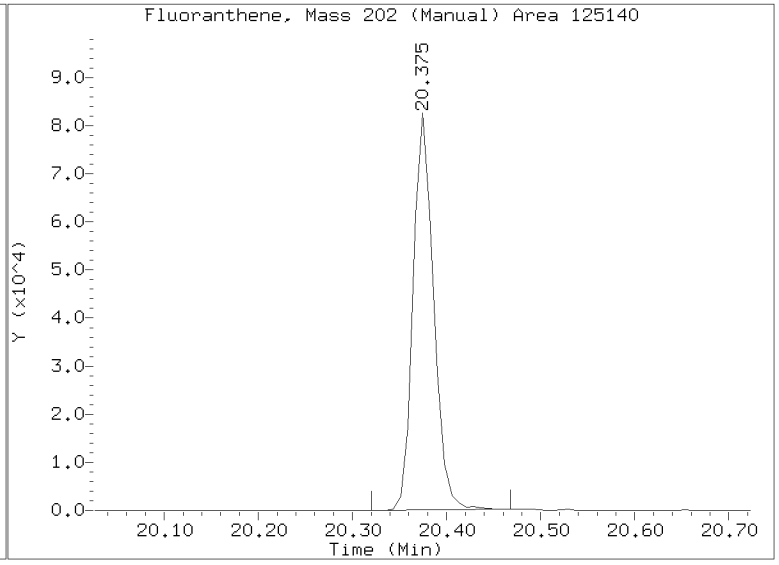
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230225.b/NT1802252307.D
Injection Date: 26-FEB-2023 00:44
Lab ID:SLC0099-CAL2 Client ID:
Report Date: 03/08/2023 15:05





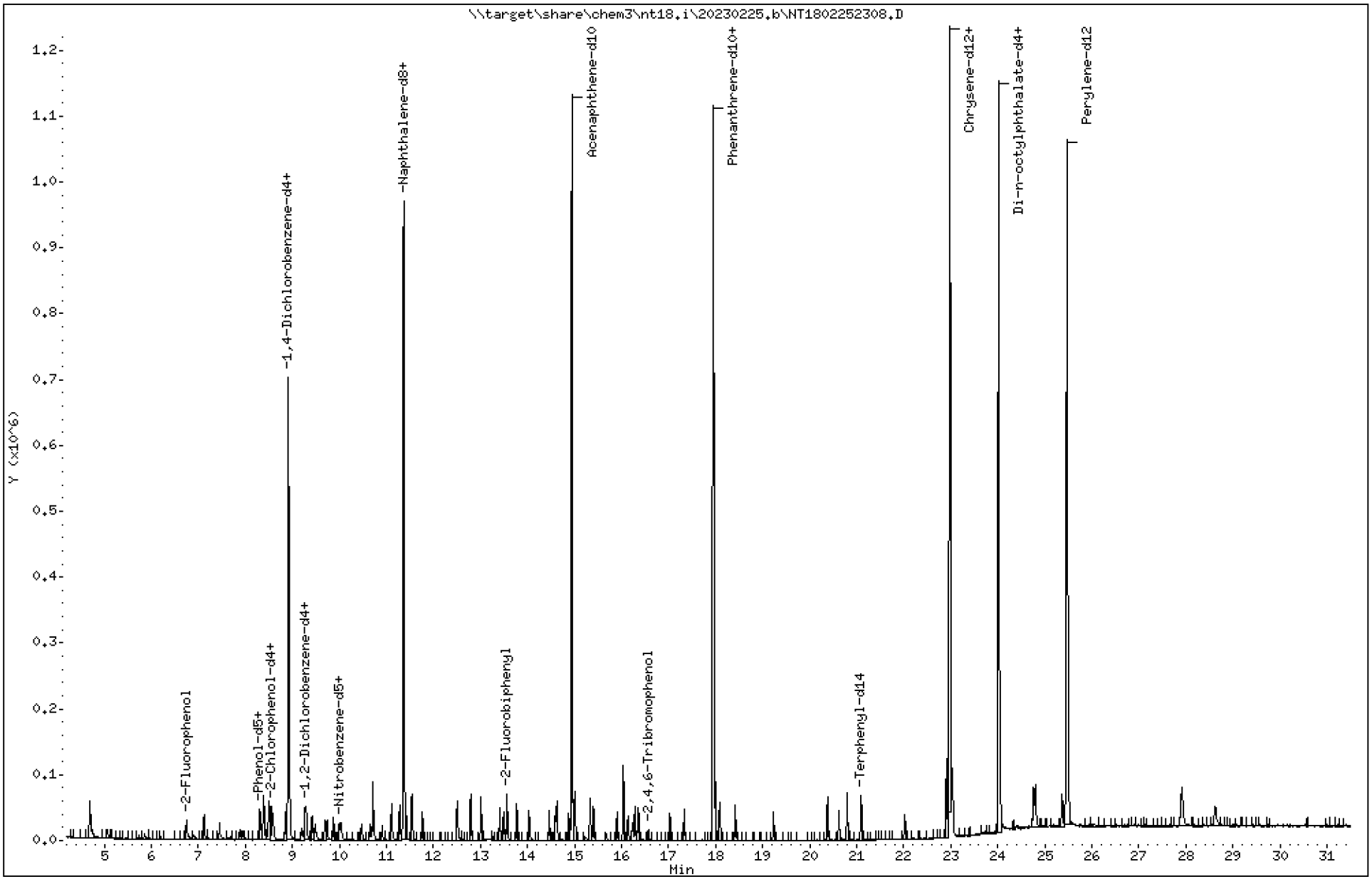




Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252308.D
Date : 26-FEB-2023 01:24
Client ID:
Sample Info: SLC0099-CAL1

Instrument: nt18.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230225.b\NT1802252308.D
Lab Smp Id: SLC0099-CAL1
Inj Date : 26-FEB-2023 01:24
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0099-CAL1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Meth Date : 08-Mar-2023 14:50 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.743	6.743	(0.756)	18300	0.30000	0.2775
$	2 Phenol-d5	99	8.296	8.296	(0.931)	25510	0.30000	0.2993
	3 Phenol	94	8.319	8.319	(0.933)	18178	0.20000	0.2050
$	5 2-Chlorophenol-d4	132	8.559	8.559	(0.960)	22639	0.30000	0.3052
	4 Bis(2-Chloroethyl)ether	93	8.474	8.474	(0.951)	13234	0.20000	0.2197
	6 2-Chlorophenol	128	8.590	8.590	(0.964)	15807	0.20000	0.2076
	7 1,3-Dichlorobenzene	146	8.853	8.853	(0.993)	17925	0.20000	0.2225
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	193315	4.00000	
	9 1,4-Dichlorobenzene	146	8.938	8.938	(1.003)	19148	0.20000	0.2332
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.264	(1.039)	12013	0.20000	0.2285
	12 1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	18428	0.20000	0.2313
	11 Benzyl alcohol	108	9.202	9.202	(1.032)	7199	0.20000	0.1707
	14 2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	4094	0.20000	0.2193
	13 2-Methylphenol	108	9.419	9.419	(1.057)	13907	0.20000	0.2027
	17 Hexachloroethane	117	9.877	9.877	(1.108)	6861	0.20000	0.2159
	16 N-Nitroso-di-n-propylamine	70	9.737	9.737	(1.092)	10495	0.20000	0.2081
	15 4-Methylphenol	108	9.683	9.683	(1.086)	14738	0.20000	0.2061
$	18 Nitrobenzene-d5	82	10.001	10.001	(0.880)	16263	0.20000	0.2061
	19 Nitrobenzene	77	10.032	10.032	(0.883)	15710	0.20000	0.2068
	20 Isophorone	82	10.467	10.467	(0.921)	18123	0.20000	0.1870
	21 2-Nitrophenol	139	10.659	10.659	(0.938)	6383	0.20000	0.1711
	22 2,4-Dimethylphenol	107	10.710	10.710	(0.942)	31022	0.40000	0.4364
	23 Bis(2-Chloroethoxy)methane	93	10.905	10.905	(0.960)	14273	0.20000	0.2151
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	11.100	11.100	(0.977)	25158	0.40000	0.4036
	26 1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	15272	0.20000	0.2269
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	740480	4.00000	
	28 Naphthalene	128	11.403	11.403	(1.003)	52640	0.20000	0.2313
	29 4-Chloroaniline	127	11.542	11.542	(1.016)	36106	0.40000	0.3980
	30 Hexachlorobutadiene	225	11.767	11.767	(1.035)	8813	0.20000	0.2233
	31 4-Chloro-3-methylphenol	107	12.502	12.502	(1.100)	21045	0.40000	0.3528
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	34523	0.20000	0.2232
	33 Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	1457	0.40000	0.05423

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34 2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	11794	0.40000	0.3067
	35 2,4,5-Trichlorophenol	196	13.485	13.485	(0.903)	12019	0.40000	0.2868
$	36 2-Fluorobiphenyl	172	13.562	13.562	(0.908)	37092	0.20000	0.2213
	37 2-Chloronaphthalene	162	13.771	13.771	(0.922)	29048	0.20000	0.2218
	38 2-Nitroaniline	65	14.034	14.034	(0.939)	13931	0.40000	0.3399
	39 Dimethylphthalate	163	14.460	14.460	(0.968)	28663	0.20000	0.2038
	40 Acenaphthylene	152	14.630	14.630	(0.979)	43711	0.20000	0.1982
	41 2,6-Dinitrotoluene	165	14.591	14.591	(0.977)	10138	0.40000	0.3144
*	42 Acenaphthene-d10	164	14.940	14.940	(1.000)	397571	4.00000	
	43 3-Nitroaniline	138	14.878	14.878	(0.996)	11623	0.40000	0.3047
	44 Acenaphthene	153	15.001	15.001	(1.004)	30861	0.20000	0.2211
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.334	15.334	(1.026)	44234	0.20000	0.2189
	47 4-Nitrophenol	109	15.218	15.218	(1.019)	1971	0.40000	0.1282(M)
	48 2,4-Dinitrotoluene	165	15.396	15.396	(1.031)	14139	0.40000	0.3207
	50 Diethylphthalate	149	15.906	15.906	(1.065)	27267	0.20000	0.1850
	49 Fluorene	166	16.037	16.037	(1.073)	31668	0.20000	0.1956
	51 4-Chlorophenyl-phenylether	204	16.029	16.029	(1.073)	15398	0.20000	0.2088
	52 4-Nitroaniline	138	16.130	16.130	(1.080)	11542	0.40000	0.3145
	53 4,6-Dinitro-2-methylphenol	198	16.230	16.230	(0.904)	6296	0.80000	0.2510
	54 N-Nitrosodiphenylamine	169	16.276	16.276	(0.907)	22075	0.20000	0.2083
$	55 2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	3746	0.30000	0.1892
	56 4-Bromophenyl-phenylether	248	17.024	17.024	(0.949)	8341	0.20000	0.1961
	57 Hexachlorobenzene	284	17.333	17.333	(0.966)	10223	0.20000	0.2081
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	17.945	17.945	(1.000)	704464	4.00000	
	60 Phenanthrene	178	17.991	17.991	(1.003)	49276	0.20000	0.2224
	61 Anthracene	178	18.084	18.084	(1.008)	39396	0.20000	0.1866
	62 Carbazole	167	18.417	18.417	(1.026)	37914	0.20000	0.1959
	63 Di-n-butylphthalate	149	19.229	19.229	(1.072)	33948	0.20000	0.1585
	64 Fluoranthene	202	20.374	20.374	(0.887)	42625	0.20000	0.1934(M)
	65 Pyrene	202	20.800	20.800	(0.905)	48078	0.20000	0.2045
$	66 Terphenyl-d14	244	21.094	21.094	(0.918)	37420	0.20000	0.1985
	67 Butylbenzylphthalate	149	22.023	22.023	(0.959)	12810	0.20000	0.1435
	68 Benzo(a)anthracene	228	22.952	22.952	(0.999)	47656	0.20000	0.2098
*	69 Chrysene-d12	240	22.975	22.975	(1.000)	629152	4.00000	
	70 3,3'-Dichlorobenzidine	252	22.906	22.906	(0.997)	41999	0.60000	0.5025
	71 Chrysene	228	23.022	23.022	(1.002)	52706	0.20000	0.2232
	72 bis(2-Ethylhexyl)phthalate	149	23.045	23.045	(0.959)	20746	0.20000	0.1670
*	134 Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	865119	4.00000	
	73 Di-n-octylphthalate	149	24.028	24.028	(1.000)	55735	0.20000	0.2312
	74 Benzo(b)fluoranthene	252	24.756	24.756	(0.972)	43157	0.20000	0.1881
	75 Benzo(k)fluoranthene	252	24.795	24.795	(0.974)	54184	0.20000	0.2084(H)
	76 Benzo(a)pyrene	252	25.360	25.360	(0.996)	39139	0.20000	0.1840
*	77 Perylene-d12	264	25.468	25.468	(1.000)	703181	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.904	27.904	(1.096)	45276	0.20000	0.1696
	79 Dibenzo(a,h)anthracene	278	27.920	27.920	(1.096)	37352	0.20000	0.1678
	80 Benzo(g,h,i)perylene	276	28.619	28.619	(1.124)	38713	0.20000	0.1809
	90 N-Nitrosodimethylamine	74	4.681	4.681	(0.525)	15552	0.40000	0.4017
	91 Aniline	93	8.389	8.389	(0.941)	44673	0.40000	0.4425
	93 Benzidine	184	20.614	20.614	(0.897)	33231	0.40000	0.3086
	103 Pyridine	79	4.689	4.689	(0.526)	26651	0.40000	0.4132
	105 1-methylnaphthalene	142	13.005	13.005	(1.144)	30244	0.20000	0.2160
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.353	16.353	(1.095)	32729	0.20000	0.2016

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	24.795	24.795	(0.974)	91314	0.40000	0.3937
120 2,3,4,6-Tetrachlorophenol	232	15.674	15.674	(1.049)	3418	0.20000	0.08983(M)

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252308.D
Lab Smp Id: SLC0099-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	193315	-9.29
27 Naphthalene-d8	806946	403473	1613892	740480	-8.24
42 Acenaphthene-d10	424249	212125	848498	397571	-6.29
59 Phenanthrene-d10	758987	379494	1517974	704464	-7.18
69 Chrysene-d12	685237	342619	1370474	629152	-8.18
134 Di-n-octylphthala	1075410	537705	2150820	865119	-19.55
77 Perylene-d12	762553	381277	1525106	703181	-7.79

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.94	14.44	15.44	14.94	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.04
69 Chrysene-d12	22.98	22.48	23.48	22.98	-0.03
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252308.D

Lab ID: SLC0099-CAL1
nt18.i, ABN.m, 26-FEB-2023 01:24

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

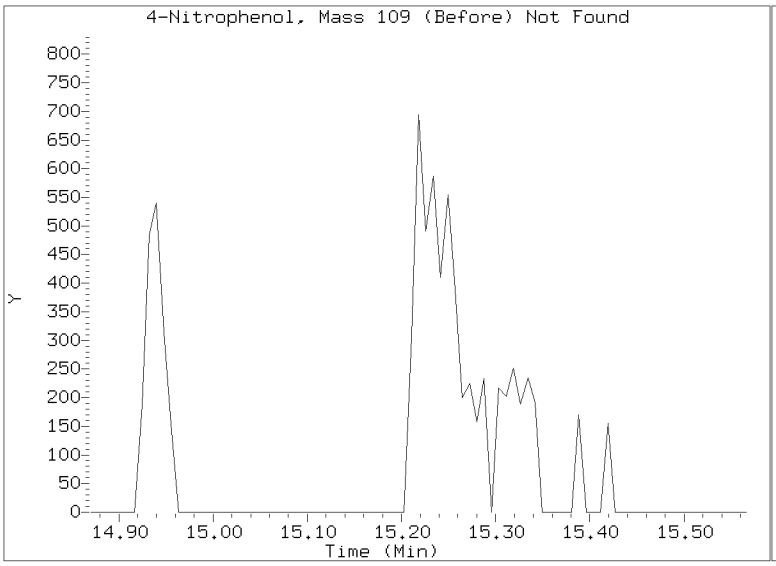
RRT check based on Ccal File: NT1802252308.D

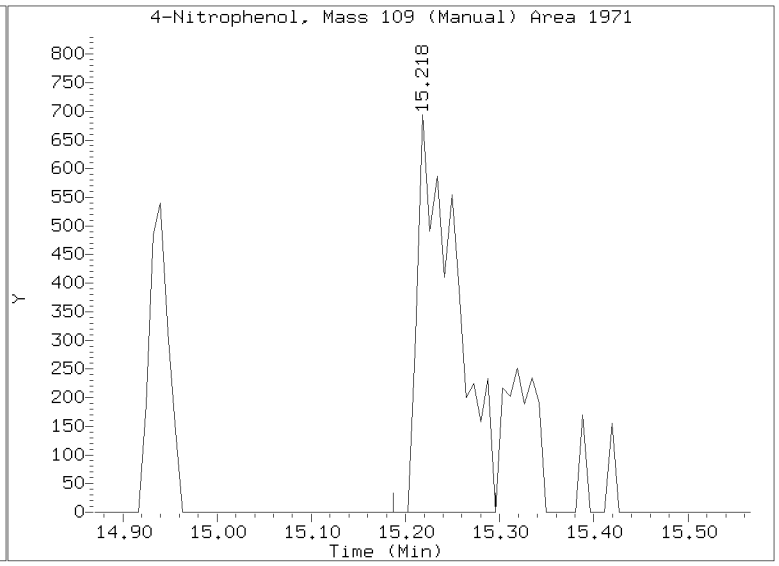
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

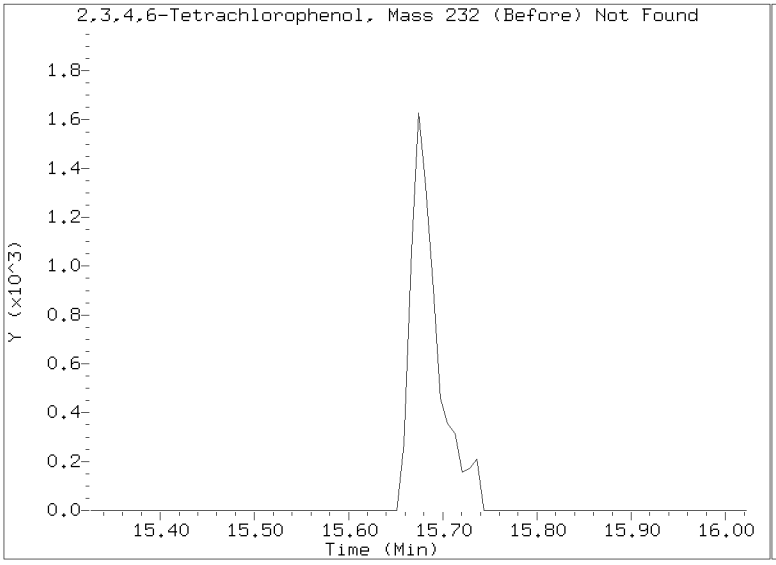
* Only compounds listed in the work order have been verified by the analyst *

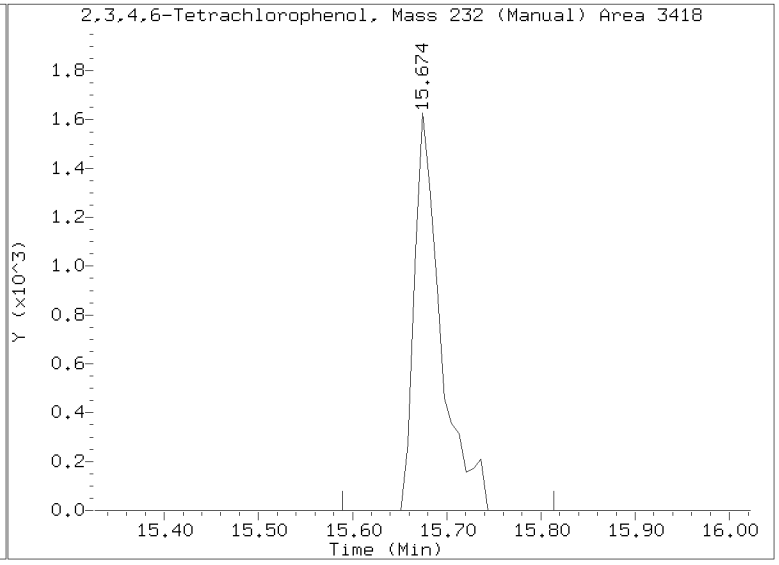
Quant Ion Manual Peak Adjustment Report

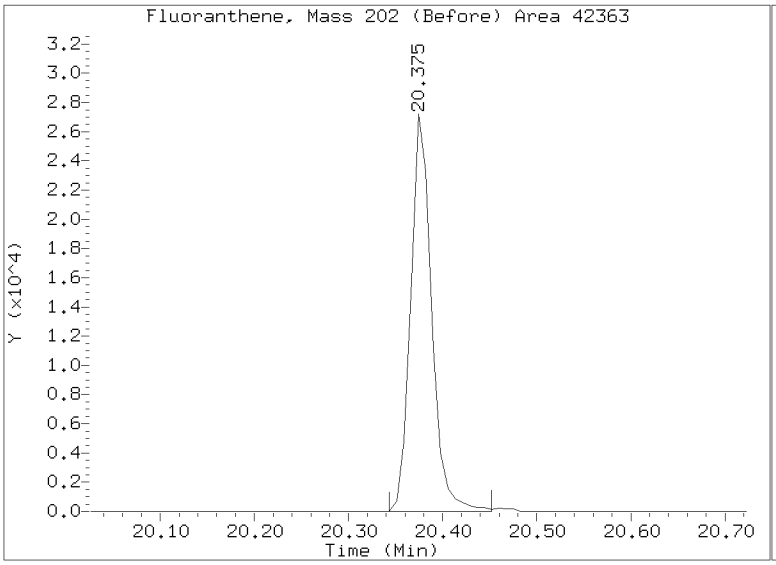
Datafile: //target/share/chem3/nt18.i/20230225.b/NT1802252308.D
Injection Date: 26-FEB-2023 01:24
Lab ID:SLC0099-CAL1 Client ID:
Report Date: 03/08/2023 15:05

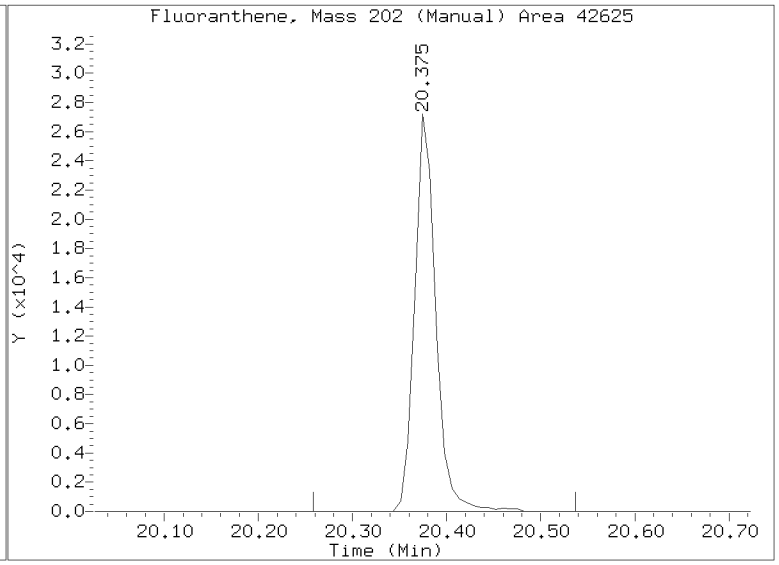












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Page 1

Date : 26-FEB-2023 03:26

Client ID:

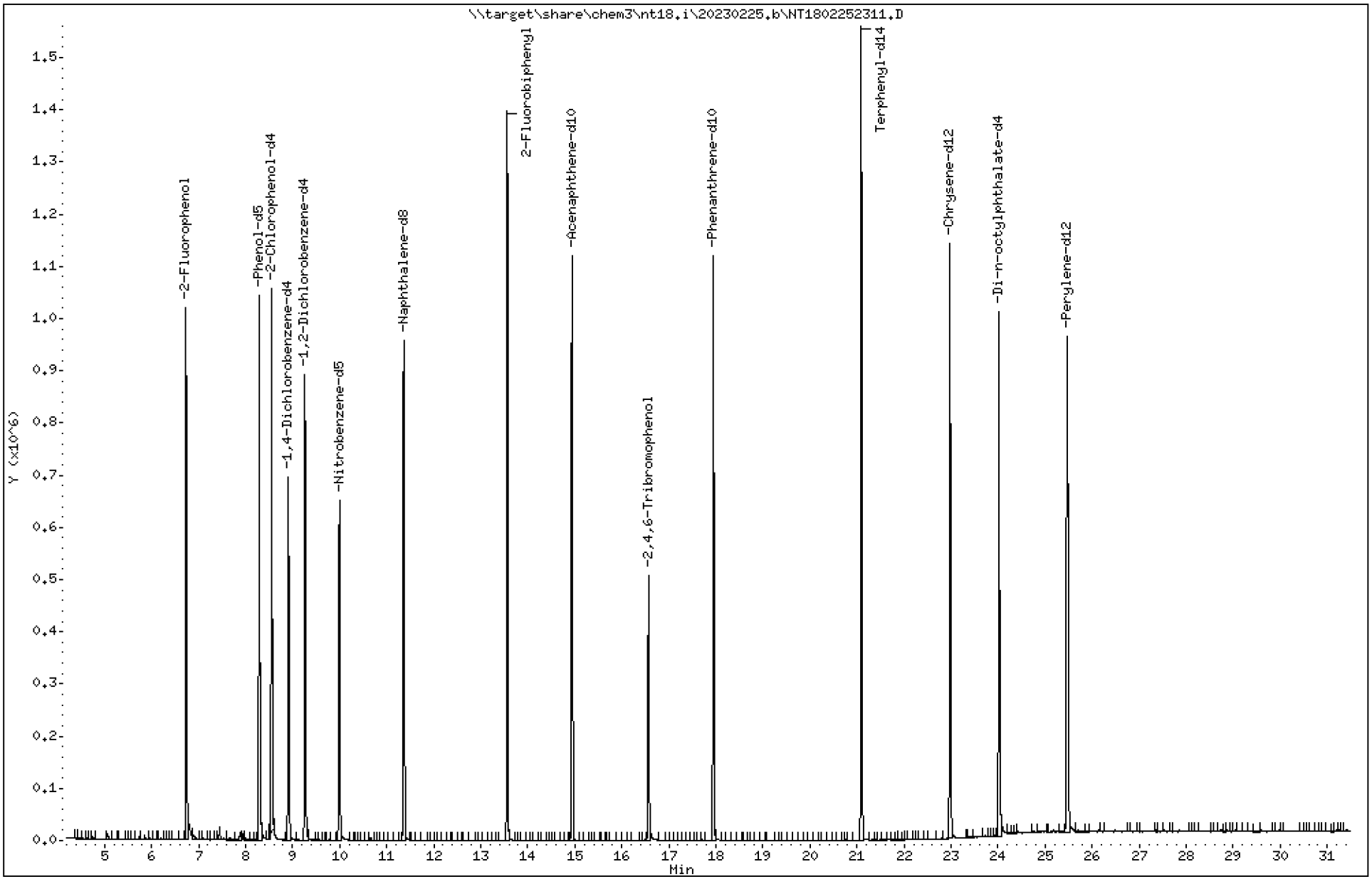
Instrument: nt18.i

Sample Info: SLC0099-ICB1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230225.b\NT1802252311.D
Lab Smp Id: SLC0099-ICB1
Inj Date : 26-FEB-2023 03:26
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0099-ICB1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Meth Date : 08-Mar-2023 14:50 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.735	6.743	(0.756)	442708	6.62184	6.622
$	2 Phenol-d5	99	8.288	8.296	(0.930)	575792	6.66407	6.664
	3 Phenol	94	Compound Not Detected.					
$	5 2-Chlorophenol-d4	132	8.559	8.559	(0.960)	490204	6.51986	6.520
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	195957	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.264	9.264	(1.039)	224895	4.21933	4.219
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	Compound Not Detected.					
$	18 Nitrobenzene-d5	82	9.993	10.001	(0.879)	342081	4.44983	4.450
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	721335	4.00000	
	28 Naphthalene	128	Compound Not Detected.					
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.562	13.562	(0.908)	700955	4.45135	4.451
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	Compound Not Detected.					
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	14.939	14.940	(1.000)	373490	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	Compound Not Detected.					
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	Compound Not Detected.					
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	Compound Not Detected.					
	49	Fluorene	166	Compound Not Detected.					
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	90020	4.70051	4.701
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	17.945	17.945	(1.000)	681936	4.00000	
	60	Phenanthrene	178	Compound Not Detected.					
	61	Anthracene	178	Compound Not Detected.					
	62	Carbazole	167	Compound Not Detected.					
	63	Di-n-butylphthalate	149	Compound Not Detected.					
	64	Fluoranthene	202	Compound Not Detected.					
	65	Pyrene	202	Compound Not Detected.					
$	66	Terphenyl-d14	244	21.094	21.094	(0.918)	819058	4.67183	4.672
	67	Butylbenzylphthalate	149	Compound Not Detected.					
	68	Benzo(a)anthracene	228	Compound Not Detected.					
*	69	Chrysene-d12	240	22.975	22.975	(1.000)	584972	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	Compound Not Detected.					
	72	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
*	134	Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	770361	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	Compound Not Detected.					
	75	Benzo(k)fluoranthene	252	Compound Not Detected.					
	76	Benzo(a)pyrene	252	Compound Not Detected.					
*	77	Perylene-d12	264	25.468	25.468	(1.000)	668327	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	Compound Not Detected.					
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	Compound Not Detected.					
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252311.D
Lab Smp Id: SLC0099-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	195957	-8.05
27 Naphthalene-d8	806946	403473	1613892	721335	-10.61
42 Acenaphthene-d10	424249	212125	848498	373490	-11.96
59 Phenanthrene-d10	758987	379494	1517974	681936	-10.15
69 Chrysene-d12	685237	342619	1370474	584972	-14.63
134 Di-n-octylphthala	1075410	537705	2150820	770361	-28.37
77 Perylene-d12	762553	381277	1525106	668327	-12.36

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.94	14.44	15.44	14.94	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.04
69 Chrysene-d12	22.98	22.48	23.48	22.98	-0.03
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252311.D

Lab ID: SLC0099-ICB1
nt18.i, ABN.m, 26-FEB-2023 03:26

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1802252308.D

On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

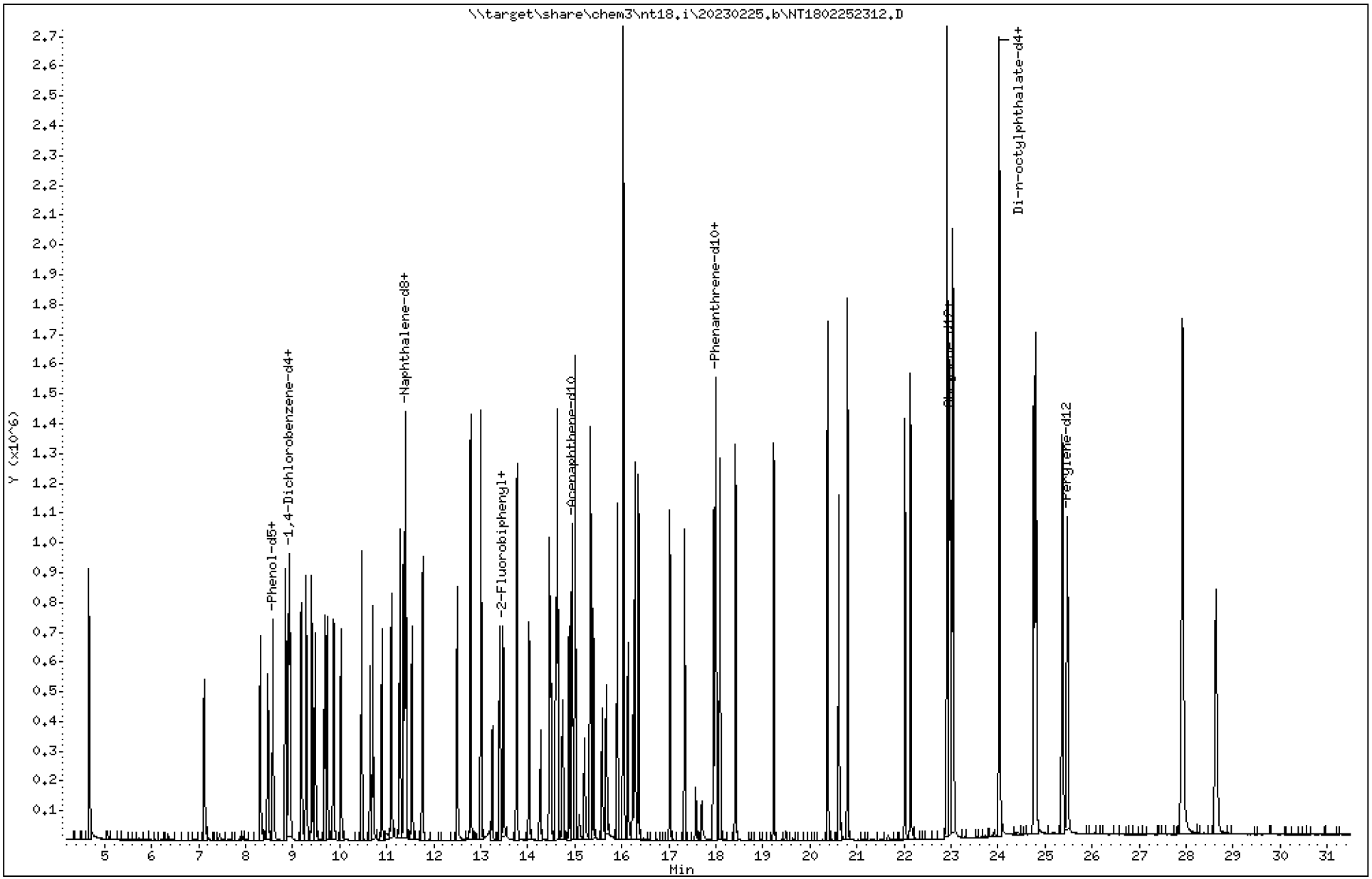
Instrument: nt18.i

Sample Info: SLC0099-SCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

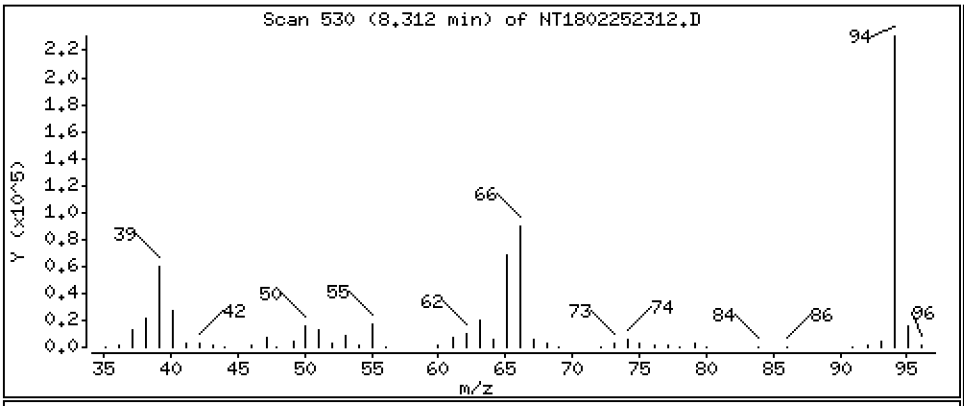
Operator: VTS

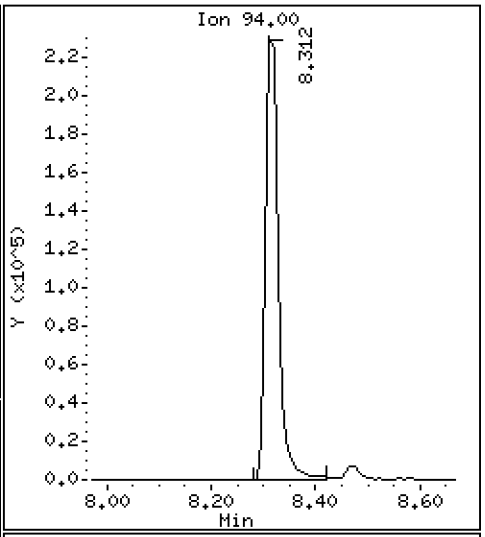
Column phase: ZB-5msi

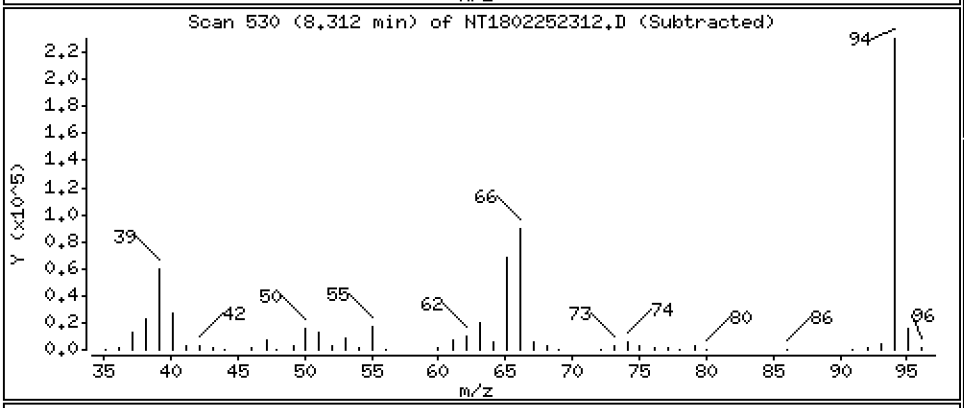
Column diameter: 0.25

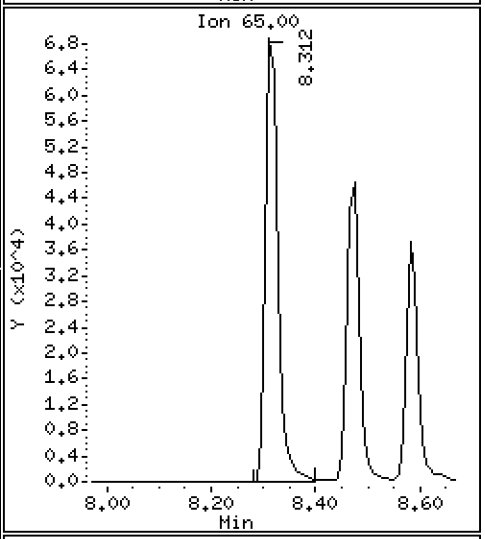
3 Phenol

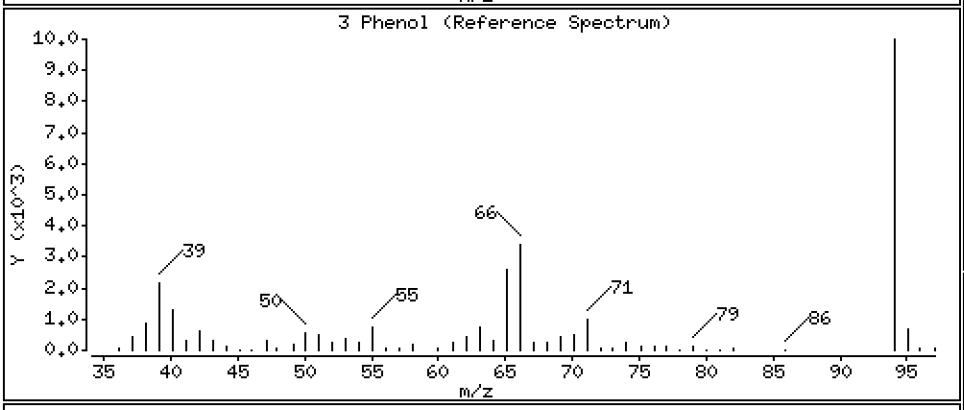
Concentration: 4.109 ug/mL

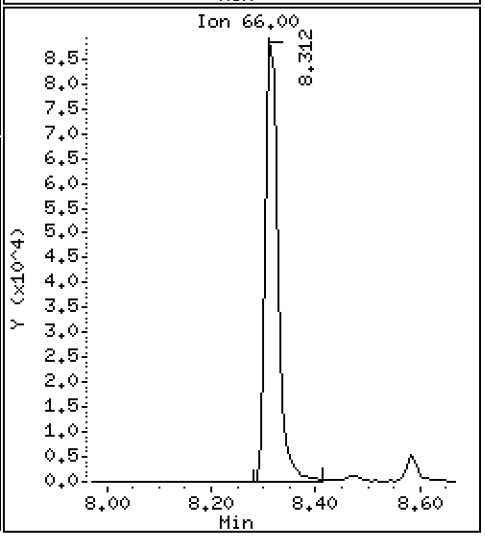


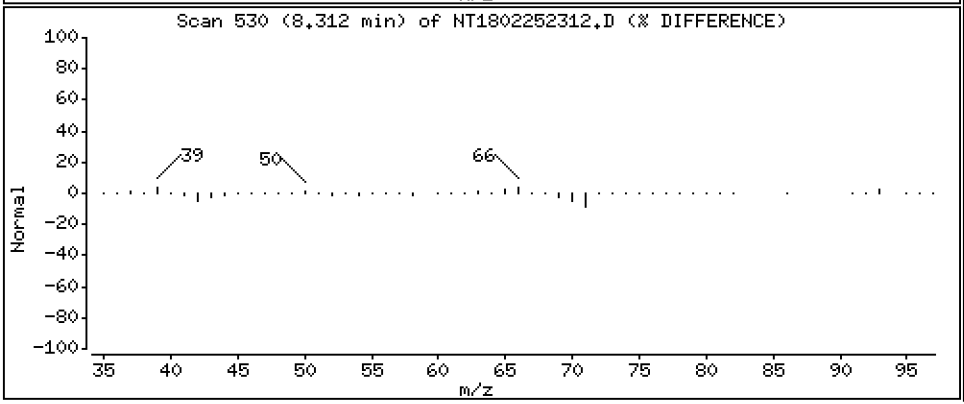












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

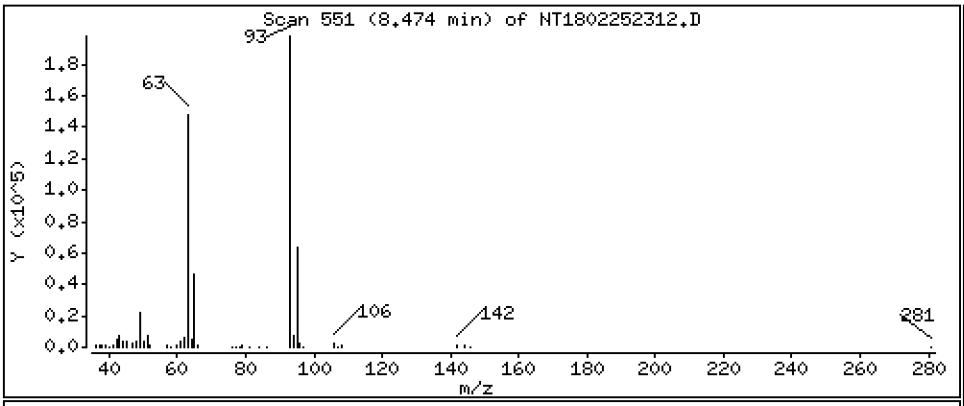
Operator: VTS

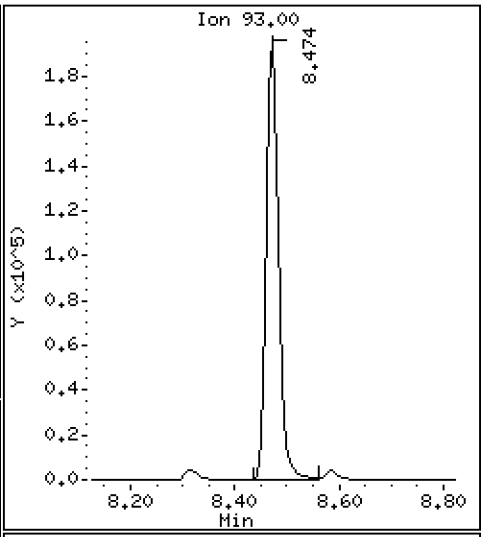
Column phase: ZB-5msi

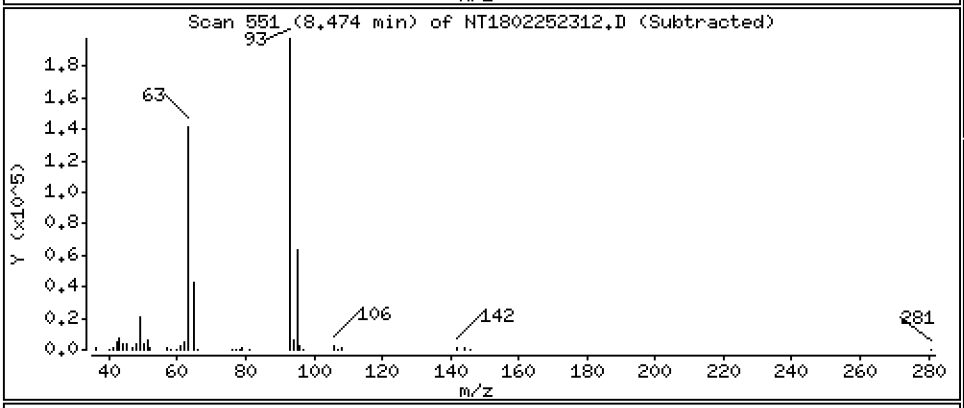
Column diameter: 0.25

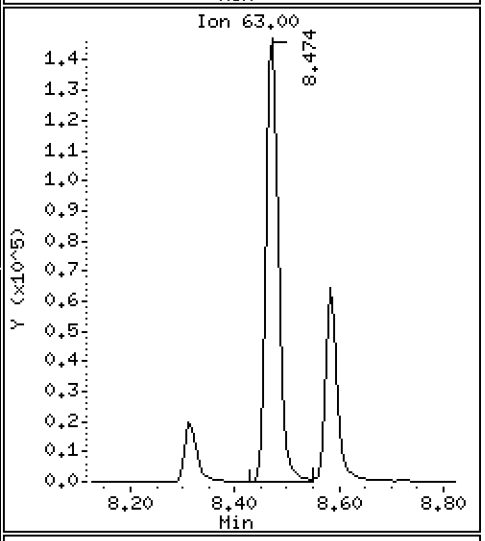
4 Bis(2-Chloroethyl)ether

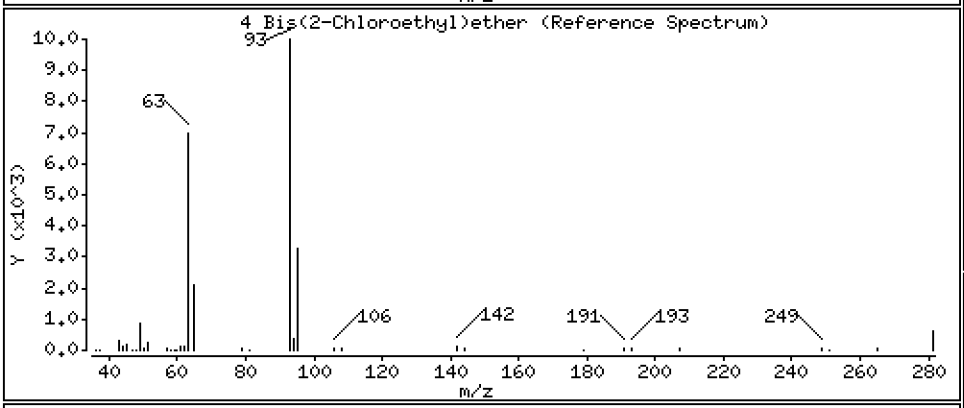
Concentration: 4.962 ug/mL

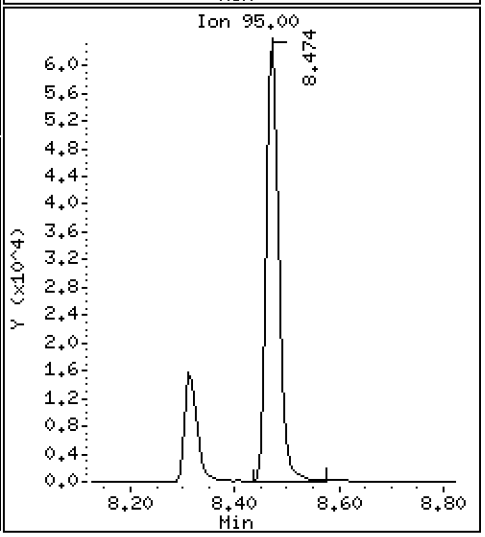


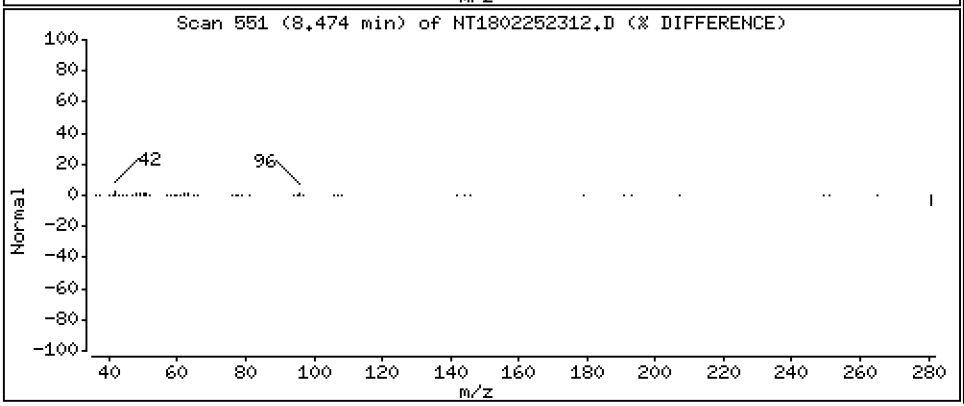












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

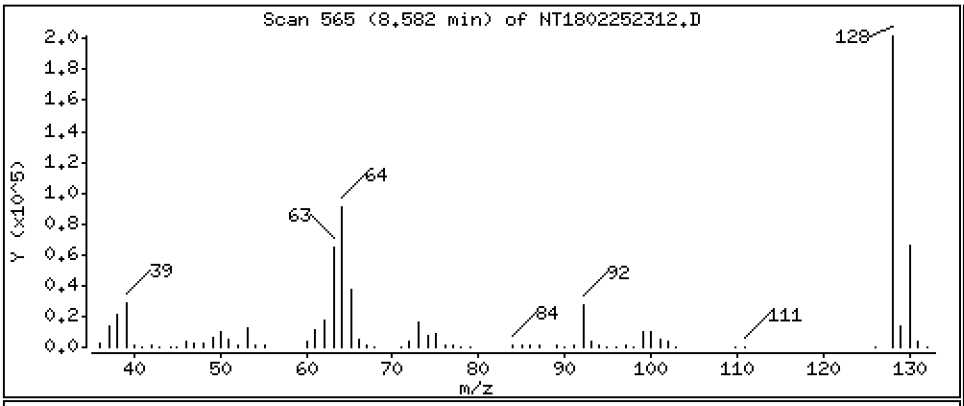
Operator: VTS

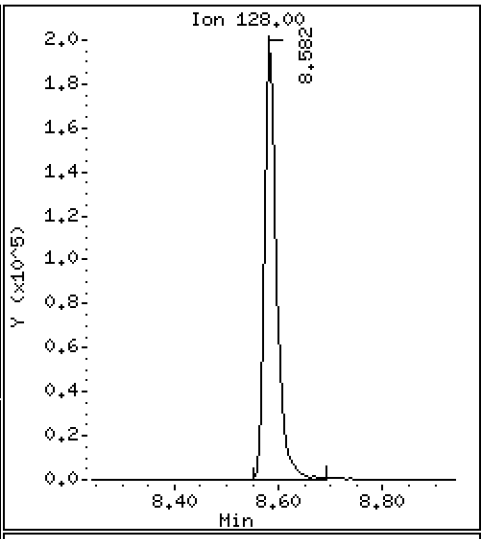
Column phase: ZB-5msi

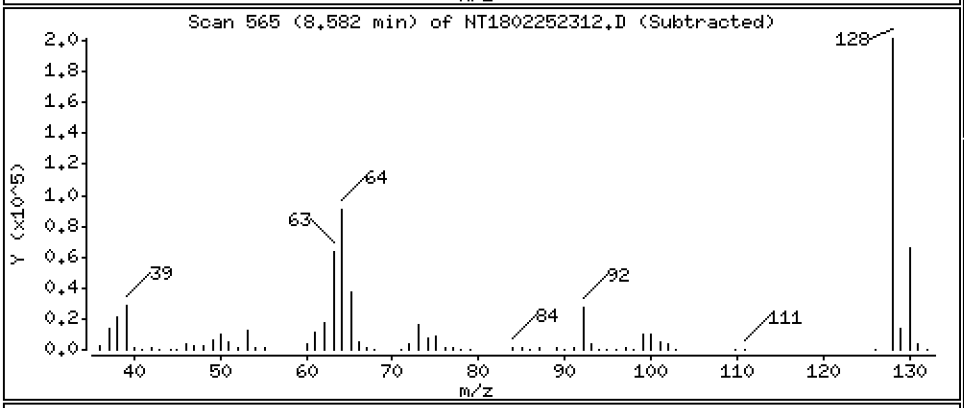
Column diameter: 0.25

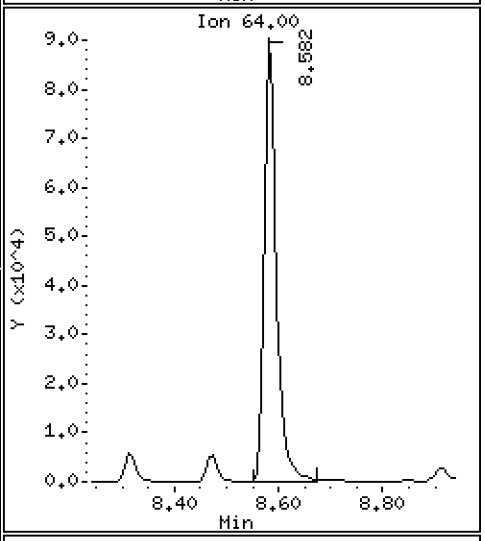
6 2-Chlorophenol

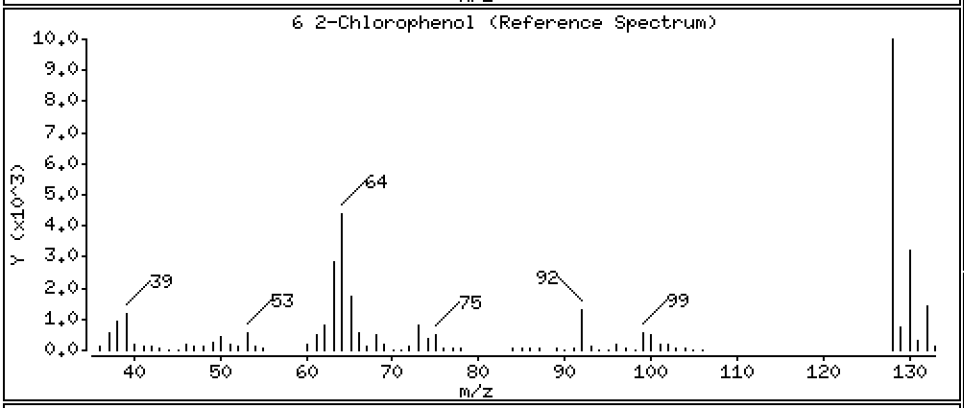
Concentration: 4.167 ug/mL

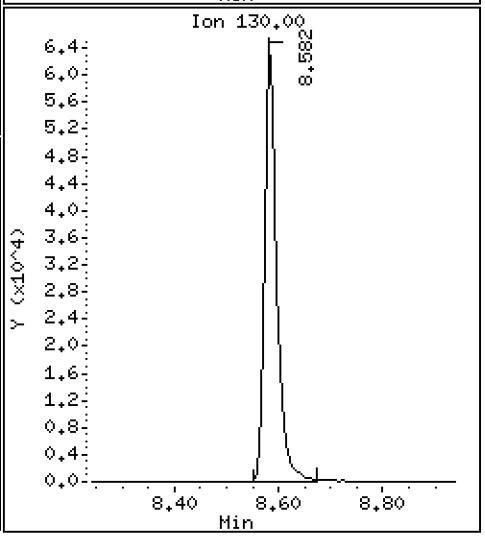


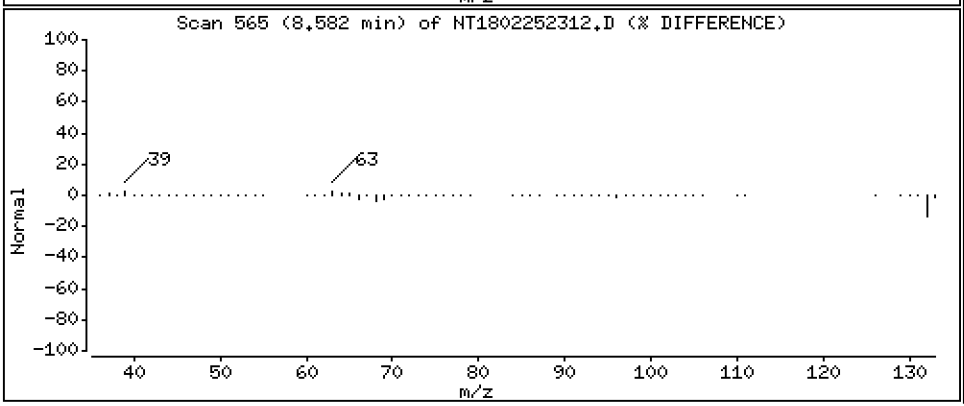












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

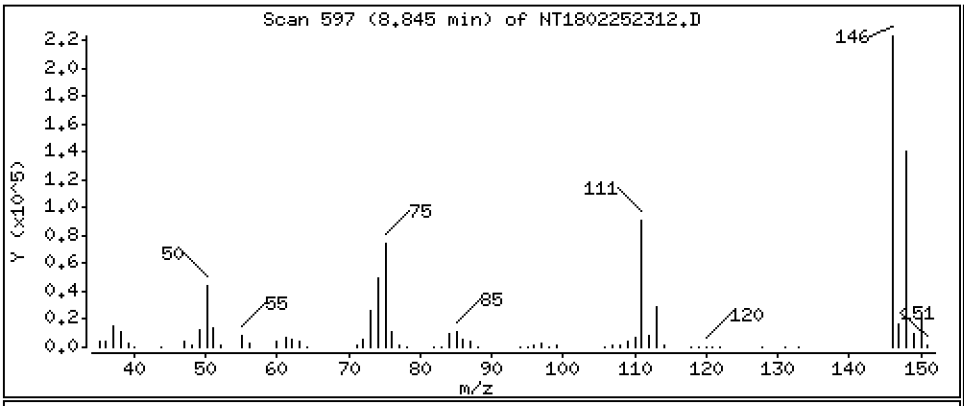
Operator: VTS

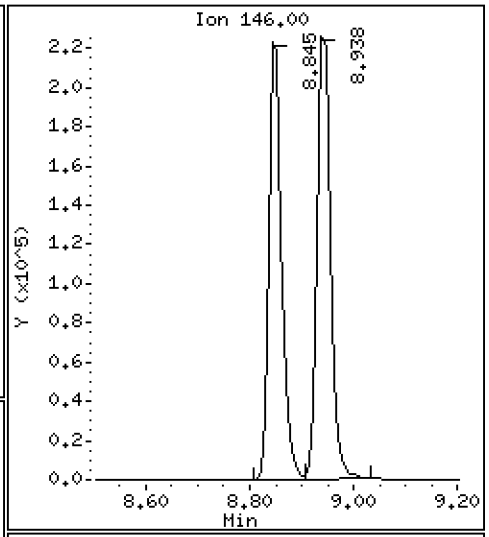
Column phase: ZB-5msi

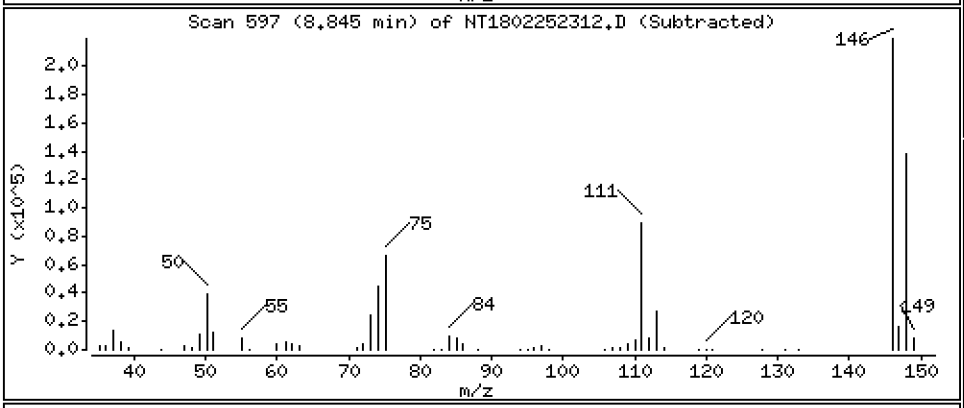
Column diameter: 0.25

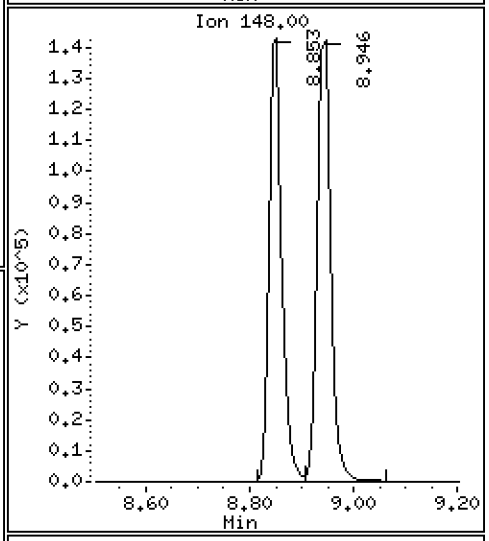
7 1,3-Dichlorobenzene

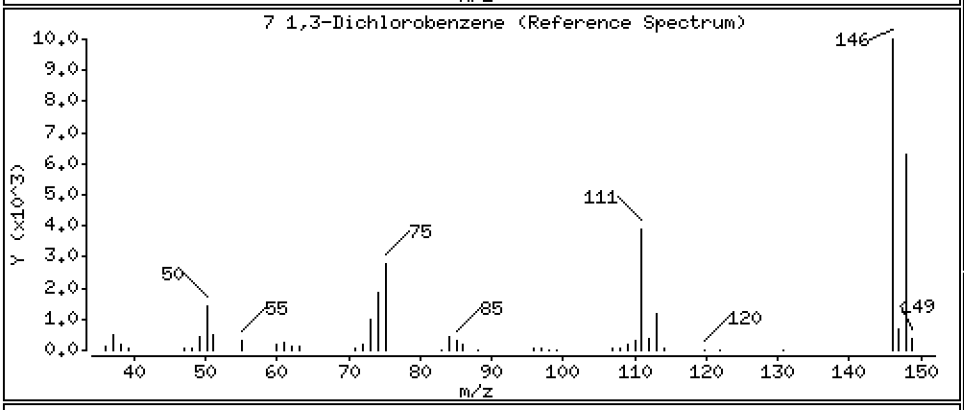
Concentration: 4.615 ug/mL

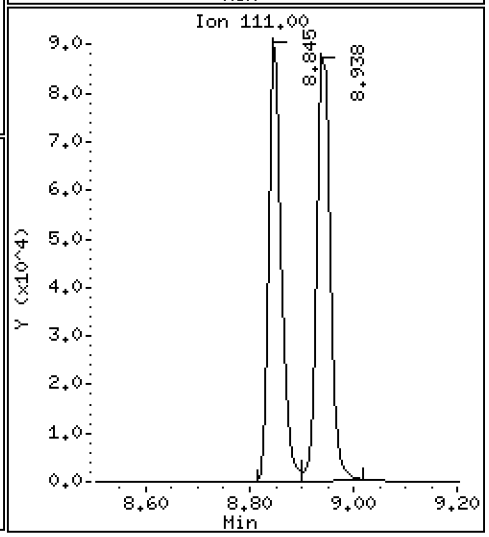


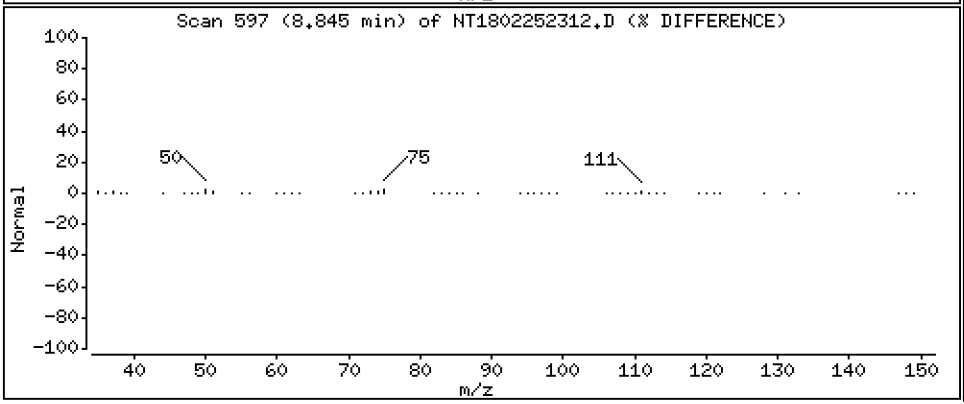












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

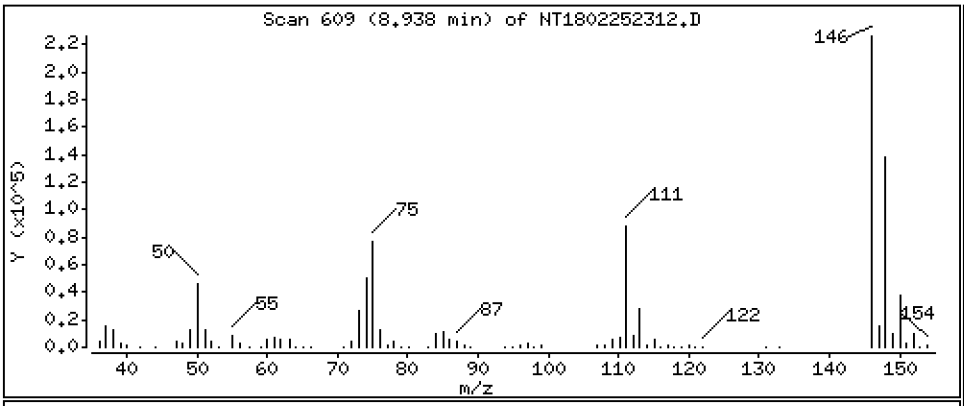
Operator: VTS

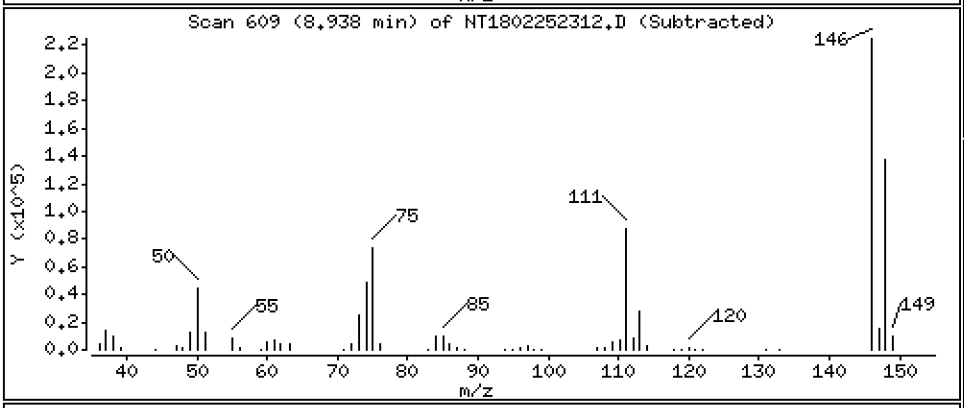
Column phase: ZB-5msi

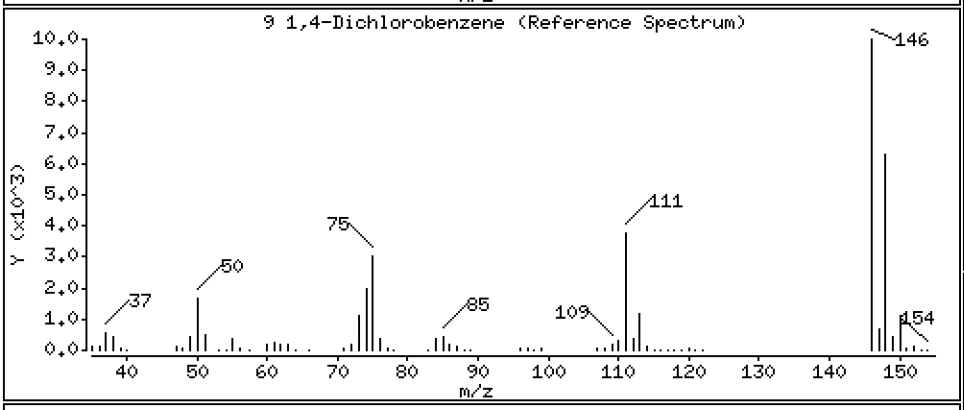
Column diameter: 0.25

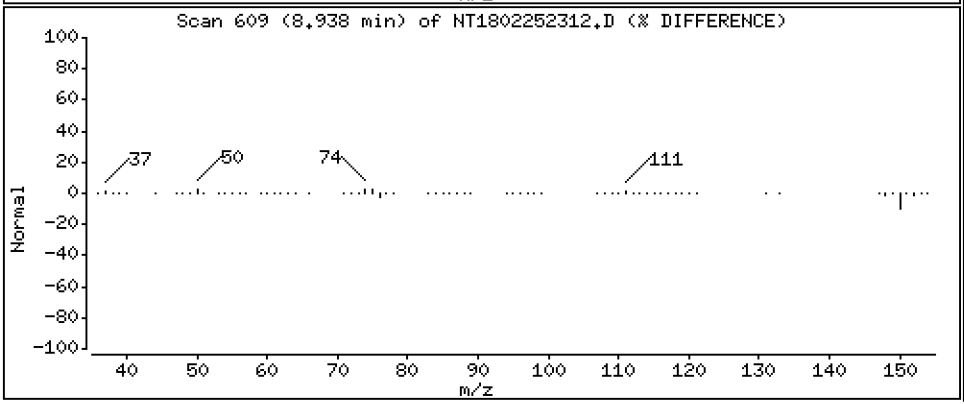
9 1,4-Dichlorobenzene

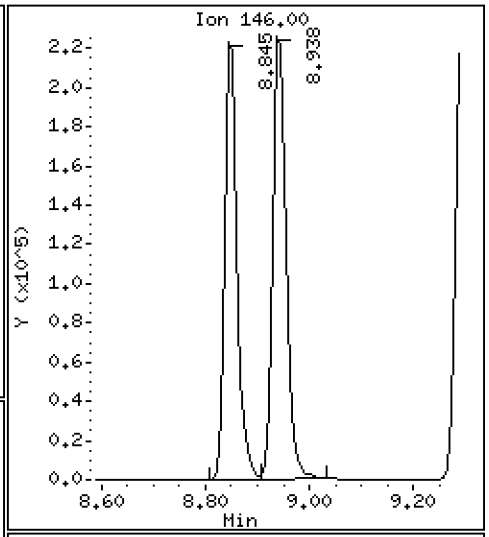
Concentration: 4.621 ug/mL

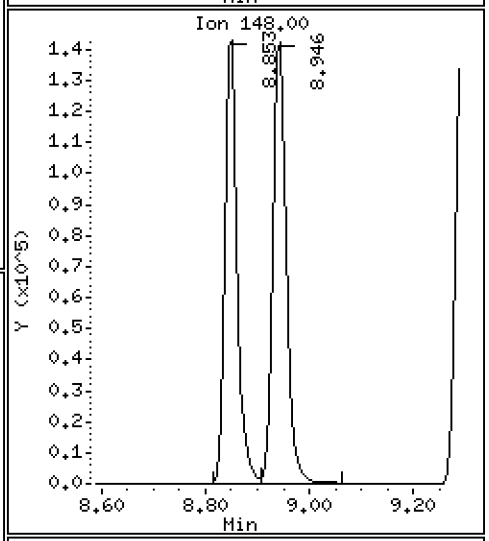


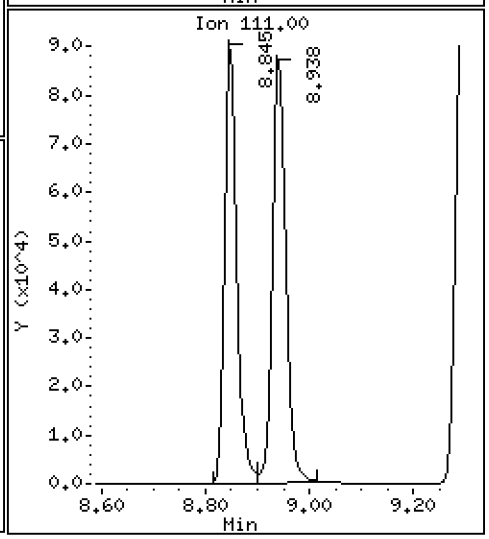












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

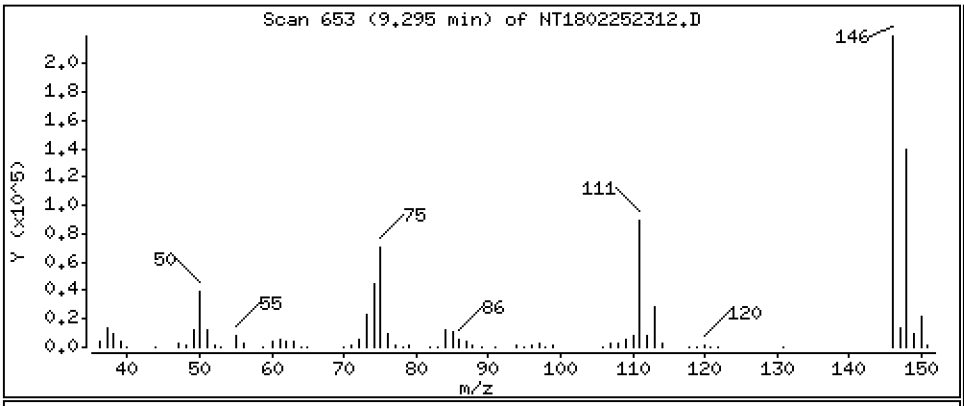
Operator: VTS

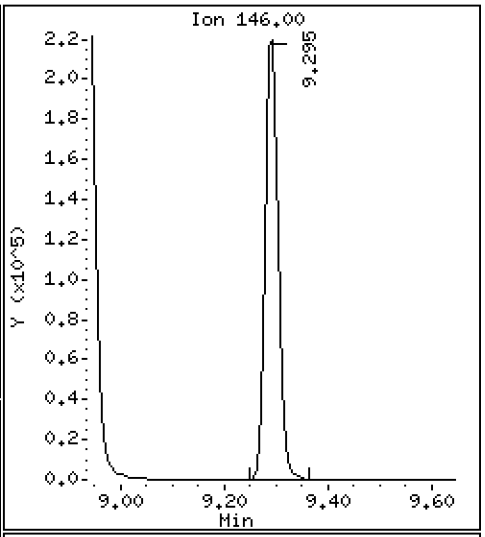
Column phase: ZB-5msi

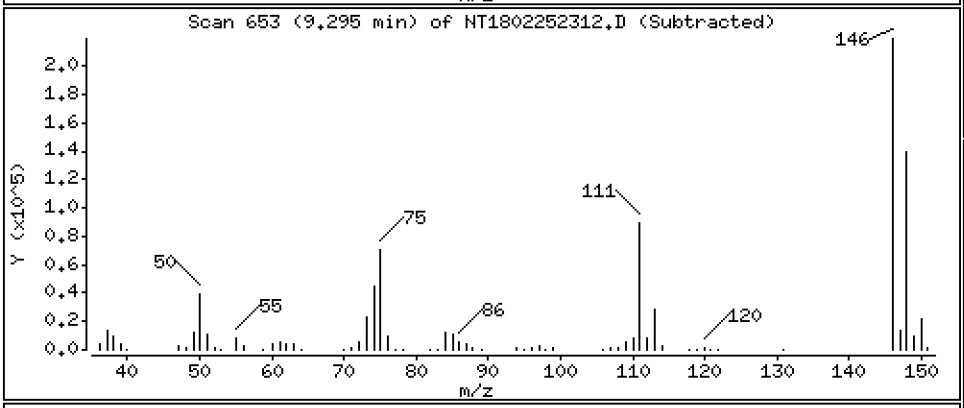
Column diameter: 0.25

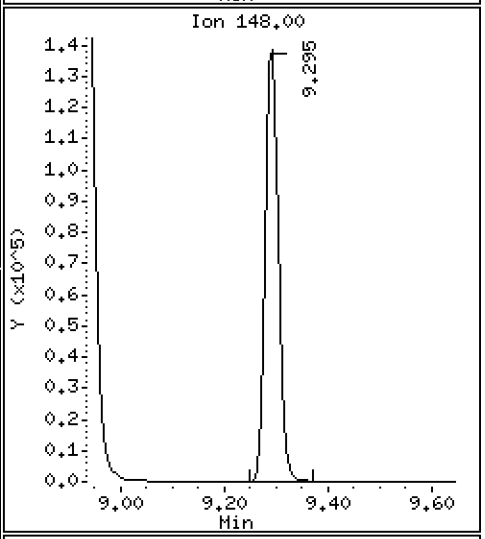
12 1,2-Dichlorobenzene

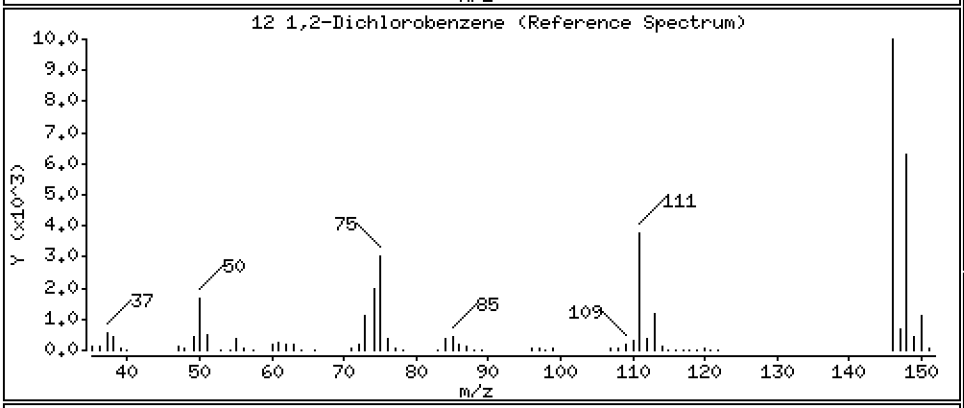
Concentration: 4.524 ug/mL

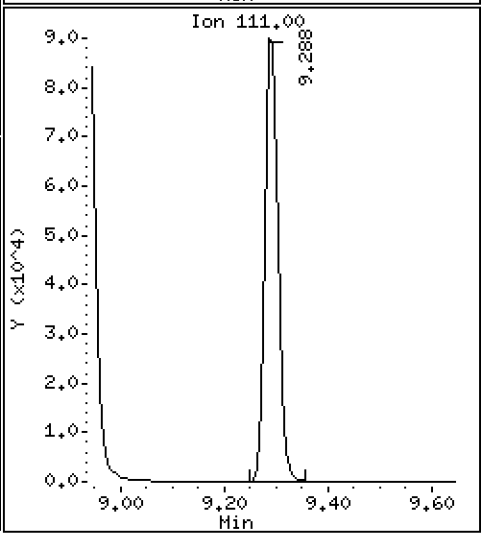


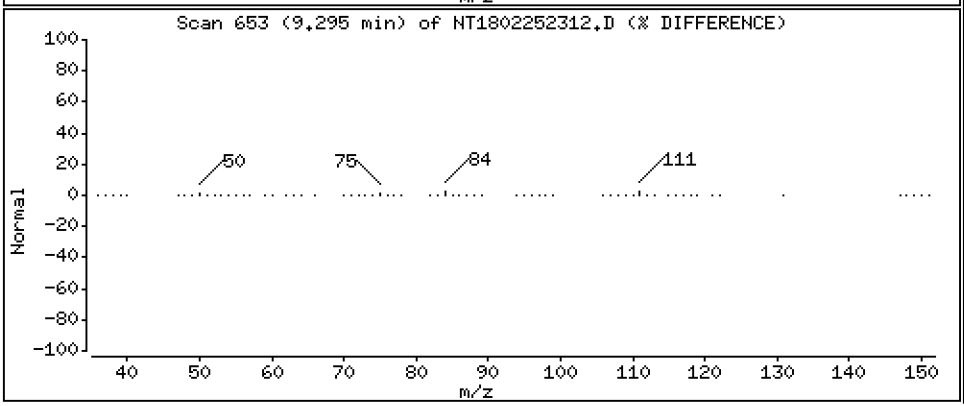












Date : 26-FEB-2023 04:06

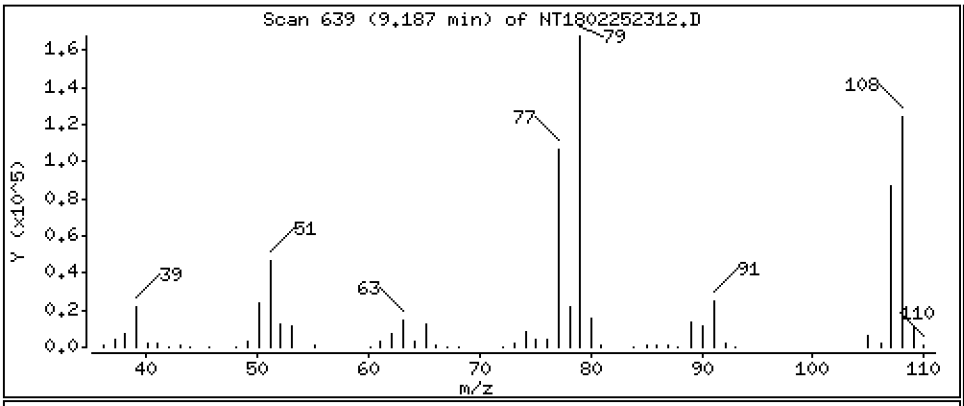
Client ID: Instrument: nt18.i

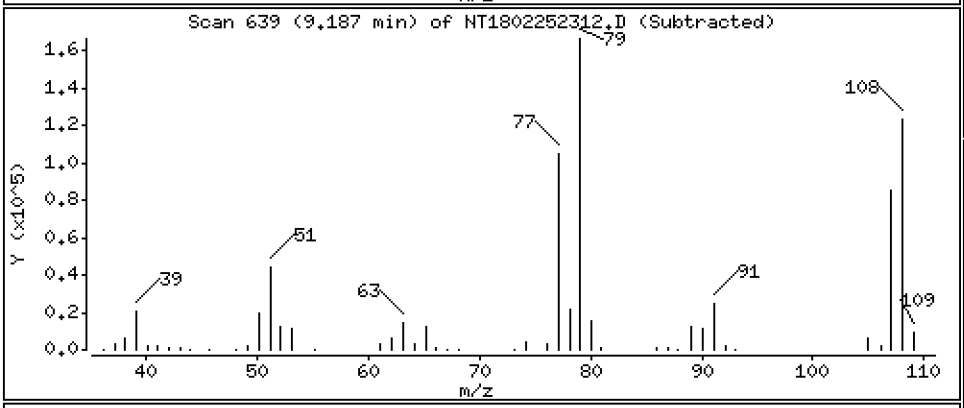
Sample Info: SLC0099-SCV1

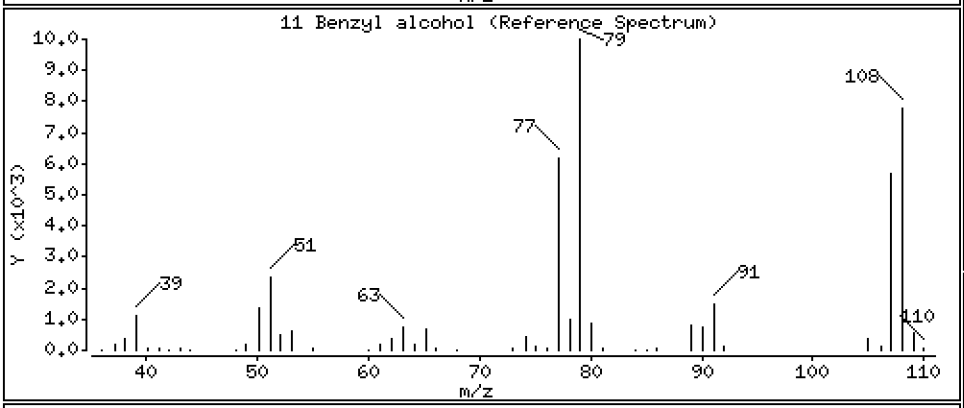
Operator: VTS

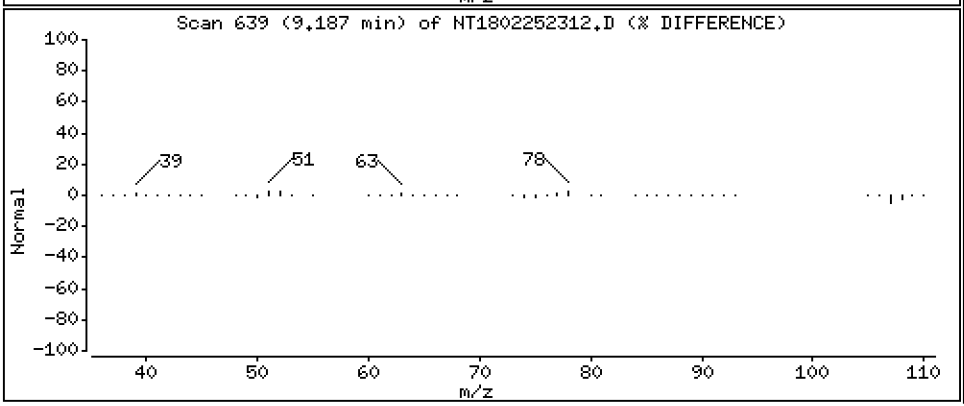
Column phase: ZB-5msi Column diameter: 0.25

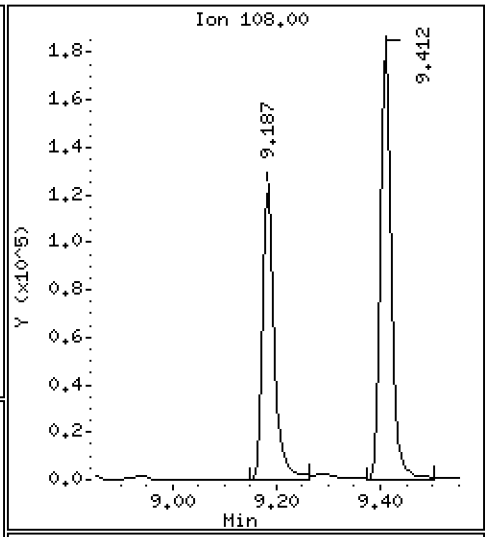
11 Benzyl alcohol Concentration: 4.677 ug/mL

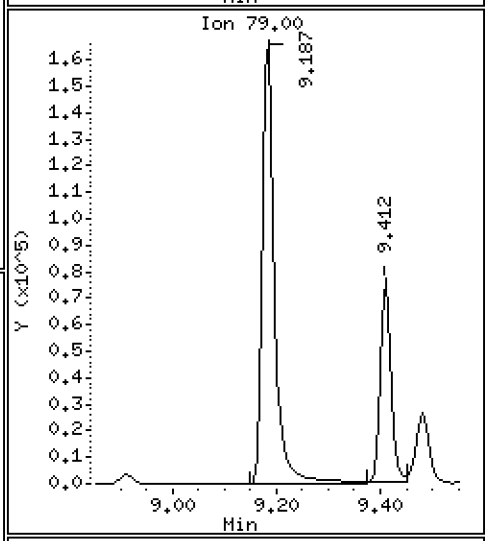


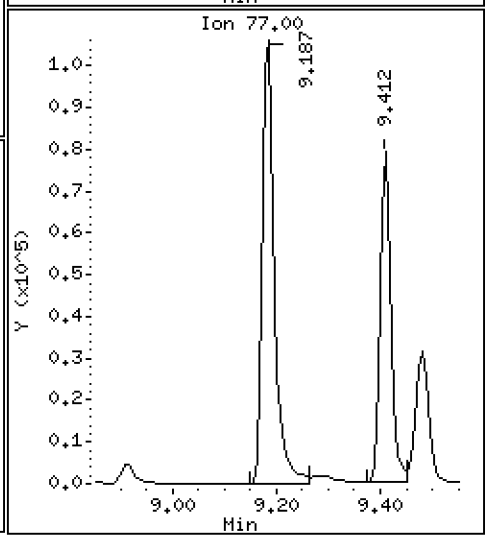












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

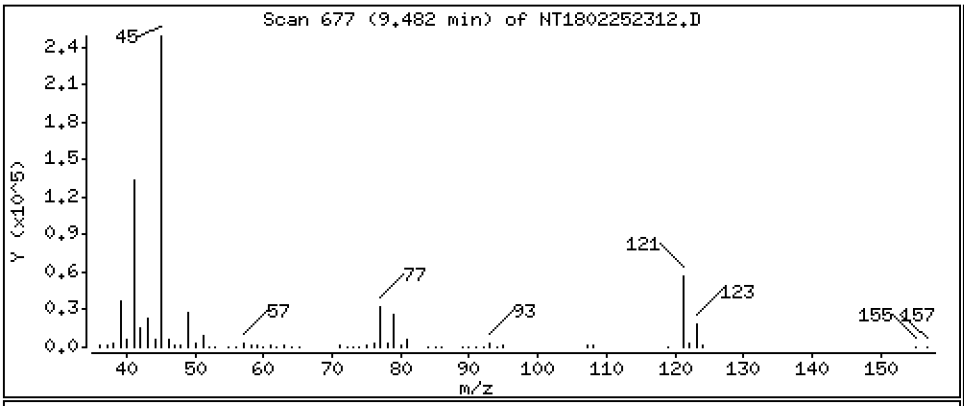
Operator: VTS

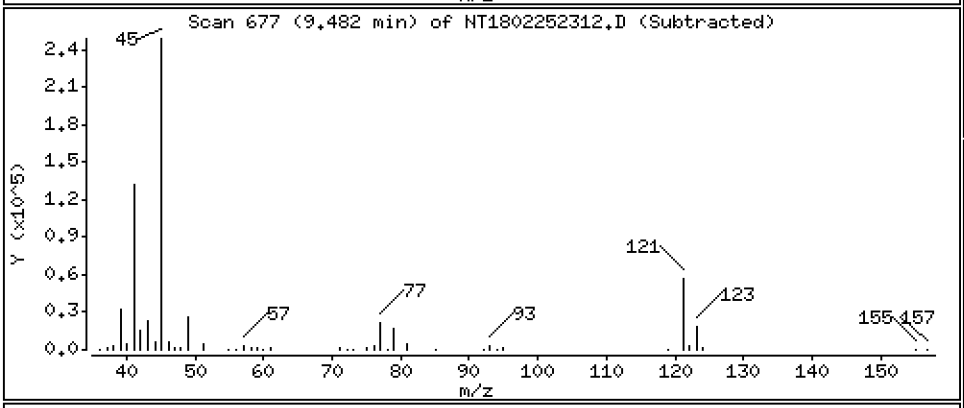
Column phase: ZB-5msi

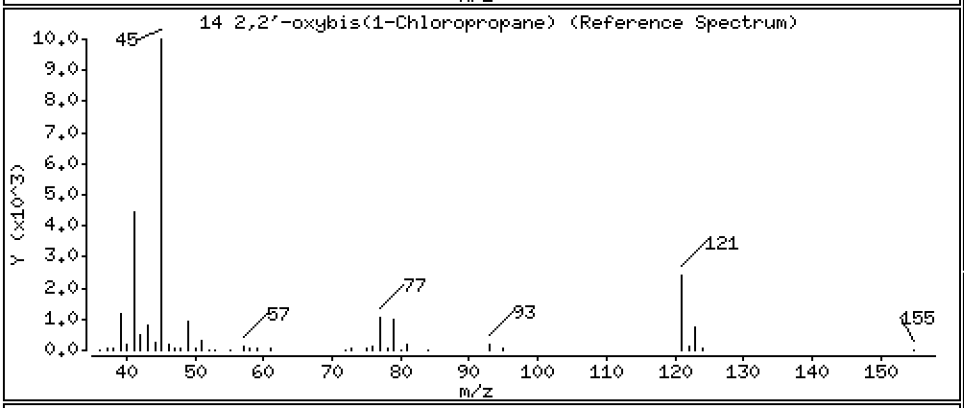
Column diameter: 0.25

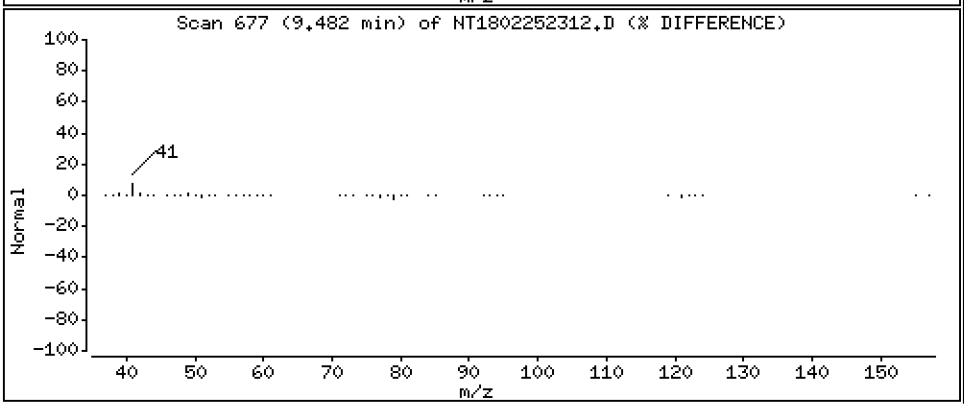
14 2,2'-oxybis(1-Chloropropane)

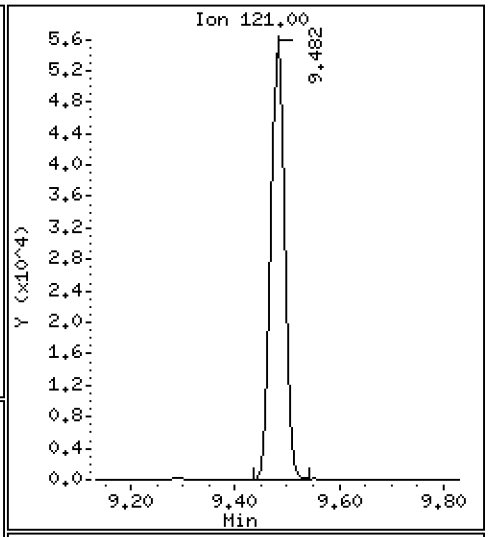
Concentration: 5.205 ug/mL

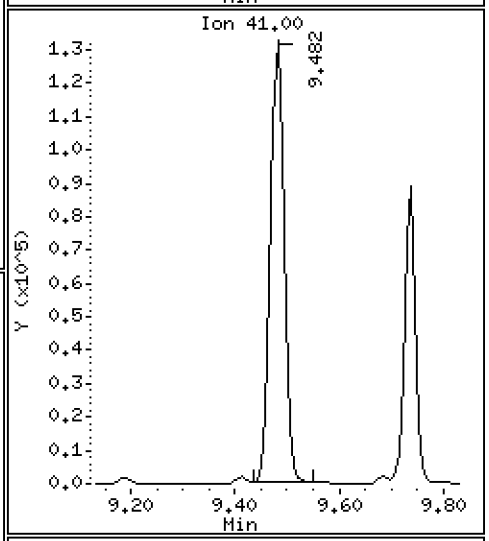


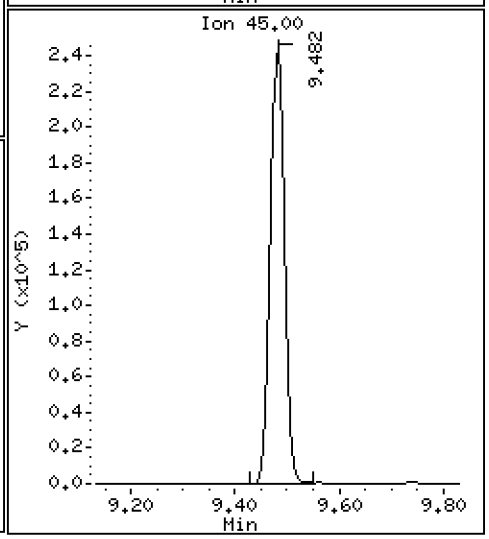












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

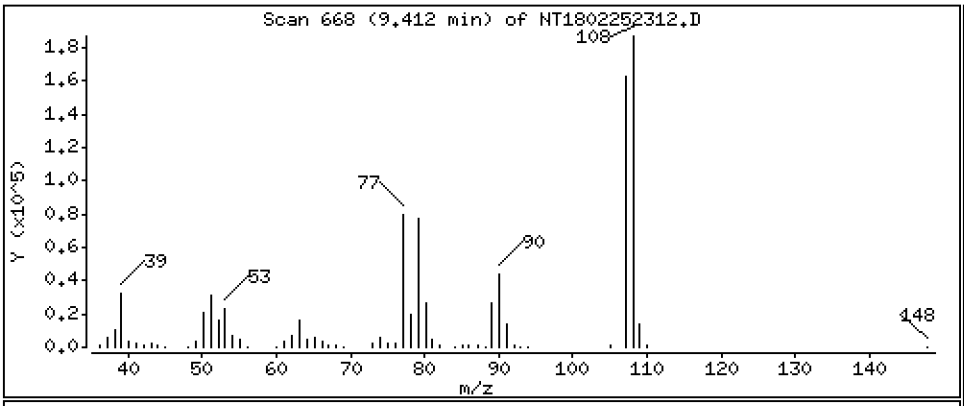
Operator: VTS

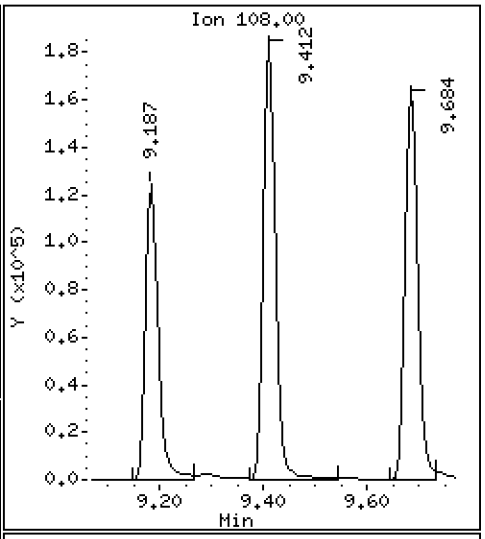
Column phase: ZB-5msi

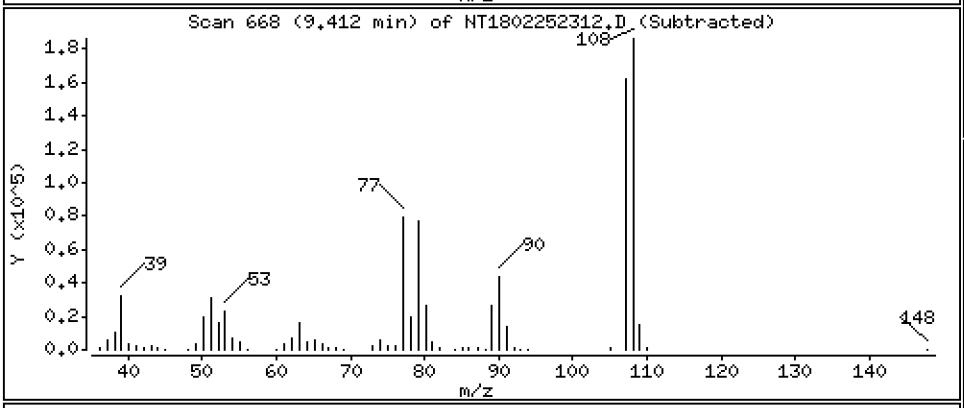
Column diameter: 0.25

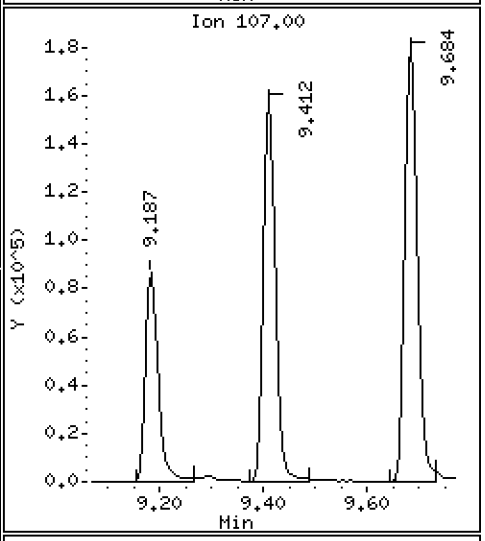
13 2-Methylphenol

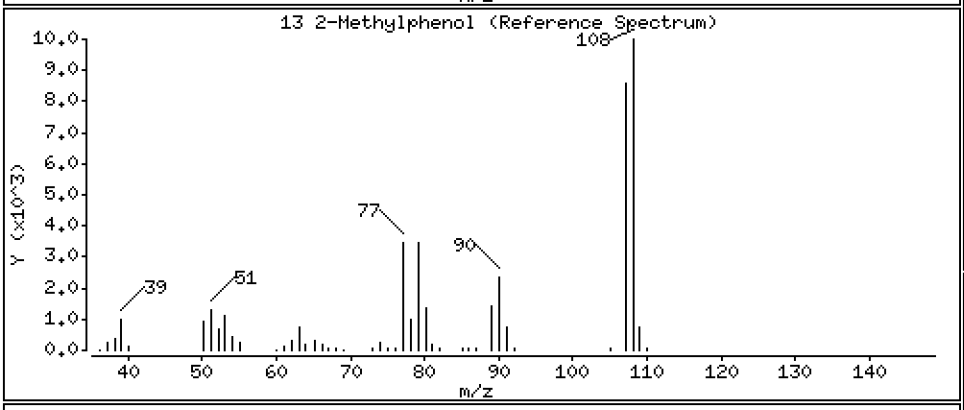
Concentration: 3.995 ug/mL

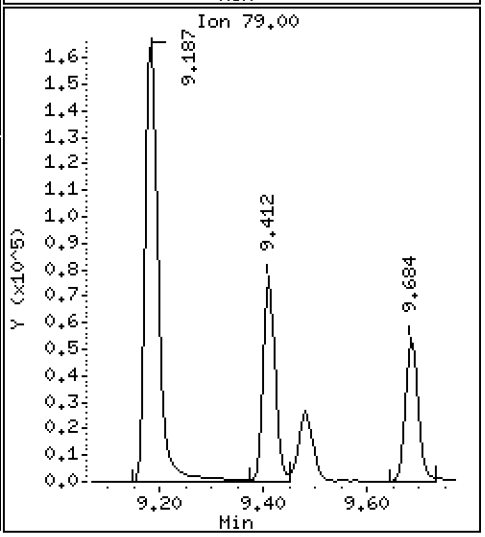


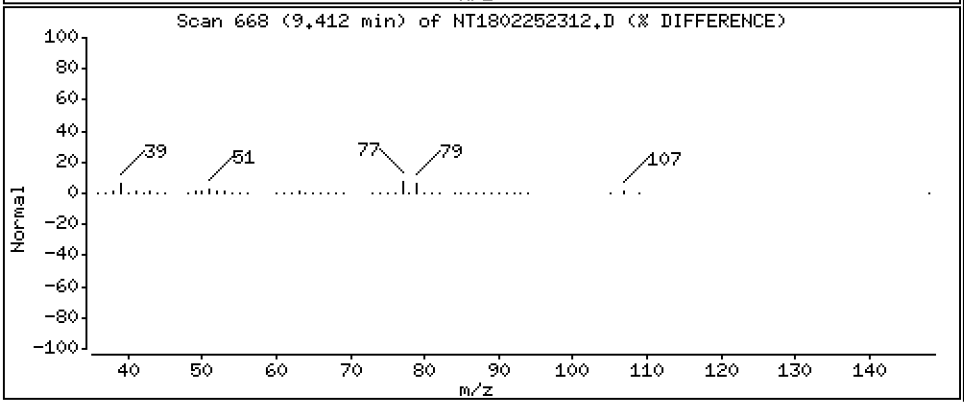












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

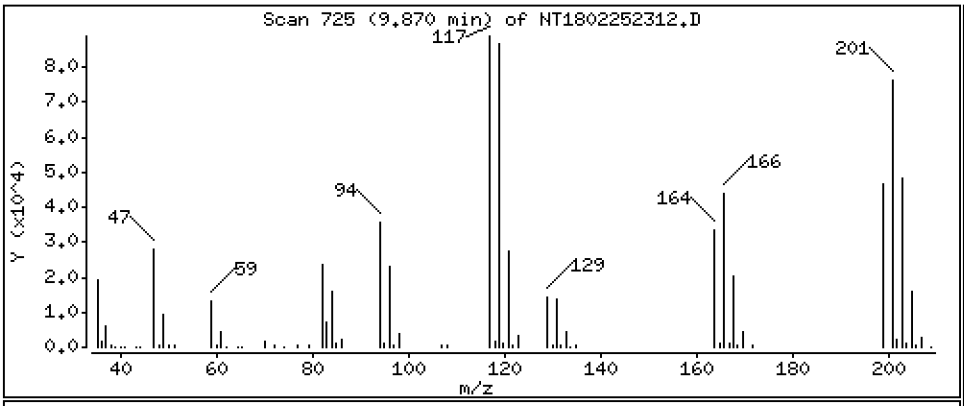
Operator: VTS

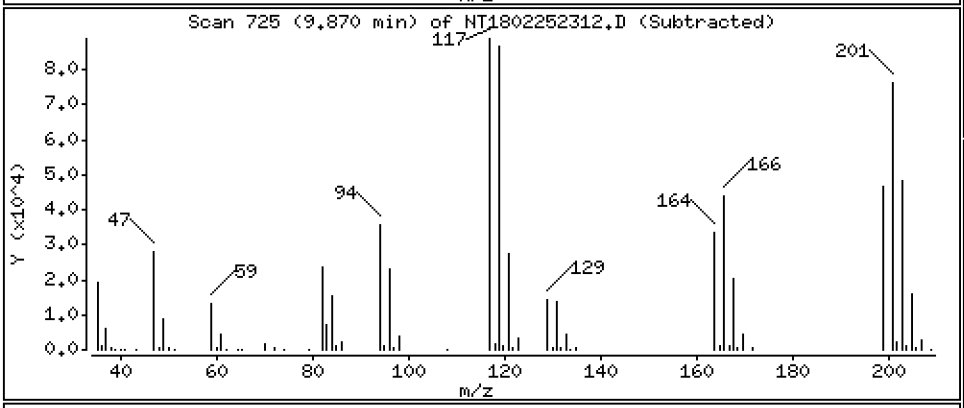
Column phase: ZB-5msi

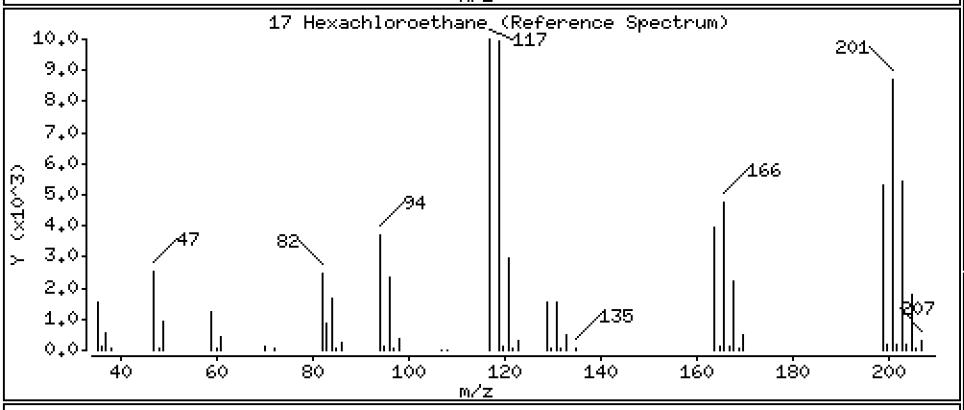
Column diameter: 0.25

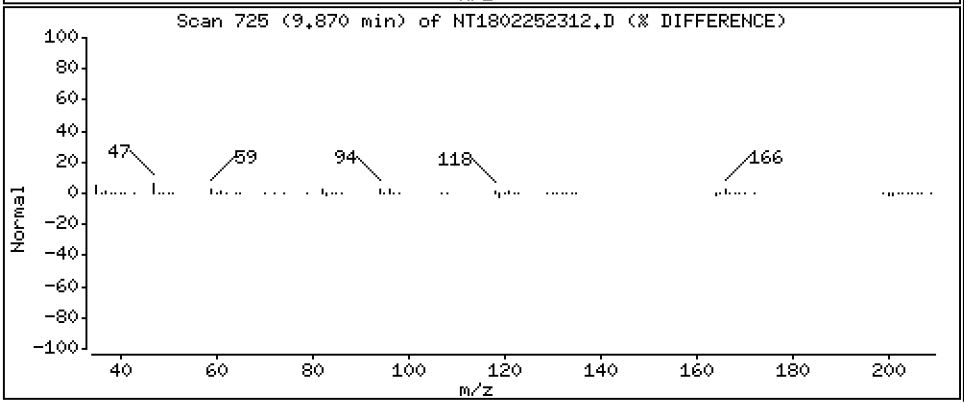
17 Hexachloroethane

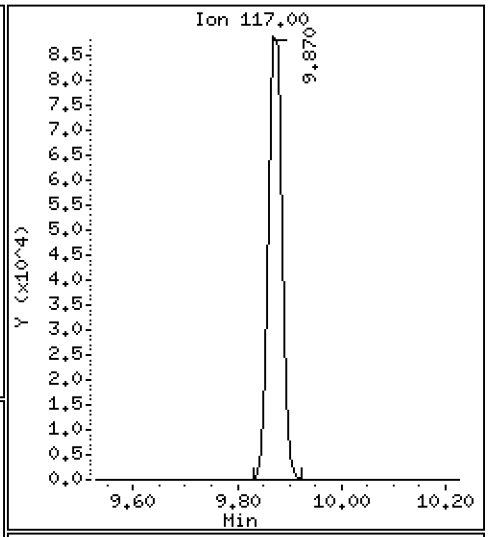
Concentration: 4.769 ug/mL

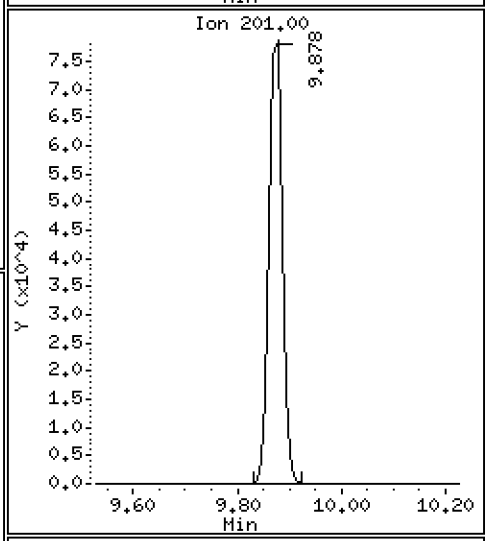


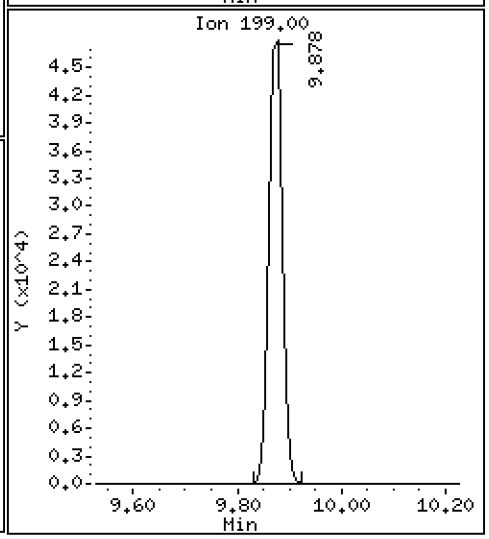












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

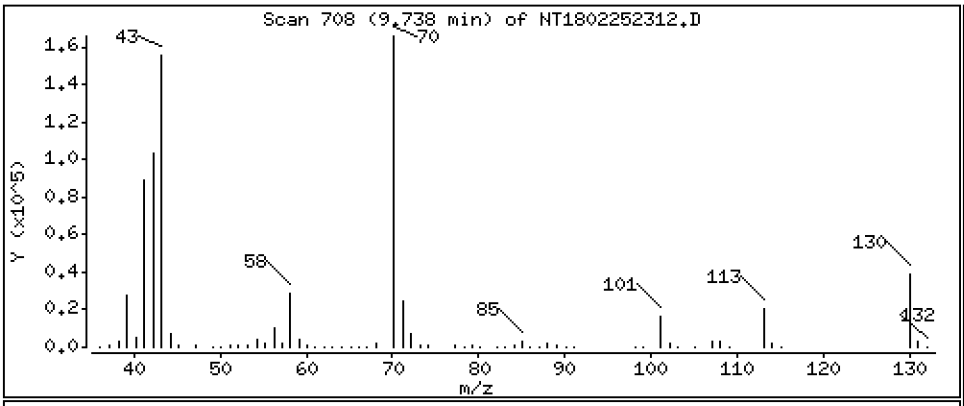
Operator: VTS

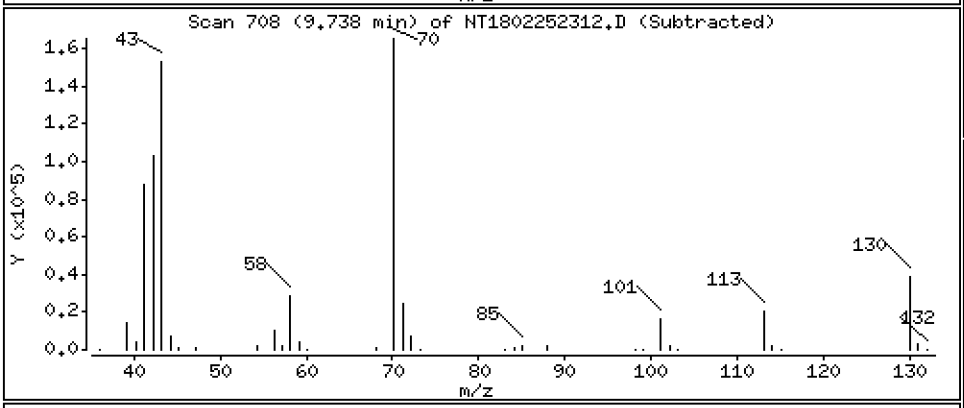
Column phase: ZB-5msi

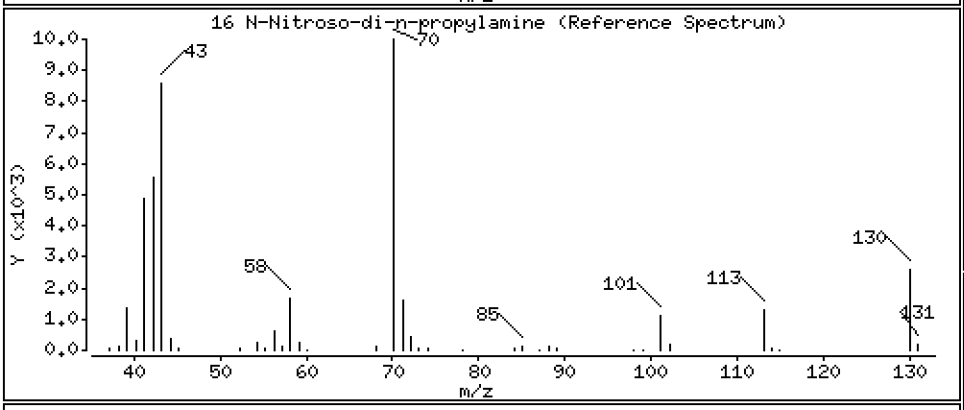
Column diameter: 0.25

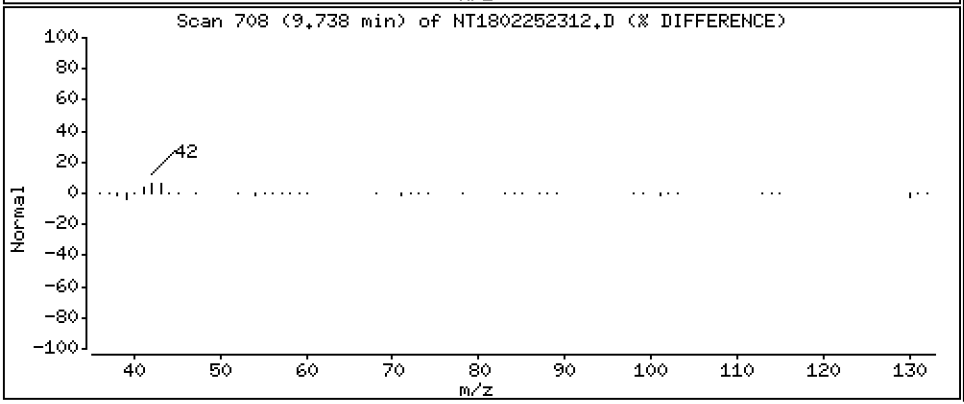
16 N-Nitroso-di-n-propylamine

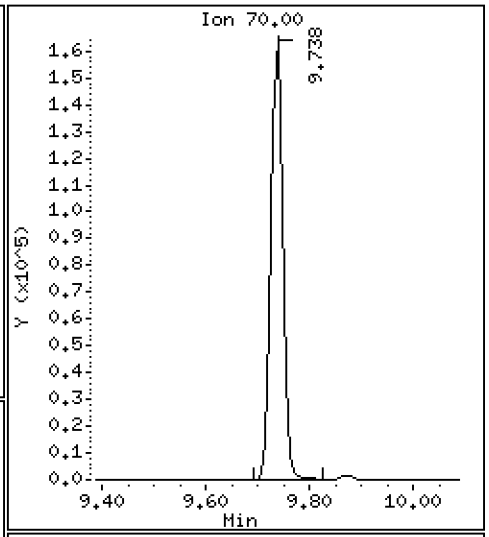
Concentration: 4.799 ug/mL

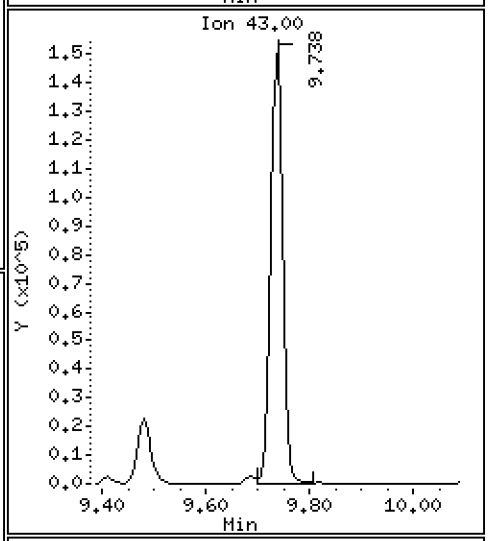


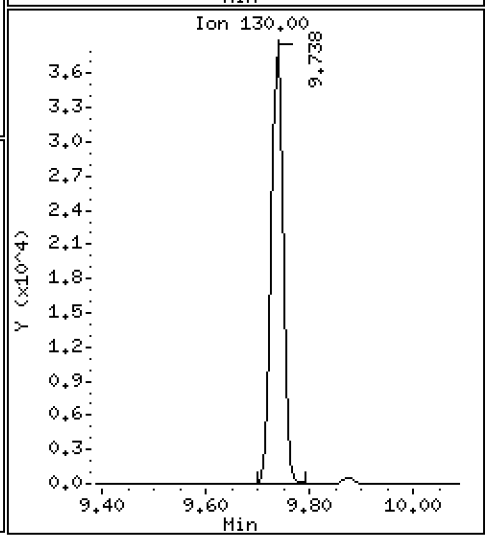












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

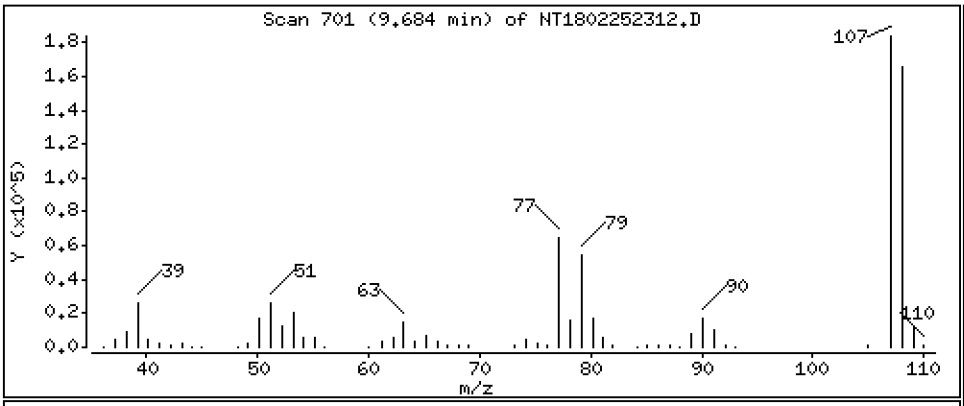
Operator: VTS

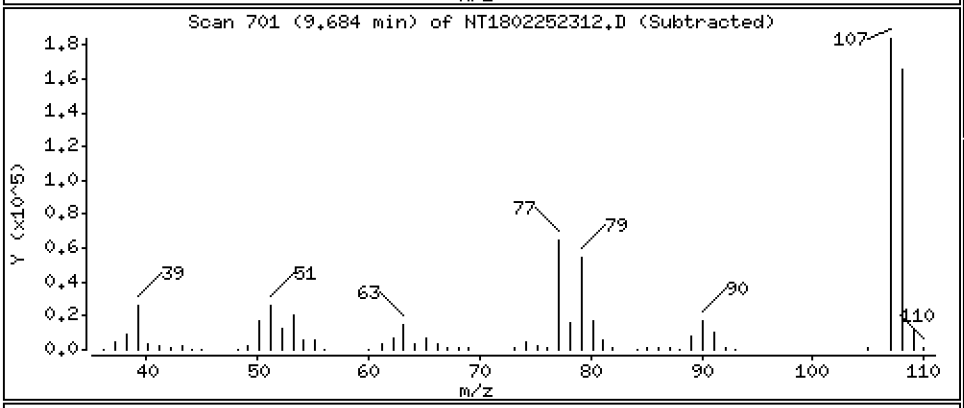
Column phase: ZB-5msi

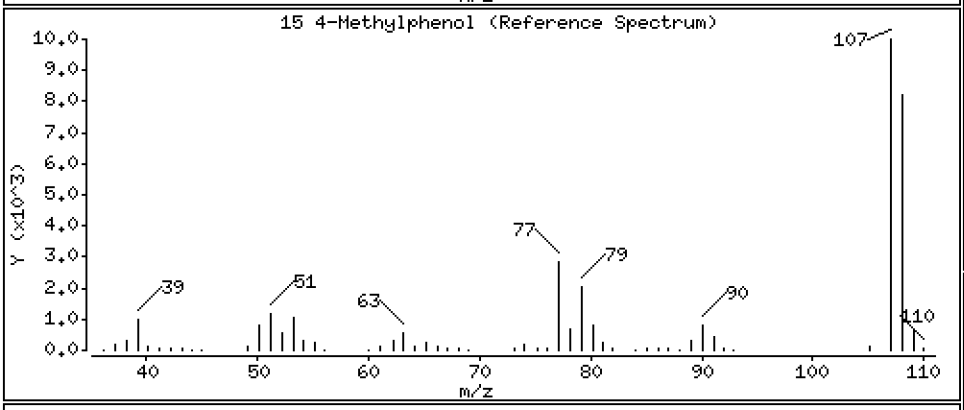
Column diameter: 0.25

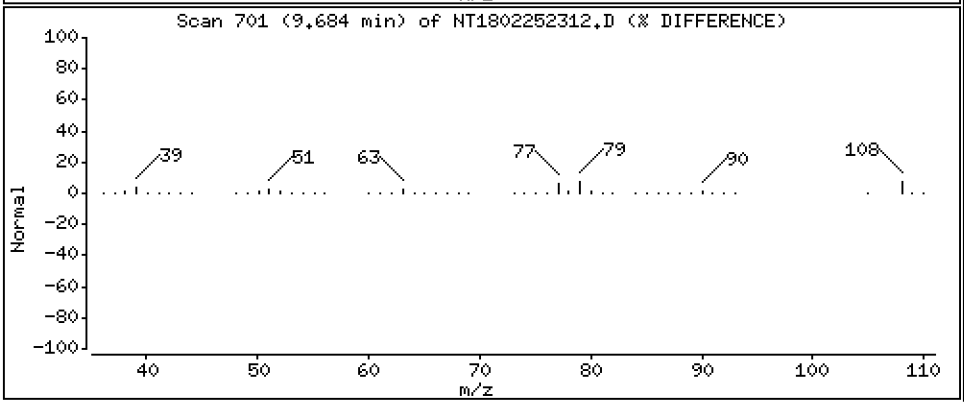
15 4-Methylphenol

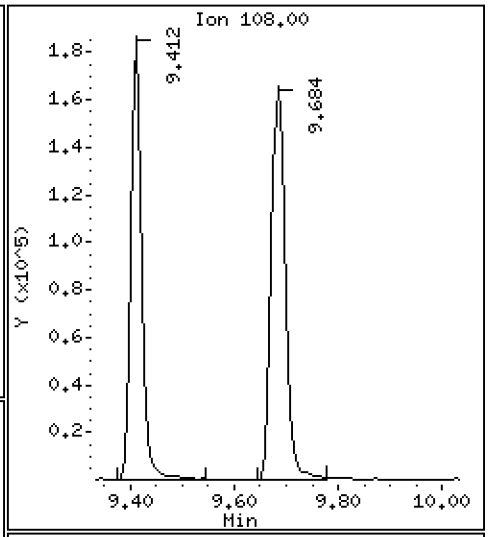
Concentration: 4.106 ug/mL

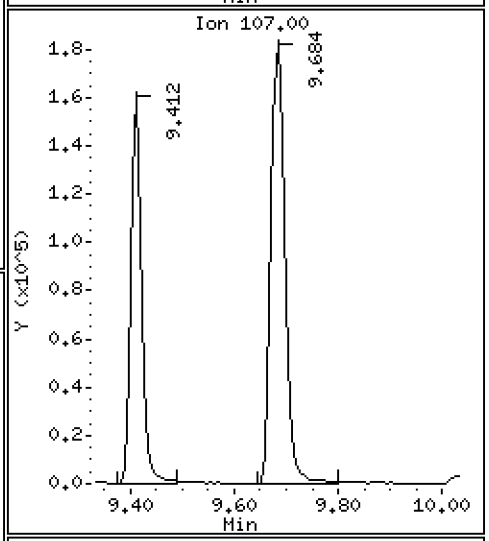


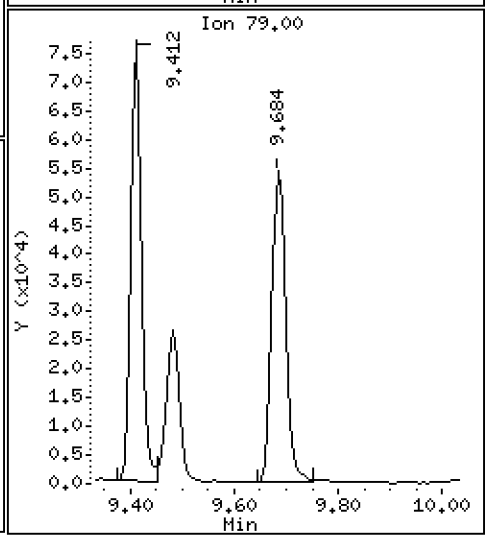












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

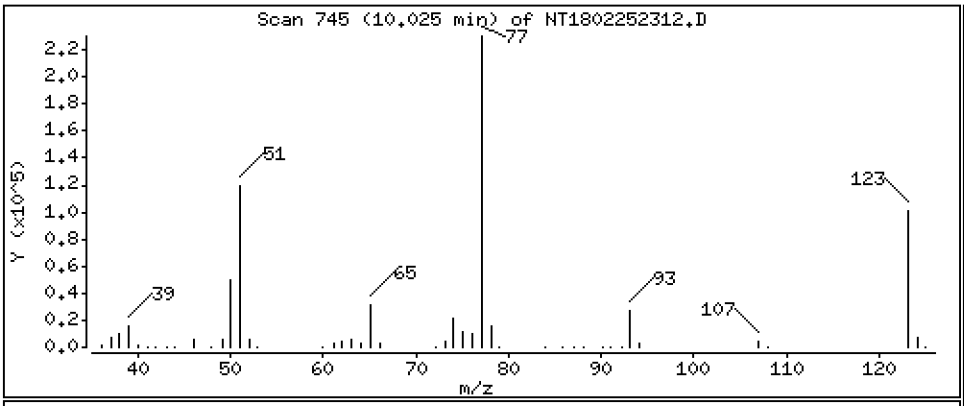
Operator: VTS

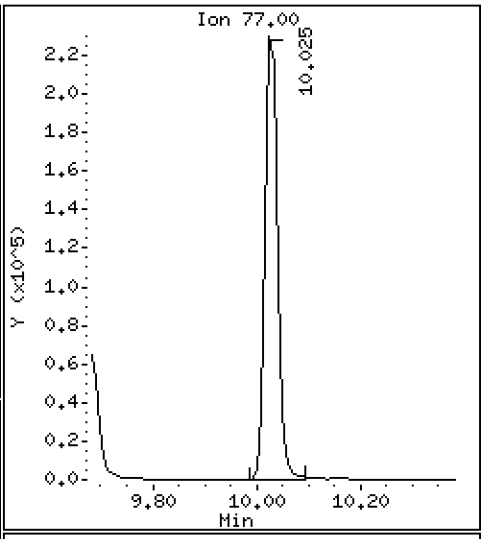
Column phase: ZB-5msi

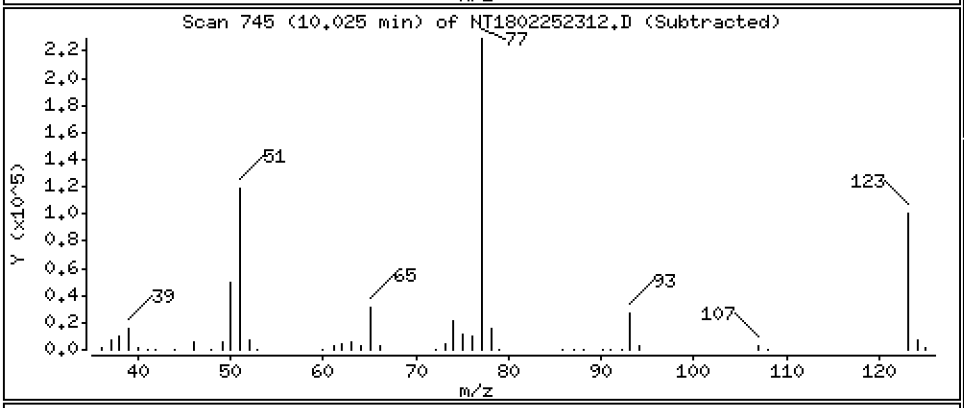
Column diameter: 0.25

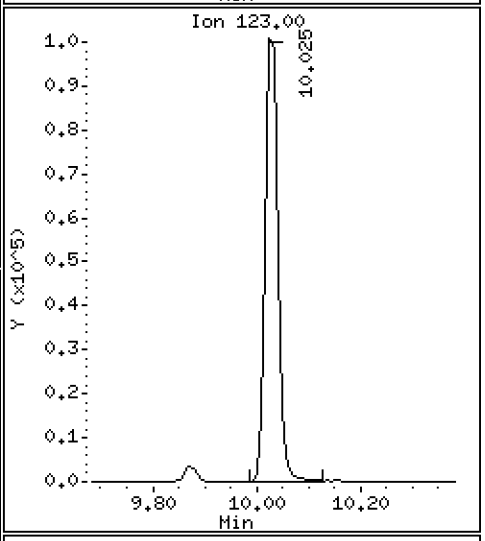
19 Nitrobenzene

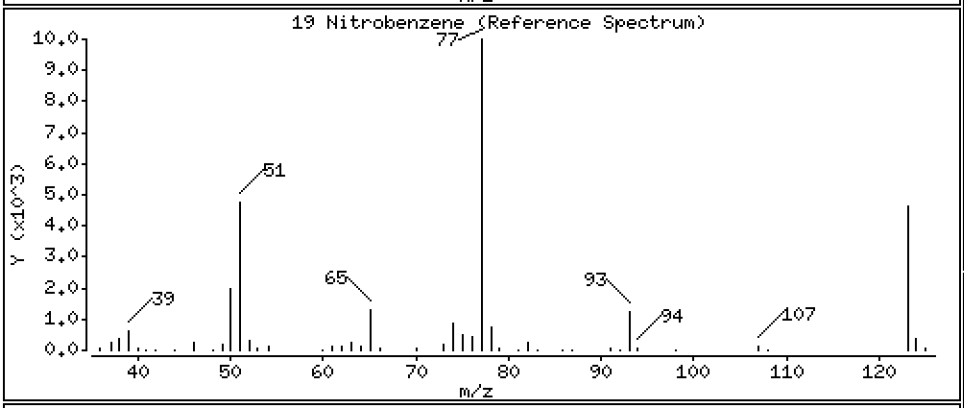
Concentration: 4.692 ug/mL

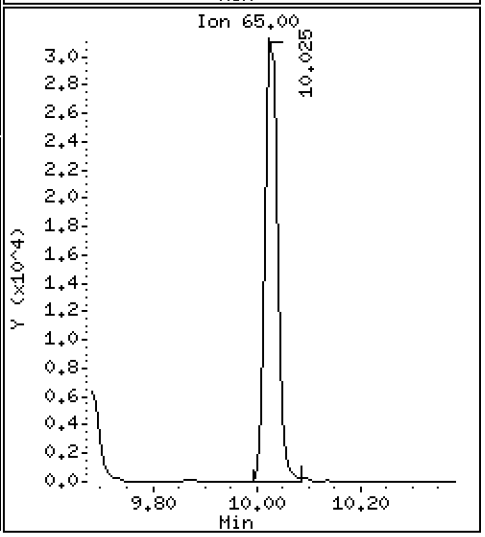


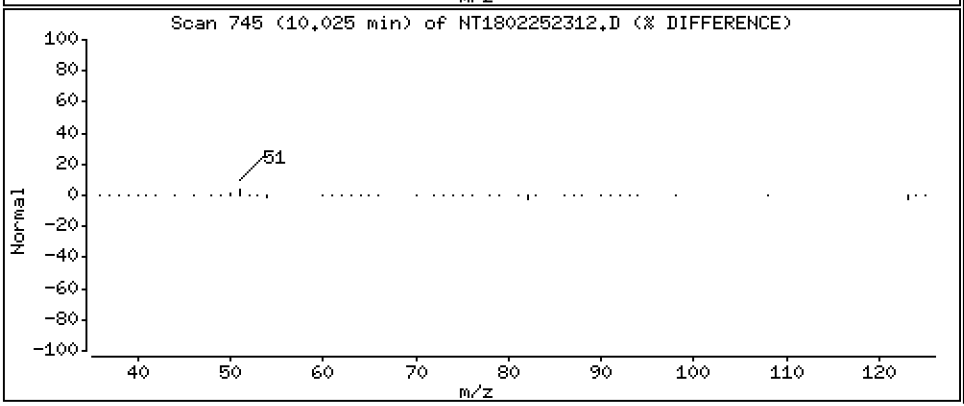












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

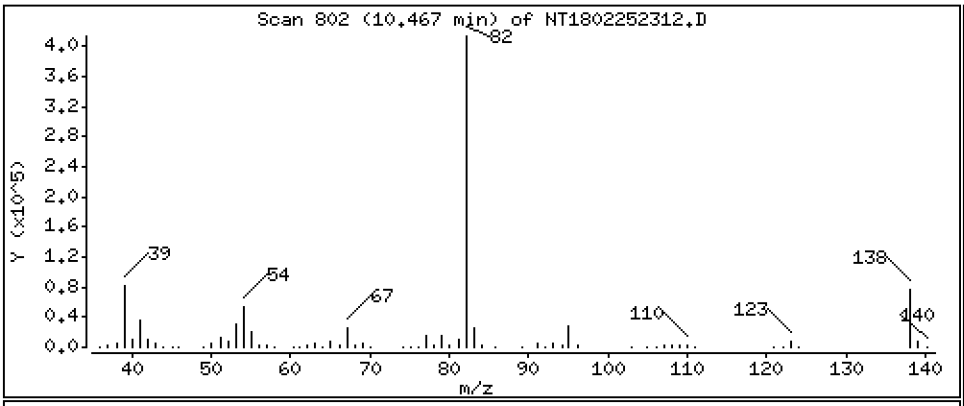
Operator: VTS

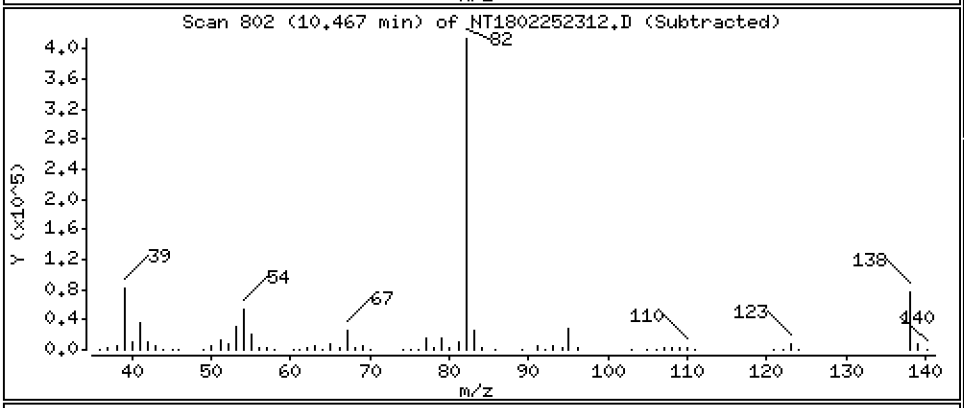
Column phase: ZB-5msi

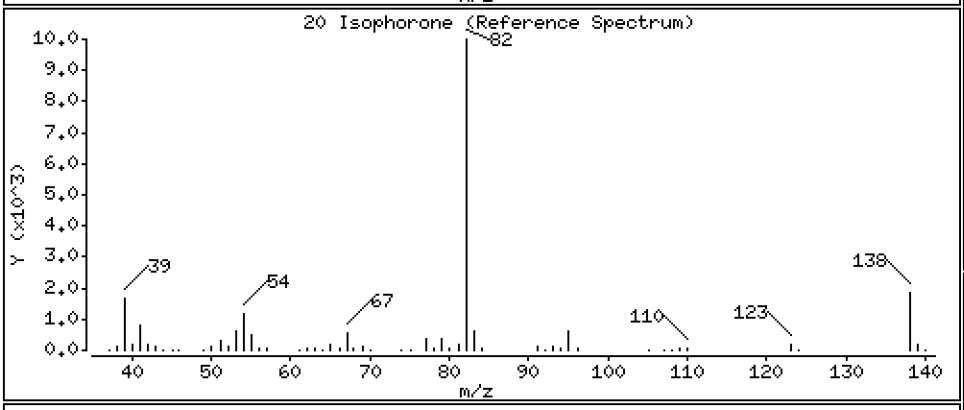
Column diameter: 0.25

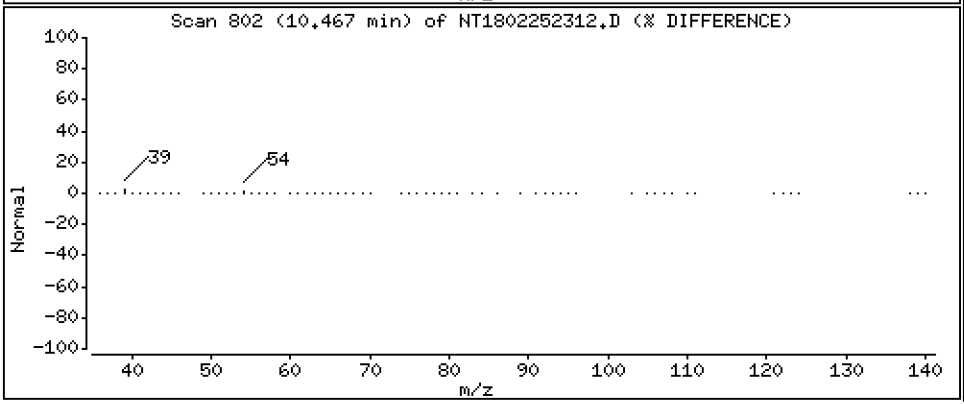
20 Isophorone

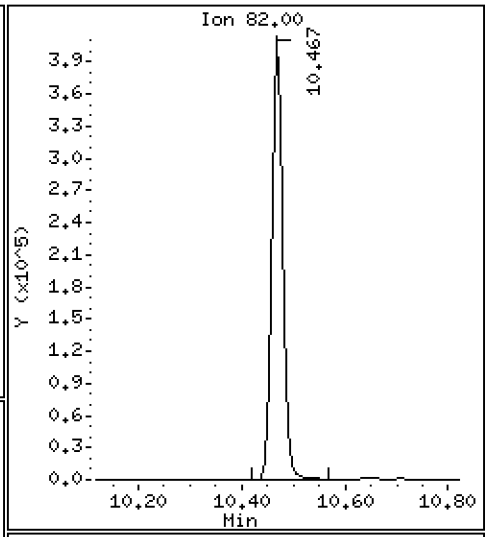
Concentration: 6.433 ug/mL

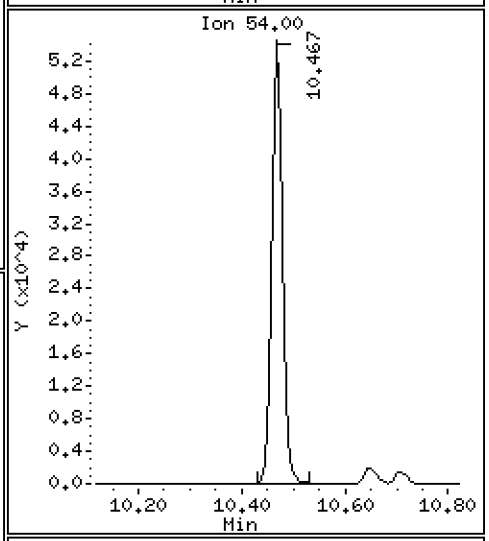


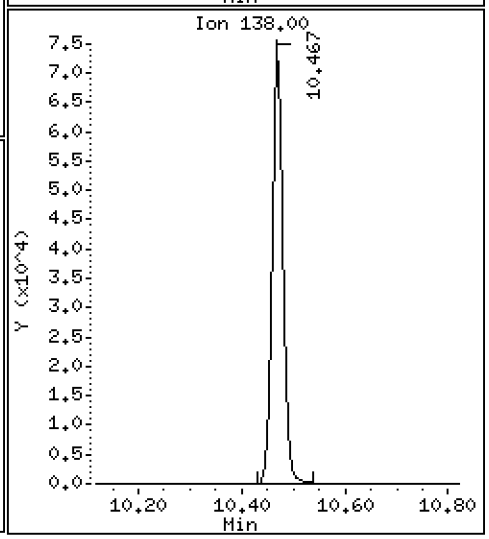












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

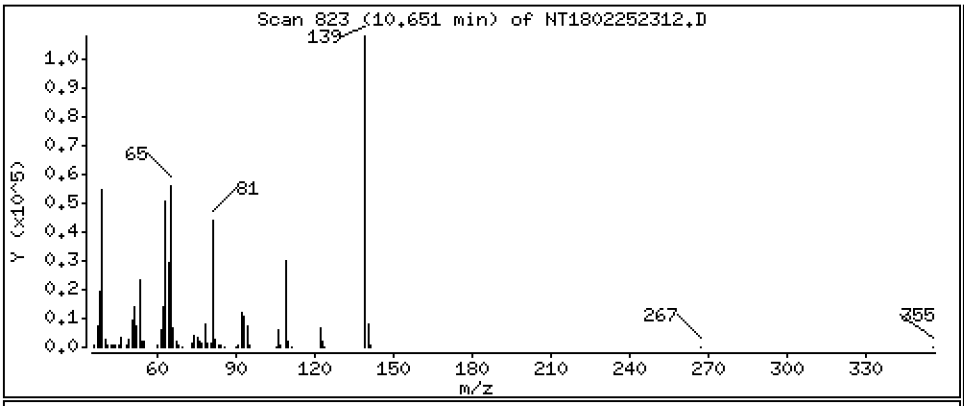
Operator: VTS

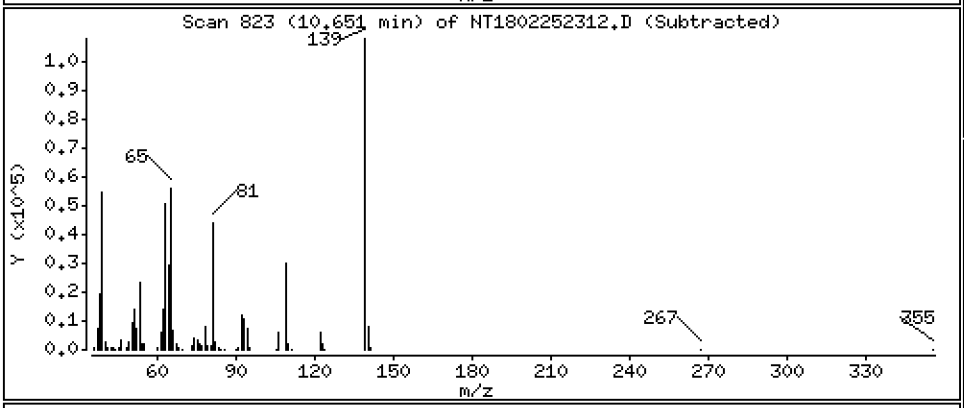
Column phase: ZB-5msi

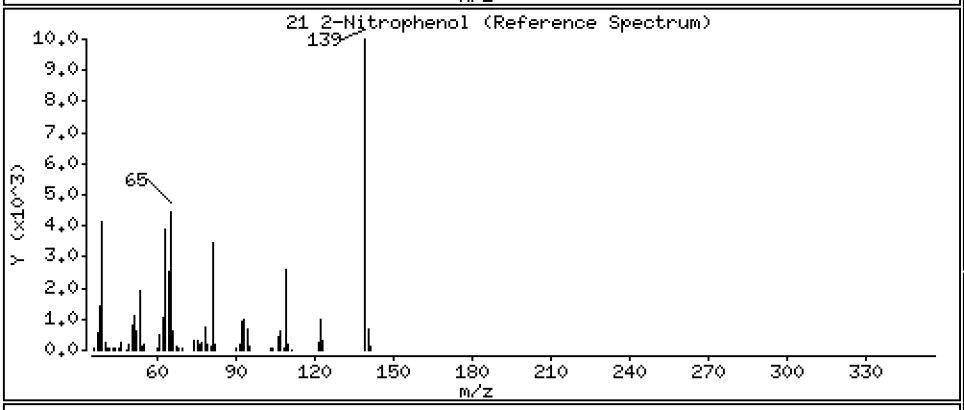
Column diameter: 0.25

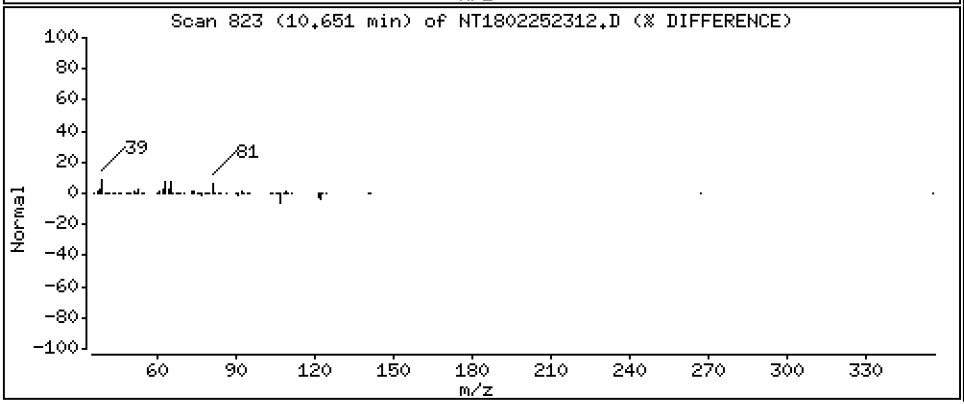
21 2-Nitrophenol

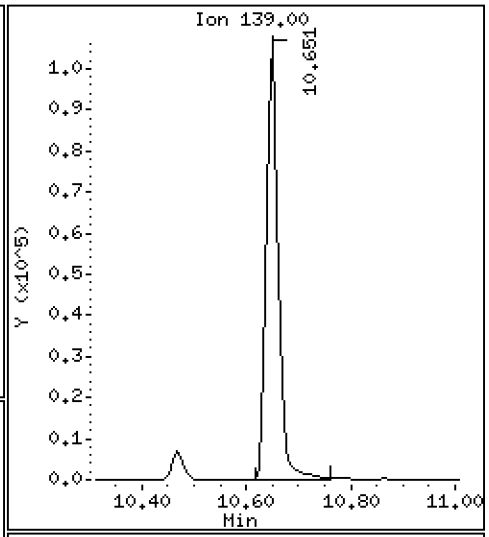
Concentration: 4.439 ug/mL

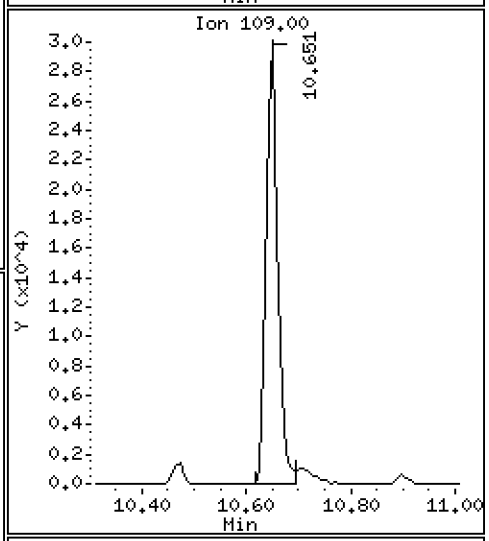


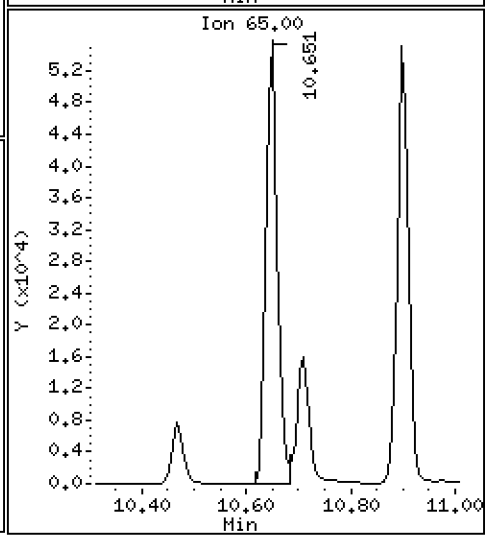












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

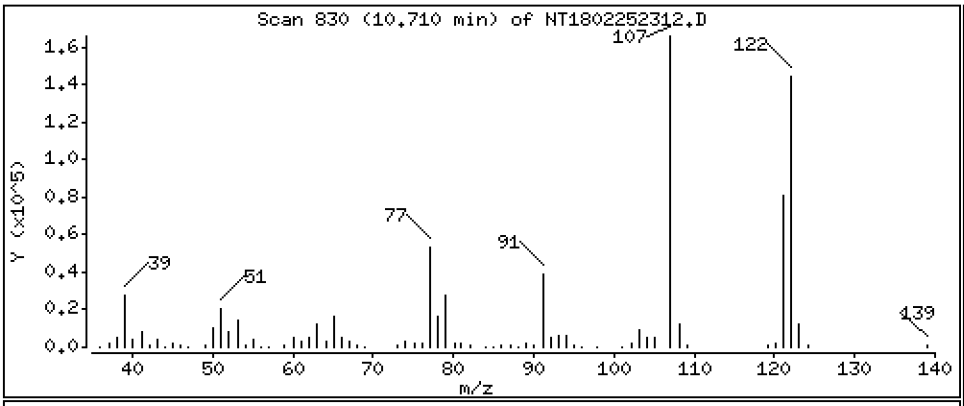
Operator: VTS

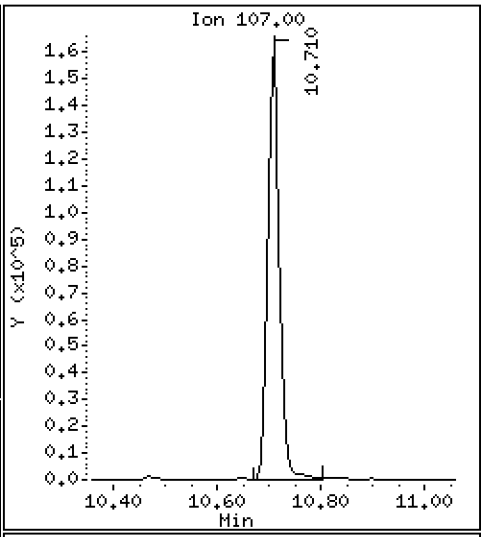
Column phase: ZB-5msi

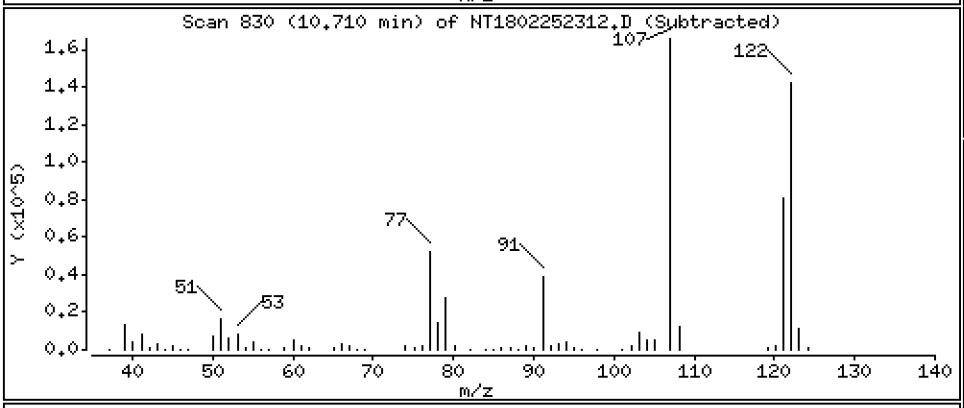
Column diameter: 0.25

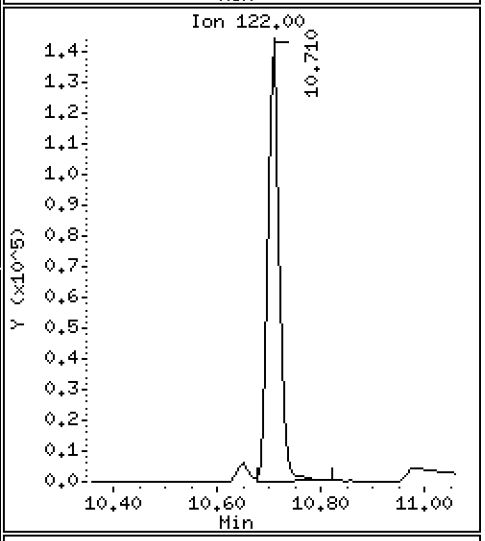
22 2,4-Dimethylphenol

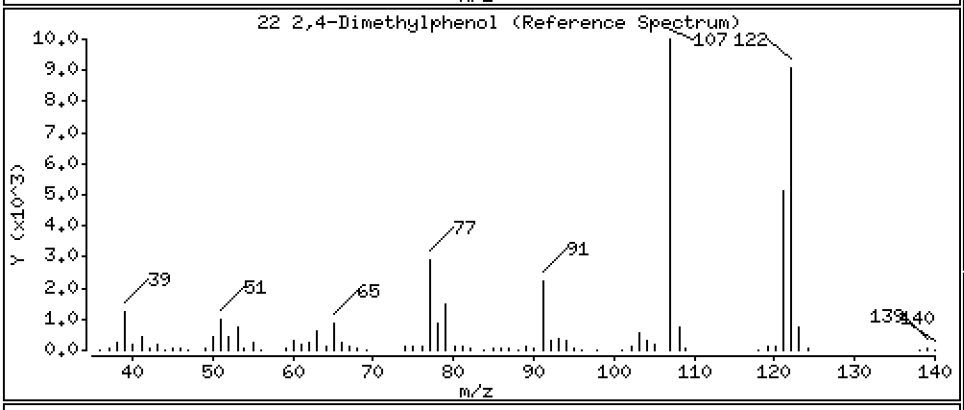
Concentration: 3.460 ug/mL

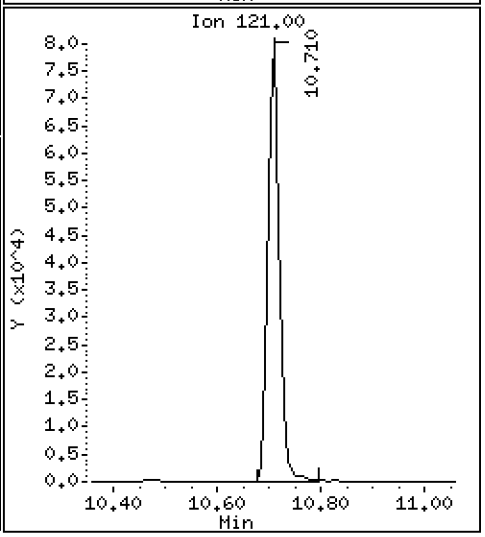


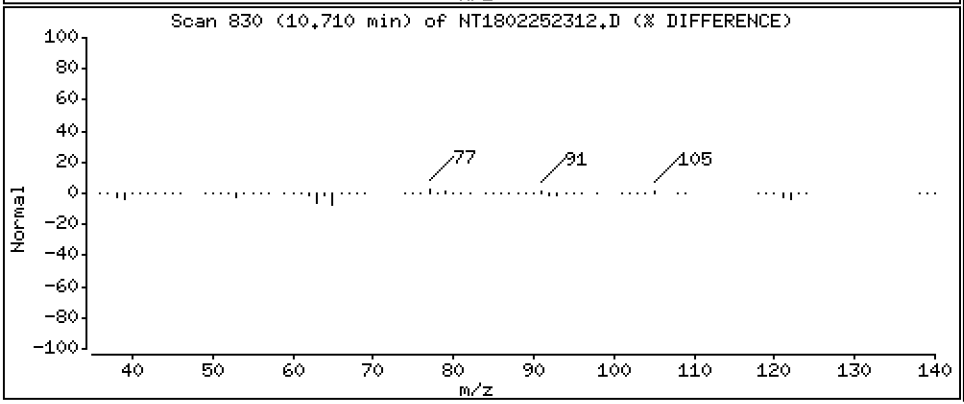












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

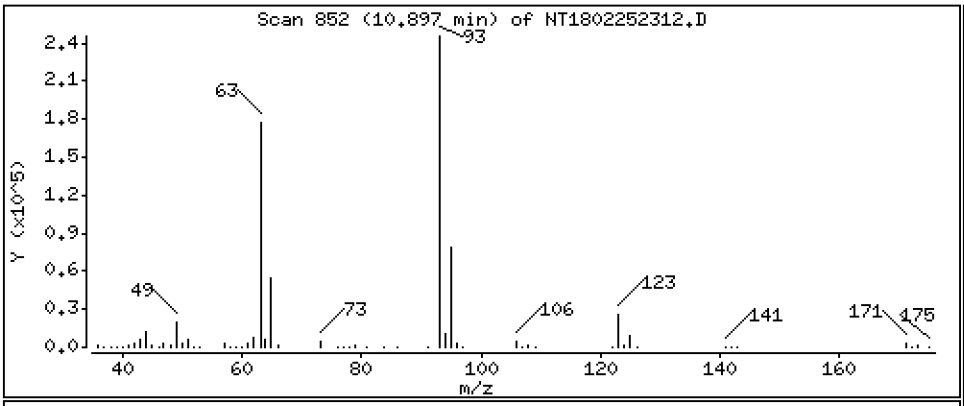
Operator: VTS

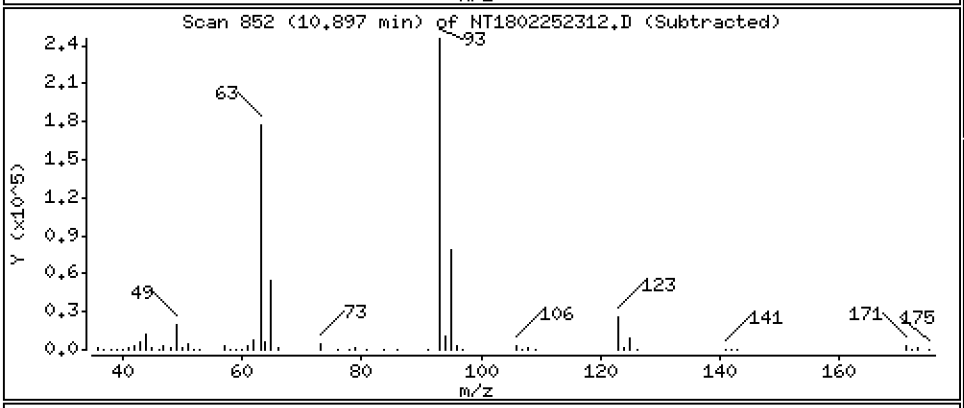
Column phase: ZB-5msi

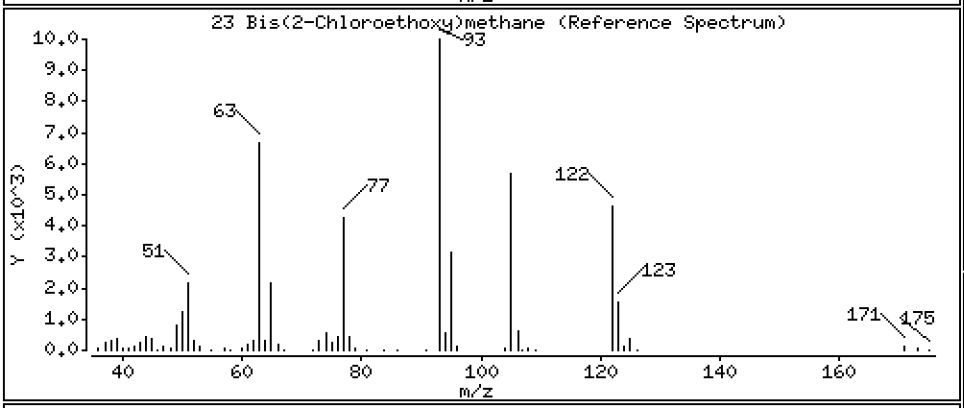
Column diameter: 0.25

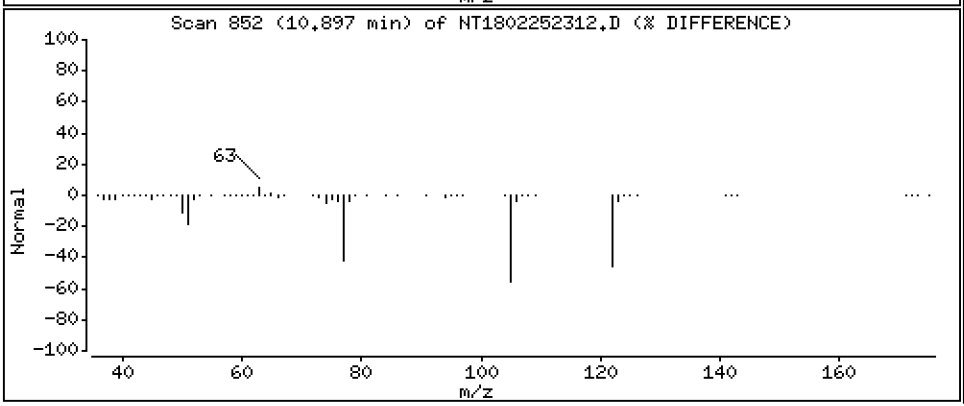
23 Bis(2-Chloroethoxy)methane

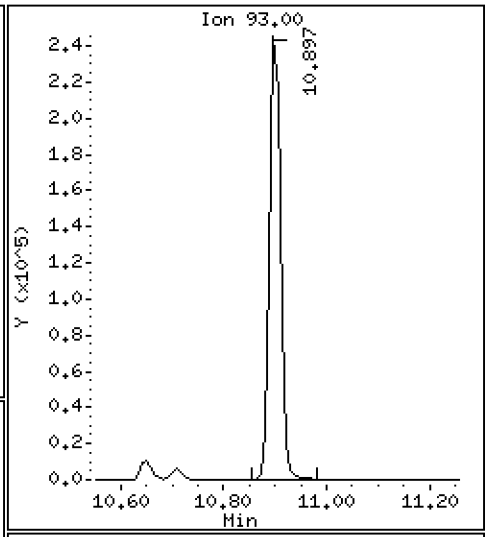
Concentration: 5.489 ug/mL

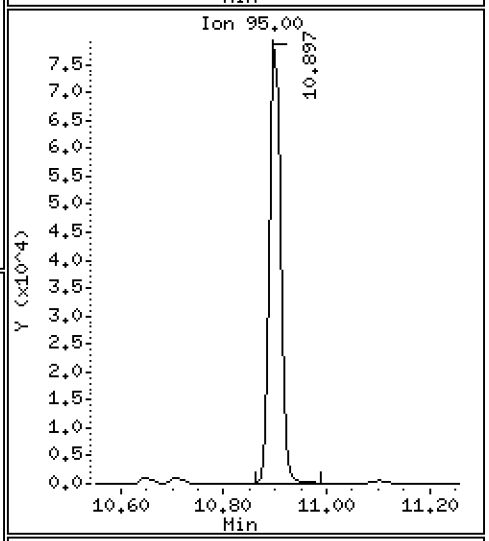


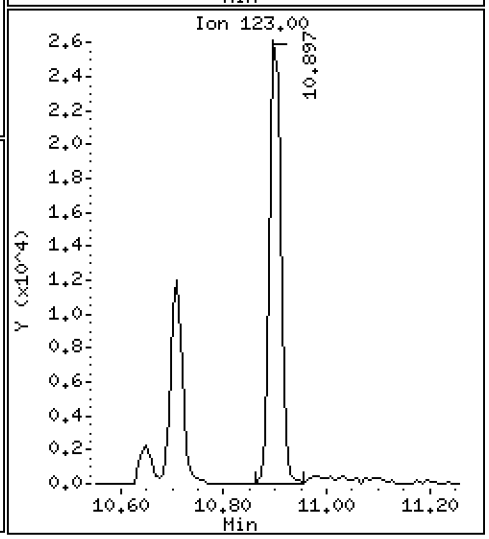












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

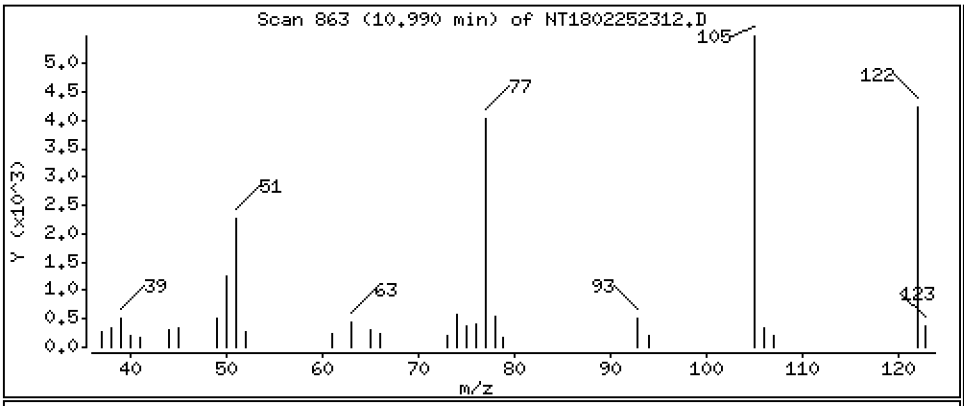
Operator: VTS

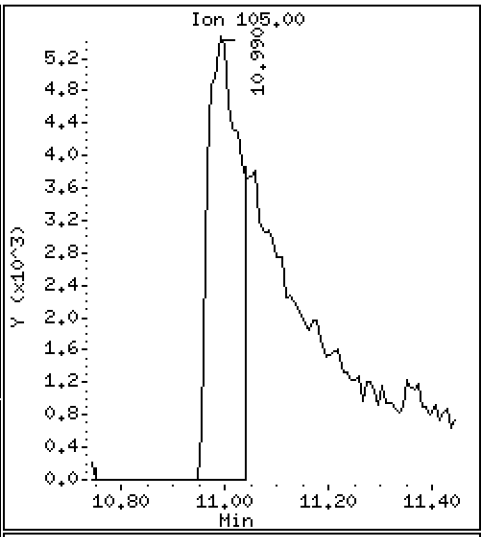
Column phase: ZB-5msi

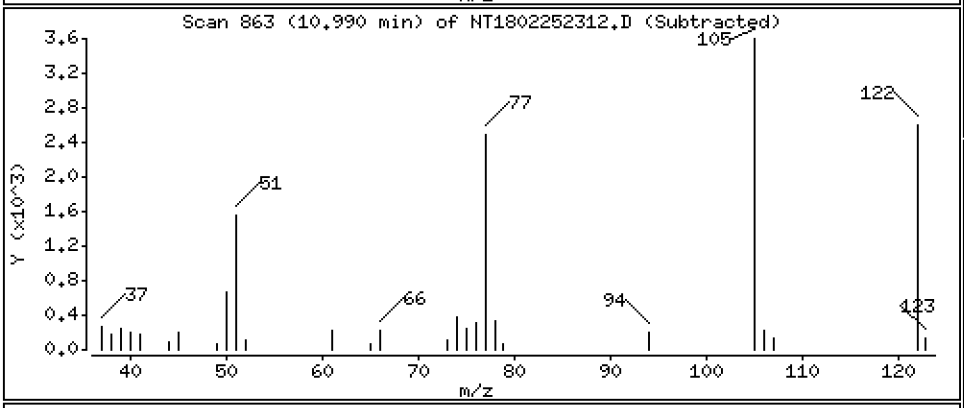
Column diameter: 0.25

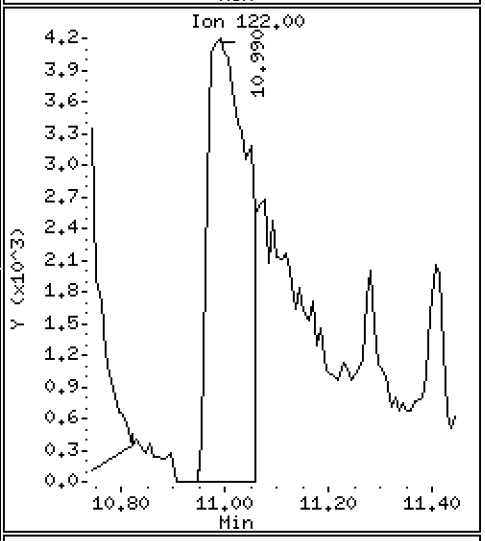
24 Benzoic acid

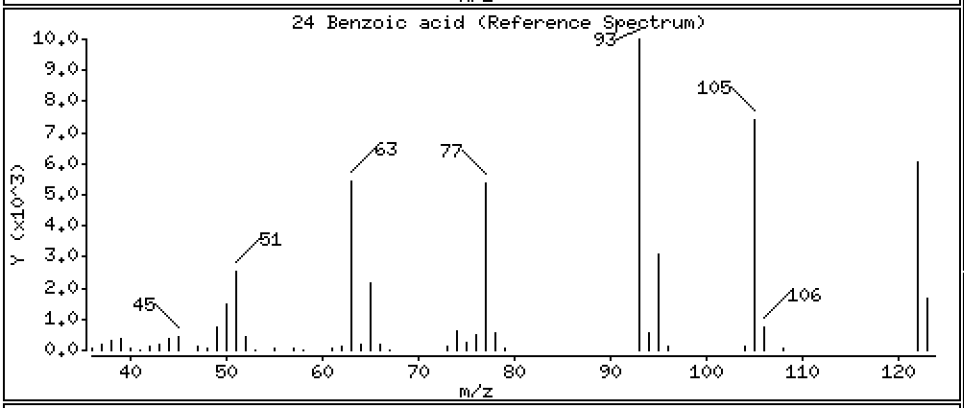
Concentration: 0.8564 ug/mL

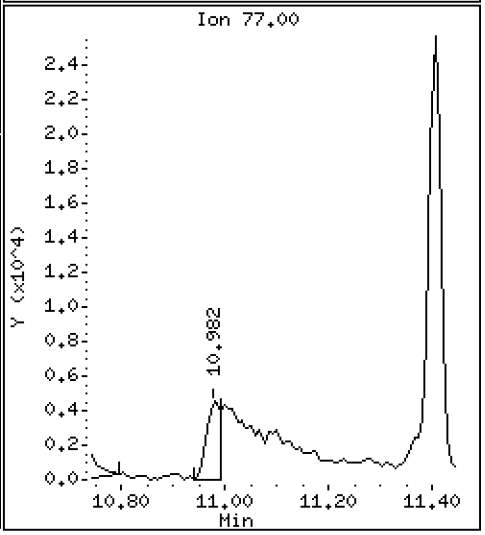


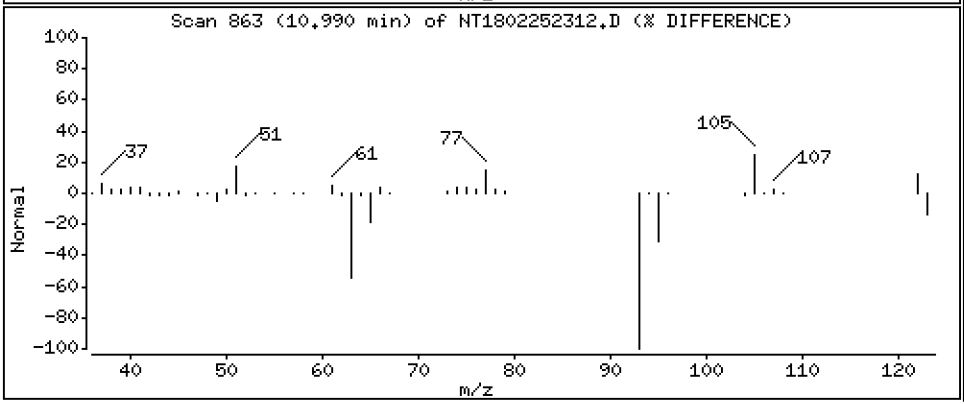












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

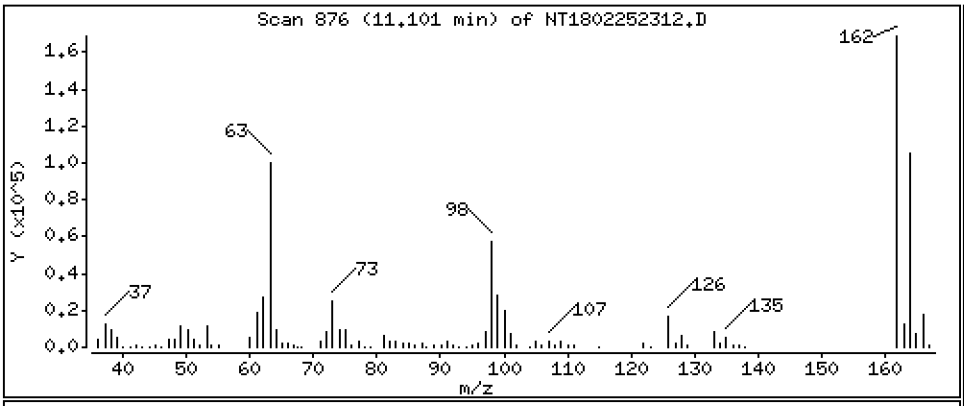
Operator: VTS

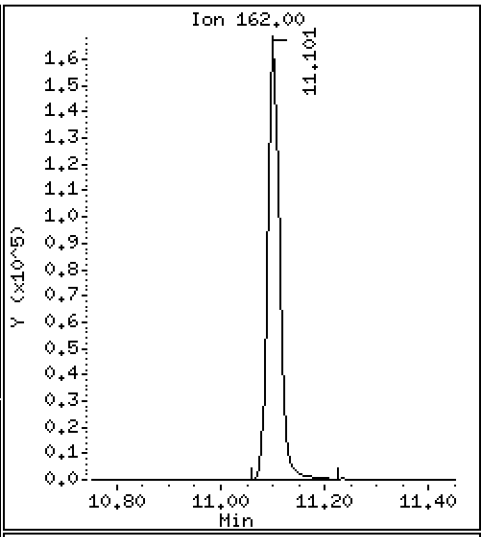
Column phase: ZB-5msi

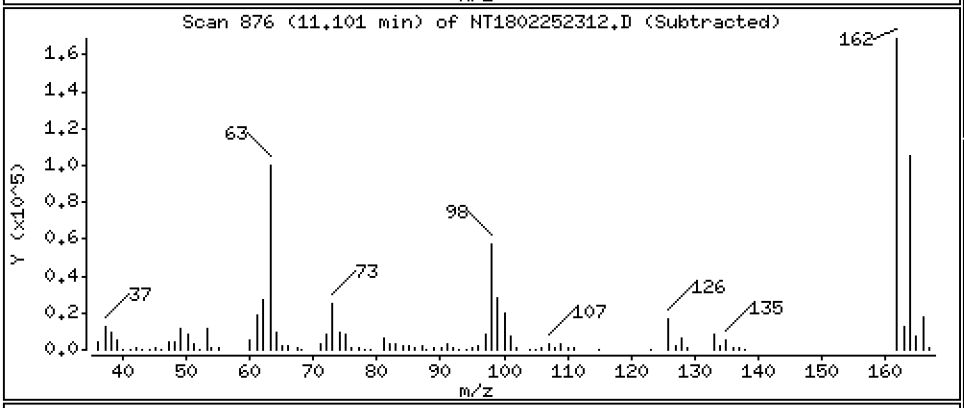
Column diameter: 0.25

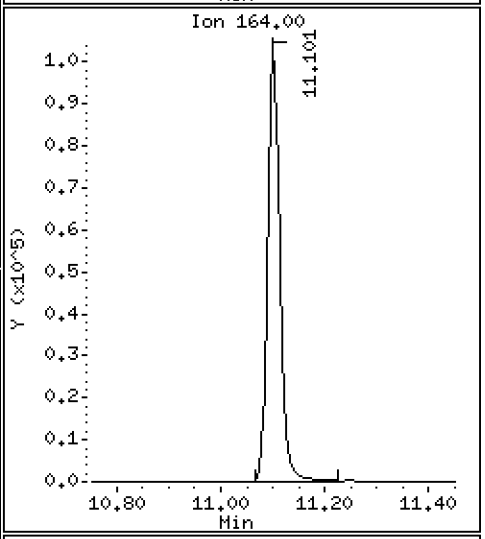
25 2,4-Dichlorophenol

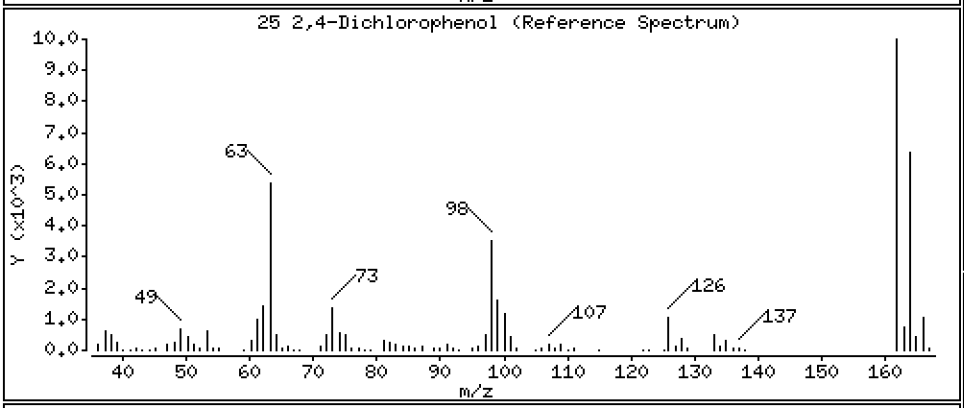
Concentration: 4.621 ug/mL

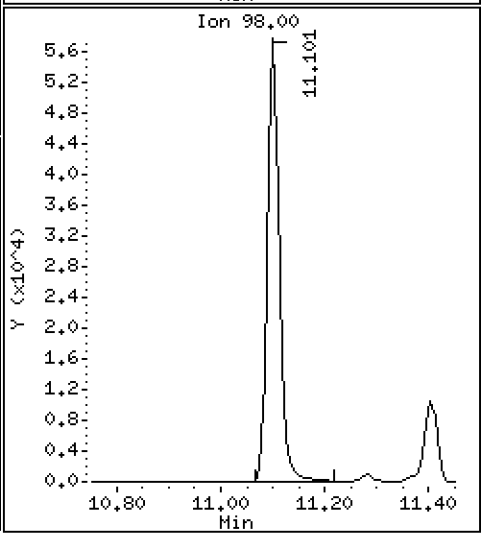


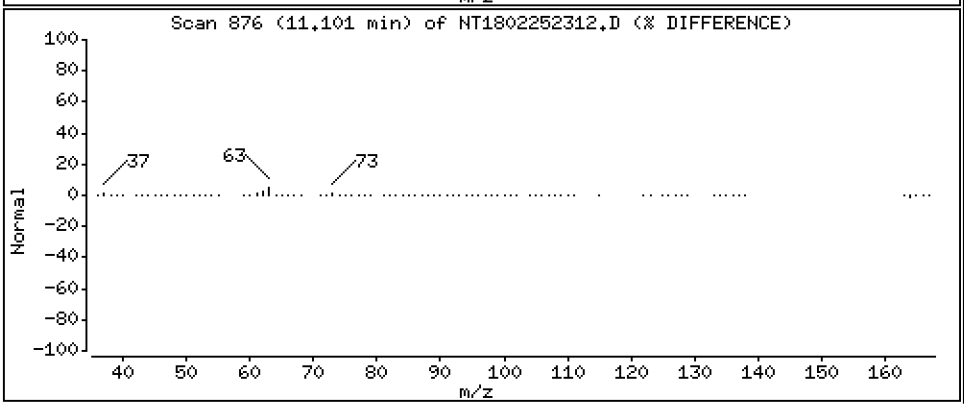












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

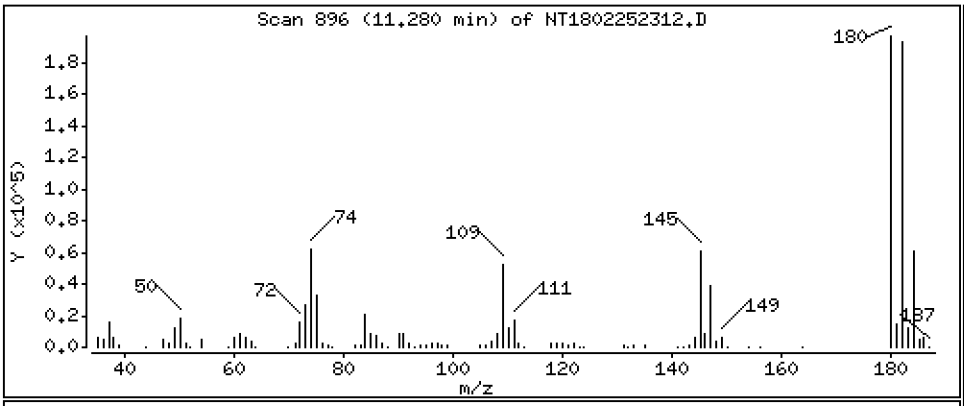
Operator: VTS

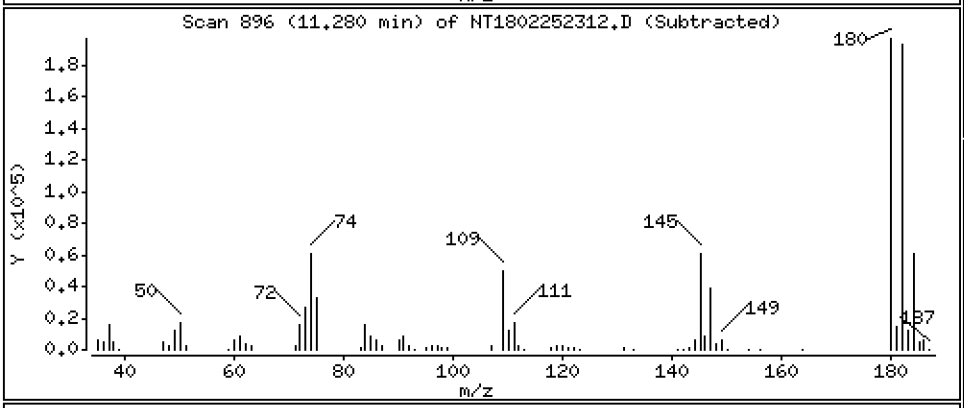
Column phase: ZB-5msi

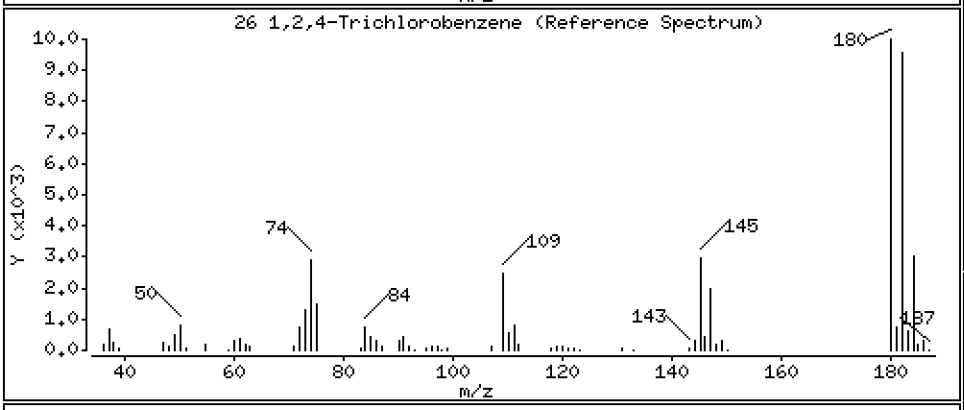
Column diameter: 0.25

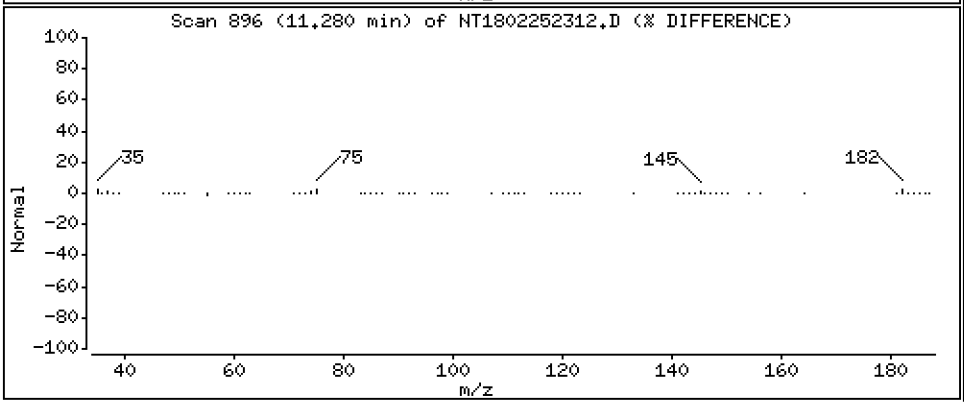
26 1,2,4-Trichlorobenzene

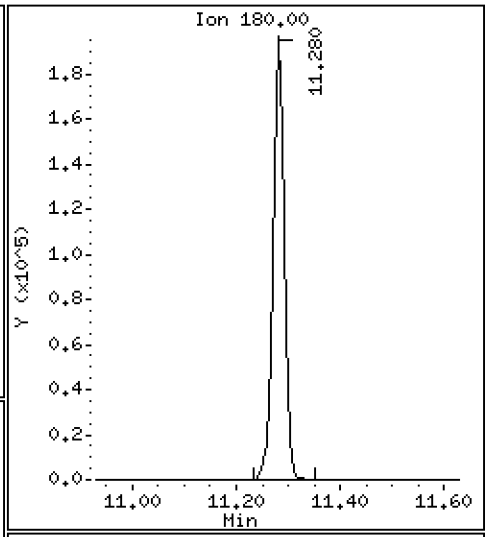
Concentration: 4.438 ug/mL

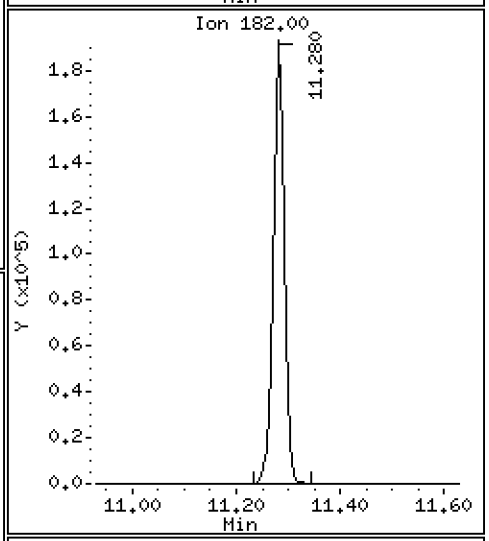


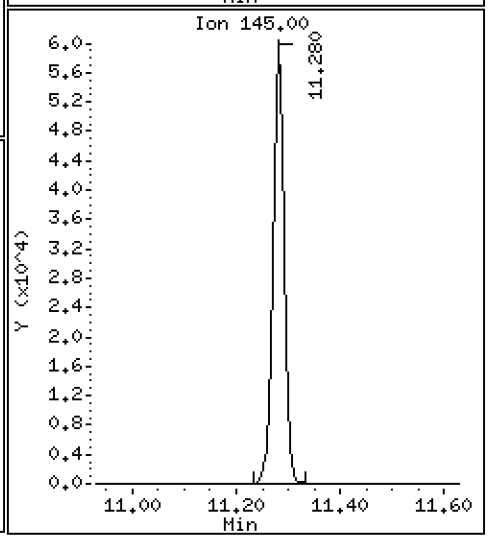












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

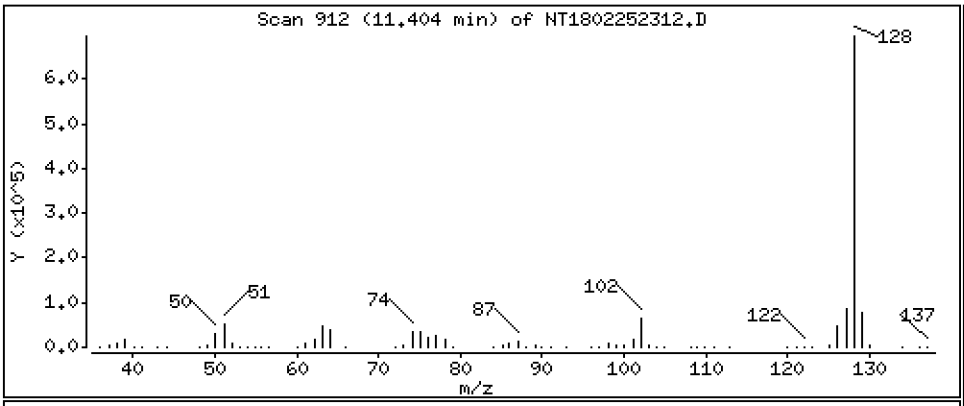
Operator: VTS

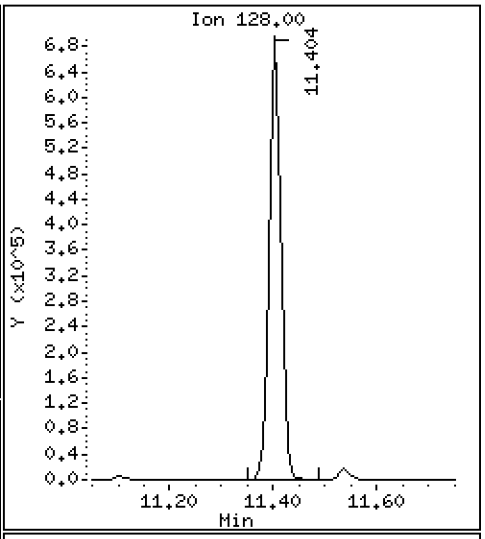
Column phase: ZB-5msi

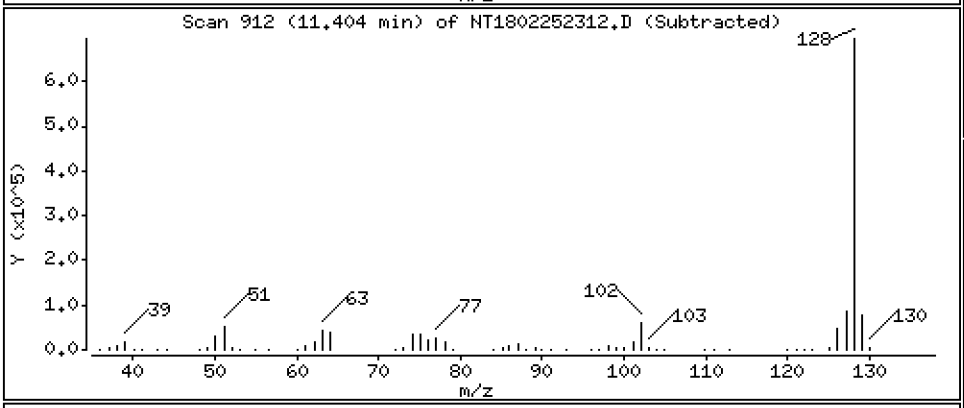
Column diameter: 0.25

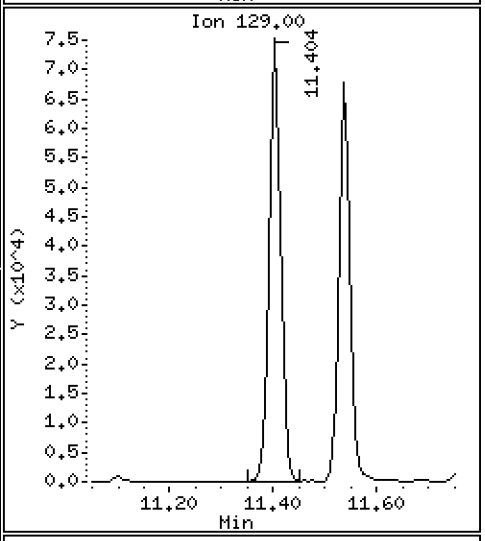
28 Naphthalene

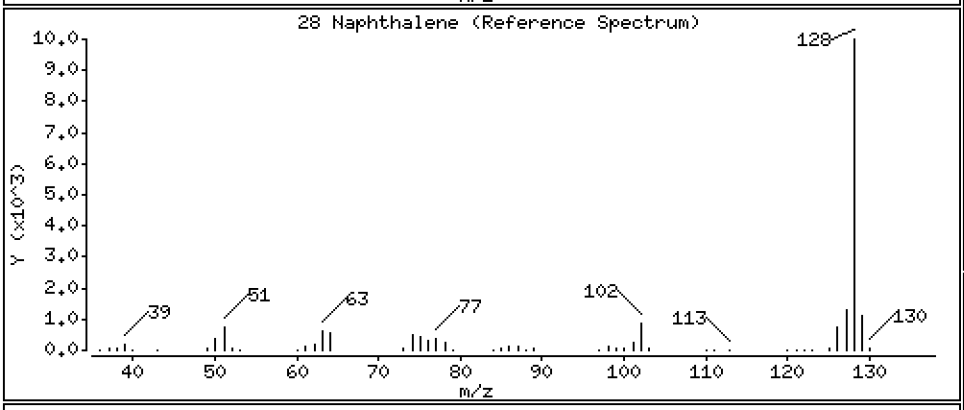
Concentration: 4.523 ug/mL

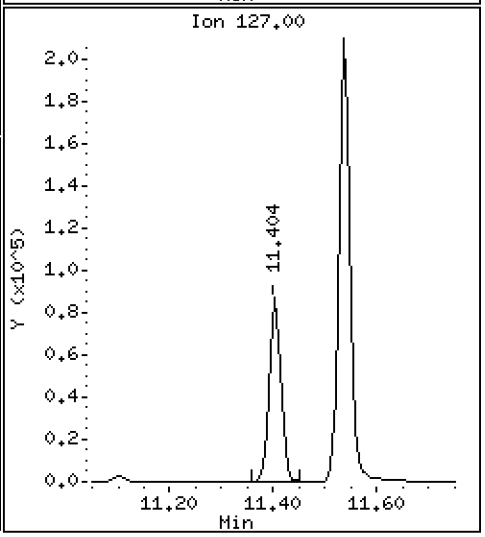


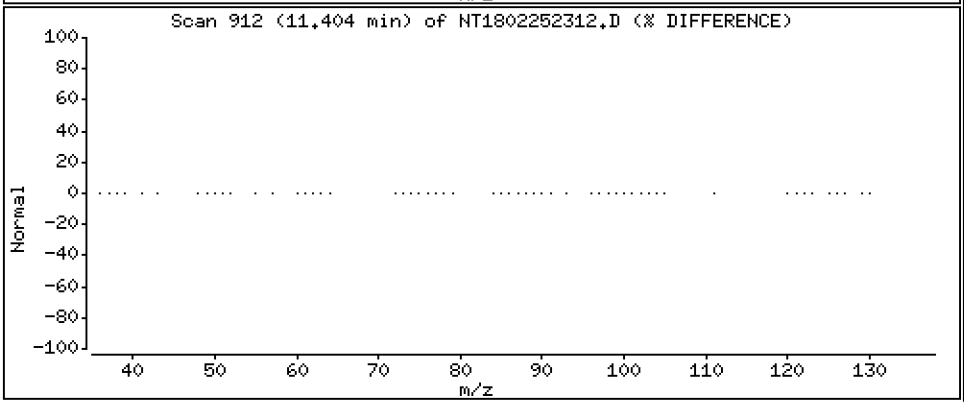












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

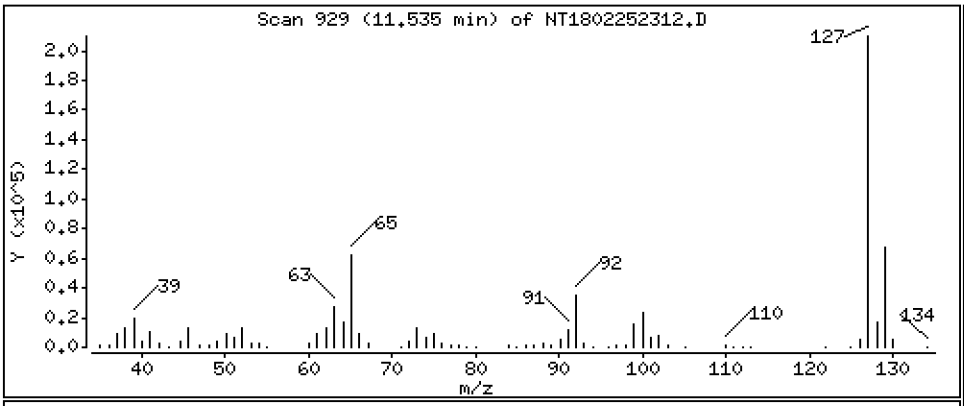
Operator: VTS

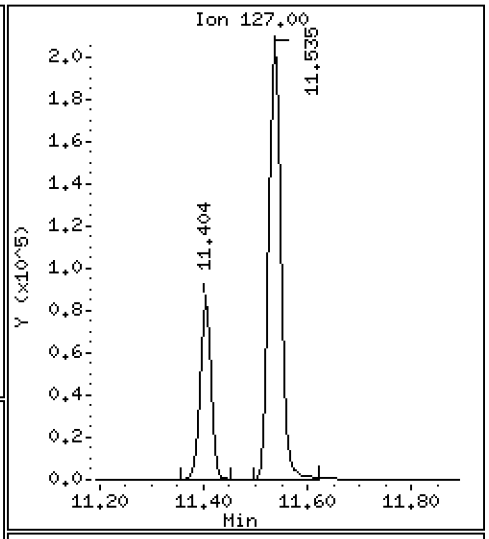
Column phase: ZB-5msi

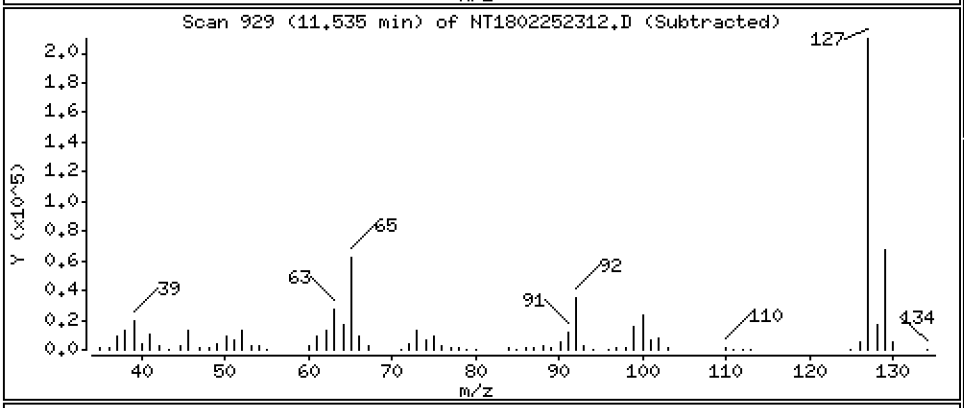
Column diameter: 0.25

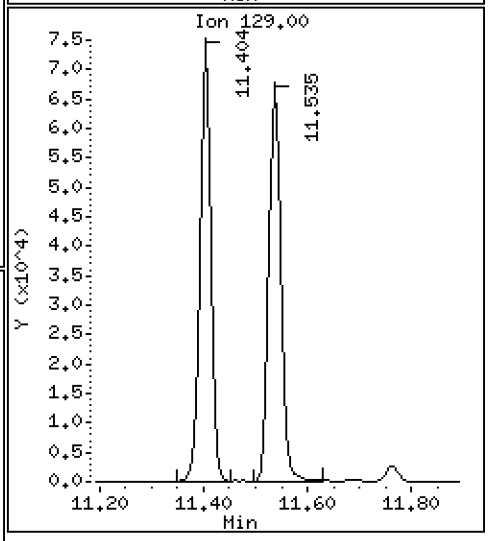
29 4-Chloroaniline

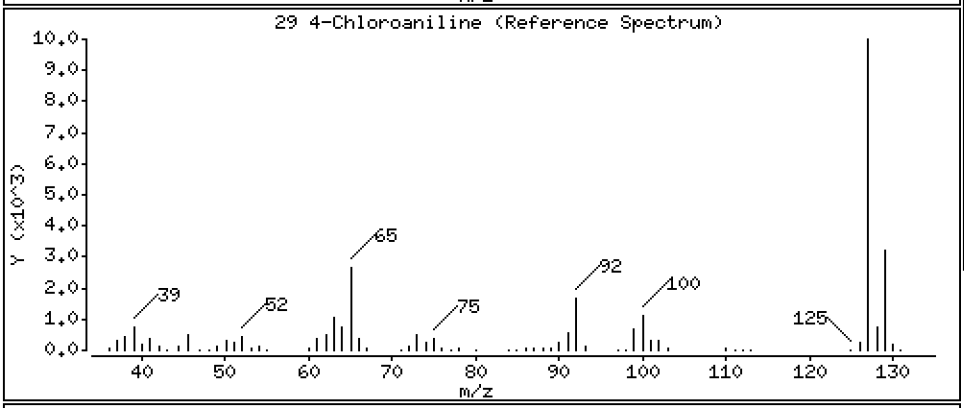
Concentration: 3.459 ug/mL

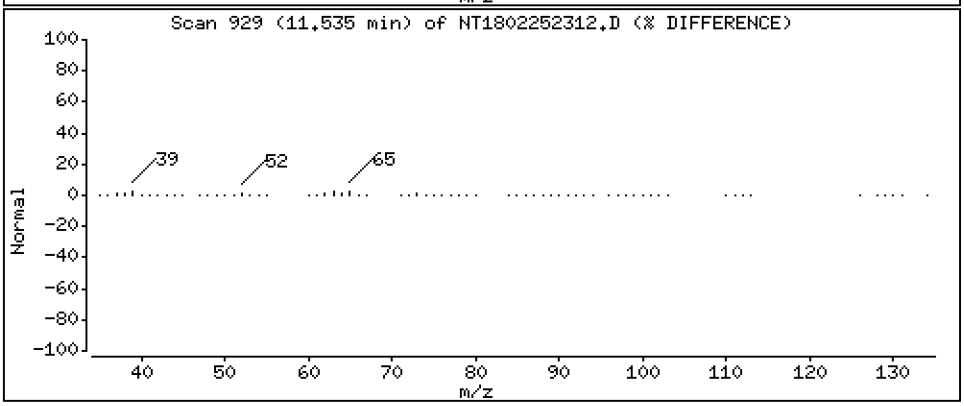












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

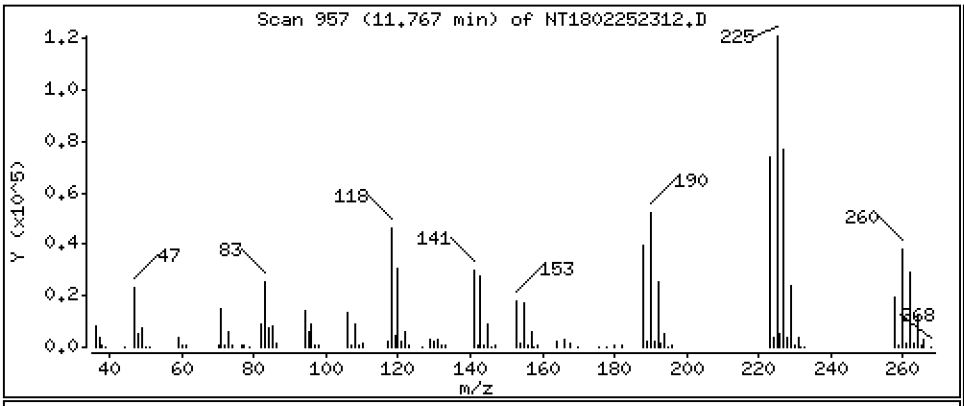
Operator: VTS

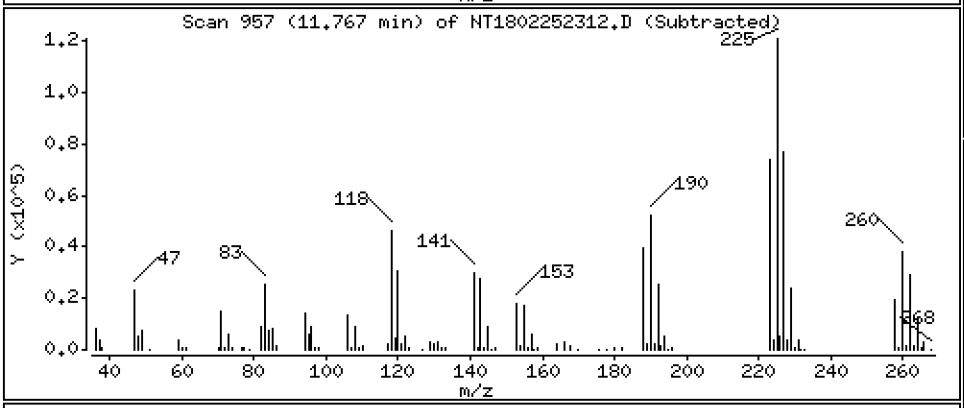
Column phase: ZB-5msi

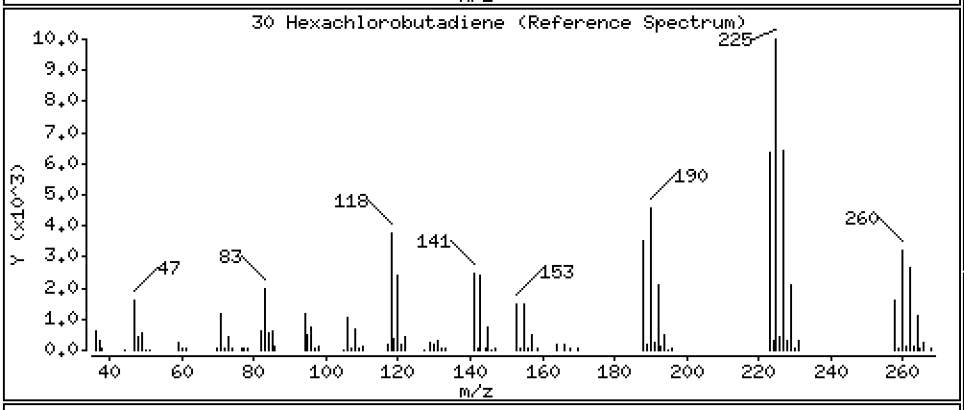
Column diameter: 0.25

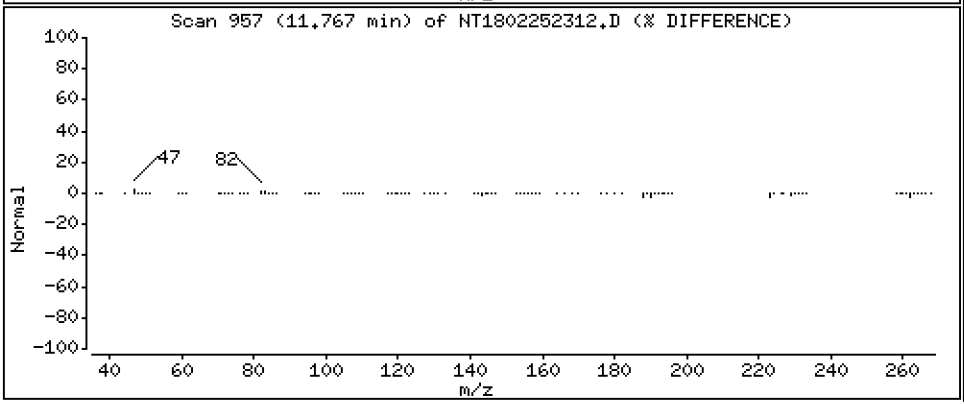
30 Hexachlorobutadiene

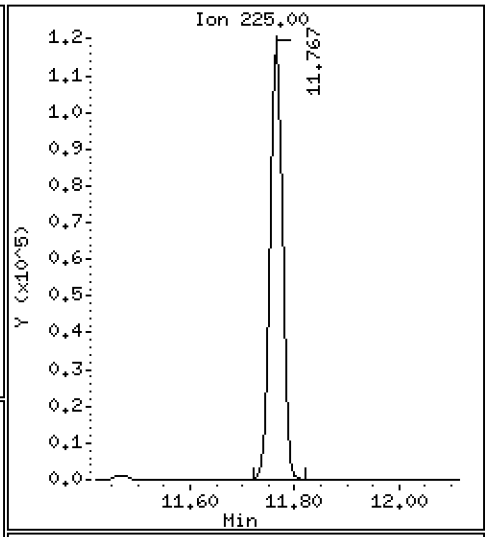
Concentration: 4.656 ug/mL

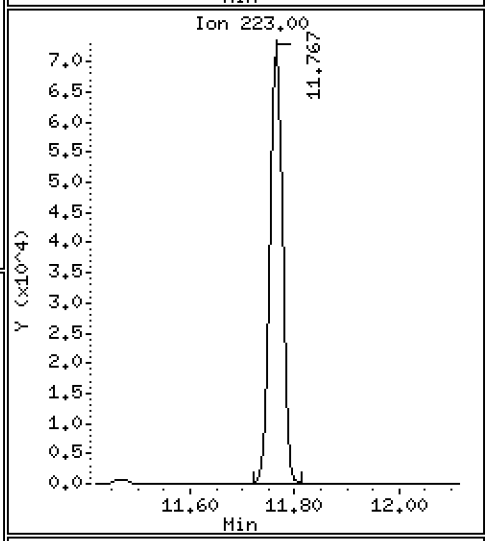


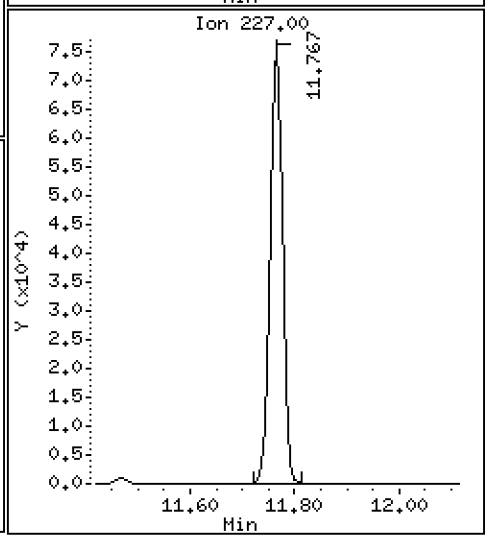












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

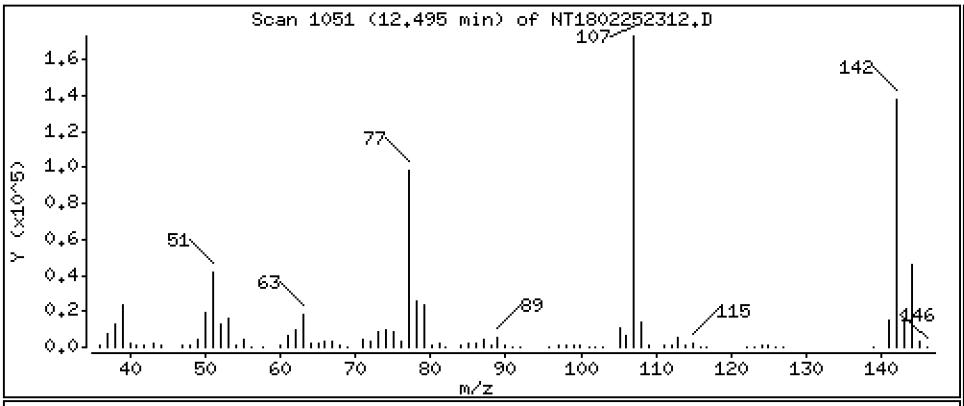
Operator: VTS

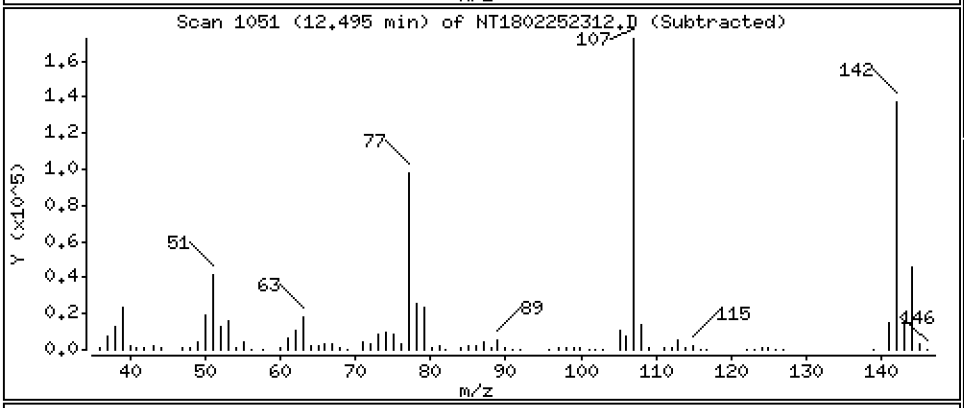
Column phase: ZB-5msi

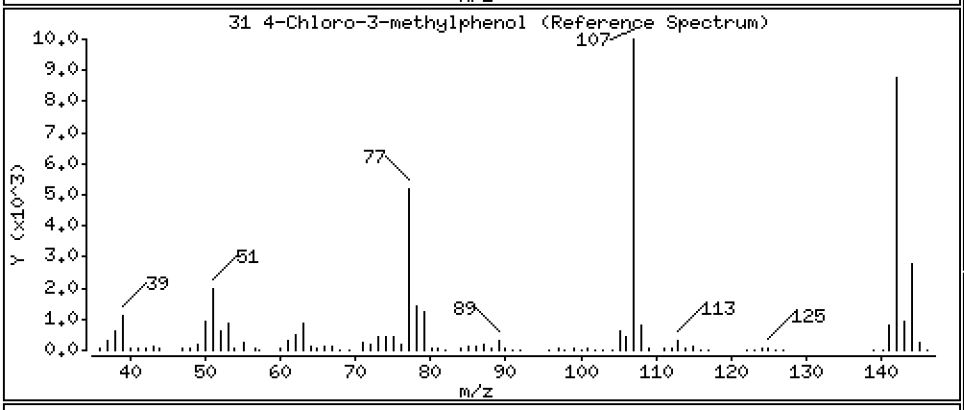
Column diameter: 0.25

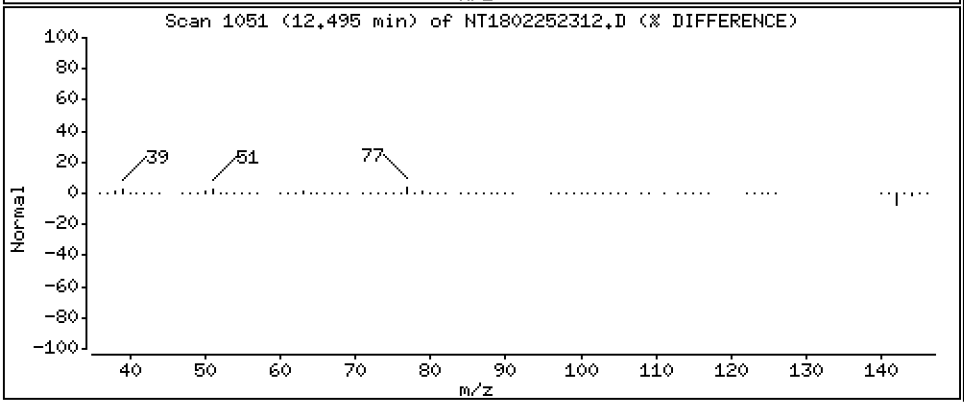
31 4-Chloro-3-methylphenol

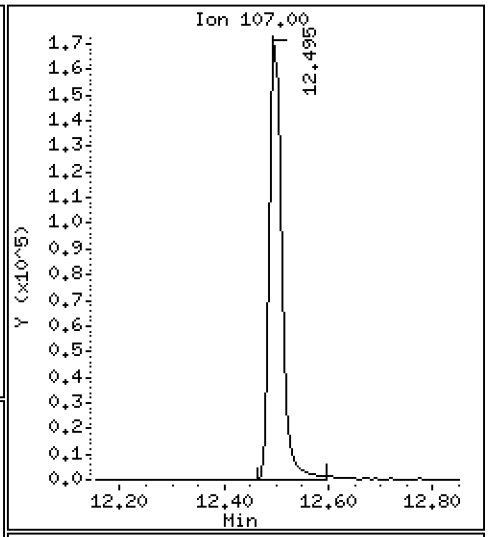
Concentration: 4.422 ug/mL

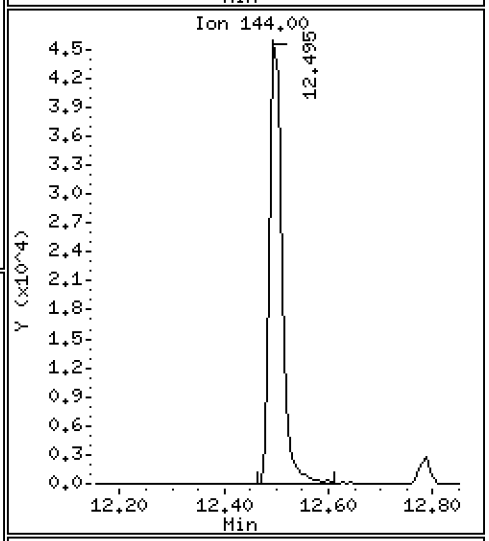


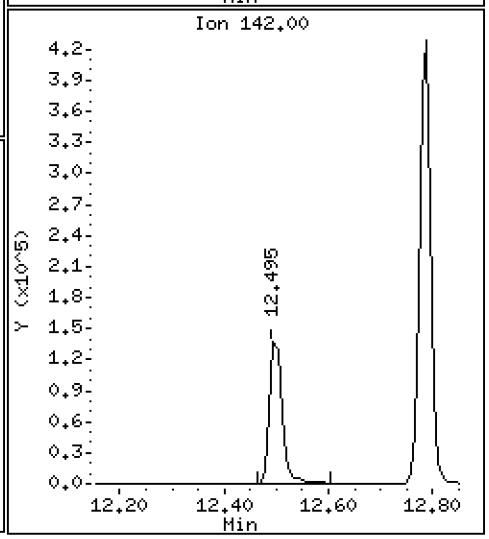












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

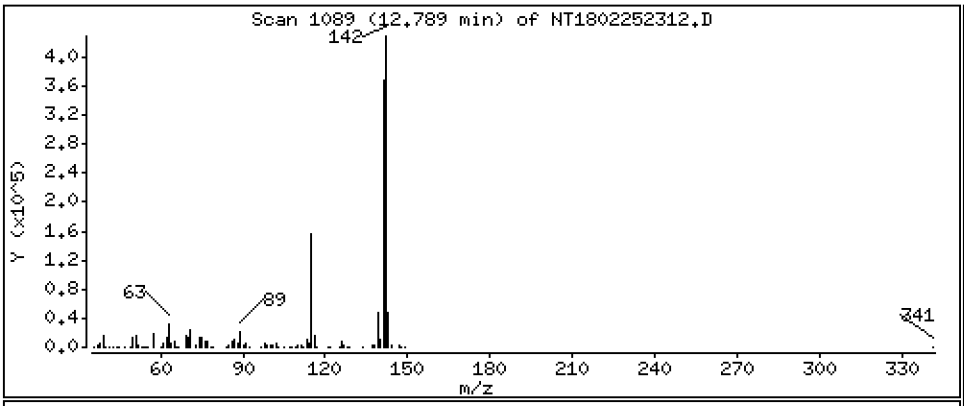
Operator: VTS

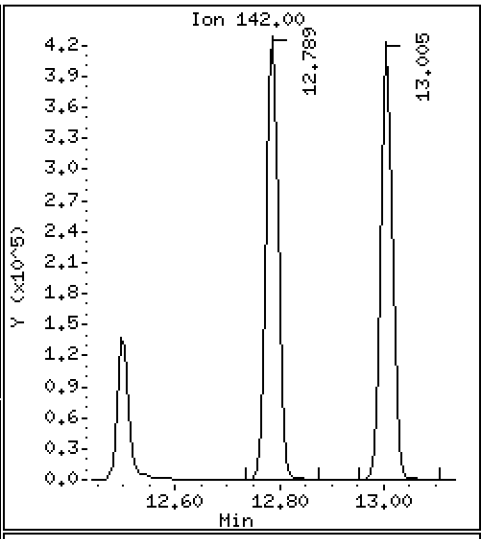
Column phase: ZB-5msi

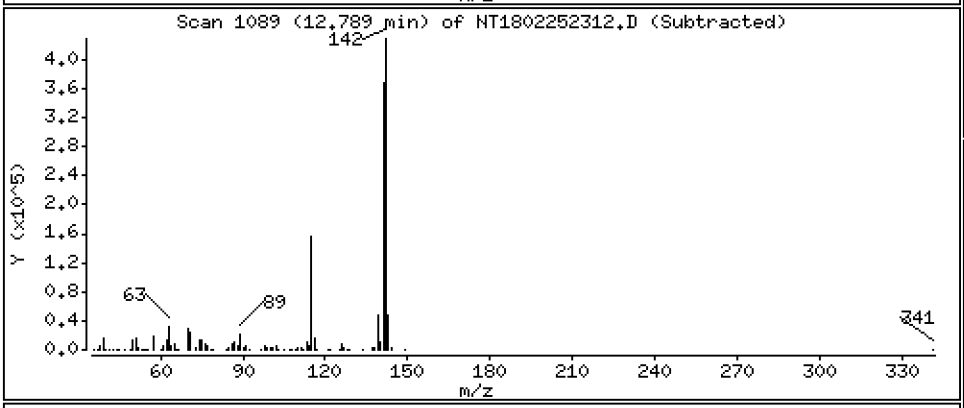
Column diameter: 0.25

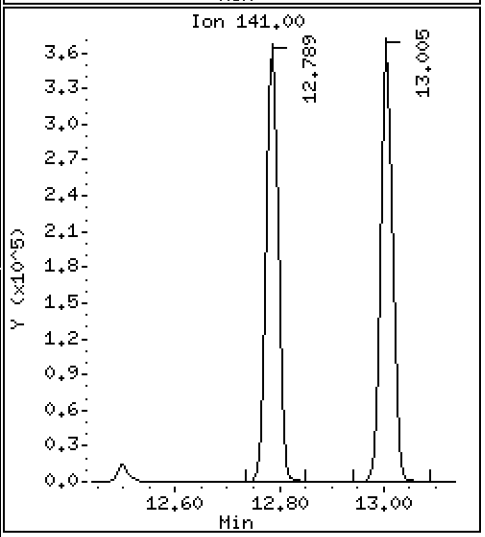
32 2-Methylnaphthalene

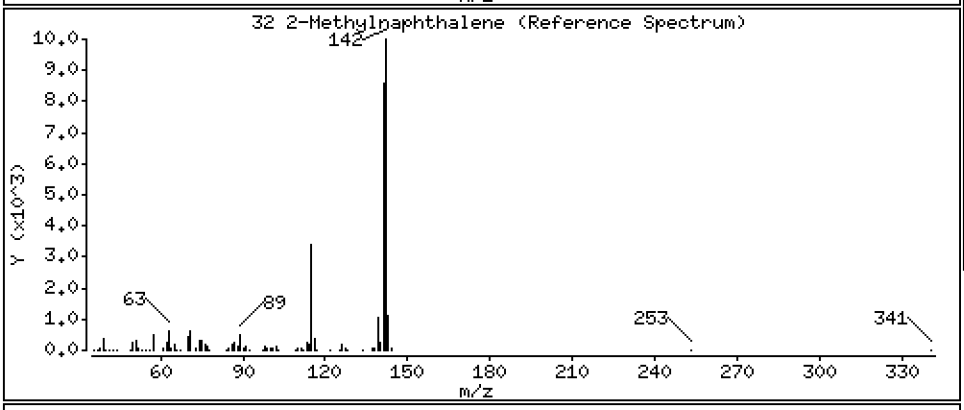
Concentration: 4.225 ug/mL

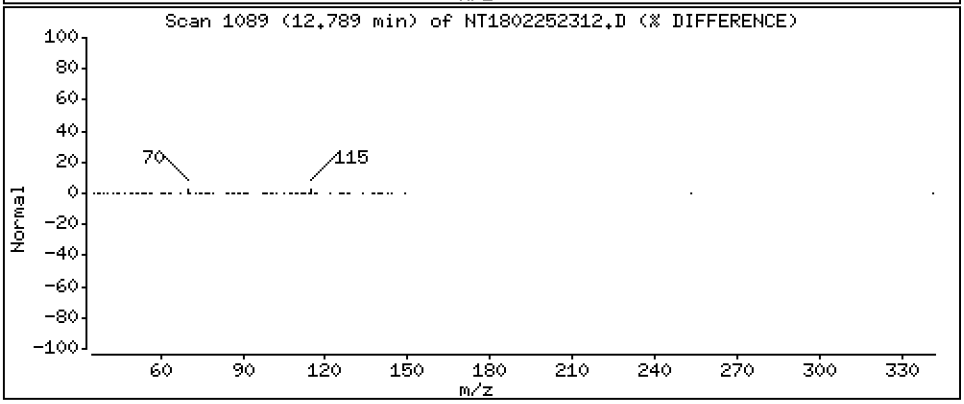












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

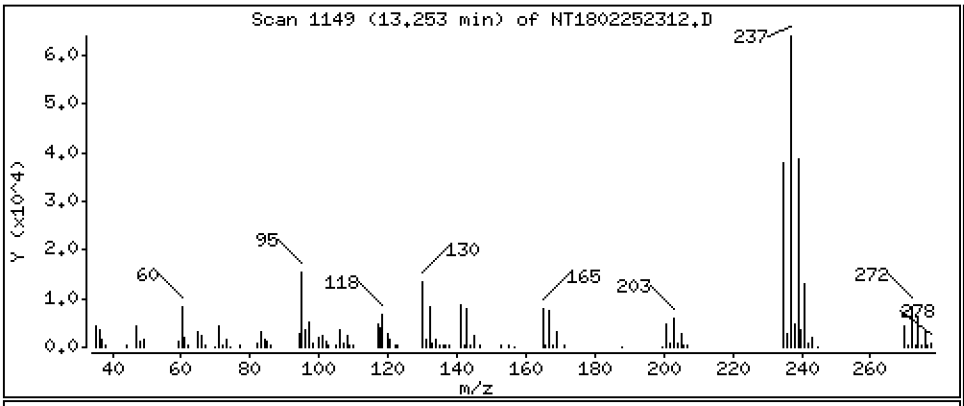
Operator: VTS

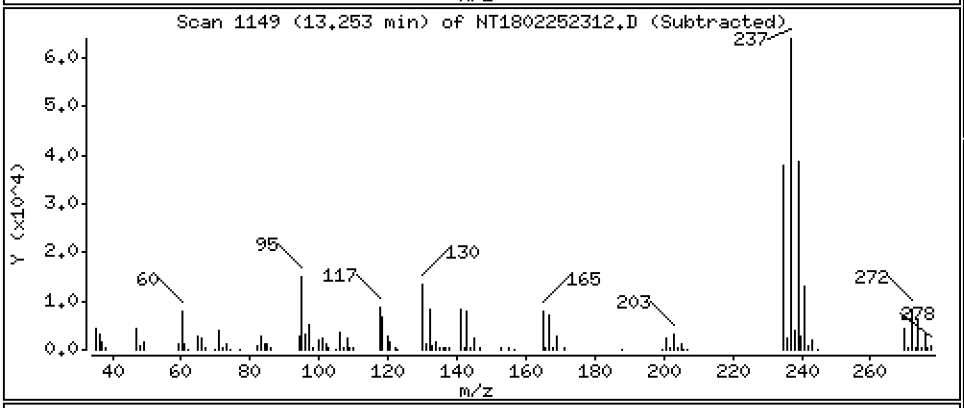
Column phase: ZB-5msi

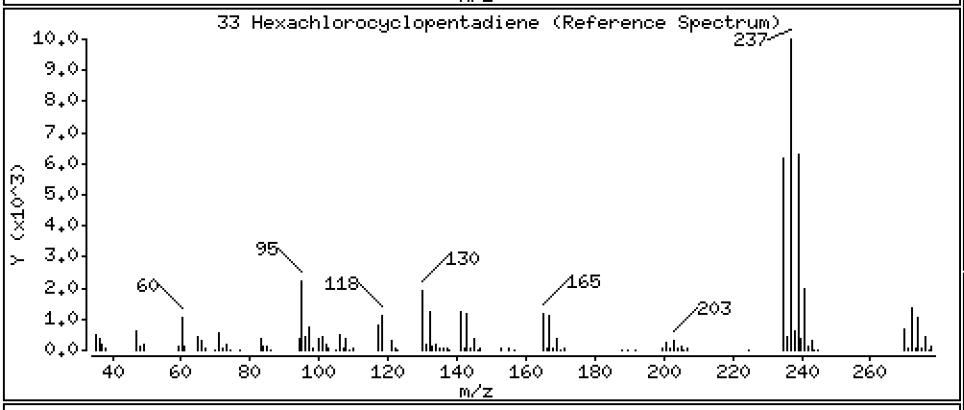
Column diameter: 0.25

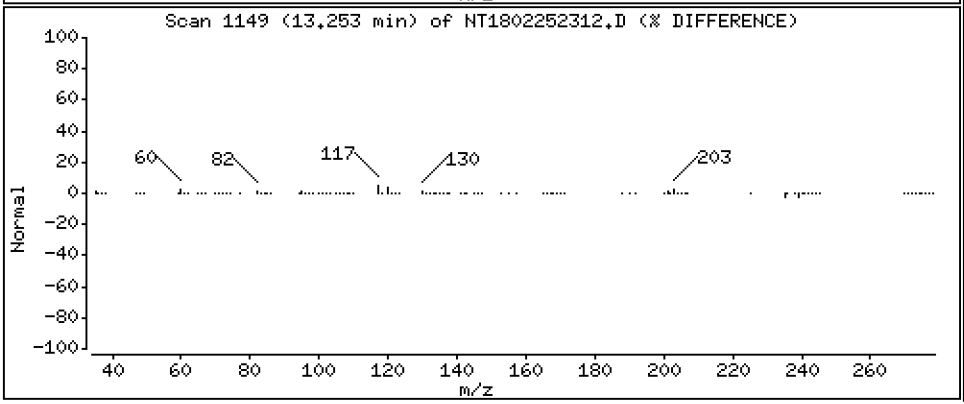
33 Hexachlorocyclopentadiene

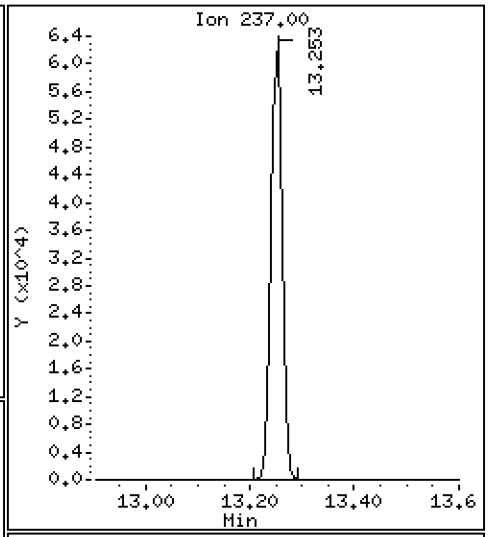
Concentration: 3.202 ug/mL

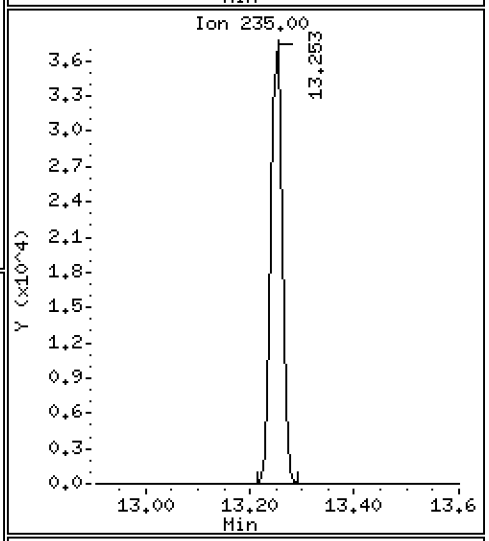


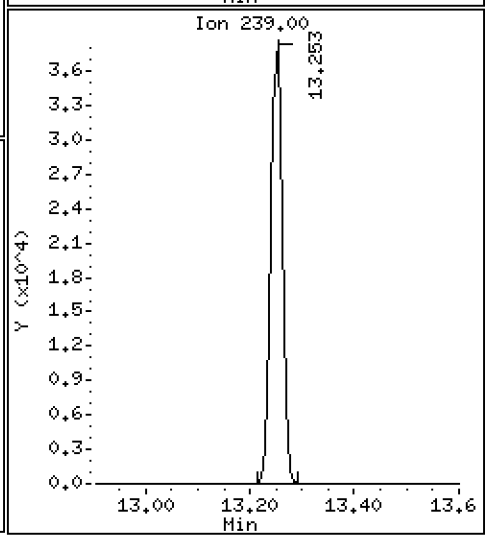












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

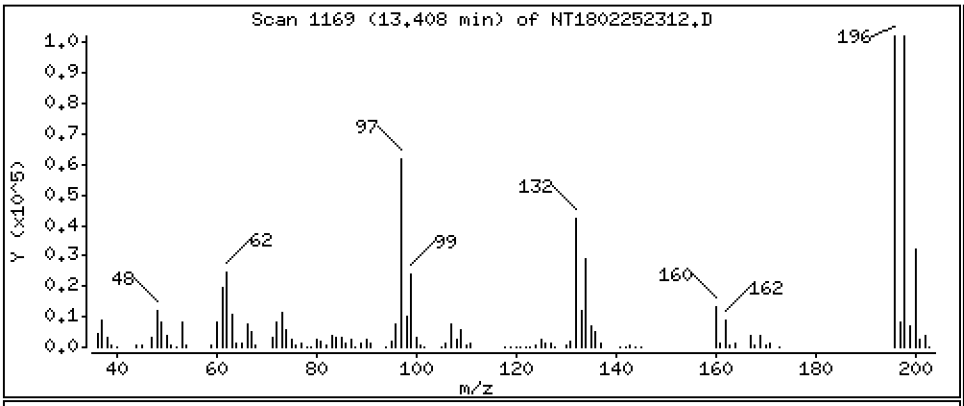
Operator: VTS

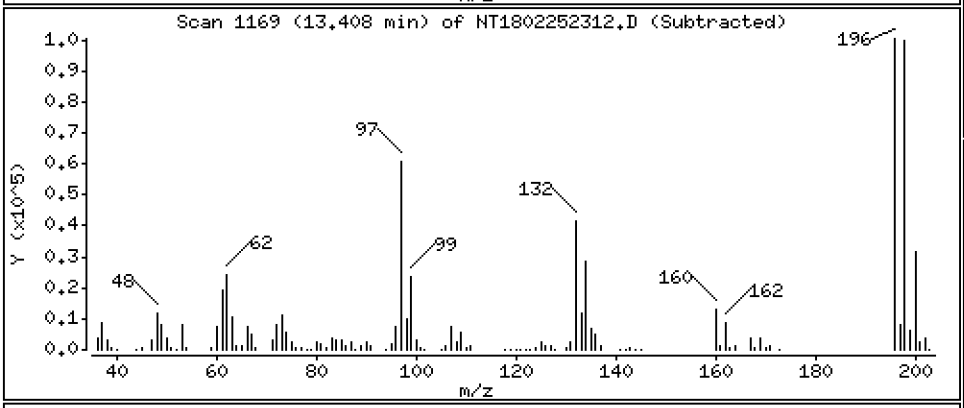
Column phase: ZB-5msi

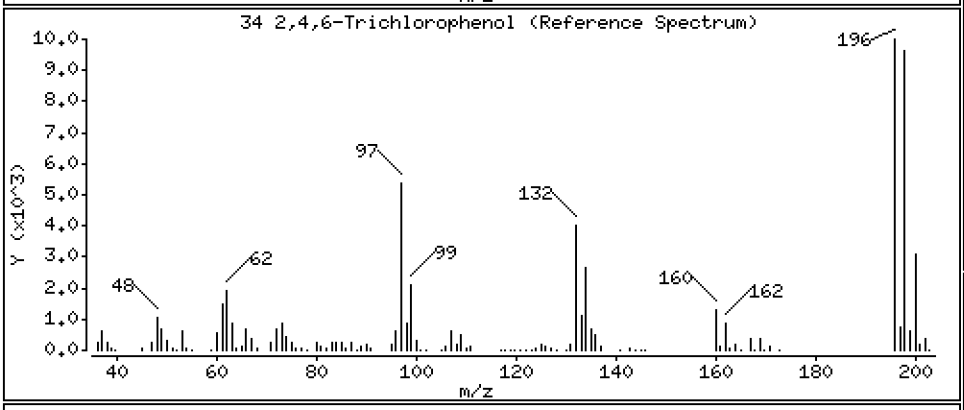
Column diameter: 0.25

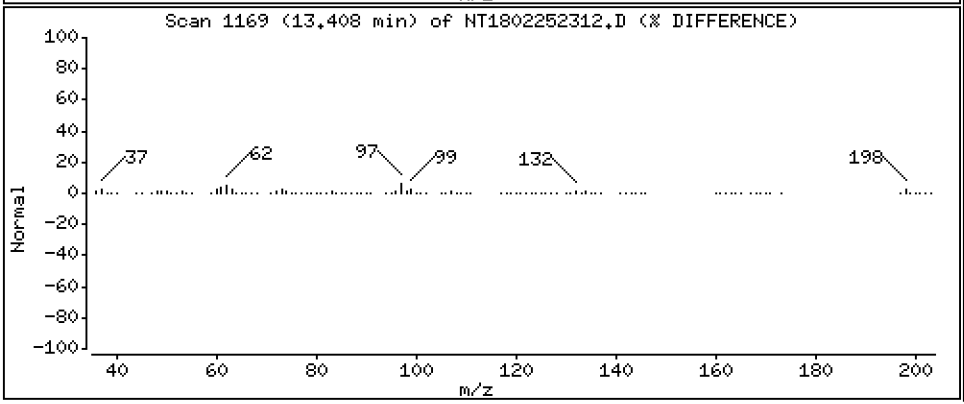
34 2,4,6-Trichlorophenol

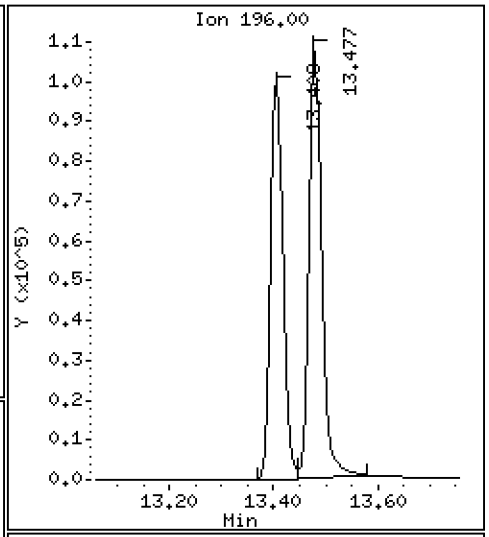
Concentration: 4.148 ug/mL

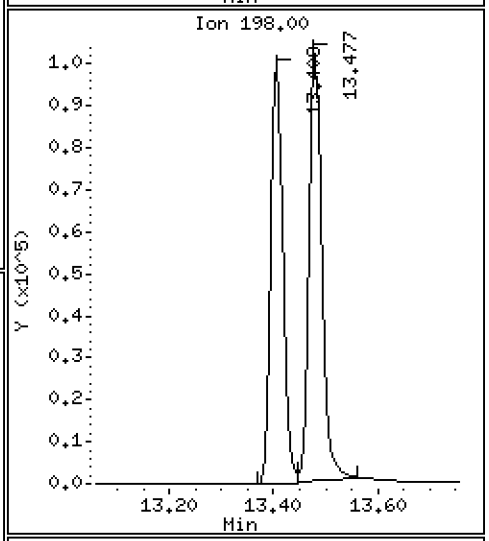


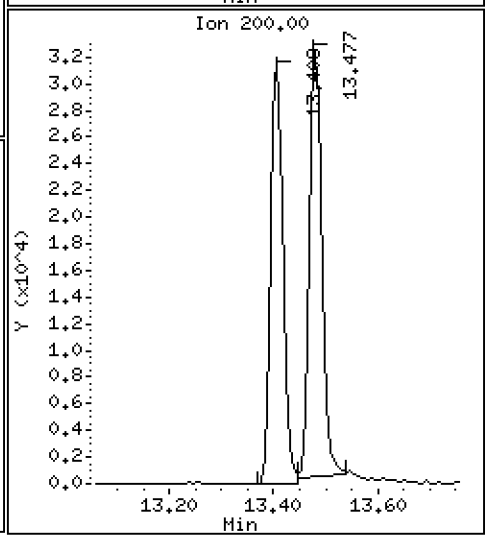












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

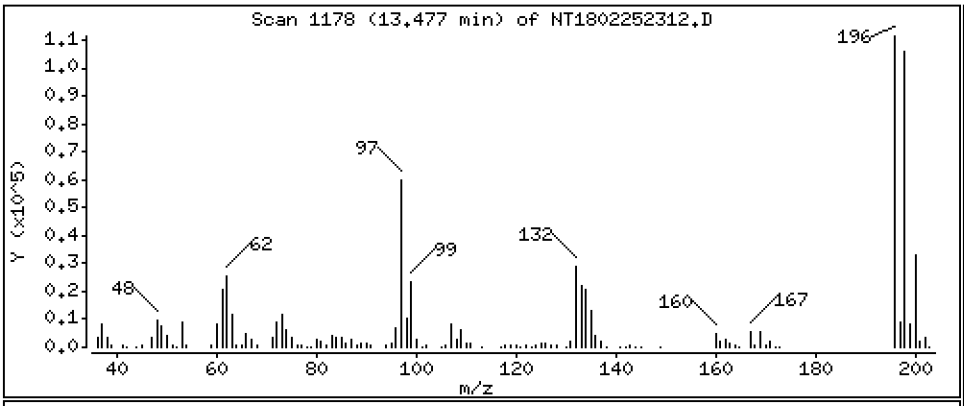
Operator: VTS

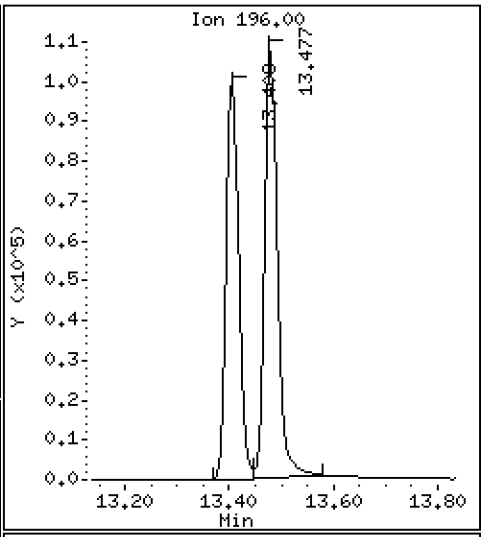
Column phase: ZB-5msi

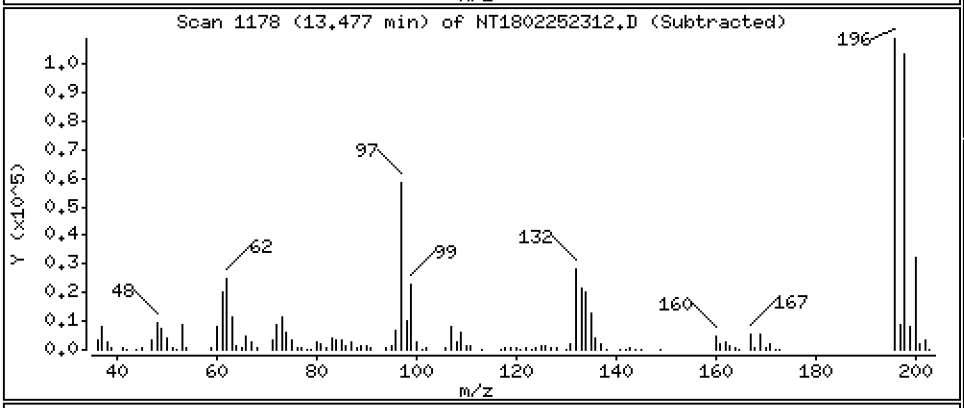
Column diameter: 0.25

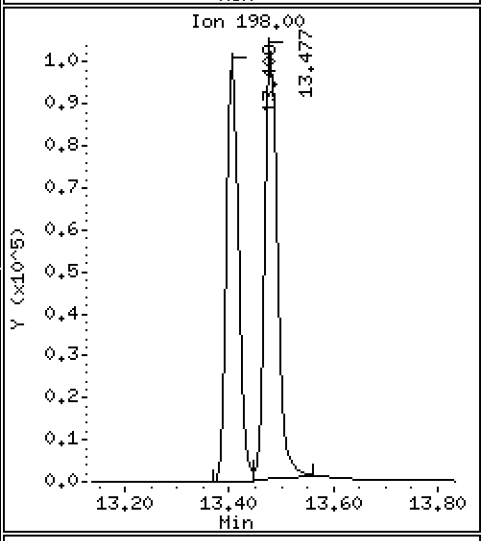
35 2,4,5-Trichlorophenol

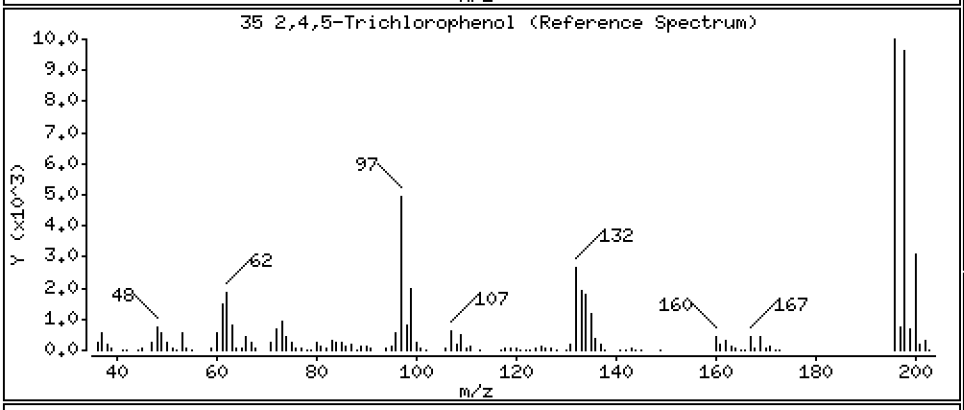
Concentration: 4.100 ug/mL

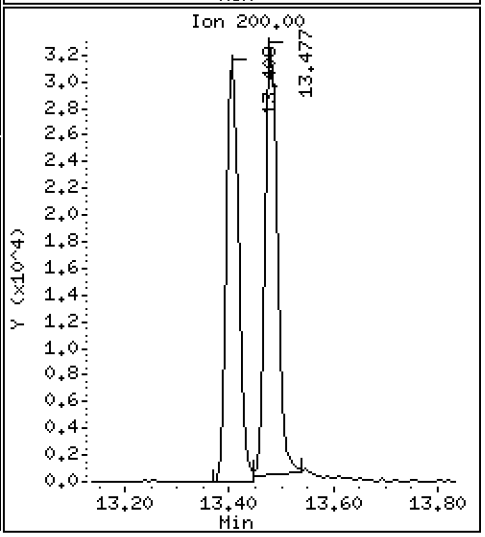


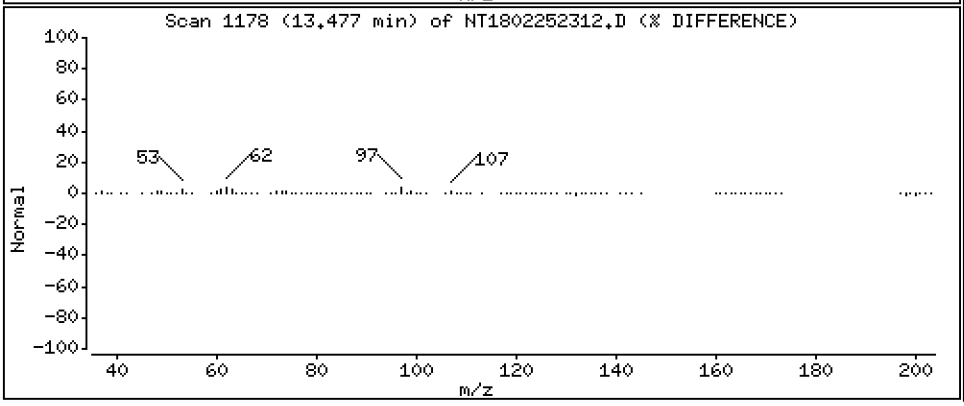












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

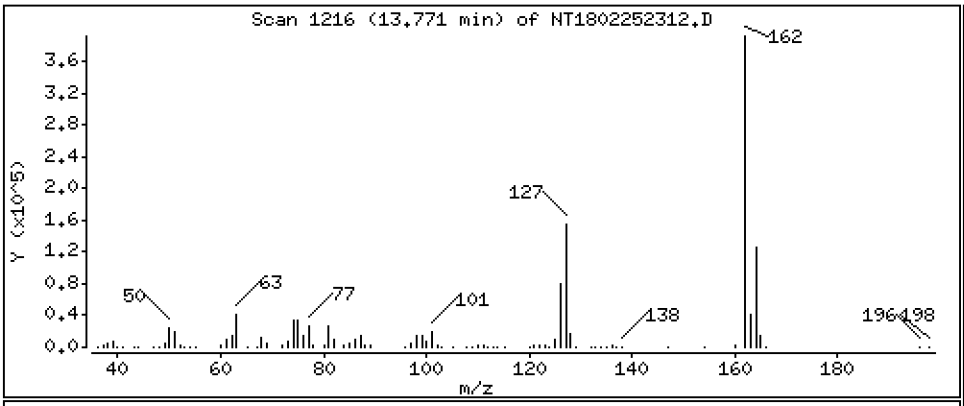
Operator: VTS

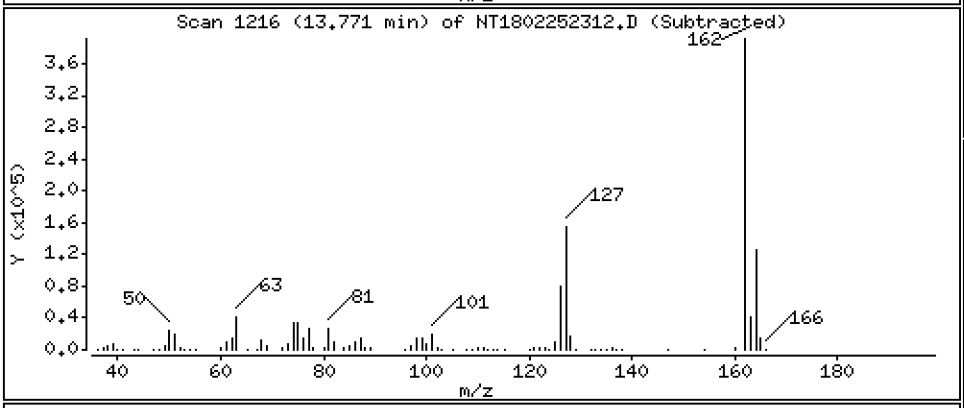
Column phase: ZB-5msi

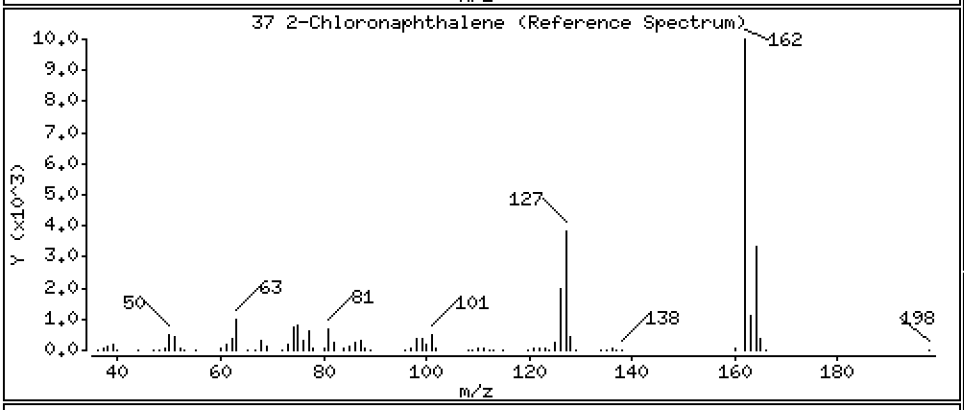
Column diameter: 0.25

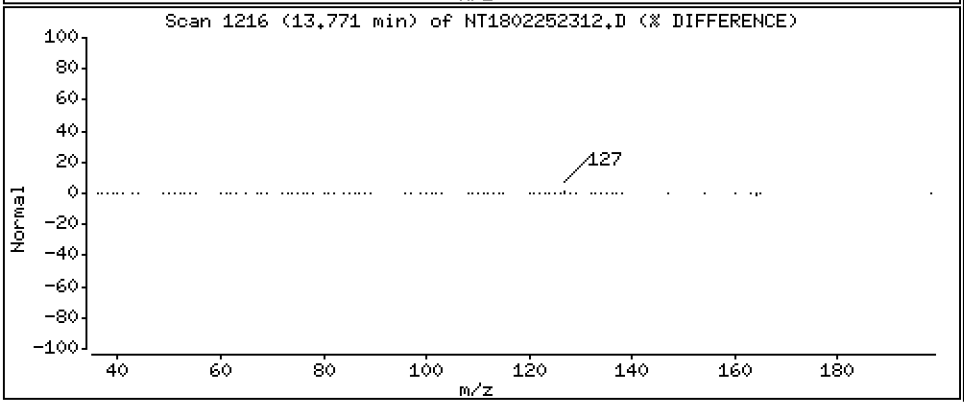
37 2-Chloronaphthalene

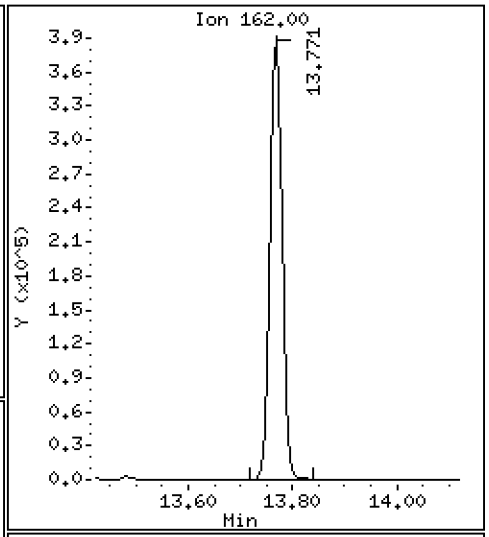
Concentration: 4.552 ug/mL

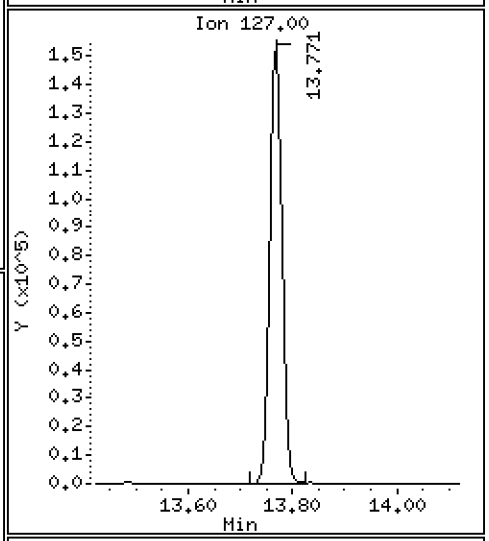


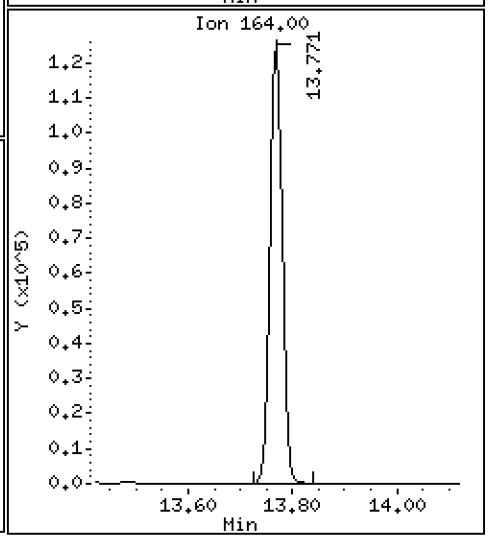












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

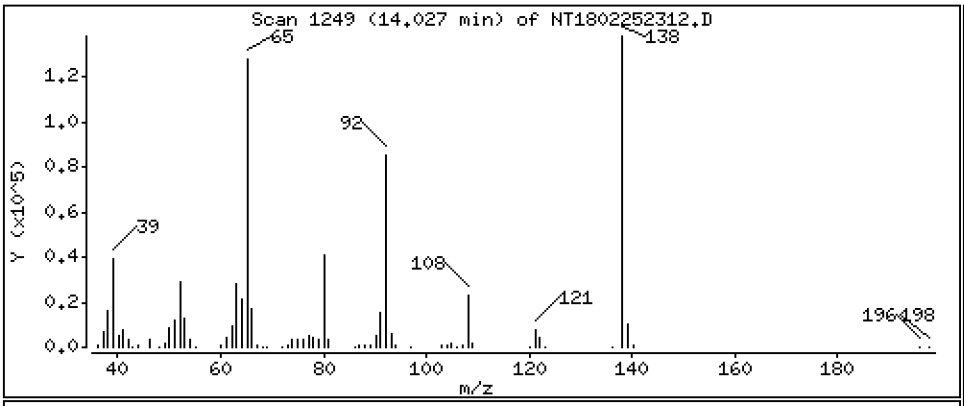
Operator: VTS

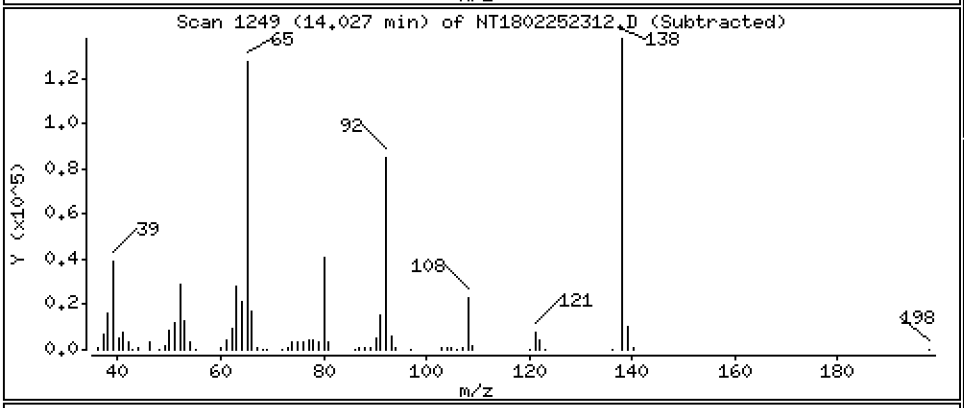
Column phase: ZB-5msi

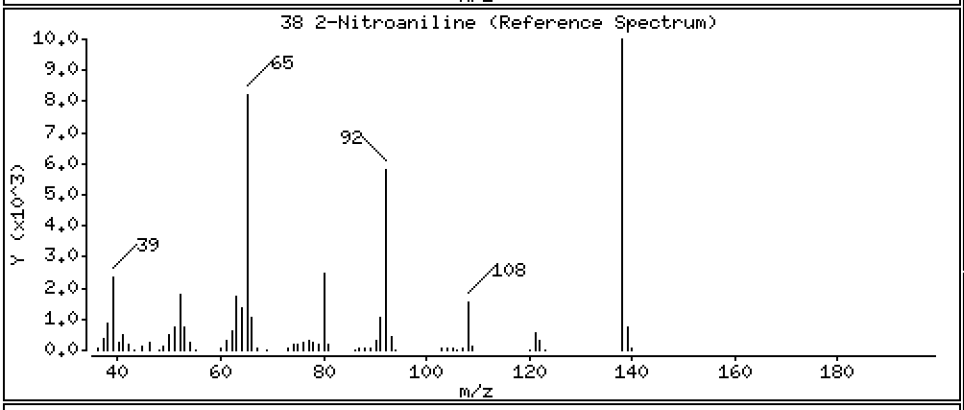
Column diameter: 0.25

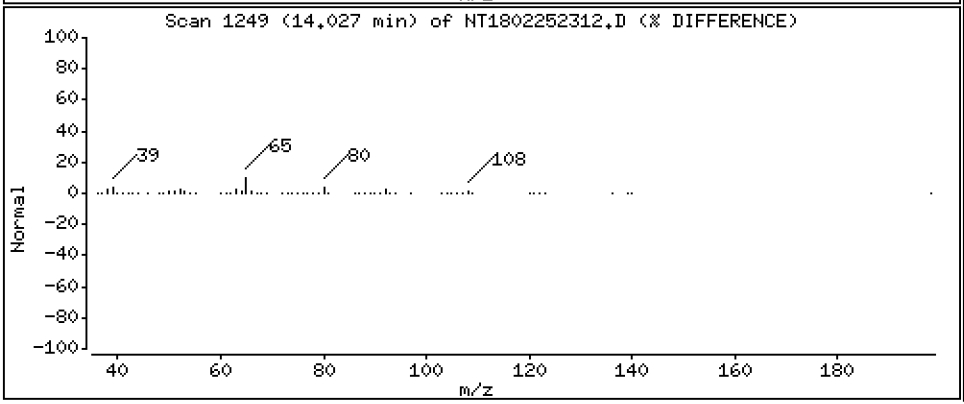
38 2-Nitroaniline

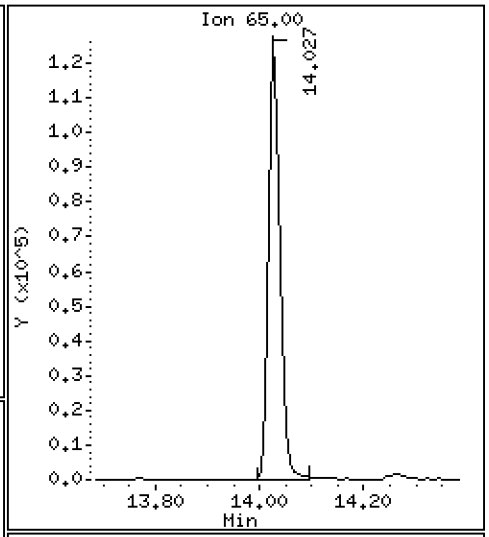
Concentration: 4.495 ug/mL

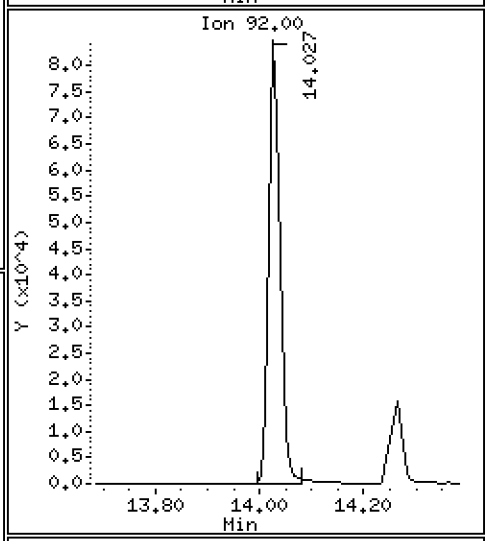


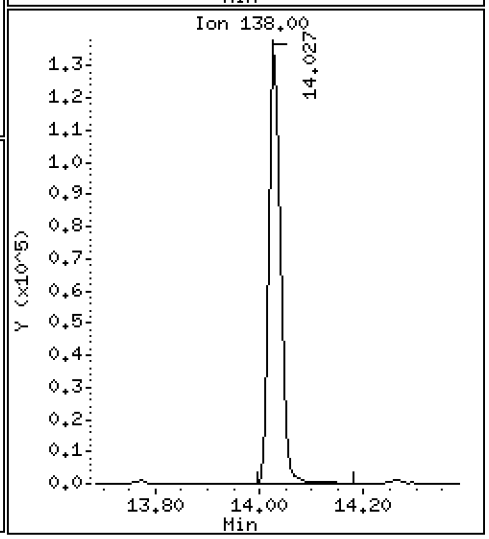












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

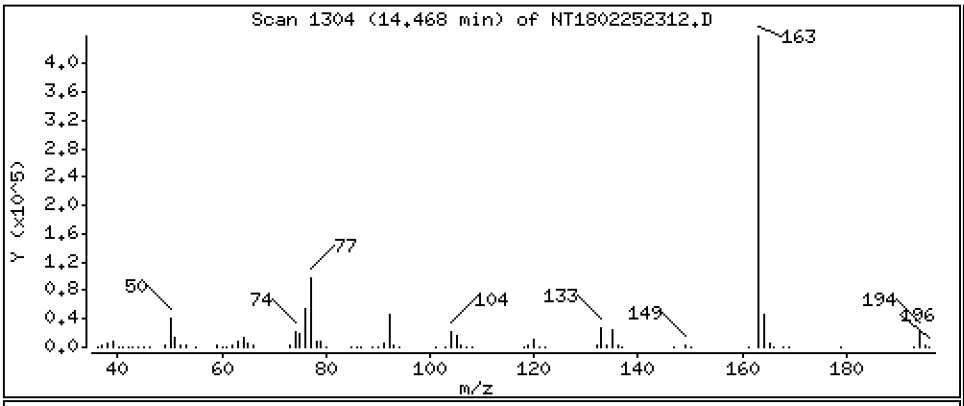
Operator: VTS

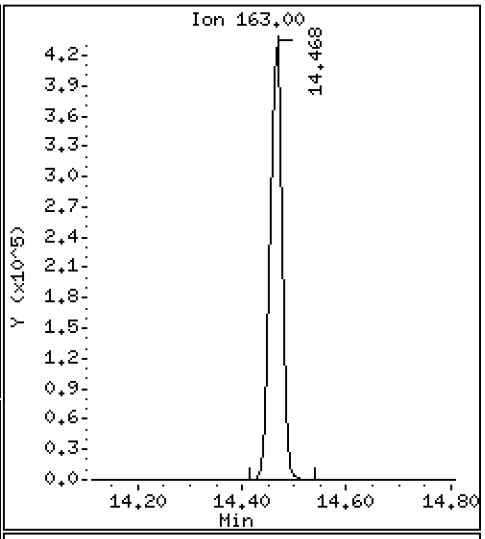
Column phase: ZB-5msi

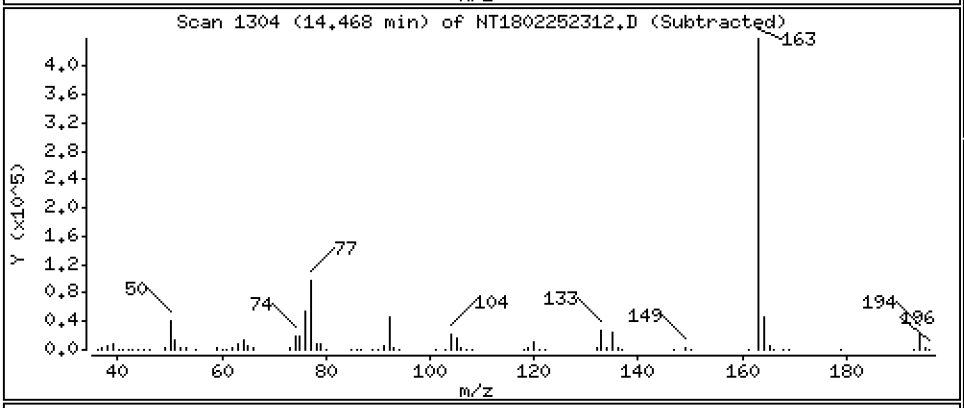
Column diameter: 0.25

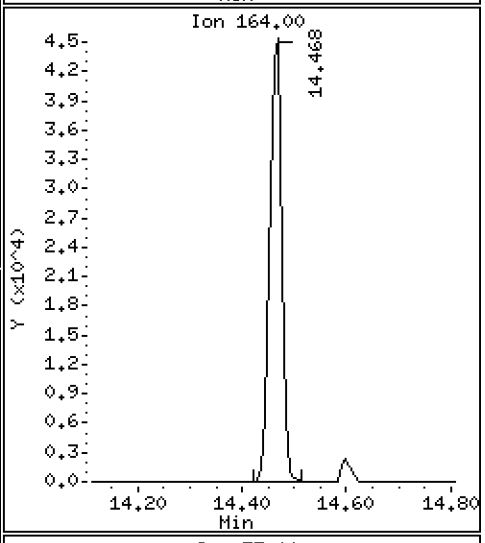
39 Dimethylphthalate

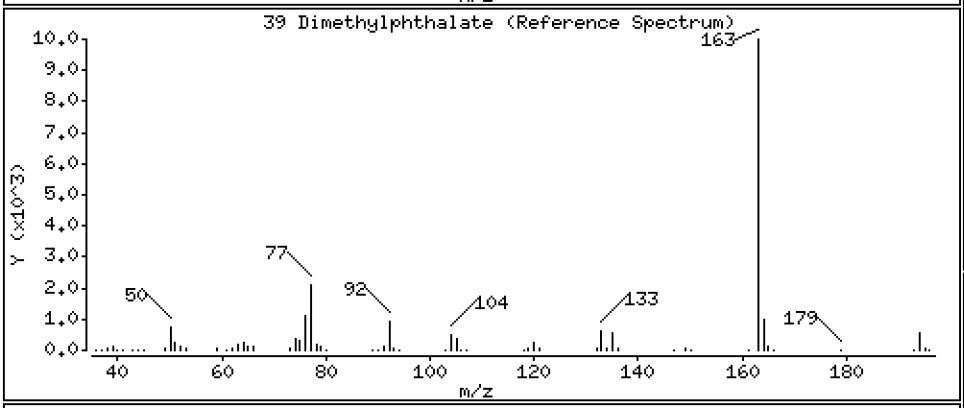
Concentration: 4.739 ug/mL

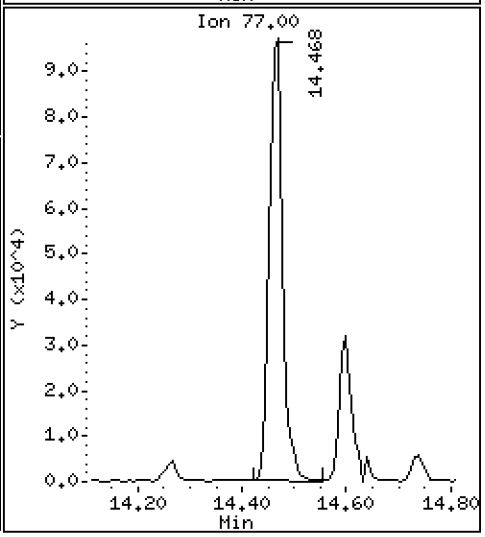


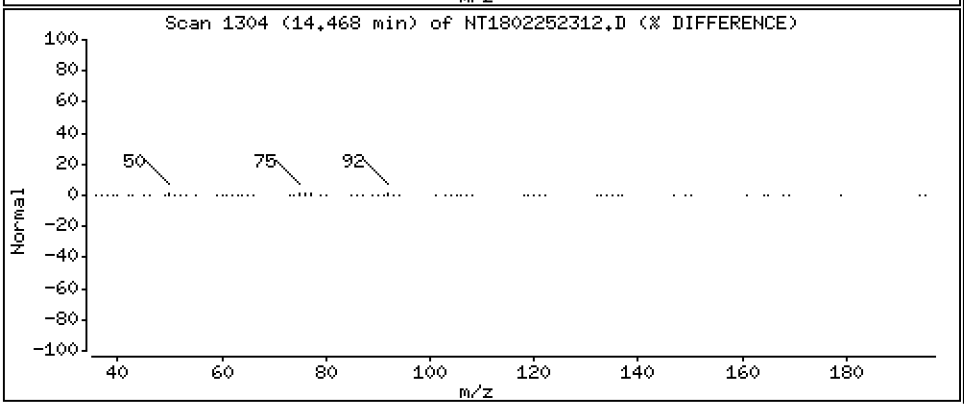












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

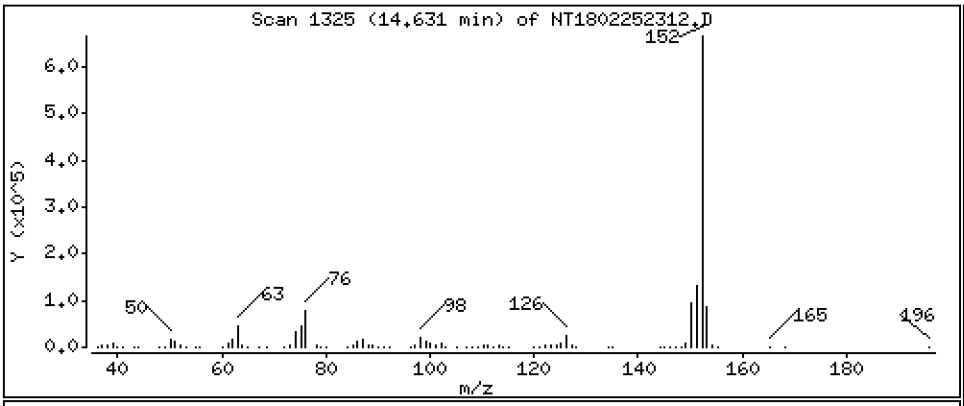
Operator: VTS

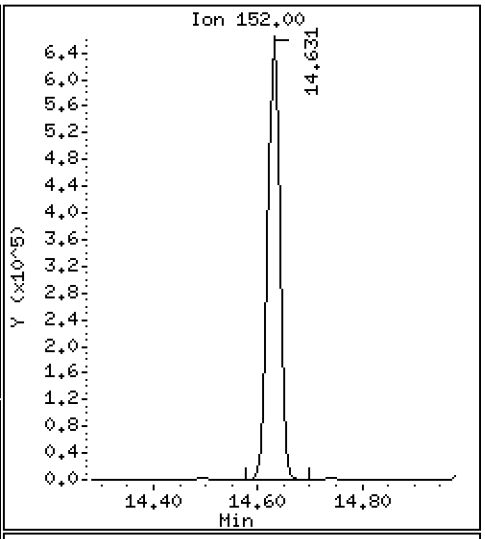
Column phase: ZB-5msi

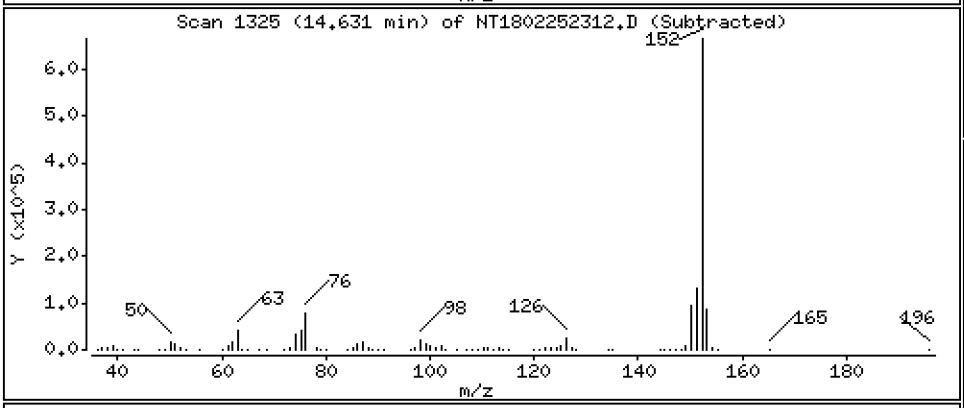
Column diameter: 0.25

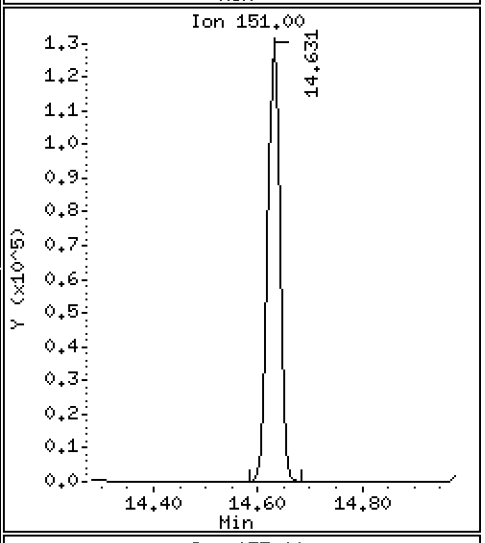
40 Acenaphthylene

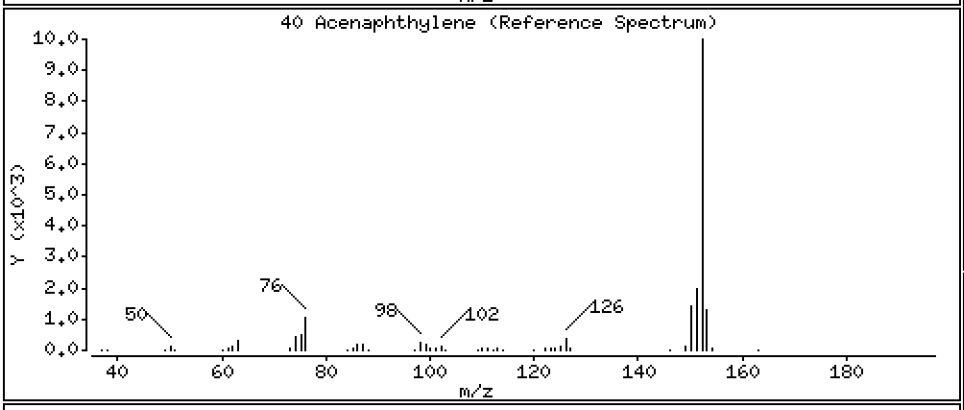
Concentration: 4.591 ug/mL

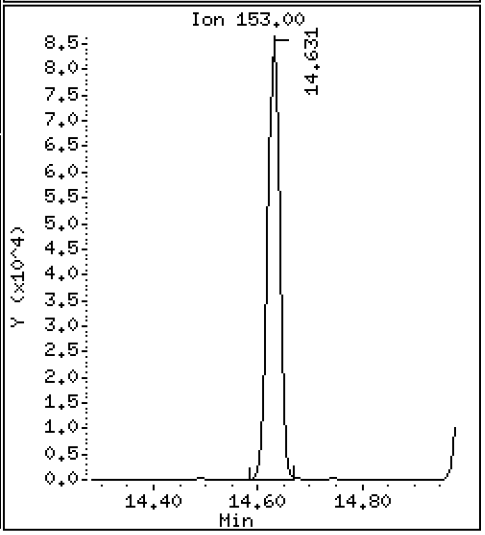


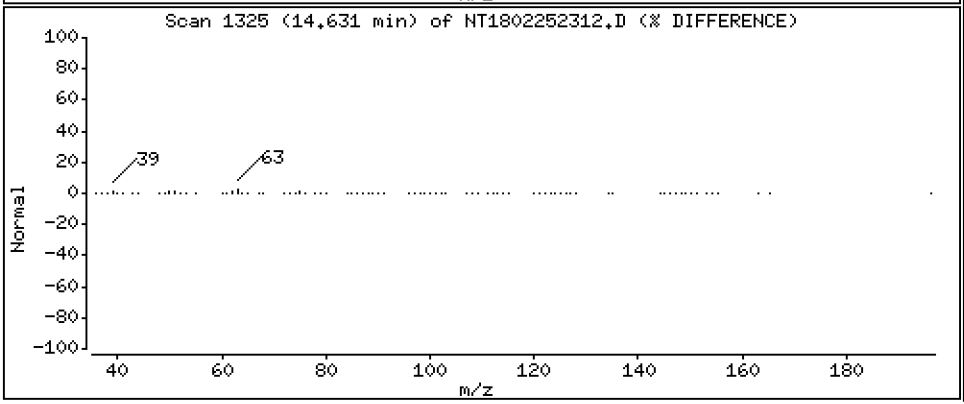












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

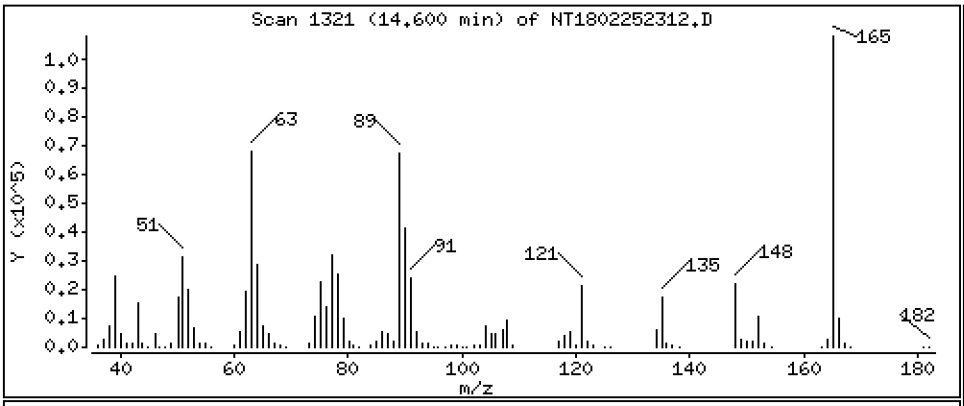
Operator: VTS

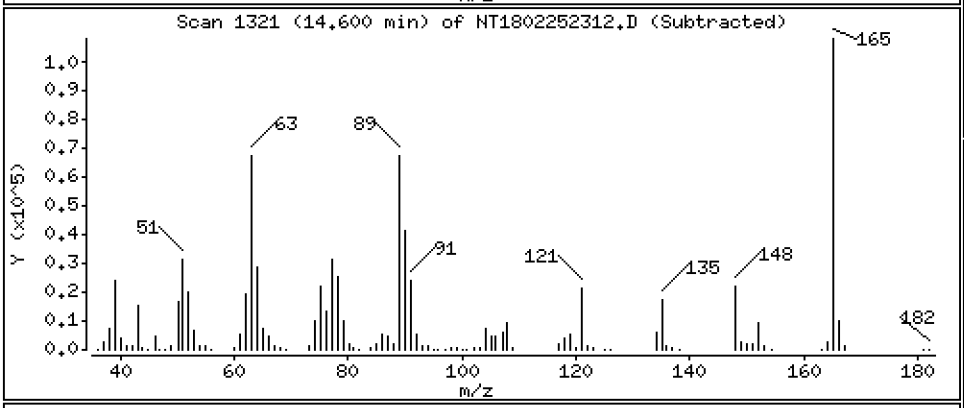
Column phase: ZB-5msi

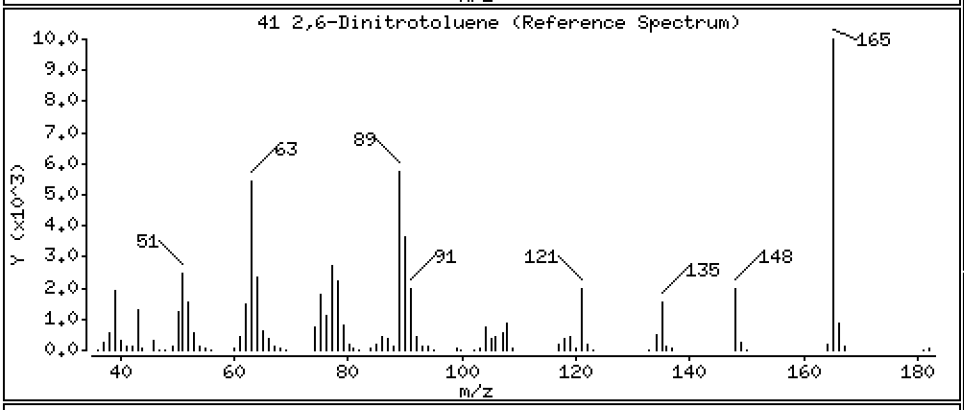
Column diameter: 0.25

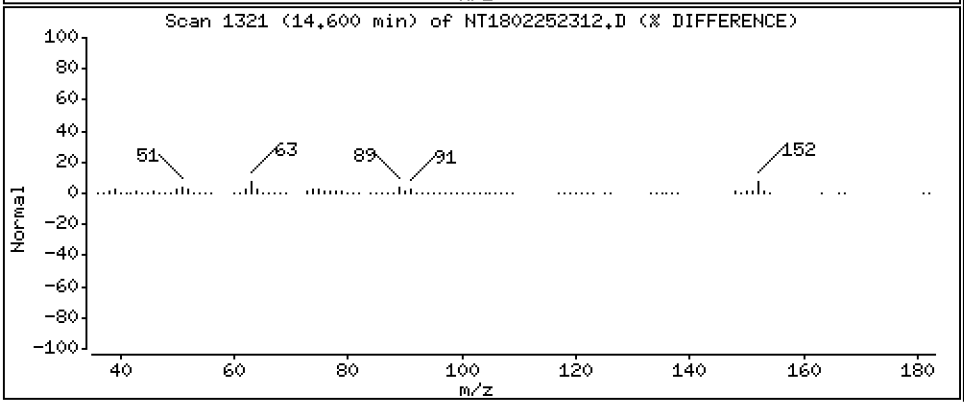
41 2,6-Dinitrotoluene

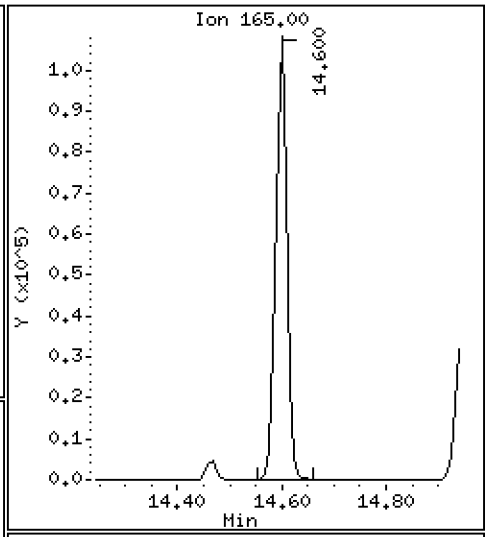
Concentration: 4.850 ug/mL

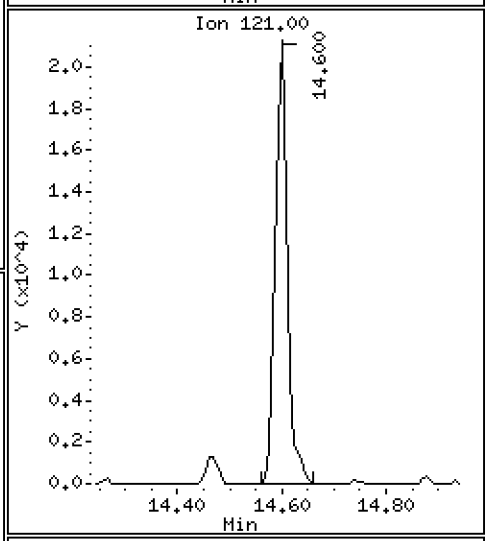


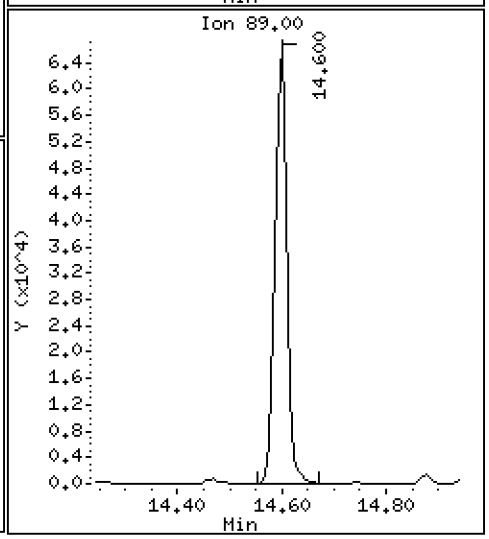












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

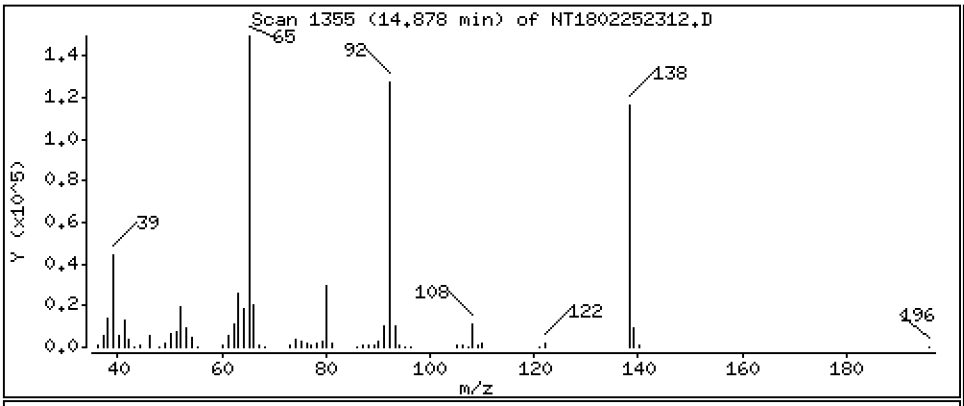
Operator: VTS

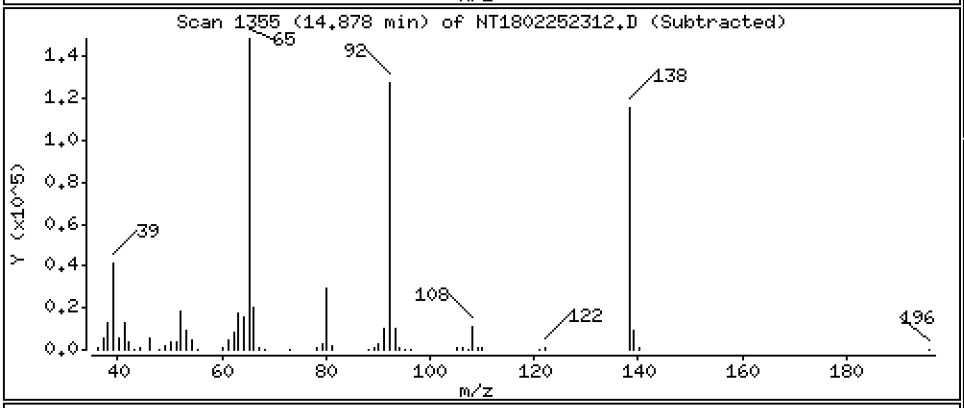
Column phase: ZB-5msi

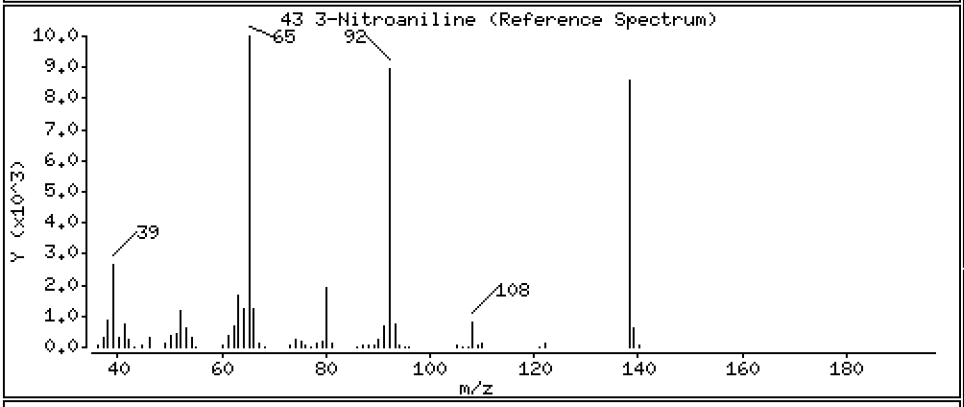
Column diameter: 0.25

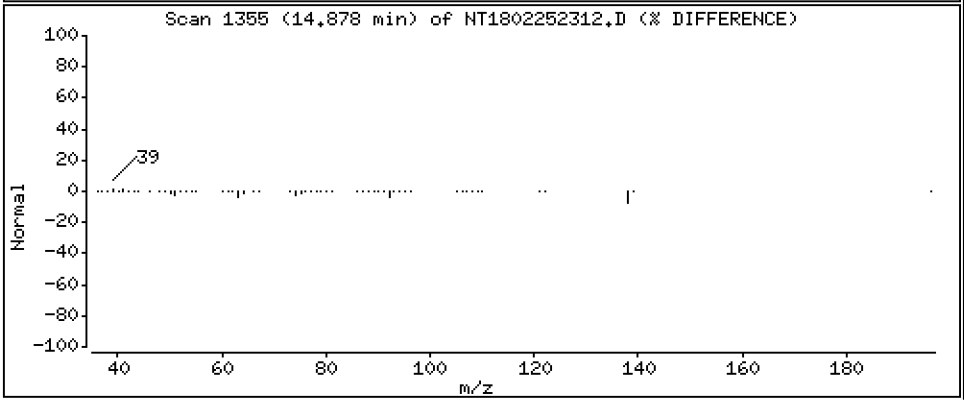
43 3-Nitroaniline

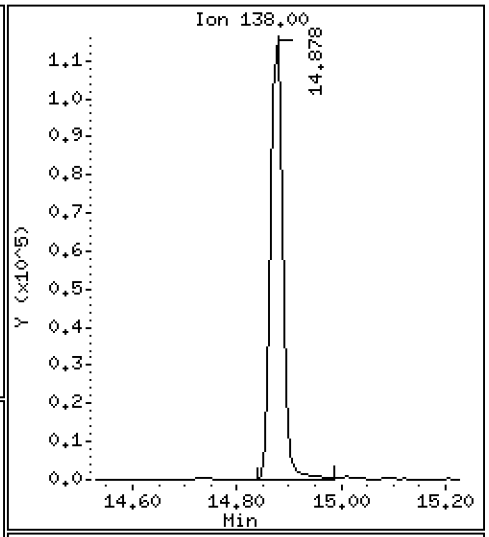
Concentration: 4.643 ug/mL

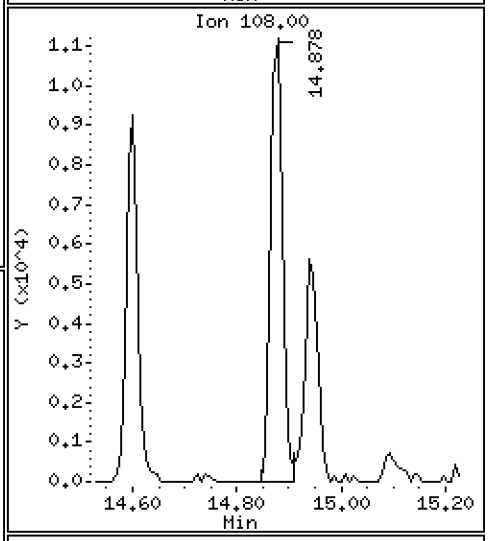


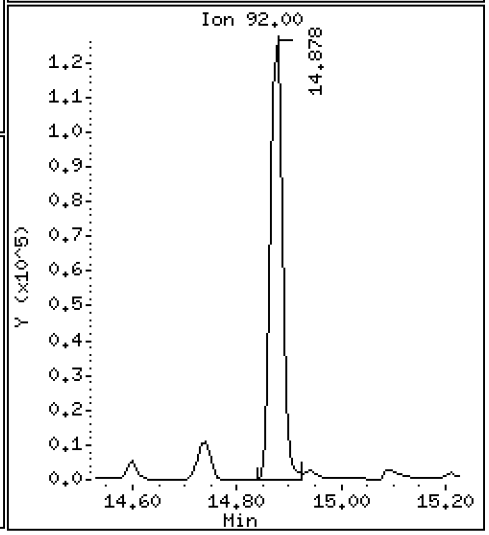












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

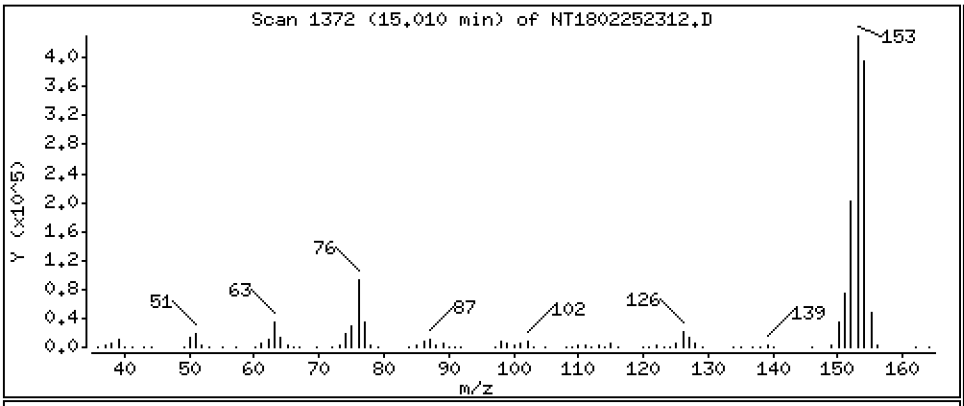
Operator: VTS

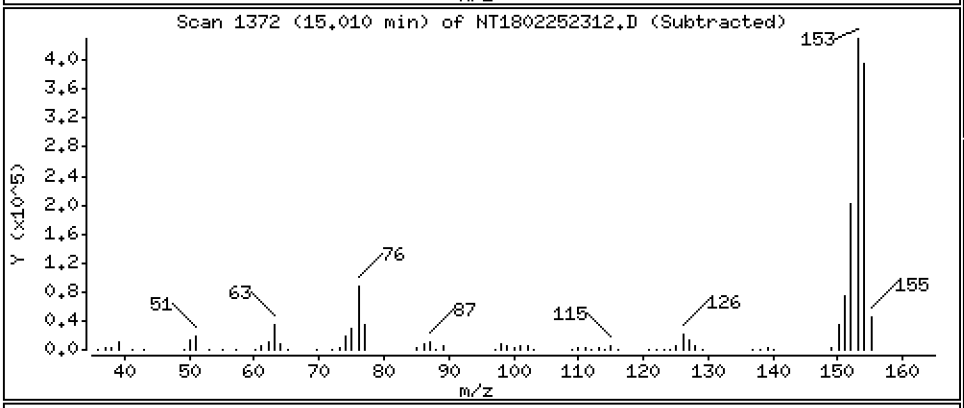
Column phase: ZB-5msi

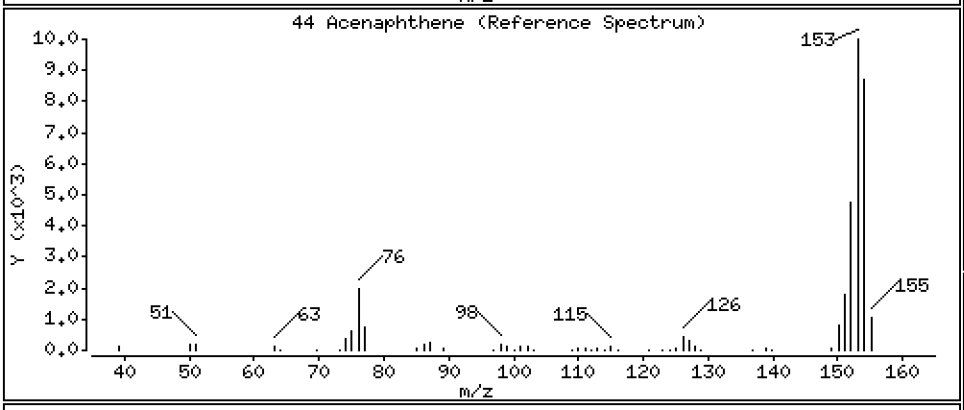
Column diameter: 0.25

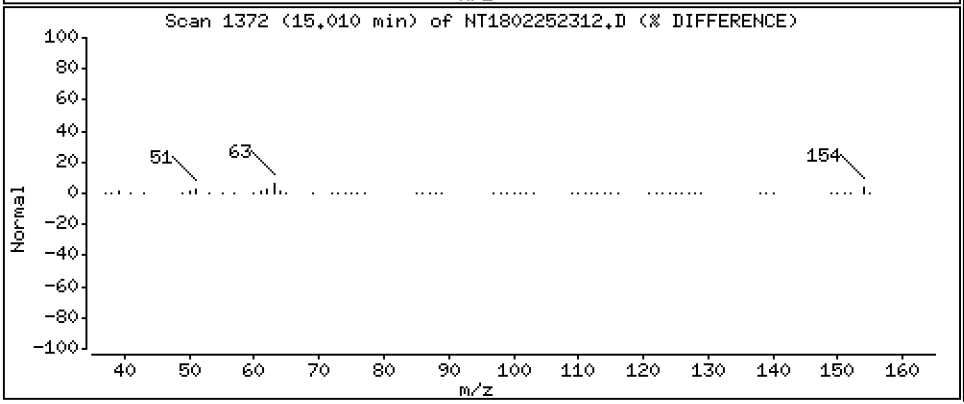
44 Acenaphthene

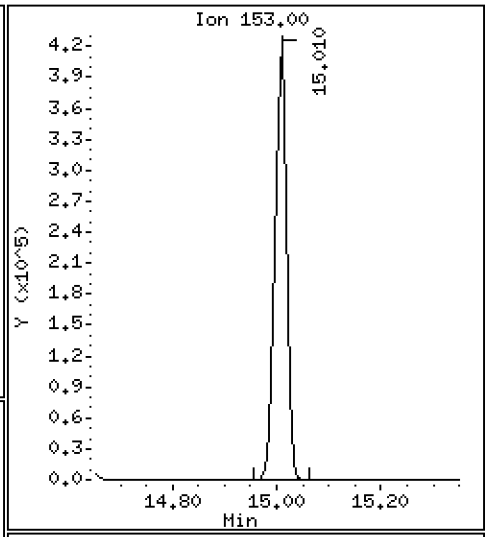
Concentration: 4.530 ug/mL

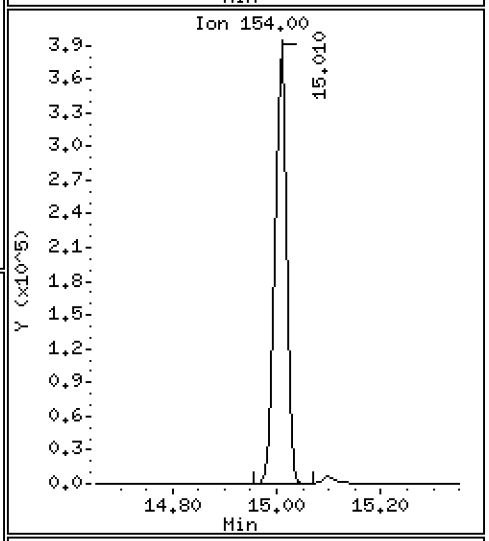


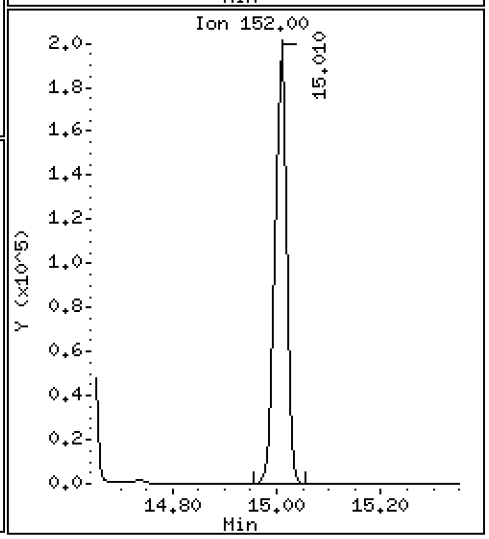












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

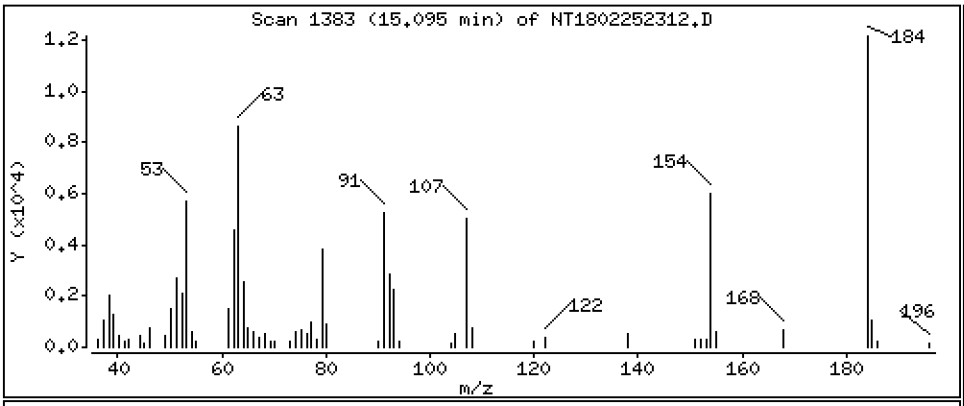
Operator: VTS

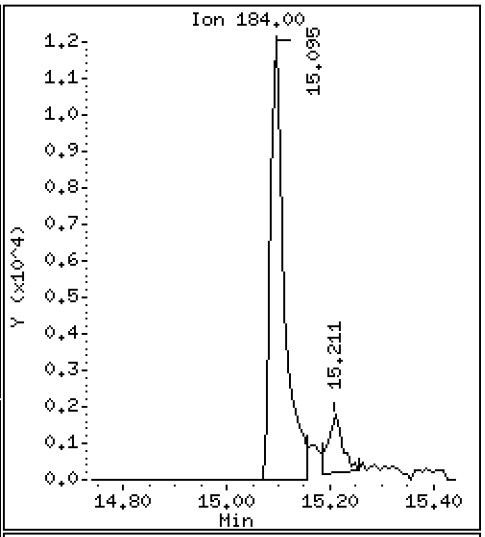
Column phase: ZB-5msi

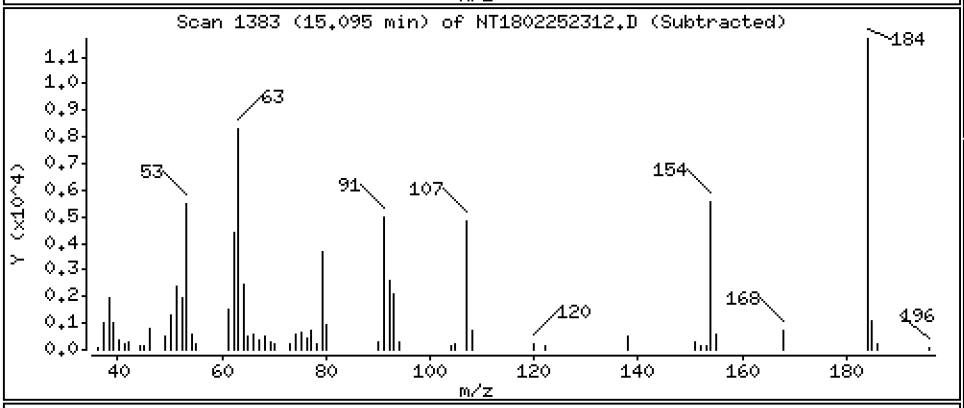
Column diameter: 0.25

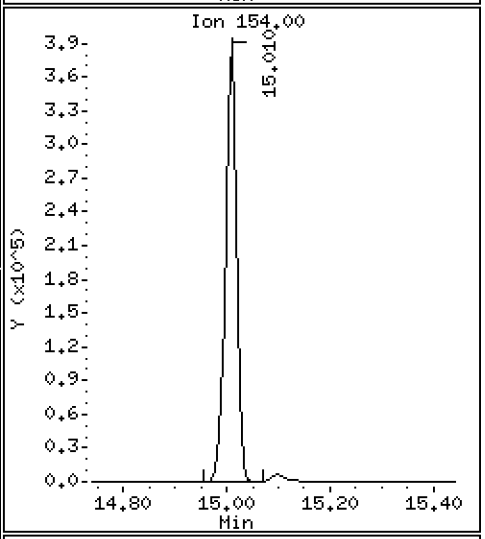
45 2,4-Dinitrophenol

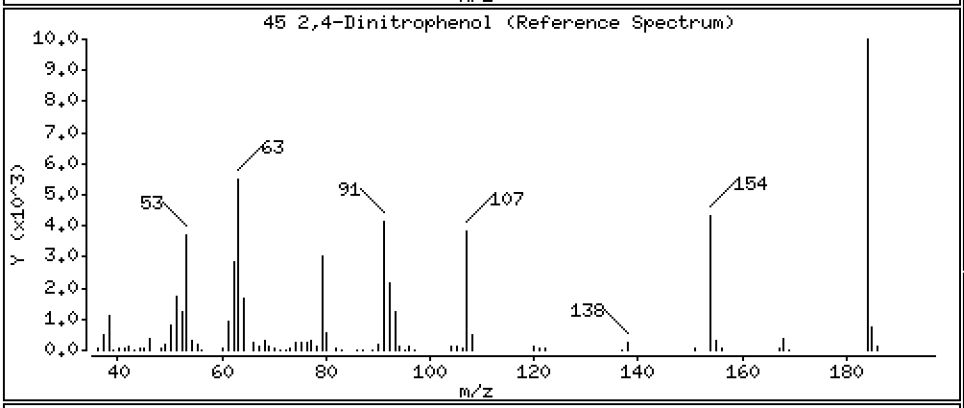
Concentration: 1.426 ug/mL

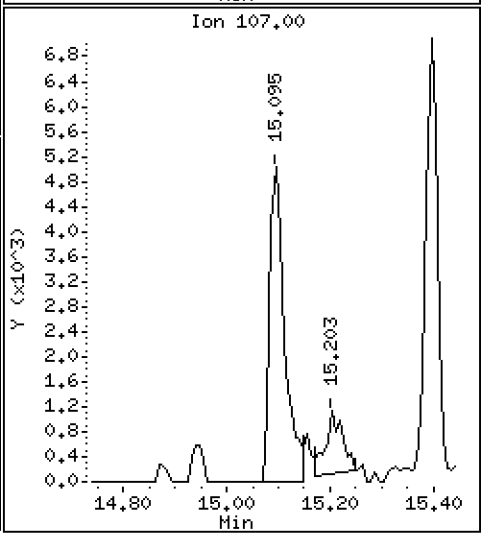


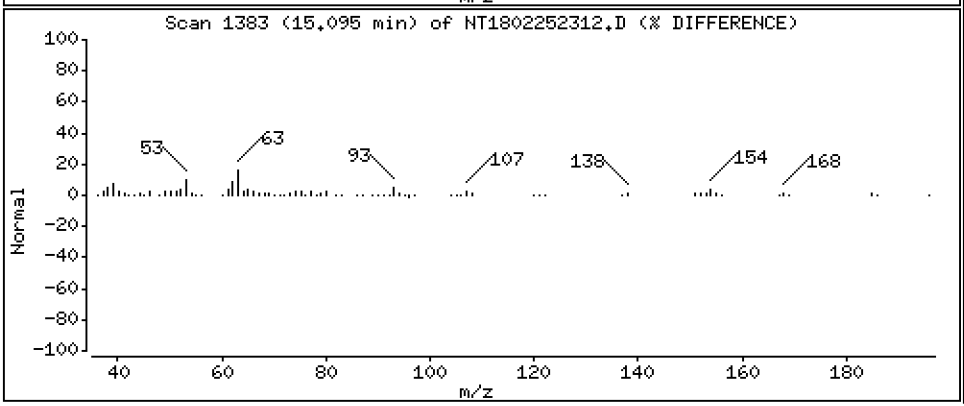












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

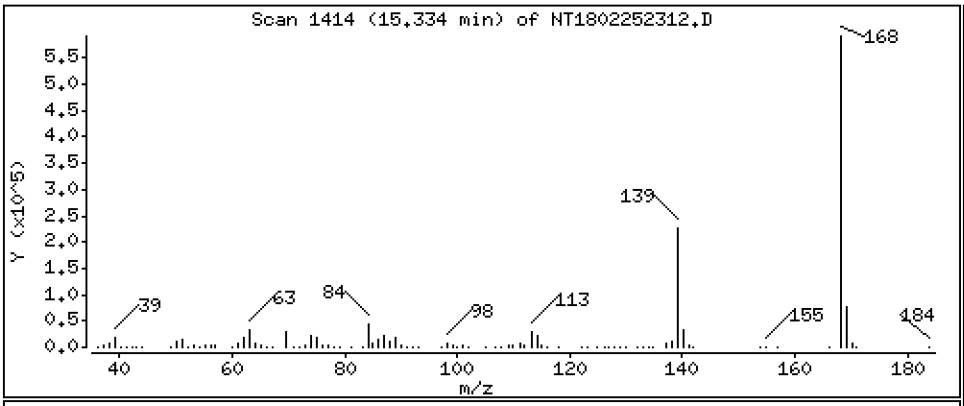
Operator: VTS

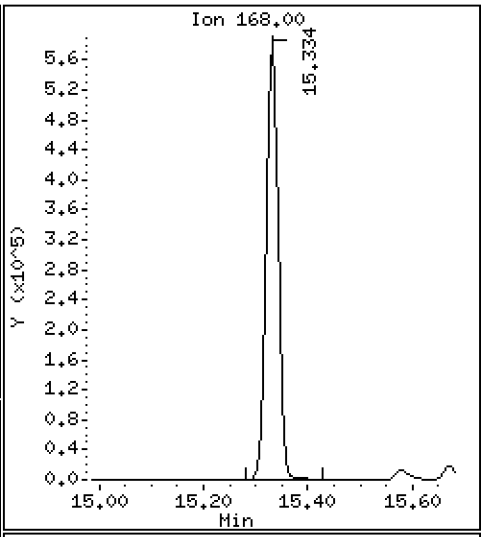
Column phase: ZB-5msi

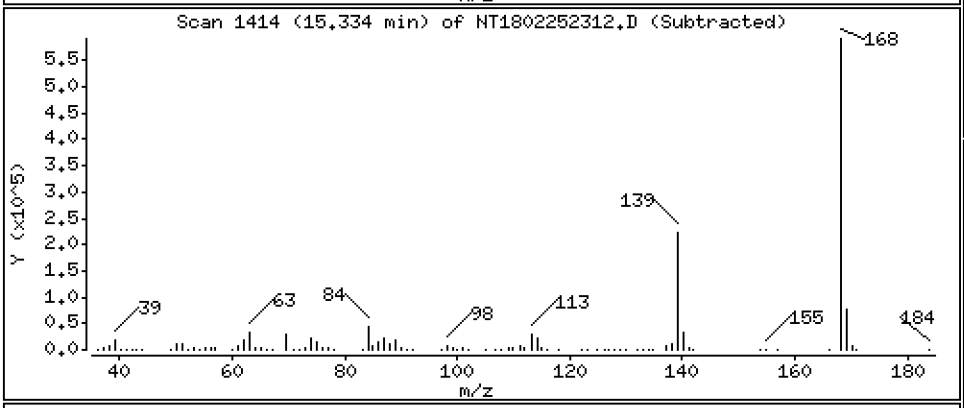
Column diameter: 0.25

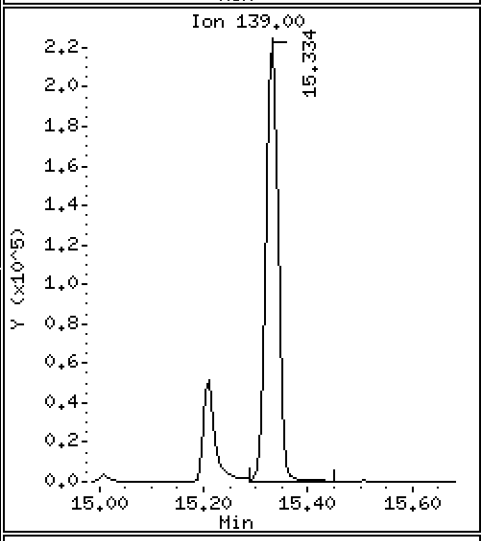
46 Dibenzofuran

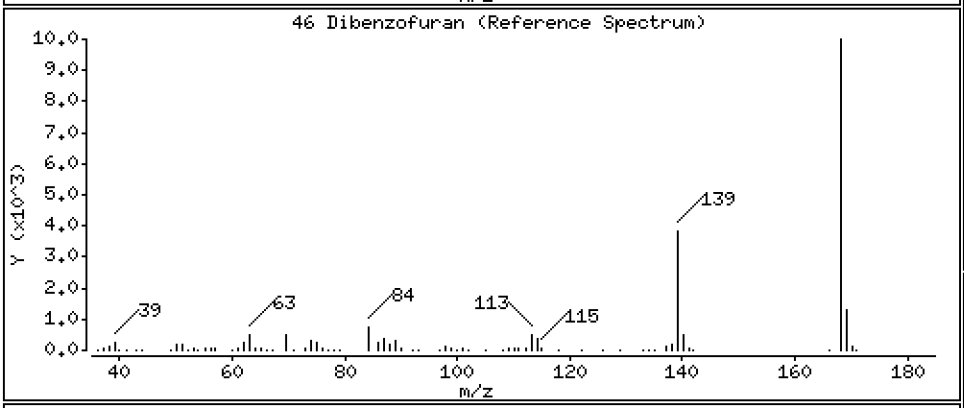
Concentration: 4.355 ug/mL

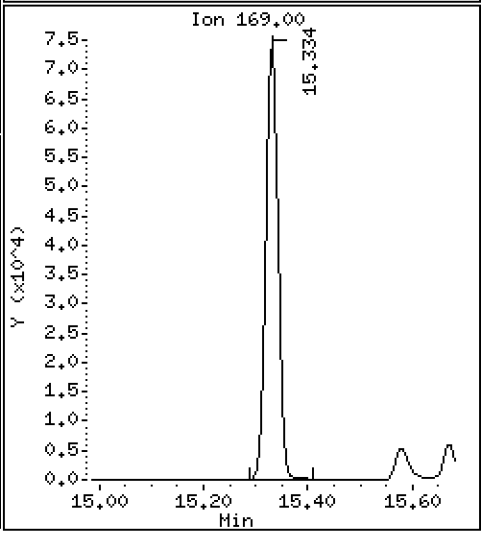


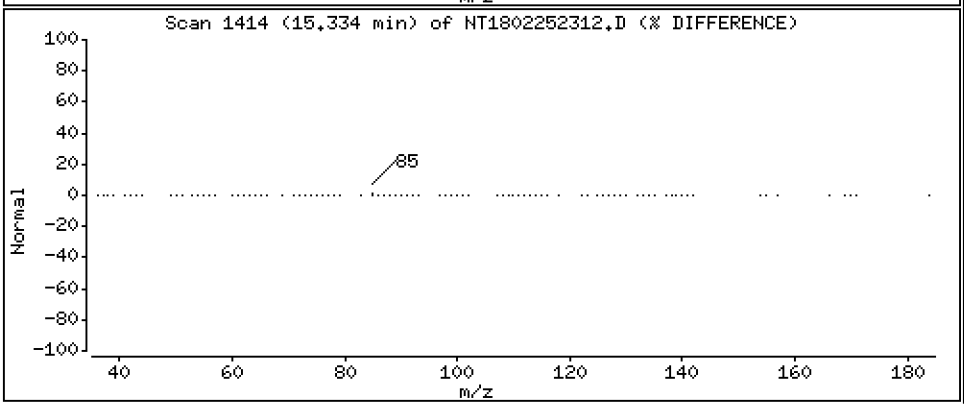












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

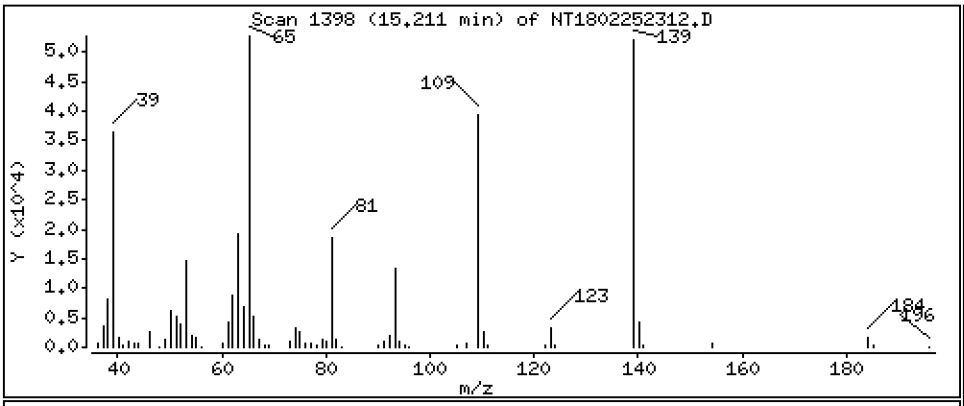
Operator: VTS

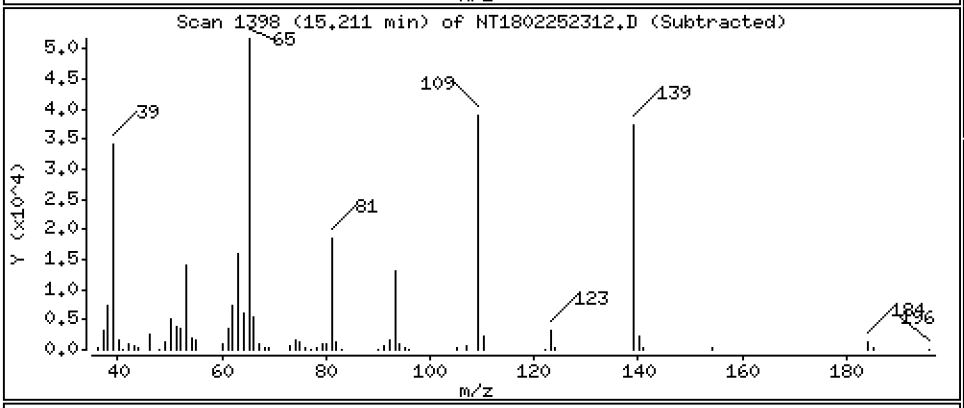
Column phase: ZB-5msi

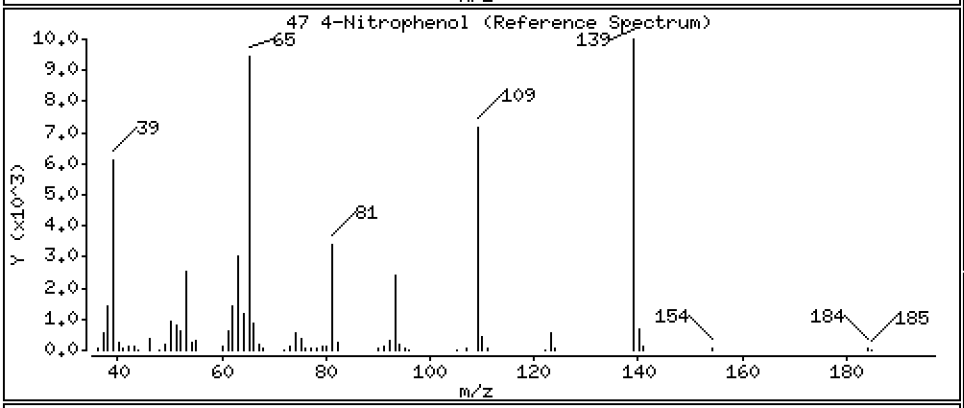
Column diameter: 0.25

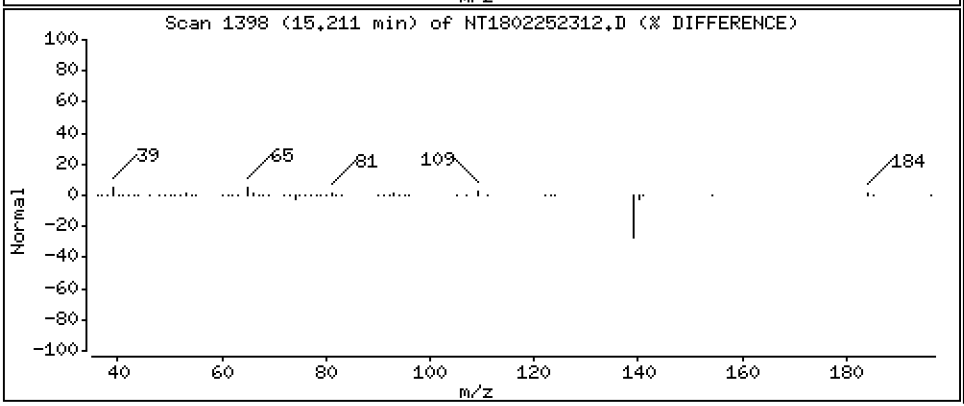
47 4-Nitrophenol

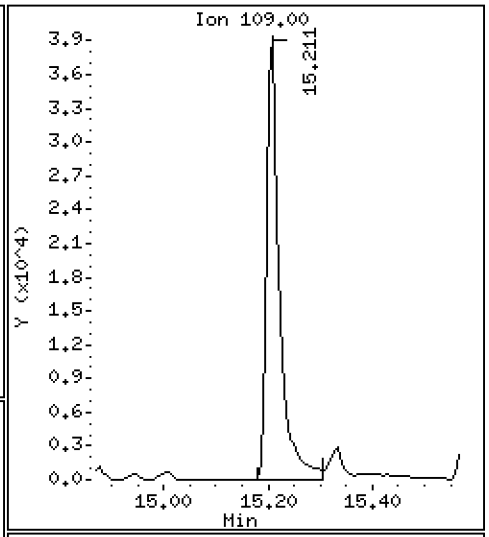
Concentration: 4.346 ug/mL

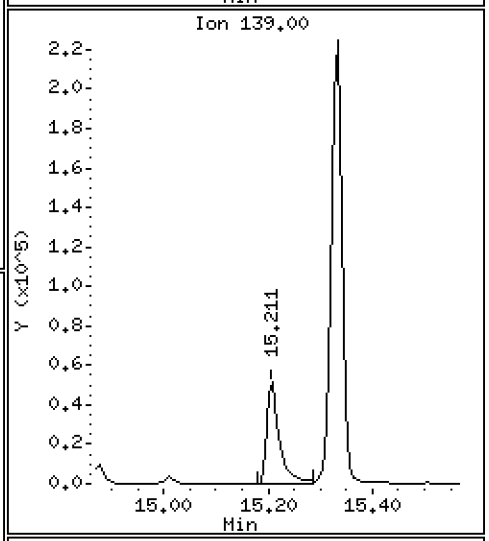


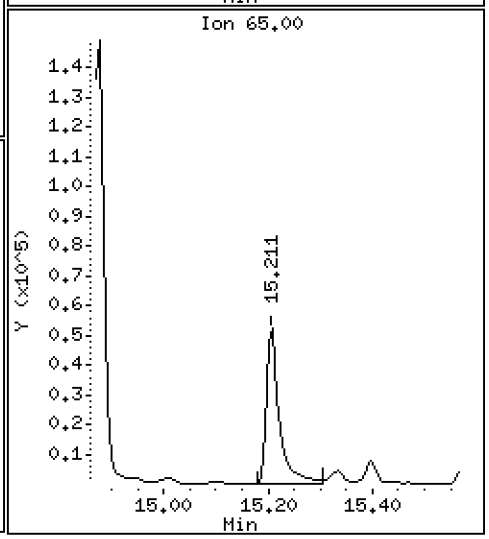












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

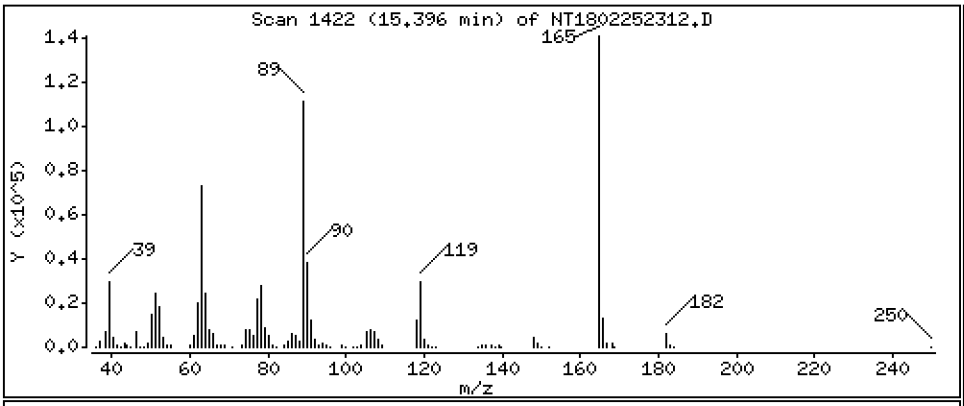
Operator: VTS

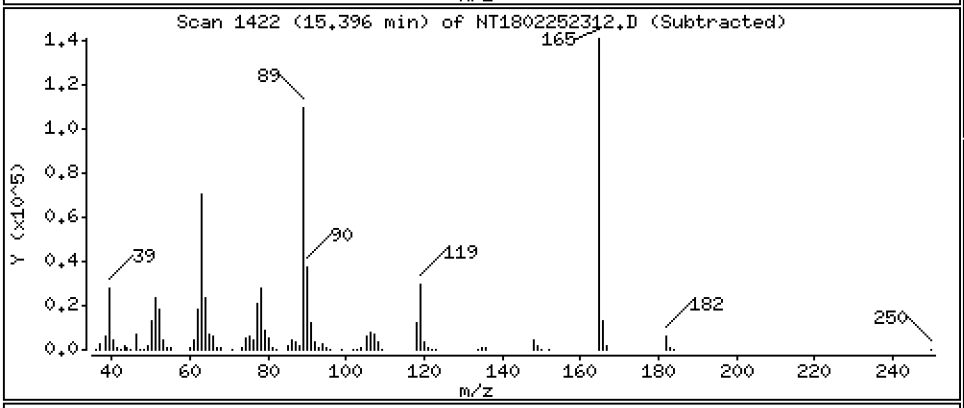
Column phase: ZB-5msi

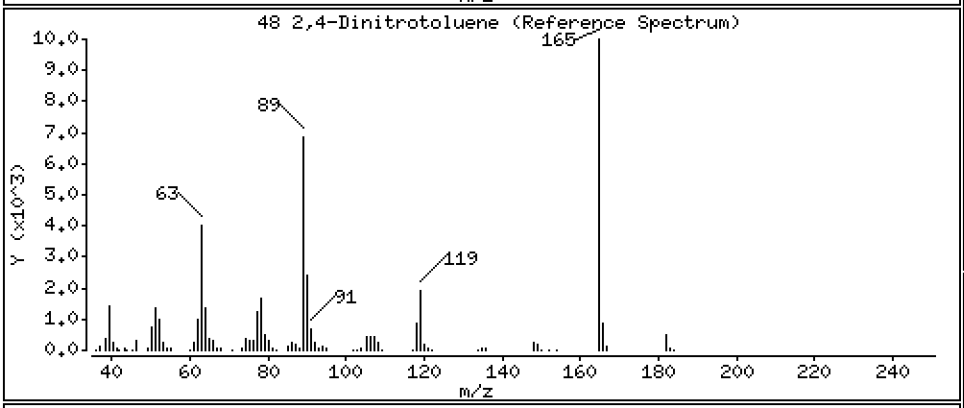
Column diameter: 0.25

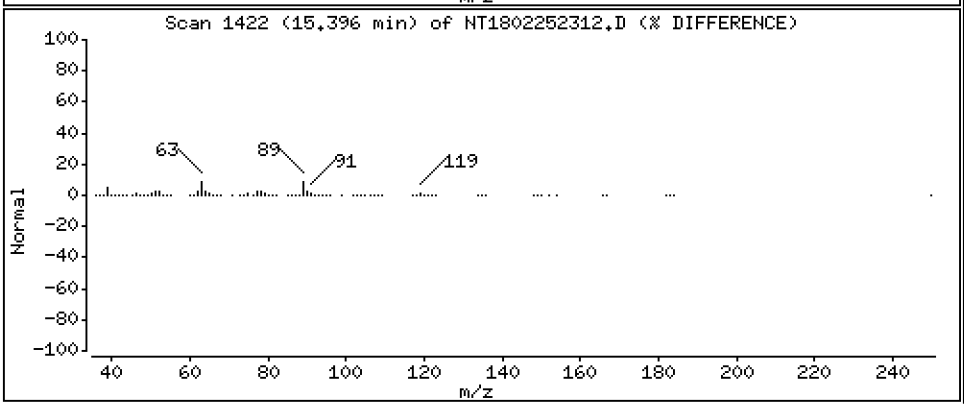
48 2,4-Dinitrotoluene

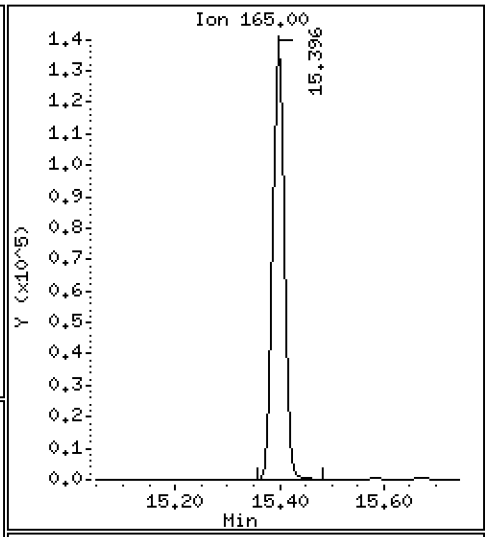
Concentration: 4.573 ug/mL

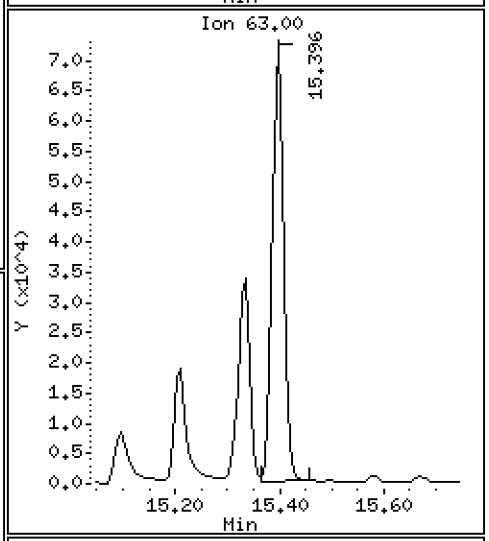


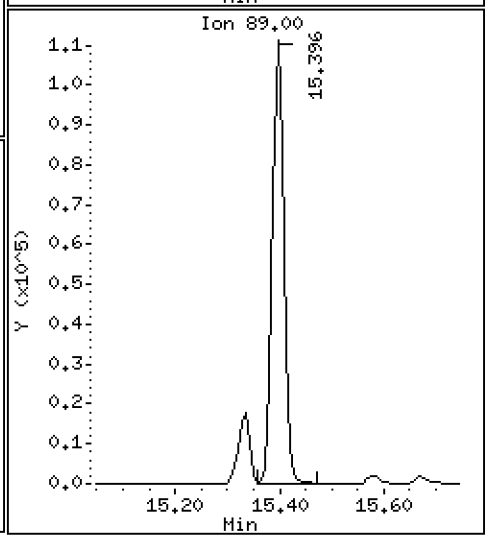












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

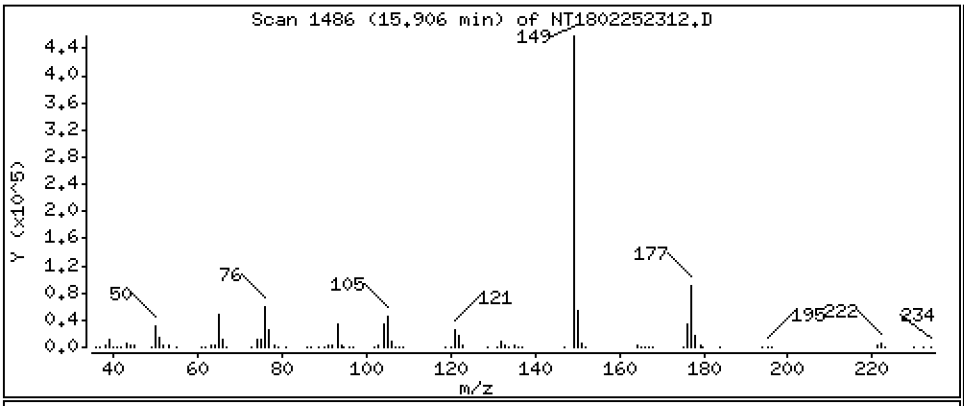
Operator: VTS

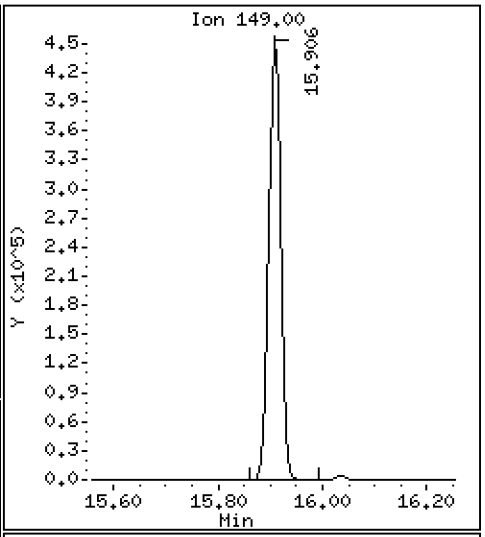
Column phase: ZB-5msi

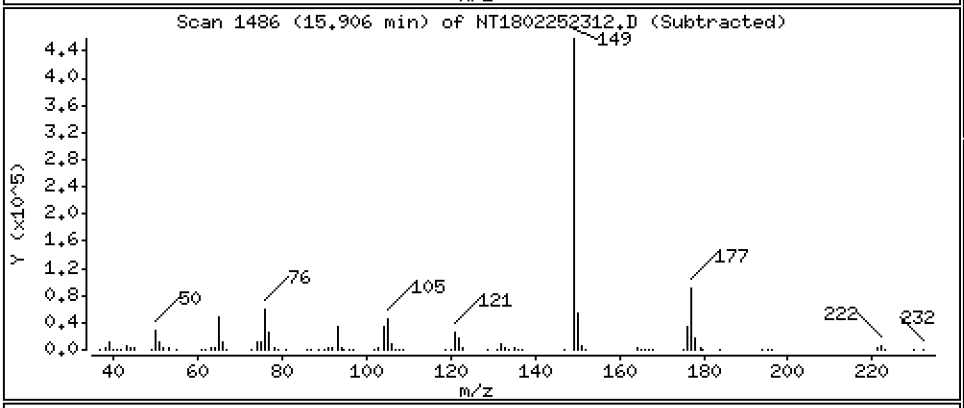
Column diameter: 0.25

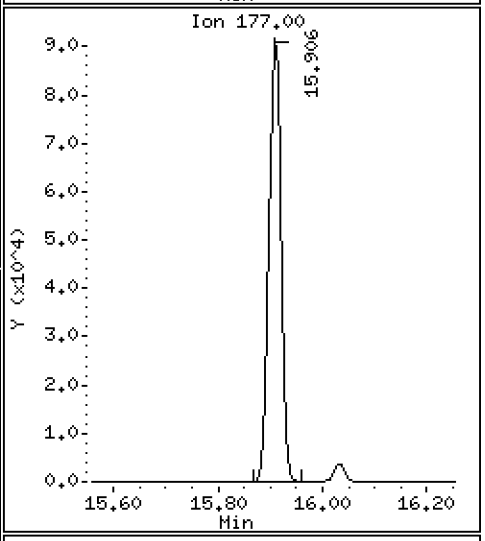
50 Diethylphthalate

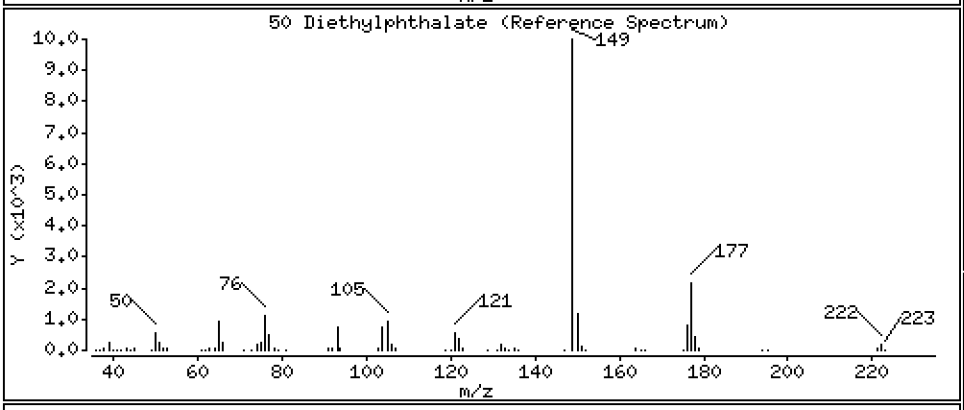
Concentration: 5.265 ug/mL

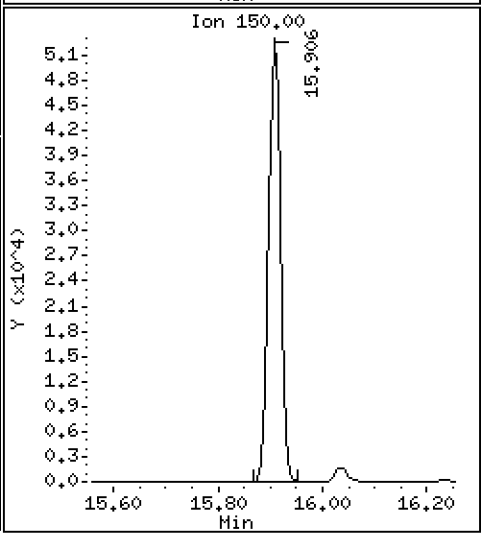


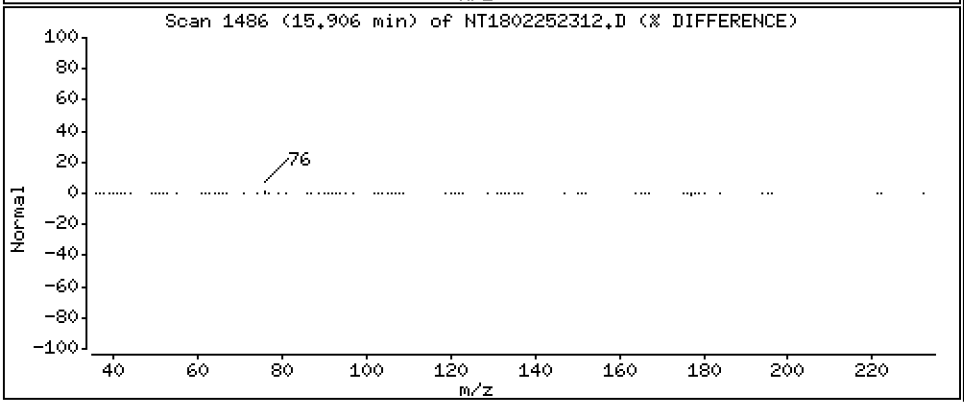












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

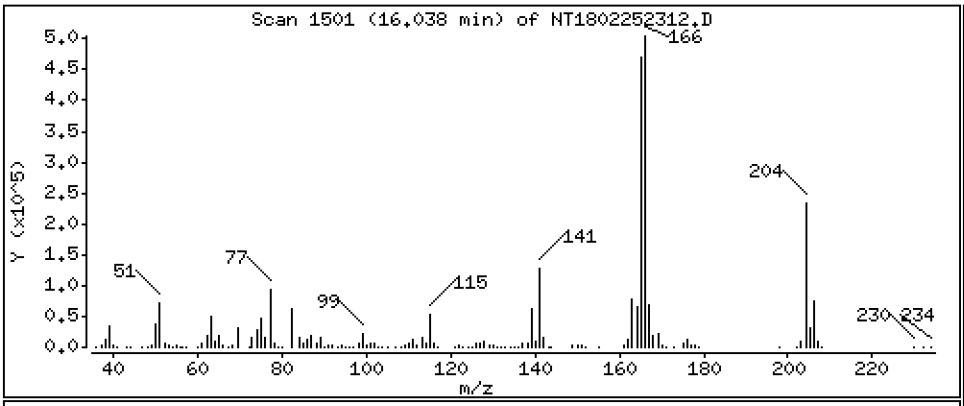
Operator: VTS

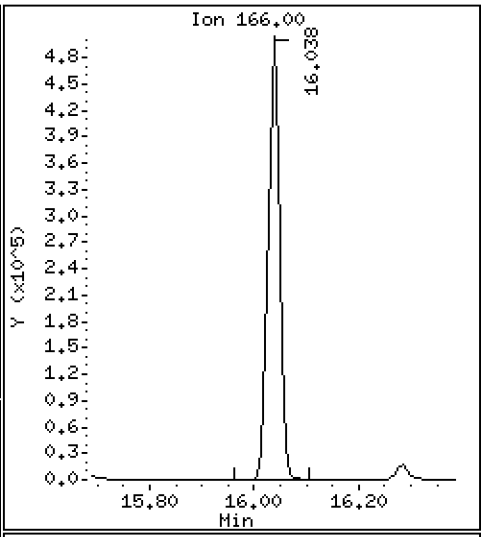
Column phase: ZB-5msi

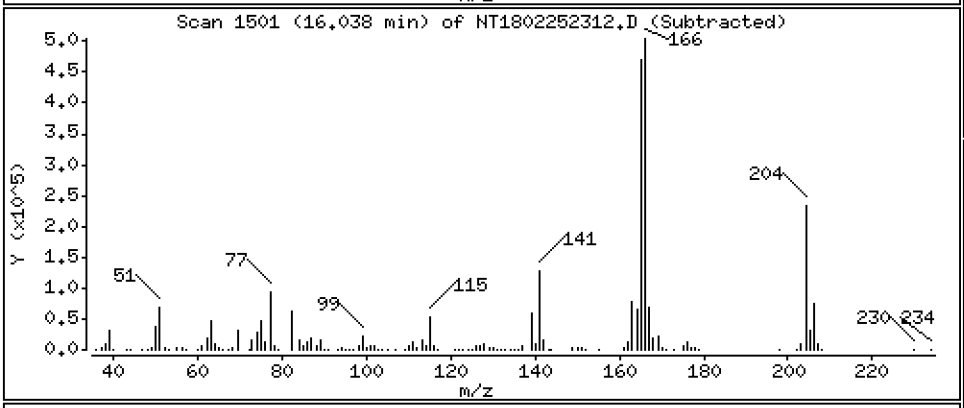
Column diameter: 0.25

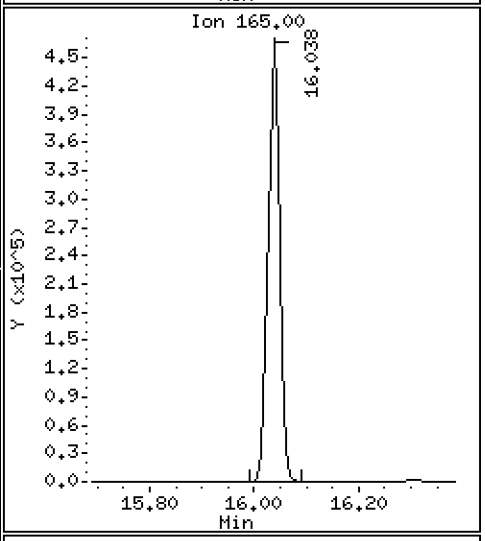
49 Fluorene

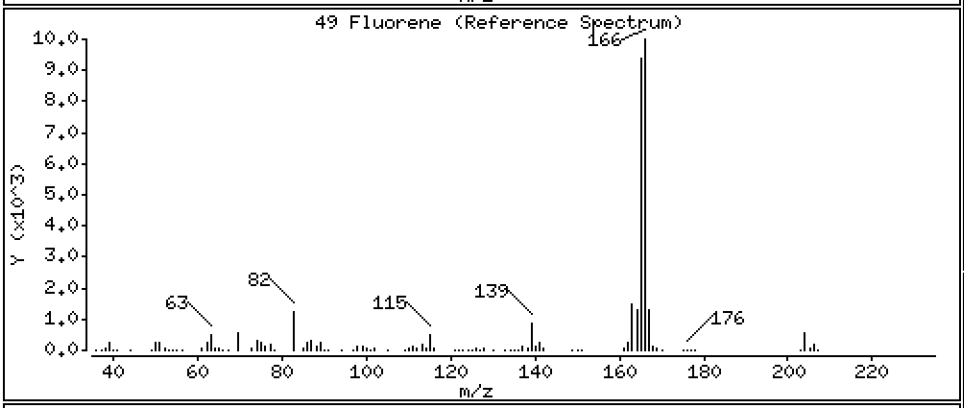
Concentration: 5.182 ug/mL

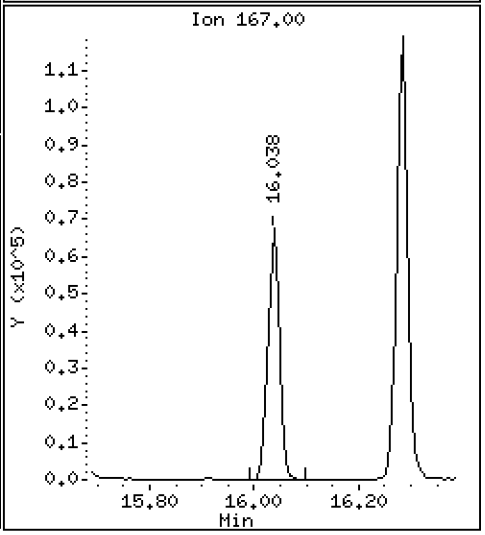


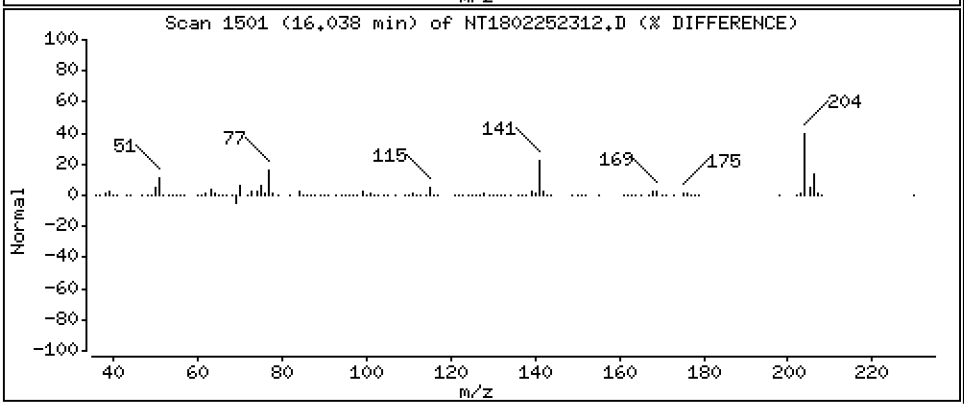












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

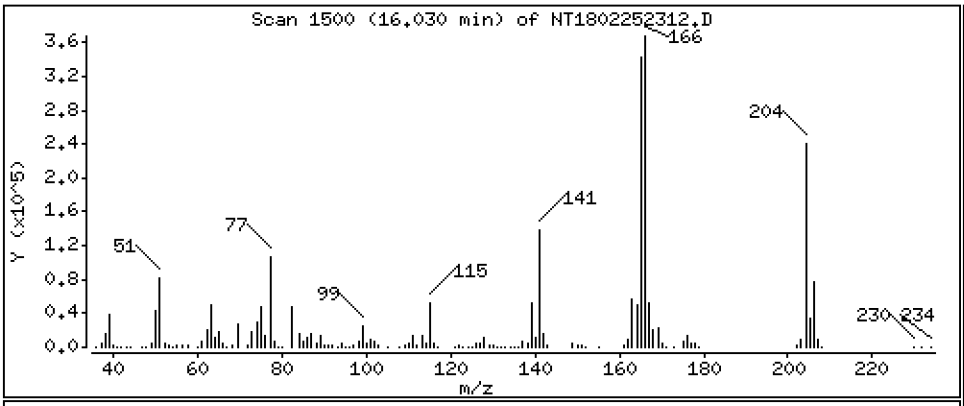
Operator: VTS

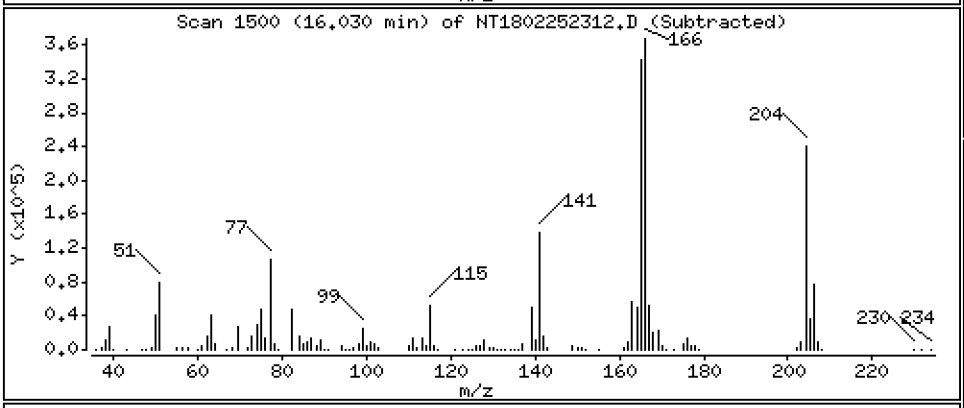
Column phase: ZB-5msi

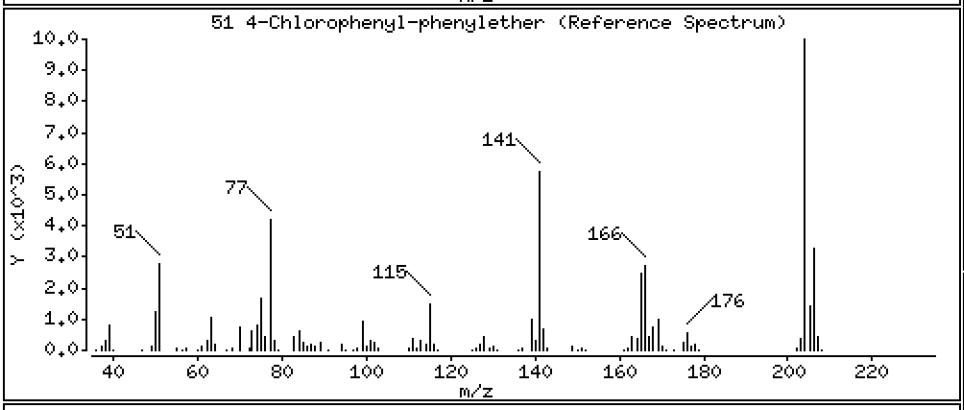
Column diameter: 0.25

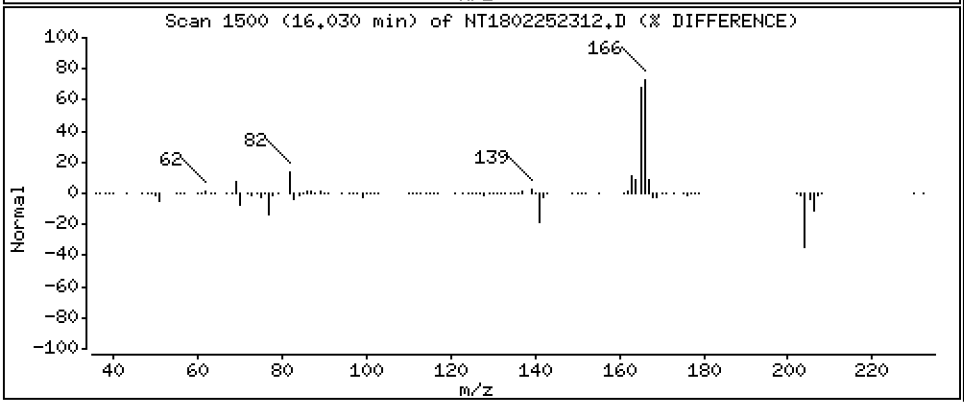
51 4-Chlorophenyl-phenylether

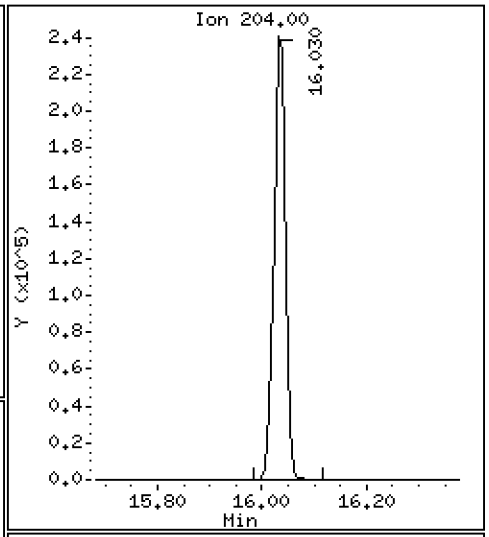
Concentration: 4.975 ug/mL

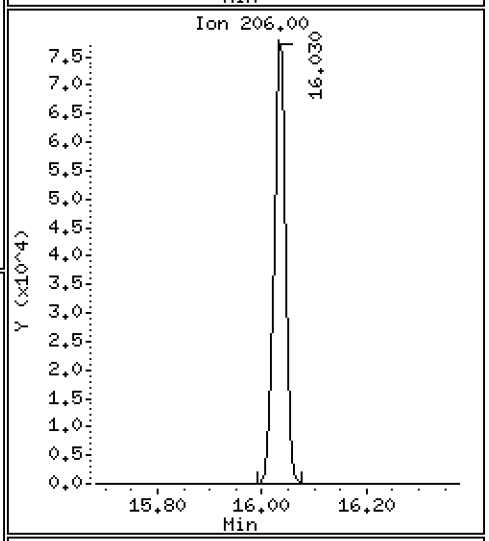


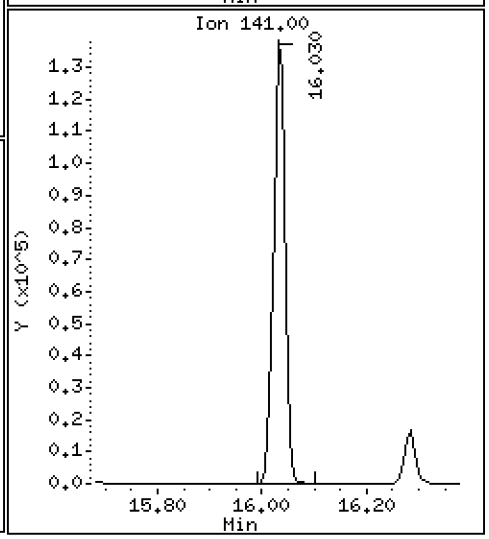












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

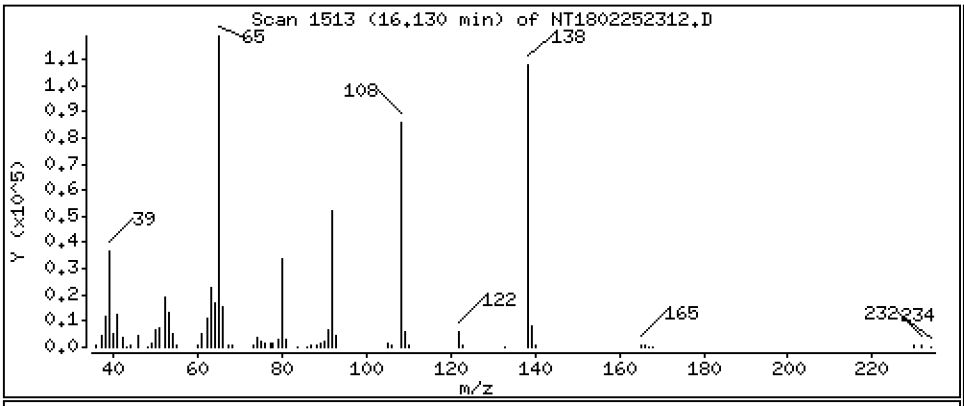
Operator: VTS

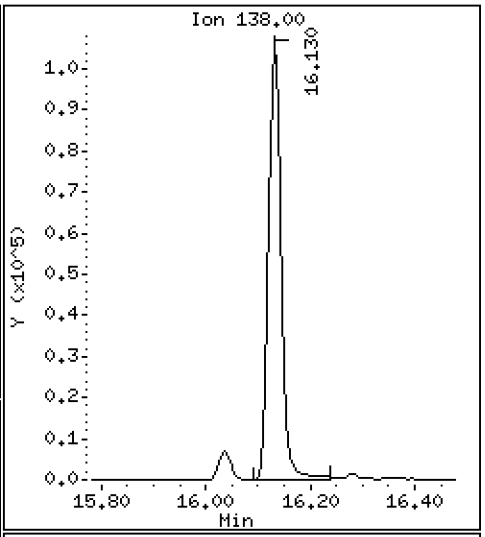
Column phase: ZB-5msi

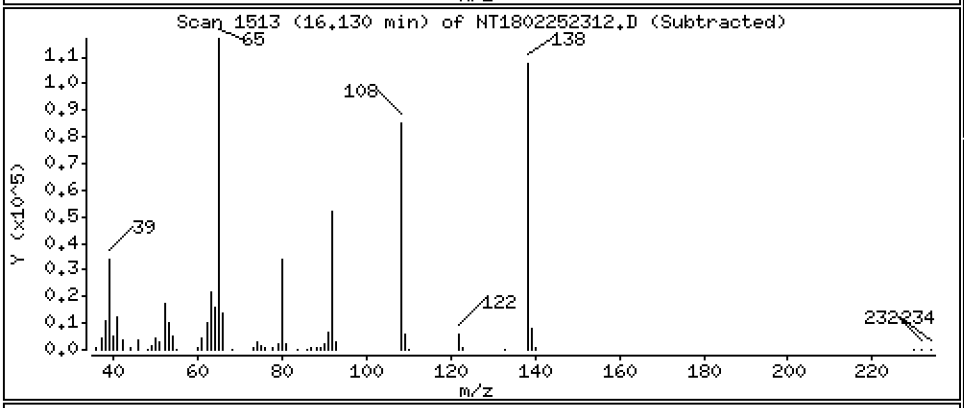
Column diameter: 0.25

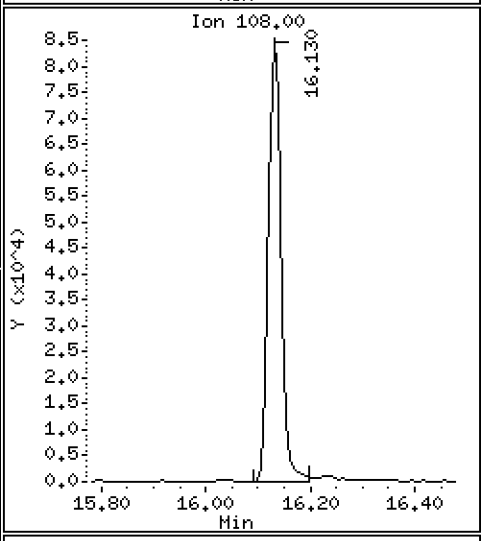
52 4-Nitroaniline

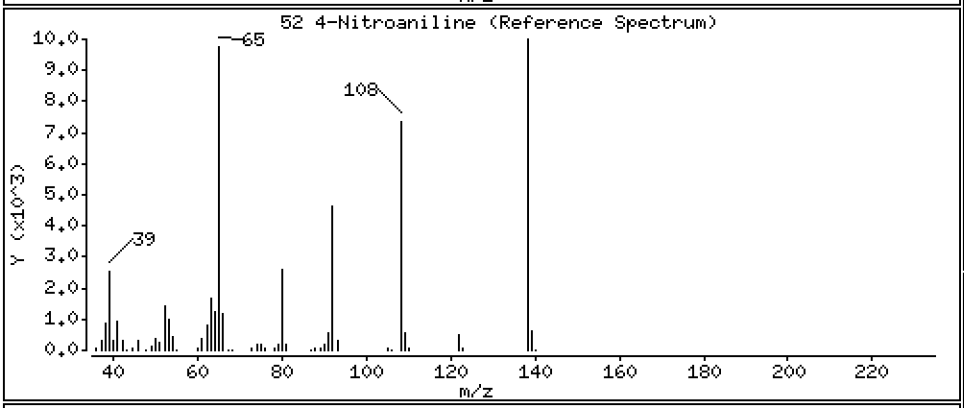
Concentration: 4.601 ug/mL

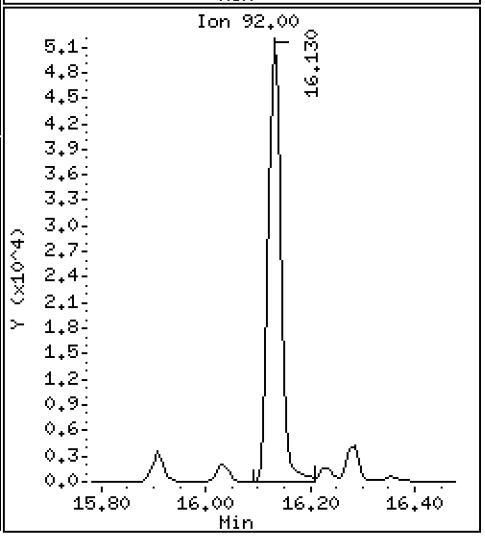


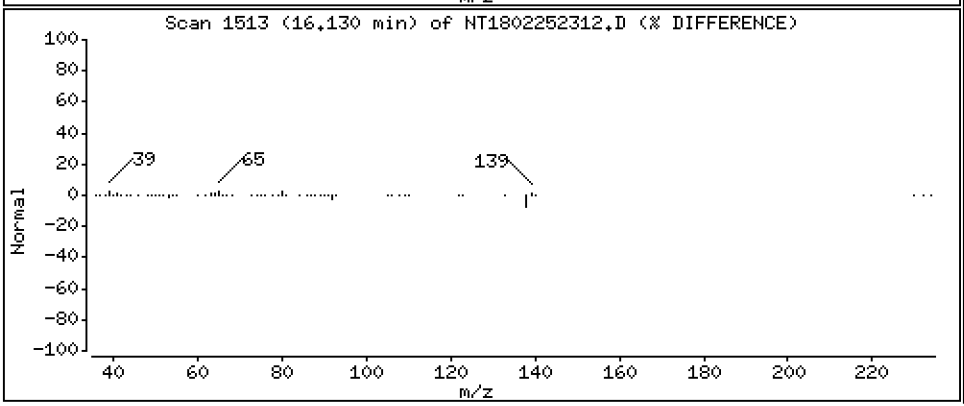












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

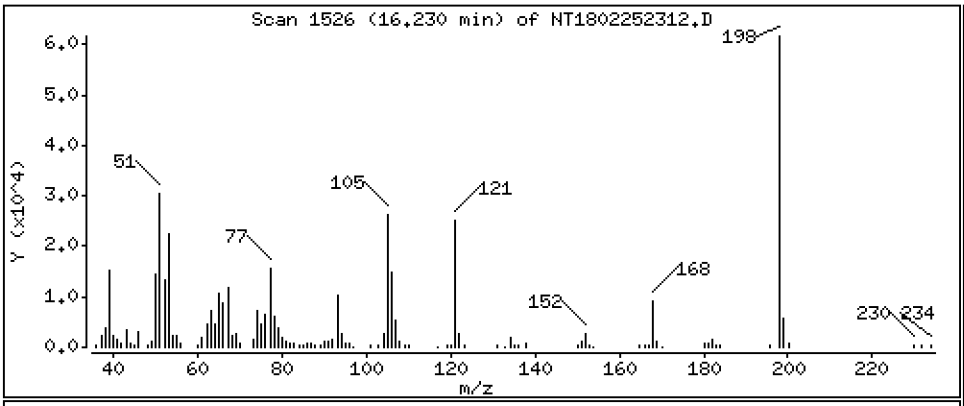
Operator: VTS

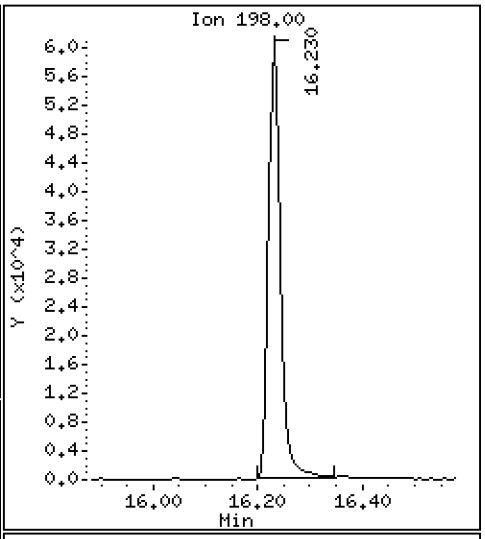
Column phase: ZB-5msi

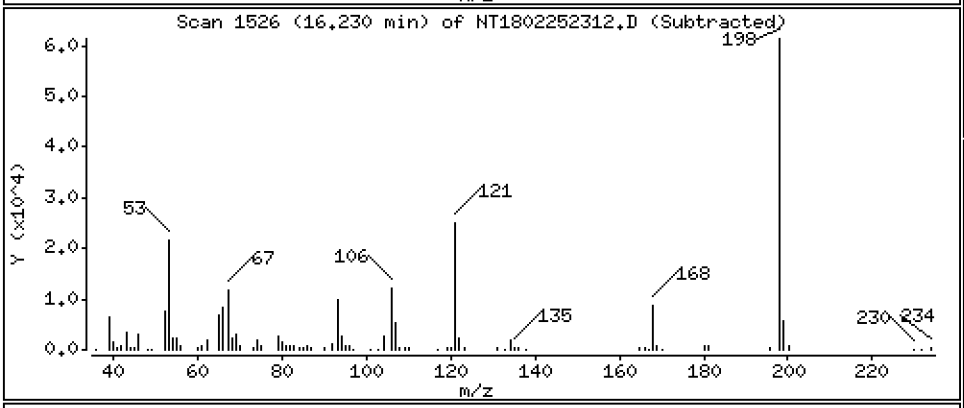
Column diameter: 0.25

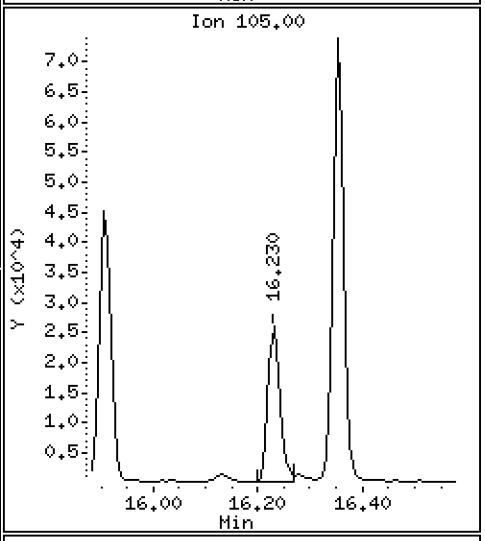
53 4,6-Dinitro-2-methylphenol

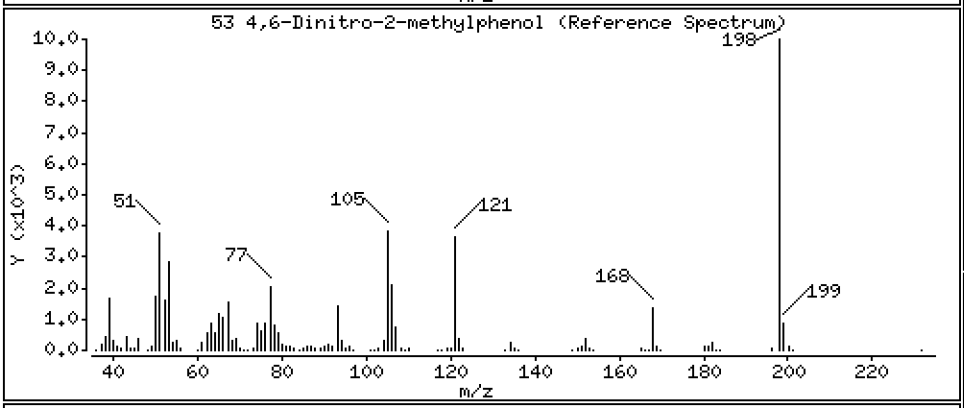
Concentration: 3.596 ug/mL

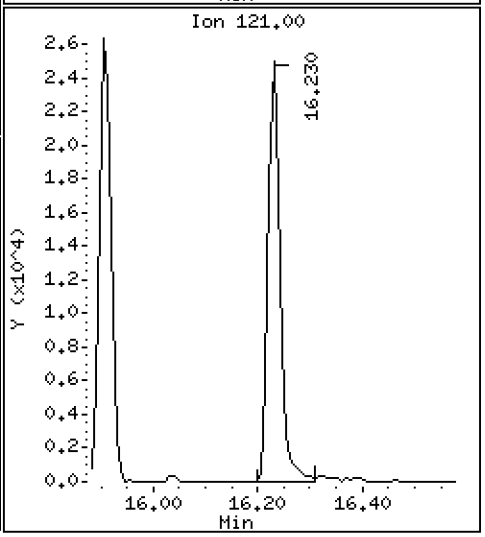


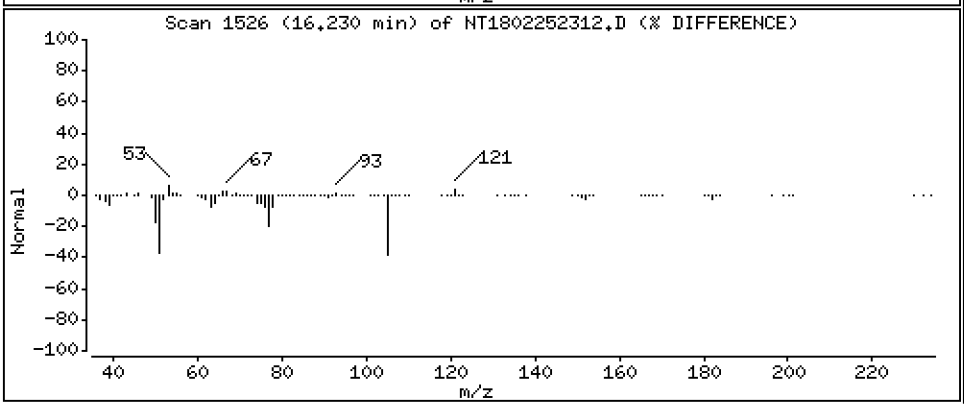












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

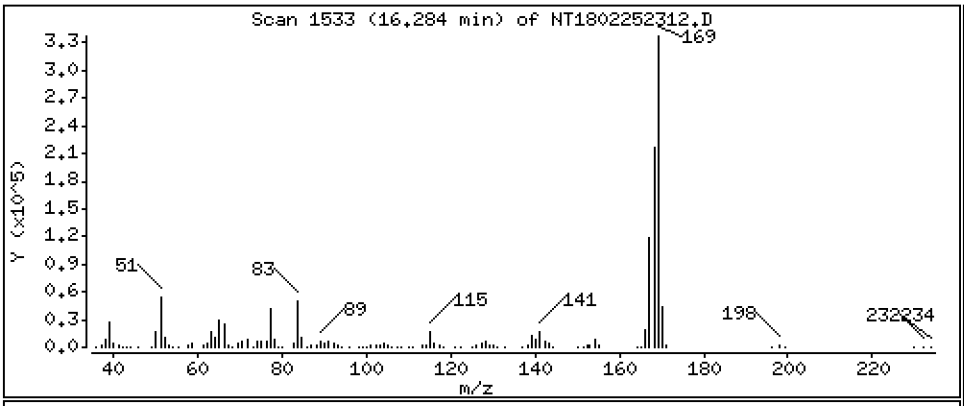
Operator: VTS

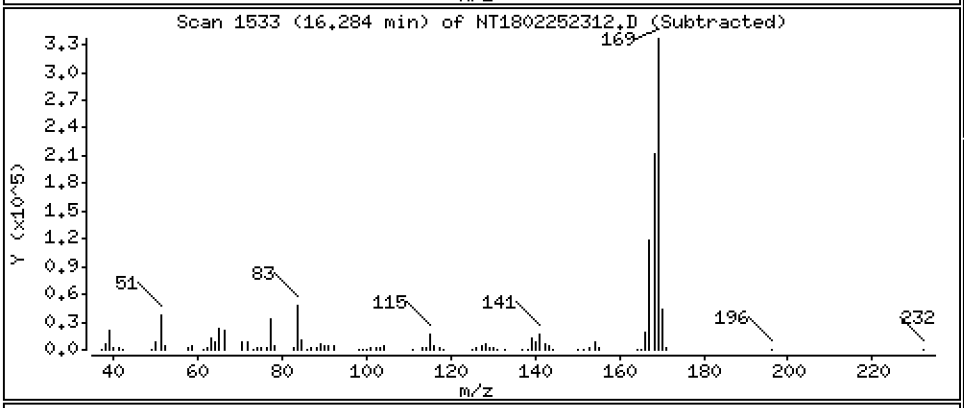
Column phase: ZB-5msi

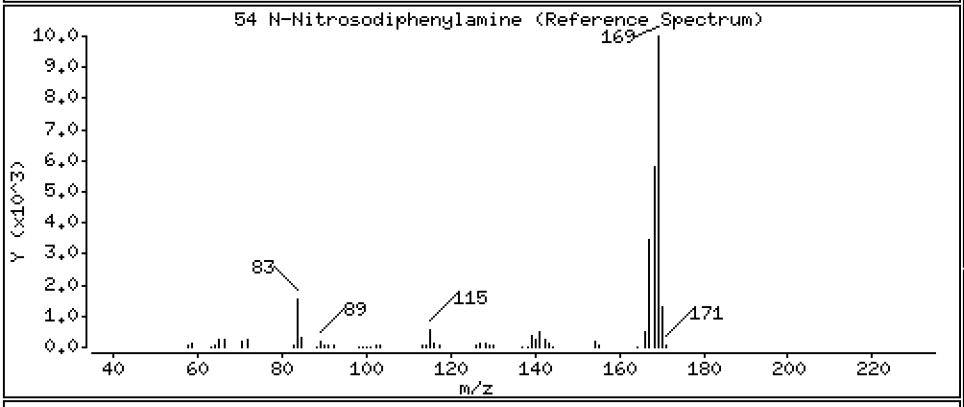
Column diameter: 0.25

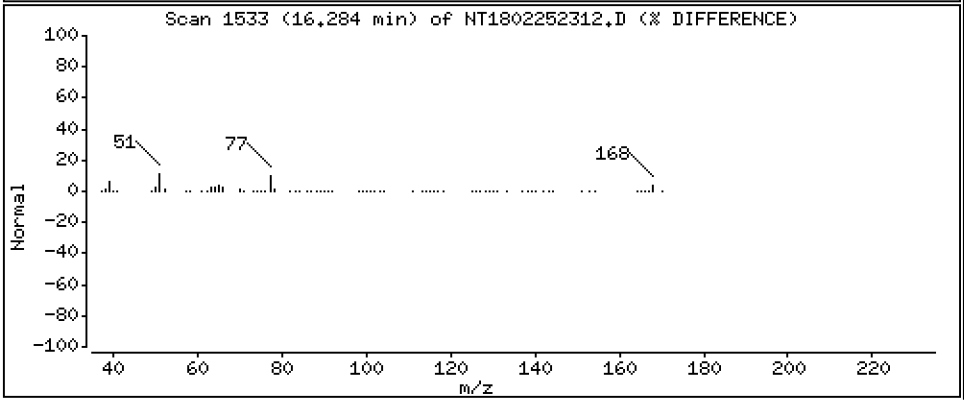
54 N-Nitrosodiphenylamine

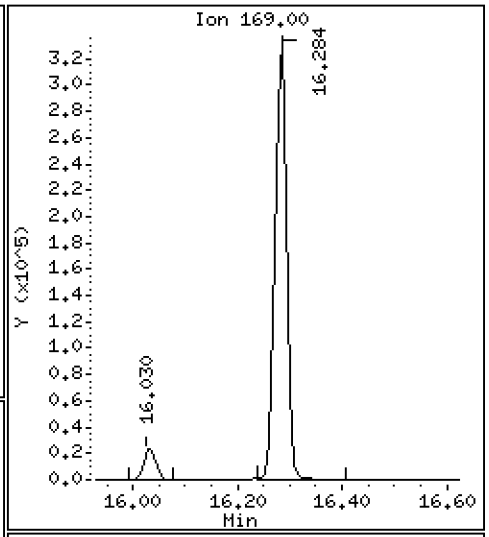
Concentration: 4.602 ug/mL

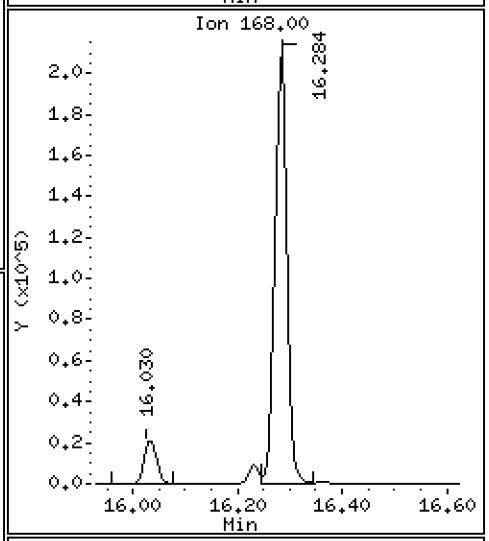


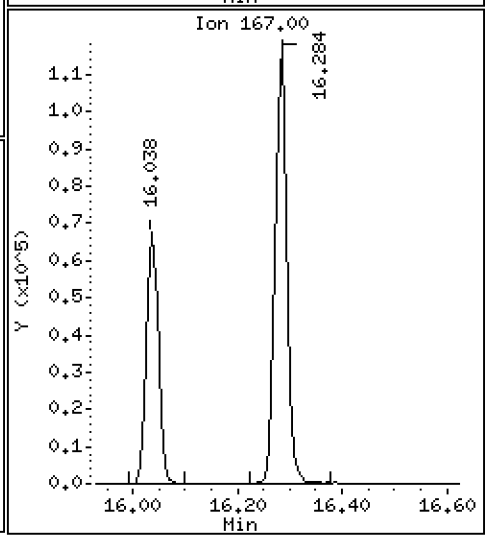












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

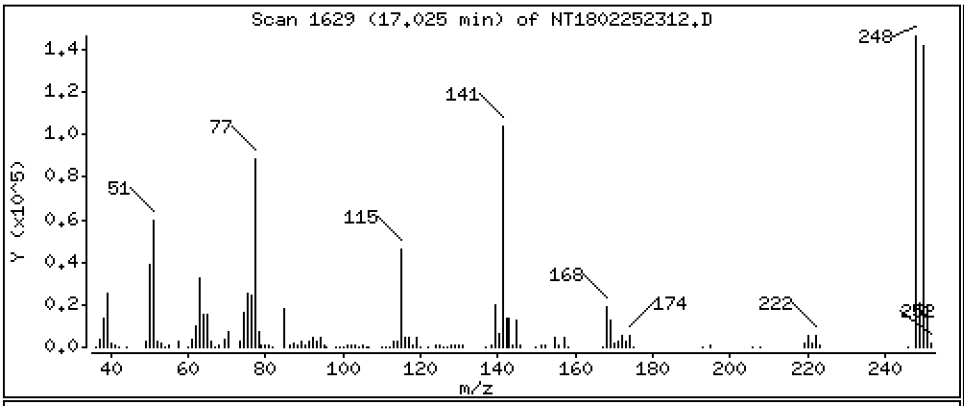
Operator: VTS

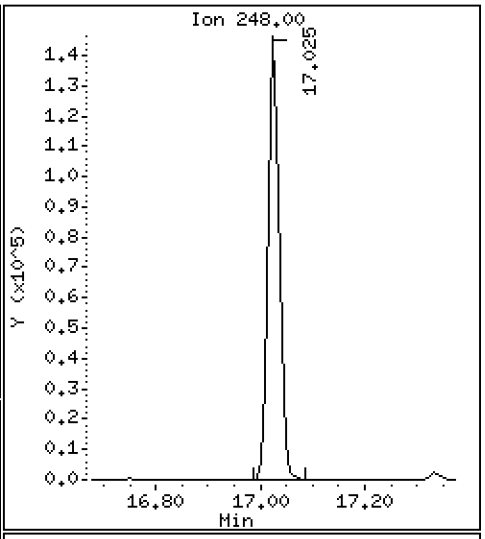
Column phase: ZB-5msi

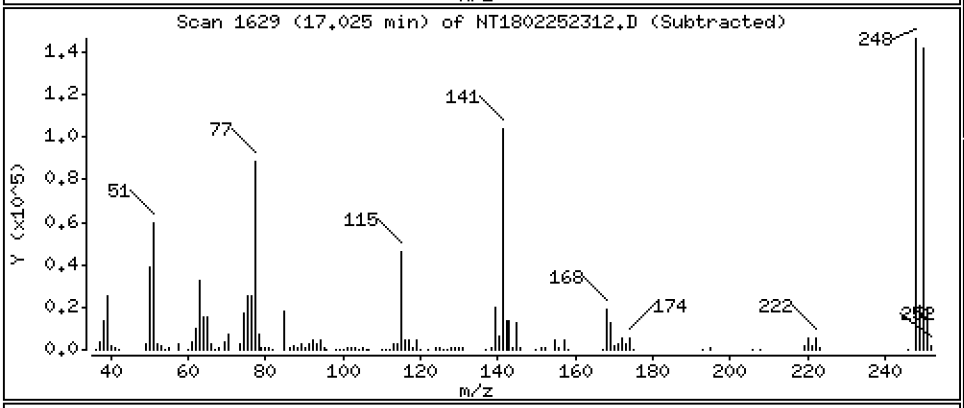
Column diameter: 0.25

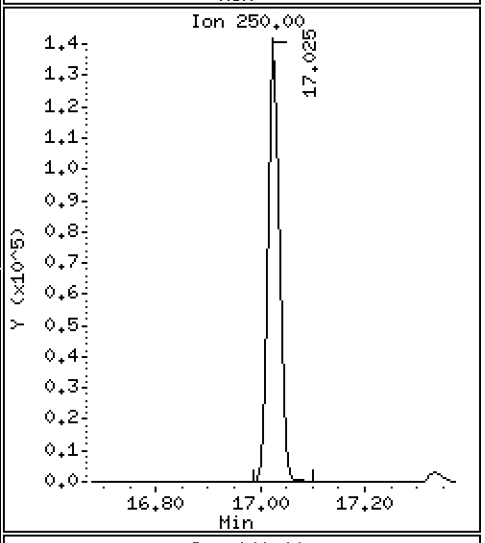
56 4-Bromophenyl-phenylether

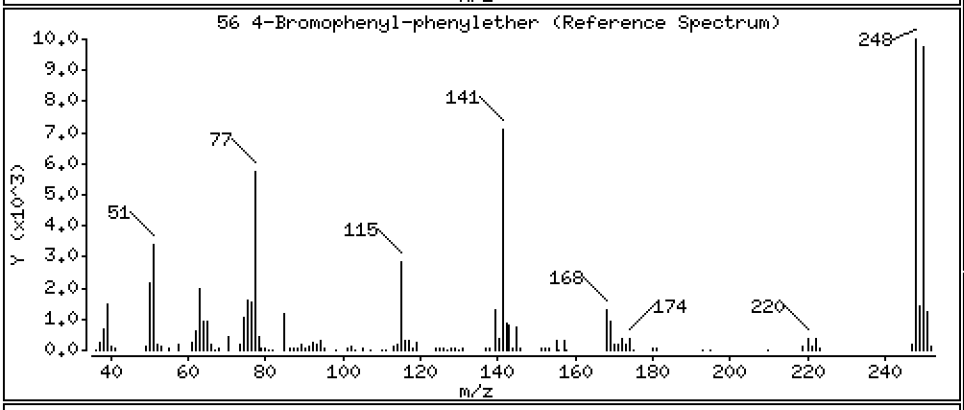
Concentration: 4.884 ug/mL

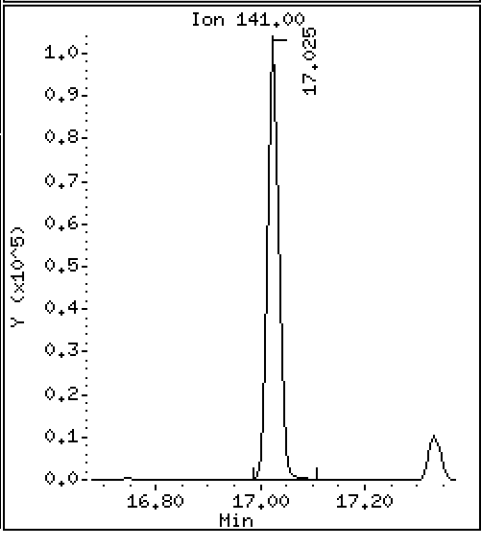


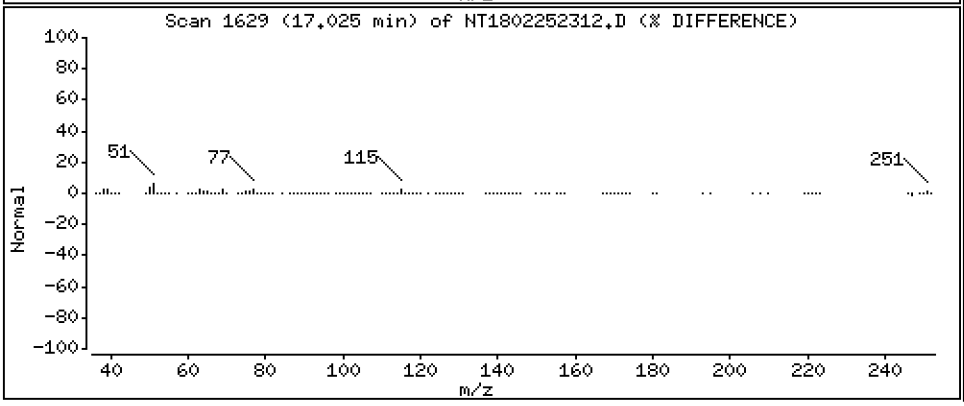












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

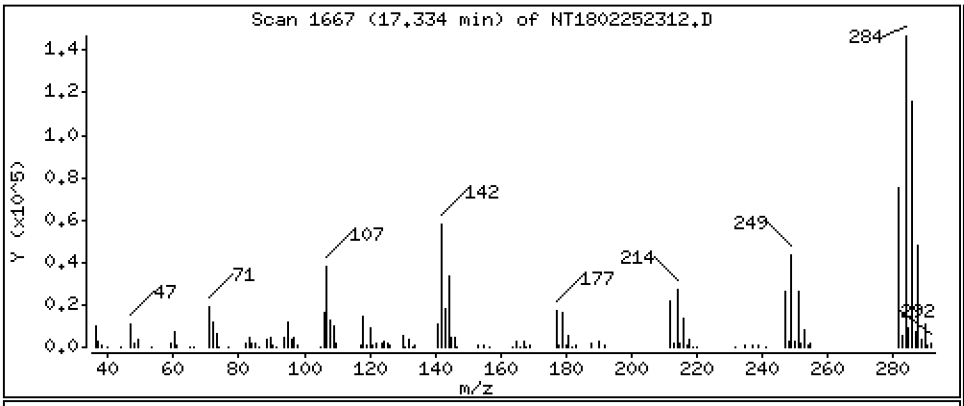
Operator: VTS

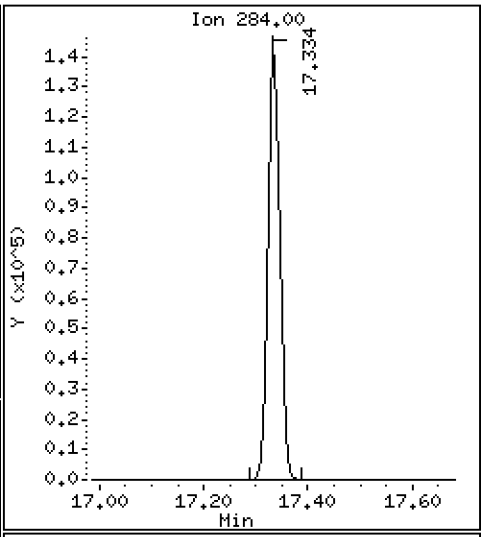
Column phase: ZB-5msi

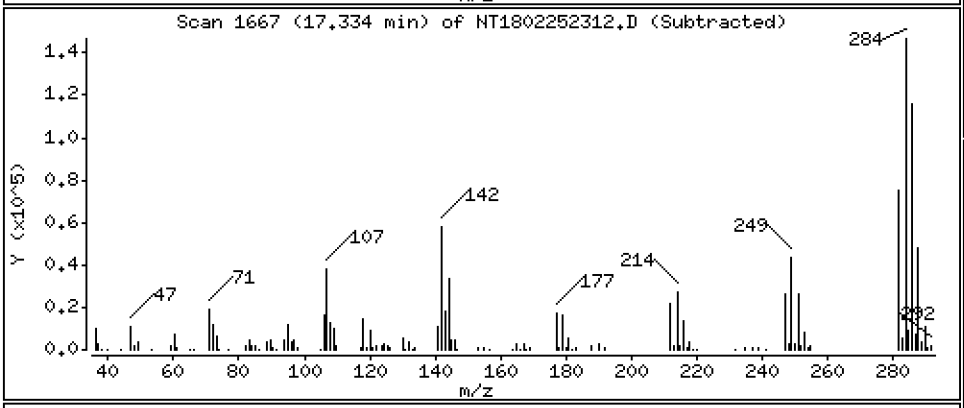
Column diameter: 0.25

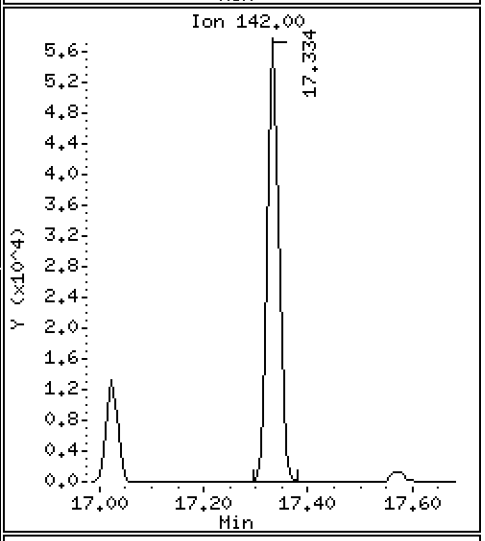
57 Hexachlorobenzene

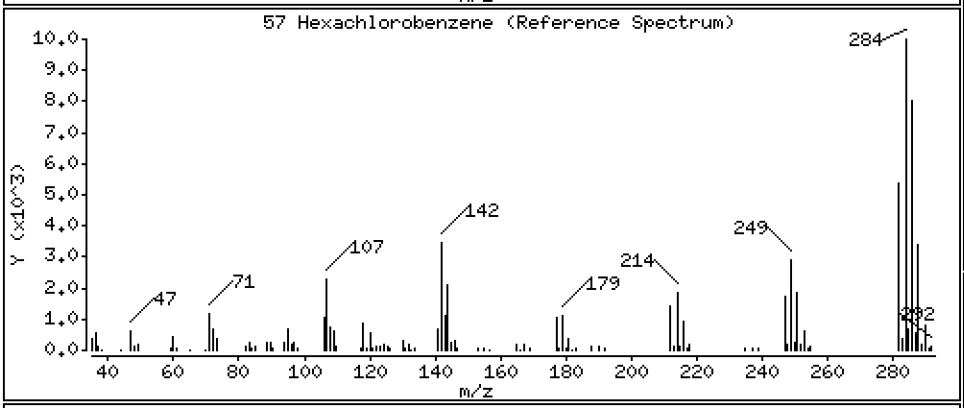
Concentration: 4.422 ug/mL

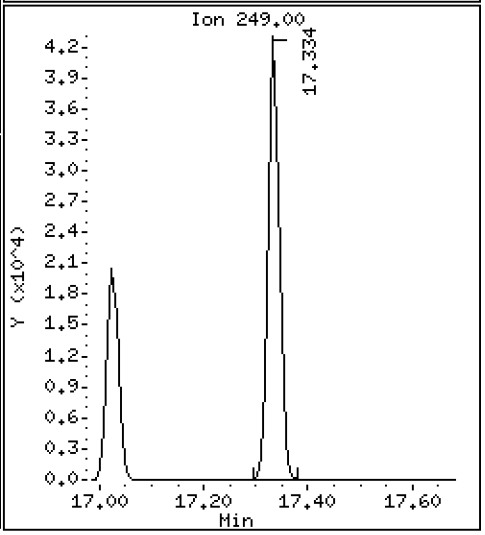


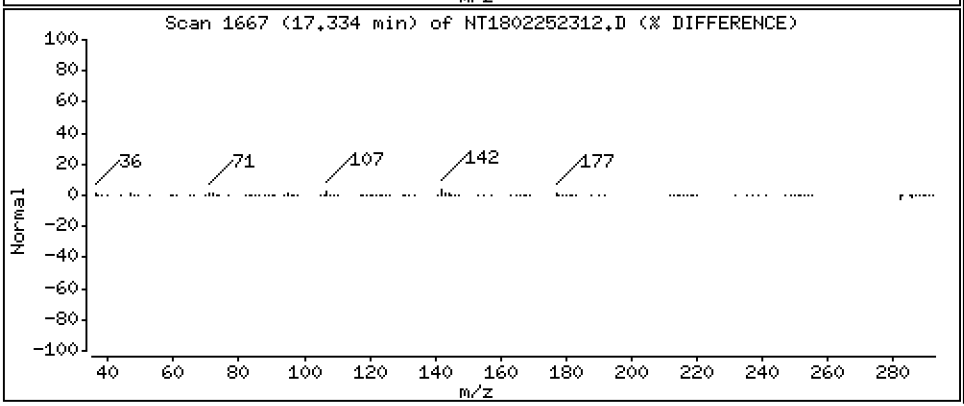












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

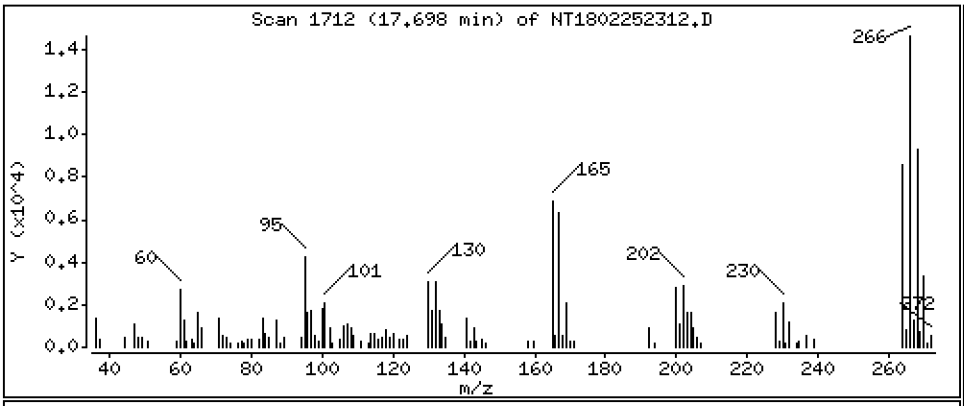
Operator: VTS

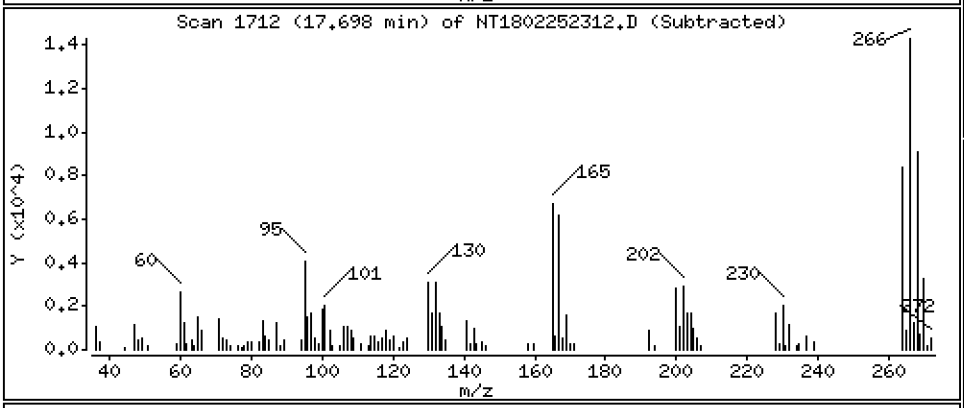
Column phase: ZB-5msi

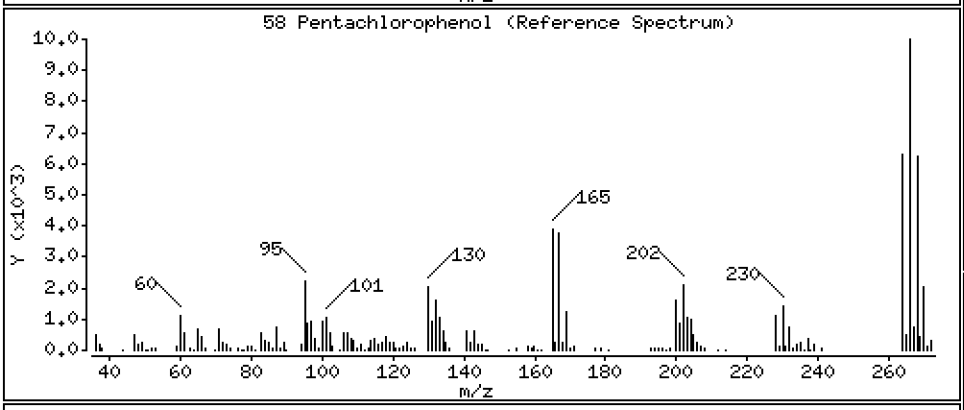
Column diameter: 0.25

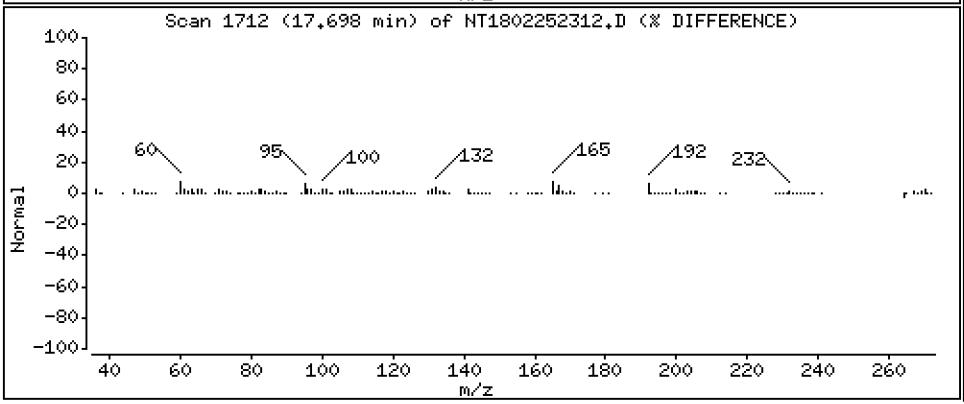
58 Pentachlorophenol

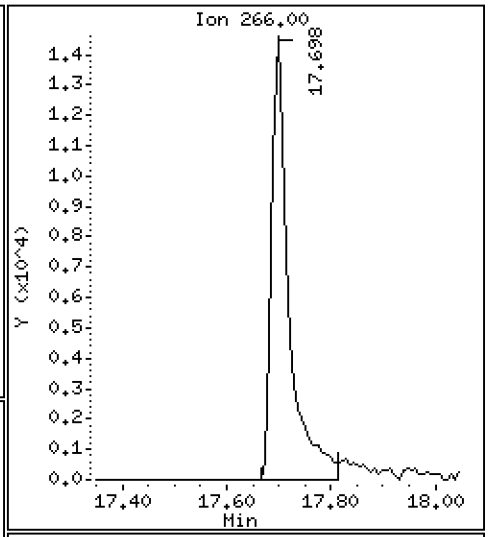
Concentration: 2.454 ug/mL

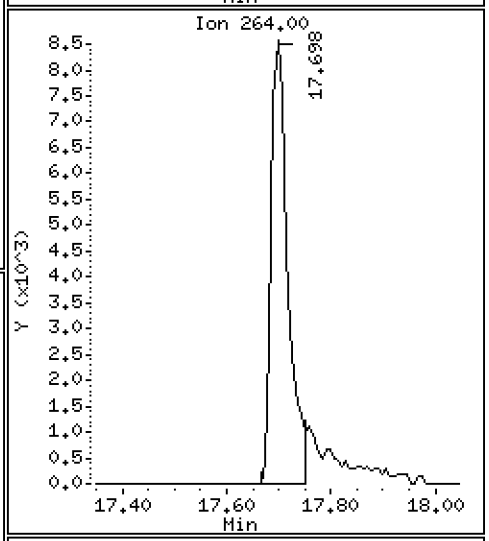


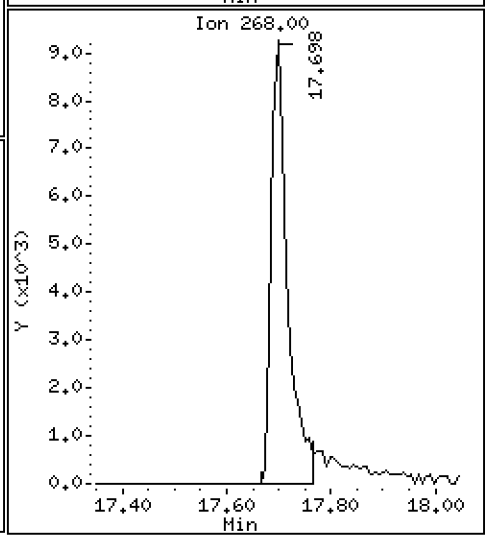












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

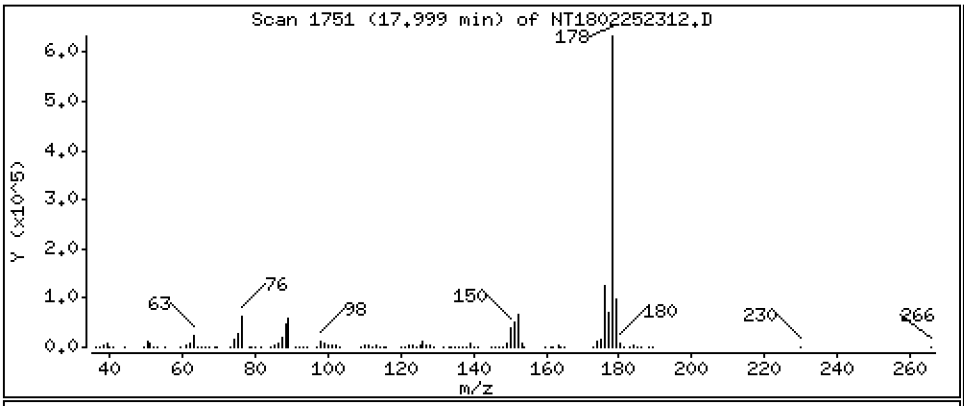
Operator: VTS

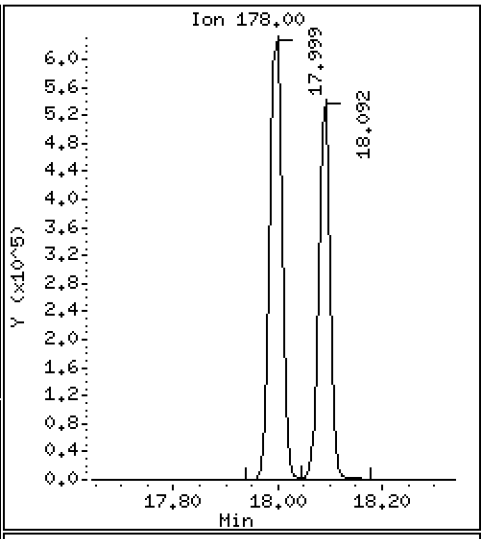
Column phase: ZB-5msi

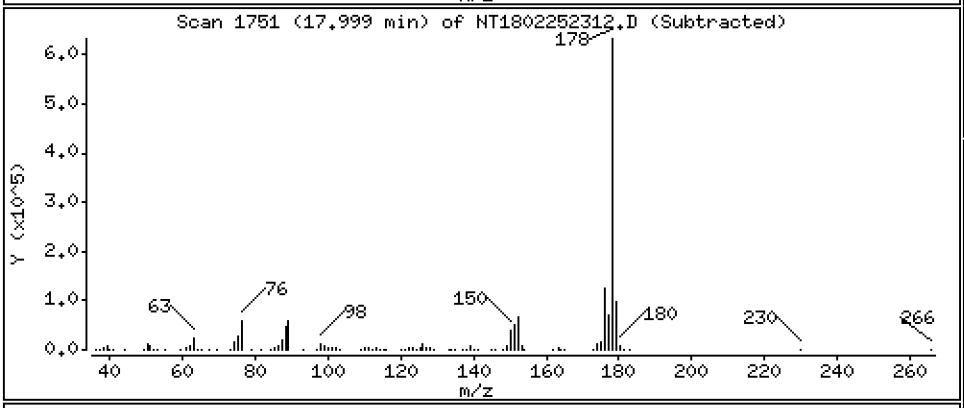
Column diameter: 0.25

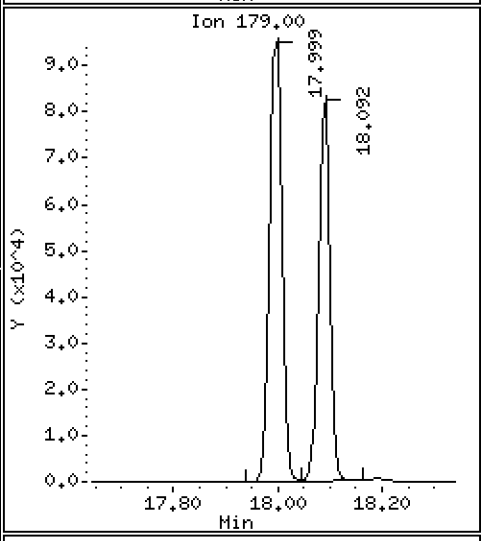
60 Phenanthrene

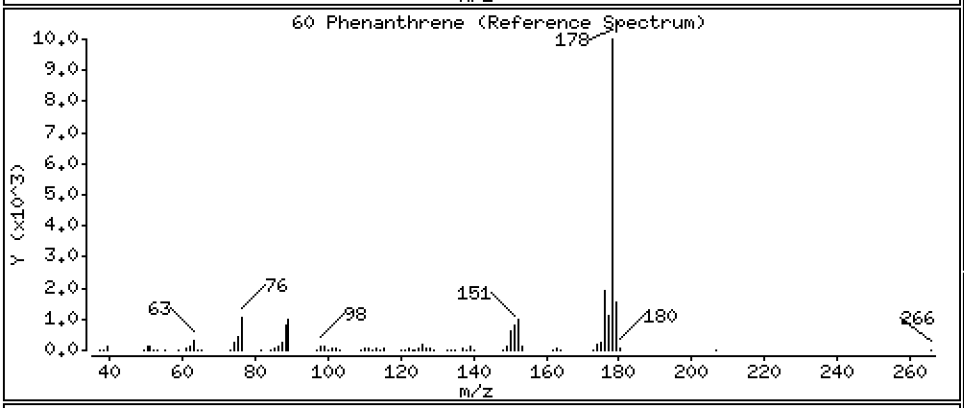
Concentration: 4.397 ug/mL

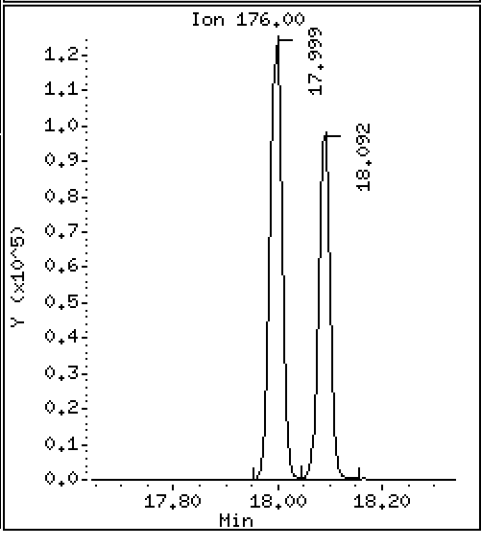


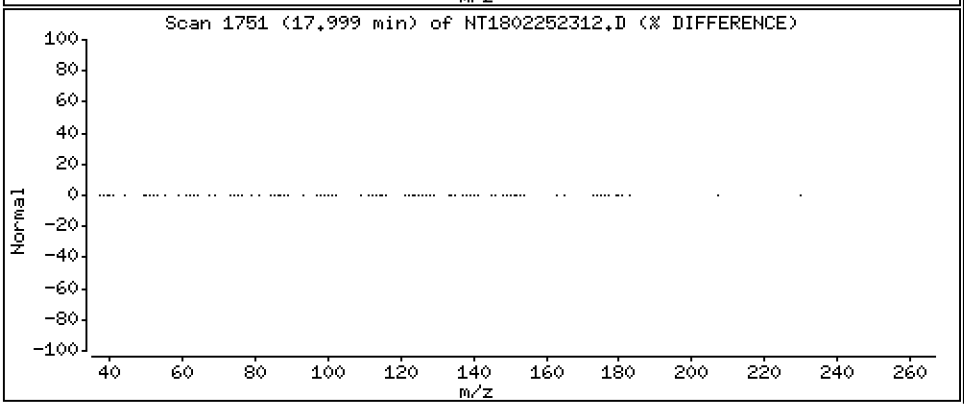












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

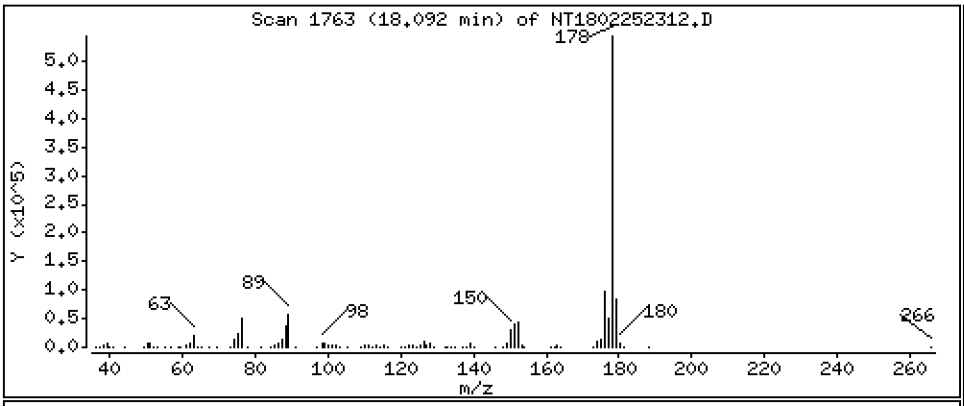
Operator: VTS

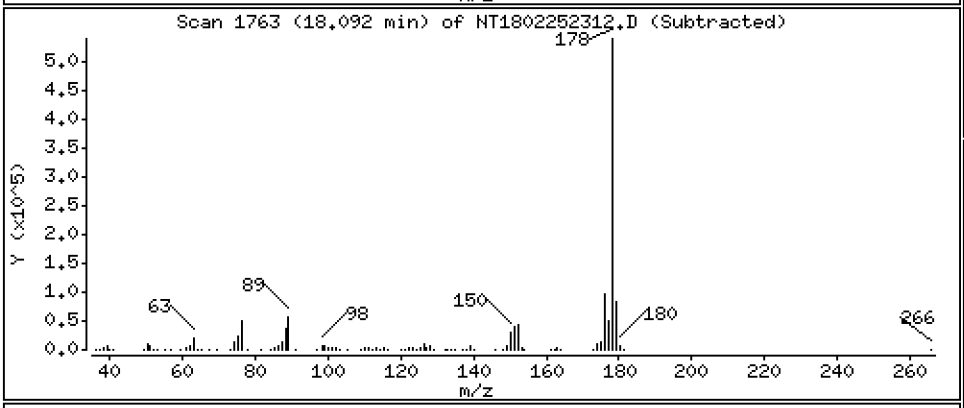
Column phase: ZB-5msi

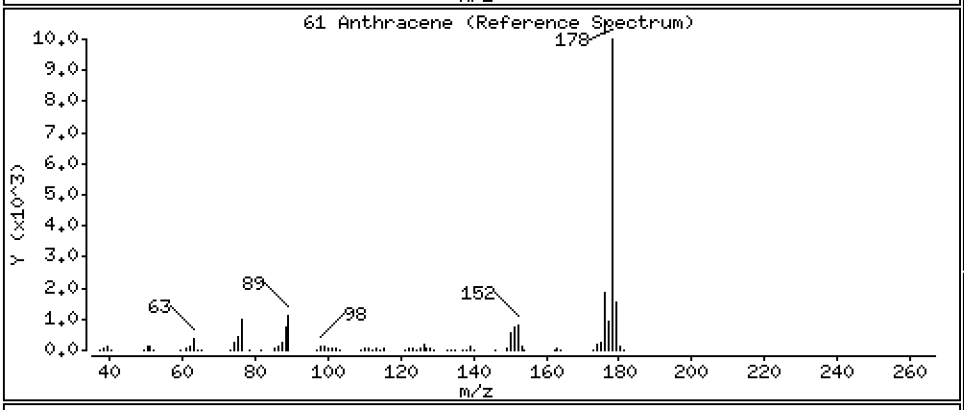
Column diameter: 0.25

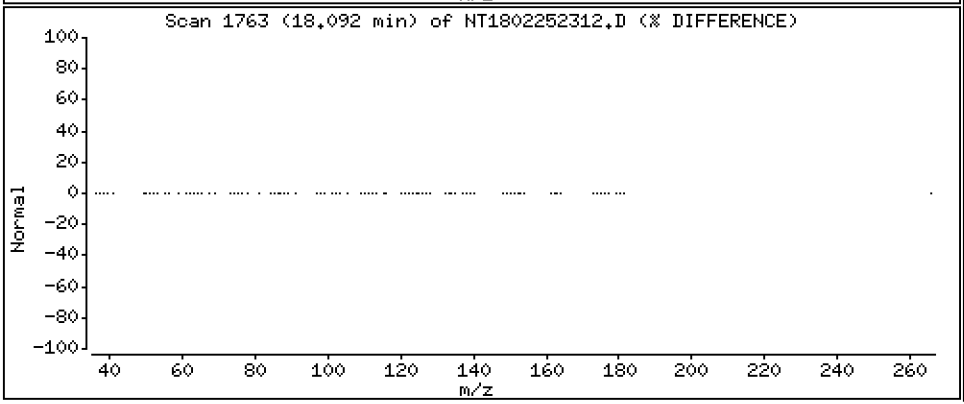
61 Anthracene

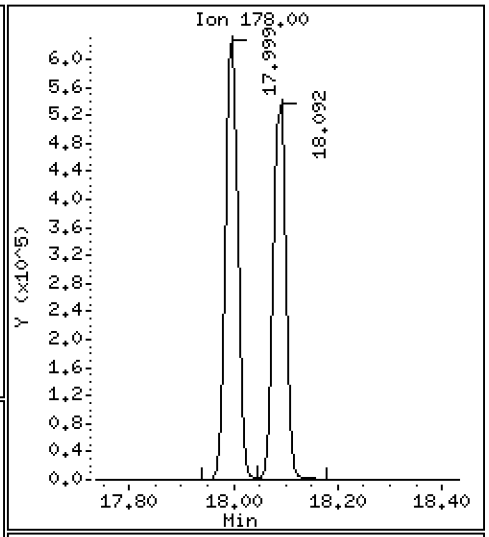
Concentration: 3.959 ug/mL

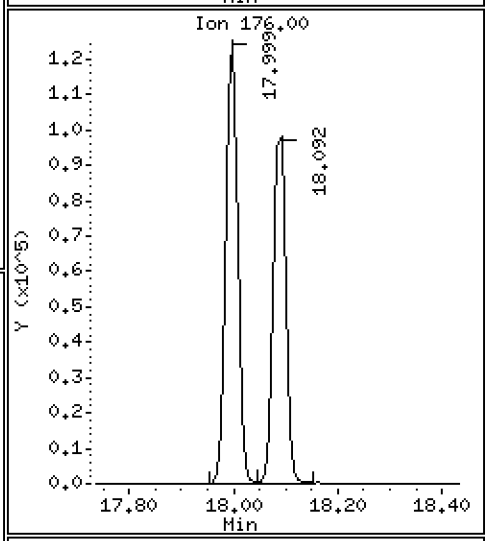


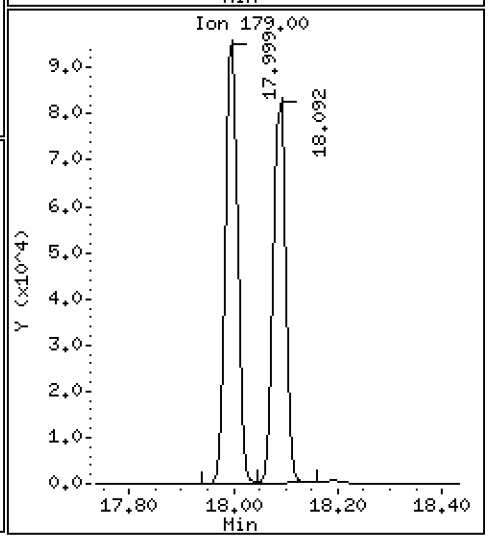












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

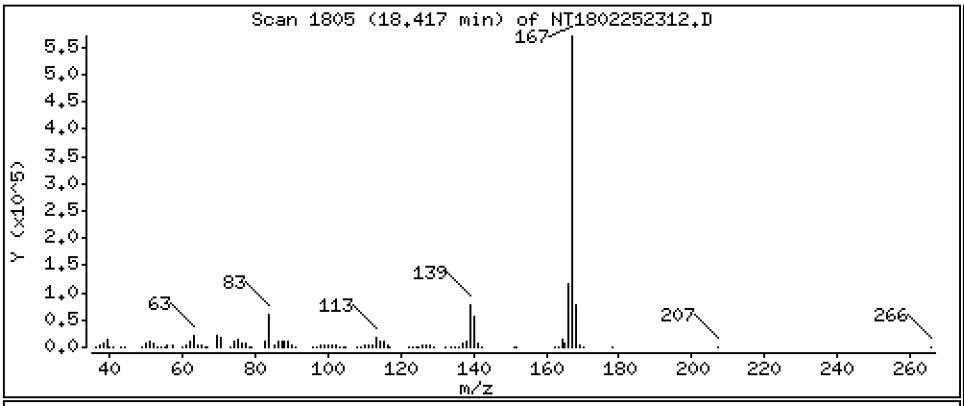
Operator: VTS

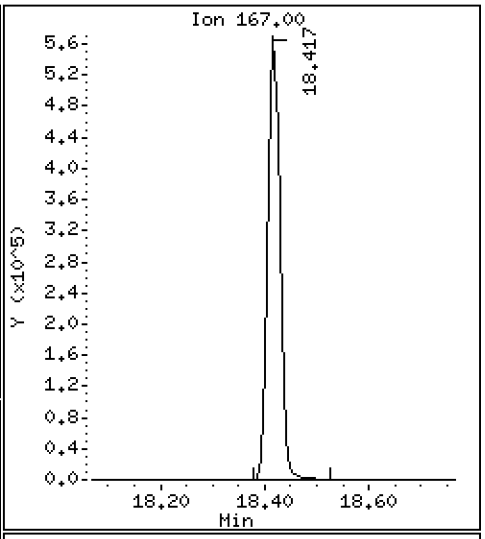
Column phase: ZB-5msi

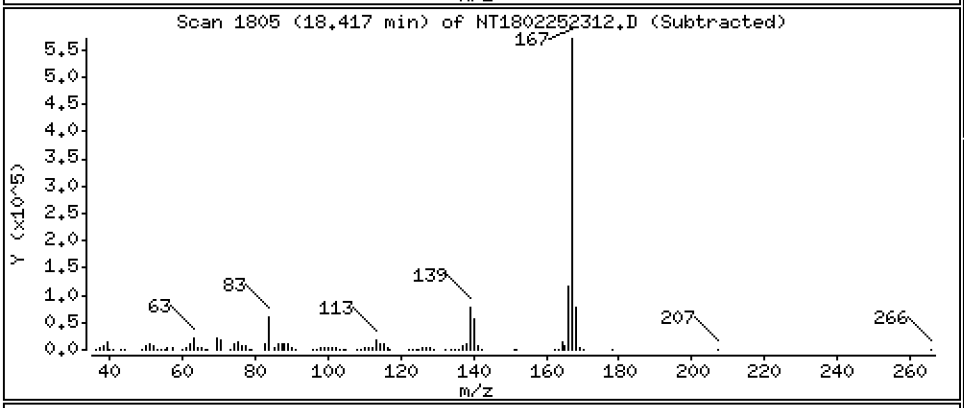
Column diameter: 0.25

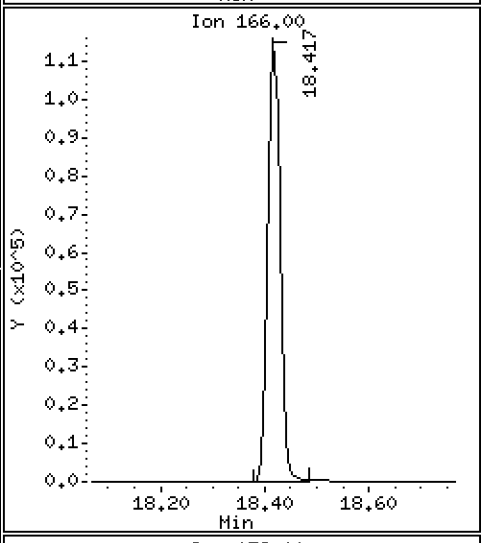
62 Carbazole

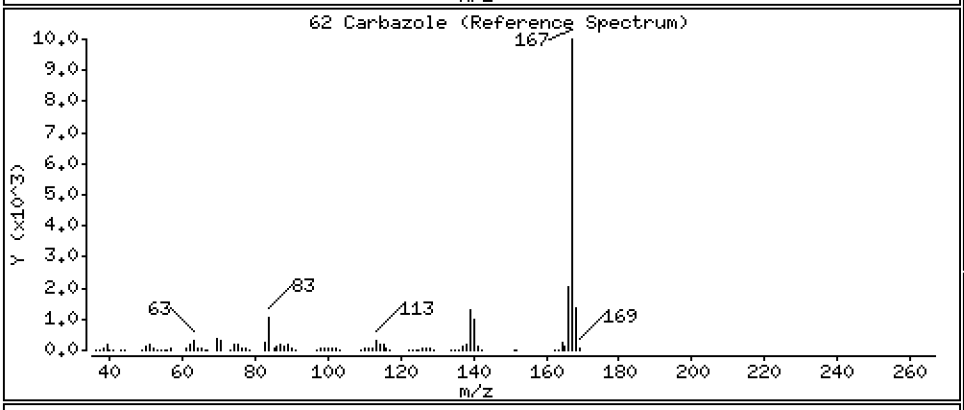
Concentration: 4.463 ug/mL

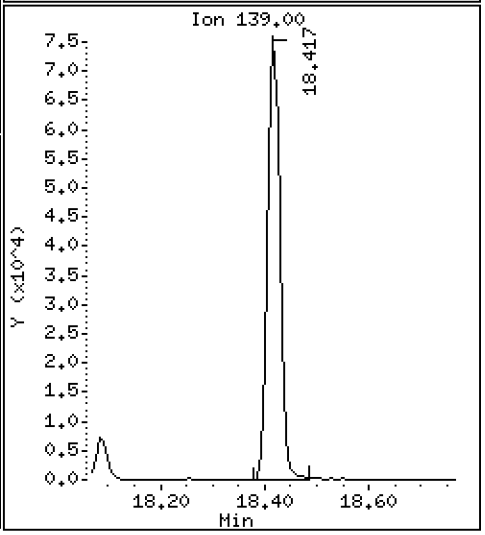


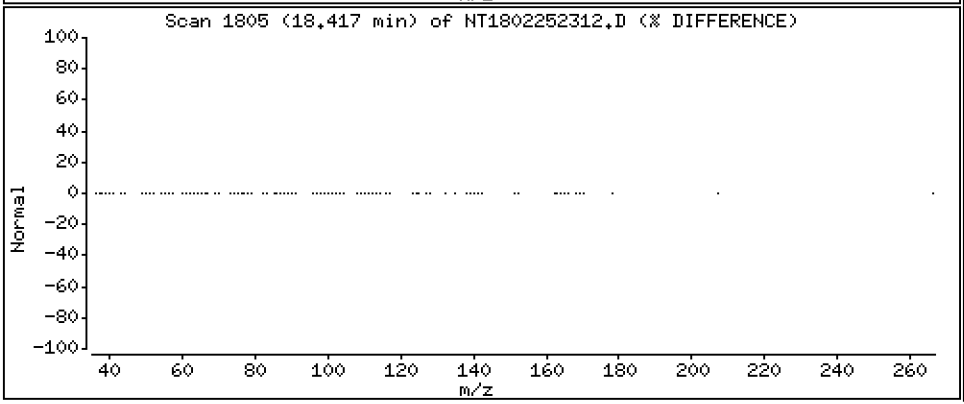












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

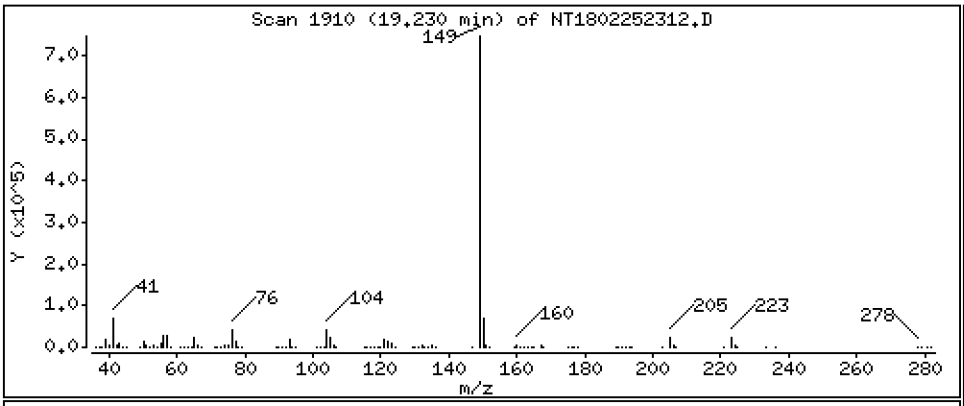
Operator: VTS

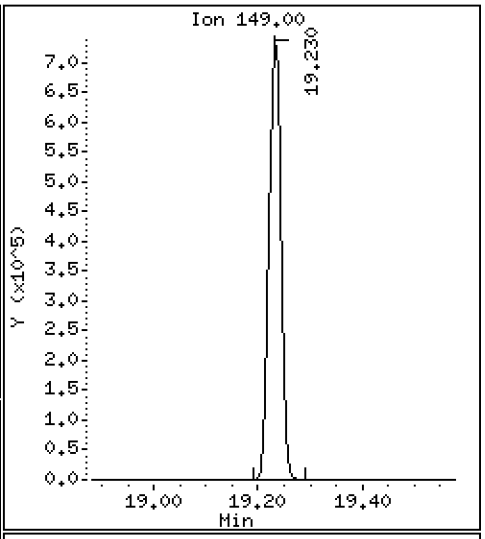
Column phase: ZB-5msi

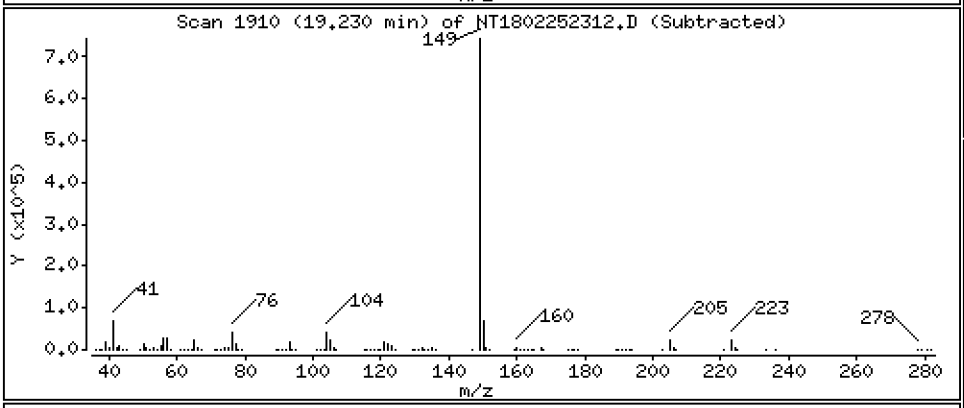
Column diameter: 0.25

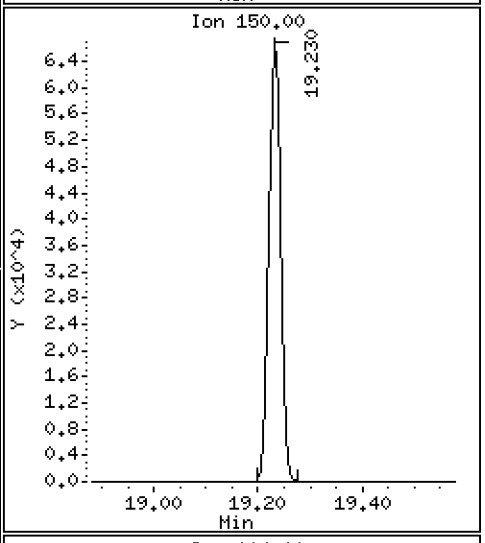
63 Di-n-butylphthalate

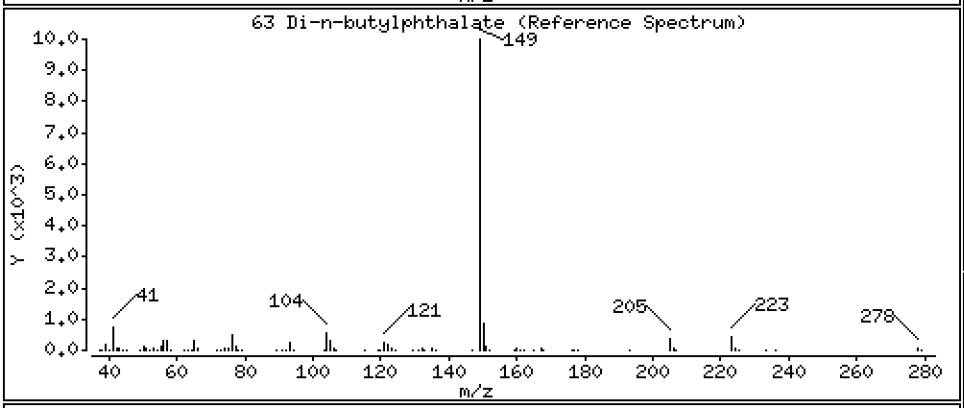
Concentration: 5.159 ug/mL

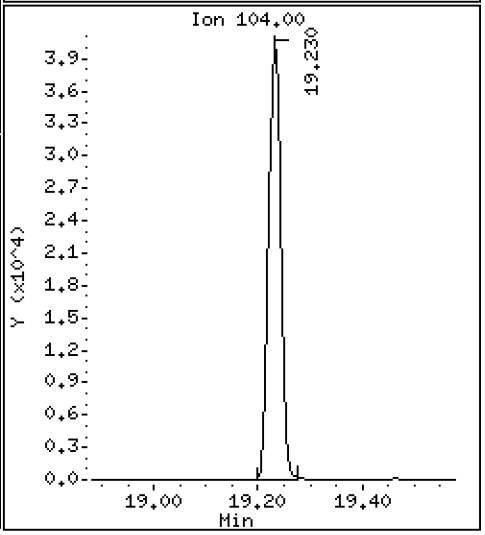


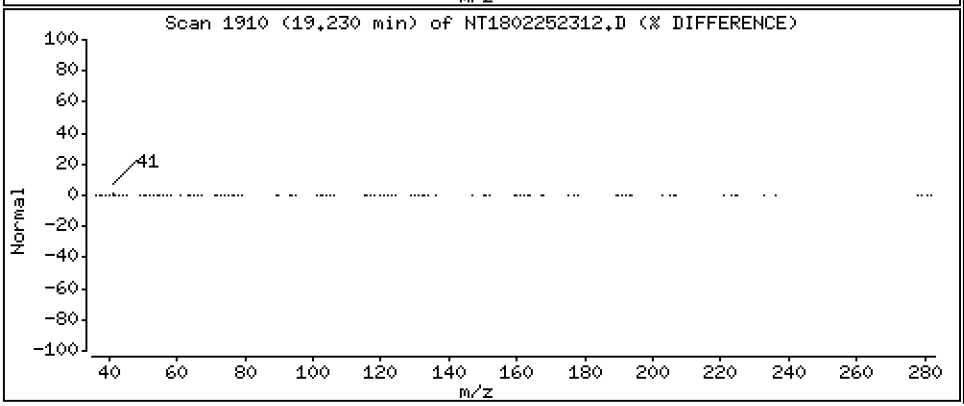












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

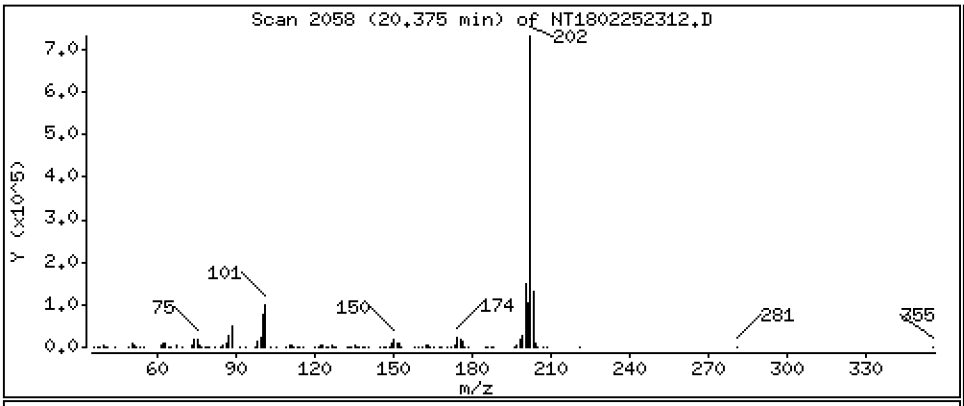
Operator: VTS

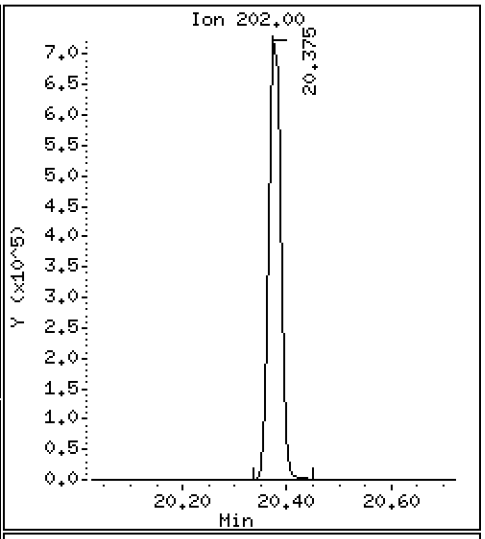
Column phase: ZB-5msi

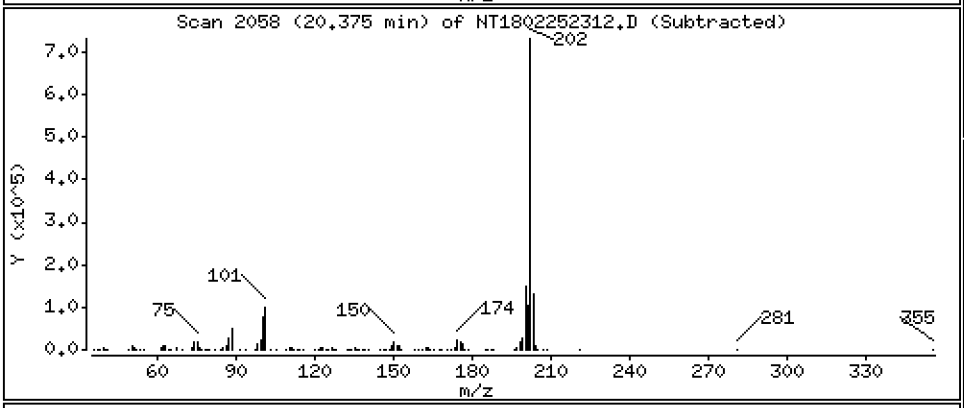
Column diameter: 0.25

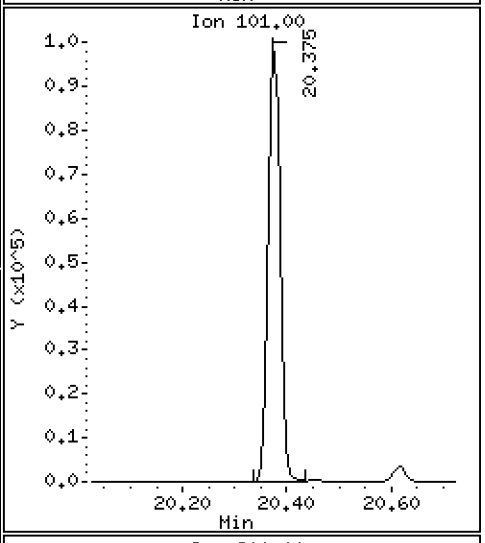
64 Fluoranthene

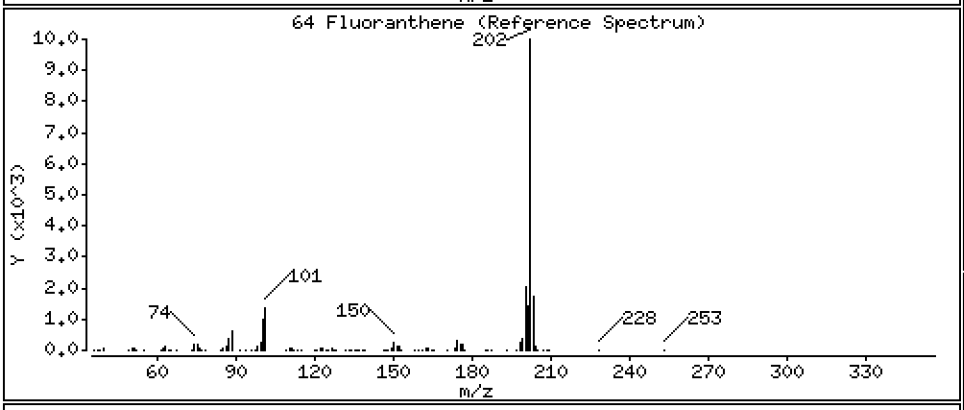
Concentration: 4.812 ug/mL

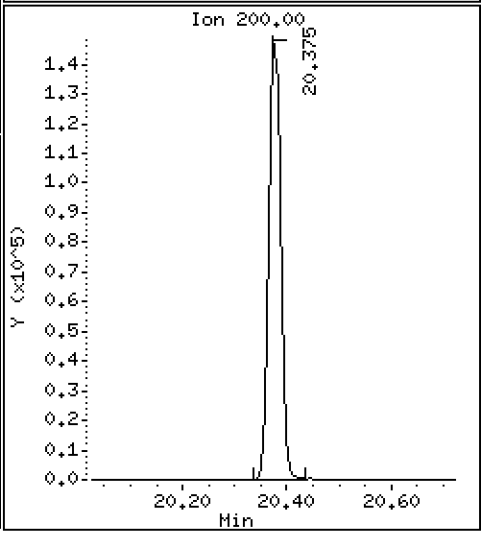


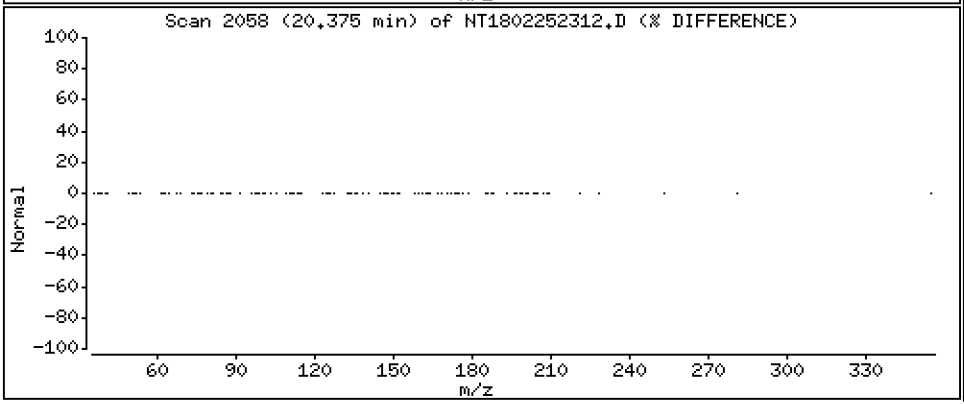












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

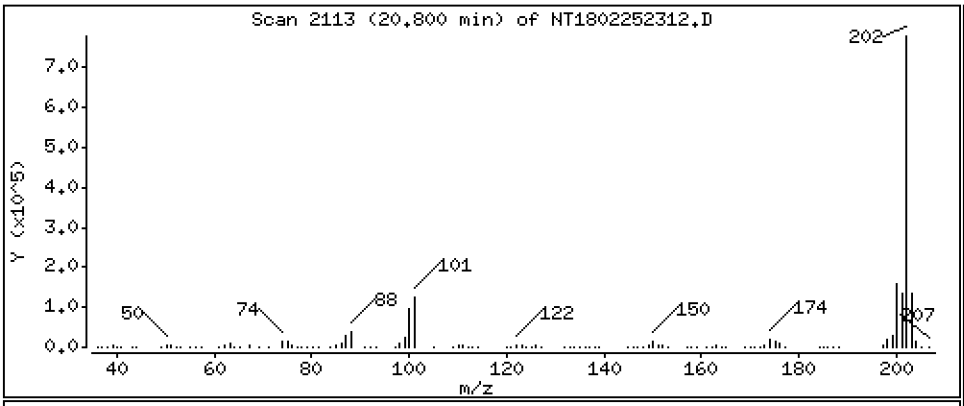
Operator: VTS

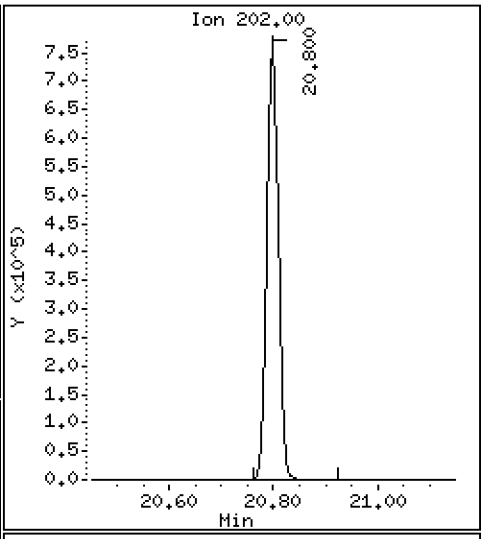
Column phase: ZB-5msi

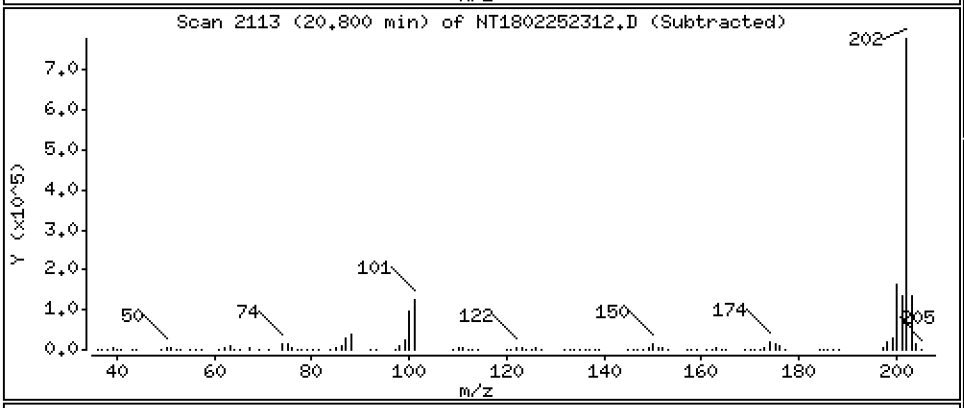
Column diameter: 0.25

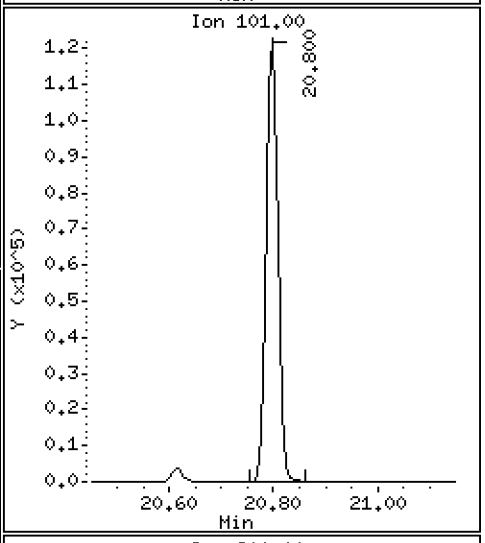
65 Pyrene

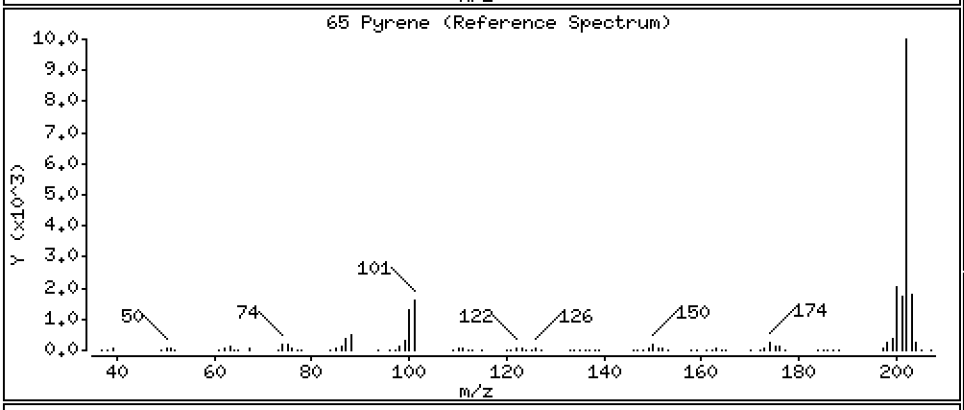
Concentration: 4.559 ug/mL

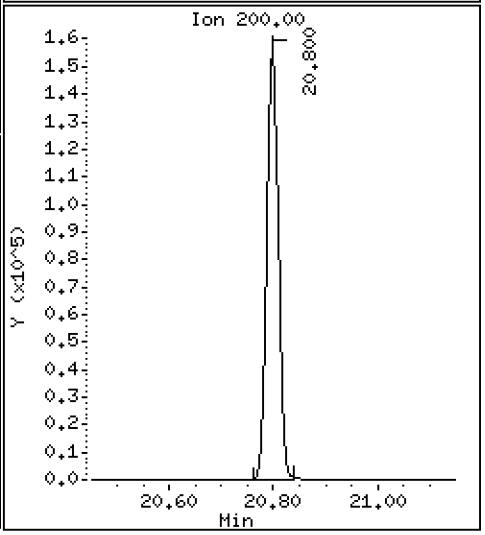


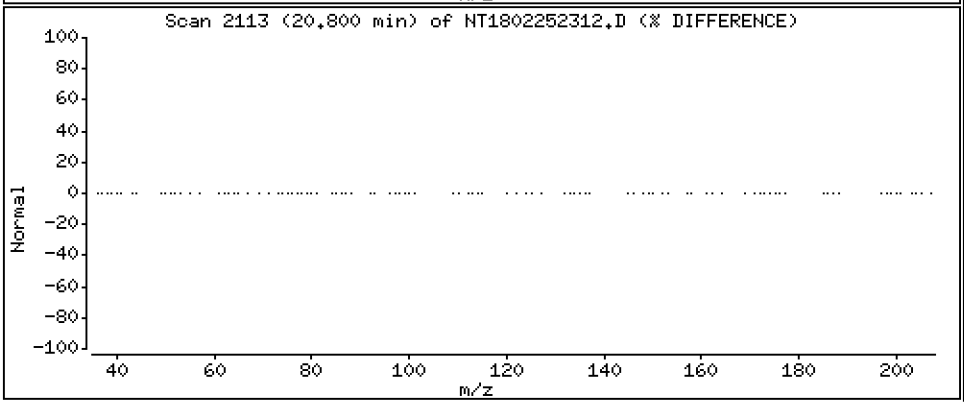












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

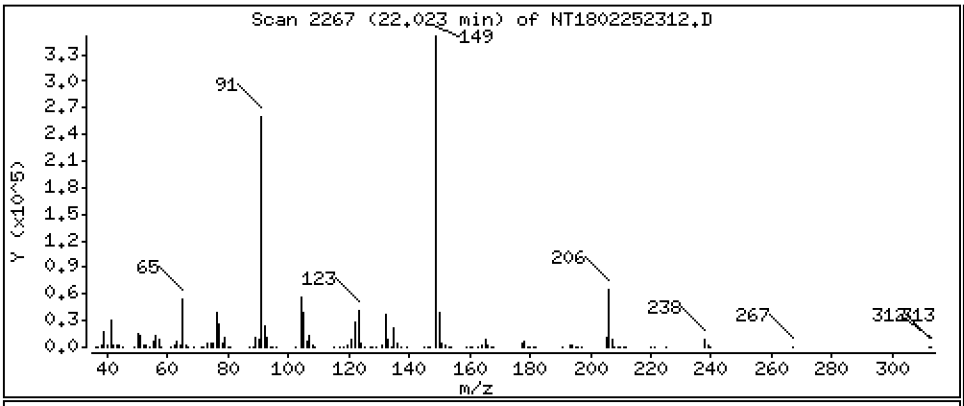
Operator: VTS

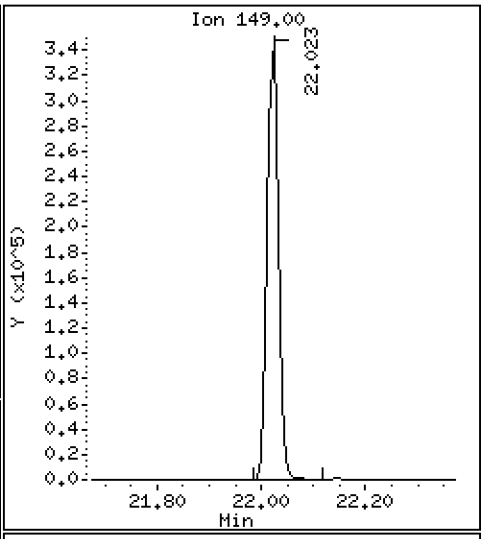
Column phase: ZB-5msi

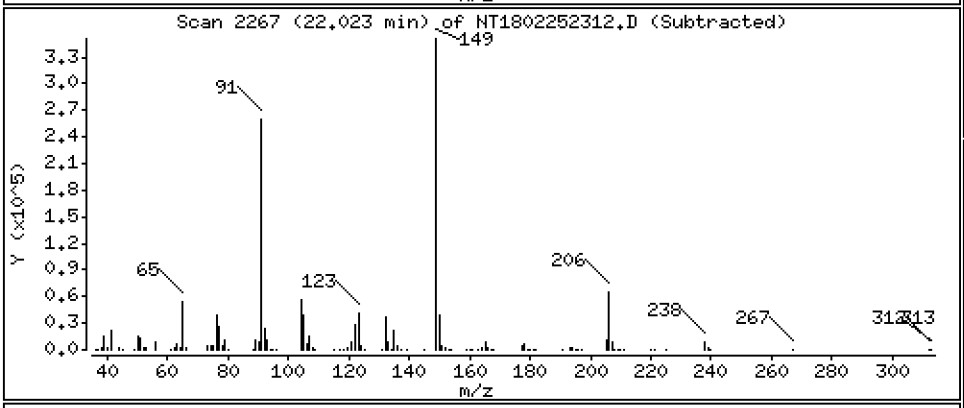
Column diameter: 0.25

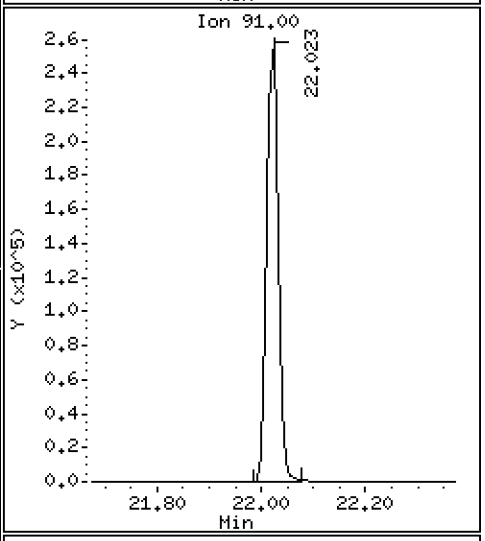
67 Butylbenzylphthalate

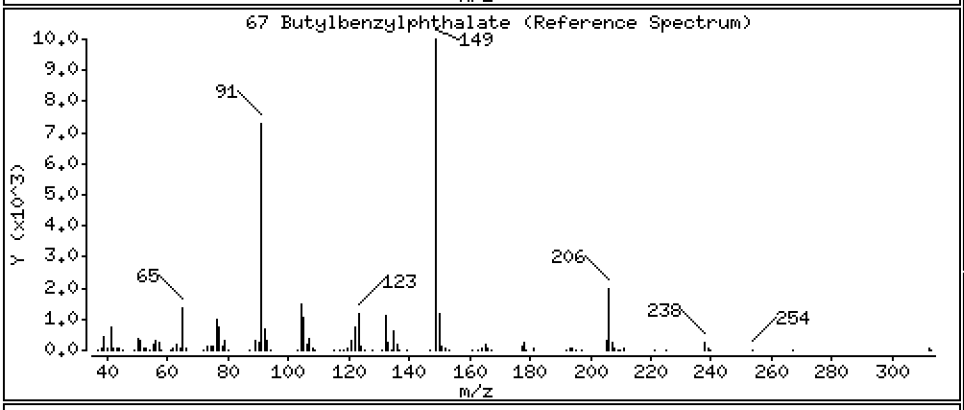
Concentration: 5.322 ug/mL

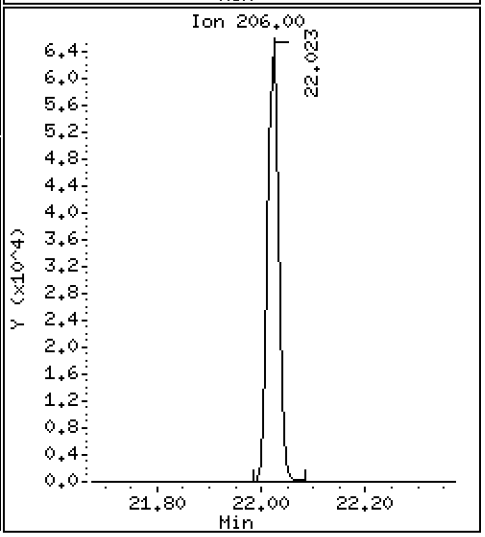


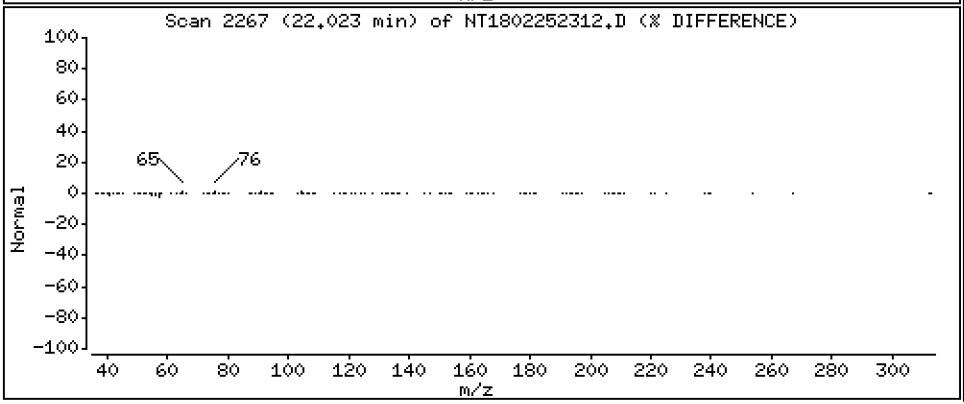












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

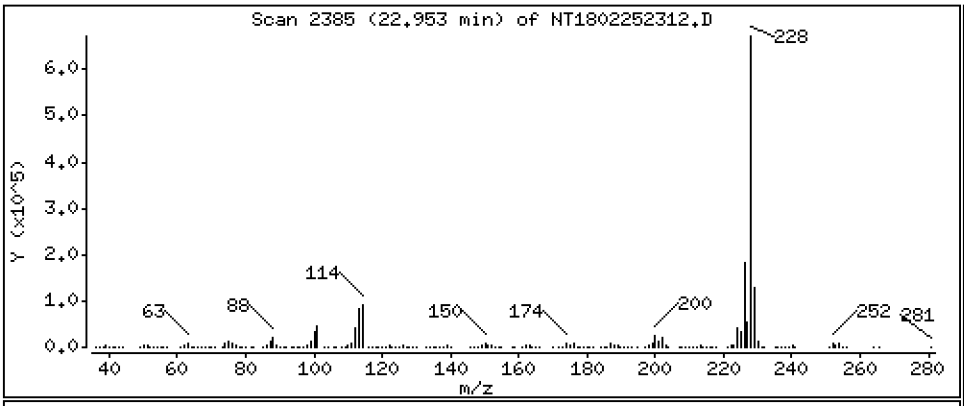
Operator: VTS

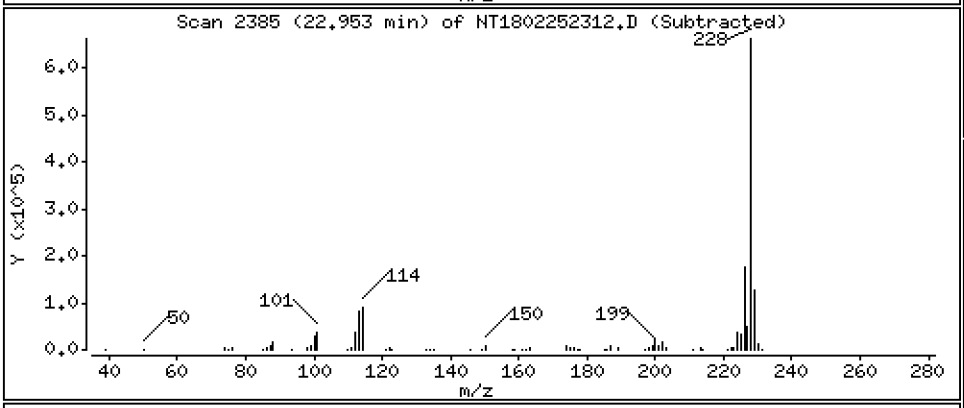
Column phase: ZB-5msi

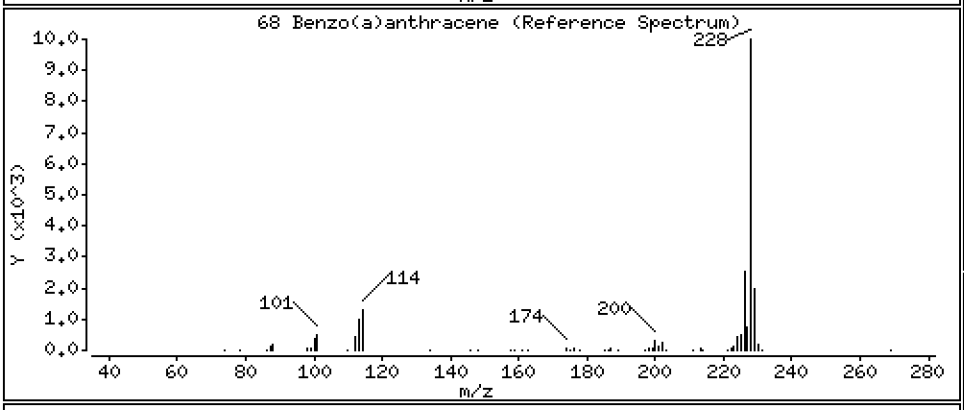
Column diameter: 0.25

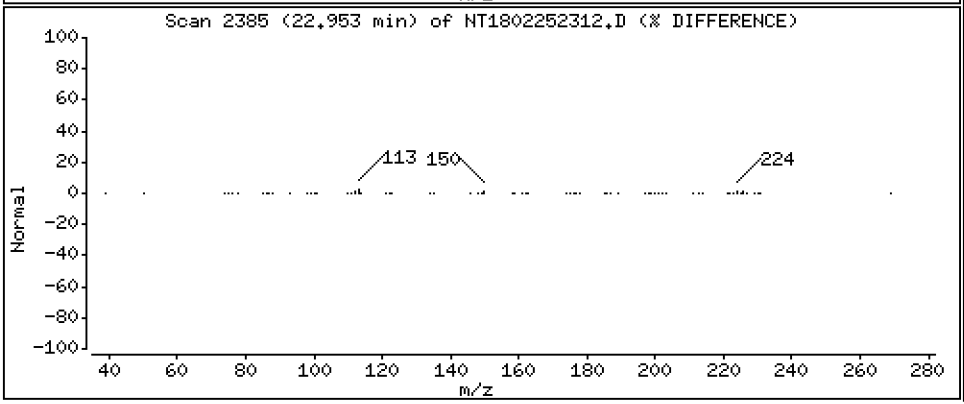
68 Benzo(a)anthracene

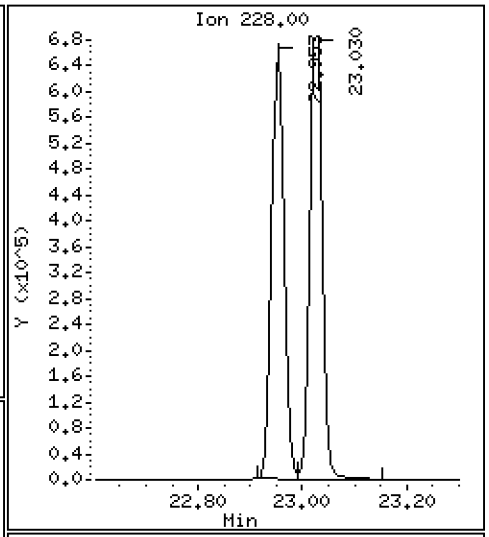
Concentration: 4.472 ug/mL

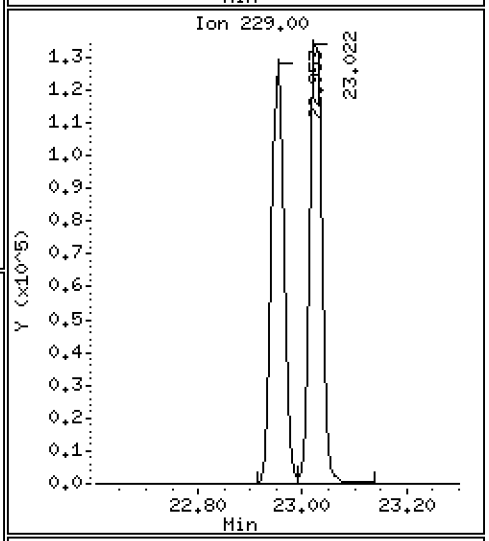


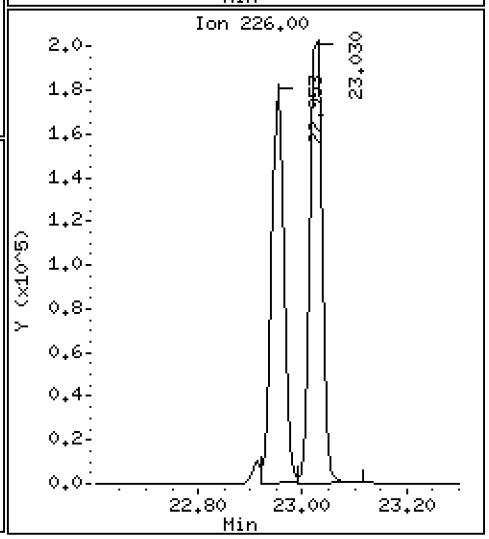












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

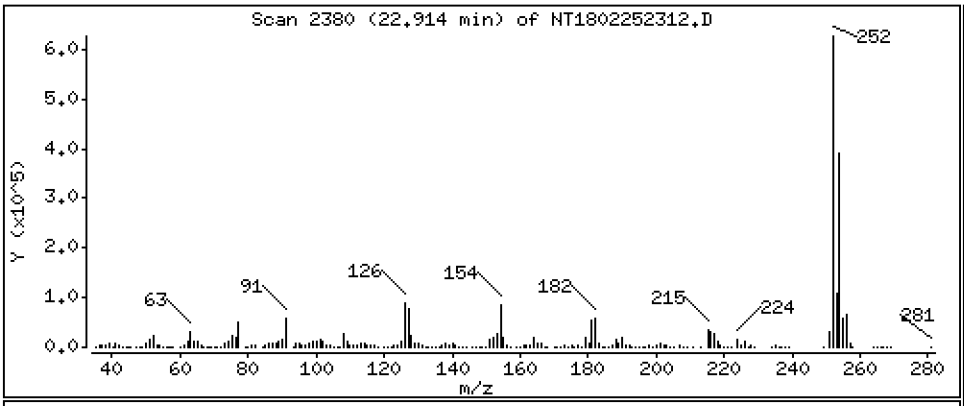
Operator: VTS

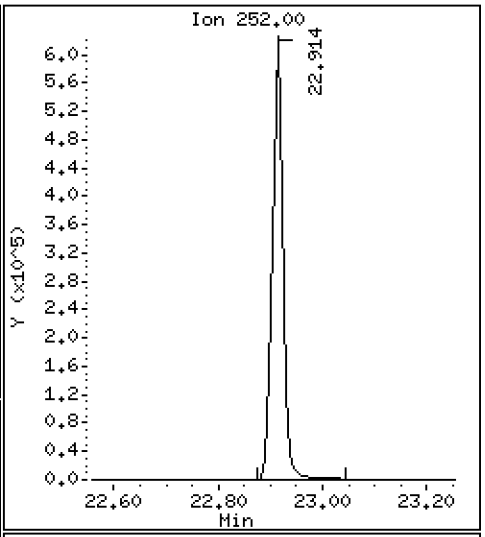
Column phase: ZB-5msi

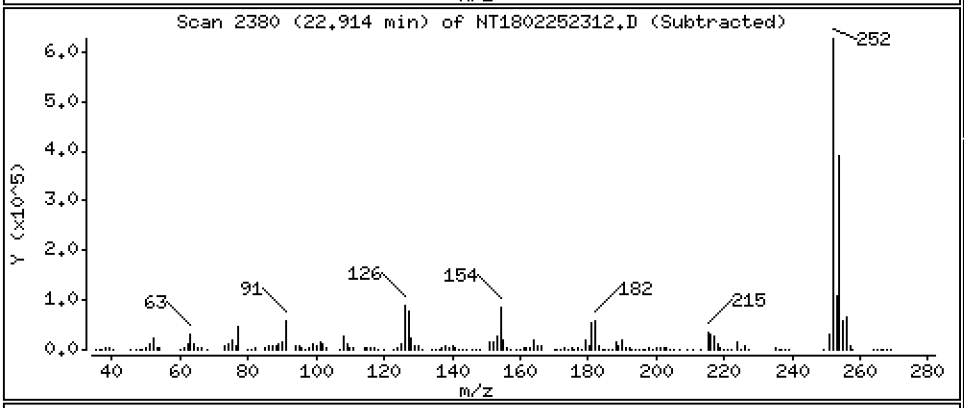
Column diameter: 0.25

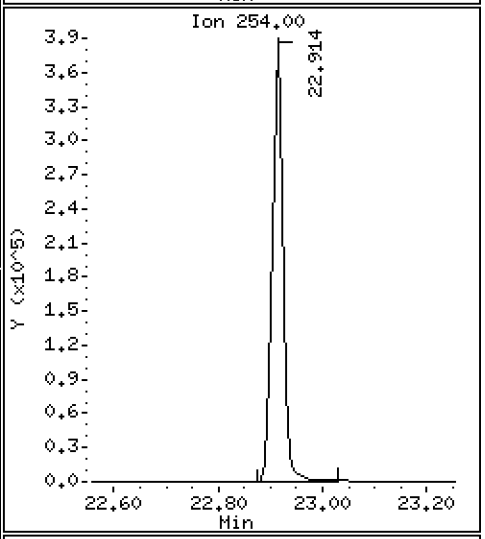
70 3,3'-Dichlorobenzidine

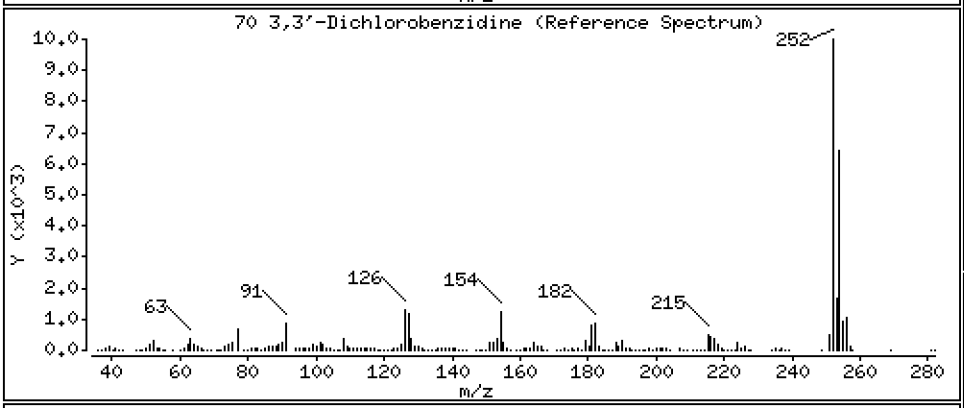
Concentration: 10.00 ug/mL

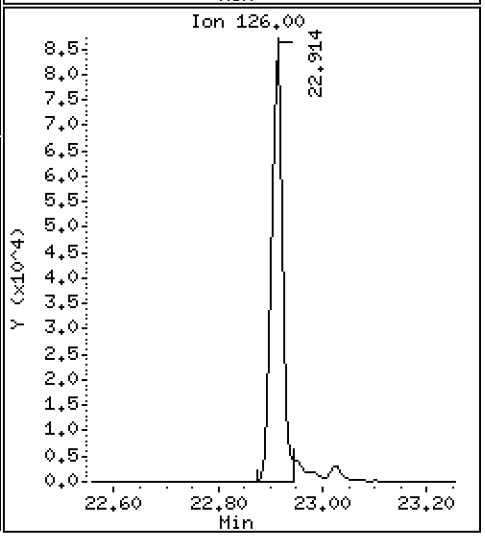


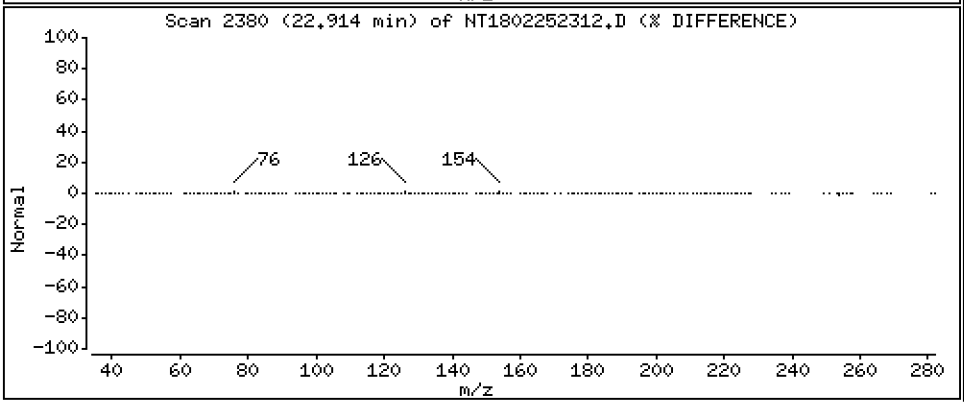












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

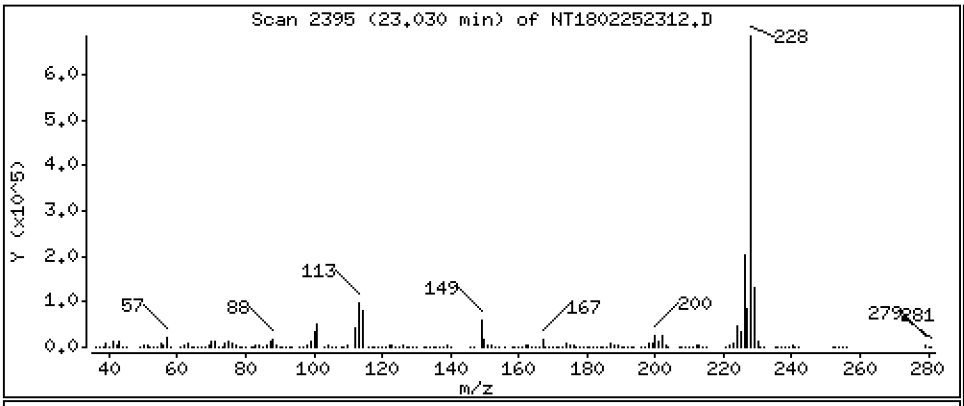
Operator: VTS

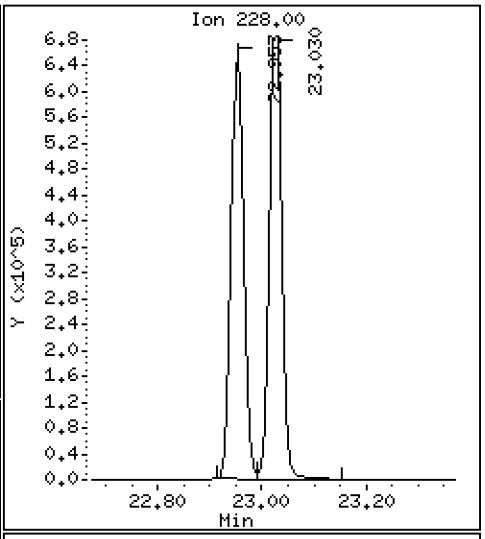
Column phase: ZB-5msi

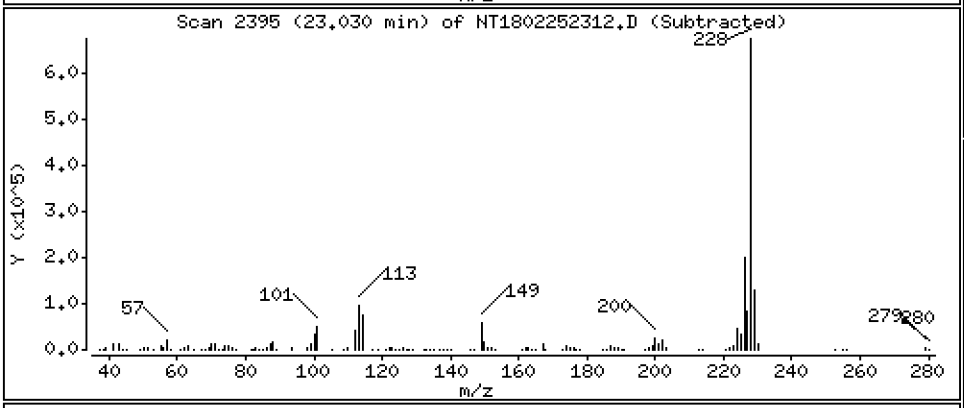
Column diameter: 0.25

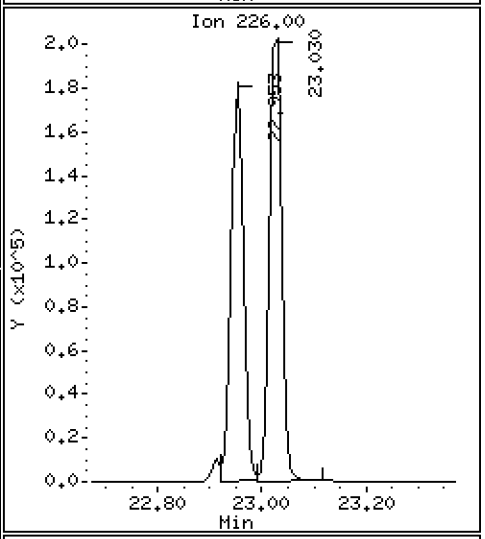
71 Chrysene

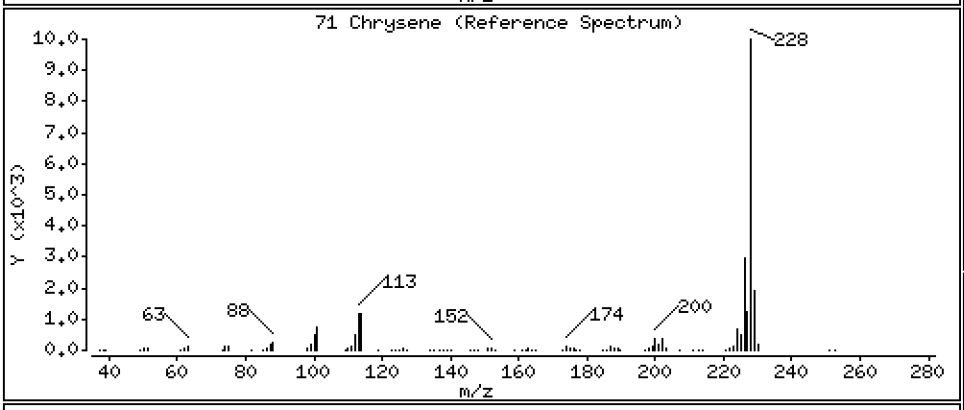
Concentration: 4.428 ug/mL

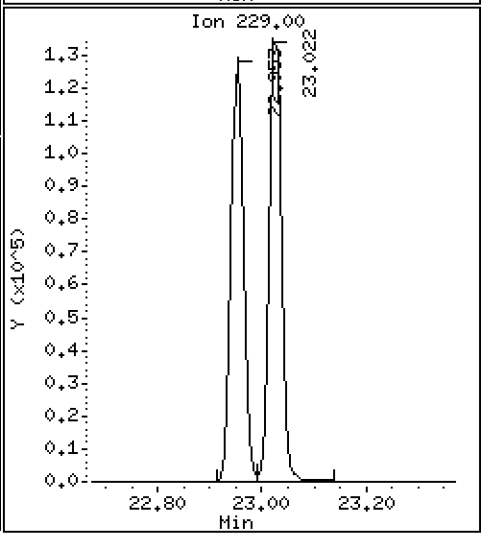


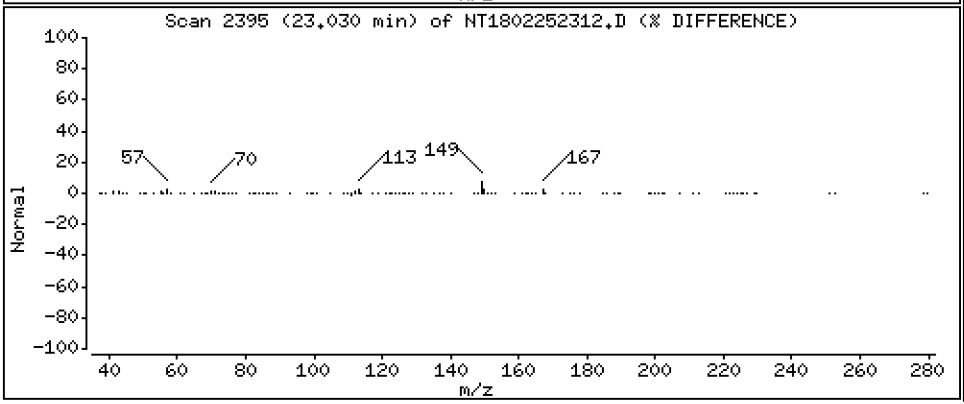












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

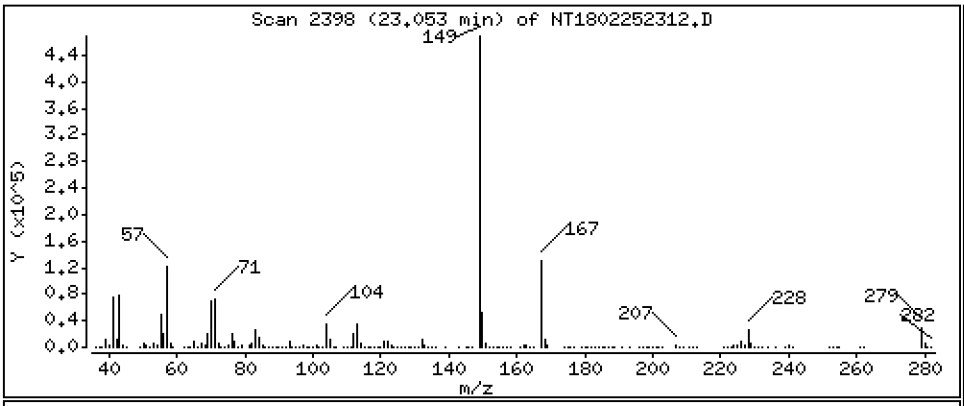
Operator: VTS

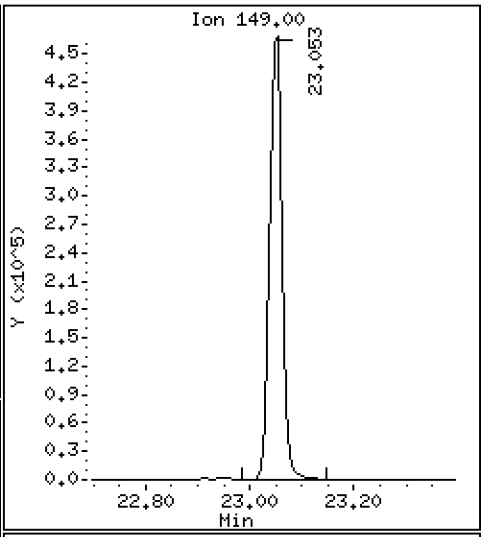
Column phase: ZB-5msi

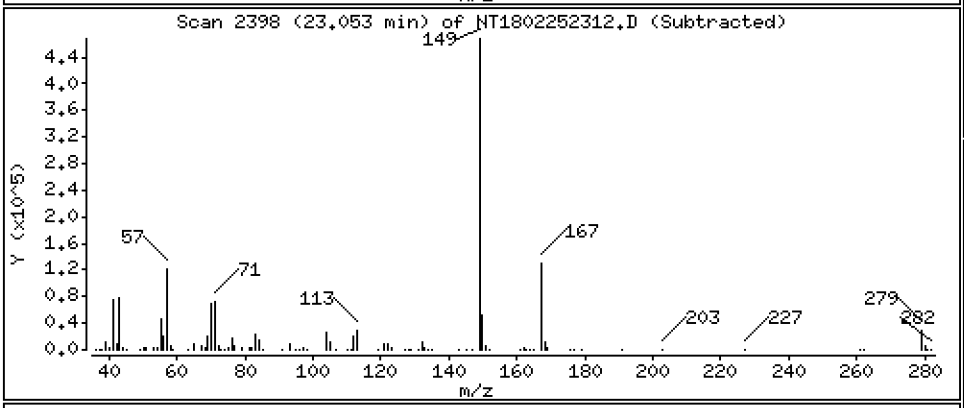
Column diameter: 0.25

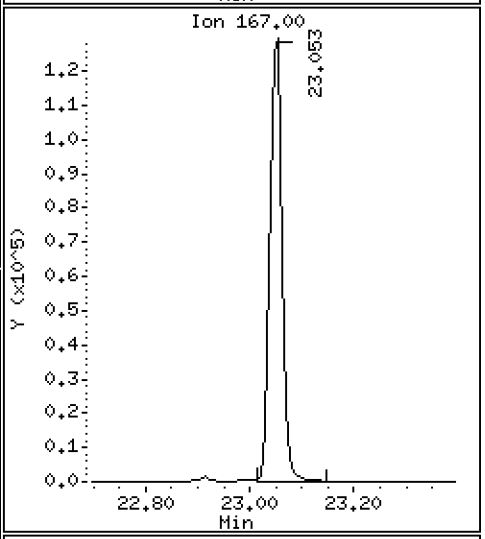
72 bis(2-Ethylhexyl)phthalate

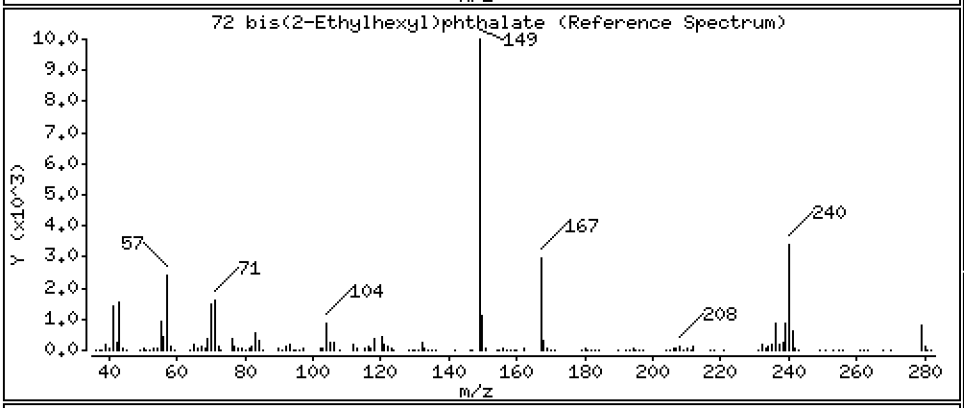
Concentration: 5.231 ug/mL

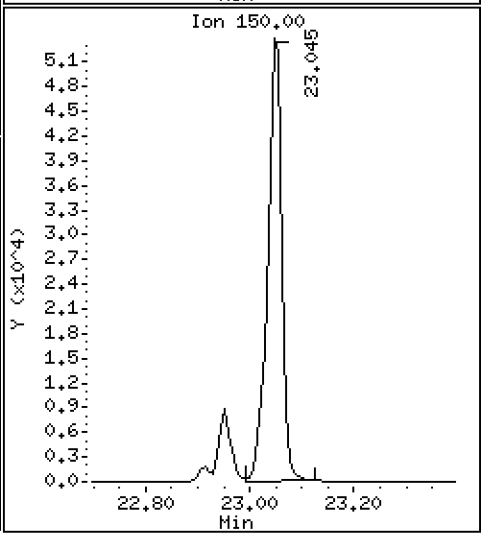


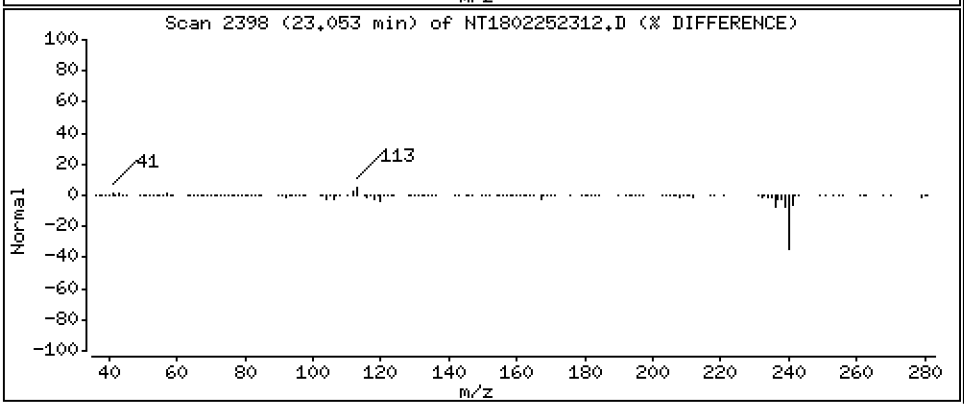












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

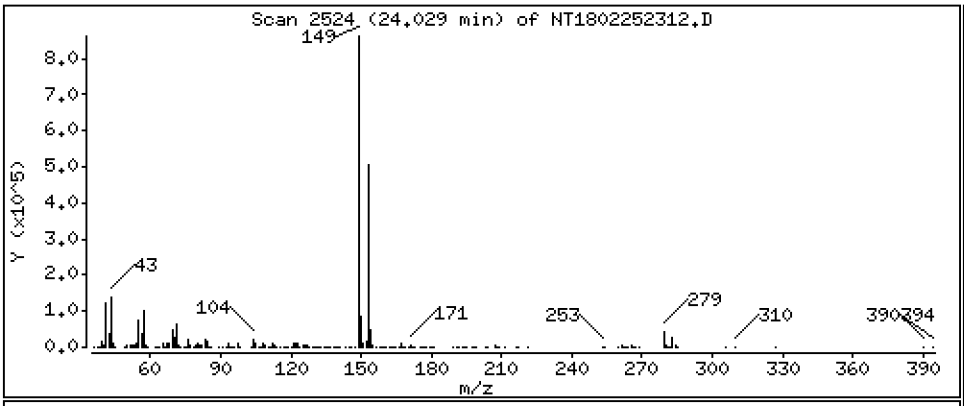
Operator: VTS

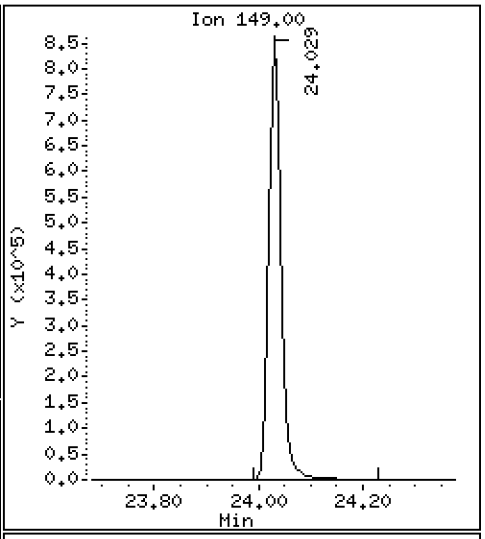
Column phase: ZB-5msi

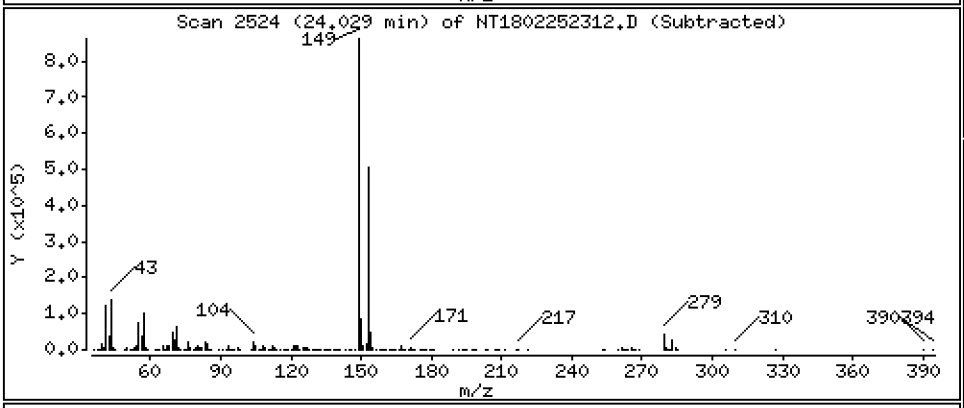
Column diameter: 0.25

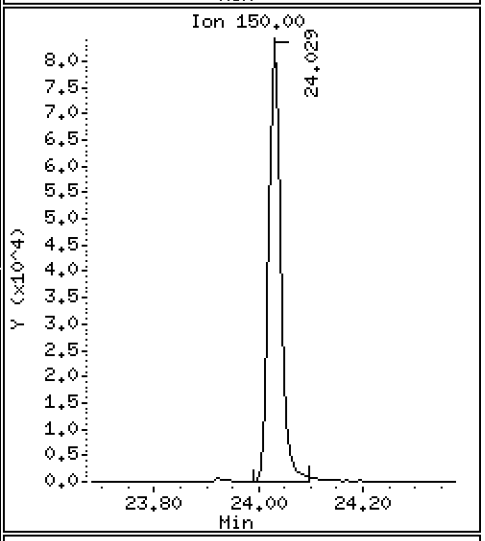
73 Di-n-octylphthalate

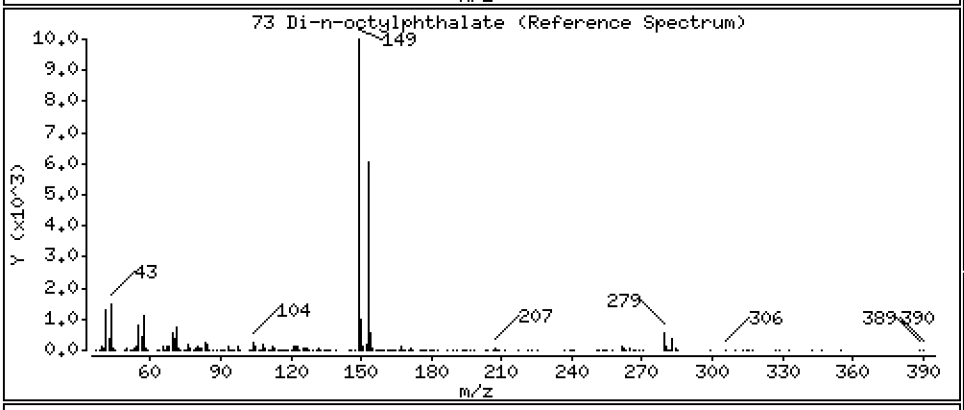
Concentration: 4.813 ug/mL

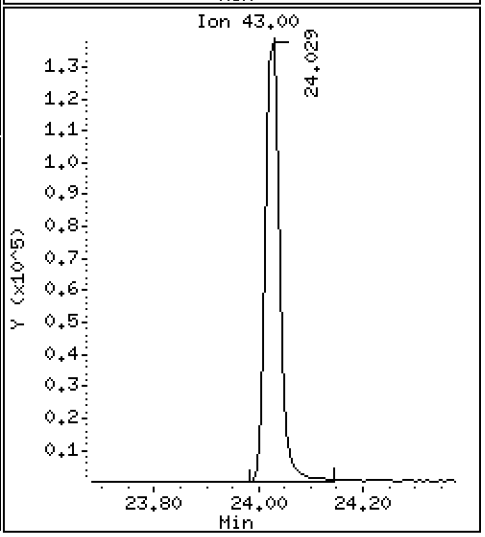


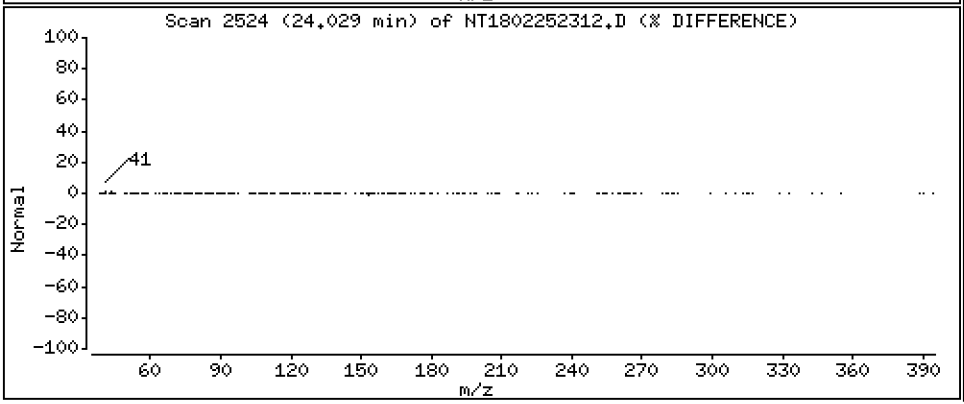












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

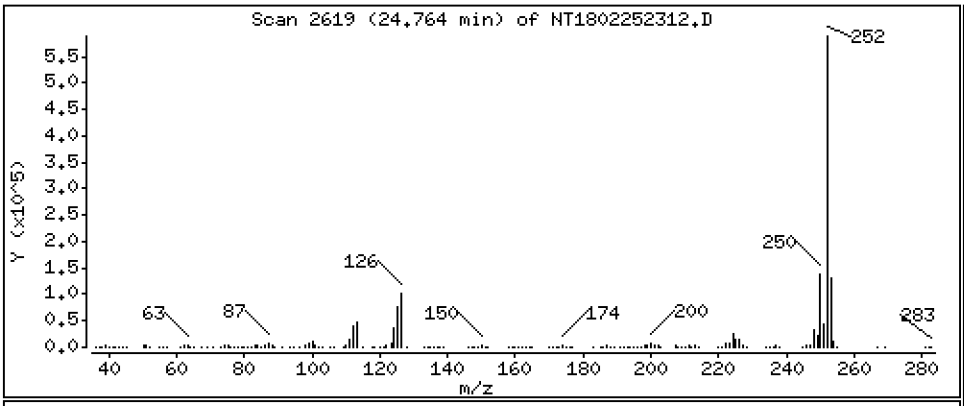
Operator: VTS

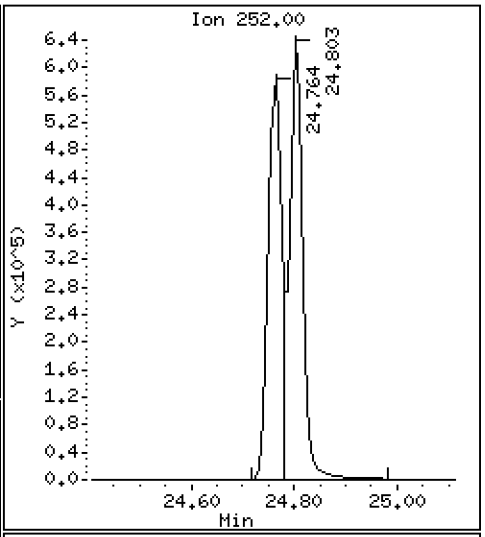
Column phase: ZB-5msi

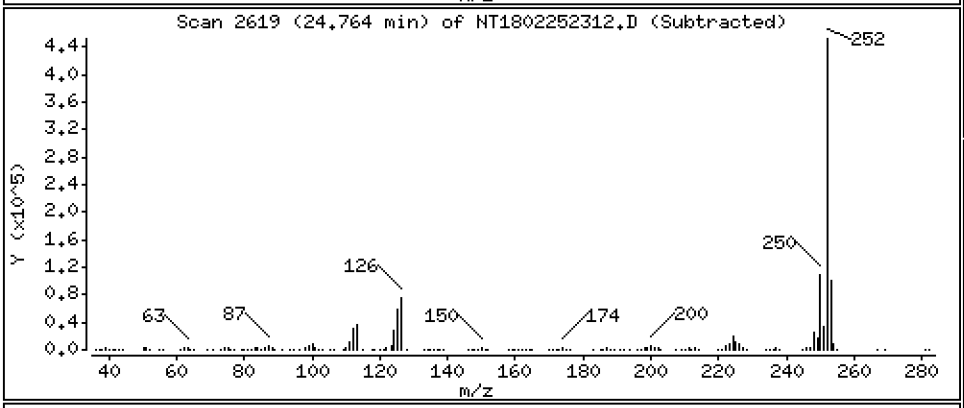
Column diameter: 0.25

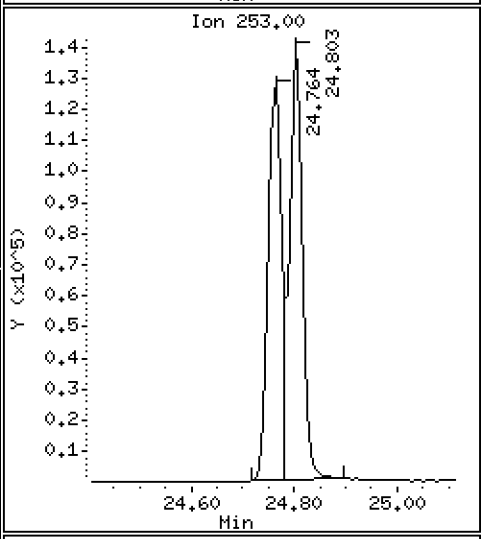
74 Benzo(b)fluoranthene

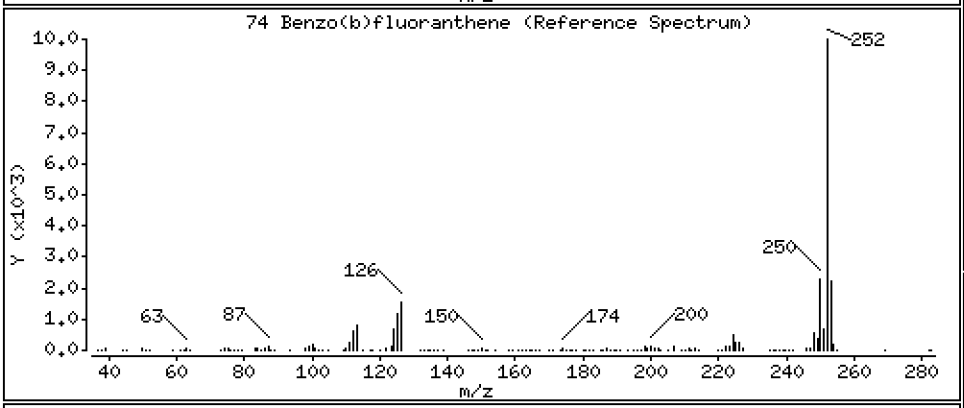
Concentration: 4.319 ug/mL

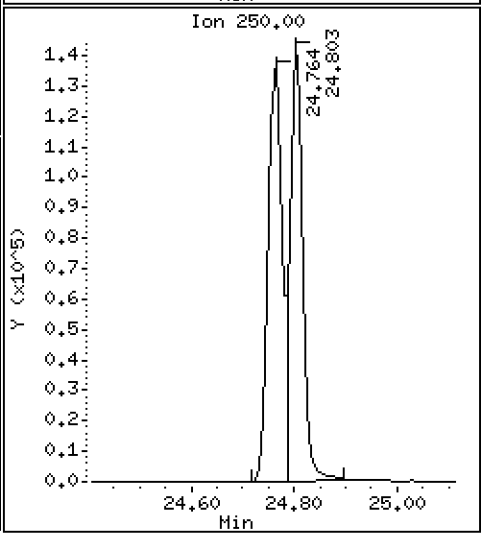


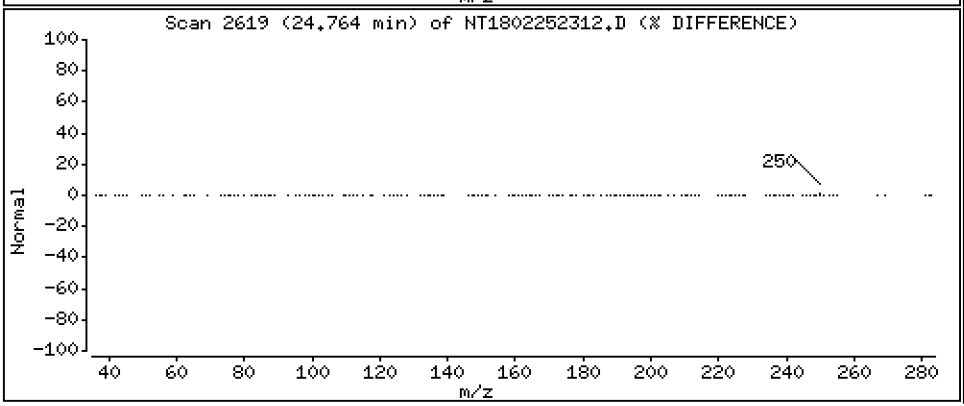












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

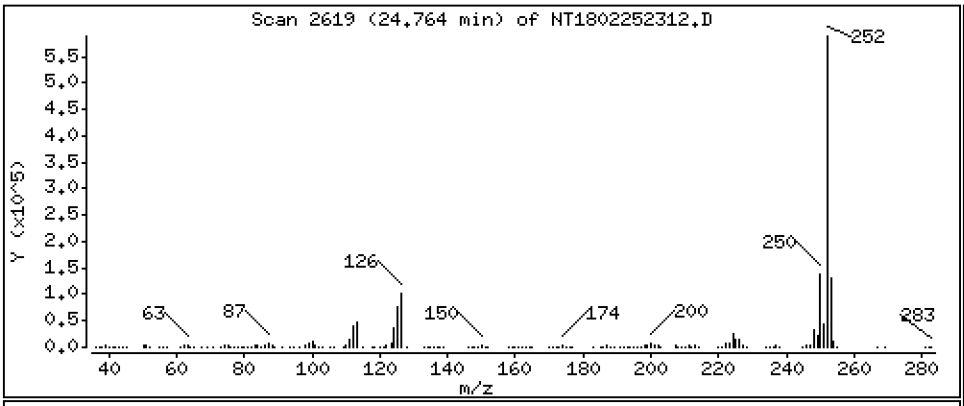
Operator: VTS

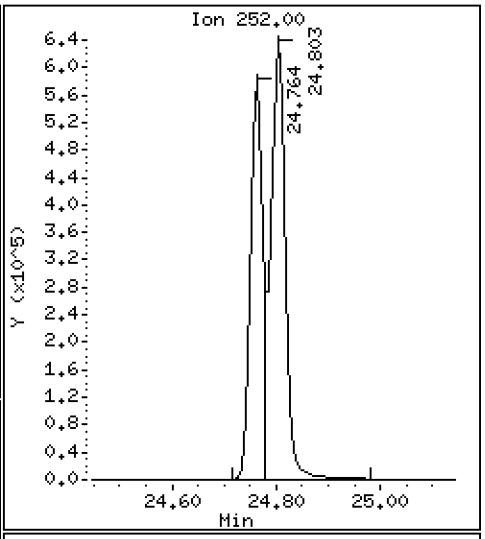
Column phase: ZB-5msi

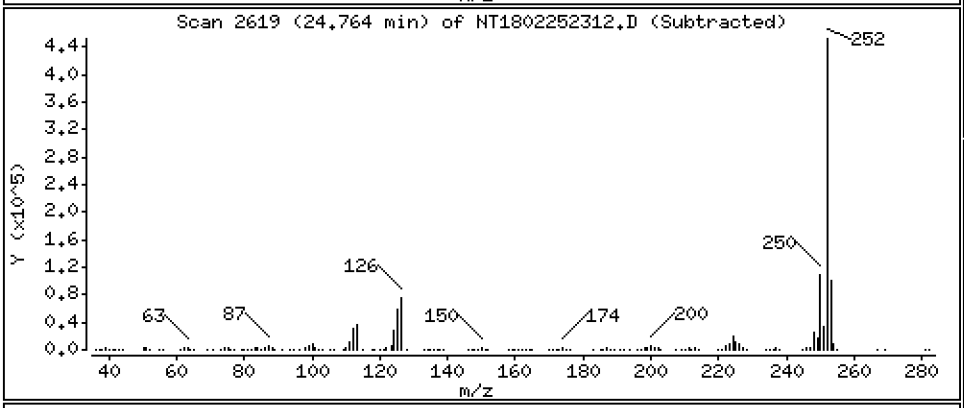
Column diameter: 0.25

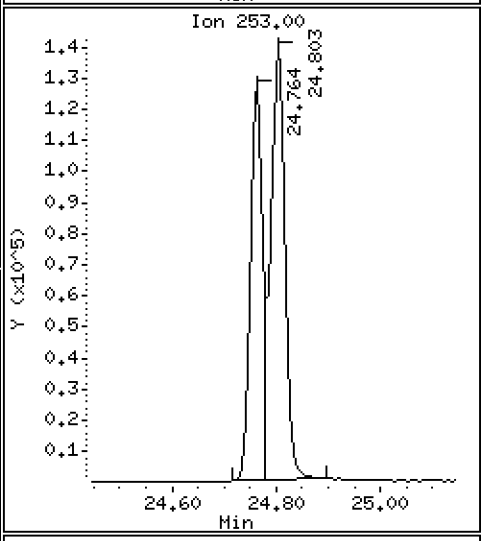
75 Benzo(k)fluoranthene

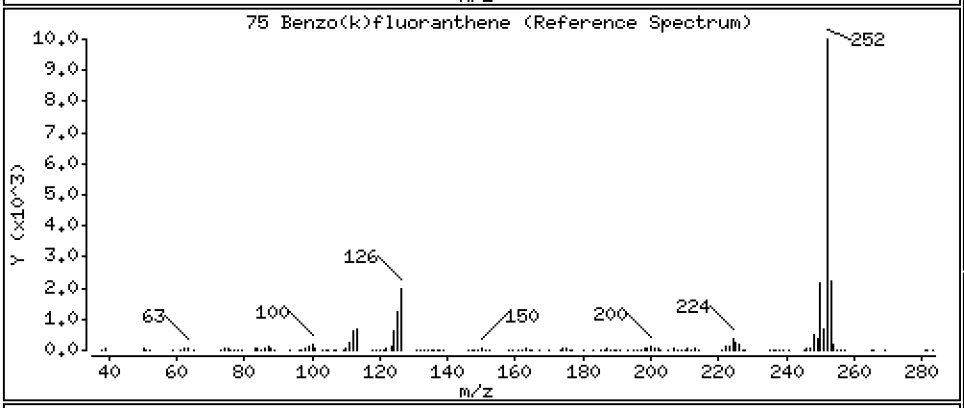
Concentration: 3.811 ug/mL

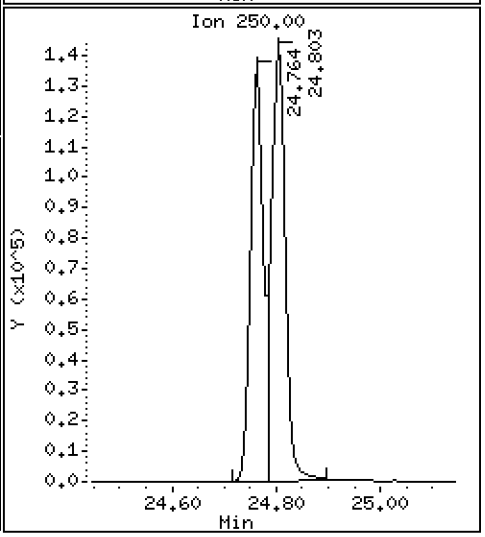


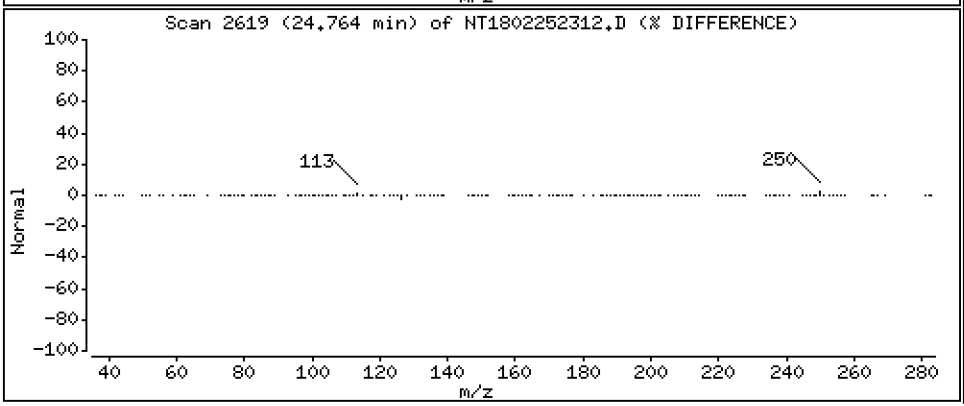












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

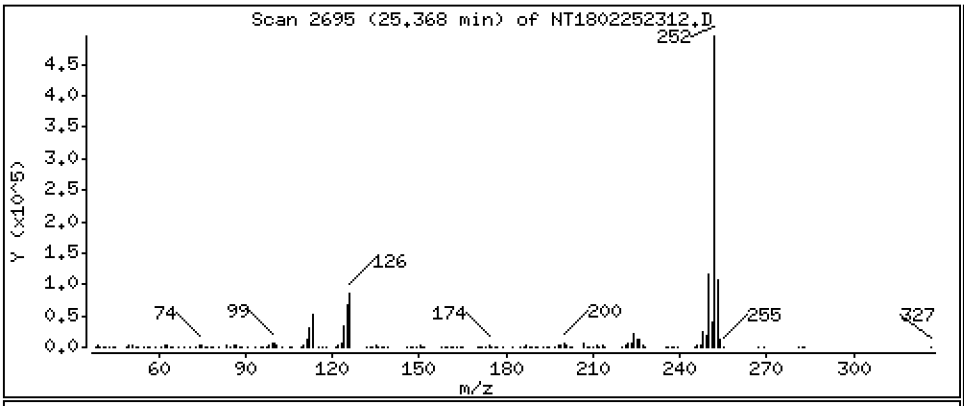
Operator: VTS

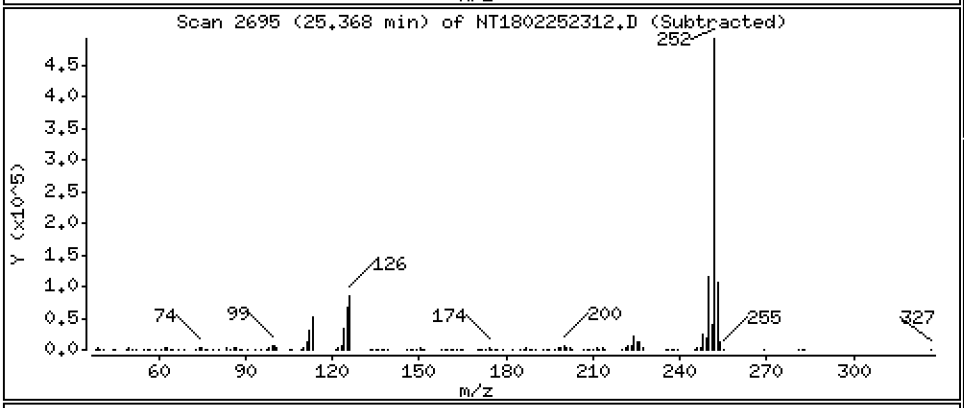
Column phase: ZB-5msi

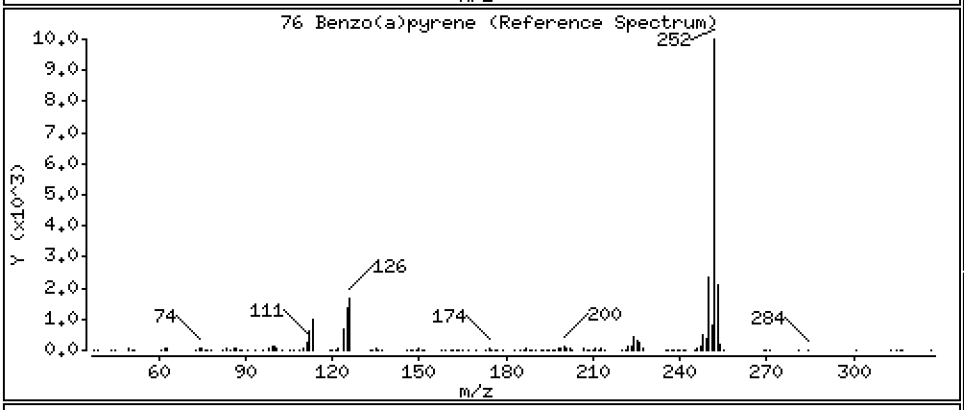
Column diameter: 0.25

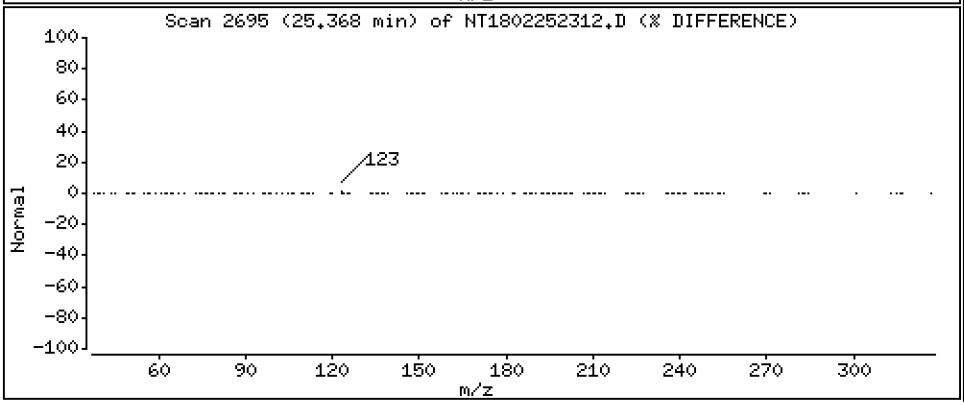
76 Benzo(a)pyrene

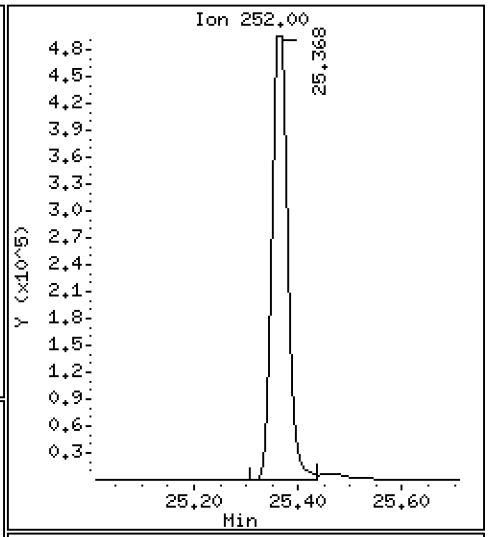
Concentration: 4.590 ug/mL

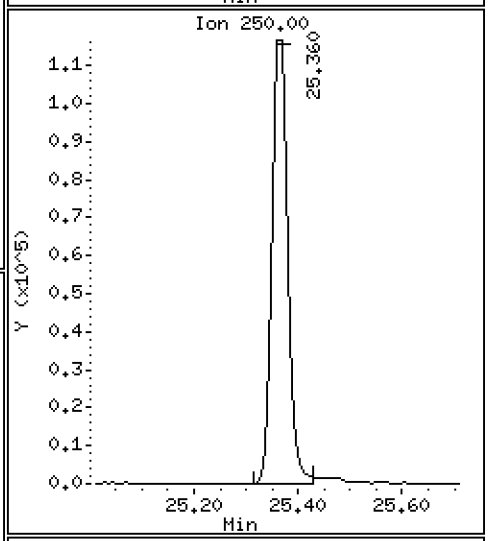


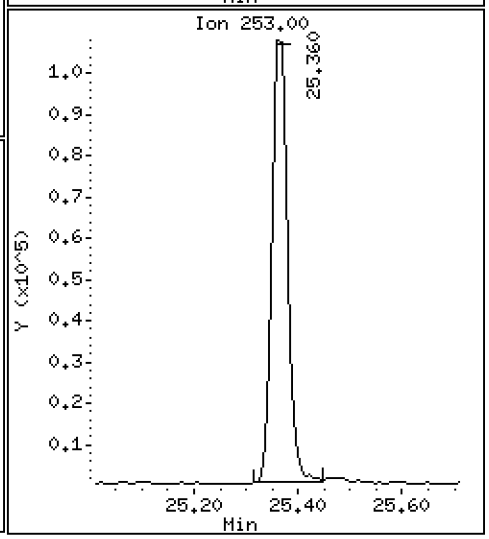












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

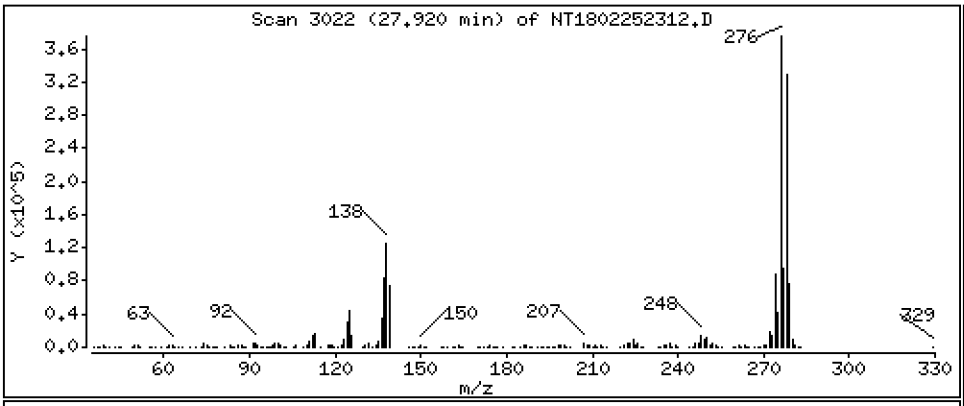
Operator: VTS

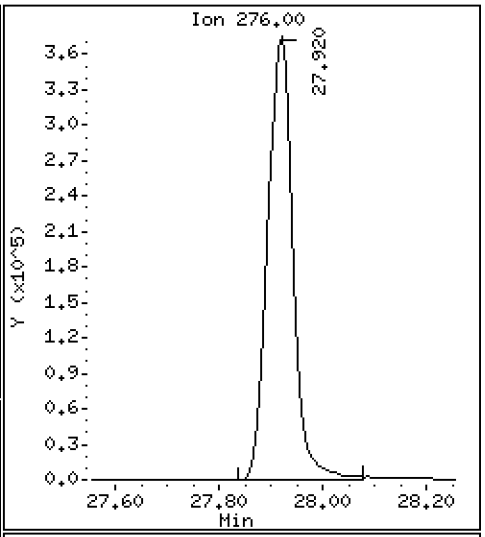
Column phase: ZB-5msi

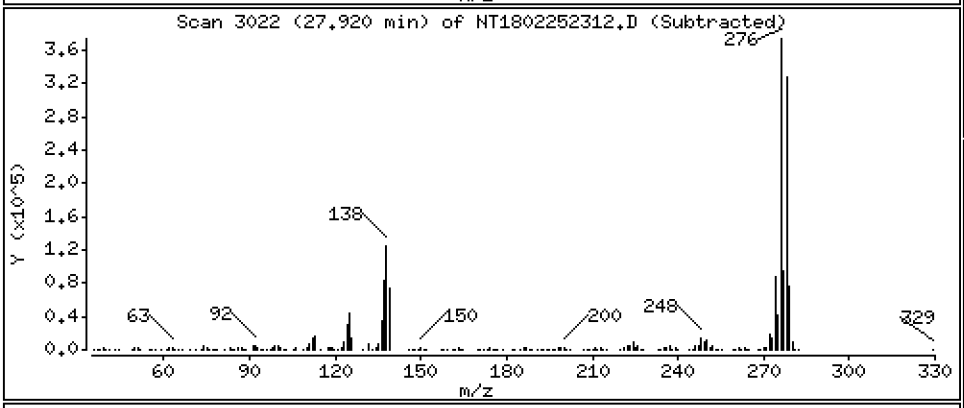
Column diameter: 0.25

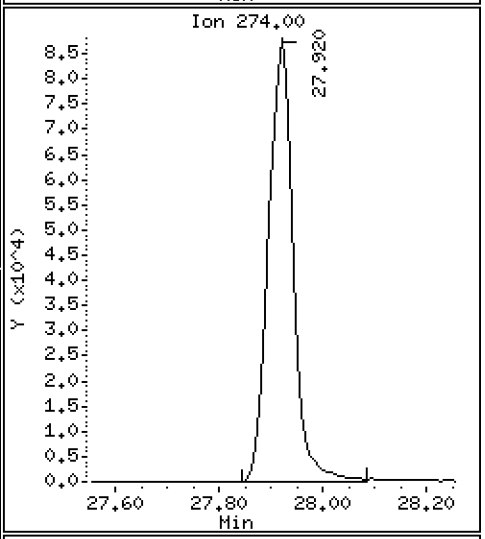
78 Indeno(1,2,3-cd)pyrene

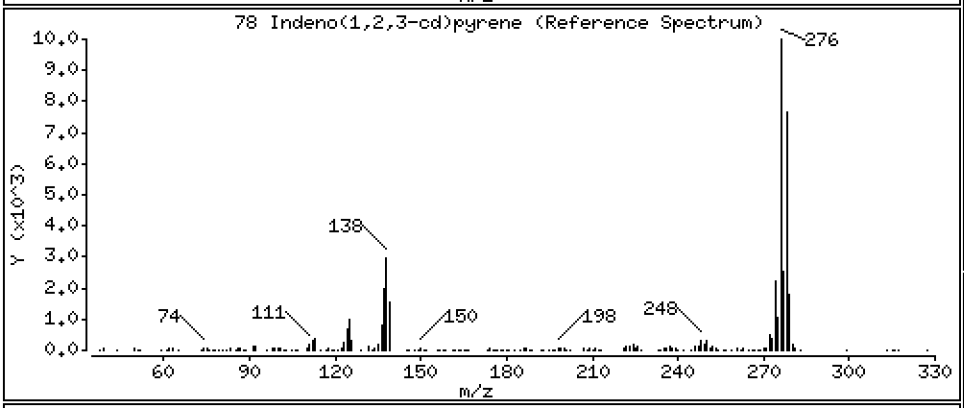
Concentration: 4.636 ug/mL

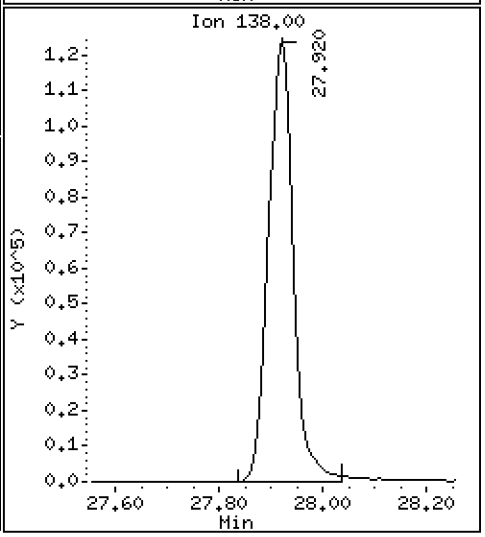


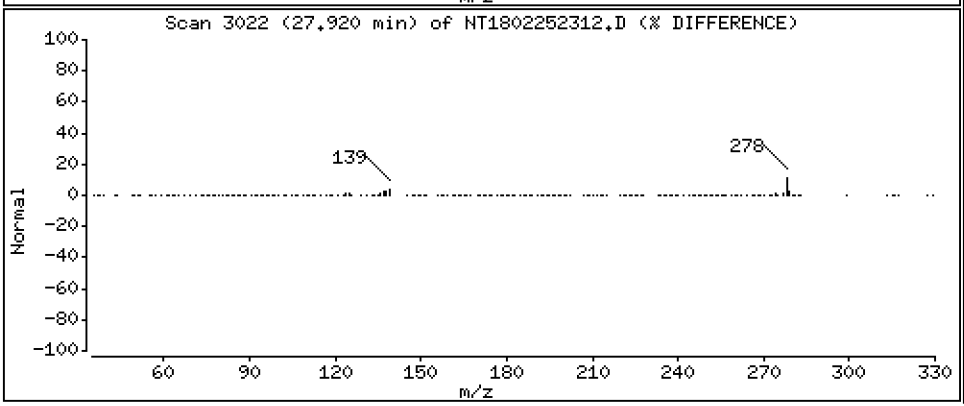












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

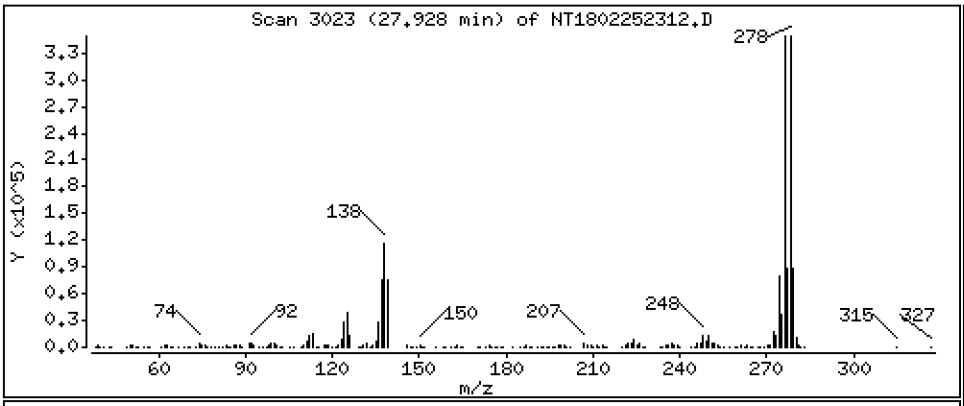
Operator: VTS

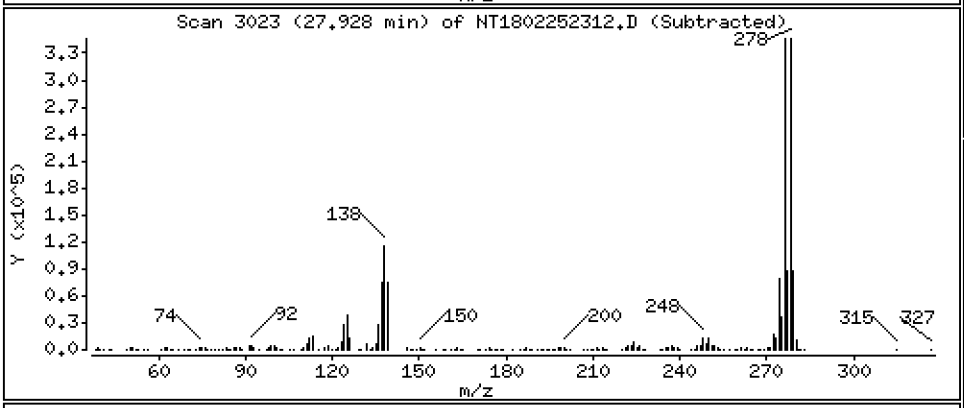
Column phase: ZB-5msi

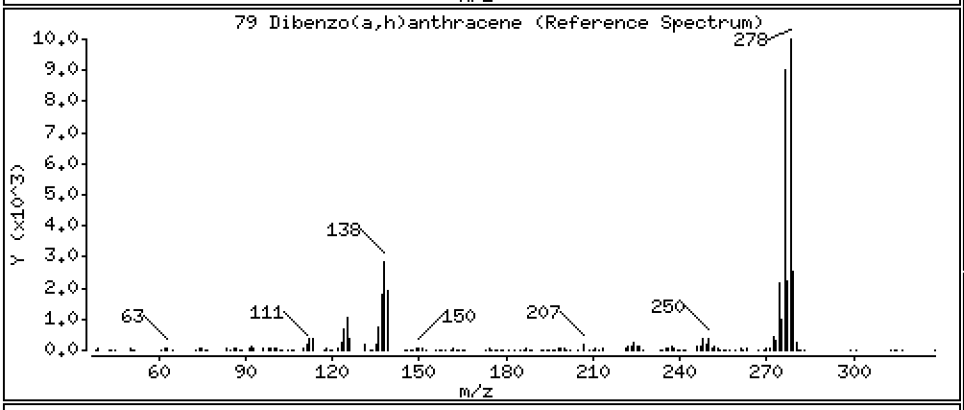
Column diameter: 0.25

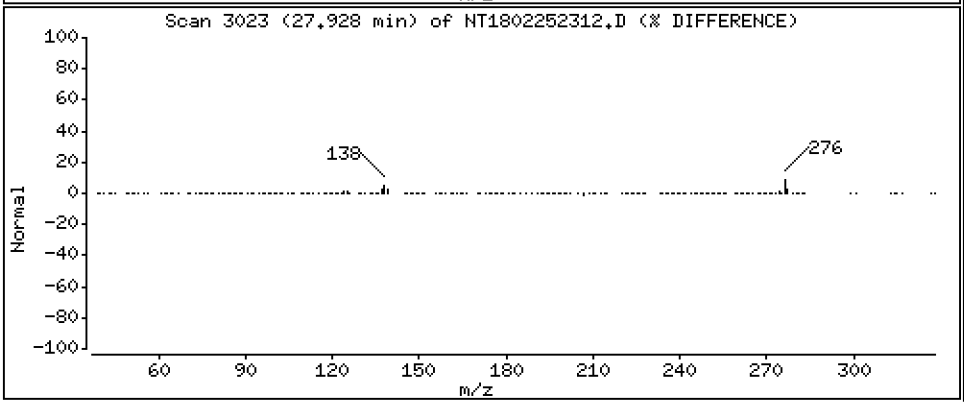
79 Dibenzo(a,h)anthracene

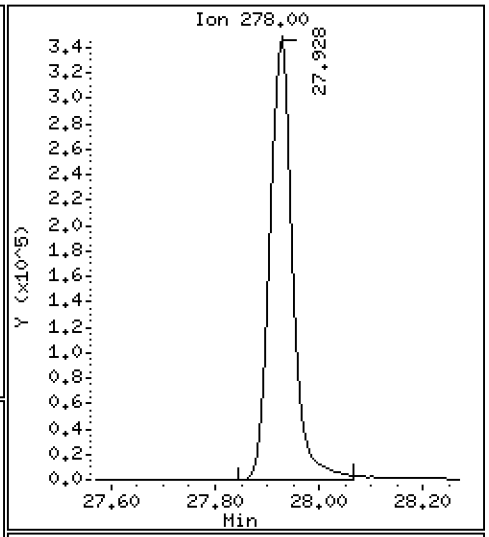
Concentration: 4.580 ug/mL

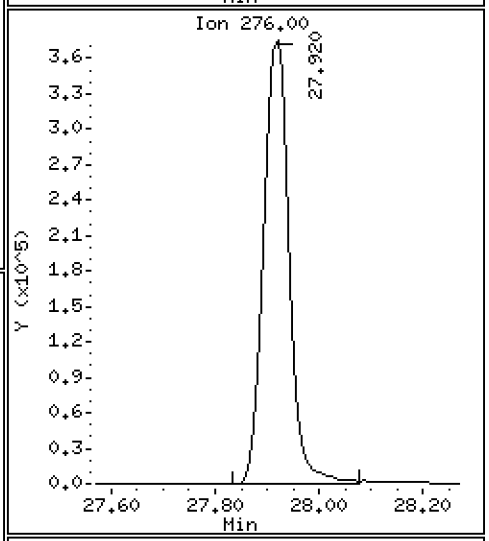


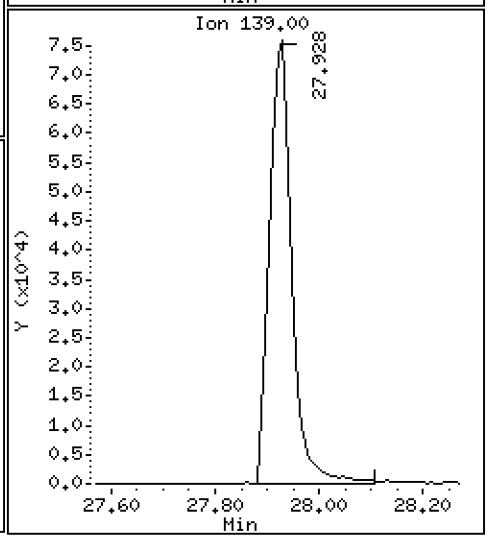












Date : 26-FEB-2023 04:06

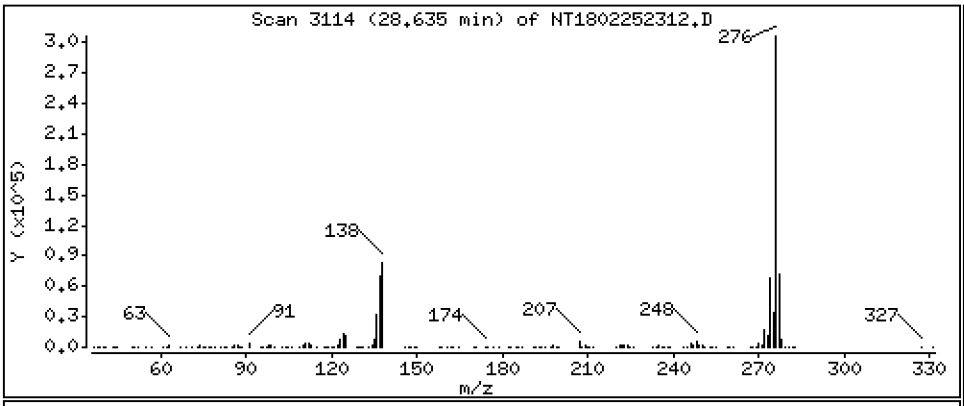
Client ID: Instrument: nt18.i

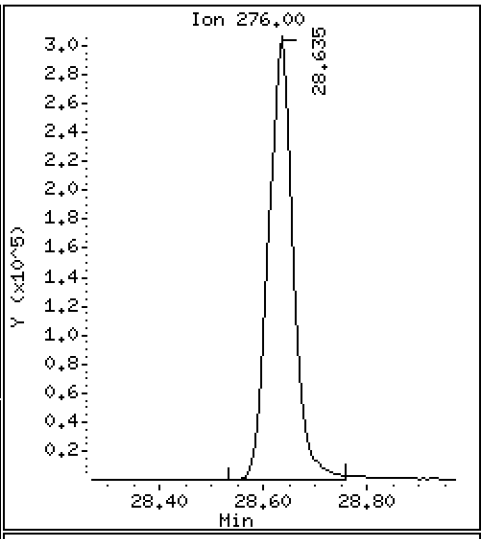
Sample Info: SLC0099-SCV1

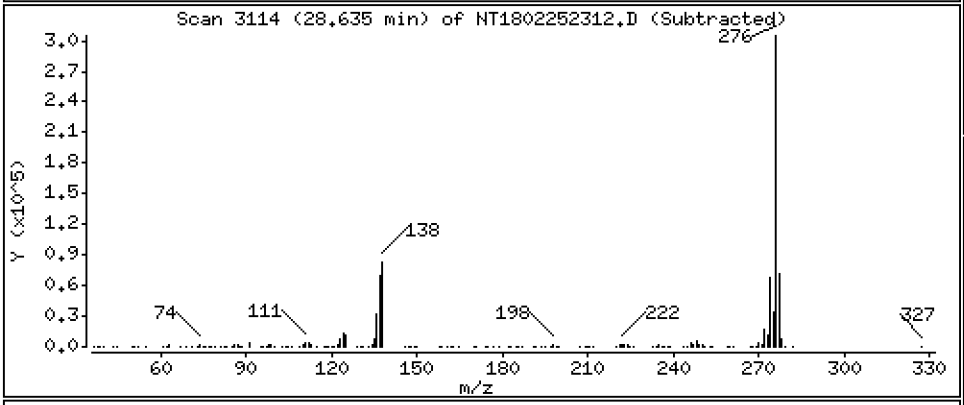
Operator: VTS

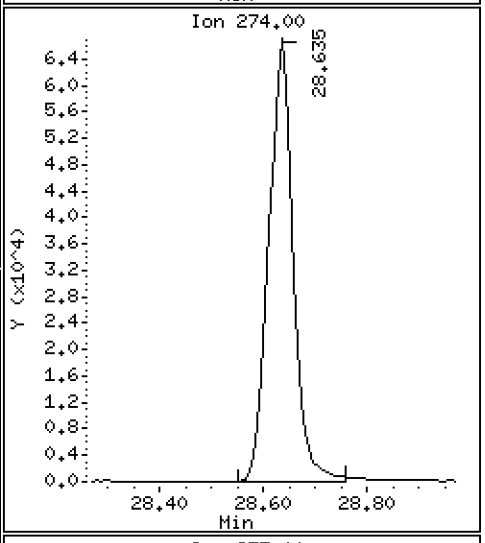
Column phase: ZB-5msi Column diameter: 0.25

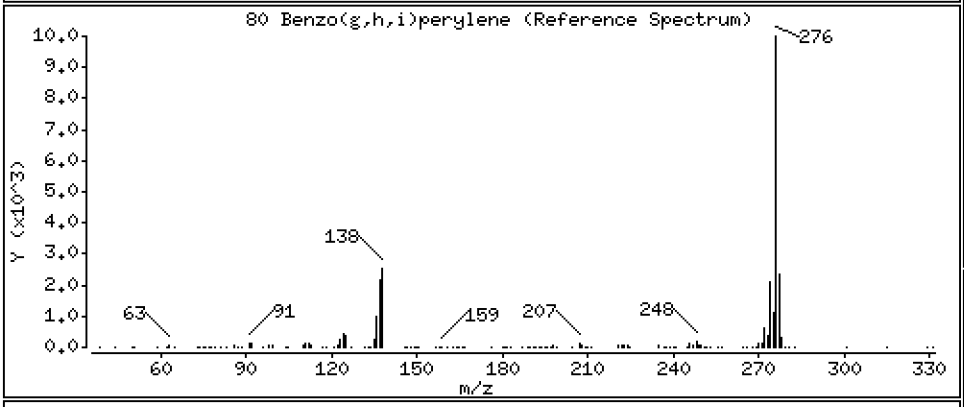
80 Benzo(g,h,i)perylene Concentration: 4.593 ug/mL

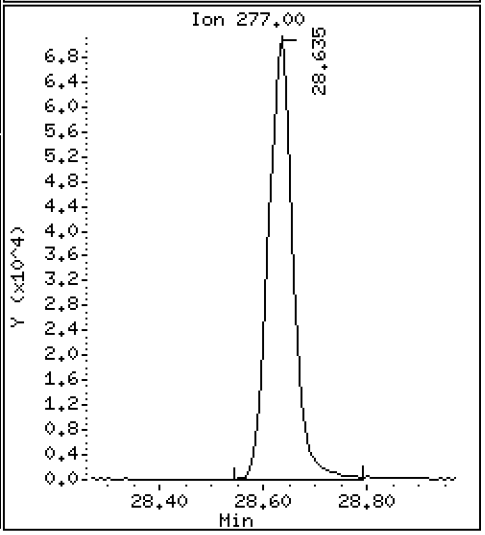


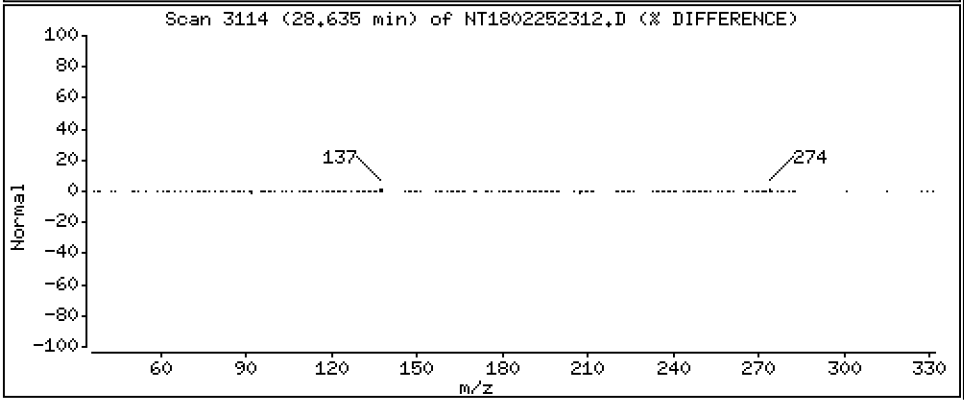












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

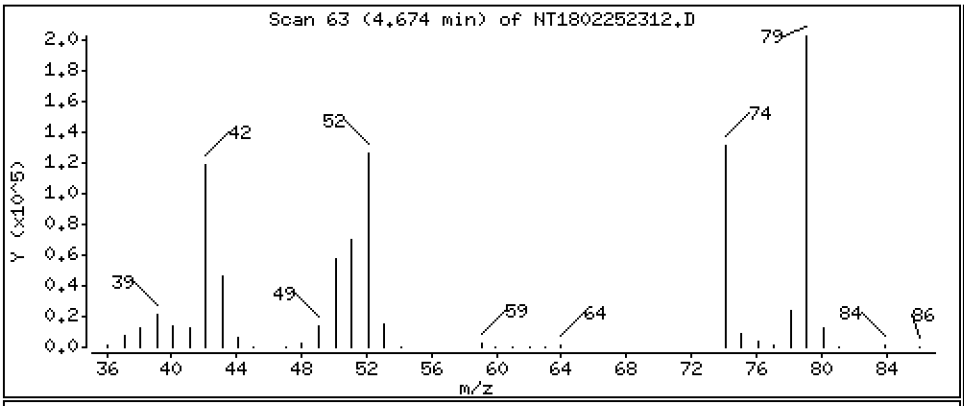
Operator: VTS

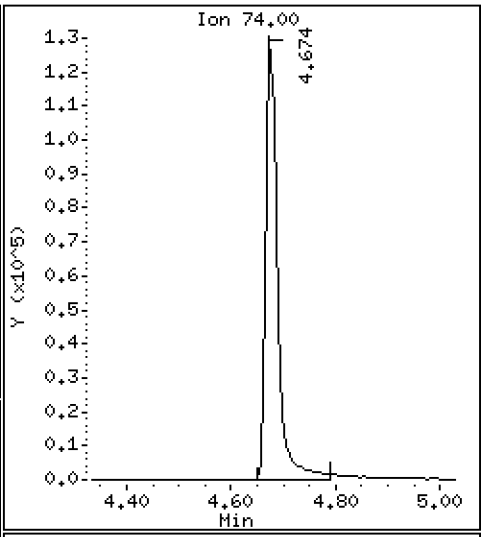
Column phase: ZB-5msi

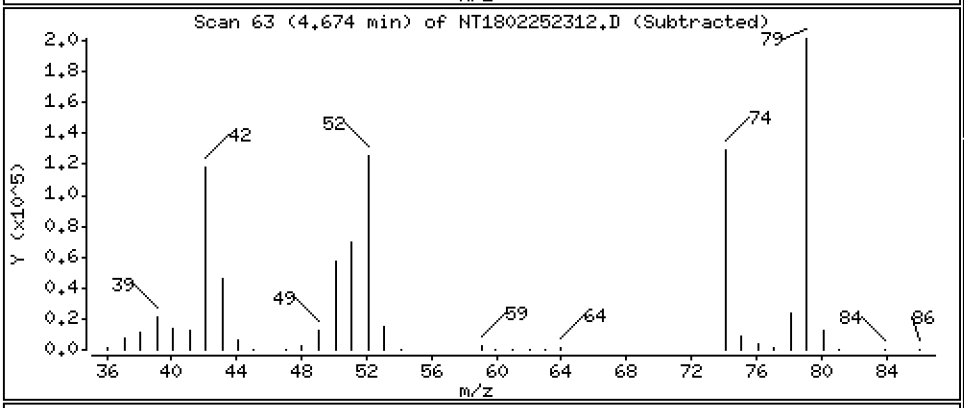
Column diameter: 0.25

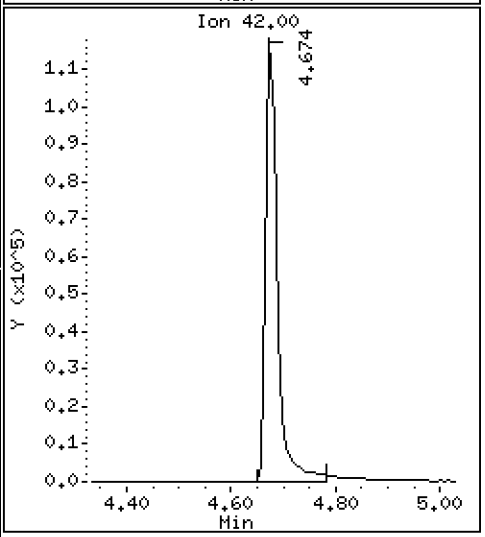
90 N-Nitrosodimethylamine

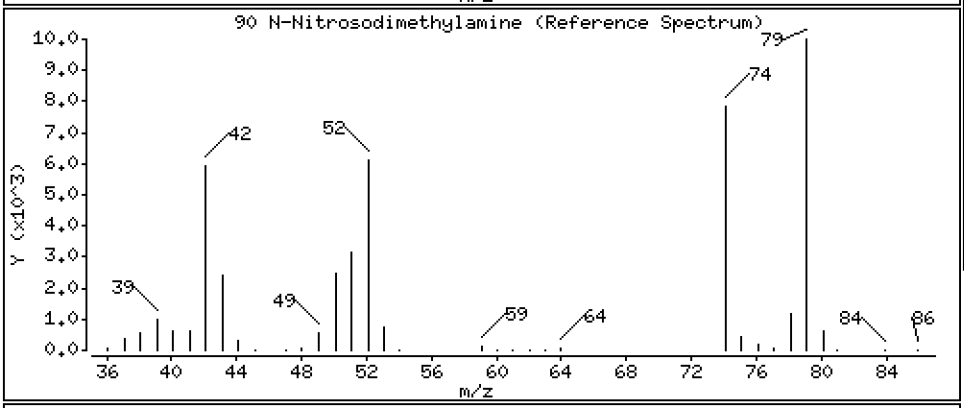
Concentration: 4.810 ug/mL

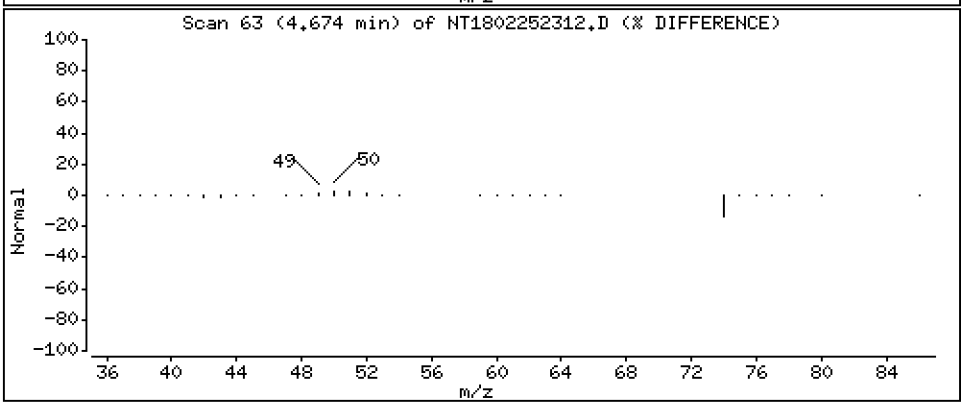












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

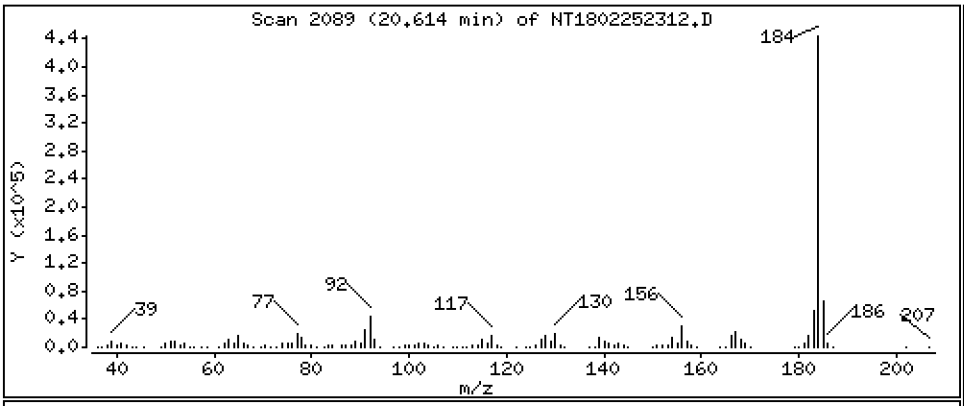
Operator: VTS

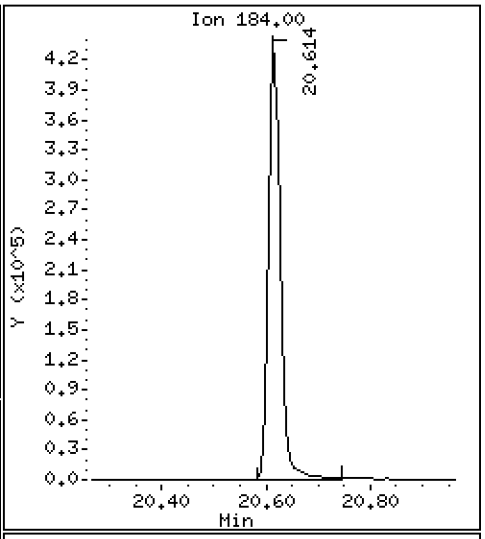
Column phase: ZB-5msi

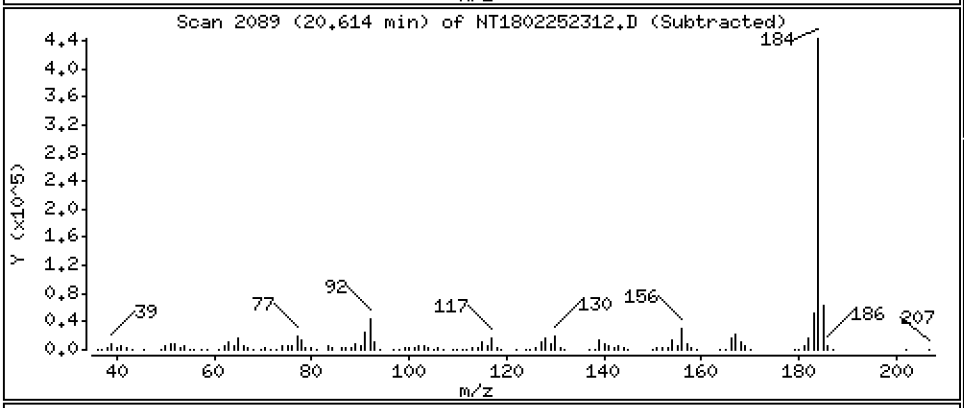
Column diameter: 0.25

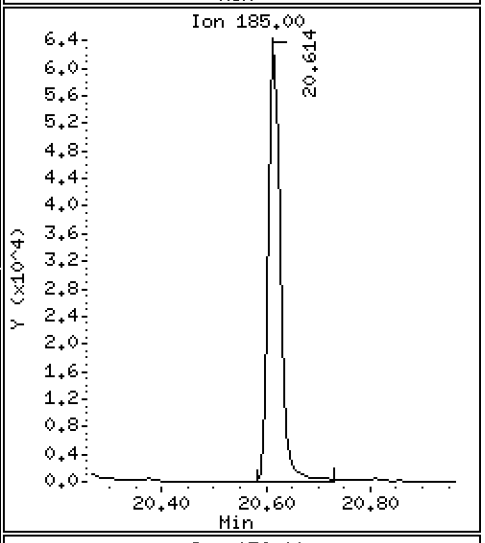
93 Benzidine

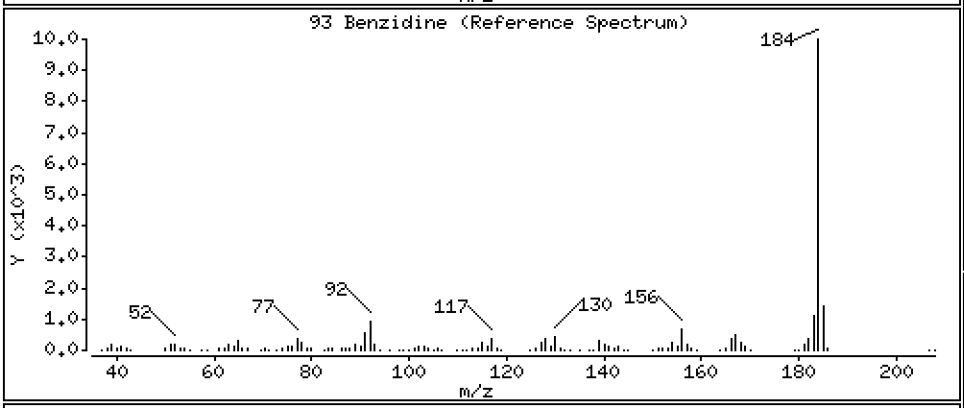
Concentration: 5.813 ug/mL

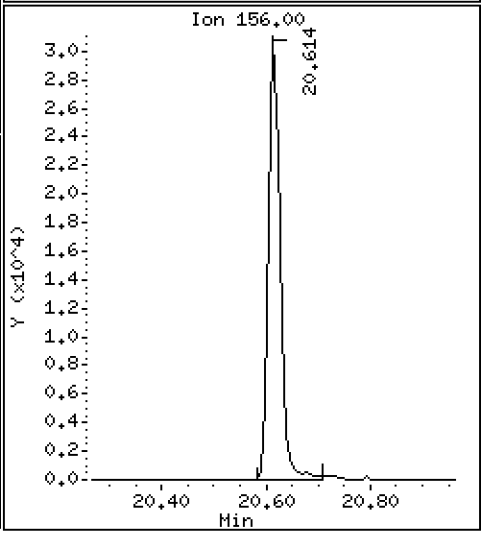


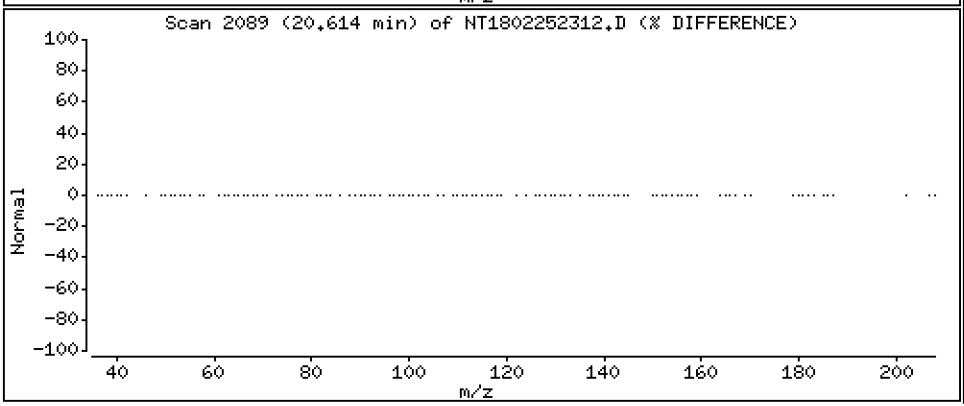












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

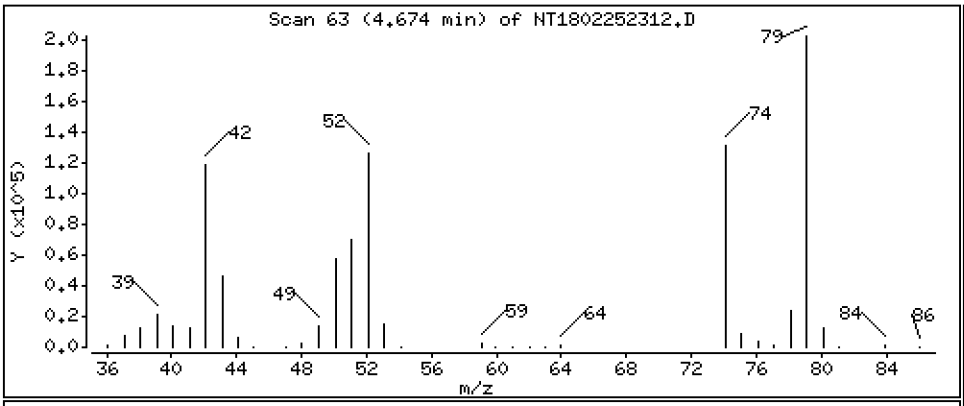
Operator: VTS

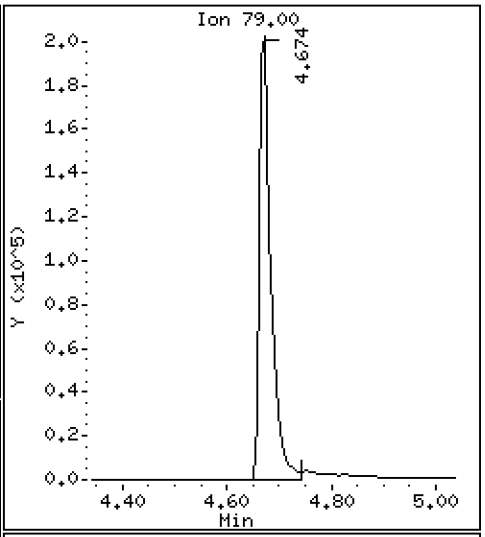
Column phase: ZB-5msi

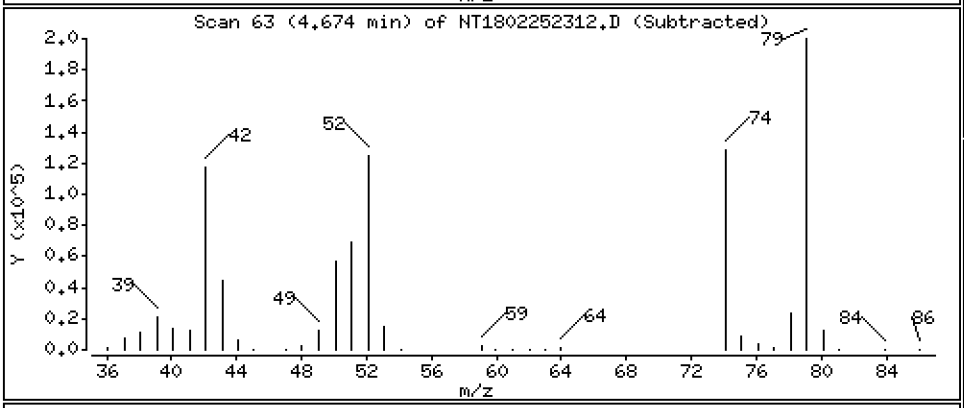
Column diameter: 0.25

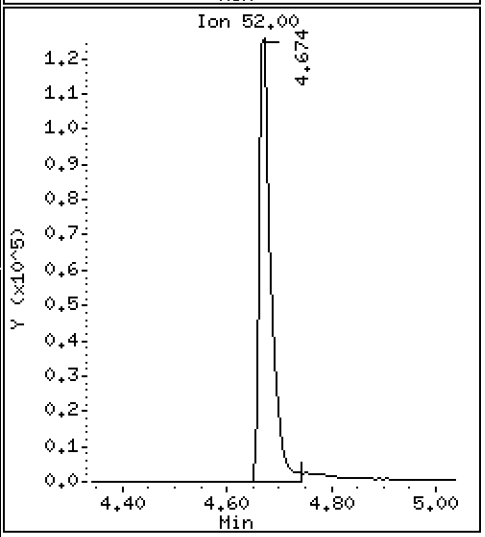
103 Pyridine

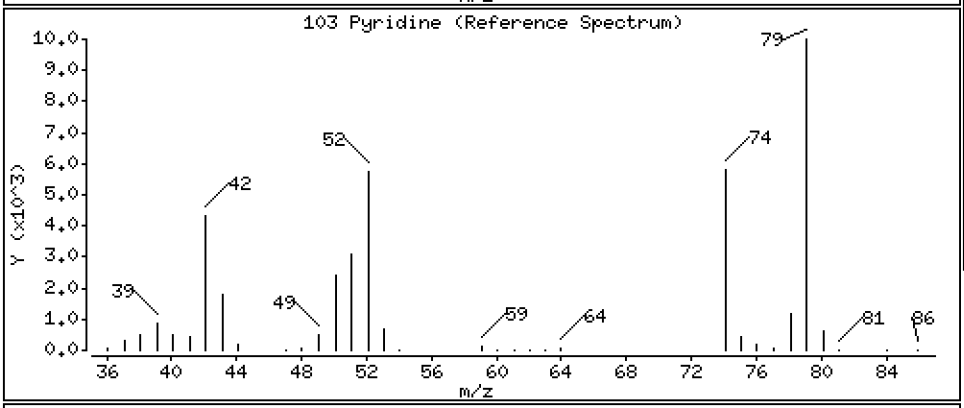
Concentration: 4.694 ug/mL

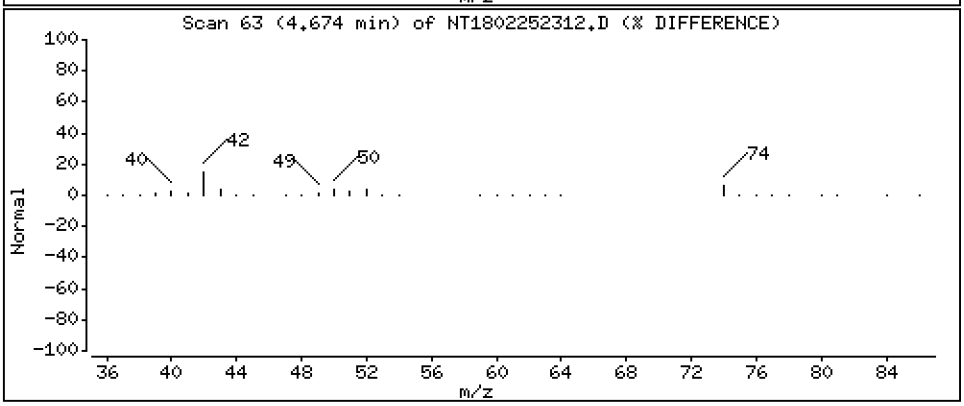












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

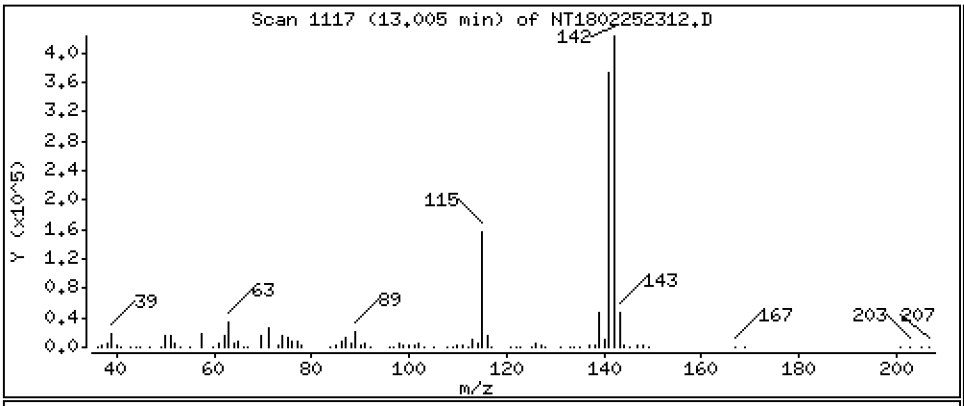
Operator: VTS

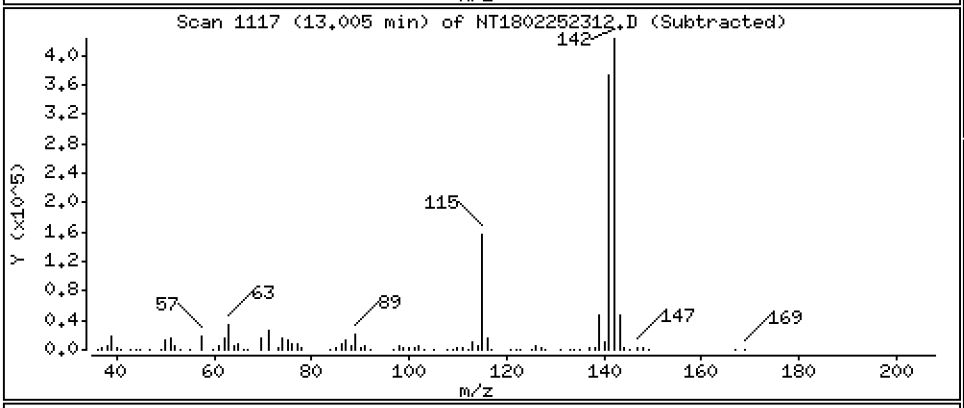
Column phase: ZB-5msi

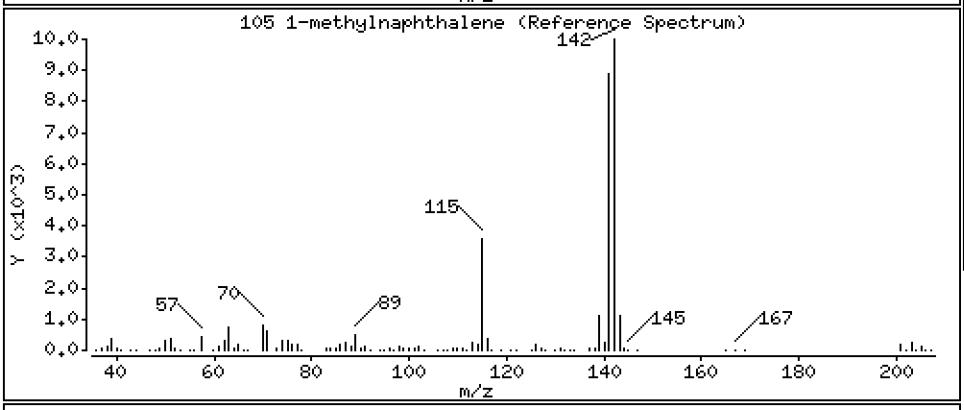
Column diameter: 0.25

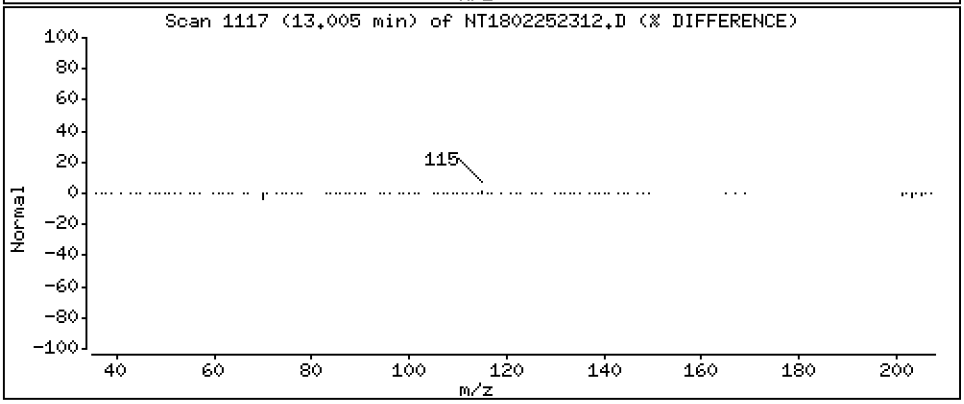
105 1-methylnaphthalene

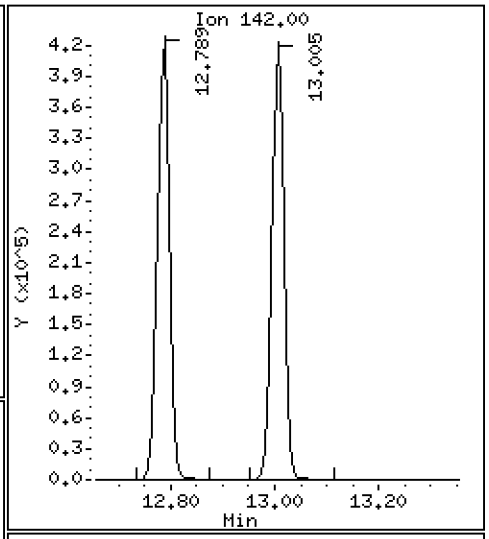
Concentration: 4.486 ug/mL

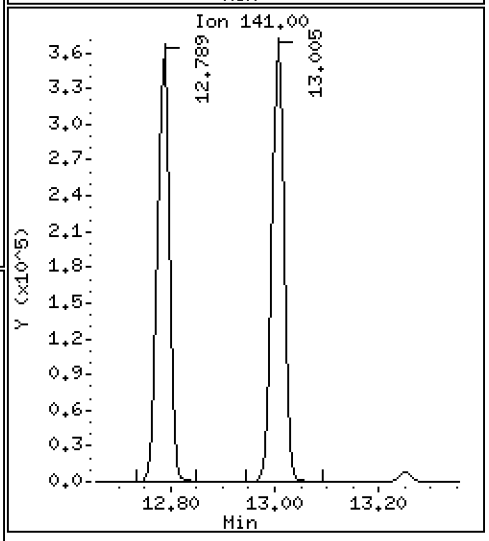












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

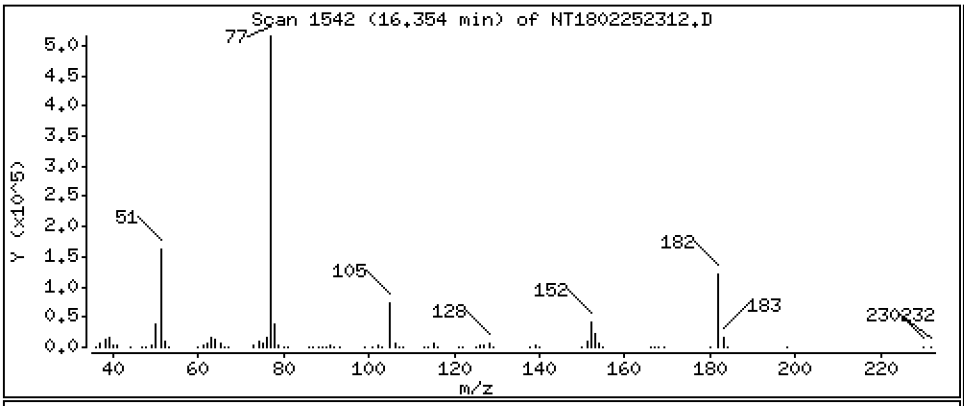
Operator: VTS

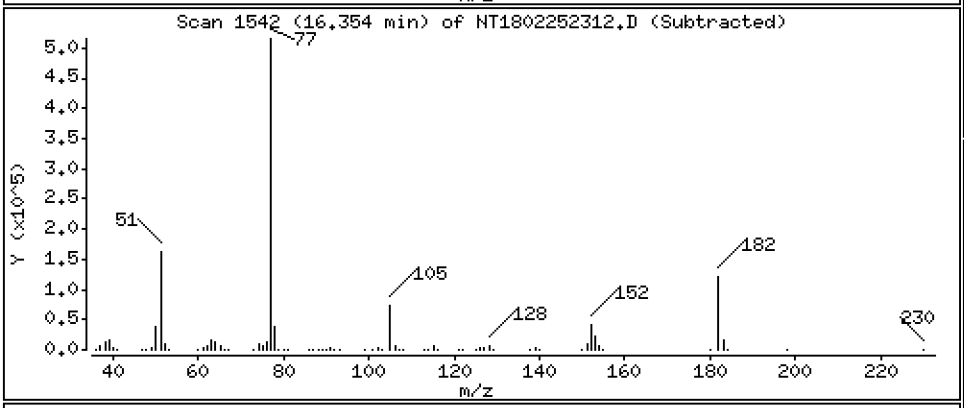
Column phase: ZB-5msi

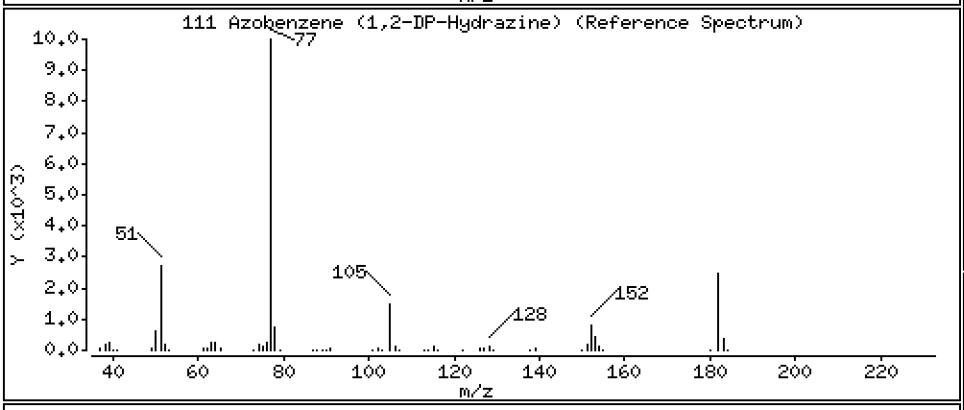
Column diameter: 0.25

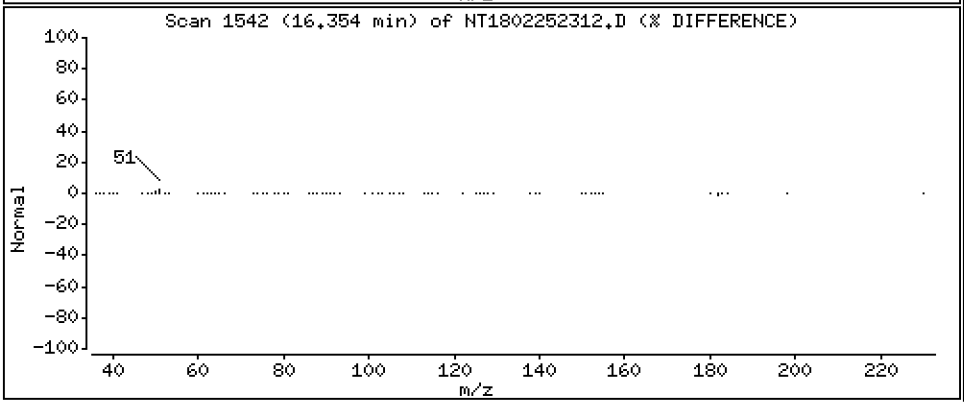
111 Azobenzene (1,2-DP-Hydrazine)

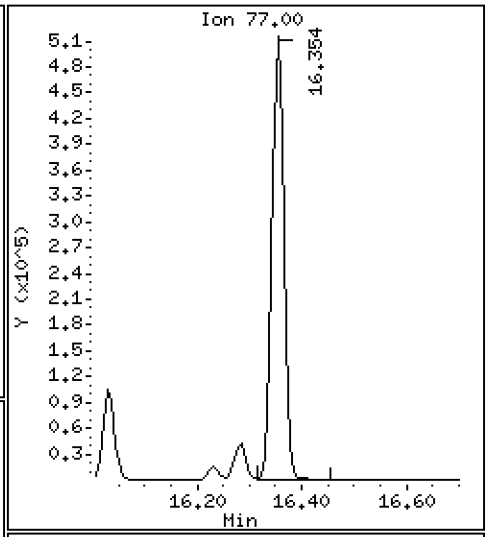
Concentration: 4.731 ug/mL

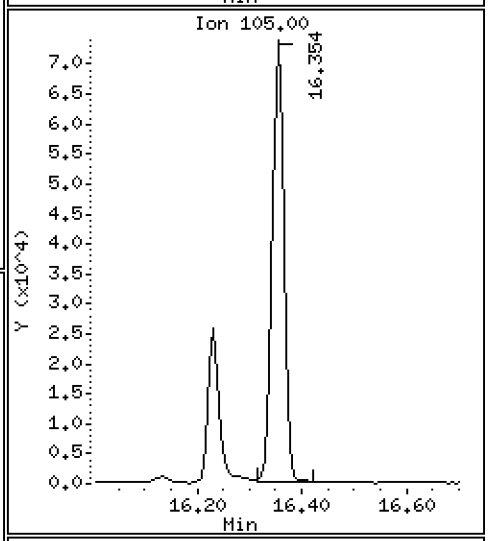


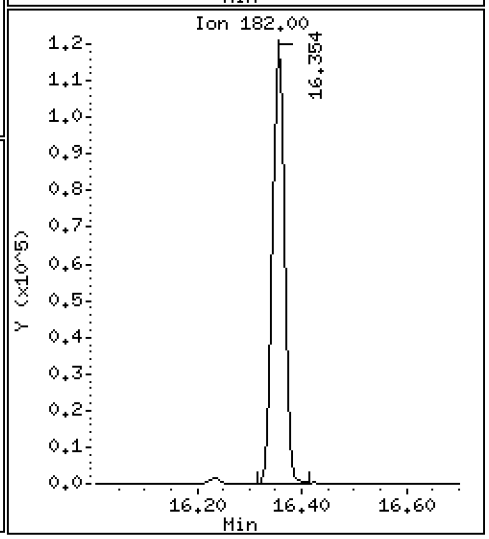












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

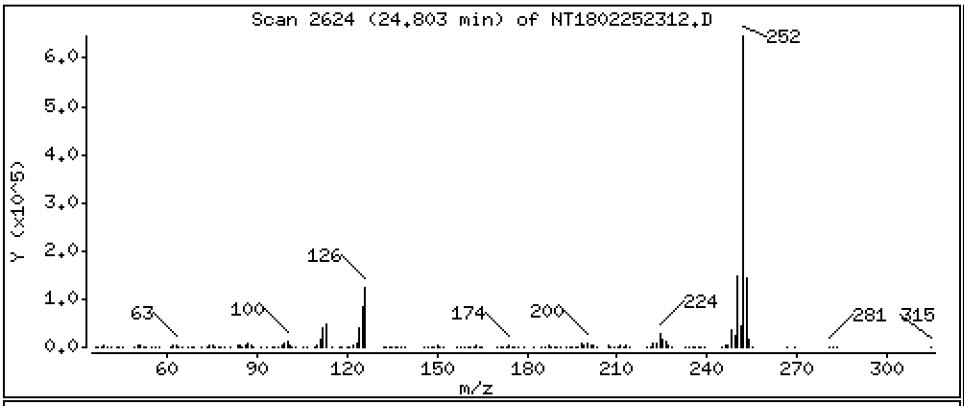
Operator: VTS

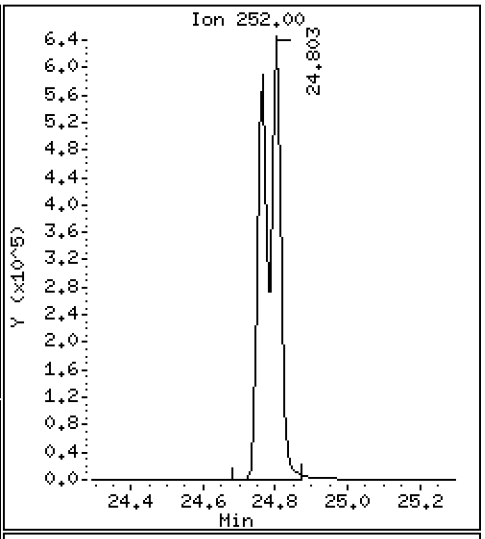
Column phase: ZB-5msi

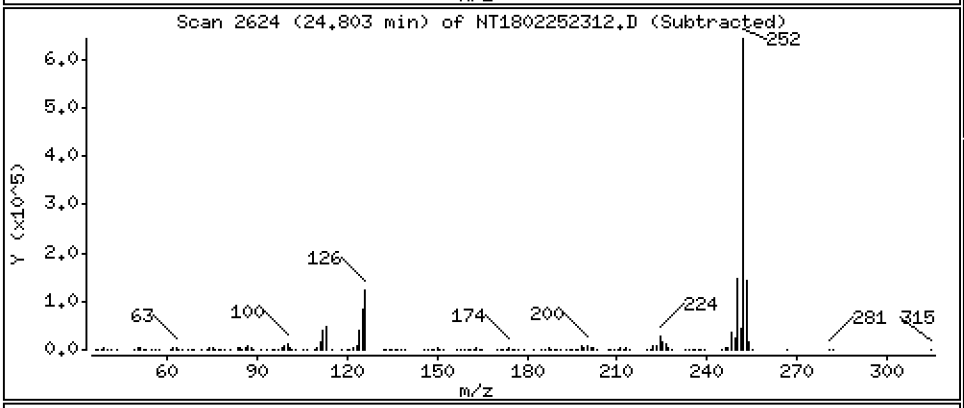
Column diameter: 0.25

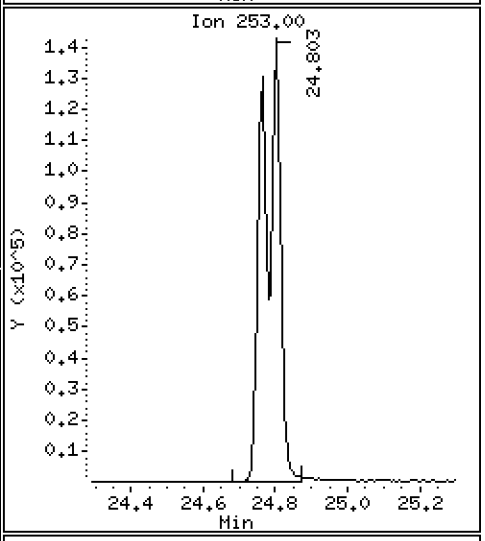
187 Total Benzofluoranthenes

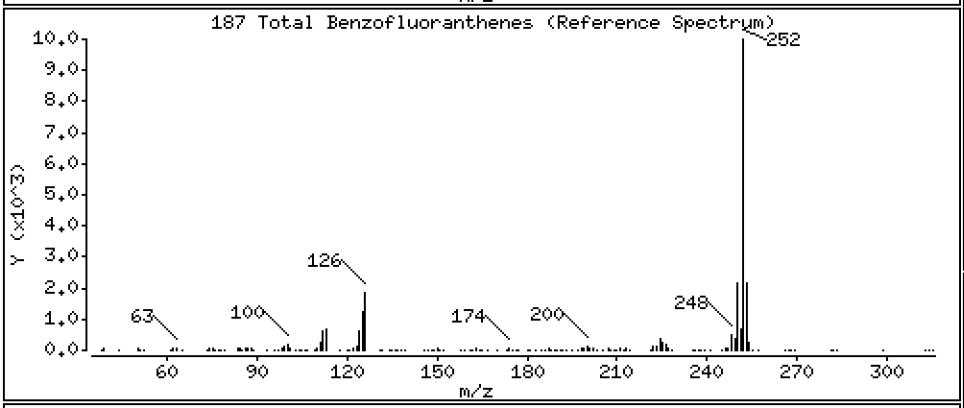
Concentration: 9.019 ug/mL

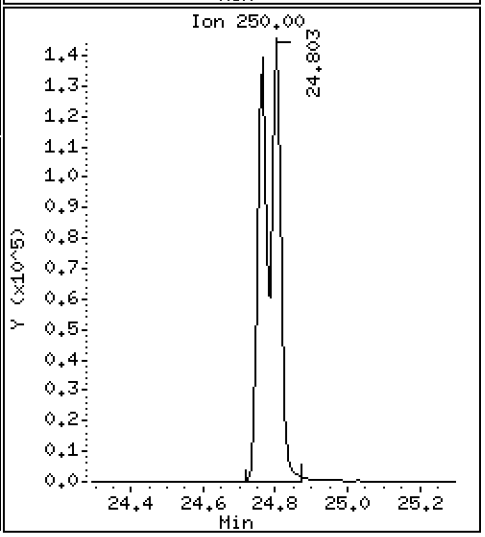


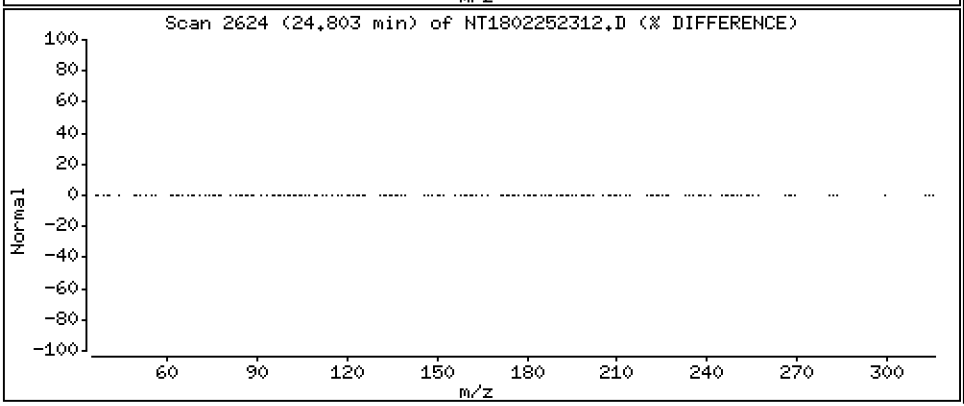












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

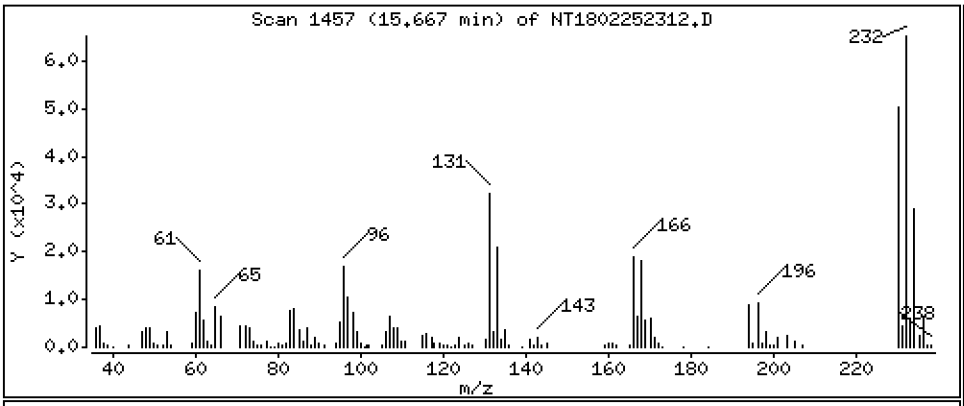
Operator: VTS

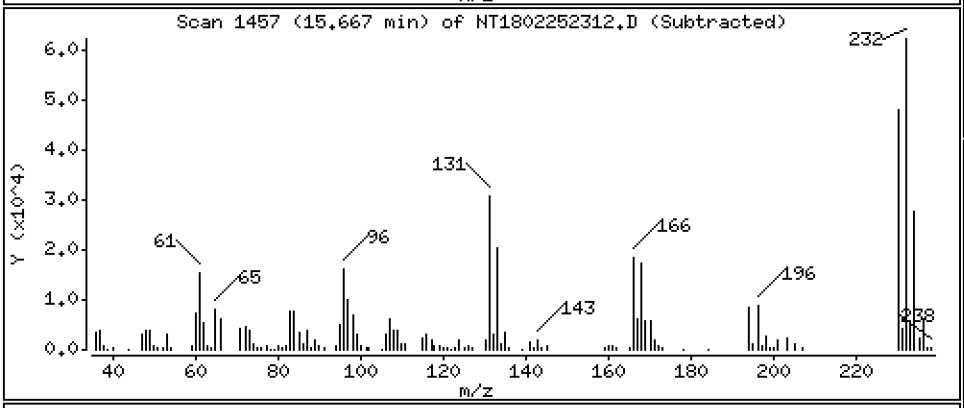
Column phase: ZB-5msi

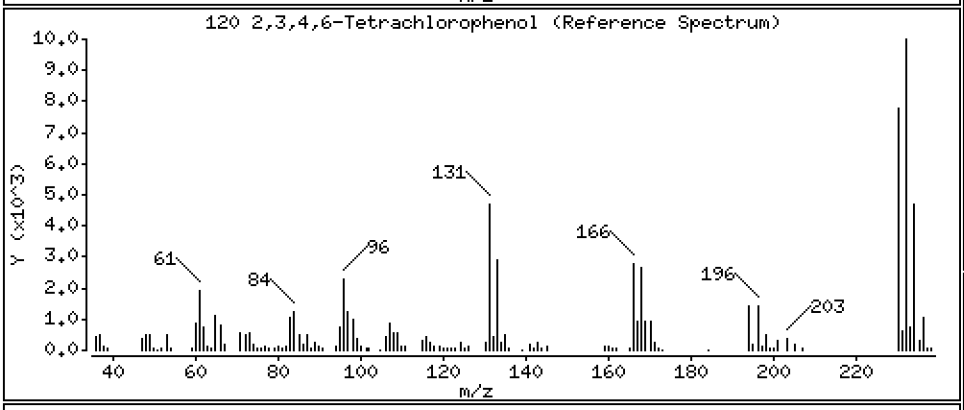
Column diameter: 0.25

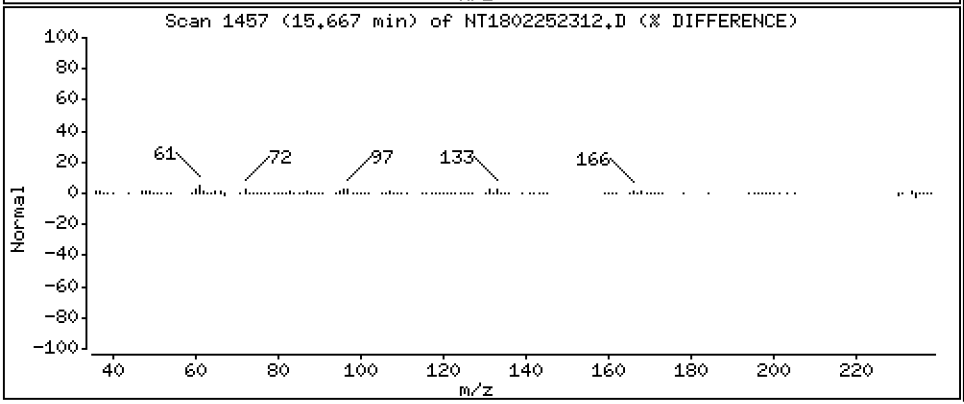
120 2,3,4,6-Tetrachlorophenol

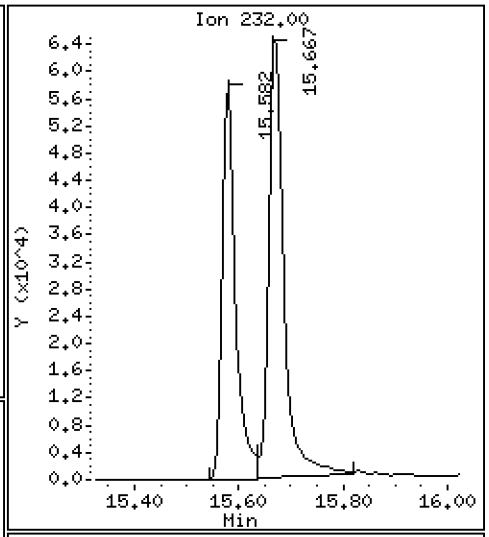
Concentration: 3.494 ug/mL

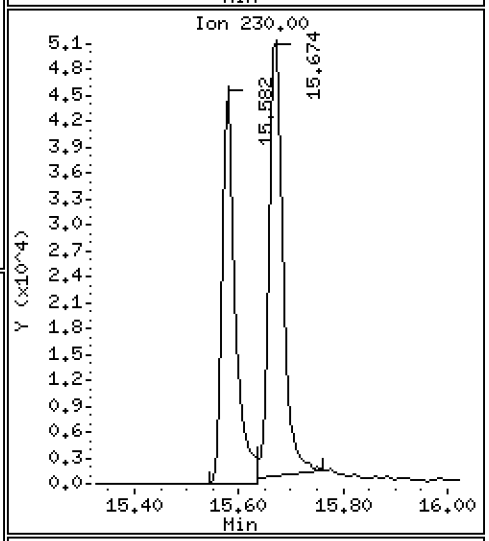


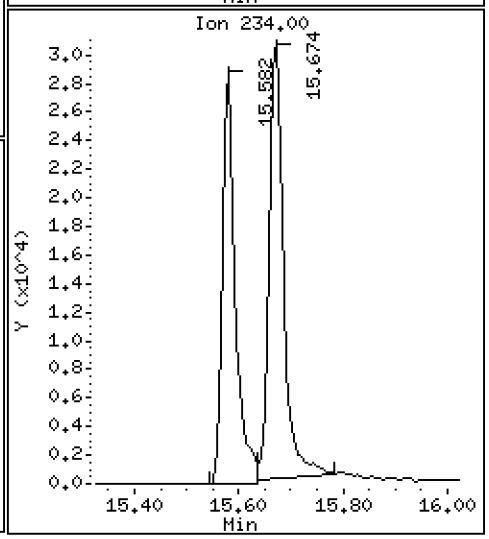












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D
Lab Smp Id: SLC0099-SCV1
Inj Date : 26-FEB-2023 04:06
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0099-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Meth Date : 08-Mar-2023 14:50 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	Compound Not Detected.					
$	2 Phenol-d5	99	8.582	8.296	(0.963)	16779	0.19336	0.1934
	3 Phenol	94	8.312	8.319	(0.932)	370940	4.10851	4.109
$	5 2-Chlorophenol-d4	132	Compound Not Detected.					
	4 Bis(2-Chloroethyl)ether	93	8.474	8.474	(0.951)	304296	4.96248	4.962
	6 2-Chlorophenol	128	8.582	8.590	(0.963)	323041	4.16677	4.167
	7 1,3-Dichlorobenzene	146	8.845	8.853	(0.992)	378421	4.61495	4.615
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	196803	4.00000	
	9 1,4-Dichlorobenzene	146	8.938	8.938	(1.003)	386214	4.62064	4.621
$	10 1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	366937	4.52355	4.524
	11 Benzyl alcohol	108	9.186	9.202	(1.030)	200760	4.67656	4.677
	14 2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	98942	5.20483	5.205
	13 2-Methylphenol	108	9.411	9.419	(1.056)	279008	3.99508	3.995
	17 Hexachloroethane	117	9.869	9.877	(1.107)	154297	4.76884	4.769
	16 N-Nitroso-di-n-propylamine	70	9.737	9.737	(1.092)	246392	4.79947	4.799
	15 4-Methylphenol	108	9.683	9.683	(1.086)	298862	4.10580	4.106
$	18 Nitrobenzene-d5	82	Compound Not Detected.					
	19 Nitrobenzene	77	10.024	10.032	(0.882)	361585	4.69174	4.692
	20 Isophorone	82	10.467	10.467	(0.921)	632536	6.43324	6.433
	21 2-Nitrophenol	139	10.650	10.659	(0.937)	168023	4.43914	4.439
	22 2,4-Dimethylphenol	107	10.710	10.710	(0.942)	249516	3.45955	3.460
	23 Bis(2-Chloroethoxy)methane	93	10.896	10.905	(0.959)	369555	5.48879	5.489
	24 Benzoic acid	105	10.990	11.092	(0.967)	23455	0.85636	0.8564
	25 2,4-Dichlorophenol	162	11.100	11.100	(0.977)	292217	4.62098	4.621
	26 1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	303141	4.43838	4.438
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	751242	4.00000	
	28 Naphthalene	128	11.403	11.403	(1.003)	1044410	4.52257	4.523
	29 4-Chloroaniline	127	11.535	11.542	(1.015)	318320	3.45878	3.459
	30 Hexachlorobutadiene	225	11.767	11.767	(1.035)	186397	4.65605	4.656
	31 4-Chloro-3-methylphenol	107	12.494	12.502	(1.099)	267666	4.42235	4.422
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	663066	4.22545	4.225
	33 Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	87571	3.20191	3.202

		QUANT SIG					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	159887	4.14757	4.148
	35 2,4,5-Trichlorophenol	196	13.477	13.485	(0.902)	172217	4.09965	4.100
$	36 2-Fluorobiphenyl	172	13.570	13.562	(0.908)	773	0.00460	0.004600
	37 2-Chloronaphthalene	162	13.771	13.771	(0.922)	597668	4.55180	4.552
	38 2-Nitroaniline	65	14.026	14.034	(0.939)	184700	4.49470	4.495
	39 Dimethylphthalate	163	14.468	14.460	(0.968)	668285	4.73886	4.739
	40 Acenaphthylene	152	14.630	14.630	(0.979)	1015081	4.59116	4.591
	41 2,6-Dinitrotoluene	165	14.599	14.591	(0.977)	156792	4.84977	4.850
*	42 Acenaphthene-d10	164	14.940	14.940	(1.000)	398556	4.00000	
	43 3-Nitroaniline	138	14.878	14.878	(0.996)	177578	4.64347	4.643
	44 Acenaphthene	153	15.009	15.001	(1.005)	633850	4.52979	4.530
	45 2,4-Dinitrophenol	184	15.094	15.094	(1.010)	21508	1.42564	1.426
	46 Dibenzofuran	168	15.334	15.334	(1.026)	882055	4.35510	4.355
	47 4-Nitrophenol	109	15.210	15.218	(1.018)	66995	4.34588	4.346
	48 2,4-Dinitrotoluene	165	15.396	15.396	(1.031)	202080	4.57277	4.573
	50 Diethylphthalate	149	15.906	15.906	(1.065)	777988	5.26498	5.265
	49 Fluorene	166	16.037	16.037	(1.073)	841063	5.18202	5.182
	51 4-Chlorophenyl-phenylether	204	16.029	16.029	(1.073)	367830	4.97548	4.975
	52 4-Nitroaniline	138	16.130	16.130	(1.080)	169269	4.60087	4.601
	53 4,6-Dinitro-2-methylphenol	198	16.230	16.230	(0.904)	91958	3.59564	3.596
	54 N-Nitrosodiphenylamine	169	16.284	16.276	(0.907)	494995	4.60237	4.602
$	55 2,4,6-Tribromophenol	330	Compound Not Detected.					
	56 4-Bromophenyl-phenylether	248	17.024	17.024	(0.948)	210814	4.88441	4.884
	57 Hexachlorobenzene	284	17.333	17.333	(0.966)	220372	4.42184	4.422
	58 Pentachlorophenol	266	17.697	17.697	(0.986)	32473	2.45386	2.454
*	59 Phenanthrene-d10	188	17.952	17.945	(1.000)	714786	4.00000	
	60 Phenanthrene	178	17.999	17.991	(1.003)	988459	4.39651	4.397
	61 Anthracene	178	18.092	18.084	(1.008)	848151	3.95863	3.959
	62 Carbazole	167	18.417	18.417	(1.026)	876153	4.46270	4.463
	63 Di-n-butylphthalate	149	19.229	19.229	(1.071)	1121126	5.15898	5.159
	64 Fluoranthene	202	20.374	20.374	(0.886)	1087530	4.81174	4.812
	65 Pyrene	202	20.800	20.800	(0.905)	1098967	4.55908	4.559
$	66 Terphenyl-d14	244	Compound Not Detected.					
	67 Butylbenzylphthalate	149	22.023	22.023	(0.958)	487079	5.32159	5.322
	68 Benzo(a)anthracene	228	22.952	22.952	(0.999)	1041421	4.47172	4.472
*	69 Chrysene-d12	240	22.983	22.975	(1.000)	645093	4.00000	
	70 3,3'-Dichlorobenzidine	252	22.913	22.906	(0.997)	856987	10.0002	10.00
	71 Chrysene	228	23.029	23.022	(1.002)	1072229	4.42756	4.428
	72 bis(2-Ethylhexyl)phthalate	149	23.053	23.045	(0.960)	743132	5.23131	5.231
*	134 Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	989444	4.00000	
	73 Di-n-octylphthalate	149	24.028	24.028	(1.000)	1326876	4.81262	4.813
	74 Benzo(b)fluoranthene	252	24.764	24.756	(0.972)	1013785	4.31859	4.319
	75 Benzo(k)fluoranthene	252	24.764	24.795	(0.972)	1013785	3.81060	3.811
	76 Benzo(a)pyrene	252	25.368	25.360	(0.996)	998824	4.58976	4.590
*	77 Perylene-d12	264	25.468	25.468	(1.000)	719540	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.920	27.904	(1.096)	1266543	4.63606	4.636
	79 Dibenzo(a,h)anthracene	278	27.928	27.920	(1.097)	1043466	4.57975	4.580
	80 Benzo(g,h,i)perylene	276	28.634	28.619	(1.124)	1005990	4.59311	4.593
	90 N-Nitrosodimethylamine	74	4.673	4.681	(0.524)	189582	4.80958	4.810
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	20.614	20.614	(0.897)	641864	5.81258	5.813
	103 Pyridine	79	4.673	4.689	(0.524)	308261	4.69431	4.694
	105 1-methylnaphthalene	142	13.005	13.005	(1.144)	637254	4.48602	4.486
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.353	16.353	(1.095)	770064	4.73097	4.731

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.802	24.795	(0.974)	2140538	9.01877	9.019
120 2,3,4,6-Tetrachlorophenol	232	15.666	15.674	(1.049)	136871	3.49441	3.494

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252312.D
Lab Smp Id: SLC0099-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	196803	-7.65
27 Naphthalene-d8	806946	403473	1613892	751242	-6.90
42 Acenaphthene-d10	424249	212125	848498	398556	-6.06
59 Phenanthrene-d10	758987	379494	1517974	714786	-5.82
69 Chrysene-d12	685237	342619	1370474	645093	-5.86
134 Di-n-octylphthala	1075410	537705	2150820	989444	-7.99
77 Perylene-d12	762553	381277	1525106	719540	-5.64

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.94	14.44	15.44	14.94	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	0.00
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252312.D

Lab ID: SLC0099-SCV1
nt18.i, ABN.m, 26-FEB-2023 04:06

RT	CO-ELUTION COMPOUNDS
24.764	Benzo(k)fluoranthene and Benzo(b)fluoranthene

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.967	0.000	0.9670	Benzoic acid
1.010	0.000	1.0103	2,4-Dinitrophenol
0.986	0.000	0.9858	Pentachlorophenol
0.963	0.931	0.0321	Phenol-d5

RRT check based on Ccal File: NT1802252308.D

On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

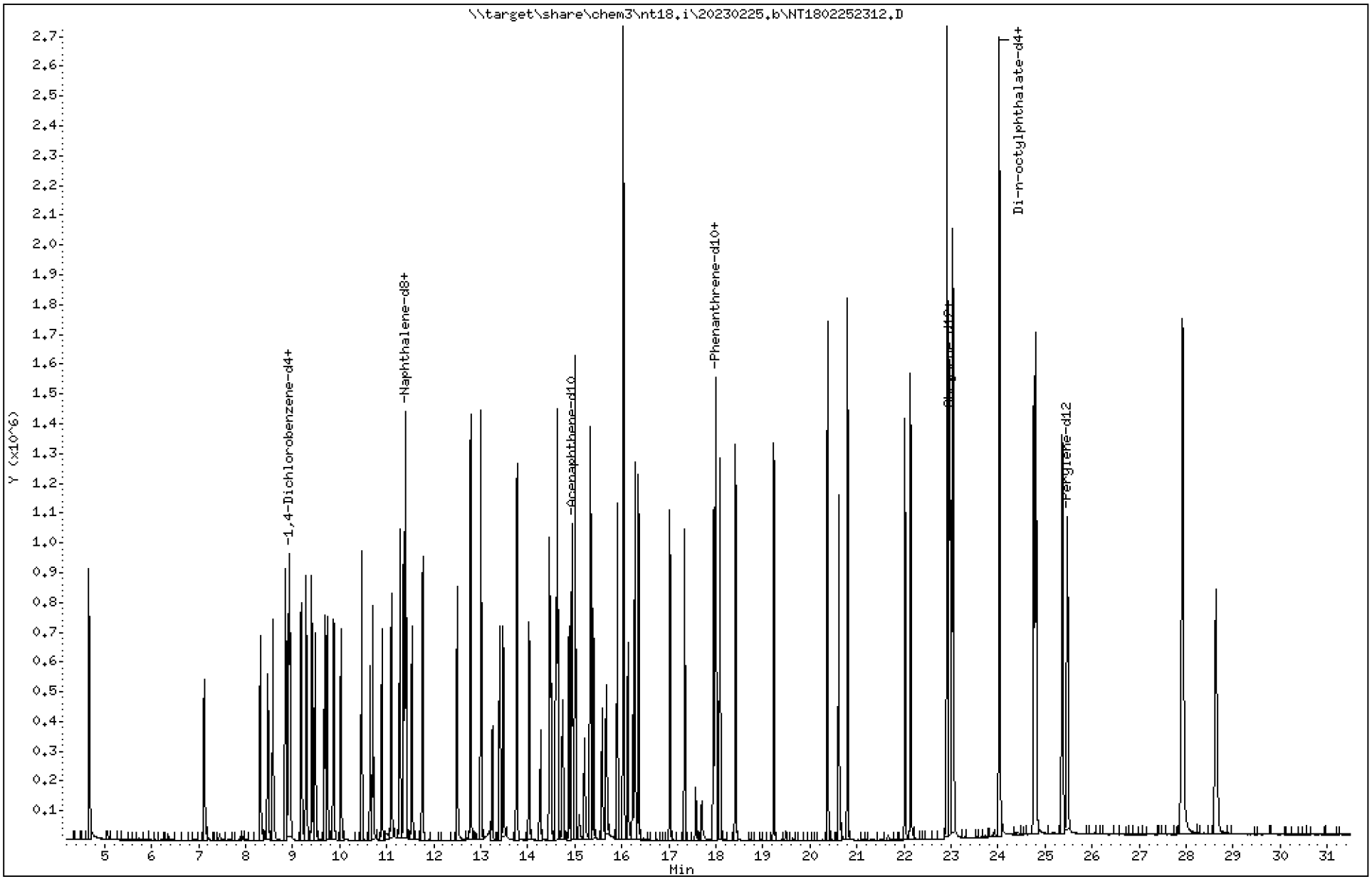
Instrument: nt18.i

Sample Info: SLC0099-SCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

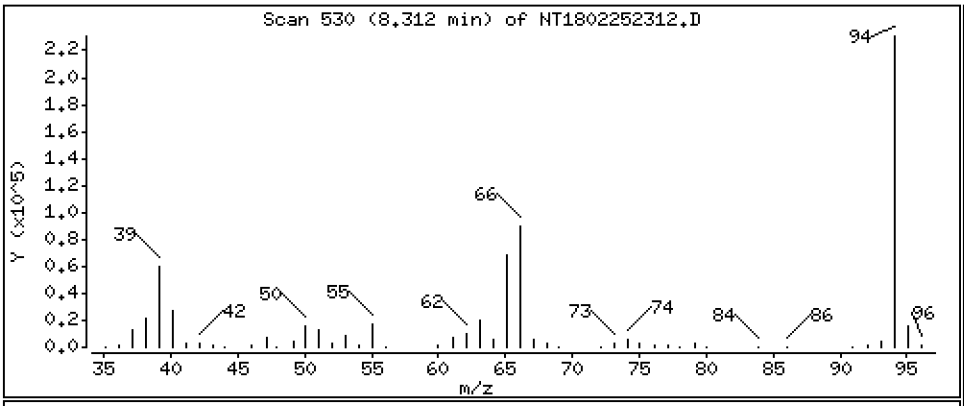
Operator: VTS

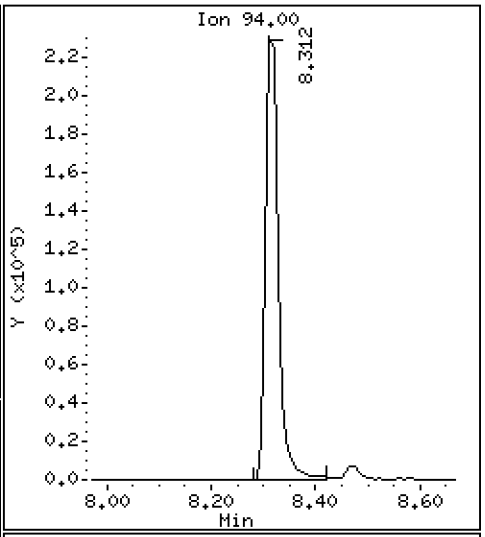
Column phase: ZB-5msi

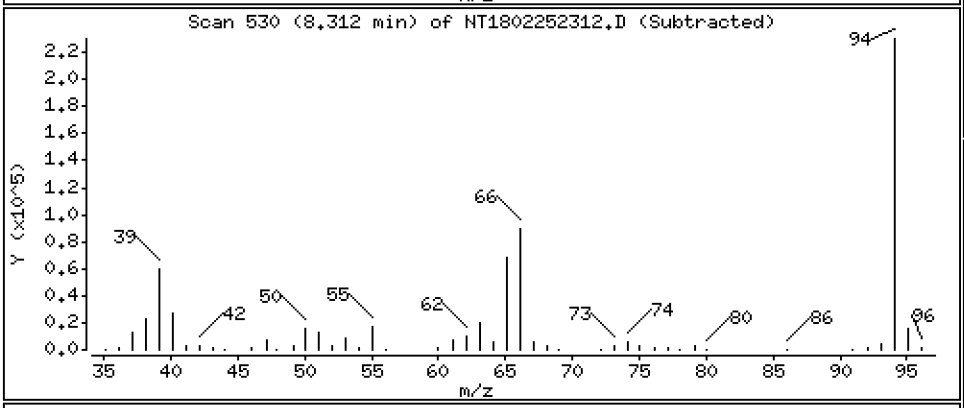
Column diameter: 0.25

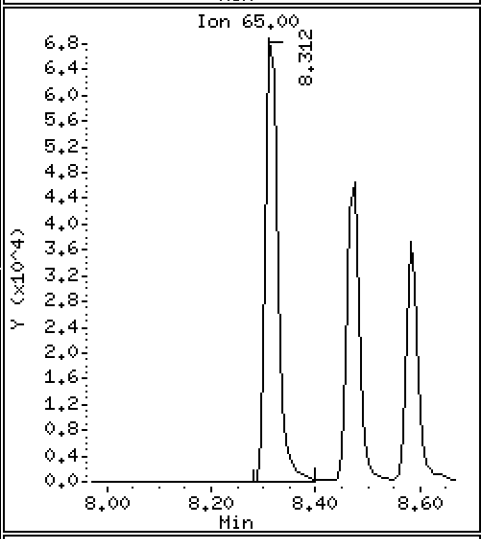
3 Phenol

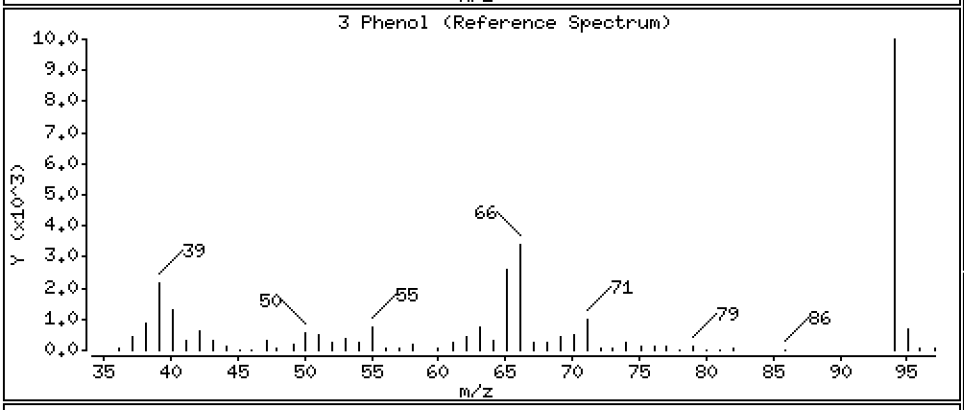
Concentration: 4.109 ug/mL

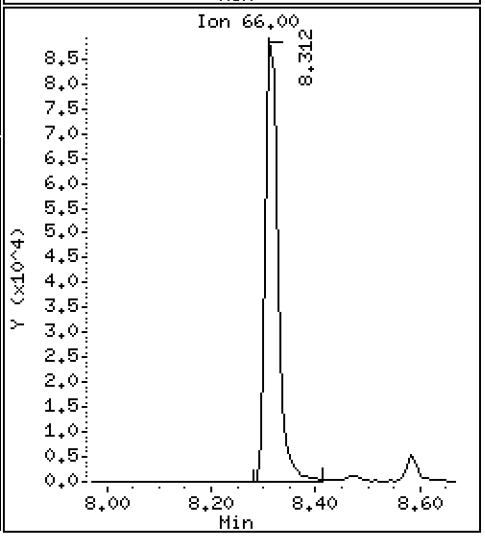


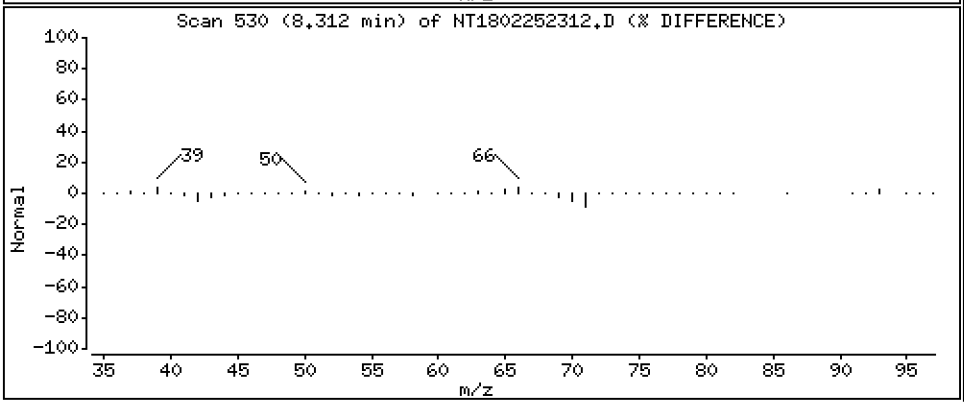












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

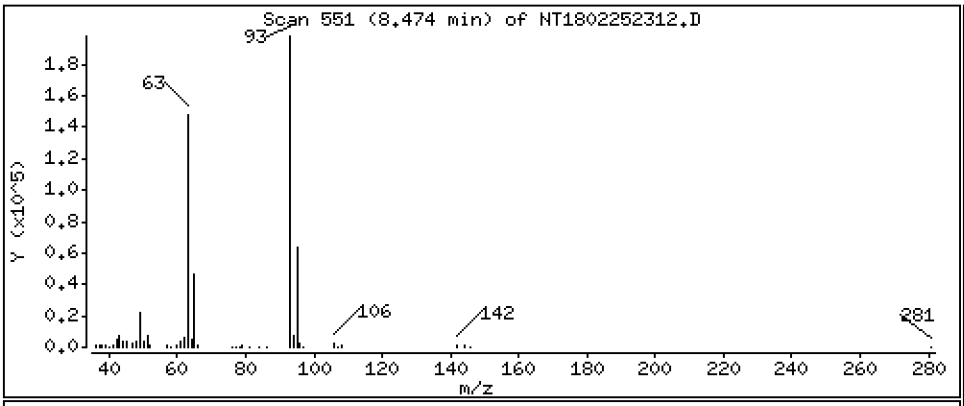
Operator: VTS

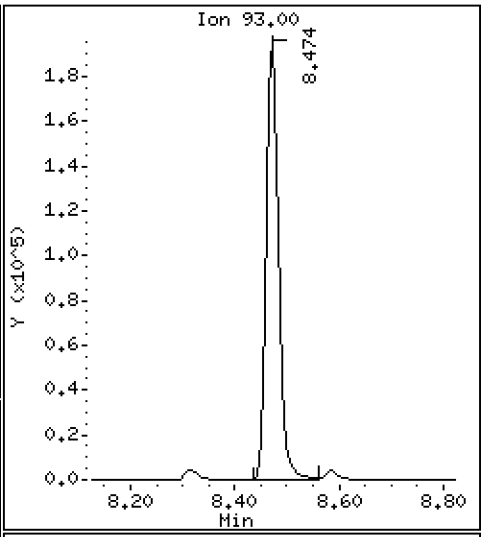
Column phase: ZB-5msi

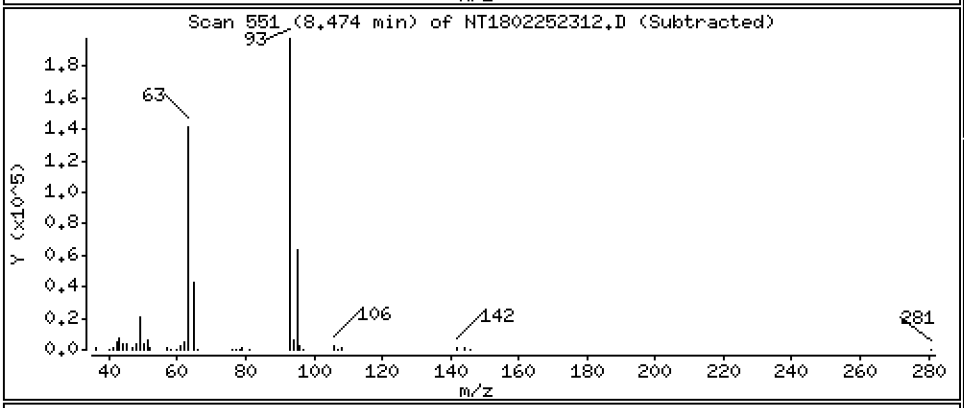
Column diameter: 0.25

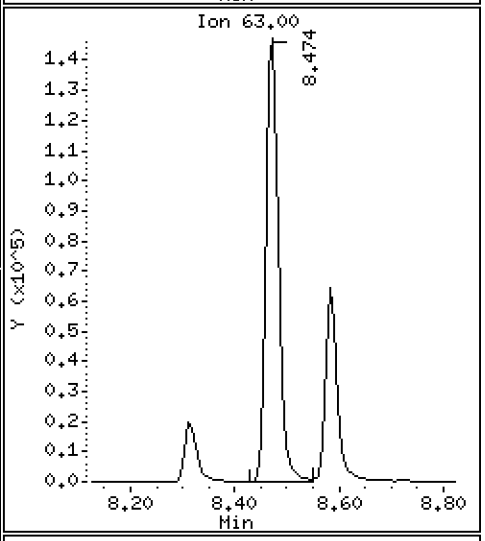
4 Bis(2-Chloroethyl)ether

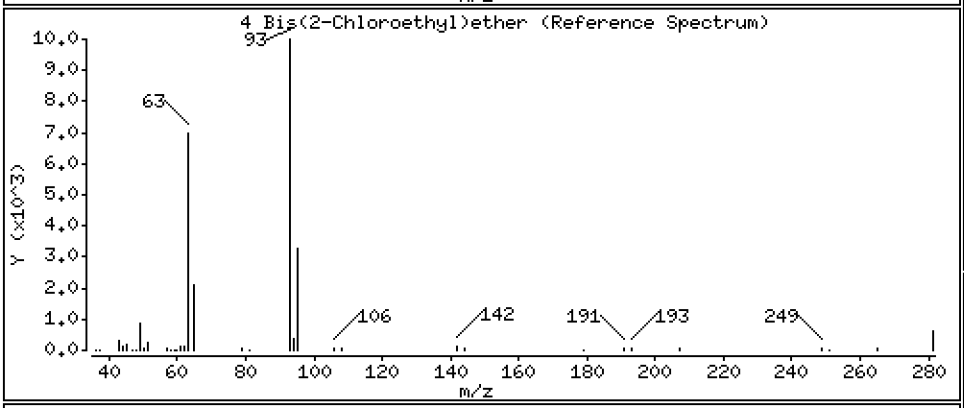
Concentration: 4.962 ug/mL

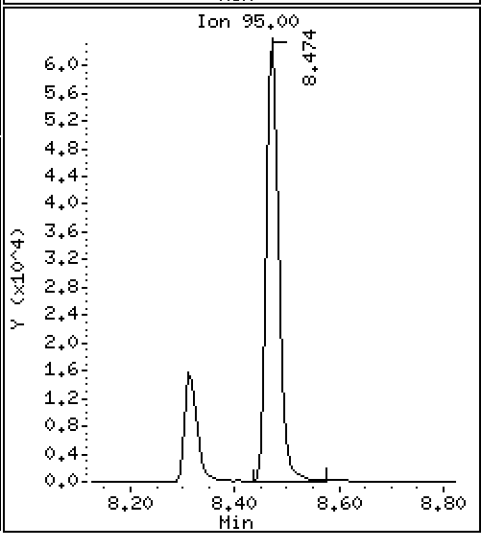


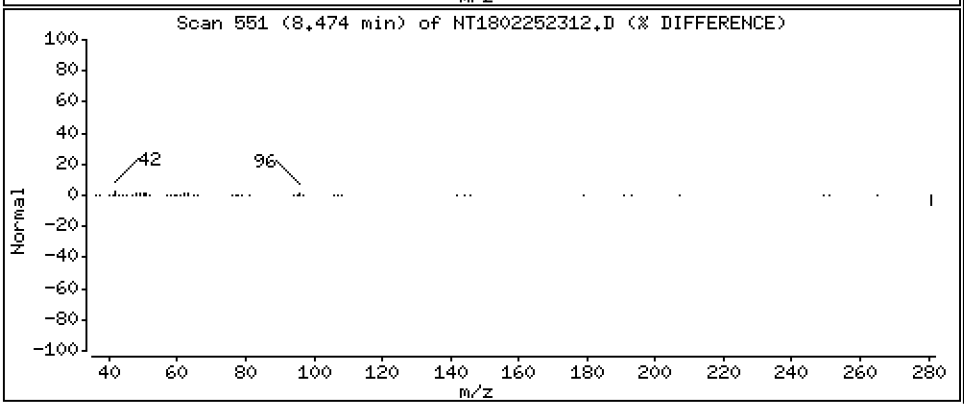












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

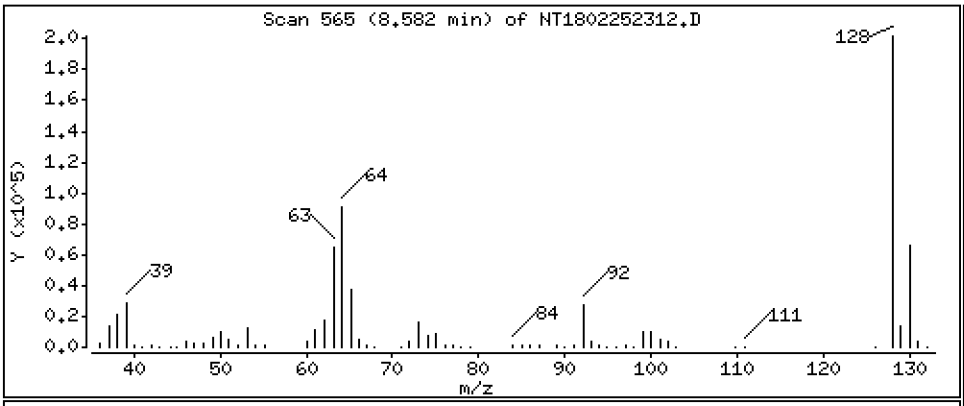
Operator: VTS

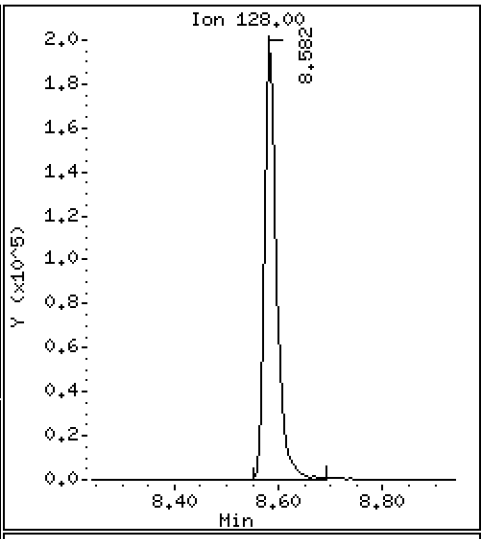
Column phase: ZB-5msi

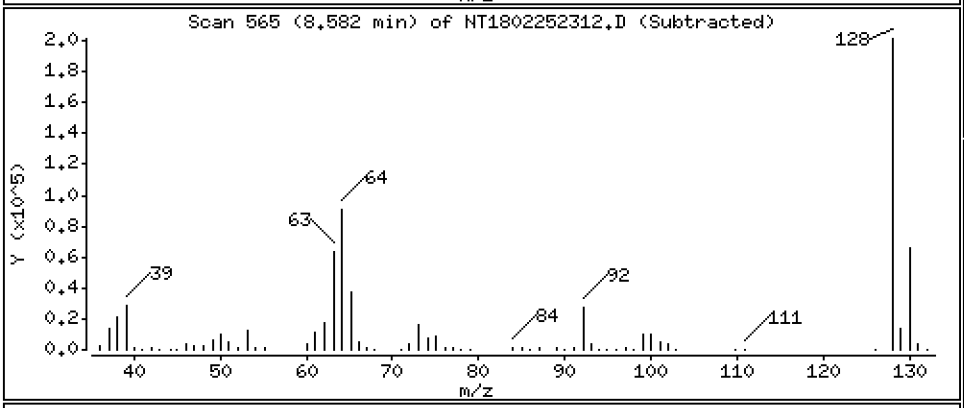
Column diameter: 0.25

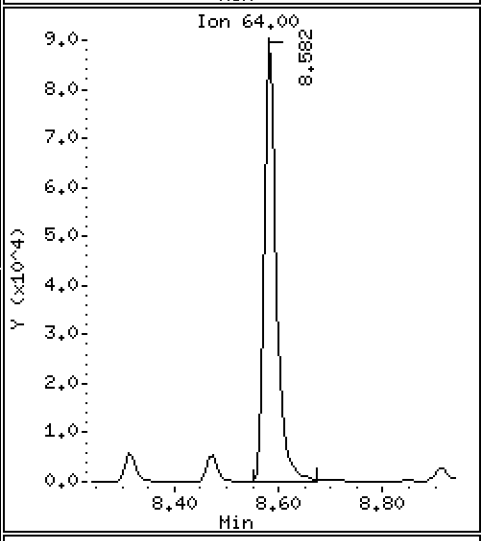
6 2-Chlorophenol

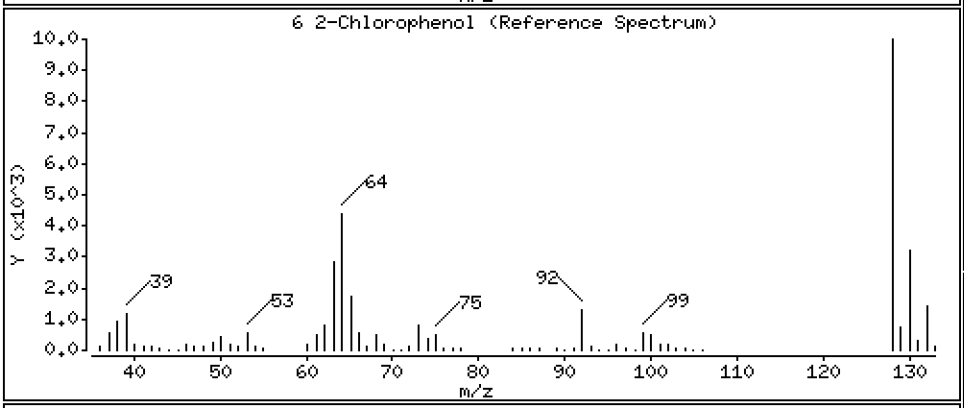
Concentration: 4.167 ug/mL

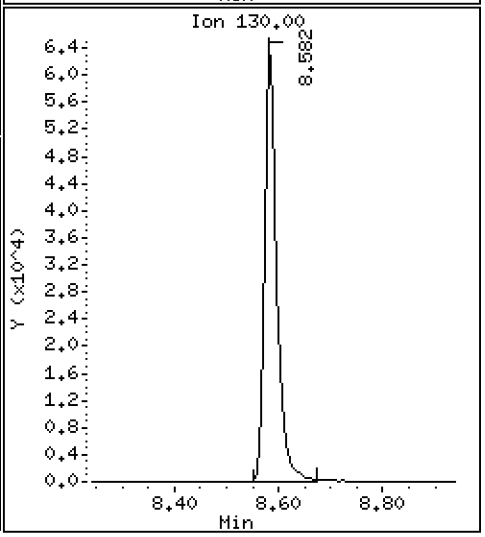


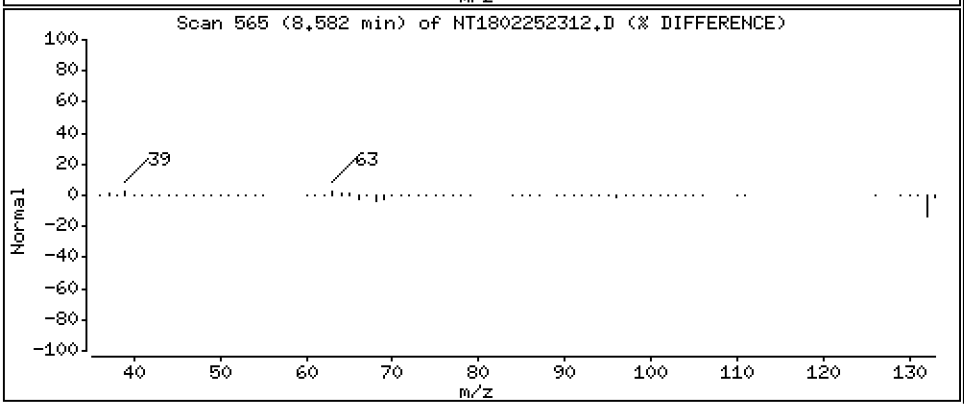












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

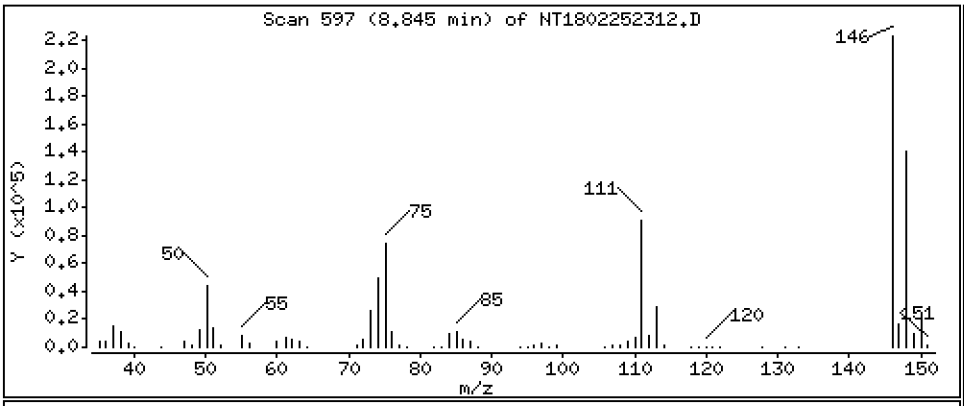
Operator: VTS

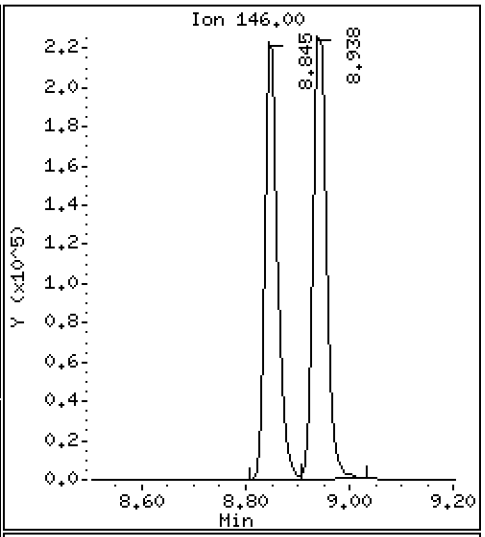
Column phase: ZB-5msi

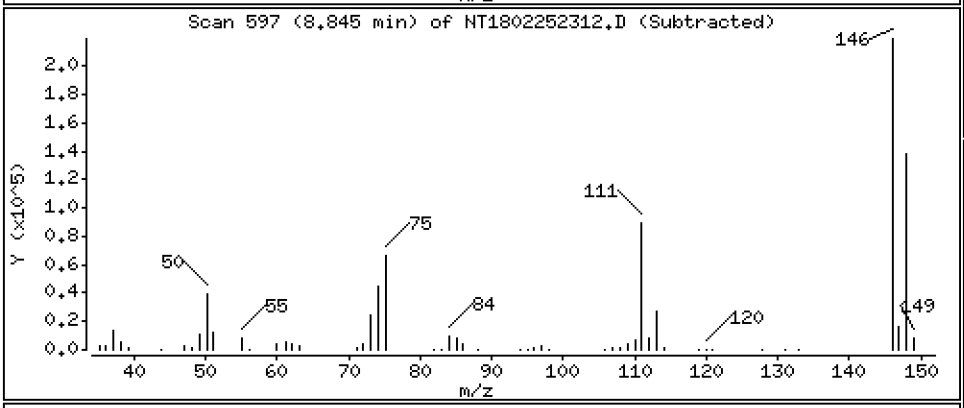
Column diameter: 0.25

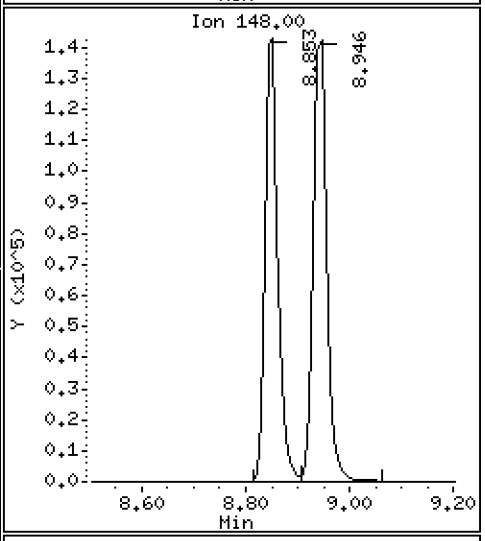
7 1,3-Dichlorobenzene

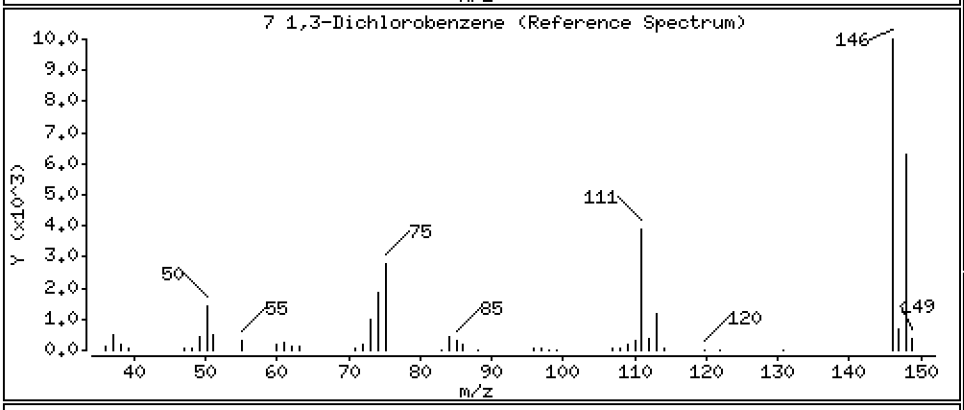
Concentration: 4.615 ug/mL

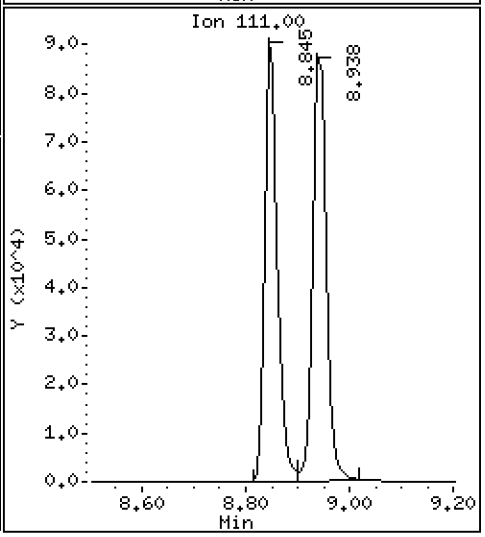


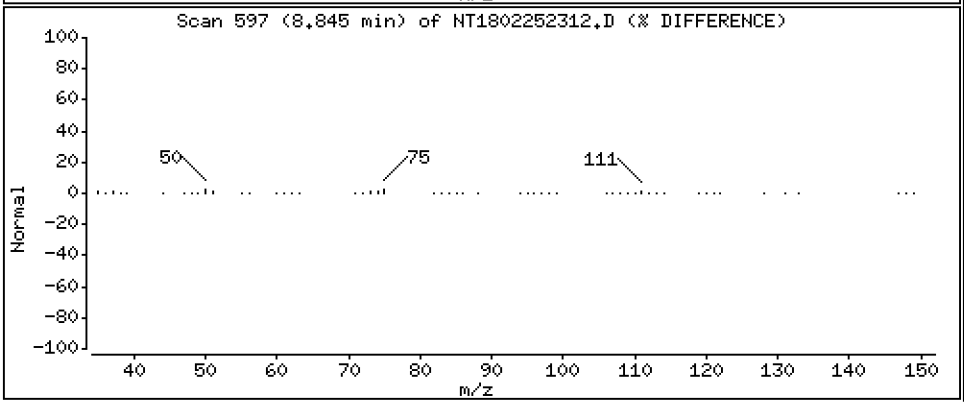












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

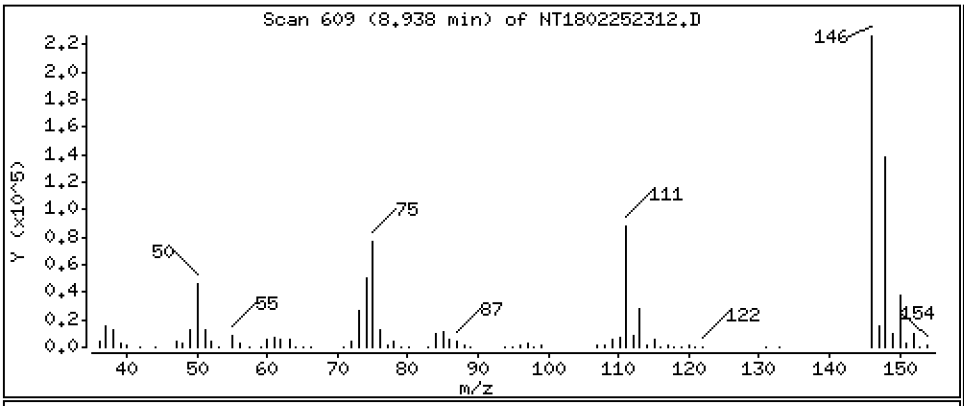
Operator: VTS

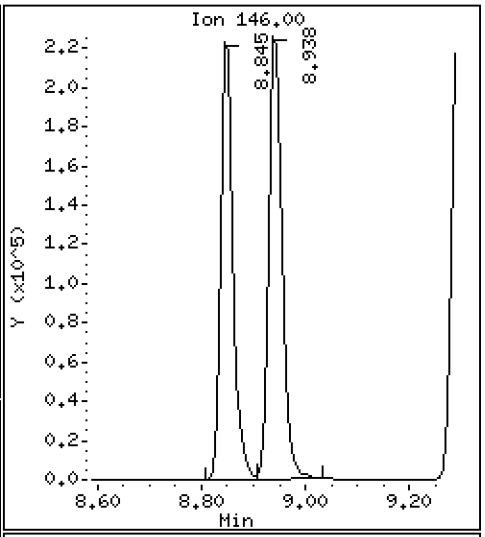
Column phase: ZB-5msi

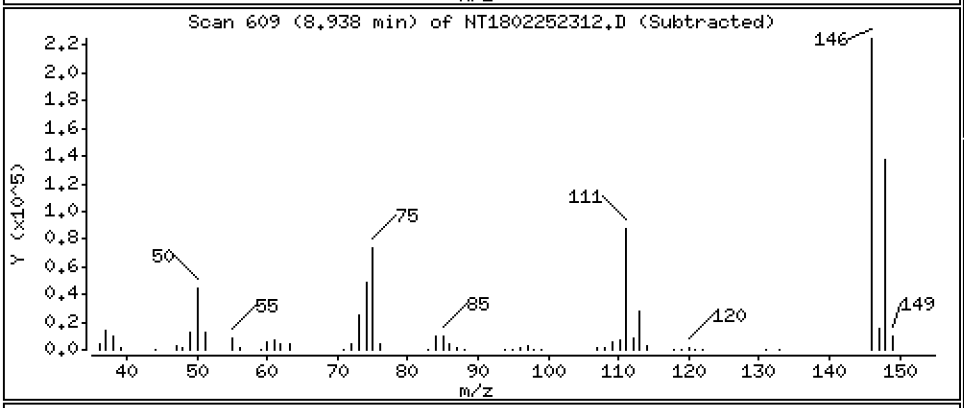
Column diameter: 0.25

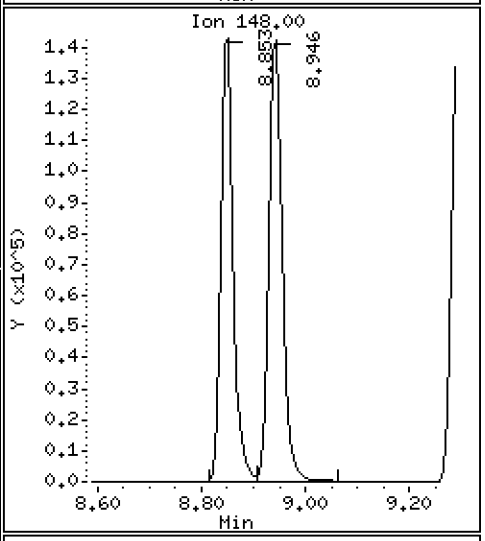
9 1,4-Dichlorobenzene

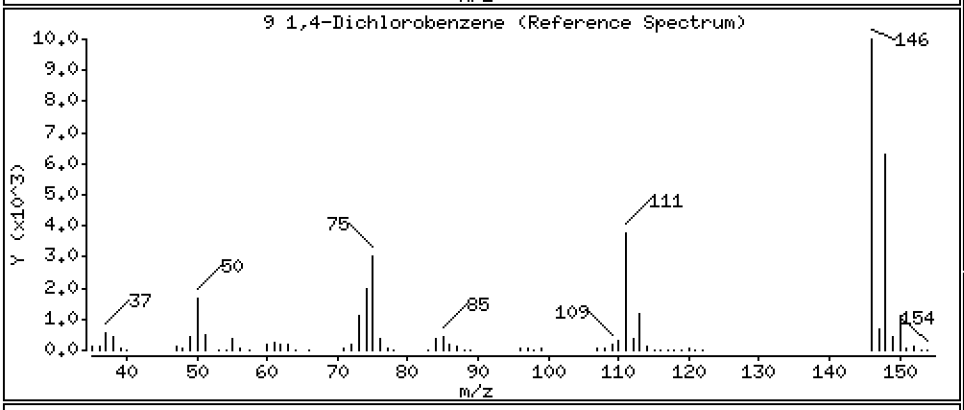
Concentration: 4.621 ug/mL

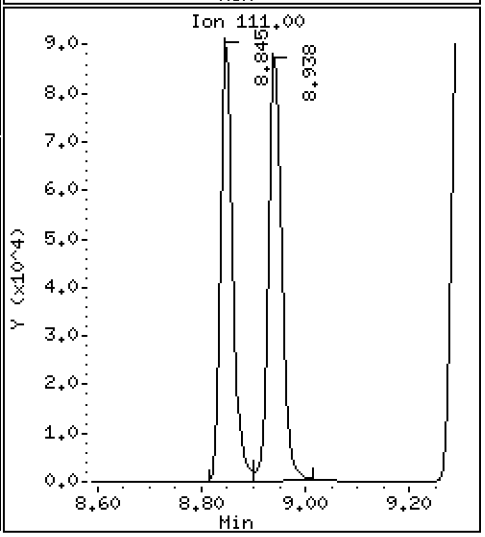


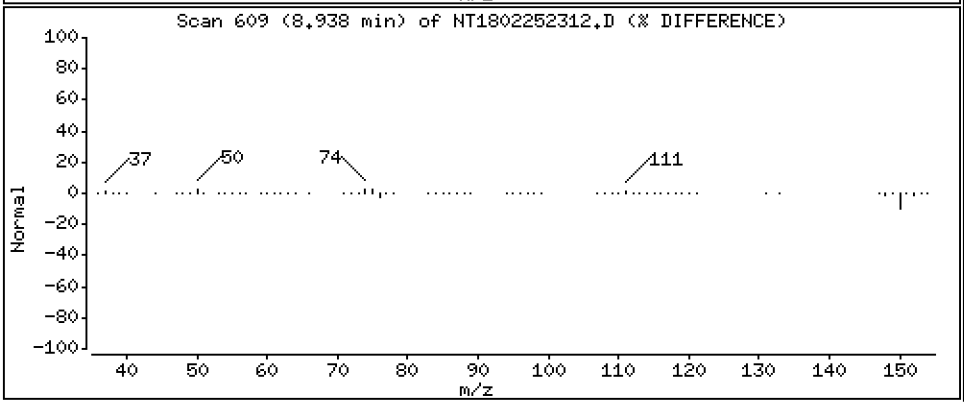












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

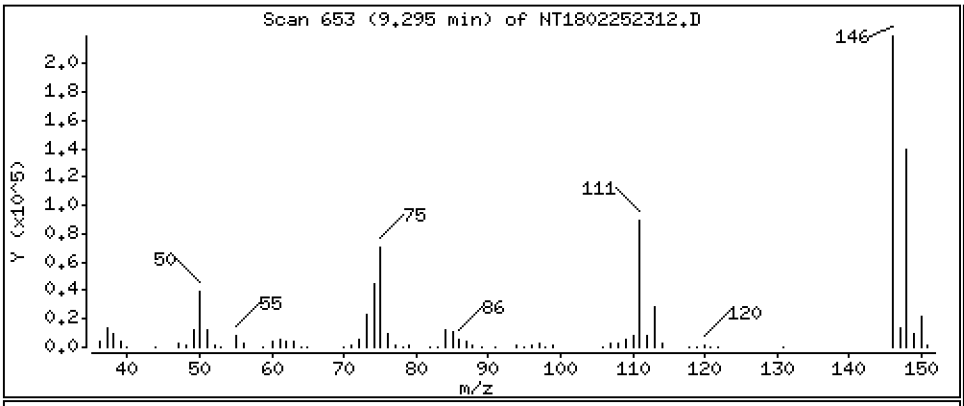
Operator: VTS

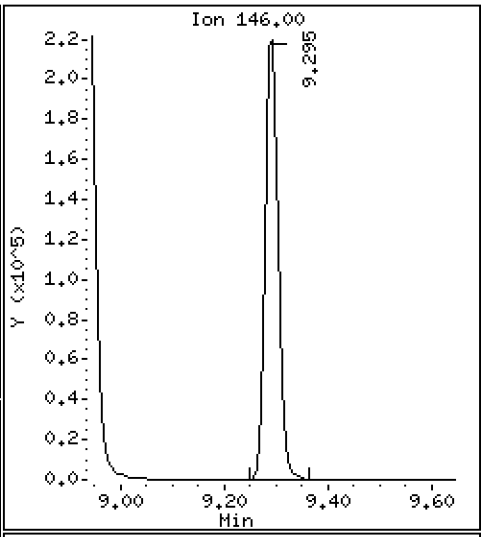
Column phase: ZB-5msi

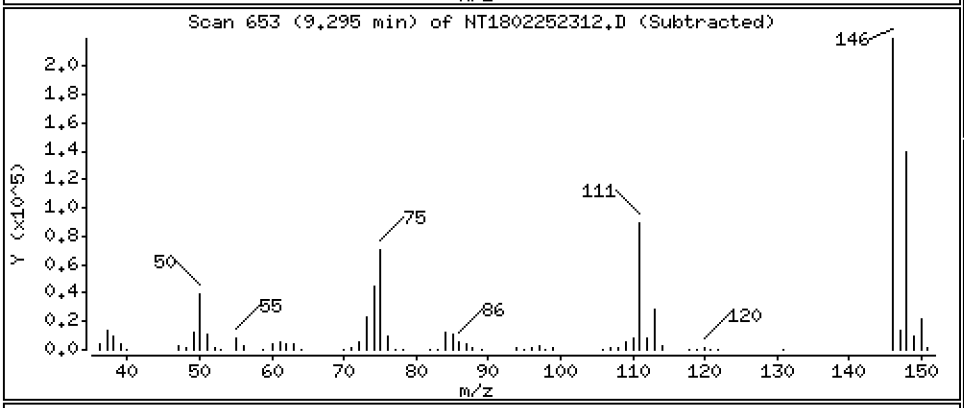
Column diameter: 0.25

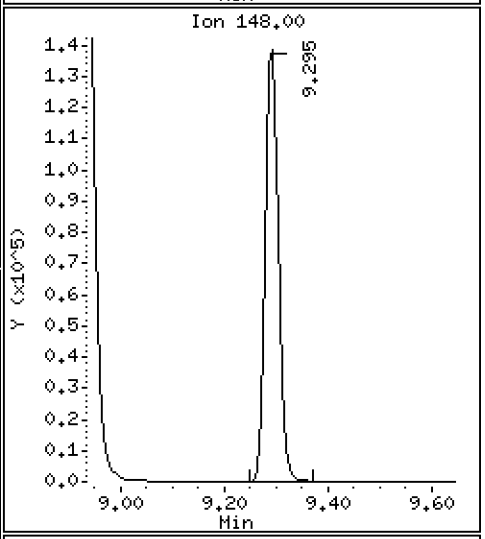
12 1,2-Dichlorobenzene

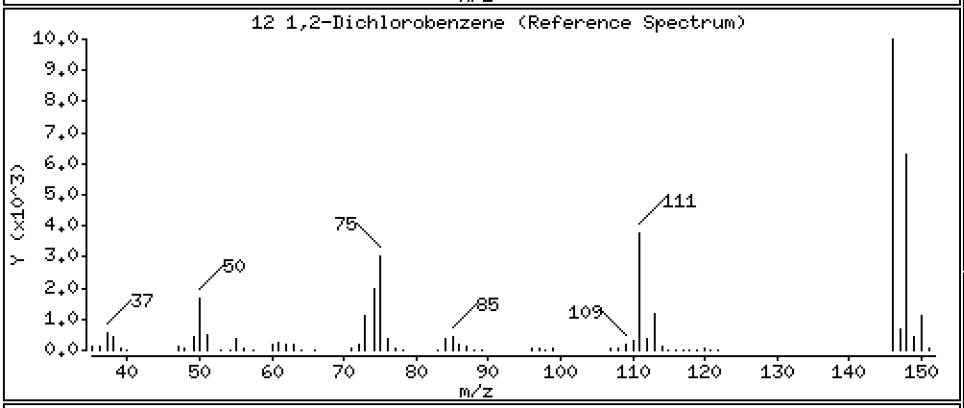
Concentration: 4.524 ug/mL

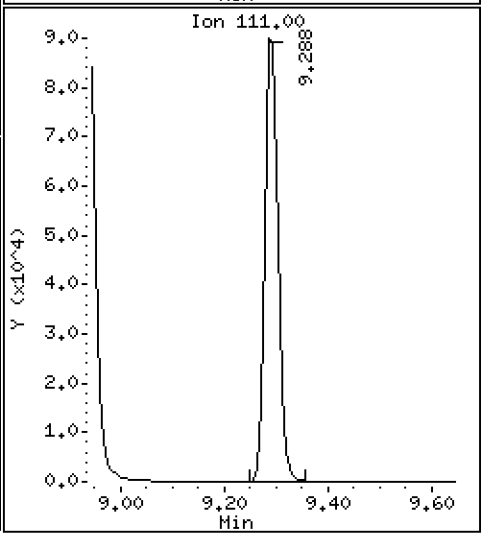


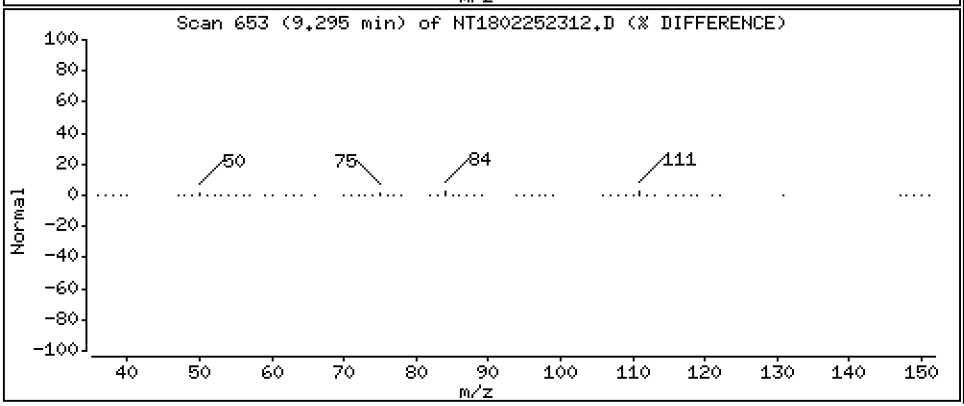












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

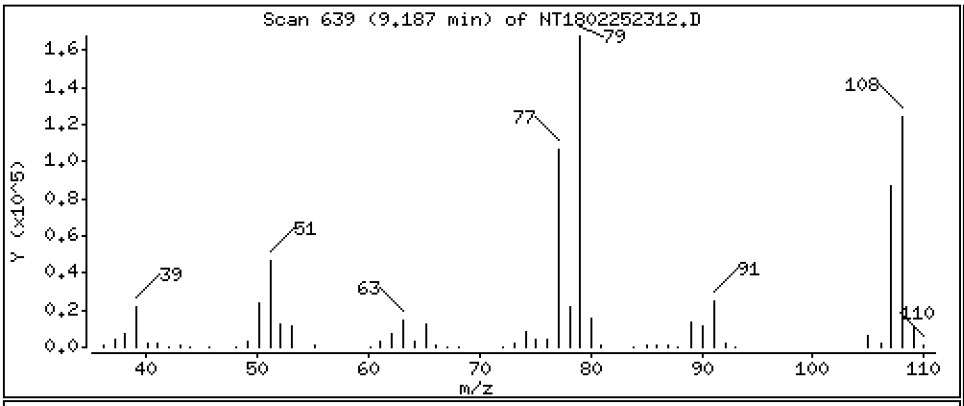
Operator: VTS

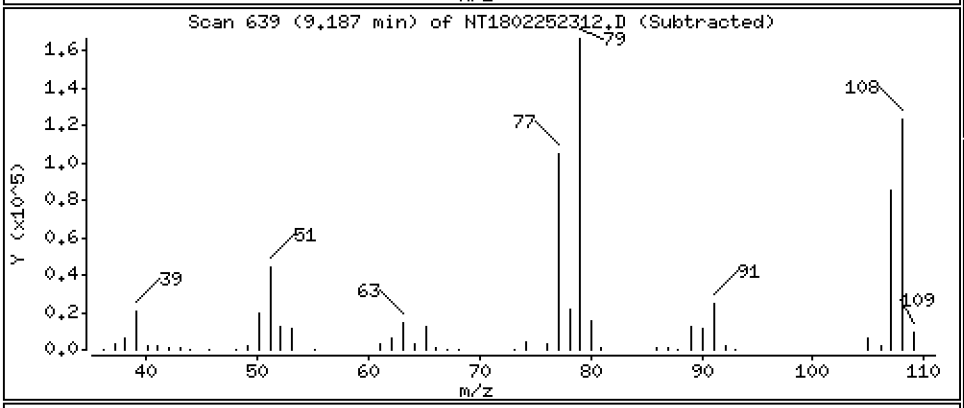
Column phase: ZB-5msi

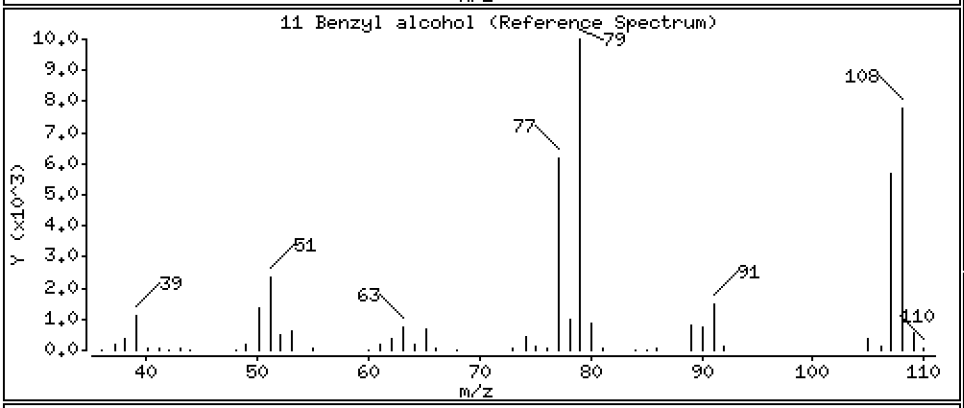
Column diameter: 0.25

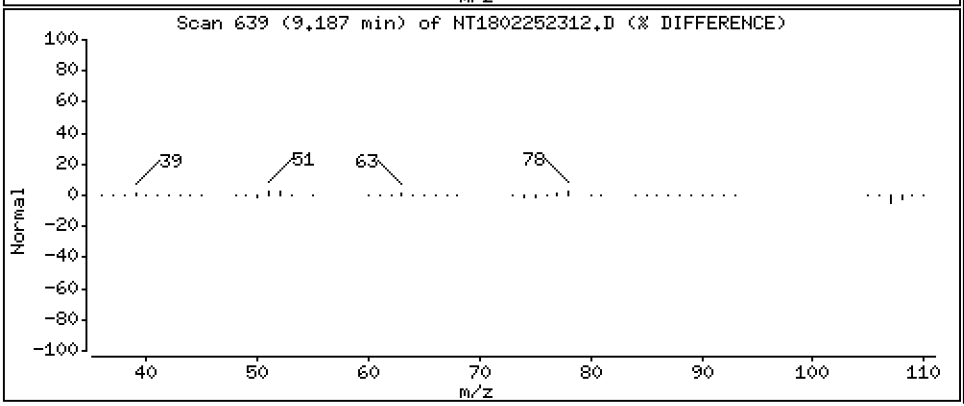
11 Benzyl alcohol

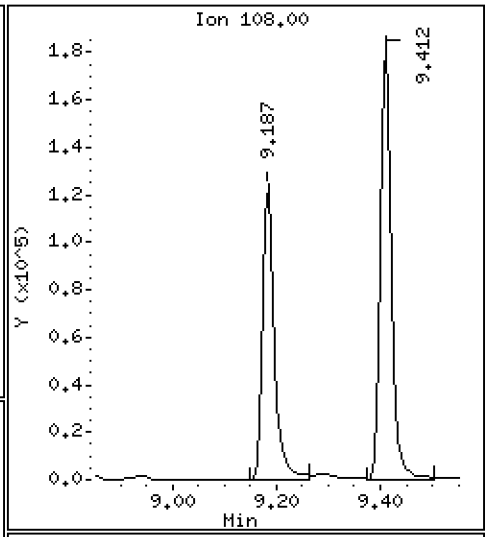
Concentration: 4.677 ug/mL

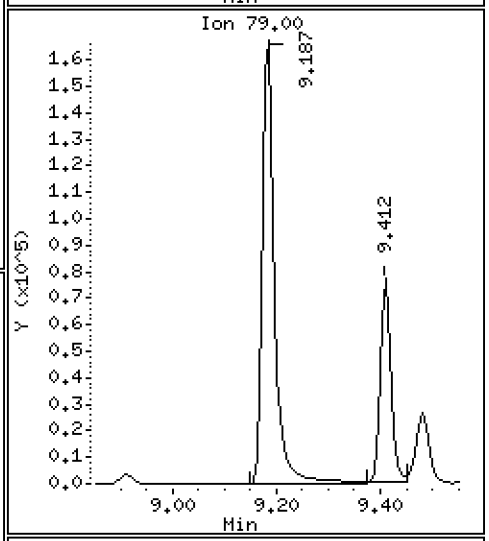


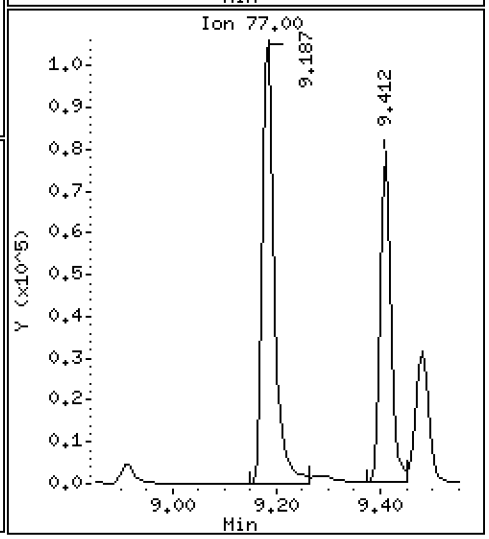












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

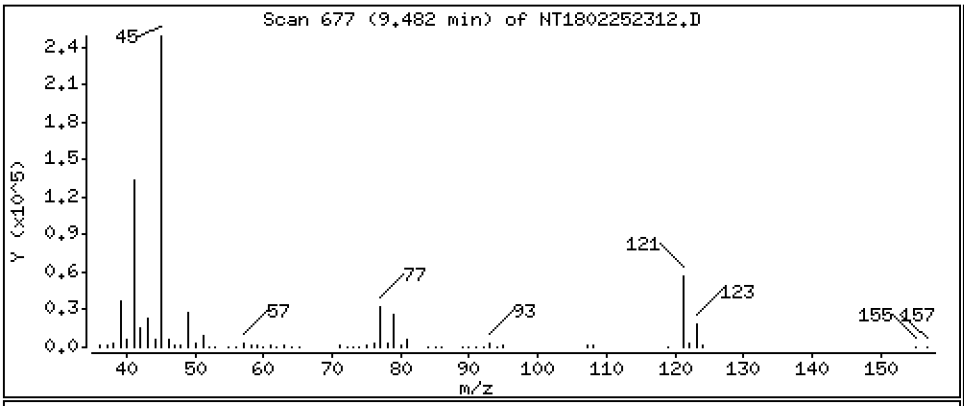
Operator: VTS

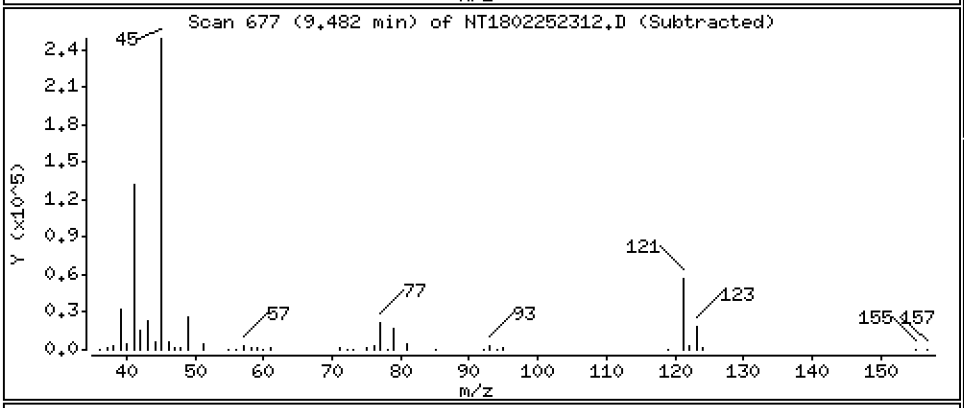
Column phase: ZB-5msi

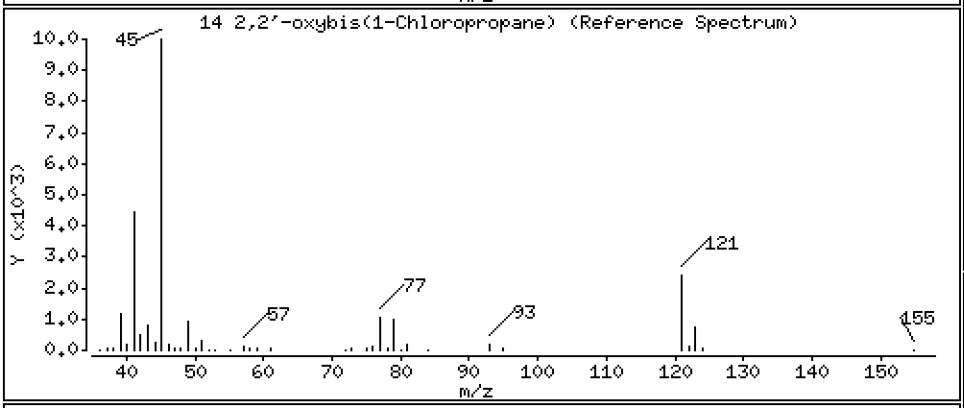
Column diameter: 0.25

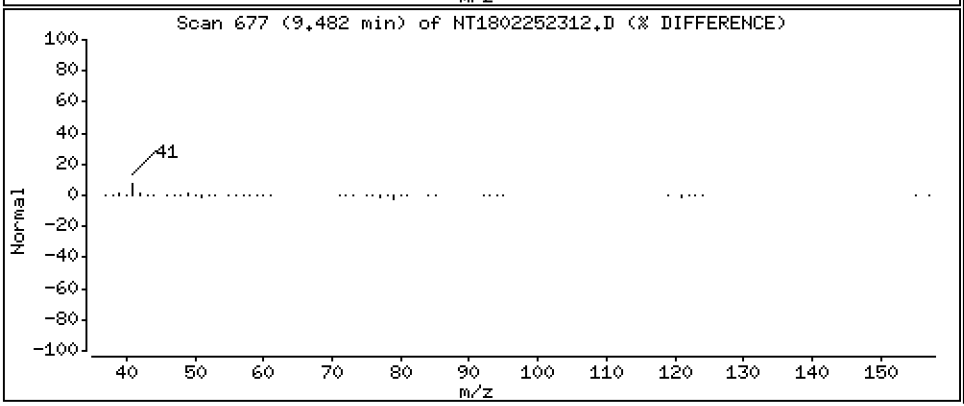
14 2,2'-oxybis(1-Chloropropane)

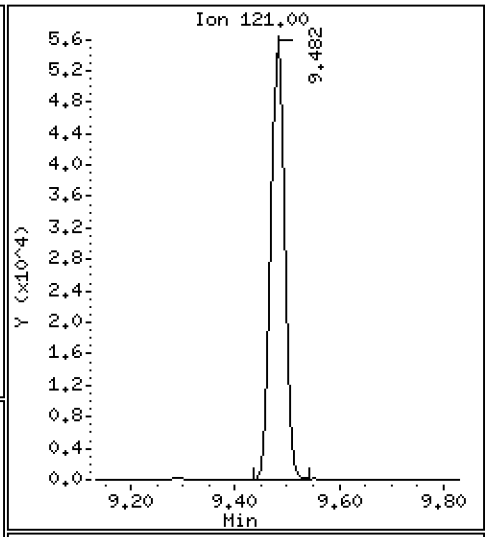
Concentration: 5.205 ug/mL

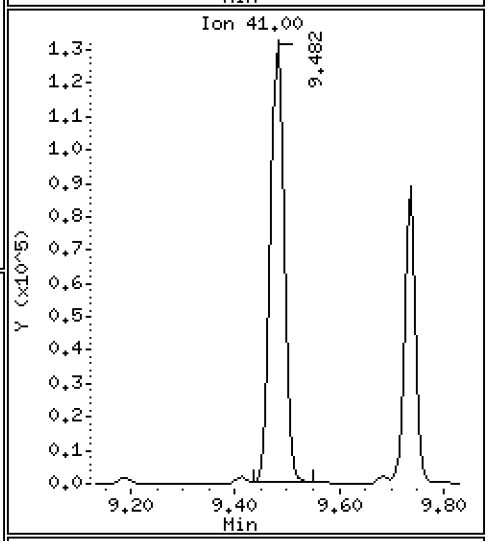


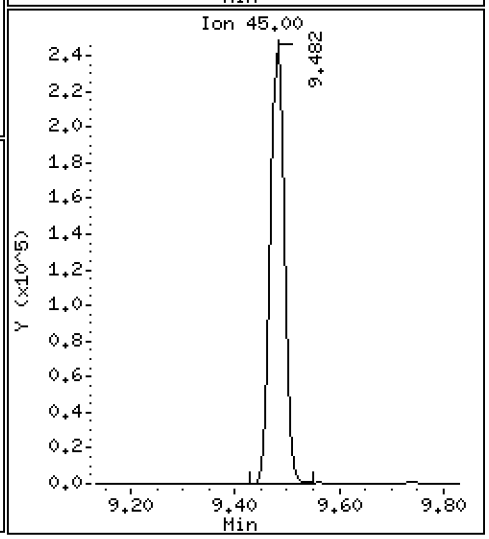












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

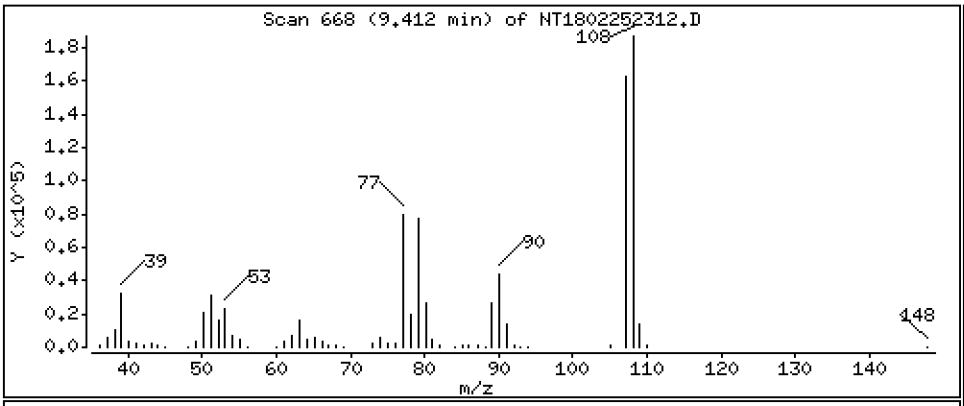
Operator: VTS

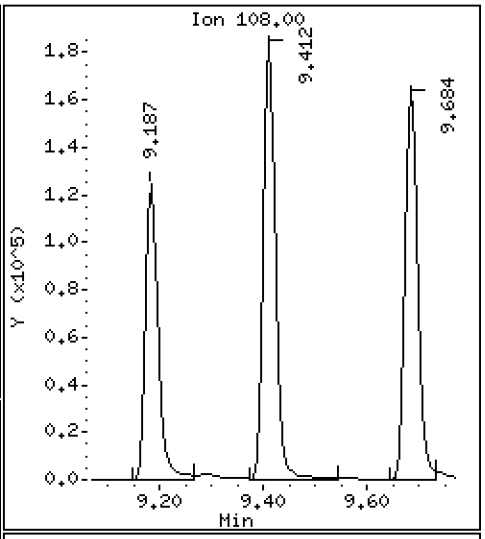
Column phase: ZB-5msi

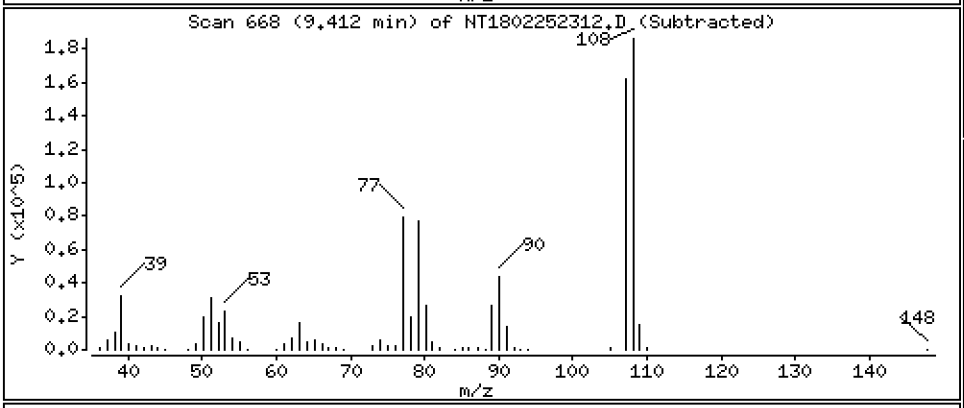
Column diameter: 0.25

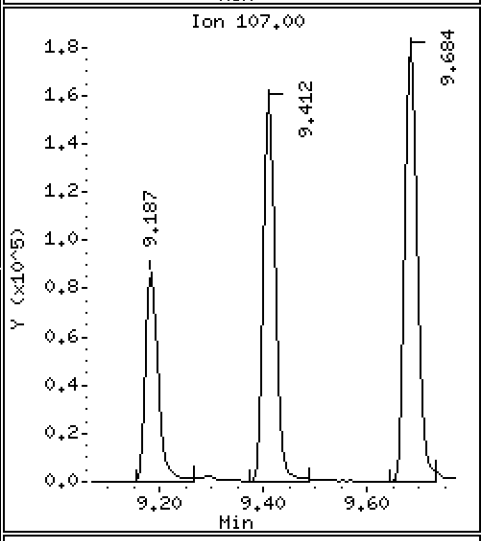
13 2-Methylphenol

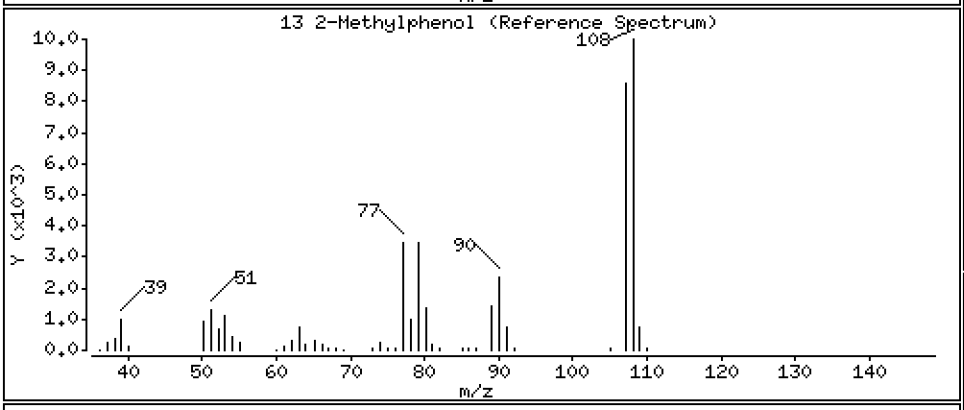
Concentration: 3.995 ug/mL

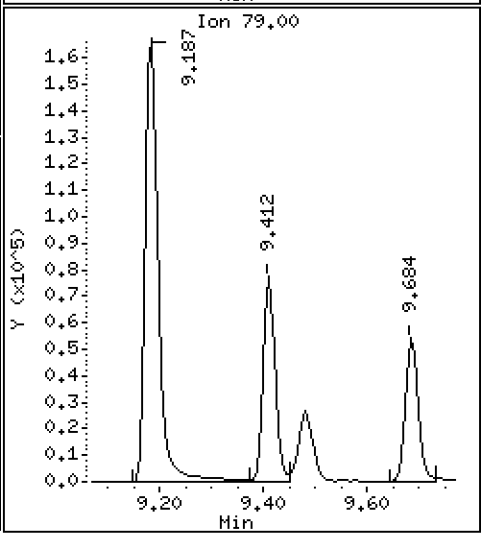


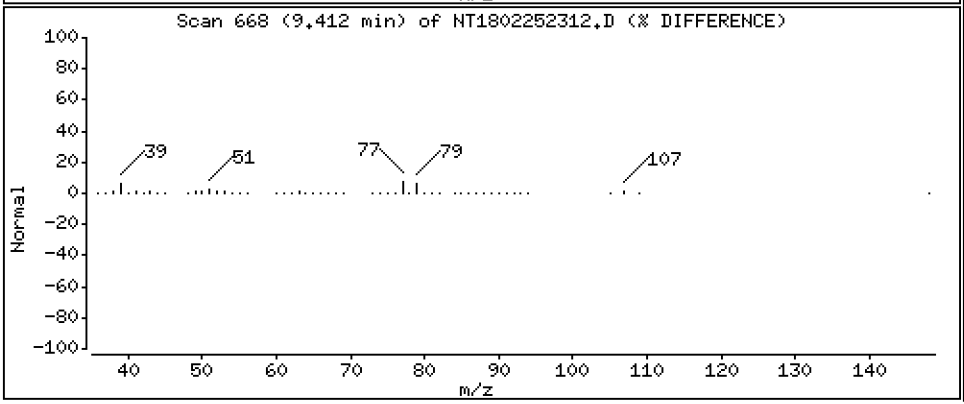












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

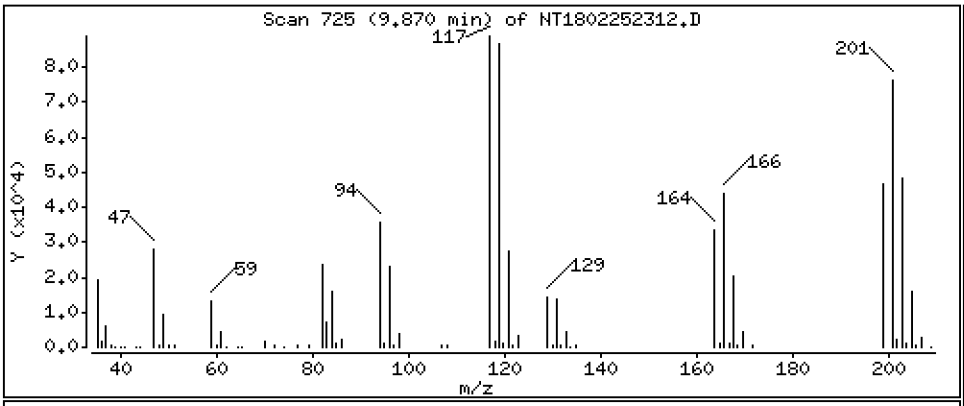
Operator: VTS

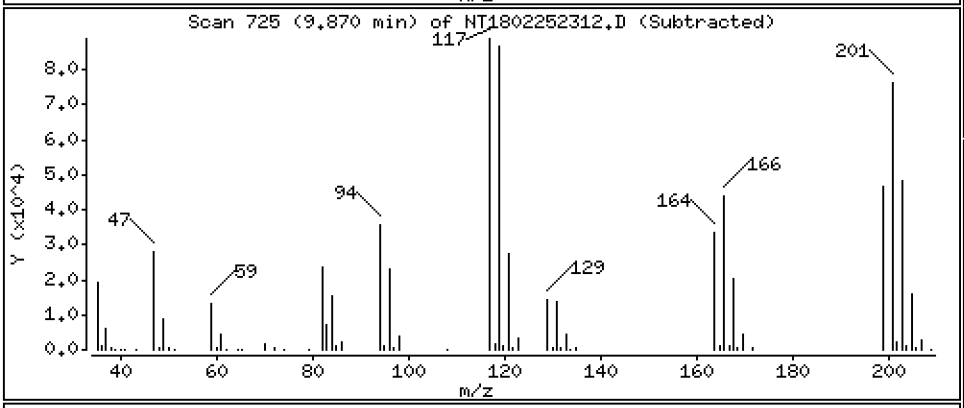
Column phase: ZB-5msi

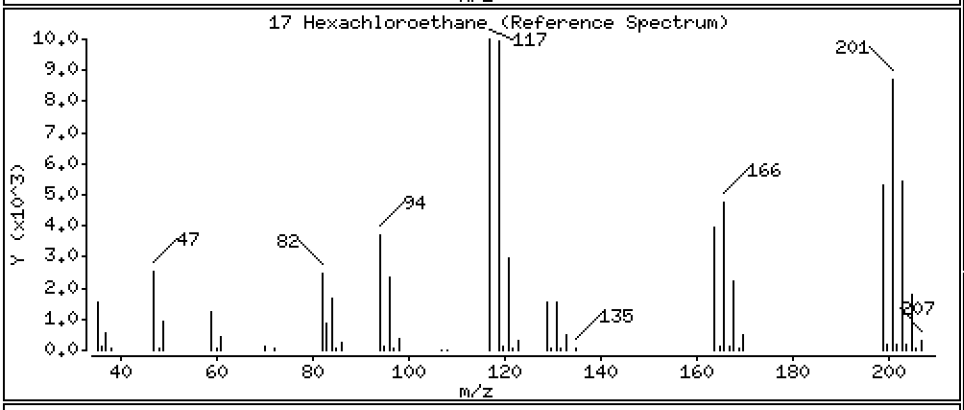
Column diameter: 0.25

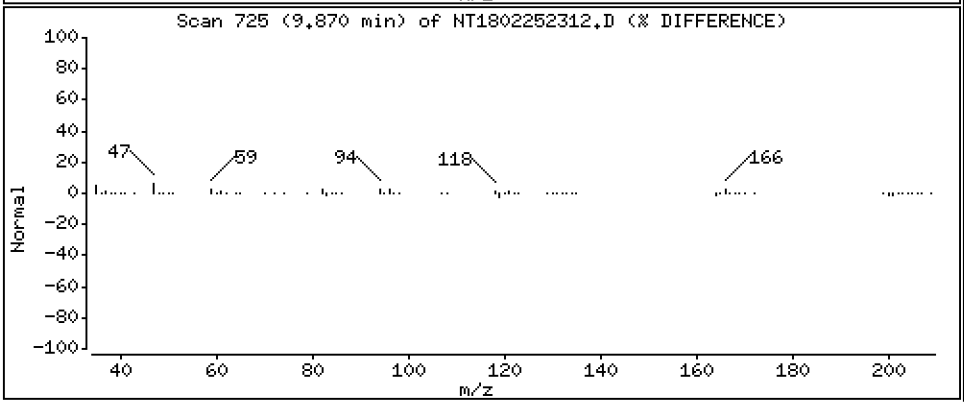
17 Hexachloroethane

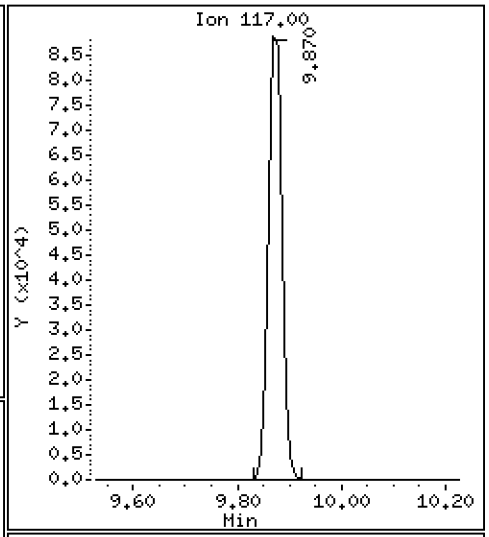
Concentration: 4.769 ug/mL

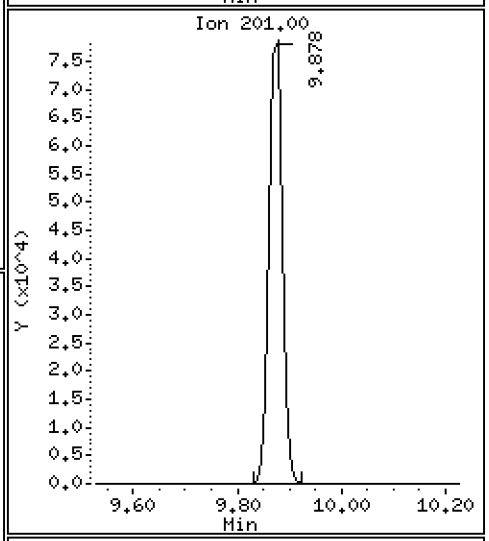


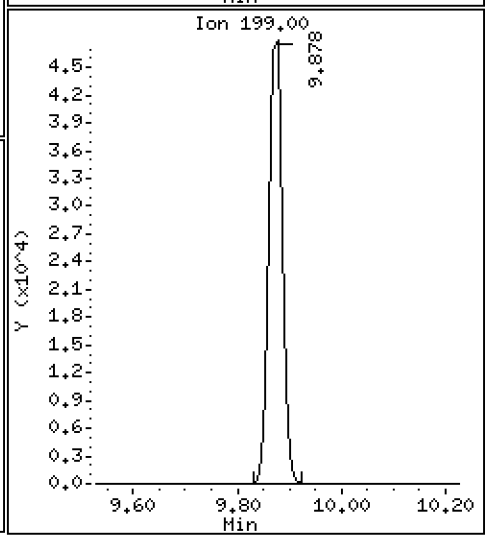












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

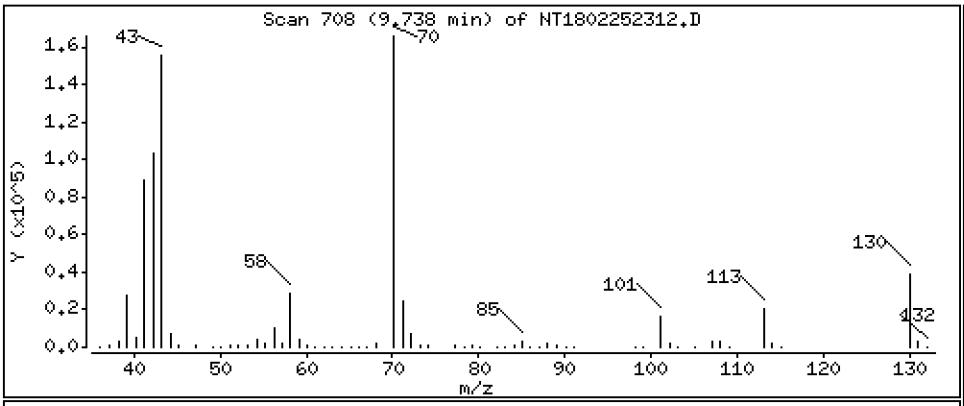
Operator: VTS

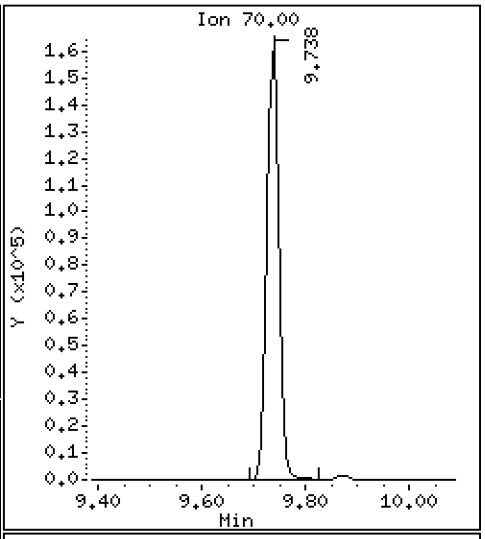
Column phase: ZB-5msi

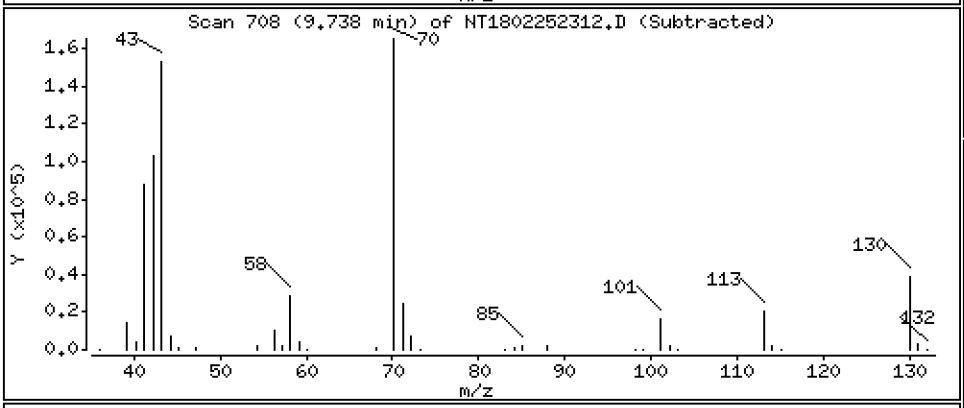
Column diameter: 0.25

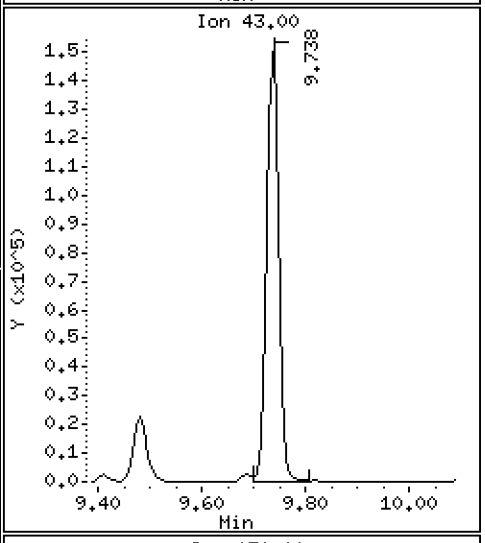
16 N-Nitroso-di-n-propylamine

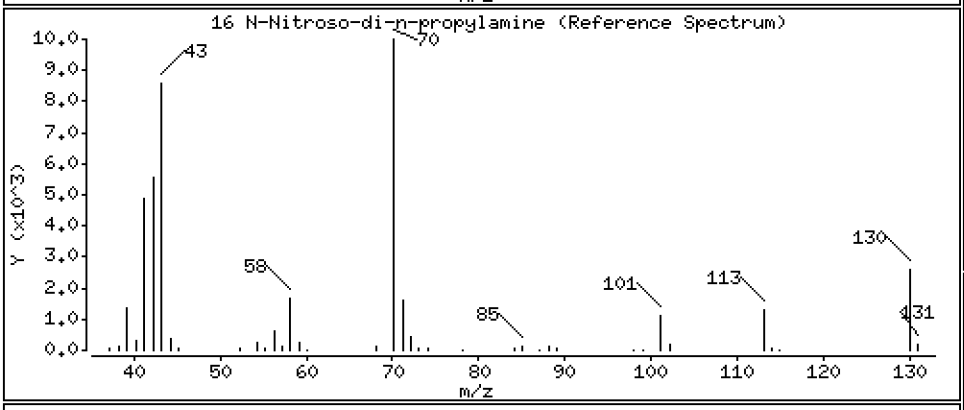
Concentration: 4.799 ug/mL

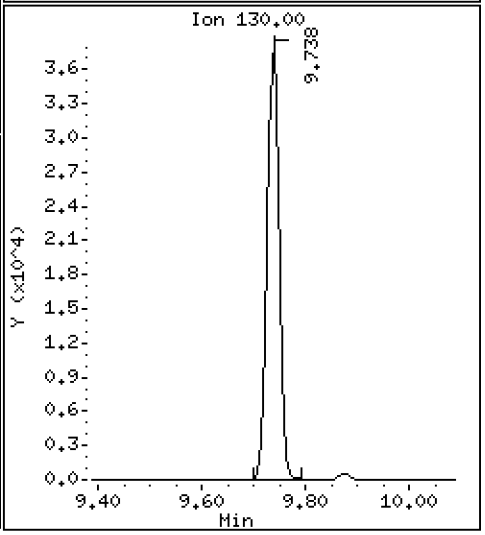


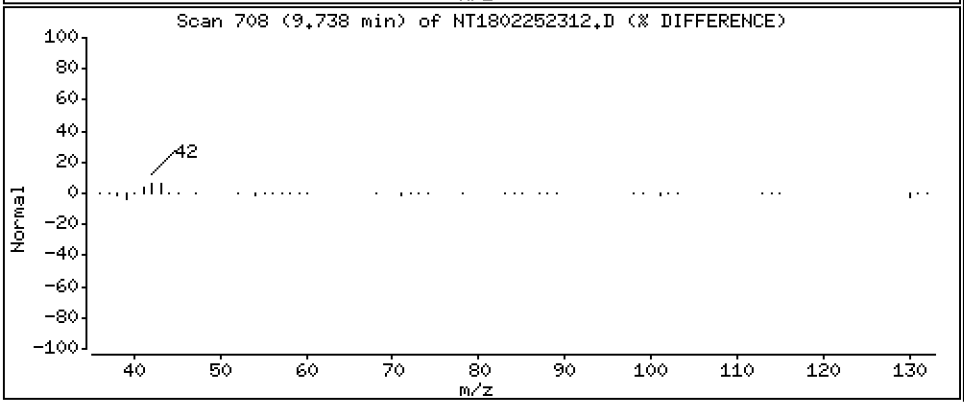












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

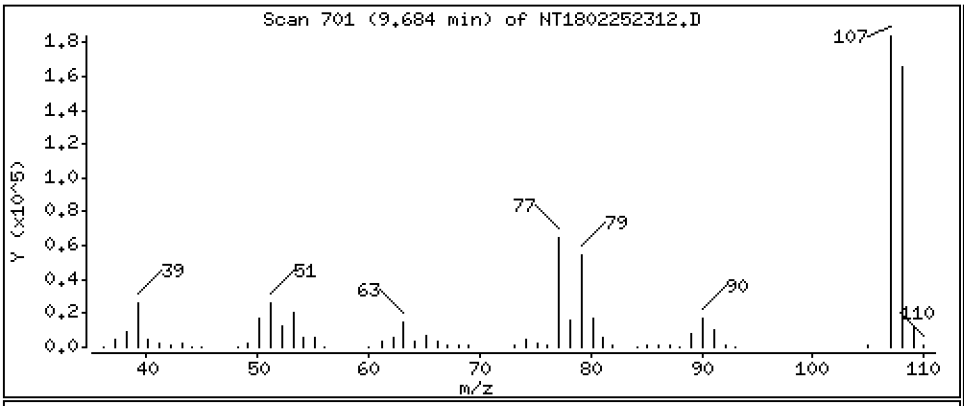
Operator: VTS

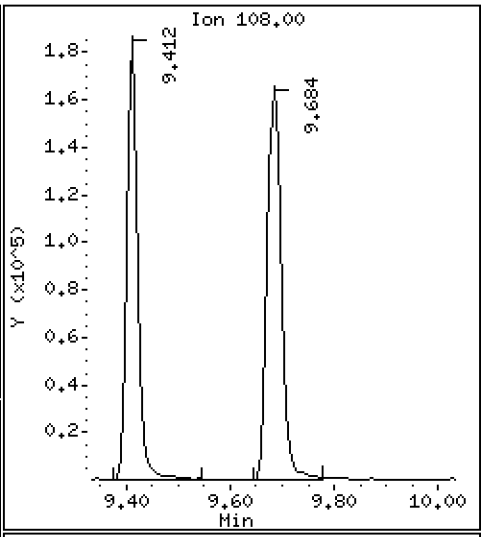
Column phase: ZB-5msi

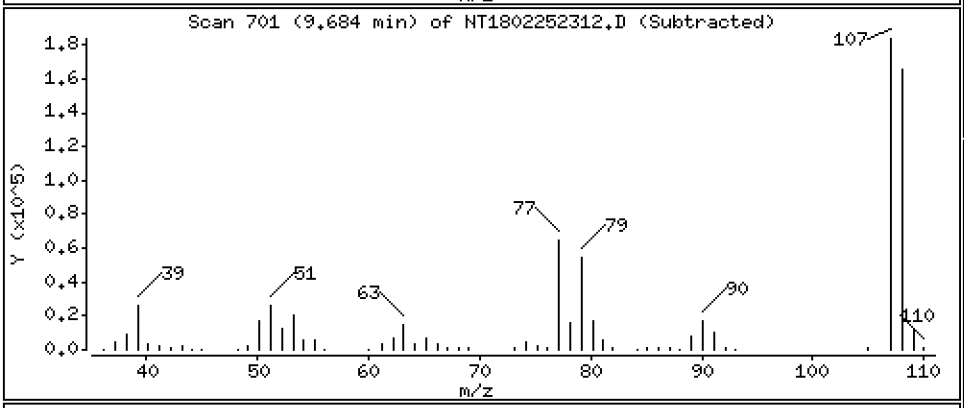
Column diameter: 0.25

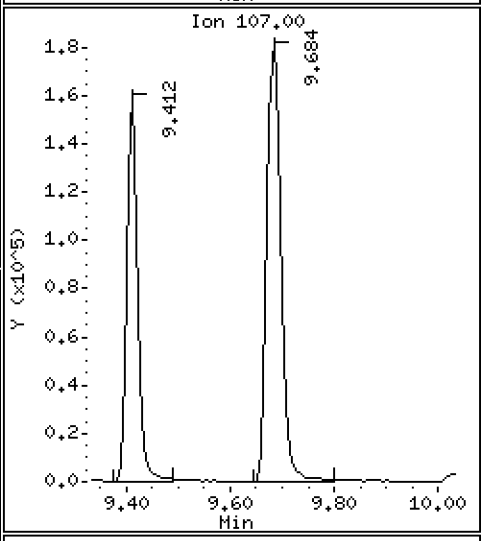
15 4-Methylphenol

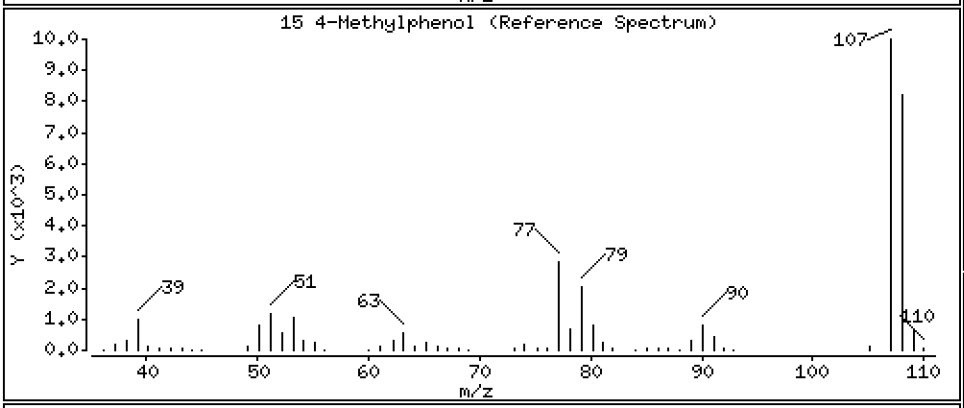
Concentration: 4.106 ug/mL

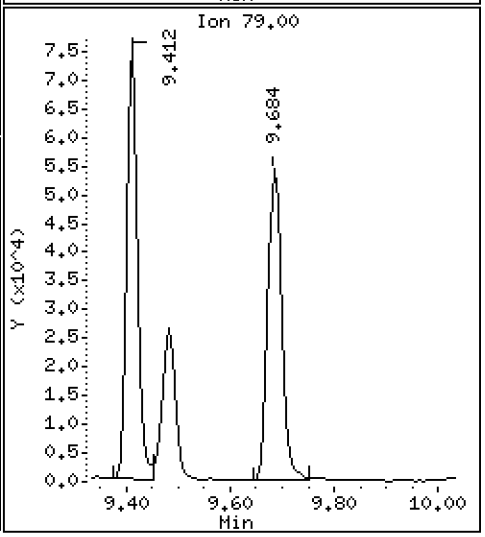


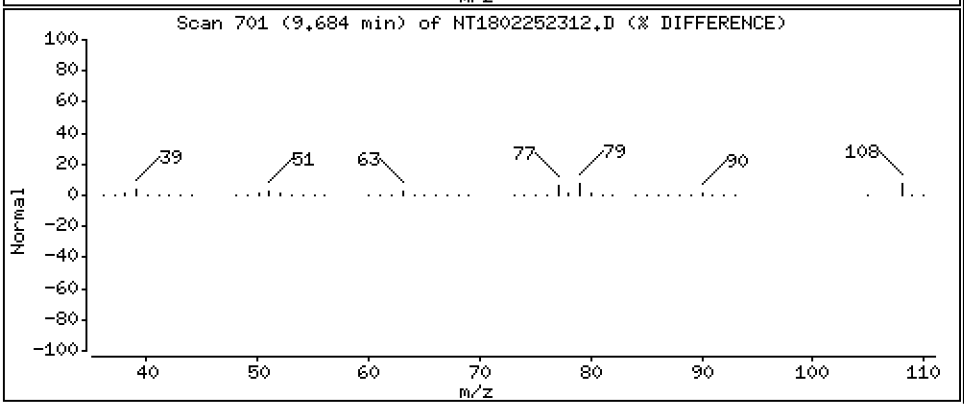












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

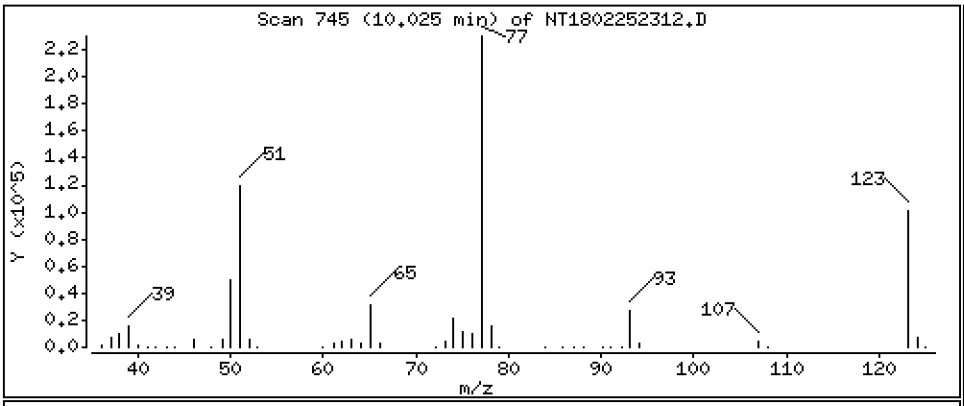
Operator: VTS

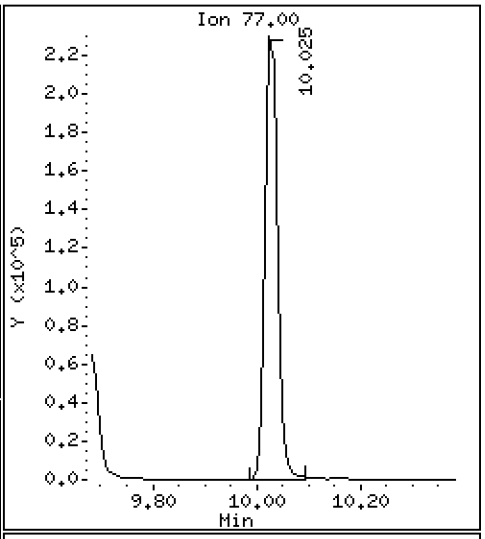
Column phase: ZB-5msi

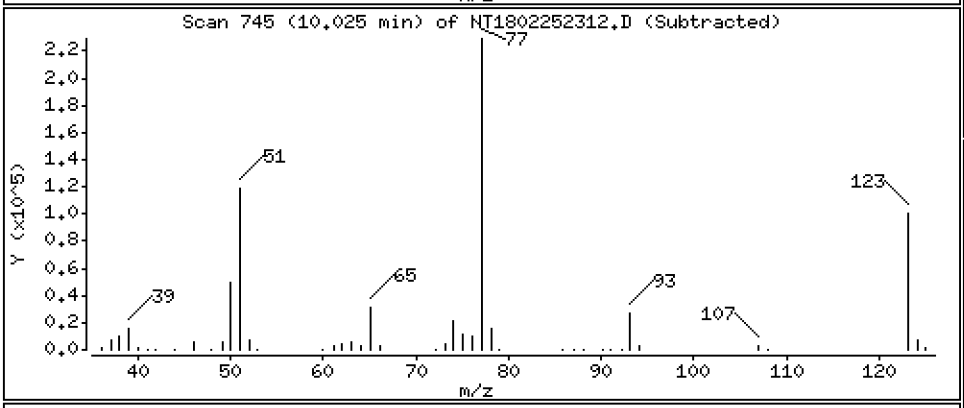
Column diameter: 0.25

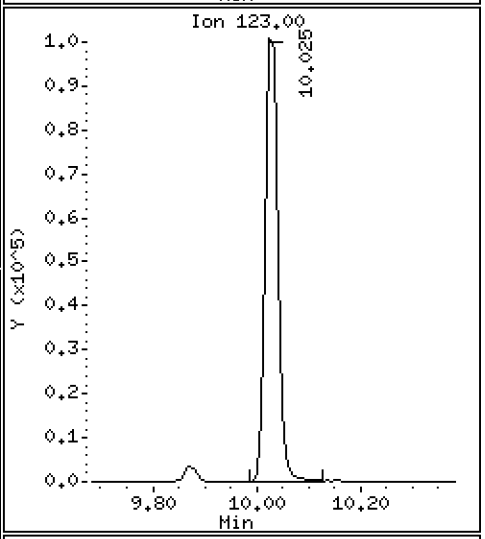
19 Nitrobenzene

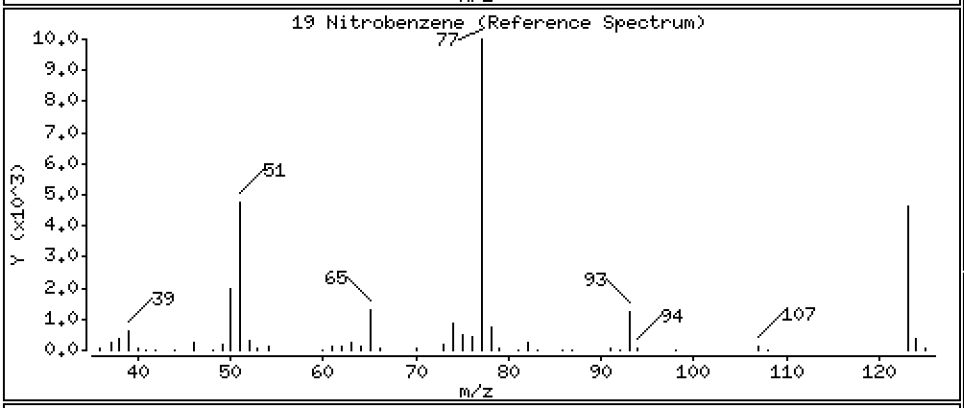
Concentration: 4.692 ug/mL

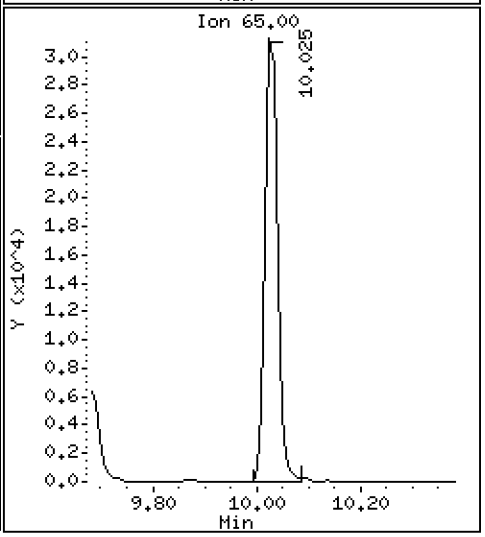


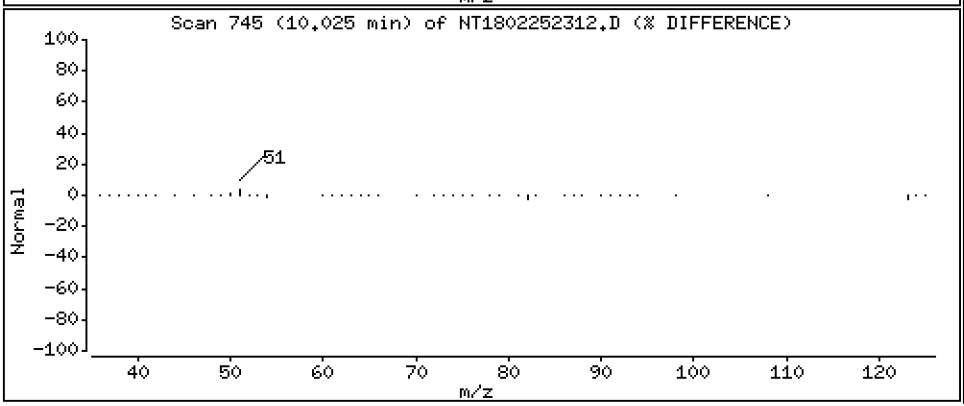












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

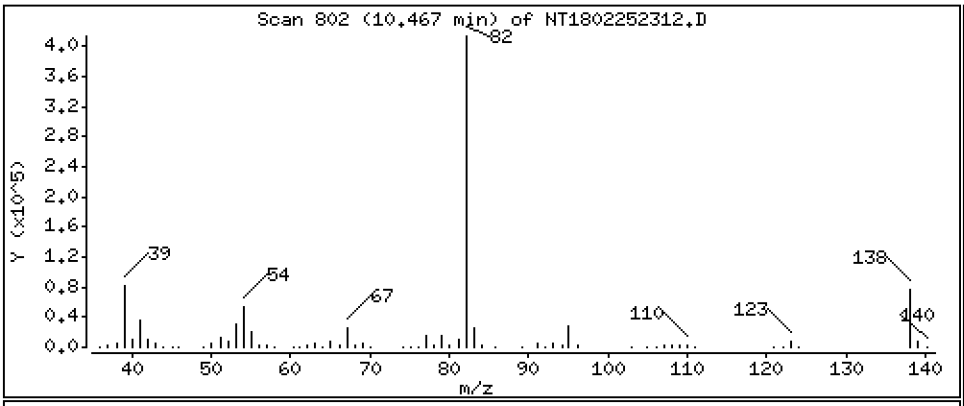
Operator: VTS

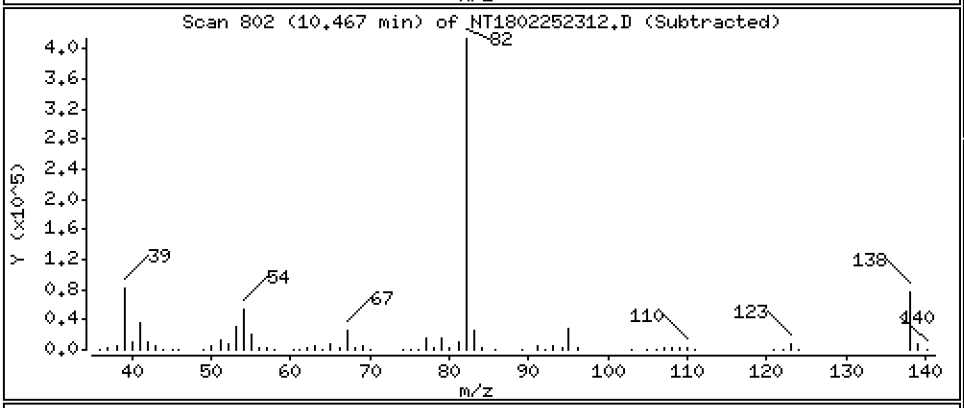
Column phase: ZB-5msi

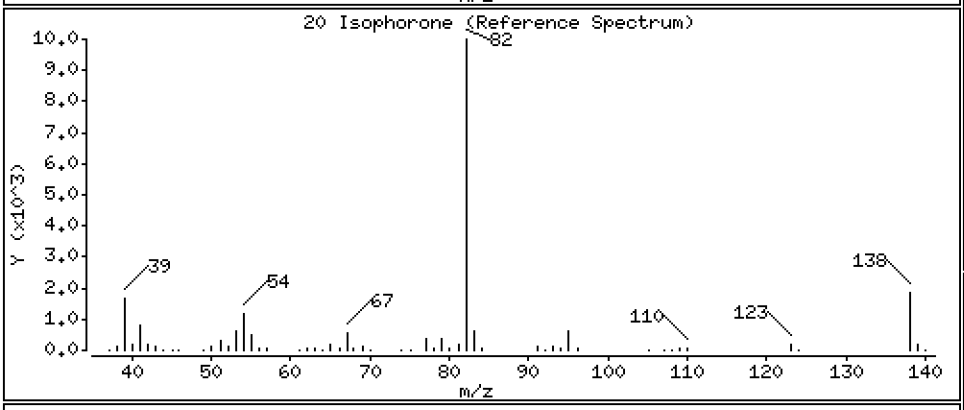
Column diameter: 0.25

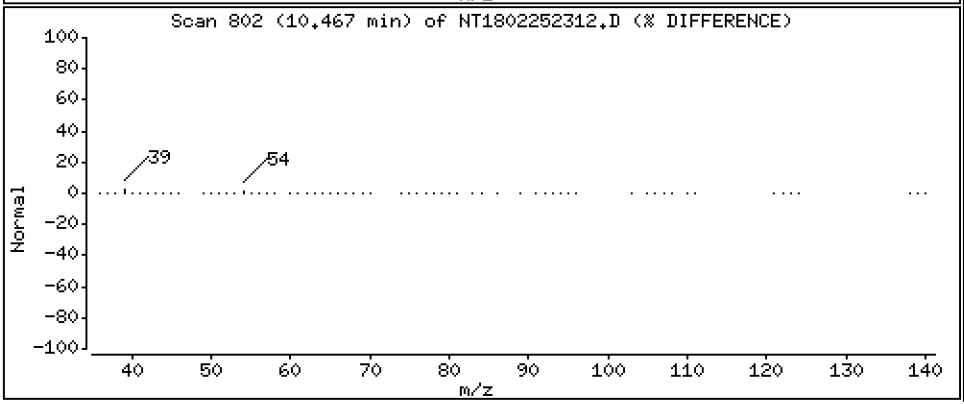
20 Isophorone

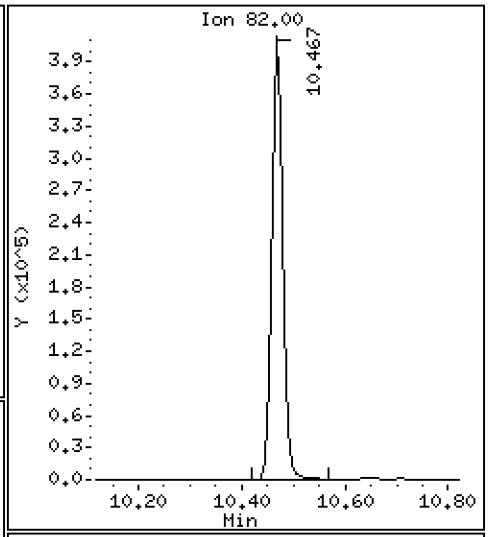
Concentration: 6.433 ug/mL

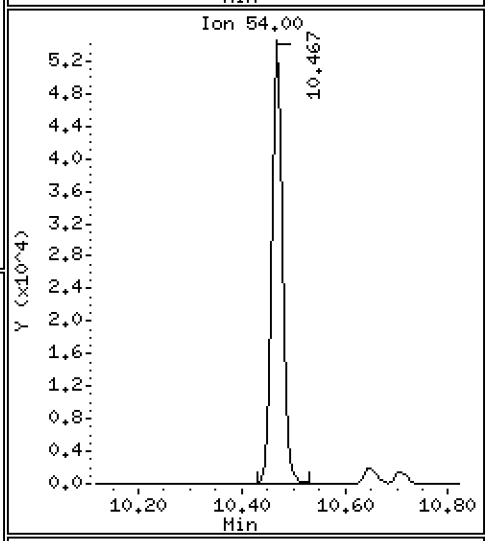


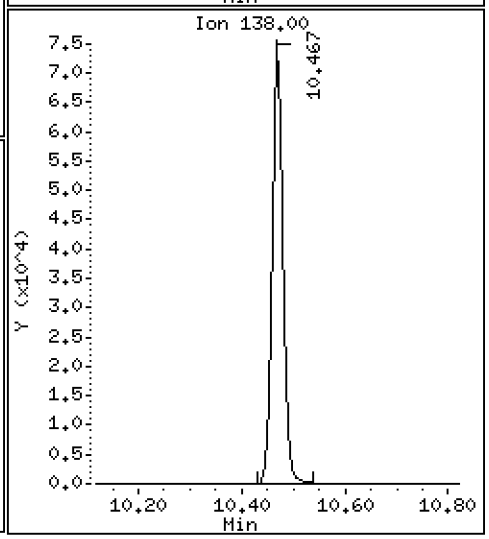












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

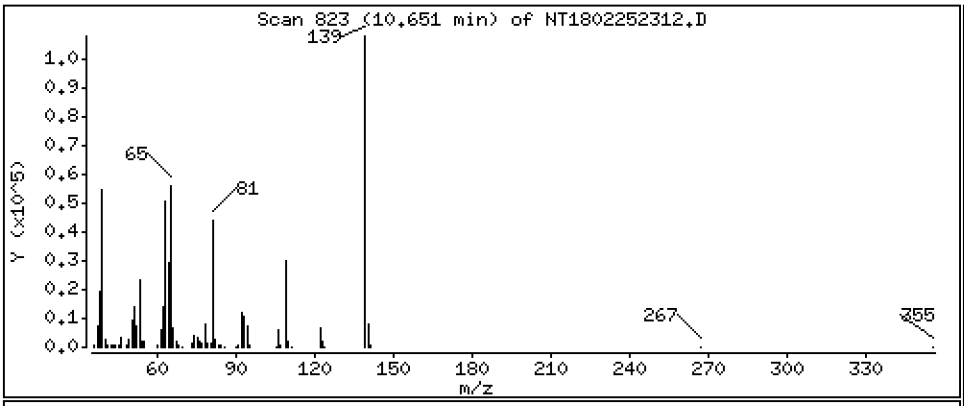
Operator: VTS

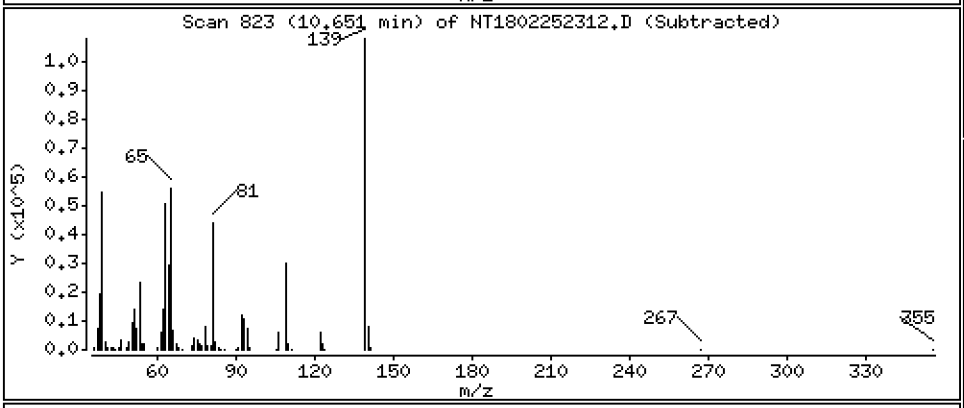
Column phase: ZB-5msi

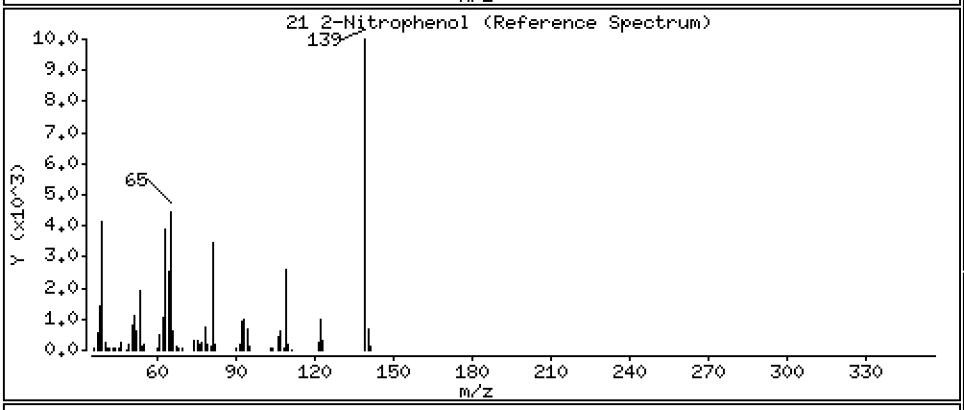
Column diameter: 0.25

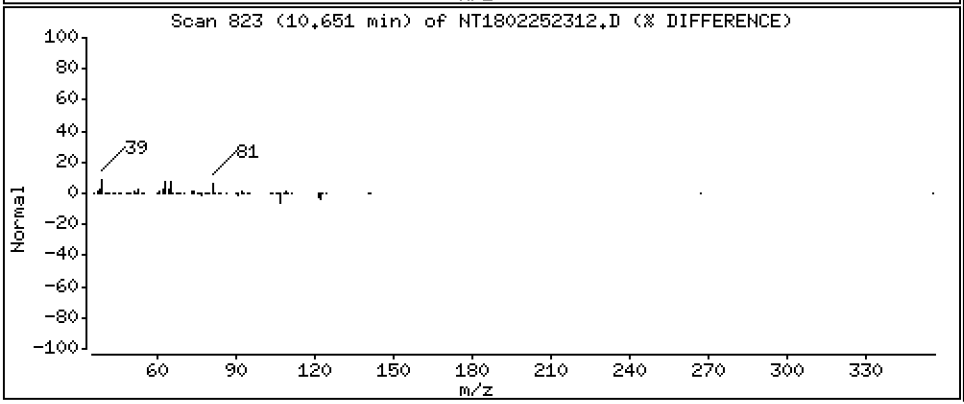
21 2-Nitrophenol

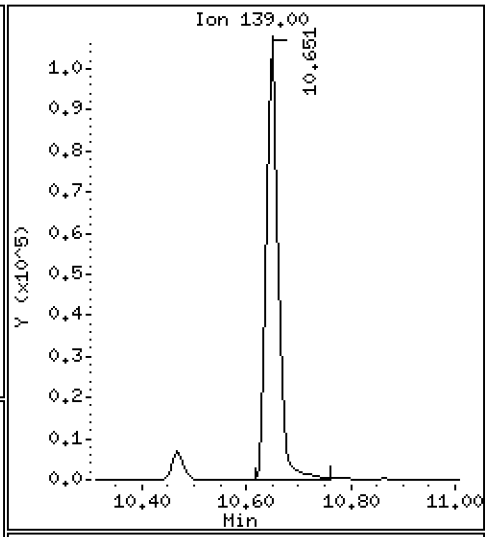
Concentration: 4.439 ug/mL

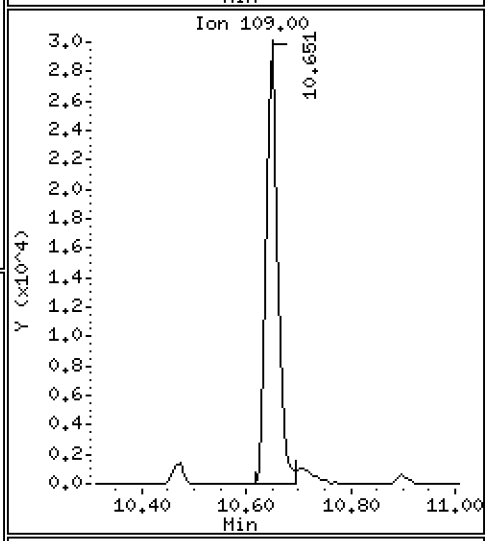


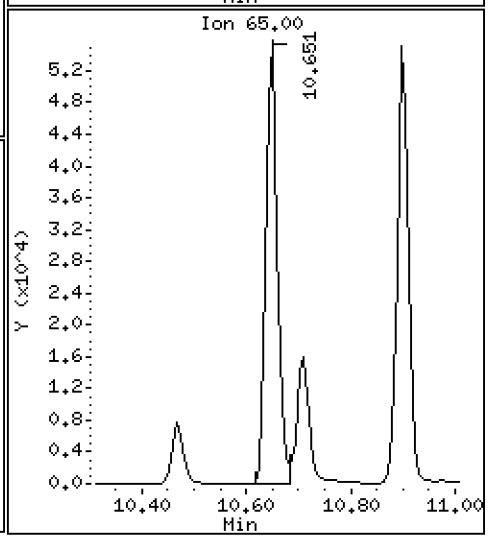












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

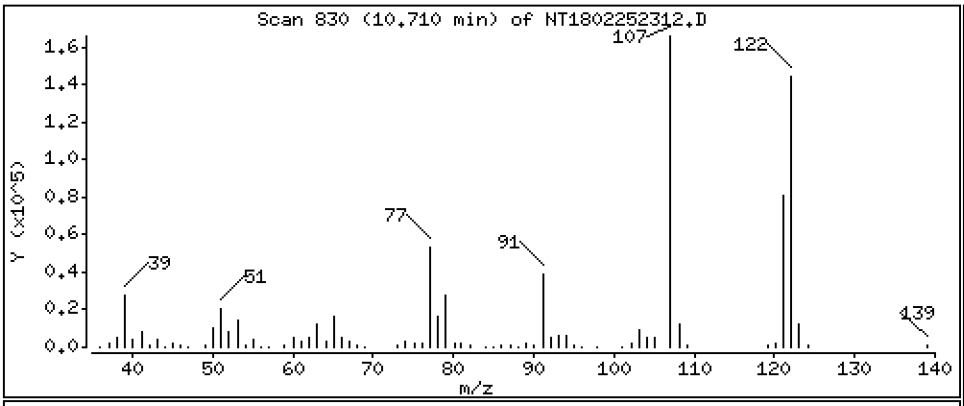
Operator: VTS

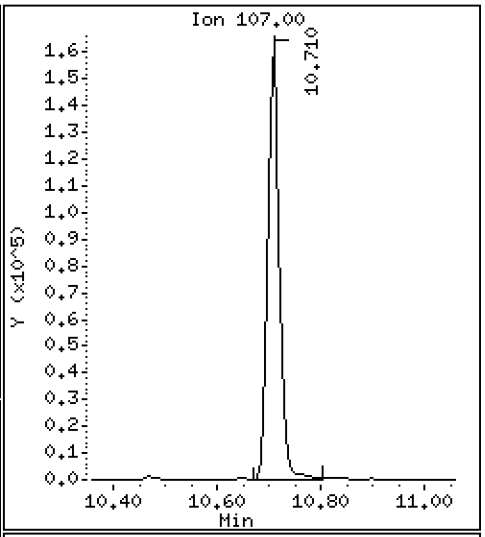
Column phase: ZB-5msi

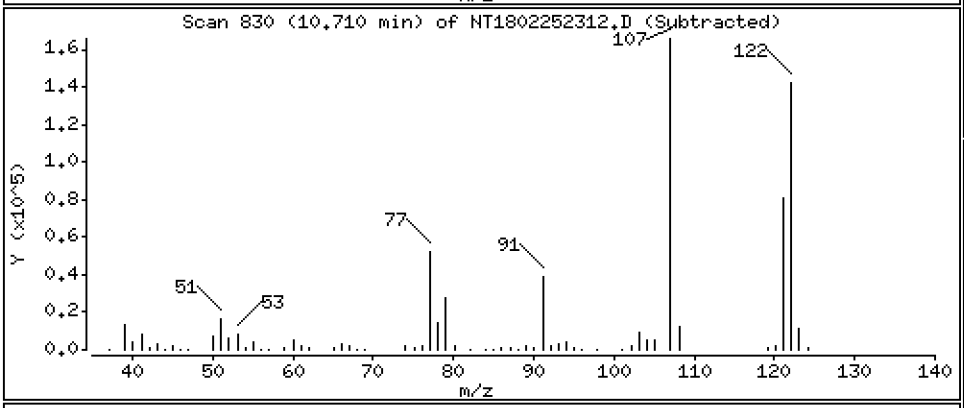
Column diameter: 0.25

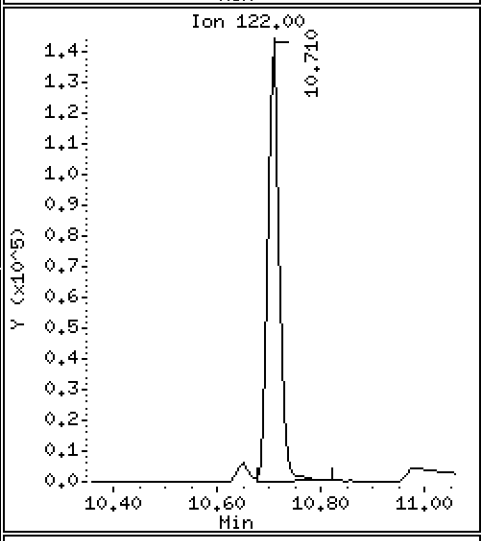
22 2,4-Dimethylphenol

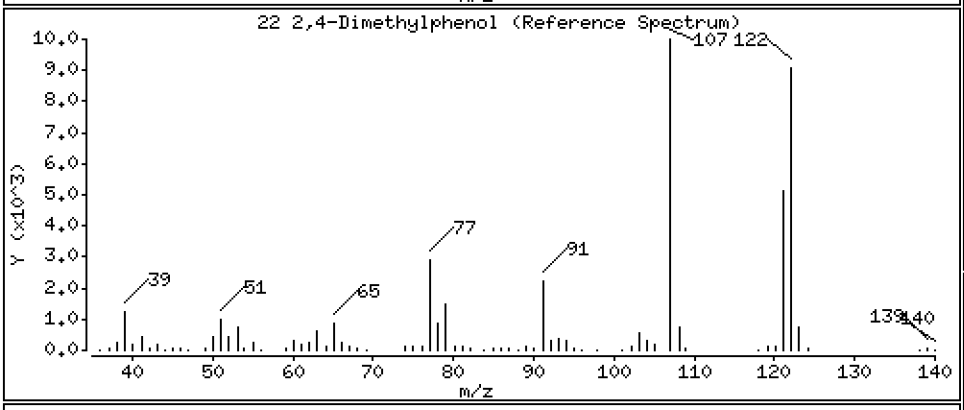
Concentration: 3.460 ug/mL

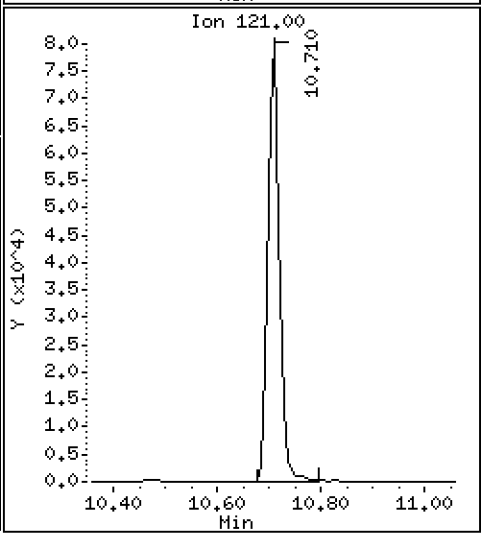


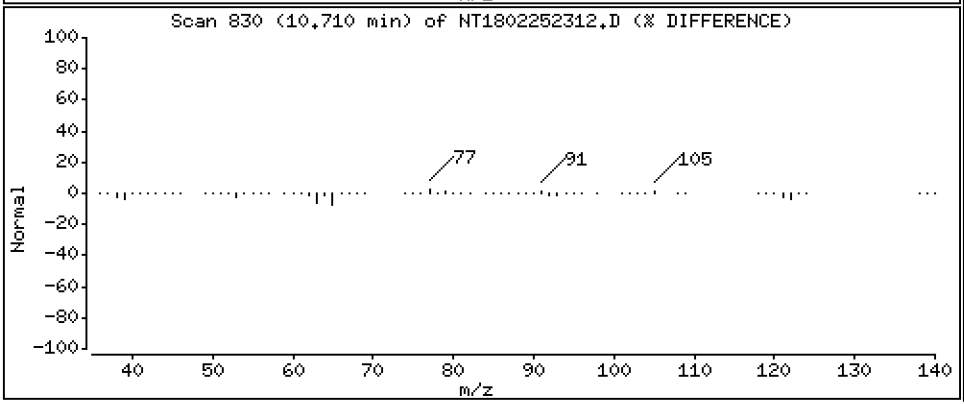












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

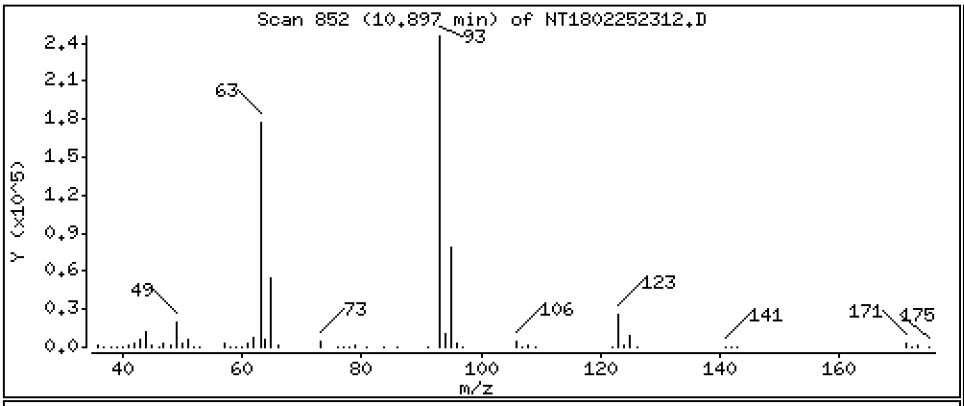
Operator: VTS

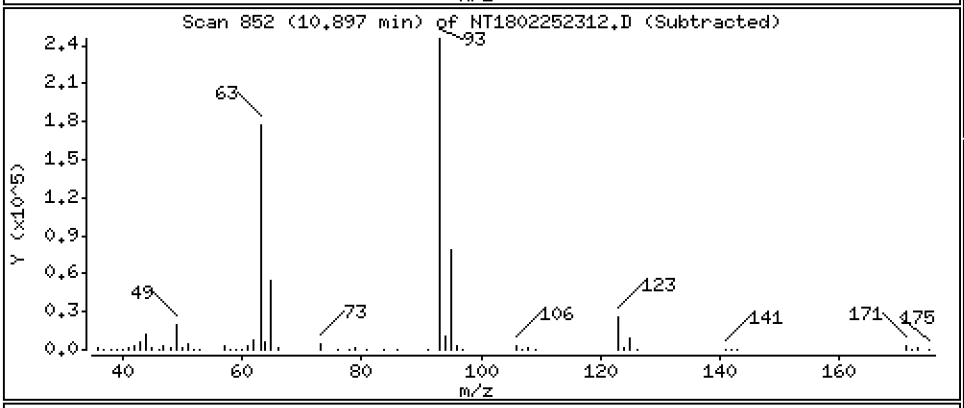
Column phase: ZB-5msi

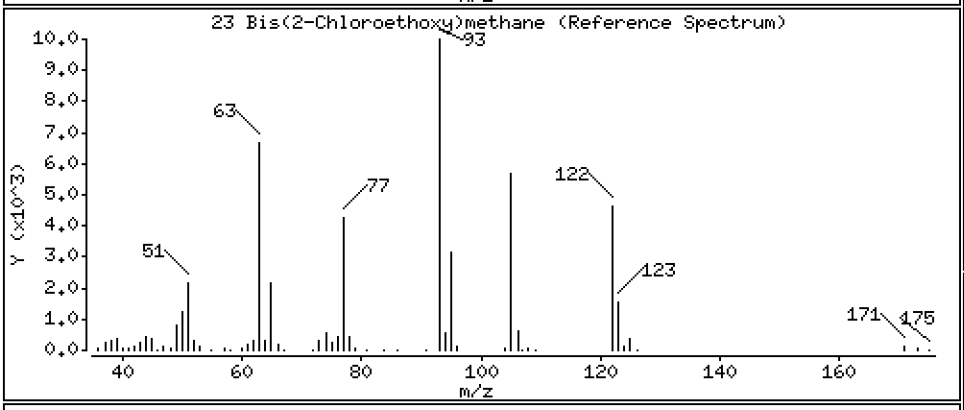
Column diameter: 0.25

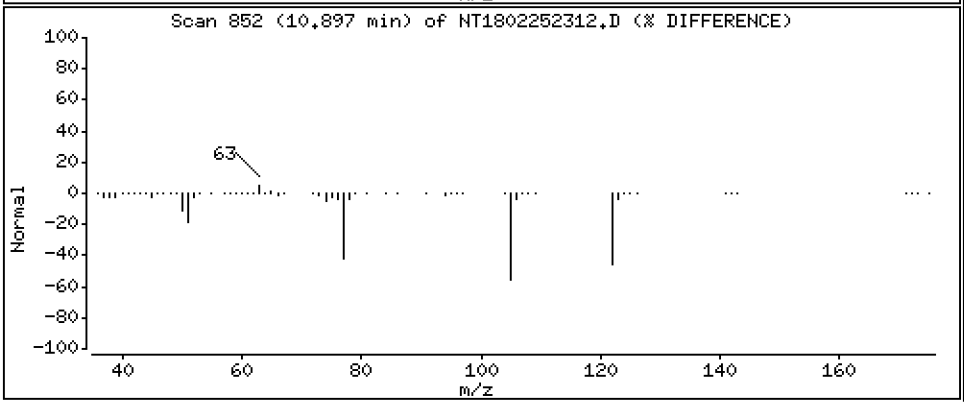
23 Bis(2-Chloroethoxy)methane

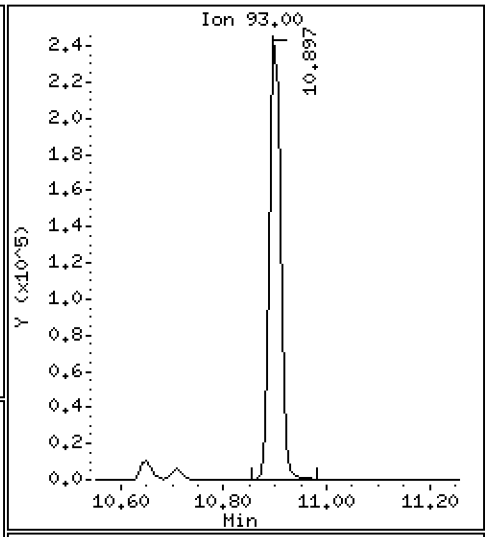
Concentration: 5.489 ug/mL

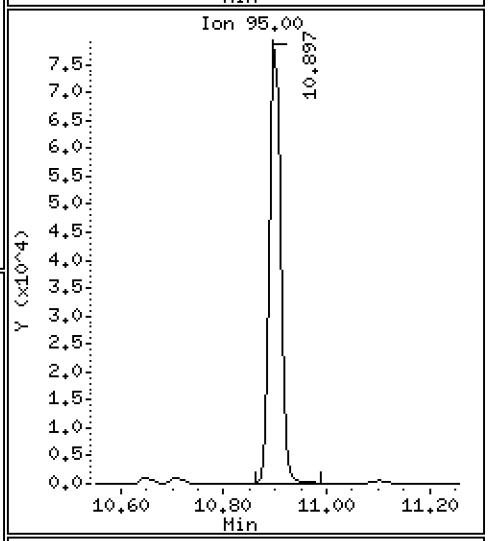


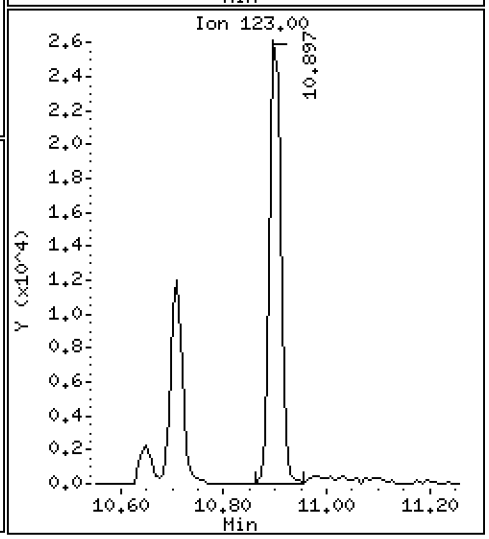












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

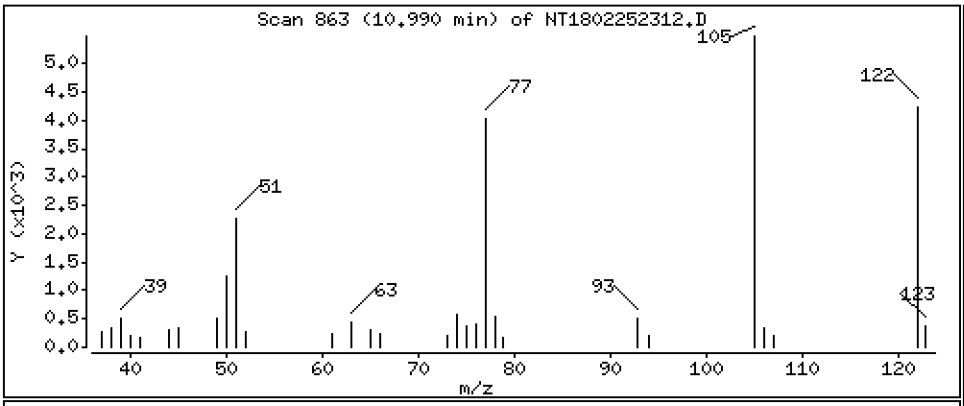
Operator: VTS

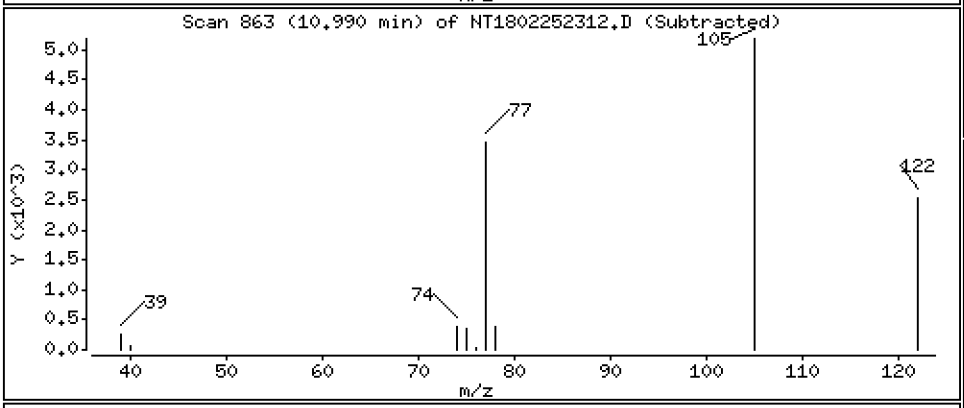
Column phase: ZB-5msi

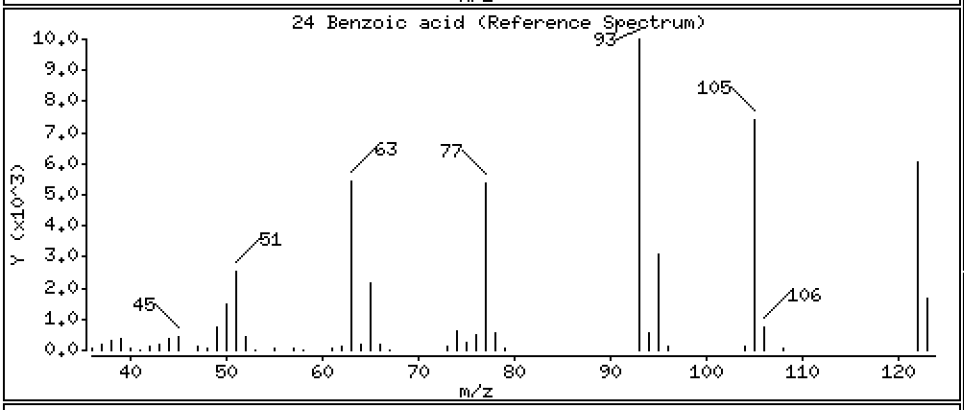
Column diameter: 0.25

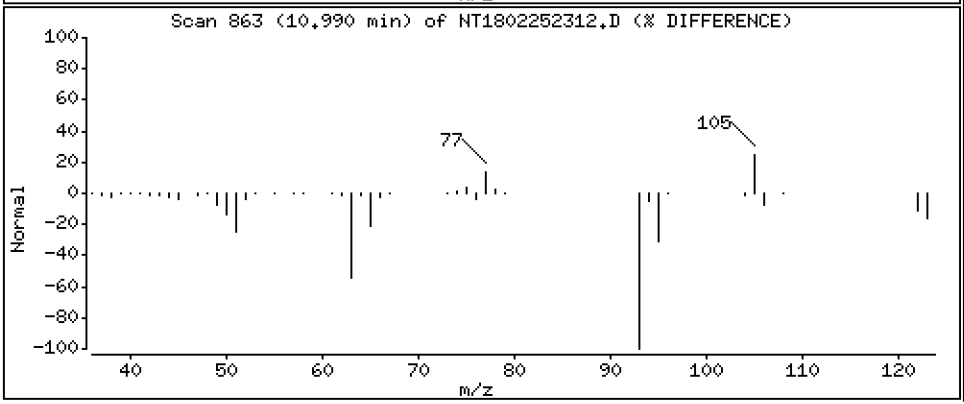
24 Benzoic acid

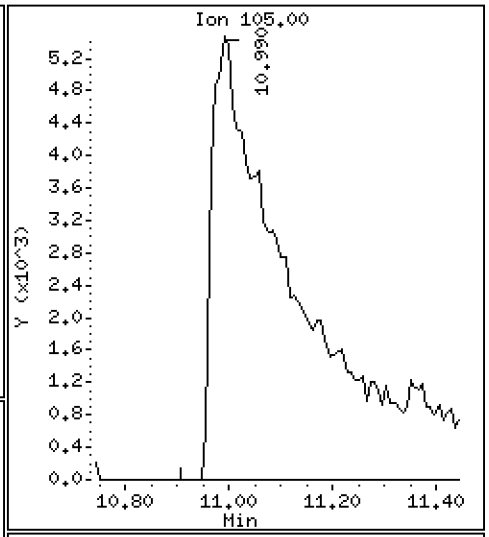
Concentration: 2.618 ug/mL

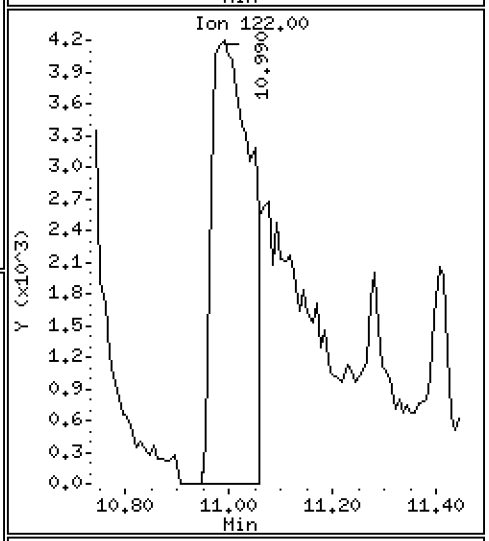


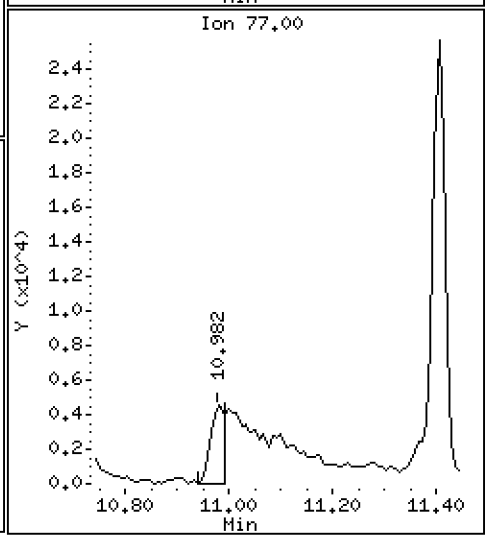












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

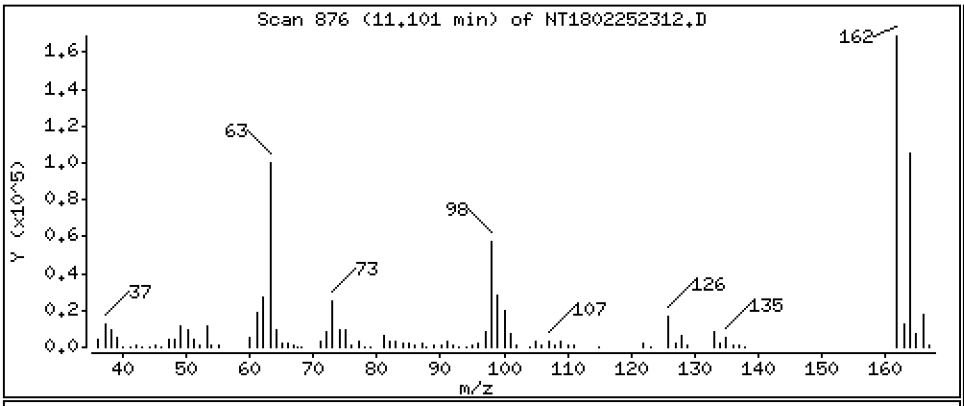
Operator: VTS

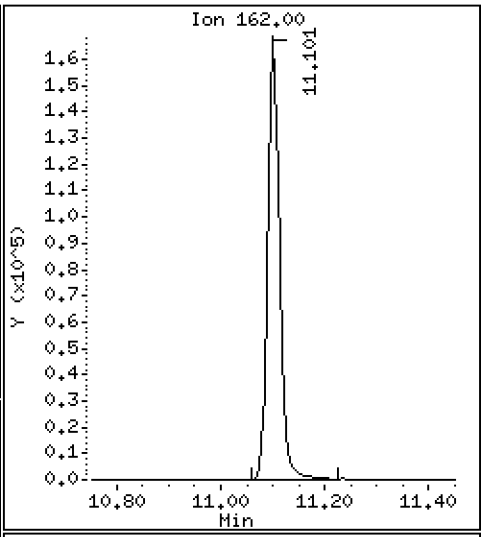
Column phase: ZB-5msi

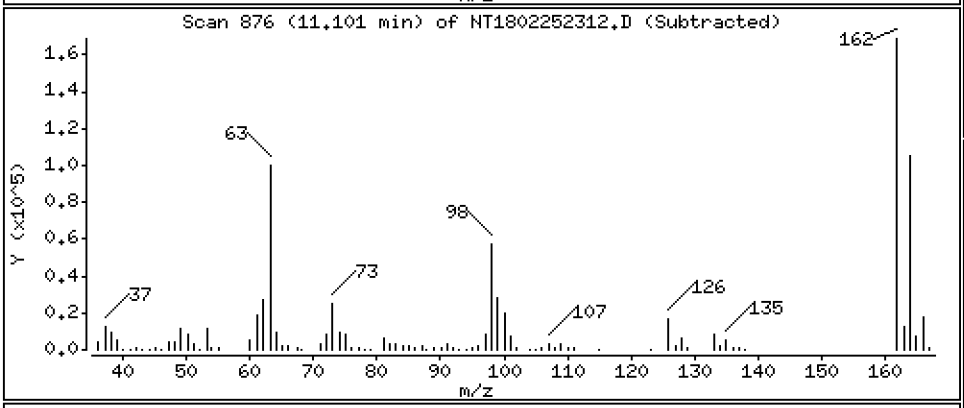
Column diameter: 0.25

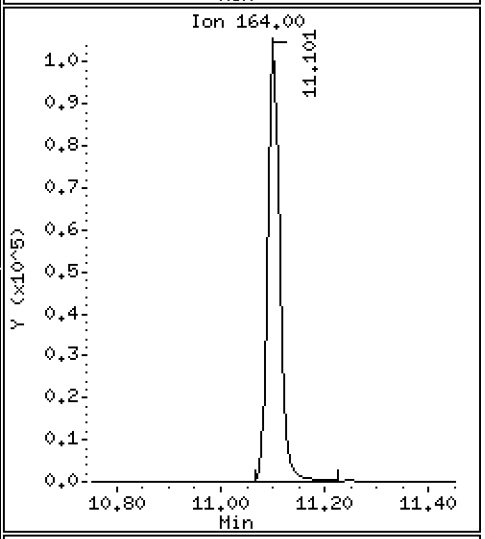
25 2,4-Dichlorophenol

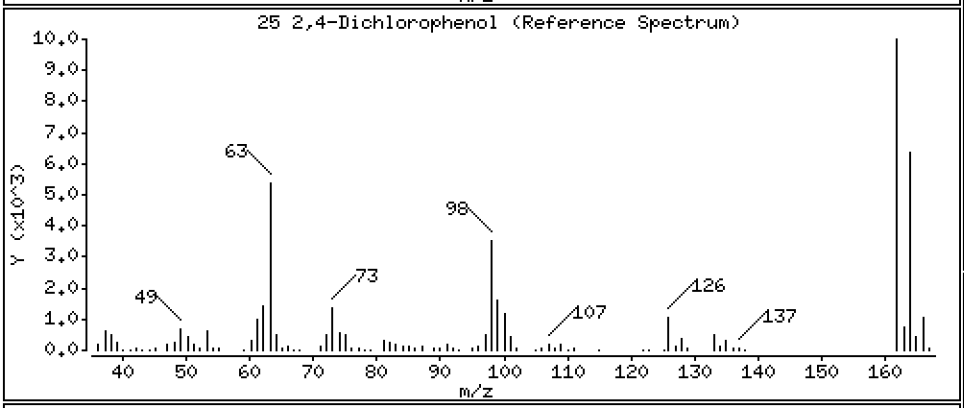
Concentration: 4.621 ug/mL

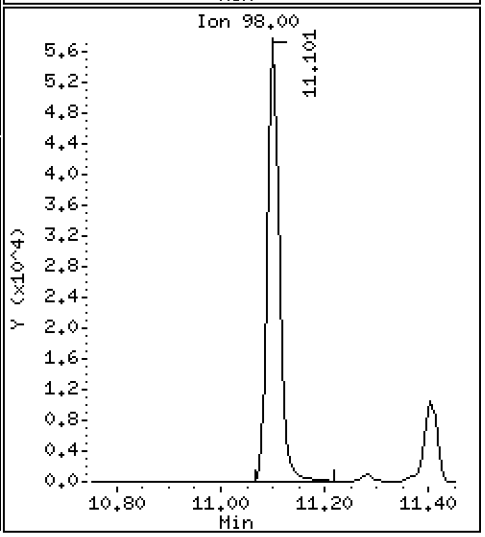


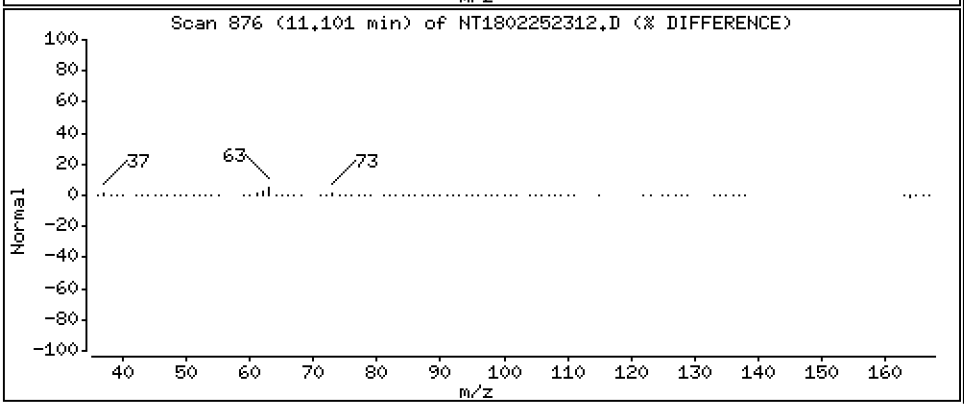












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

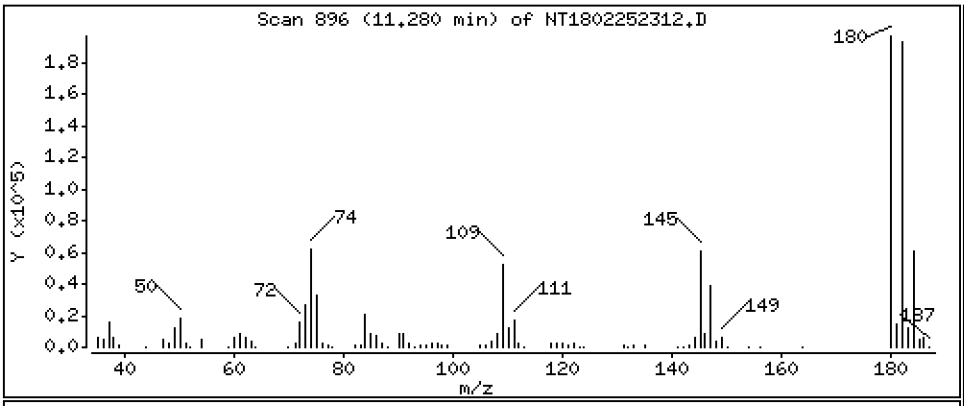
Operator: VTS

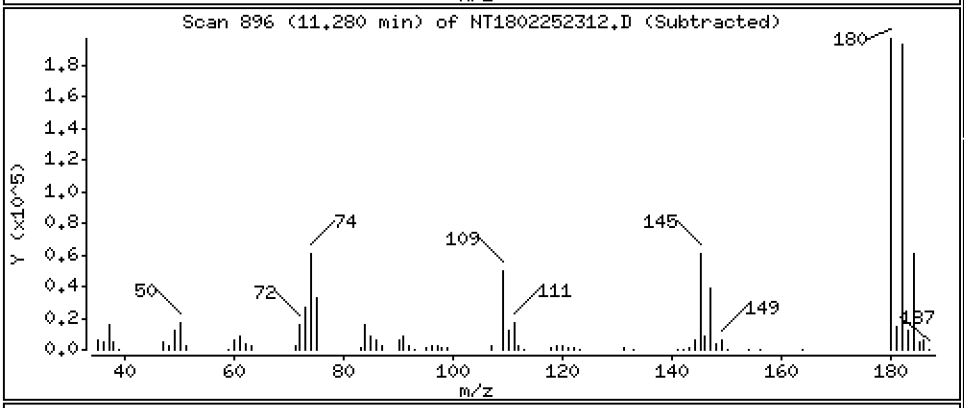
Column phase: ZB-5msi

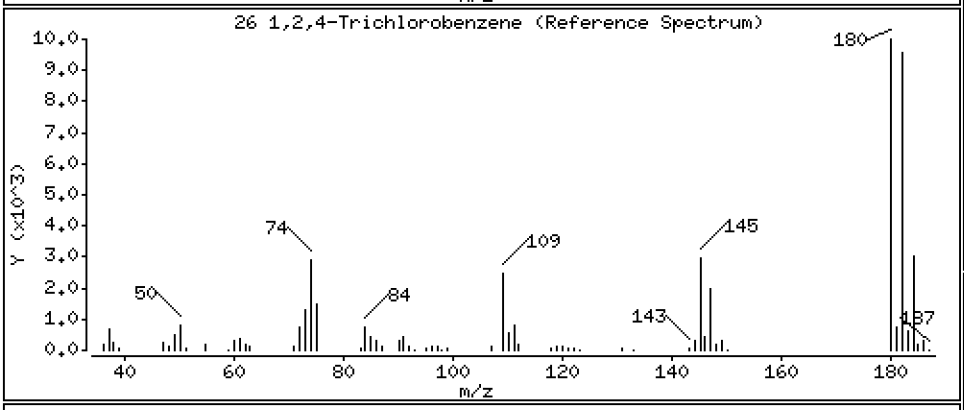
Column diameter: 0.25

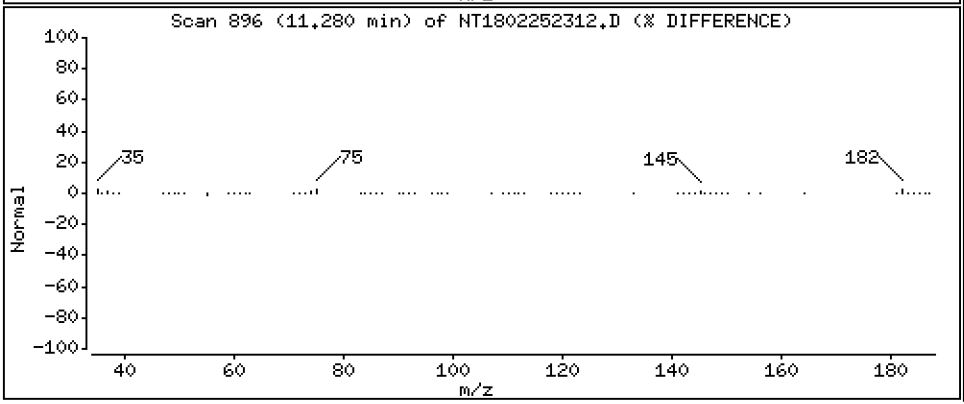
26 1,2,4-Trichlorobenzene

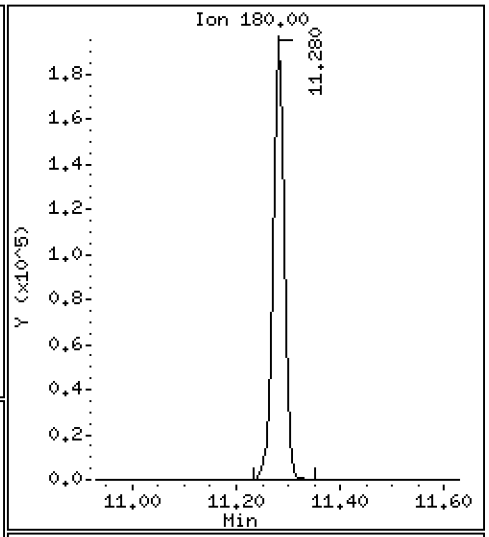
Concentration: 4.438 ug/mL

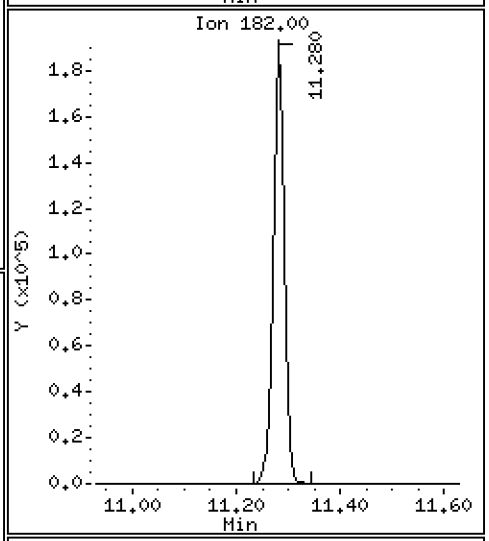


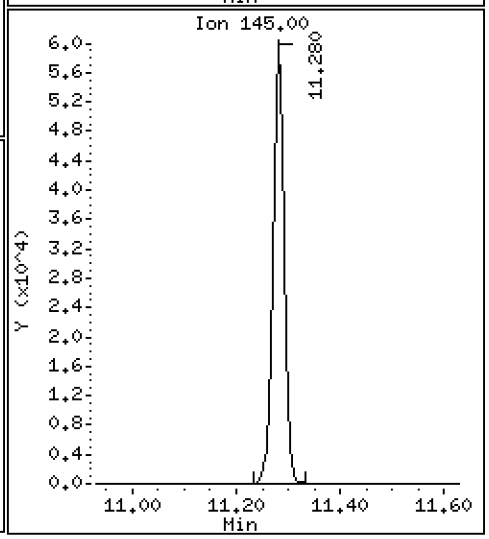












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

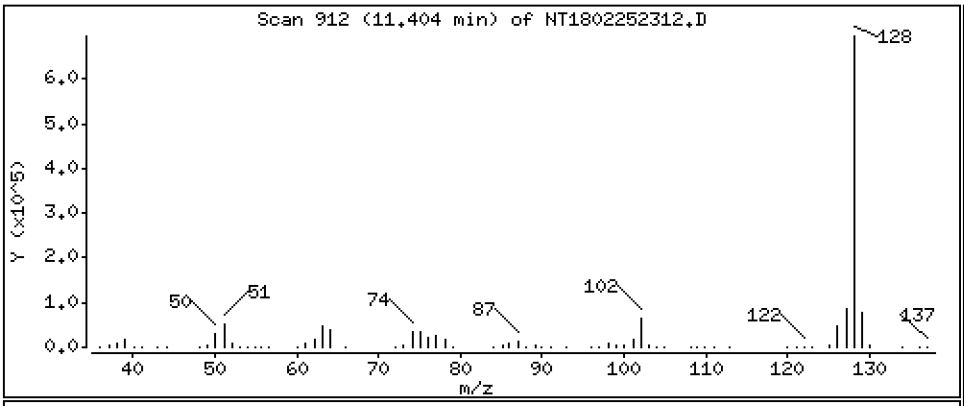
Operator: VTS

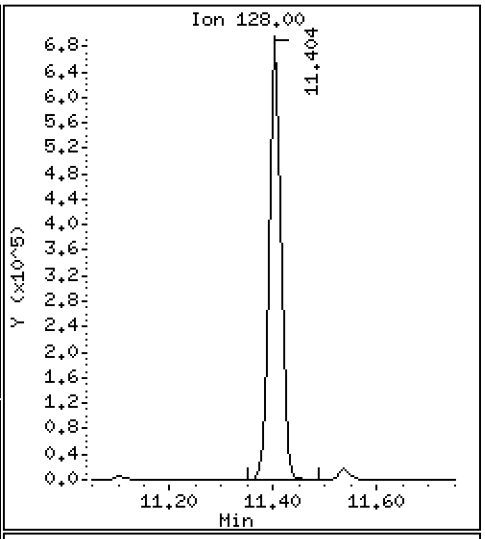
Column phase: ZB-5msi

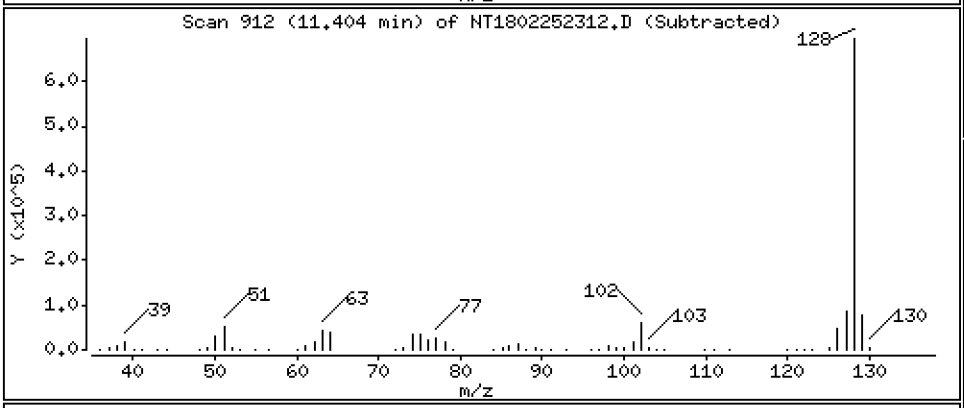
Column diameter: 0.25

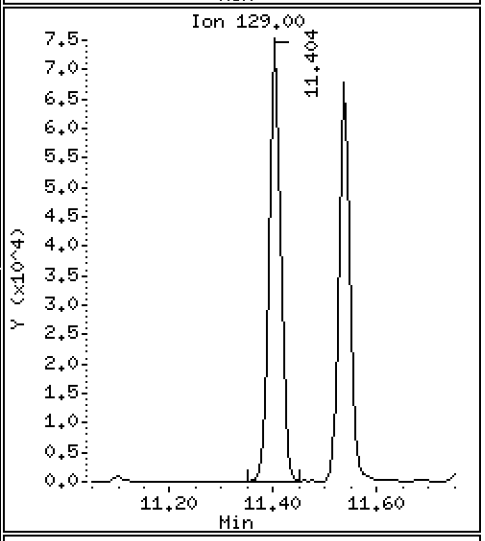
28 Naphthalene

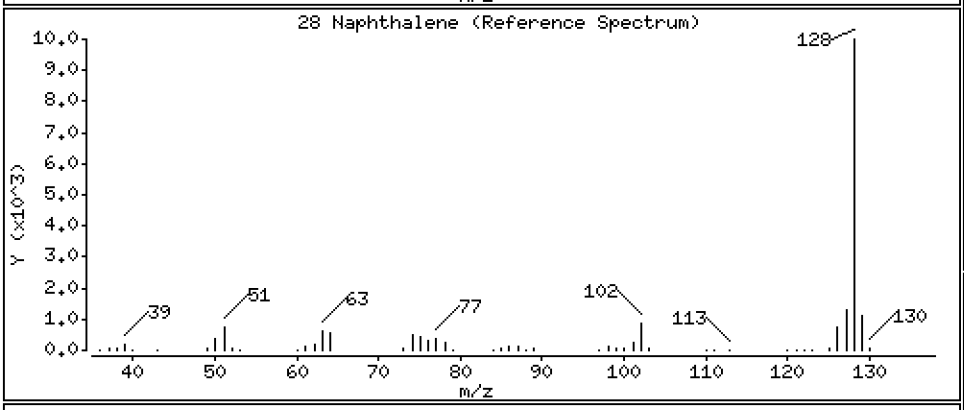
Concentration: 4.523 ug/mL

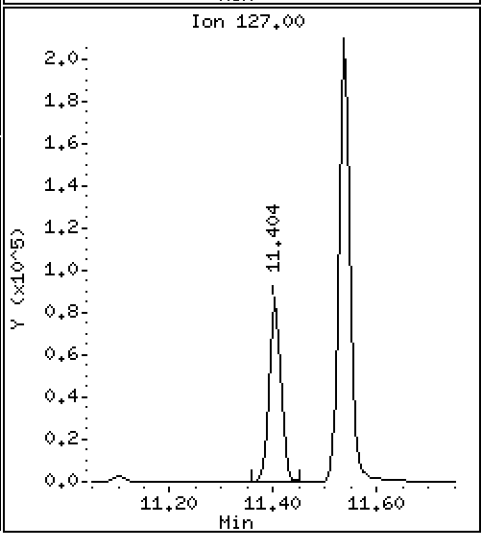


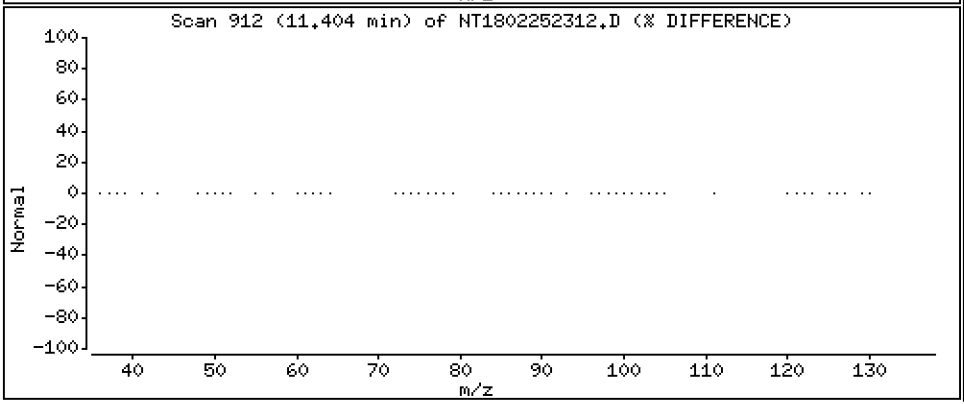












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

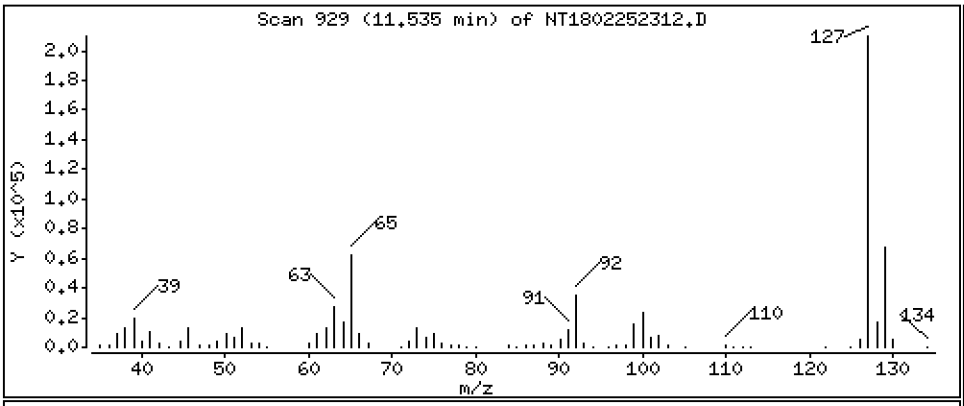
Operator: VTS

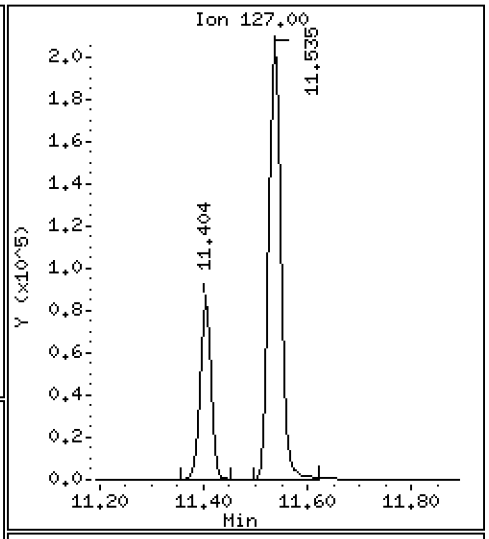
Column phase: ZB-5msi

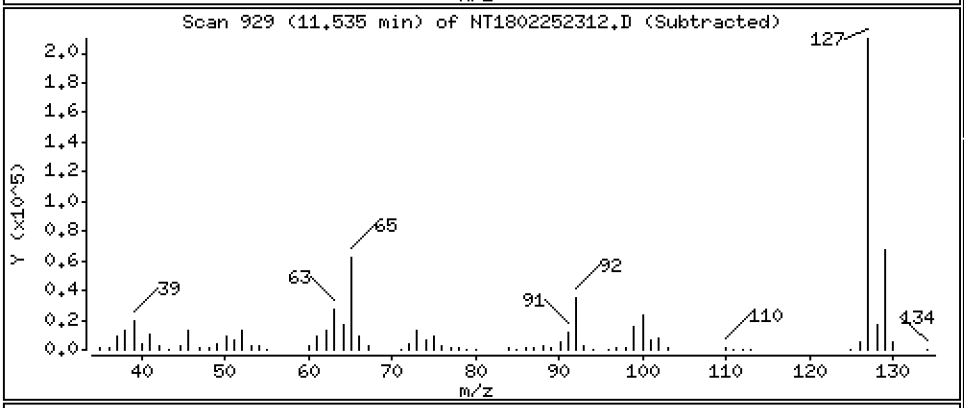
Column diameter: 0.25

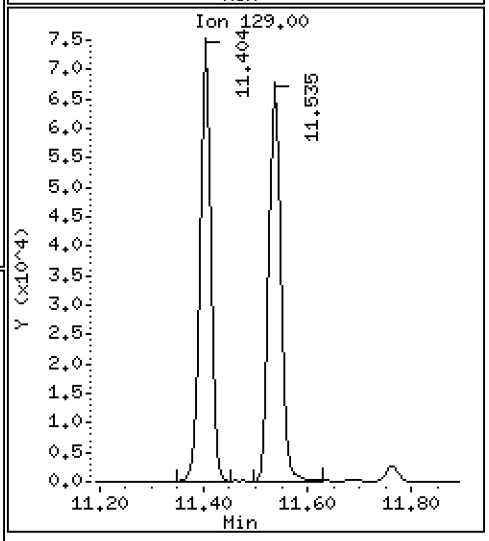
29 4-Chloroaniline

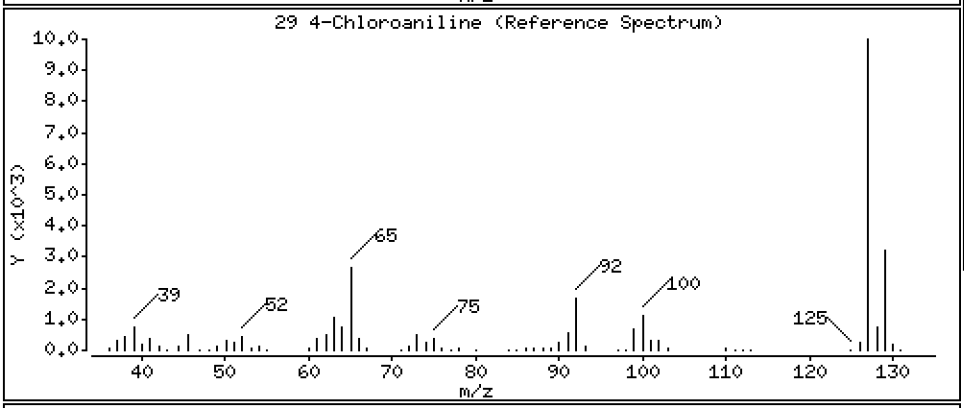
Concentration: 3.459 ug/mL

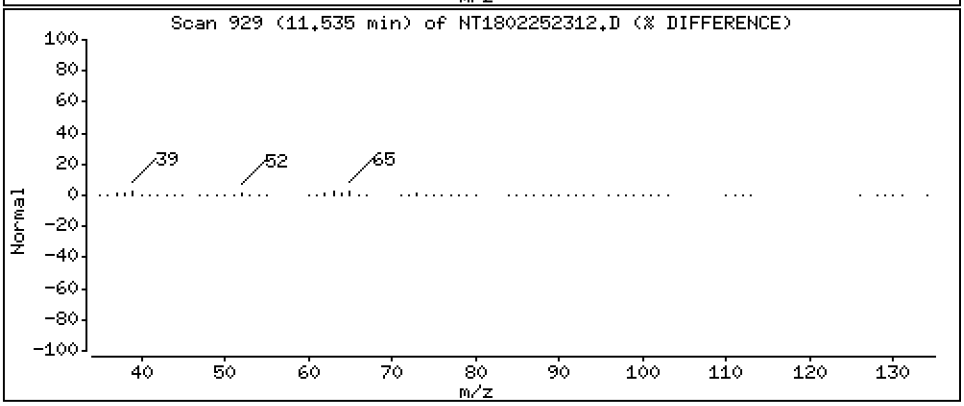












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

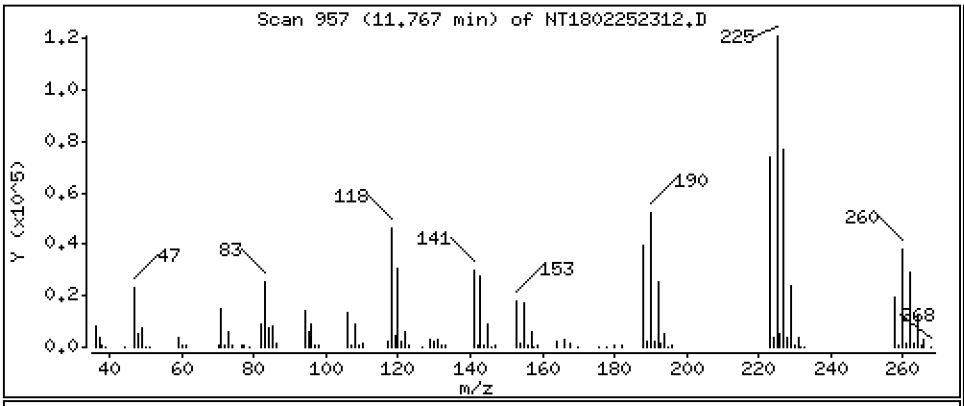
Operator: VTS

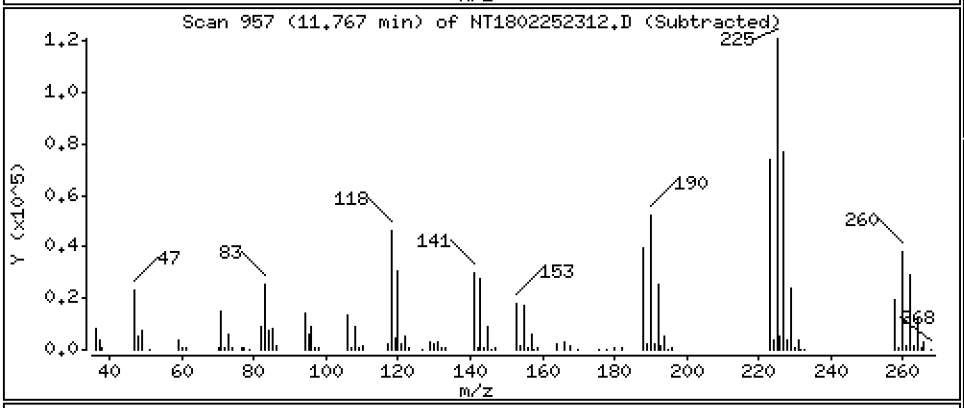
Column phase: ZB-5msi

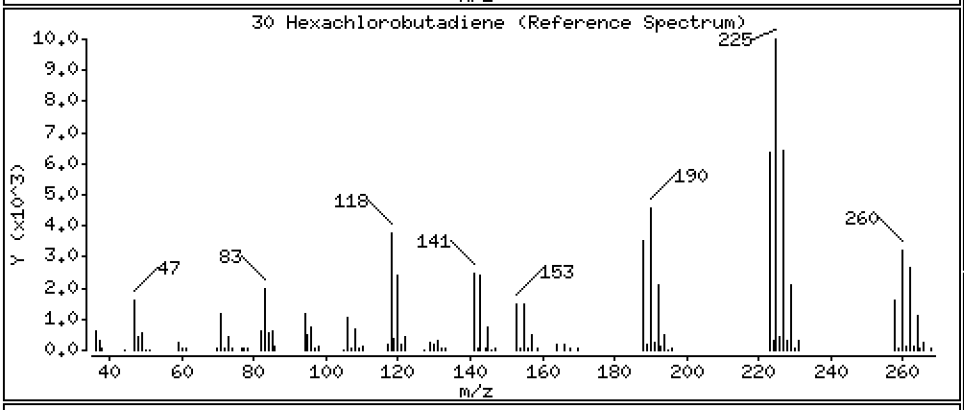
Column diameter: 0.25

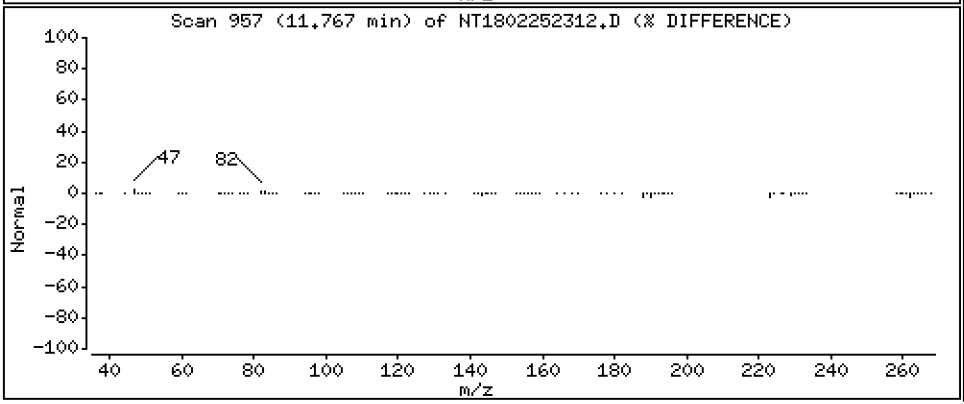
30 Hexachlorobutadiene

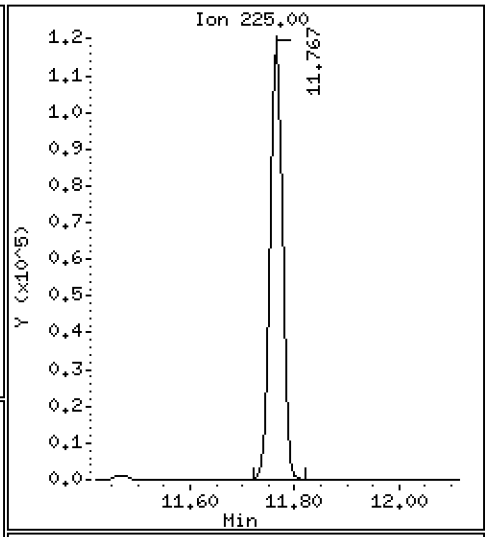
Concentration: 4.656 ug/mL

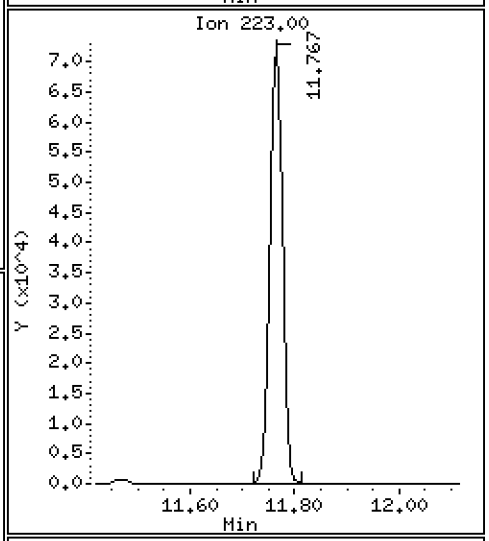


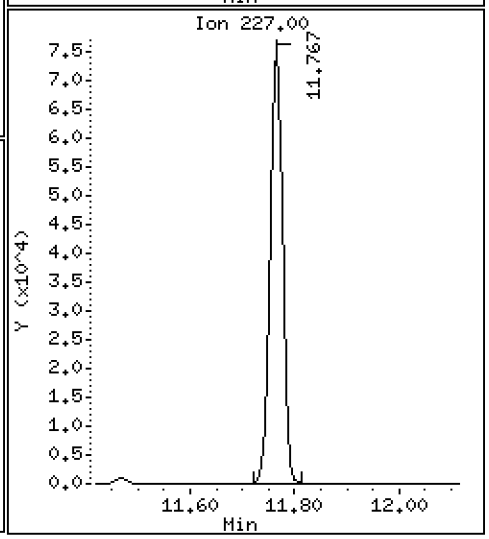












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

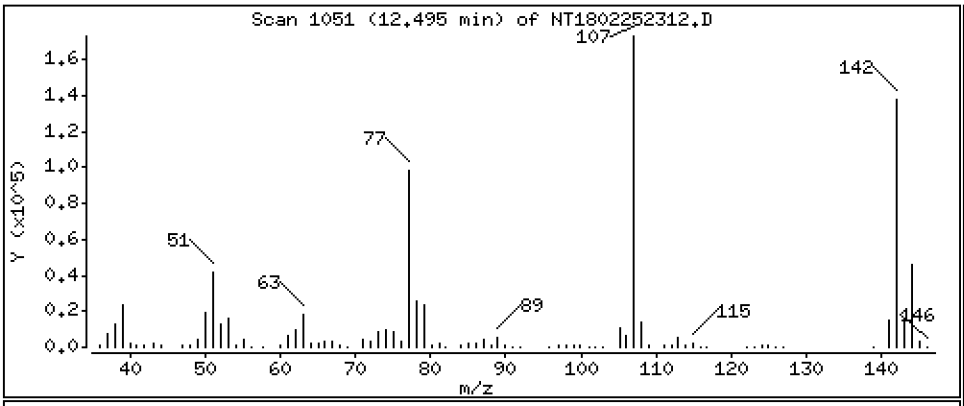
Operator: VTS

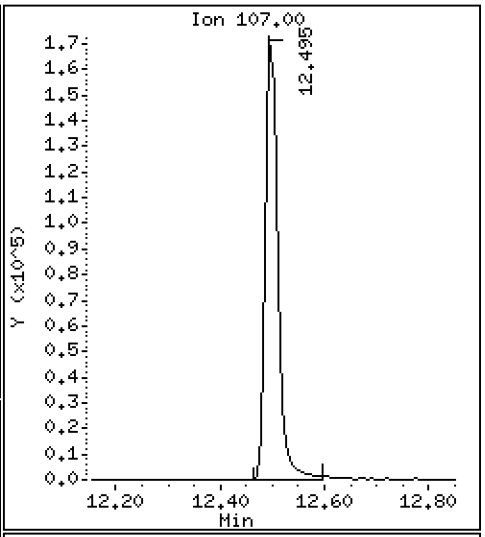
Column phase: ZB-5msi

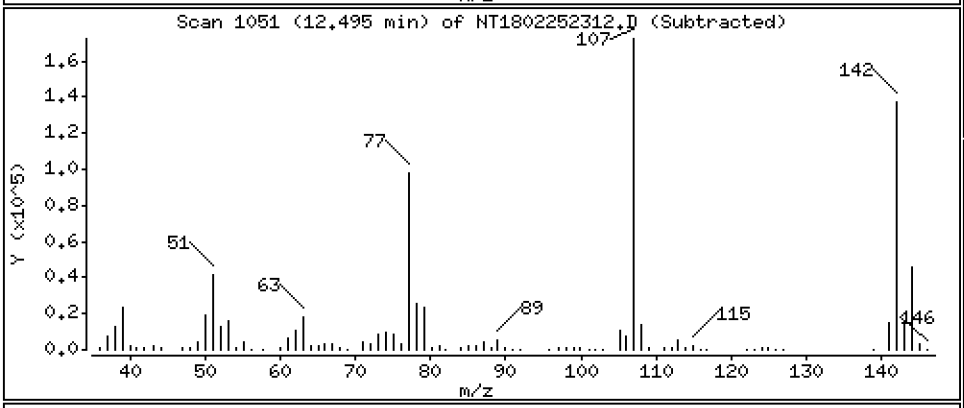
Column diameter: 0.25

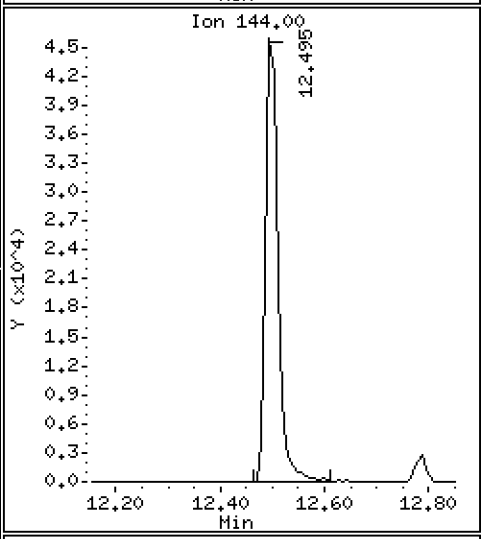
31 4-Chloro-3-methylphenol

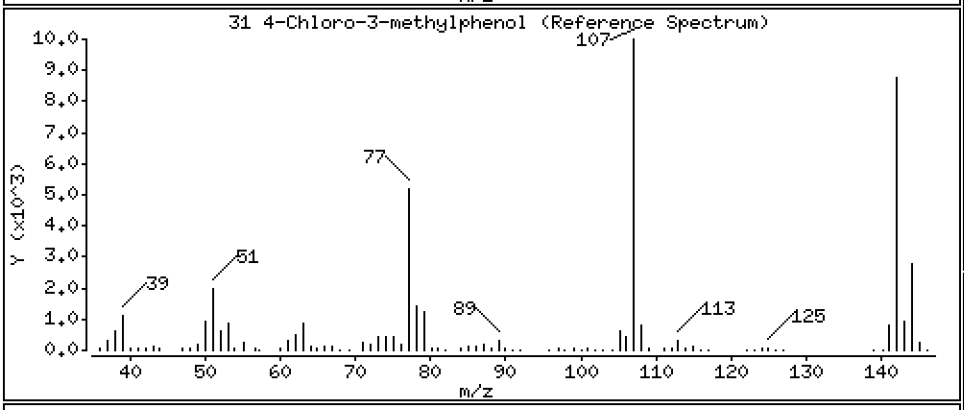
Concentration: 4.422 ug/mL

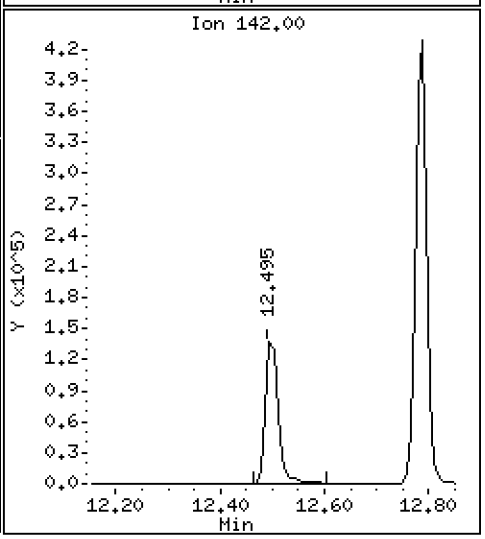


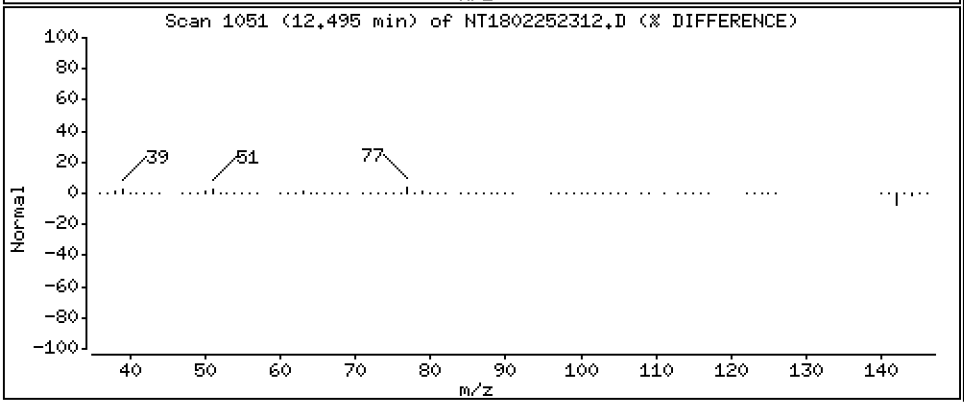












Date : 26-FEB-2023 04:06

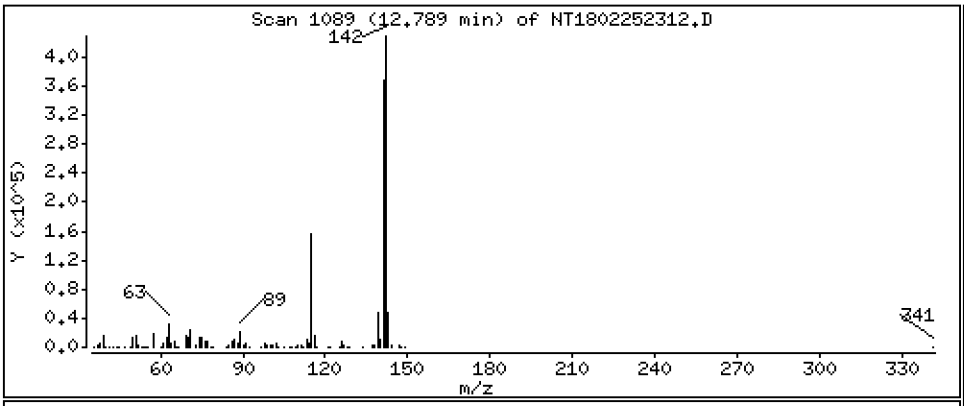
Client ID: Instrument: nt18.i

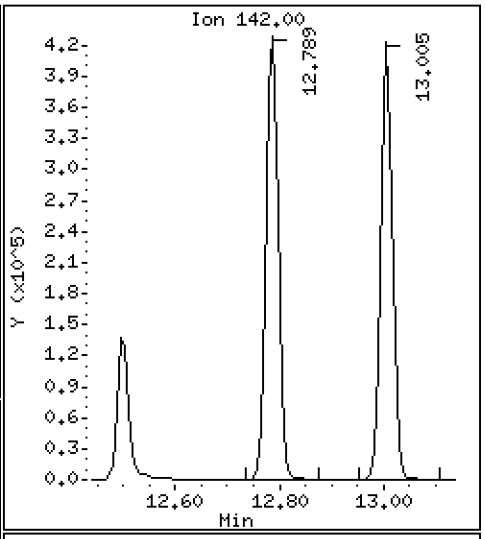
Sample Info: SLC0099-SCV1

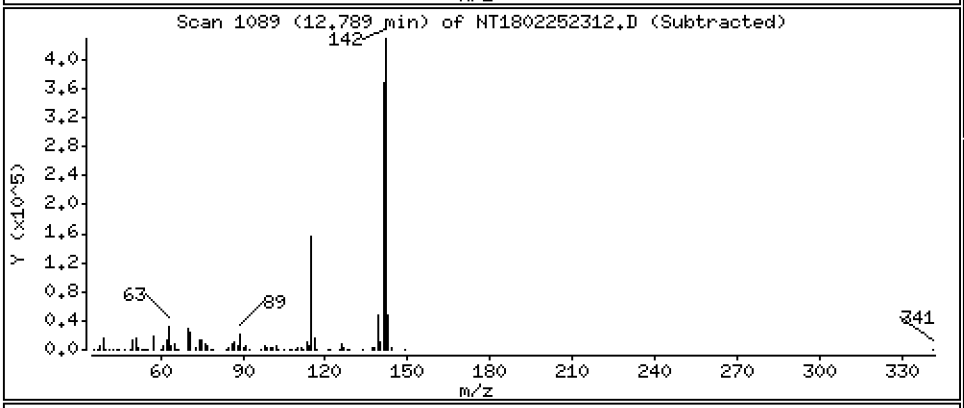
Operator: VTS

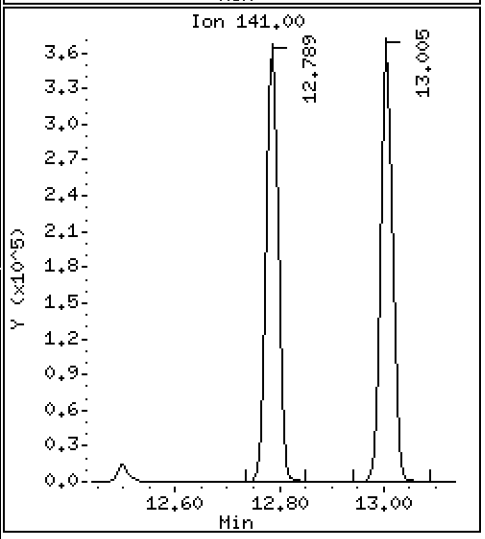
Column phase: ZB-5msi Column diameter: 0.25

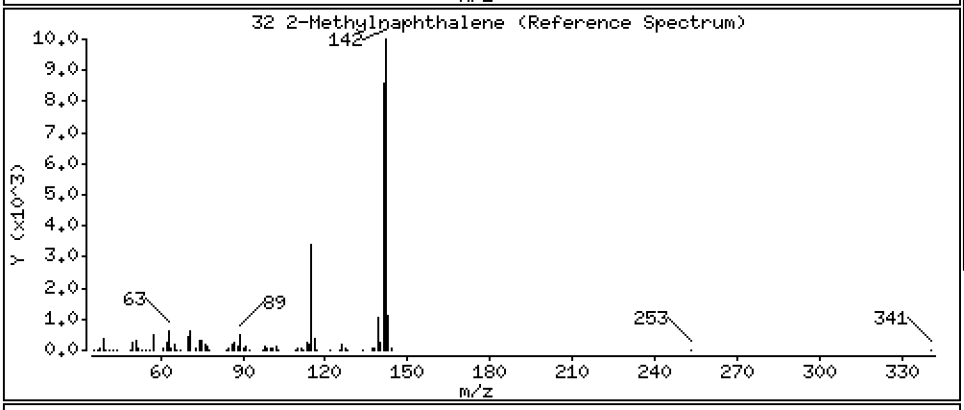
32 2-Methylnaphthalene Concentration: 4.225 ug/mL

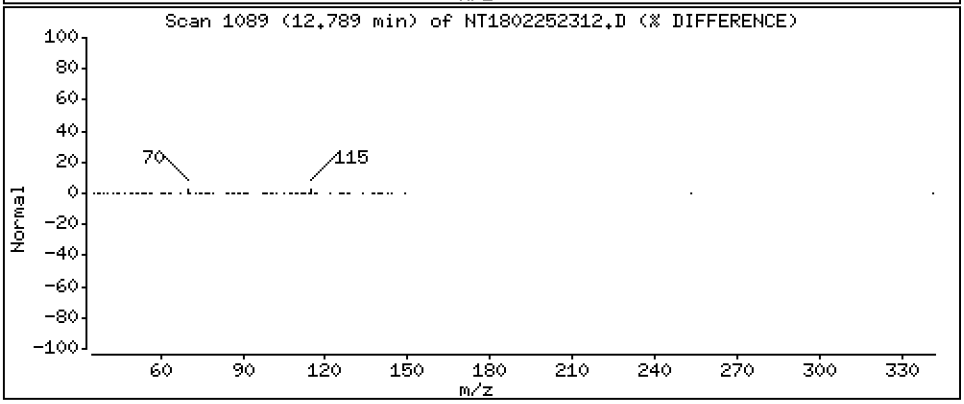












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

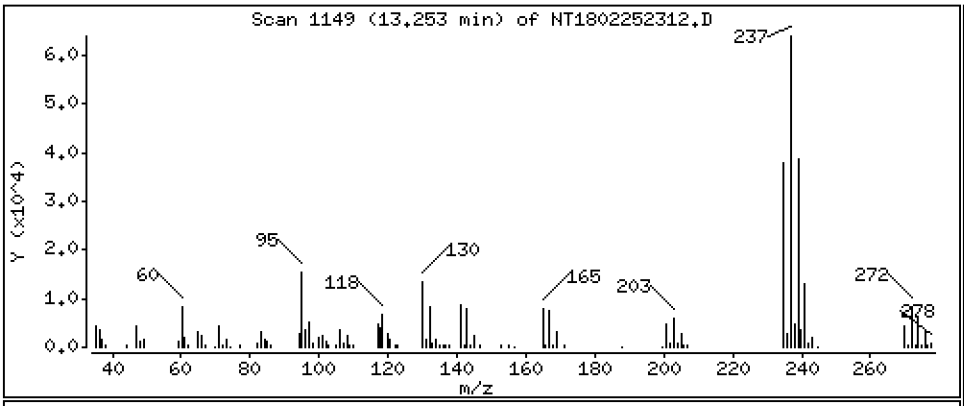
Operator: VTS

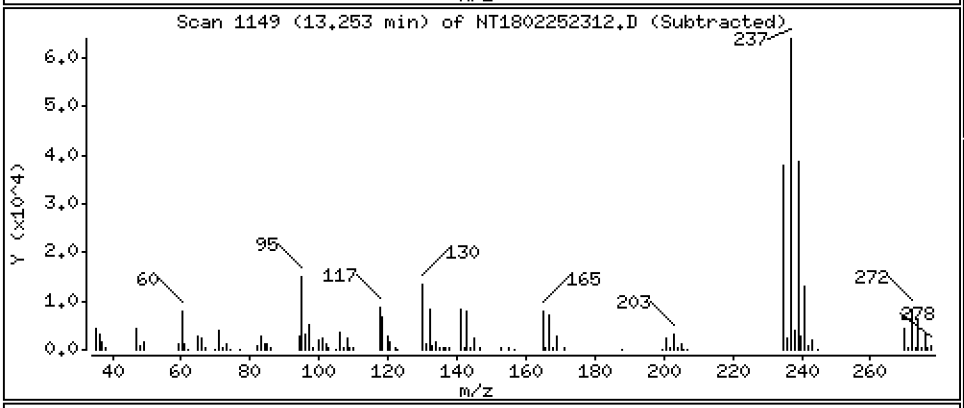
Column phase: ZB-5msi

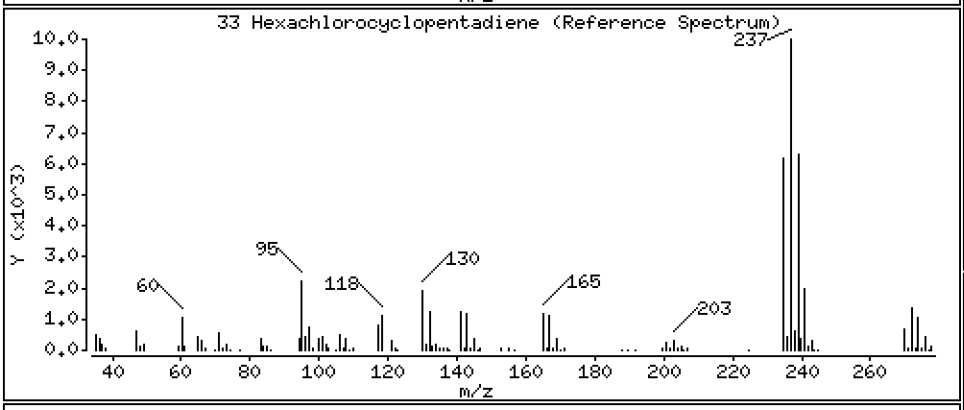
Column diameter: 0.25

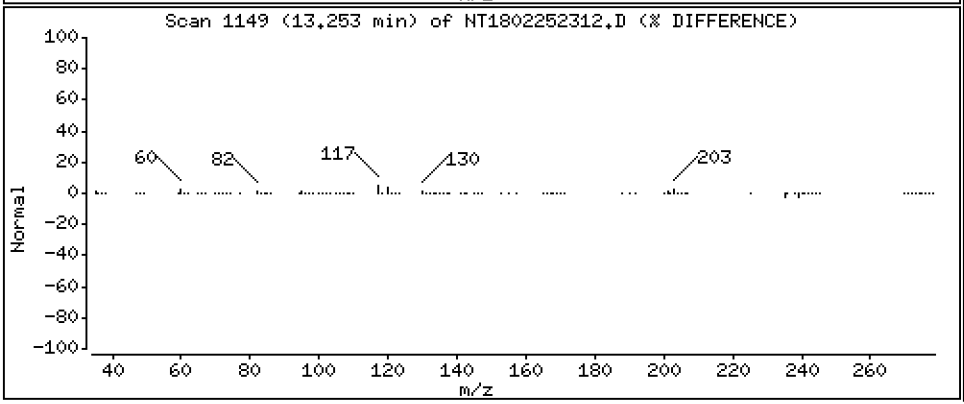
33 Hexachlorocyclopentadiene

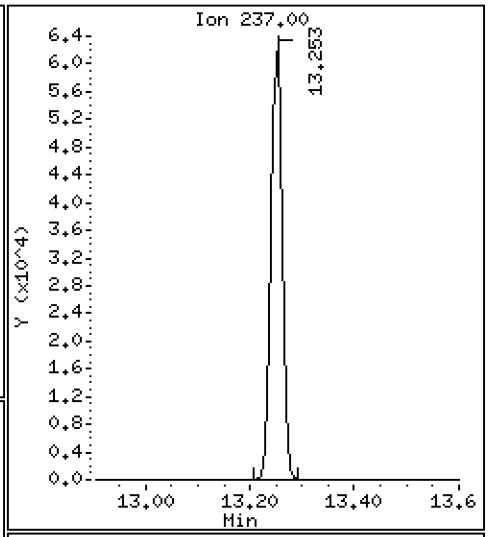
Concentration: 3.202 ug/mL

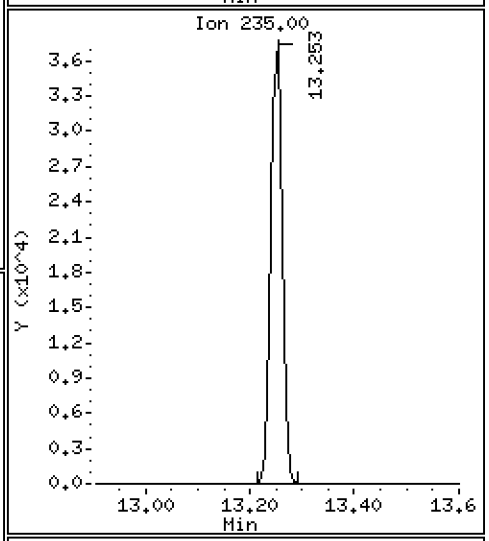


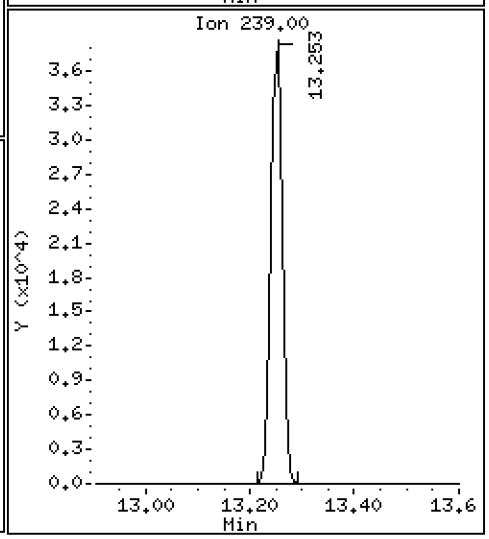












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

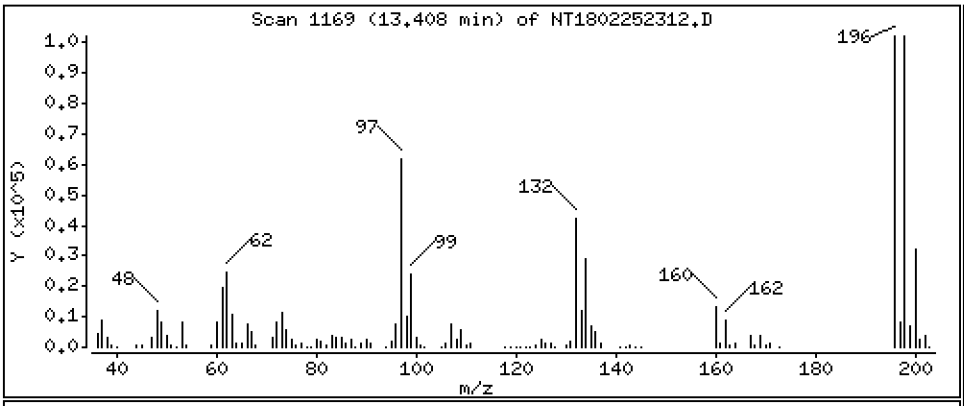
Operator: VTS

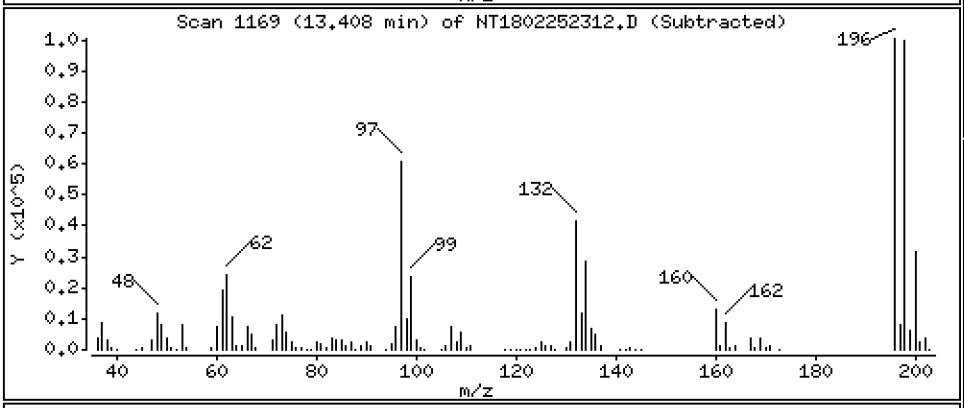
Column phase: ZB-5msi

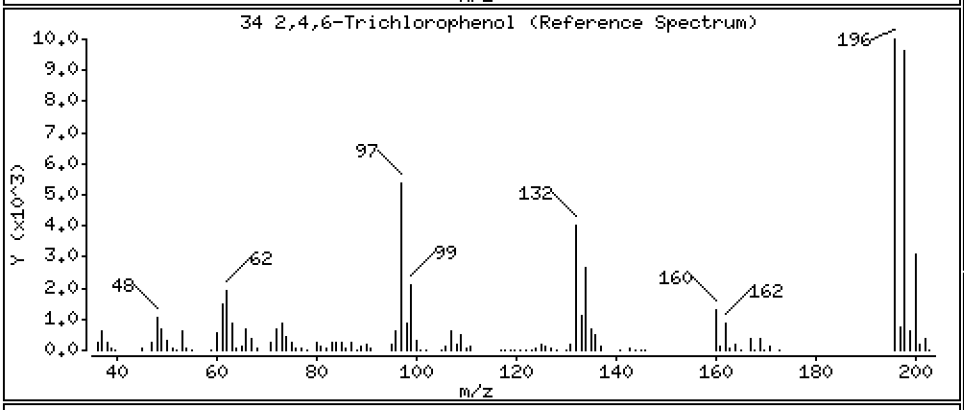
Column diameter: 0.25

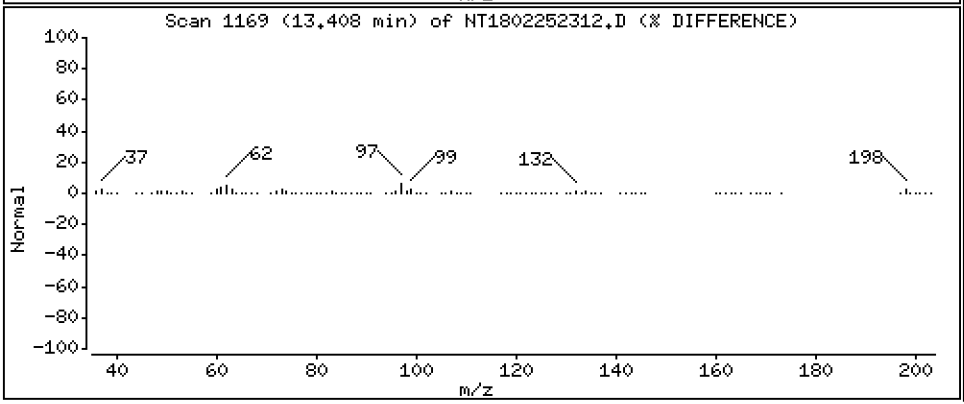
34 2,4,6-Trichlorophenol

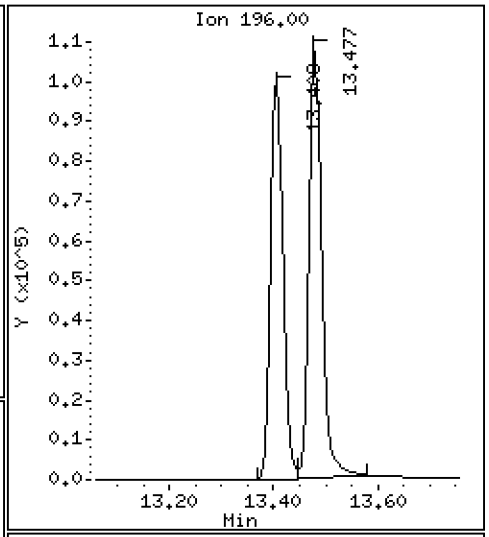
Concentration: 4.148 ug/mL

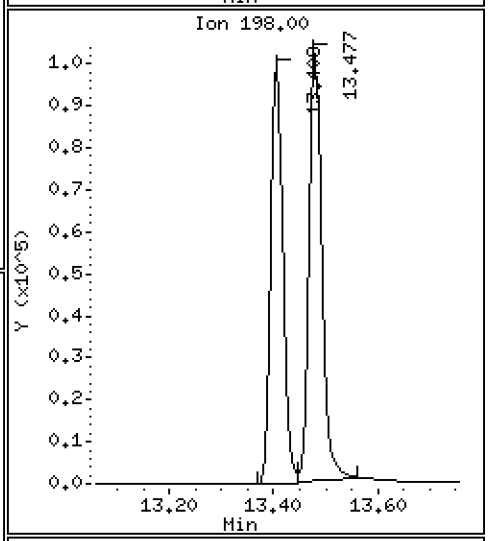


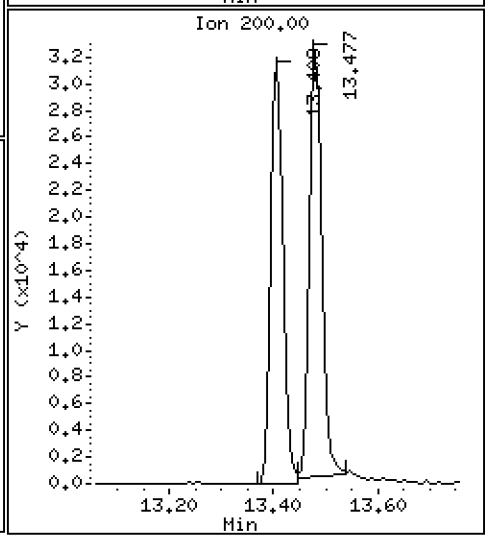












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

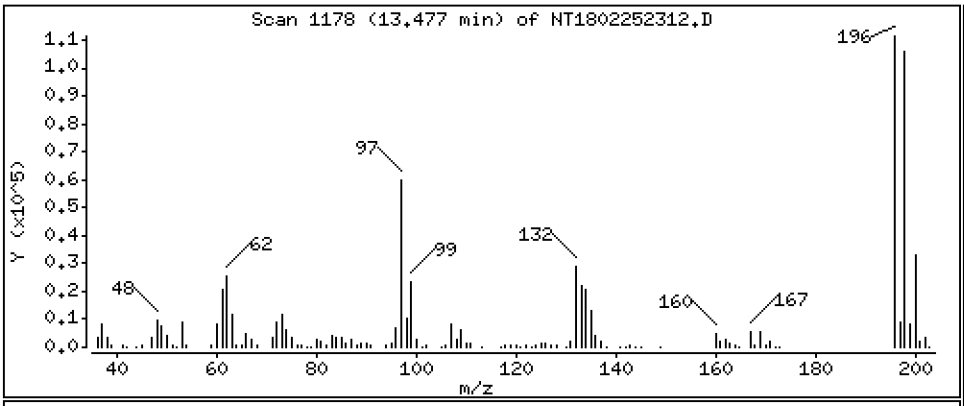
Operator: VTS

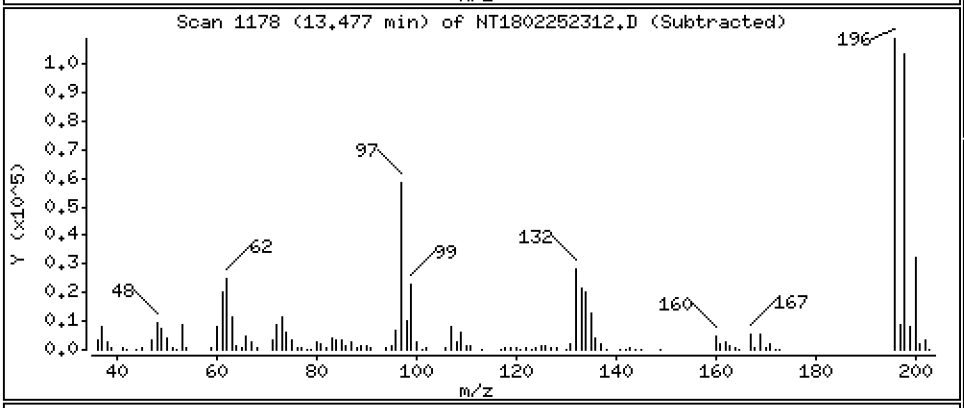
Column phase: ZB-5msi

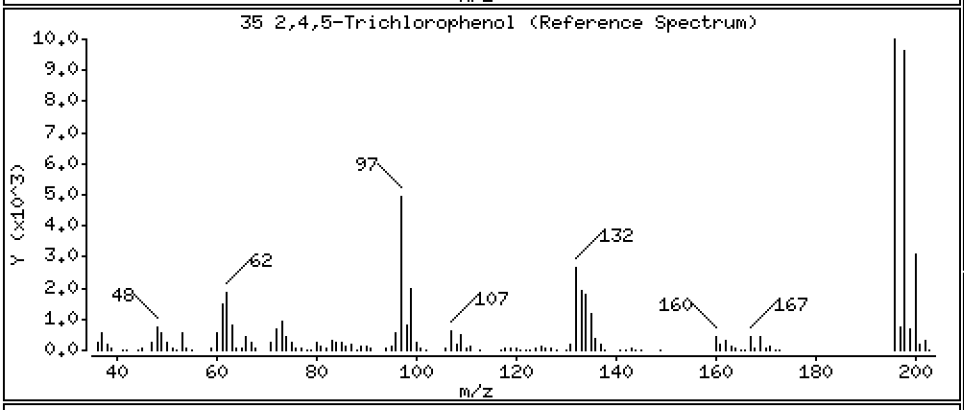
Column diameter: 0.25

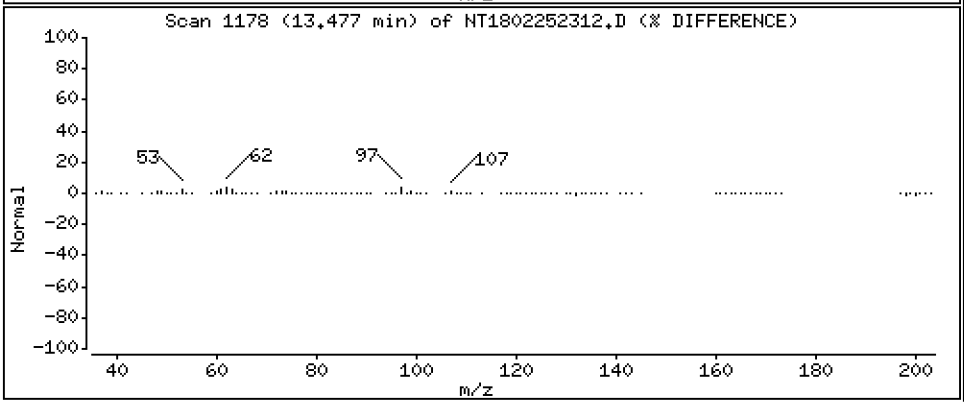
35 2,4,5-Trichlorophenol

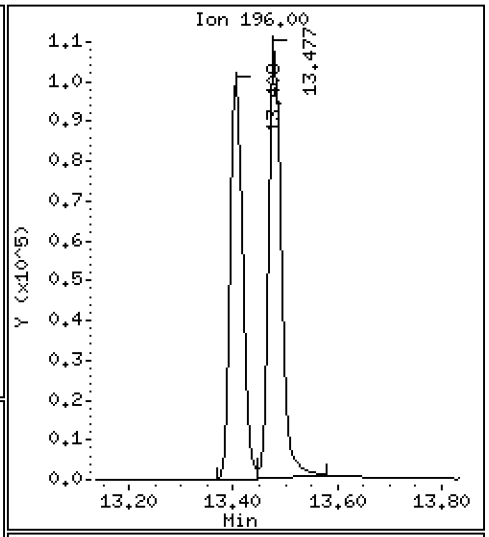
Concentration: 4.100 ug/mL

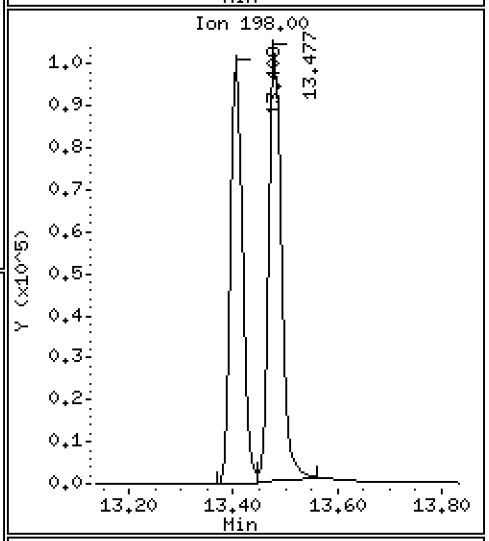


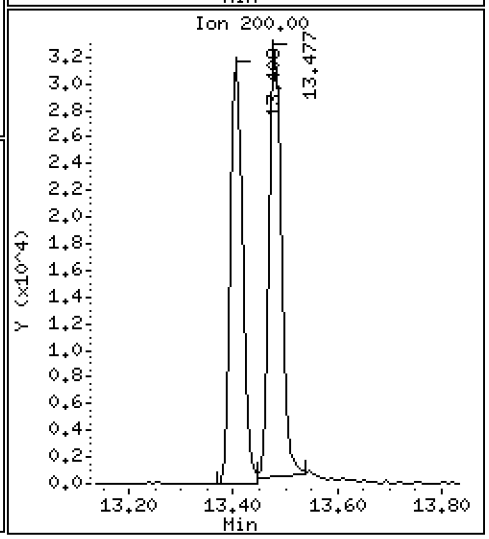












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

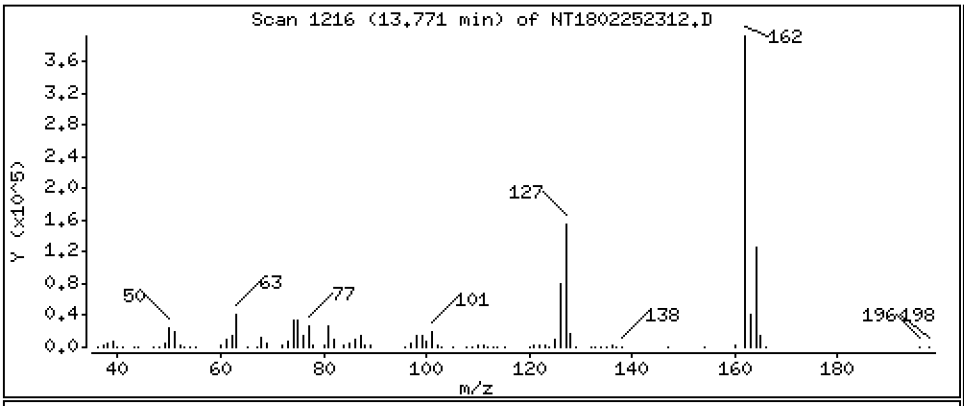
Operator: VTS

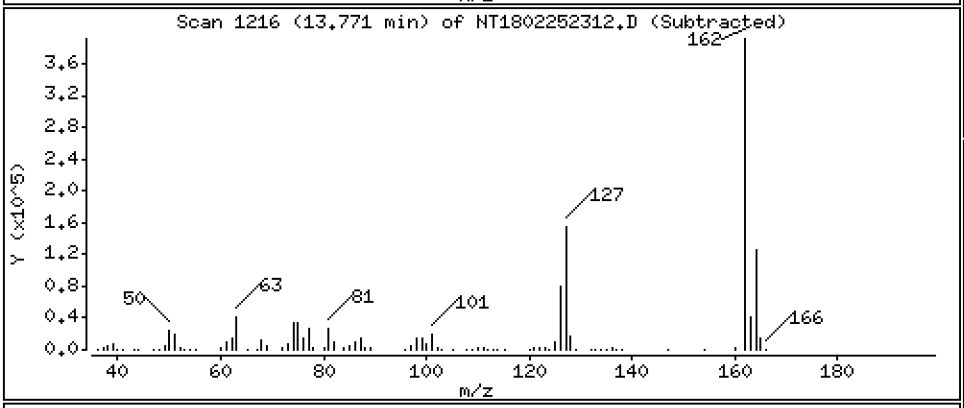
Column phase: ZB-5msi

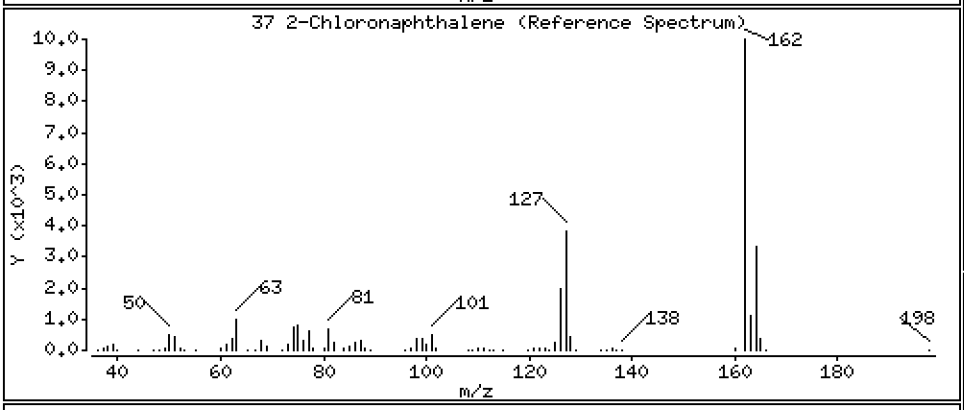
Column diameter: 0.25

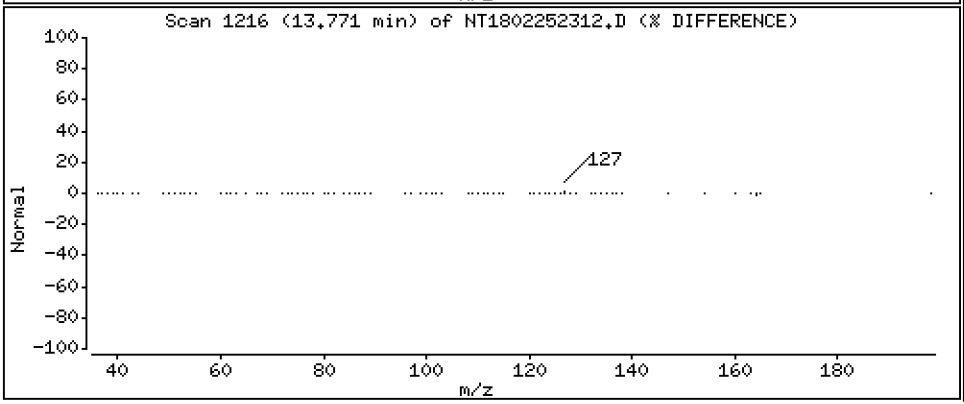
37 2-Chloronaphthalene

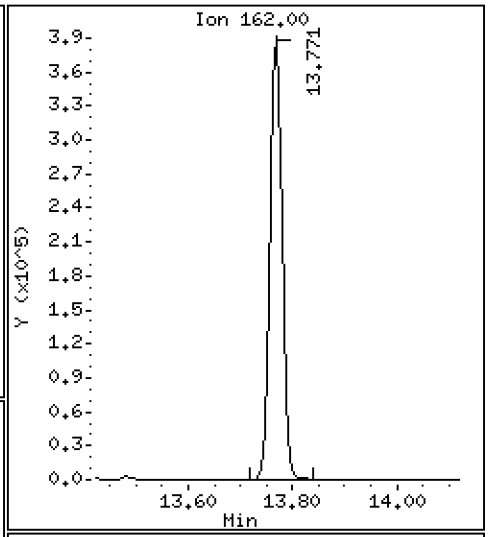
Concentration: 4.552 ug/mL

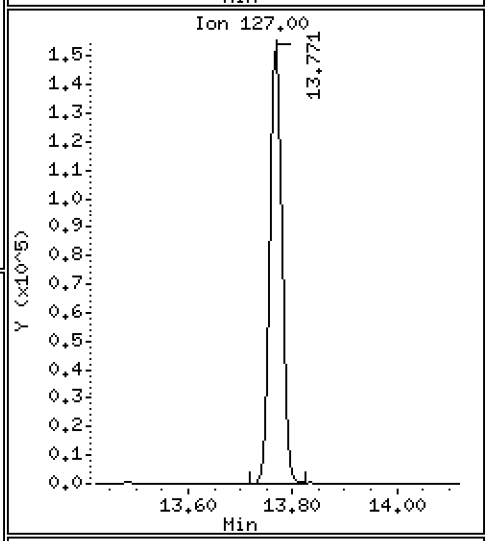


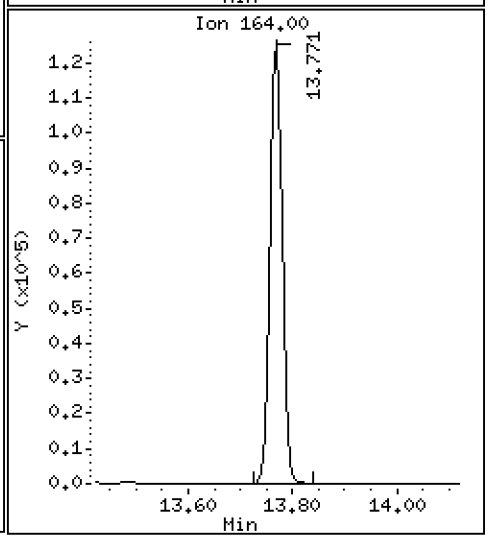












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

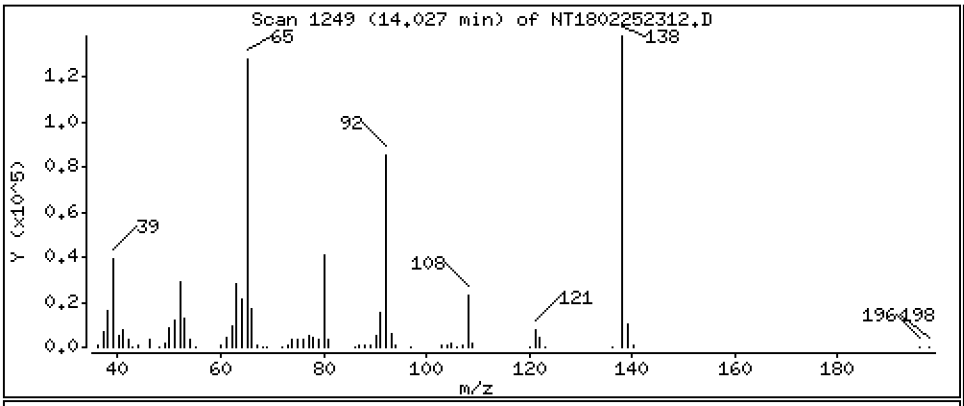
Operator: VTS

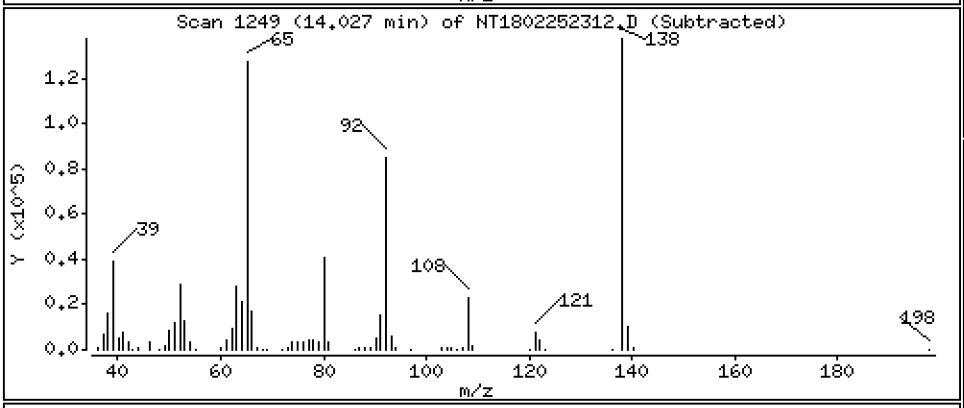
Column phase: ZB-5msi

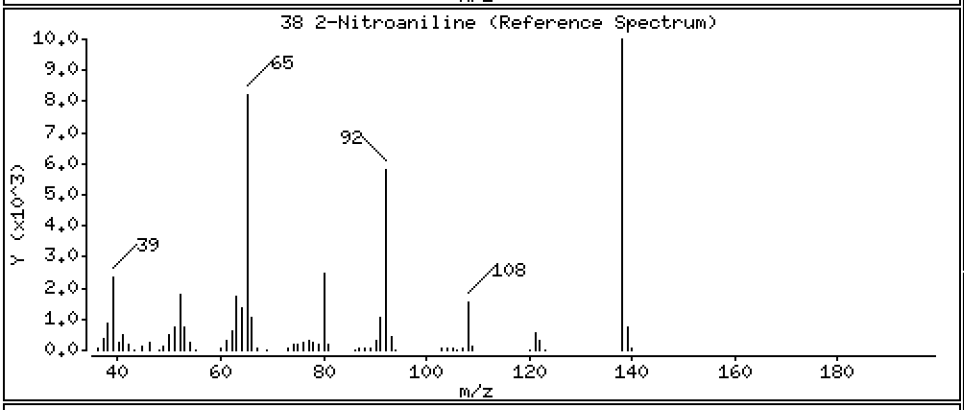
Column diameter: 0.25

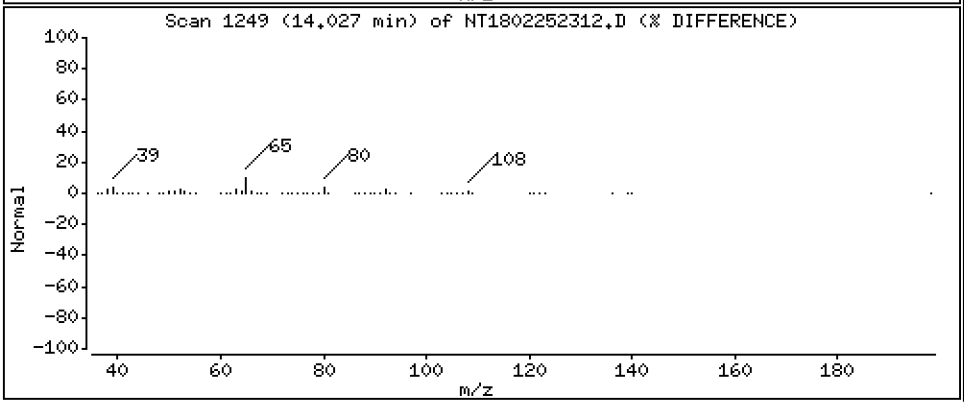
38 2-Nitroaniline

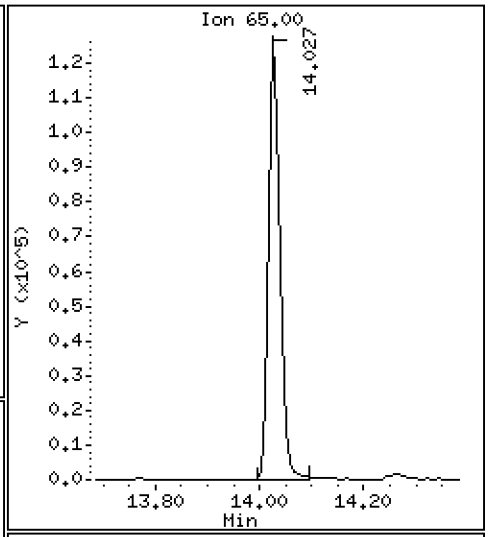
Concentration: 4.495 ug/mL

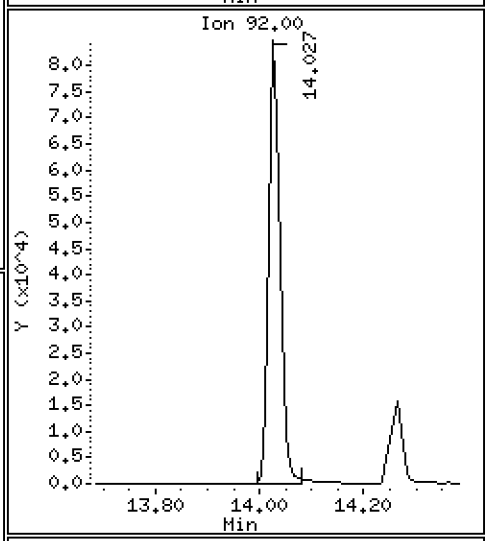


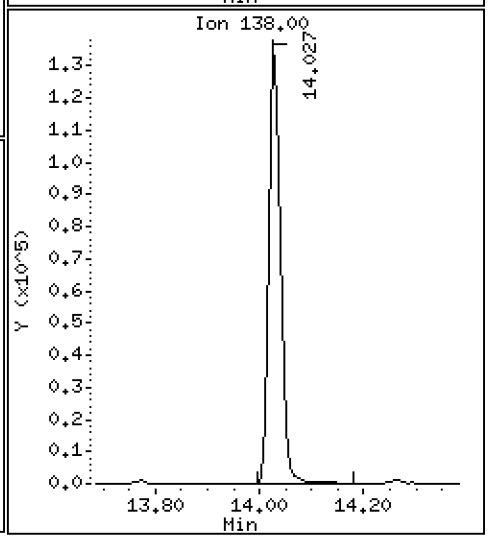












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

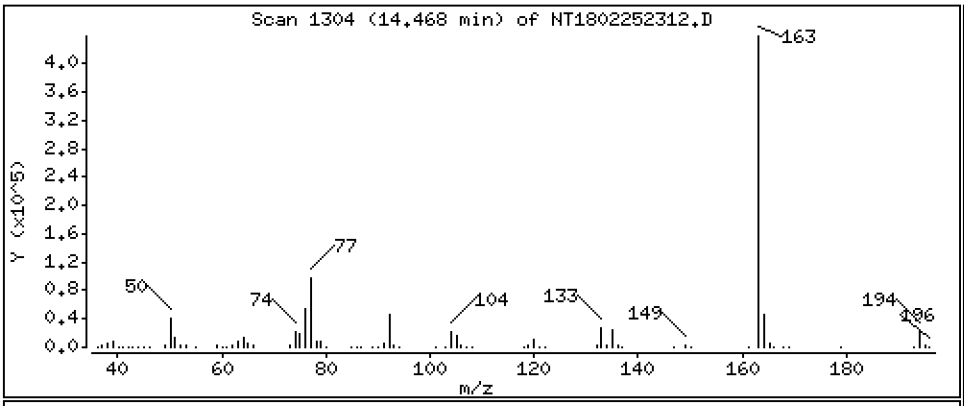
Operator: VTS

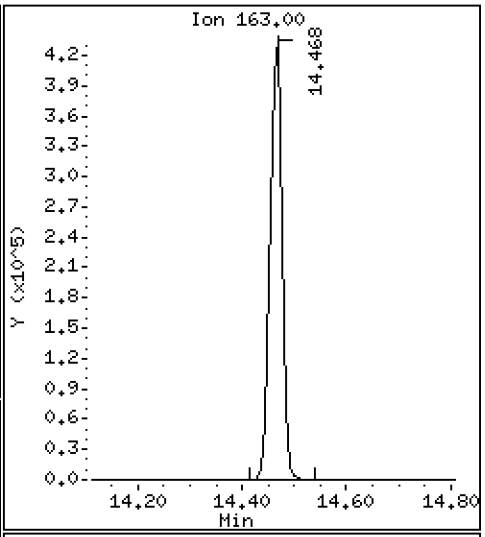
Column phase: ZB-5msi

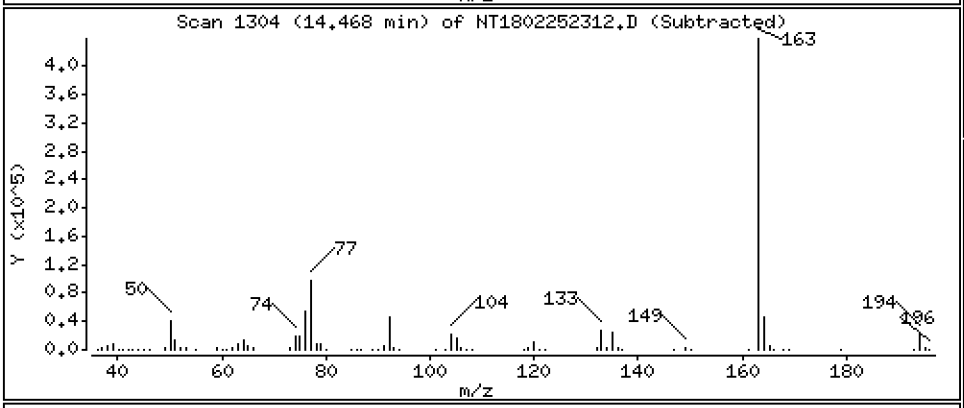
Column diameter: 0.25

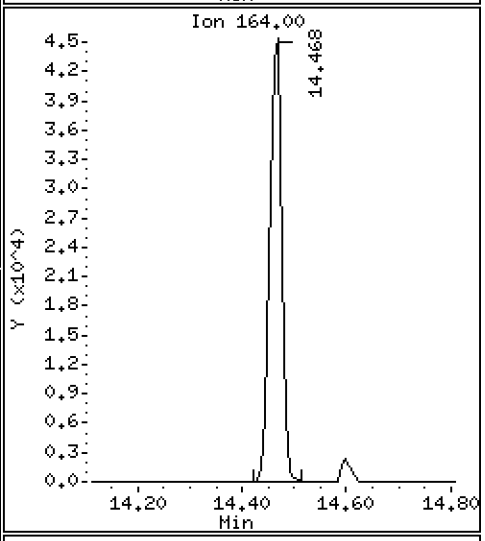
39 Dimethylphthalate

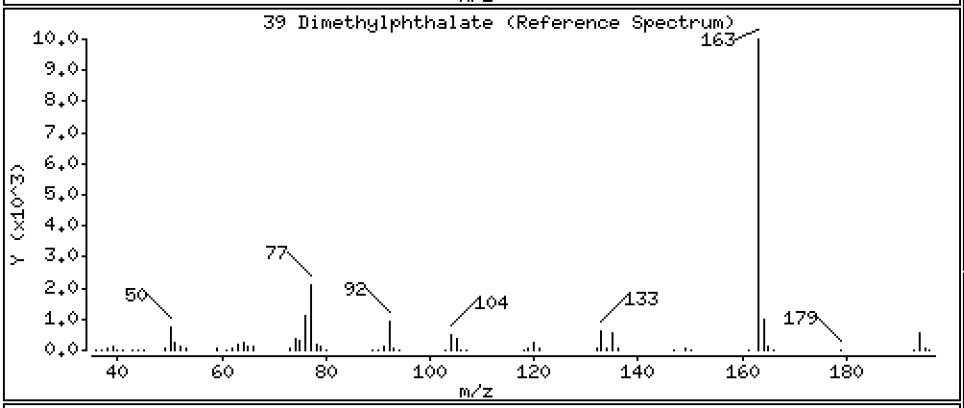
Concentration: 4.739 ug/mL

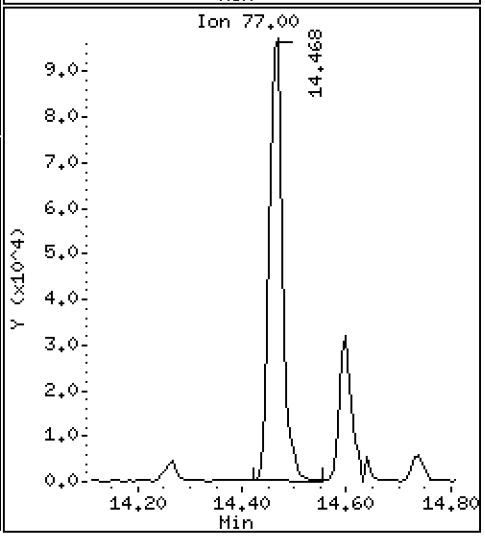


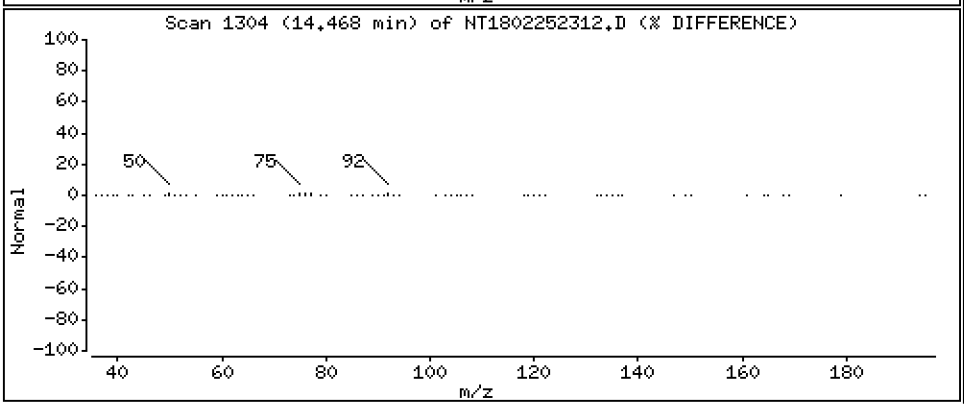












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

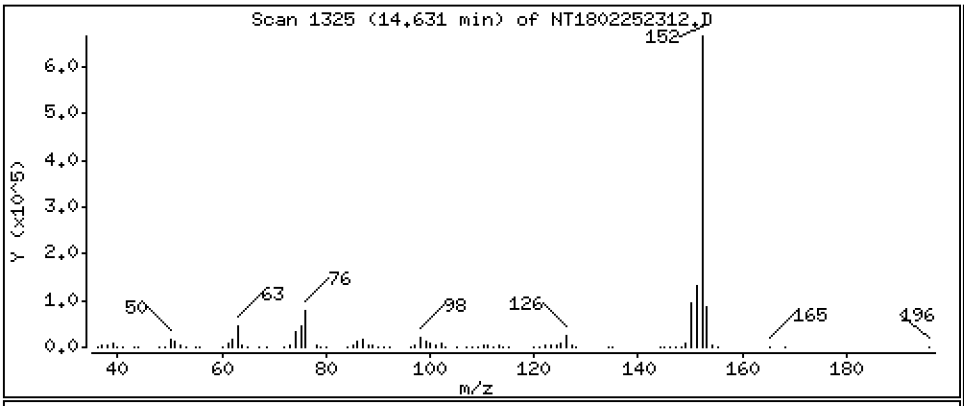
Operator: VTS

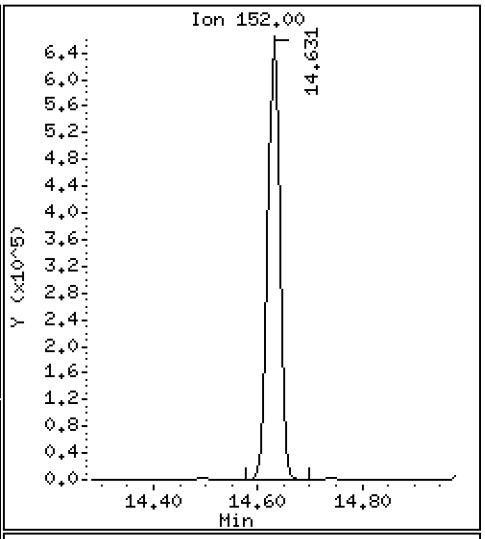
Column phase: ZB-5msi

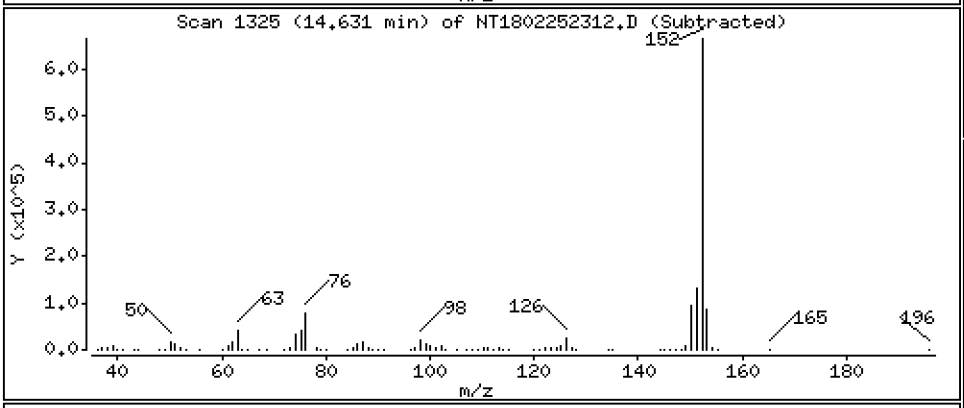
Column diameter: 0.25

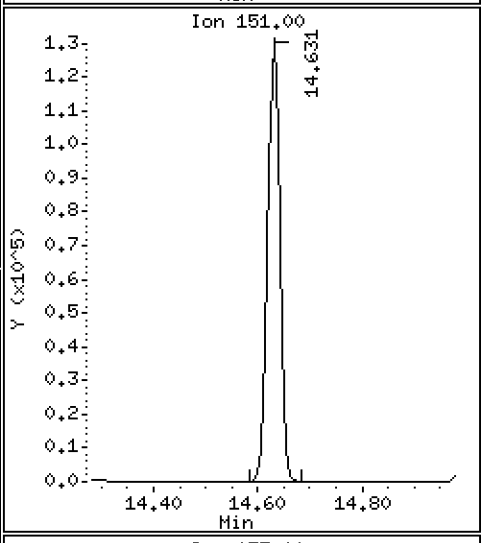
40 Acenaphthylene

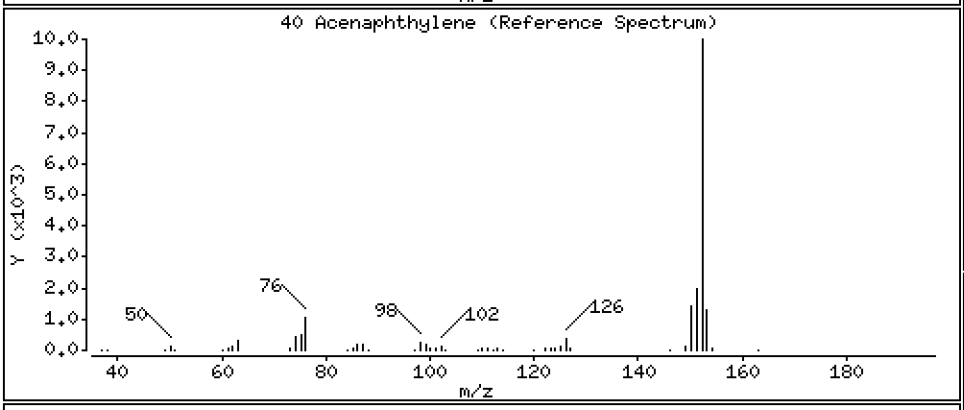
Concentration: 4.591 ug/mL

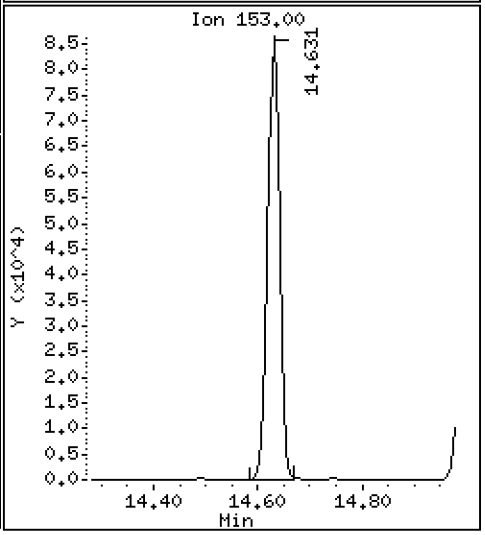


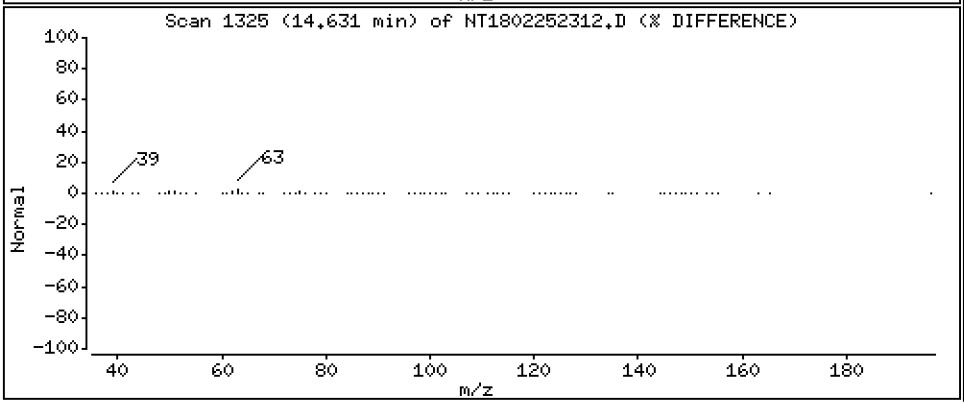












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

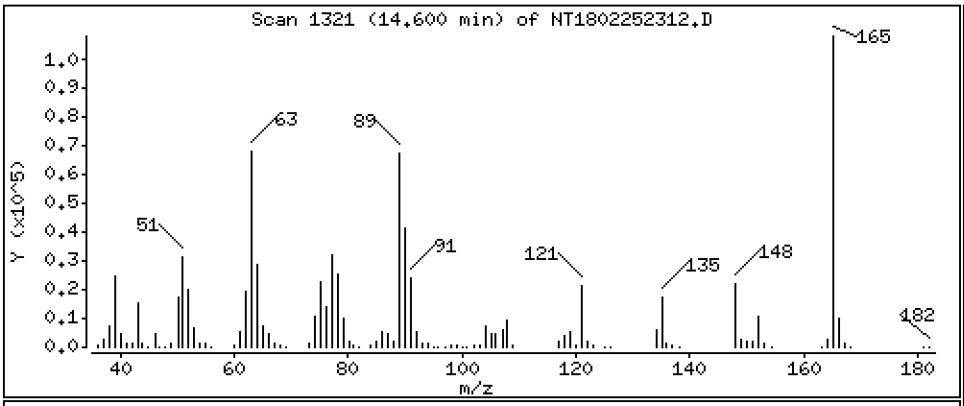
Operator: VTS

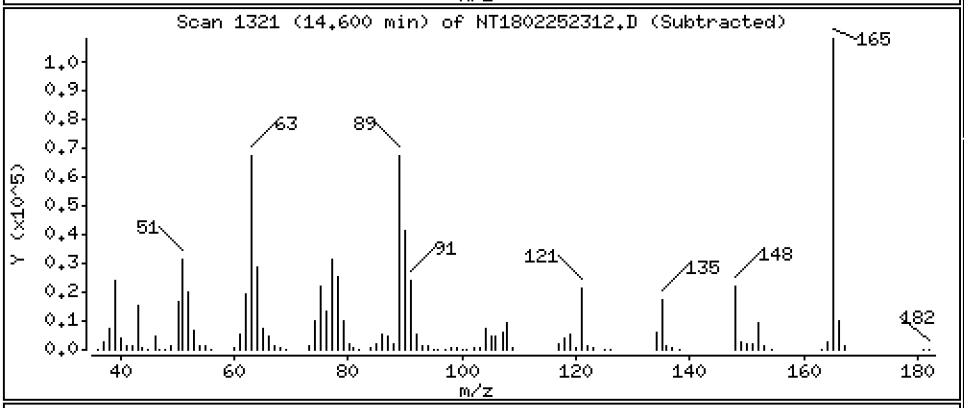
Column phase: ZB-5msi

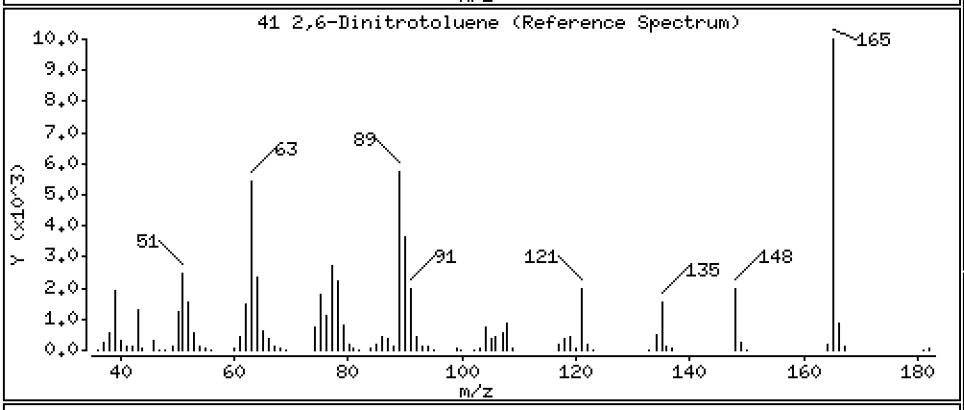
Column diameter: 0.25

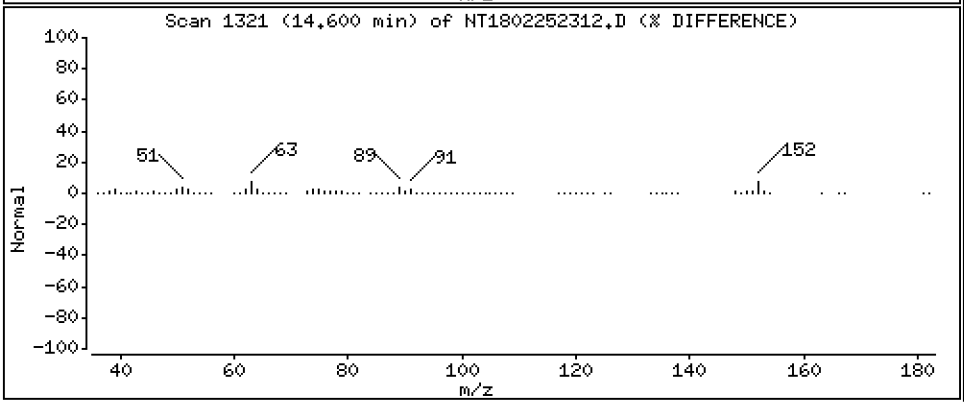
41 2,6-Dinitrotoluene

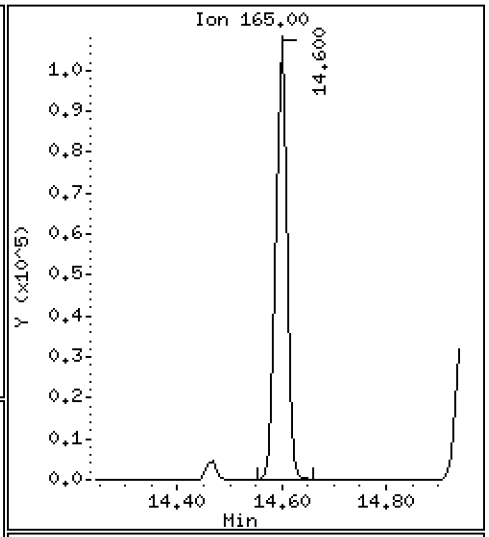
Concentration: 4.850 ug/mL

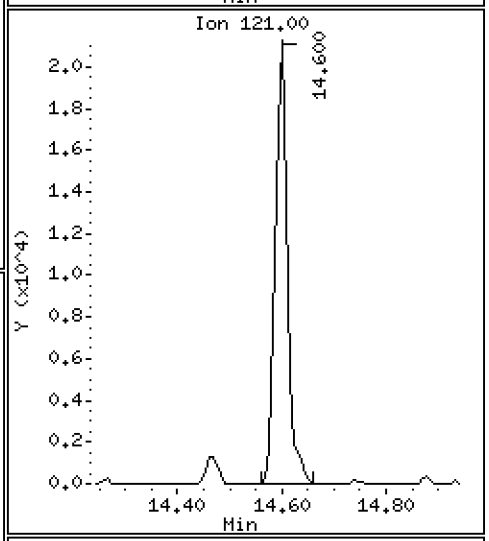


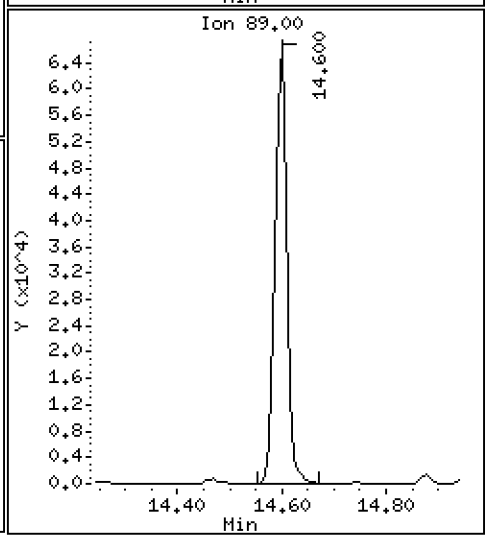












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

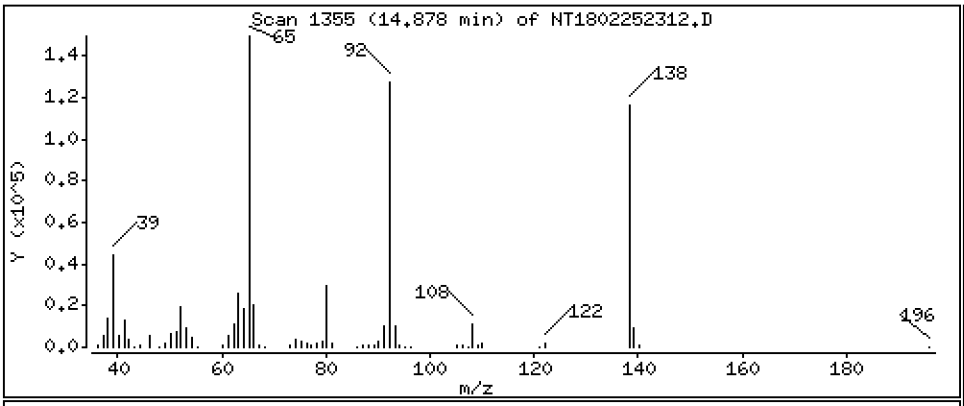
Operator: VTS

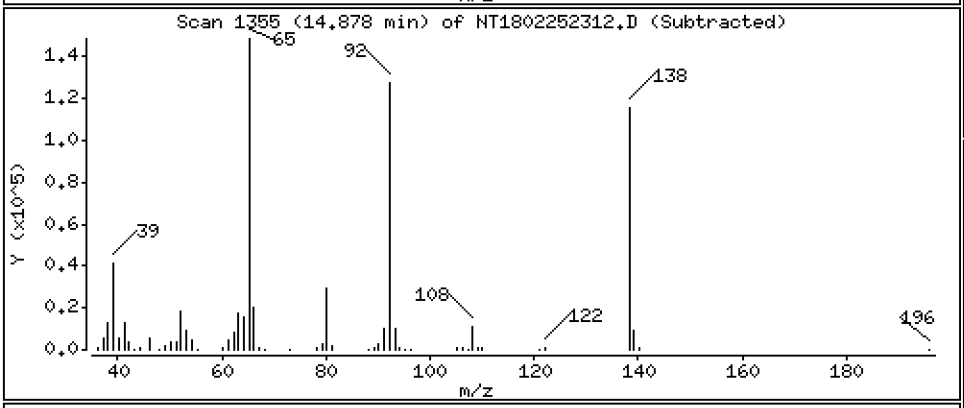
Column phase: ZB-5msi

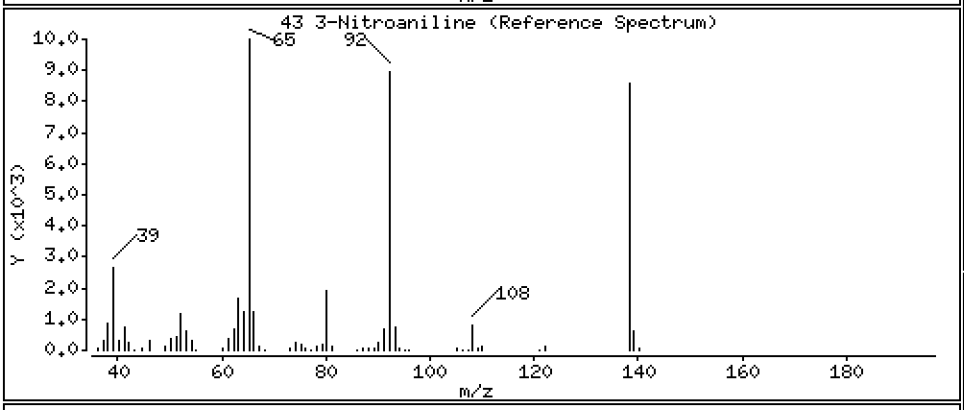
Column diameter: 0.25

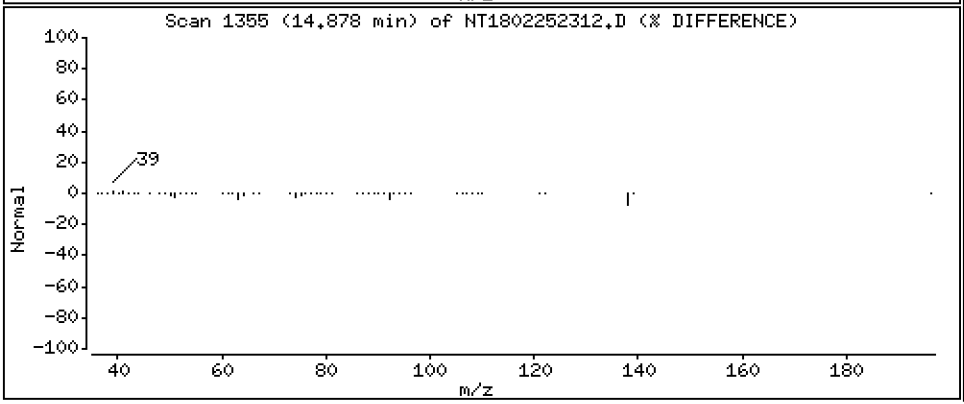
43 3-Nitroaniline

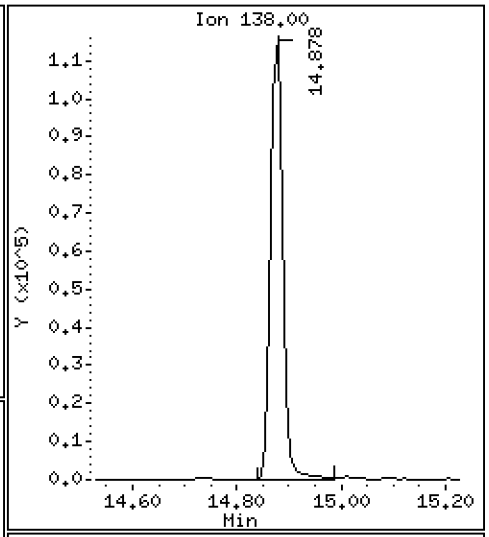
Concentration: 4.643 ug/mL

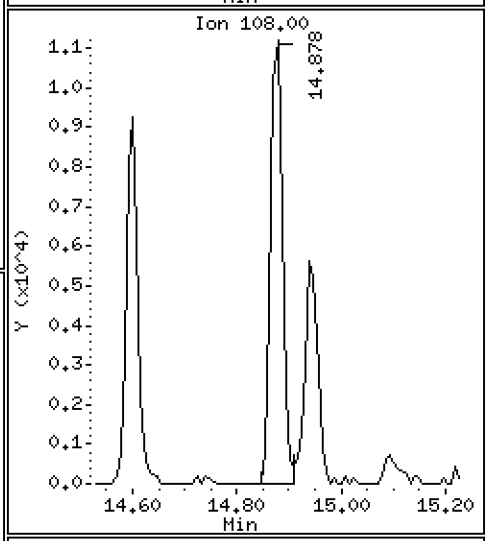


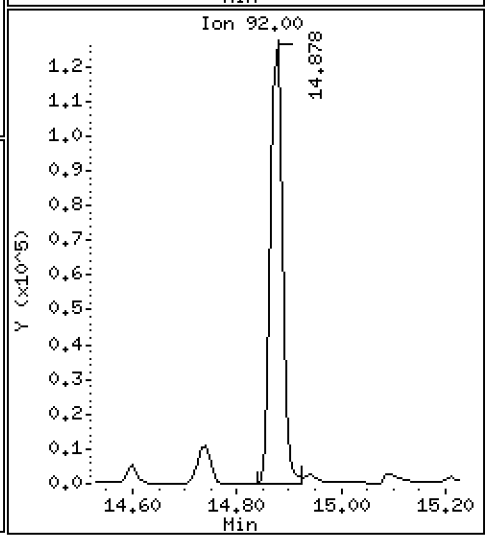












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

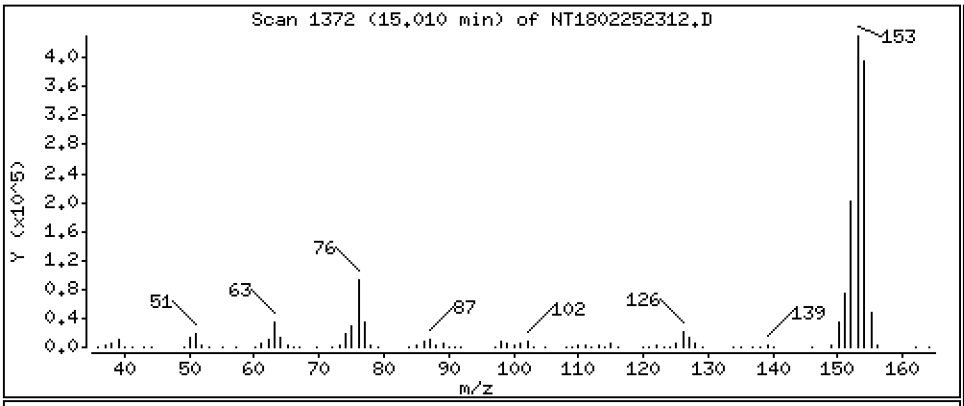
Operator: VTS

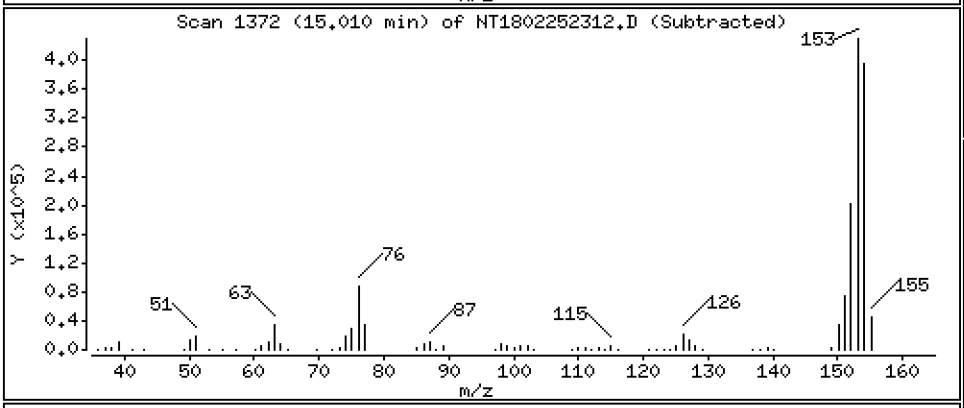
Column phase: ZB-5msi

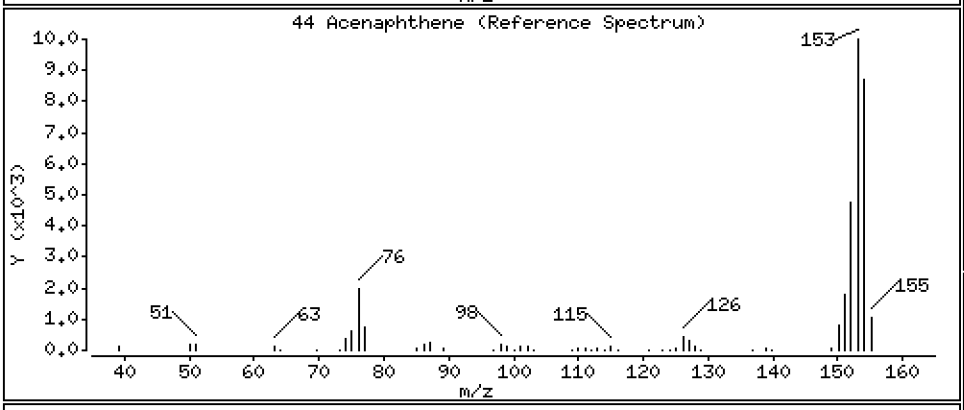
Column diameter: 0.25

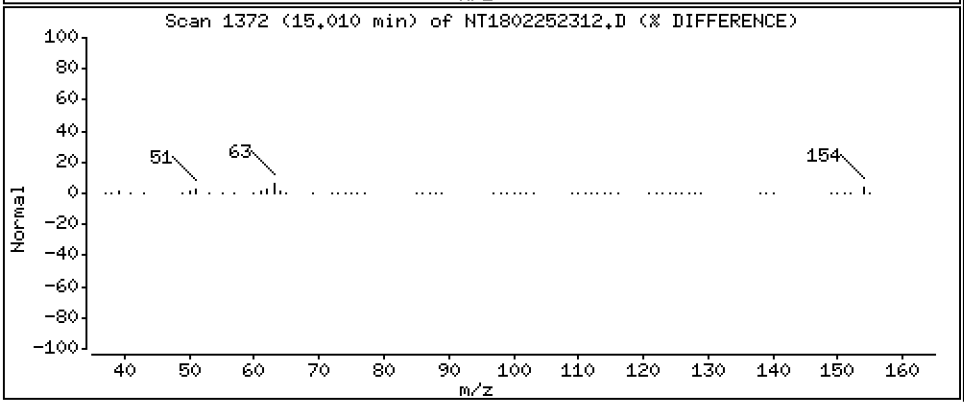
44 Acenaphthene

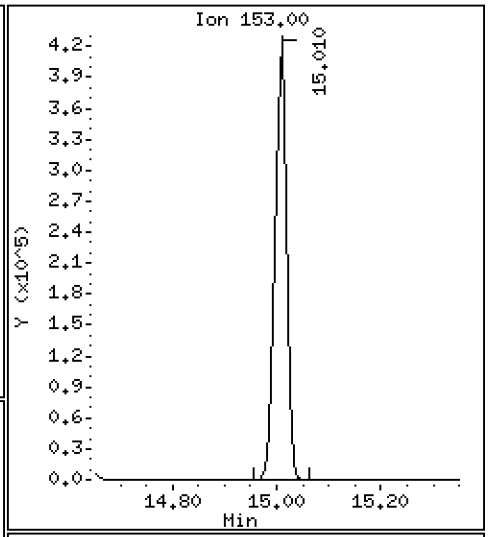
Concentration: 4.530 ug/mL

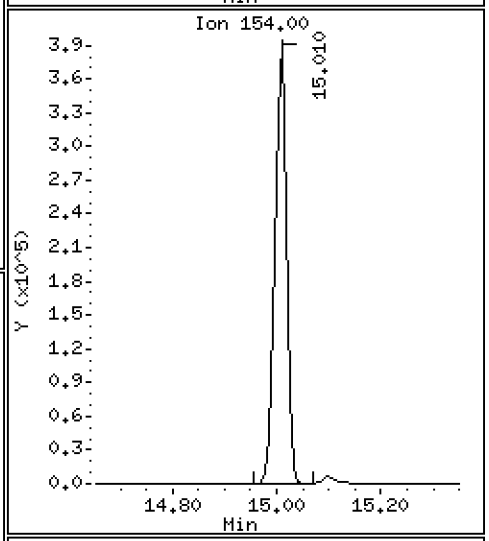


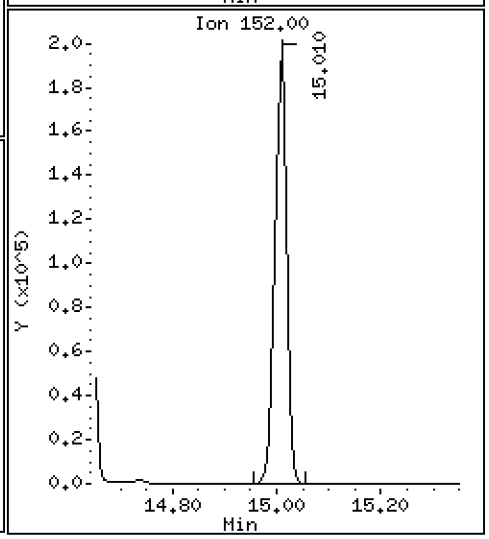












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

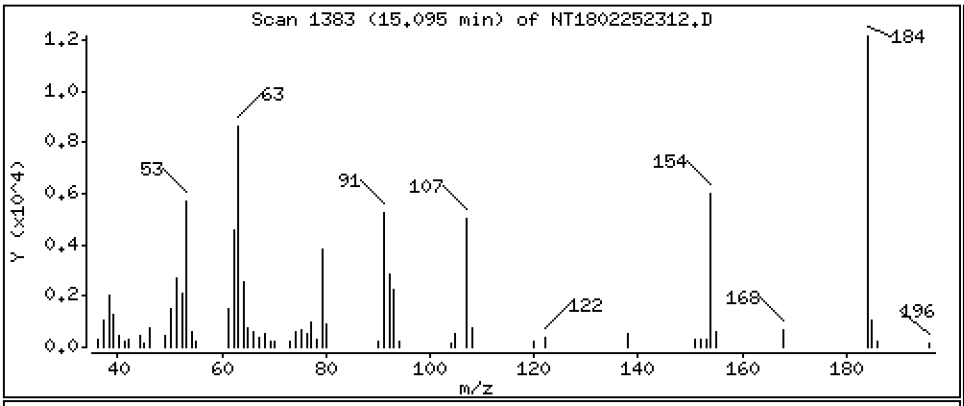
Operator: VTS

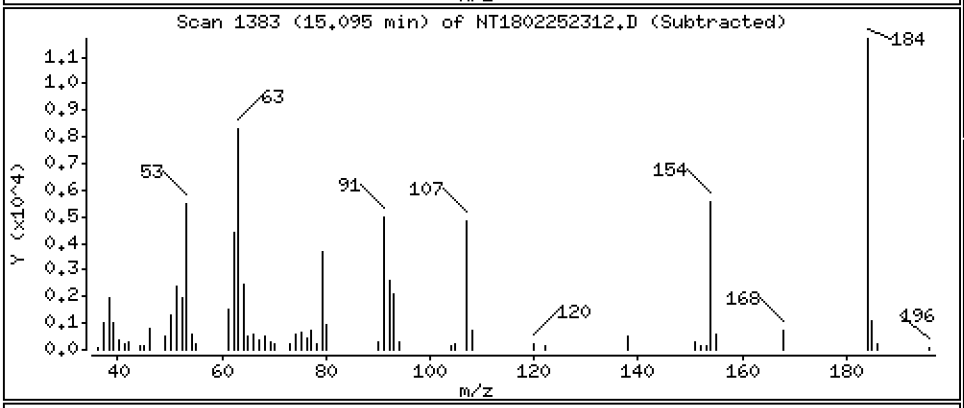
Column phase: ZB-5msi

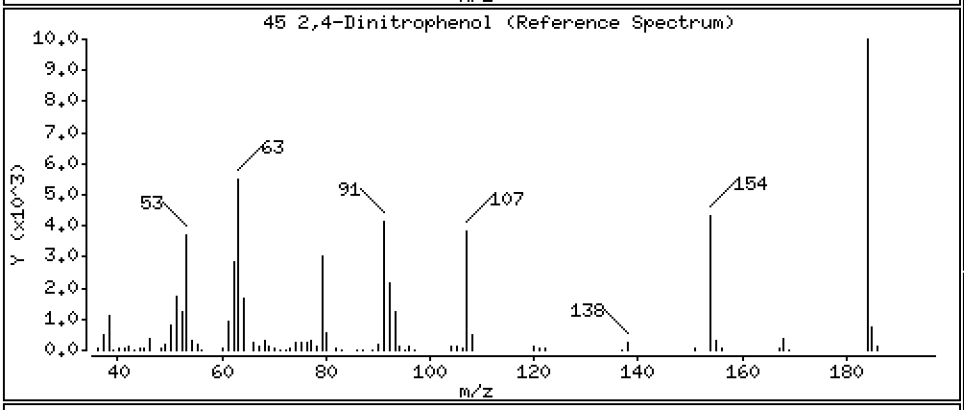
Column diameter: 0.25

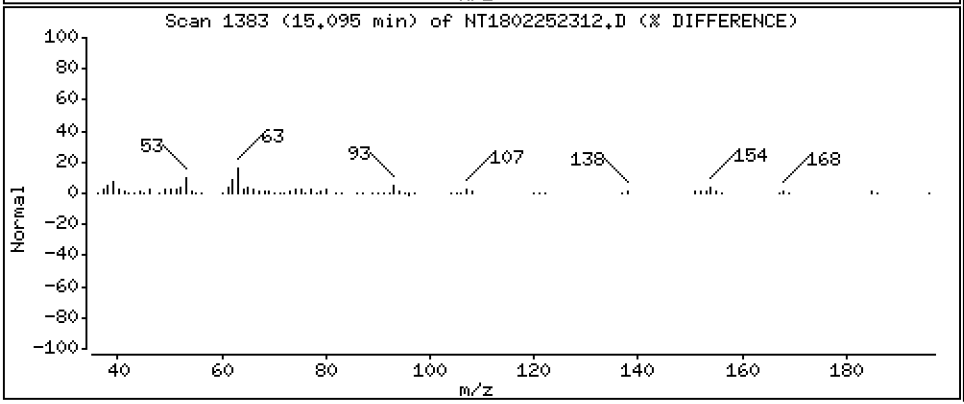
45 2,4-Dinitrophenol

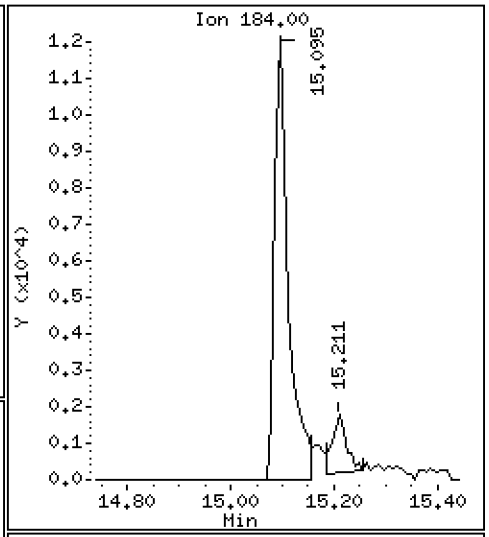
Concentration: 1.426 ug/mL

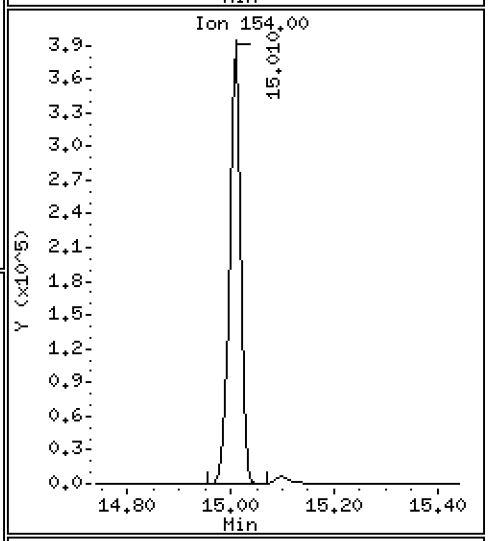


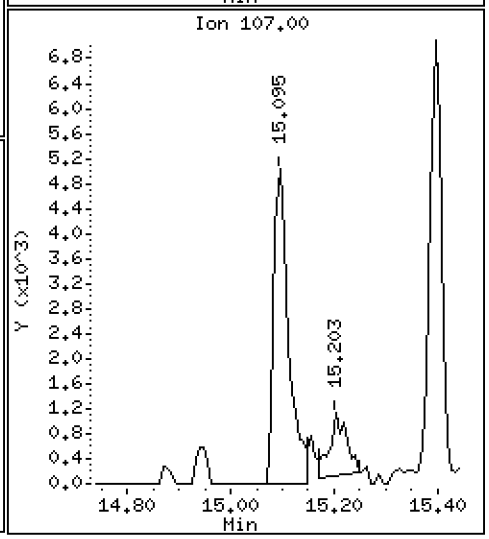












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

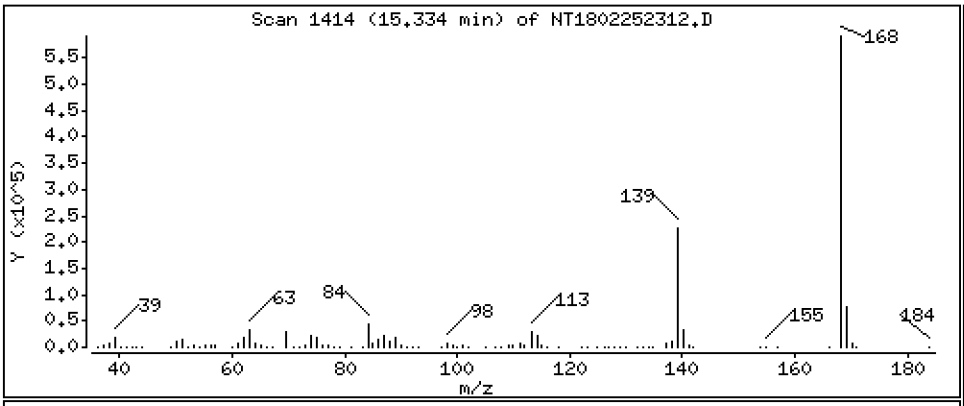
Operator: VTS

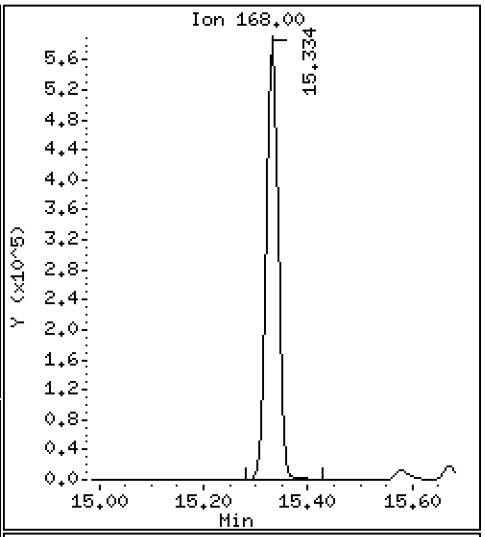
Column phase: ZB-5msi

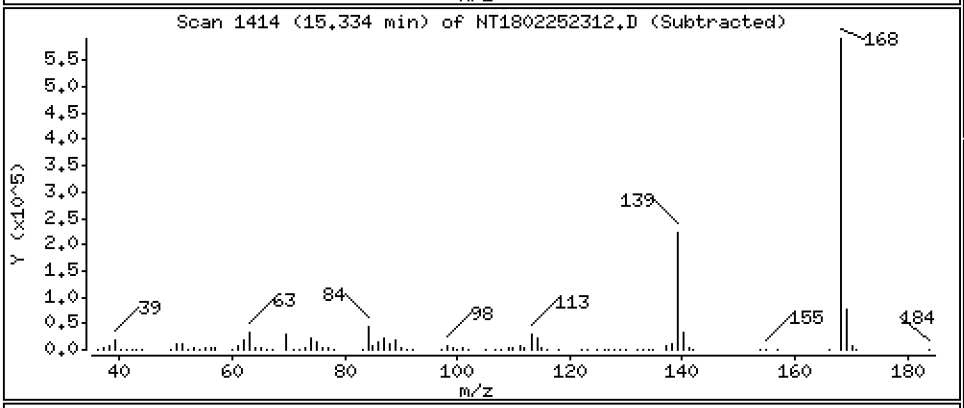
Column diameter: 0.25

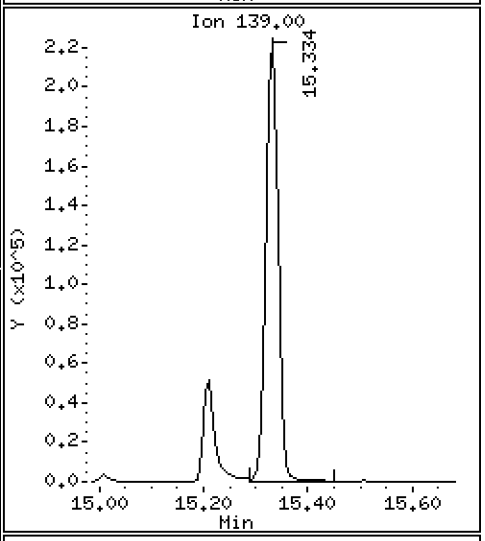
46 Dibenzofuran

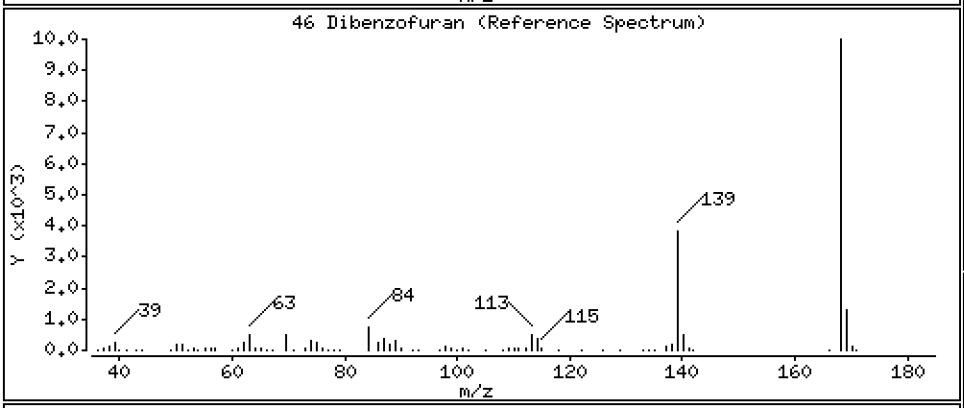
Concentration: 4.355 ug/mL

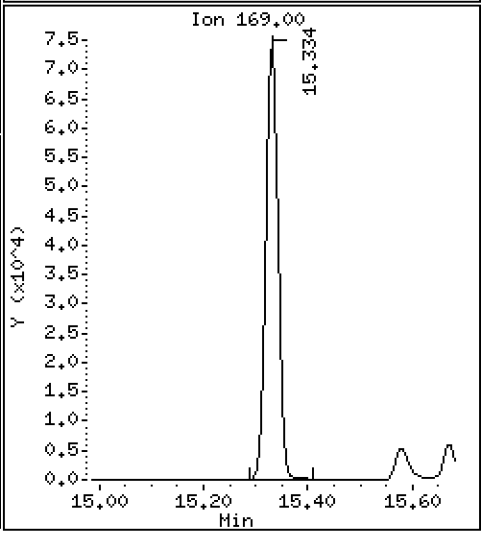


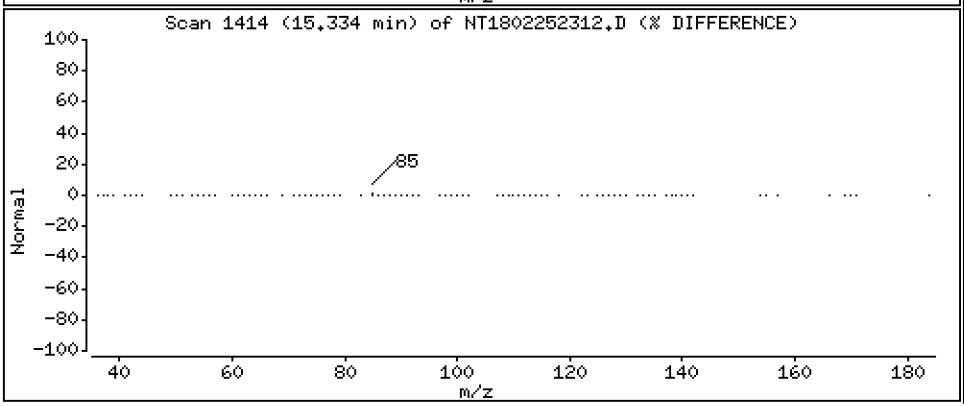












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

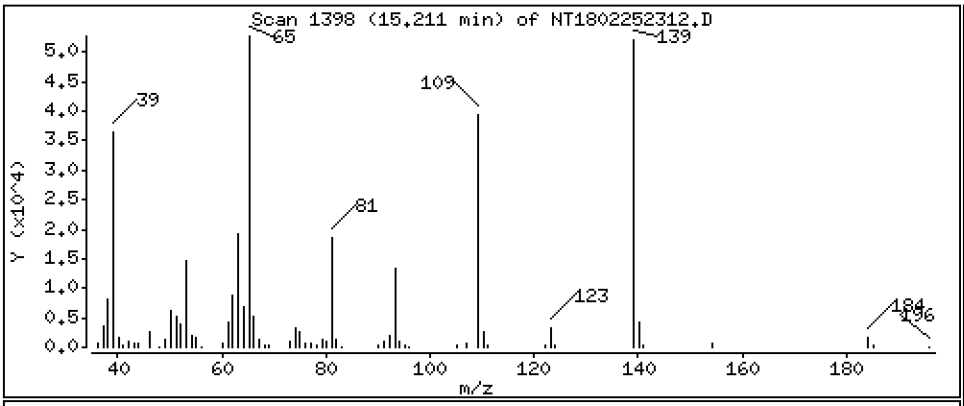
Operator: VTS

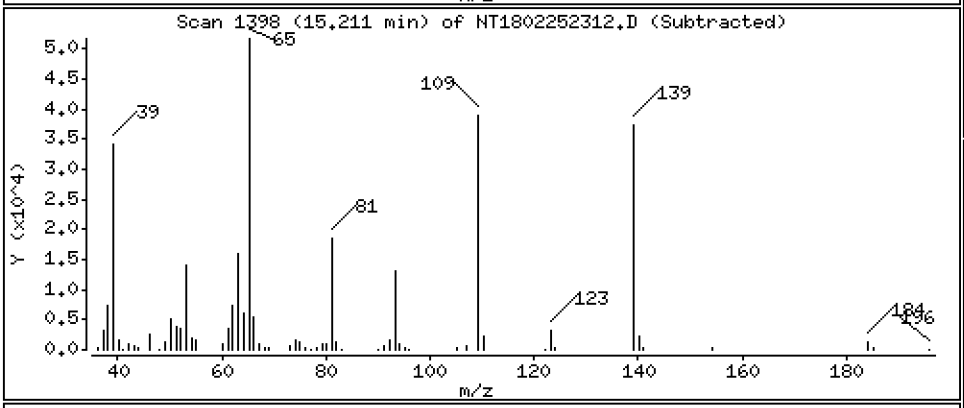
Column phase: ZB-5msi

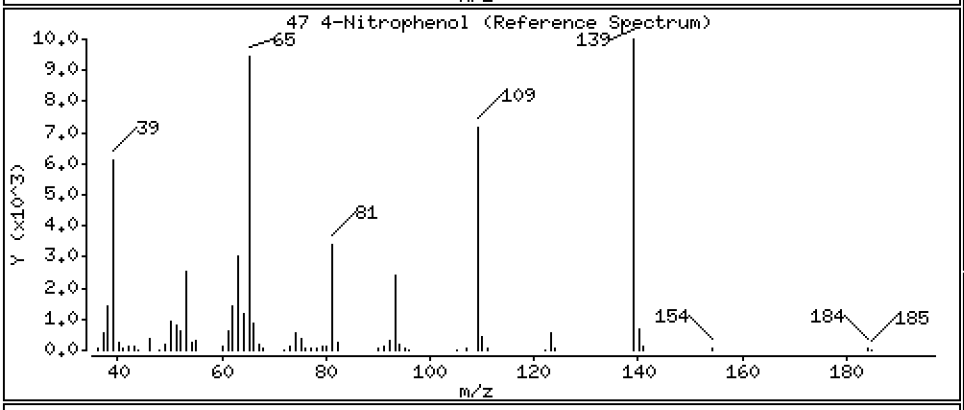
Column diameter: 0.25

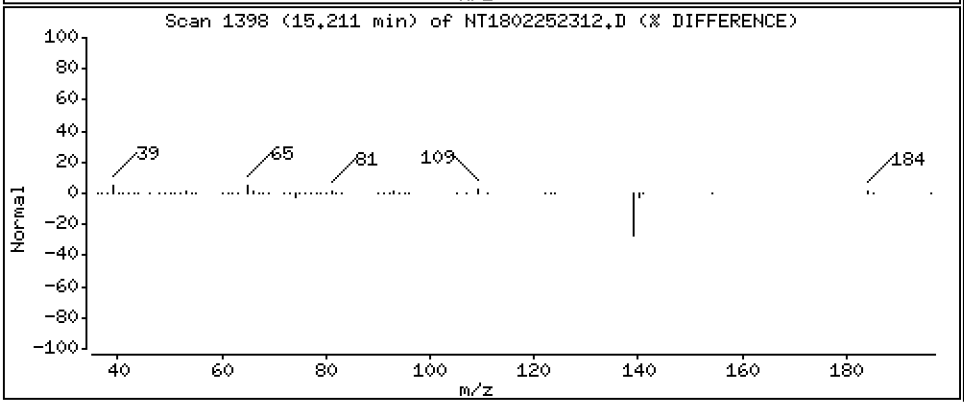
47 4-Nitrophenol

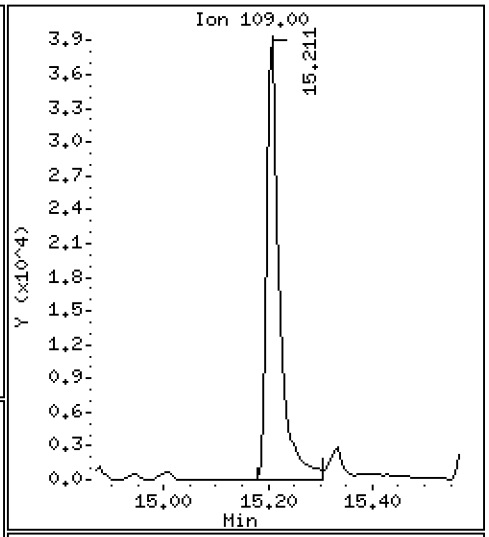
Concentration: 4.346 ug/mL

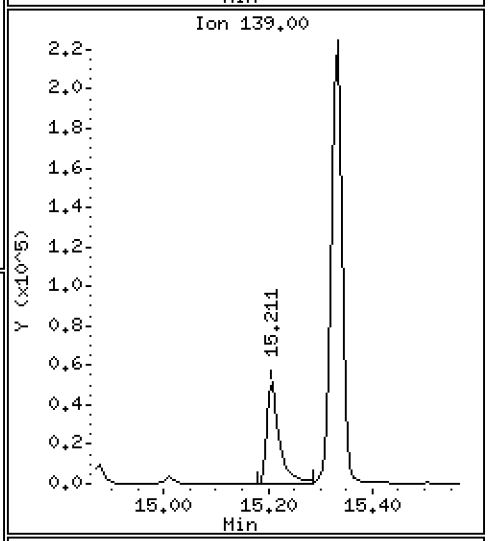


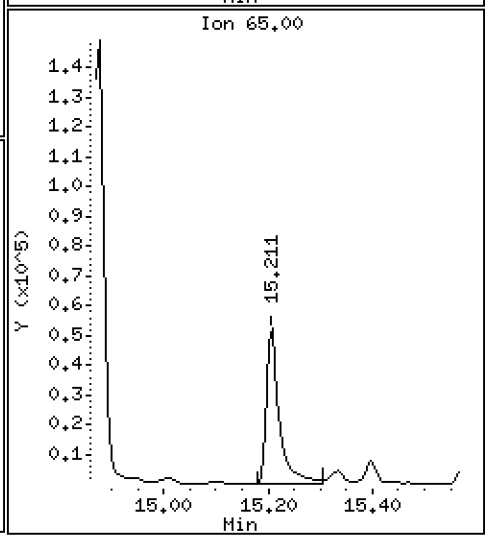












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

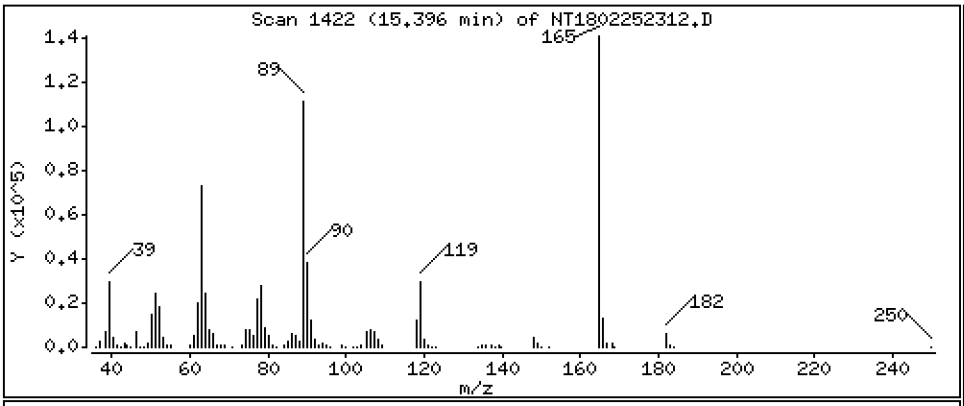
Operator: VTS

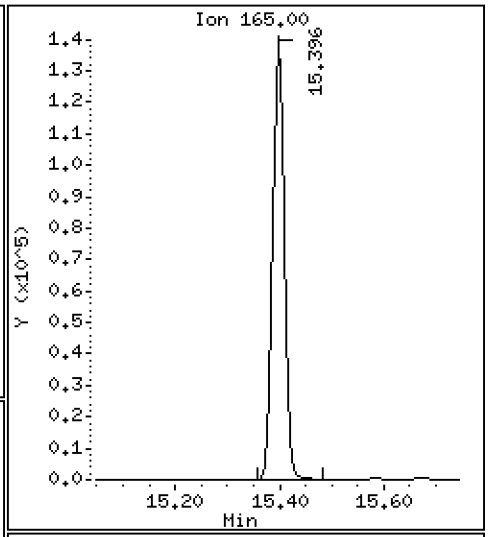
Column phase: ZB-5msi

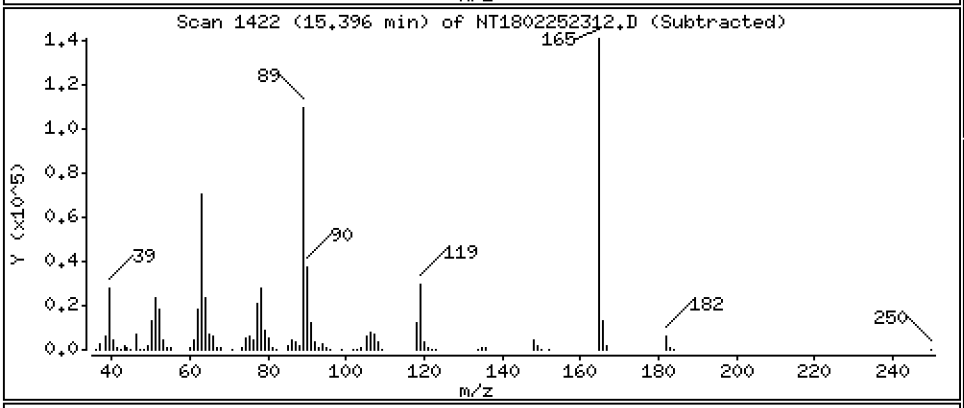
Column diameter: 0.25

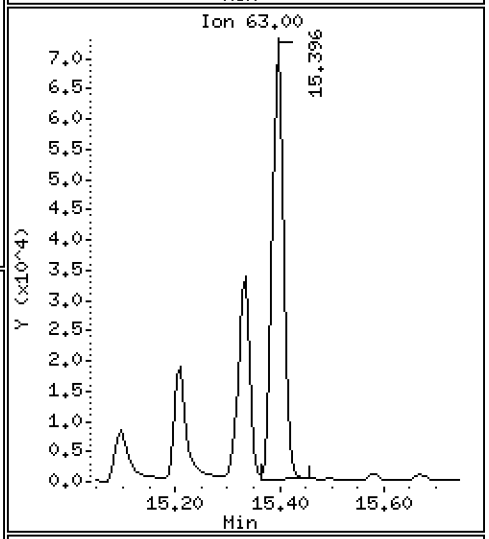
48 2,4-Dinitrotoluene

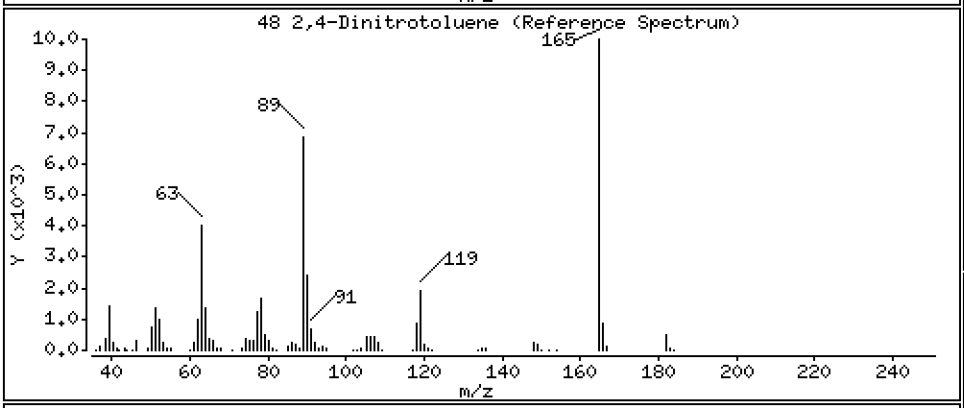
Concentration: 4.573 ug/mL

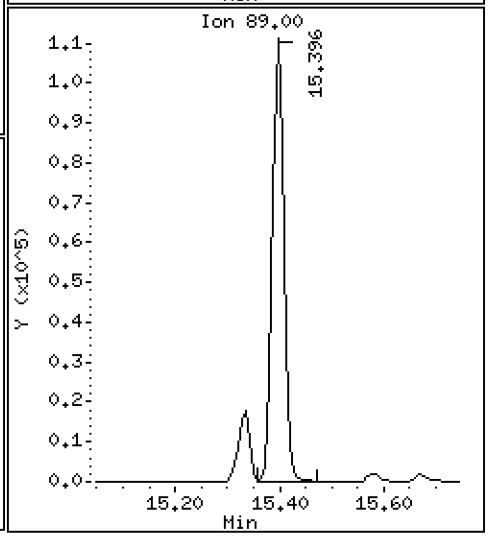


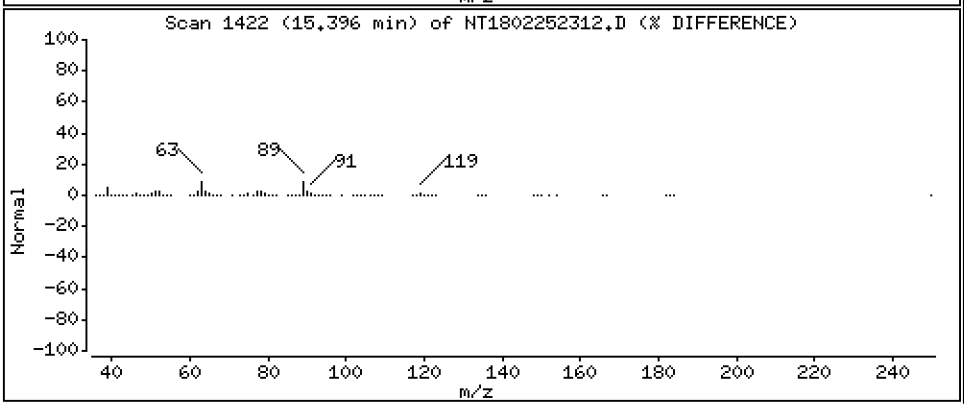












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

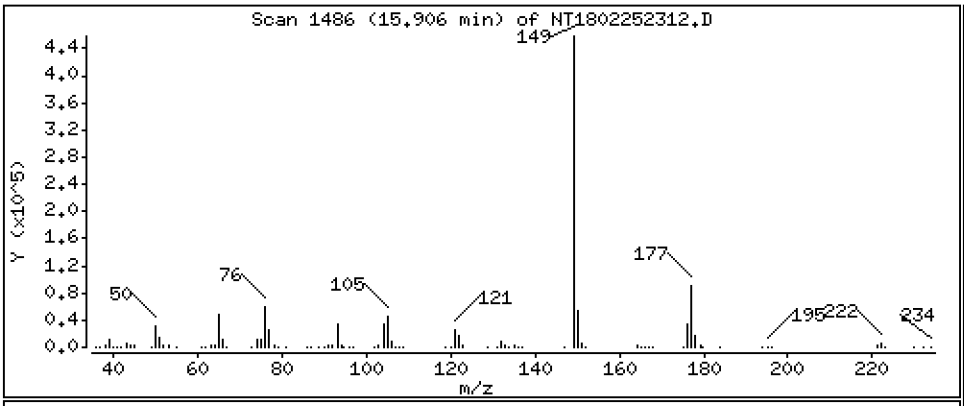
Operator: VTS

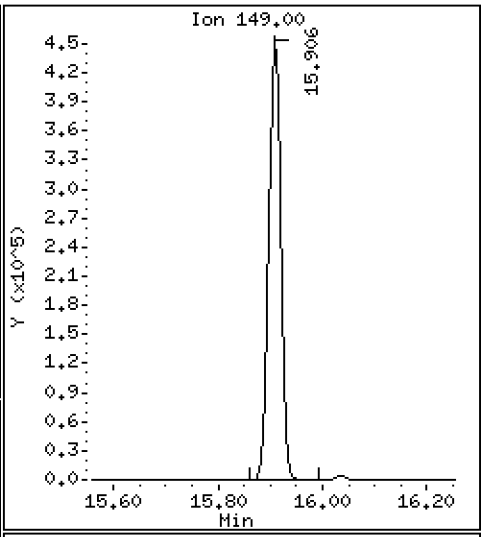
Column phase: ZB-5msi

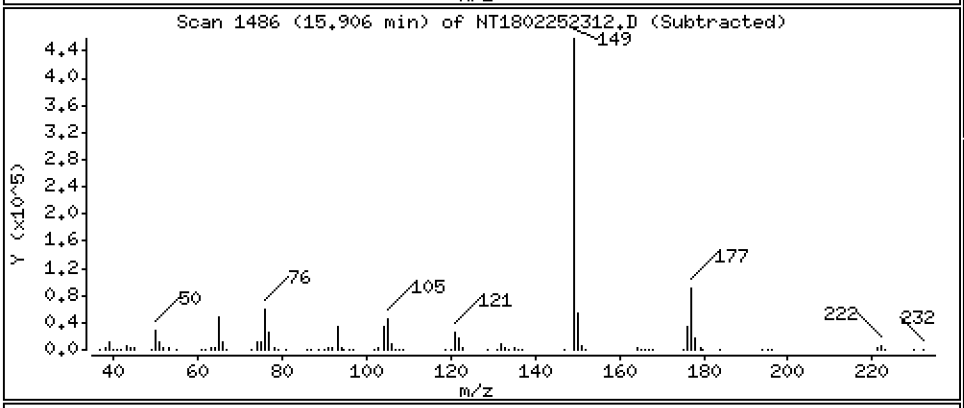
Column diameter: 0.25

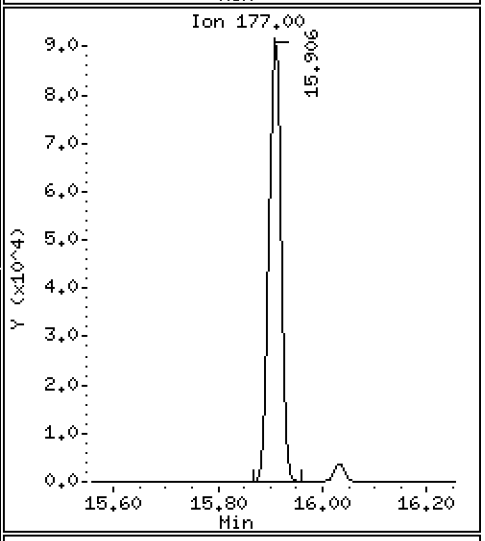
50 Diethylphthalate

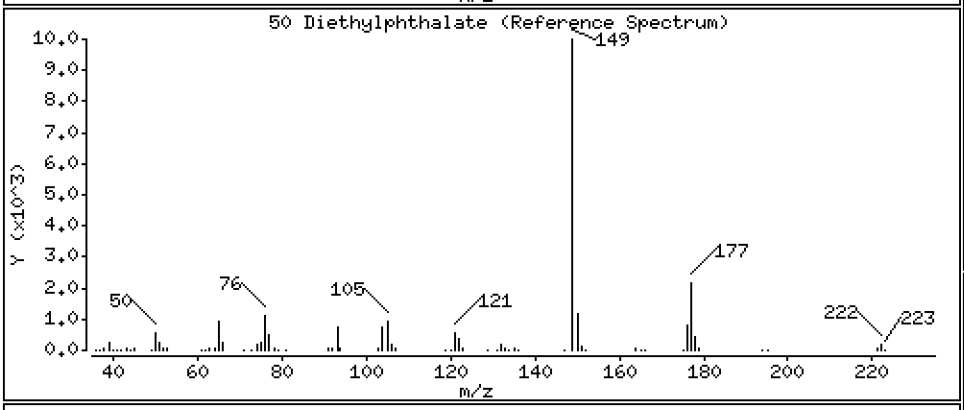
Concentration: 5.265 ug/mL

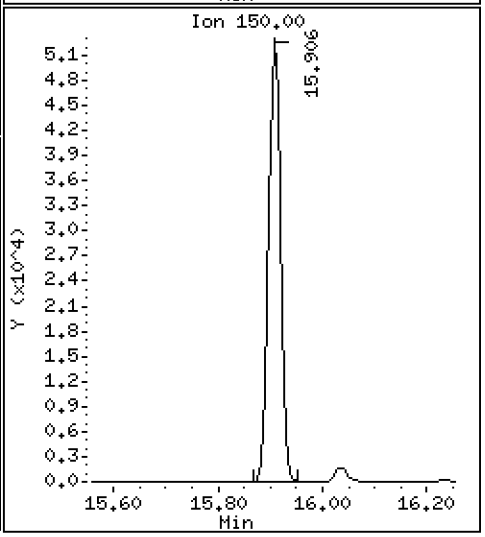


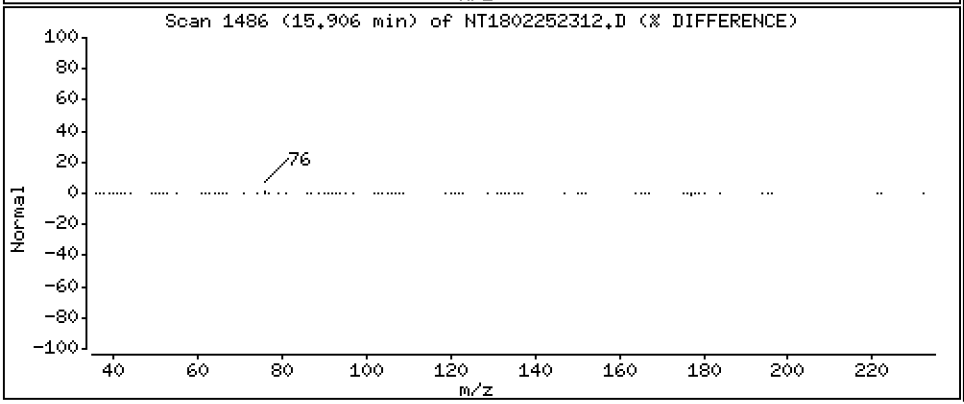












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

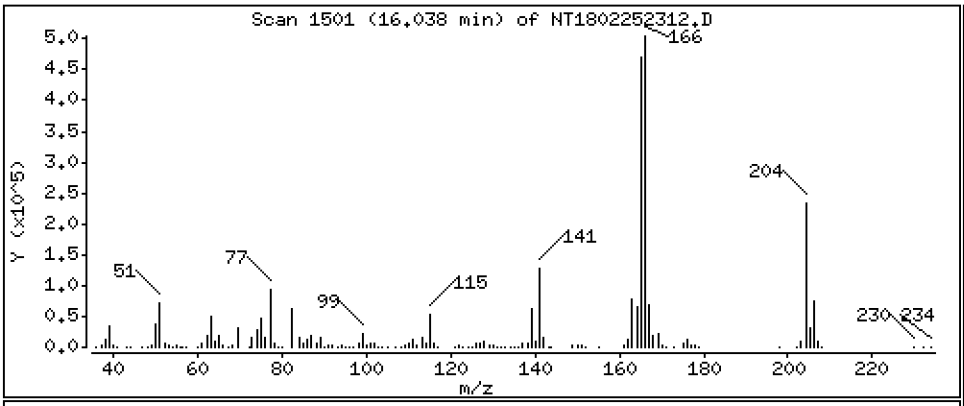
Operator: VTS

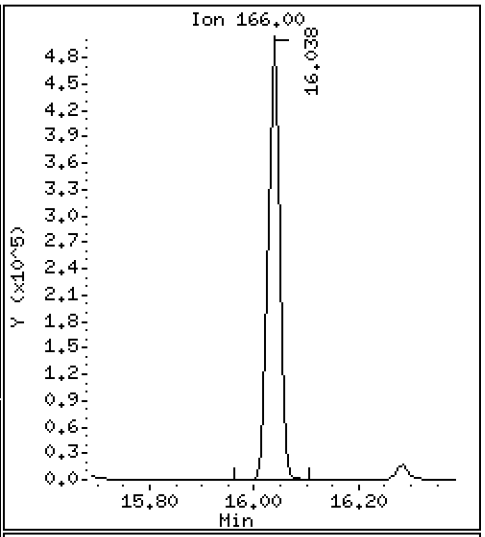
Column phase: ZB-5msi

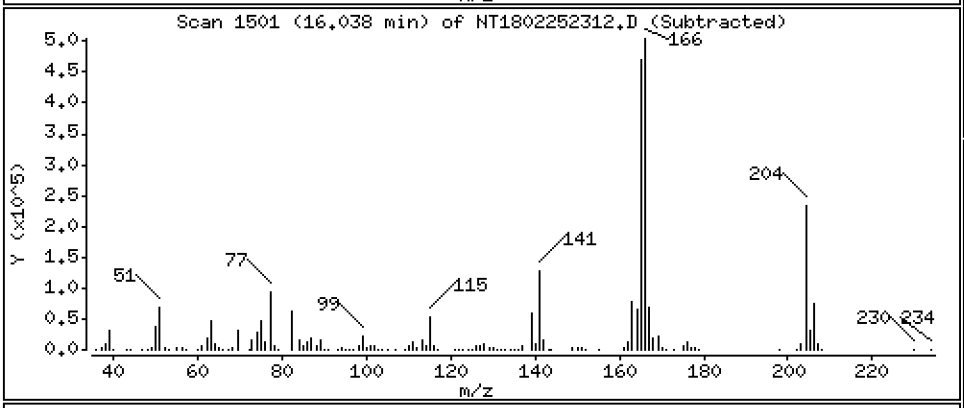
Column diameter: 0.25

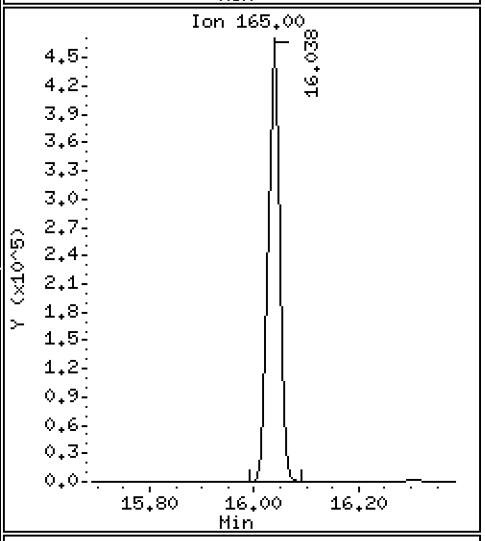
49 Fluorene

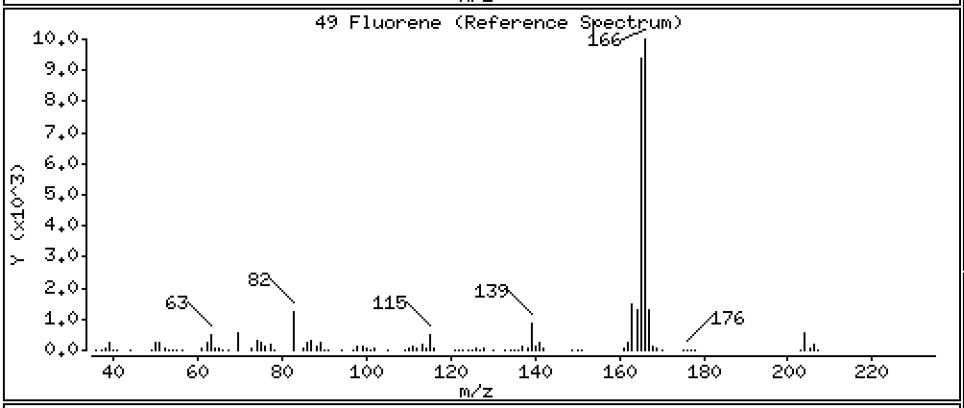
Concentration: 5.182 ug/mL

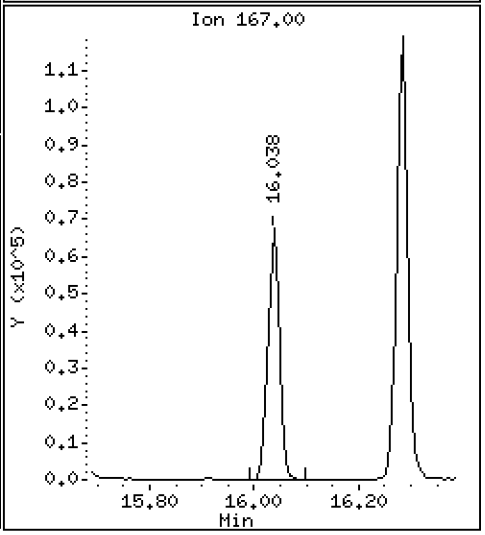


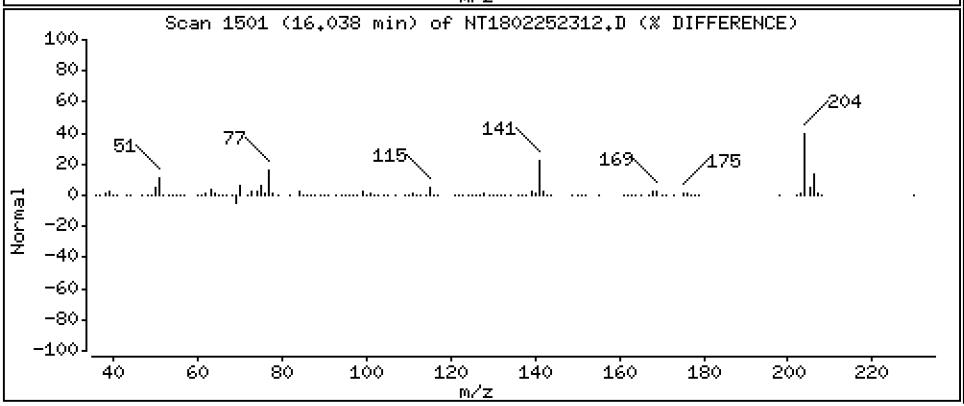












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

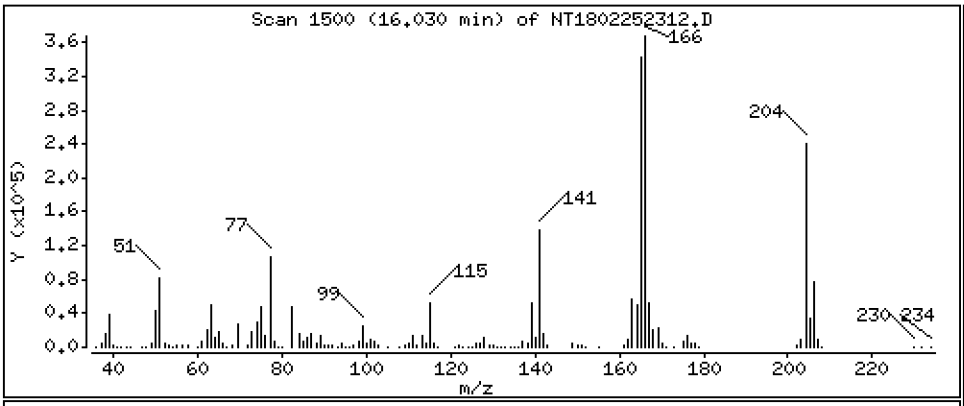
Operator: VTS

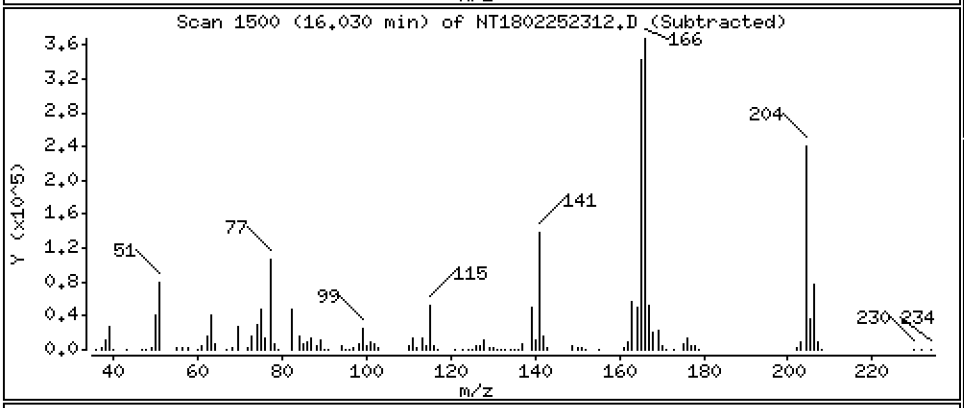
Column phase: ZB-5msi

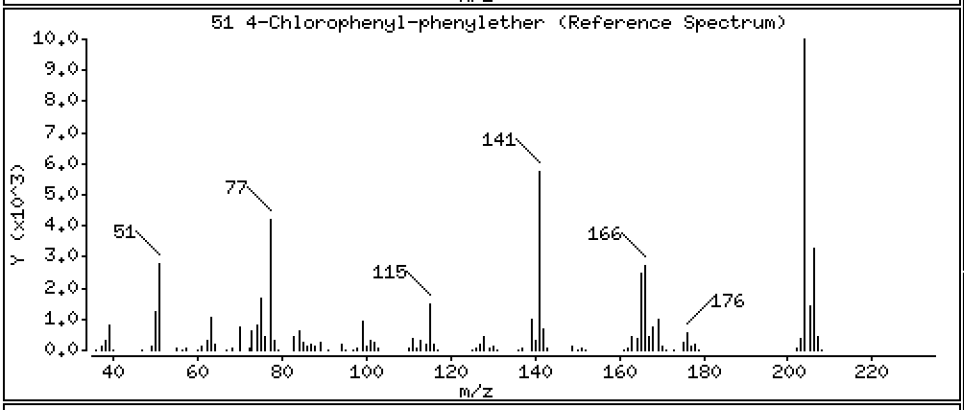
Column diameter: 0.25

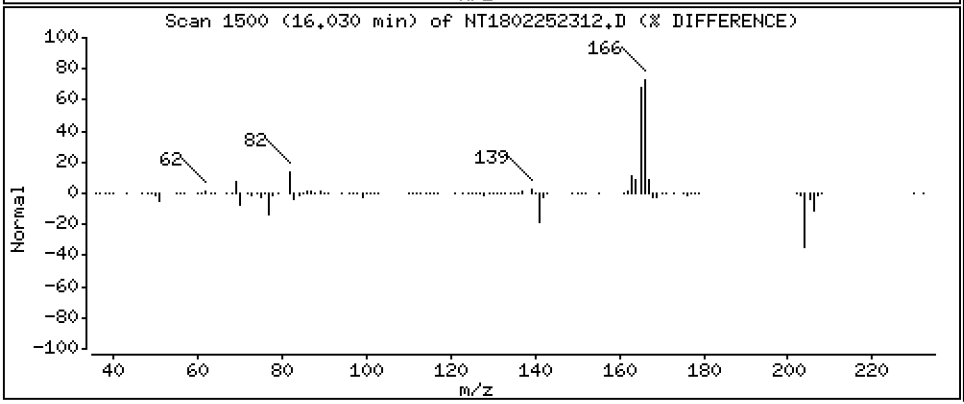
51 4-Chlorophenyl-phenylether

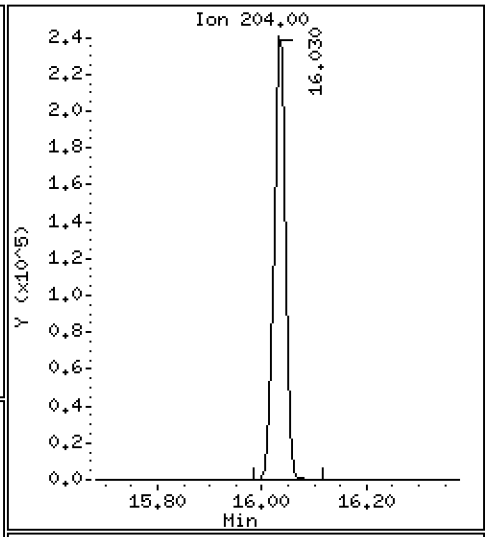
Concentration: 4.975 ug/mL

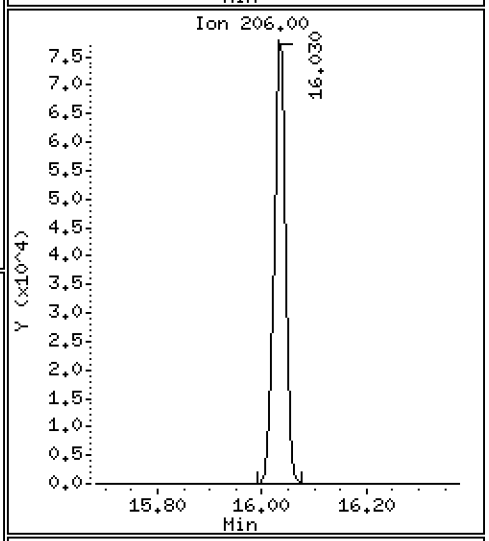


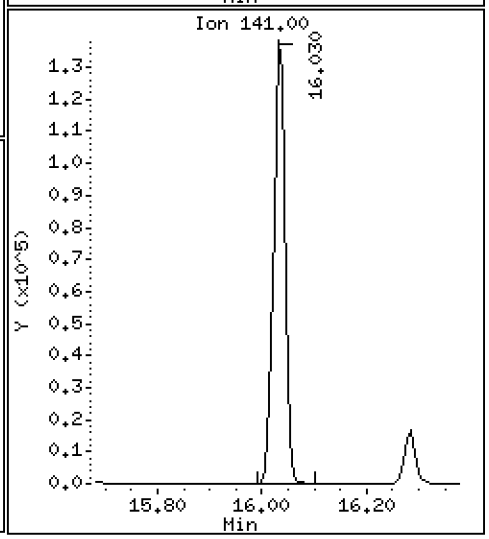












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

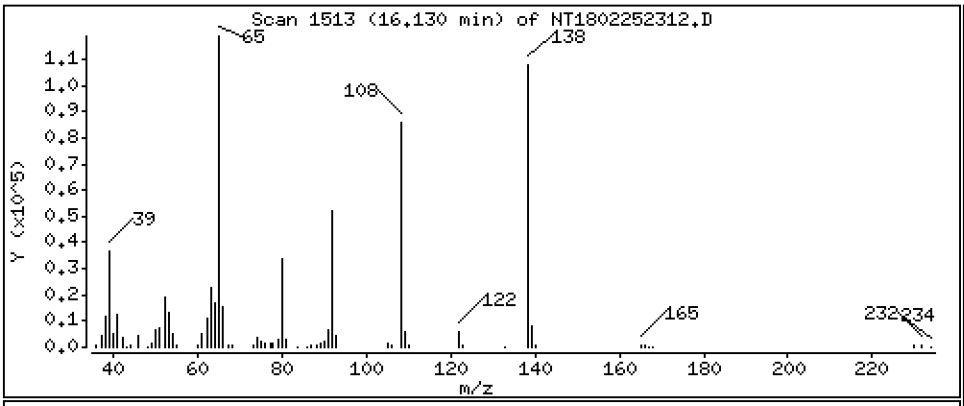
Operator: VTS

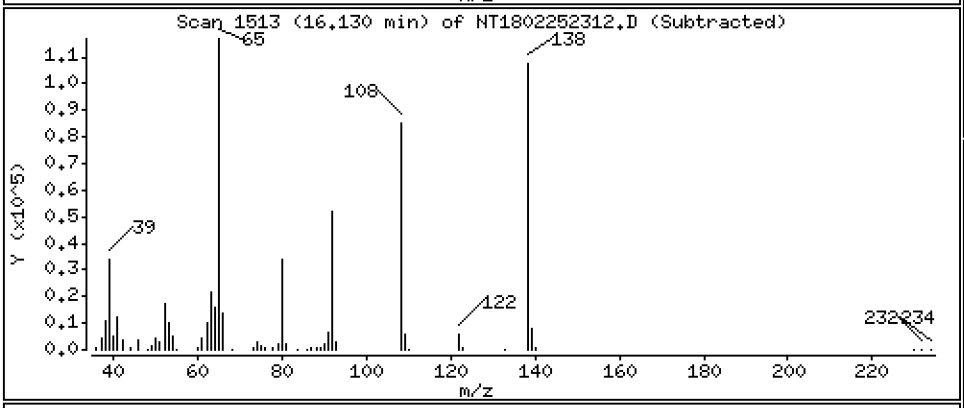
Column phase: ZB-5msi

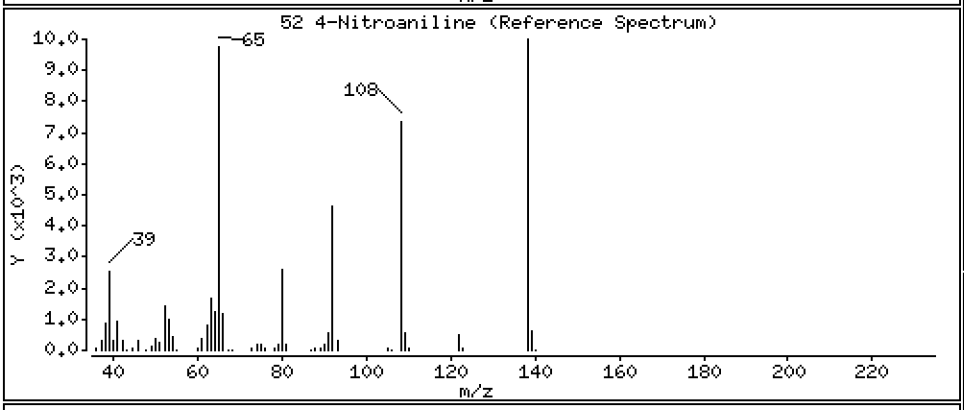
Column diameter: 0.25

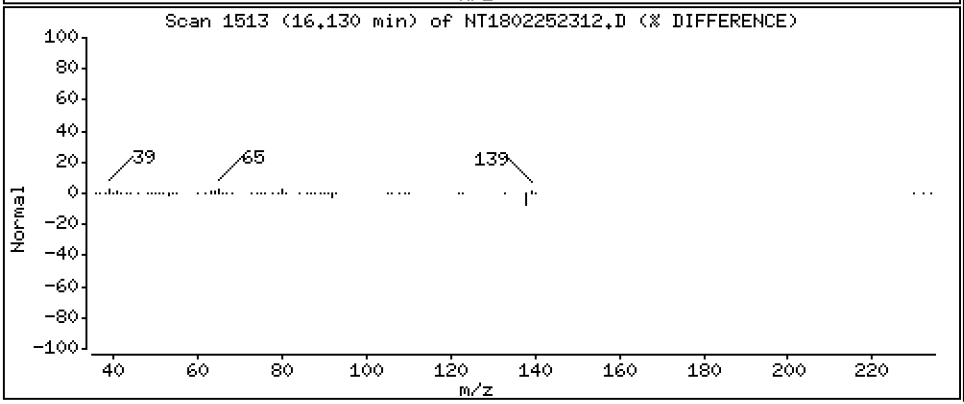
52 4-Nitroaniline

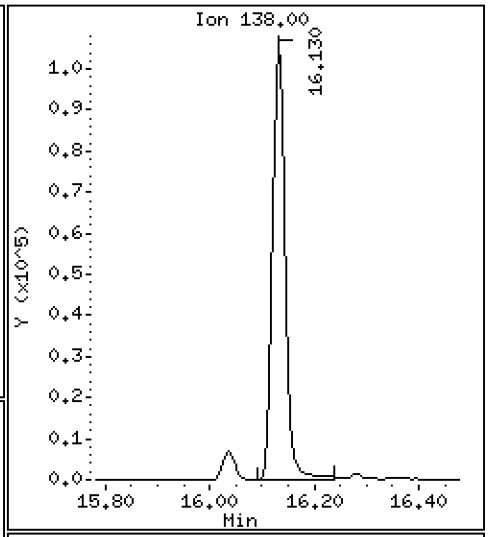
Concentration: 4.601 ug/mL

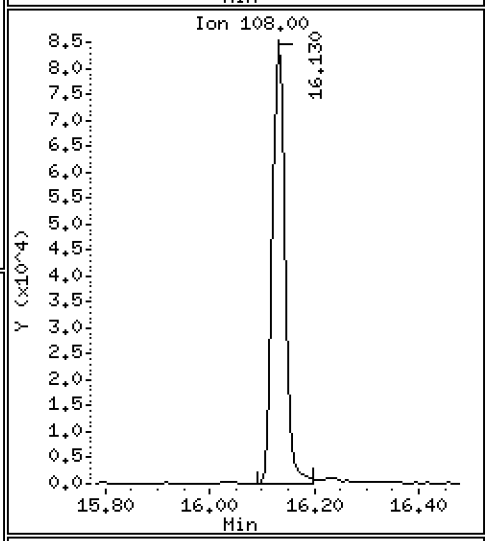


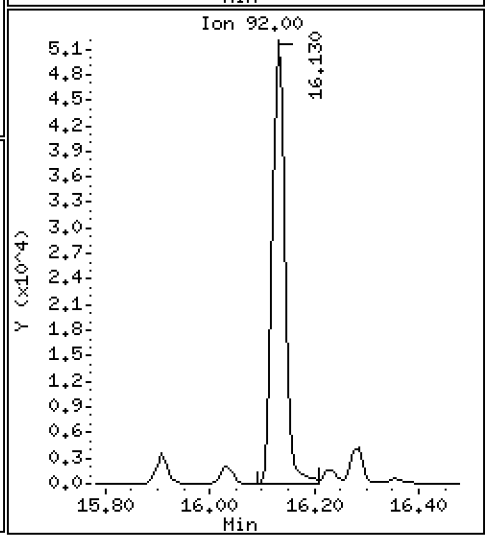












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

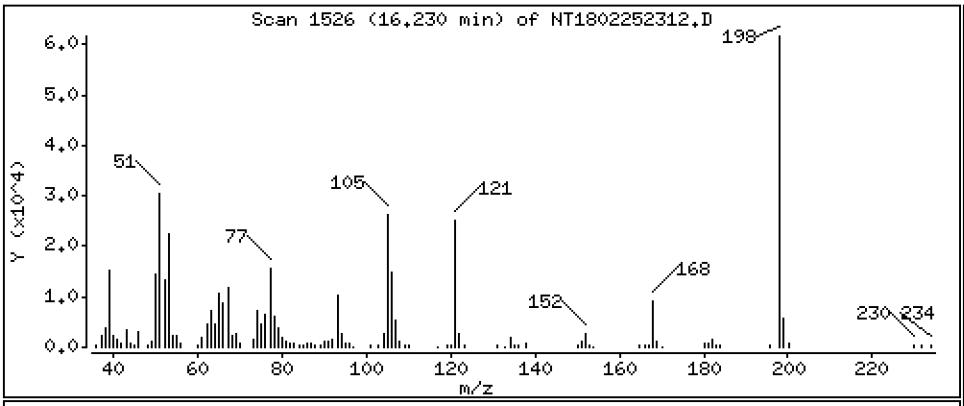
Operator: VTS

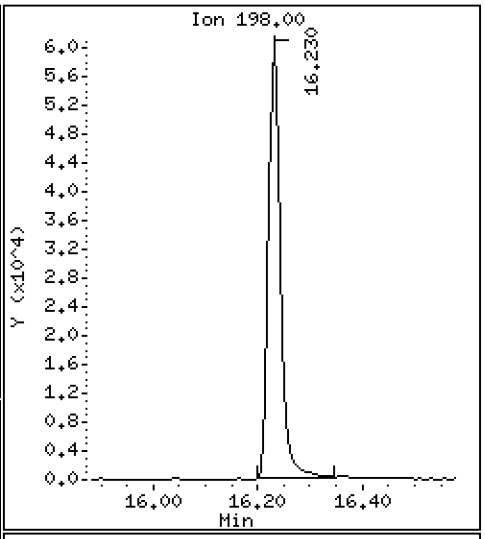
Column phase: ZB-5msi

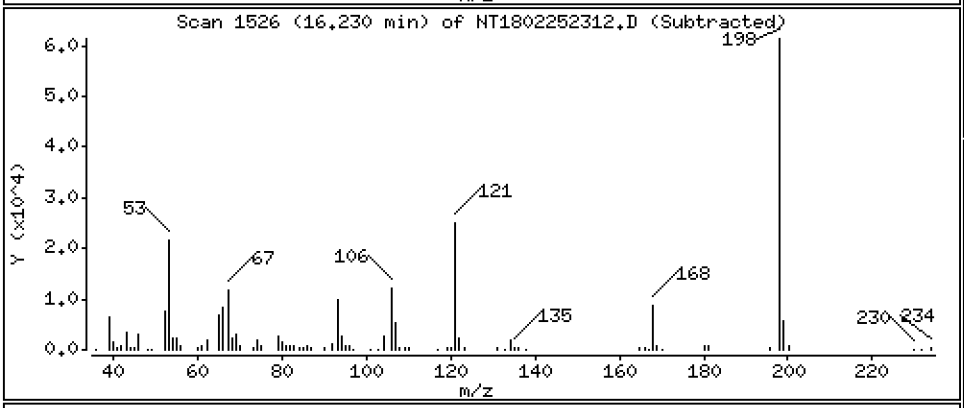
Column diameter: 0.25

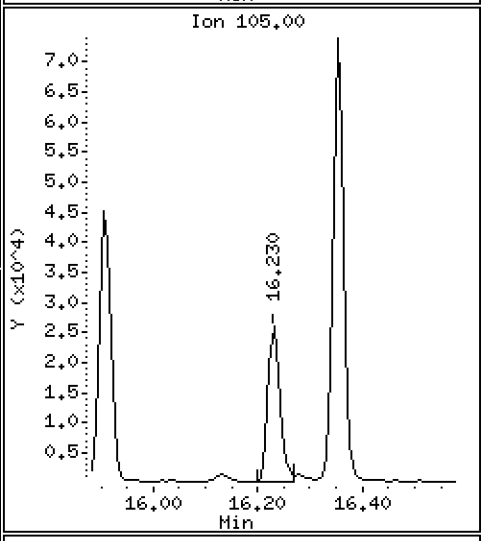
53 4,6-Dinitro-2-methylphenol

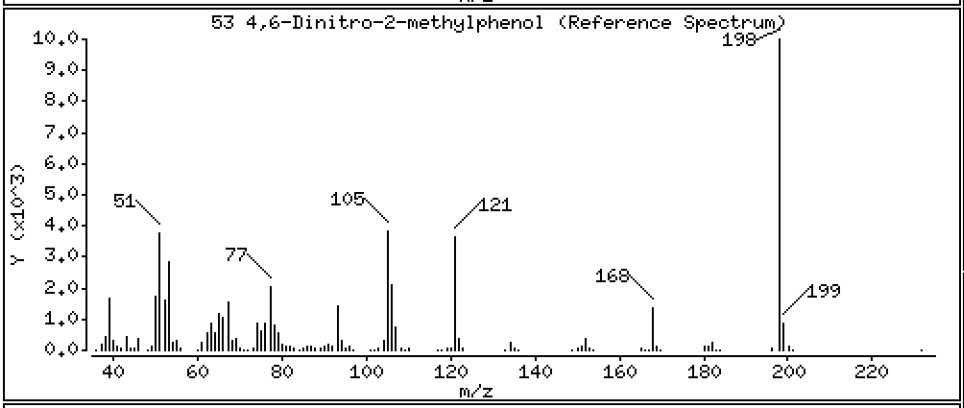
Concentration: 3.596 ug/mL

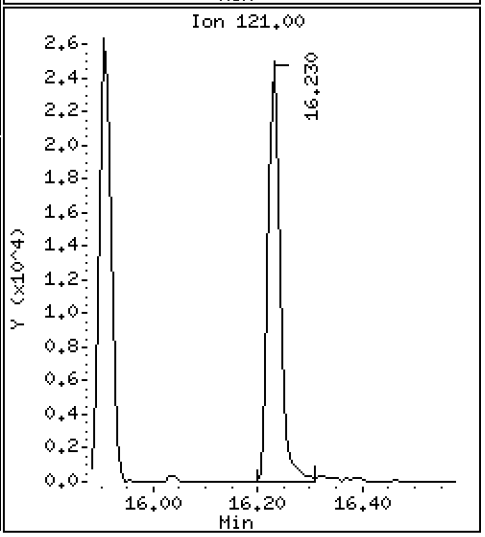


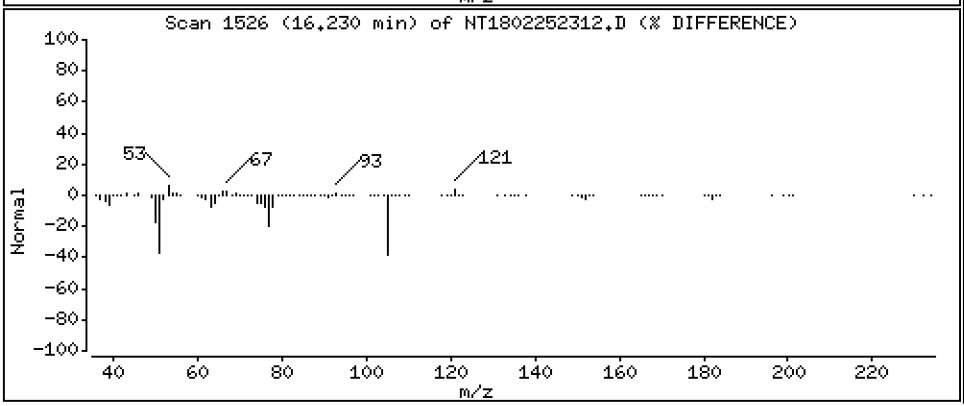












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

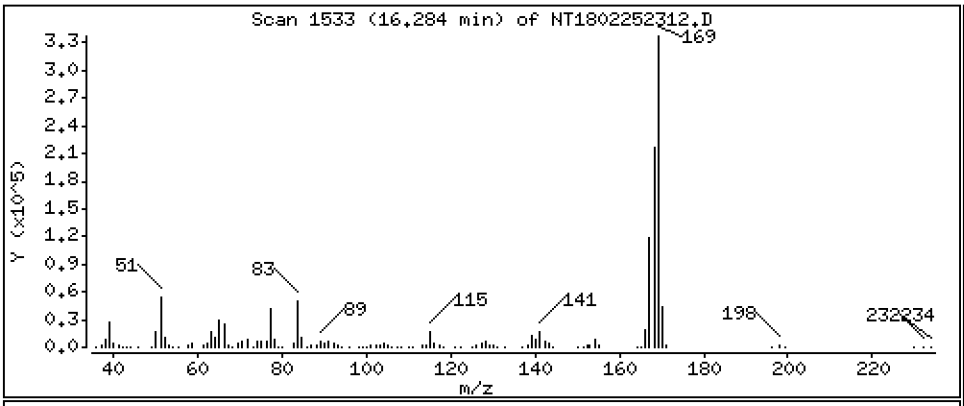
Operator: VTS

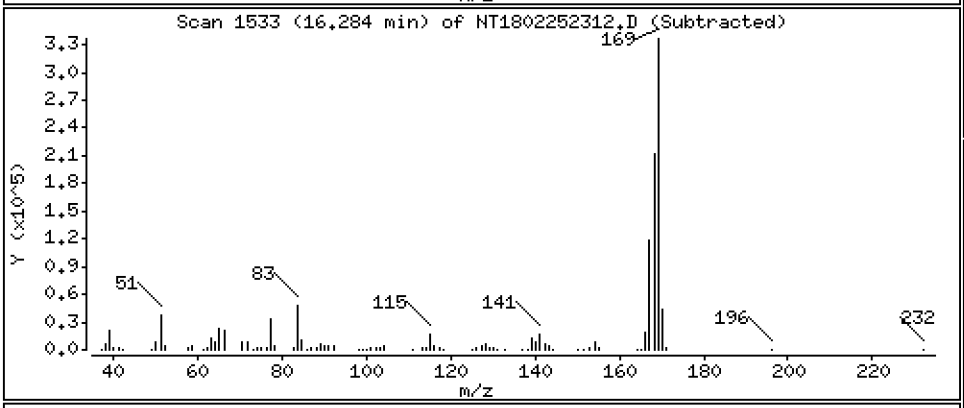
Column phase: ZB-5msi

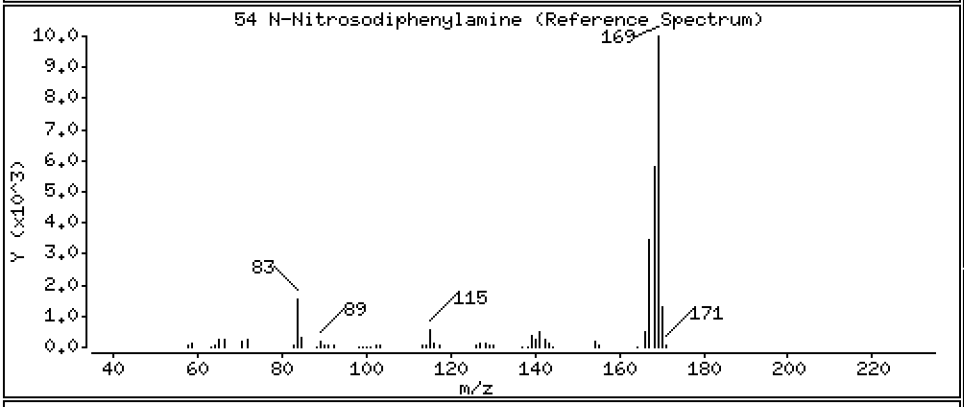
Column diameter: 0.25

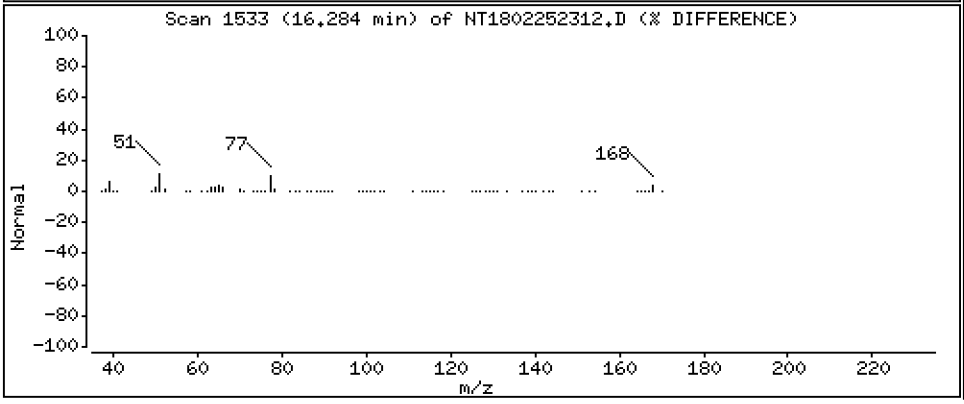
54 N-Nitrosodiphenylamine

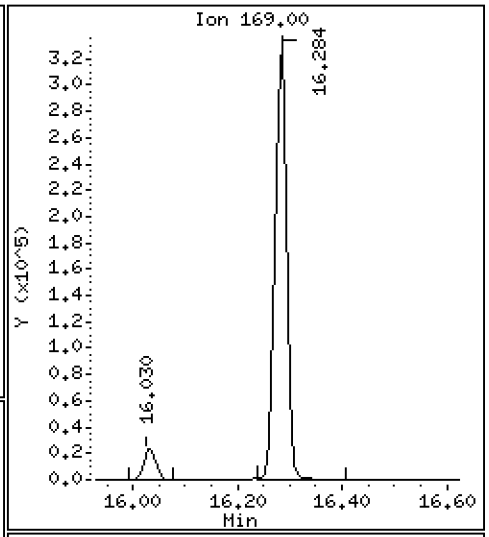
Concentration: 4.602 ug/mL

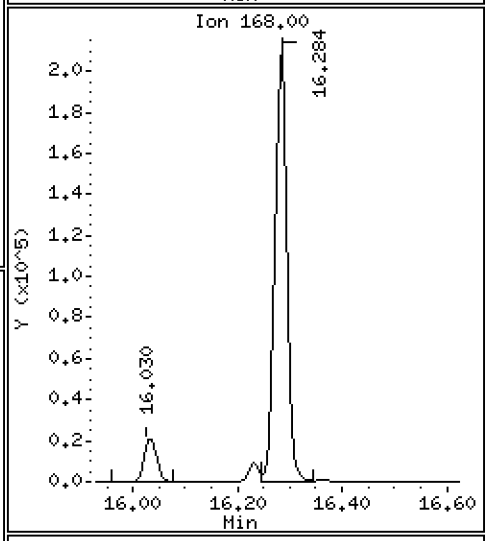


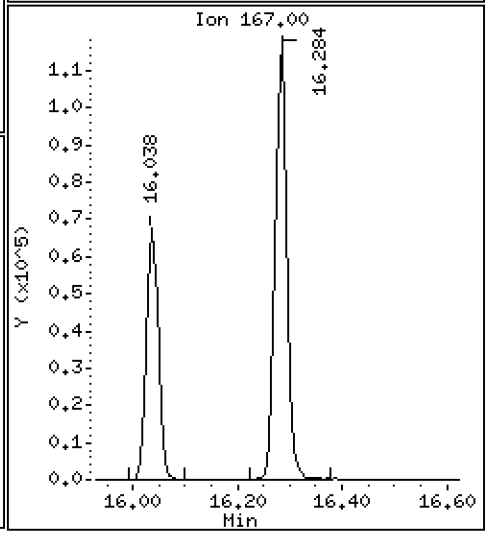












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

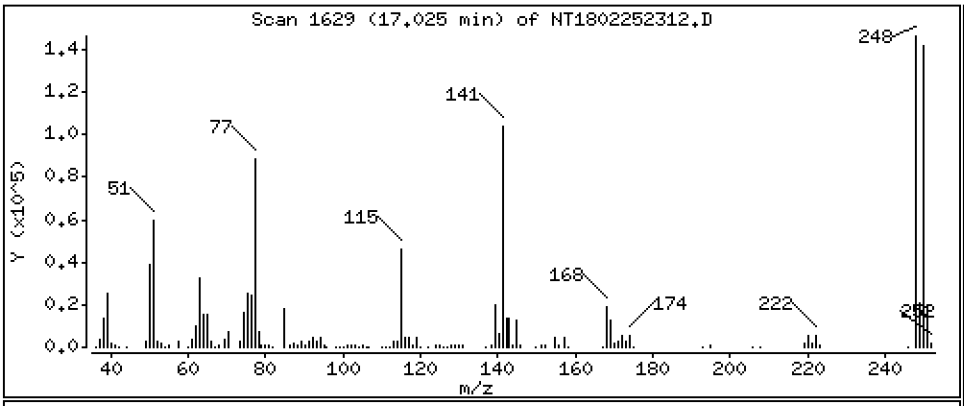
Operator: VTS

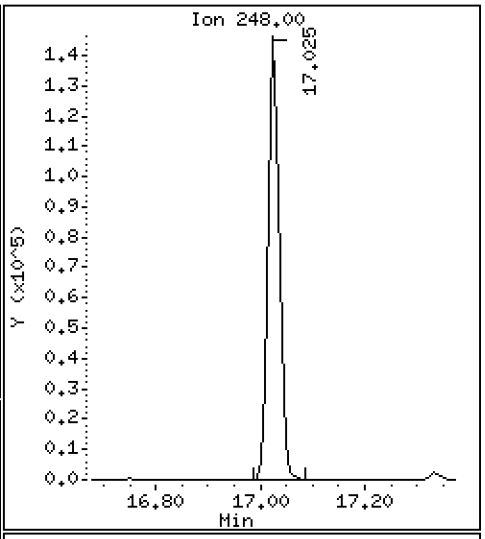
Column phase: ZB-5msi

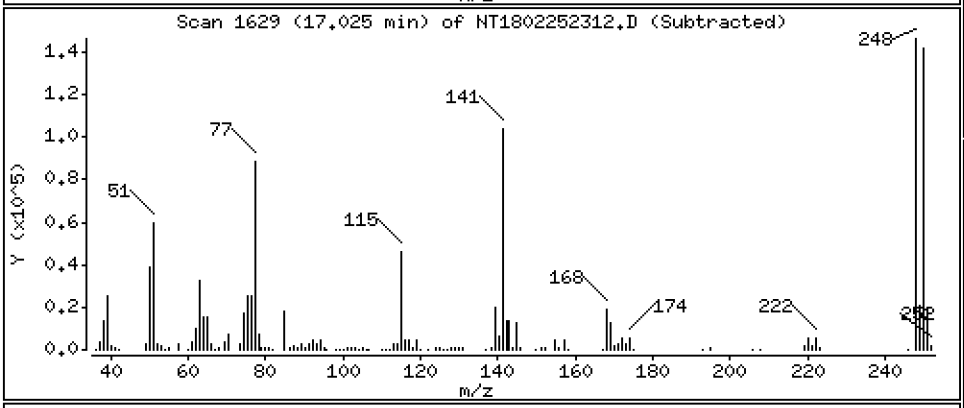
Column diameter: 0.25

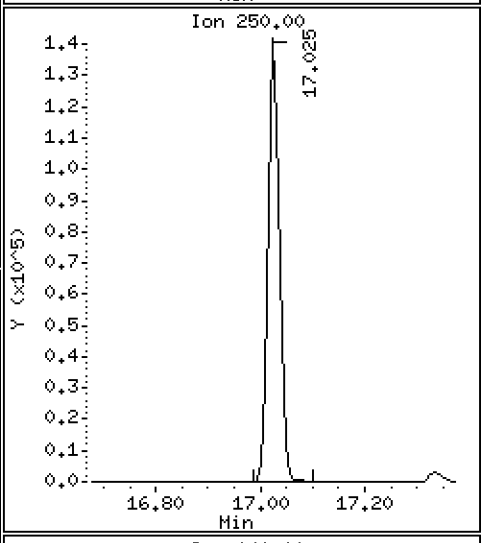
56 4-Bromophenyl-phenylether

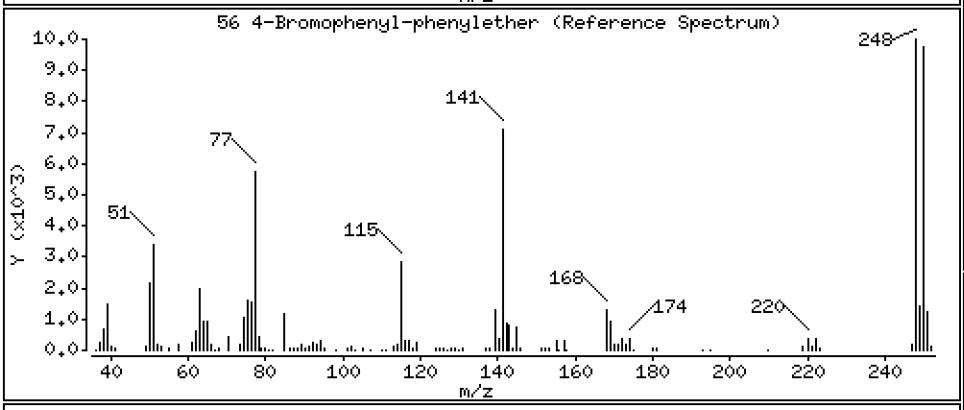
Concentration: 4.884 ug/mL

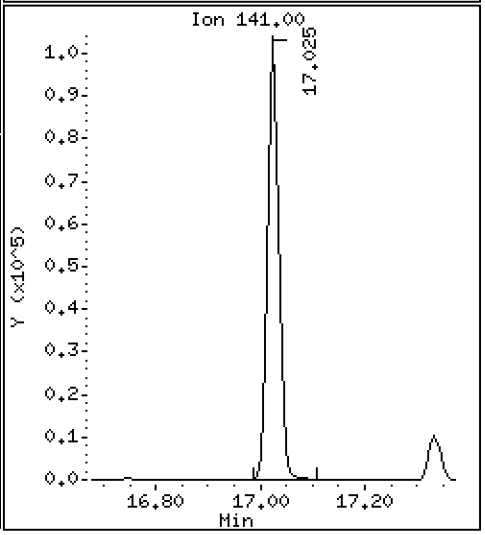


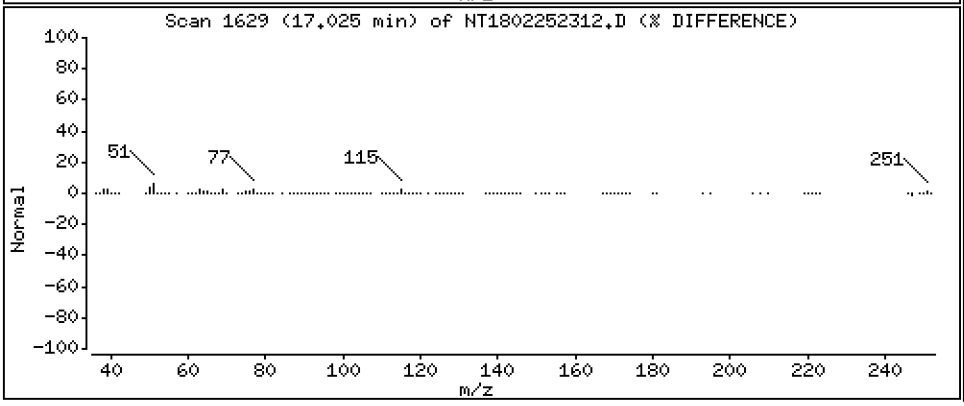












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

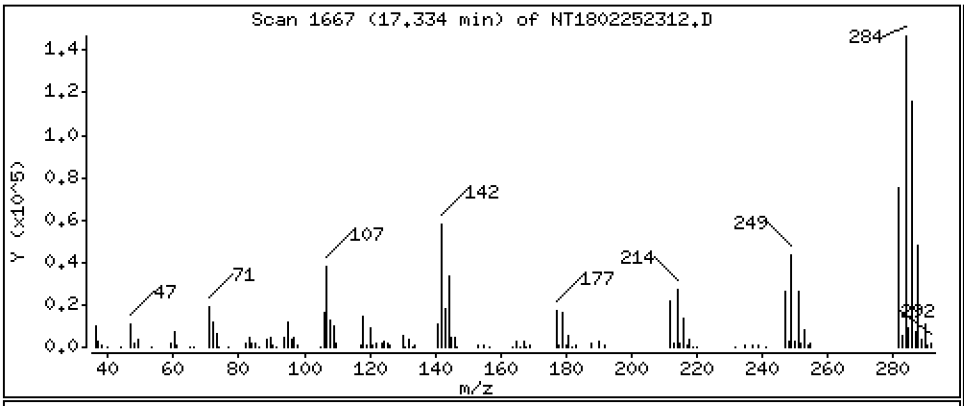
Operator: VTS

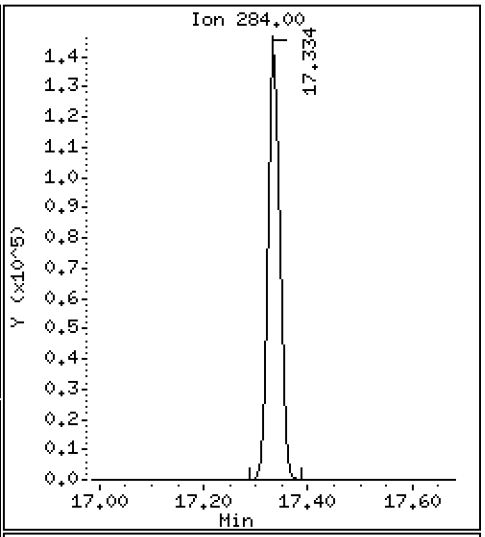
Column phase: ZB-5msi

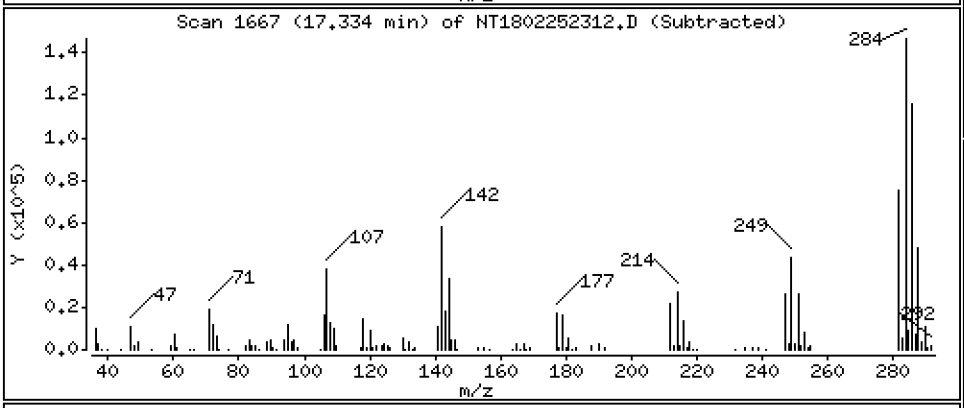
Column diameter: 0.25

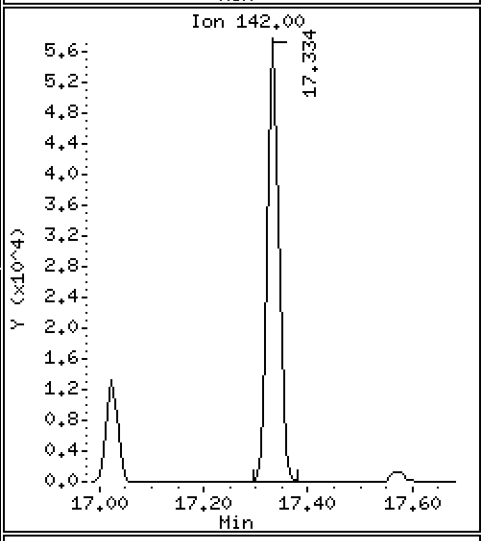
57 Hexachlorobenzene

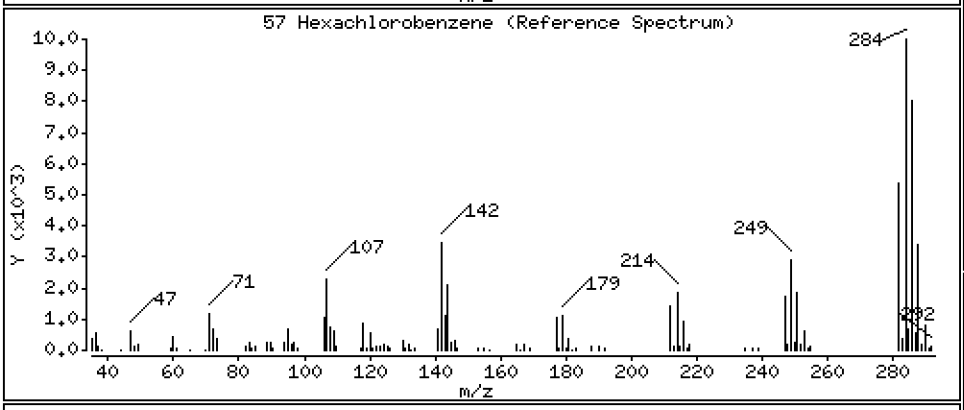
Concentration: 4.422 ug/mL

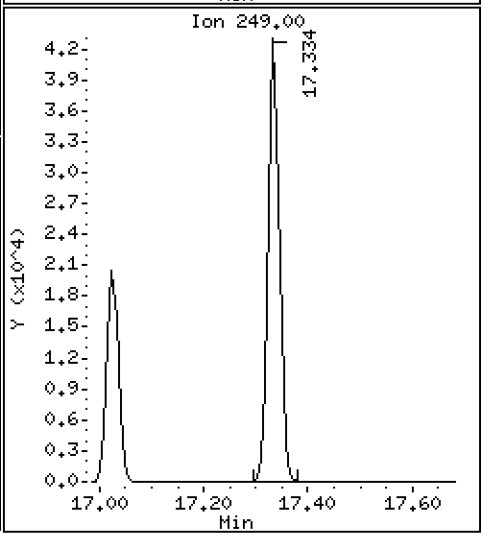


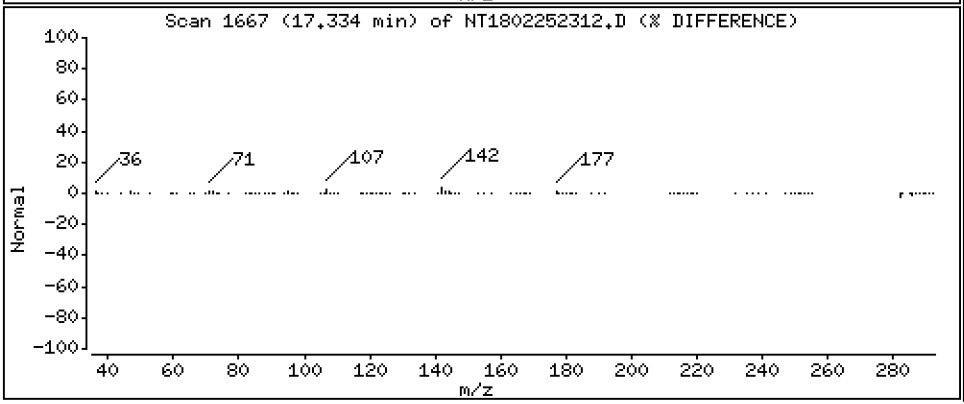












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

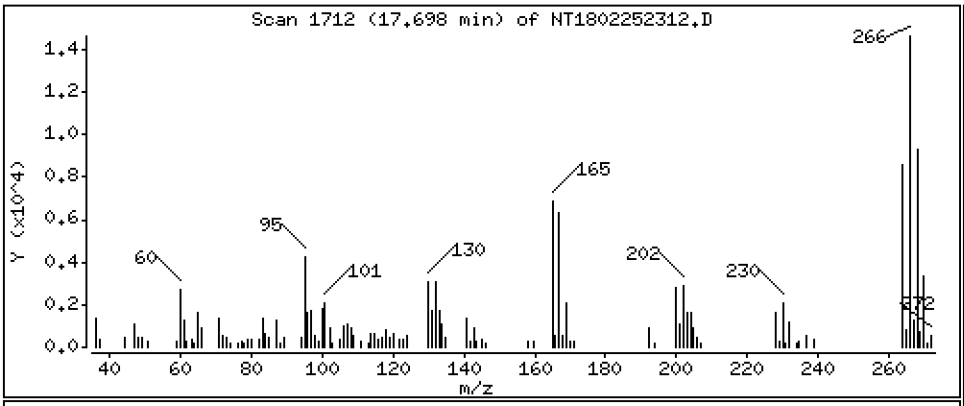
Operator: VTS

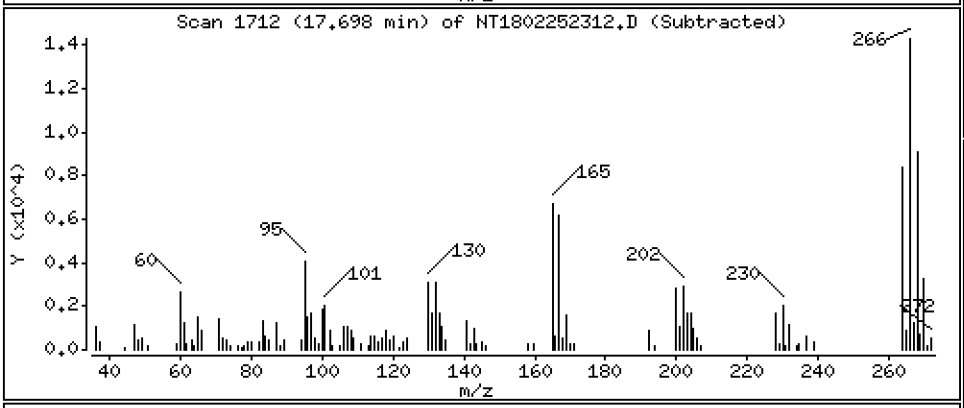
Column phase: ZB-5msi

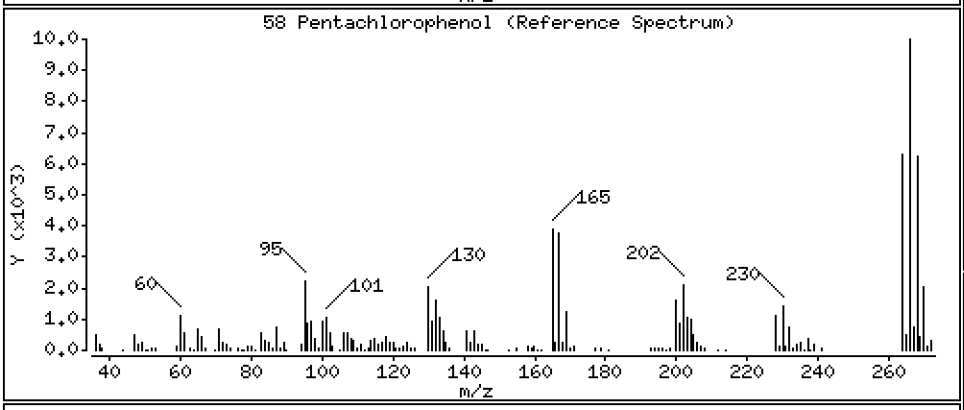
Column diameter: 0.25

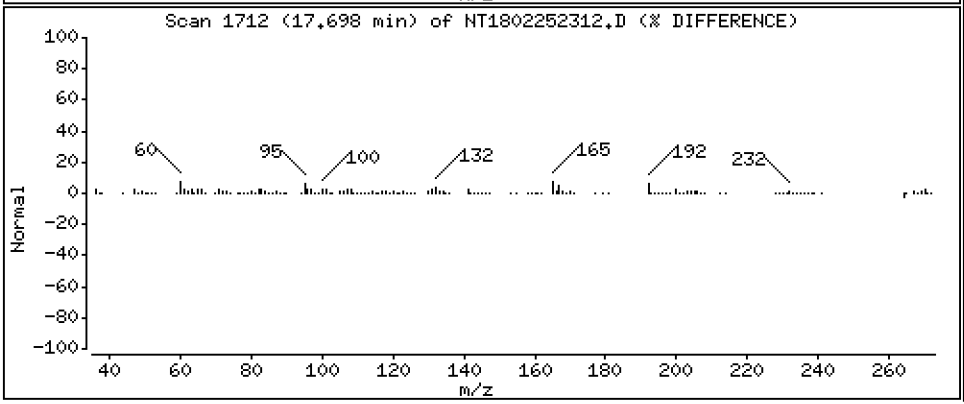
58 Pentachlorophenol

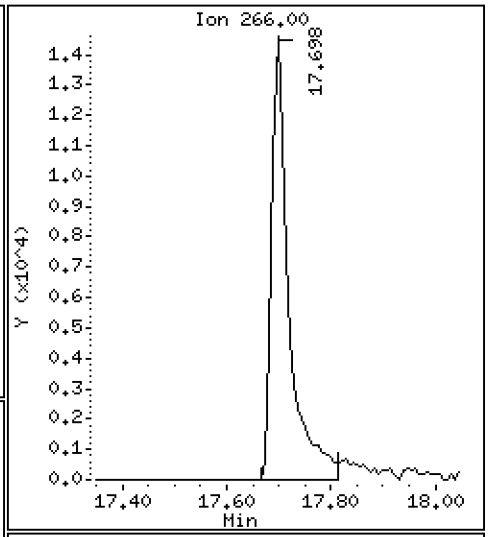
Concentration: 2.454 ug/mL

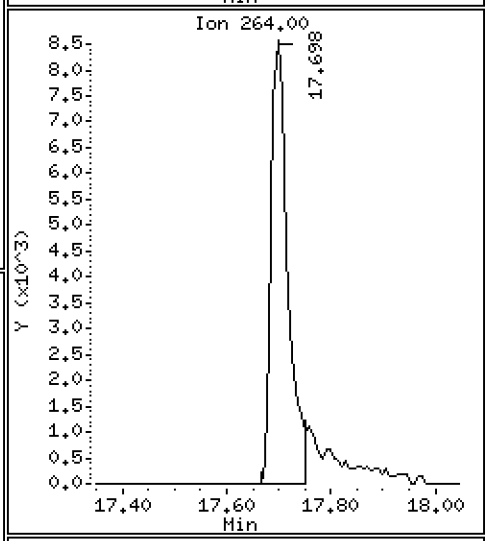


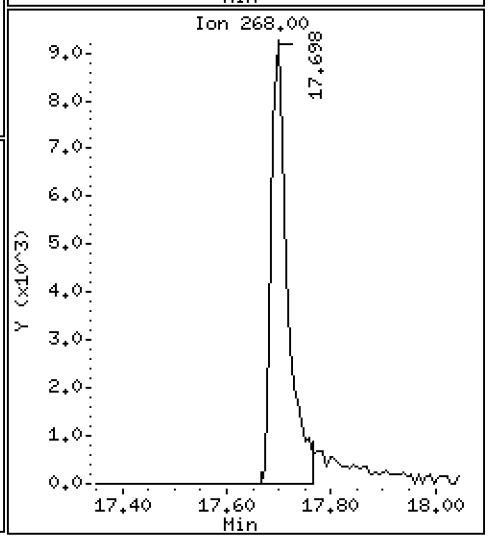












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

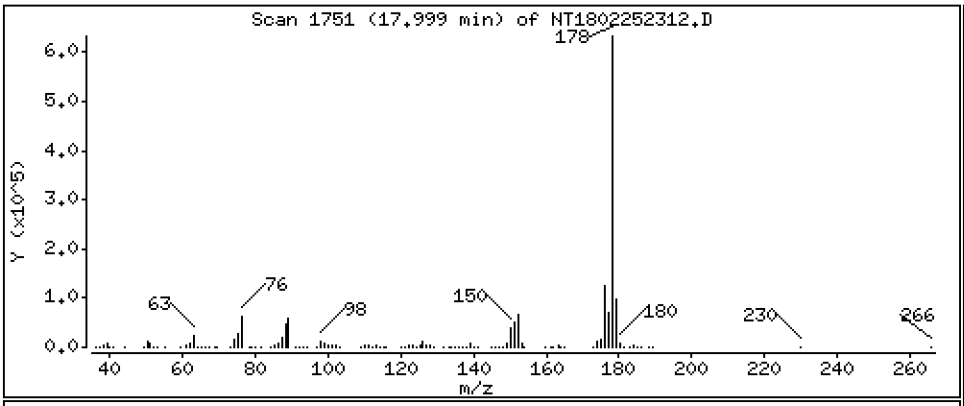
Operator: VTS

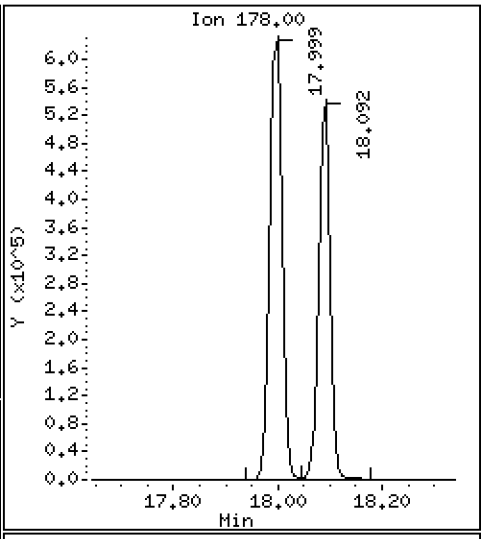
Column phase: ZB-5msi

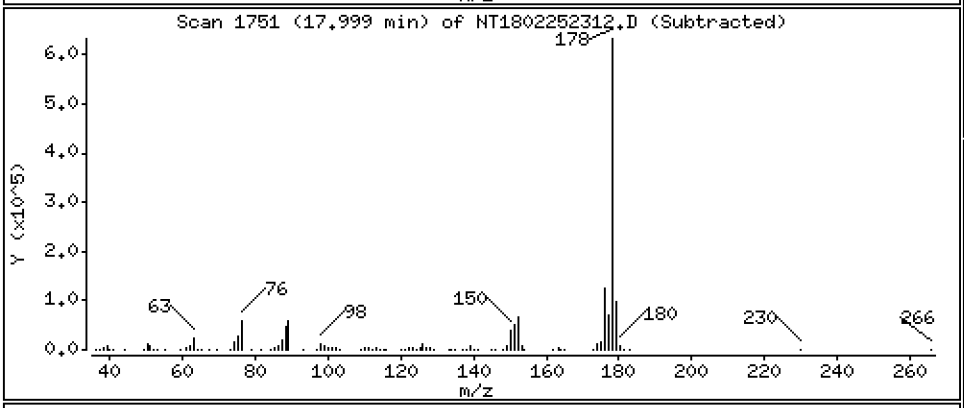
Column diameter: 0.25

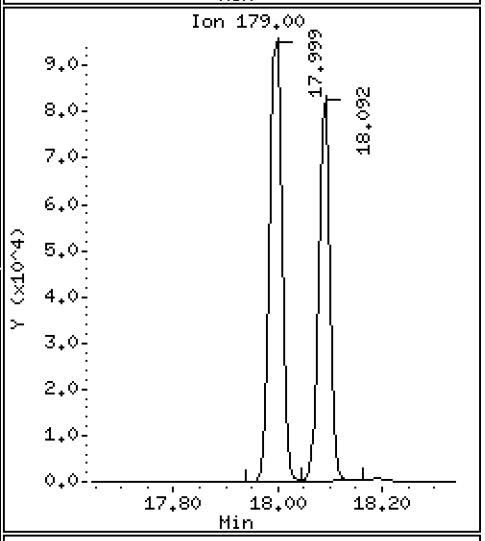
60 Phenanthrene

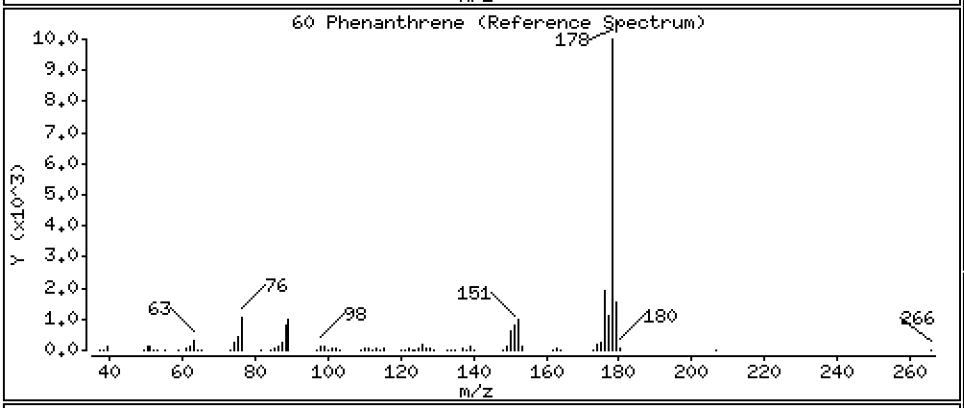
Concentration: 4.397 ug/mL

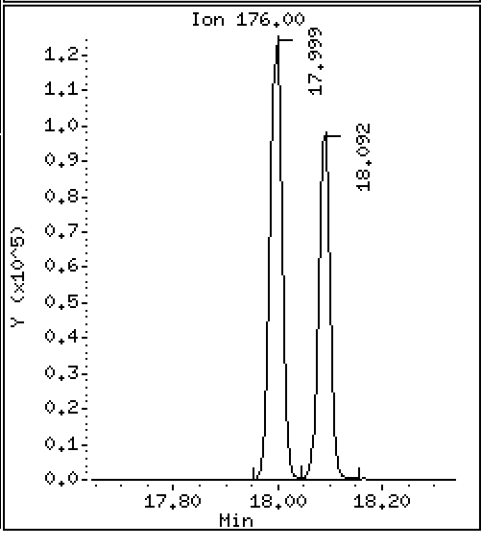


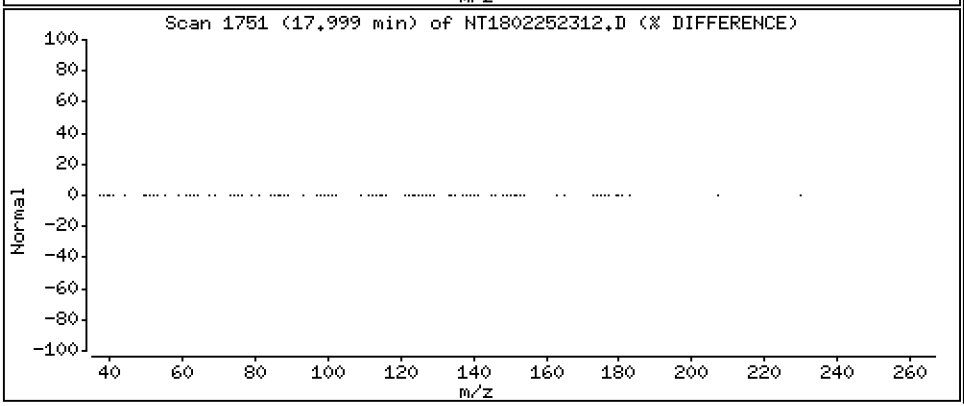












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

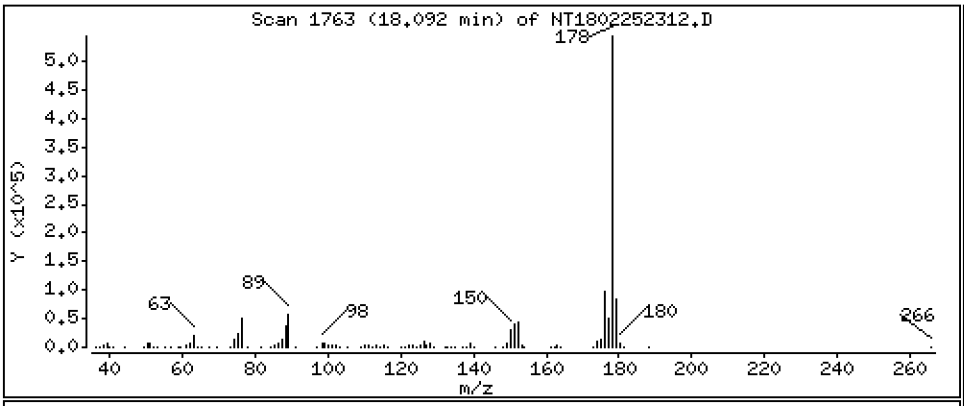
Operator: VTS

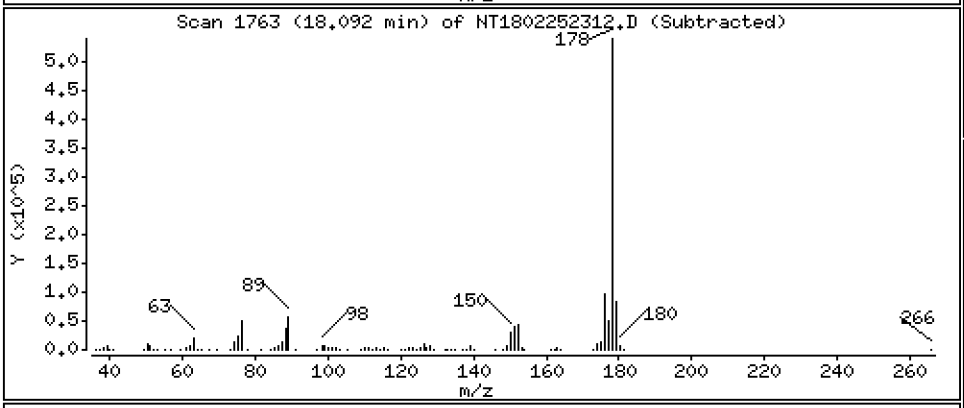
Column phase: ZB-5msi

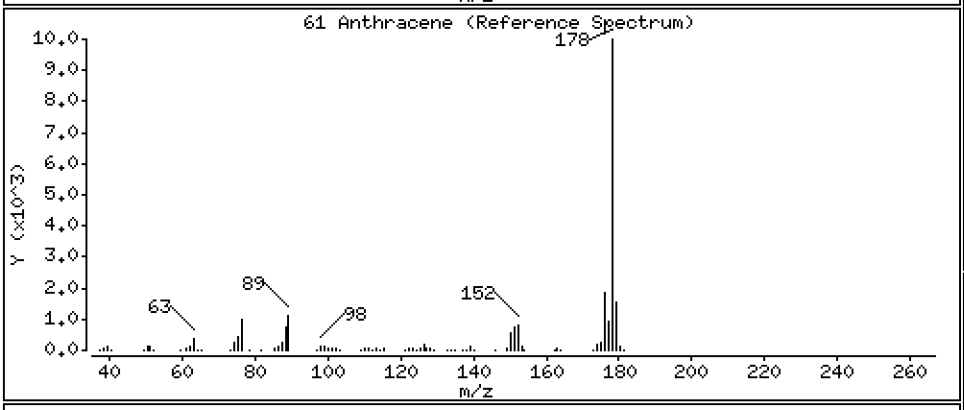
Column diameter: 0.25

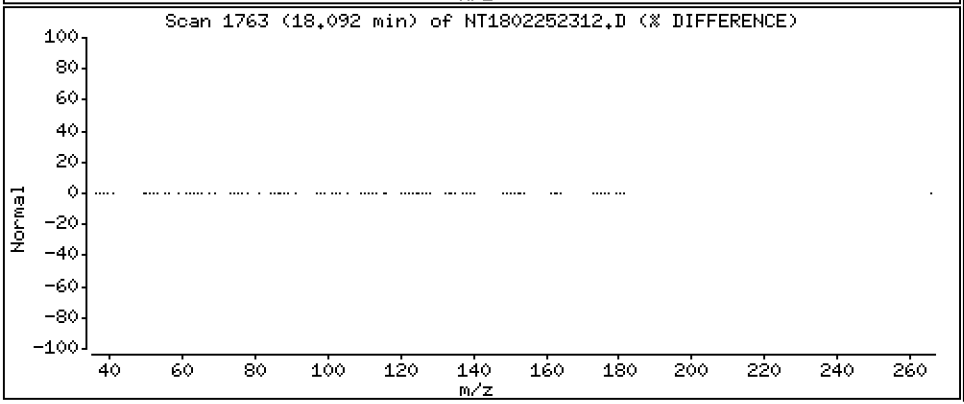
61 Anthracene

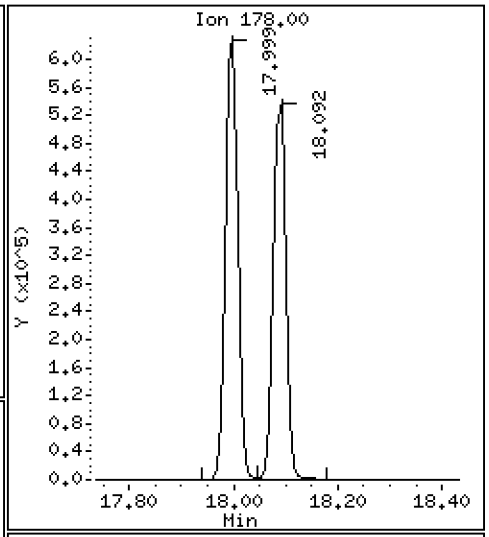
Concentration: 3.959 ug/mL

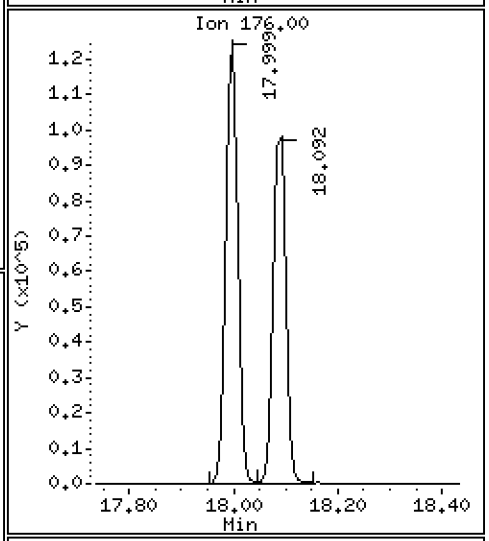


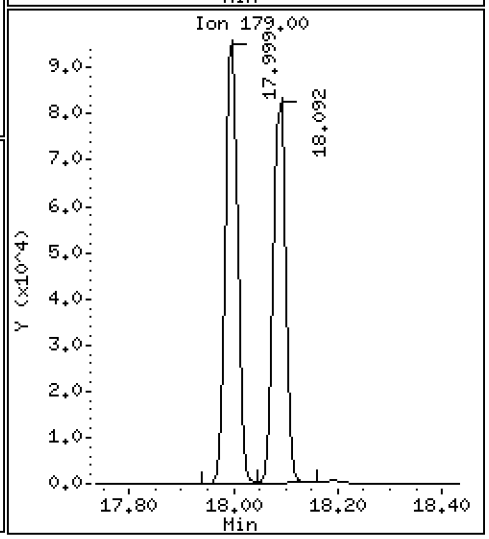












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

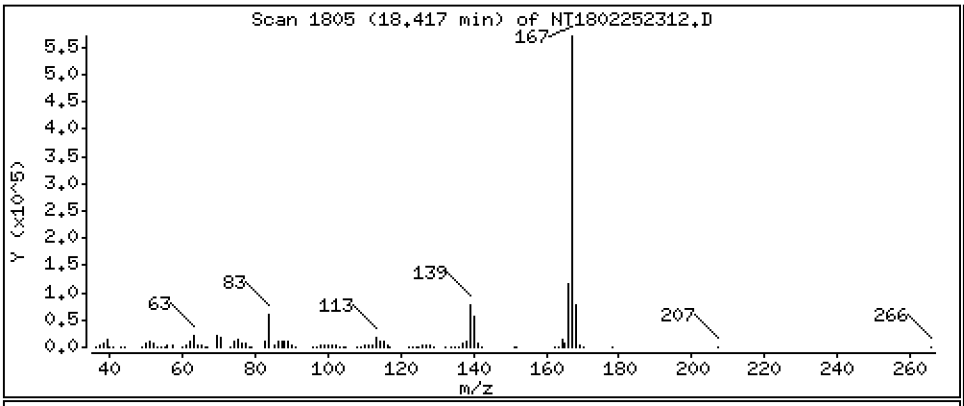
Operator: VTS

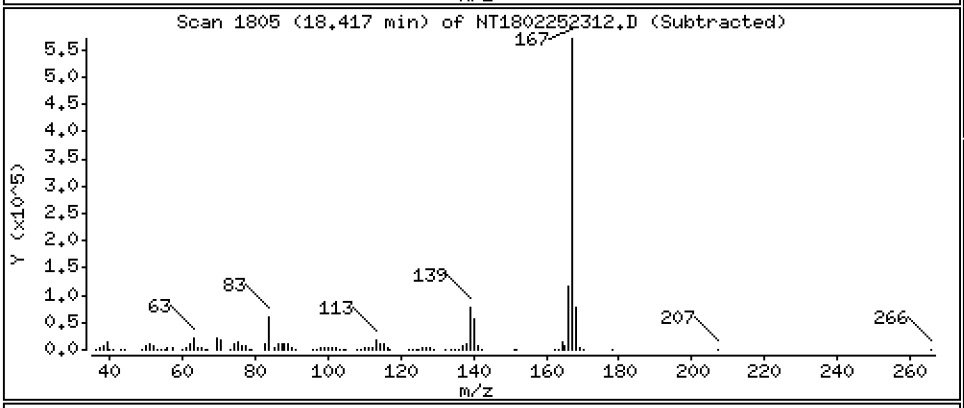
Column phase: ZB-5msi

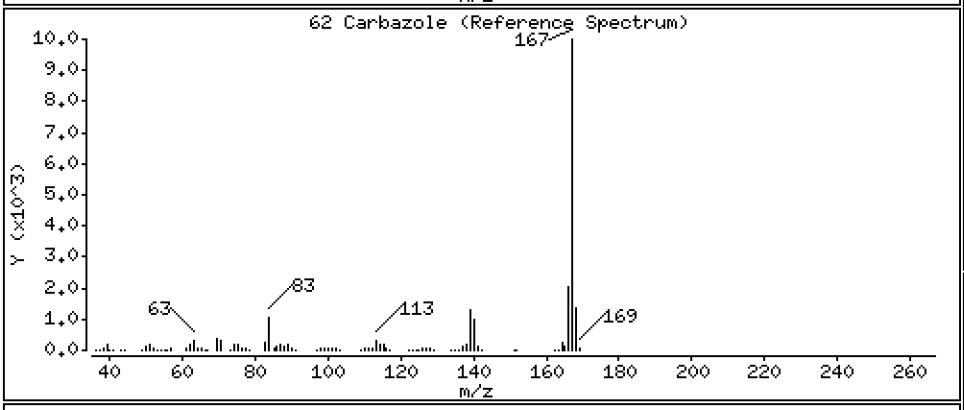
Column diameter: 0.25

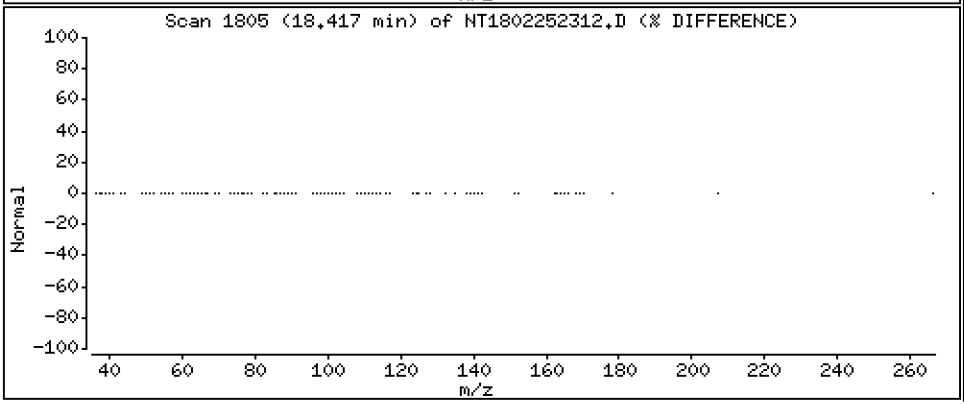
62 Carbazole

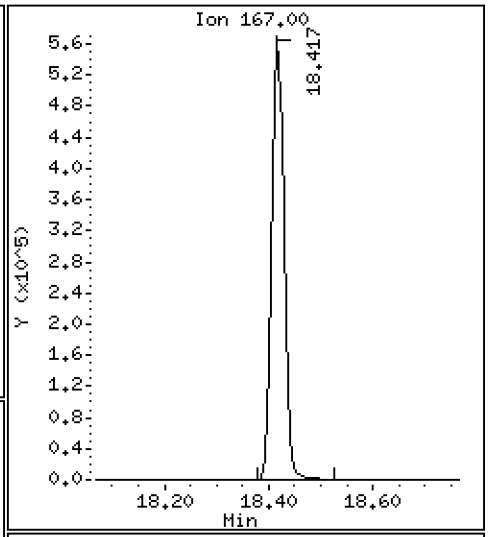
Concentration: 4.463 ug/mL

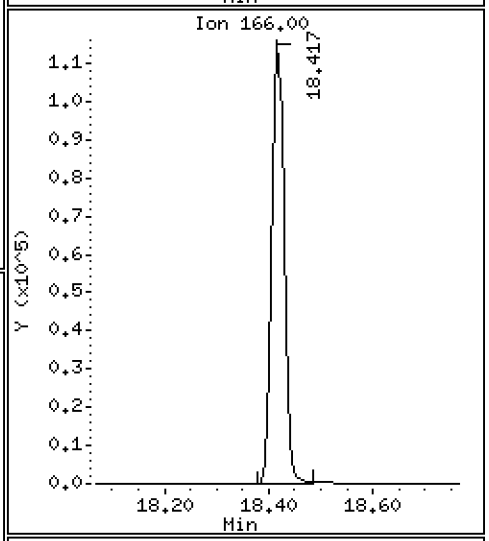


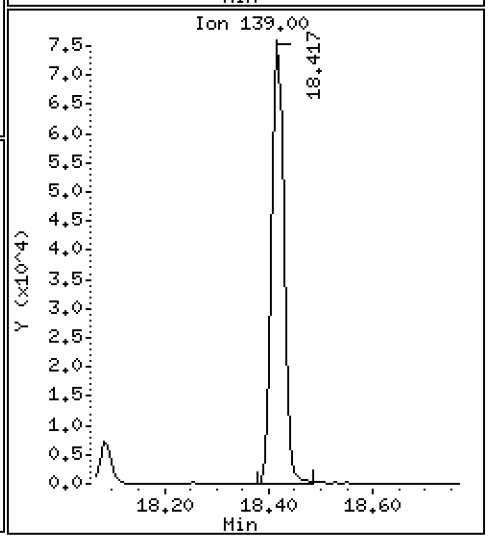












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

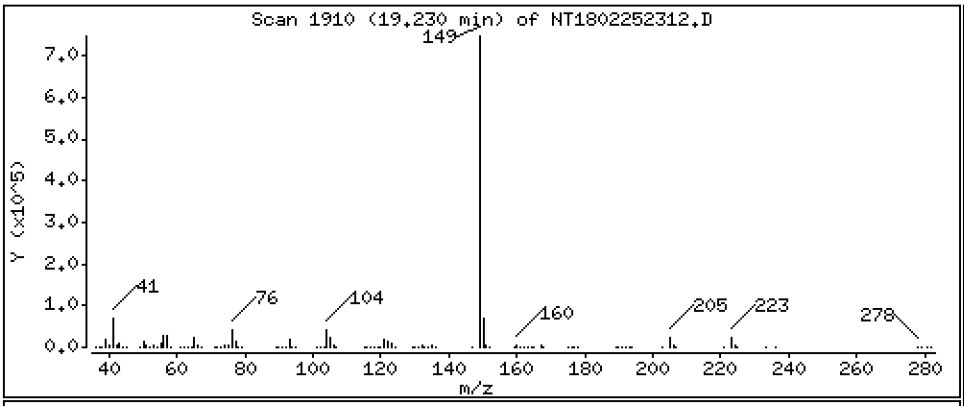
Operator: VTS

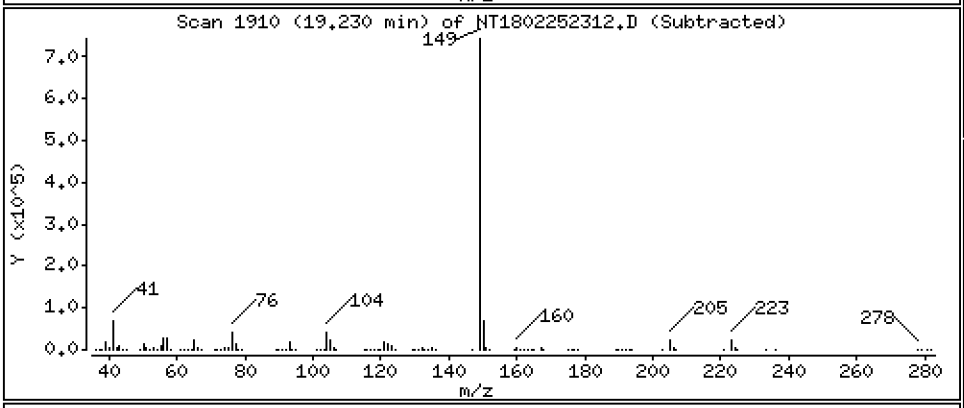
Column phase: ZB-5msi

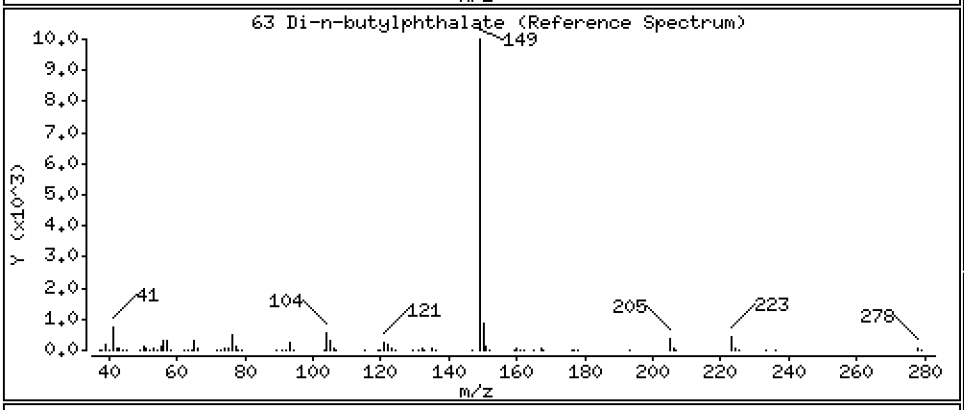
Column diameter: 0.25

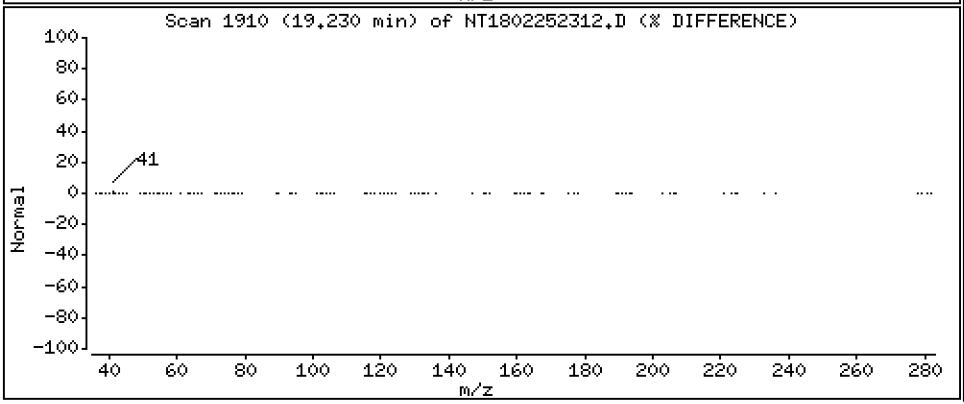
63 Di-n-butylphthalate

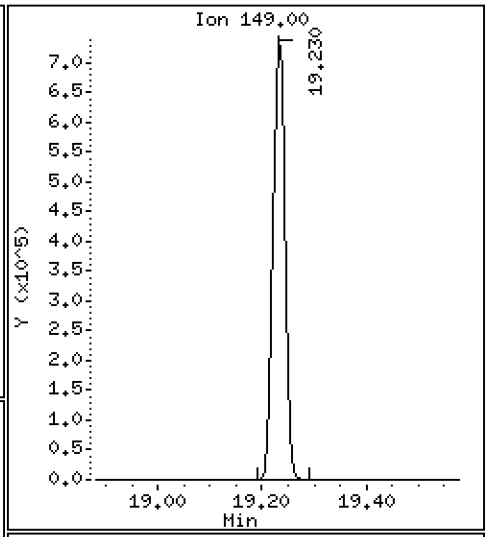
Concentration: 5.159 ug/mL

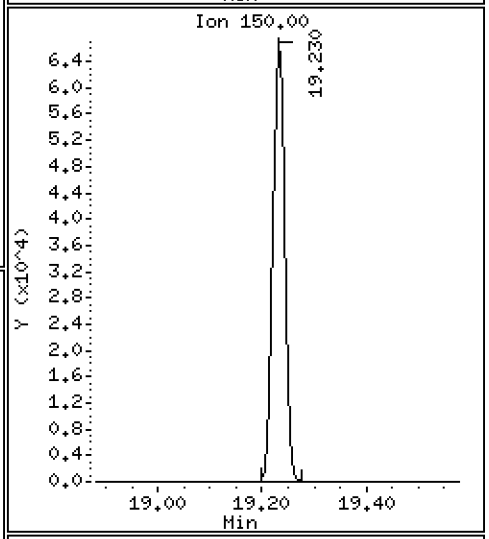


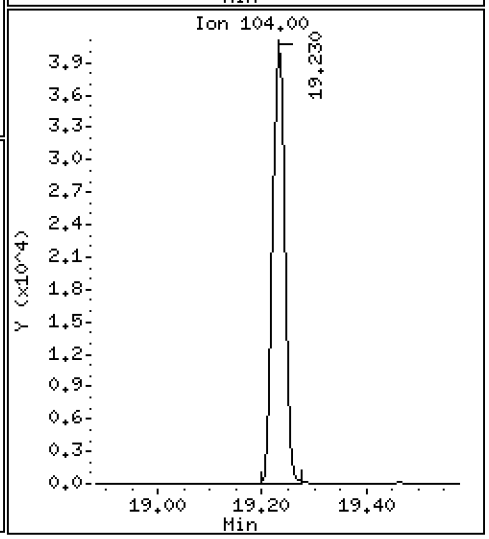












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

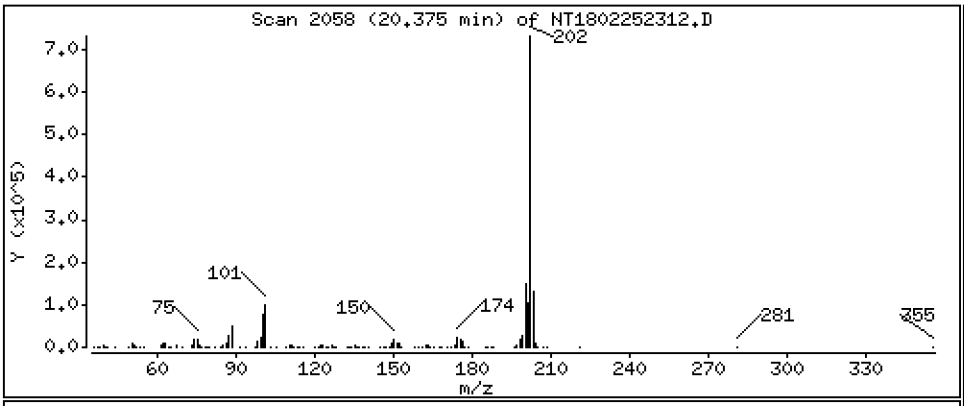
Operator: VTS

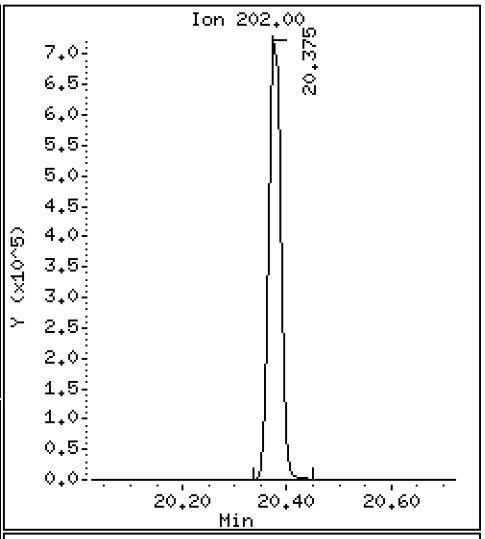
Column phase: ZB-5msi

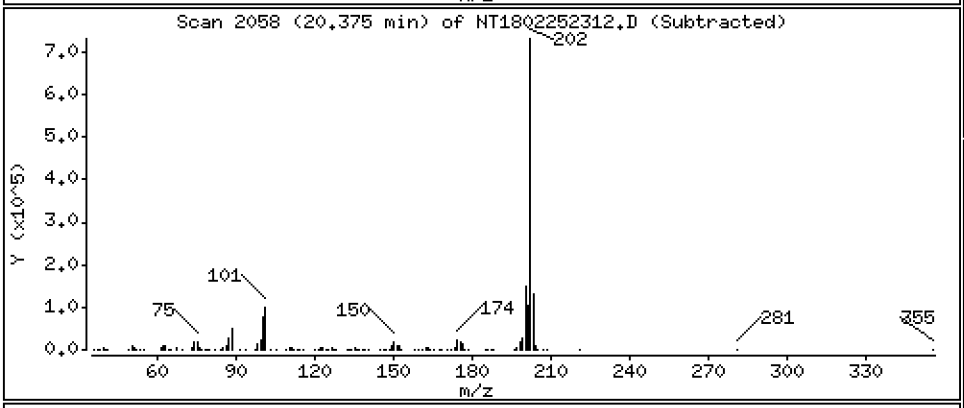
Column diameter: 0.25

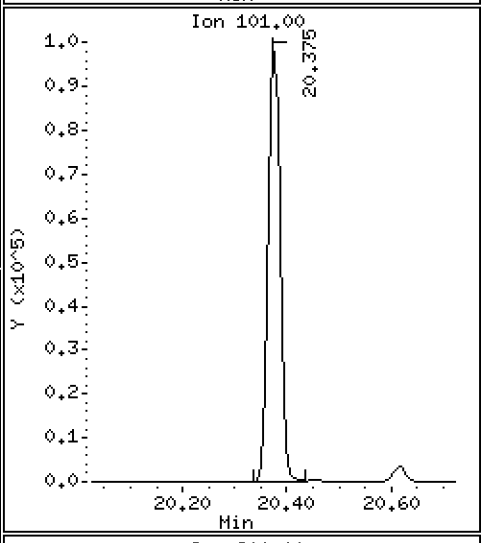
64 Fluoranthene

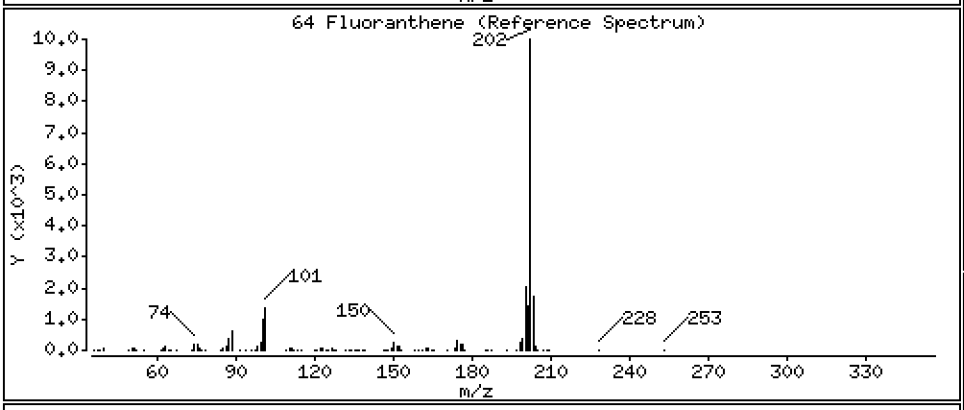
Concentration: 4.812 ug/mL

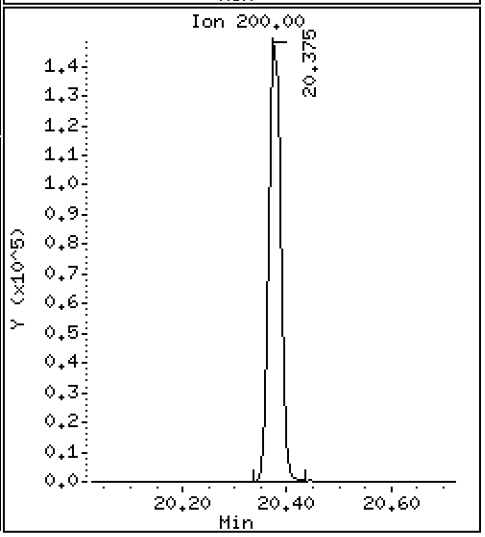


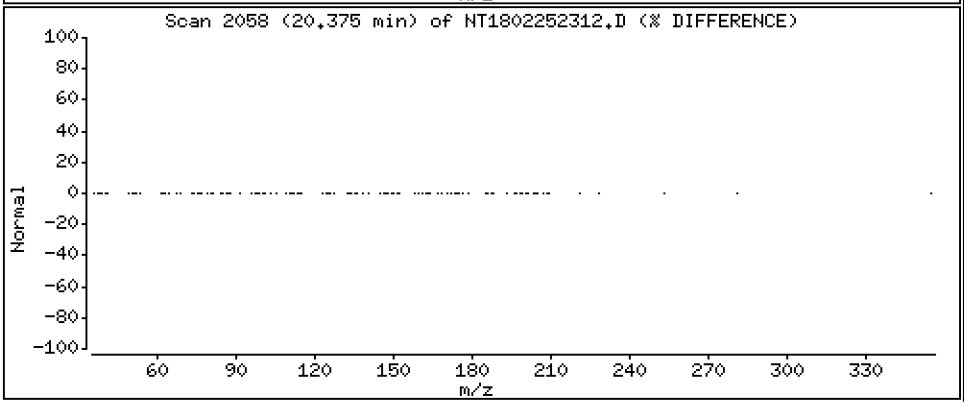












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

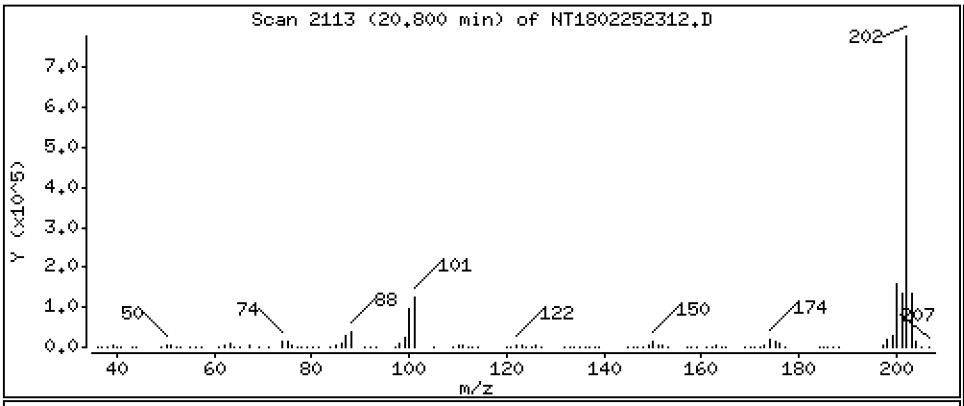
Operator: VTS

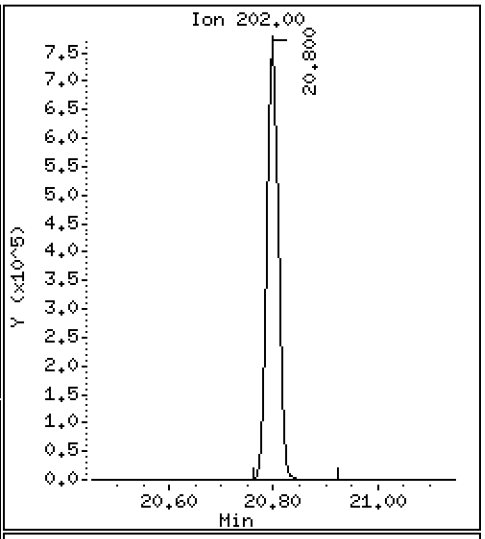
Column phase: ZB-5msi

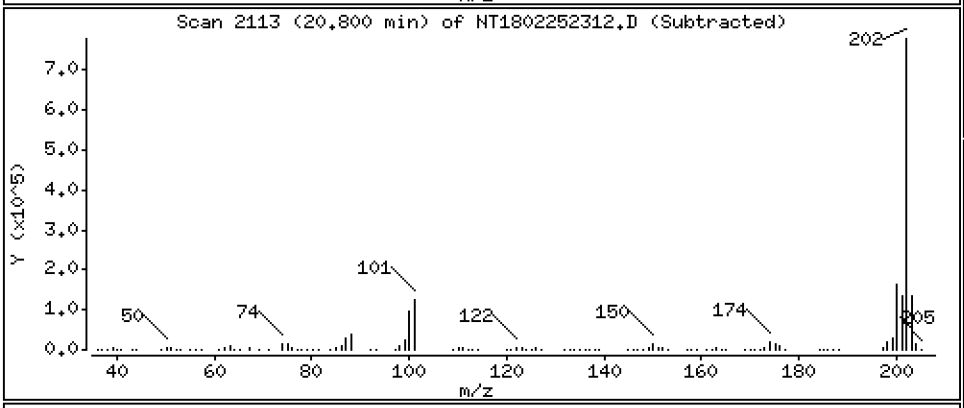
Column diameter: 0.25

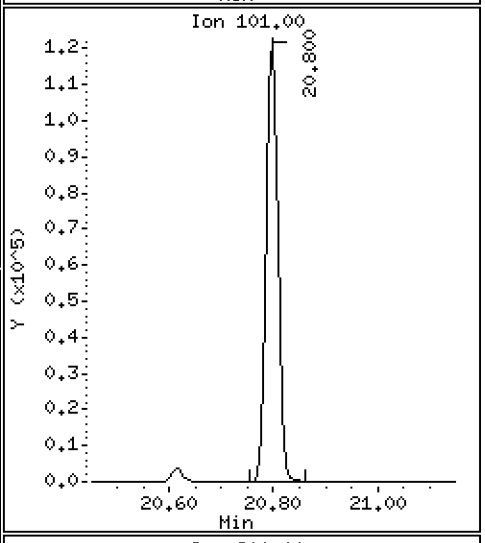
65 Pyrene

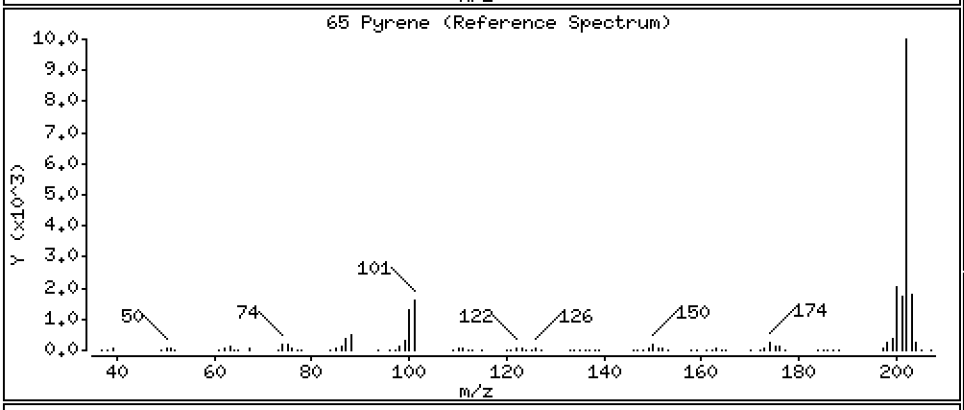
Concentration: 4.559 ug/mL

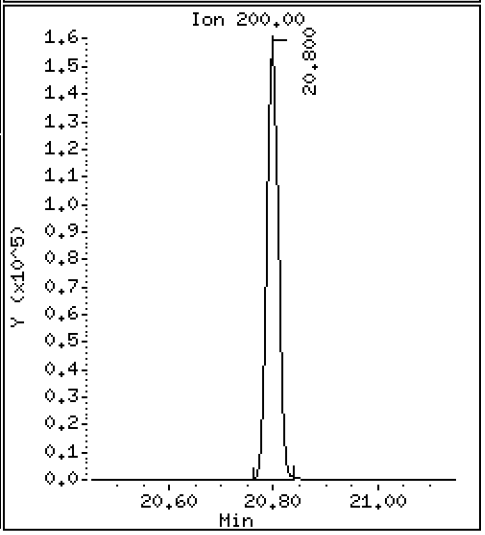


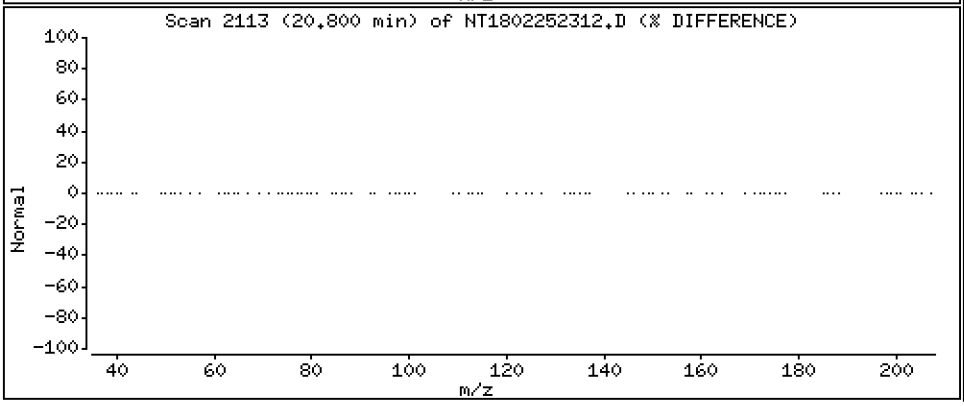












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

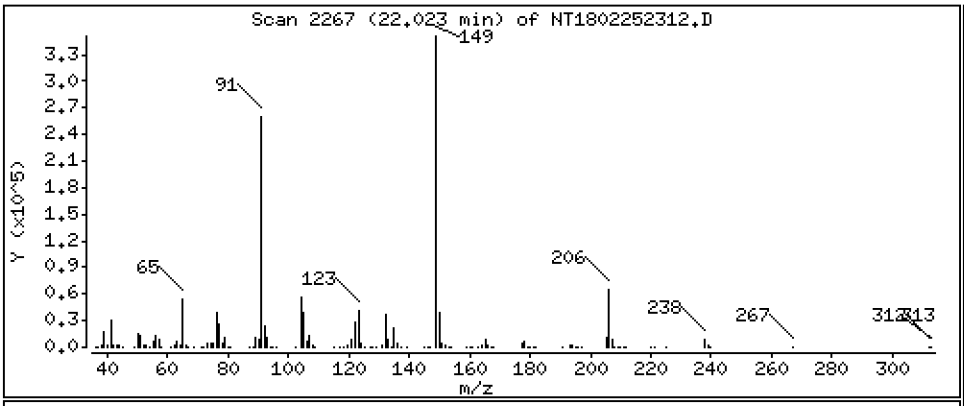
Operator: VTS

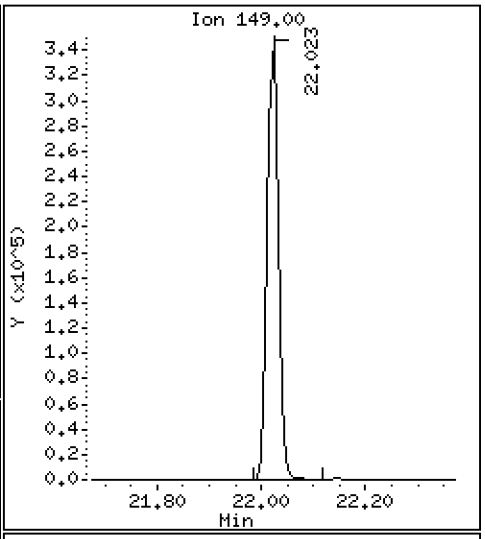
Column phase: ZB-5msi

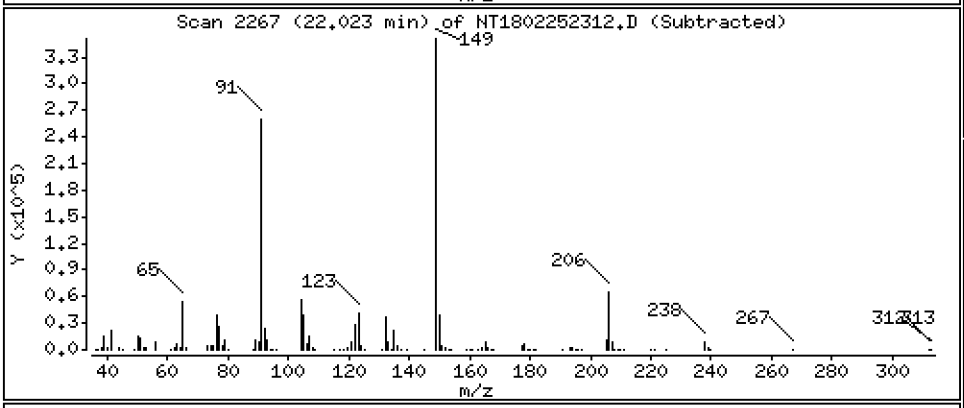
Column diameter: 0.25

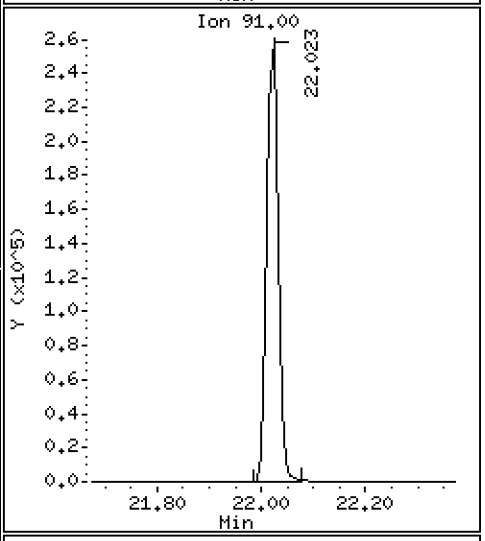
67 Butylbenzylphthalate

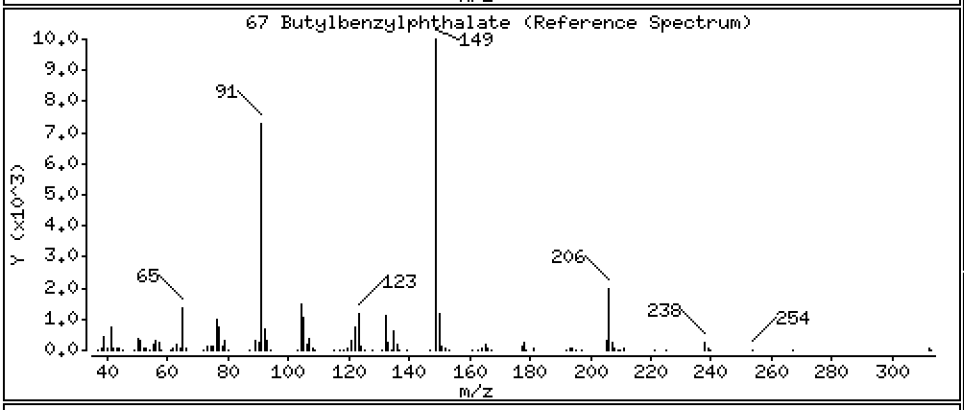
Concentration: 5.322 ug/mL

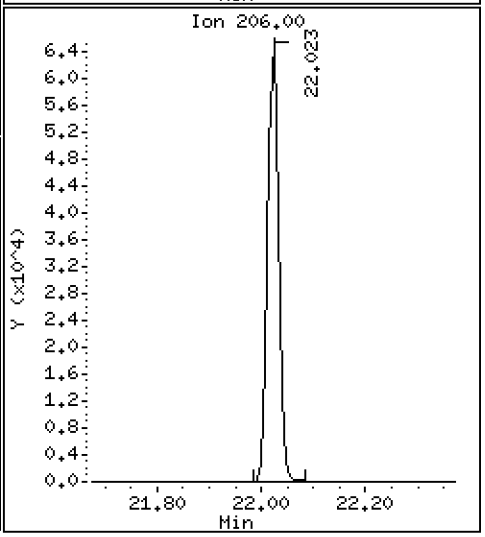


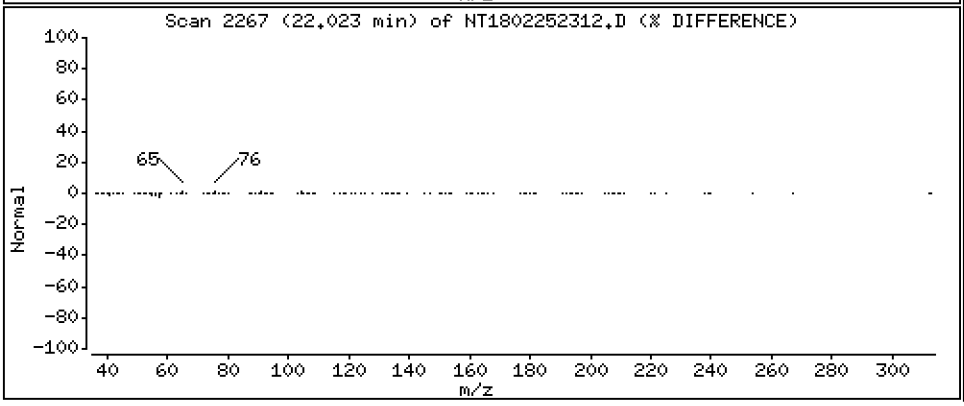












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

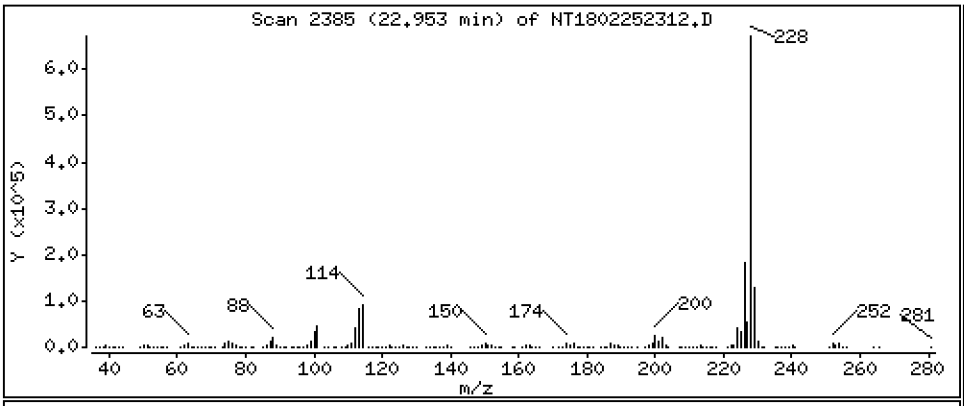
Operator: VTS

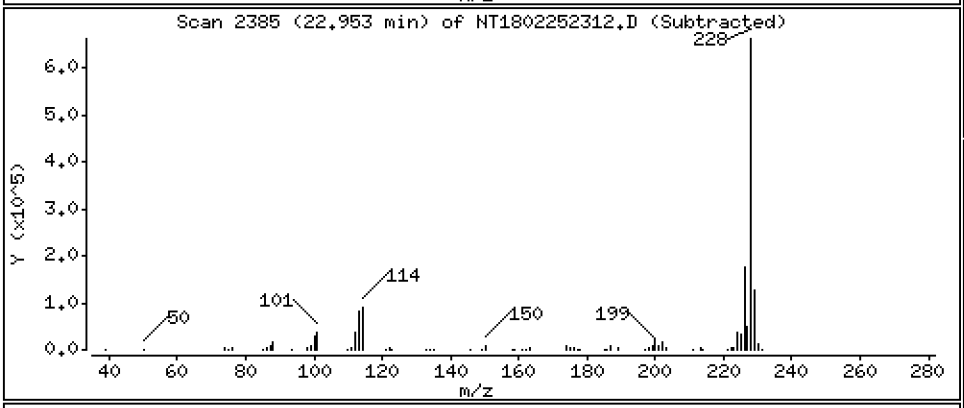
Column phase: ZB-5msi

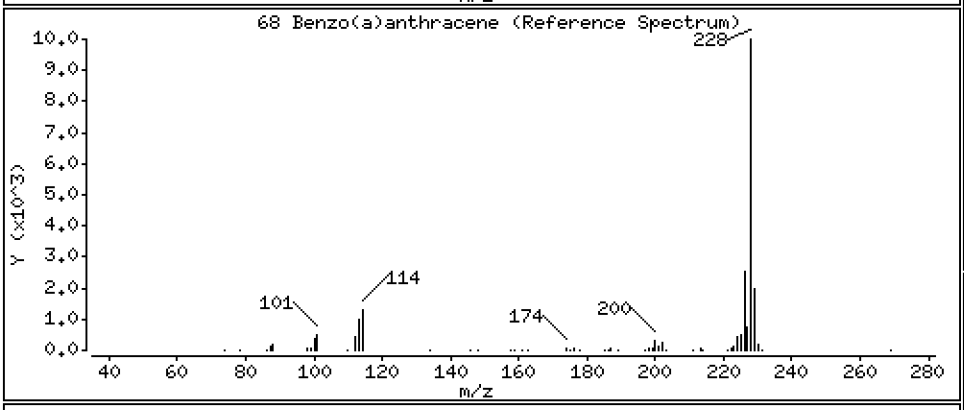
Column diameter: 0.25

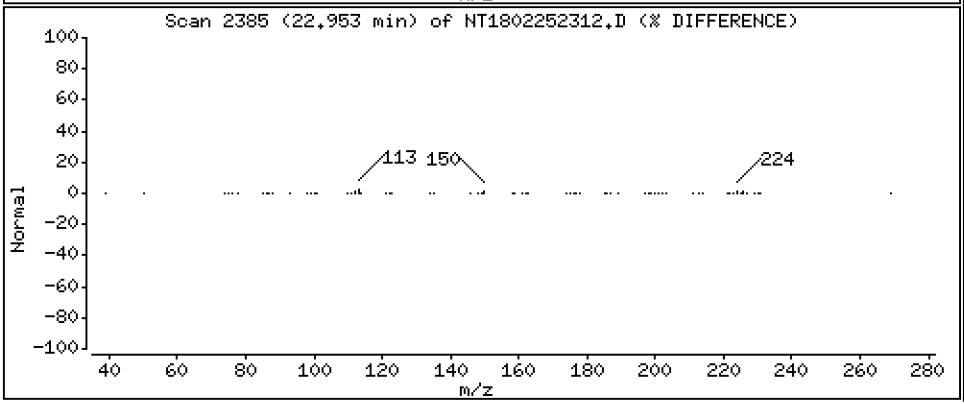
68 Benzo(a)anthracene

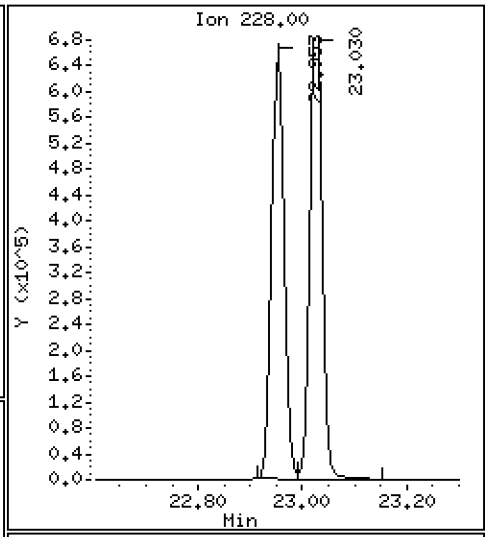
Concentration: 4.472 ug/mL

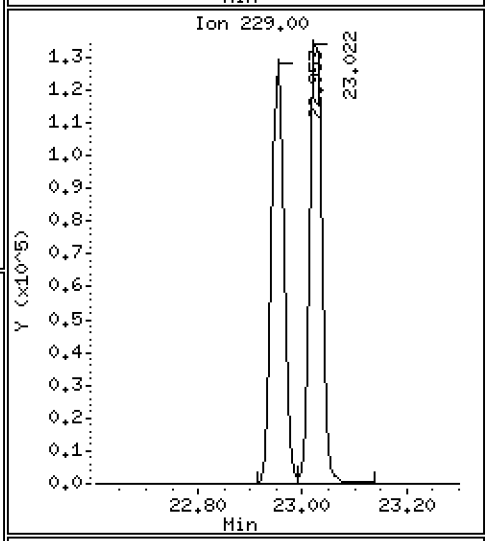


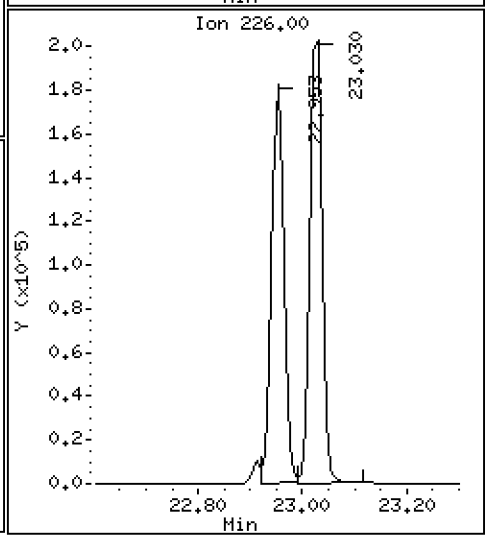












Date : 26-FEB-2023 04:06

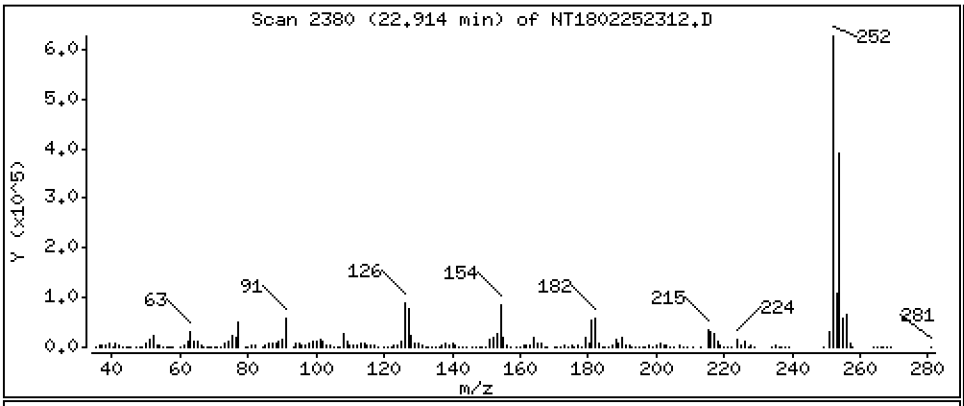
Client ID: Instrument: nt18.i

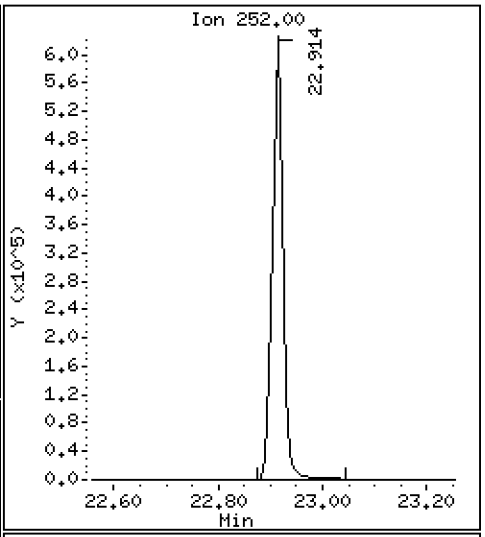
Sample Info: SLC0099-SCV1

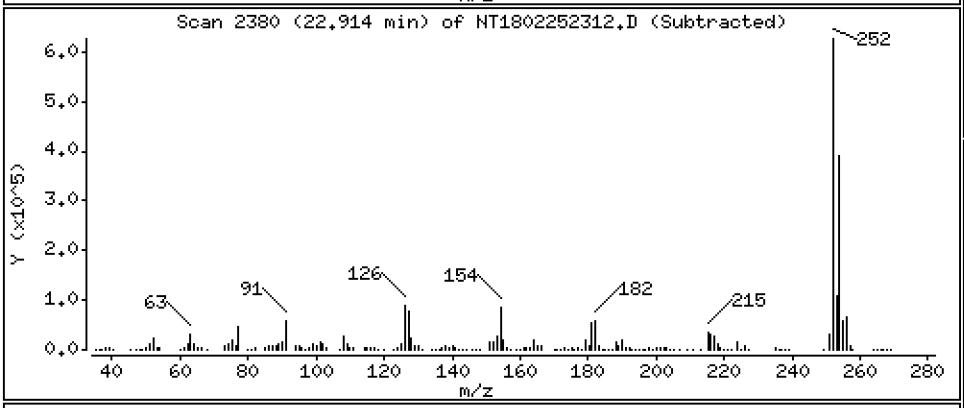
Operator: VTS

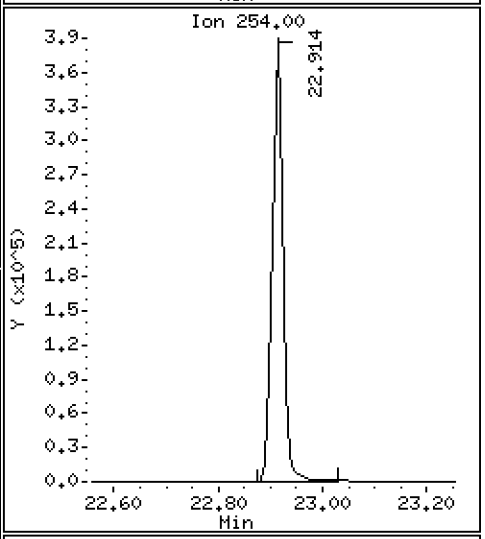
Column phase: ZB-5msi Column diameter: 0.25

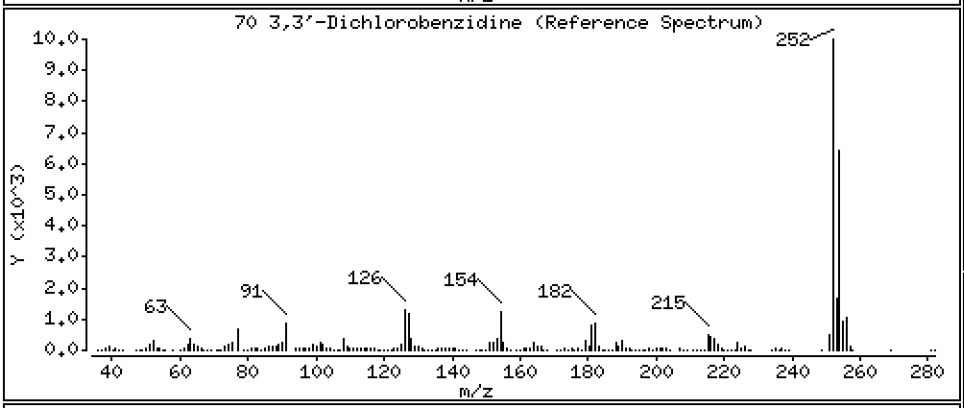
70 3,3'-Dichlorobenzidine Concentration: 10.00 ug/mL

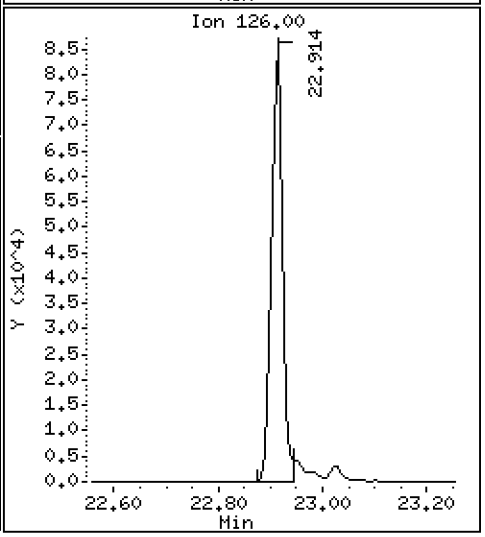


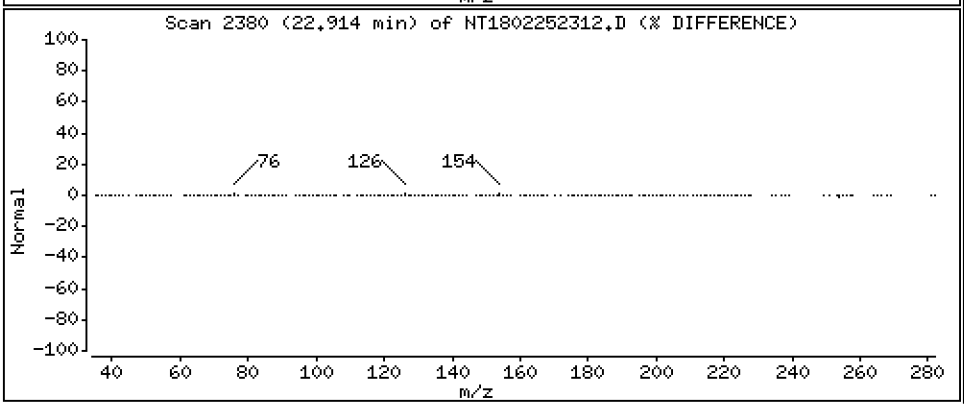












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

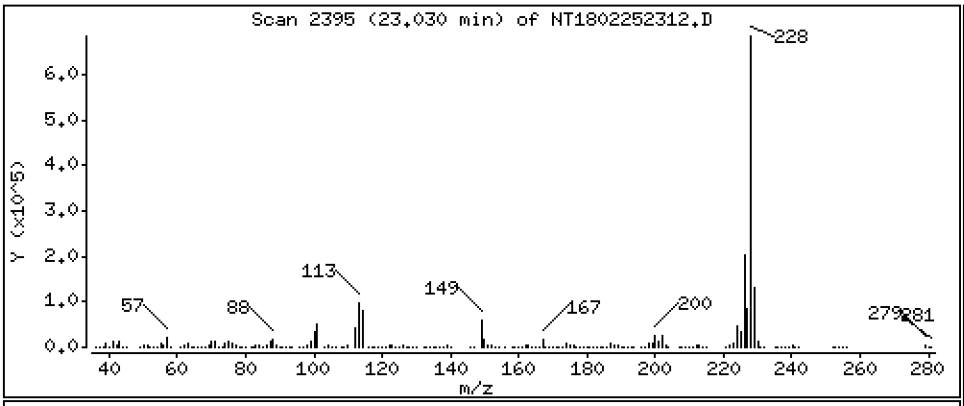
Operator: VTS

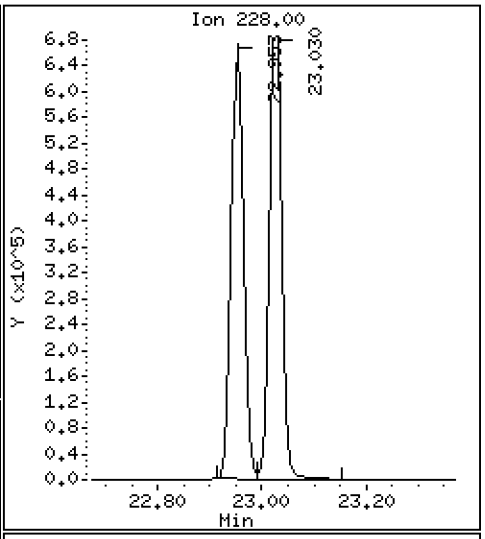
Column phase: ZB-5msi

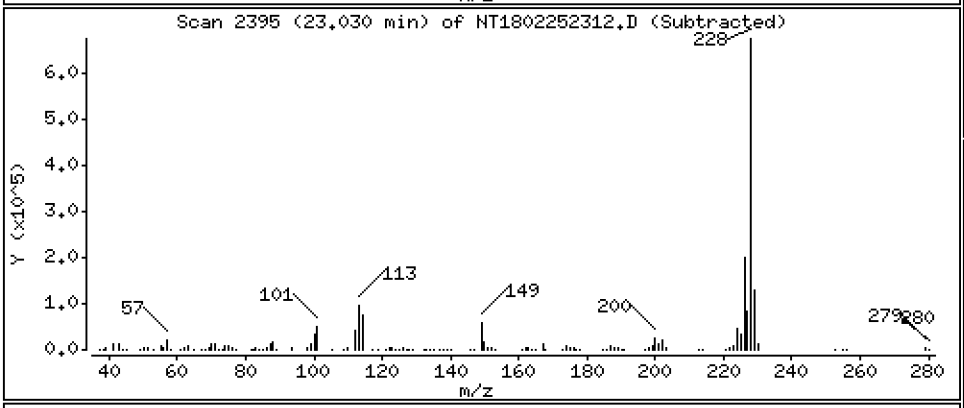
Column diameter: 0.25

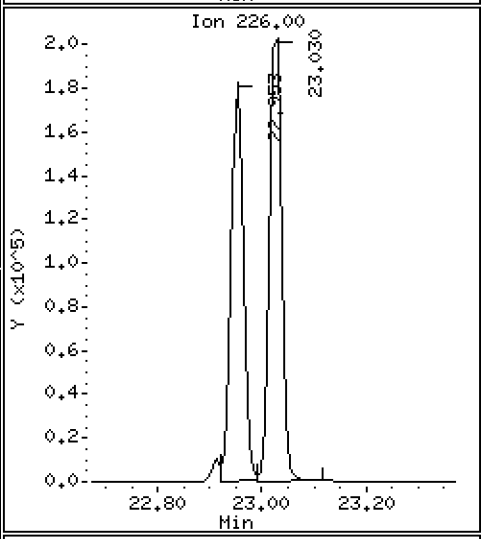
71 Chrysene

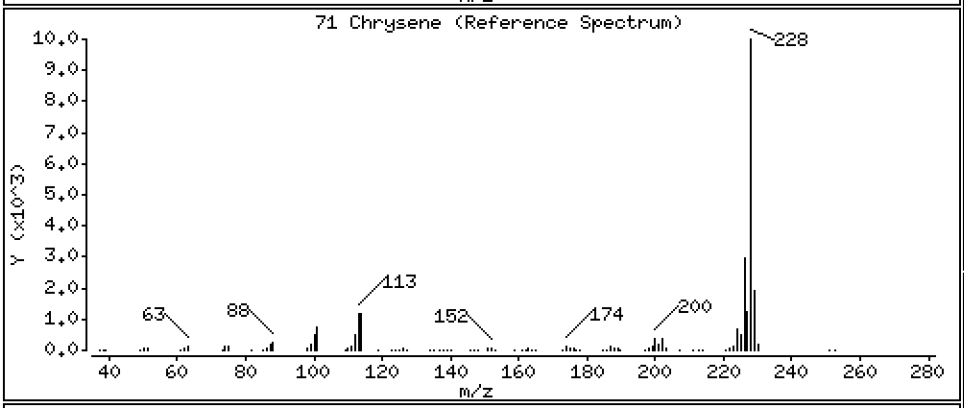
Concentration: 4.428 ug/mL

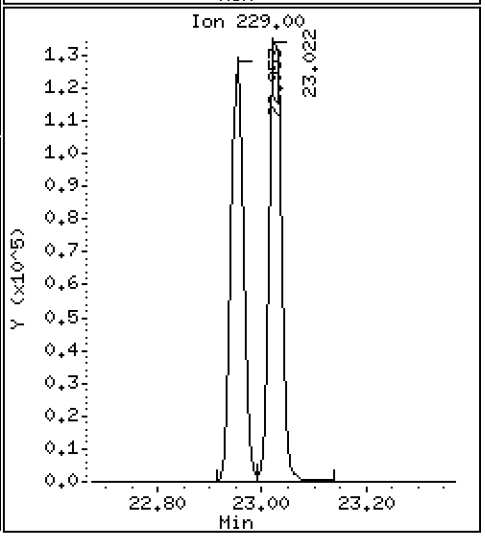


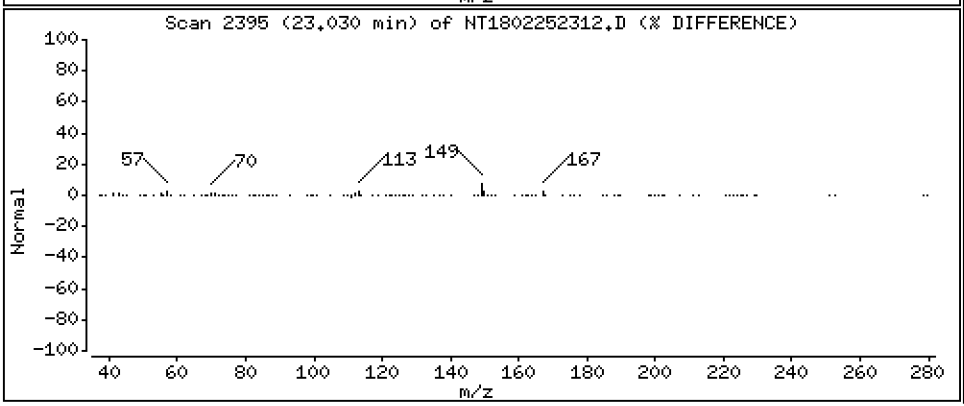












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

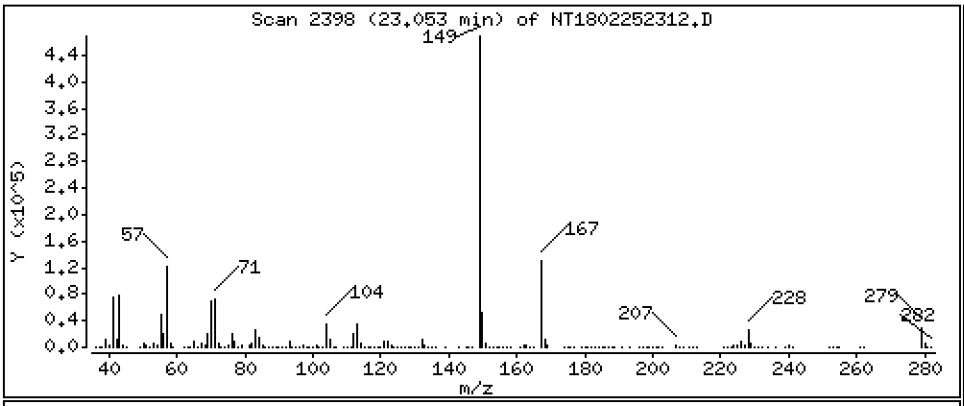
Operator: VTS

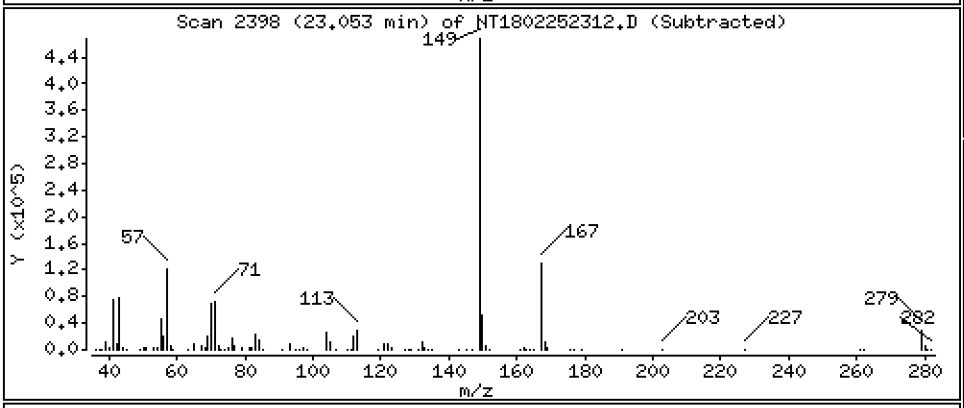
Column phase: ZB-5msi

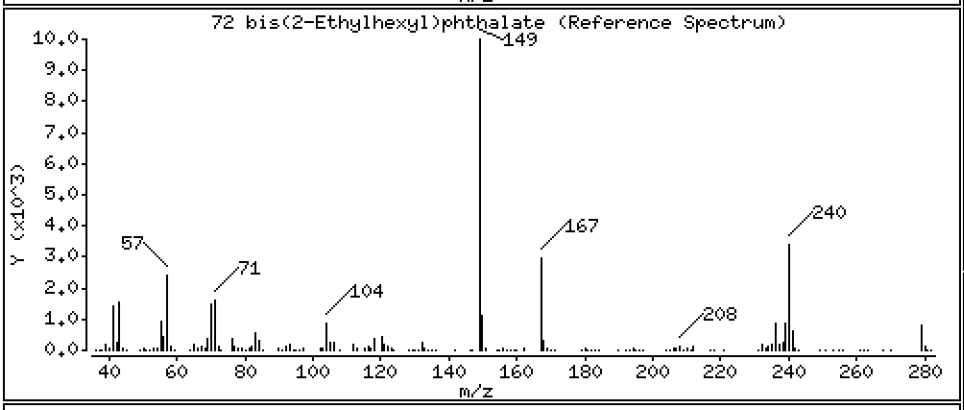
Column diameter: 0.25

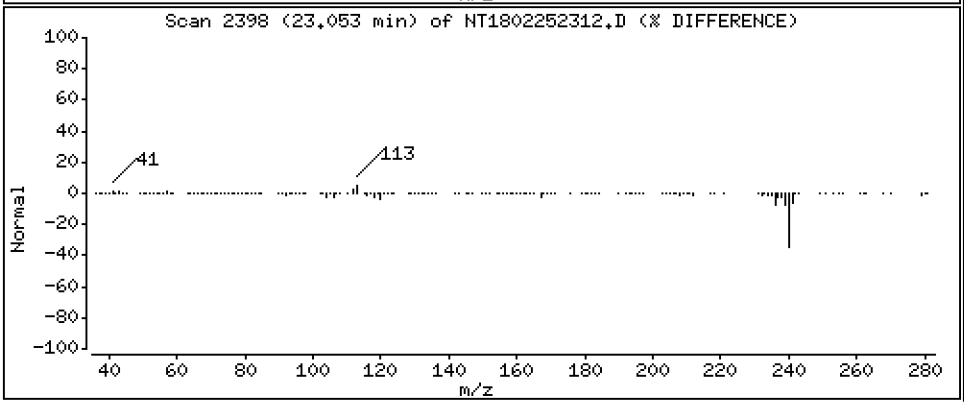
72 bis(2-Ethylhexyl)phthalate

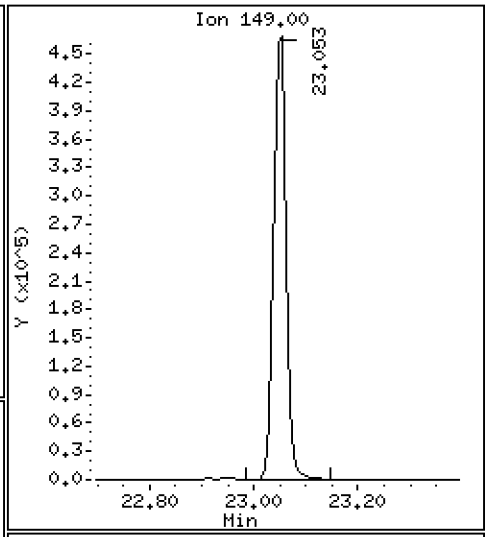
Concentration: 5.231 ug/mL

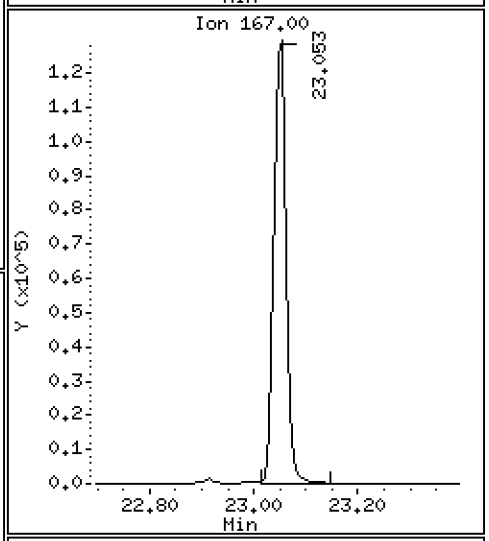


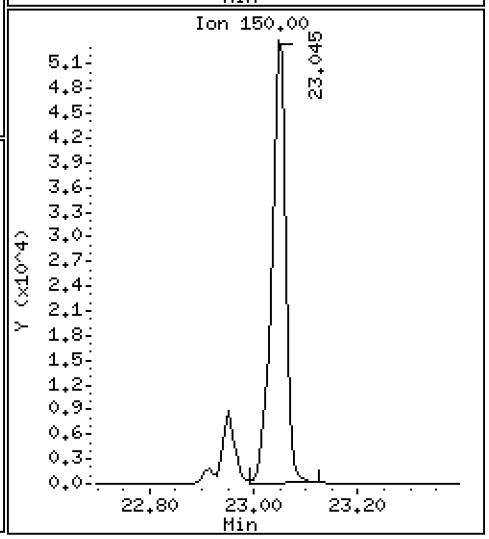












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

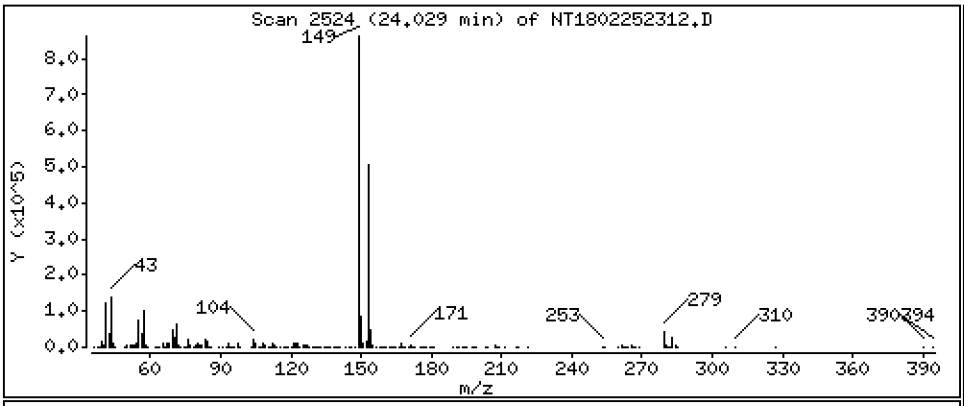
Operator: VTS

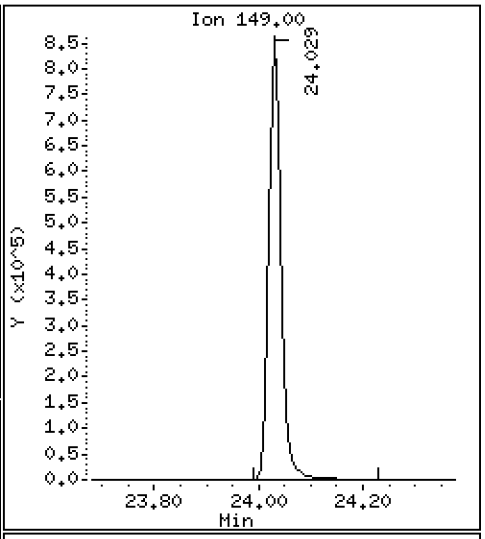
Column phase: ZB-5msi

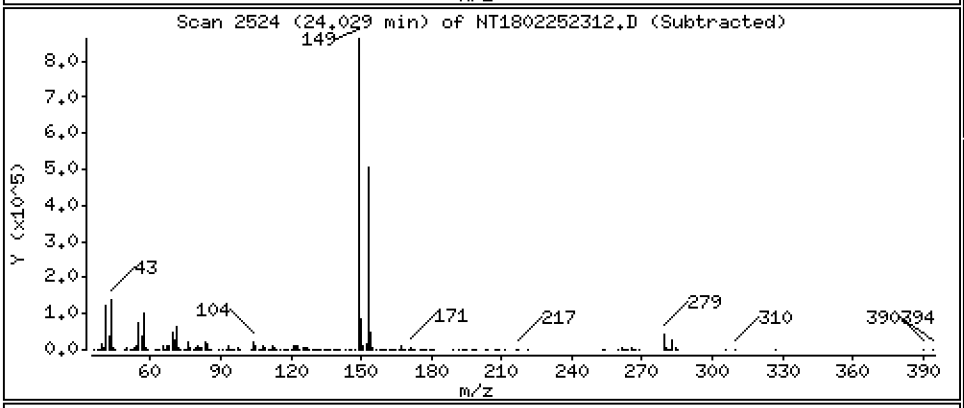
Column diameter: 0.25

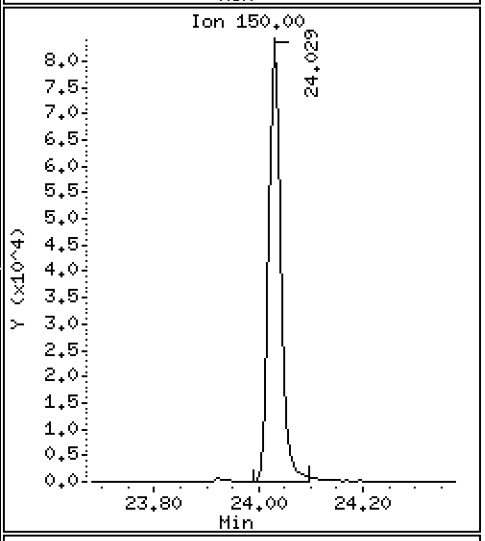
73 Di-n-octylphthalate

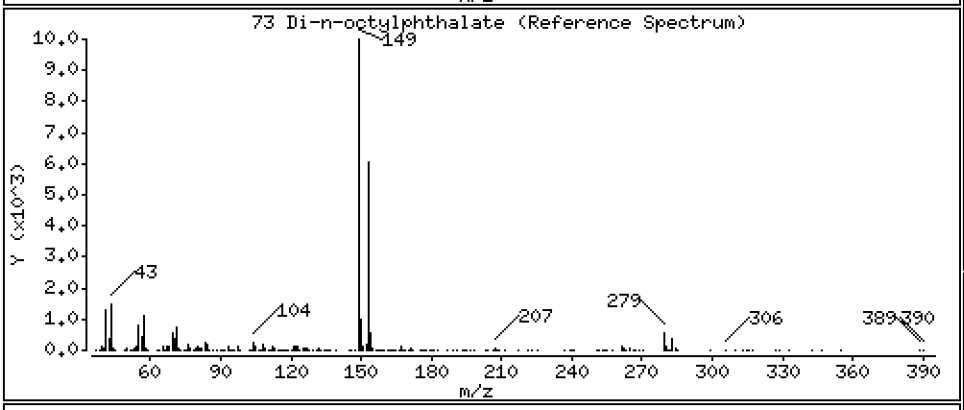
Concentration: 4.813 ug/mL

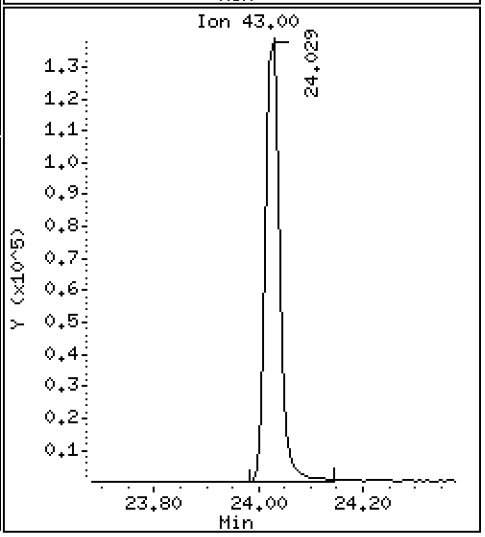


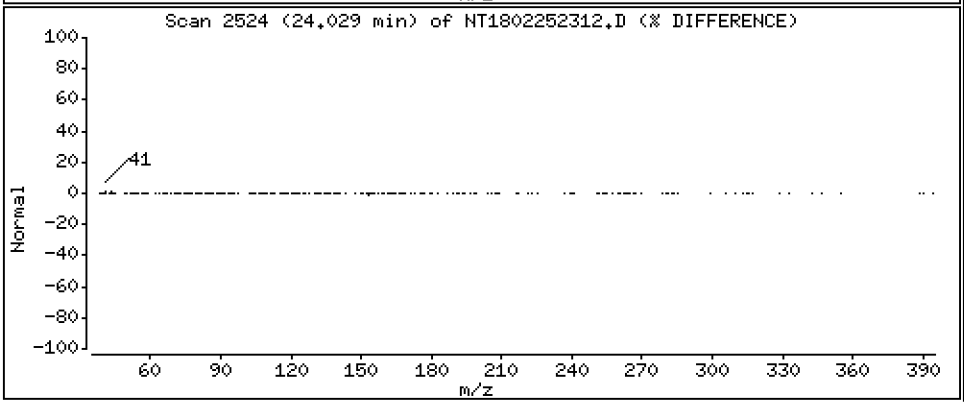












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

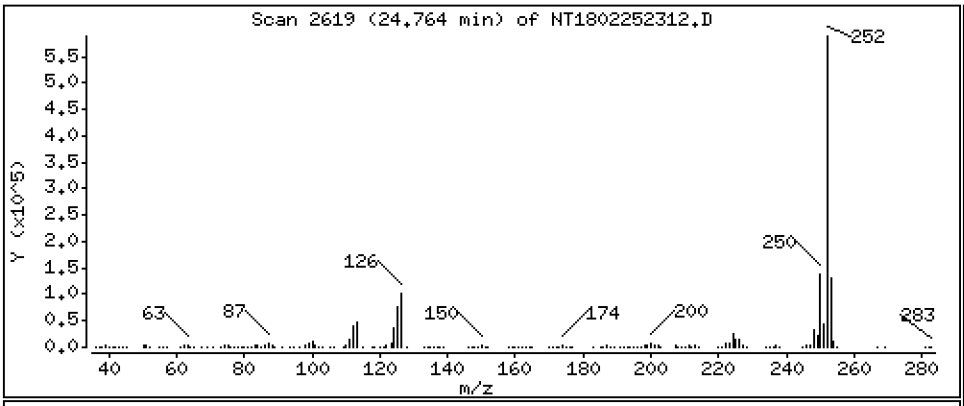
Operator: VTS

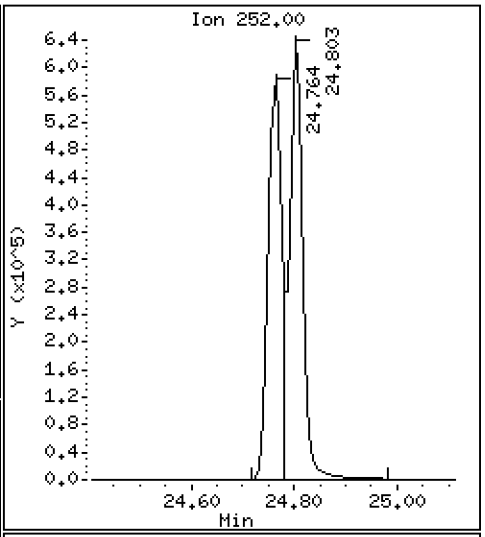
Column phase: ZB-5msi

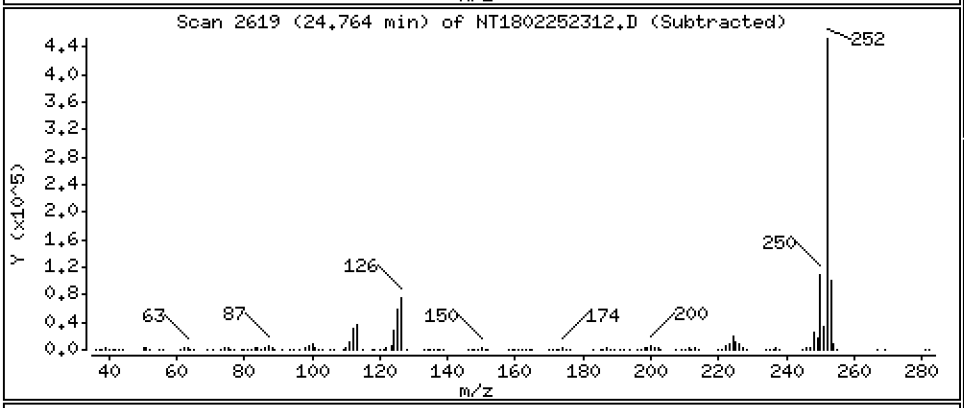
Column diameter: 0.25

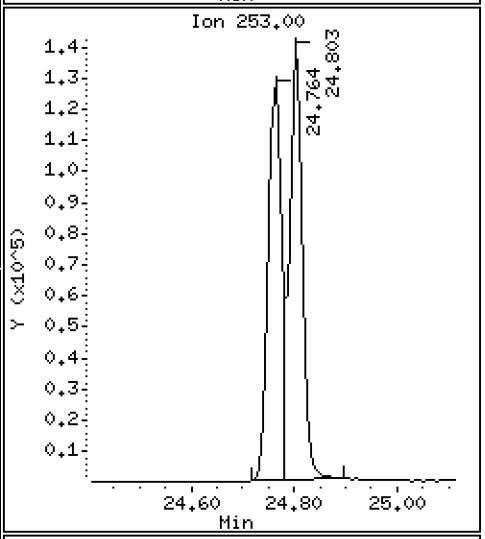
74 Benzo(b)fluoranthene

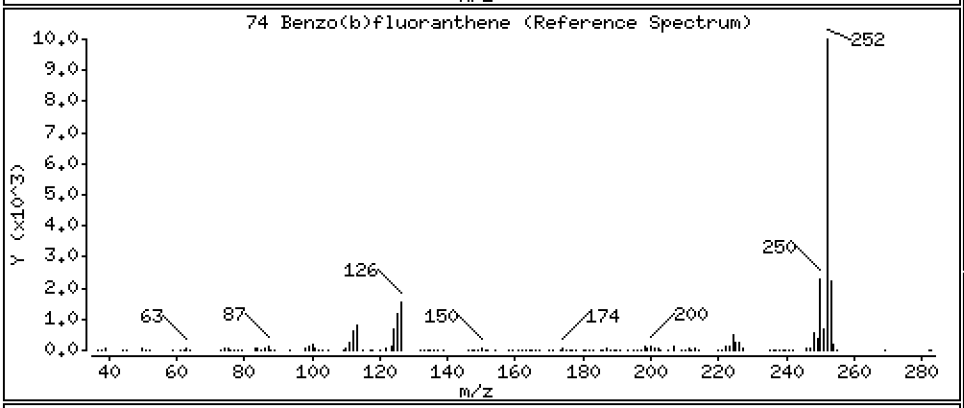
Concentration: 4.319 ug/mL

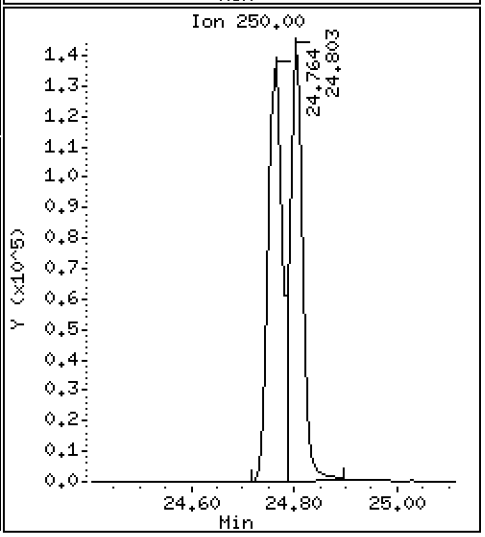


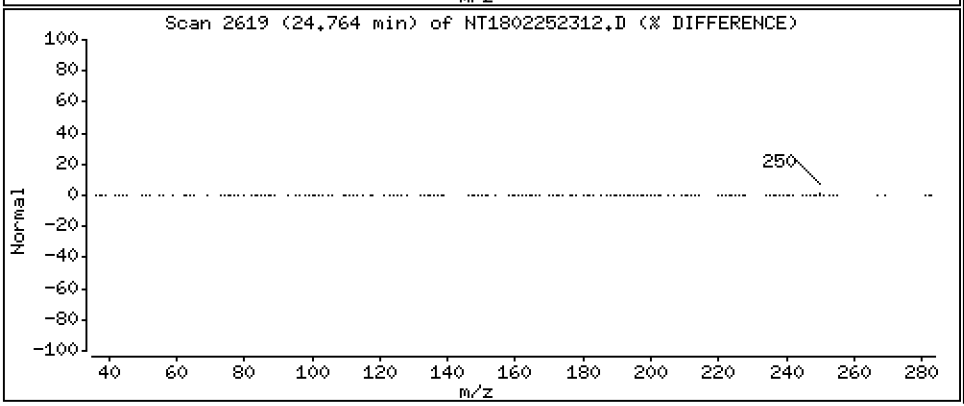












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

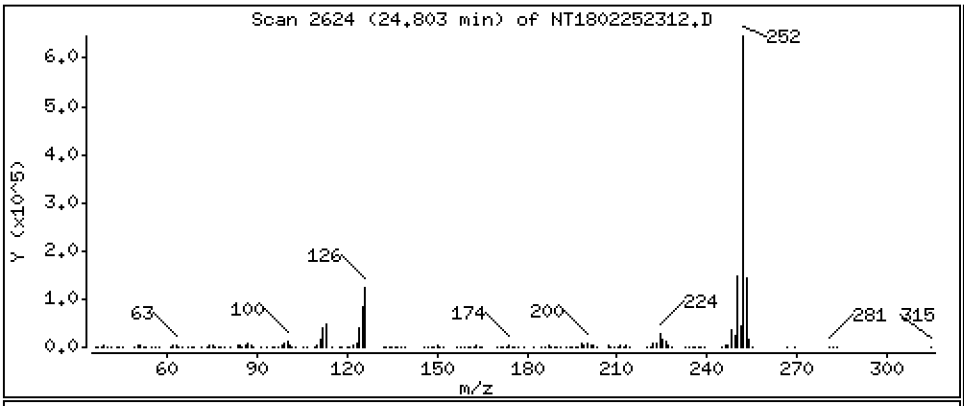
Operator: VTS

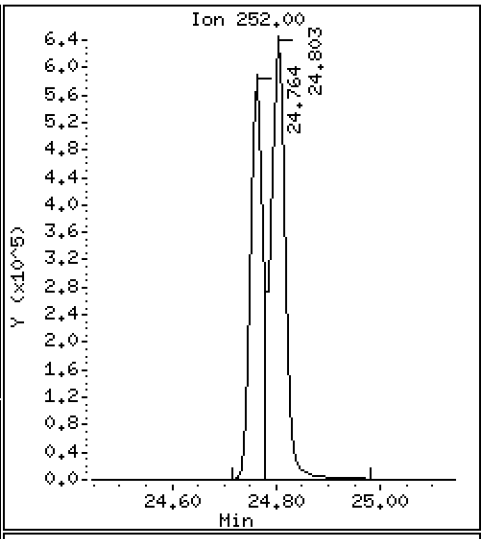
Column phase: ZB-5msi

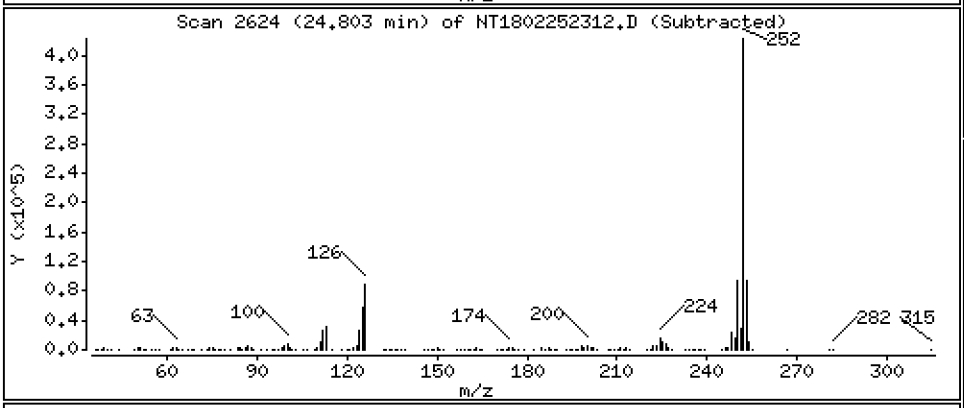
Column diameter: 0.25

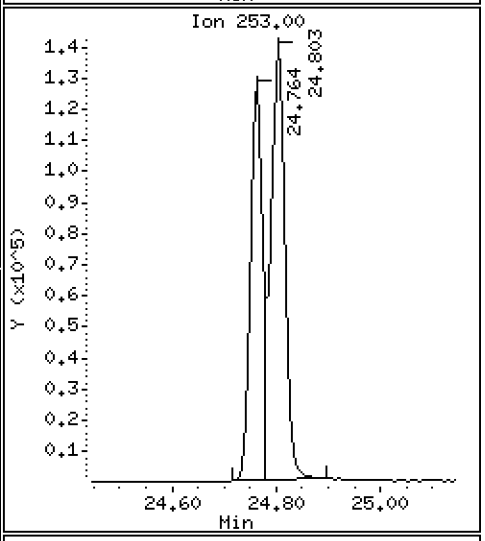
75 Benzo(k)fluoranthene

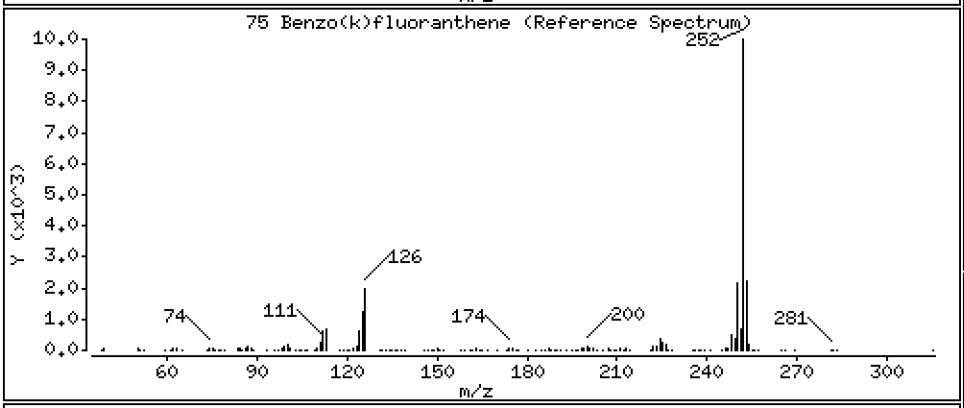
Concentration: 4.735 ug/mL

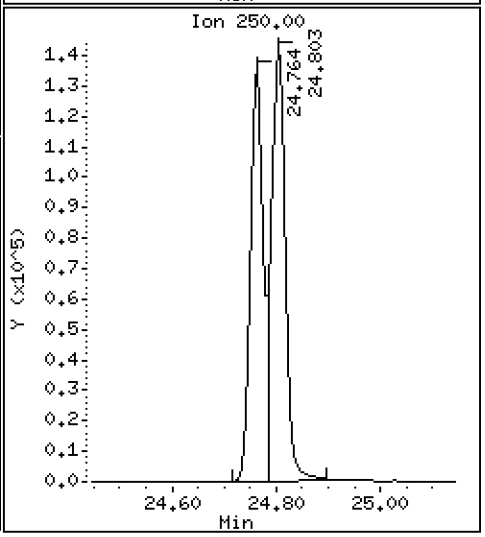


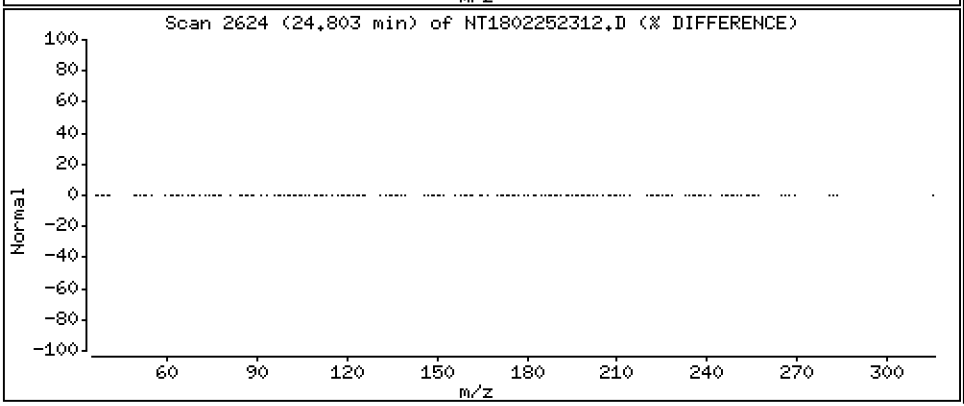












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

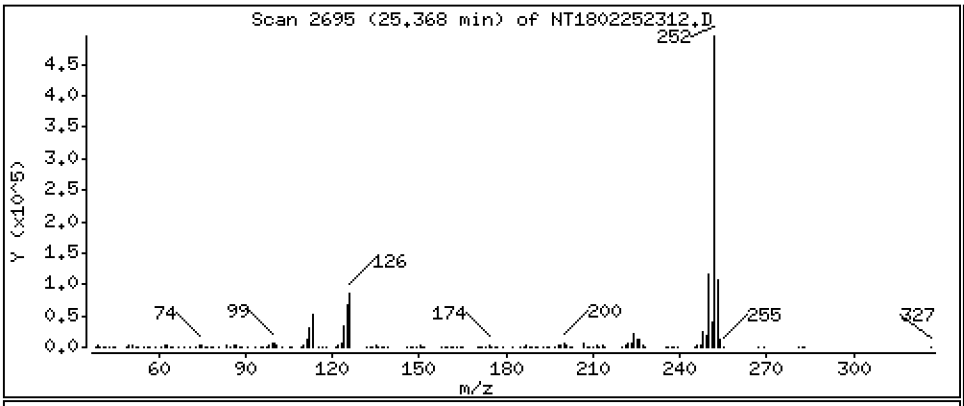
Operator: VTS

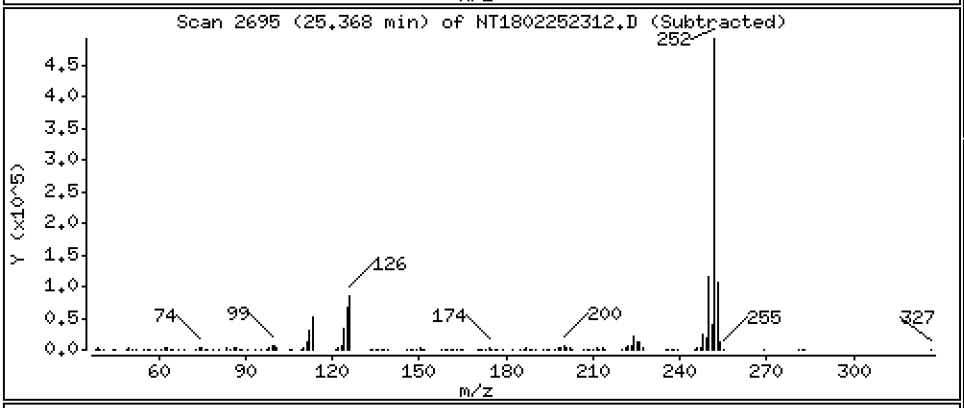
Column phase: ZB-5msi

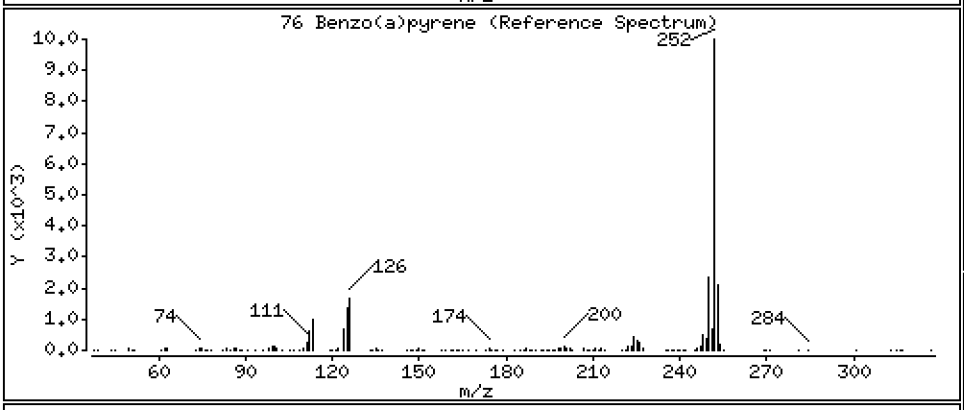
Column diameter: 0.25

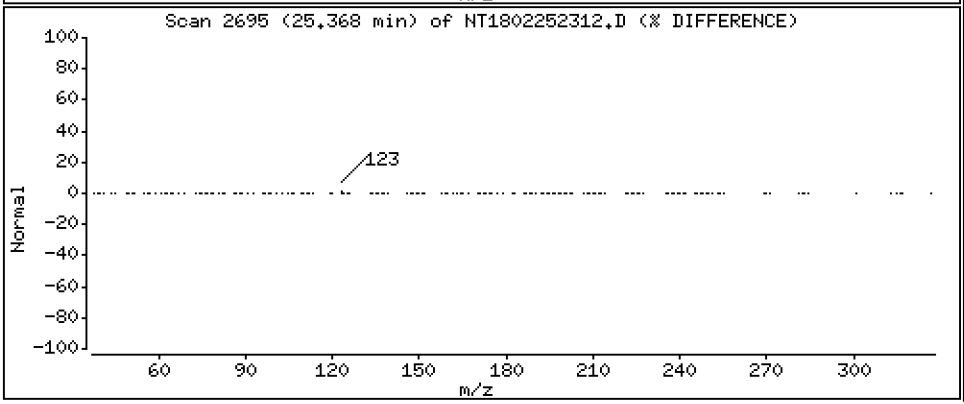
76 Benzo(a)pyrene

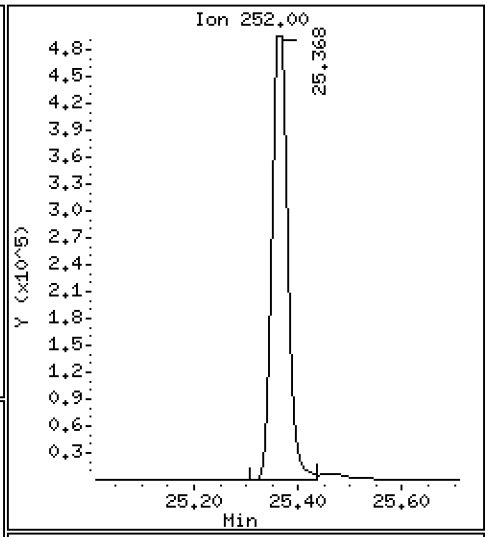
Concentration: 4.590 ug/mL

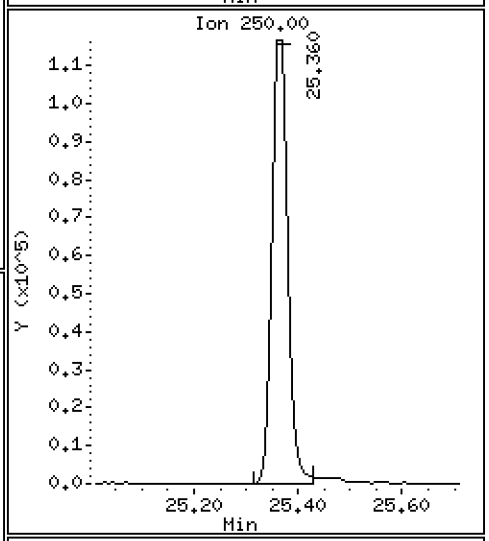


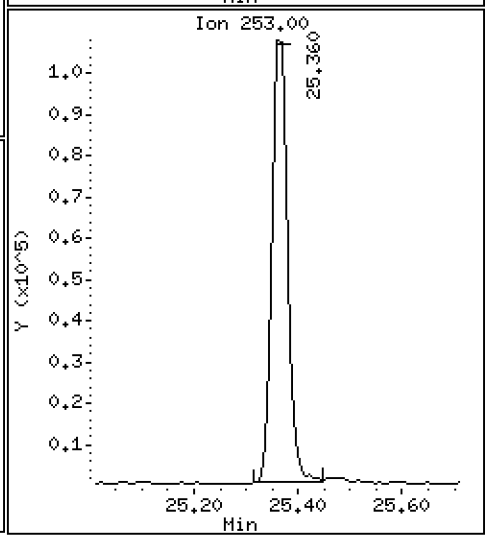












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

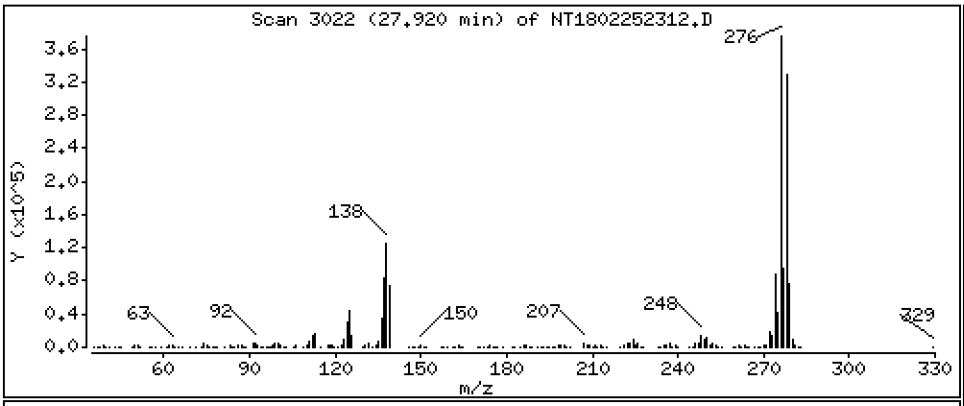
Operator: VTS

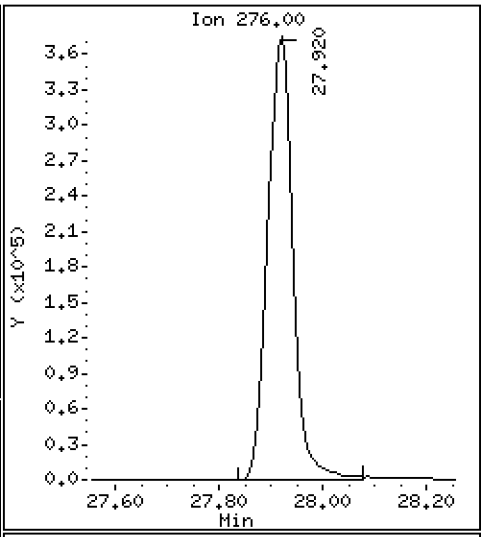
Column phase: ZB-5msi

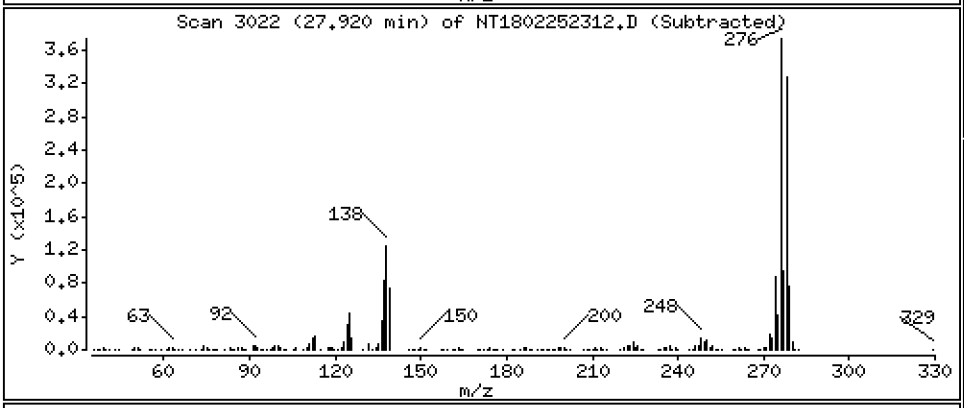
Column diameter: 0.25

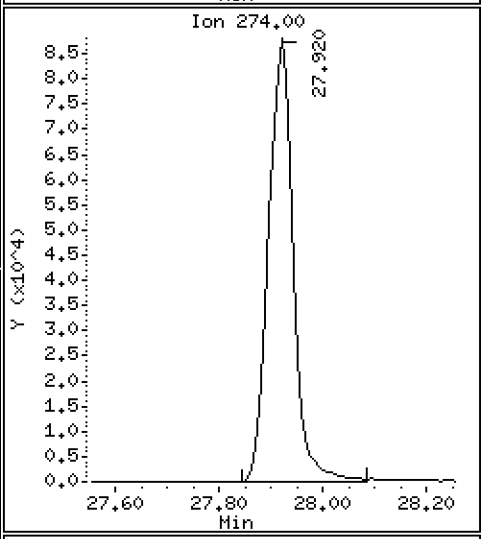
78 Indeno(1,2,3-cd)pyrene

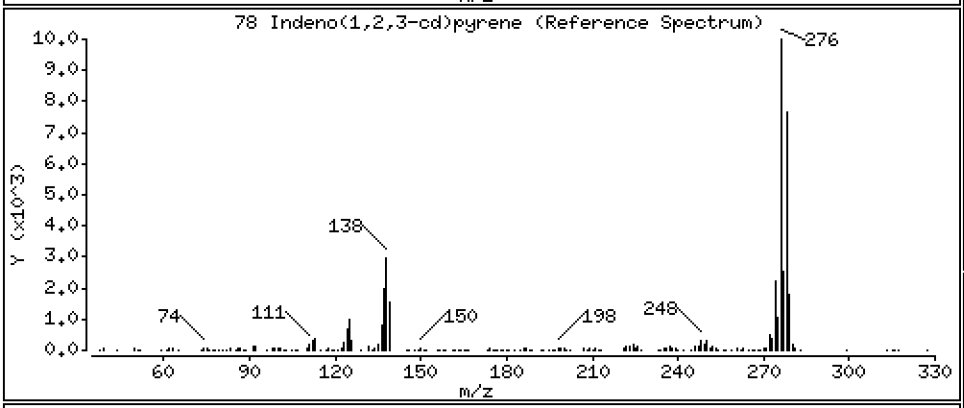
Concentration: 4.636 ug/mL

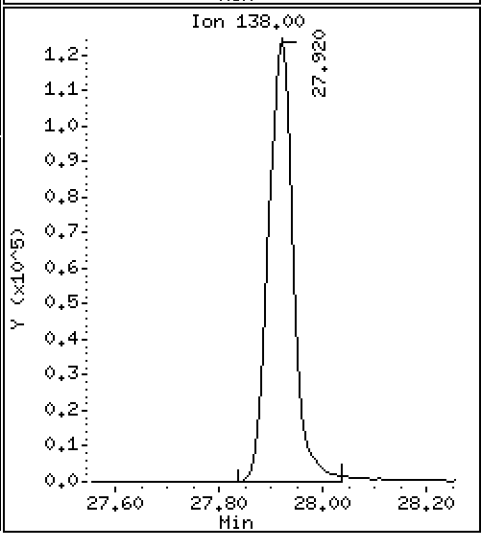


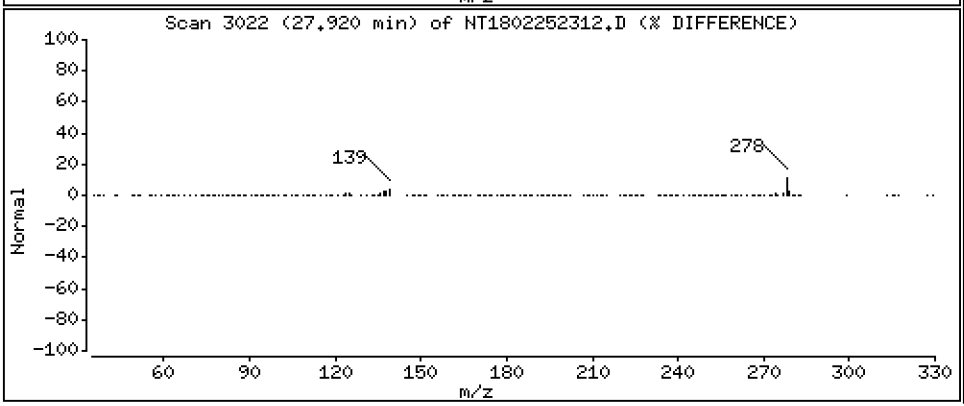












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

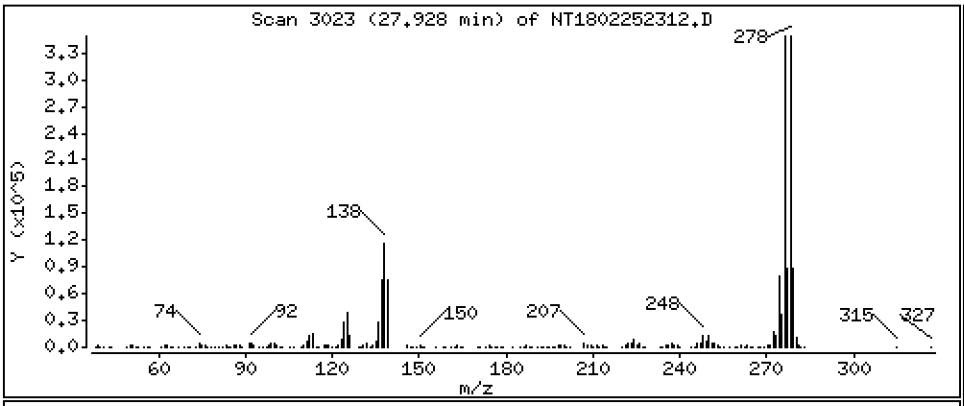
Operator: VTS

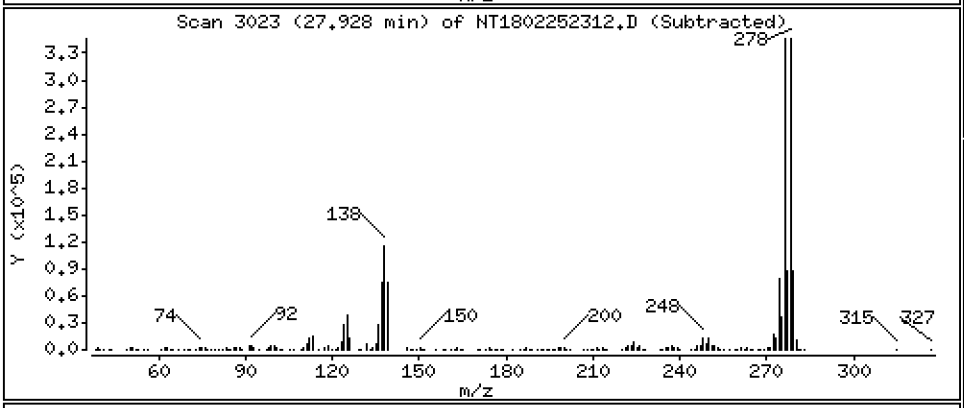
Column phase: ZB-5msi

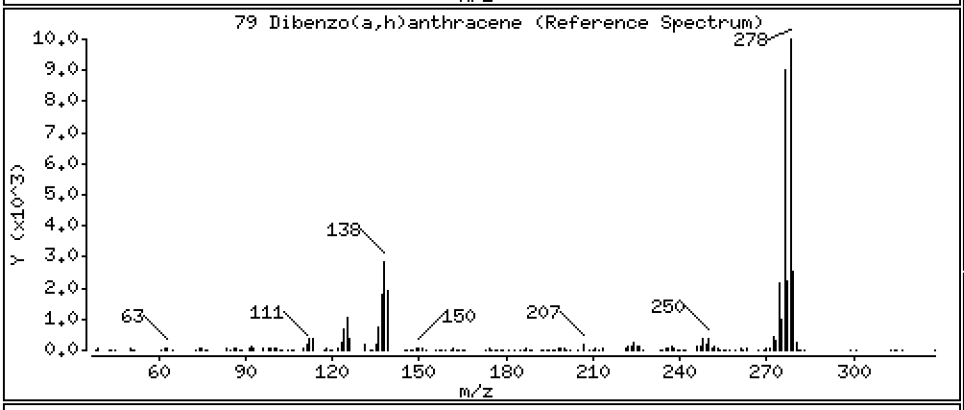
Column diameter: 0.25

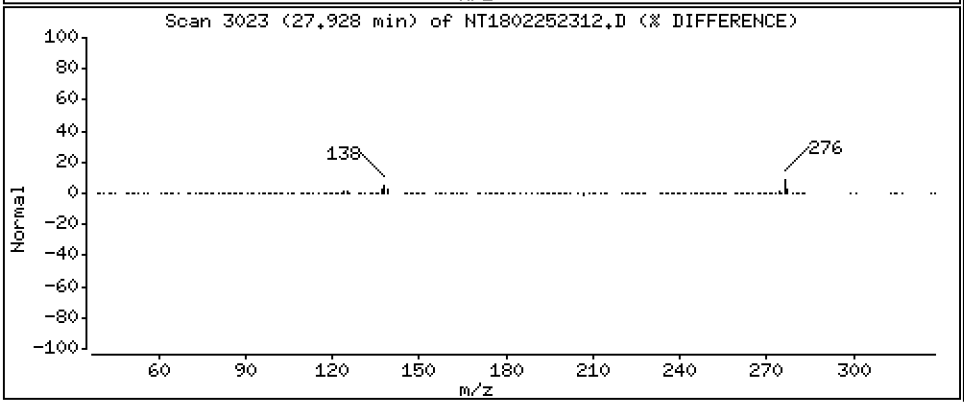
79 Dibenzo(a,h)anthracene

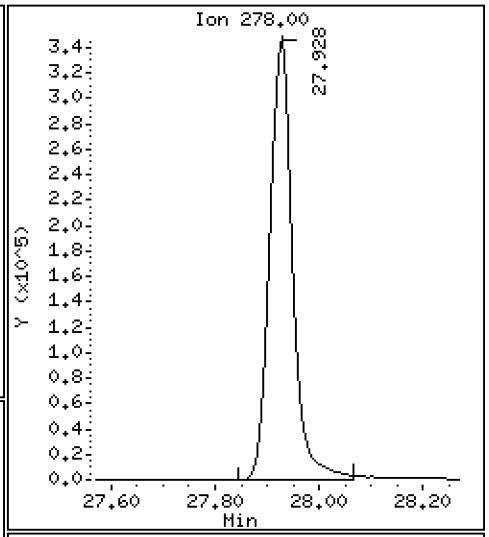
Concentration: 4.580 ug/mL

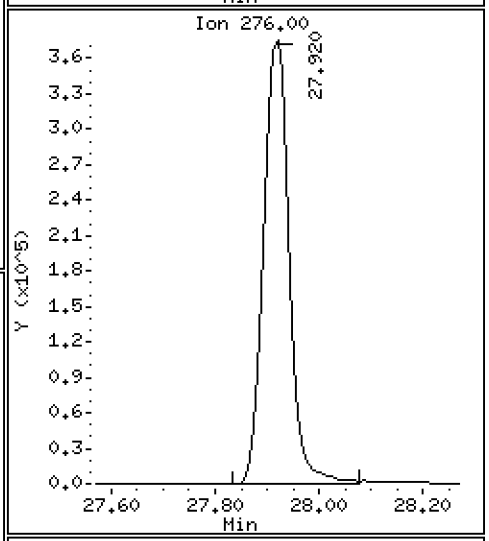


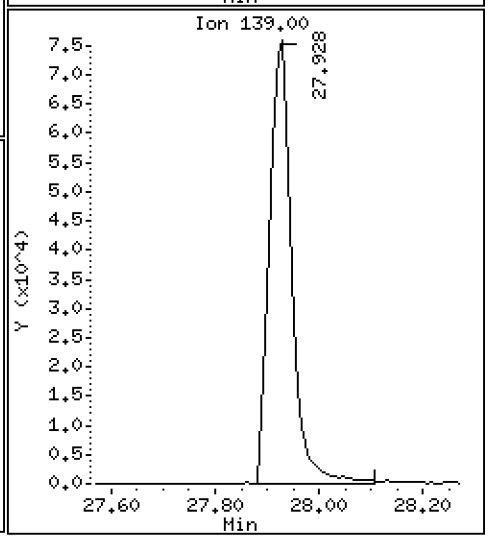












Date : 26-FEB-2023 04:06

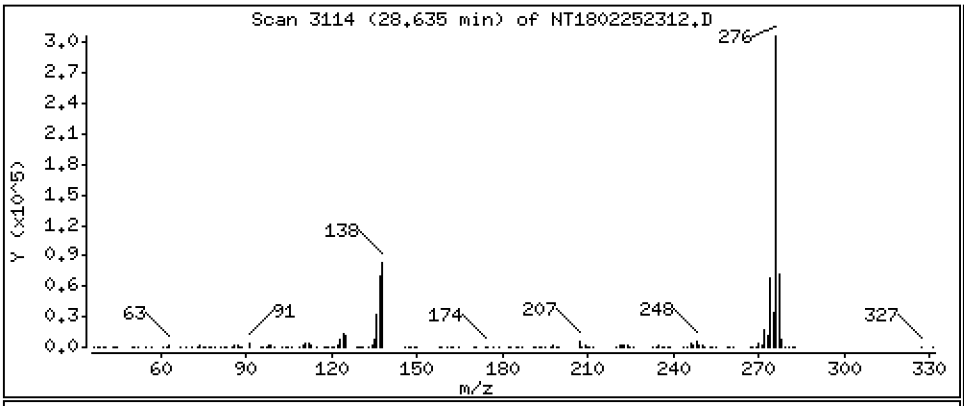
Client ID: Instrument: nt18.i

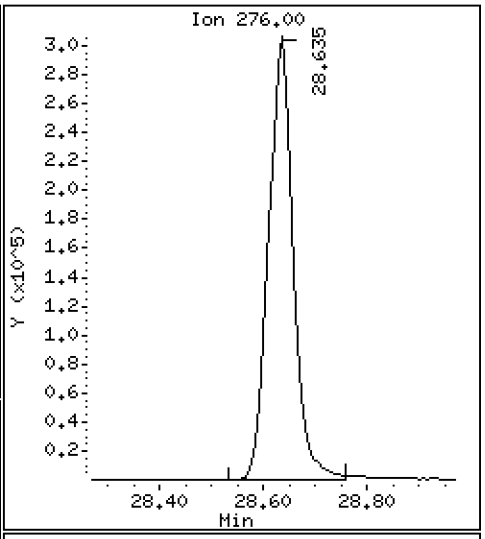
Sample Info: SLC0099-SCV1

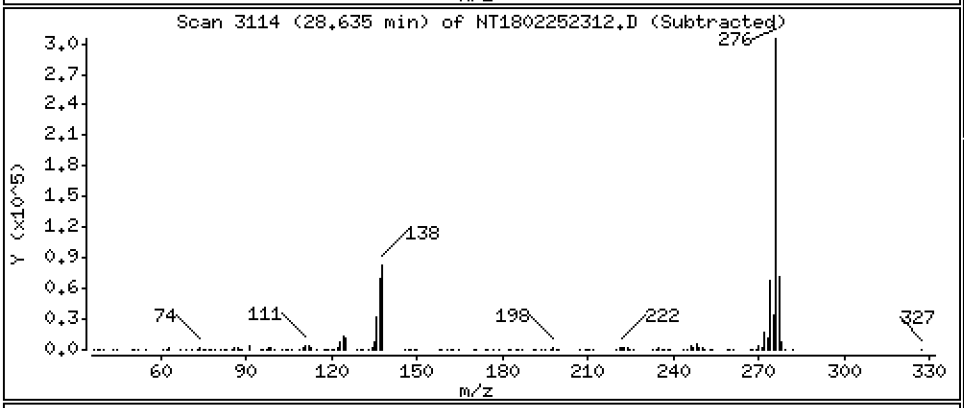
Operator: VTS

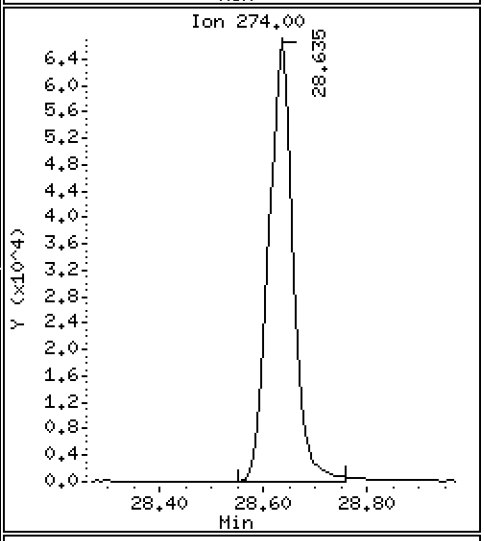
Column phase: ZB-5msi Column diameter: 0.25

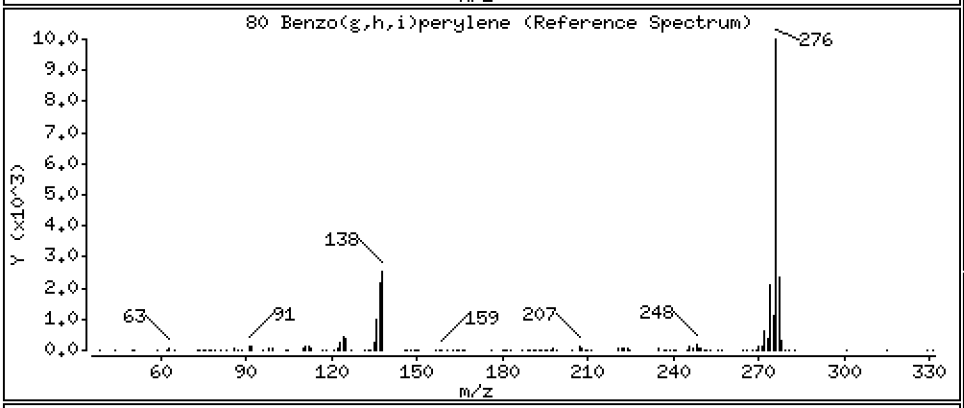
80 Benzo(g,h,i)perylene Concentration: 4.593 ug/mL

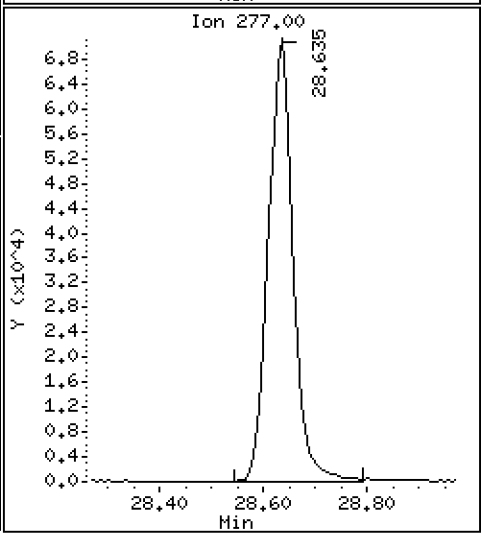


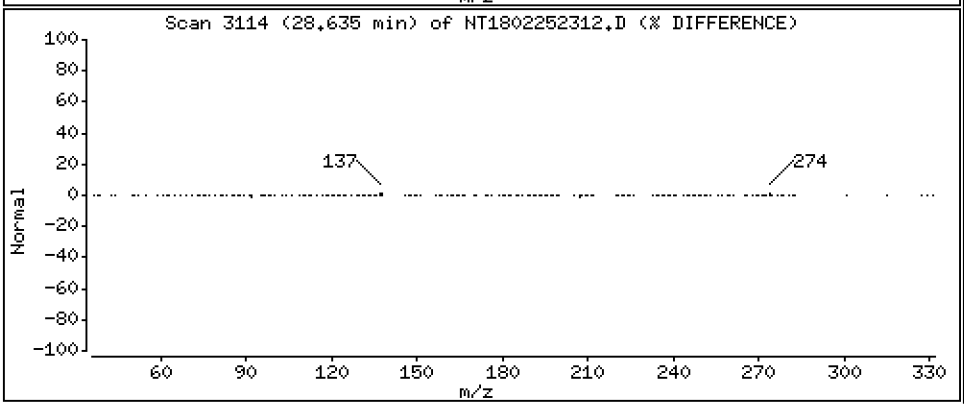












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

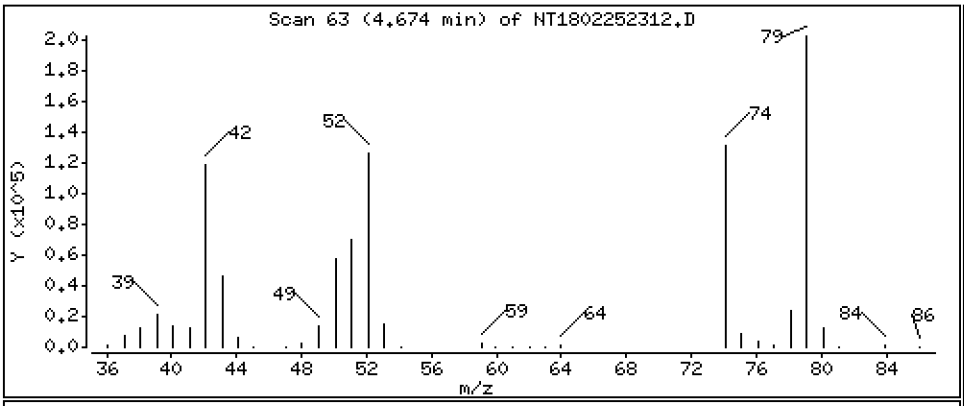
Operator: VTS

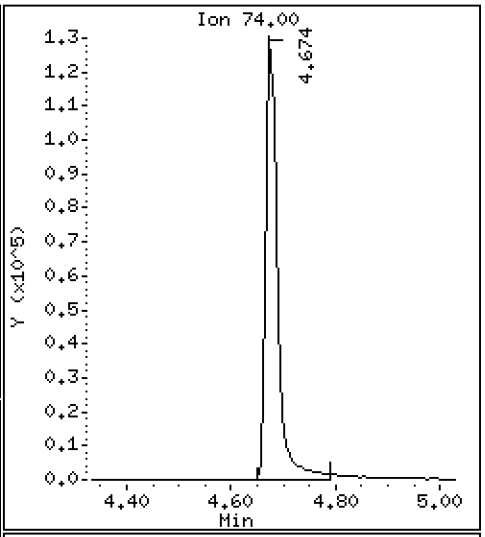
Column phase: ZB-5msi

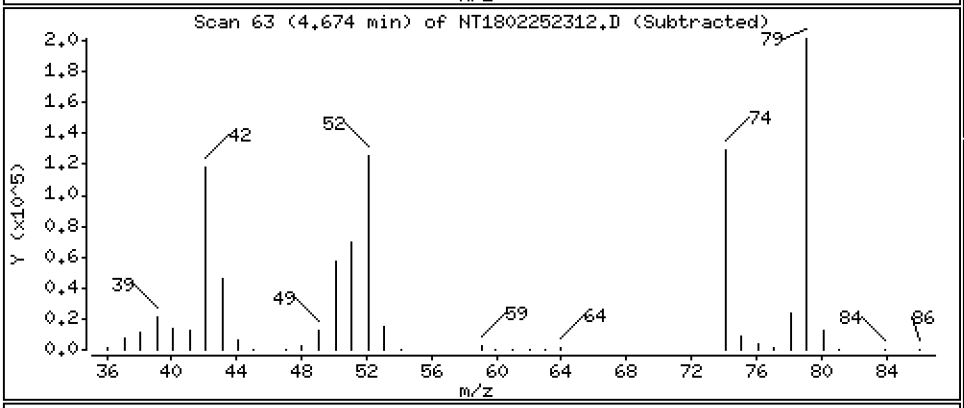
Column diameter: 0.25

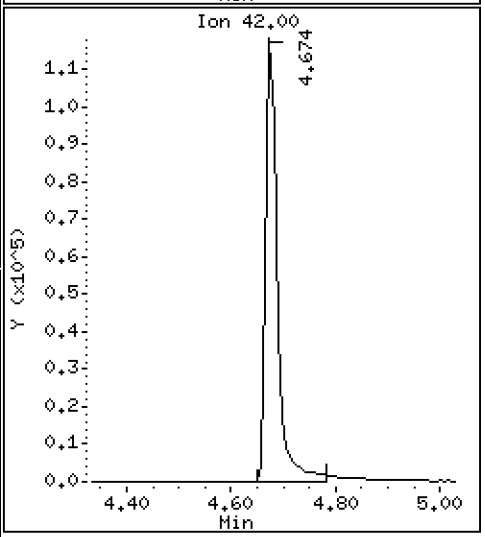
90 N-Nitrosodimethylamine

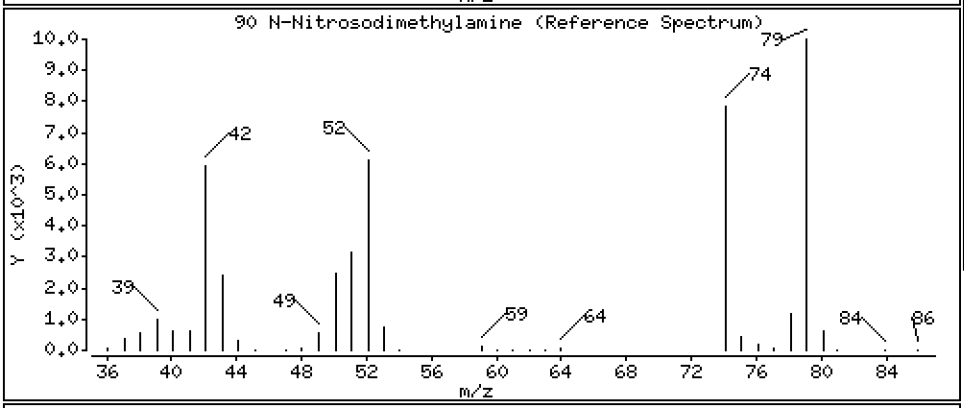
Concentration: 4.810 ug/mL

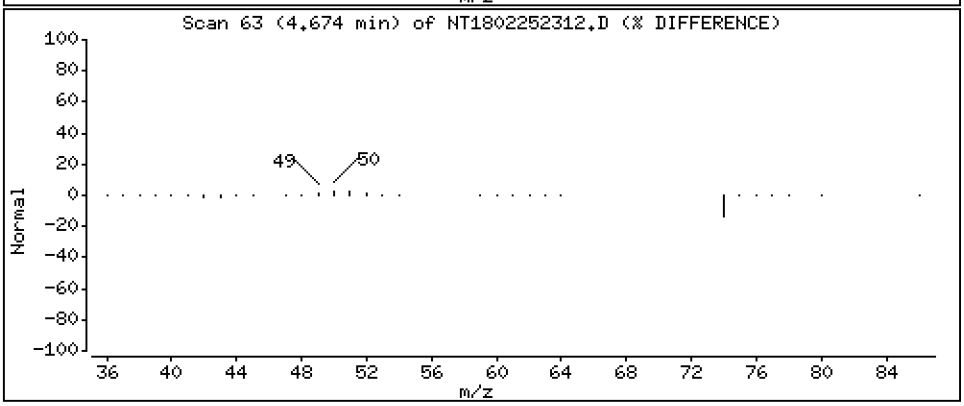












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

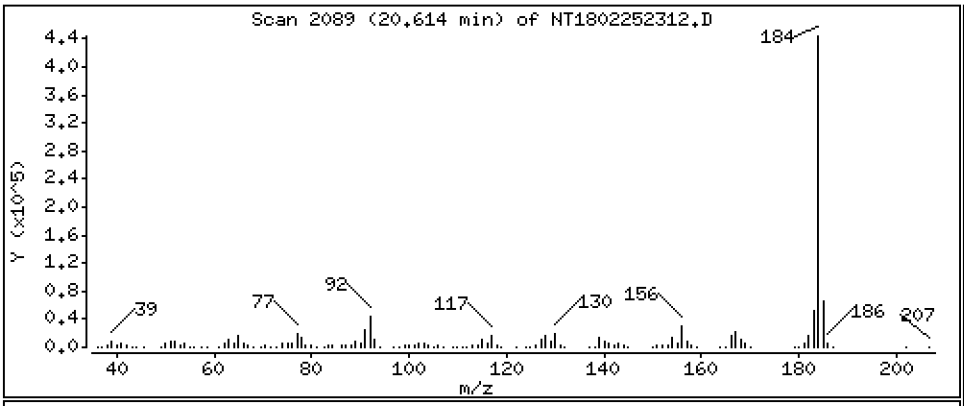
Operator: VTS

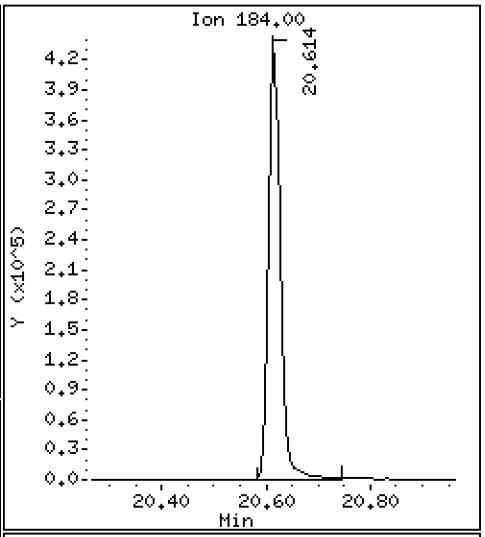
Column phase: ZB-5msi

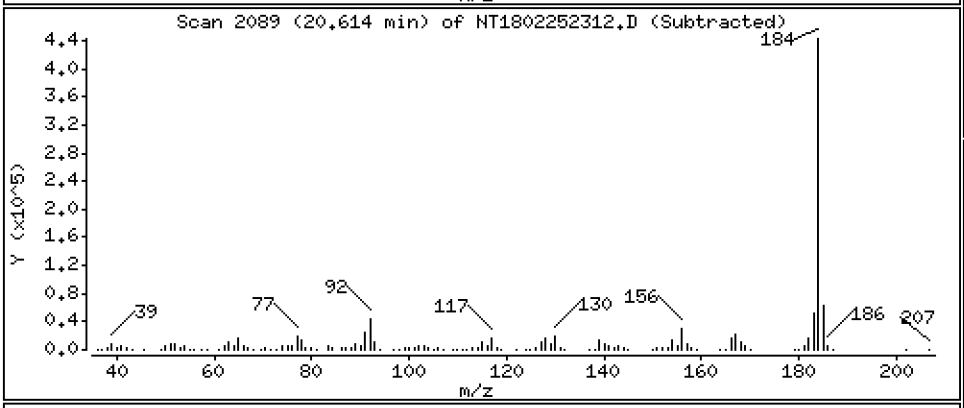
Column diameter: 0.25

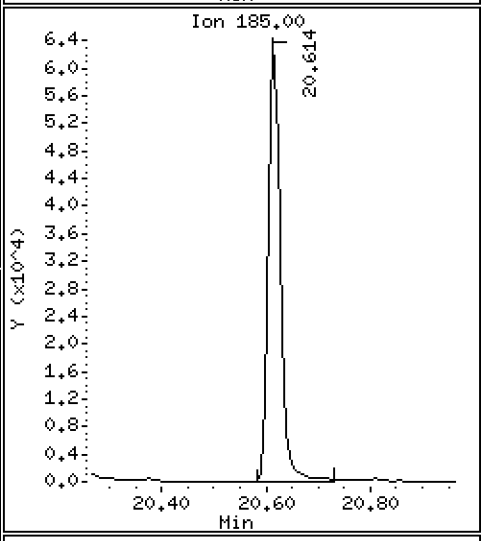
93 Benzidine

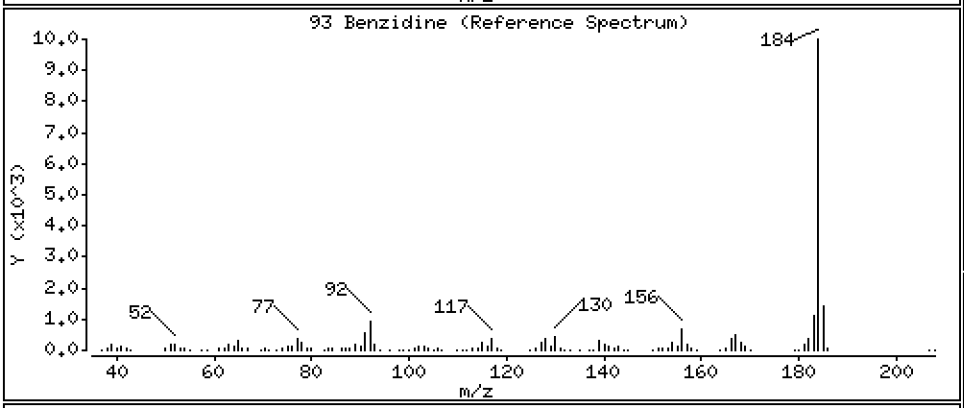
Concentration: 5.813 ug/mL

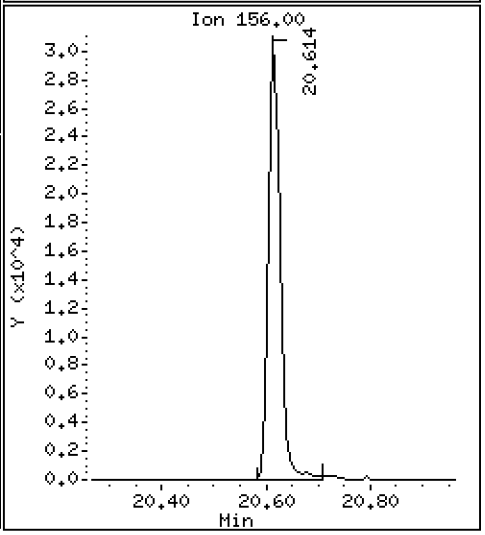


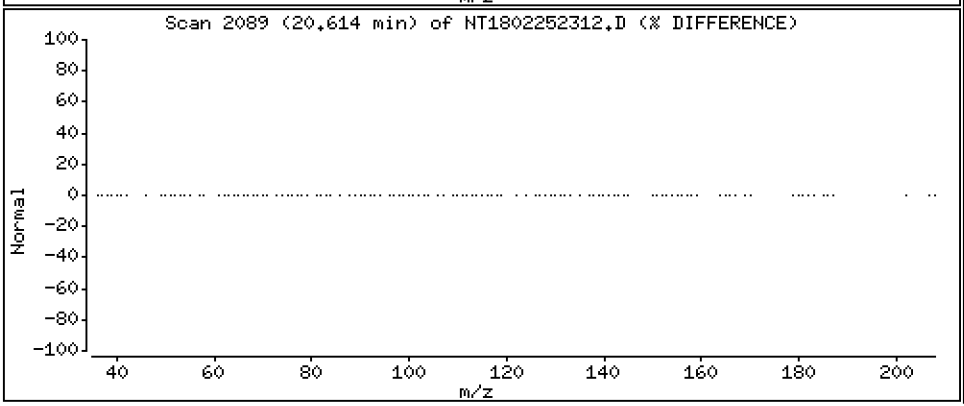












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

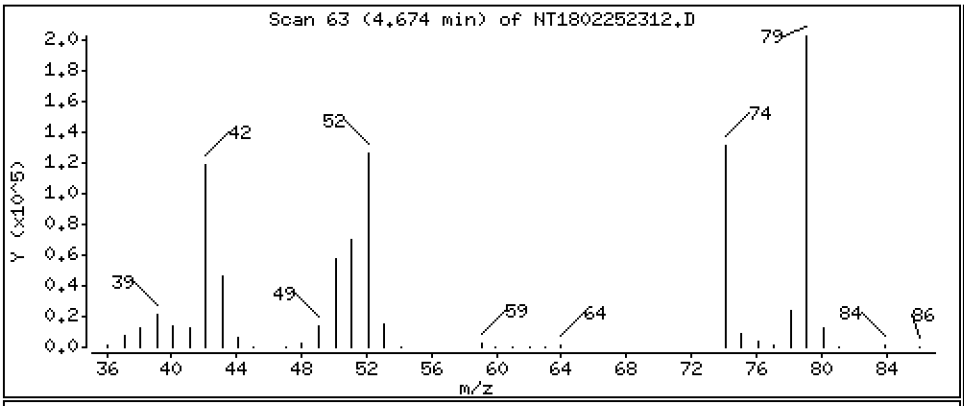
Operator: VTS

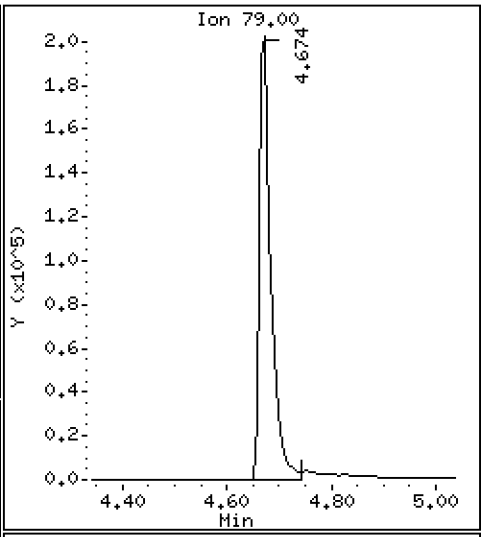
Column phase: ZB-5msi

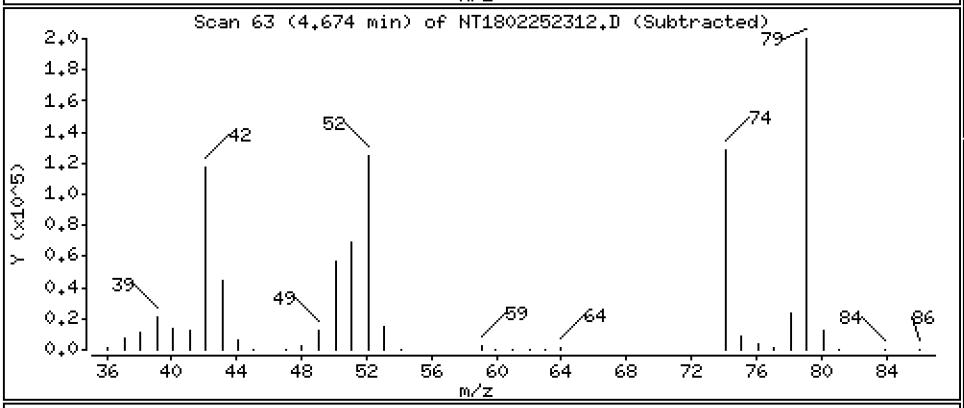
Column diameter: 0.25

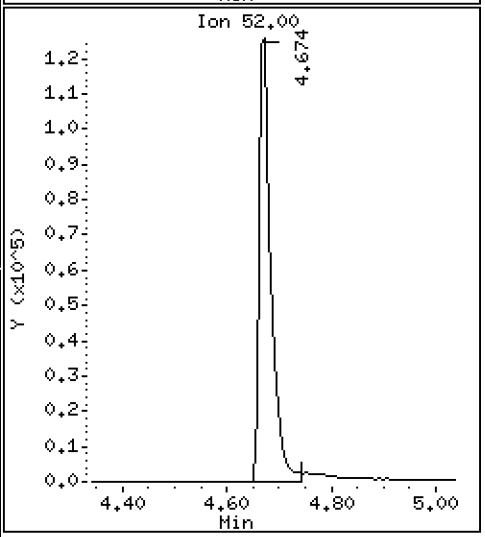
103 Pyridine

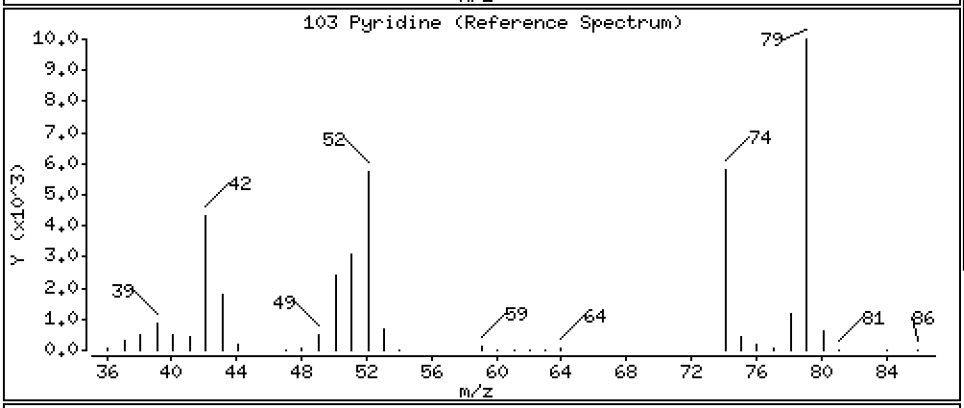
Concentration: 4.694 ug/mL

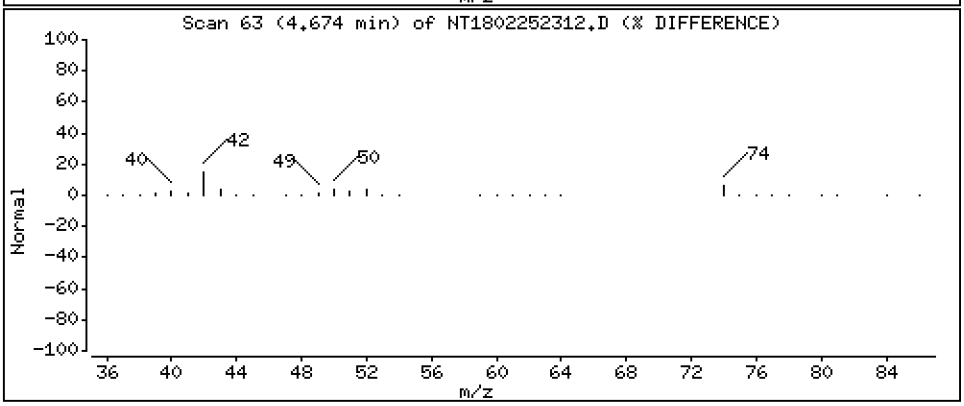












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

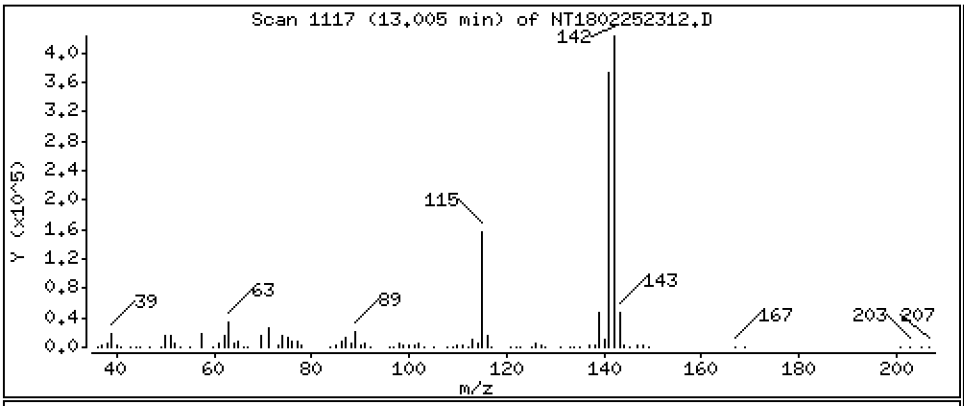
Operator: VTS

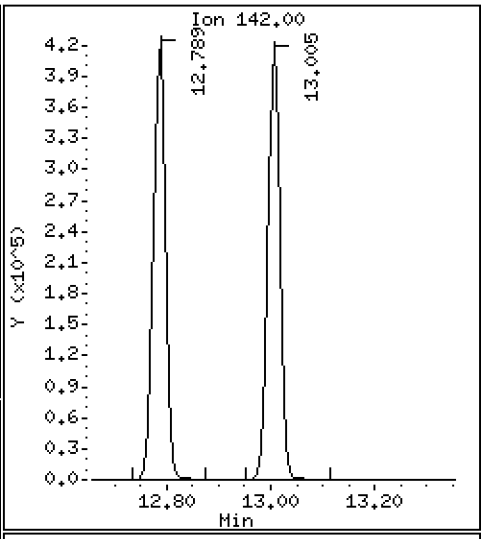
Column phase: ZB-5msi

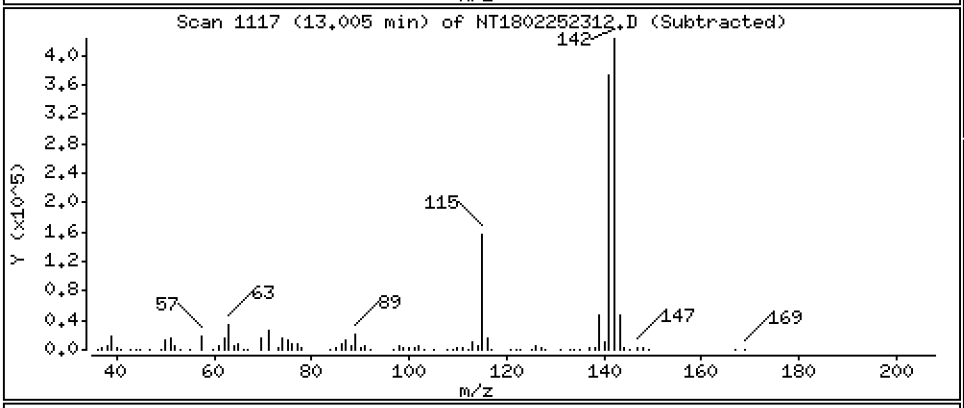
Column diameter: 0.25

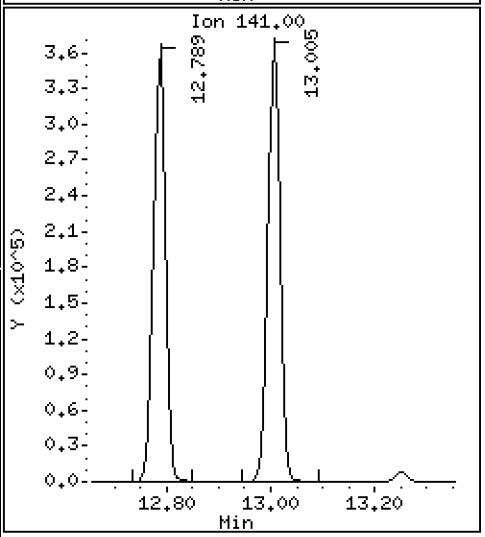
105 1-methylnaphthalene

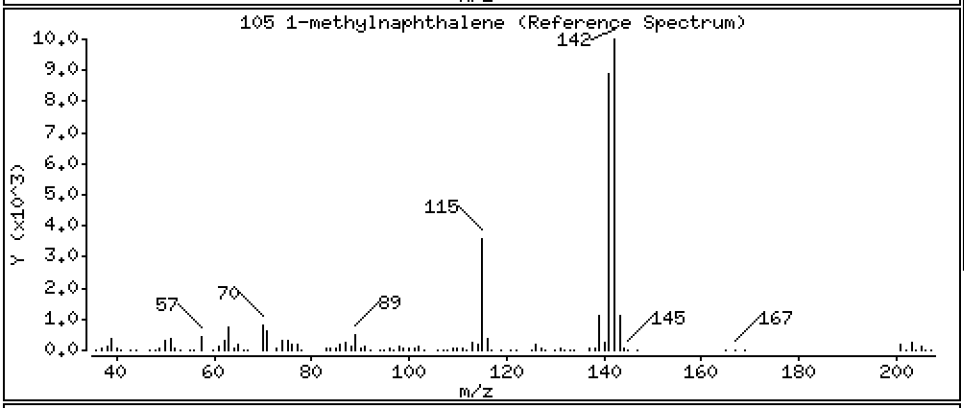
Concentration: 4.486 ug/mL

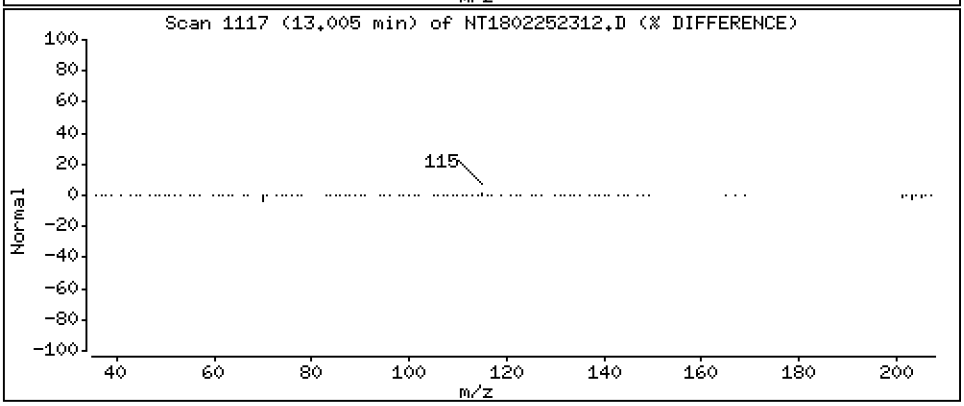












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

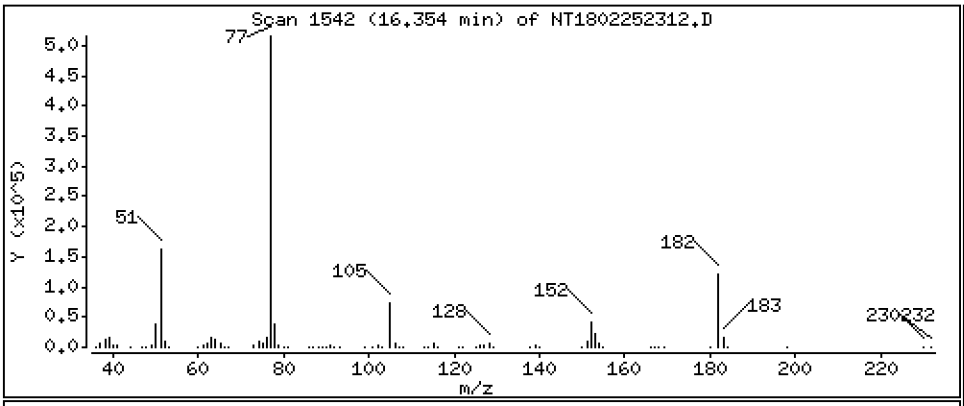
Operator: VTS

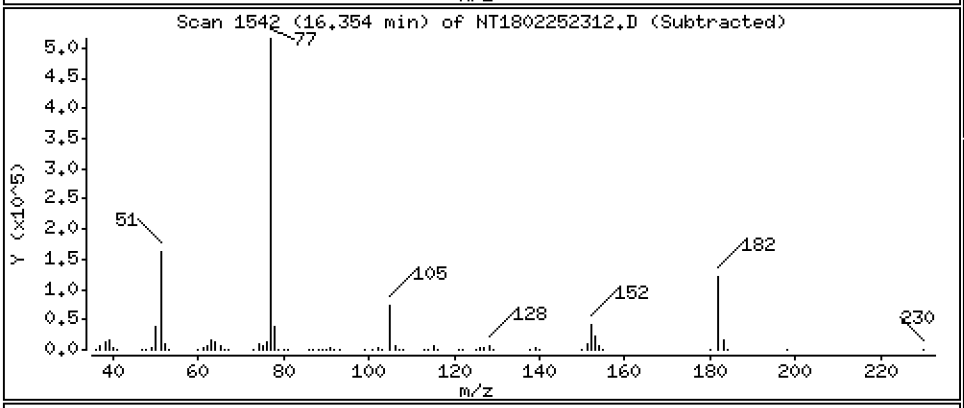
Column phase: ZB-5msi

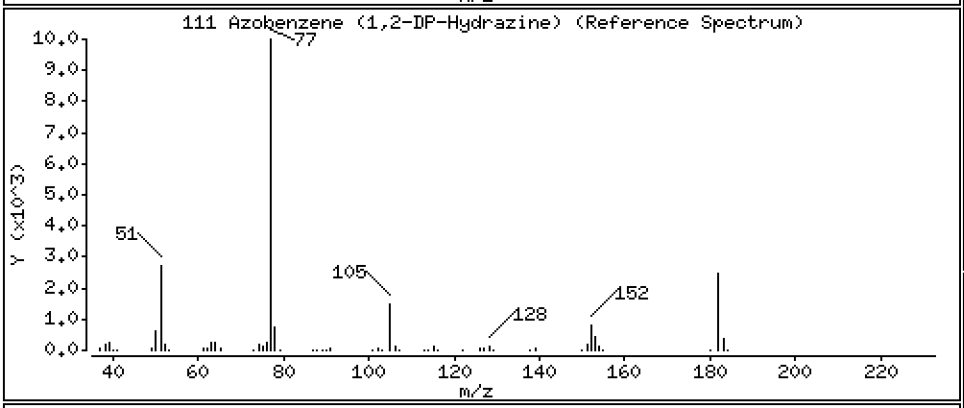
Column diameter: 0.25

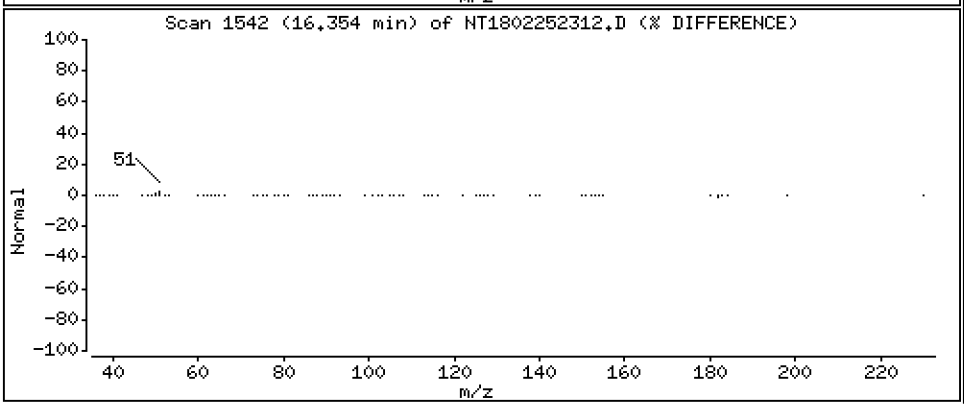
111 Azobenzene (1,2-DP-Hydrazine)

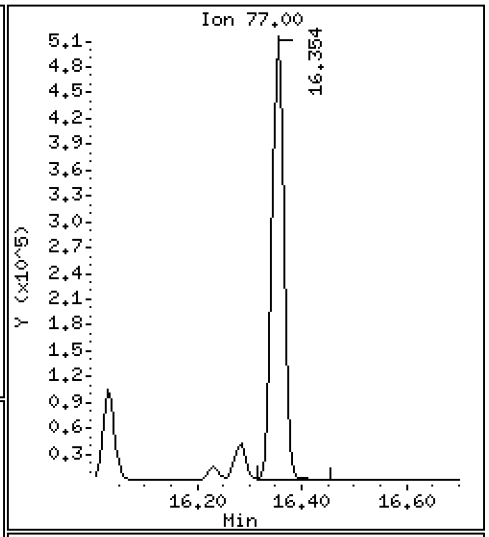
Concentration: 4.731 ug/mL

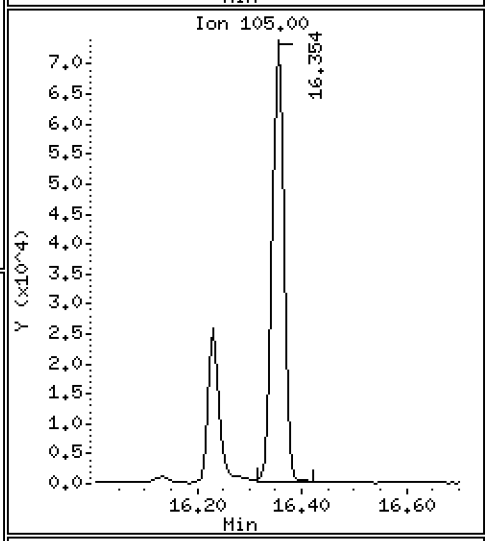


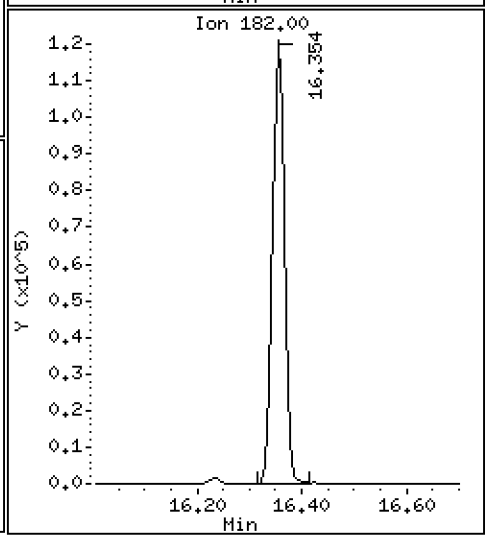












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

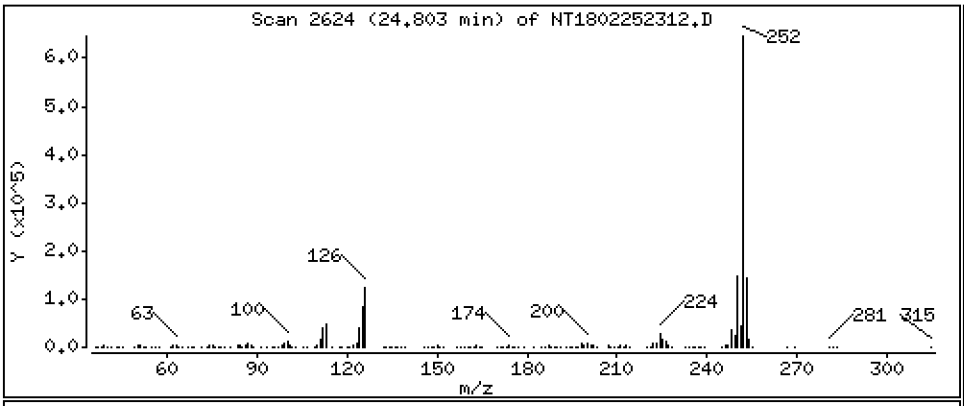
Operator: VTS

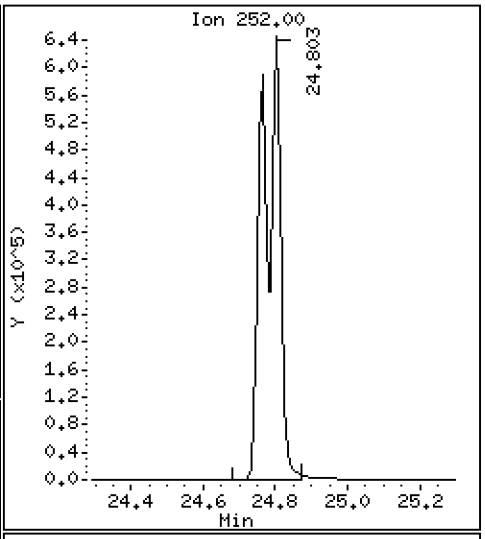
Column phase: ZB-5msi

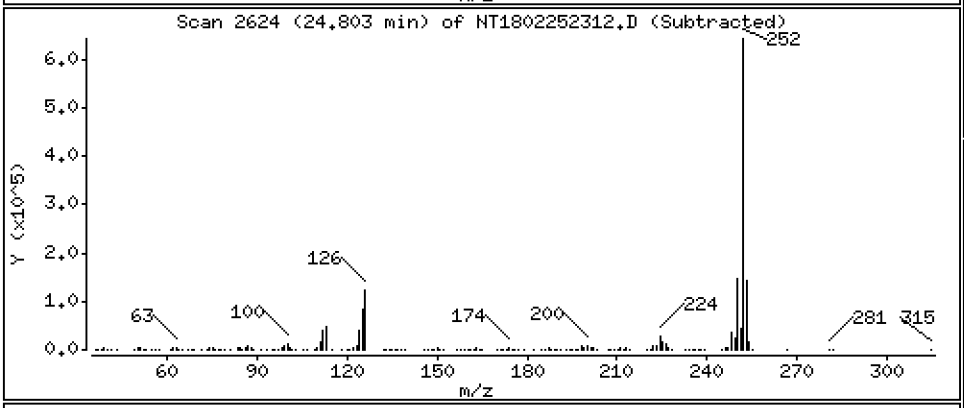
Column diameter: 0.25

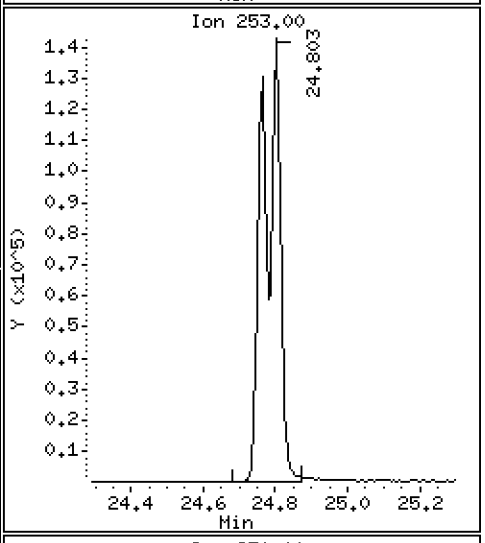
187 Total Benzofluoranthenes

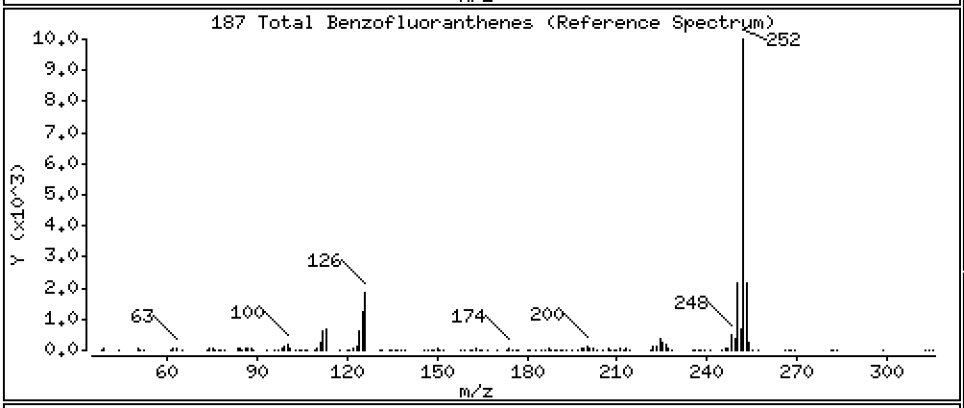
Concentration: 9.019 ug/mL

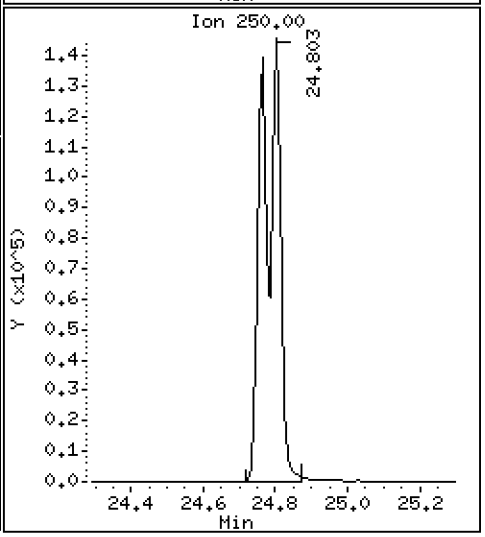


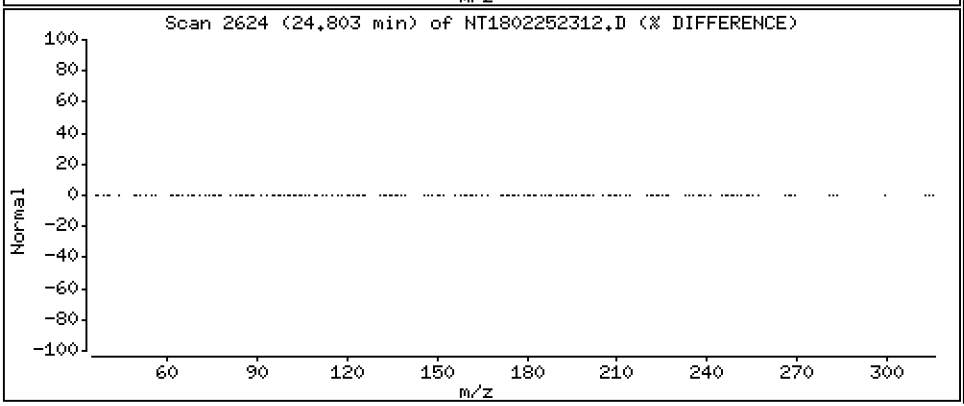












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

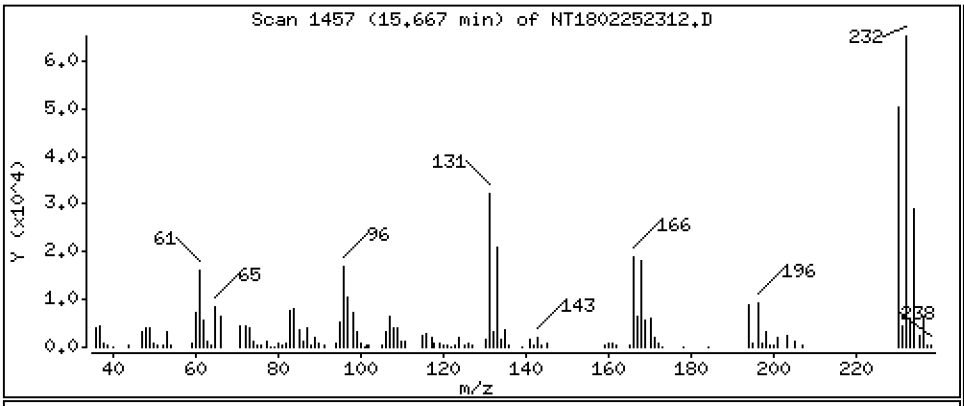
Operator: VTS

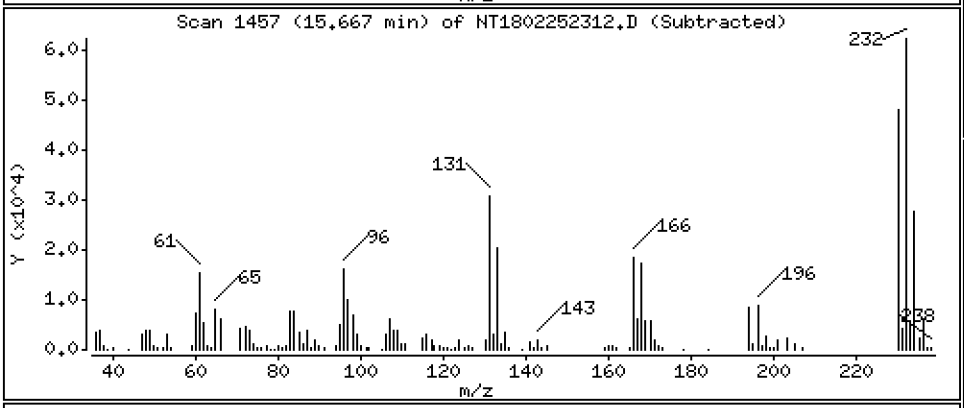
Column phase: ZB-5msi

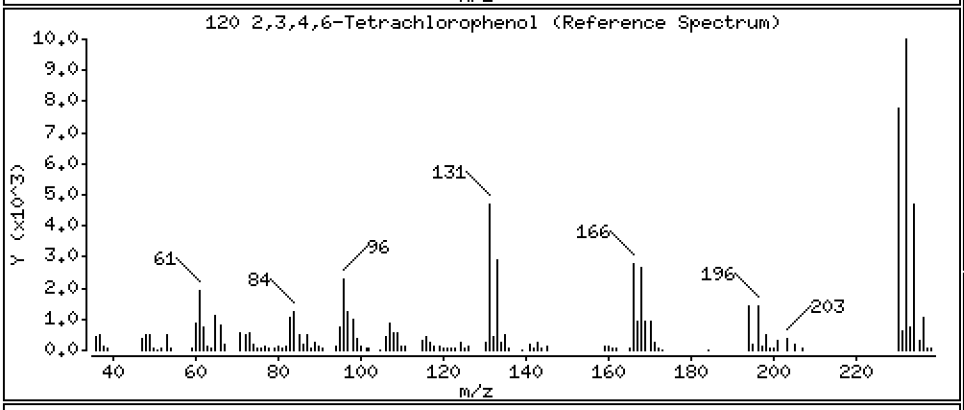
Column diameter: 0.25

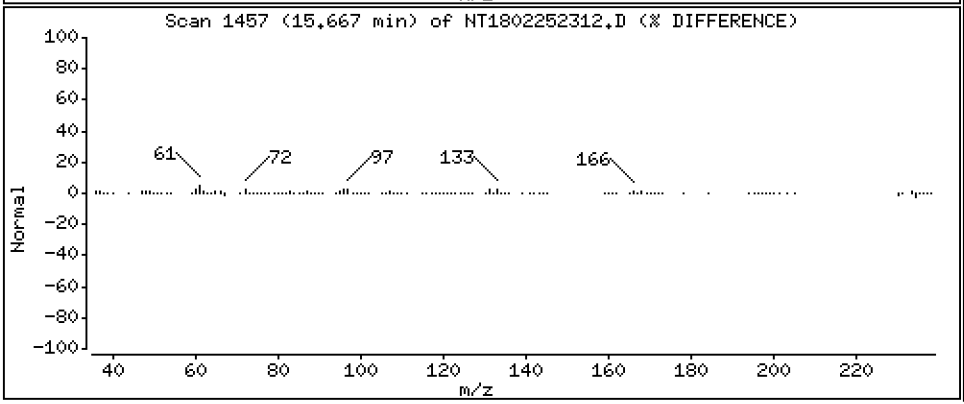
120 2,3,4,6-Tetrachlorophenol

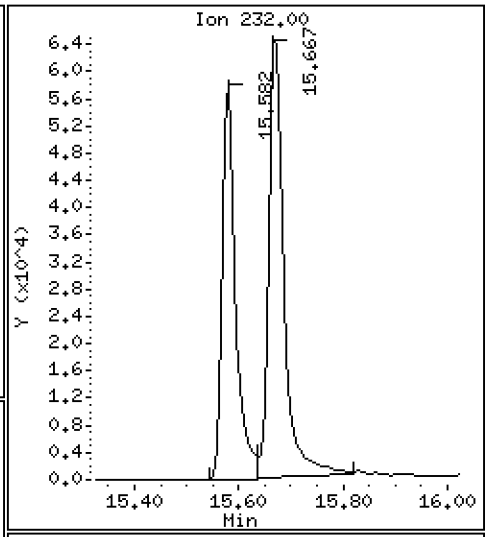
Concentration: 3.494 ug/mL

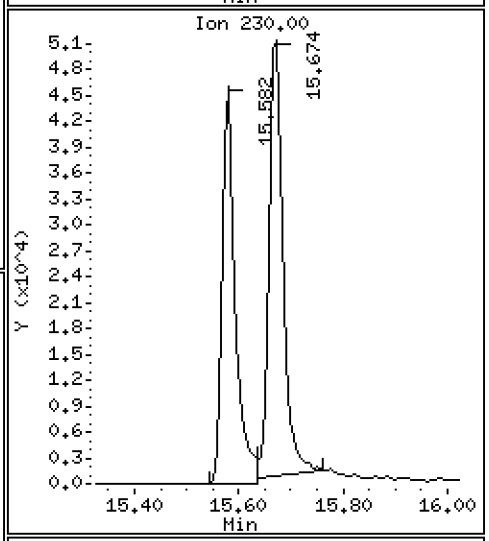


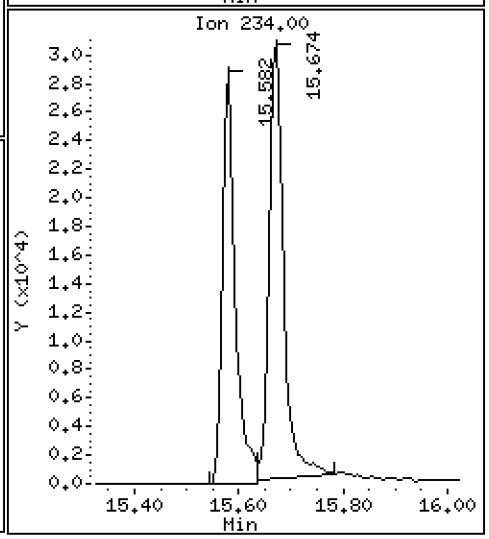












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D
Lab Smp Id: SLC0099-SCV1
Inj Date : 26-FEB-2023 04:06
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0099-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Meth Date : 08-Mar-2023 14:50 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1	2-Fluorophenol	112	Compound Not Detected.					
$	2	Phenol-d5	99	Compound Not Detected.					
	3	Phenol	94	8.312	8.319	(0.932)	370940	4.10851	4.109
$	5	2-Chlorophenol-d4	132	Compound Not Detected.					
	4	Bis(2-Chloroethyl)ether	93	8.474	8.474	(0.951)	304296	4.96248	4.962
	6	2-Chlorophenol	128	8.582	8.590	(0.963)	323041	4.16677	4.167
	7	1,3-Dichlorobenzene	146	8.845	8.853	(0.992)	378421	4.61495	4.615
*	8	1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	196803	4.00000	
	9	1,4-Dichlorobenzene	146	8.938	8.938	(1.003)	386214	4.62064	4.621
$	10	1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
	12	1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	366937	4.52355	4.524
	11	Benzyl alcohol	108	9.186	9.202	(1.030)	200760	4.67656	4.677
	14	2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	98942	5.20483	5.205
	13	2-Methylphenol	108	9.411	9.419	(1.056)	279008	3.99508	3.995
	17	Hexachloroethane	117	9.869	9.877	(1.107)	154297	4.76884	4.769
	16	N-Nitroso-di-n-propylamine	70	9.737	9.737	(1.092)	246392	4.79947	4.799
	15	4-Methylphenol	108	9.683	9.683	(1.086)	298862	4.10580	4.106
$	18	Nitrobenzene-d5	82	Compound Not Detected.					
	19	Nitrobenzene	77	10.024	10.032	(0.882)	361585	4.69174	4.692
	20	Isophorone	82	10.467	10.467	(0.921)	632536	6.43324	6.433
	21	2-Nitrophenol	139	10.650	10.659	(0.937)	168023	4.43914	4.439
	22	2,4-Dimethylphenol	107	10.710	10.710	(0.942)	249516	3.45955	3.460
	23	Bis(2-Chloroethoxy)methane	93	10.896	10.905	(0.959)	369555	5.48879	5.489
	24	Benzoic acid	105	10.990	11.092	(0.967)	72051	2.61790	2.618(M)
	25	2,4-Dichlorophenol	162	11.100	11.100	(0.977)	292217	4.62098	4.621
	26	1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	303141	4.43838	4.438
*	27	Naphthalene-d8	136	11.365	11.365	(1.000)	751242	4.00000	
	28	Naphthalene	128	11.403	11.403	(1.003)	1044410	4.52257	4.523
	29	4-Chloroaniline	127	11.535	11.542	(1.015)	318320	3.45878	3.459
	30	Hexachlorobutadiene	225	11.767	11.767	(1.035)	186397	4.65605	4.656
	31	4-Chloro-3-methylphenol	107	12.494	12.502	(1.099)	267666	4.42235	4.422
	32	2-Methylnaphthalene	142	12.788	12.788	(1.125)	663066	4.22545	4.225
	33	Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	87571	3.20191	3.202

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	159887	4.14757	4.148
35	2,4,5-Trichlorophenol	196	13.477	13.485	(0.902)	172217	4.09965	4.100
$ 36	2-Fluorobiphenyl	172	Compound Not Detected.					
37	2-Chloronaphthalene	162	13.771	13.771	(0.922)	597668	4.55180	4.552
38	2-Nitroaniline	65	14.026	14.034	(0.939)	184700	4.49470	4.495
39	Dimethylphthalate	163	14.468	14.460	(0.968)	668285	4.73886	4.739
40	Acenaphthylene	152	14.630	14.630	(0.979)	1015081	4.59116	4.591
41	2,6-Dinitrotoluene	165	14.599	14.591	(0.977)	156792	4.84977	4.850
* 42	Acenaphthene-d10	164	14.940	14.940	(1.000)	398556	4.00000	
43	3-Nitroaniline	138	14.878	14.878	(0.996)	177578	4.64347	4.643
44	Acenaphthene	153	15.009	15.001	(1.005)	633850	4.52979	4.530
45	2,4-Dinitrophenol	184	15.094	15.094	(1.010)	21508	1.42564	1.426
46	Dibenzofuran	168	15.334	15.334	(1.026)	882055	4.35510	4.355
47	4-Nitrophenol	109	15.210	15.218	(1.018)	66995	4.34588	4.346
48	2,4-Dinitrotoluene	165	15.396	15.396	(1.031)	202080	4.57277	4.573
50	Diethylphthalate	149	15.906	15.906	(1.065)	777988	5.26498	5.265
49	Fluorene	166	16.037	16.037	(1.073)	841063	5.18202	5.182
51	4-Chlorophenyl-phenylether	204	16.029	16.029	(1.073)	367830	4.97548	4.975
52	4-Nitroaniline	138	16.130	16.130	(1.080)	169269	4.60087	4.601
53	4,6-Dinitro-2-methylphenol	198	16.230	16.230	(0.904)	91958	3.59564	3.596
54	N-Nitrosodiphenylamine	169	16.284	16.276	(0.907)	494995	4.60237	4.602
$ 55	2,4,6-Tribromophenol	330	Compound Not Detected.					
56	4-Bromophenyl-phenylether	248	17.024	17.024	(0.948)	210814	4.88441	4.884
57	Hexachlorobenzene	284	17.333	17.333	(0.966)	220372	4.42184	4.422
58	Pentachlorophenol	266	17.697	17.697	(0.986)	32473	2.45386	2.454
* 59	Phenanthrene-d10	188	17.952	17.945	(1.000)	714786	4.00000	
60	Phenanthrene	178	17.999	17.991	(1.003)	988459	4.39651	4.397
61	Anthracene	178	18.092	18.084	(1.008)	848151	3.95863	3.959
62	Carbazole	167	18.417	18.417	(1.026)	876153	4.46270	4.463
63	Di-n-butylphthalate	149	19.229	19.229	(1.071)	1121126	5.15898	5.159
64	Fluoranthene	202	20.374	20.374	(0.886)	1087530	4.81174	4.812
65	Pyrene	202	20.800	20.800	(0.905)	1098967	4.55908	4.559
$ 66	Terphenyl-d14	244	Compound Not Detected.					
67	Butylbenzylphthalate	149	22.023	22.023	(0.958)	487079	5.32159	5.322
68	Benzo(a)anthracene	228	22.952	22.952	(0.999)	1041421	4.47172	4.472
* 69	Chrysene-d12	240	22.983	22.975	(1.000)	645093	4.00000	
70	3,3'-Dichlorobenzidine	252	22.913	22.906	(0.997)	856987	10.0002	10.00
71	Chrysene	228	23.029	23.022	(1.002)	1072229	4.42756	4.428
72	bis(2-Ethylhexyl)phthalate	149	23.053	23.045	(0.960)	743132	5.23131	5.231
* 134	Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	989444	4.00000	
73	Di-n-octylphthalate	149	24.028	24.028	(1.000)	1326876	4.81262	4.813
74	Benzo(b)fluoranthene	252	24.764	24.756	(0.972)	1013785	4.31859	4.319
75	Benzo(k)fluoranthene	252	24.802	24.795	(0.974)	1259698	4.73494	4.735(H)
76	Benzo(a)pyrene	252	25.368	25.360	(0.996)	998824	4.58976	4.590
* 77	Perylene-d12	264	25.468	25.468	(1.000)	719540	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.920	27.904	(1.096)	1266543	4.63606	4.636
79	Dibenzo(a,h)anthracene	278	27.928	27.920	(1.097)	1043466	4.57975	4.580
80	Benzo(g,h,i)perylene	276	28.634	28.619	(1.124)	1005990	4.59311	4.593
90	N-Nitrosodimethylamine	74	4.673	4.681	(0.524)	189582	4.80958	4.810
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	20.614	20.614	(0.897)	641864	5.81258	5.813
103	Pyridine	79	4.673	4.689	(0.524)	308261	4.69431	4.694
105	1-methylnaphthalene	142	13.005	13.005	(1.144)	637254	4.48602	4.486
111	Azobenzene (1,2-DP-Hydrazine)	77	16.353	16.353	(1.095)	770064	4.73097	4.731

						CONCENTRATIONS	
	QUANT SIG					ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
187 Total Benzofluoranthenes	252	24.802	24.795	(0.974)	2140538	9.01877	9.019
120 2,3,4,6-Tetrachlorophenol	232	15.666	15.674	(1.049)	136871	3.49441	3.494

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252312.D
Lab Smp Id: SLC0099-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	196803	-7.65
27 Naphthalene-d8	806946	403473	1613892	751242	-6.90
42 Acenaphthene-d10	424249	212125	848498	398556	-6.06
59 Phenanthrene-d10	758987	379494	1517974	714786	-5.82
69 Chrysene-d12	685237	342619	1370474	645093	-5.86
134 Di-n-octylphthala	1075410	537705	2150820	989444	-7.99
77 Perylene-d12	762553	381277	1525106	719540	-5.64

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.94	14.44	15.44	14.94	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	0.00
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252312.D

Lab ID: SLC0099-SCV1
nt18.i, ABN.m, 26-FEB-2023 04:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.967	0.000	0.9670	Benzoic acid
1.010	0.000	1.0103	2,4-Dinitrophenol
0.986	0.000	0.9858	Pentachlorophenol

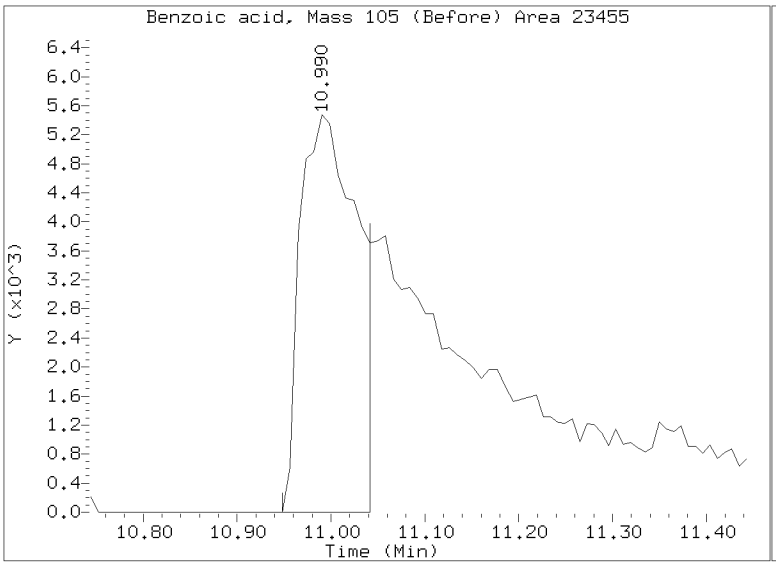
RRT check based on Ccal File: NT1802252308.D

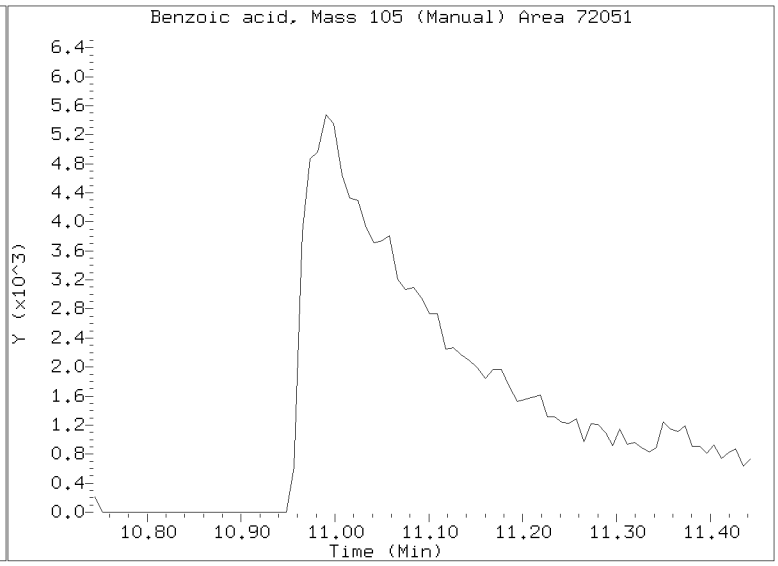
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230225.b/NT1802252312.D
Injection Date: 26-FEB-2023 04:06
Lab ID:SLC0099-SCV1 Client ID:
Report Date: 03/10/2023 07:50





SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00023
Laboratory ID: SLC0099-SCV1
Sequence: SLC0099
Sequence Name: SCV 5.0
Standard ID: L002576

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.1	-17.8	20.00
bis(2-chloroethyl) ether	5.0000	5.0	-0.8	20.00
2-Chlorophenol	5.0000	4.2	-16.7	20.00
1,3-Dichlorobenzene	5.0000	4.6	-7.7	20.00
1,4-Dichlorobenzene	5.0000	4.6	-7.6	20.00
1,2-Dichlorobenzene	5.0000	4.5	-9.5	20.00
Benzyl Alcohol	5.0000	4.7	-6.5	20.00
2,2'-Oxybis(1-chloropropane)	5.0000	5.2	4.1	20.00
2-Methylphenol	5.0000	4.0	-20.1 *	20.00
Hexachloroethane	5.0000	4.8	-4.6	20.00
N-Nitroso-di-n-Propylamine	5.0000	4.8	-4.0	20.00
4-Methylphenol	5.0000	4.1	-17.9	20.00
Nitrobenzene	5.0000	4.7	-6.2	20.00
Isophorone	5.0000	6.4	28.7 *	20.00
2-Nitrophenol	5.0000	4.4	-11.2	20.00
2,4-Dimethylphenol	5.0000	3.5	-30.8 *	20.00
Bis(2-Chloroethoxy)methane	5.0000	5.5	9.8	20.00
2,4-Dichlorophenol	5.0000	4.6	-7.6	20.00
1,2,4-Trichlorobenzene	5.0000	4.4	-11.2	20.00
Naphthalene	5.0000	4.5	-9.5	20.00
Benzoic acid	10.000	2.6	-73.8 *	20.00
4-Chloroaniline	5.0000	3.5	-30.8 *	20.00
Hexachlorobutadiene	5.0000	4.7	-6.9	20.00
4-Chloro-3-Methylphenol	5.0000	4.4	-11.6	20.00
2-Methylnaphthalene	5.0000	4.2	-15.5	20.00
Hexachlorocyclopentadiene	5.0000	3.2	-36.0 *	20.00
2,4,6-Trichlorophenol	5.0000	4.1	-17.0	20.00
2,4,5-Trichlorophenol	5.0000	4.1	-18.0	20.00
2-Chloronaphthalene	5.0000	4.6	-9.0	20.00
2-Nitroaniline	5.0000	4.5	-10.1	20.00
Acenaphthylene	5.0000	4.6	-8.2	20.00
Dimethylphthalate	5.0000	4.7	-5.2	20.00
2,6-Dinitrotoluene	5.0000	4.8	-3.0	20.00
Acenaphthene	5.0000	4.5	-9.4	20.00

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00023
Laboratory ID: SLC0099-SCV1
Sequence: SLC0099
Sequence Name: SCV 5.0
Standard ID: L002576

3-Nitroaniline	5.0000	4.6	-7.1	20.00
2,4-Dinitrophenol	5.0000	1.4	-71.5 *	20.00
Dibenzofuran	5.0000	4.4	-12.9	20.00
4-Nitrophenol	5.0000	4.3	-13.1	20.00
2,4-Dinitrotoluene	5.0000	4.6	-8.5	20.00
Fluorene	5.0000	5.2	3.6	20.00
4-Chlorophenylphenyl ether	5.0000	5.0	-0.5	20.00
Diethyl phthalate	5.0000	5.3	5.3	20.00
4-Nitroaniline	5.0000	4.6	-8.0	20.00
4,6-Dinitro-2-methylphenol	5.0000	3.6	-28.1 *	20.00
N-Nitrosodiphenylamine	5.0000	4.6	-8.0	20.00
4-Bromophenyl phenyl ether	5.0000	4.9	-2.3	20.00
Hexachlorobenzene	5.0000	4.4	-11.6	20.00
Pentachlorophenol	5.0000	2.5	-50.9 *	20.00
Phenanthrene	5.0000	4.4	-12.1	20.00
Anthracene	5.0000	4.0	-20.8 *	20.00
Carbazole	5.0000	4.5	-10.7	20.00
Di-n-Butylphthalate	5.0000	5.2	3.2	20.00
Fluoranthene	5.0000	4.8	-3.8	20.00
Pyrene	5.0000	4.6	-8.8	20.00
Butylbenzylphthalate	5.0000	5.3	6.4	20.00
Benzo(a)anthracene	5.0000	4.5	-10.6	20.00
3,3'-Dichlorobenzidine	10.000	10.0	0.002	20.00
Chrysene	5.0000	4.4	-11.4	20.00
bis(2-Ethylhexyl)phthalate	5.0000	5.2	4.6	20.00
Di-n-Octylphthalate	5.0000	4.8	-3.7	20.00
Benzofluoranthenes, Total	10.000	9.0	-9.8	20.00
Benzo(a)pyrene	5.0000	4.6	-8.2	20.00
Indeno(1,2,3-cd)pyrene	5.0000	4.6	-7.3	20.00
Dibenzo(a,h)anthracene	5.0000	4.6	-8.4	20.00
Benzo(g,h,i)perylene	5.0000	4.6	-8.1	20.00
1-Methylnaphthalene	5.0000	4.5	-10.3	20.00

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

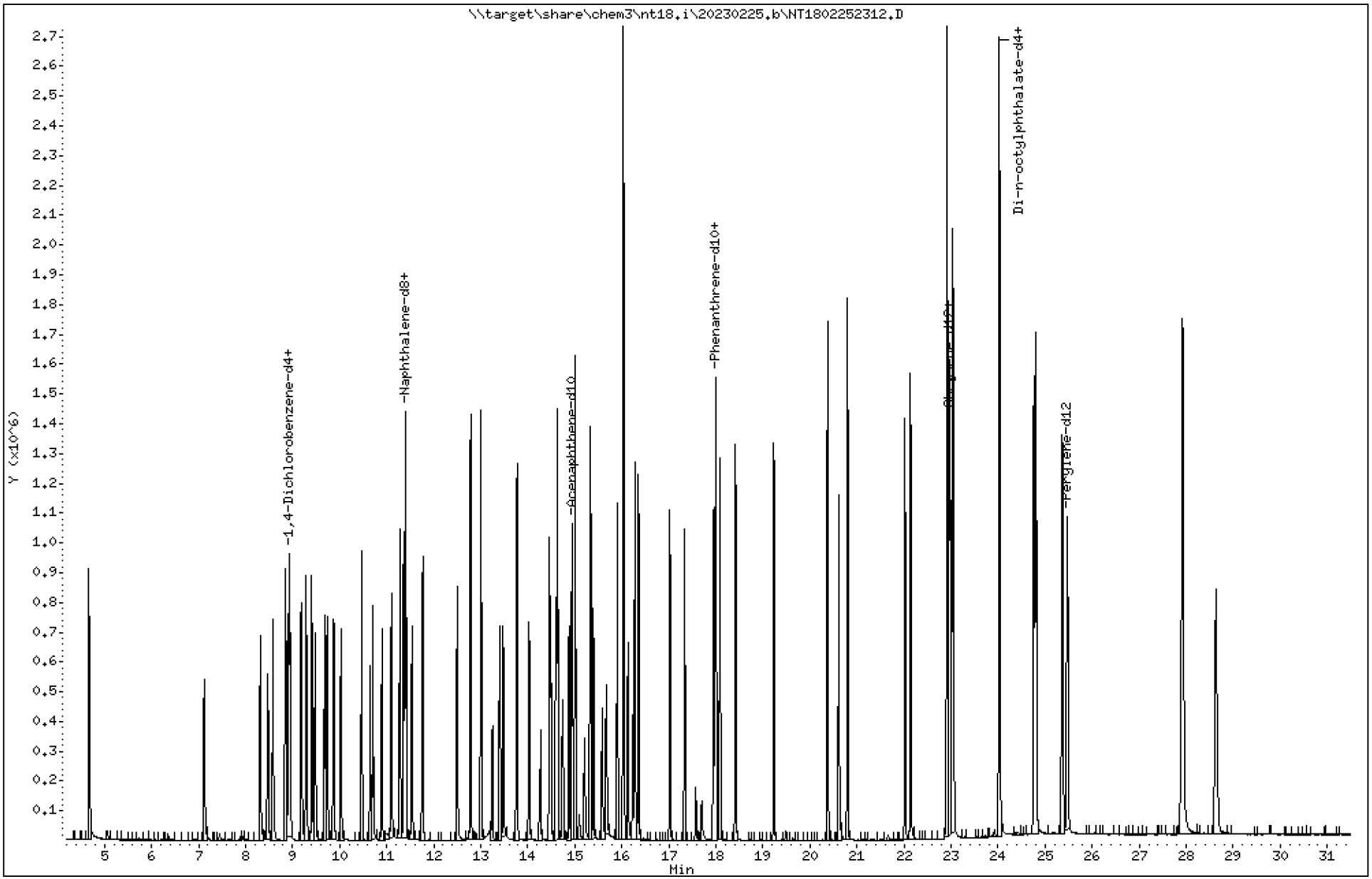
Instrument: nt18.i

Sample Info: SLC0099-SCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

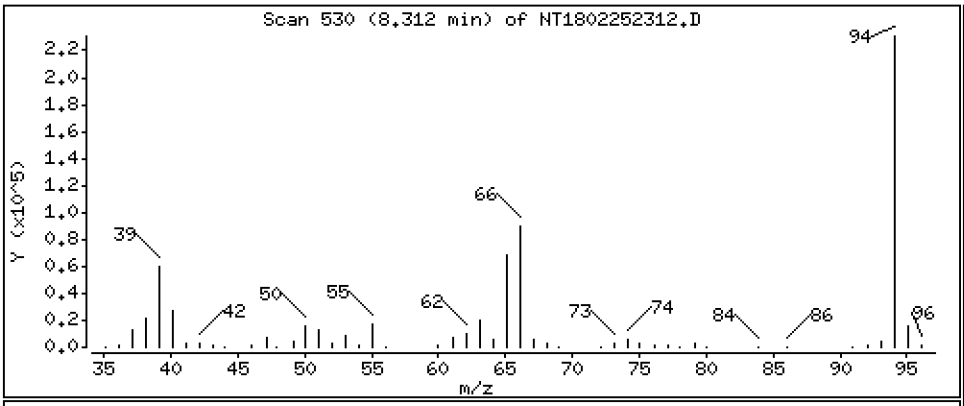
Operator: VTS

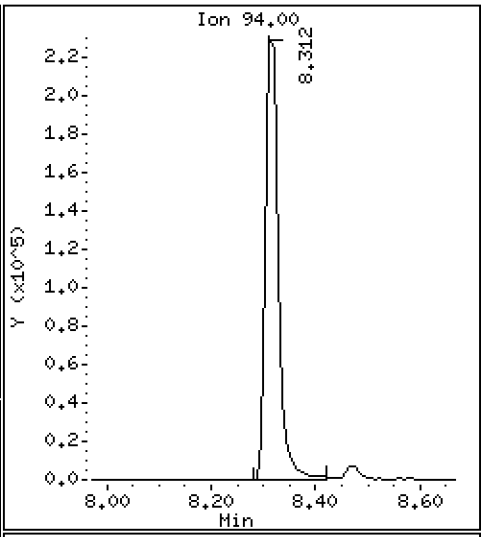
Column phase: ZB-5msi

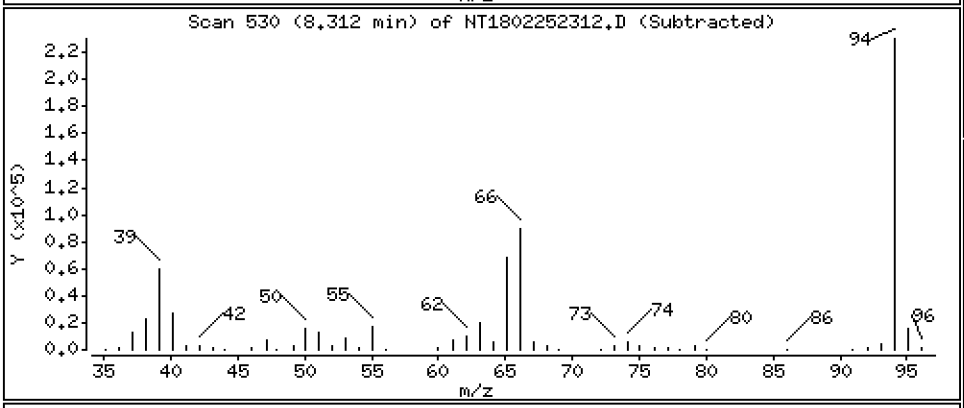
Column diameter: 0.25

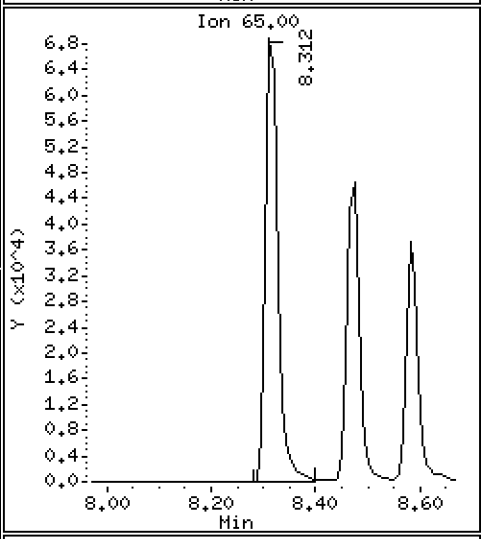
3 Phenol

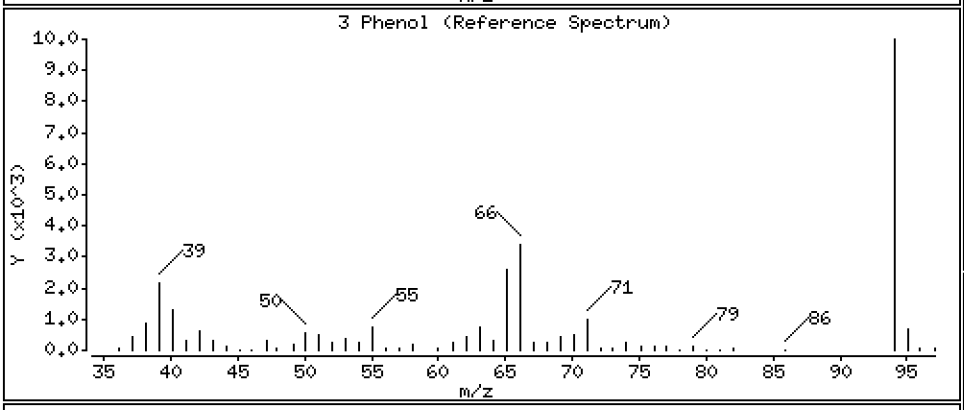
Concentration: 4.109 ug/mL

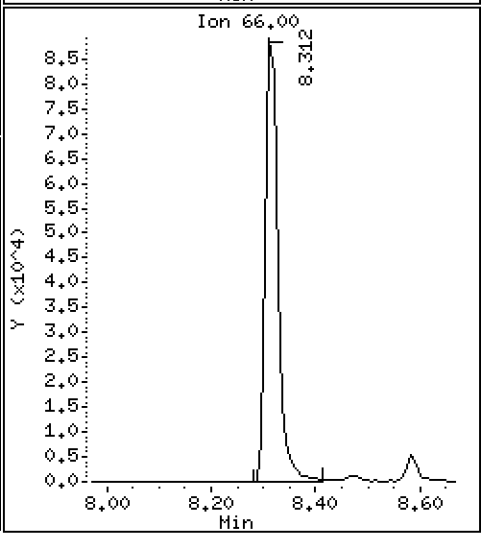


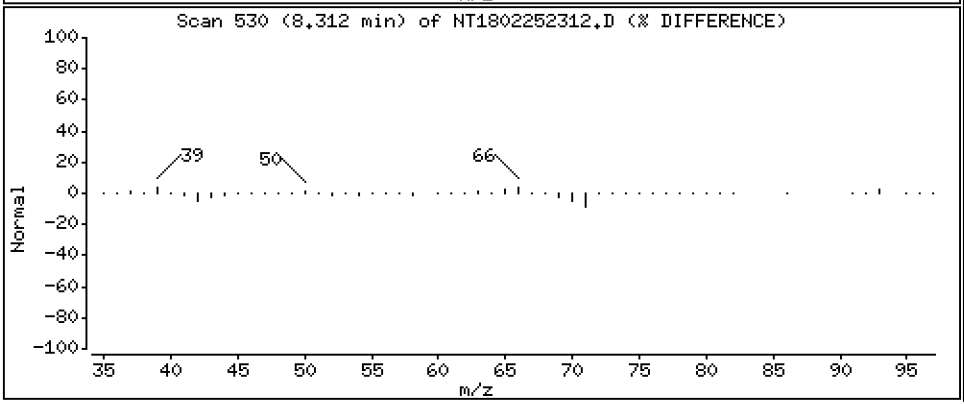












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

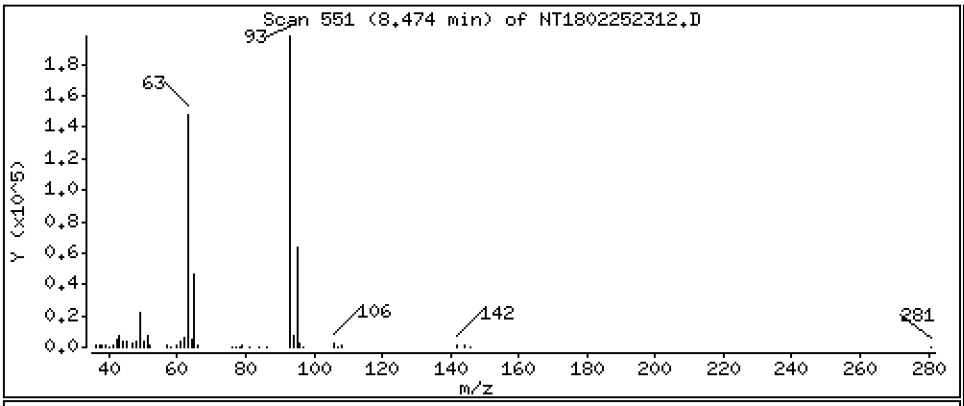
Operator: VTS

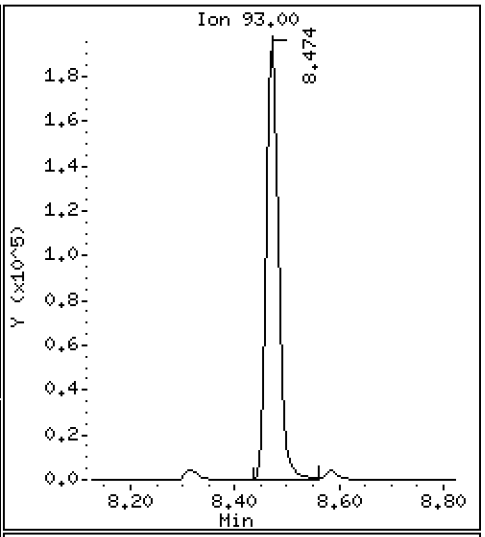
Column phase: ZB-5msi

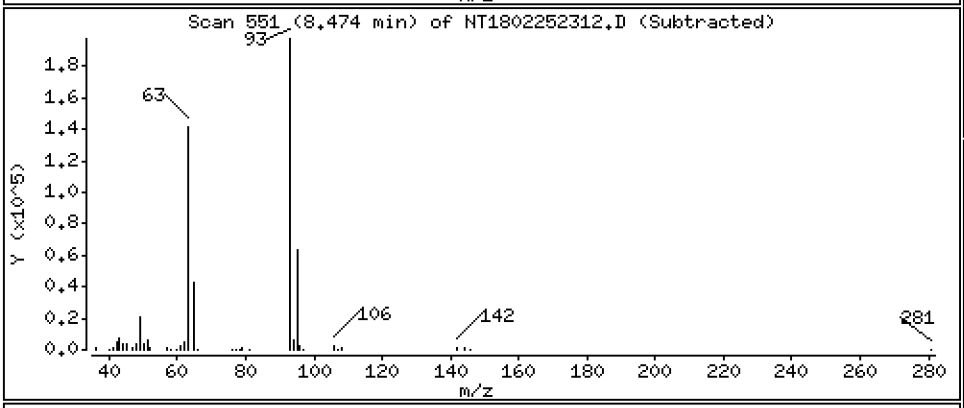
Column diameter: 0.25

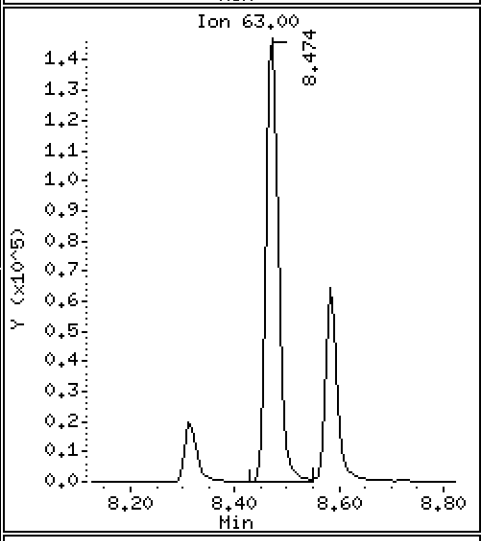
4 Bis(2-Chloroethyl)ether

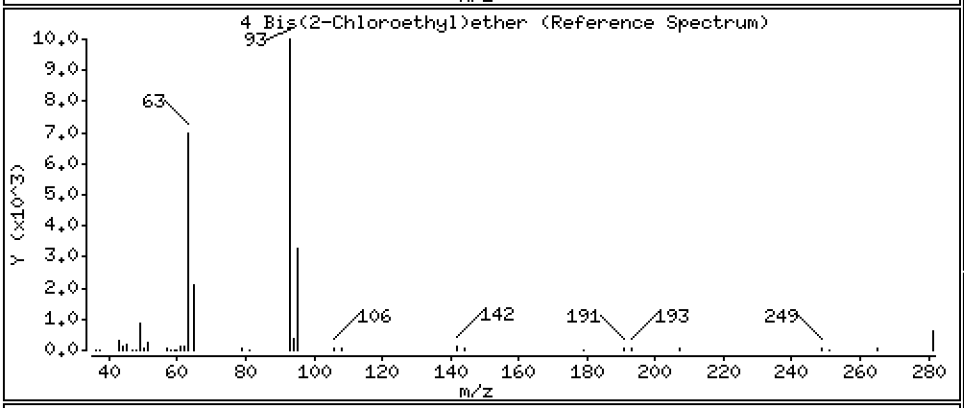
Concentration: 4.962 ug/mL

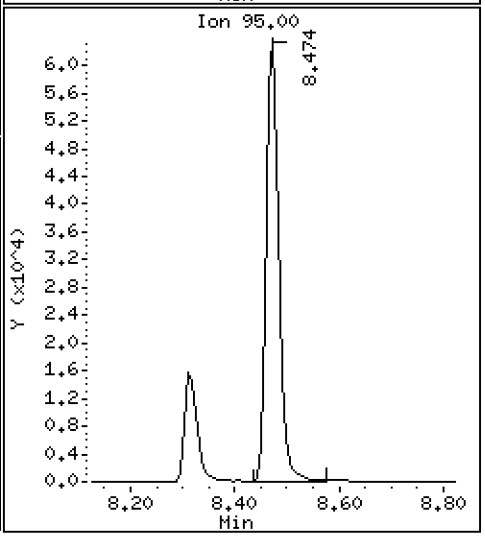


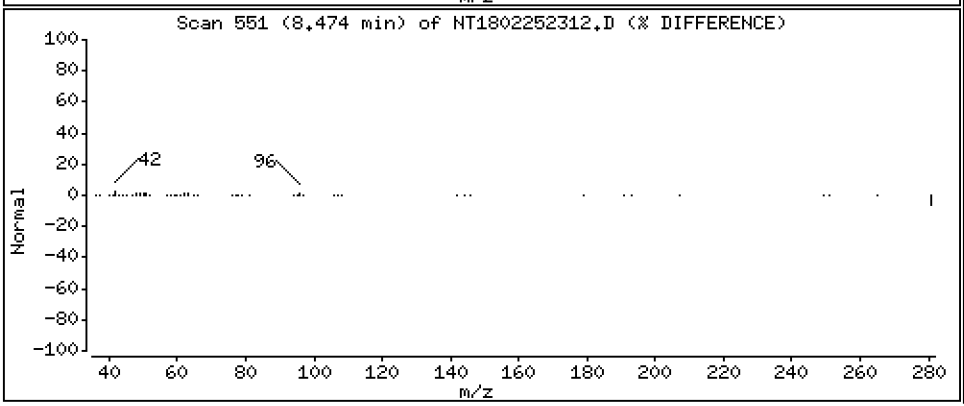












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

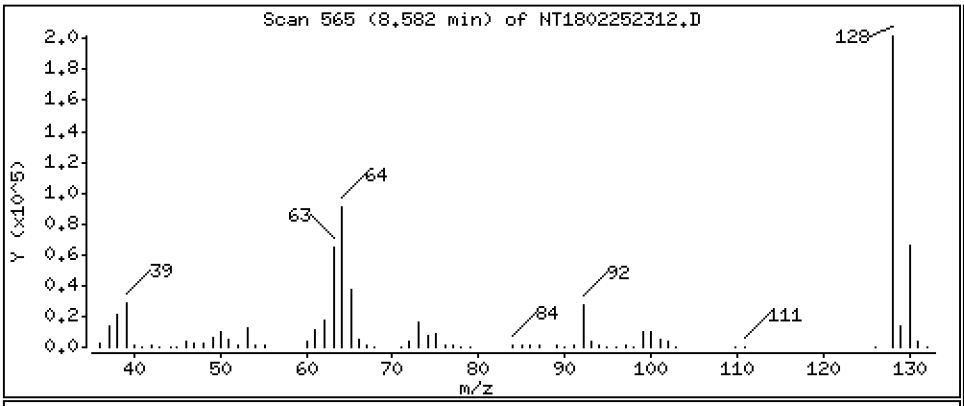
Operator: VTS

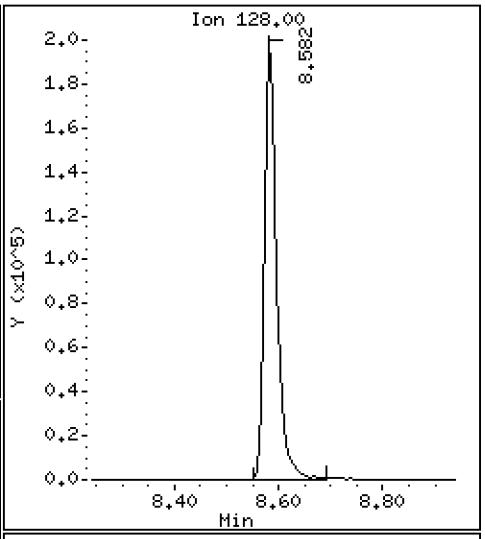
Column phase: ZB-5msi

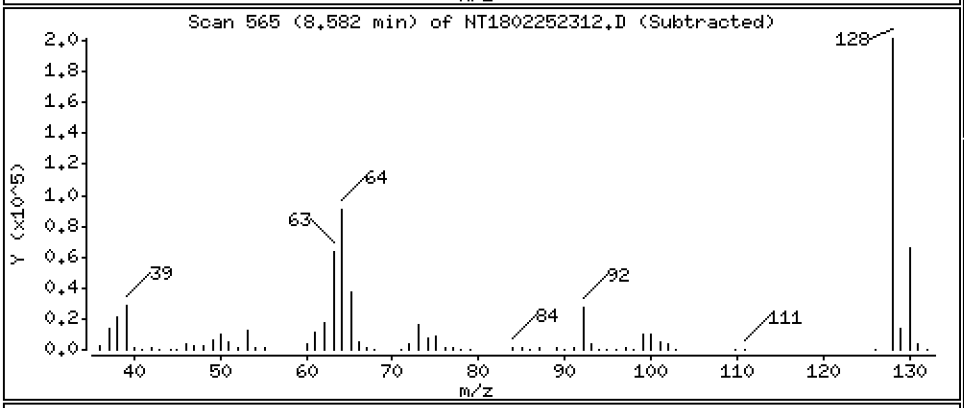
Column diameter: 0.25

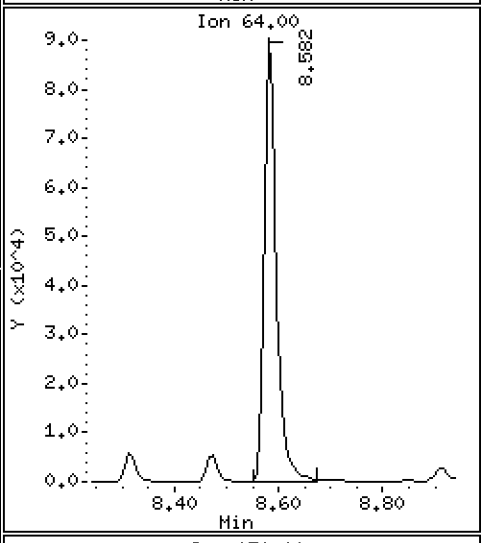
6 2-Chlorophenol

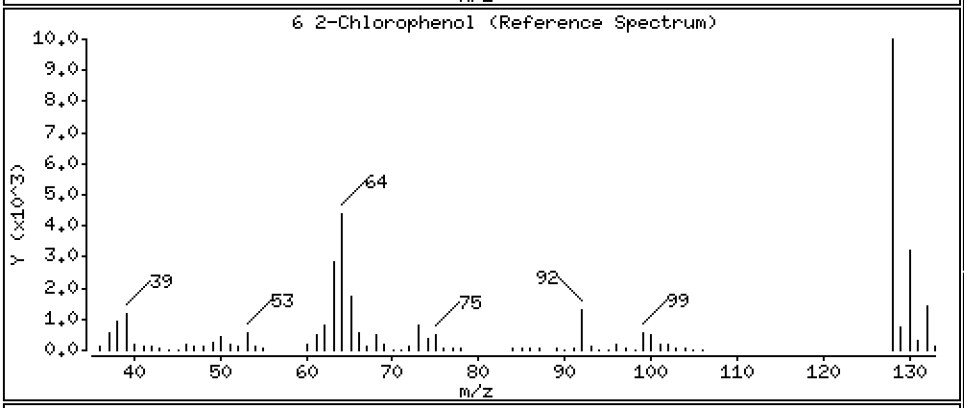
Concentration: 4.167 ug/mL

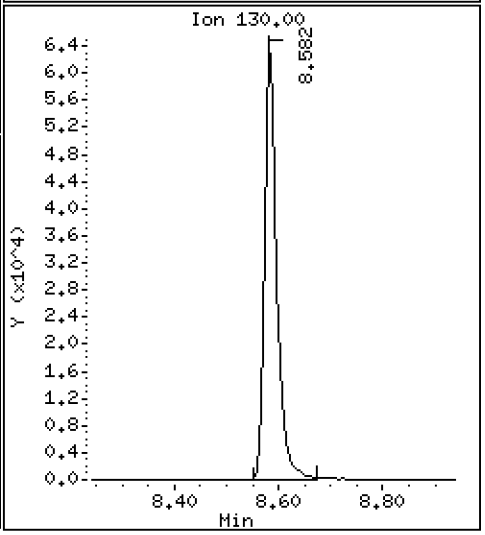


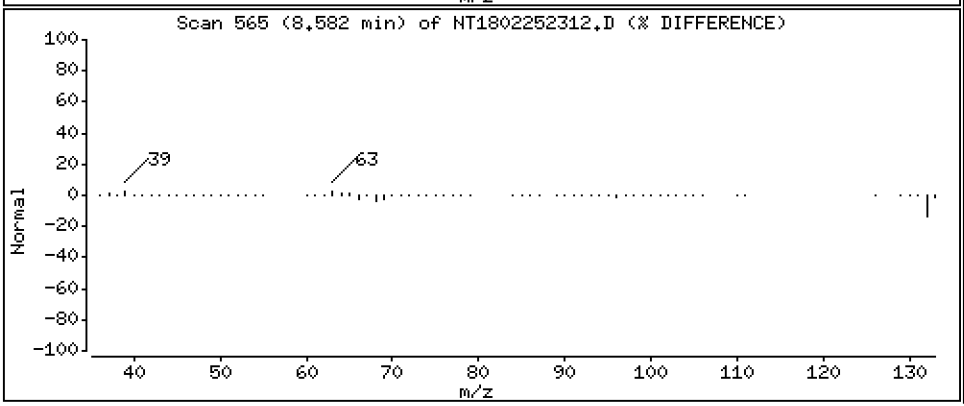












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

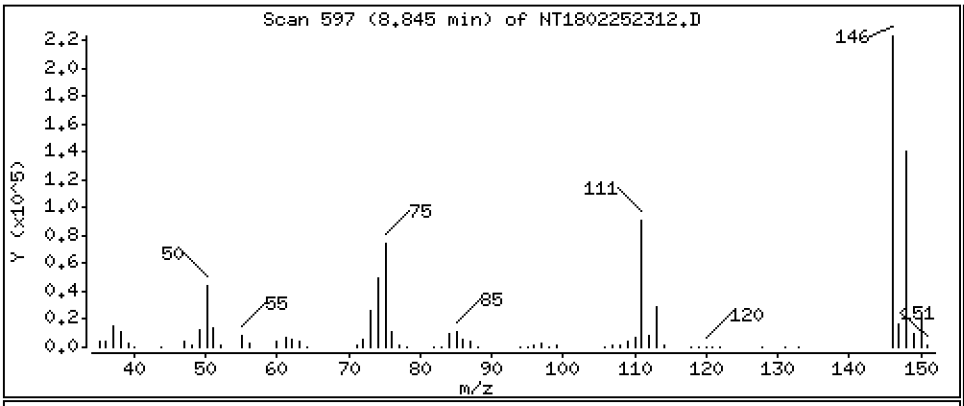
Operator: VTS

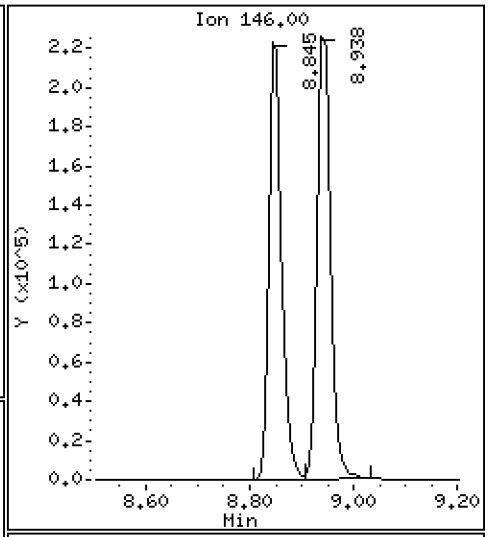
Column phase: ZB-5msi

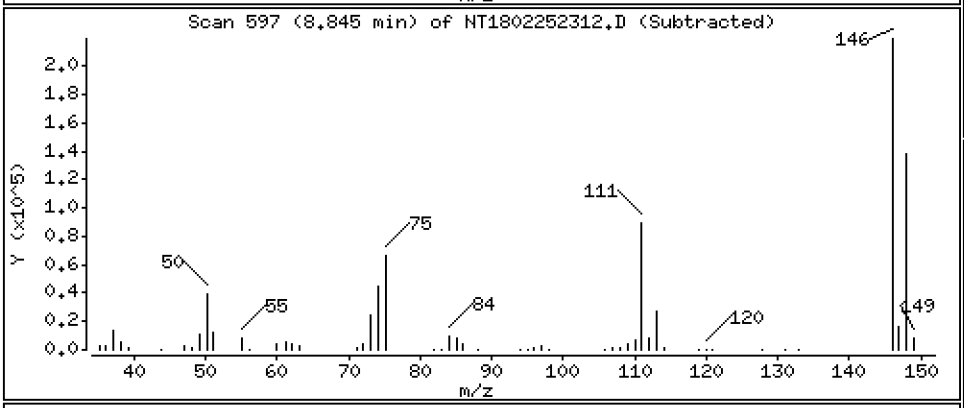
Column diameter: 0.25

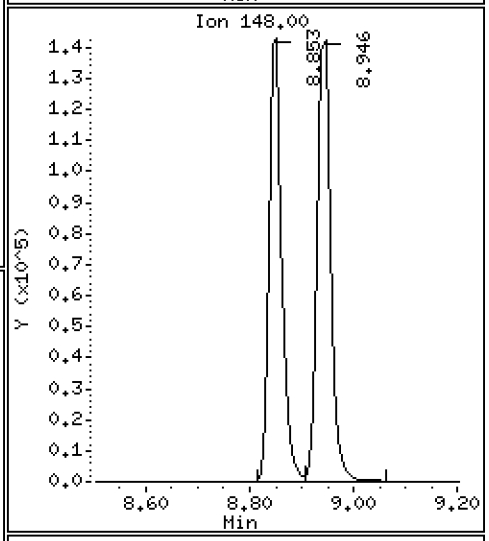
7 1,3-Dichlorobenzene

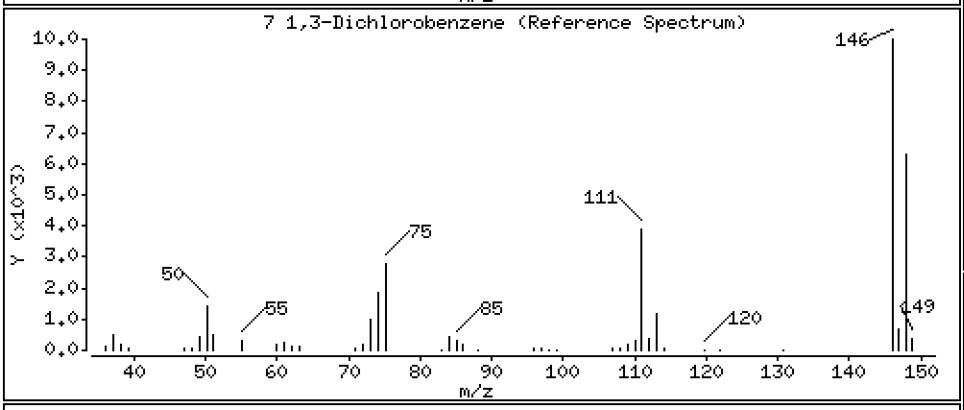
Concentration: 4.615 ug/mL

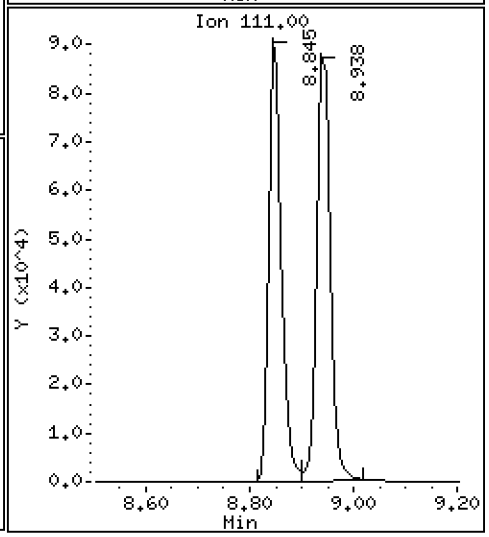


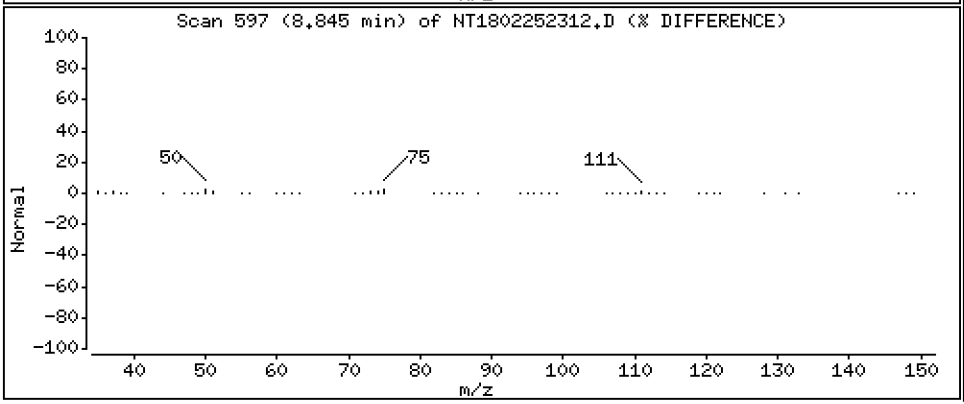












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

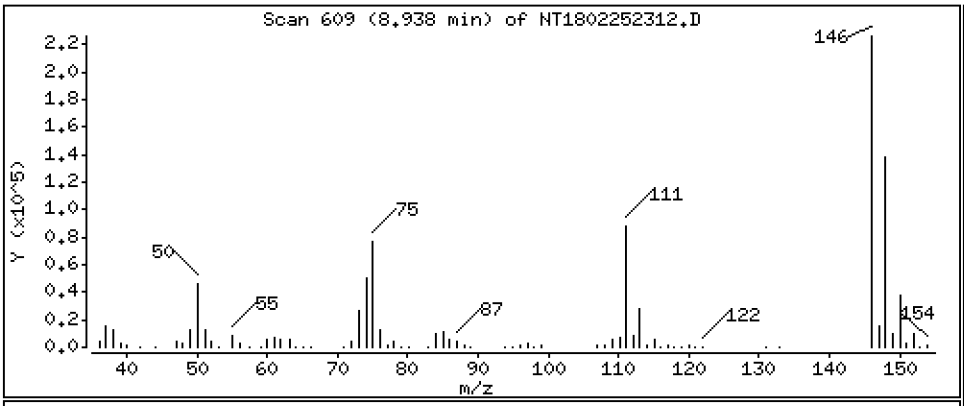
Operator: VTS

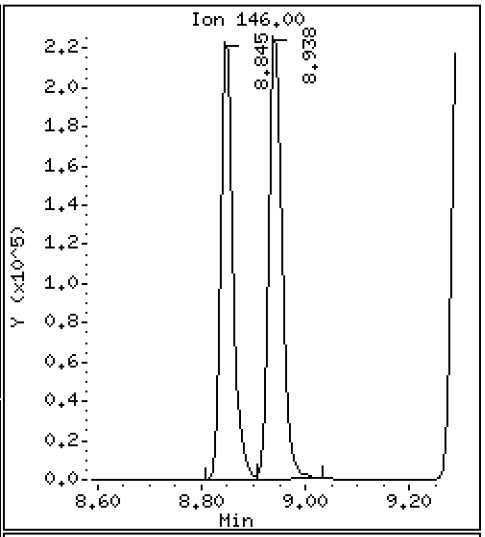
Column phase: ZB-5msi

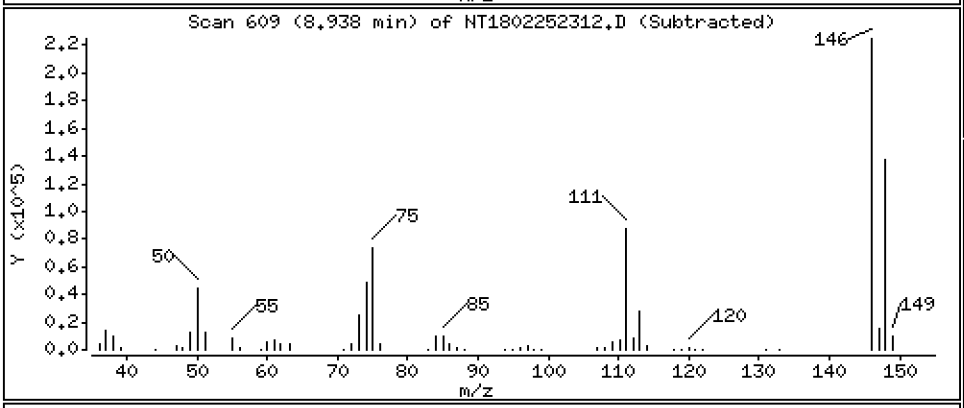
Column diameter: 0.25

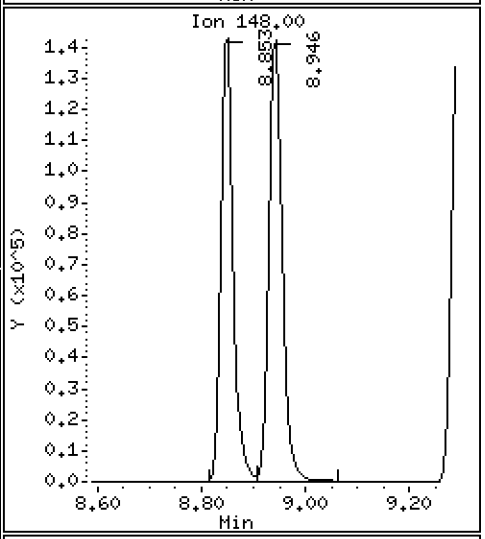
9 1,4-Dichlorobenzene

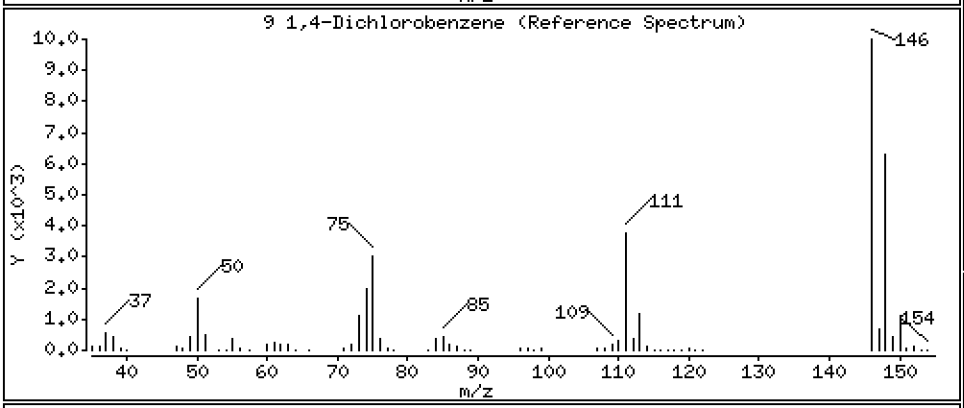
Concentration: 4.621 ug/mL

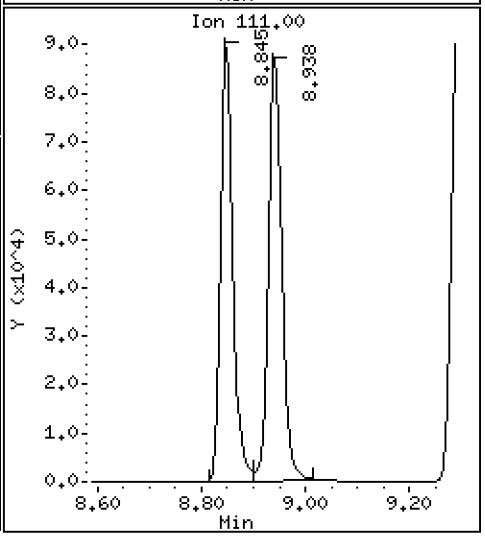


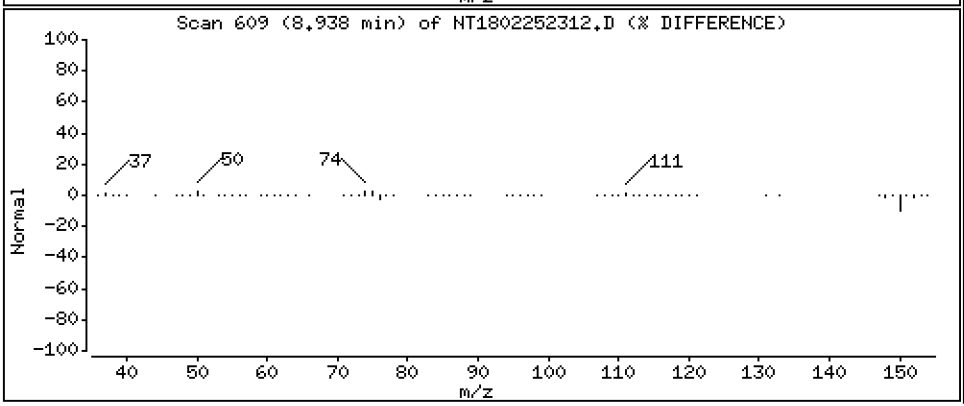












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

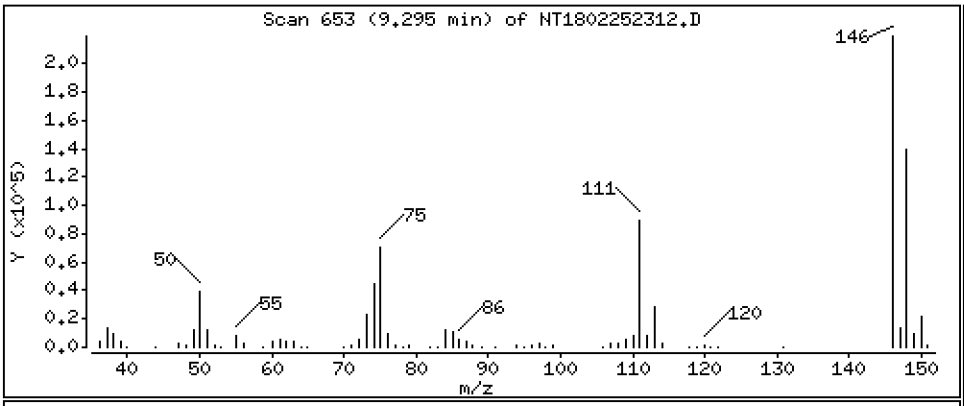
Operator: VTS

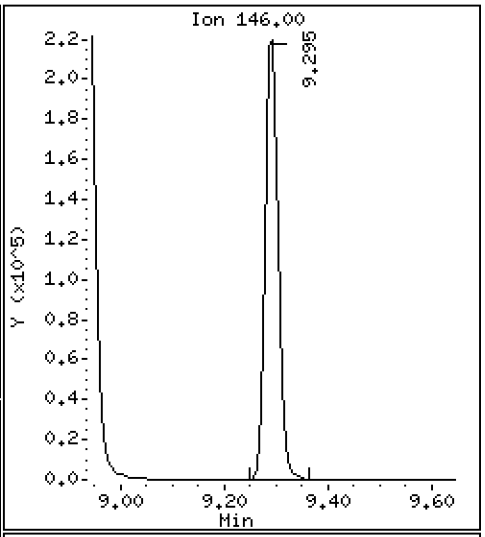
Column phase: ZB-5msi

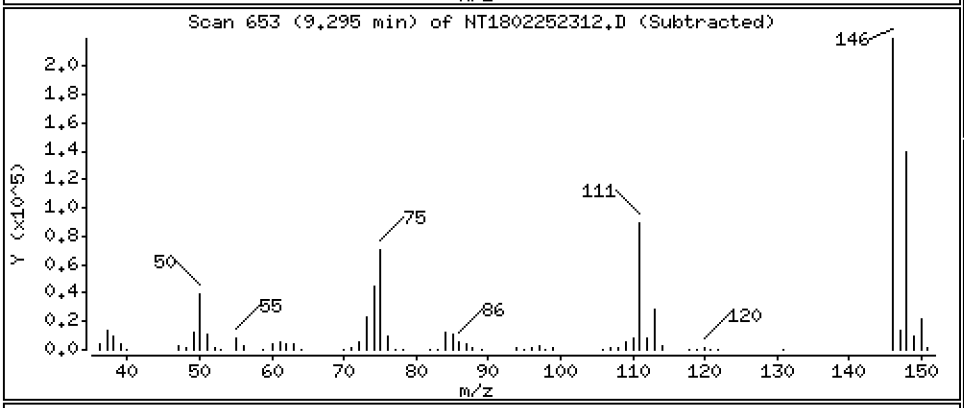
Column diameter: 0.25

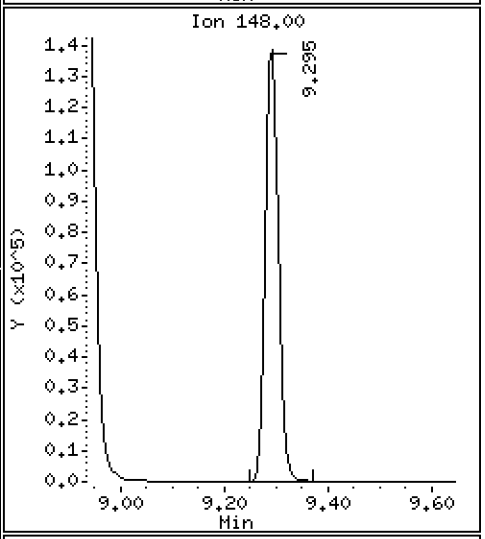
12 1,2-Dichlorobenzene

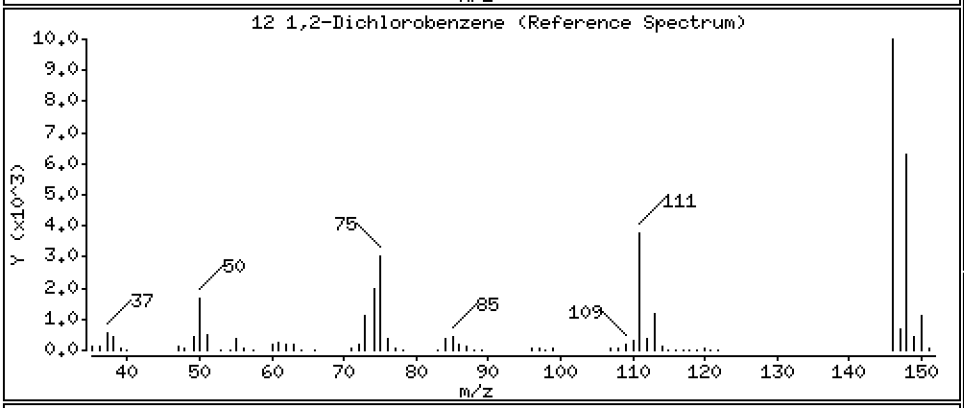
Concentration: 4.524 ug/mL

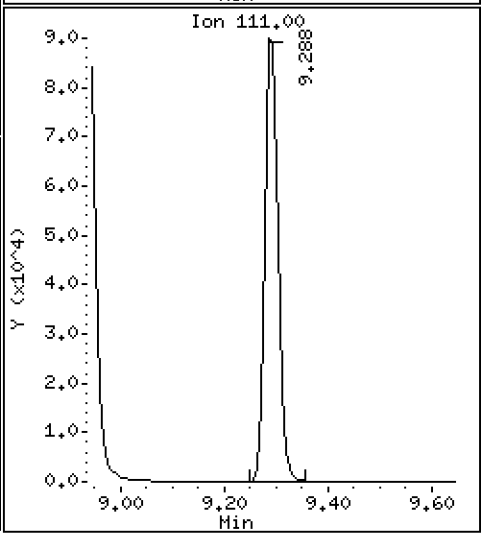


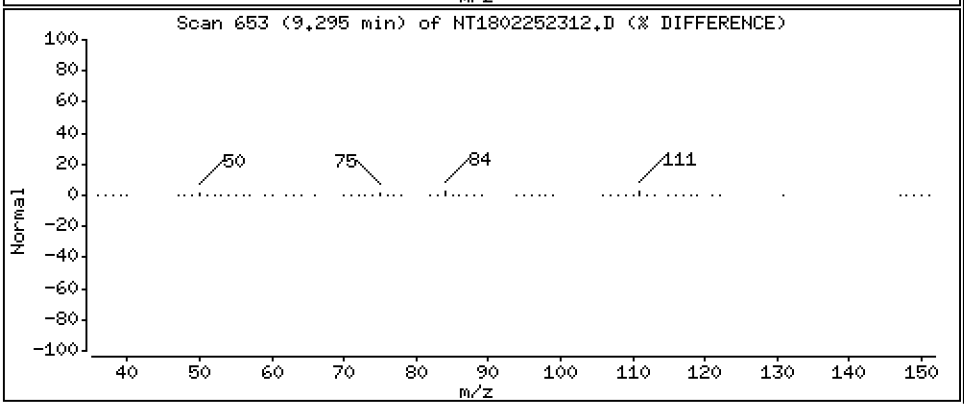












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

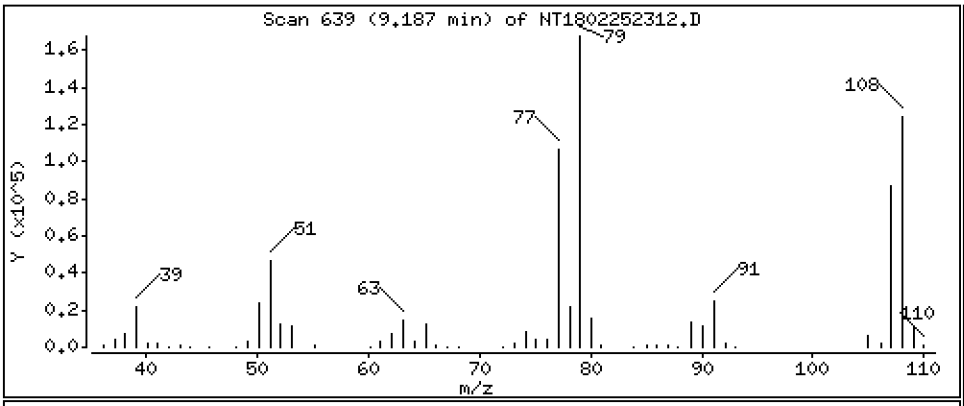
Operator: VTS

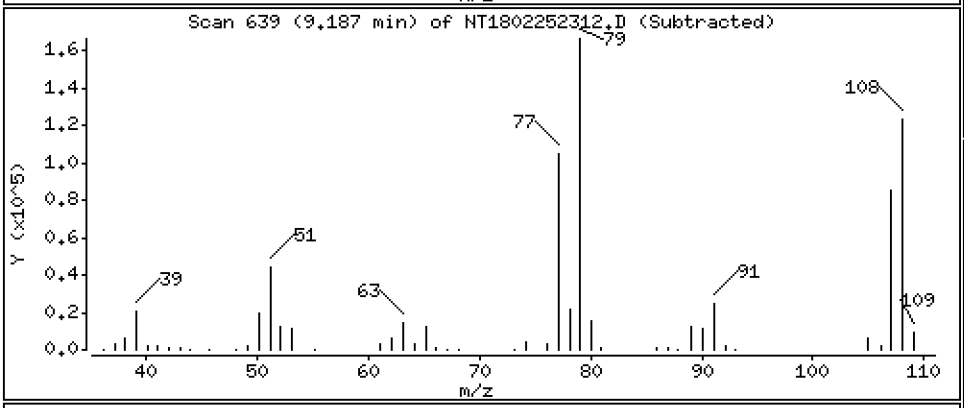
Column phase: ZB-5msi

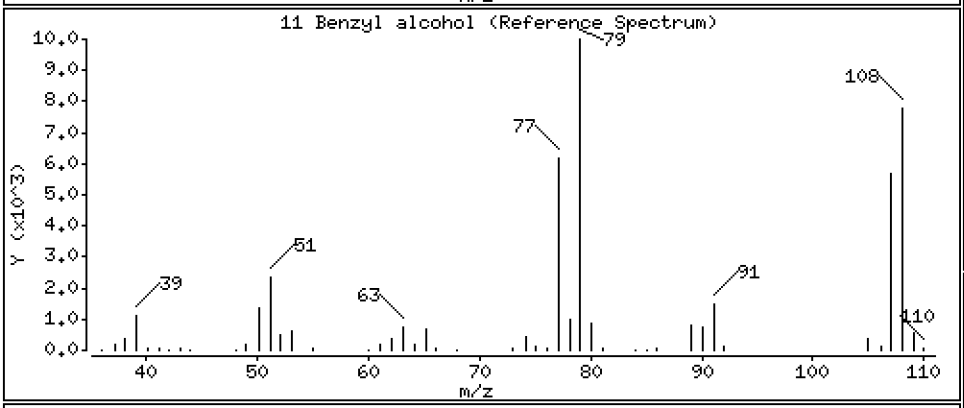
Column diameter: 0.25

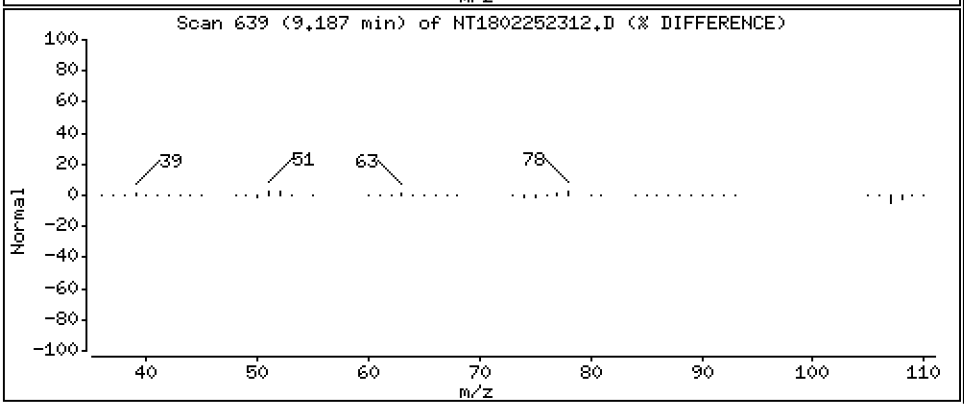
11 Benzyl alcohol

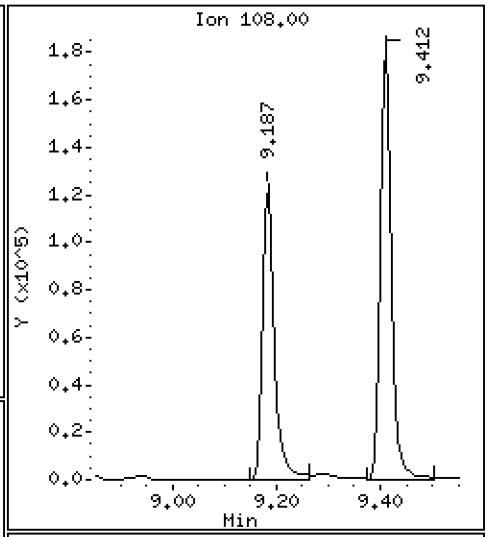
Concentration: 4.677 ug/mL

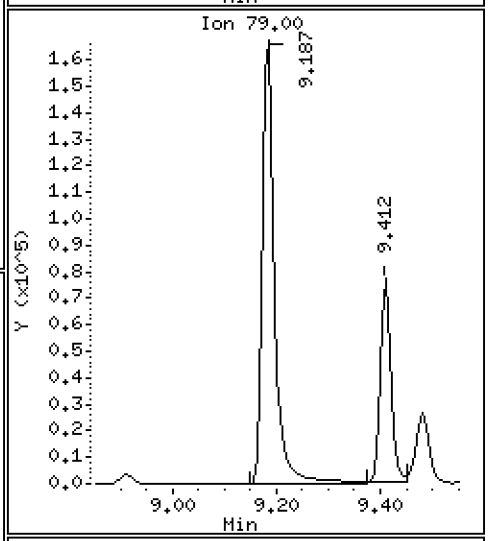


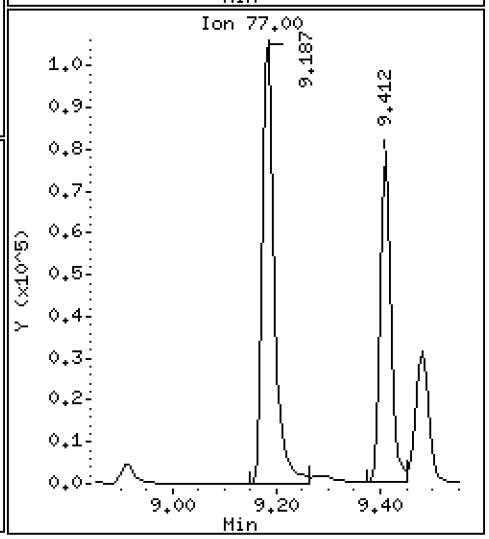












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

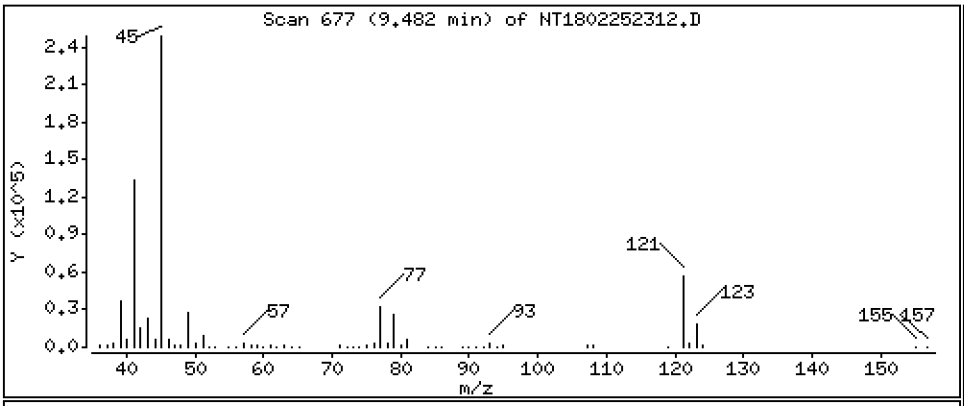
Operator: VTS

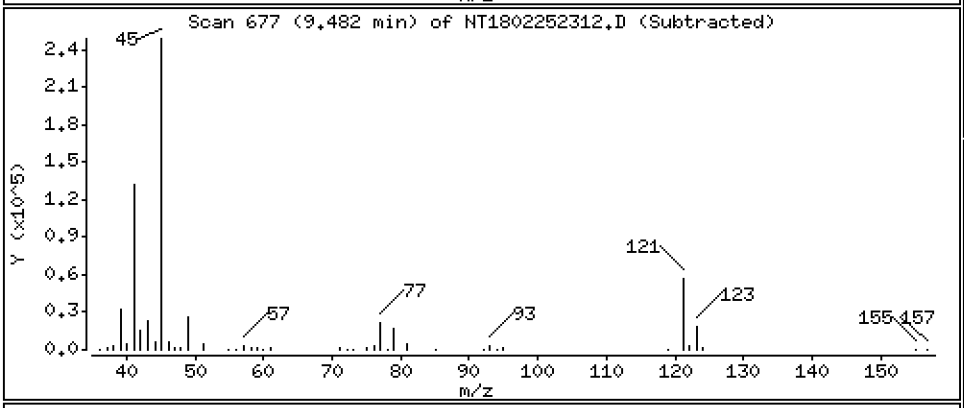
Column phase: ZB-5msi

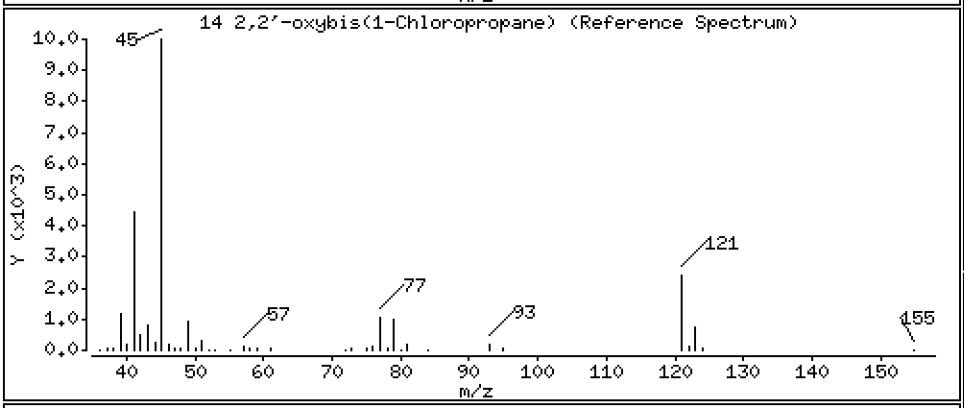
Column diameter: 0.25

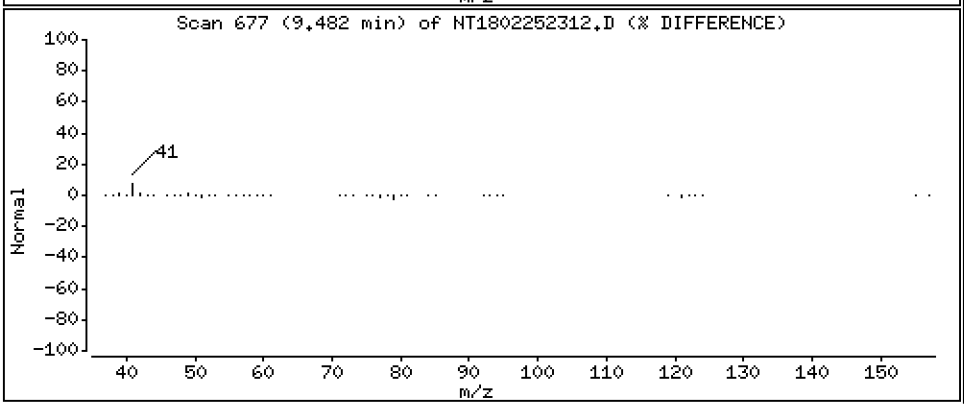
14 2,2'-oxybis(1-Chloropropane)

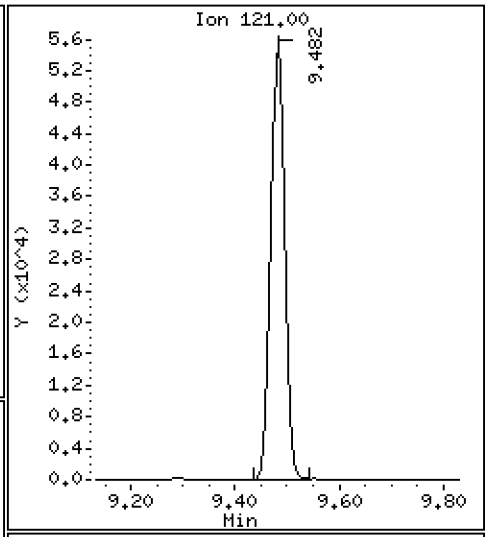
Concentration: 5.205 ug/mL

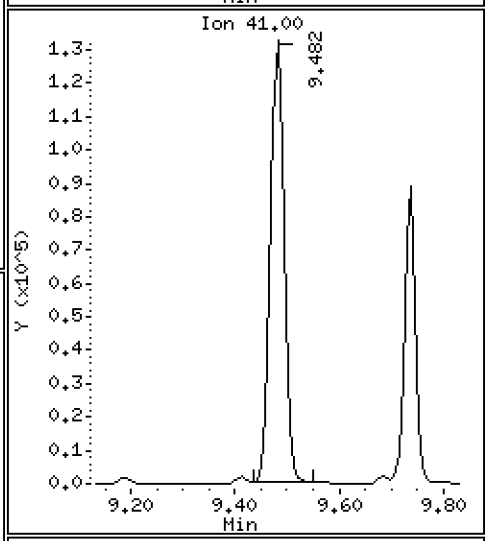


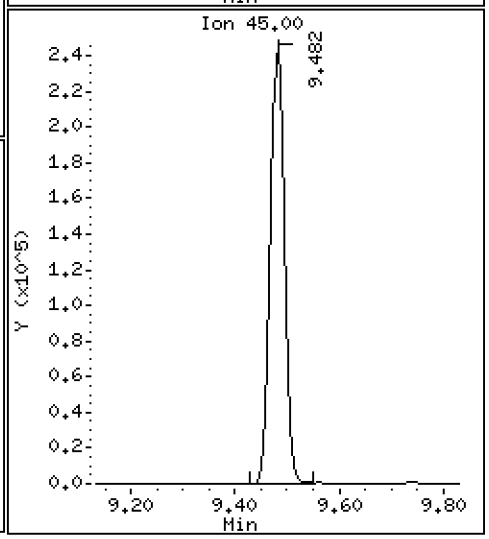












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

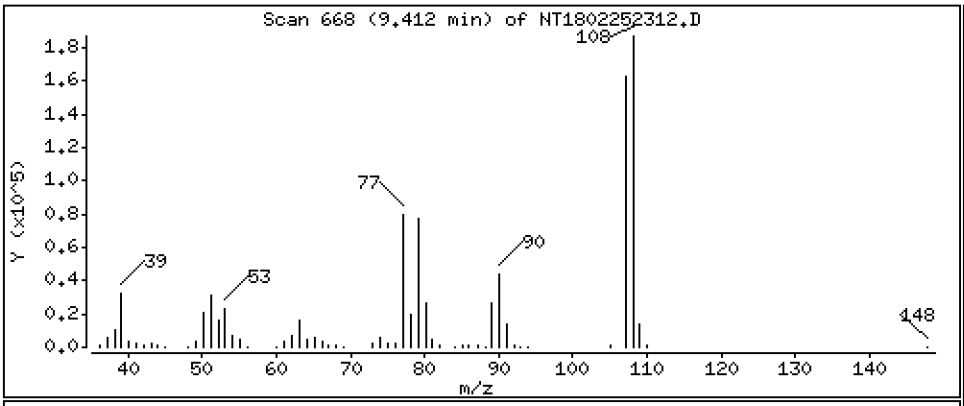
Operator: VTS

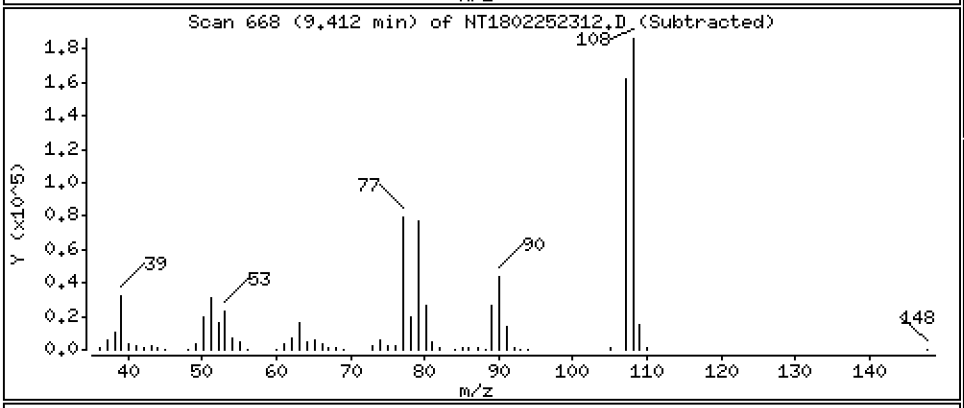
Column phase: ZB-5msi

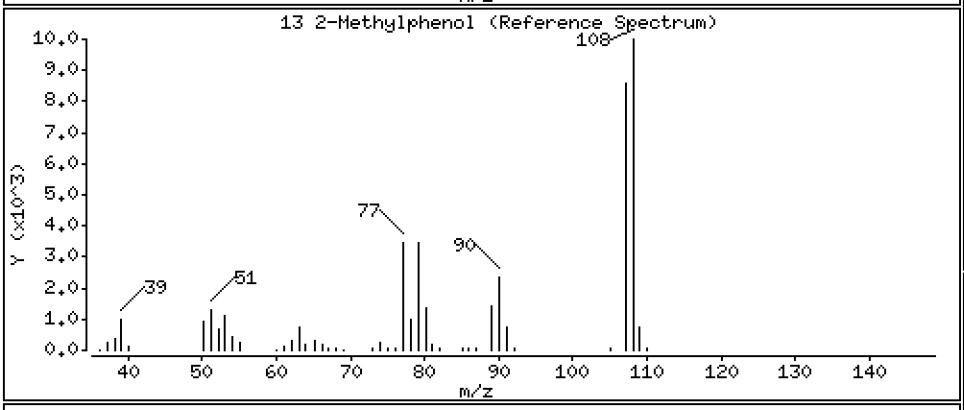
Column diameter: 0.25

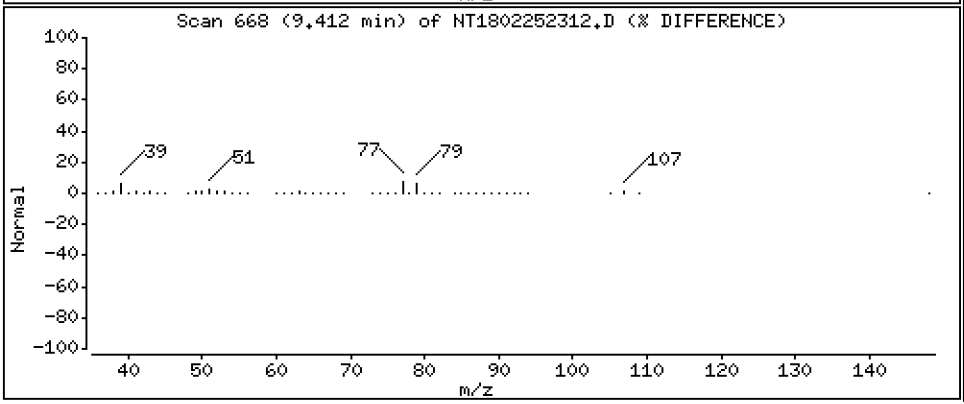
13 2-Methylphenol

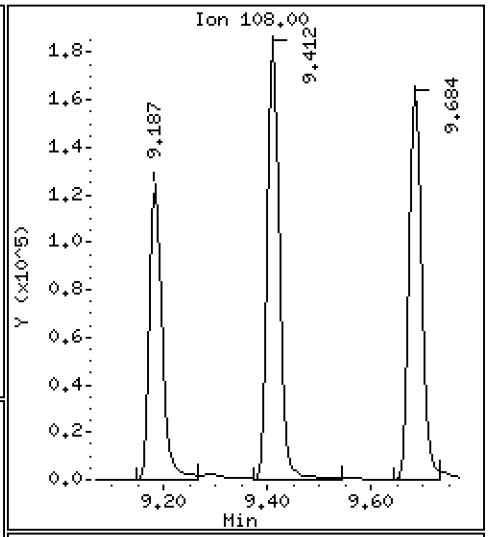
Concentration: 3.995 ug/mL

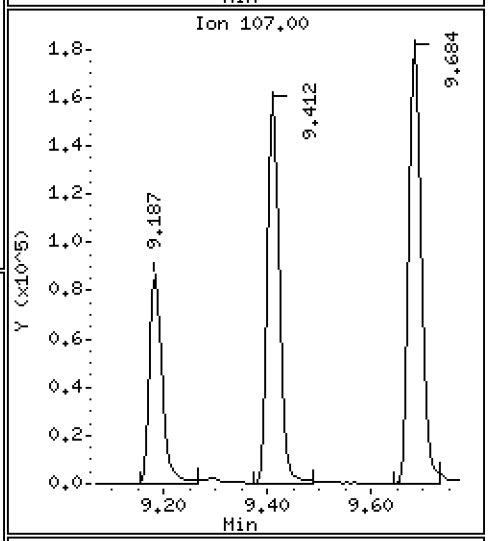


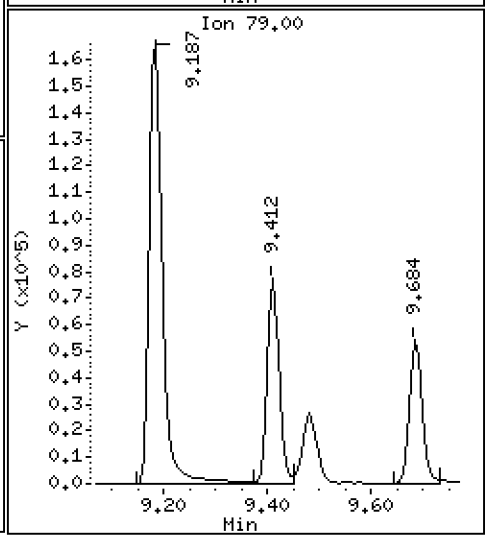












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

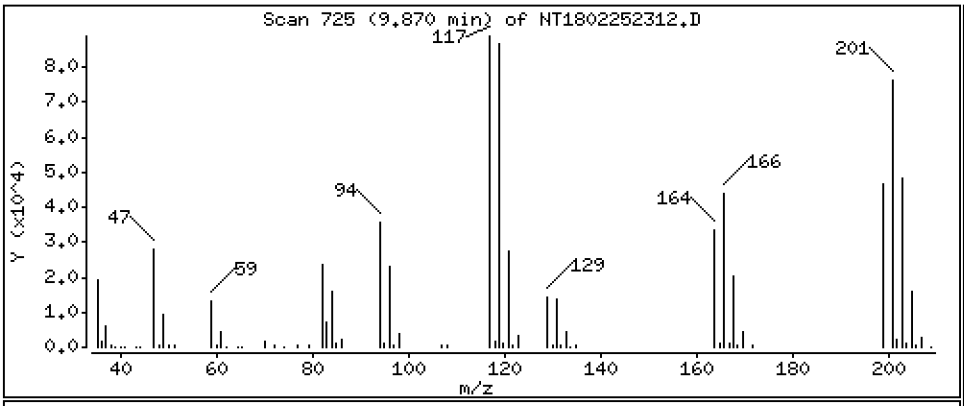
Operator: VTS

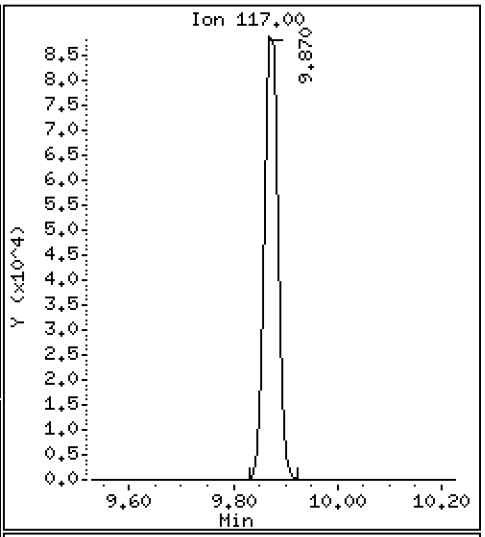
Column phase: ZB-5msi

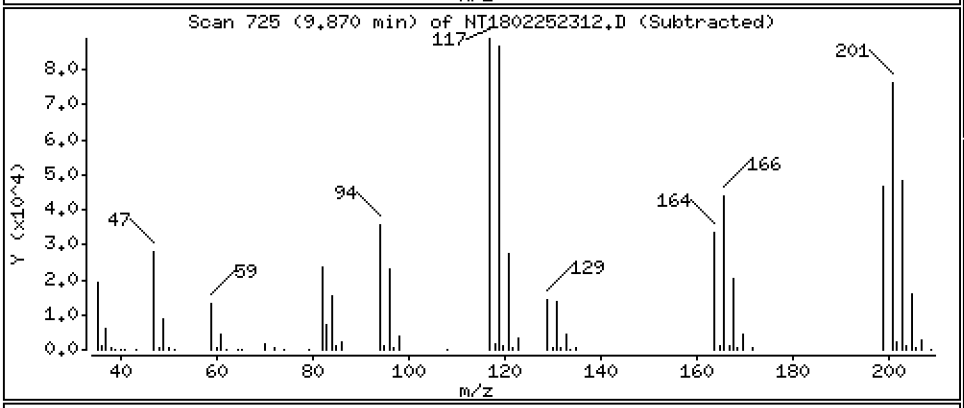
Column diameter: 0.25

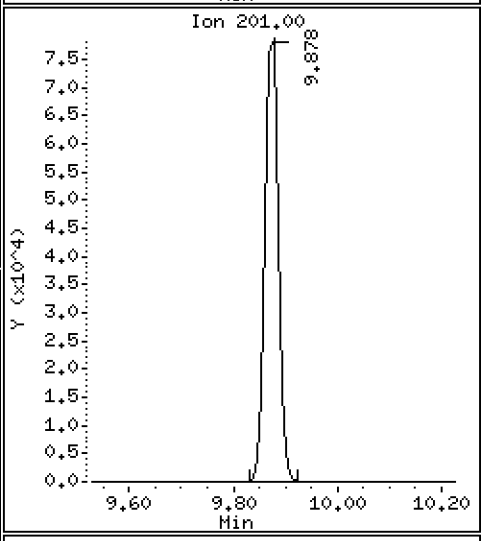
17 Hexachloroethane

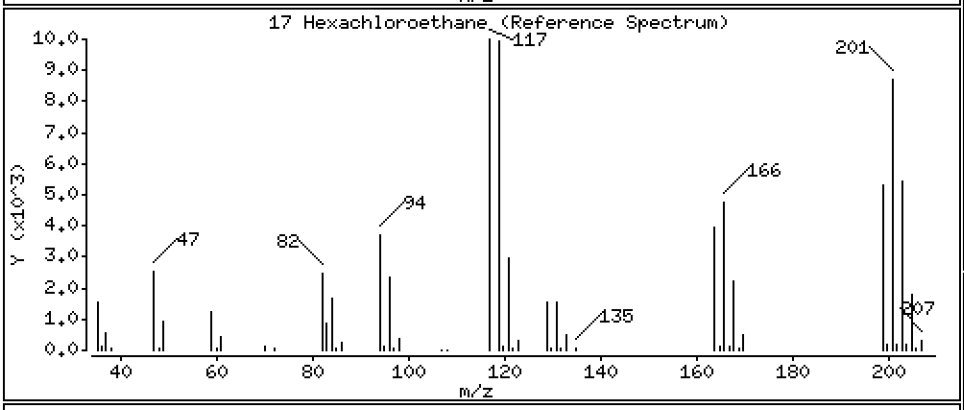
Concentration: 4.769 ug/mL

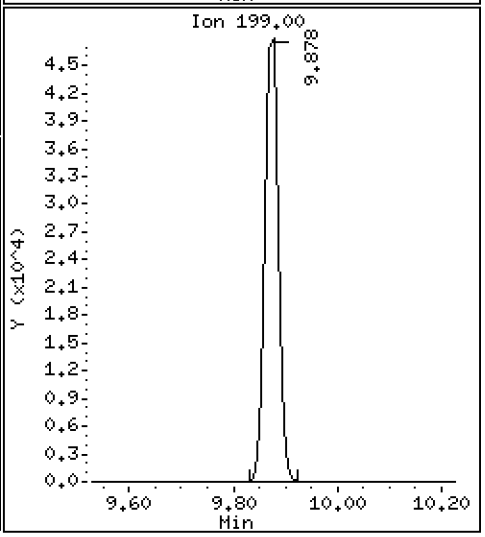


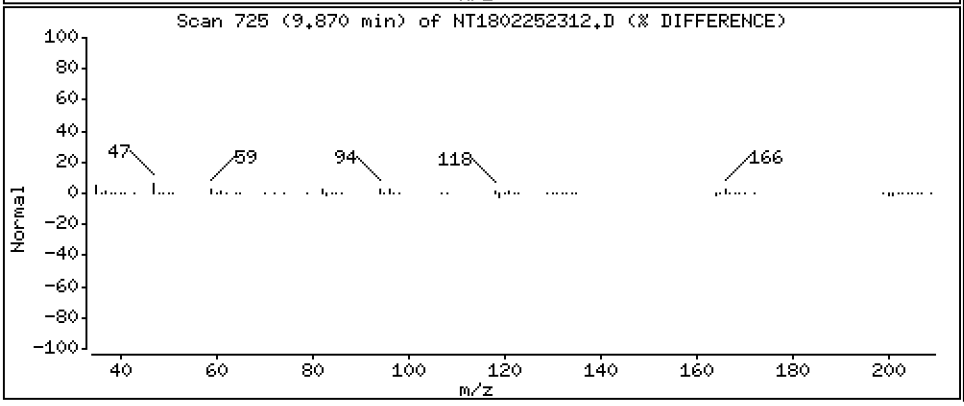












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

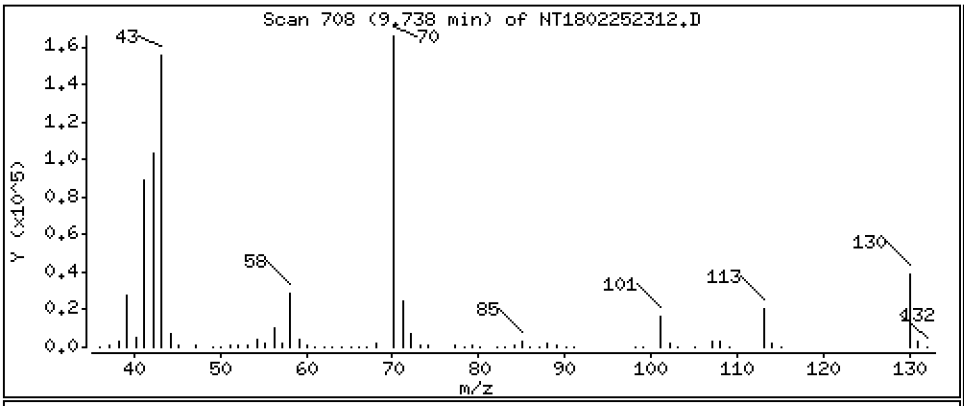
Operator: VTS

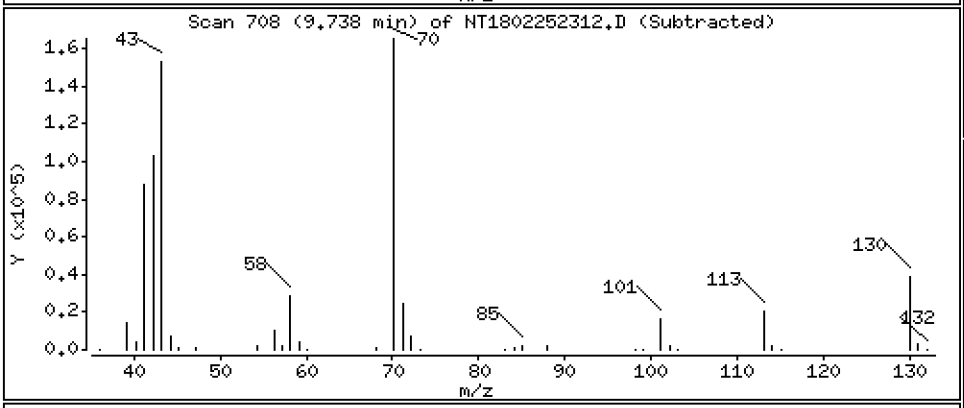
Column phase: ZB-5msi

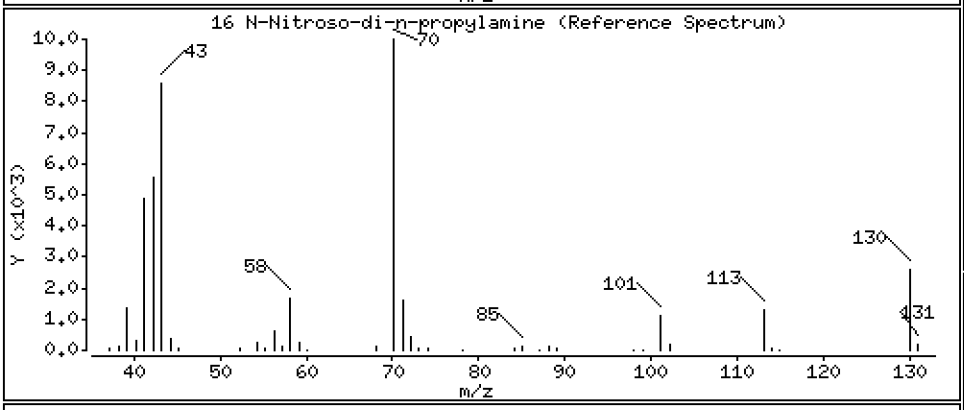
Column diameter: 0.25

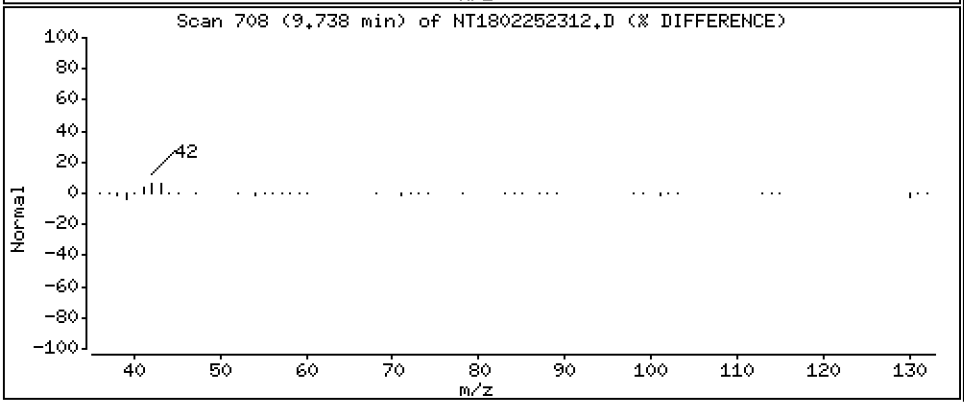
16 N-Nitroso-di-n-propylamine

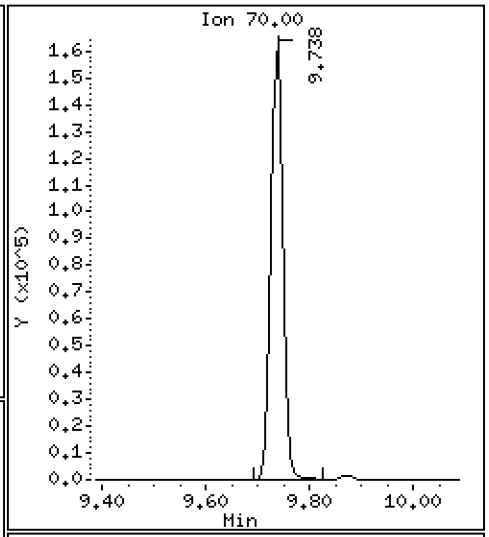
Concentration: 4.799 ug/mL

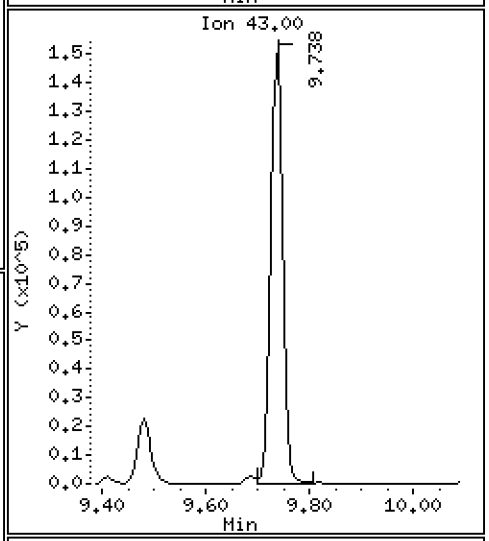


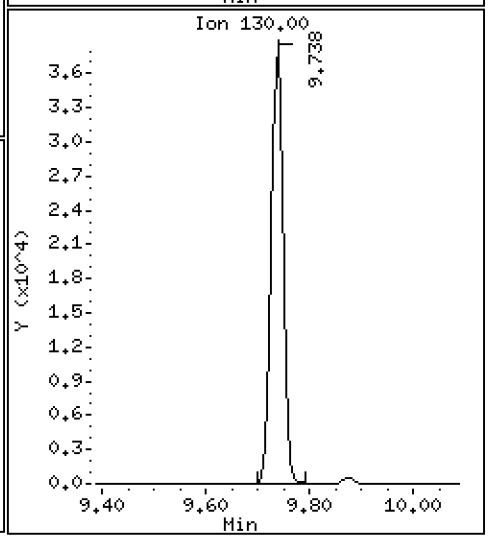












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

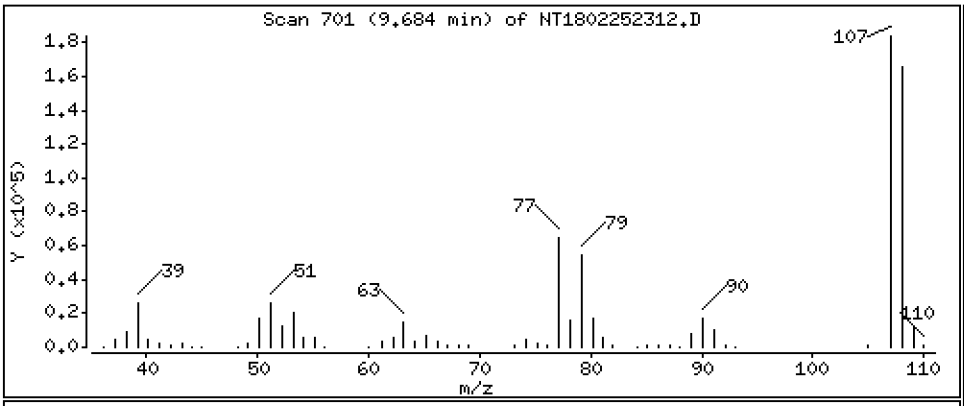
Operator: VTS

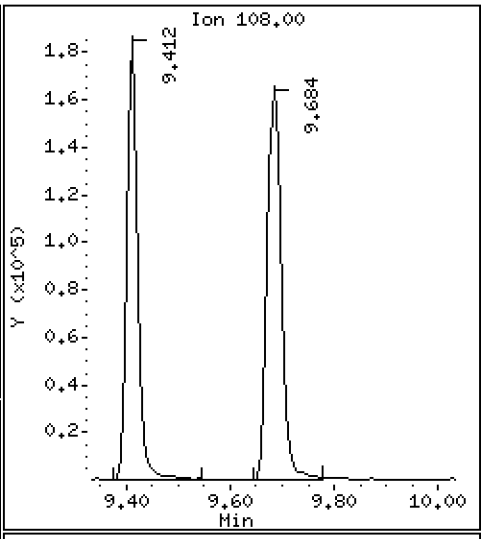
Column phase: ZB-5msi

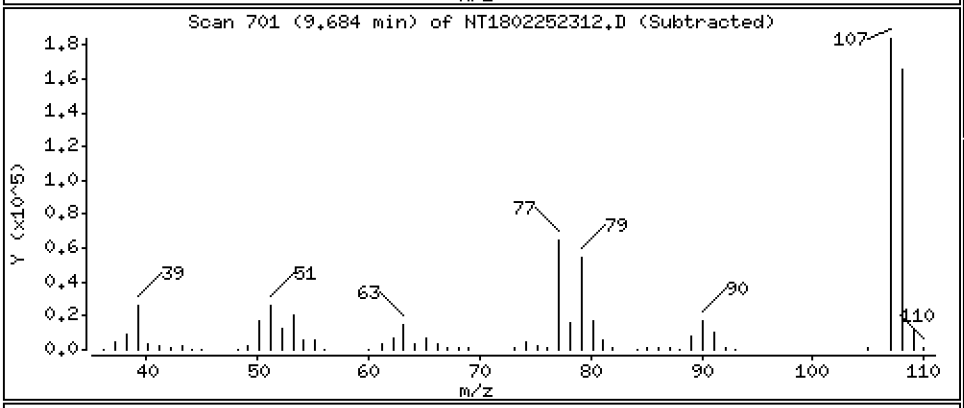
Column diameter: 0.25

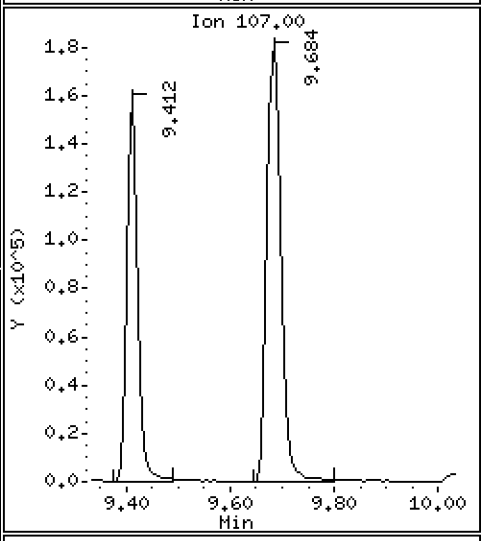
15 4-Methylphenol

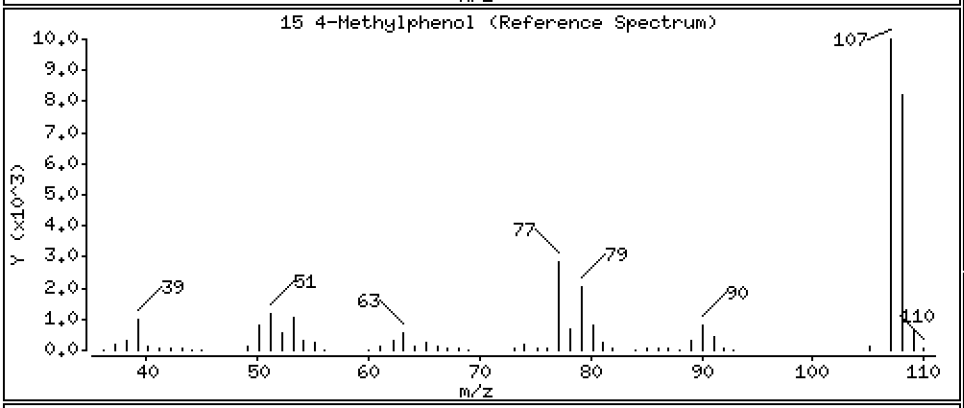
Concentration: 4.106 ug/mL

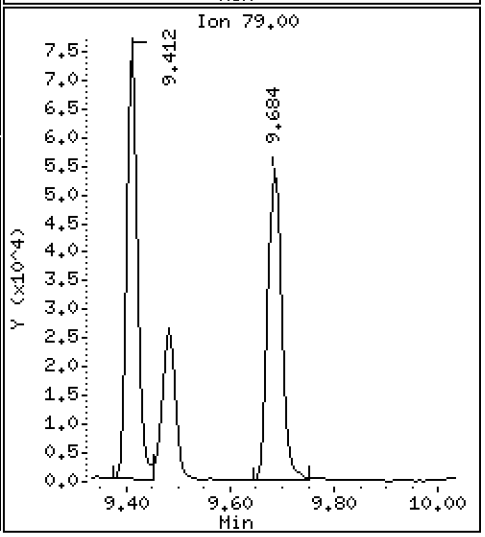


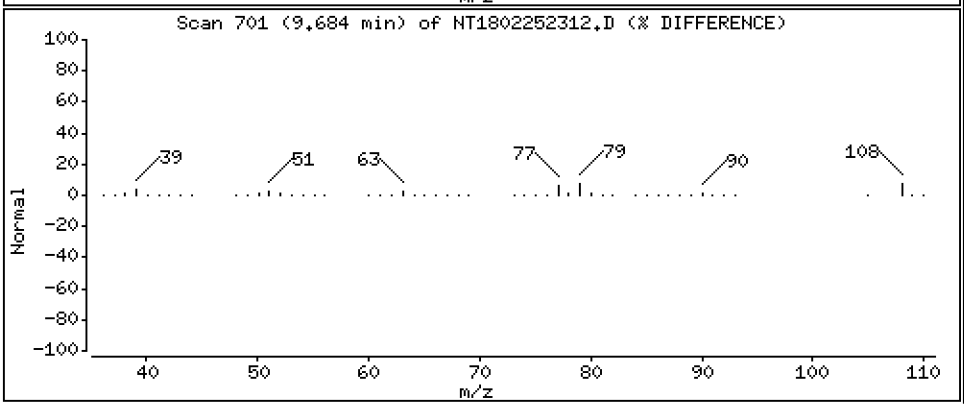












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

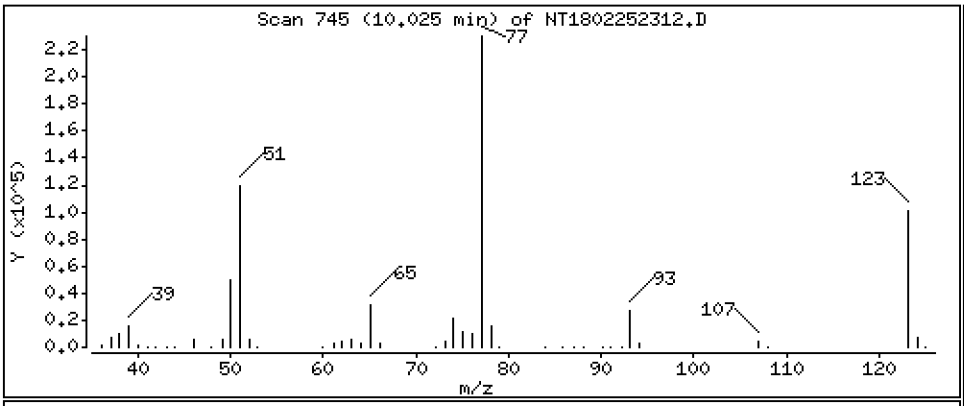
Operator: VTS

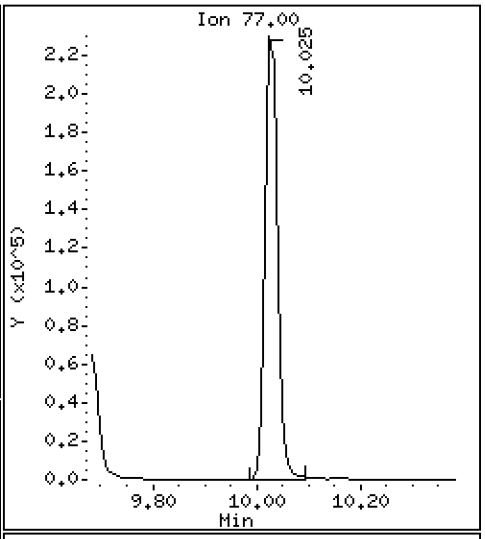
Column phase: ZB-5msi

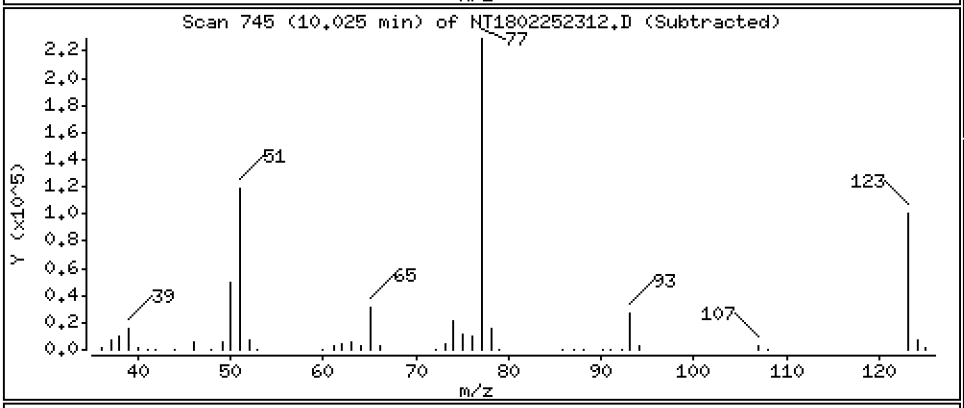
Column diameter: 0.25

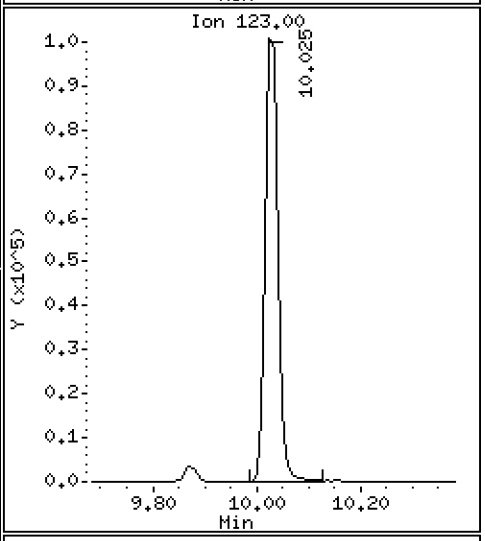
19 Nitrobenzene

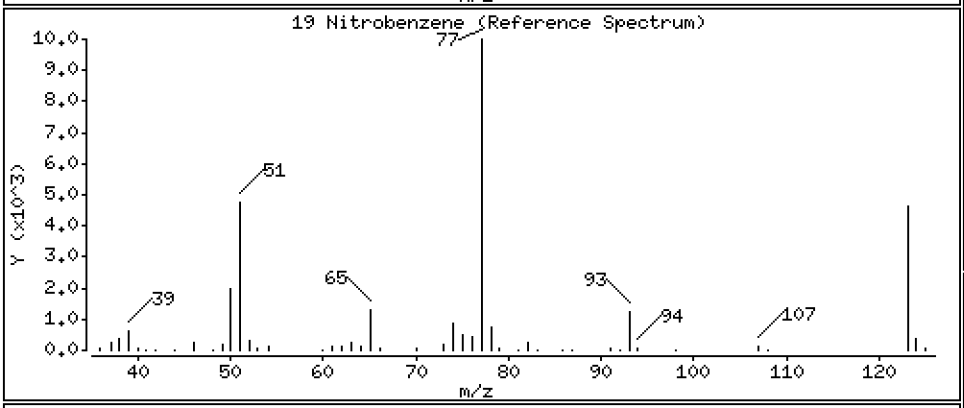
Concentration: 4.692 ug/mL

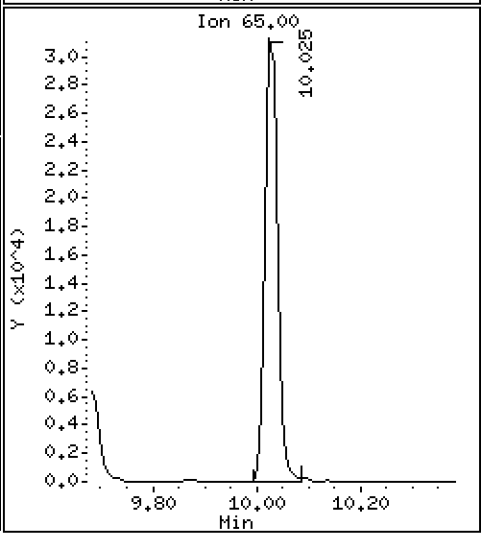


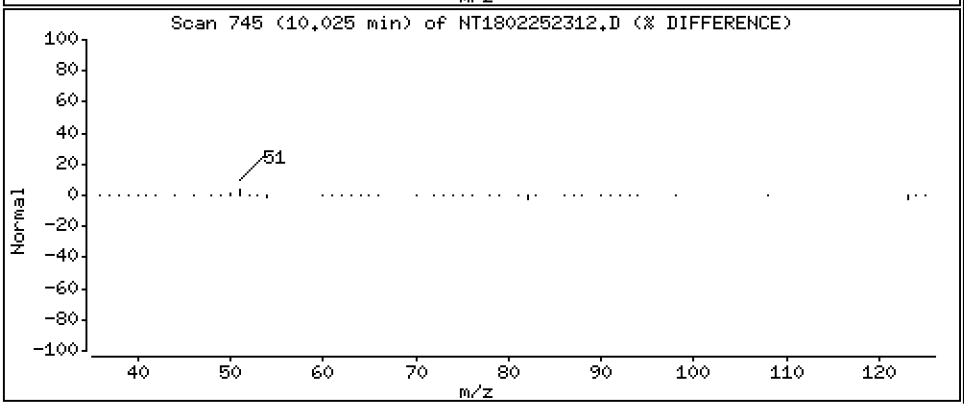












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

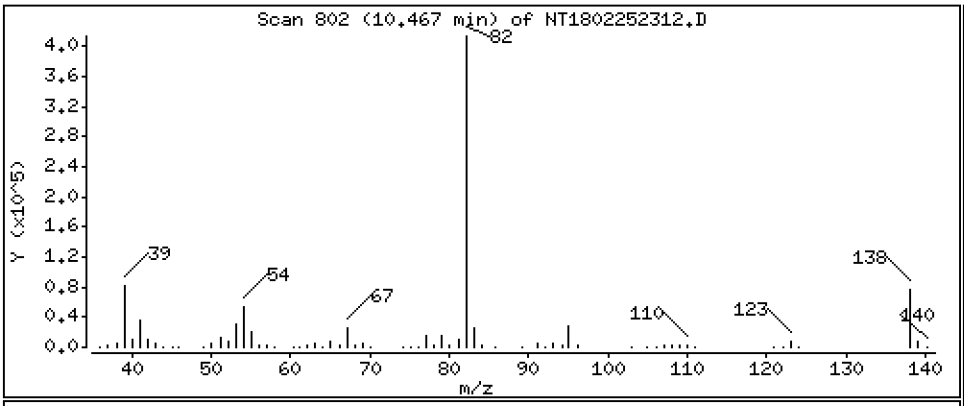
Operator: VTS

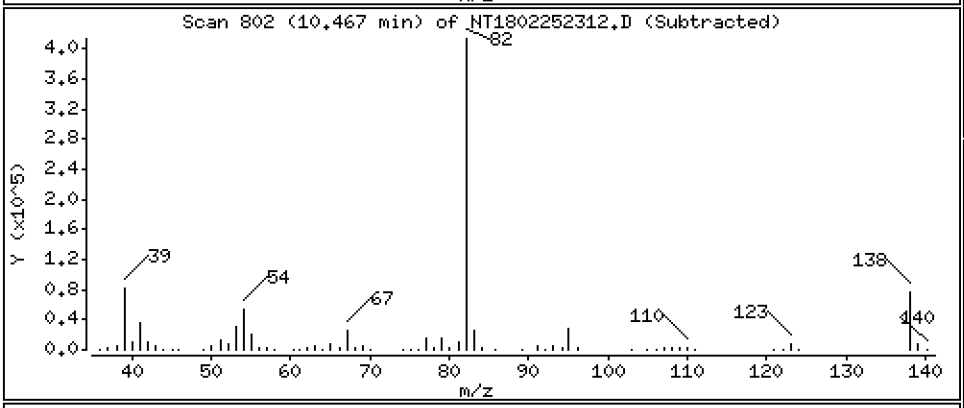
Column phase: ZB-5msi

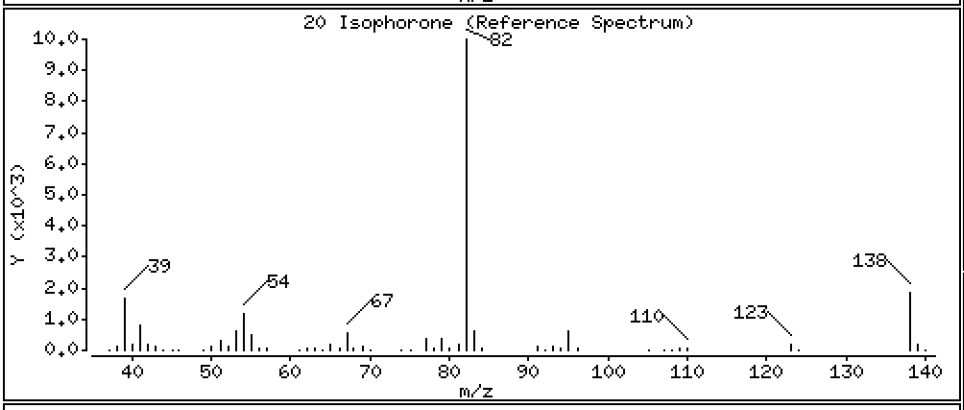
Column diameter: 0.25

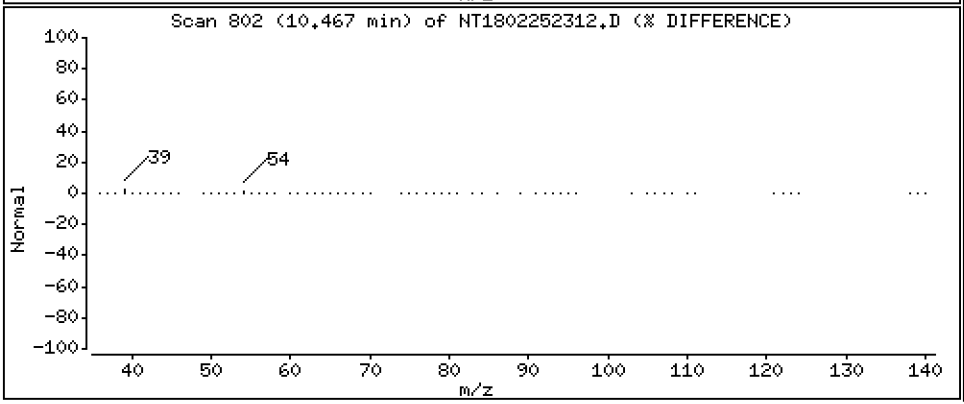
20 Isophorone

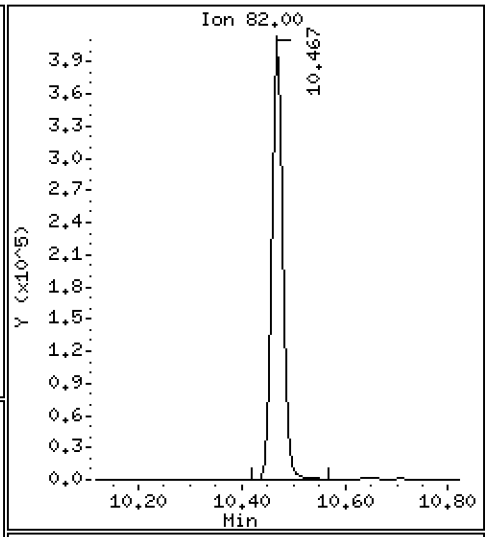
Concentration: 6.433 ug/mL

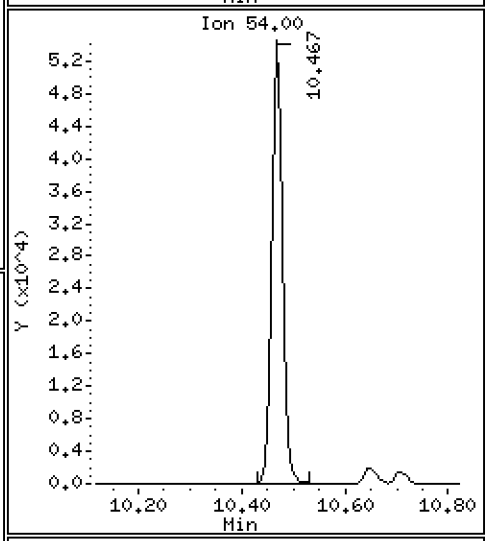


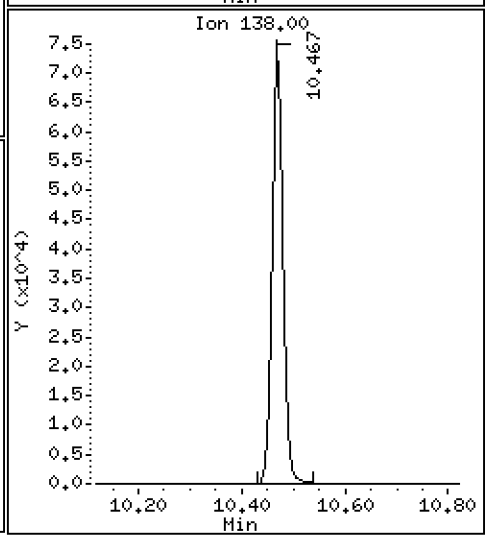












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

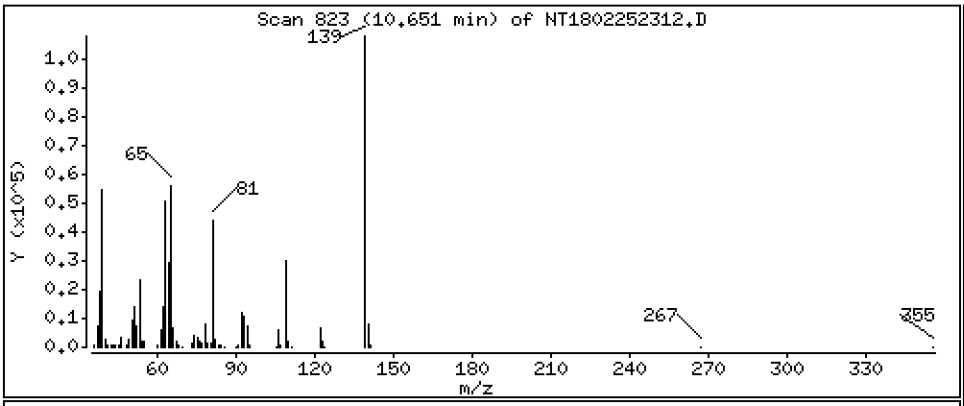
Operator: VTS

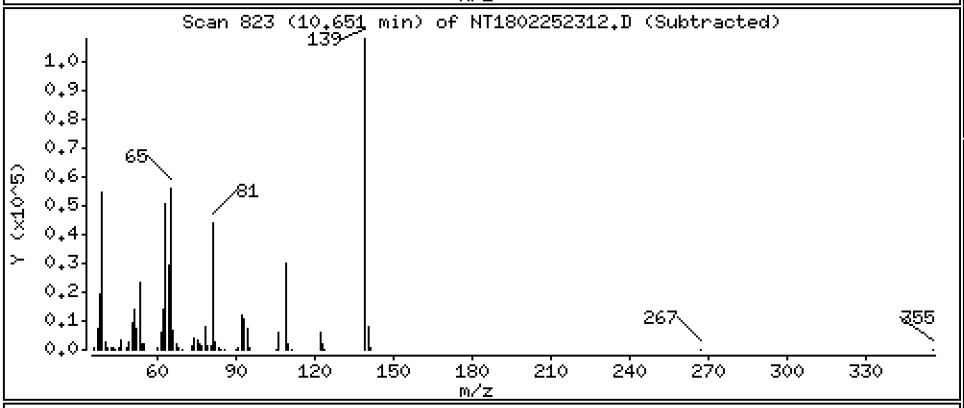
Column phase: ZB-5msi

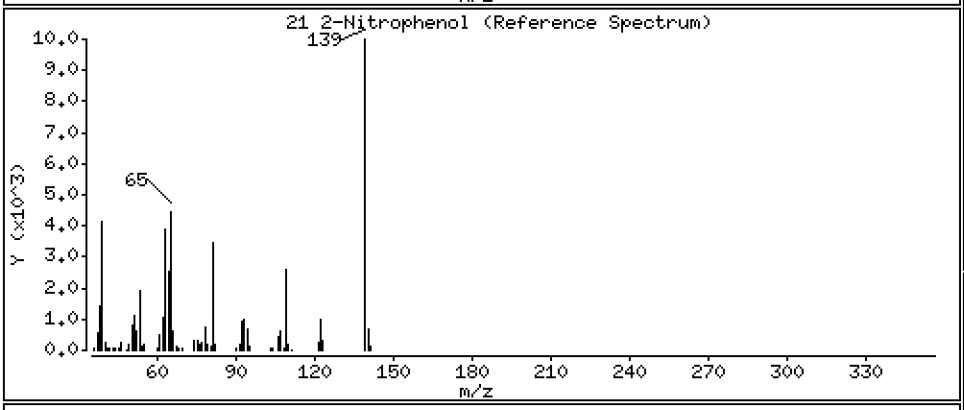
Column diameter: 0.25

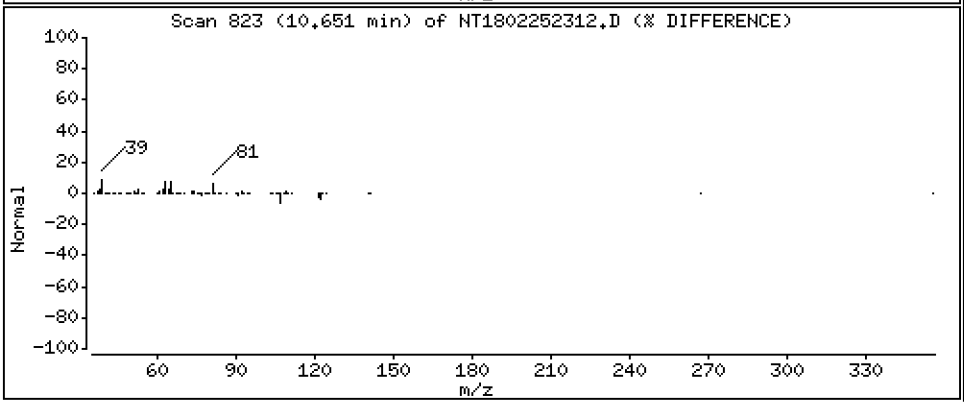
21 2-Nitrophenol

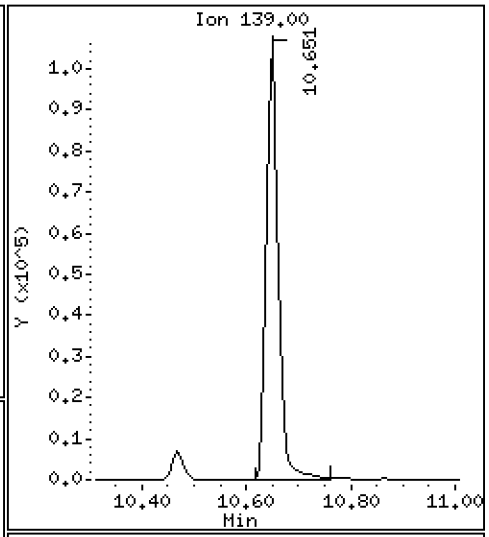
Concentration: 4.439 ug/mL

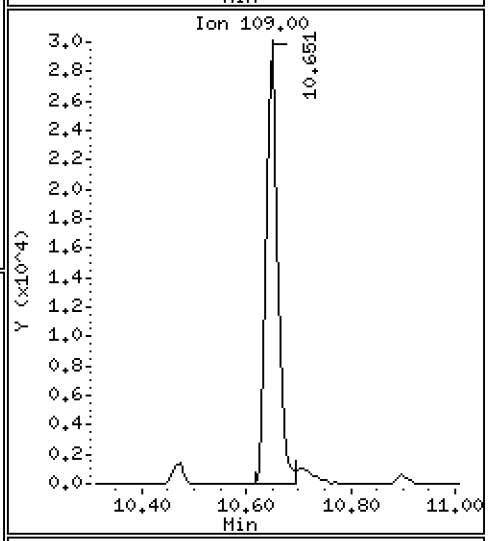


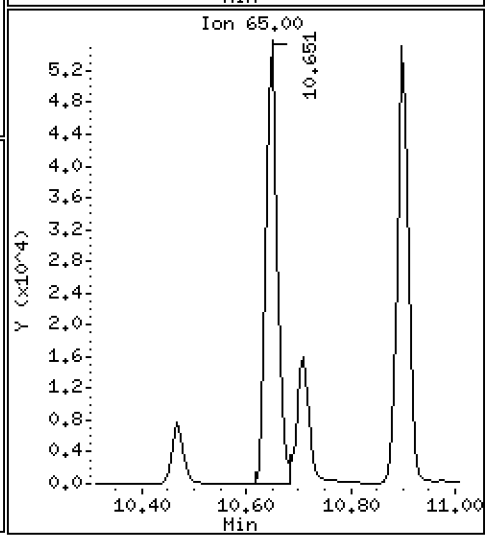












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

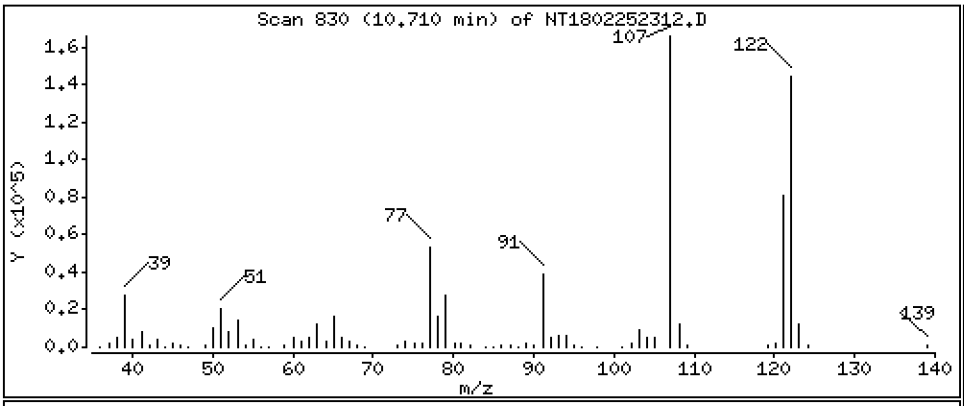
Operator: VTS

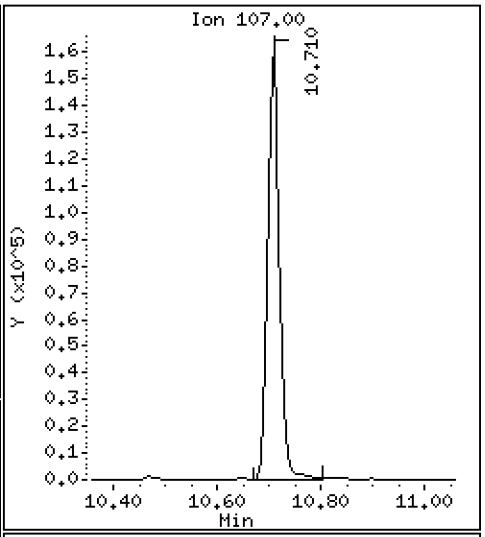
Column phase: ZB-5msi

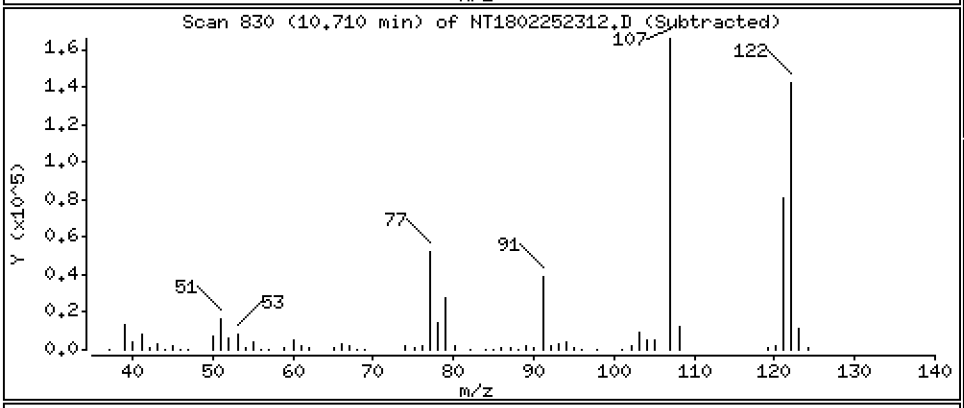
Column diameter: 0.25

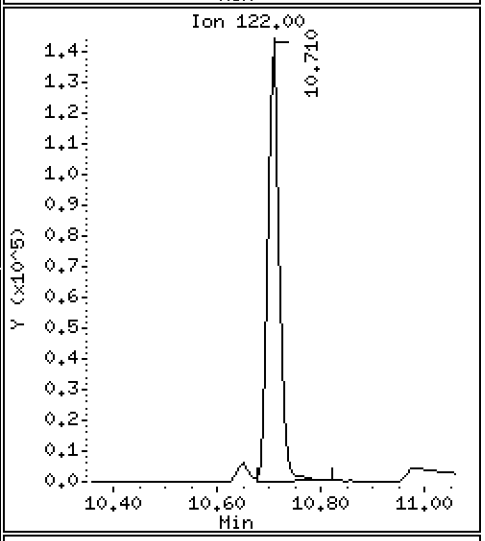
22 2,4-Dimethylphenol

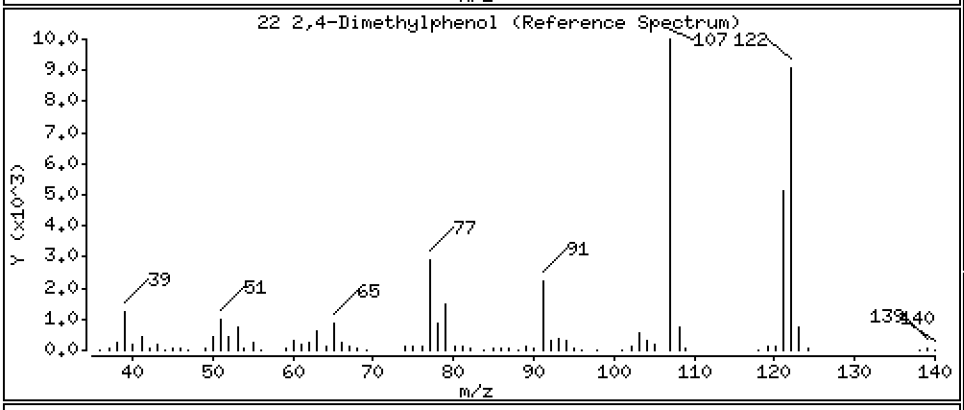
Concentration: 3.460 ug/mL

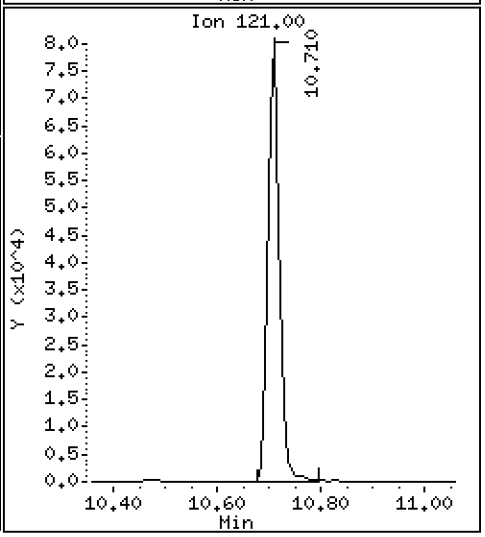


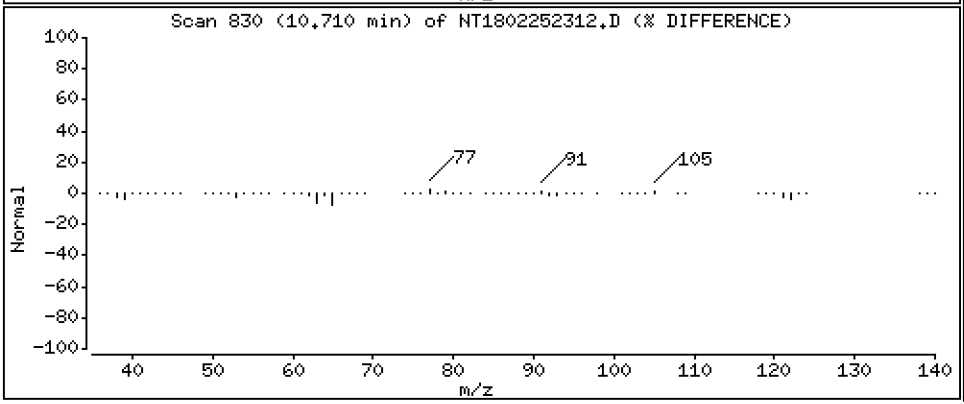












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

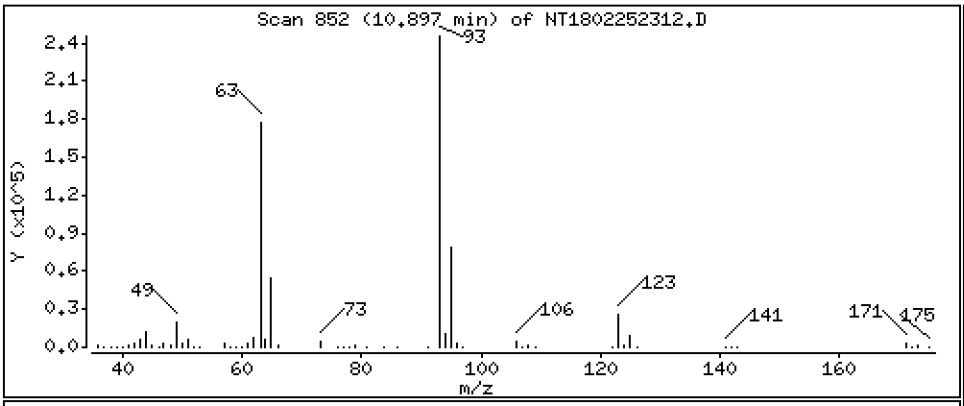
Operator: VTS

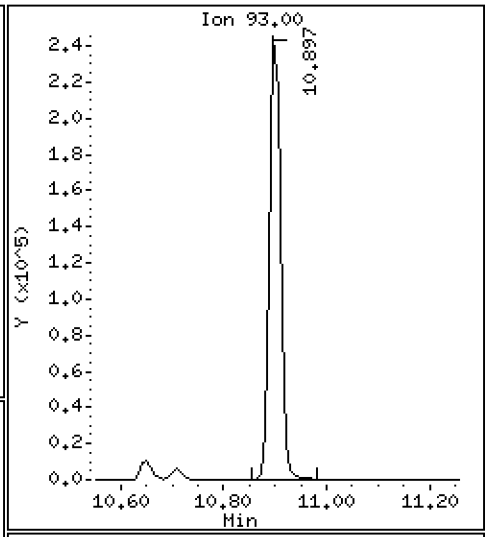
Column phase: ZB-5msi

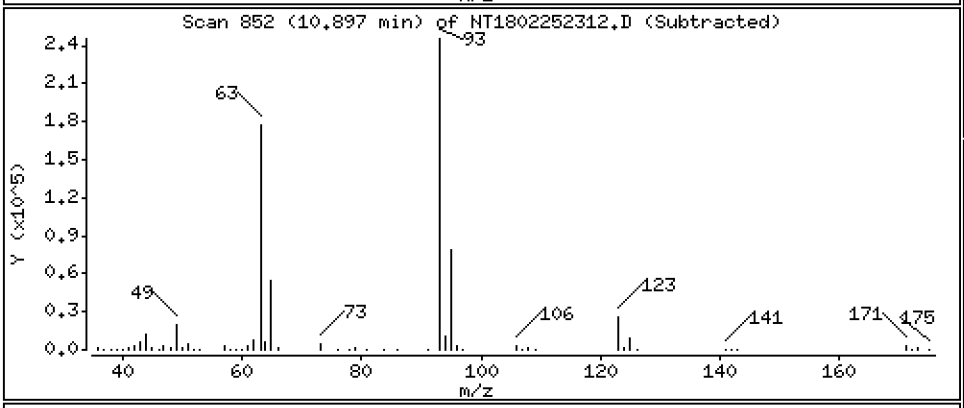
Column diameter: 0.25

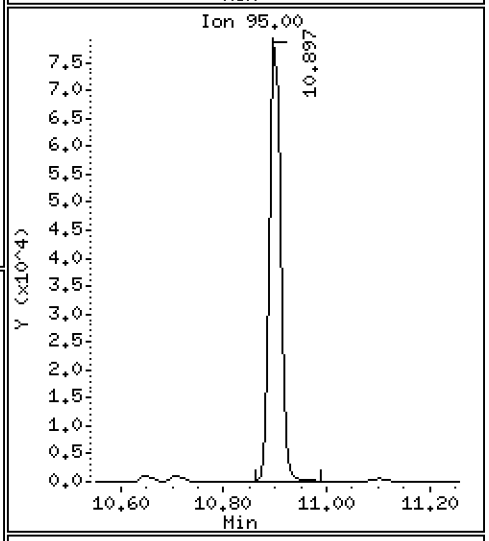
23 Bis(2-Chloroethoxy)methane

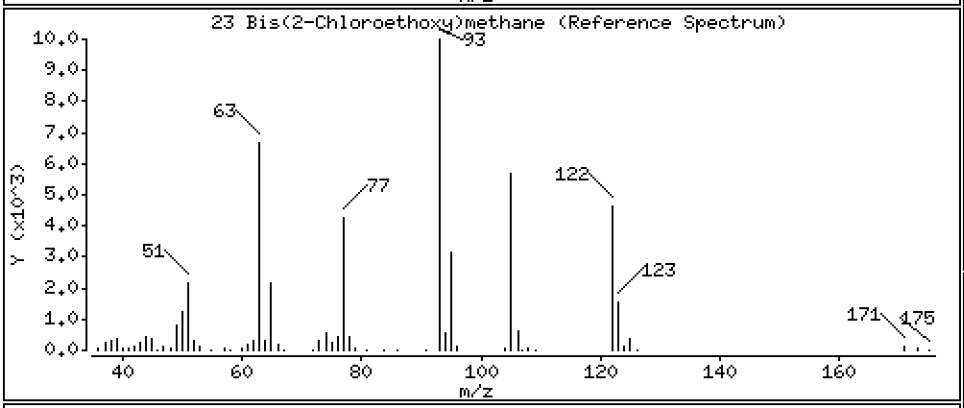
Concentration: 5.489 ug/mL

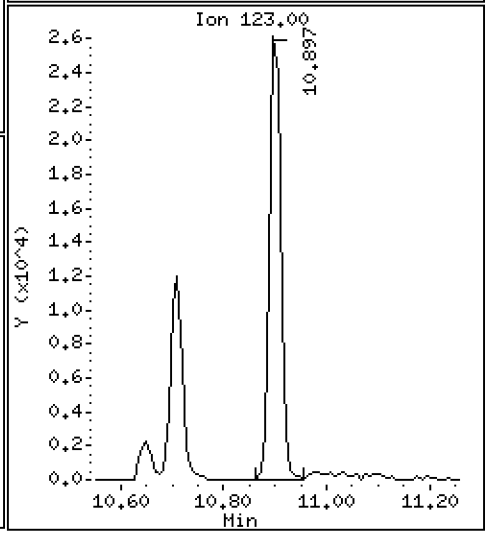


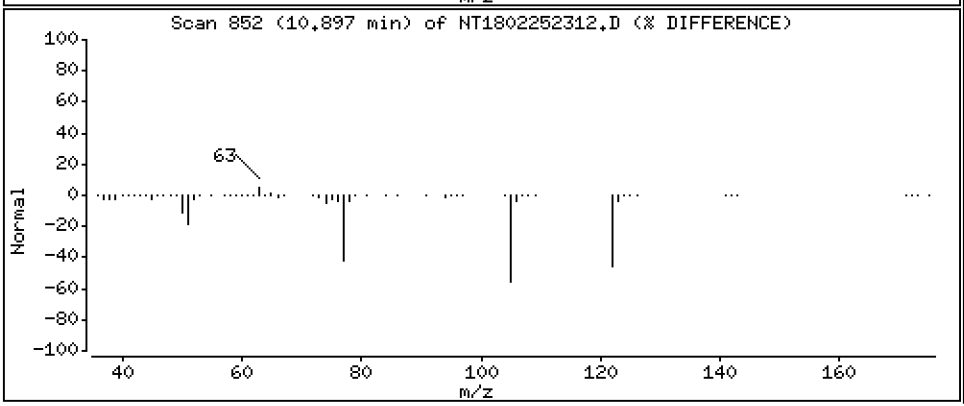












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

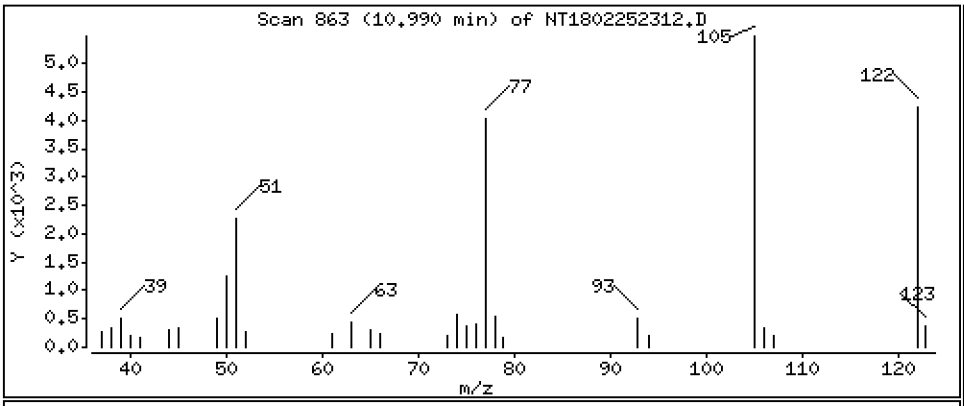
Operator: VTS

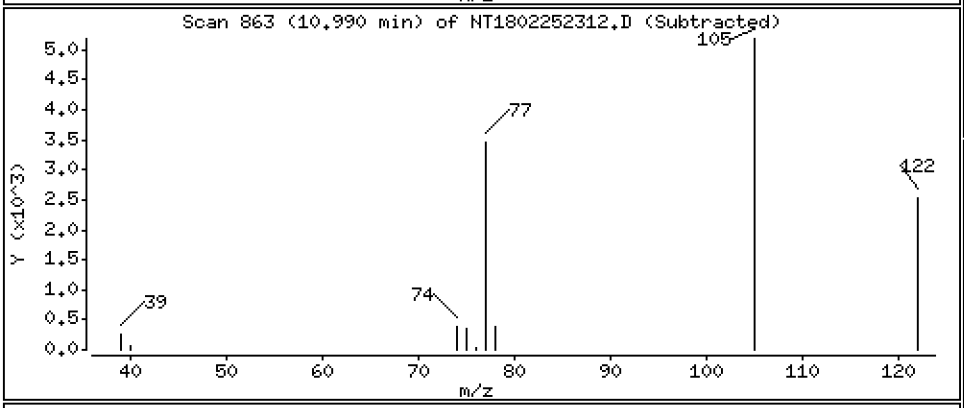
Column phase: ZB-5msi

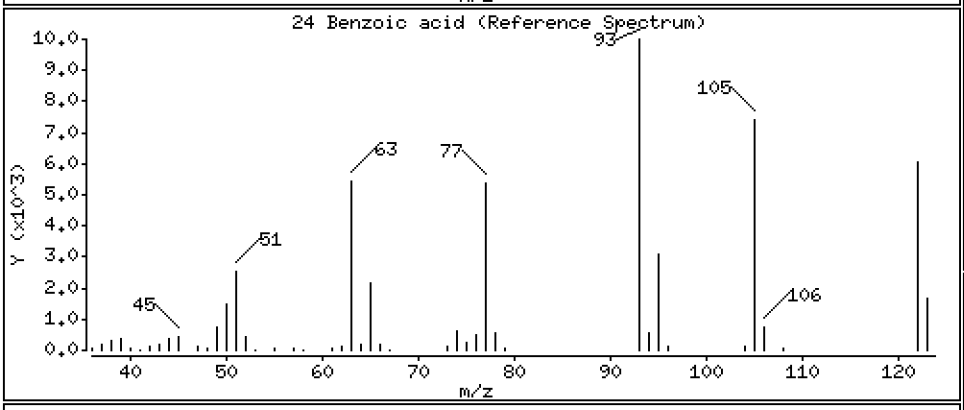
Column diameter: 0.25

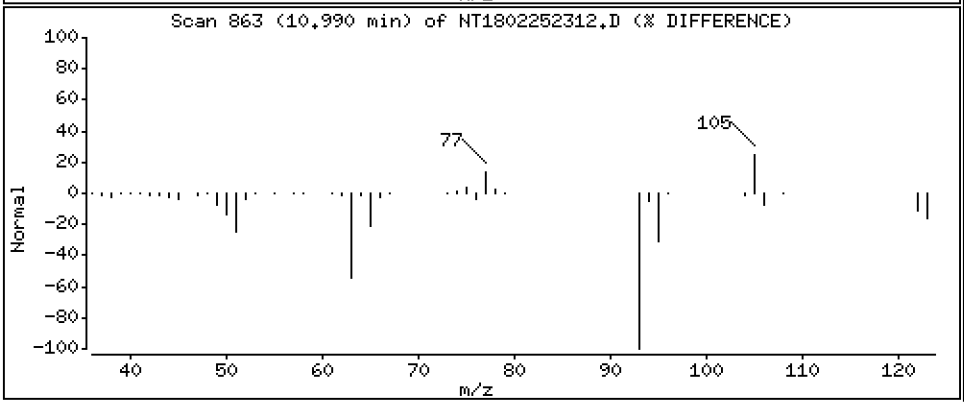
24 Benzoic acid

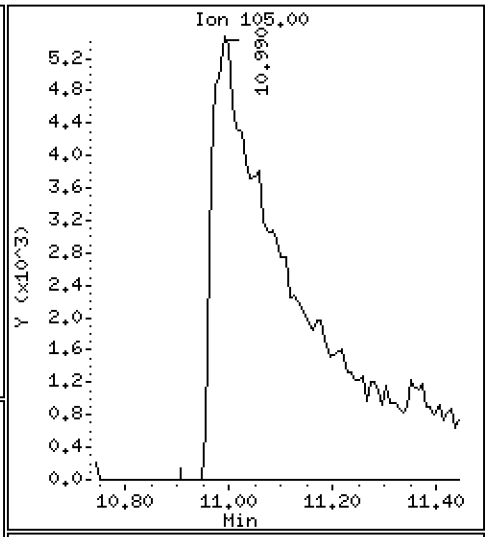
Concentration: 2.618 ug/mL

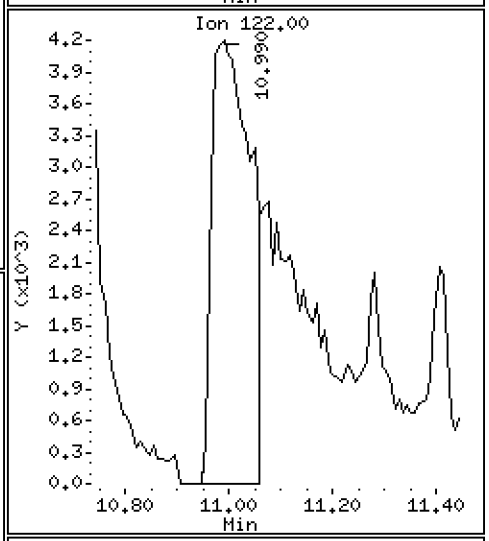


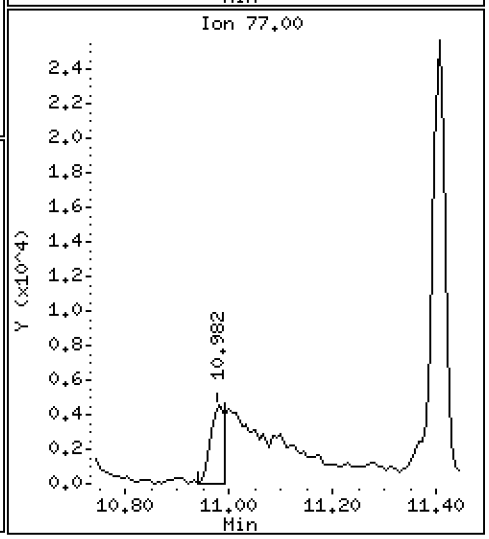












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

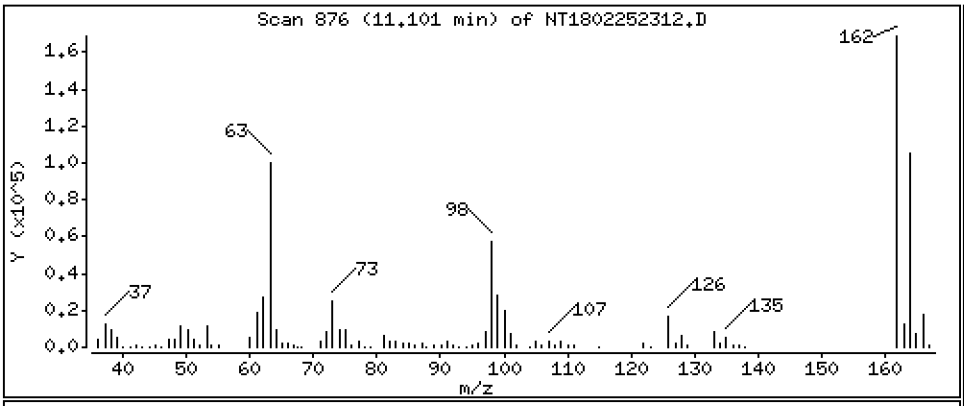
Operator: VTS

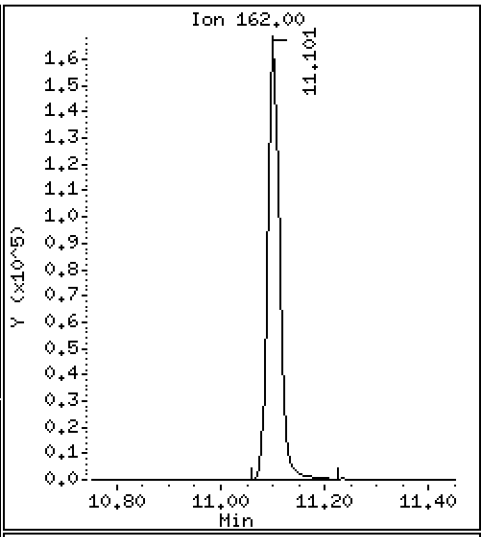
Column phase: ZB-5msi

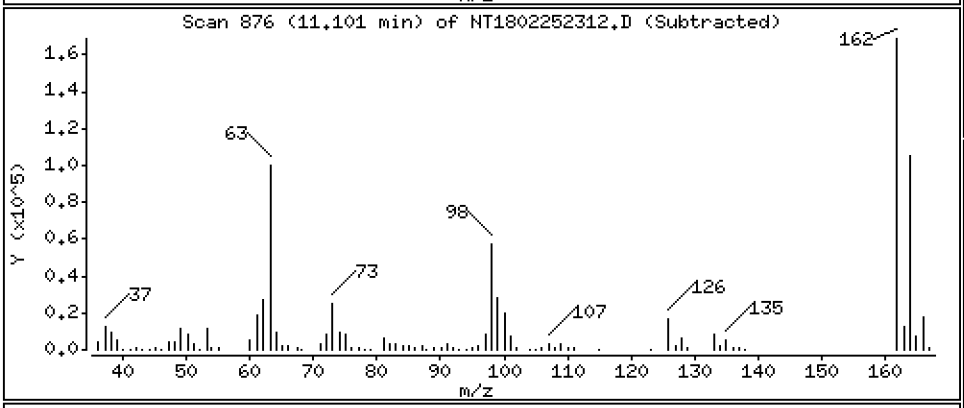
Column diameter: 0.25

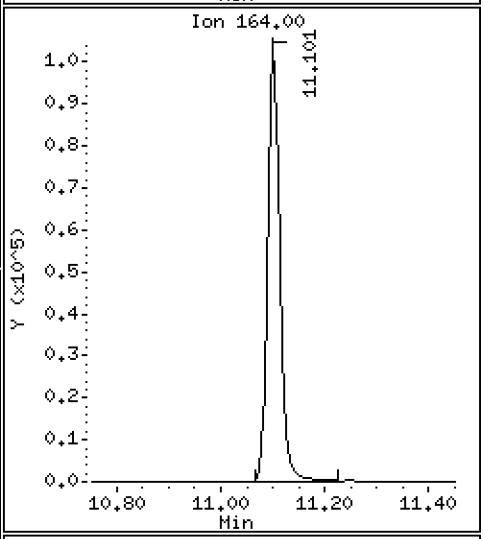
25 2,4-Dichlorophenol

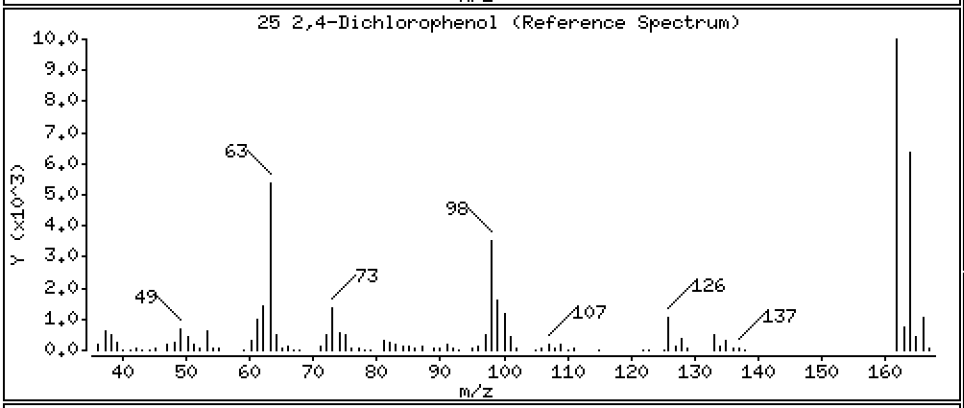
Concentration: 4.621 ug/mL

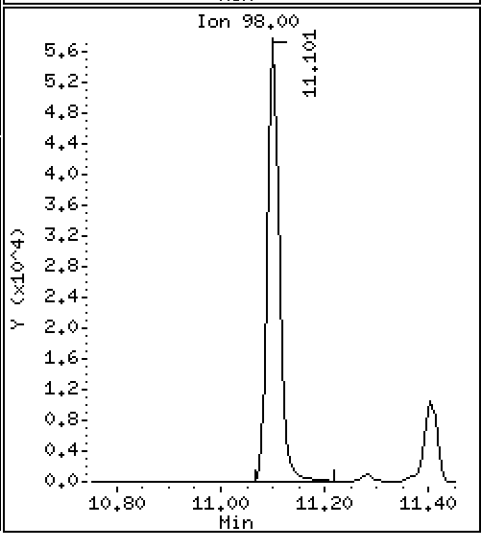


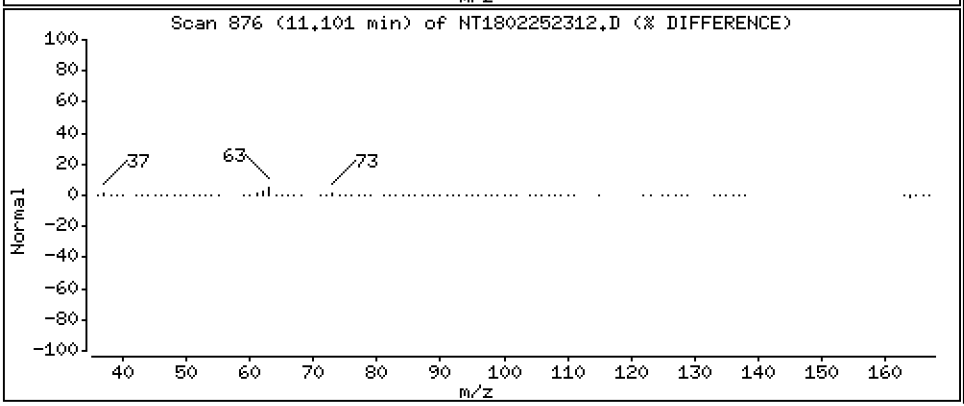












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

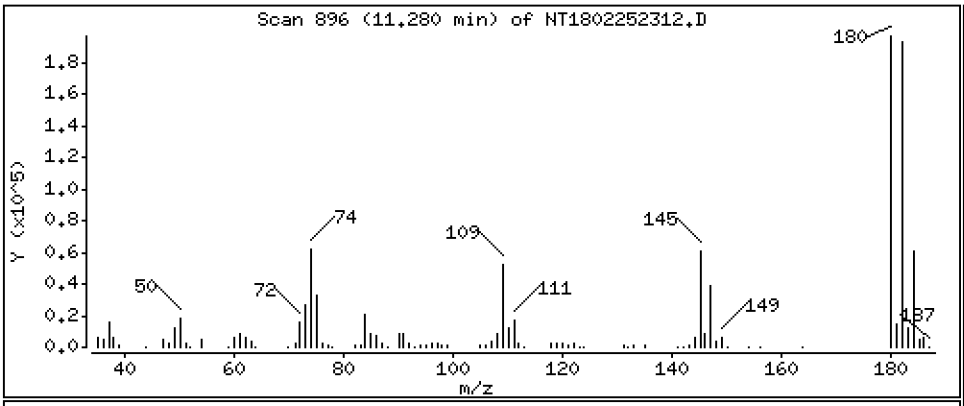
Operator: VTS

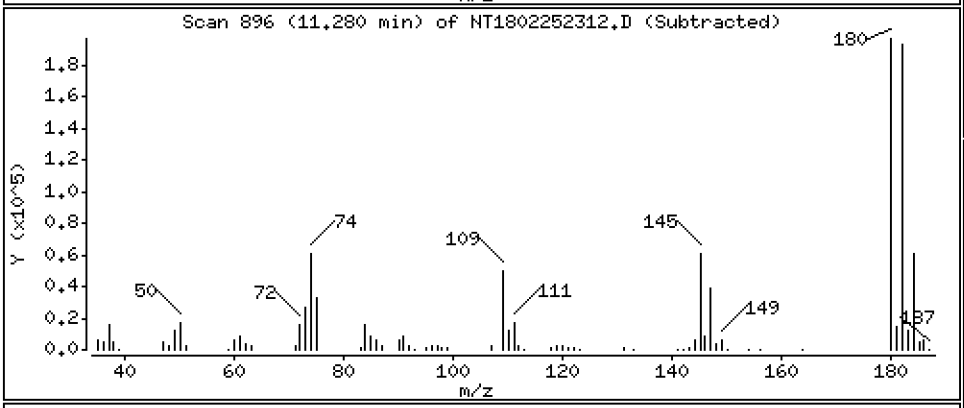
Column phase: ZB-5msi

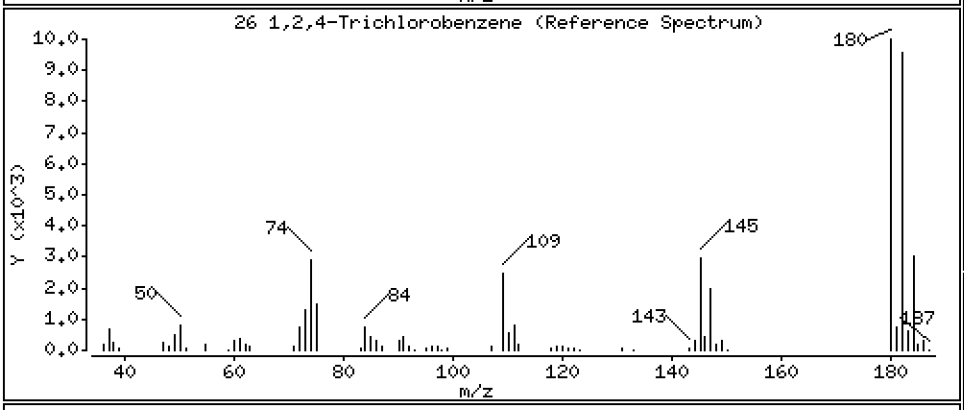
Column diameter: 0.25

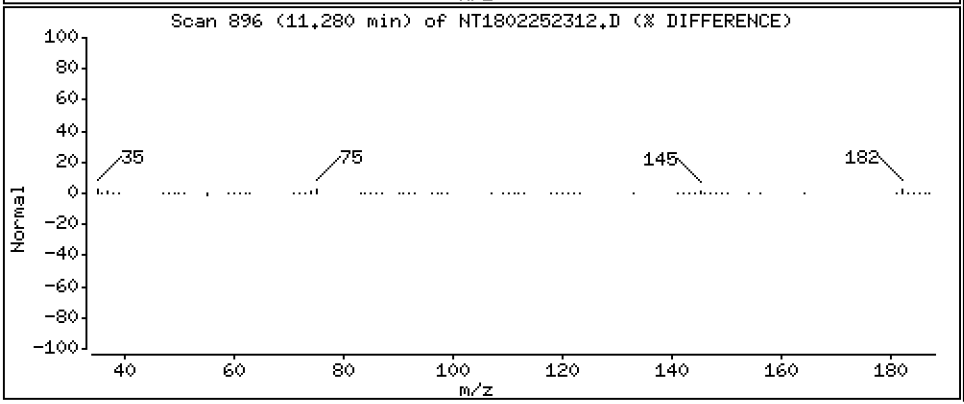
26 1,2,4-Trichlorobenzene

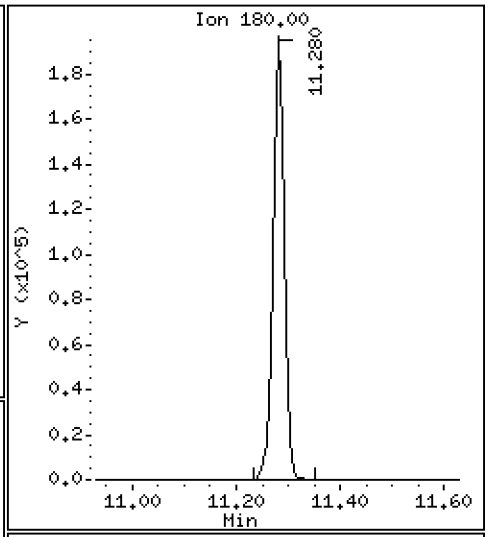
Concentration: 4.438 ug/mL

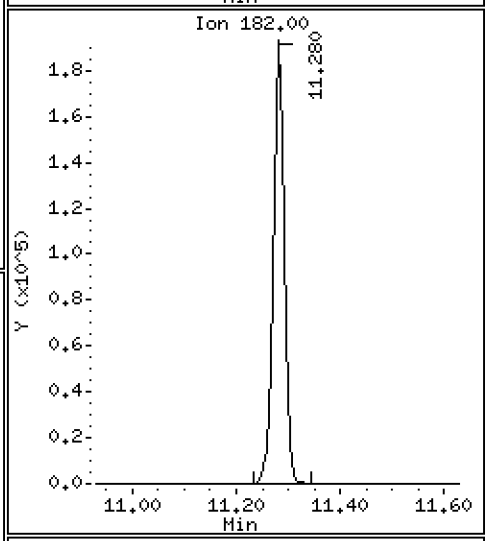


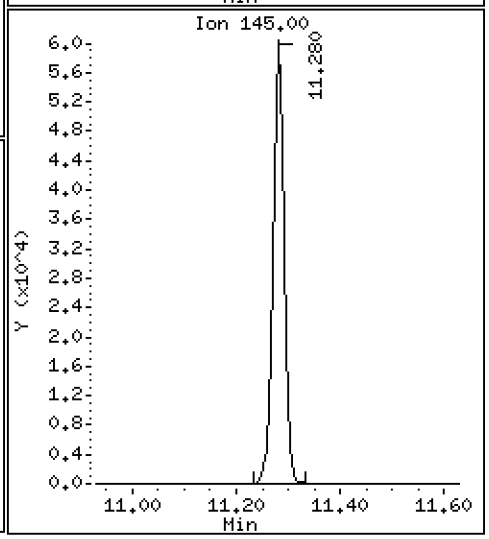












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

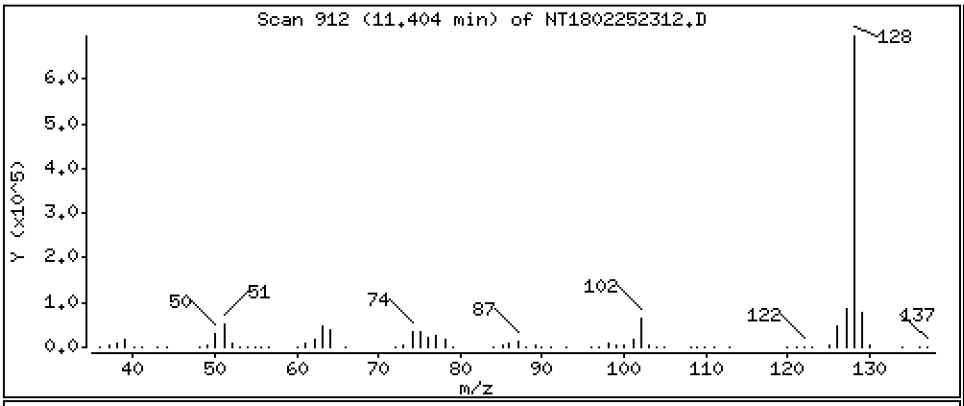
Operator: VTS

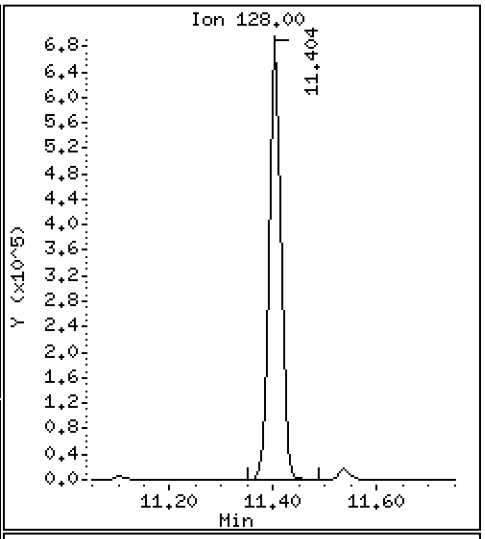
Column phase: ZB-5msi

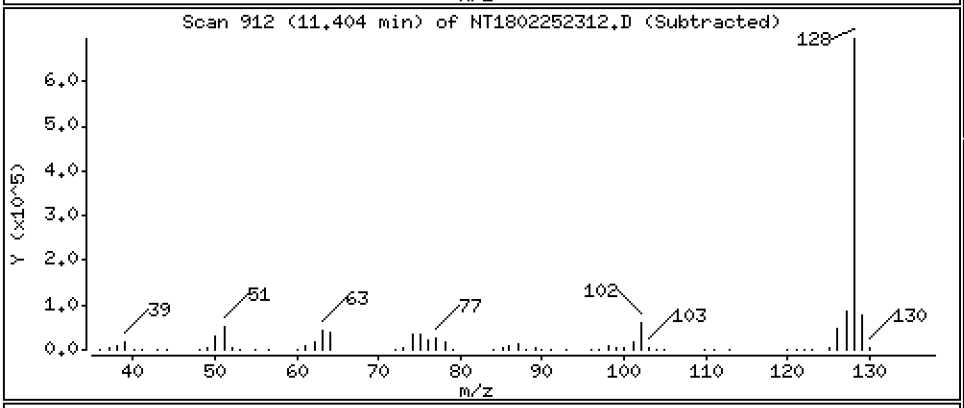
Column diameter: 0.25

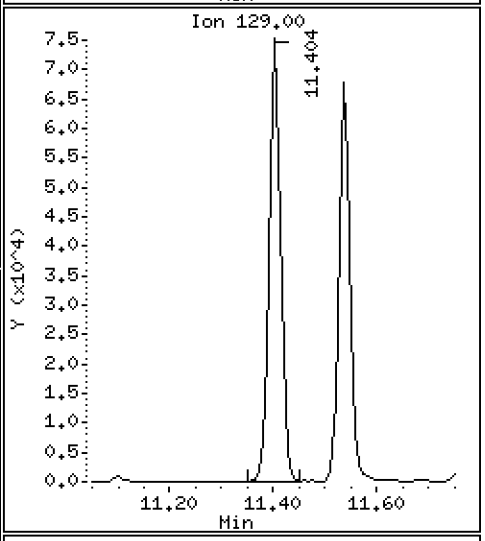
28 Naphthalene

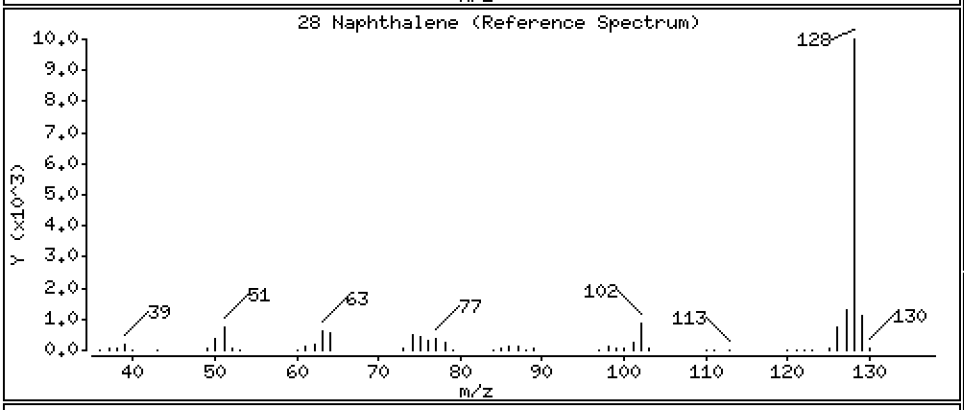
Concentration: 4.523 ug/mL

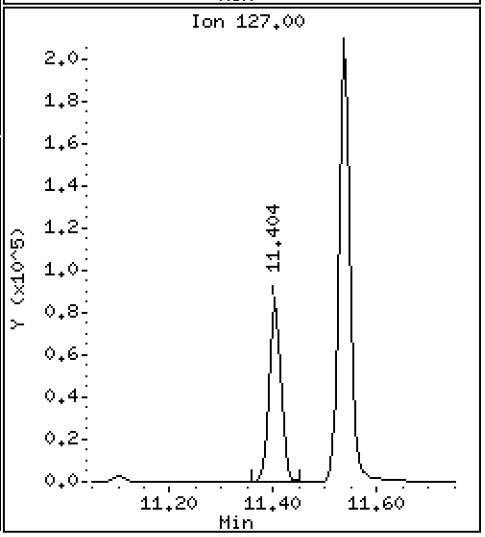


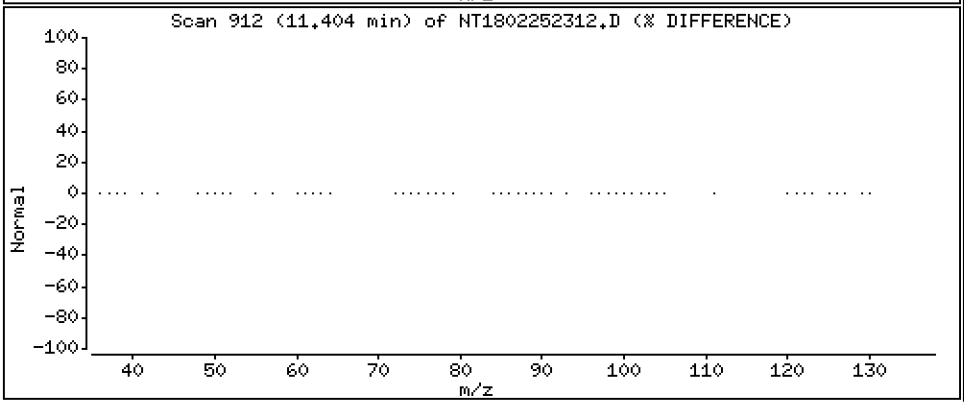












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

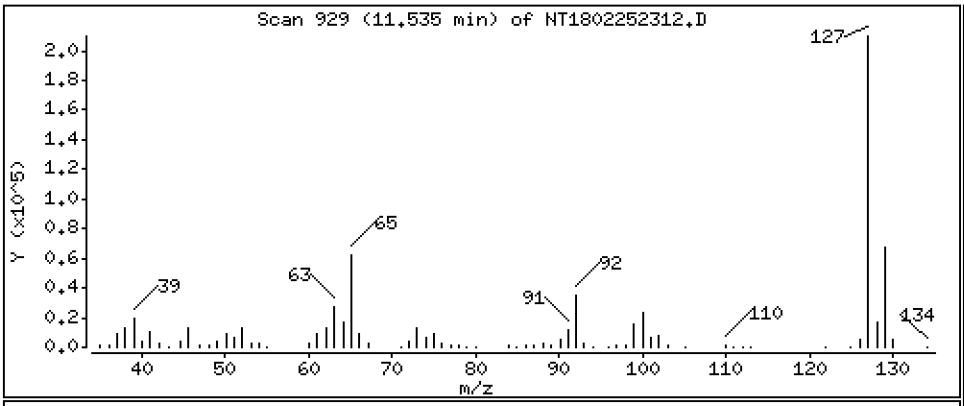
Operator: VTS

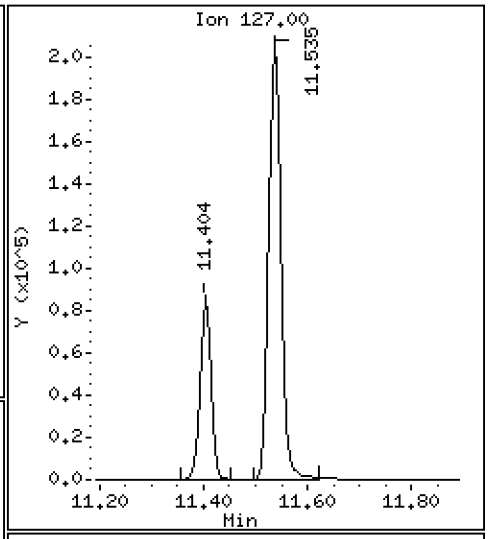
Column phase: ZB-5msi

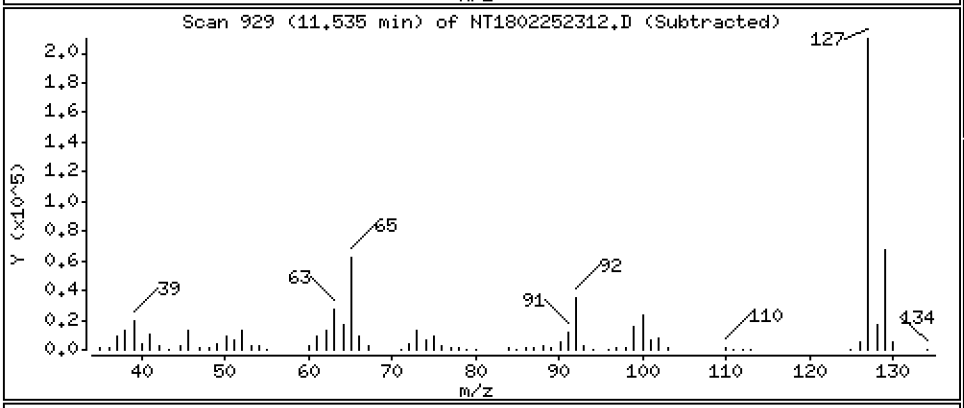
Column diameter: 0.25

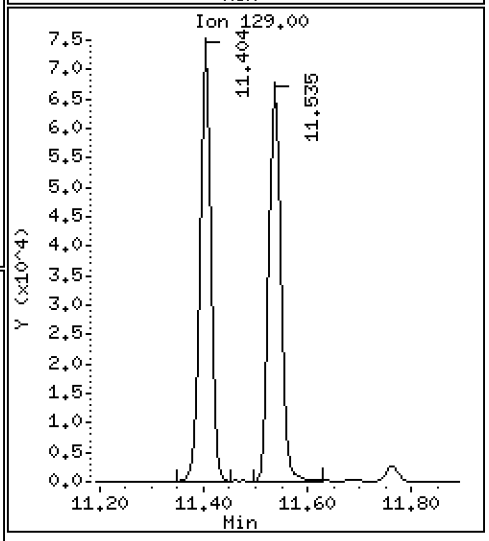
29 4-Chloroaniline

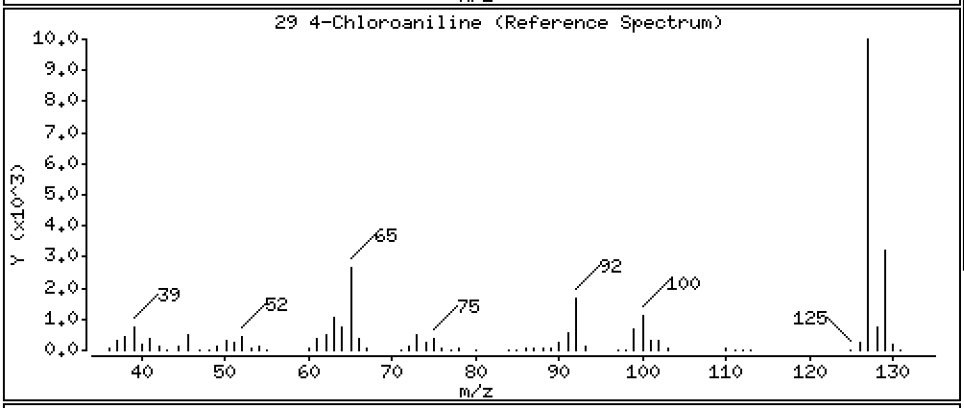
Concentration: 3.459 ug/mL

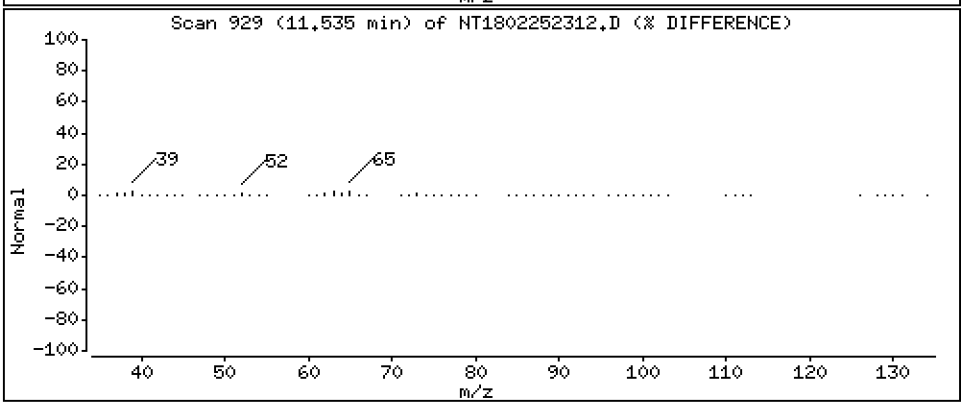












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

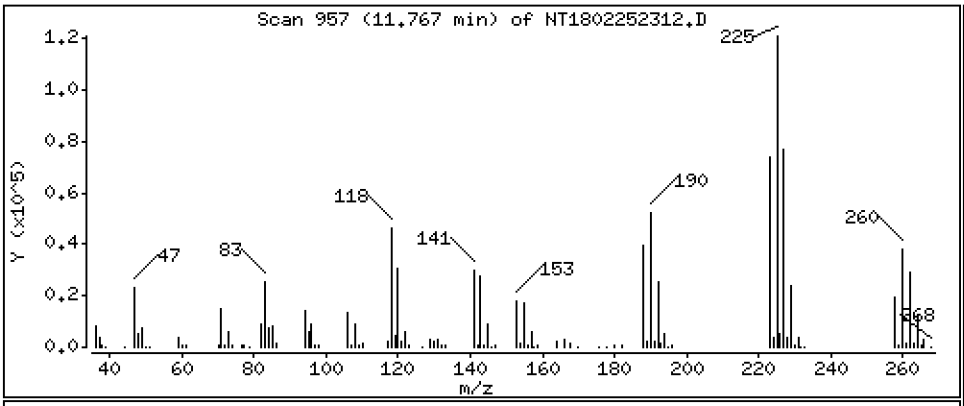
Operator: VTS

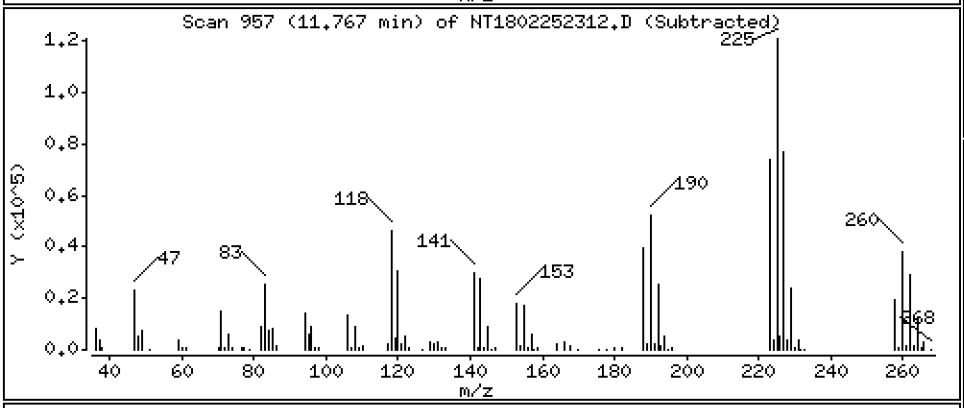
Column phase: ZB-5msi

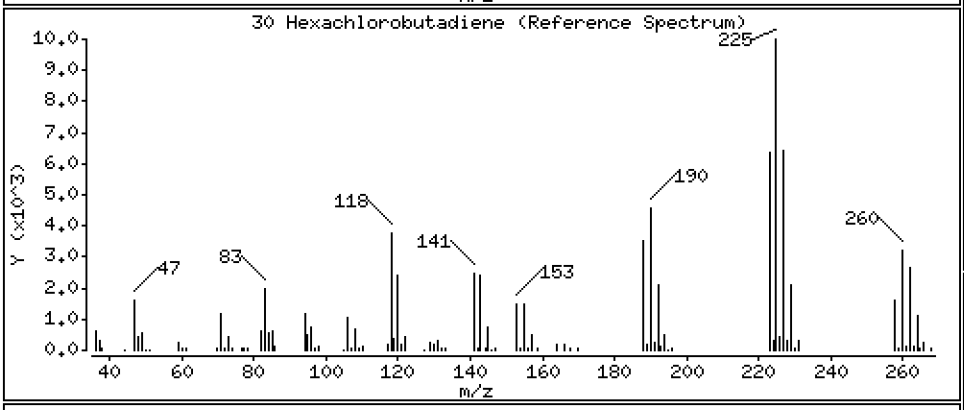
Column diameter: 0.25

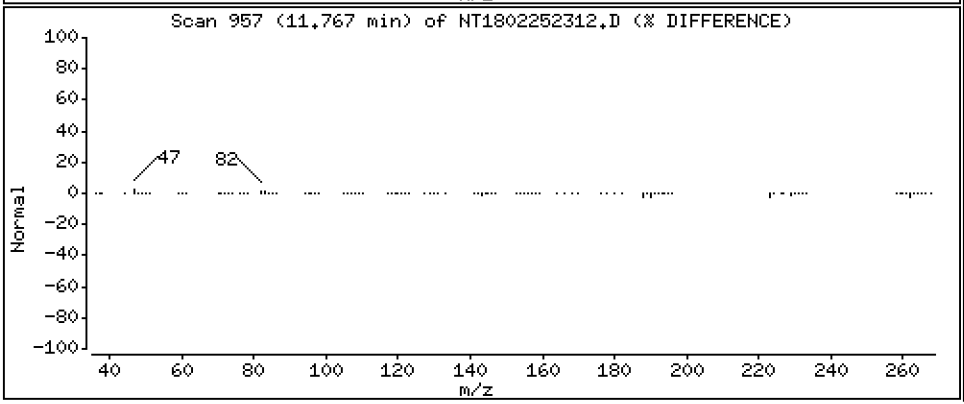
30 Hexachlorobutadiene

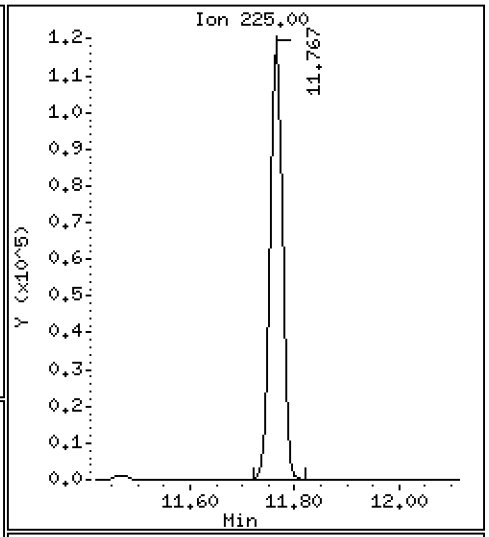
Concentration: 4.656 ug/mL

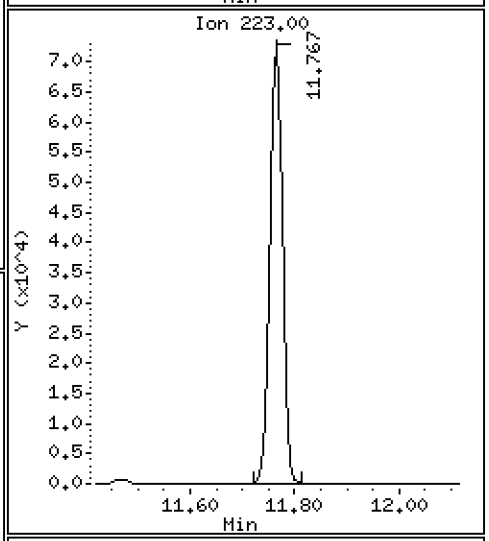


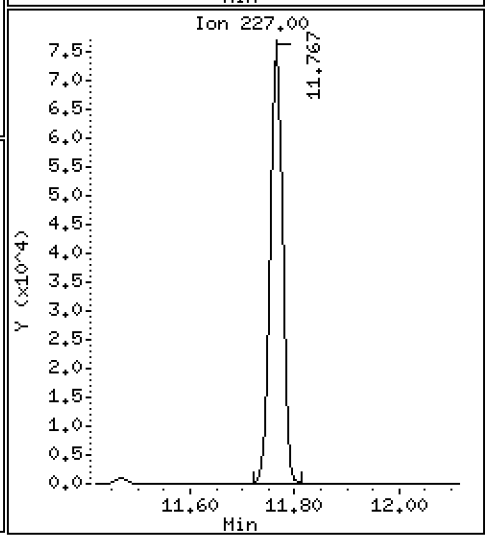












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

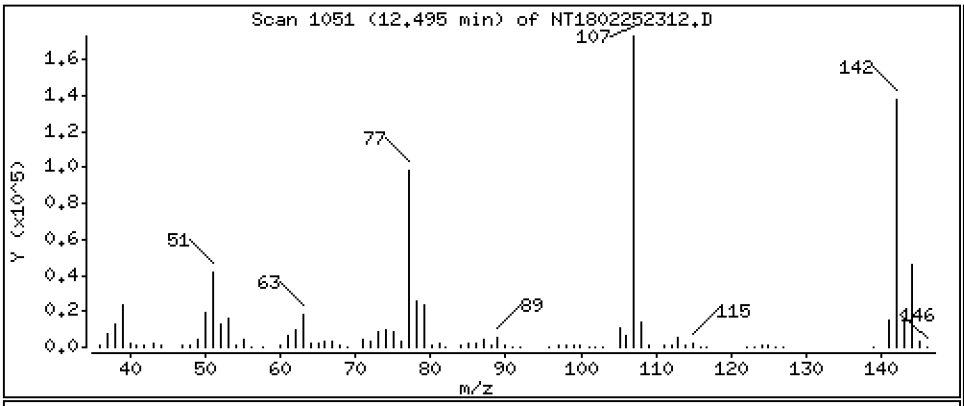
Operator: VTS

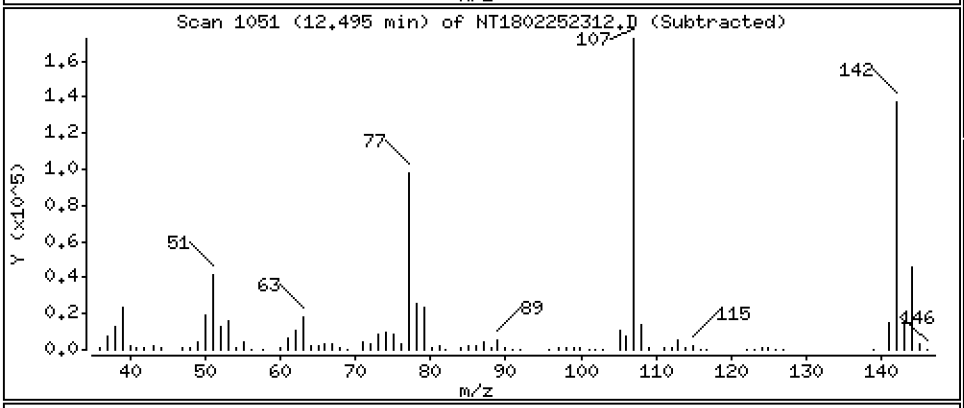
Column phase: ZB-5msi

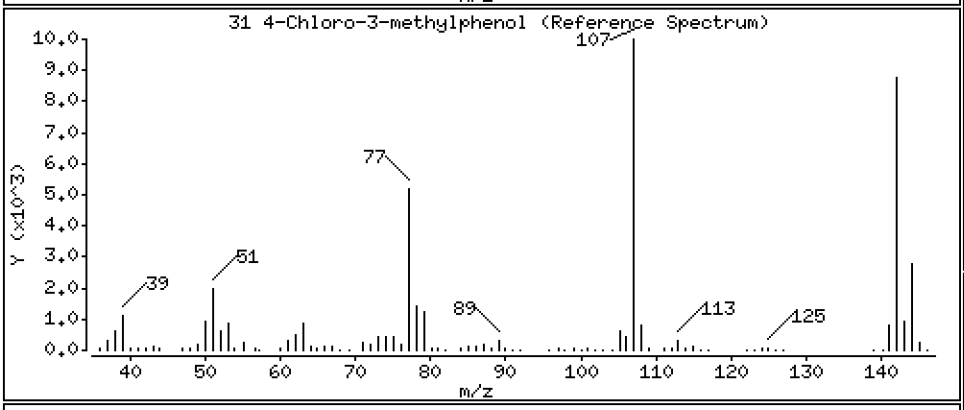
Column diameter: 0.25

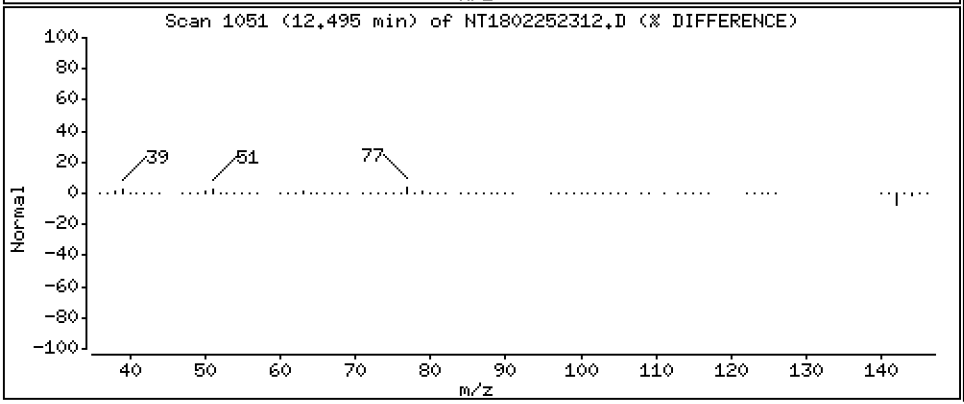
31 4-Chloro-3-methylphenol

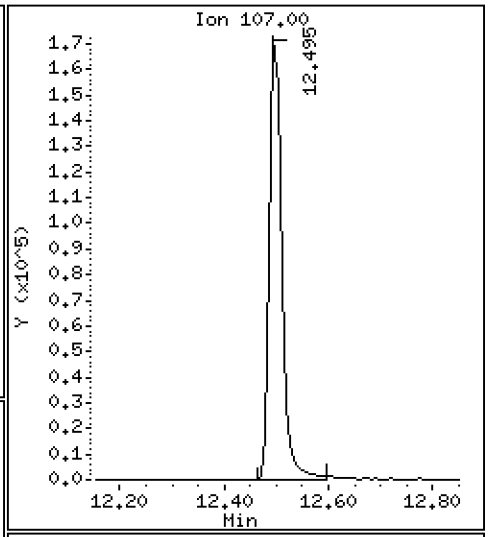
Concentration: 4.422 ug/mL

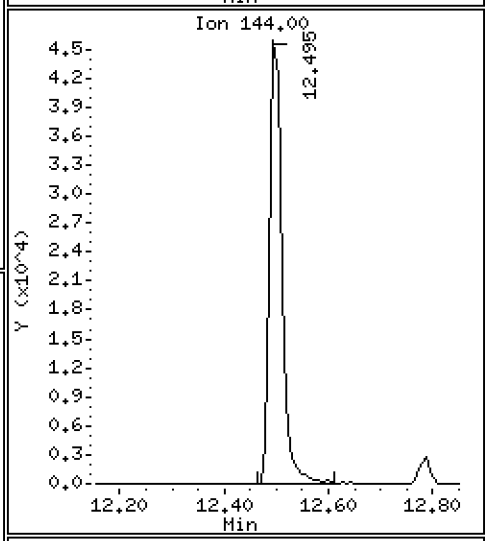


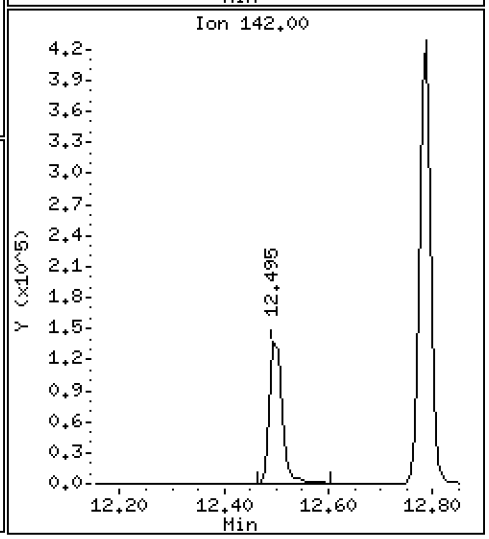












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

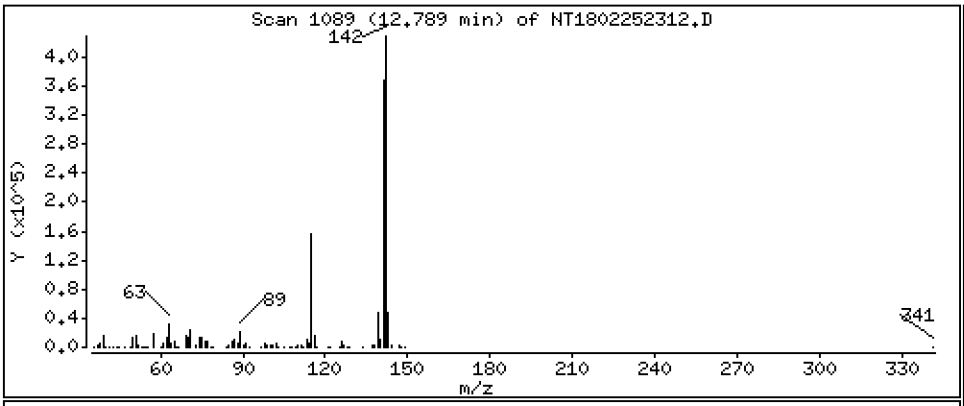
Operator: VTS

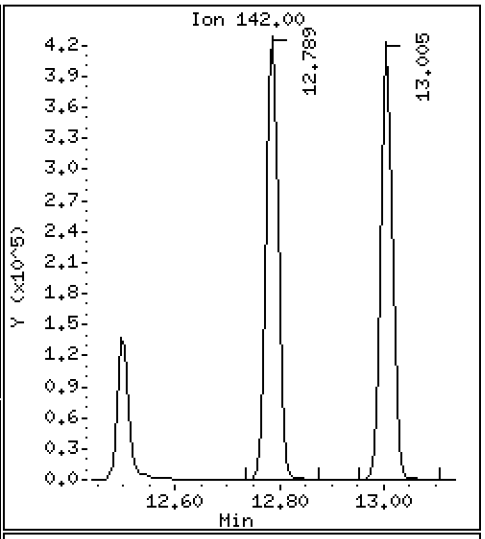
Column phase: ZB-5msi

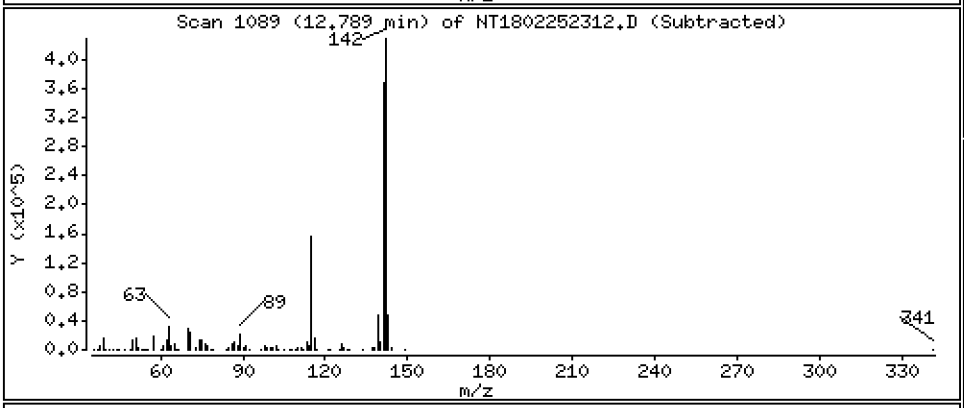
Column diameter: 0.25

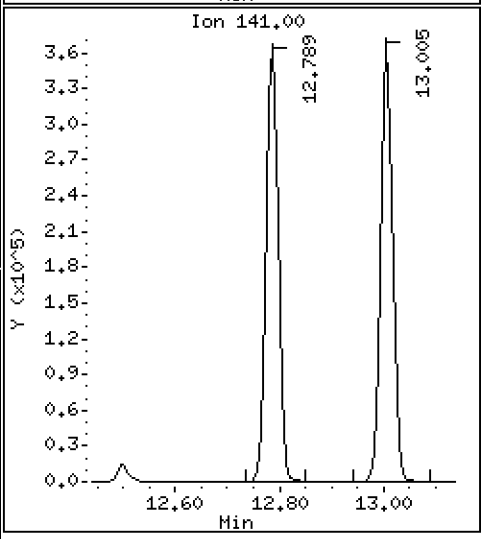
32 2-Methylnaphthalene

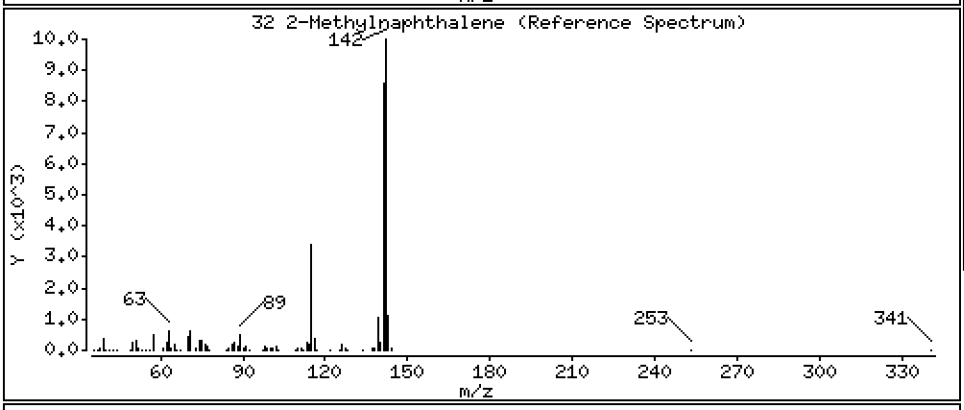
Concentration: 4.225 ug/mL

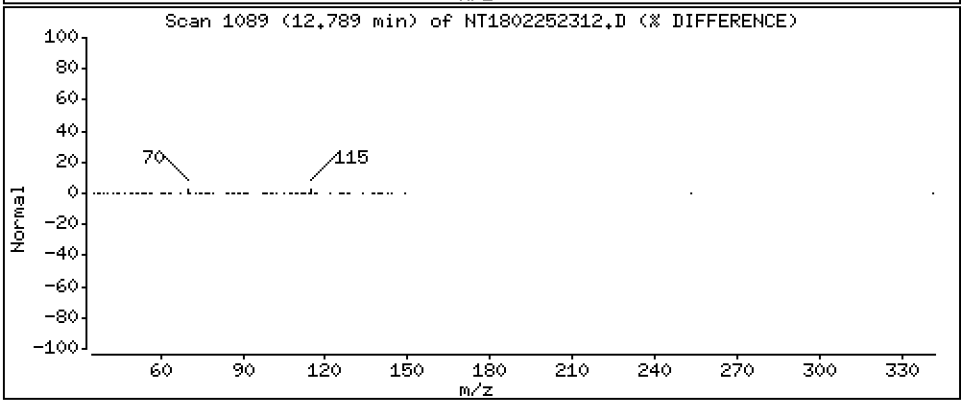












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

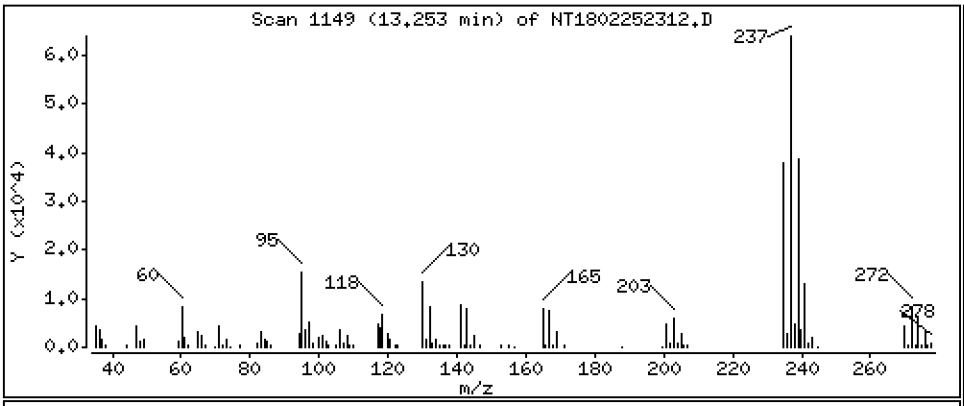
Operator: VTS

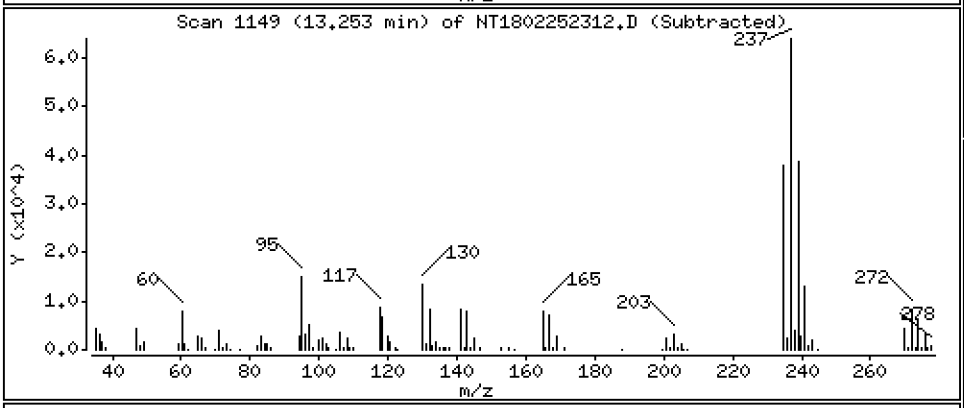
Column phase: ZB-5msi

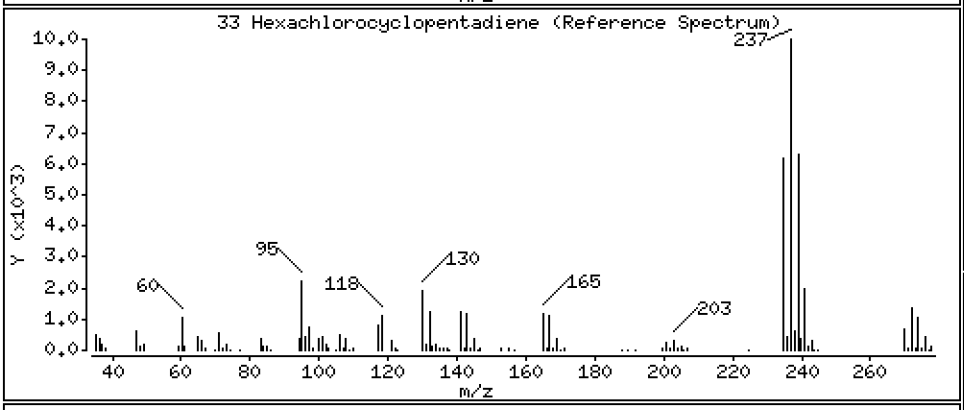
Column diameter: 0.25

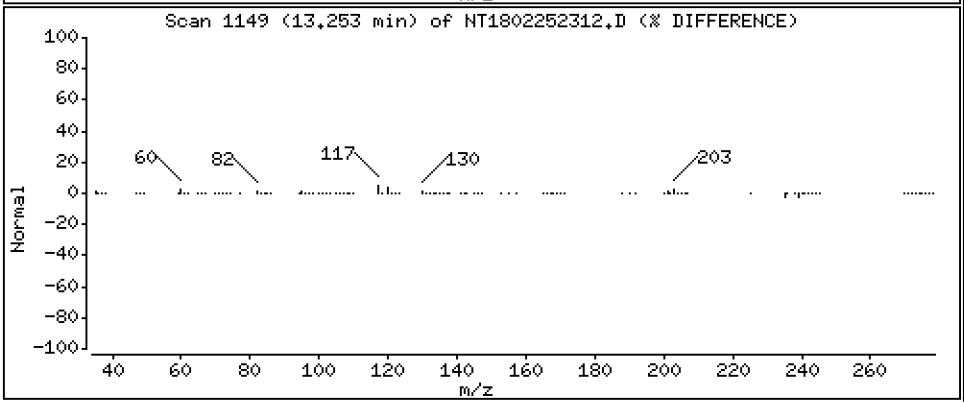
33 Hexachlorocyclopentadiene

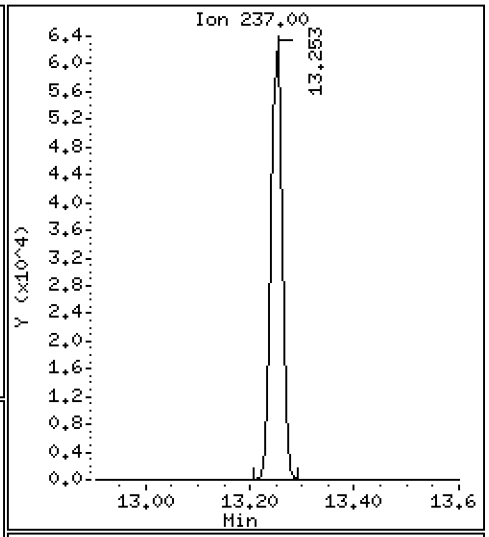
Concentration: 3.202 ug/mL

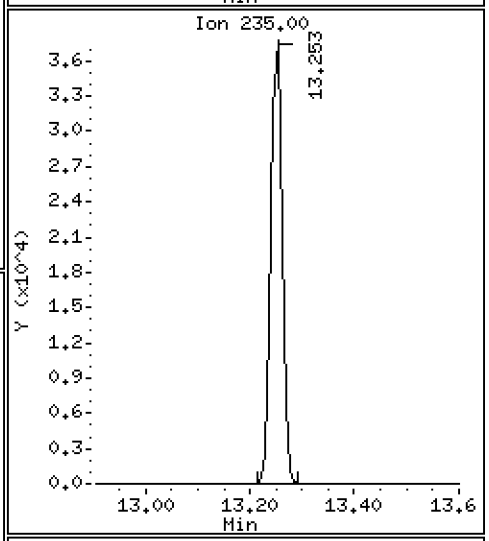


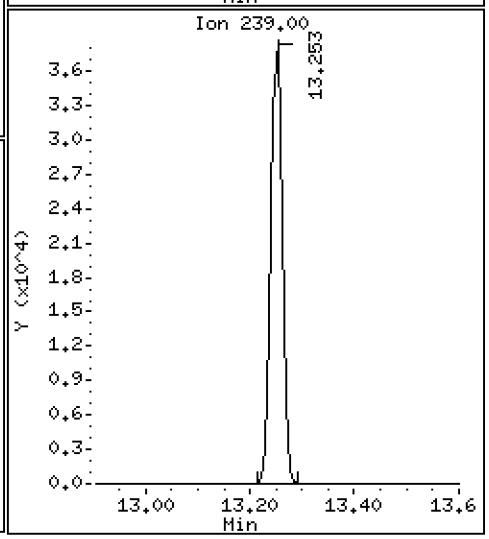












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

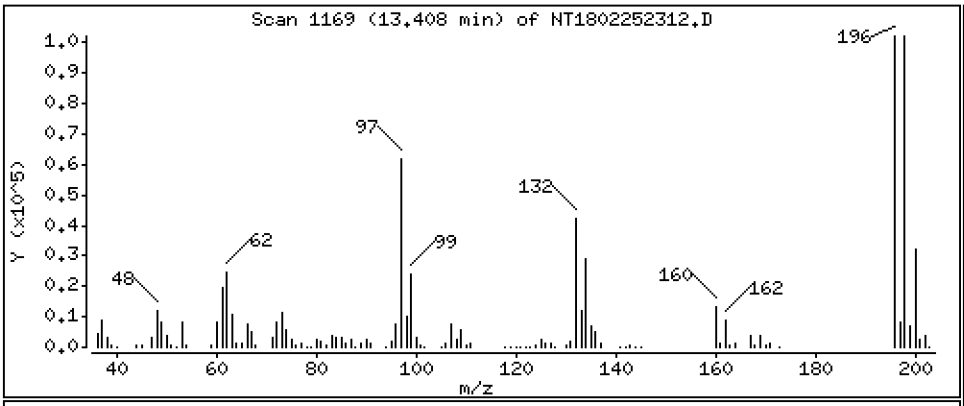
Operator: VTS

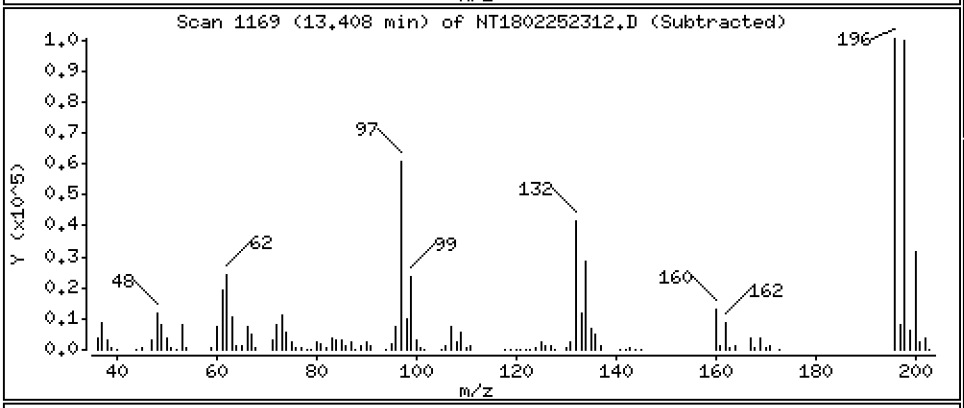
Column phase: ZB-5msi

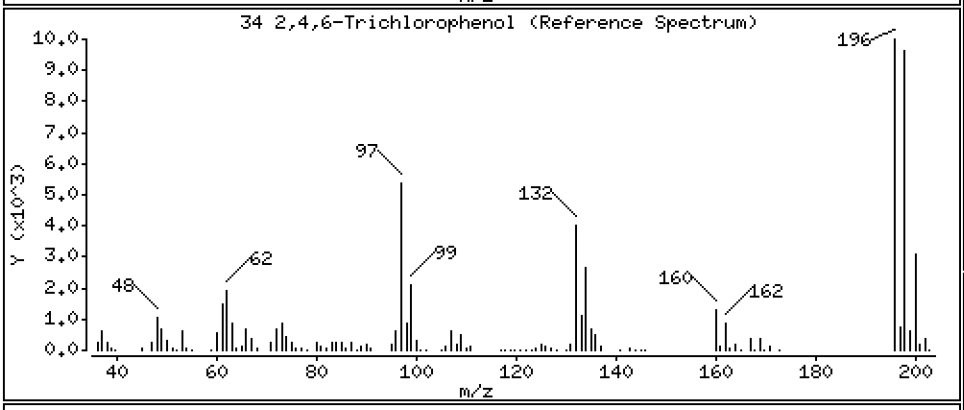
Column diameter: 0.25

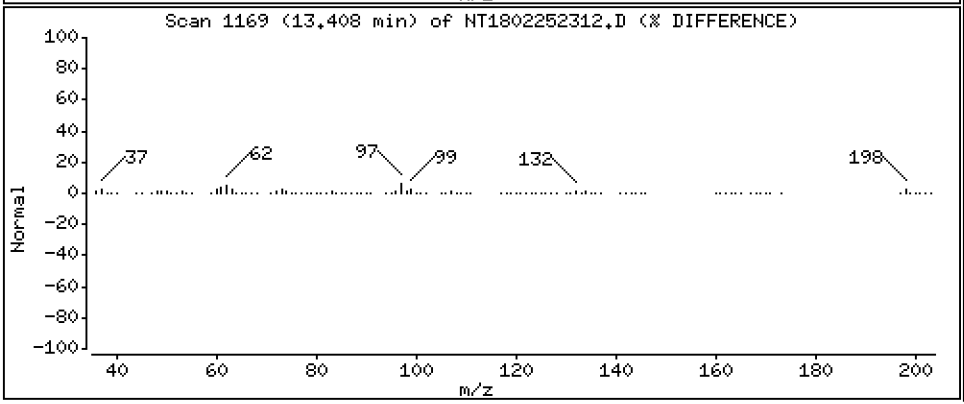
34 2,4,6-Trichlorophenol

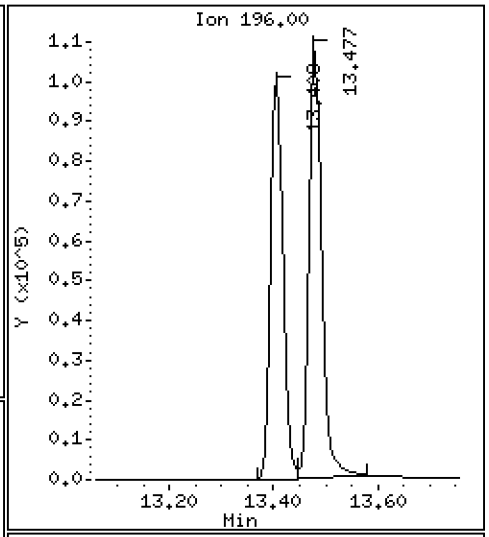
Concentration: 4.148 ug/mL

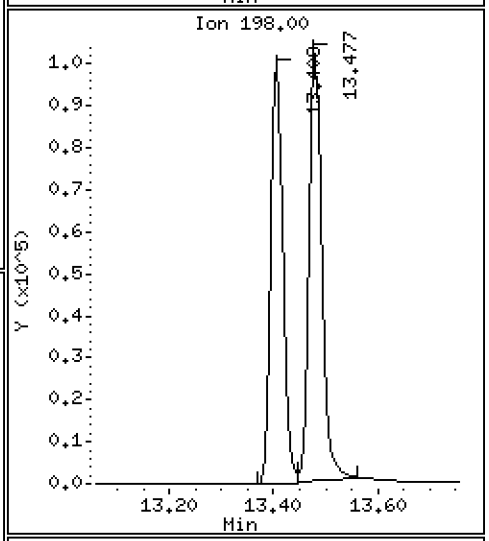


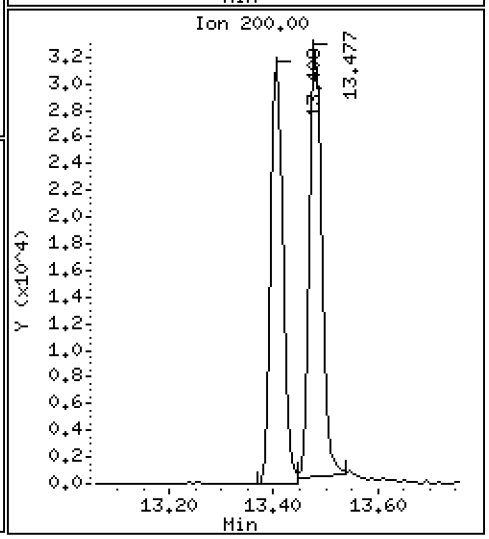












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

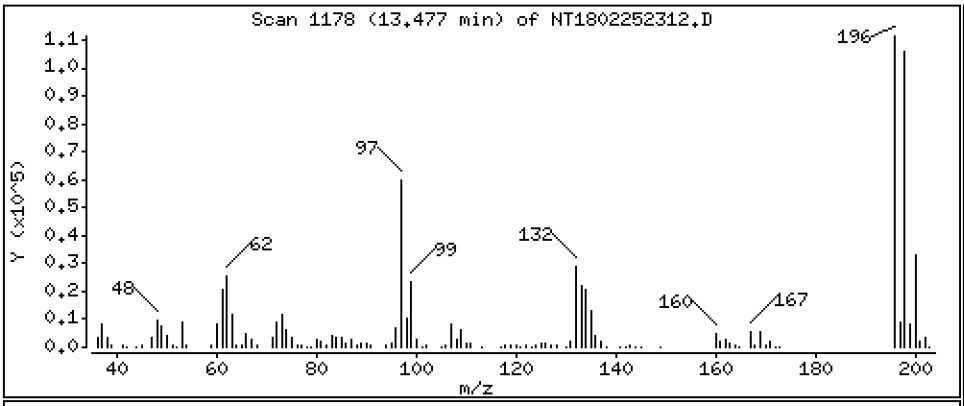
Operator: VTS

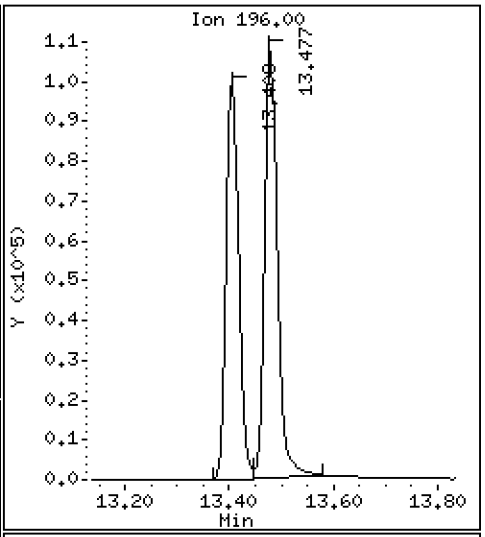
Column phase: ZB-5msi

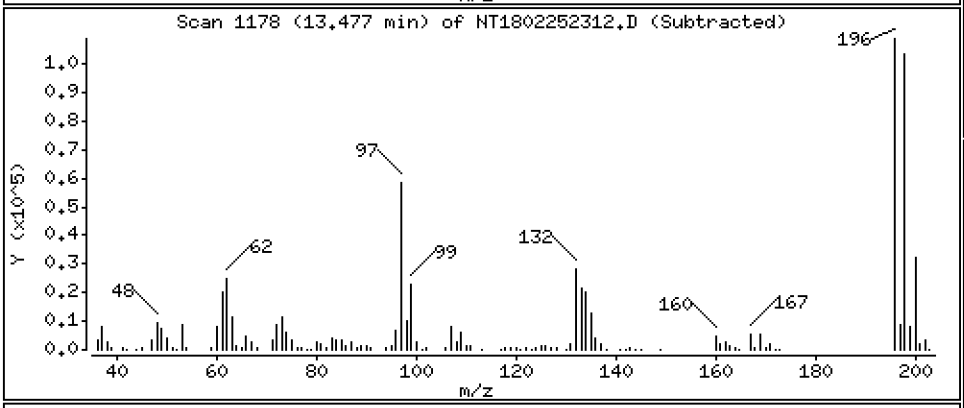
Column diameter: 0.25

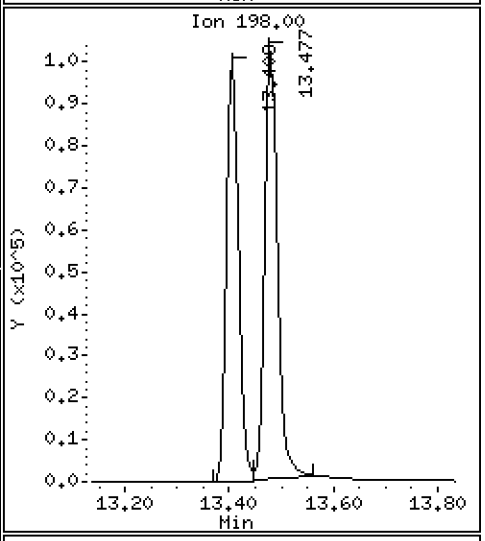
35 2,4,5-Trichlorophenol

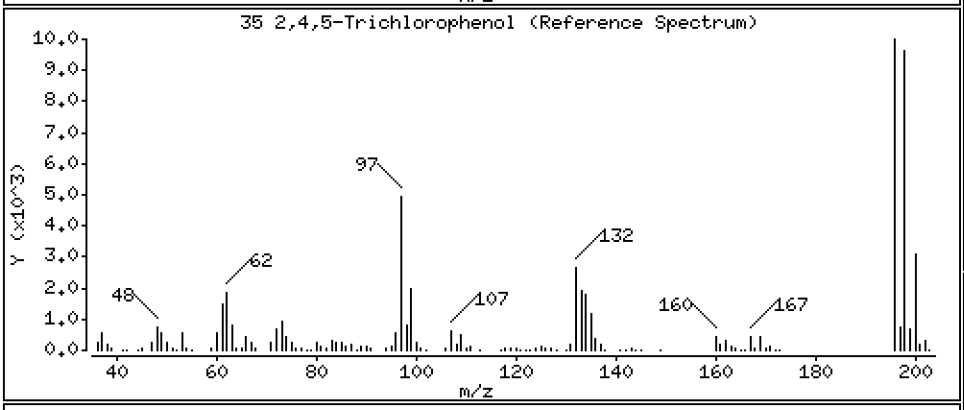
Concentration: 4.100 ug/mL

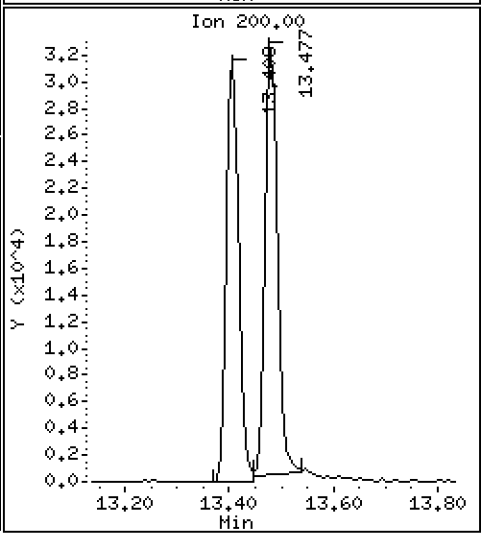


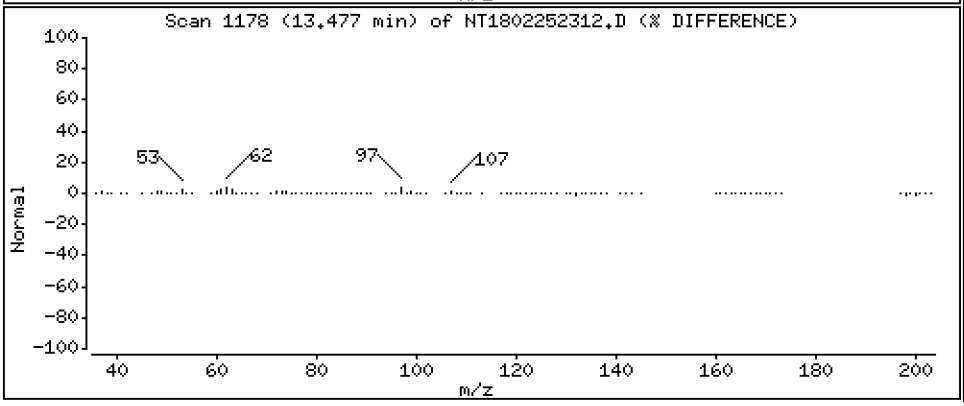












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

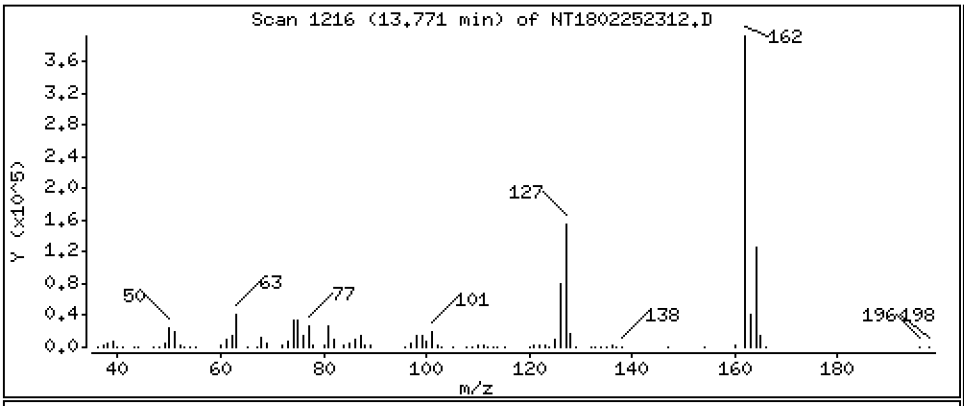
Operator: VTS

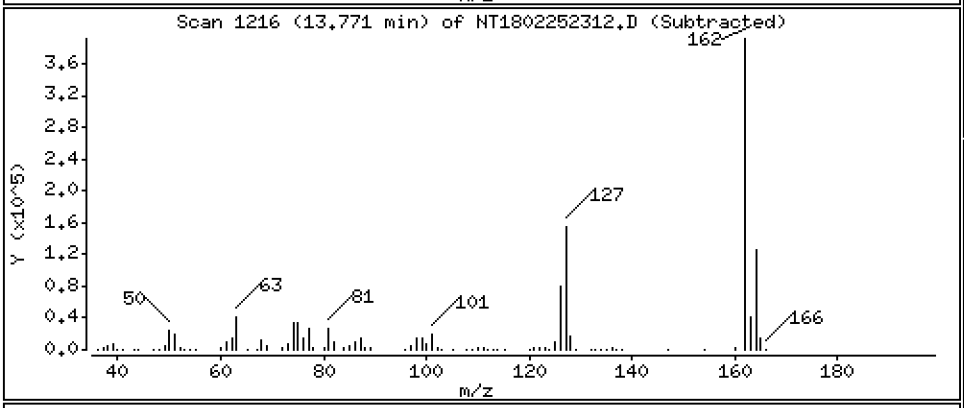
Column phase: ZB-5msi

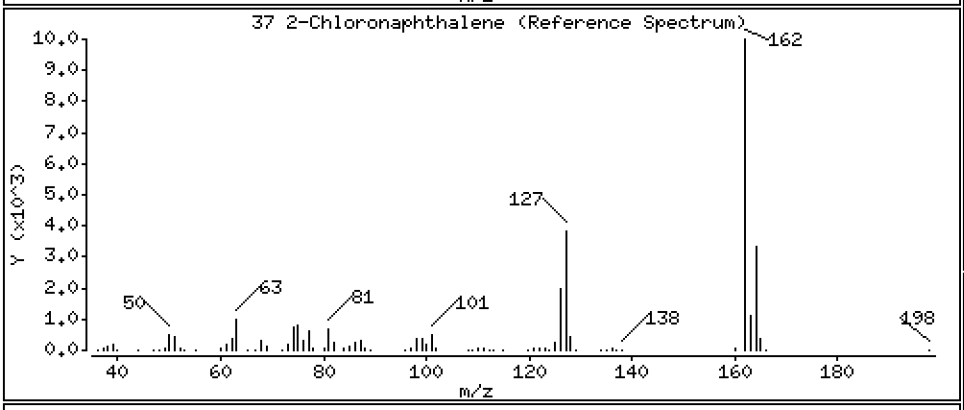
Column diameter: 0.25

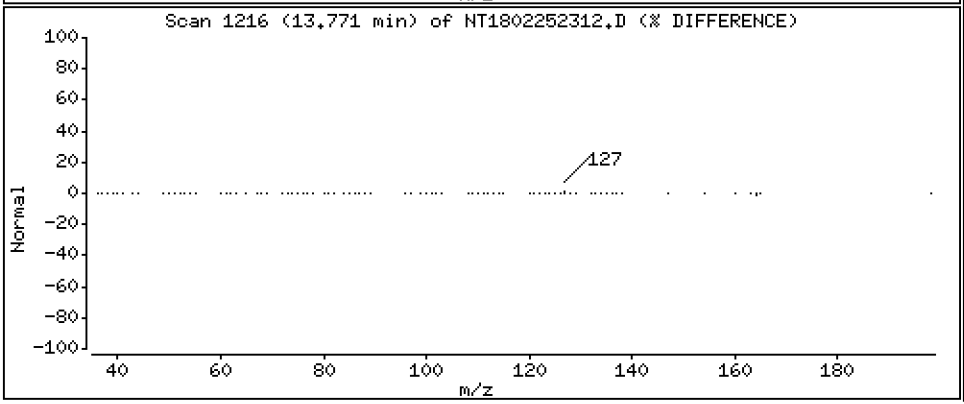
37 2-Chloronaphthalene

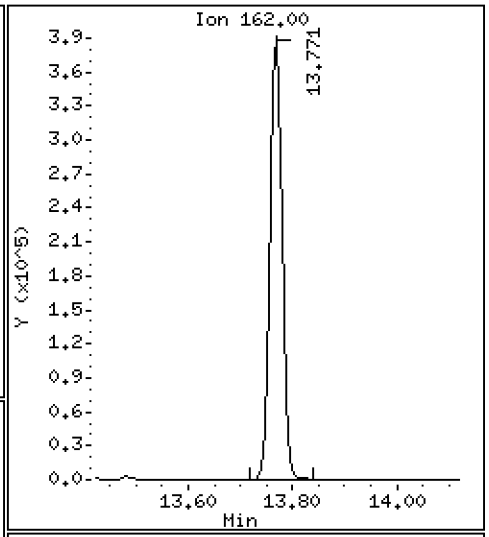
Concentration: 4.552 ug/mL

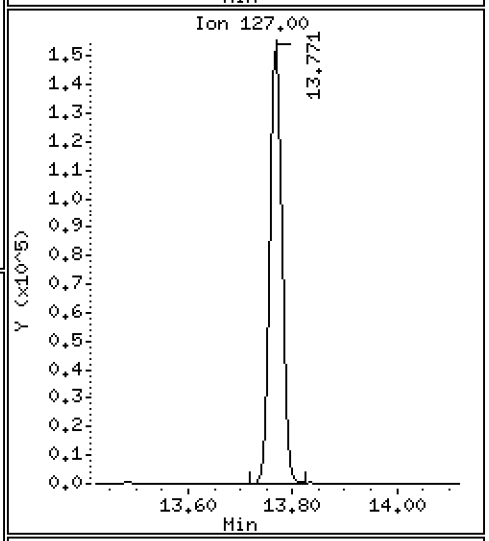


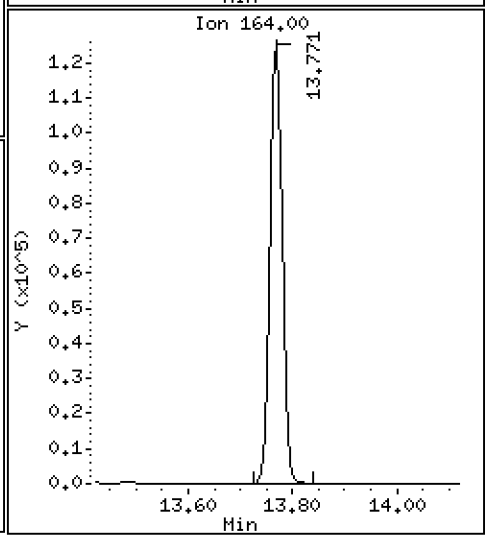












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

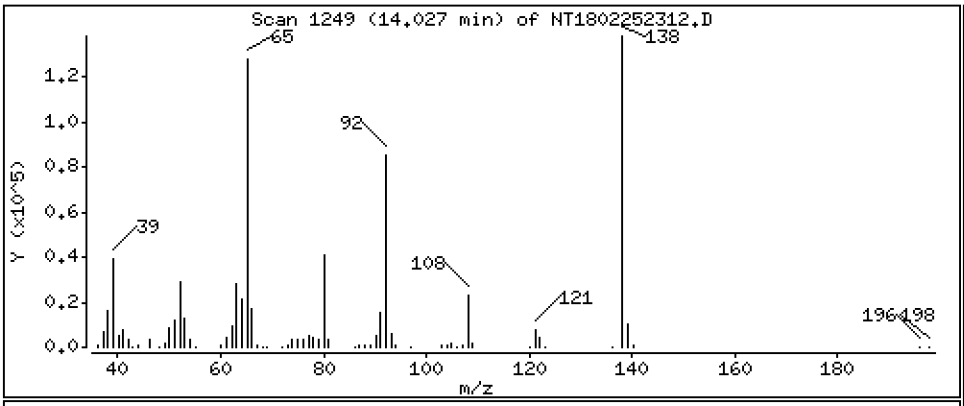
Operator: VTS

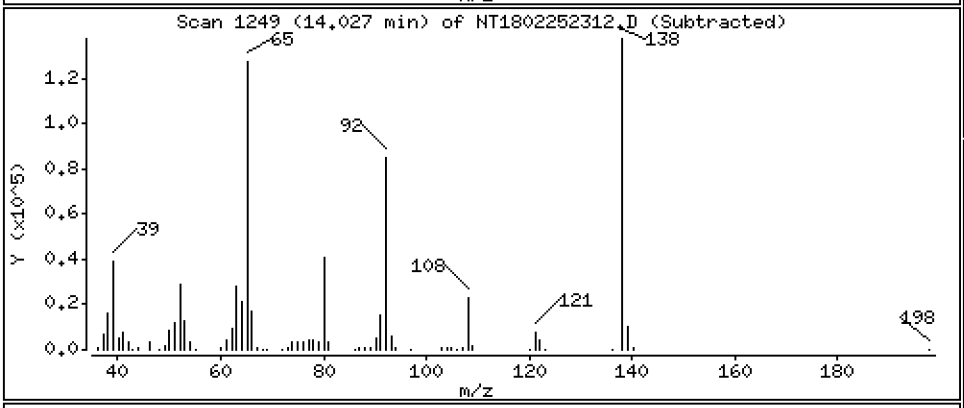
Column phase: ZB-5msi

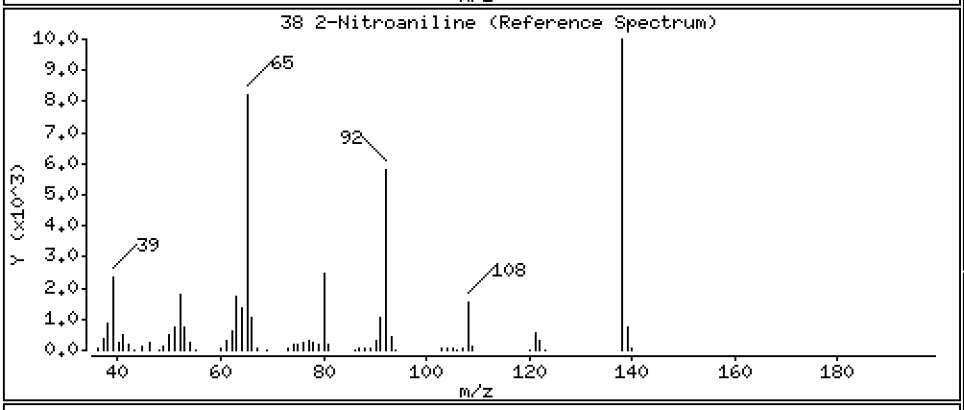
Column diameter: 0.25

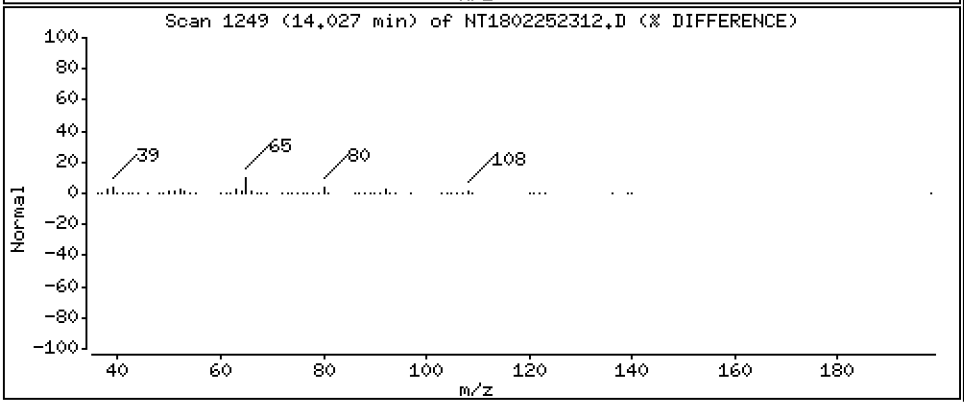
38 2-Nitroaniline

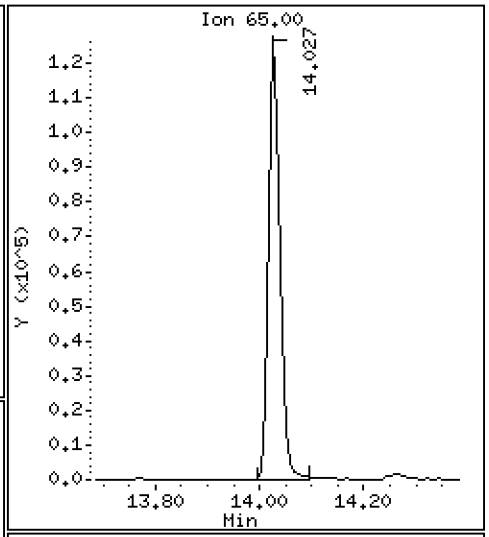
Concentration: 4.495 ug/mL

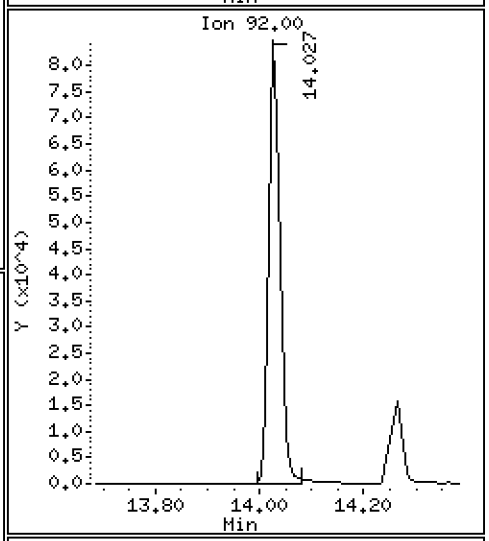


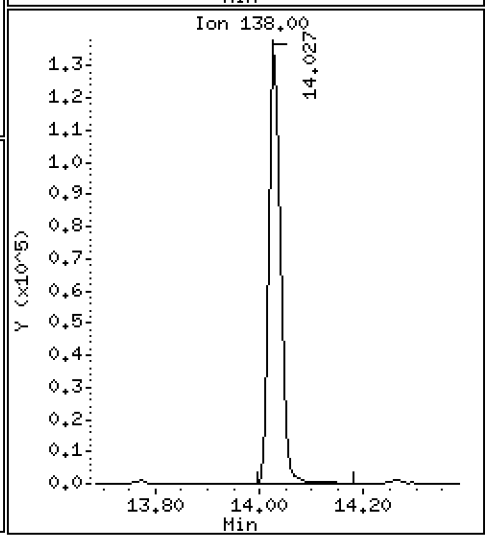












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

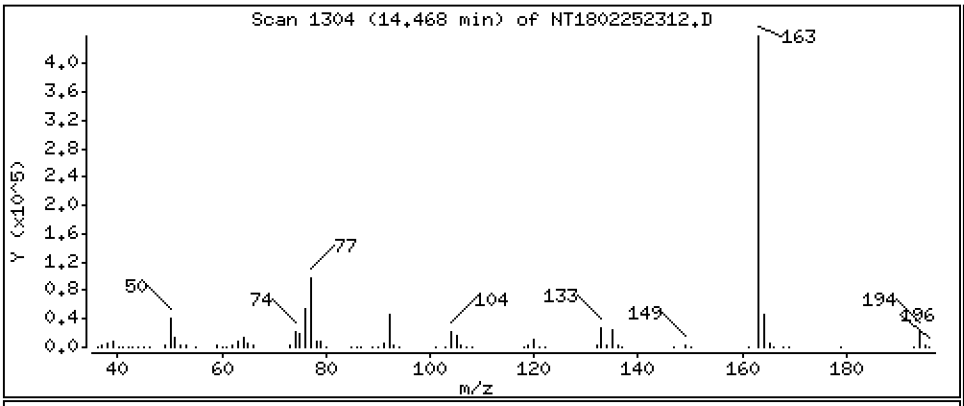
Operator: VTS

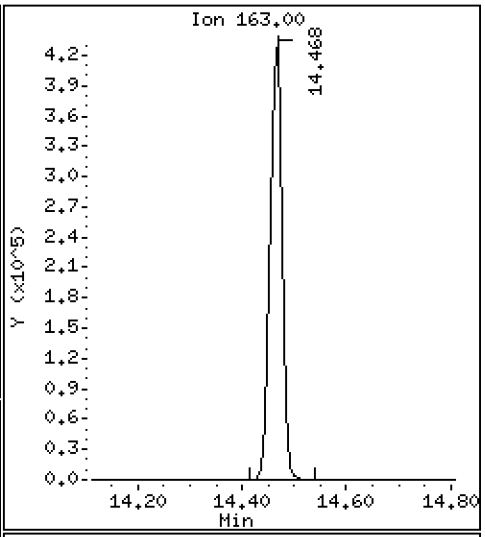
Column phase: ZB-5msi

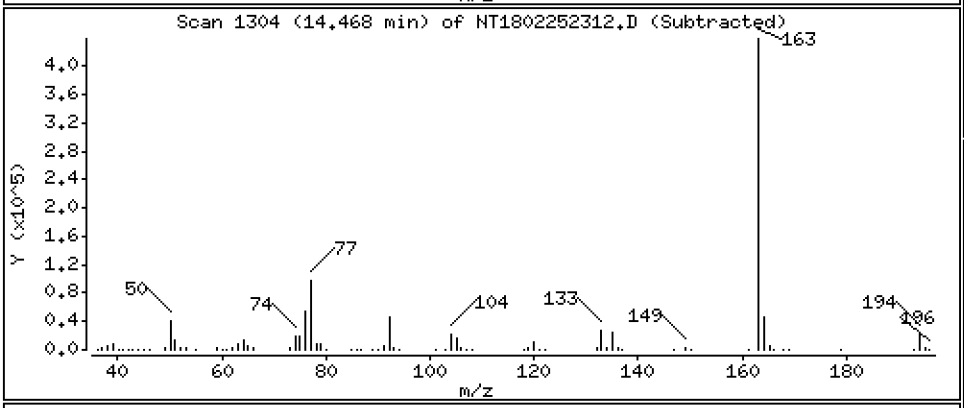
Column diameter: 0.25

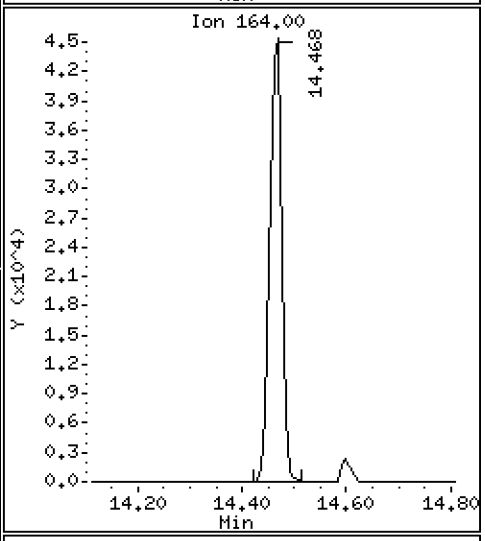
39 Dimethylphthalate

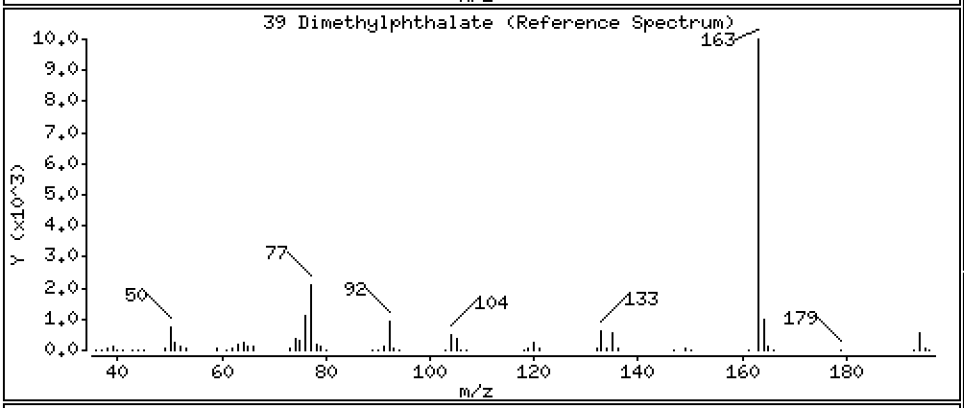
Concentration: 4.739 ug/mL

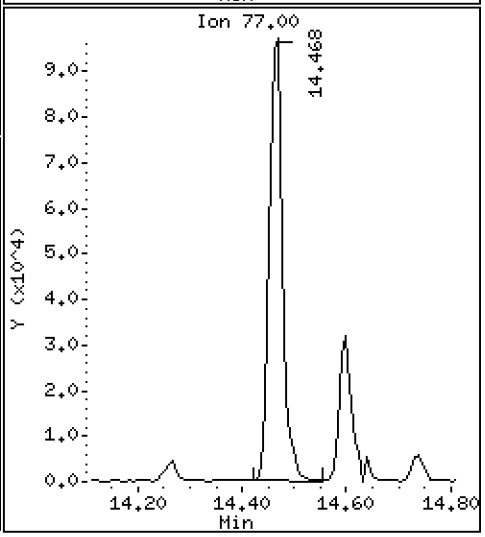


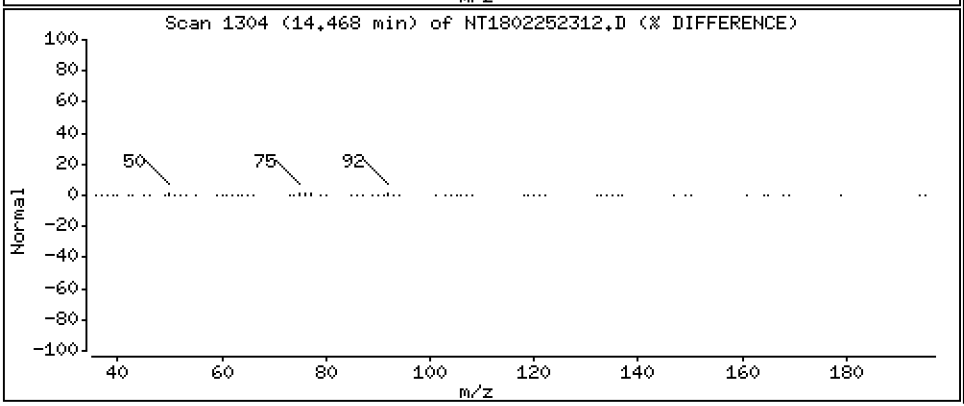












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

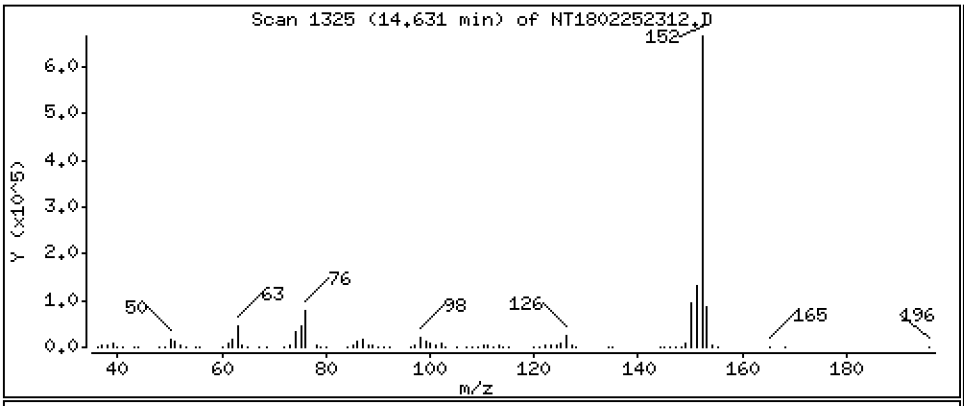
Operator: VTS

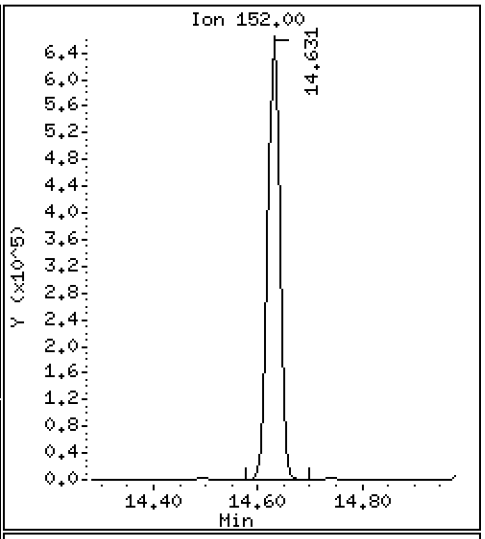
Column phase: ZB-5msi

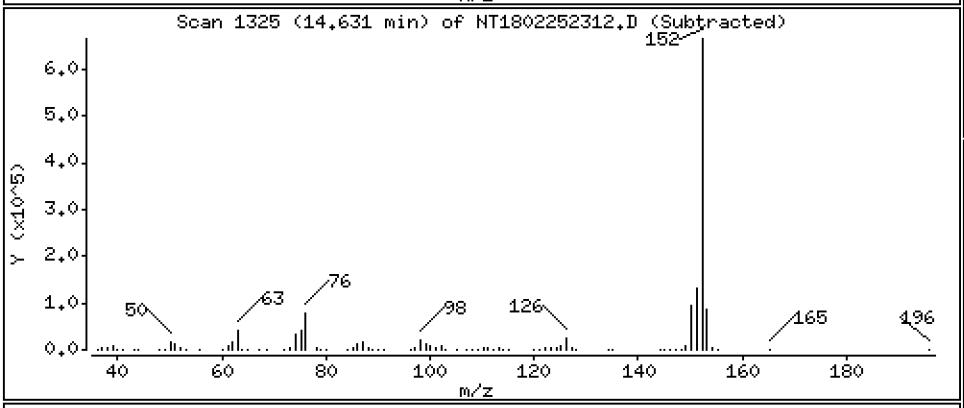
Column diameter: 0.25

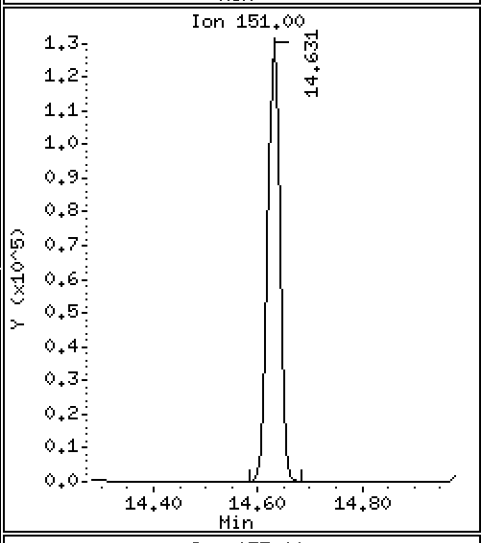
40 Acenaphthylene

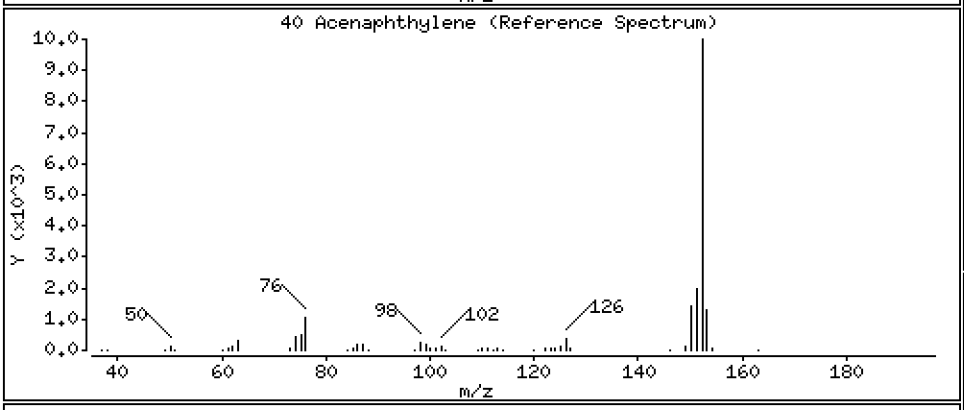
Concentration: 4.591 ug/mL

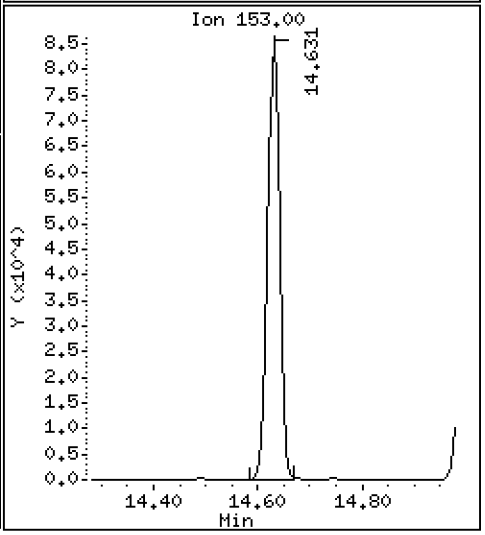


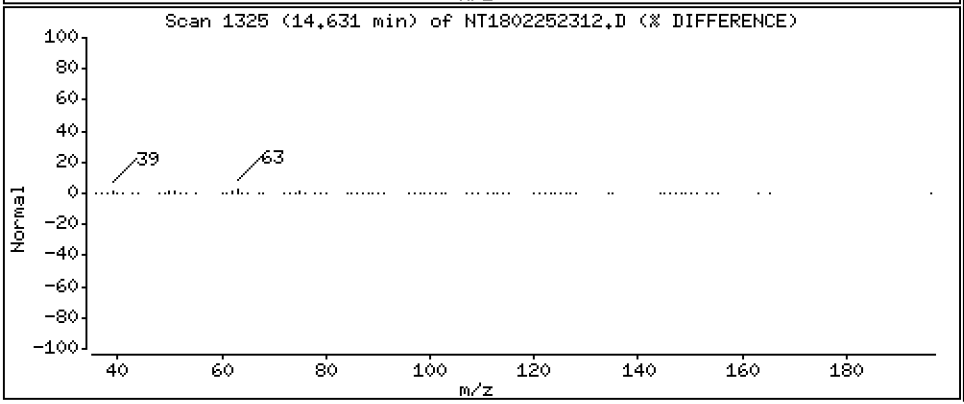












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

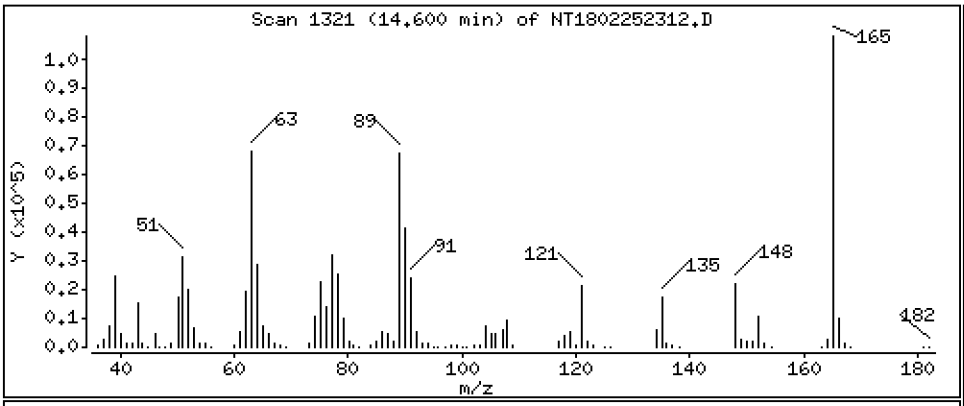
Operator: VTS

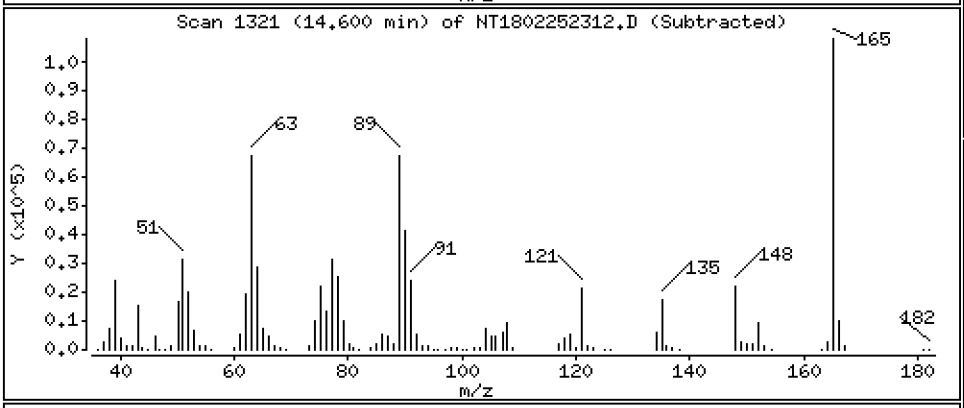
Column phase: ZB-5msi

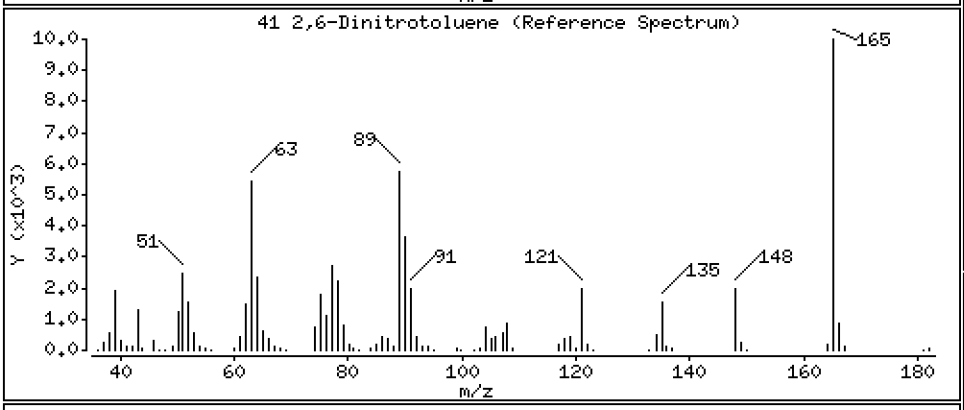
Column diameter: 0.25

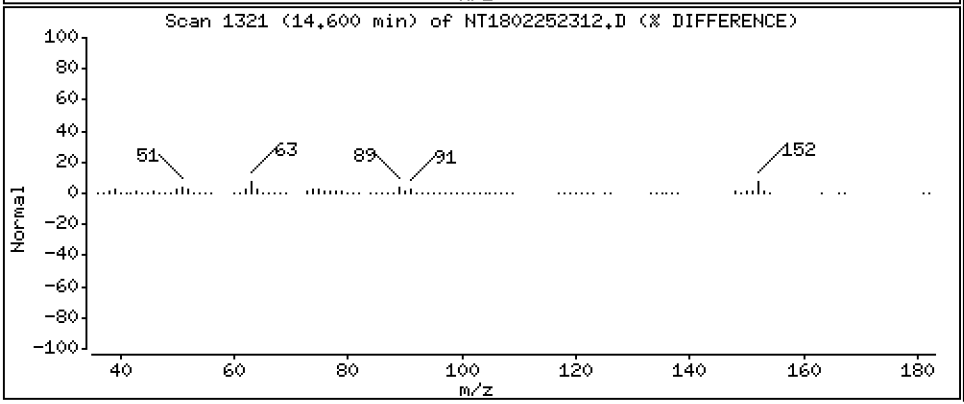
41 2,6-Dinitrotoluene

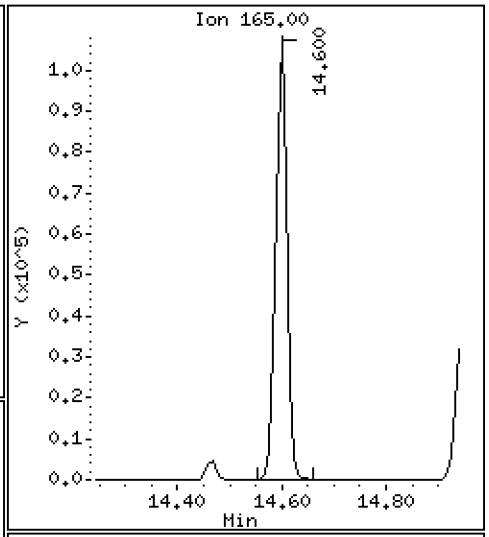
Concentration: 4.850 ug/mL

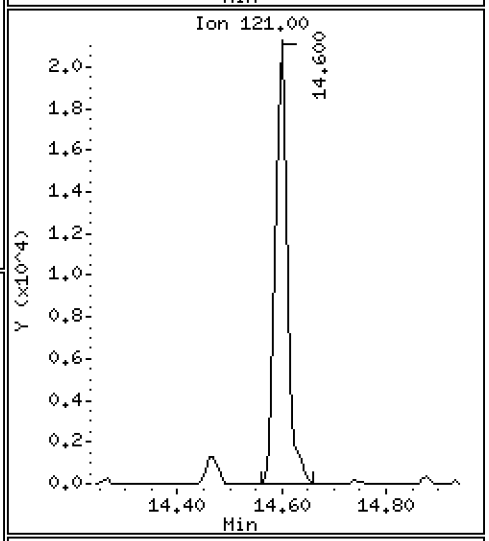


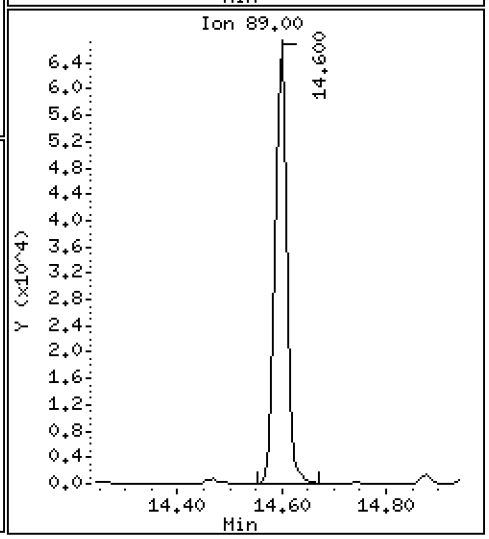












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

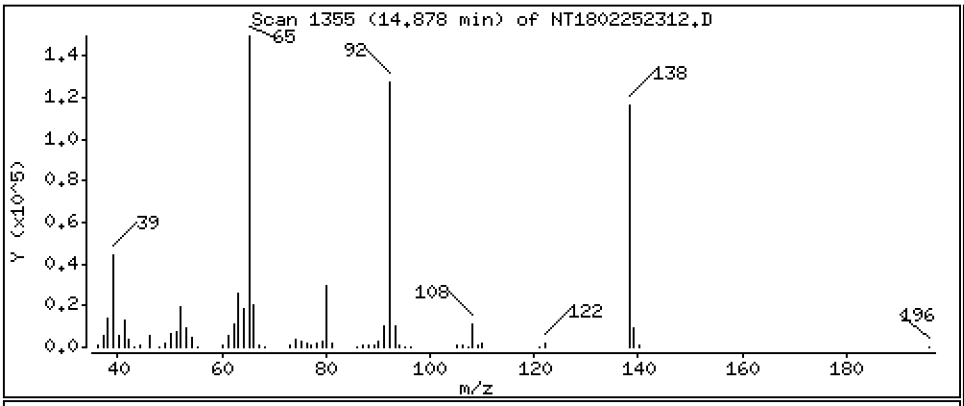
Operator: VTS

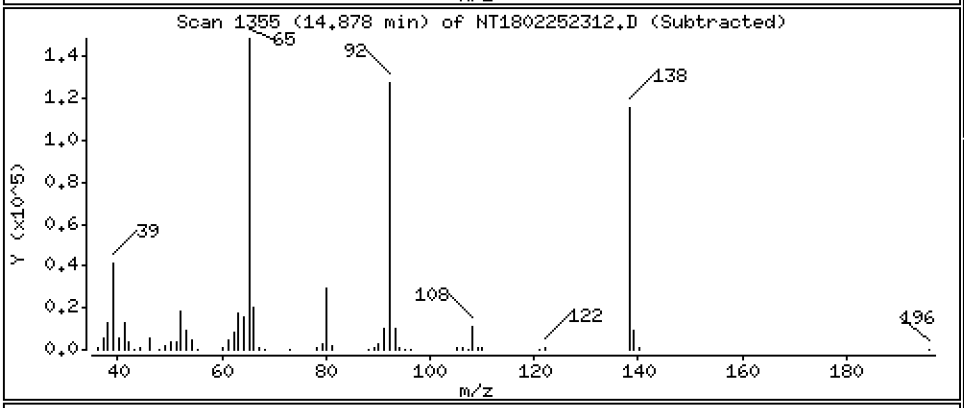
Column phase: ZB-5msi

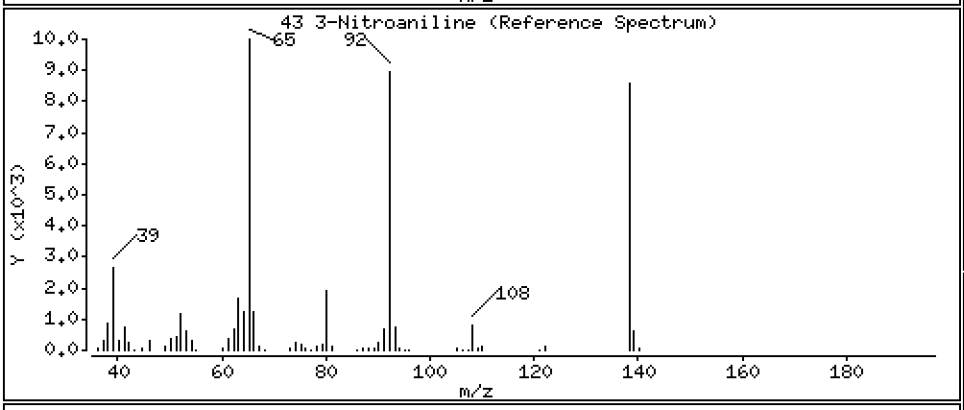
Column diameter: 0.25

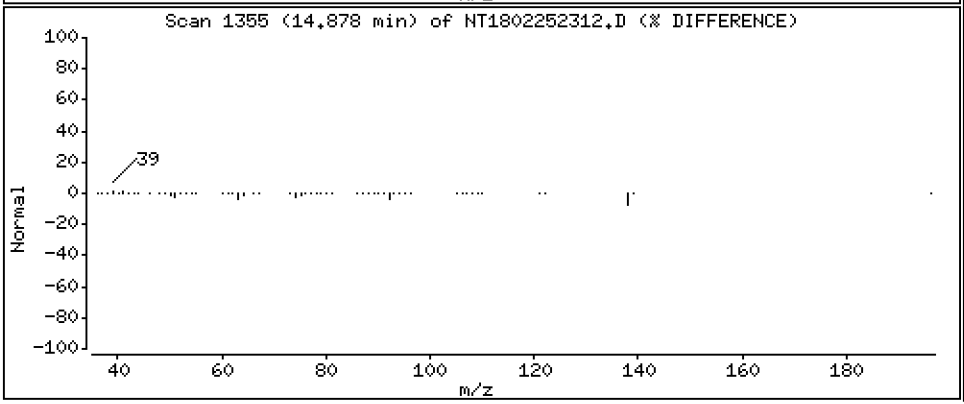
43 3-Nitroaniline

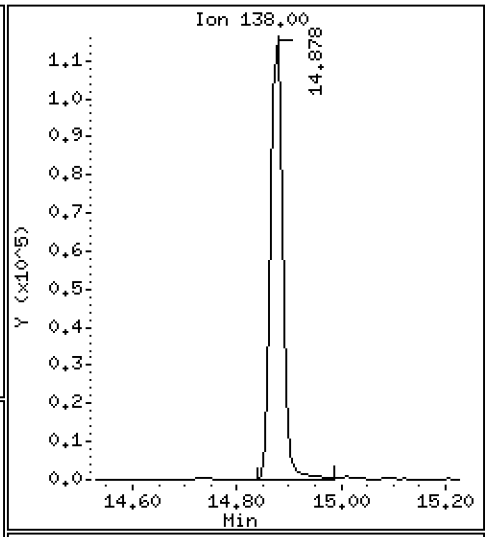
Concentration: 4.643 ug/mL

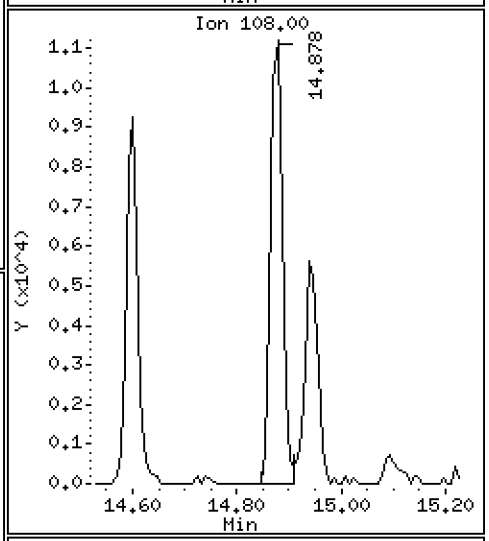


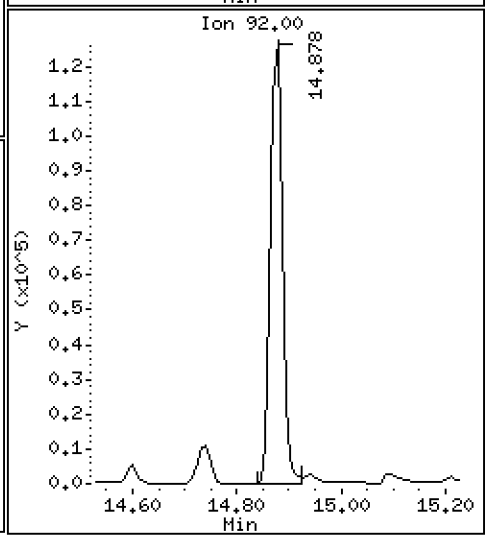












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

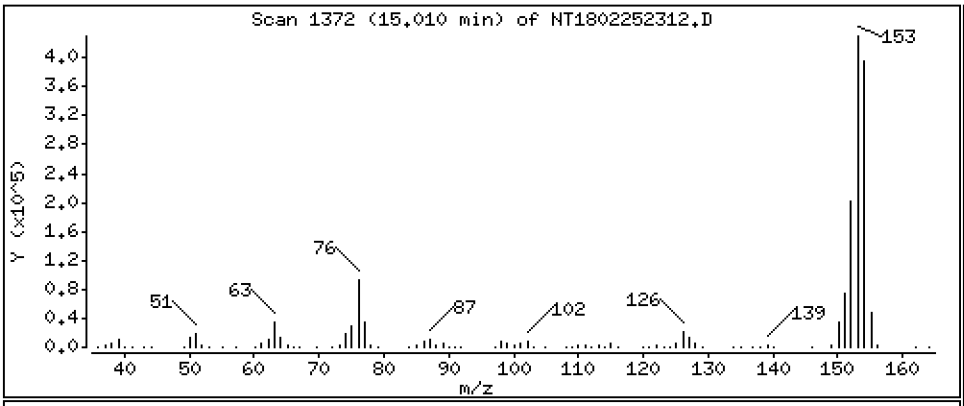
Operator: VTS

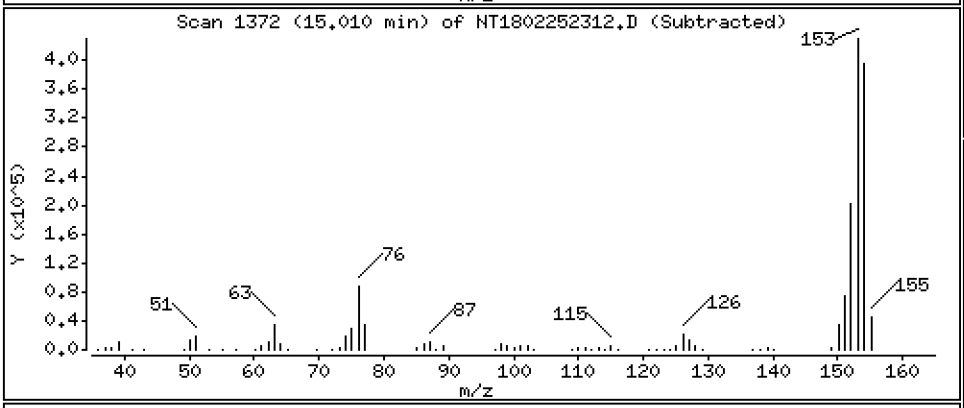
Column phase: ZB-5msi

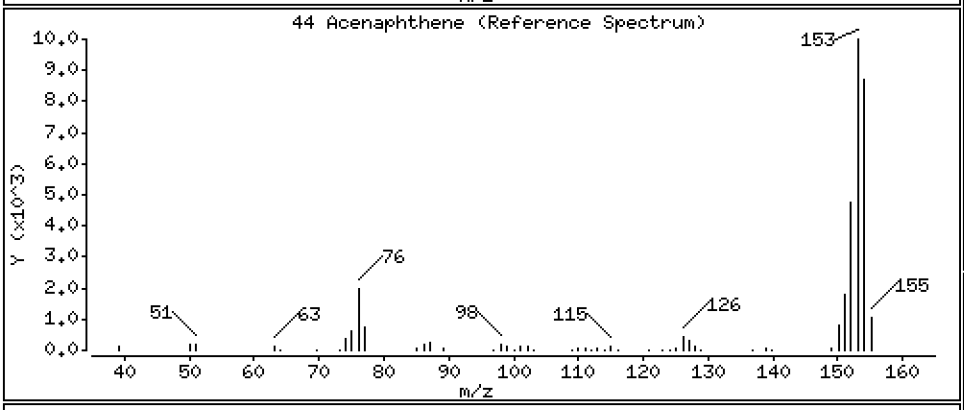
Column diameter: 0.25

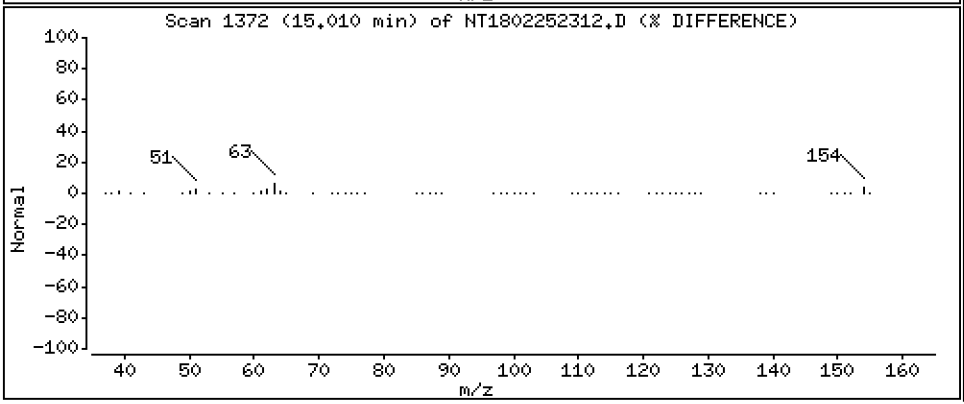
44 Acenaphthene

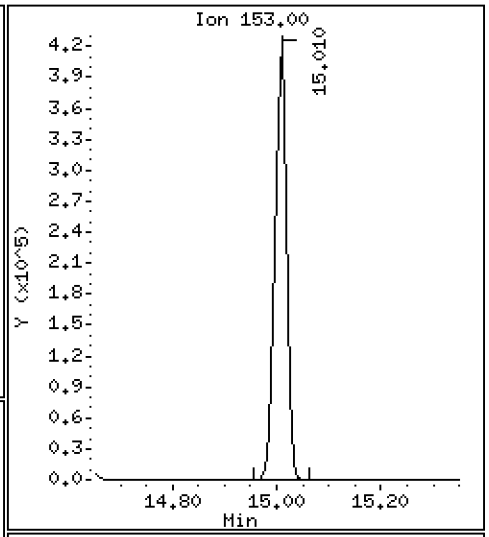
Concentration: 4.530 ug/mL

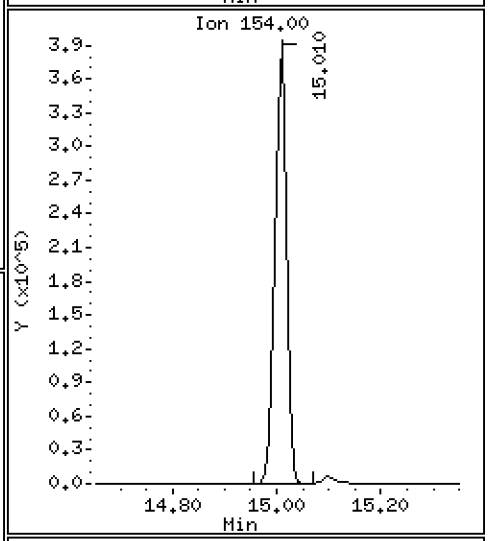


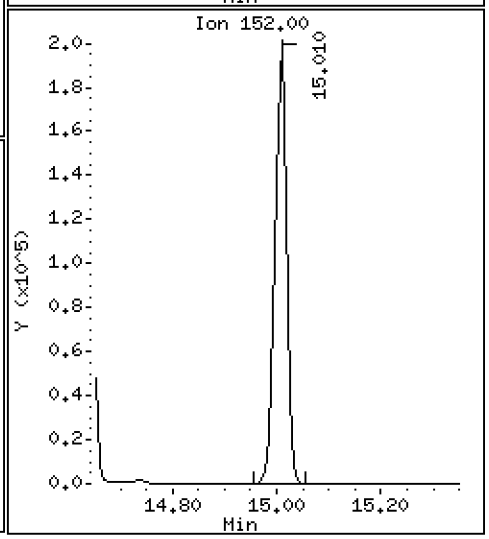












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

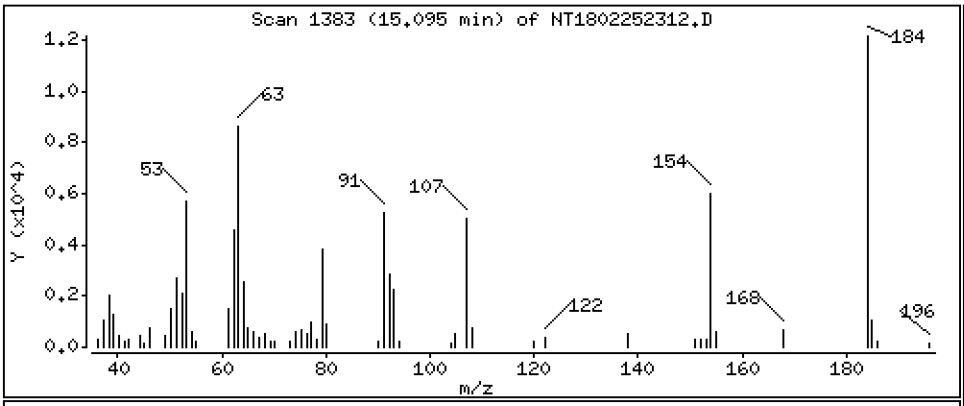
Operator: VTS

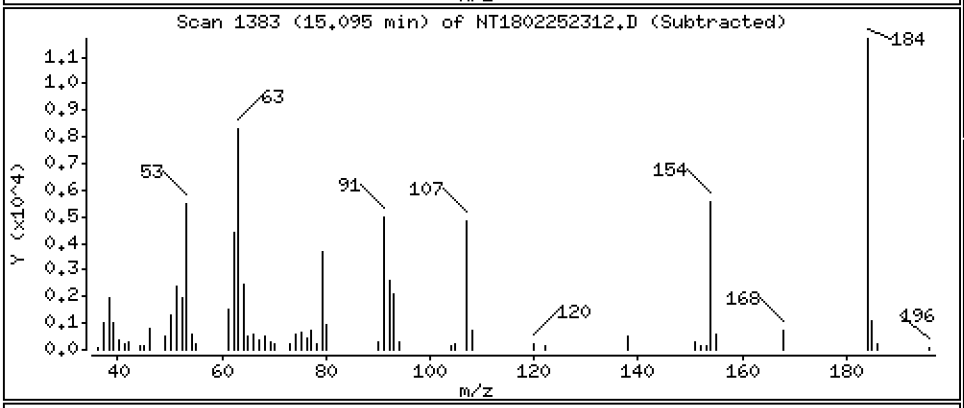
Column phase: ZB-5msi

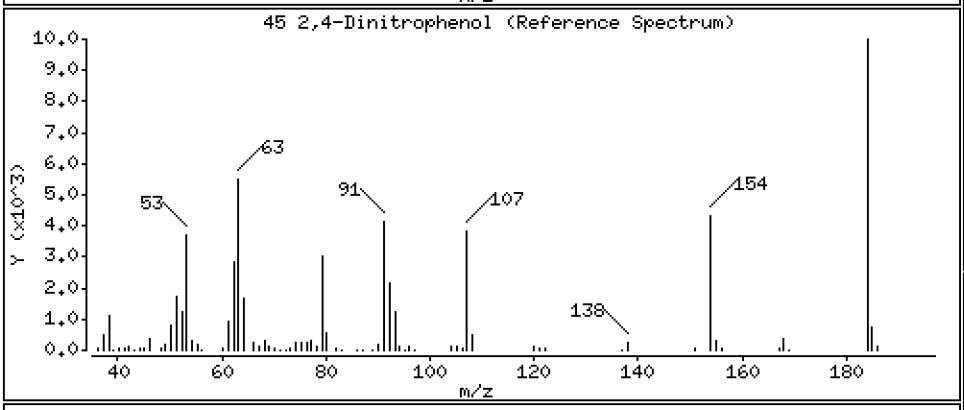
Column diameter: 0.25

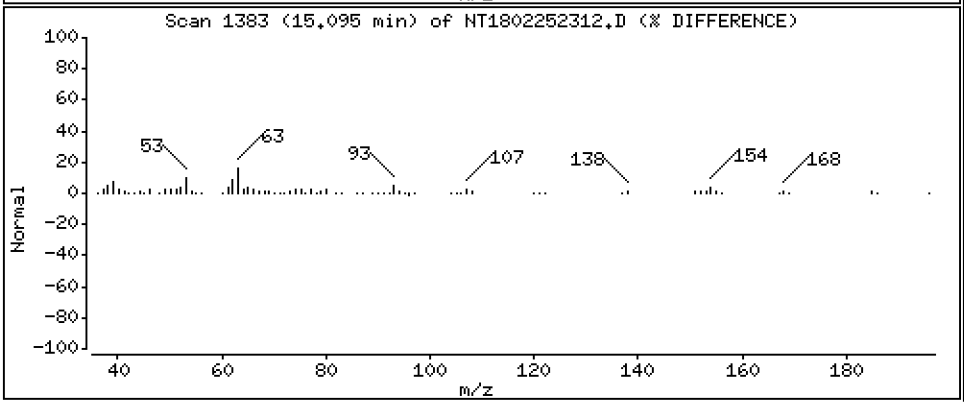
45 2,4-Dinitrophenol

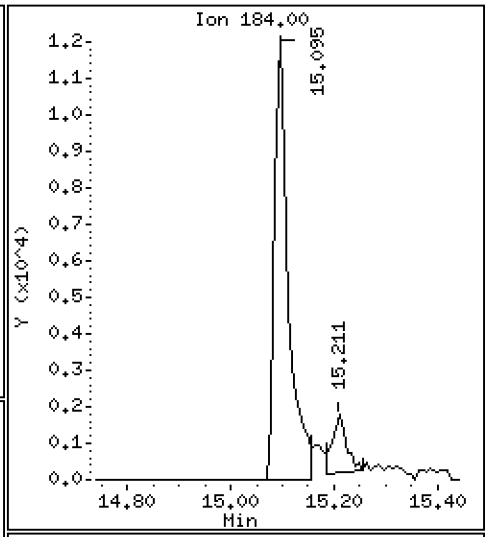
Concentration: 1.426 ug/mL

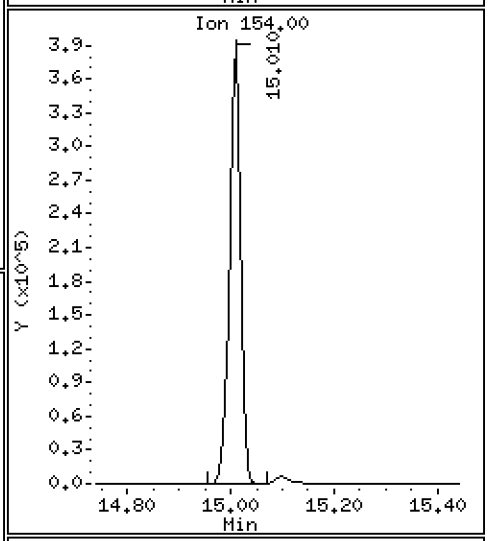


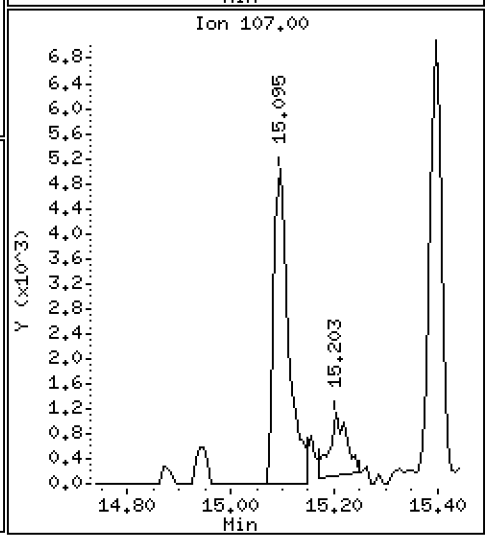












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

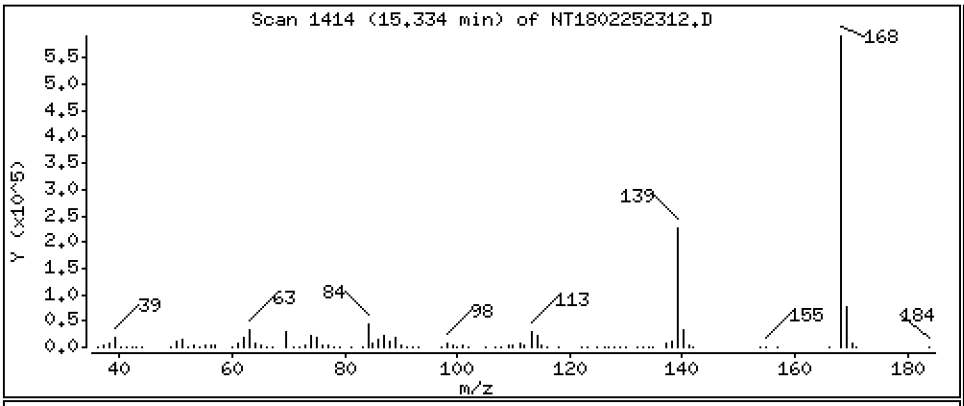
Operator: VTS

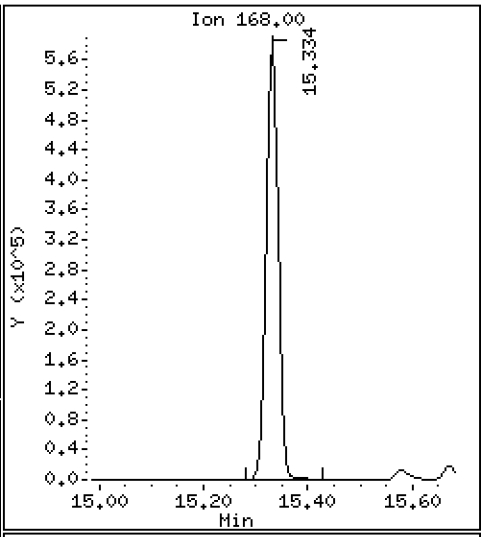
Column phase: ZB-5msi

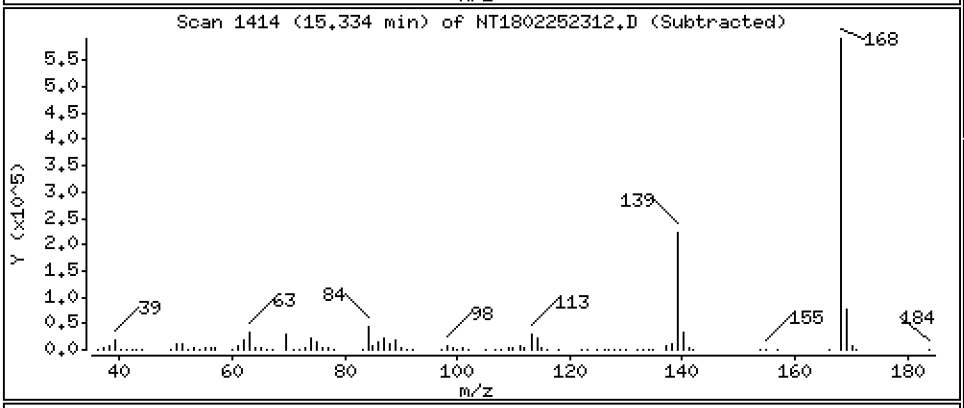
Column diameter: 0.25

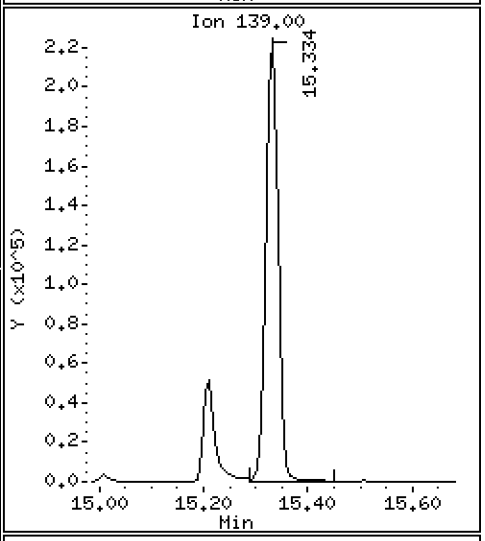
46 Dibenzofuran

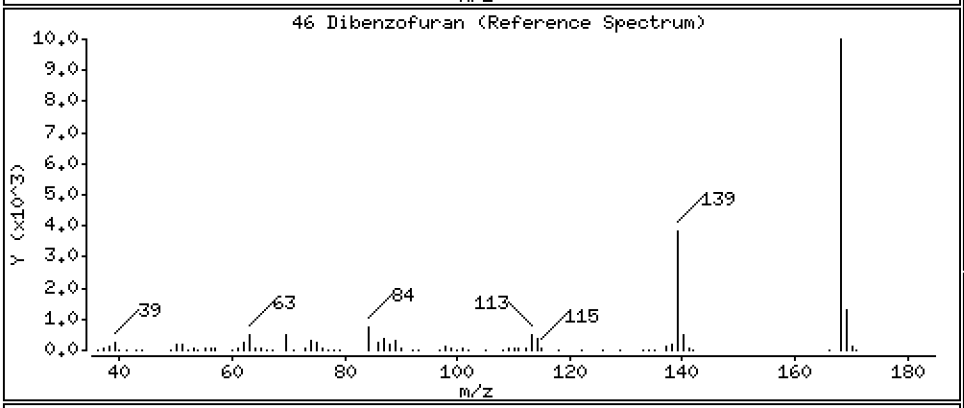
Concentration: 4.355 ug/mL

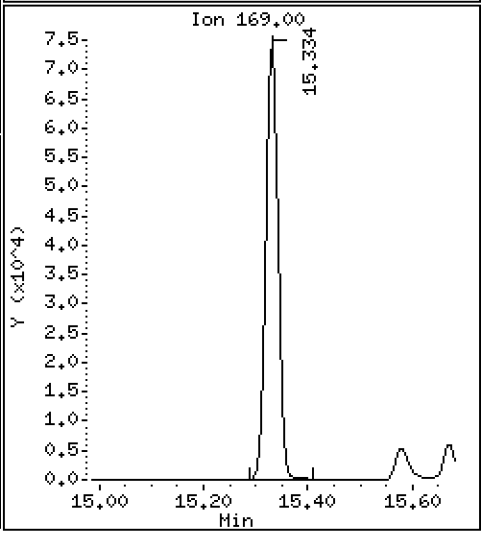


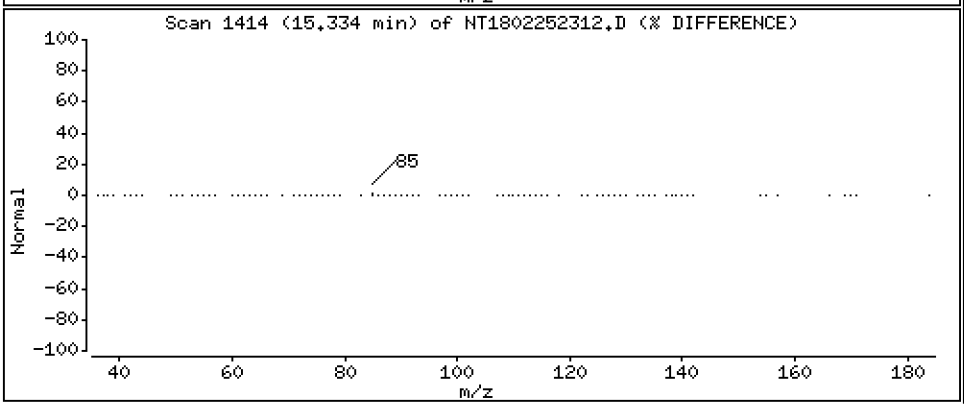












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

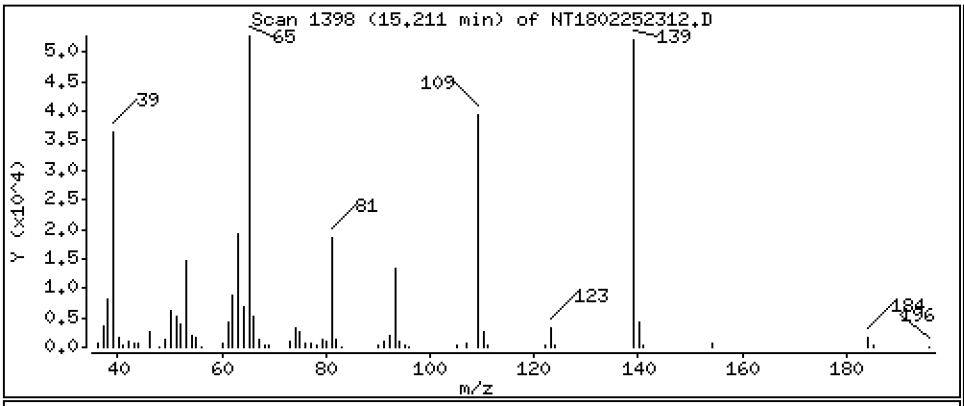
Operator: VTS

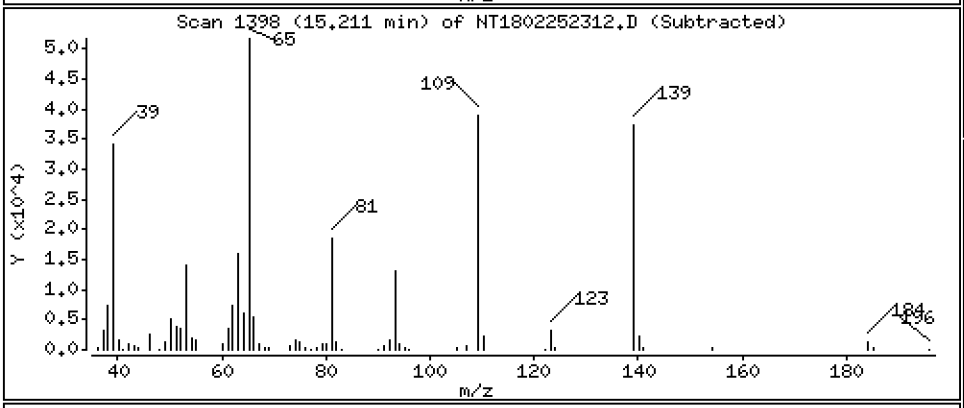
Column phase: ZB-5msi

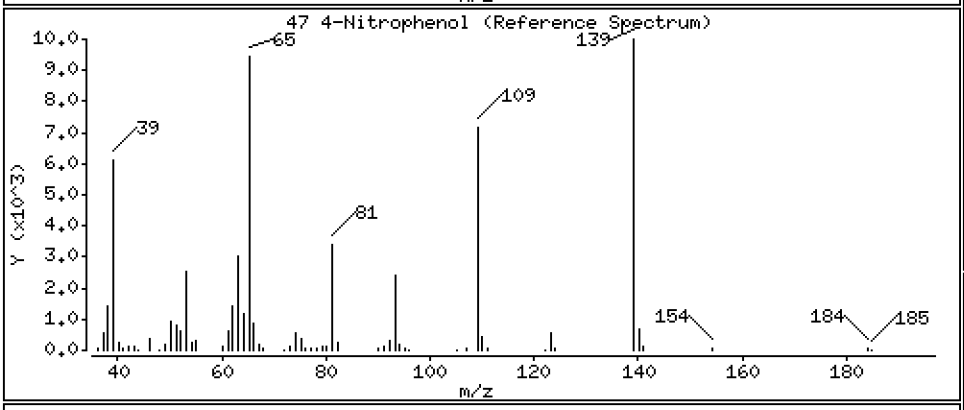
Column diameter: 0.25

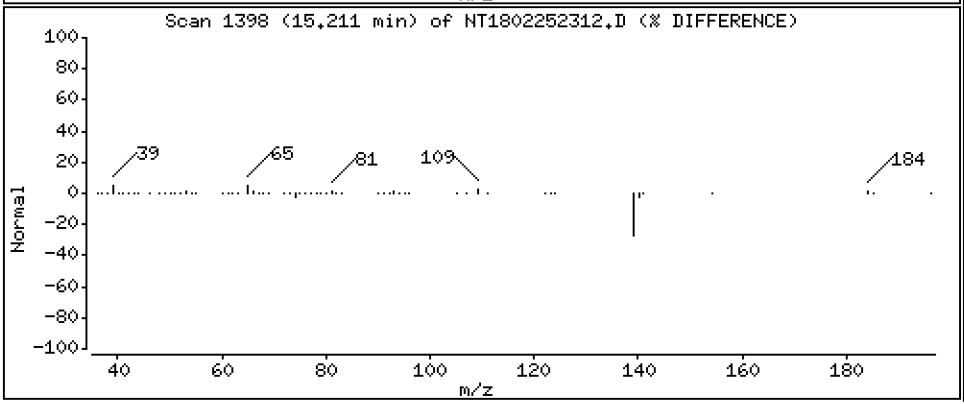
47 4-Nitrophenol

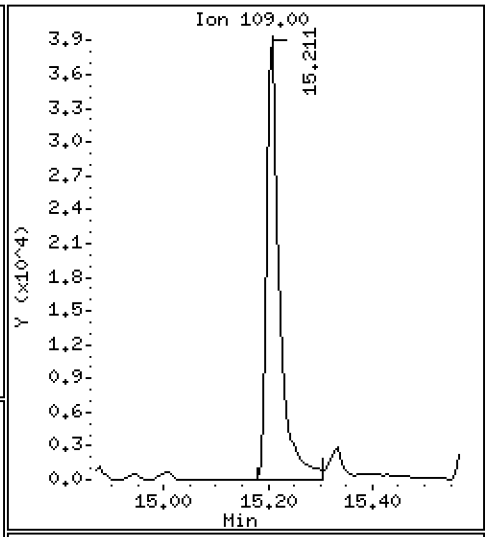
Concentration: 4.346 ug/mL

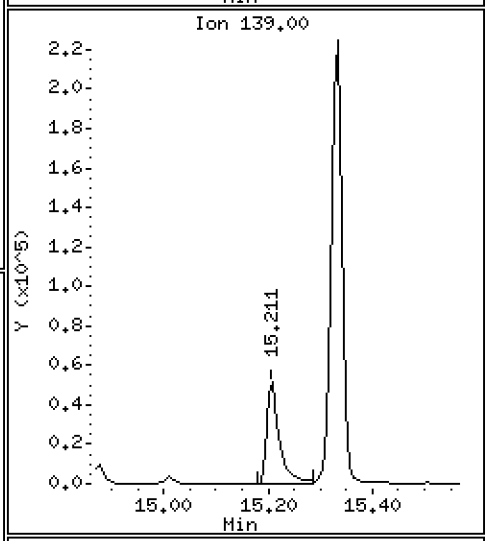


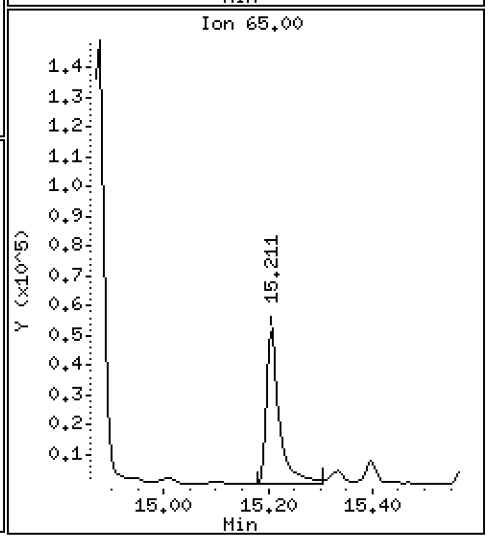












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

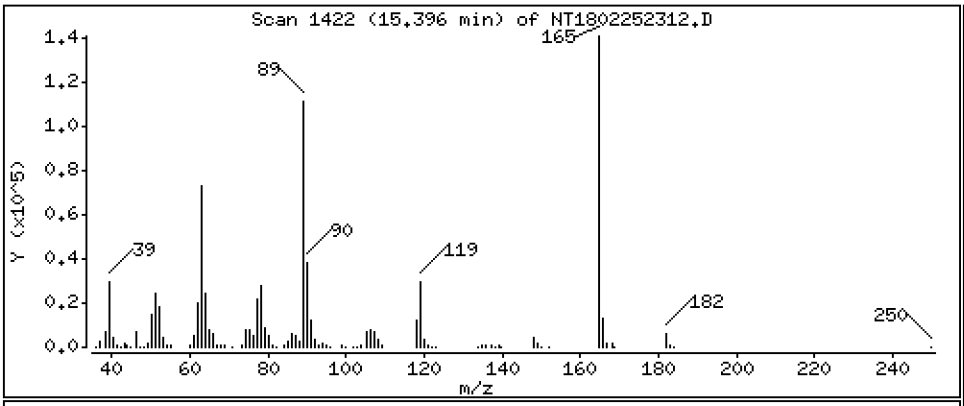
Operator: VTS

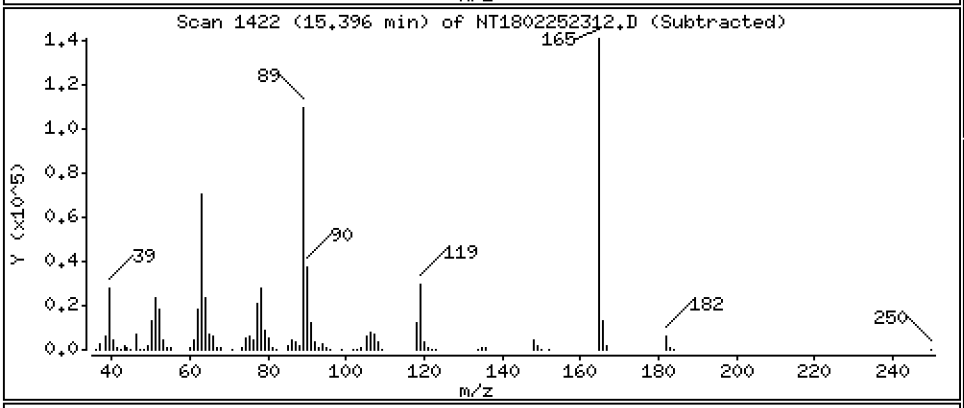
Column phase: ZB-5msi

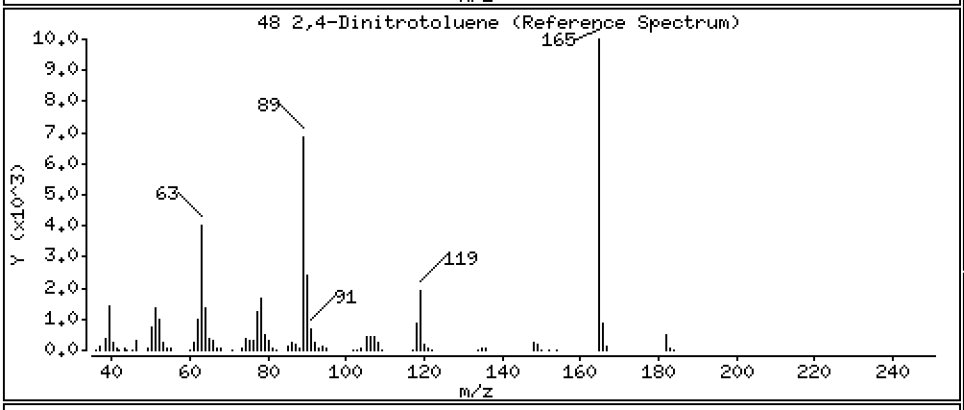
Column diameter: 0.25

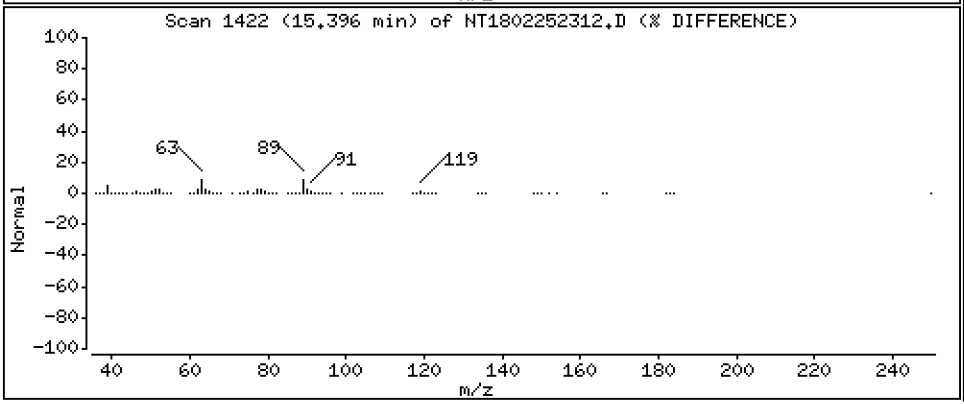
48 2,4-Dinitrotoluene

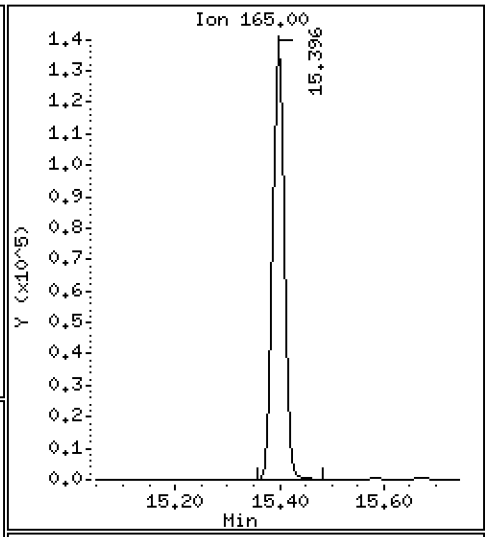
Concentration: 4.573 ug/mL

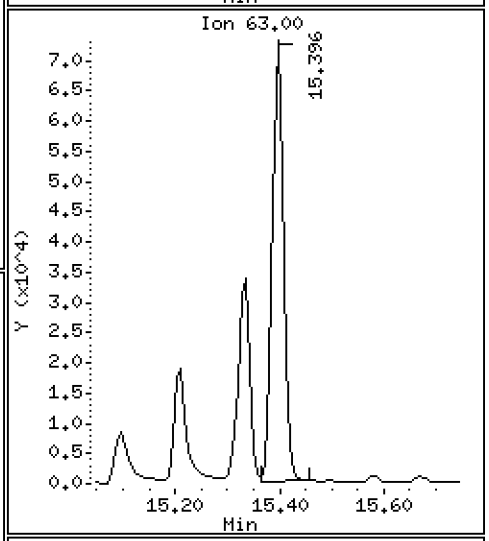


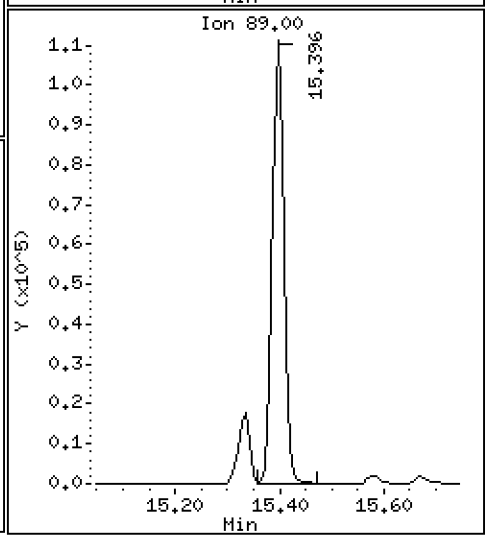












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

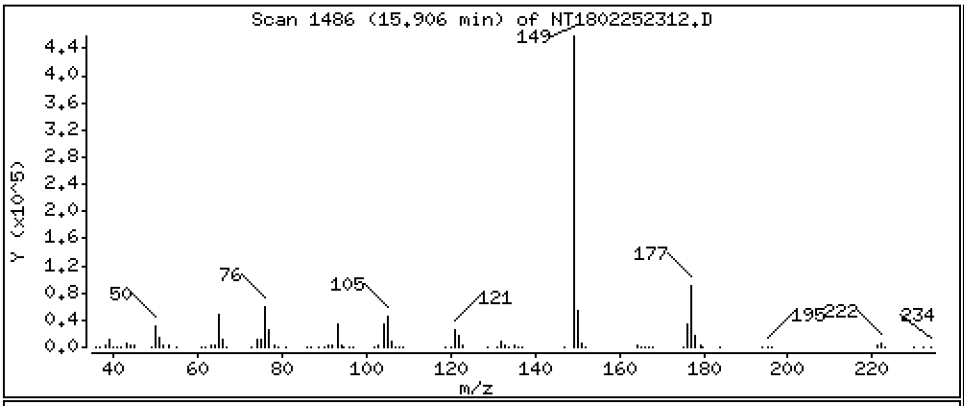
Operator: VTS

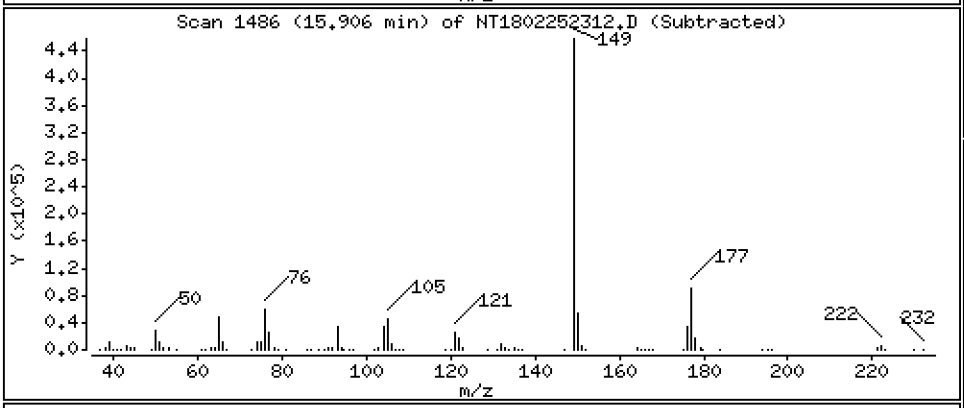
Column phase: ZB-5msi

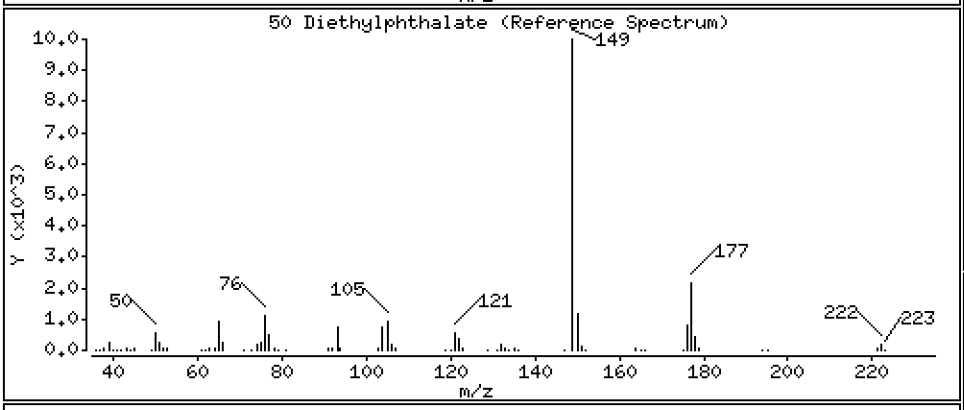
Column diameter: 0.25

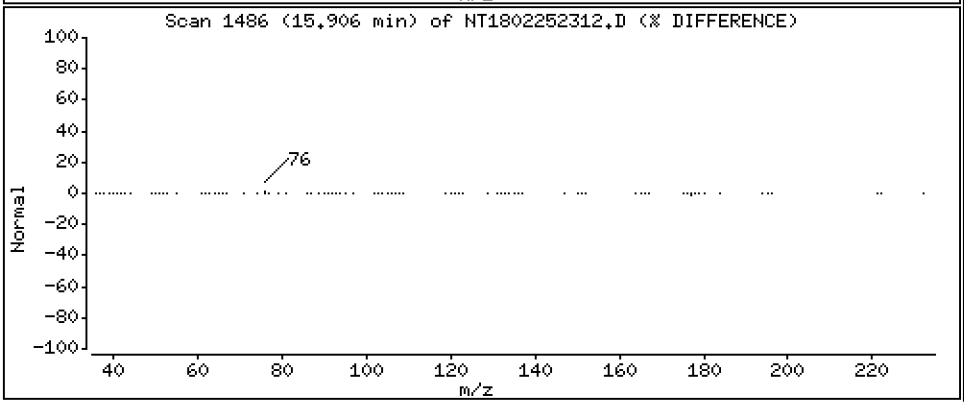
50 Diethylphthalate

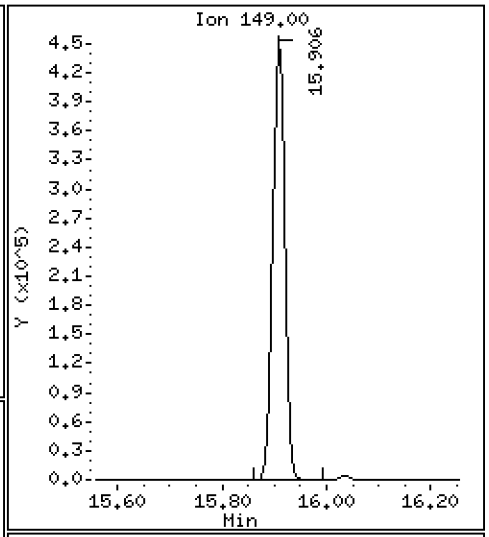
Concentration: 5.265 ug/mL

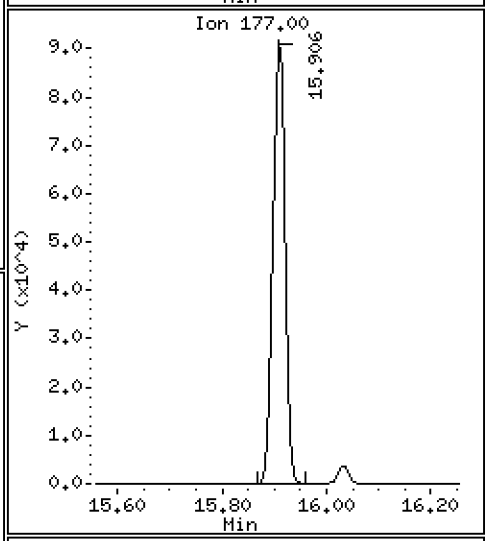


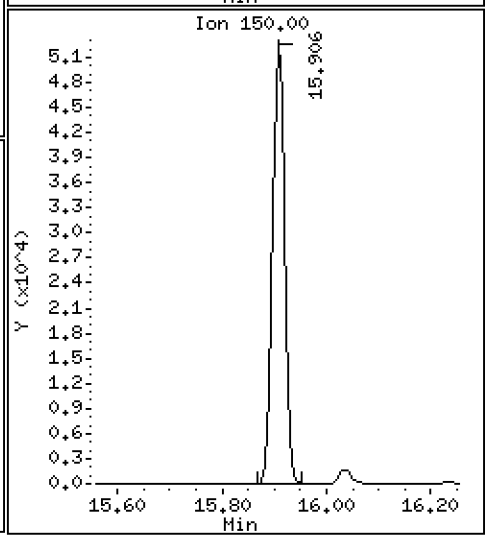












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

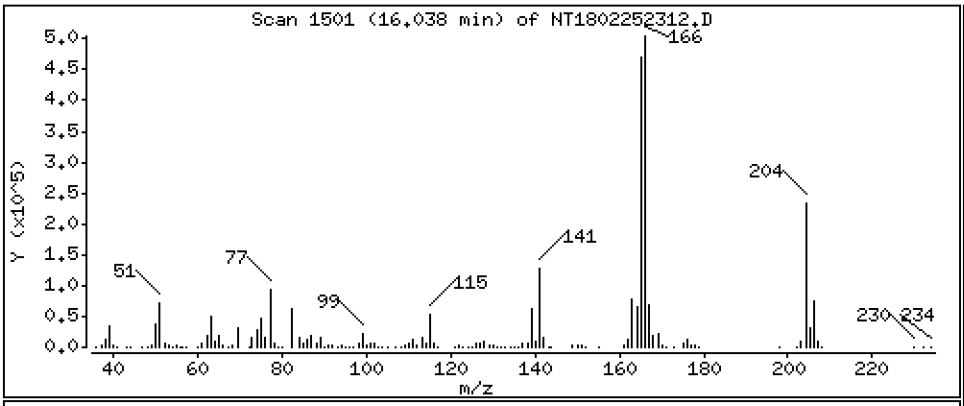
Operator: VTS

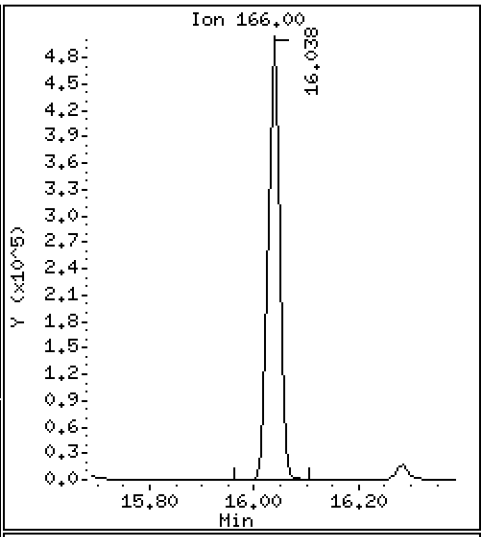
Column phase: ZB-5msi

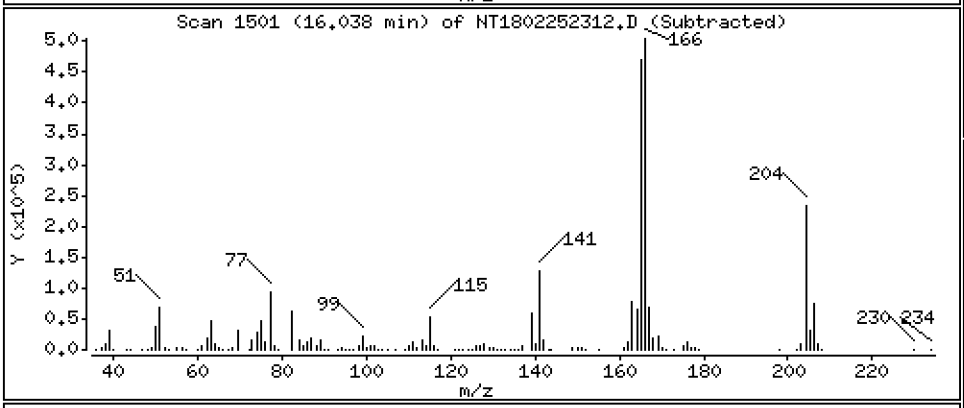
Column diameter: 0.25

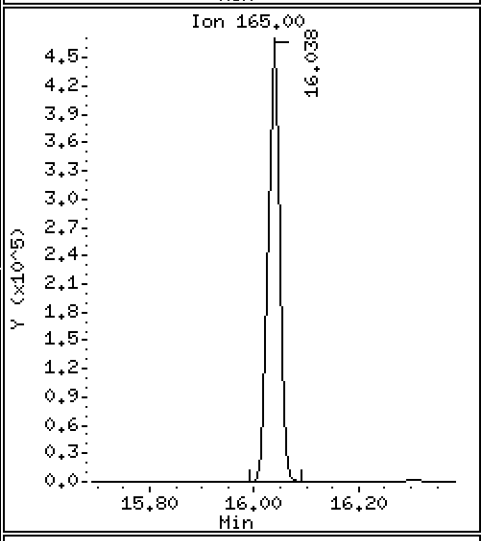
49 Fluorene

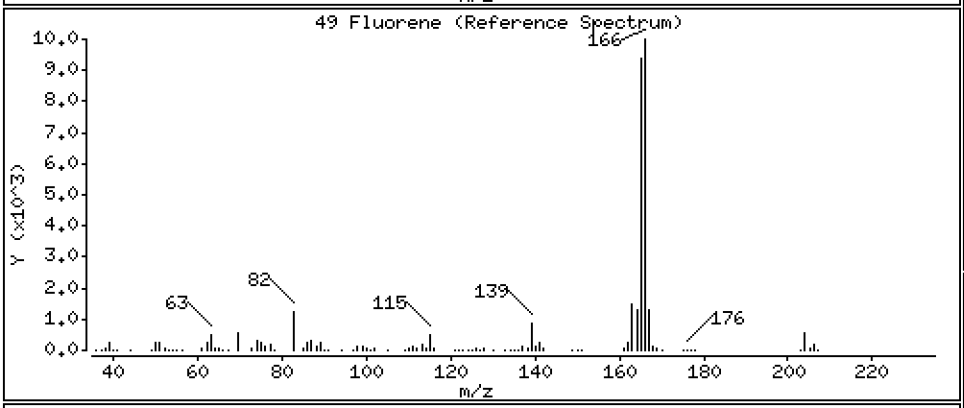
Concentration: 5.182 ug/mL

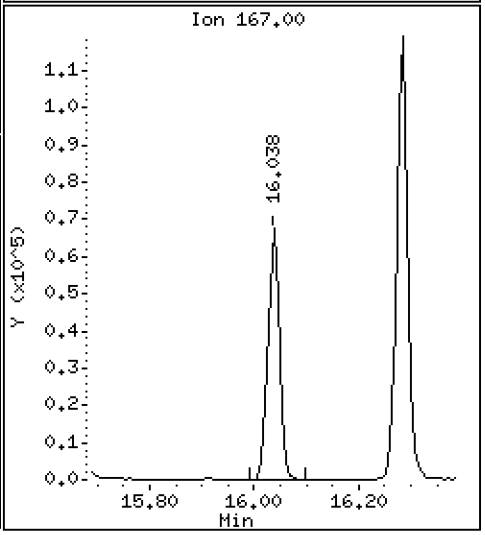


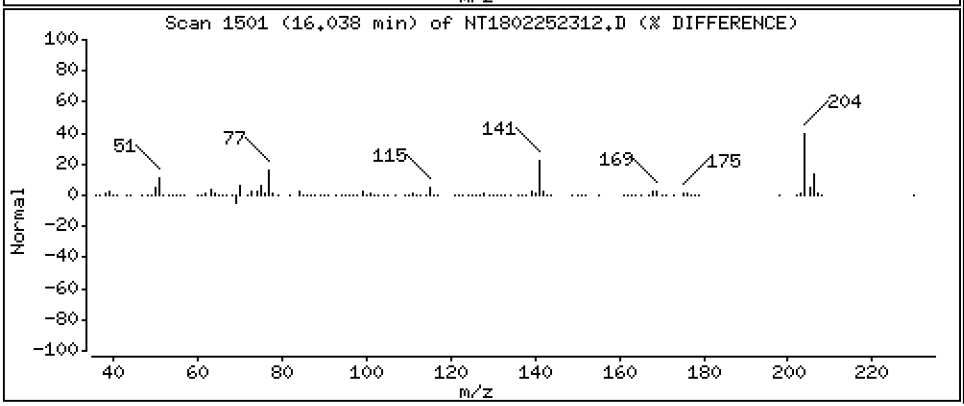












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

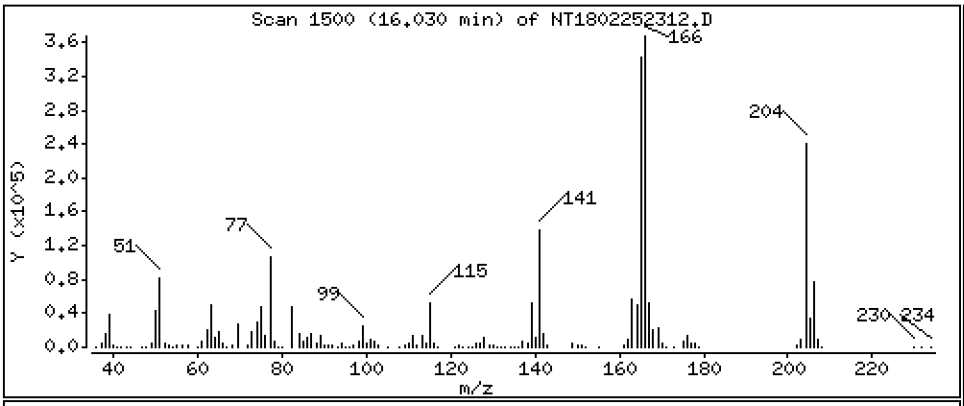
Operator: VTS

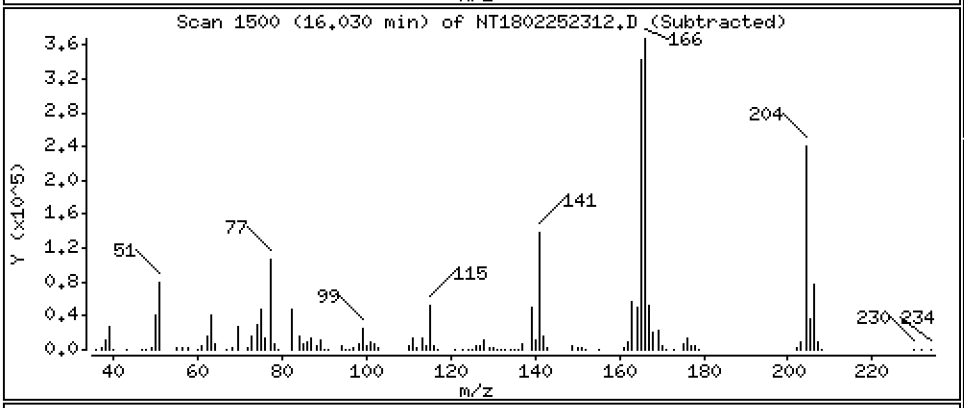
Column phase: ZB-5msi

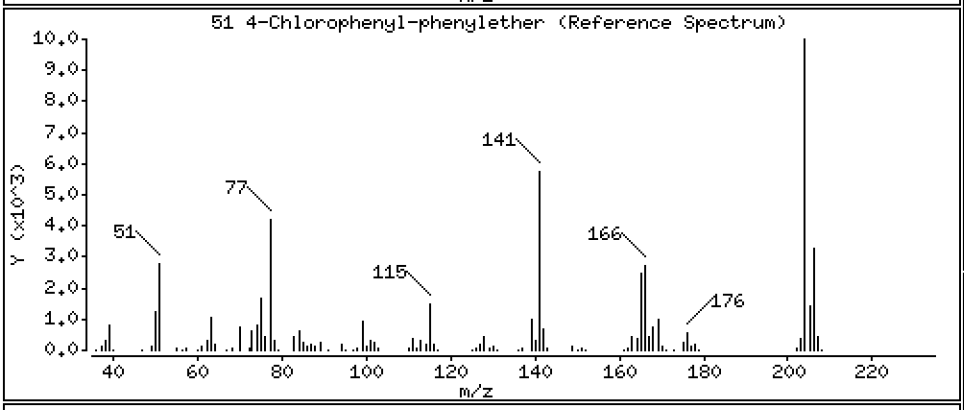
Column diameter: 0.25

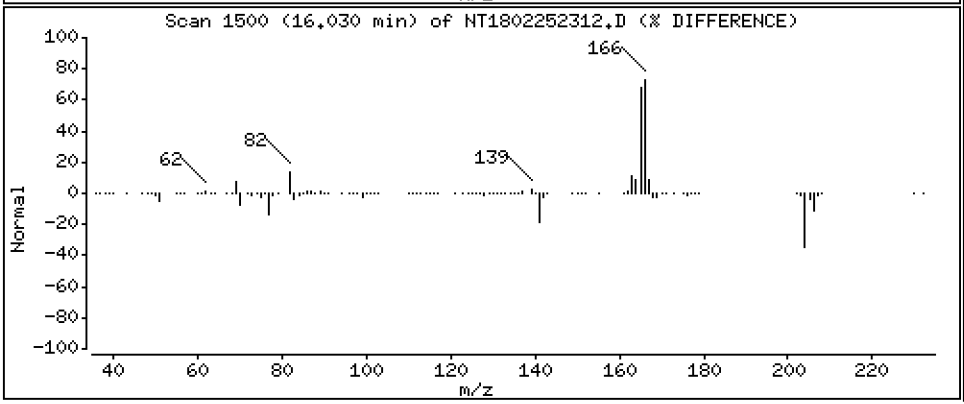
51 4-Chlorophenyl-phenylether

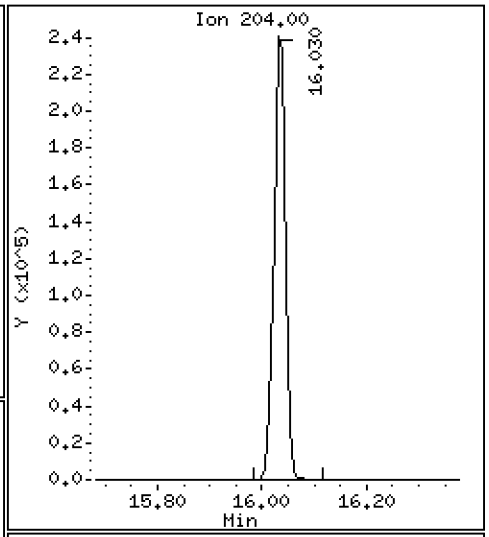
Concentration: 4.975 ug/mL

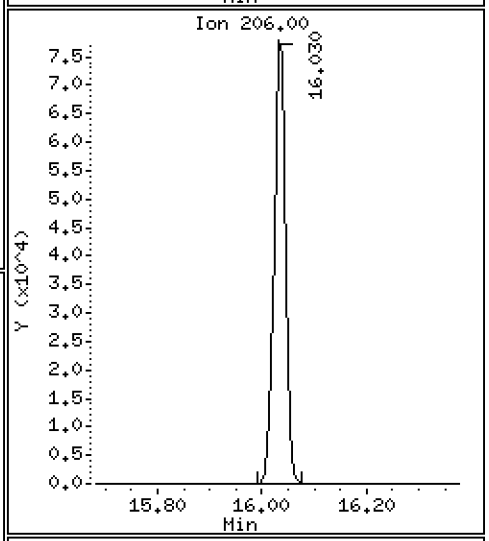


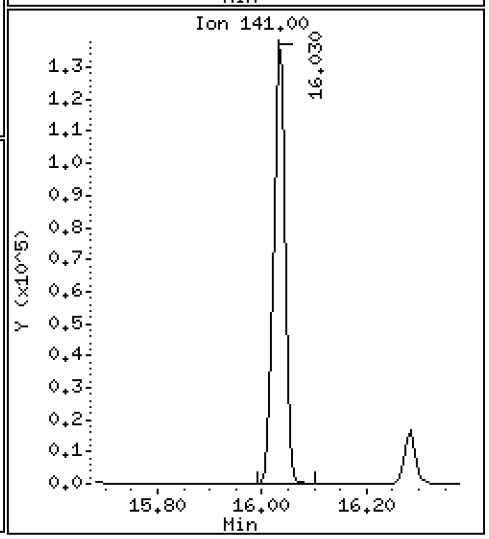












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

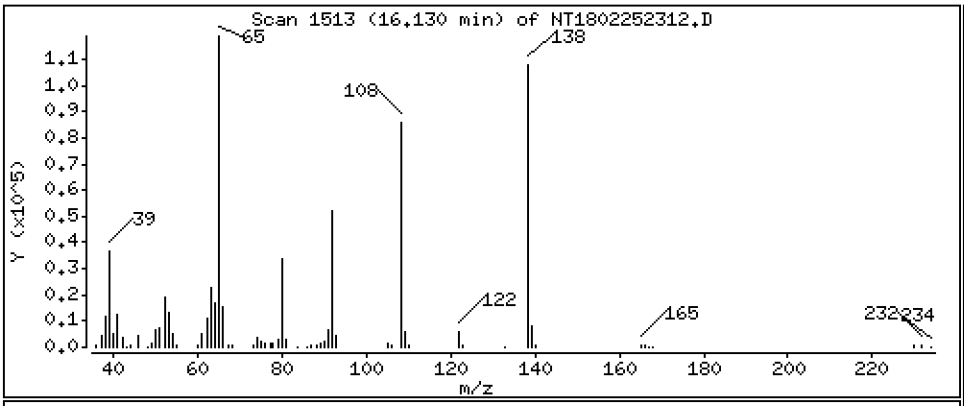
Operator: VTS

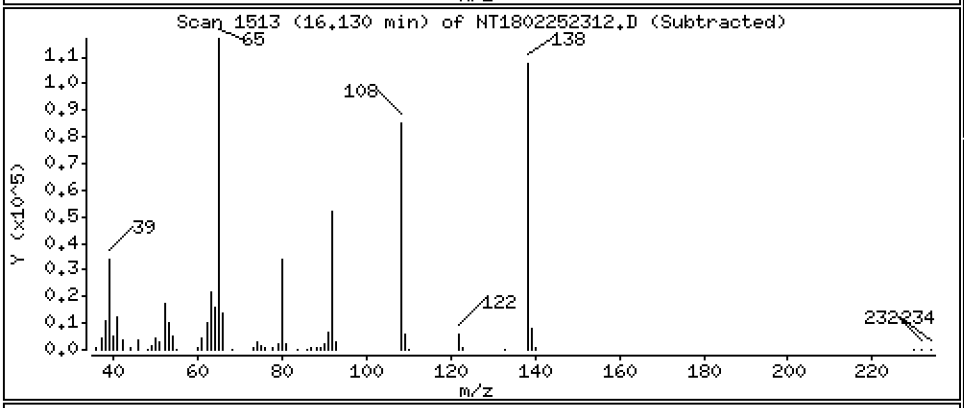
Column phase: ZB-5msi

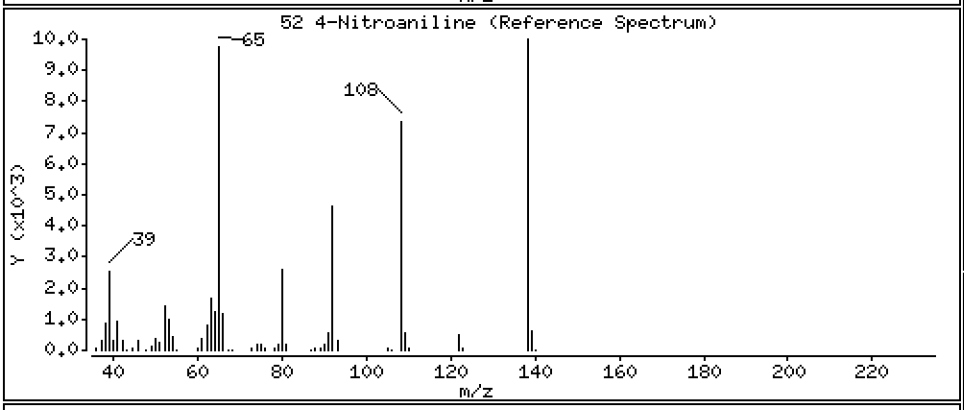
Column diameter: 0.25

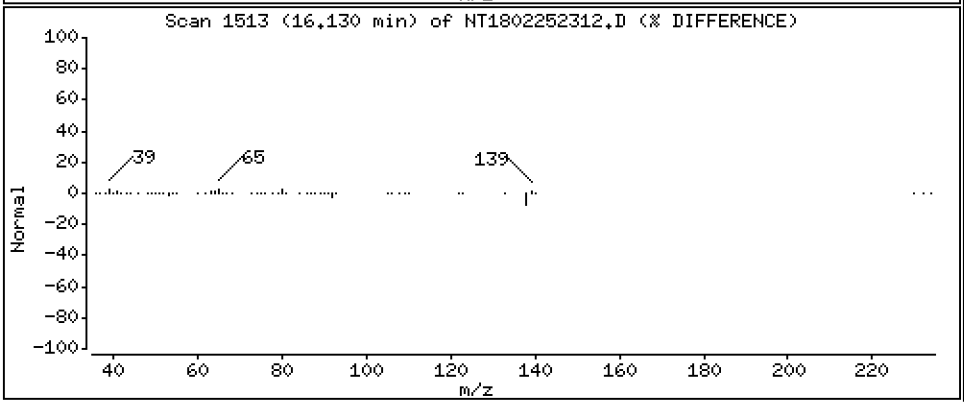
52 4-Nitroaniline

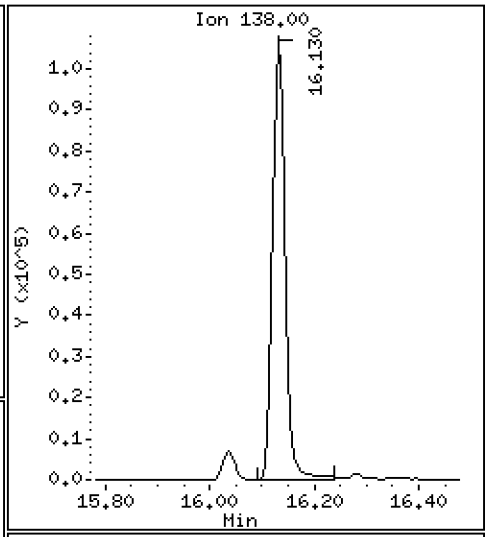
Concentration: 4.601 ug/mL

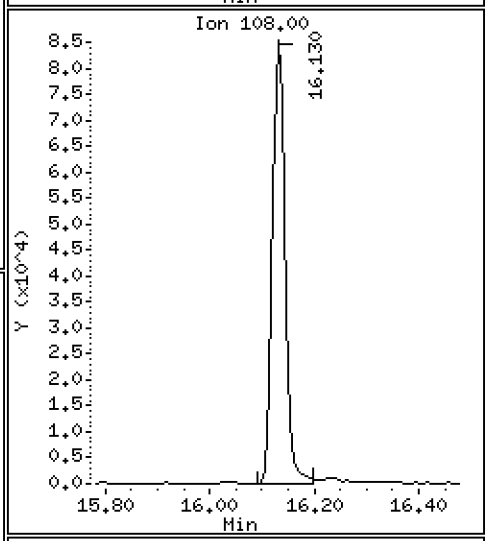


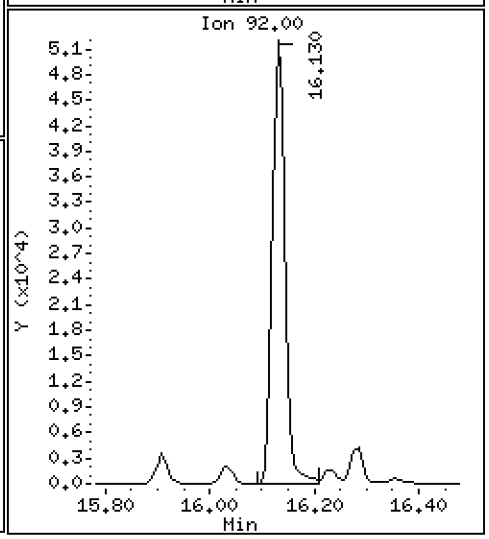












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

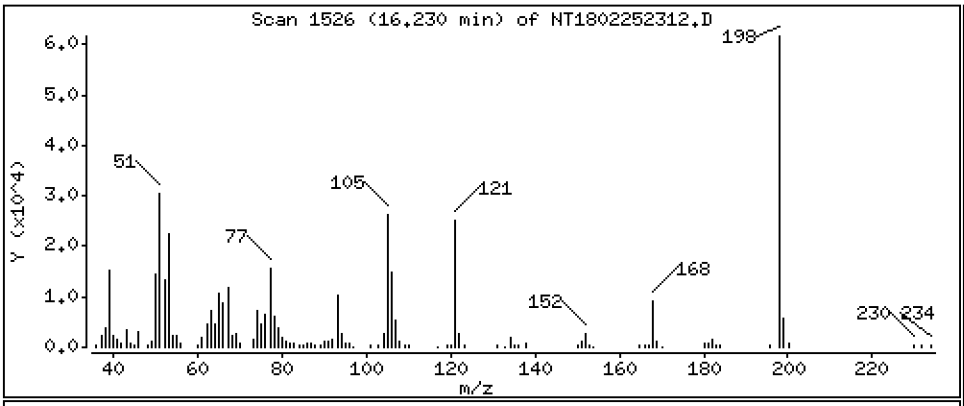
Operator: VTS

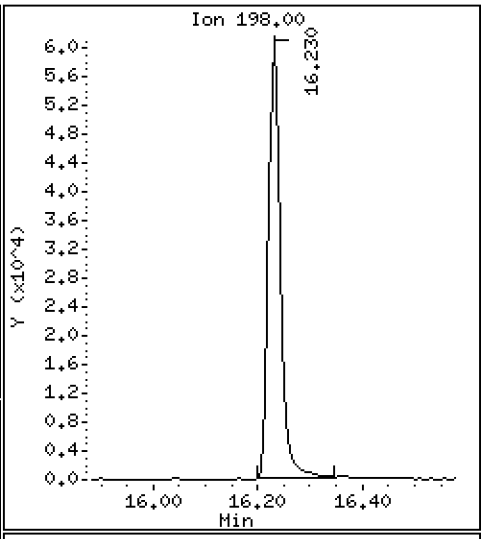
Column phase: ZB-5msi

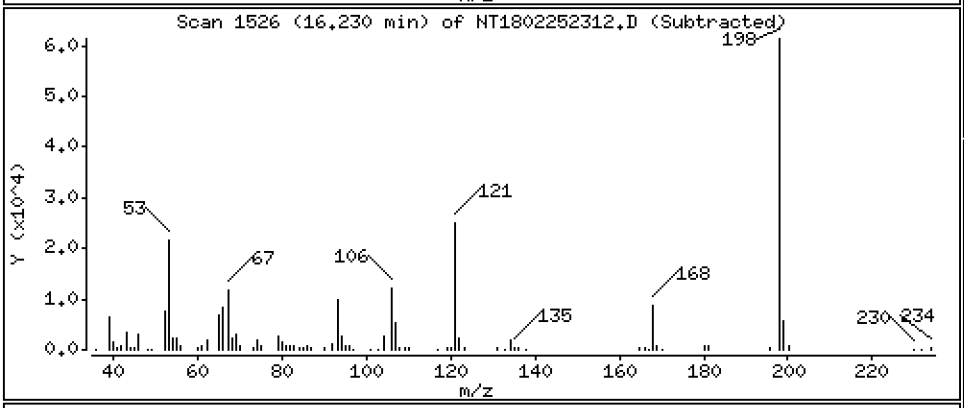
Column diameter: 0.25

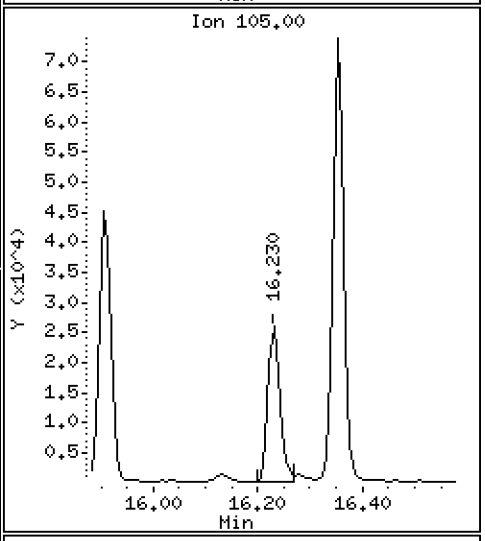
53 4,6-Dinitro-2-methylphenol

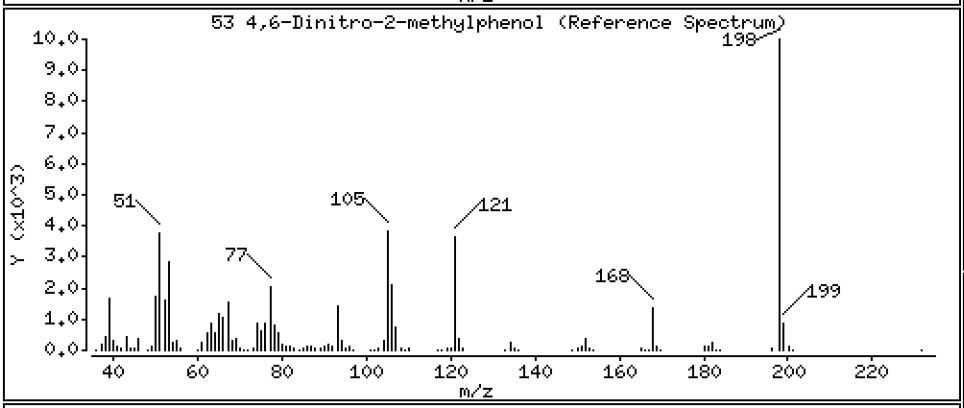
Concentration: 3.596 ug/mL

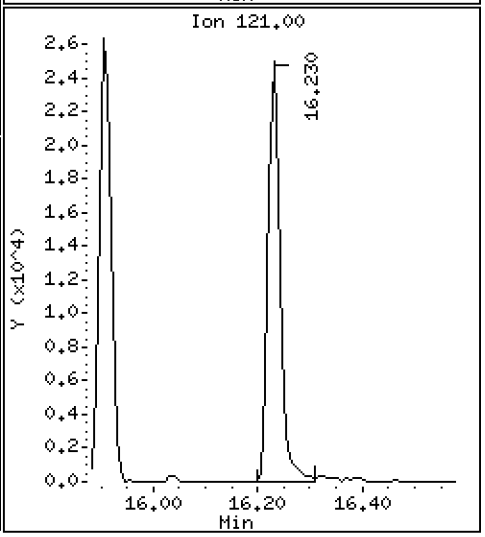


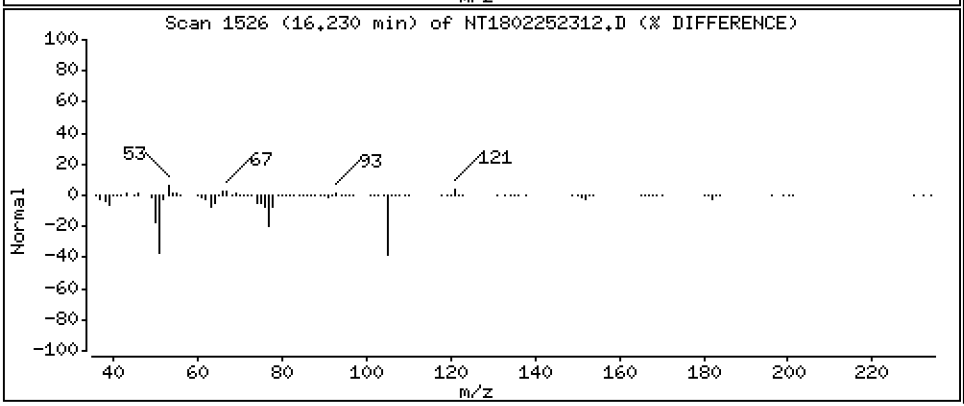












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

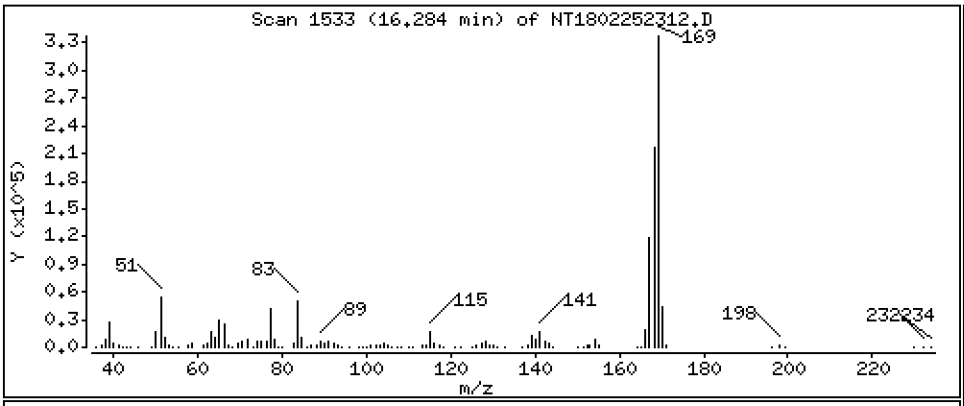
Operator: VTS

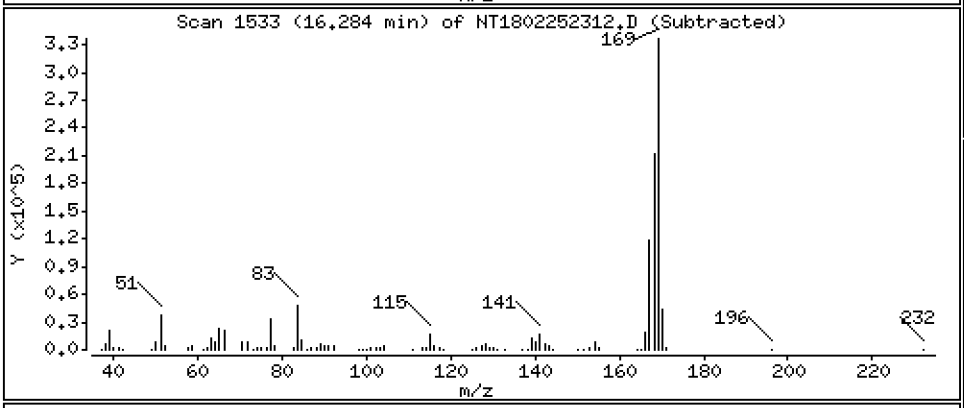
Column phase: ZB-5msi

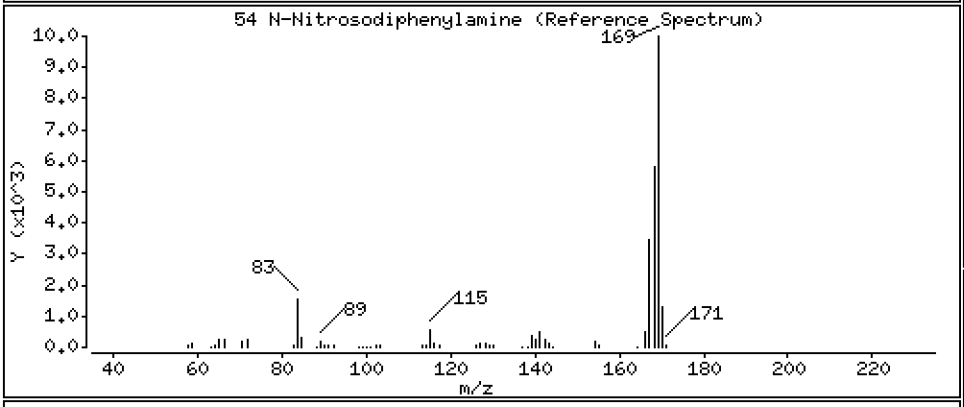
Column diameter: 0.25

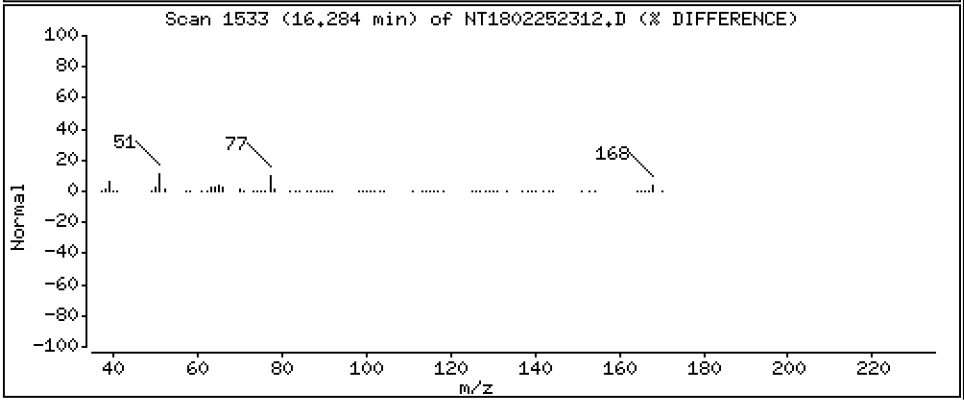
54 N-Nitrosodiphenylamine

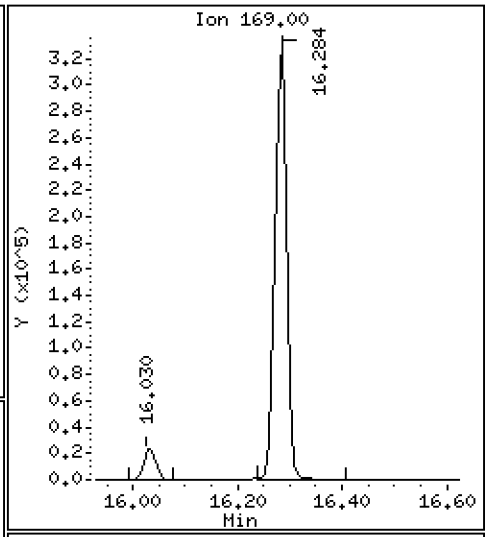
Concentration: 4.602 ug/mL

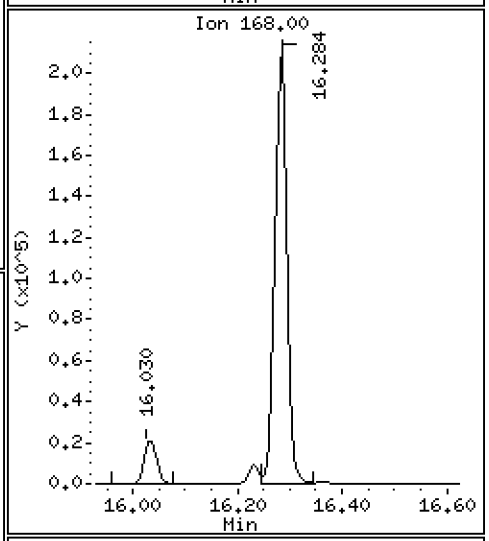


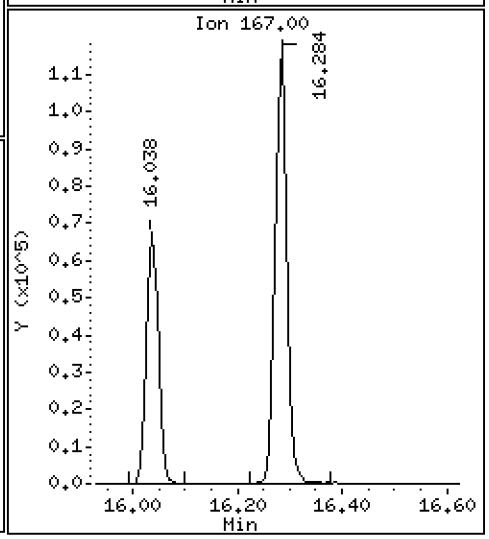












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

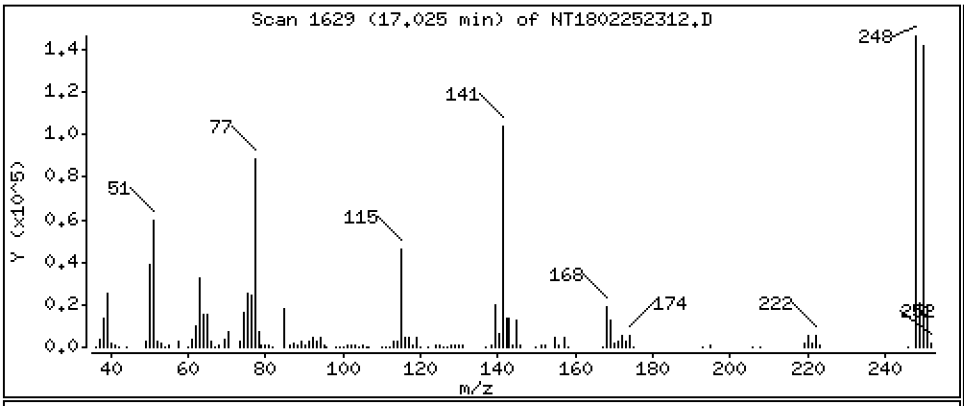
Operator: VTS

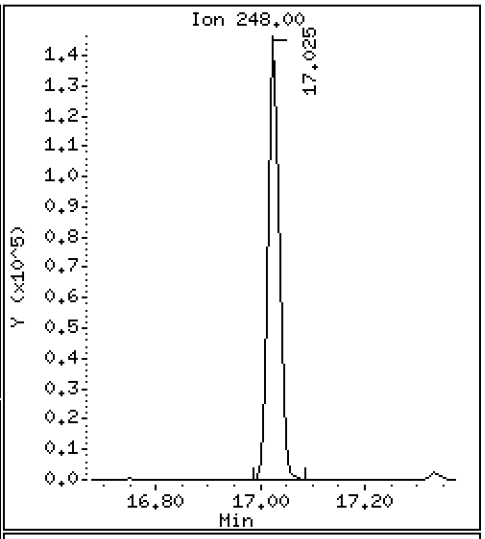
Column phase: ZB-5msi

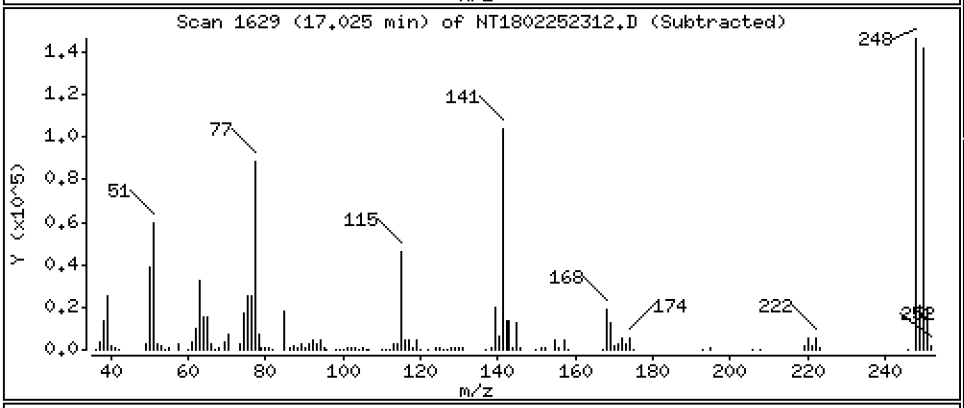
Column diameter: 0.25

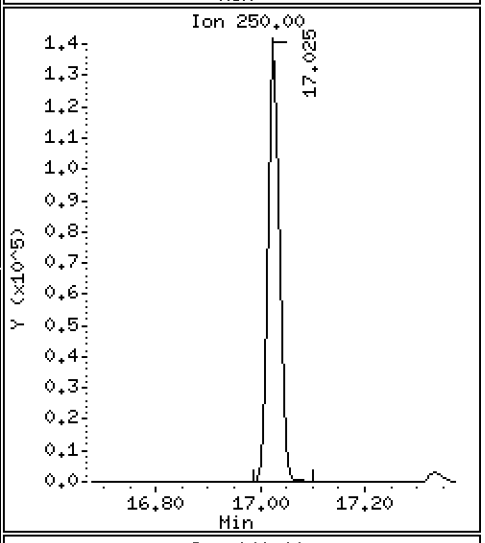
56 4-Bromophenyl-phenylether

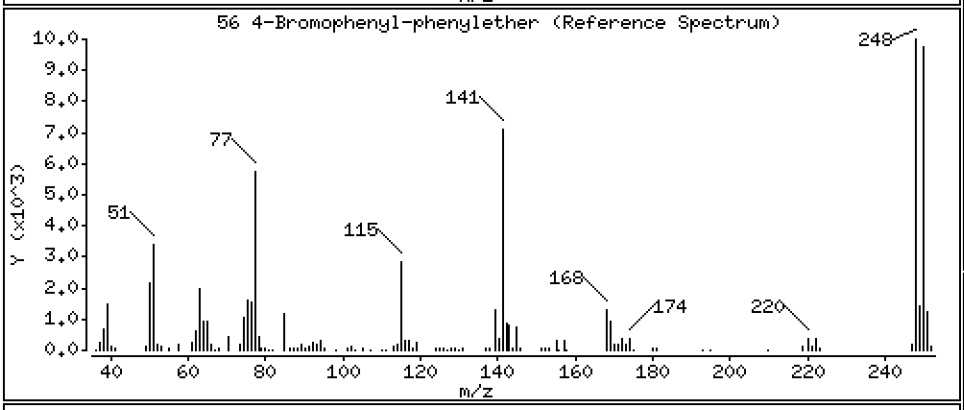
Concentration: 4.884 ug/mL

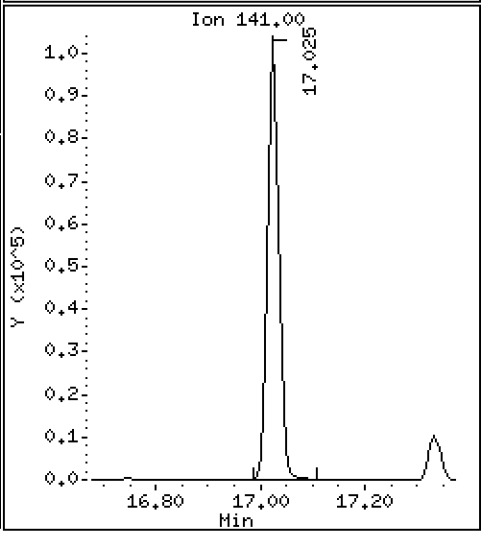


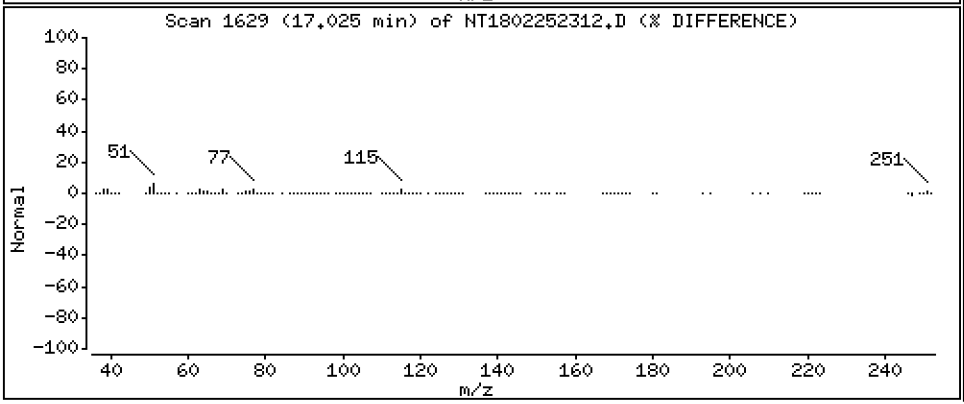












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

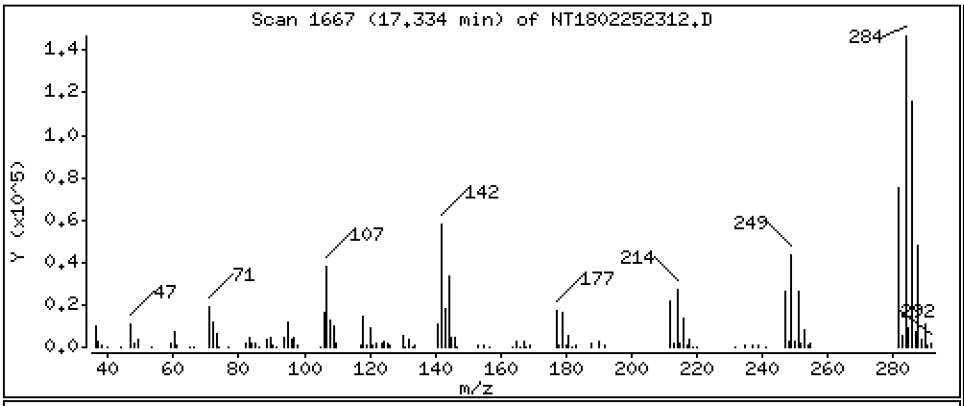
Operator: VTS

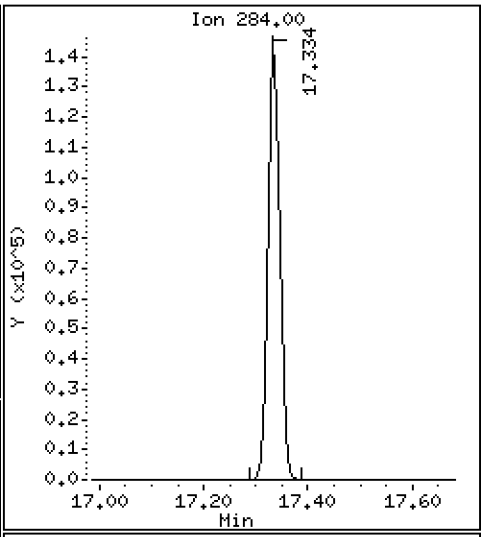
Column phase: ZB-5msi

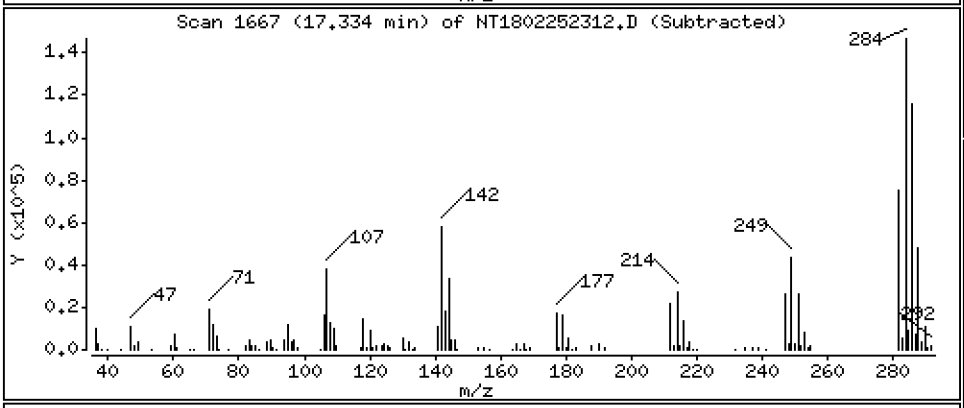
Column diameter: 0.25

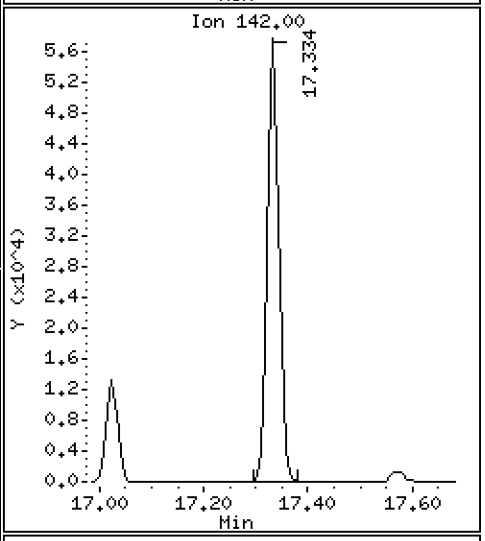
57 Hexachlorobenzene

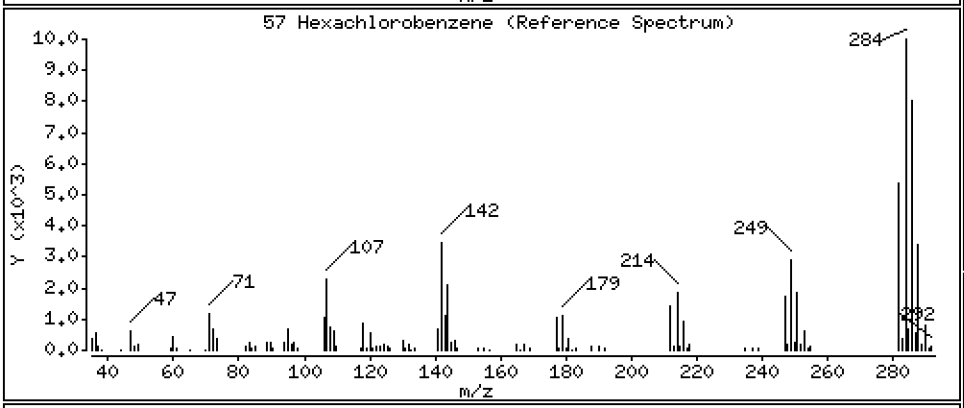
Concentration: 4.422 ug/mL

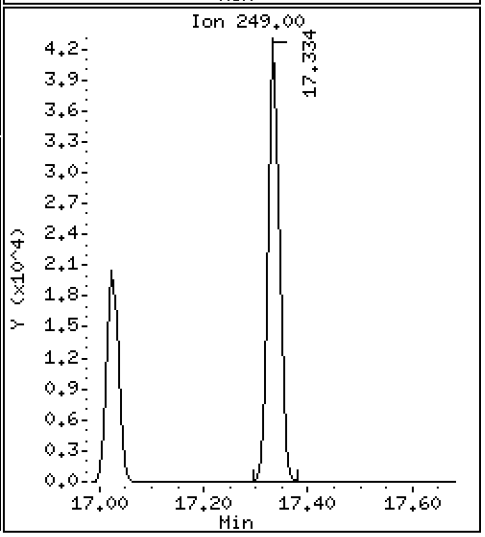


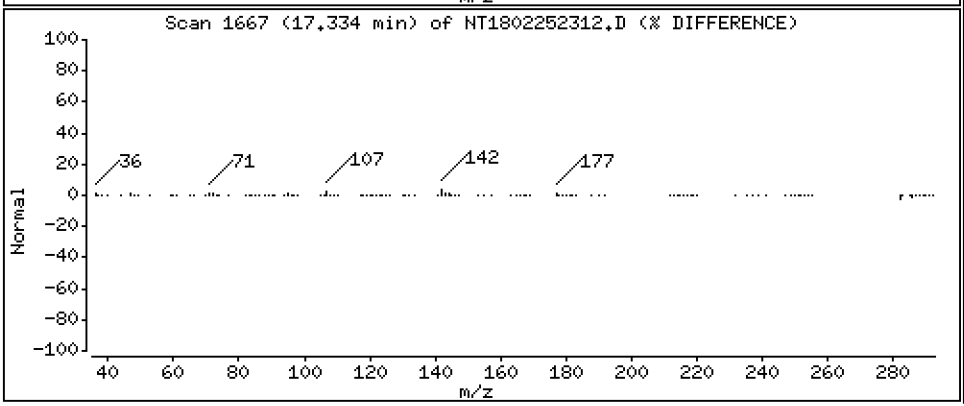












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

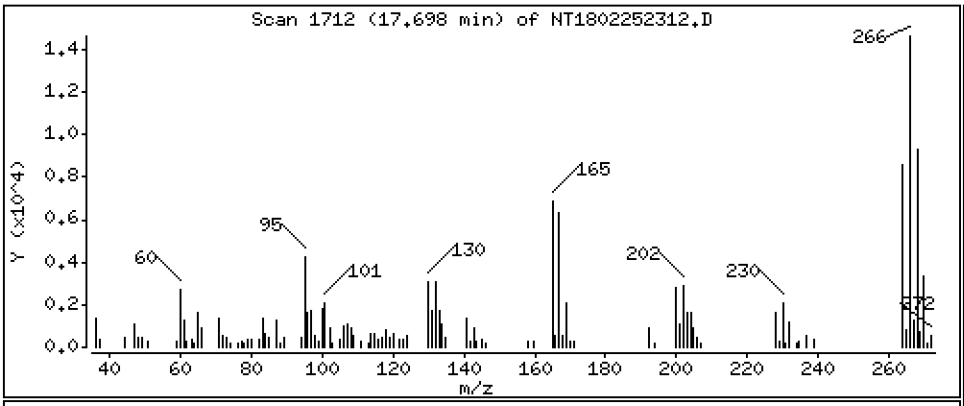
Operator: VTS

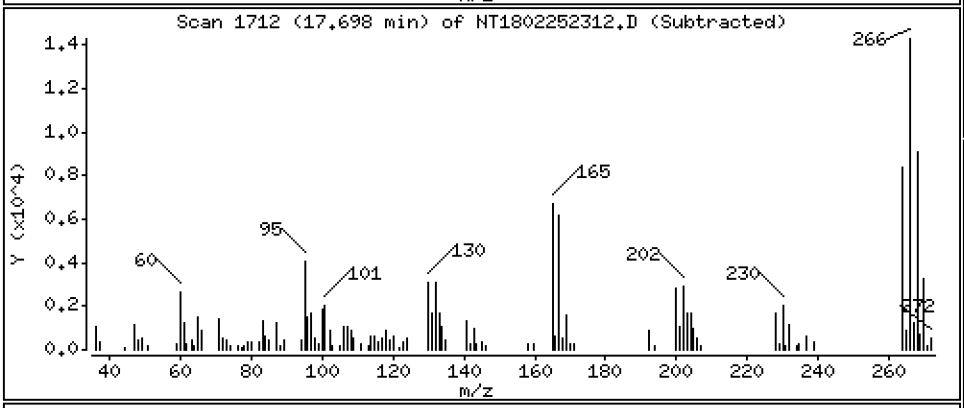
Column phase: ZB-5msi

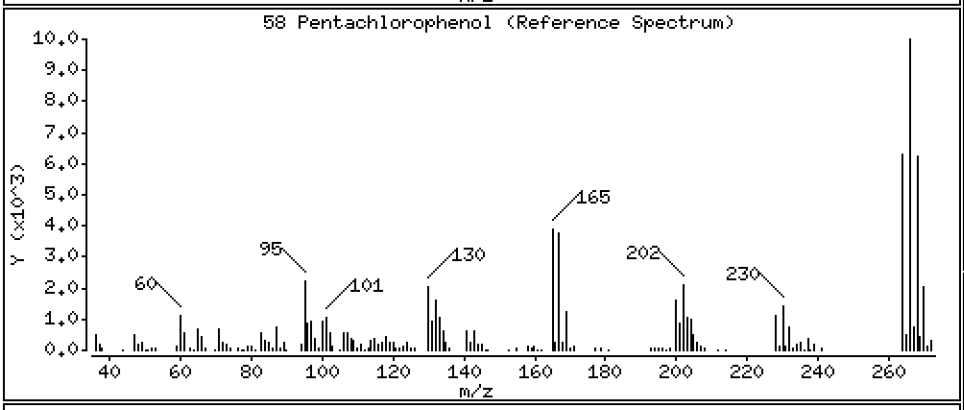
Column diameter: 0.25

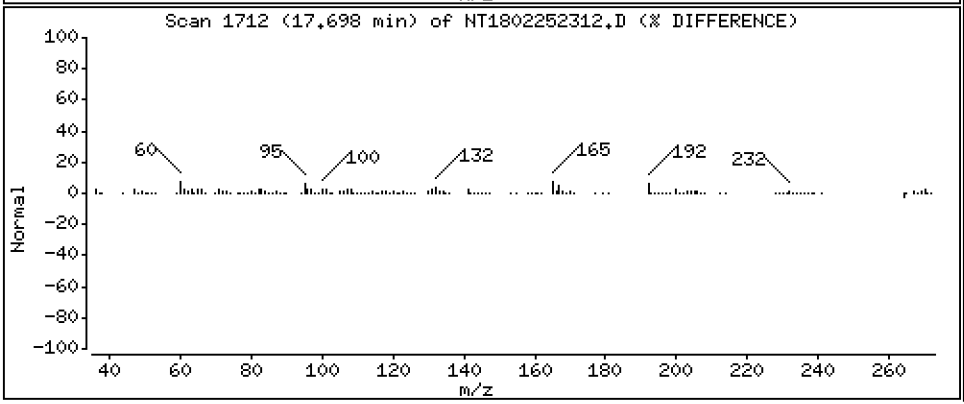
58 Pentachlorophenol

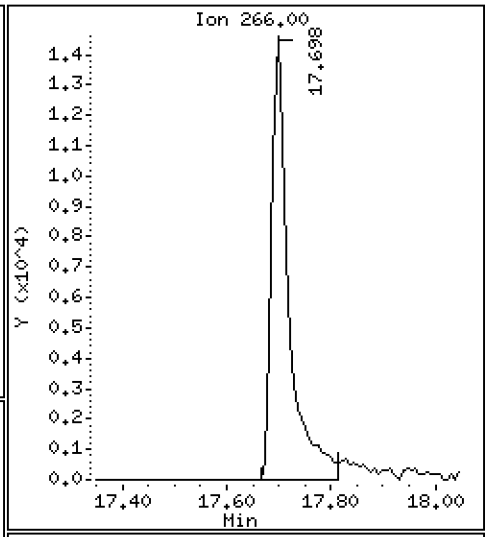
Concentration: 2.454 ug/mL

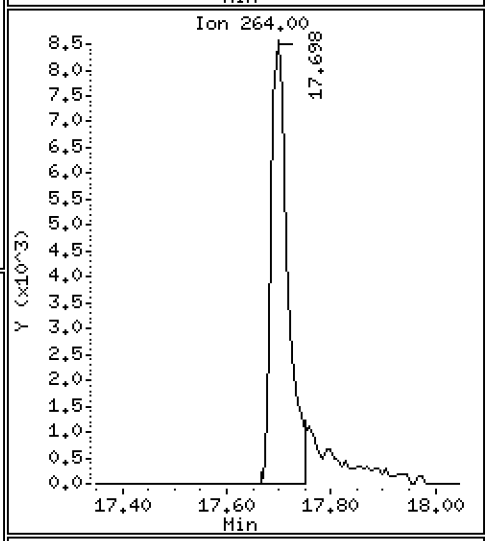


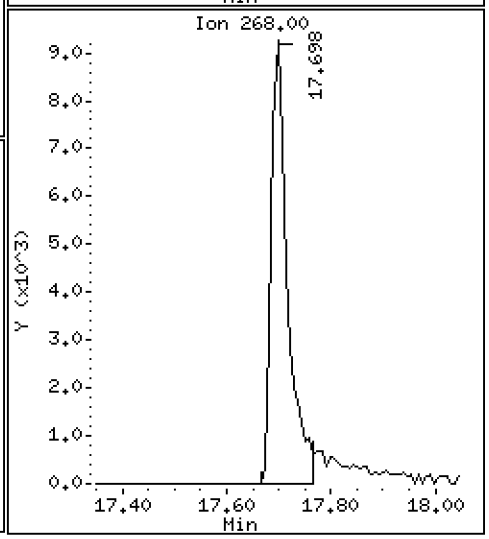












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

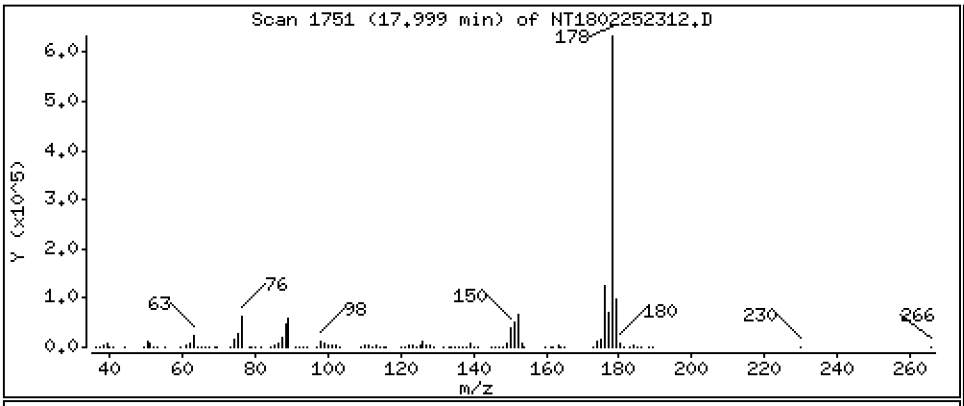
Operator: VTS

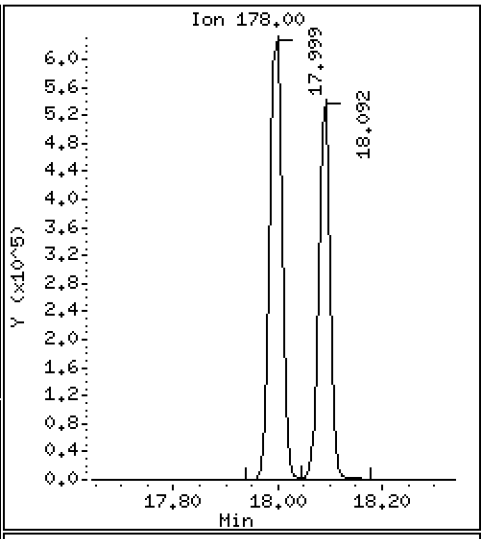
Column phase: ZB-5msi

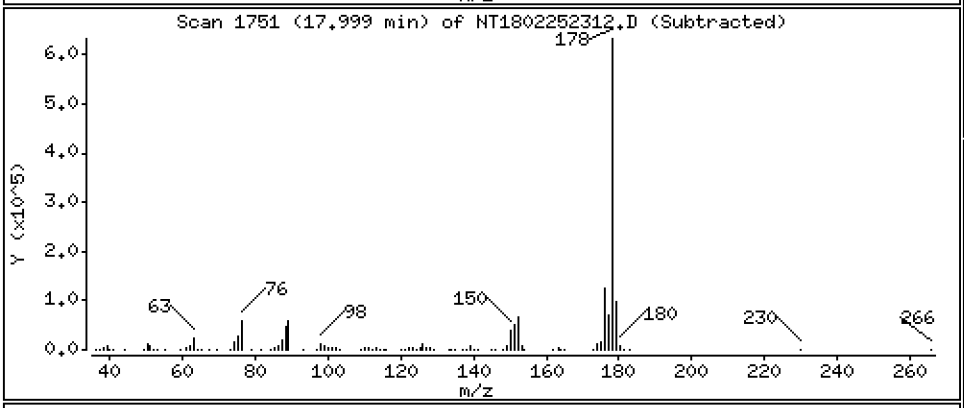
Column diameter: 0.25

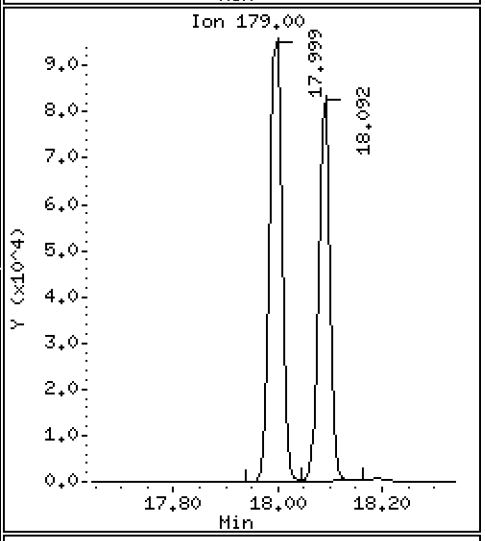
60 Phenanthrene

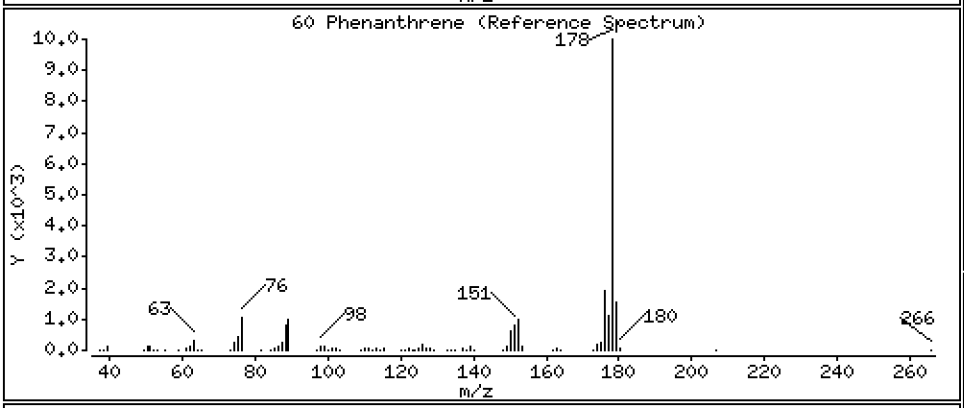
Concentration: 4.397 ug/mL

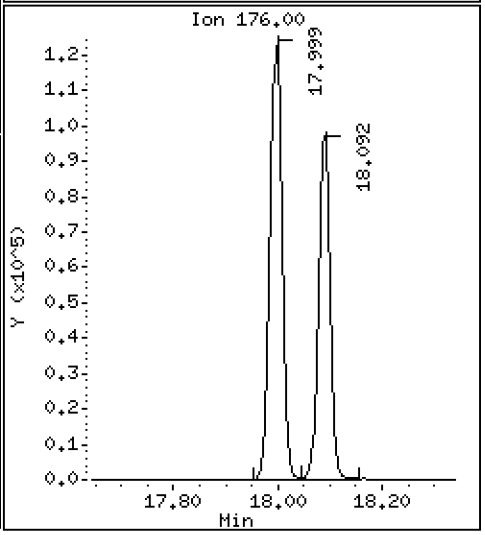


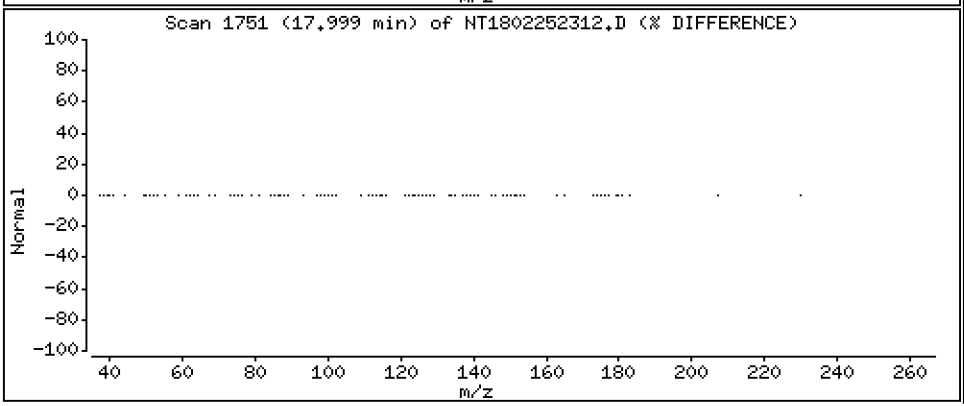












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

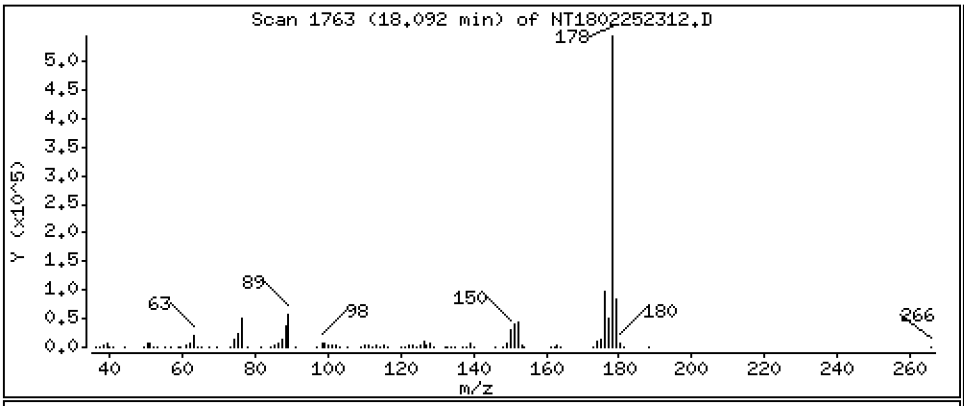
Operator: VTS

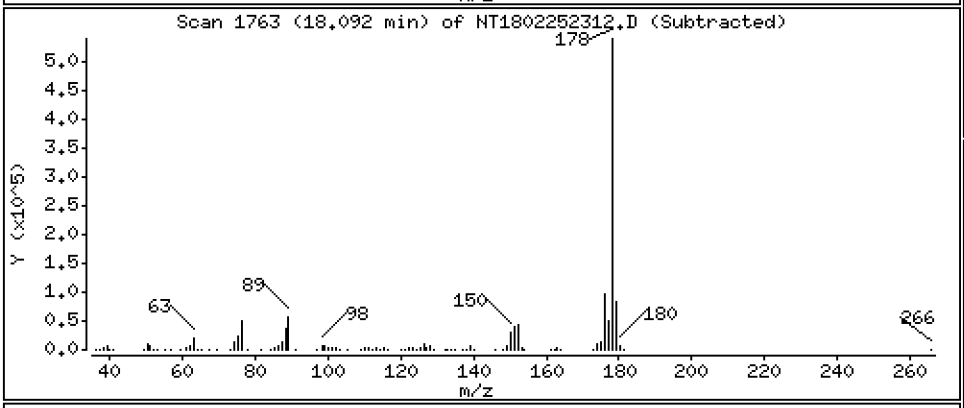
Column phase: ZB-5msi

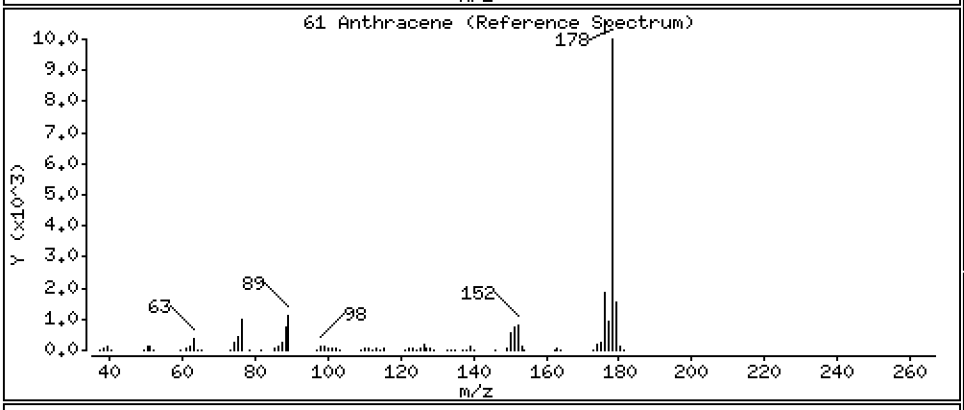
Column diameter: 0.25

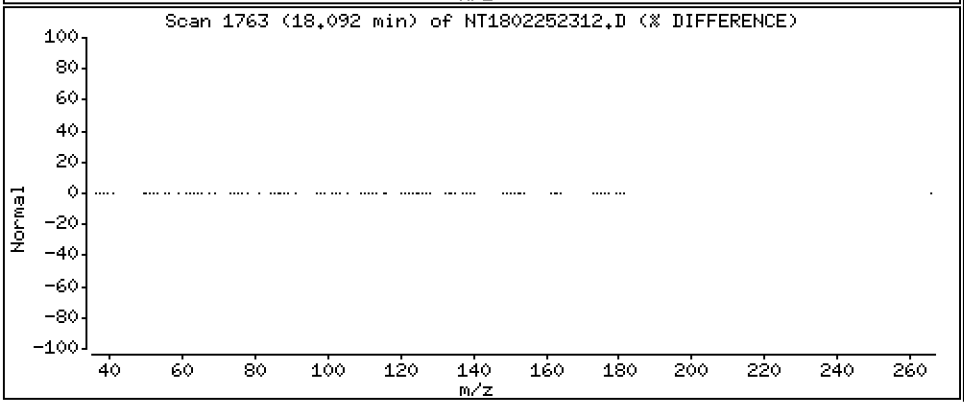
61 Anthracene

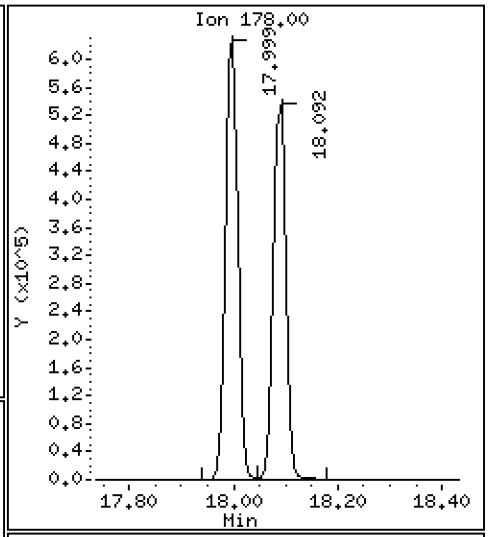
Concentration: 3.959 ug/mL

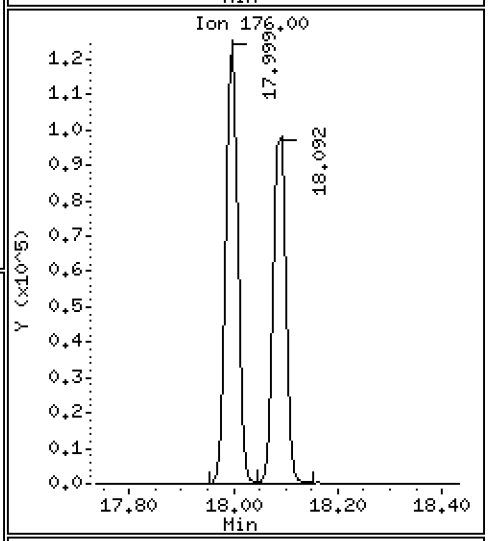


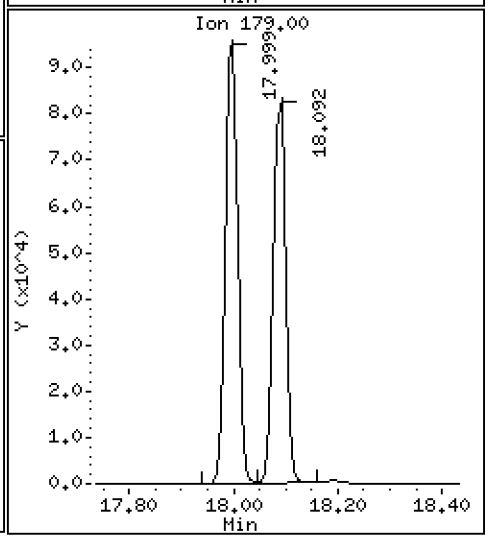












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

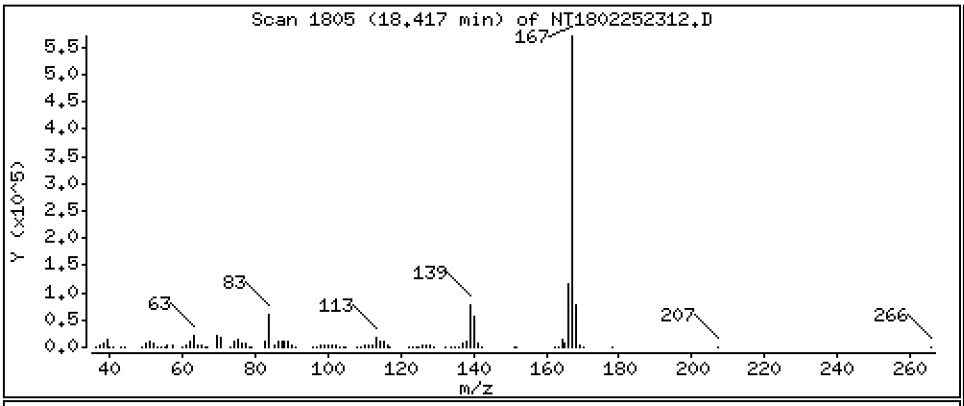
Operator: VTS

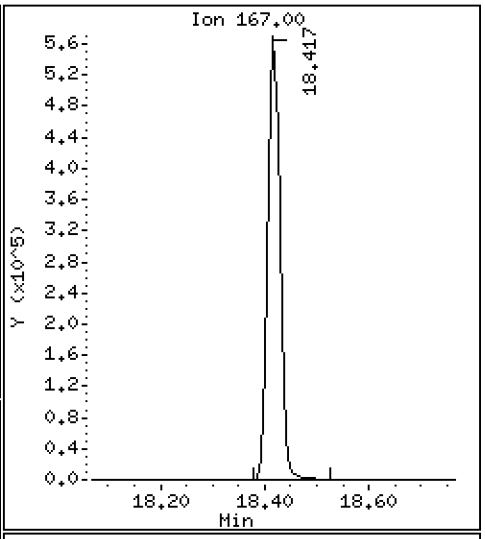
Column phase: ZB-5msi

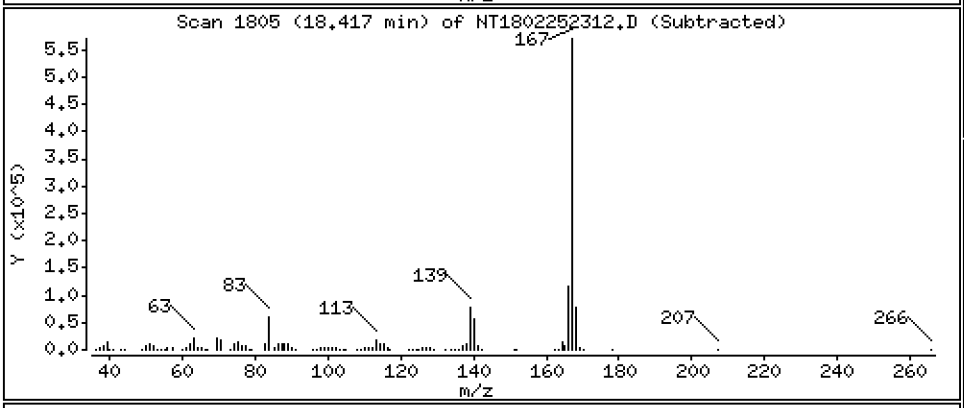
Column diameter: 0.25

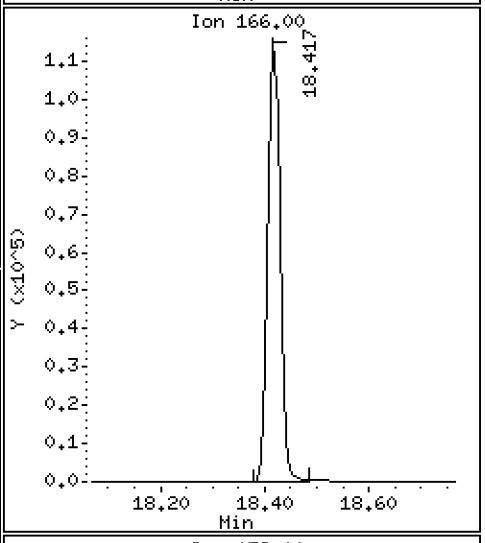
62 Carbazole

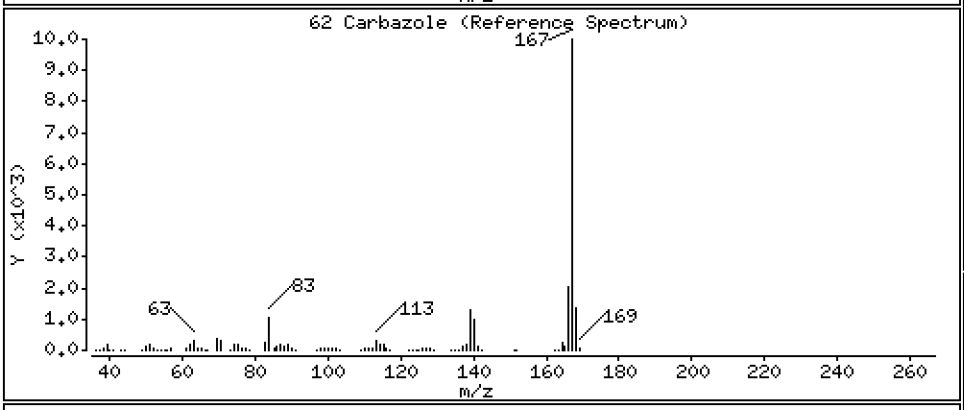
Concentration: 4.463 ug/mL

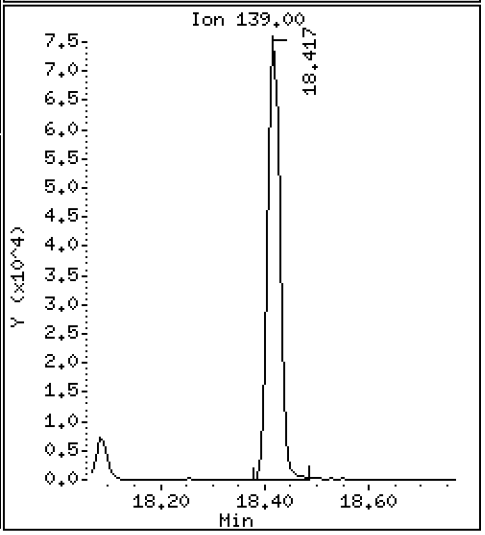


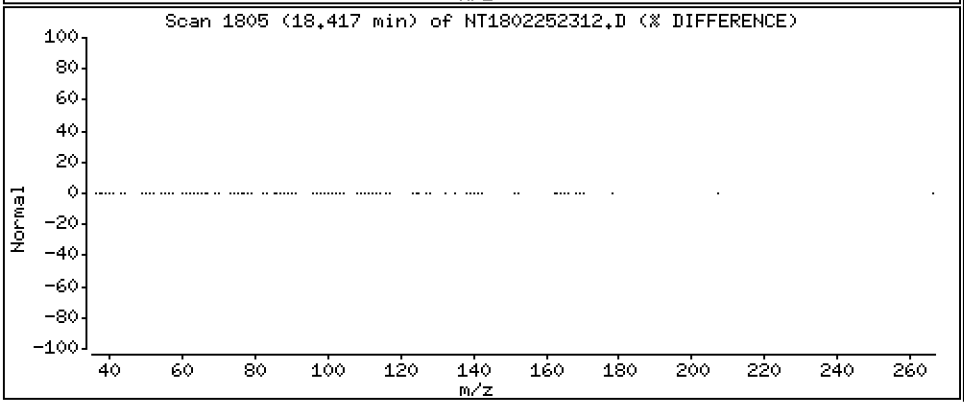












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

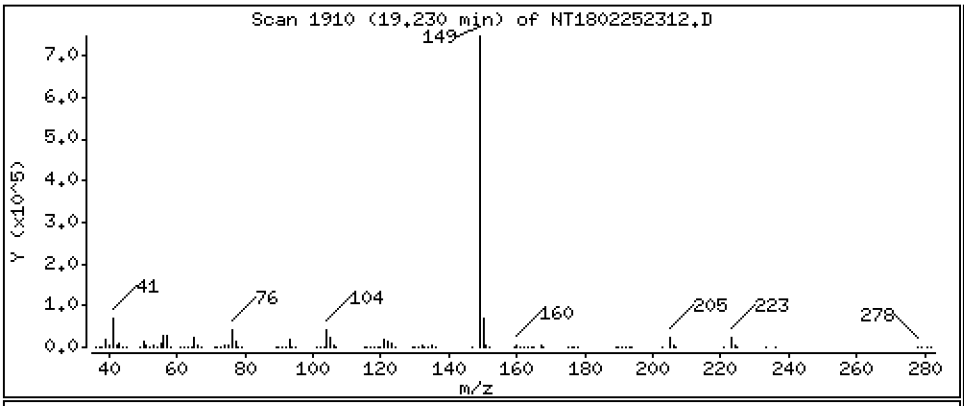
Operator: VTS

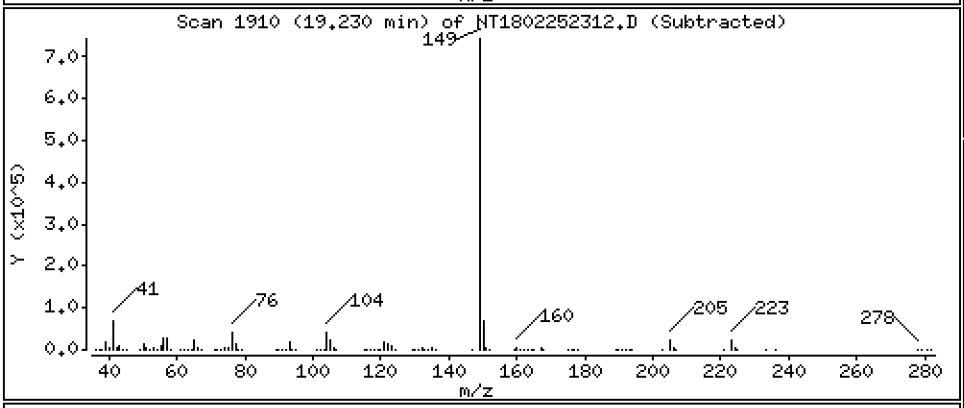
Column phase: ZB-5msi

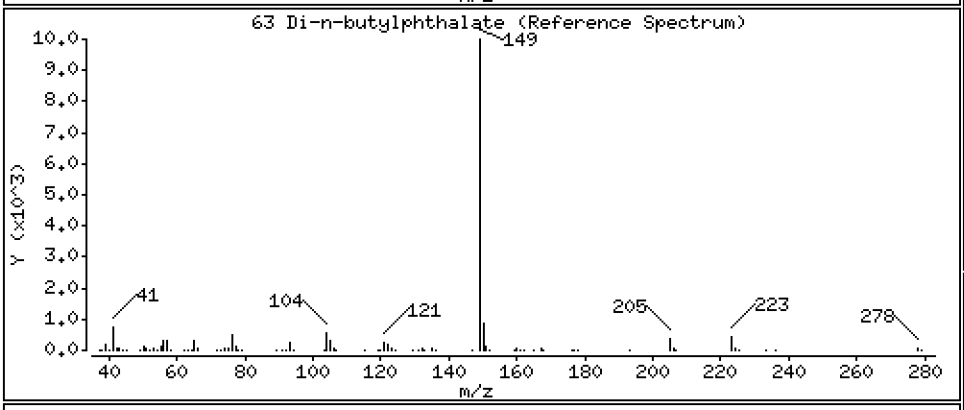
Column diameter: 0.25

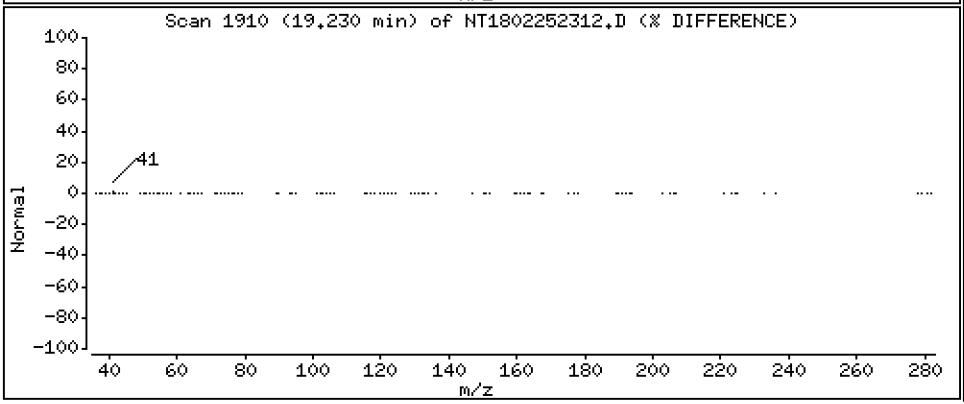
63 Di-n-butylphthalate

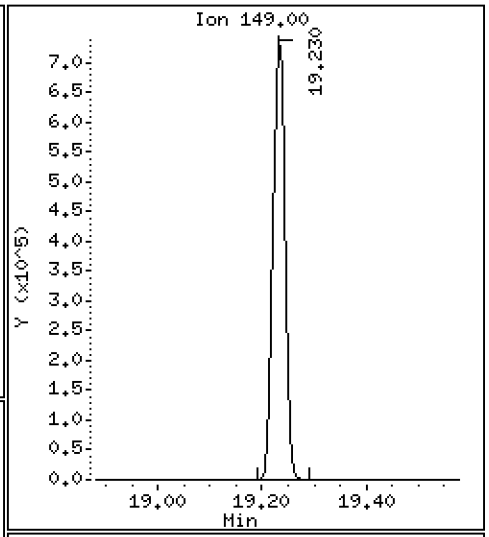
Concentration: 5.159 ug/mL

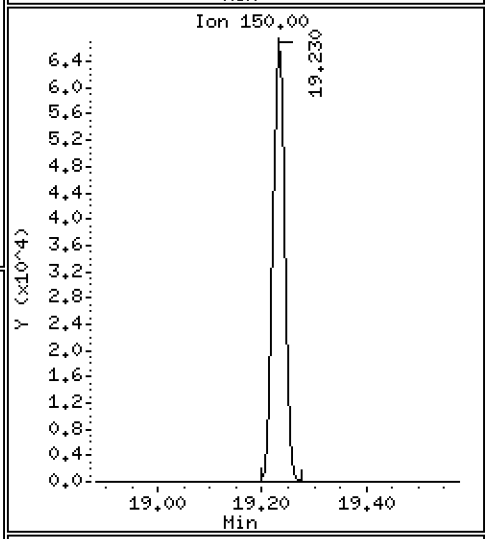


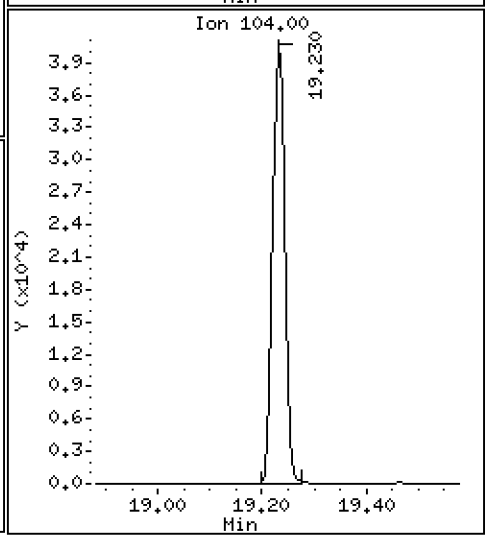












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

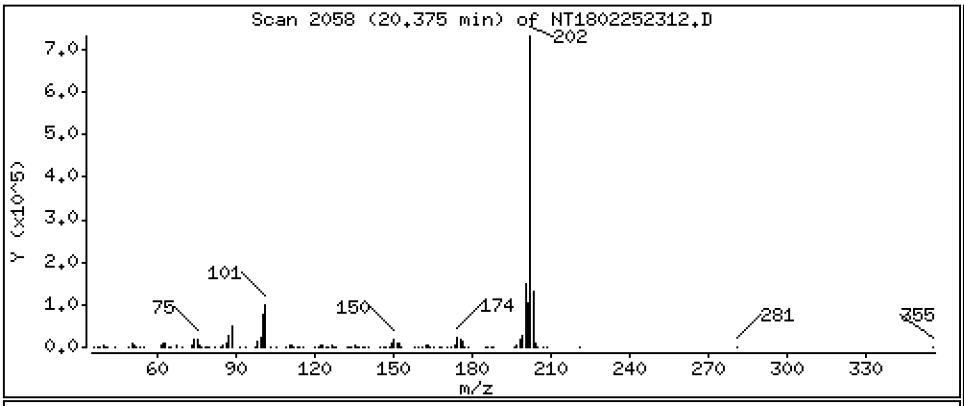
Operator: VTS

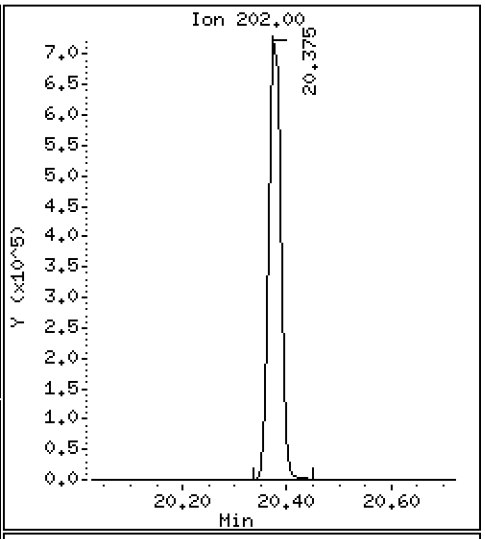
Column phase: ZB-5msi

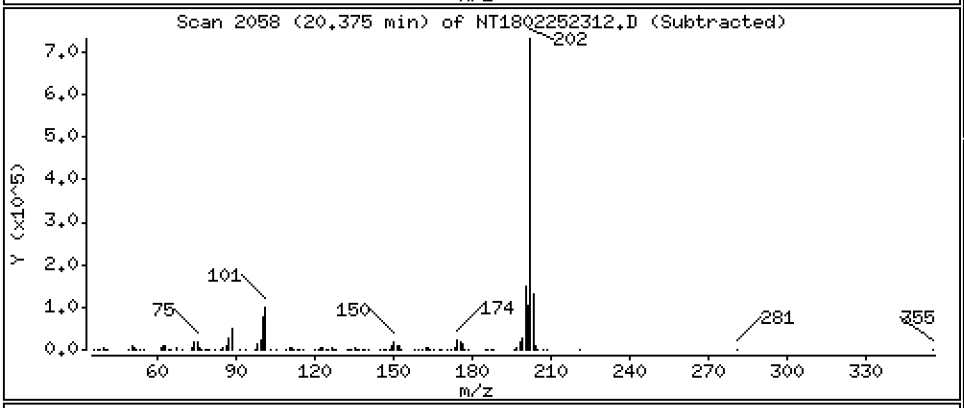
Column diameter: 0.25

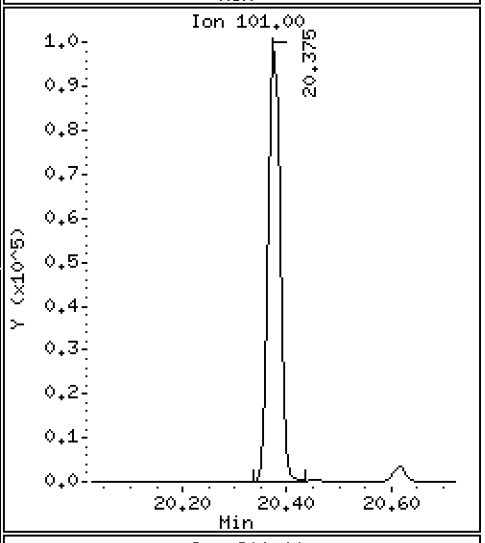
64 Fluoranthene

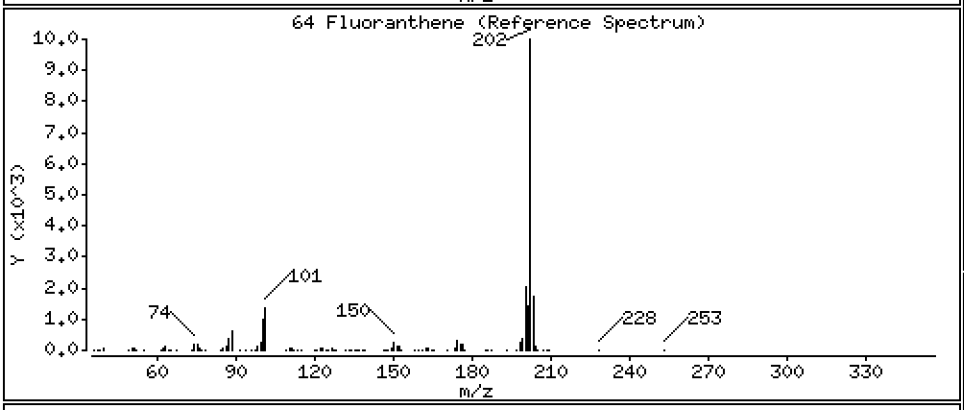
Concentration: 4.812 ug/mL

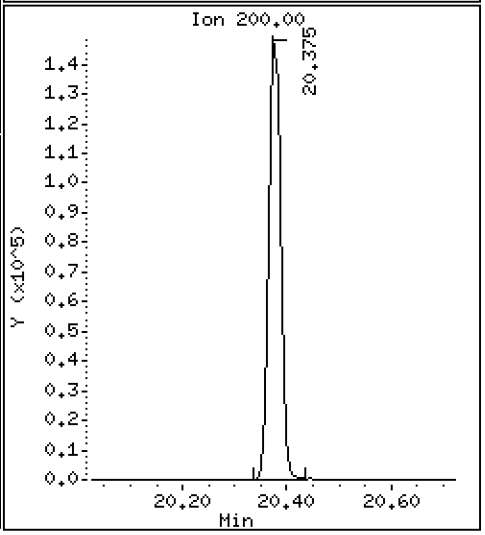


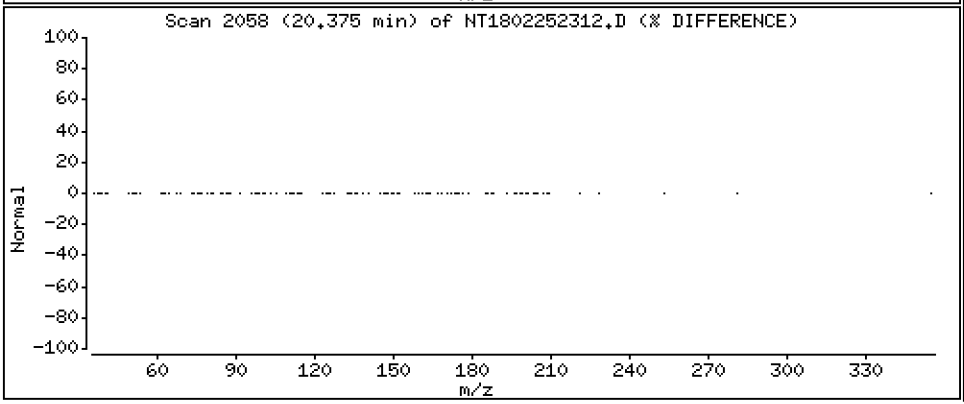












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

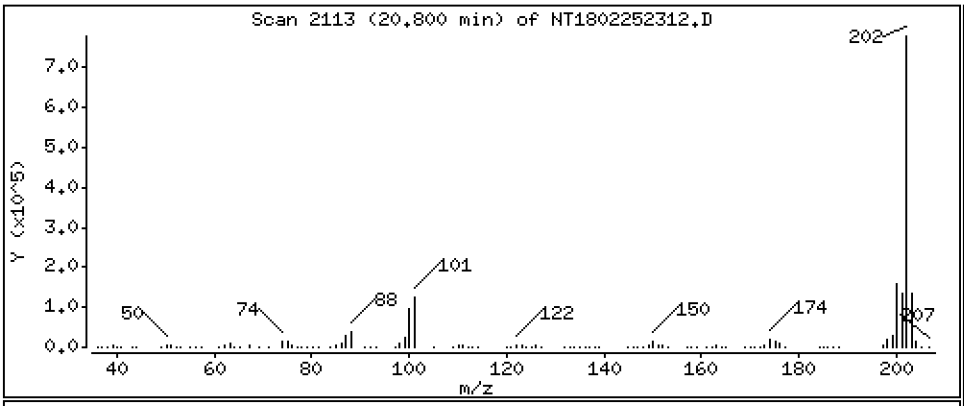
Operator: VTS

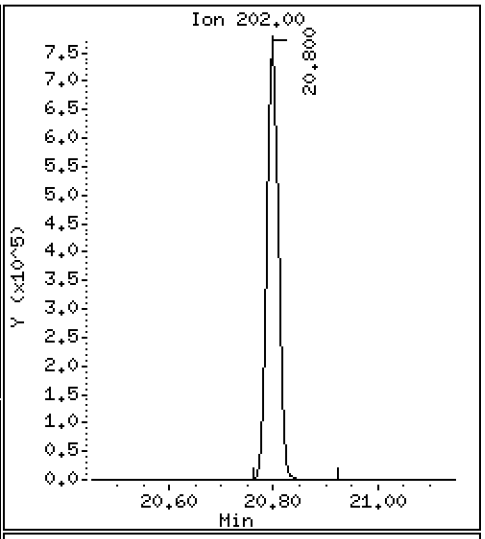
Column phase: ZB-5msi

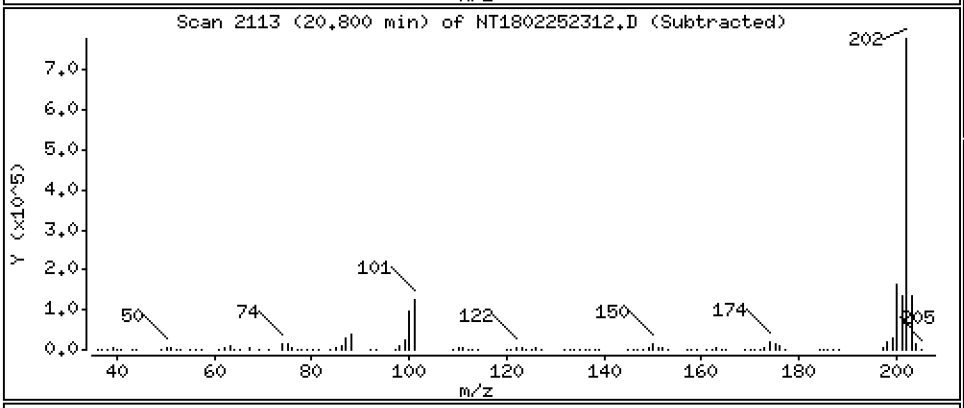
Column diameter: 0.25

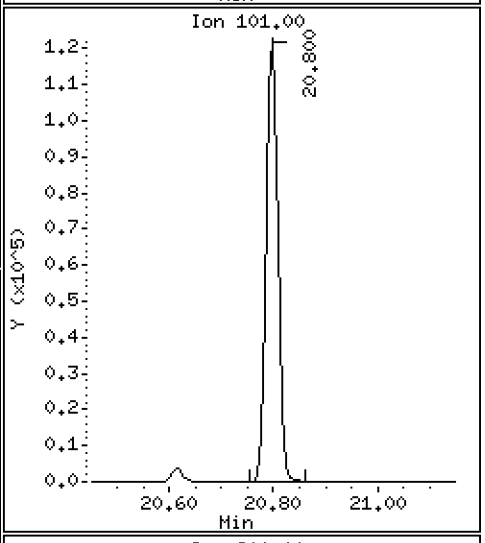
65 Pyrene

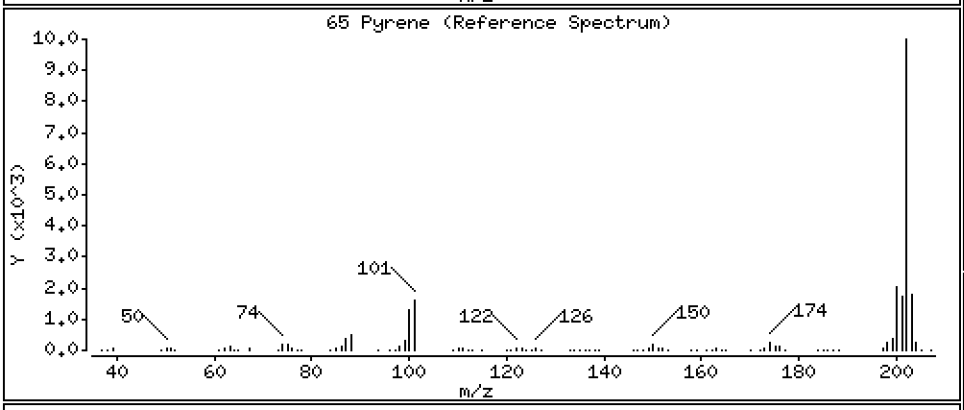
Concentration: 4.559 ug/mL

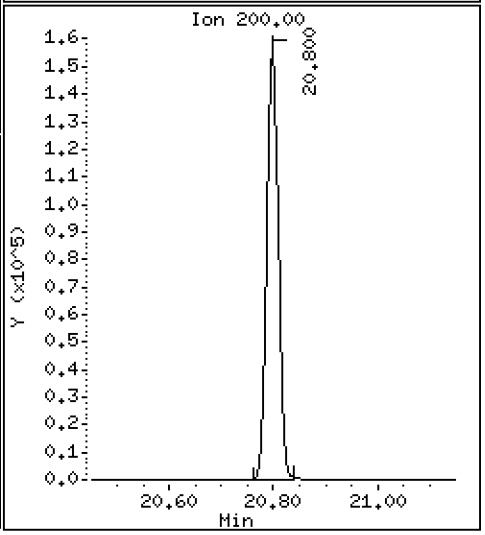


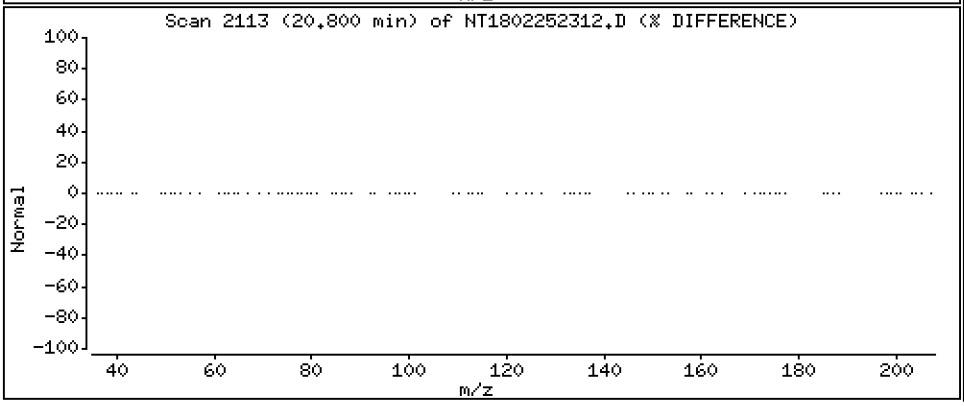












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

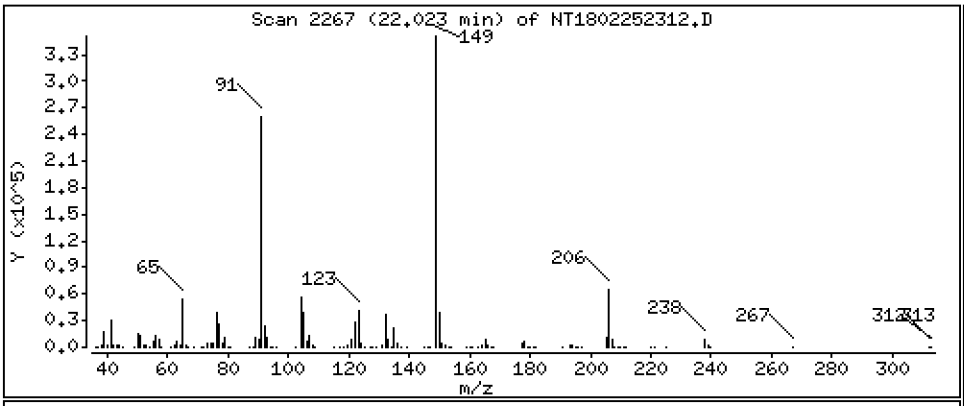
Operator: VTS

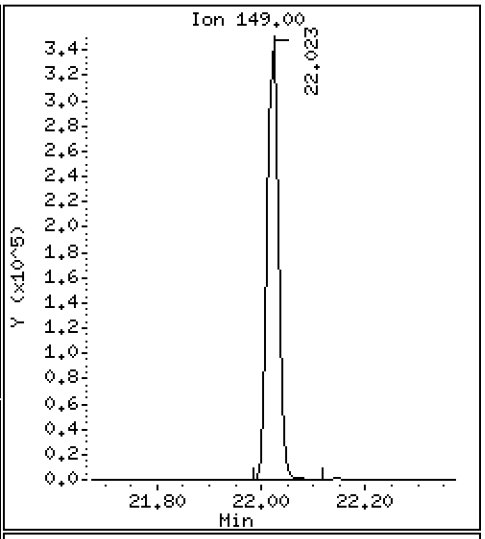
Column phase: ZB-5msi

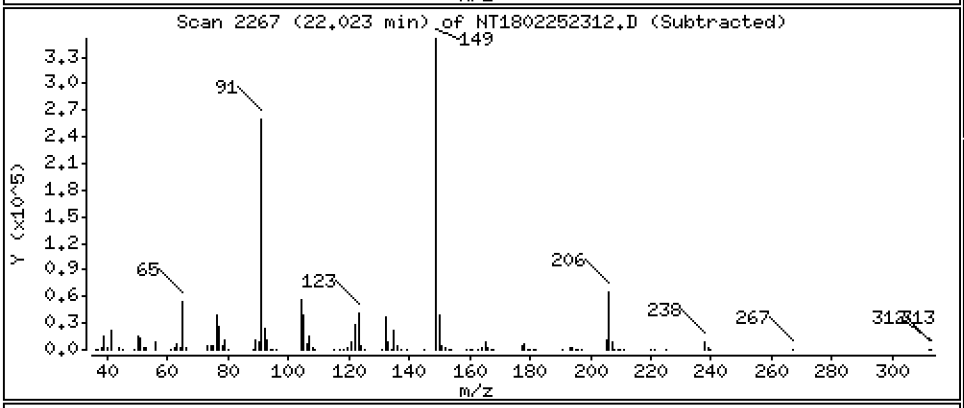
Column diameter: 0.25

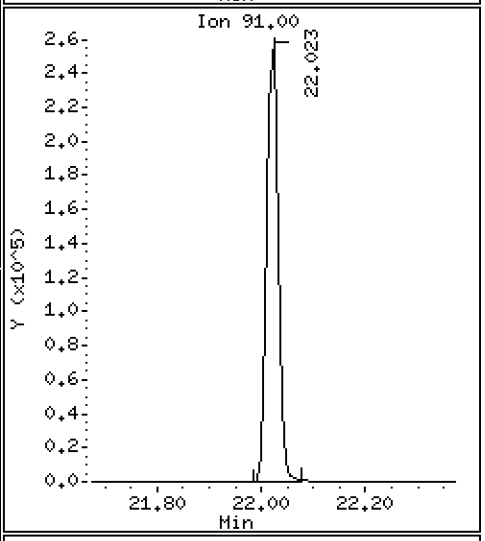
67 Butylbenzylphthalate

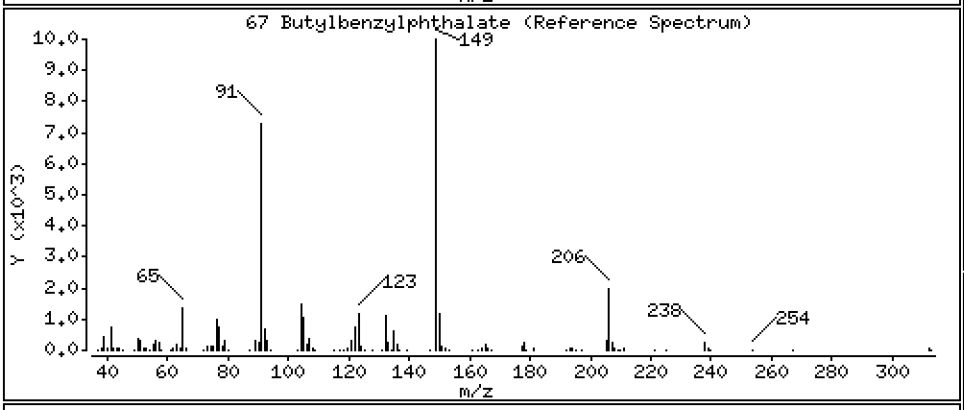
Concentration: 5.322 ug/mL

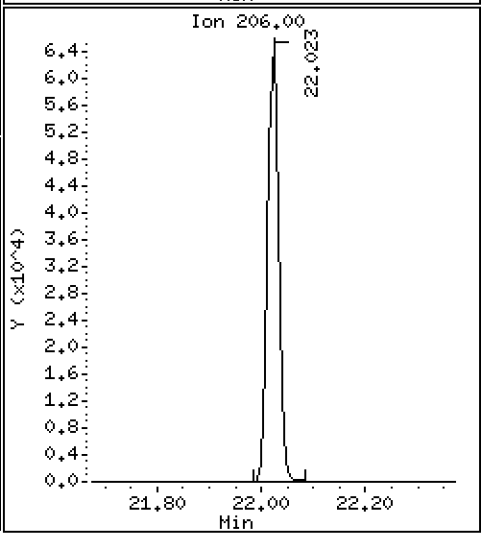


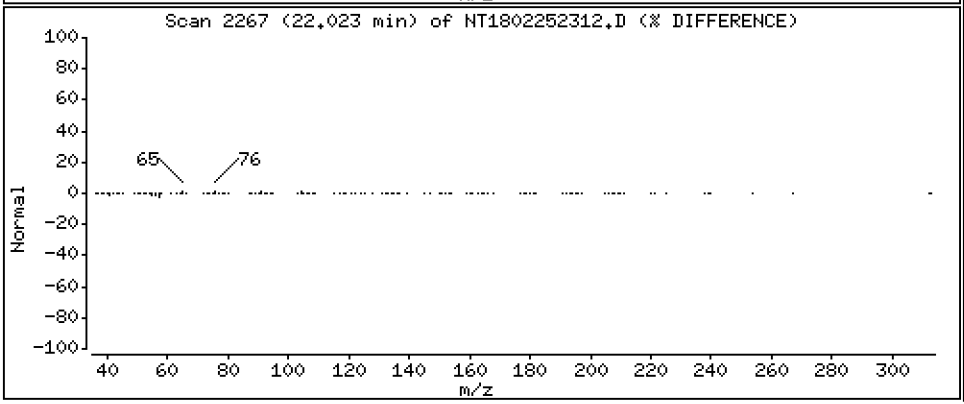












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

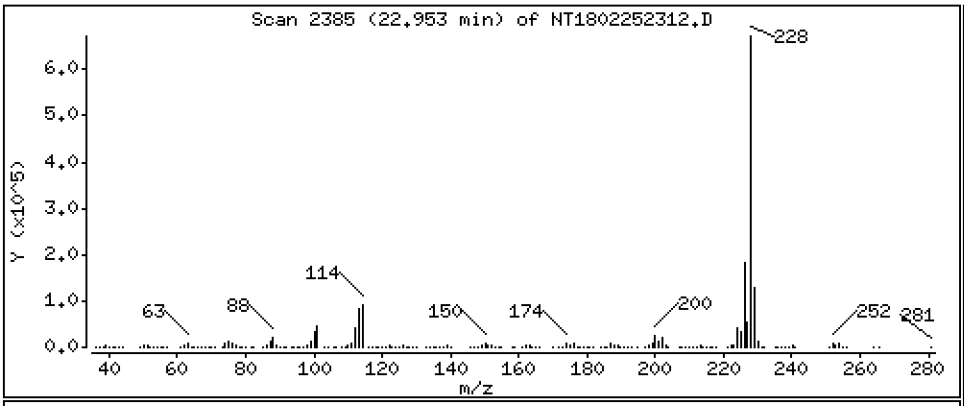
Operator: VTS

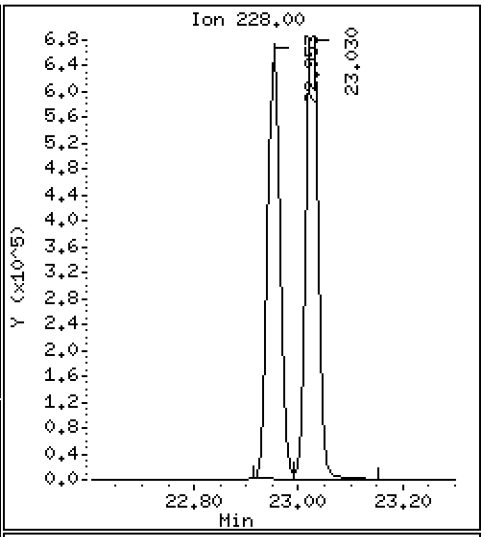
Column phase: ZB-5msi

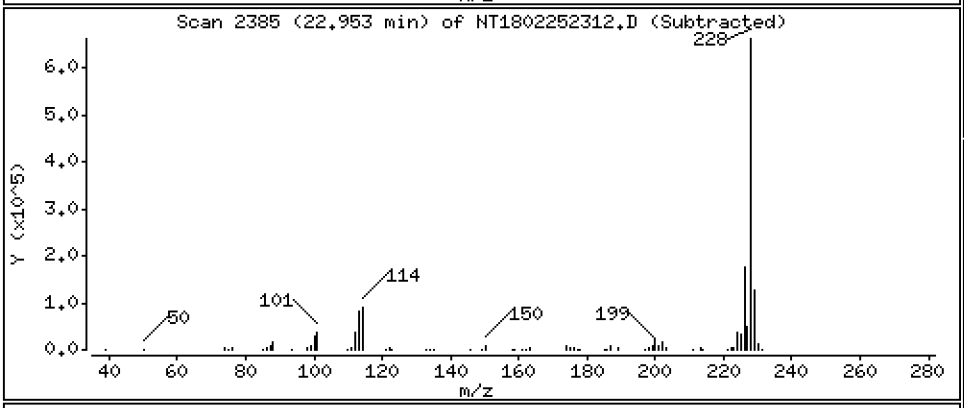
Column diameter: 0.25

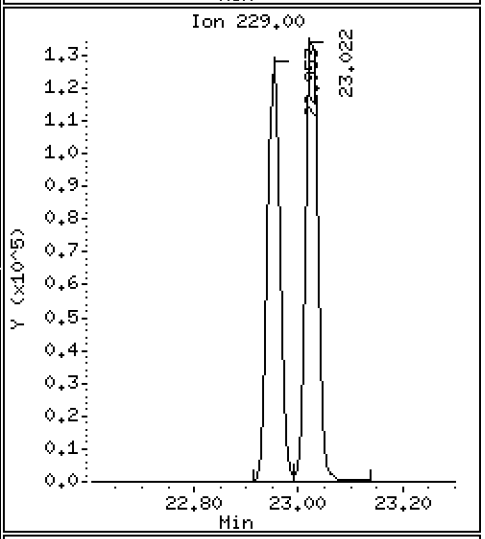
68 Benzo(a)anthracene

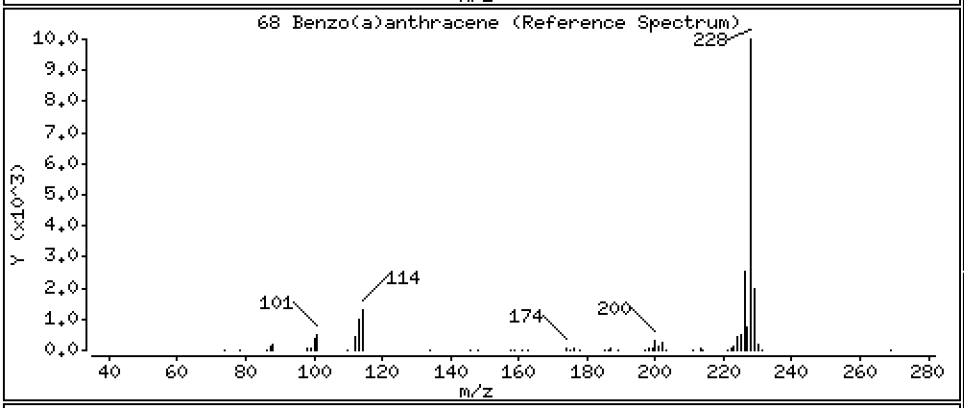
Concentration: 4.472 ug/mL

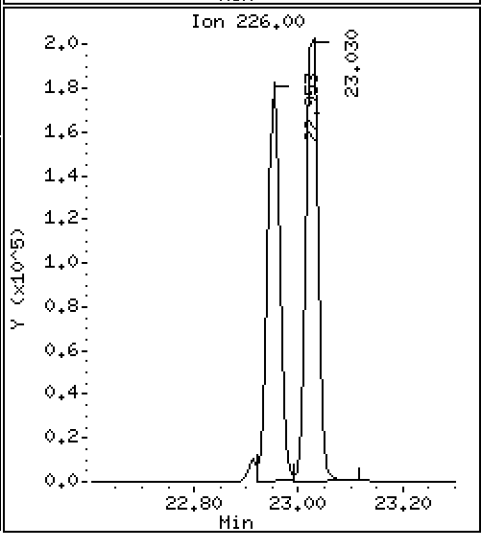


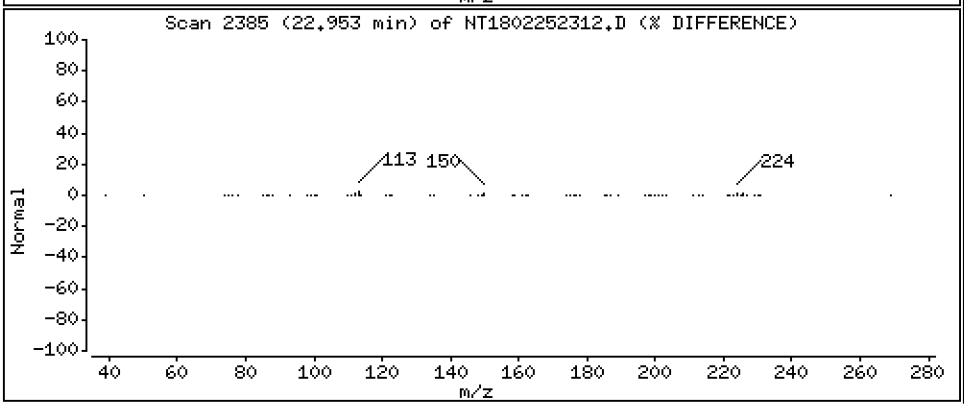












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

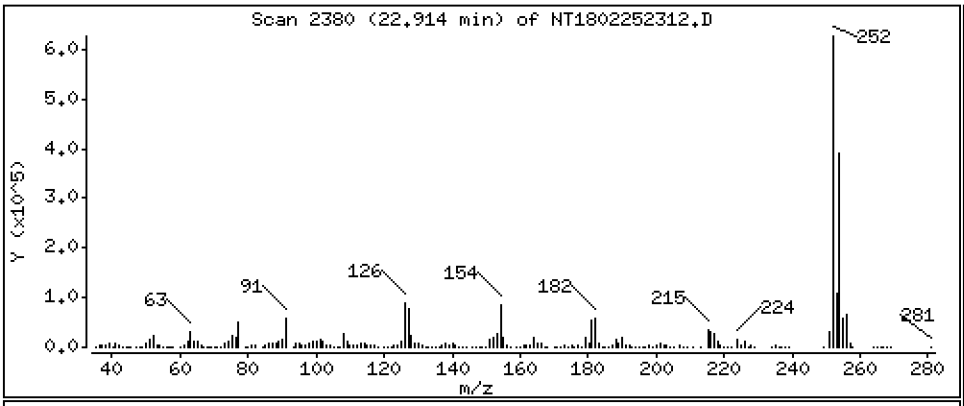
Operator: VTS

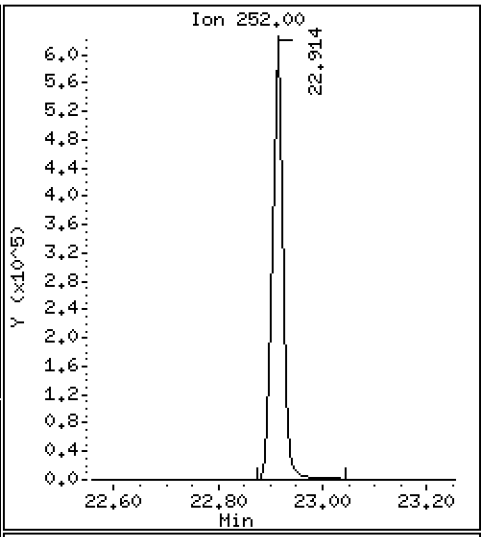
Column phase: ZB-5msi

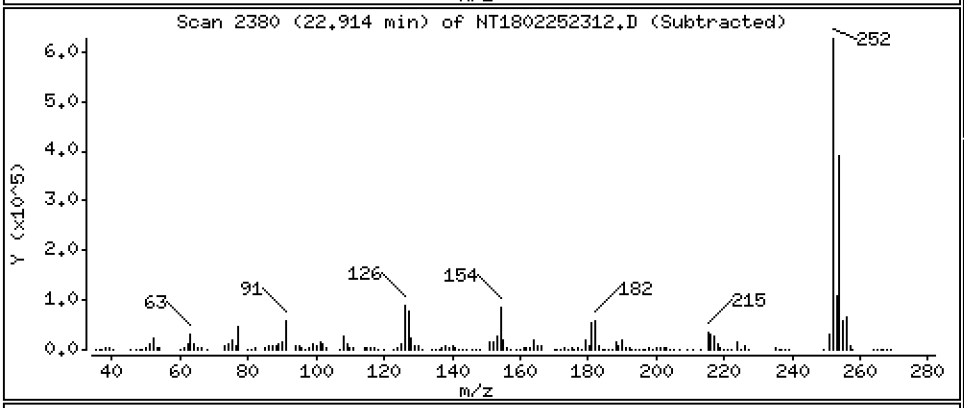
Column diameter: 0.25

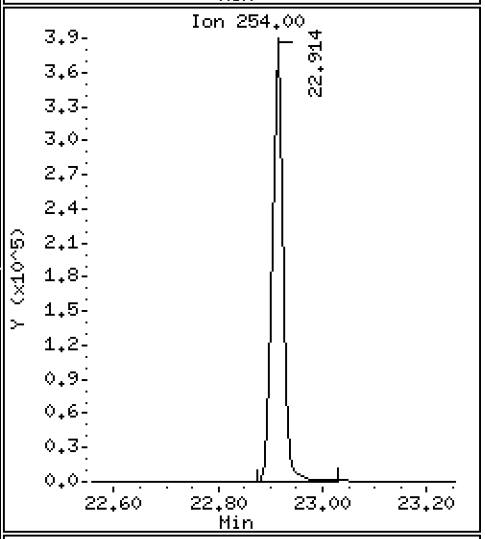
70 3,3'-Dichlorobenzidine

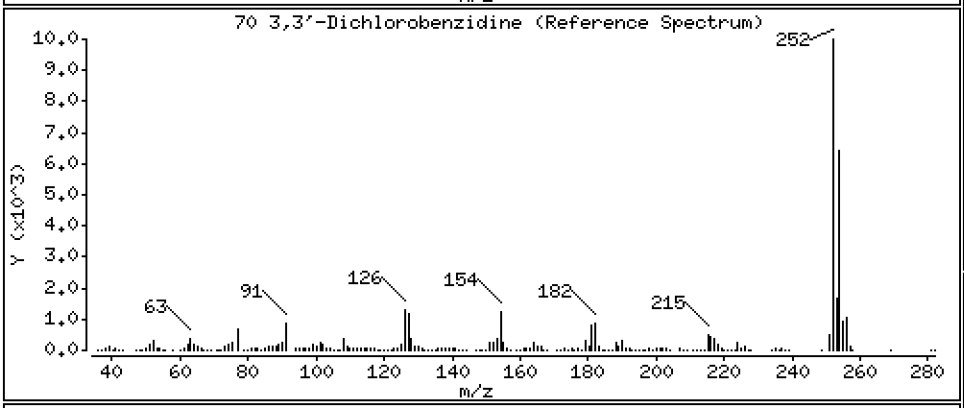
Concentration: 10.00 ug/mL

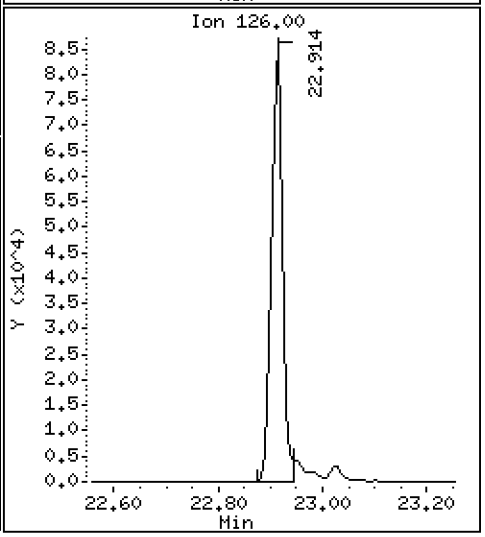


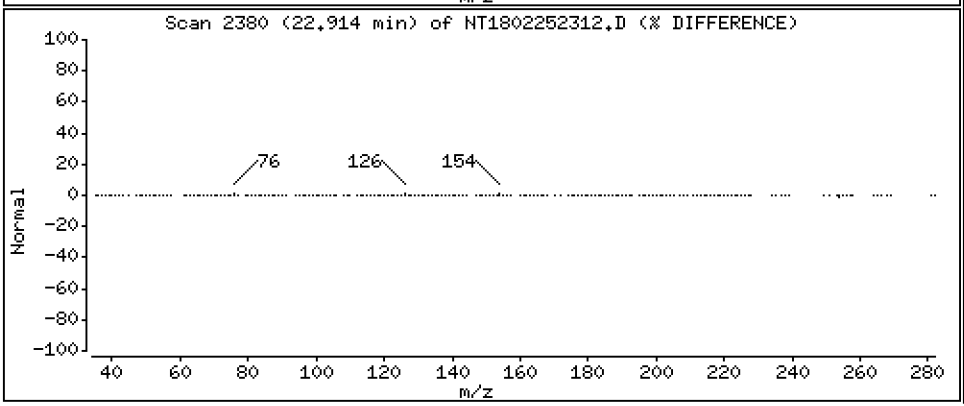












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

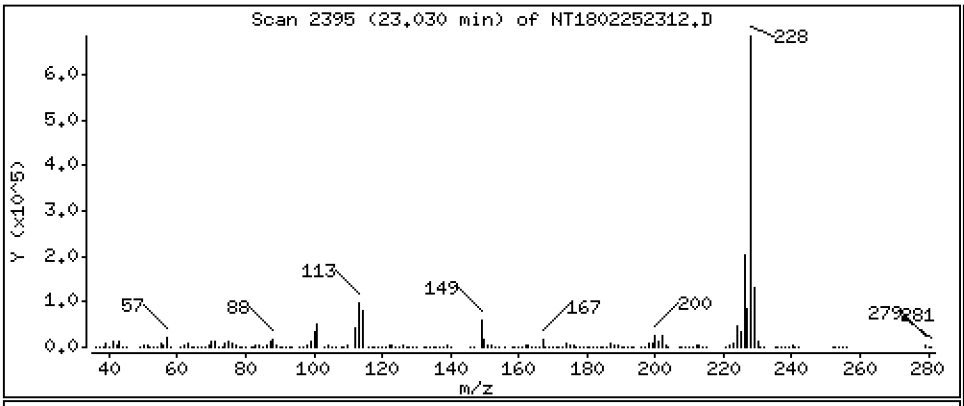
Operator: VTS

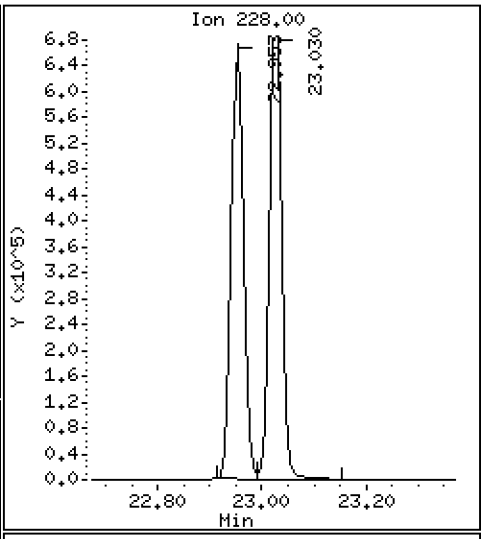
Column phase: ZB-5msi

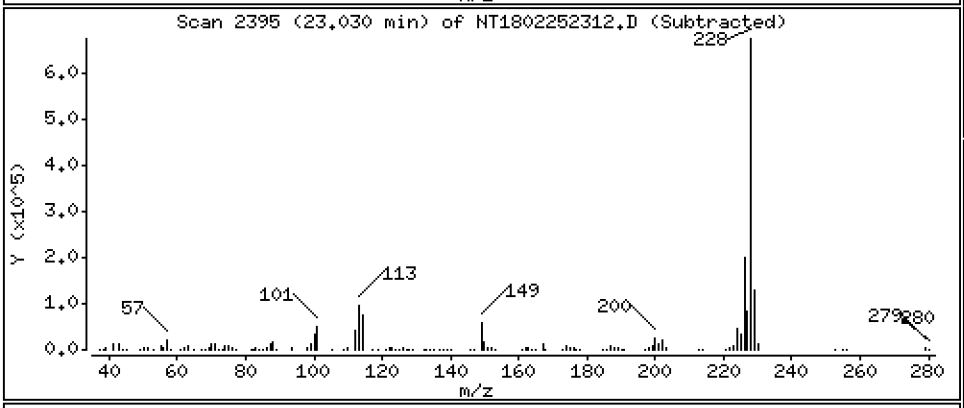
Column diameter: 0.25

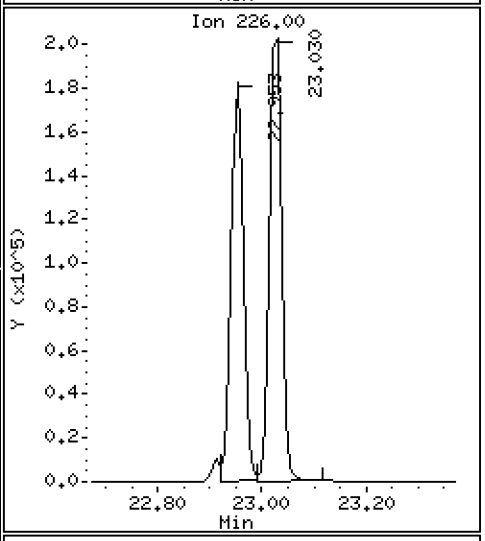
71 Chrysene

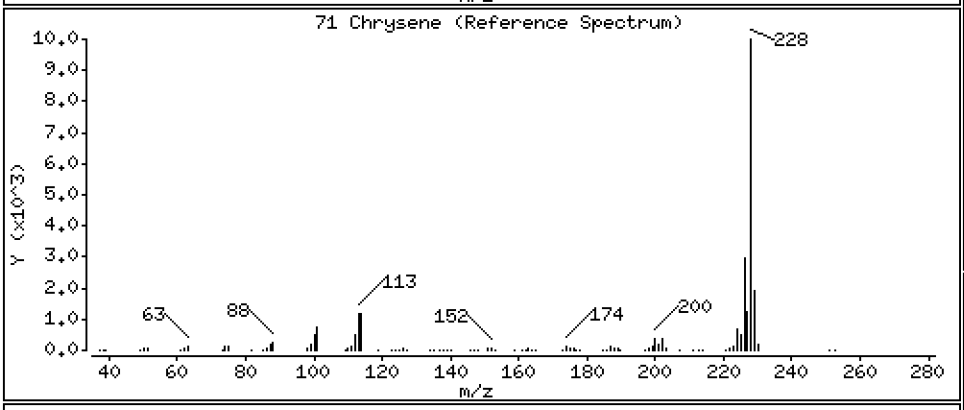
Concentration: 4.428 ug/mL

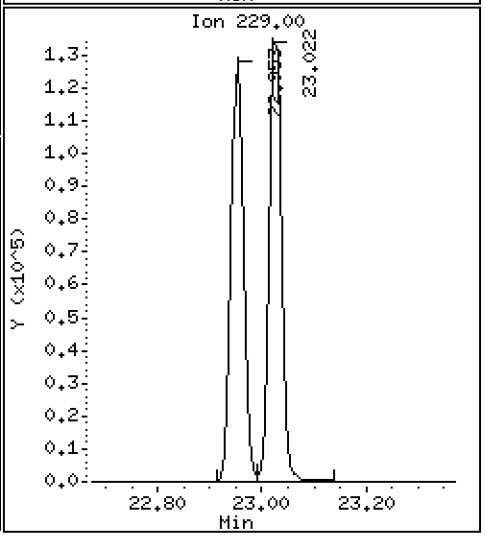


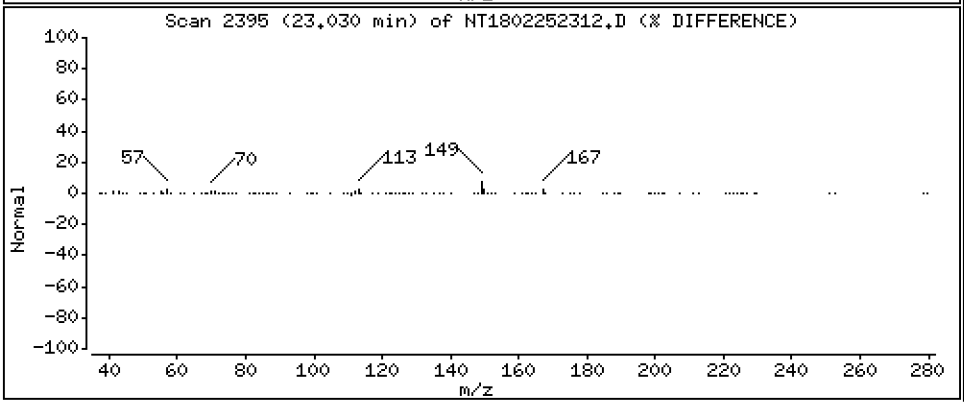












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

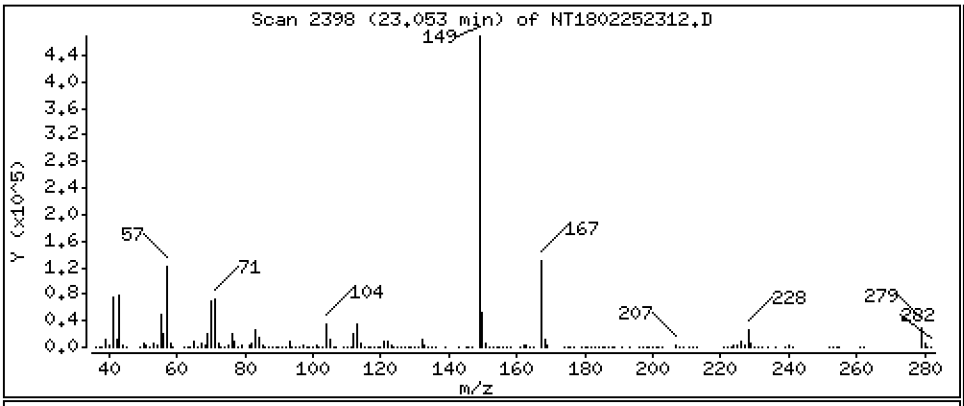
Operator: VTS

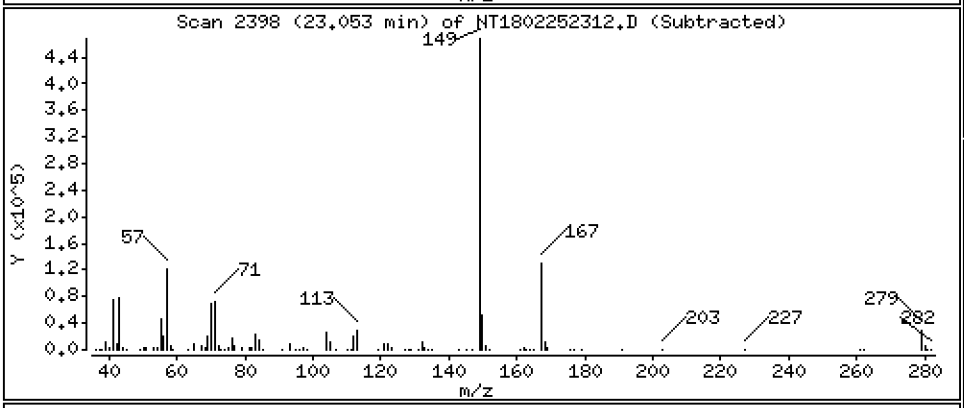
Column phase: ZB-5msi

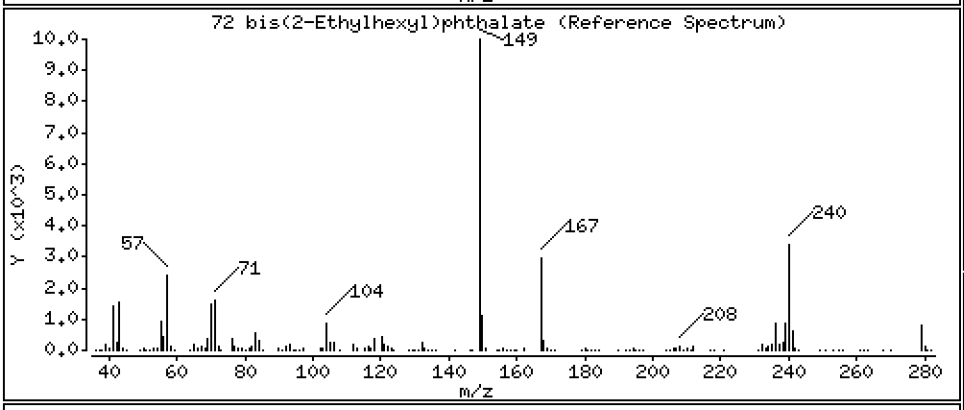
Column diameter: 0.25

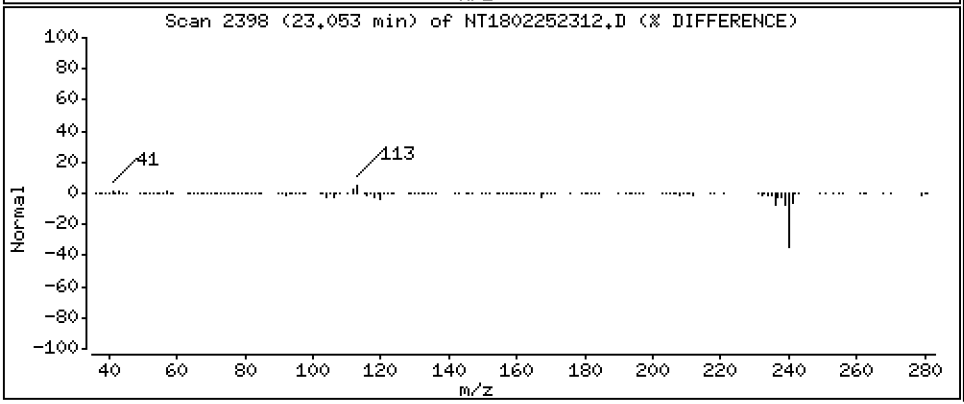
72 bis(2-Ethylhexyl)phthalate

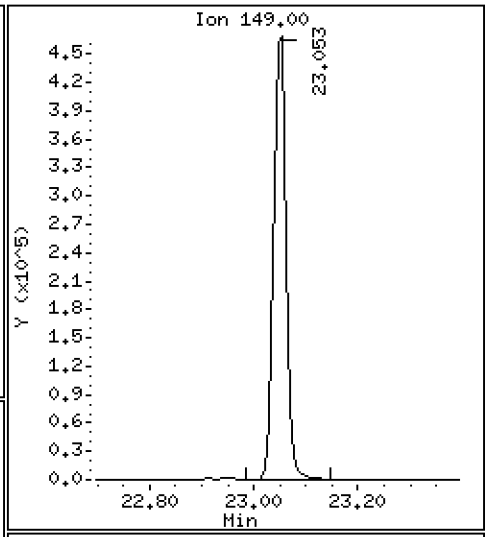
Concentration: 5.231 ug/mL

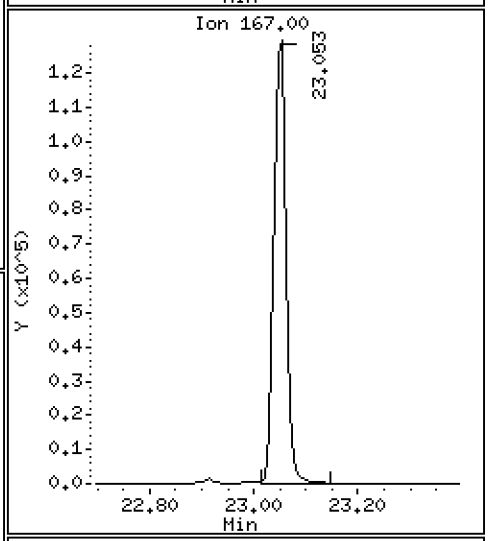


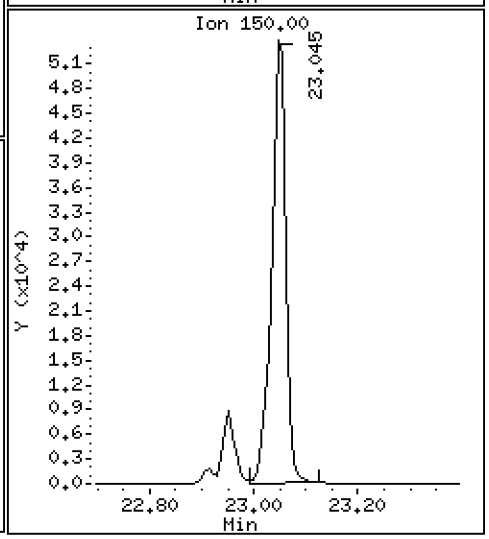












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

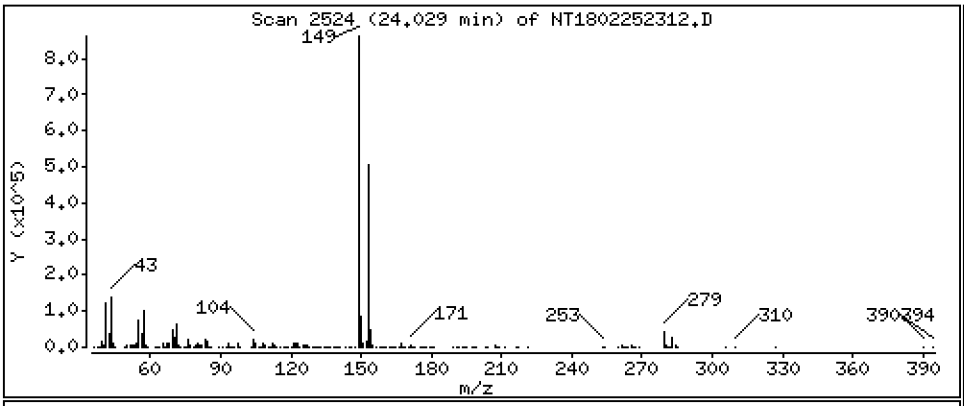
Operator: VTS

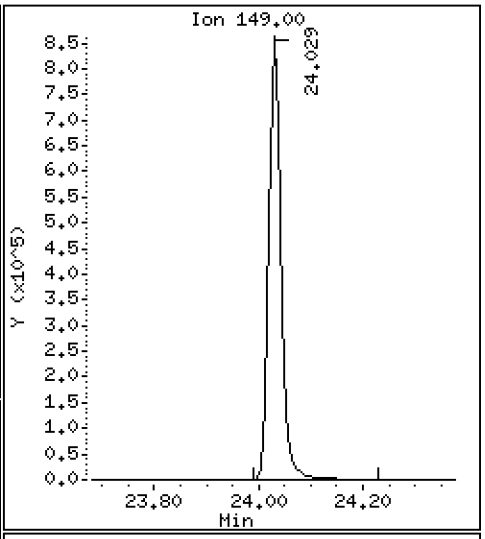
Column phase: ZB-5msi

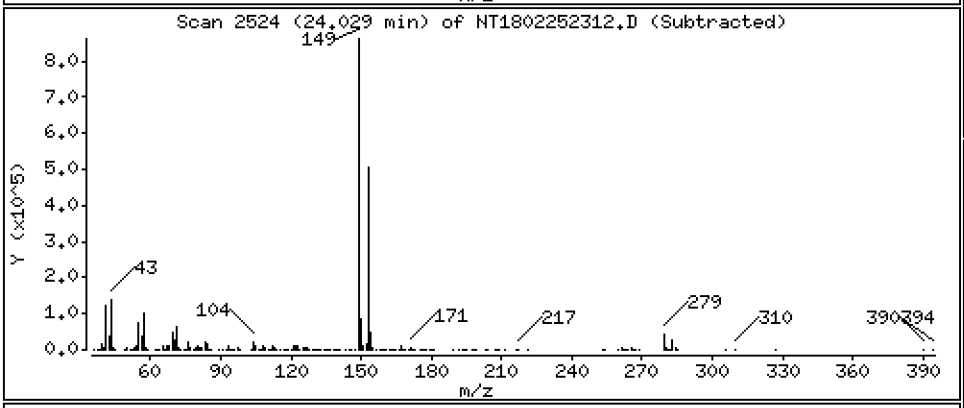
Column diameter: 0.25

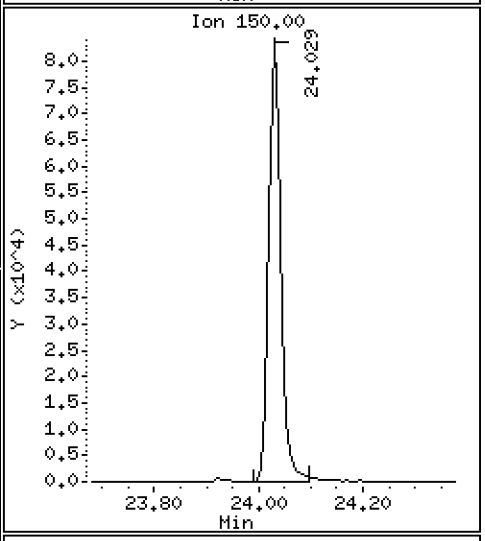
73 Di-n-octylphthalate

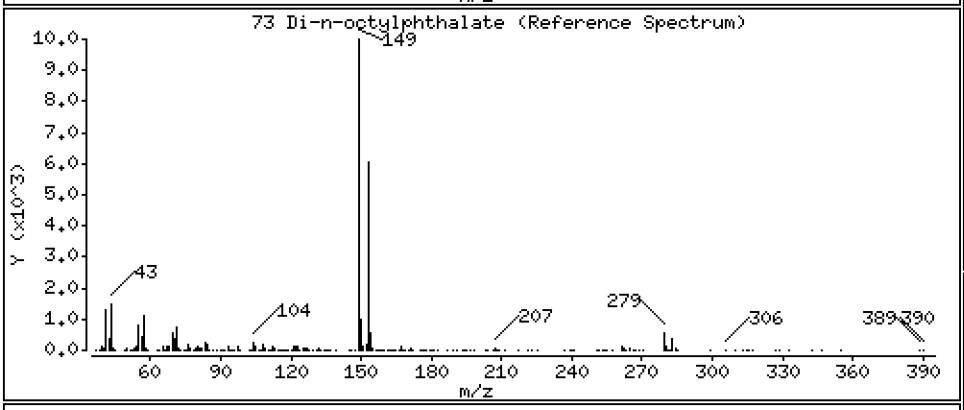
Concentration: 4.813 ug/mL

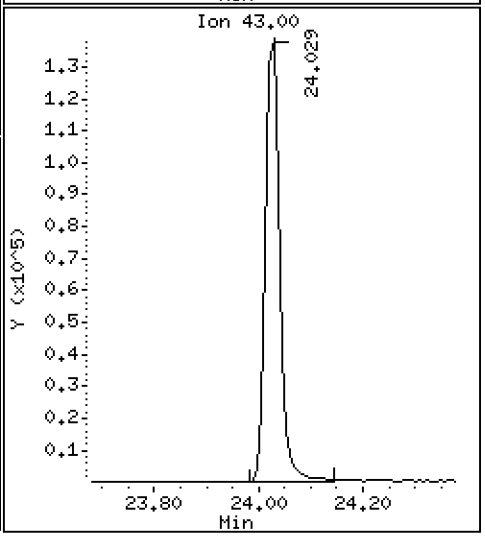


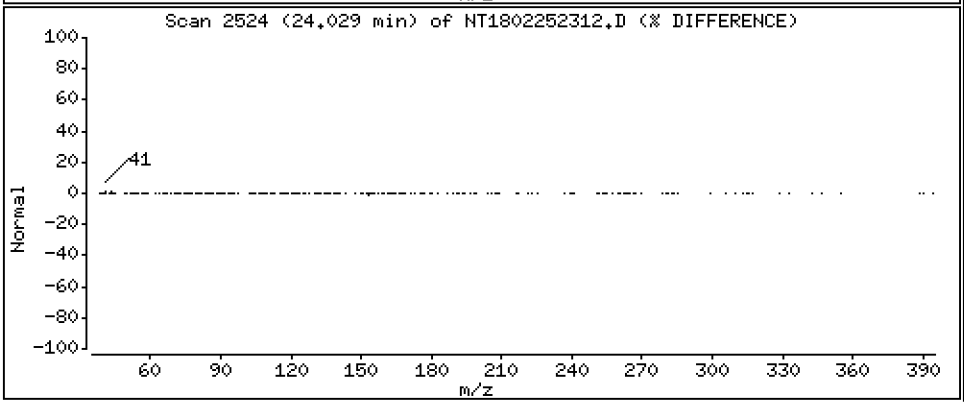












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

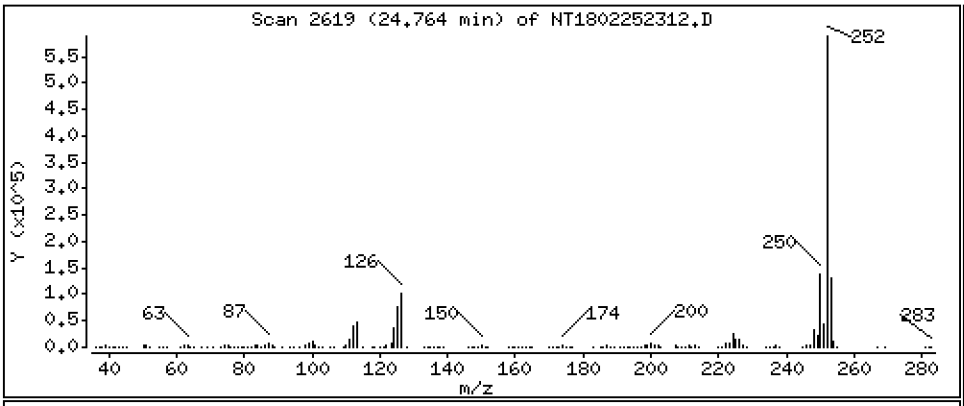
Operator: VTS

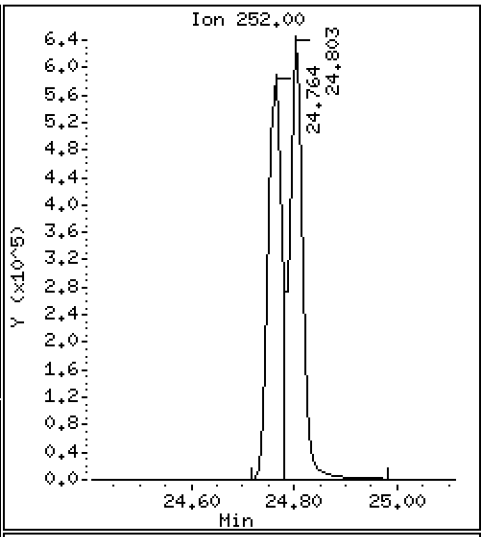
Column phase: ZB-5msi

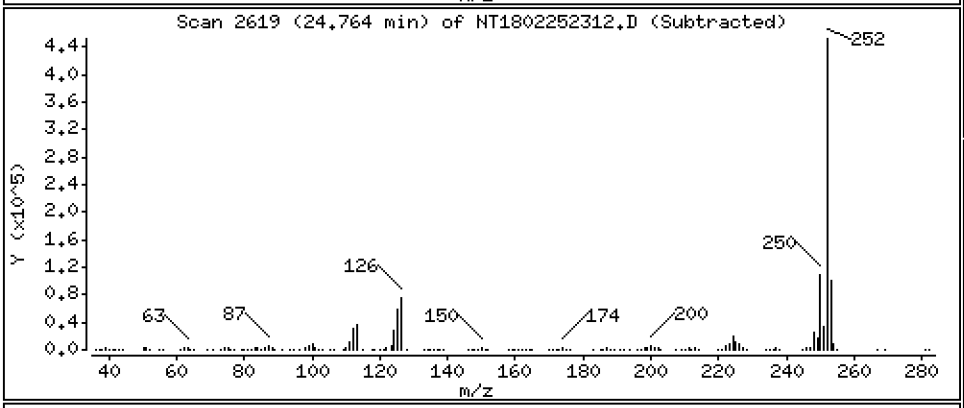
Column diameter: 0.25

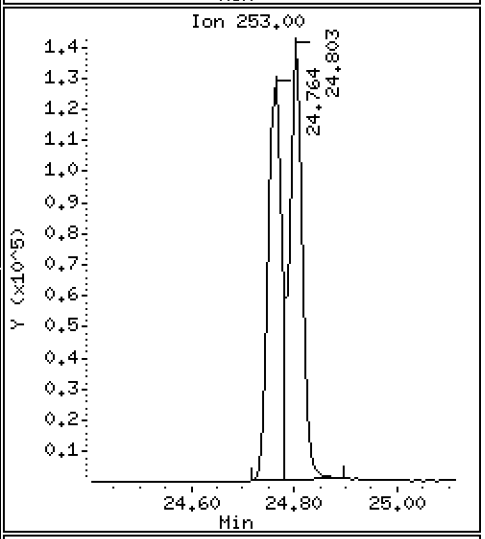
74 Benzo(b)fluoranthene

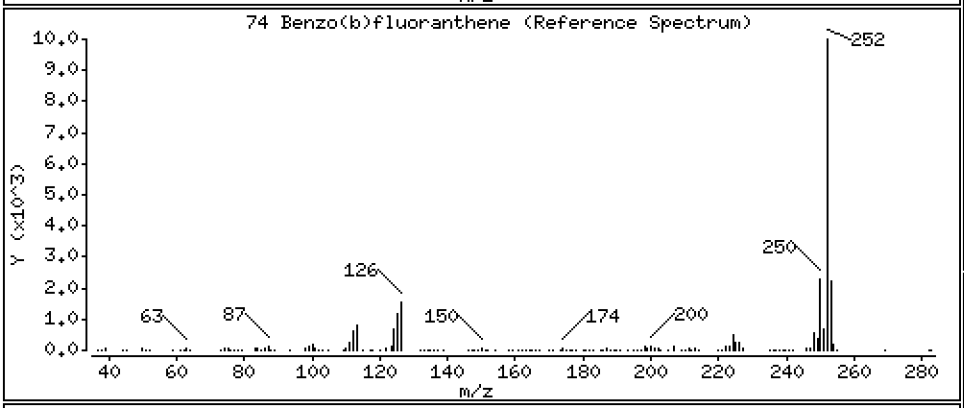
Concentration: 4.319 ug/mL

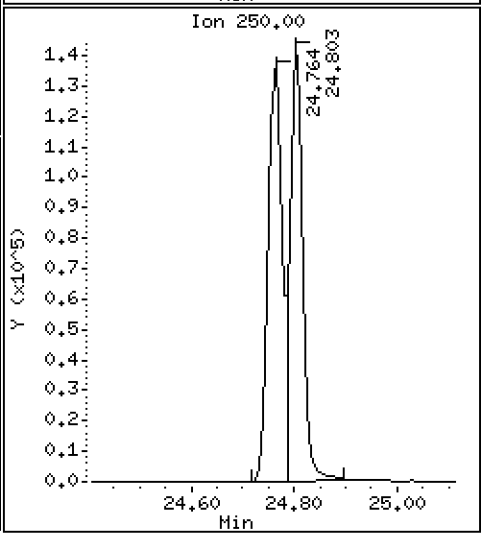


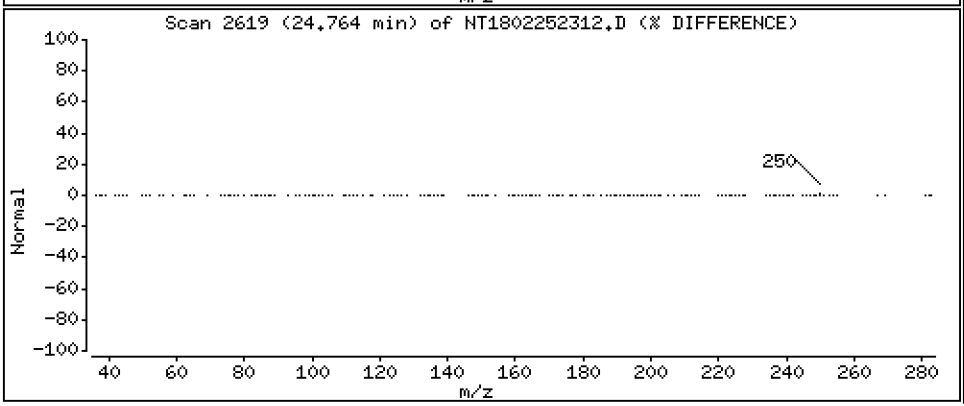












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

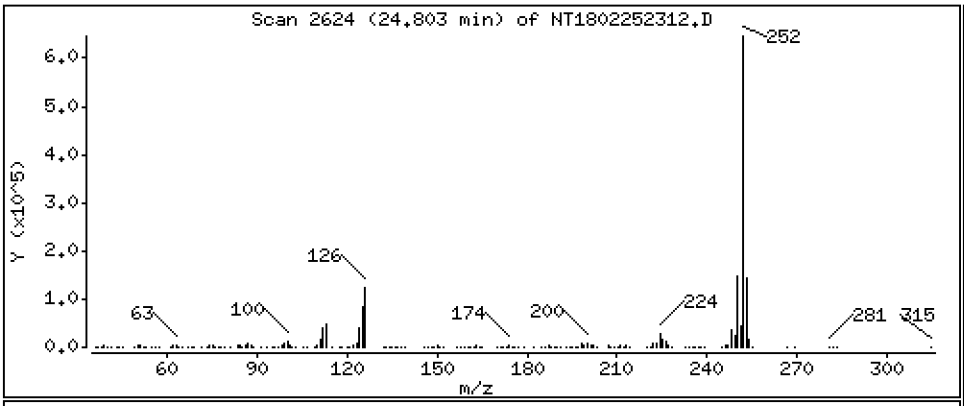
Operator: VTS

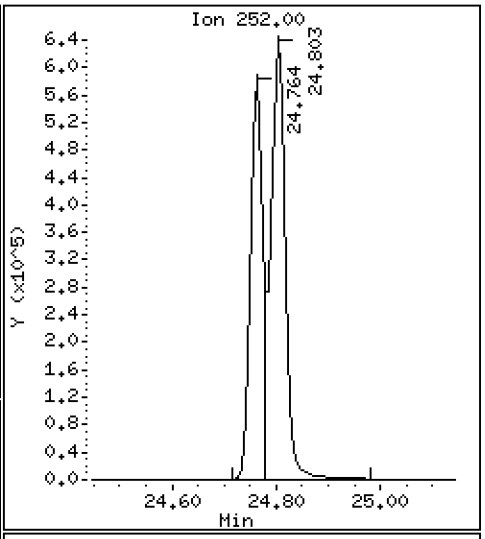
Column phase: ZB-5msi

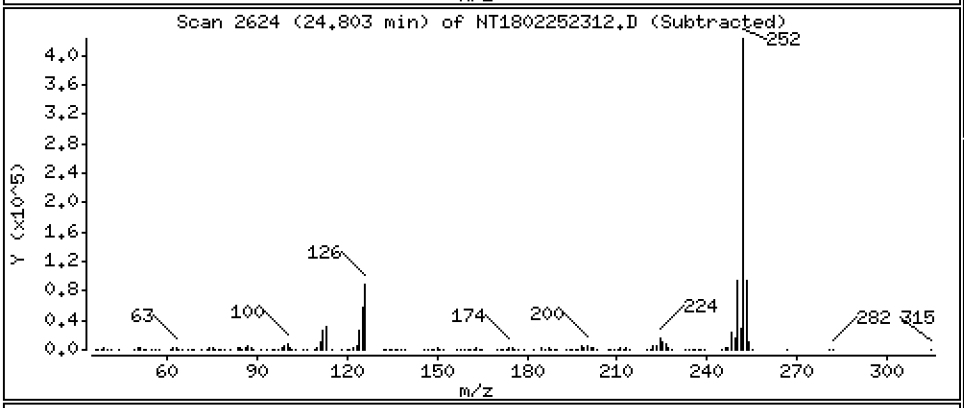
Column diameter: 0.25

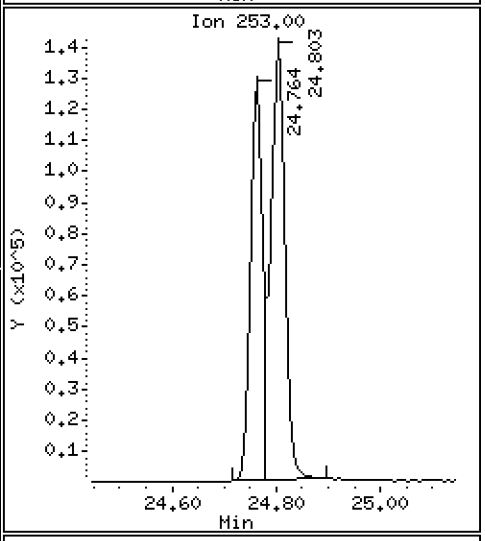
75 Benzo(k)fluoranthene

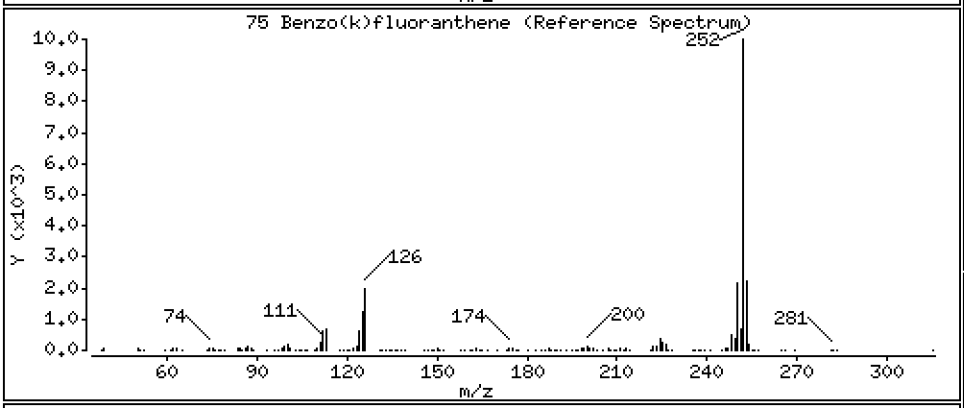
Concentration: 4.735 ug/mL

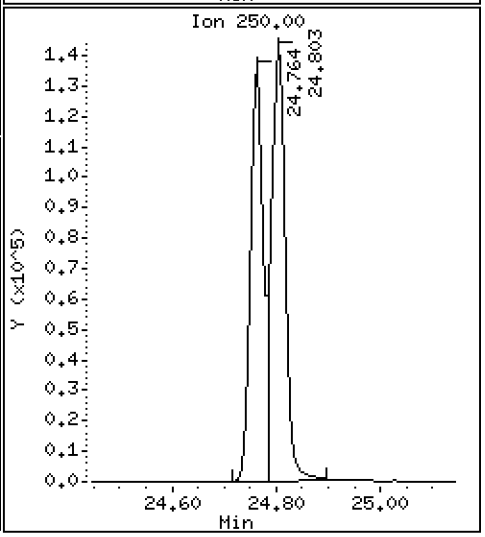


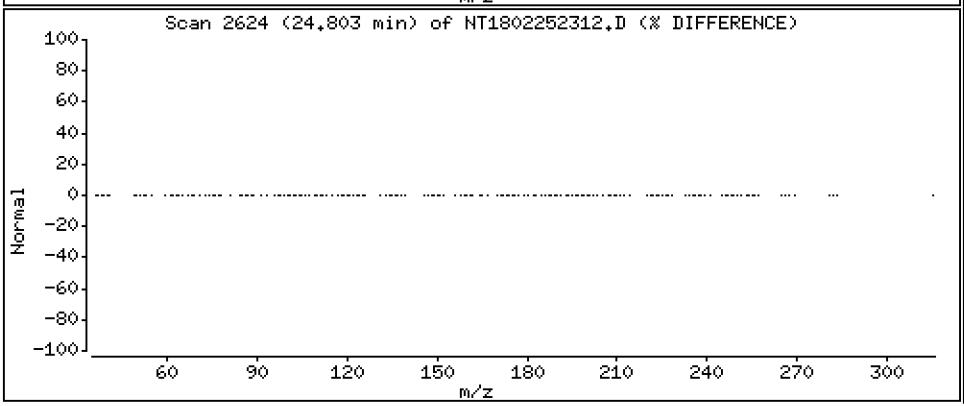












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

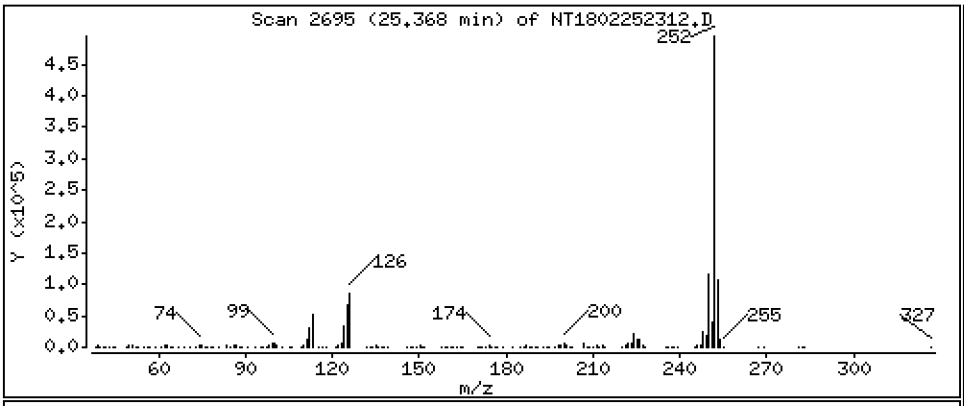
Operator: VTS

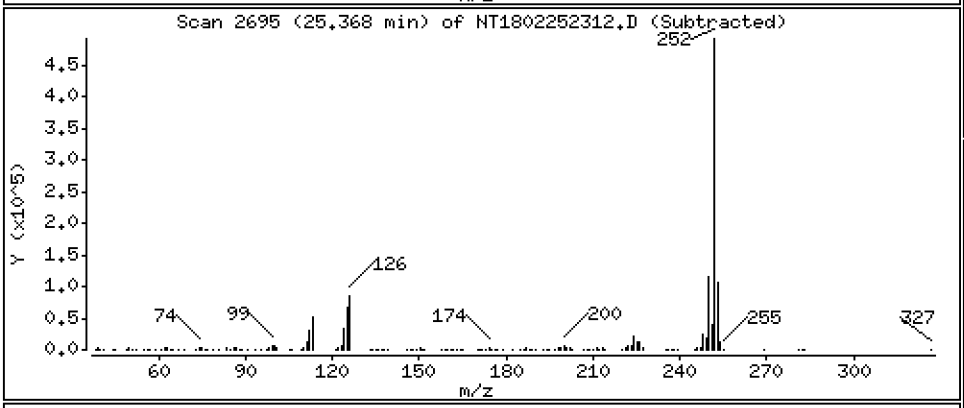
Column phase: ZB-5msi

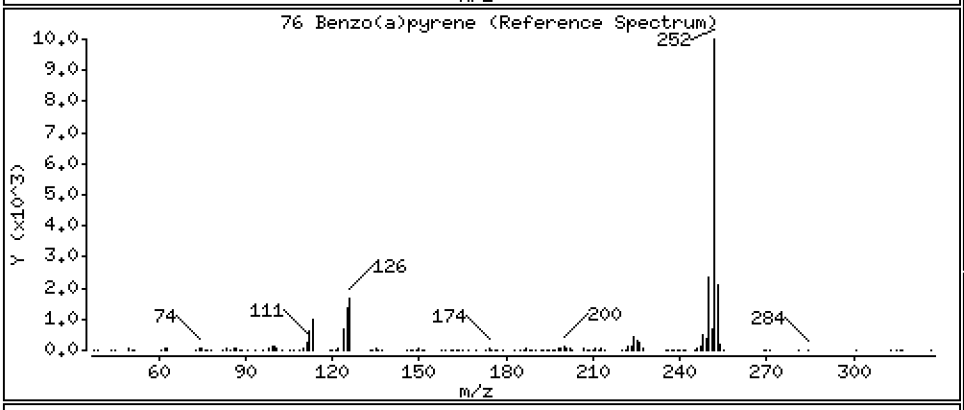
Column diameter: 0.25

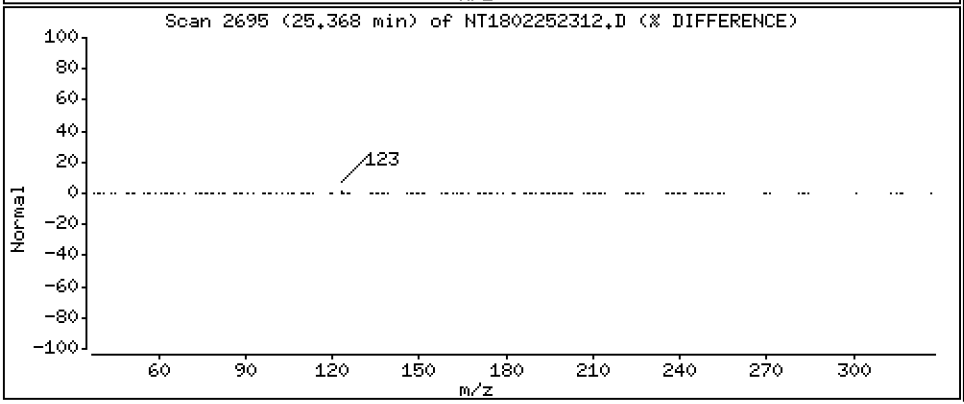
76 Benzo(a)pyrene

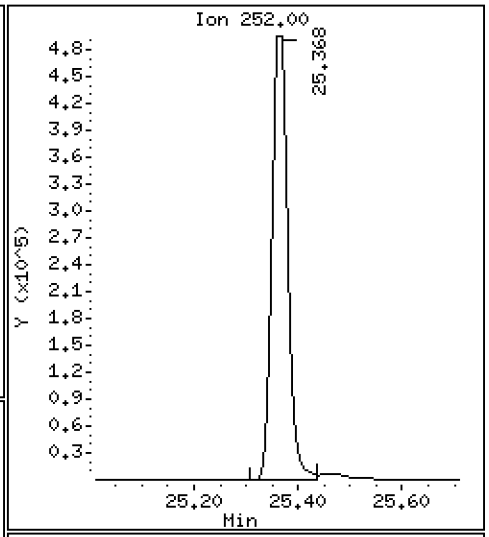
Concentration: 4.590 ug/mL

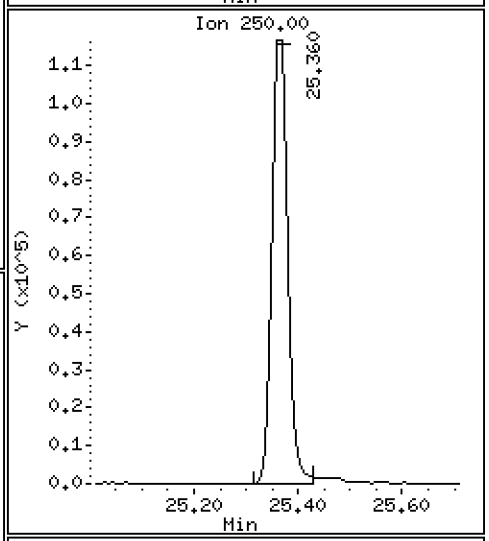


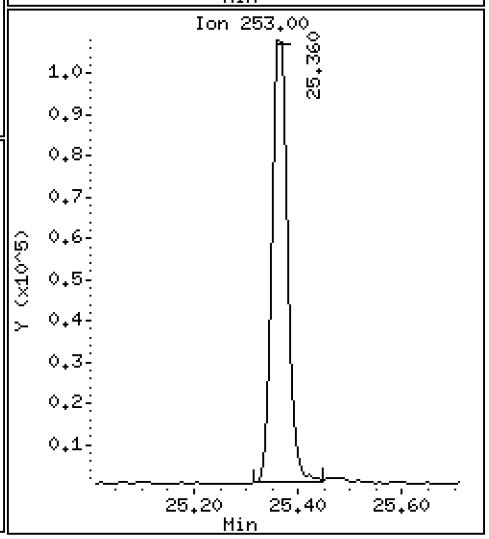












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

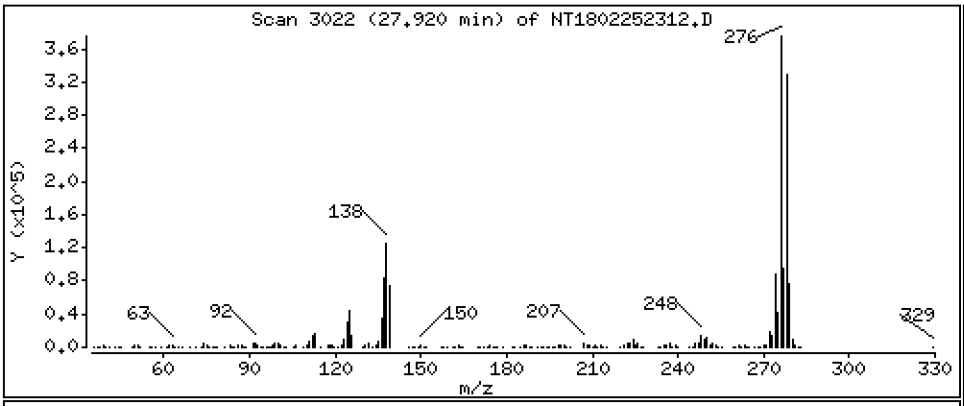
Operator: VTS

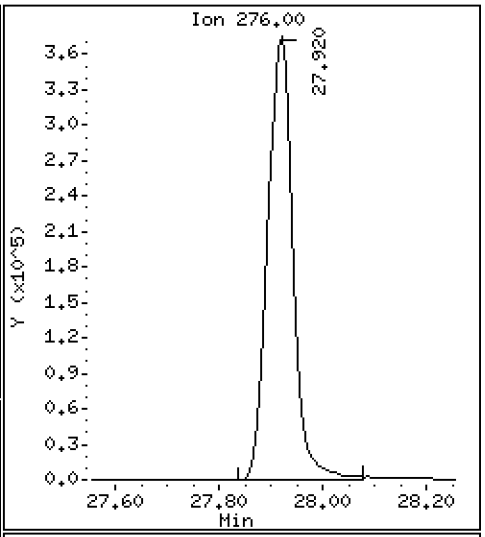
Column phase: ZB-5msi

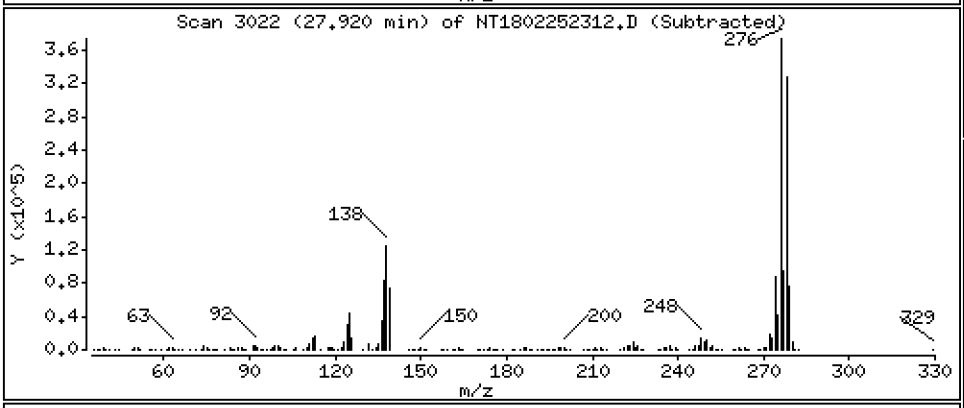
Column diameter: 0.25

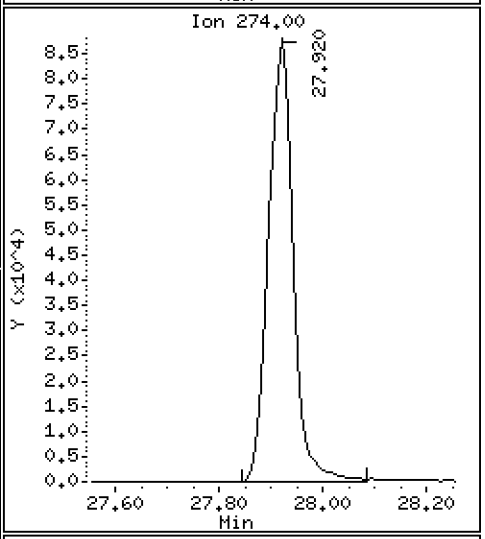
78 Indeno(1,2,3-cd)pyrene

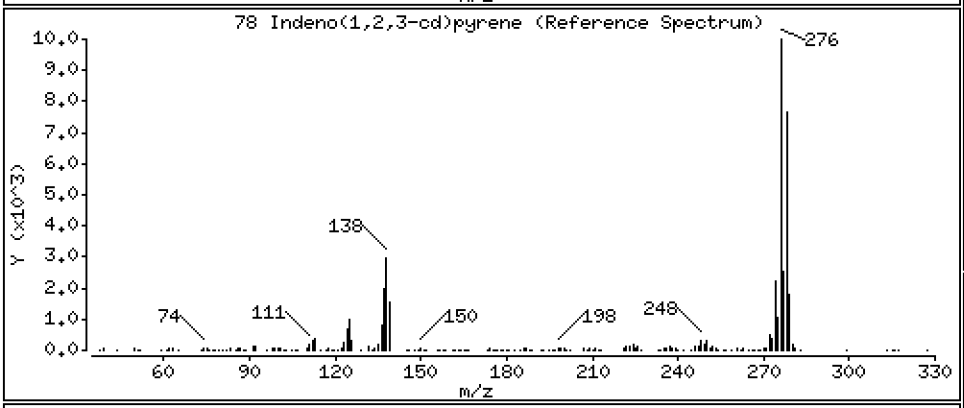
Concentration: 4.636 ug/mL

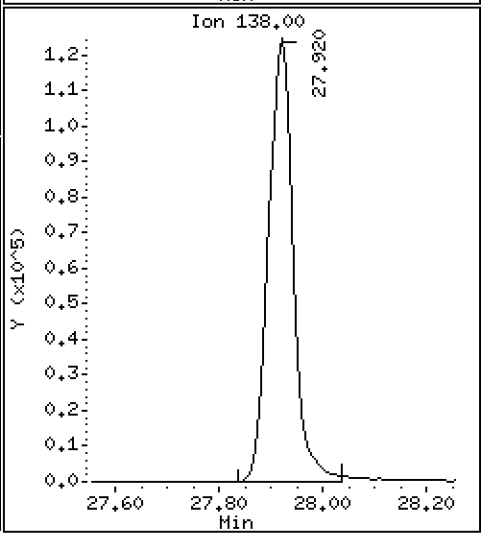


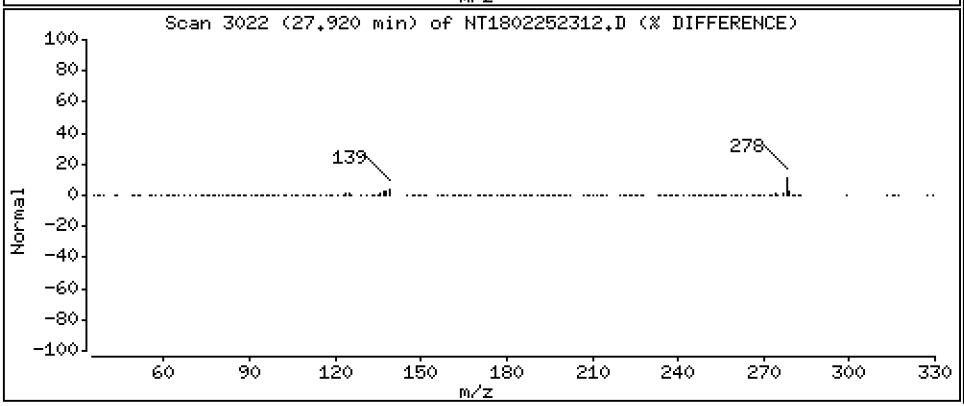












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

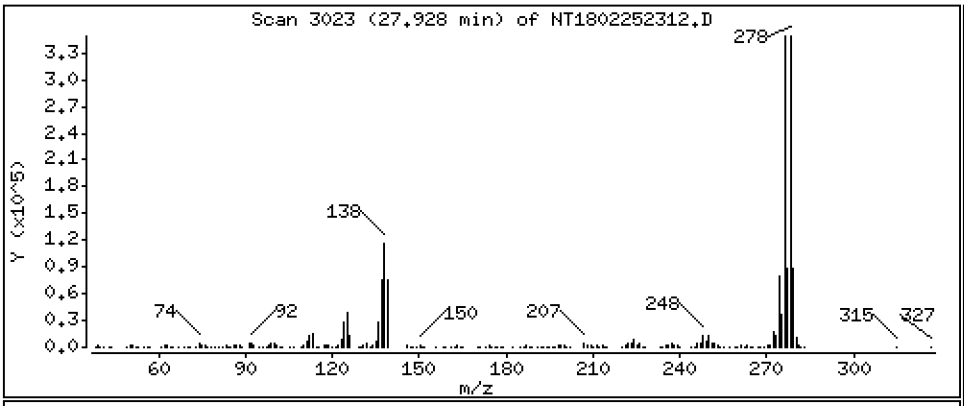
Operator: VTS

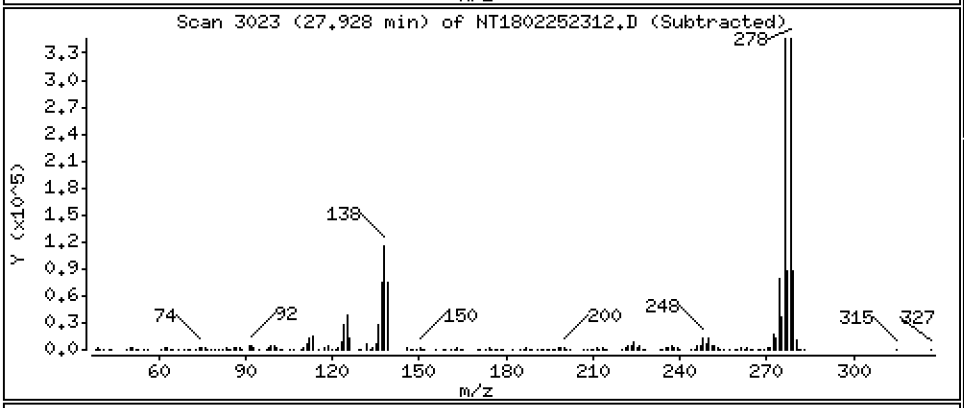
Column phase: ZB-5msi

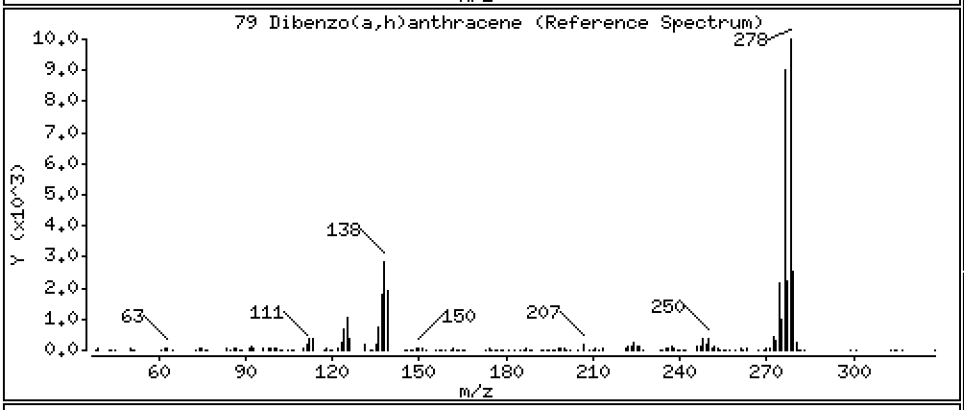
Column diameter: 0.25

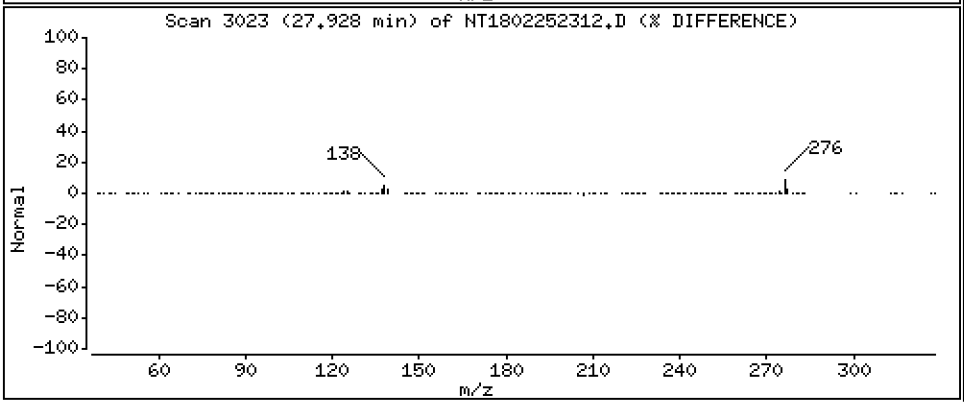
79 Dibenzo(a,h)anthracene

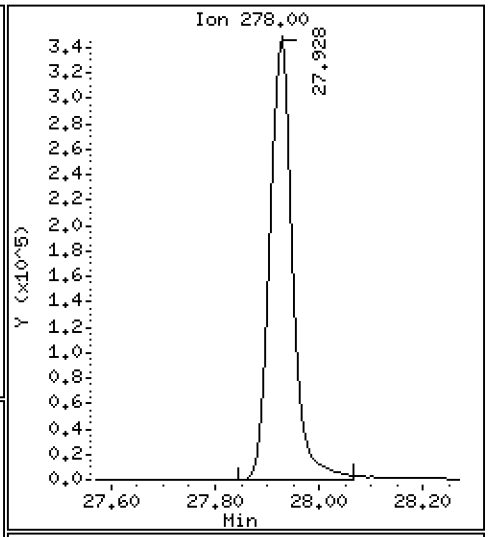
Concentration: 4.580 ug/mL

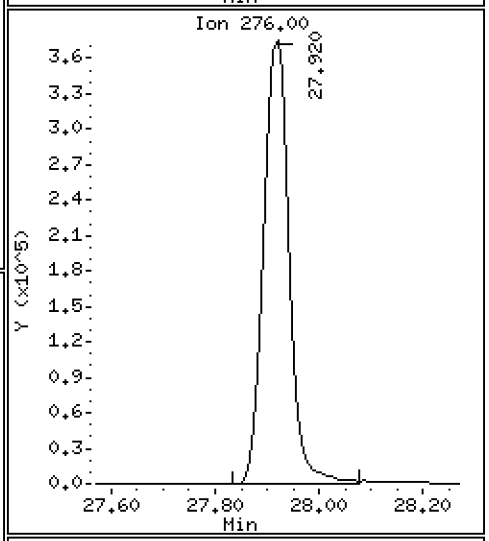


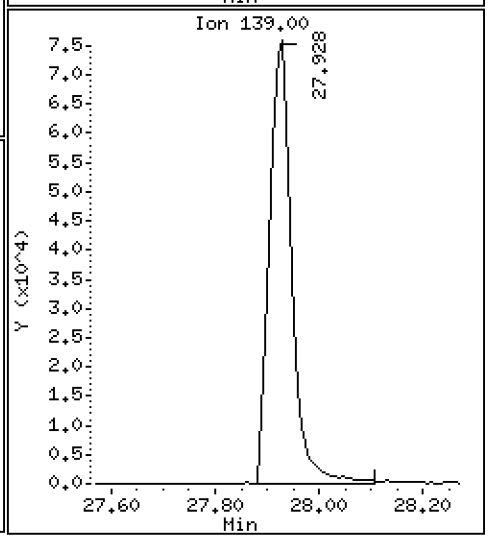












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

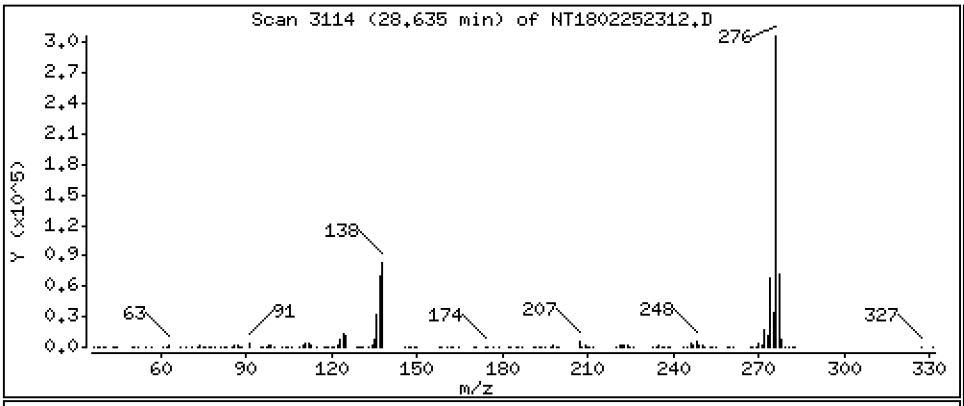
Operator: VTS

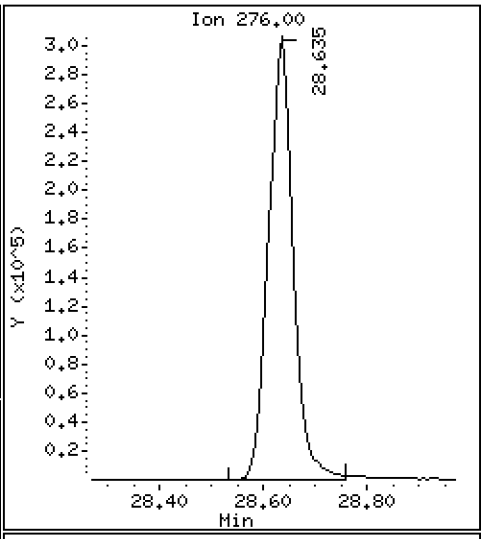
Column phase: ZB-5msi

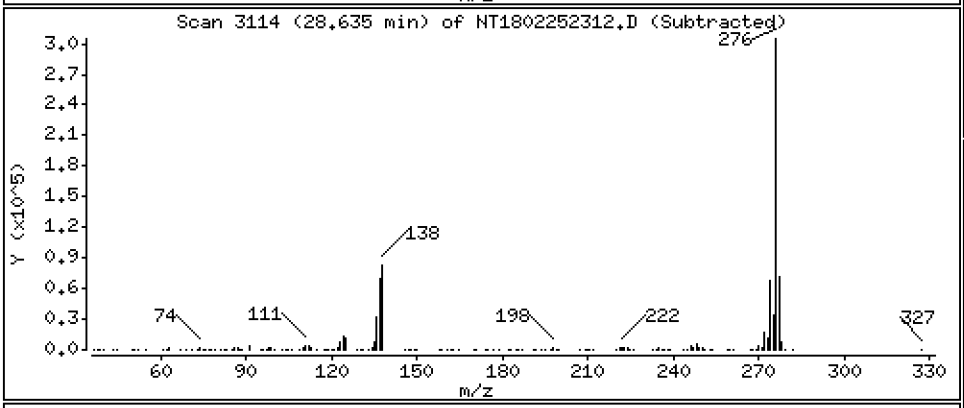
Column diameter: 0.25

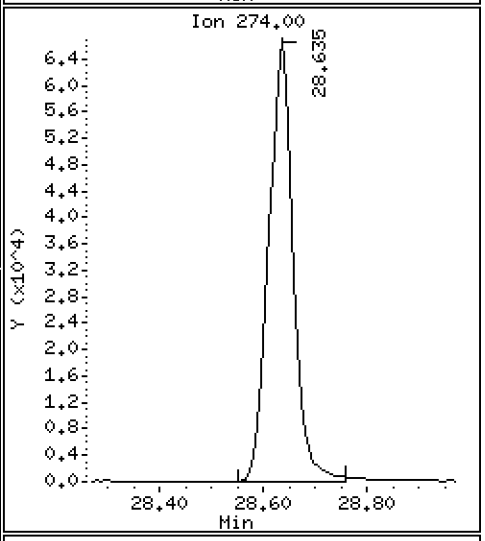
80 Benzo(g,h,i)perylene

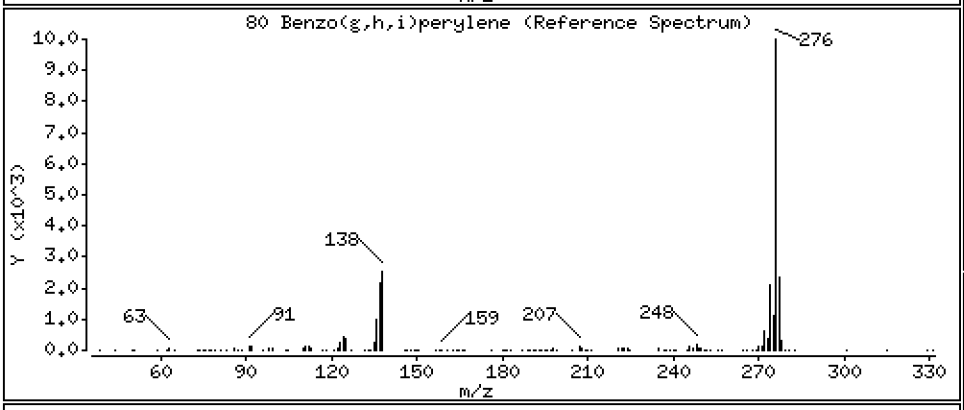
Concentration: 4.593 ug/mL

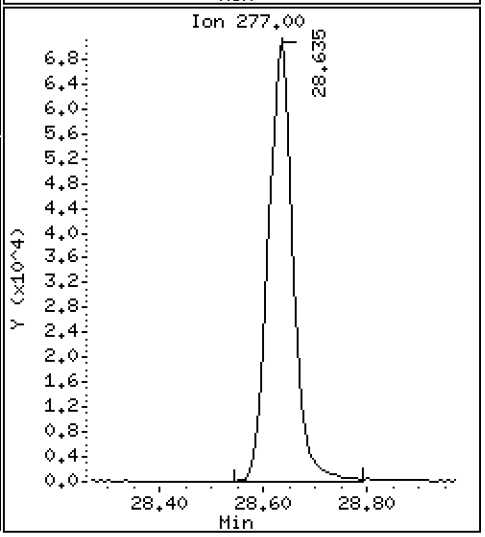


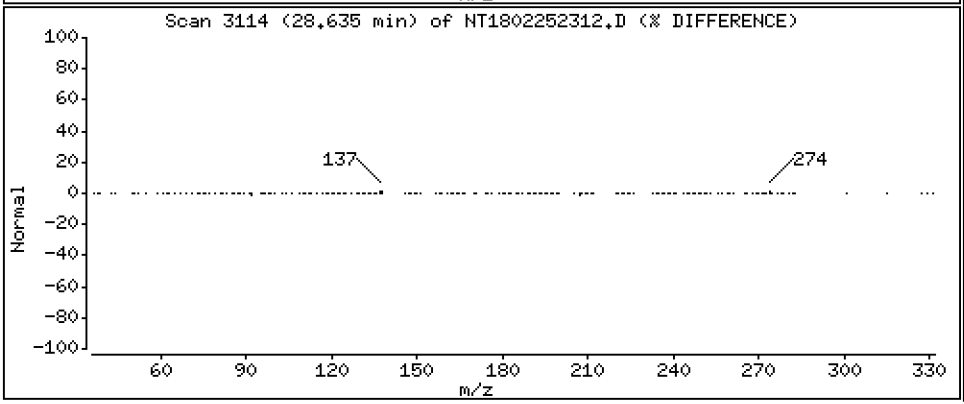












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

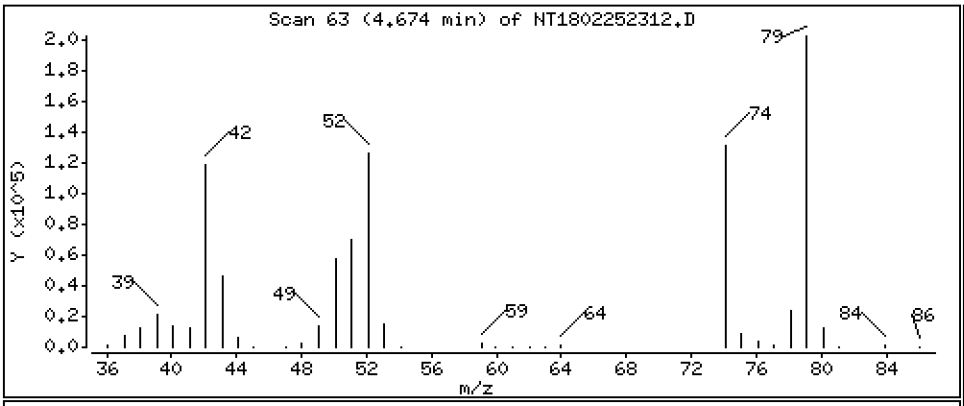
Operator: VTS

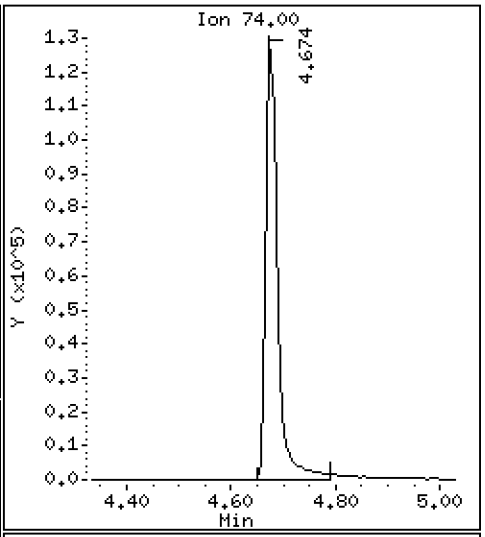
Column phase: ZB-5msi

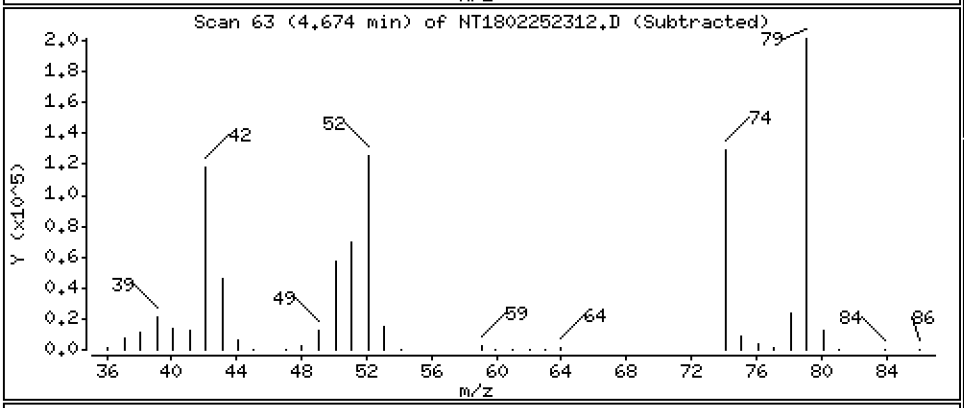
Column diameter: 0.25

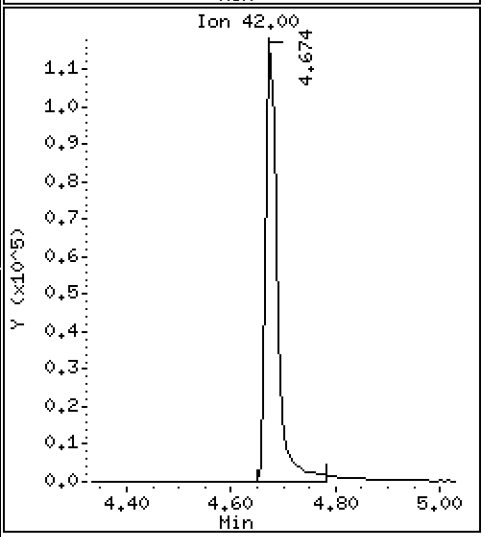
90 N-Nitrosodimethylamine

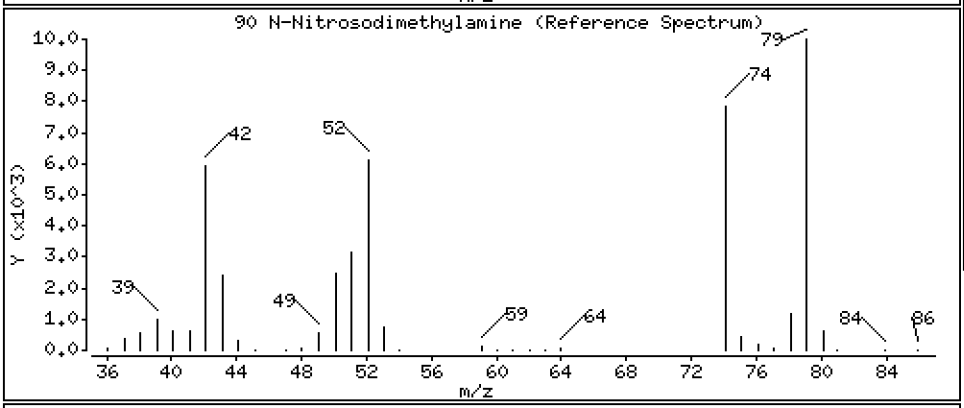
Concentration: 4.810 ug/mL

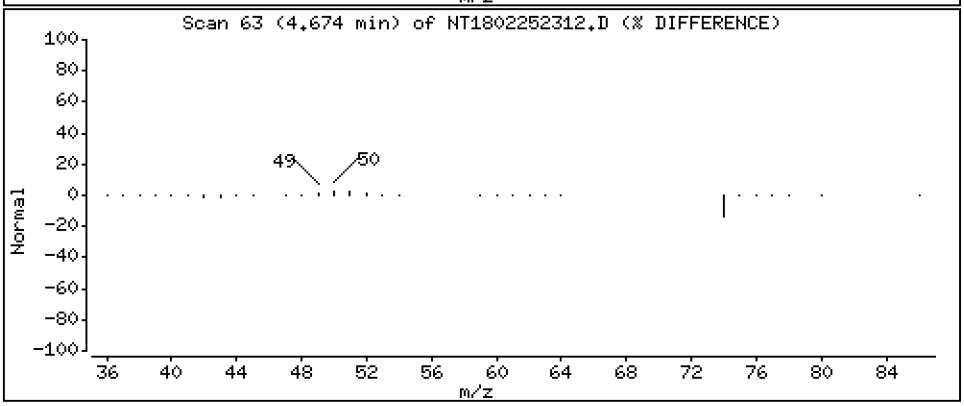












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

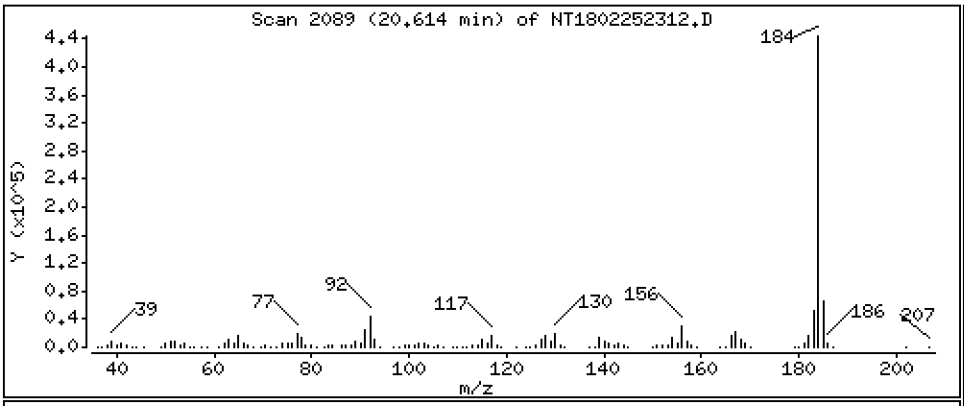
Operator: VTS

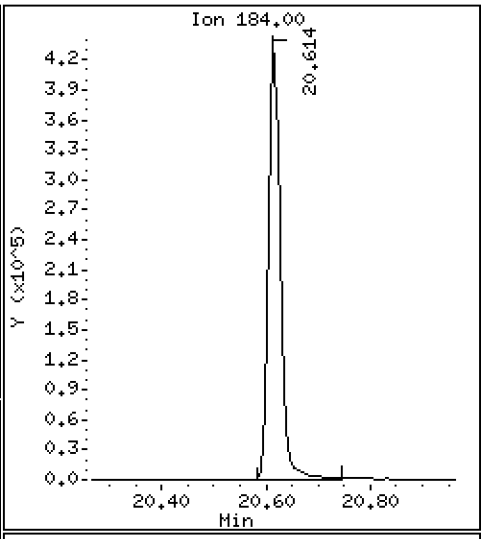
Column phase: ZB-5msi

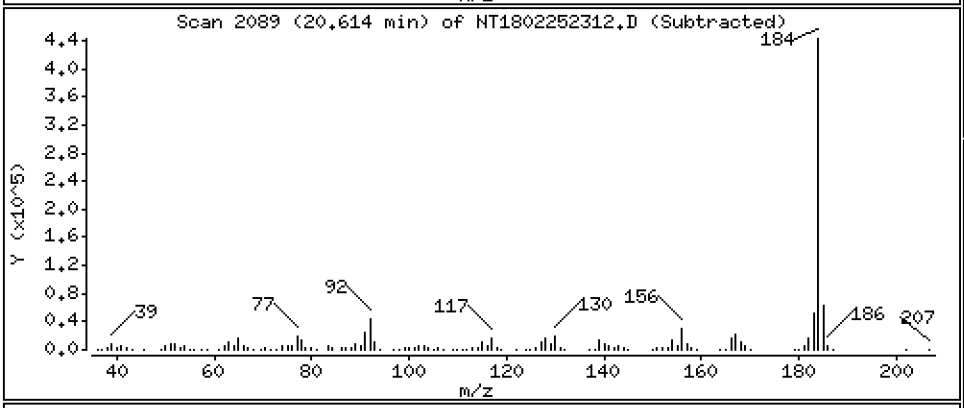
Column diameter: 0.25

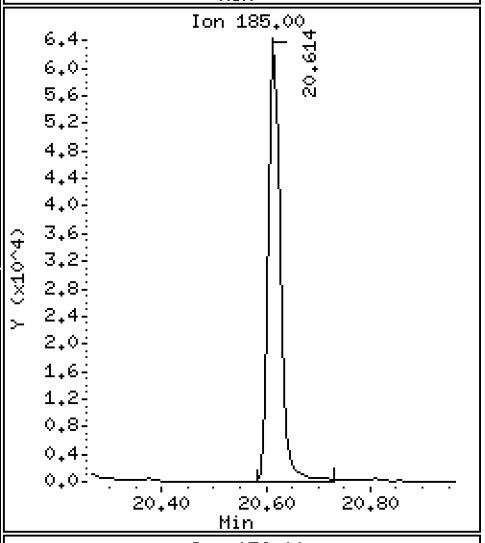
93 Benzidine

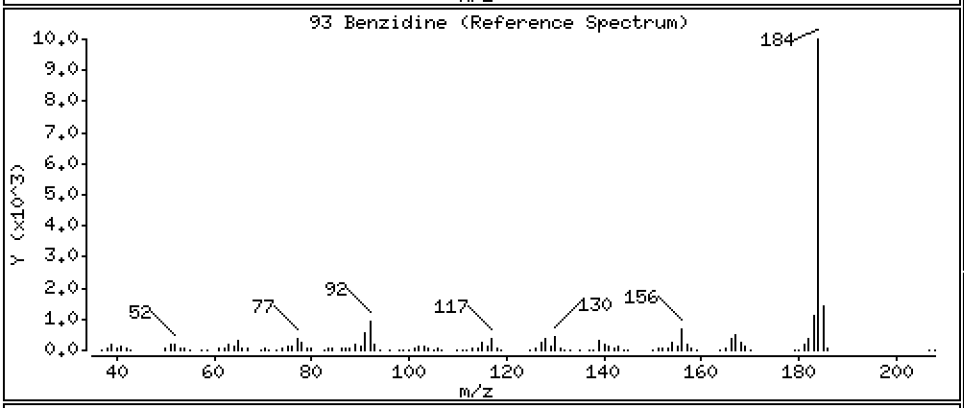
Concentration: 5.813 ug/mL

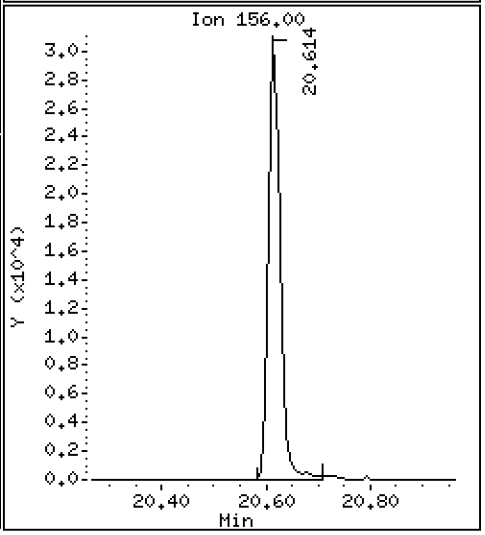


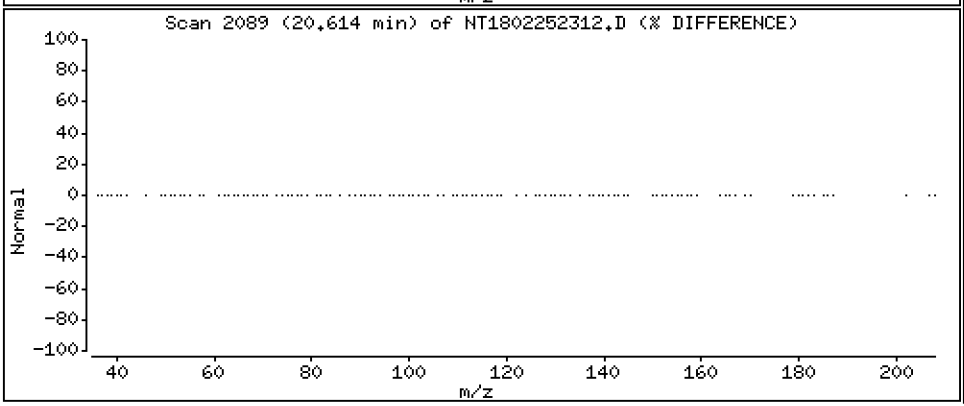












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

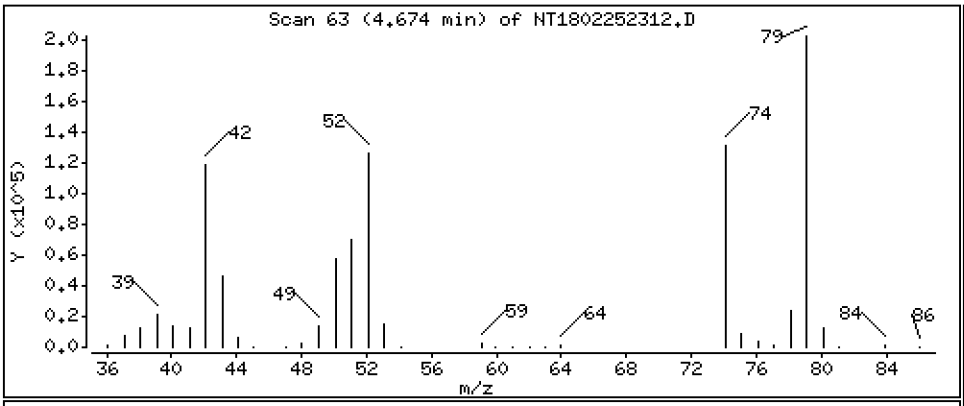
Operator: VTS

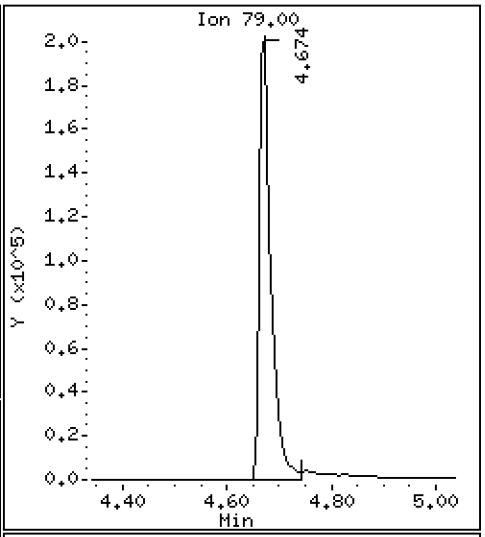
Column phase: ZB-5msi

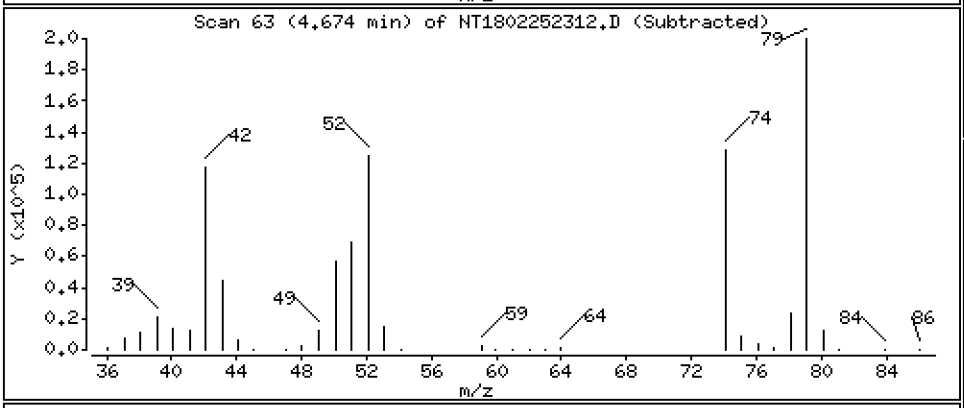
Column diameter: 0.25

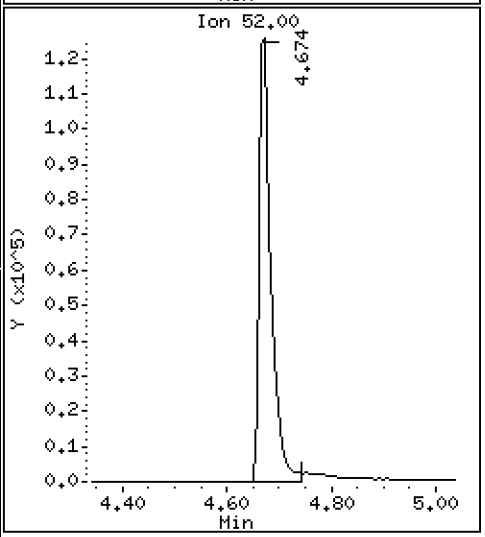
103 Pyridine

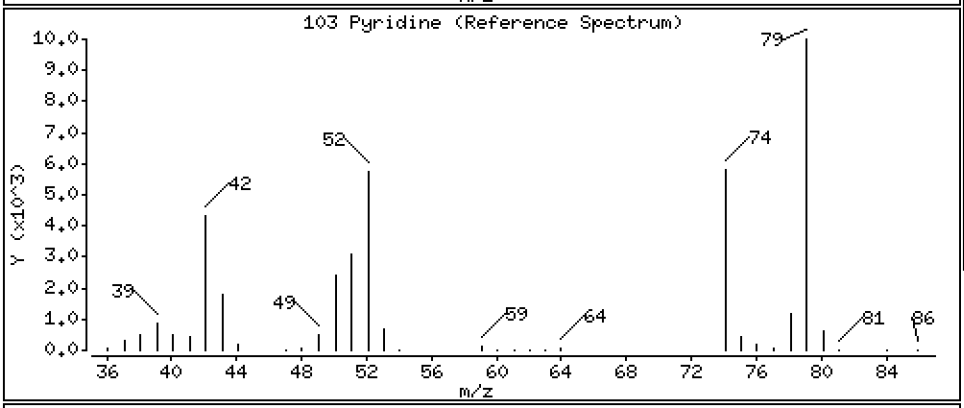
Concentration: 4.694 ug/mL

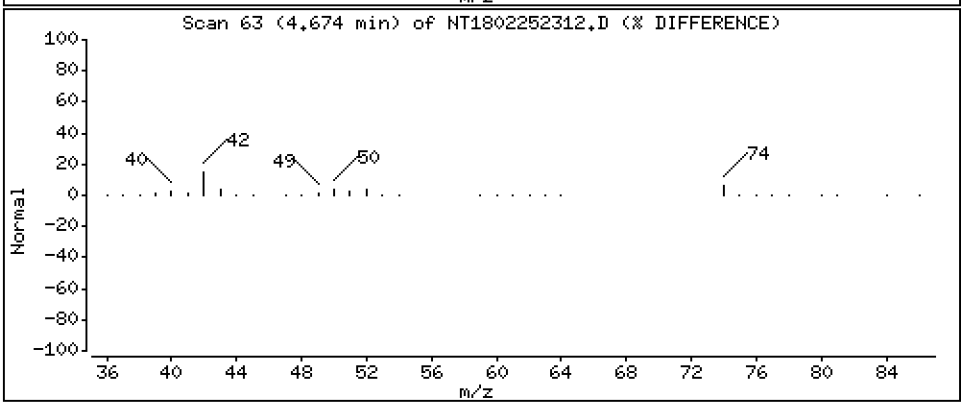












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

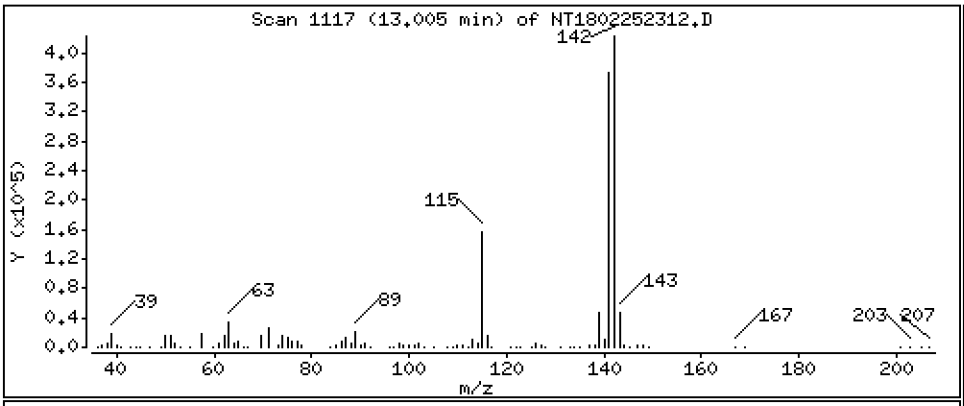
Operator: VTS

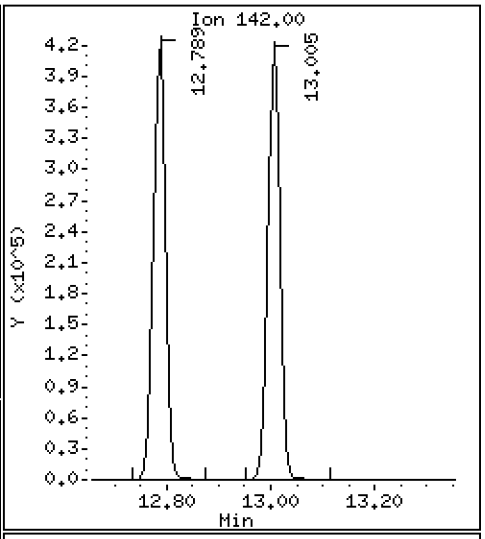
Column phase: ZB-5msi

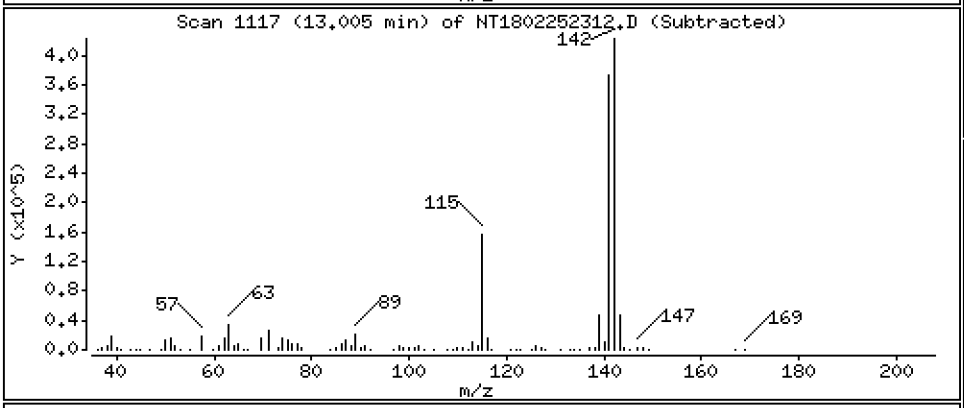
Column diameter: 0.25

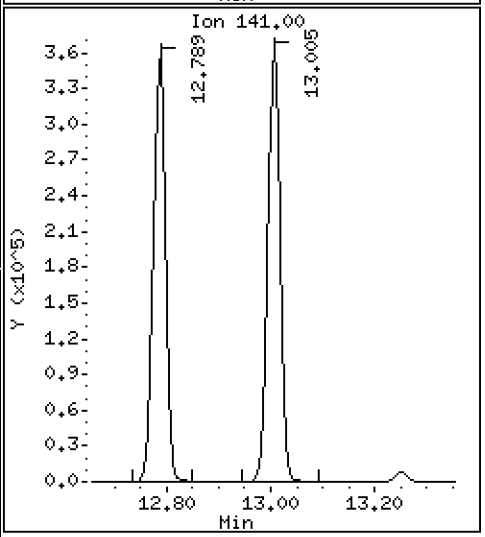
105 1-methylnaphthalene

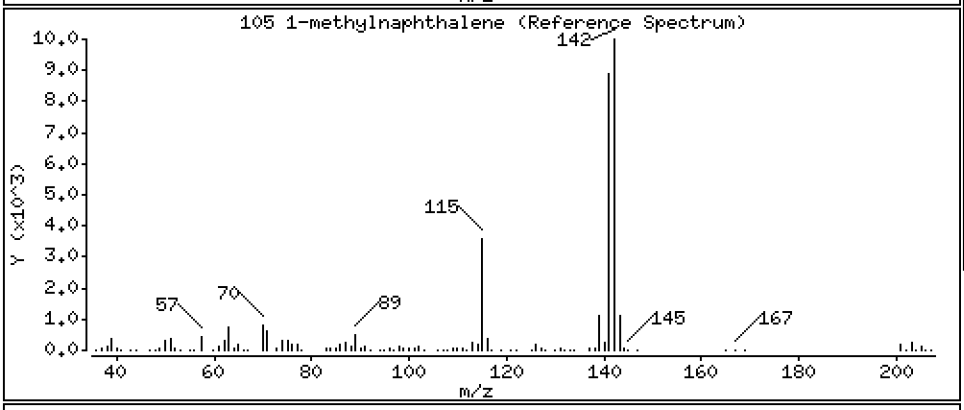
Concentration: 4.486 ug/mL

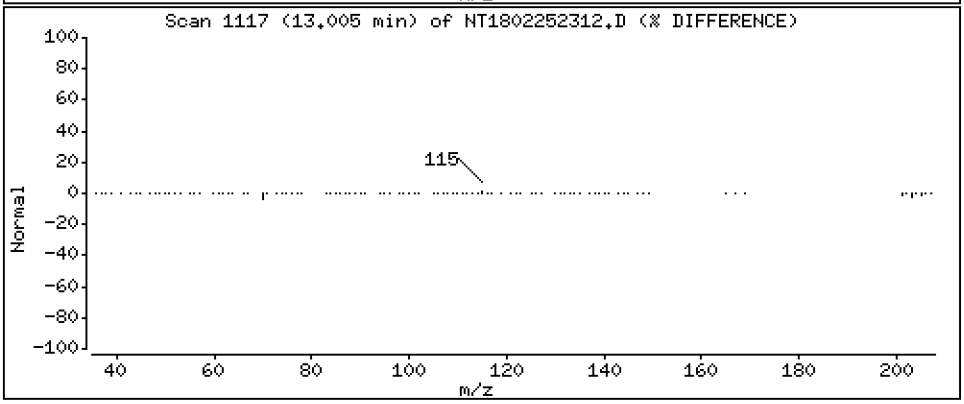












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

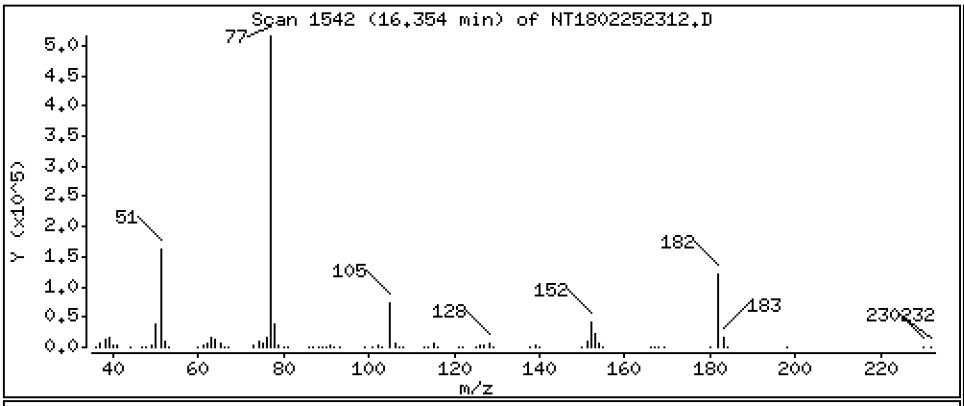
Operator: VTS

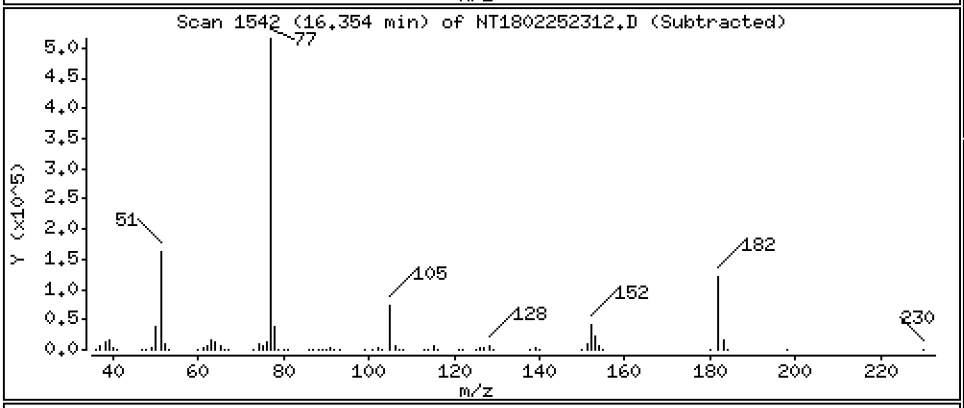
Column phase: ZB-5msi

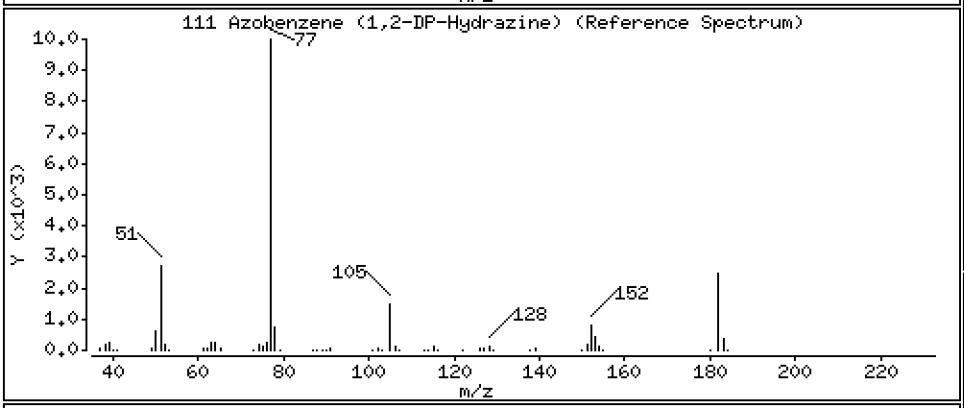
Column diameter: 0.25

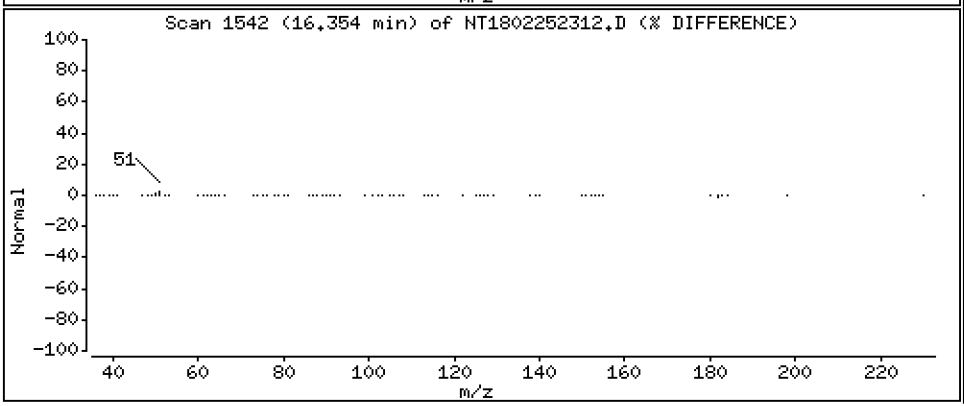
111 Azobenzene (1,2-DP-Hydrazine)

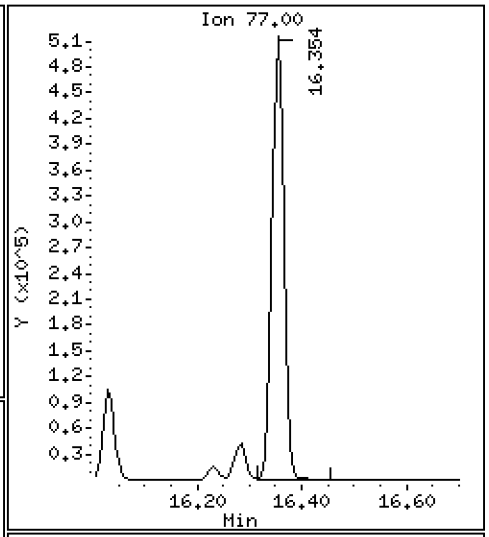
Concentration: 4.731 ug/mL

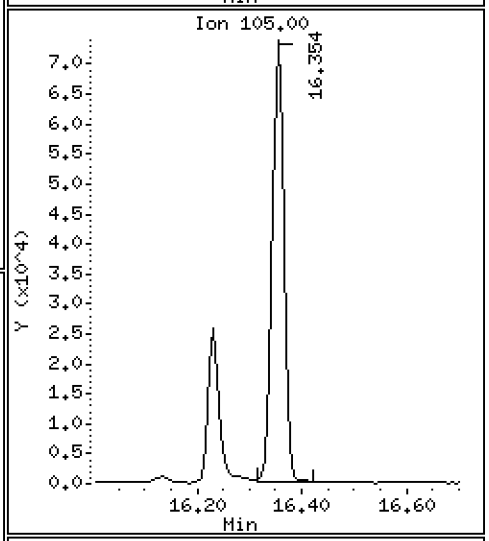


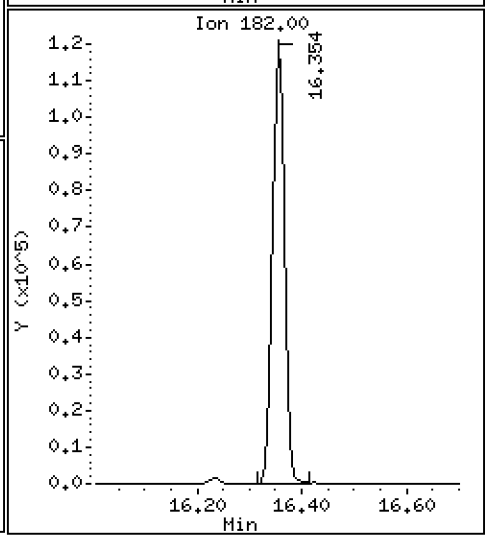












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

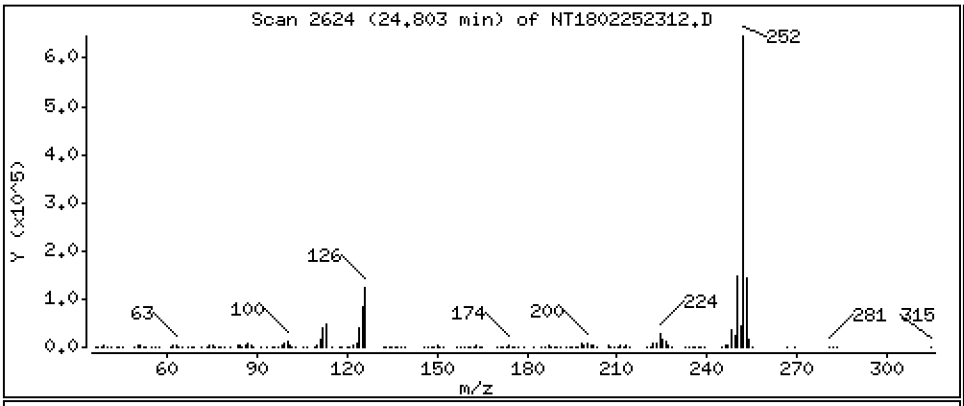
Operator: VTS

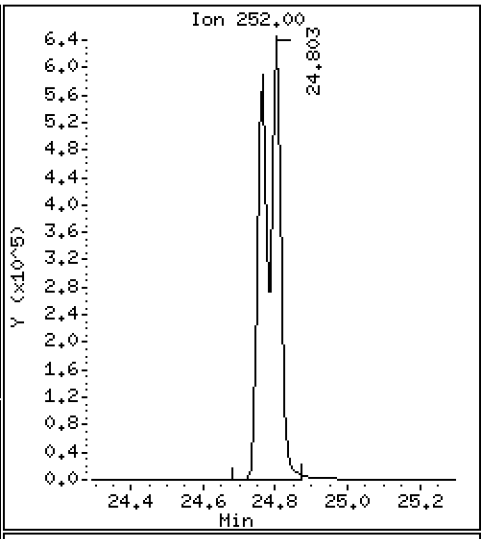
Column phase: ZB-5msi

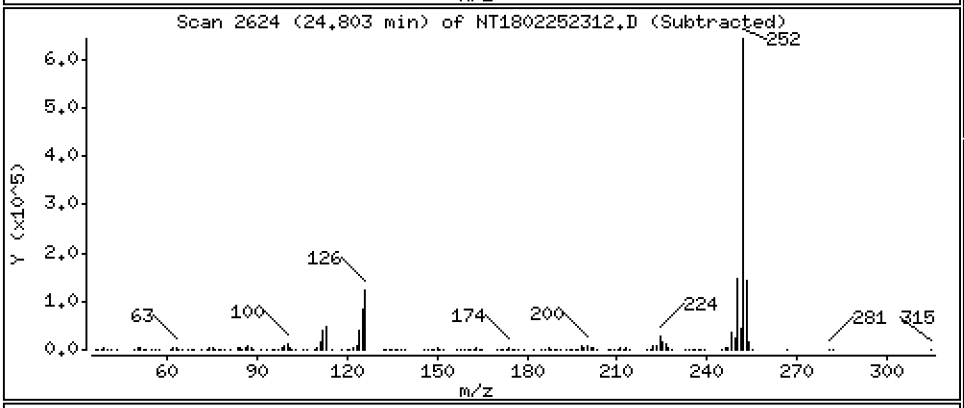
Column diameter: 0.25

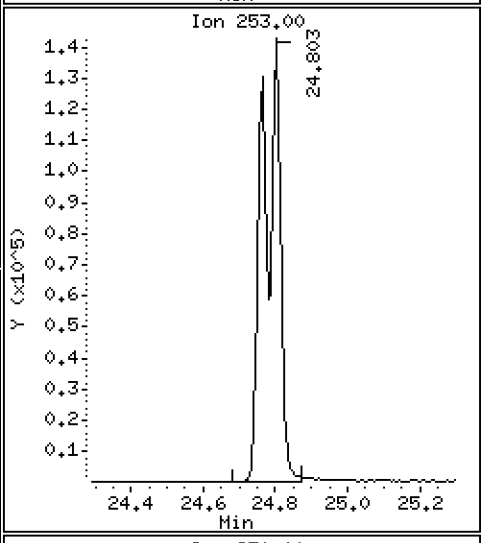
187 Total Benzofluoranthenes

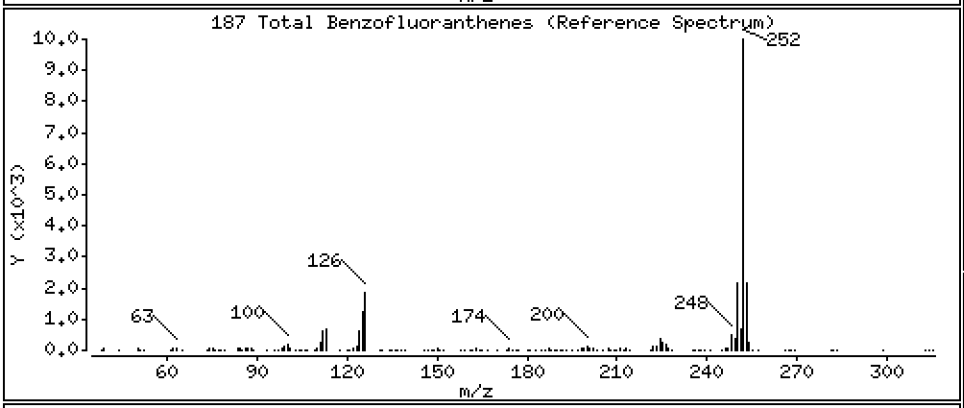
Concentration: 9.019 ug/mL

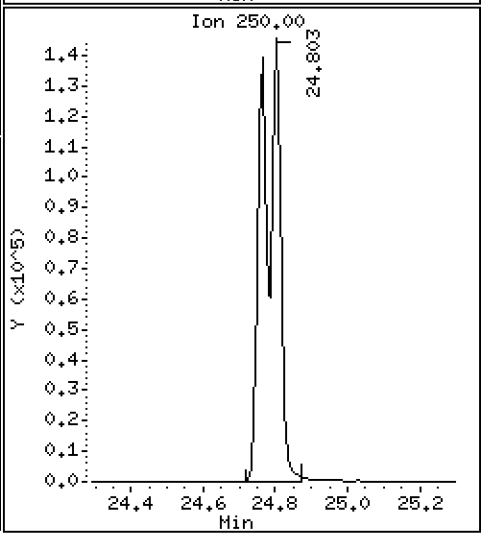


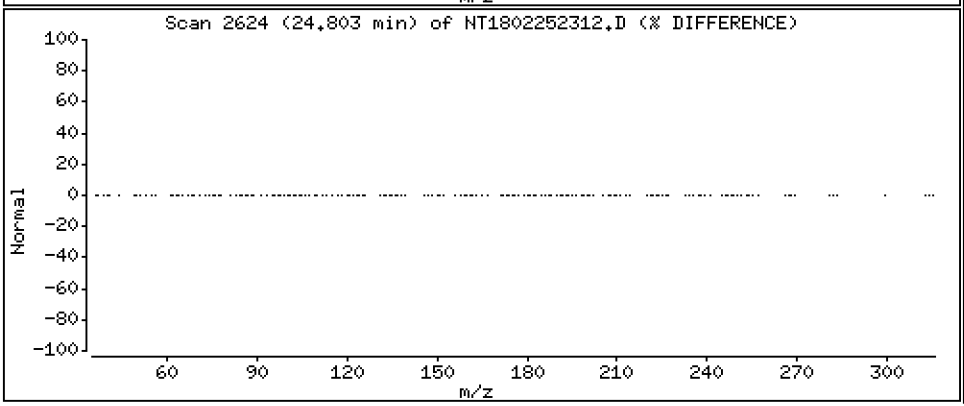












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

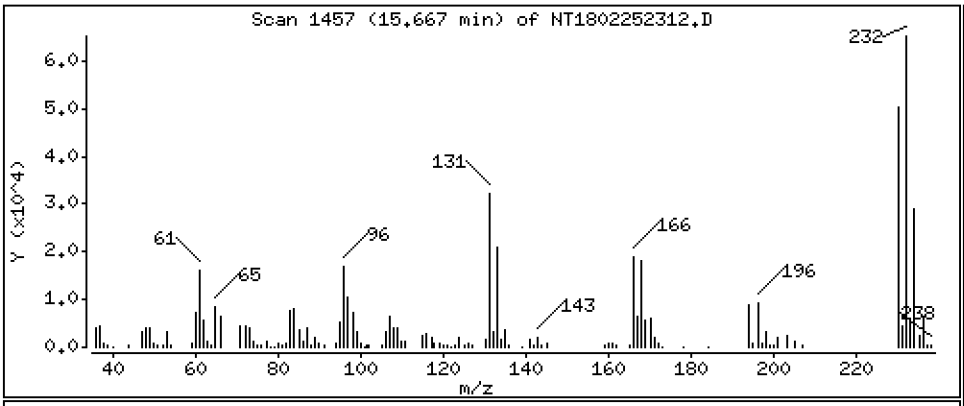
Operator: VTS

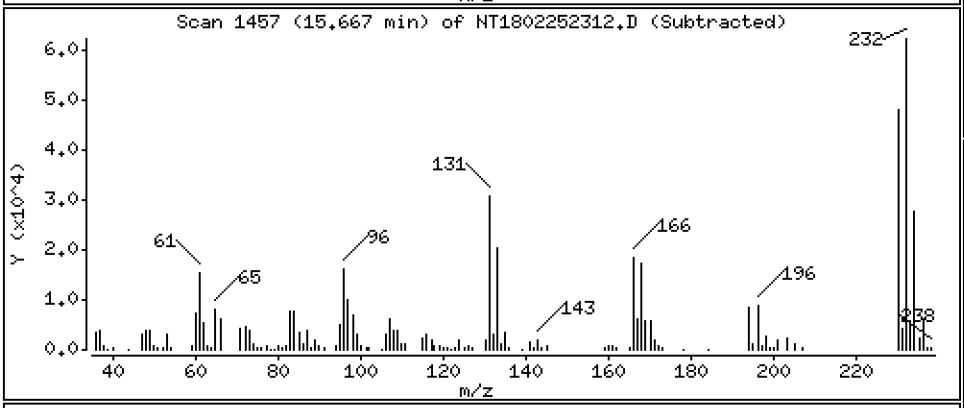
Column phase: ZB-5msi

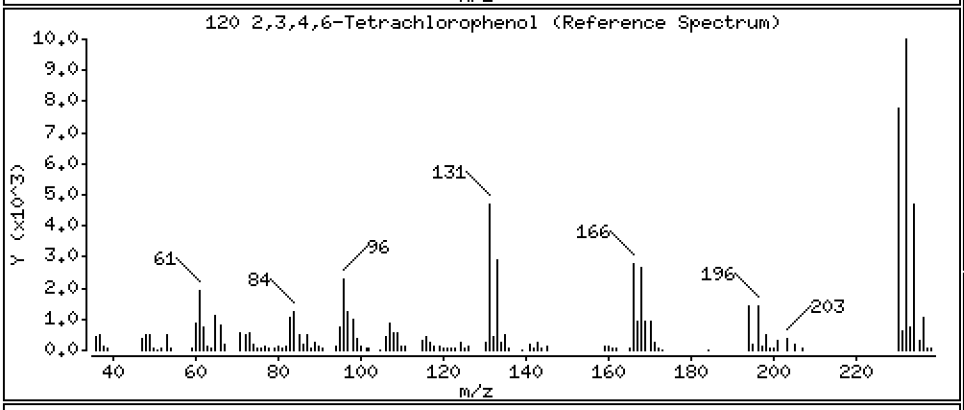
Column diameter: 0.25

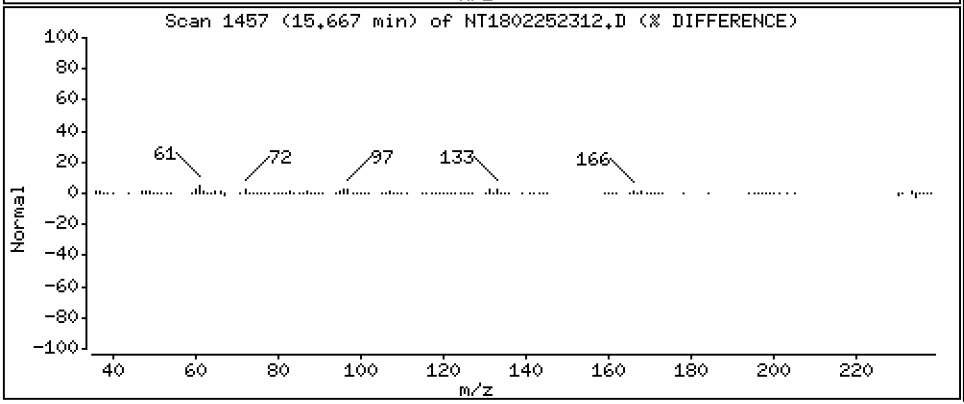
120 2,3,4,6-Tetrachlorophenol

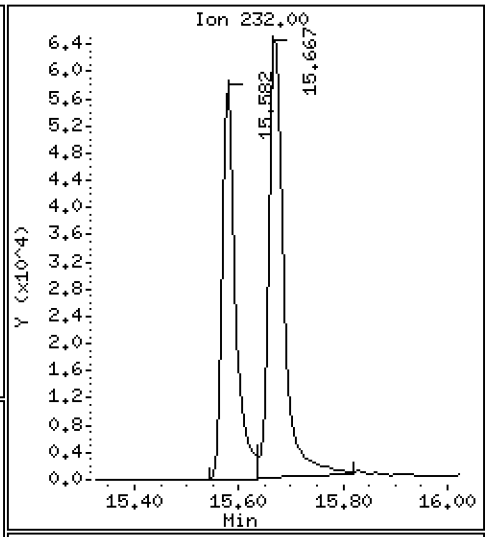
Concentration: 3.494 ug/mL

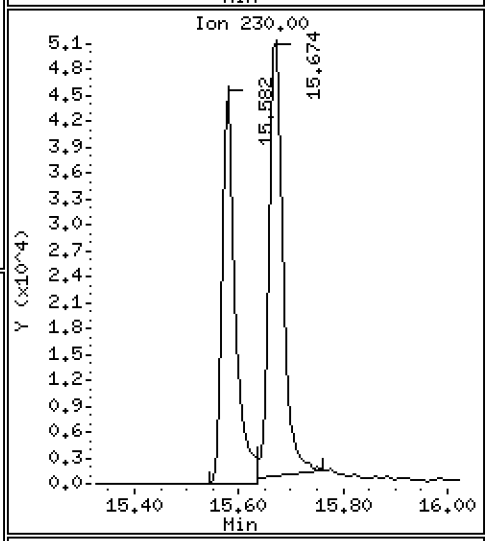


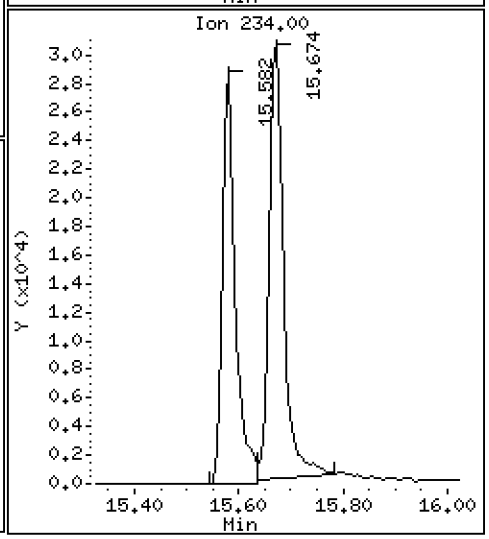












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D
Lab Smp Id: SLC0099-SCV1
Inj Date : 26-FEB-2023 04:06
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0099-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Meth Date : 08-Mar-2023 14:50 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	Compound Not Detected.					
$ 2	Phenol-d5	99	Compound Not Detected.					
3	Phenol	94	8.312	8.319	(0.932)	370940	4.10851	4.109
$ 5	2-Chlorophenol-d4	132	Compound Not Detected.					
4	Bis(2-Chloroethyl)ether	93	8.474	8.474	(0.951)	304296	4.96248	4.962
6	2-Chlorophenol	128	8.582	8.590	(0.963)	323041	4.16677	4.167
7	1,3-Dichlorobenzene	146	8.845	8.853	(0.992)	378421	4.61495	4.615
* 8	1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	196803	4.00000	
9	1,4-Dichlorobenzene	146	8.938	8.938	(1.003)	386214	4.62064	4.621
$ 10	1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	366937	4.52355	4.524
11	Benzyl alcohol	108	9.186	9.202	(1.030)	200760	4.67656	4.677
14	2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	98942	5.20483	5.205
13	2-Methylphenol	108	9.411	9.419	(1.056)	279008	3.99508	3.995
17	Hexachloroethane	117	9.869	9.877	(1.107)	154297	4.76884	4.769
16	N-Nitroso-di-n-propylamine	70	9.737	9.737	(1.092)	246392	4.79947	4.799
15	4-Methylphenol	108	9.683	9.683	(1.086)	298862	4.10580	4.106
$ 18	Nitrobenzene-d5	82	Compound Not Detected.					
19	Nitrobenzene	77	10.024	10.032	(0.882)	361585	4.69174	4.692
20	Isophorone	82	10.467	10.467	(0.921)	632536	6.43324	6.433
21	2-Nitrophenol	139	10.650	10.659	(0.937)	168023	4.43914	4.439
22	2,4-Dimethylphenol	107	10.710	10.710	(0.942)	249516	3.45955	3.460
23	Bis(2-Chloroethoxy)methane	93	10.896	10.905	(0.959)	369555	5.48879	5.489
24	Benzoic acid	105	10.990	11.092	(0.967)	72051	2.61790	2.618(M)
25	2,4-Dichlorophenol	162	11.100	11.100	(0.977)	292217	4.62098	4.621
26	1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	303141	4.43838	4.438
* 27	Naphthalene-d8	136	11.365	11.365	(1.000)	751242	4.00000	
28	Naphthalene	128	11.403	11.403	(1.003)	1044410	4.52257	4.523
29	4-Chloroaniline	127	11.535	11.542	(1.015)	318320	3.45878	3.459
30	Hexachlorobutadiene	225	11.767	11.767	(1.035)	186397	4.65605	4.656
31	4-Chloro-3-methylphenol	107	12.494	12.502	(1.099)	267666	4.42235	4.422
32	2-Methylnaphthalene	142	12.788	12.788	(1.125)	663066	4.22545	4.225
33	Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	87571	3.20191	3.202

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	159887	4.14757	4.148
	35 2,4,5-Trichlorophenol	196	13.477	13.485	(0.902)	172217	4.09965	4.100
$	36 2-Fluorobiphenyl	172	Compound Not Detected.					
	37 2-Chloronaphthalene	162	13.771	13.771	(0.922)	597668	4.55180	4.552
	38 2-Nitroaniline	65	14.026	14.034	(0.939)	184700	4.49470	4.495
	39 Dimethylphthalate	163	14.468	14.460	(0.968)	668285	4.73886	4.739
	40 Acenaphthylene	152	14.630	14.630	(0.979)	1015081	4.59116	4.591
	41 2,6-Dinitrotoluene	165	14.599	14.591	(0.977)	156792	4.84977	4.850
*	42 Acenaphthene-d10	164	14.940	14.940	(1.000)	398556	4.00000	
	43 3-Nitroaniline	138	14.878	14.878	(0.996)	177578	4.64347	4.643
	44 Acenaphthene	153	15.009	15.001	(1.005)	633850	4.52979	4.530
	45 2,4-Dinitrophenol	184	15.094	15.094	(1.010)	21508	1.42564	1.426
	46 Dibenzofuran	168	15.334	15.334	(1.026)	882055	4.35510	4.355
	47 4-Nitrophenol	109	15.210	15.218	(1.018)	66995	4.34588	4.346
	48 2,4-Dinitrotoluene	165	15.396	15.396	(1.031)	202080	4.57277	4.573
	50 Diethylphthalate	149	15.906	15.906	(1.065)	777988	5.26498	5.265
	49 Fluorene	166	16.037	16.037	(1.073)	841063	5.18202	5.182
	51 4-Chlorophenyl-phenylether	204	16.029	16.029	(1.073)	367830	4.97548	4.975
	52 4-Nitroaniline	138	16.130	16.130	(1.080)	169269	4.60087	4.601
	53 4,6-Dinitro-2-methylphenol	198	16.230	16.230	(0.904)	91958	3.59564	3.596
	54 N-Nitrosodiphenylamine	169	16.284	16.276	(0.907)	494995	4.60237	4.602
$	55 2,4,6-Tribromophenol	330	Compound Not Detected.					
	56 4-Bromophenyl-phenylether	248	17.024	17.024	(0.948)	210814	4.88441	4.884
	57 Hexachlorobenzene	284	17.333	17.333	(0.966)	220372	4.42184	4.422
	58 Pentachlorophenol	266	17.697	17.697	(0.986)	32473	2.45386	2.454
*	59 Phenanthrene-d10	188	17.952	17.945	(1.000)	714786	4.00000	
	60 Phenanthrene	178	17.999	17.991	(1.003)	988459	4.39651	4.397
	61 Anthracene	178	18.092	18.084	(1.008)	848151	3.95863	3.959
	62 Carbazole	167	18.417	18.417	(1.026)	876153	4.46270	4.463
	63 Di-n-butylphthalate	149	19.229	19.229	(1.071)	1121126	5.15898	5.159
	64 Fluoranthene	202	20.374	20.374	(0.886)	1087530	4.81174	4.812
	65 Pyrene	202	20.800	20.800	(0.905)	1098967	4.55908	4.559
$	66 Terphenyl-d14	244	Compound Not Detected.					
	67 Butylbenzylphthalate	149	22.023	22.023	(0.958)	487079	5.32159	5.322
	68 Benzo(a)anthracene	228	22.952	22.952	(0.999)	1041421	4.47172	4.472
*	69 Chrysene-d12	240	22.983	22.975	(1.000)	645093	4.00000	
	70 3,3'-Dichlorobenzidine	252	22.913	22.906	(0.997)	856987	10.0002	10.00
	71 Chrysene	228	23.029	23.022	(1.002)	1072229	4.42756	4.428
	72 bis(2-Ethylhexyl)phthalate	149	23.053	23.045	(0.960)	743132	5.23131	5.231
*	134 Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	989444	4.00000	
	73 Di-n-octylphthalate	149	24.028	24.028	(1.000)	1326876	4.81262	4.813
	74 Benzo(b)fluoranthene	252	24.764	24.756	(0.972)	1013785	4.31859	4.319
	75 Benzo(k)fluoranthene	252	24.802	24.795	(0.974)	1259698	4.73494	4.735(H)
	76 Benzo(a)pyrene	252	25.368	25.360	(0.996)	998824	4.58976	4.590
*	77 Perylene-d12	264	25.468	25.468	(1.000)	719540	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.920	27.904	(1.096)	1266543	4.63606	4.636
	79 Dibenzo(a,h)anthracene	278	27.928	27.920	(1.097)	1043466	4.57975	4.580
	80 Benzo(g,h,i)perylene	276	28.634	28.619	(1.124)	1005990	4.59311	4.593
	90 N-Nitrosodimethylamine	74	4.673	4.681	(0.524)	189582	4.80958	4.810
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	20.614	20.614	(0.897)	641864	5.81258	5.813
	103 Pyridine	79	4.673	4.689	(0.524)	308261	4.69431	4.694
	105 1-methylnaphthalene	142	13.005	13.005	(1.144)	637254	4.48602	4.486
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.353	16.353	(1.095)	770064	4.73097	4.731

						CONCENTRATIONS	
	QUANT SIG					ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
187 Total Benzofluoranthenes	252	24.802	24.795	(0.974)	2140538	9.01877	9.019
120 2,3,4,6-Tetrachlorophenol	232	15.666	15.674	(1.049)	136871	3.49441	3.494

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252312.D
Lab Smp Id: SLC0099-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	196803	-7.65
27 Naphthalene-d8	806946	403473	1613892	751242	-6.90
42 Acenaphthene-d10	424249	212125	848498	398556	-6.06
59 Phenanthrene-d10	758987	379494	1517974	714786	-5.82
69 Chrysene-d12	685237	342619	1370474	645093	-5.86
134 Di-n-octylphthala	1075410	537705	2150820	989444	-7.99
77 Perylene-d12	762553	381277	1525106	719540	-5.64

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.94	14.44	15.44	14.94	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	0.00
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252312.D

Lab ID: SLC0099-SCV1
nt18.i, ABN.m, 26-FEB-2023 04:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.967	0.000	0.9670	Benzoic acid
1.010	0.000	1.0103	2,4-Dinitrophenol
0.986	0.000	0.9858	Pentachlorophenol

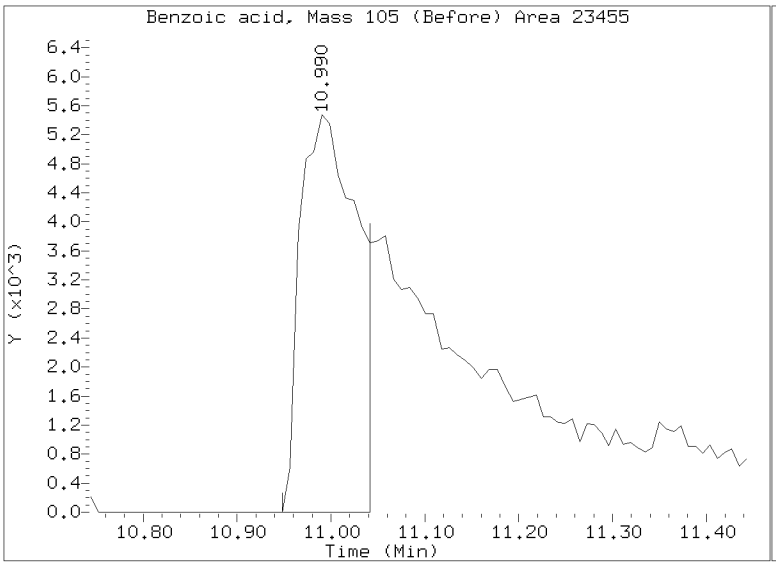
RRT check based on Ccal File: NT1802252308.D

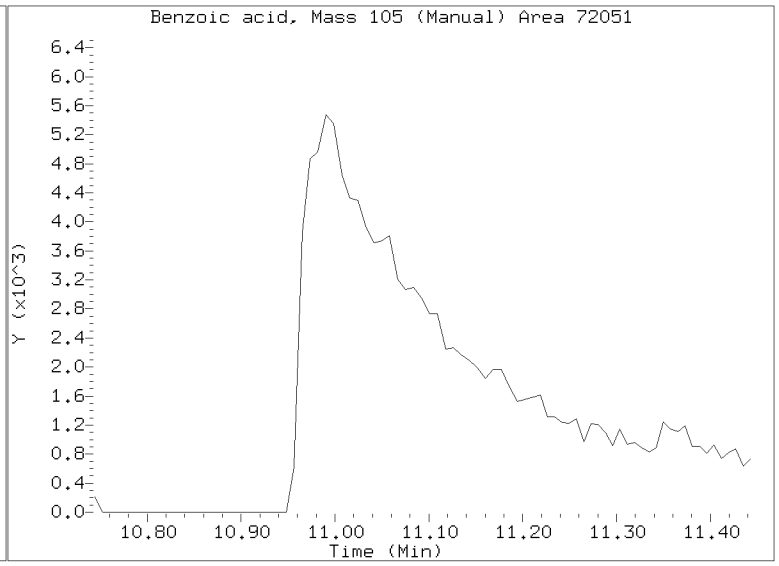
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230225.b/NT1802252312.D
Injection Date: 26-FEB-2023 04:06
Lab ID:SLC0099-SCV1 Client ID:
Report Date: 03/10/2023 07:50





SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00023
Laboratory ID: SLC0099-SCV1
Sequence: SLC0099
Standard ID: L002576

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.1	-17.8	20.00
bis(2-chloroethyl) ether	5.0000	5.0	-0.8	20.00
2-Chlorophenol	5.0000	4.2	-16.7	20.00
1,3-Dichlorobenzene	5.0000	4.6	-7.7	20.00
1,4-Dichlorobenzene	5.0000	4.6	-7.6	20.00
1,2-Dichlorobenzene	5.0000	4.5	-9.5	20.00
Benzyl Alcohol	5.0000	4.7	-6.5	20.00
2,2'-Oxybis(1-chloropropane)	5.0000	5.2	4.1	20.00
2-Methylphenol	5.0000	4.0	-20.1 *	20.00
Hexachloroethane	5.0000	4.8	-4.6	20.00
N-Nitroso-di-n-Propylamine	5.0000	4.8	-4.0	20.00
4-Methylphenol	5.0000	4.1	-17.9	20.00
Nitrobenzene	5.0000	4.7	-6.2	20.00
Isophorone	5.0000	6.4	28.7 *	20.00
2-Nitrophenol	5.0000	4.4	-11.2	20.00
2,4-Dimethylphenol	5.0000	3.5	-30.8 *	20.00
Bis(2-Chloroethoxy)methane	5.0000	5.5	9.8	20.00
2,4-Dichlorophenol	5.0000	4.6	-7.6	20.00
1,2,4-Trichlorobenzene	5.0000	4.4	-11.2	20.00
Naphthalene	5.0000	4.5	-9.5	20.00
Benzoic acid	10.000	2.6	-73.8 *	20.00
4-Chloroaniline	5.0000	3.5	-30.8 *	20.00
Hexachlorobutadiene	5.0000	4.7	-6.9	20.00
4-Chloro-3-Methylphenol	5.0000	4.4	-11.6	20.00
2-Methylnaphthalene	5.0000	4.2	-15.5	20.00
Hexachlorocyclopentadiene	5.0000	3.2	-36.0 *	20.00
2,4,6-Trichlorophenol	5.0000	4.1	-17.0	20.00
2,4,5-Trichlorophenol	5.0000	4.1	-18.0	20.00
2-Chloronaphthalene	5.0000	4.6	-9.0	20.00
2-Nitroaniline	5.0000	4.5	-10.1	20.00
Acenaphthylene	5.0000	4.6	-8.2	20.00
Dimethylphthalate	5.0000	4.7	-5.2	20.00

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC **SDG:** 23A0134

Client: Anchor QEA, LLC **Project:** AOC5 MR Phase 1

Calibration: GC00023 **Laboratory ID:** SLC0099-SCV1

Sequence: SLC0099 **Standard ID:** L002576

2,6-Dinitrotoluene	5.0000	4.8	-3.0	20.00
Acenaphthene	5.0000	4.5	-9.4	20.00
3-Nitroaniline	5.0000	4.6	-7.1	20.00
2,4-Dinitrophenol	5.0000	1.4	-71.5 *	20.00
Dibenzofuran	5.0000	4.4	-12.9	20.00
4-Nitrophenol	5.0000	4.3	-13.1	20.00
2,4-Dinitrotoluene	5.0000	4.6	-8.5	20.00
Fluorene	5.0000	5.2	3.6	20.00
4-Chlorophenylphenyl ether	5.0000	5.0	-0.5	20.00
Diethyl phthalate	5.0000	5.3	5.3	20.00
4-Nitroaniline	5.0000	4.6	-8.0	20.00
4,6-Dinitro-2-methylphenol	5.0000	3.6	-28.1 *	20.00
N-Nitrosodiphenylamine	5.0000	4.6	-8.0	20.00
4-Bromophenyl phenyl ether	5.0000	4.9	-2.3	20.00
Hexachlorobenzene	5.0000	4.4	-11.6	20.00
Pentachlorophenol	5.0000	2.5	-50.9 *	20.00
Phenanthrene	5.0000	4.4	-12.1	20.00
Anthracene	5.0000	4.0	-20.8 *	20.00
Carbazole	5.0000	4.5	-10.7	20.00
Di-n-Butylphthalate	5.0000	5.2	3.2	20.00
Fluoranthene	5.0000	4.8	-3.8	20.00
Pyrene	5.0000	4.6	-8.8	20.00
Butylbenzylphthalate	5.0000	5.3	6.4	20.00
Benzo(a)anthracene	5.0000	4.5	-10.6	20.00
3,3'-Dichlorobenzidine	10.000	10.0	0.002	20.00
Chrysene	5.0000	4.4	-11.4	20.00
bis(2-Ethylhexyl)phthalate	5.0000	5.2	4.6	20.00
Di-n-Octylphthalate	5.0000	4.8	-3.7	20.00
Benzofluoranthenes, Total	10.000	9.0	-9.8	20.00
Benzo(a)pyrene	5.0000	4.6	-8.2	20.00
Indeno(1,2,3-cd)pyrene	5.0000	4.6	-7.3	20.00
Dibenzo(a,h)anthracene	5.0000	4.6	-8.4	20.00
Benzo(g,h,i)perylene	5.0000	4.6	-8.1	20.00
1-Methylnaphthalene	5.0000	4.5	-10.3	20.00

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

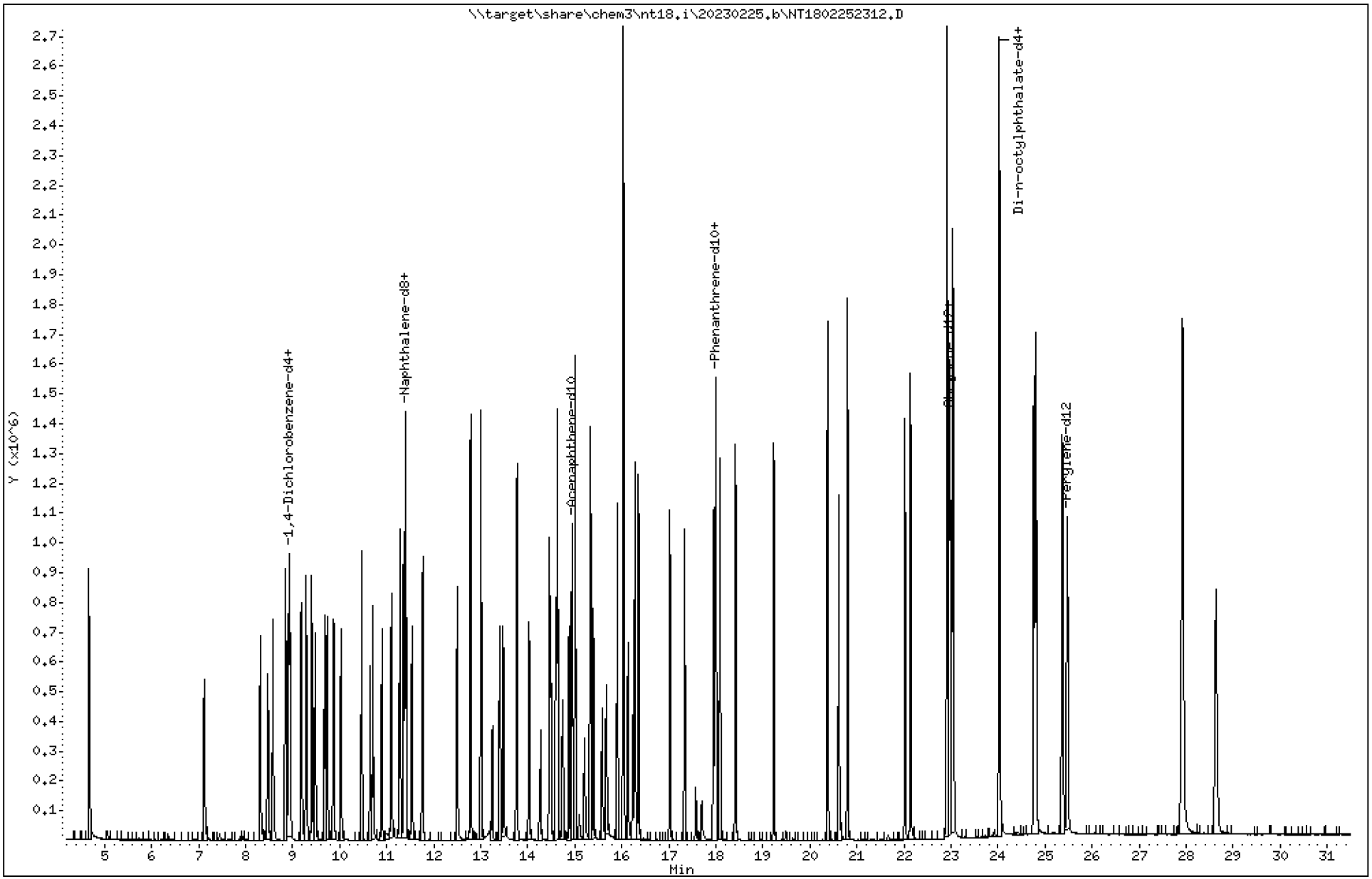
Instrument: nt18.i

Sample Info: SLC0099-SCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

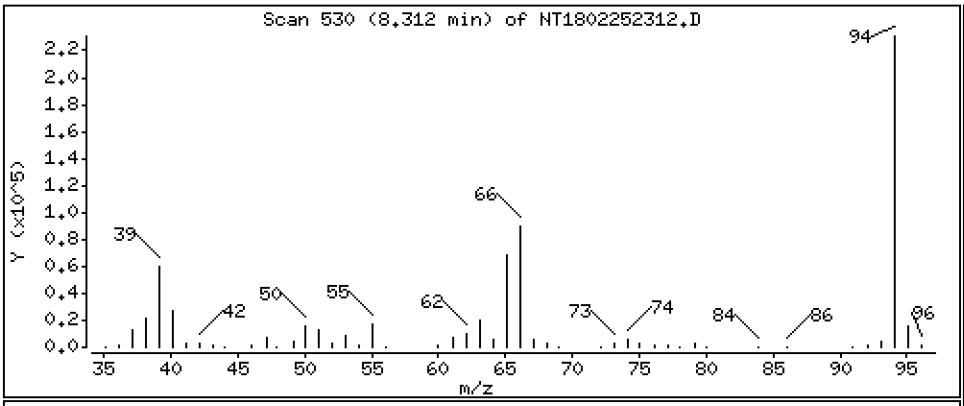
Operator: VTS

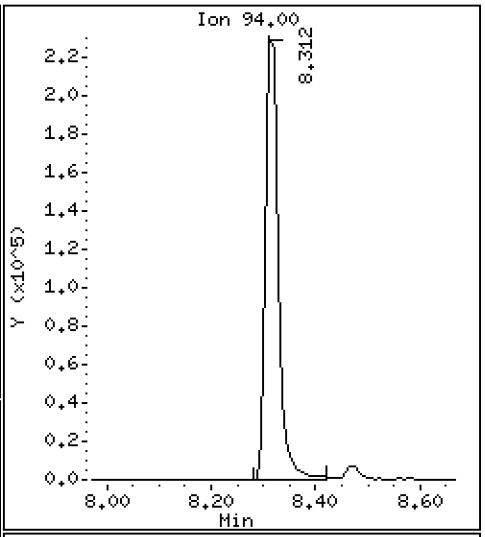
Column phase: ZB-5msi

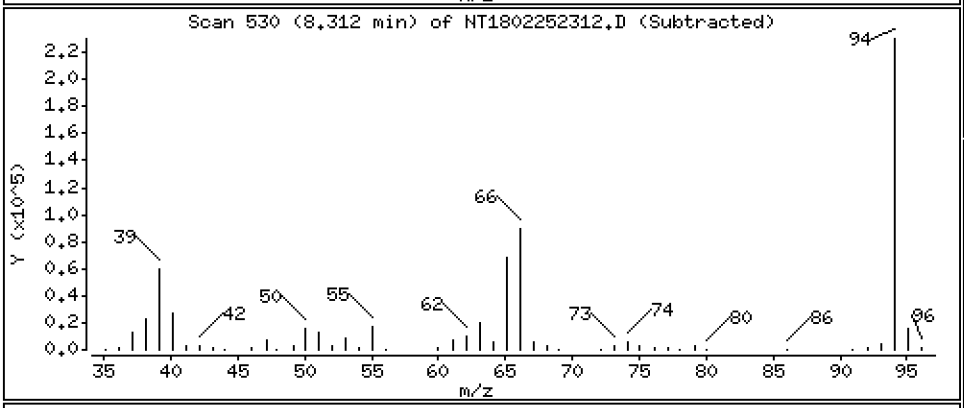
Column diameter: 0.25

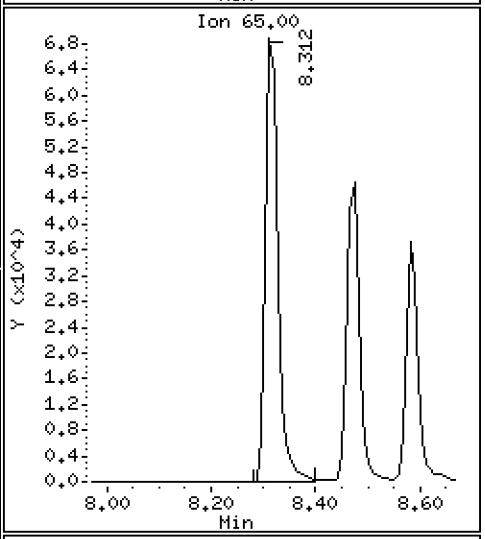
3 Phenol

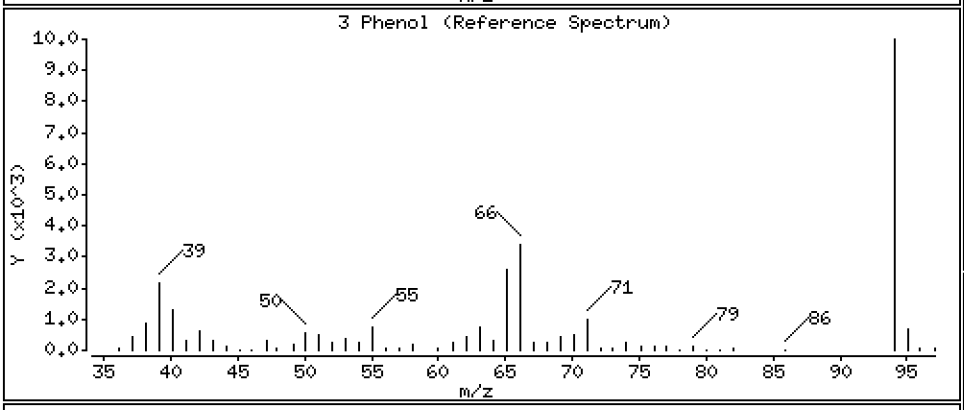
Concentration: 4.109 ug/mL

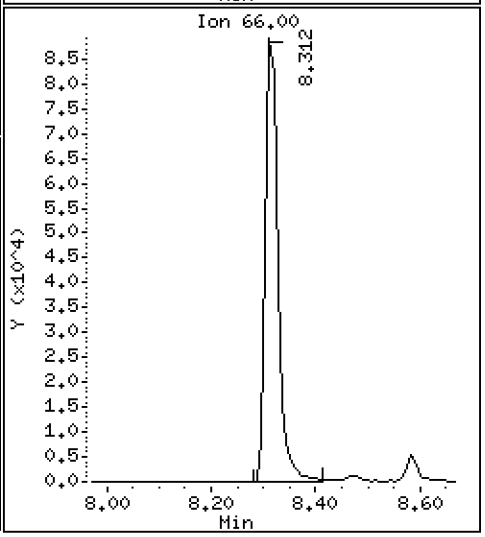


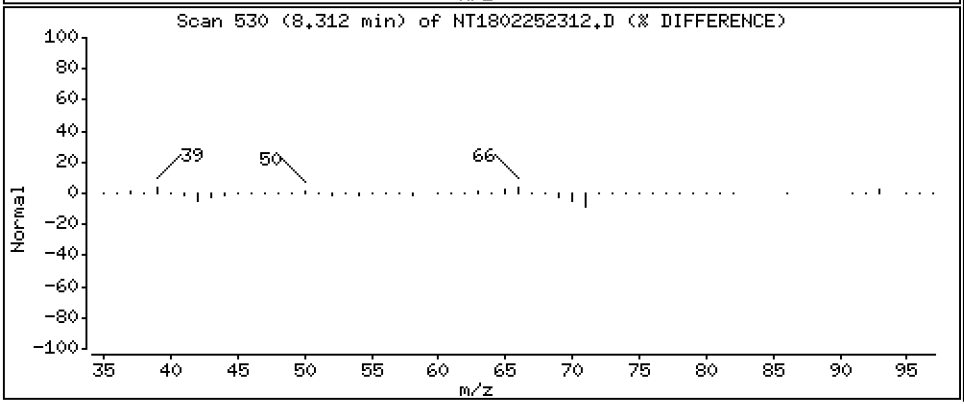












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

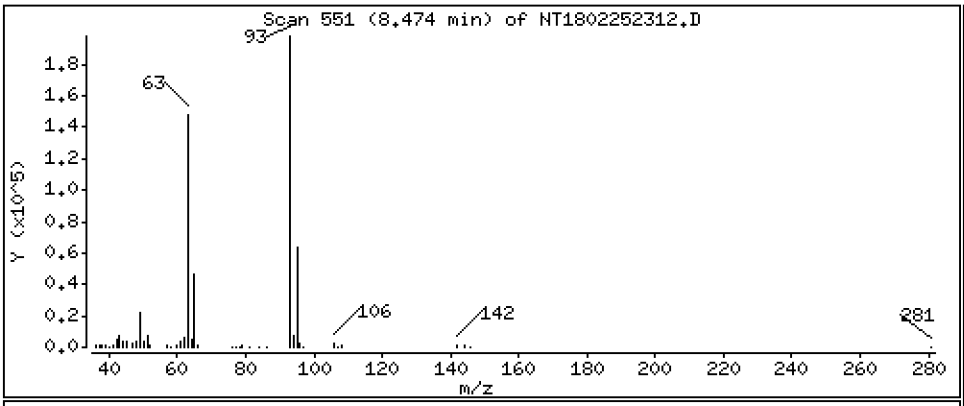
Operator: VTS

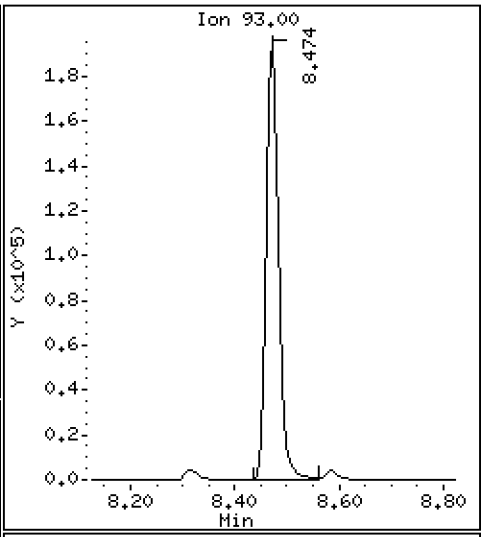
Column phase: ZB-5msi

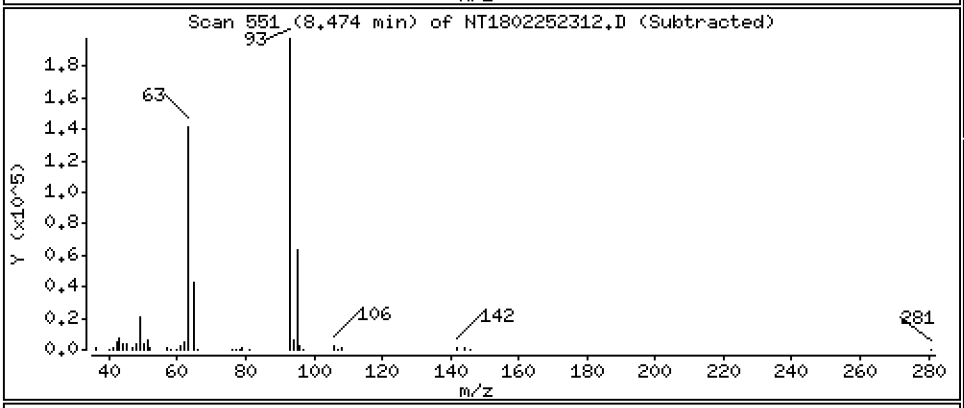
Column diameter: 0.25

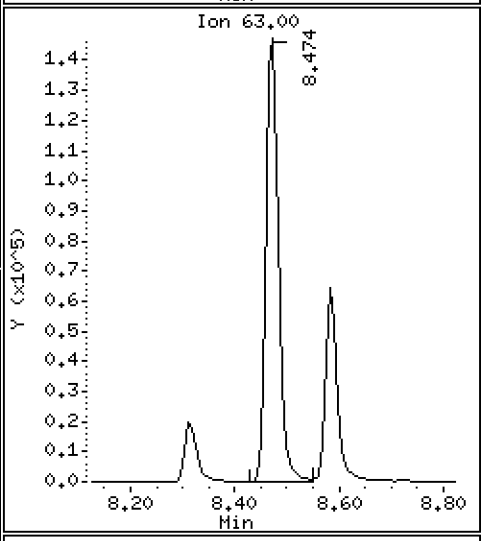
4 Bis(2-Chloroethyl)ether

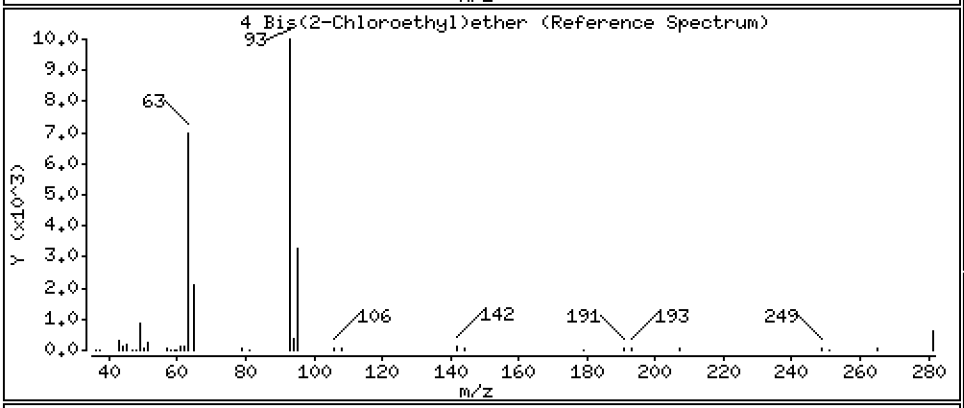
Concentration: 4.962 ug/mL

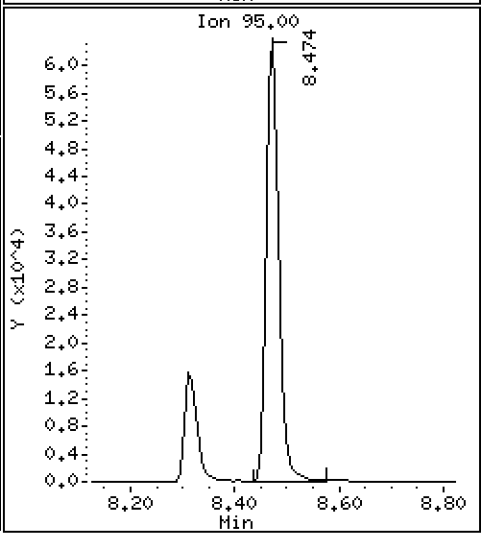


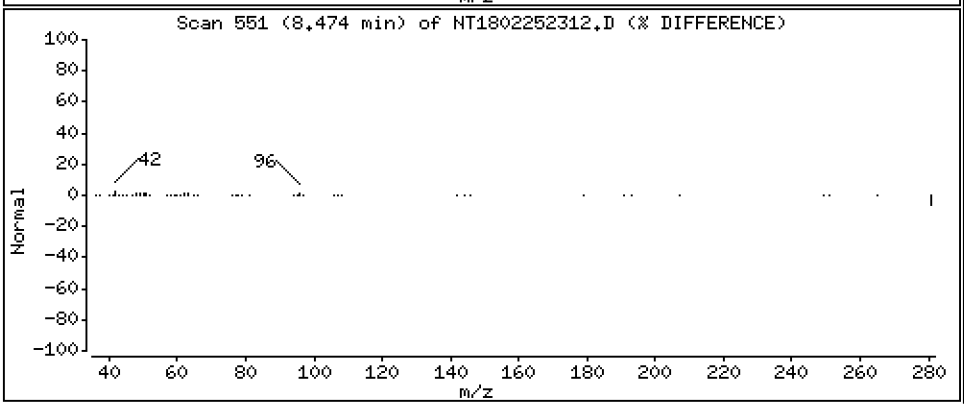












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

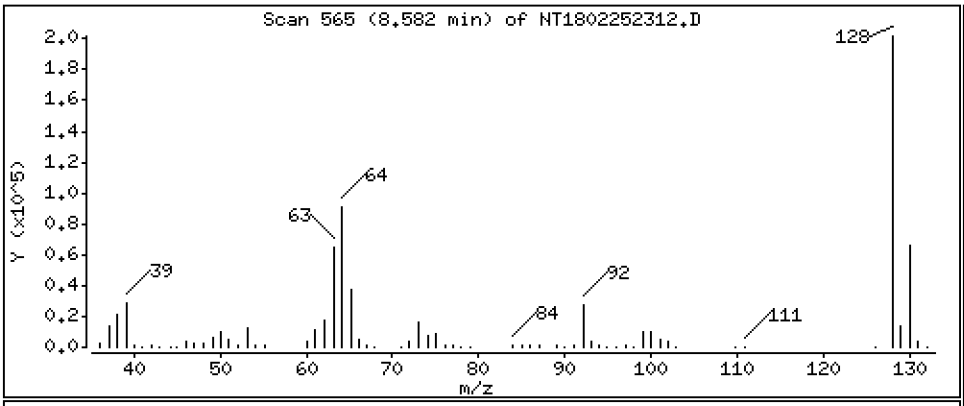
Operator: VTS

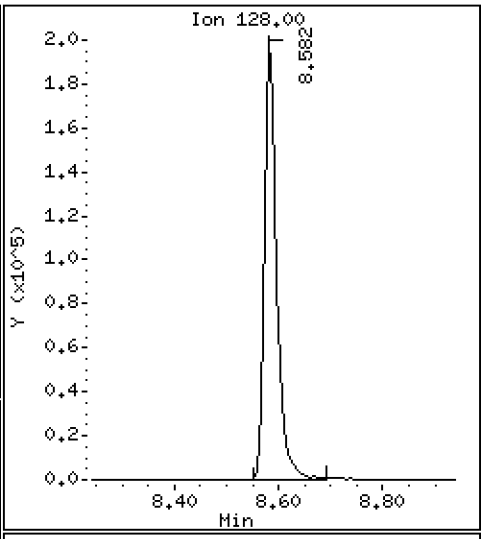
Column phase: ZB-5msi

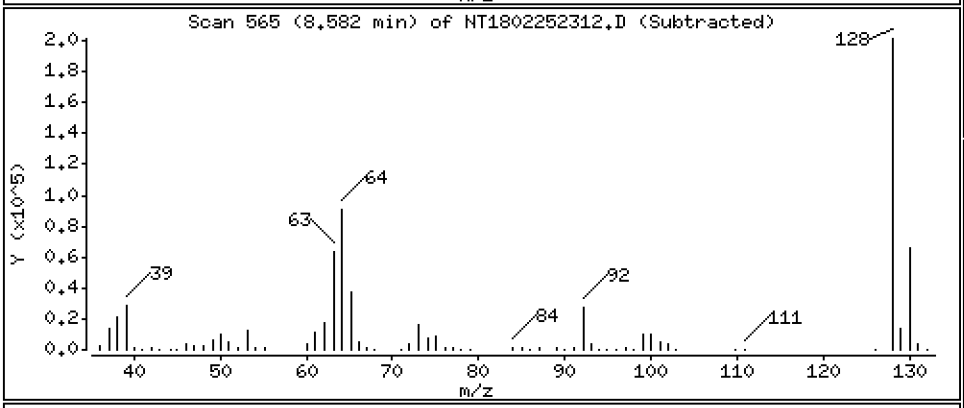
Column diameter: 0.25

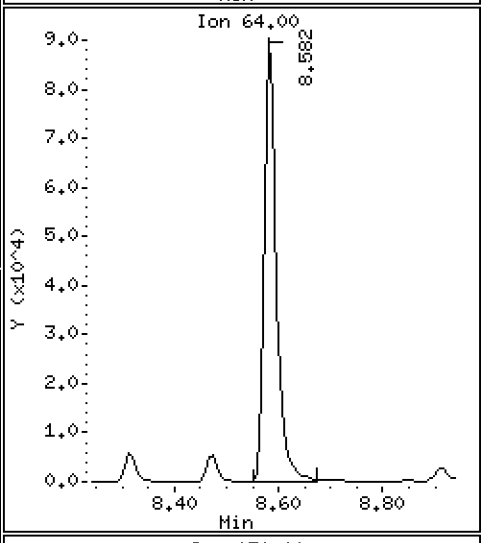
6 2-Chlorophenol

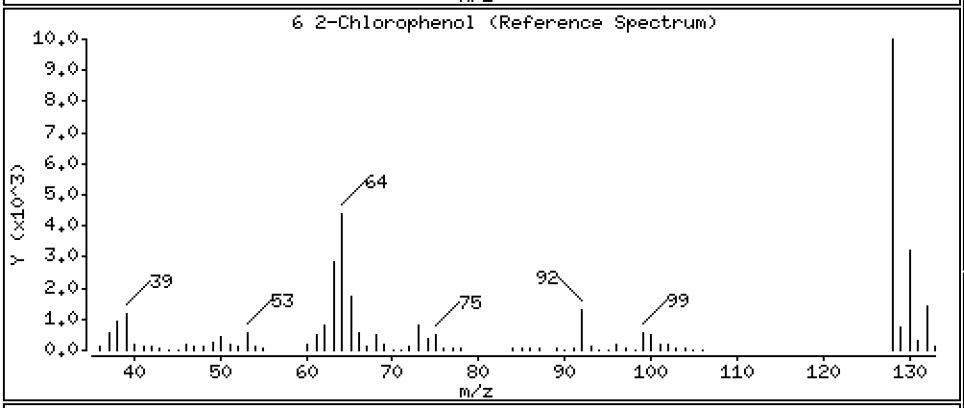
Concentration: 4.167 ug/mL

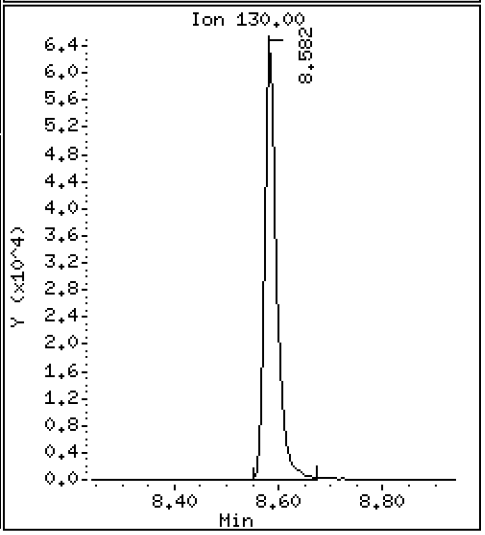


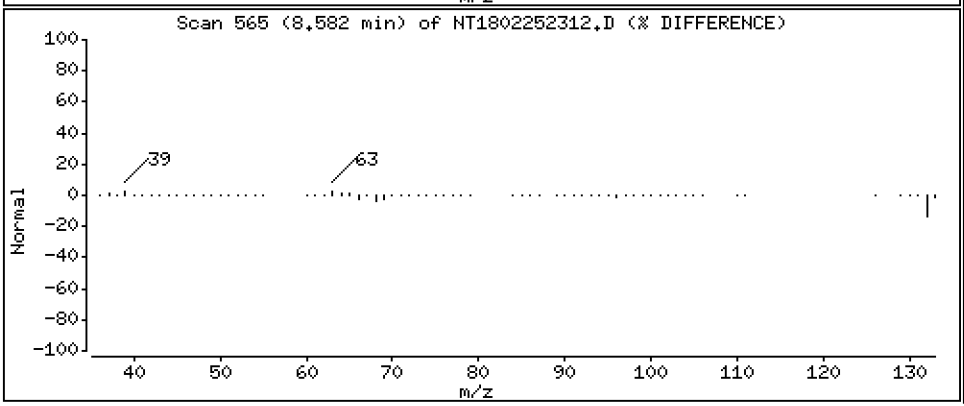












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

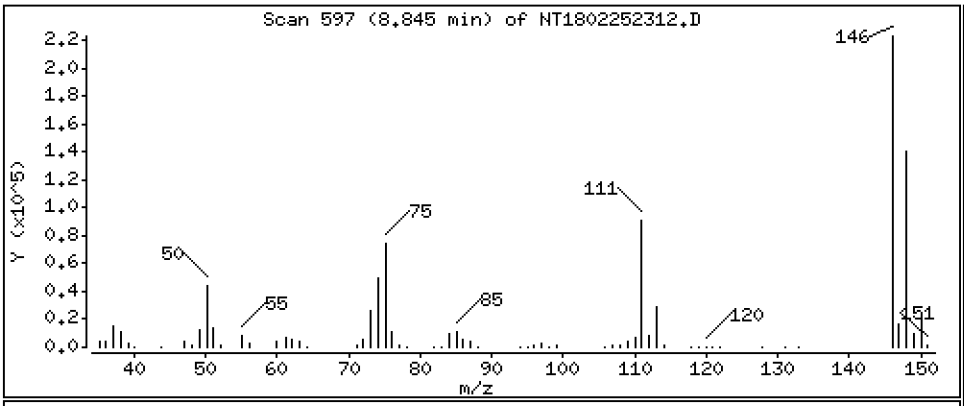
Operator: VTS

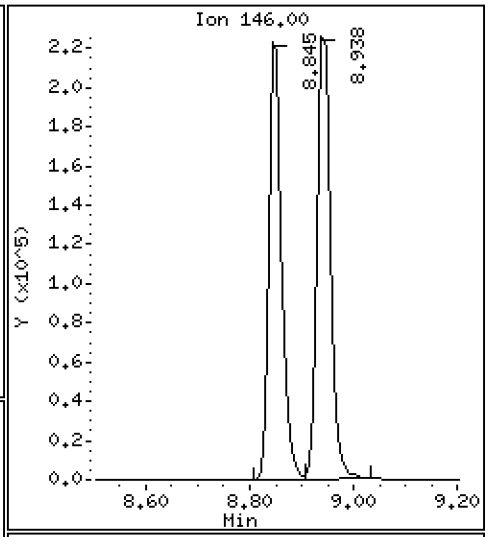
Column phase: ZB-5msi

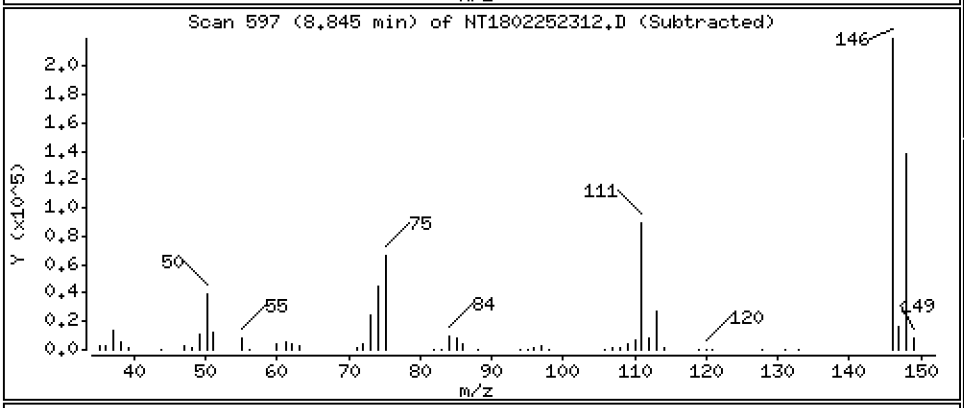
Column diameter: 0.25

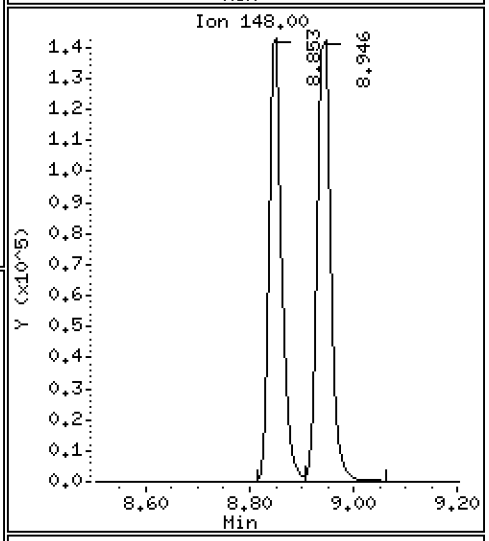
7 1,3-Dichlorobenzene

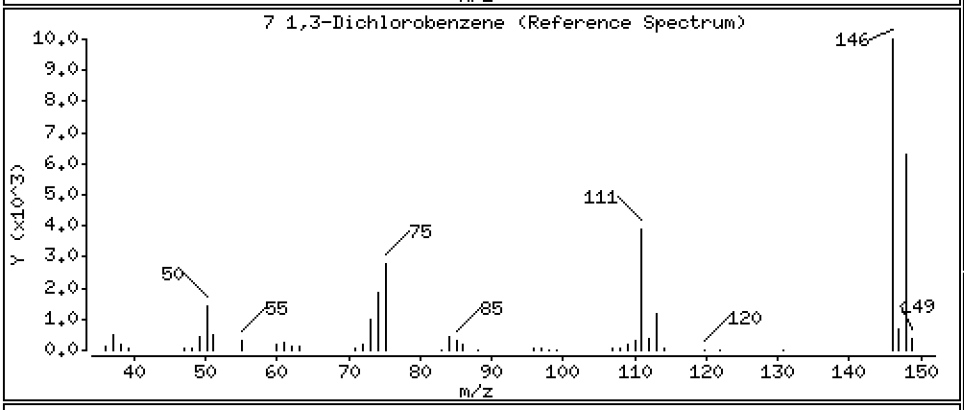
Concentration: 4.615 ug/mL

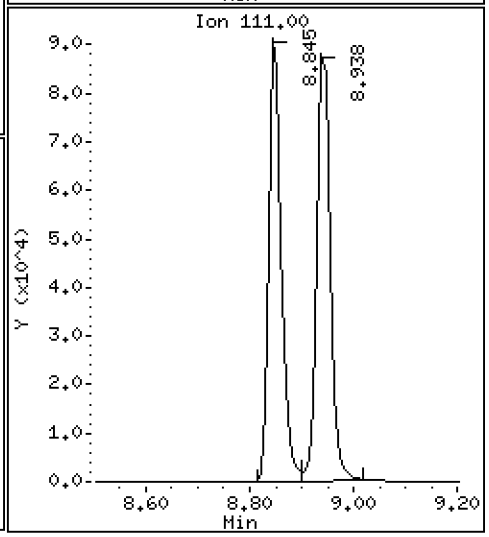


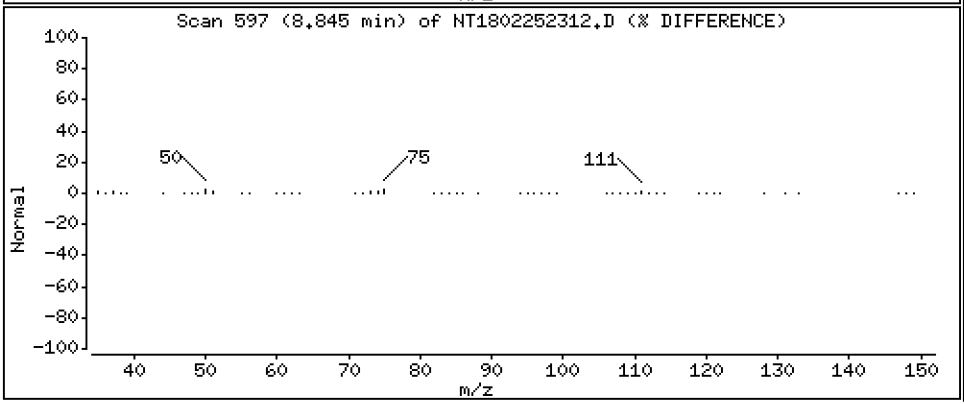












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

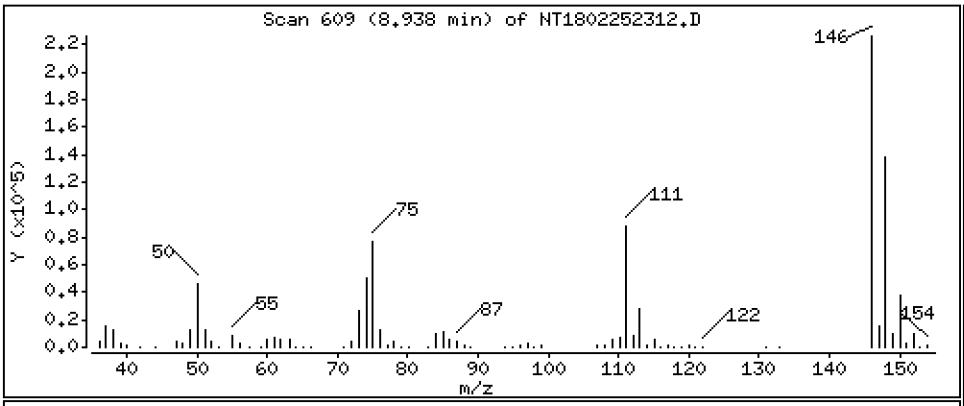
Operator: VTS

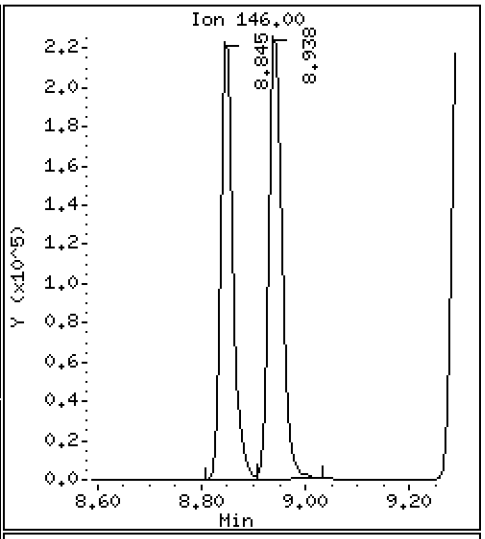
Column phase: ZB-5msi

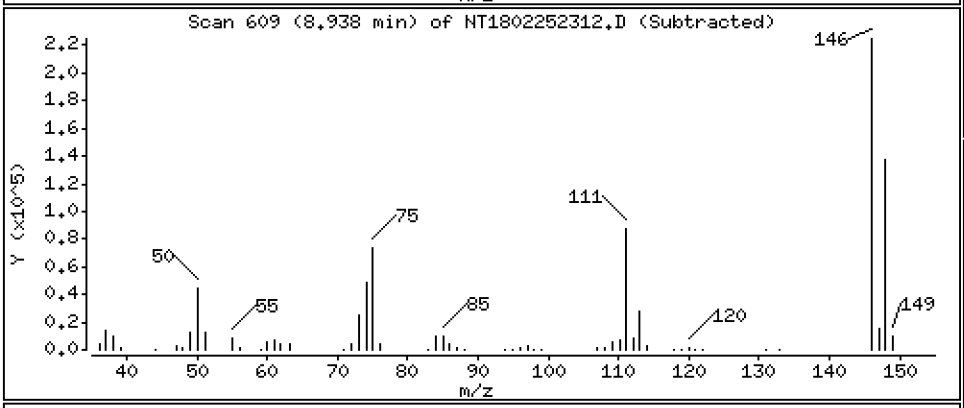
Column diameter: 0.25

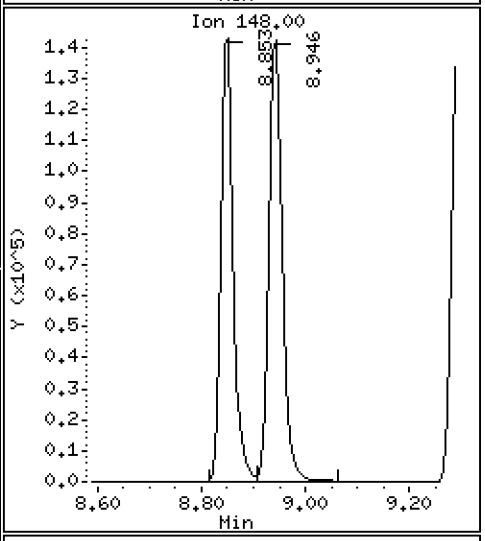
9 1,4-Dichlorobenzene

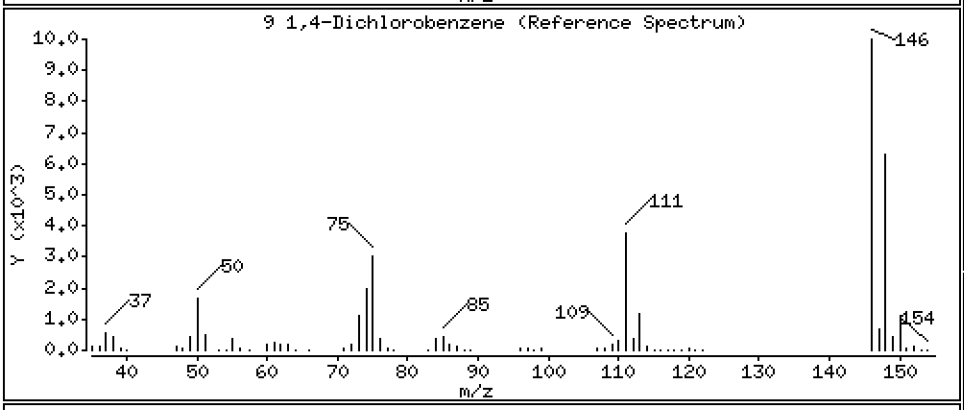
Concentration: 4.621 ug/mL

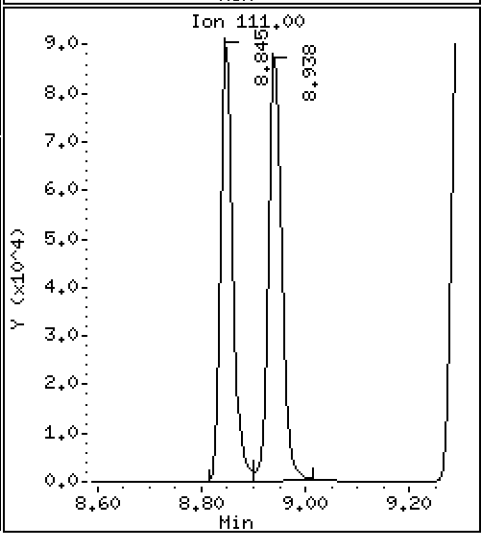


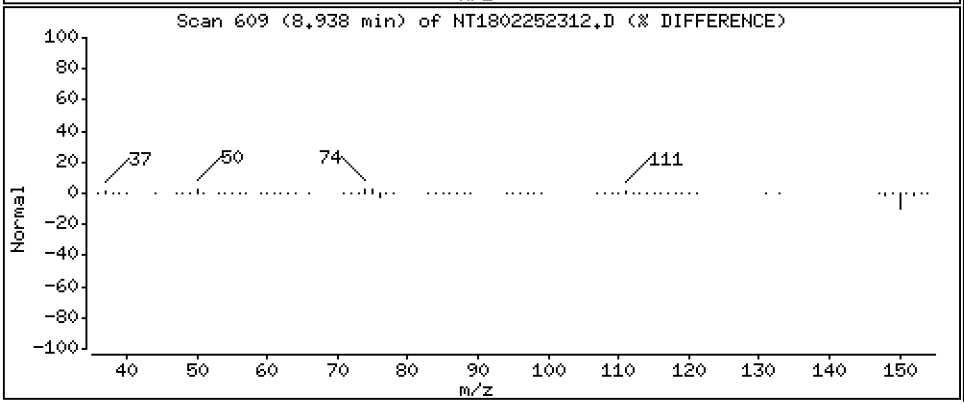












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

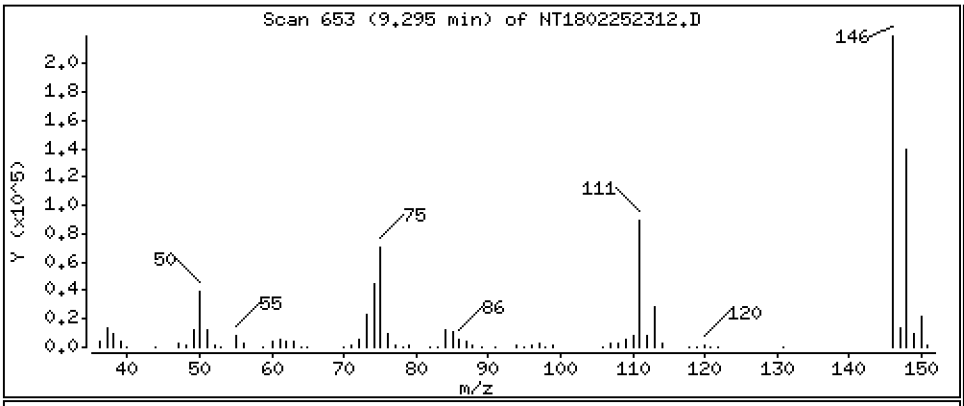
Operator: VTS

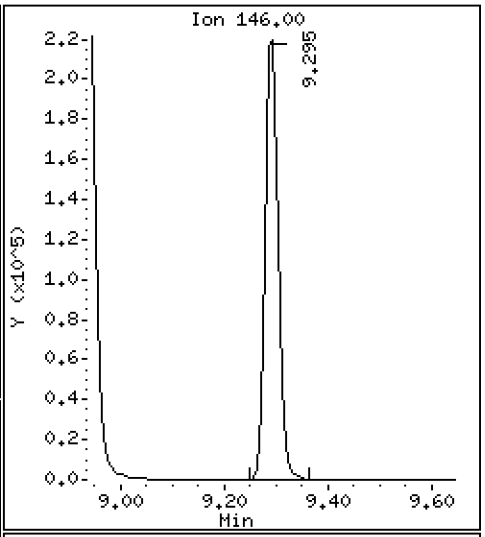
Column phase: ZB-5msi

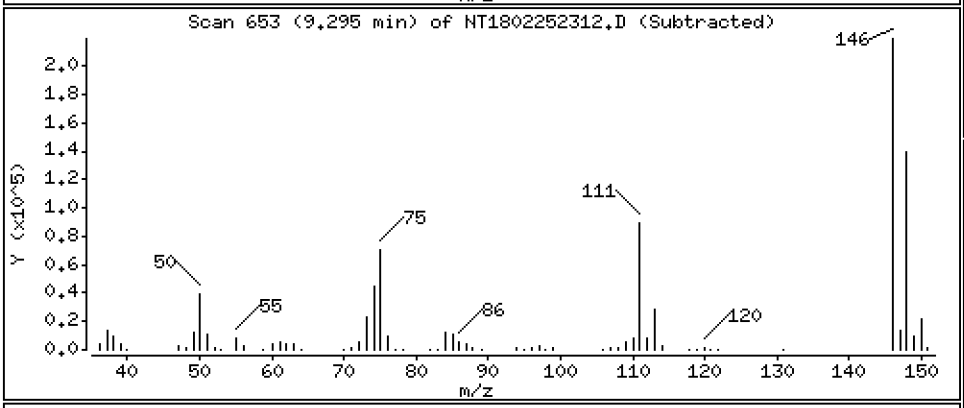
Column diameter: 0.25

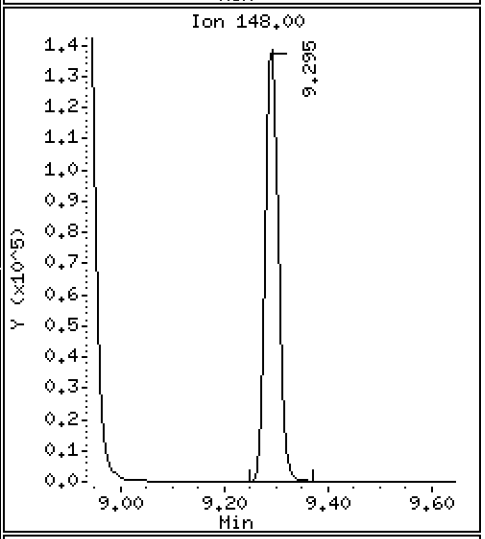
12 1,2-Dichlorobenzene

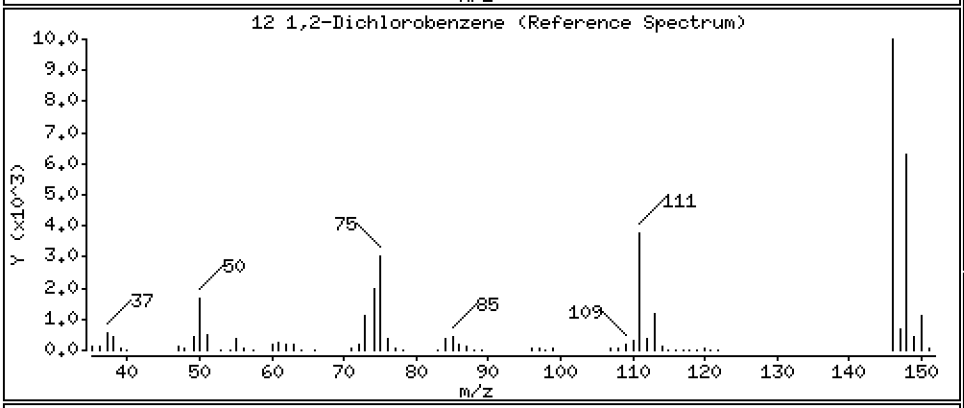
Concentration: 4.524 ug/mL

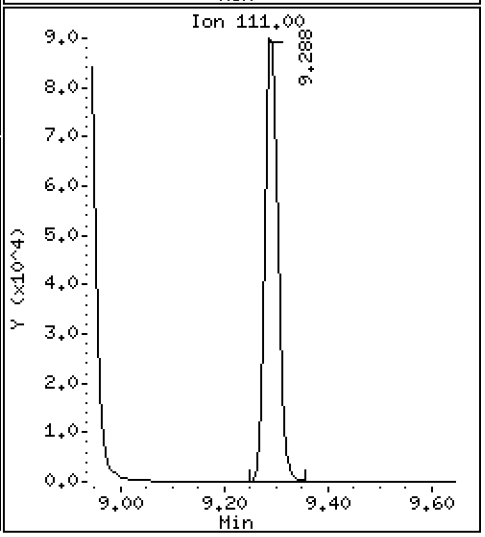


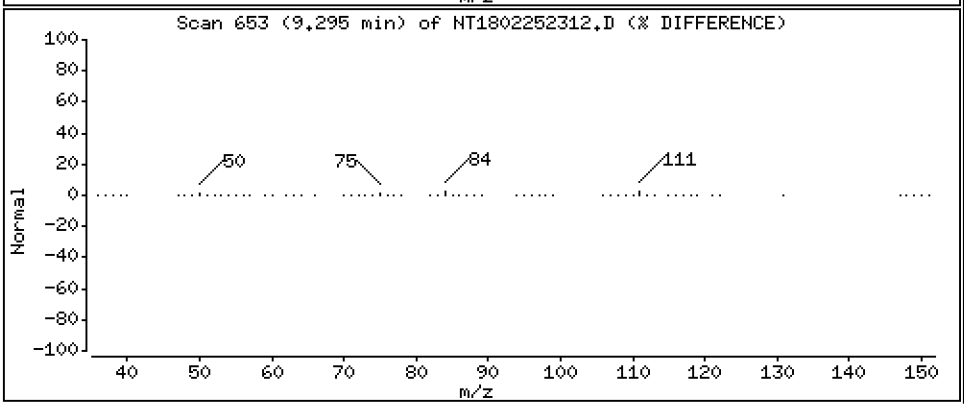












Date : 26-FEB-2023 04:06

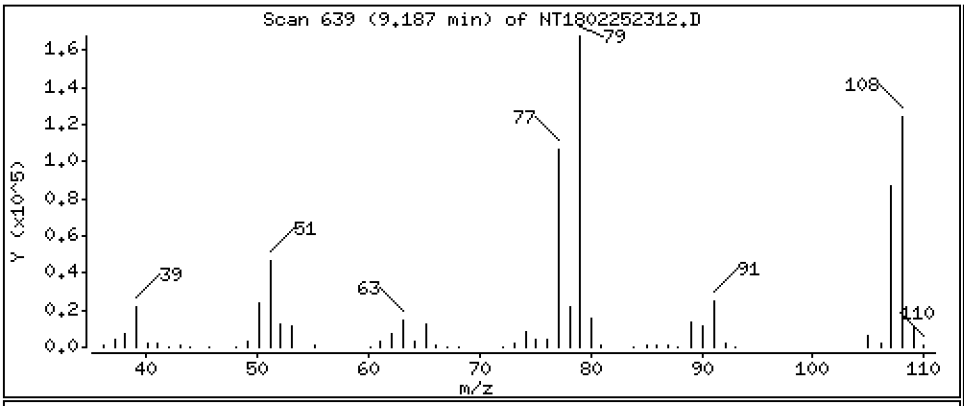
Client ID: Instrument: nt18.i

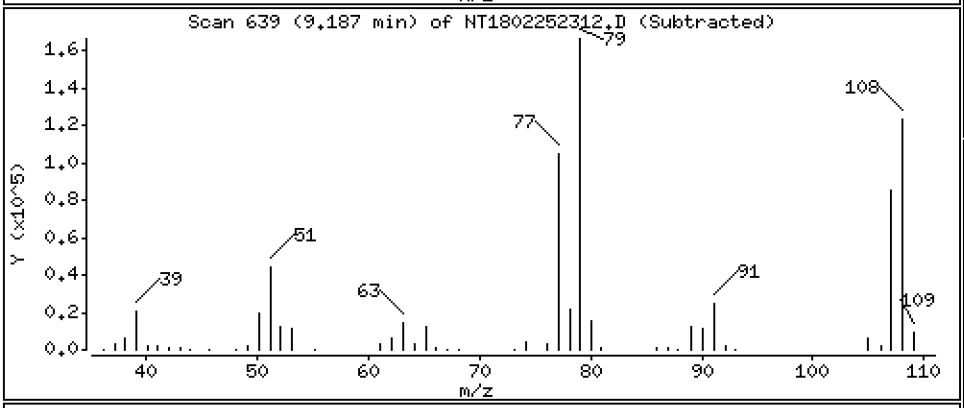
Sample Info: SLC0099-SCV1

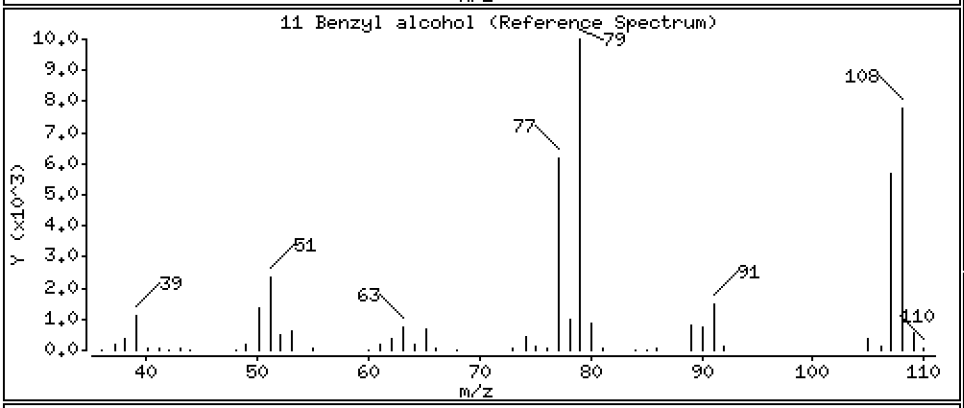
Operator: VTS

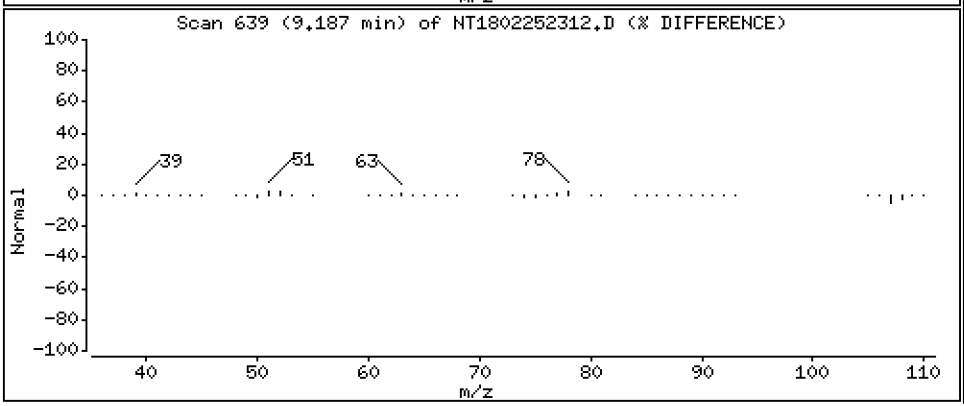
Column phase: ZB-5msi Column diameter: 0.25

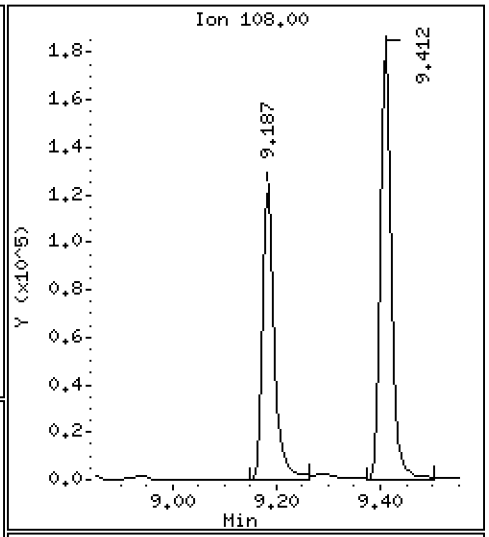
11 Benzyl alcohol Concentration: 4.677 ug/mL

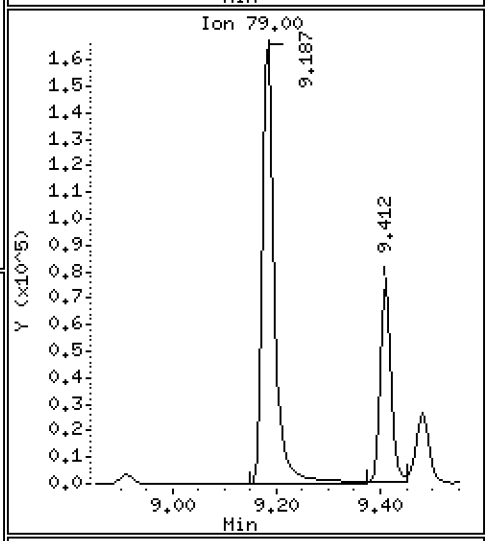


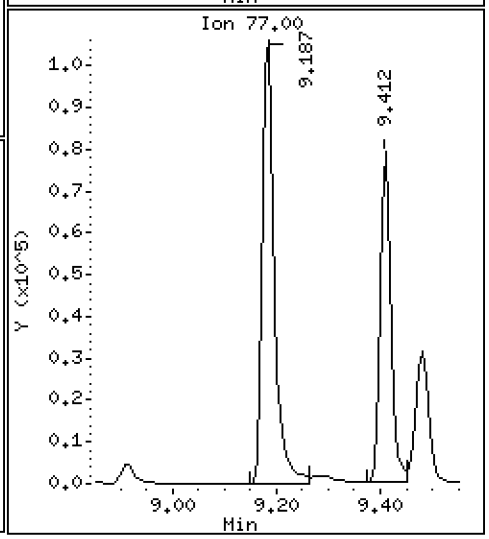












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

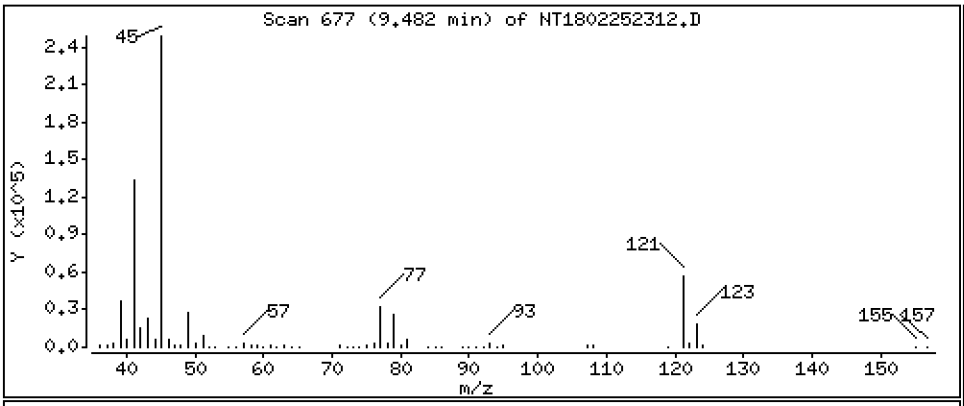
Operator: VTS

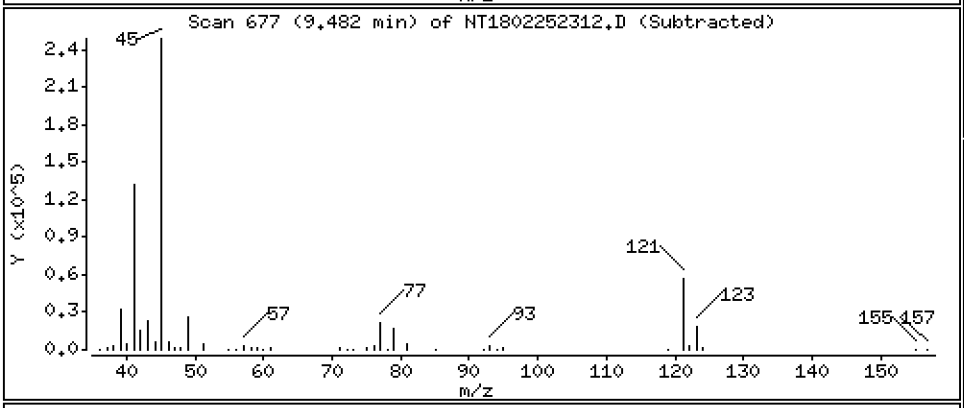
Column phase: ZB-5msi

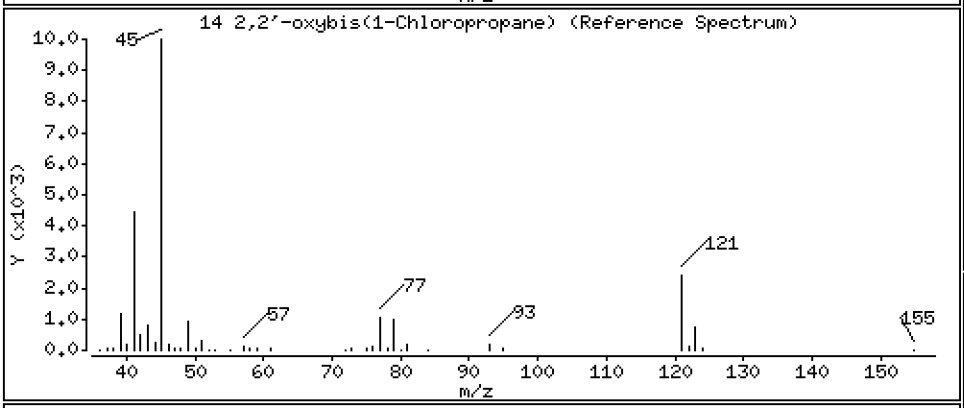
Column diameter: 0.25

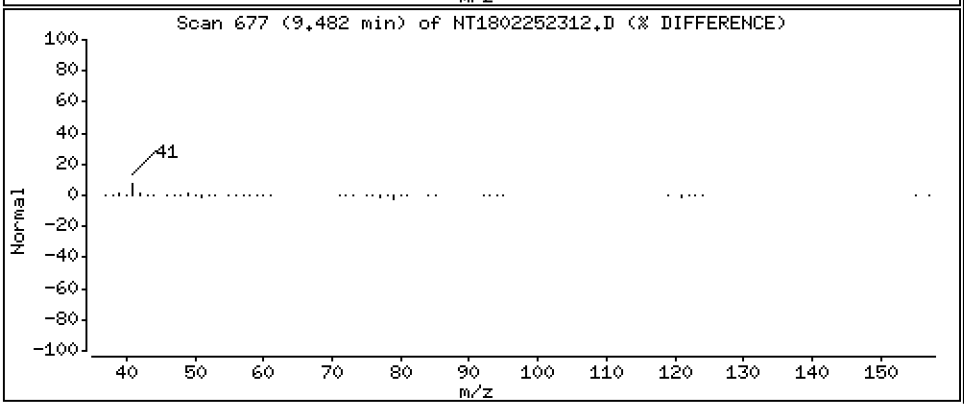
14 2,2'-oxybis(1-Chloropropane)

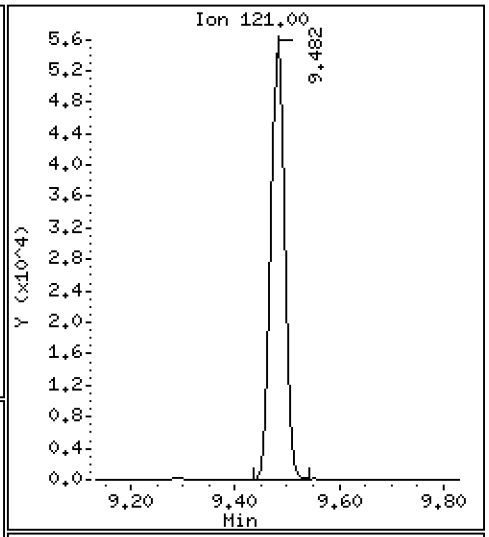
Concentration: 5.205 ug/mL

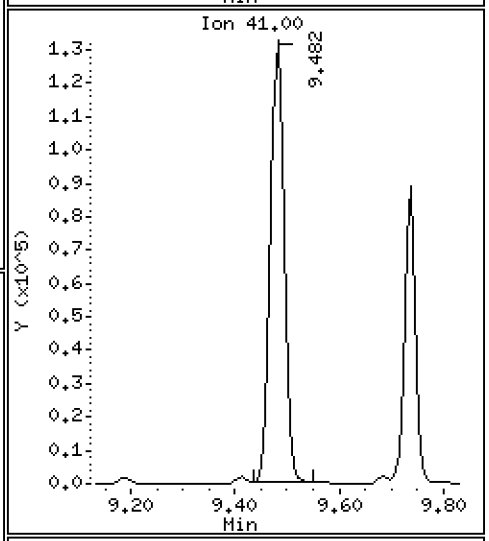


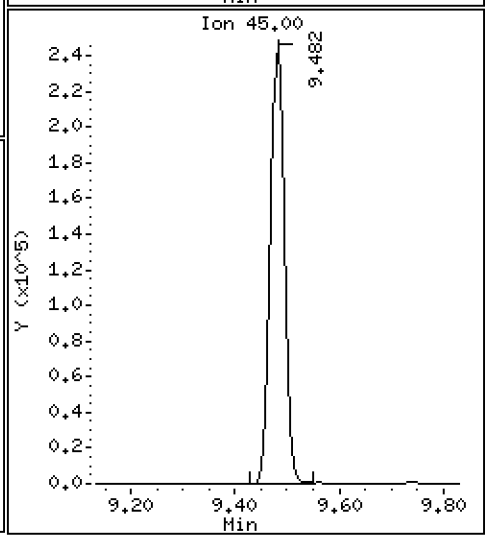












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

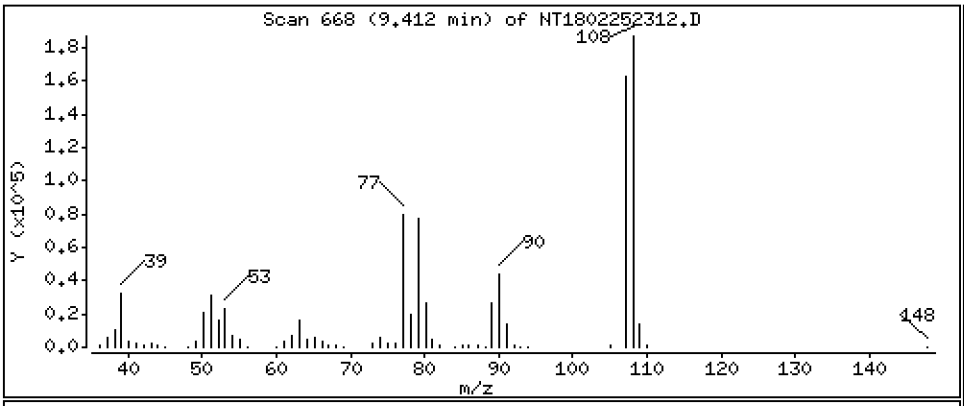
Operator: VTS

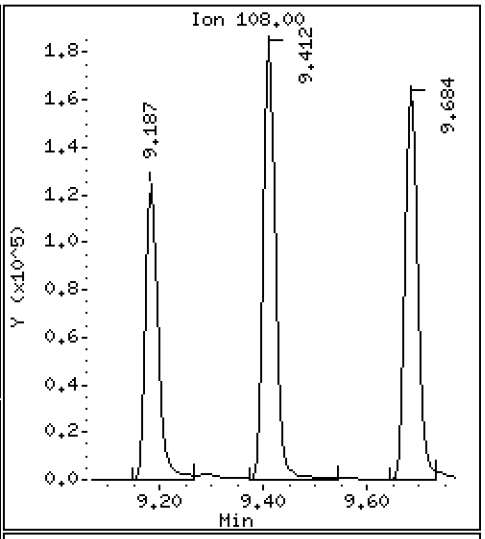
Column phase: ZB-5msi

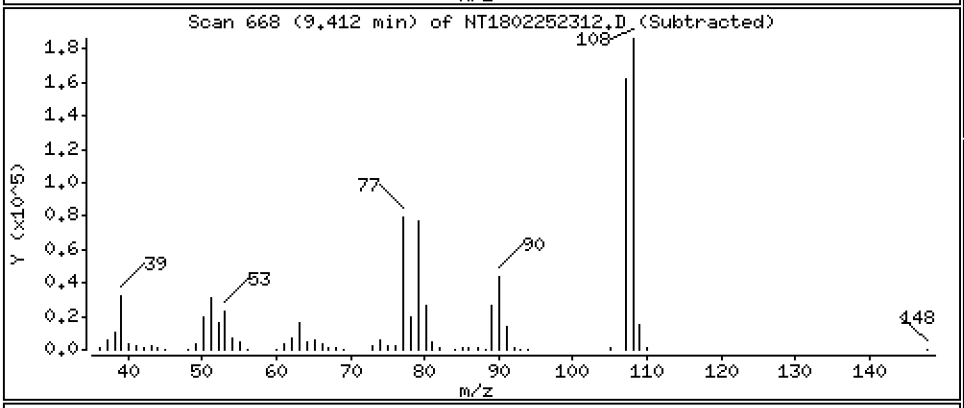
Column diameter: 0.25

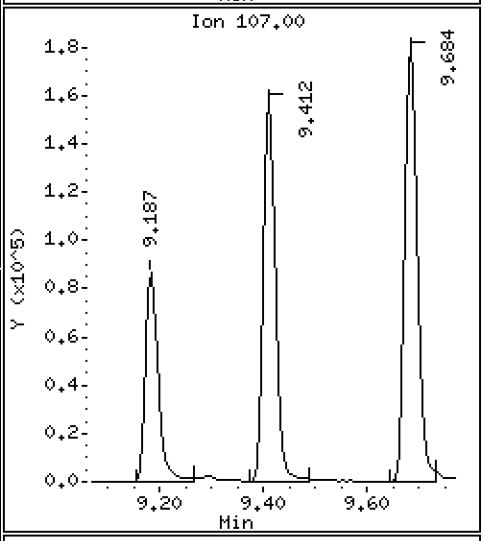
13 2-Methylphenol

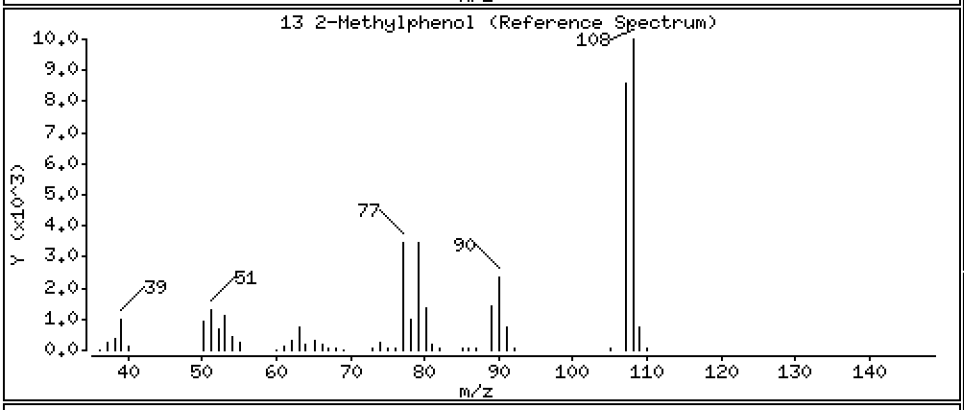
Concentration: 3.995 ug/mL

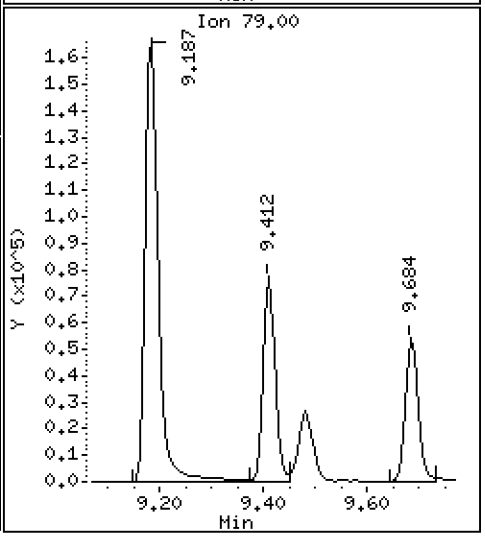


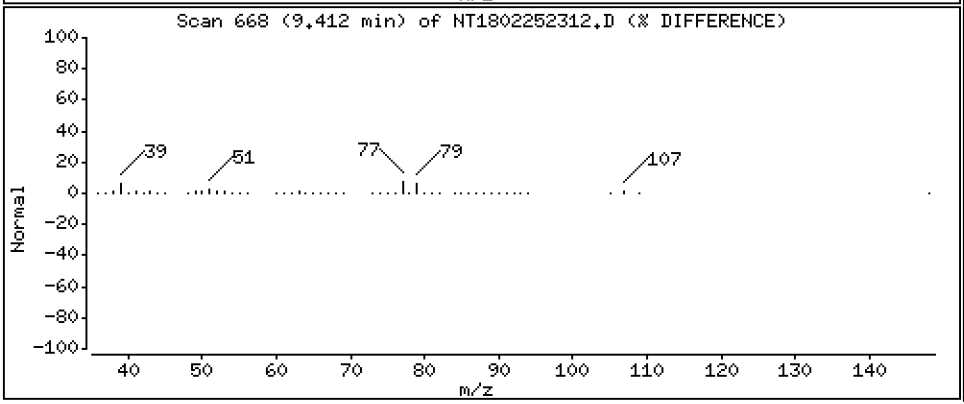












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

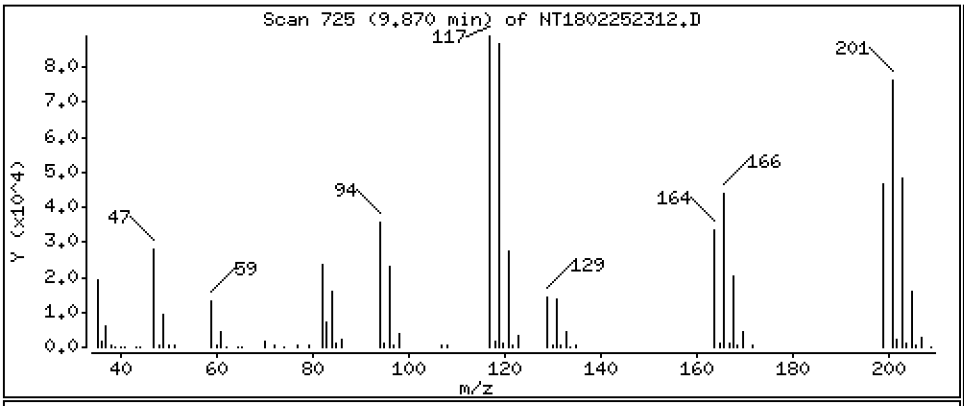
Operator: VTS

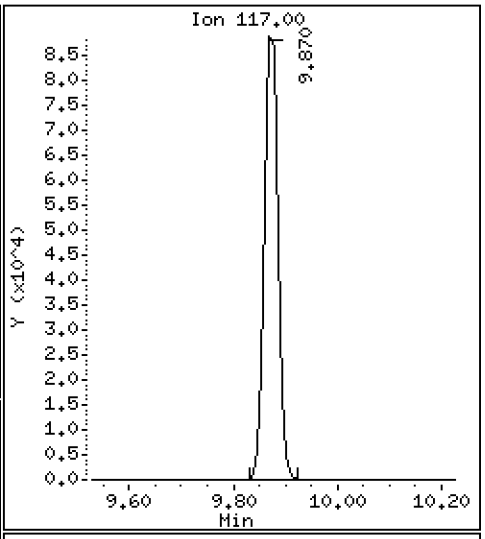
Column phase: ZB-5msi

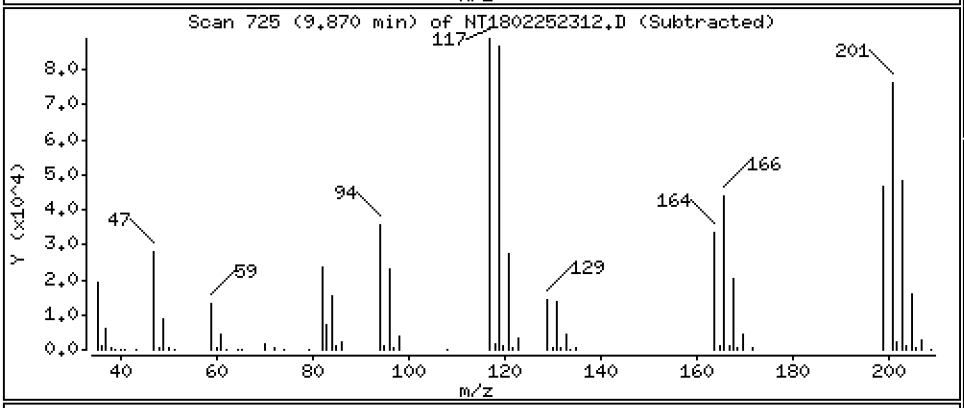
Column diameter: 0.25

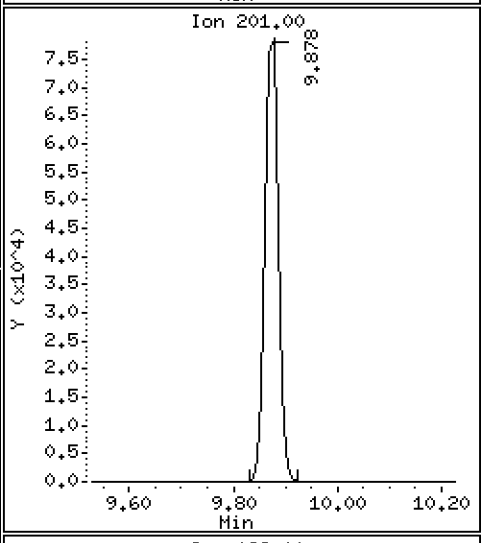
17 Hexachloroethane

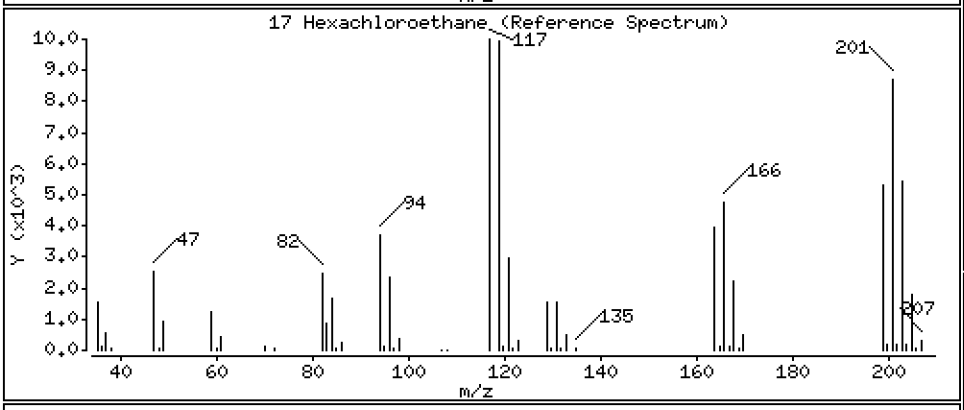
Concentration: 4.769 ug/mL

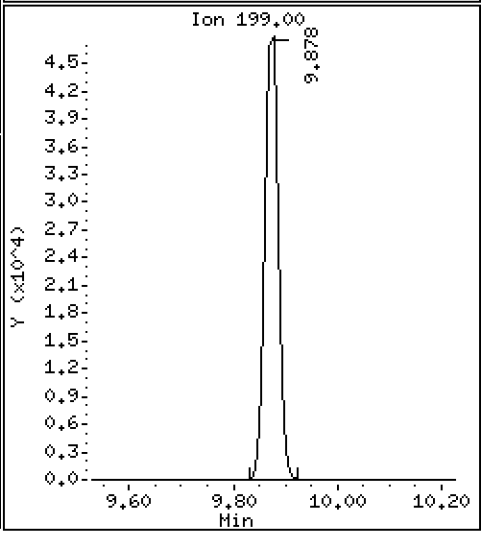


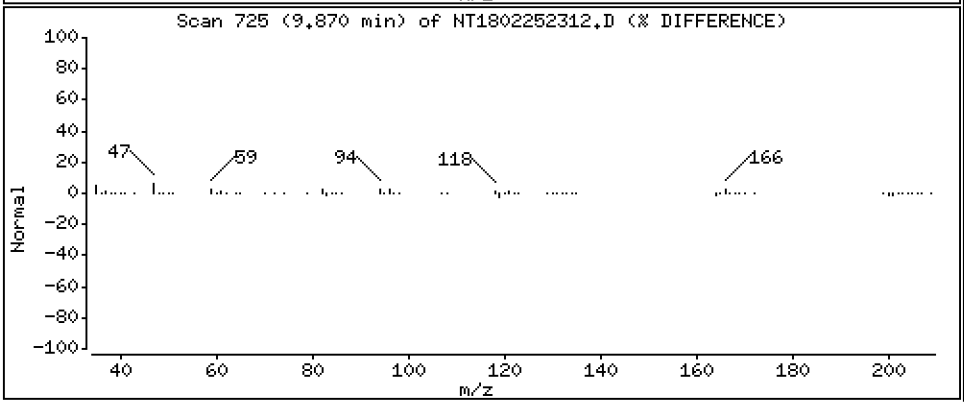












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

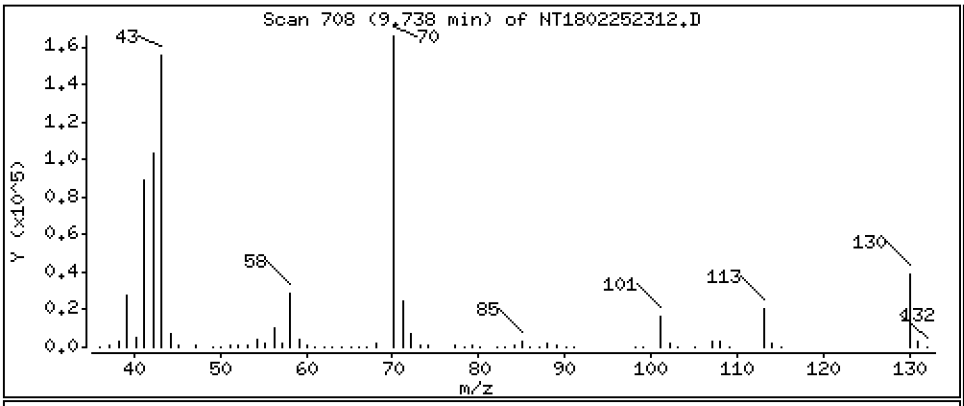
Operator: VTS

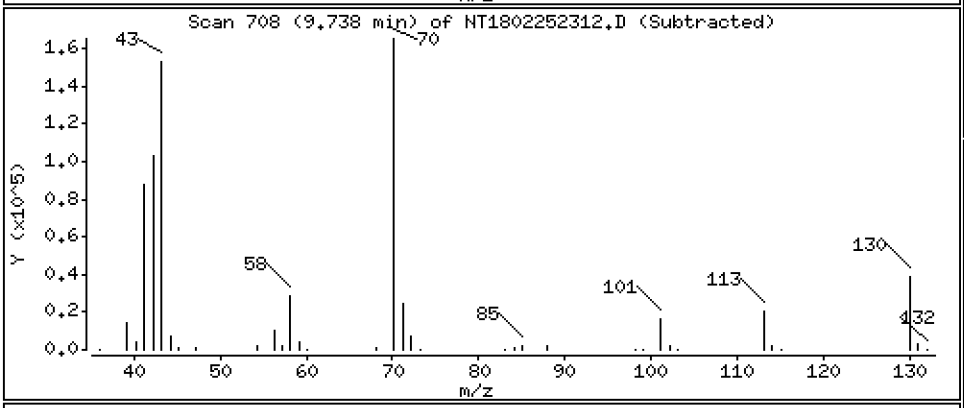
Column phase: ZB-5msi

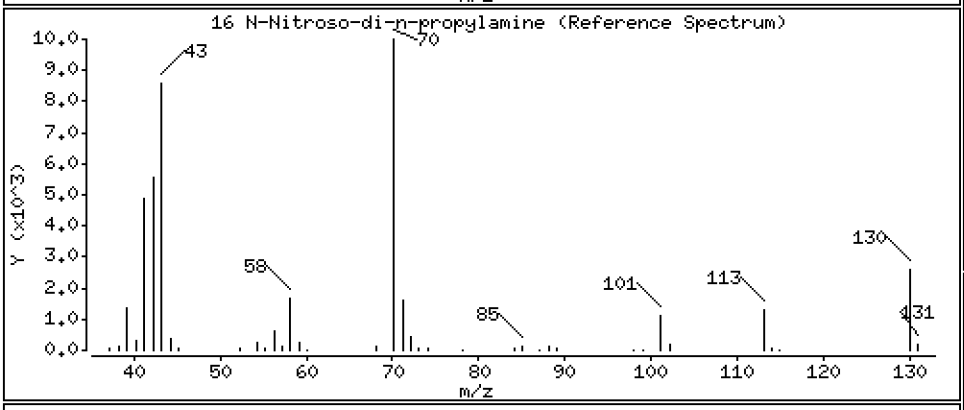
Column diameter: 0.25

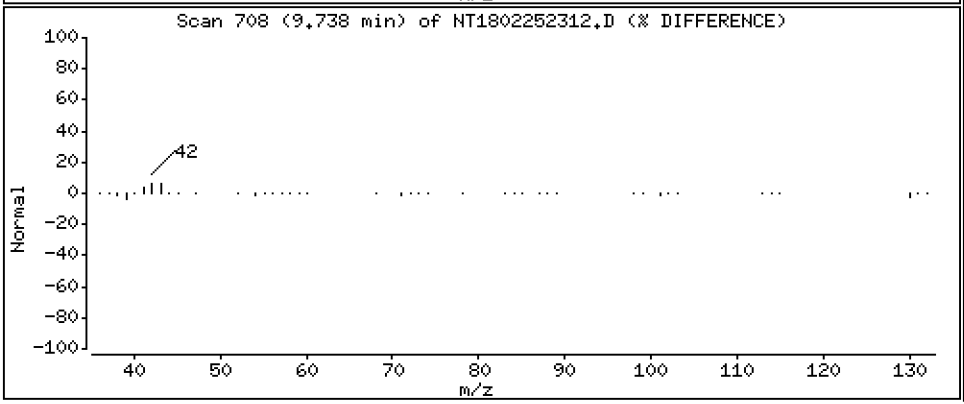
16 N-Nitroso-di-n-propylamine

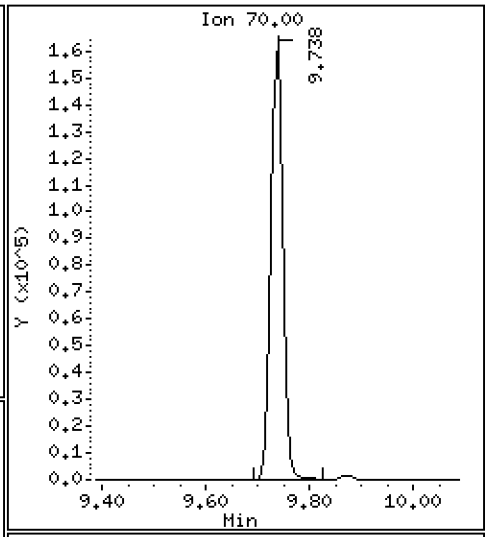
Concentration: 4.799 ug/mL

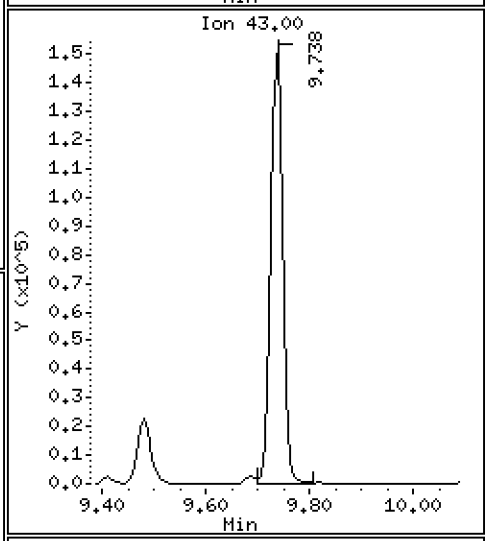


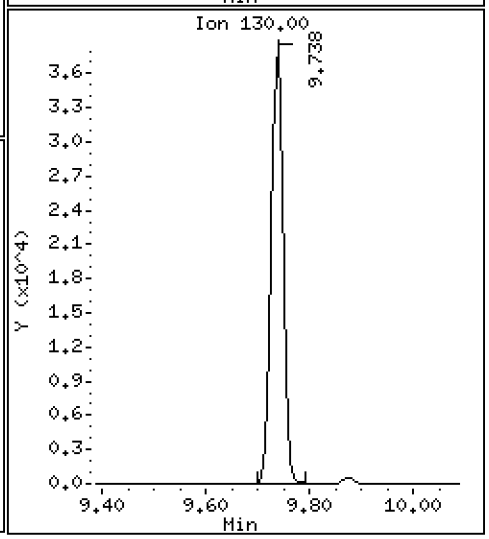












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

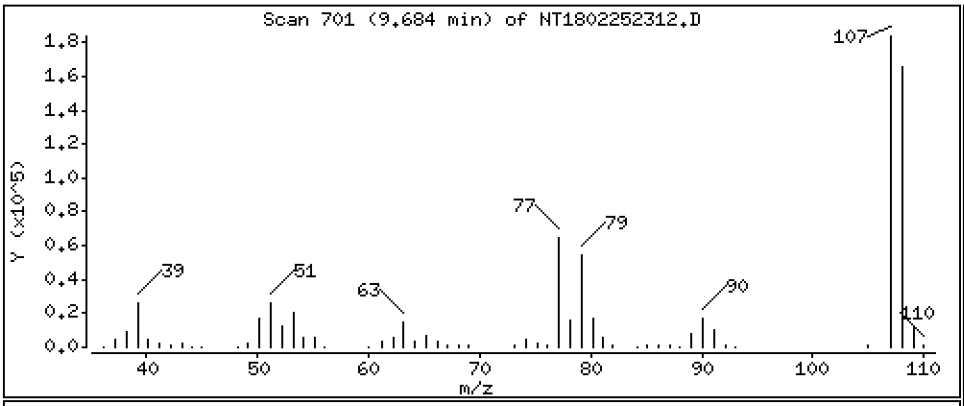
Operator: VTS

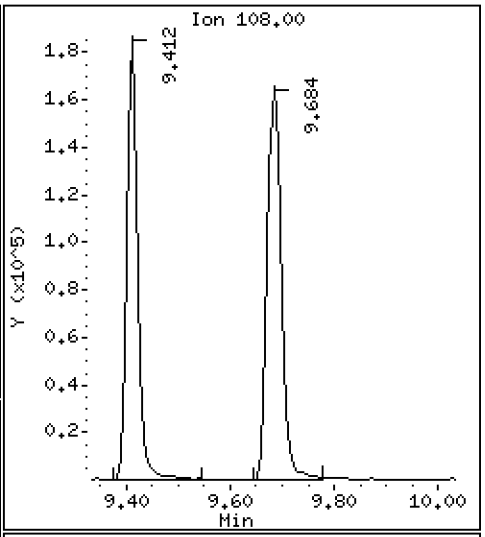
Column phase: ZB-5msi

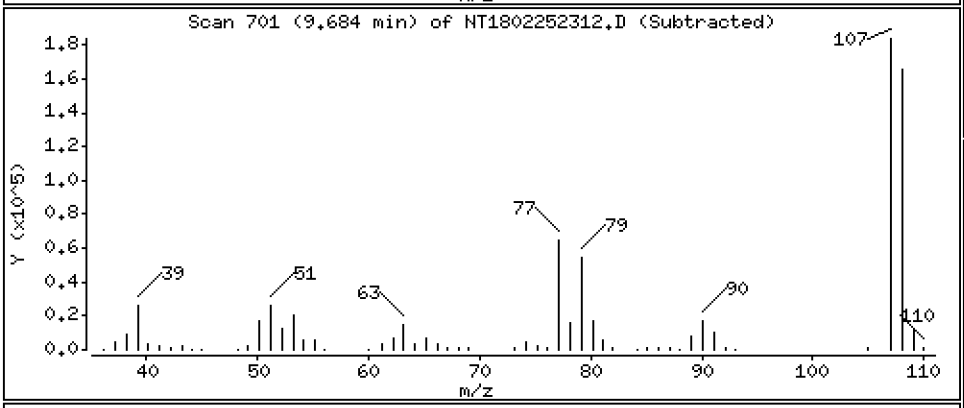
Column diameter: 0.25

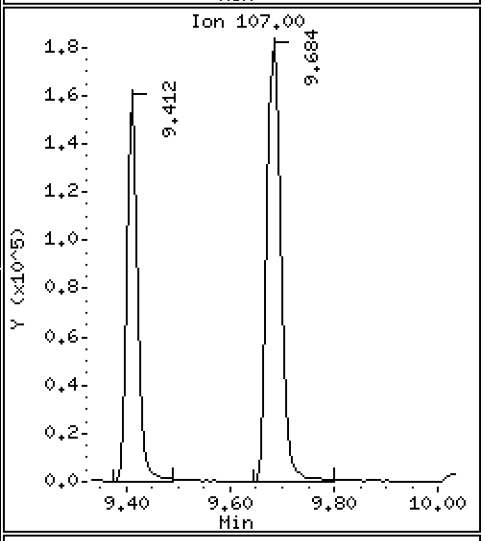
15 4-Methylphenol

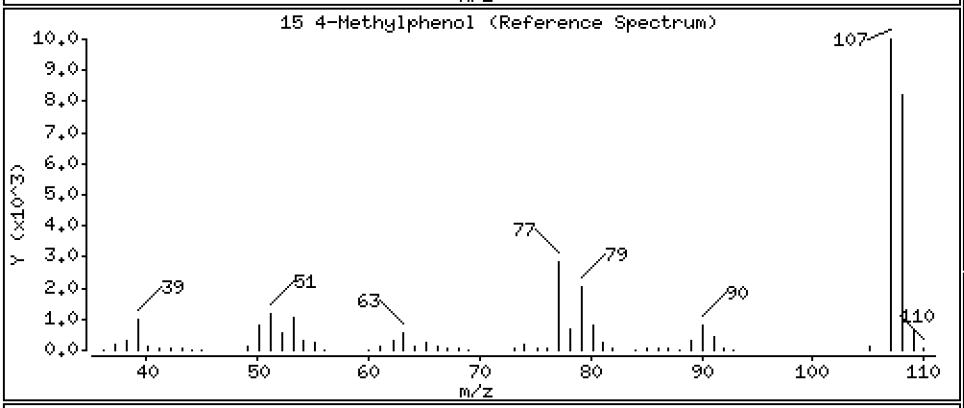
Concentration: 4.106 ug/mL

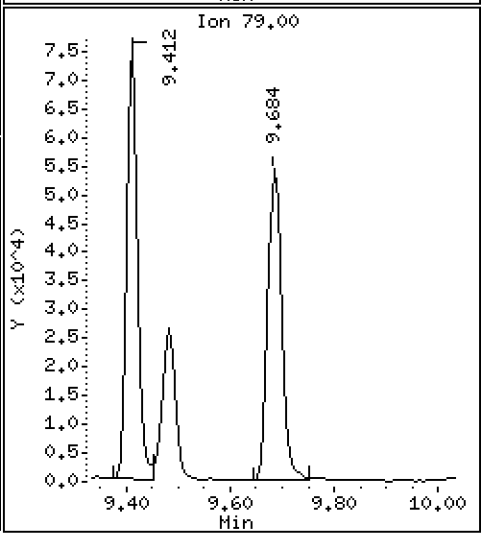


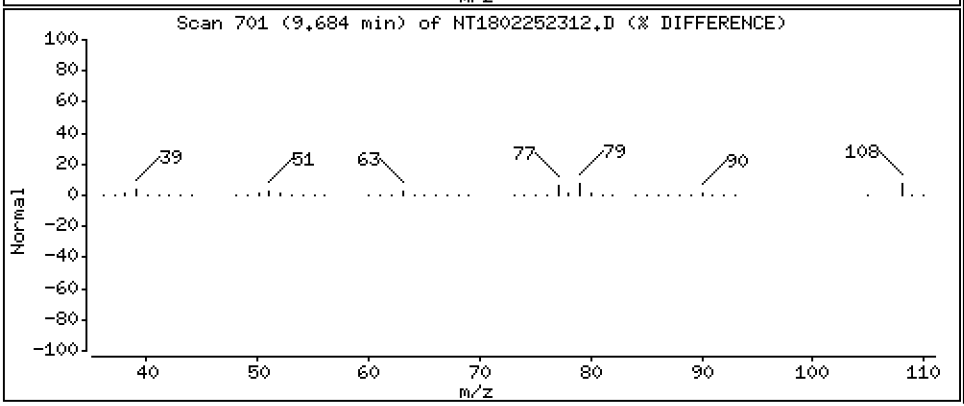












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

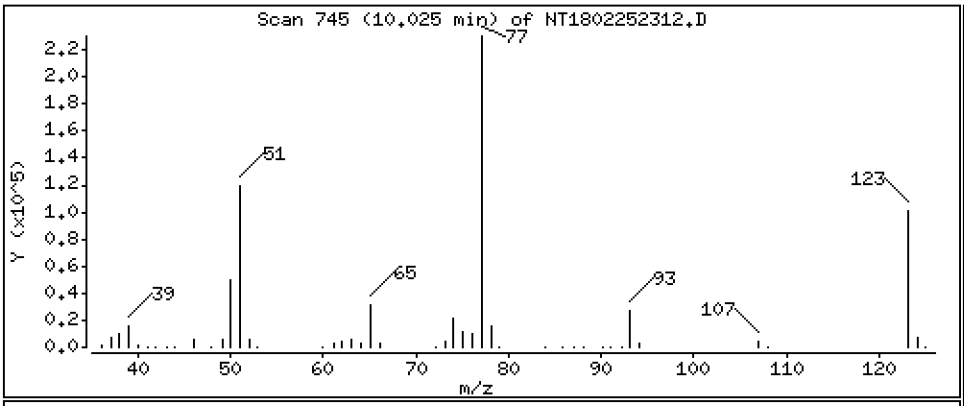
Operator: VTS

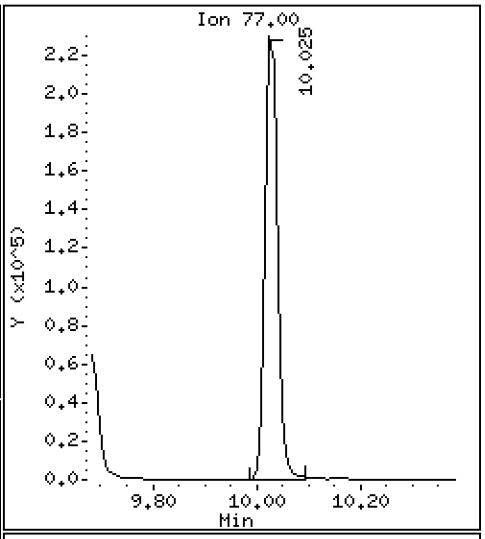
Column phase: ZB-5msi

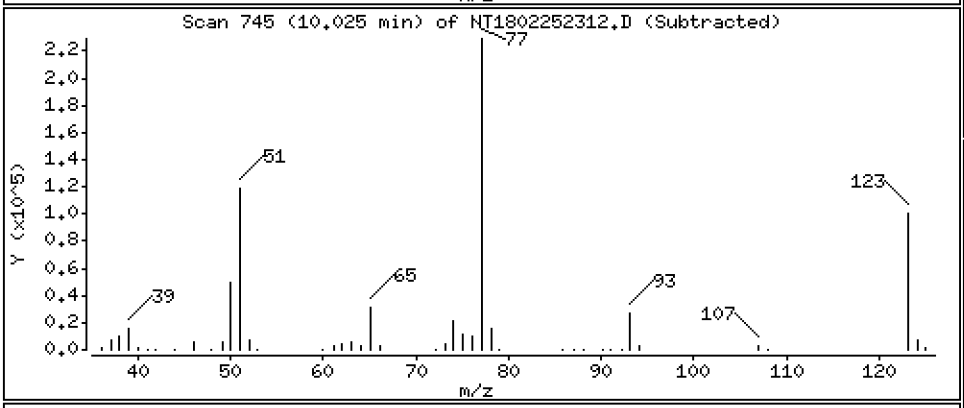
Column diameter: 0.25

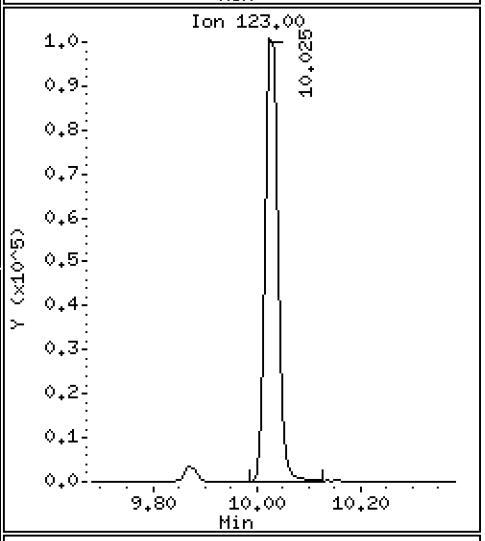
19 Nitrobenzene

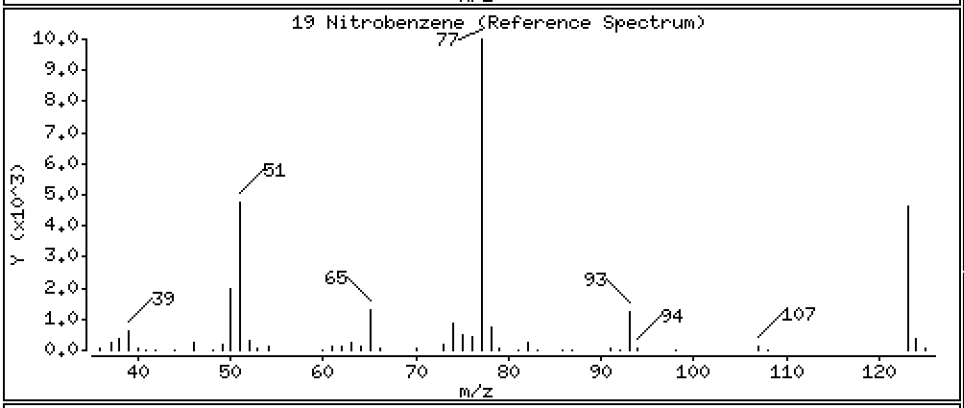
Concentration: 4.692 ug/mL

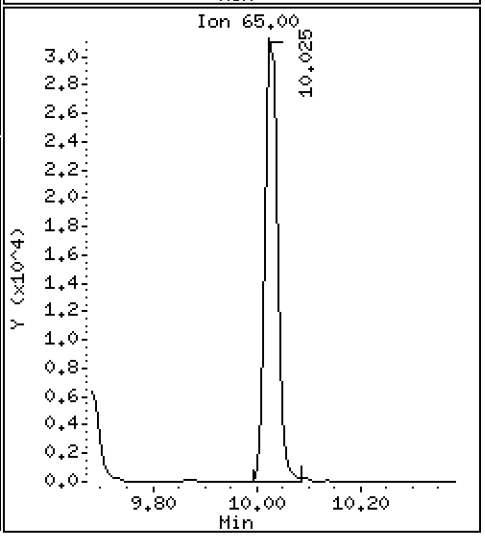


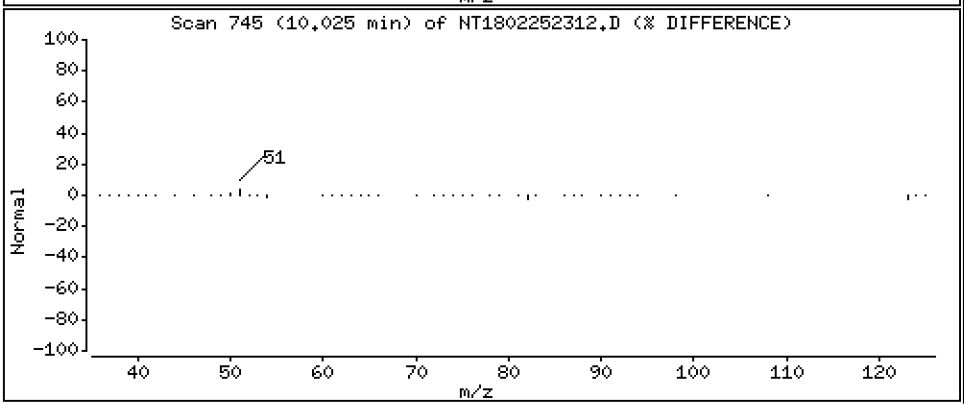












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

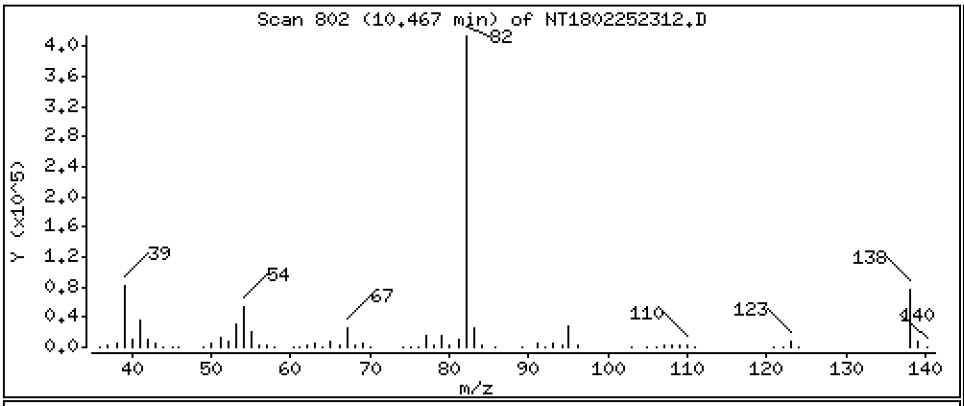
Operator: VTS

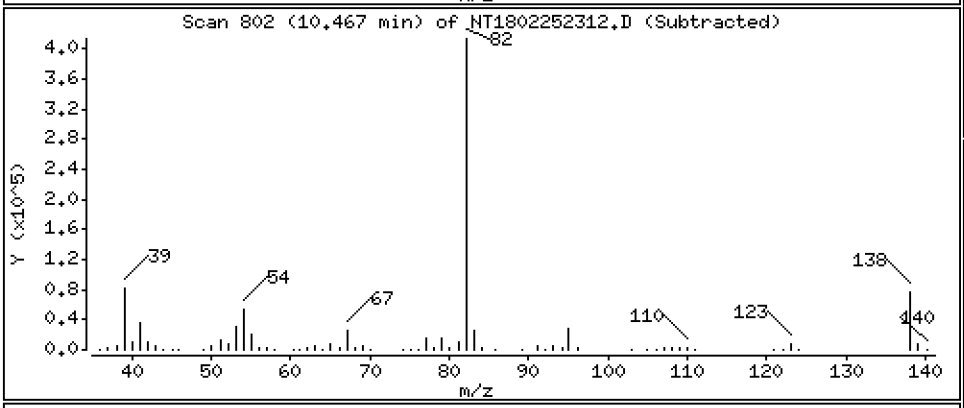
Column phase: ZB-5msi

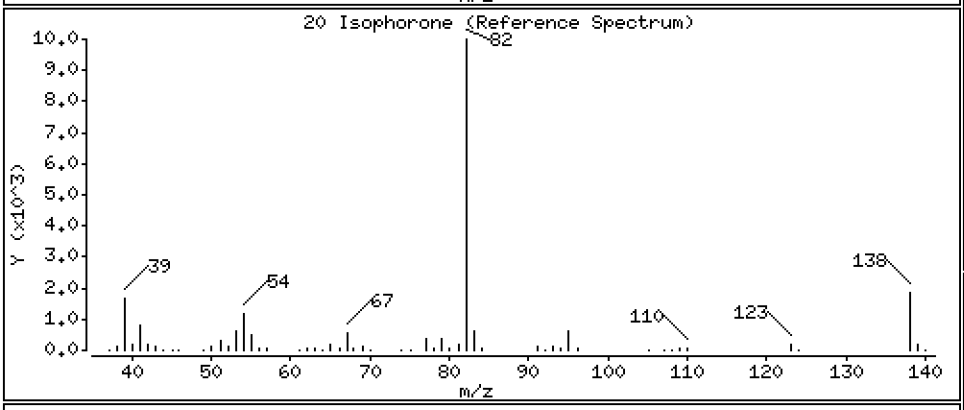
Column diameter: 0.25

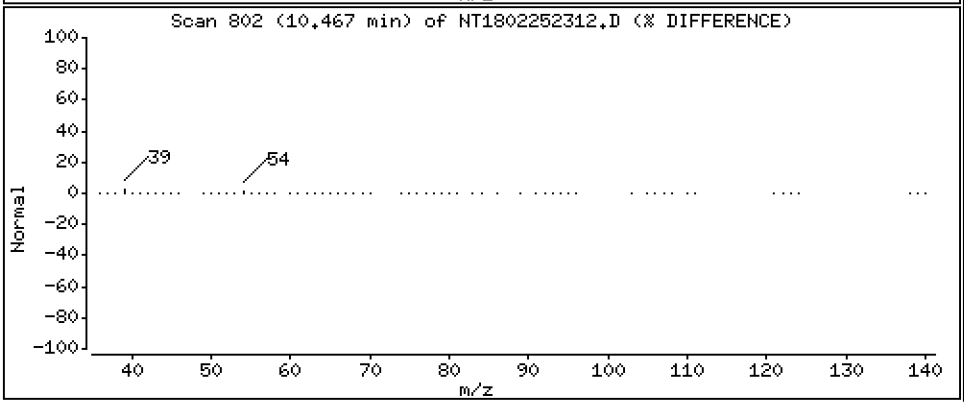
20 Isophorone

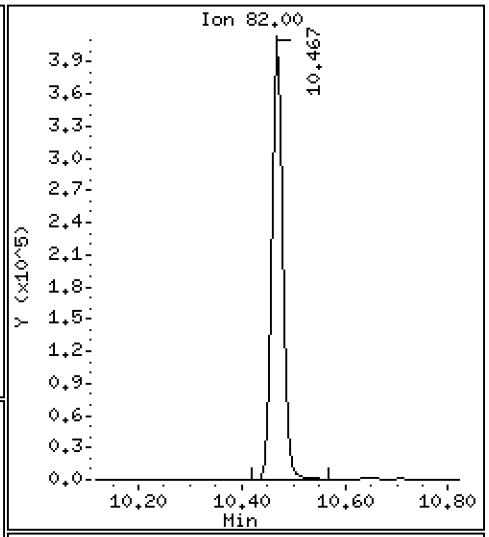
Concentration: 6.433 ug/mL

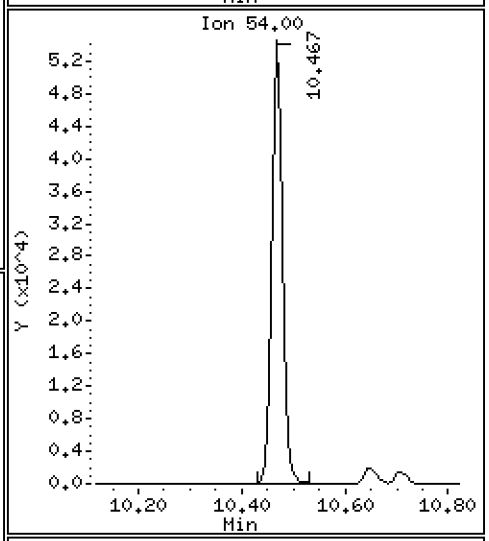


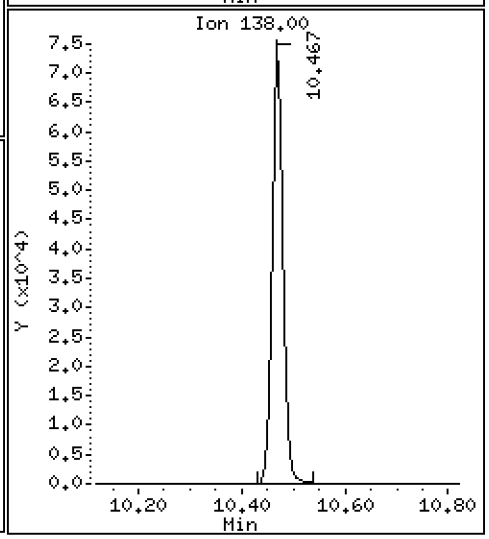












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

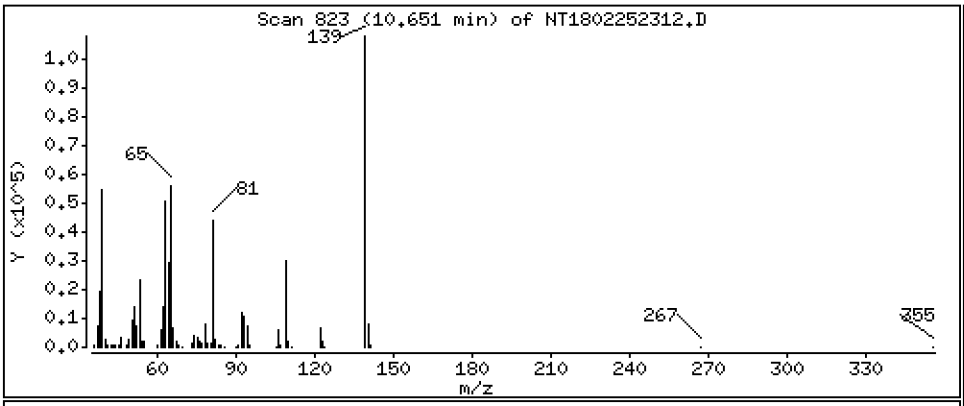
Operator: VTS

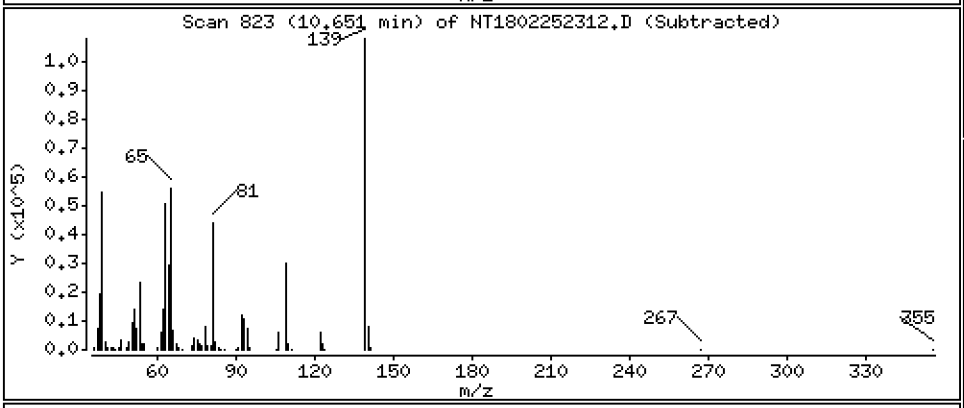
Column phase: ZB-5msi

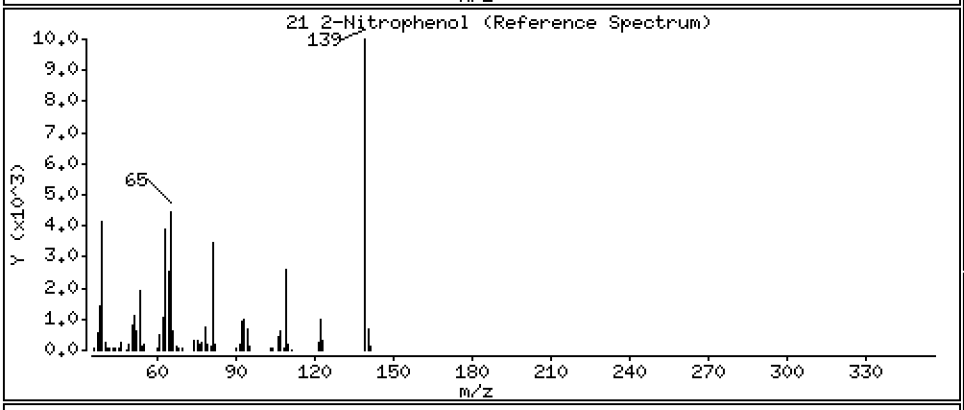
Column diameter: 0.25

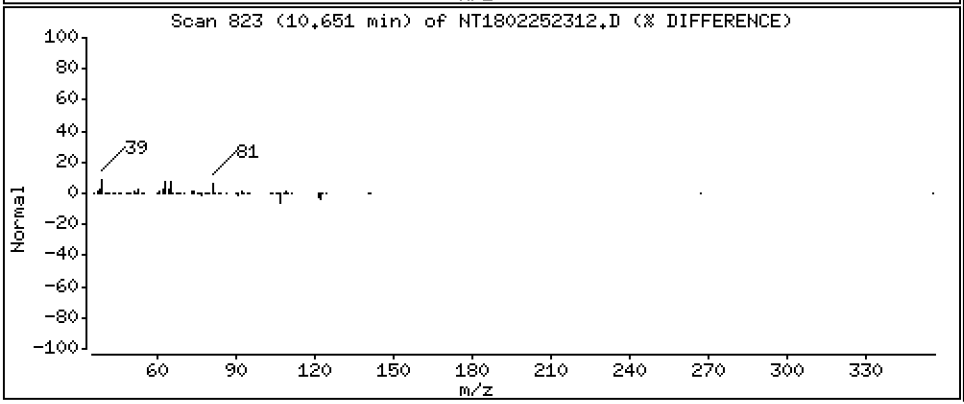
21 2-Nitrophenol

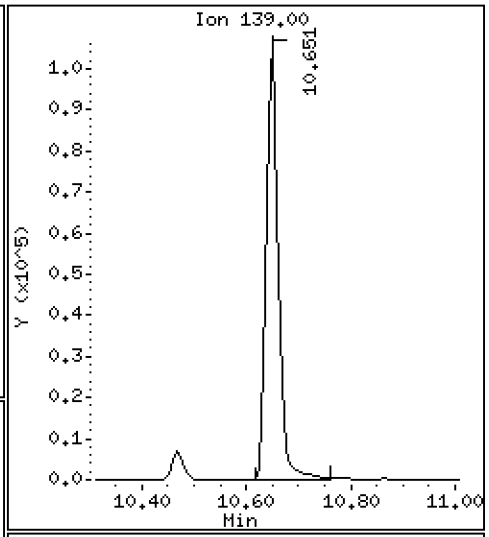
Concentration: 4.439 ug/mL

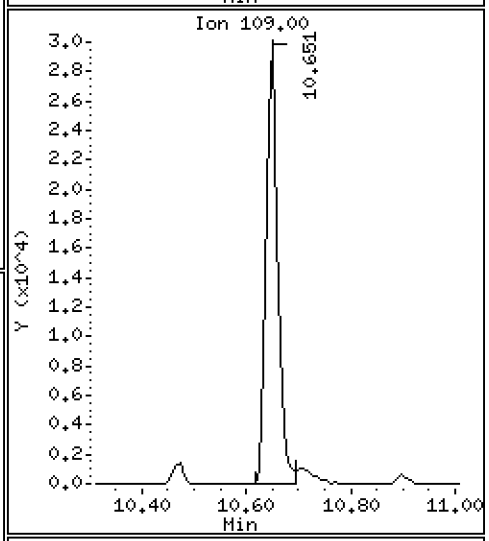


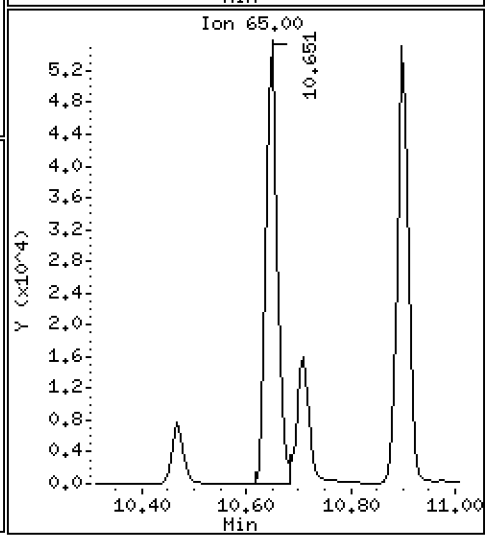












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

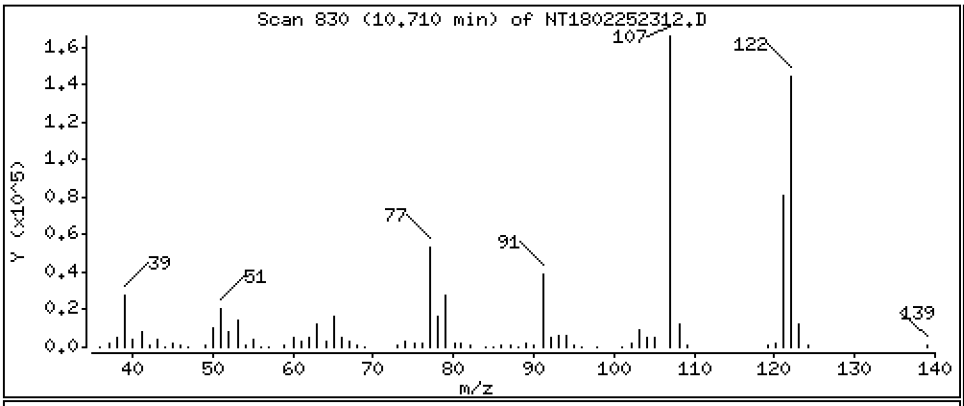
Operator: VTS

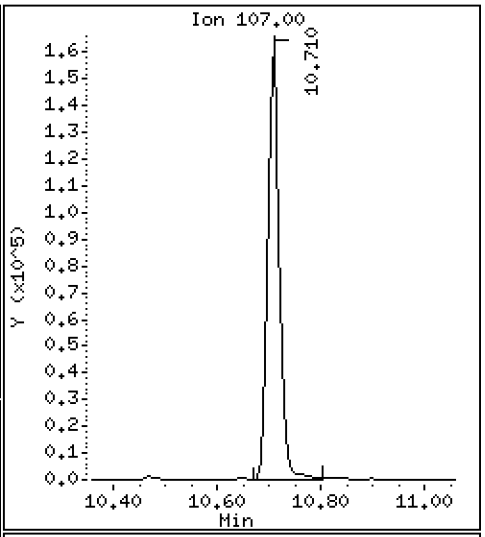
Column phase: ZB-5msi

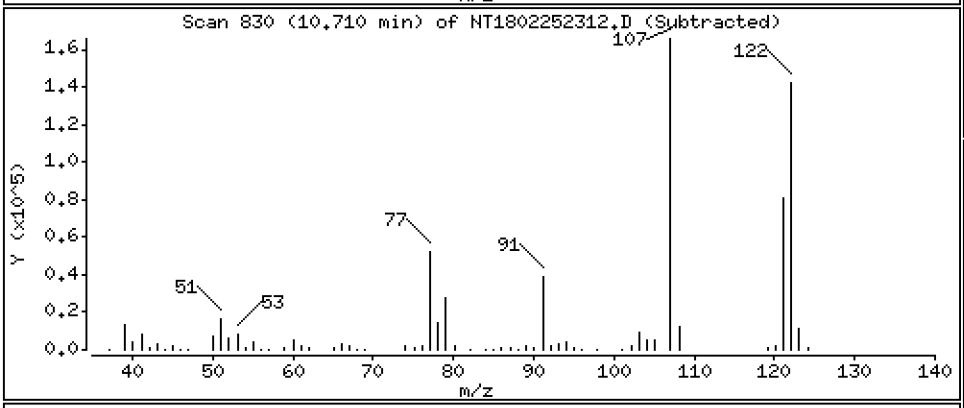
Column diameter: 0.25

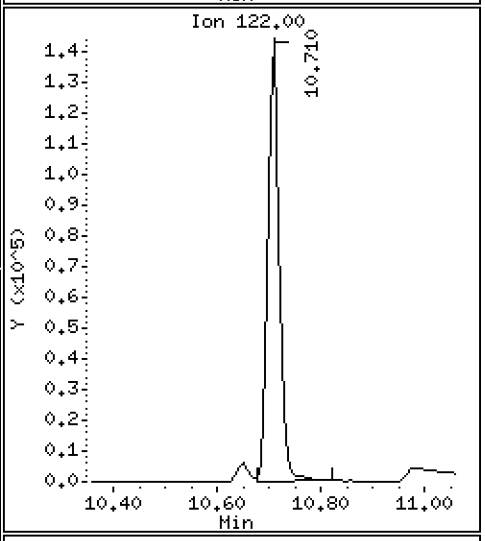
22 2,4-Dimethylphenol

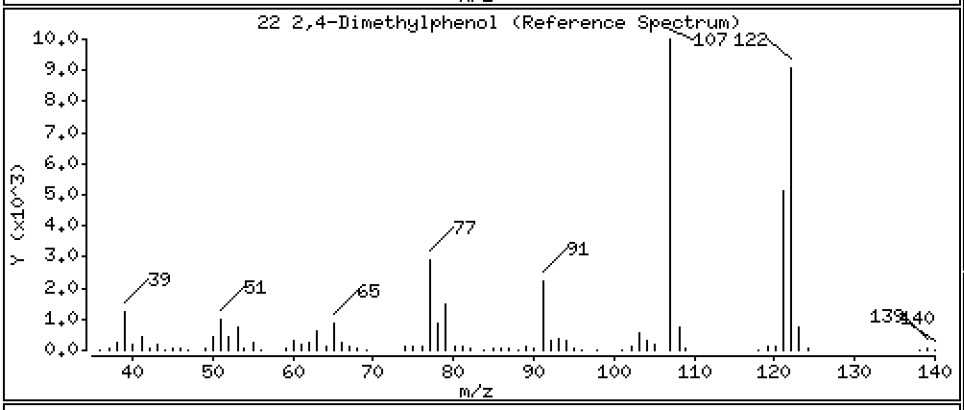
Concentration: 3.460 ug/mL

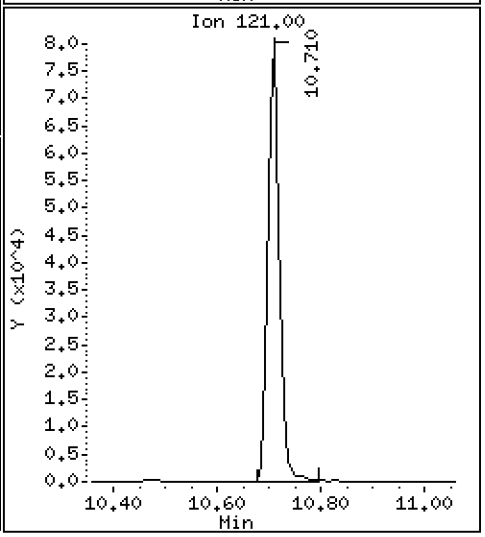


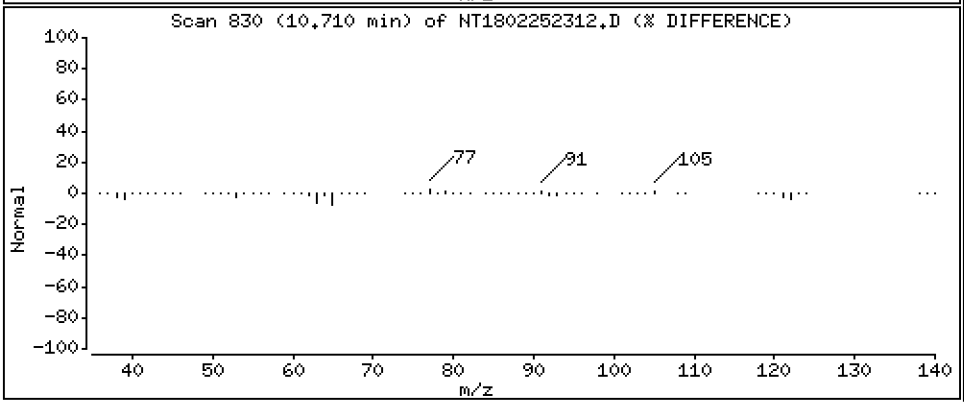












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

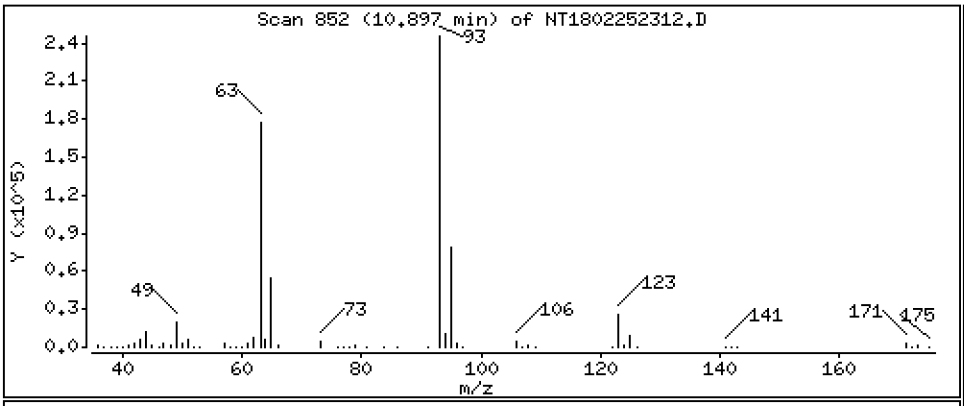
Operator: VTS

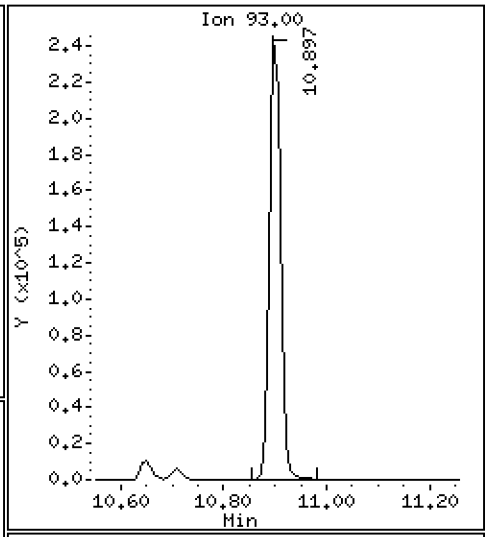
Column phase: ZB-5msi

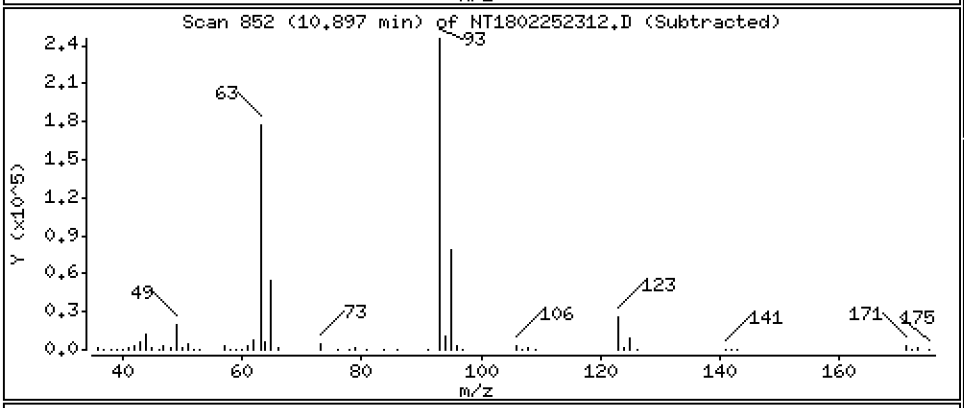
Column diameter: 0.25

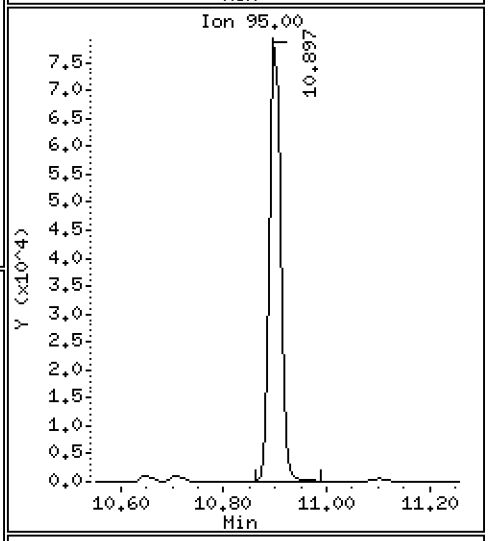
23 Bis(2-Chloroethoxy)methane

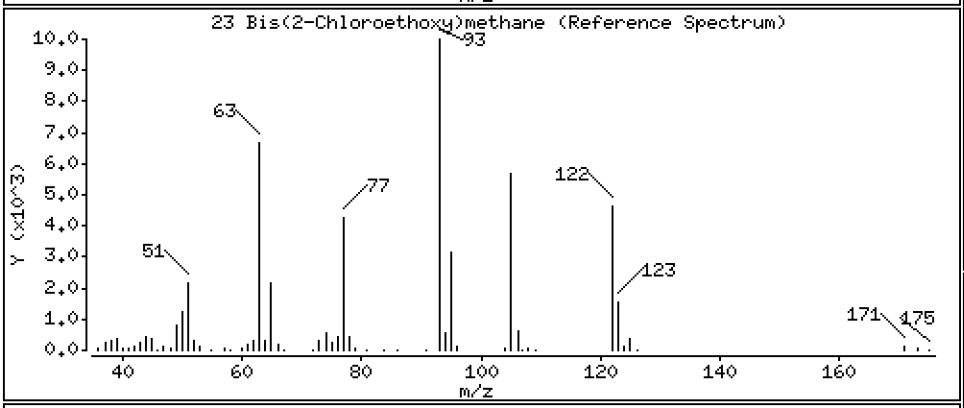
Concentration: 5.489 ug/mL

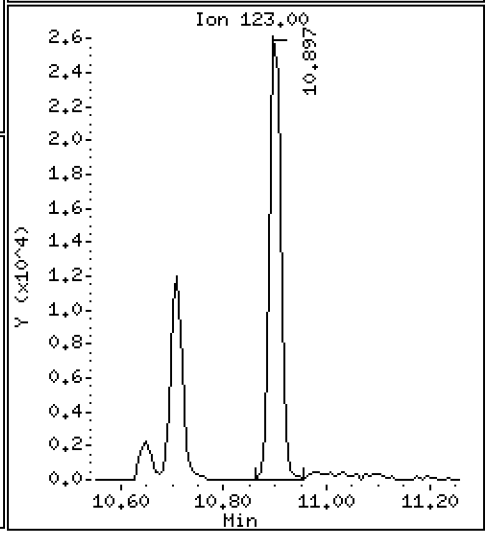


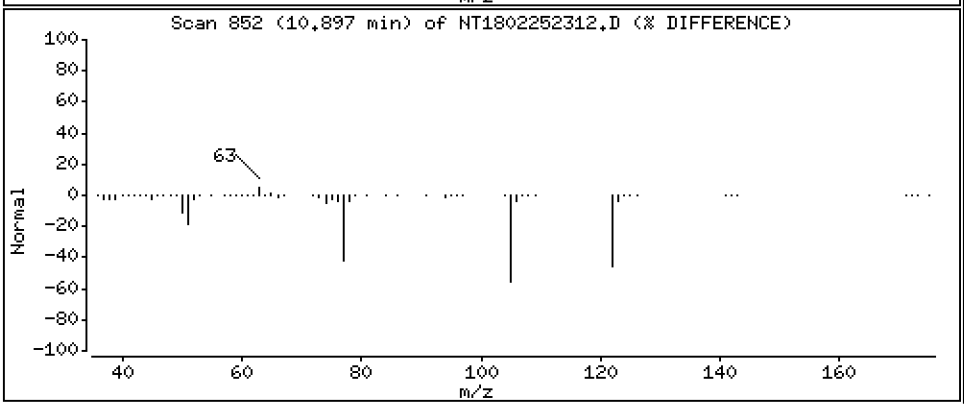












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

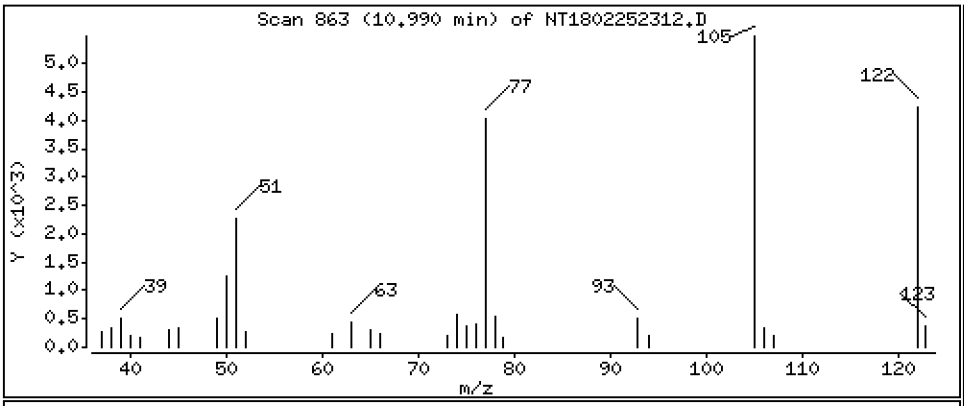
Operator: VTS

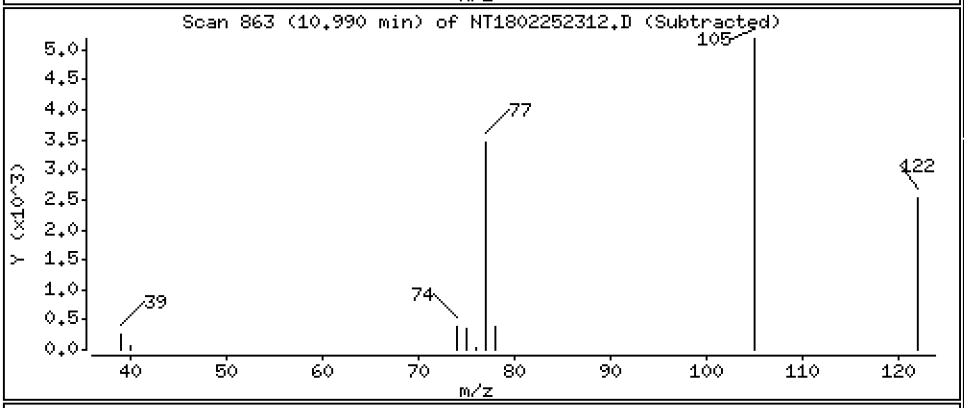
Column phase: ZB-5msi

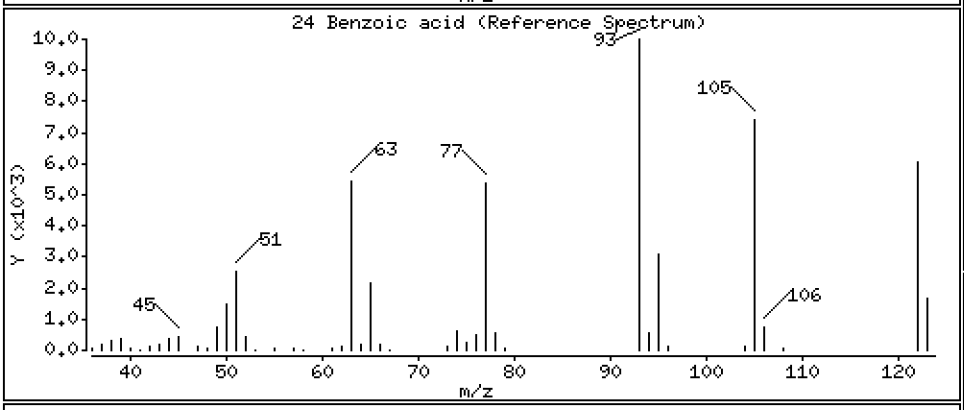
Column diameter: 0.25

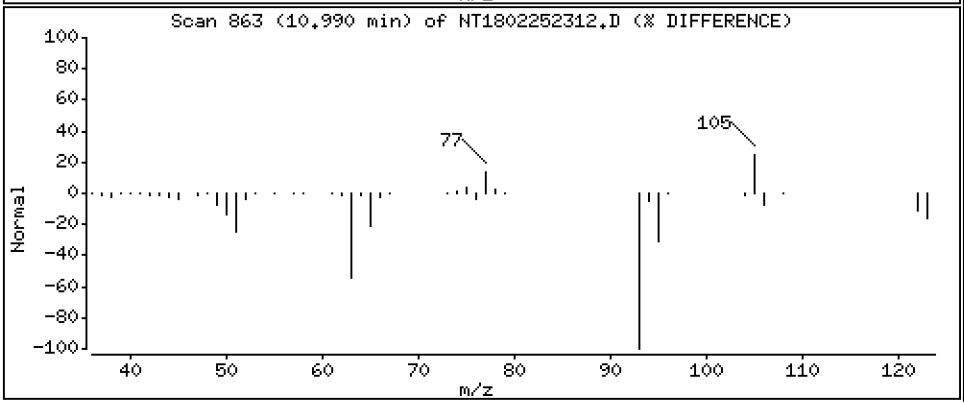
24 Benzoic acid

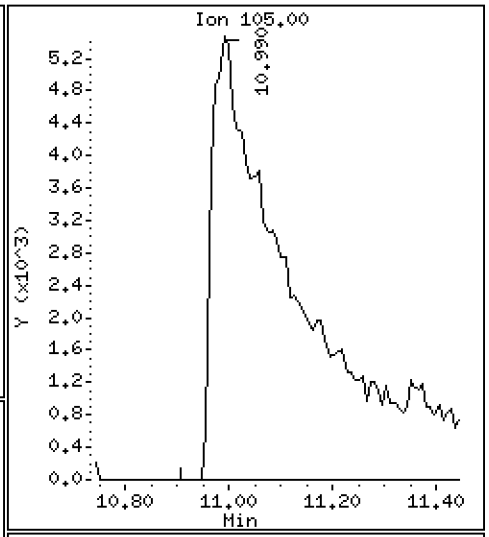
Concentration: 2.618 ug/mL

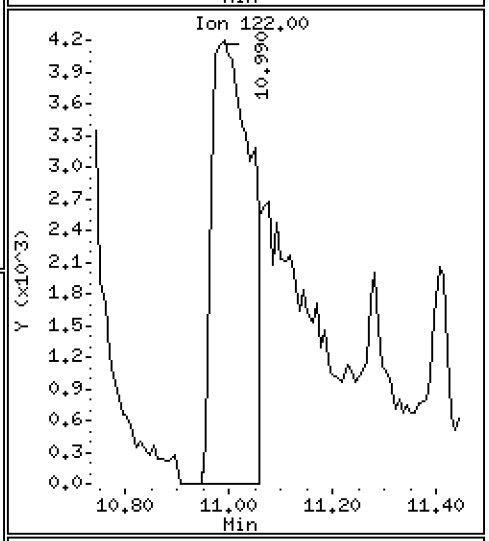


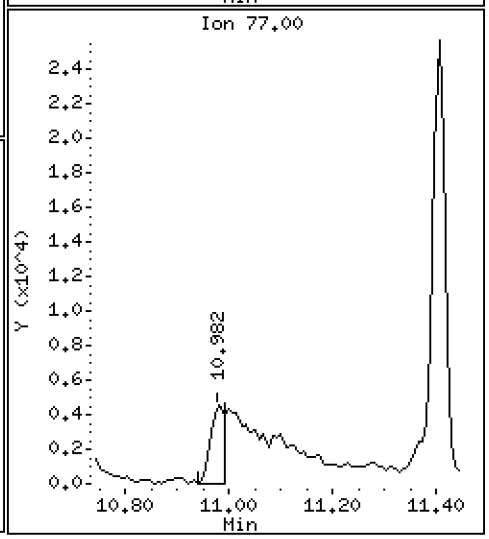












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

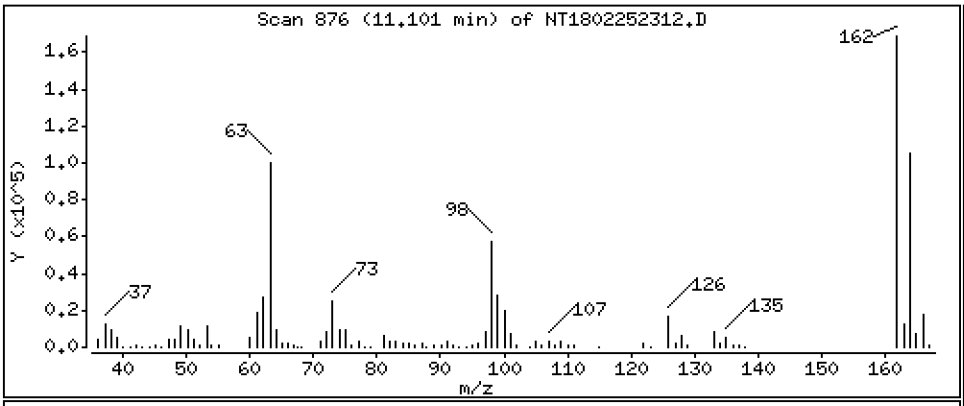
Operator: VTS

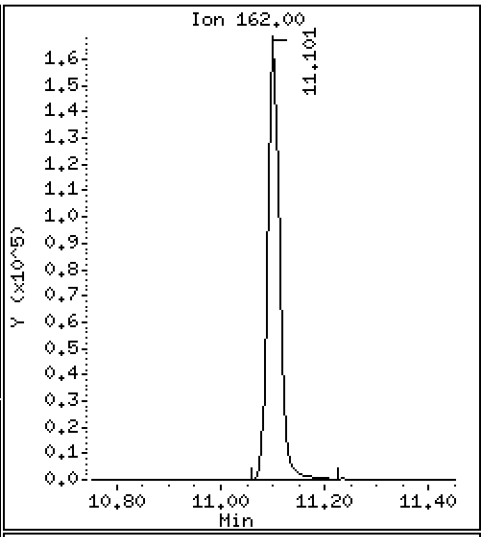
Column phase: ZB-5msi

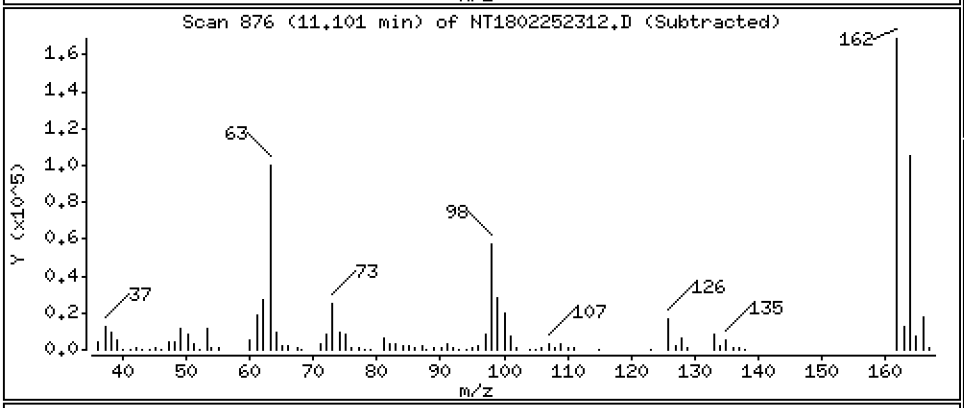
Column diameter: 0.25

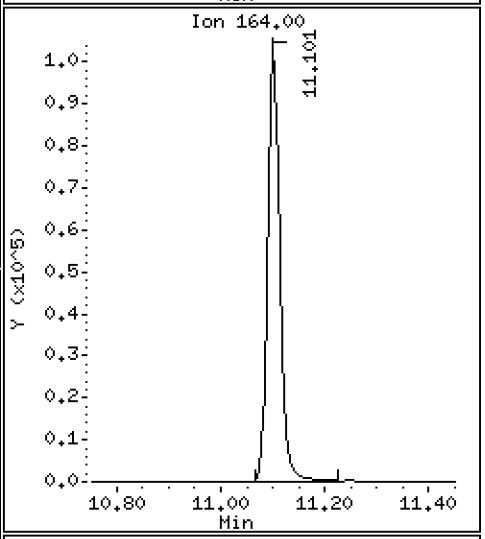
25 2,4-Dichlorophenol

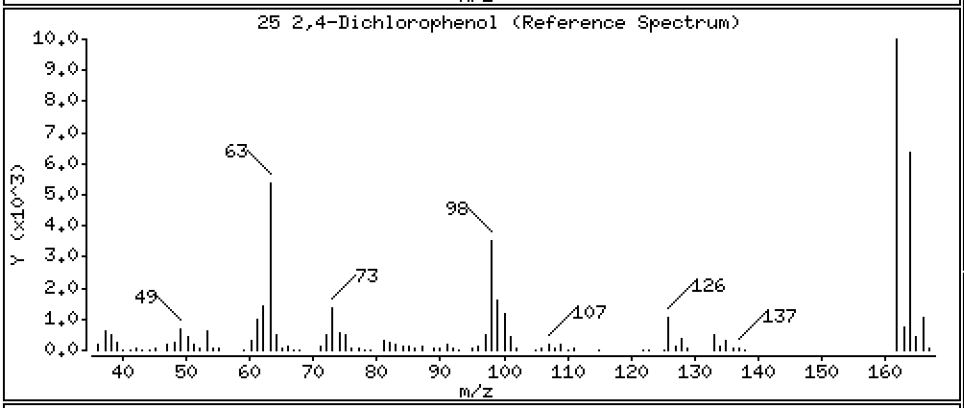
Concentration: 4.621 ug/mL

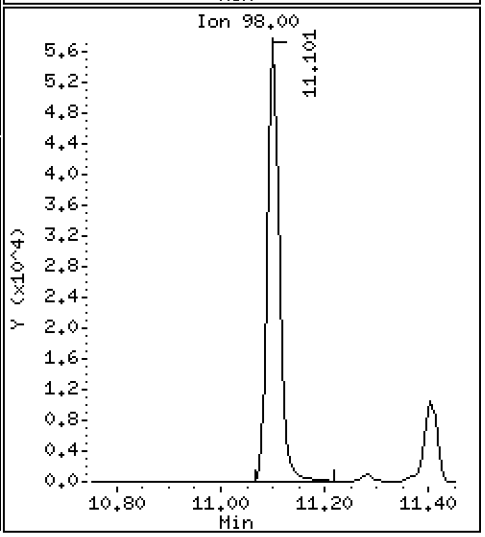


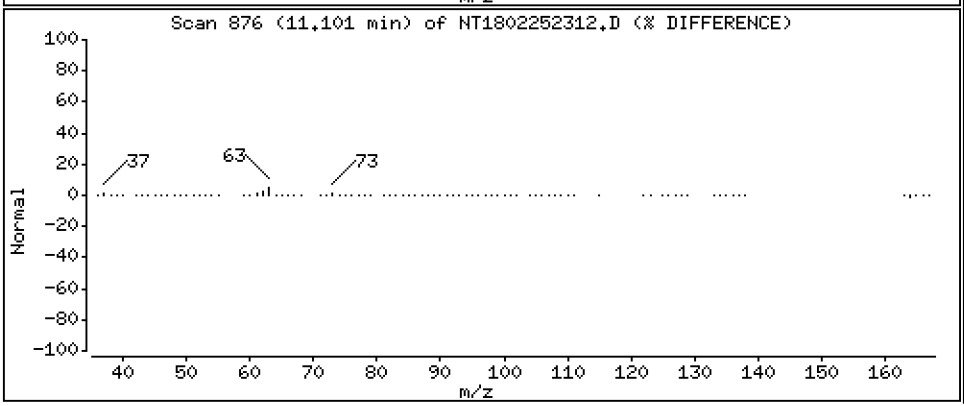












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

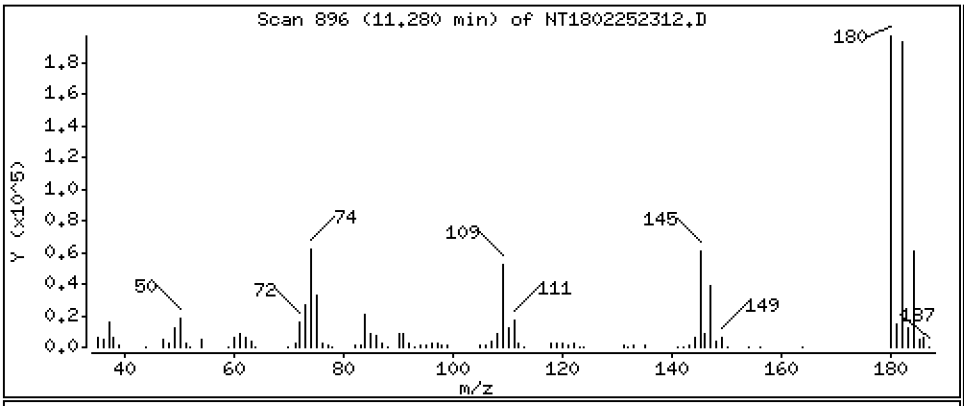
Operator: VTS

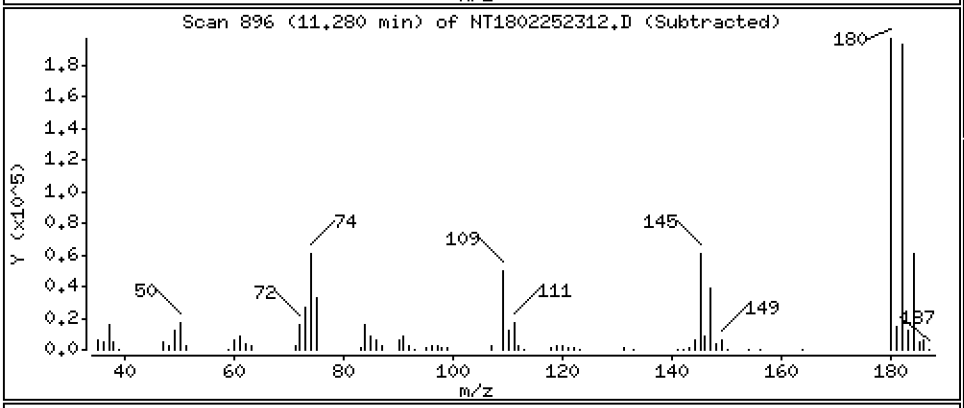
Column phase: ZB-5msi

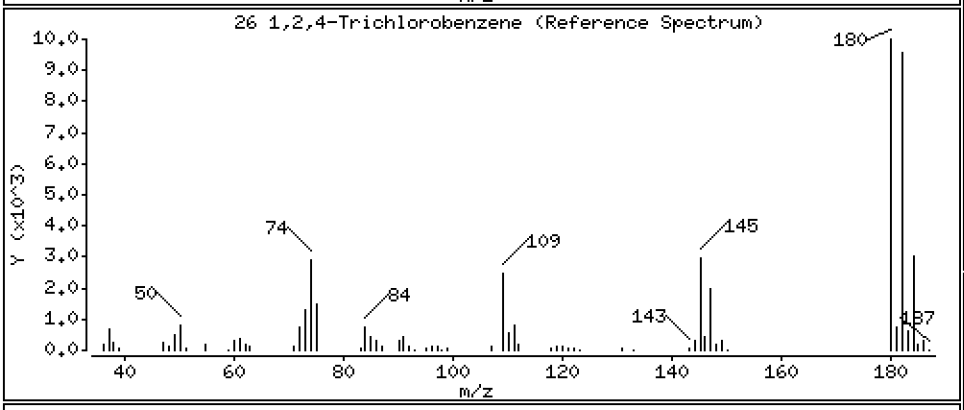
Column diameter: 0.25

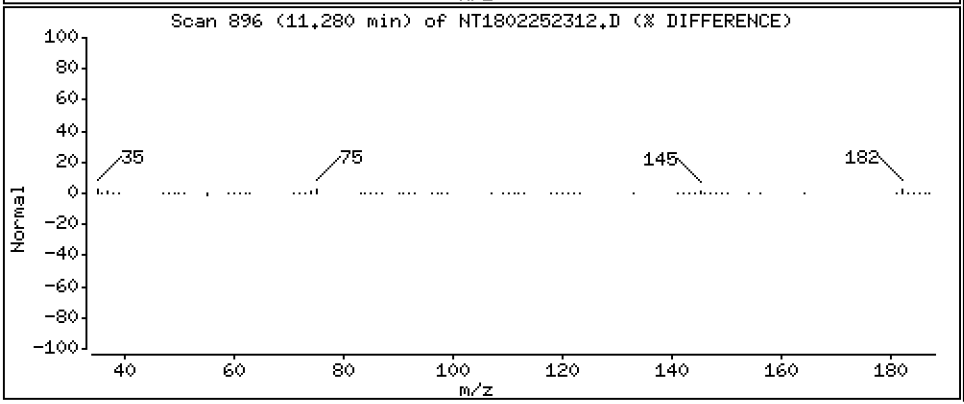
26 1,2,4-Trichlorobenzene

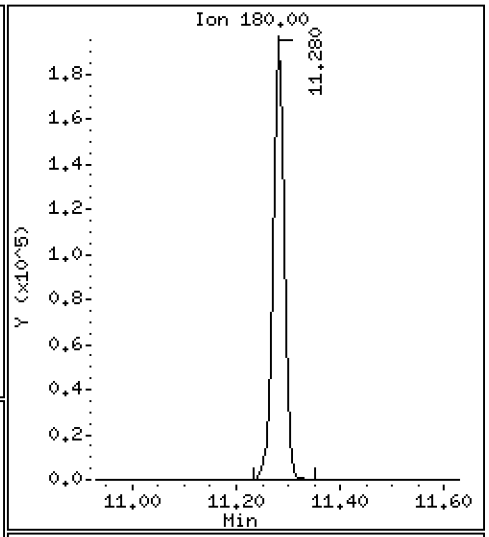
Concentration: 4.438 ug/mL

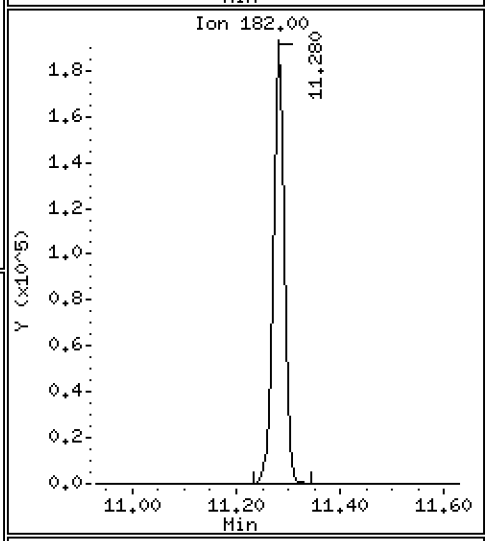


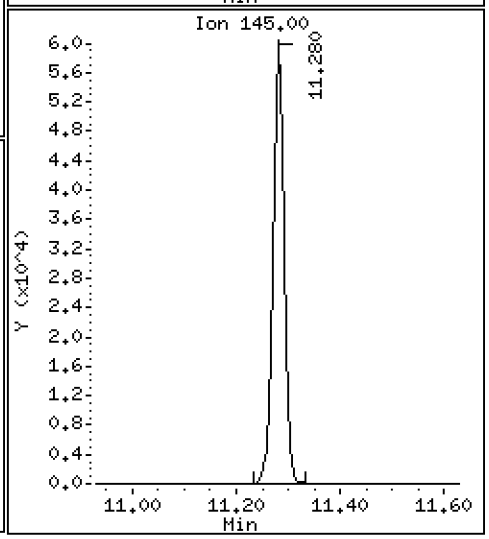












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

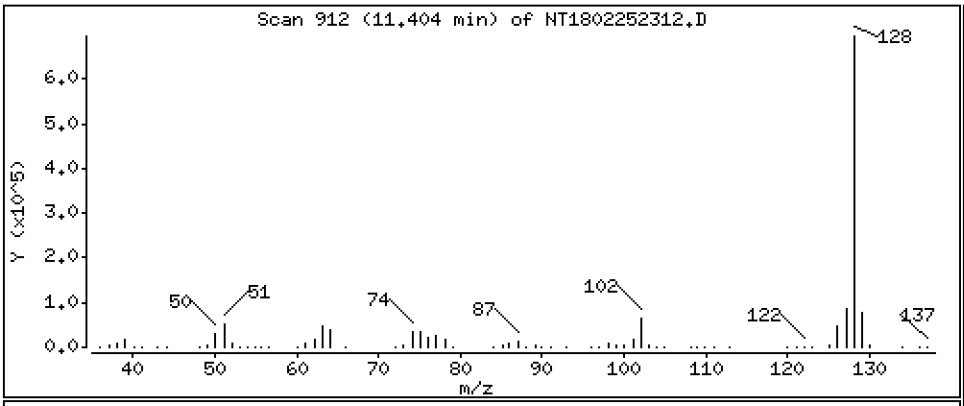
Operator: VTS

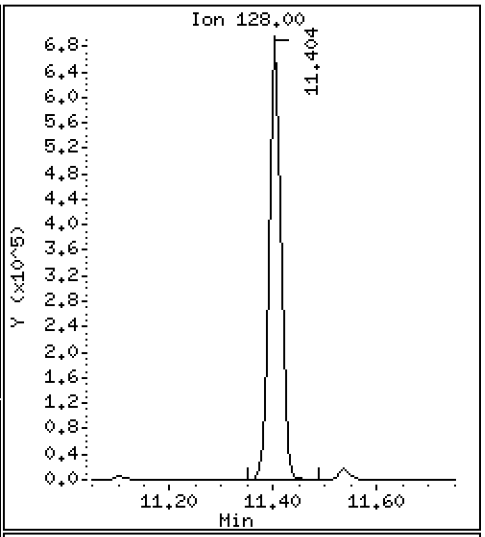
Column phase: ZB-5msi

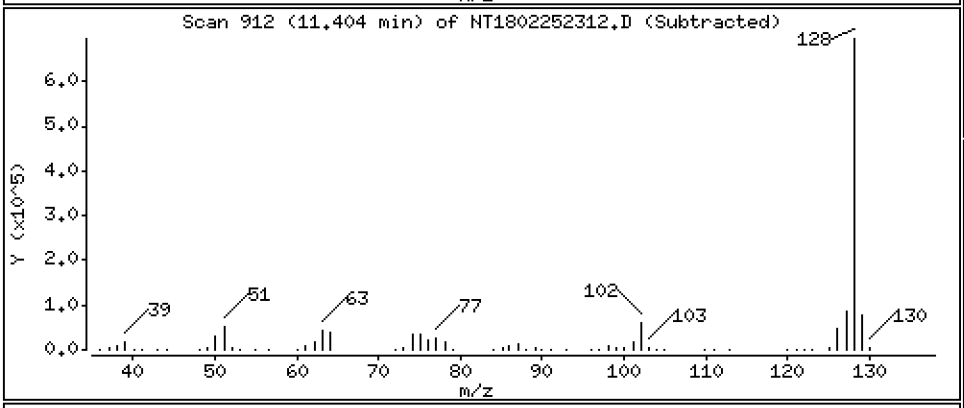
Column diameter: 0.25

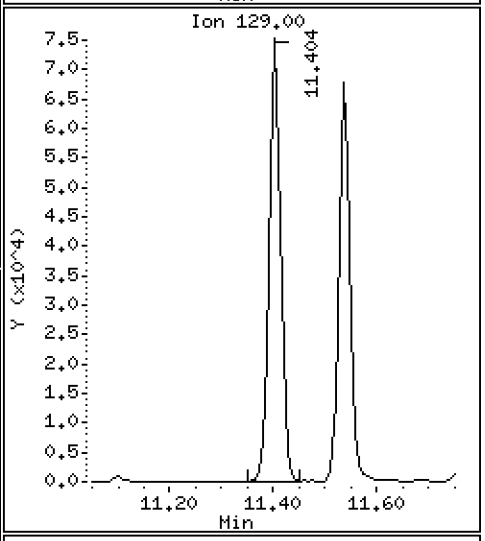
28 Naphthalene

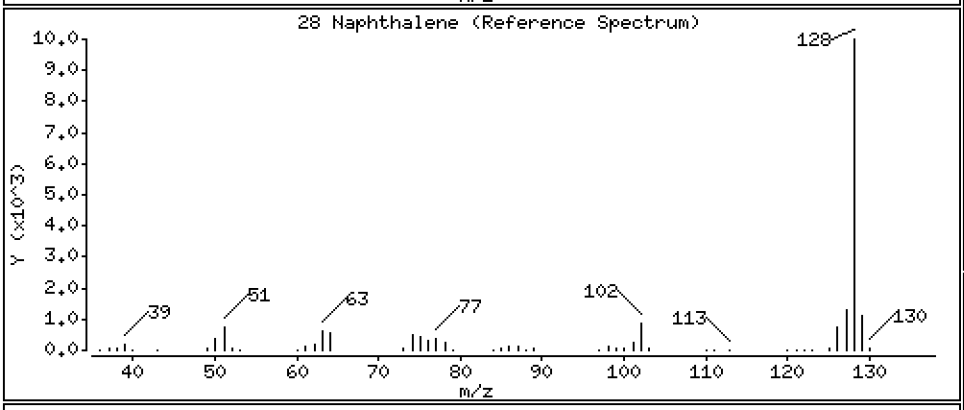
Concentration: 4.523 ug/mL

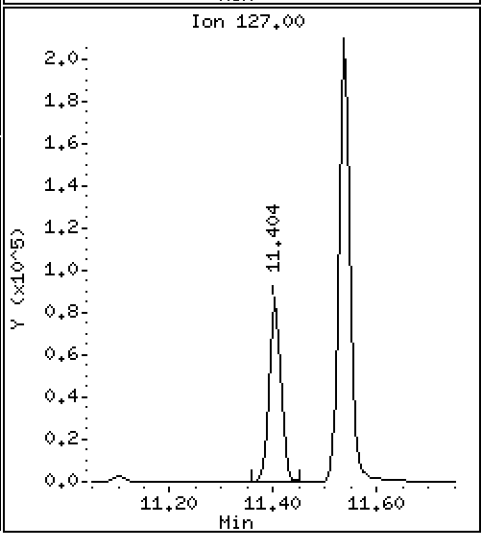


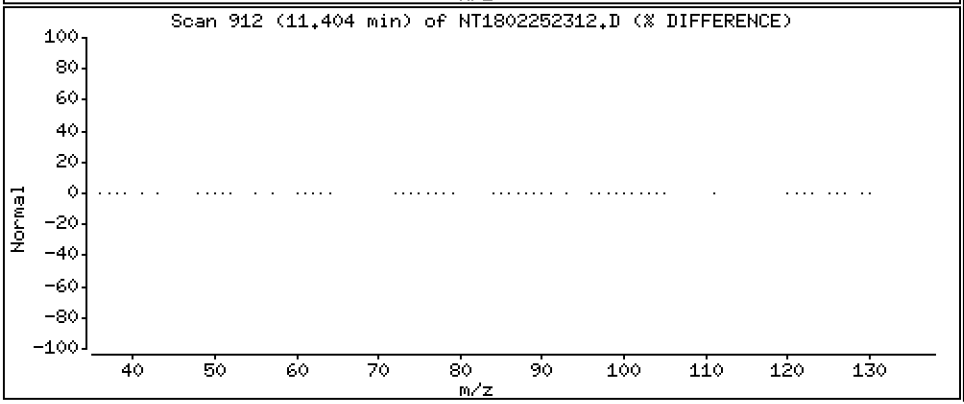












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

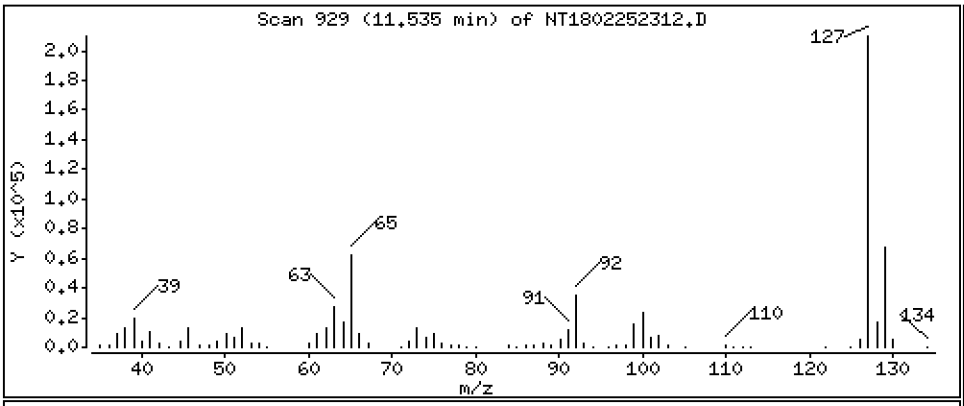
Operator: VTS

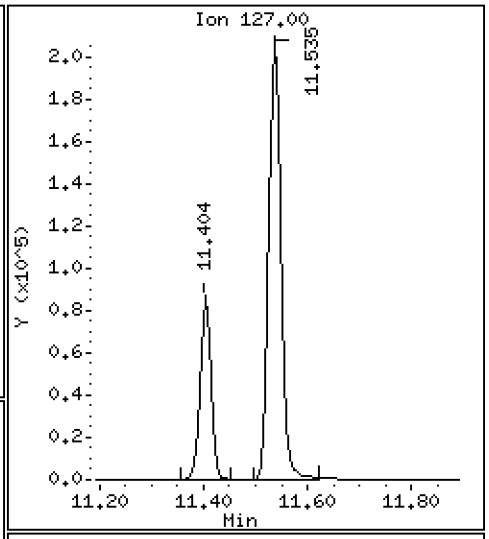
Column phase: ZB-5msi

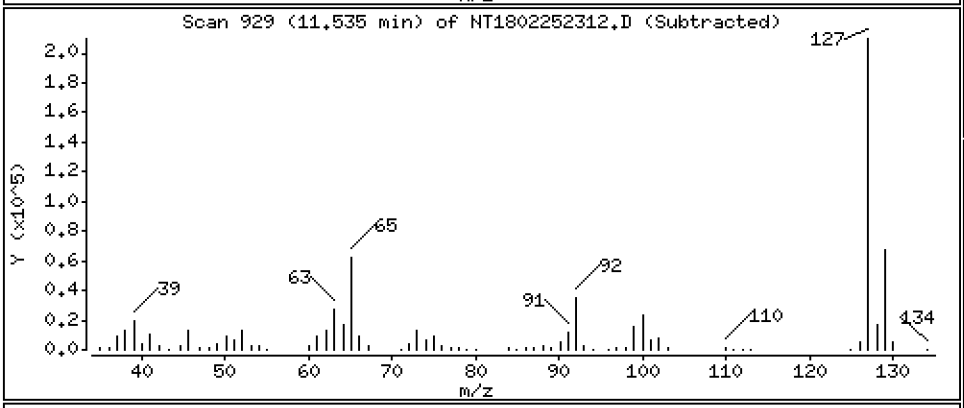
Column diameter: 0.25

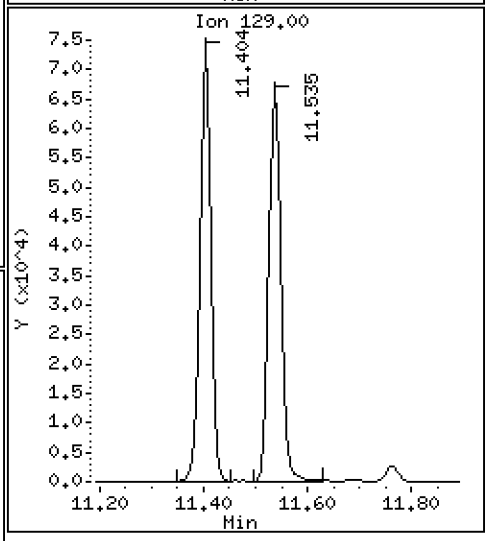
29 4-Chloroaniline

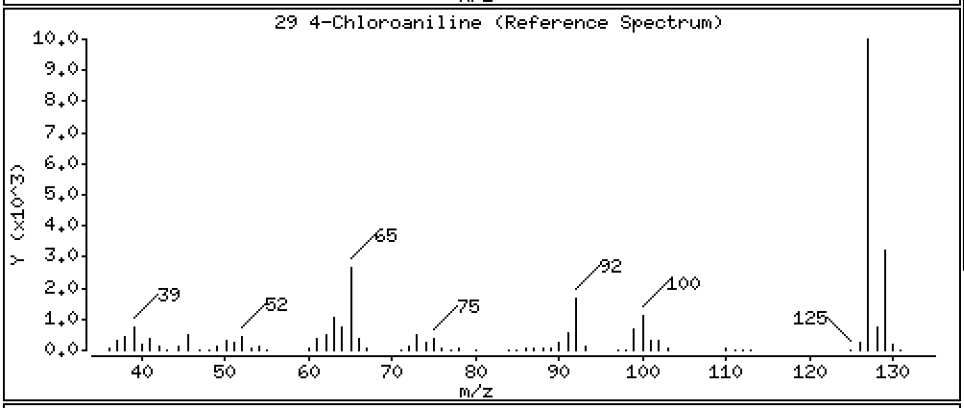
Concentration: 3.459 ug/mL

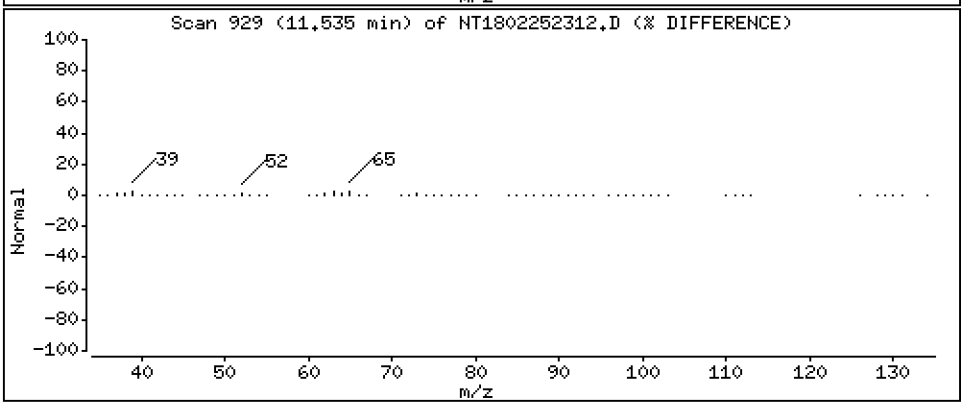












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

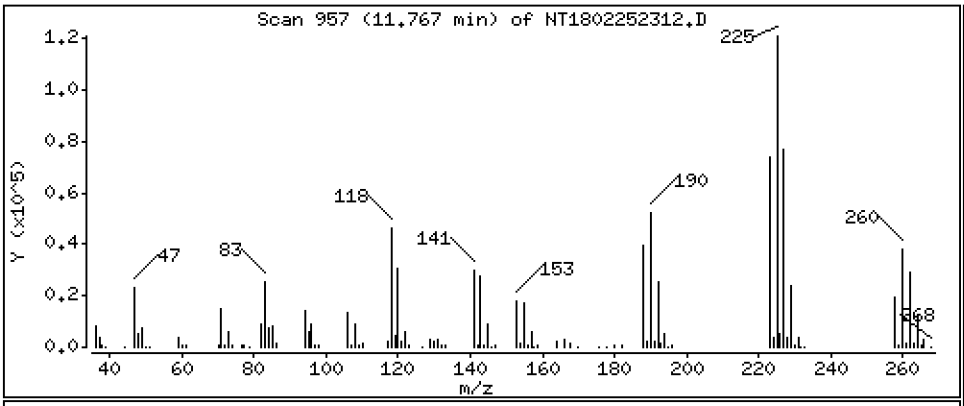
Operator: VTS

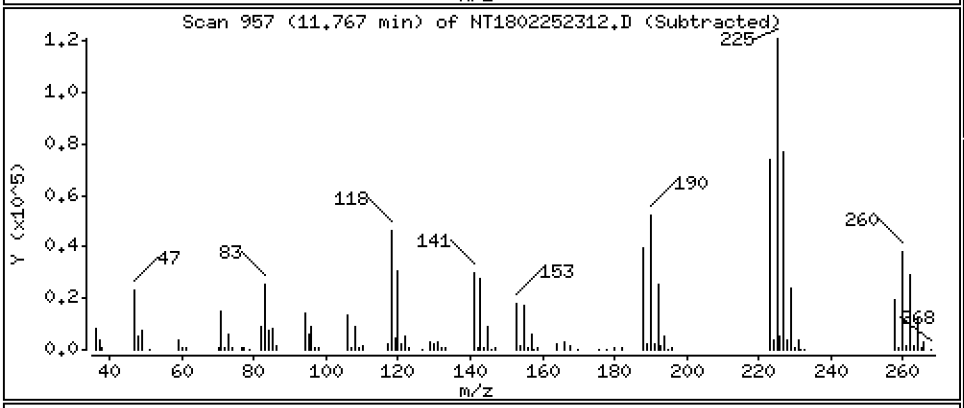
Column phase: ZB-5msi

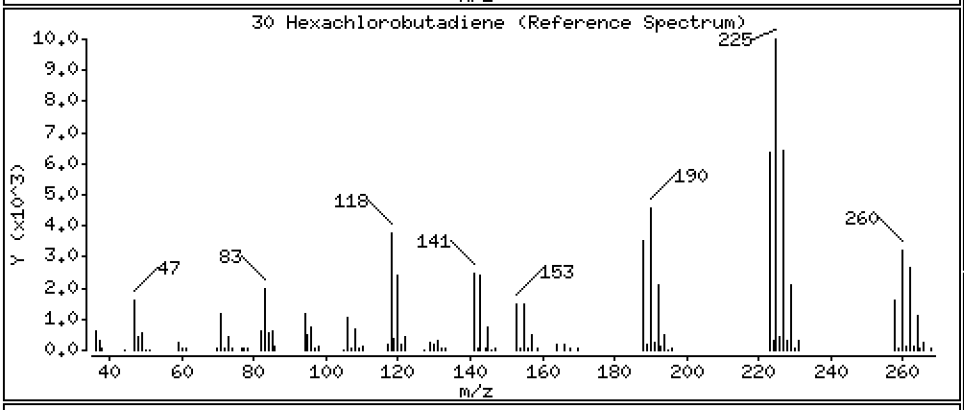
Column diameter: 0.25

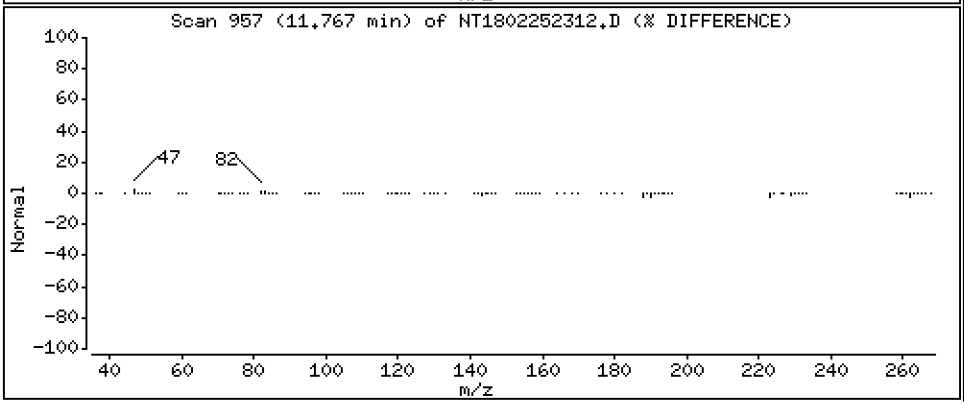
30 Hexachlorobutadiene

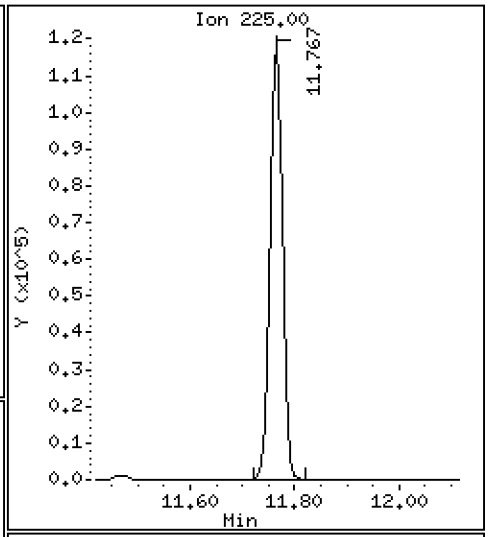
Concentration: 4.656 ug/mL

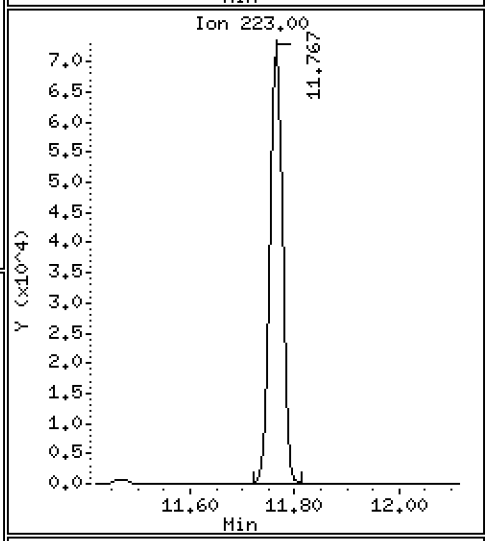


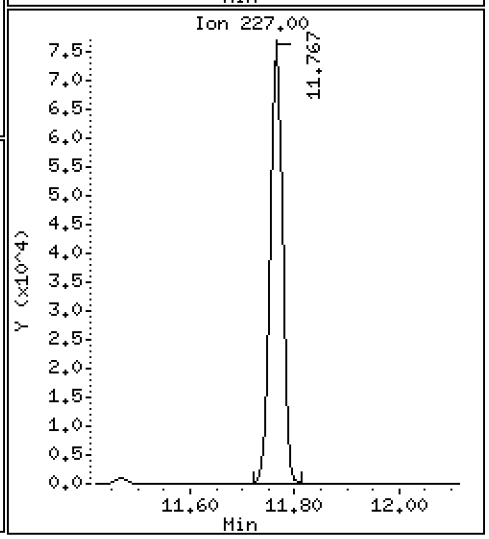












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

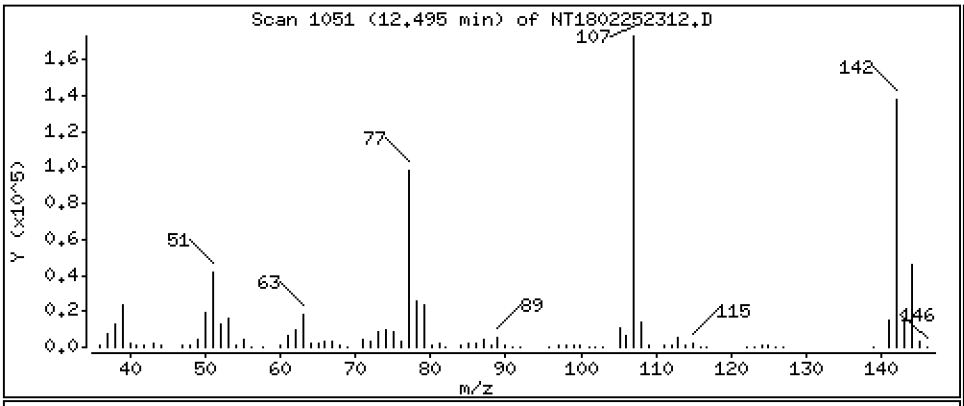
Operator: VTS

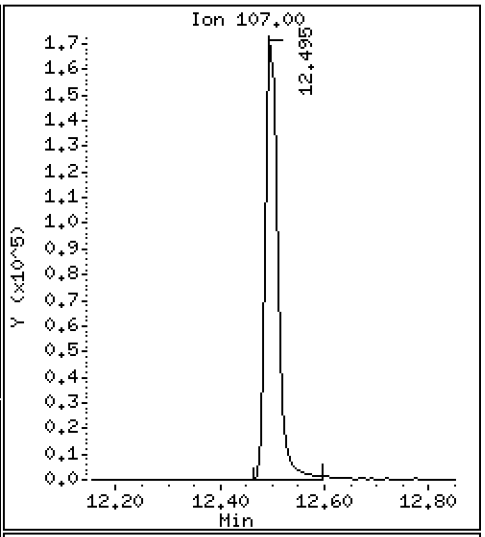
Column phase: ZB-5msi

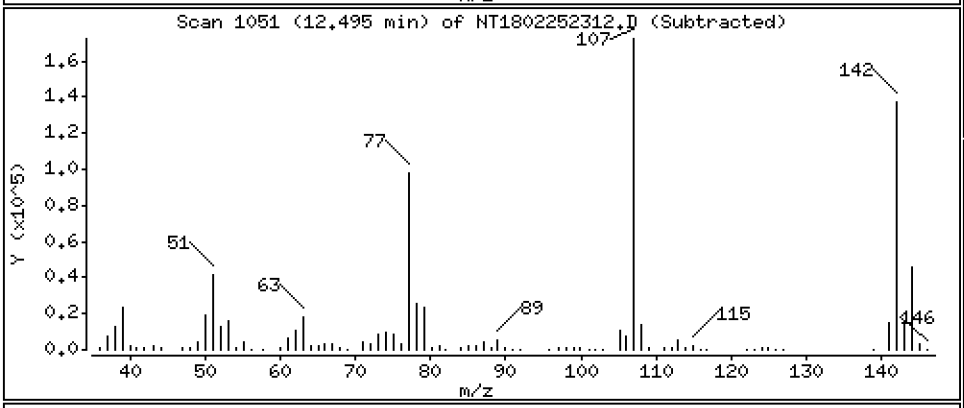
Column diameter: 0.25

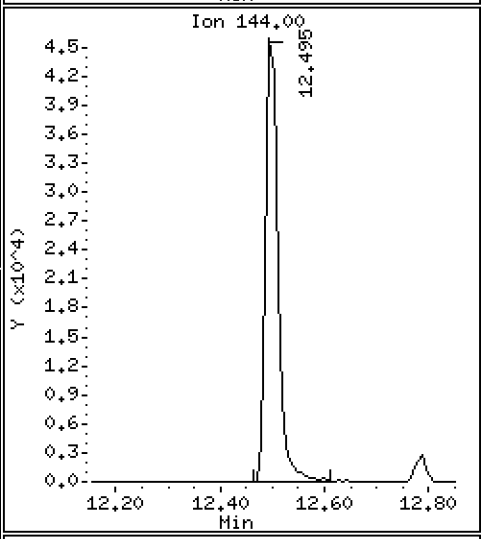
31 4-Chloro-3-methylphenol

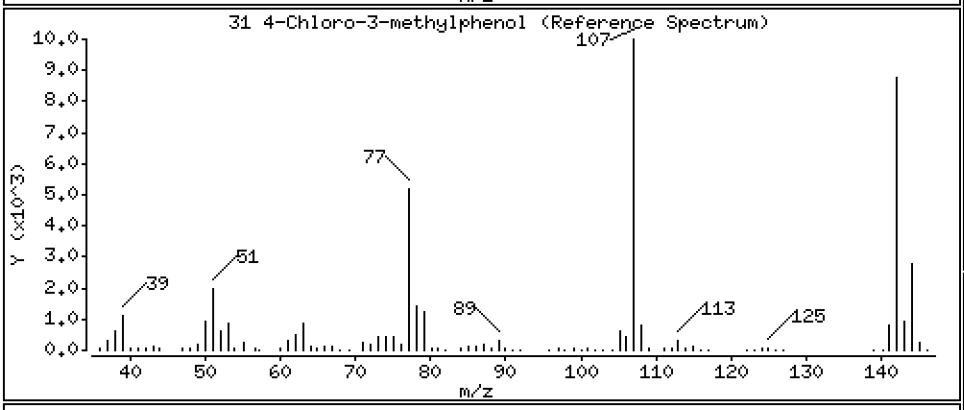
Concentration: 4.422 ug/mL

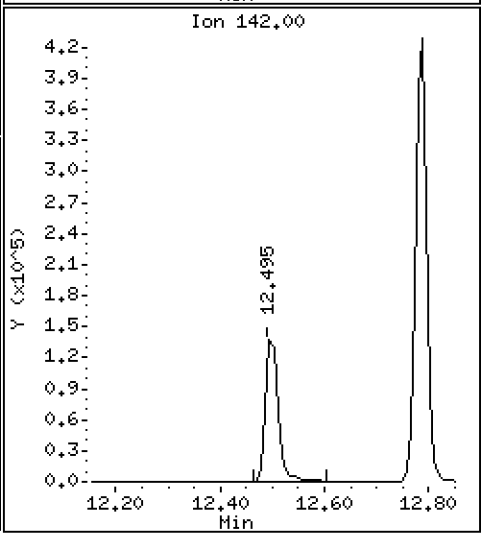


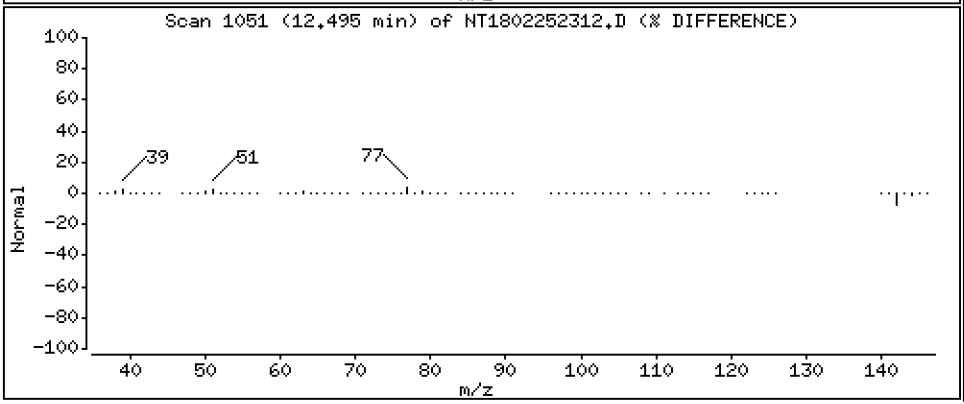












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

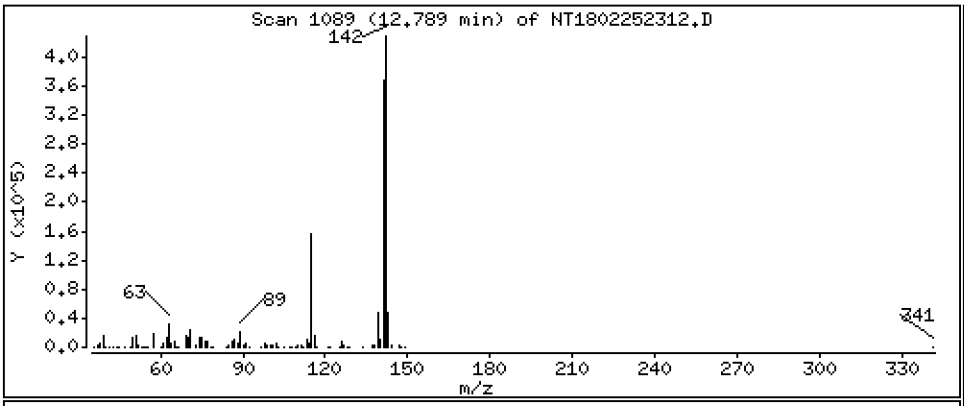
Operator: VTS

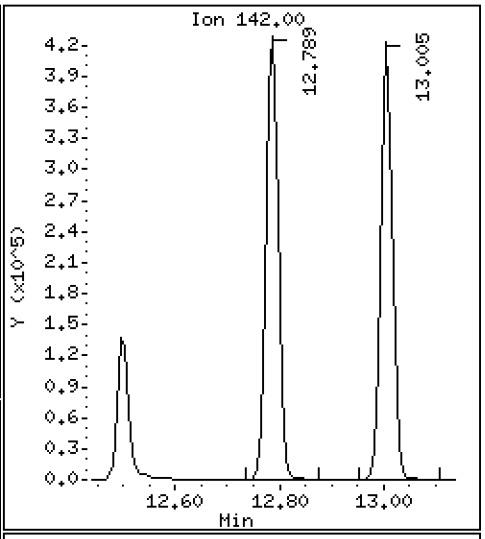
Column phase: ZB-5msi

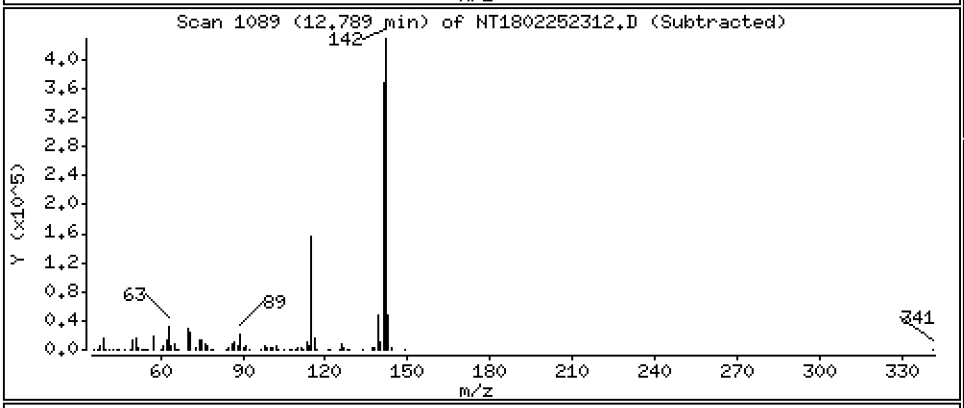
Column diameter: 0.25

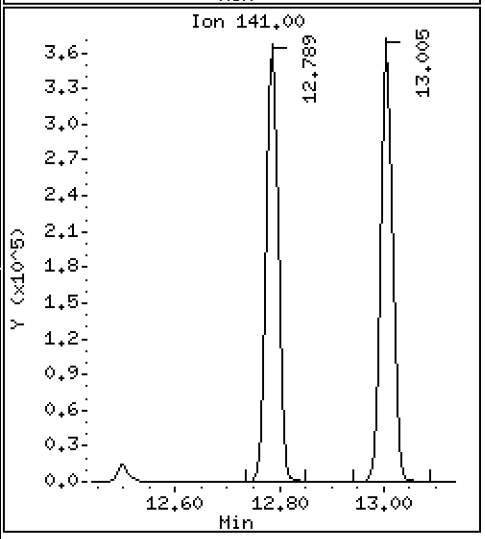
32 2-Methylnaphthalene

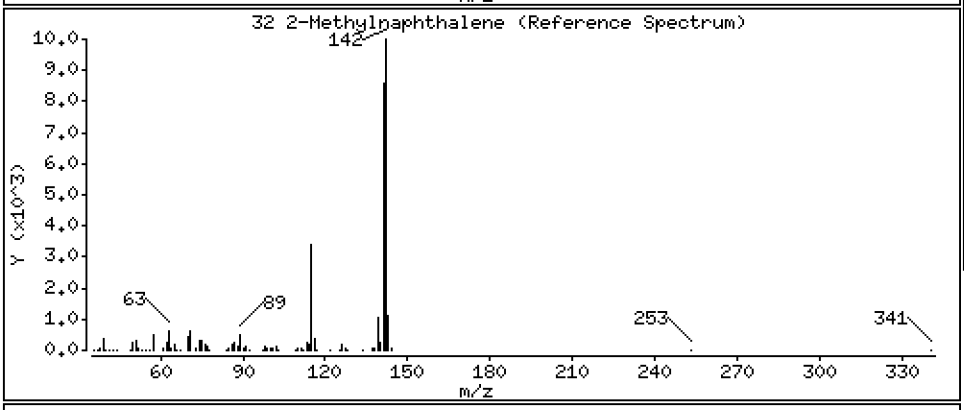
Concentration: 4.225 ug/mL

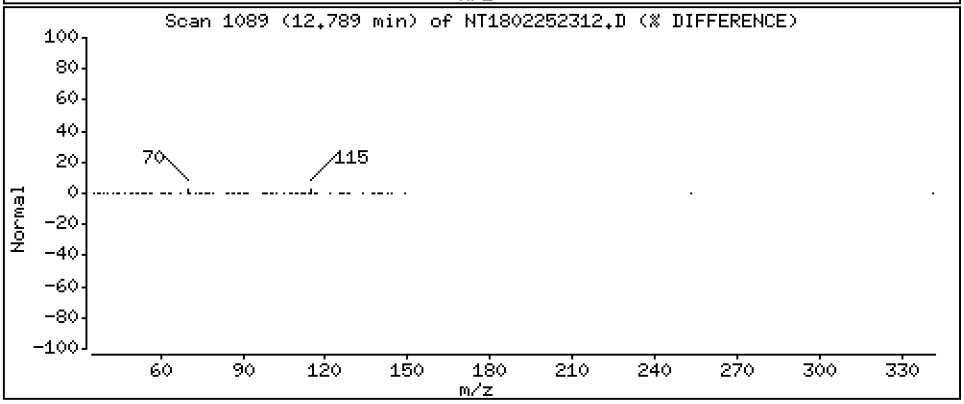












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

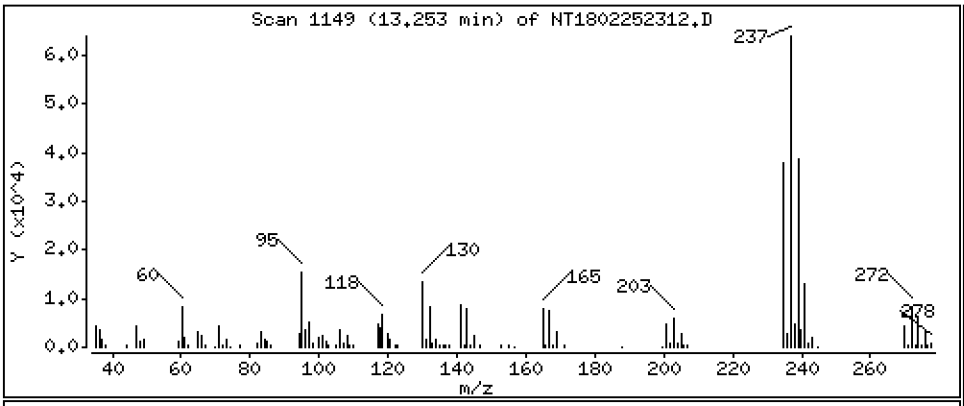
Operator: VTS

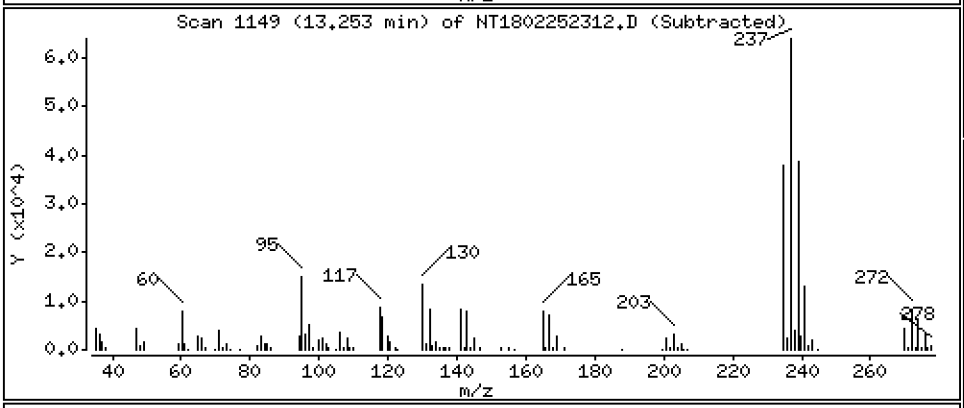
Column phase: ZB-5msi

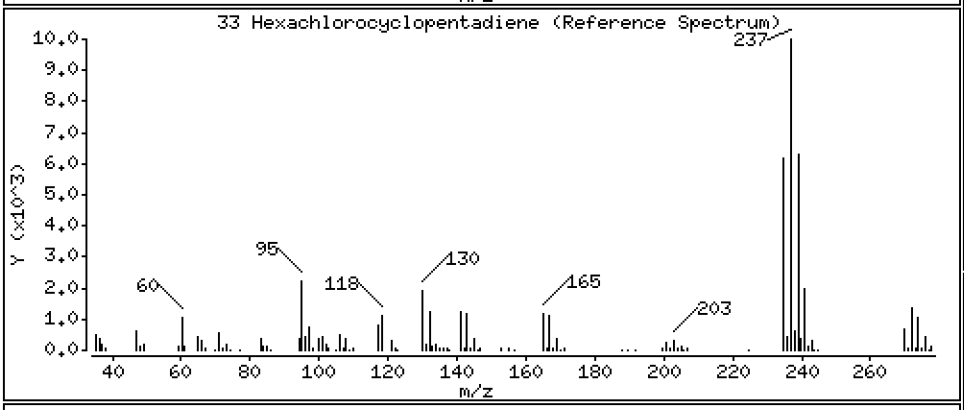
Column diameter: 0.25

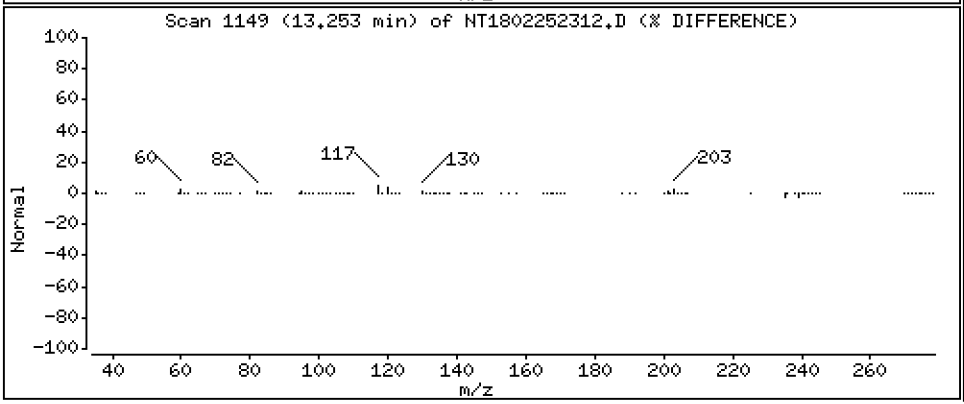
33 Hexachlorocyclopentadiene

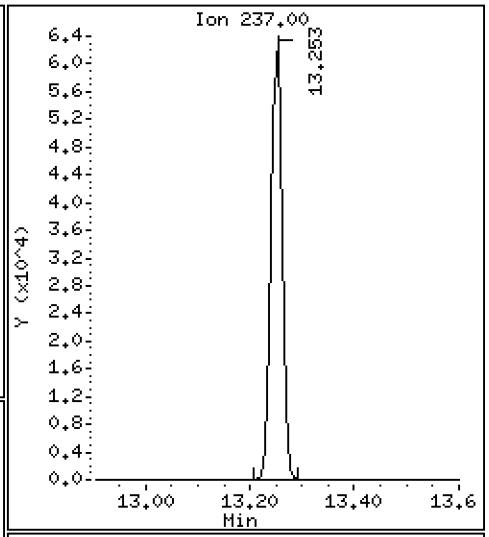
Concentration: 3.202 ug/mL

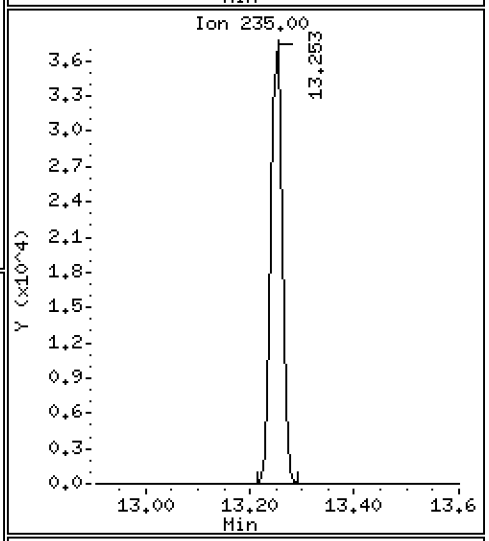


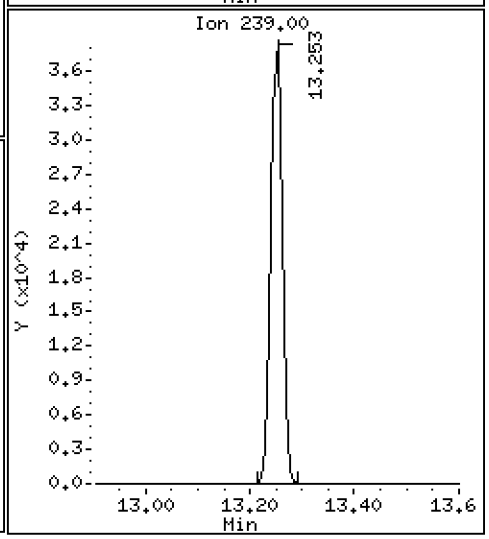












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

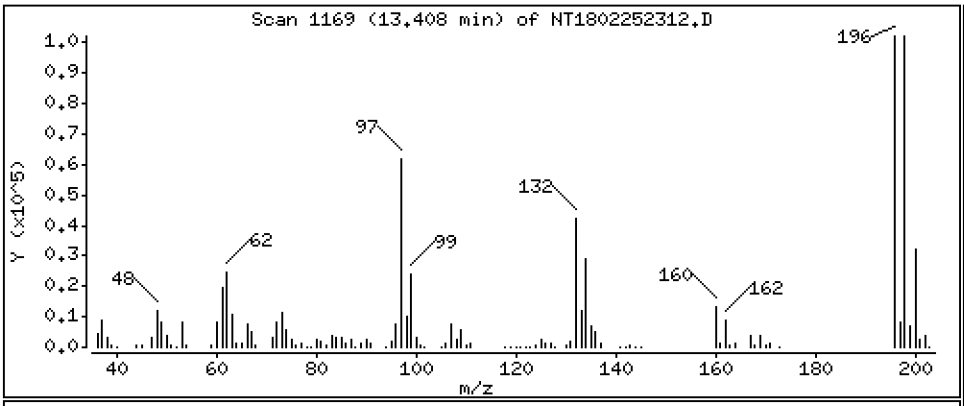
Operator: VTS

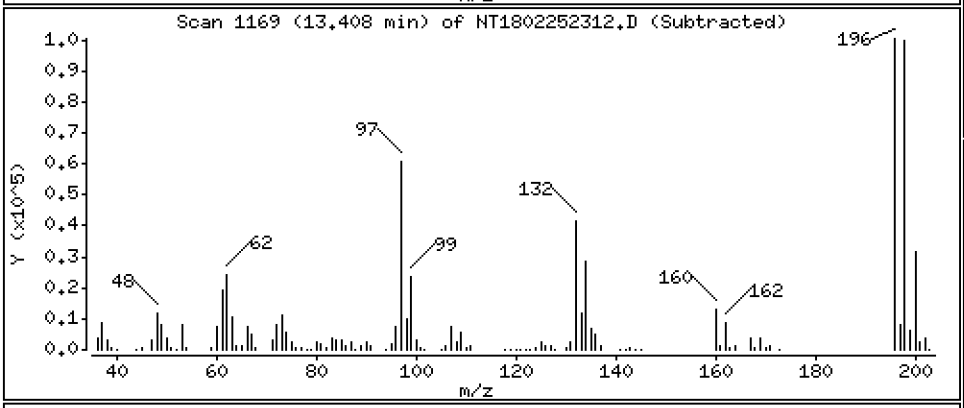
Column phase: ZB-5msi

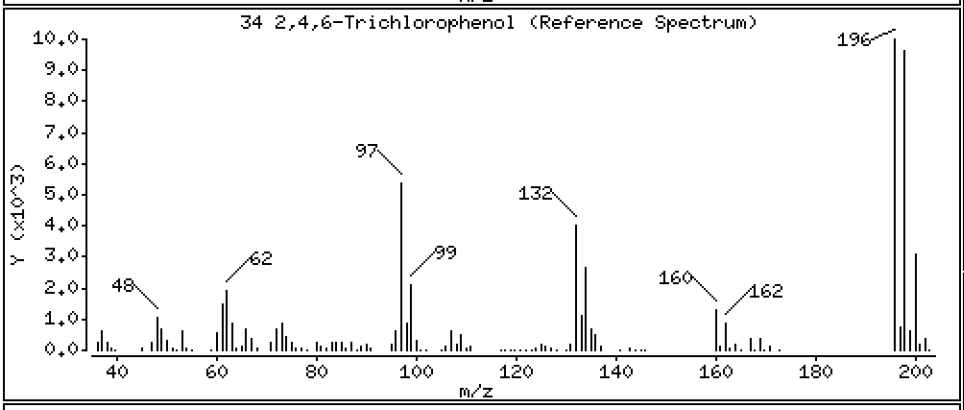
Column diameter: 0.25

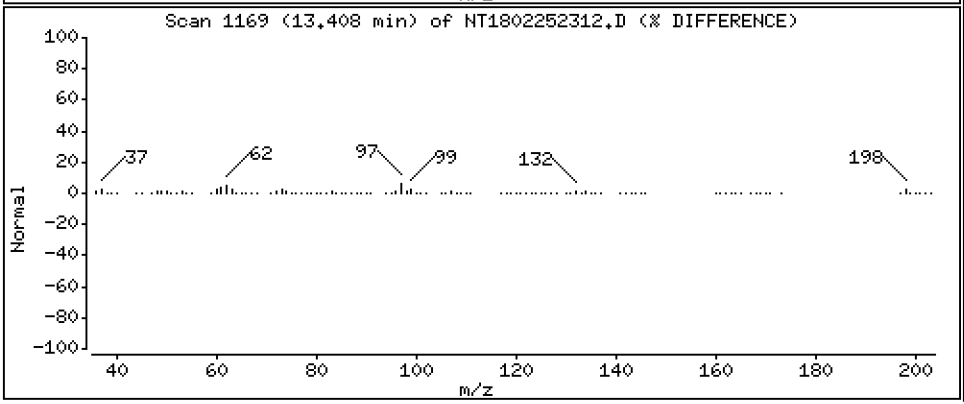
34 2,4,6-Trichlorophenol

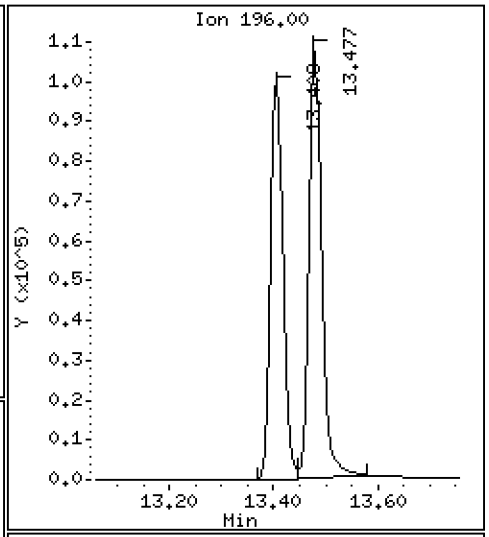
Concentration: 4.148 ug/mL

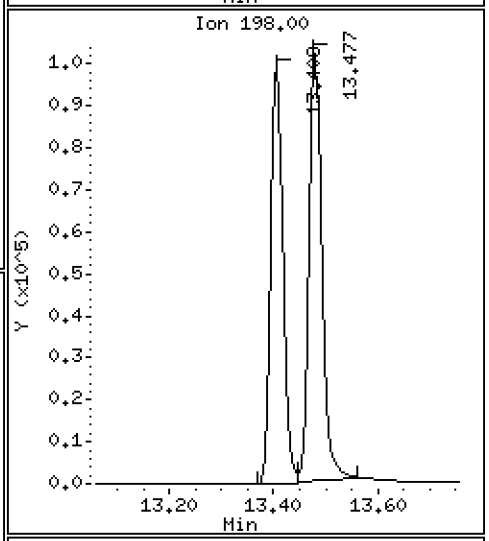


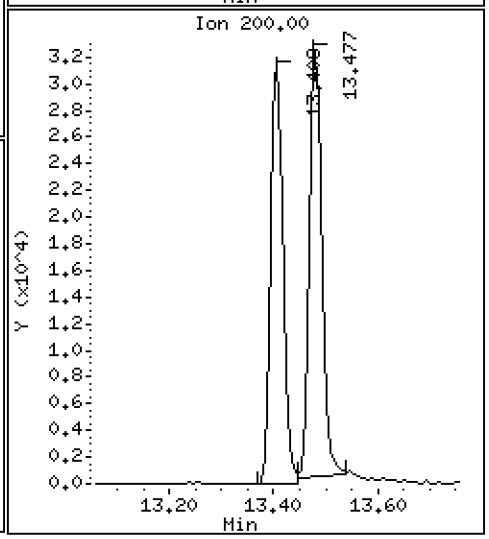












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

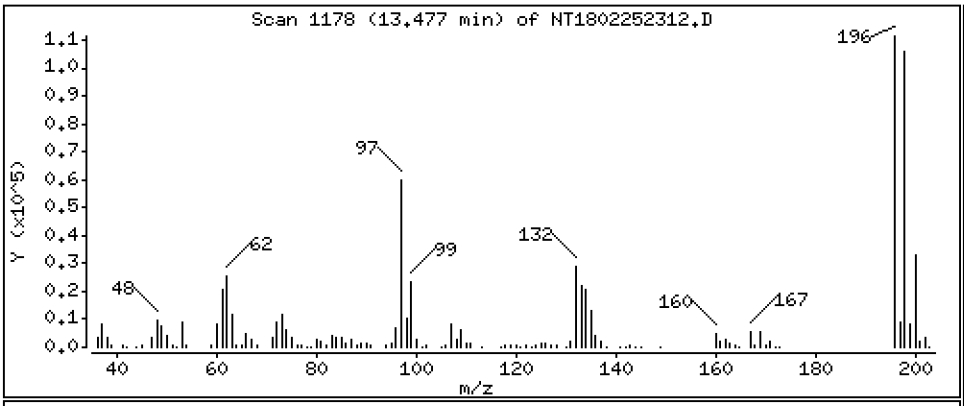
Operator: VTS

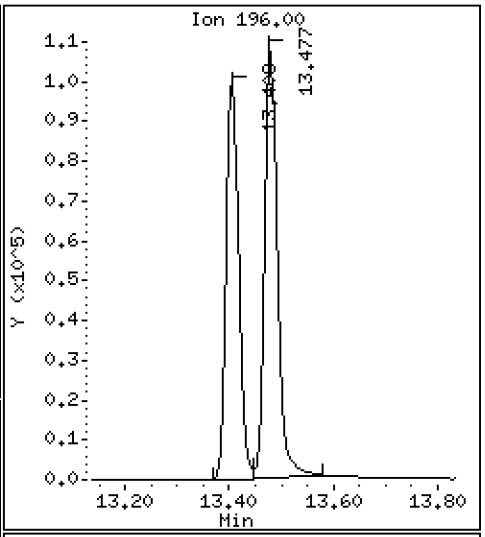
Column phase: ZB-5msi

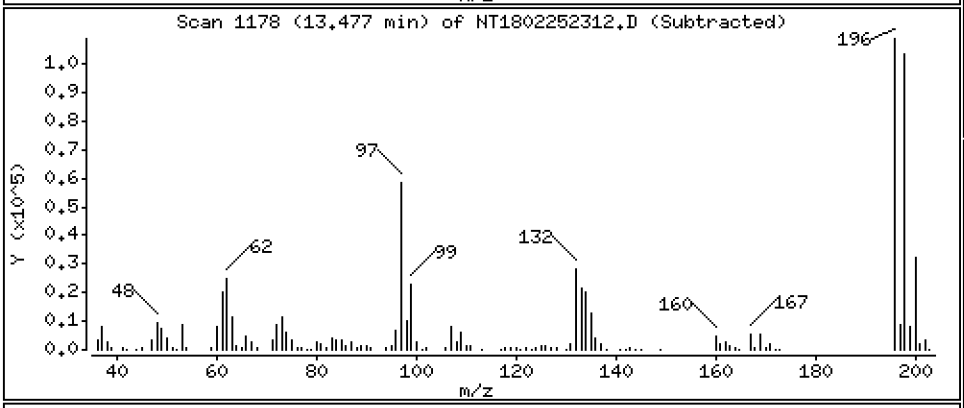
Column diameter: 0.25

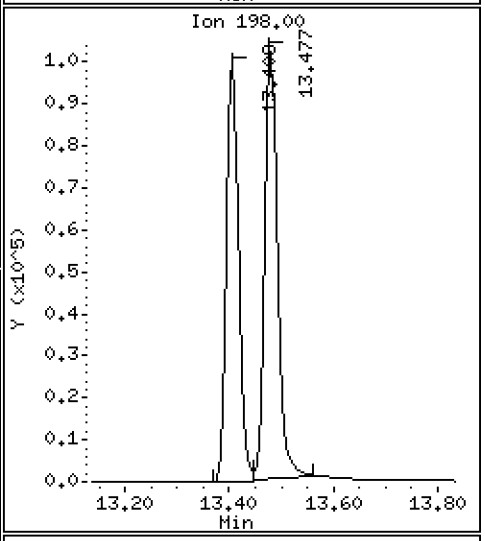
35 2,4,5-Trichlorophenol

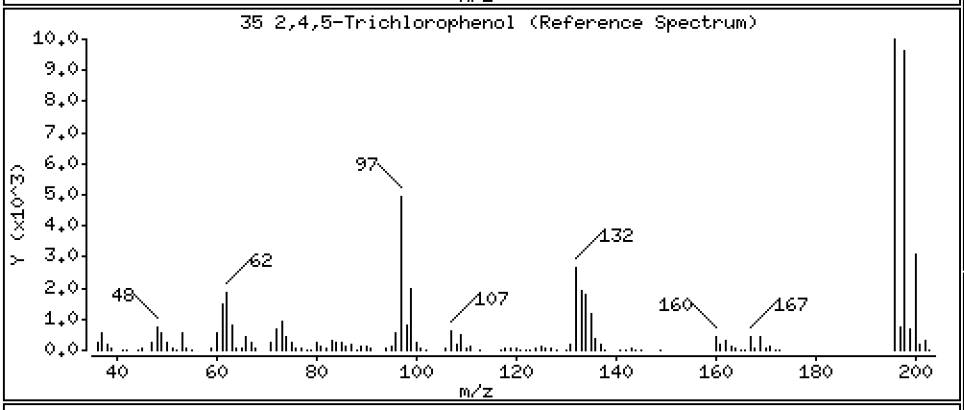
Concentration: 4.100 ug/mL

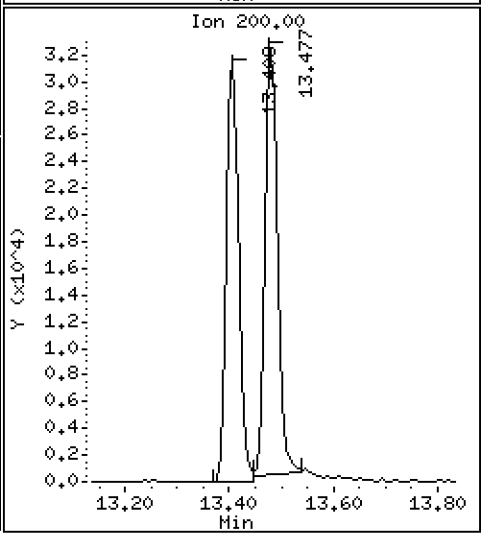


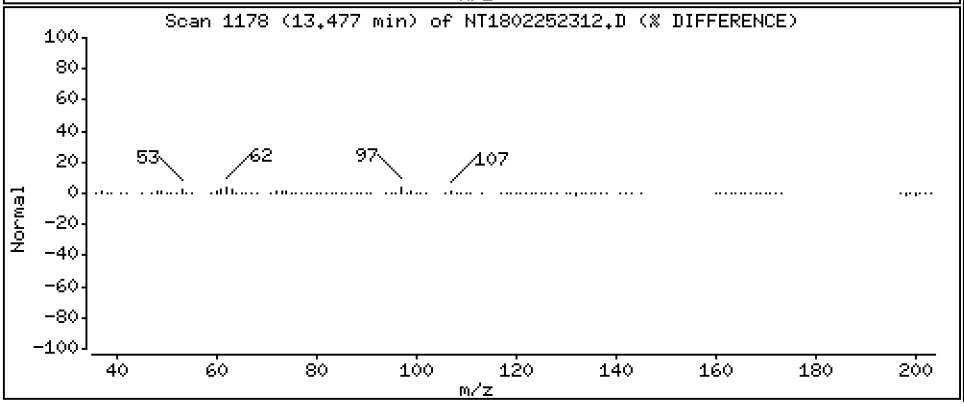












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

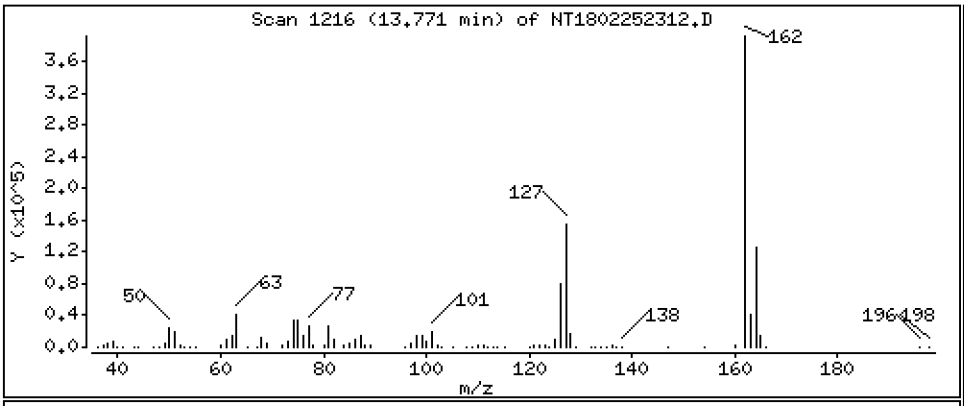
Operator: VTS

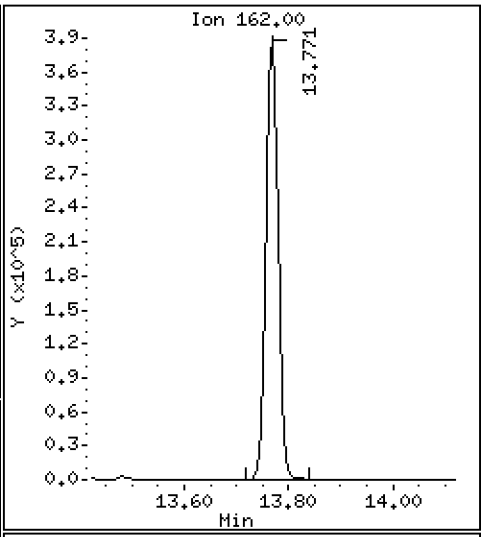
Column phase: ZB-5msi

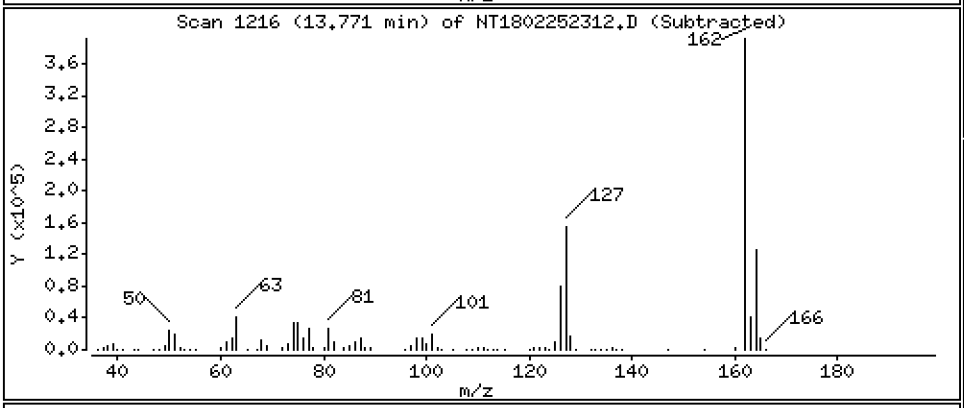
Column diameter: 0.25

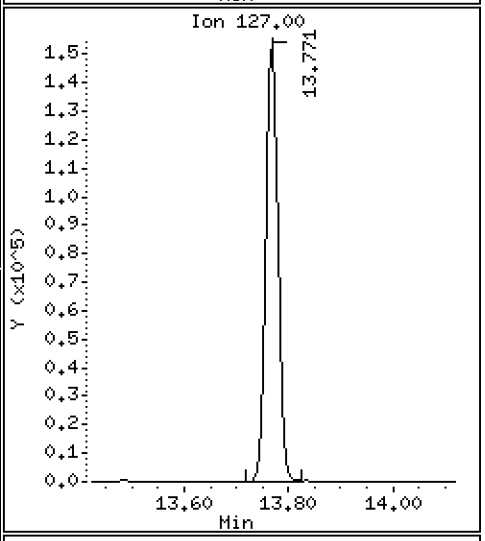
37 2-Chloronaphthalene

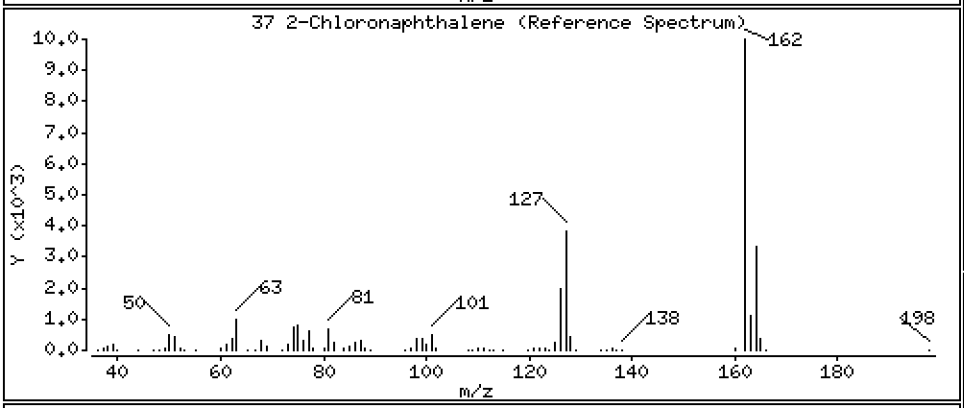
Concentration: 4.552 ug/mL

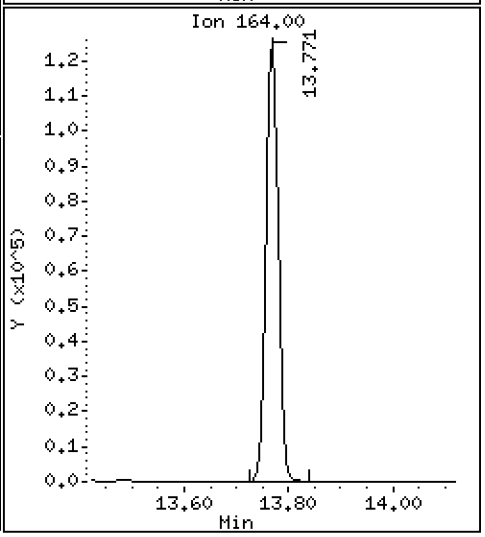


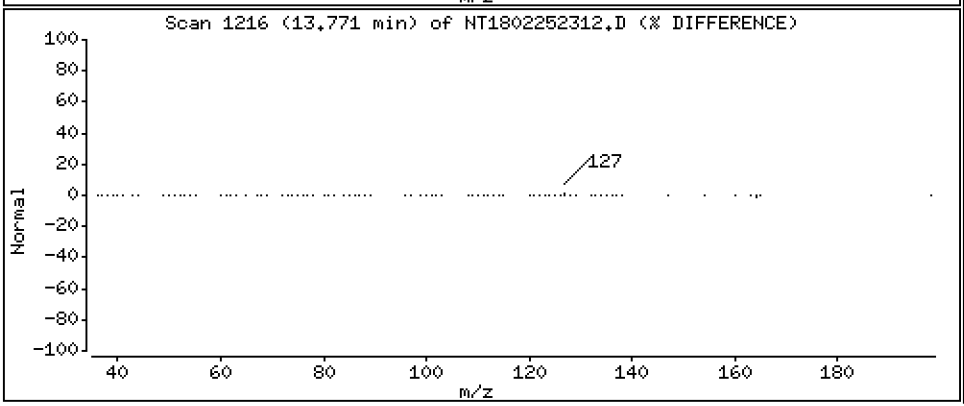












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

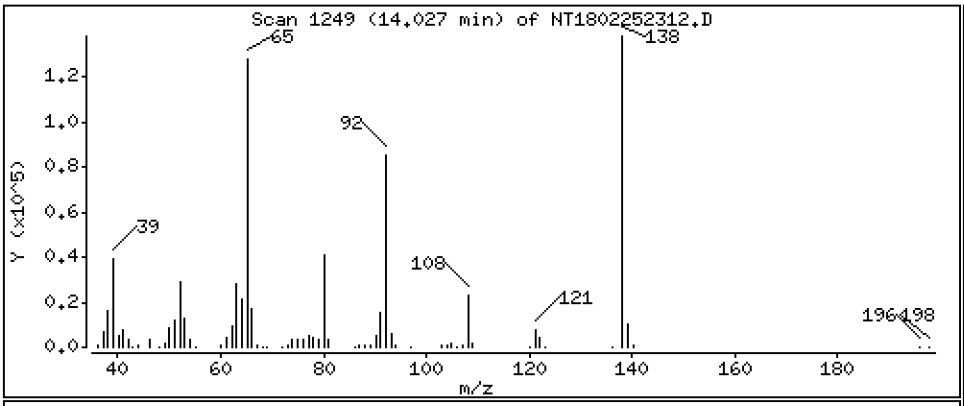
Operator: VTS

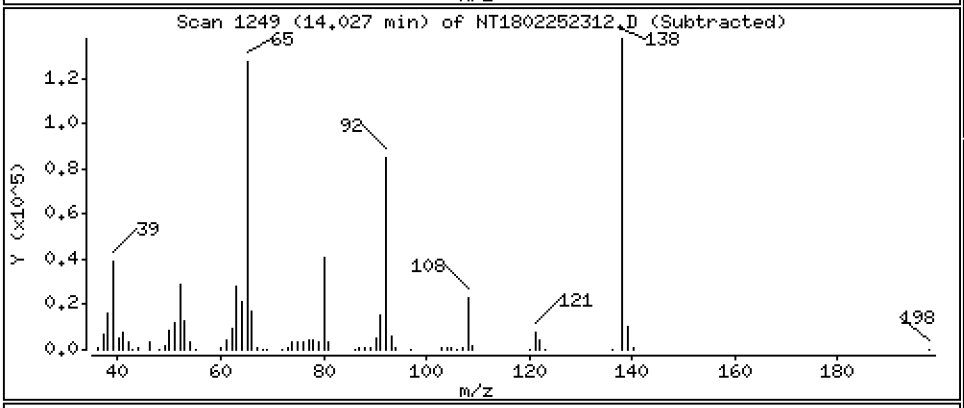
Column phase: ZB-5msi

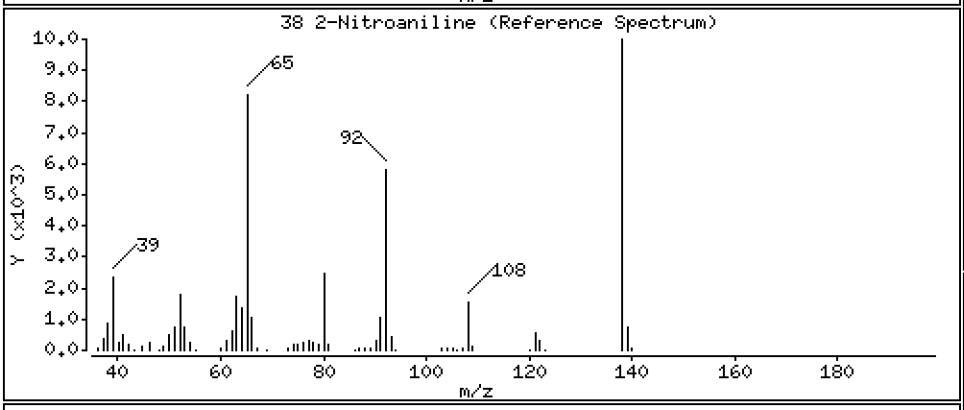
Column diameter: 0.25

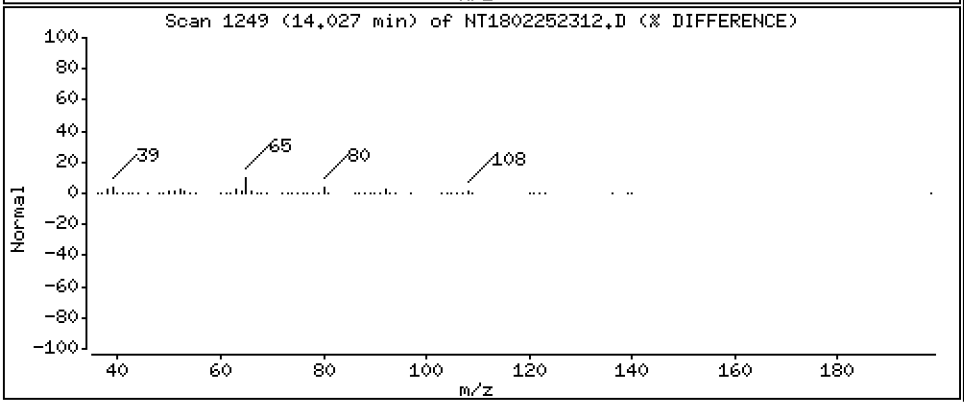
38 2-Nitroaniline

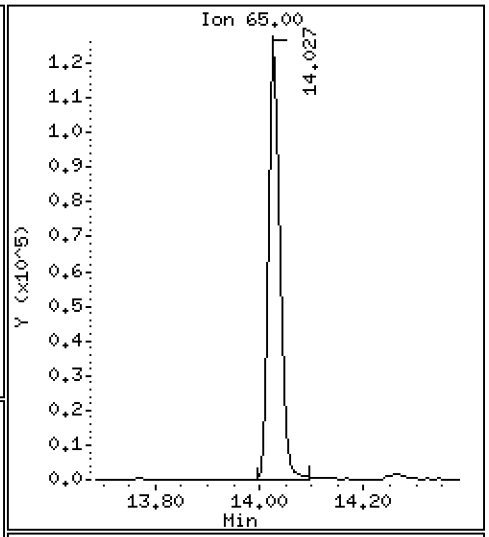
Concentration: 4.495 ug/mL

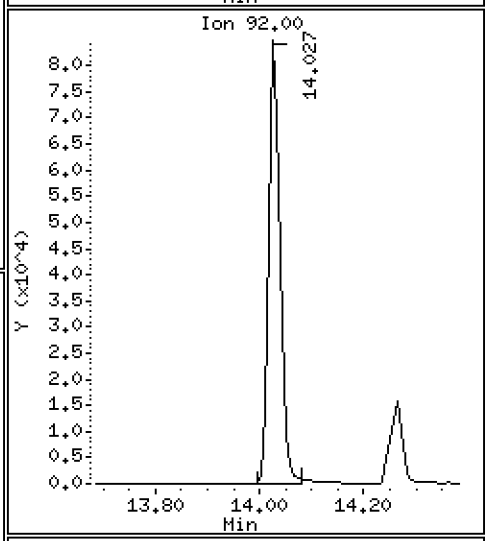


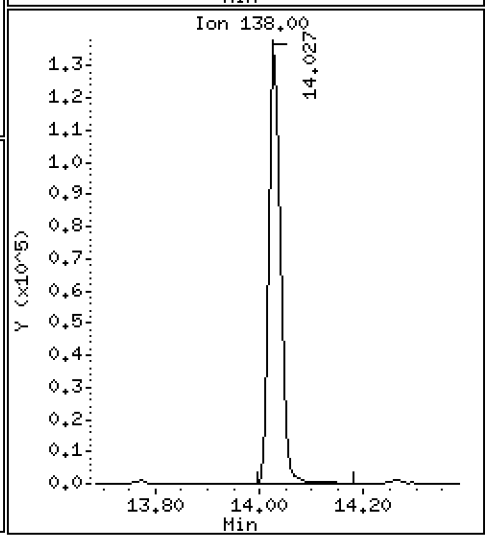












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

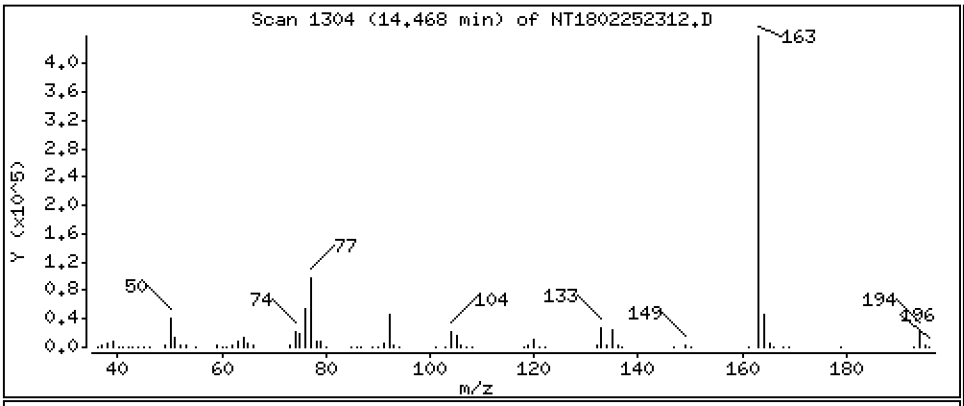
Operator: VTS

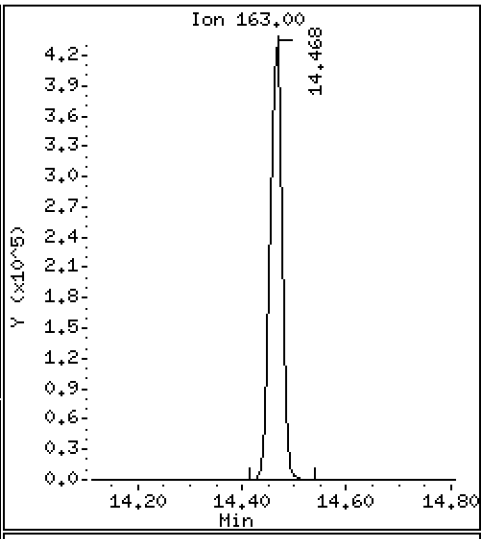
Column phase: ZB-5msi

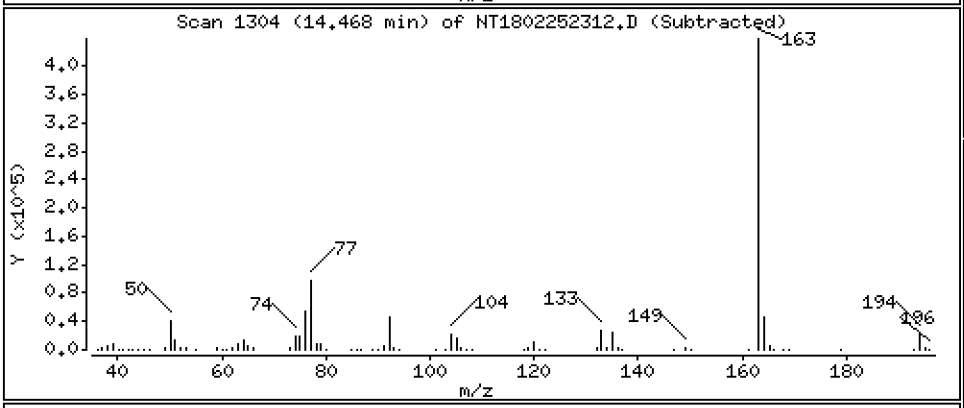
Column diameter: 0.25

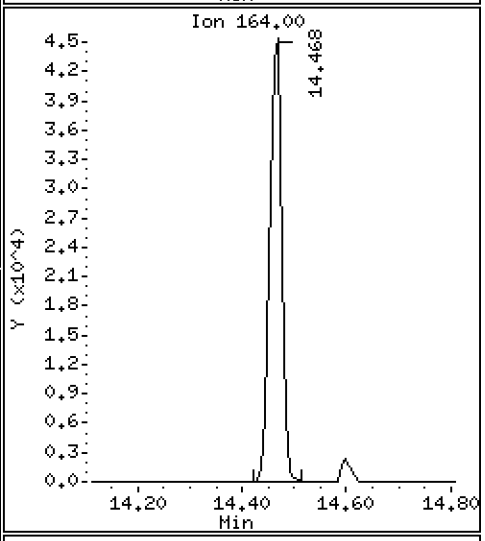
39 Dimethylphthalate

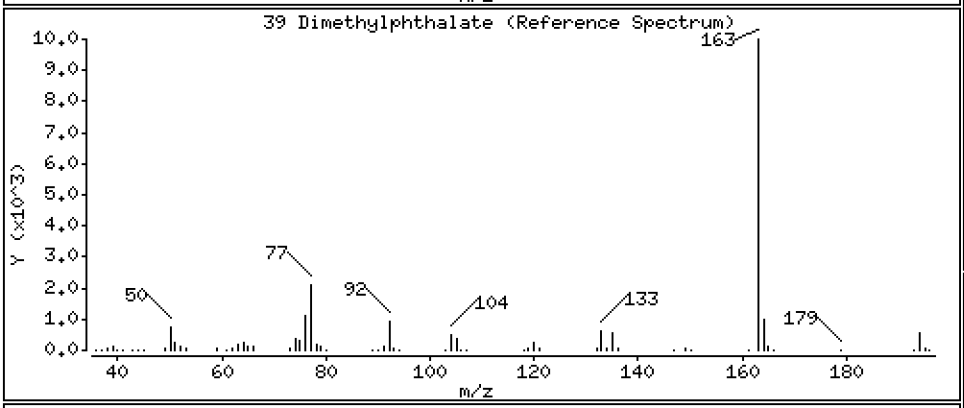
Concentration: 4.739 ug/mL

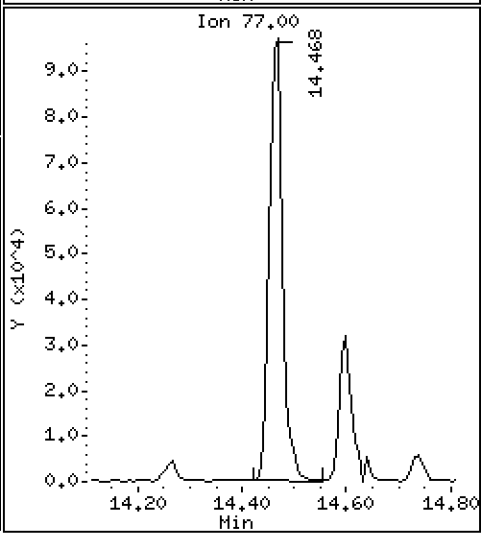


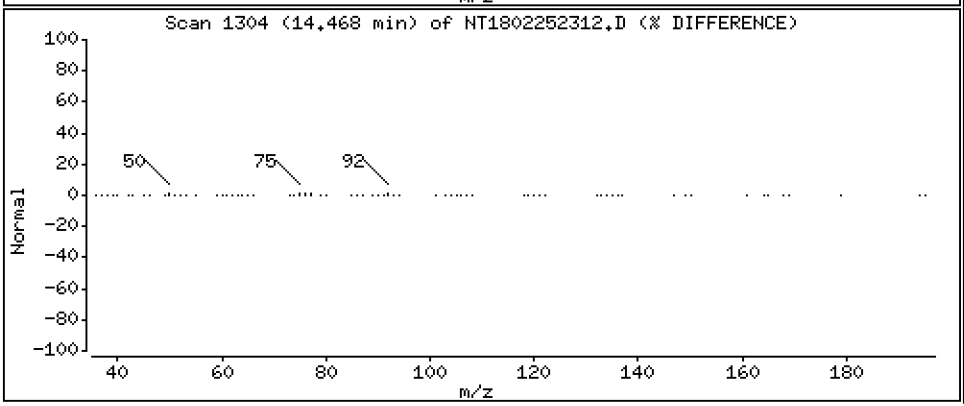












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

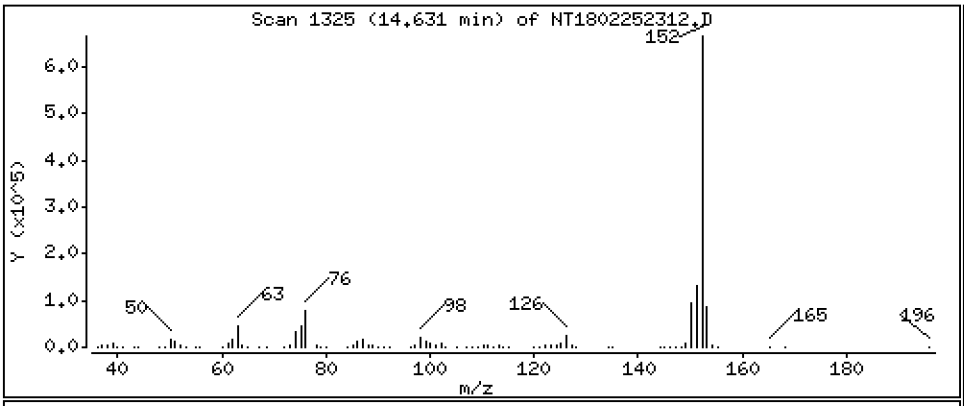
Operator: VTS

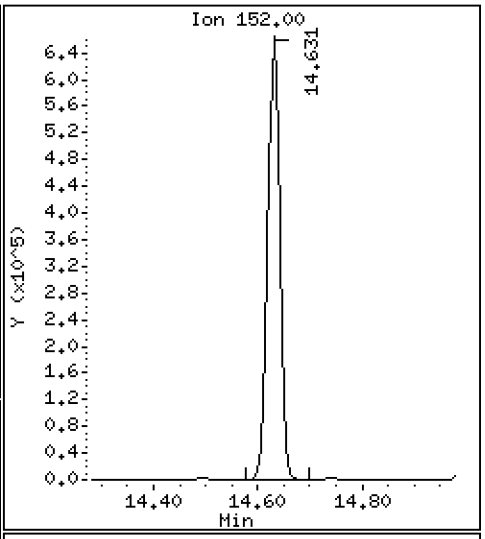
Column phase: ZB-5msi

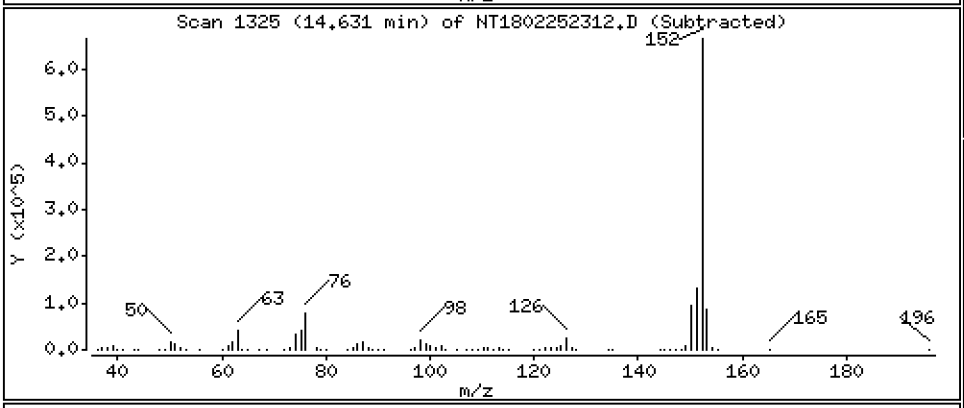
Column diameter: 0.25

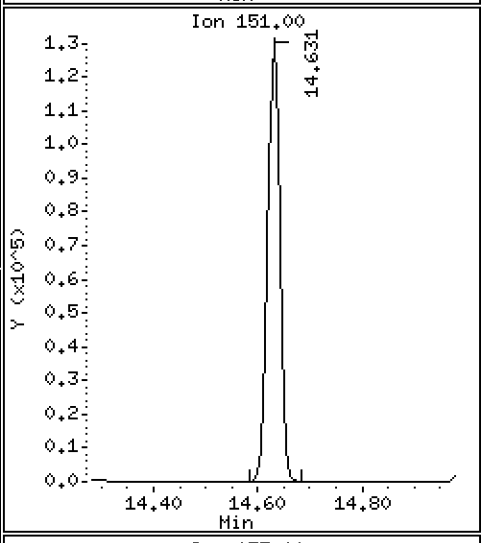
40 Acenaphthylene

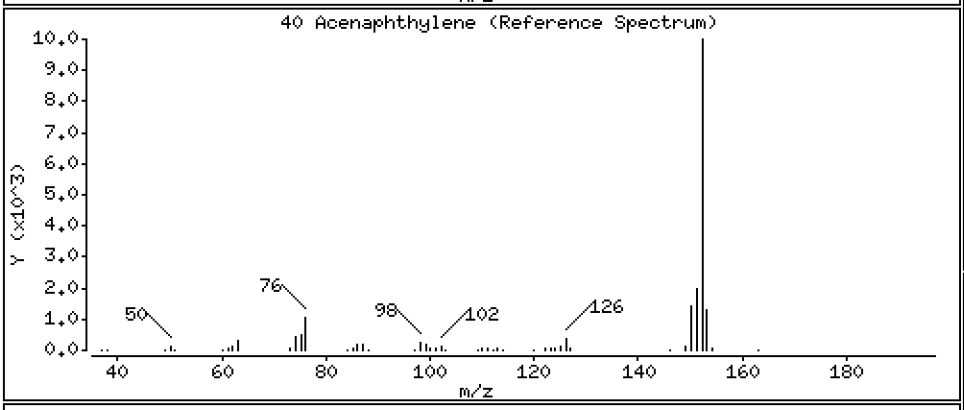
Concentration: 4.591 ug/mL

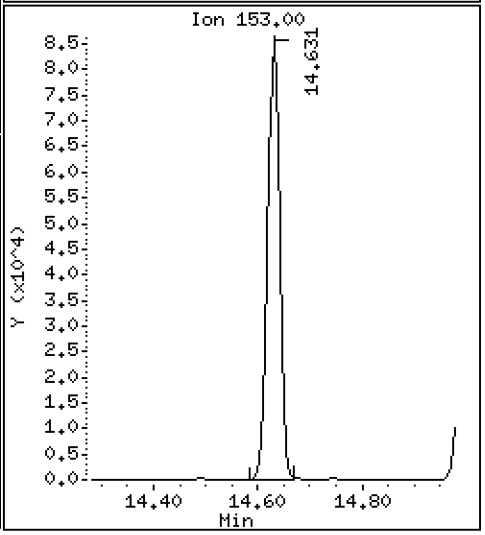


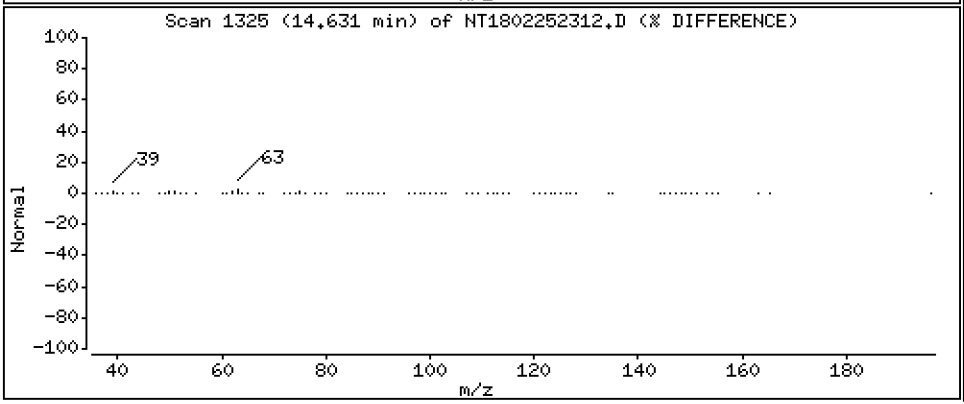












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

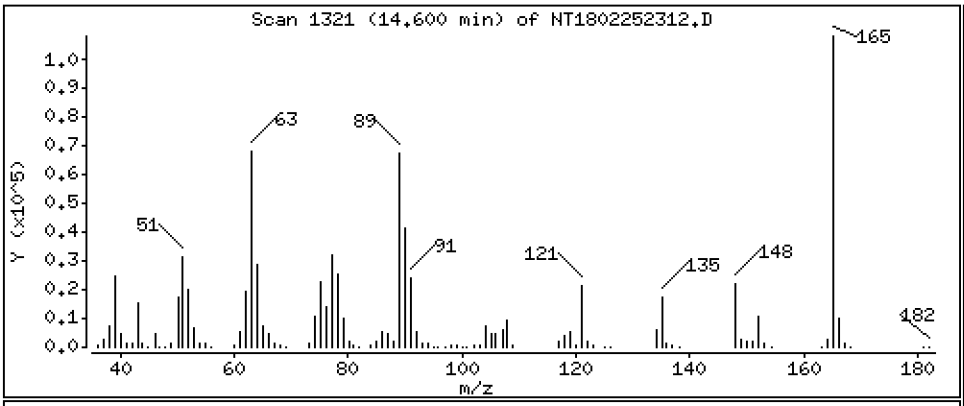
Operator: VTS

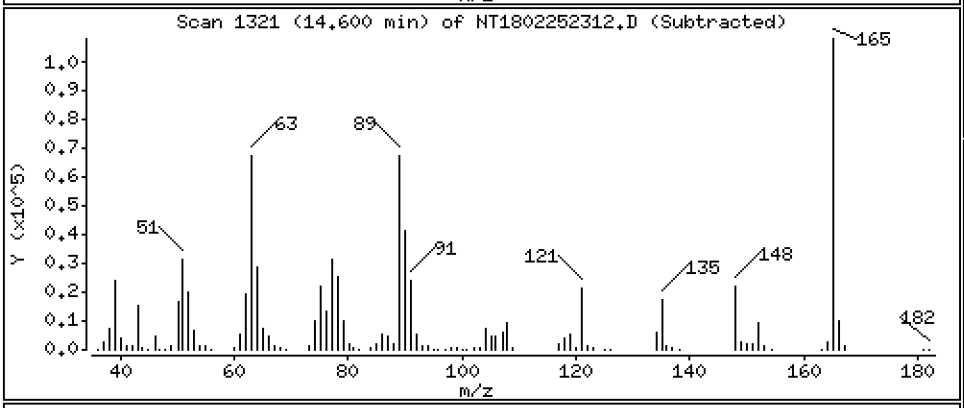
Column phase: ZB-5msi

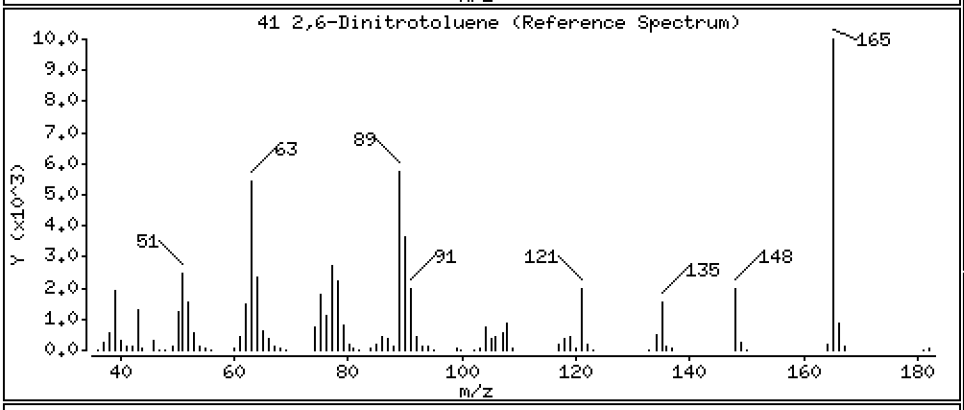
Column diameter: 0.25

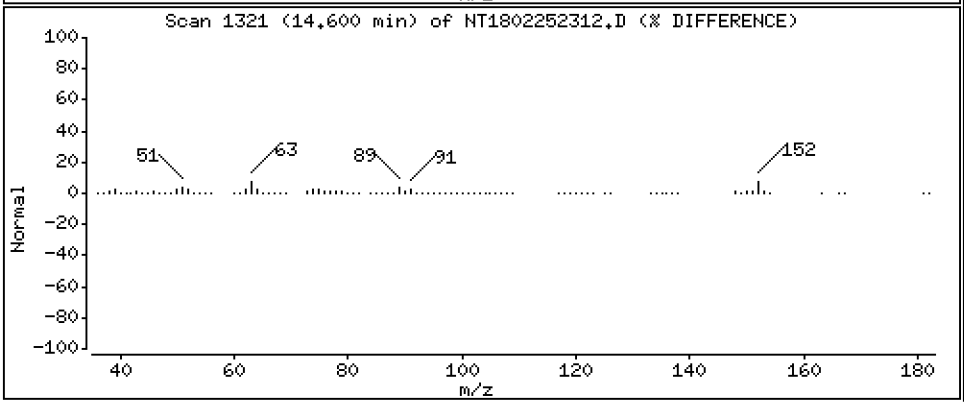
41 2,6-Dinitrotoluene

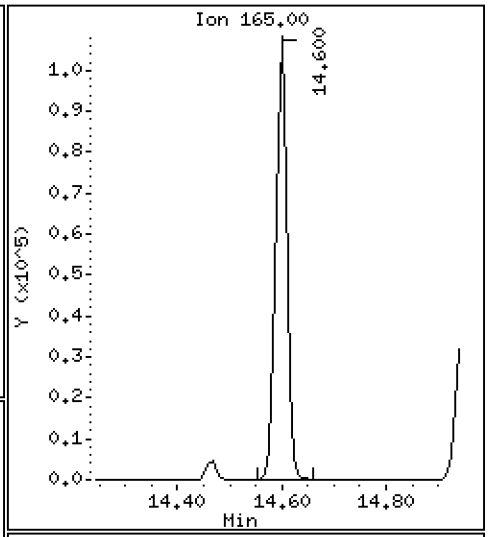
Concentration: 4.850 ug/mL

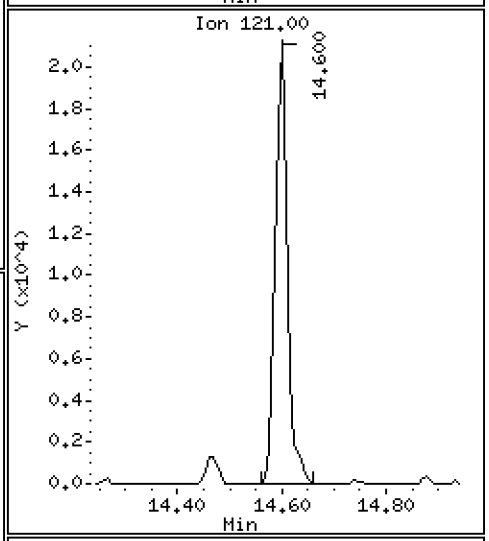


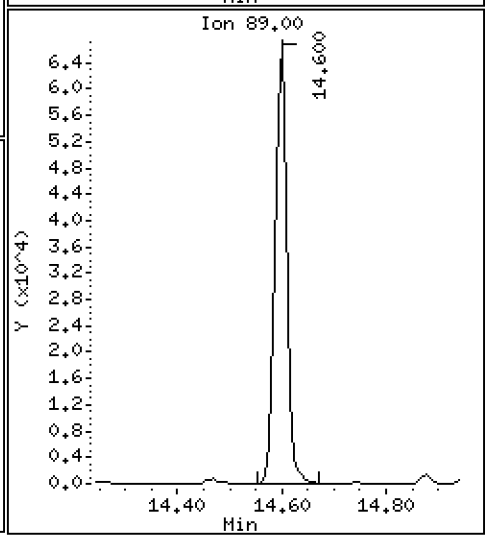












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

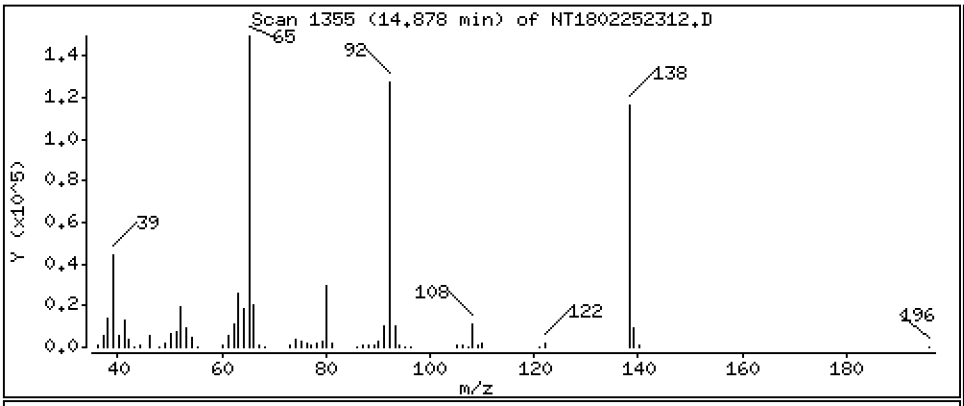
Operator: VTS

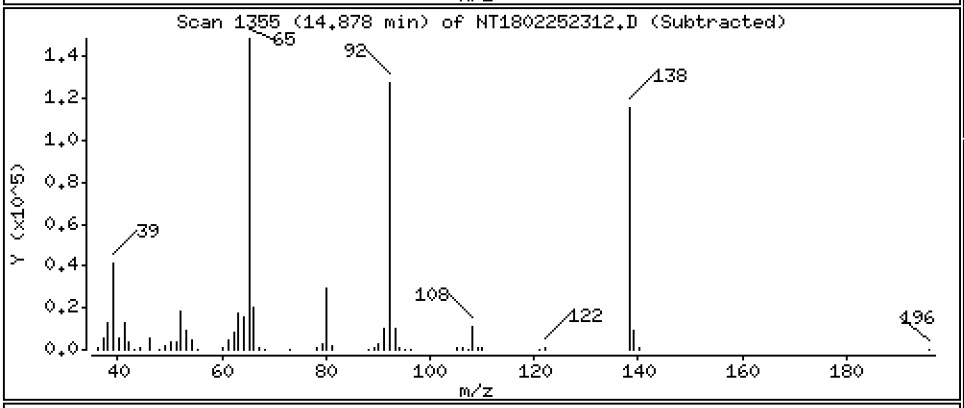
Column phase: ZB-5msi

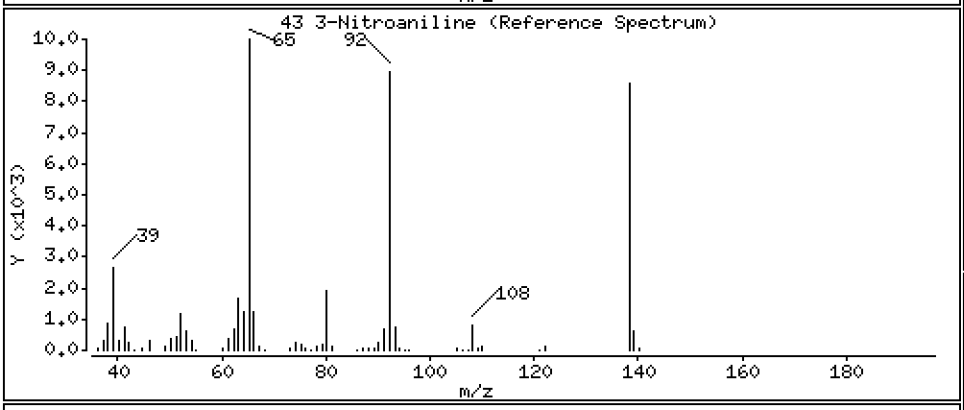
Column diameter: 0.25

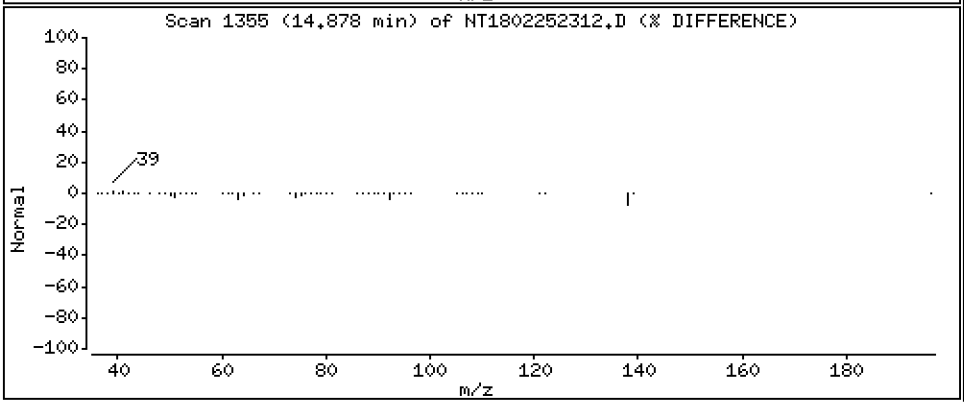
43 3-Nitroaniline

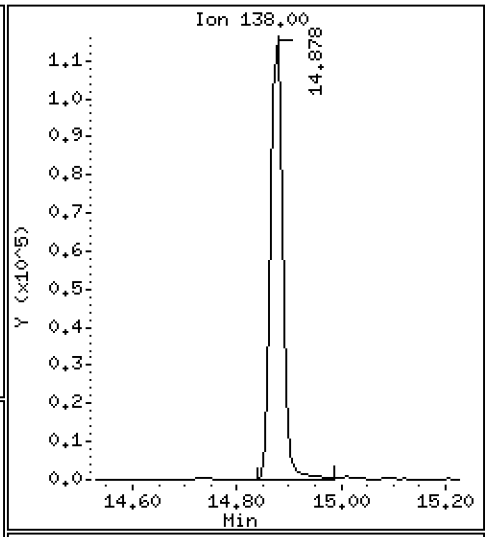
Concentration: 4.643 ug/mL

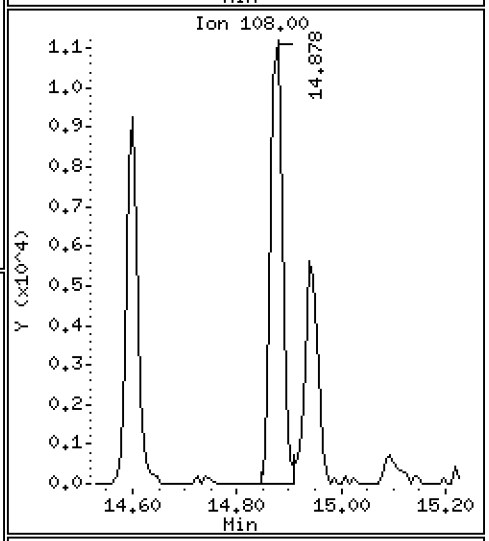


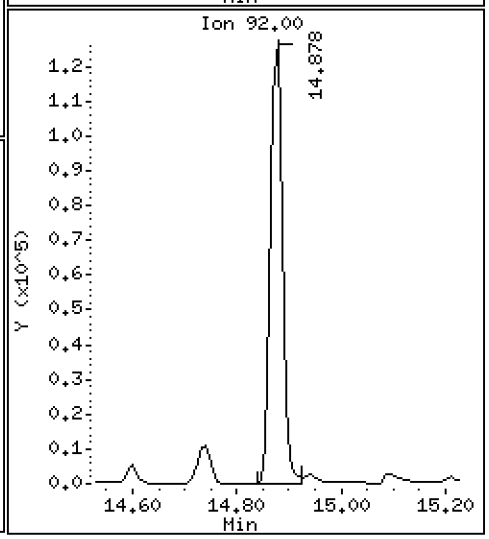












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

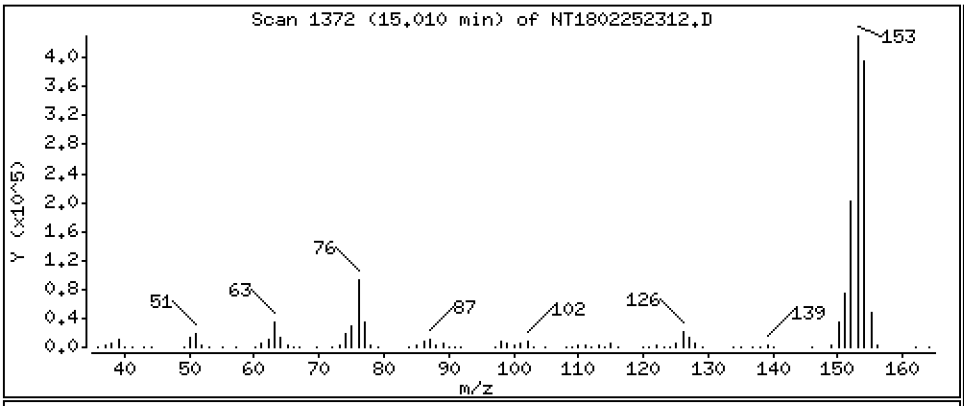
Operator: VTS

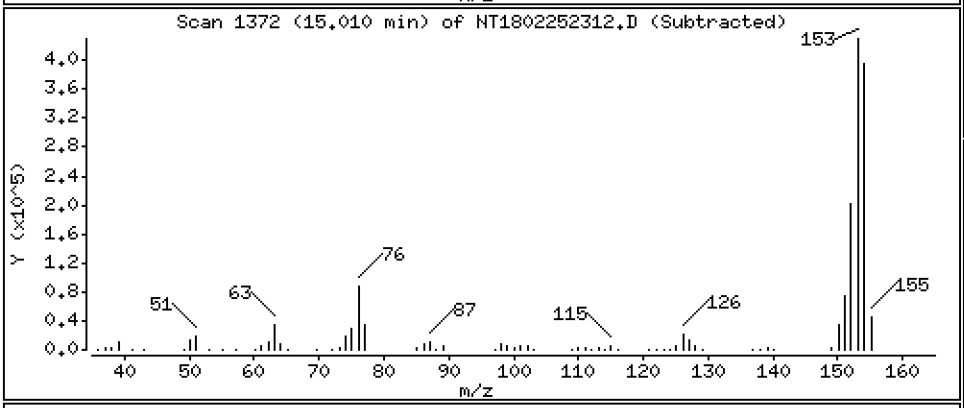
Column phase: ZB-5msi

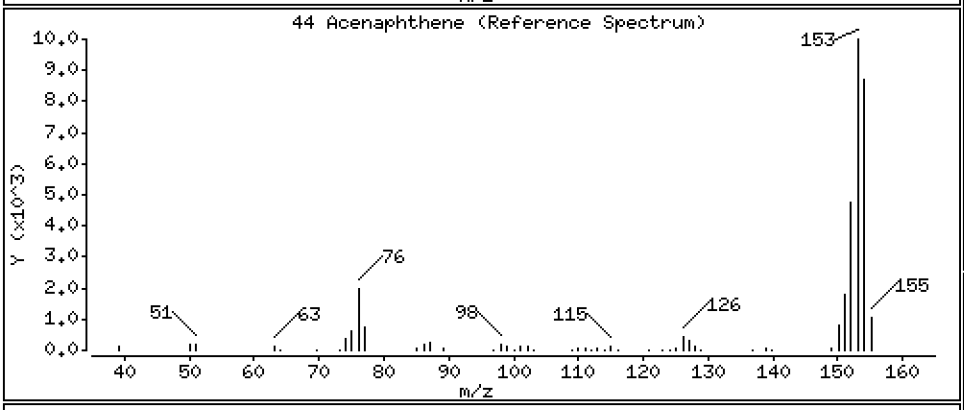
Column diameter: 0.25

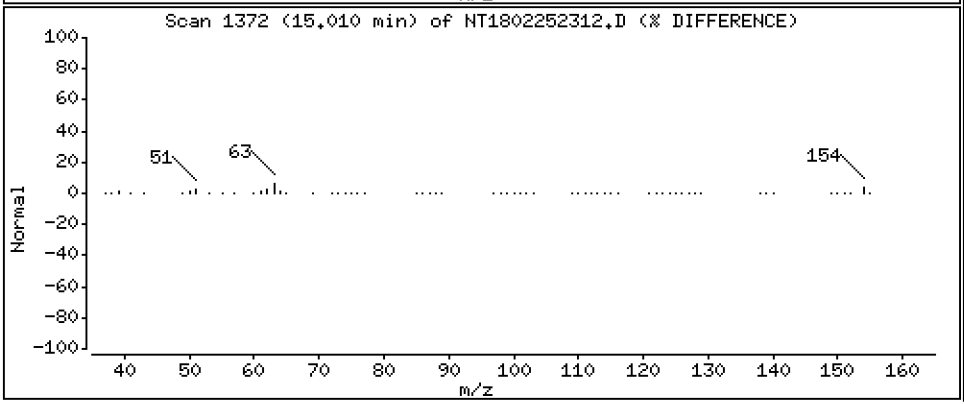
44 Acenaphthene

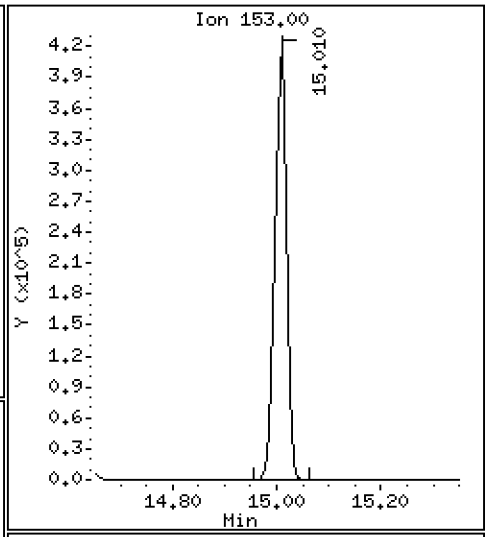
Concentration: 4.530 ug/mL

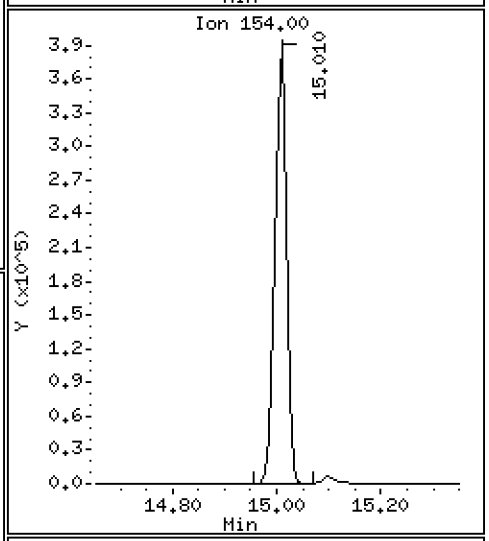


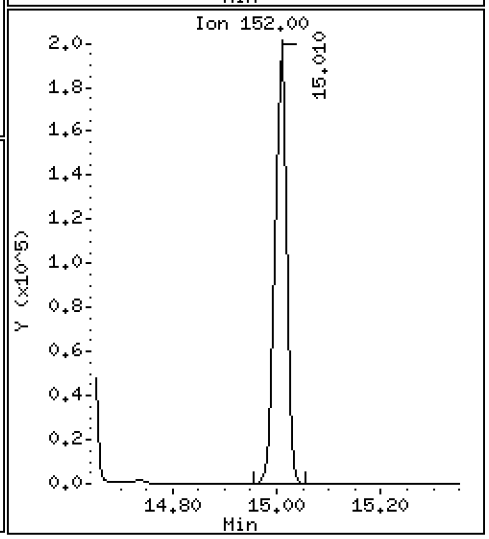












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

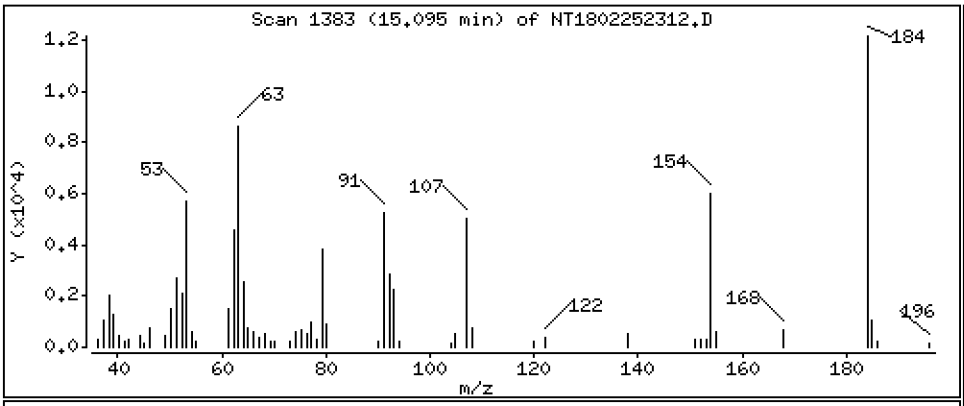
Operator: VTS

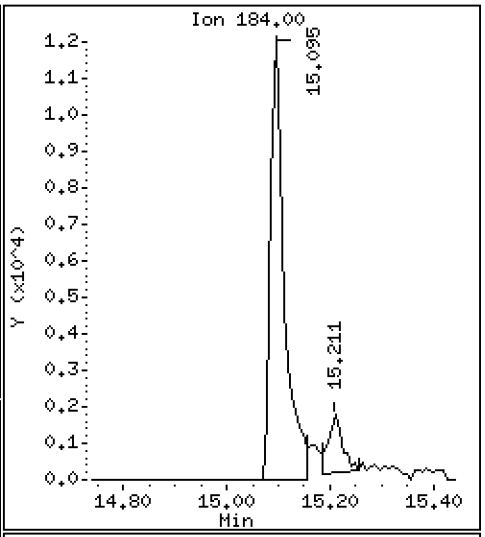
Column phase: ZB-5msi

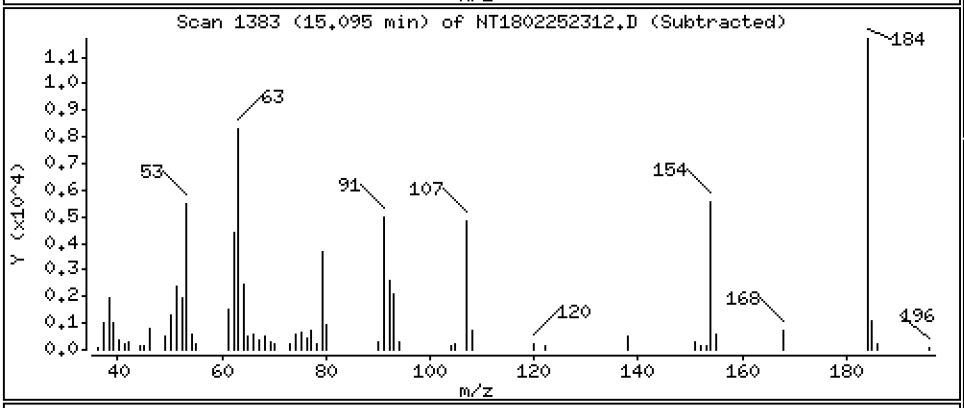
Column diameter: 0.25

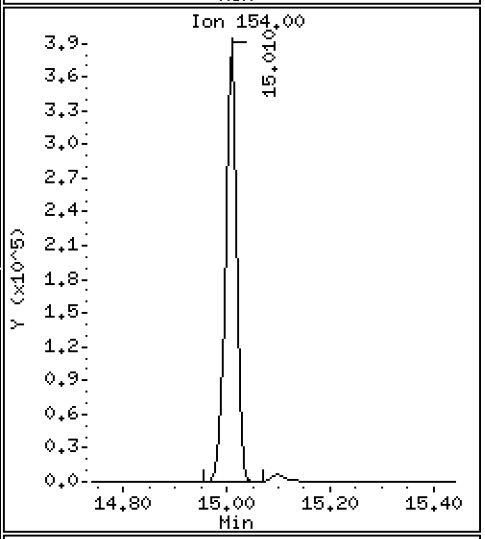
45 2,4-Dinitrophenol

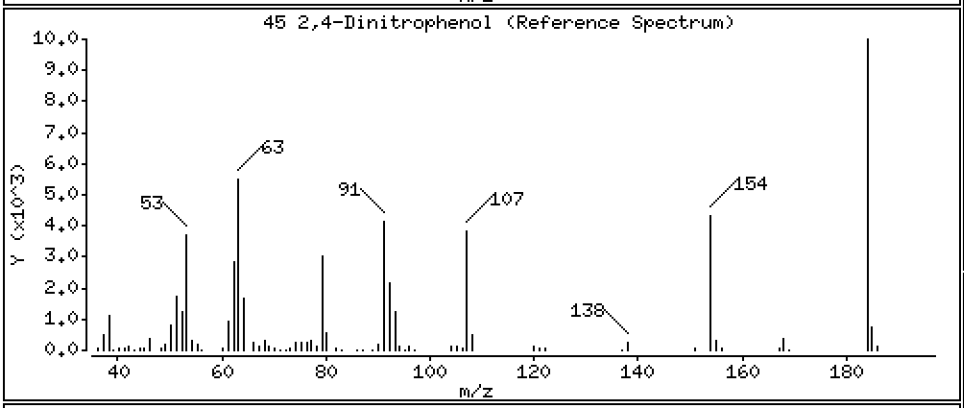
Concentration: 1.426 ug/mL

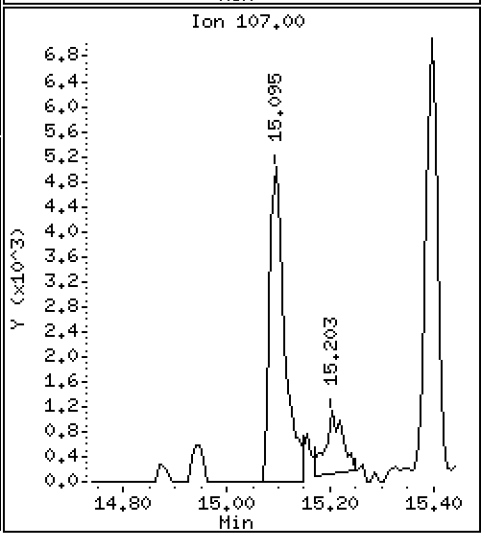


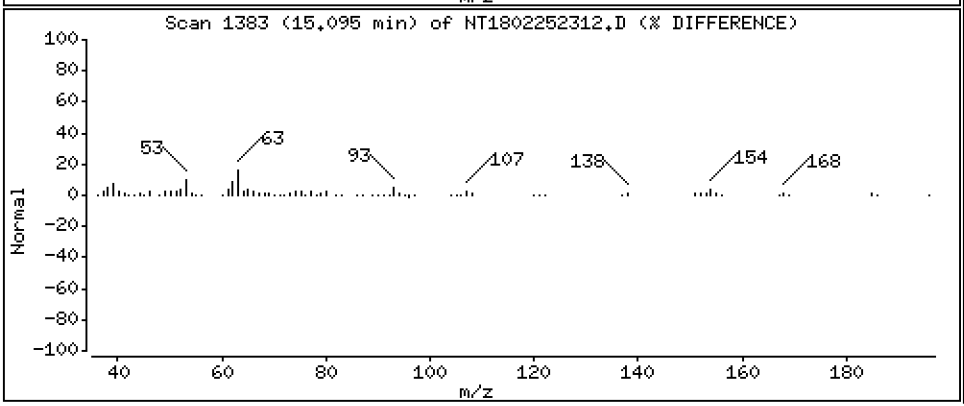












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

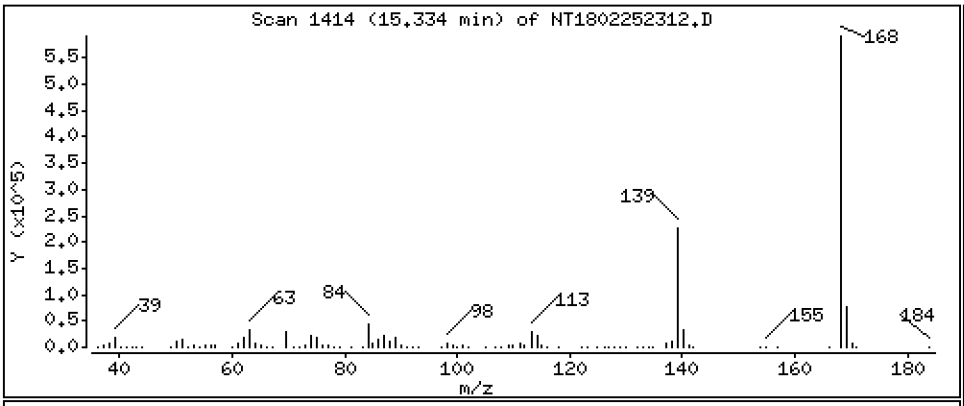
Operator: VTS

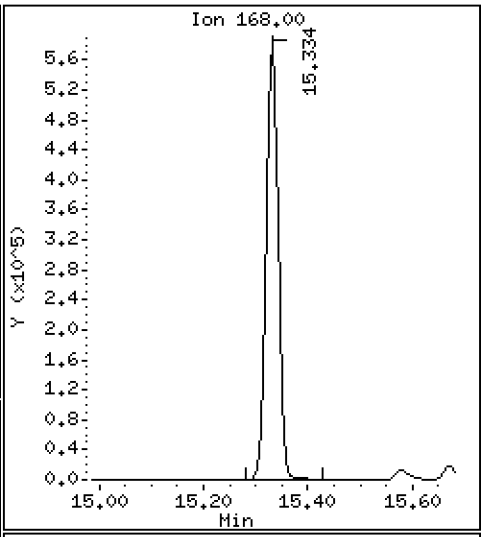
Column phase: ZB-5msi

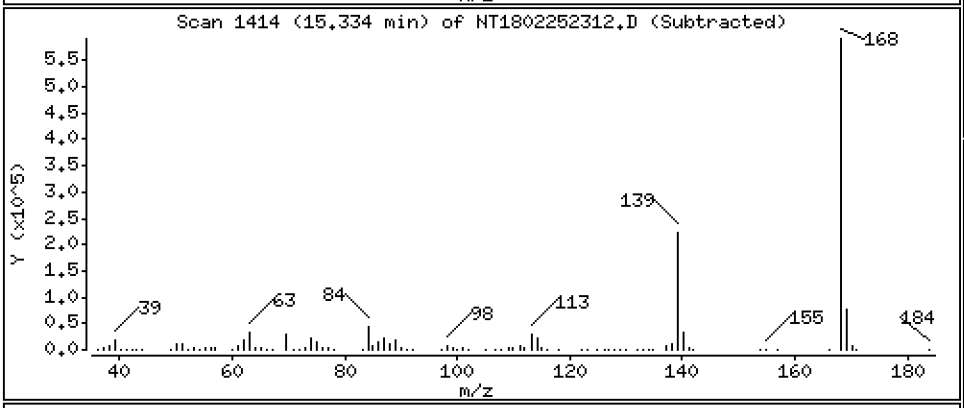
Column diameter: 0.25

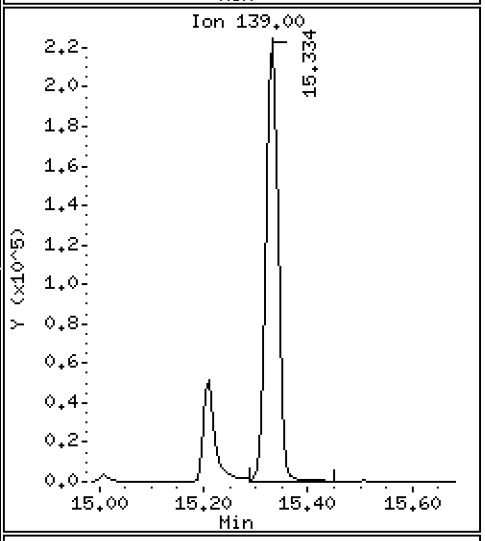
46 Dibenzofuran

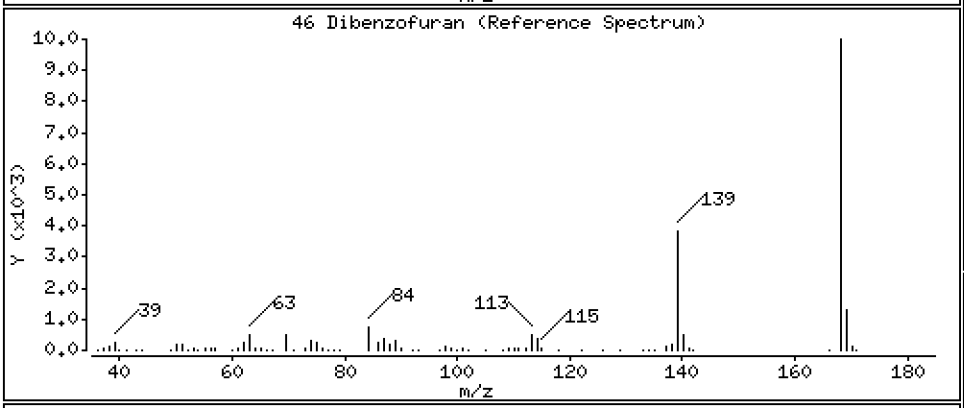
Concentration: 4.355 ug/mL

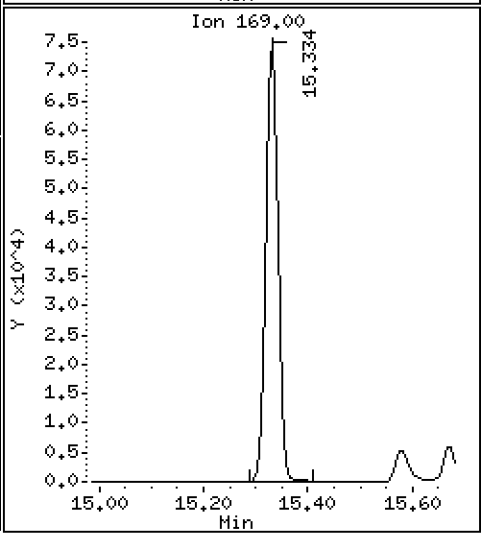


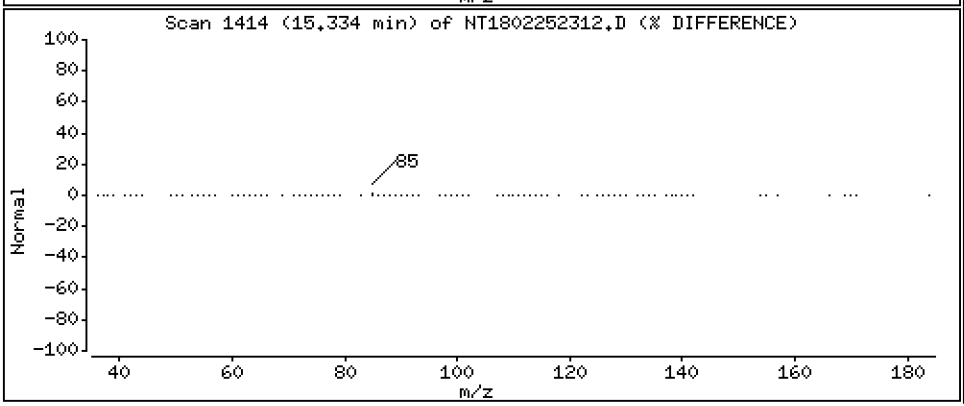












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

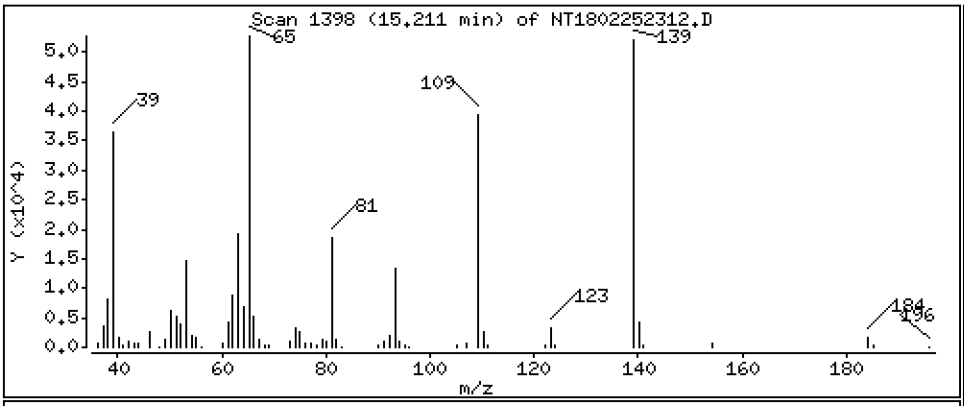
Operator: VTS

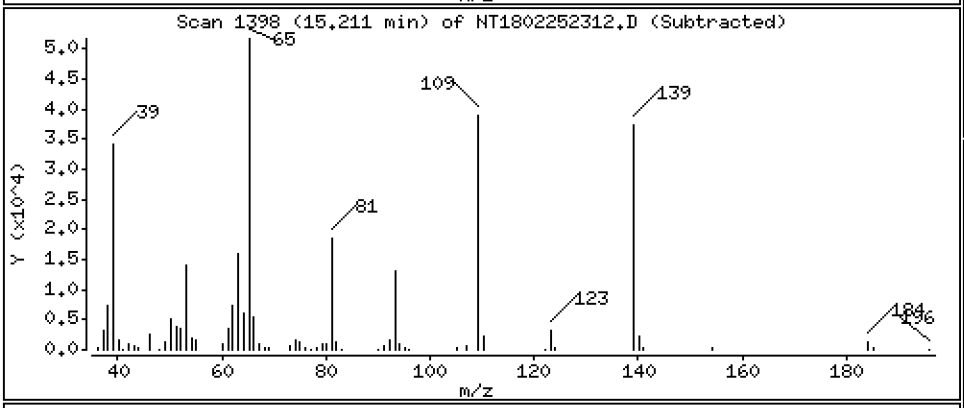
Column phase: ZB-5msi

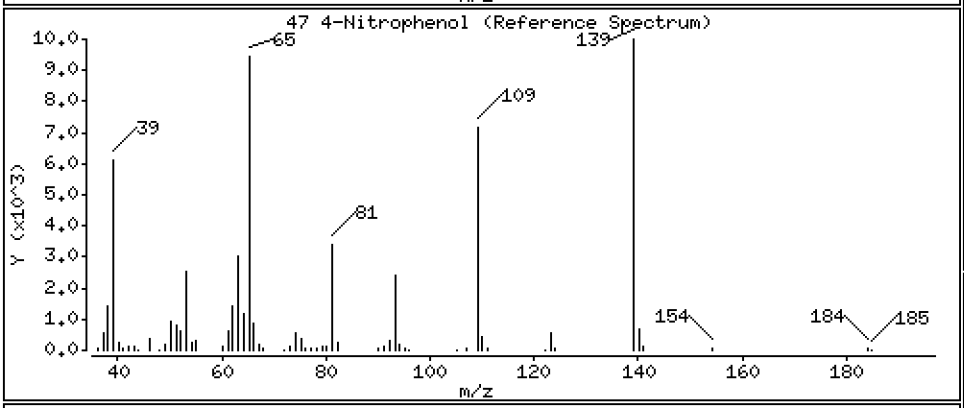
Column diameter: 0.25

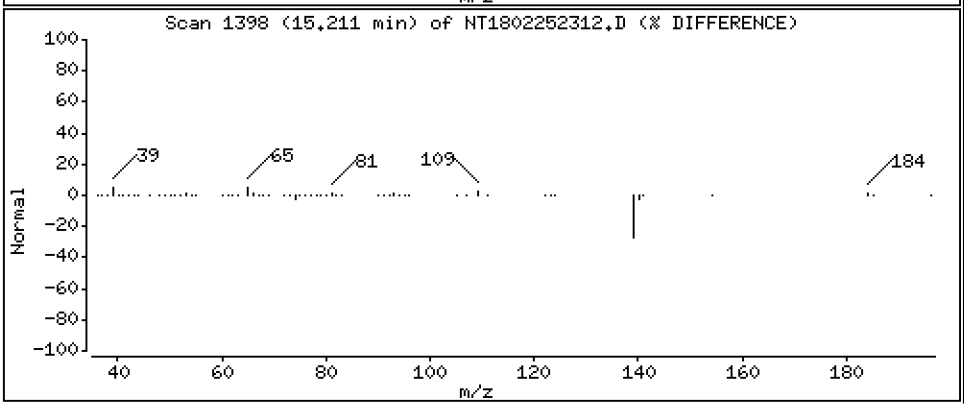
47 4-Nitrophenol

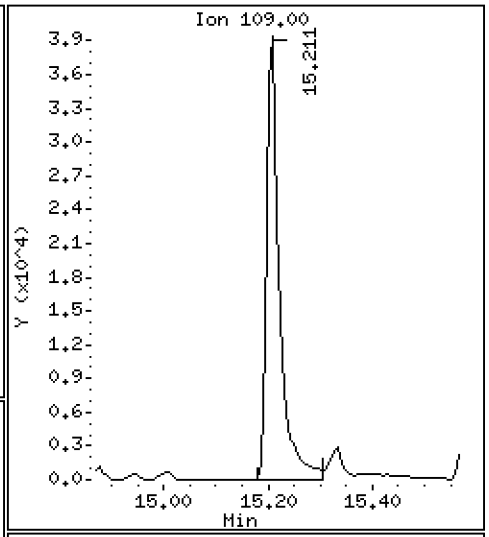
Concentration: 4.346 ug/mL

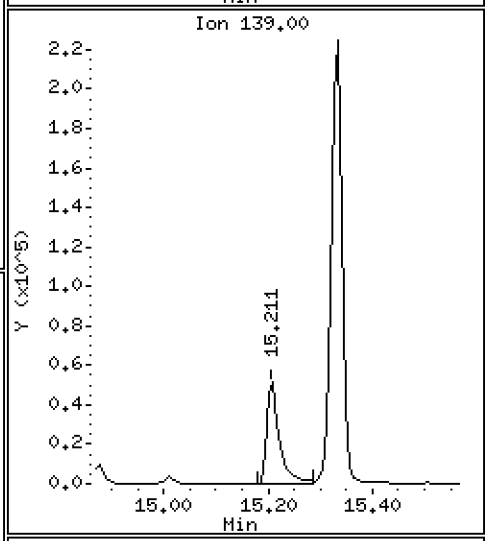


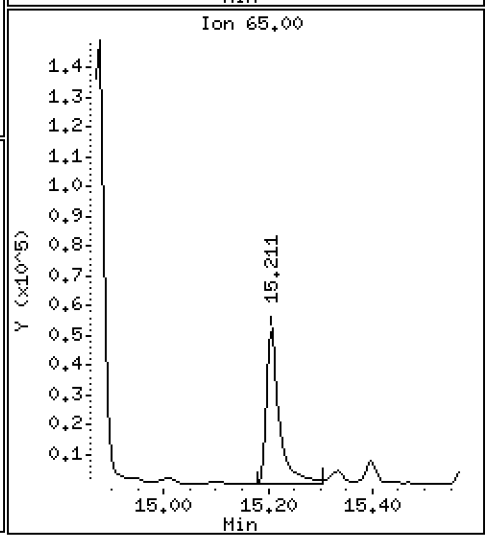












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

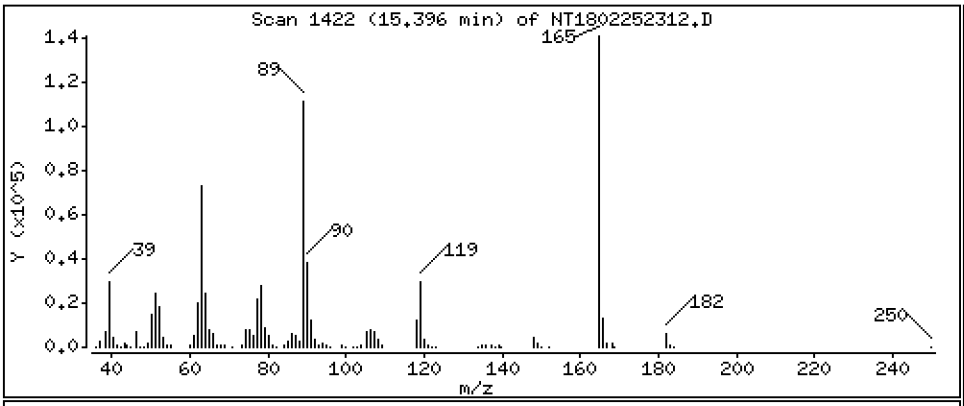
Operator: VTS

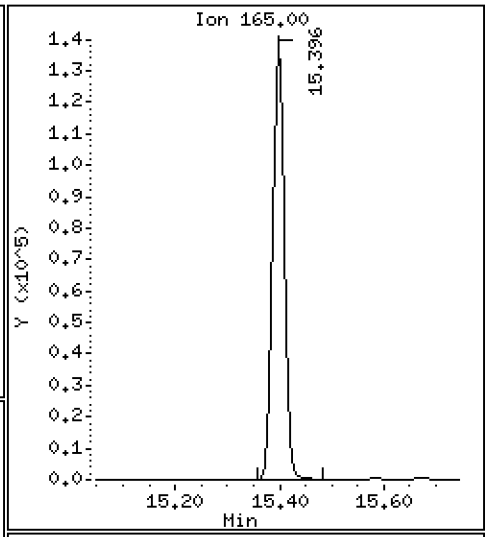
Column phase: ZB-5msi

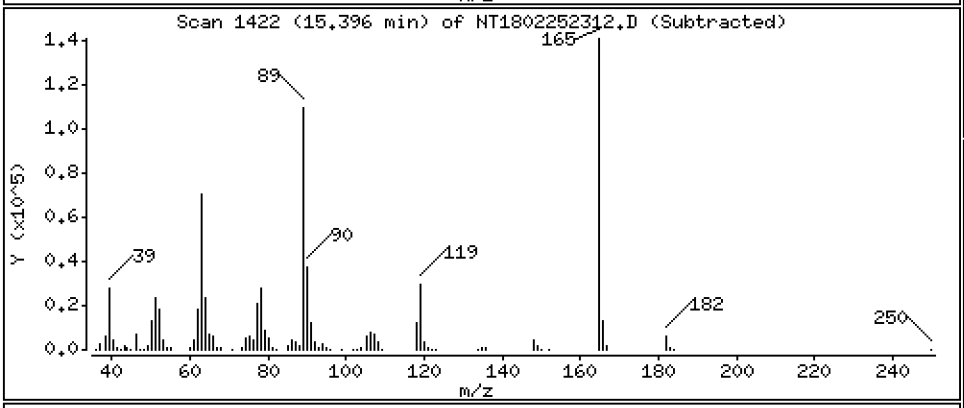
Column diameter: 0.25

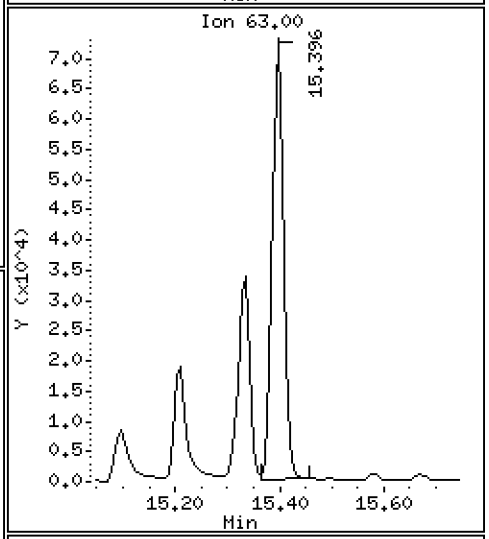
48 2,4-Dinitrotoluene

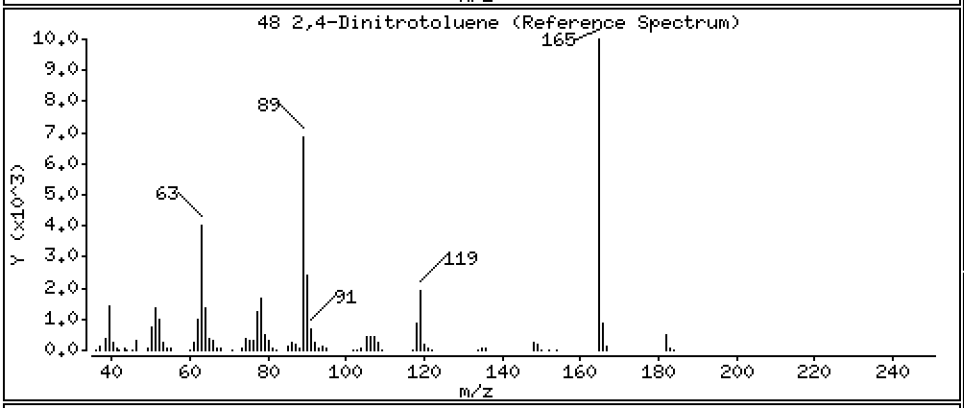
Concentration: 4.573 ug/mL

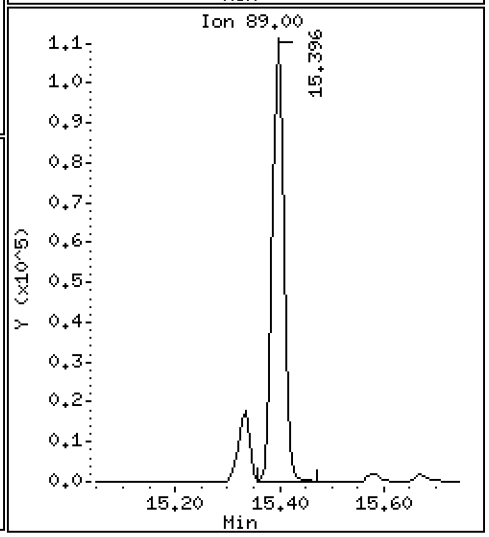


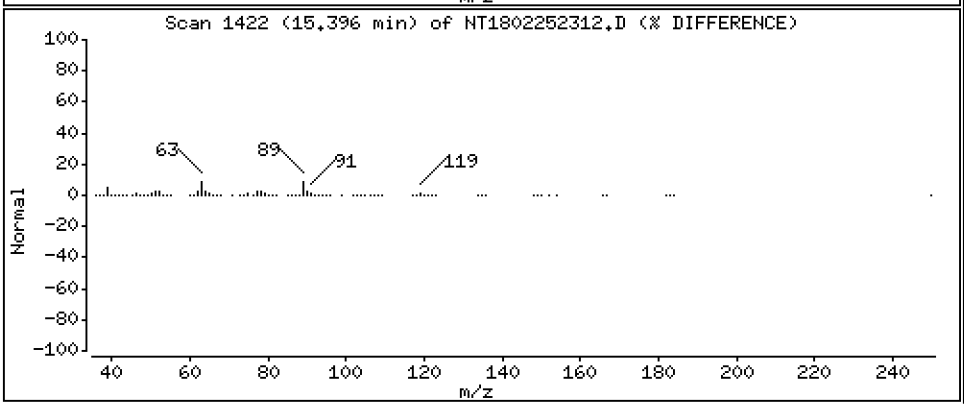












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

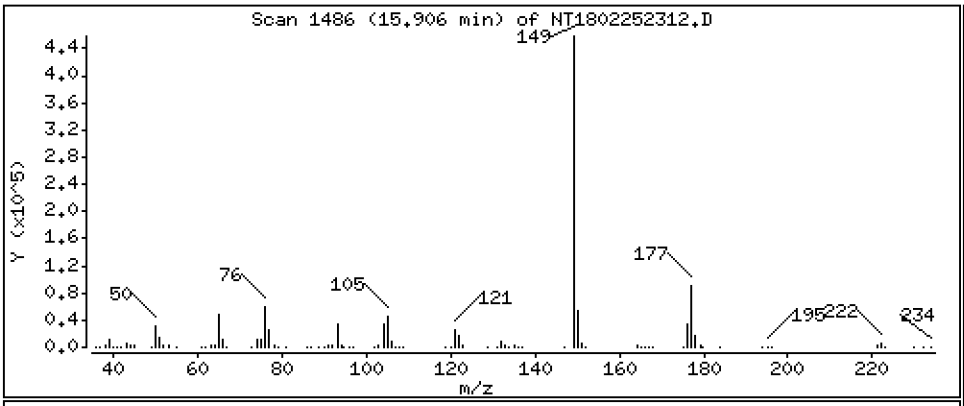
Operator: VTS

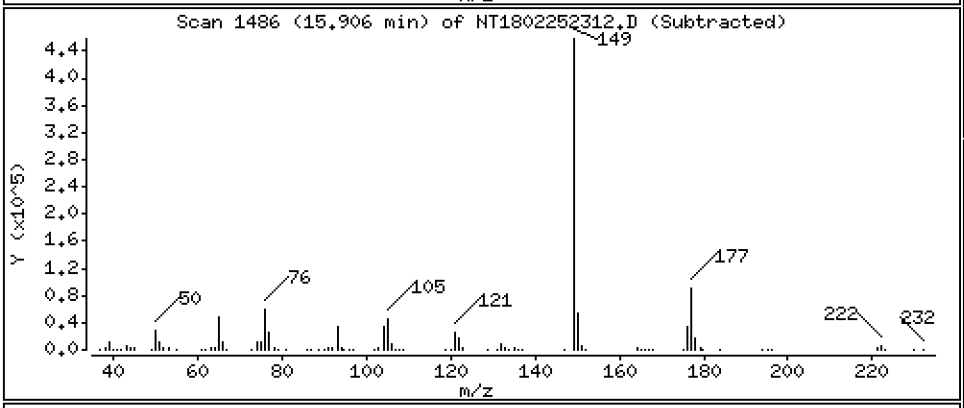
Column phase: ZB-5msi

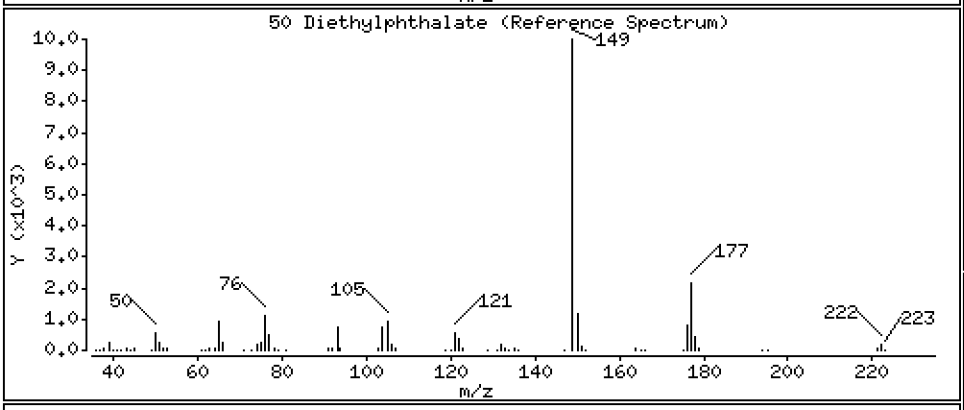
Column diameter: 0.25

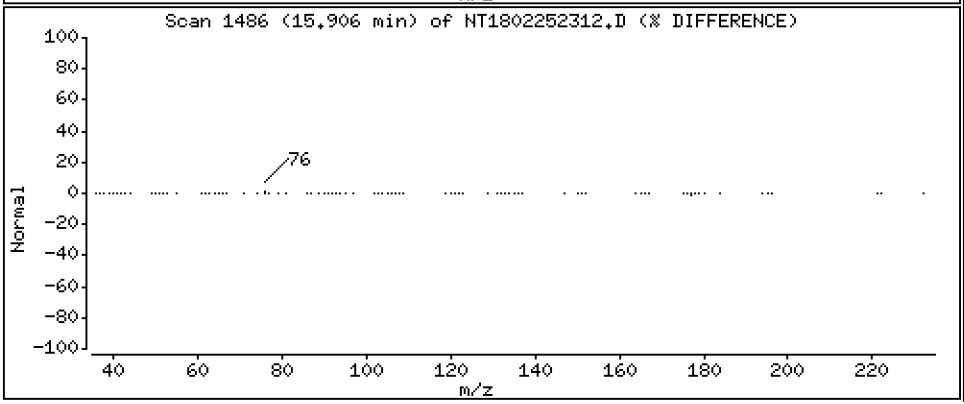
50 Diethylphthalate

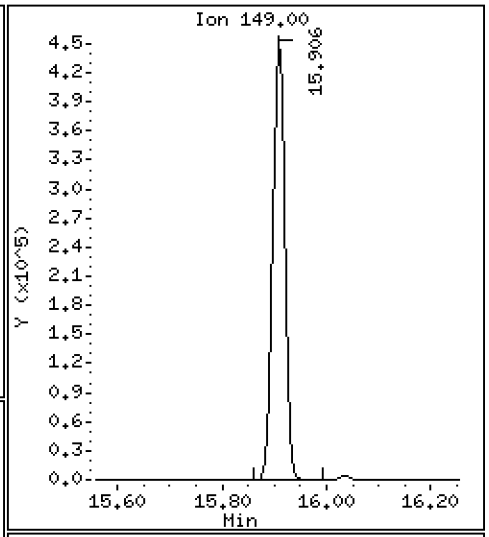
Concentration: 5.265 ug/mL

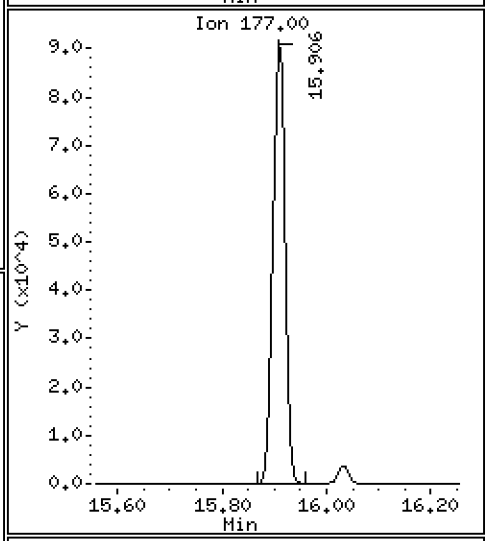


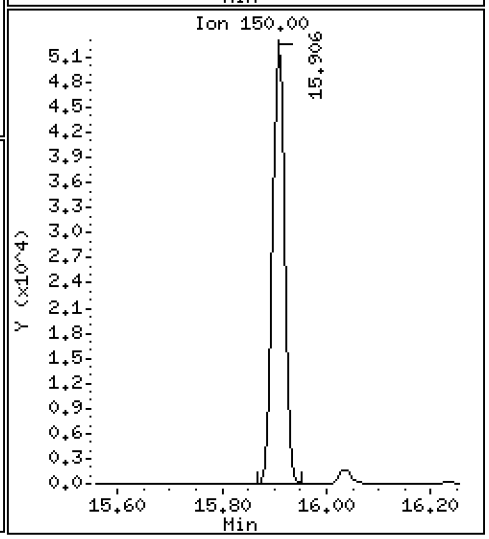












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

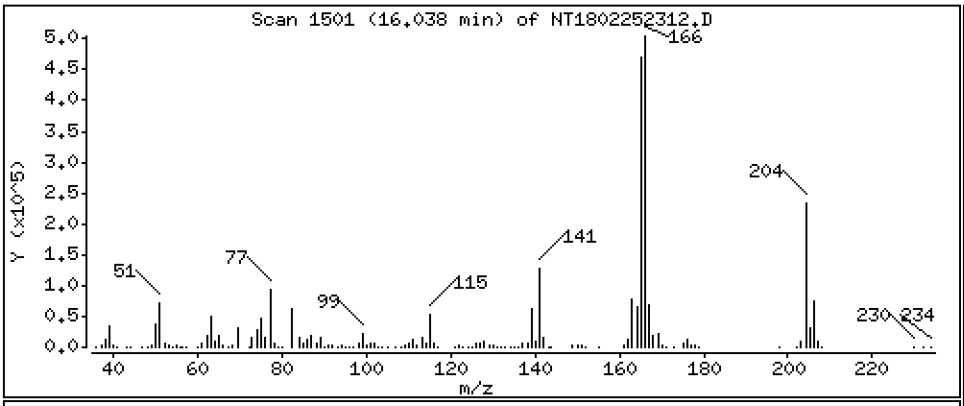
Operator: VTS

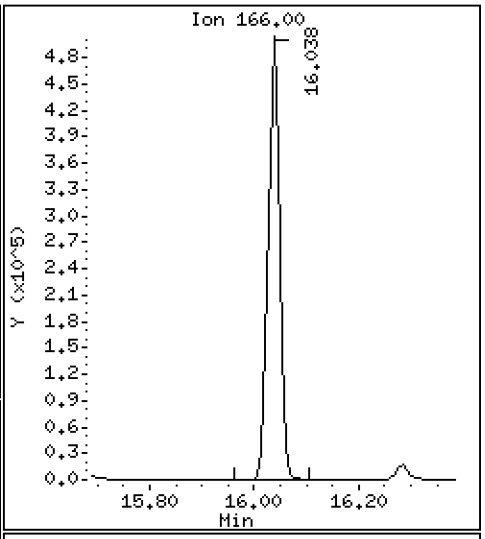
Column phase: ZB-5msi

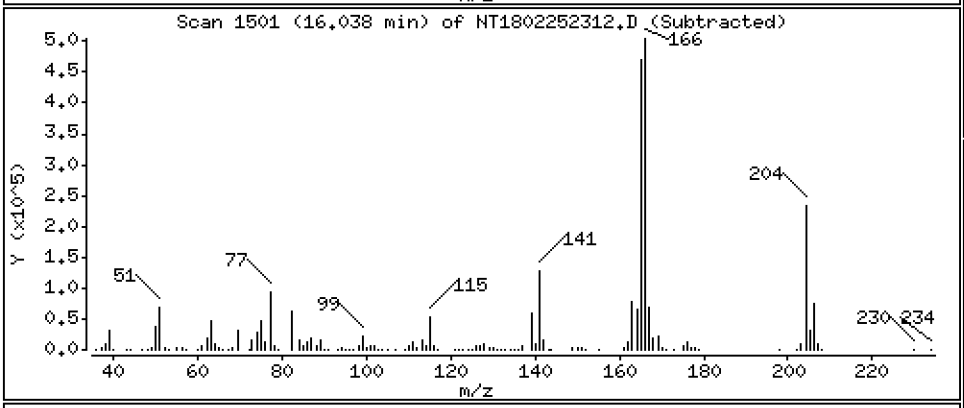
Column diameter: 0.25

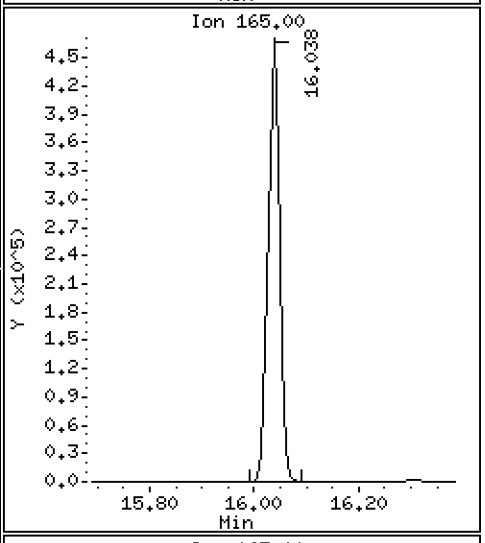
49 Fluorene

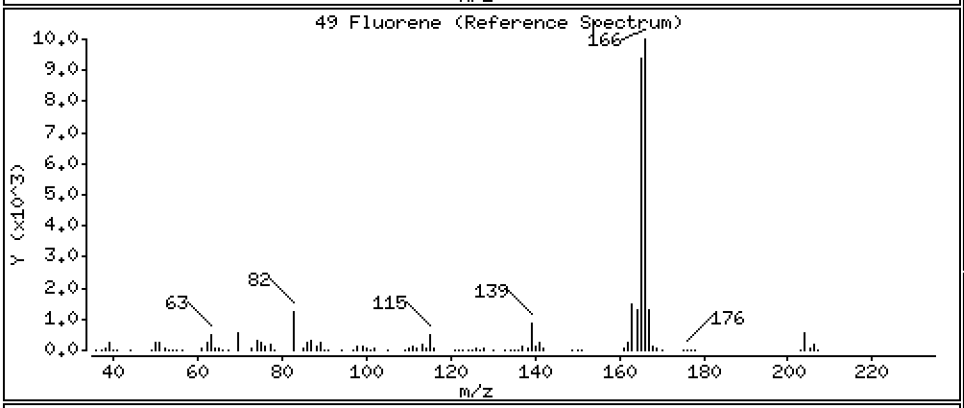
Concentration: 5.182 ug/mL

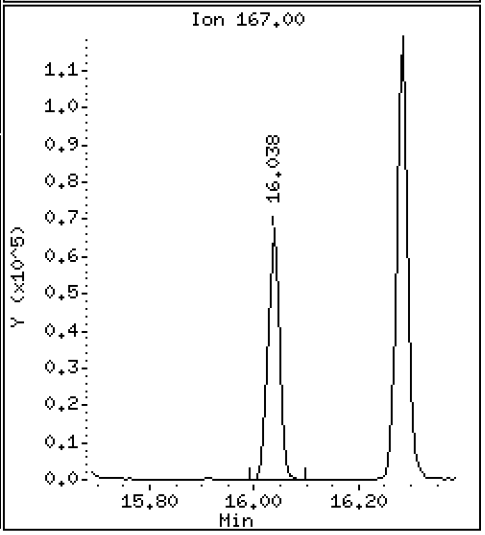


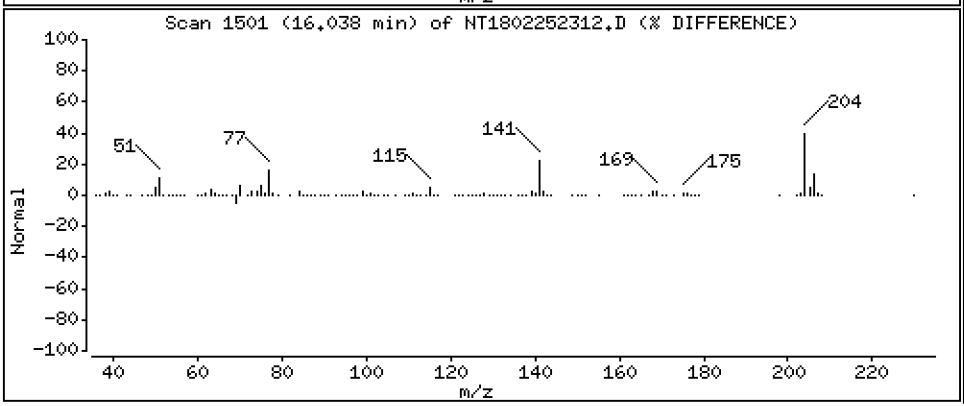












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

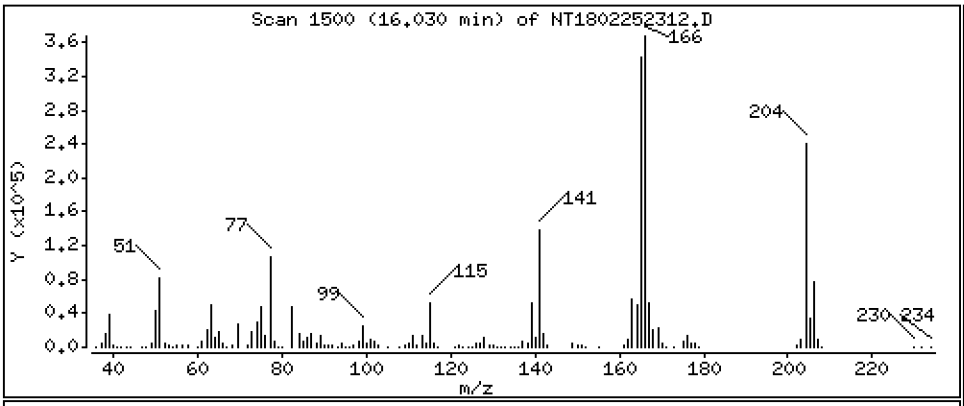
Operator: VTS

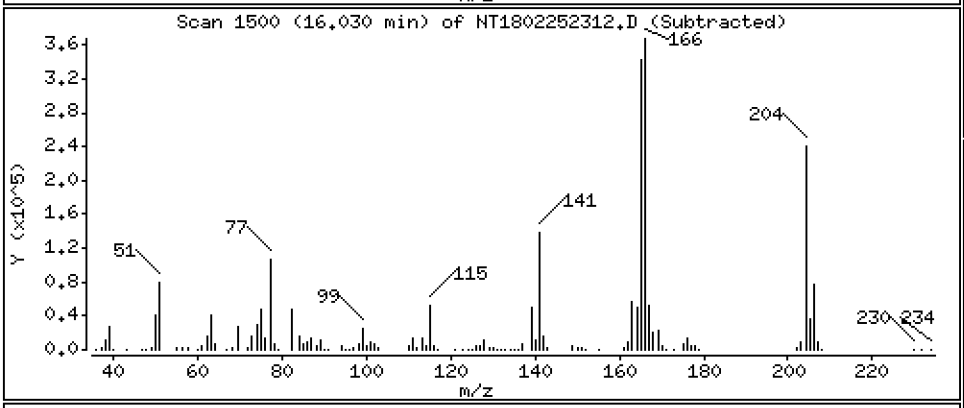
Column phase: ZB-5msi

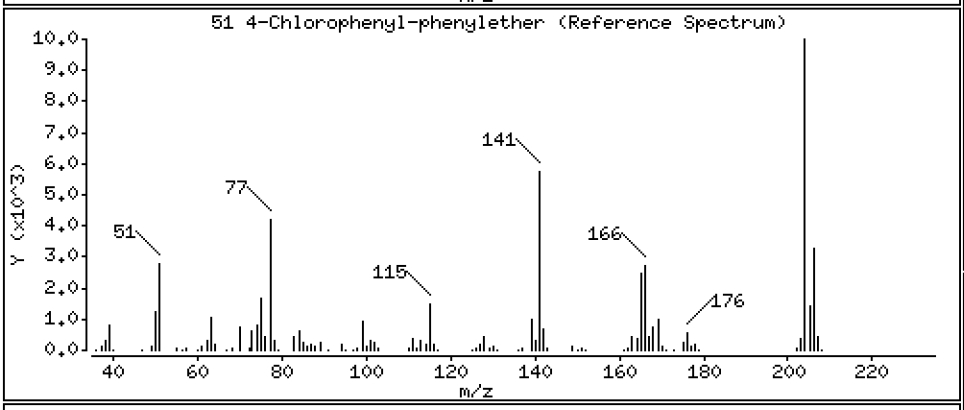
Column diameter: 0.25

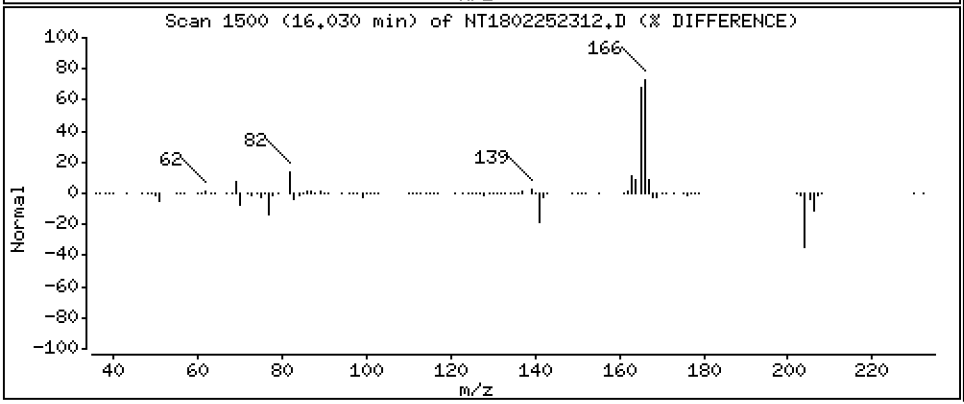
51 4-Chlorophenyl-phenylether

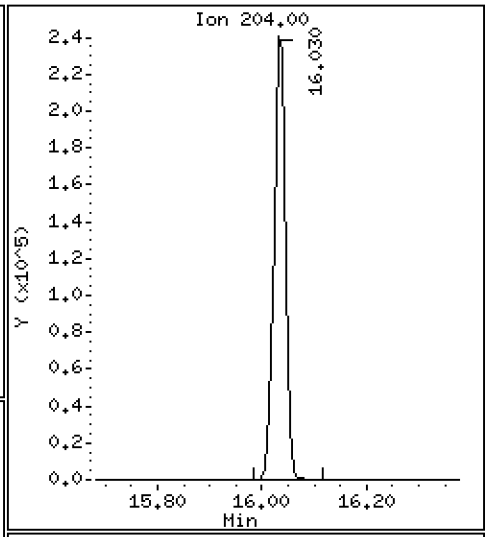
Concentration: 4.975 ug/mL

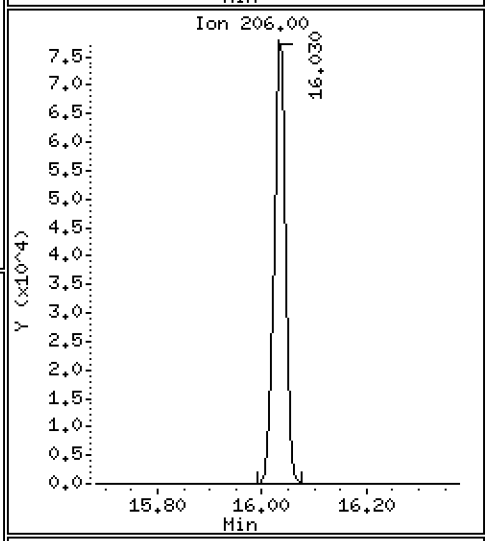


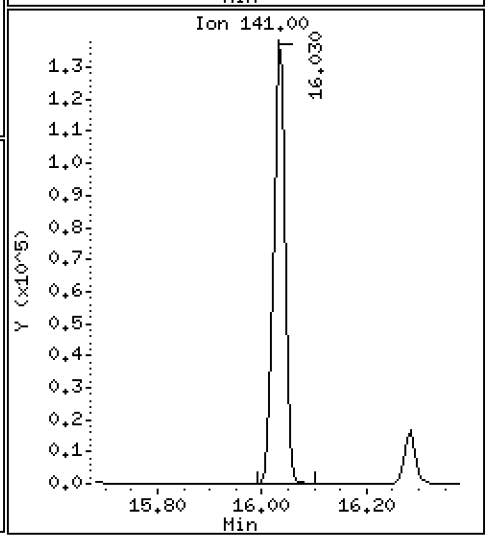












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

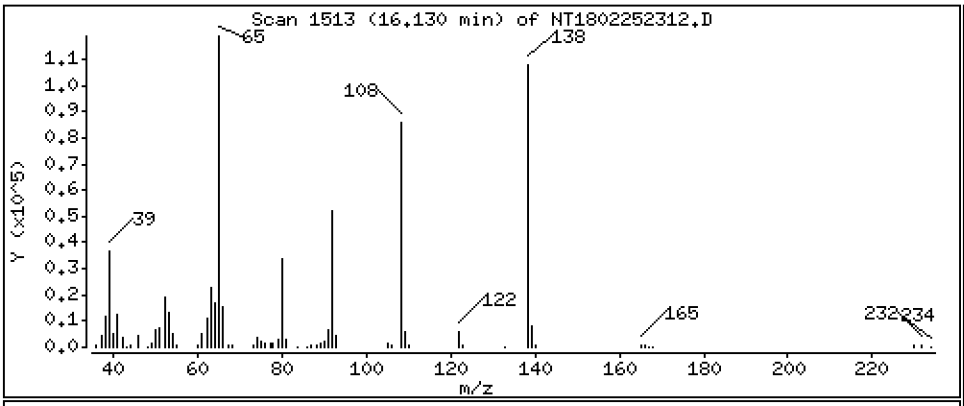
Operator: VTS

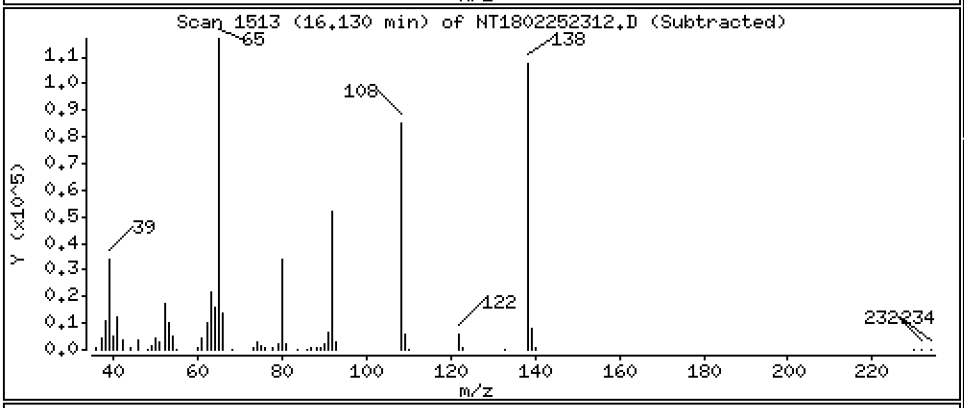
Column phase: ZB-5msi

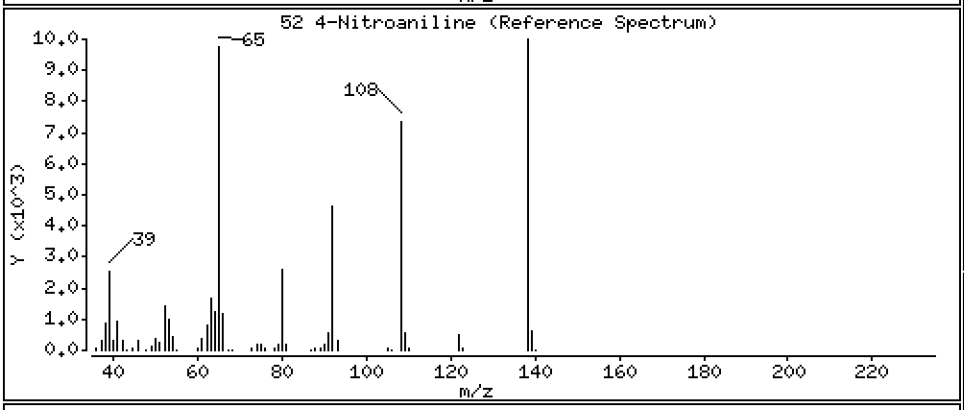
Column diameter: 0.25

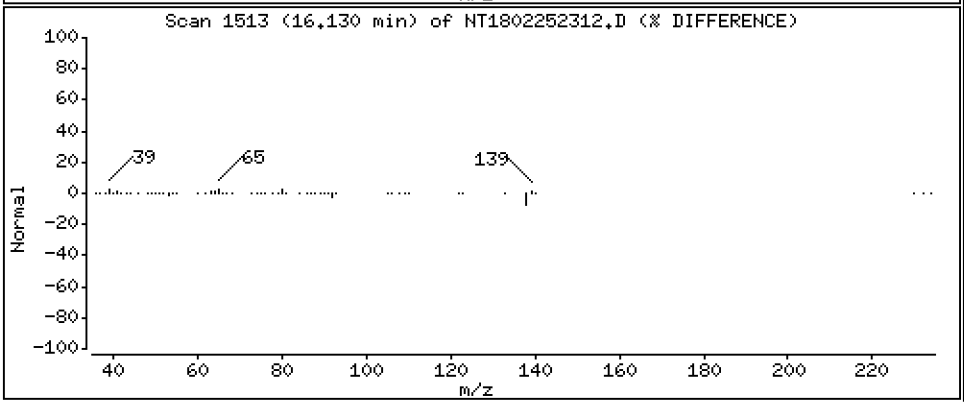
52 4-Nitroaniline

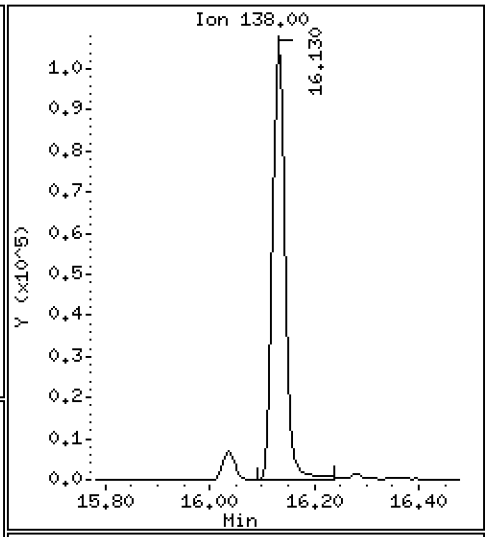
Concentration: 4.601 ug/mL

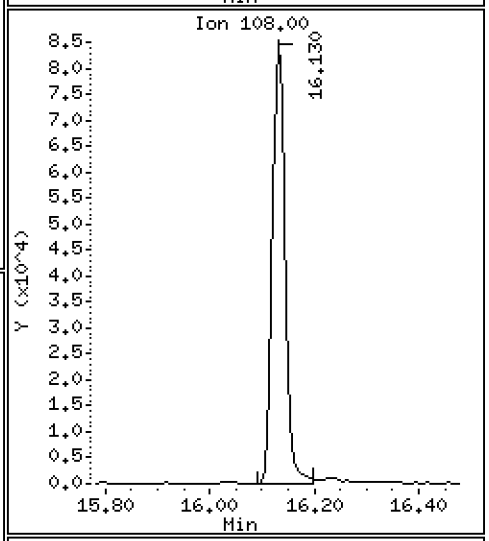


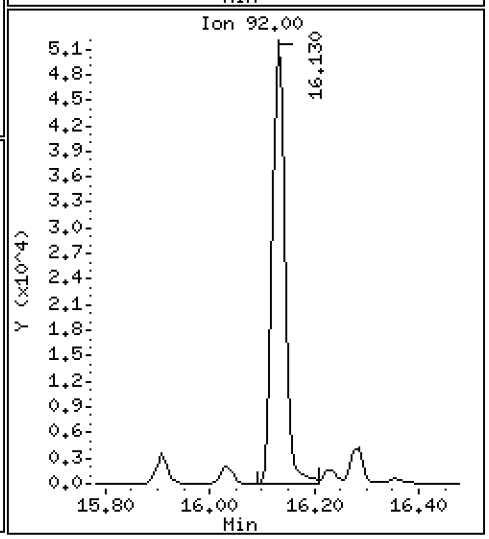












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

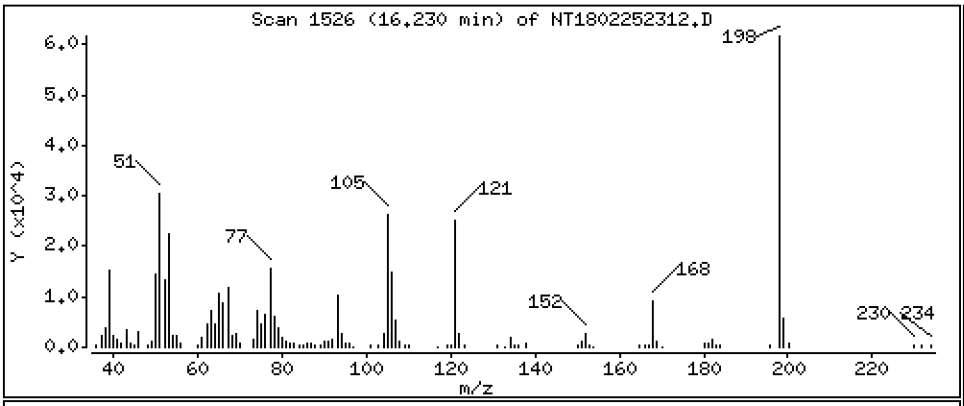
Operator: VTS

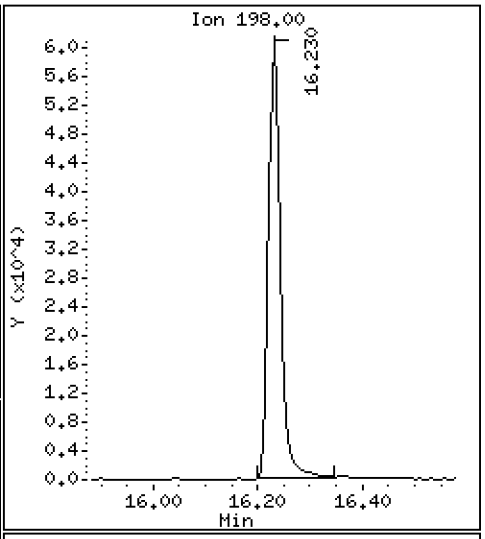
Column phase: ZB-5msi

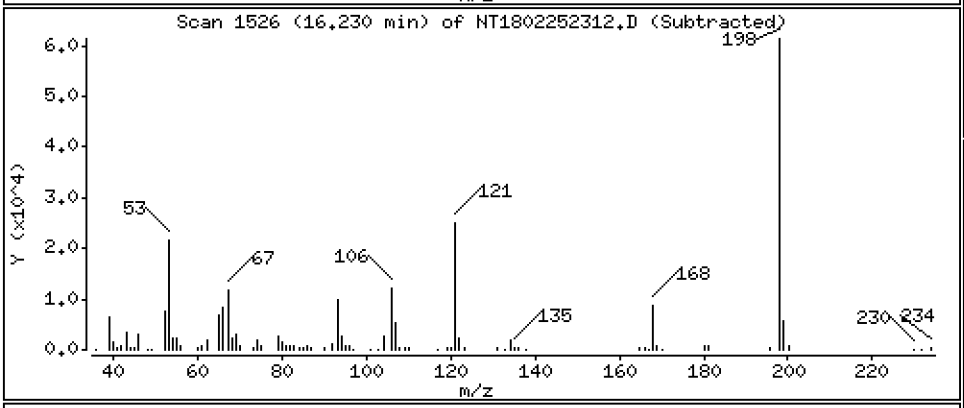
Column diameter: 0.25

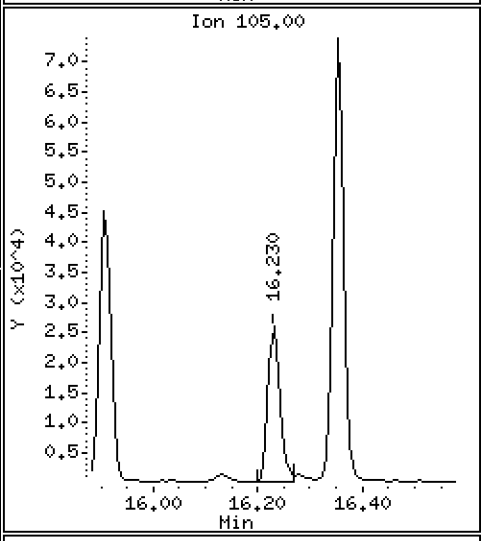
53 4,6-Dinitro-2-methylphenol

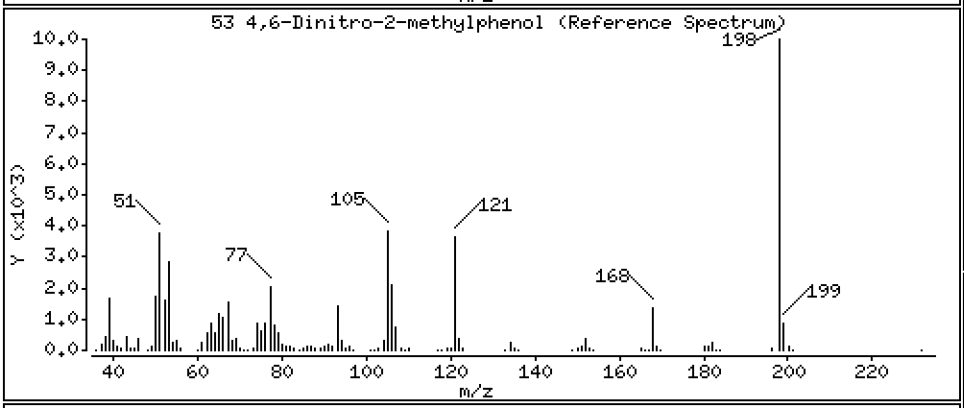
Concentration: 3.596 ug/mL

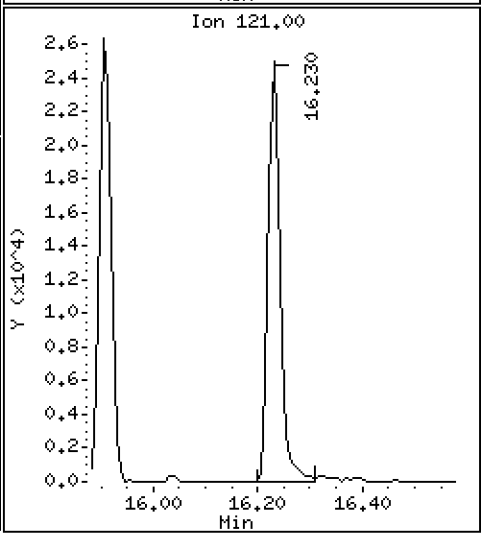


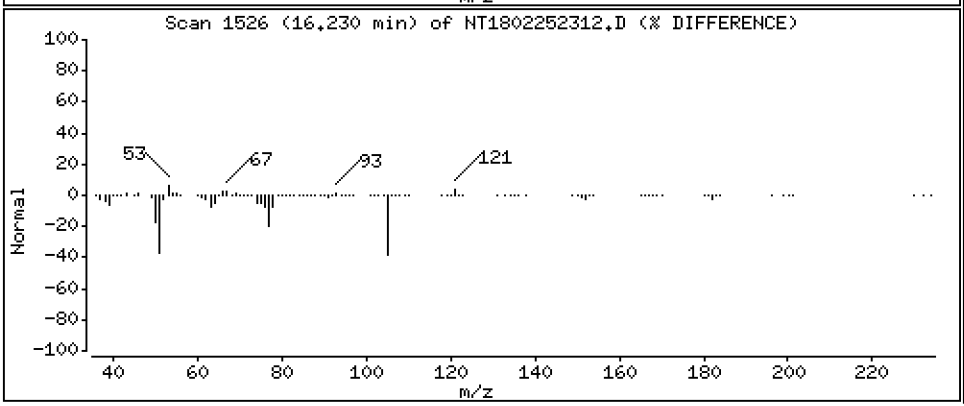












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

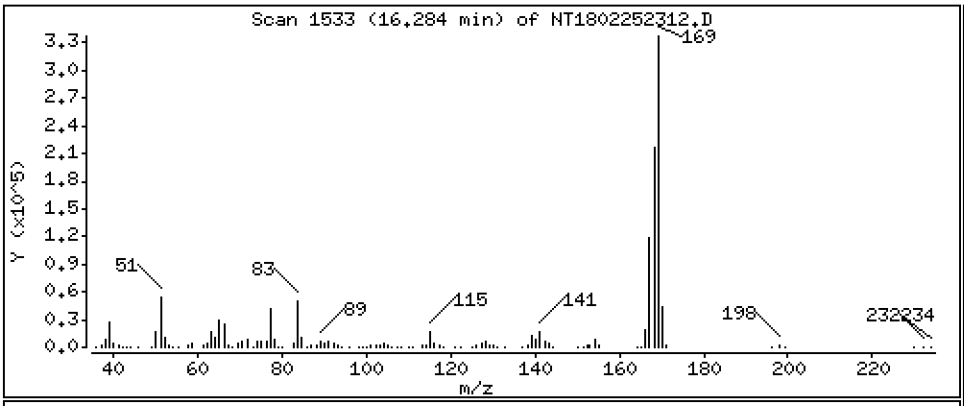
Operator: VTS

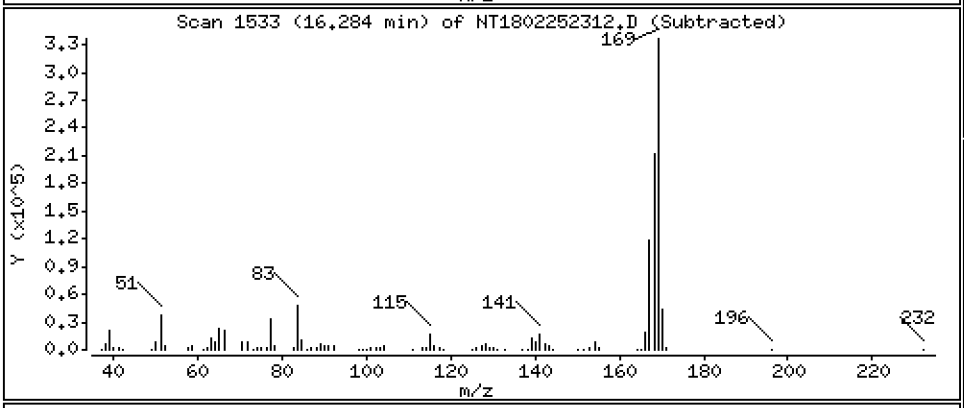
Column phase: ZB-5msi

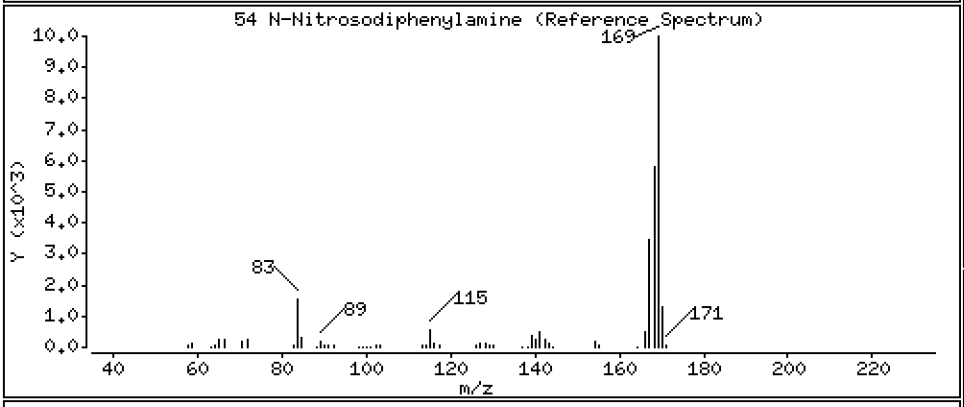
Column diameter: 0.25

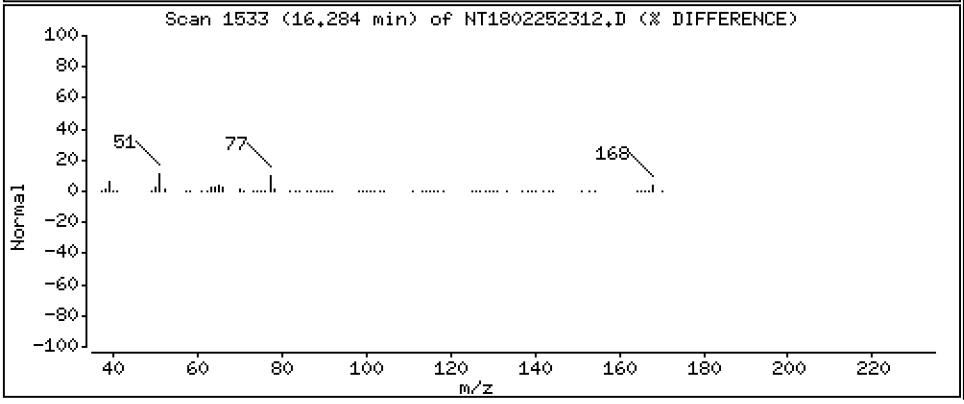
54 N-Nitrosodiphenylamine

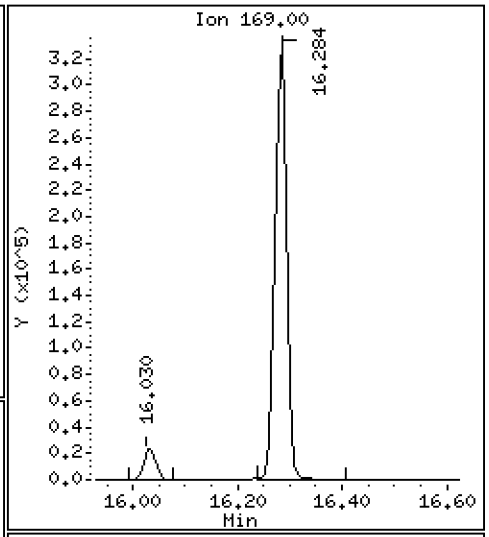
Concentration: 4.602 ug/mL

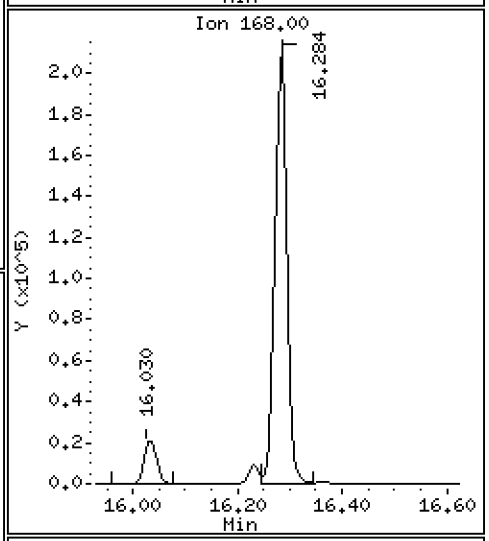


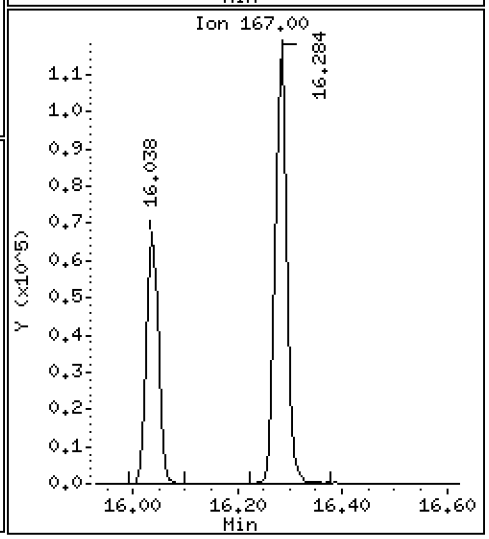












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

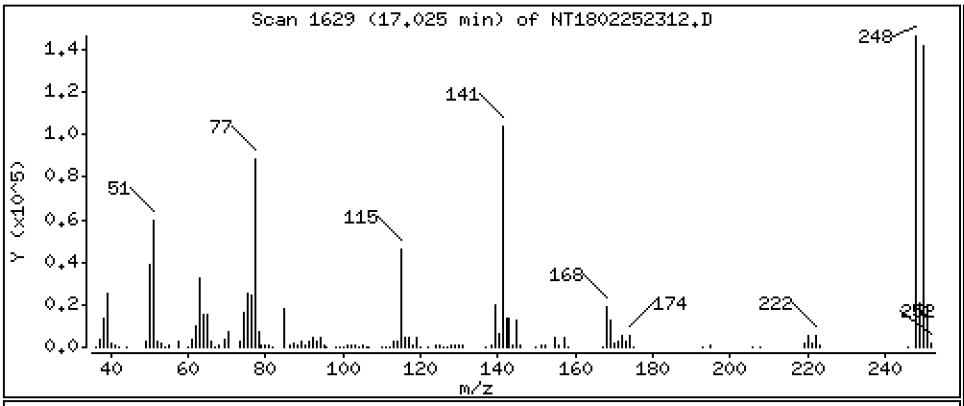
Operator: VTS

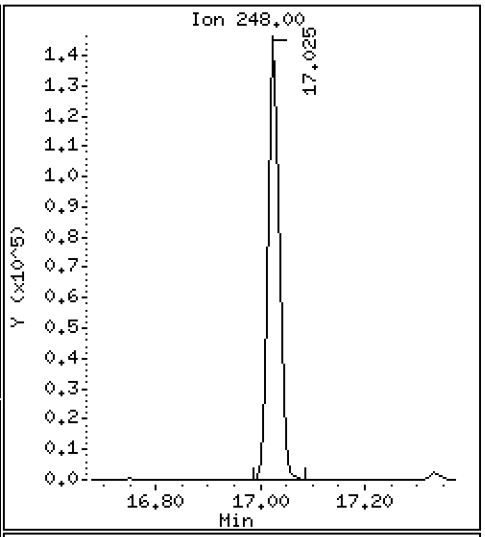
Column phase: ZB-5msi

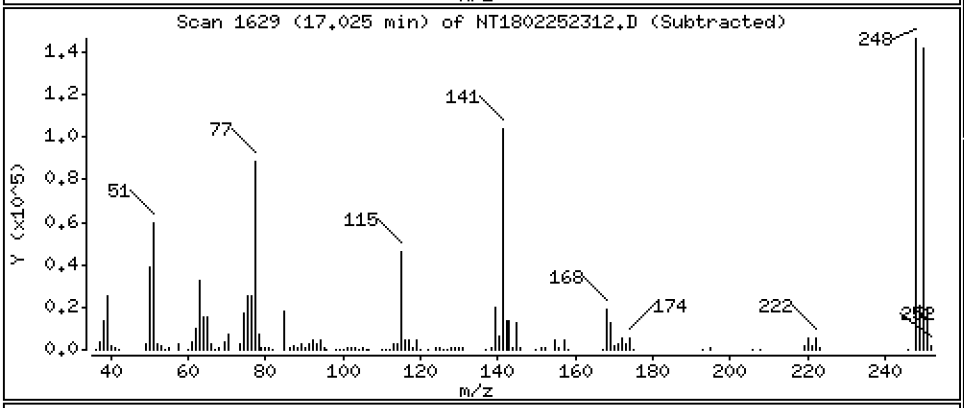
Column diameter: 0.25

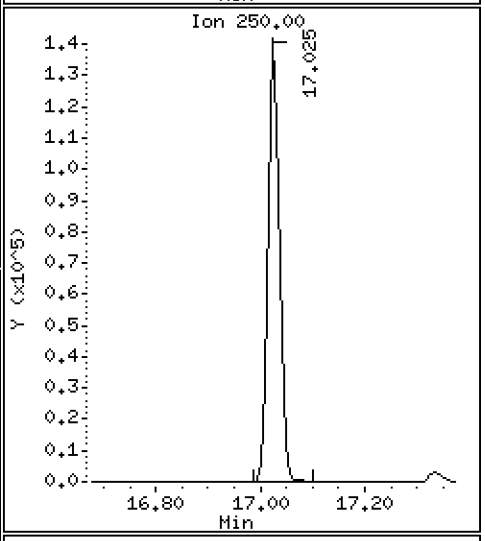
56 4-Bromophenyl-phenylether

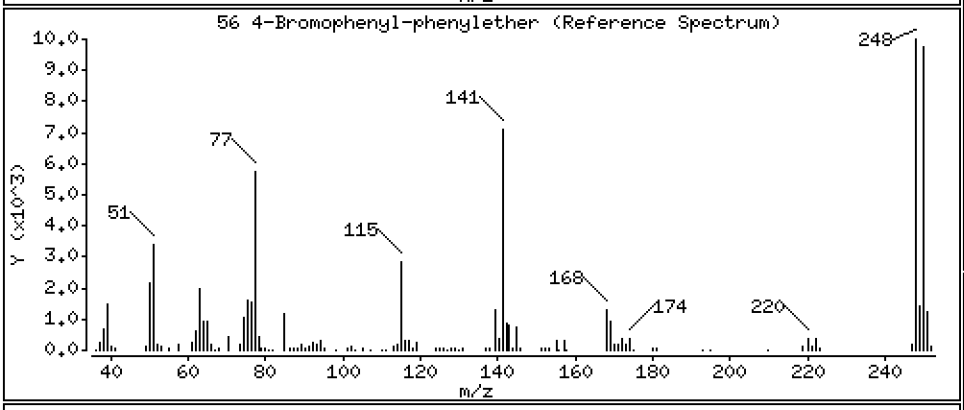
Concentration: 4.884 ug/mL

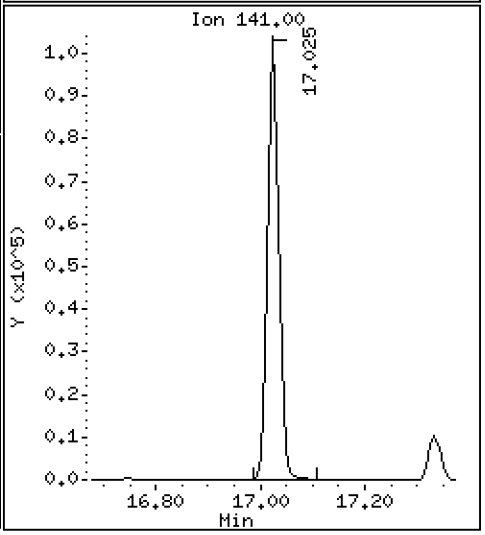


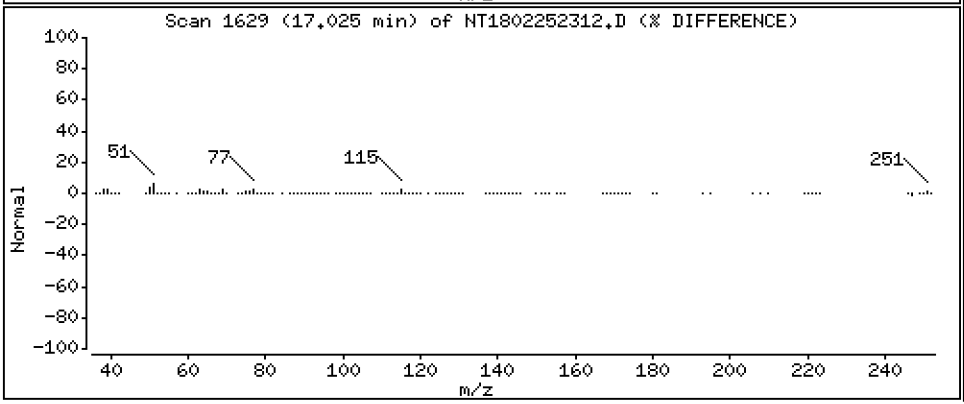












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

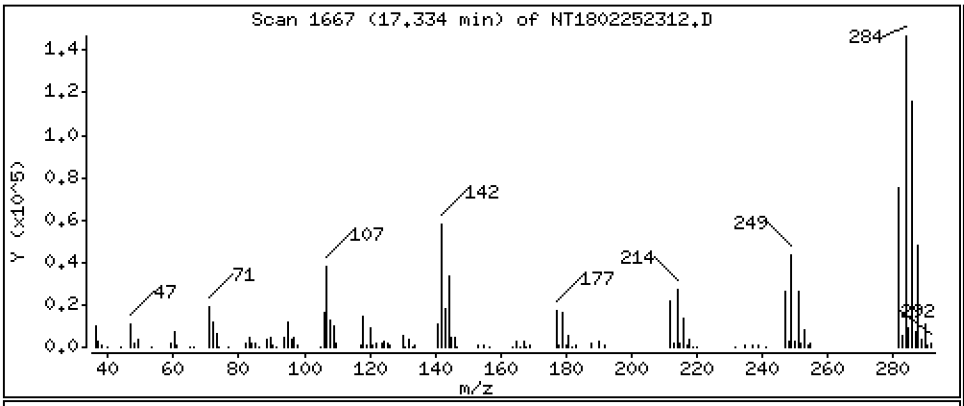
Operator: VTS

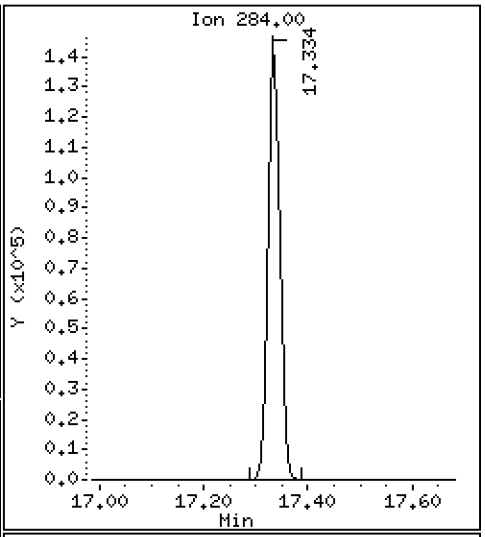
Column phase: ZB-5msi

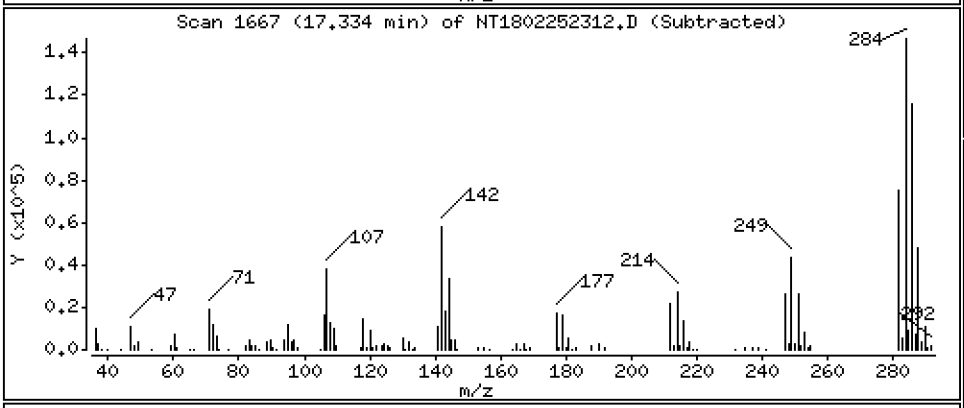
Column diameter: 0.25

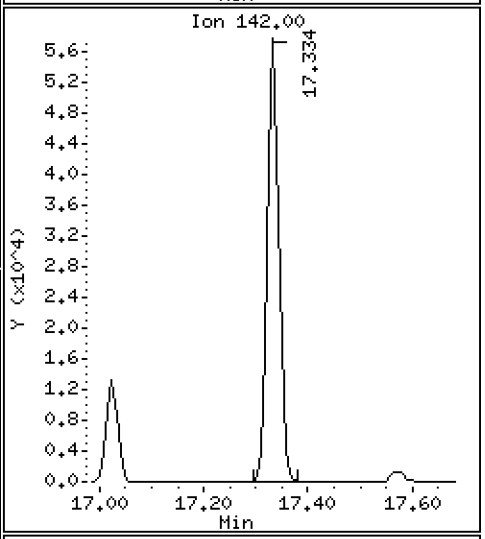
57 Hexachlorobenzene

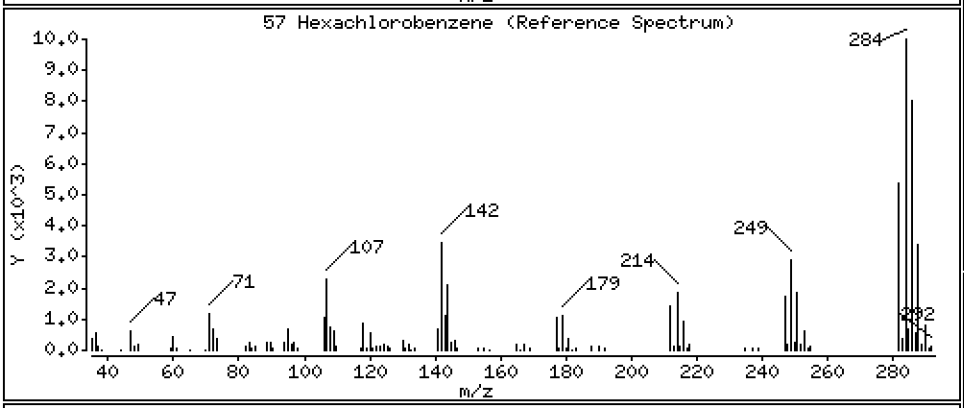
Concentration: 4.422 ug/mL

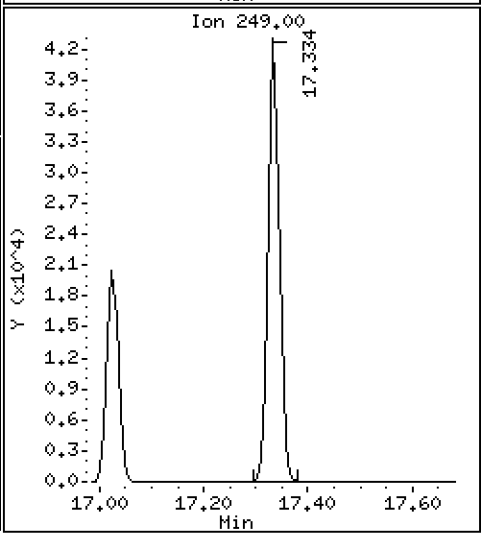


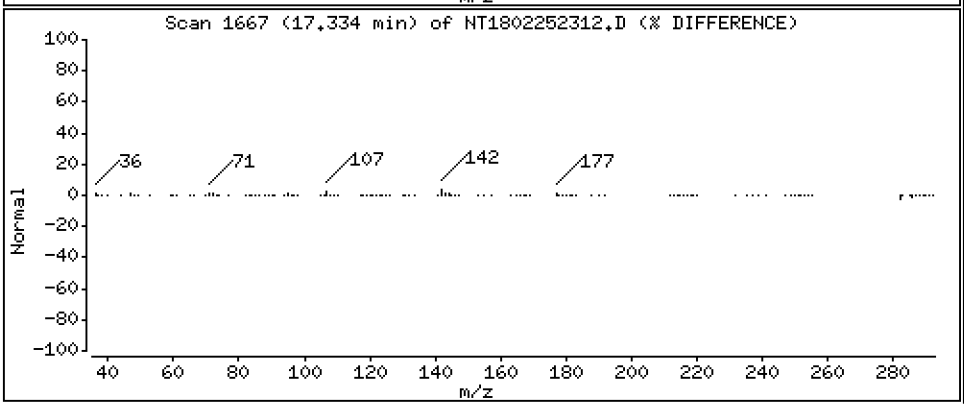












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

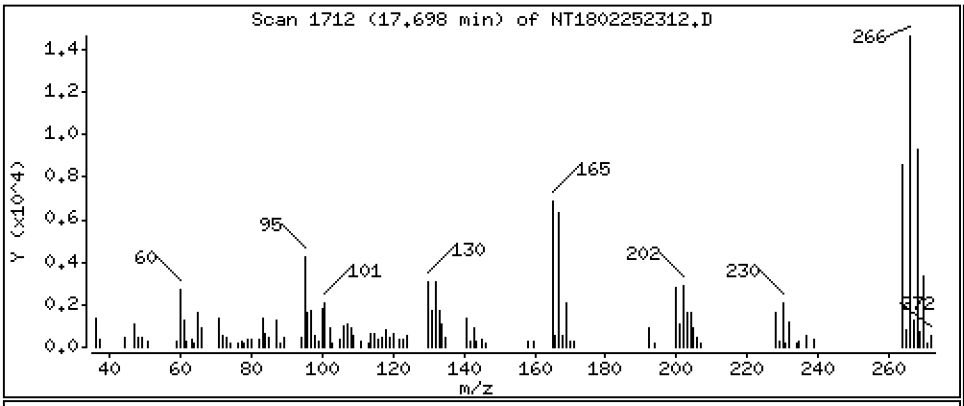
Operator: VTS

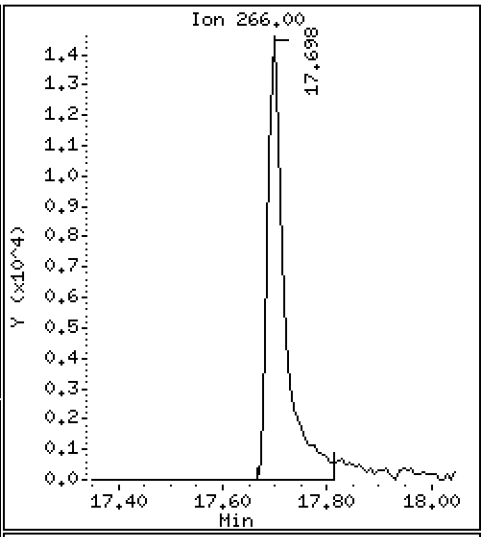
Column phase: ZB-5msi

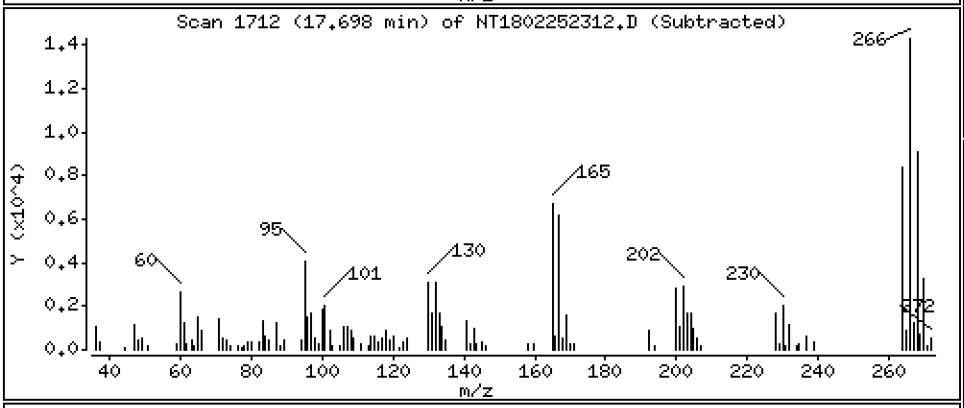
Column diameter: 0.25

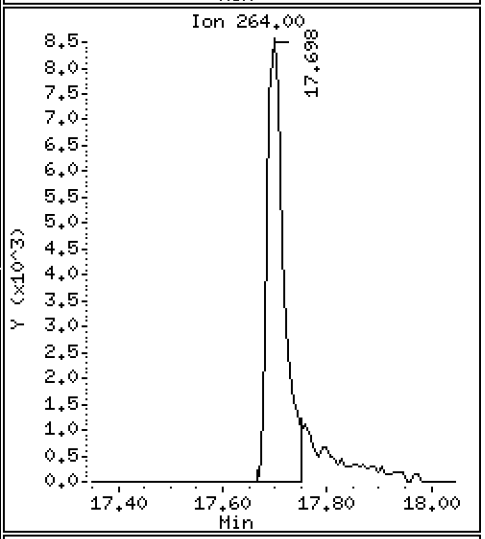
58 Pentachlorophenol

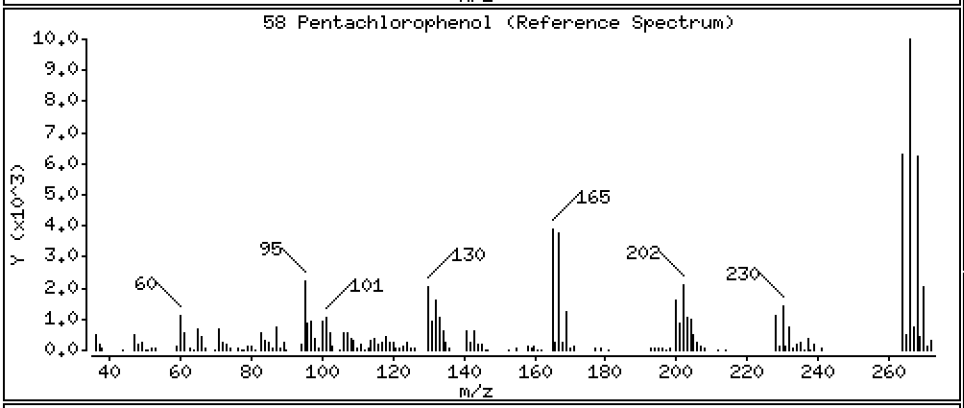
Concentration: 2.454 ug/mL

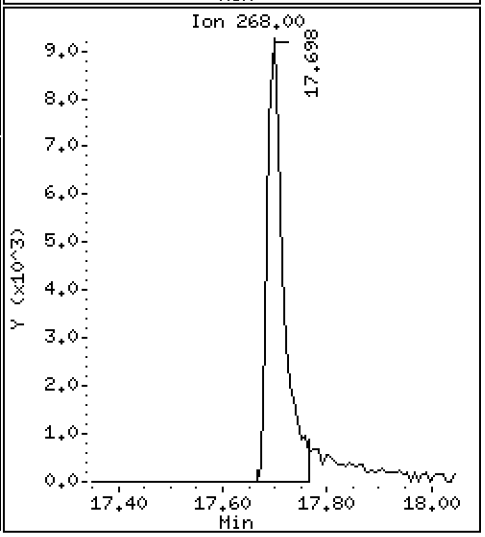


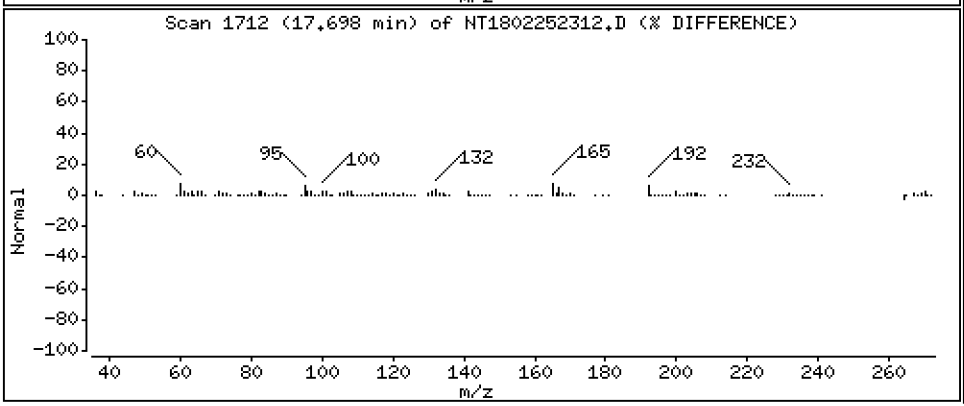












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

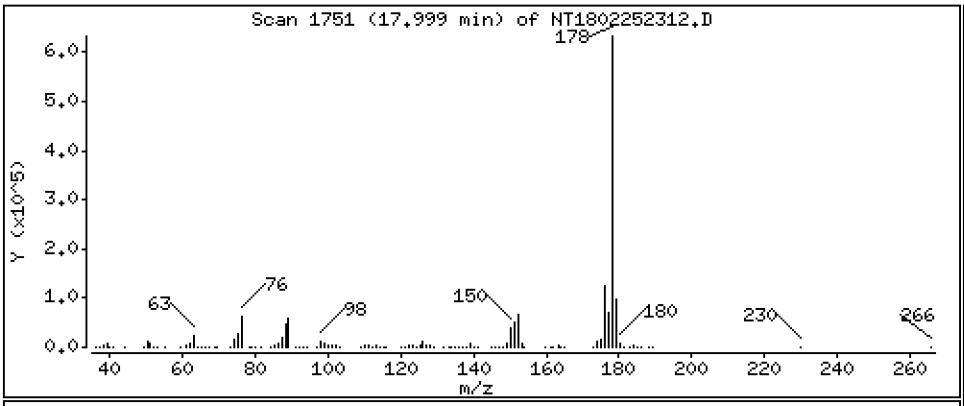
Operator: VTS

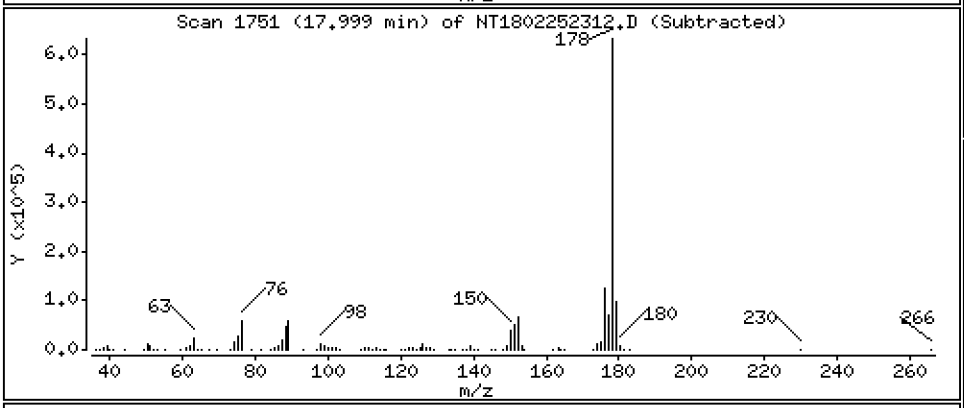
Column phase: ZB-5msi

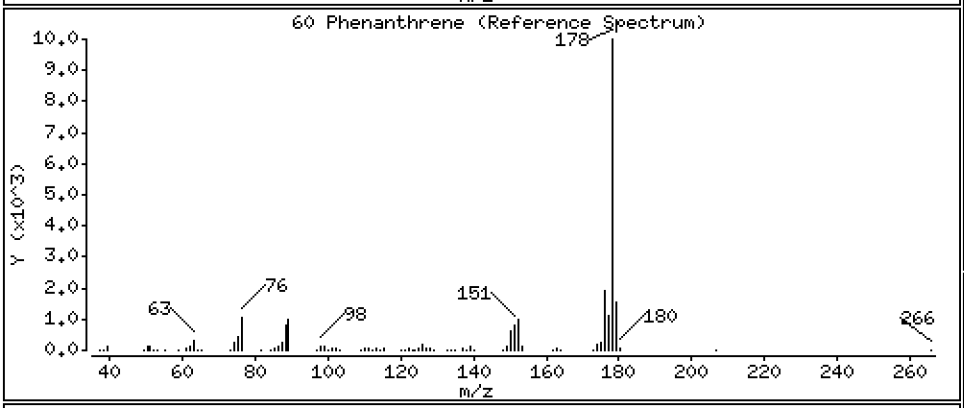
Column diameter: 0.25

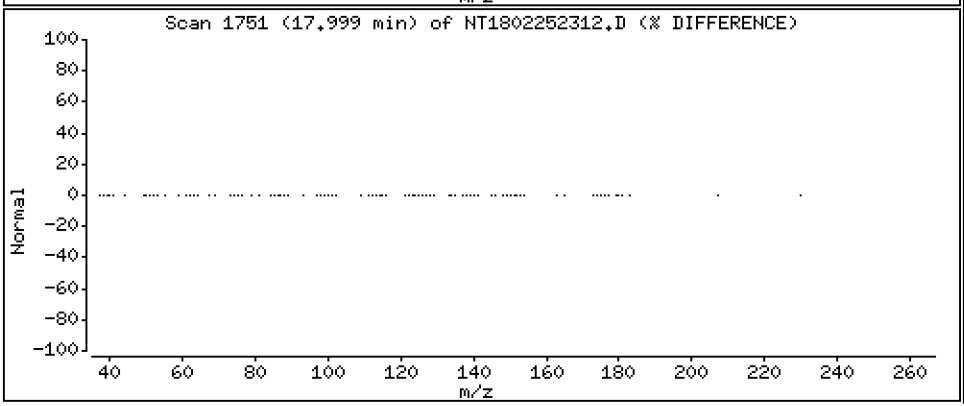
60 Phenanthrene

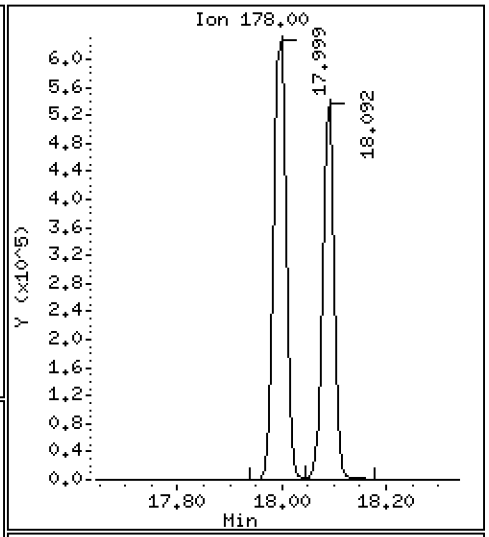
Concentration: 4.397 ug/mL

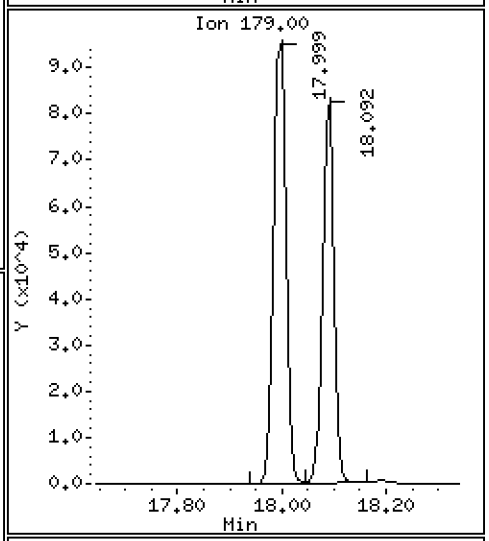


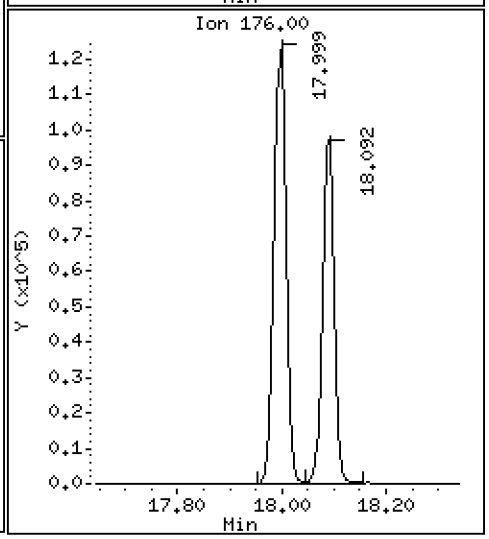












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

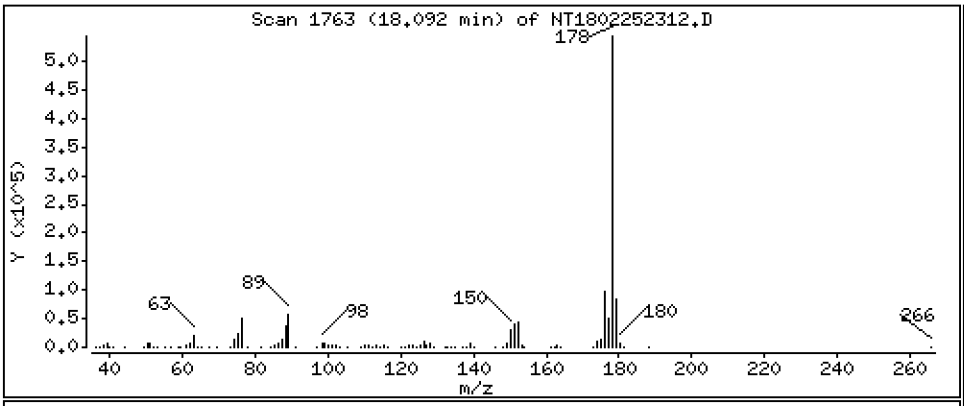
Operator: VTS

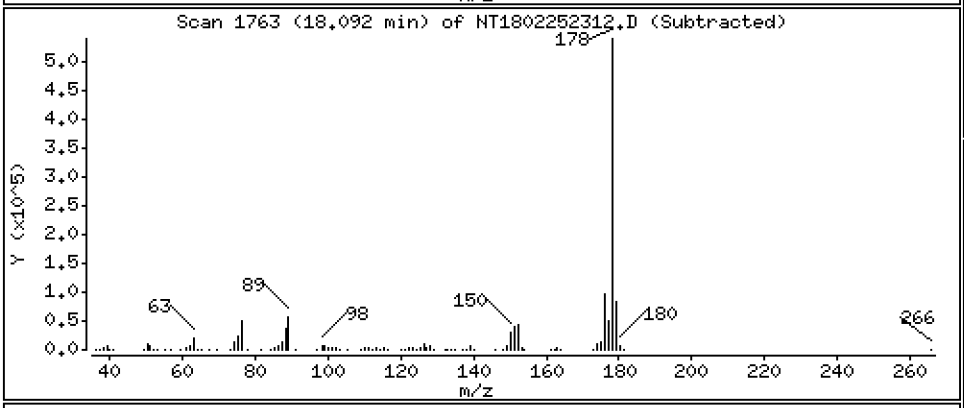
Column phase: ZB-5msi

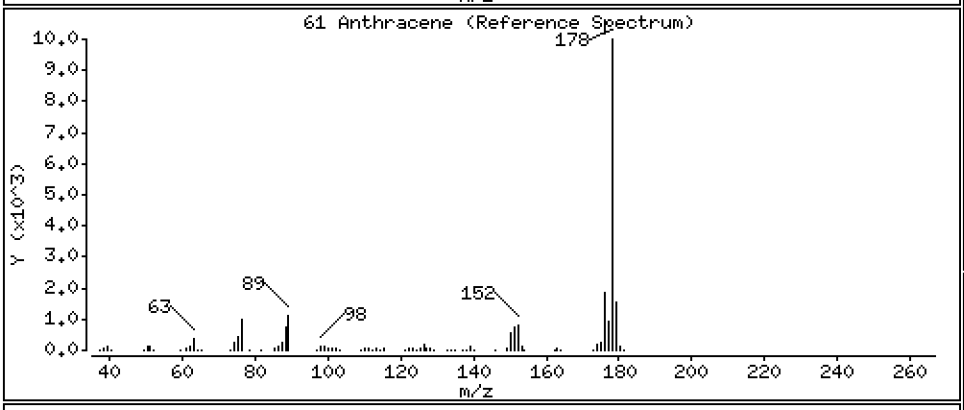
Column diameter: 0.25

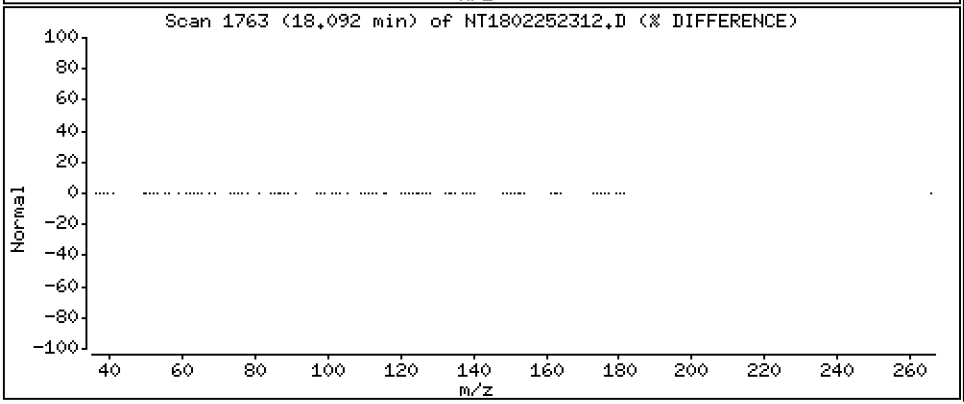
61 Anthracene

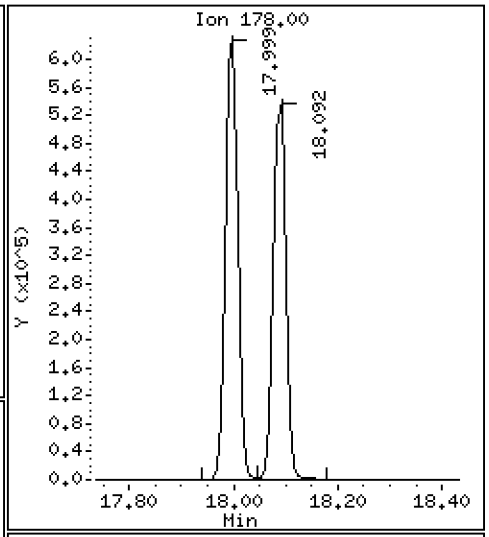
Concentration: 3.959 ug/mL

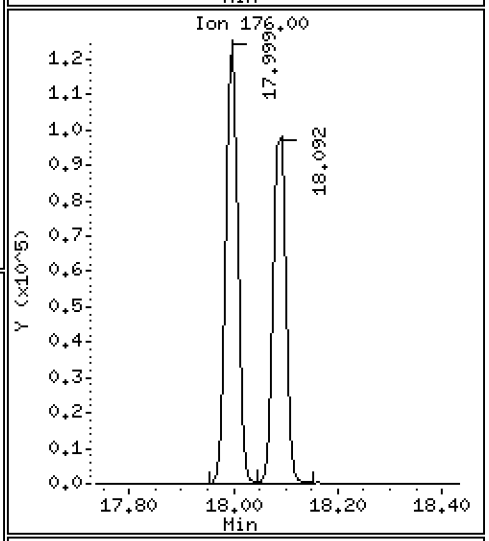


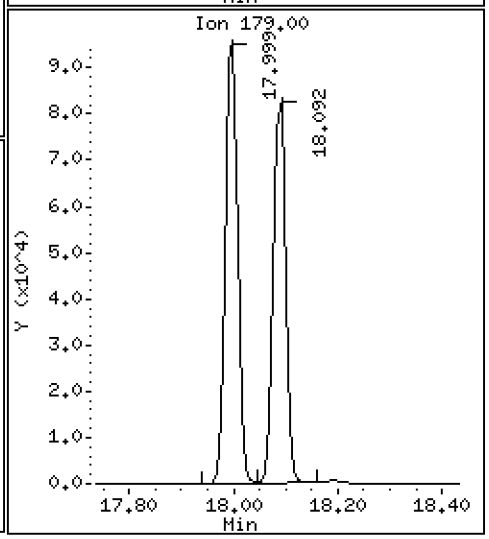












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

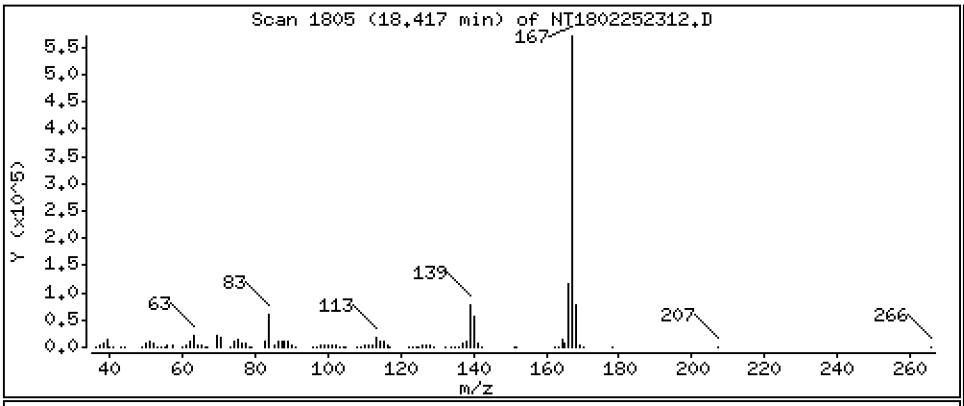
Operator: VTS

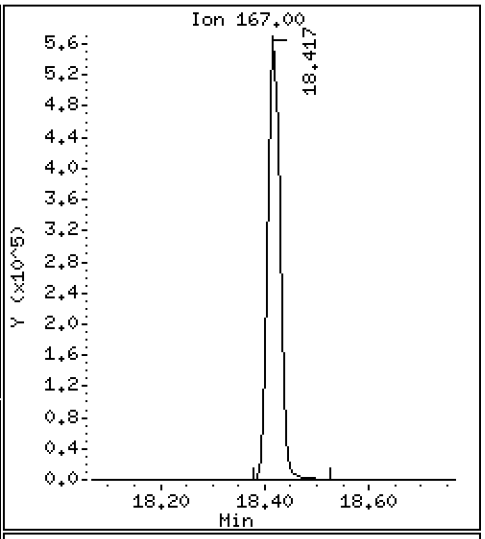
Column phase: ZB-5msi

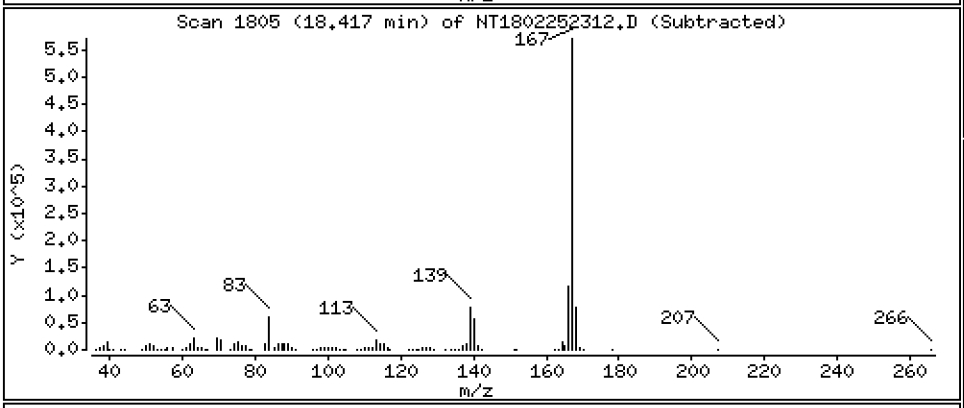
Column diameter: 0.25

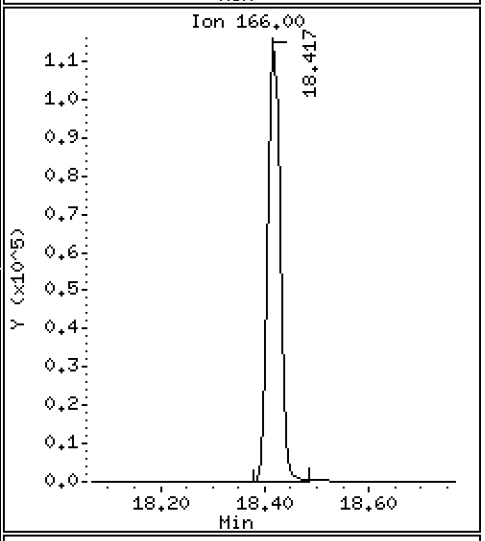
62 Carbazole

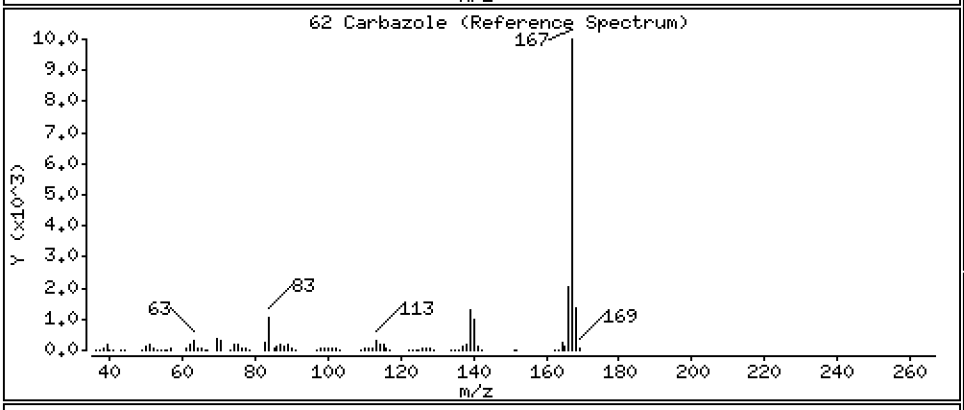
Concentration: 4.463 ug/mL

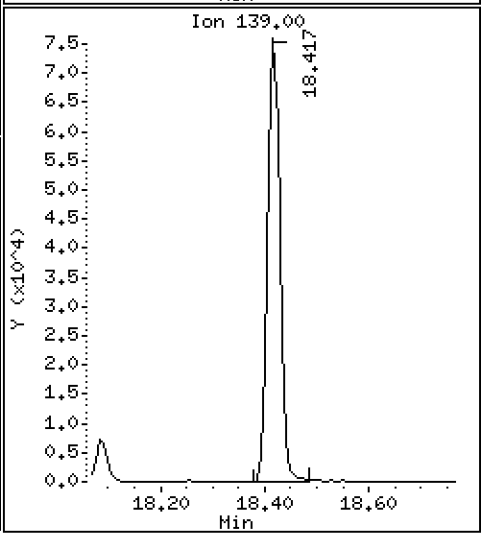


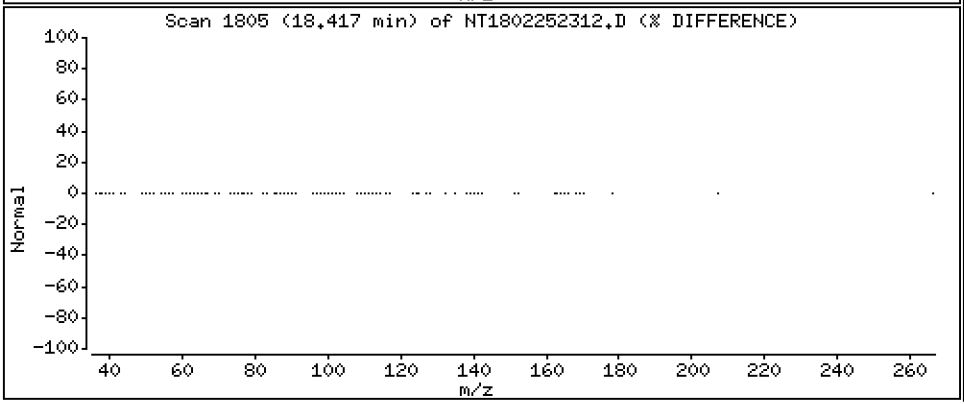












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

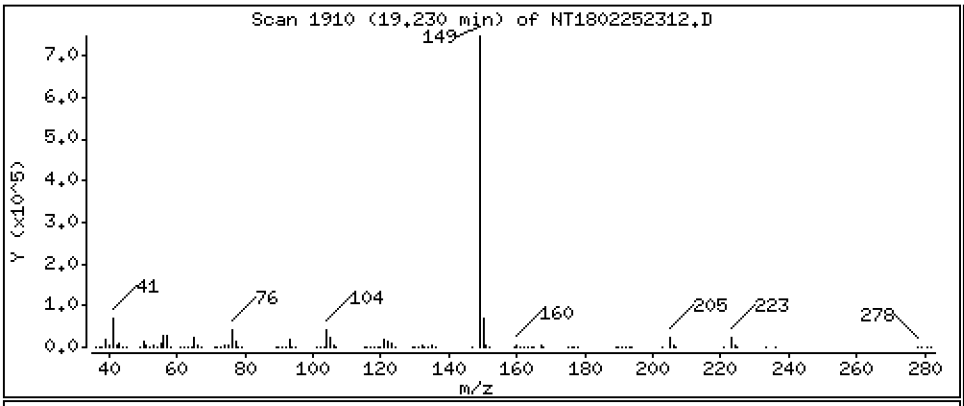
Operator: VTS

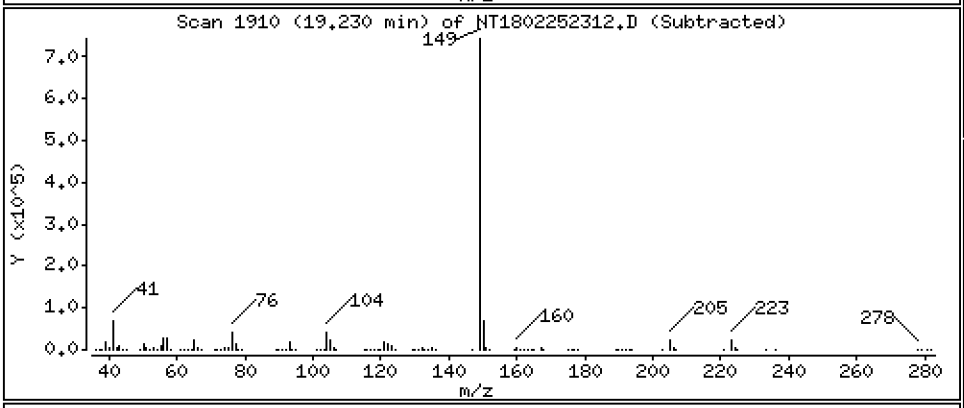
Column phase: ZB-5msi

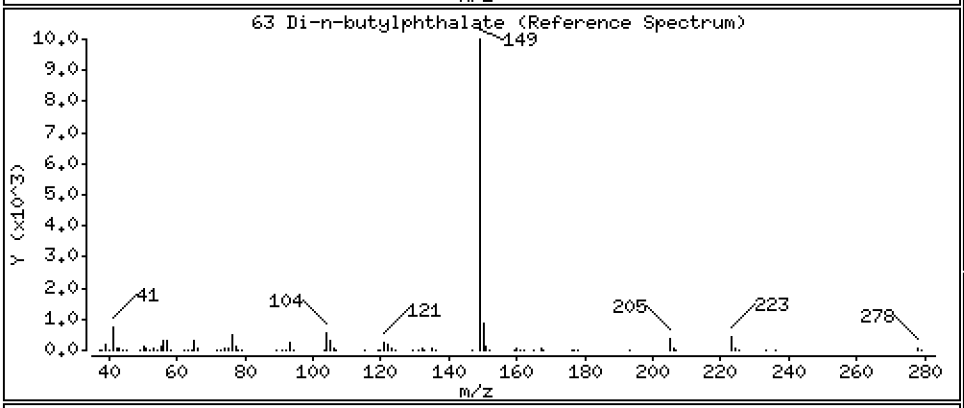
Column diameter: 0.25

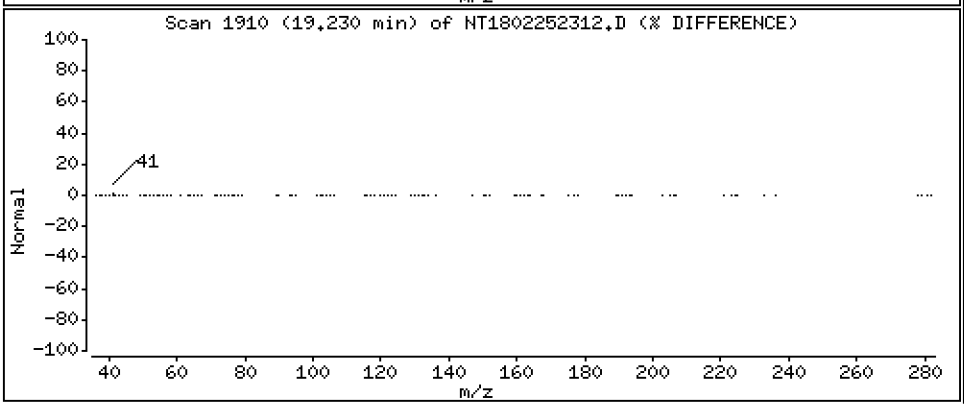
63 Di-n-butylphthalate

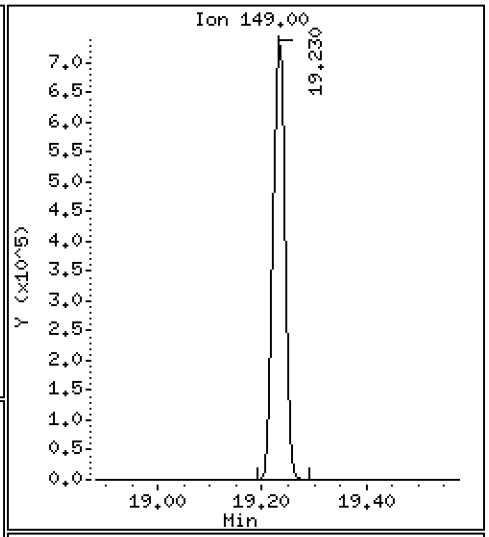
Concentration: 5.159 ug/mL

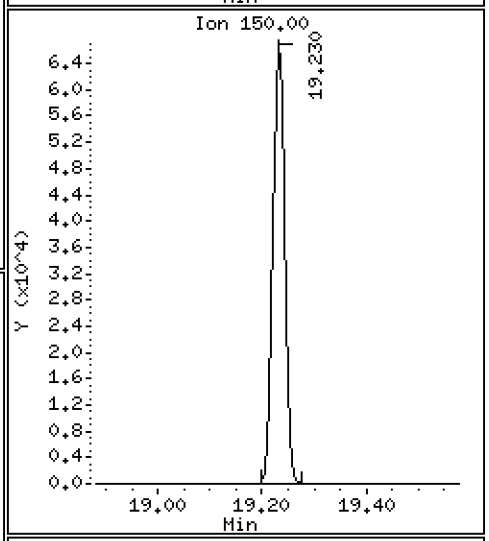


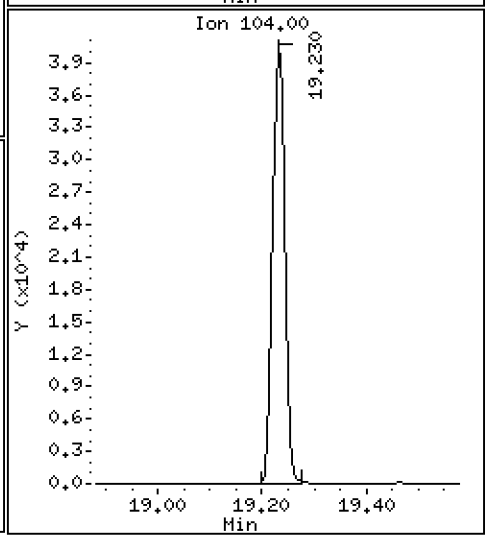












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

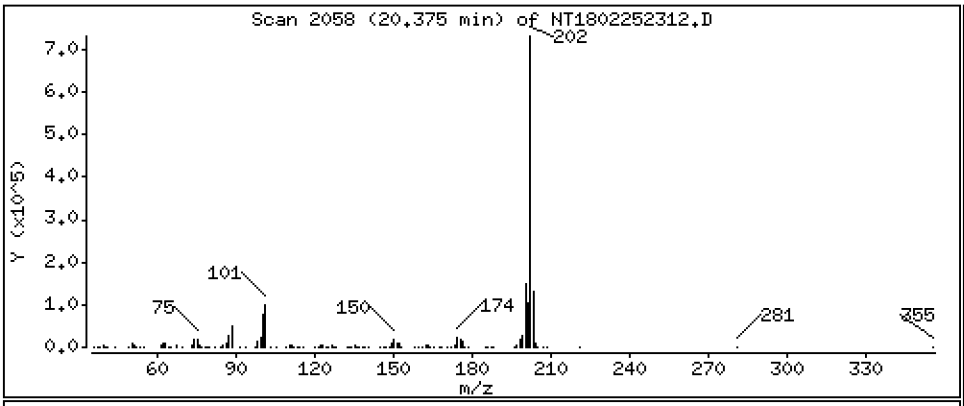
Operator: VTS

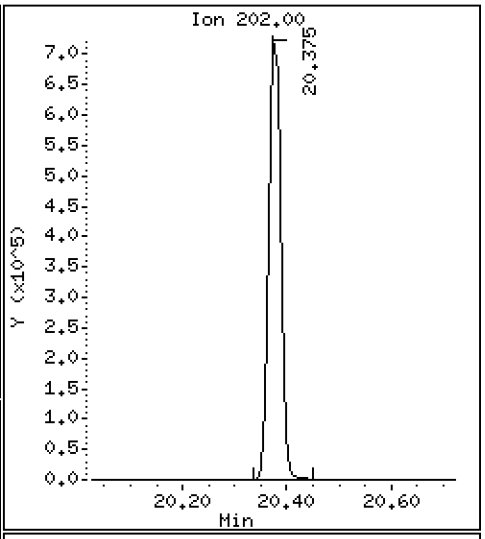
Column phase: ZB-5msi

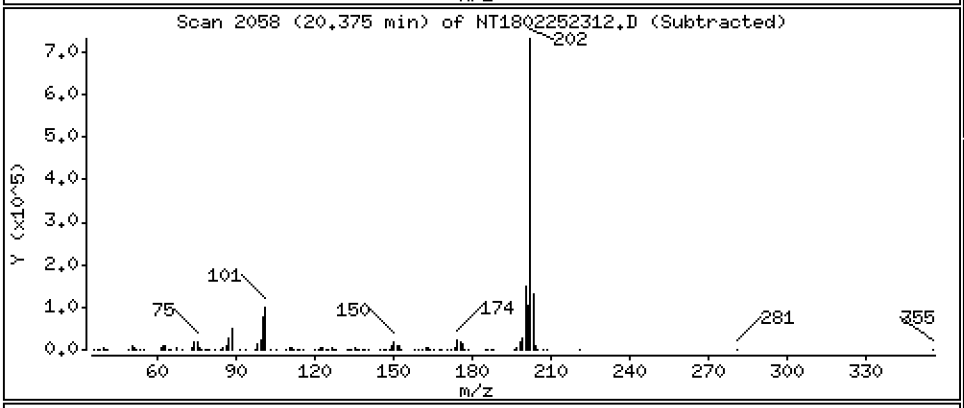
Column diameter: 0.25

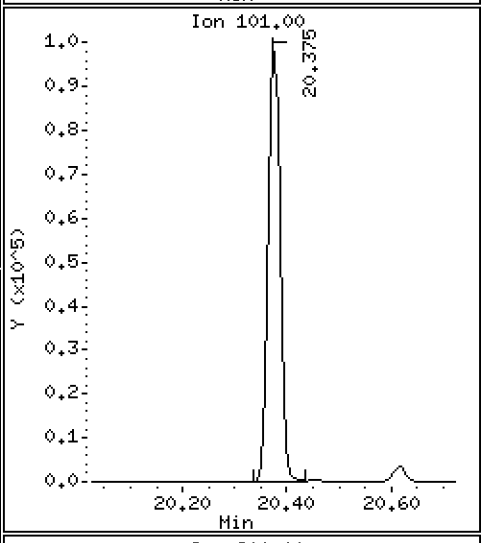
64 Fluoranthene

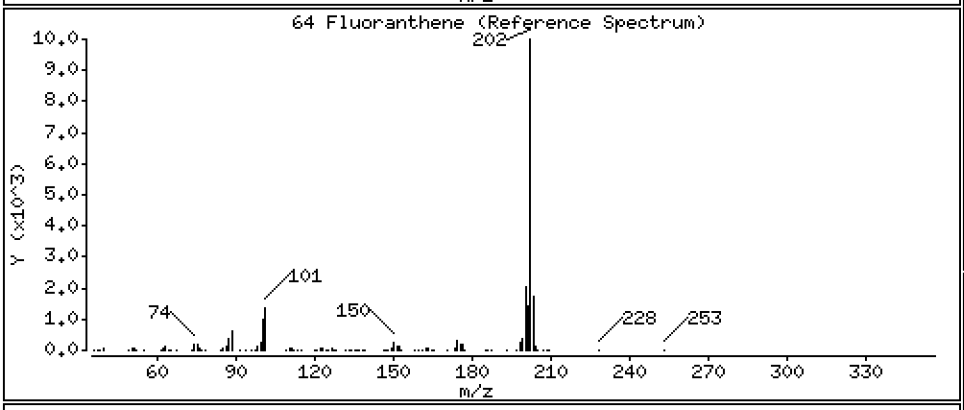
Concentration: 4.812 ug/mL

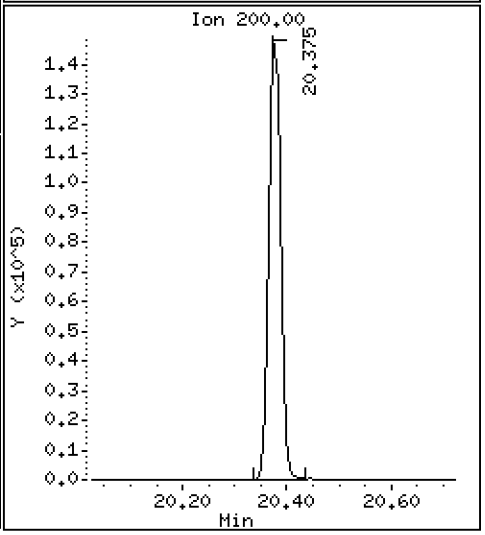


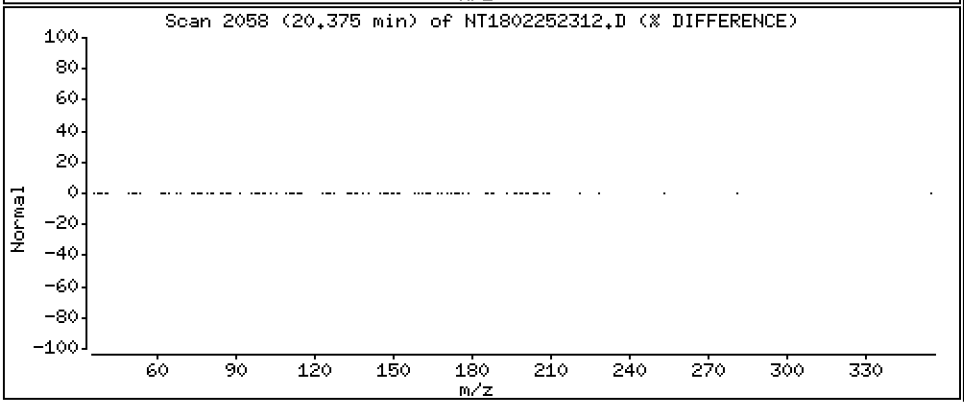












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

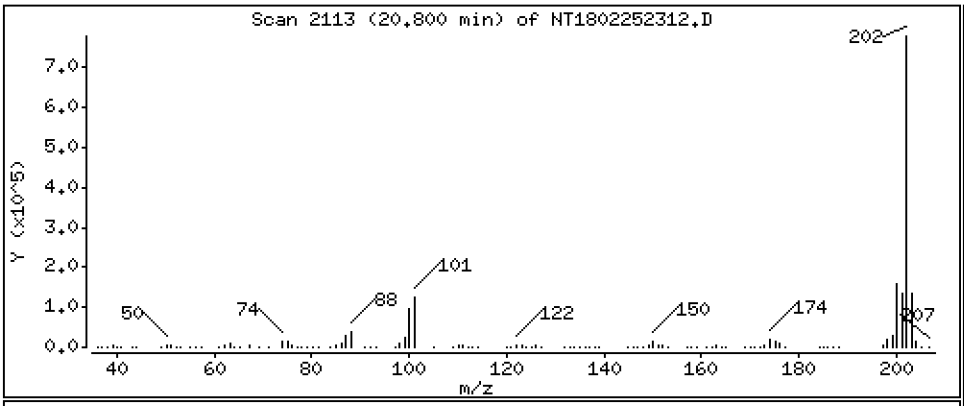
Operator: VTS

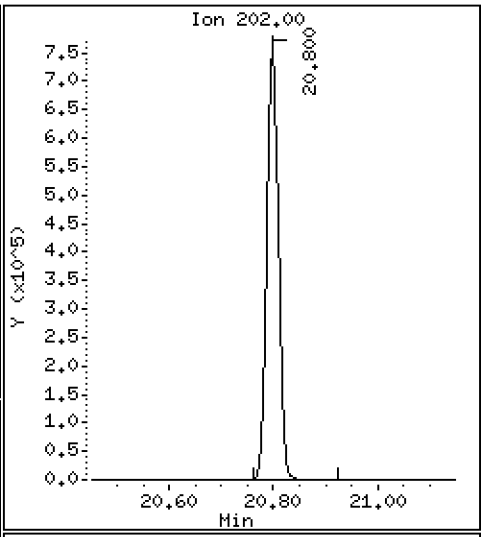
Column phase: ZB-5msi

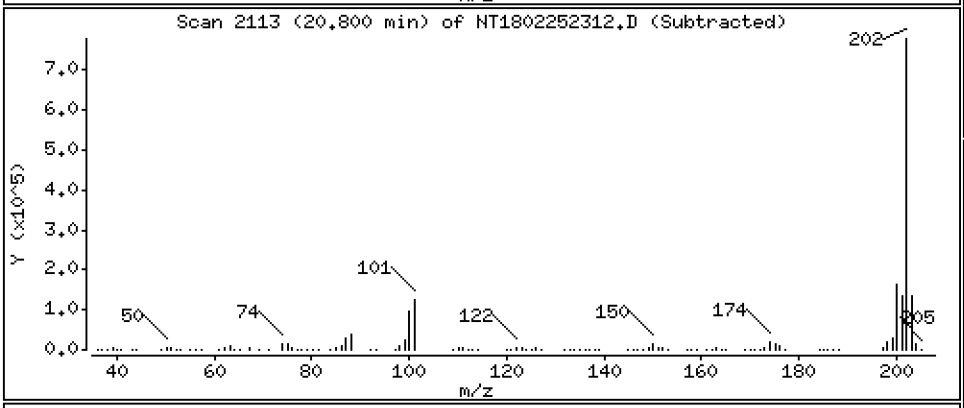
Column diameter: 0.25

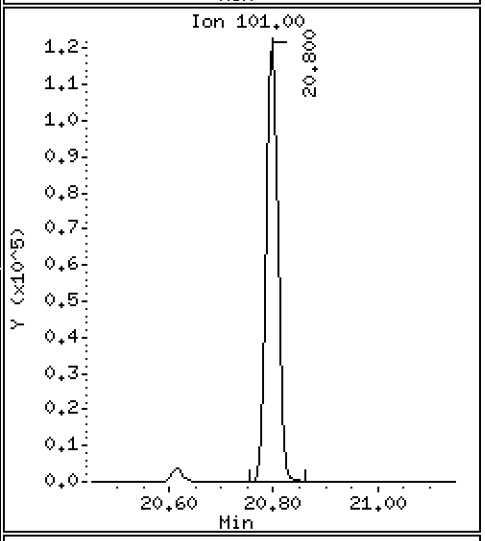
65 Pyrene

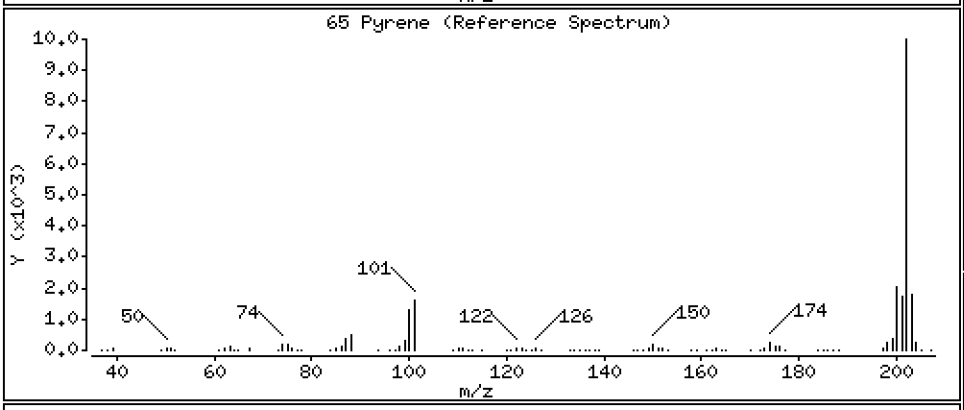
Concentration: 4.559 ug/mL

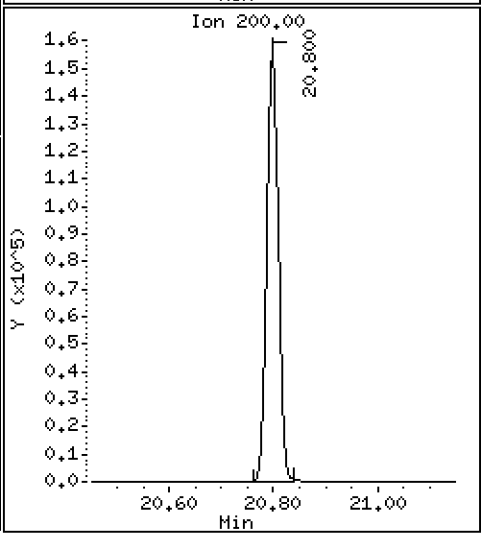


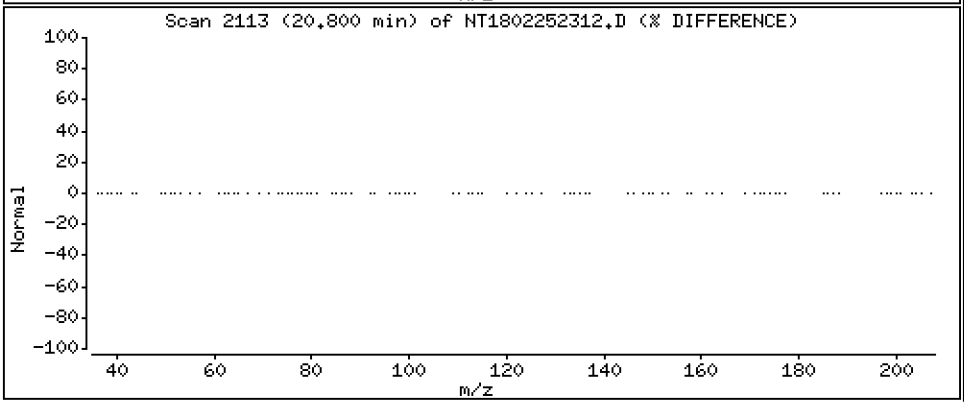












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

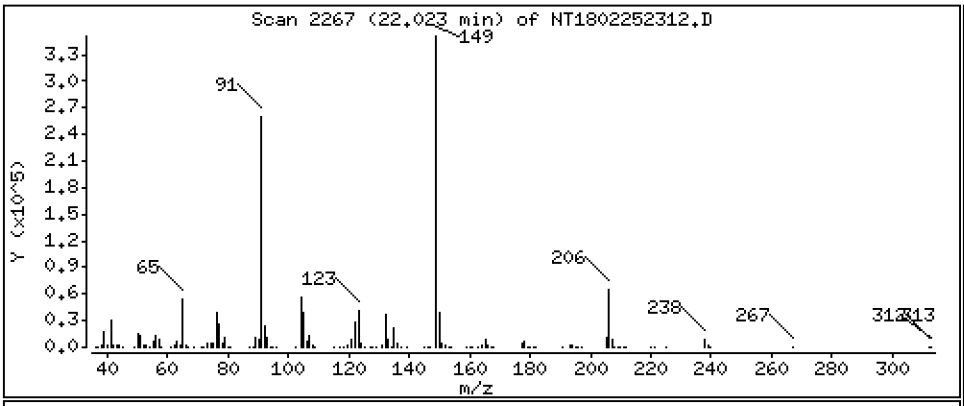
Operator: VTS

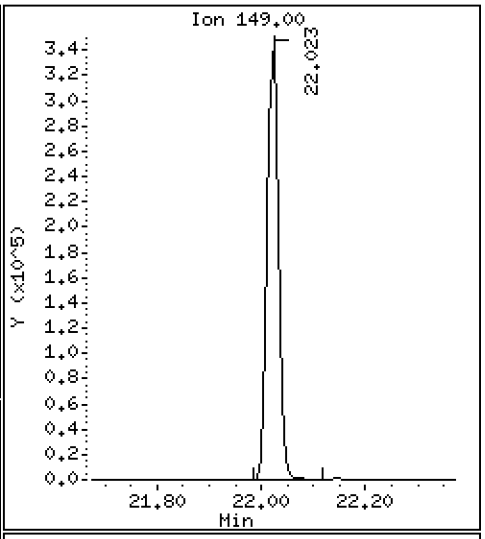
Column phase: ZB-5msi

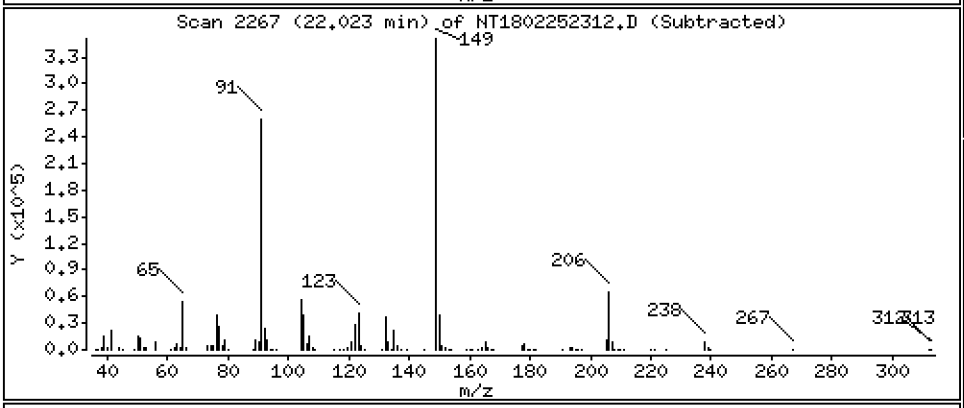
Column diameter: 0.25

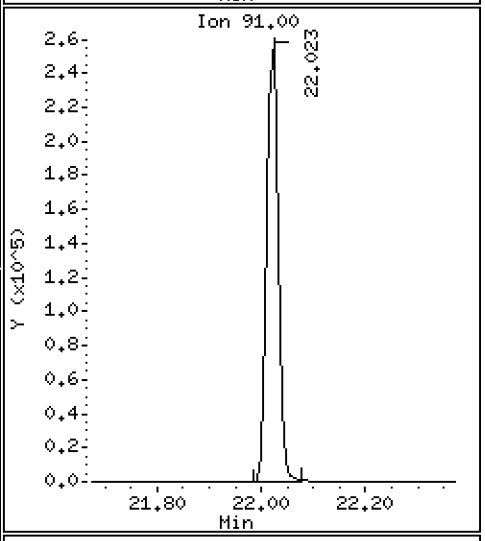
67 Butylbenzylphthalate

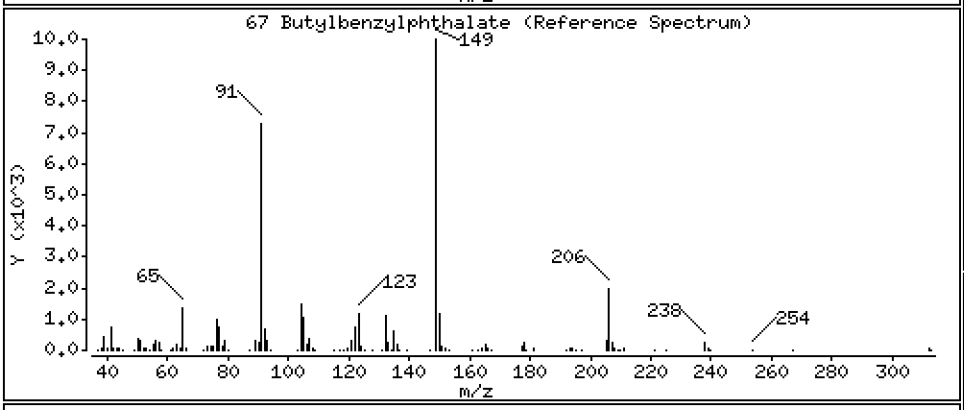
Concentration: 5.322 ug/mL

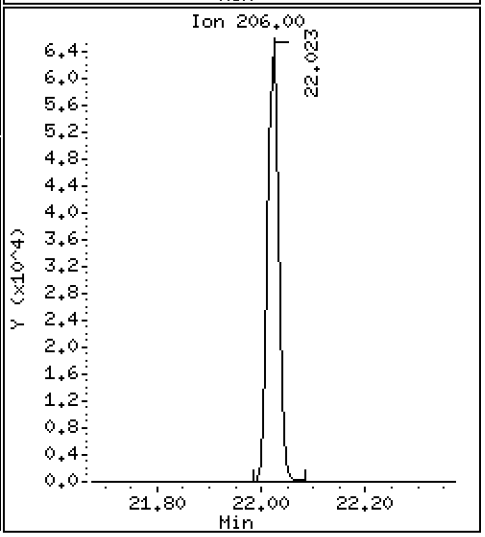


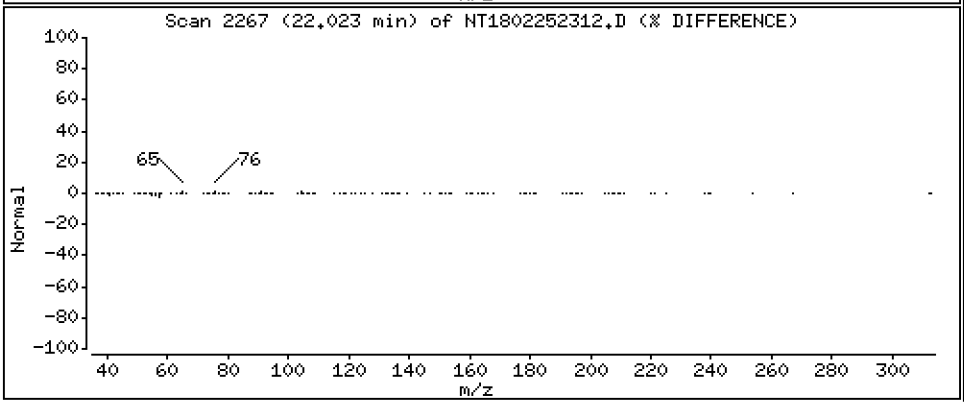












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

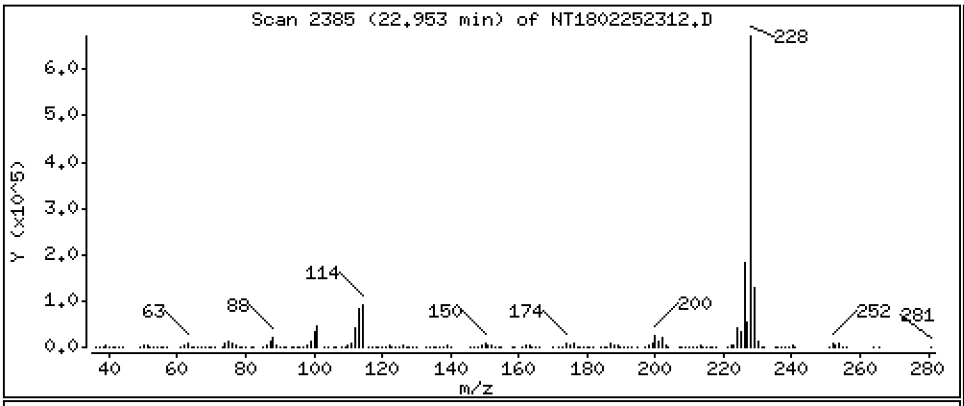
Operator: VTS

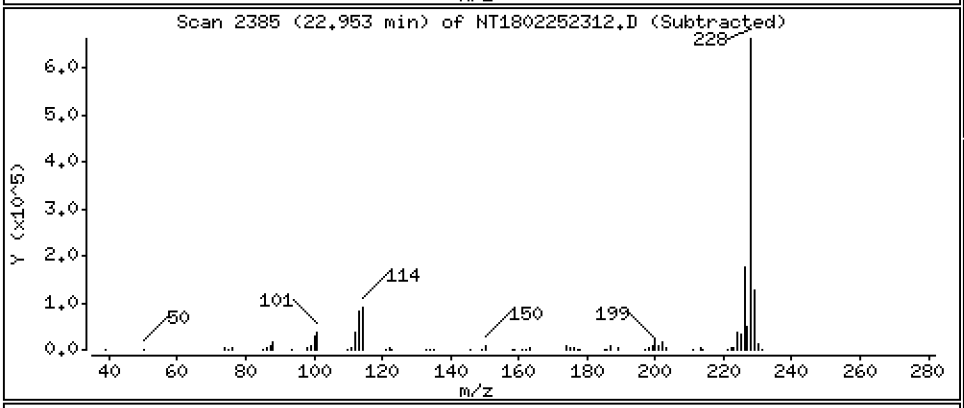
Column phase: ZB-5msi

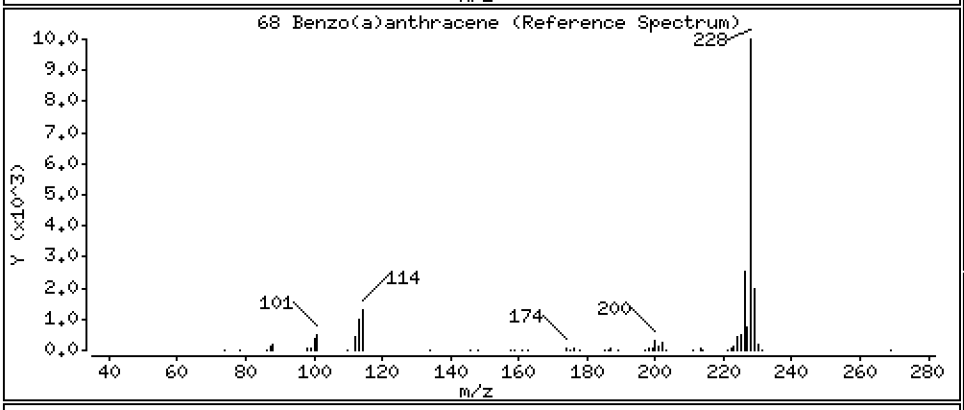
Column diameter: 0.25

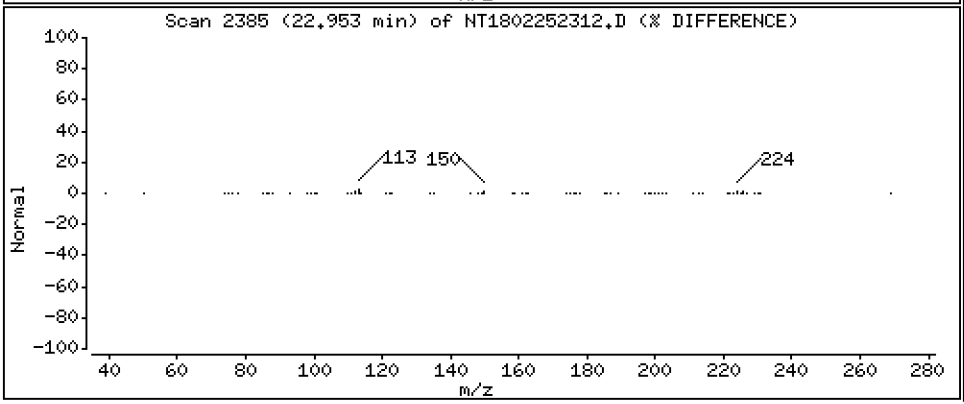
68 Benzo(a)anthracene

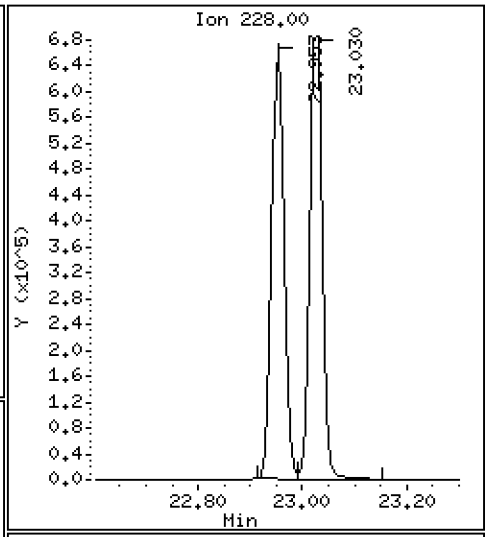
Concentration: 4.472 ug/mL

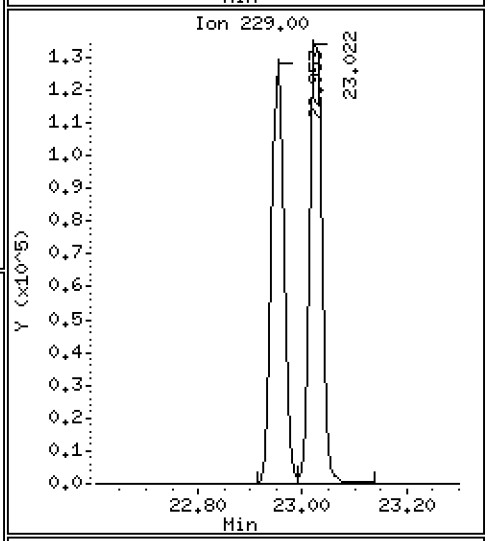


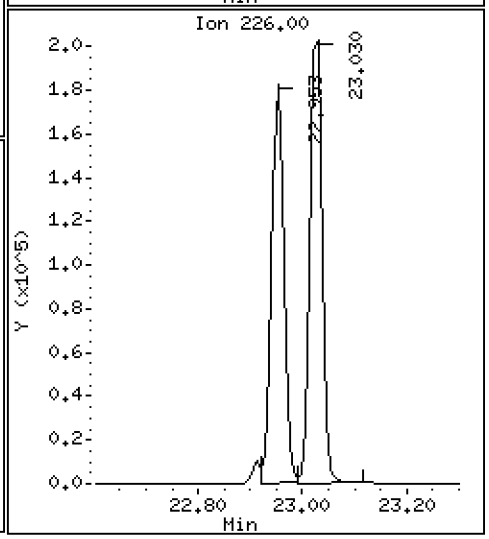












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

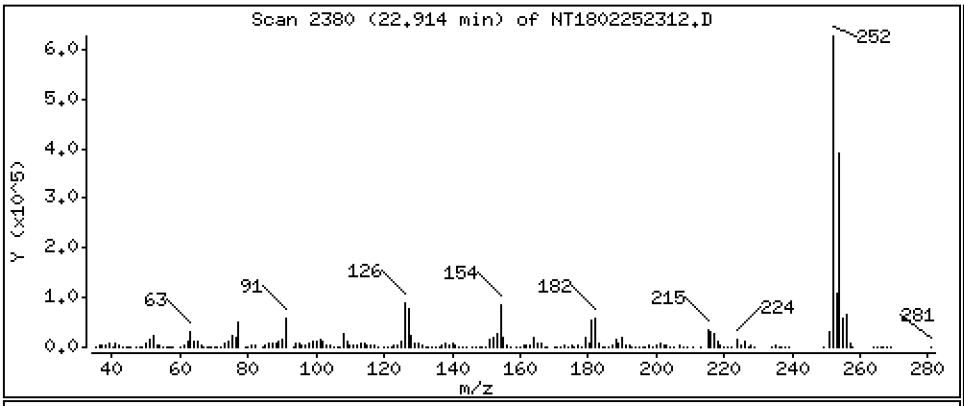
Operator: VTS

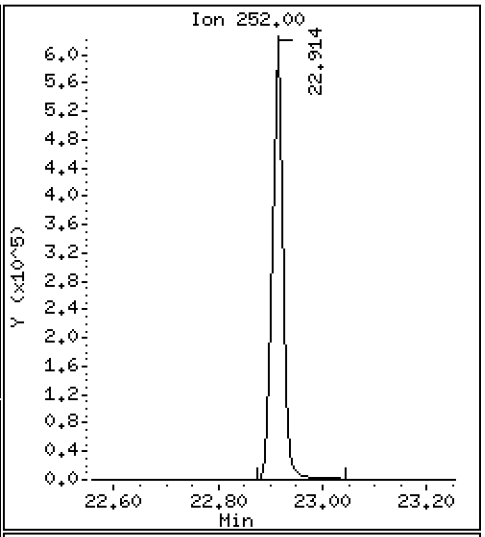
Column phase: ZB-5msi

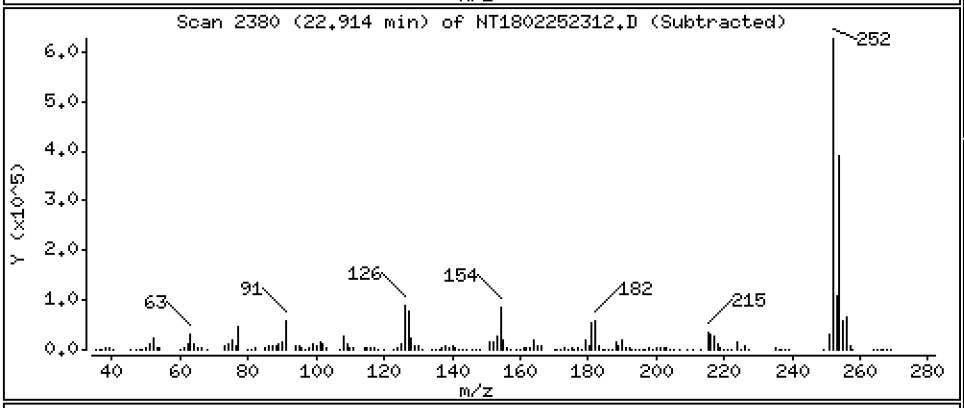
Column diameter: 0.25

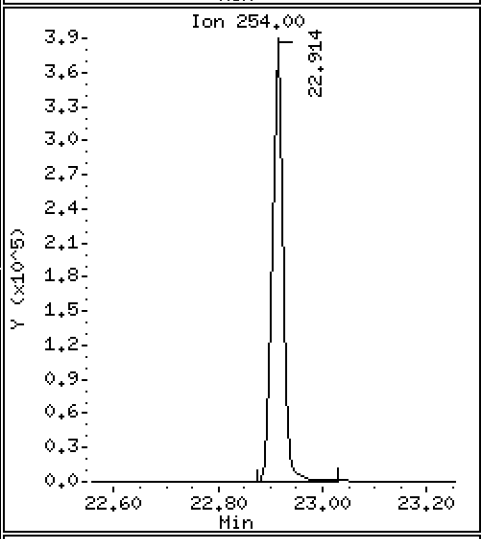
70 3,3'-Dichlorobenzidine

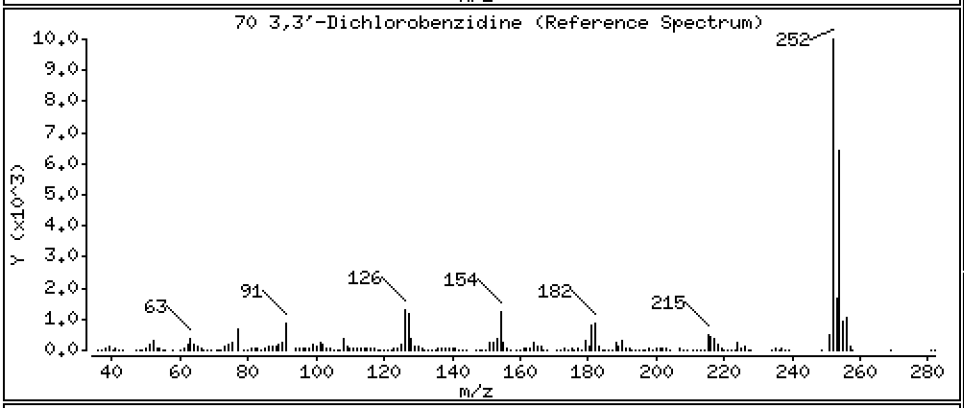
Concentration: 10.00 ug/mL

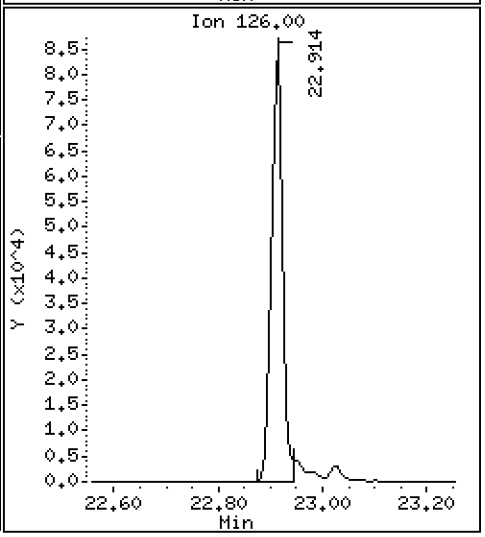


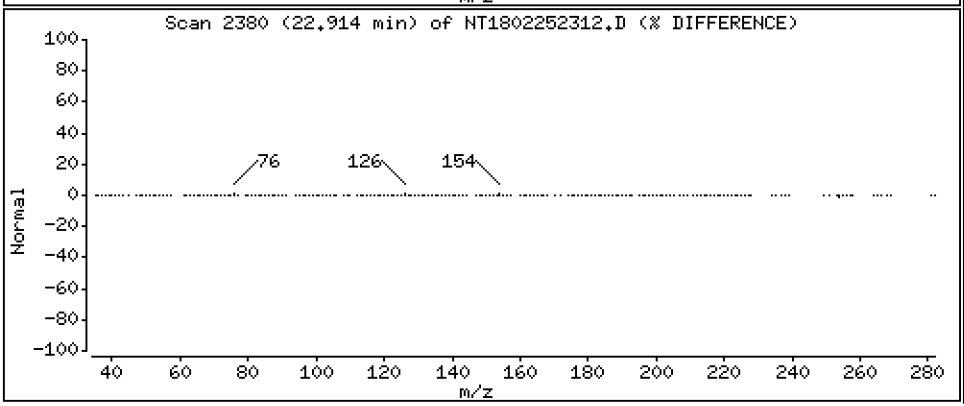












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

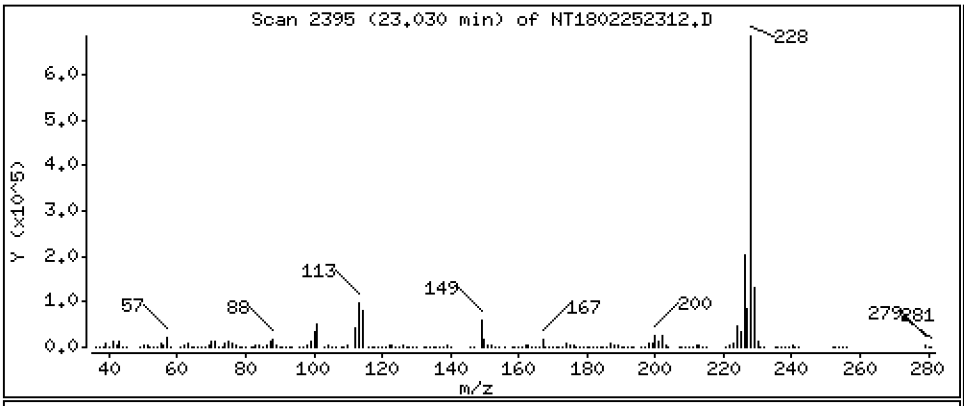
Operator: VTS

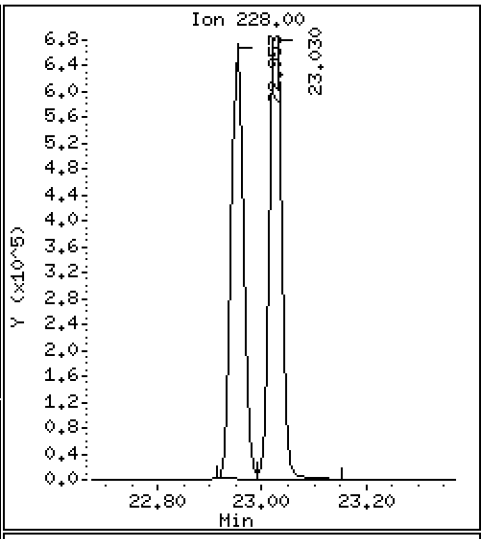
Column phase: ZB-5msi

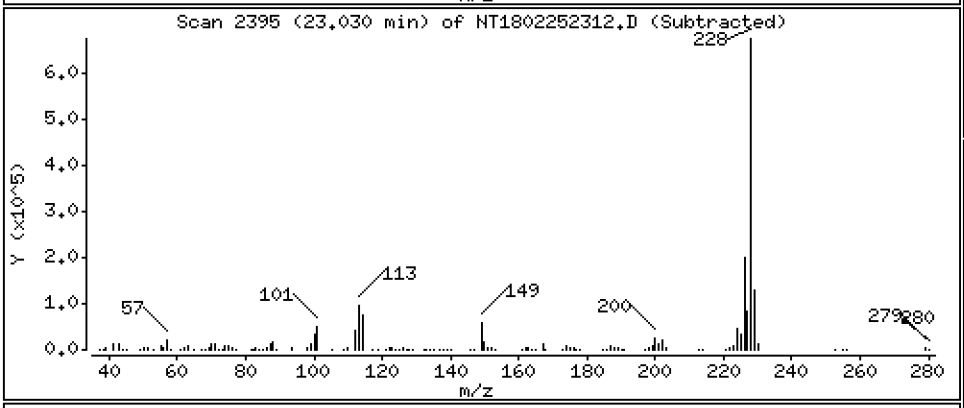
Column diameter: 0.25

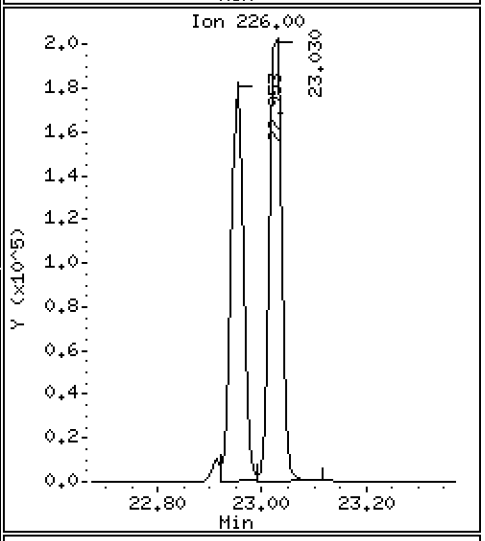
71 Chrysene

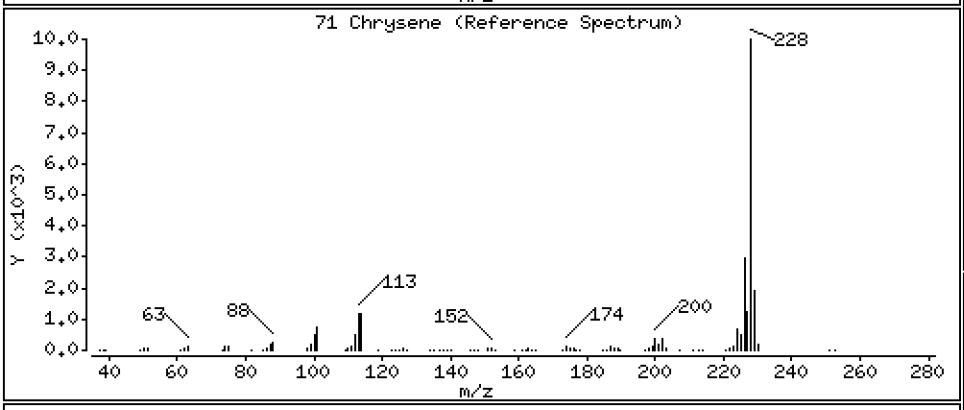
Concentration: 4.428 ug/mL

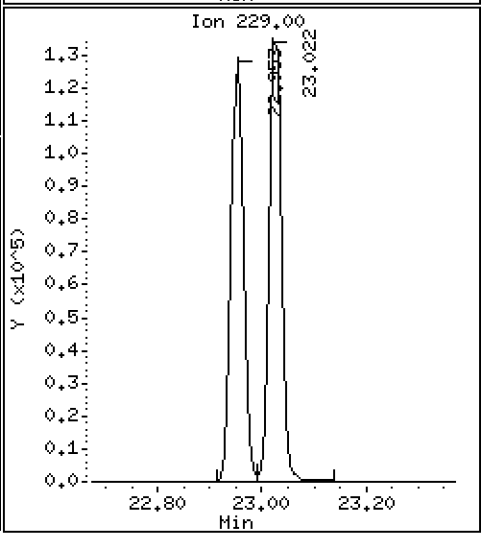


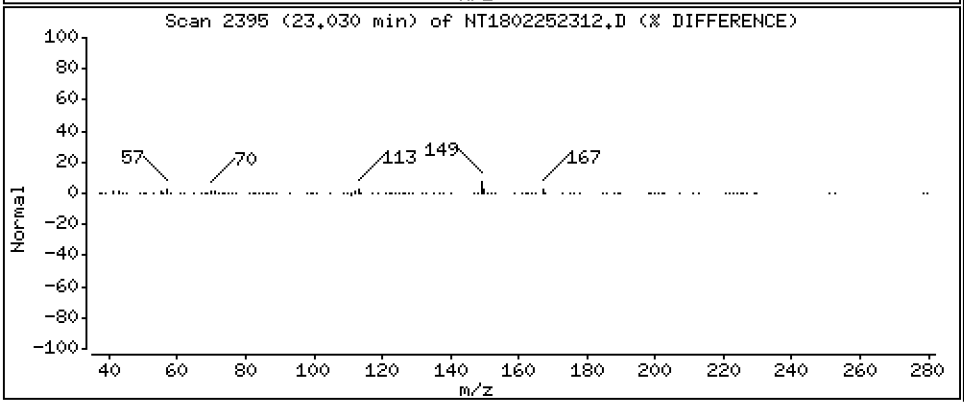












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

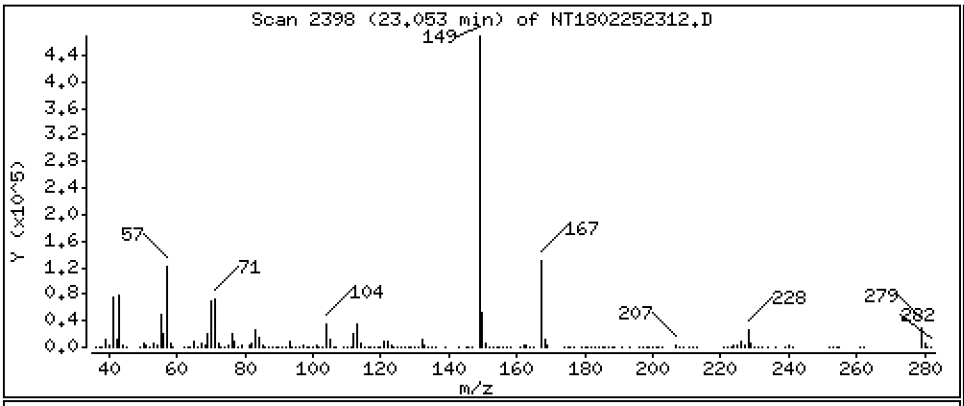
Operator: VTS

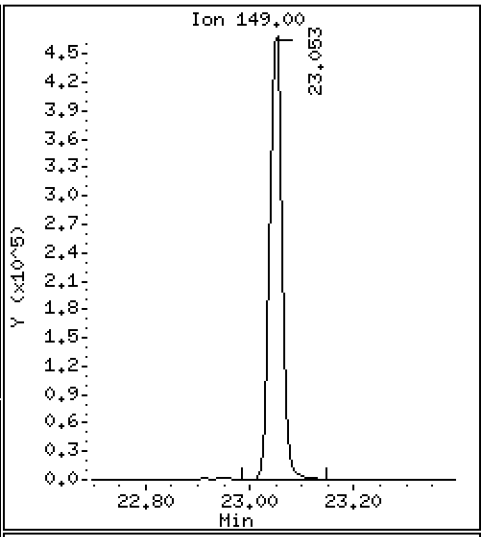
Column phase: ZB-5msi

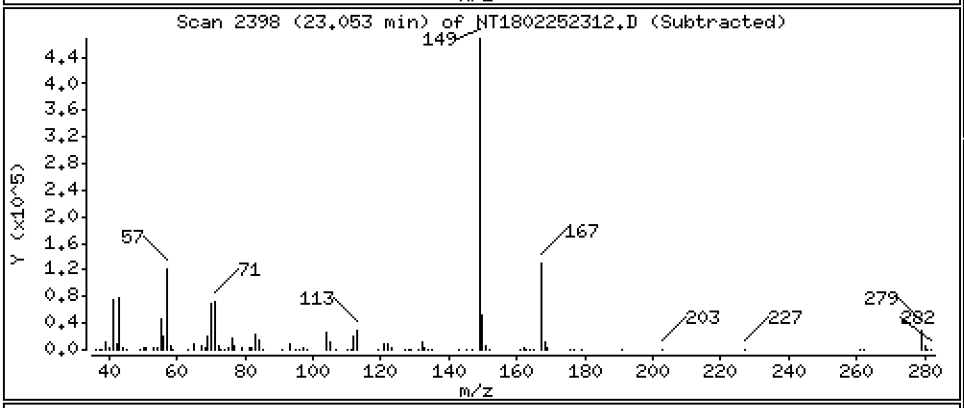
Column diameter: 0.25

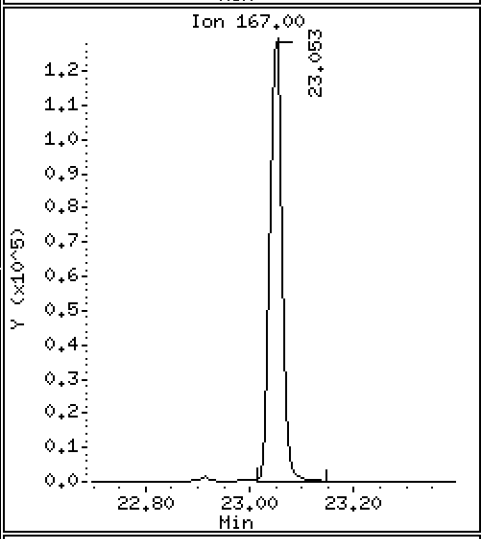
72 bis(2-Ethylhexyl)phthalate

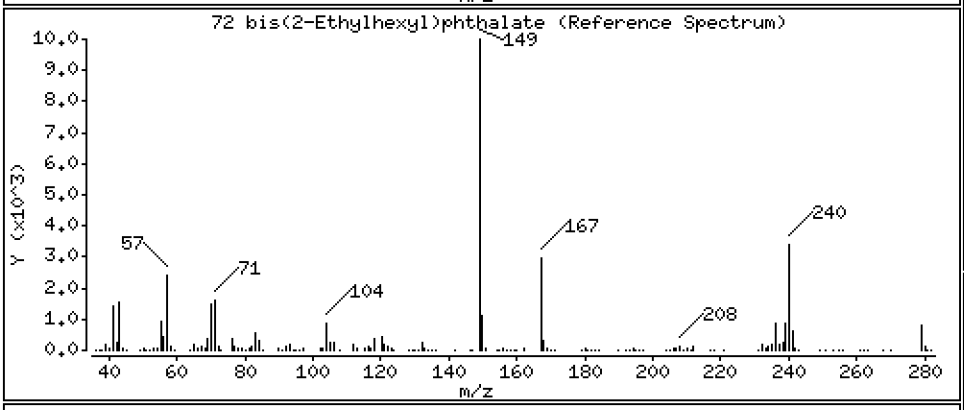
Concentration: 5.231 ug/mL

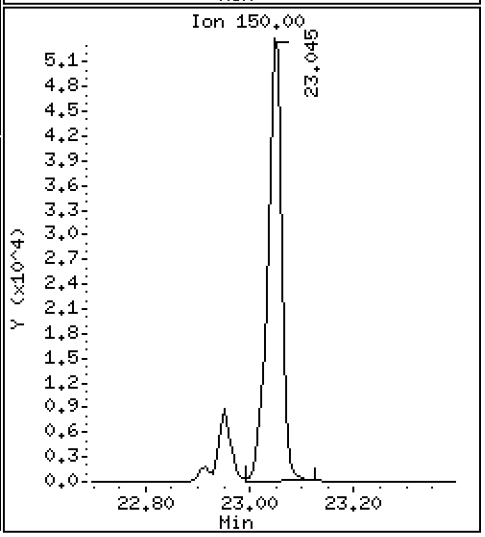


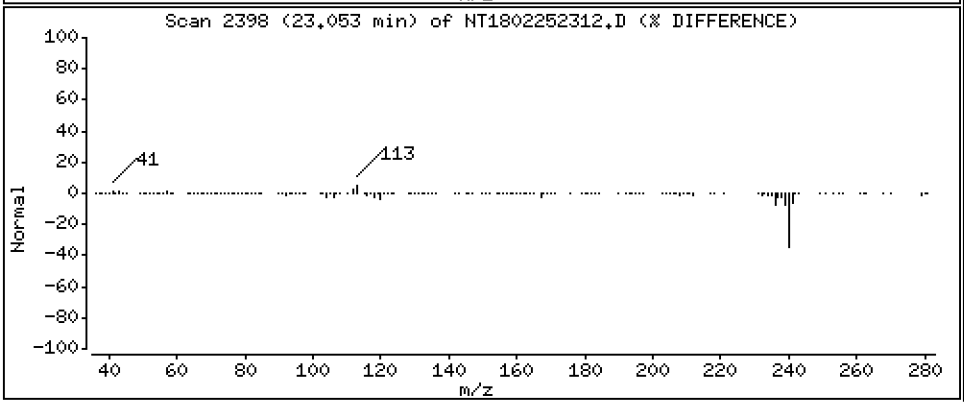












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

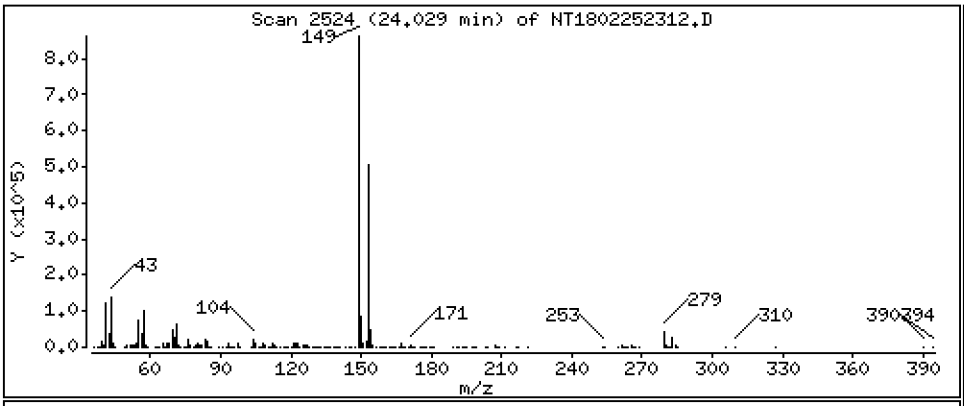
Operator: VTS

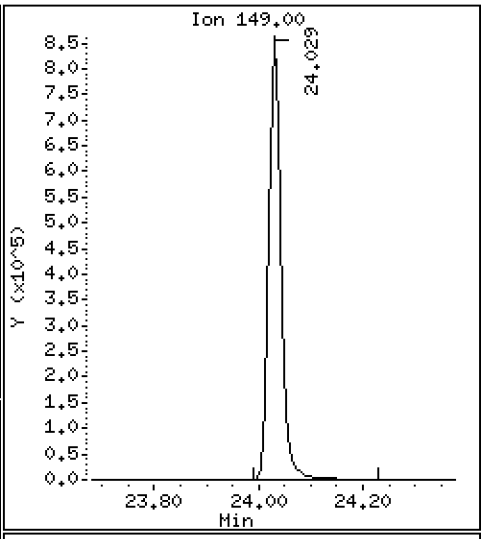
Column phase: ZB-5msi

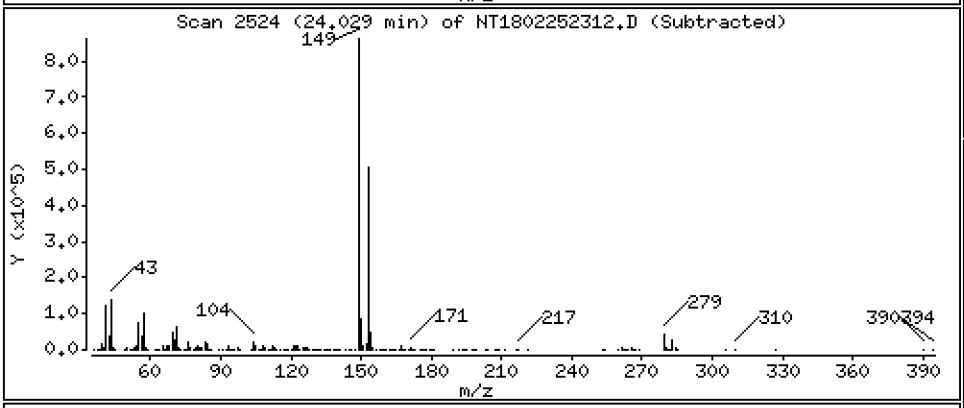
Column diameter: 0.25

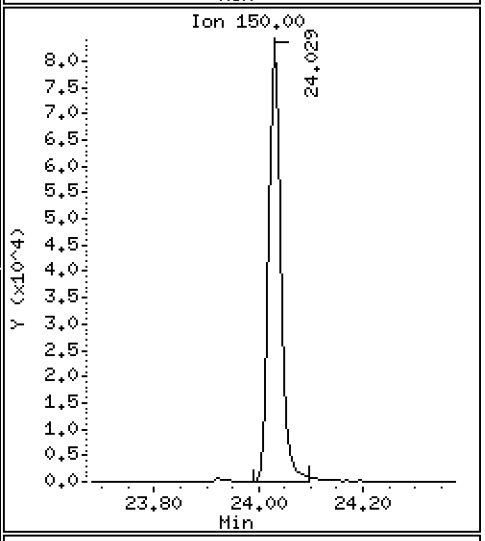
73 Di-n-octylphthalate

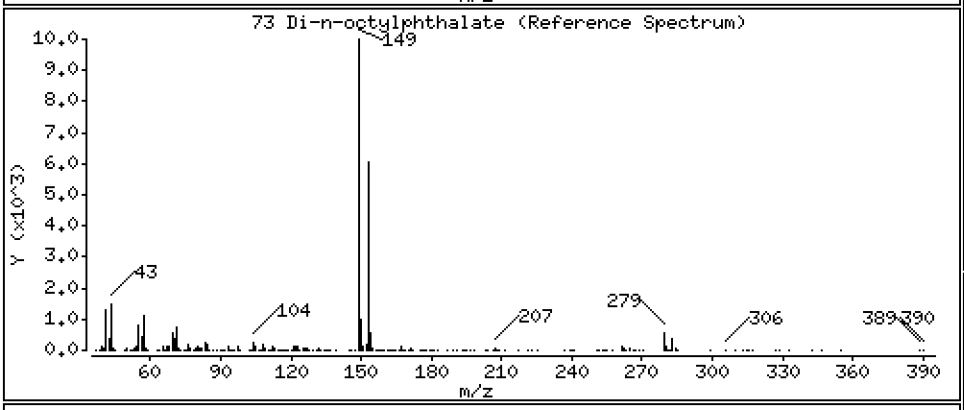
Concentration: 4.813 ug/mL

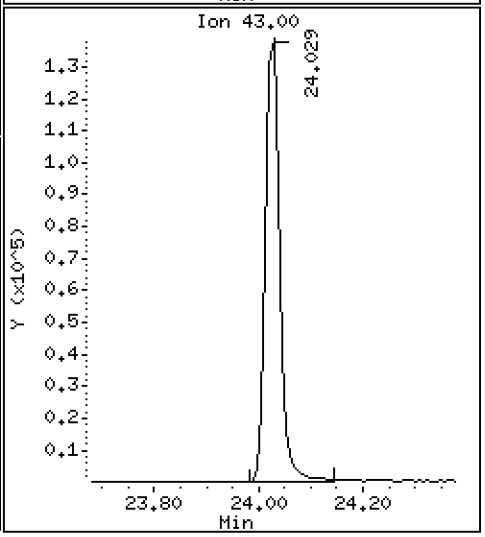


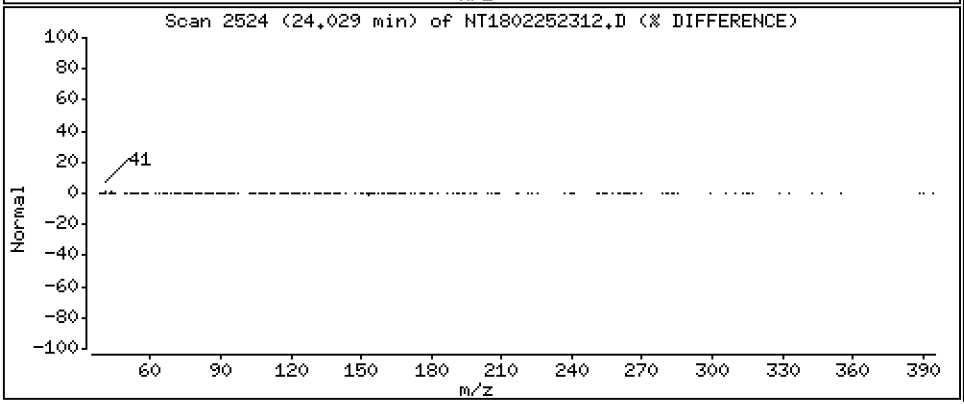












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

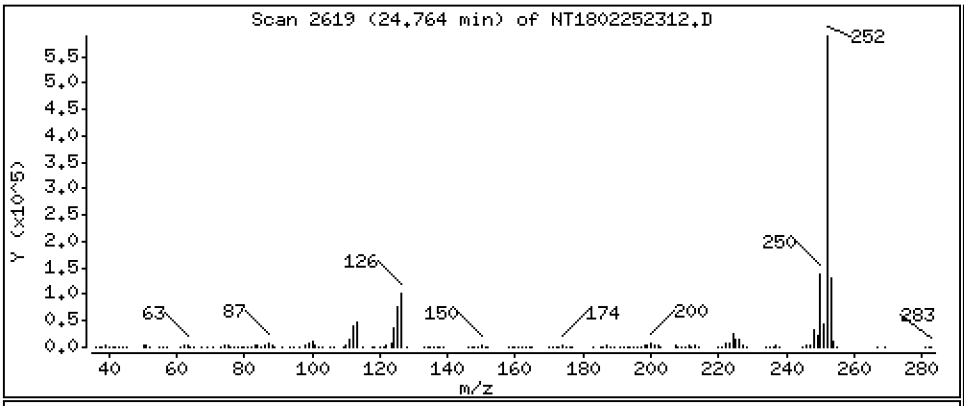
Operator: VTS

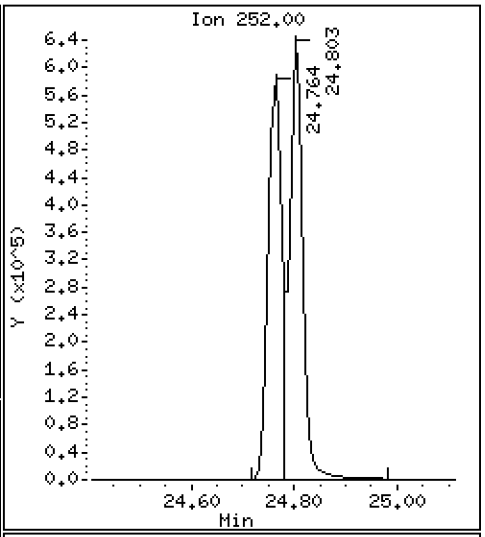
Column phase: ZB-5msi

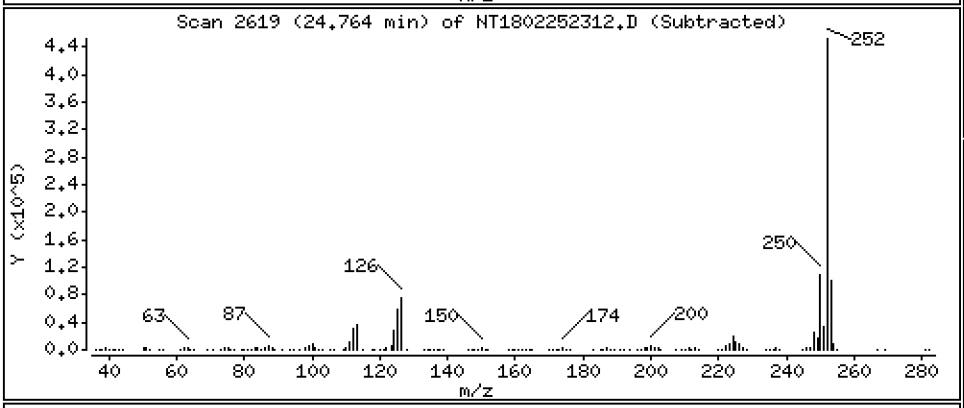
Column diameter: 0.25

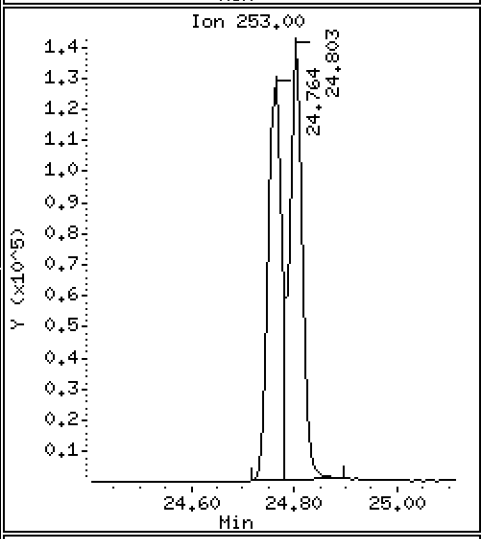
74 Benzo(b)fluoranthene

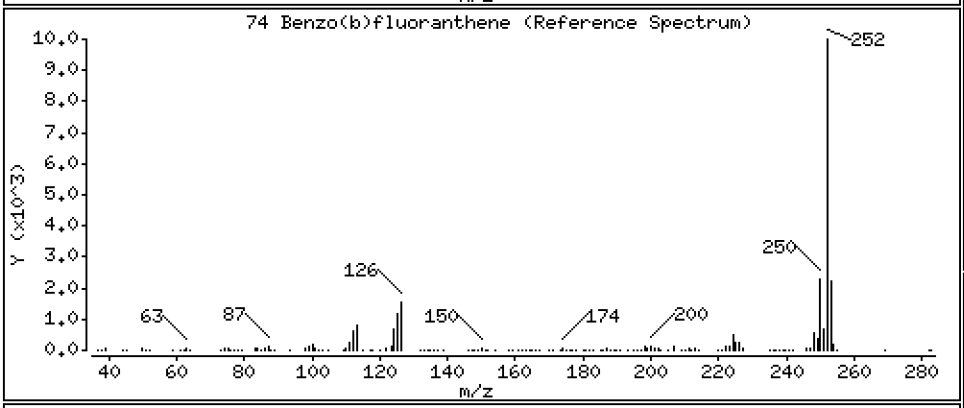
Concentration: 4.319 ug/mL

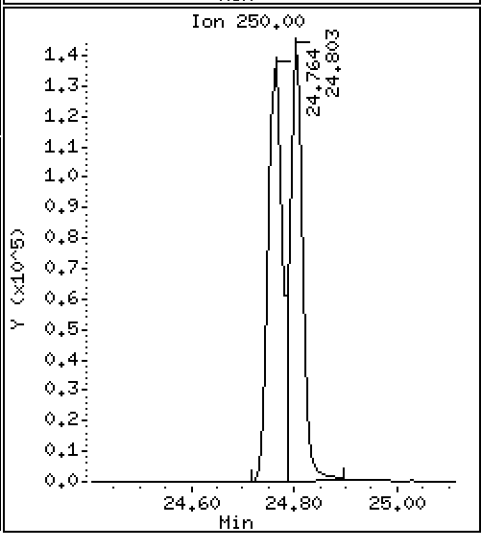


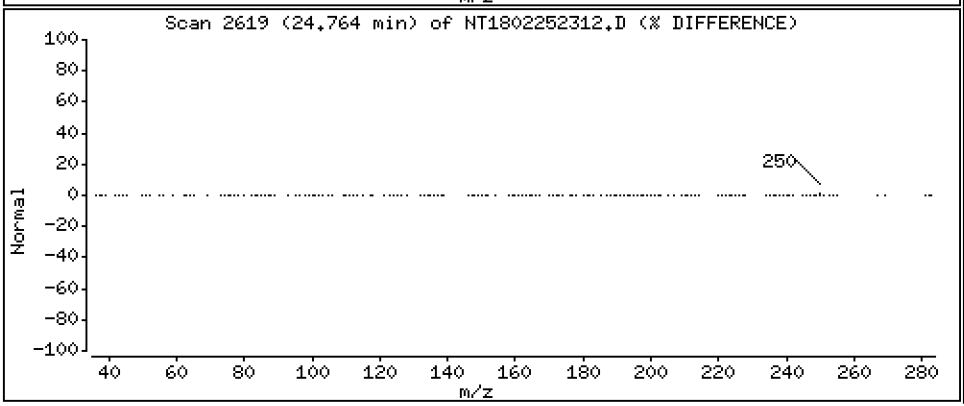












Date : 26-FEB-2023 04:06

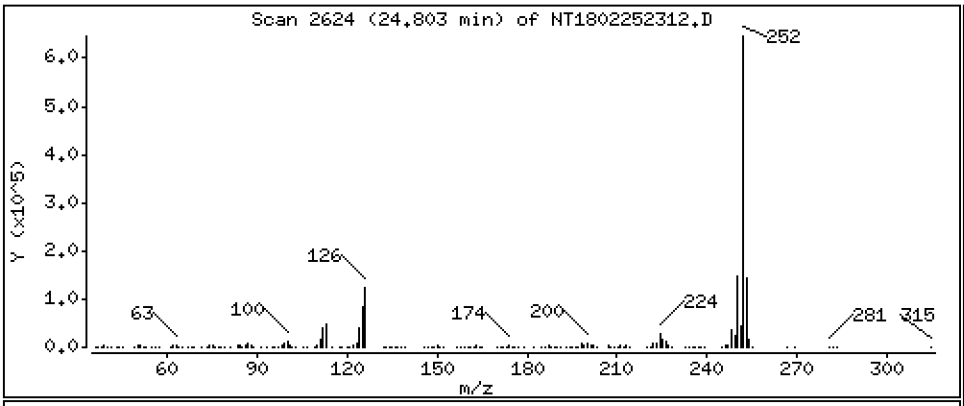
Client ID: Instrument: nt18.i

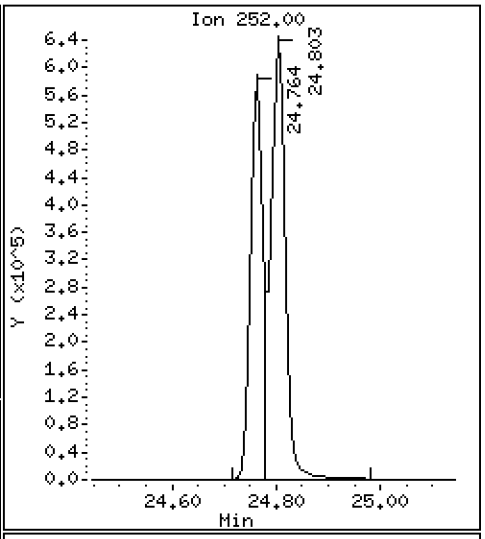
Sample Info: SLC0099-SCV1

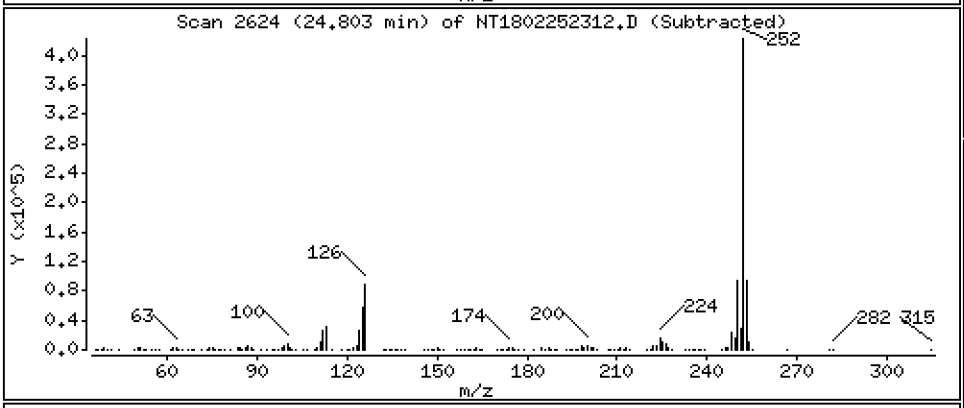
Operator: VTS

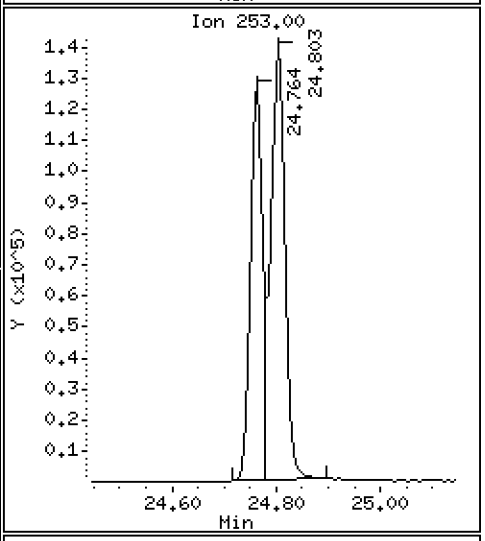
Column phase: ZB-5msi Column diameter: 0.25

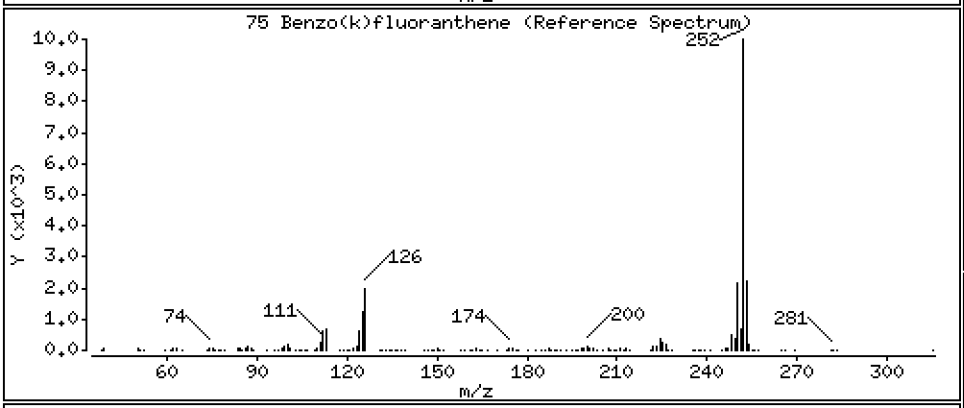
75 Benzo(k)fluoranthene Concentration: 4.735 ug/mL

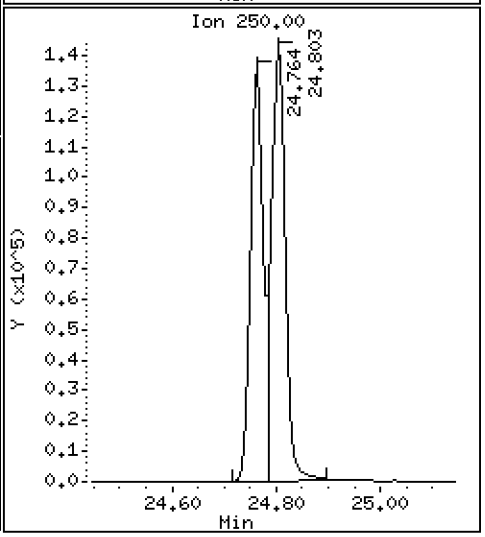


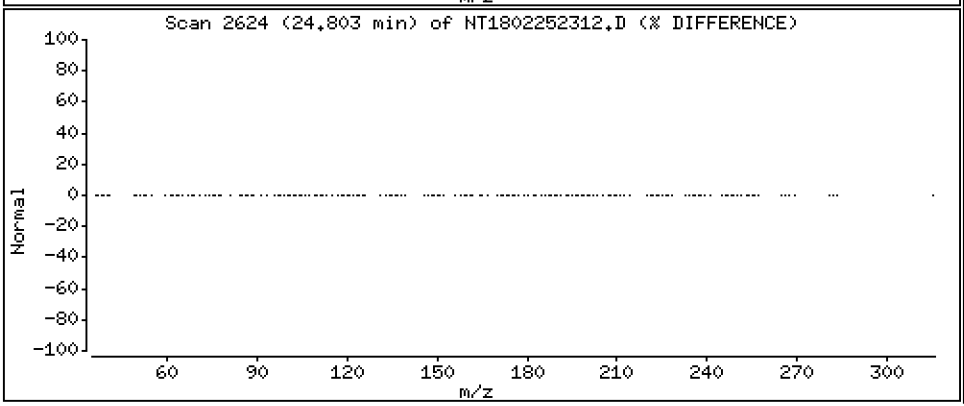












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

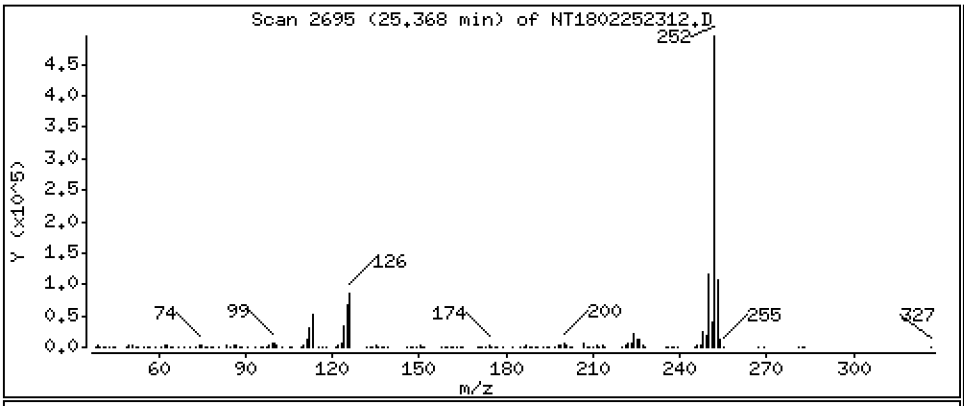
Operator: VTS

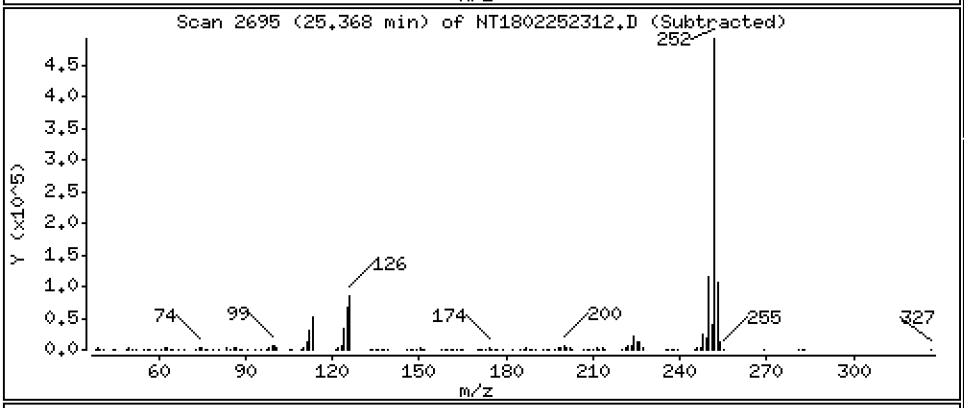
Column phase: ZB-5msi

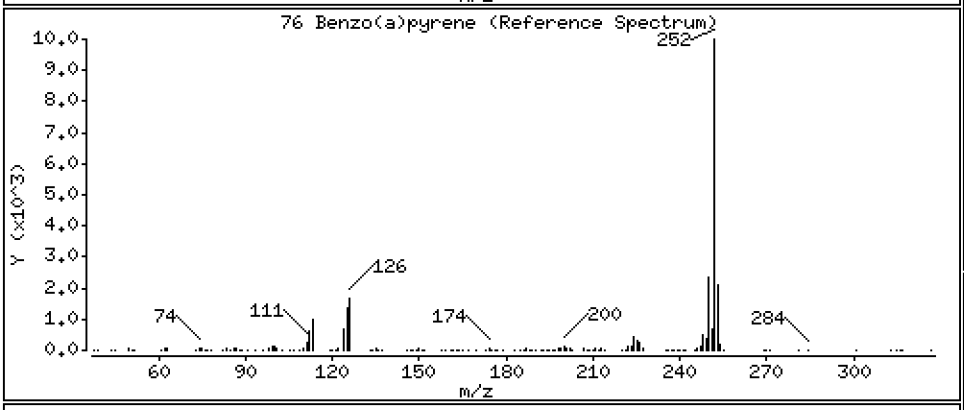
Column diameter: 0.25

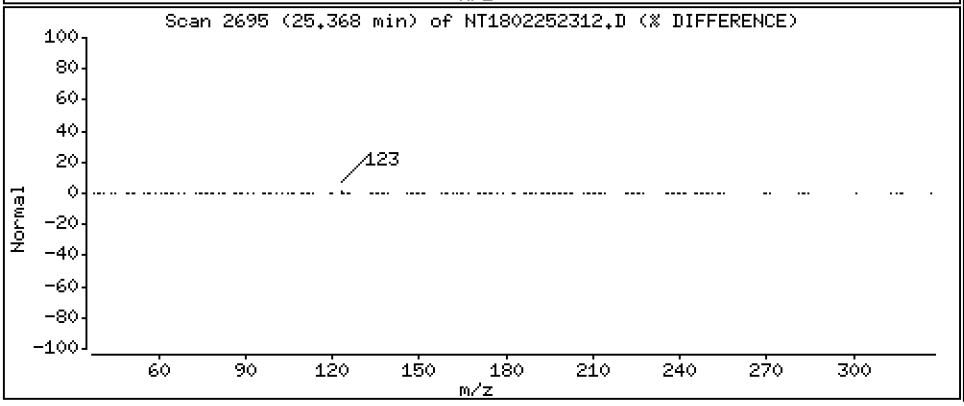
76 Benzo(a)pyrene

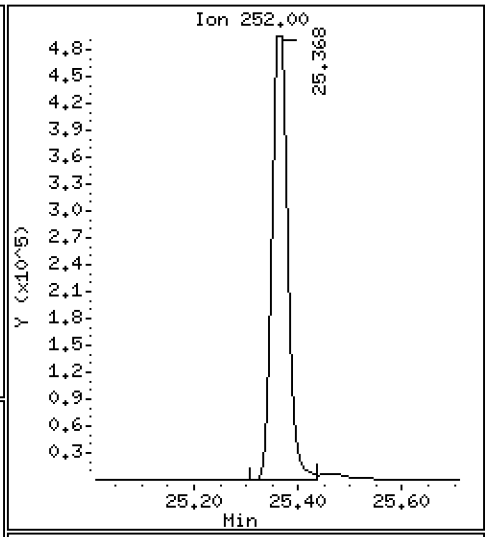
Concentration: 4.590 ug/mL

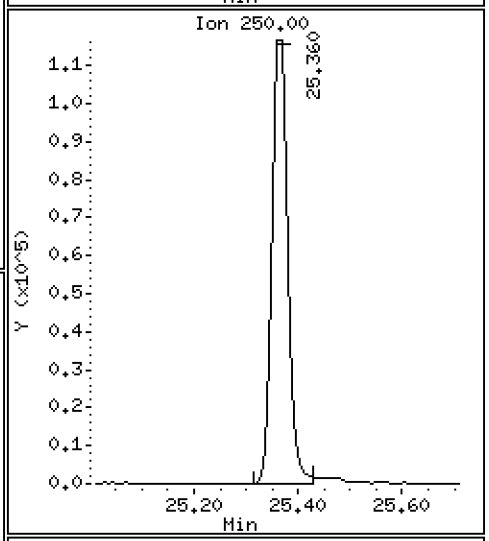


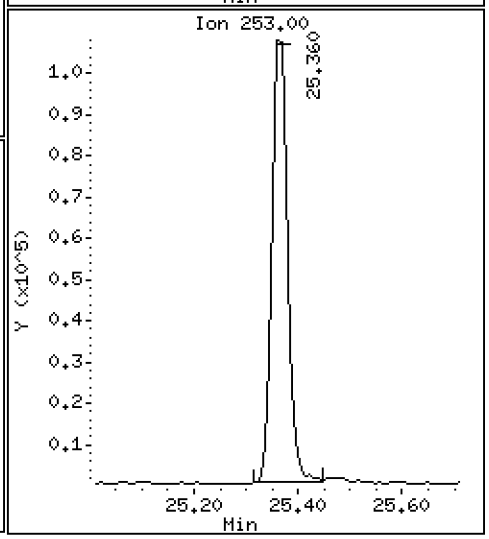












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

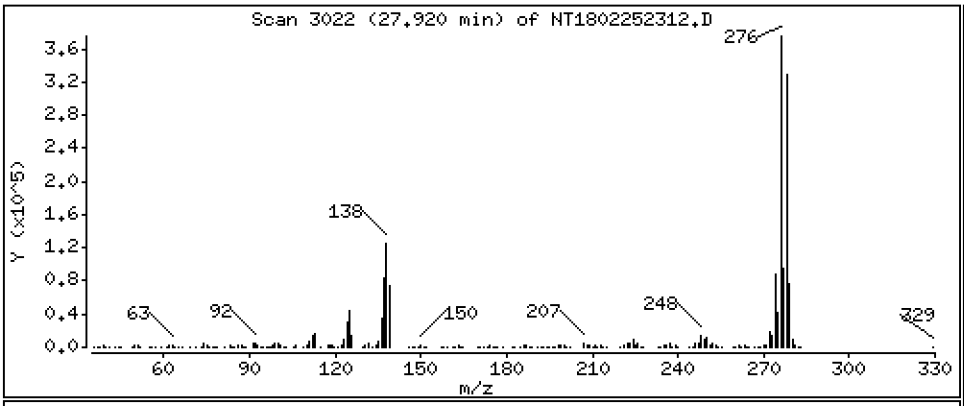
Operator: VTS

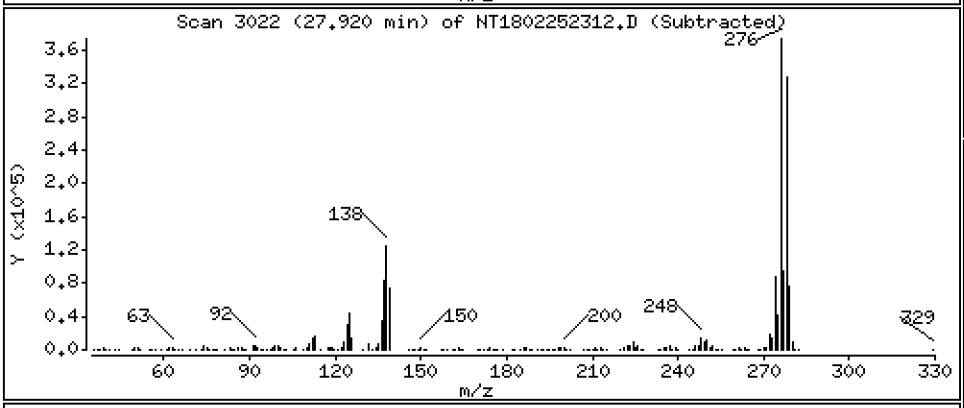
Column phase: ZB-5msi

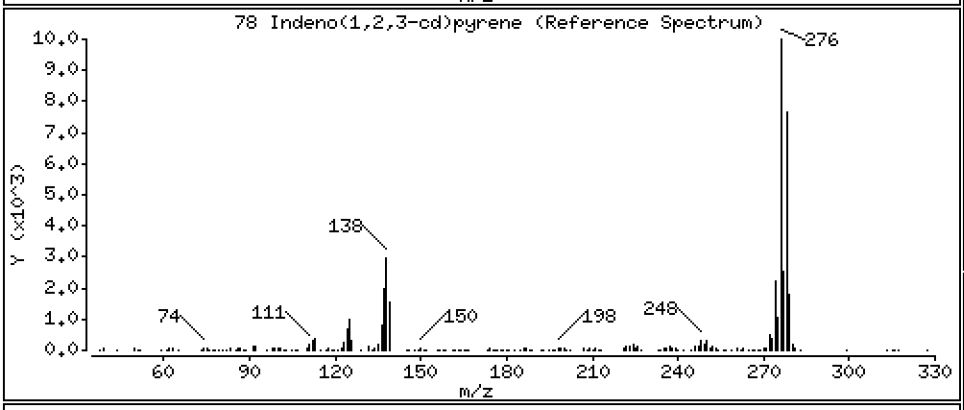
Column diameter: 0.25

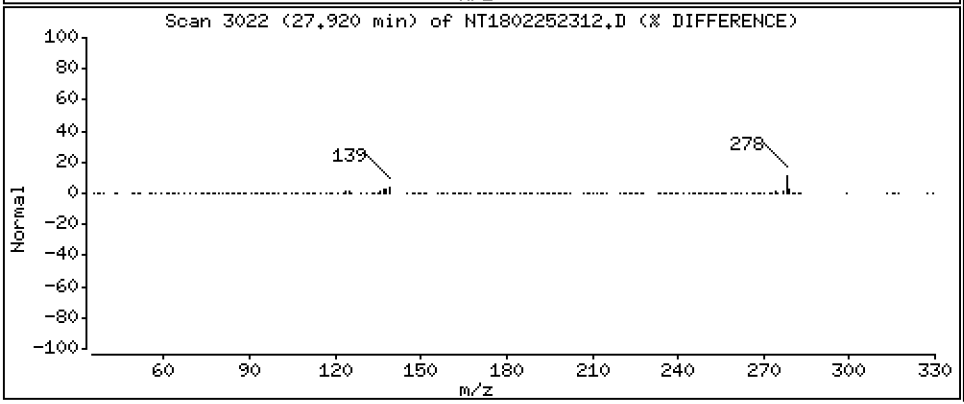
78 Indeno(1,2,3-cd)pyrene

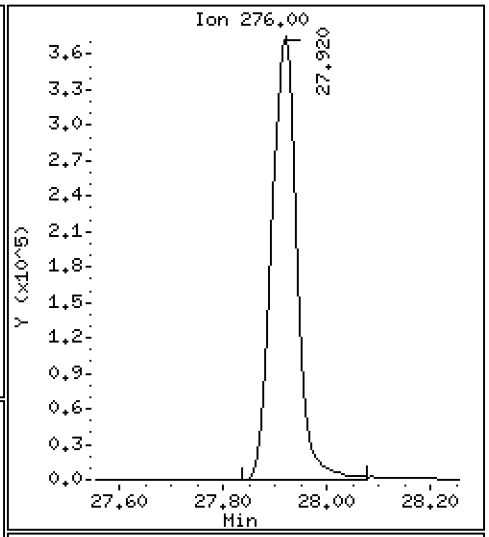
Concentration: 4.636 ug/mL

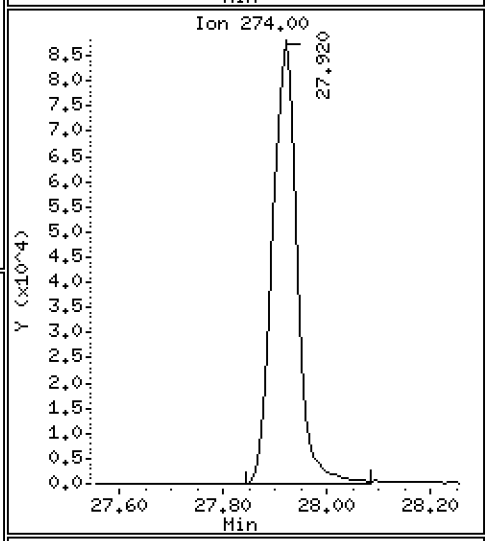


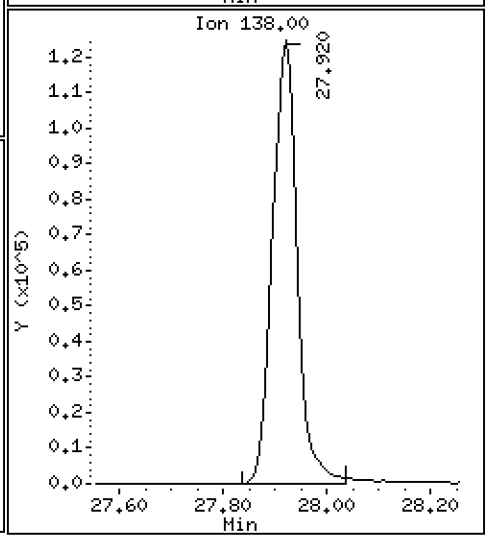












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

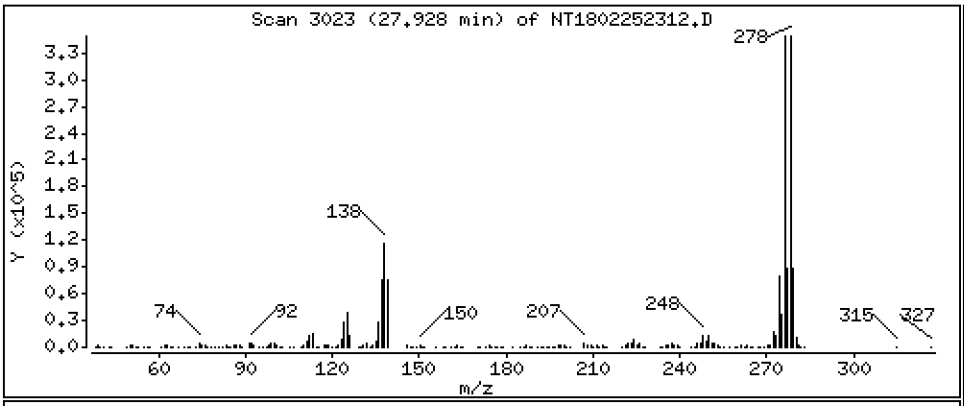
Operator: VTS

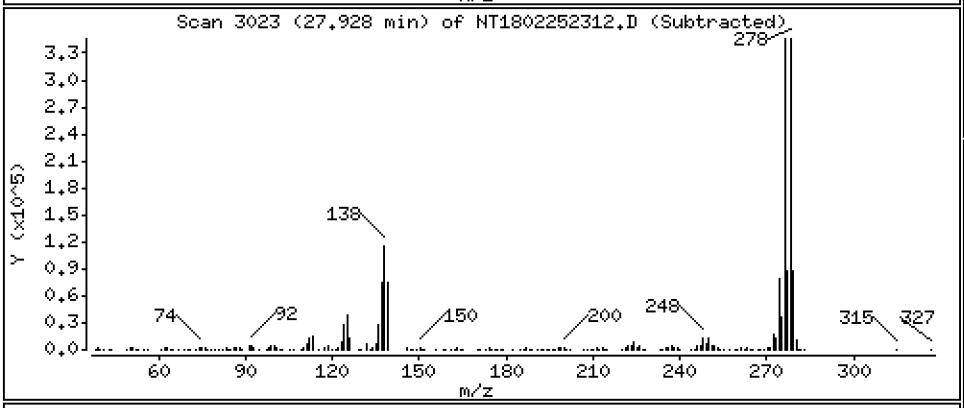
Column phase: ZB-5msi

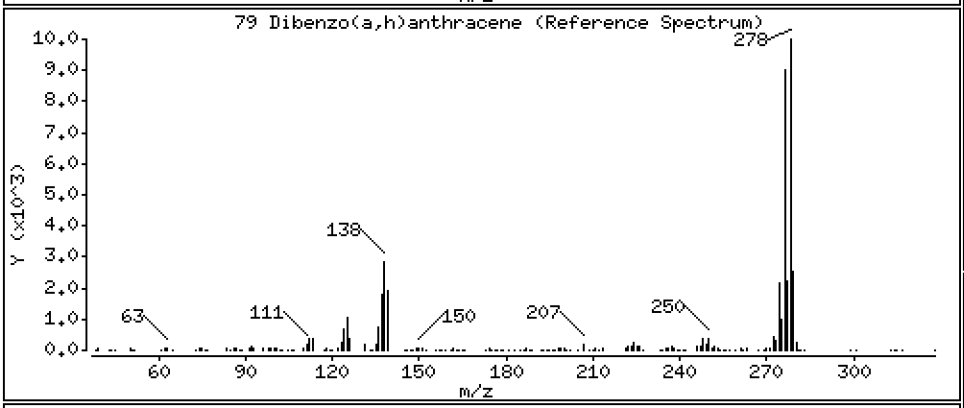
Column diameter: 0.25

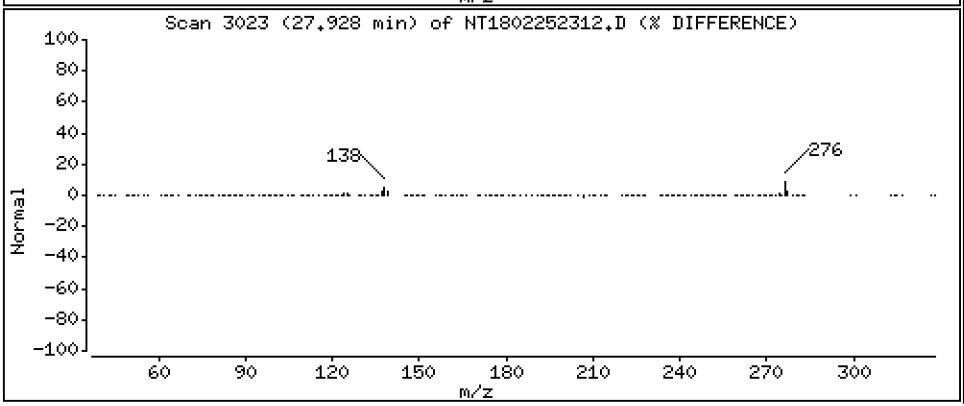
79 Dibenzo(a,h)anthracene

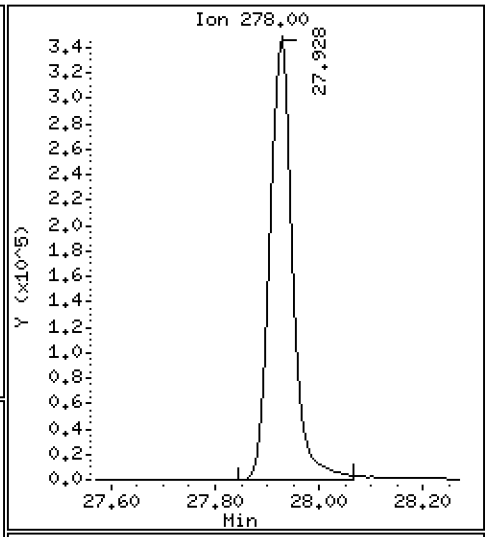
Concentration: 4.580 ug/mL

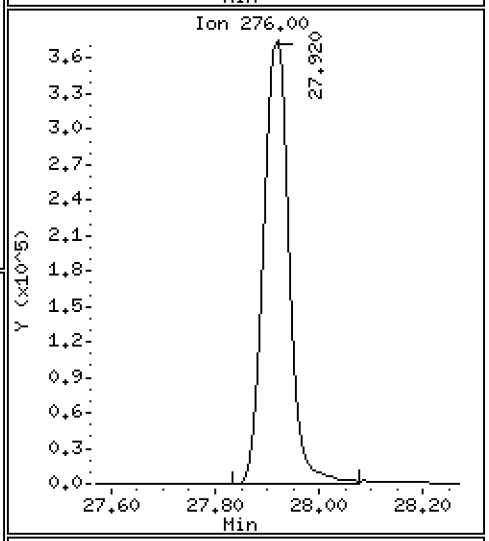


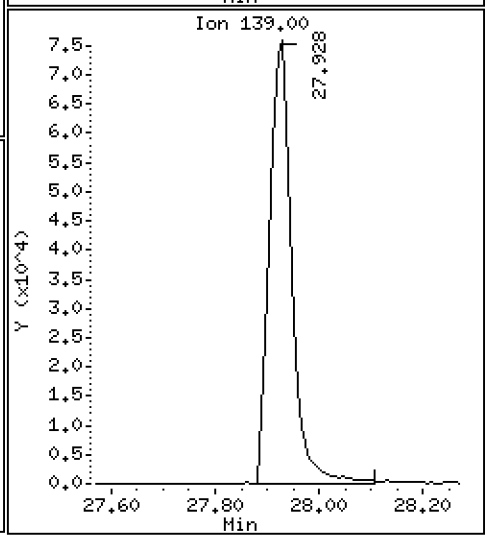












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

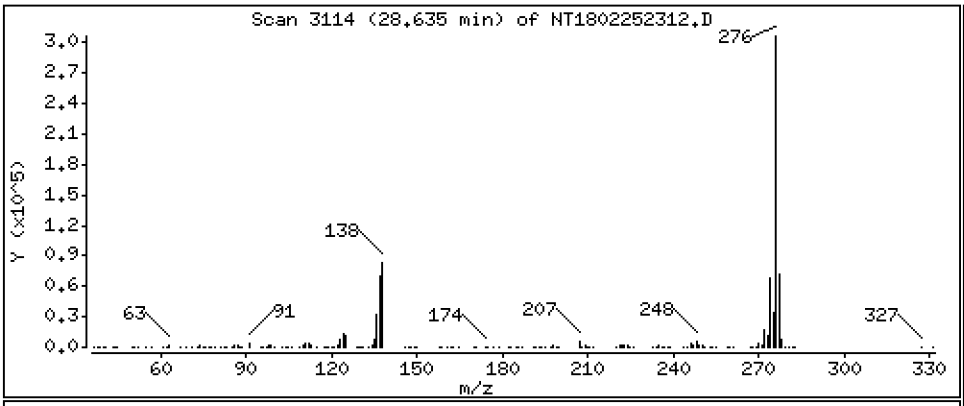
Operator: VTS

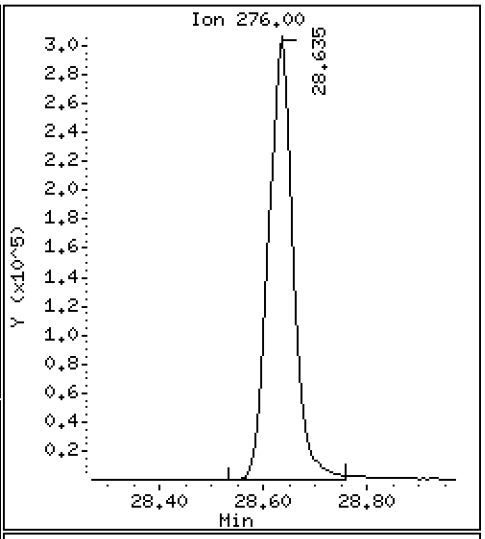
Column phase: ZB-5msi

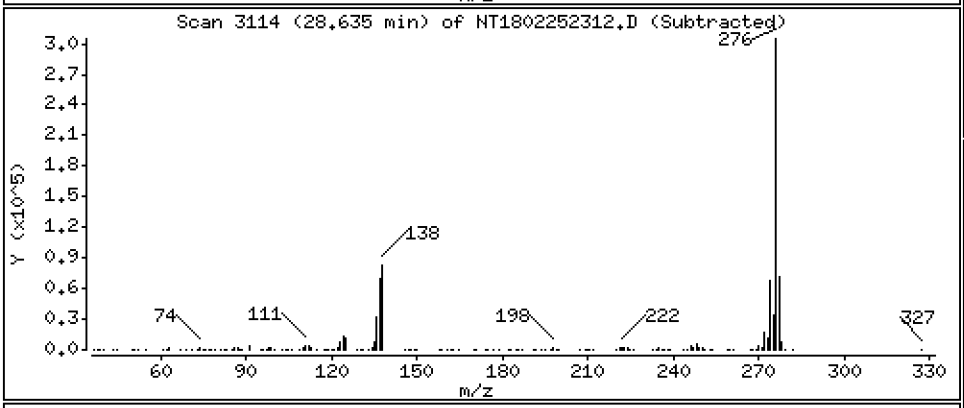
Column diameter: 0.25

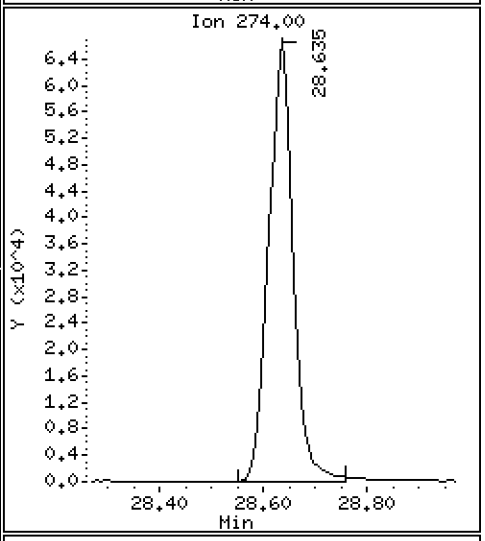
80 Benzo(g,h,i)perylene

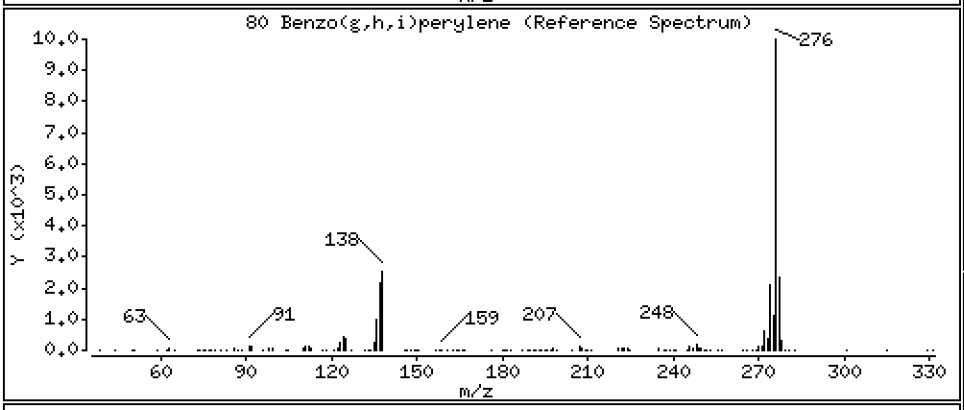
Concentration: 4.593 ug/mL

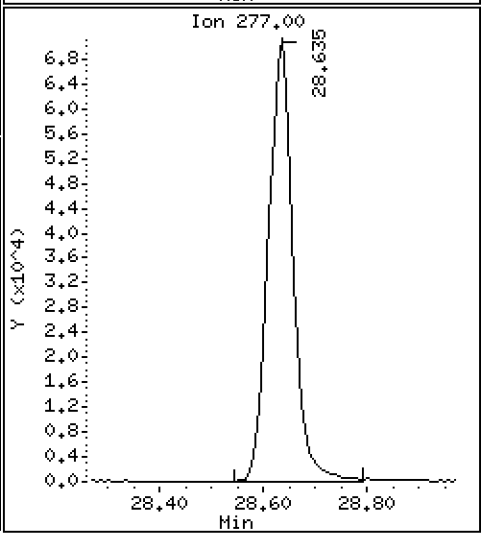


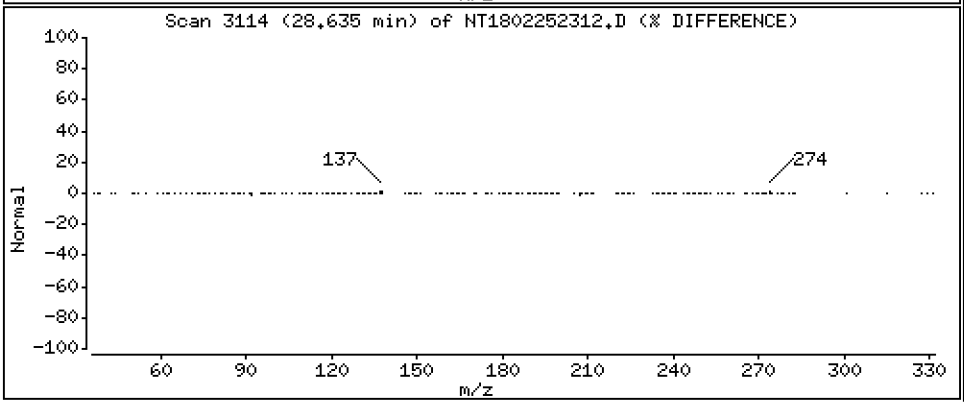












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

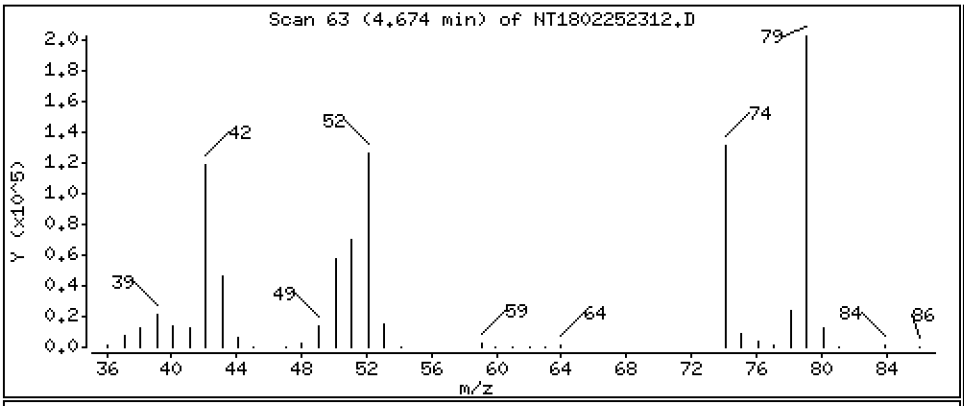
Operator: VTS

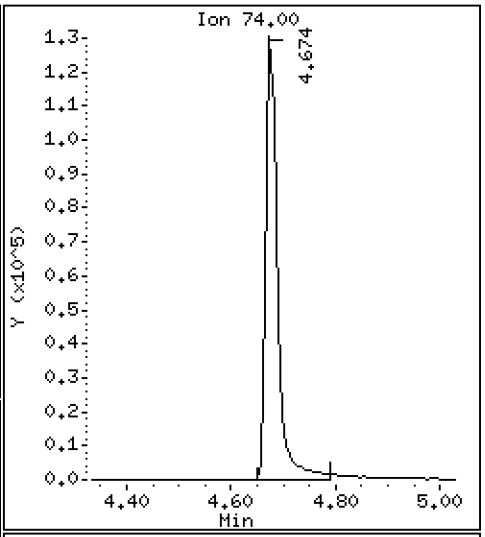
Column phase: ZB-5msi

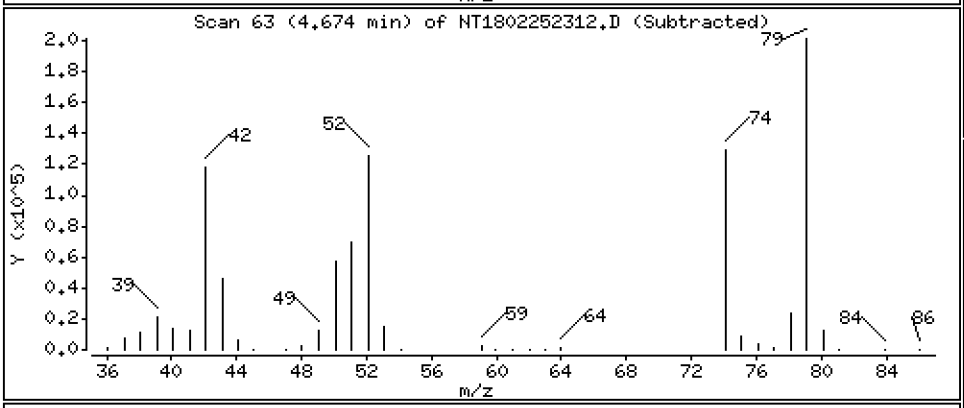
Column diameter: 0.25

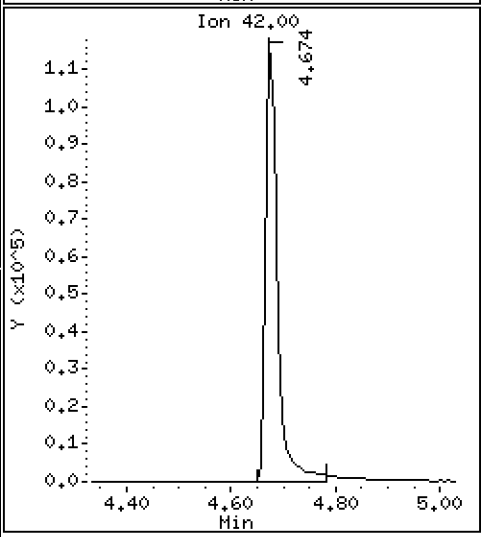
90 N-Nitrosodimethylamine

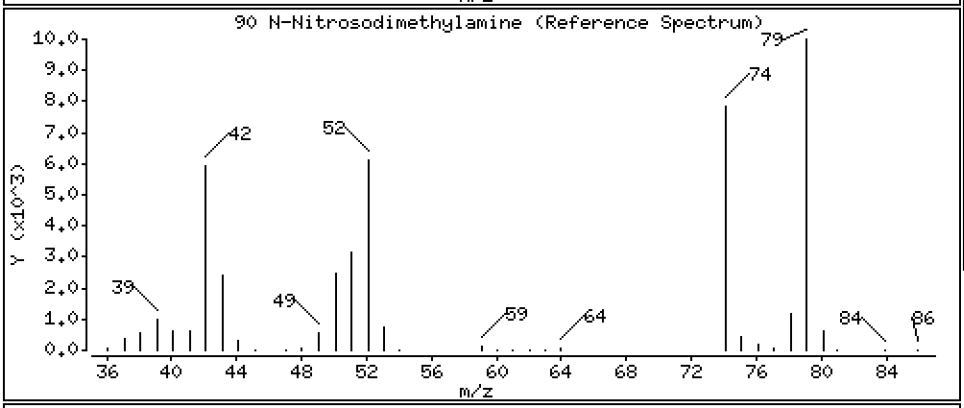
Concentration: 4.810 ug/mL

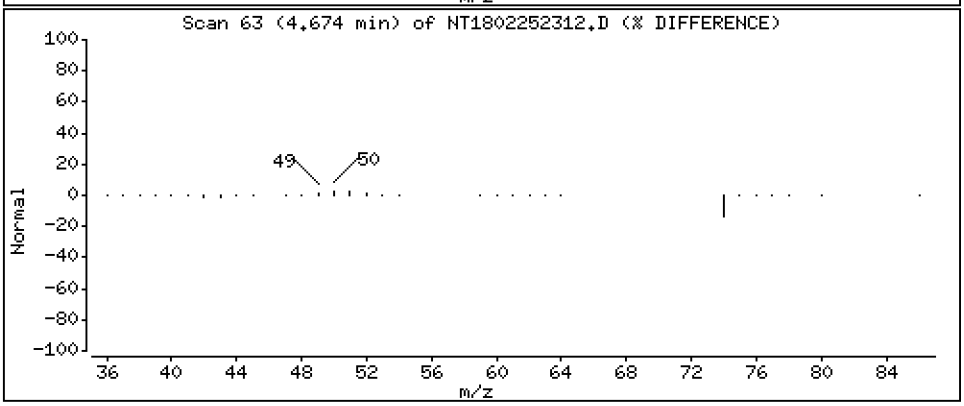












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

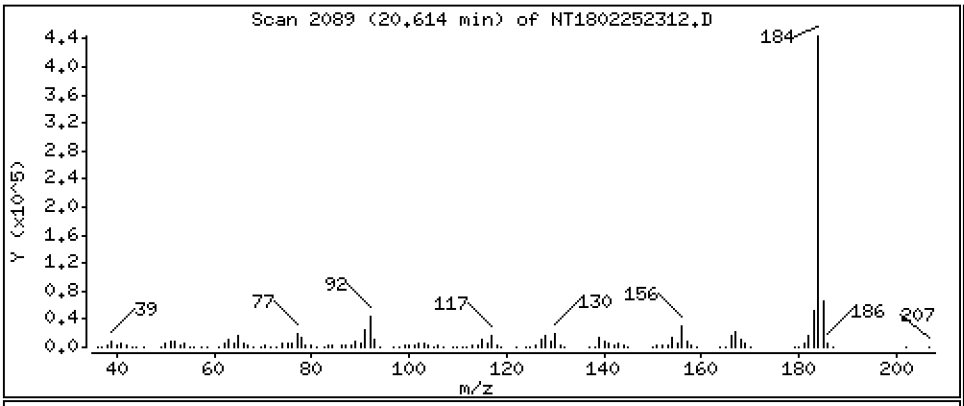
Operator: VTS

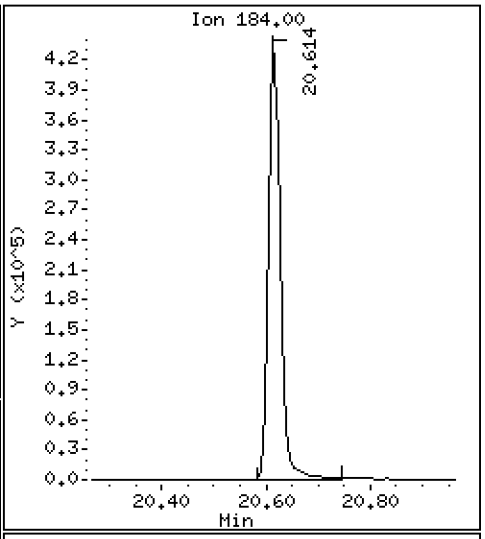
Column phase: ZB-5msi

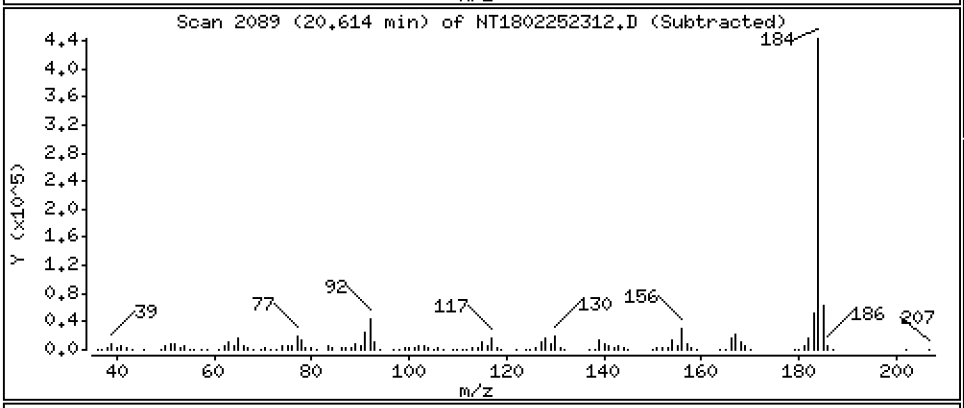
Column diameter: 0.25

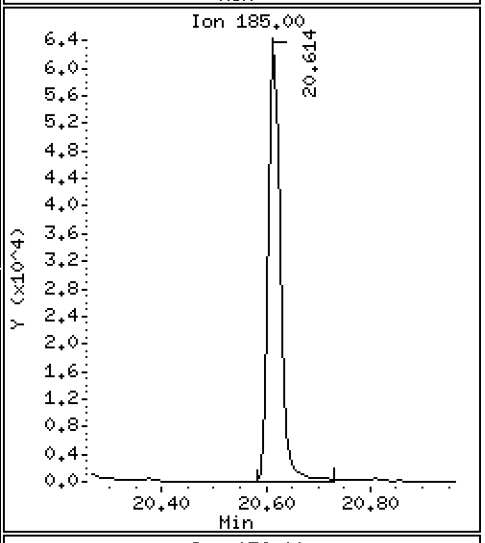
93 Benzidine

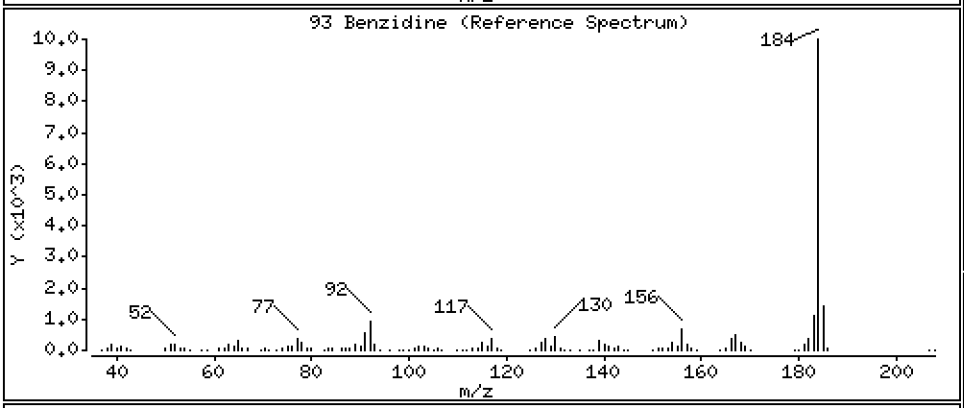
Concentration: 5.813 ug/mL

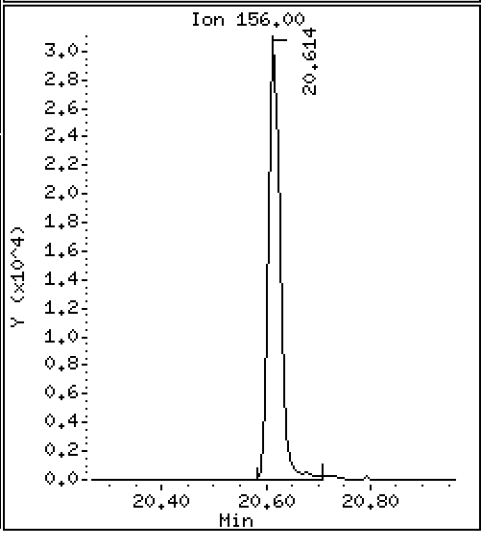


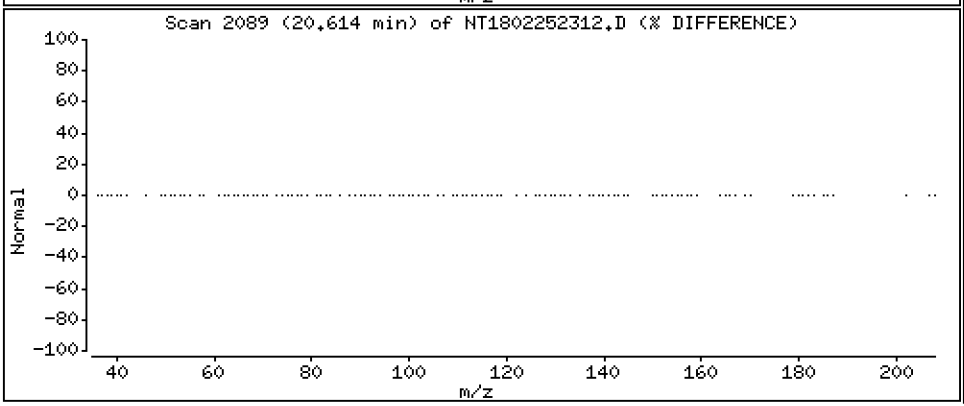












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

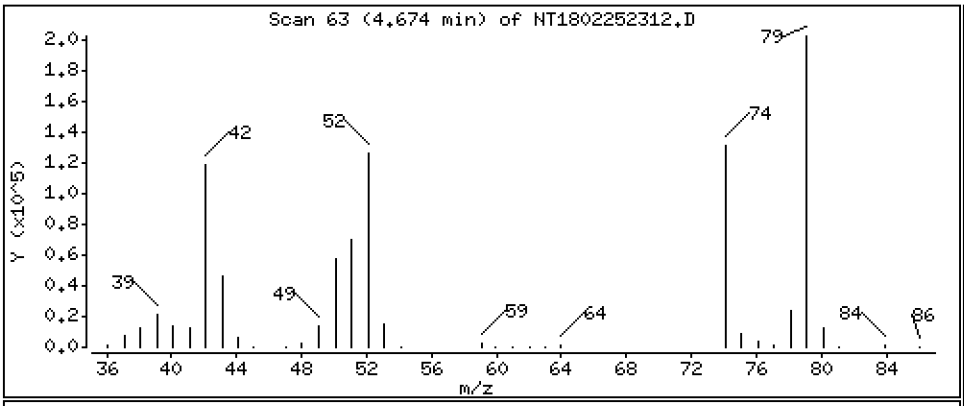
Operator: VTS

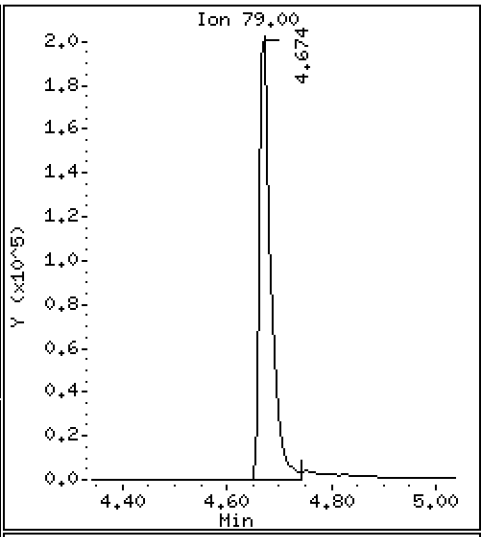
Column phase: ZB-5msi

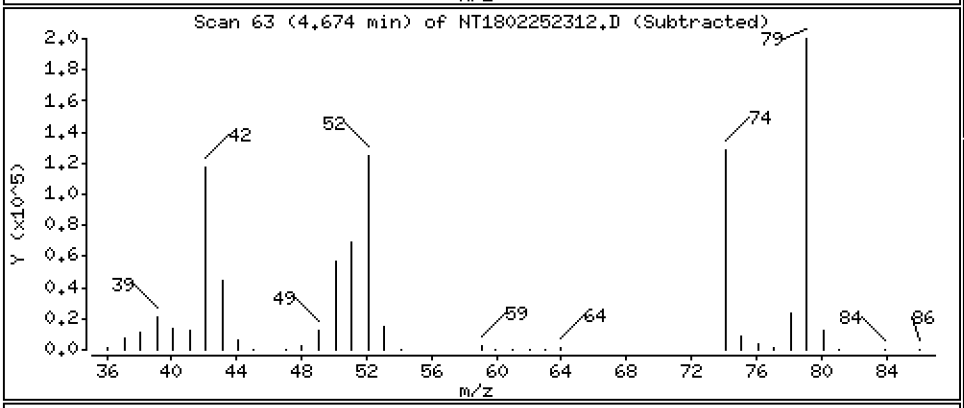
Column diameter: 0.25

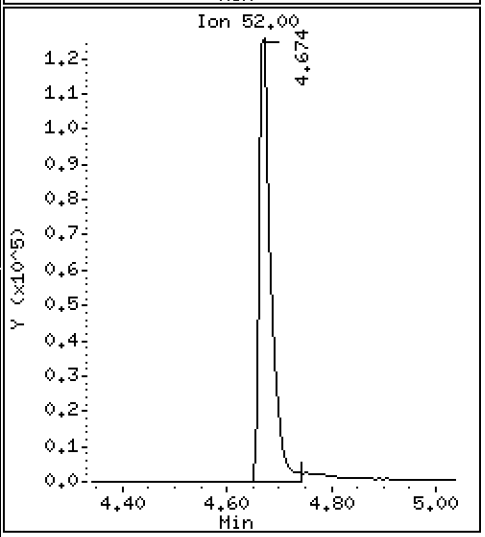
103 Pyridine

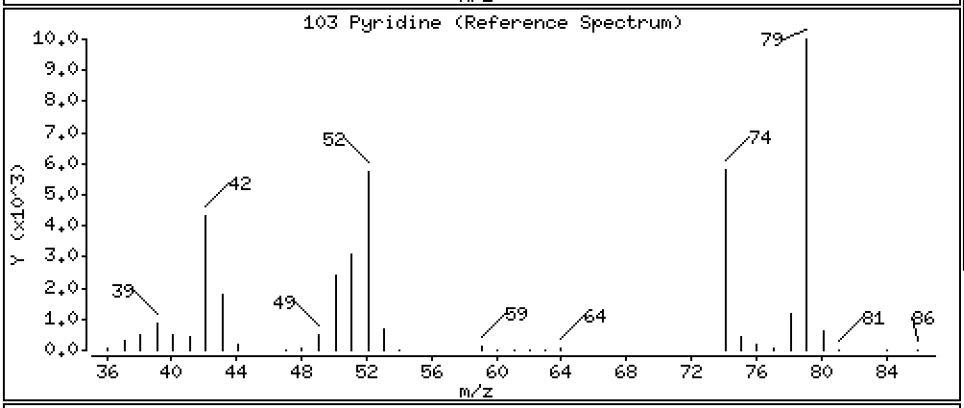
Concentration: 4.694 ug/mL

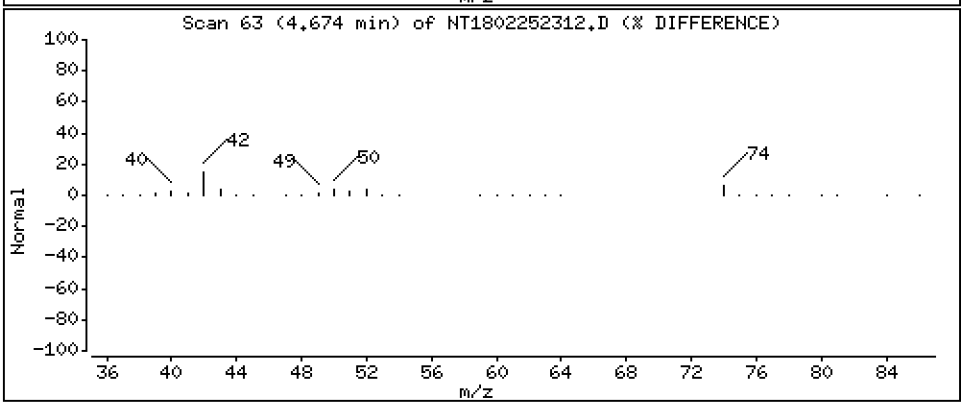












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

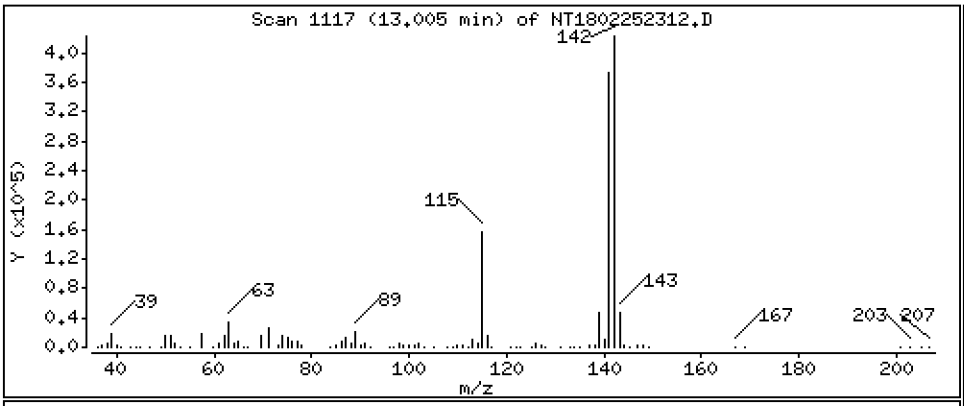
Operator: VTS

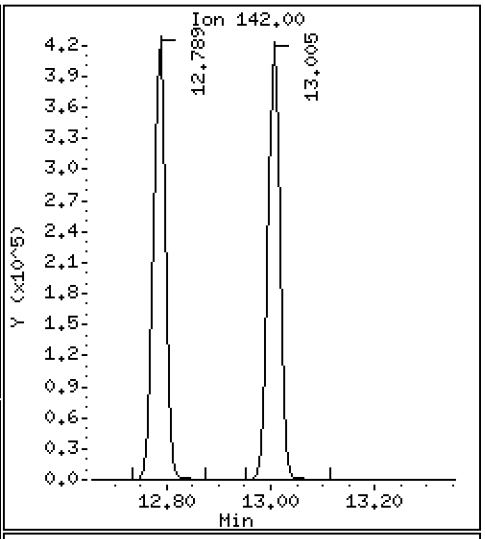
Column phase: ZB-5msi

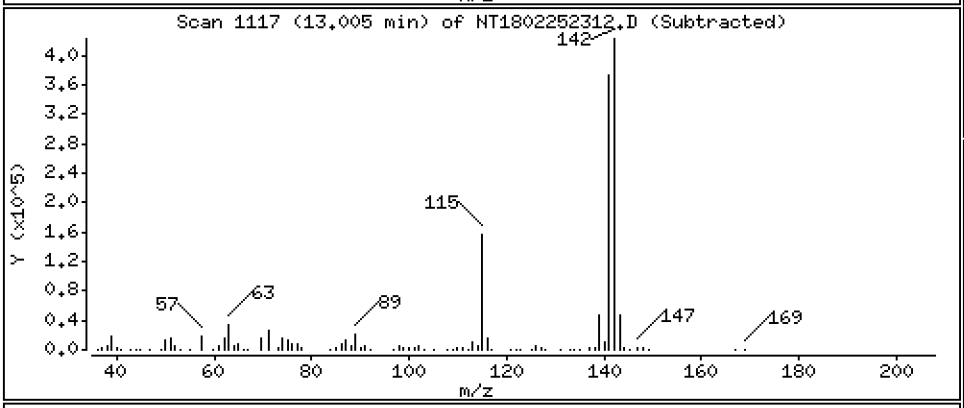
Column diameter: 0.25

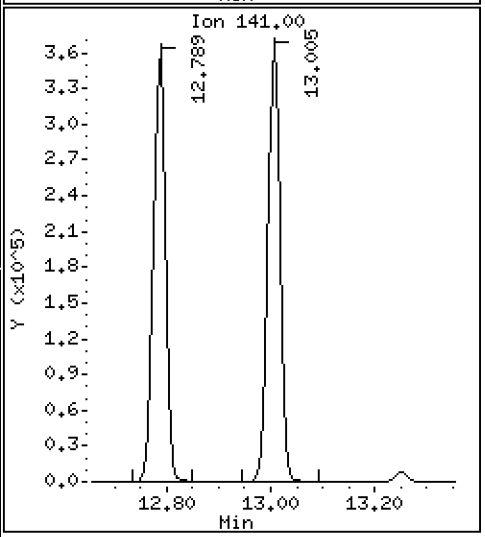
105 1-methylnaphthalene

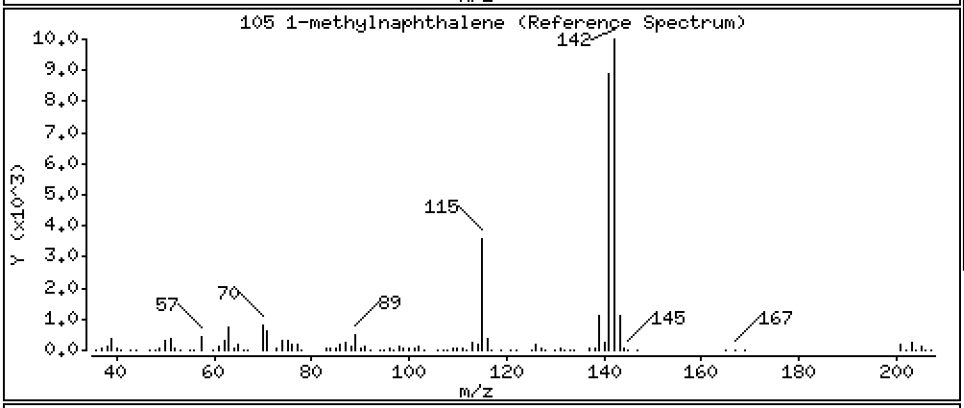
Concentration: 4.486 ug/mL

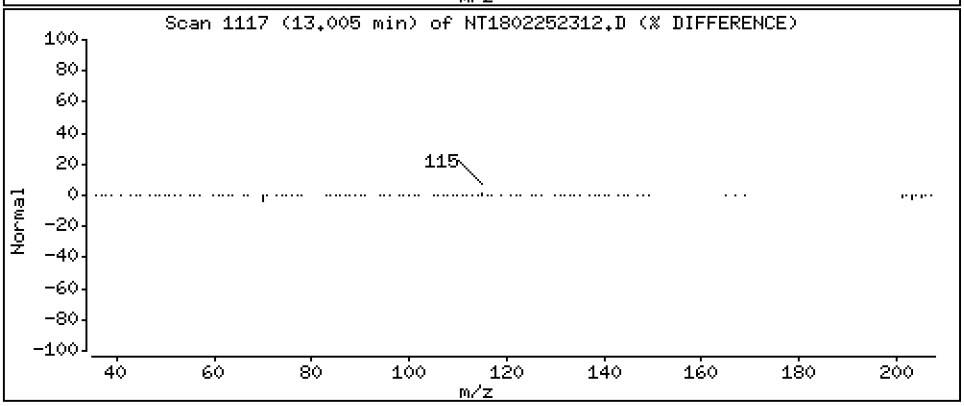












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

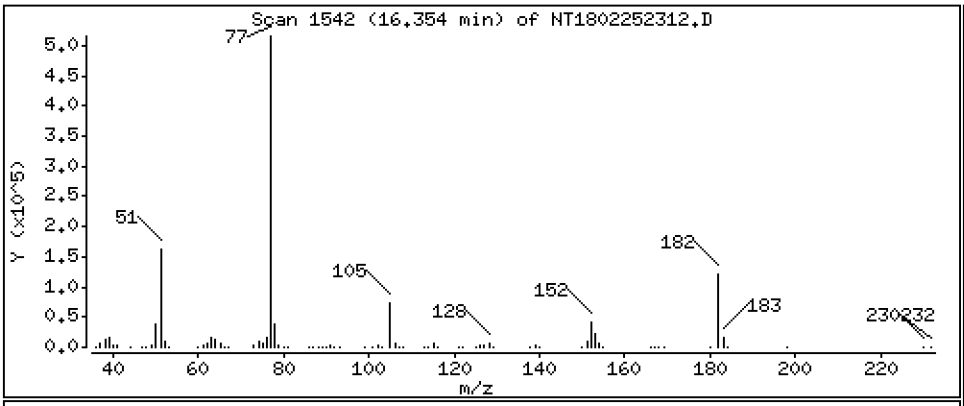
Operator: VTS

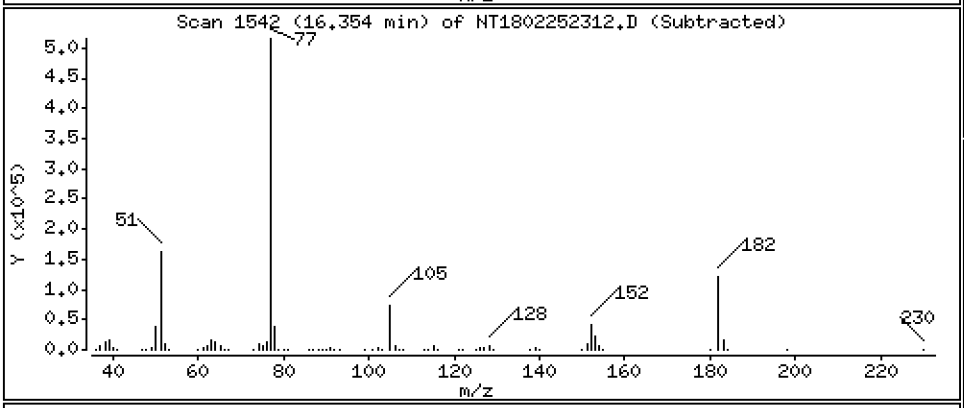
Column phase: ZB-5msi

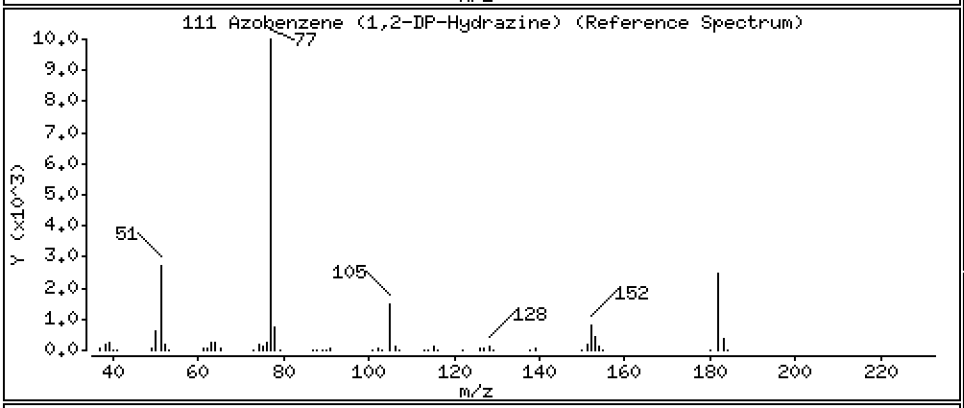
Column diameter: 0.25

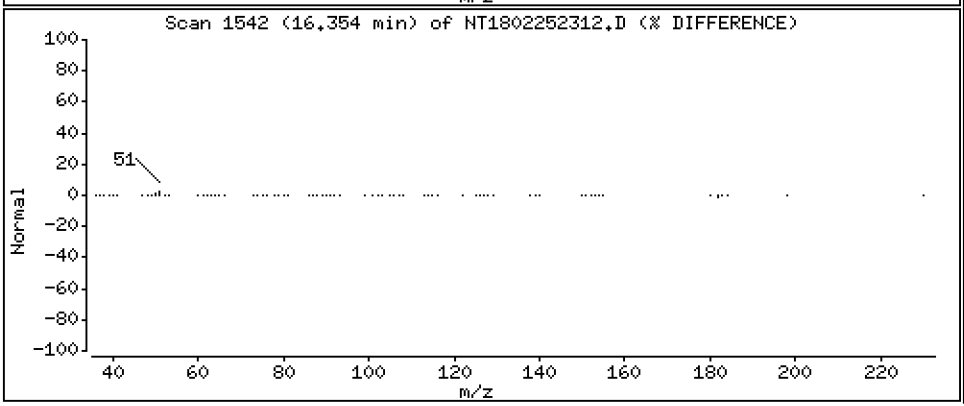
111 Azobenzene (1,2-DP-Hydrazine)

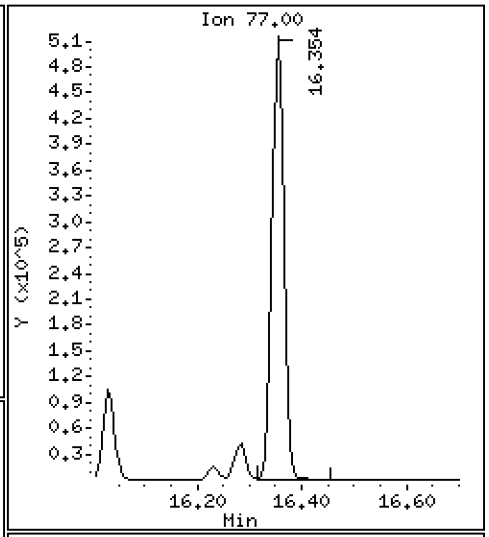
Concentration: 4.731 ug/mL

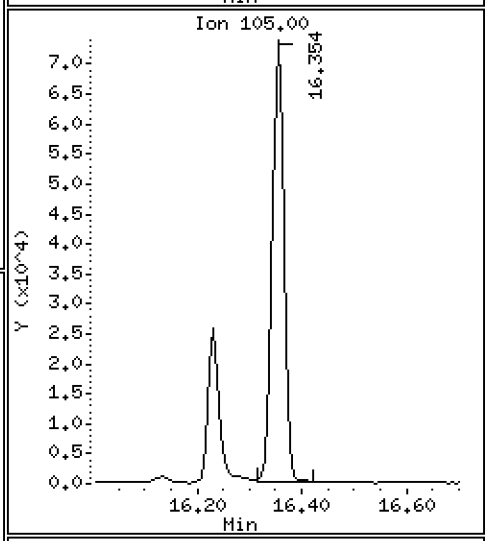


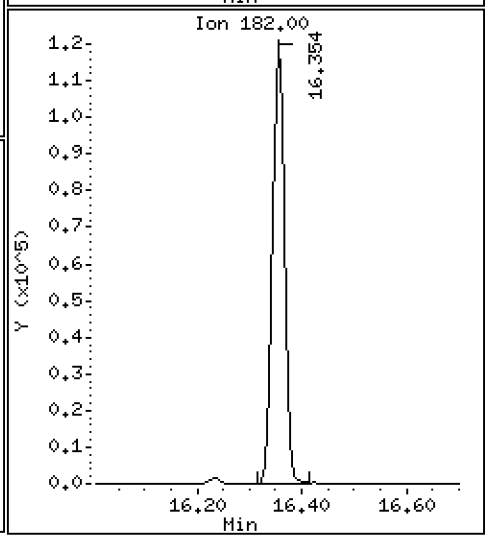












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

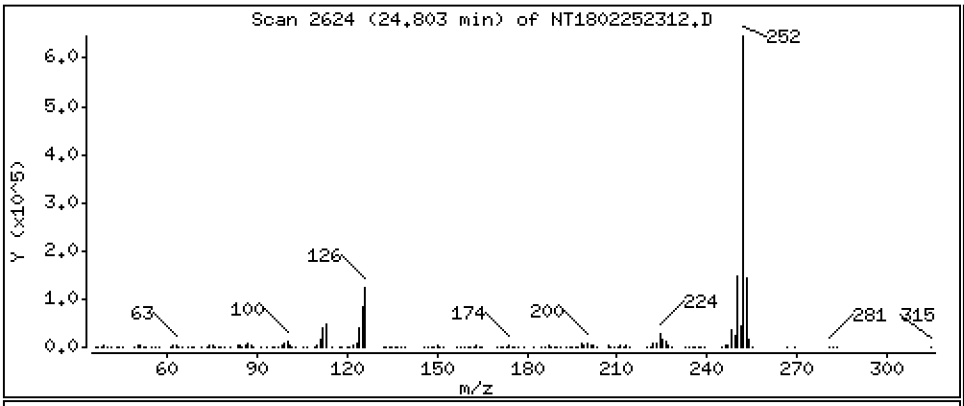
Operator: VTS

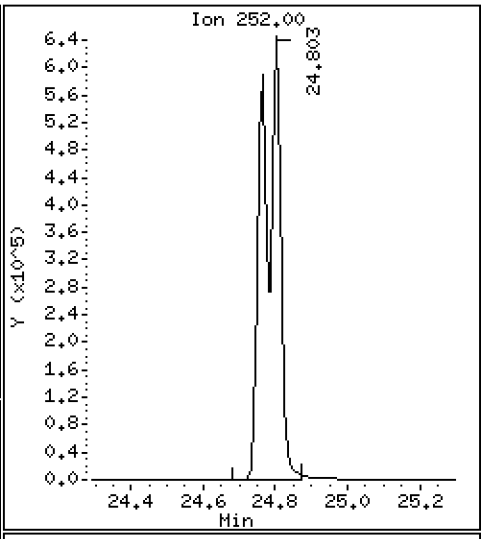
Column phase: ZB-5msi

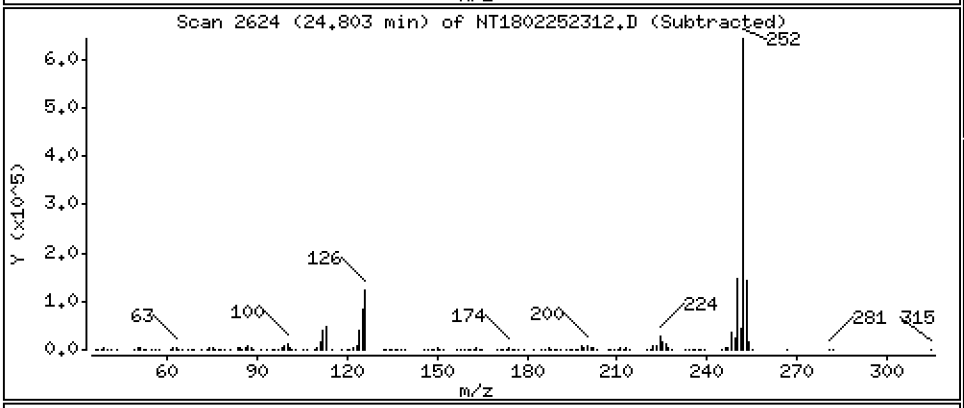
Column diameter: 0.25

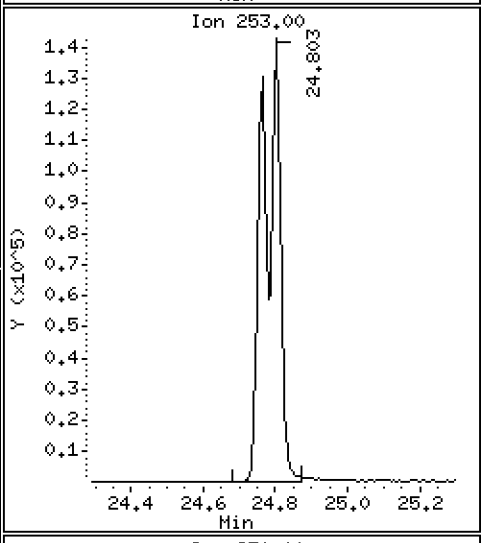
187 Total Benzofluoranthenes

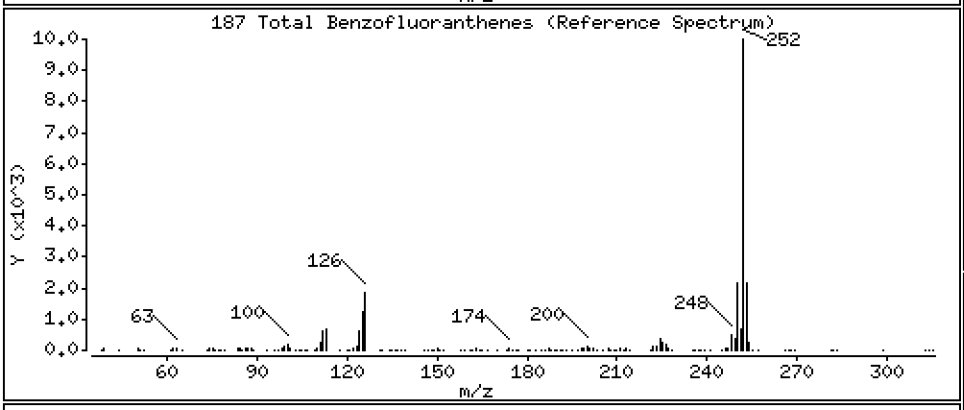
Concentration: 9.019 ug/mL

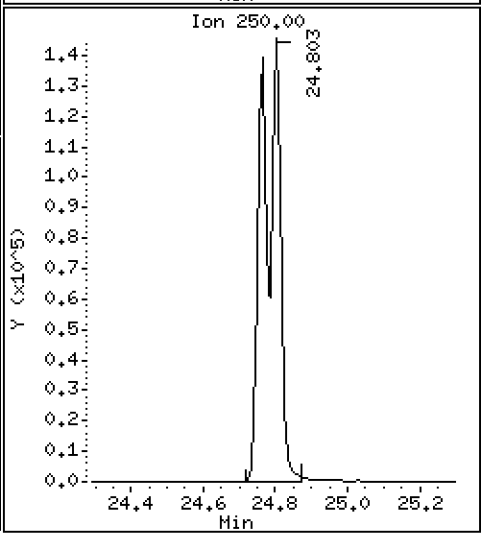


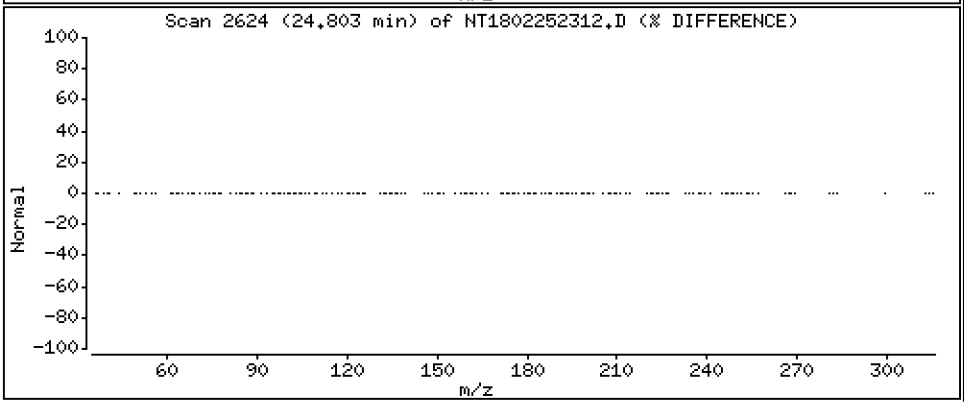












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

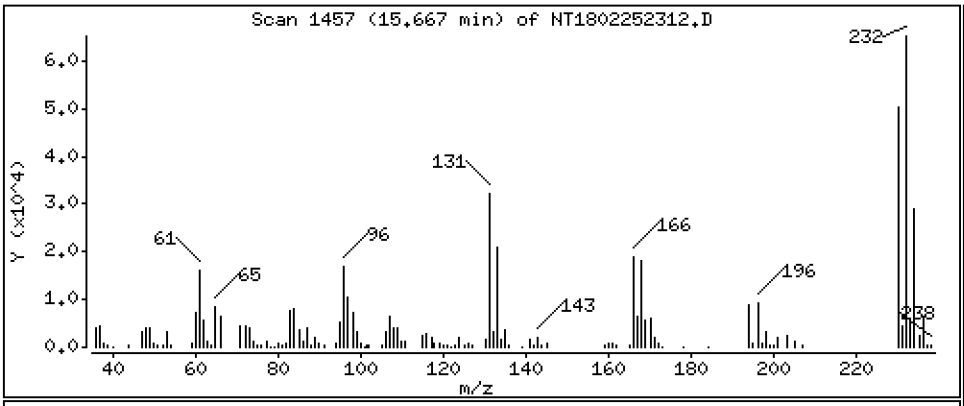
Operator: VTS

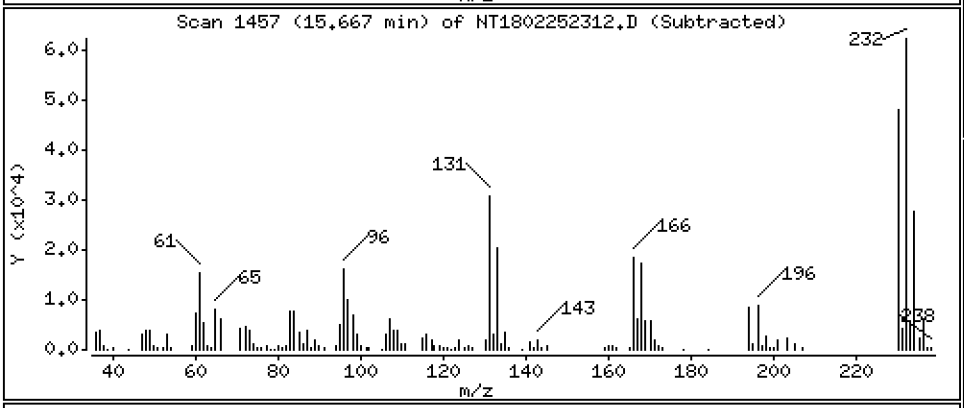
Column phase: ZB-5msi

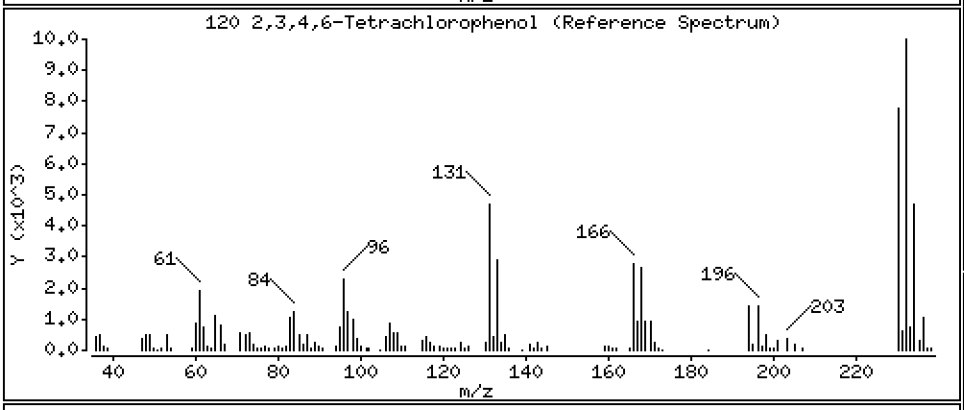
Column diameter: 0.25

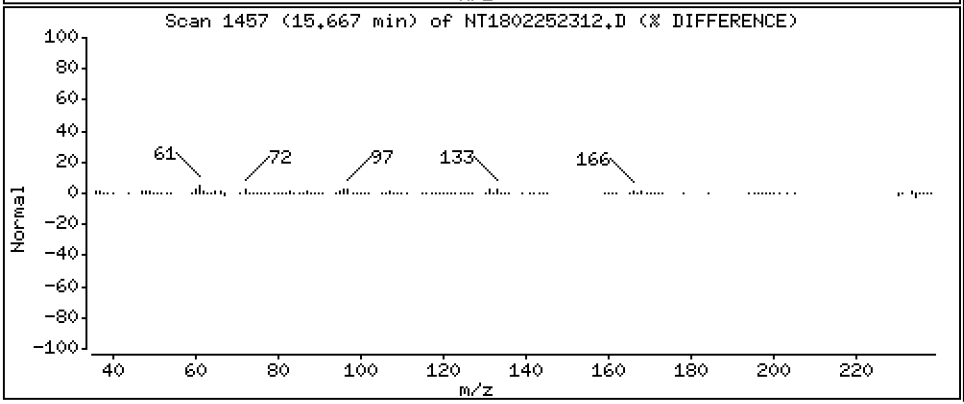
120 2,3,4,6-Tetrachlorophenol

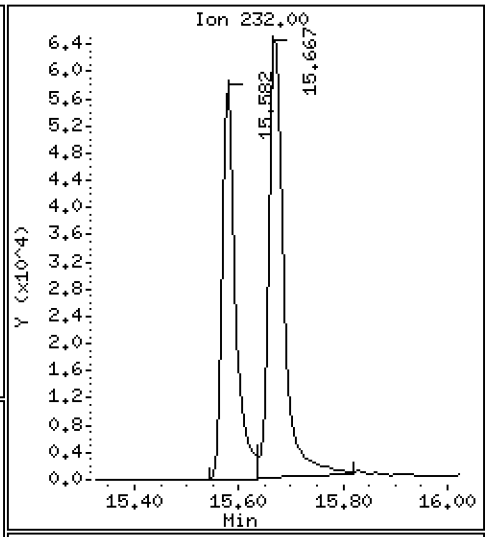
Concentration: 3.494 ug/mL

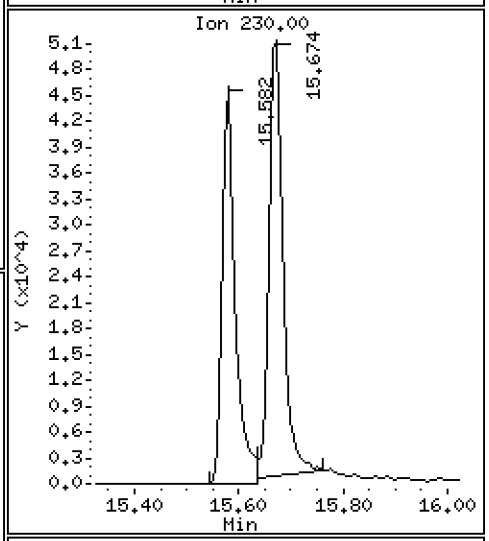


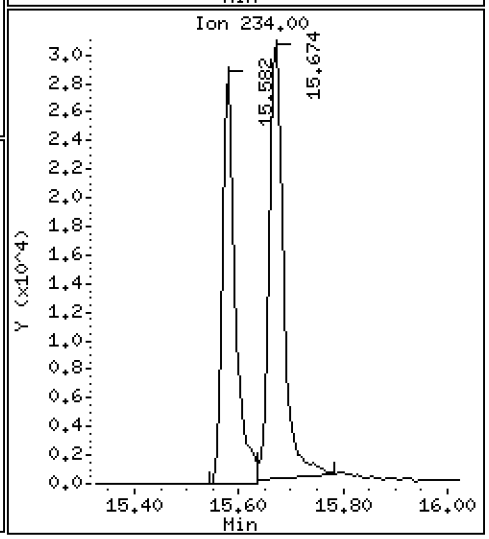












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D
Lab Smp Id: SLC0099-SCV1
Inj Date : 26-FEB-2023 04:06
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0099-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Meth Date : 08-Mar-2023 14:50 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	Compound Not Detected.					
$ 2	Phenol-d5	99	Compound Not Detected.					
3	Phenol	94	8.312	8.319	(0.932)	370940	4.10851	4.109
$ 5	2-Chlorophenol-d4	132	Compound Not Detected.					
4	Bis(2-Chloroethyl)ether	93	8.474	8.474	(0.951)	304296	4.96248	4.962
6	2-Chlorophenol	128	8.582	8.590	(0.963)	323041	4.16677	4.167
7	1,3-Dichlorobenzene	146	8.845	8.853	(0.992)	378421	4.61495	4.615
* 8	1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	196803	4.00000	
9	1,4-Dichlorobenzene	146	8.938	8.938	(1.003)	386214	4.62064	4.621
$ 10	1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	366937	4.52355	4.524
11	Benzyl alcohol	108	9.186	9.202	(1.030)	200760	4.67656	4.677
14	2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	98942	5.20483	5.205
13	2-Methylphenol	108	9.411	9.419	(1.056)	279008	3.99508	3.995
17	Hexachloroethane	117	9.869	9.877	(1.107)	154297	4.76884	4.769
16	N-Nitroso-di-n-propylamine	70	9.737	9.737	(1.092)	246392	4.79947	4.799
15	4-Methylphenol	108	9.683	9.683	(1.086)	298862	4.10580	4.106
$ 18	Nitrobenzene-d5	82	Compound Not Detected.					
19	Nitrobenzene	77	10.024	10.032	(0.882)	361585	4.69174	4.692
20	Isophorone	82	10.467	10.467	(0.921)	632536	6.43324	6.433
21	2-Nitrophenol	139	10.650	10.659	(0.937)	168023	4.43914	4.439
22	2,4-Dimethylphenol	107	10.710	10.710	(0.942)	249516	3.45955	3.460
23	Bis(2-Chloroethoxy)methane	93	10.896	10.905	(0.959)	369555	5.48879	5.489
24	Benzoic acid	105	10.990	11.092	(0.967)	72051	2.61790	2.618(M)
25	2,4-Dichlorophenol	162	11.100	11.100	(0.977)	292217	4.62098	4.621
26	1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	303141	4.43838	4.438
* 27	Naphthalene-d8	136	11.365	11.365	(1.000)	751242	4.00000	
28	Naphthalene	128	11.403	11.403	(1.003)	1044410	4.52257	4.523
29	4-Chloroaniline	127	11.535	11.542	(1.015)	318320	3.45878	3.459
30	Hexachlorobutadiene	225	11.767	11.767	(1.035)	186397	4.65605	4.656
31	4-Chloro-3-methylphenol	107	12.494	12.502	(1.099)	267666	4.42235	4.422
32	2-Methylnaphthalene	142	12.788	12.788	(1.125)	663066	4.22545	4.225
33	Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	87571	3.20191	3.202

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	159887	4.14757	4.148
	35	2,4,5-Trichlorophenol	196	13.477	13.485	(0.902)	172217	4.09965	4.100
$	36	2-Fluorobiphenyl	172	Compound Not Detected.					
	37	2-Chloronaphthalene	162	13.771	13.771	(0.922)	597668	4.55180	4.552
	38	2-Nitroaniline	65	14.026	14.034	(0.939)	184700	4.49470	4.495
	39	Dimethylphthalate	163	14.468	14.460	(0.968)	668285	4.73886	4.739
	40	Acenaphthylene	152	14.630	14.630	(0.979)	1015081	4.59116	4.591
	41	2,6-Dinitrotoluene	165	14.599	14.591	(0.977)	156792	4.84977	4.850
*	42	Acenaphthene-d10	164	14.940	14.940	(1.000)	398556	4.00000	
	43	3-Nitroaniline	138	14.878	14.878	(0.996)	177578	4.64347	4.643
	44	Acenaphthene	153	15.009	15.001	(1.005)	633850	4.52979	4.530
	45	2,4-Dinitrophenol	184	15.094	15.094	(1.010)	21508	1.42564	1.426
	46	Dibenzofuran	168	15.334	15.334	(1.026)	882055	4.35510	4.355
	47	4-Nitrophenol	109	15.210	15.218	(1.018)	66995	4.34588	4.346
	48	2,4-Dinitrotoluene	165	15.396	15.396	(1.031)	202080	4.57277	4.573
	50	Diethylphthalate	149	15.906	15.906	(1.065)	777988	5.26498	5.265
	49	Fluorene	166	16.037	16.037	(1.073)	841063	5.18202	5.182
	51	4-Chlorophenyl-phenylether	204	16.029	16.029	(1.073)	367830	4.97548	4.975
	52	4-Nitroaniline	138	16.130	16.130	(1.080)	169269	4.60087	4.601
	53	4,6-Dinitro-2-methylphenol	198	16.230	16.230	(0.904)	91958	3.59564	3.596
	54	N-Nitrosodiphenylamine	169	16.284	16.276	(0.907)	494995	4.60237	4.602
$	55	2,4,6-Tribromophenol	330	Compound Not Detected.					
	56	4-Bromophenyl-phenylether	248	17.024	17.024	(0.948)	210814	4.88441	4.884
	57	Hexachlorobenzene	284	17.333	17.333	(0.966)	220372	4.42184	4.422
	58	Pentachlorophenol	266	17.697	17.697	(0.986)	32473	2.45386	2.454
*	59	Phenanthrene-d10	188	17.952	17.945	(1.000)	714786	4.00000	
	60	Phenanthrene	178	17.999	17.991	(1.003)	988459	4.39651	4.397
	61	Anthracene	178	18.092	18.084	(1.008)	848151	3.95863	3.959
	62	Carbazole	167	18.417	18.417	(1.026)	876153	4.46270	4.463
	63	Di-n-butylphthalate	149	19.229	19.229	(1.071)	1121126	5.15898	5.159
	64	Fluoranthene	202	20.374	20.374	(0.886)	1087530	4.81174	4.812
	65	Pyrene	202	20.800	20.800	(0.905)	1098967	4.55908	4.559
$	66	Terphenyl-d14	244	Compound Not Detected.					
	67	Butylbenzylphthalate	149	22.023	22.023	(0.958)	487079	5.32159	5.322
	68	Benzo(a)anthracene	228	22.952	22.952	(0.999)	1041421	4.47172	4.472
*	69	Chrysene-d12	240	22.983	22.975	(1.000)	645093	4.00000	
	70	3,3'-Dichlorobenzidine	252	22.913	22.906	(0.997)	856987	10.0002	10.00
	71	Chrysene	228	23.029	23.022	(1.002)	1072229	4.42756	4.428
	72	bis(2-Ethylhexyl)phthalate	149	23.053	23.045	(0.960)	743132	5.23131	5.231
*	134	Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	989444	4.00000	
	73	Di-n-octylphthalate	149	24.028	24.028	(1.000)	1326876	4.81262	4.813
	74	Benzo(b)fluoranthene	252	24.764	24.756	(0.972)	1013785	4.31859	4.319
	75	Benzo(k)fluoranthene	252	24.802	24.795	(0.974)	1259698	4.73494	4.735(H)
	76	Benzo(a)pyrene	252	25.368	25.360	(0.996)	998824	4.58976	4.590
*	77	Perylene-d12	264	25.468	25.468	(1.000)	719540	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	27.920	27.904	(1.096)	1266543	4.63606	4.636
	79	Dibenzo(a,h)anthracene	278	27.928	27.920	(1.097)	1043466	4.57975	4.580
	80	Benzo(g,h,i)perylene	276	28.634	28.619	(1.124)	1005990	4.59311	4.593
	90	N-Nitrosodimethylamine	74	4.673	4.681	(0.524)	189582	4.80958	4.810
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	20.614	20.614	(0.897)	641864	5.81258	5.813
	103	Pyridine	79	4.673	4.689	(0.524)	308261	4.69431	4.694
	105	1-methylnaphthalene	142	13.005	13.005	(1.144)	637254	4.48602	4.486
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.353	16.353	(1.095)	770064	4.73097	4.731

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.802	24.795	(0.974)	2140538	9.01877	9.019
120 2,3,4,6-Tetrachlorophenol	232	15.666	15.674	(1.049)	136871	3.49441	3.494

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252312.D
Lab Smp Id: SLC0099-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	196803	-7.65
27 Naphthalene-d8	806946	403473	1613892	751242	-6.90
42 Acenaphthene-d10	424249	212125	848498	398556	-6.06
59 Phenanthrene-d10	758987	379494	1517974	714786	-5.82
69 Chrysene-d12	685237	342619	1370474	645093	-5.86
134 Di-n-octylphthala	1075410	537705	2150820	989444	-7.99
77 Perylene-d12	762553	381277	1525106	719540	-5.64

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.94	14.44	15.44	14.94	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	0.00
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252312.D

Lab ID: SLC0099-SCV1
nt18.i, ABN.m, 26-FEB-2023 04:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.967	0.000	0.9670	Benzoic acid
1.010	0.000	1.0103	2,4-Dinitrophenol
0.986	0.000	0.9858	Pentachlorophenol

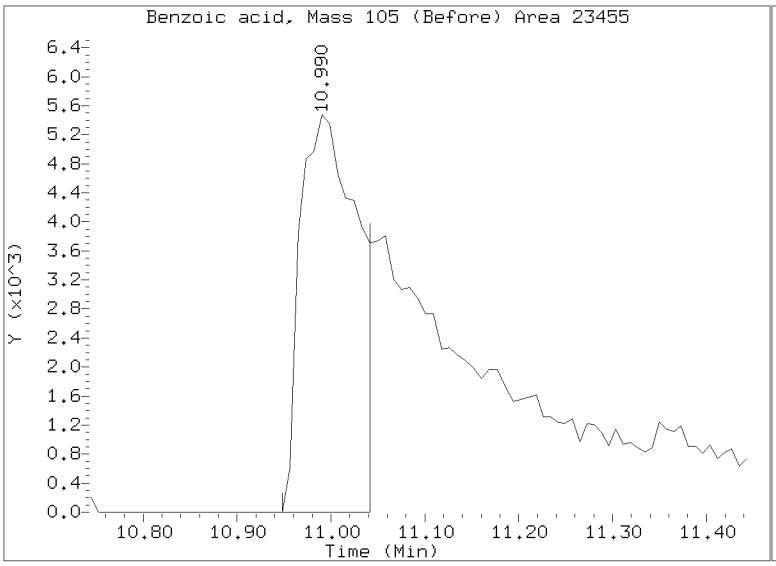
RRT check based on Ccal File: NT1802252308.D

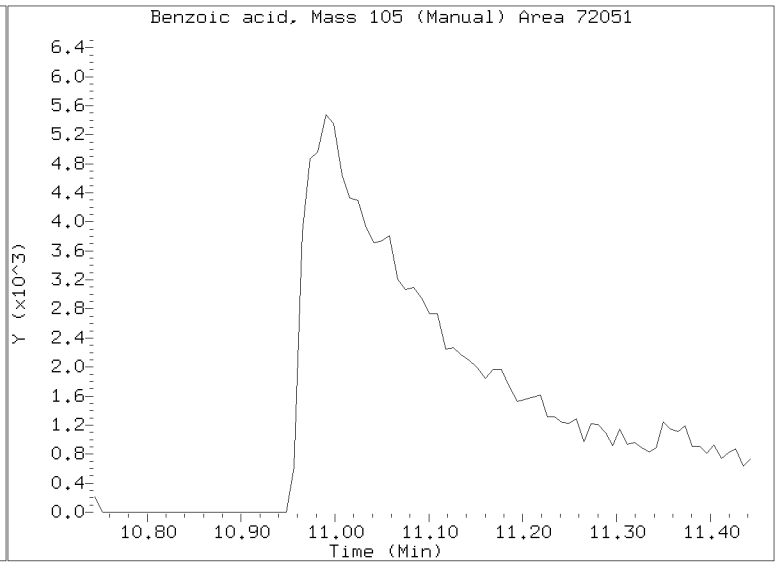
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230225.b/NT1802252312.D
Injection Date: 26-FEB-2023 04:06
Lab ID:SLC0099-SCV1 Client ID:
Report Date: 03/10/2023 07:50





LOW-CONCENTRATION CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00023
Laboratory ID: SLC0385-LCV1
Sequence: SLC0385
Standard ID: K011105

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	0.20000	0.2	-4.2	50.00
4-Methylphenol	0.20000	0.2	9.6	50.00
Naphthalene	0.20000	0.2	13.5	50.00
2-Methylnaphthalene	0.20000	0.2	14.5	50.00
Acenaphthylene	0.20000	0.2	7.4	50.00
Dimethylphthalate	0.20000	0.2	9.3	50.00
Acenaphthene	0.20000	0.2	12.5	50.00
Dibenzofuran	0.20000	0.2	10.9	50.00
Fluorene	0.20000	0.2	21.1	50.00
Phenanthrene	0.20000	0.2	8.0	50.00
Anthracene	0.20000	0.2	5.5	50.00
Fluoranthene	0.20000	0.2	15.3	50.00
Pyrene	0.20000	0.2	12.5	50.00
Butylbenzylphthalate	0.20000	0.3	27.7	50.00
Benzo(a)anthracene	0.20000	0.2	11.6	50.00
Chrysene	0.20000	0.2	6.4	50.00
bis(2-Ethylhexyl)phthalate	0.20000	0.2	8.2	50.00
Benzofluoranthenes, Total	0.40000	0.4	9.8	50.00
Benzo(a)pyrene	0.20000	0.2	10.8	50.00
Indeno(1,2,3-cd)pyrene	0.20000	0.2	-3.8	50.00
Dibenzo(a,h)anthracene	0.20000	0.2	-8.0	50.00
Benzo(g,h,i)perylene	0.20000	0.2	7.6	50.00
2-Fluorophenol	0.30000	0.330	10.1	50.00
Phenol-d5	0.30000	0.312	4.0	50.00
2-Chlorophenol-d4	0.30000	0.328	9.5	50.00
1,2-Dichlorobenzene-d4	0.20000	0.227	13.4	50.00
Nitrobenzene-d5	0.20000	0.208	3.8	50.00
2-Fluorobiphenyl	0.20000	0.211	5.4	50.00
2,4,6-Tribromophenol	0.30000	0.267	-10.9	50.00

LOW-CONCENTRATION CALIBRATION VERIFICATION
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00023
Laboratory ID: SLC0385-LCV1
Sequence: SLC0385
Standard ID: K011105

p-Terphenyl-d14	0.20000	0.210	5.0	50.00

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

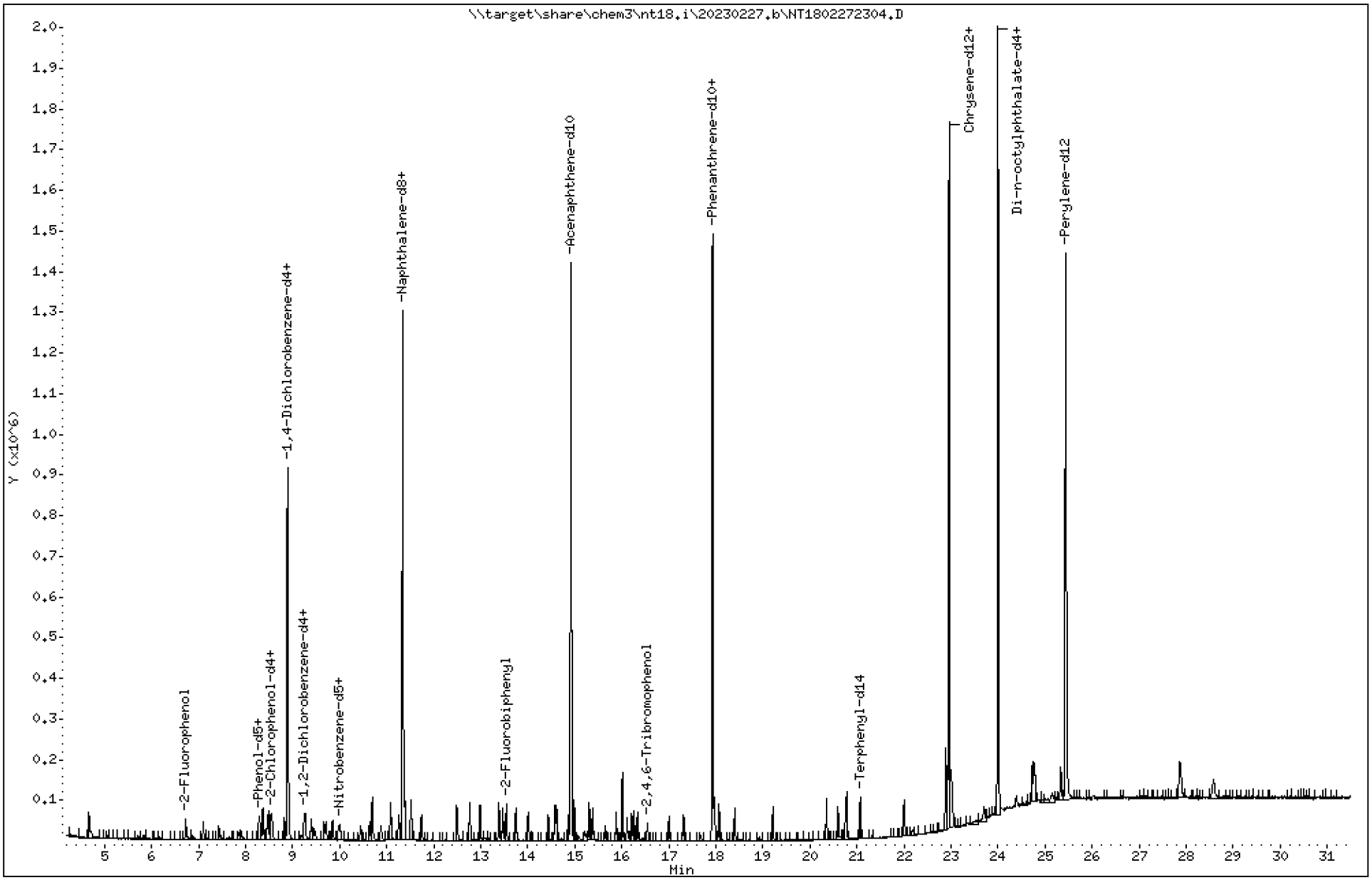
Instrument: nt18.i

Sample Info: SLC0385-LCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

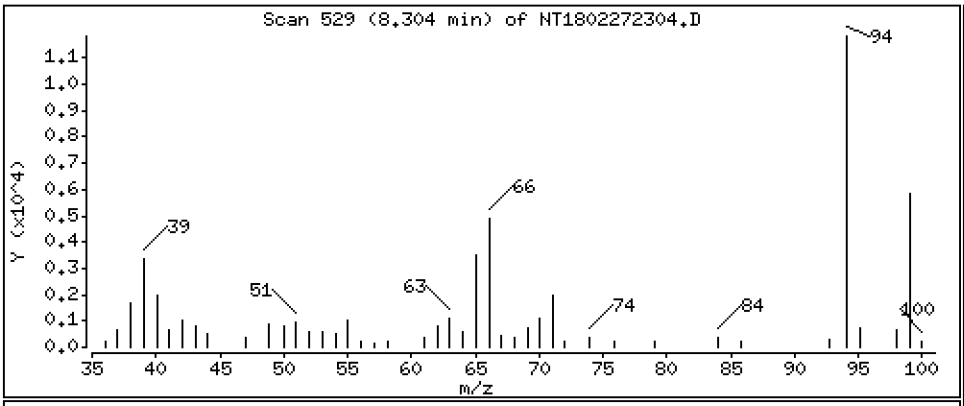
Operator: VTS

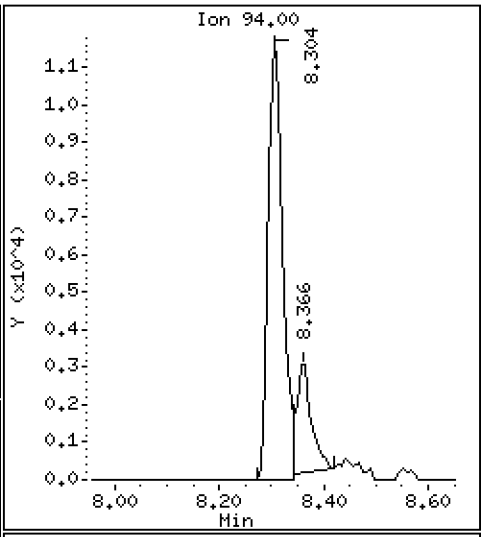
Column phase: ZB-5msi

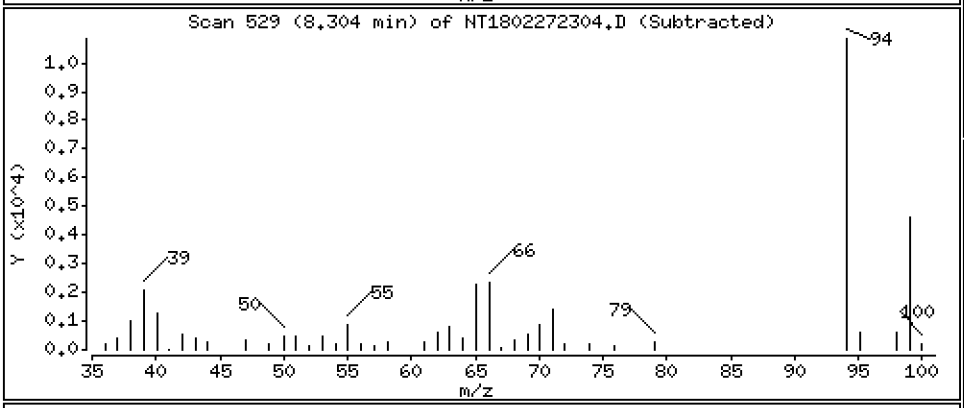
Column diameter: 0.25

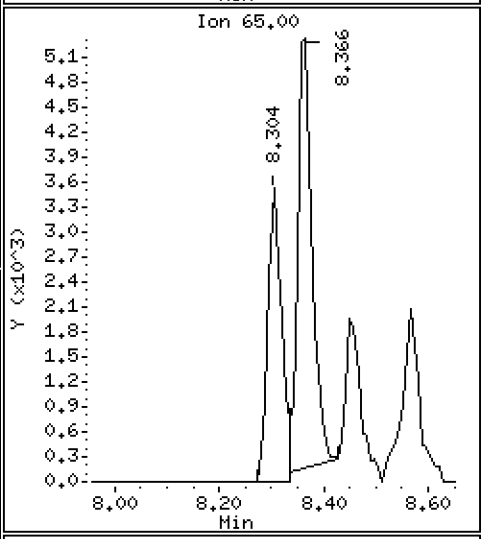
3 Phenol

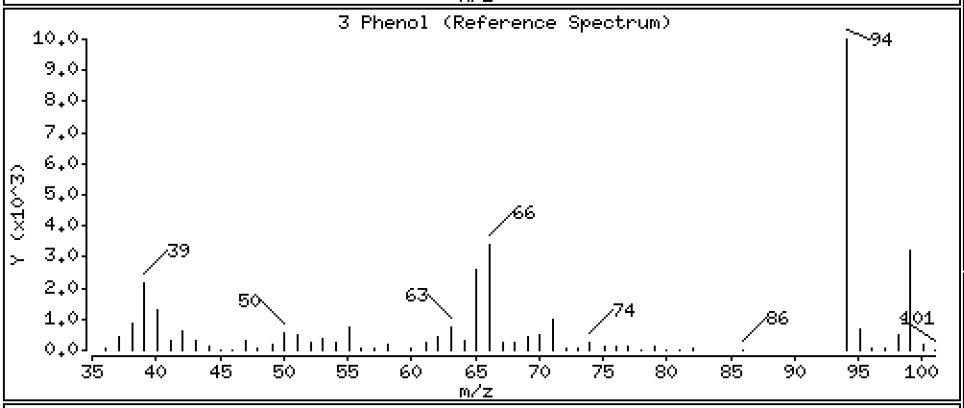
Concentration: 0.1916 ug/mL

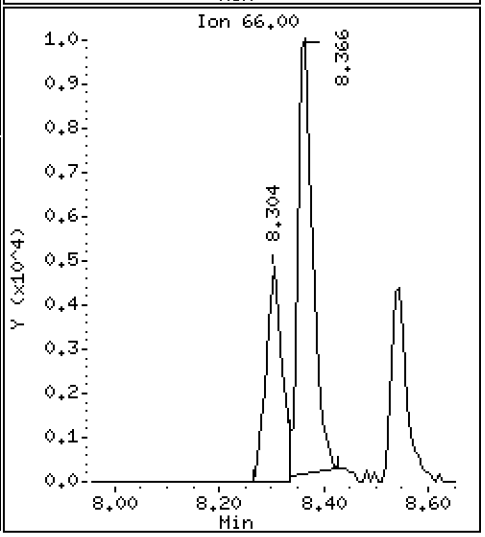


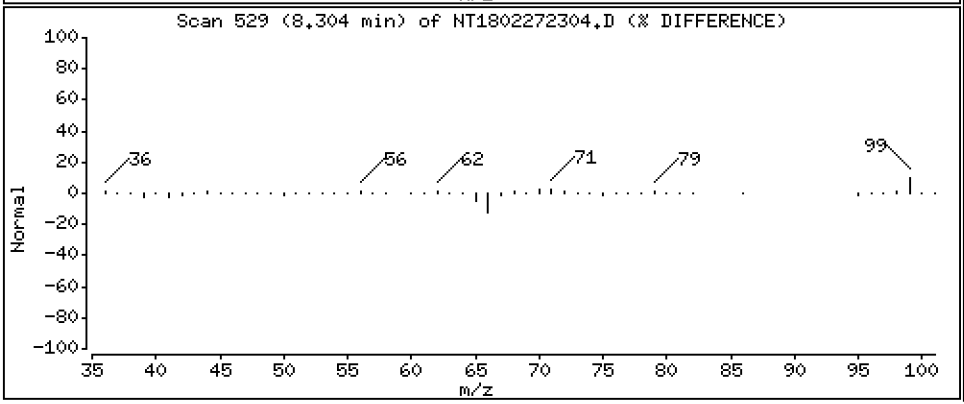












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

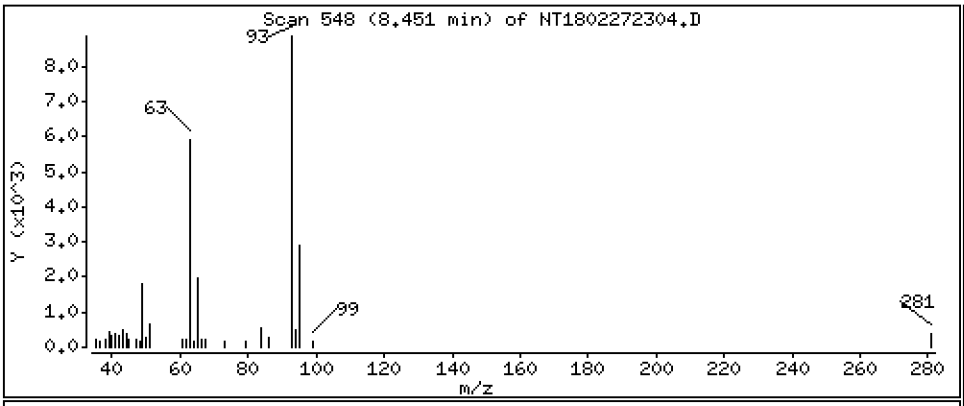
Operator: VTS

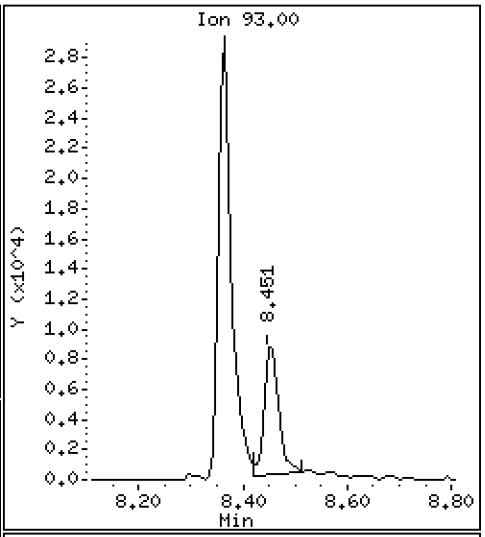
Column phase: ZB-5msi

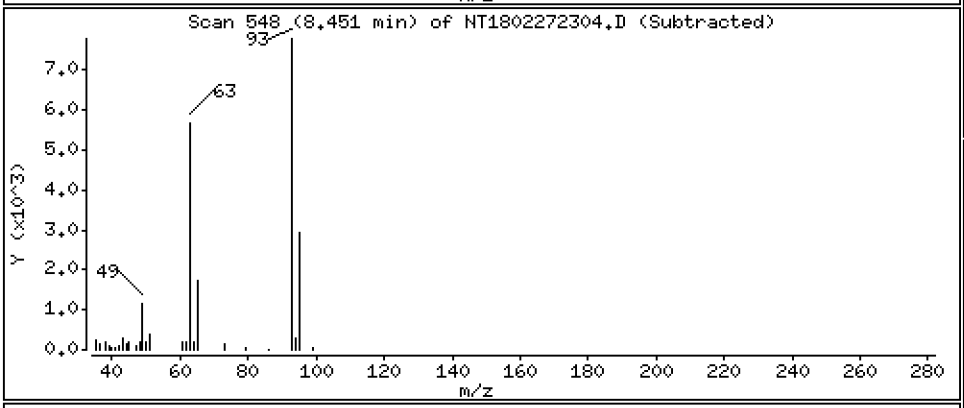
Column diameter: 0.25

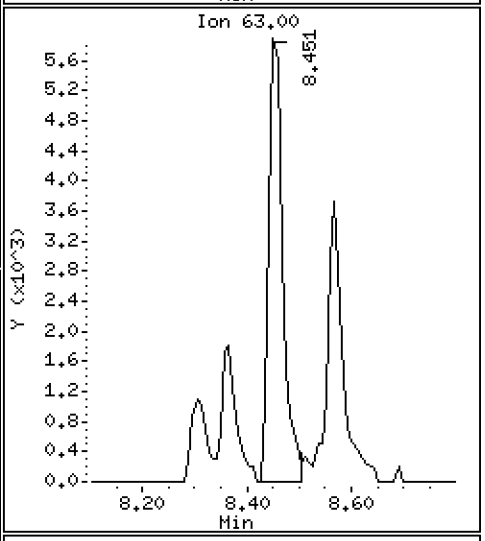
4 Bis(2-Chloroethyl)ether

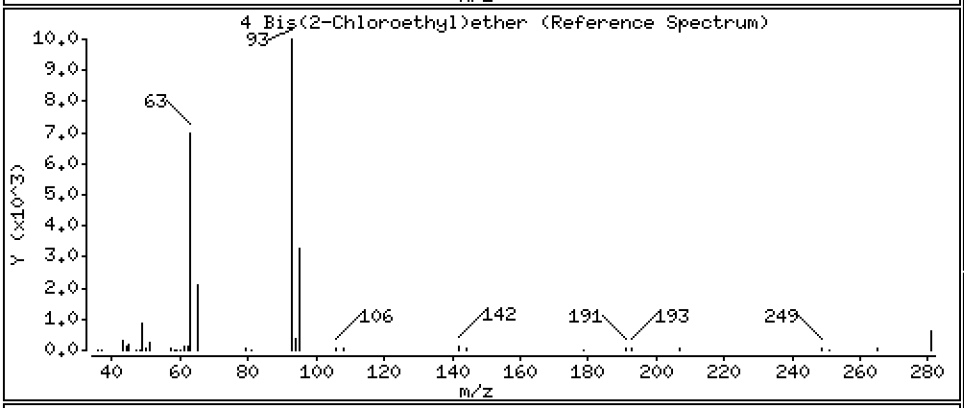
Concentration: 0.2024 ug/mL

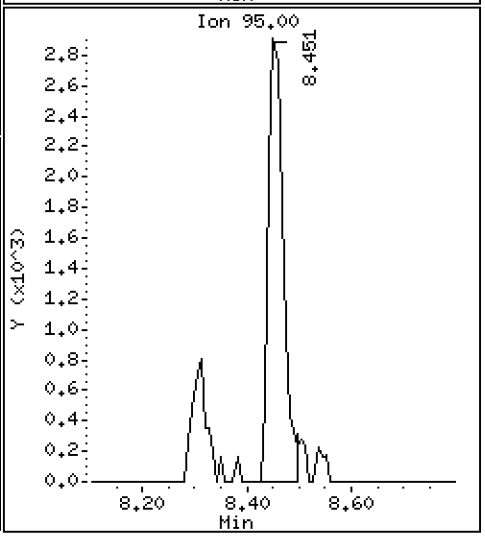


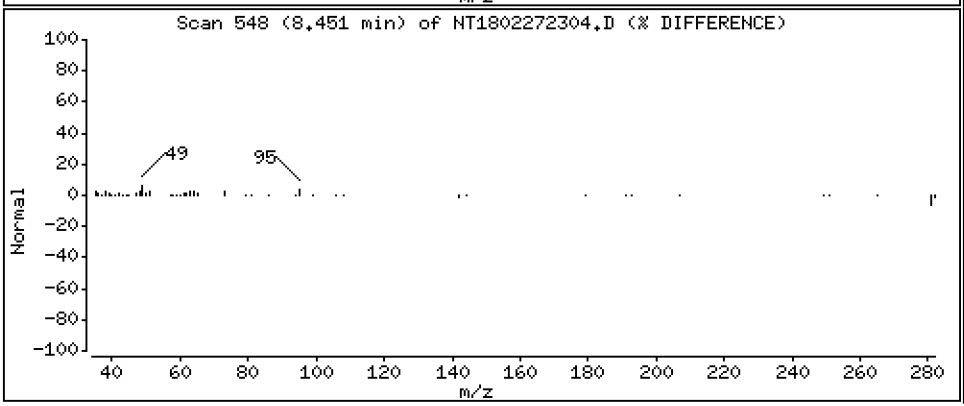












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

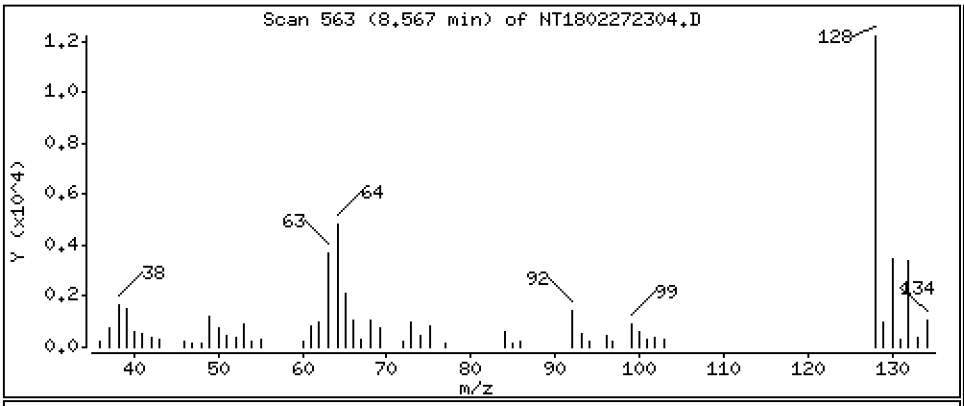
Operator: VTS

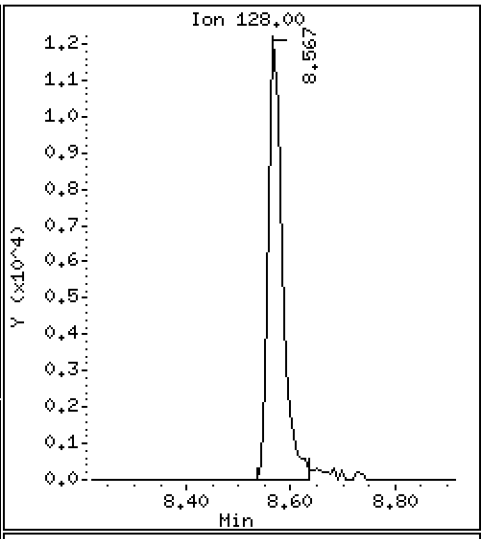
Column phase: ZB-5msi

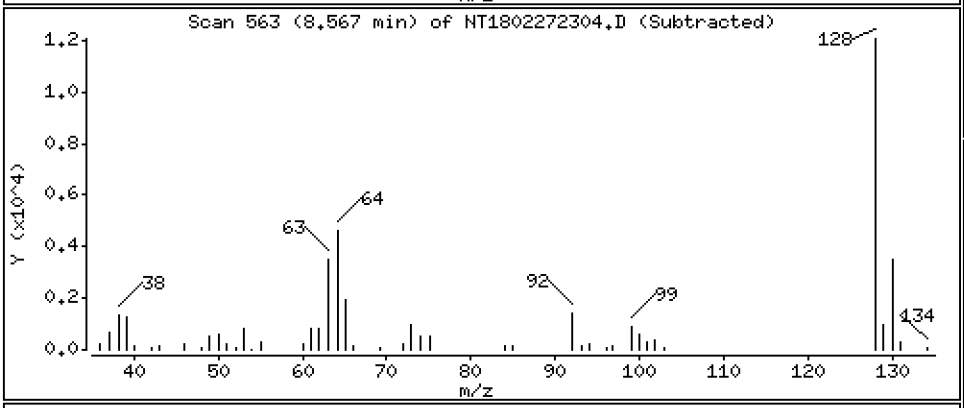
Column diameter: 0.25

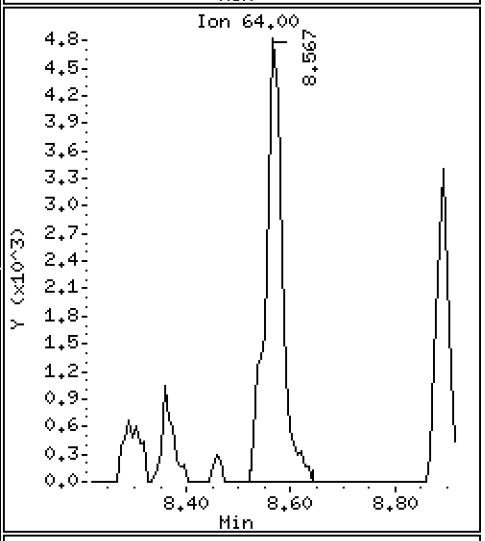
6 2-Chlorophenol

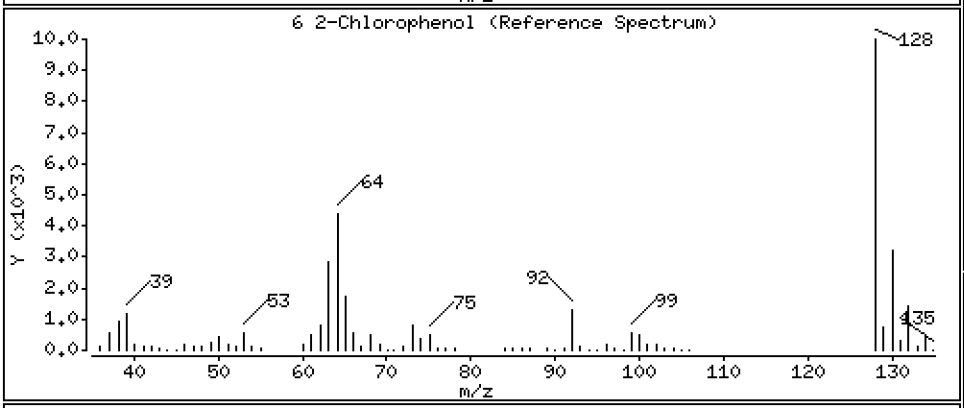
Concentration: 0.2232 ug/mL

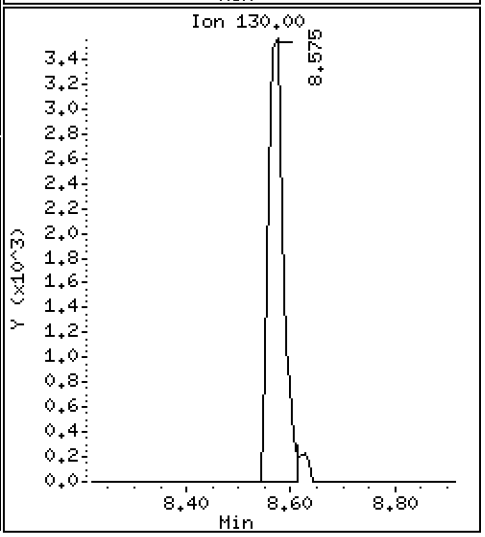


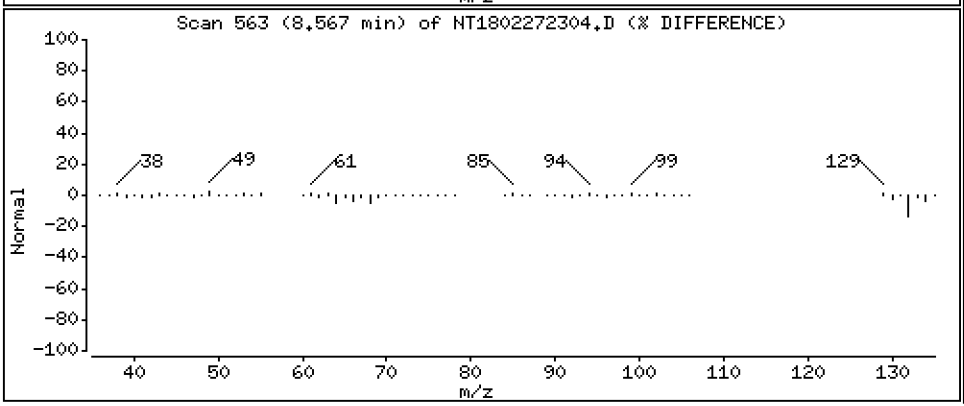












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

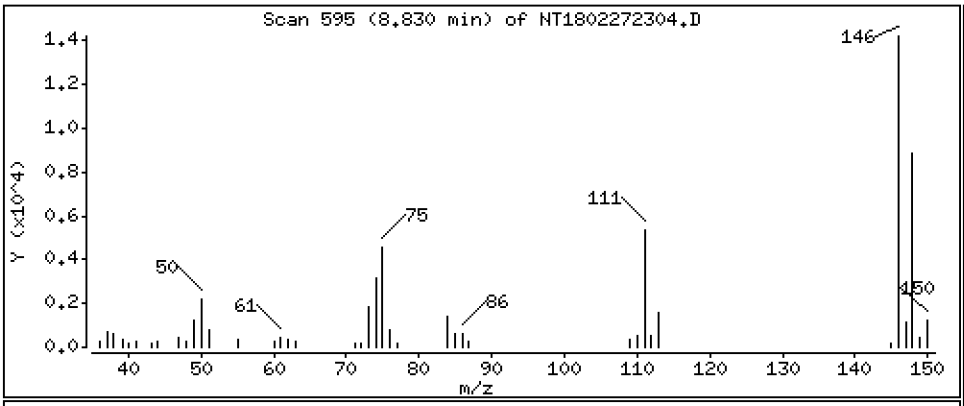
Operator: VTS

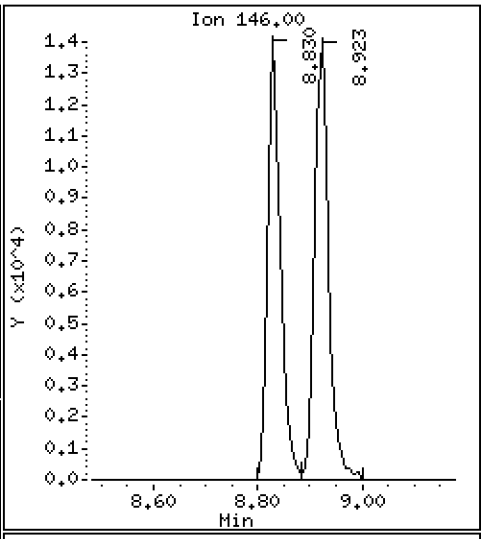
Column phase: ZB-5msi

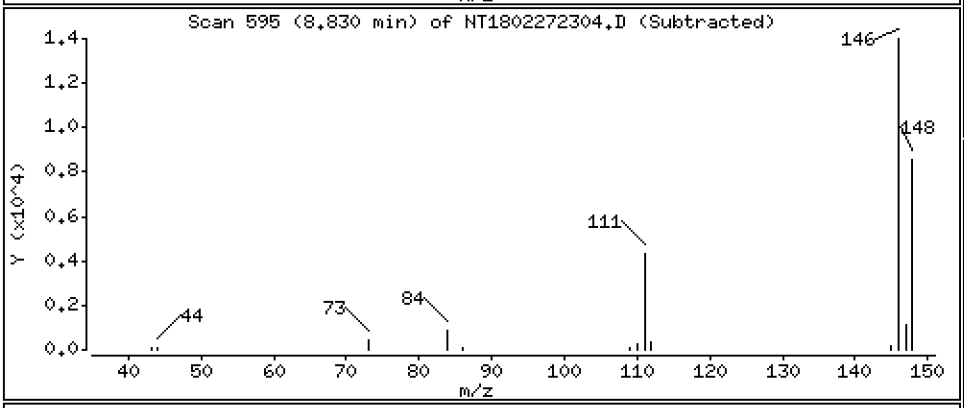
Column diameter: 0.25

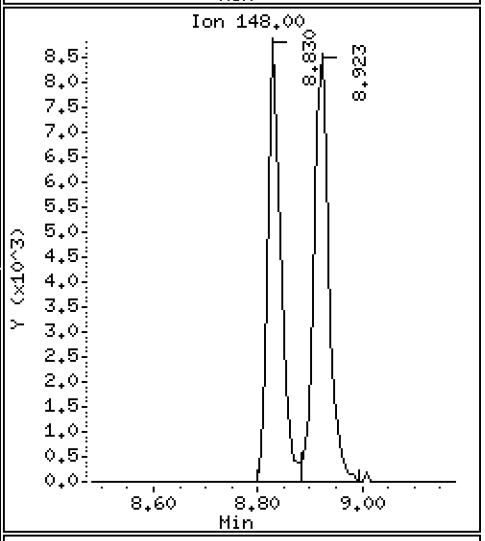
7 1,3-Dichlorobenzene

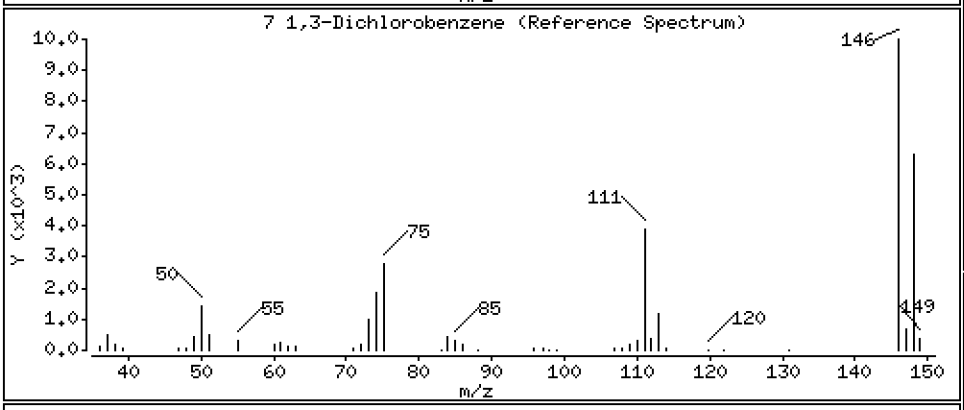
Concentration: 0.2258 ug/mL

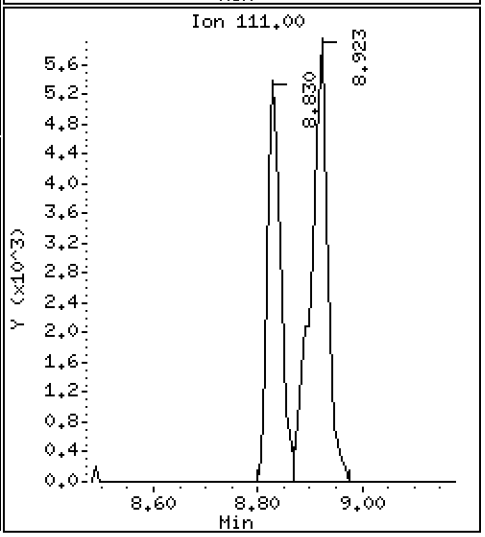


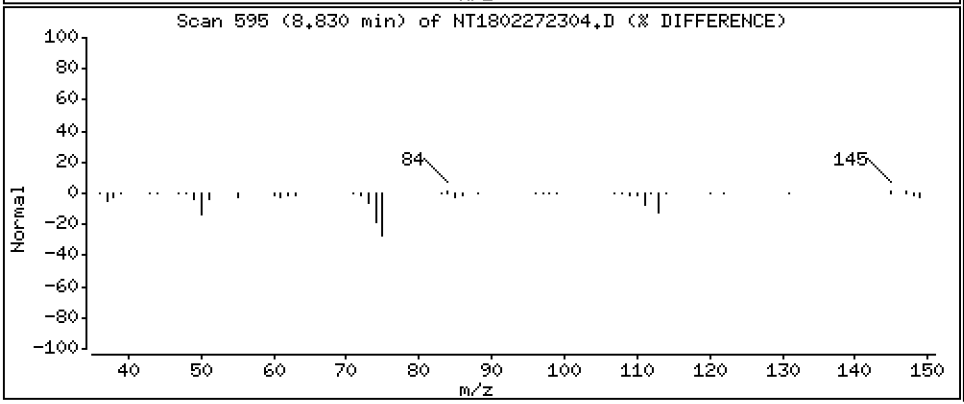












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

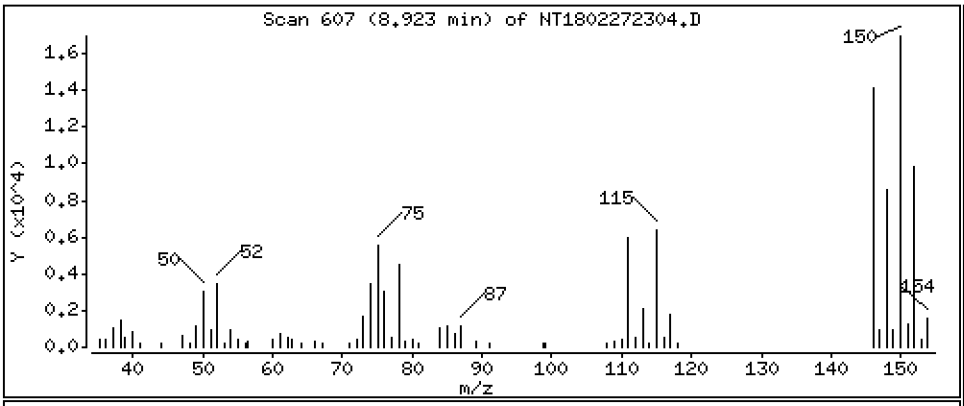
Operator: VTS

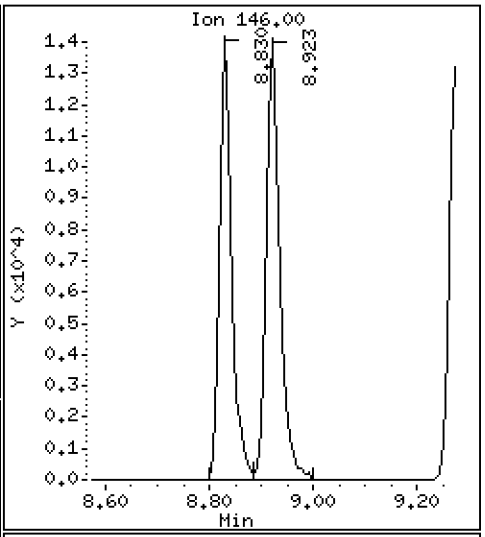
Column phase: ZB-5msi

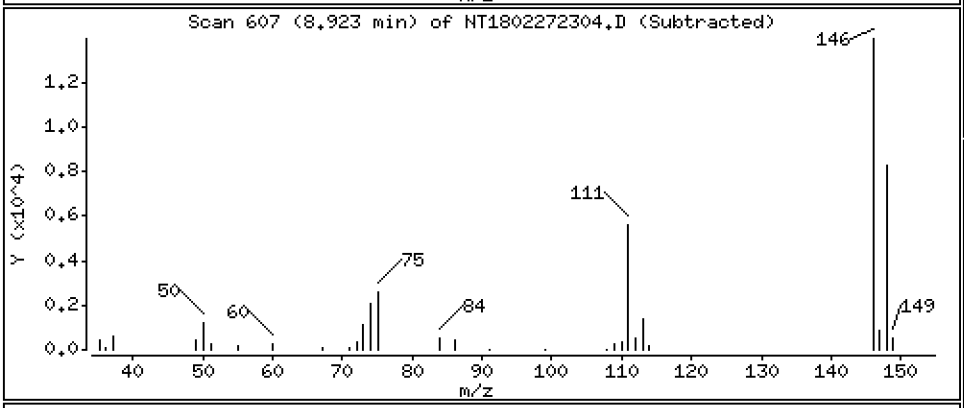
Column diameter: 0.25

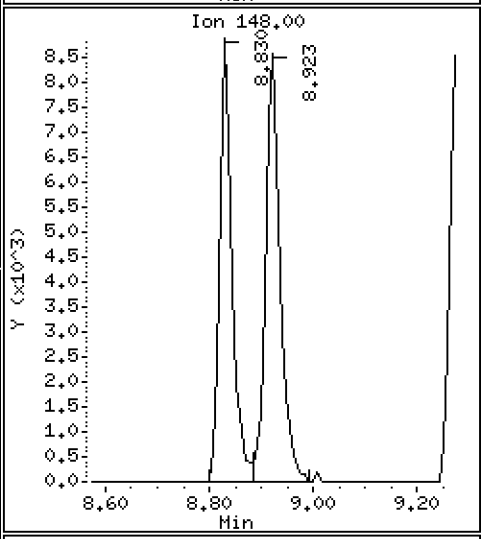
9 1,4-Dichlorobenzene

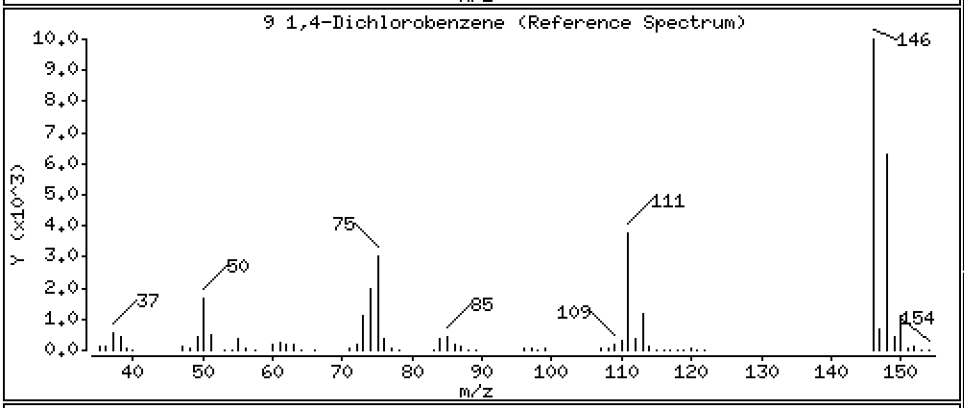
Concentration: 0.2372 ug/mL

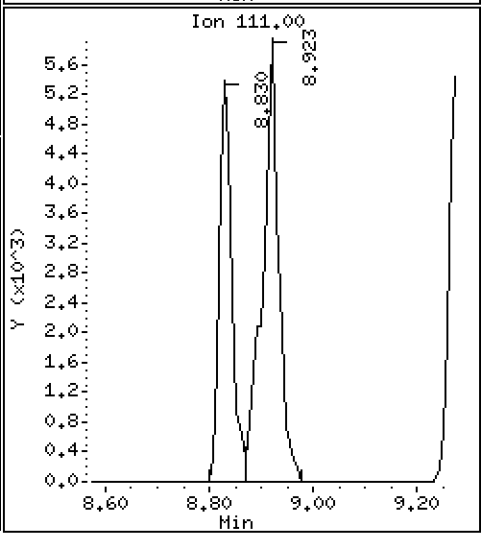


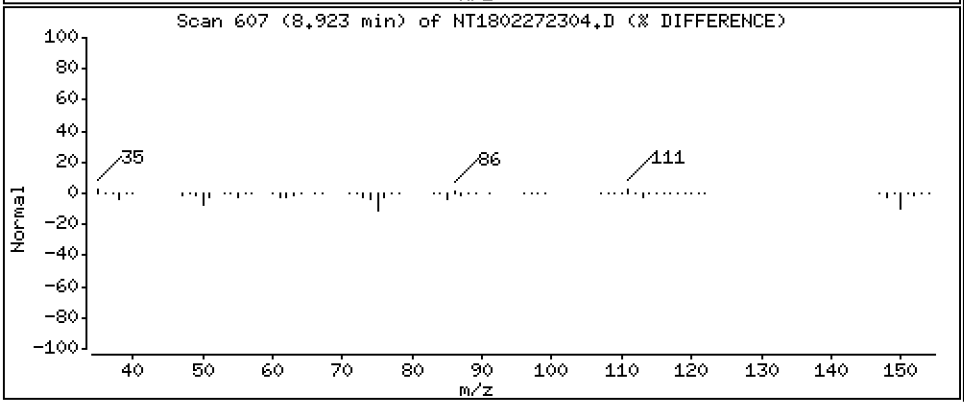












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

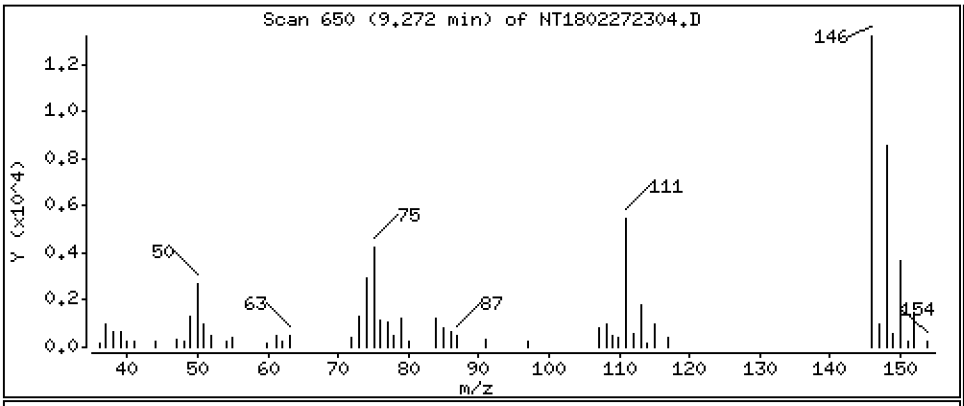
Operator: VTS

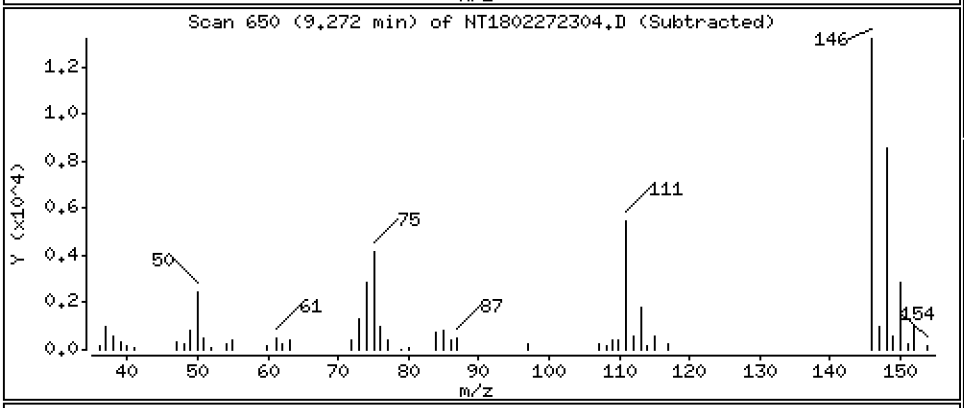
Column phase: ZB-5msi

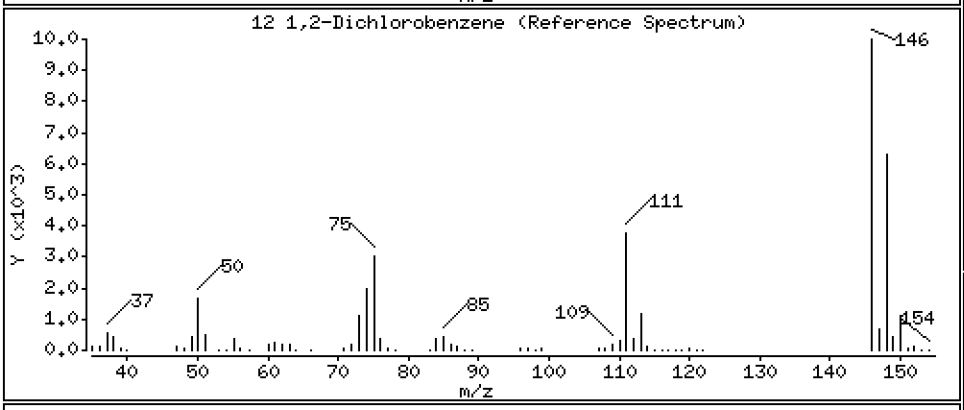
Column diameter: 0.25

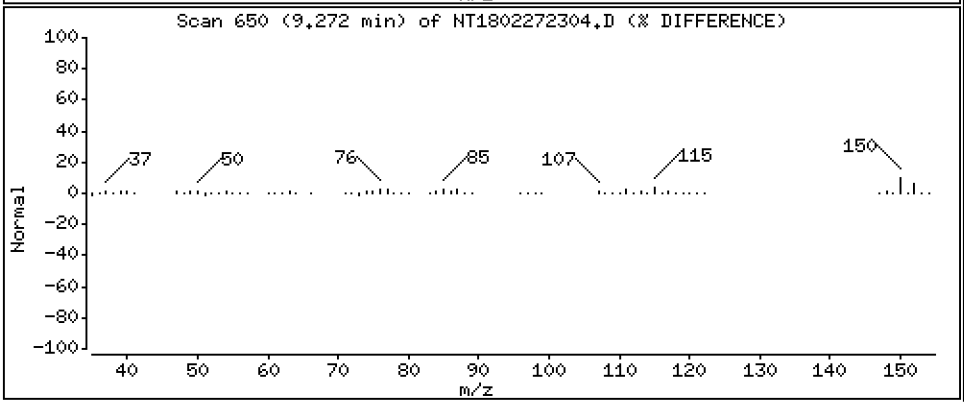
12 1,2-Dichlorobenzene

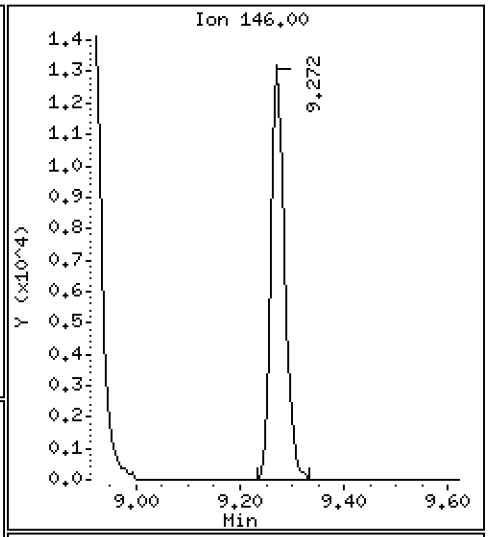
Concentration: 0.2219 ug/mL

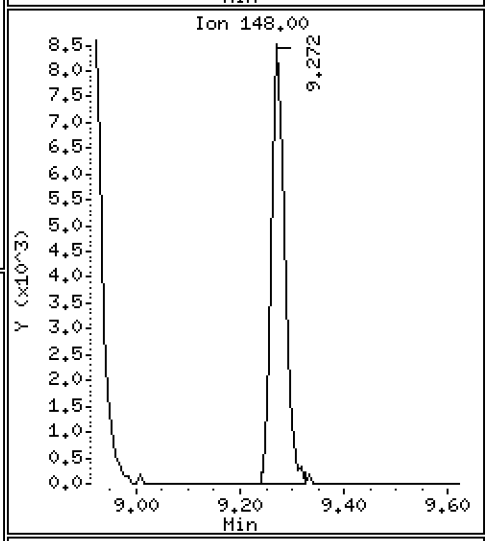


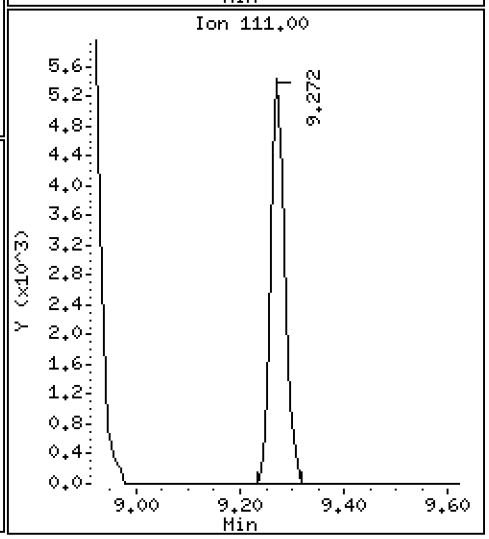












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

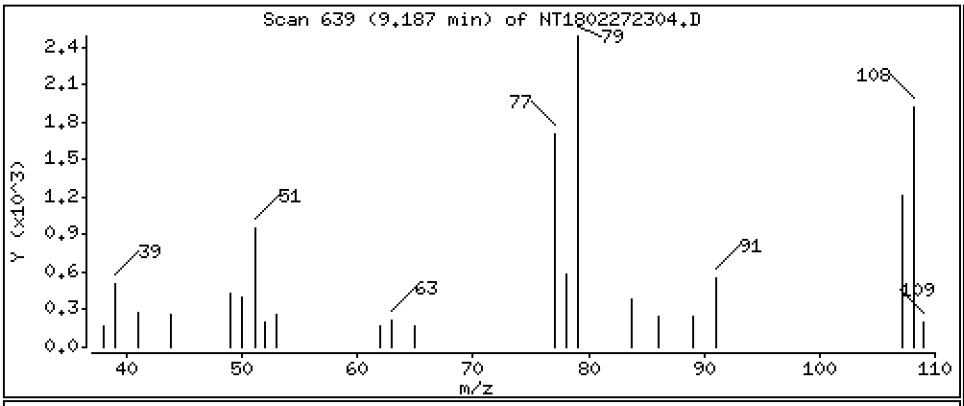
Operator: VTS

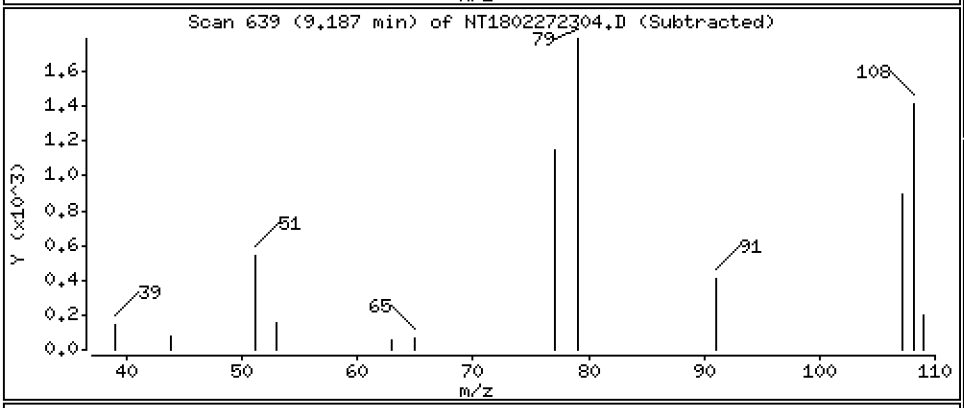
Column phase: ZB-5msi

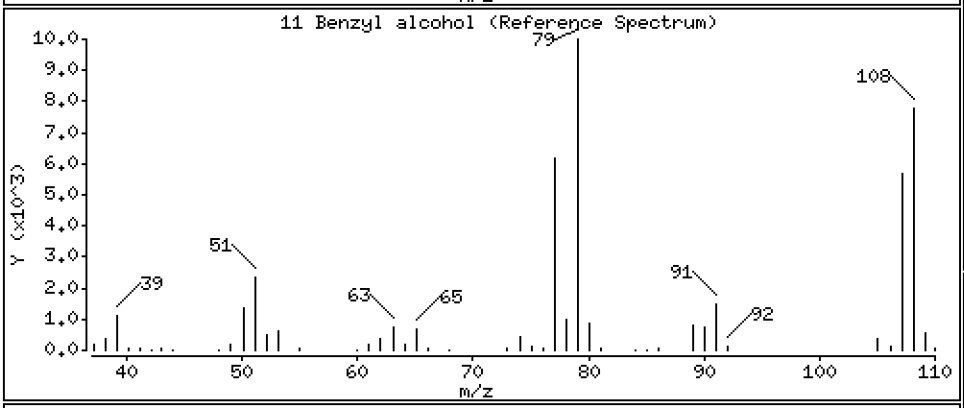
Column diameter: 0.25

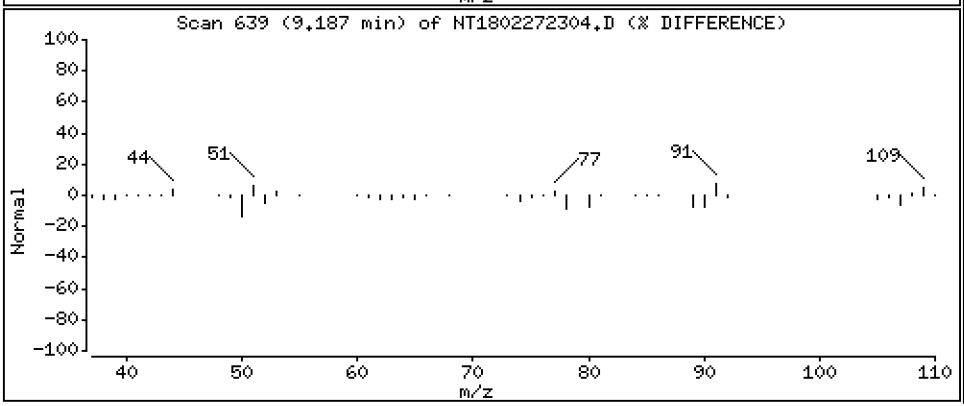
11 Benzyl alcohol

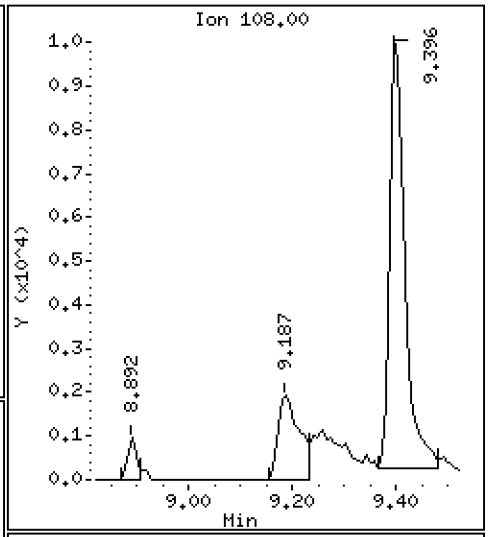
Concentration: 0.1013 ug/mL

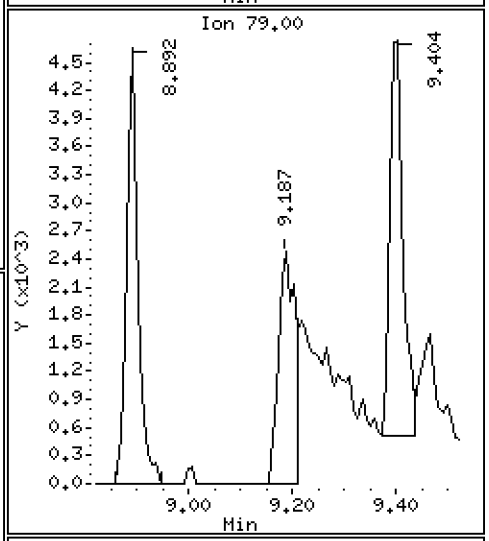


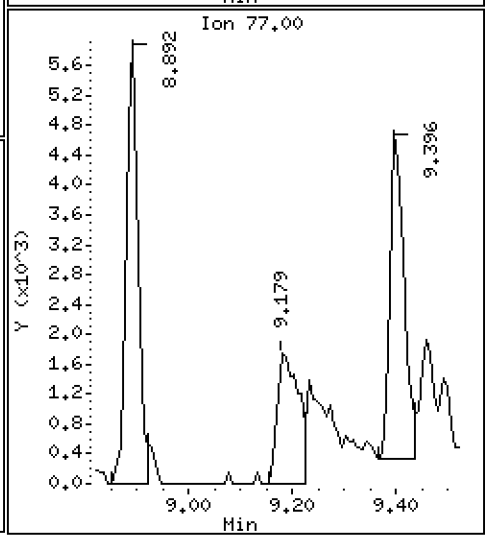












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

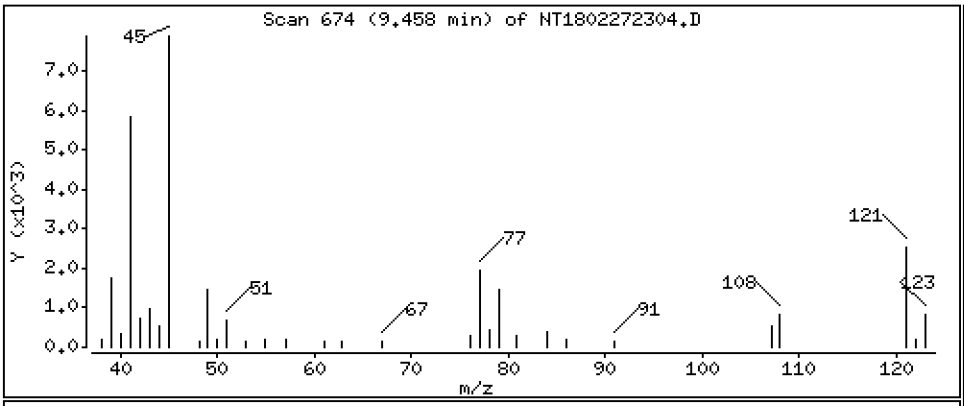
Operator: VTS

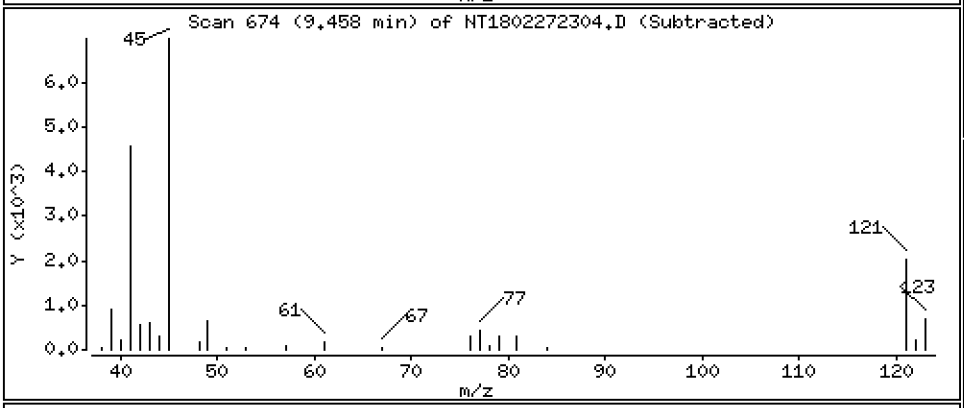
Column phase: ZB-5msi

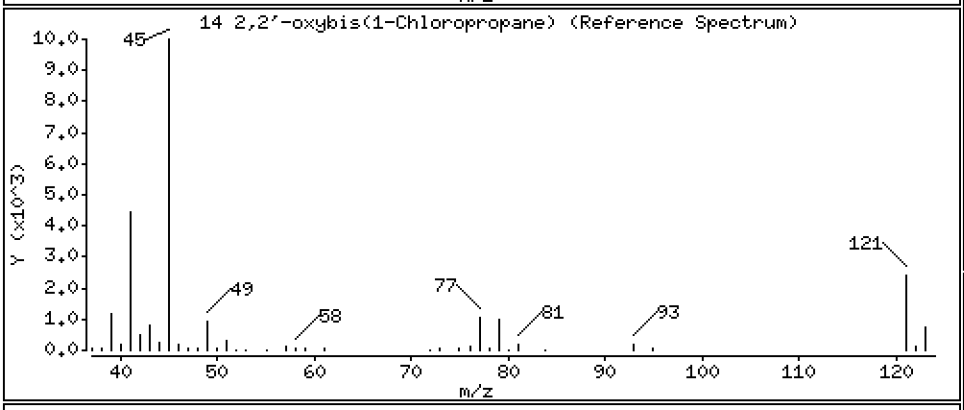
Column diameter: 0.25

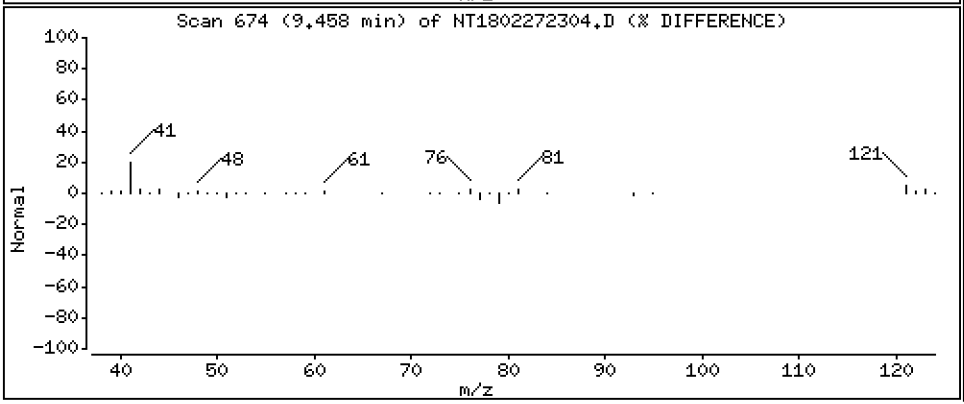
14 2,2'-oxybis(1-Chloropropane)

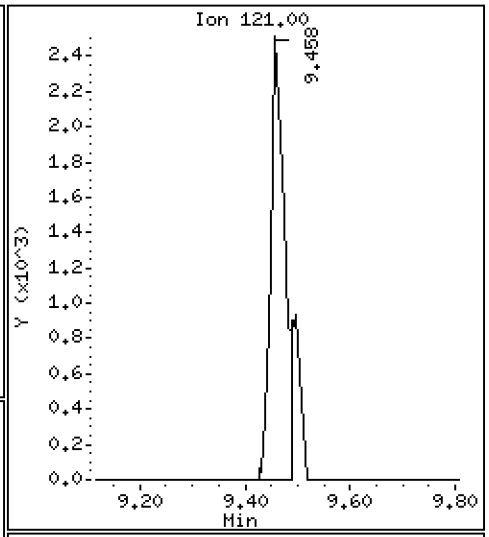
Concentration: 0.1860 ug/mL

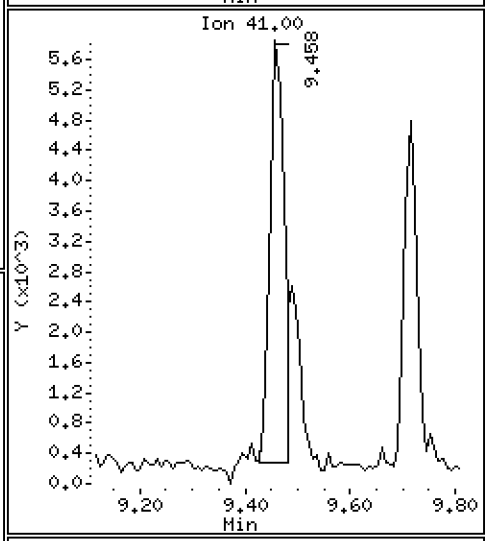


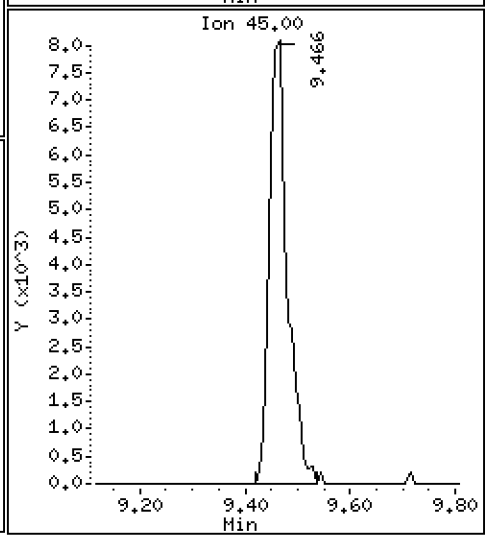












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

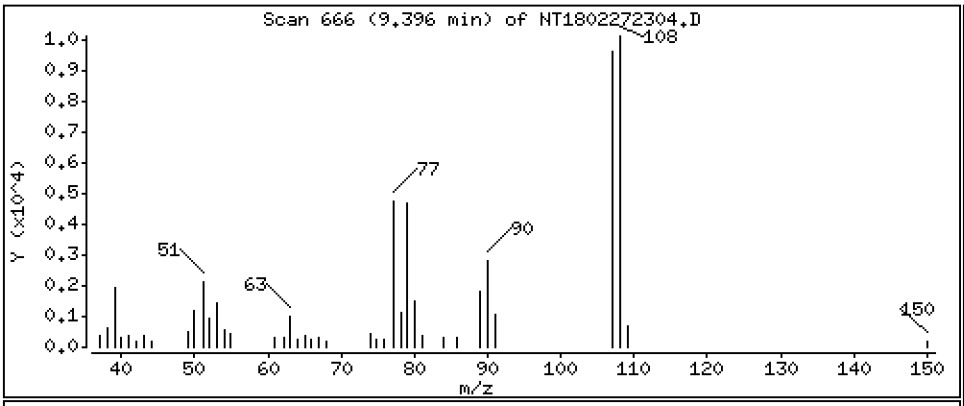
Operator: VTS

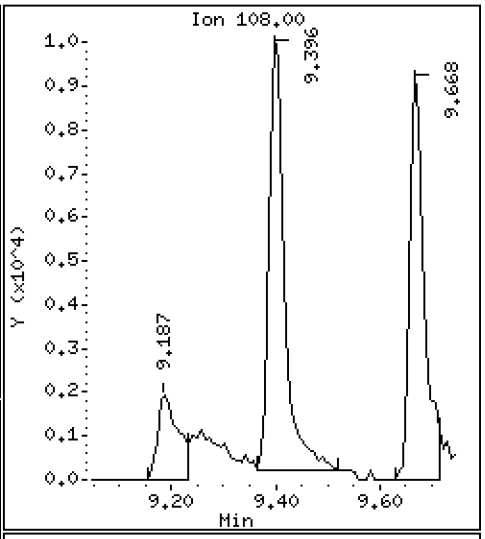
Column phase: ZB-5msi

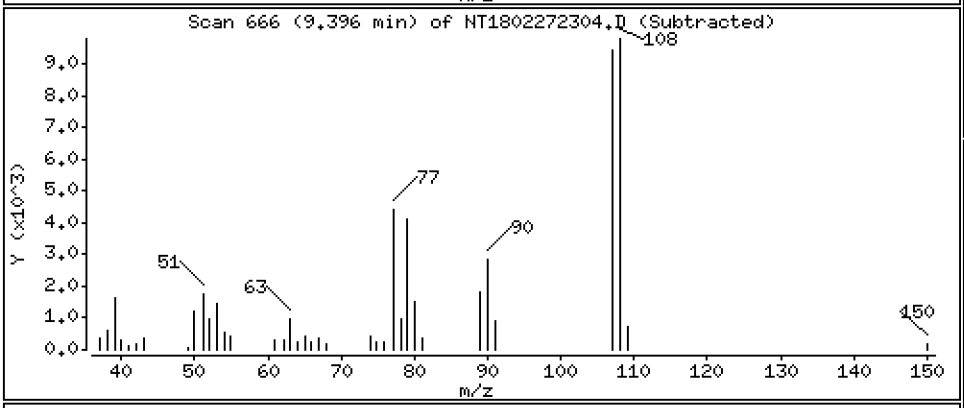
Column diameter: 0.25

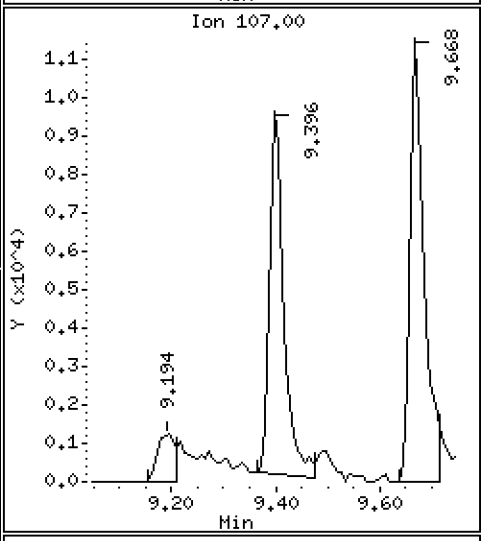
13 2-Methylphenol

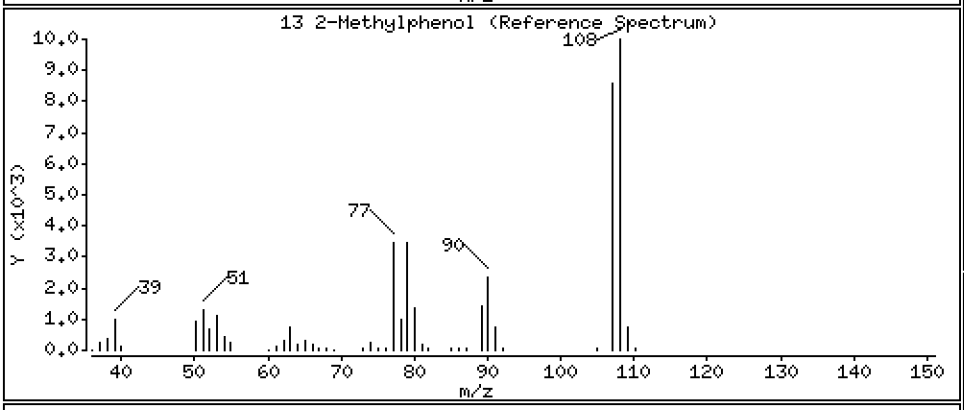
Concentration: 0.2230 ug/mL

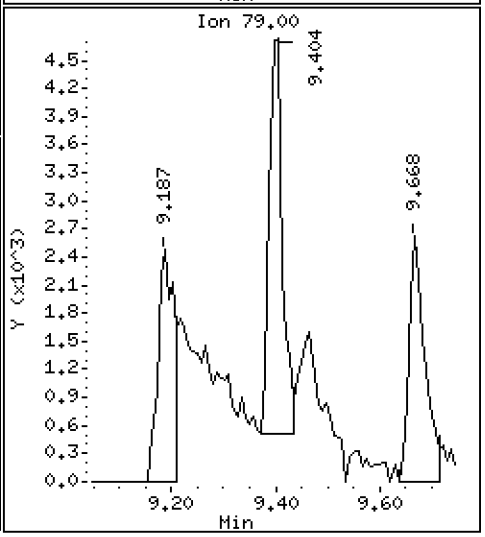


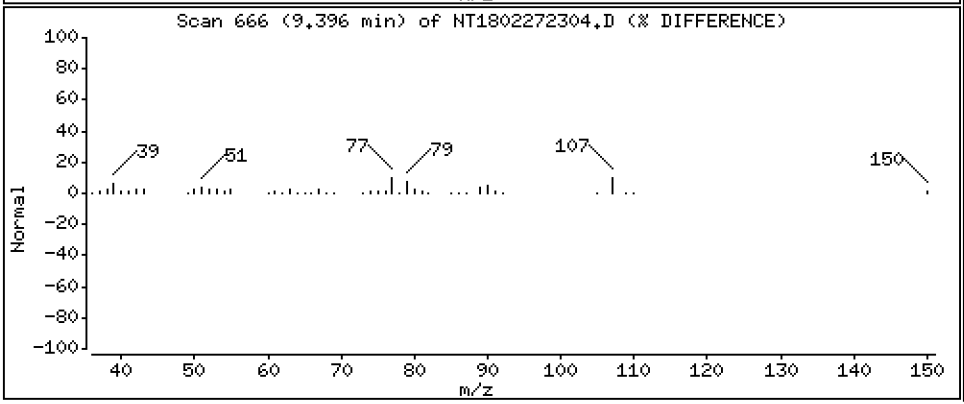












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

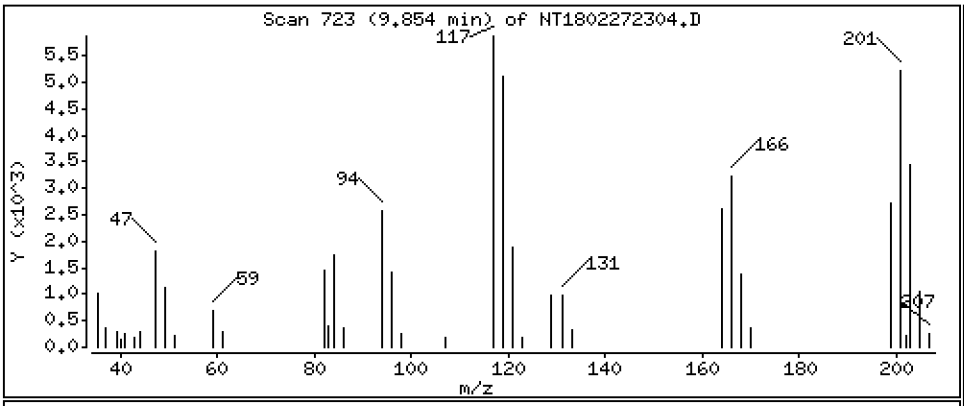
Operator: VTS

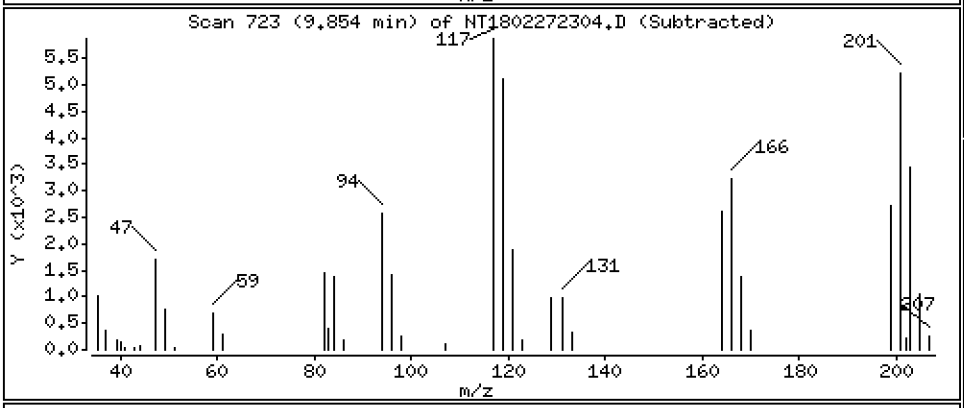
Column phase: ZB-5msi

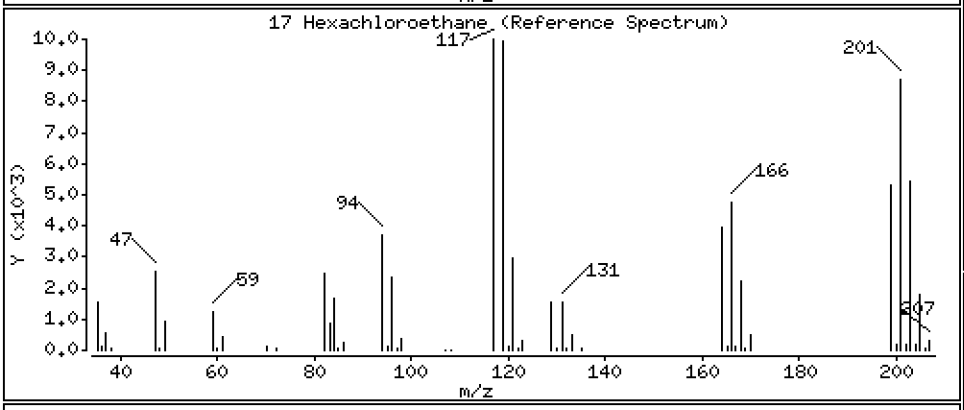
Column diameter: 0.25

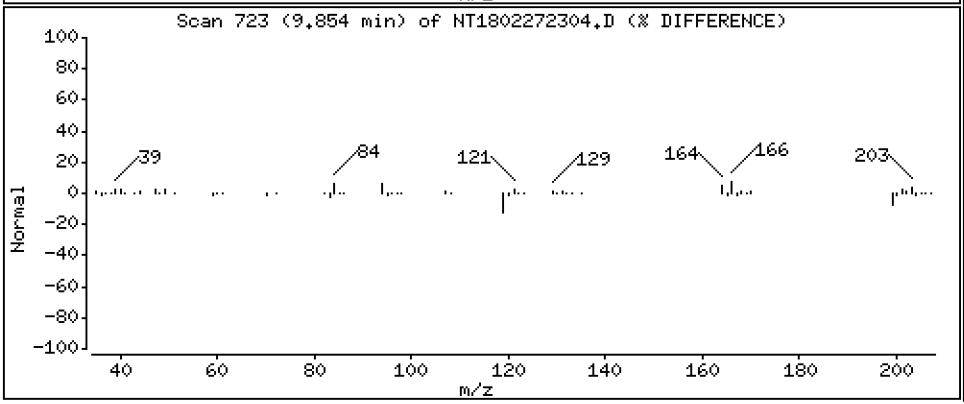
17 Hexachloroethane

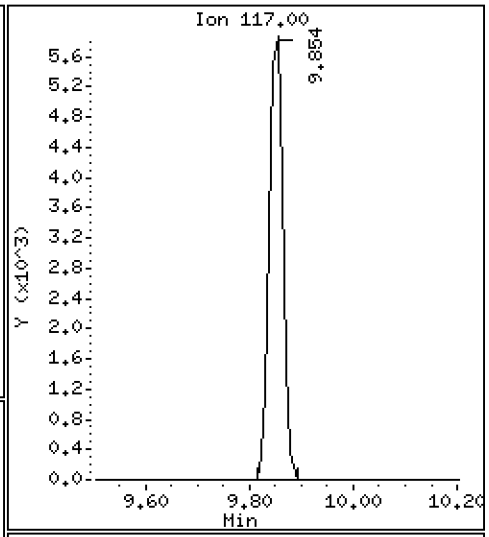
Concentration: 0.2496 ug/mL

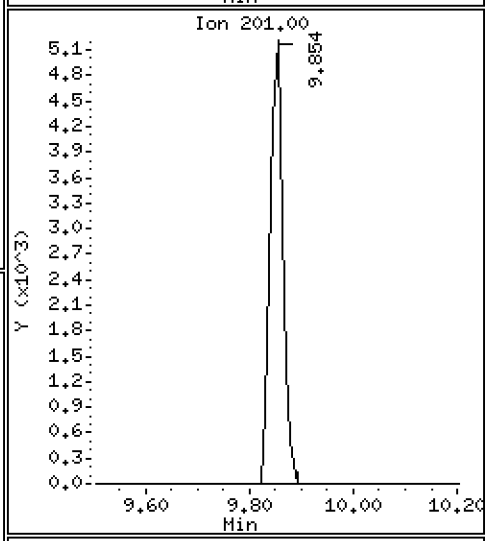


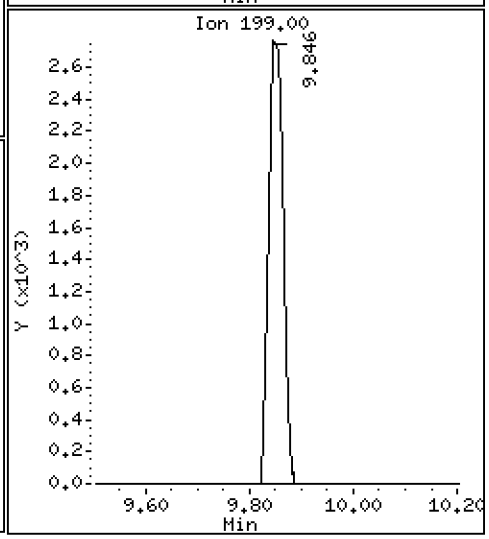












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

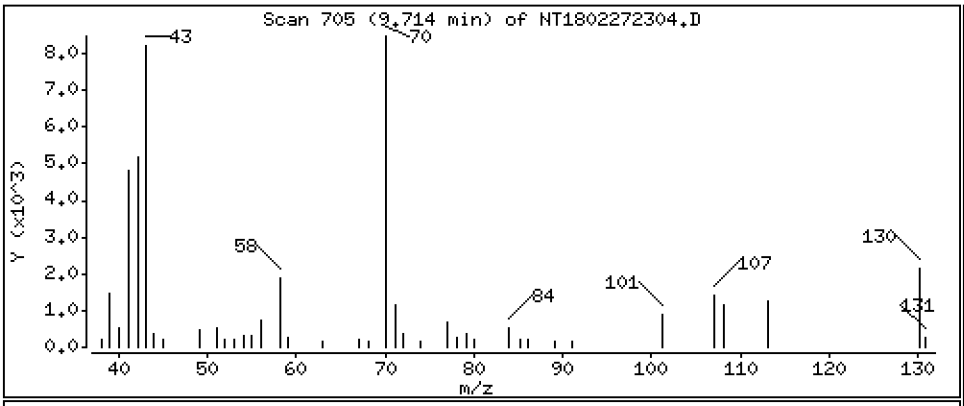
Operator: VTS

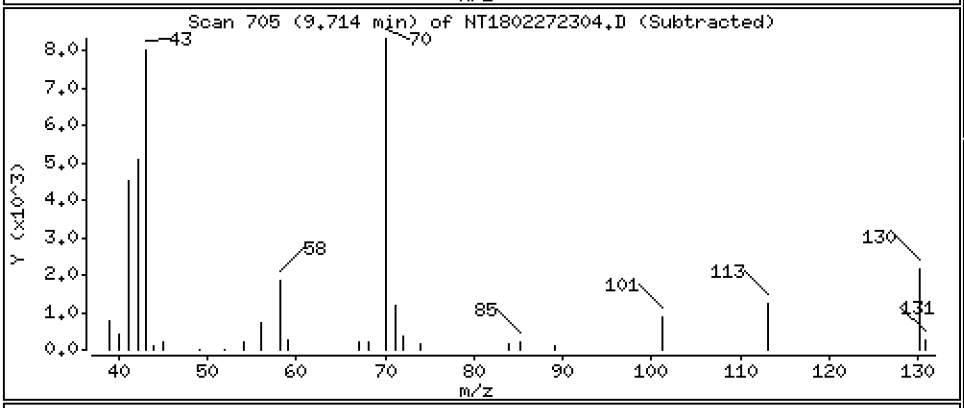
Column phase: ZB-5msi

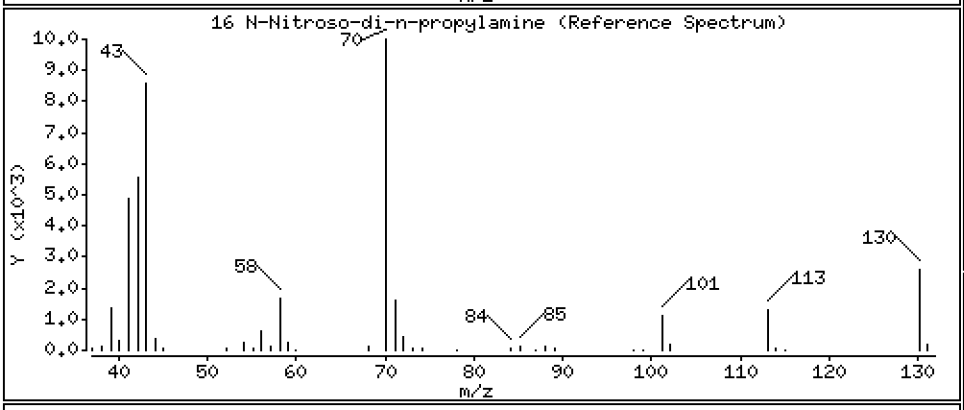
Column diameter: 0.25

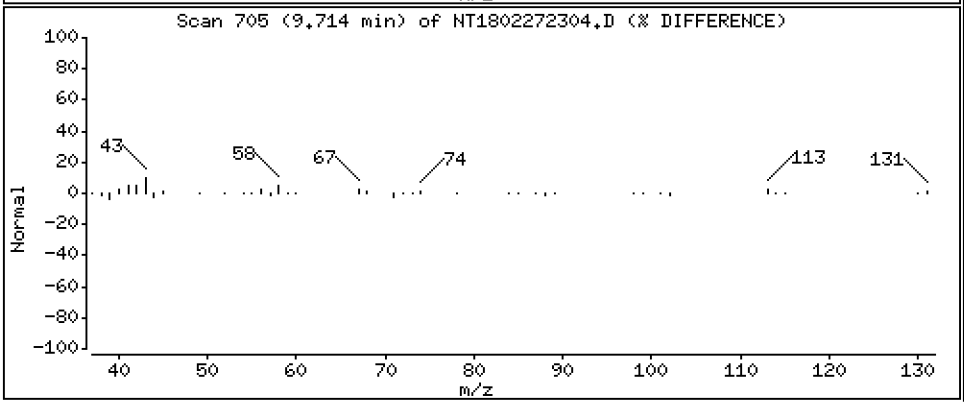
16 N-Nitroso-di-n-propylamine

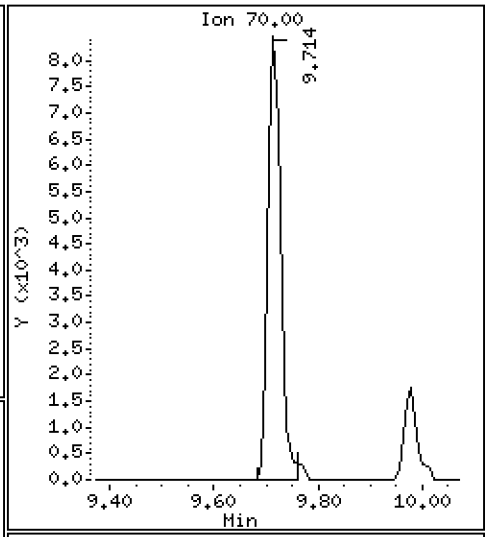
Concentration: 0.2116 ug/mL

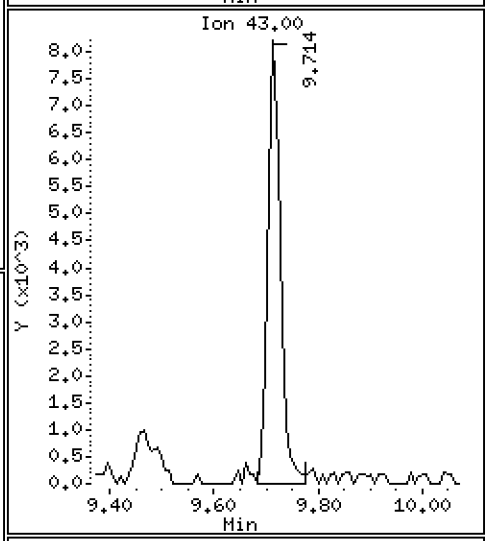


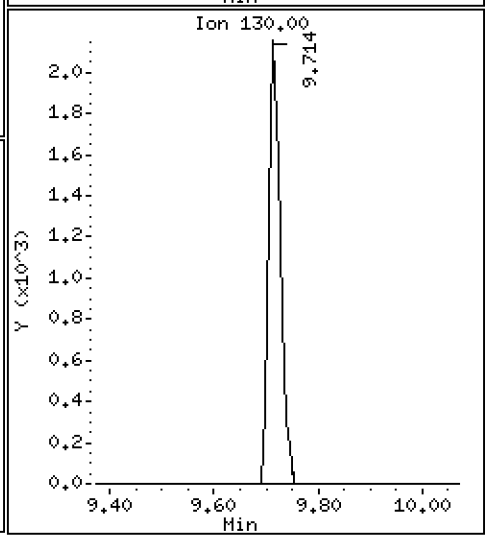












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

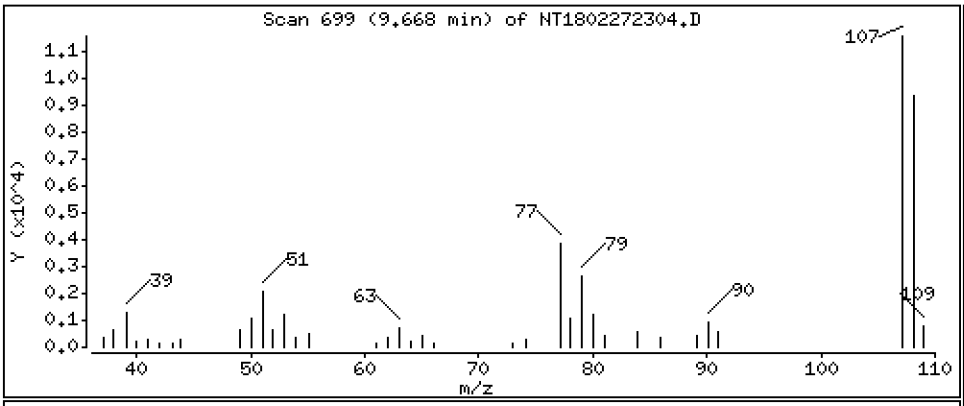
Operator: VTS

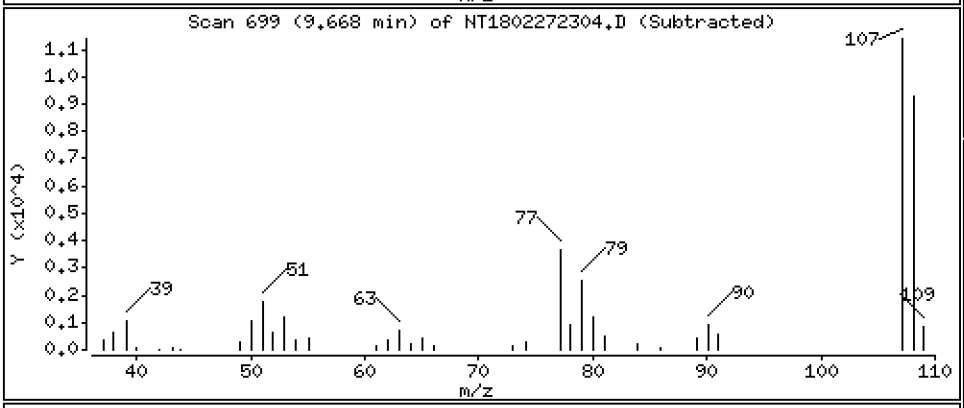
Column phase: ZB-5msi

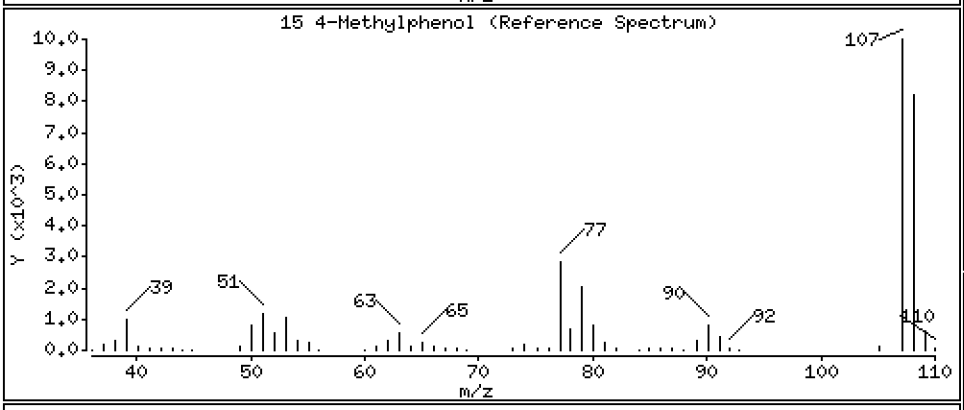
Column diameter: 0.25

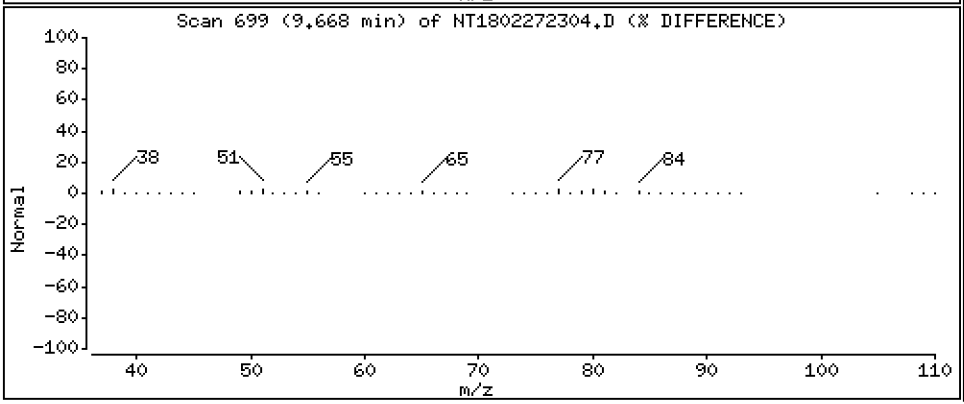
15 4-Methylphenol

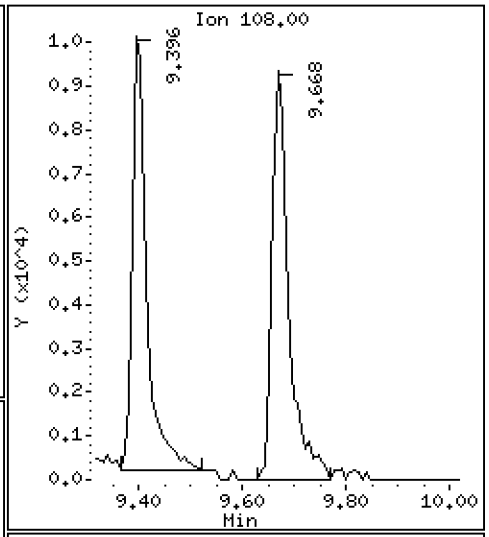
Concentration: 0.2192 ug/mL

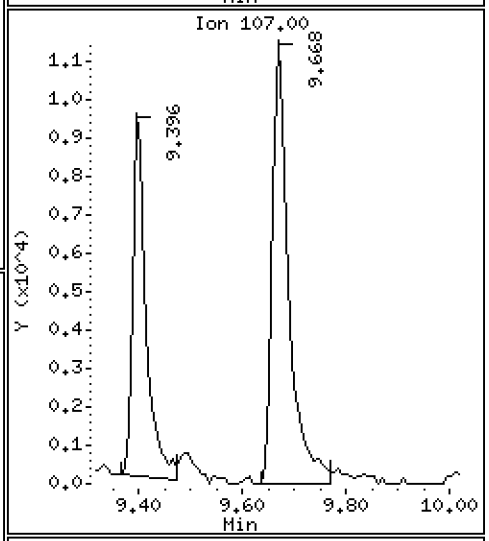


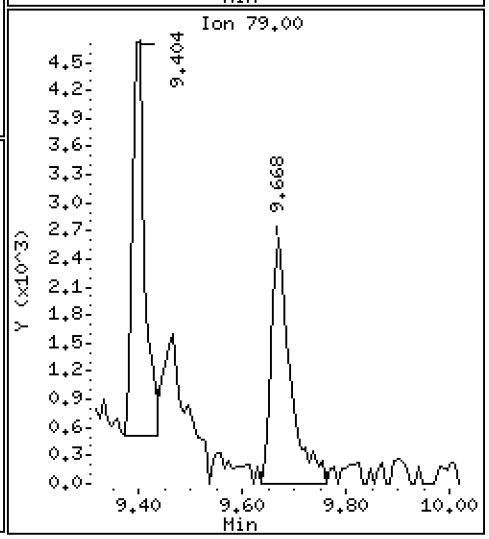












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

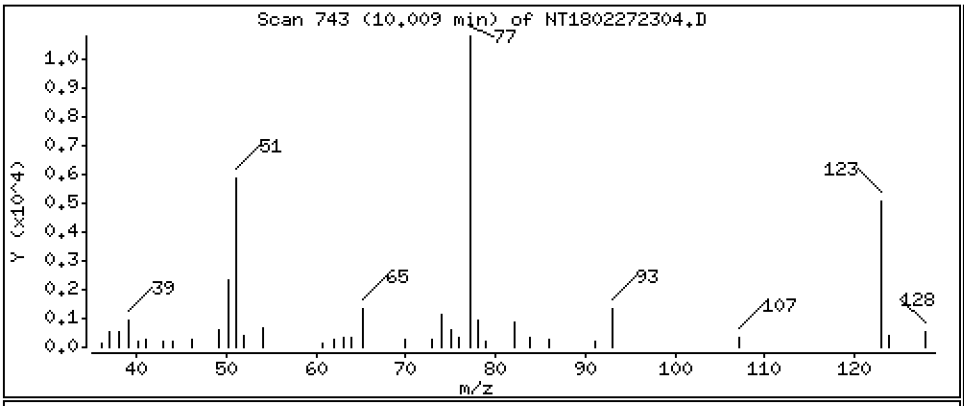
Operator: VTS

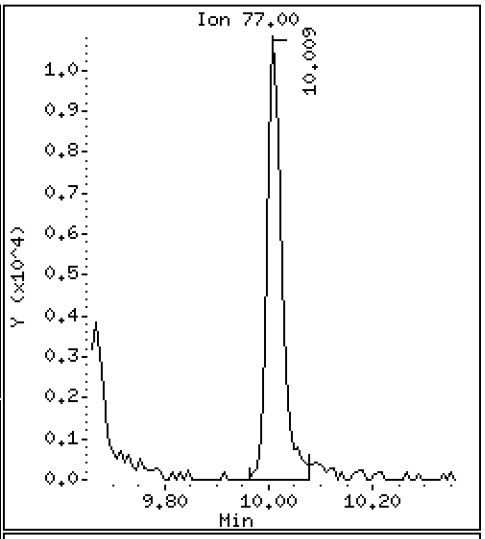
Column phase: ZB-5msi

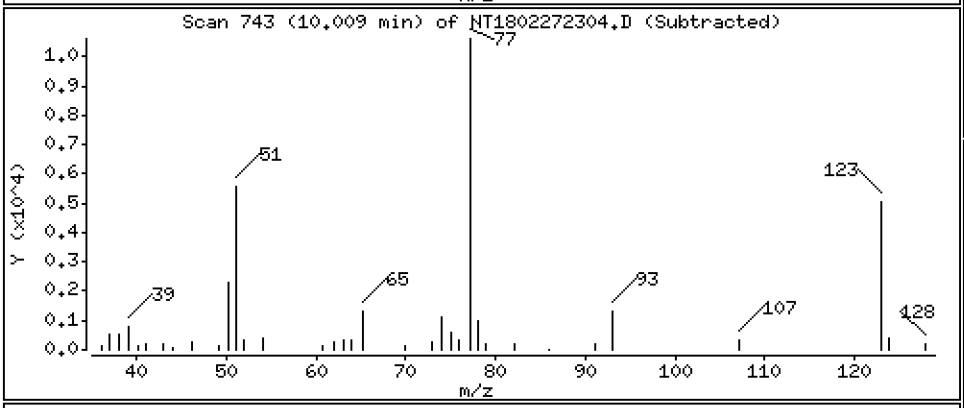
Column diameter: 0.25

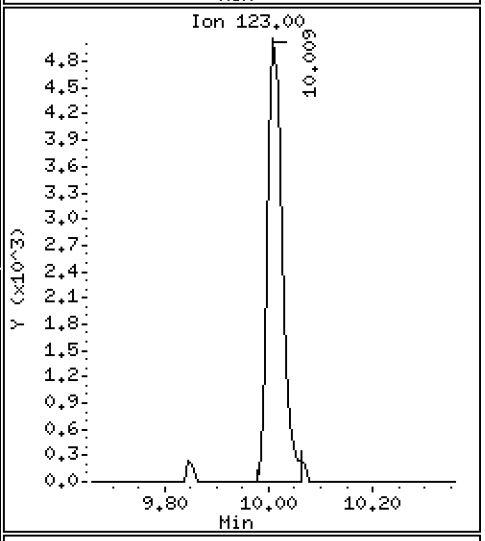
19 Nitrobenzene

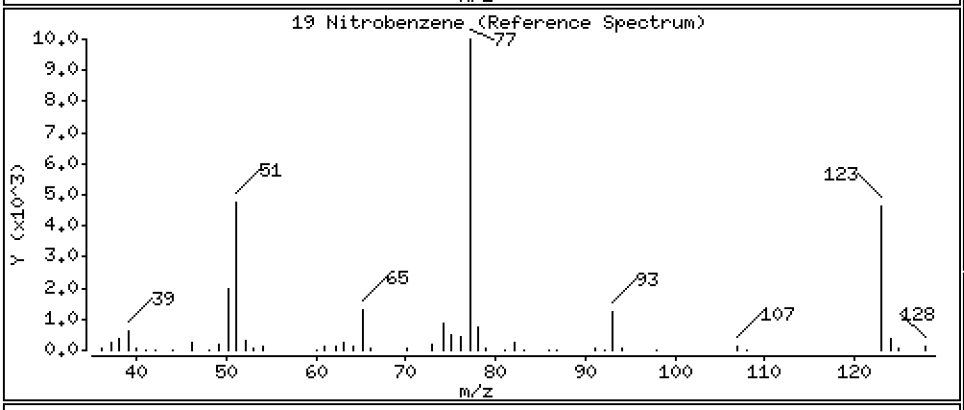
Concentration: 0.2054 ug/mL

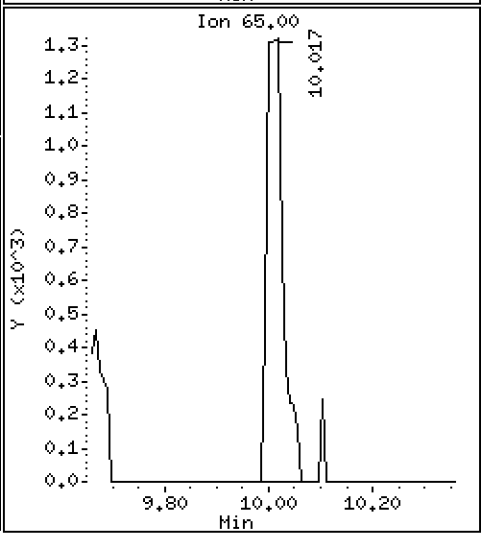


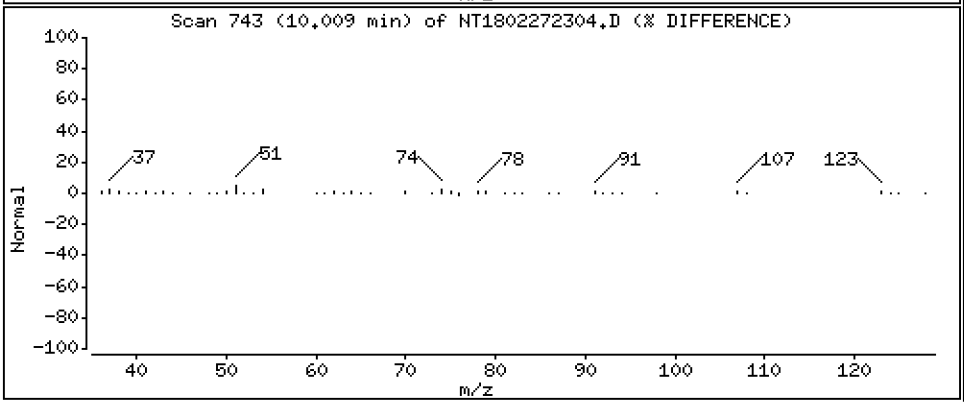












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

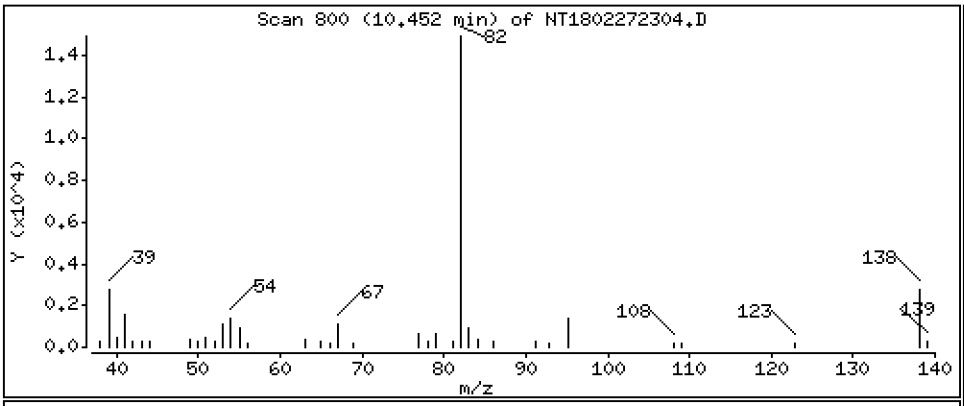
Operator: VTS

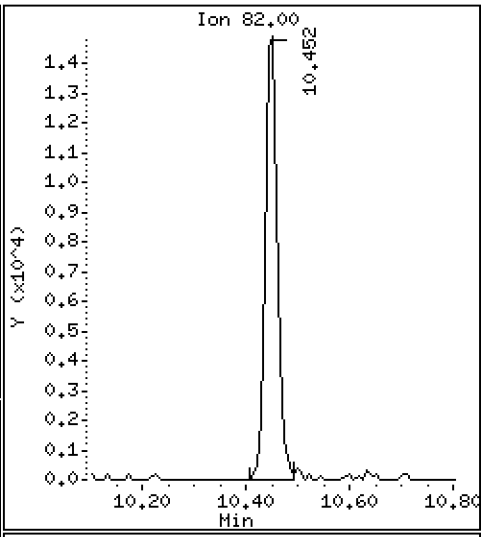
Column phase: ZB-5msi

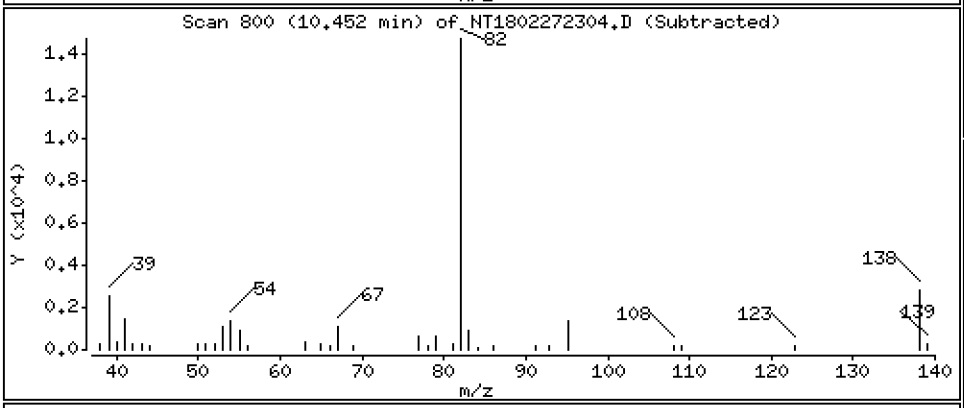
Column diameter: 0.25

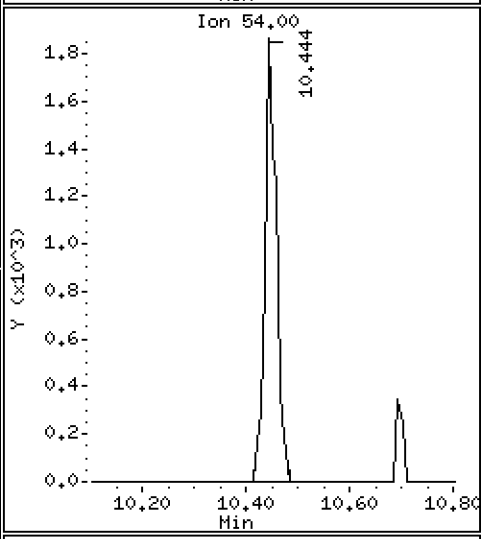
20 Isophorone

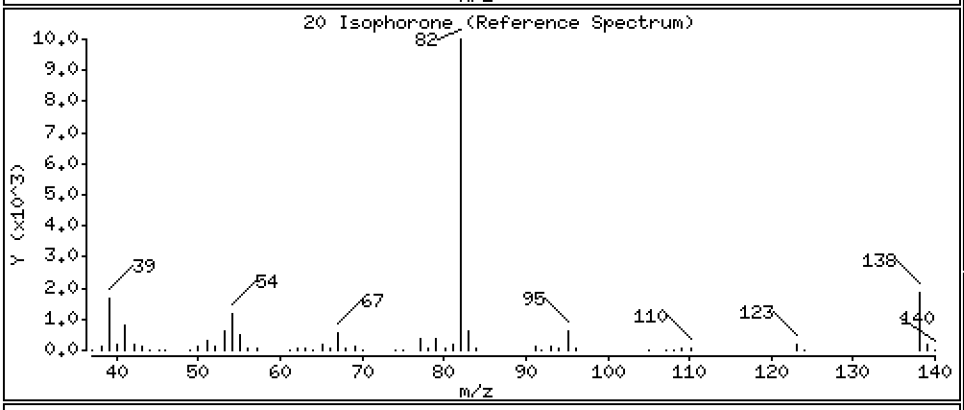
Concentration: 0.2003 ug/mL

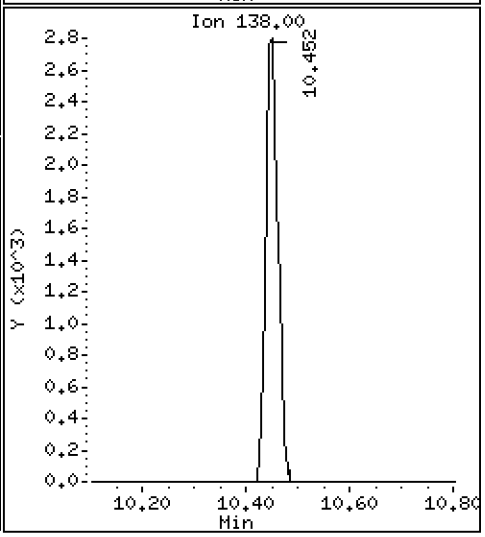


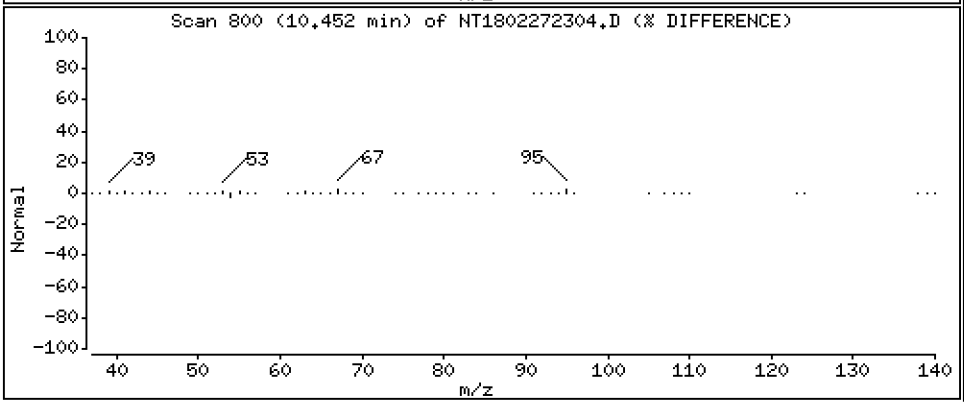












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

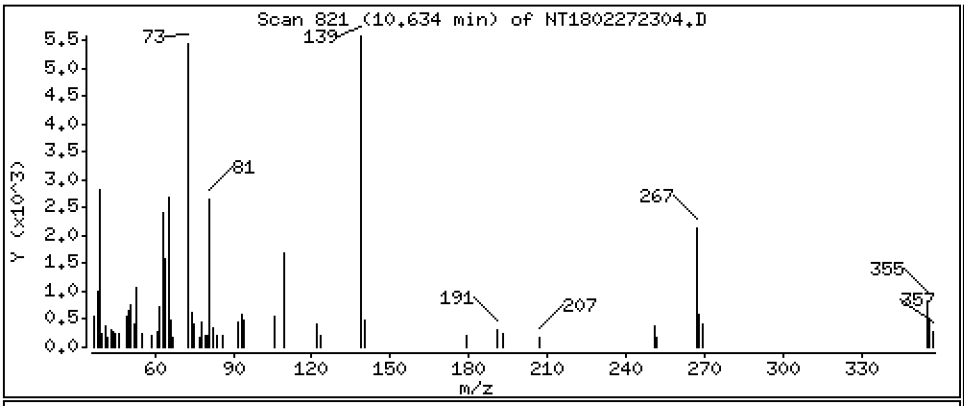
Operator: VTS

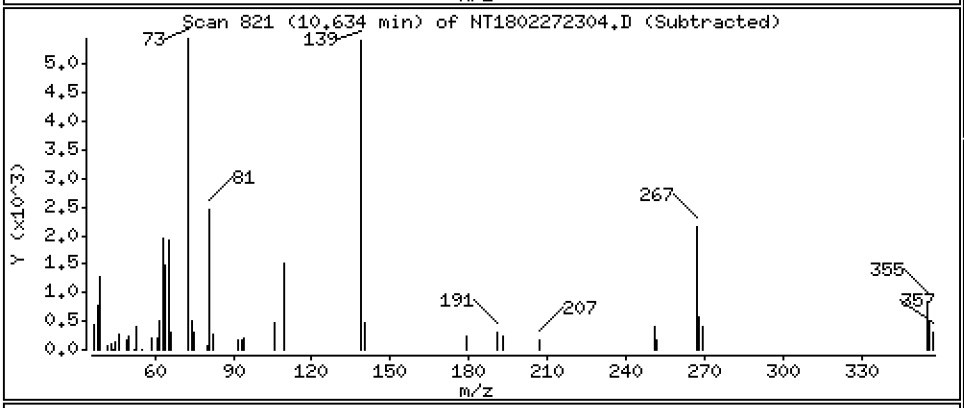
Column phase: ZB-5msi

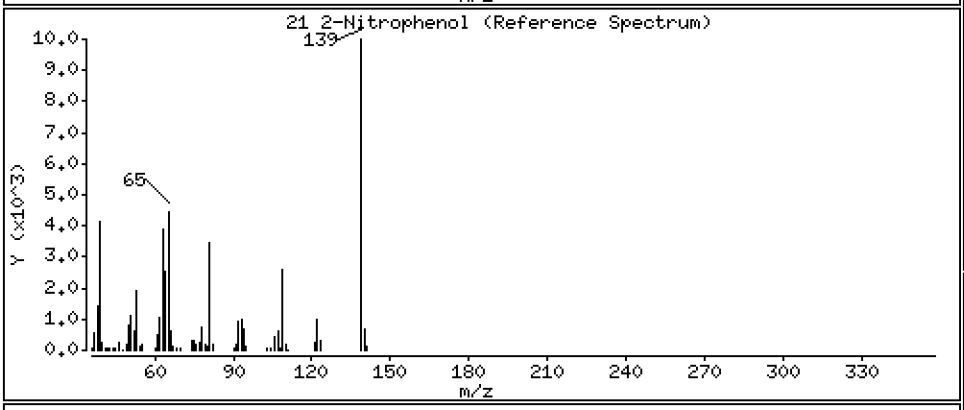
Column diameter: 0.25

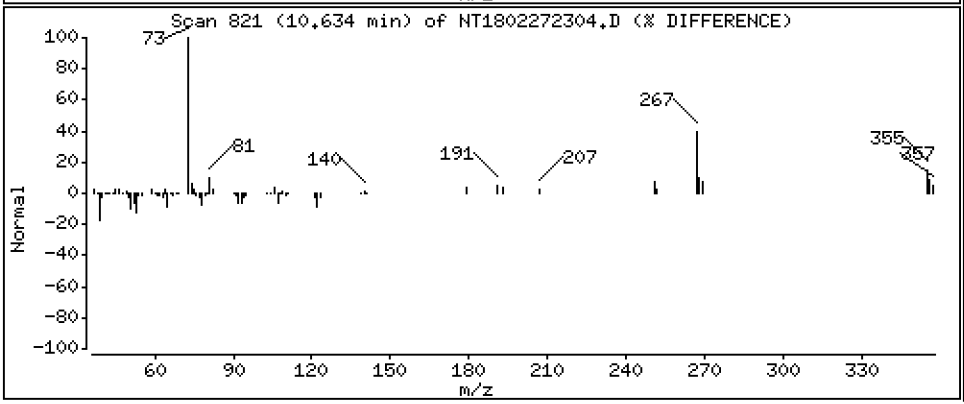
21 2-Nitrophenol

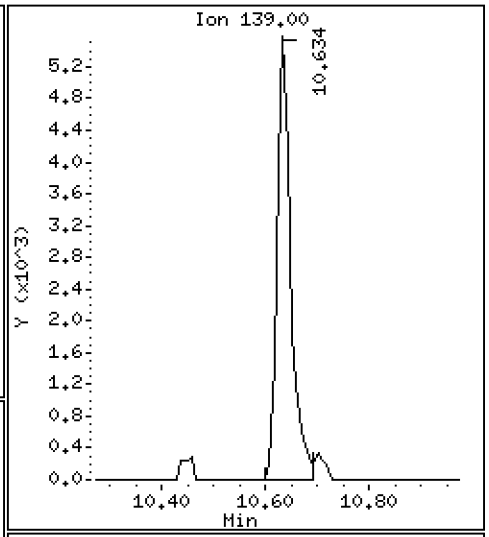
Concentration: 0.2076 ug/mL

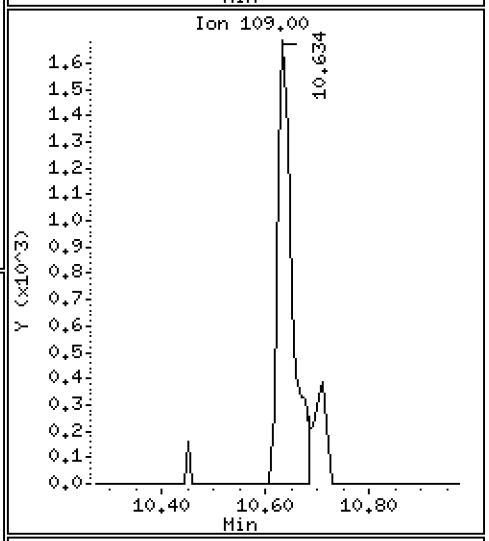


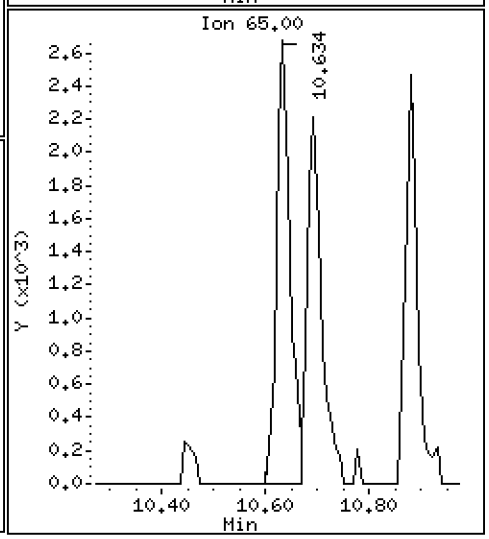












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

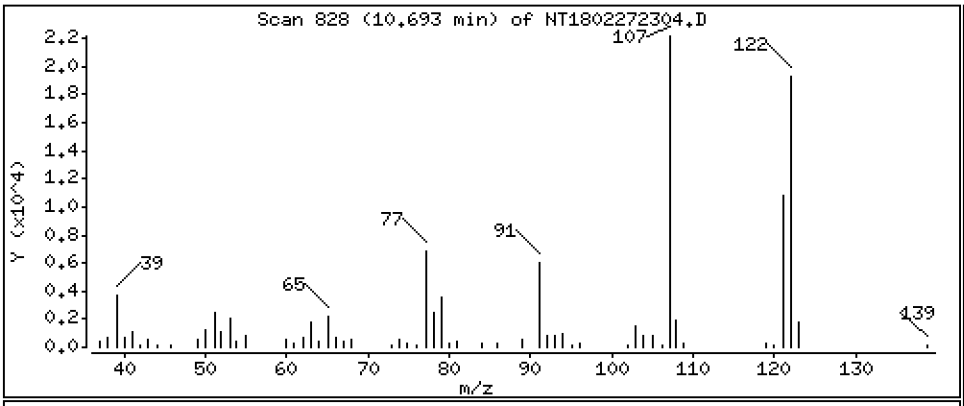
Operator: VTS

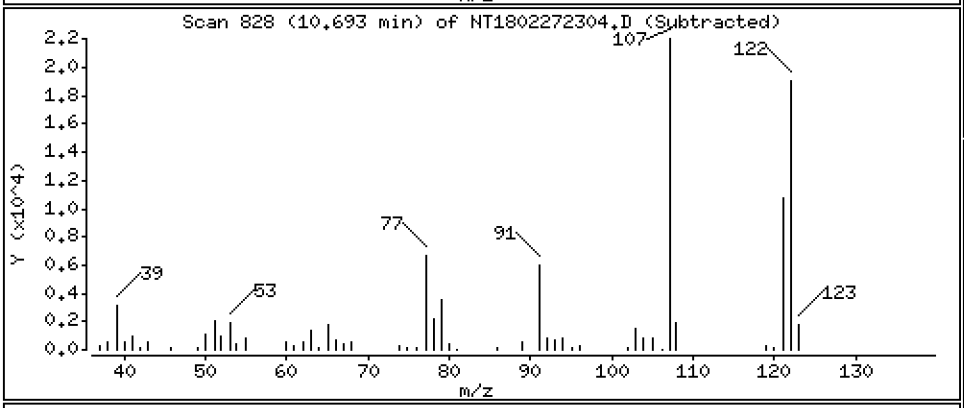
Column phase: ZB-5msi

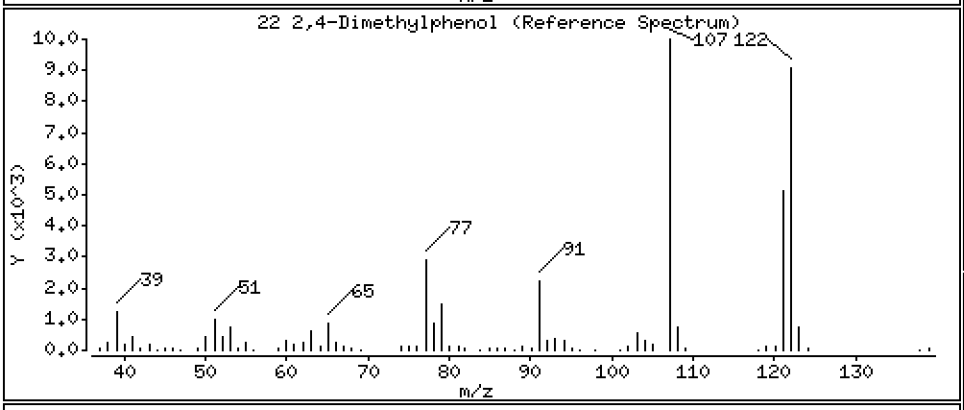
Column diameter: 0.25

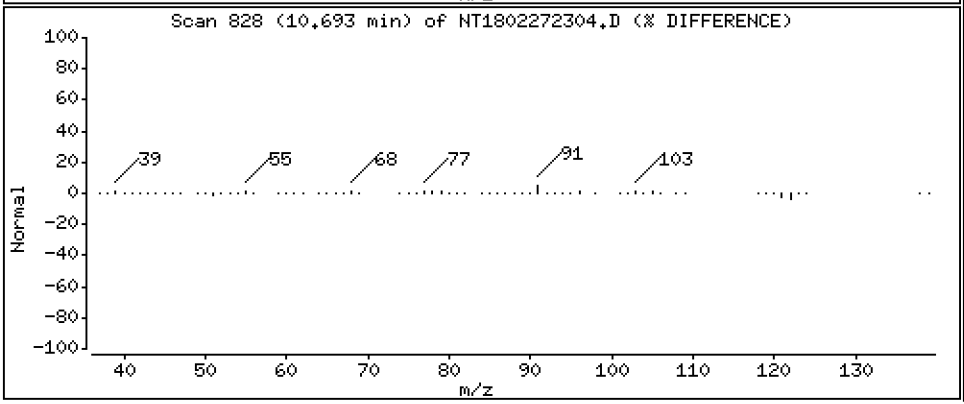
22 2,4-Dimethylphenol

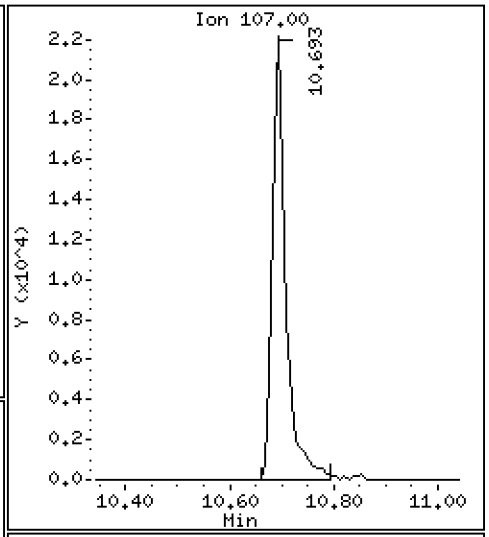
Concentration: 0.4403 ug/mL

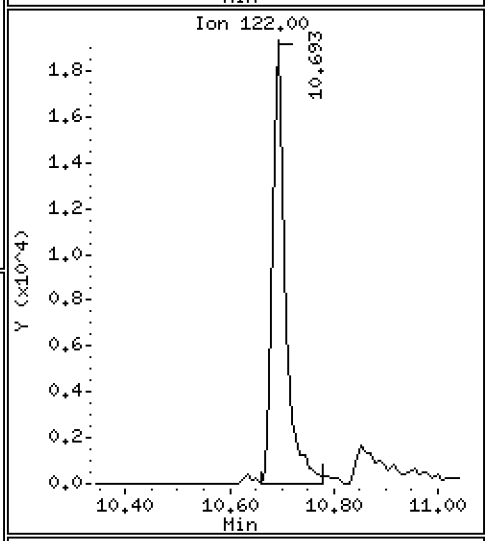


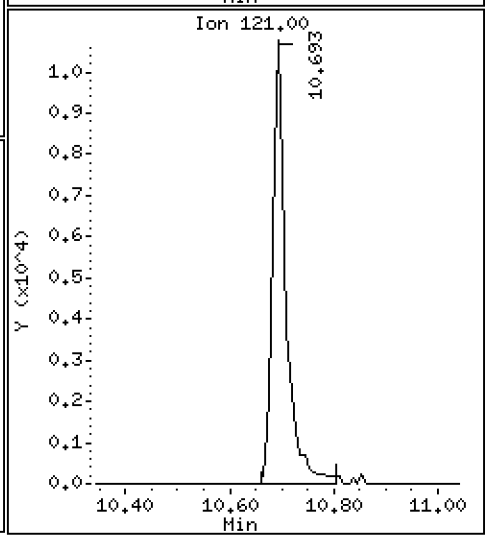












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

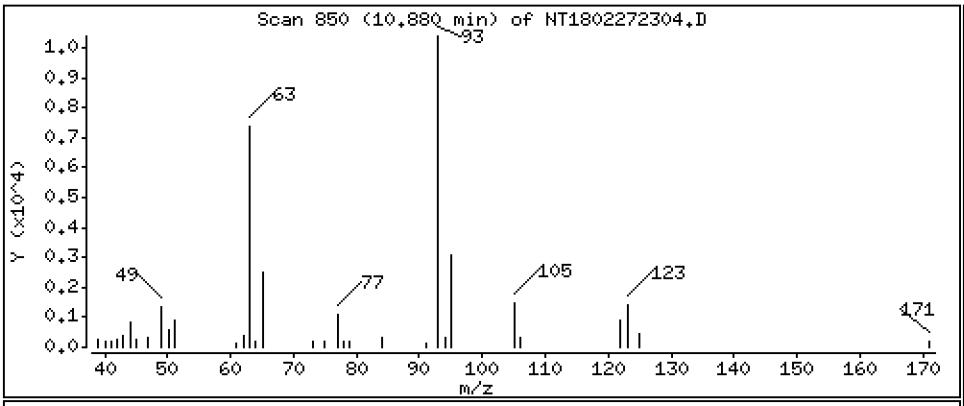
Operator: VTS

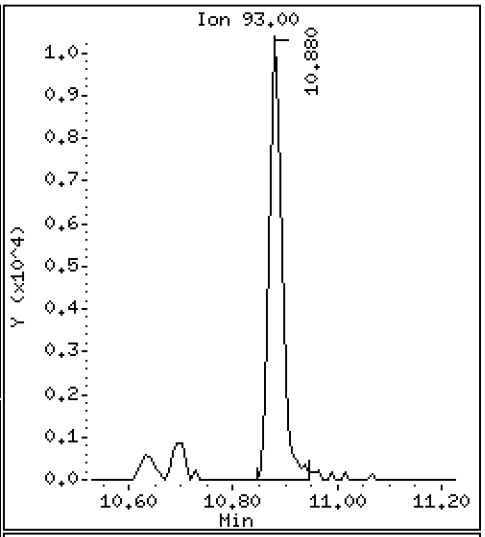
Column phase: ZB-5msi

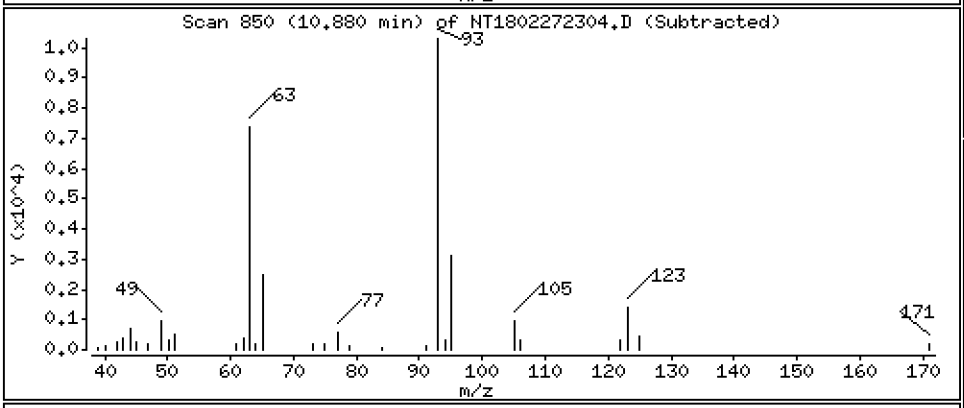
Column diameter: 0.25

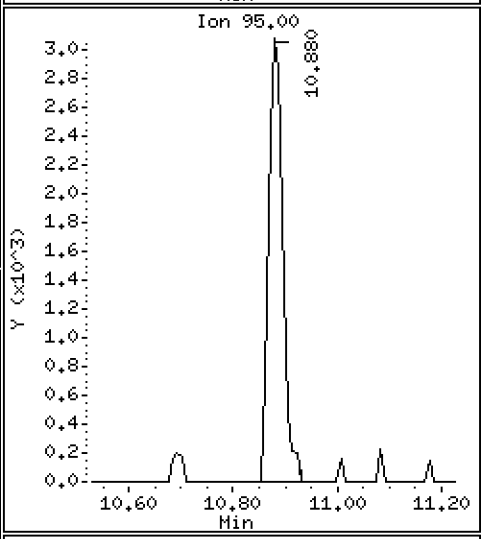
23 Bis(2-Chloroethoxy)methane

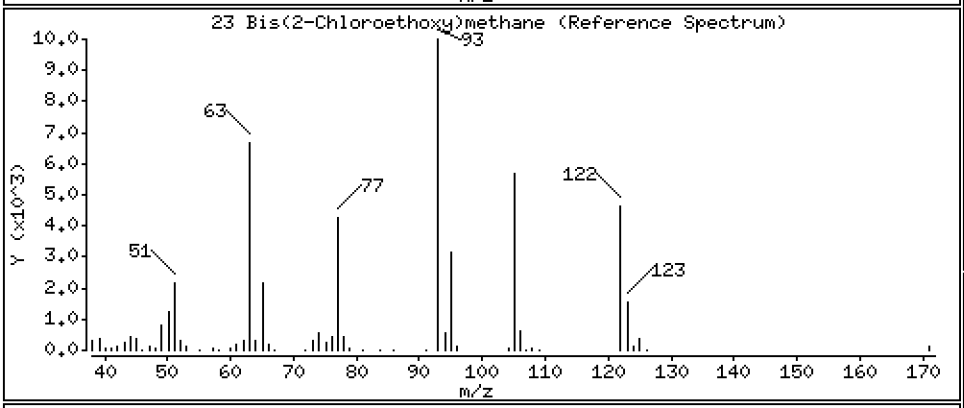
Concentration: 0.2050 ug/mL

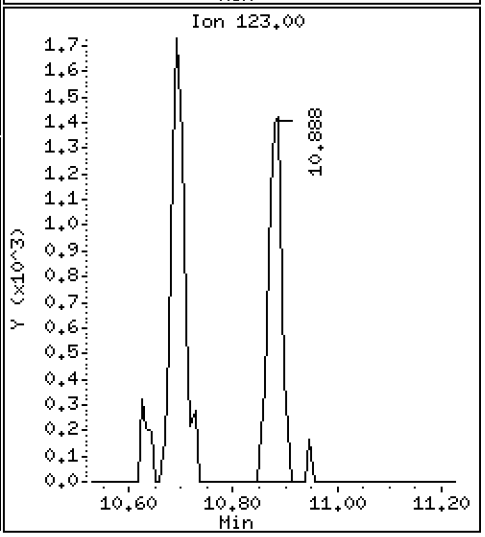


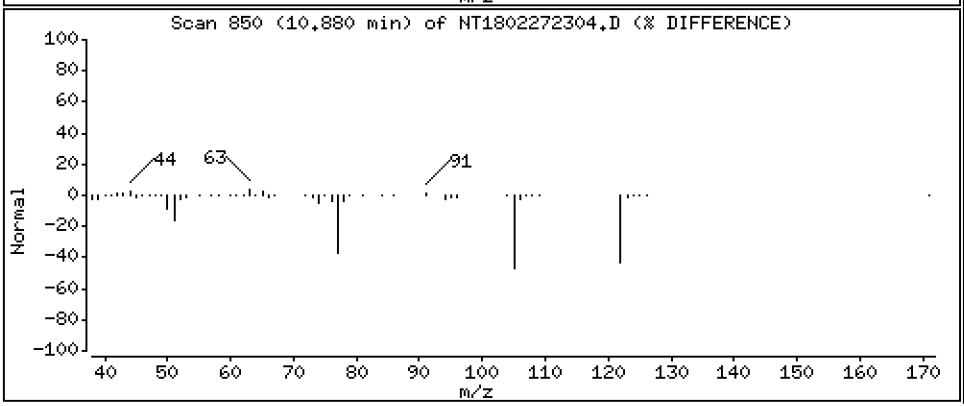












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

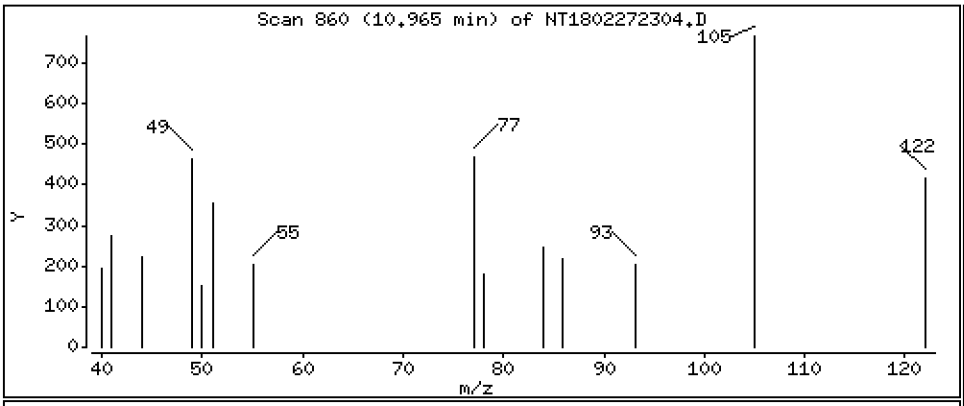
Operator: VTS

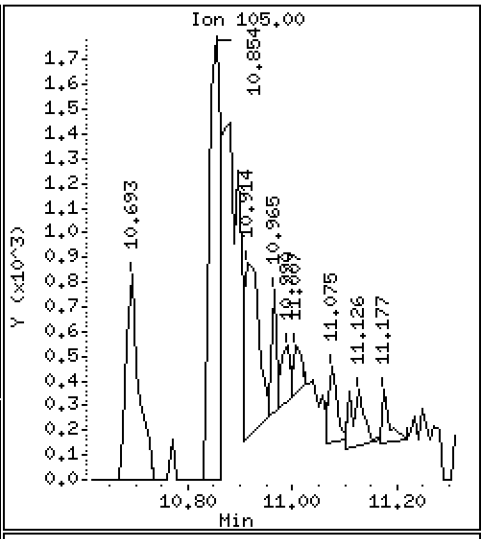
Column phase: ZB-5msi

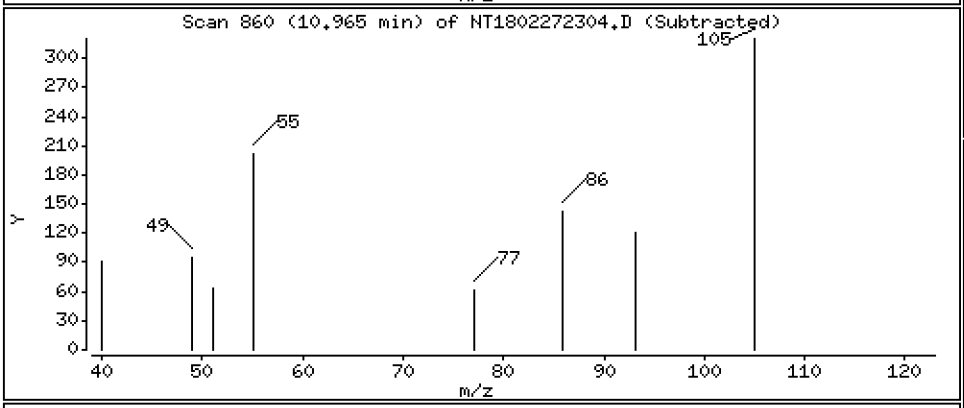
Column diameter: 0.25

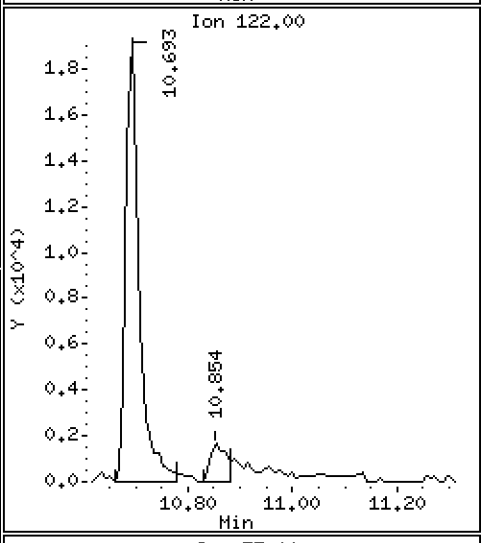
24 Benzoic acid

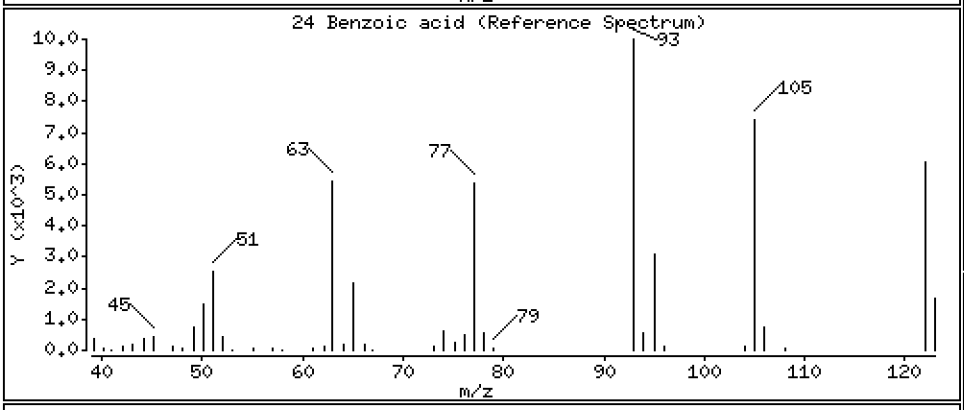
Concentration: 0.009657 ug/mL

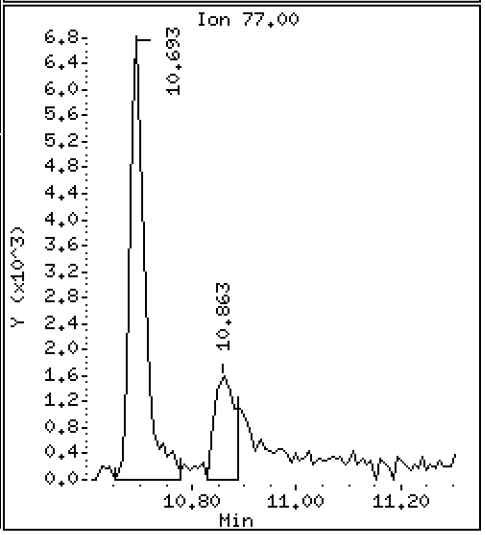


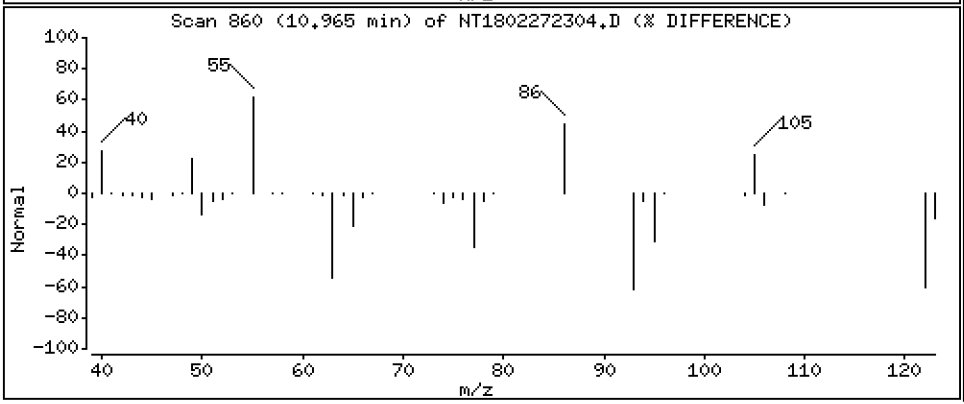












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

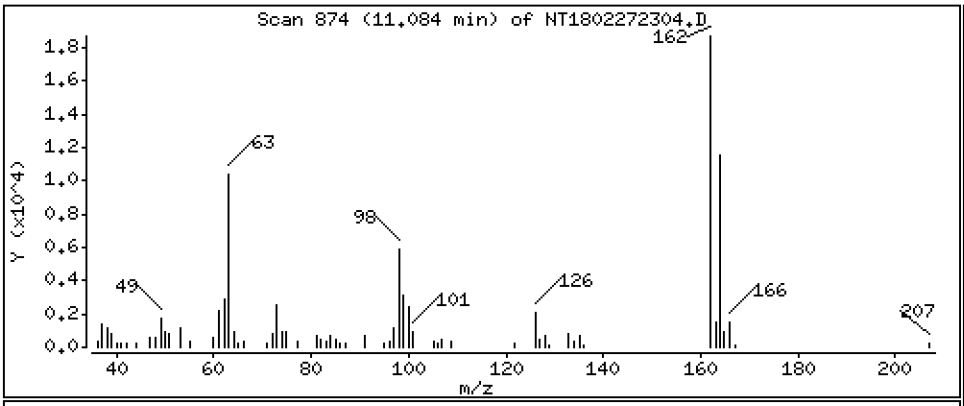
Operator: VTS

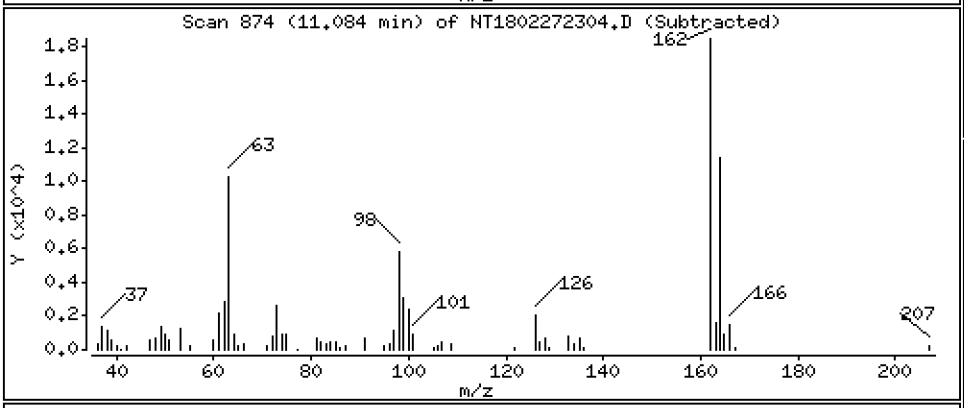
Column phase: ZB-5msi

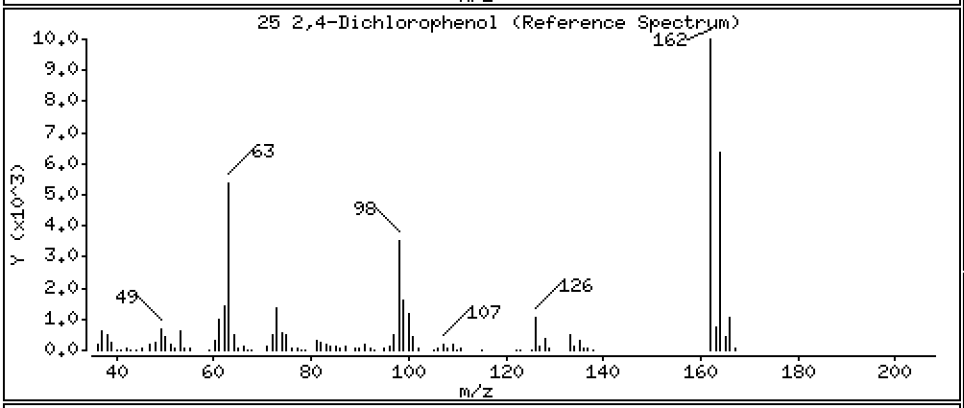
Column diameter: 0.25

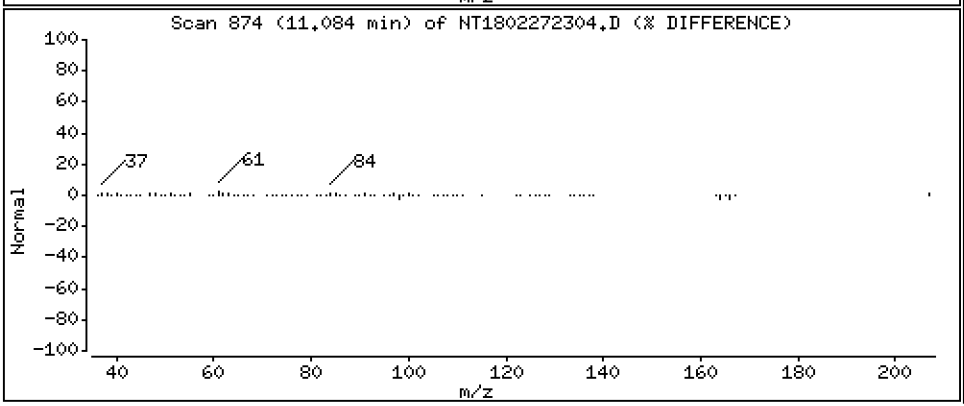
25 2,4-Dichlorophenol

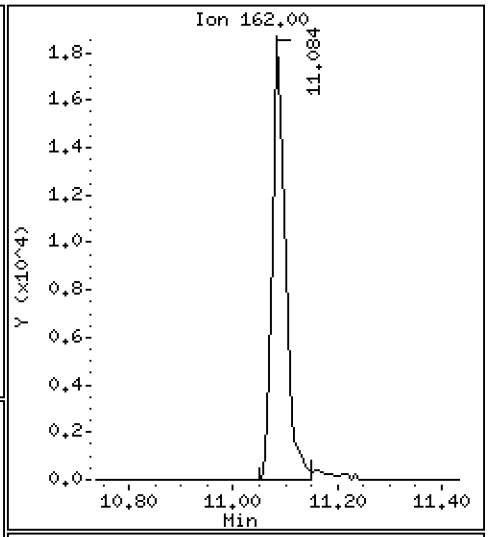
Concentration: 0.3998 ug/mL

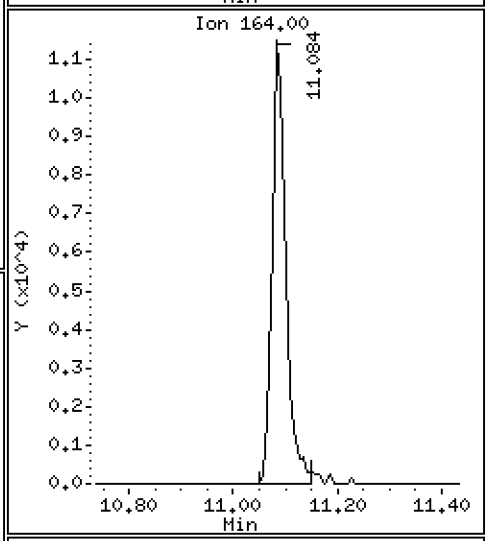


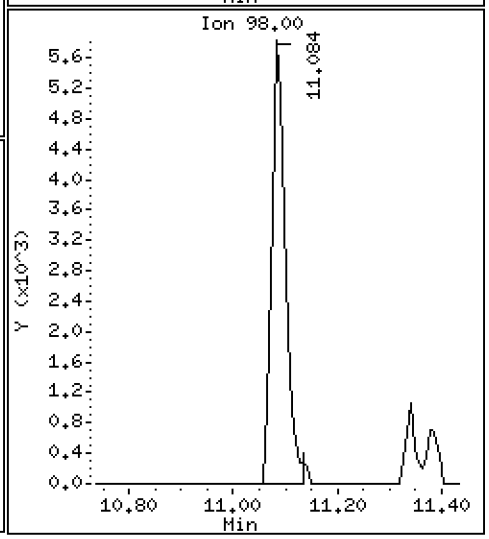












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

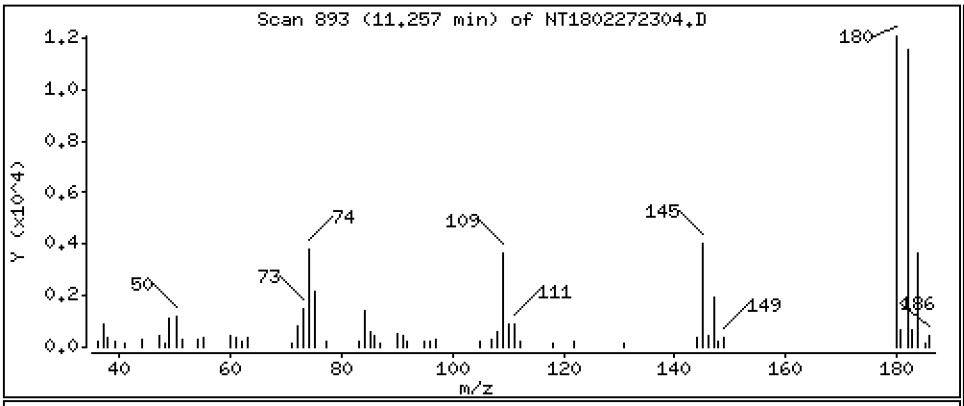
Operator: VTS

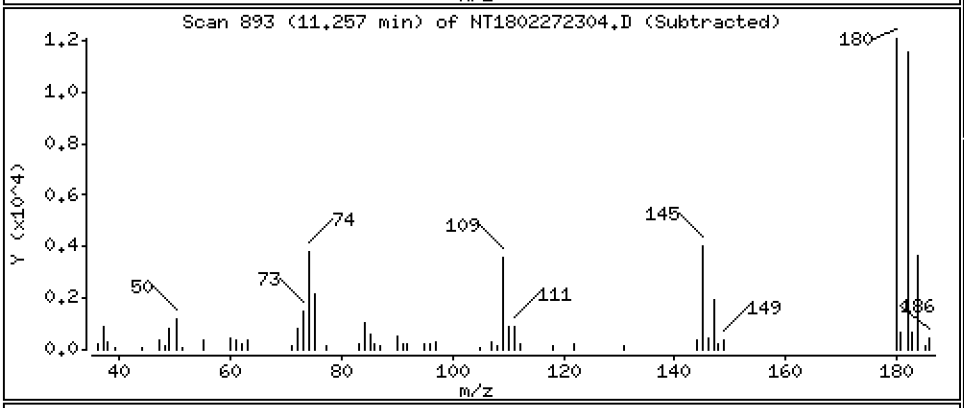
Column phase: ZB-5msi

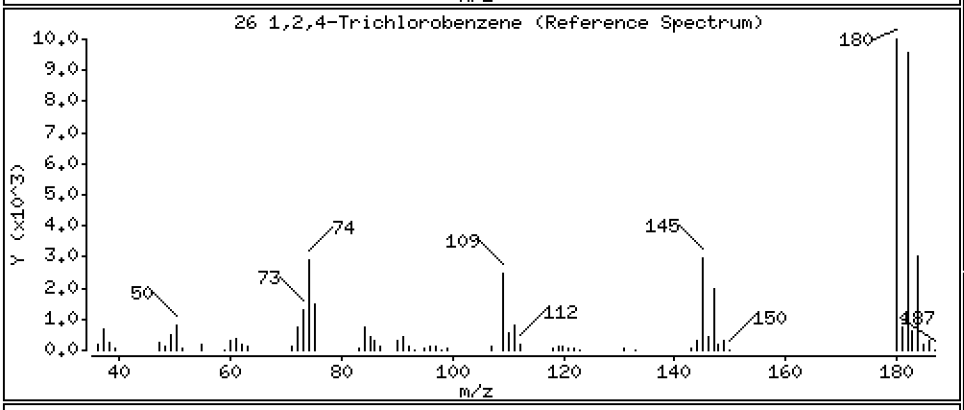
Column diameter: 0.25

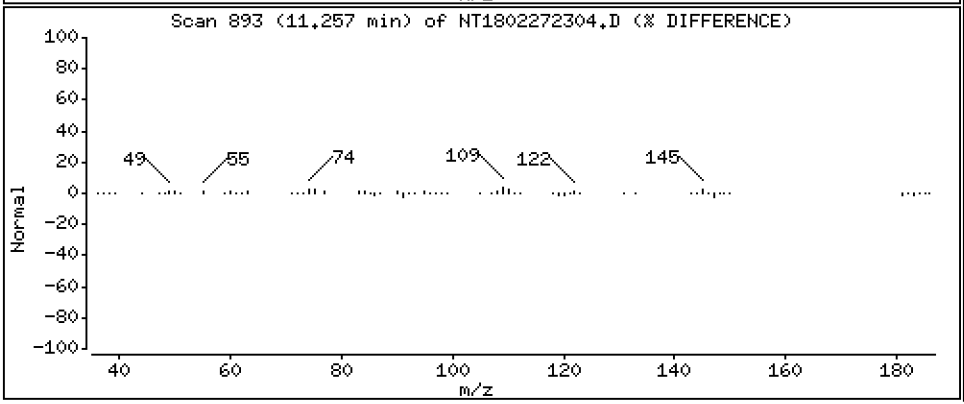
26 1,2,4-Trichlorobenzene

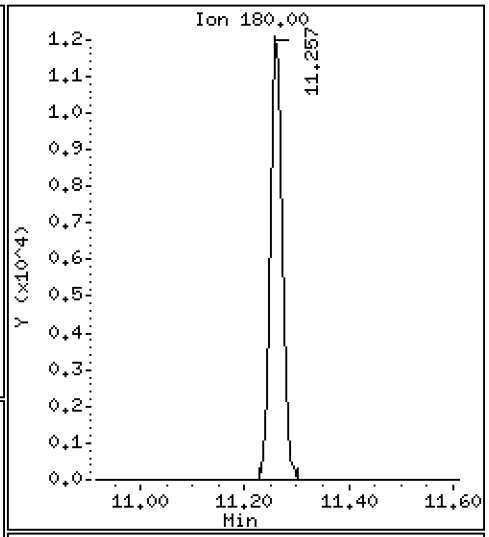
Concentration: 0.2292 ug/mL

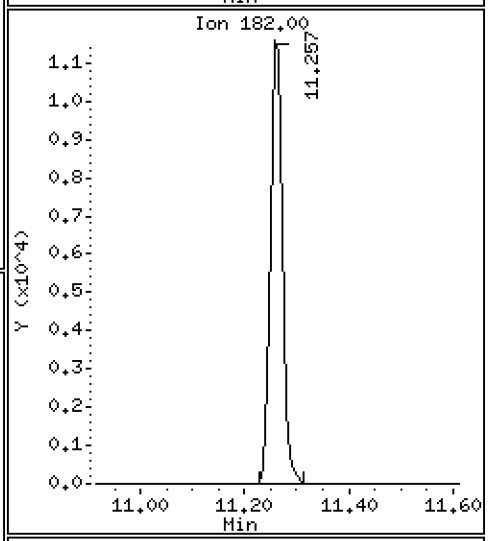


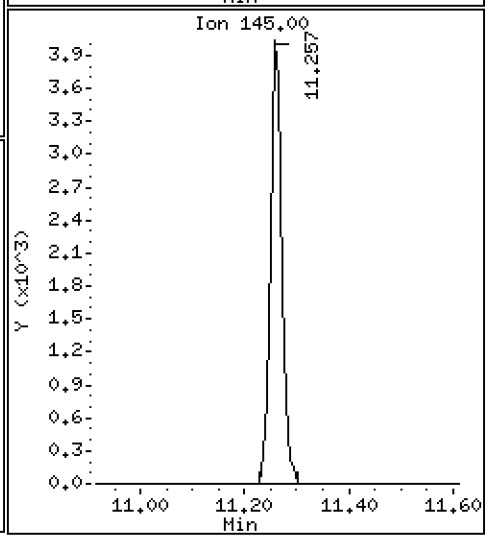












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

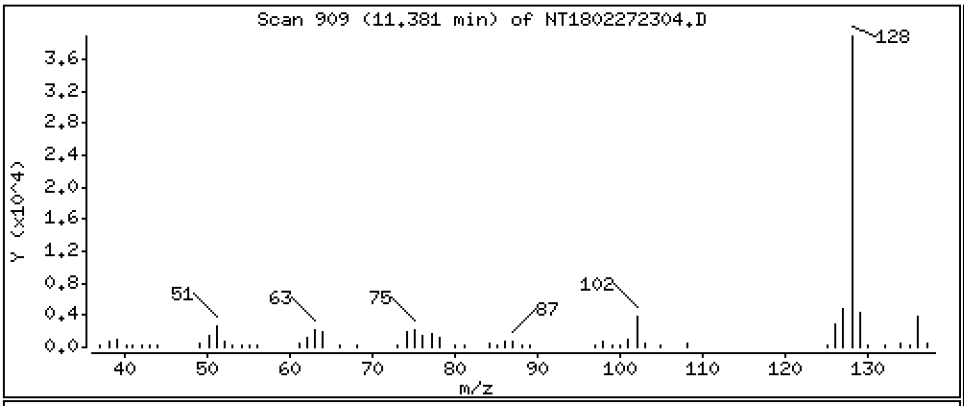
Operator: VTS

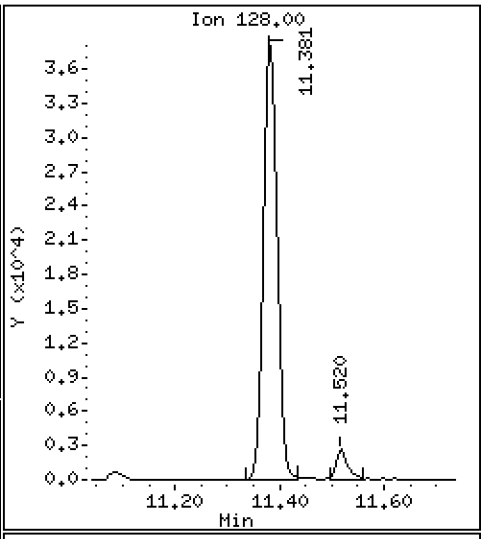
Column phase: ZB-5msi

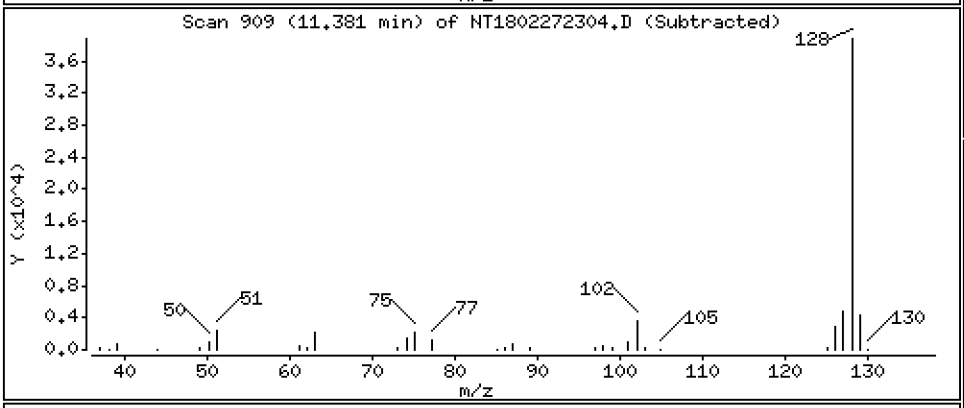
Column diameter: 0.25

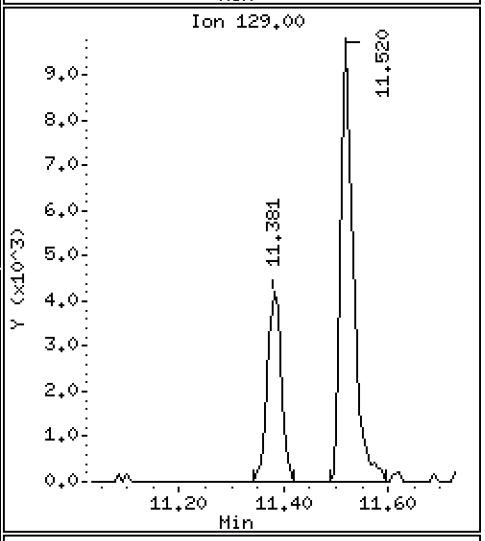
28 Naphthalene

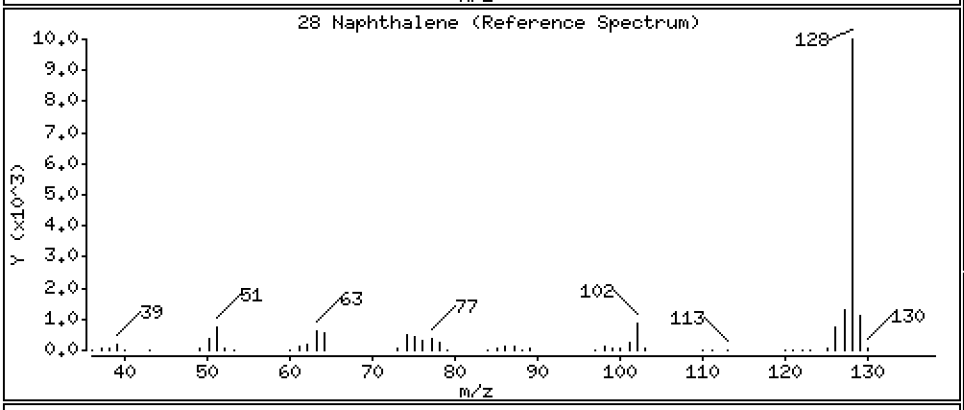
Concentration: 0.2270 ug/mL

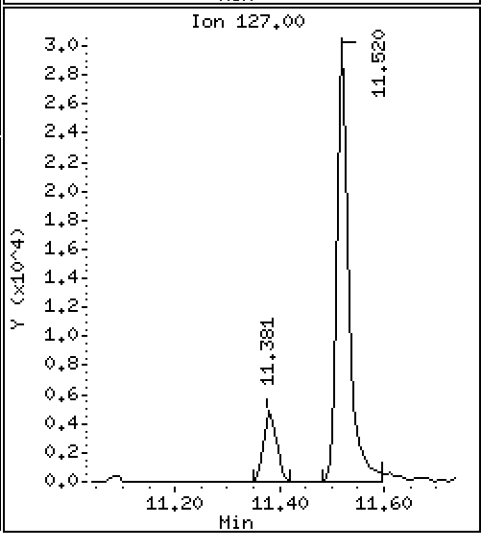


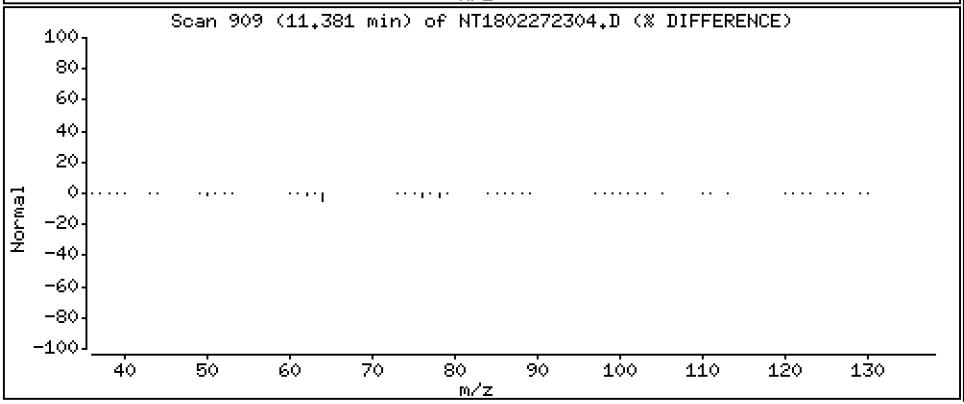












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

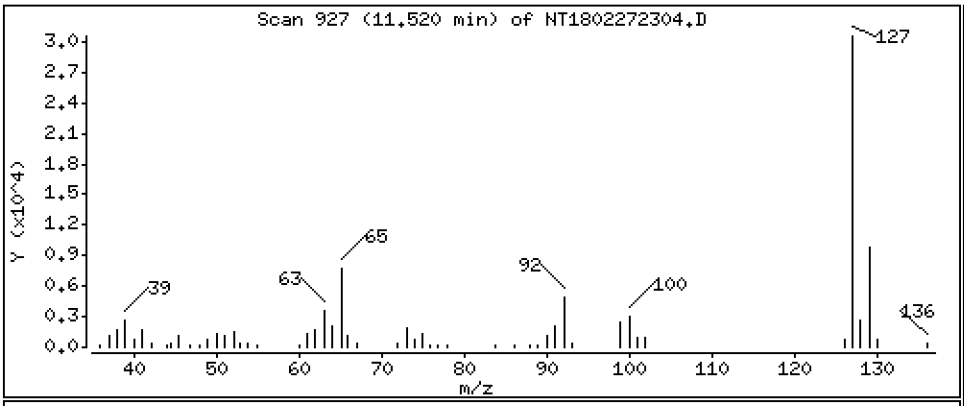
Operator: VTS

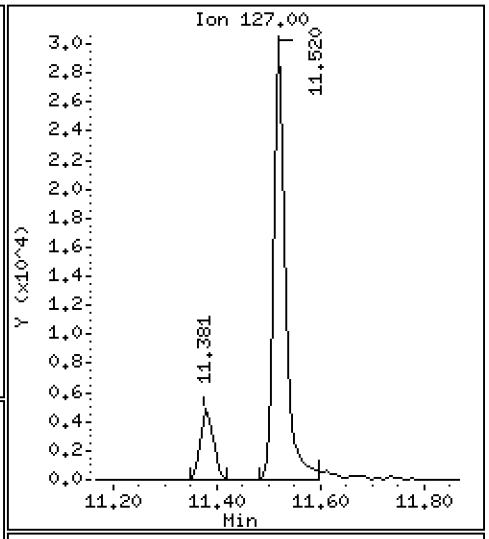
Column phase: ZB-5msi

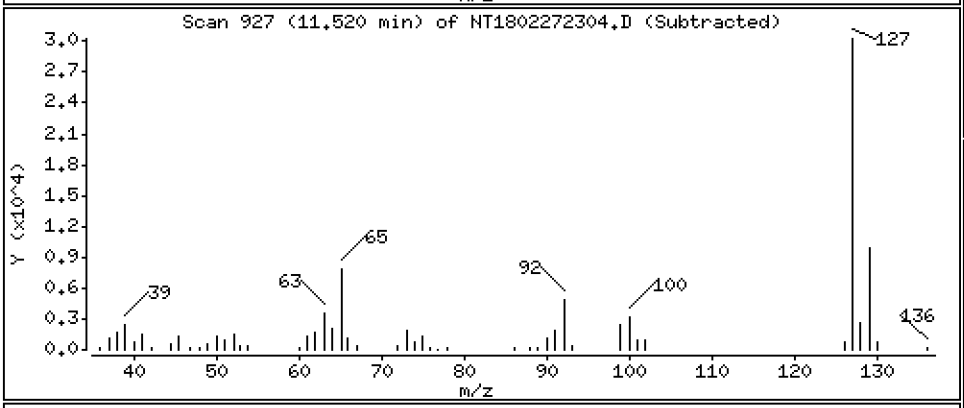
Column diameter: 0.25

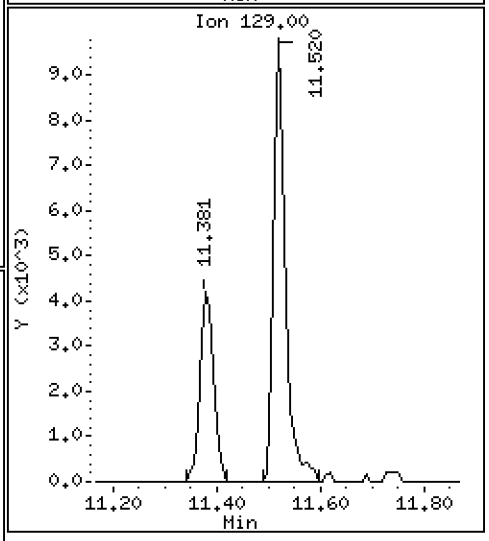
29 4-Chloroaniline

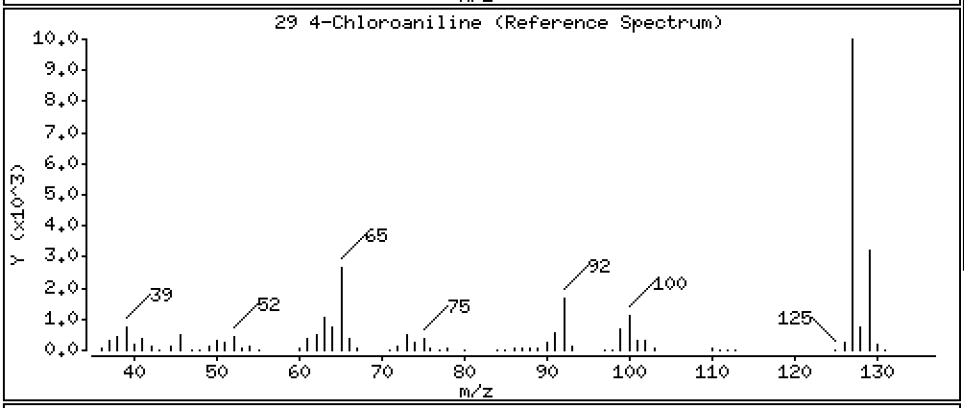
Concentration: 0.4169 ug/mL

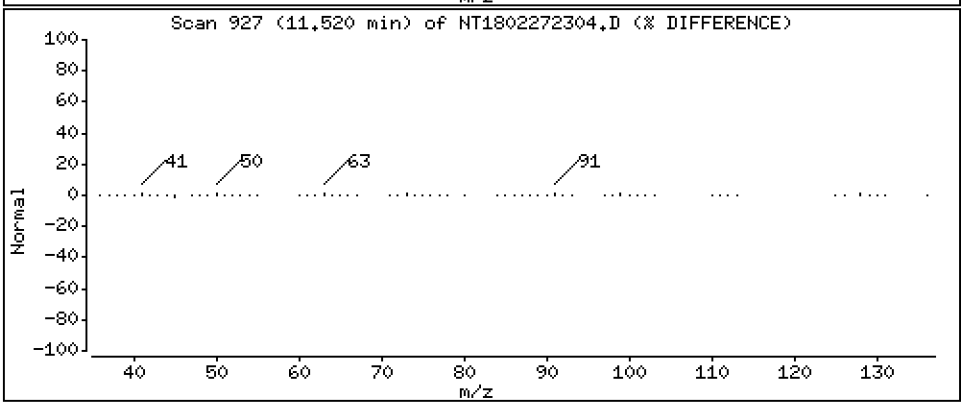












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

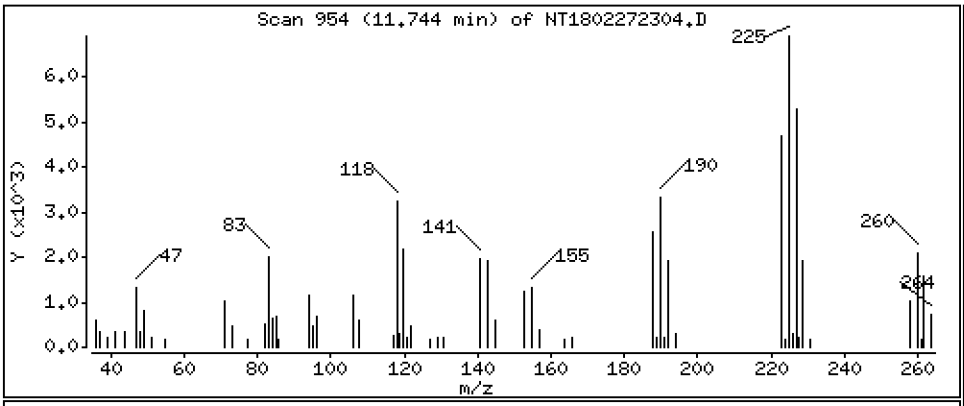
Operator: VTS

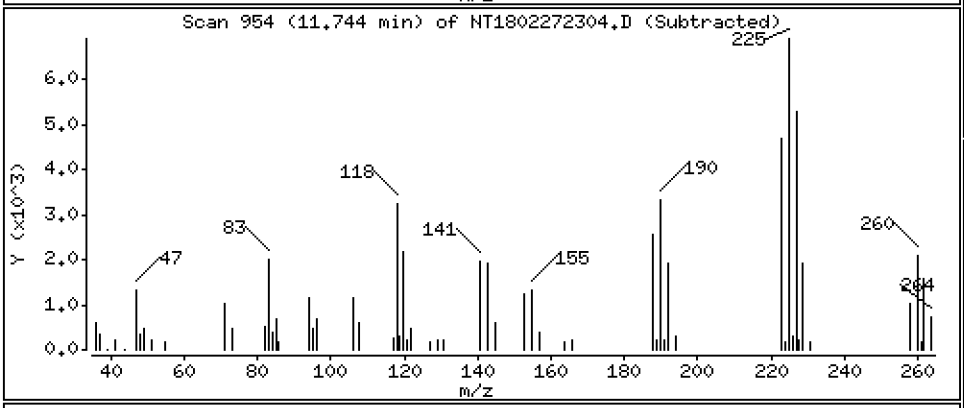
Column phase: ZB-5msi

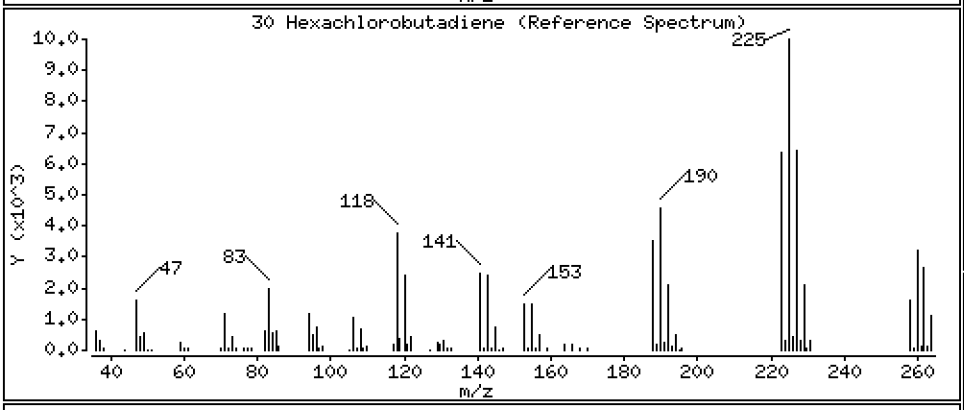
Column diameter: 0.25

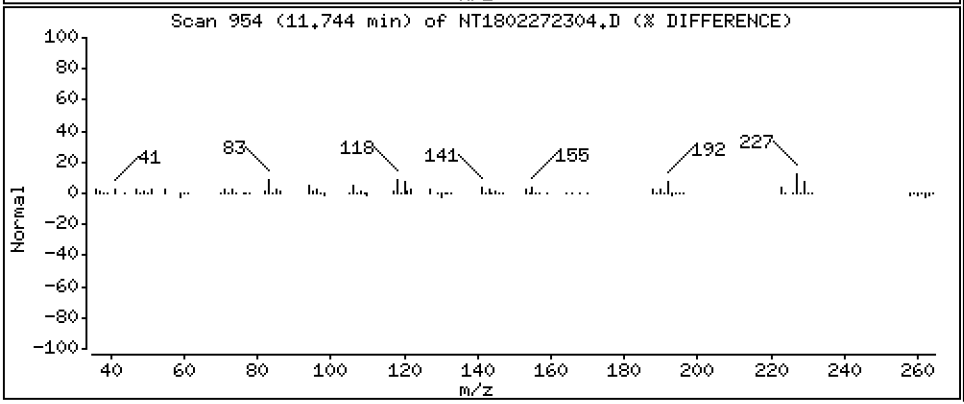
30 Hexachlorobutadiene

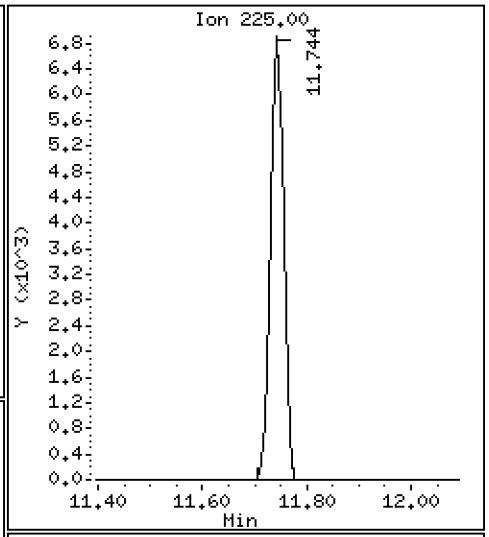
Concentration: 0.2220 ug/mL

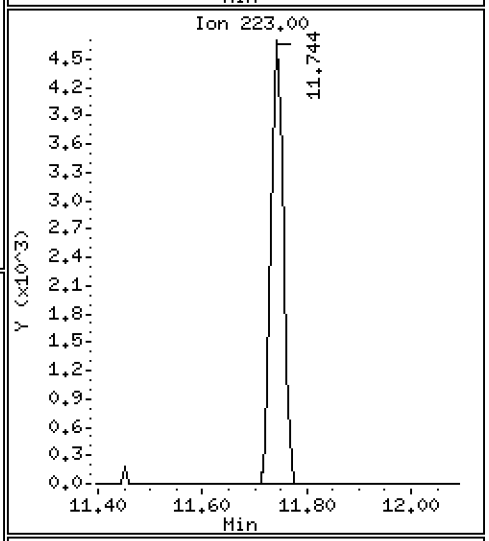


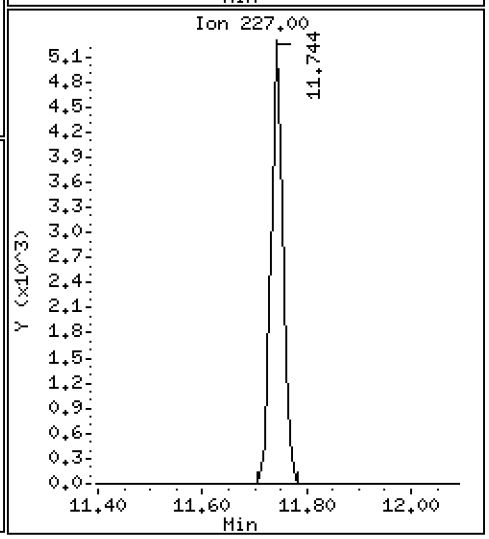












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

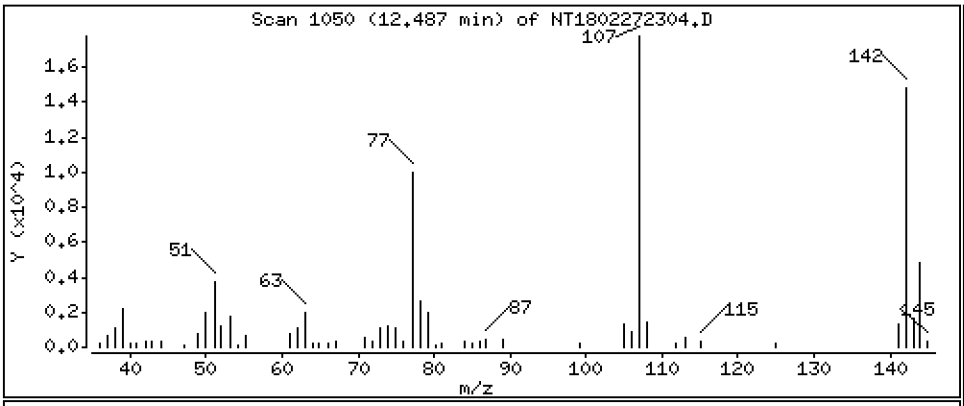
Operator: VTS

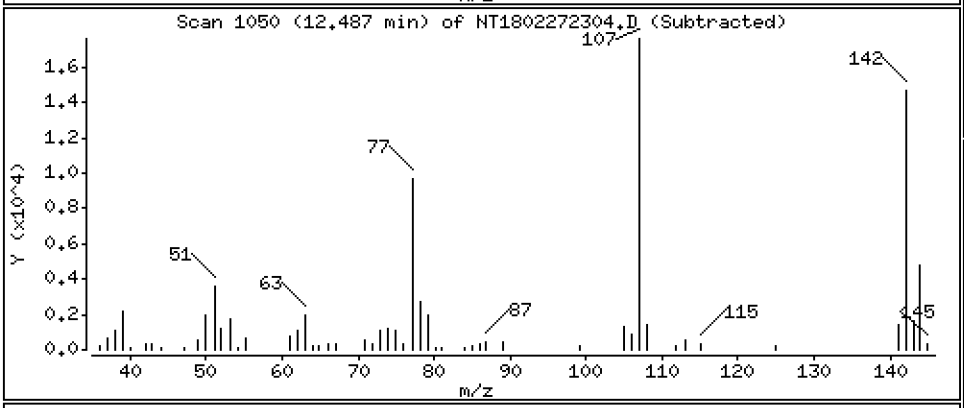
Column phase: ZB-5msi

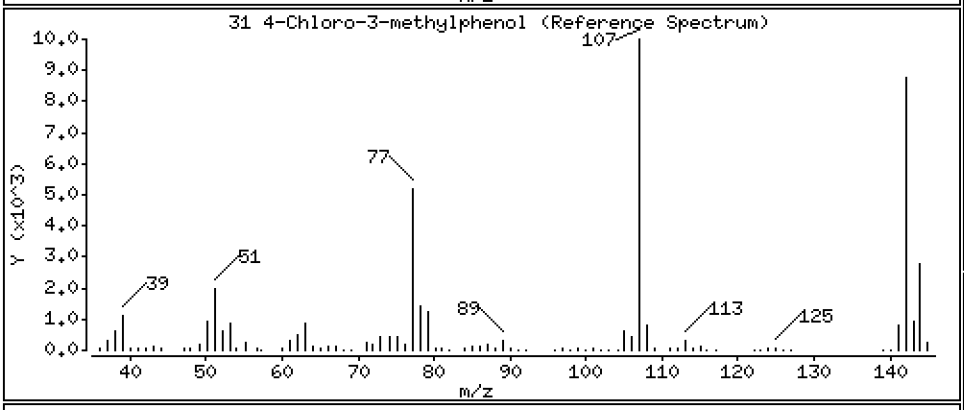
Column diameter: 0.25

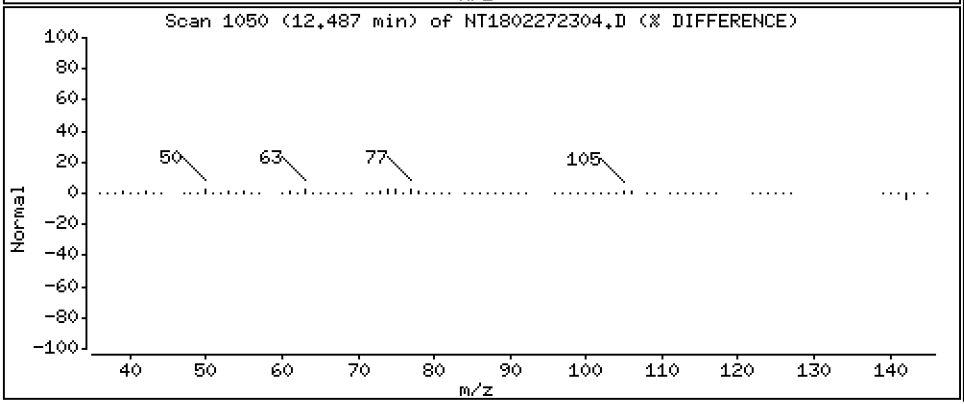
31 4-Chloro-3-methylphenol

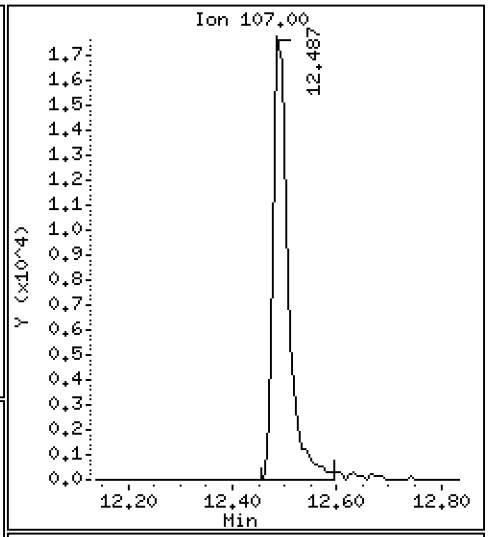
Concentration: 0.4421 ug/mL

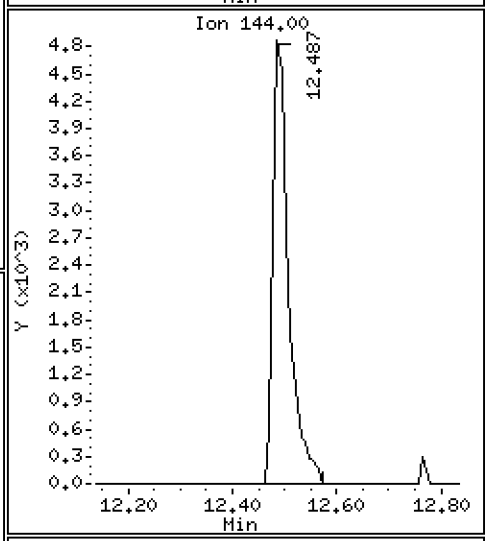


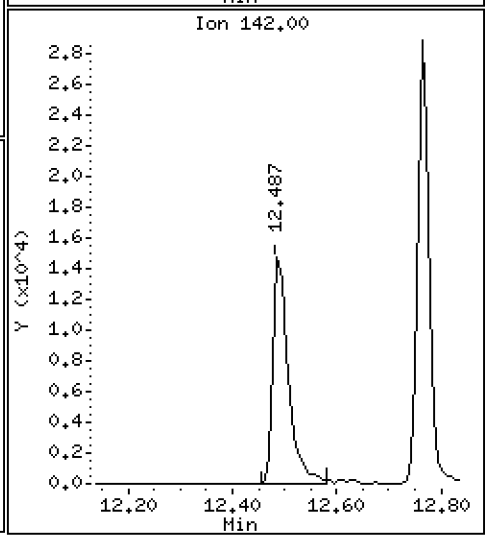












Date : 27-FEB-2023 19:10

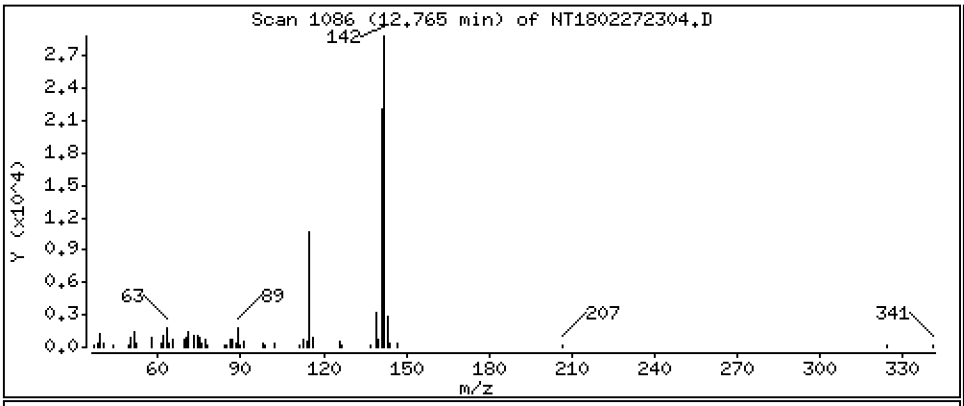
Client ID: Instrument: nt18.i

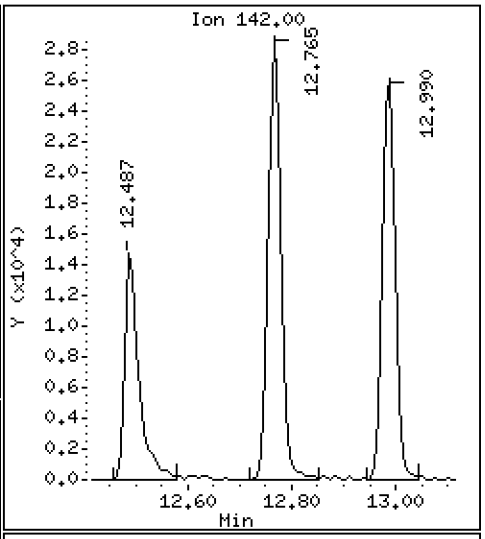
Sample Info: SLC0385-LCV1

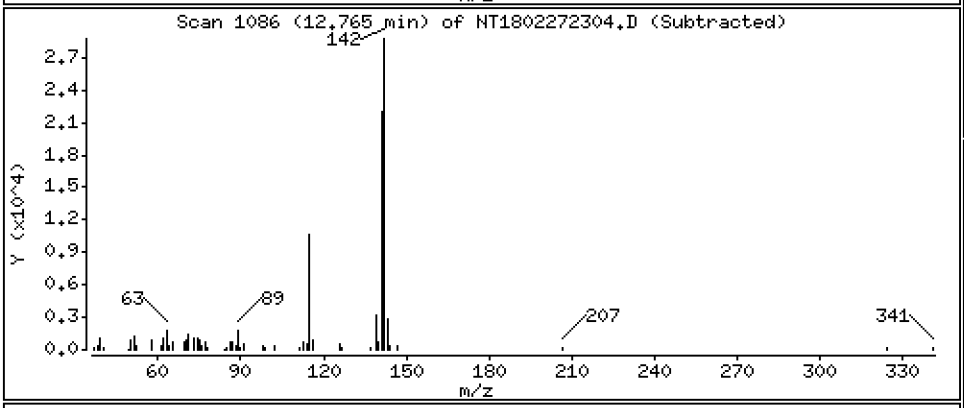
Operator: VTS

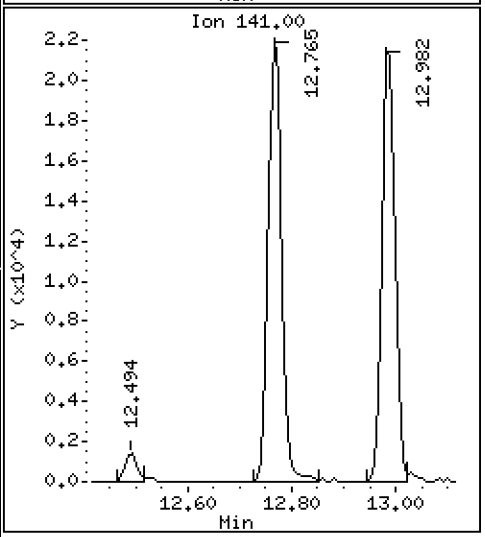
Column phase: ZB-5msi Column diameter: 0.25

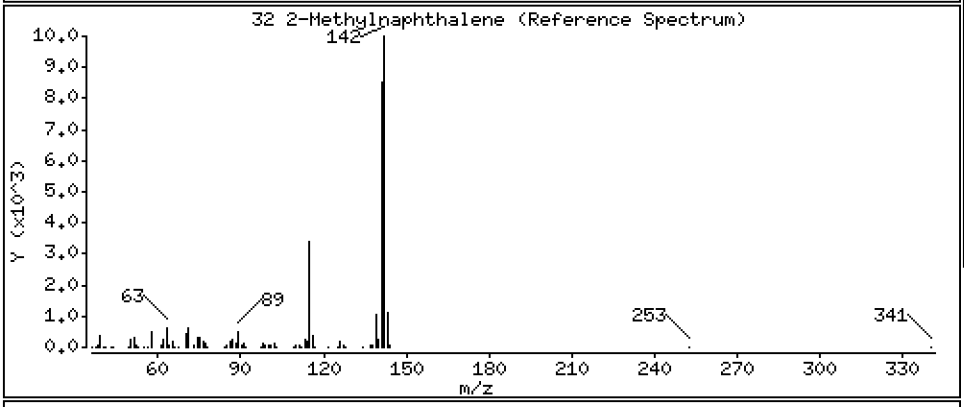
32 2-Methylnaphthalene Concentration: 0.2290 ug/mL

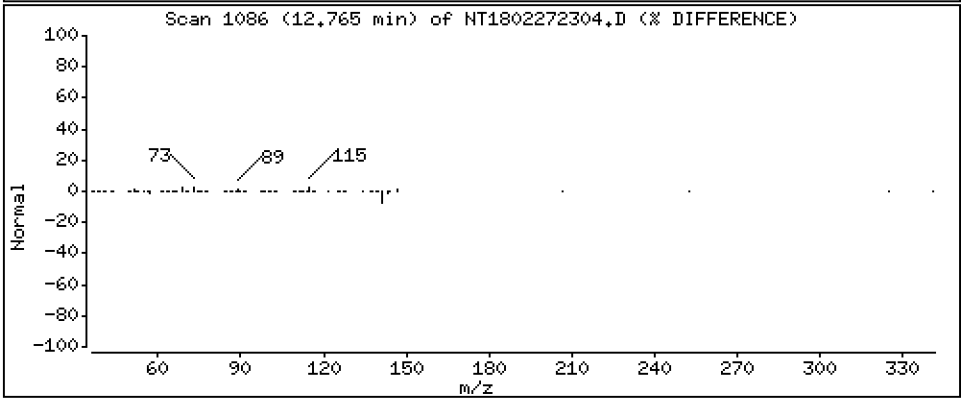












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

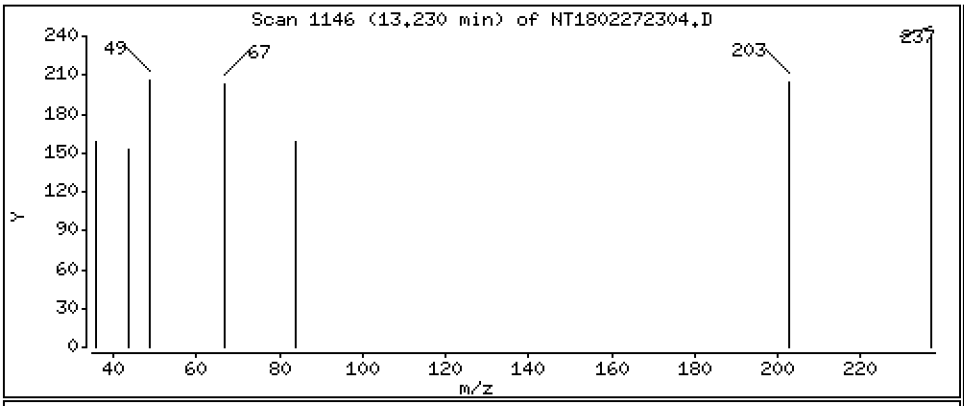
Operator: VTS

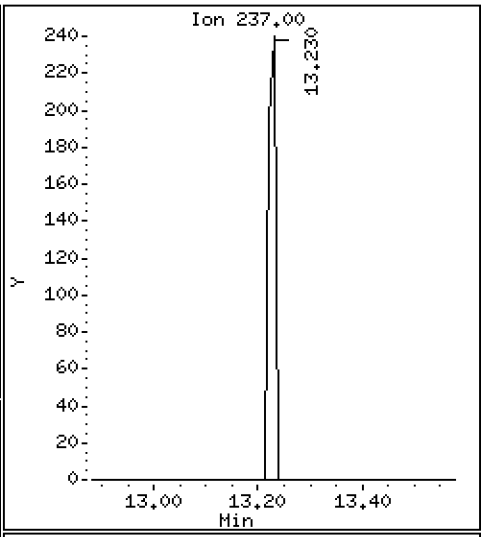
Column phase: ZB-5msi

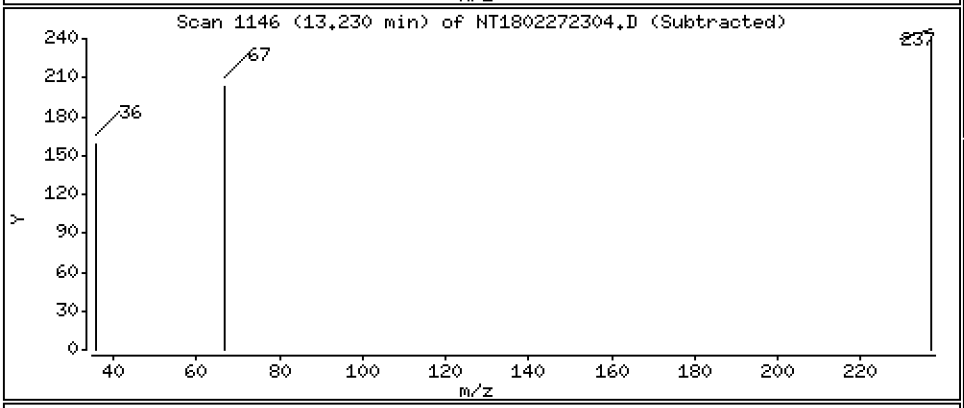
Column diameter: 0.25

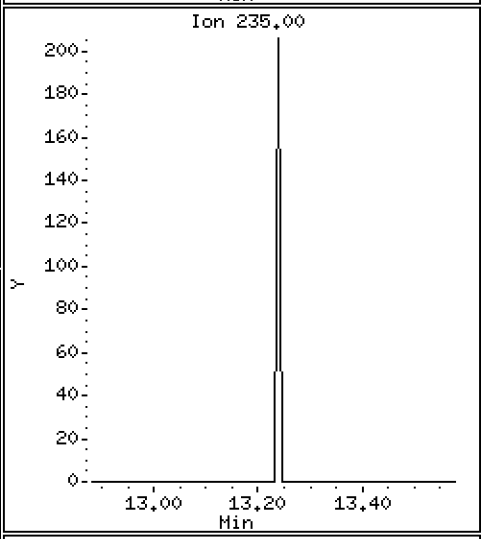
33 Hexachlorocyclopentadiene

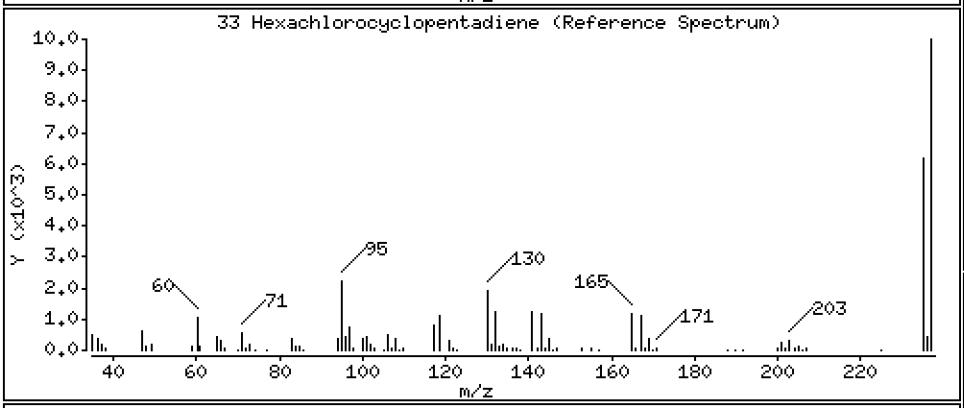
Concentration: 0.005654 ug/mL

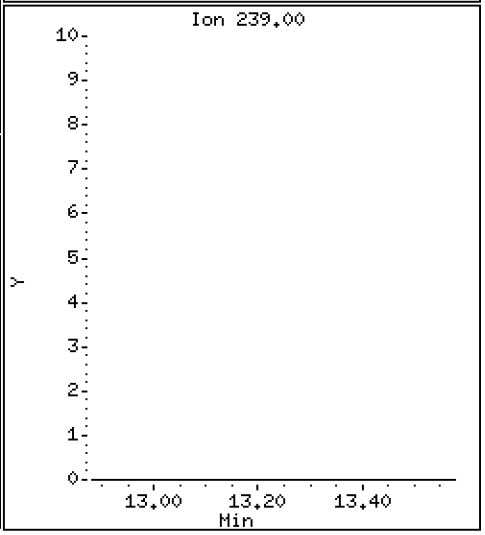


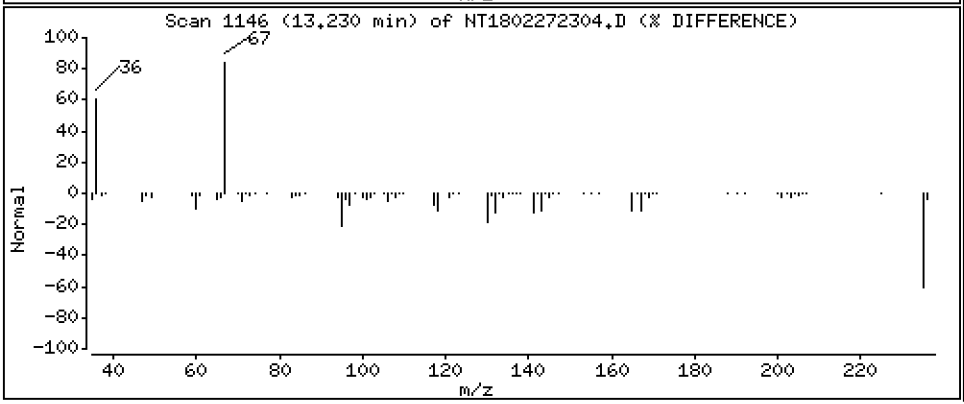












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

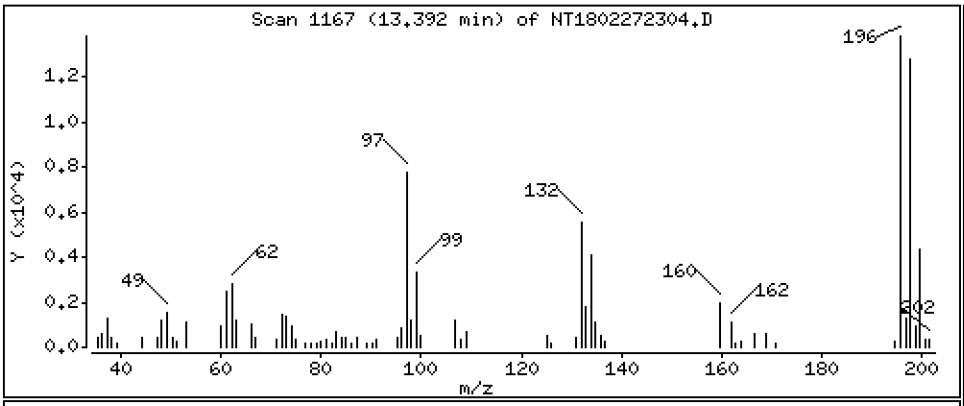
Operator: VTS

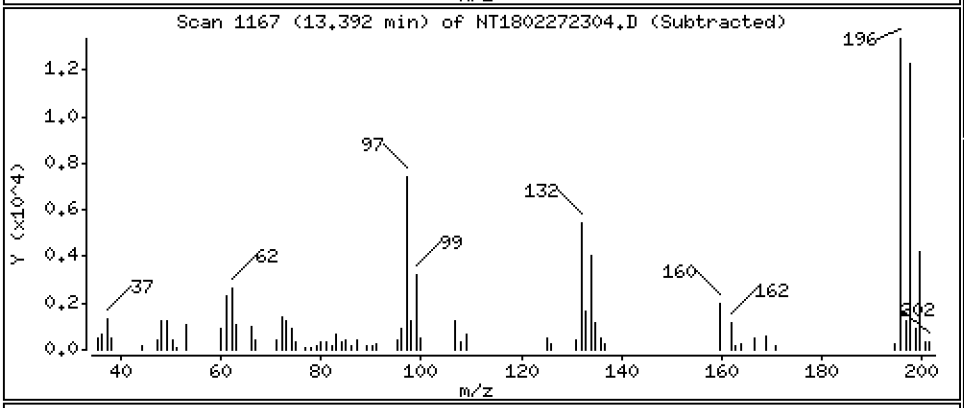
Column phase: ZB-5msi

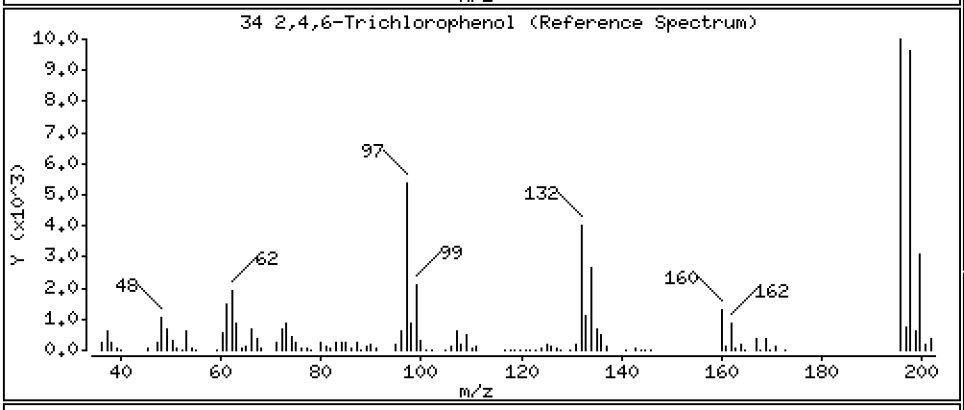
Column diameter: 0.25

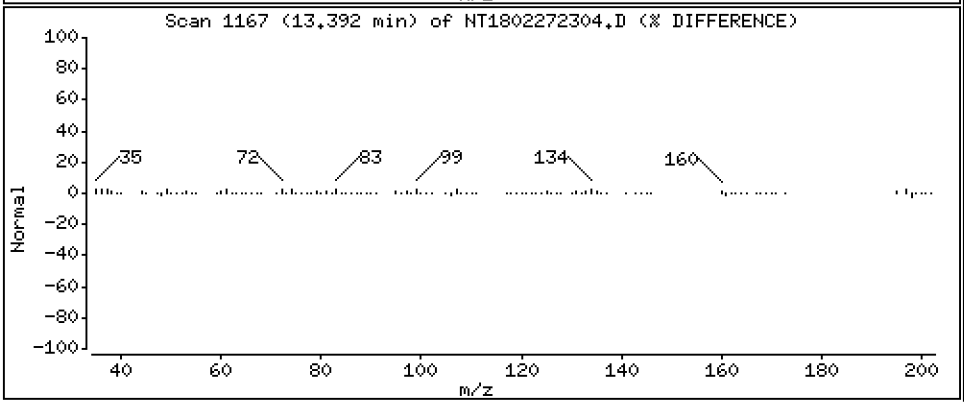
34 2,4,6-Trichlorophenol

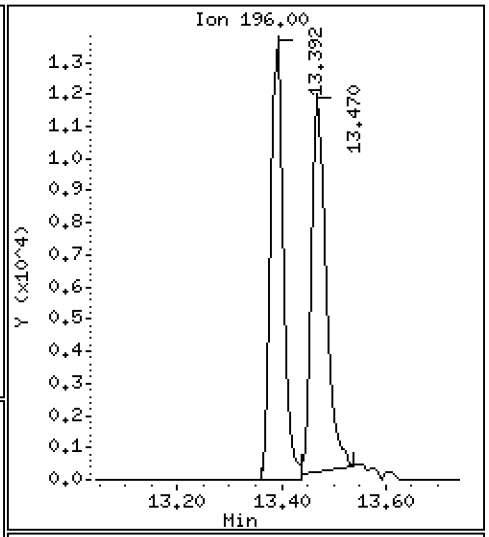
Concentration: 0.4306 ug/mL

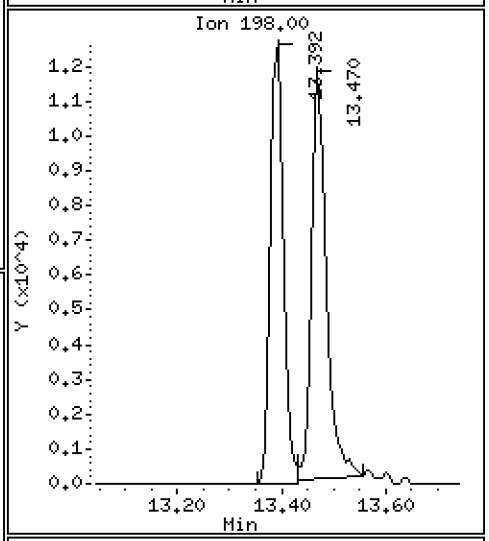


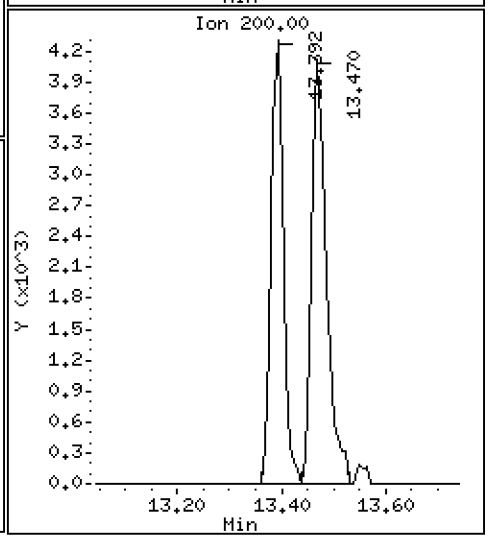












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

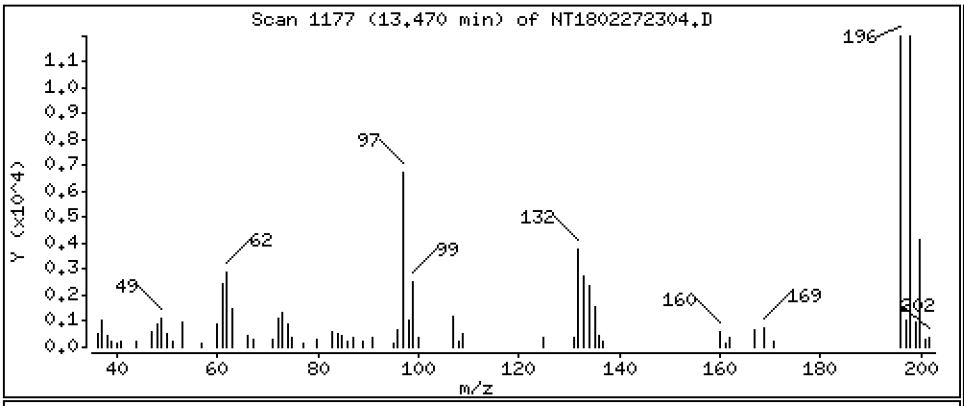
Operator: VTS

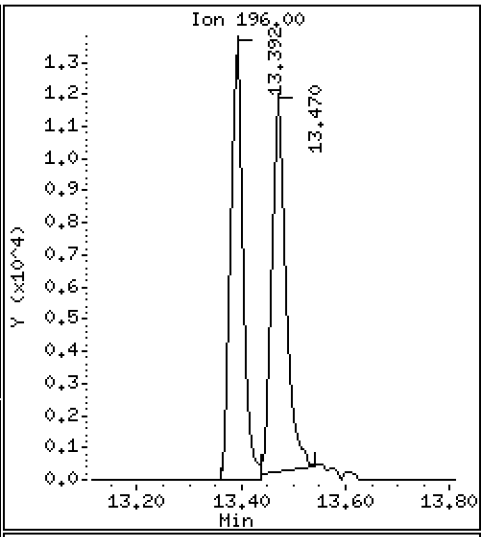
Column phase: ZB-5msi

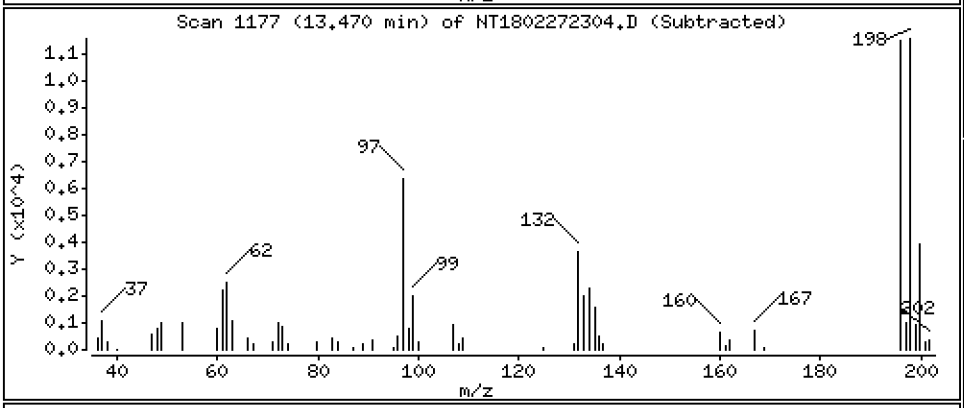
Column diameter: 0.25

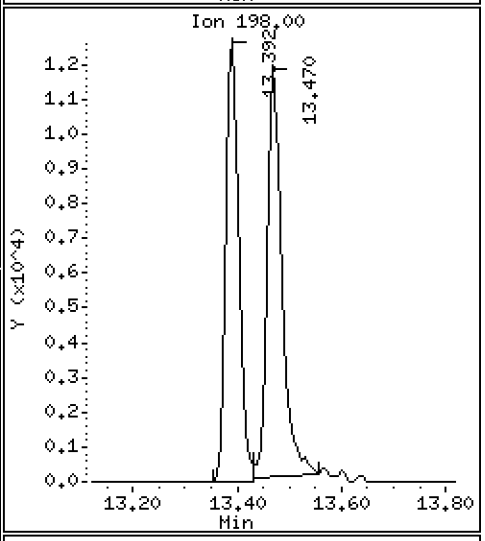
35 2,4,5-Trichlorophenol

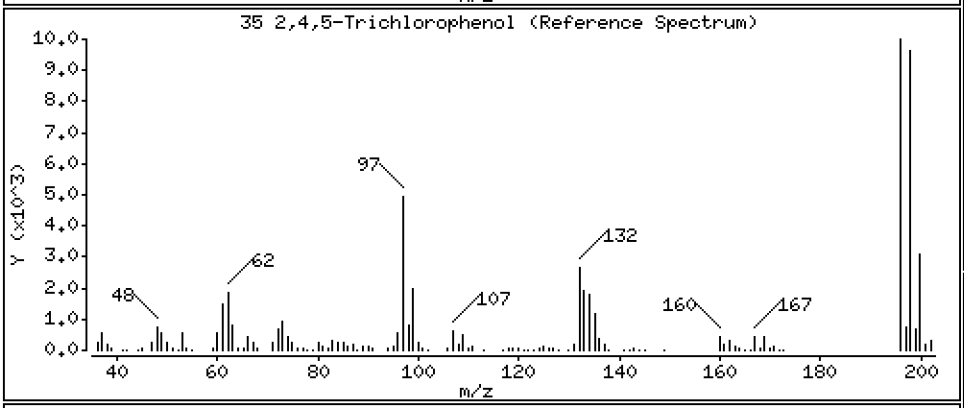
Concentration: 0.3892 ug/mL

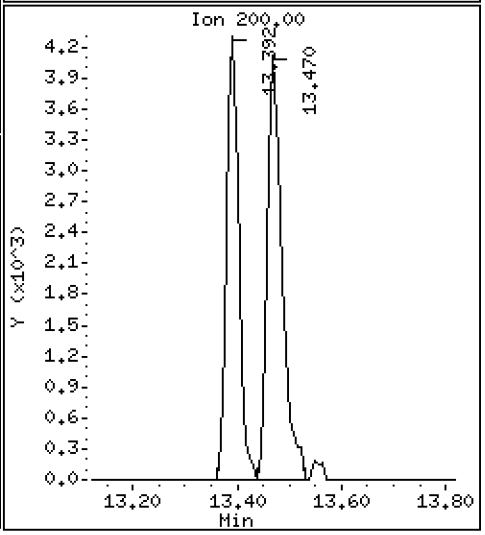


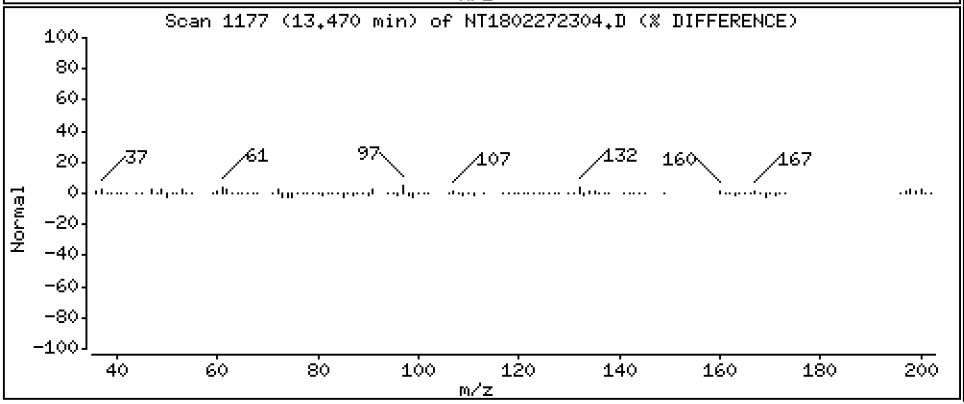












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

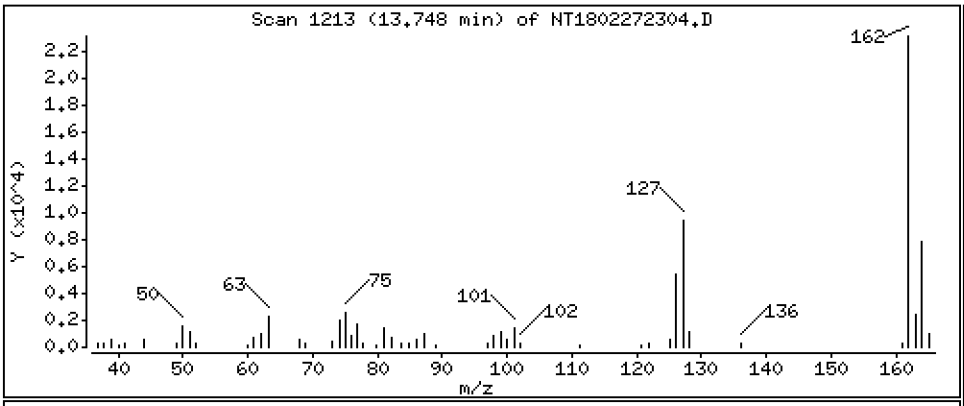
Operator: VTS

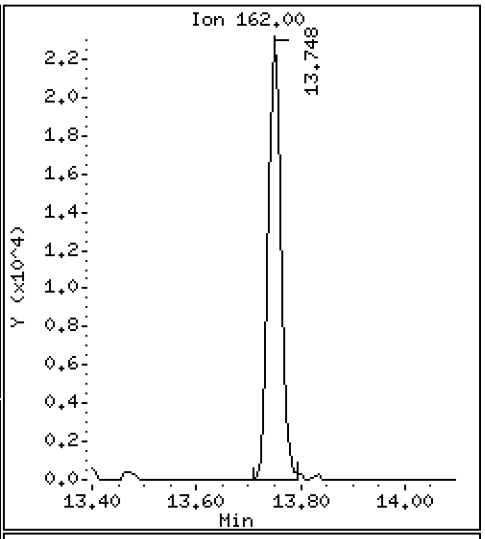
Column phase: ZB-5msi

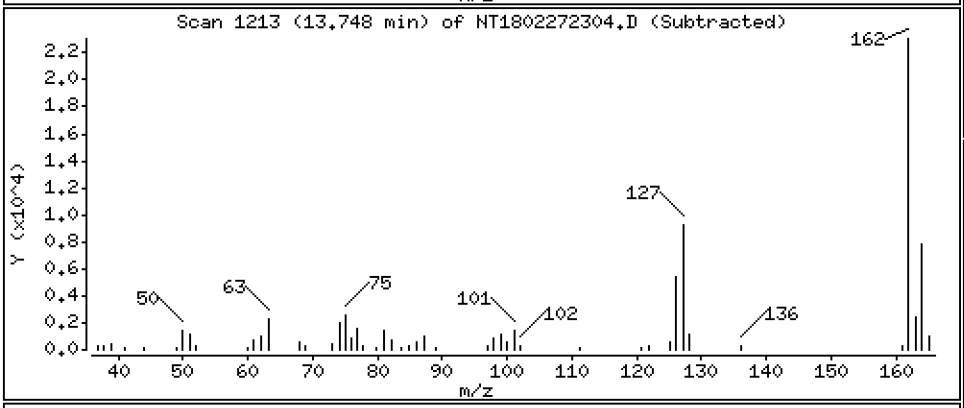
Column diameter: 0.25

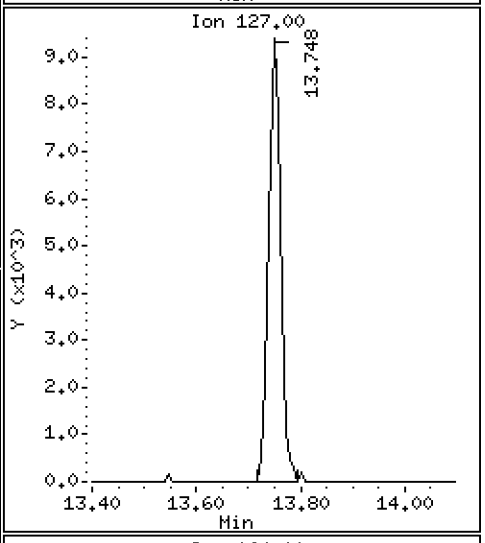
37 2-Chloronaphthalene

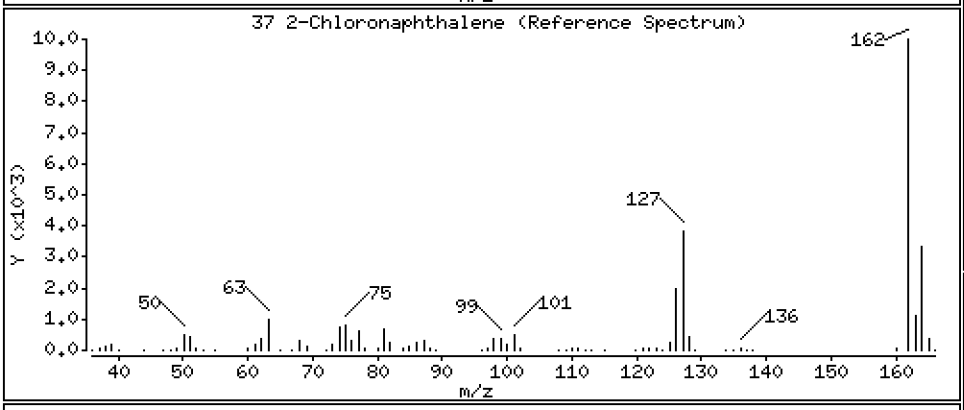
Concentration: 0.2158 ug/mL

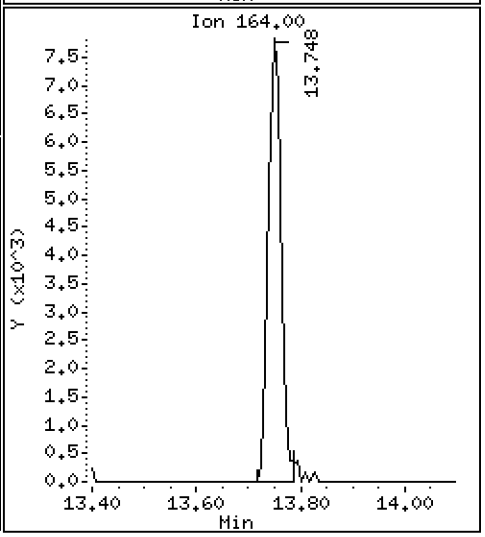


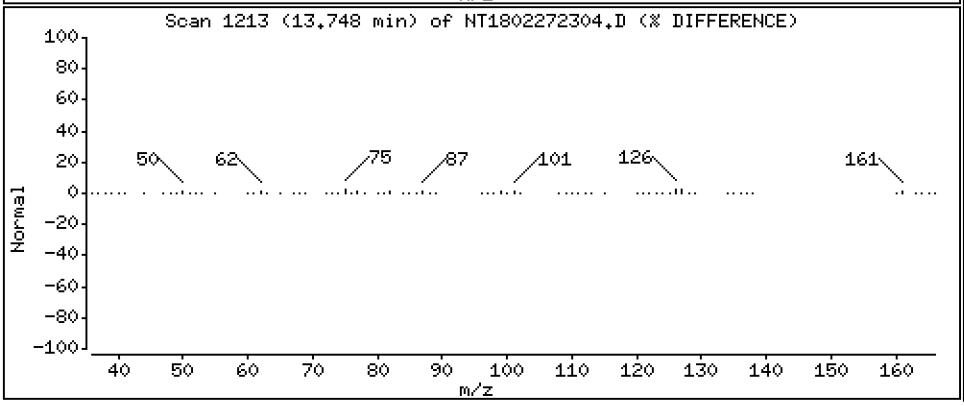












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

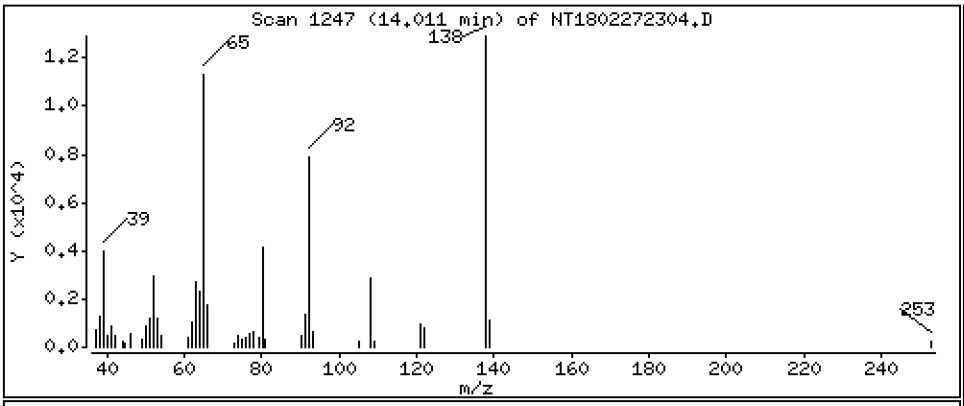
Operator: VTS

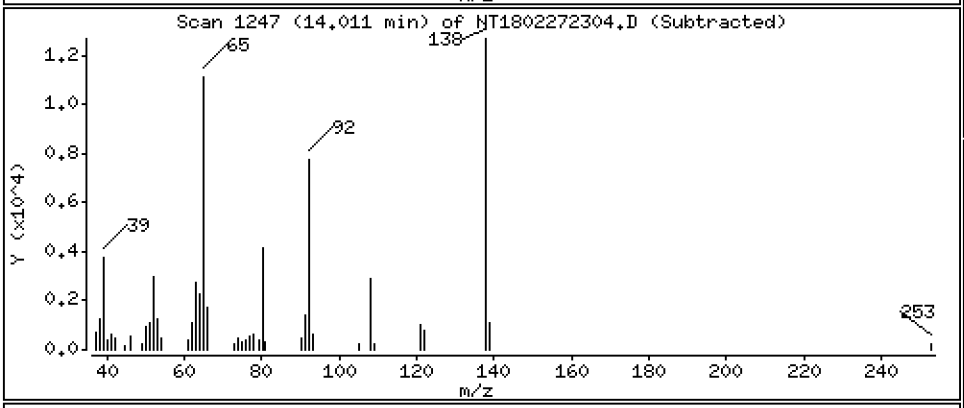
Column phase: ZB-5msi

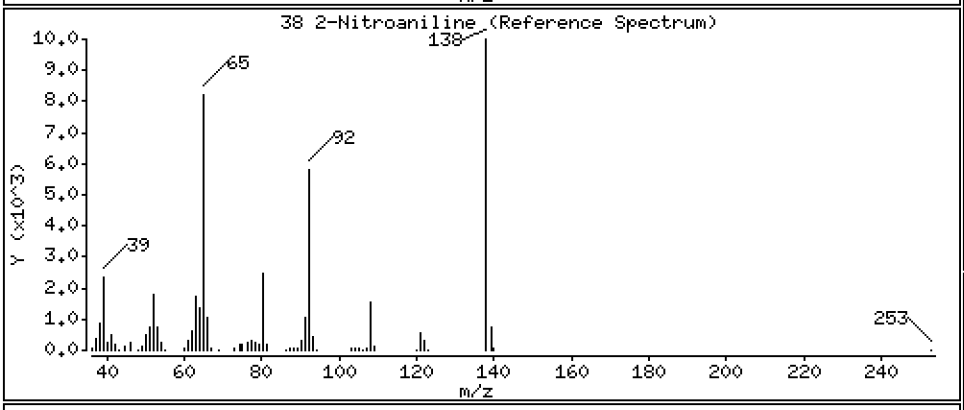
Column diameter: 0.25

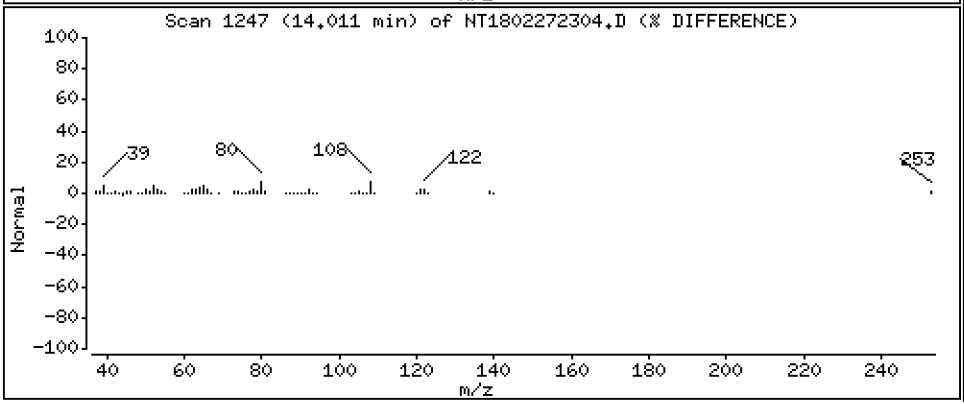
38 2-Nitroaniline

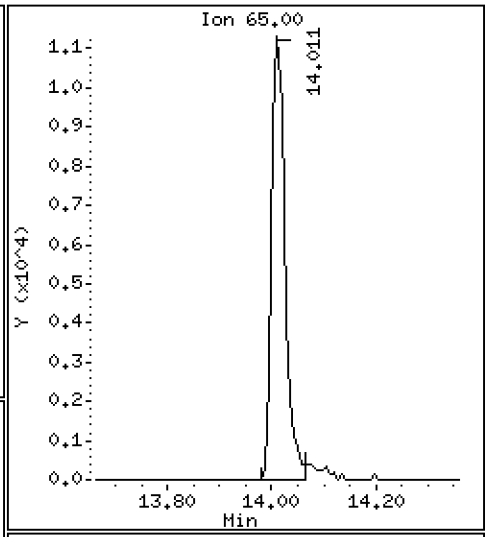
Concentration: 0.3572 ug/mL

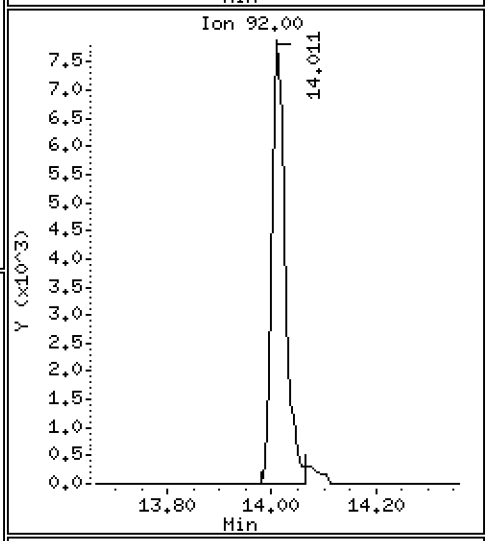


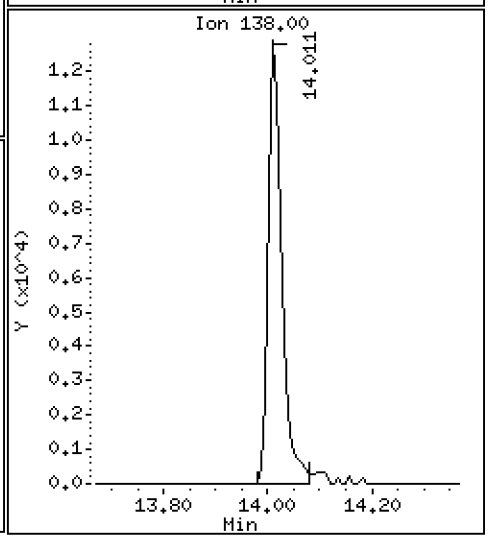












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

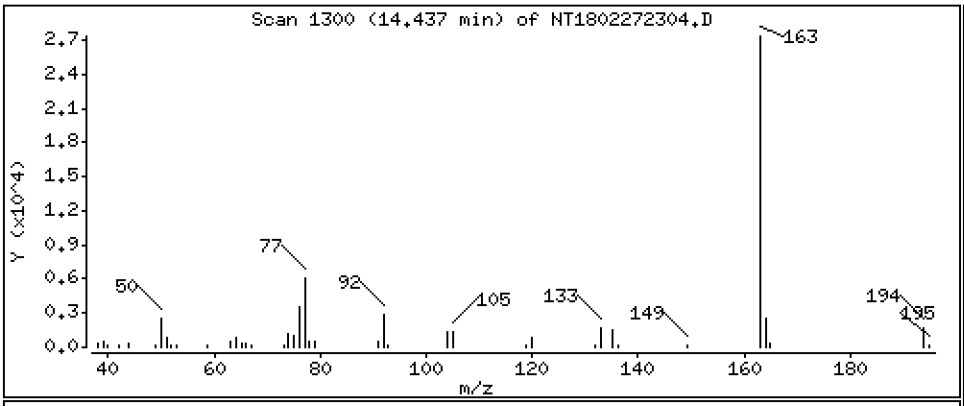
Operator: VTS

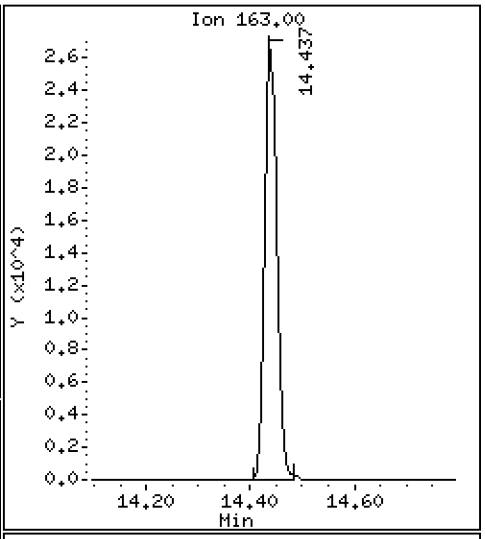
Column phase: ZB-5msi

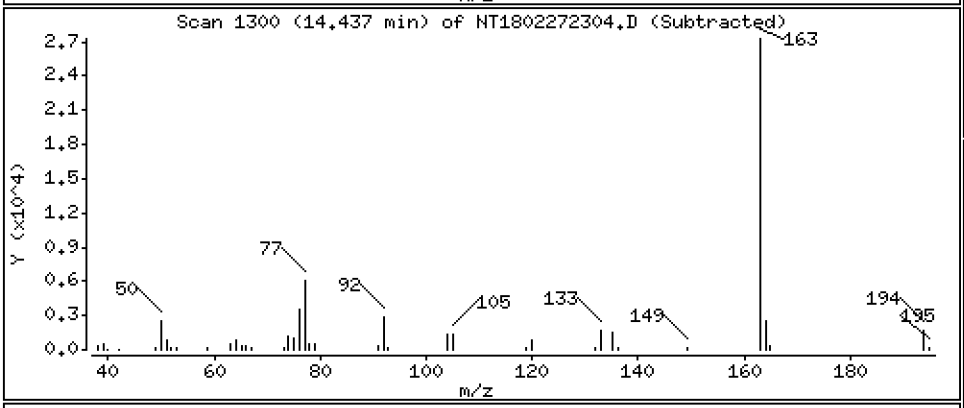
Column diameter: 0.25

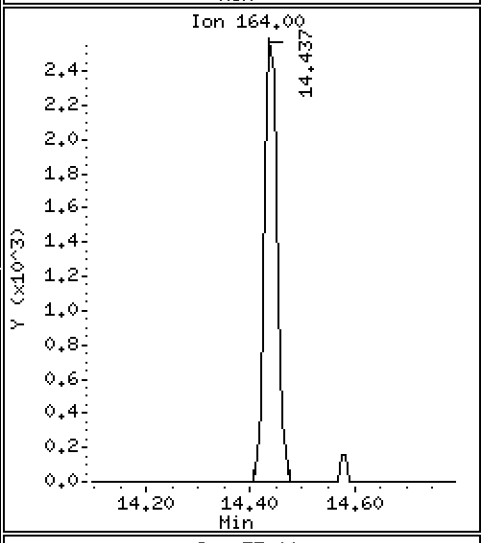
39 Dimethylphthalate

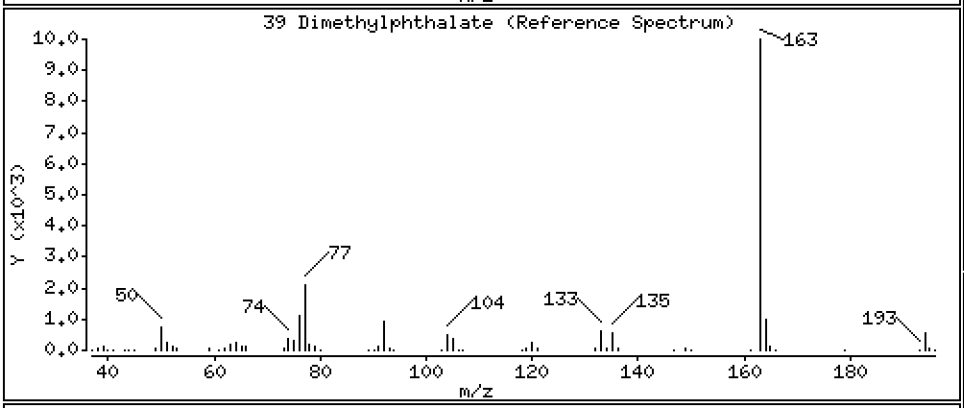
Concentration: 0.2186 ug/mL

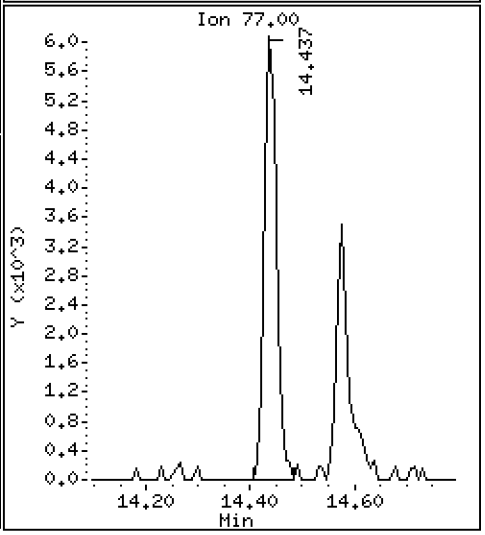


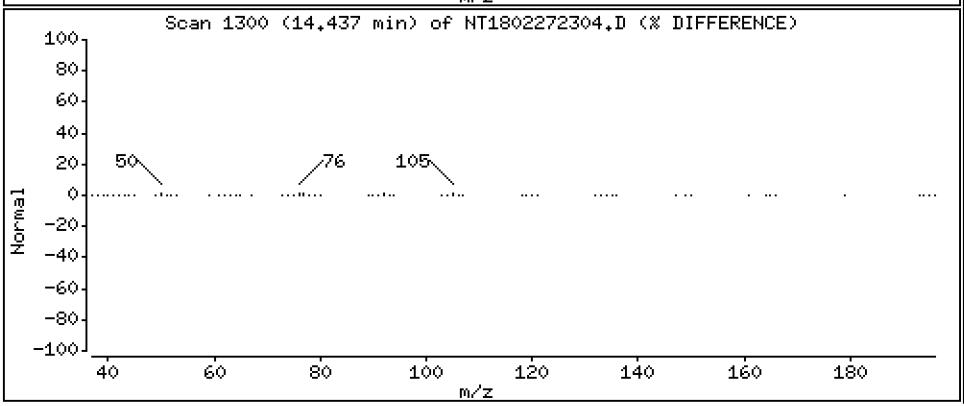












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

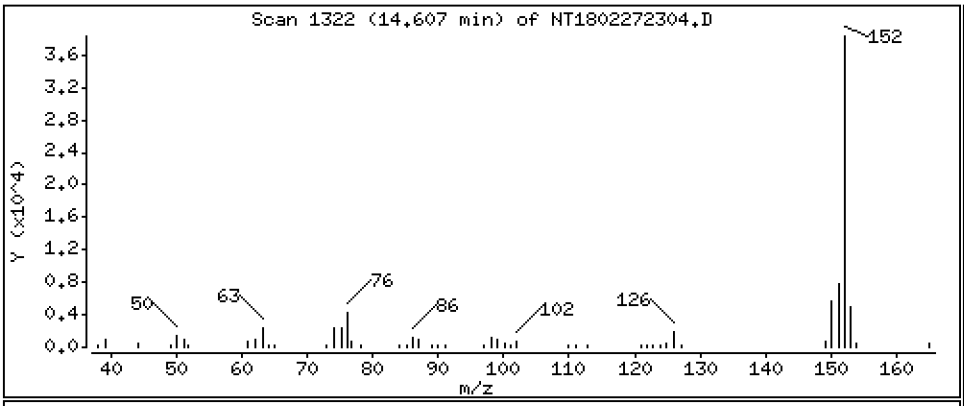
Operator: VTS

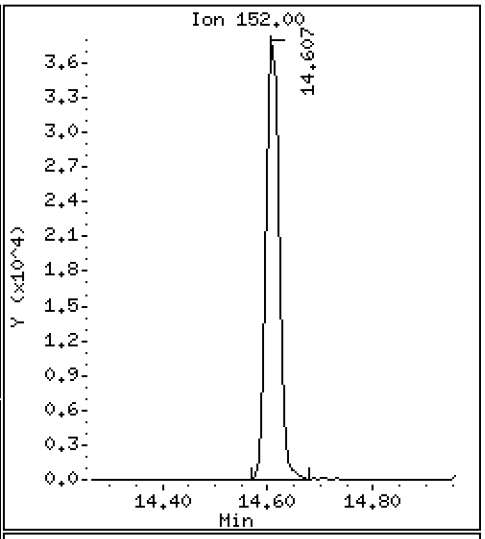
Column phase: ZB-5msi

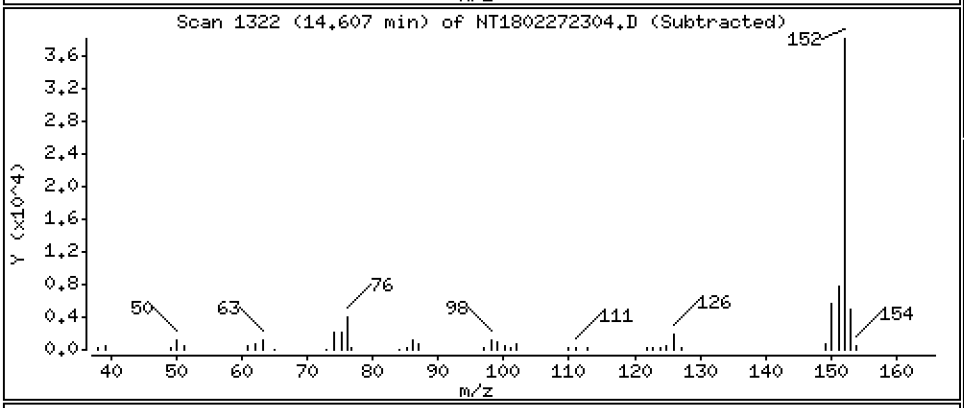
Column diameter: 0.25

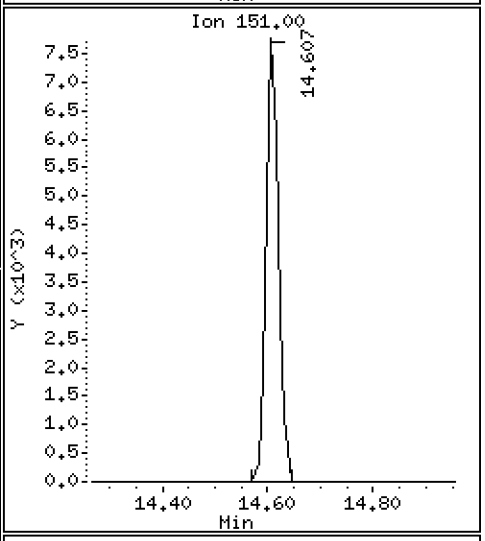
40 Acenaphthylene

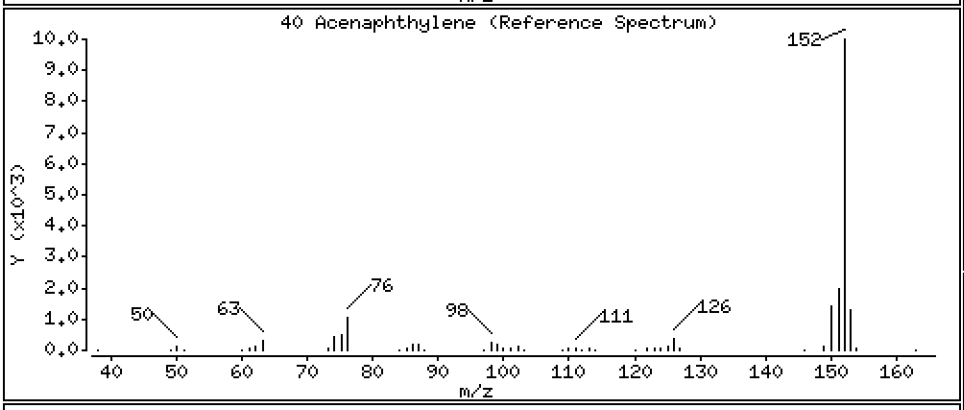
Concentration: 0.2148 ug/mL

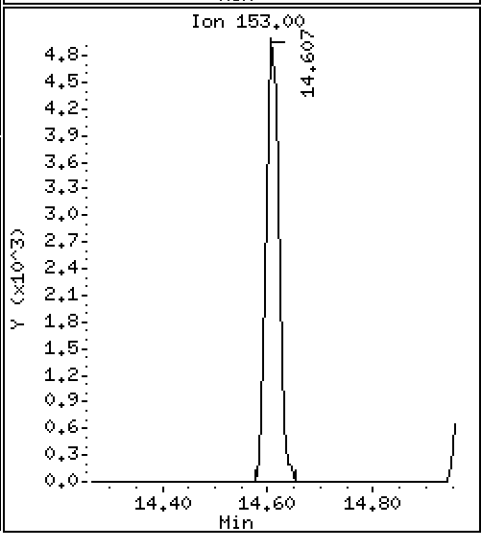


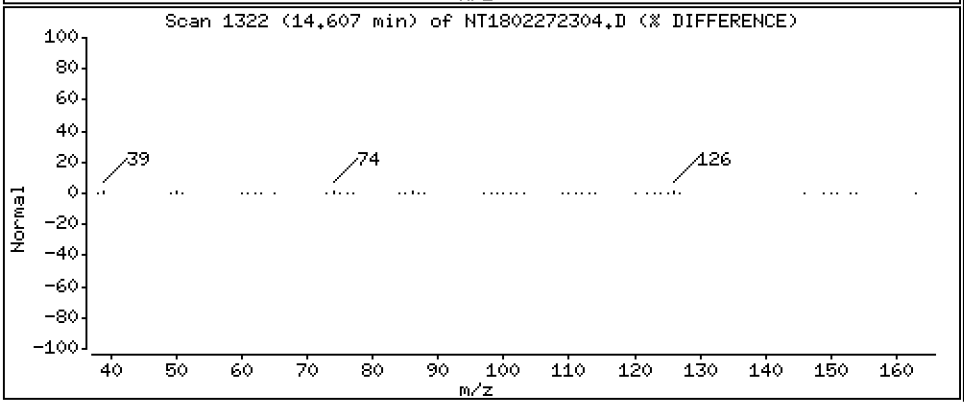












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

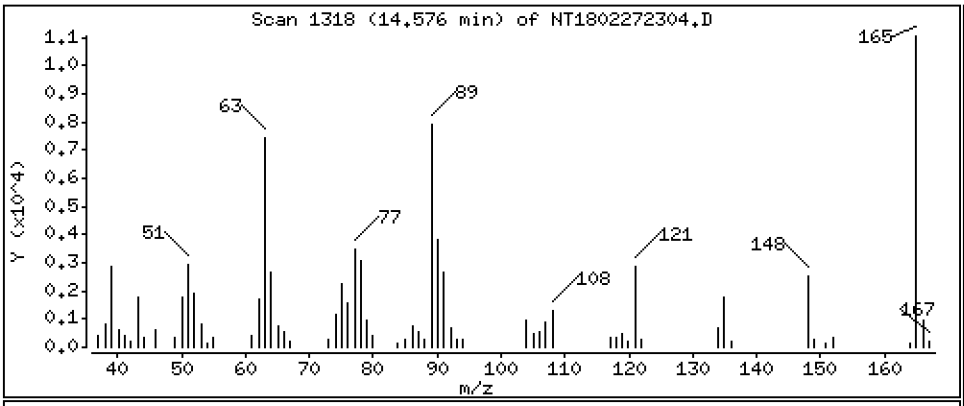
Operator: VTS

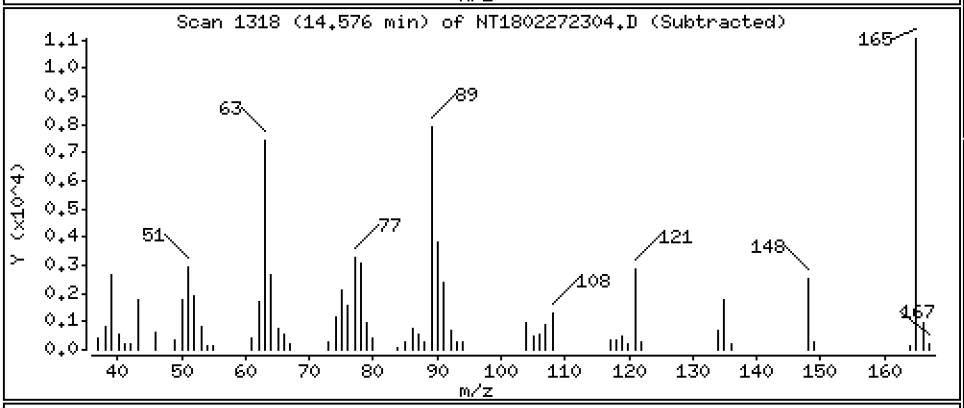
Column phase: ZB-5msi

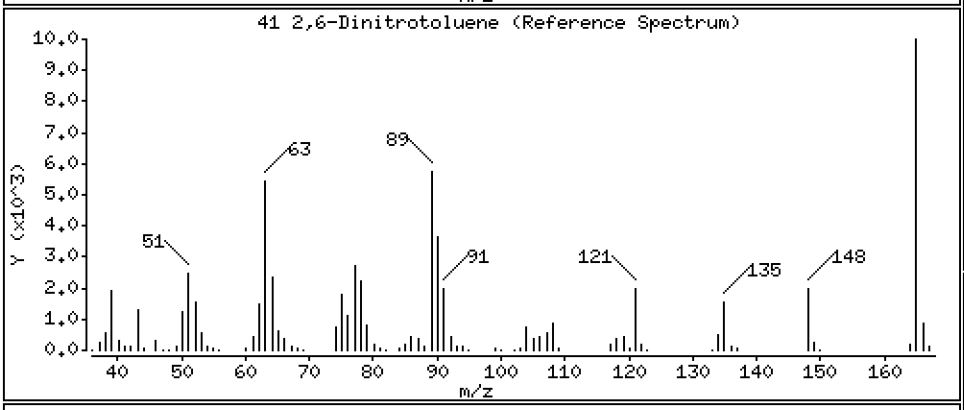
Column diameter: 0.25

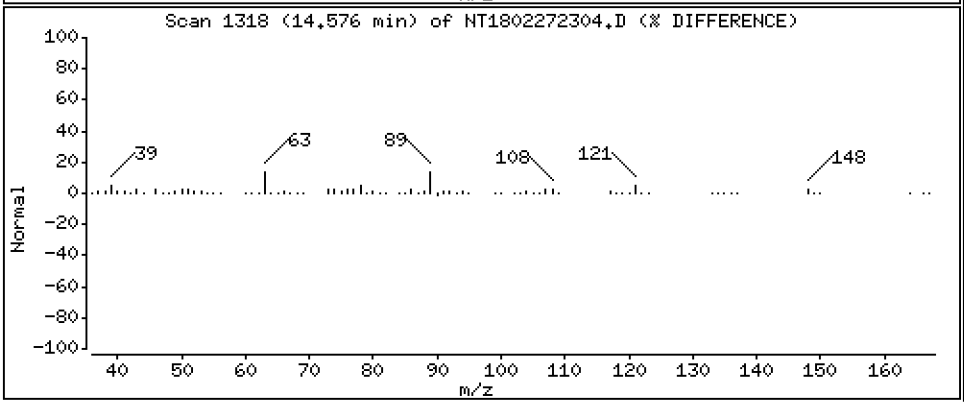
41 2,6-Dinitrotoluene

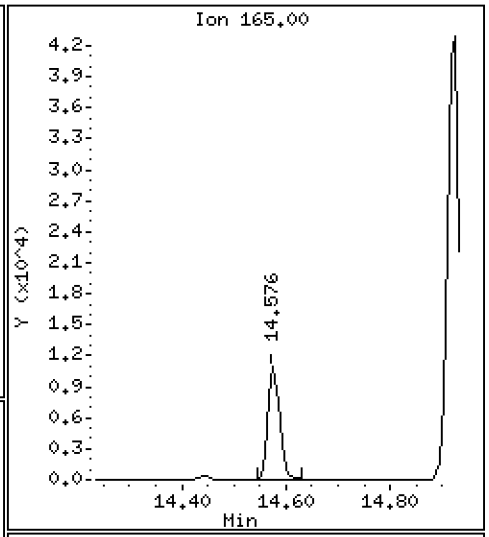
Concentration: 0.3789 ug/mL

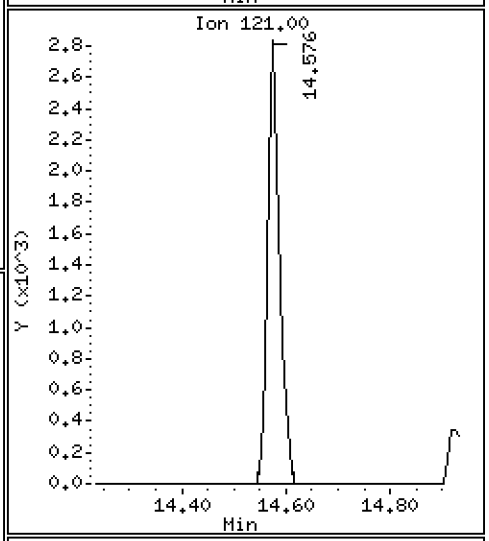


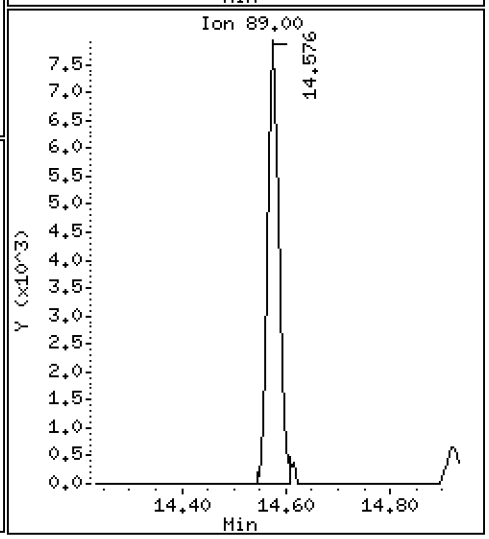












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

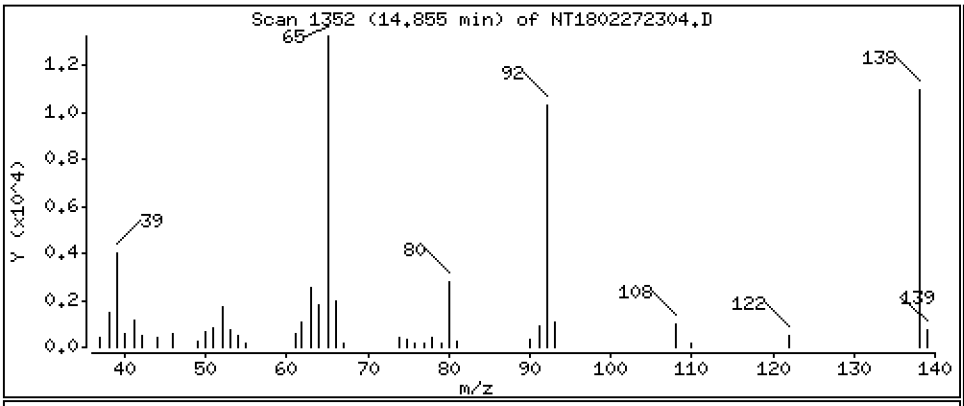
Operator: VTS

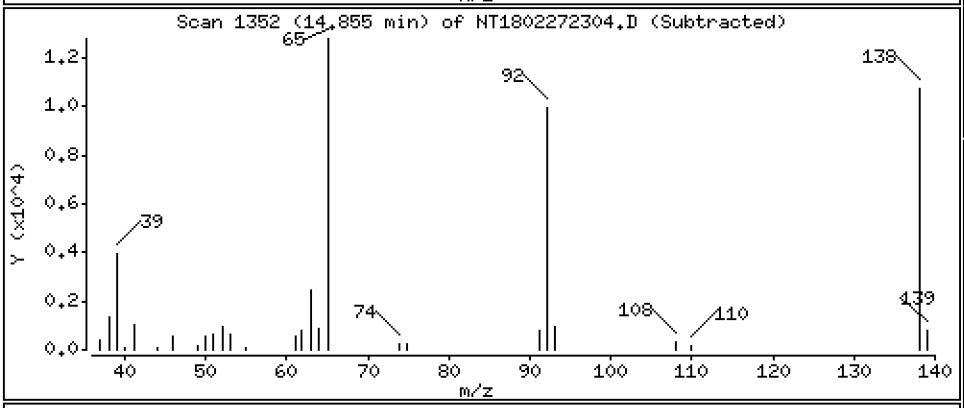
Column phase: ZB-5msi

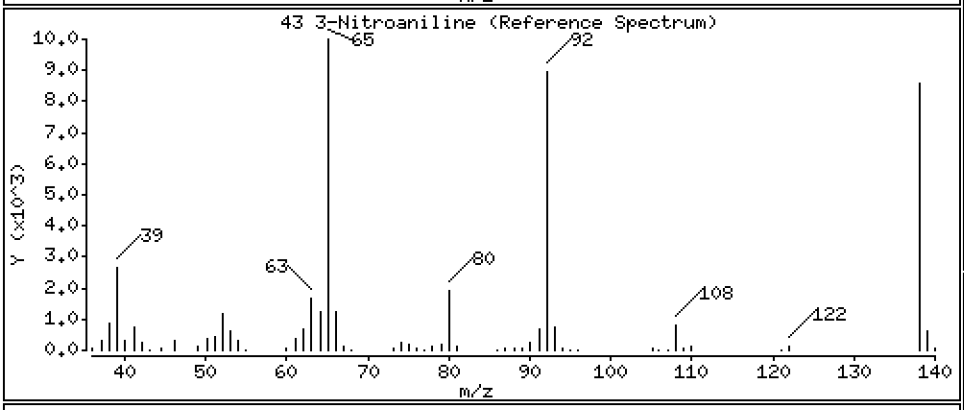
Column diameter: 0.25

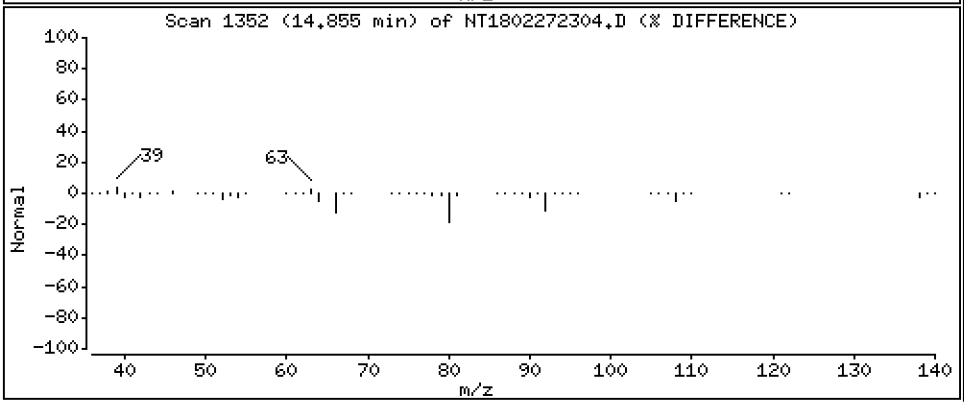
43 3-Nitroaniline

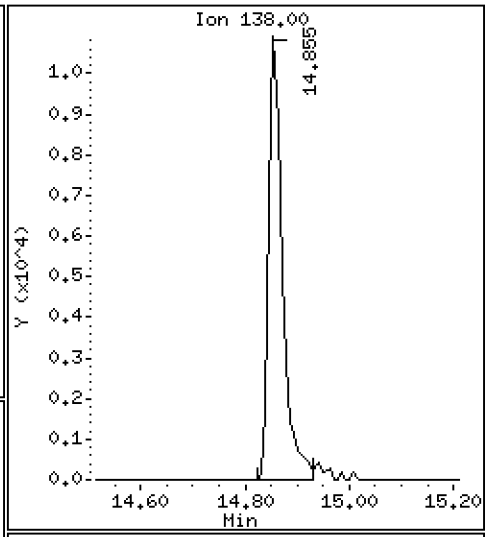
Concentration: 0.3811 ug/mL

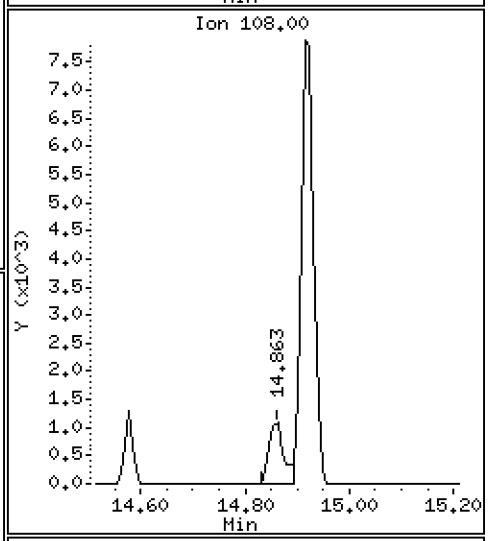


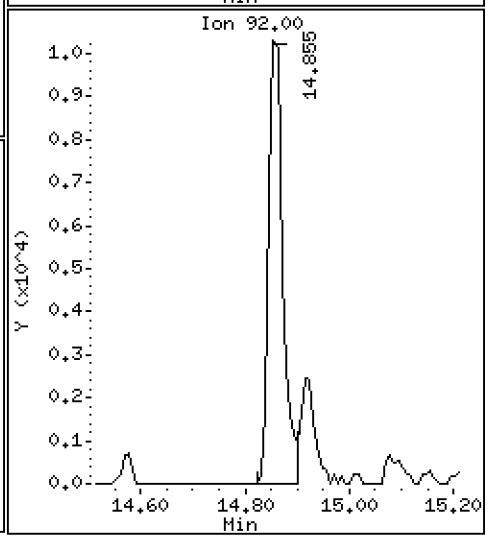












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

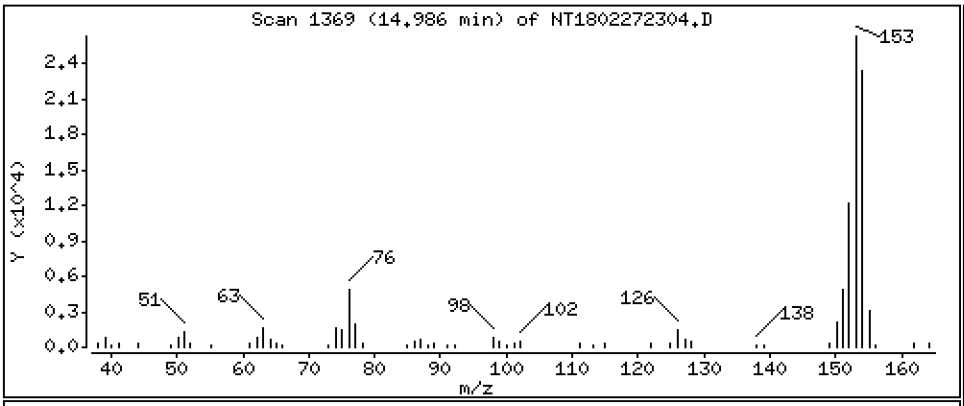
Operator: VTS

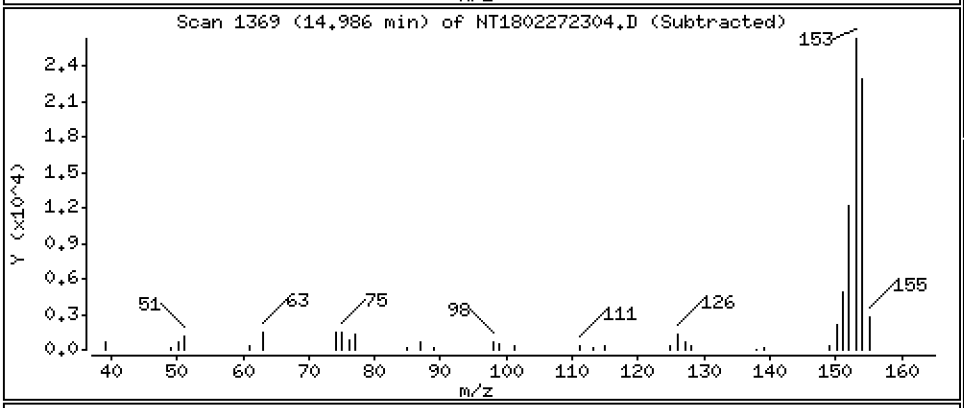
Column phase: ZB-5msi

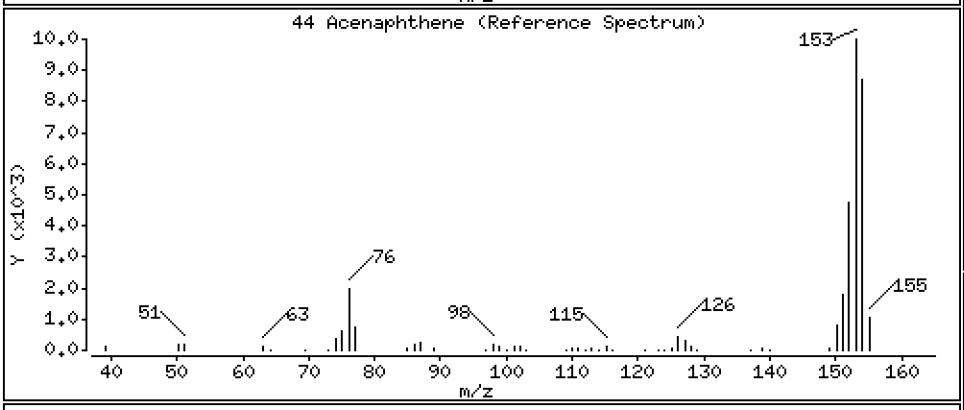
Column diameter: 0.25

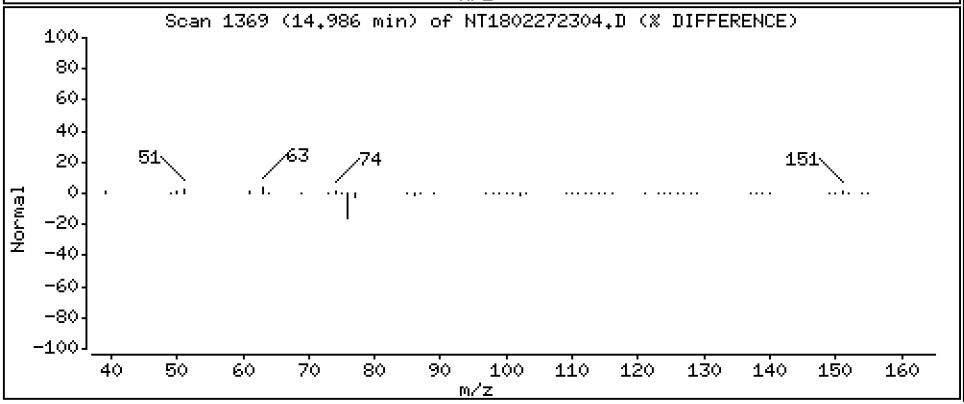
44 Acenaphthene

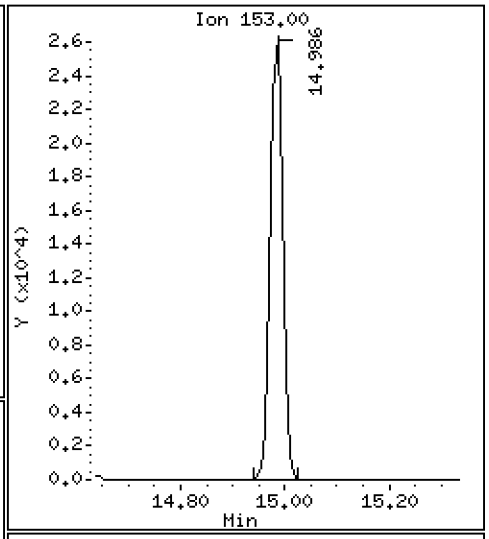
Concentration: 0.2249 ug/mL

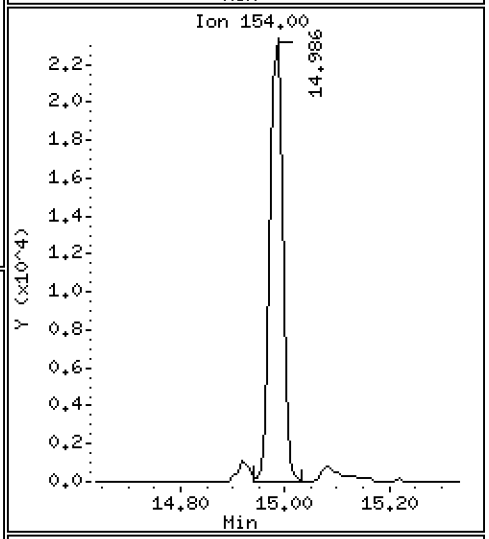


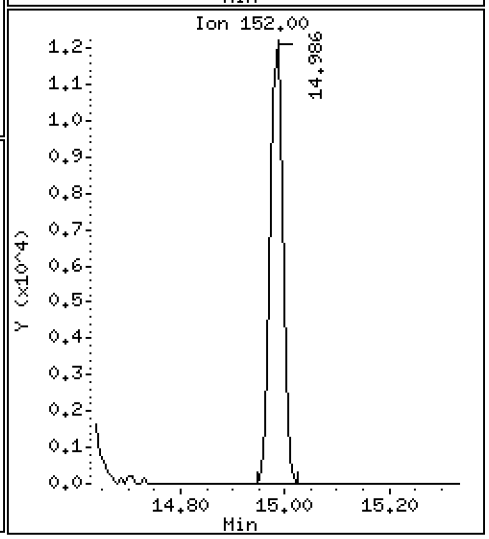












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

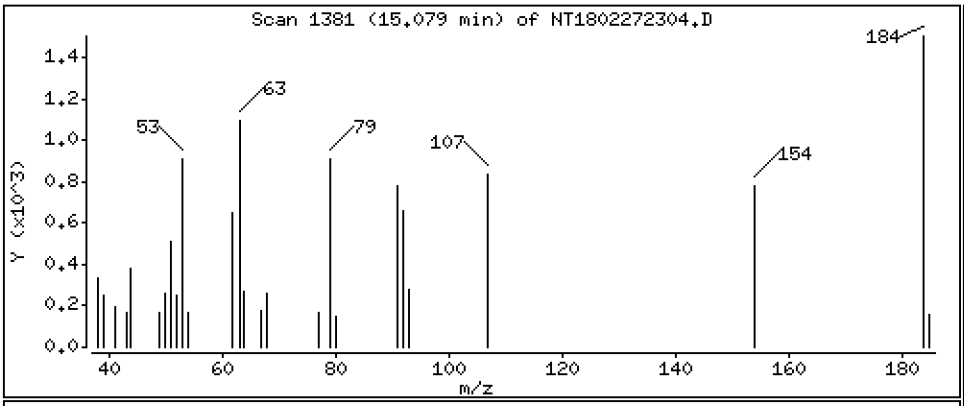
Operator: VTS

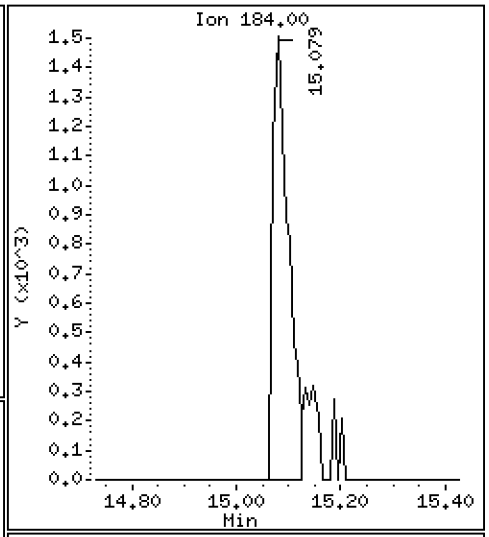
Column phase: ZB-5msi

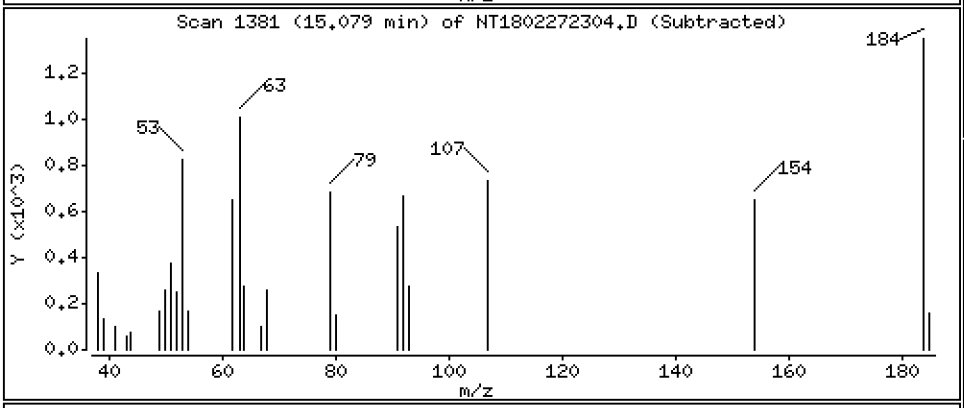
Column diameter: 0.25

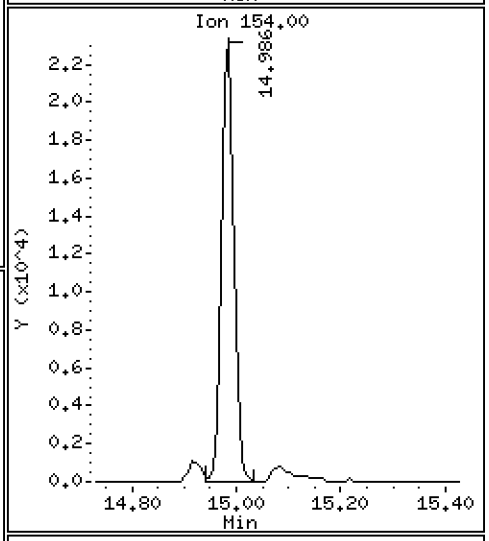
45 2,4-Dinitrophenol

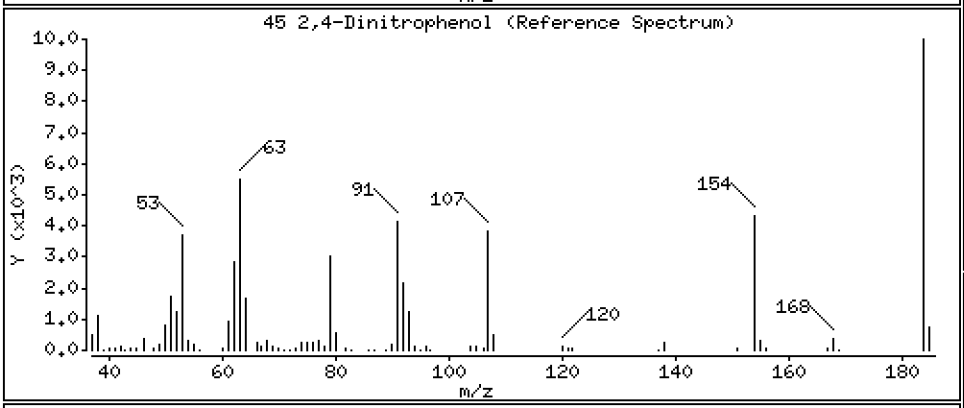
Concentration: 0.1544 ug/mL

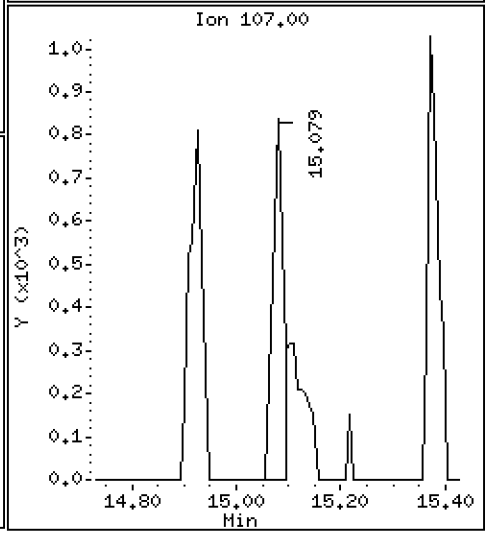


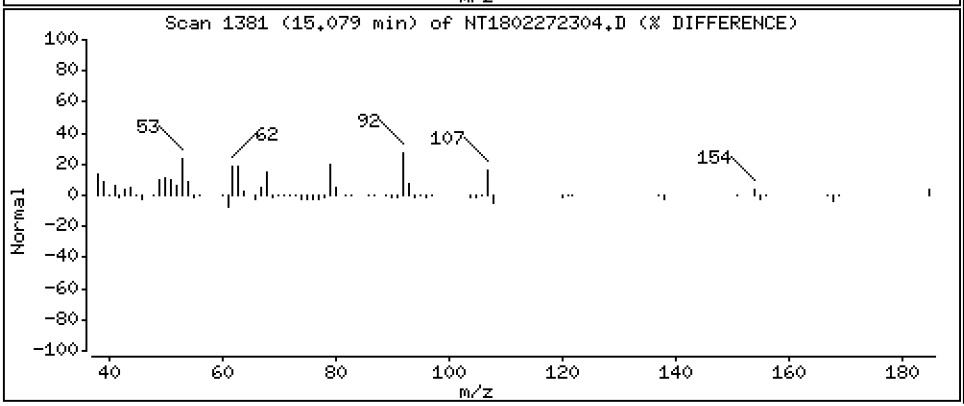












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

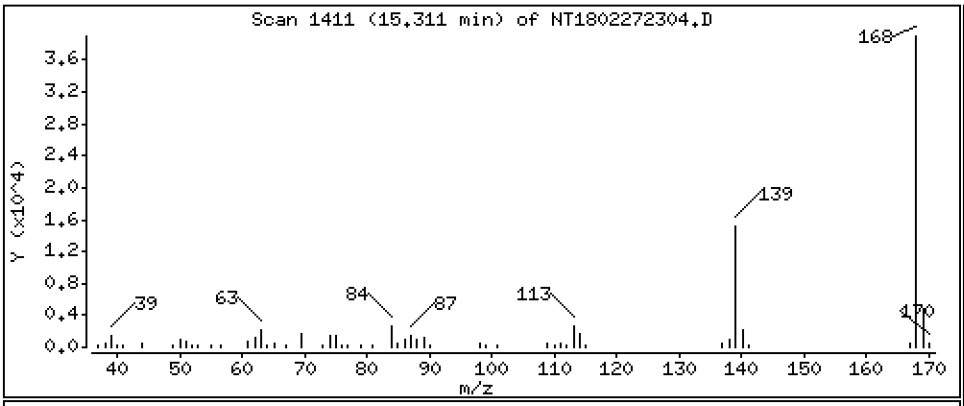
Operator: VTS

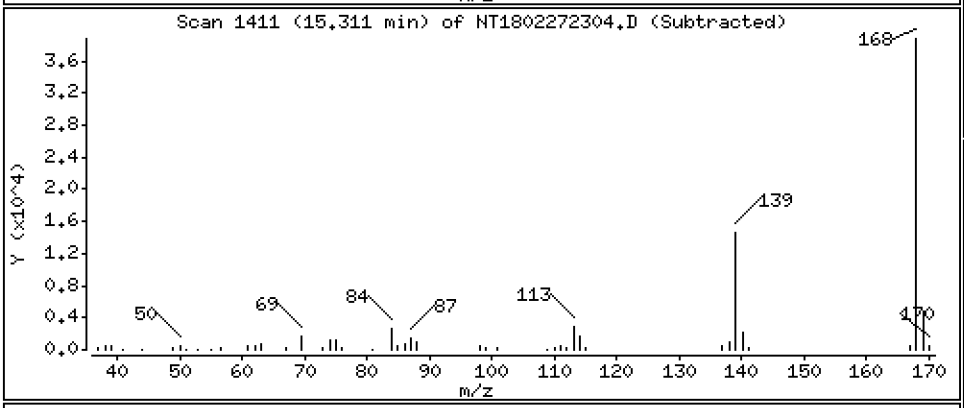
Column phase: ZB-5msi

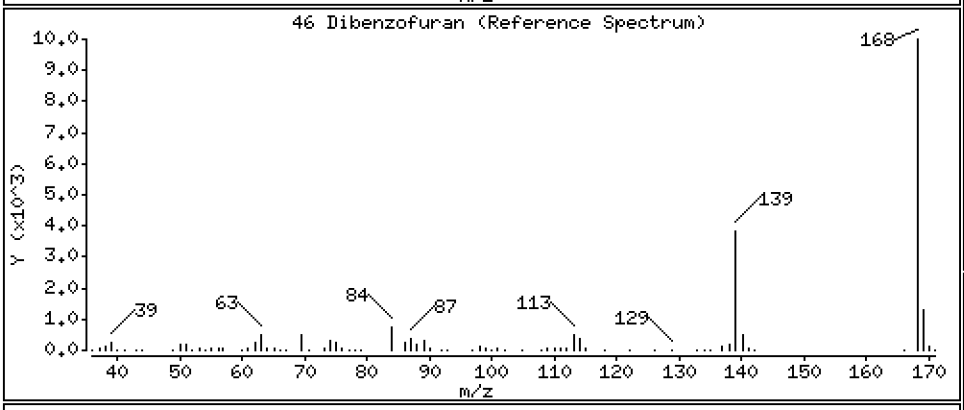
Column diameter: 0.25

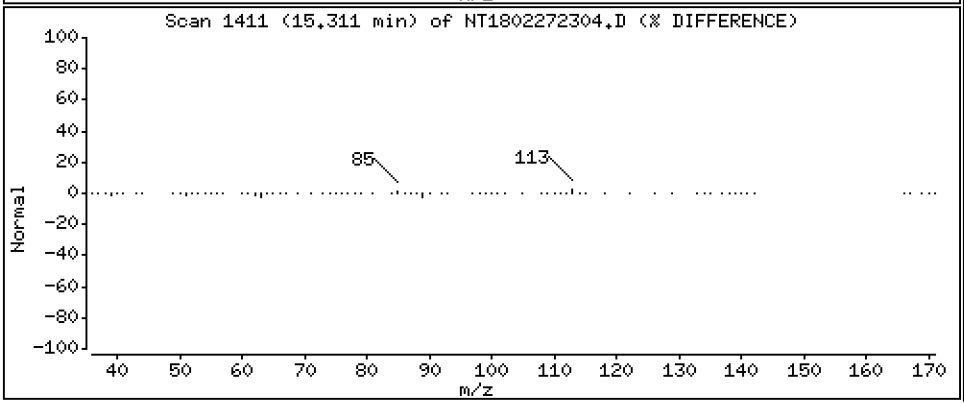
46 Dibenzofuran

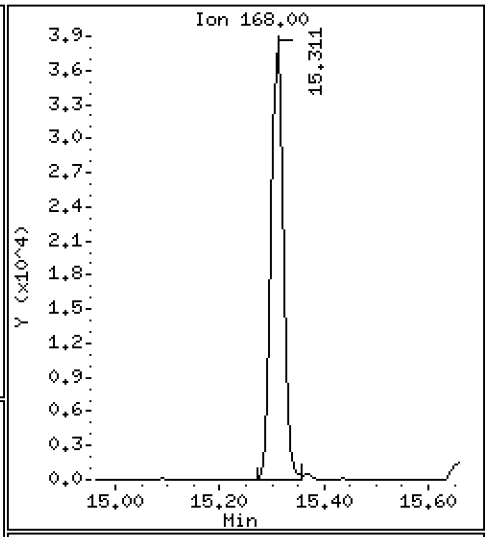
Concentration: 0.2218 ug/mL

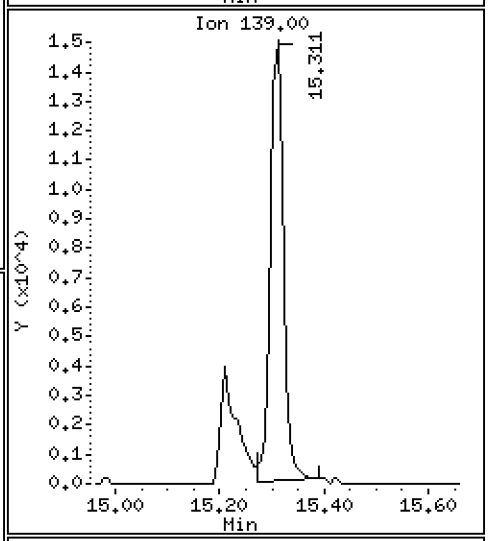


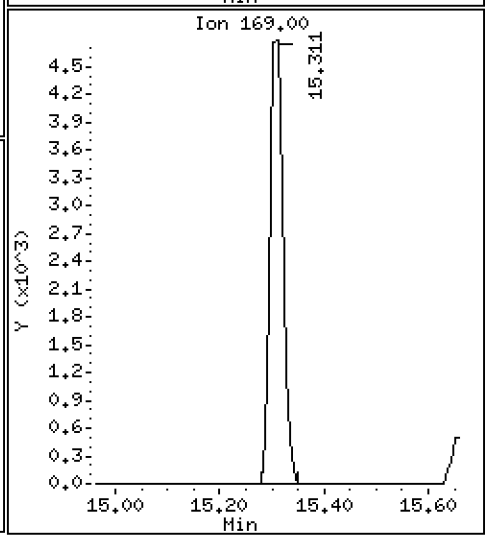












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

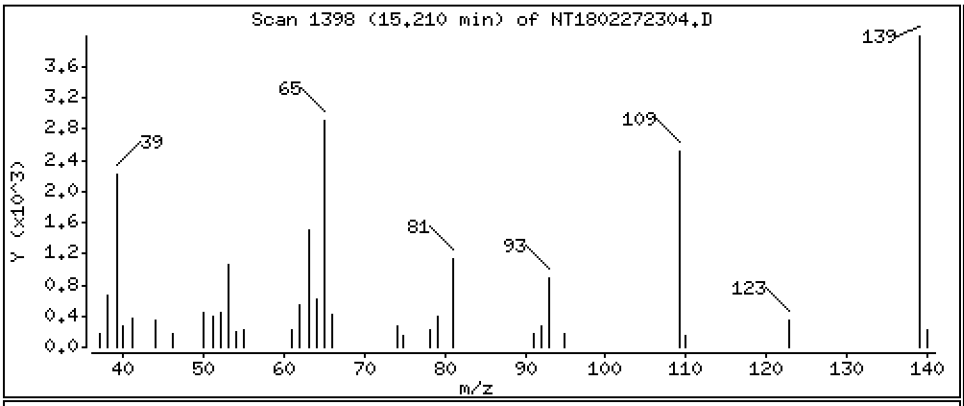
Operator: VTS

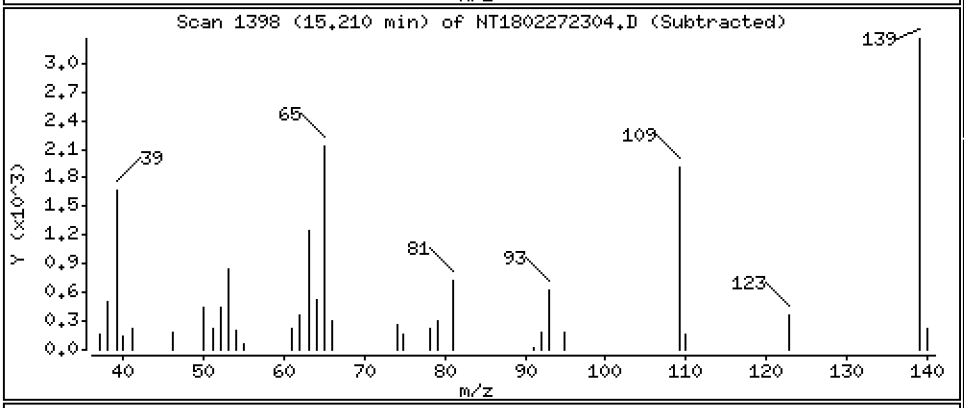
Column phase: ZB-5msi

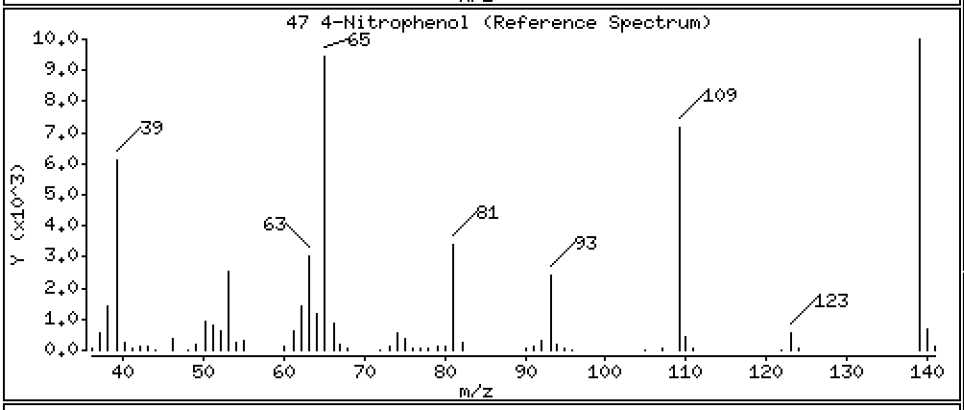
Column diameter: 0.25

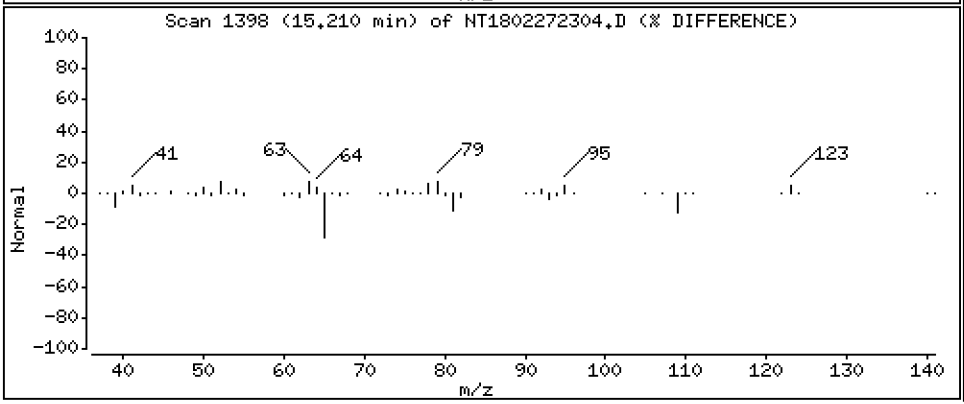
47 4-Nitrophenol

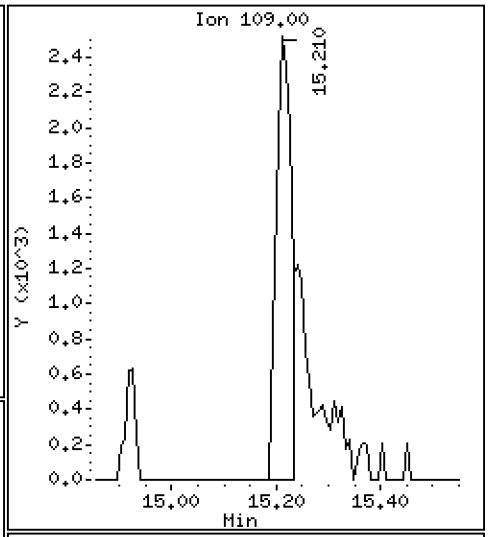
Concentration: 0.2462 ug/mL

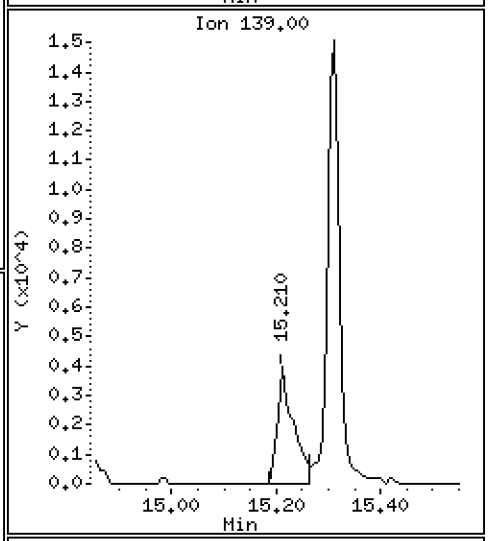


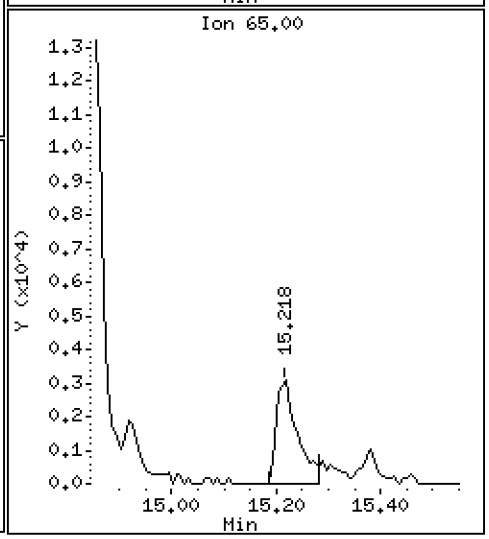












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

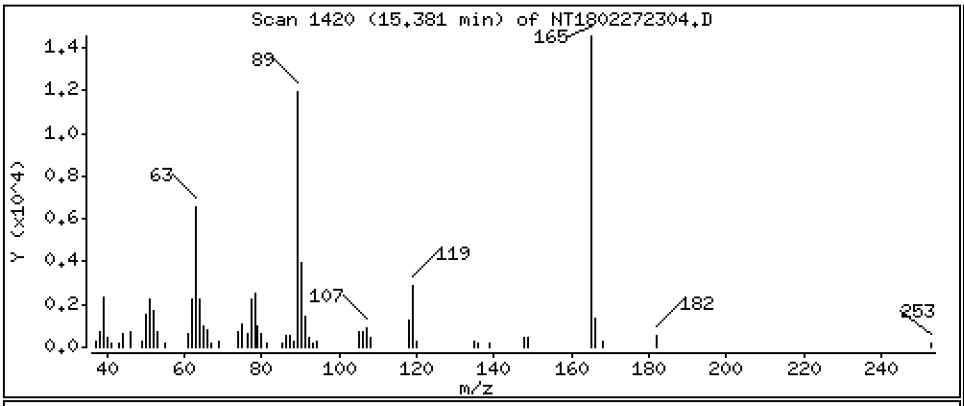
Operator: VTS

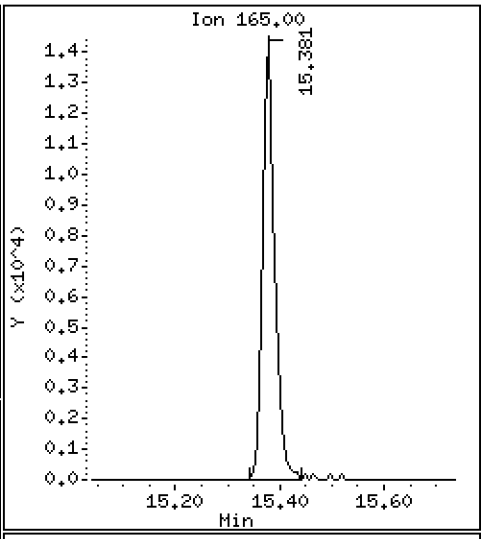
Column phase: ZB-5msi

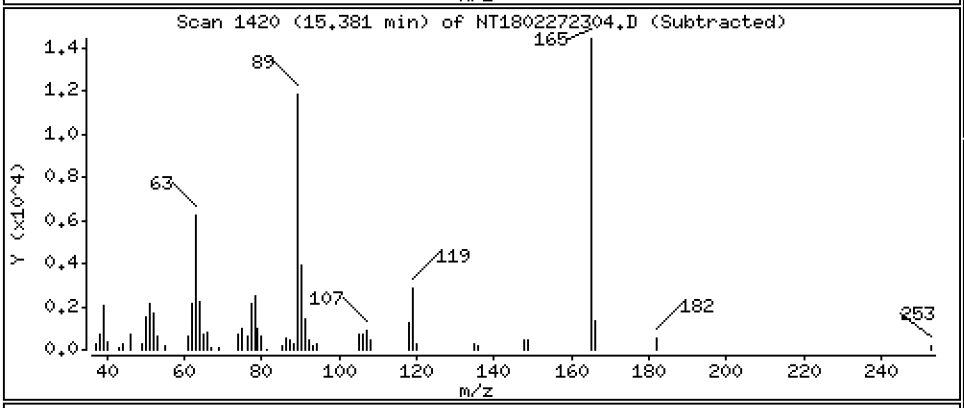
Column diameter: 0.25

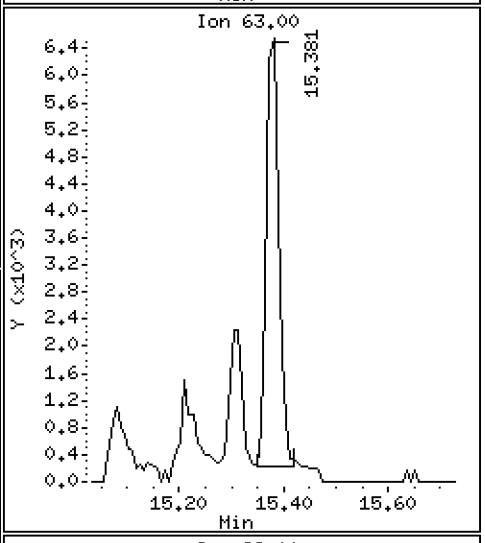
48 2,4-Dinitrotoluene

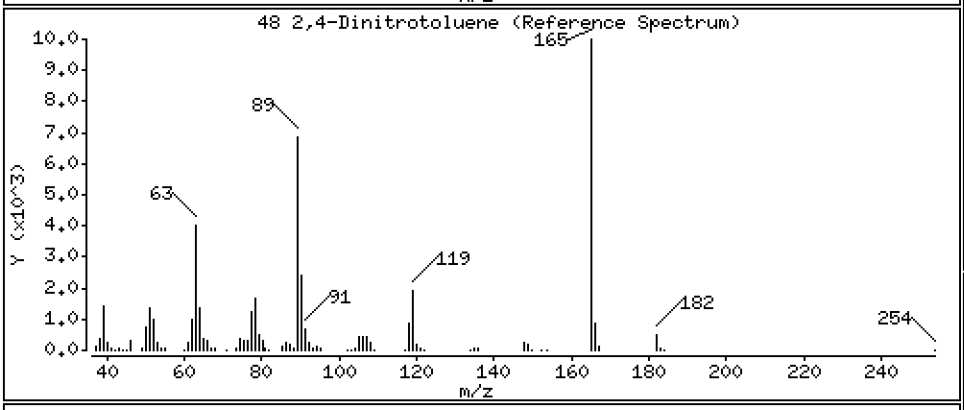
Concentration: 0.3915 ug/mL

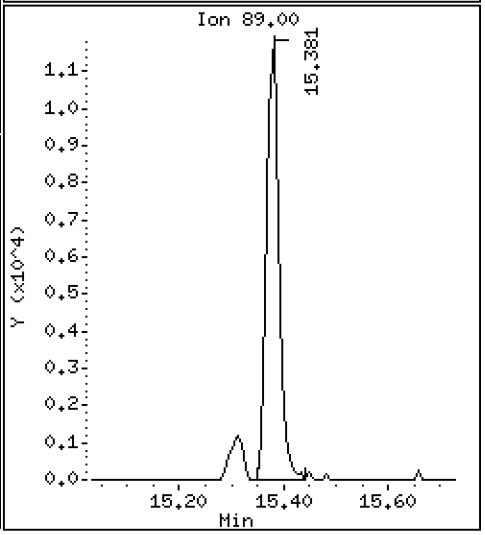


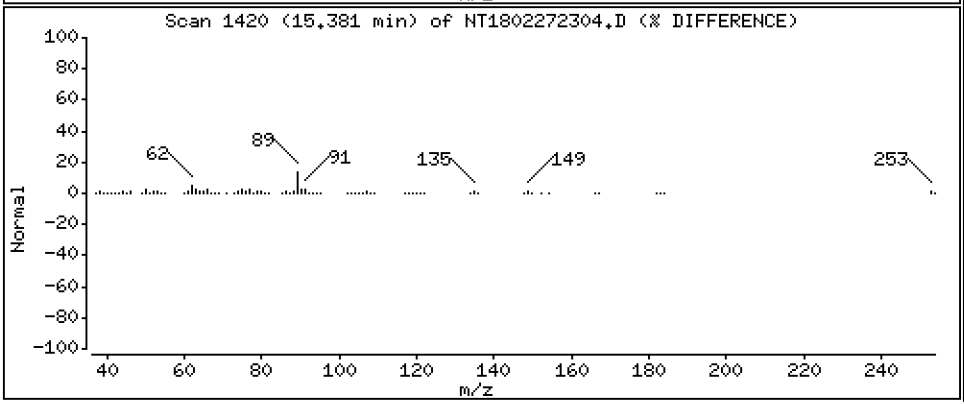












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

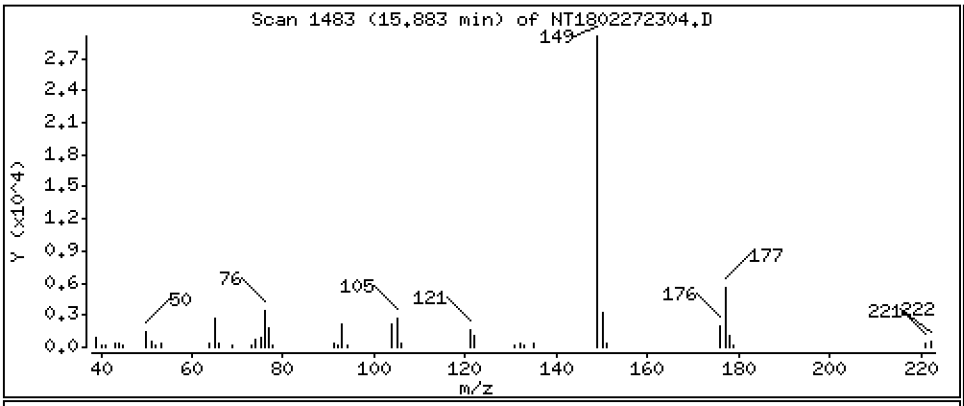
Operator: VTS

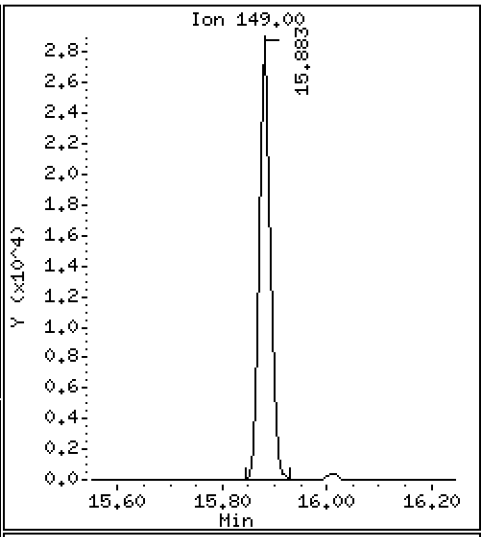
Column phase: ZB-5msi

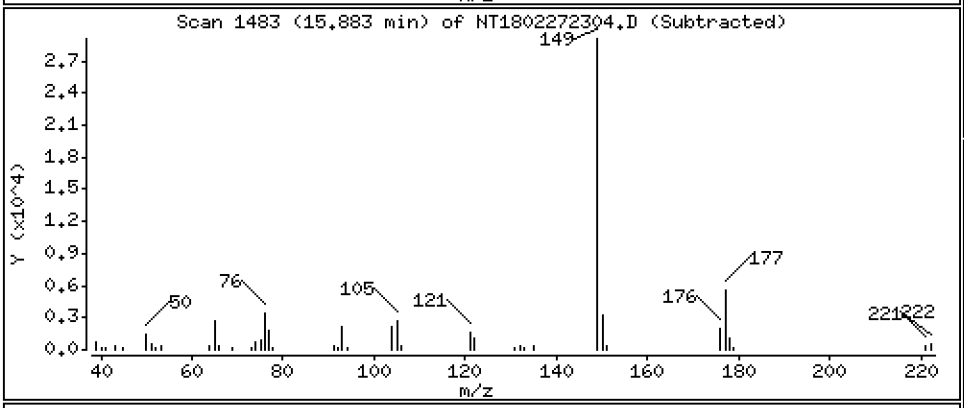
Column diameter: 0.25

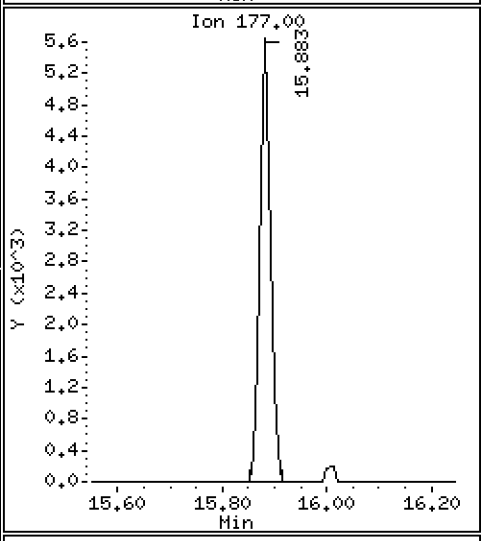
50 Diethylphthalate

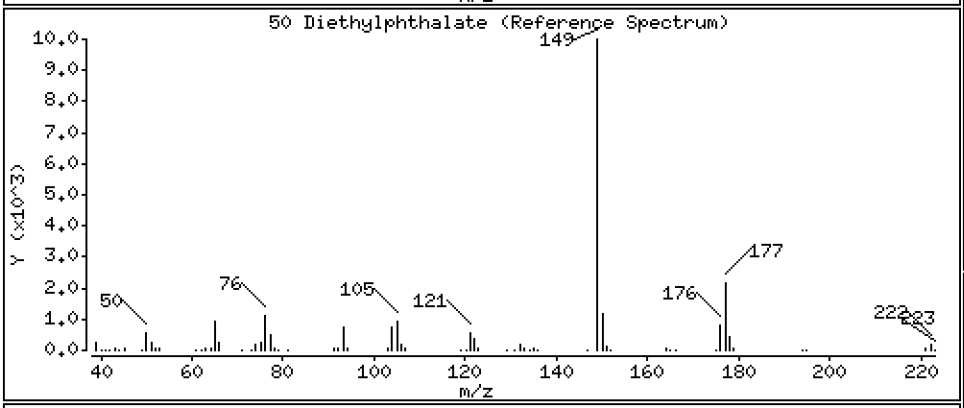
Concentration: 0.2128 ug/mL

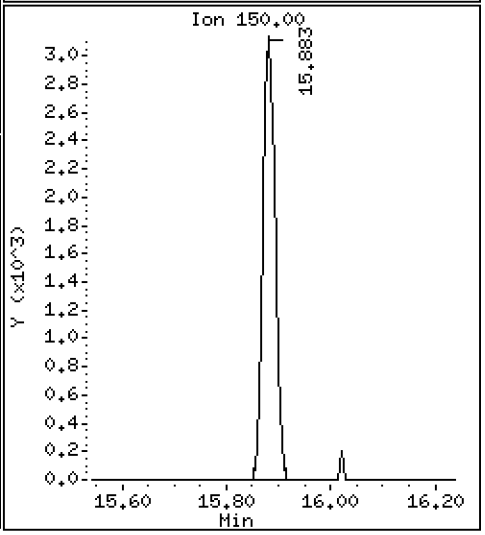


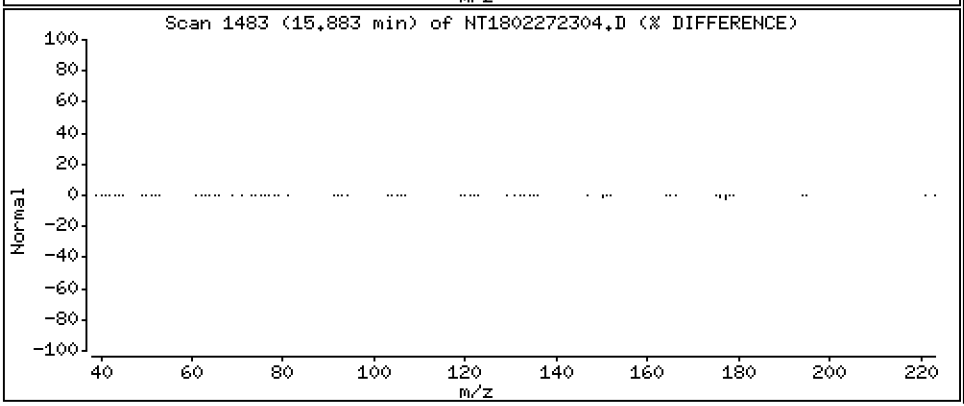












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

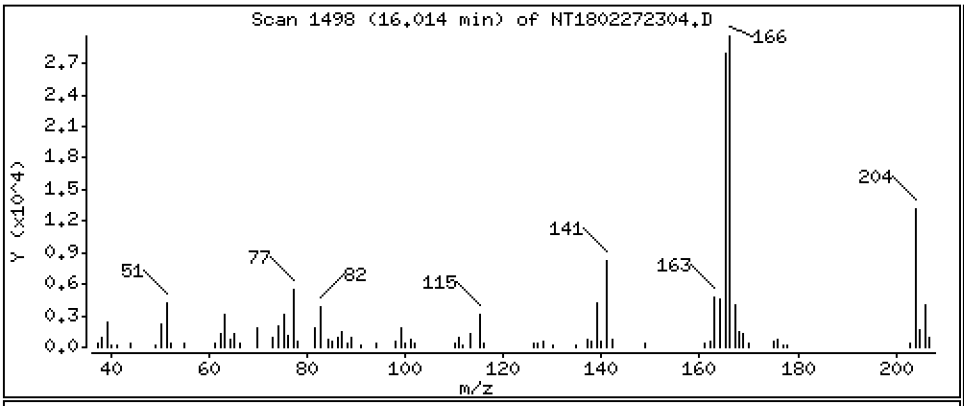
Operator: VTS

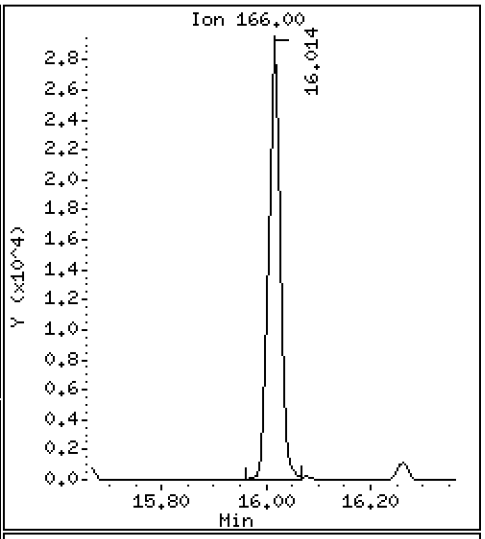
Column phase: ZB-5msi

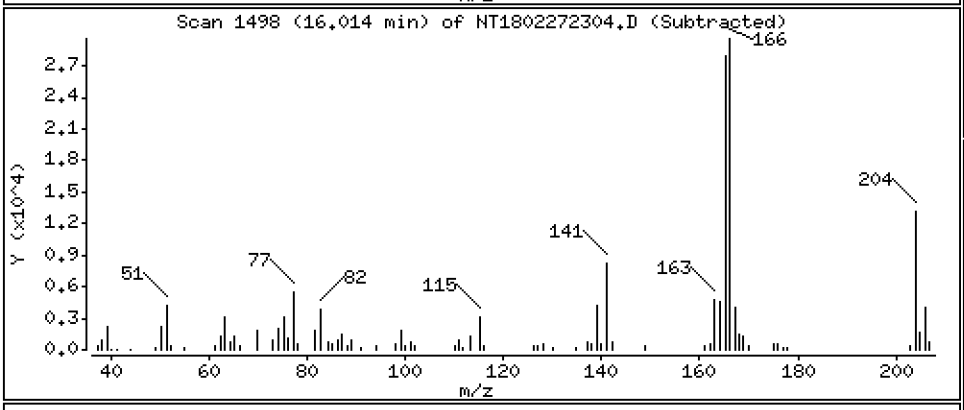
Column diameter: 0.25

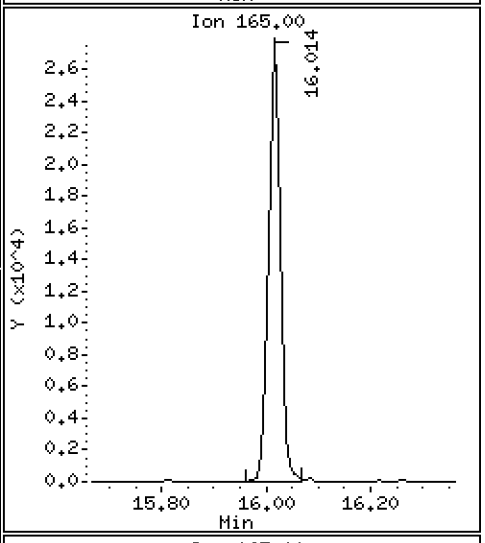
49 Fluorene

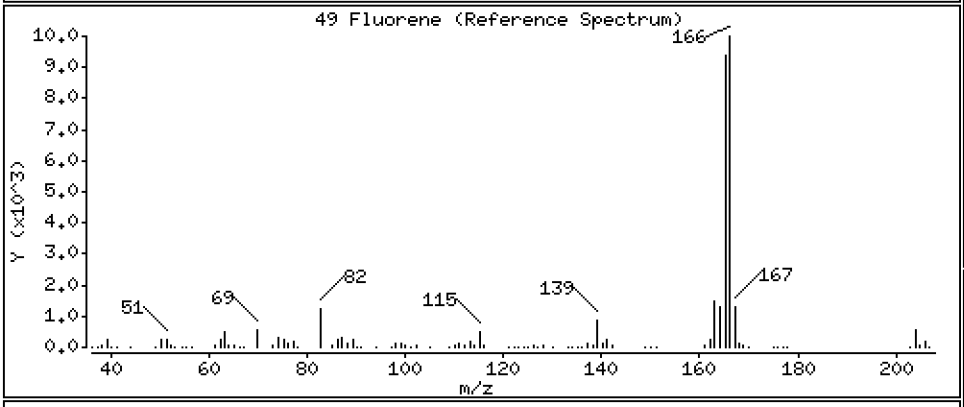
Concentration: 0.2421 ug/mL

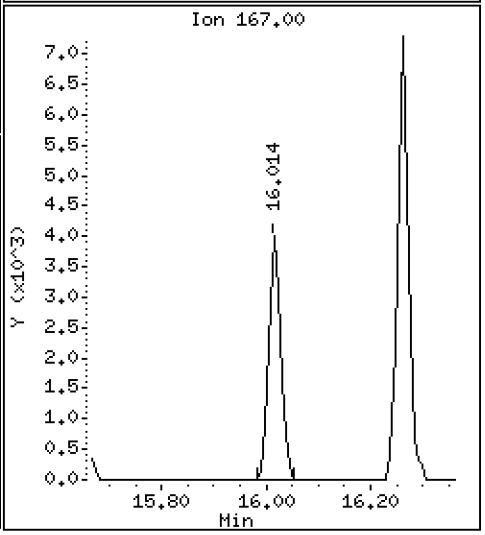


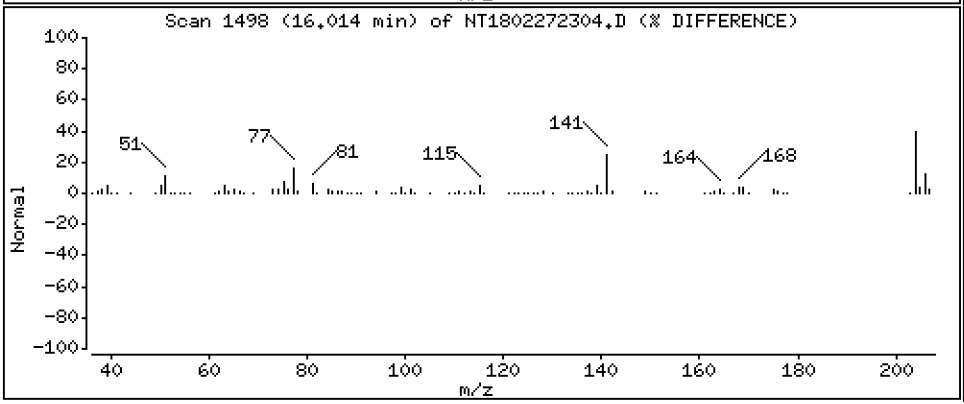












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

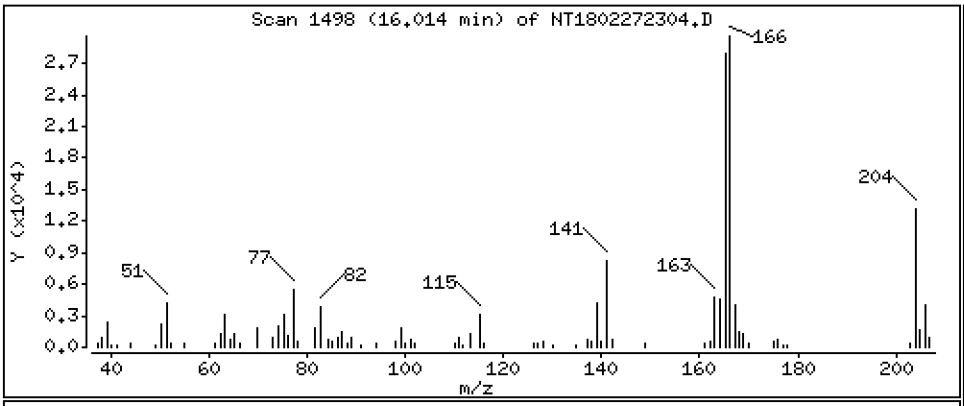
Operator: VTS

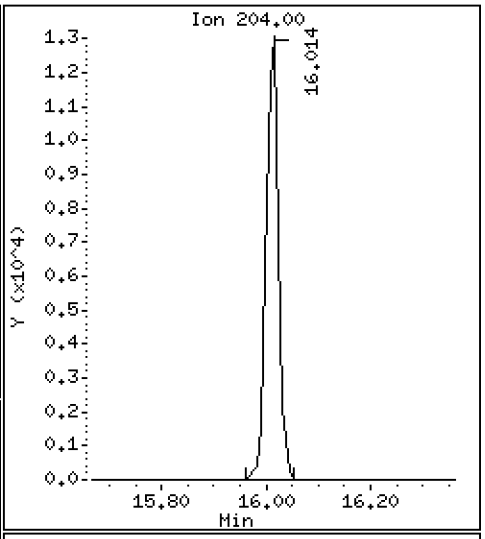
Column phase: ZB-5msi

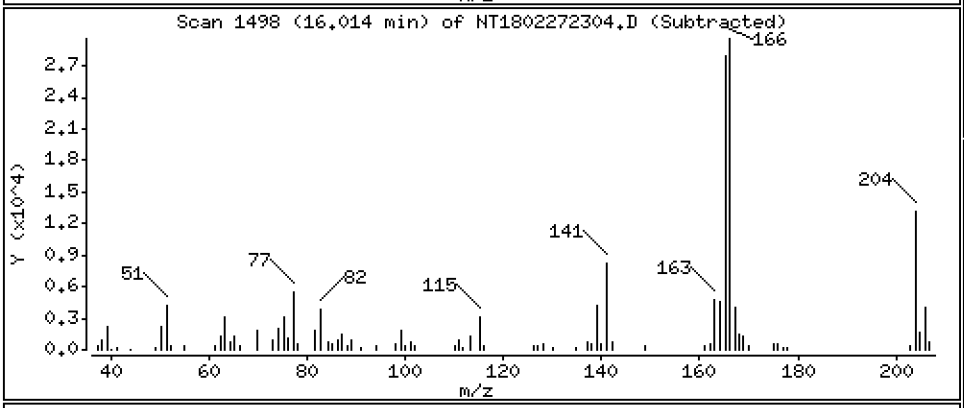
Column diameter: 0.25

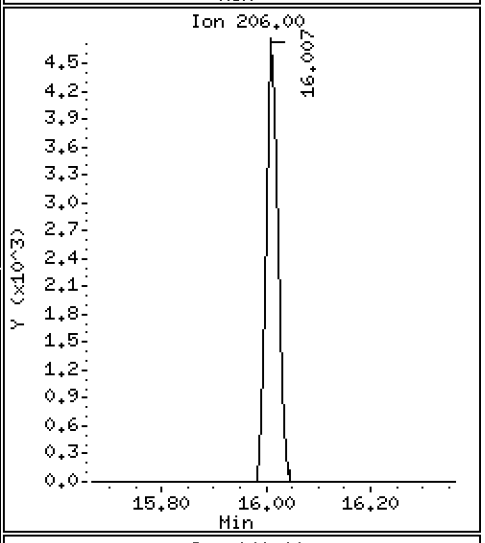
51 4-Chlorophenyl-phenylether

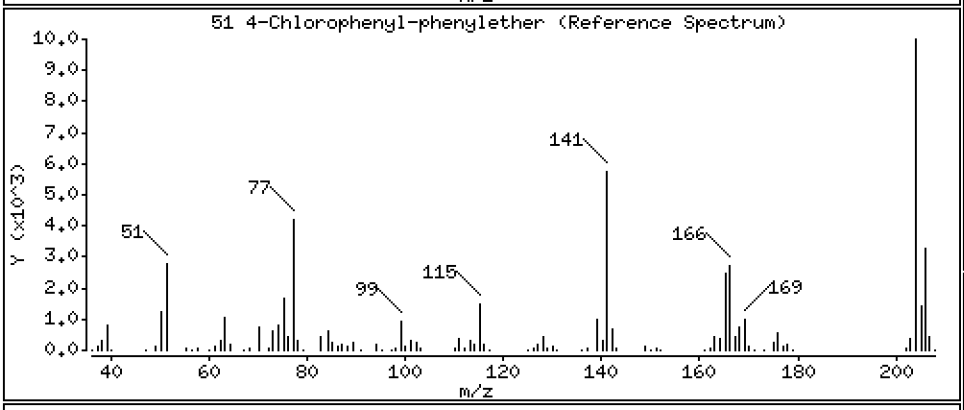
Concentration: 0.2488 ug/mL

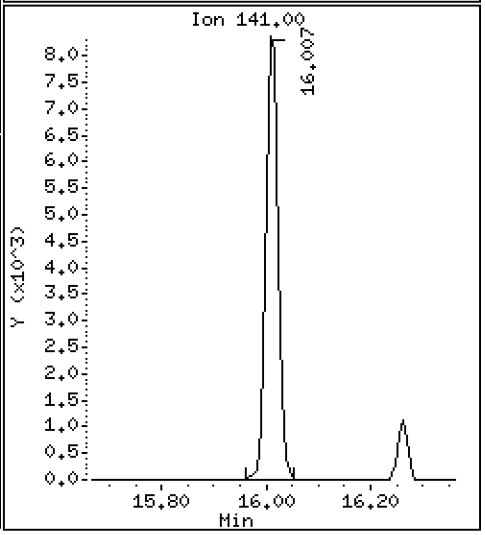


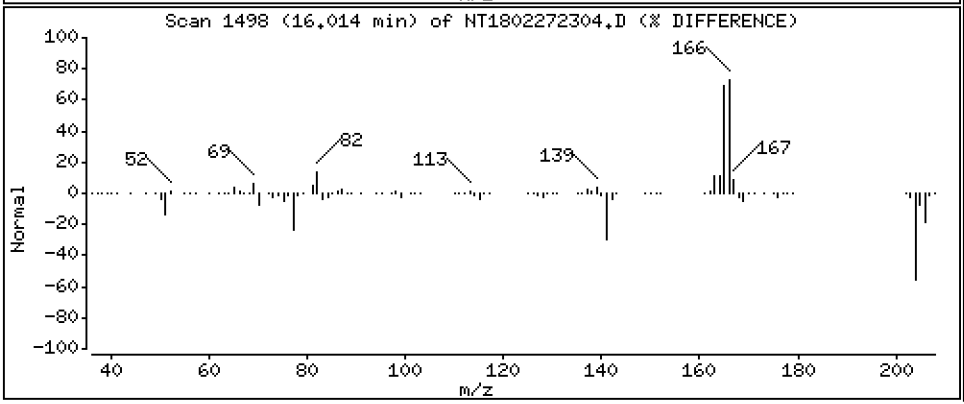












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

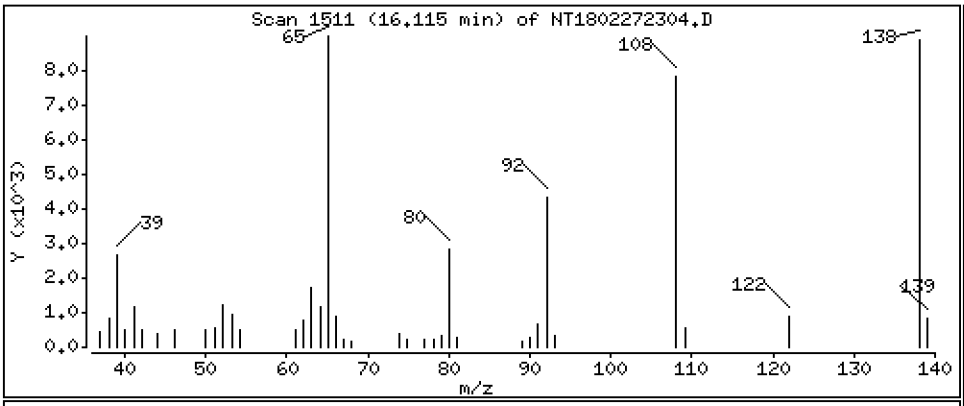
Operator: VTS

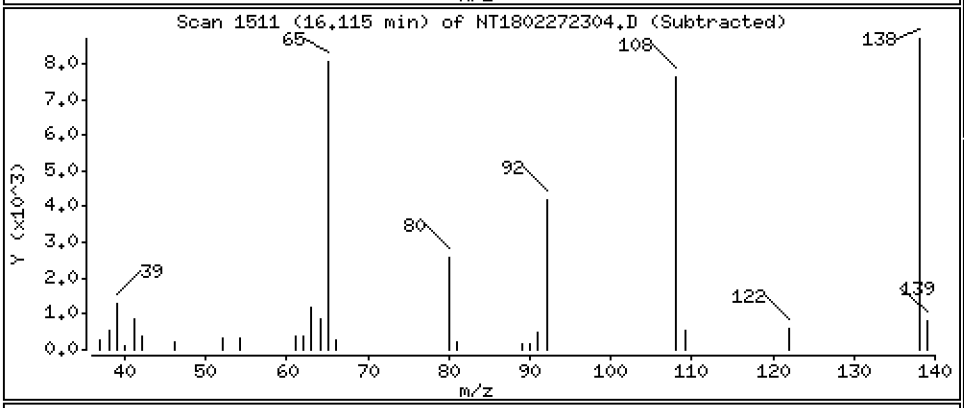
Column phase: ZB-5msi

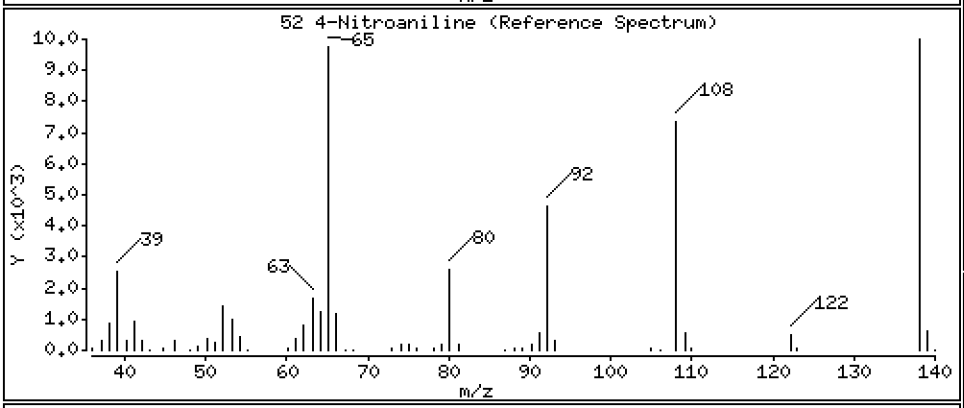
Column diameter: 0.25

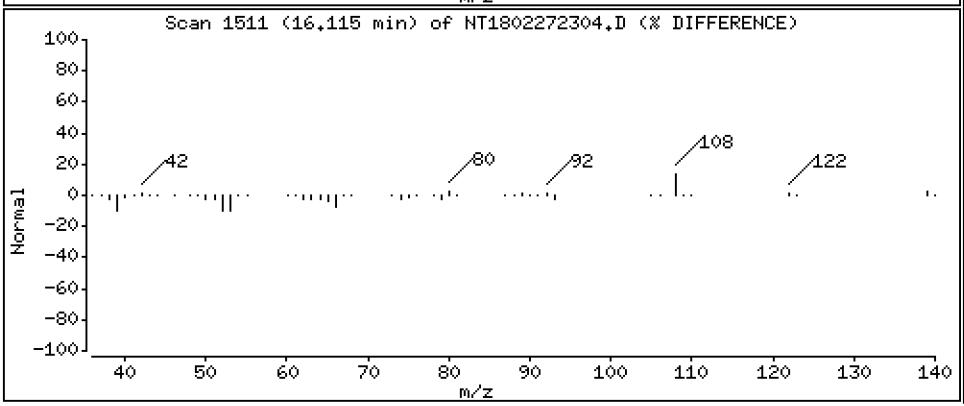
52 4-Nitroaniline

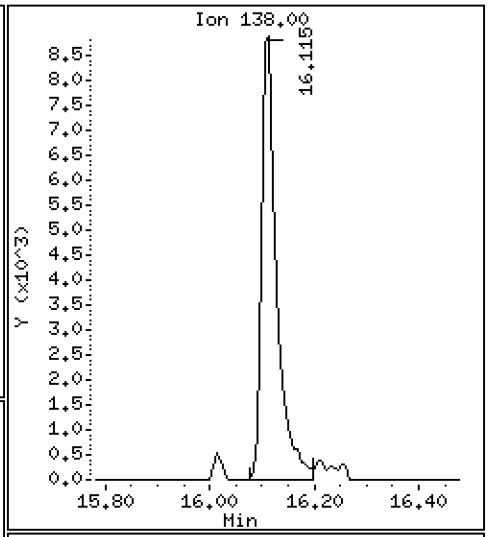
Concentration: 0.3673 ug/mL

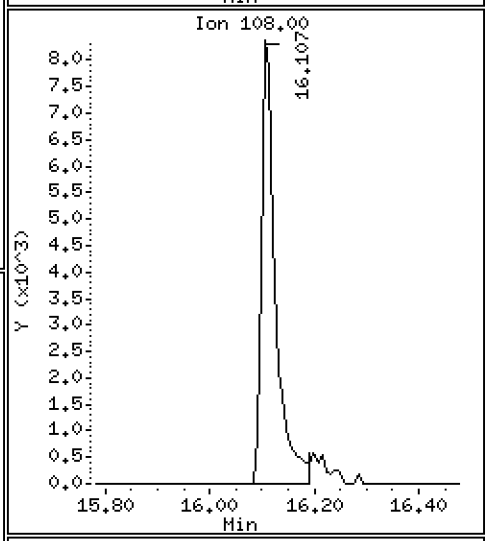


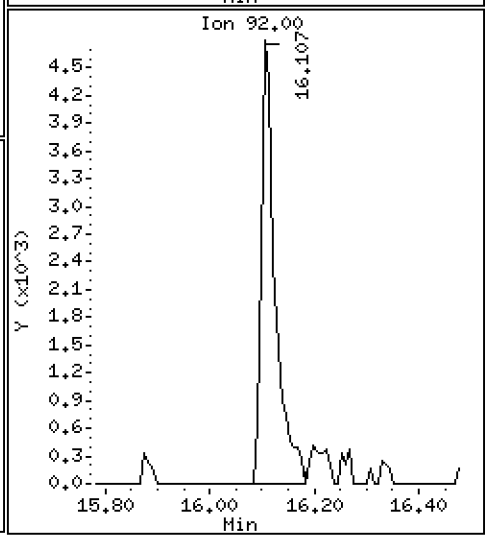












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

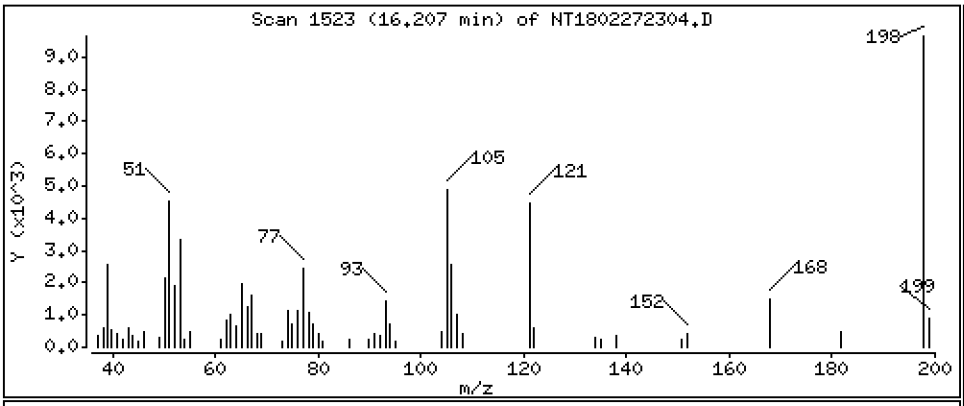
Operator: VTS

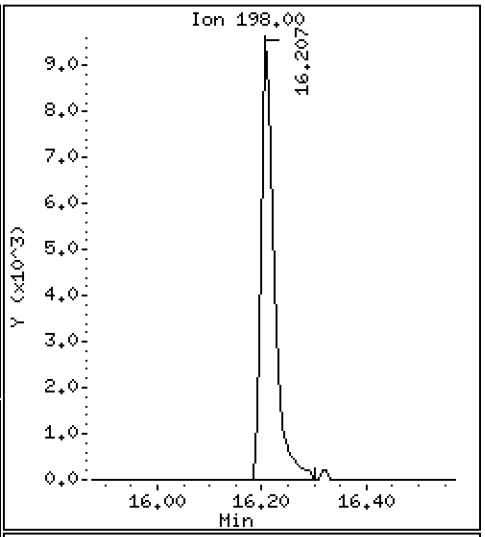
Column phase: ZB-5msi

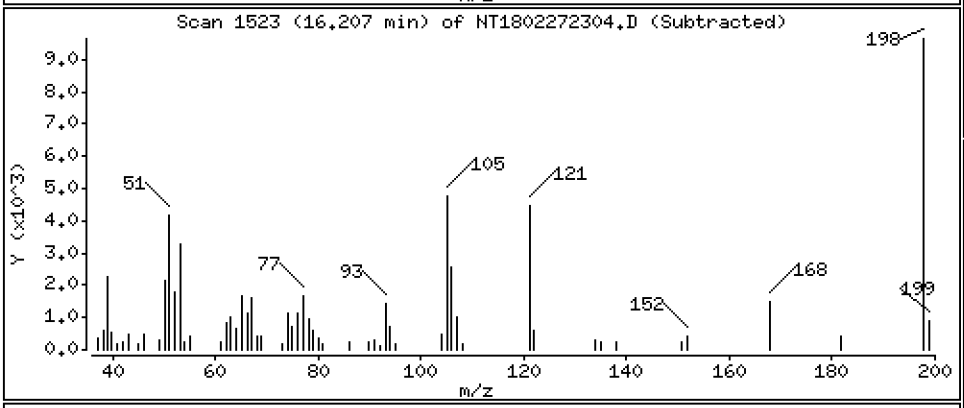
Column diameter: 0.25

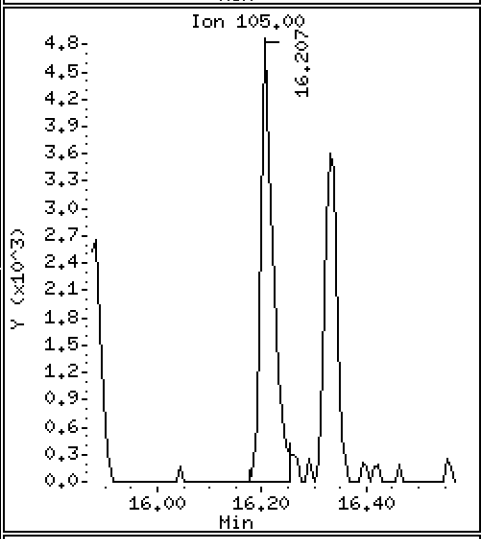
53 4,6-Dinitro-2-methylphenol

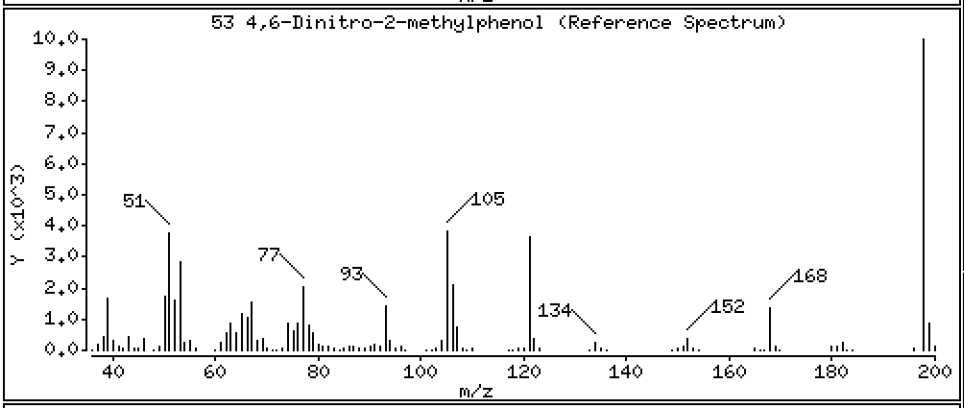
Concentration: 0.4690 ug/mL

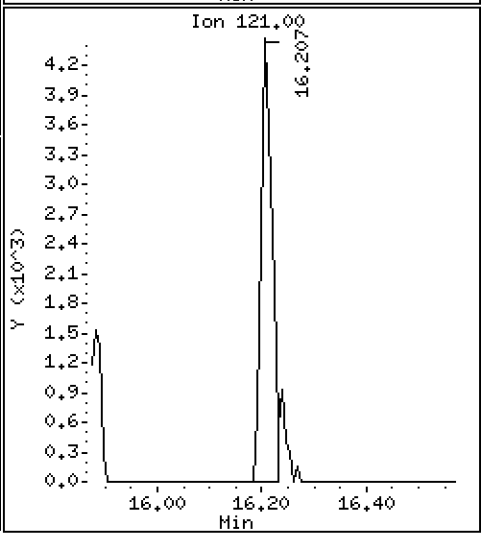


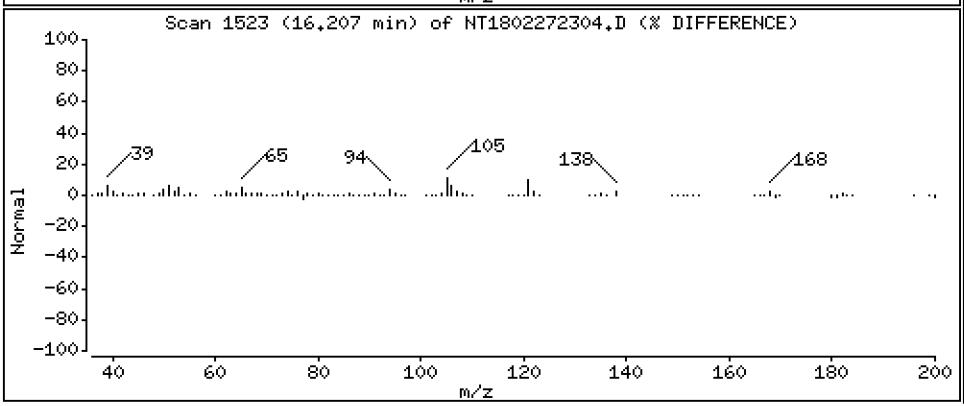












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

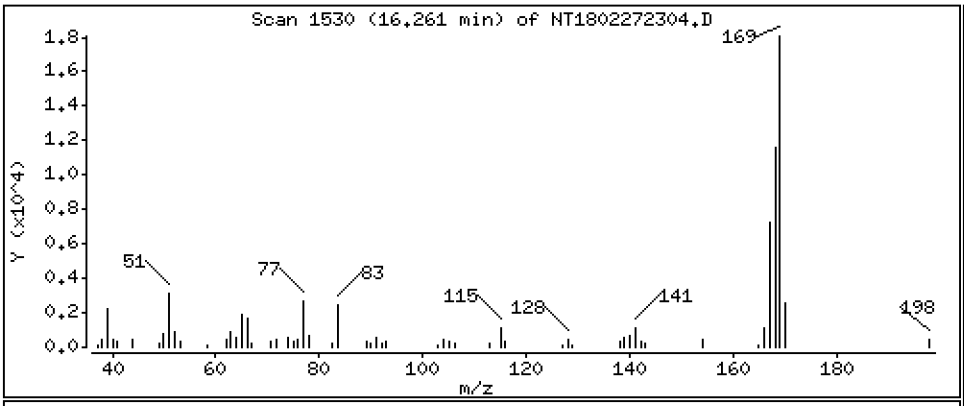
Operator: VTS

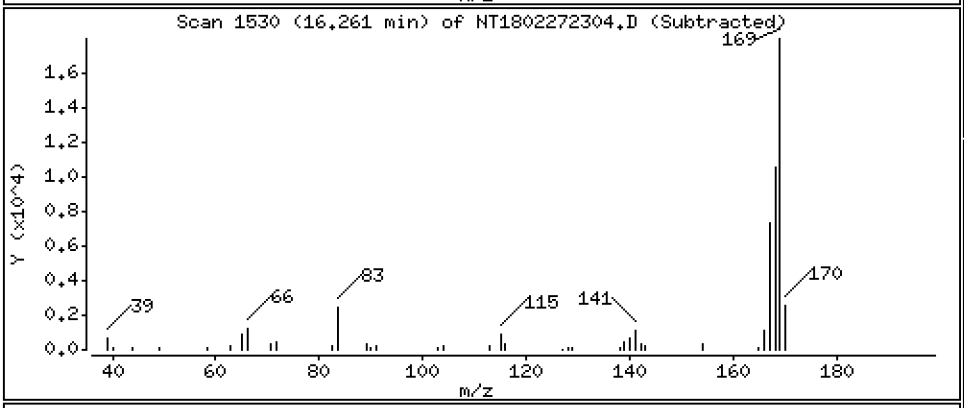
Column phase: ZB-5msi

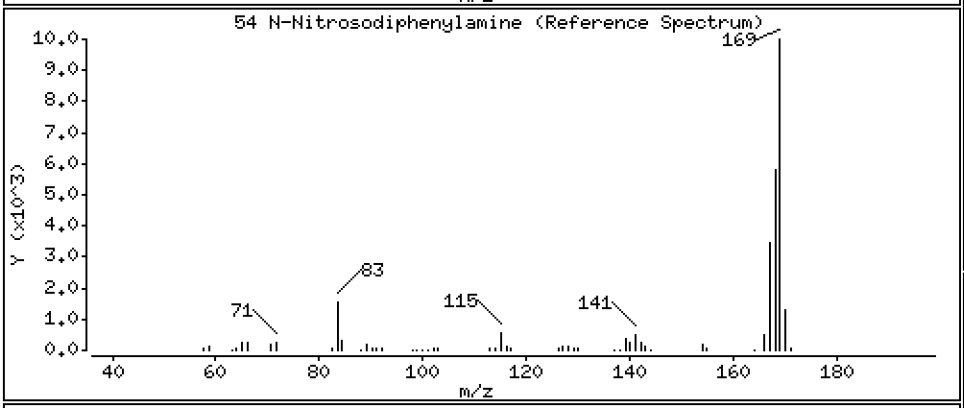
Column diameter: 0.25

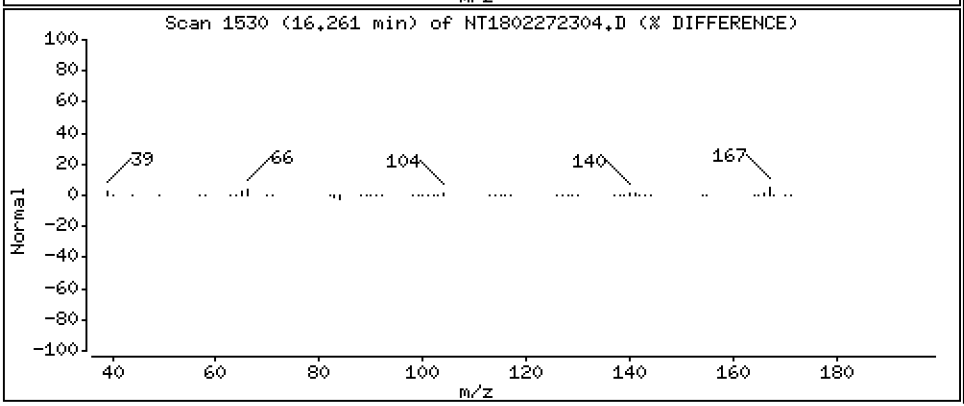
54 N-Nitrosodiphenylamine

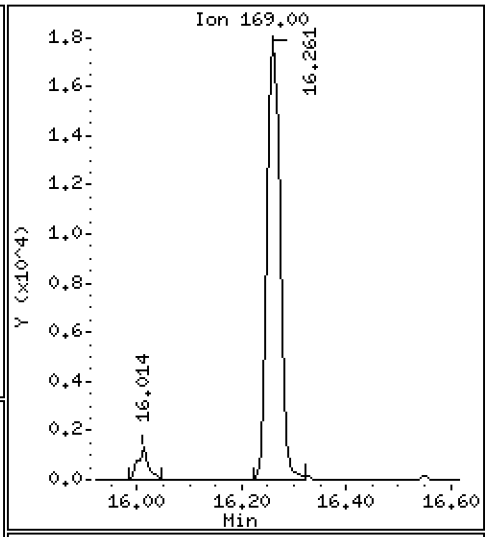
Concentration: 0.2029 ug/mL

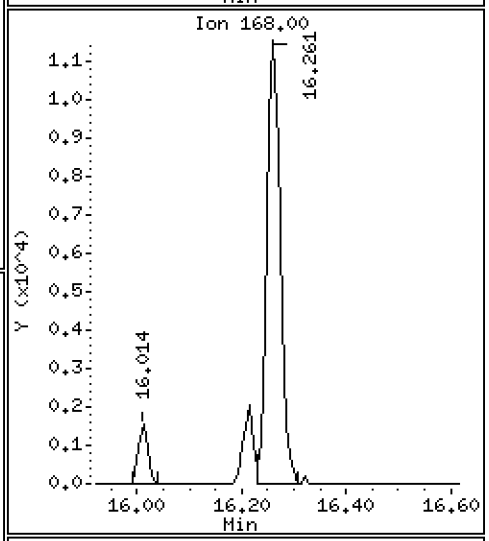


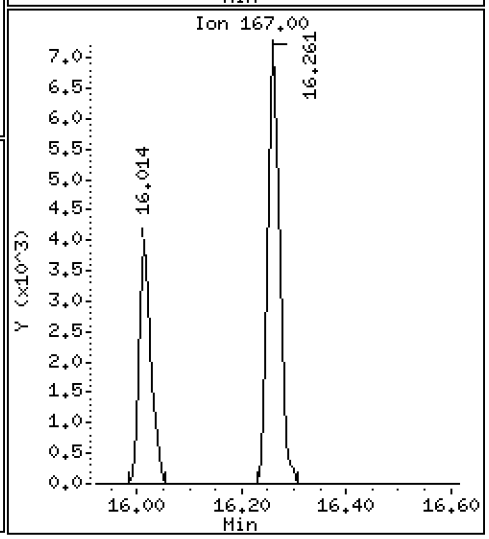












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

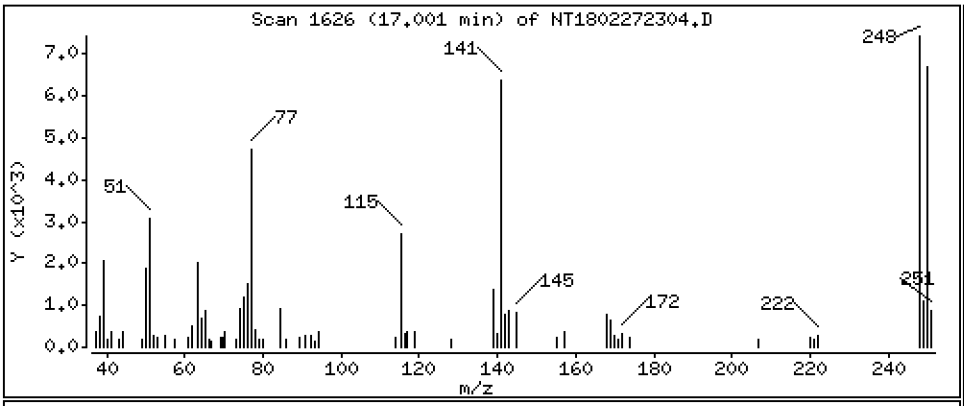
Operator: VTS

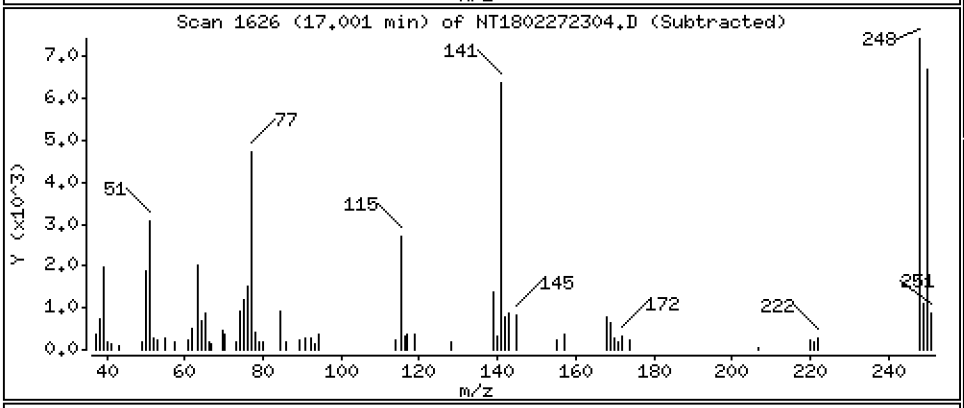
Column phase: ZB-5msi

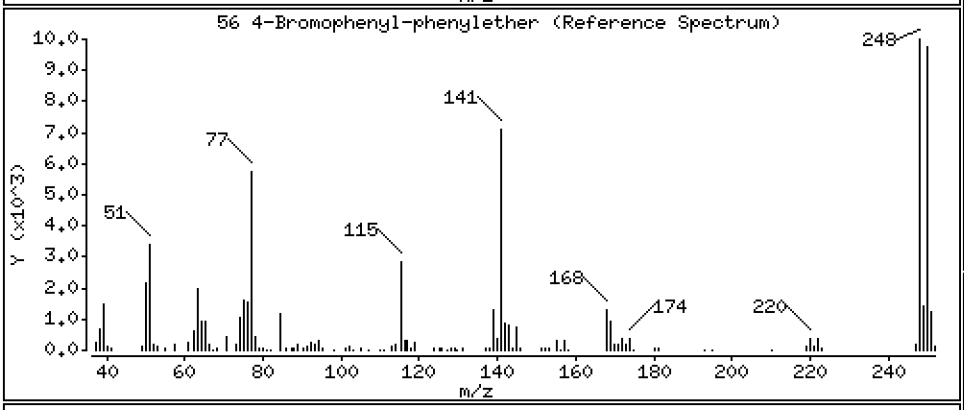
Column diameter: 0.25

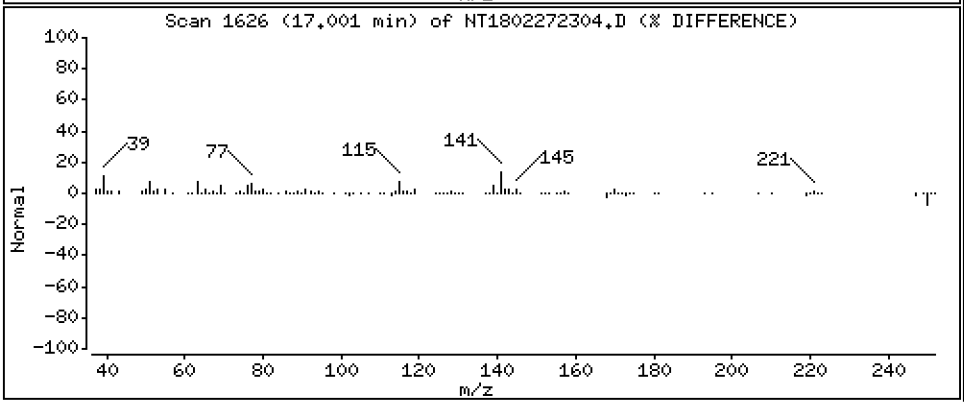
56 4-Bromophenyl-phenylether

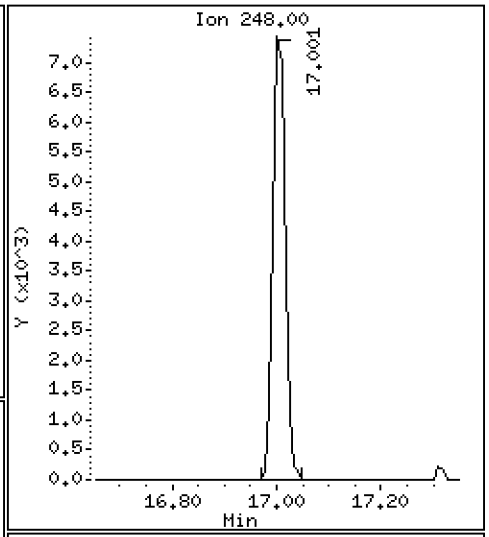
Concentration: 0.1968 ug/mL

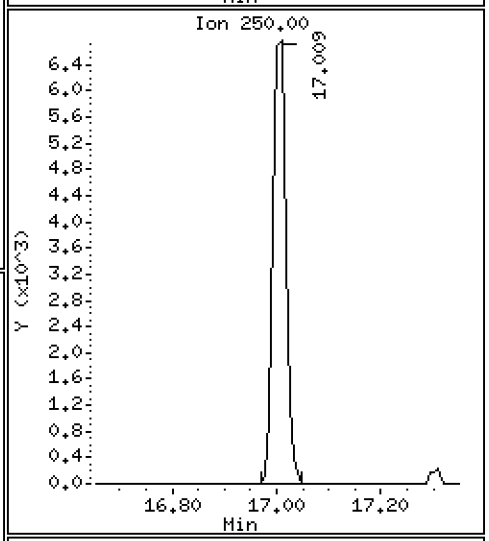


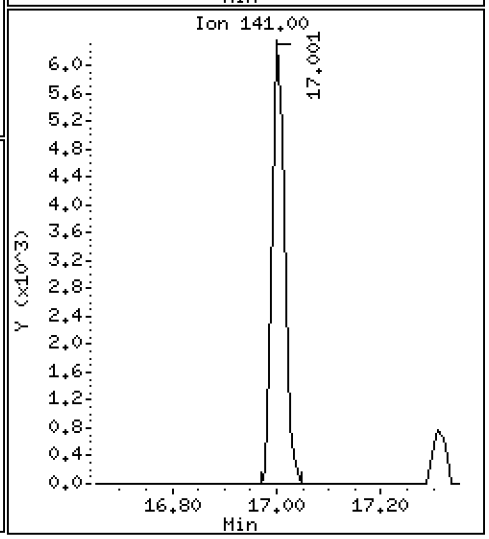












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

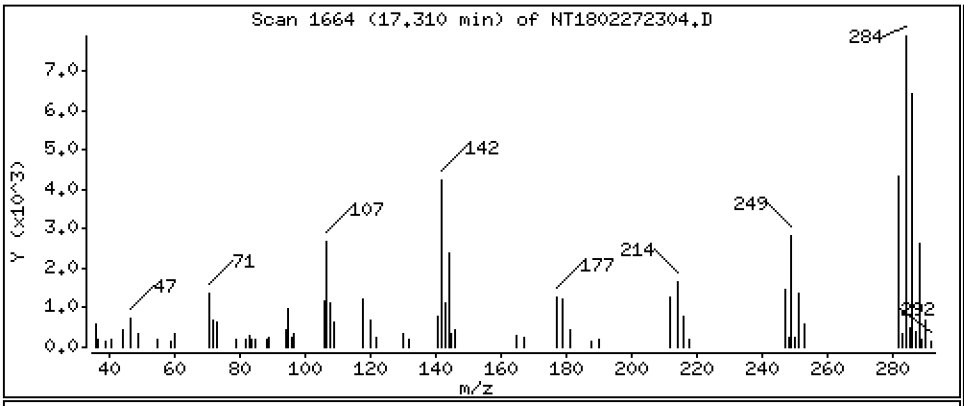
Operator: VTS

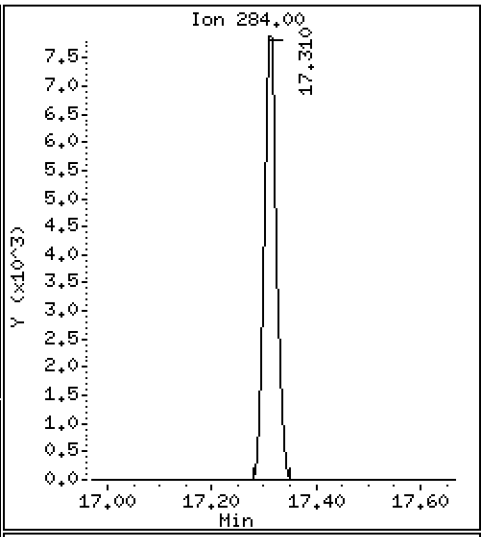
Column phase: ZB-5msi

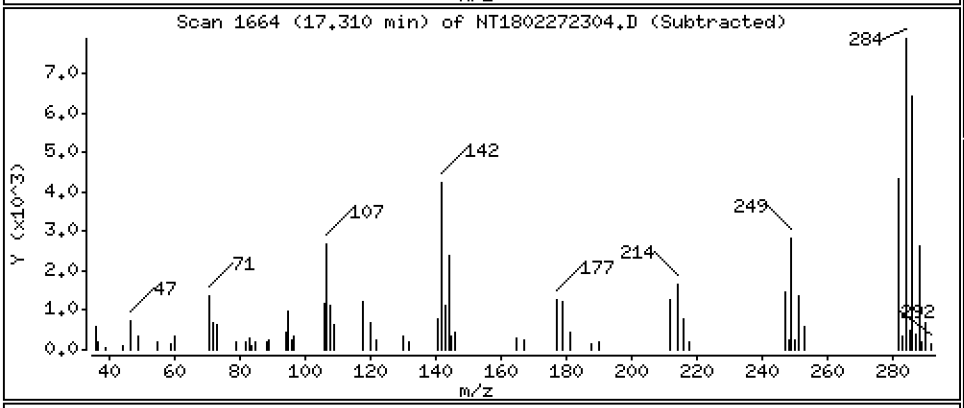
Column diameter: 0.25

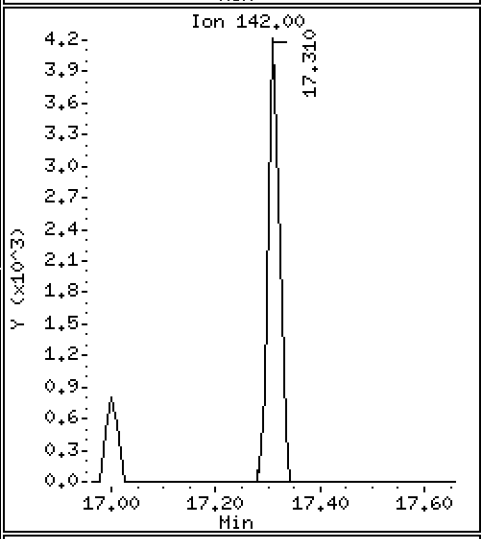
57 Hexachlorobenzene

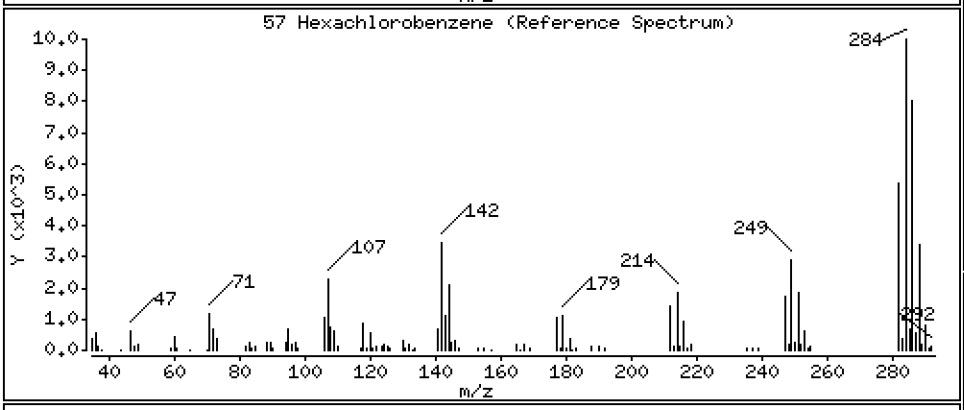
Concentration: 0.1948 ug/mL

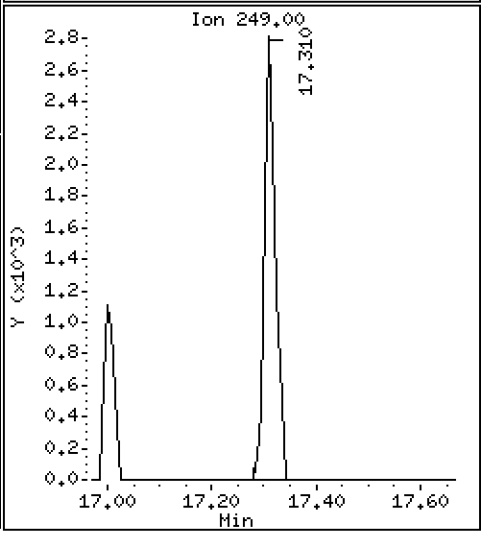


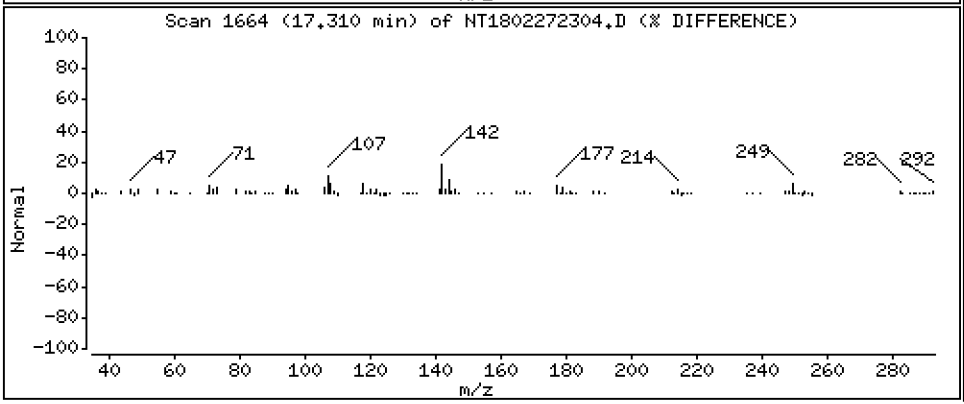












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

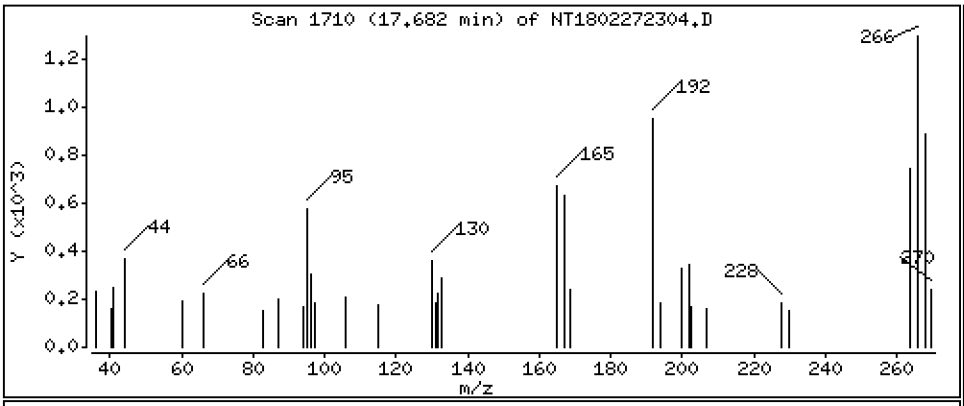
Operator: VTS

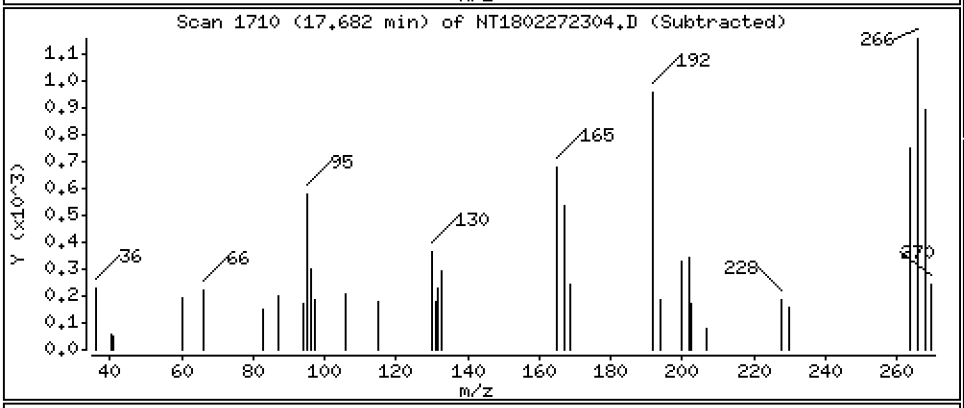
Column phase: ZB-5msi

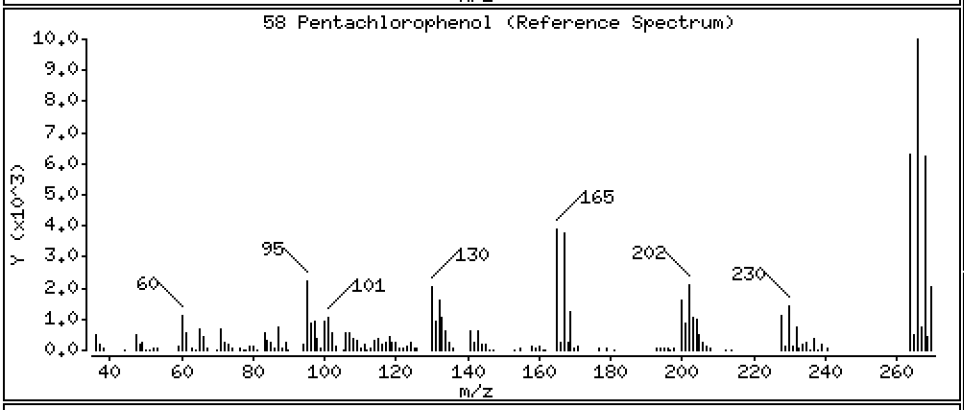
Column diameter: 0.25

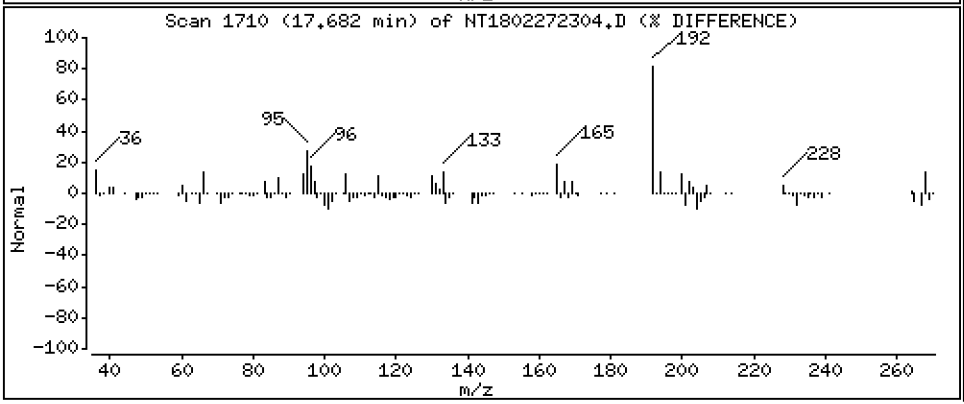
58 Pentachlorophenol

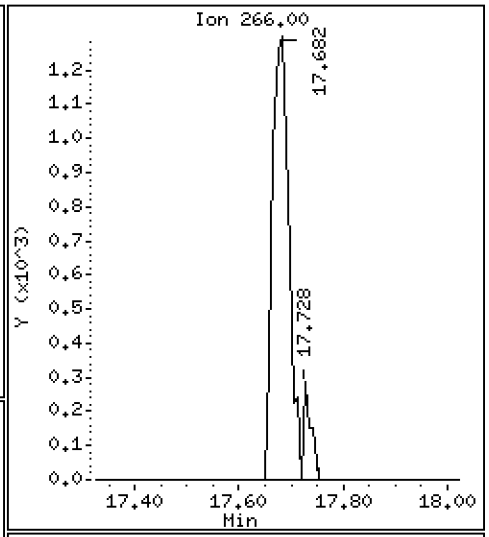
Concentration: 0.1573 ug/mL

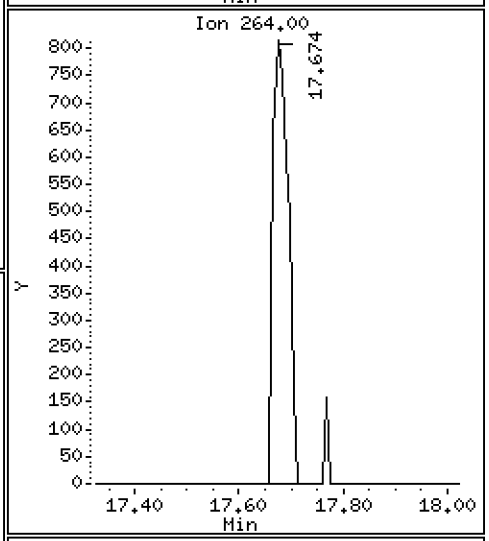


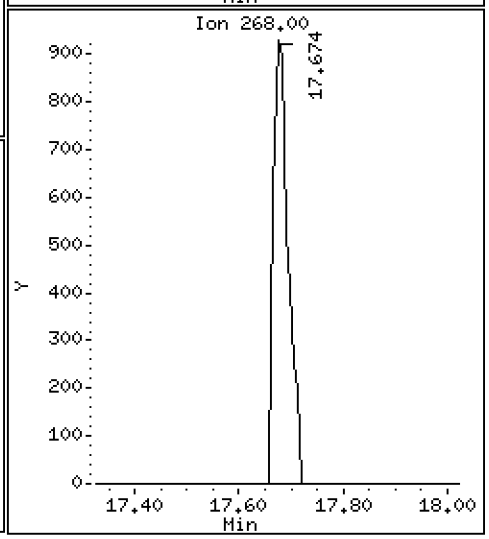












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

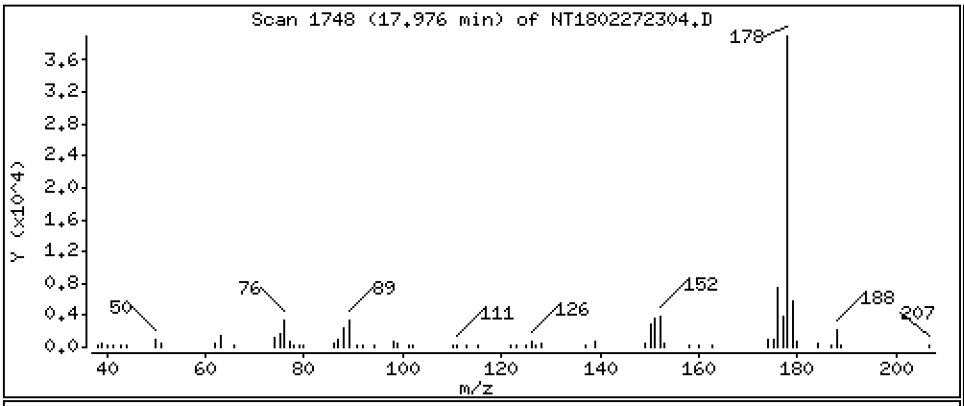
Operator: VTS

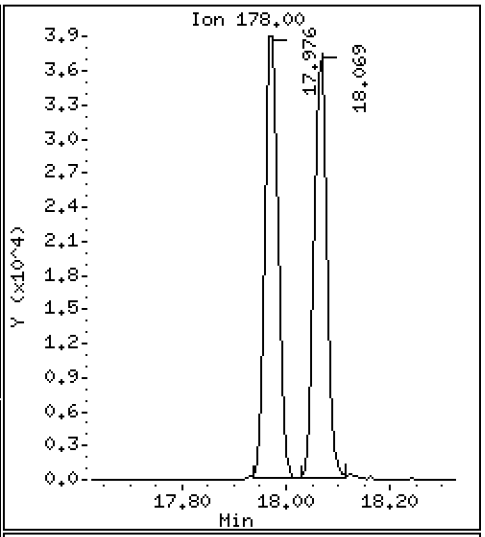
Column phase: ZB-5msi

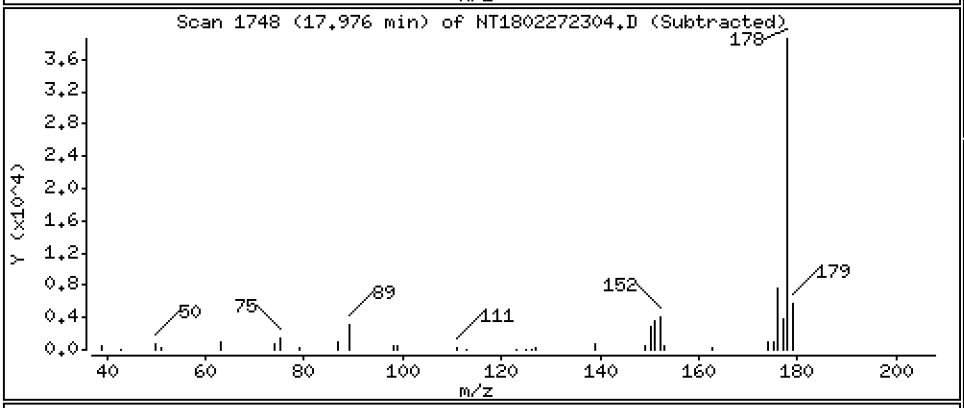
Column diameter: 0.25

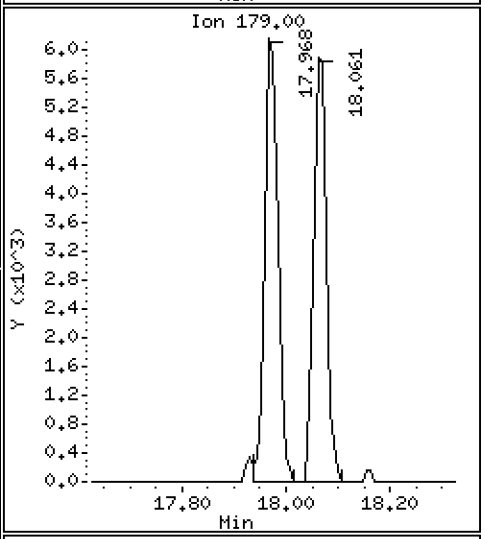
60 Phenanthrene

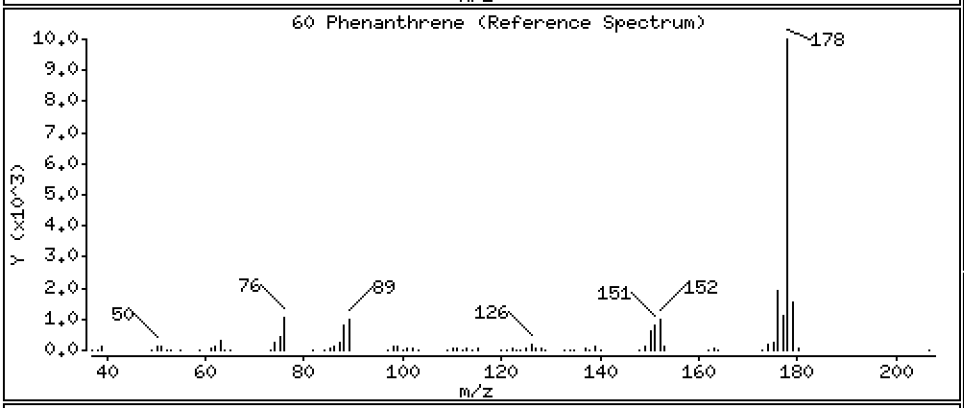
Concentration: 0.2160 ug/mL

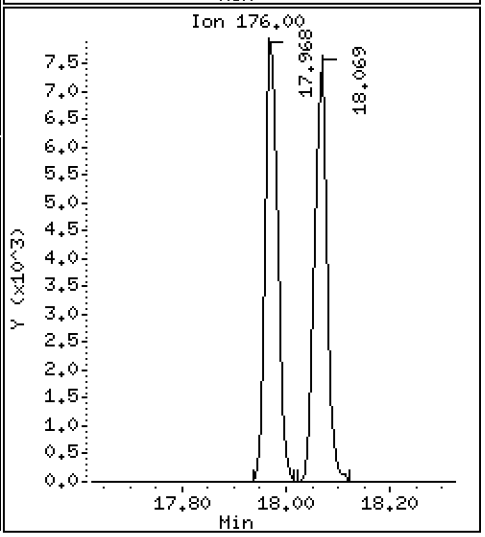


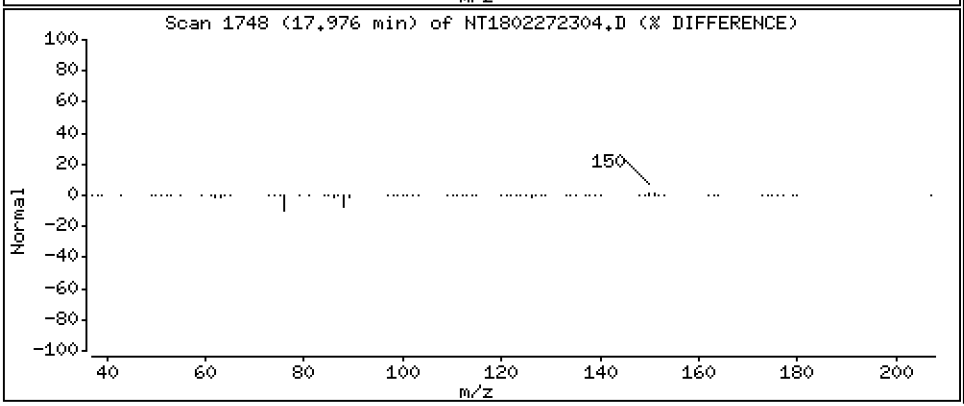












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

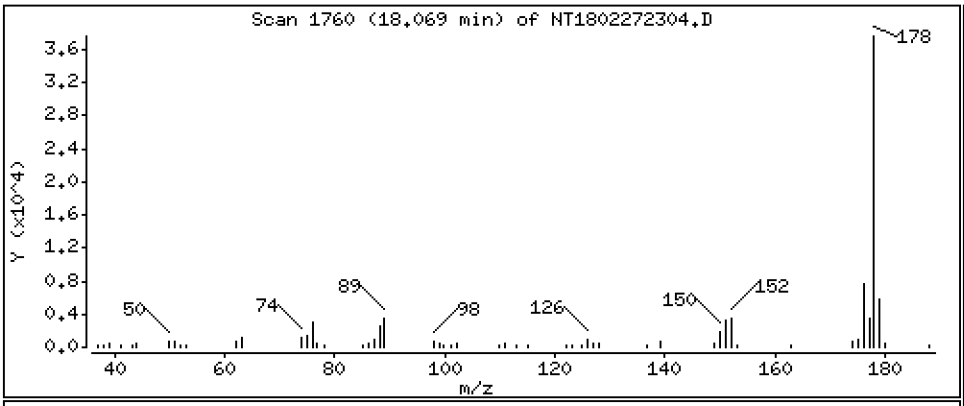
Operator: VTS

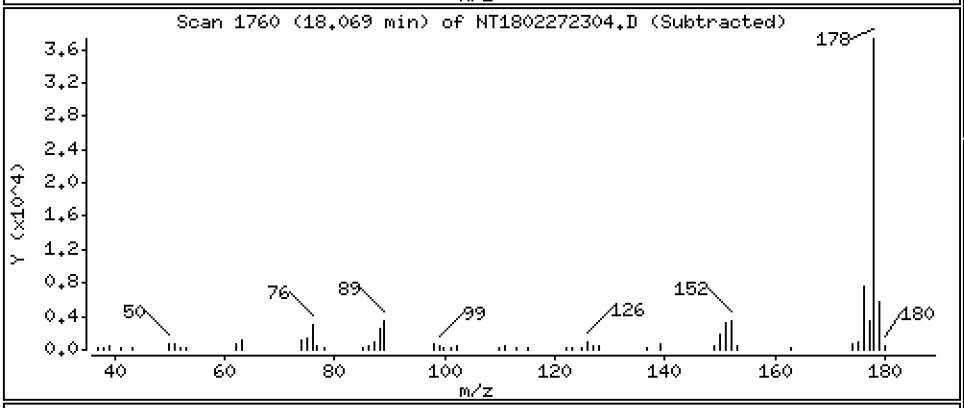
Column phase: ZB-5msi

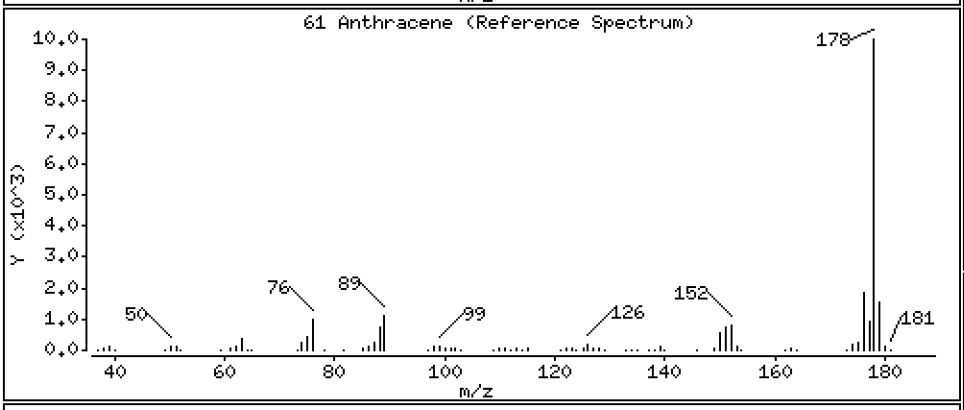
Column diameter: 0.25

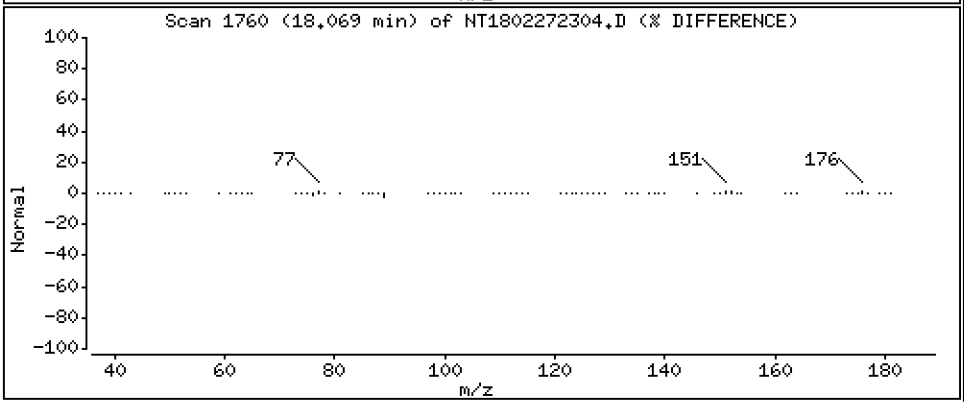
61 Anthracene

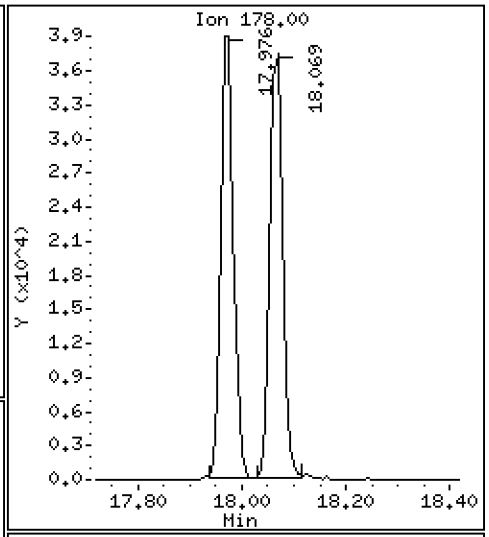
Concentration: 0.2110 ug/mL

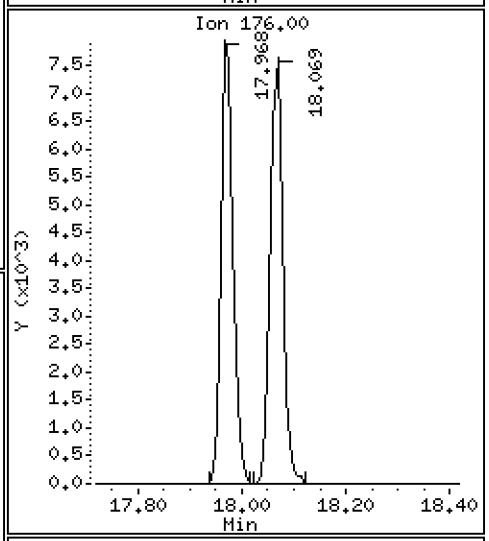


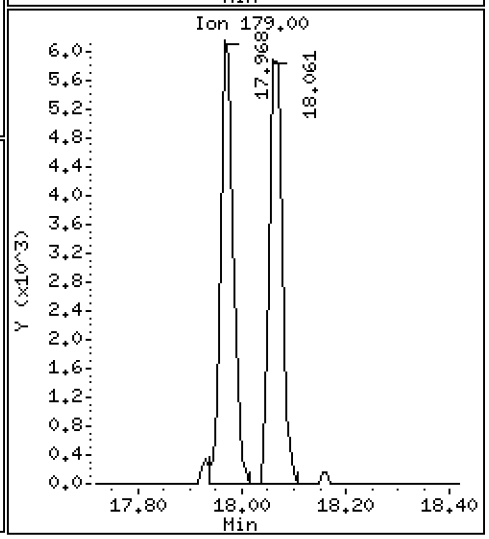












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

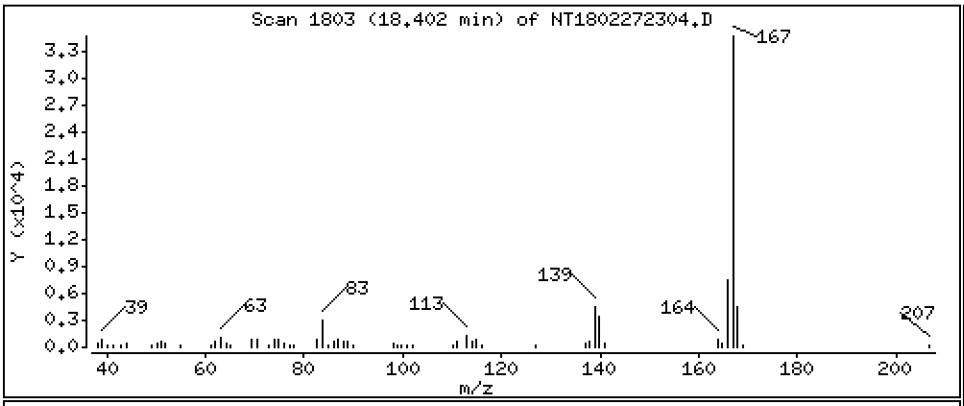
Operator: VTS

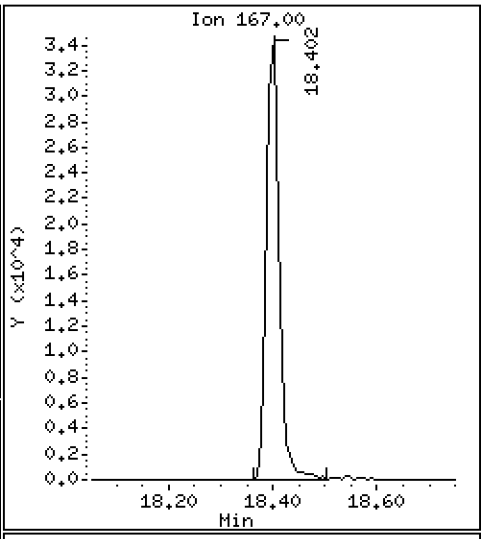
Column phase: ZB-5msi

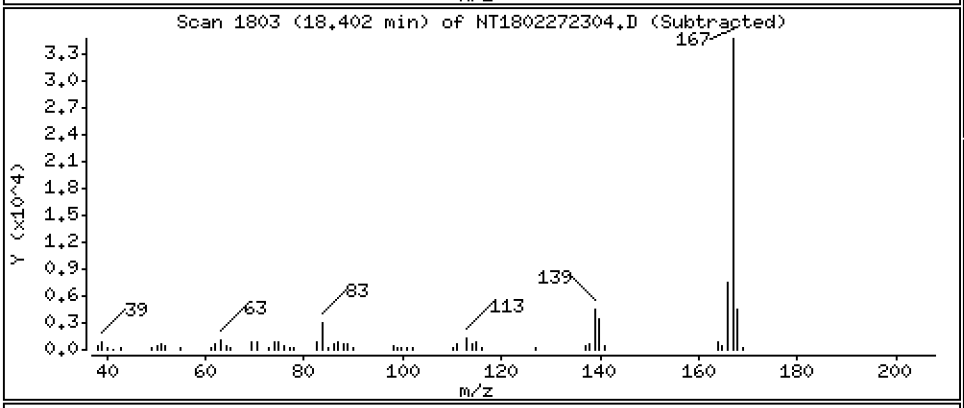
Column diameter: 0.25

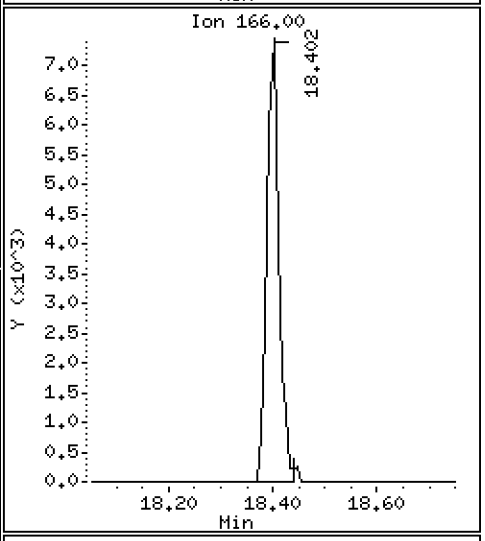
62 Carbazole

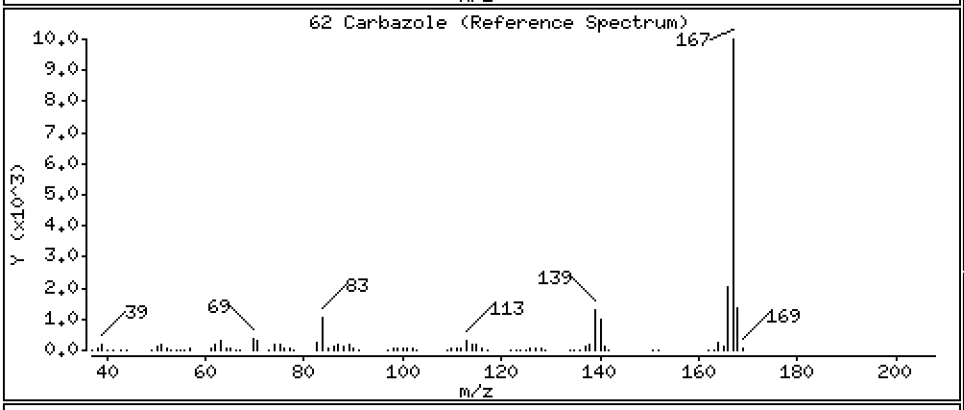
Concentration: 0.2094 ug/mL

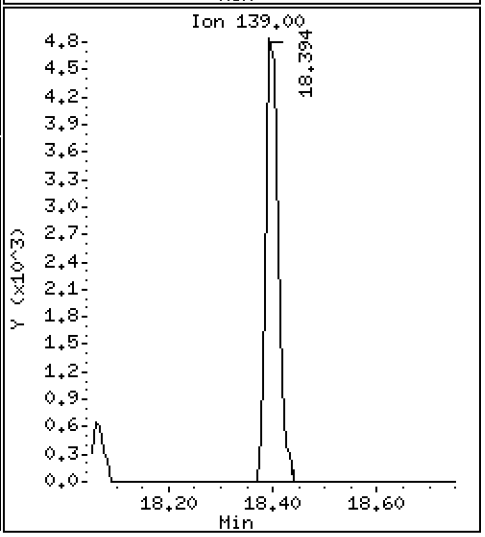


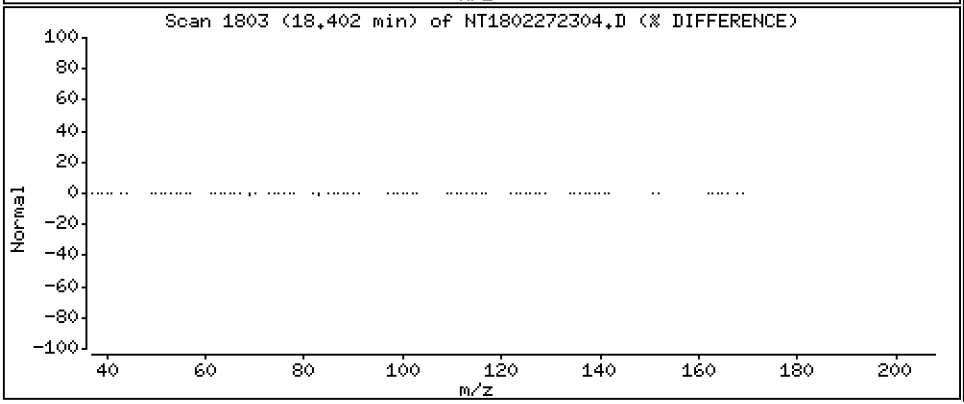












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

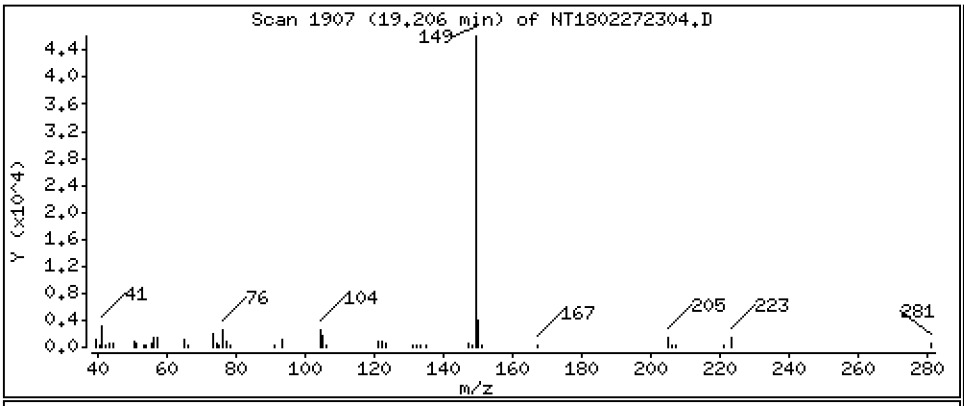
Operator: VTS

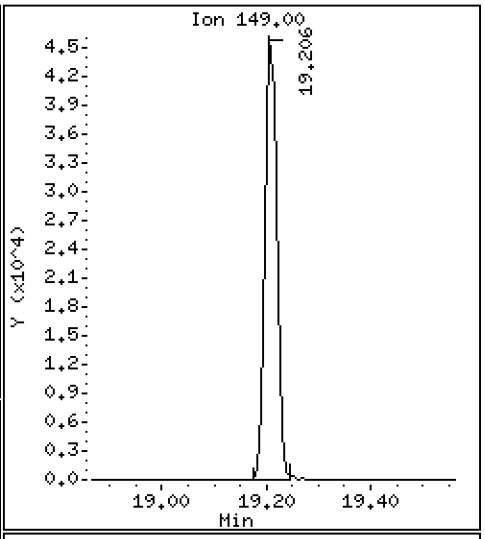
Column phase: ZB-5msi

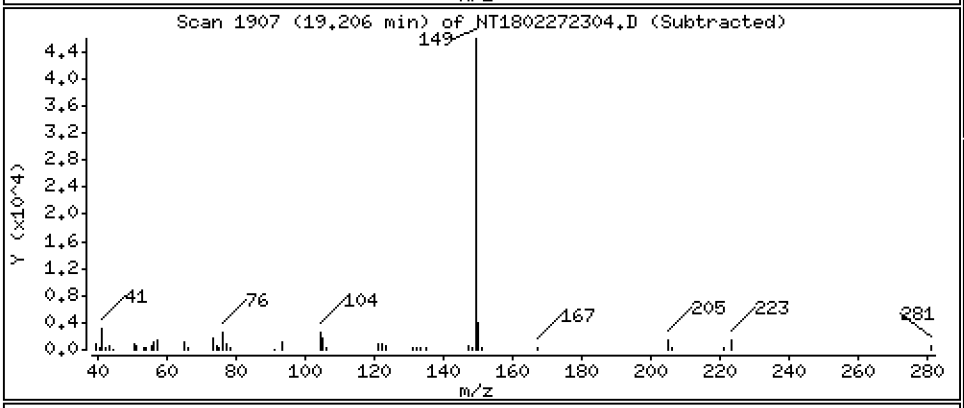
Column diameter: 0.25

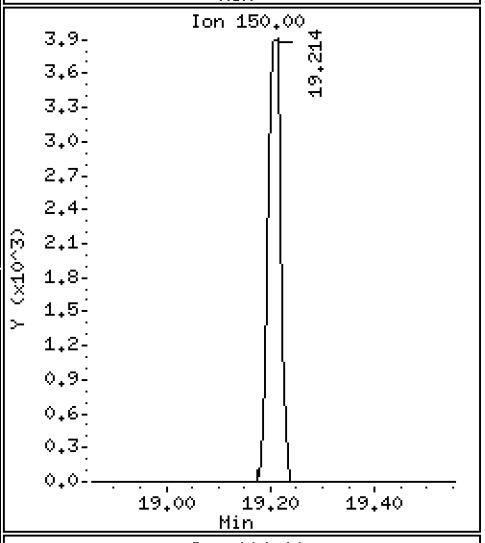
63 Di-n-butylphthalate

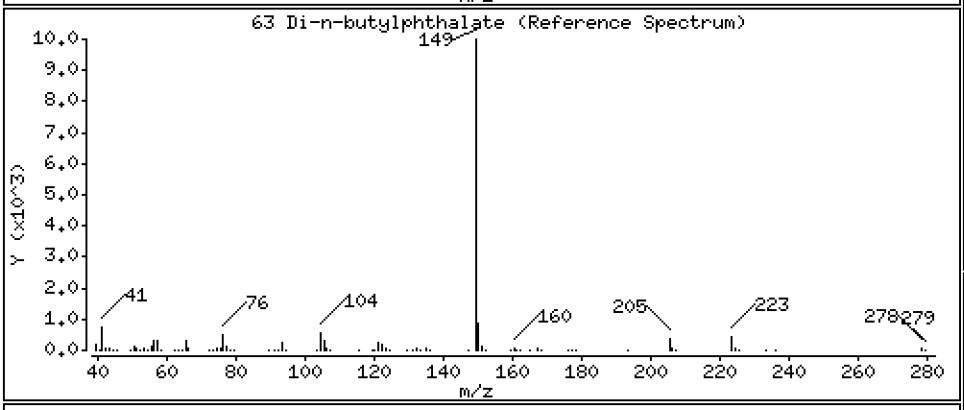
Concentration: 0.2308 ug/mL

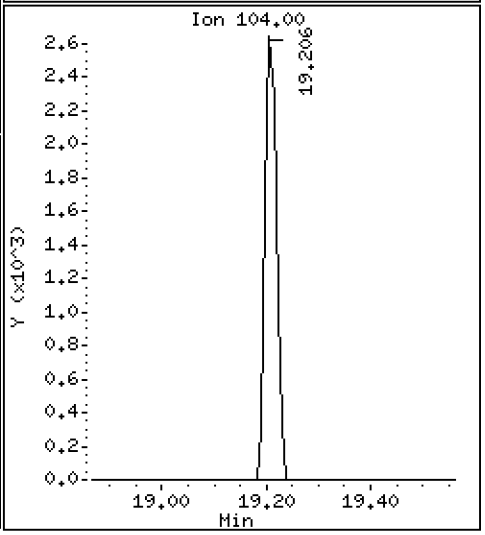


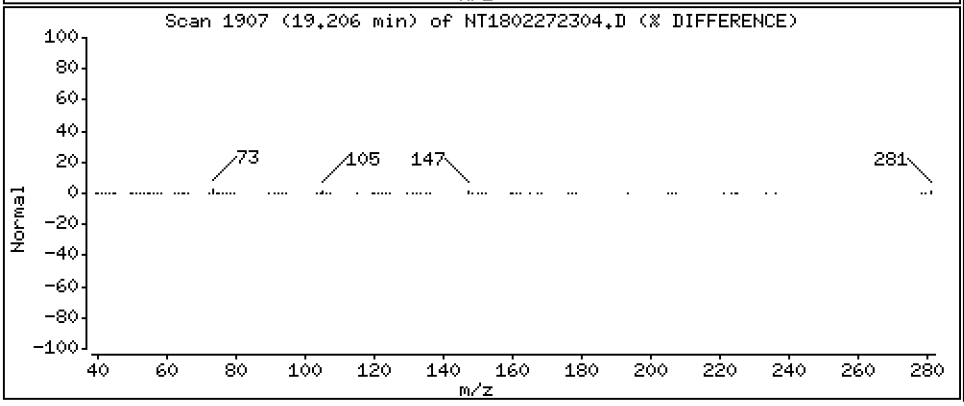












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

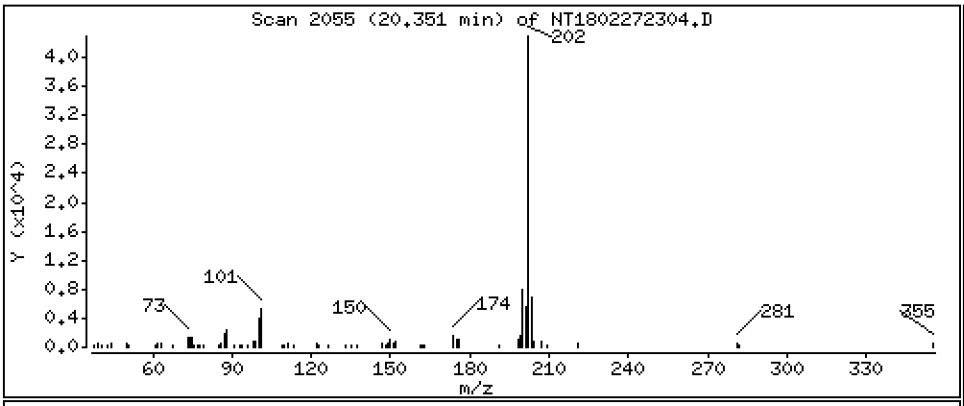
Operator: VTS

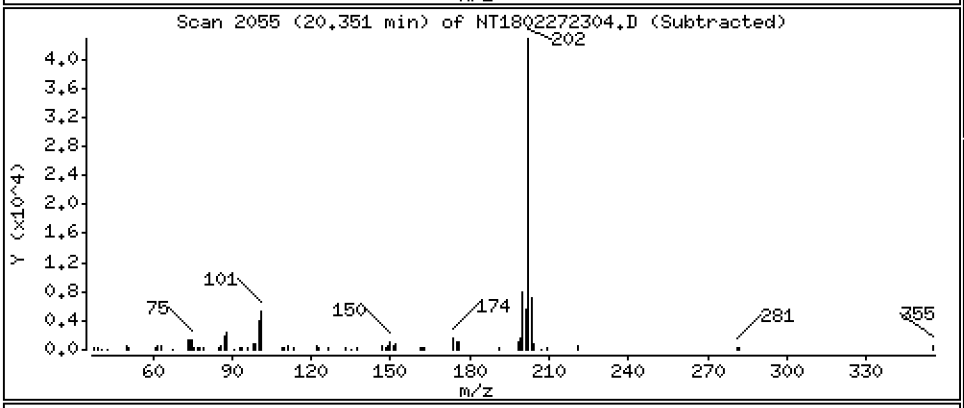
Column phase: ZB-5msi

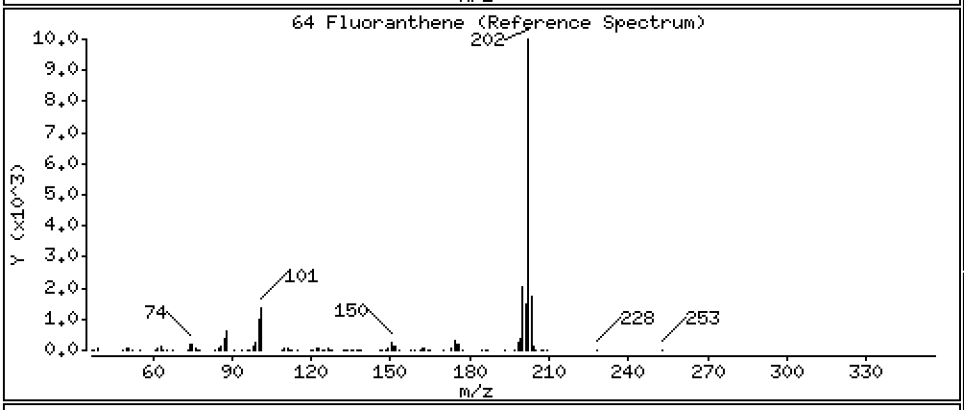
Column diameter: 0.25

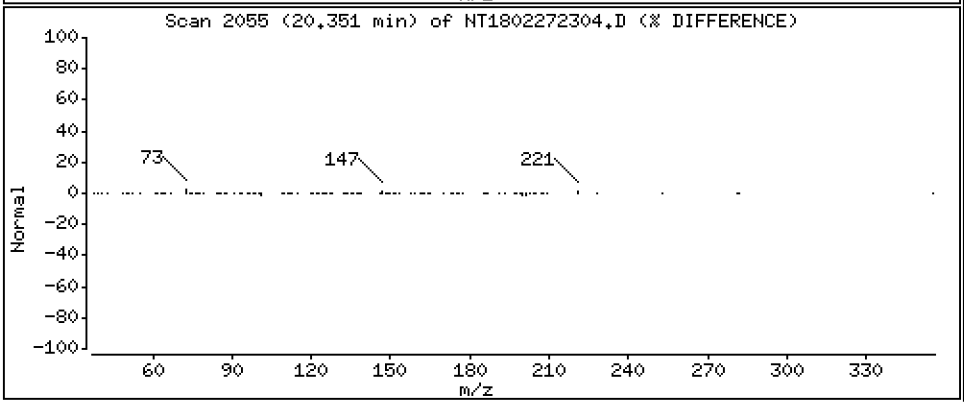
64 Fluoranthene

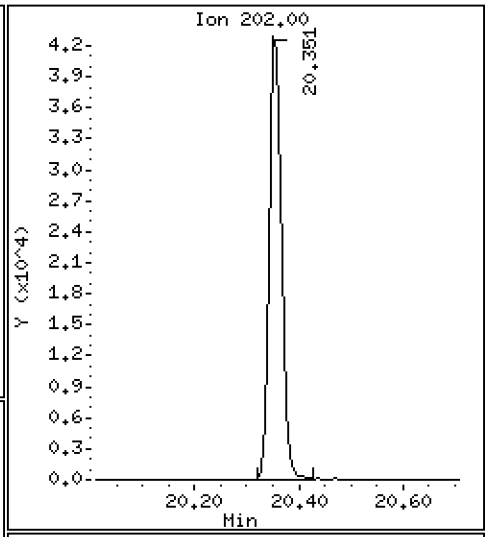
Concentration: 0.2307 ug/mL

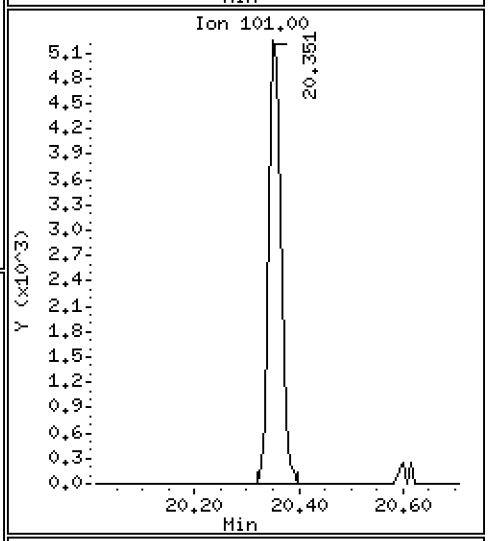


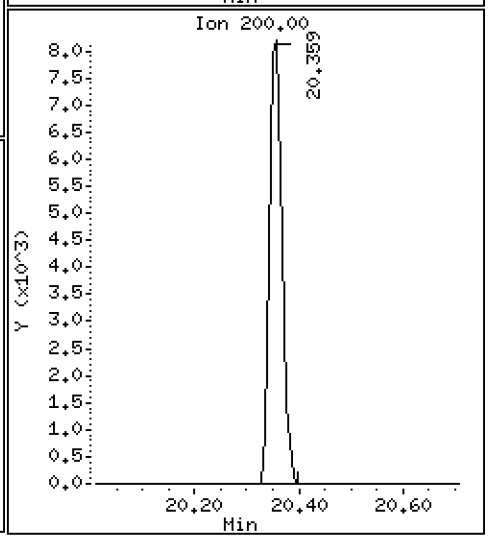












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

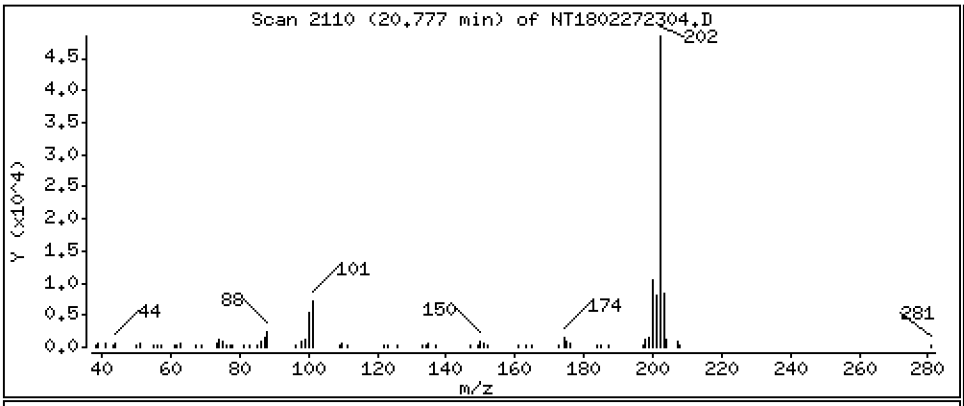
Operator: VTS

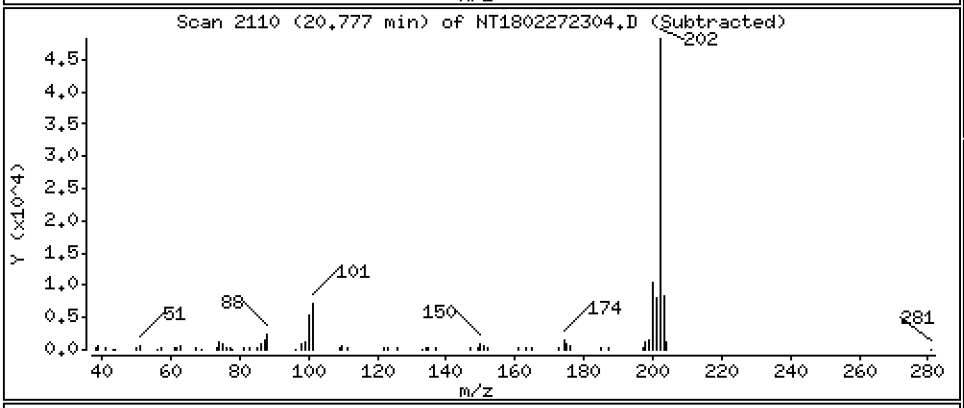
Column phase: ZB-5msi

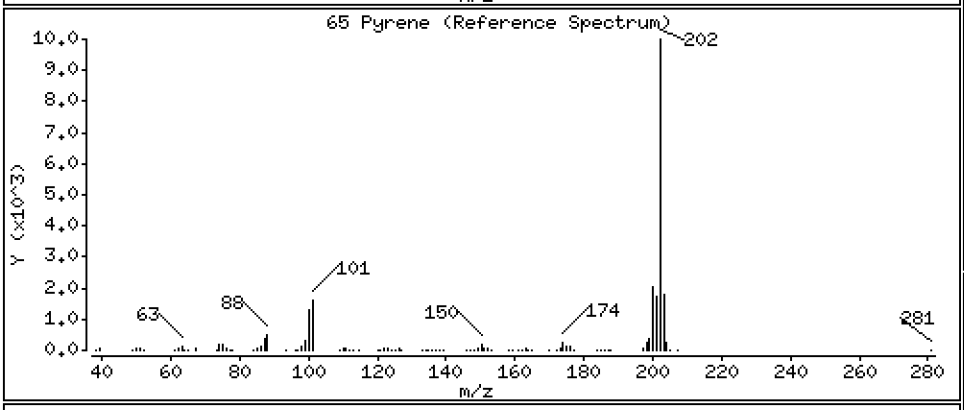
Column diameter: 0.25

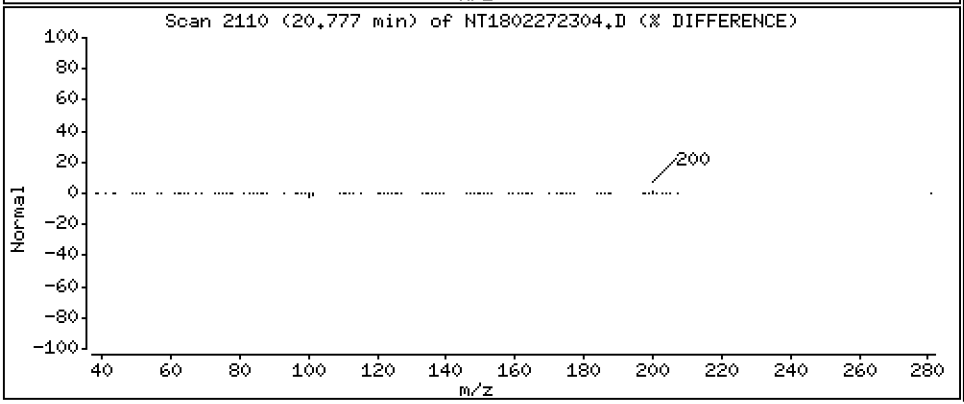
65 Pyrene

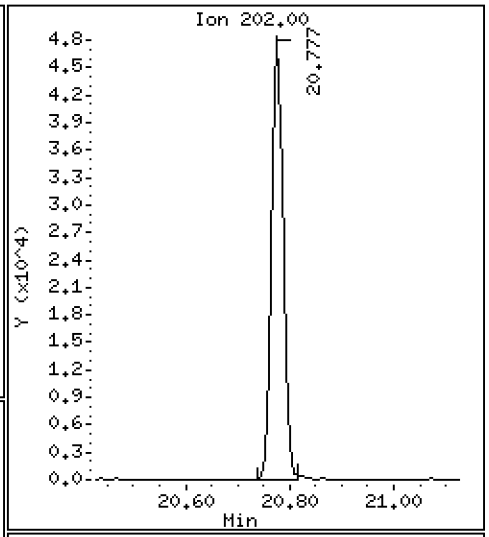
Concentration: 0.2250 ug/mL

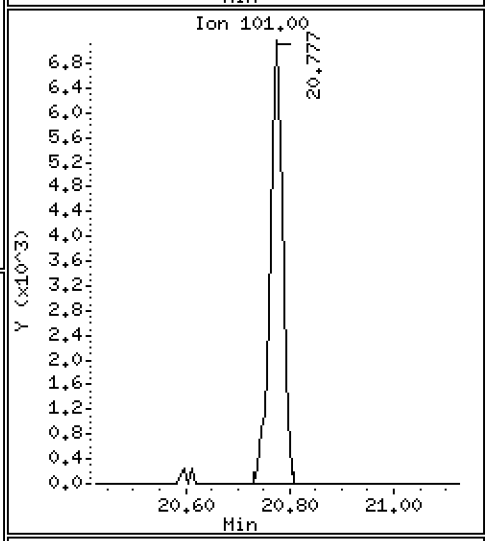


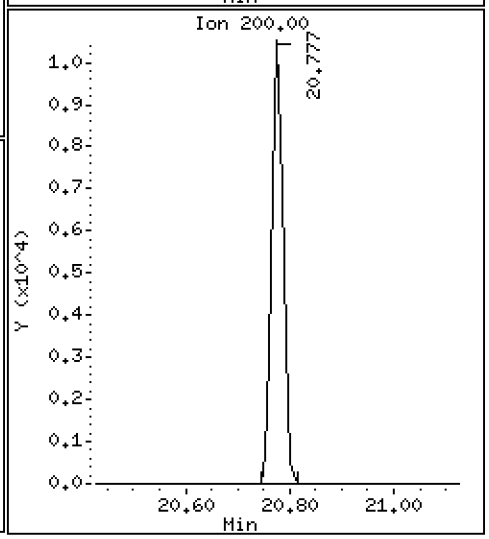












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

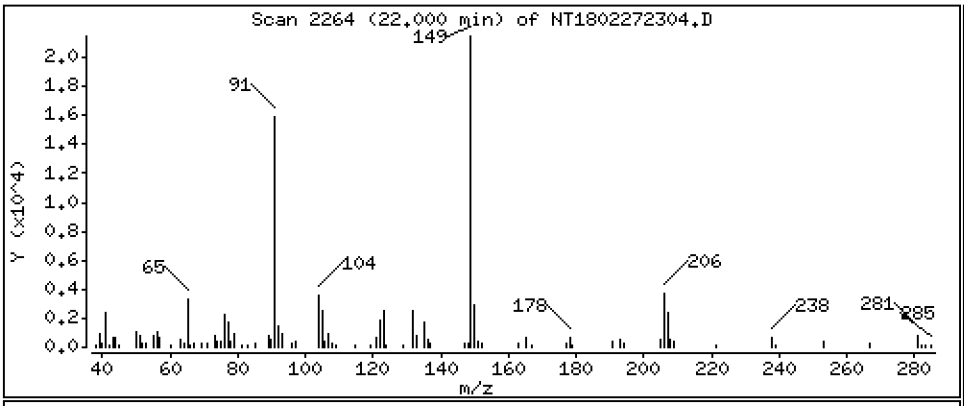
Operator: VTS

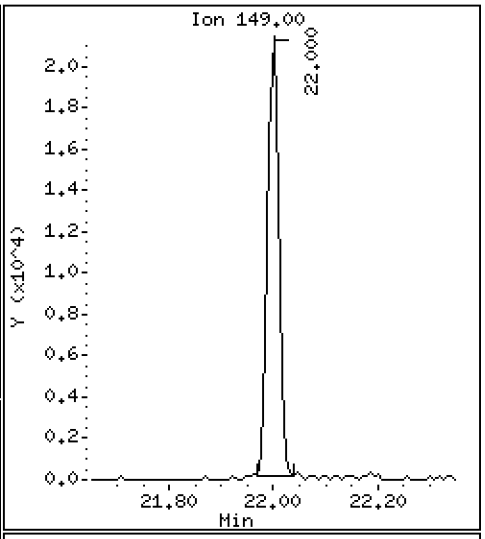
Column phase: ZB-5msi

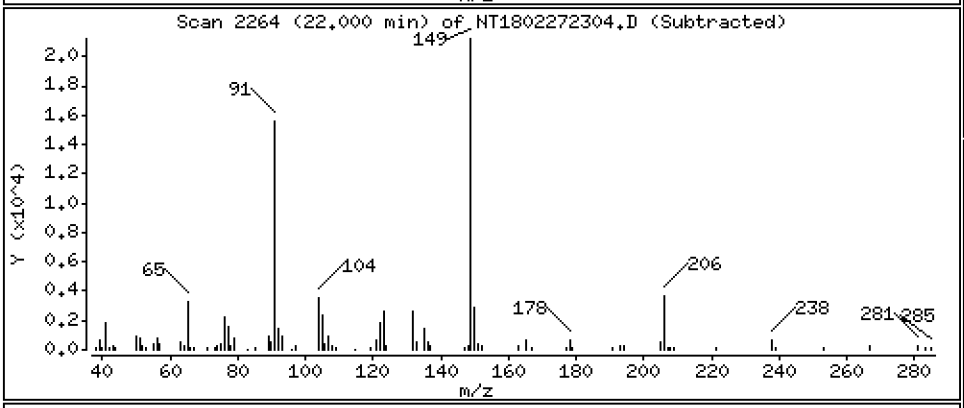
Column diameter: 0.25

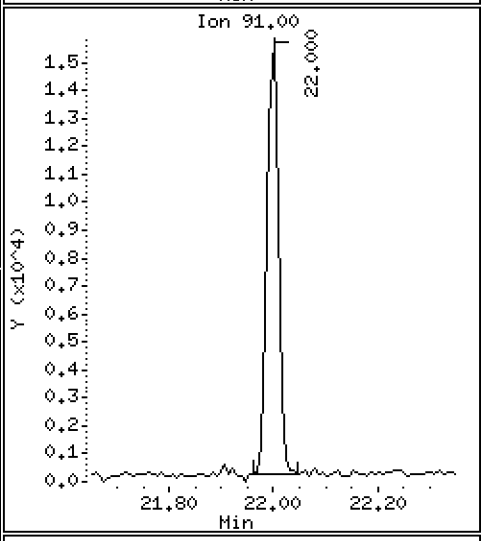
67 Butylbenzylphthalate

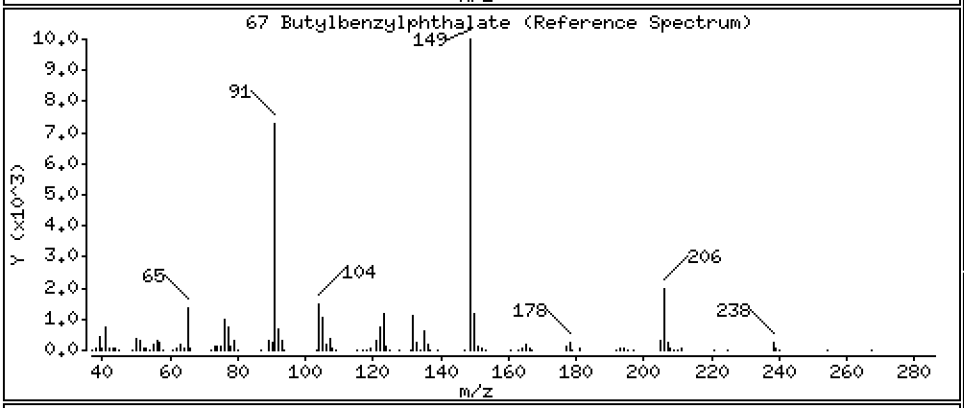
Concentration: 0.2554 ug/mL

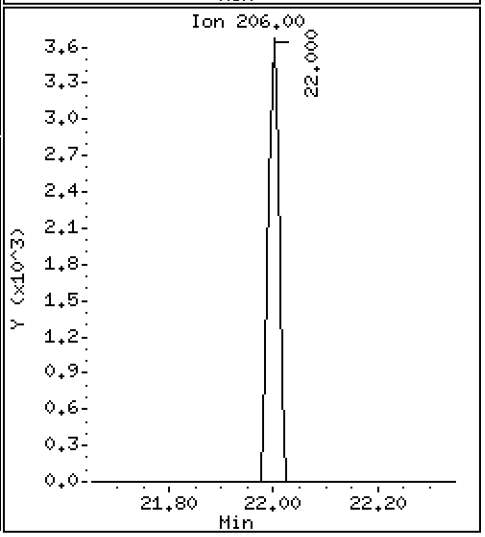


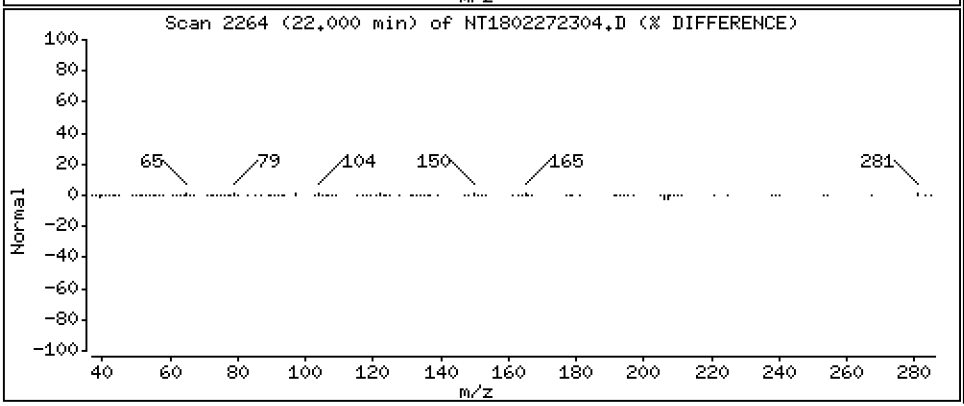












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

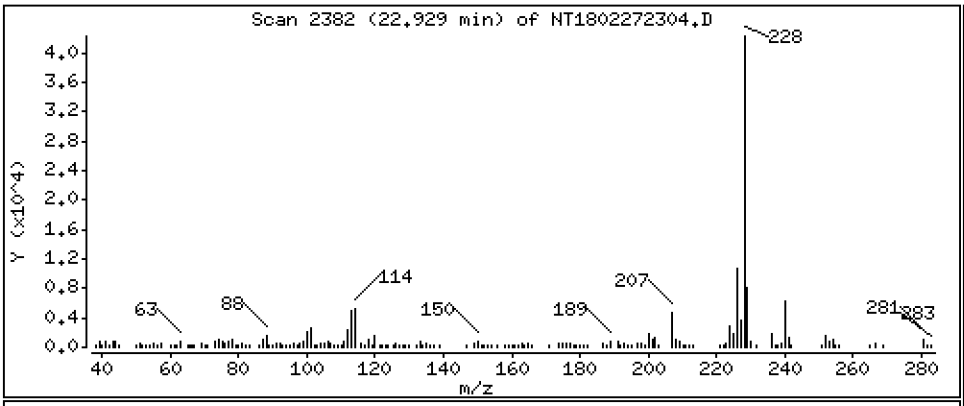
Operator: VTS

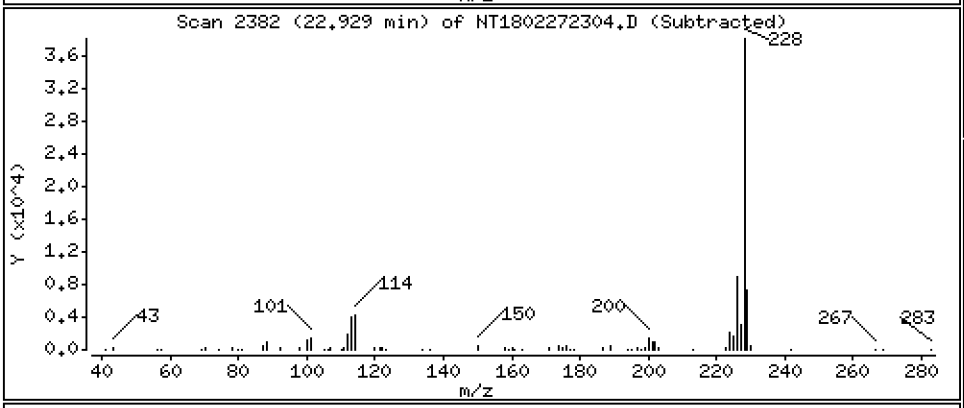
Column phase: ZB-5msi

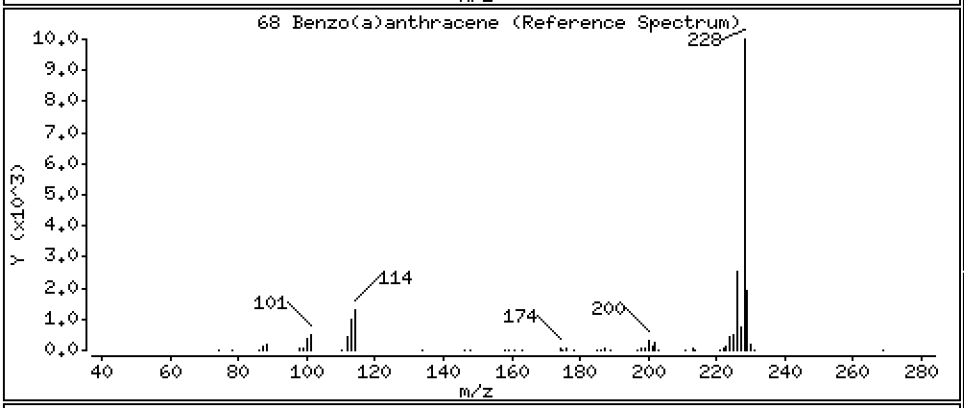
Column diameter: 0.25

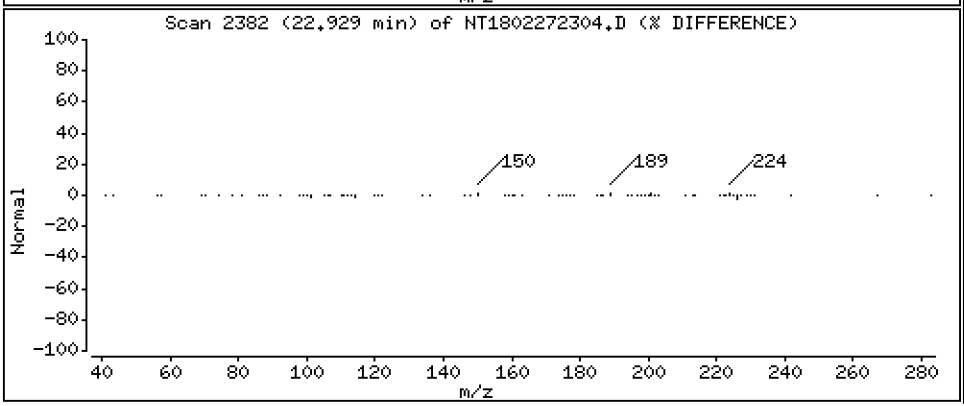
68 Benzo(a)anthracene

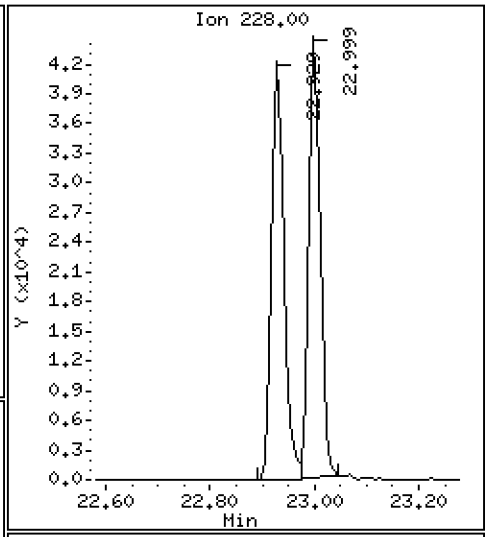
Concentration: 0.2233 ug/mL

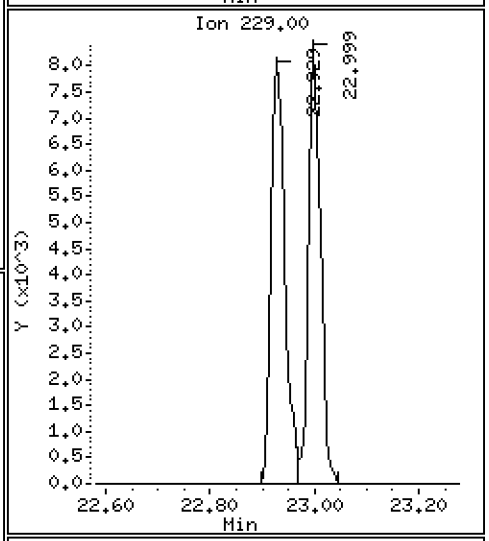


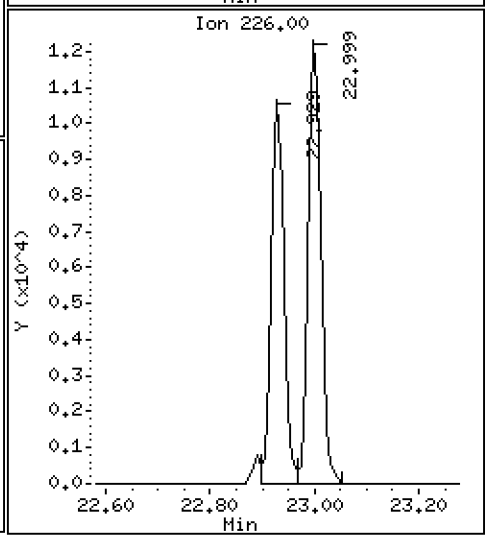












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

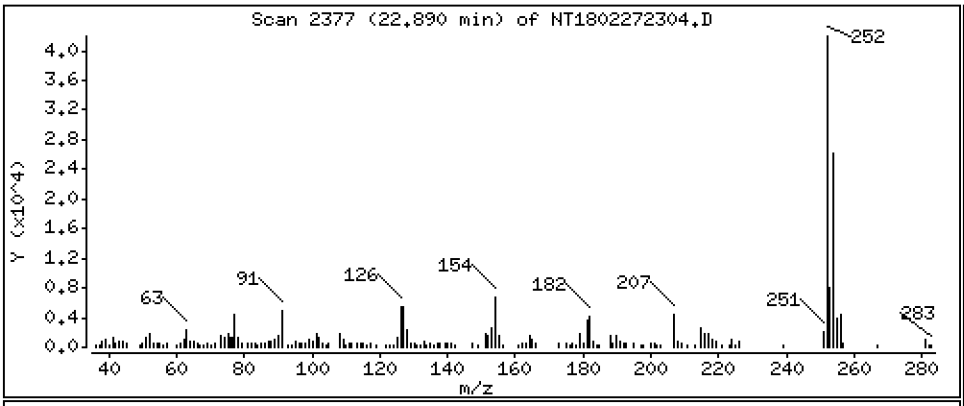
Operator: VTS

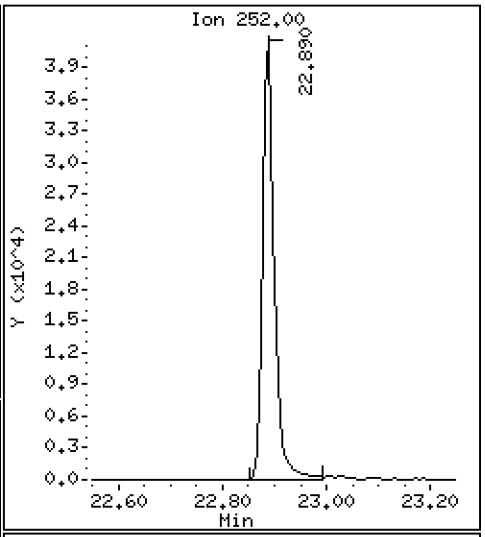
Column phase: ZB-5msi

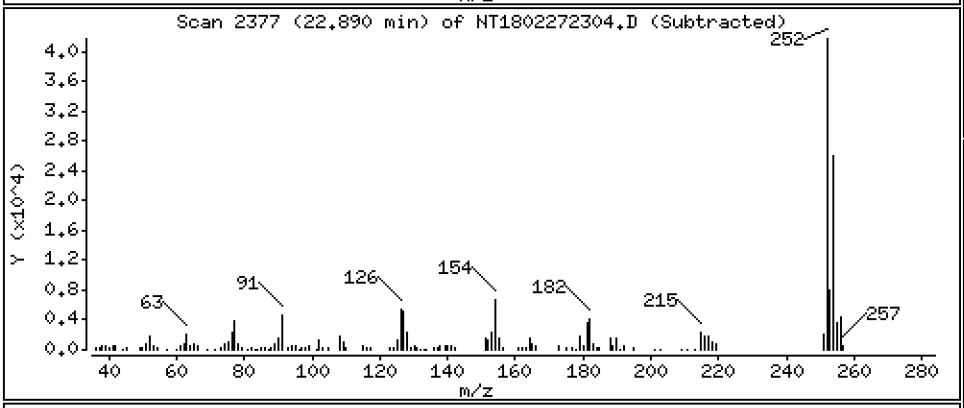
Column diameter: 0.25

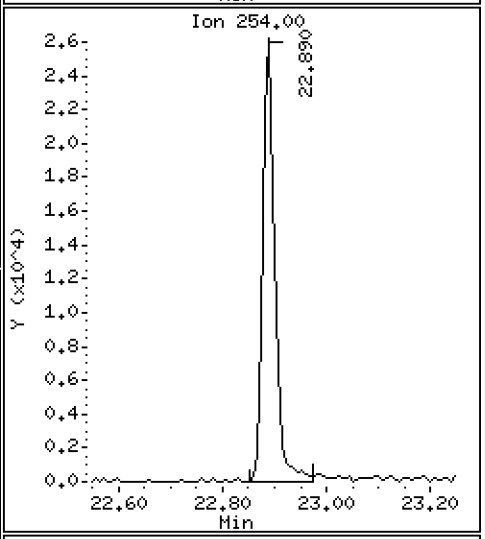
70 3,3'-Dichlorobenzidine

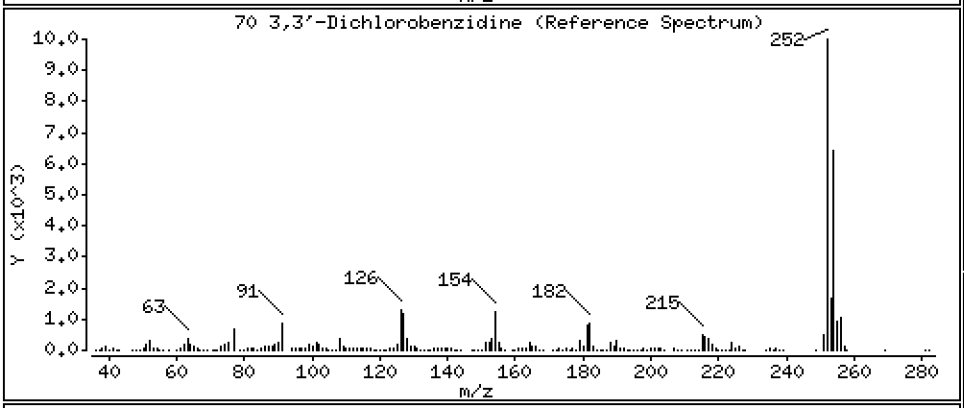
Concentration: 0.5845 ug/mL

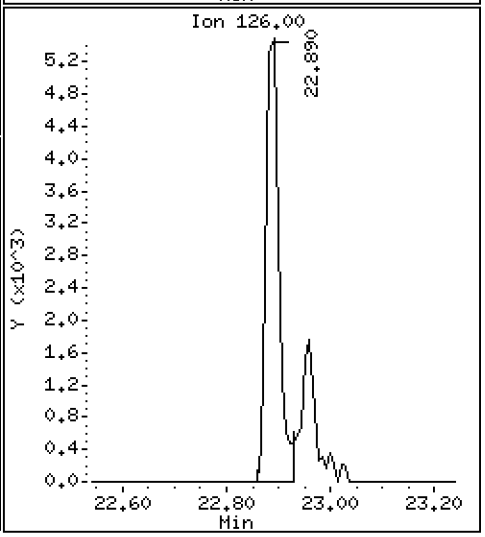


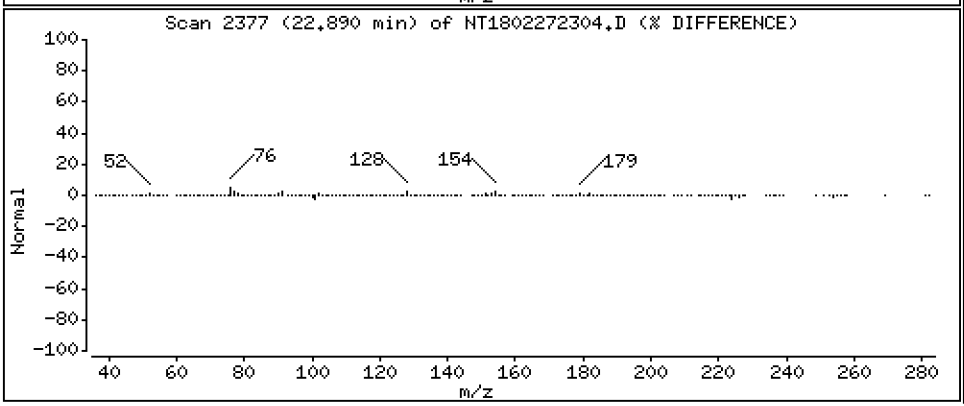












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

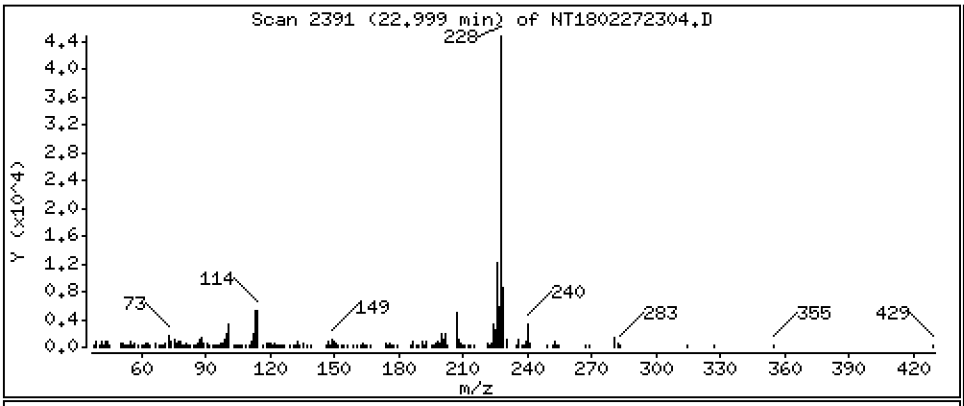
Operator: VTS

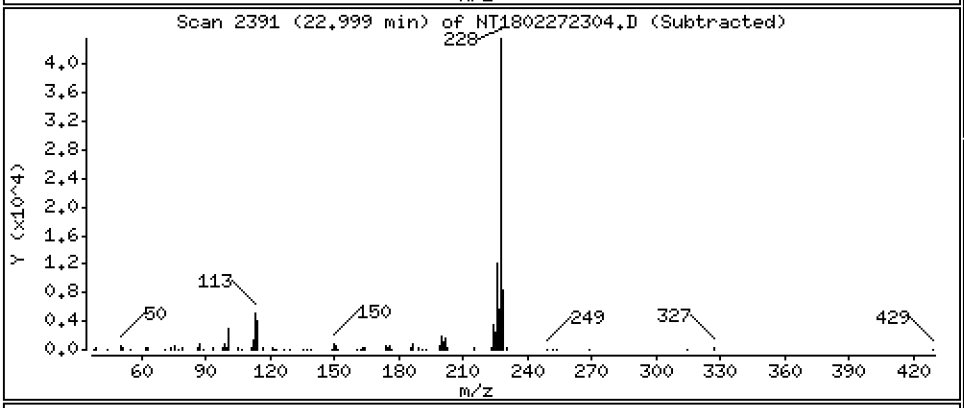
Column phase: ZB-5msi

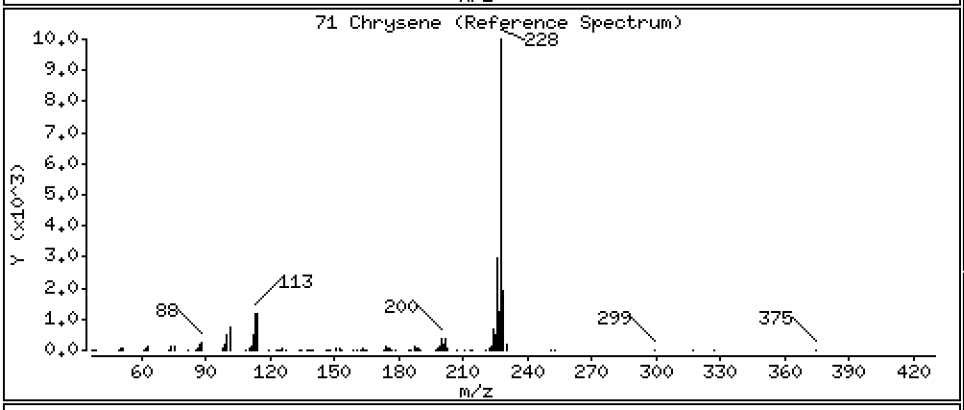
Column diameter: 0.25

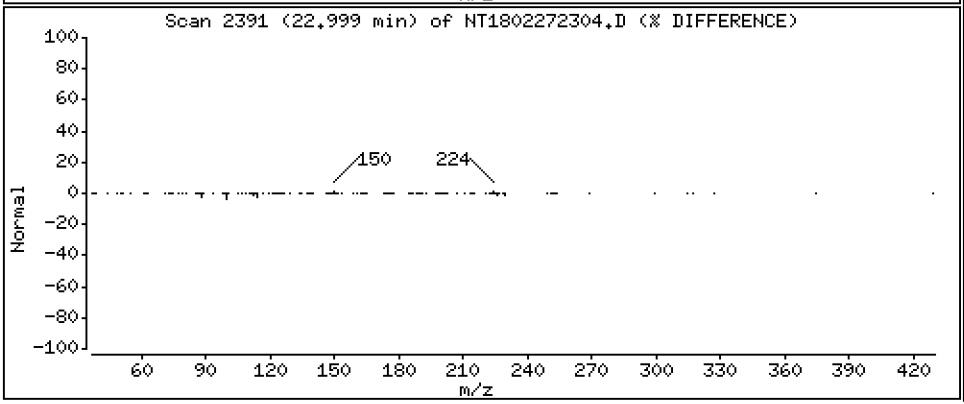
71 Chrysene

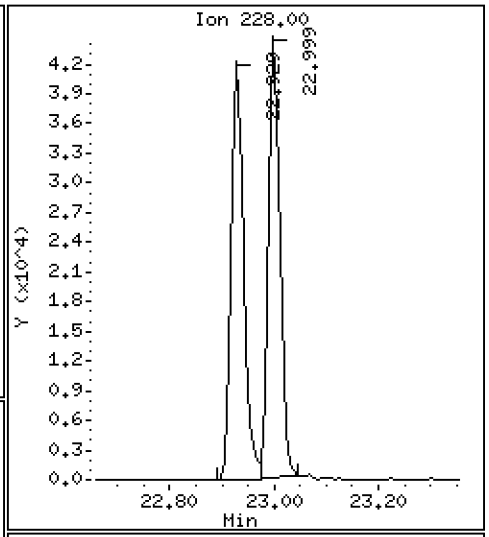
Concentration: 0.2127 ug/mL

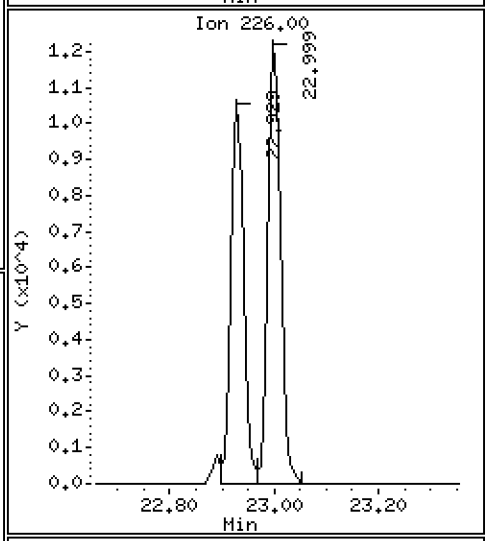


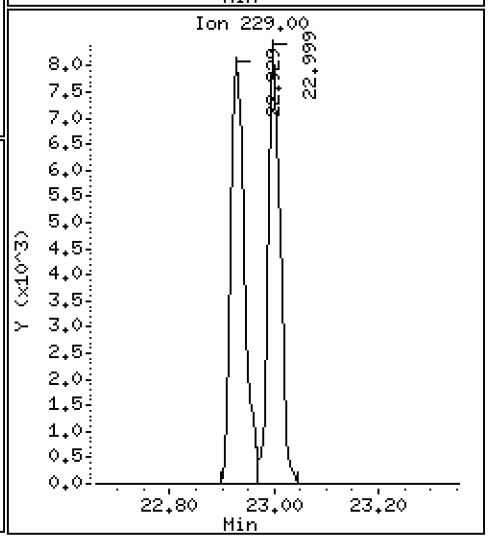












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

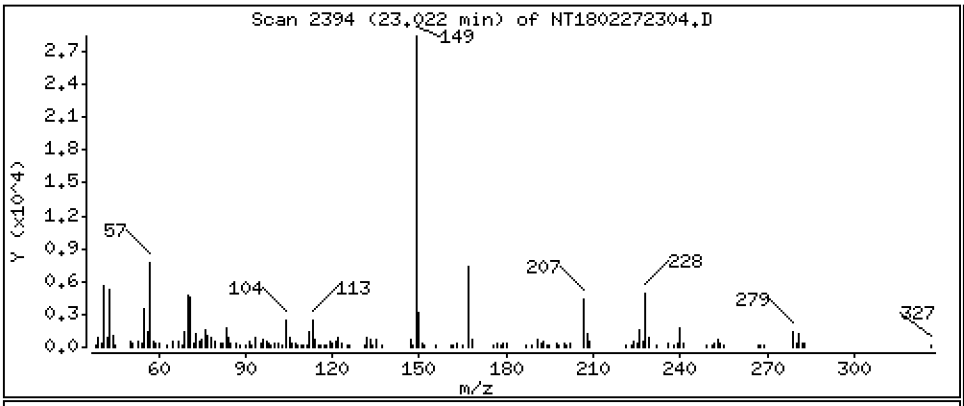
Operator: VTS

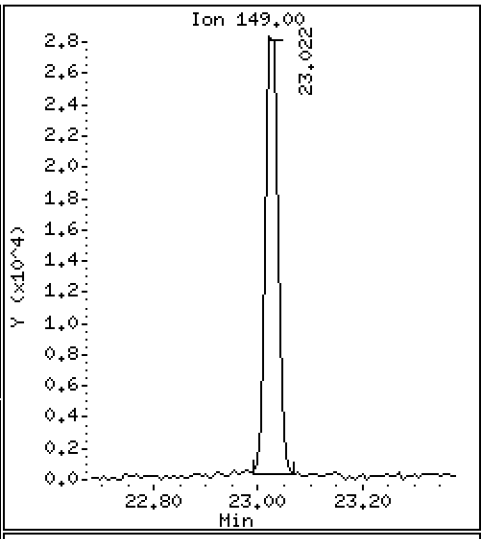
Column phase: ZB-5msi

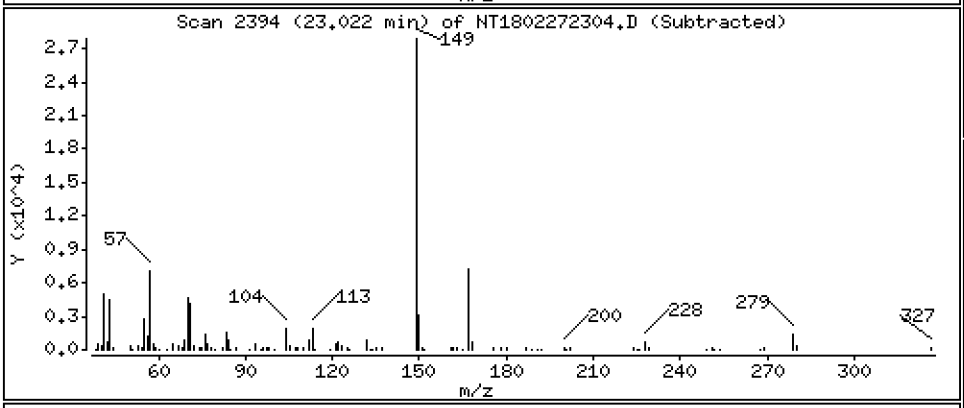
Column diameter: 0.25

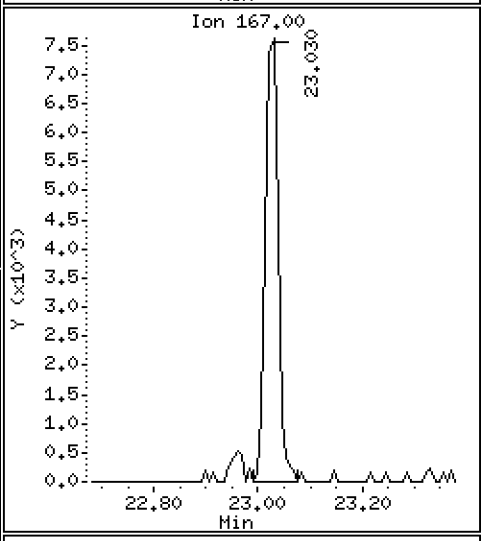
72 bis(2-Ethylhexyl)phthalate

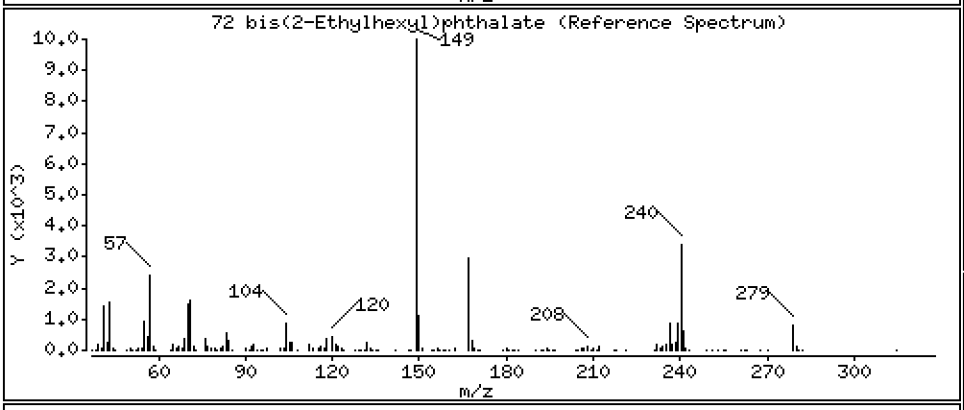
Concentration: 0.2164 ug/mL

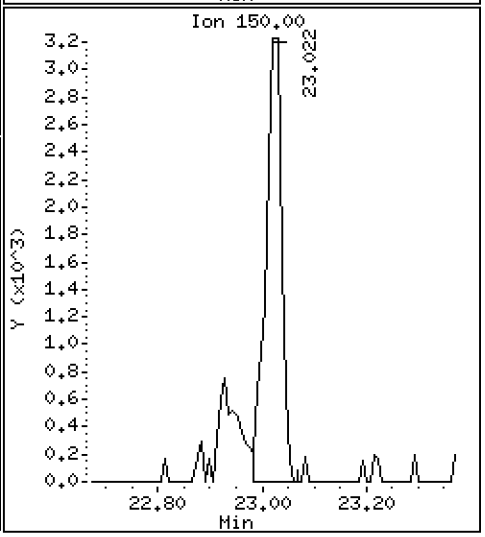


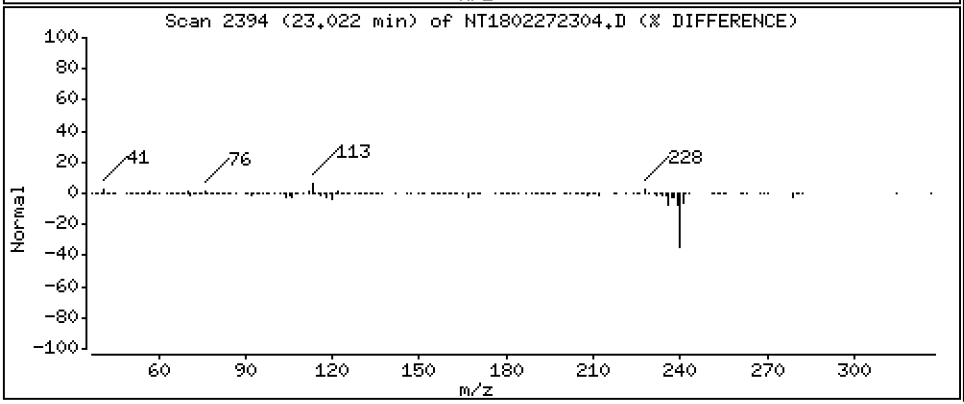












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

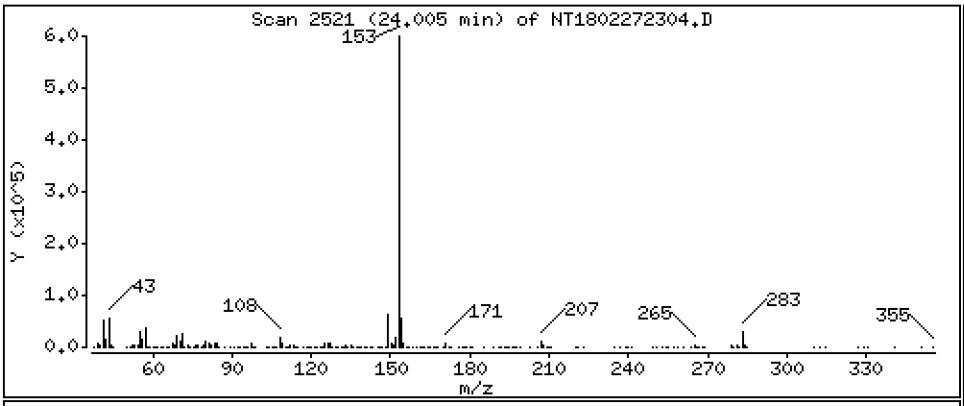
Operator: VTS

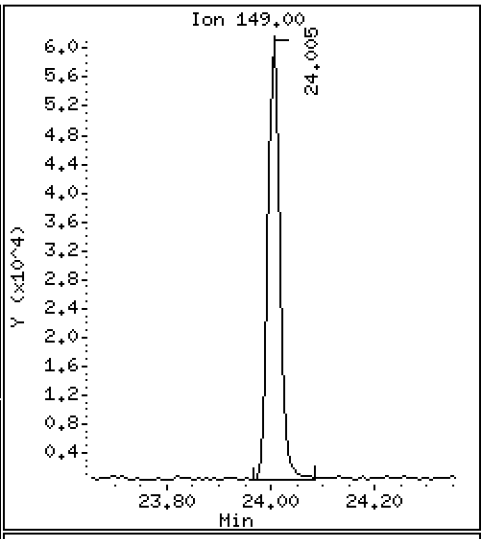
Column phase: ZB-5msi

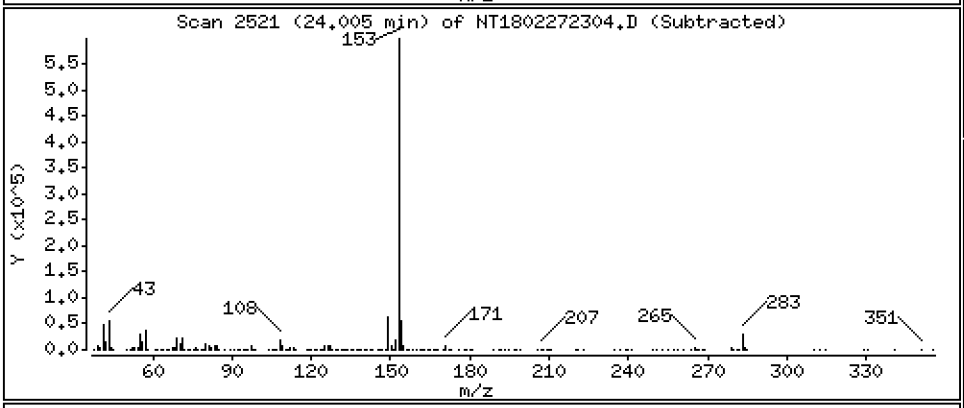
Column diameter: 0.25

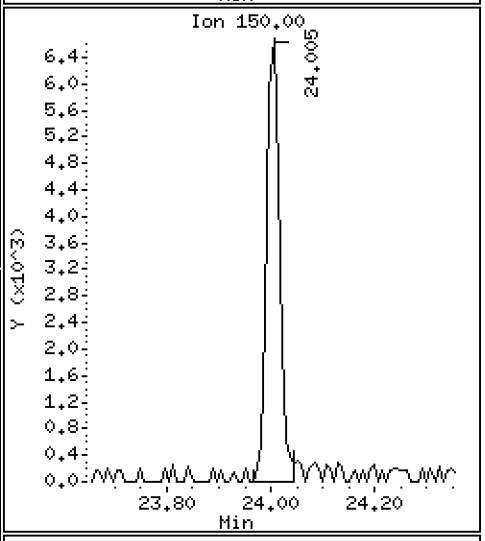
73 Di-n-octylphthalate

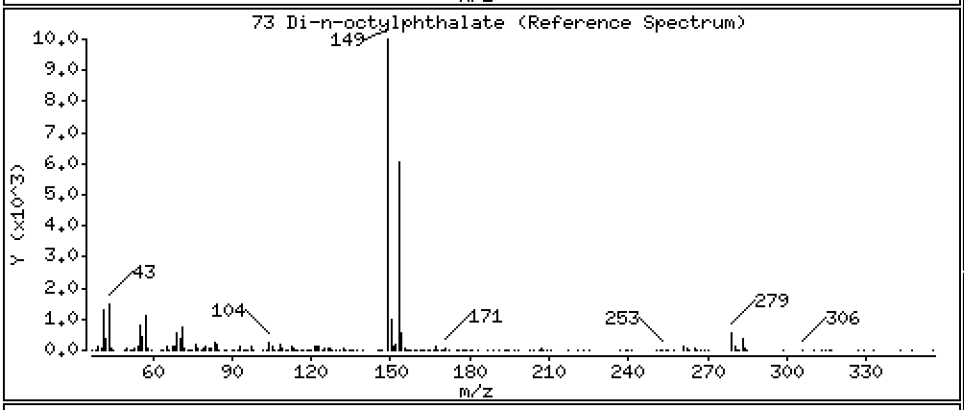
Concentration: 0.2309 ug/mL

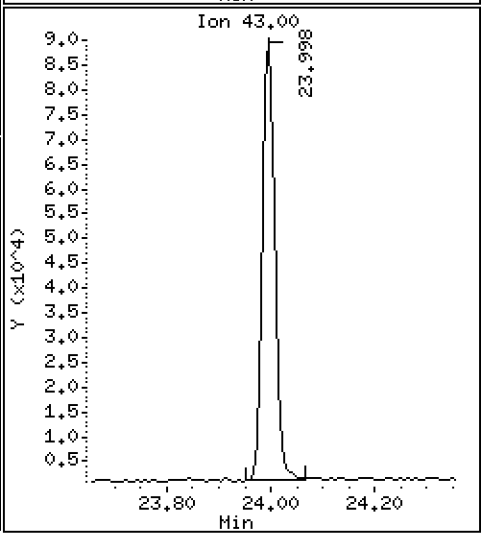


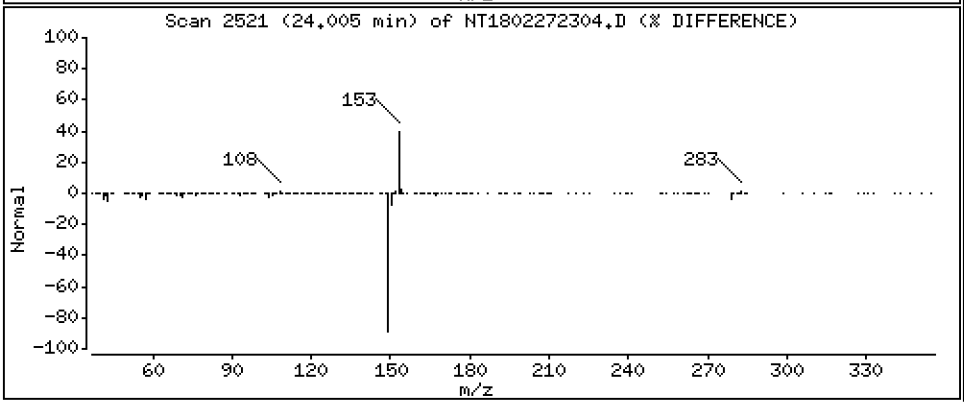












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

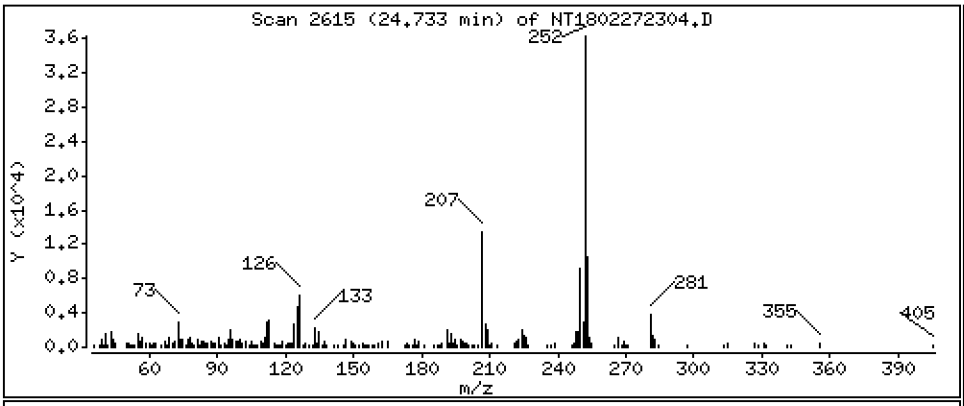
Operator: VTS

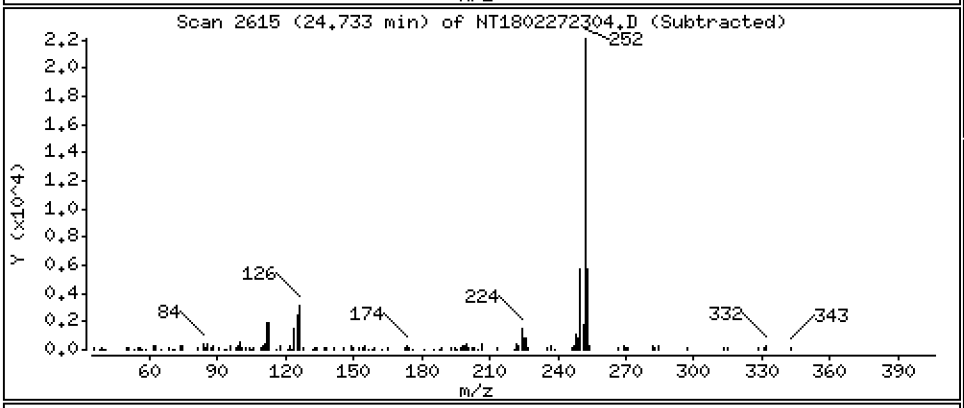
Column phase: ZB-5msi

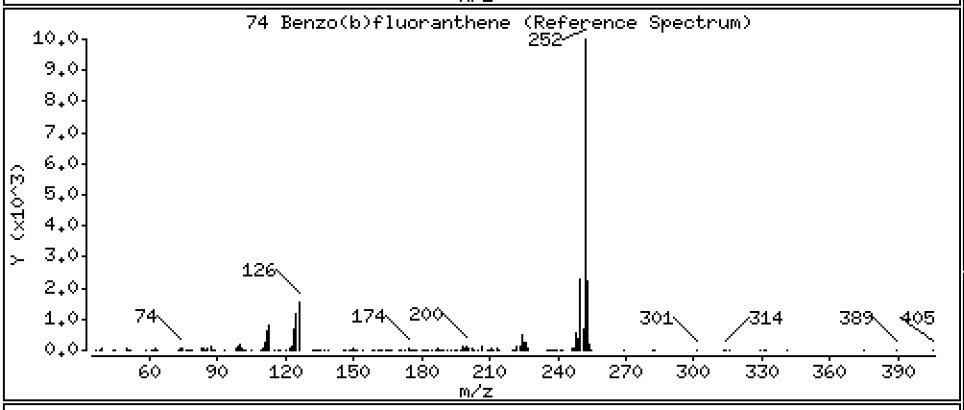
Column diameter: 0.25

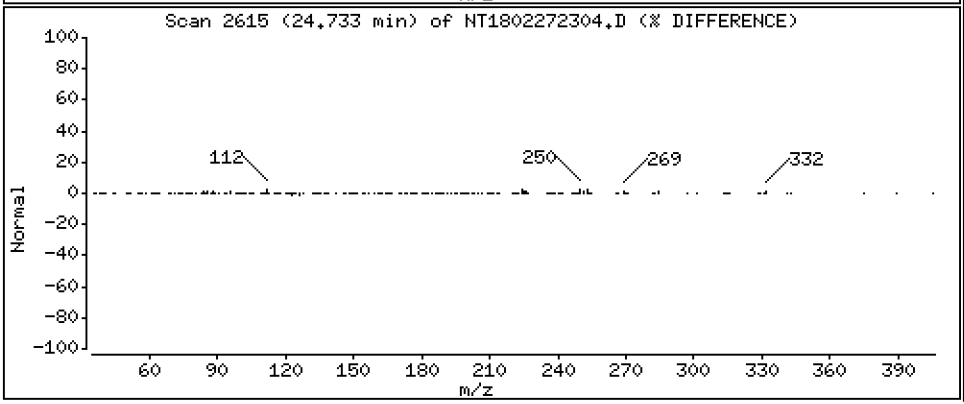
74 Benzo(b)fluoranthene

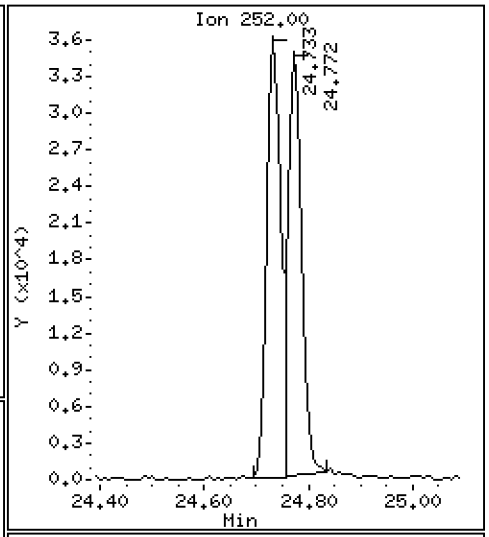
Concentration: 0.2332 ug/mL

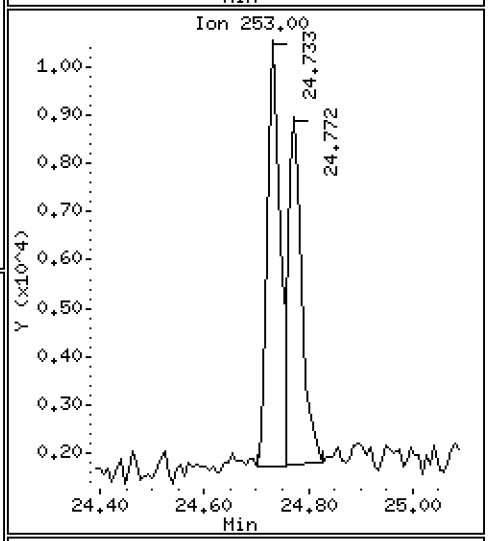


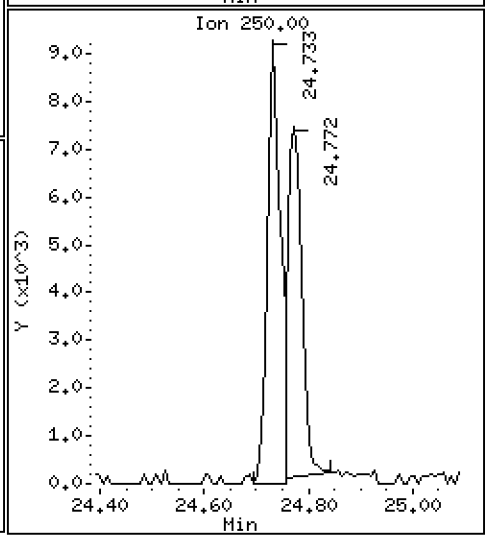












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

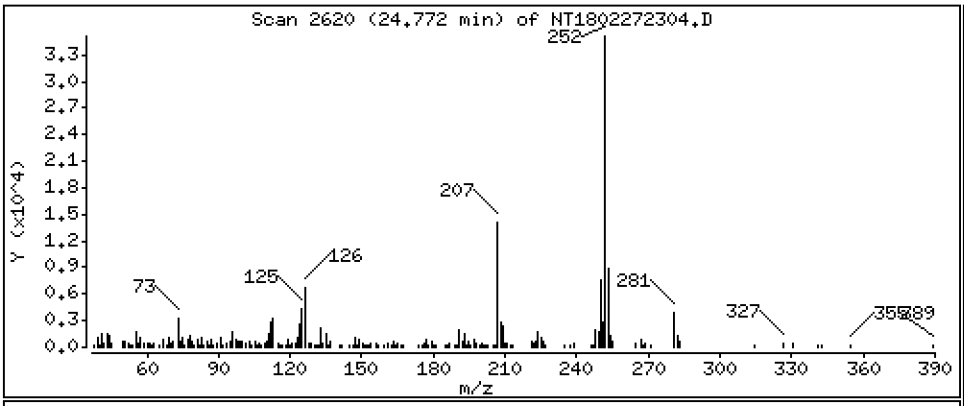
Operator: VTS

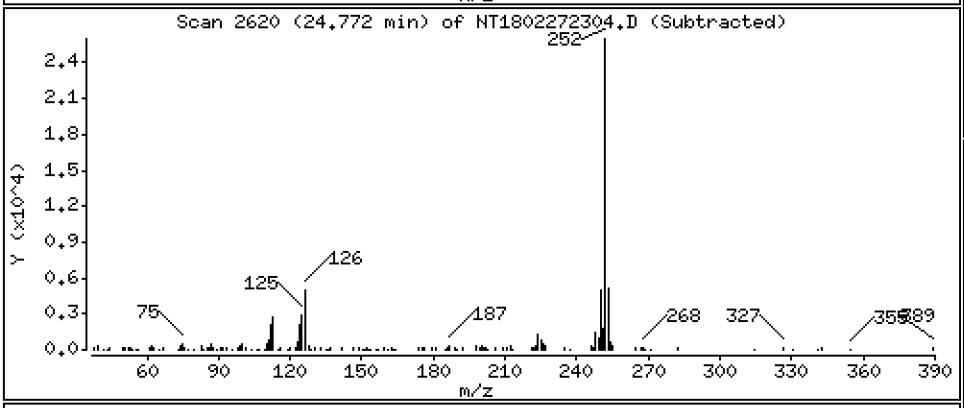
Column phase: ZB-5msi

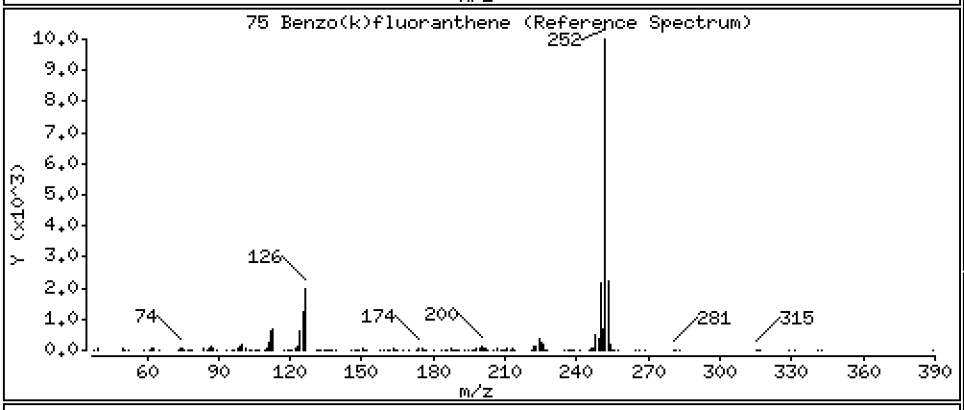
Column diameter: 0.25

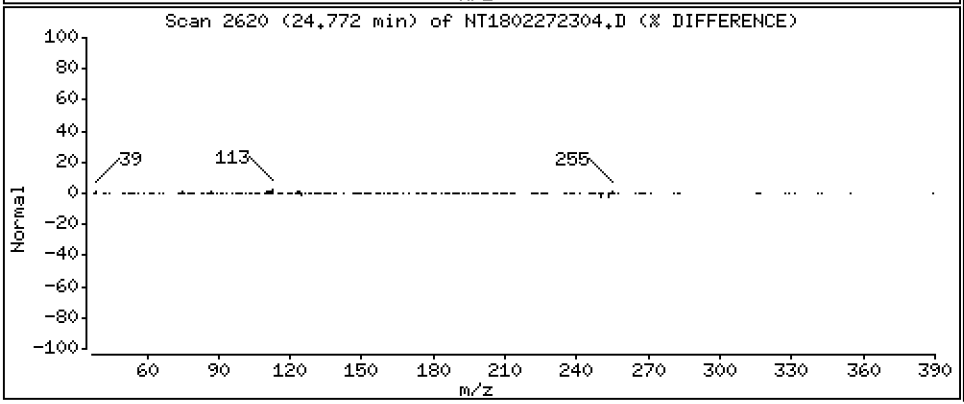
75 Benzo(k)fluoranthene

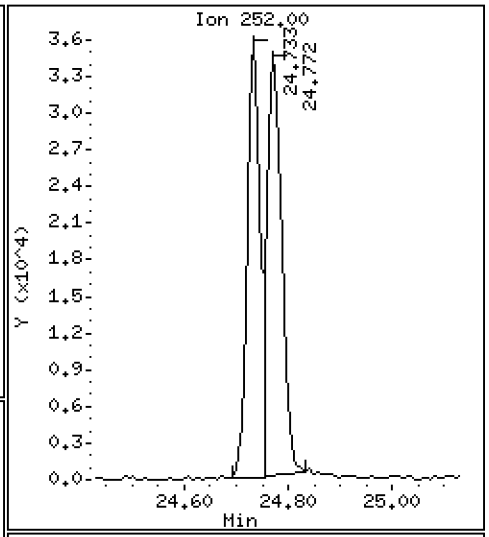
Concentration: 0.2008 ug/mL

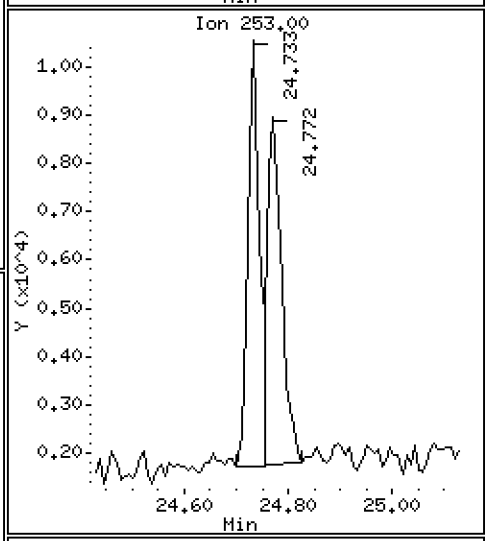


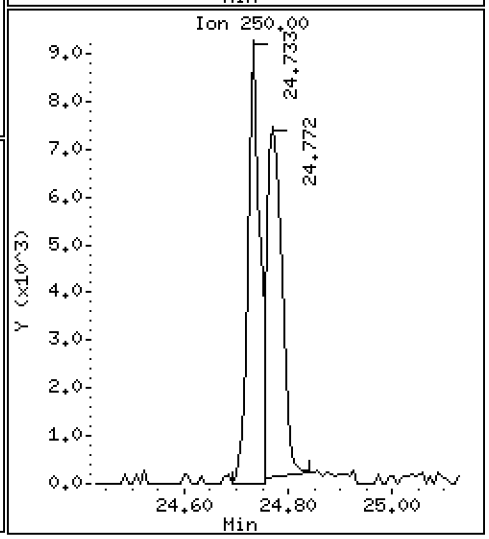












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

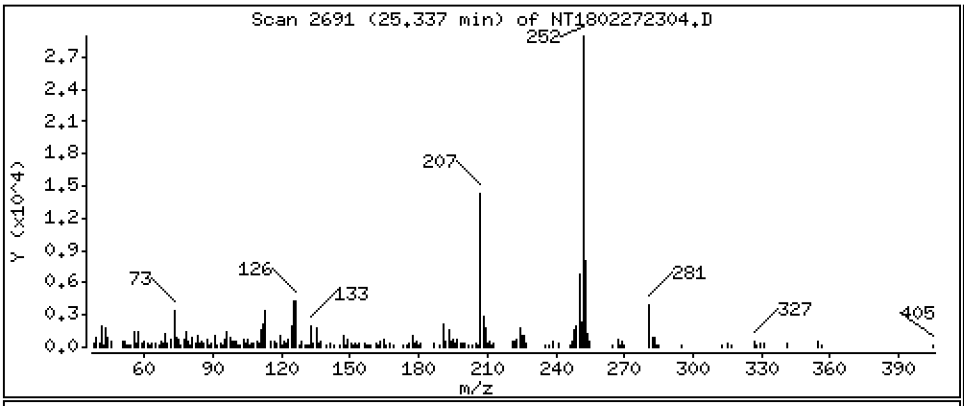
Operator: VTS

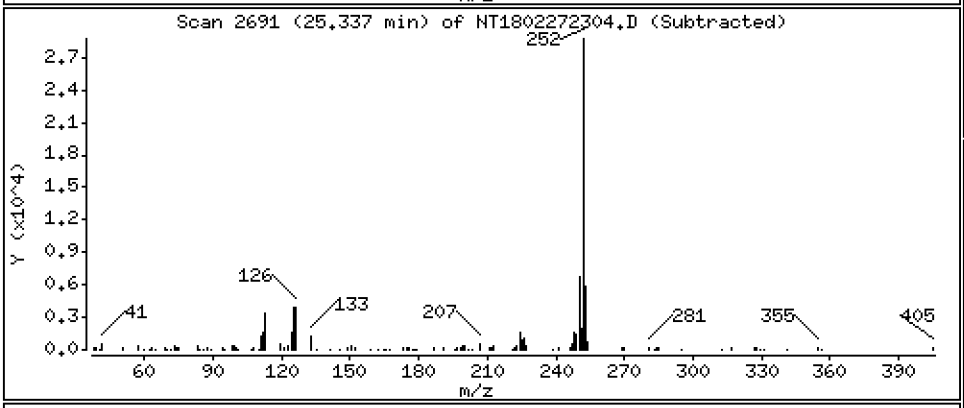
Column phase: ZB-5msi

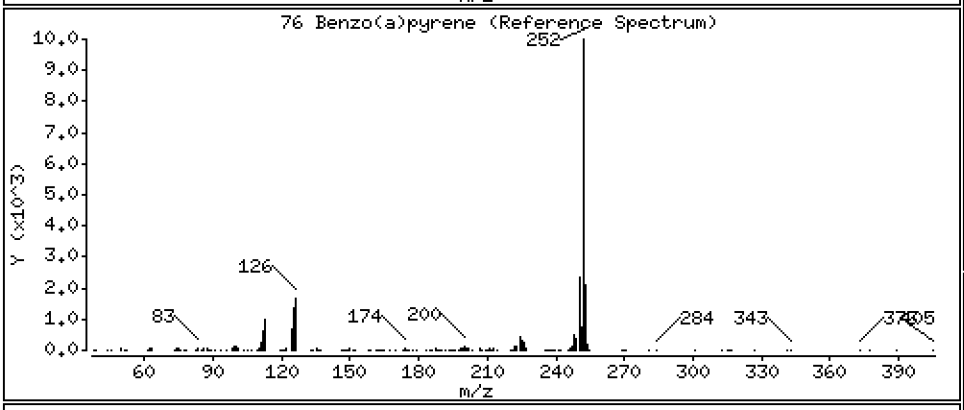
Column diameter: 0.25

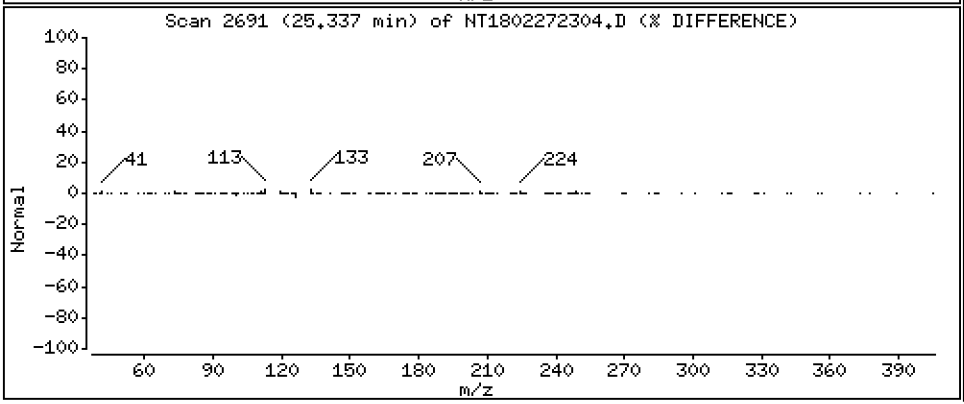
76 Benzo(a)pyrene

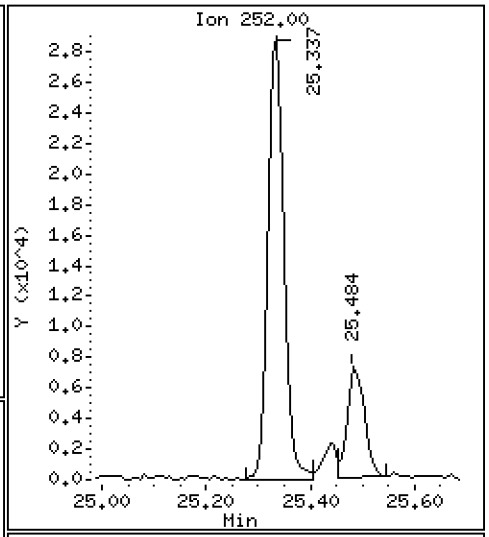
Concentration: 0.2216 ug/mL

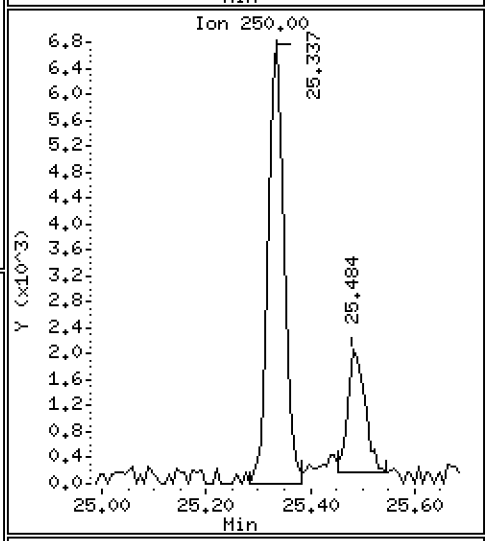


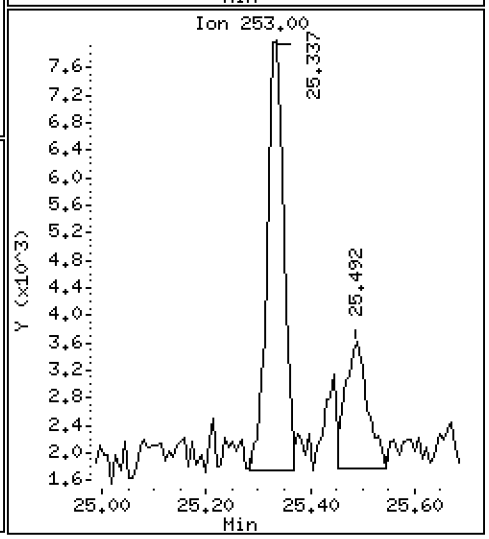












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

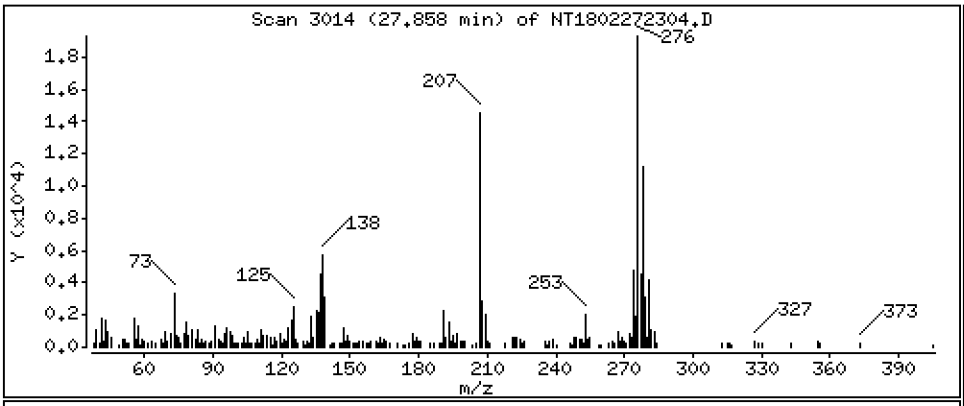
Operator: VTS

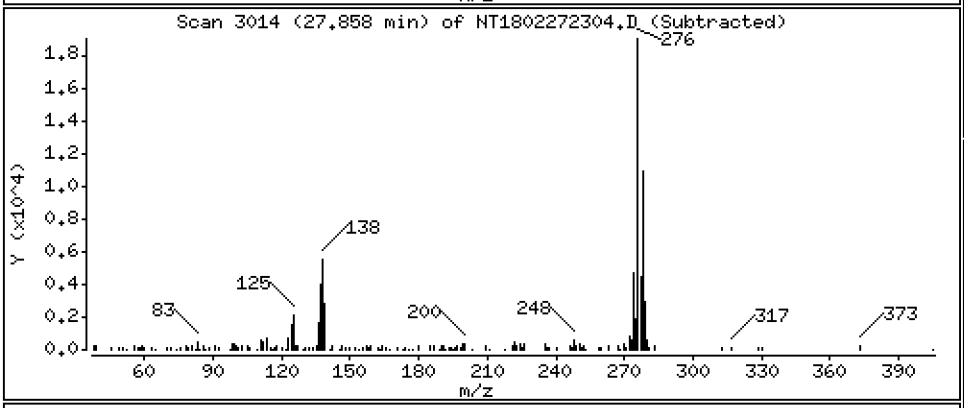
Column phase: ZB-5msi

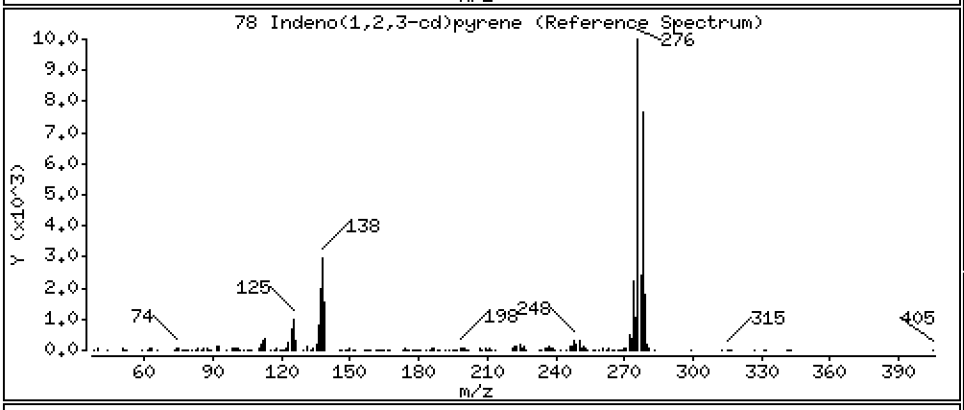
Column diameter: 0.25

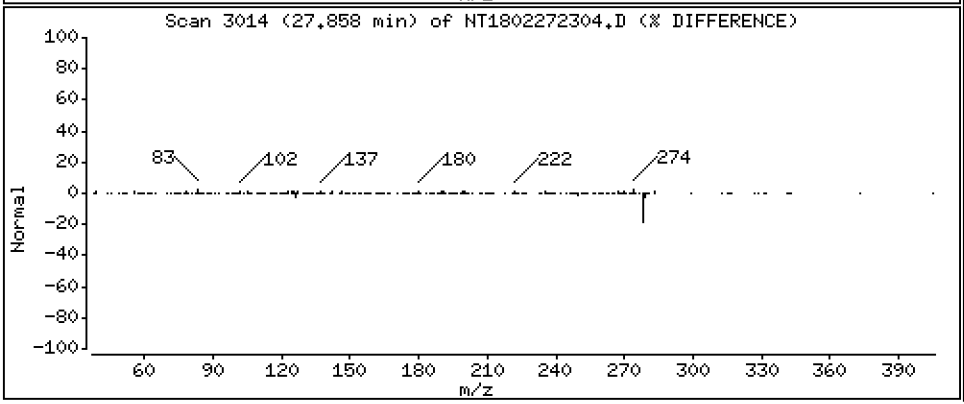
78 Indeno(1,2,3-cd)pyrene

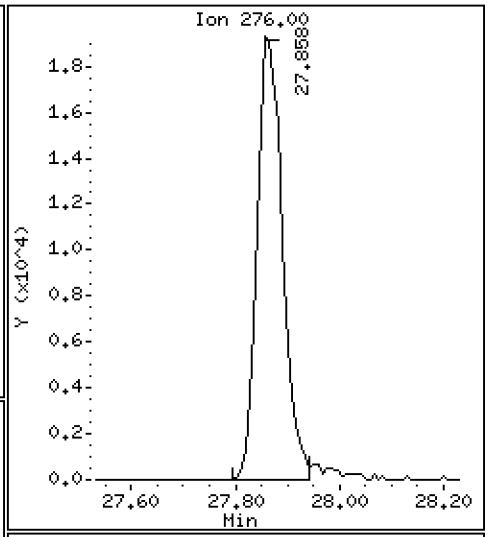
Concentration: 0.1924 ug/mL

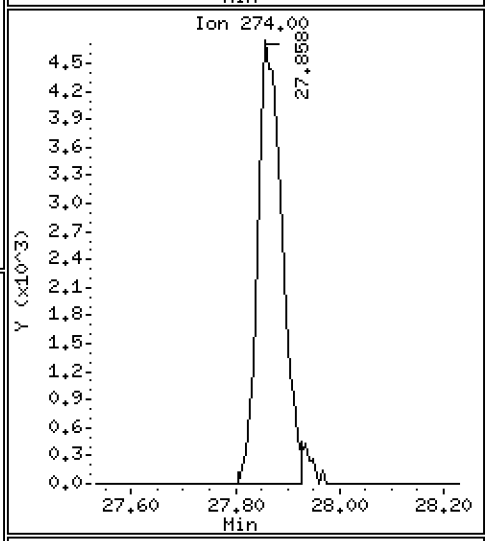


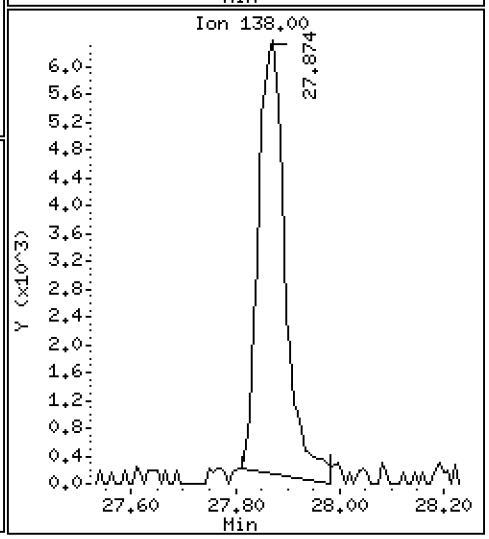












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

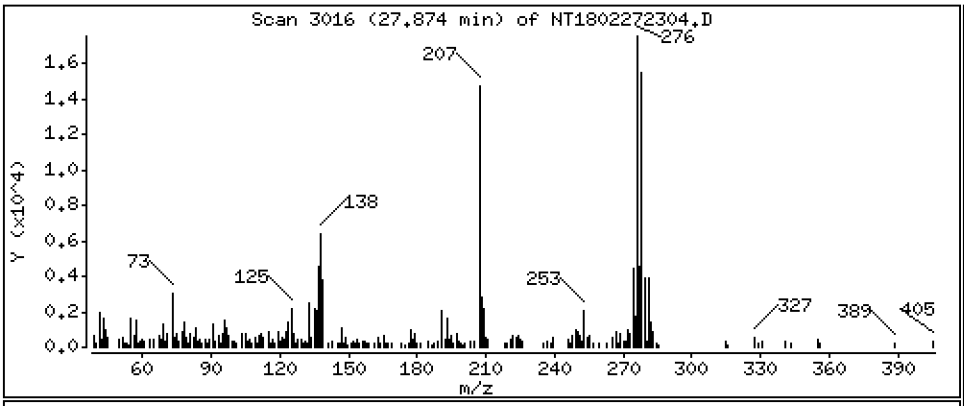
Operator: VTS

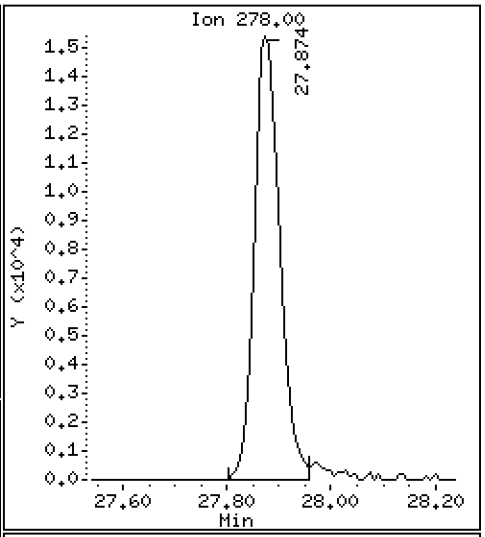
Column phase: ZB-5msi

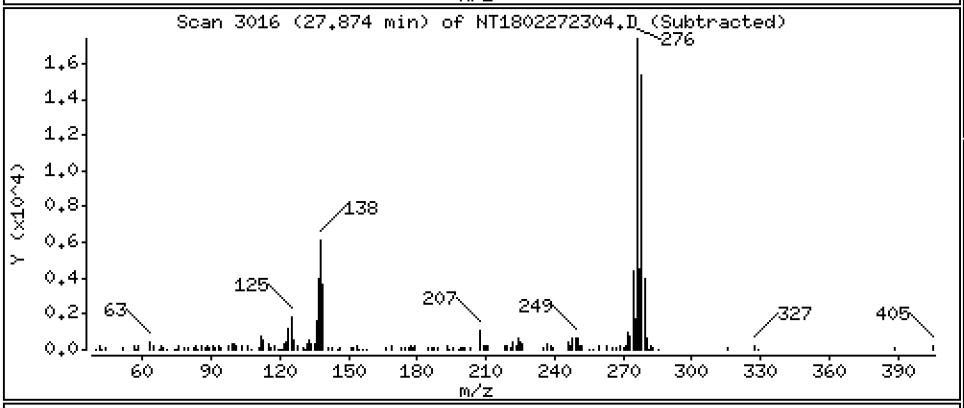
Column diameter: 0.25

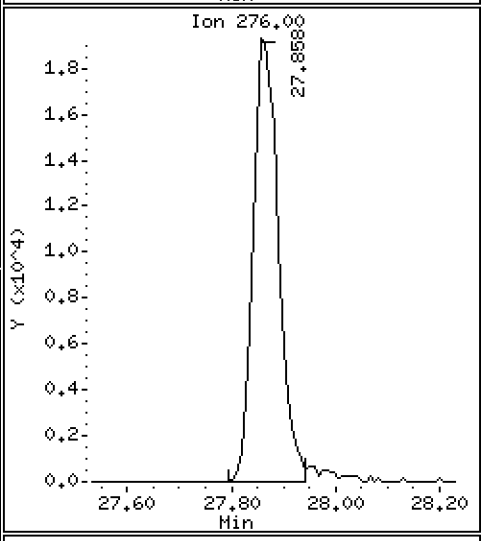
79 Dibenzo(a,h)anthracene

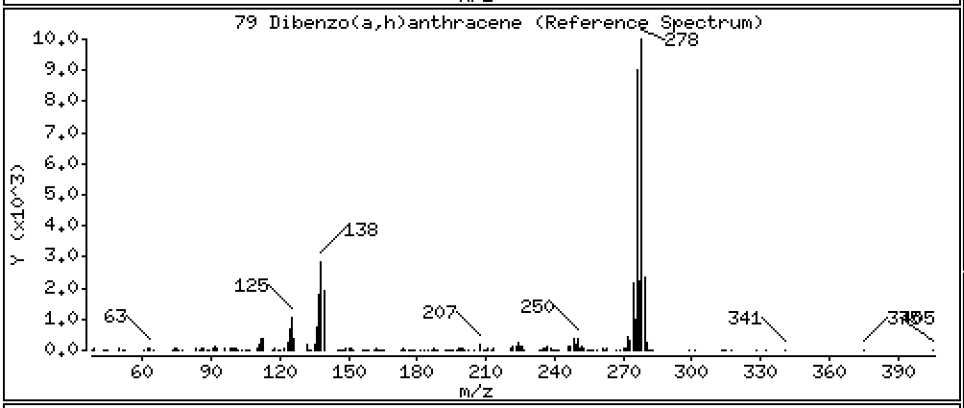
Concentration: 0.1841 ug/mL

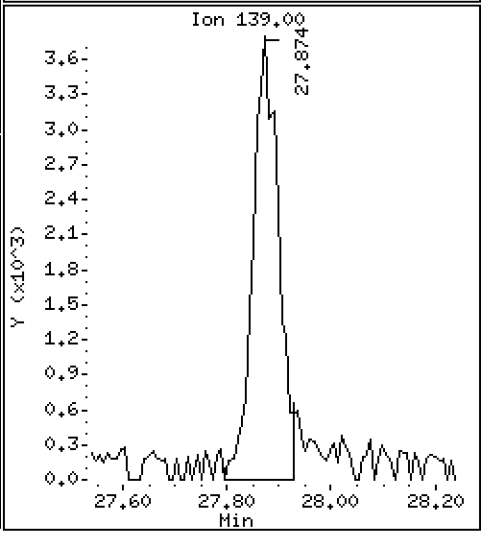


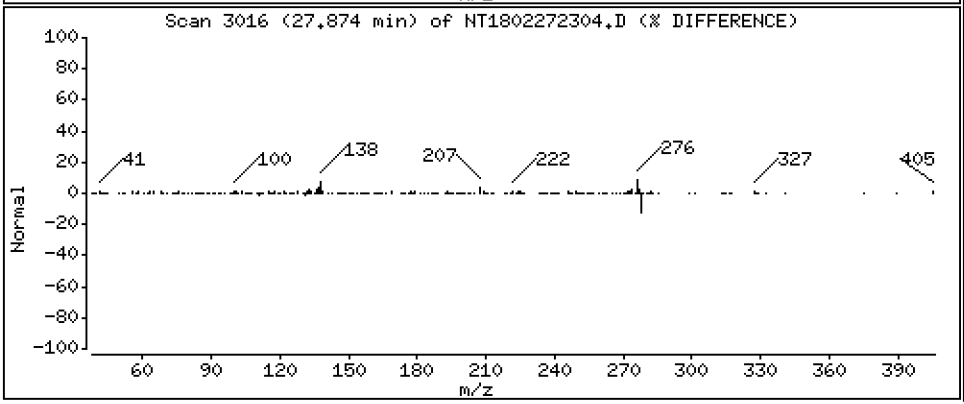












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

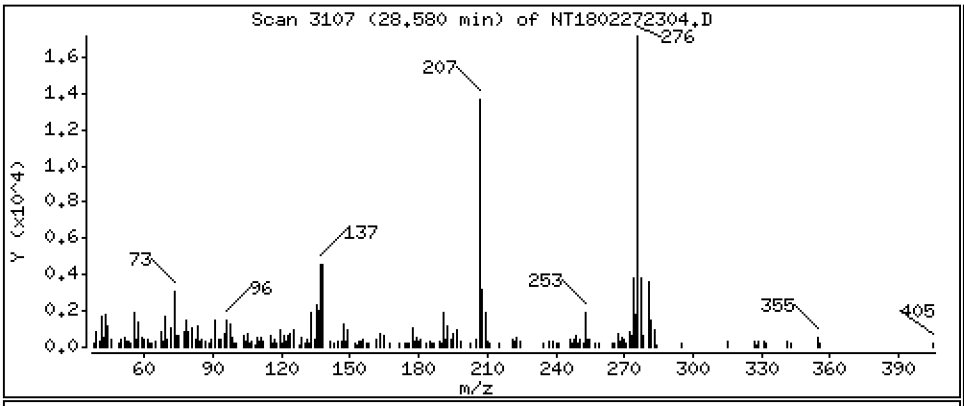
Operator: VTS

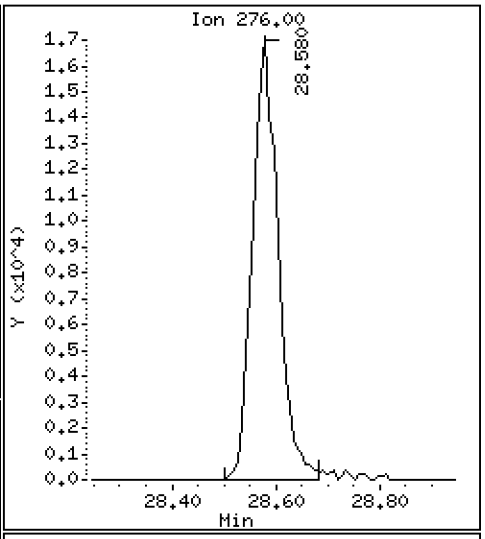
Column phase: ZB-5msi

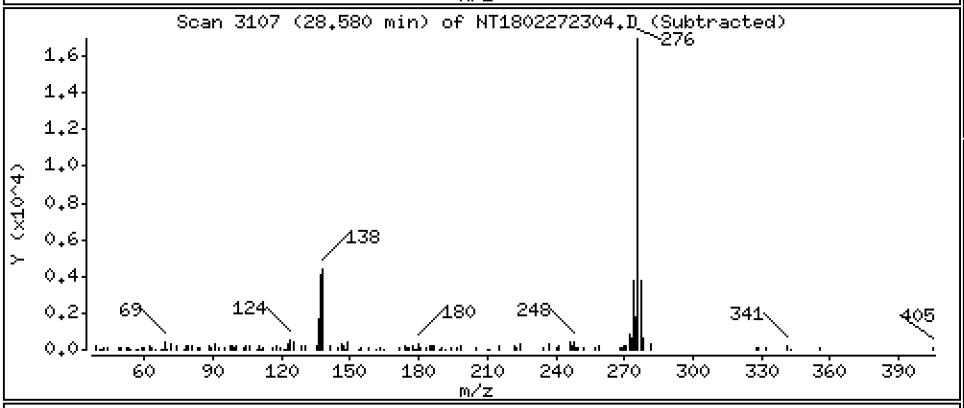
Column diameter: 0.25

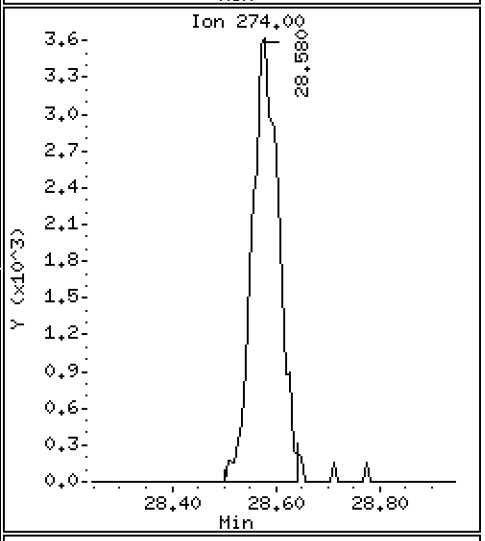
80 Benzo(g,h,i)perylene

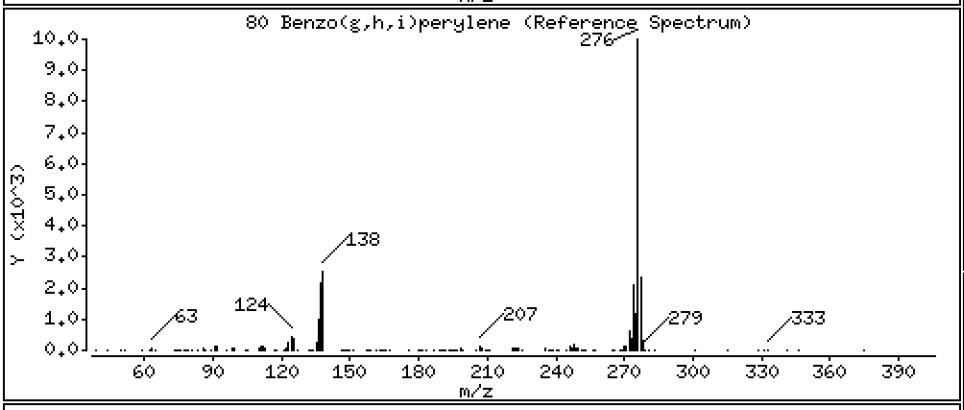
Concentration: 0.2153 ug/mL

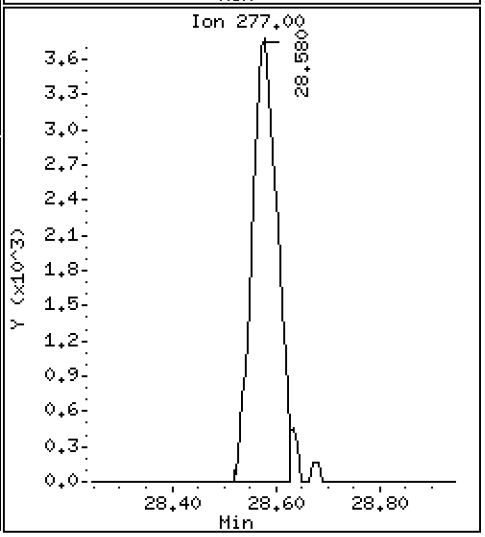


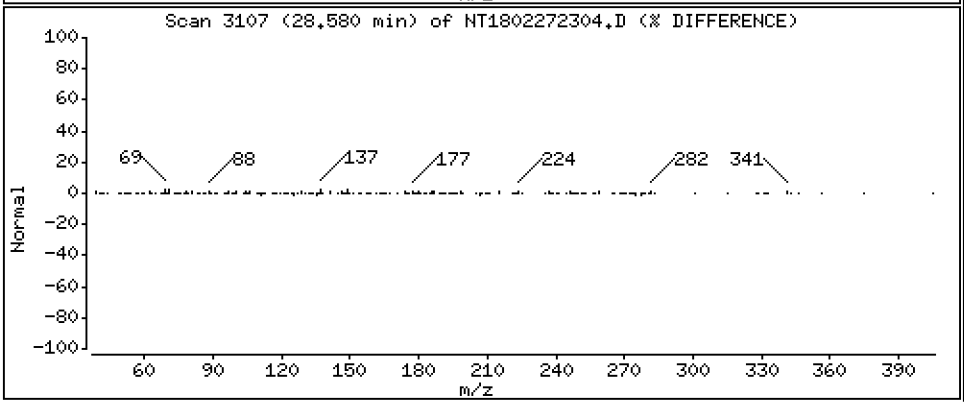












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

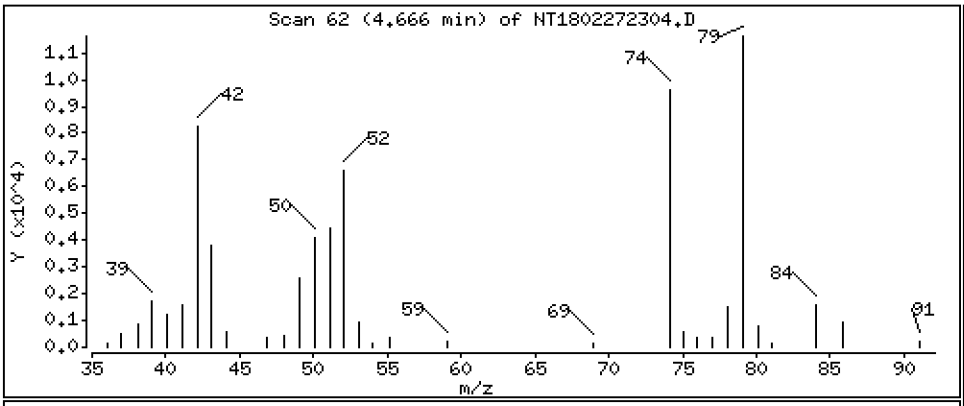
Operator: VTS

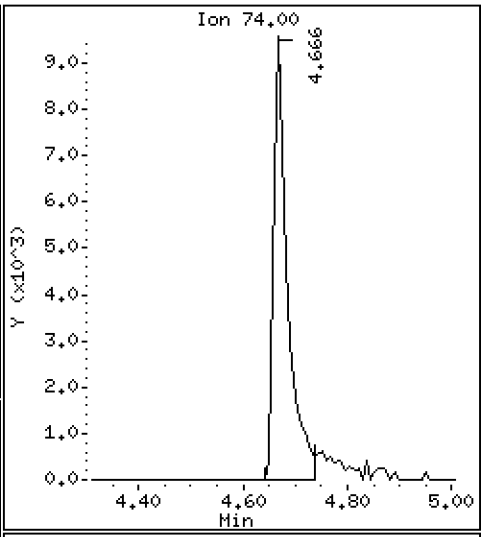
Column phase: ZB-5msi

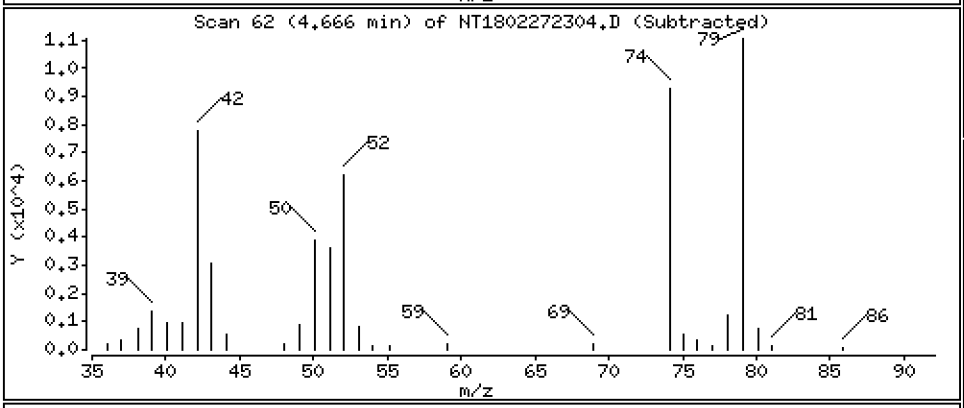
Column diameter: 0.25

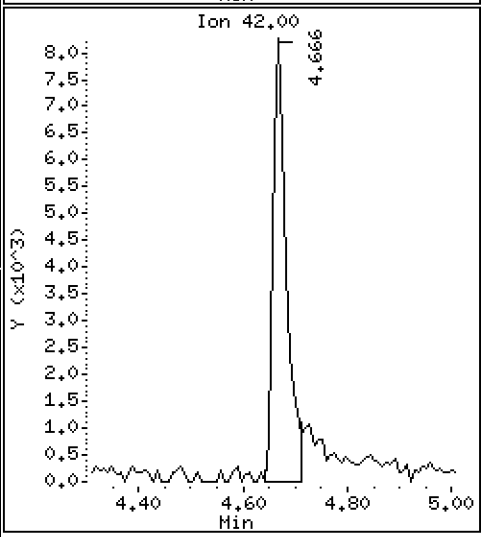
90 N-Nitrosodimethylamine

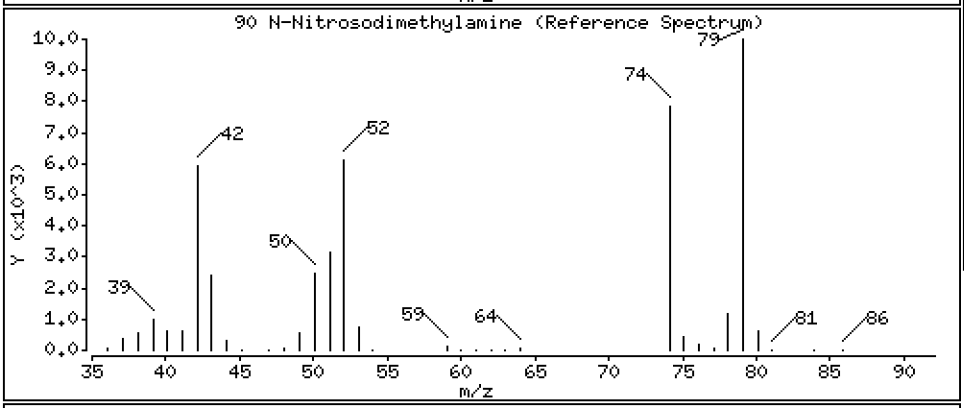
Concentration: 0.3551 ug/mL

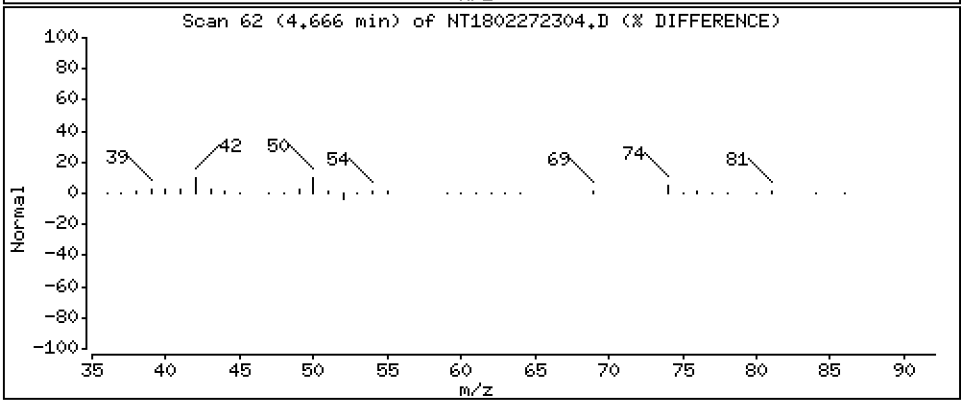












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

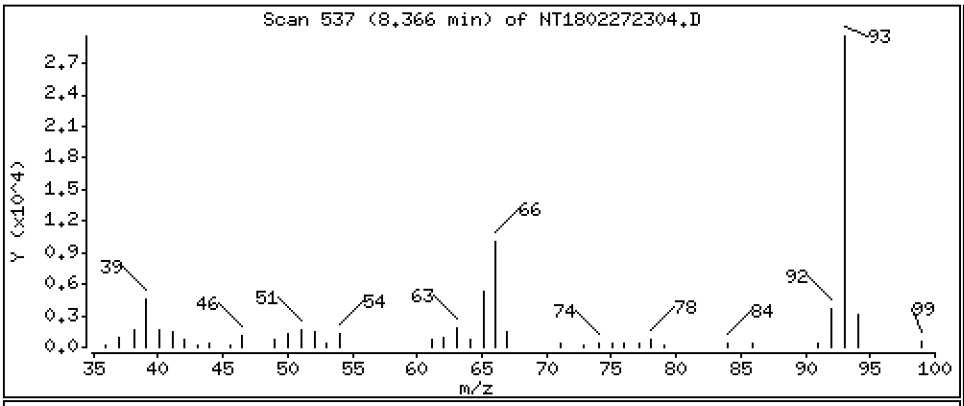
Operator: VTS

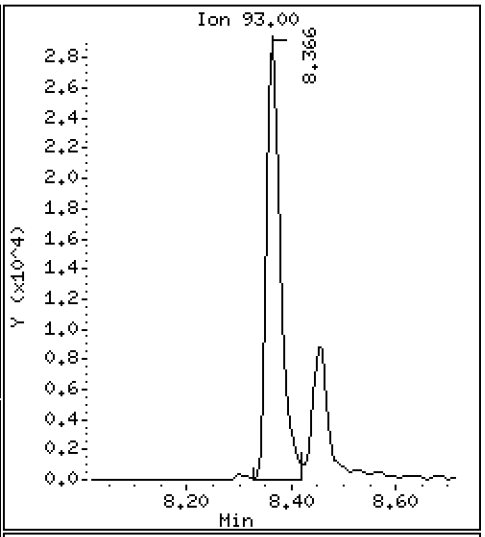
Column phase: ZB-5msi

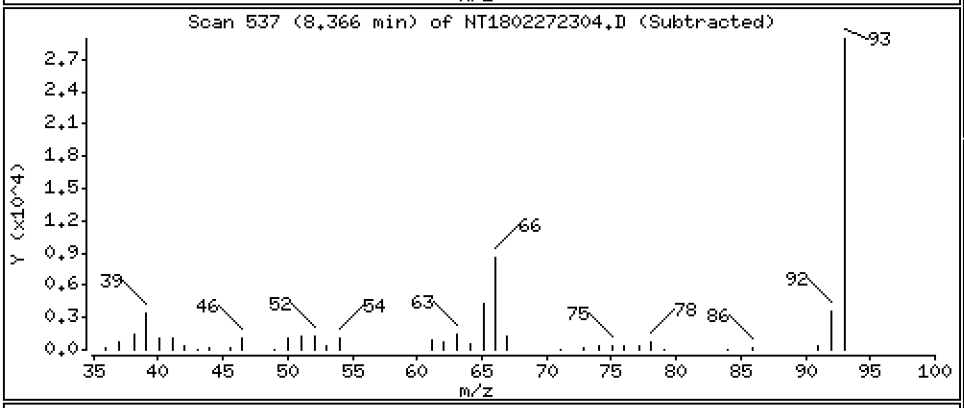
Column diameter: 0.25

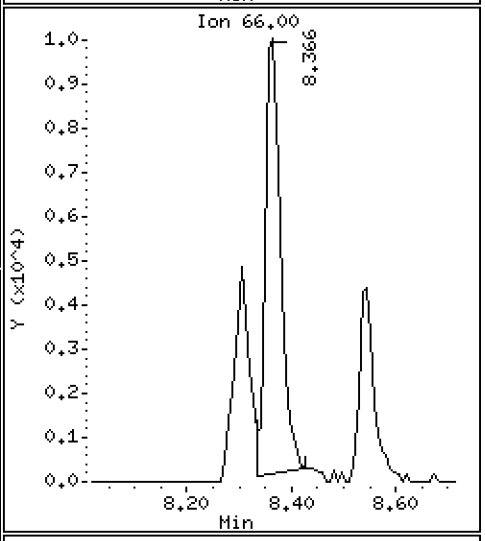
91 Aniline

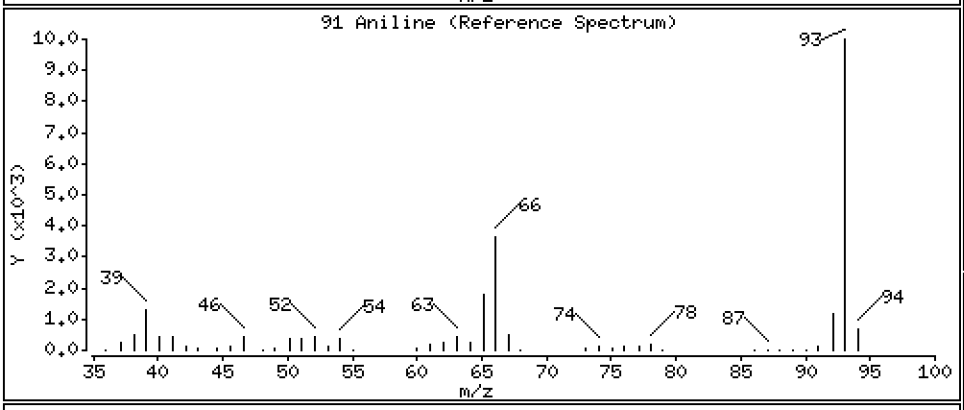
Concentration: 0.4033 ug/mL

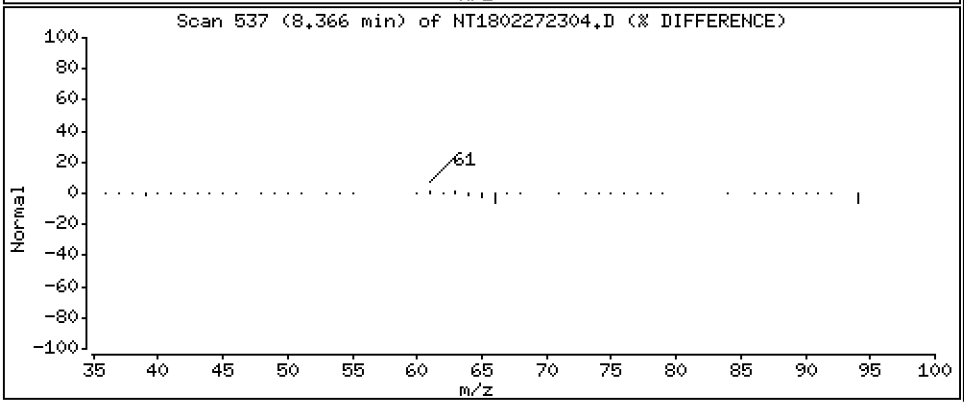


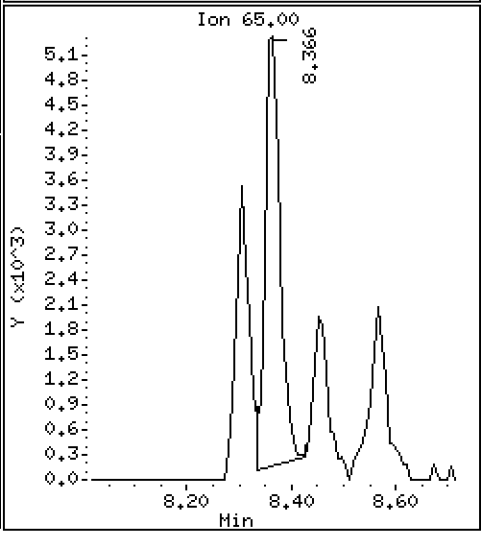












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

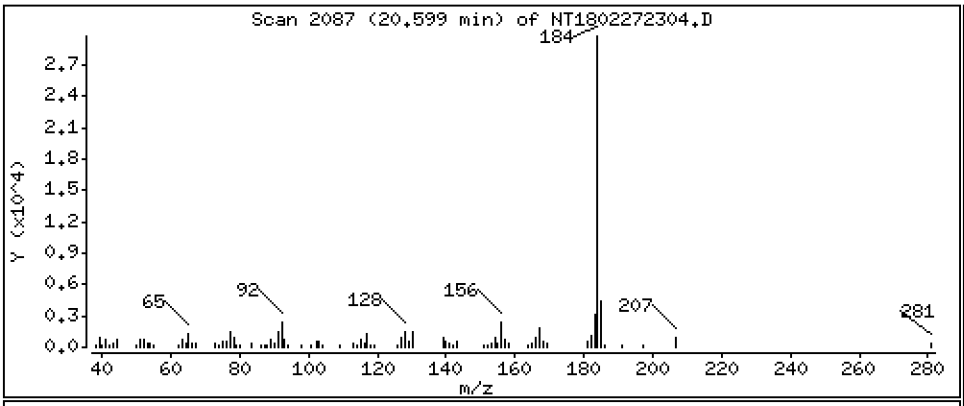
Operator: VTS

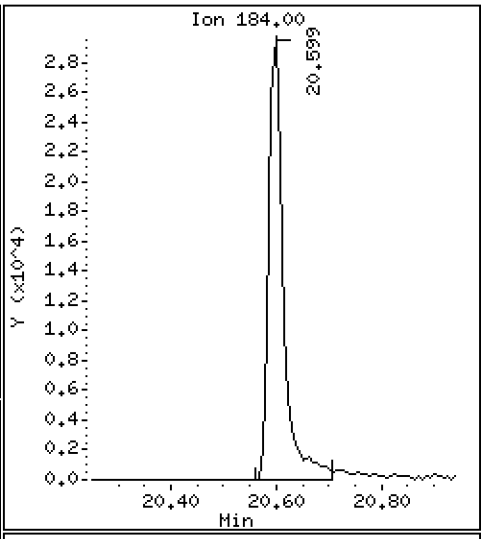
Column phase: ZB-5msi

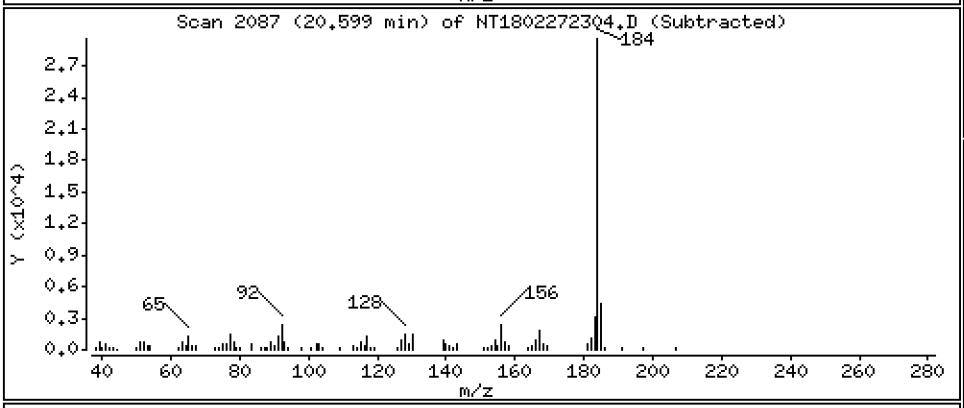
Column diameter: 0.25

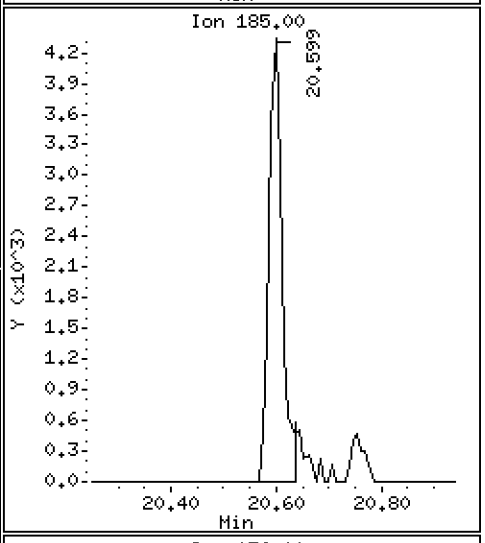
93 Benzidine

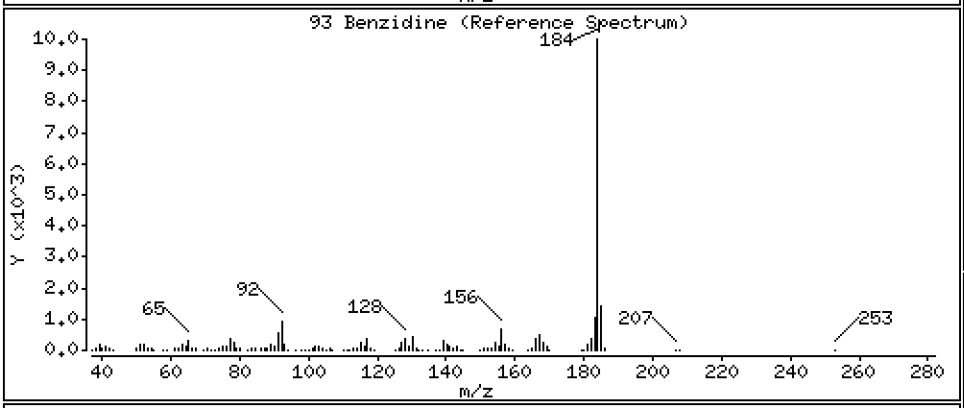
Concentration: 0.3930 ug/mL

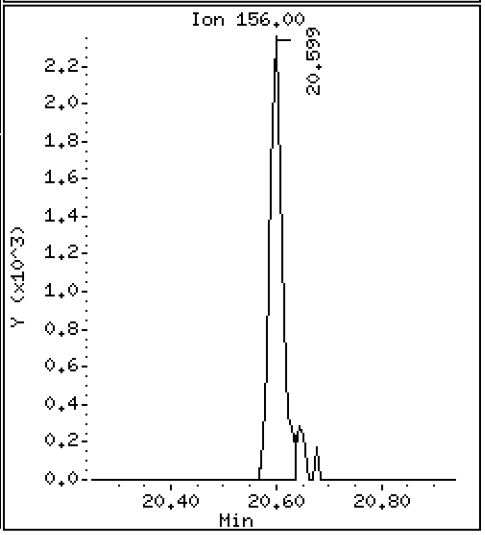


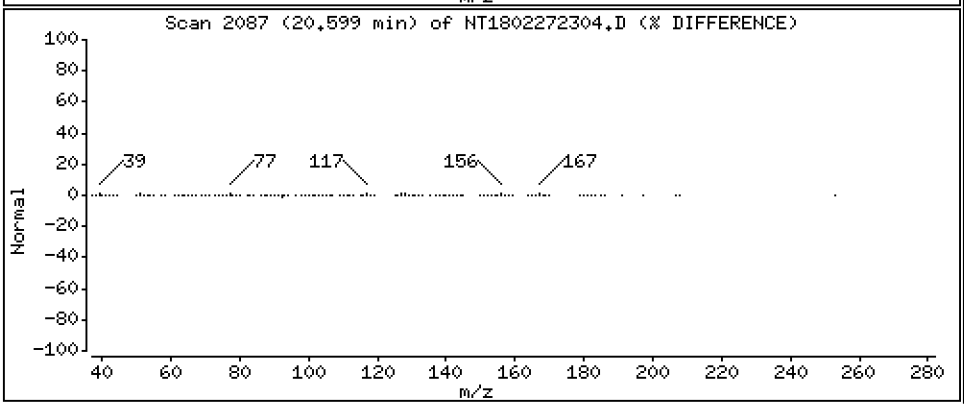












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

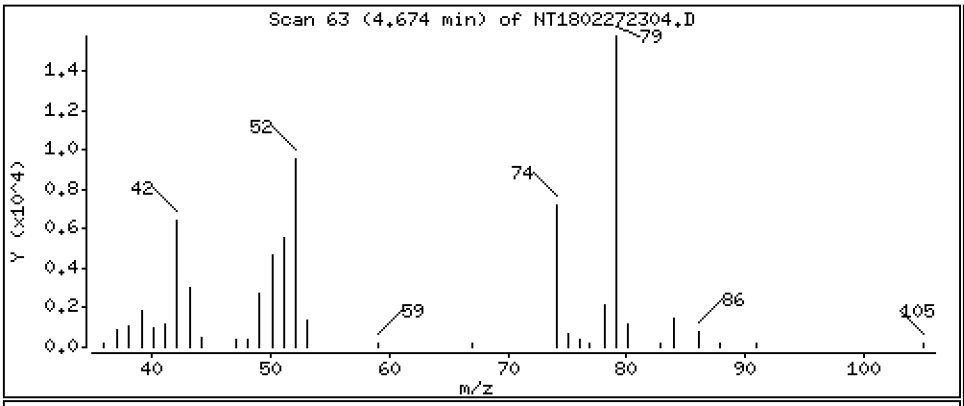
Operator: VTS

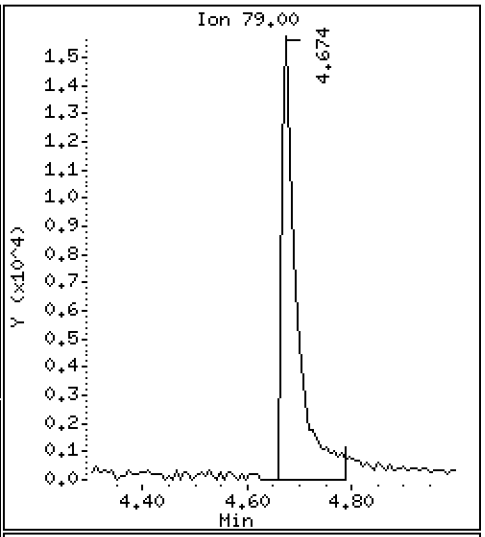
Column phase: ZB-5msi

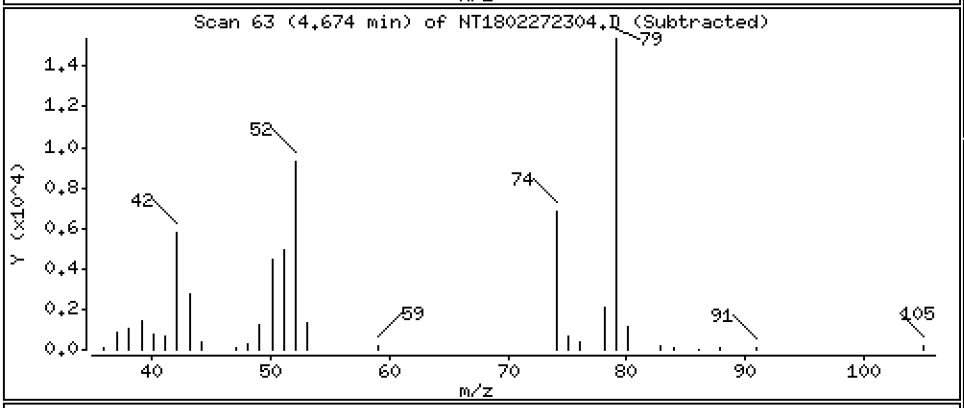
Column diameter: 0.25

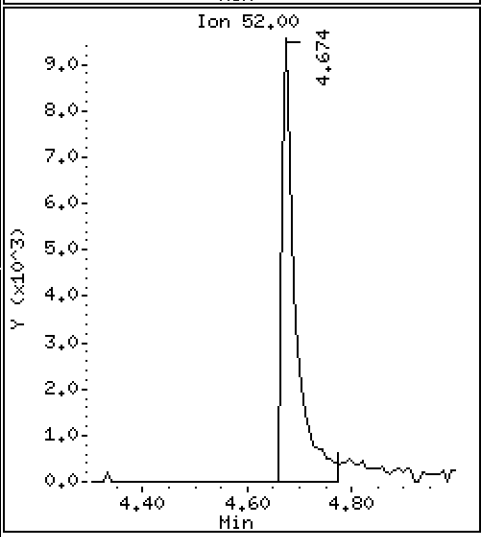
103 Pyridine

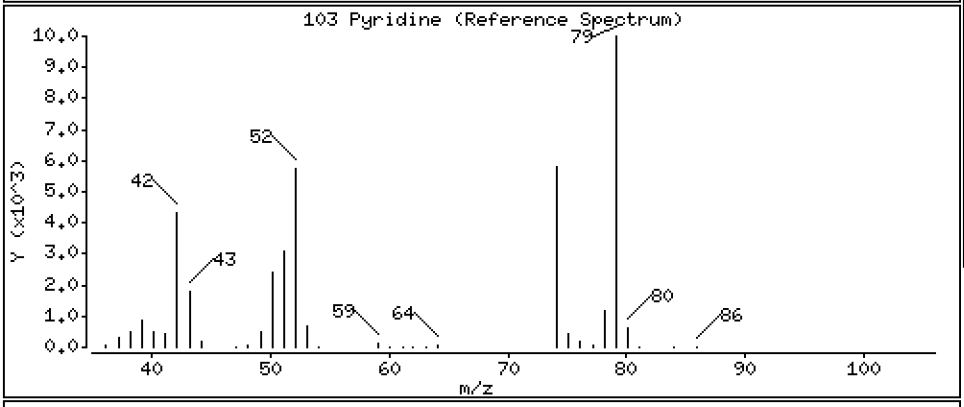
Concentration: 0.3957 ug/mL

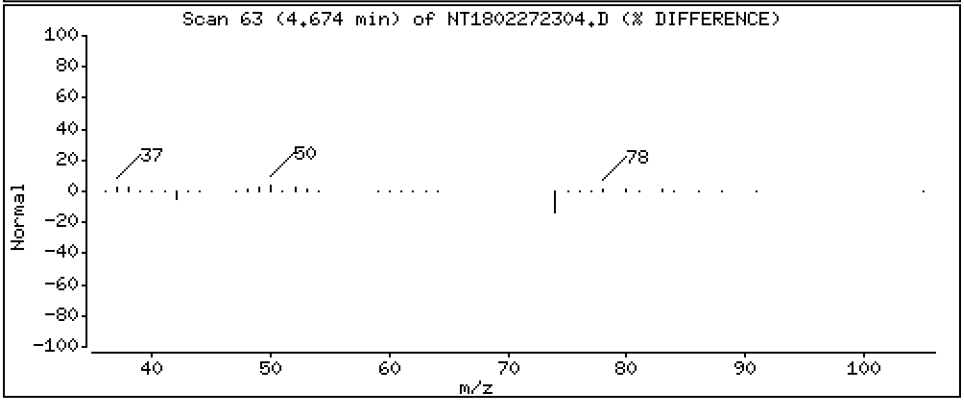












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

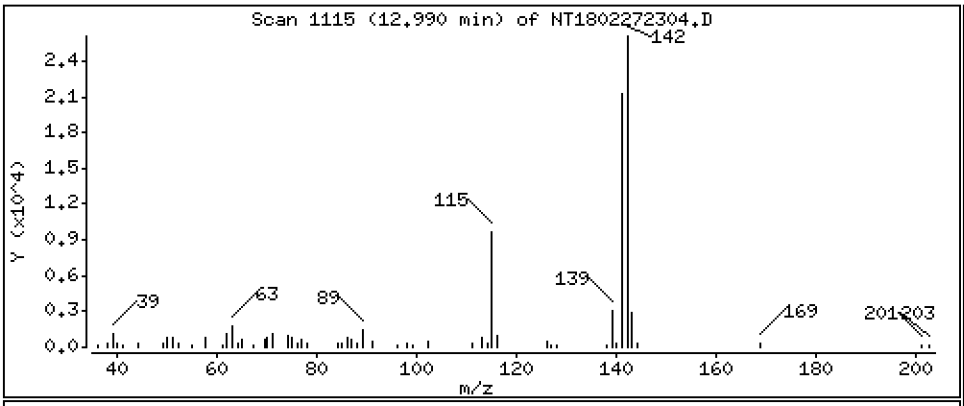
Operator: VTS

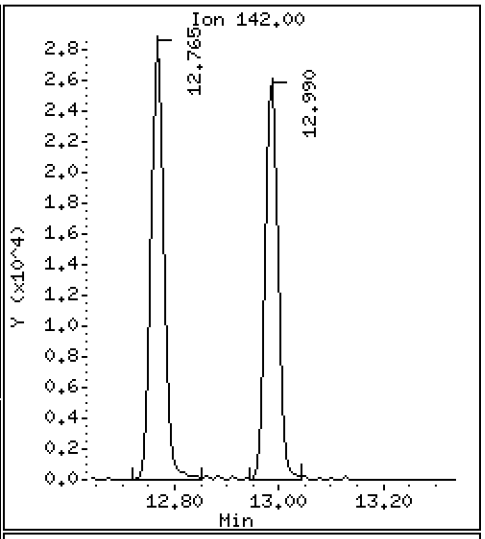
Column phase: ZB-5msi

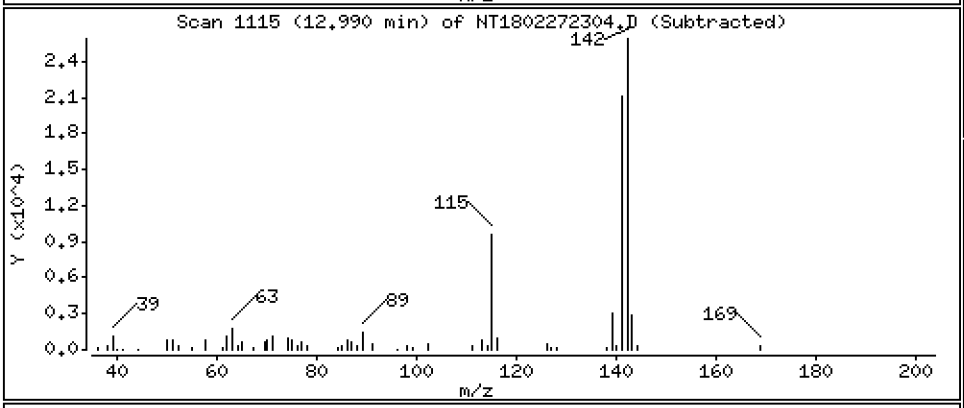
Column diameter: 0.25

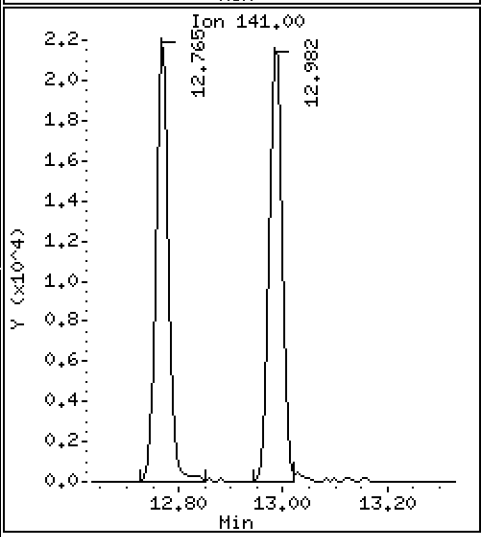
105 1-methylnaphthalene

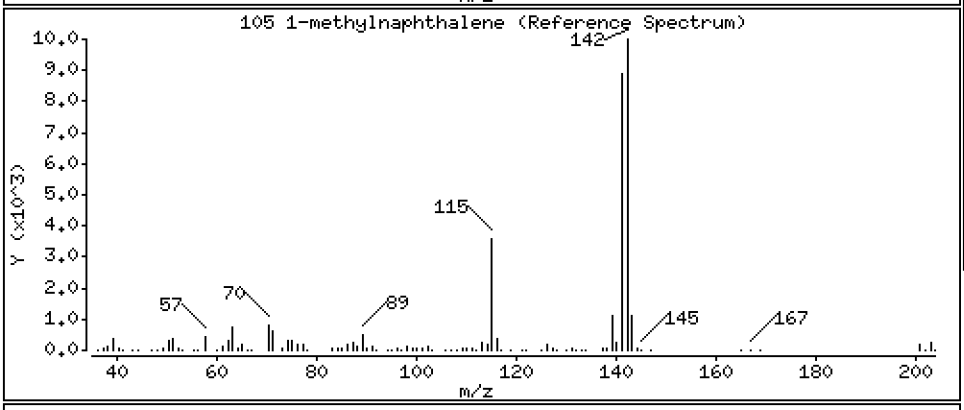
Concentration: 0.2338 ug/mL

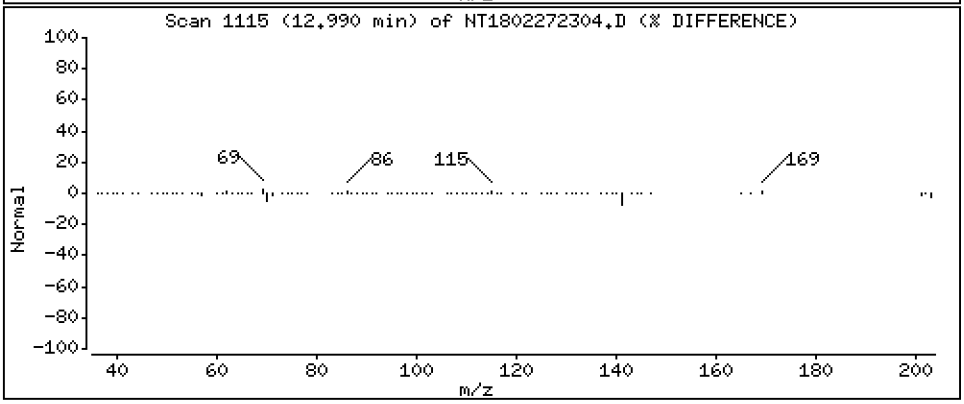












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

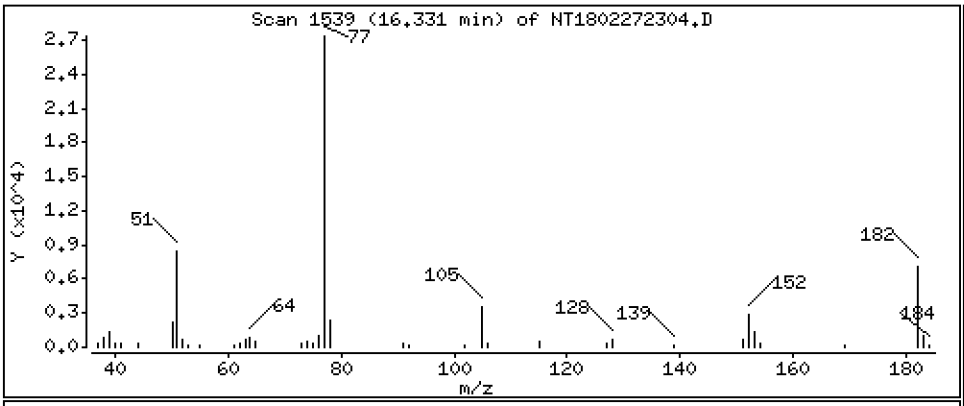
Operator: VTS

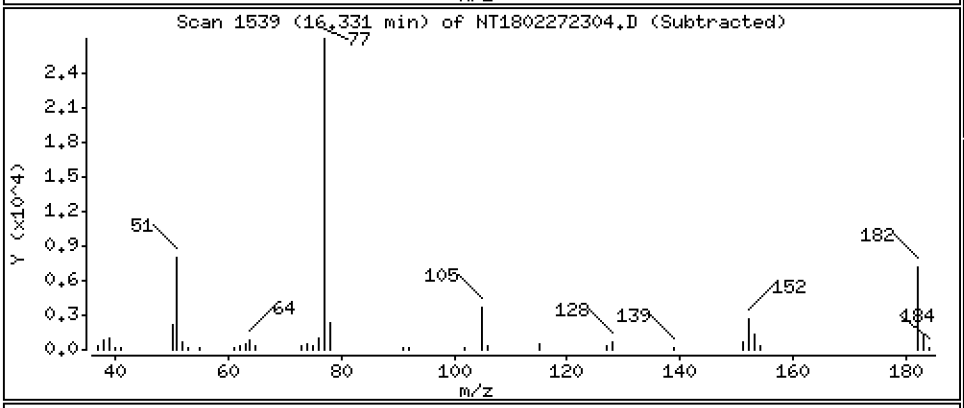
Column phase: ZB-5msi

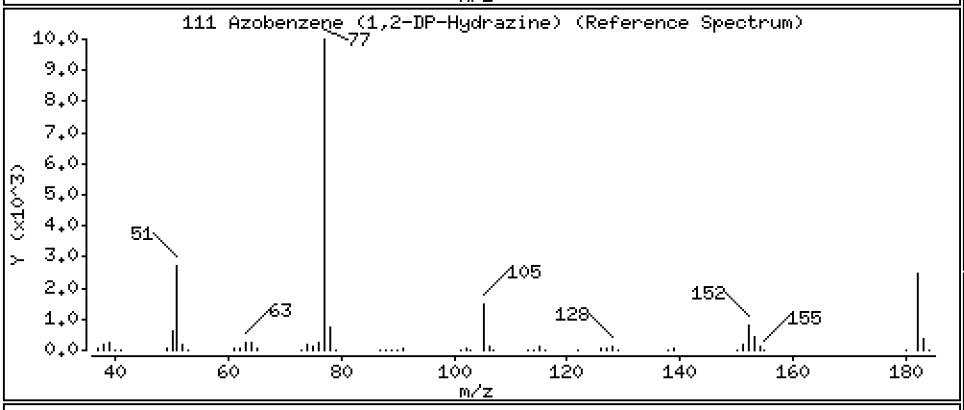
Column diameter: 0.25

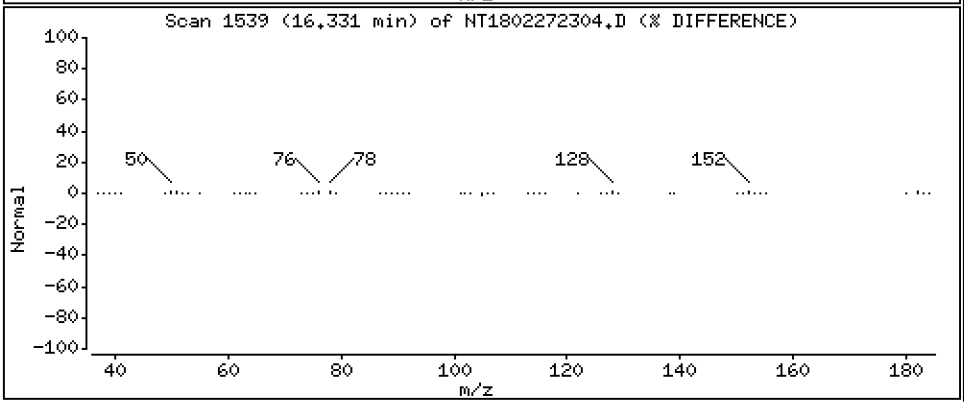
111 Azobenzene (1,2-DP-Hydrazine)

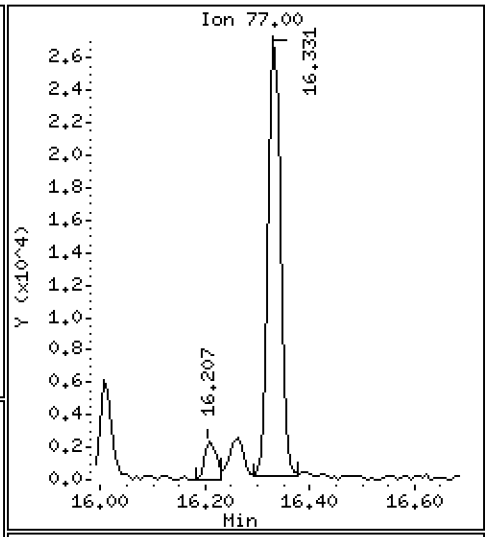
Concentration: 0.1965 ug/mL

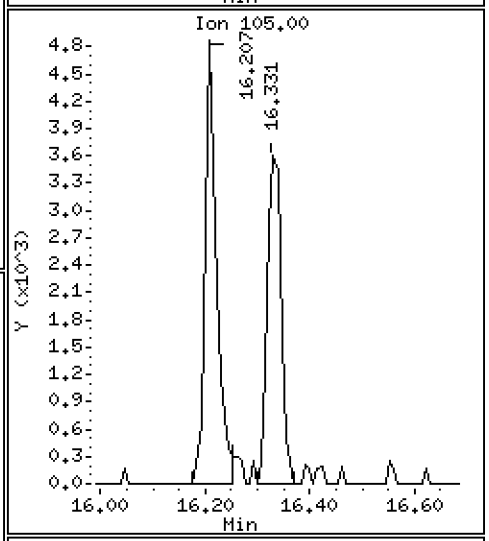


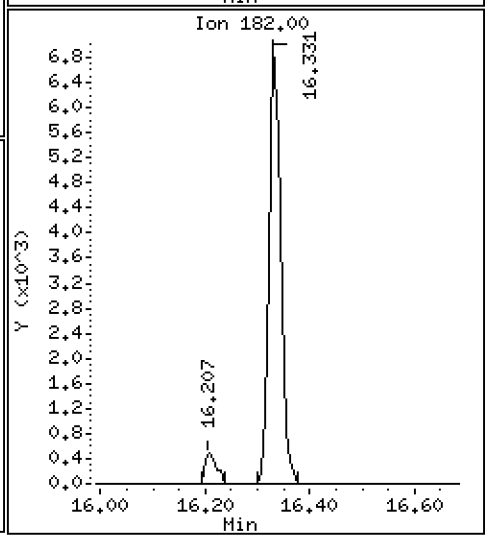












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

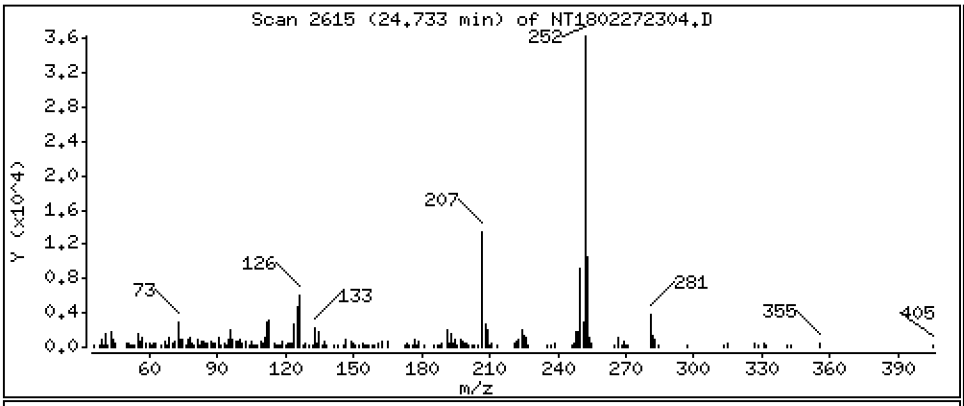
Operator: VTS

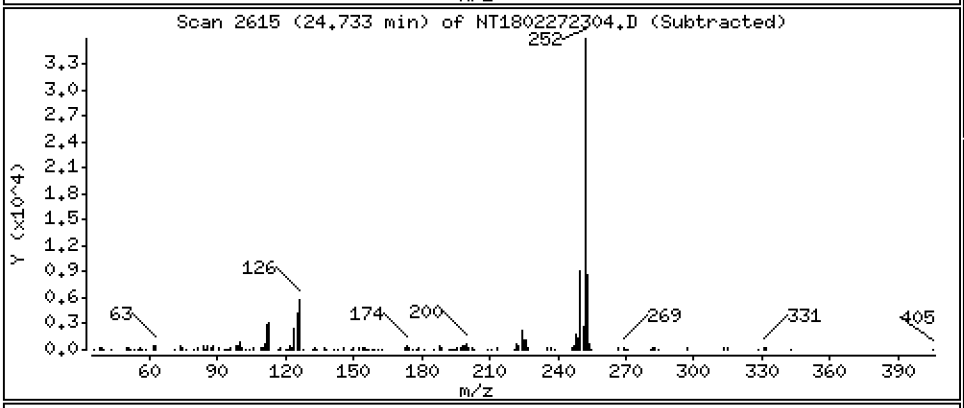
Column phase: ZB-5msi

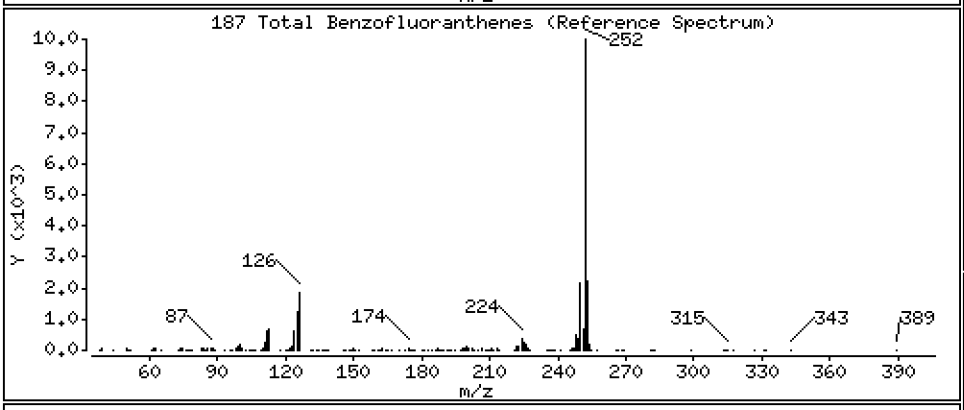
Column diameter: 0.25

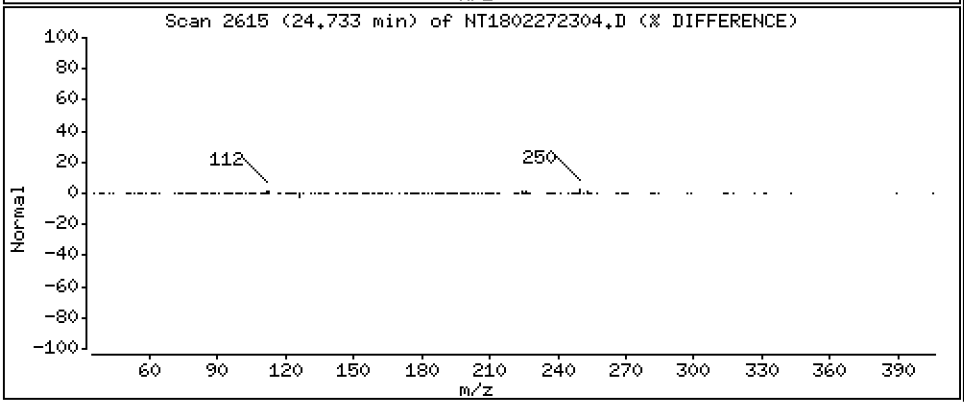
187 Total Benzofluoranthenes

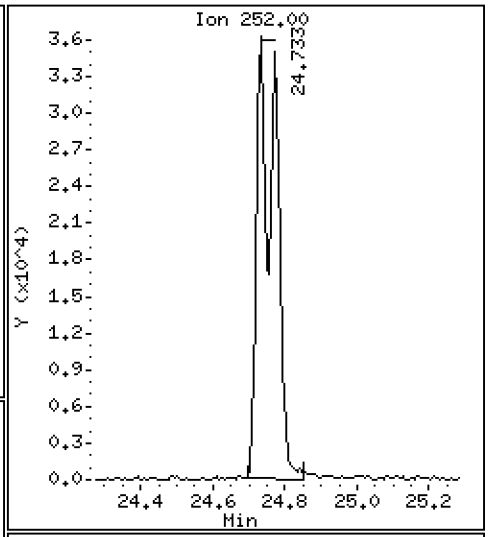
Concentration: 0.4391 ug/mL

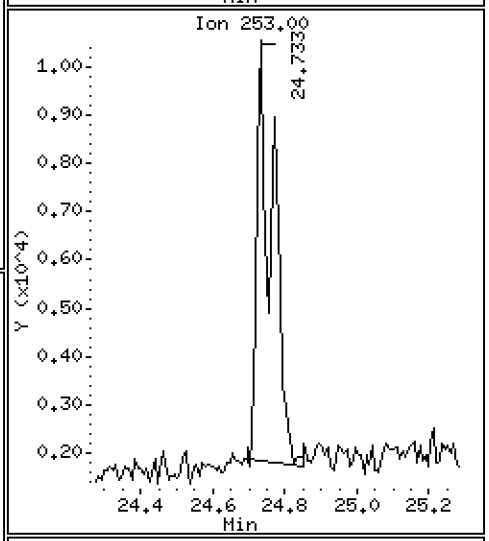


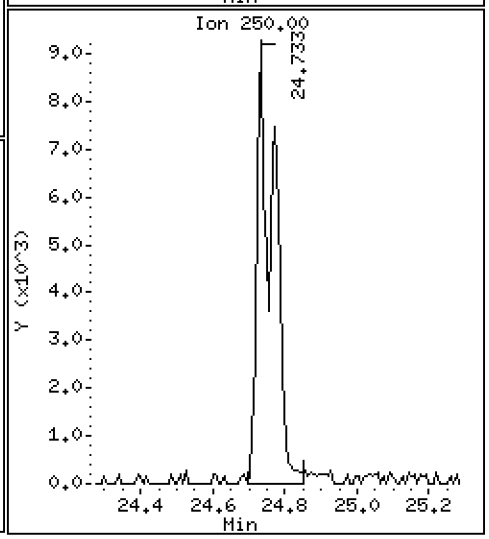












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

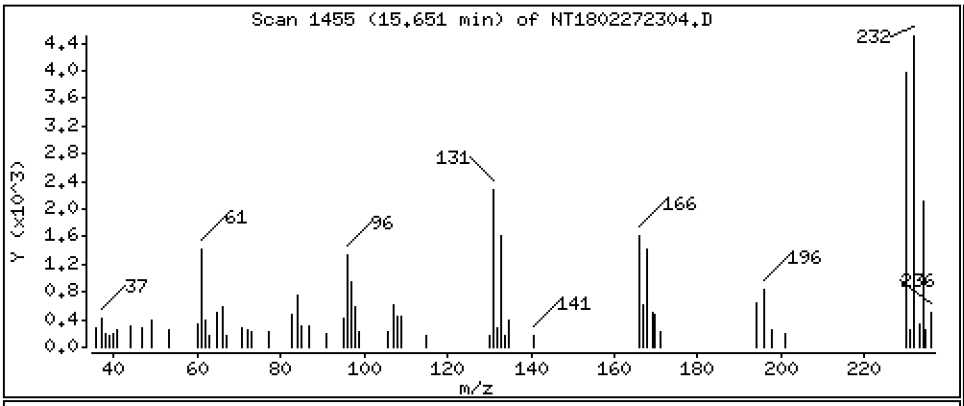
Operator: VTS

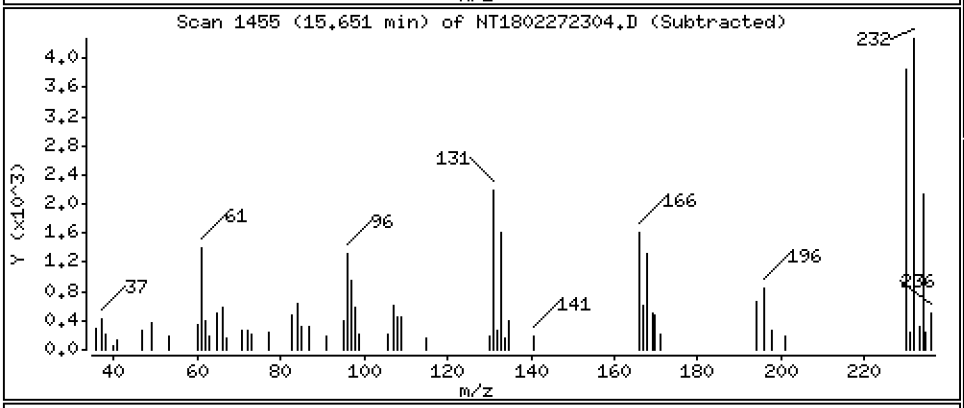
Column phase: ZB-5msi

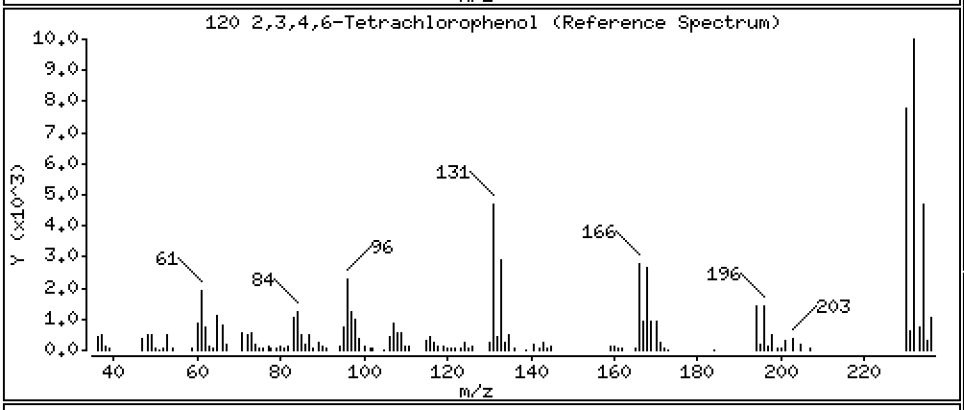
Column diameter: 0.25

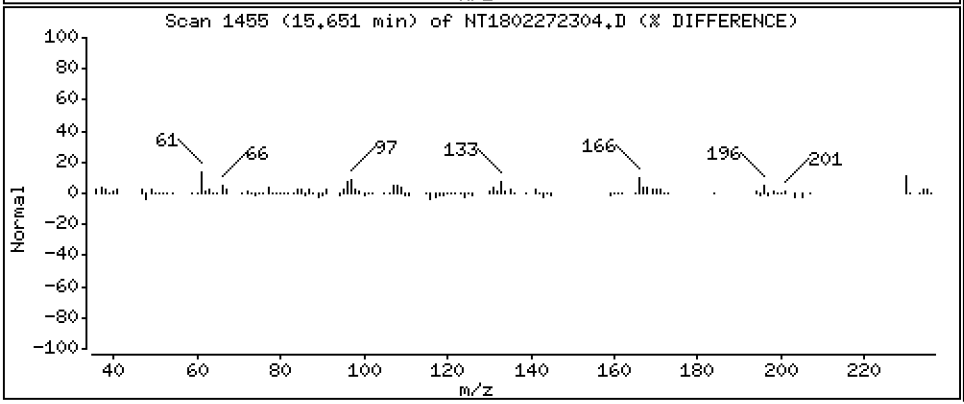
120 2,3,4,6-Tetrachlorophenol

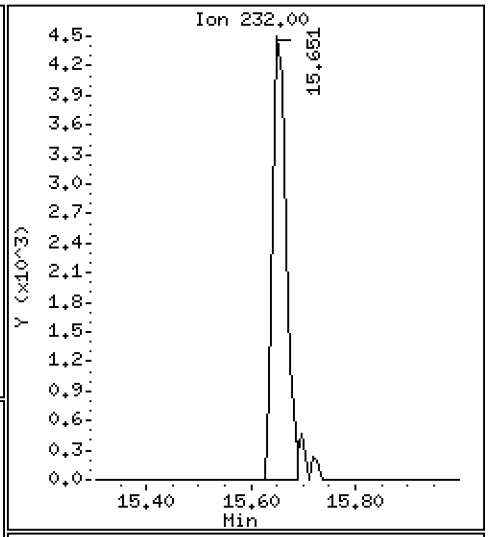
Concentration: 0.1549 ug/mL

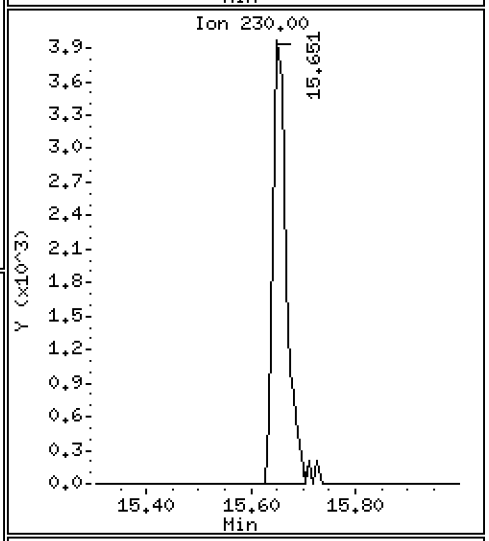


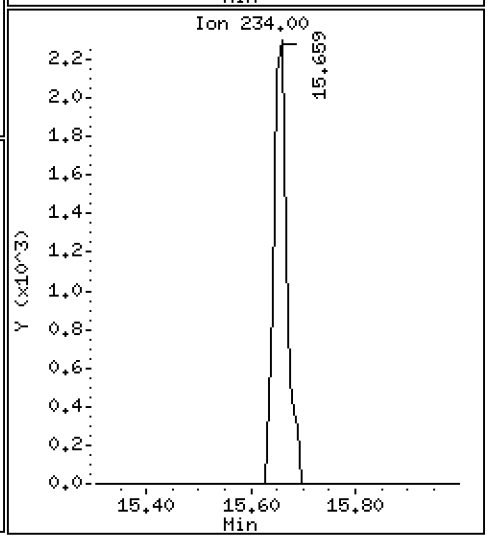












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D
Lab Smp Id: SLC0385-LCV1
Inj Date : 27-FEB-2023 19:10
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0385-LCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230227.b\ABN.m
Meth Date : 24-Mar-2023 10:19 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.728	6.728	(0.757)	28216	0.33035	0.3304
$	2 Phenol-d5	99	8.281	8.288	(0.931)	34433	0.31194	0.3119
	3 Phenol	94	8.304	8.304	(0.934)	22008	0.19163	0.1916
$	5 2-Chlorophenol-d4	132	8.543	8.543	(0.961)	31551	0.32847	0.3285
	4 Bis(2-Chloroethyl)ether	93	8.450	8.458	(0.950)	15785	0.20237	0.2024
	6 2-Chlorophenol	128	8.566	8.566	(0.963)	22012	0.22320	0.2232
	7 1,3-Dichlorobenzene	146	8.829	8.829	(0.993)	23552	0.22579	0.2258
*	8 1,4-Dichlorobenzene-d4	152	8.891	8.891	(1.000)	250344	4.00000	
	9 1,4-Dichlorobenzene	146	8.922	8.922	(1.003)	25221	0.23721	0.2372
$	10 1,2-Dichlorobenzene-d4	152	9.248	9.248	(1.040)	15445	0.22682	0.2268
	12 1,2-Dichlorobenzene	146	9.271	9.271	(1.043)	22901	0.22194	0.2219
	11 Benzyl alcohol	108	9.186	9.170	(1.033)	5531	0.10129	0.1013
	14 2,2'-oxybis(1-Chloropropane)	121	9.458	9.458	(1.064)	4498	0.18601	0.1860
	13 2-Methylphenol	108	9.396	9.396	(1.057)	19810	0.22299	0.2230
	17 Hexachloroethane	117	9.854	9.854	(1.108)	10274	0.24963	0.2496
	16 N-Nitroso-di-n-propylamine	70	9.714	9.722	(1.093)	13819	0.21161	0.2116
	15 4-Methylphenol	108	9.667	9.667	(1.087)	20292	0.21915	0.2192
$	18 Nitrobenzene-d5	82	9.978	9.970	(0.880)	21468	0.20750	0.2075
	19 Nitrobenzene	77	10.009	10.009	(0.882)	20456	0.20540	0.2054
	20 Isophorone	82	10.451	10.451	(0.921)	25455	0.20034	0.2003
	21 2-Nitrophenol	139	10.633	10.625	(0.938)	10153	0.20758	0.2076
	22 2,4-Dimethylphenol	107	10.693	10.693	(0.943)	41032	0.44025	0.4403
	23 Bis(2-Chloroethoxy)methane	93	10.879	10.879	(0.959)	17839	0.20504	0.2050
	24 Benzoic acid	105	10.964	10.964	(0.967)	341	0.00966	0.009657
	25 2,4-Dichlorophenol	162	11.083	11.083	(0.977)	32669	0.39978	0.3998
	26 1,2,4-Trichlorobenzene	180	11.257	11.264	(0.993)	20231	0.22922	0.2292
*	27 Naphthalene-d8	136	11.342	11.342	(1.000)	970777	4.00000	
	28 Naphthalene	128	11.380	11.388	(1.003)	67735	0.22698	0.2270
	29 4-Chloroaniline	127	11.519	11.519	(1.016)	49581	0.41690	0.4169
	30 Hexachlorobutadiene	225	11.743	11.743	(1.035)	11482	0.22195	0.2220
	31 4-Chloro-3-methylphenol	107	12.486	12.486	(1.101)	34577	0.44209	0.4421
	32 2-Methylnaphthalene	142	12.765	12.765	(1.125)	46441	0.22902	0.2290
	33 Hexachlorocyclopentadiene	237	13.229	13.229	(0.886)	201	0.00565	0.005654

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	13.392	13.392	(0.897)	21912	0.43055	0.4306
35	2,4,5-Trichlorophenol	196	13.469	13.461	(0.903)	21582	0.38916	0.3892
$ 36	2-Fluorobiphenyl	172	13.539	13.546	(0.907)	46766	0.21081	0.2108
37	2-Chloronaphthalene	162	13.748	13.748	(0.921)	37412	0.21582	0.2158
38	2-Nitroaniline	65	14.011	14.011	(0.939)	19376	0.35716	0.3572
39	Dimethylphthalate	163	14.436	14.444	(0.967)	40706	0.21864	0.2186
40	Acenaphthylene	152	14.607	14.607	(0.979)	62706	0.21483	0.2148
41	2,6-Dinitrotoluene	165	14.576	14.584	(0.977)	16170	0.37886	0.3789
* 42	Acenaphthene-d10	164	14.924	14.924	(1.000)	526167	4.00000	
43	3-Nitroaniline	138	14.854	14.862	(0.995)	19242	0.38113	0.3811
44	Acenaphthene	153	14.986	14.986	(1.004)	41554	0.22494	0.2249
45	2,4-Dinitrophenol	184	15.079	15.079	(1.010)	3066	0.15438	0.1544
46	Dibenzofuran	168	15.310	15.310	(1.026)	59297	0.22177	0.2218
47	4-Nitrophenol	109	15.210	15.202	(1.019)	5010	0.24617	0.2462
48	2,4-Dinitrotoluene	165	15.380	15.388	(1.031)	22842	0.39152	0.3915
50	Diethylphthalate	149	15.883	15.898	(1.064)	41522	0.21285	0.2128
49	Fluorene	166	16.014	16.014	(1.073)	51874	0.24210	0.2421
51	4-Chlorophenyl-phenylether	204	16.014	16.014	(1.073)	24282	0.24879	0.2488
52	4-Nitroaniline	138	16.114	16.130	(1.080)	17842	0.36734	0.3673
53	4,6-Dinitro-2-methylphenol	198	16.207	16.222	(0.904)	16171	0.46900	0.4690
54	N-Nitrosodiphenylamine	169	16.261	16.268	(0.907)	29557	0.20294	0.2029
$ 55	2,4,6-Tribromophenol	330	16.546	16.546	(1.109)	7010	0.26735	0.2674
56	4-Bromophenyl-phenylether	248	17.001	17.001	(0.948)	11500	0.19676	0.1968
57	Hexachlorobenzene	284	17.310	17.318	(0.965)	13147	0.19481	0.1948
58	Pentachlorophenol	266	17.682	17.674	(0.986)	2779	0.15732	0.1573
* 59	Phenanthrene-d10	188	17.929	17.929	(1.000)	967937	4.00000	
60	Phenanthrene	178	17.976	17.975	(1.003)	65769	0.21602	0.2160
61	Anthracene	178	18.068	18.068	(1.008)	61222	0.21101	0.2110
62	Carbazole	167	18.401	18.401	(1.026)	55683	0.20944	0.2094
63	Di-n-butylphthalate	149	19.206	19.213	(1.071)	67928	0.23083	0.2308
64	Fluoranthene	202	20.351	20.358	(0.886)	67048	0.23067	0.2307
65	Pyrene	202	20.776	20.776	(0.905)	69745	0.22498	0.2250
$ 66	Terphenyl-d14	244	21.070	21.070	(0.918)	52211	0.20999	0.2100
67	Butylbenzylphthalate	149	22.000	21.999	(0.958)	30065	0.25542	0.2554
68	Benzo(a)anthracene	228	22.929	22.929	(0.999)	66867	0.22326	0.2233
* 69	Chrysene-d12	240	22.960	22.960	(1.000)	829619	4.00000	
70	3,3'-Dichlorobenzidine	252	22.890	22.898	(0.997)	64418	0.58450	0.5845
71	Chrysene	228	22.998	23.006	(1.002)	66249	0.21272	0.2127
72	bis(2-Ethylhexyl)phthalate	149	23.022	23.029	(0.959)	44078	0.21637	0.2164
* 134	Di-n-octylphthalate-d4	153	23.997	23.997	(1.000)	1418909	4.00000	
73	Di-n-octylphthalate	149	24.005	24.005	(1.000)	91287	0.23089	0.2309
74	Benzo(b)fluoranthene	252	24.733	24.740	(0.972)	68146	0.23325	0.2332
75	Benzo(k)fluoranthene	252	24.771	24.779	(0.974)	66502	0.20085	0.2008
76	Benzo(a)pyrene	252	25.336	25.336	(0.996)	60024	0.22162	0.2216
* 77	Perylene-d12	264	25.437	25.445	(1.000)	895519	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.858	27.881	(1.095)	65431	0.19244	0.1924
79	Dibenzo(a,h)anthracene	278	27.873	27.889	(1.096)	52193	0.18406	0.1841
80	Benzo(g,h,i)perylene	276	28.580	28.595	(1.124)	58678	0.21526	0.2153
90	N-Nitrosodimethylamine	74	4.665	4.658	(0.525)	17806	0.35512	0.3551
91	Aniline	93	8.366	8.365	(0.941)	52725	0.40333	0.4033
93	Benzidine	184	20.598	20.598	(0.897)	55813	0.39301	0.3930
103	Pyridine	79	4.673	4.650	(0.526)	33053	0.39569	0.3957
105	1-methylnaphthalene	142	12.989	12.989	(1.145)	42914	0.23378	0.2338
111	Azobenzene (1,2-DP-Hydrazine)	77	16.330	16.338	(1.094)	42235	0.19654	0.1965

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.733	24.779	(0.972)	129718	0.43914	0.4391
120 2,3,4,6-Tetrachlorophenol	232	15.651	15.651	(1.049)	7806	0.15494	0.1549

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272304.D
Lab Smp Id: SLC0385-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230227.b\ABN.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:03
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	269759	134880	539518	250344	-7.20
27 Naphthalene-d8	1037039	518520	2074078	970777	-6.39
42 Acenaphthene-d10	556159	278080	1112318	526167	-5.39
59 Phenanthrene-d10	1021294	510647	2042588	967937	-5.22
69 Chrysene-d12	922264	461132	1844528	829619	-10.05
134 Di-n-octylphthala	1611284	805642	3222568	1418909	-11.94
77 Perylene-d12	948357	474179	1896714	895519	-5.57

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.89	8.39	9.39	8.89	0.00
27 Naphthalene-d8	11.34	10.84	11.84	11.34	0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.92	0.00
59 Phenanthrene-d10	17.93	17.43	18.43	17.93	0.00
69 Chrysene-d12	22.96	22.46	23.46	22.96	0.00
134 Di-n-octylphthala	24.00	23.50	24.50	24.00	0.00
77 Perylene-d12	25.45	24.95	25.95	25.44	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272304.D

Lab ID: SLC0385-LCV1
nt18.i, ABN.m, 27-FEB-2023 19:10

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1802272302.D

On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00023
Lab File ID:	NT1802262302.D	Calibration Date:	02/25/2023
Sequence:	SLC0111	Injection Date:	02/26/23
Lab Sample ID:	SLC0111-ICV1	Injection Time:	12:08
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Phenol	A	5.0000	4.9	1.8350500	1.7925100		-2.3	+/-20
4-Methylphenol	A	5.0000	5.0	1.4794550	1.4664770		-0.9	+/-20
Naphthalene	A	5.0000	4.7	1.2296060	1.1470510		-6.7	+/-20
2-Methylnaphthalene	A	5.0000	4.7	0.8355327	0.7892218		-5.5	+/-20
Acenaphthylene	A	5.0000	4.8	2.2189590	2.1465500		-3.3	+/-20
Dimethylphthalate	A	5.0000	4.8	1.4153330	1.3642620		-3.6	+/-20
Acenaphthene	A	5.0000	4.7	1.4043630	1.3227350		-5.8	+/-20
Dibenzofuran	A	5.0000	4.7	2.0326750	1.9199930		-5.5	+/-20
Fluorene	A	5.0000	4.9	1.6289200	1.5882490		-2.5	+/-20
Phenanthrene	A	5.0000	4.7	1.2581570	1.1862480		-5.7	+/-20
Anthracene	A	5.0000	5.0	1.1989790	1.2066110		0.6	+/-20
Fluoranthene	A	5.0000	4.8	1.4014480	1.3560920		-3.2	+/-20
Pyrene	A	5.0000	4.7	1.4946680	1.3998900		-6.3	+/-20
Butylbenzylphthalate	A	5.0000	5.4	0.5675390	0.6178893		8.9	+/-20
Benzo(a)anthracene	A	5.0000	4.8	1.4440750	1.3970680		-3.3	+/-20
Chrysene	A	5.0000	4.8	1.5016220	1.4311360		-4.7	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	5.2	0.5742806	0.6002158		4.5	+/-20
Benzofluoranthenes, Total	A	10.000	9.7	1.3194130	1.2769530		-3.2	+/-20
Benzo(a)pyrene	A	5.0000	5.1	1.2097740	1.2396420		2.5	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	5.1	1.5187130	1.5493960		2.0	+/-20
Dibenzo(a,h)anthracene	A	5.0000	5.1	1.2666050	1.2907810		1.9	+/-20
Benzo(g,h,i)perylene	A	5.0000	5.0	1.2175640	1.2130440		-0.4	+/-20
2-Fluorophenol	A	7.5000	7.46	1.3647030	1.3569520		-0.6	+/-20
Phenol-d5	A	7.5000	7.40	1.7637020	1.7397900		-1.4	+/-20
2-Chlorophenol-d4	A	7.5000	7.32	1.5347490	1.4977580		-2.4	+/-20
1,2-Dichlorobenzene-d4	A	5.0000	4.71	1.0880180	1.0237930		-5.9	+/-20
Nitrobenzene-d5	A	5.0000	4.97	0.4262932	0.4238321		-0.6	+/-20
2-Fluorobiphenyl	A	5.0000	4.68	1.6864720	1.5789520		-6.4	+/-20
2,4,6-Tribromophenol	A	7.5000	7.08	0.2004134	0.1968760		-5.6	+/-20
p-Terphenyl-d14	A	5.0000	4.81	1.1988160	1.1535860		-3.8	+/-20

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262302.D

Page 1

Date : 26-FEB-2023 12:08

Client ID:

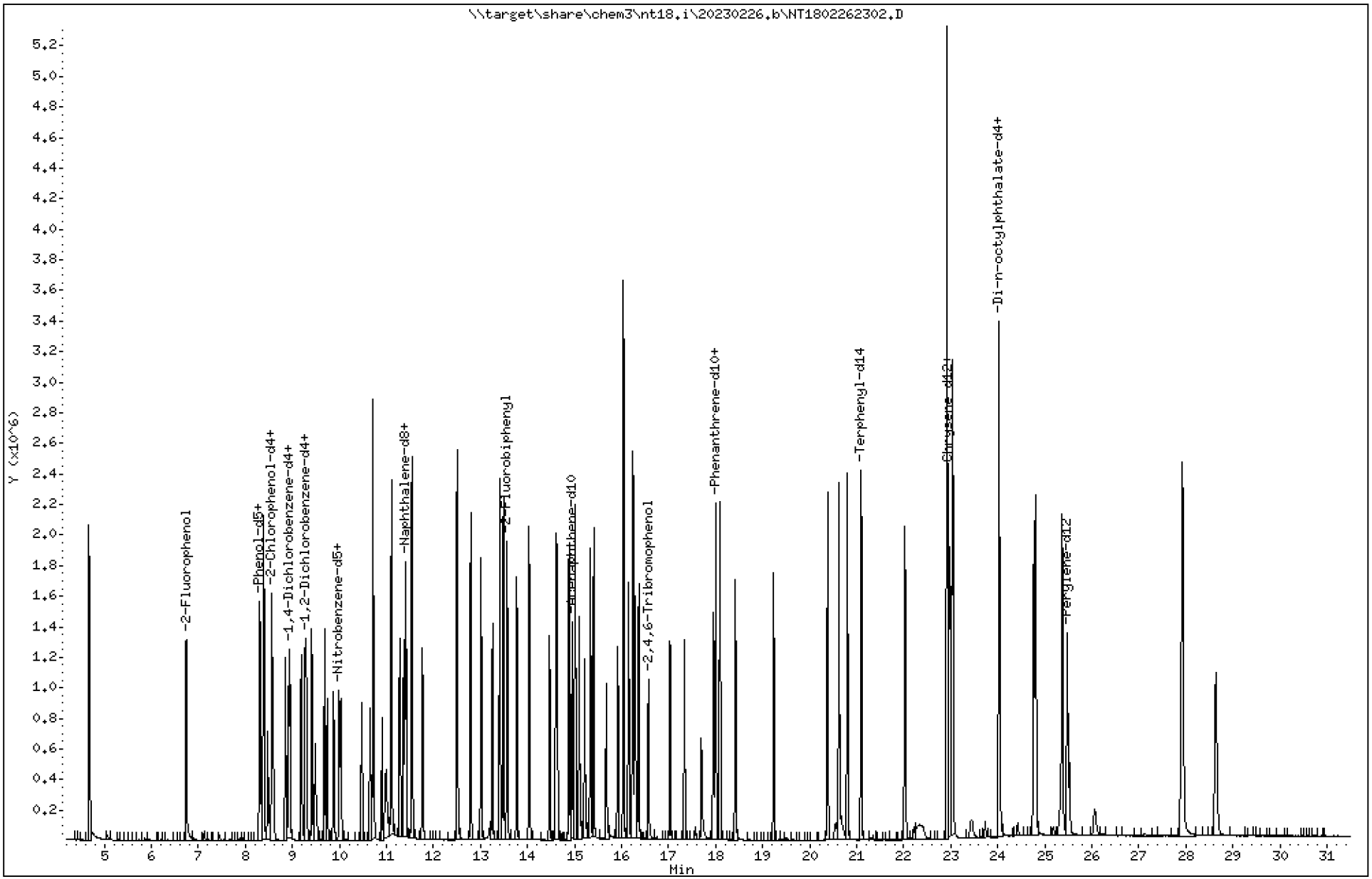
Instrument: nt18.i

Sample Info: SLC0111-ICV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230226.b\NT1802262302.D
Lab Smp Id: SLC0111-ICV1
Inj Date : 26-FEB-2023 12:08
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0111-ICV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 10-Mar-2023 08:32 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.743	6.743	(0.756)	621116	7.50000	7.457
$	2 Phenol-d5	99	8.296	8.296	(0.931)	796352	7.50000	7.398
	3 Phenol	94	8.319	8.319	(0.933)	546989	5.00000	4.884
$	5 2-Chlorophenol-d4	132	8.559	8.559	(0.960)	685567	7.50000	7.319
	4 Bis(2-Chloroethyl)ether	93	8.474	8.474	(0.951)	363215	5.00000	4.775
	6 2-Chlorophenol	128	8.590	8.590	(0.964)	465417	5.00000	4.840
	7 1,3-Dichlorobenzene	146	8.853	8.853	(0.993)	474914	5.00000	4.669
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	244122	4.00000	
	9 1,4-Dichlorobenzene	146	8.946	8.946	(1.003)	527882	5.00000	5.091
$	10 1,2-Dichlorobenzene-d4	152	9.272	9.272	(1.040)	312413	5.00000	4.705
	12 1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	472590	5.00000	4.697
	11 Benzyl alcohol	108	9.186	9.186	(1.030)	282093	5.00000	5.297
	14 2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	113939	5.00000	4.832(M)
	13 2-Methylphenol	108	9.411	9.411	(1.056)	416766	5.00000	4.811
	17 Hexachloroethane	117	9.877	9.877	(1.108)	194644	5.00000	4.850
	16 N-Nitroso-di-n-propylamine	70	9.737	9.737	(1.092)	317522	5.00000	4.986
	15 4-Methylphenol	108	9.683	9.683	(1.086)	447499	5.00000	4.956
$	18 Nitrobenzene-d5	82	9.993	9.993	(0.879)	499679	5.00000	4.971
	19 Nitrobenzene	77	10.032	10.032	(0.883)	467796	5.00000	4.835
	20 Isophorone	82	10.475	10.475	(0.922)	591747	5.00000	4.794
	21 2-Nitrophenol	139	10.650	10.650	(0.937)	245442	5.00000	5.165
	22 2,4-Dimethylphenol	107	10.710	10.710	(0.942)	903521	10.0000	9.978
	23 Bis(2-Chloroethoxy)methane	93	10.905	10.905	(0.960)	404969	5.00000	4.791
	24 Benzoic acid	105	10.990	10.990	(0.967)	509913	20.0000	14.26(M)
	25 2,4-Dichlorophenol	162	11.100	11.100	(0.977)	725155	10.0000	9.134
	26 1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	397430	5.00000	4.635
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	943164	4.00000	
	28 Naphthalene	128	11.403	11.403	(1.003)	1352322	5.00000	4.664
	29 4-Chloroaniline	127	11.542	11.542	(1.016)	1203876	10.0000	10.42
	30 Hexachlorobutadiene	225	11.767	11.767	(1.035)	233573	5.00000	4.647
	31 4-Chloro-3-methylphenol	107	12.502	12.502	(1.100)	765126	10.0000	10.07
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	930457	5.00000	4.723
	33 Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	335372	10.0000	9.425

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34 2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	485408	10.0000	9.999
	35 2,4,5-Trichlorophenol	196	13.485	13.485	(0.902)	550939	10.0000	10.41
$	36 2-Fluorobiphenyl	172	13.570	13.570	(0.908)	990581	5.00000	4.681
	37 2-Chloronaphthalene	162	13.771	13.771	(0.921)	773184	5.00000	4.676
	38 2-Nitroaniline	65	14.034	14.034	(0.939)	531811	10.0000	10.28
	39 Dimethylphthalate	163	14.468	14.468	(0.968)	855892	5.00000	4.820
	40 Acenaphthylene	152	14.630	14.630	(0.979)	1346673	5.00000	4.837
	41 2,6-Dinitrotoluene	165	14.607	14.607	(0.977)	407686	10.0000	10.01
*	42 Acenaphthene-d10	164	14.947	14.947	(1.000)	501893	4.00000	
	43 3-Nitroaniline	138	14.885	14.885	(0.996)	488420	10.0000	10.14
	44 Acenaphthene	153	15.009	15.009	(1.004)	829839	5.00000	4.709
	45 2,4-Dinitrophenol	184	15.102	15.102	(1.010)	352112	20.0000	17.82
	46 Dibenzofuran	168	15.334	15.334	(1.026)	1204539	5.00000	4.723
	47 4-Nitrophenol	109	15.218	15.218	(1.018)	208880	10.0000	10.76
	48 2,4-Dinitrotoluene	165	15.403	15.403	(1.031)	560107	10.0000	10.06
	50 Diethylphthalate	149	15.921	15.921	(1.065)	970789	5.00000	5.217
	49 Fluorene	166	16.037	16.037	(1.073)	996414	5.00000	4.875
	51 4-Chlorophenyl-phenylether	204	16.037	16.037	(1.073)	454756	5.00000	4.885
	52 4-Nitroaniline	138	16.145	16.145	(1.080)	471583	10.0000	10.18
	53 4,6-Dinitro-2-methylphenol	198	16.238	16.238	(0.904)	615956	20.0000	18.78
	54 N-Nitrosodiphenylamine	169	16.292	16.292	(0.907)	632934	5.00000	4.692
$	55 2,4,6-Tribromophenol	330	16.569	16.569	(1.109)	185270	7.50000	7.082
	56 4-Bromophenyl-phenylether	248	17.032	17.032	(0.949)	262741	5.00000	4.854
	57 Hexachlorobenzene	284	17.341	17.341	(0.966)	287339	5.00000	4.597
	58 Pentachlorophenol	266	17.697	17.697	(0.986)	144781	10.0000	8.379
*	59 Phenanthrene-d10	188	17.952	17.952	(1.000)	896502	4.00000	
	60 Phenanthrene	178	17.999	17.999	(1.003)	1329342	5.00000	4.714
	61 Anthracene	178	18.092	18.092	(1.008)	1352161	5.00000	5.032
	62 Carbazole	167	18.424	18.424	(1.026)	1208286	5.00000	4.907
	63 Di-n-butylphthalate	149	19.237	19.237	(1.072)	1446534	5.00000	5.307
	64 Fluoranthene	202	20.382	20.382	(0.887)	1428102	5.00000	4.838
	65 Pyrene	202	20.800	20.800	(0.905)	1474226	5.00000	4.683
$	66 Terphenyl-d14	244	21.094	21.094	(0.918)	1214843	5.00000	4.811
	67 Butylbenzylphthalate	149	22.023	22.023	(0.958)	650700	5.00000	5.444
	68 Benzo(a)anthracene	228	22.952	22.952	(0.999)	1471254	5.00000	4.837
*	69 Chrysene-d12	240	22.983	22.983	(1.000)	842481	4.00000	
	70 3,3'-Dichlorobenzidine	252	22.921	22.921	(0.997)	1826173	15.0000	16.32
	71 Chrysene	228	23.029	23.029	(1.002)	1507131	5.00000	4.765
	72 bis(2-Ethylhexyl)phthalate	149	23.053	23.053	(0.960)	958877	5.00000	5.226
*	134 Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	1278043	4.00000	
	73 Di-n-octylphthalate	149	24.028	24.028	(1.000)	1654285	5.00000	4.645
	74 Benzo(b)fluoranthene	252	24.764	24.764	(0.972)	1479497	5.00000	4.952
	75 Benzo(k)fluoranthene	252	24.802	24.802	(0.974)	1600253	5.00000	4.727
	76 Benzo(a)pyrene	252	25.368	25.368	(0.996)	1418896	5.00000	5.123
*	77 Perylene-d12	264	25.476	25.476	(1.000)	915681	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.920	27.920	(1.096)	1773441	5.00000	5.101
	79 Dibenzo(a,h)anthracene	278	27.927	27.927	(1.096)	1477429	5.00000	5.095
	80 Benzo(g,h,i)perylene	276	28.642	28.642	(1.124)	1388452	5.00000	4.981
	90 N-Nitrosodimethylamine	74	4.681	4.681	(0.525)	484417	10.0000	9.907
	91 Aniline	93	8.389	8.389	(0.941)	1259005	10.0000	9.876
	93 Benzidine	184	20.622	20.622	(0.897)	1300015	10.0000	9.014
	103 Pyridine	79	4.673	4.673	(0.524)	826132	10.0000	10.14
	105 1-methylnaphthalene	142	13.005	13.005	(1.144)	844831	5.00000	4.737
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.361	16.361	(1.095)	1009585	5.00000	4.925

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	24.802	24.802	(0.974)	2923203	10.0000	9.678
120 2,3,4,6-Tetrachlorophenol	232	15.674	15.674	(1.049)	217730	5.00000	4.382

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262302.D
Lab Smp Id: SLC0111-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	244122	0.00
27 Naphthalene-d8	943164	471582	1886328	943164	0.00
42 Acenaphthene-d10	501893	250947	1003786	501893	0.00
59 Phenanthrene-d10	896502	448251	1793004	896502	0.00
69 Chrysene-d12	842481	421241	1684962	842481	0.00
134 Di-n-octylphthala	1278043	639022	2556086	1278043	0.00
77 Perylene-d12	915681	457841	1831362	915681	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	0.00
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.48	24.98	25.98	25.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262302.D

Lab ID: SLC0111-ICV1
nt18.i, ABN.m, 26-FEB-2023 12:08

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

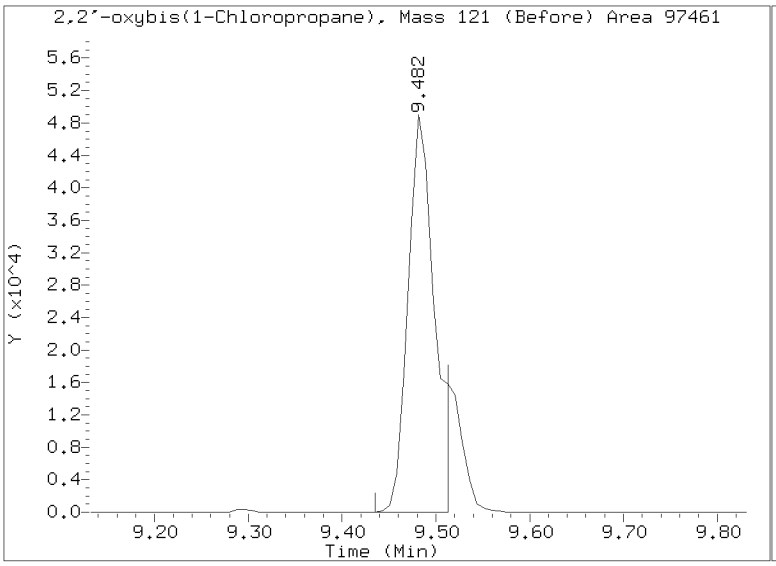
No RRT check. Ccal file.

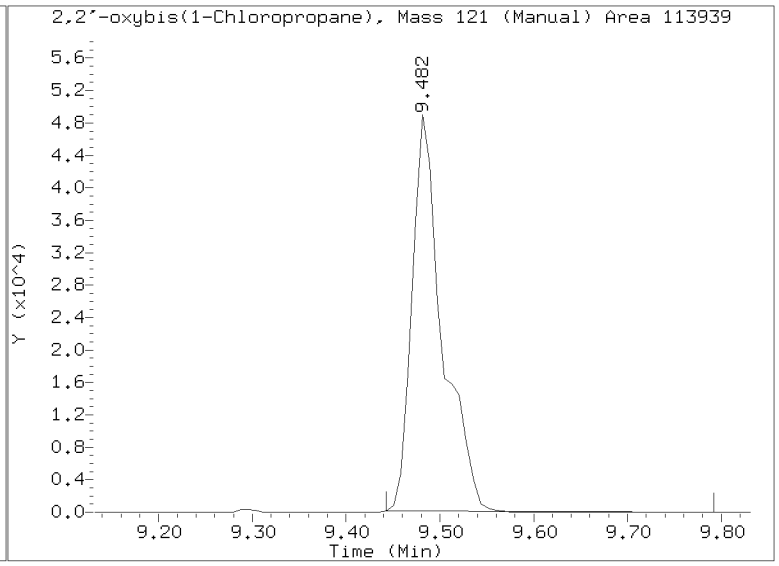
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

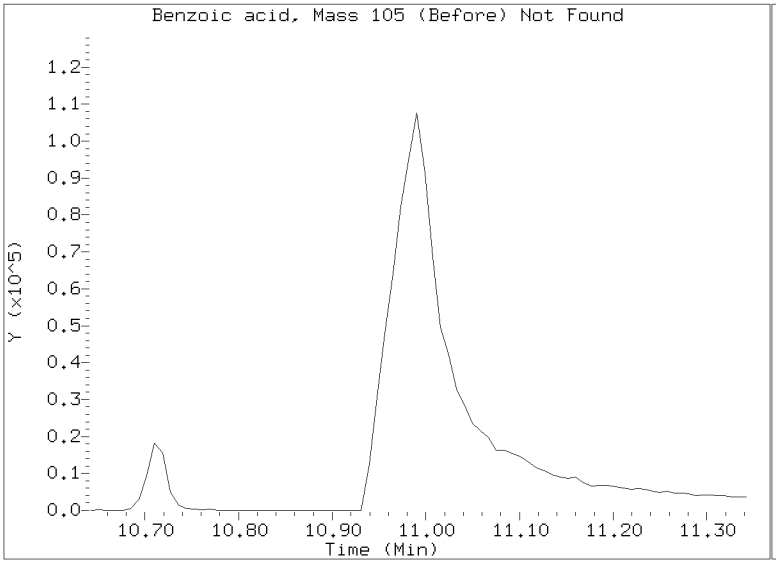
* Only compounds listed in the work order have been verified by the analyst *

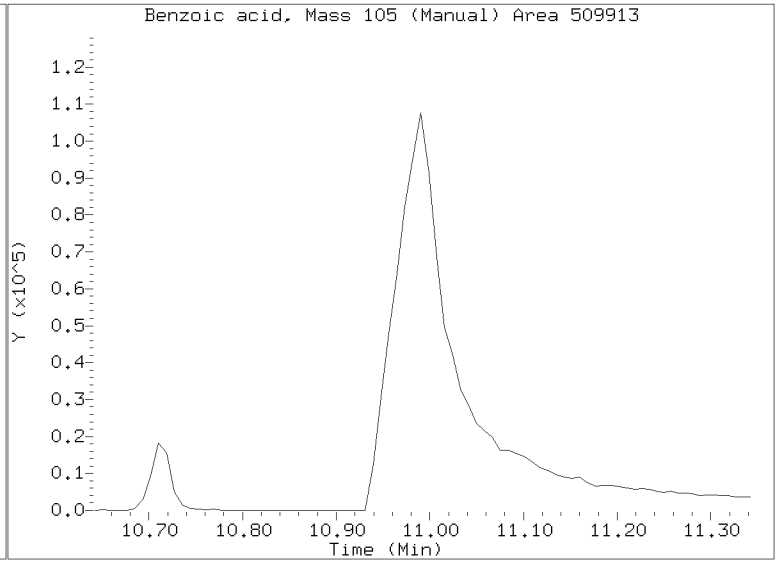
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/NT1802262302.D
Injection Date: 26-FEB-2023 12:08
Lab ID:SLC0111-ICV1 Client ID:
Report Date: 03/10/2023 08:32









Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230226.b

Instrument: nt18.i Date: 26-FEB-2023 Method: ABN.m

INITIAL CAL: 25-FEB-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1802262302.D 26-FEB-2023 12:08

Compound	%D
Benzoic acid	-28.7

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00023
Lab File ID:	NT1802272302.D	Calibration Date:	02/25/2023
Sequence:	SLC0385	Injection Date:	02/27/23
Lab Sample ID:	SLC0385-ICV1	Injection Time:	17:03
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
Phenol	A	5.0000	4.5	1.8350500	1.6624350		-9.4	+/-20	
4-Methylphenol	A	5.0000	4.7	1.4794550	1.4000730		-5.4	+/-20	
Naphthalene	A	5.0000	4.6	1.2296060	1.1326590		-7.9	+/-20	
2-Methylnaphthalene	A	5.0000	4.8	0.8355327	0.7946208		-4.9	+/-20	
Acenaphthylene	A	5.0000	4.9	2.2189590	2.1635870		-2.5	+/-20	
Dimethylphthalate	A	5.0000	4.9	1.4153330	1.3879610		-1.9	+/-20	
Acenaphthene	A	5.0000	4.7	1.4043630	1.3281800		-5.4	+/-20	
Dibenzofuran	A	5.0000	4.8	2.0326750	1.9410160		-4.5	+/-20	
Fluorene	A	5.0000	5.6	1.6289200	1.8235590		11.9	+/-20	
Phenanthrene	A	5.0000	4.6	1.2581570	1.1698200		-7.0	+/-20	
Anthracene	A	5.0000	4.9	1.1989790	1.1718220		-2.3	+/-20	
Fluoranthene	A	5.0000	5.1	1.4014480	1.4278770		1.9	+/-20	
Pyrene	A	5.0000	4.8	1.4946680	1.4493930		-3.0	+/-20	
Butylbenzylphthalate	A	5.0000	6.1	0.5675390	0.6910073		21.8	+/-20	*
Benzo(a)anthracene	A	5.0000	5.0	1.4440750	1.4329480		-0.8	+/-20	
Chrysene	A	5.0000	4.8	1.5016220	1.4543960		-3.1	+/-20	
bis(2-Ethylhexyl)phthalate	A	5.0000	5.2	0.5742806	0.5922899		3.1	+/-20	
Benzofluoranthenes, Total	A	10.000	10.1	1.3194130	1.3327980		1.0	+/-20	
Benzo(a)pyrene	A	5.0000	5.2	1.2097740	1.2579630		4.0	+/-20	
Indeno(1,2,3-cd)pyrene	A	5.0000	5.1	1.5187130	1.5351790		1.1	+/-20	
Dibenzo(a,h)anthracene	A	5.0000	5.0	1.2666050	1.2646200		-0.2	+/-20	
Benzo(g,h,i)perylene	A	5.0000	4.9	1.2175640	1.1942970		-1.9	+/-20	
2-Fluorophenol	A	7.5000	7.25	1.3647030	1.3182790		-3.4	+/-20	
Phenol-d5	A	7.5000	6.92	1.7637020	1.6272180		-7.7	+/-20	
2-Chlorophenol-d4	A	7.5000	7.43	1.5347490	1.5199500		-1.0	+/-20	
1,2-Dichlorobenzene-d4	A	5.0000	4.68	1.0880180	1.0176790		-6.5	+/-20	
Nitrobenzene-d5	A	5.0000	4.66	0.4262932	0.3968985		-6.9	+/-20	
2-Fluorobiphenyl	A	5.0000	4.62	1.6864720	1.5591500		-7.5	+/-20	
2,4,6-Tribromophenol	A	7.5000	6.95	0.2004134	0.1930393		-7.3	+/-20	
p-Terphenyl-d14	A	5.0000	4.72	1.1988160	1.1322690		-5.6	+/-20	

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272302.D

Date : 27-FEB-2023 17:03

Client ID:

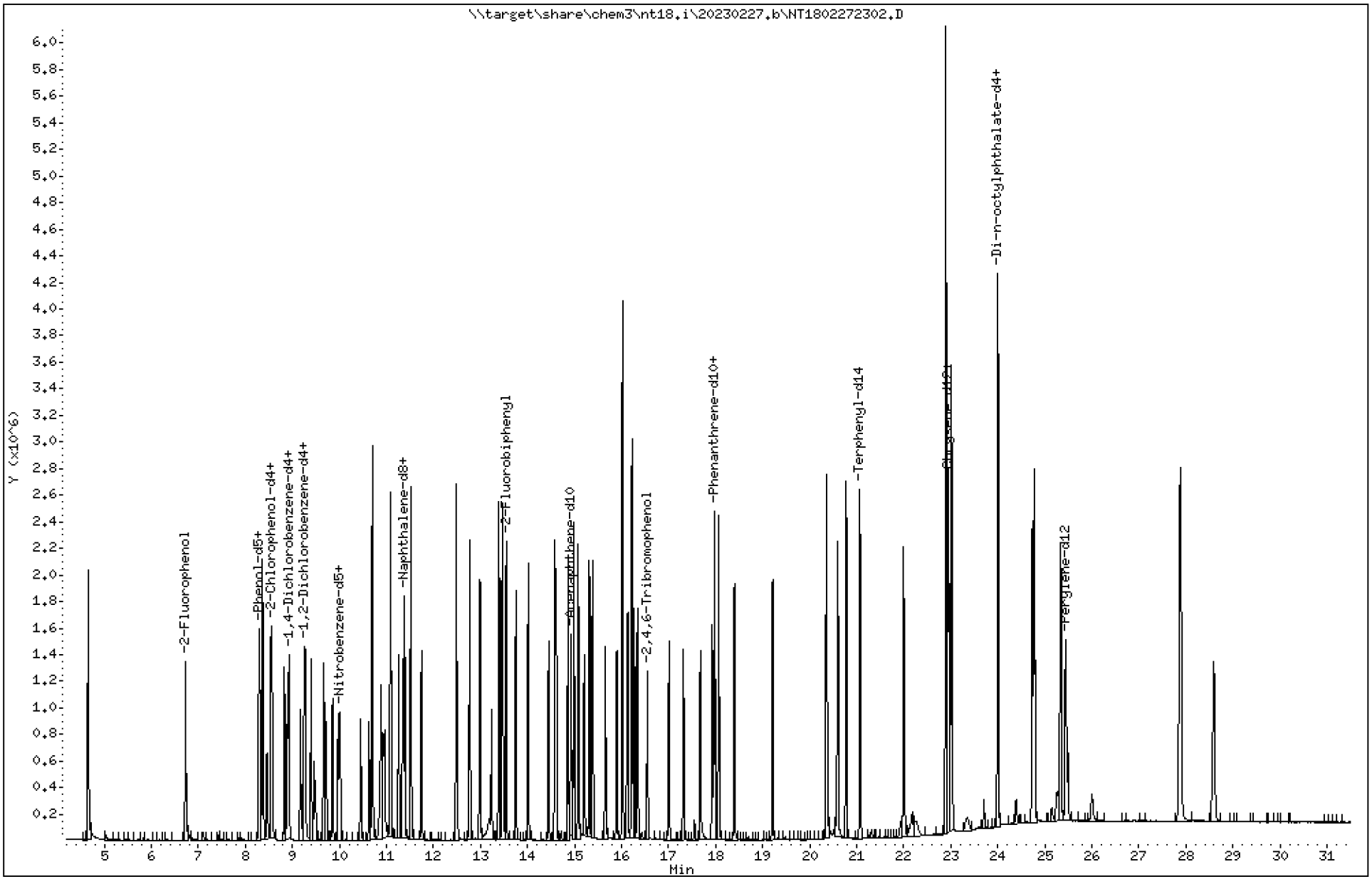
Instrument: nt18.i

Sample Info: SLC0385-ICV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230227.b\NT1802272302.D
Lab Smp Id: SLC0385-ICV1
Inj Date : 27-FEB-2023 17:03
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0385-ICV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230227.b\ABN.m
Meth Date : 24-Mar-2023 10:19 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							AMOUNTS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.728	6.728	(0.757)	666783	7.50000	7.245
$	2 Phenol-d5	99	8.288	8.288	(0.932)	823044	7.50000	6.920
	3 Phenol	94	8.304	8.304	(0.934)	560571	5.00000	4.530
$	5 2-Chlorophenol-d4	132	8.543	8.543	(0.961)	768788	7.50000	7.428
	4 Bis(2-Chloroethyl)ether	93	8.458	8.458	(0.951)	376734	5.00000	4.482
	6 2-Chlorophenol	128	8.566	8.566	(0.963)	512087	5.00000	4.819
	7 1,3-Dichlorobenzene	146	8.829	8.829	(0.993)	524925	5.00000	4.670
*	8 1,4-Dichlorobenzene-d4	152	8.891	8.891	(1.000)	269759	4.00000	
	9 1,4-Dichlorobenzene	146	8.922	8.922	(1.003)	526968	5.00000	4.600
$	10 1,2-Dichlorobenzene-d4	152	9.248	9.248	(1.040)	343160	5.00000	4.677
	12 1,2-Dichlorobenzene	146	9.271	9.271	(1.043)	512128	5.00000	4.606
	11 Benzyl alcohol	108	9.170	9.170	(1.031)	291802	5.00000	4.959
	14 2,2'-oxybis(1-Chloropropane)	121	9.458	9.458	(1.064)	120374	5.00000	4.620(M)
	13 2-Methylphenol	108	9.396	9.396	(1.057)	451915	5.00000	4.721
	17 Hexachloroethane	117	9.854	9.854	(1.108)	219021	5.00000	4.939
	16 N-Nitroso-di-n-propylamine	70	9.722	9.722	(1.093)	316572	5.00000	4.499
	15 4-Methylphenol	108	9.667	9.667	(1.087)	472103	5.00000	4.732
$	18 Nitrobenzene-d5	82	9.970	9.970	(0.879)	514499	5.00000	4.655
	19 Nitrobenzene	77	10.009	10.009	(0.882)	476476	5.00000	4.479
	20 Isophorone	82	10.451	10.451	(0.921)	614086	5.00000	4.524
	21 2-Nitrophenol	139	10.625	10.625	(0.937)	313839	5.00000	6.007
	22 2,4-Dimethylphenol	107	10.693	10.693	(0.943)	956825	10.0000	9.610
	23 Bis(2-Chloroethoxy)methane	93	10.879	10.879	(0.959)	427022	5.00000	4.594
	24 Benzoic acid	105	10.964	10.964	(0.967)	1088736	20.0000	26.60(M)
	25 2,4-Dichlorophenol	162	11.083	11.083	(0.977)	822036	10.0000	9.417
	26 1,2,4-Trichlorobenzene	180	11.264	11.264	(0.993)	501057	5.00000	5.314
*	27 Naphthalene-d8	136	11.342	11.342	(1.000)	1037039	4.00000	
	28 Naphthalene	128	11.388	11.388	(1.004)	1468265	5.00000	4.606
	29 4-Chloroaniline	127	11.519	11.519	(1.016)	1235960	10.0000	9.729
	30 Hexachlorobutadiene	225	11.743	11.743	(1.035)	259941	5.00000	4.704
	31 4-Chloro-3-methylphenol	107	12.486	12.486	(1.101)	838352	10.0000	10.03
	32 2-Methylnaphthalene	142	12.765	12.765	(1.125)	1030066	5.00000	4.755
	33 Hexachlorocyclopentadiene	237	13.229	13.229	(0.886)	214926	10.0000	5.564

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	13.392	13.392	(0.897)	581968	10.0000	10.82
35	2,4,5-Trichlorophenol	196	13.461	13.461	(0.902)	636811	10.0000	10.86
$ 36	2-Fluorobiphenyl	172	13.546	13.546	(0.908)	1083919	5.00000	4.623
37	2-Chloronaphthalene	162	13.748	13.748	(0.921)	861187	5.00000	4.700
38	2-Nitroaniline	65	14.011	14.011	(0.939)	528696	10.0000	9.220
39	Dimethylphthalate	163	14.444	14.444	(0.968)	964909	5.00000	4.903
40	Acenaphthylene	152	14.607	14.607	(0.979)	1504123	5.00000	4.875
41	2,6-Dinitrotoluene	165	14.584	14.584	(0.977)	462889	10.0000	10.26
* 42	Acenaphthene-d10	164	14.924	14.924	(1.000)	556159	4.00000	
43	3-Nitroaniline	138	14.862	14.862	(0.996)	545599	10.0000	10.22
44	Acenaphthene	153	14.986	14.986	(1.004)	923349	5.00000	4.729
45	2,4-Dinitrophenol	184	15.079	15.079	(1.010)	503216	20.0000	22.70
46	Dibenzofuran	168	15.310	15.310	(1.026)	1349392	5.00000	4.775
47	4-Nitrophenol	109	15.202	15.202	(1.019)	278685	10.0000	12.96
48	2,4-Dinitrotoluene	165	15.388	15.388	(1.031)	635143	10.0000	10.30
50	Diethylphthalate	149	15.898	15.898	(1.065)	1117036	5.00000	5.417
49	Fluorene	166	16.014	16.014	(1.073)	1267736	5.00000	5.597
51	4-Chlorophenyl-phenylether	204	16.014	16.014	(1.073)	569744	5.00000	5.523
52	4-Nitroaniline	138	16.130	16.130	(1.081)	523585	10.0000	10.20
53	4,6-Dinitro-2-methylphenol	198	16.222	16.222	(0.905)	758254	20.0000	20.25
54	N-Nitrosodiphenylamine	169	16.268	16.268	(0.907)	710908	5.00000	4.626
$ 55	2,4,6-Tribromophenol	330	16.546	16.546	(1.109)	201301	7.50000	6.950
56	4-Bromophenyl-phenylether	248	17.001	17.001	(0.948)	270740	5.00000	4.390
57	Hexachlorobenzene	284	17.318	17.318	(0.966)	296009	5.00000	4.157
58	Pentachlorophenol	266	17.674	17.674	(0.986)	249956	10.0000	12.33
* 59	Phenanthrene-d10	188	17.929	17.929	(1.000)	1021294	4.00000	
60	Phenanthrene	178	17.975	17.975	(1.003)	1493413	5.00000	4.649
61	Anthracene	178	18.068	18.068	(1.008)	1495969	5.00000	4.887
62	Carbazole	167	18.401	18.401	(1.026)	1370073	5.00000	4.884
63	Di-n-butylphthalate	149	19.213	19.213	(1.072)	1732518	5.00000	5.580
64	Fluoranthene	202	20.358	20.358	(0.887)	1646099	5.00000	5.094
65	Pyrene	202	20.776	20.776	(0.905)	1670904	5.00000	4.849
$ 66	Terphenyl-d14	244	21.070	21.070	(0.918)	1305314	5.00000	4.722
67	Butylbenzylphthalate	149	21.999	21.999	(0.958)	796614	5.00000	6.088
68	Benzo(a)anthracene	228	22.929	22.929	(0.999)	1651945	5.00000	4.961
* 69	Chrysene-d12	240	22.960	22.960	(1.000)	922264	4.00000	
70	3,3'-Dichlorobenzidine	252	22.898	22.898	(0.997)	2043245	15.0000	16.68
71	Chrysene	228	23.006	23.006	(1.002)	1676671	5.00000	4.843
72	bis(2-Ethylhexyl)phthalate	149	23.029	23.029	(0.960)	1192934	5.00000	5.157
* 134	Di-n-octylphthalate-d4	153	23.997	23.997	(1.000)	1611284	4.00000	
73	Di-n-octylphthalate	149	24.005	24.005	(1.000)	2096923	5.00000	4.670
74	Benzo(b)fluoranthene	252	24.740	24.740	(0.972)	1578379	5.00000	5.101
75	Benzo(k)fluoranthene	252	24.779	24.779	(0.974)	1747273	5.00000	4.983
76	Benzo(a)pyrene	252	25.336	25.336	(0.996)	1491248	5.00000	5.199
* 77	Perylene-d12	264	25.445	25.445	(1.000)	948357	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.881	27.881	(1.096)	1819872	5.00000	5.054
79	Dibenzo(a,h)anthracene	278	27.889	27.889	(1.096)	1499139	5.00000	4.992
80	Benzo(g,h,i)perylene	276	28.595	28.595	(1.124)	1415775	5.00000	4.904
90	N-Nitrosodimethylamine	74	4.658	4.658	(0.524)	463570	10.0000	8.580
91	Aniline	93	8.365	8.365	(0.941)	1267969	10.0000	9.001
93	Benzidine	184	20.598	20.598	(0.897)	1268678	10.0000	8.036
103	Pyridine	79	4.650	4.650	(0.523)	734907	10.0000	8.165
105	1-methylnaphthalene	142	12.989	12.989	(1.145)	927213	5.00000	4.728
111	Azobenzene (1,2-DP-Hydrazine)	77	16.338	16.338	(1.095)	1045548	5.00000	4.603

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	24.779	24.779	(0.974)	3159920	10.0000	10.10
120 2,3,4,6-Tetrachlorophenol	232	15.651	15.651	(1.049)	301584	5.00000	5.430

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272302.D
Lab Smp Id: SLC0385-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230227.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	269759	26.58
27 Naphthalene-d8	806946	403473	1613892	1037039	28.51
42 Acenaphthene-d10	424249	212125	848498	556159	31.09
59 Phenanthrene-d10	758987	379494	1517974	1021294	34.56
69 Chrysene-d12	685237	342619	1370474	922264	34.59
134 Di-n-octylphthala	1075410	537705	2150820	1611284	49.83
77 Perylene-d12	762553	381277	1525106	948357	24.37

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.89	-0.26
27 Naphthalene-d8	11.37	10.87	11.87	11.34	-0.20
42 Acenaphthene-d10	14.94	14.44	15.44	14.92	-0.10
59 Phenanthrene-d10	17.95	17.45	18.45	17.93	-0.13
69 Chrysene-d12	22.98	22.48	23.48	22.96	-0.10
134 Di-n-octylphthala	24.02	23.52	24.52	24.00	-0.10
77 Perylene-d12	25.47	24.97	25.97	25.45	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272302.D

Lab ID: SLC0385-ICV1
nt18.i, ABN.m, 27-FEB-2023 17:03

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

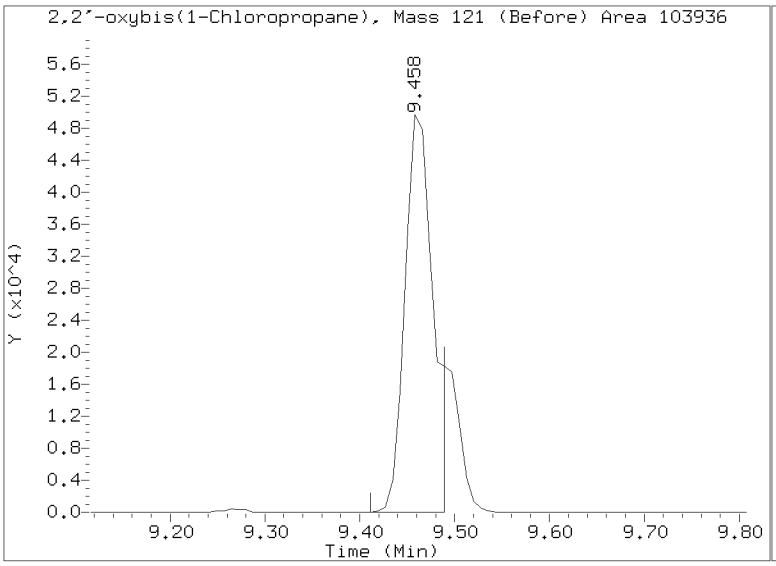
No RRT check. Ccal file.

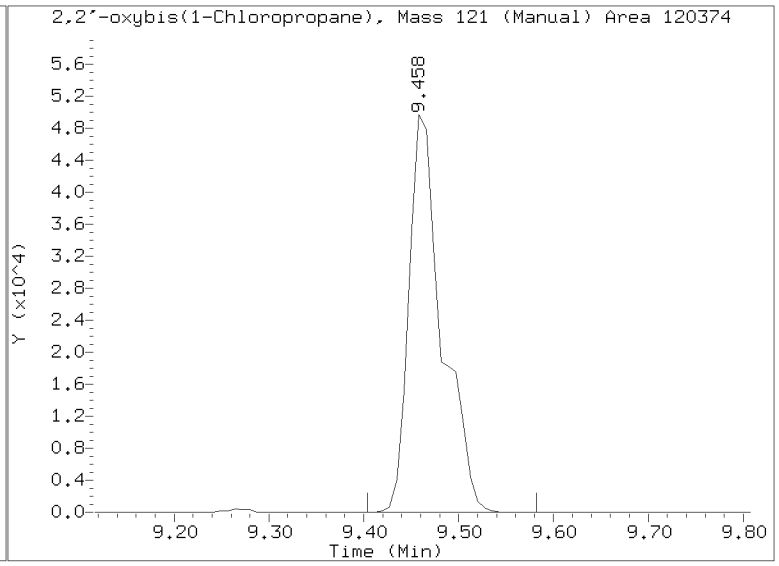
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

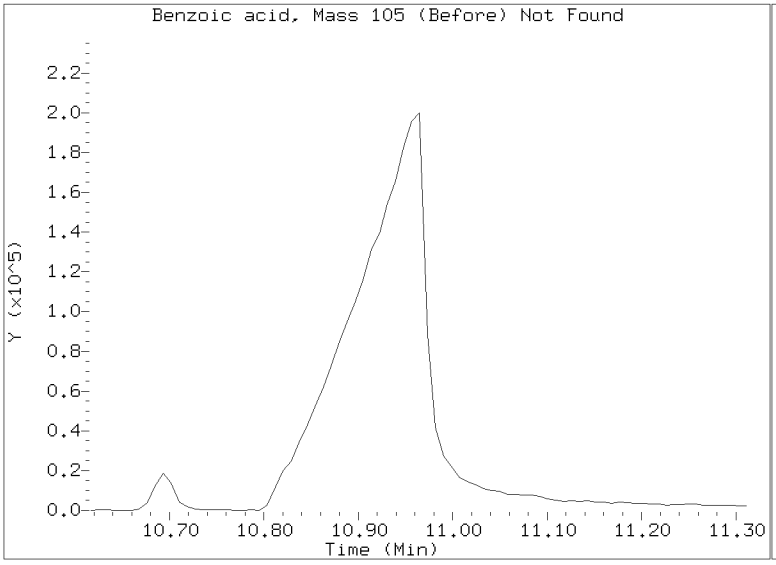
* Only compounds listed in the work order have been verified by the analyst *

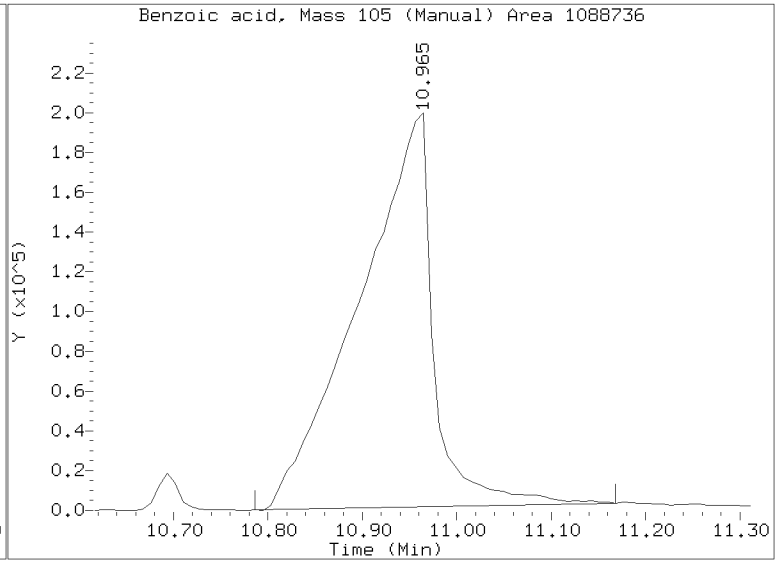
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230227.b/NT1802272302.D
Injection Date: 27-FEB-2023 17:03
Lab ID:SLC0385-ICV1 Client ID:
Report Date: 03/24/2023 10:41









APPROVED

By Deenay Dunmore at 10:44 am, Mar 24, 2023

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230227.b

Instrument: nt18.i Date: 27-FEB-2023 Method: ABN.m

INITIAL CAL: 25-FEB-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1802272302.D 27-FEB-2023 17:03

Compound	%D
Benzoic acid	33.0
Hexachlorocyclopentadiene	-44.4
4-Nitrophenol	29.55
Pentachlorophenol	23.3
Butylbenzylphthalate	21.76

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00023
Lab File ID:	NT1802252312.D	Calibration Date:	02/25/2023
Sequence:	SLC0099	Injection Date:	02/26/23
Lab Sample ID:	SLC0099-SCV1	Injection Time:	04:06
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Phenol	A	5.0000	4.1	1.8350500	1.5078630		-17.8	+/-20	
bis(2-chloroethyl) ether	A	5.0000	5.0	1.2463090	1.2369570		-0.8	+/-20	
2-Chlorophenol	A	5.0000	4.2	1.5757460	1.3131550		-16.7	+/-20	
1,3-Dichlorobenzene	A	5.0000	4.6	1.6666210	1.5382730		-7.7	+/-20	
1,4-Dichlorobenzene	A	5.0000	4.6	1.6988470	1.5699520		-7.6	+/-20	
1,2-Dichlorobenzene	A	5.0000	4.5	1.6486950	1.4915910		-9.5	+/-20	
Benzyl Alcohol	A	5.0000	4.7	0.8725275	0.8160851		-6.5	+/-20	
2,2'-Oxybis(1-chloropropane)	A	5.0000	5.2	0.3863689	0.4021971		4.1	+/-20	
2-Methylphenol	A	5.0000	4.0	1.4194470	1.1341620		-20.1	+/-20	*
Hexachloroethane	A	5.0000	4.8	0.6576166	0.6272140		-4.6	+/-20	
N-Nitroso-di-n-Propylamine	A	5.0000	4.8	1.0434250	1.0015780		-4.0	+/-20	
4-Methylphenol	A	5.0000	4.1	1.4794550	1.2148680		-17.9	+/-20	
Nitrobenzene	A	5.0000	4.7	0.4103525	0.3850530		-6.2	+/-20	
Isophorone	A	5.0000	6.4	0.5235229	0.6735896		28.7	+/-20	*
2-Nitrophenol	A	5.0000	4.4	0.2015348	0.1789282		-11.2	+/-20	
2,4-Dimethylphenol	A	5.0000	3.5	0.3840249	0.2657104		-30.8	+/-20	*
Bis(2-Chloroethoxy)methane	A	5.0000	5.5	0.3584943	0.3935403		9.8	+/-20	
2,4-Dichlorophenol	A	5.0000	4.6	0.3367066	0.3111828		-7.6	+/-20	
1,2,4-Trichlorobenzene	A	5.0000	4.4	0.3636639	0.3228158		-11.2	+/-20	
Naphthalene	A	5.0000	4.5	1.2296060	1.1121960		-9.5	+/-20	
Benzoic acid	A	10.000	2.6	0.1055197	0.0383637		-73.8	+/-20	*
4-Chloroaniline	A	5.0000	3.5	0.4900285	0.3389800		-30.8	+/-20	*
Hexachlorobutadiene	A	5.0000	4.7	0.2131581	0.1984948		-6.9	+/-20	
4-Chloro-3-Methylphenol	A	5.0000	4.4	0.3222702	0.2850384		-11.6	+/-20	
2-Methylnaphthalene	A	5.0000	4.2	0.8355327	0.7061011		-15.5	+/-20	
Hexachlorocyclopentadiene	A	5.0000	3.2	0.2241045	0.1757766		-36.0	+/-20	*
2,4,6-Trichlorophenol	A	5.0000	4.1	0.3868922	0.3209326		-17.0	+/-20	
2,4,5-Trichlorophenol	A	5.0000	4.1	0.4215997	0.3456819		-18.0	+/-20	
2-Chloronaphthalene	A	5.0000	4.6	1.3177950	1.1996670		-9.0	+/-20	
2-Nitroaniline	A	5.0000	4.5	0.4124176	0.3707384		-10.1	+/-20	
Acenaphthylene	A	5.0000	4.6	2.2189590	2.0375170		-8.2	+/-20	
Dimethylphthalate	A	5.0000	4.7	1.4153330	1.3414120		-5.2	+/-20	
2,6-Dinitrotoluene	A	5.0000	4.8	0.3244689	0.3147201		-3.0	+/-20	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00023
Lab File ID:	NT1802252312.D	Calibration Date:	02/25/2023
Sequence:	SLC0099	Injection Date:	02/26/23
Lab Sample ID:	SLC0099-SCV1	Injection Time:	04:06
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Acenaphthene	A	5.0000	4.5	1.4043630	1.2722930		-9.4	+/-20	
3-Nitroaniline	A	5.0000	4.6	0.3838108	0.3564428		-7.1	+/-20	
2,4-Dinitrophenol	A	5.0000	1.4	0.1204498	0.0431719		-71.5	+/-20	*
Dibenzofuran	A	5.0000	4.4	2.0326750	1.7705020		-12.9	+/-20	
4-Nitrophenol	A	5.0000	4.3	0.1547161	0.1344755		-13.1	+/-20	
2,4-Dinitrotoluene	A	5.0000	4.6	0.4435218	0.4056243		-8.5	+/-20	
Fluorene	A	5.0000	5.2	1.6289200	1.6882200		3.6	+/-20	
4-Chlorophenylphenyl ether	A	5.0000	5.0	0.7419635	0.7383254		-0.5	+/-20	
Diethyl phthalate	A	5.0000	5.3	1.4830190	1.5616130		5.3	+/-20	
4-Nitroaniline	A	5.0000	4.6	0.3692398	0.3397646		-8.0	+/-20	
4,6-Dinitro-2-methylphenol	A	5.0000	3.6	0.1305617	0.1029209		-28.1	+/-20	*
N-Nitrosodiphenylamine	A	5.0000	4.6	0.6018703	0.5540064		-8.0	+/-20	
4-Bromophenyl phenyl ether	A	5.0000	4.9	0.2415300	0.2359464		-2.3	+/-20	
Hexachlorobenzene	A	5.0000	4.4	0.2788926	0.2466439		-11.6	+/-20	
Pentachlorophenol	A	5.0000	2.5	0.0630235	0.0363443		-50.9	+/-20	*
Phenanthrene	A	5.0000	4.4	1.2581570	1.1062990		-12.1	+/-20	
Anthracene	A	5.0000	4.0	1.1989790	0.9492643		-20.8	+/-20	*
Carbazole	A	5.0000	4.5	1.0986680	0.9806045		-10.7	+/-20	
Di-n-Butylphthalate	A	5.0000	5.2	1.2161160	1.2547820		3.2	+/-20	
Fluoranthene	A	5.0000	4.8	1.4014480	1.3486800		-3.8	+/-20	
Pyrene	A	5.0000	4.6	1.4946680	1.3628630		-8.8	+/-20	
Butylbenzylphthalate	A	5.0000	5.3	0.5675390	0.6040419		6.4	+/-20	
Benzo(a)anthracene	A	5.0000	4.5	1.4440750	1.2914990		-10.6	+/-20	
3,3'-Dichlorobenzidine	A	10.000	10.0	0.5313791	0.5313882		0.002	+/-20	
Chrysene	A	5.0000	4.4	1.5016220	1.3297050		-11.4	+/-20	
bis(2-Ethylhexyl)phthalate	A	5.0000	5.2	0.5742806	0.6008482		4.6	+/-20	
Di-n-Octylphthalate	A	5.0000	4.8	1.1145960	1.0728260		-3.7	+/-20	
Benzofluoranthenes, Total	A	10.000	9.0	1.3194130	1.1899480		-9.8	+/-20	
Benzo(a)pyrene	A	5.0000	4.6	1.2097740	1.1105140		-8.2	+/-20	
Indeno(1,2,3-cd)pyrene	A	5.0000	4.6	1.5187130	1.4081700		-7.3	+/-20	
Dibenzo(a,h)anthracene	A	5.0000	4.6	1.2666050	1.1601480		-8.4	+/-20	
Benzo(g,h,i)perylene	A	5.0000	4.6	1.2175640	1.1184810		-8.1	+/-20	
1-Methylnaphthalene	A	5.0000	4.5	0.7563647	0.6786138		-10.3	+/-20	

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

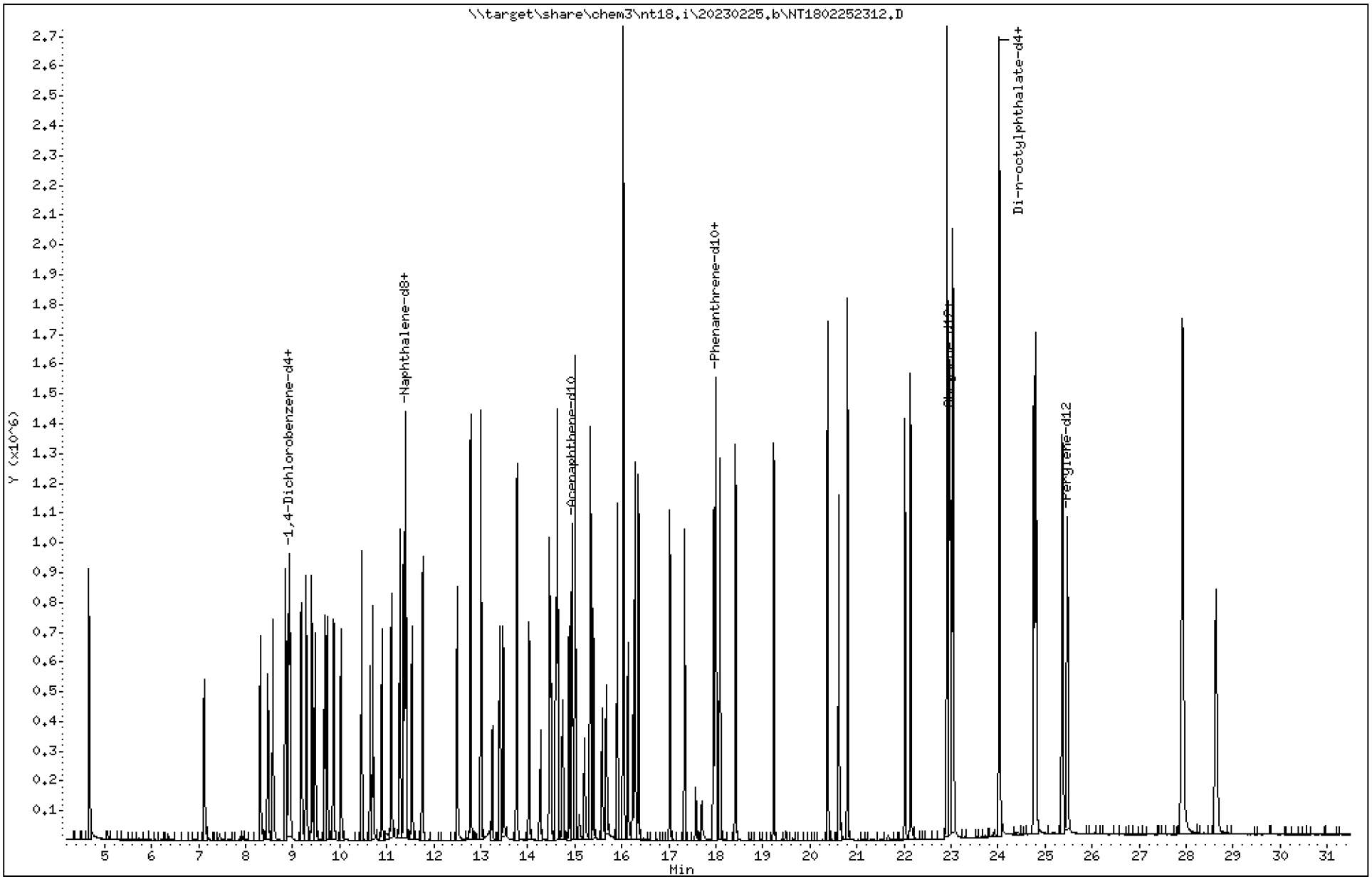
Instrument: nt18.i

Sample Info: SLC0099-SCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

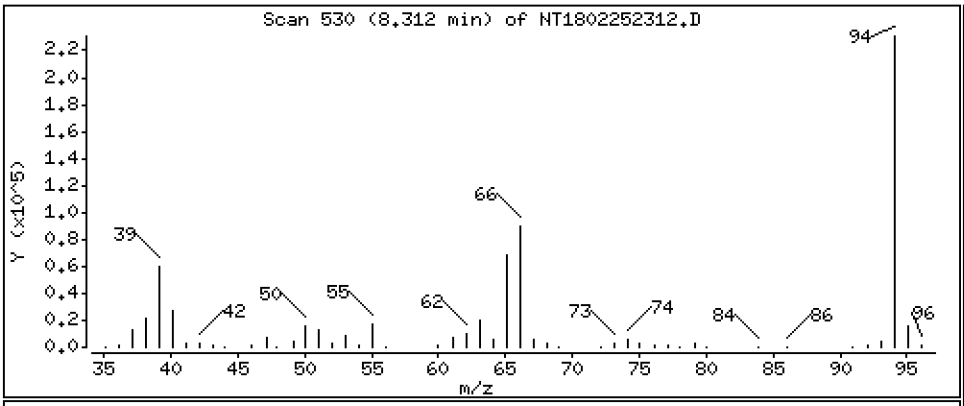
Operator: VTS

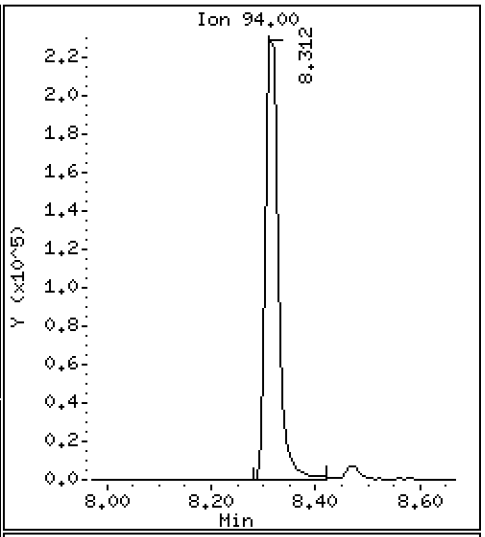
Column phase: ZB-5msi

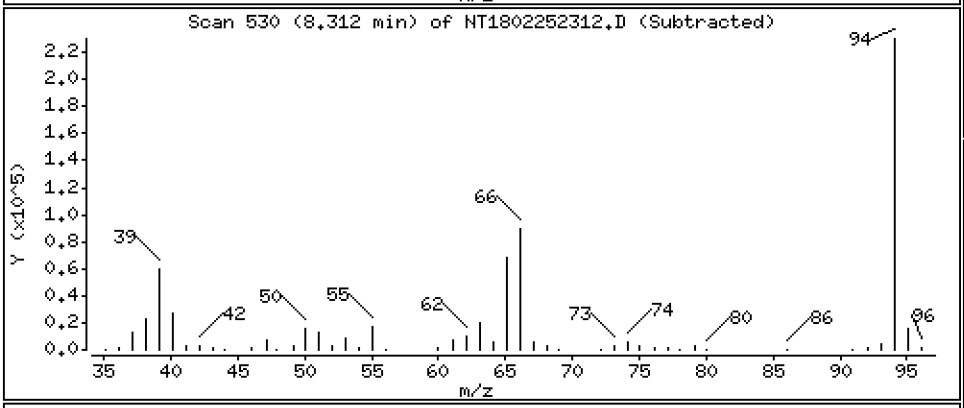
Column diameter: 0.25

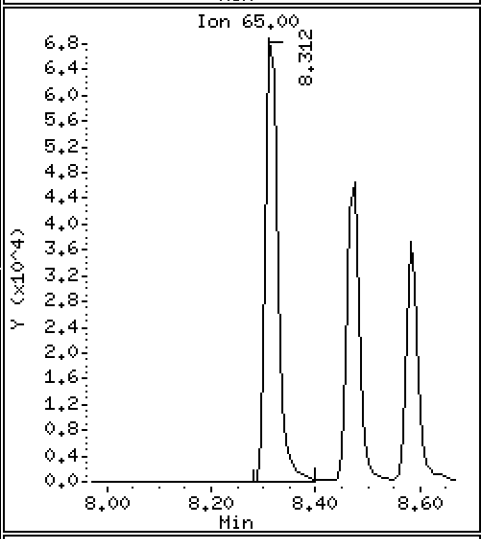
3 Phenol

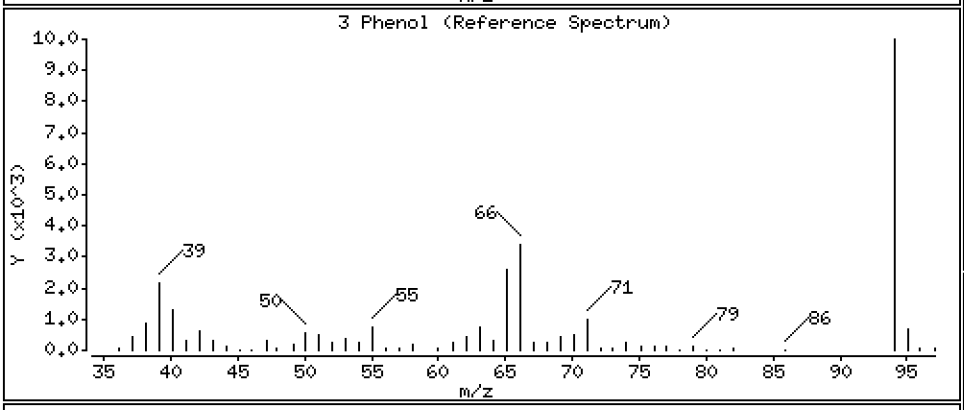
Concentration: 4.109 ug/mL

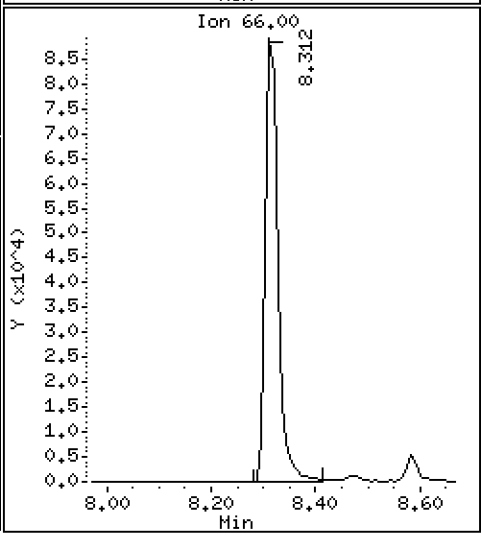


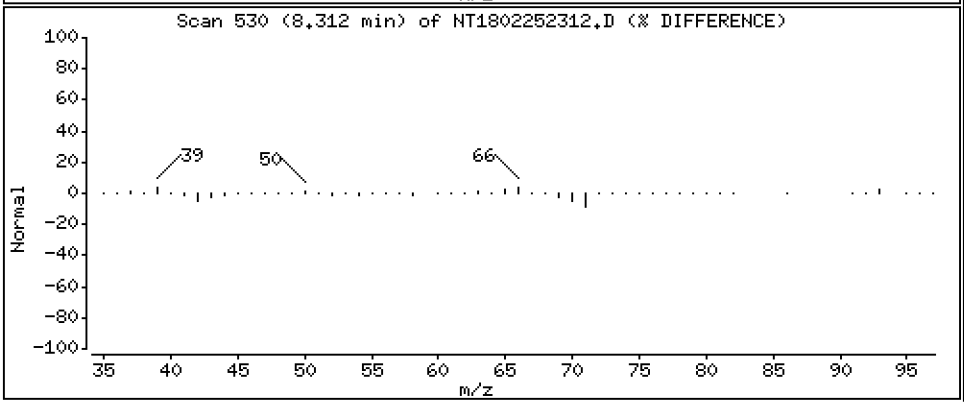












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

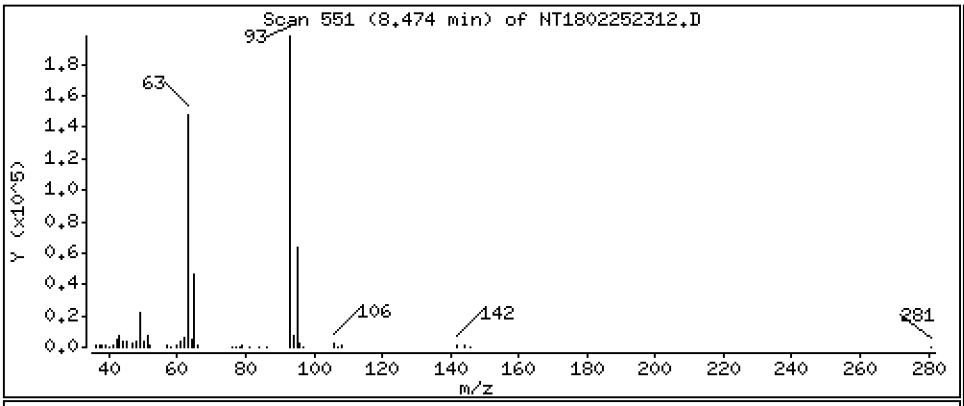
Operator: VTS

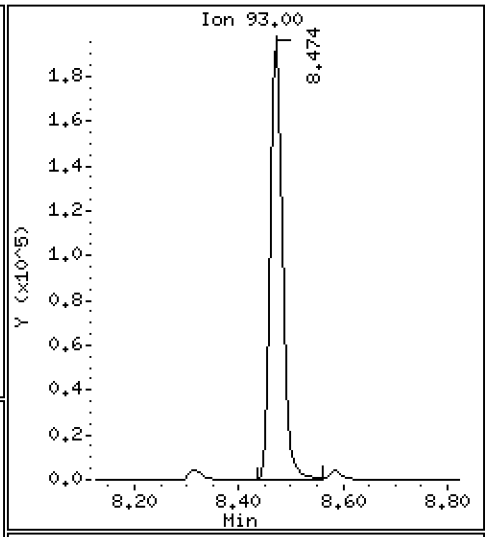
Column phase: ZB-5msi

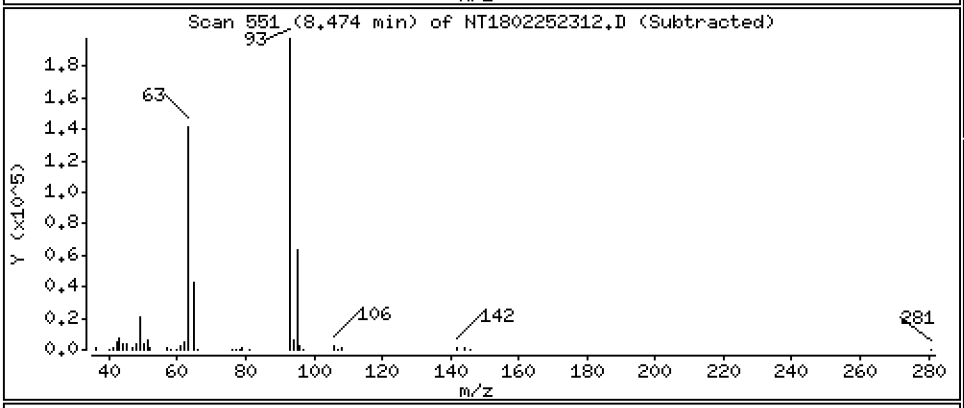
Column diameter: 0.25

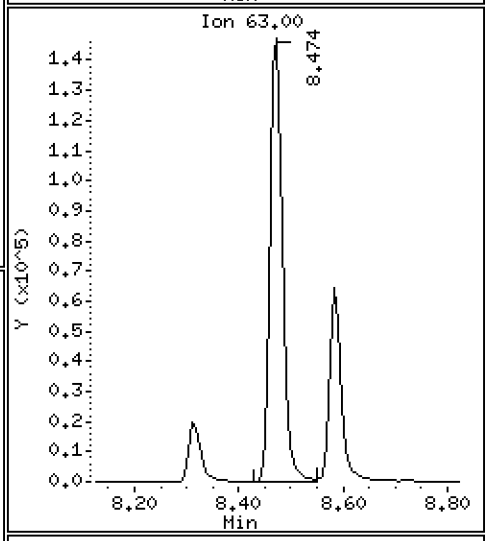
4 Bis(2-Chloroethyl)ether

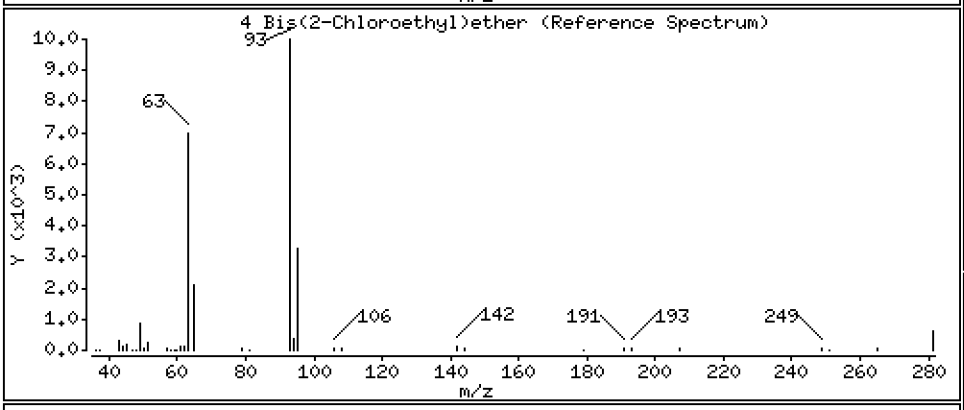
Concentration: 4.962 ug/mL

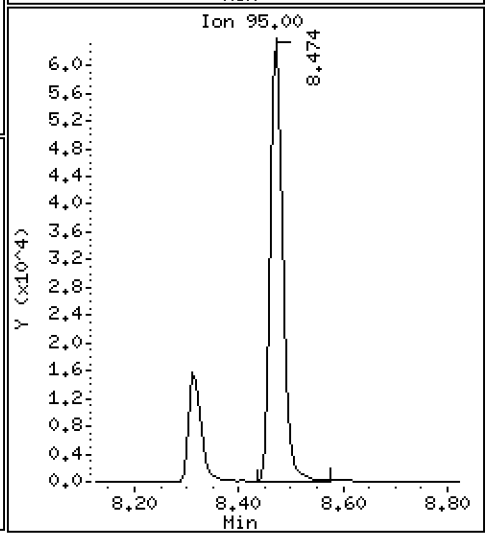


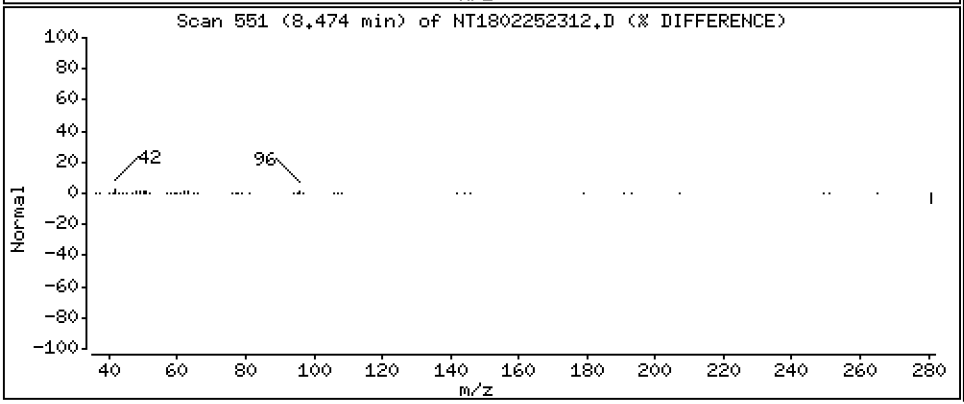












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

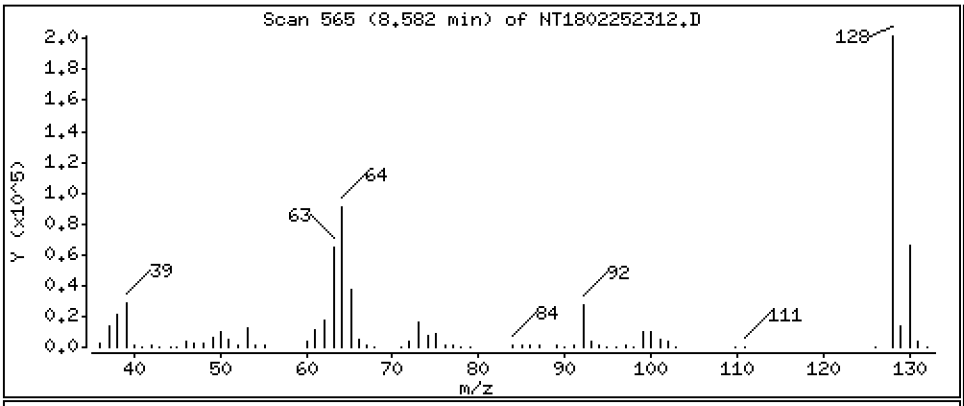
Operator: VTS

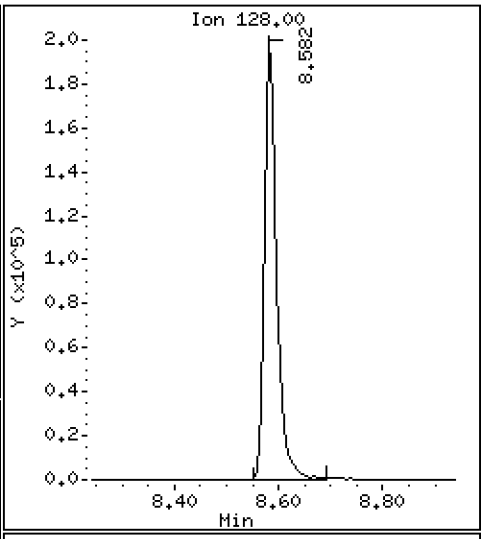
Column phase: ZB-5msi

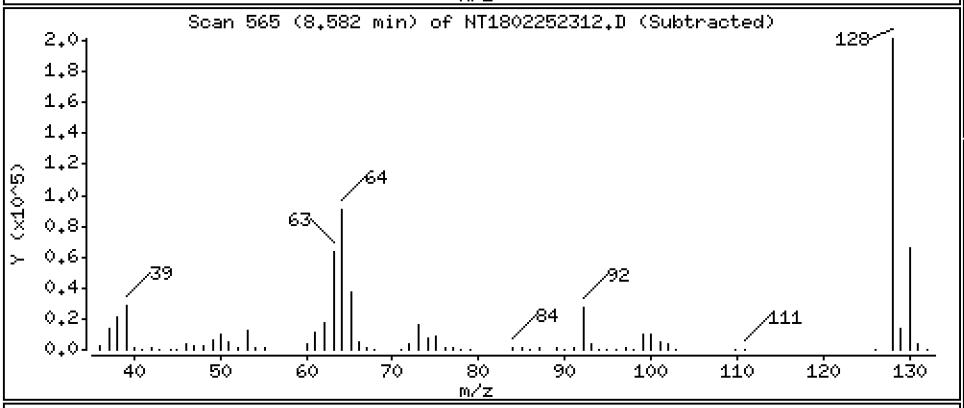
Column diameter: 0.25

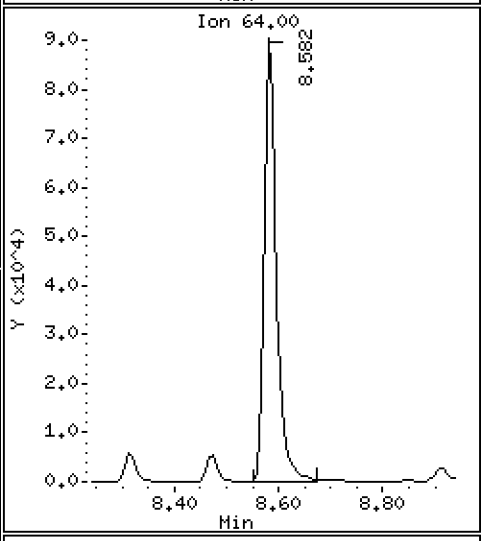
6 2-Chlorophenol

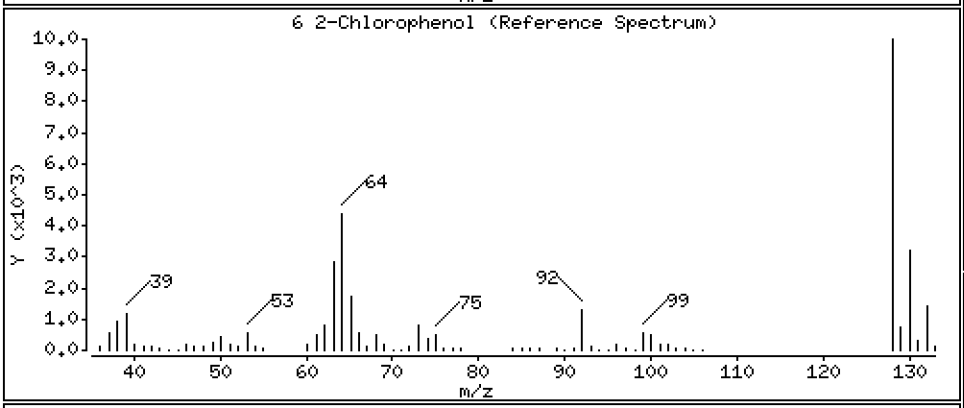
Concentration: 4.167 ug/mL

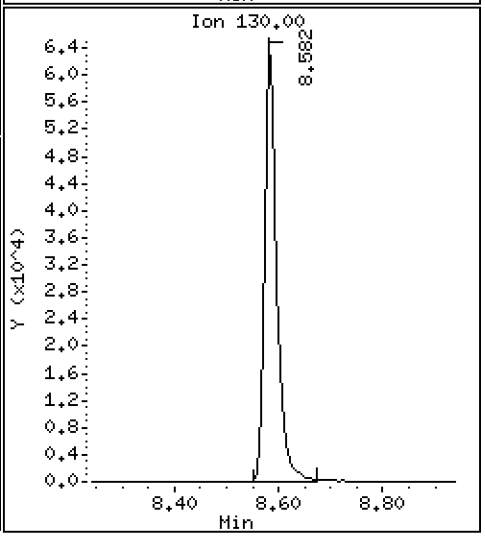


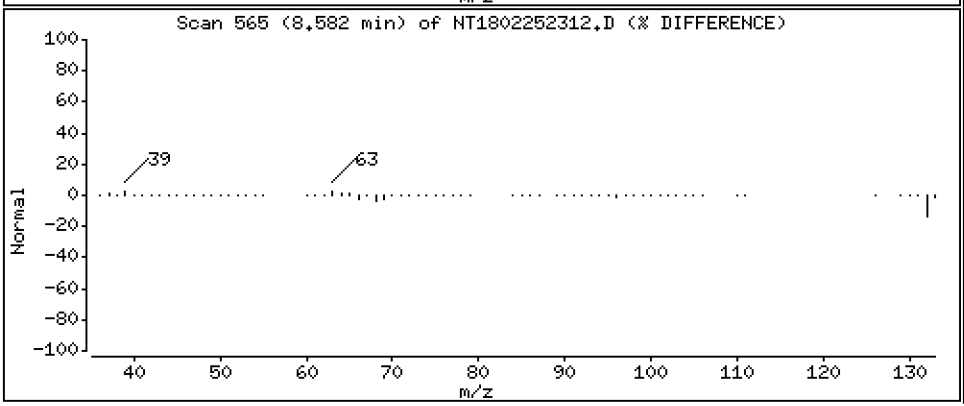












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

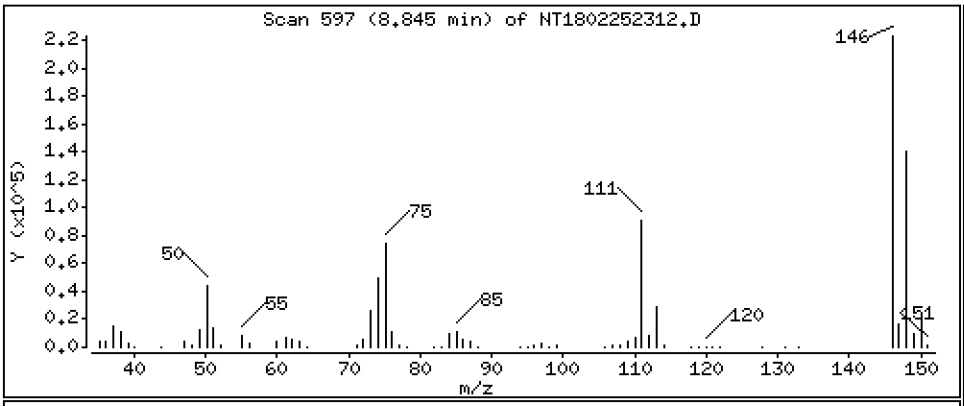
Operator: VTS

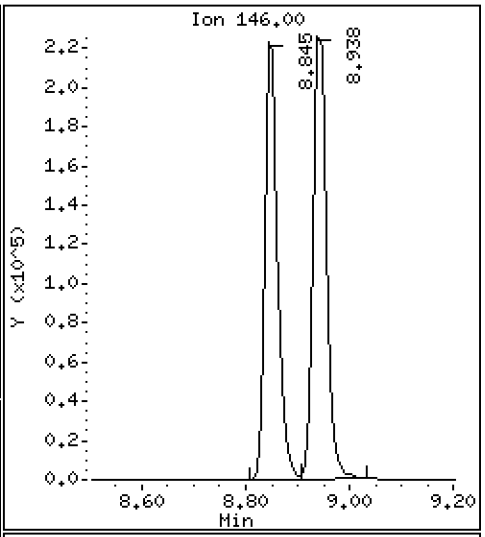
Column phase: ZB-5msi

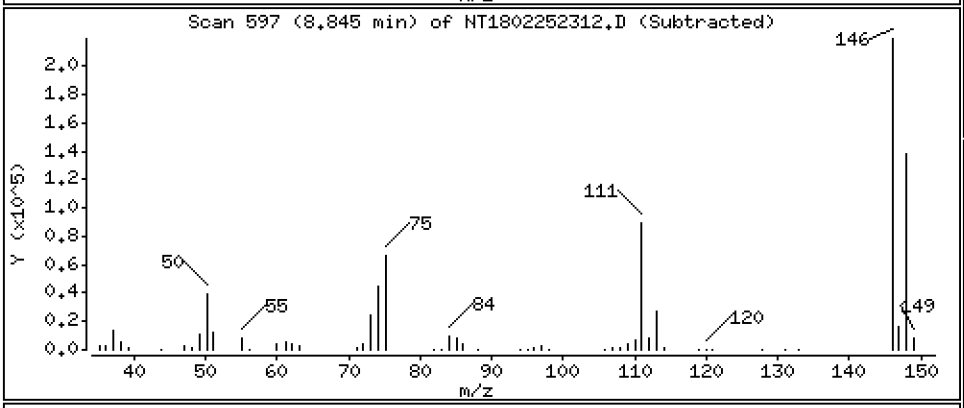
Column diameter: 0.25

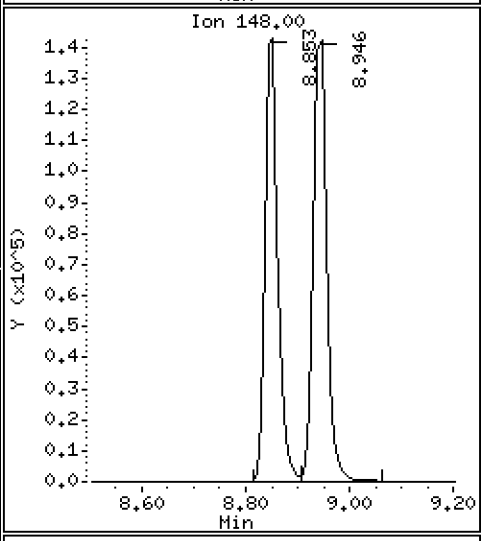
7 1,3-Dichlorobenzene

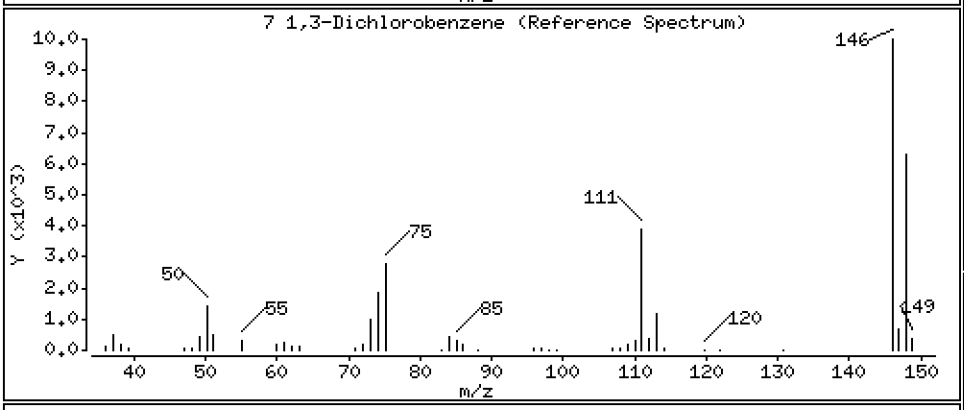
Concentration: 4.615 ug/mL

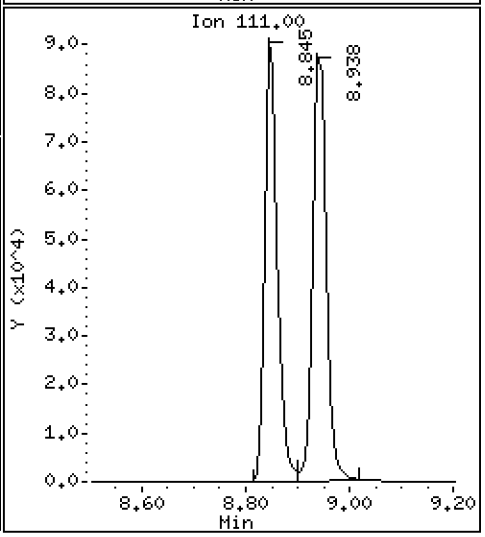


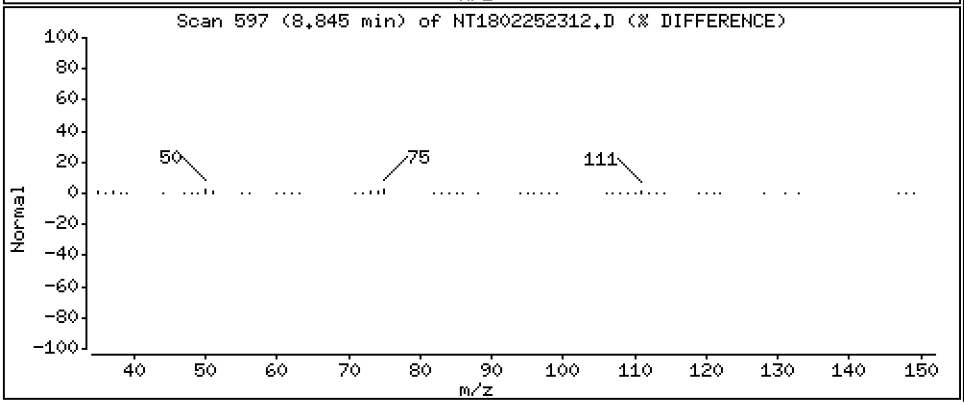












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

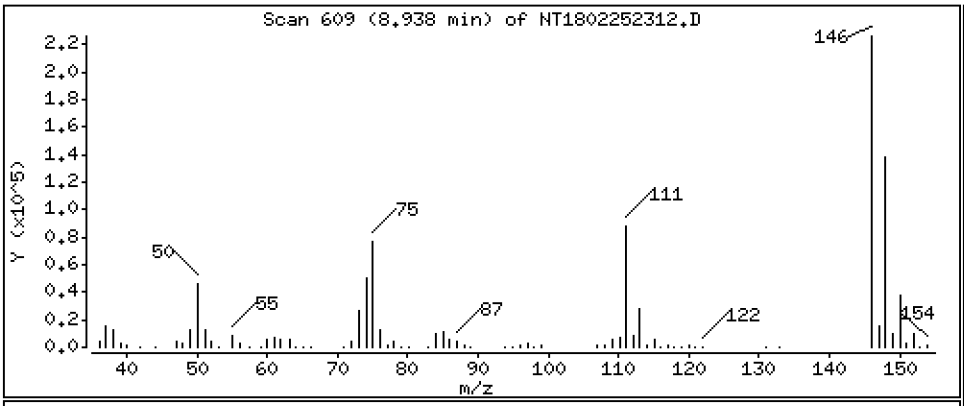
Operator: VTS

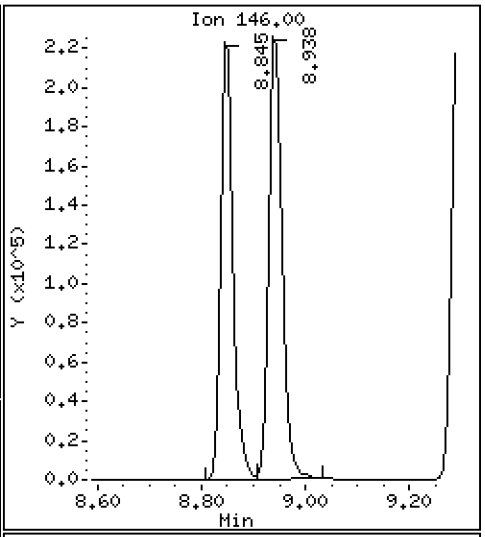
Column phase: ZB-5msi

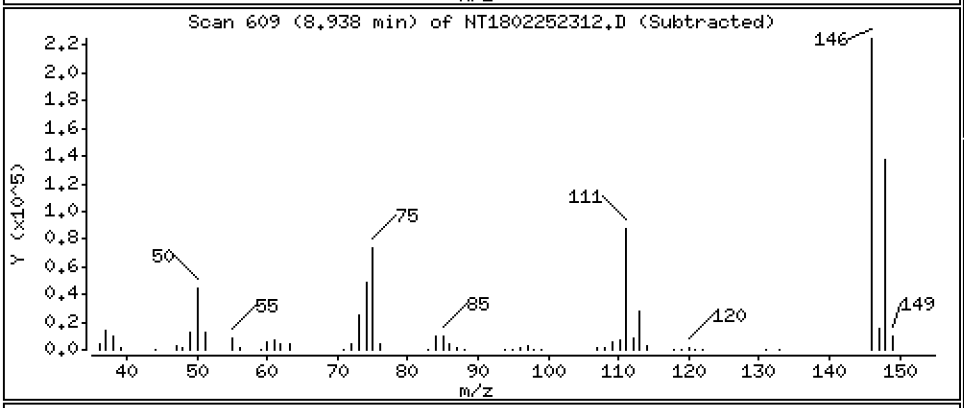
Column diameter: 0.25

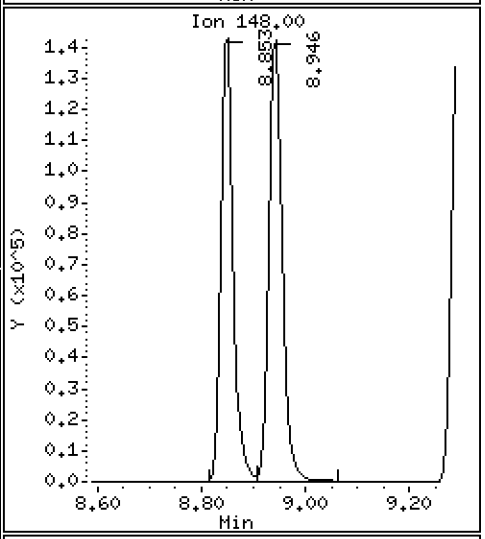
9 1,4-Dichlorobenzene

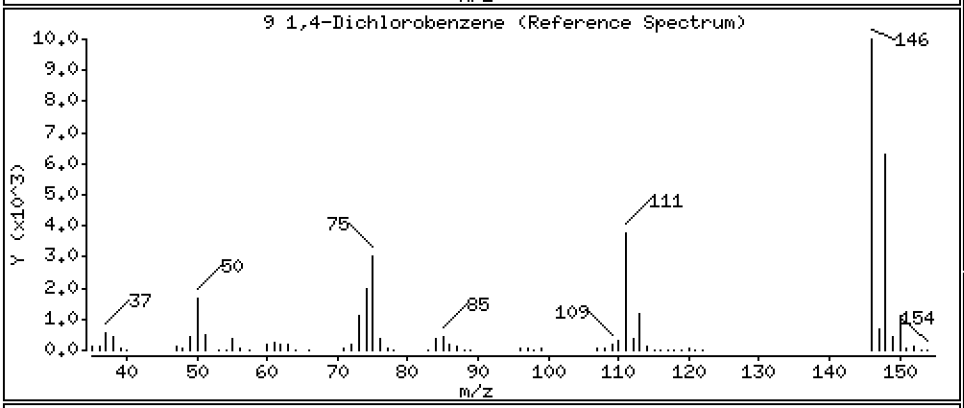
Concentration: 4.621 ug/mL

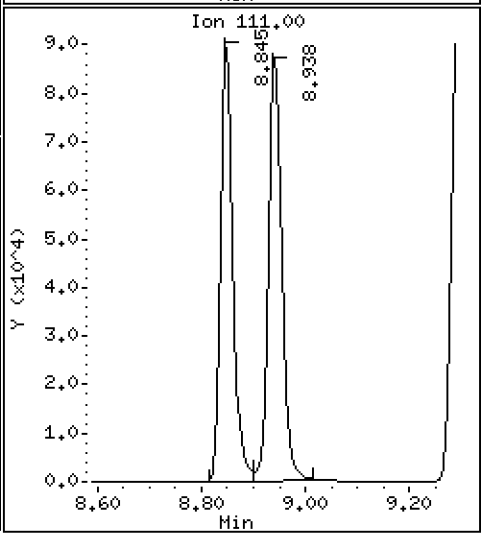


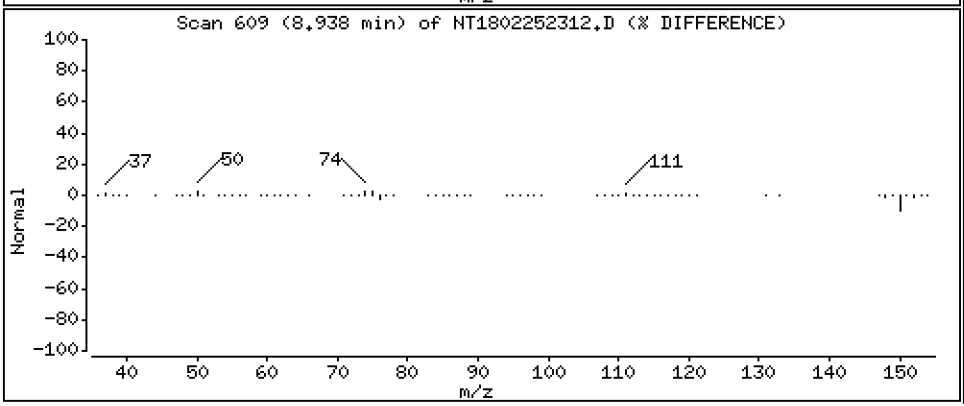












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

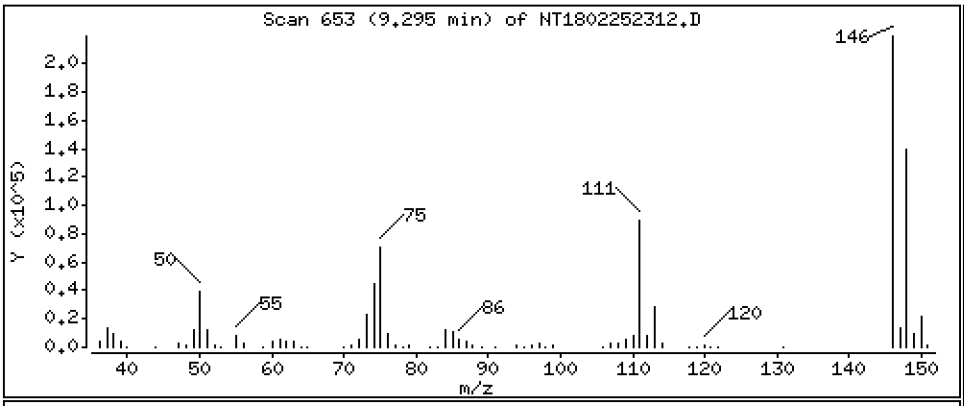
Operator: VTS

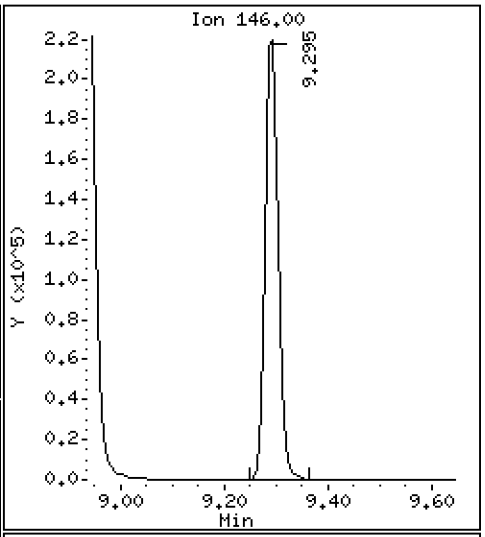
Column phase: ZB-5msi

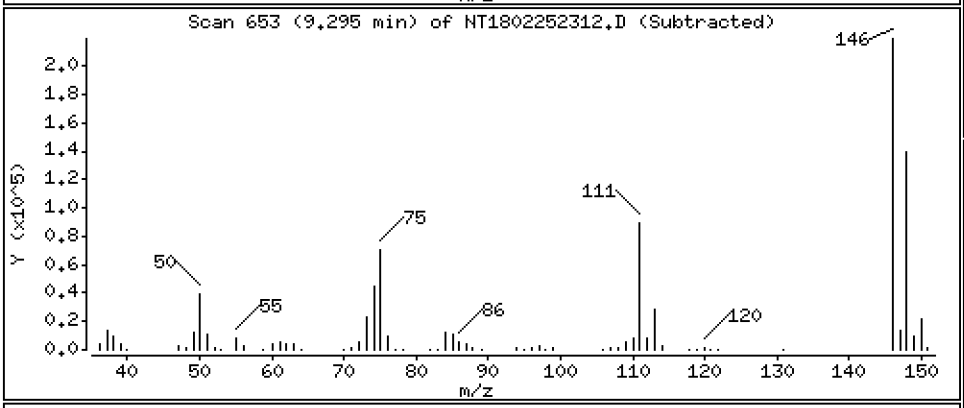
Column diameter: 0.25

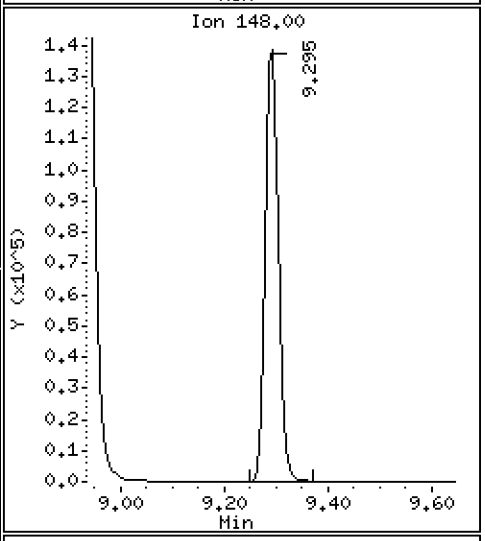
12 1,2-Dichlorobenzene

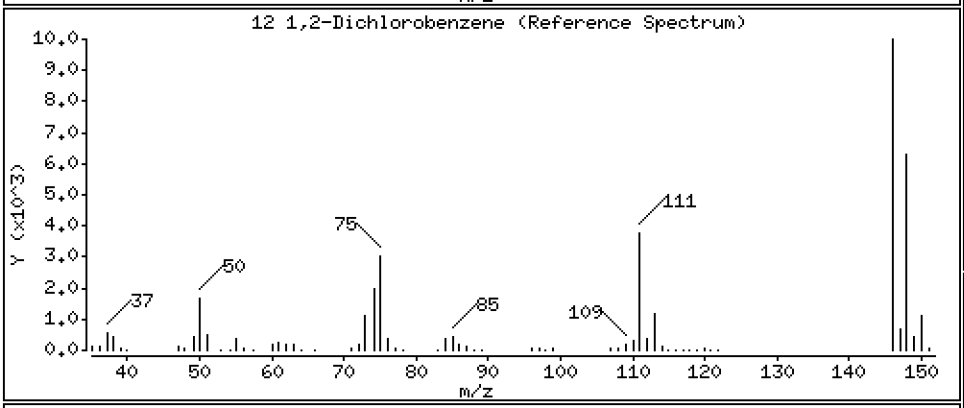
Concentration: 4.524 ug/mL

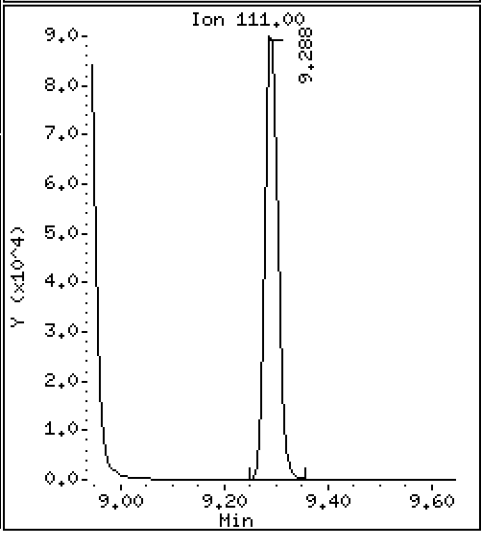


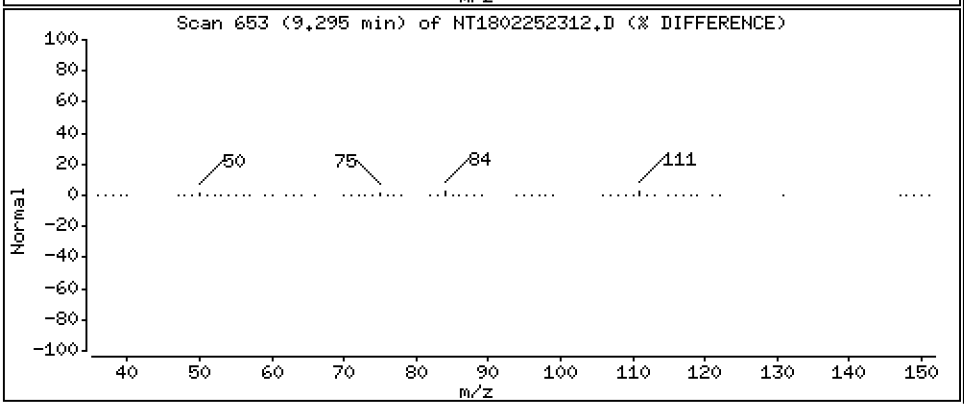












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

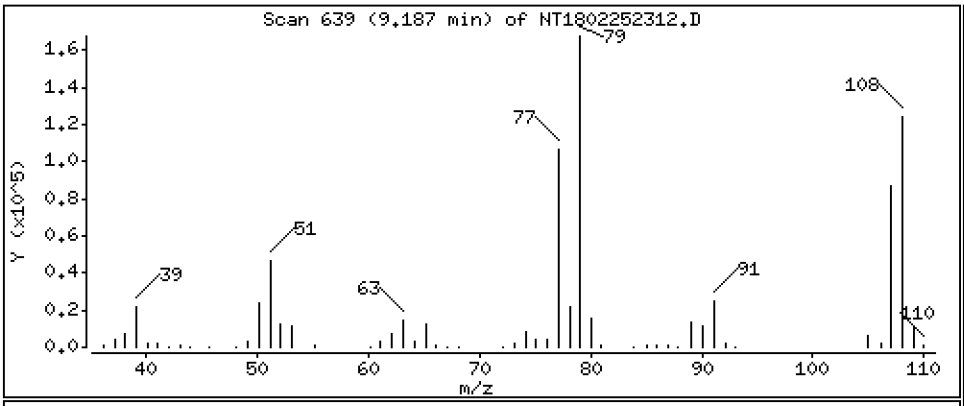
Operator: VTS

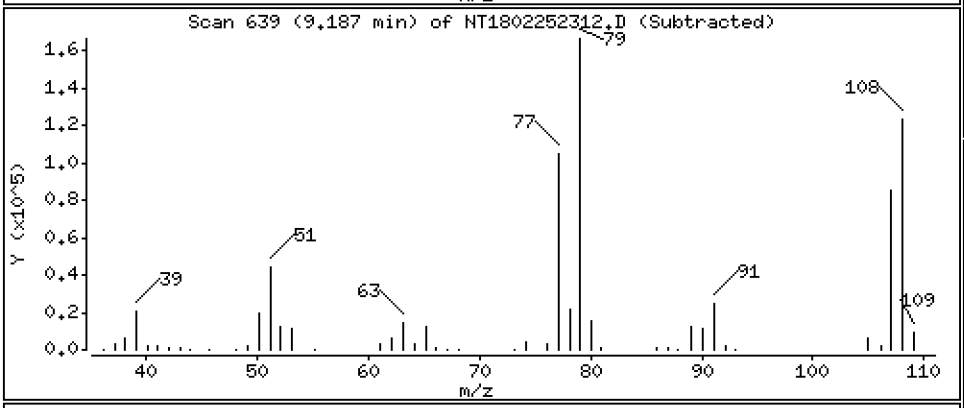
Column phase: ZB-5msi

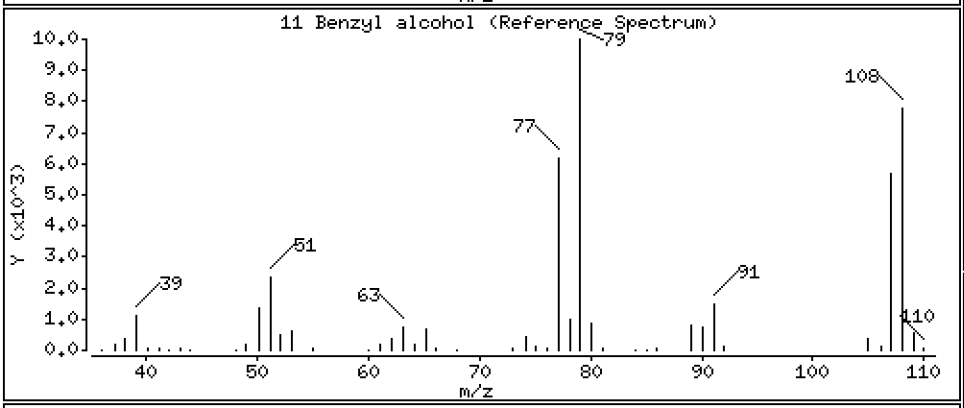
Column diameter: 0.25

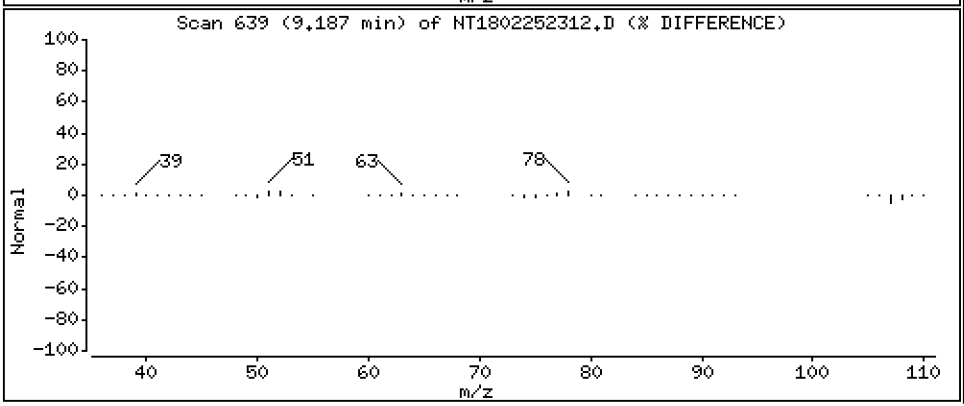
11 Benzyl alcohol

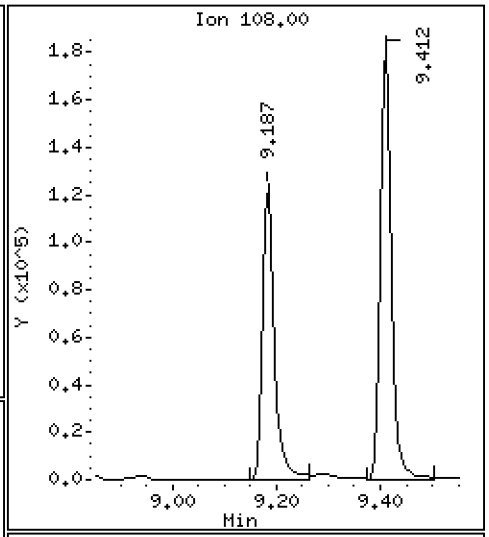
Concentration: 4.677 ug/mL

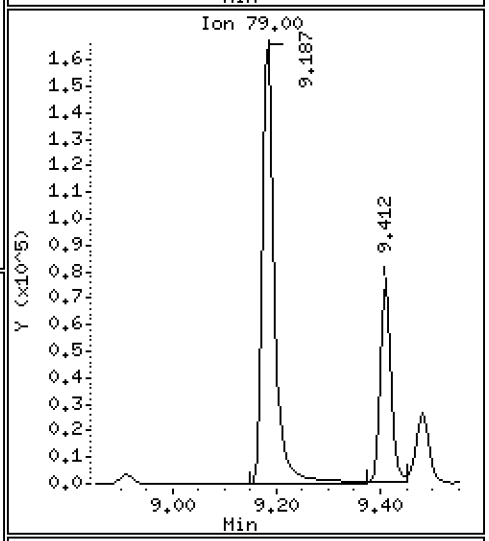


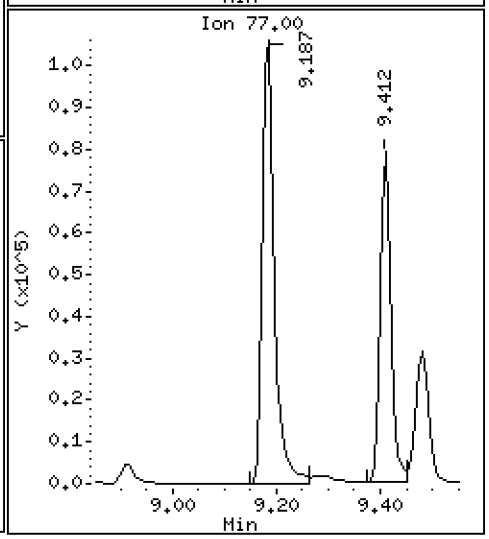












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

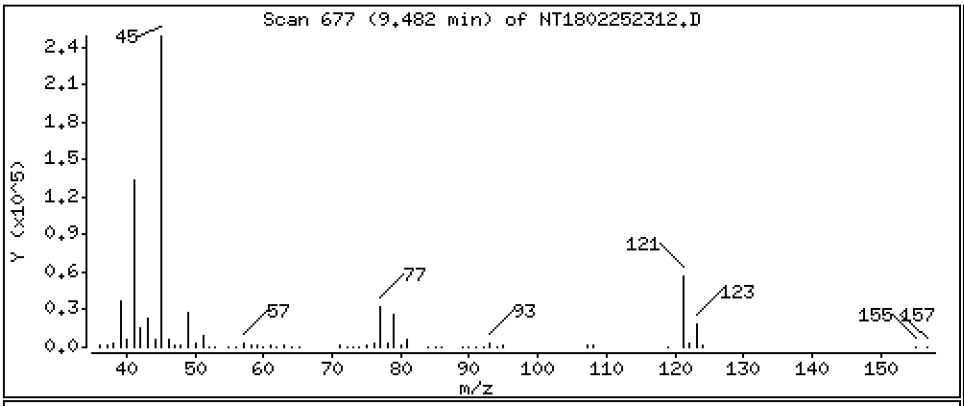
Operator: VTS

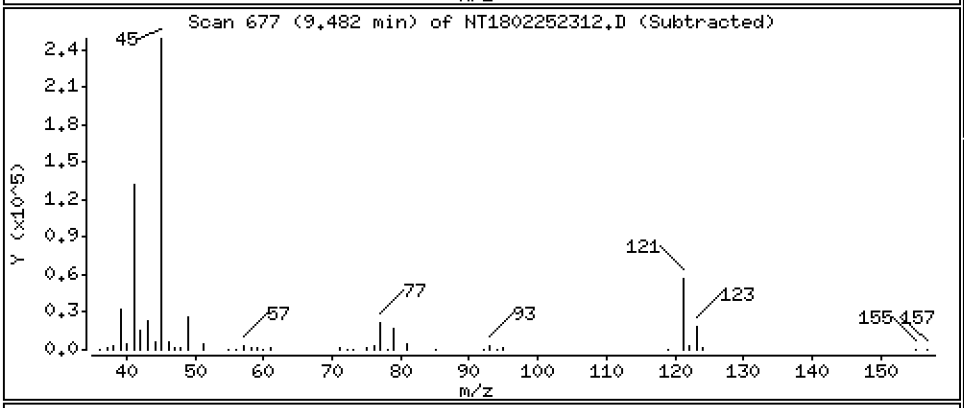
Column phase: ZB-5msi

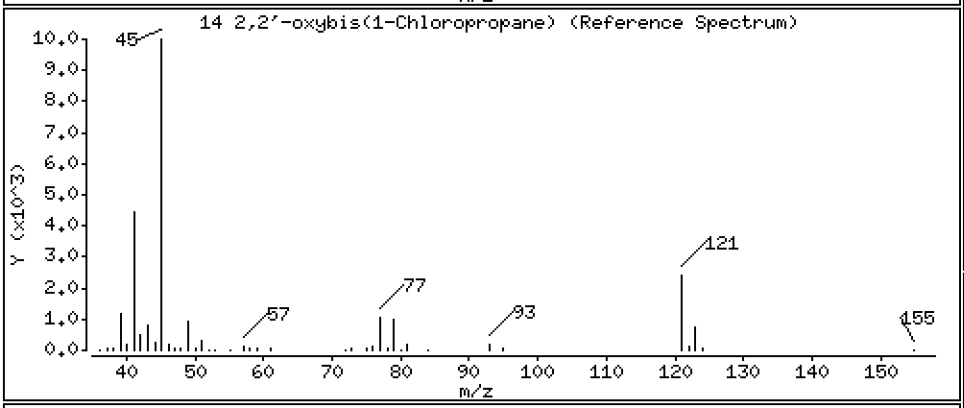
Column diameter: 0.25

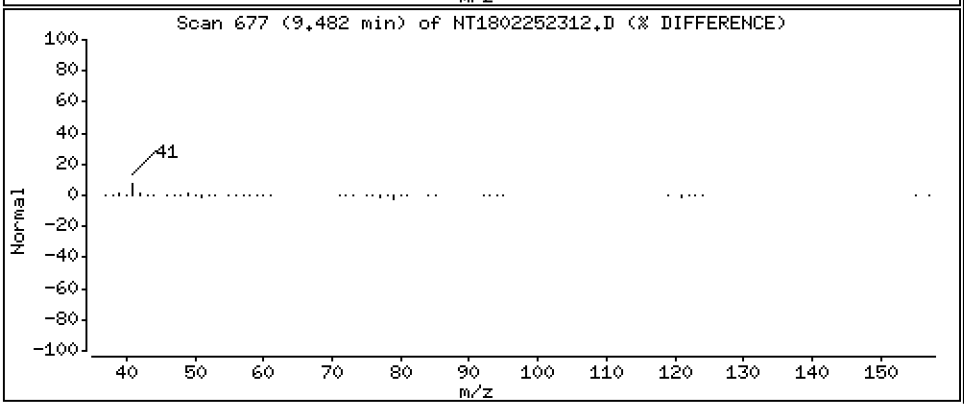
14 2,2'-oxybis(1-Chloropropane)

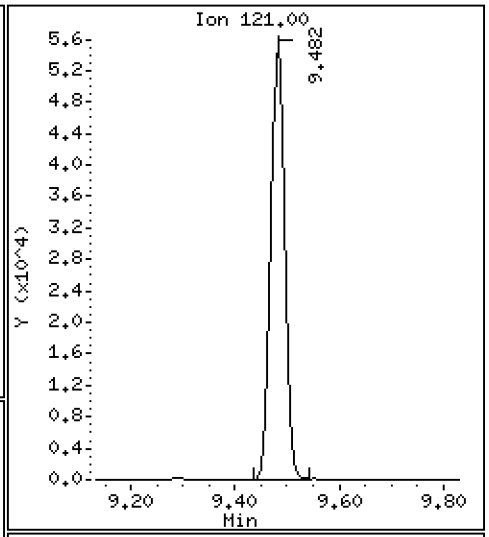
Concentration: 5.205 ug/mL

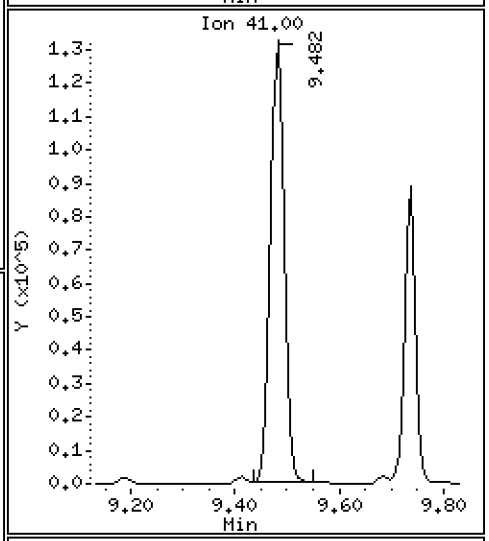


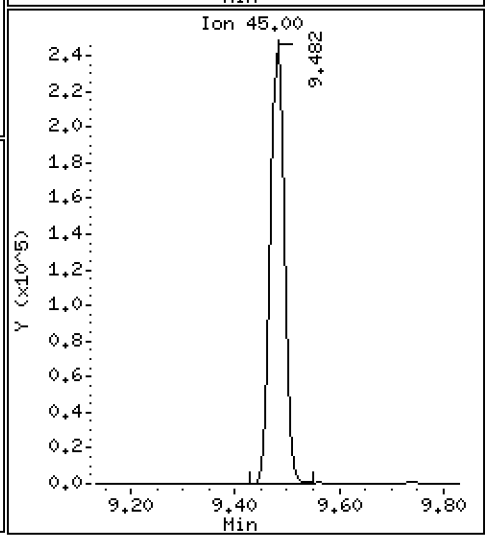












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

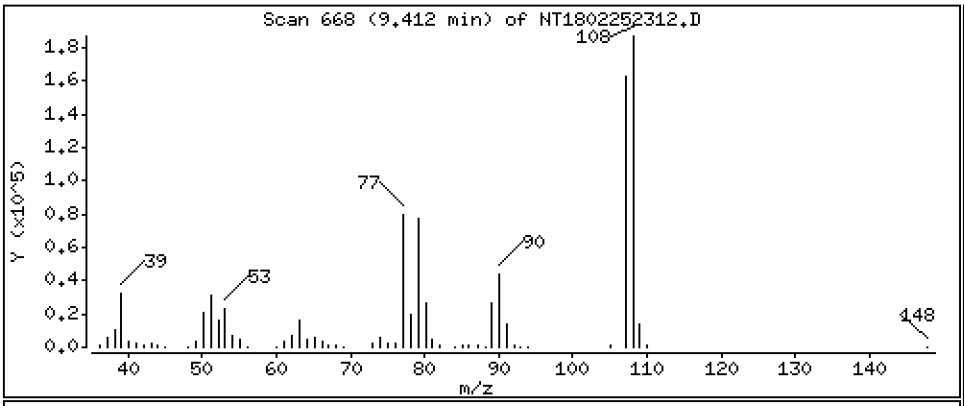
Operator: VTS

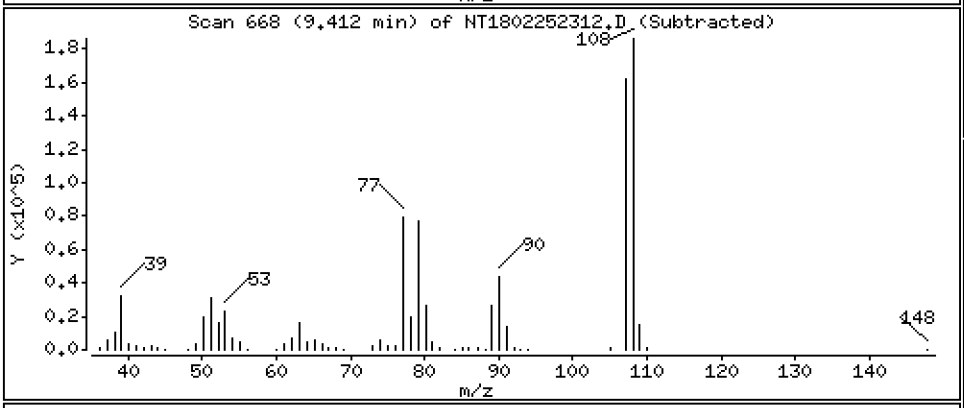
Column phase: ZB-5msi

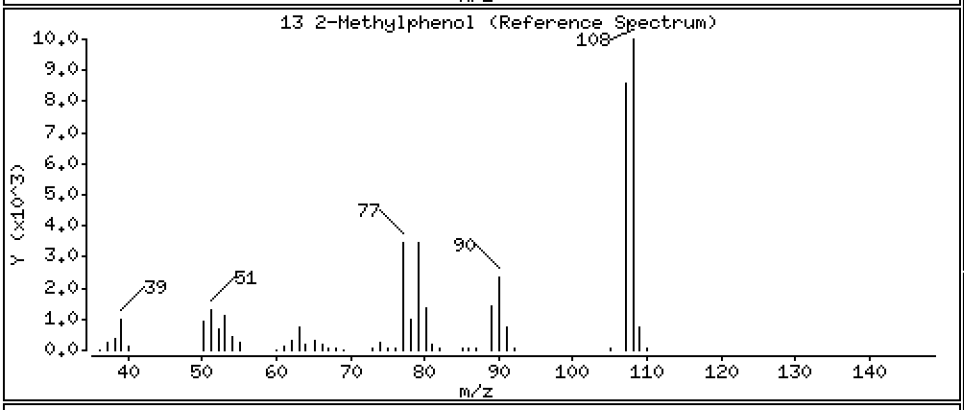
Column diameter: 0.25

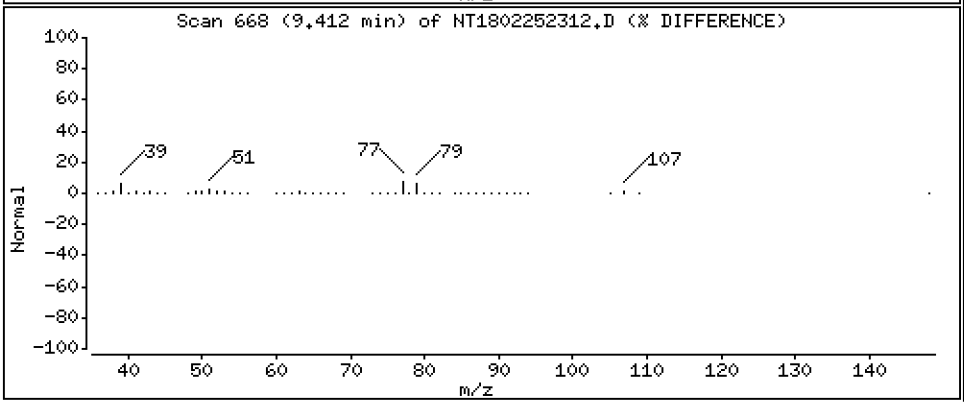
13 2-Methylphenol

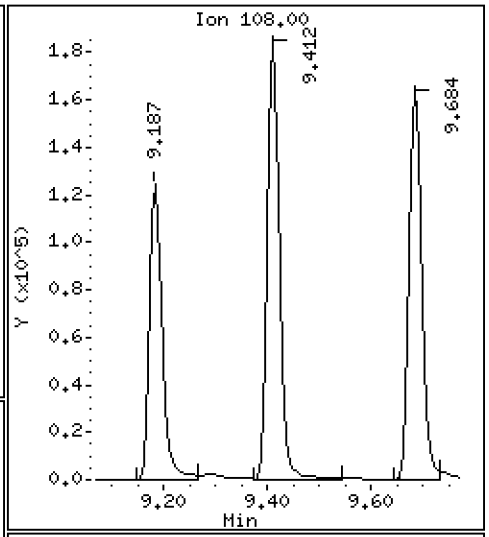
Concentration: 3.995 ug/mL

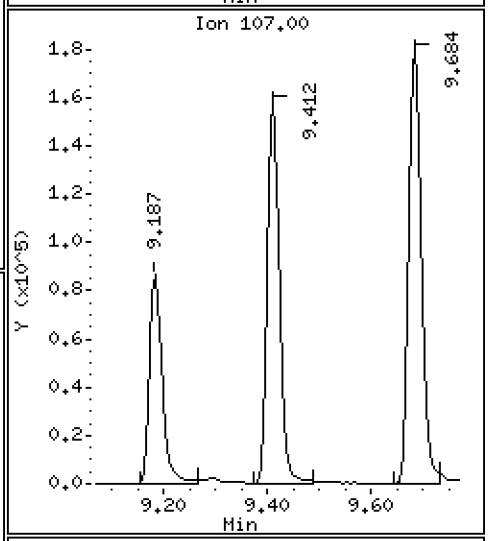


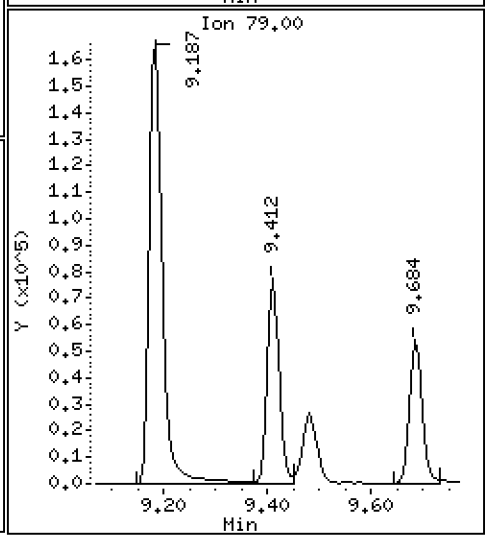












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

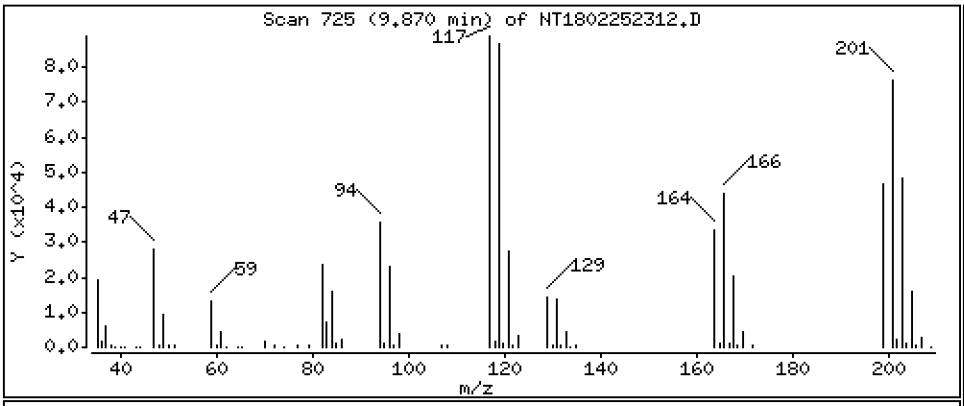
Operator: VTS

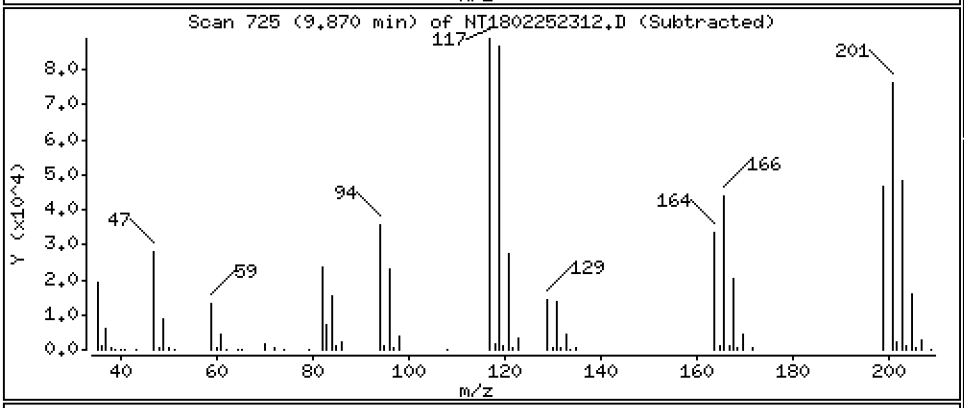
Column phase: ZB-5msi

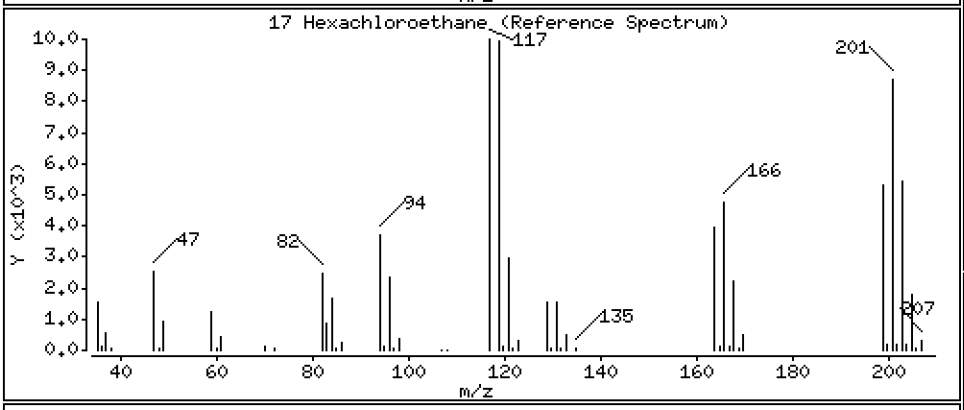
Column diameter: 0.25

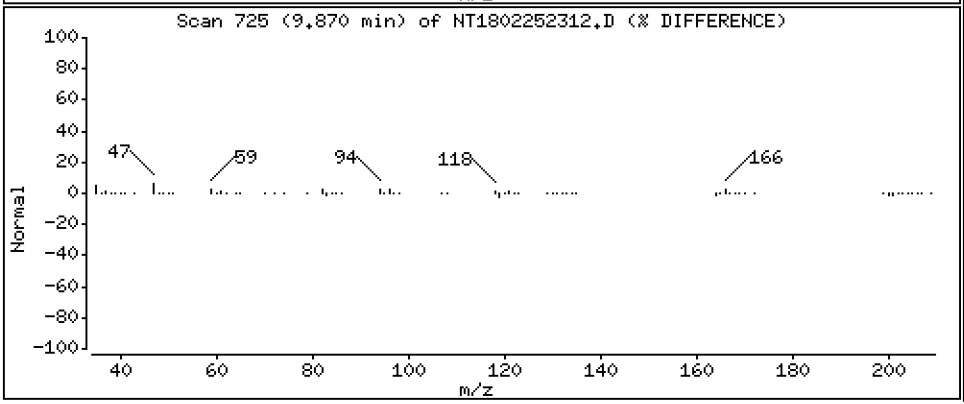
17 Hexachloroethane

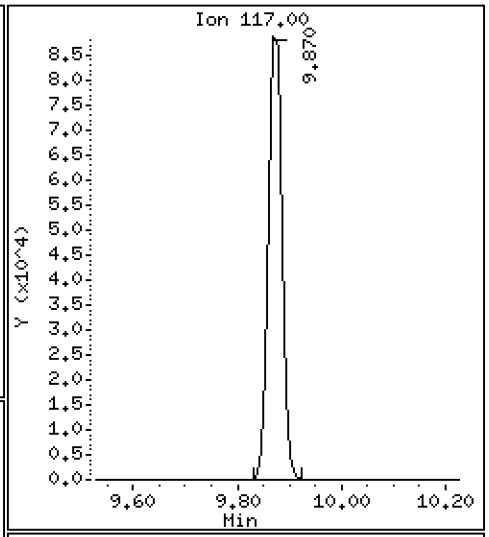
Concentration: 4.769 ug/mL

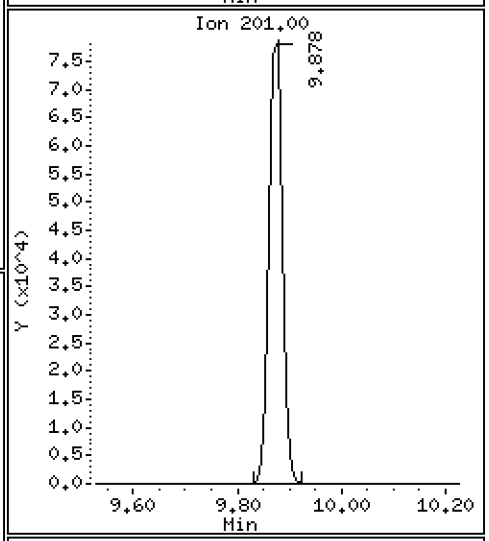


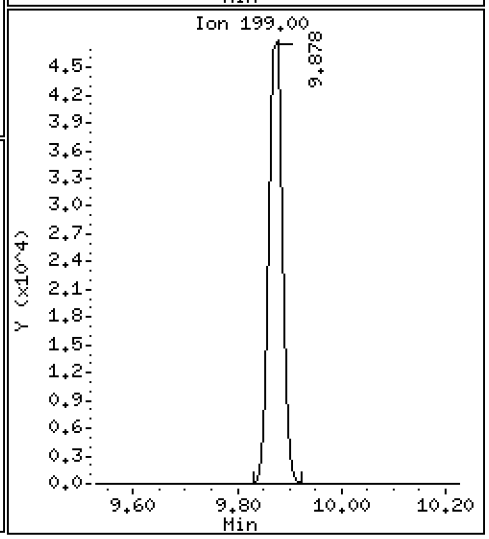












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

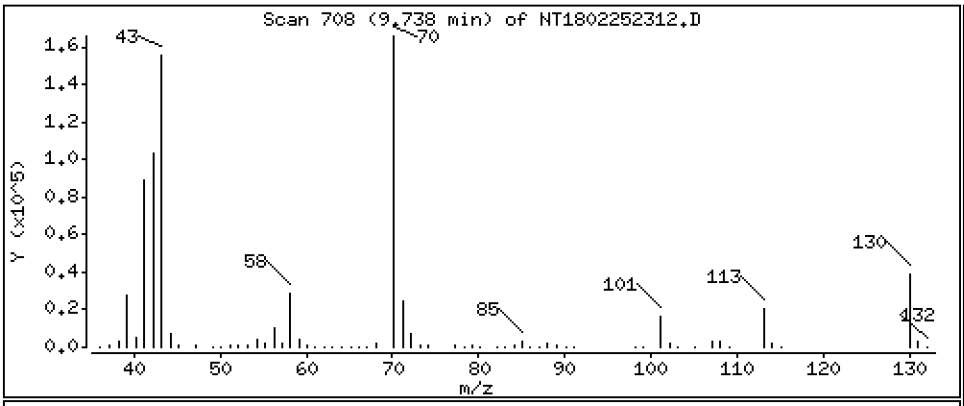
Operator: VTS

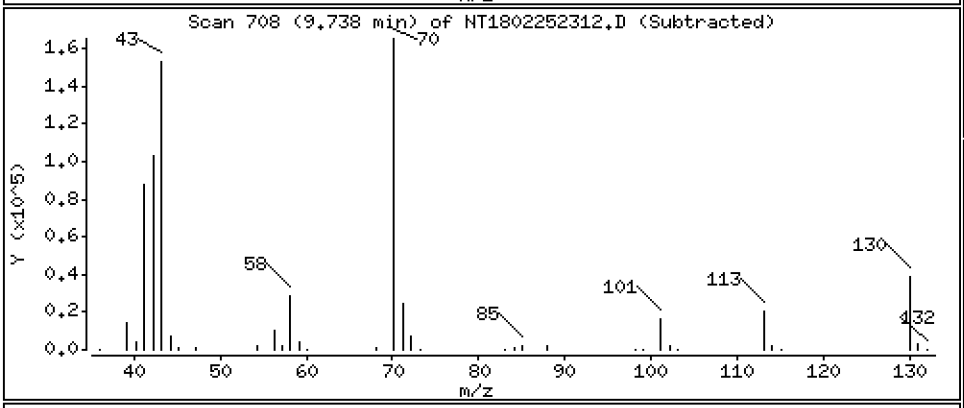
Column phase: ZB-5msi

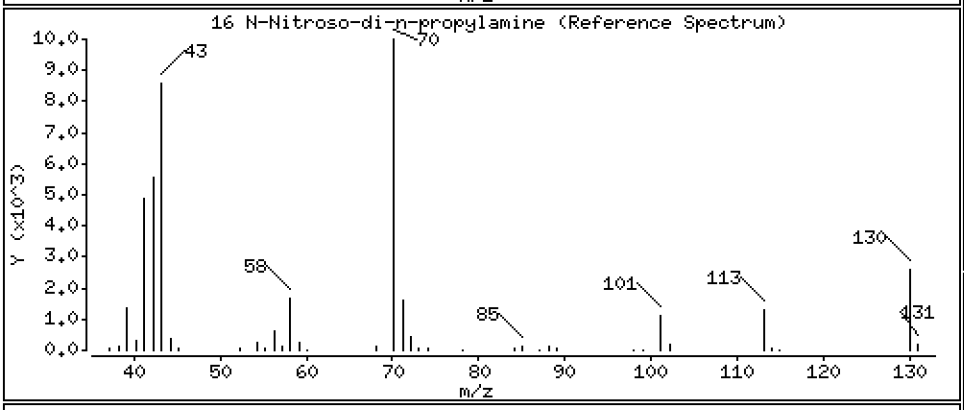
Column diameter: 0.25

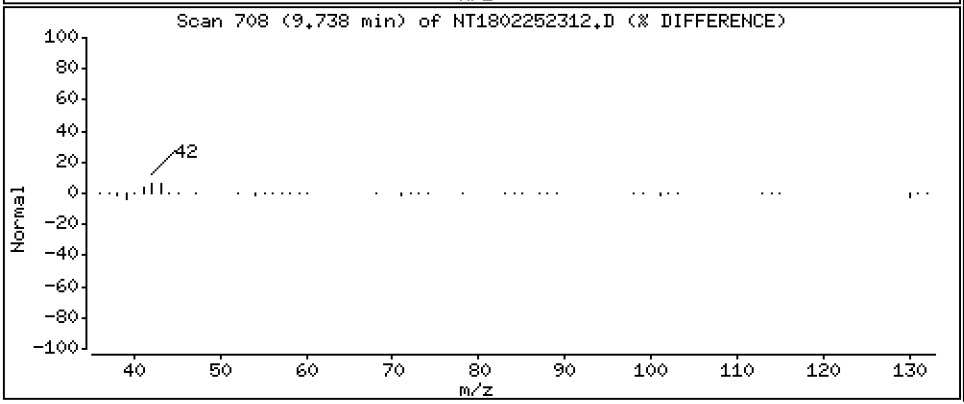
16 N-Nitroso-di-n-propylamine

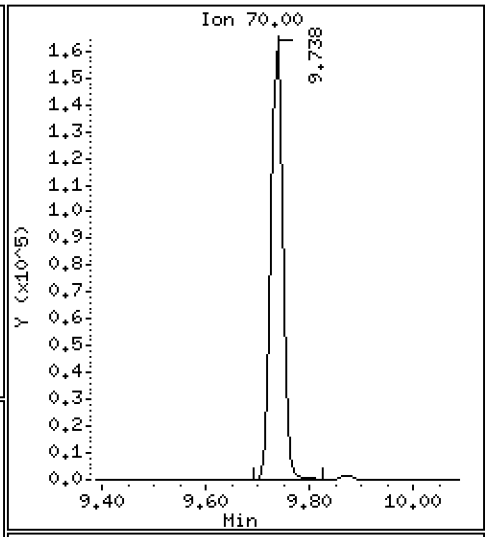
Concentration: 4.799 ug/mL

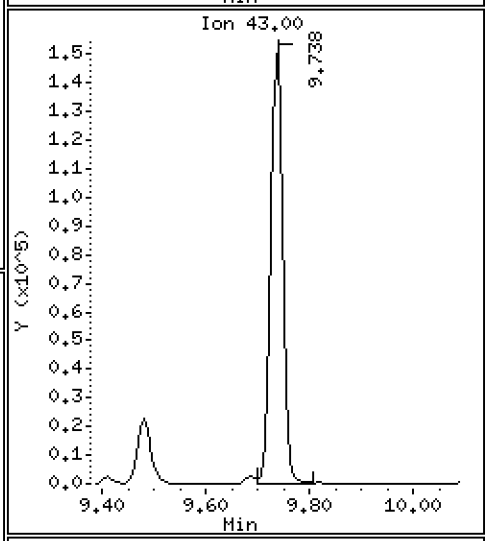


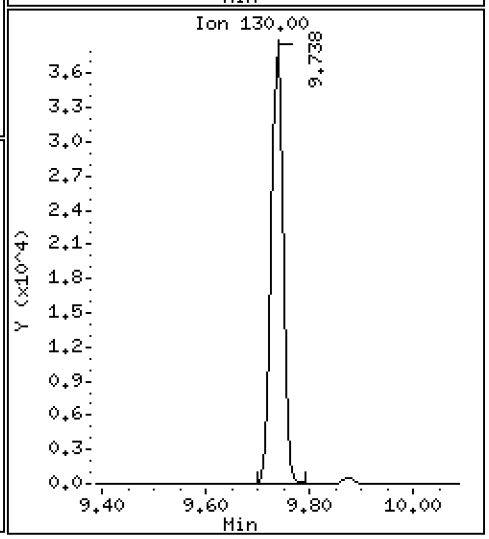












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

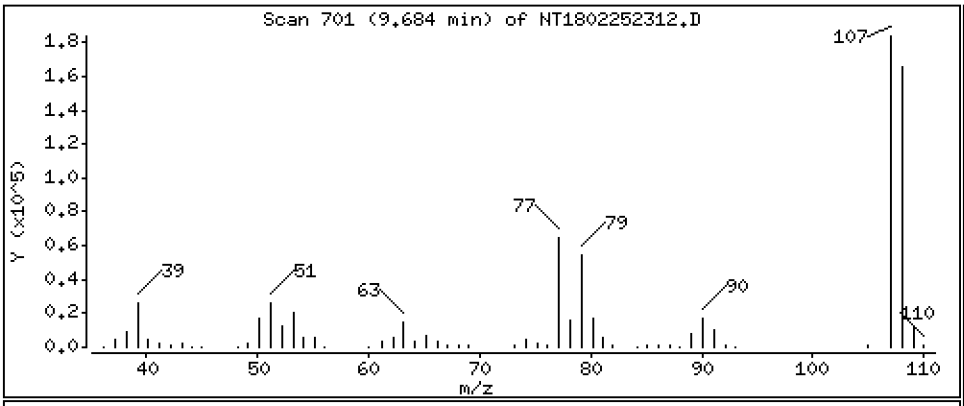
Operator: VTS

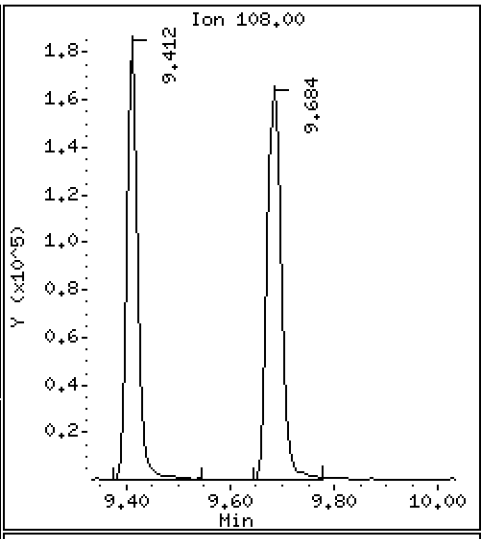
Column phase: ZB-5msi

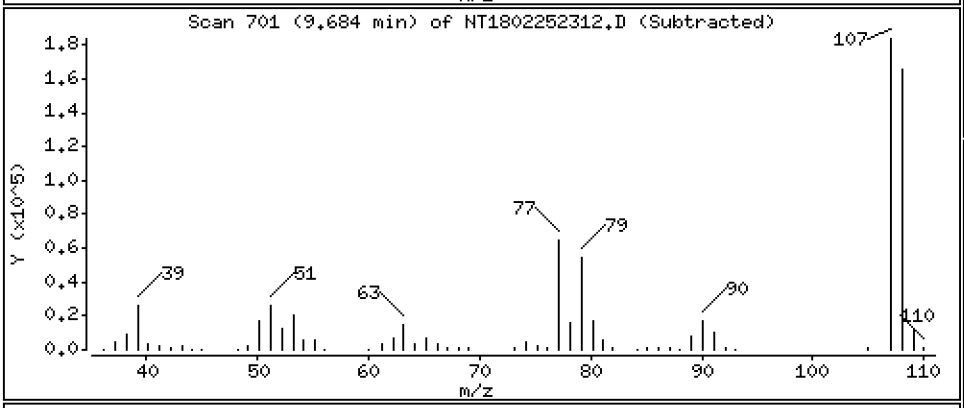
Column diameter: 0.25

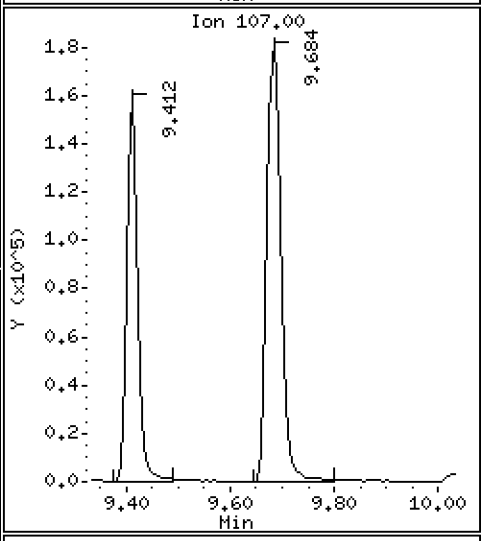
15 4-Methylphenol

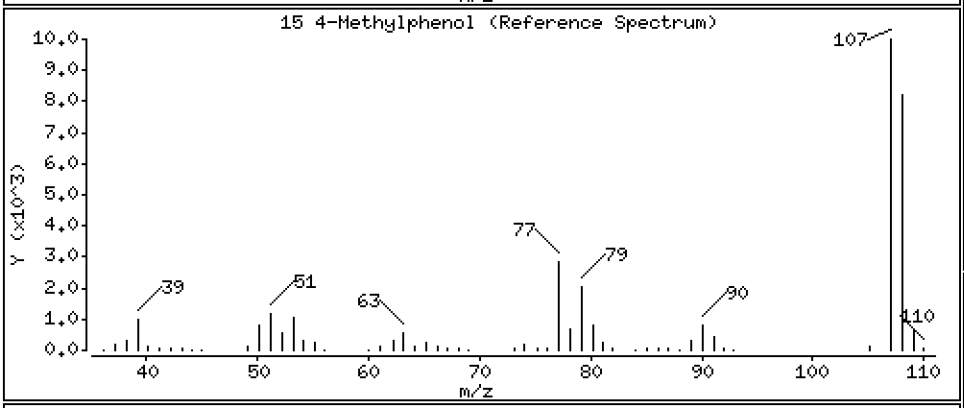
Concentration: 4.106 ug/mL

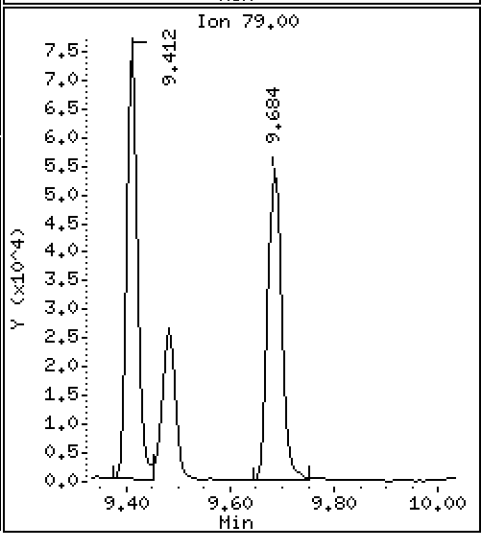


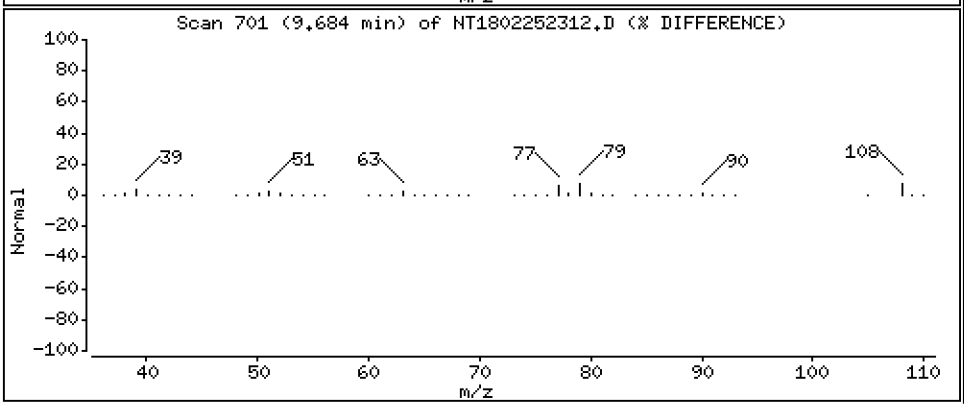












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

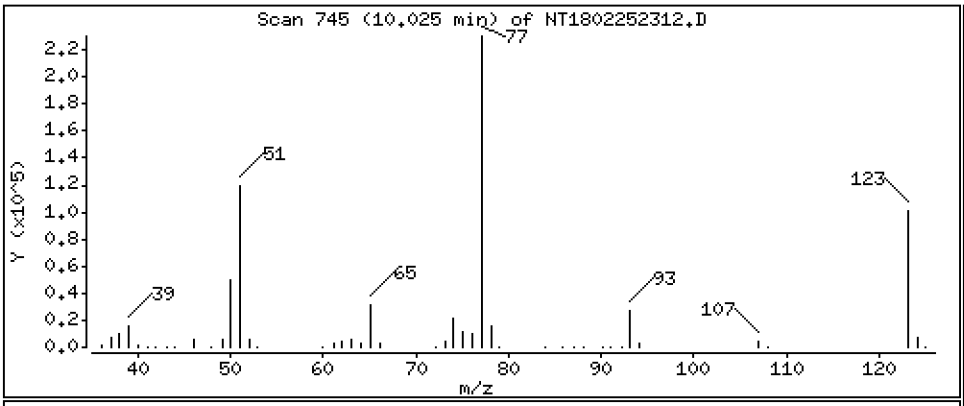
Operator: VTS

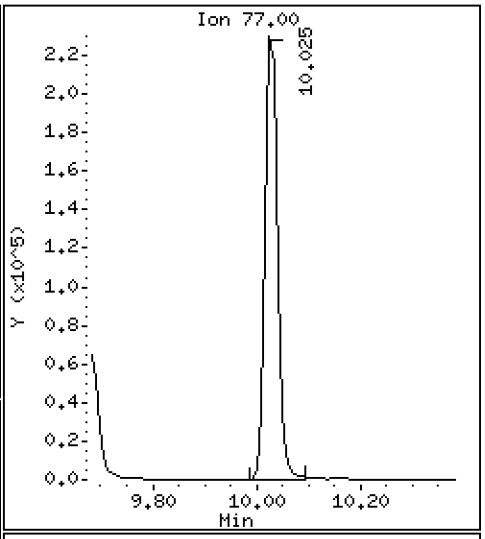
Column phase: ZB-5msi

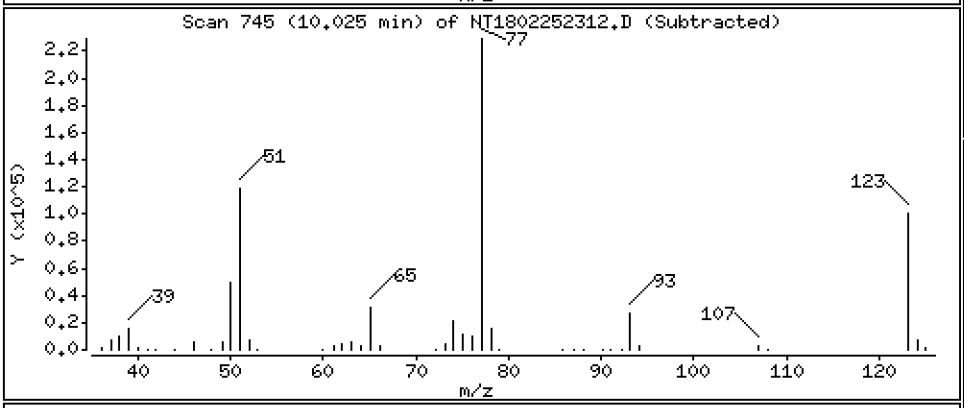
Column diameter: 0.25

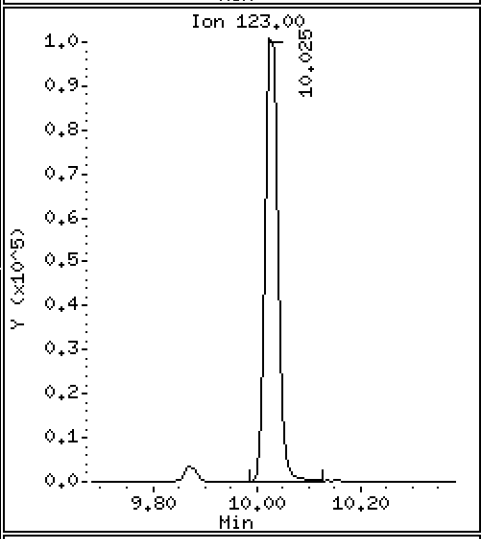
19 Nitrobenzene

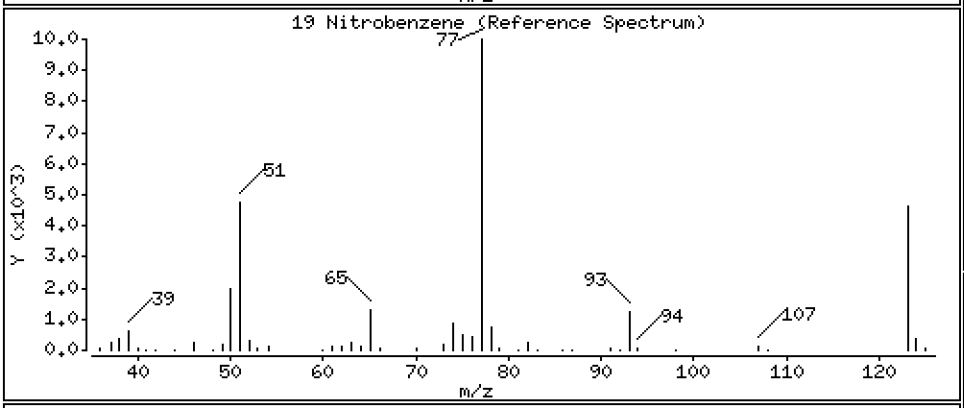
Concentration: 4.692 ug/mL

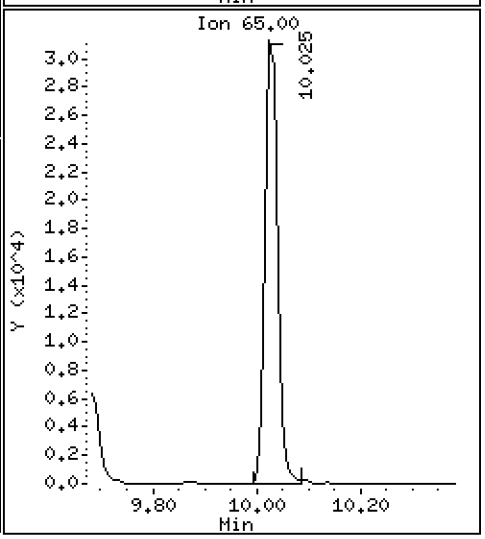


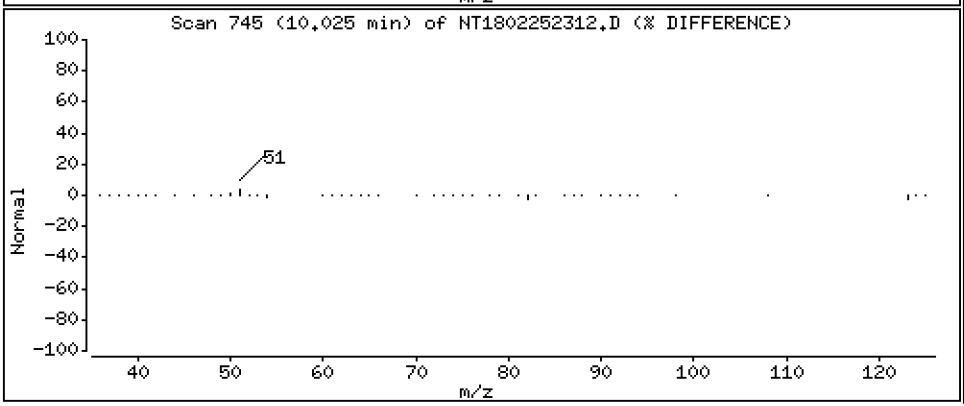












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

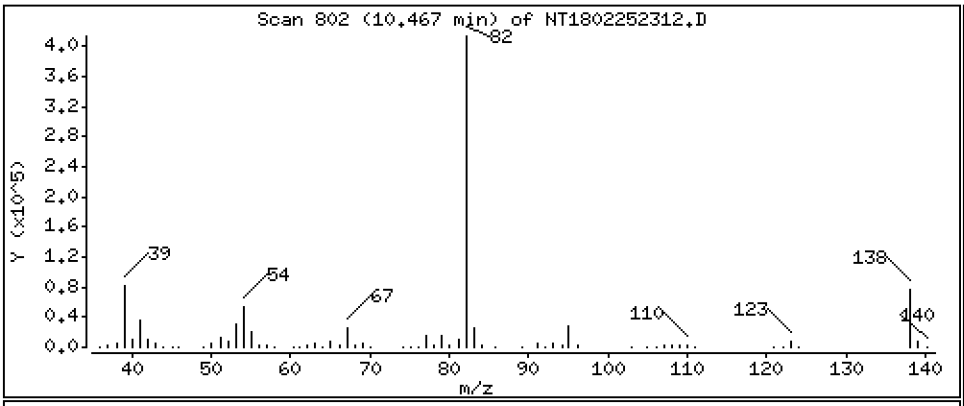
Operator: VTS

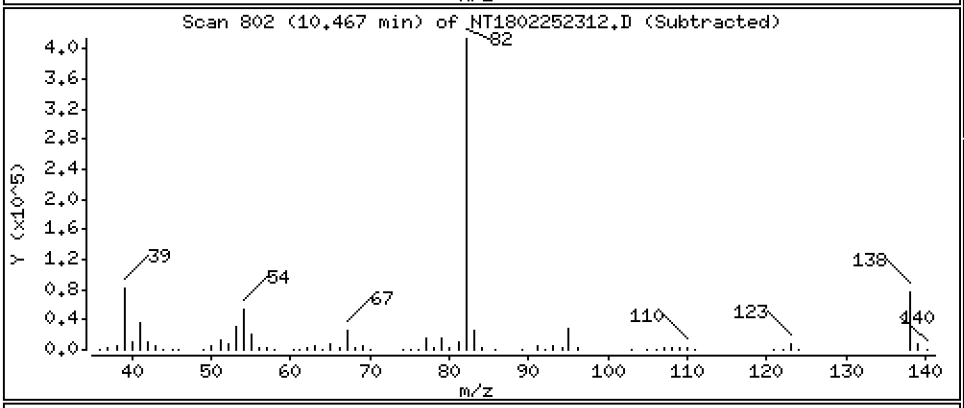
Column phase: ZB-5msi

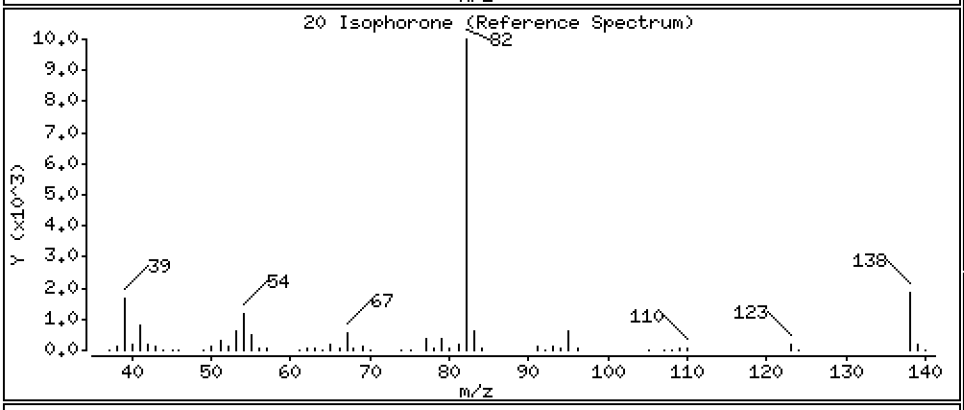
Column diameter: 0.25

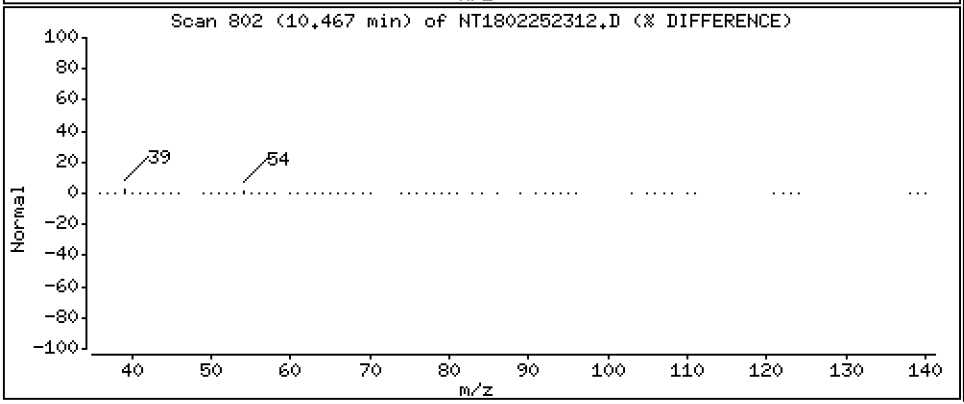
20 Isophorone

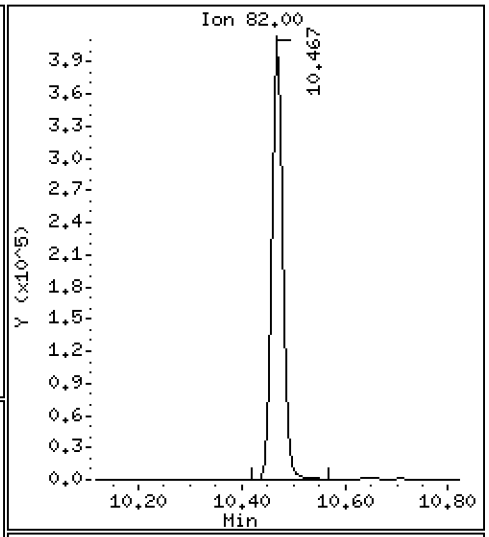
Concentration: 6.433 ug/mL

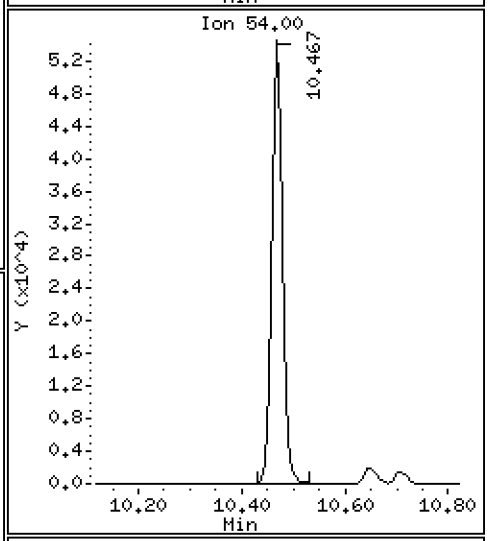


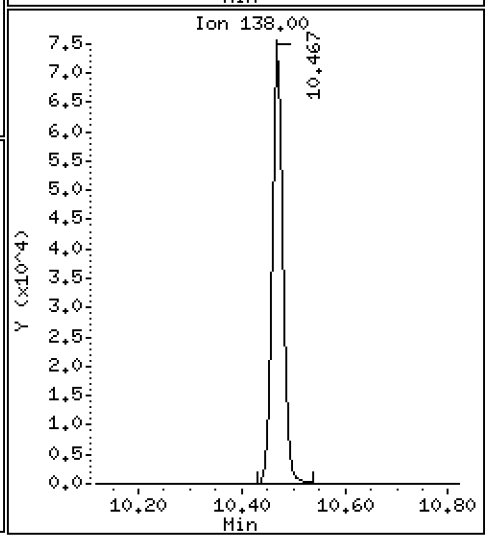












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

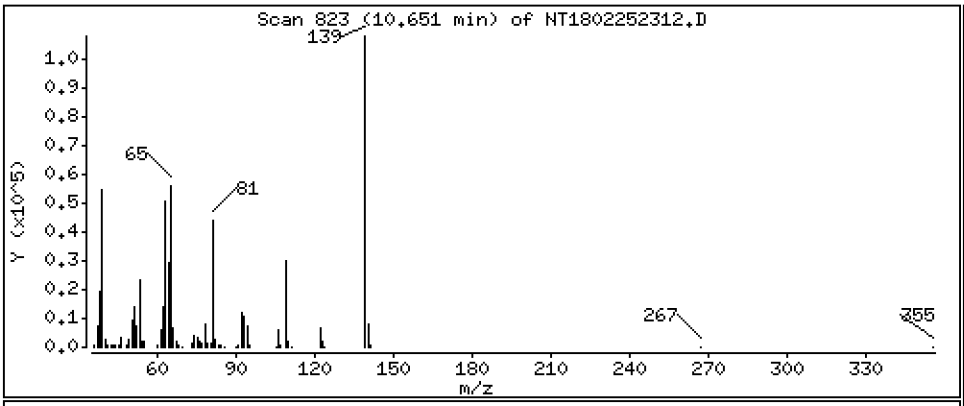
Operator: VTS

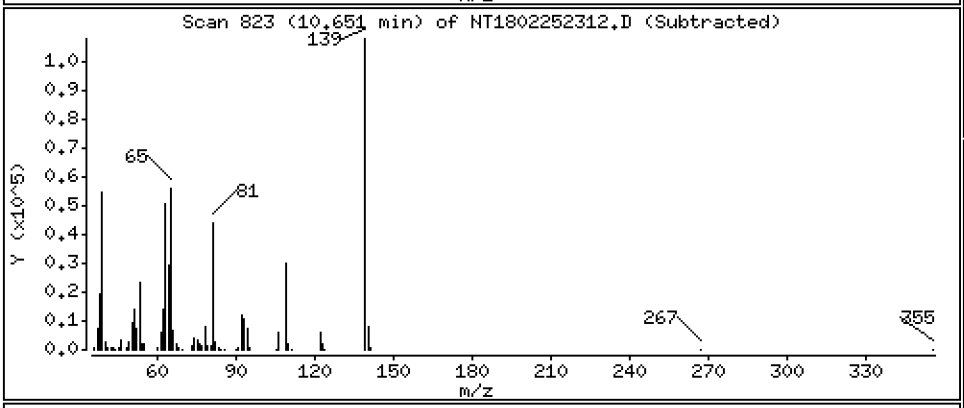
Column phase: ZB-5msi

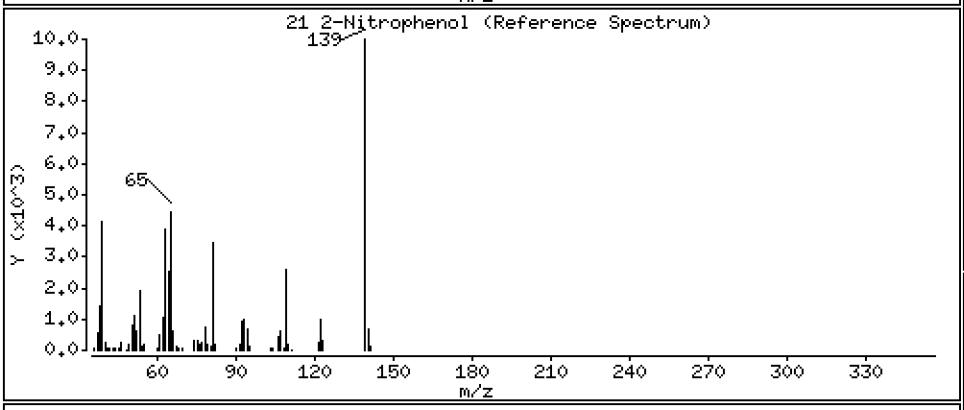
Column diameter: 0.25

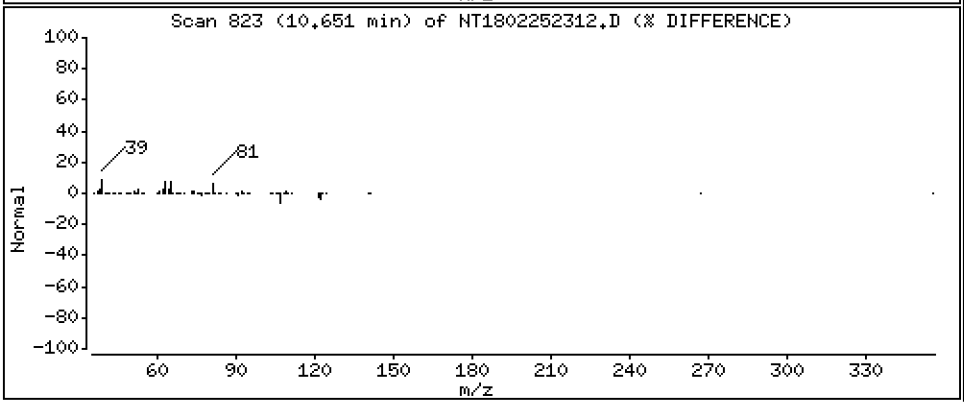
21 2-Nitrophenol

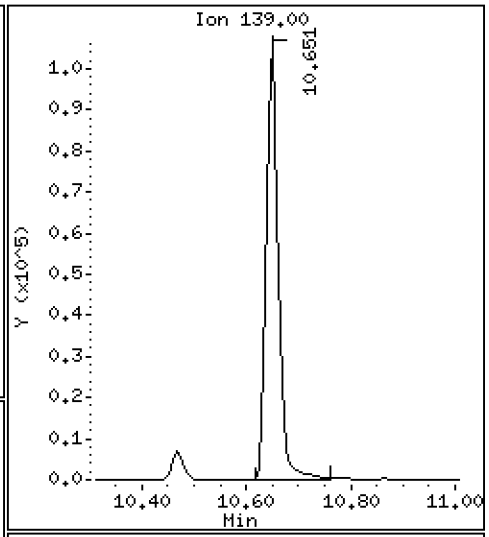
Concentration: 4.439 ug/mL

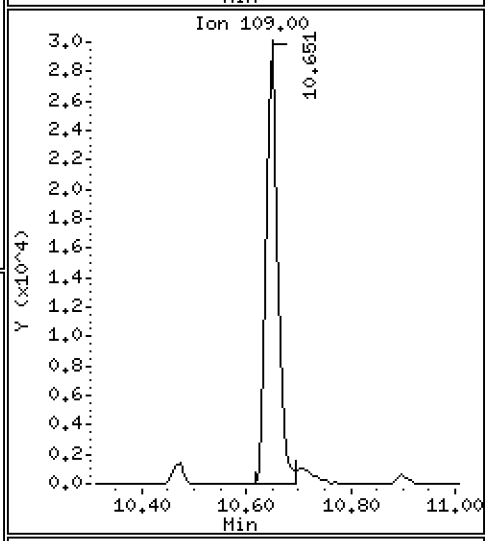


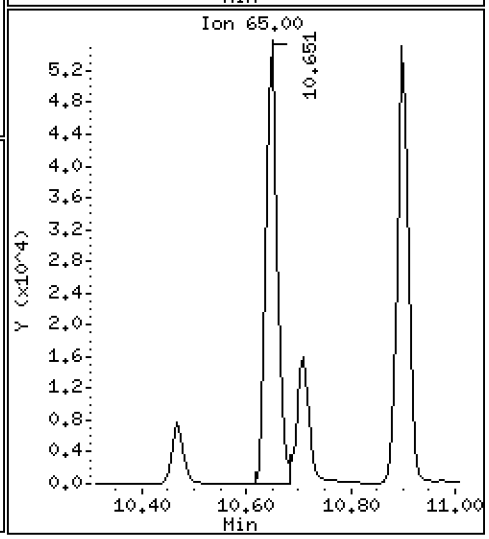












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

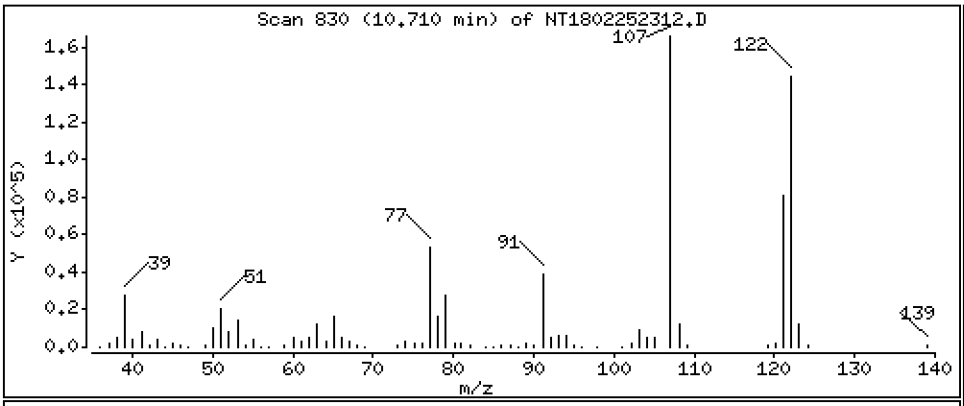
Operator: VTS

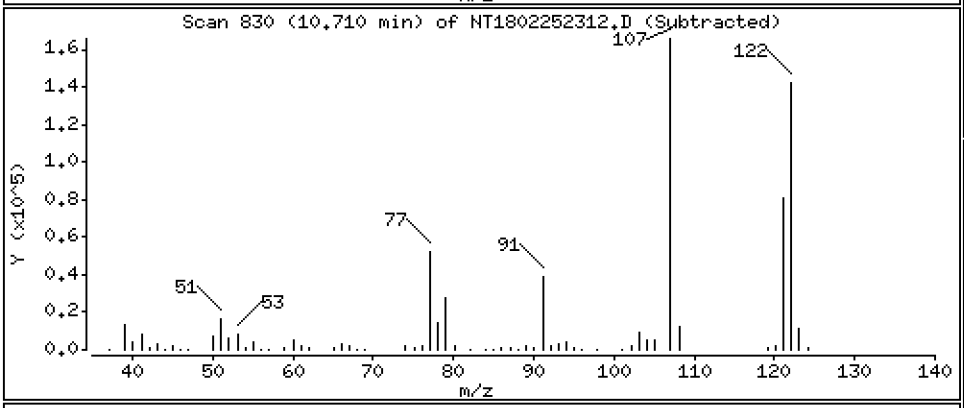
Column phase: ZB-5msi

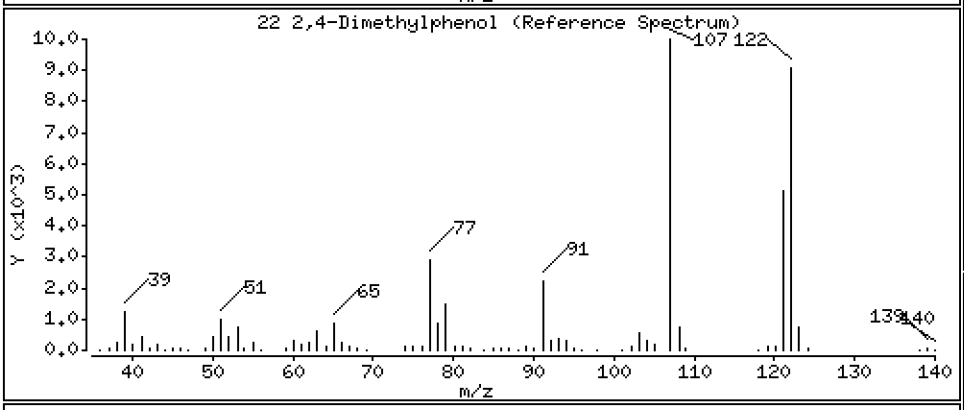
Column diameter: 0.25

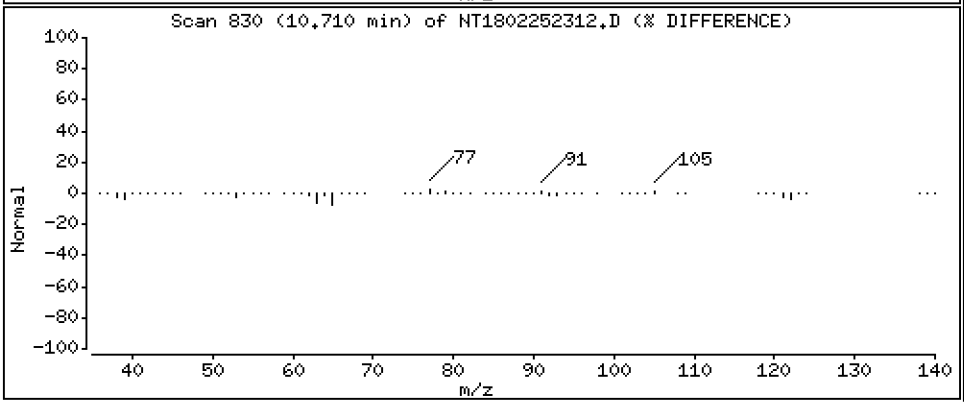
22 2,4-Dimethylphenol

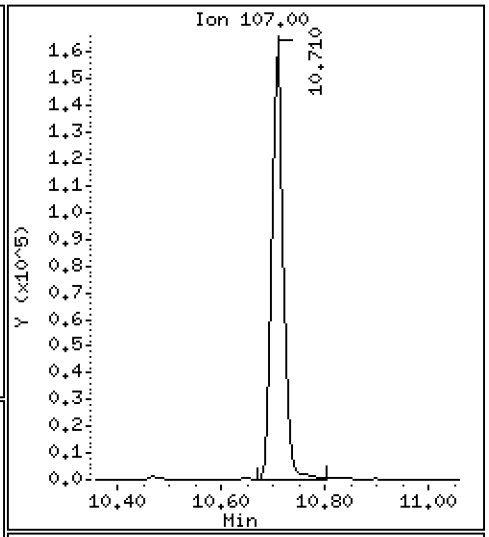
Concentration: 3.460 ug/mL

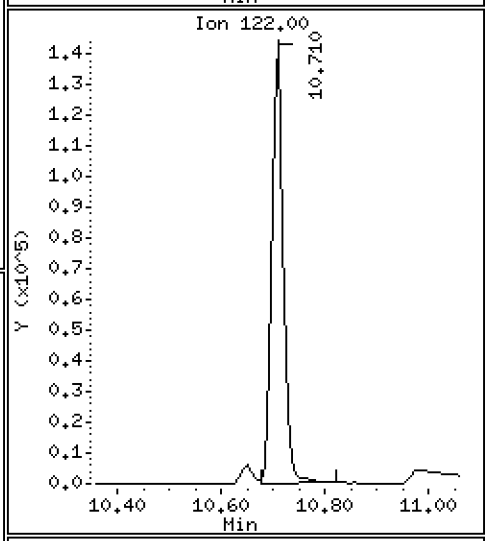


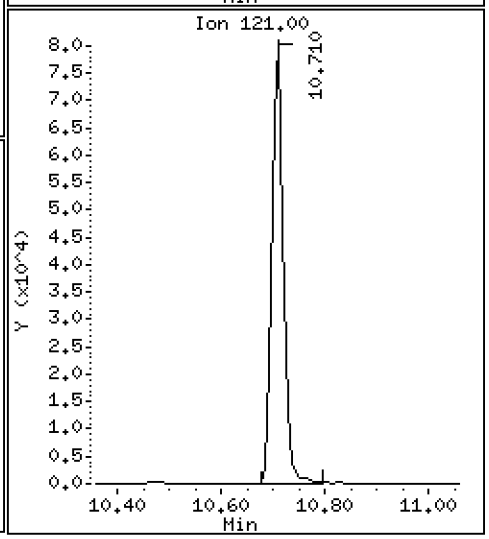












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

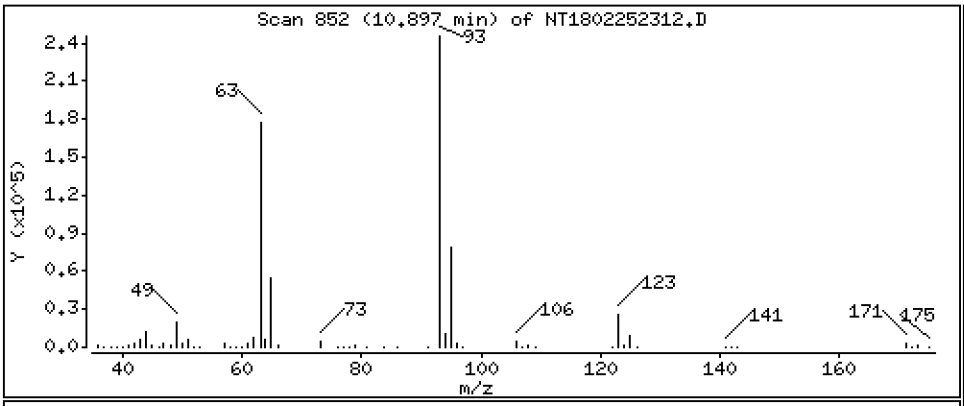
Operator: VTS

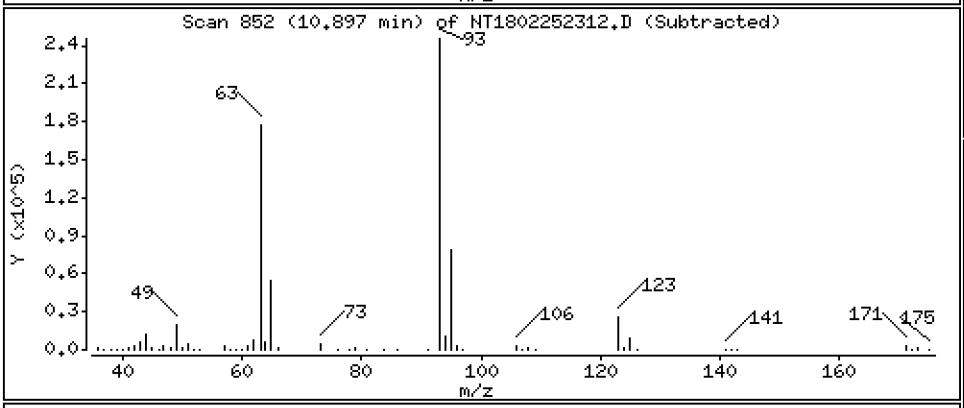
Column phase: ZB-5msi

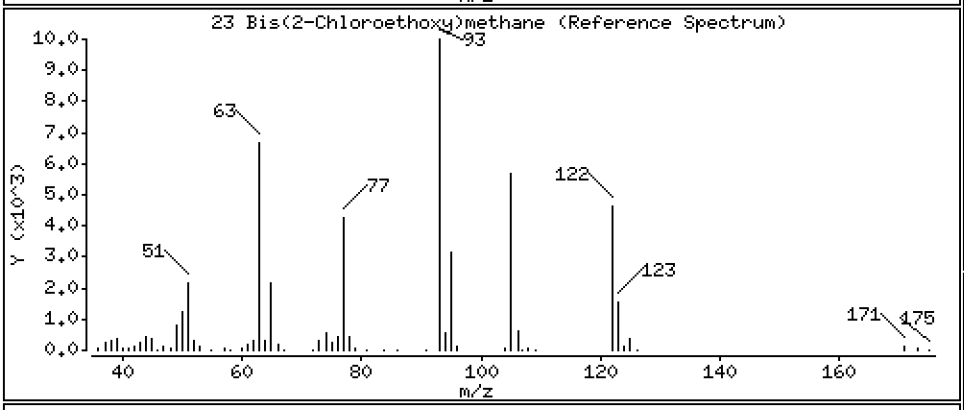
Column diameter: 0.25

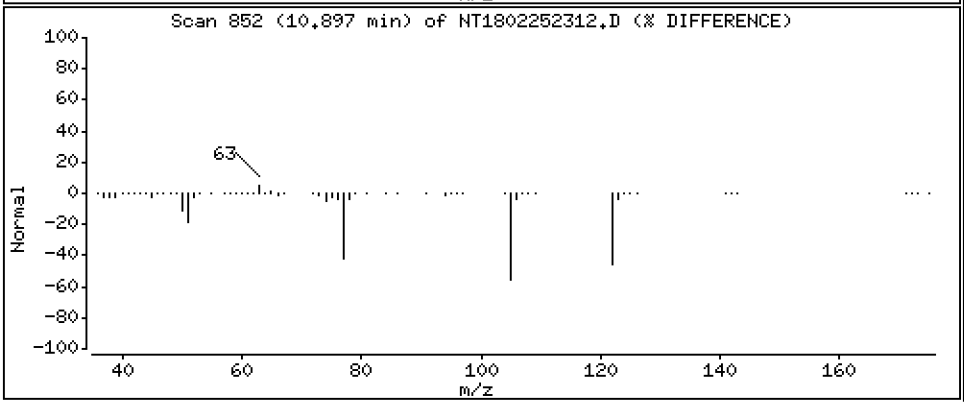
23 Bis(2-Chloroethoxy)methane

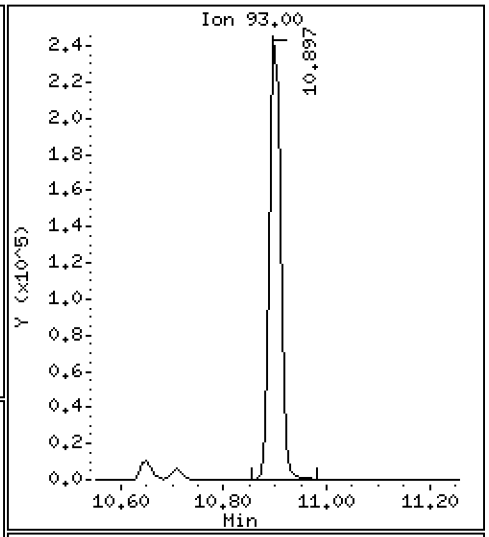
Concentration: 5.489 ug/mL

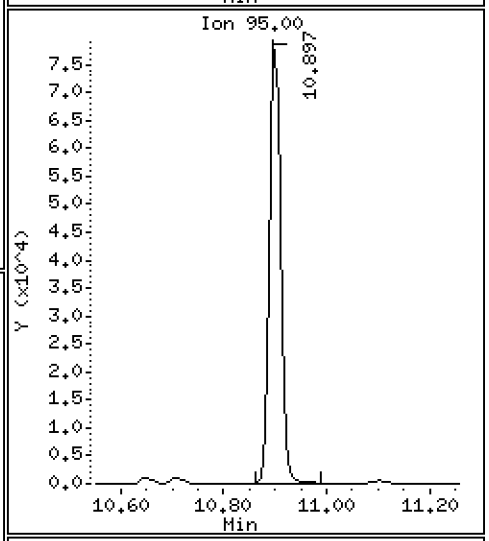


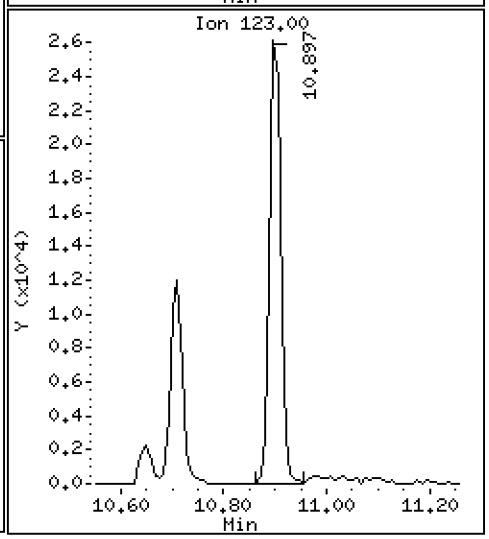












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

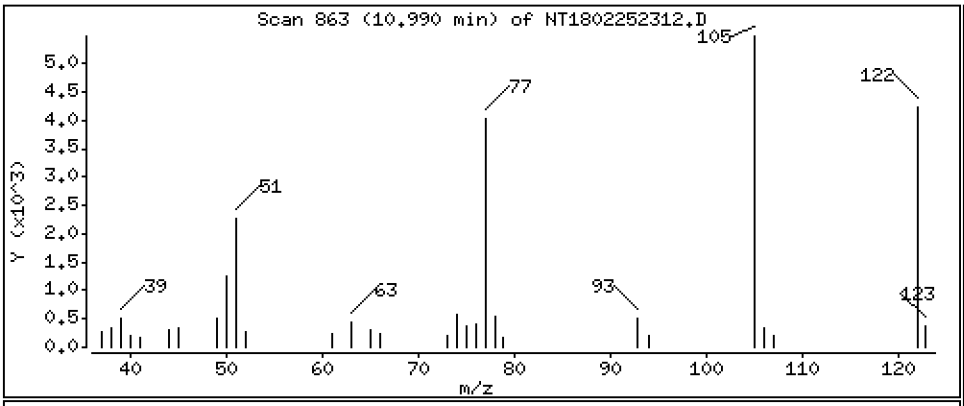
Operator: VTS

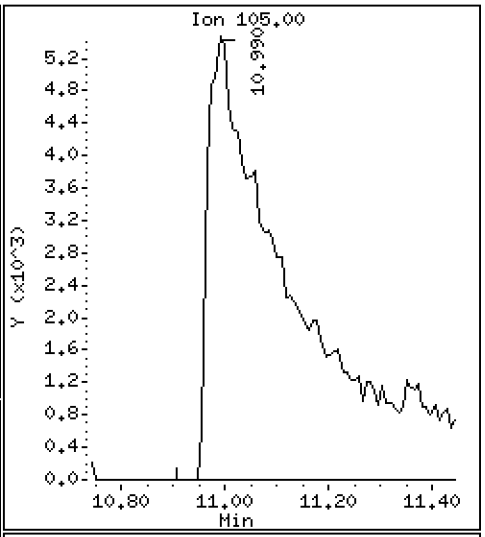
Column phase: ZB-5msi

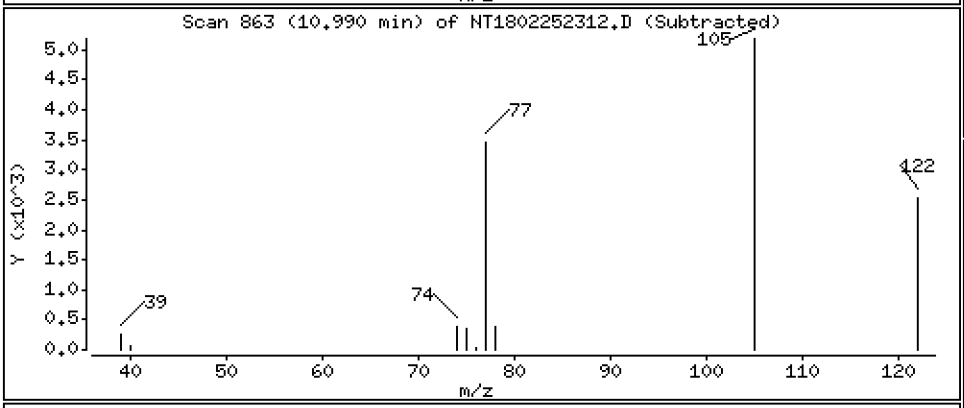
Column diameter: 0.25

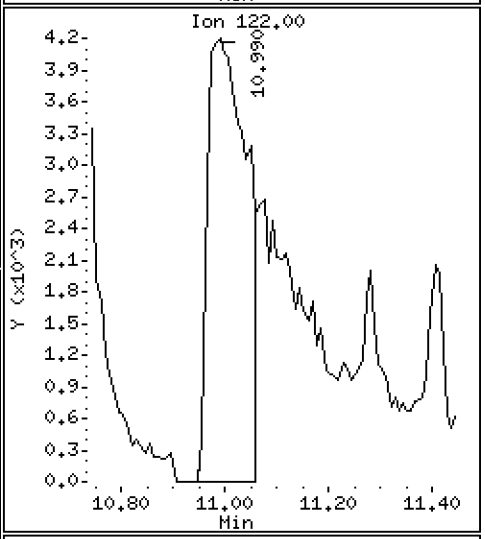
24 Benzoic acid

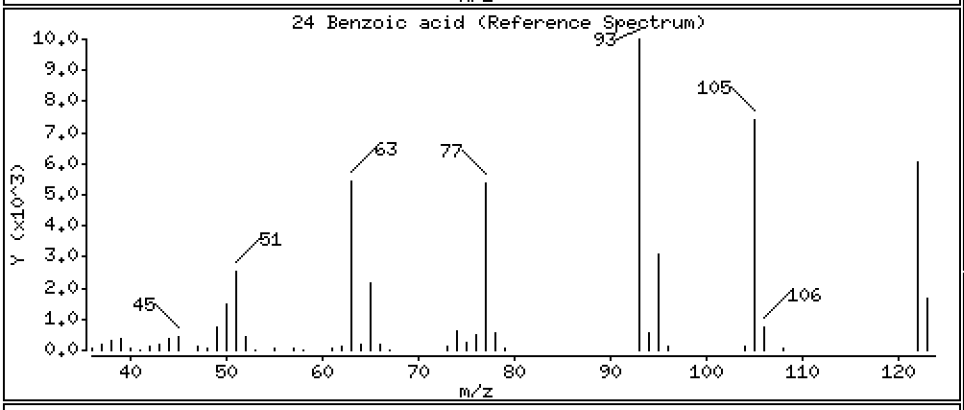
Concentration: 2.618 ug/mL

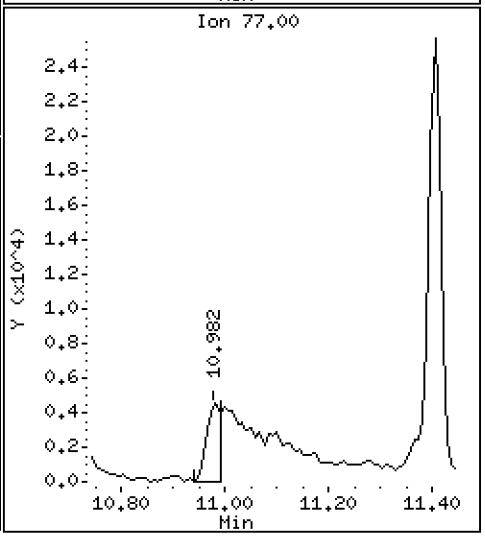


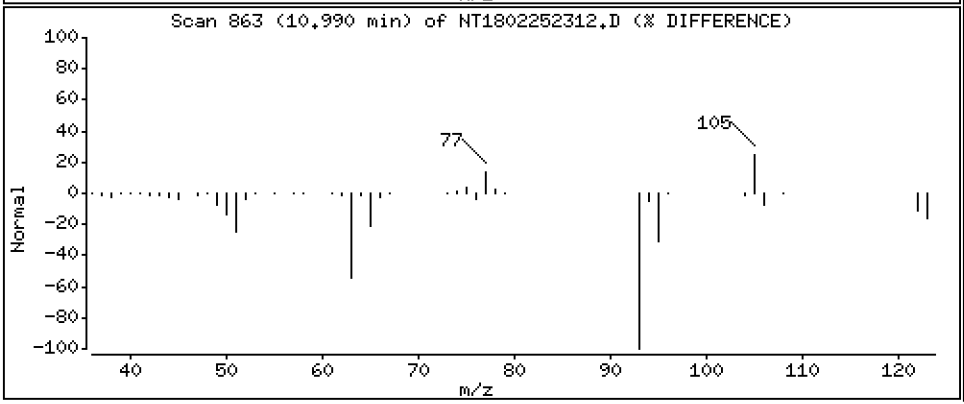












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

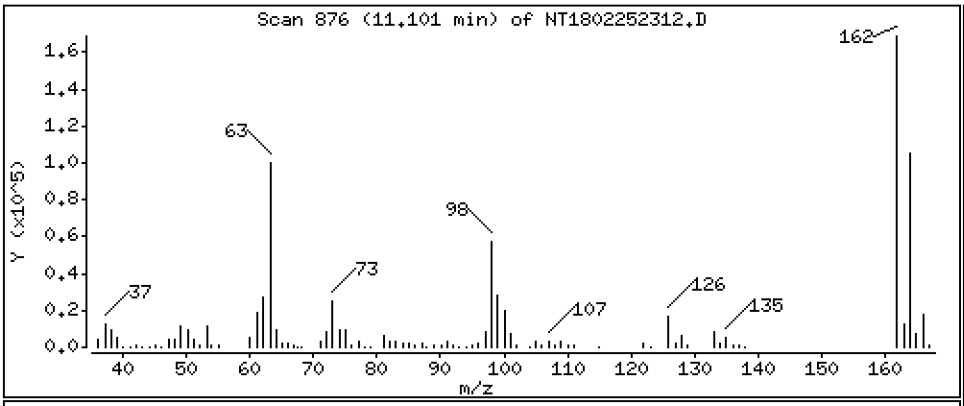
Operator: VTS

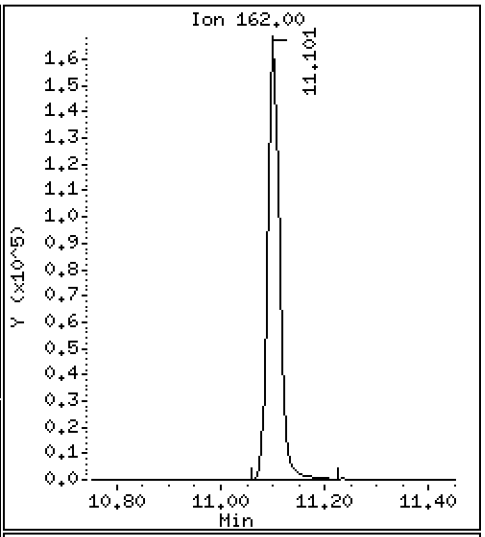
Column phase: ZB-5msi

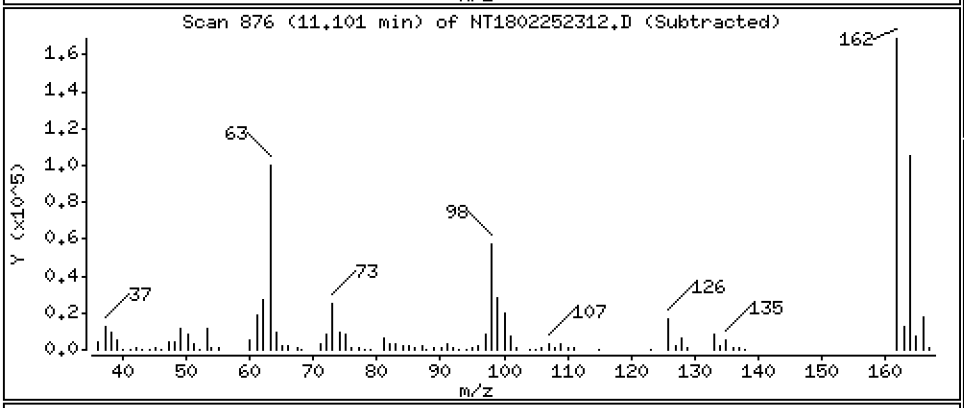
Column diameter: 0.25

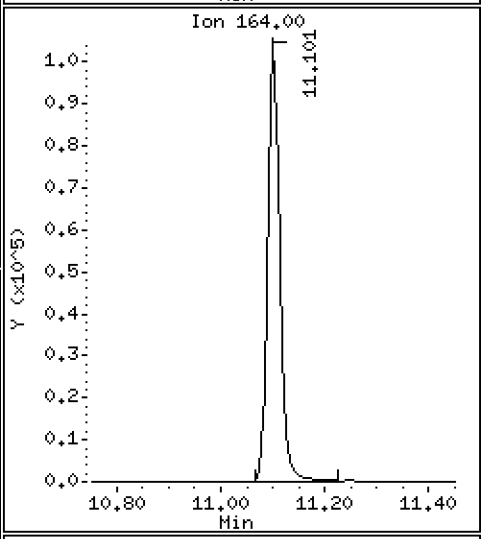
25 2,4-Dichlorophenol

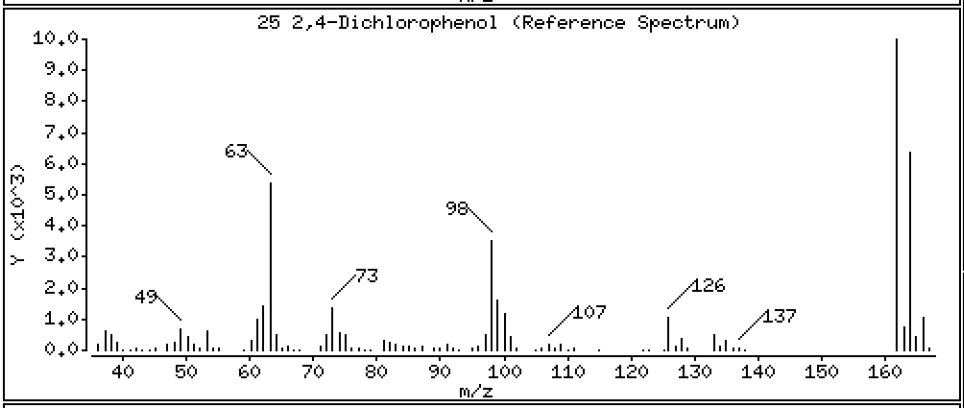
Concentration: 4.621 ug/mL

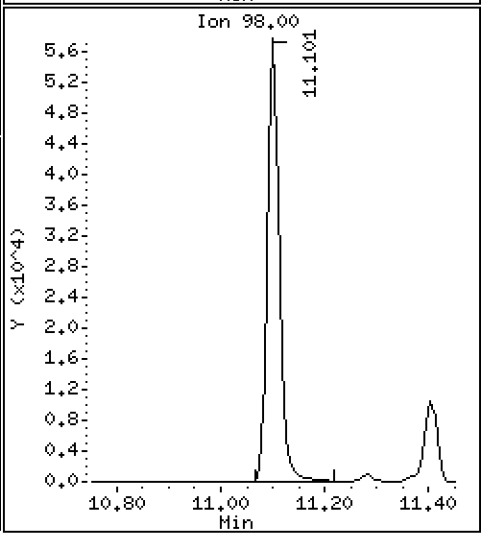


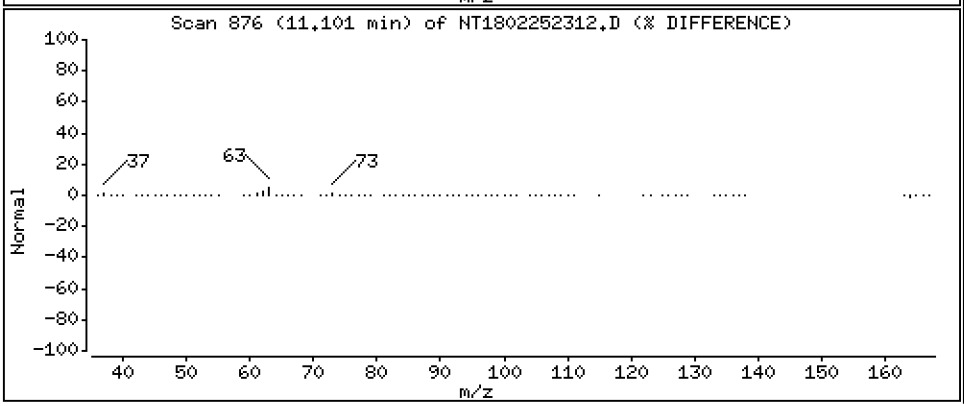












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

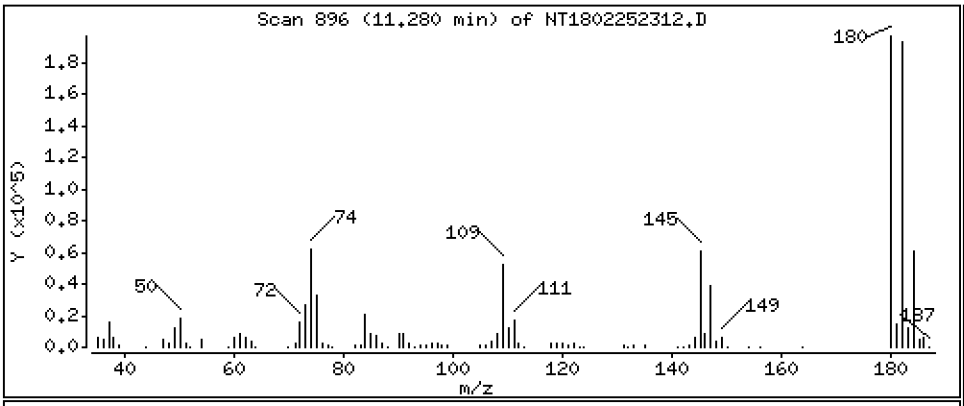
Operator: VTS

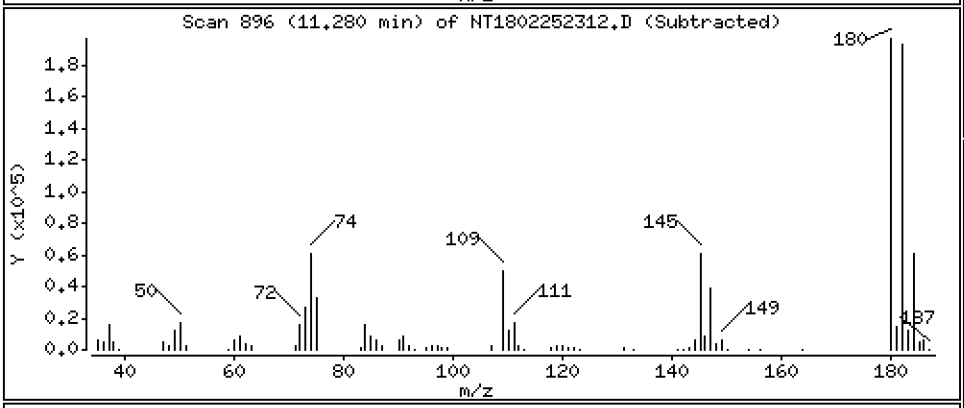
Column phase: ZB-5msi

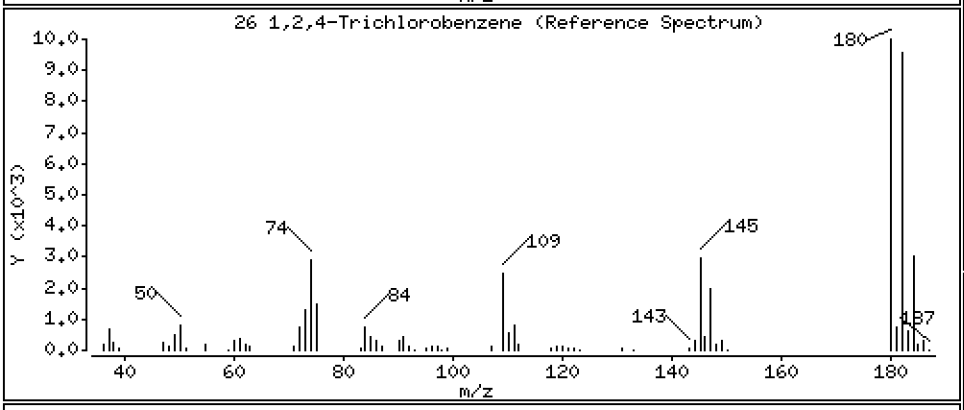
Column diameter: 0.25

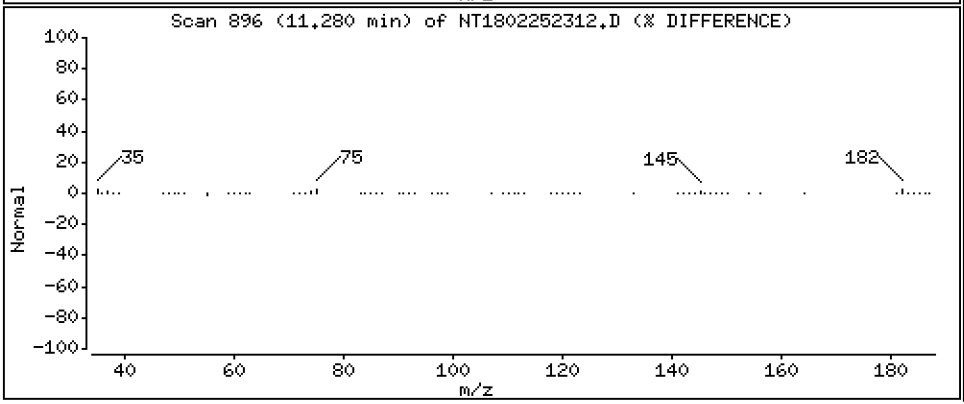
26 1,2,4-Trichlorobenzene

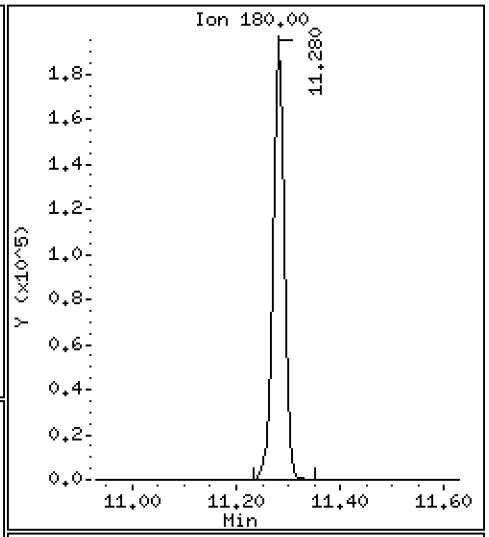
Concentration: 4.438 ug/mL

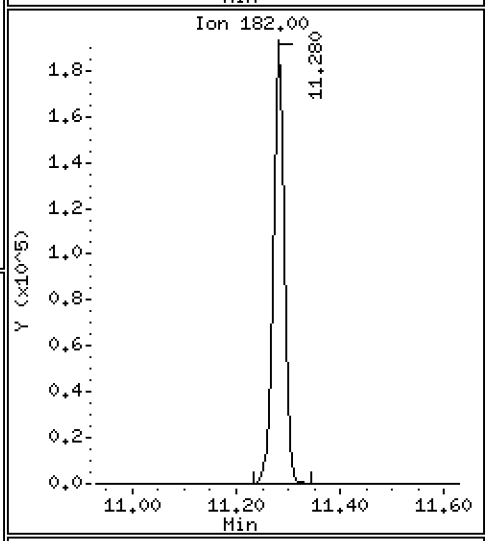


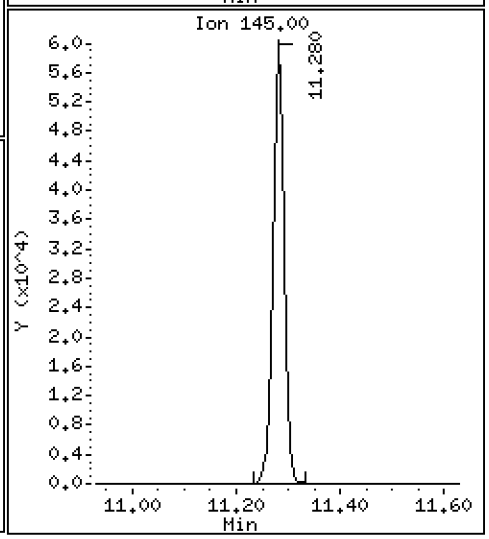












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

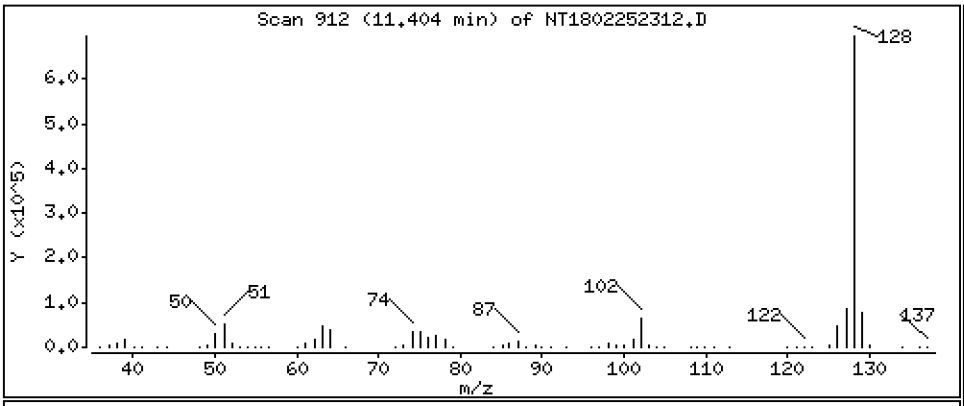
Operator: VTS

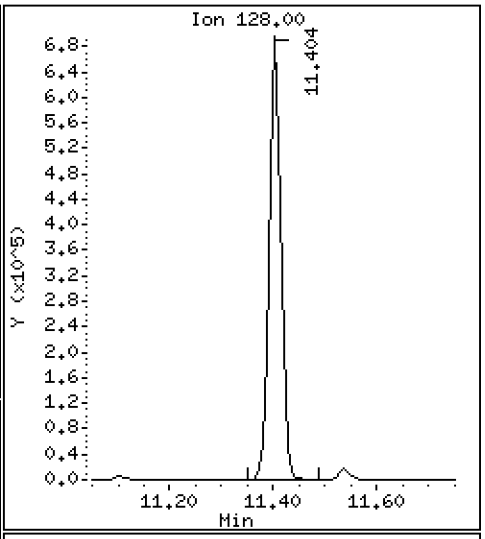
Column phase: ZB-5msi

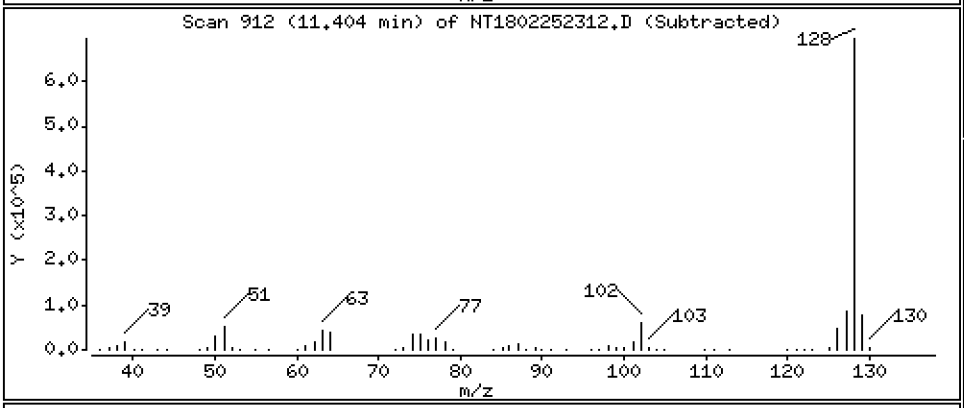
Column diameter: 0.25

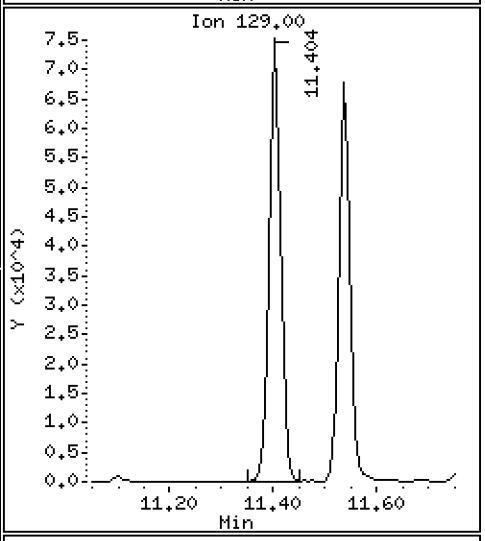
28 Naphthalene

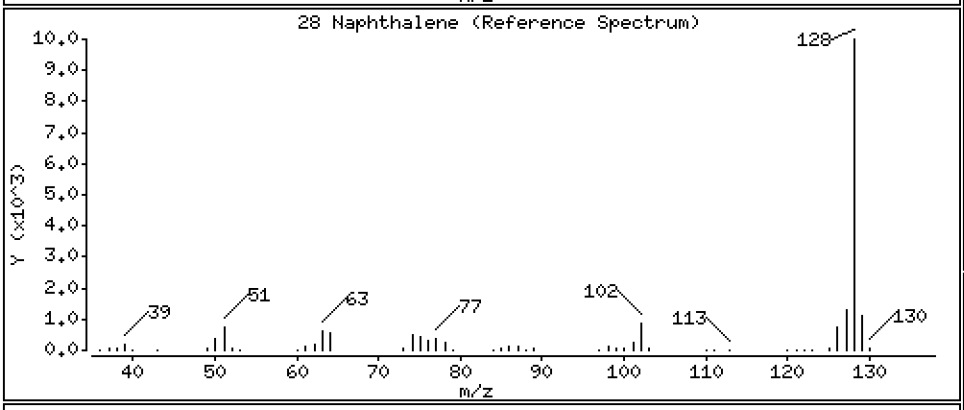
Concentration: 4.523 ug/mL

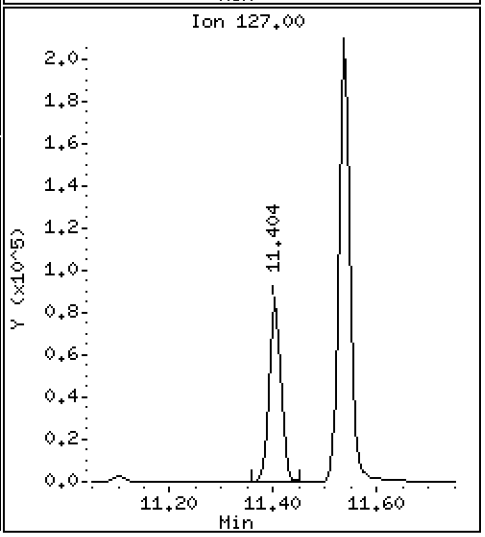


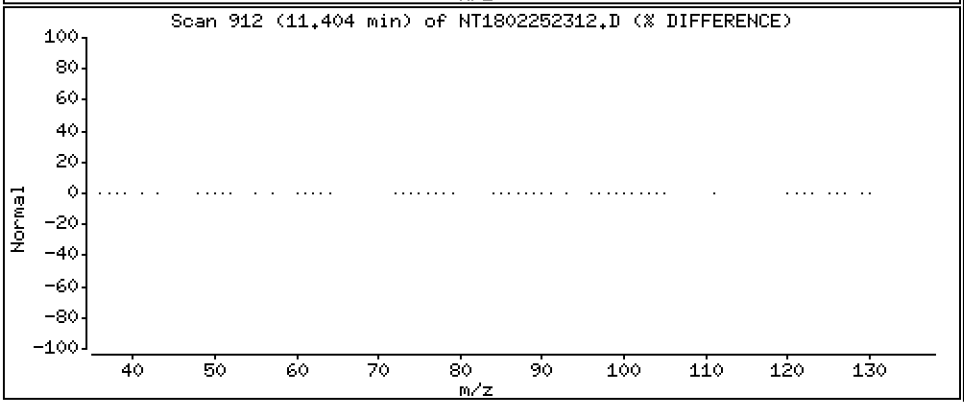












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

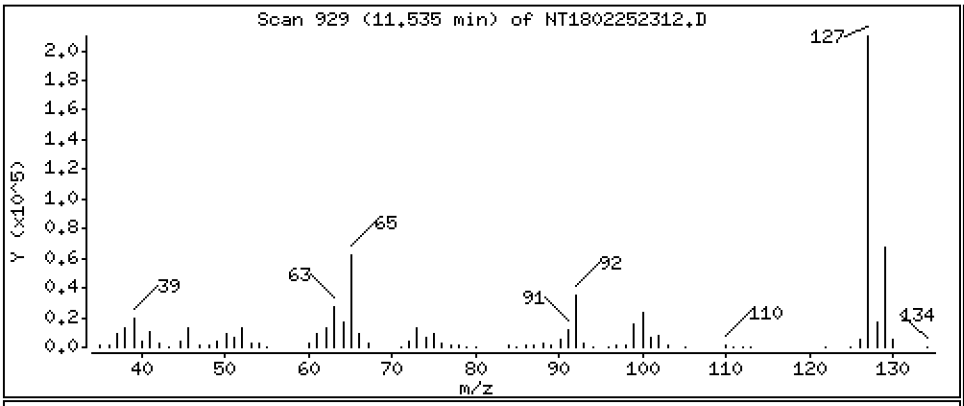
Operator: VTS

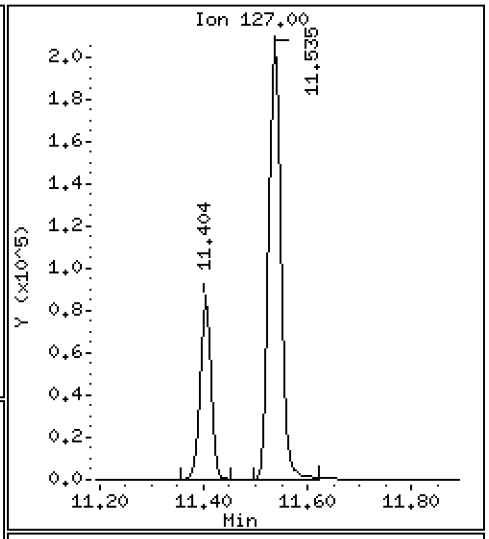
Column phase: ZB-5msi

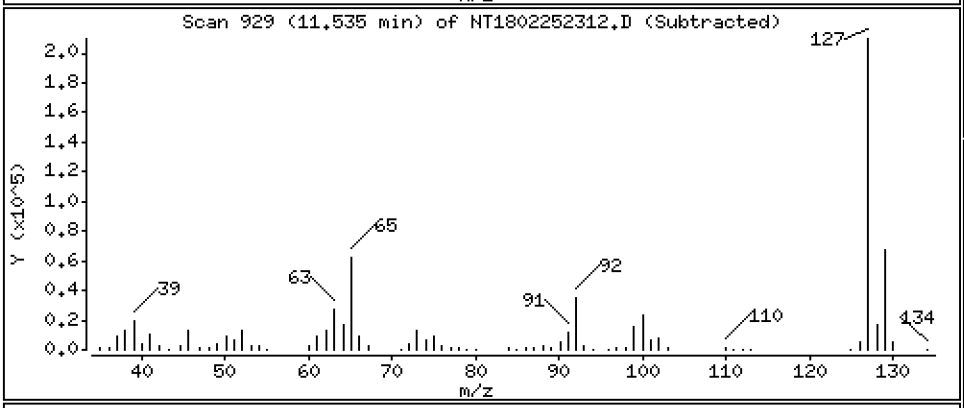
Column diameter: 0.25

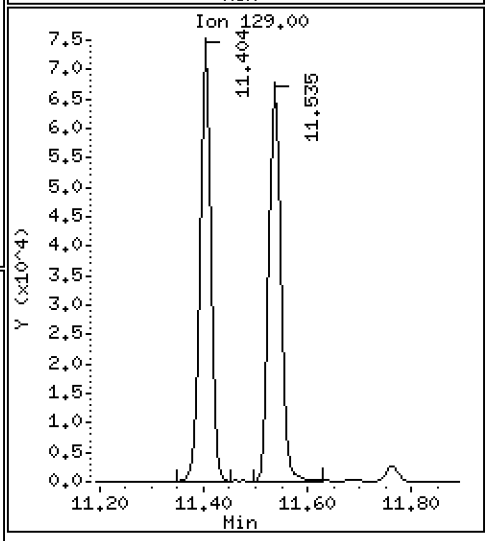
29 4-Chloroaniline

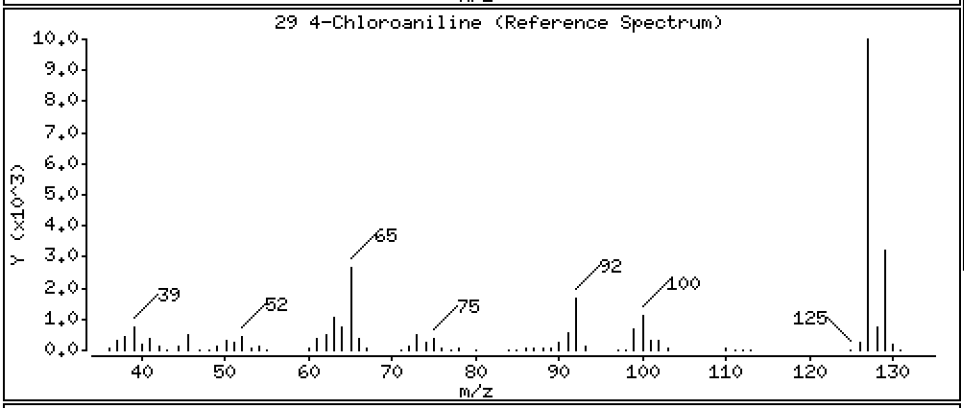
Concentration: 3.459 ug/mL

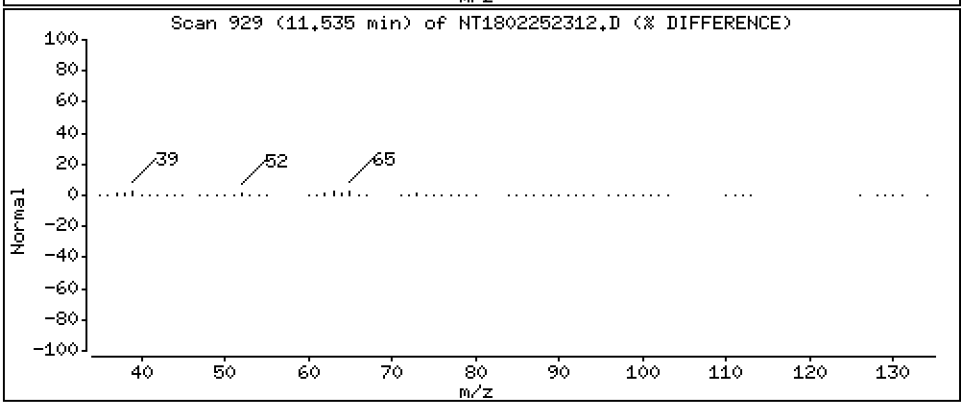












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

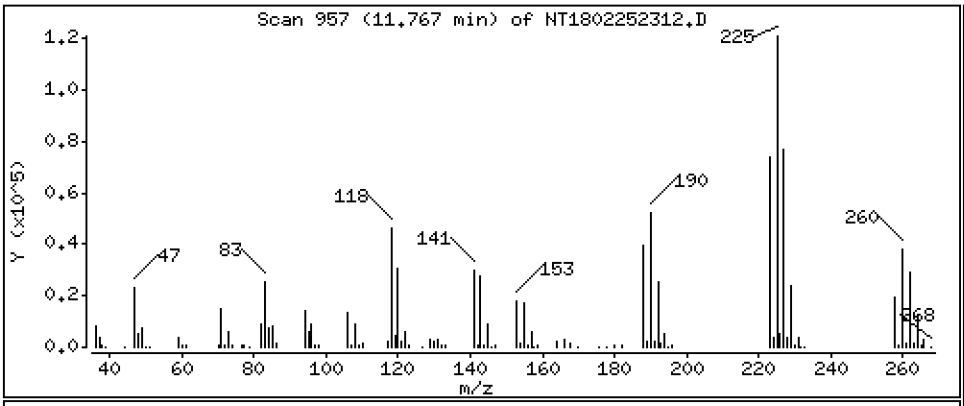
Operator: VTS

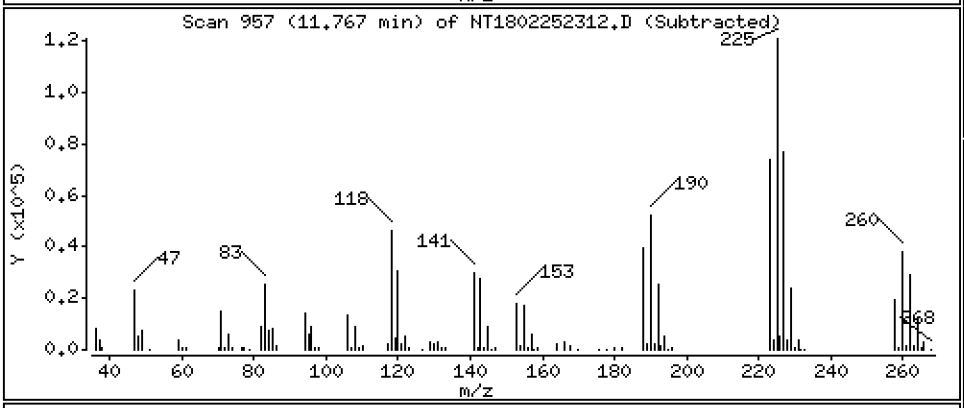
Column phase: ZB-5msi

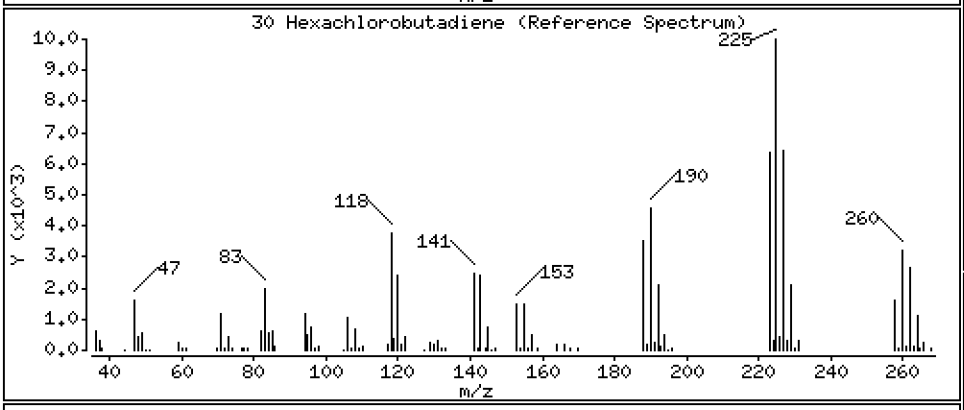
Column diameter: 0.25

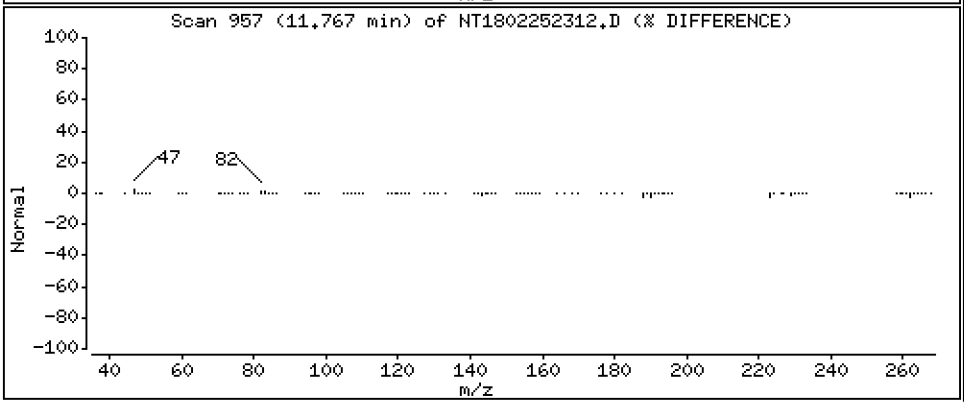
30 Hexachlorobutadiene

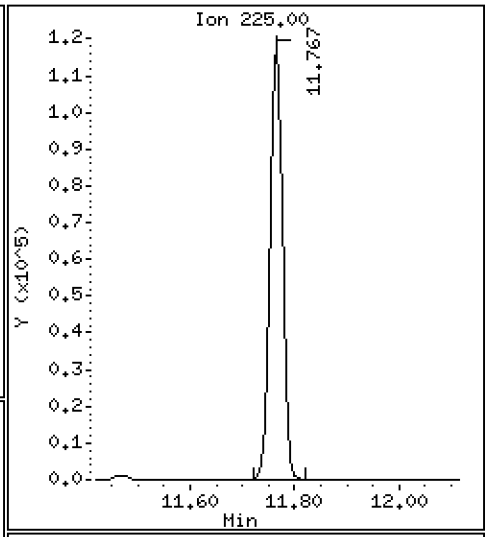
Concentration: 4.656 ug/mL

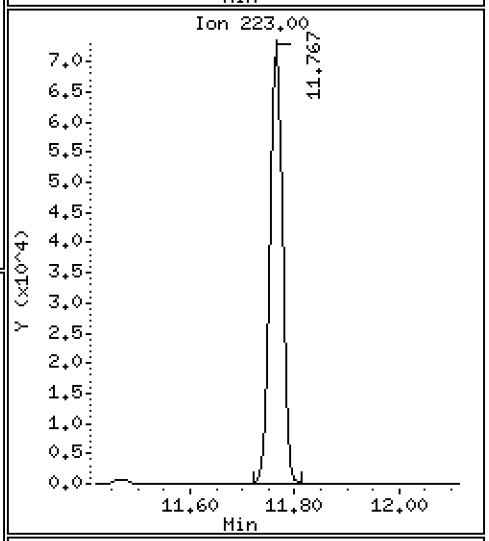


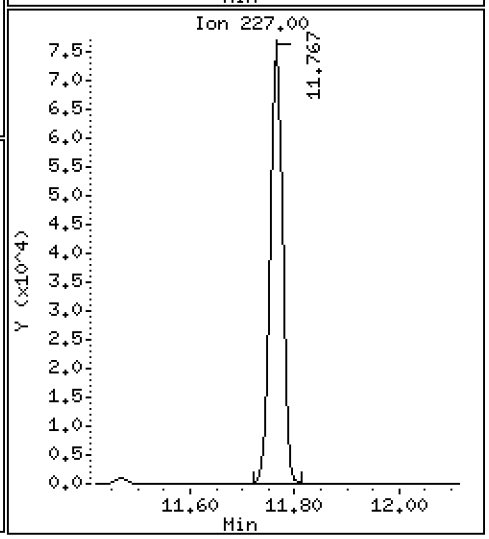












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

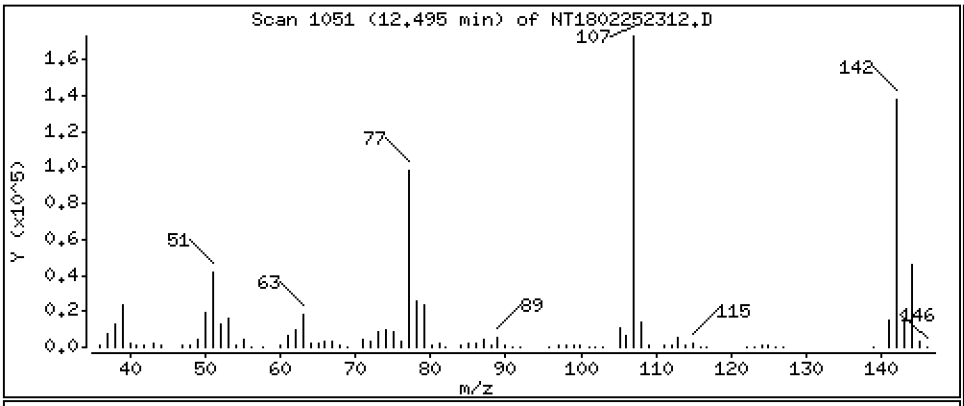
Operator: VTS

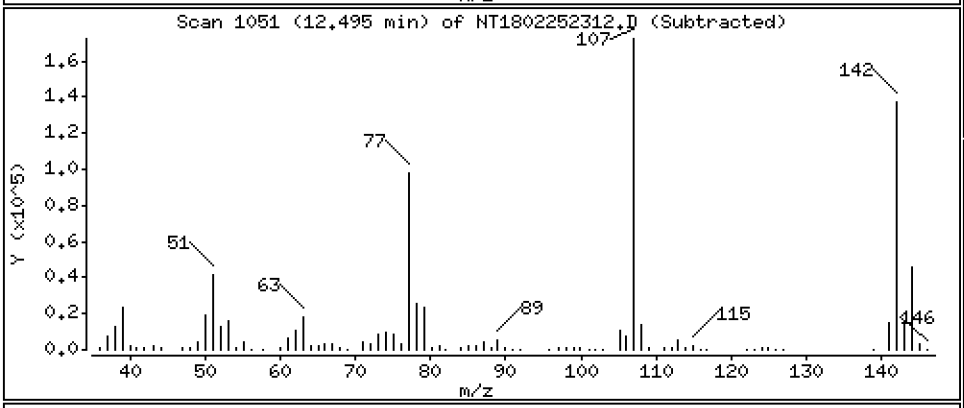
Column phase: ZB-5msi

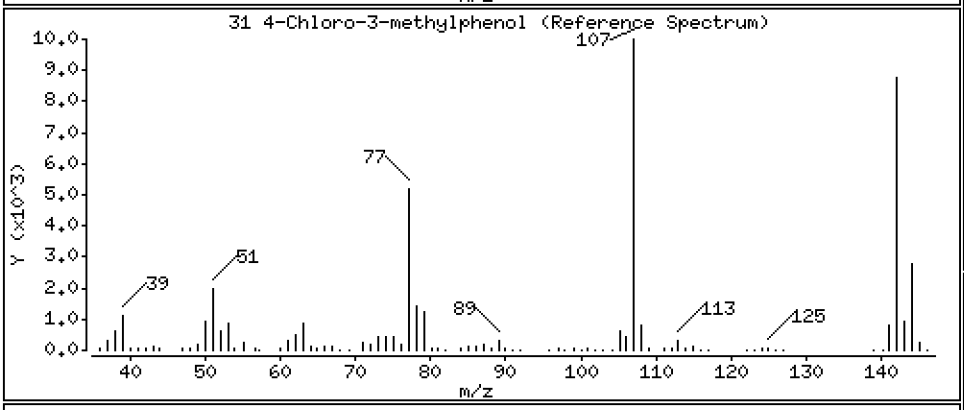
Column diameter: 0.25

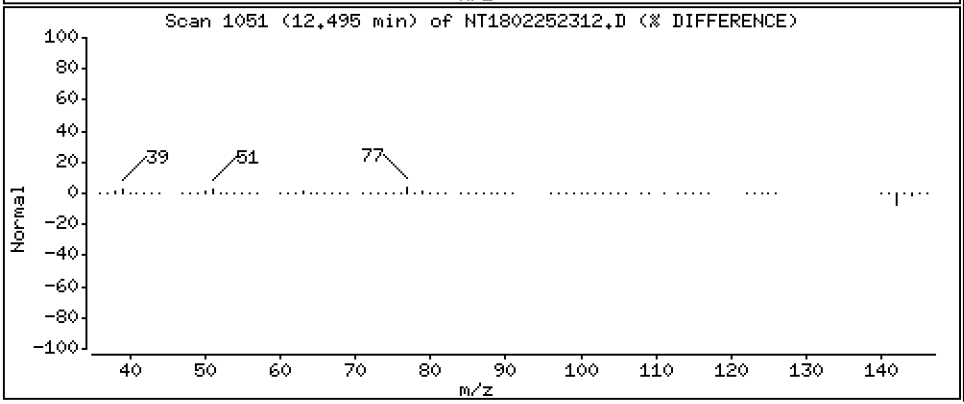
31 4-Chloro-3-methylphenol

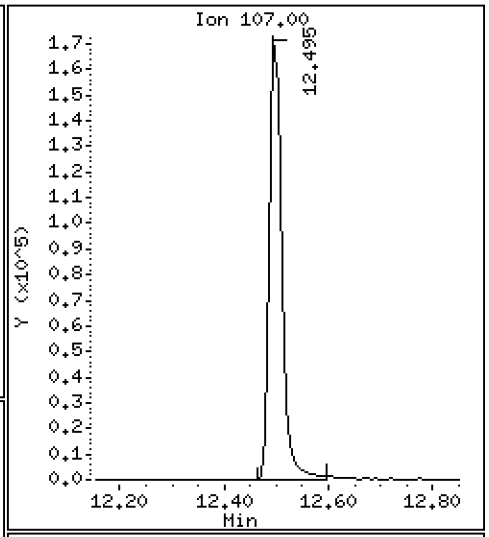
Concentration: 4.422 ug/mL

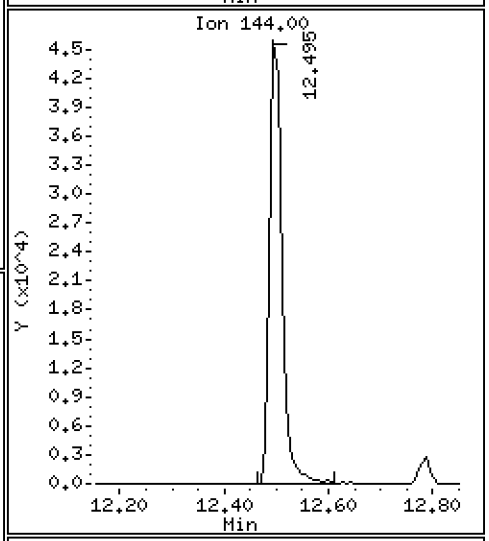


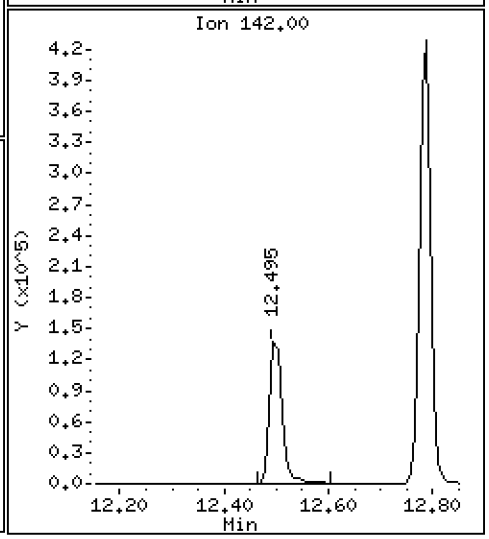












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

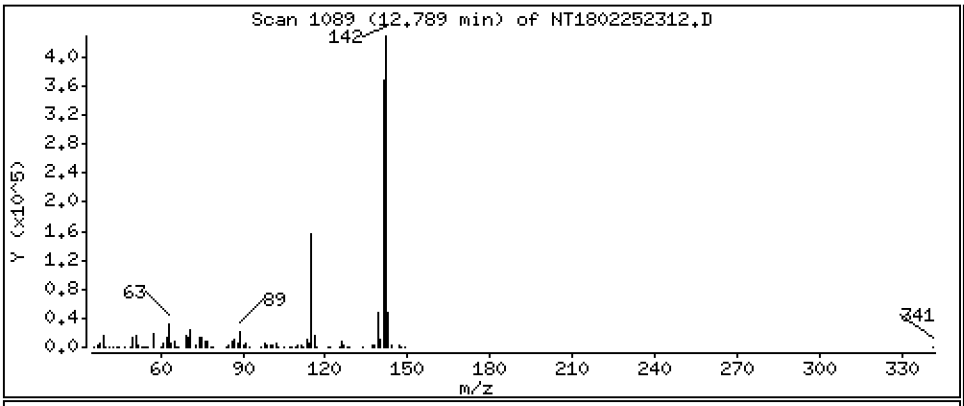
Operator: VTS

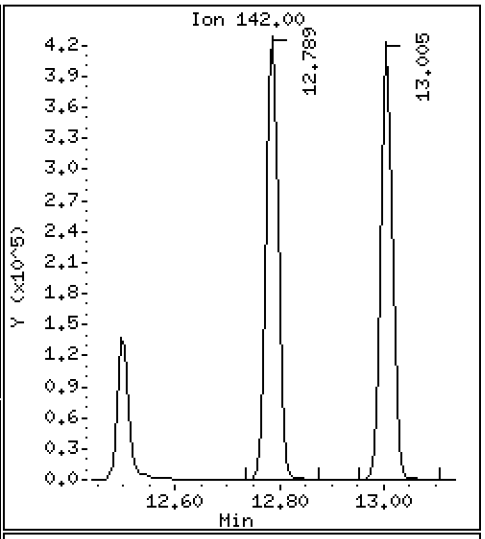
Column phase: ZB-5msi

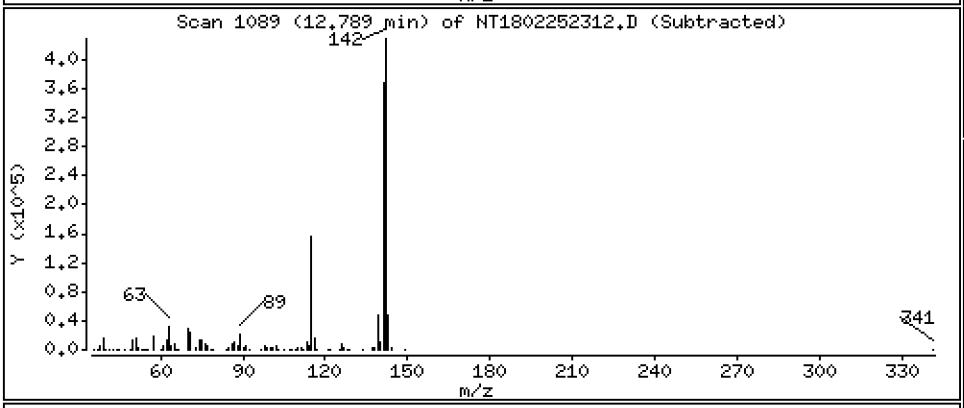
Column diameter: 0.25

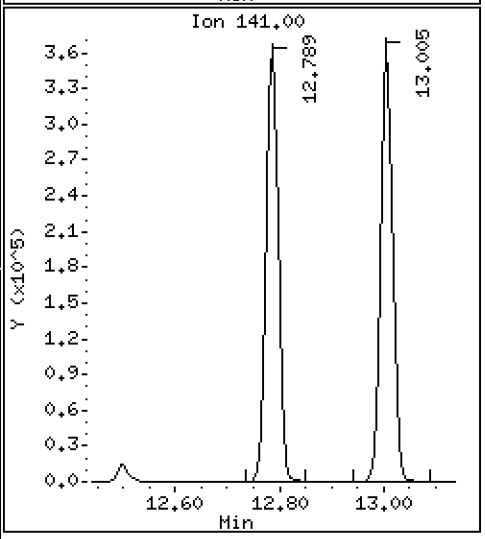
32 2-Methylnaphthalene

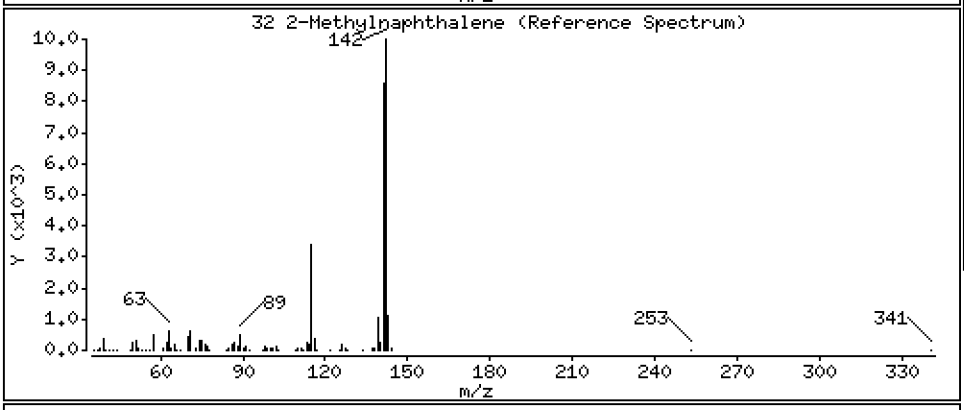
Concentration: 4.225 ug/mL

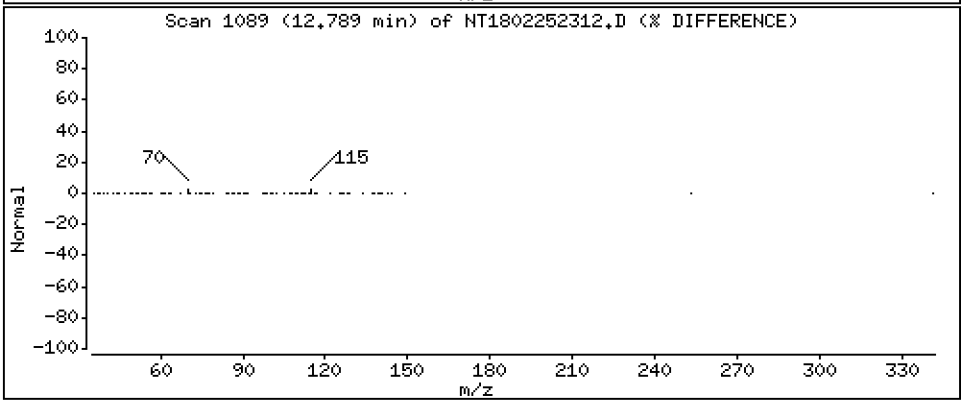












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

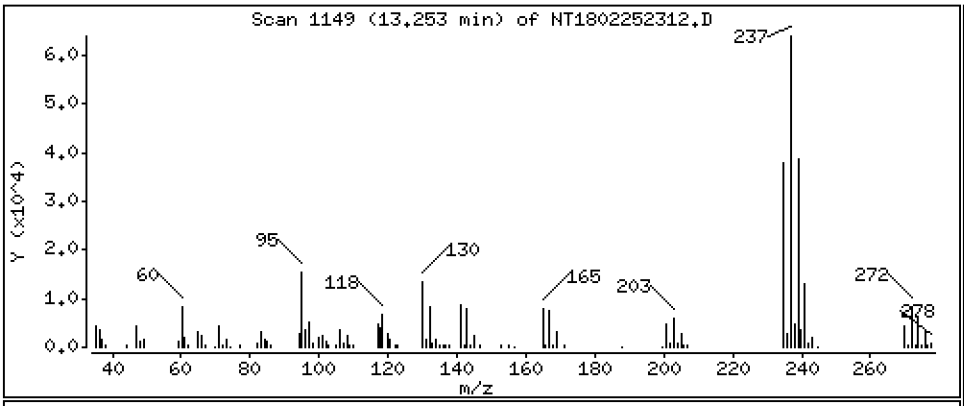
Operator: VTS

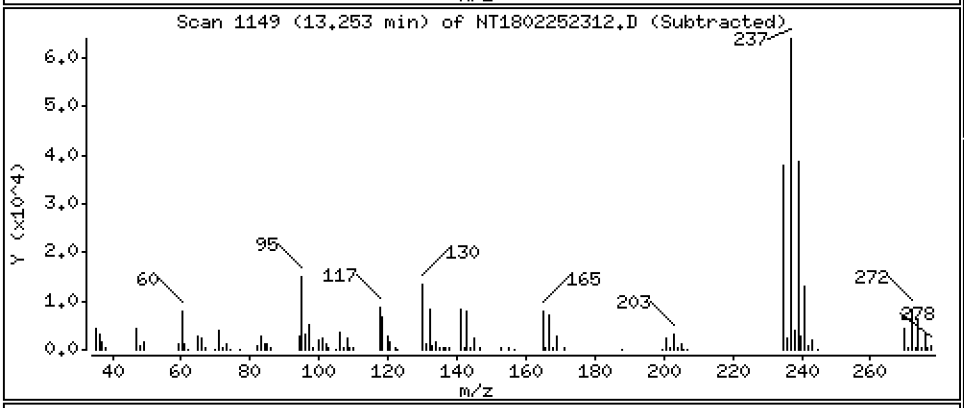
Column phase: ZB-5msi

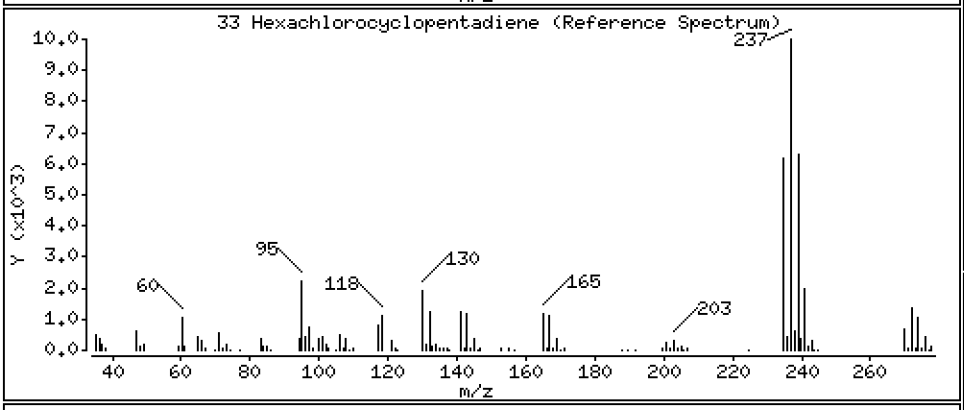
Column diameter: 0.25

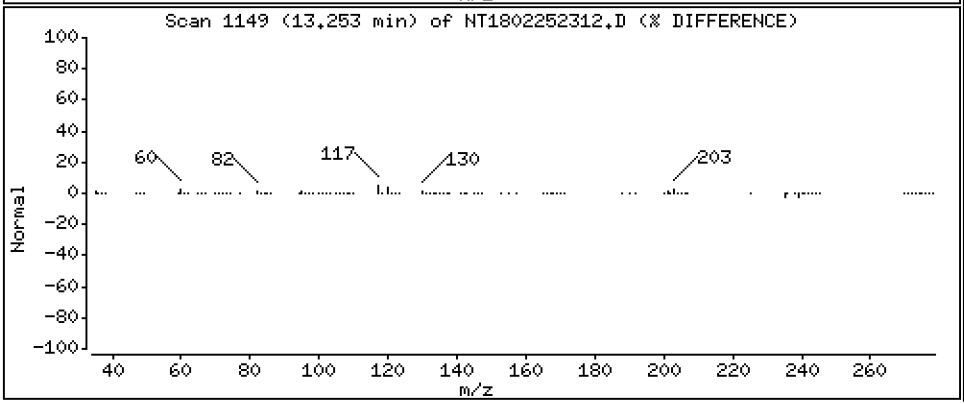
33 Hexachlorocyclopentadiene

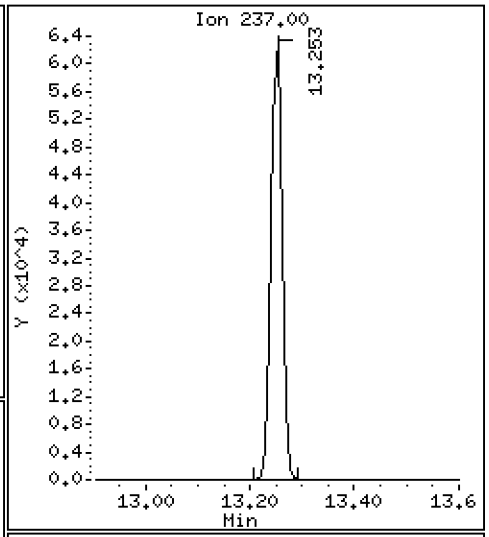
Concentration: 3.202 ug/mL

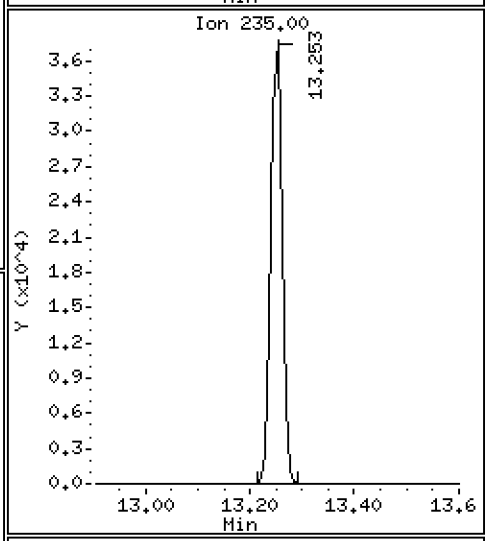


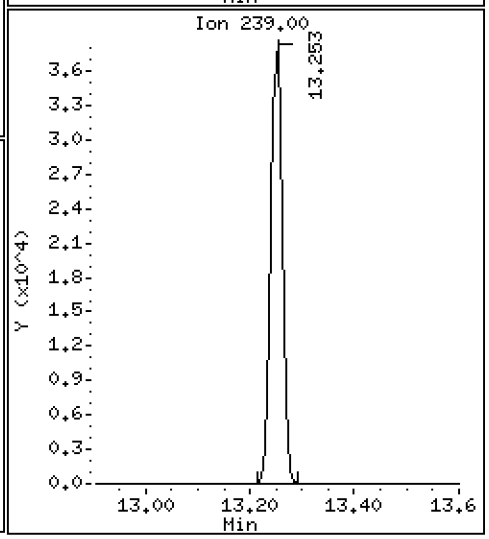












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

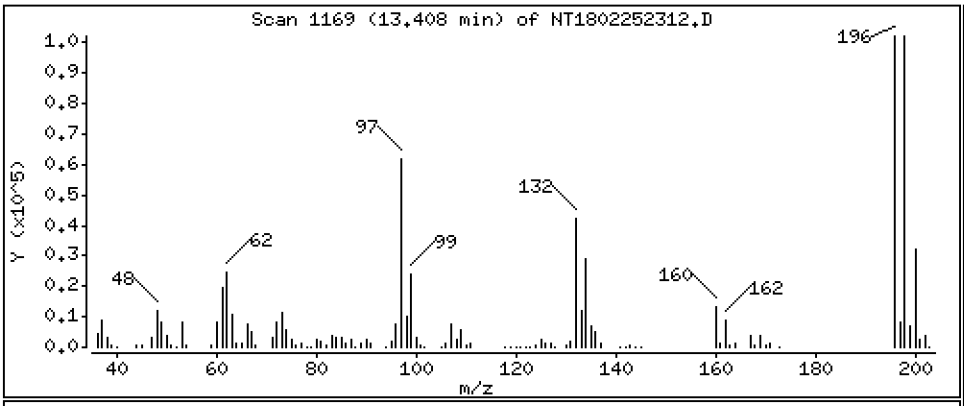
Operator: VTS

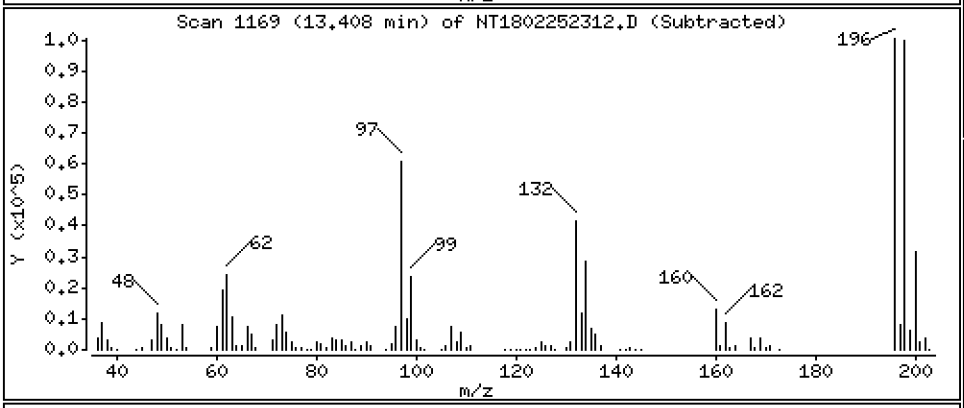
Column phase: ZB-5msi

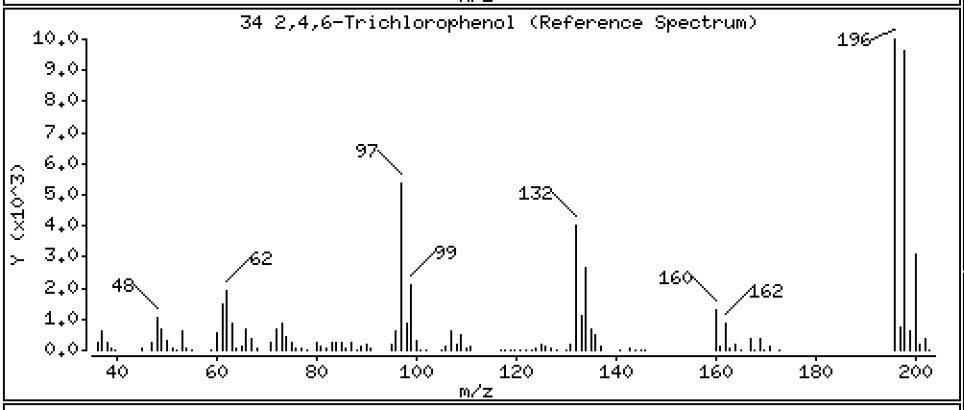
Column diameter: 0.25

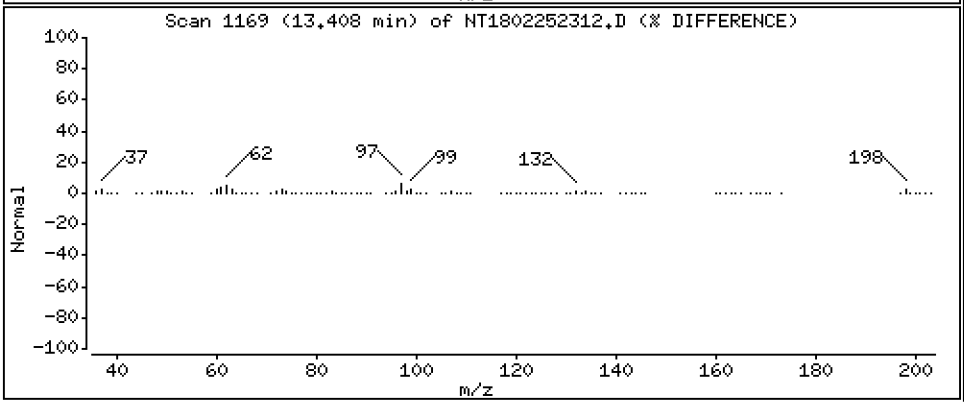
34 2,4,6-Trichlorophenol

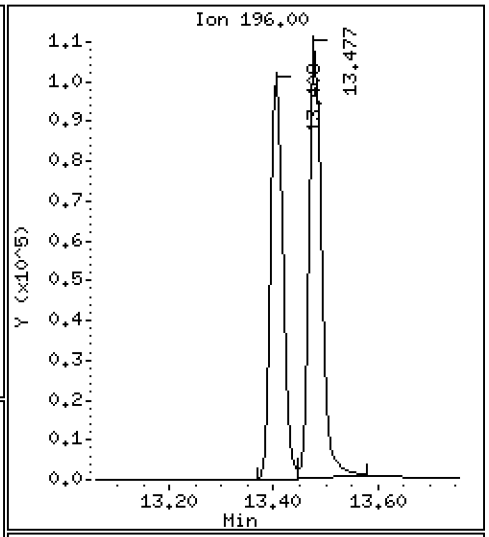
Concentration: 4.148 ug/mL

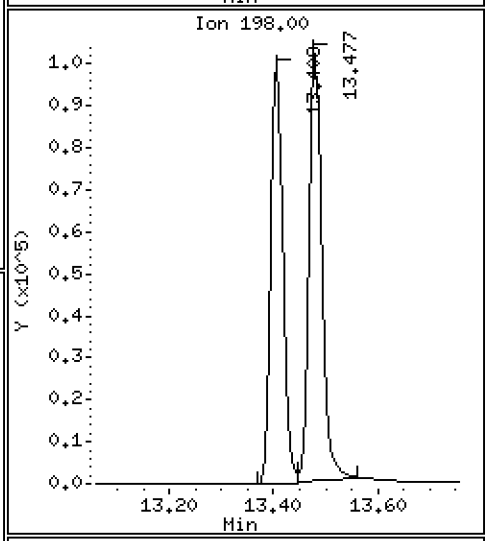


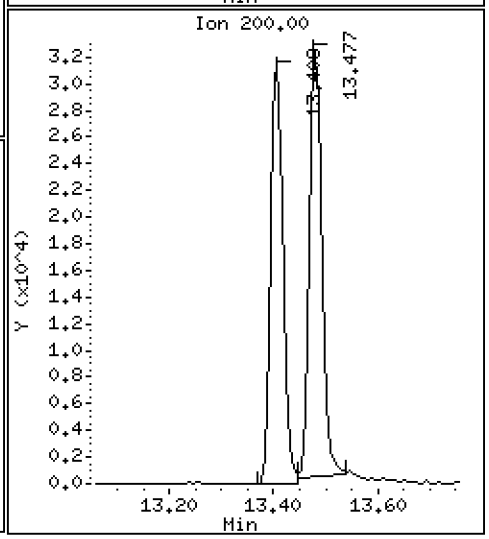












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

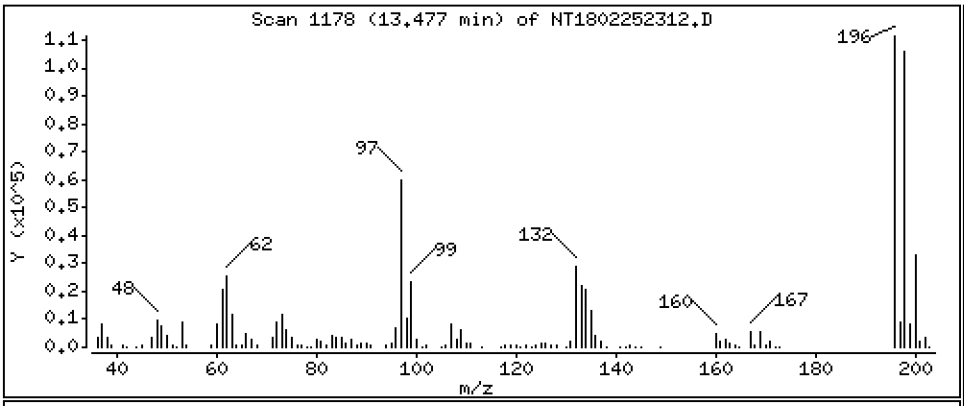
Operator: VTS

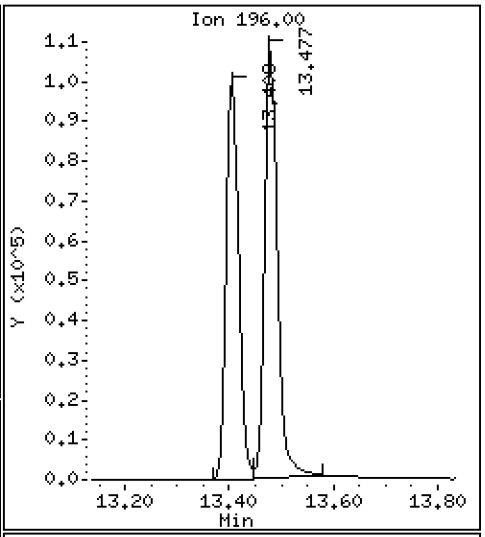
Column phase: ZB-5msi

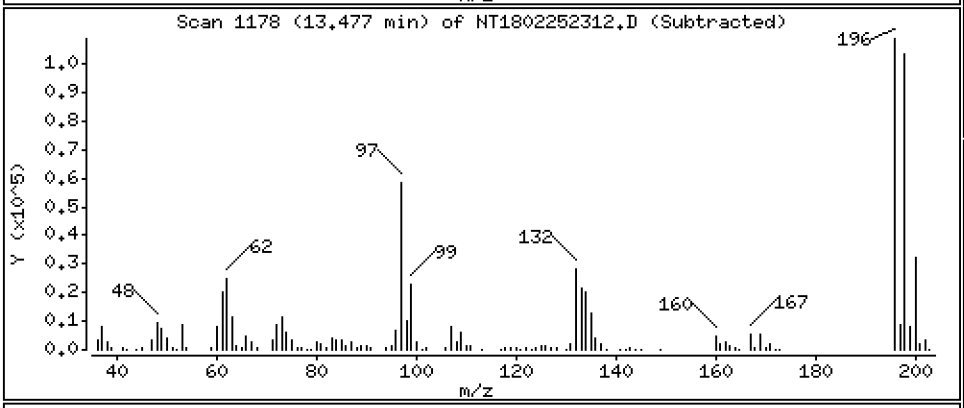
Column diameter: 0.25

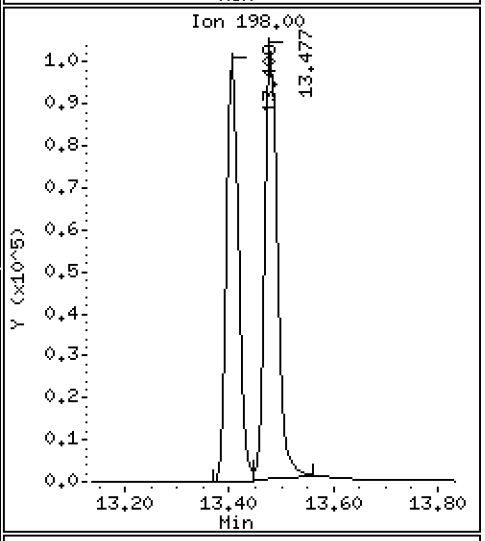
35 2,4,5-Trichlorophenol

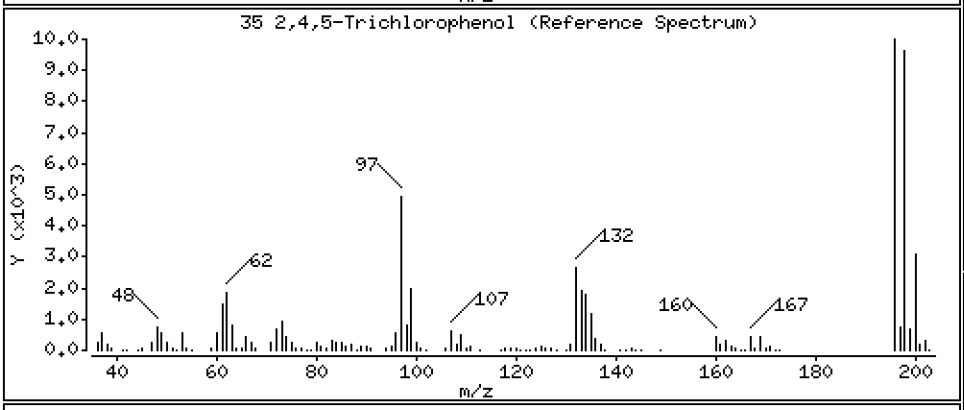
Concentration: 4.100 ug/mL

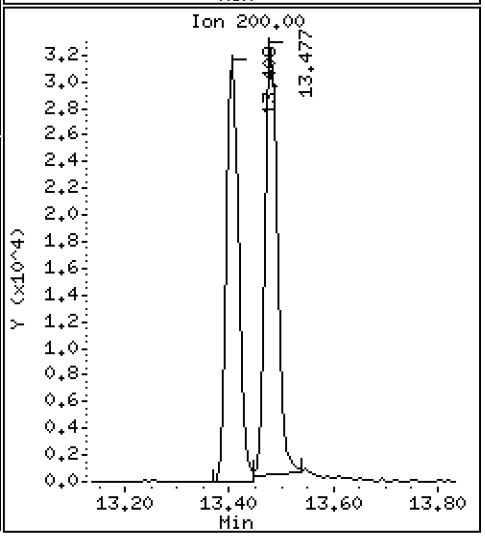


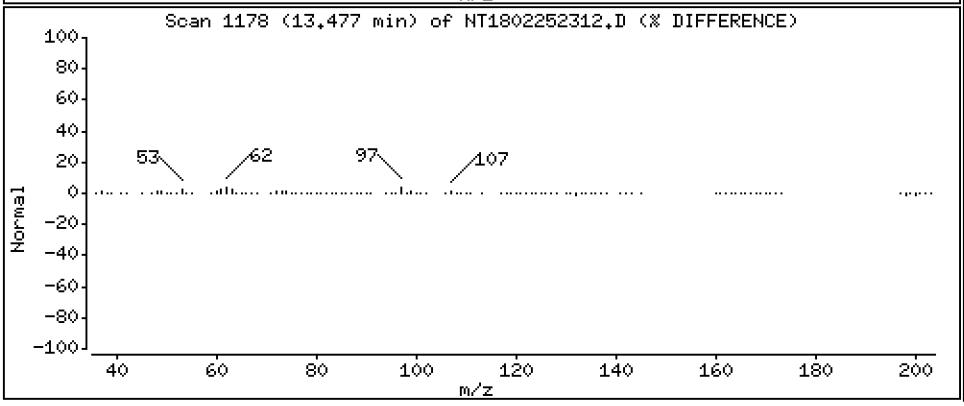












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

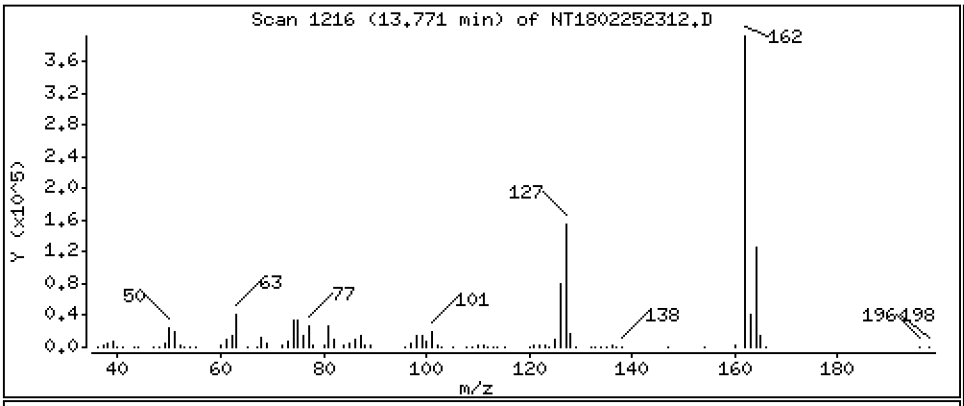
Operator: VTS

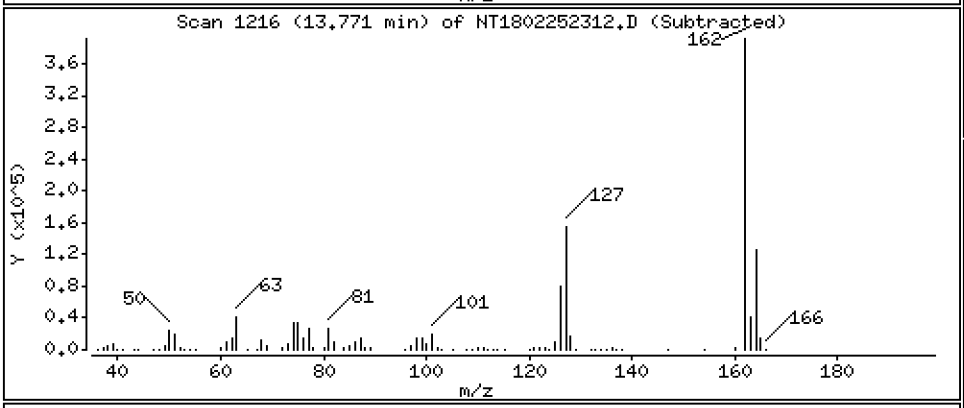
Column phase: ZB-5msi

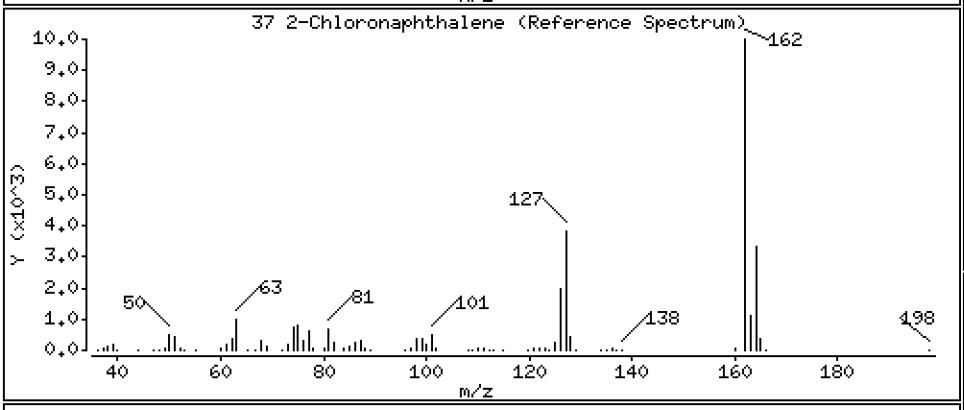
Column diameter: 0.25

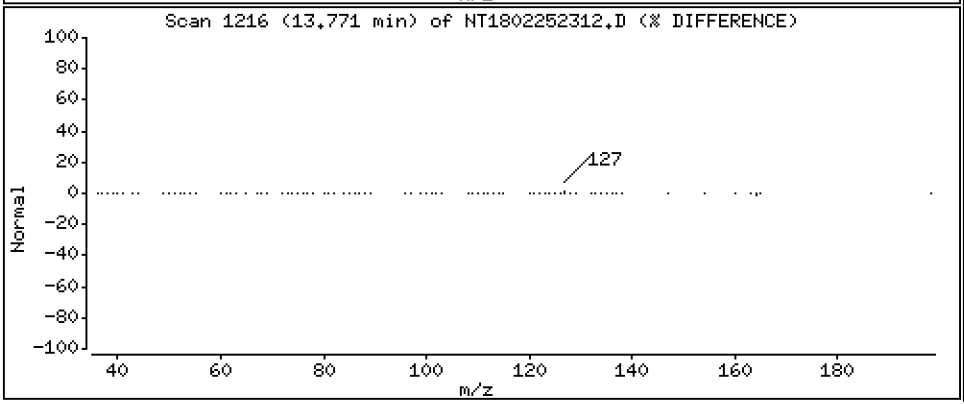
37 2-Chloronaphthalene

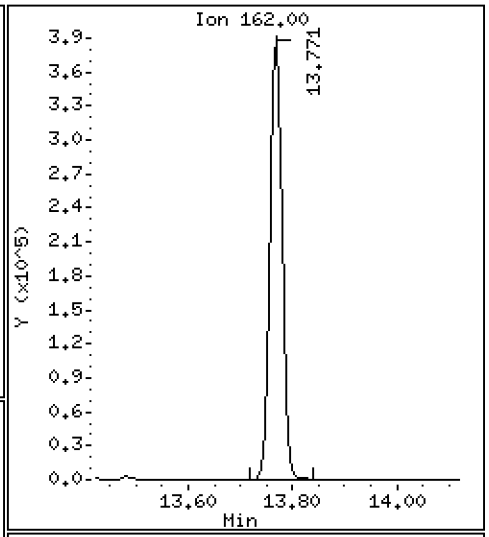
Concentration: 4.552 ug/mL

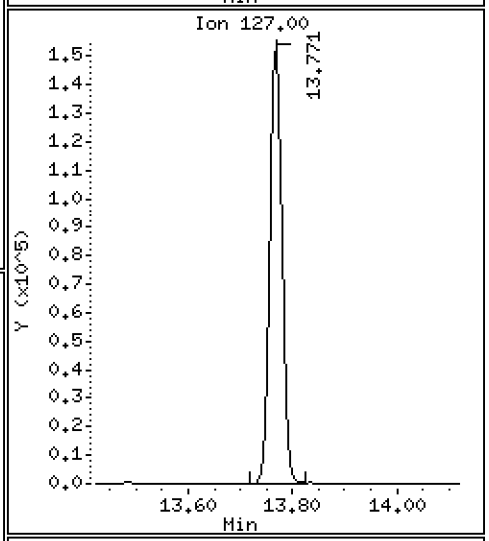


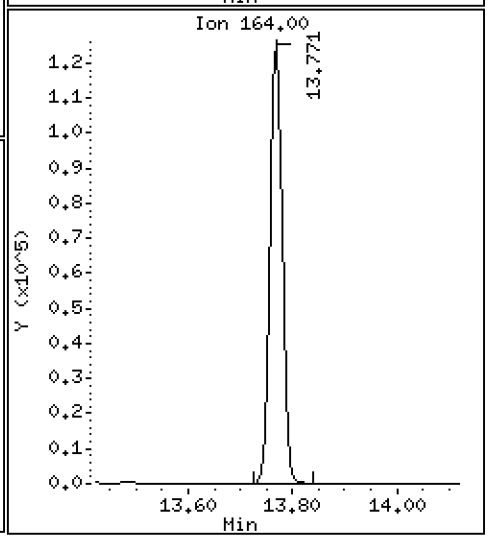












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

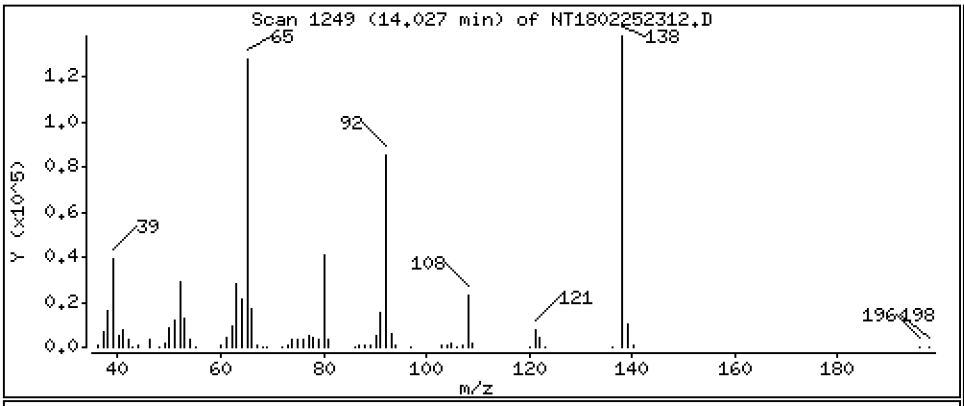
Operator: VTS

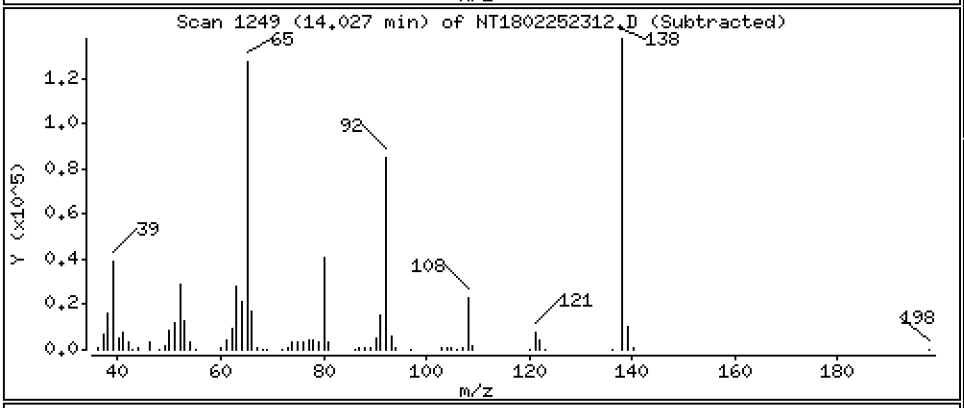
Column phase: ZB-5msi

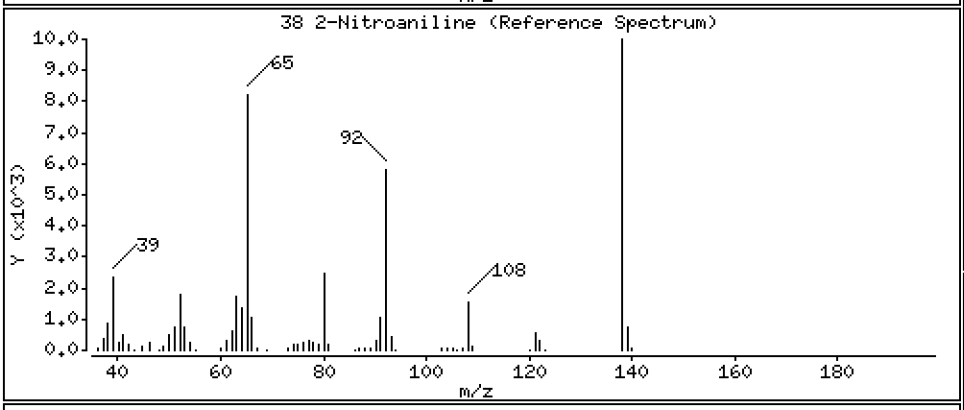
Column diameter: 0.25

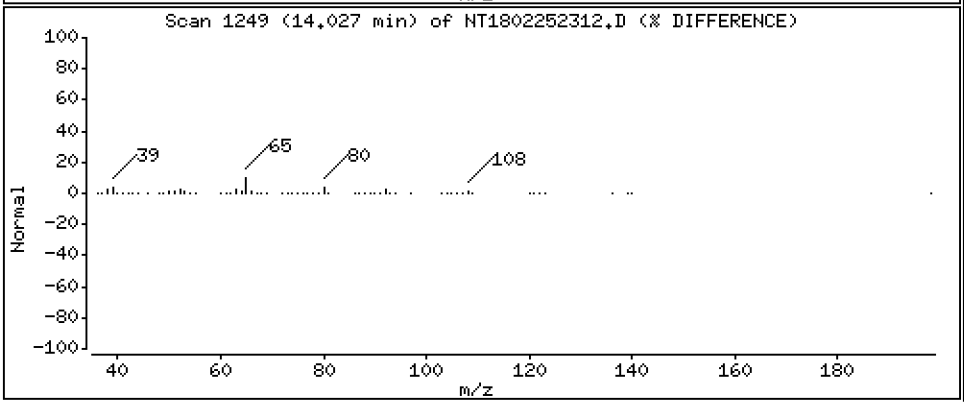
38 2-Nitroaniline

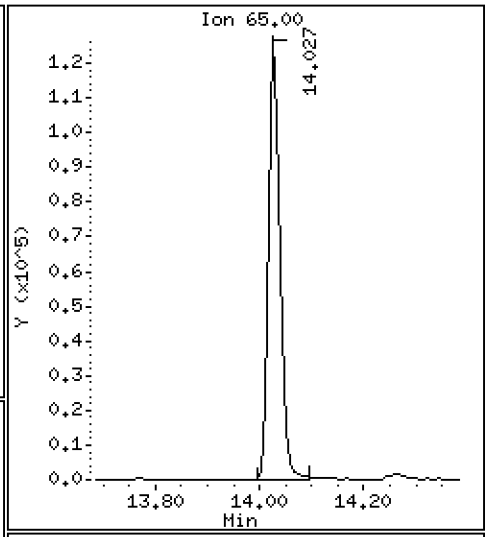
Concentration: 4.495 ug/mL

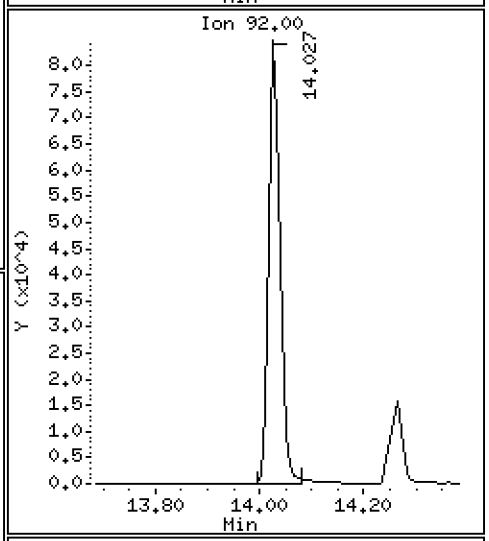


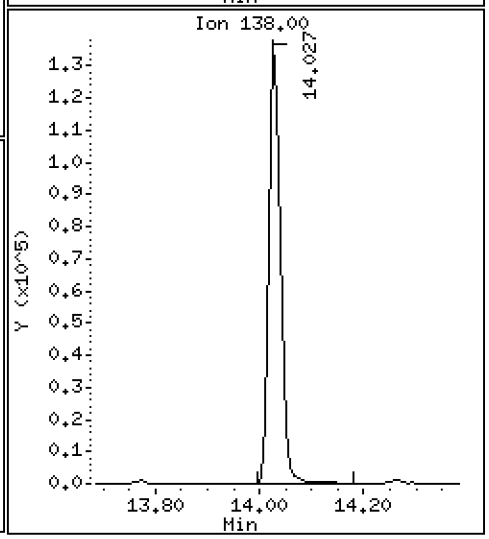












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

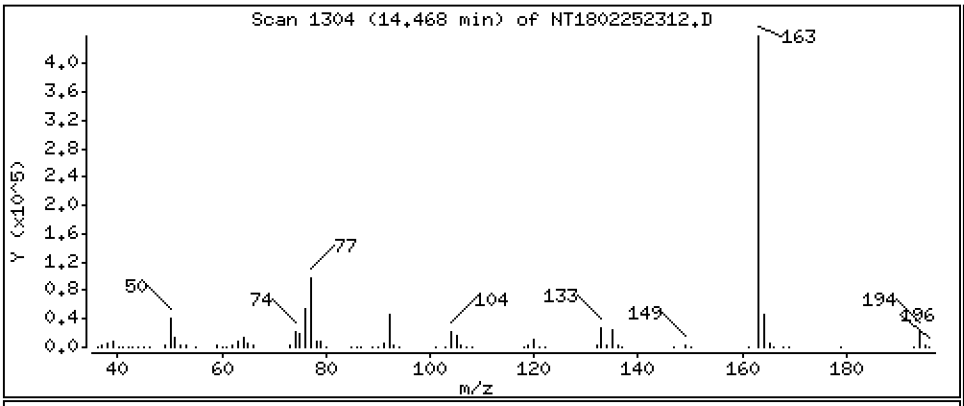
Operator: VTS

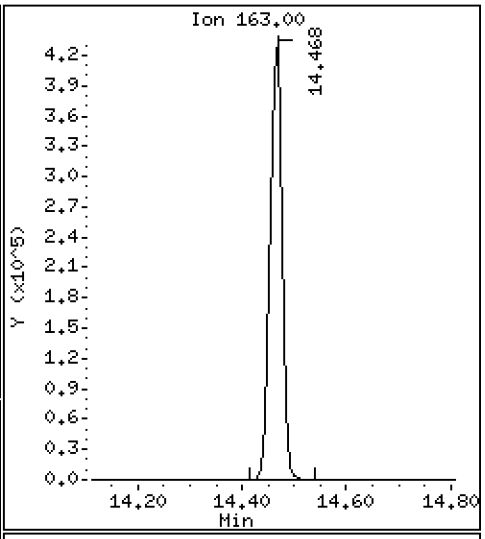
Column phase: ZB-5msi

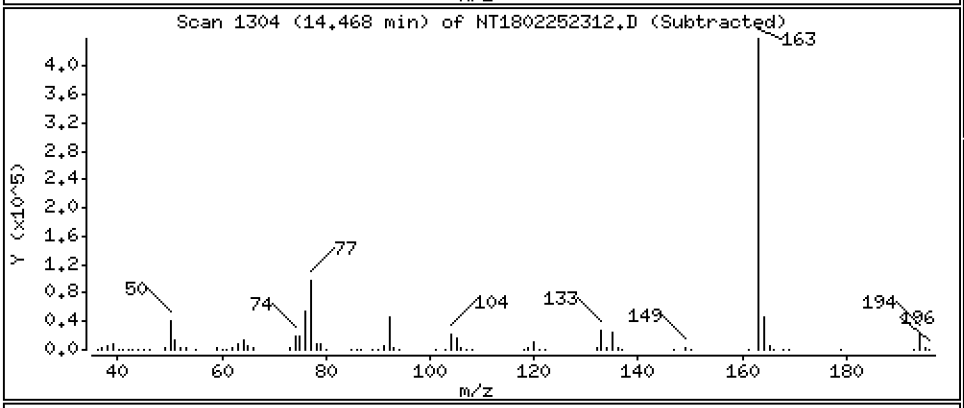
Column diameter: 0.25

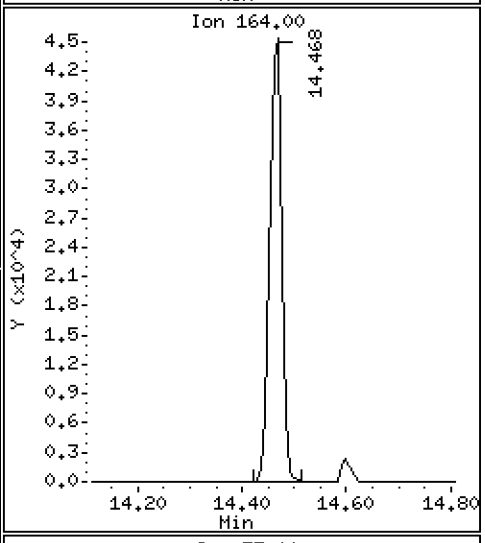
39 Dimethylphthalate

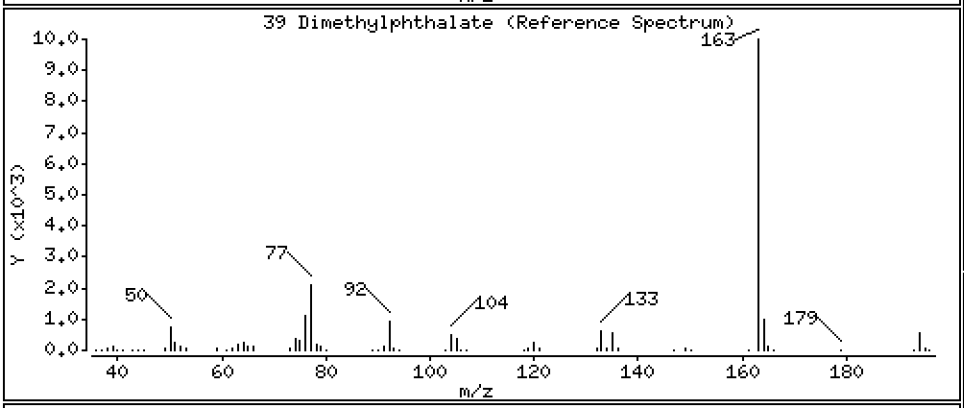
Concentration: 4.739 ug/mL

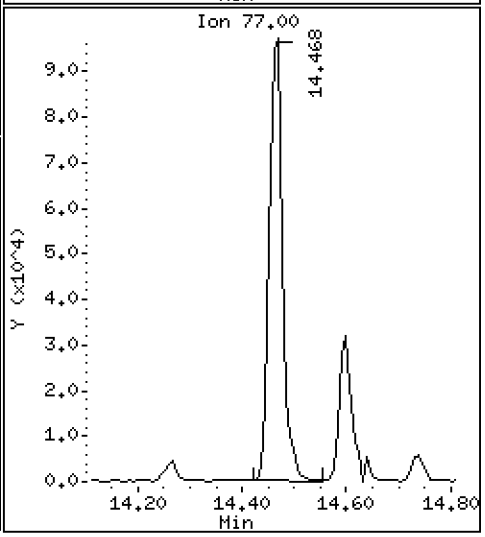


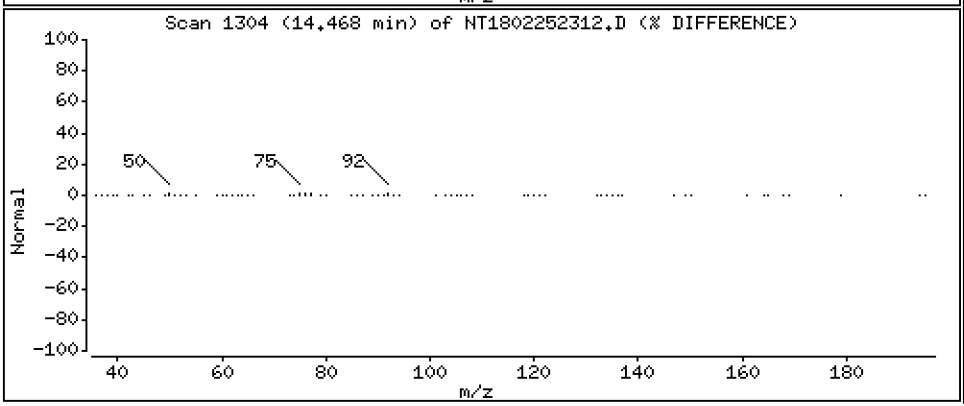












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

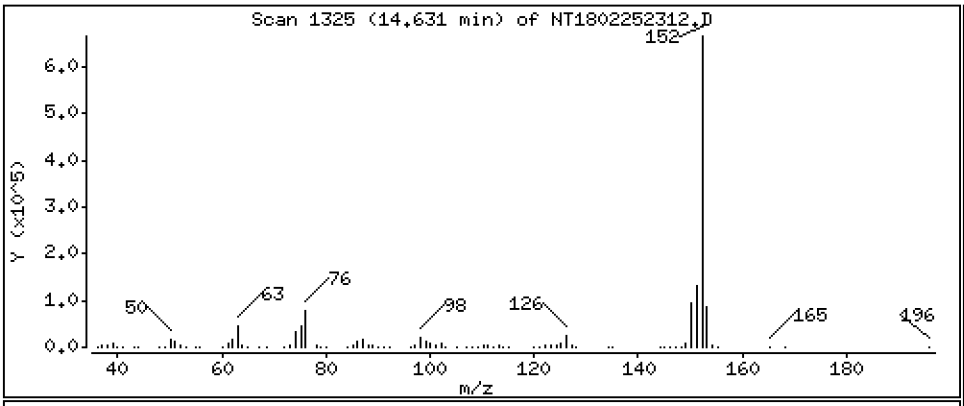
Operator: VTS

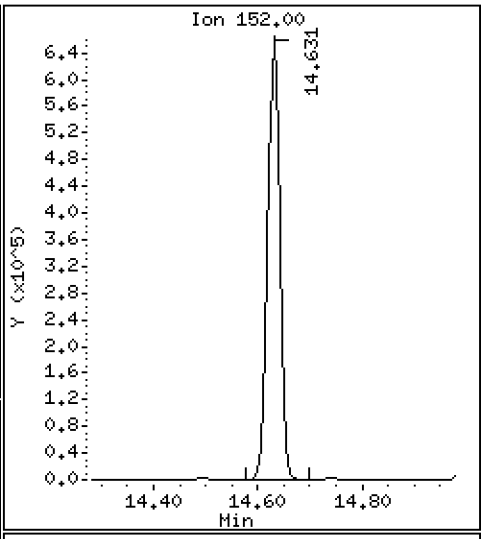
Column phase: ZB-5msi

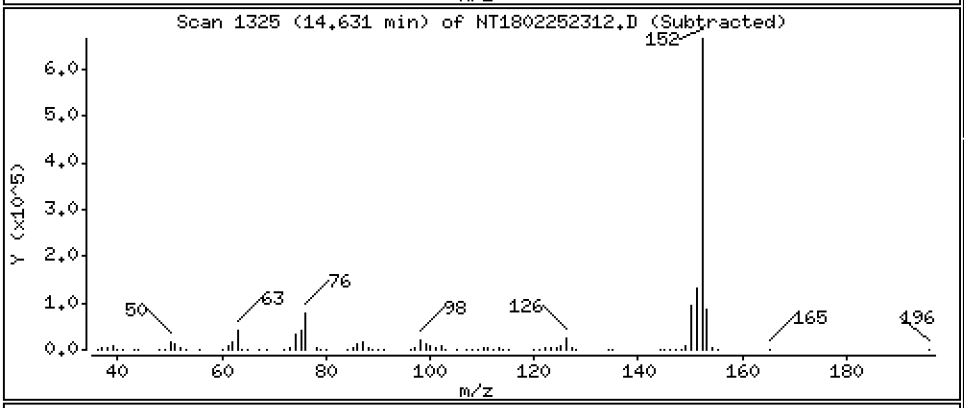
Column diameter: 0.25

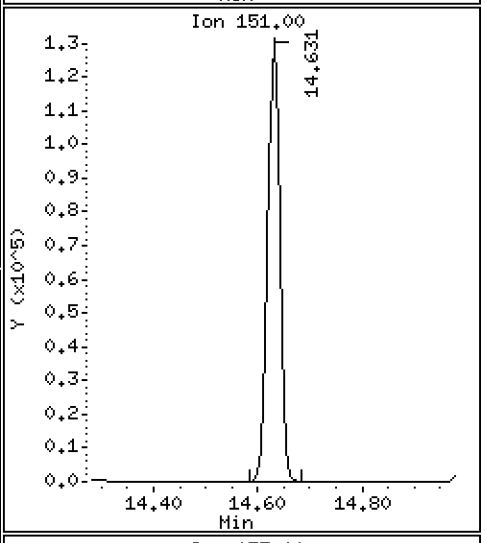
40 Acenaphthylene

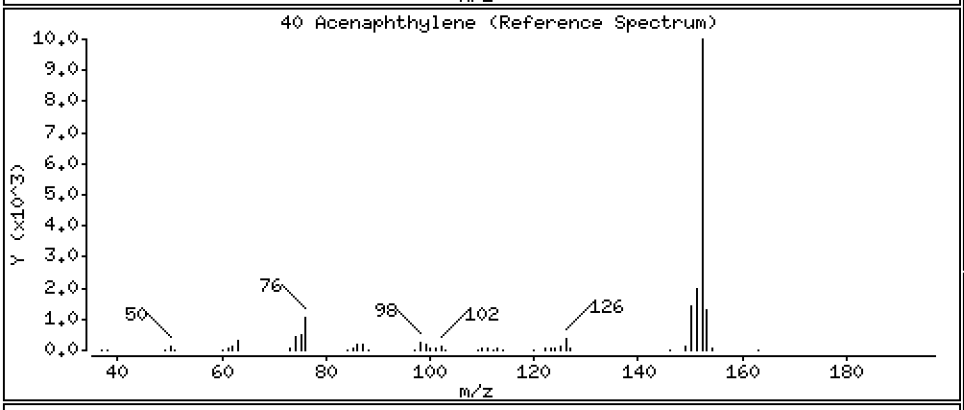
Concentration: 4.591 ug/mL

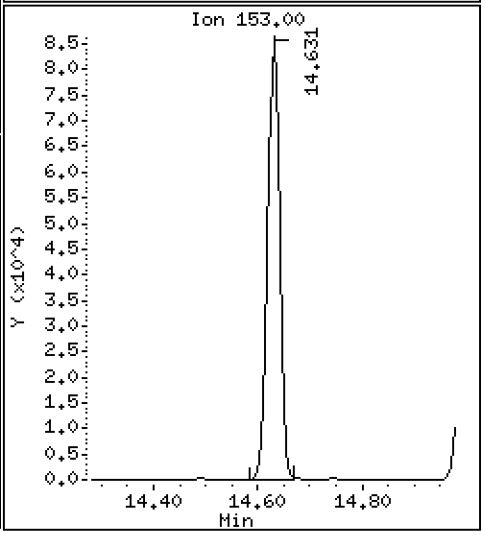


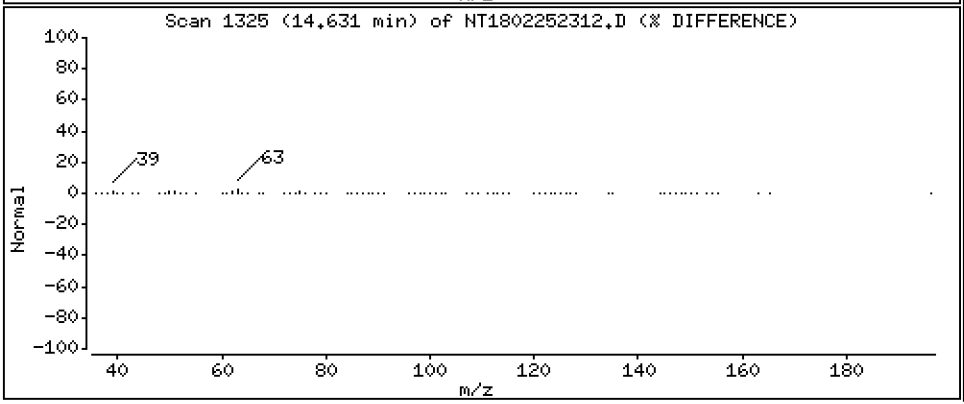












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

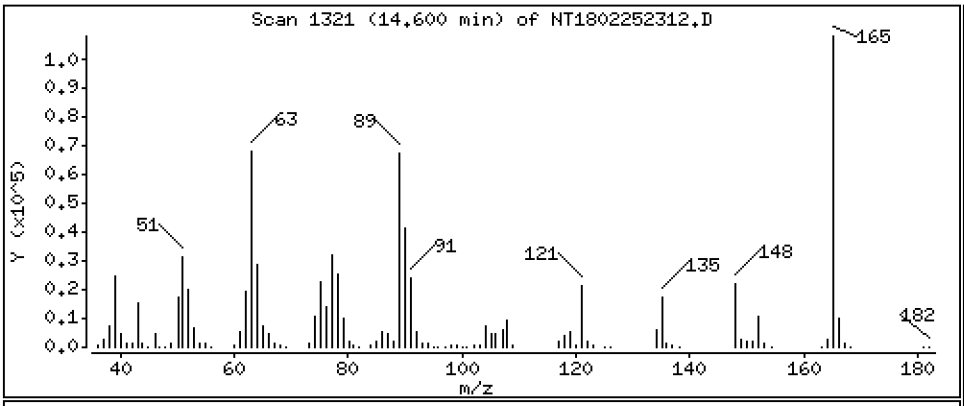
Operator: VTS

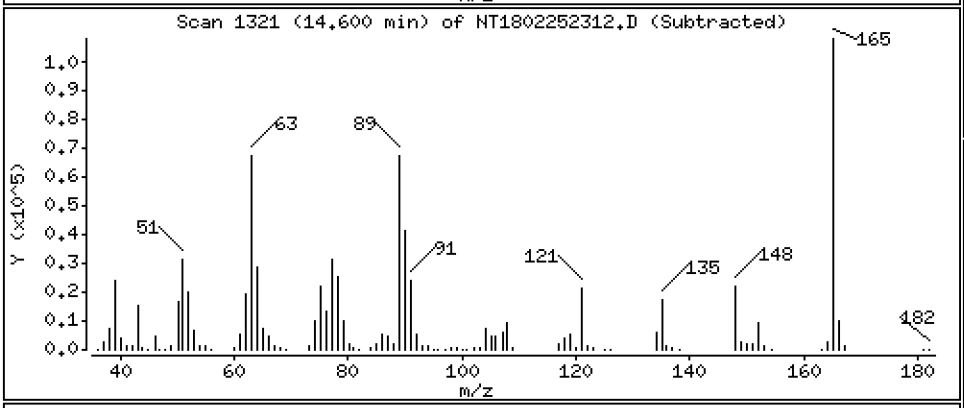
Column phase: ZB-5msi

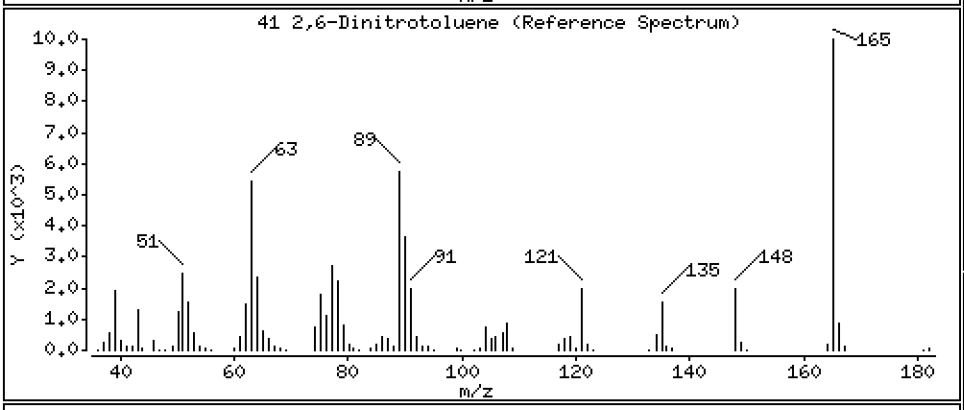
Column diameter: 0.25

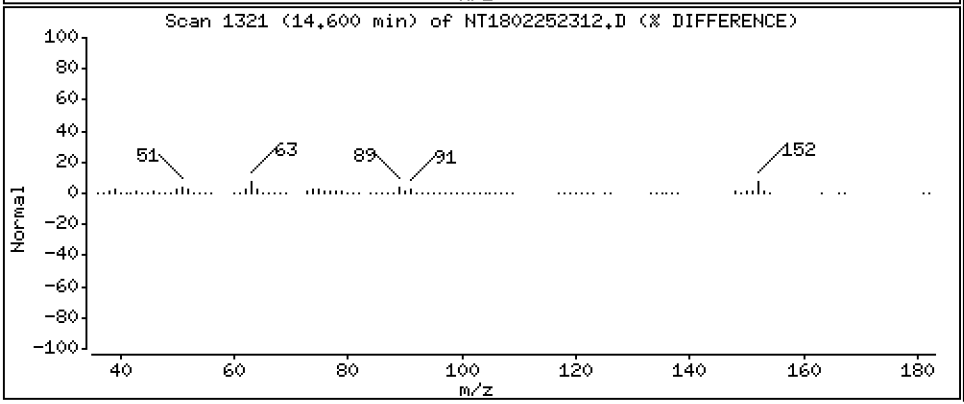
41 2,6-Dinitrotoluene

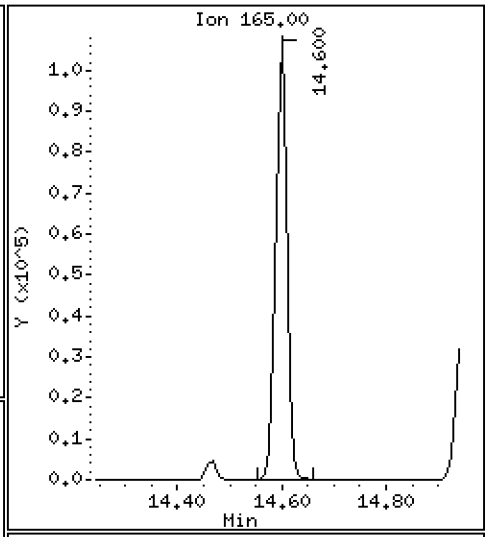
Concentration: 4.850 ug/mL

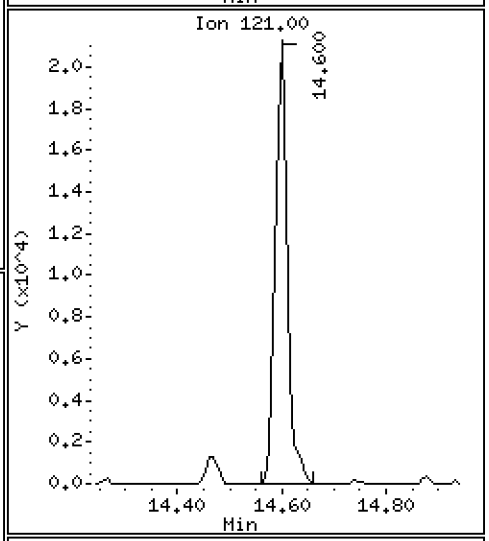


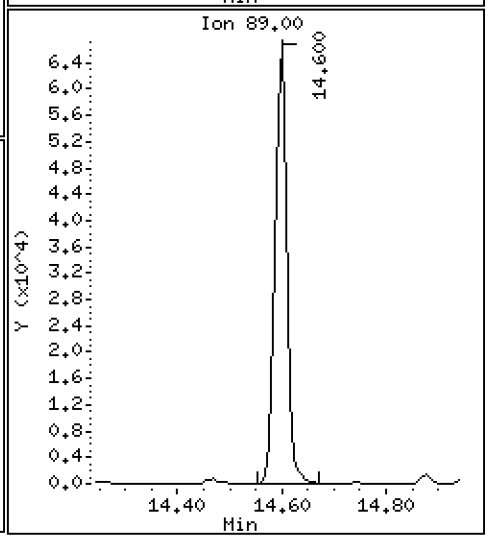












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

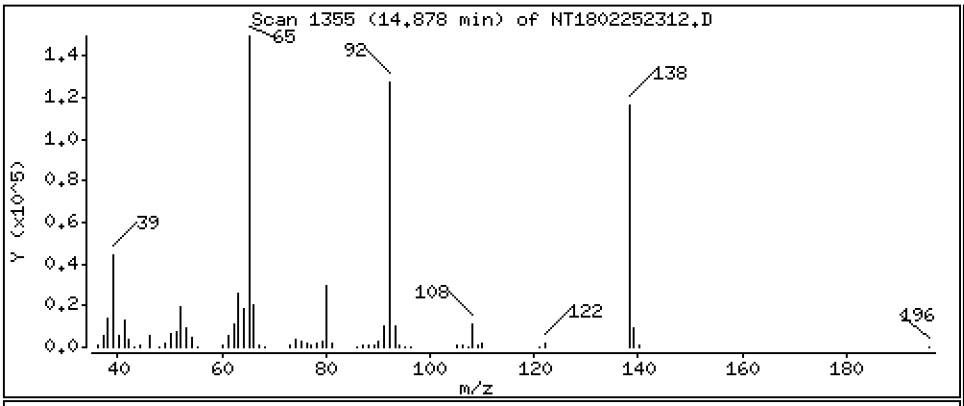
Operator: VTS

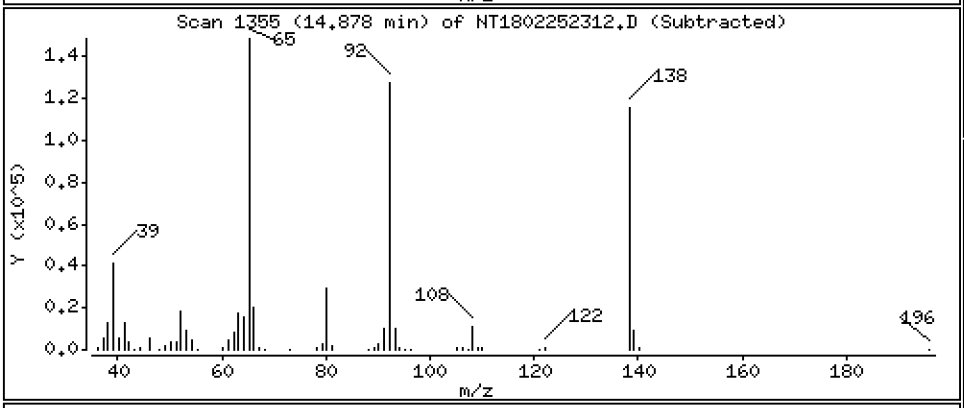
Column phase: ZB-5msi

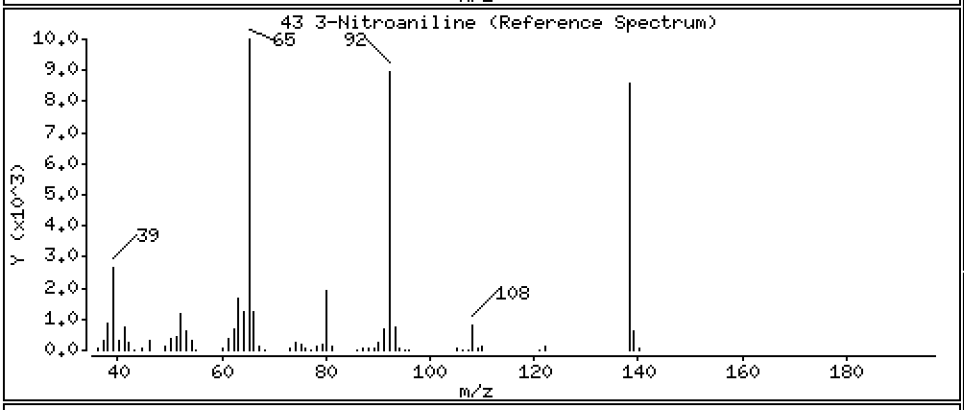
Column diameter: 0.25

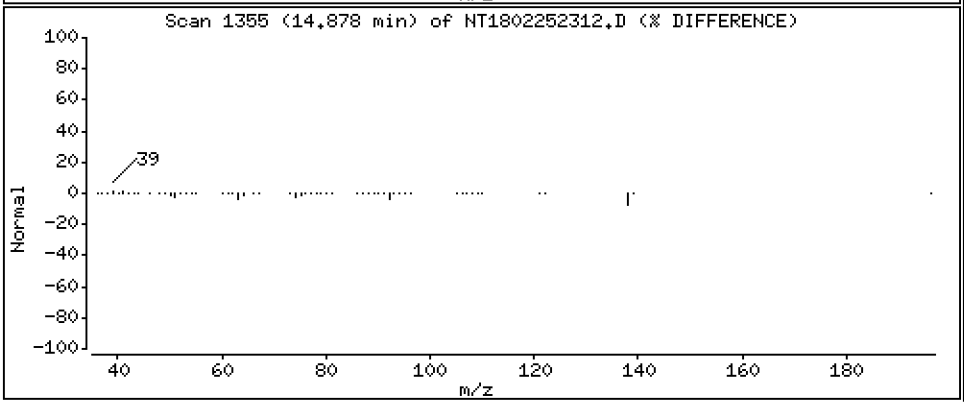
43 3-Nitroaniline

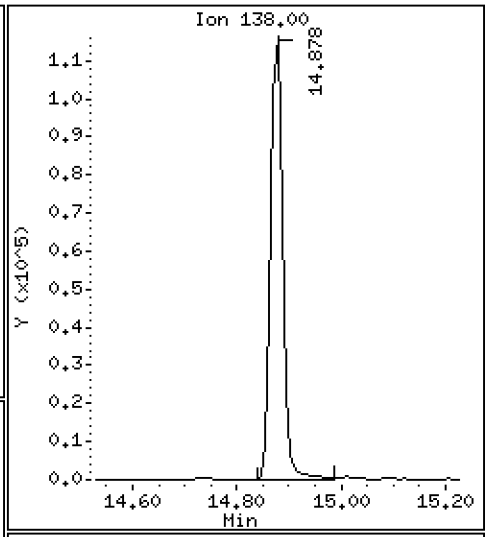
Concentration: 4.643 ug/mL

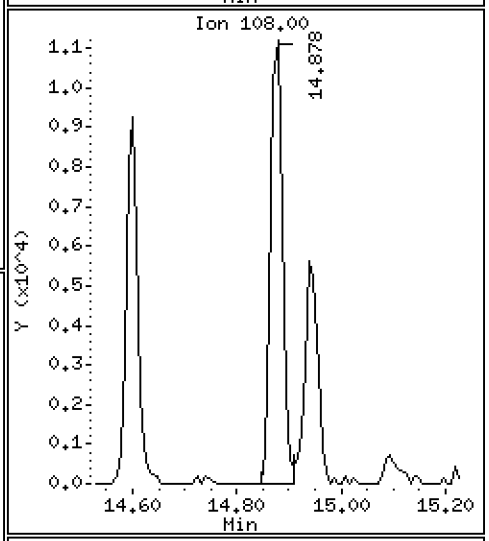


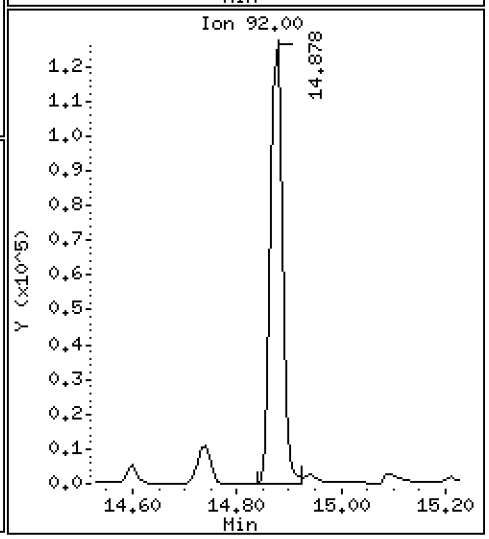












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

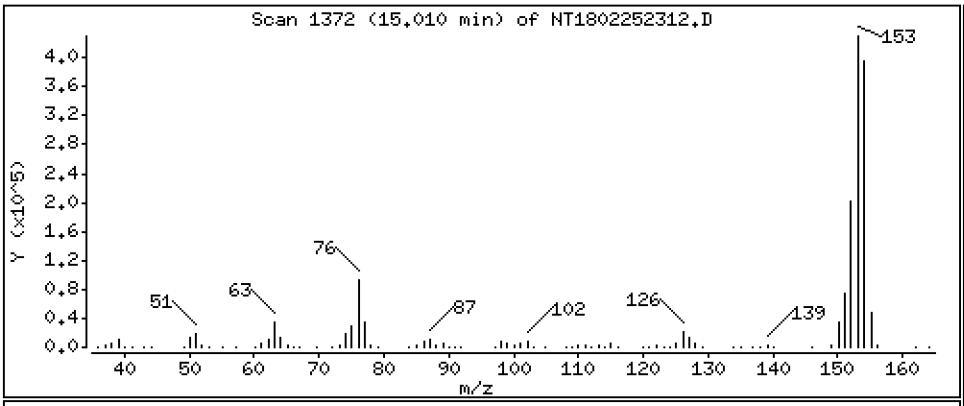
Operator: VTS

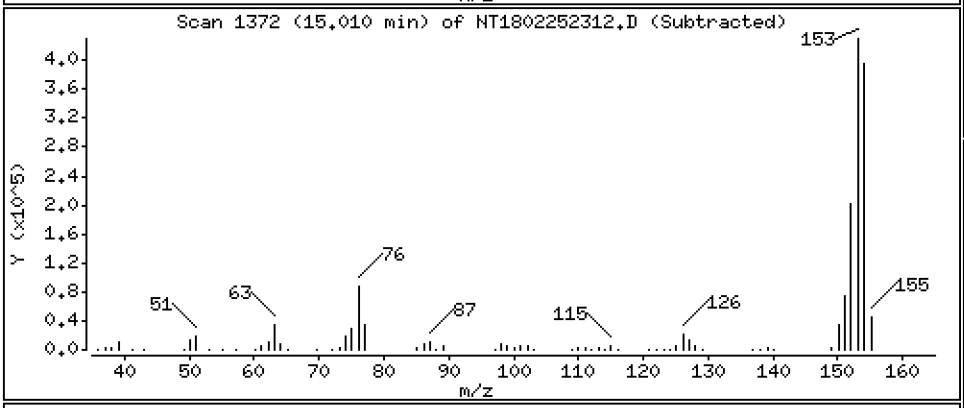
Column phase: ZB-5msi

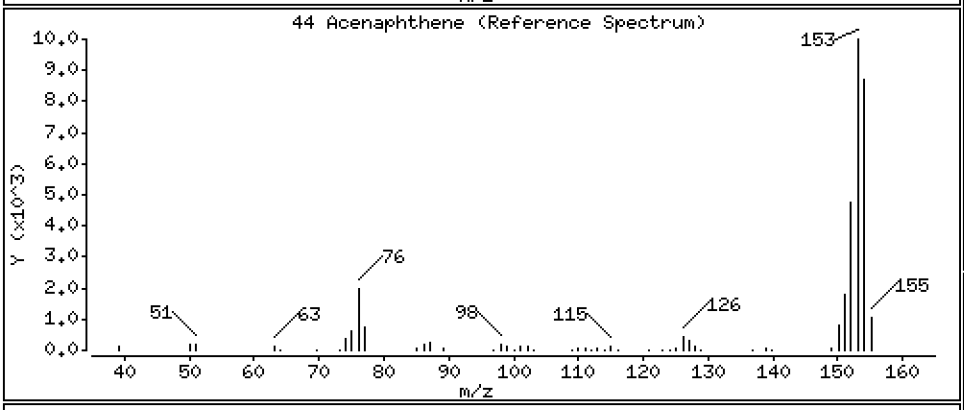
Column diameter: 0.25

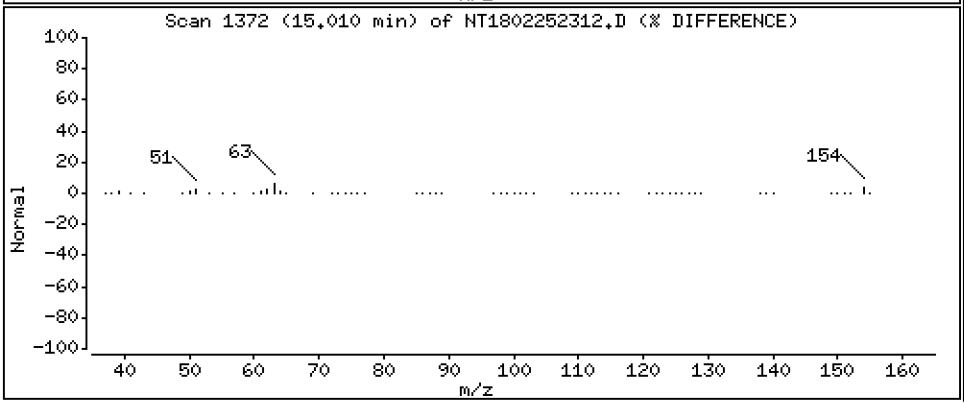
44 Acenaphthene

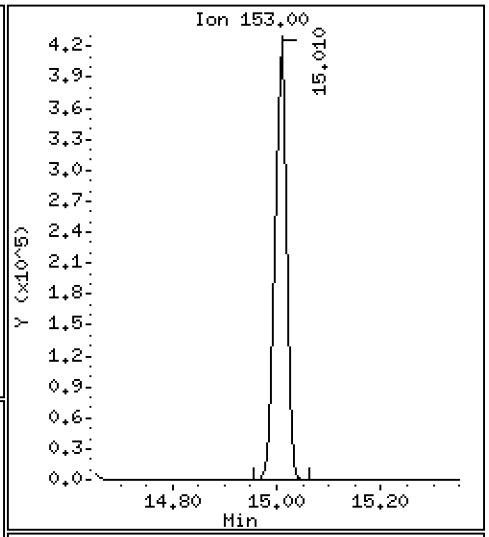
Concentration: 4.530 ug/mL

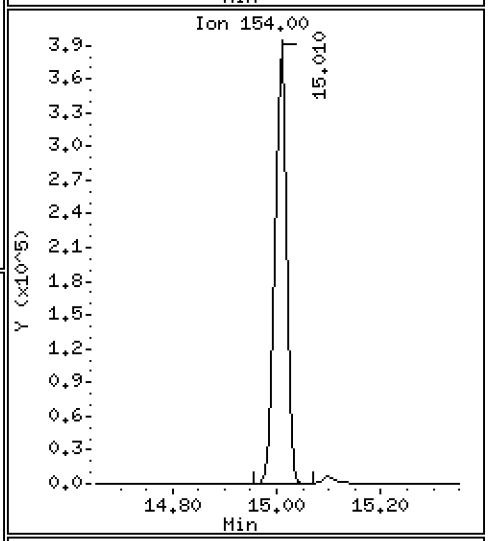


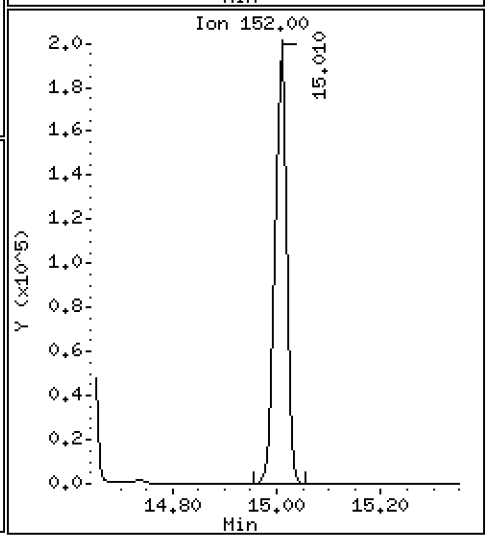












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

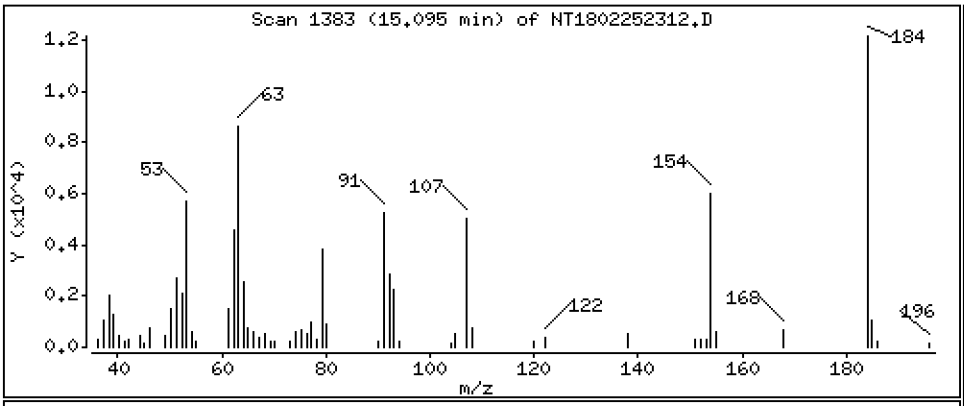
Operator: VTS

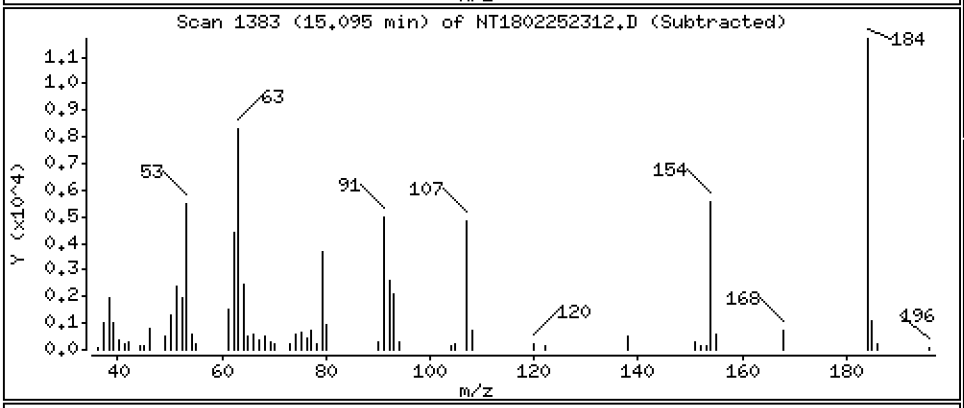
Column phase: ZB-5msi

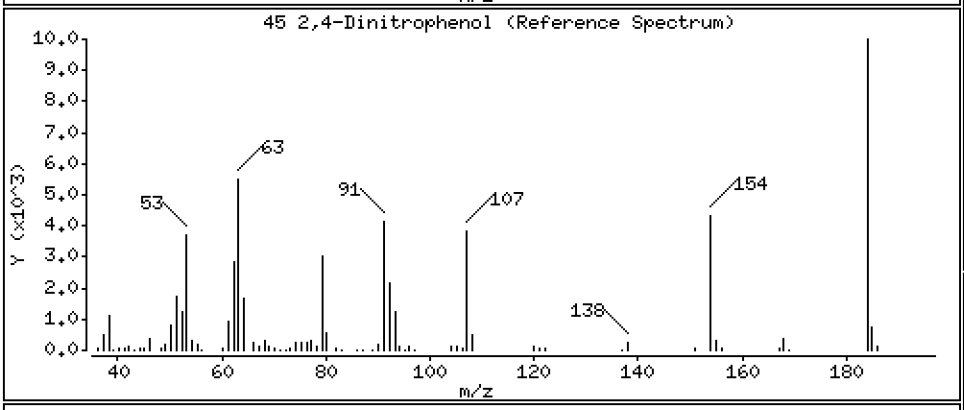
Column diameter: 0.25

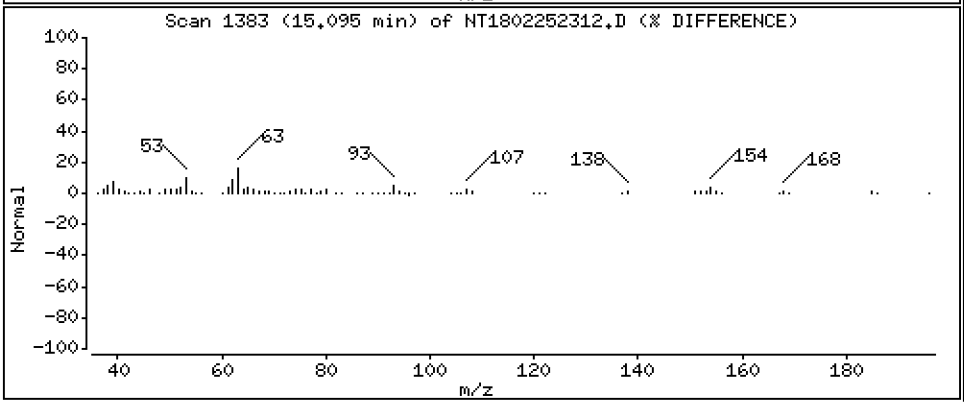
45 2,4-Dinitrophenol

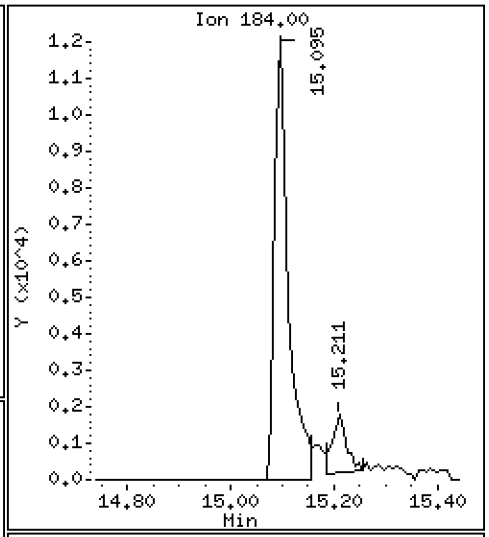
Concentration: 1.426 ug/mL

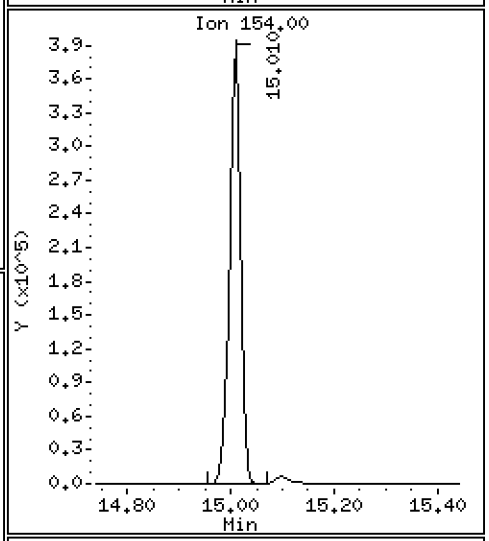


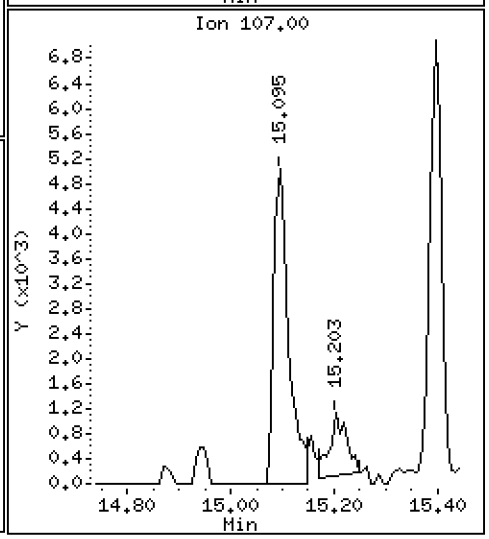












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

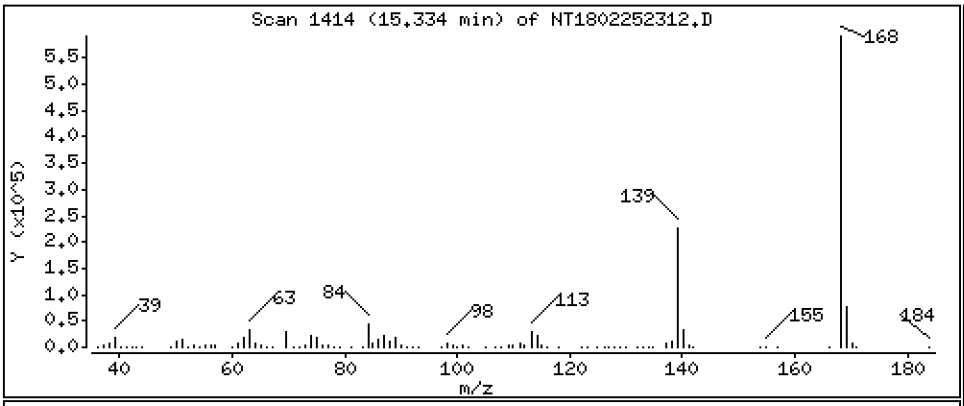
Operator: VTS

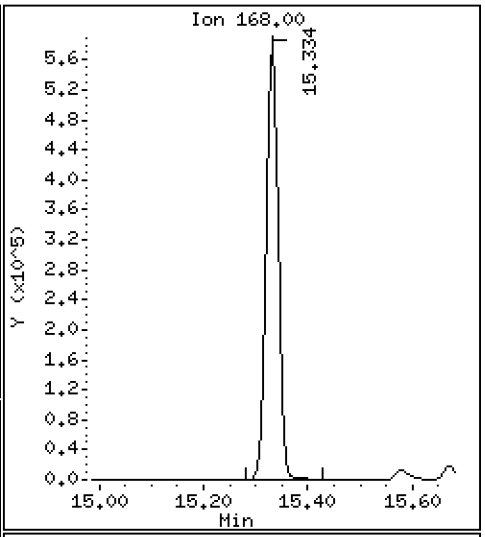
Column phase: ZB-5msi

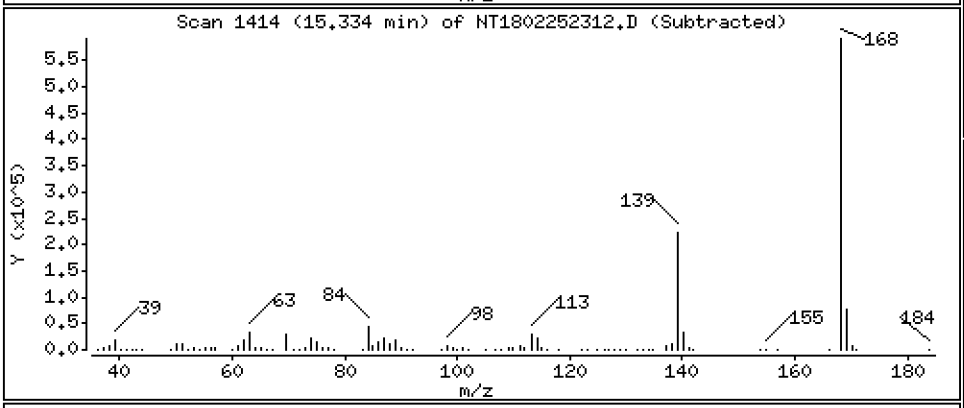
Column diameter: 0.25

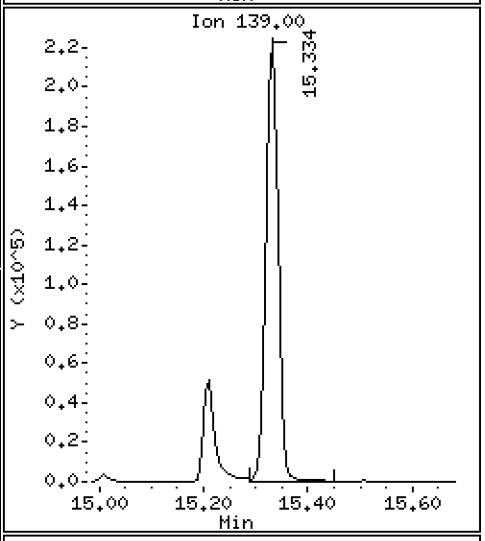
46 Dibenzofuran

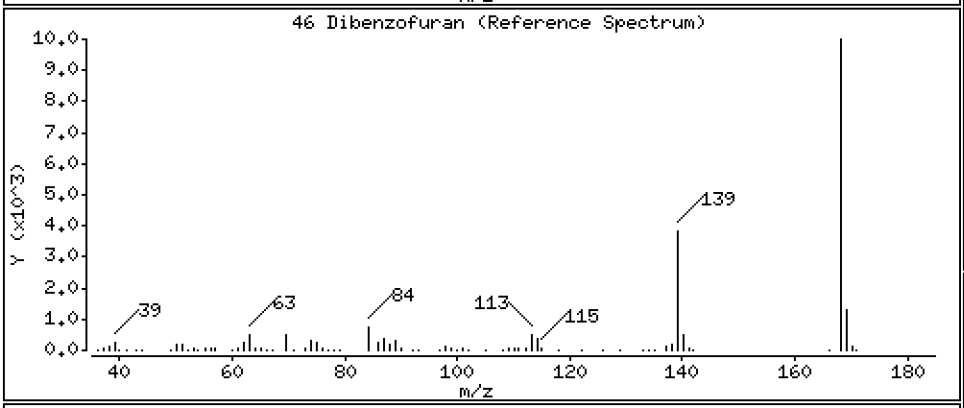
Concentration: 4.355 ug/mL

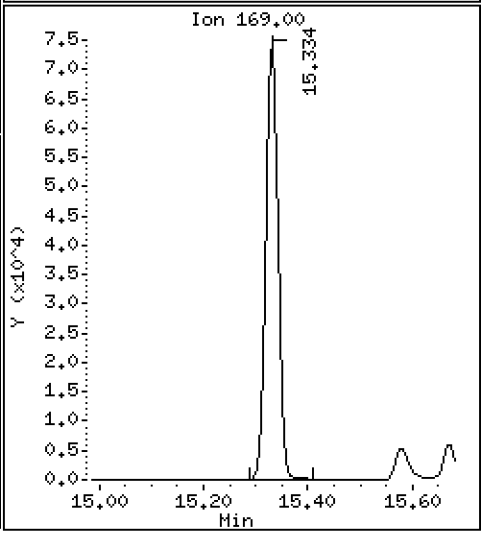


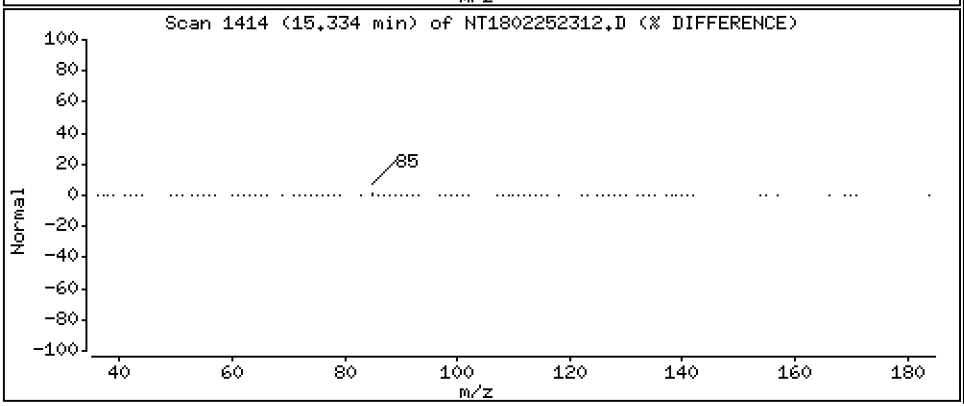












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

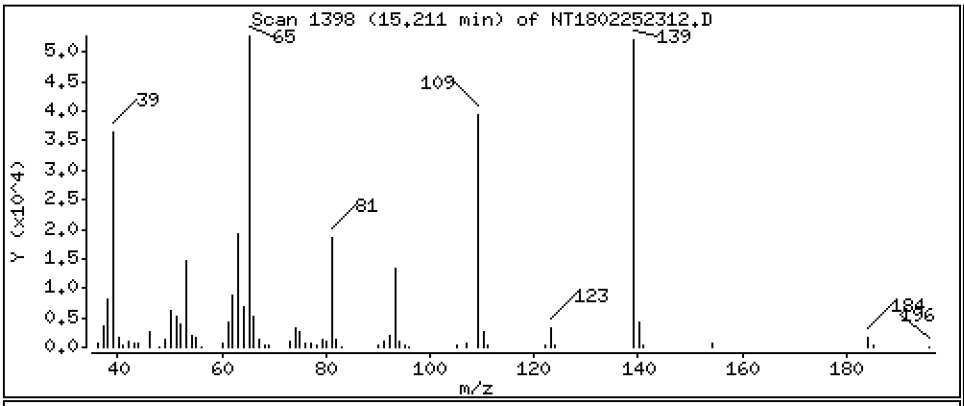
Operator: VTS

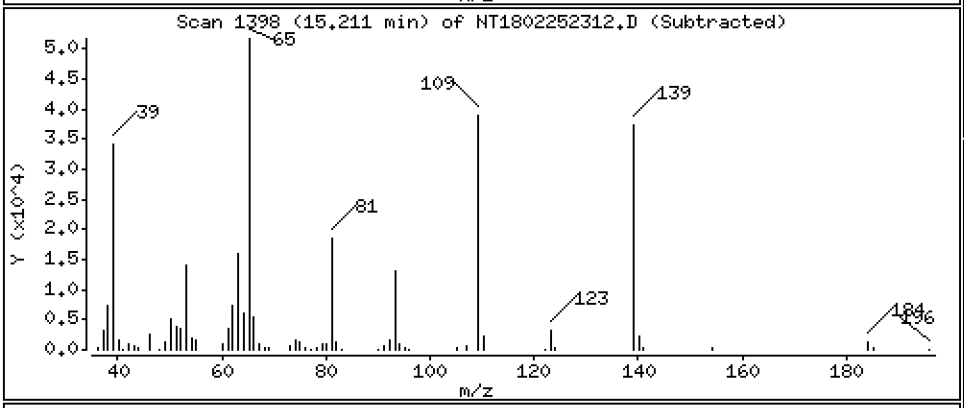
Column phase: ZB-5msi

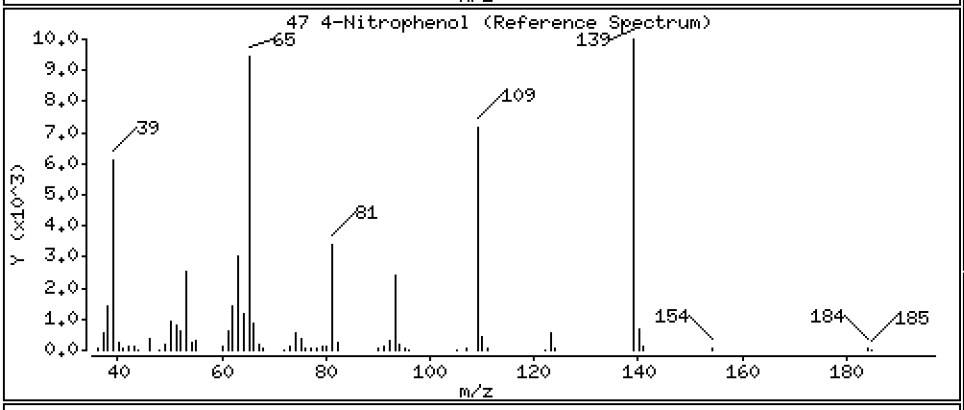
Column diameter: 0.25

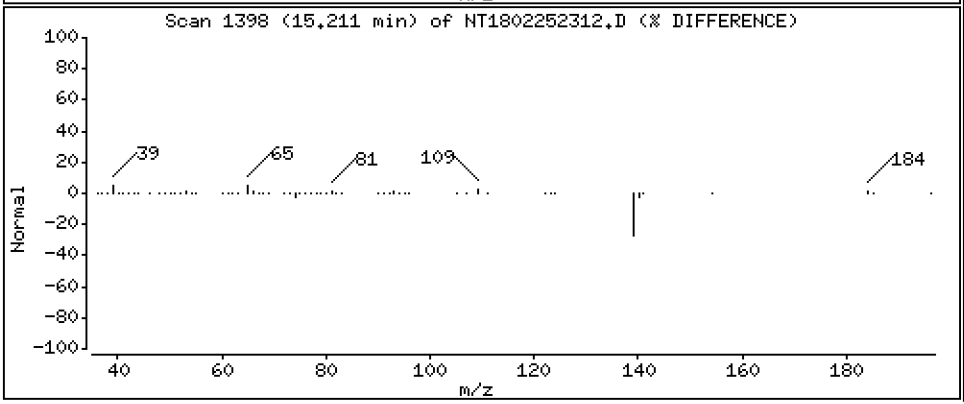
47 4-Nitrophenol

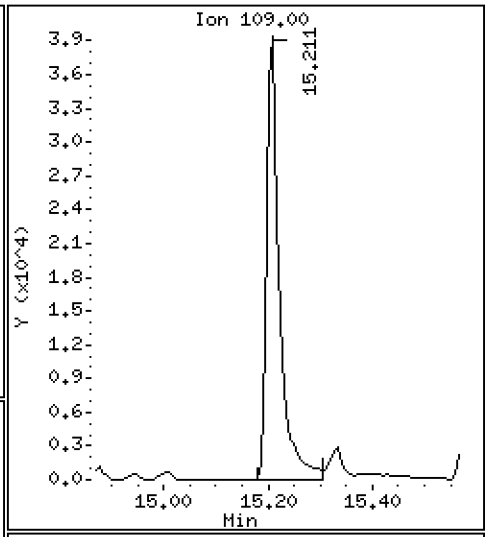
Concentration: 4.346 ug/mL

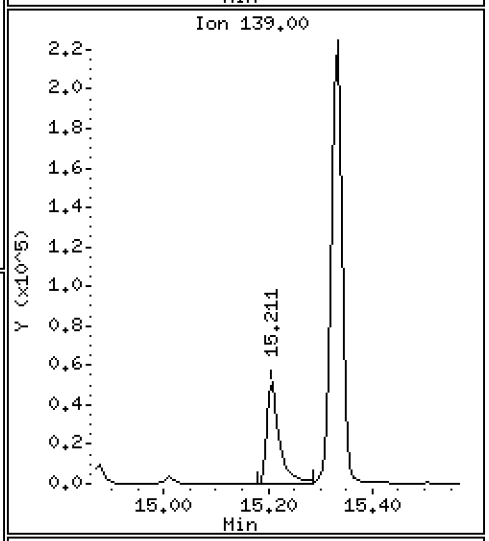


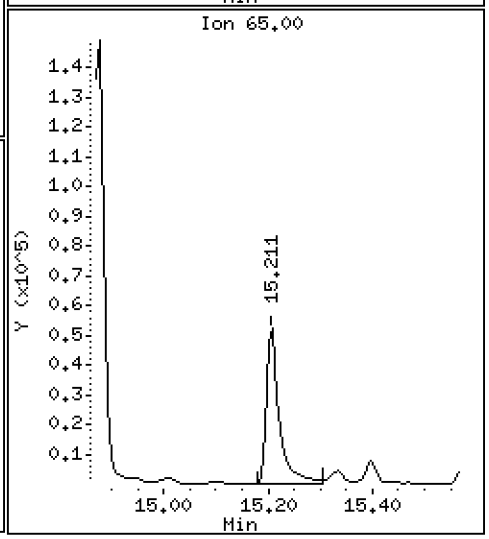












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

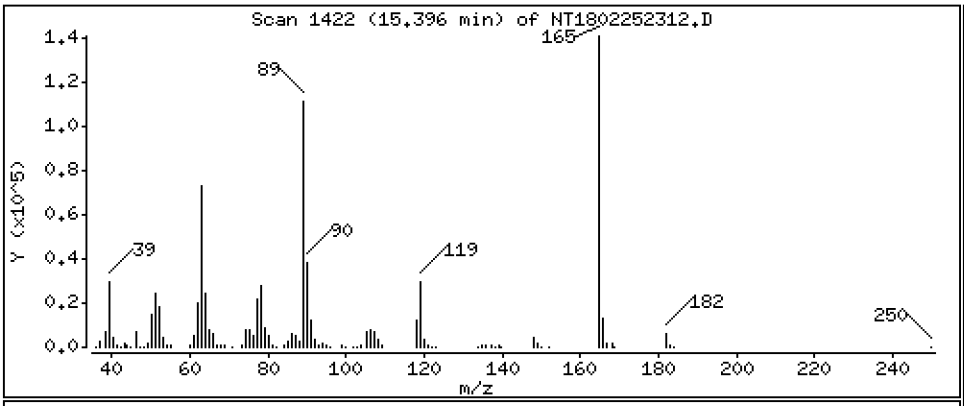
Operator: VTS

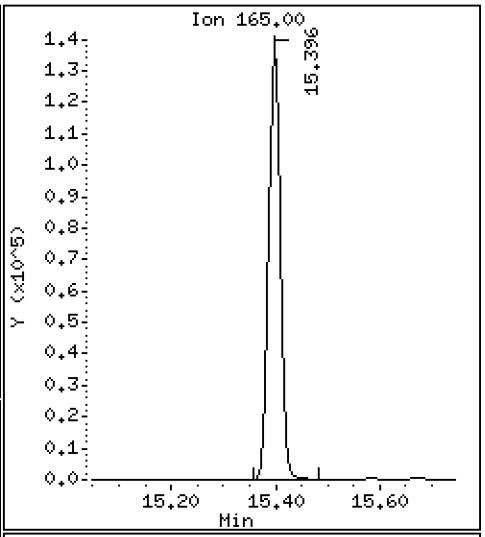
Column phase: ZB-5msi

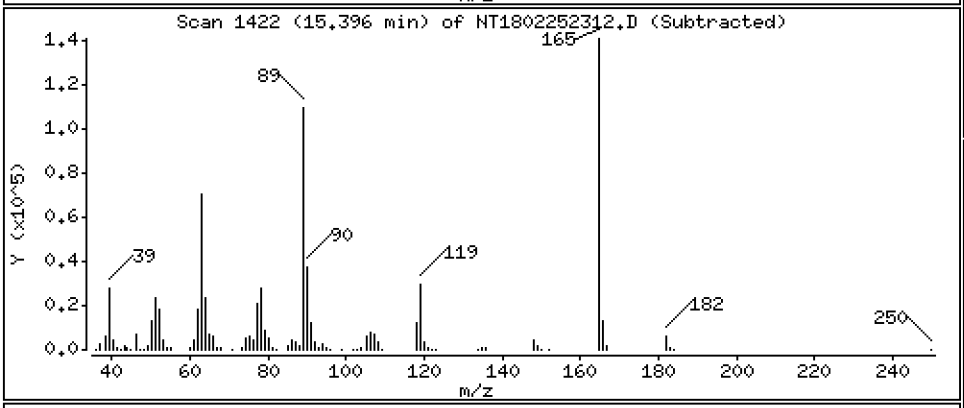
Column diameter: 0.25

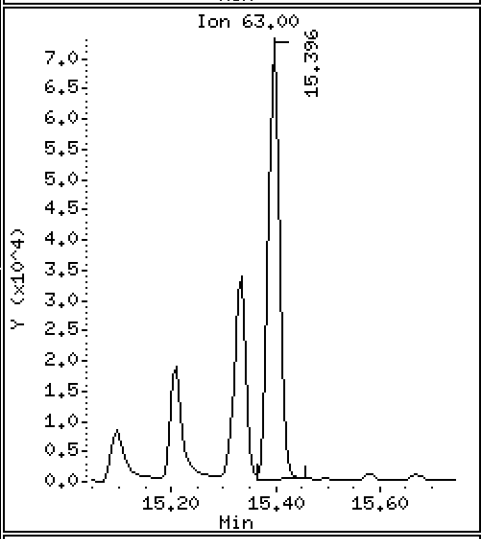
48 2,4-Dinitrotoluene

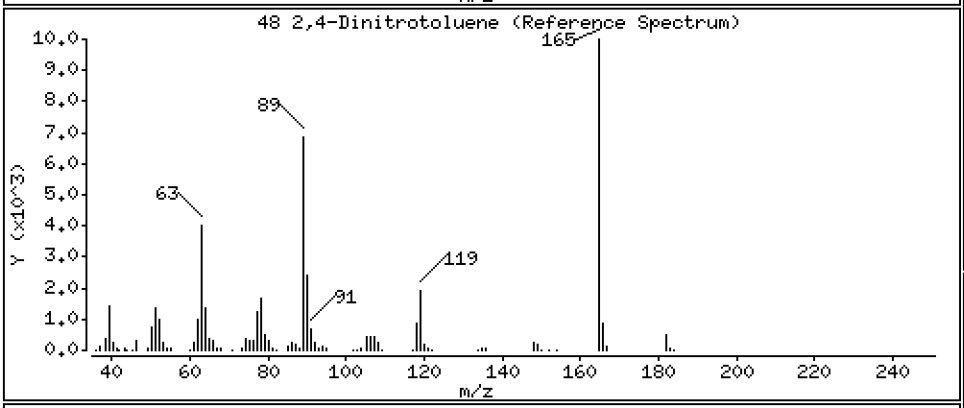
Concentration: 4.573 ug/mL

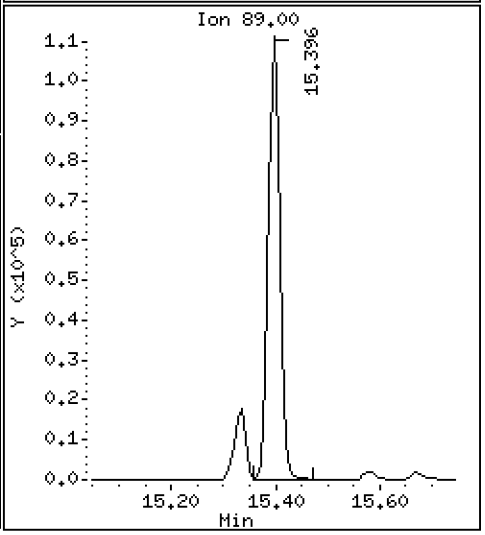


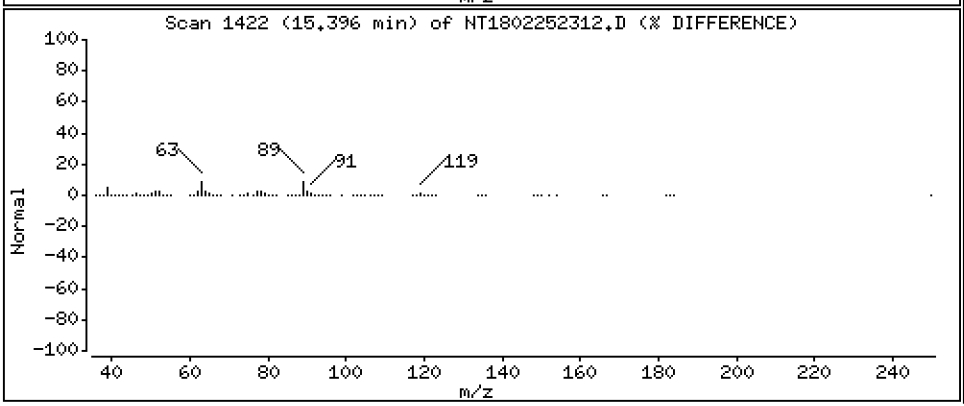












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

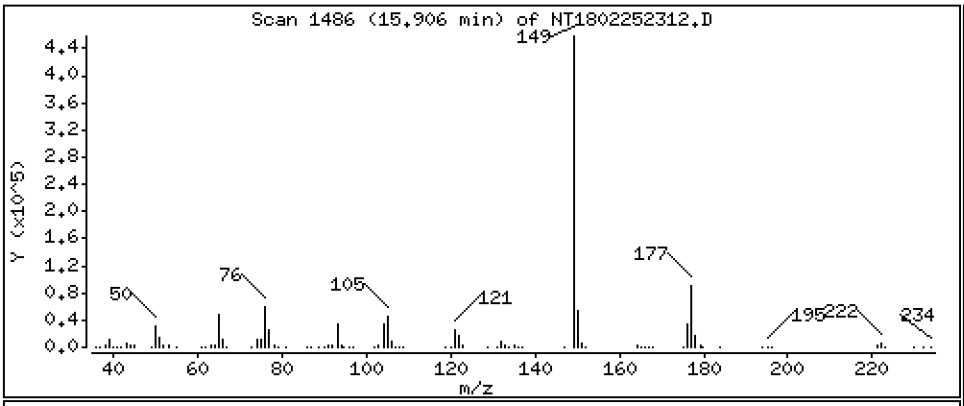
Operator: VTS

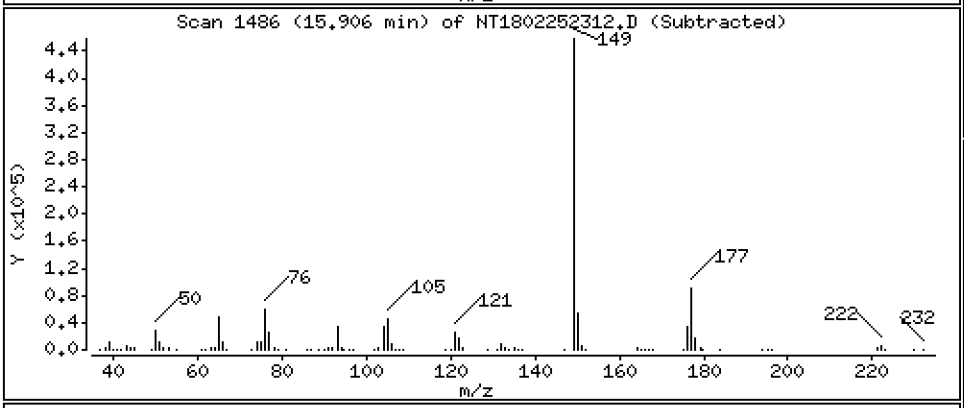
Column phase: ZB-5msi

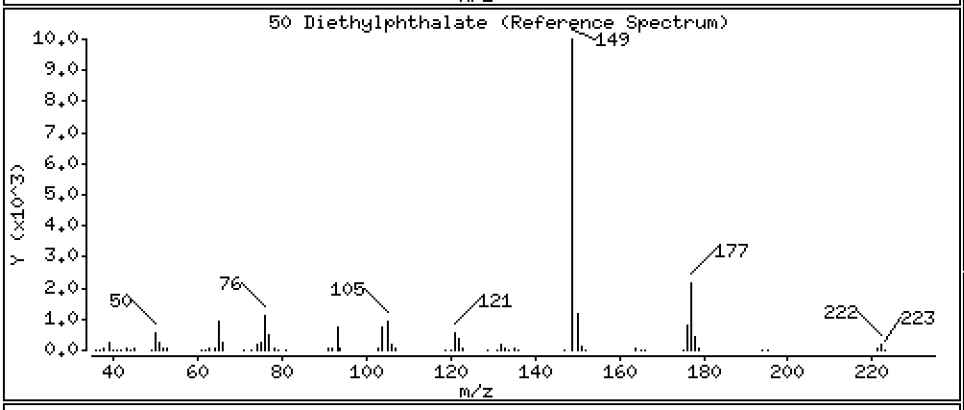
Column diameter: 0.25

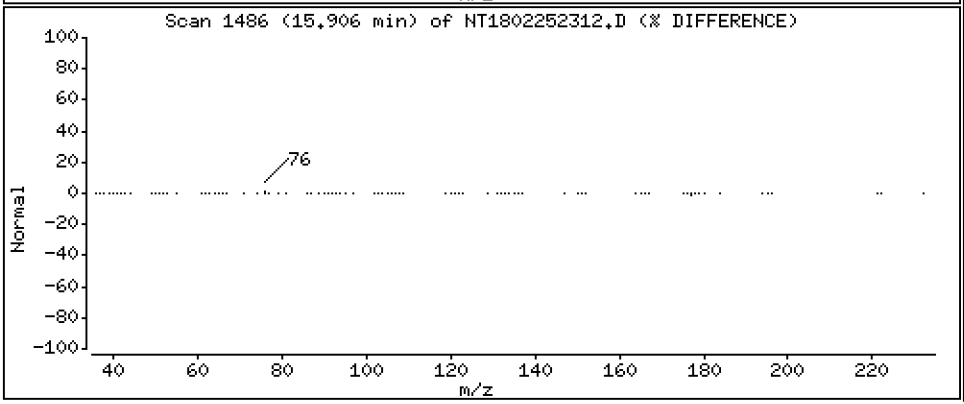
50 Diethylphthalate

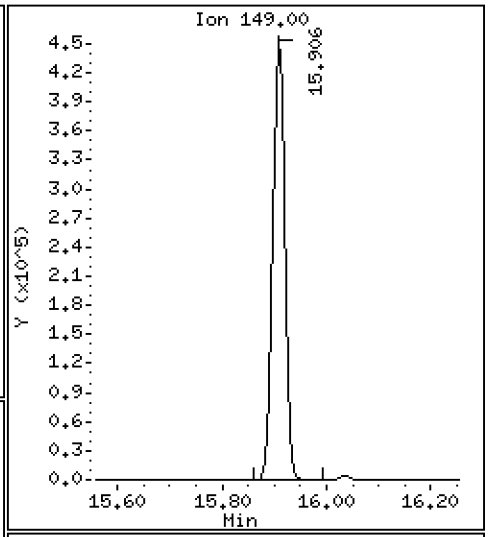
Concentration: 5.265 ug/mL

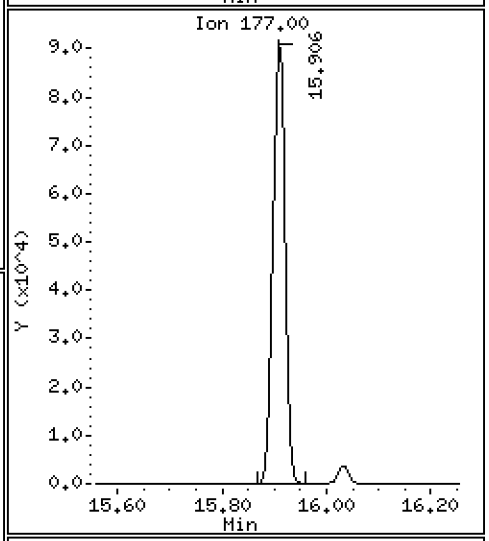


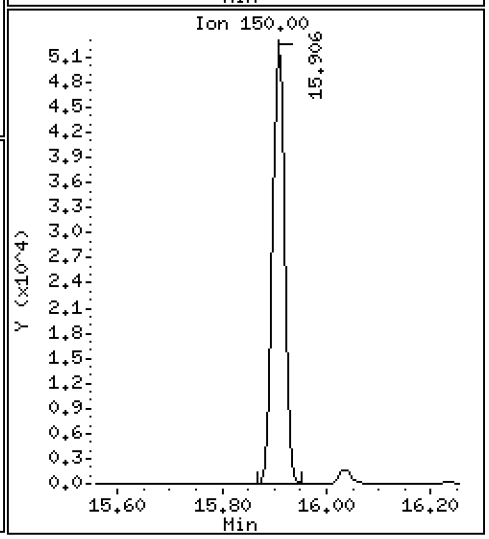












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

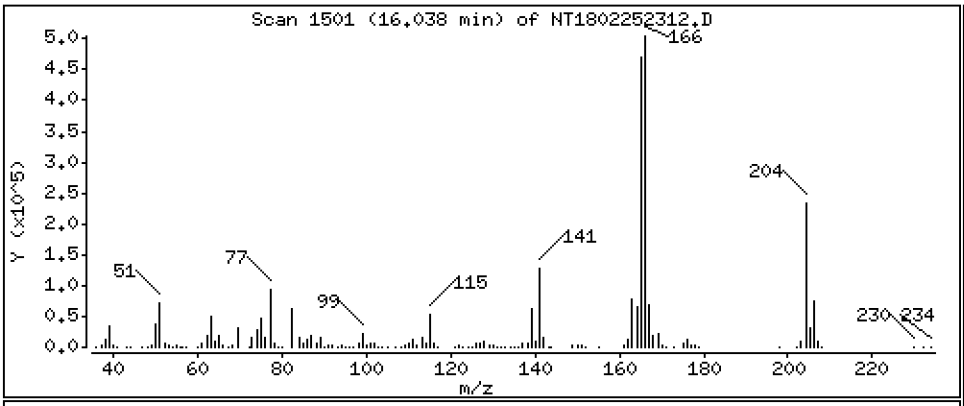
Operator: VTS

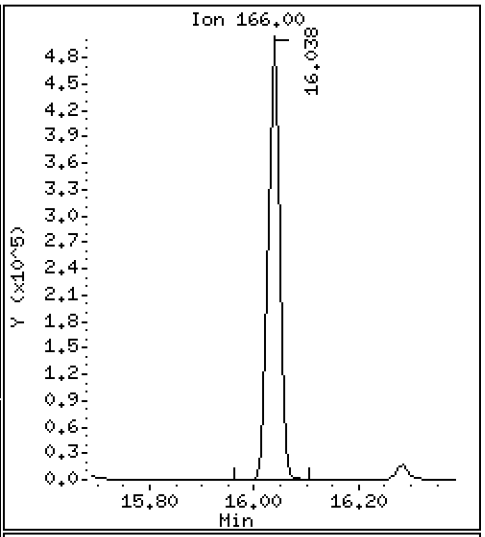
Column phase: ZB-5msi

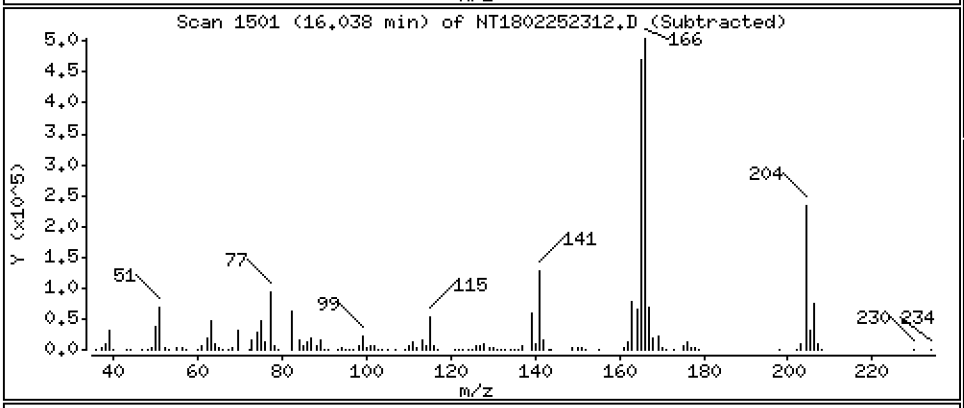
Column diameter: 0.25

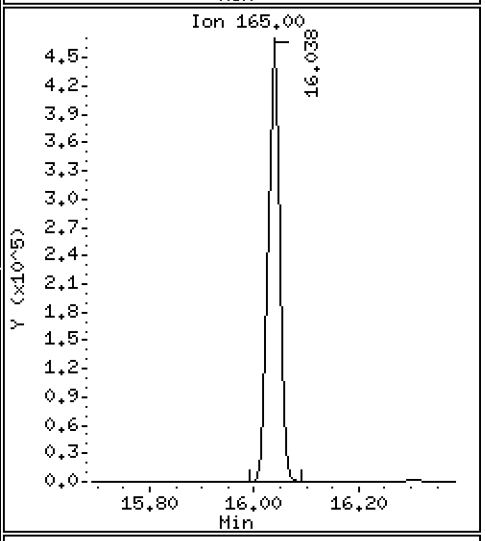
49 Fluorene

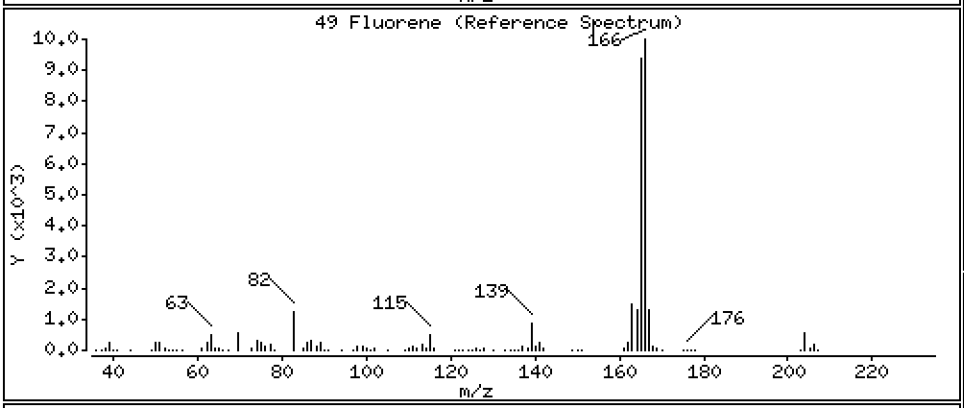
Concentration: 5.182 ug/mL

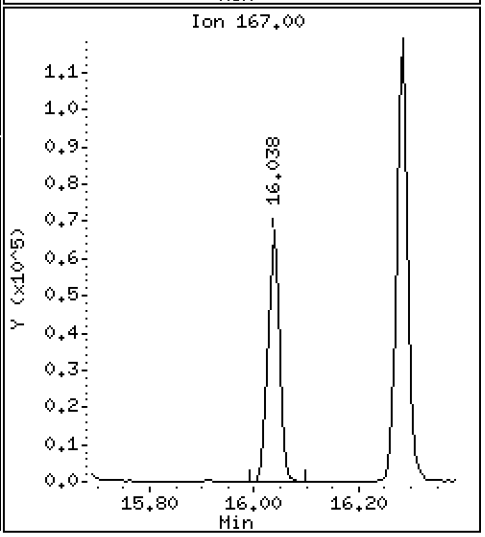


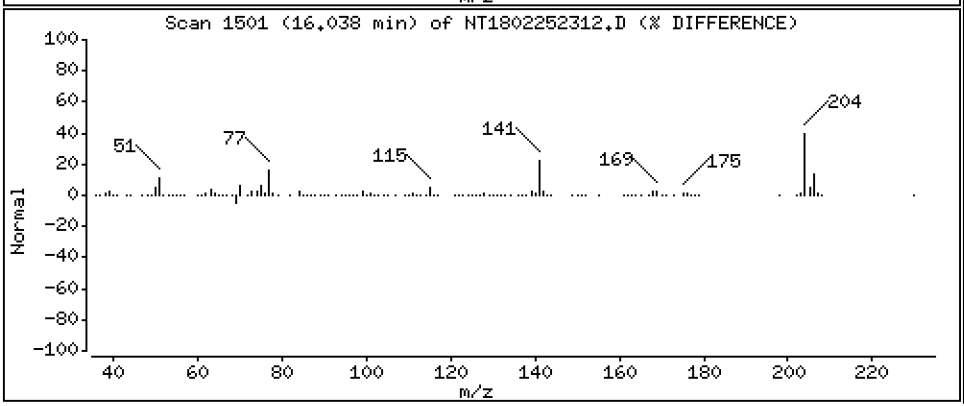












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

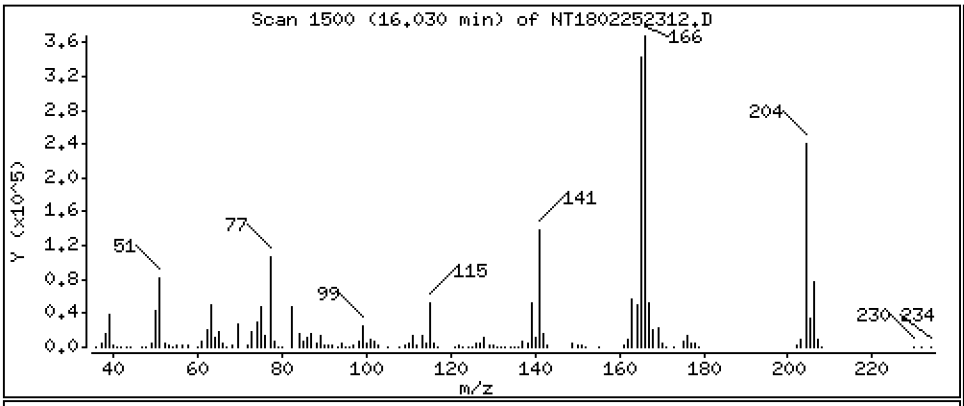
Operator: VTS

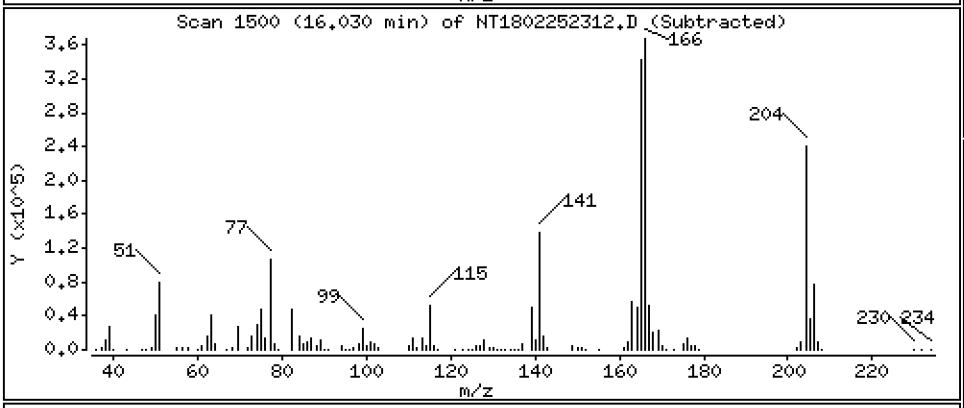
Column phase: ZB-5msi

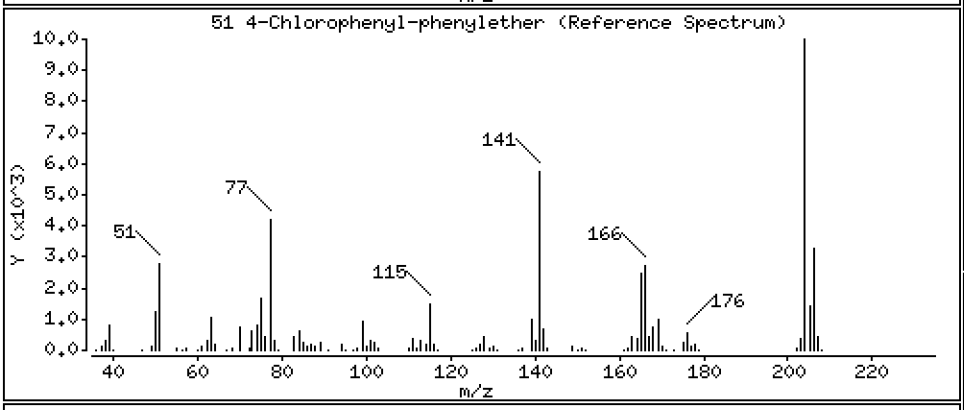
Column diameter: 0.25

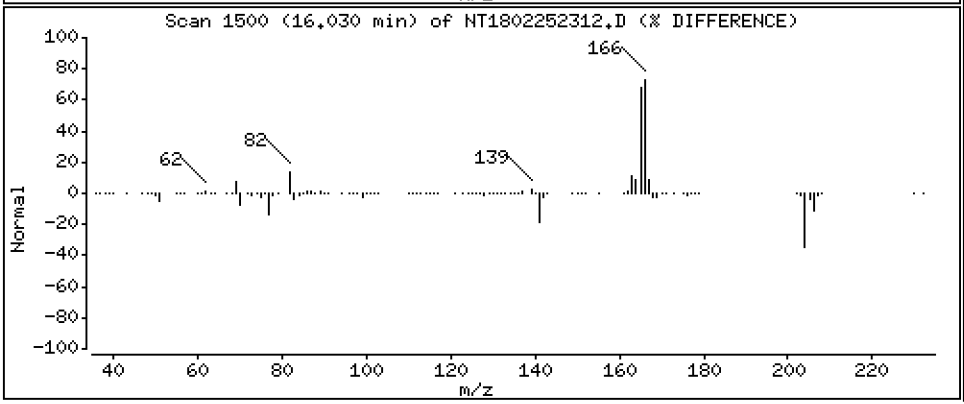
51 4-Chlorophenyl-phenylether

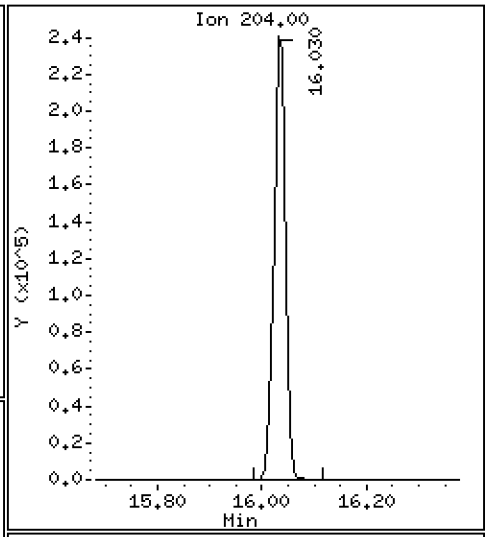
Concentration: 4.975 ug/mL

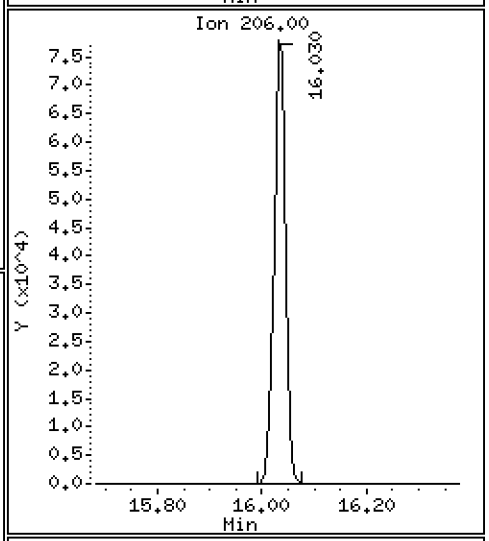


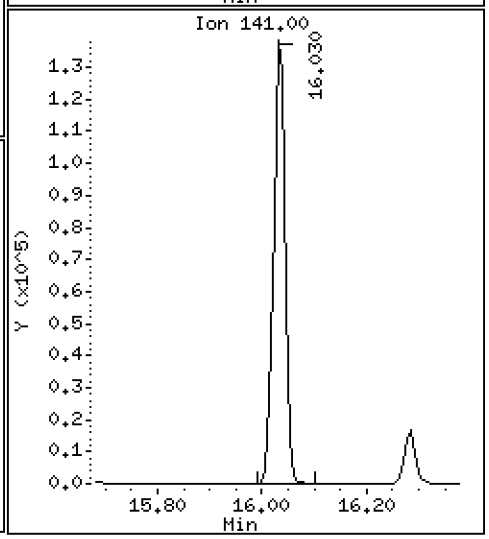












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

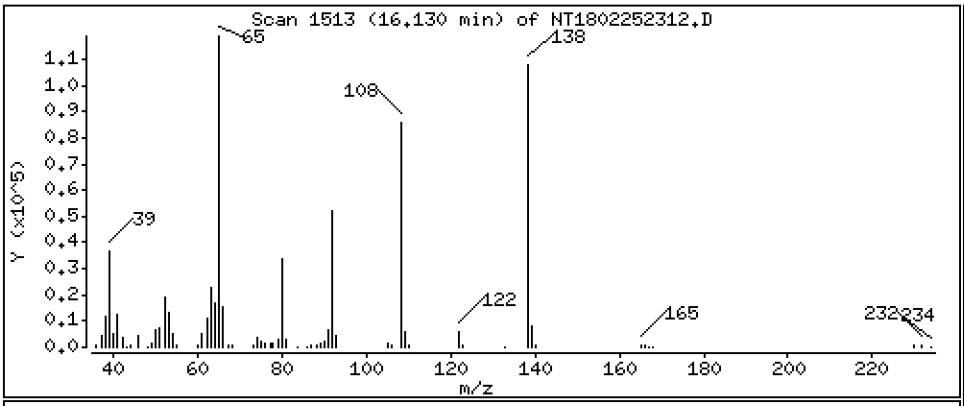
Operator: VTS

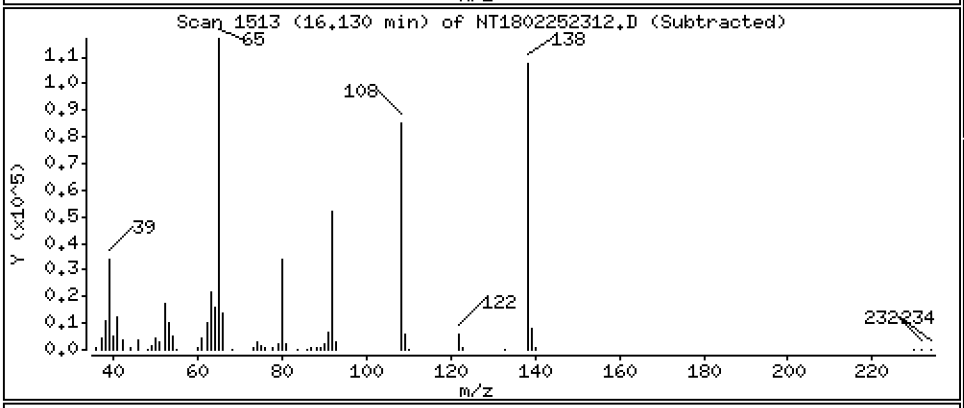
Column phase: ZB-5msi

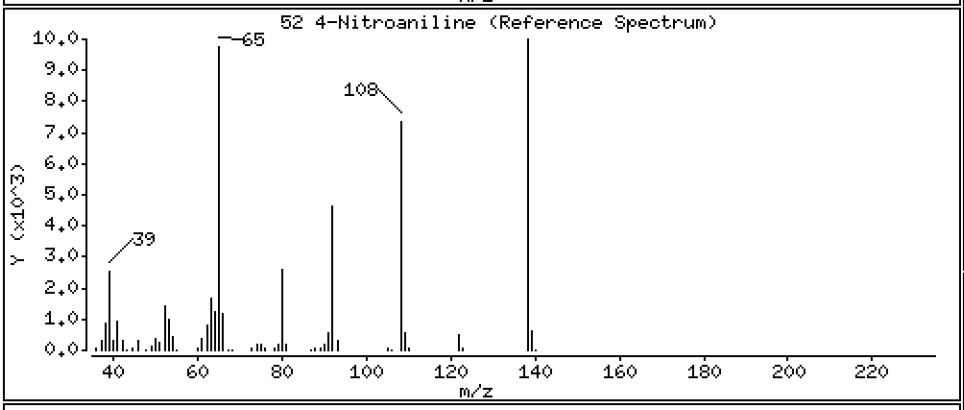
Column diameter: 0.25

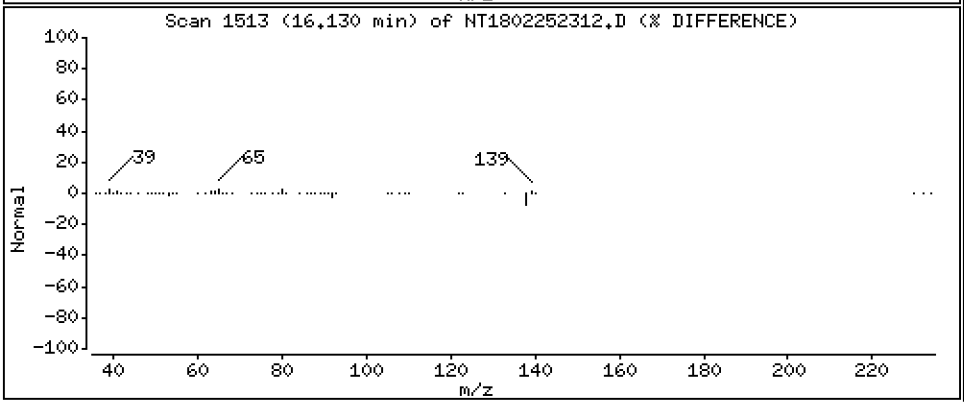
52 4-Nitroaniline

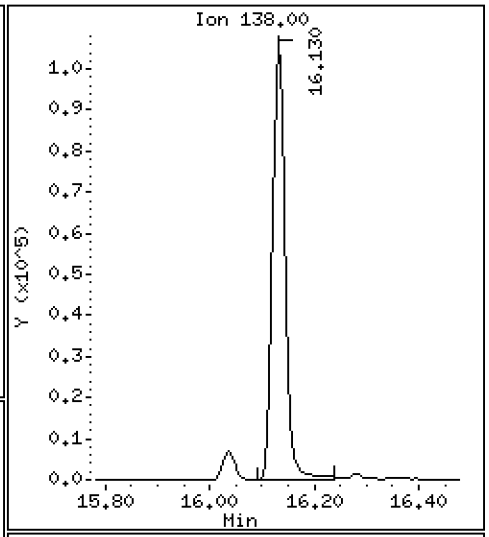
Concentration: 4.601 ug/mL

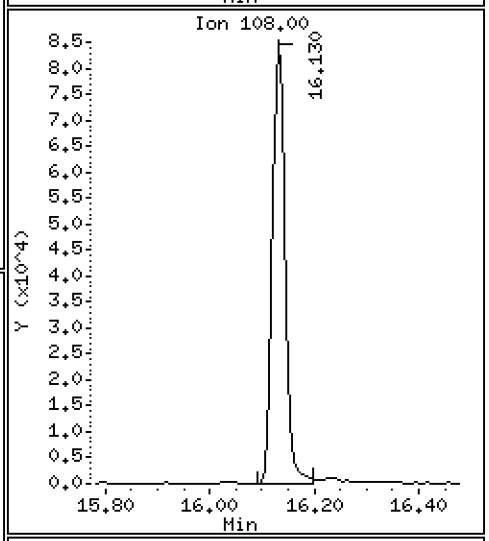


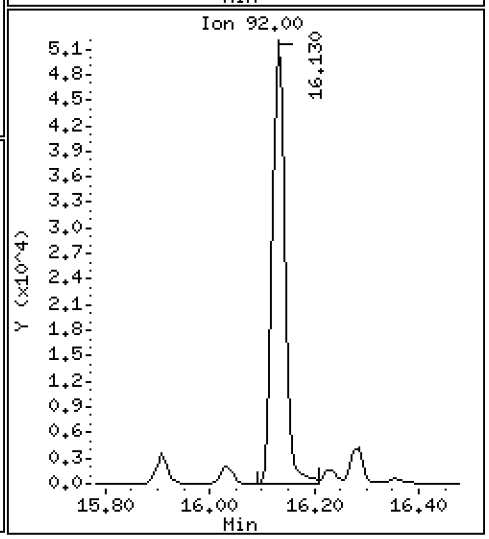












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

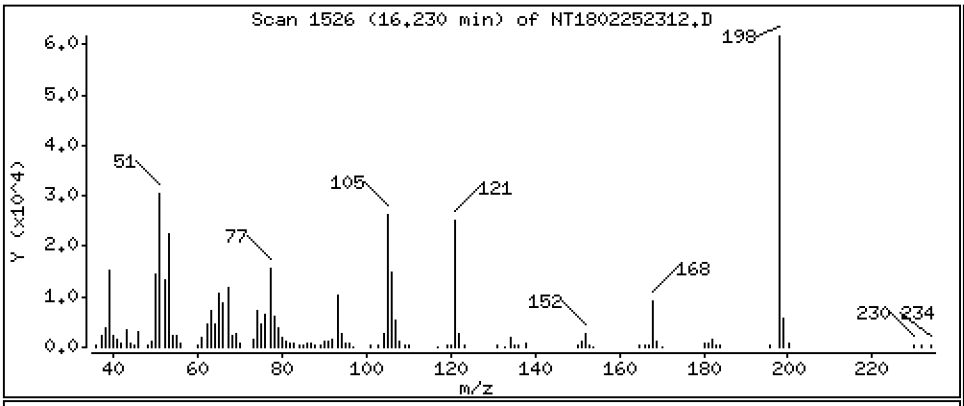
Operator: VTS

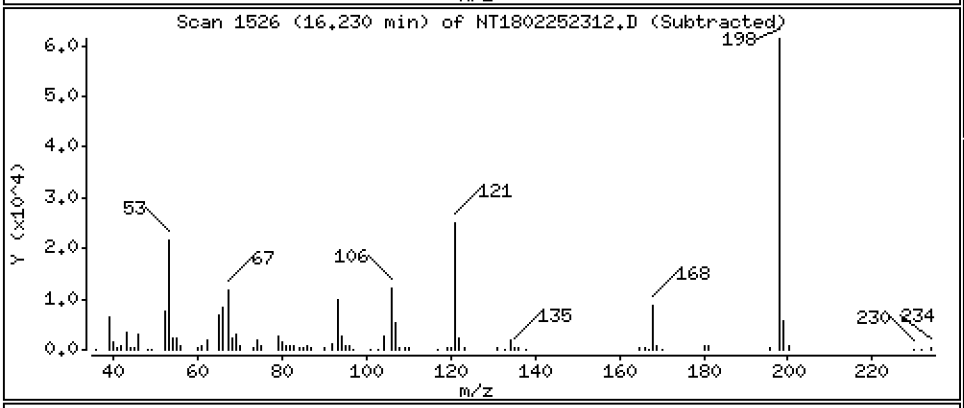
Column phase: ZB-5msi

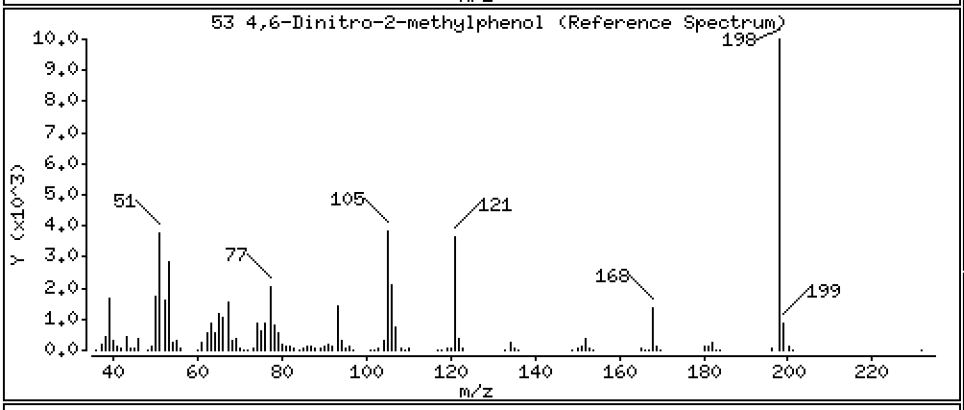
Column diameter: 0.25

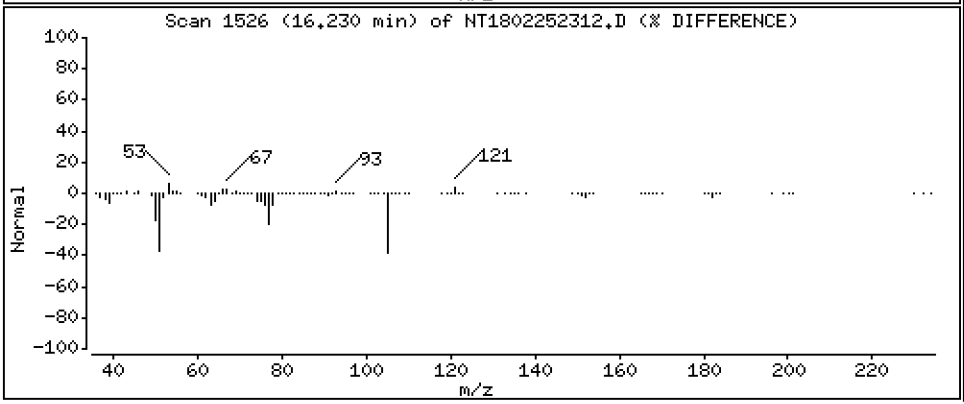
53 4,6-Dinitro-2-methylphenol

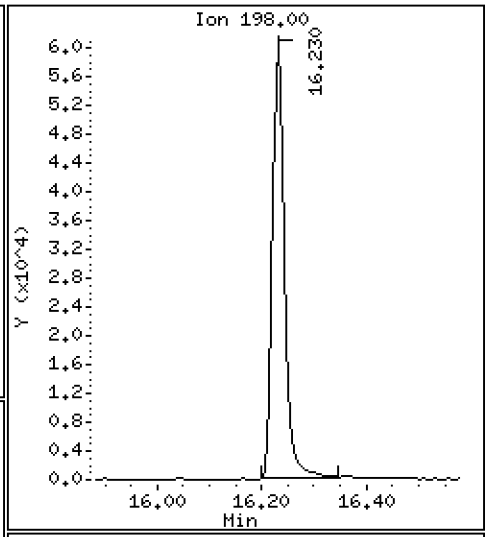
Concentration: 3.596 ug/mL

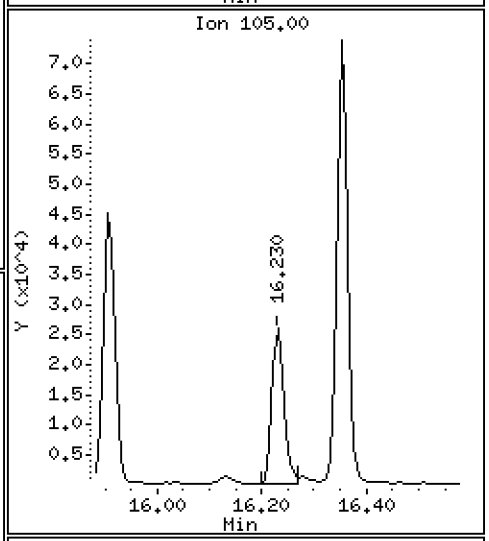


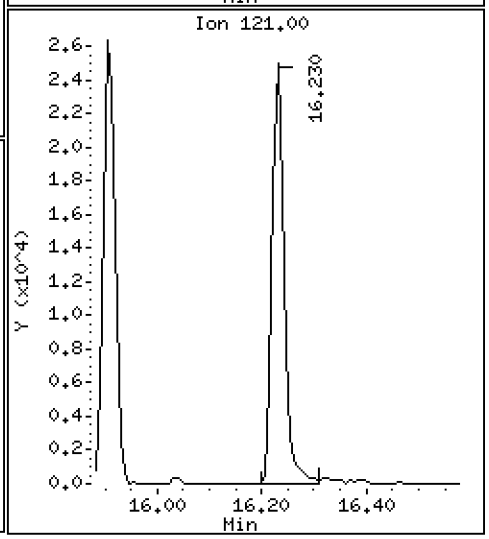












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

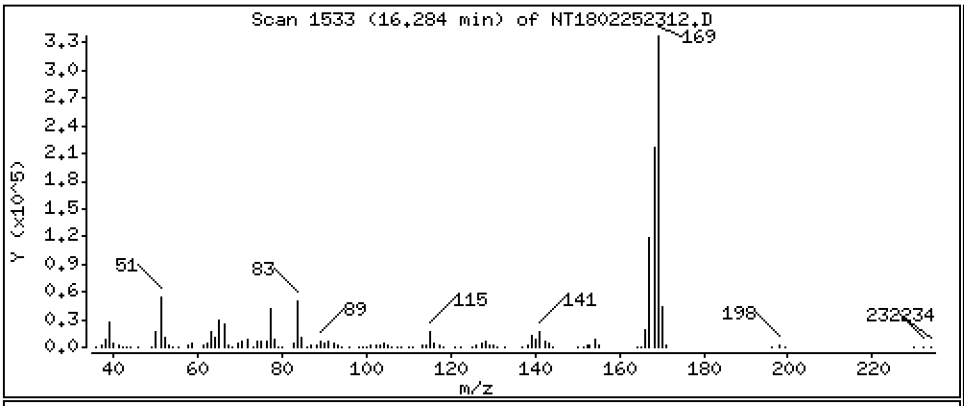
Operator: VTS

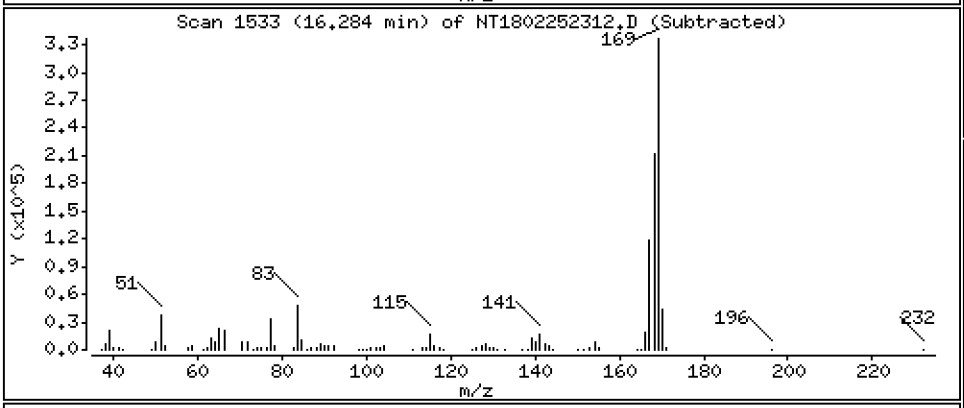
Column phase: ZB-5msi

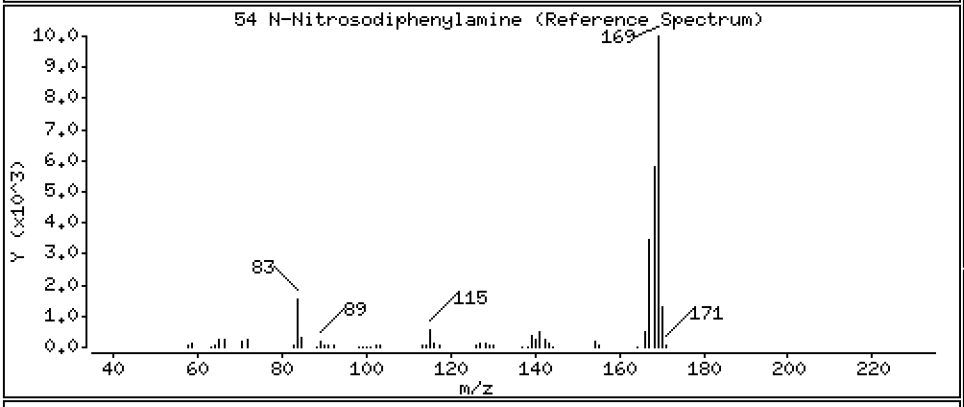
Column diameter: 0.25

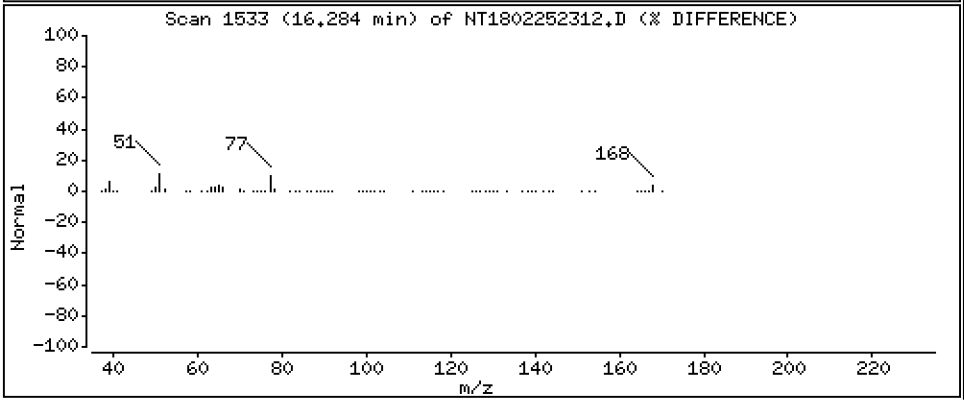
54 N-Nitrosodiphenylamine

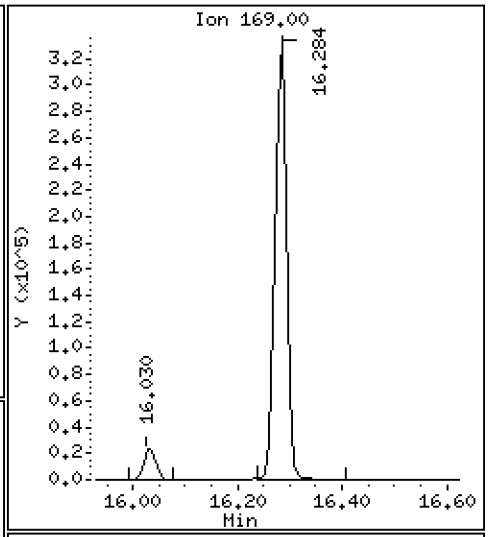
Concentration: 4.602 ug/mL

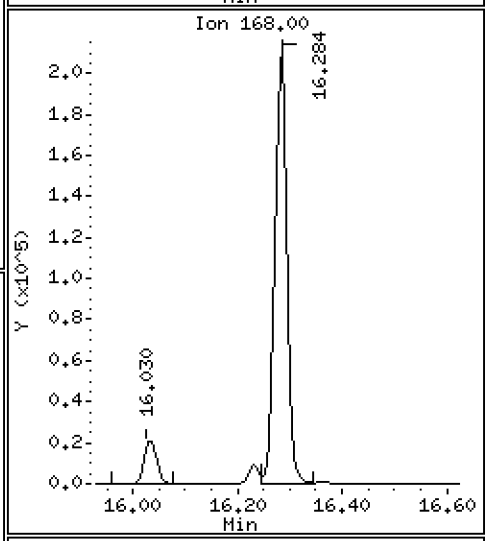


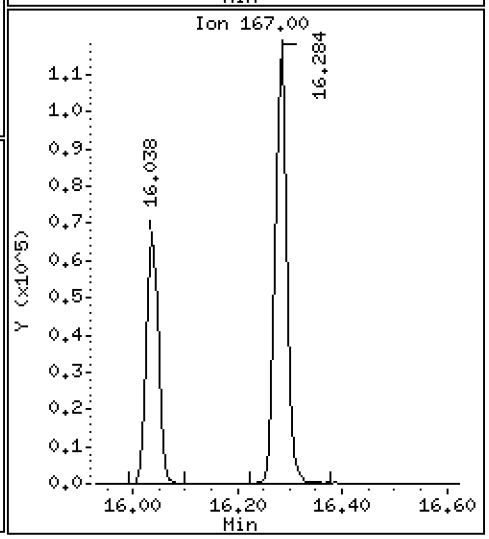












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

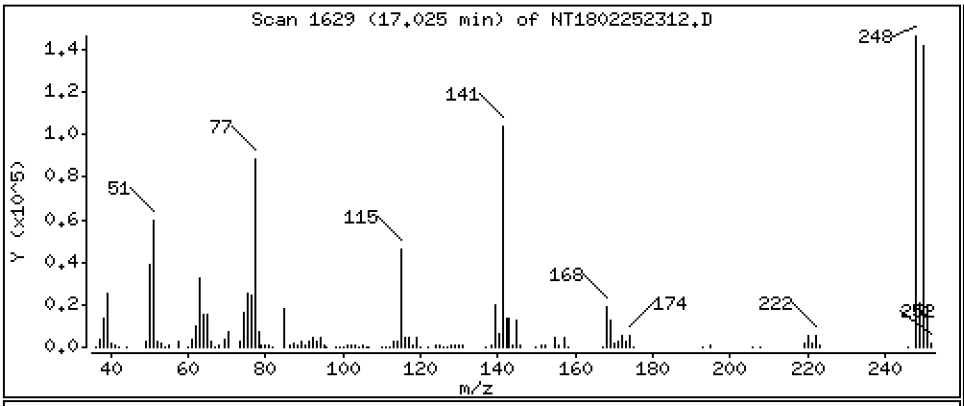
Operator: VTS

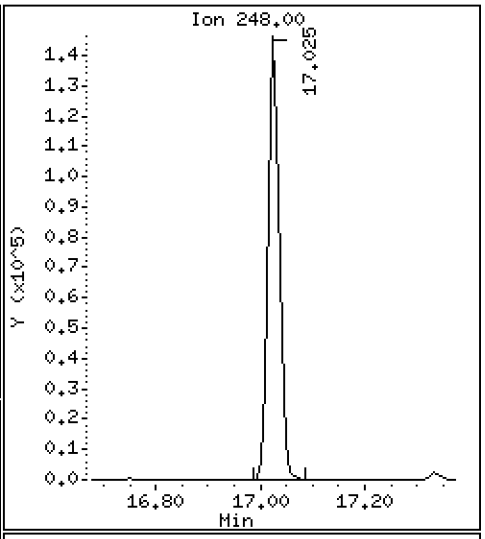
Column phase: ZB-5msi

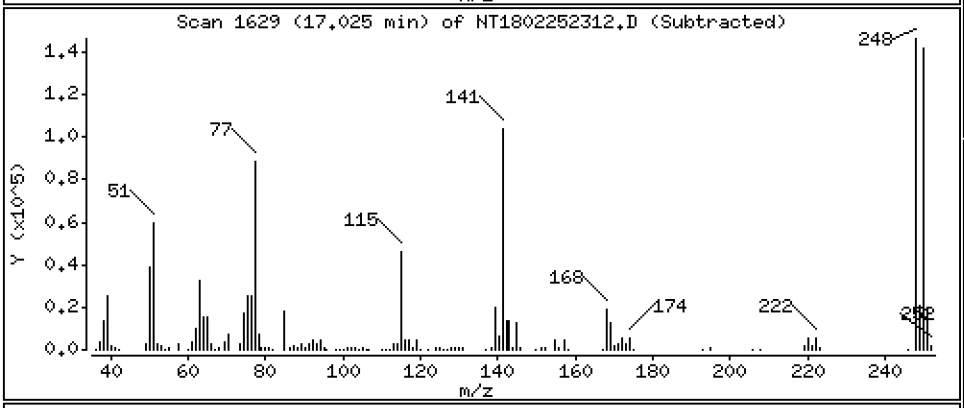
Column diameter: 0.25

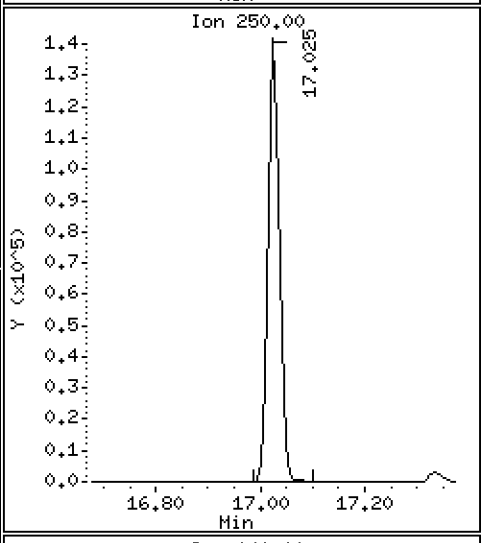
56 4-Bromophenyl-phenylether

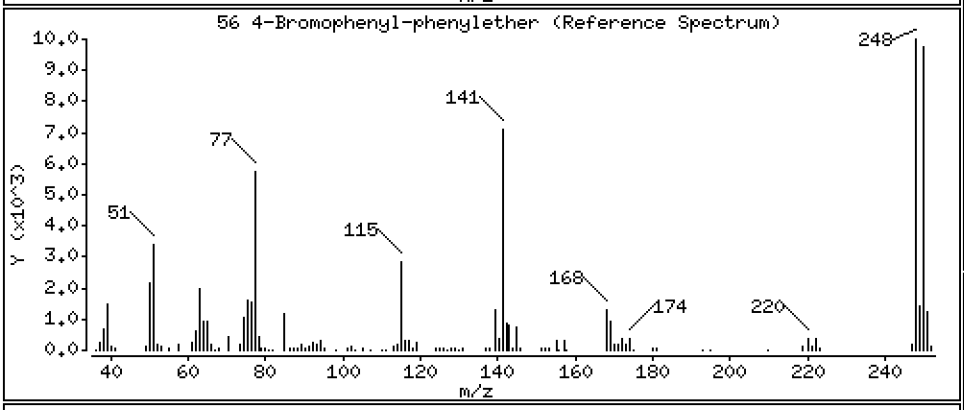
Concentration: 4.884 ug/mL

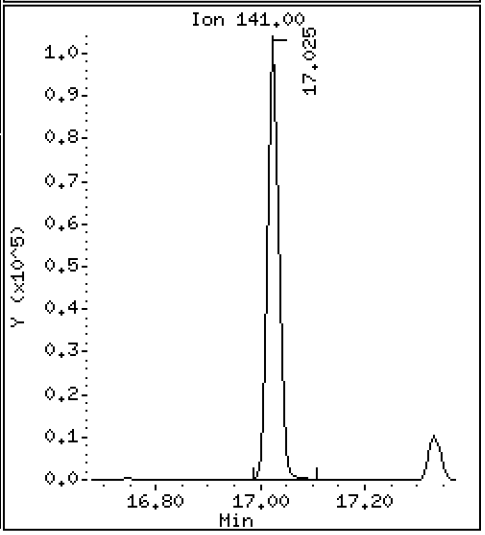


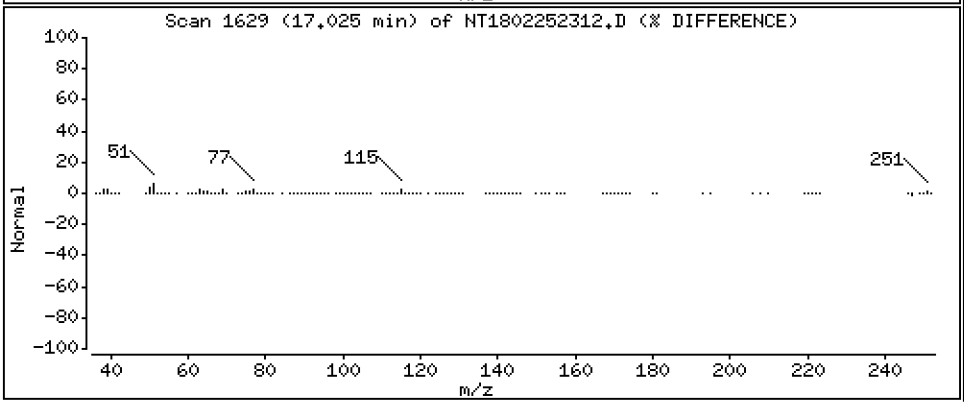












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

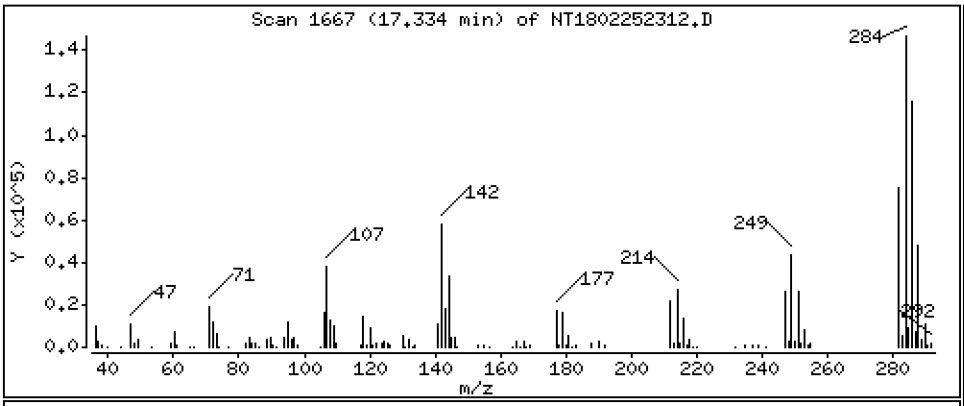
Operator: VTS

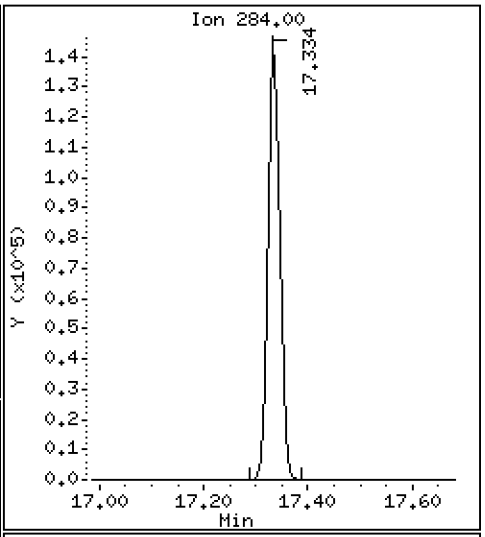
Column phase: ZB-5msi

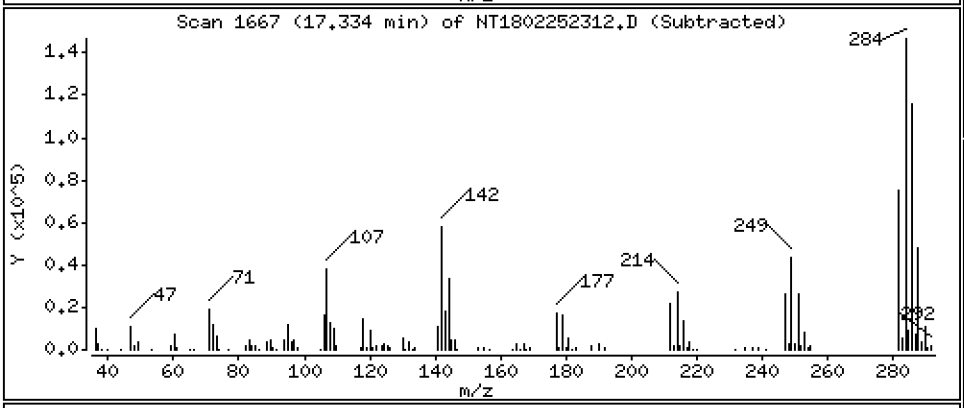
Column diameter: 0.25

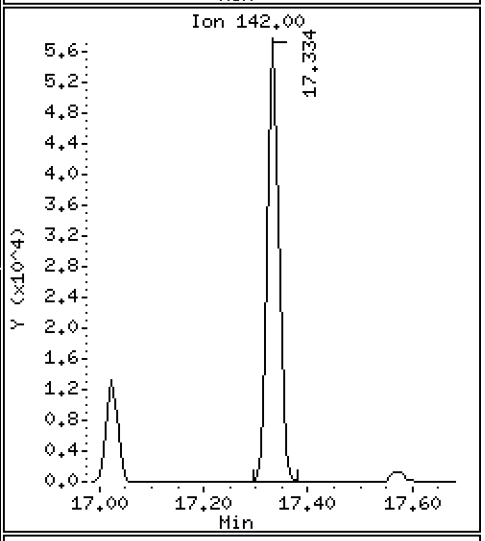
57 Hexachlorobenzene

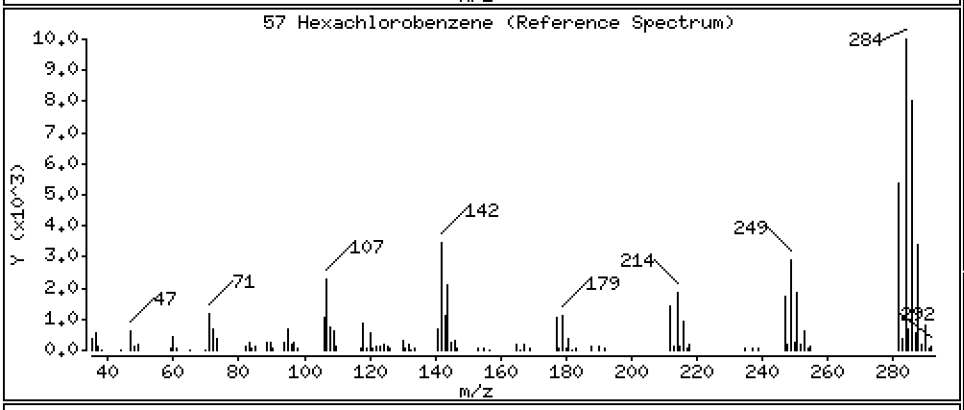
Concentration: 4.422 ug/mL

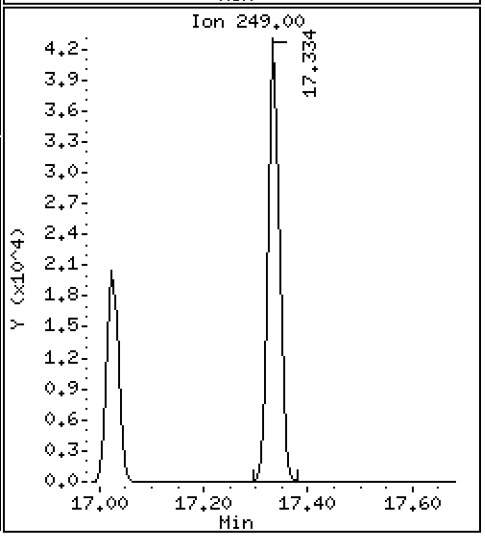


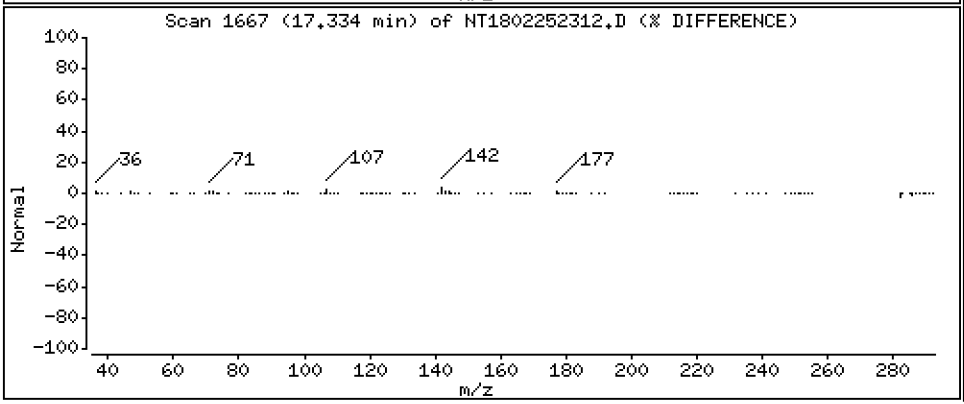












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

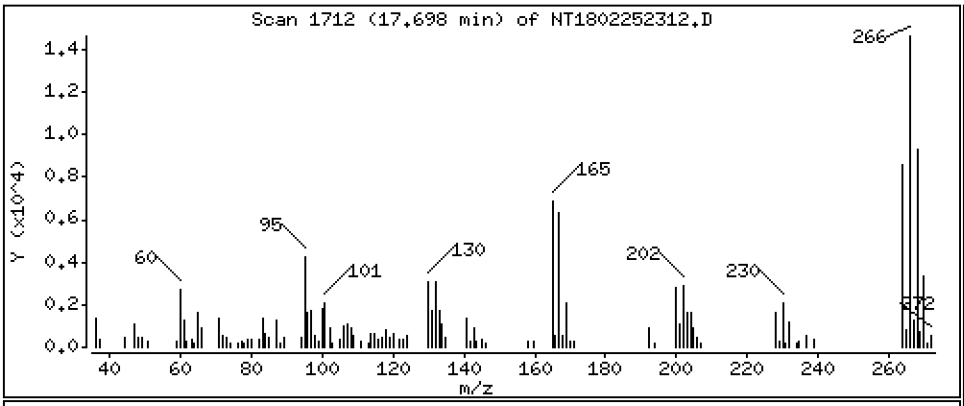
Operator: VTS

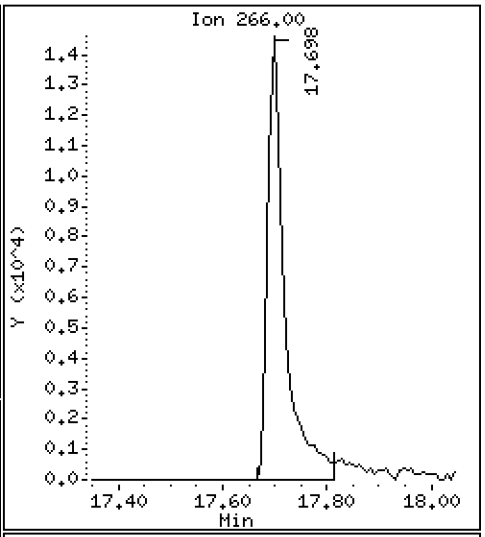
Column phase: ZB-5msi

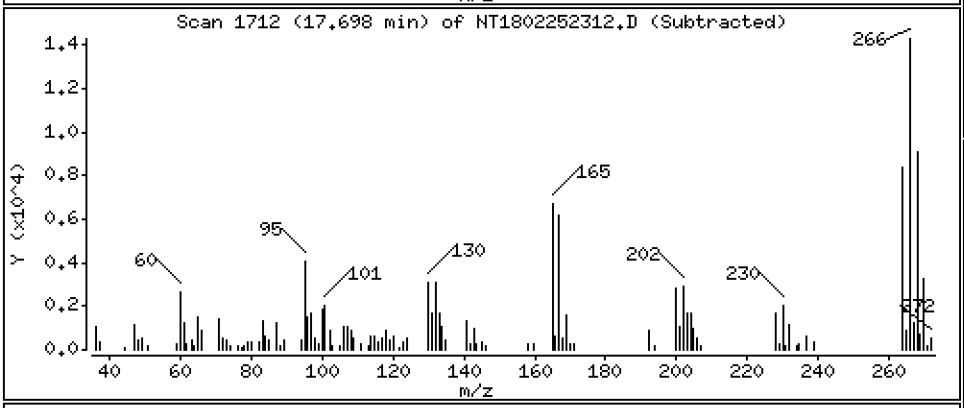
Column diameter: 0.25

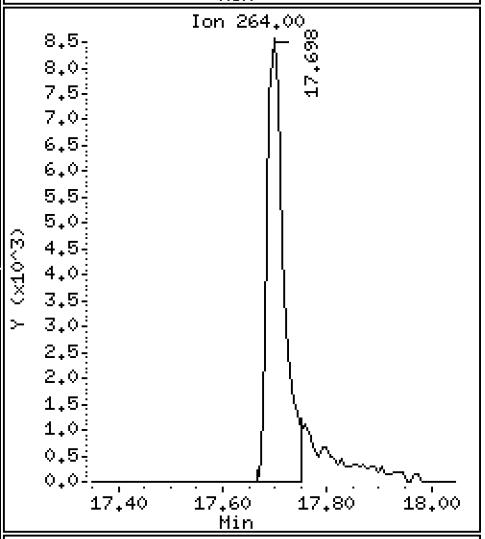
58 Pentachlorophenol

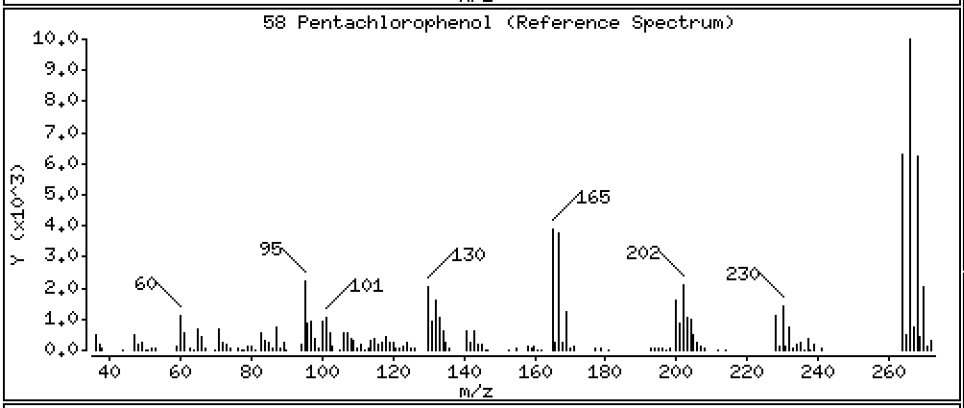
Concentration: 2.454 ug/mL

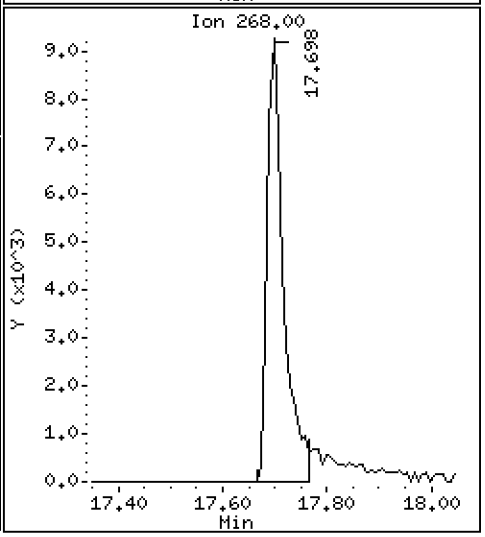


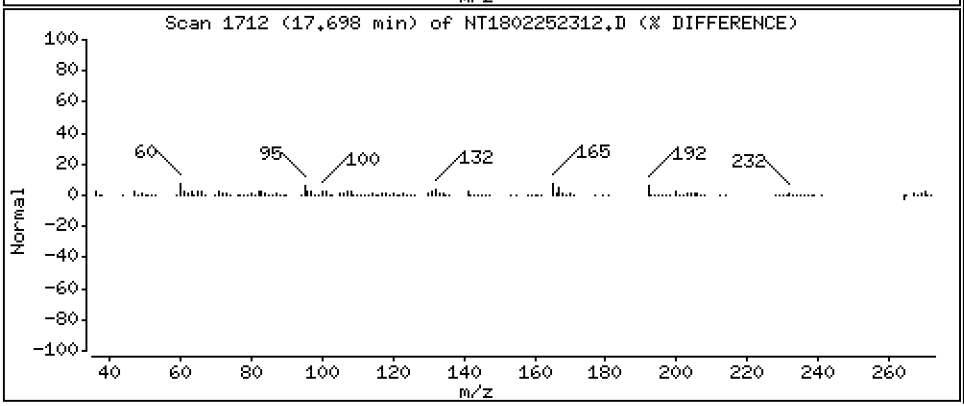












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

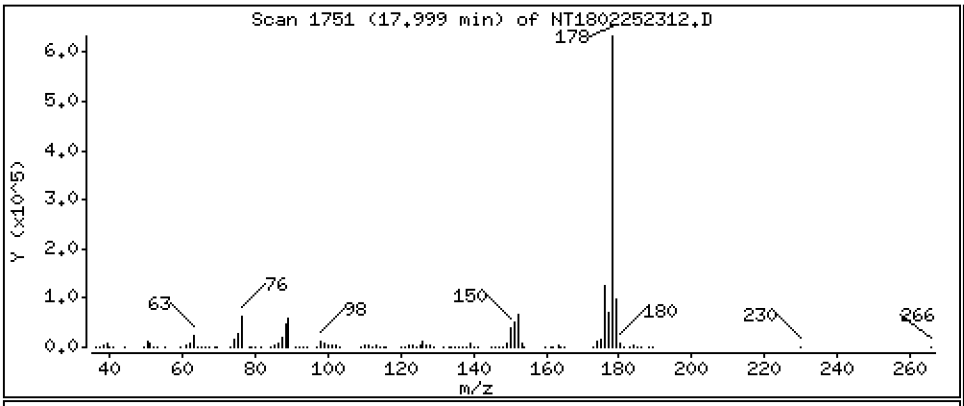
Operator: VTS

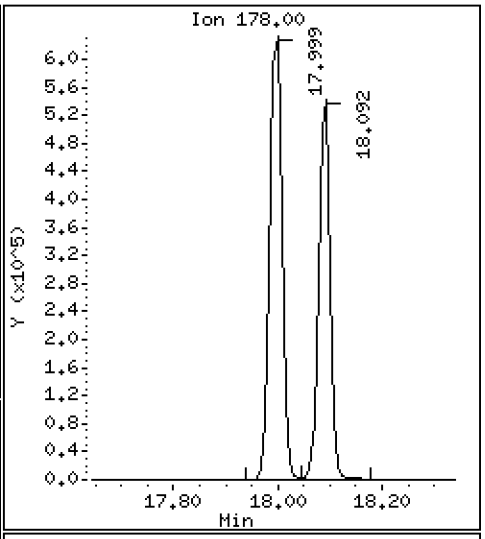
Column phase: ZB-5msi

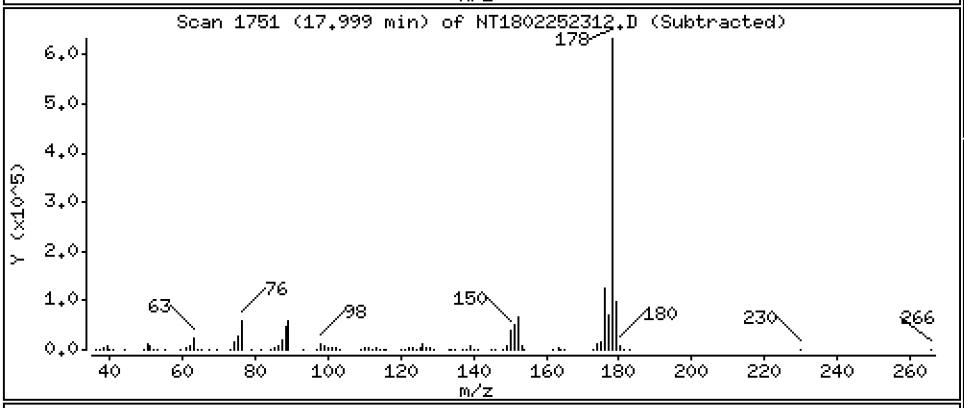
Column diameter: 0.25

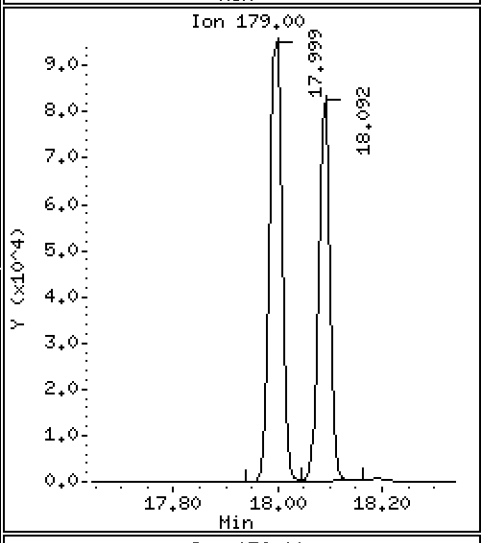
60 Phenanthrene

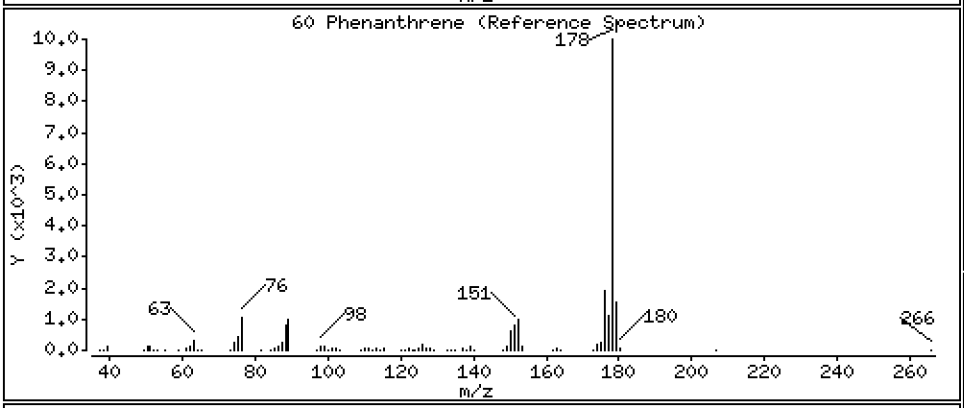
Concentration: 4.397 ug/mL

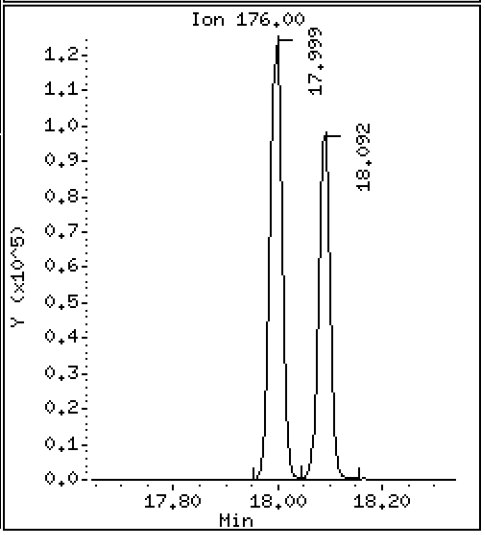


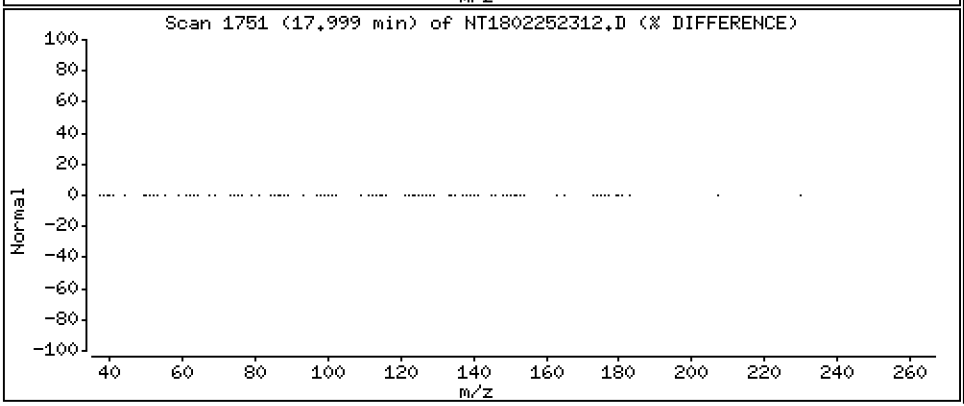












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

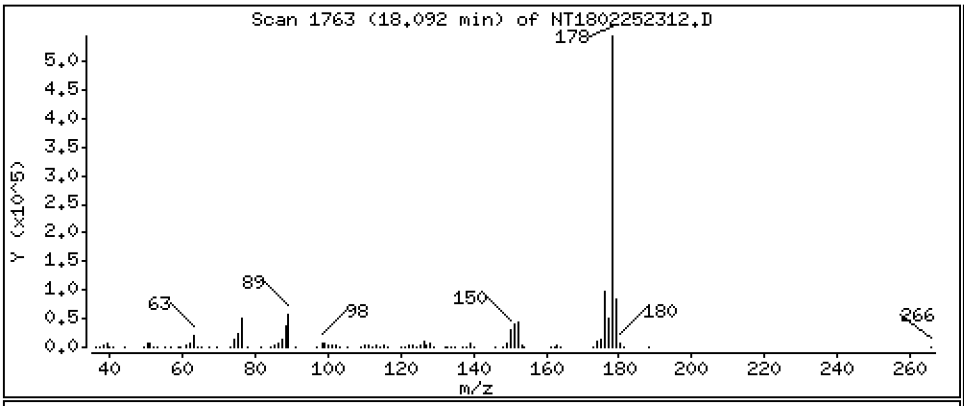
Operator: VTS

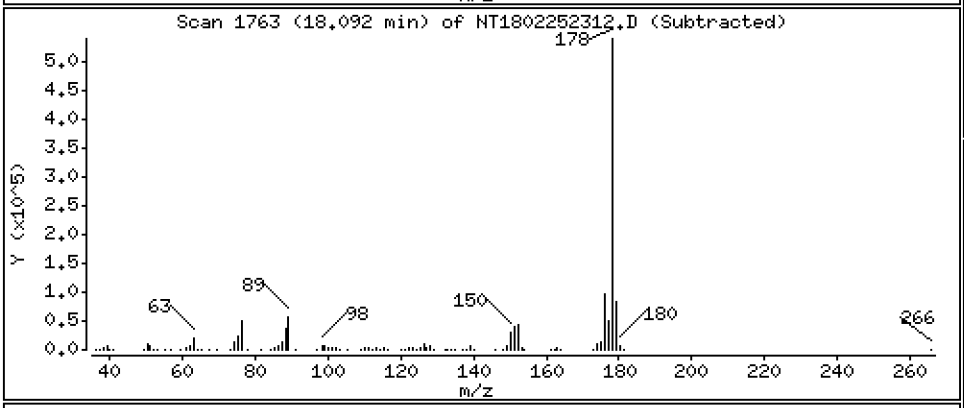
Column phase: ZB-5msi

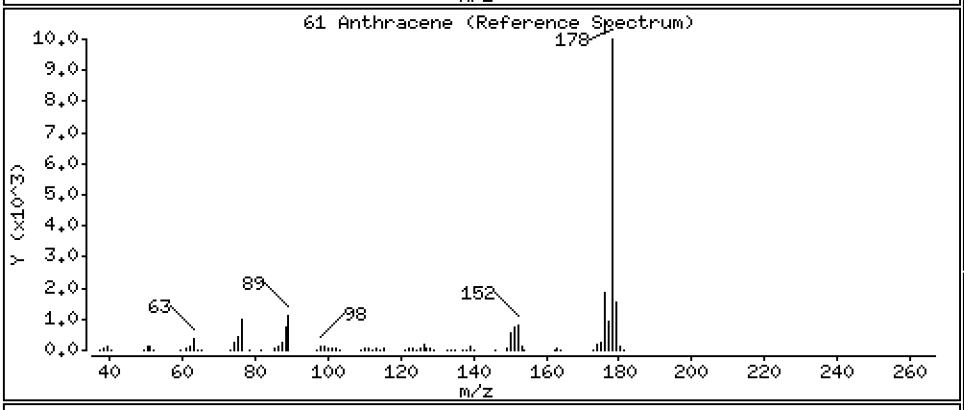
Column diameter: 0.25

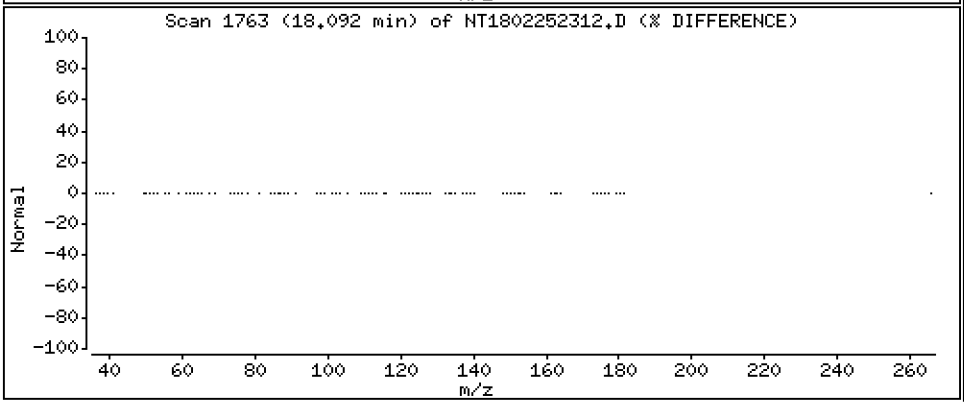
61 Anthracene

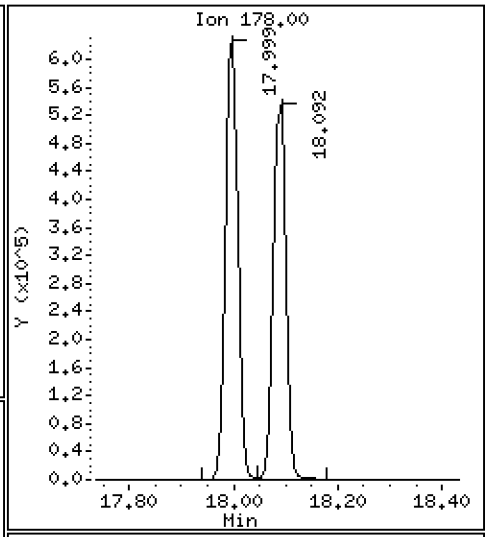
Concentration: 3.959 ug/mL

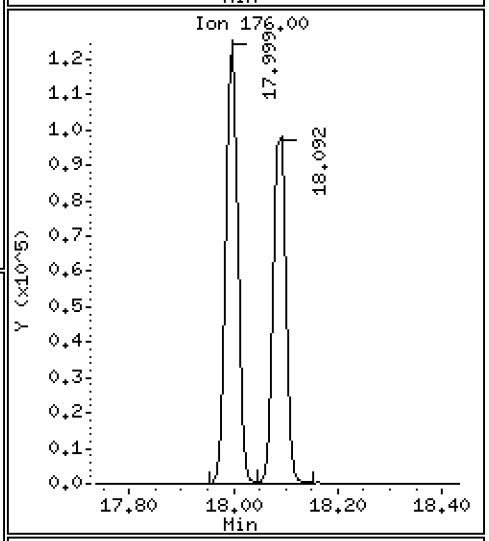


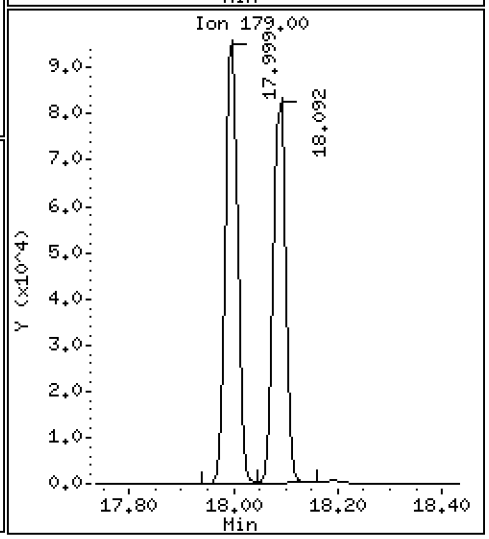












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

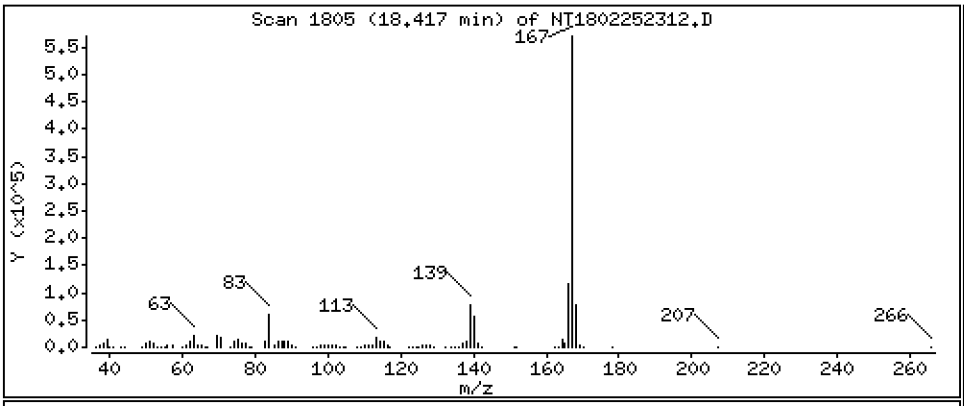
Operator: VTS

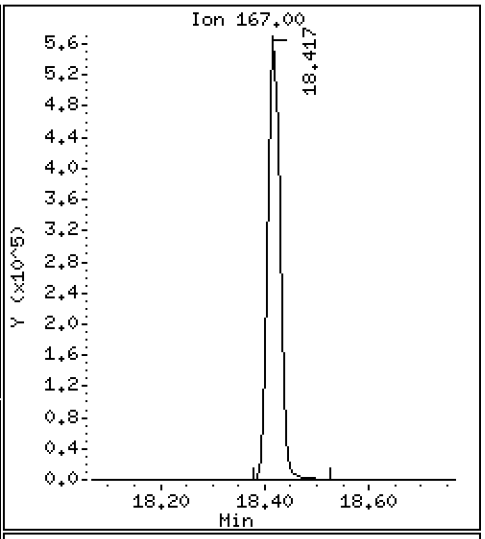
Column phase: ZB-5msi

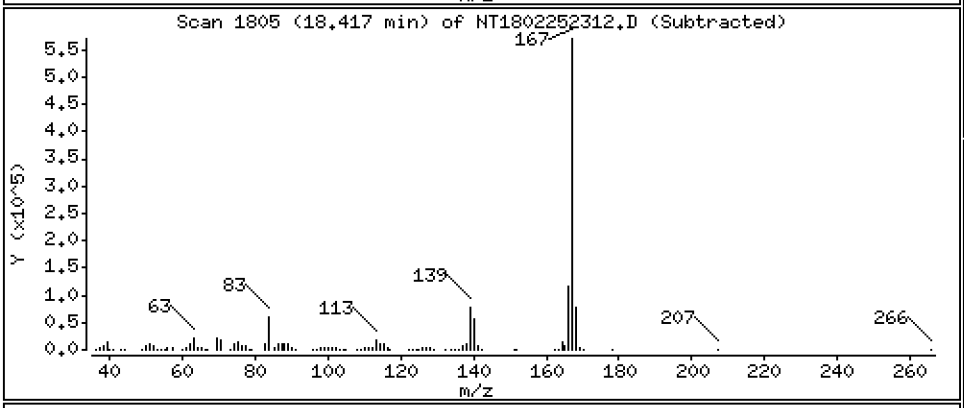
Column diameter: 0.25

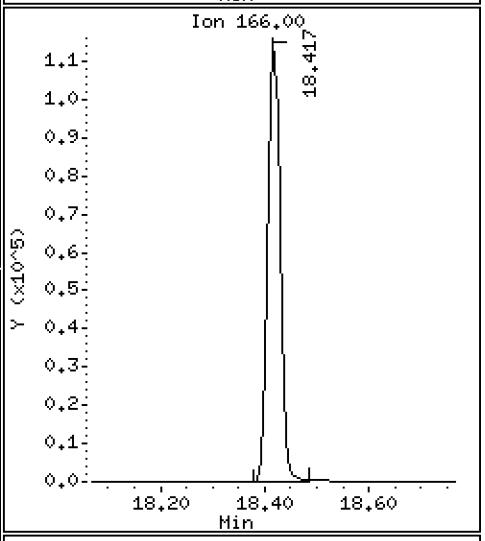
62 Carbazole

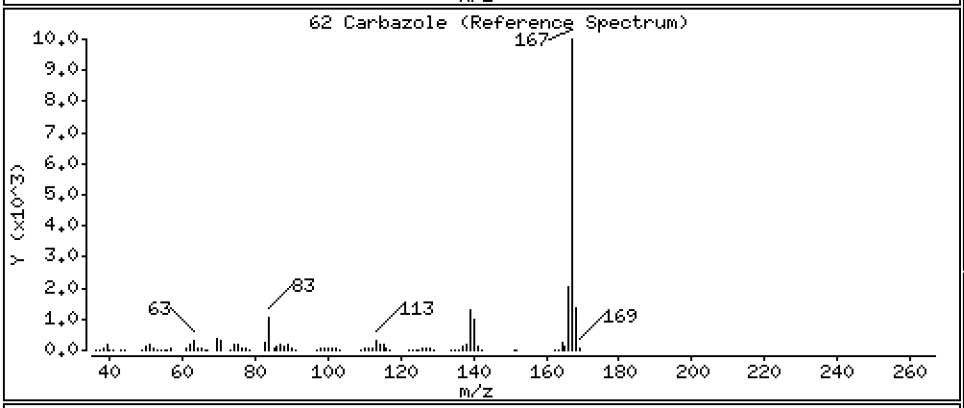
Concentration: 4.463 ug/mL

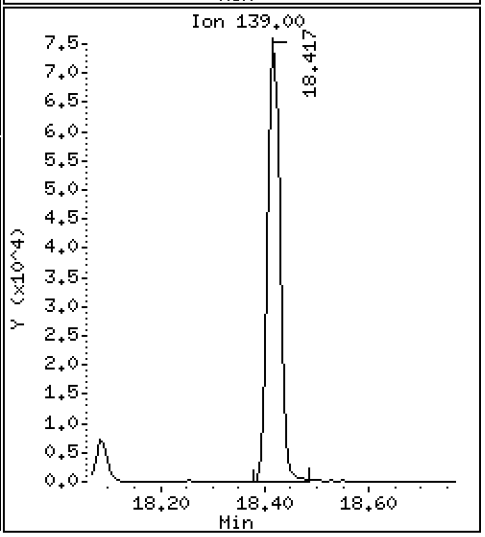


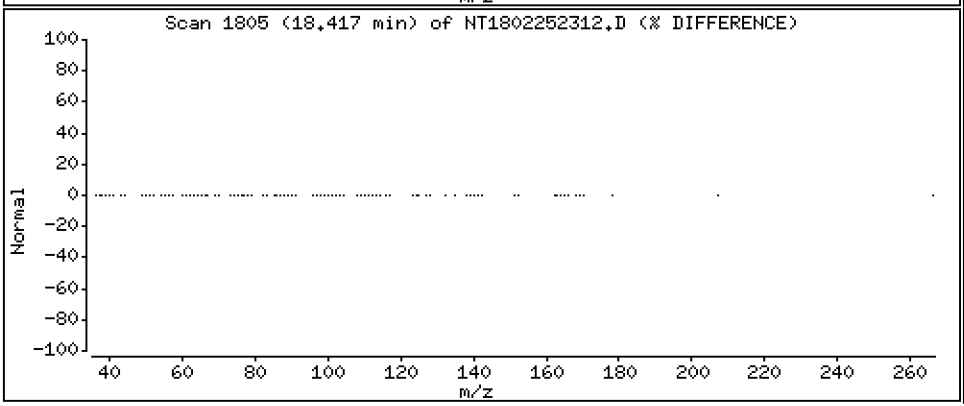












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

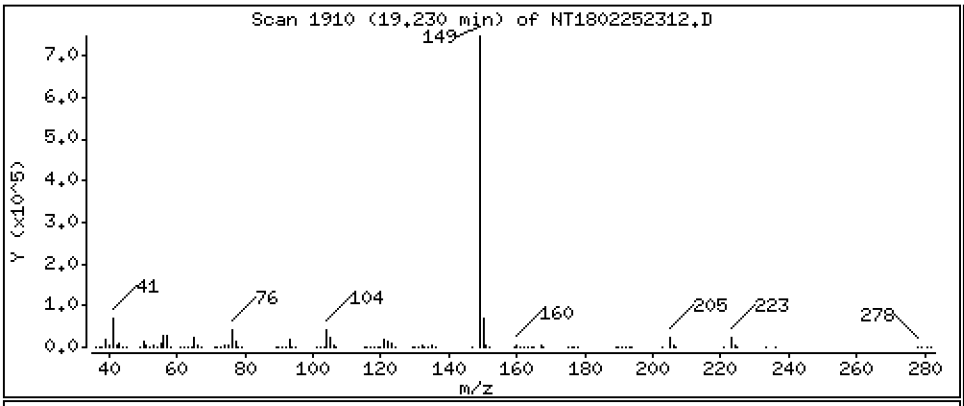
Operator: VTS

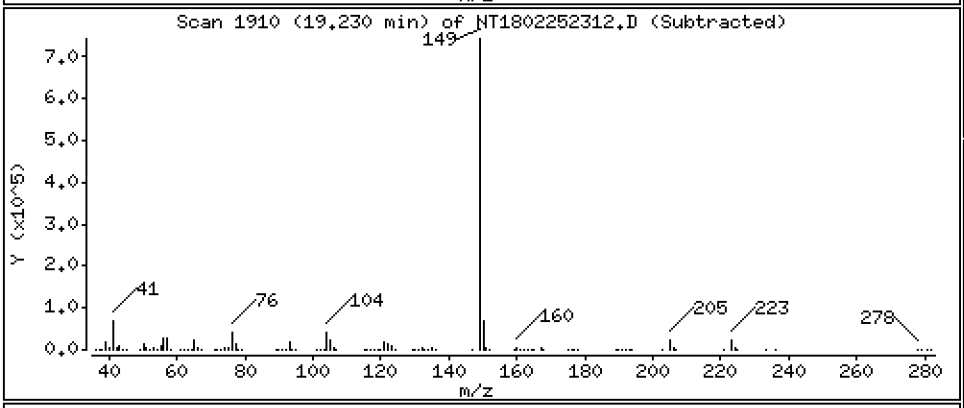
Column phase: ZB-5msi

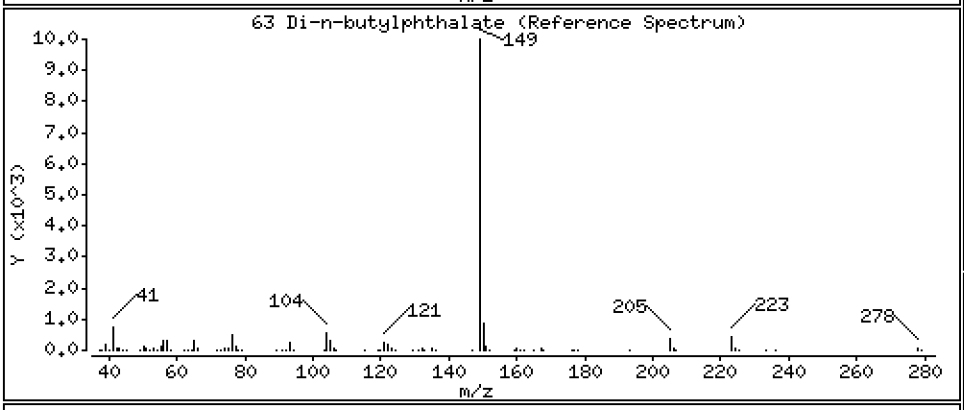
Column diameter: 0.25

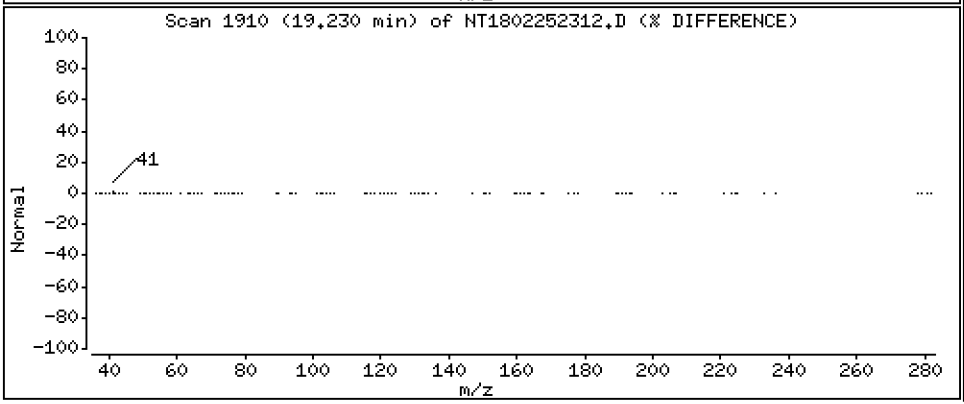
63 Di-n-butylphthalate

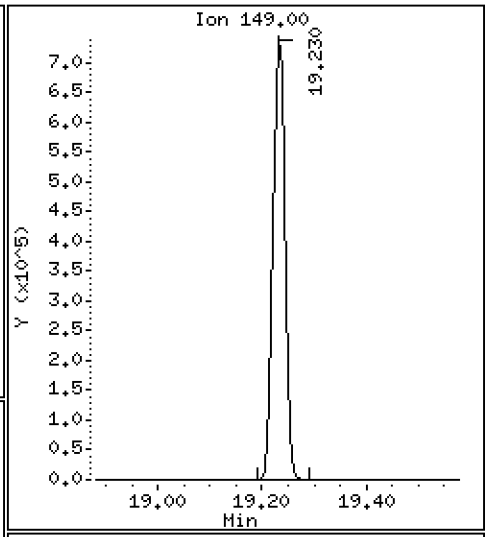
Concentration: 5.159 ug/mL

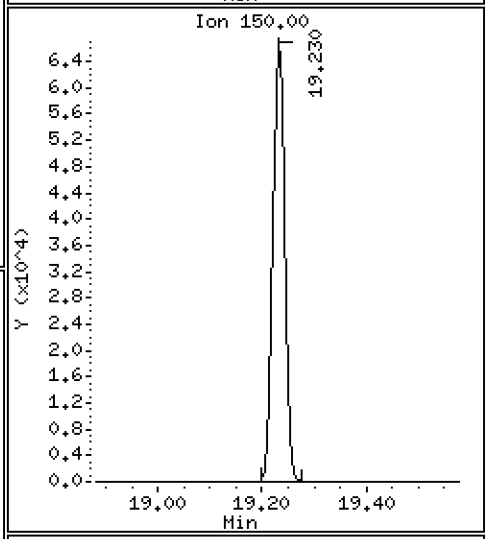


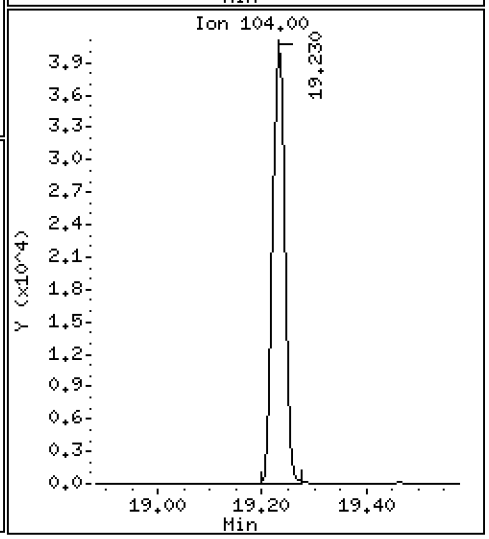












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

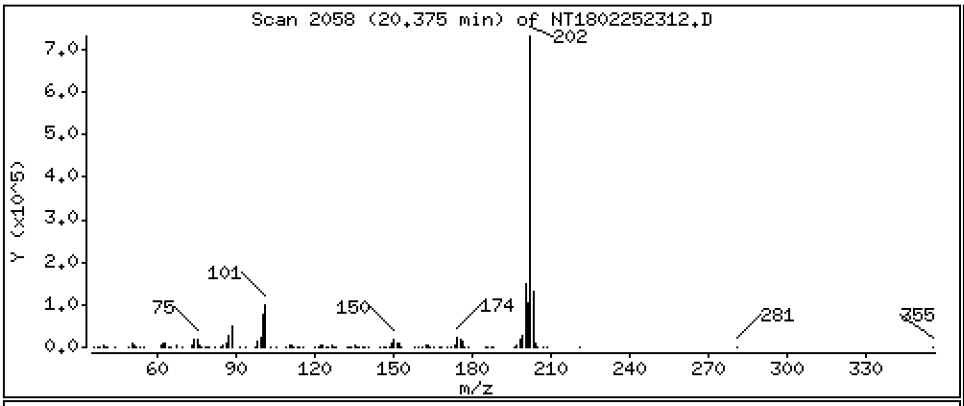
Operator: VTS

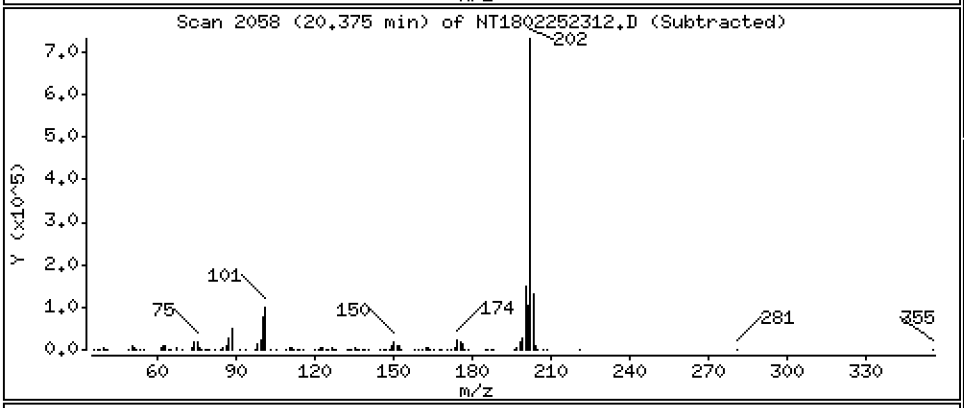
Column phase: ZB-5msi

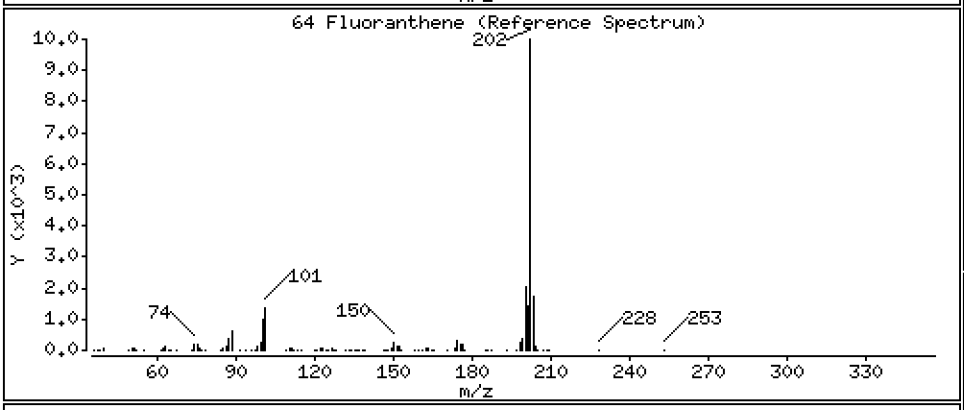
Column diameter: 0.25

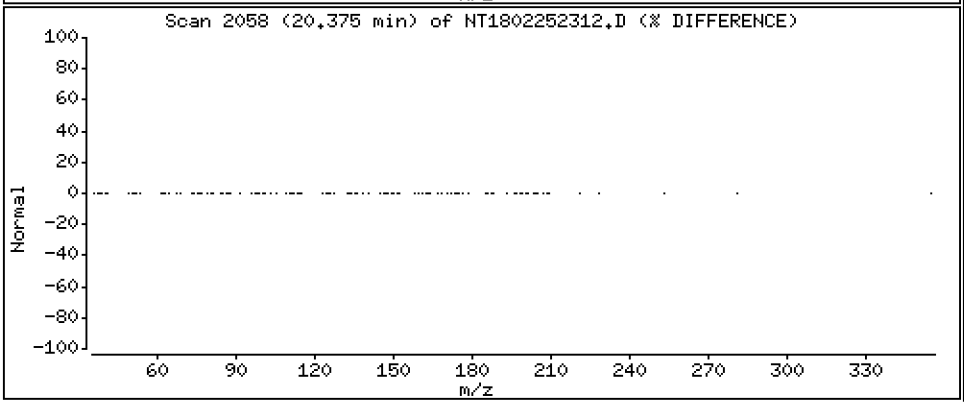
64 Fluoranthene

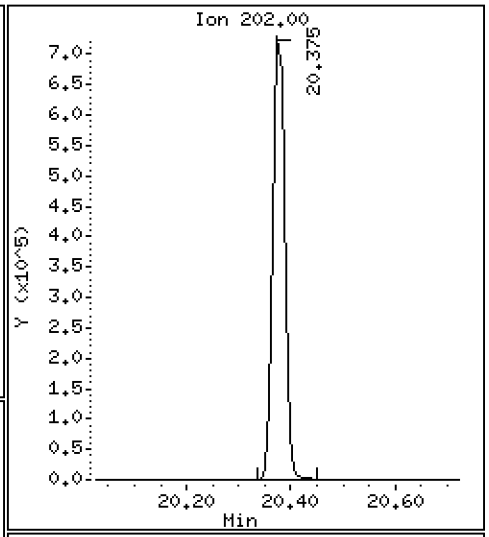
Concentration: 4.812 ug/mL

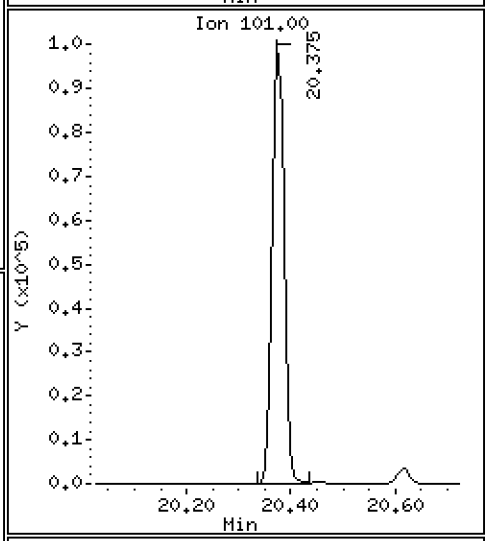


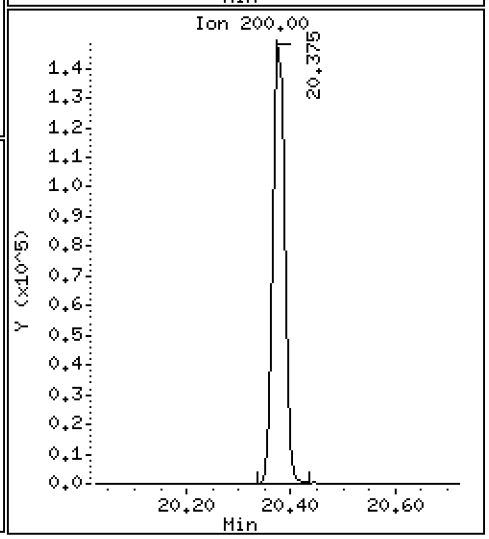












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

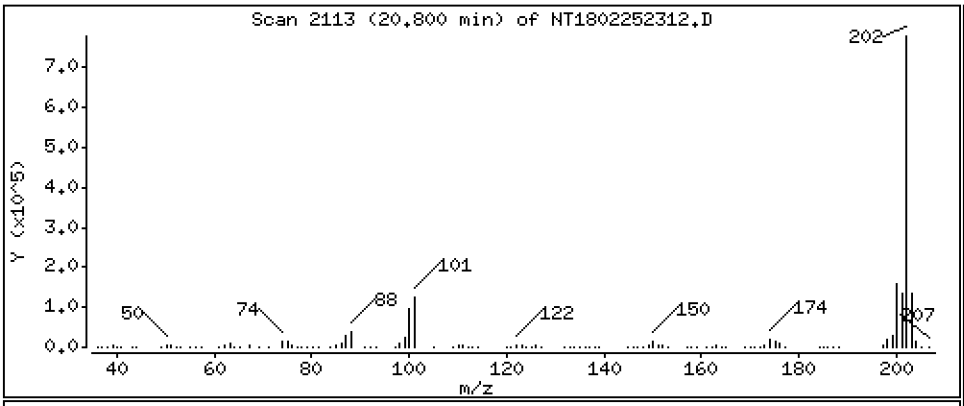
Operator: VTS

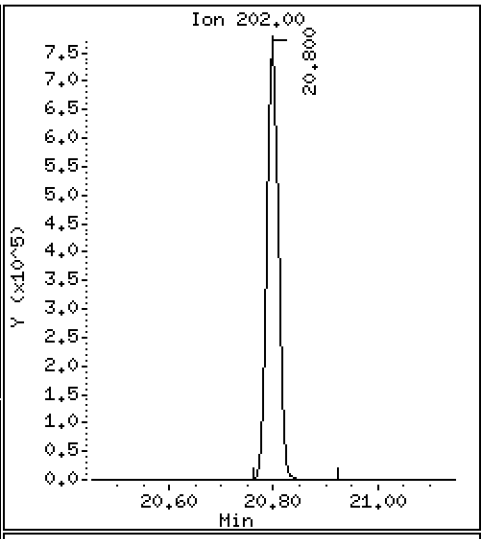
Column phase: ZB-5msi

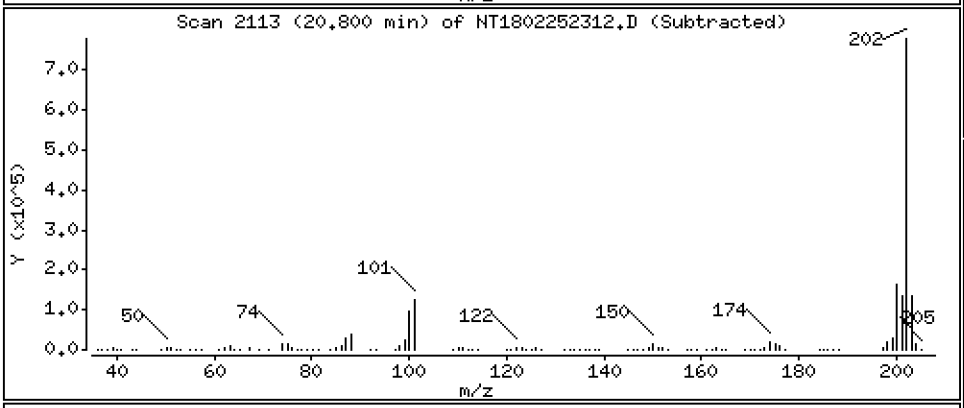
Column diameter: 0.25

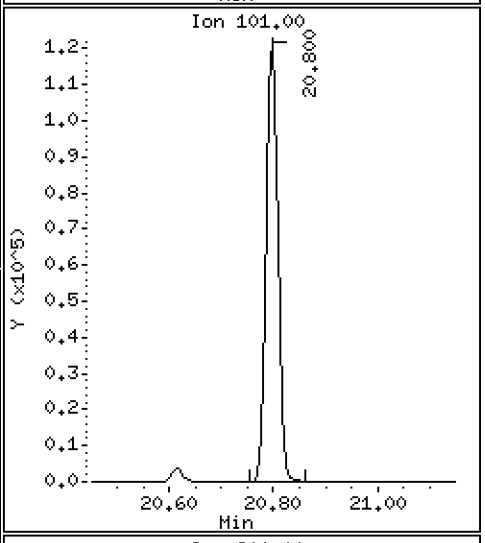
65 Pyrene

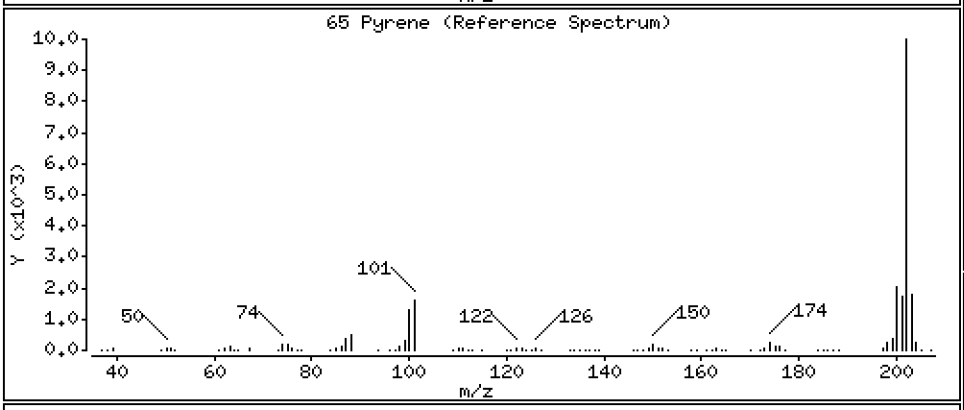
Concentration: 4.559 ug/mL

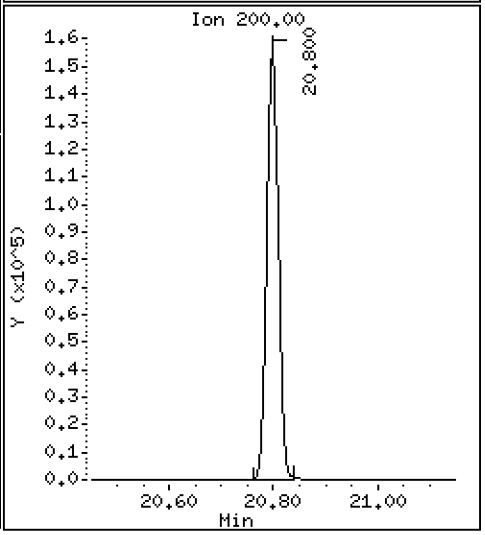


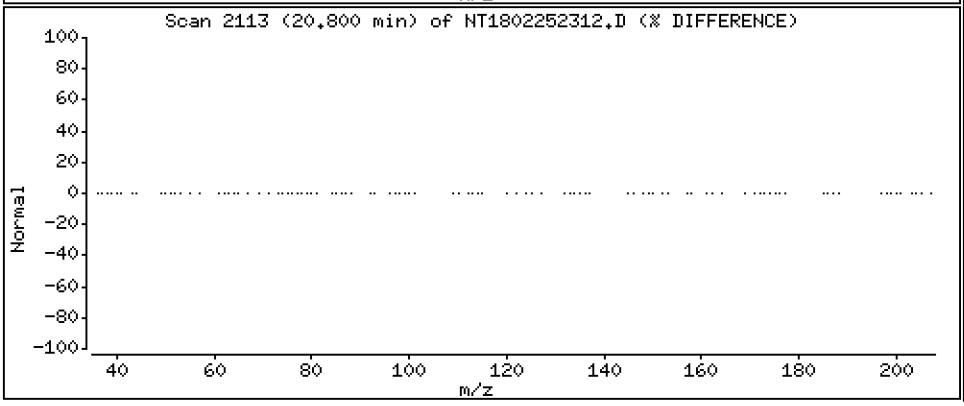












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

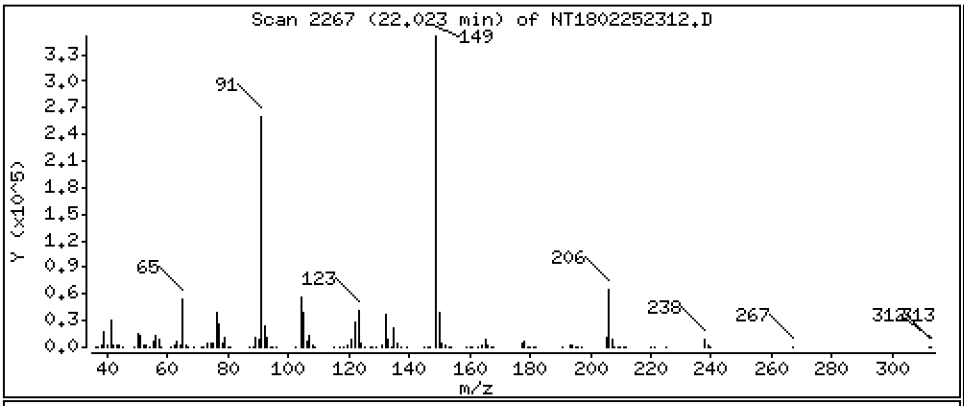
Operator: VTS

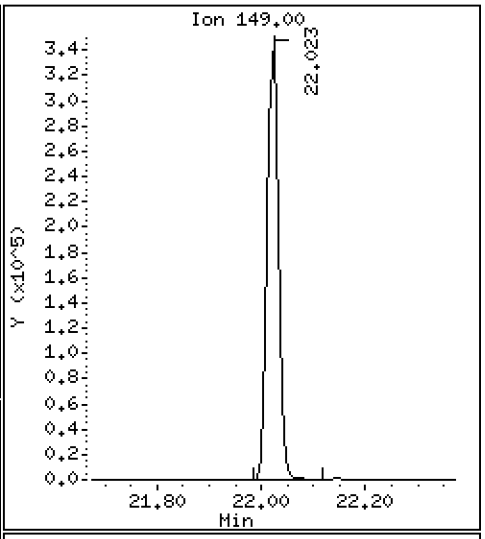
Column phase: ZB-5msi

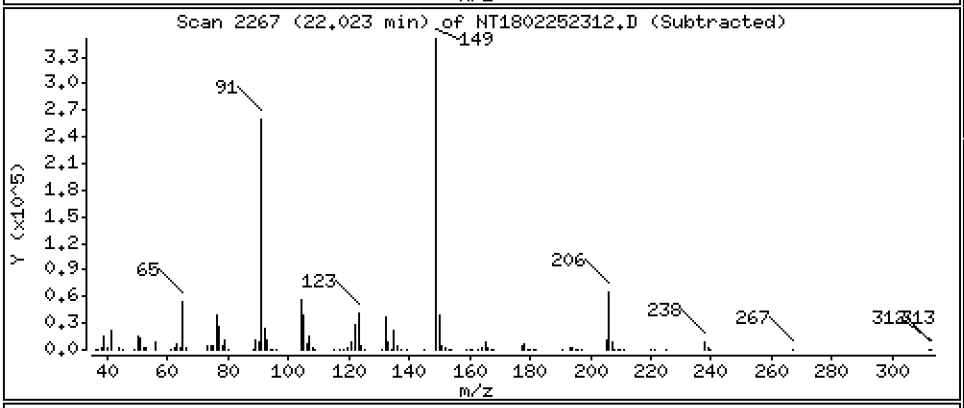
Column diameter: 0.25

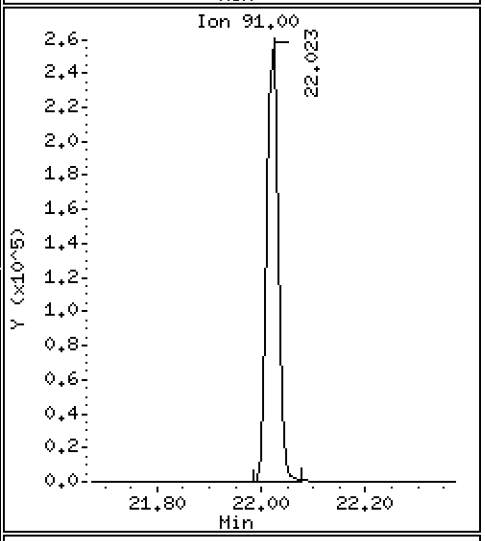
67 Butylbenzylphthalate

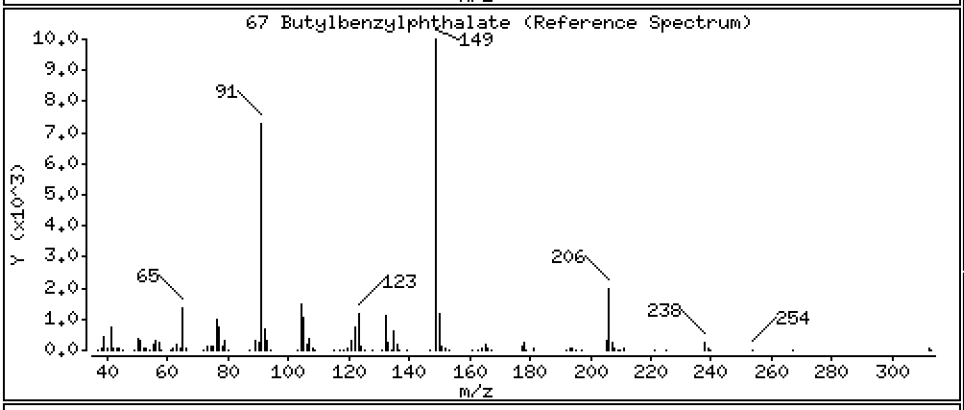
Concentration: 5.322 ug/mL

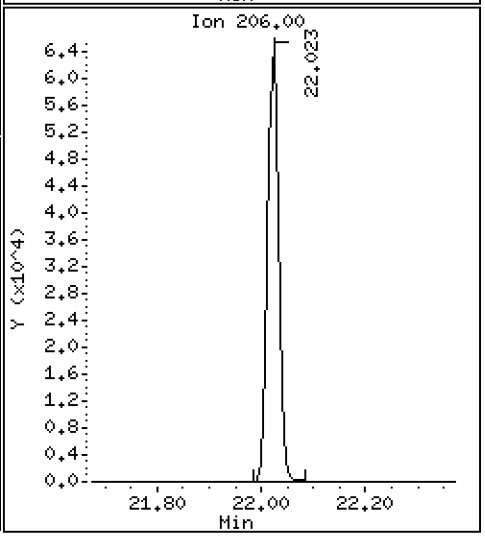


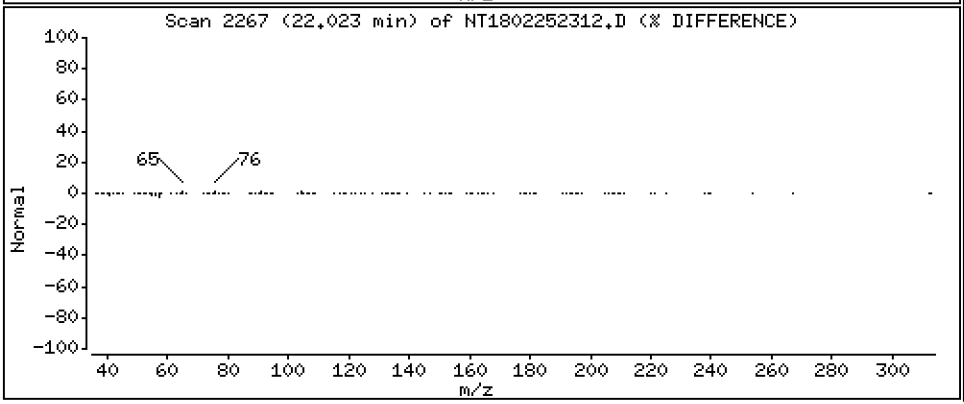












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

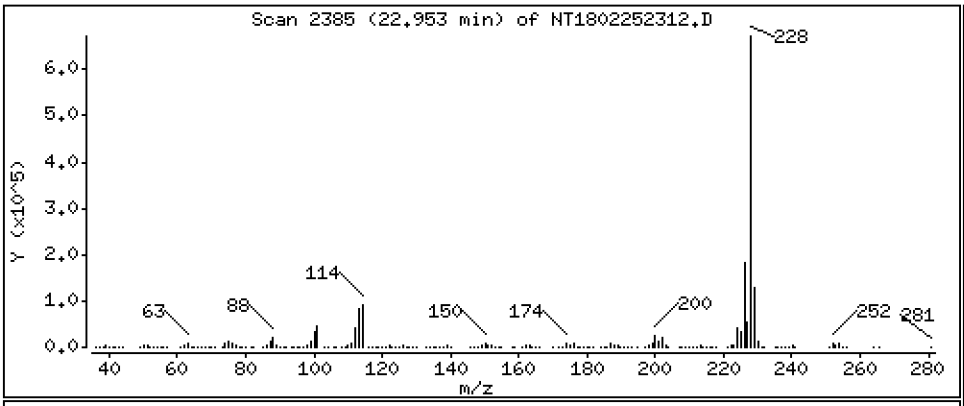
Operator: VTS

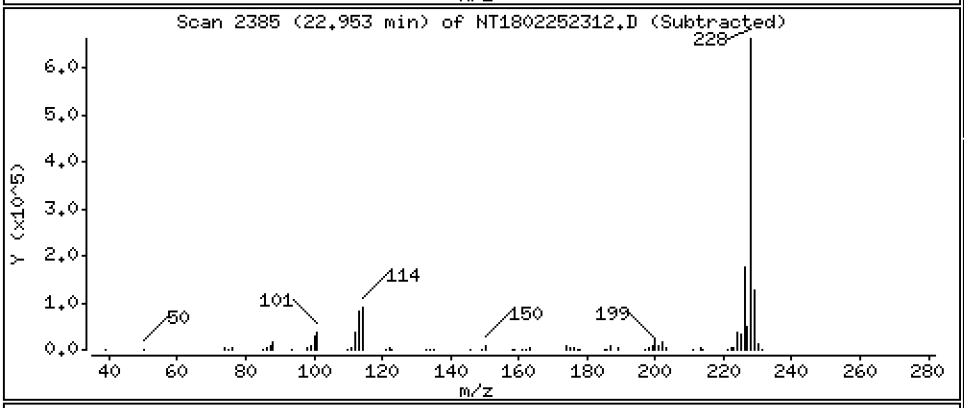
Column phase: ZB-5msi

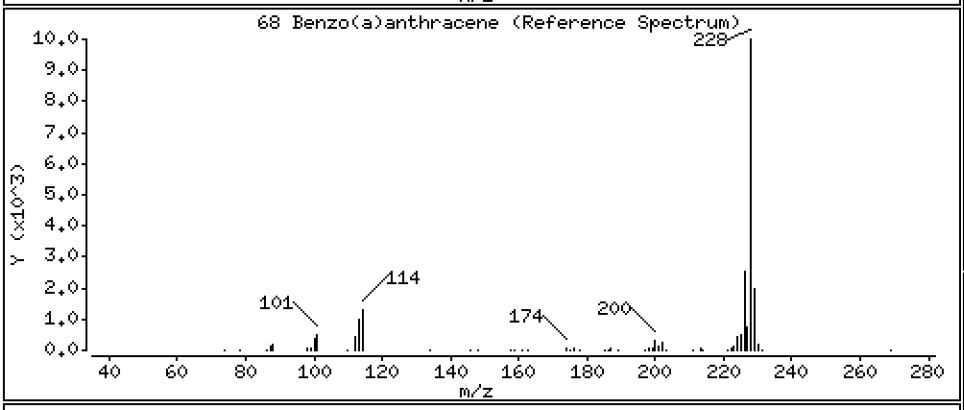
Column diameter: 0.25

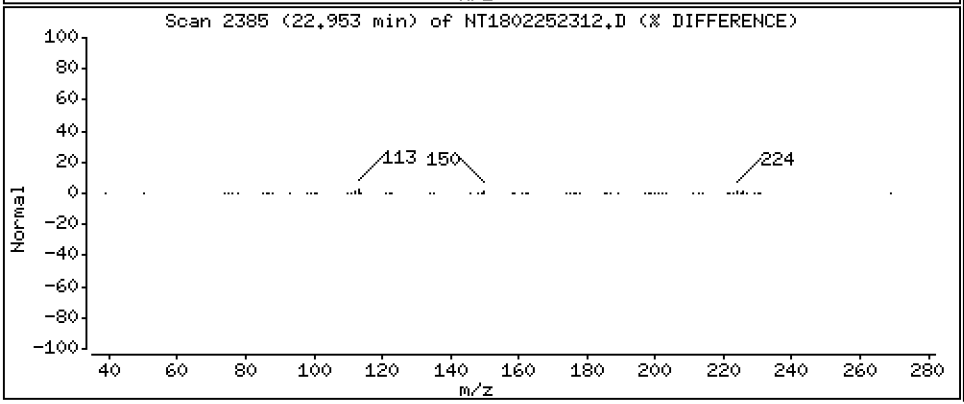
68 Benzo(a)anthracene

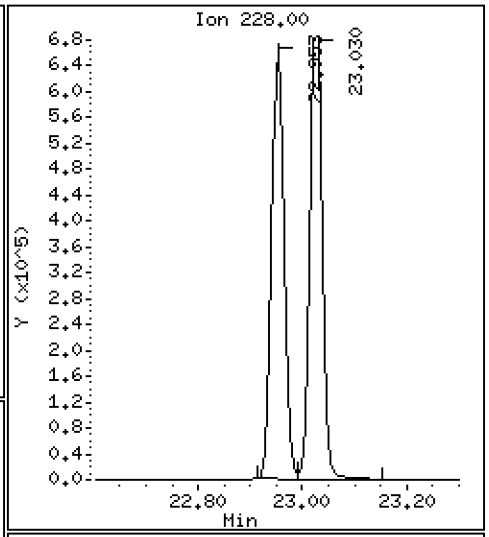
Concentration: 4.472 ug/mL

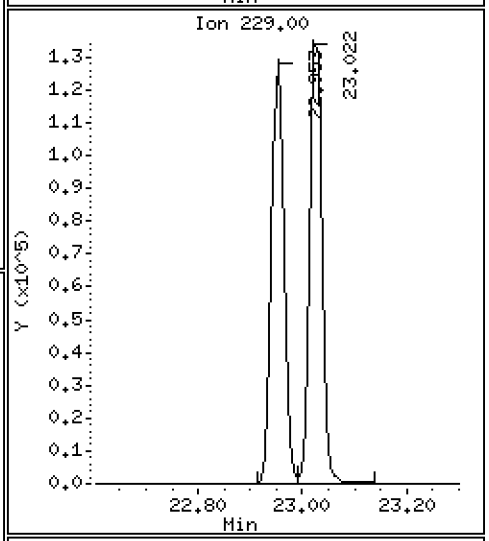


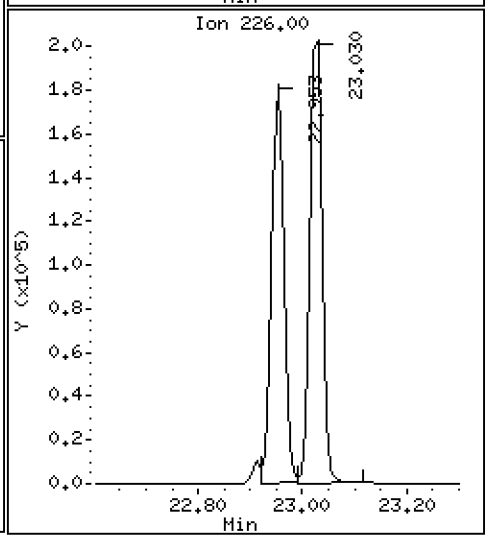












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

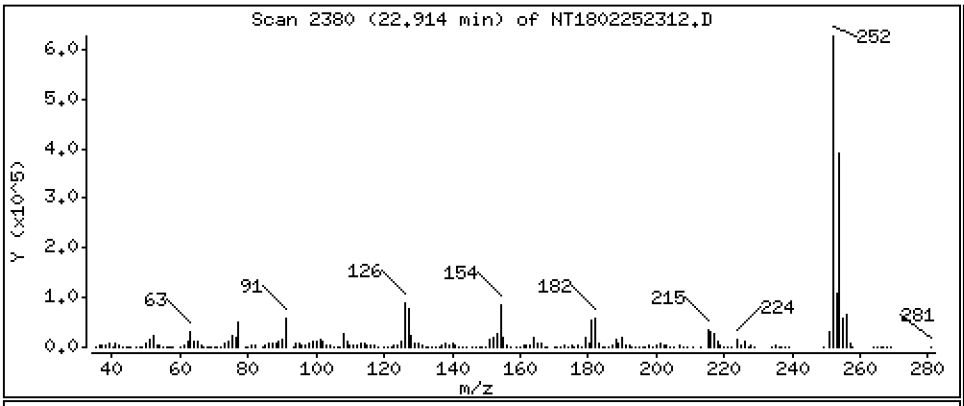
Operator: VTS

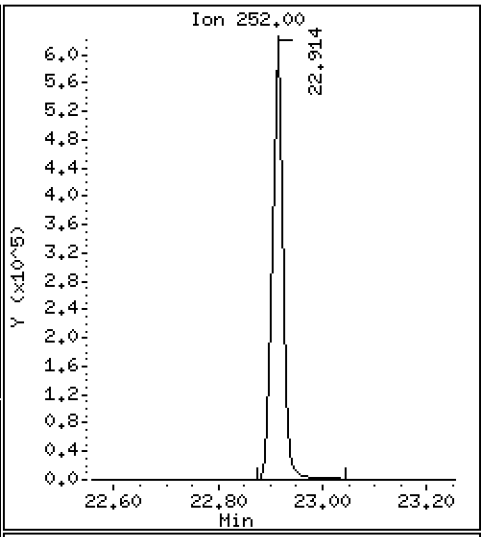
Column phase: ZB-5msi

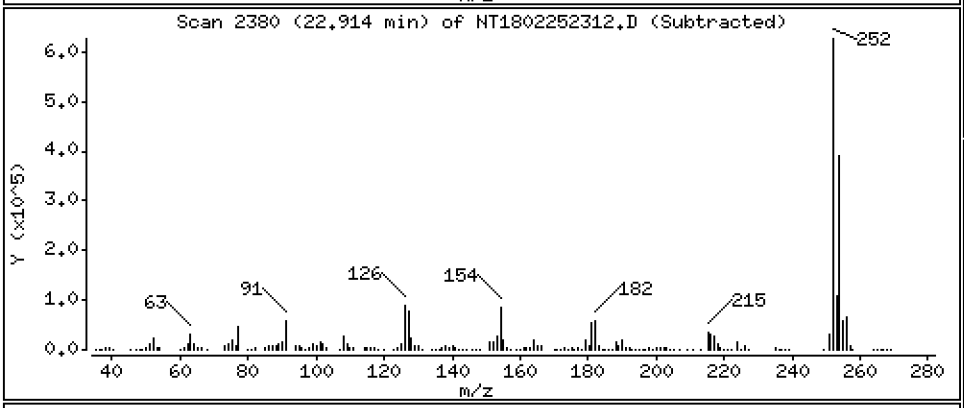
Column diameter: 0.25

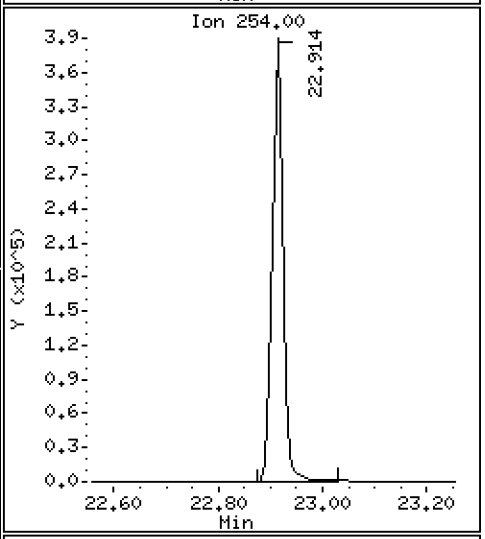
70 3,3'-Dichlorobenzidine

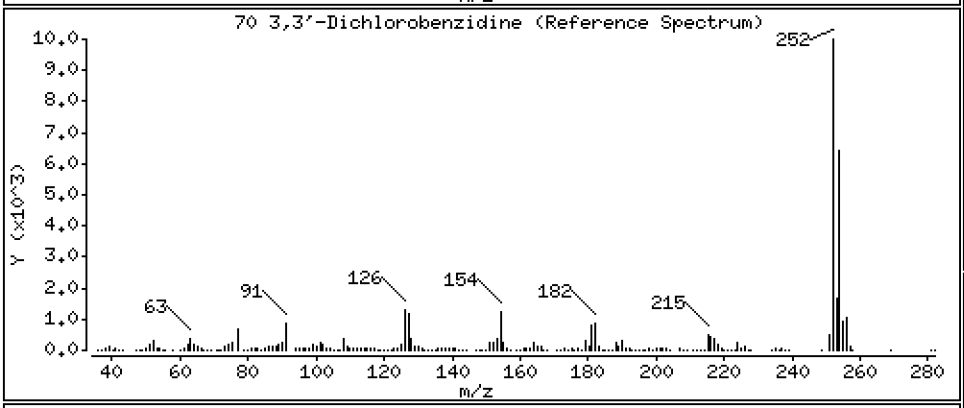
Concentration: 10.00 ug/mL

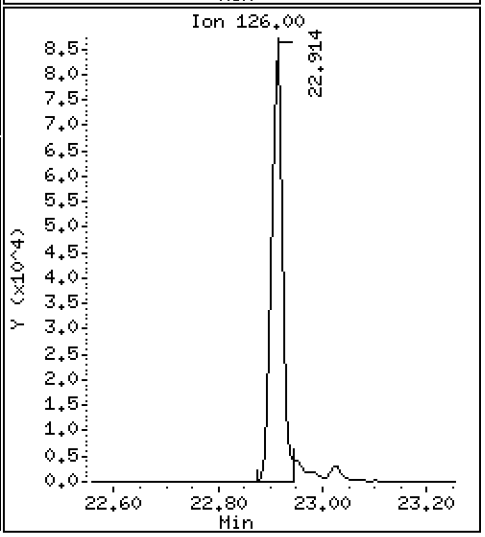


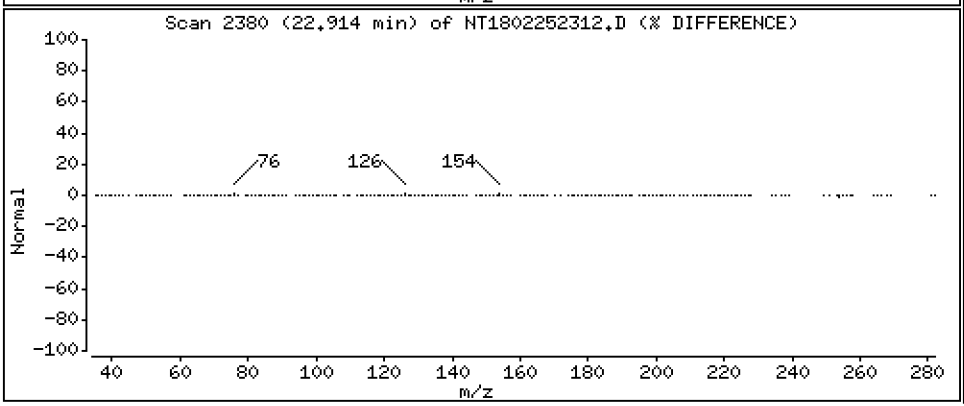












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

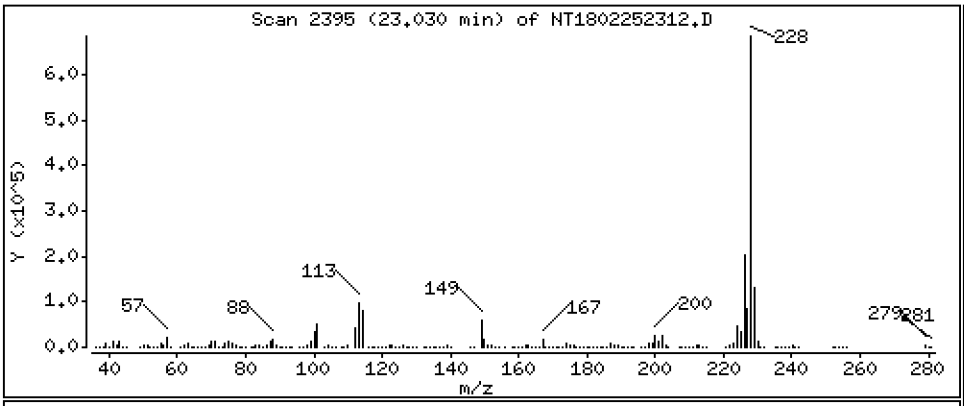
Operator: VTS

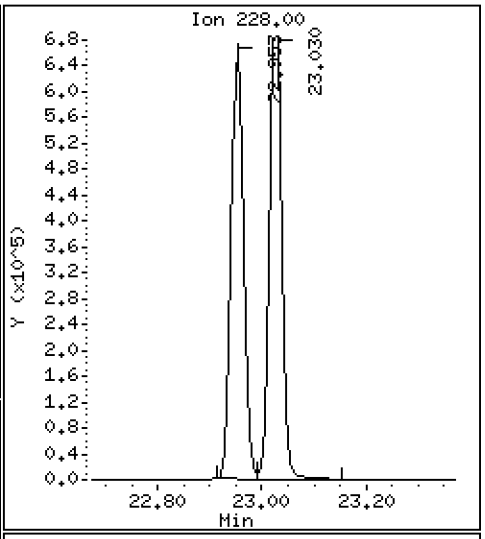
Column phase: ZB-5msi

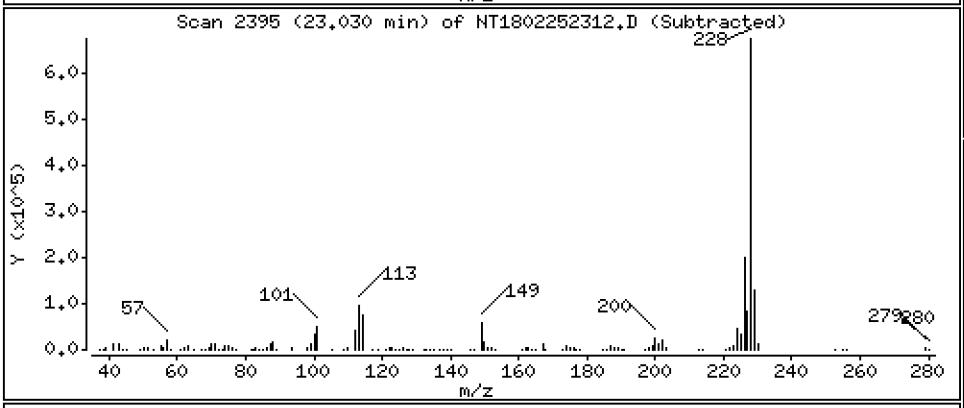
Column diameter: 0.25

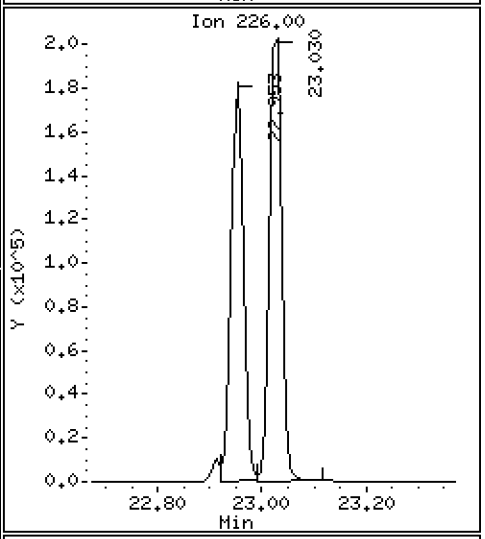
71 Chrysene

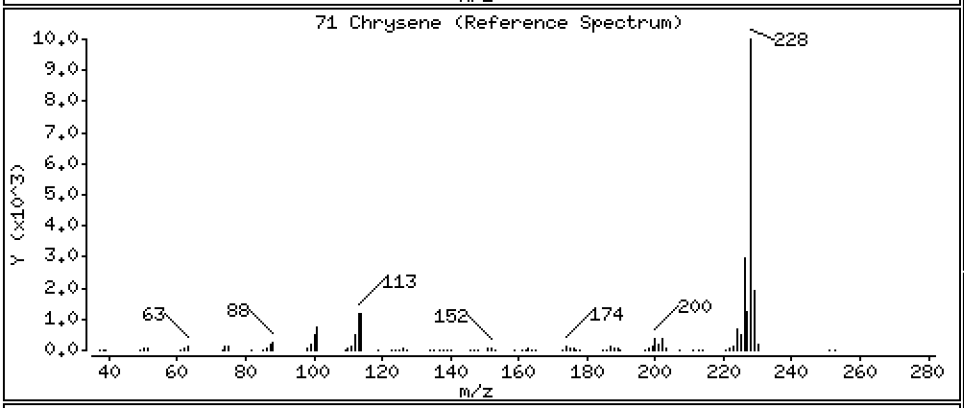
Concentration: 4.428 ug/mL

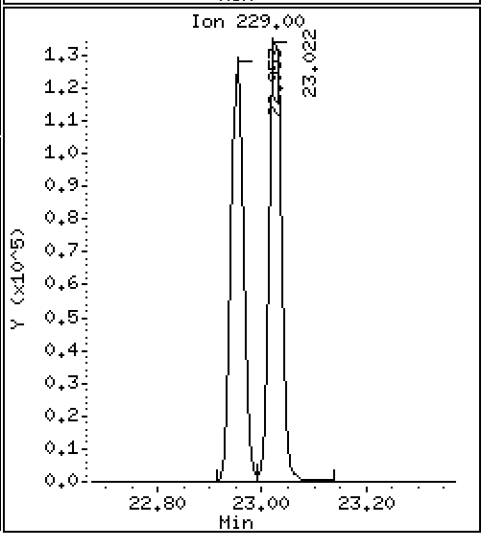


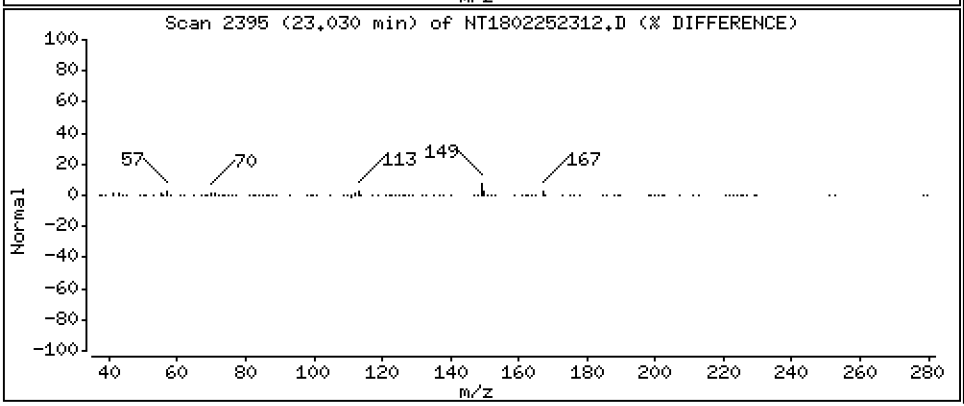












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

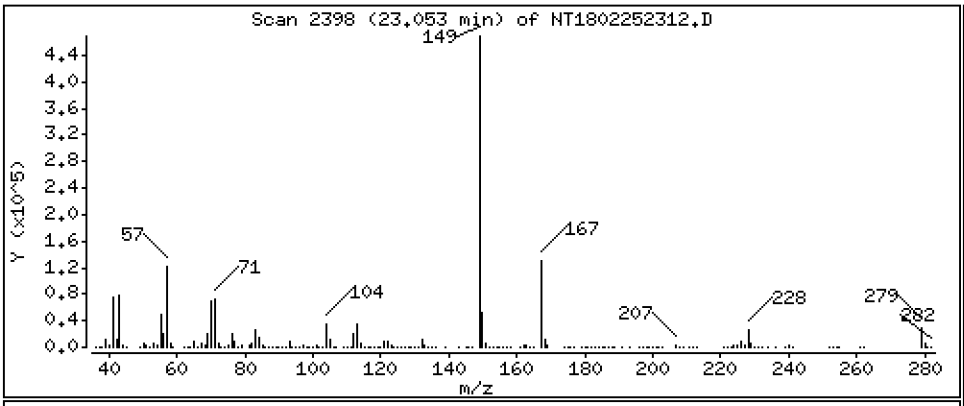
Operator: VTS

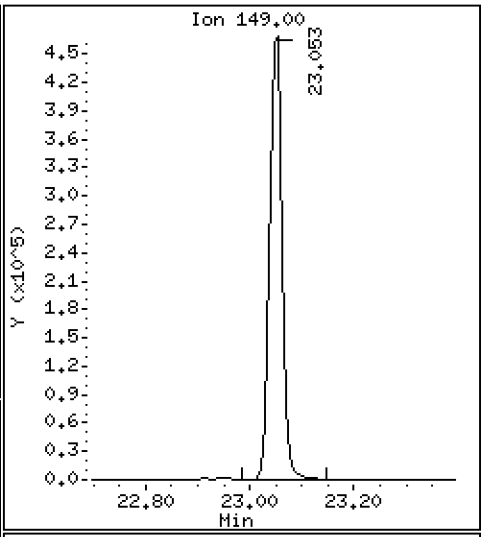
Column phase: ZB-5msi

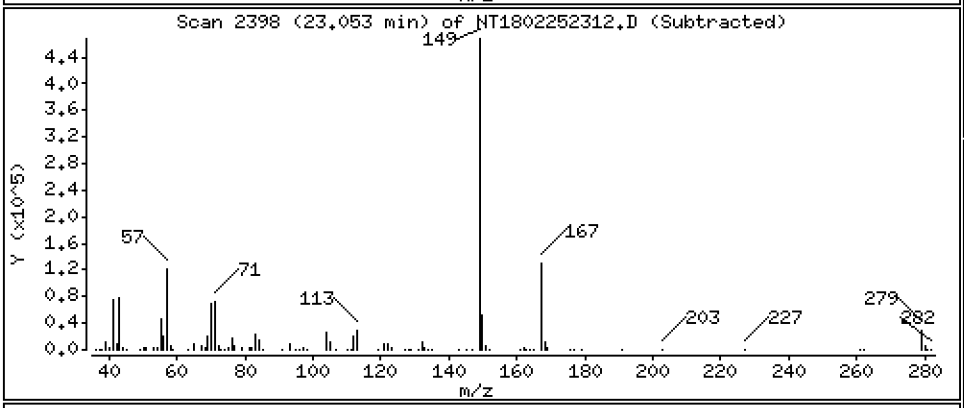
Column diameter: 0.25

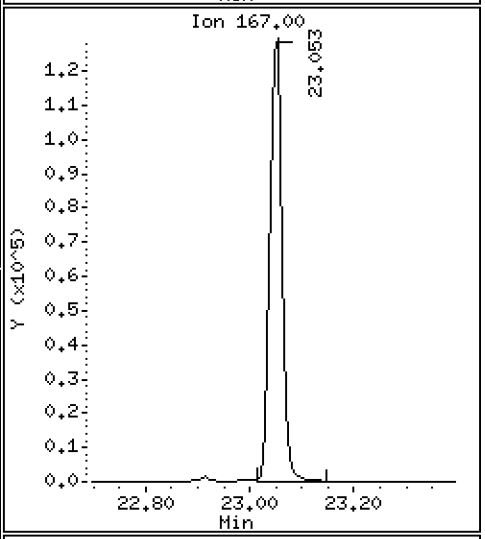
72 bis(2-Ethylhexyl)phthalate

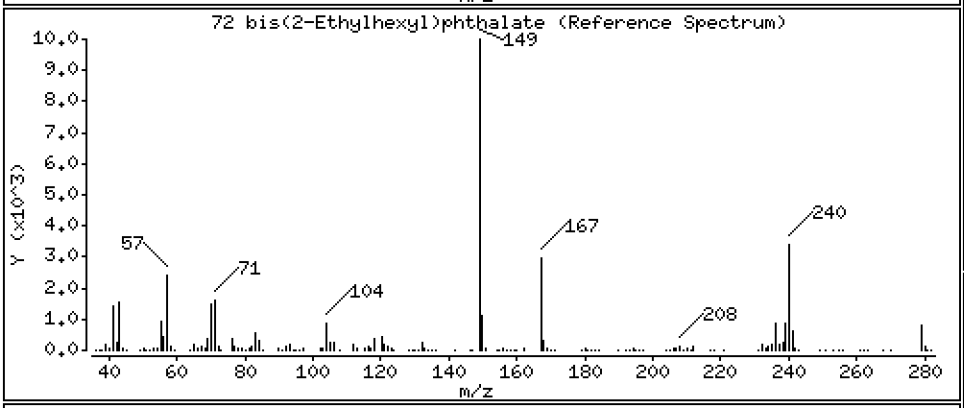
Concentration: 5.231 ug/mL

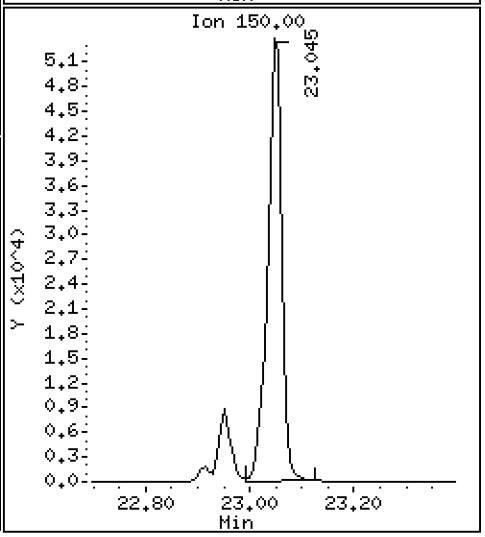


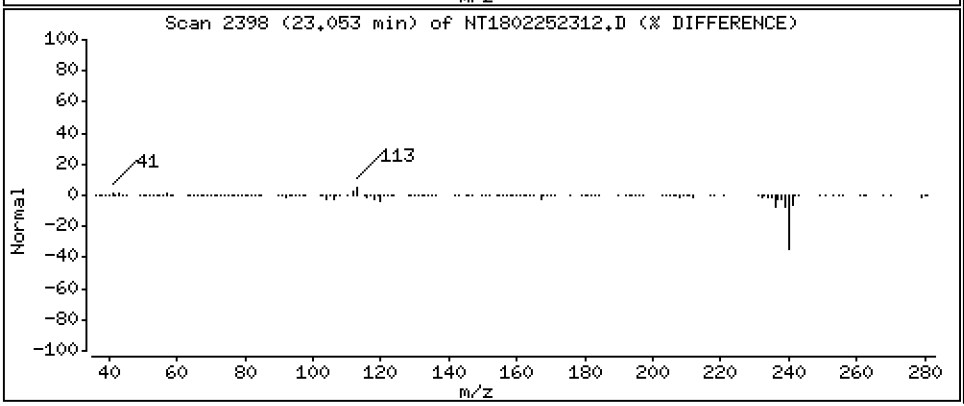












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

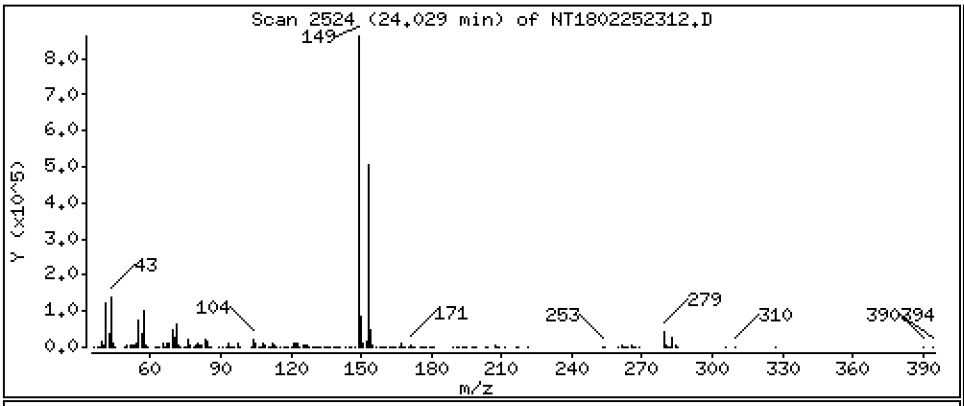
Operator: VTS

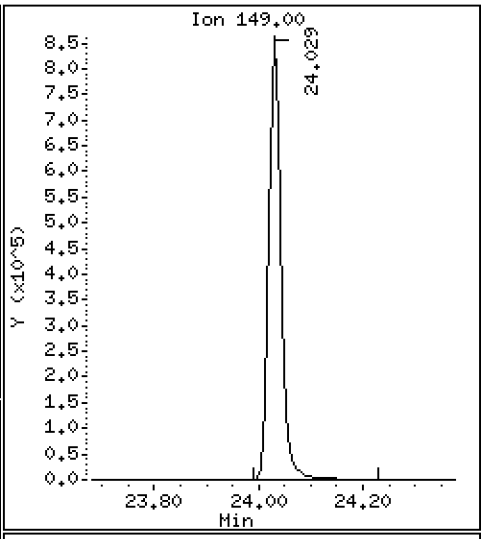
Column phase: ZB-5msi

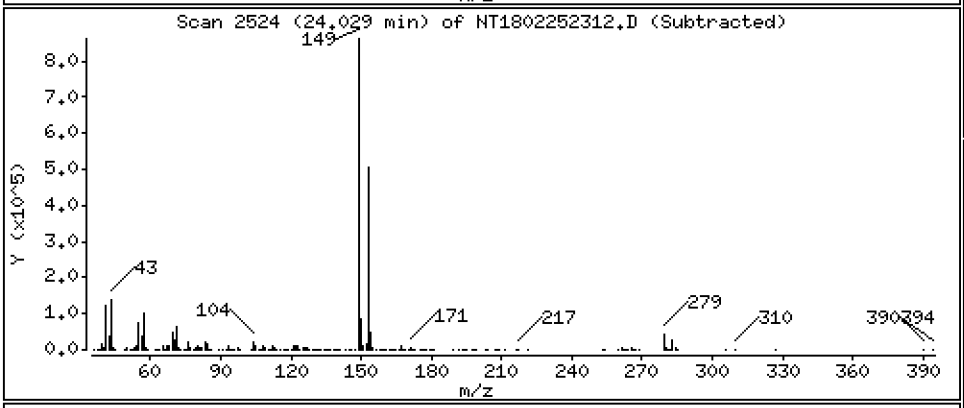
Column diameter: 0.25

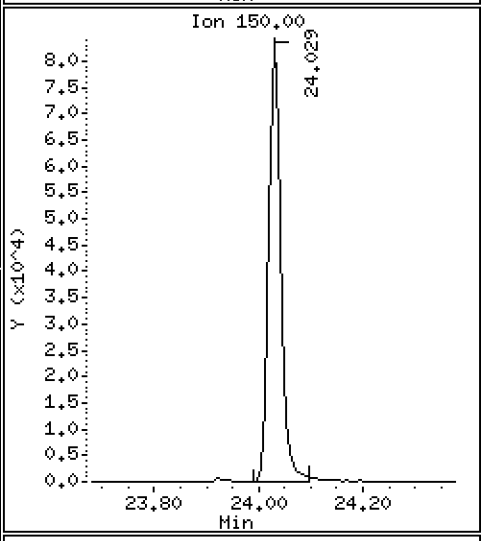
73 Di-n-octylphthalate

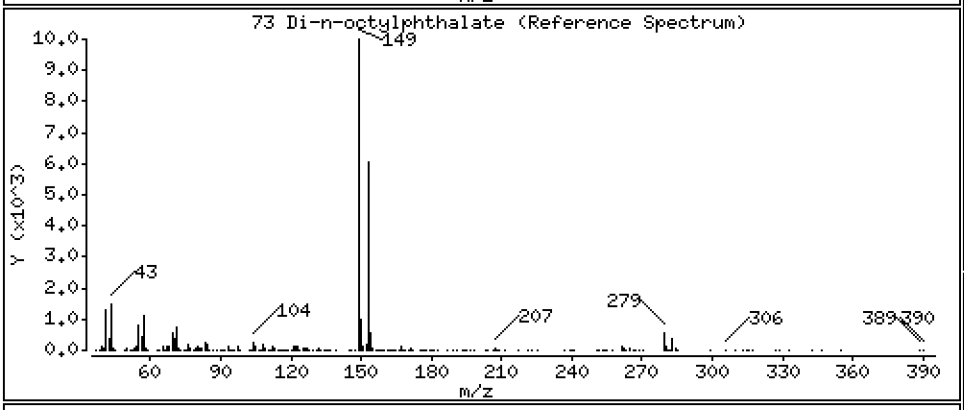
Concentration: 4.813 ug/mL

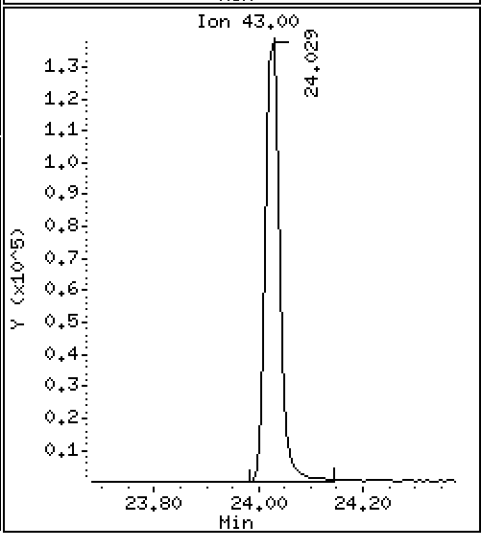


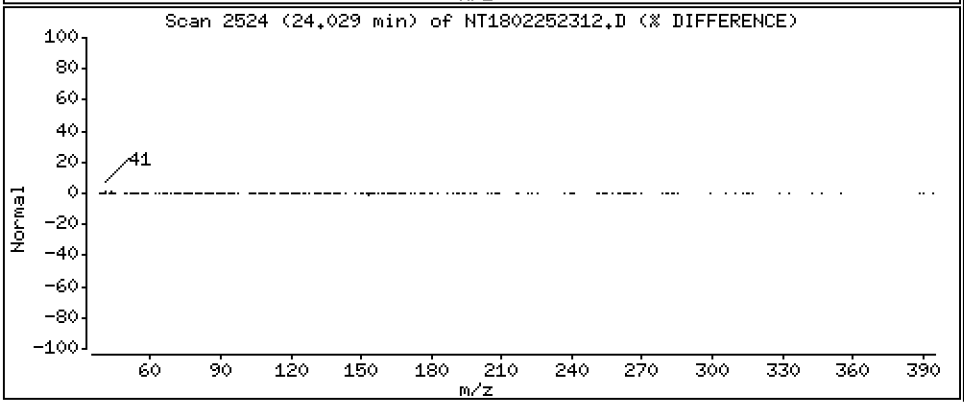












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

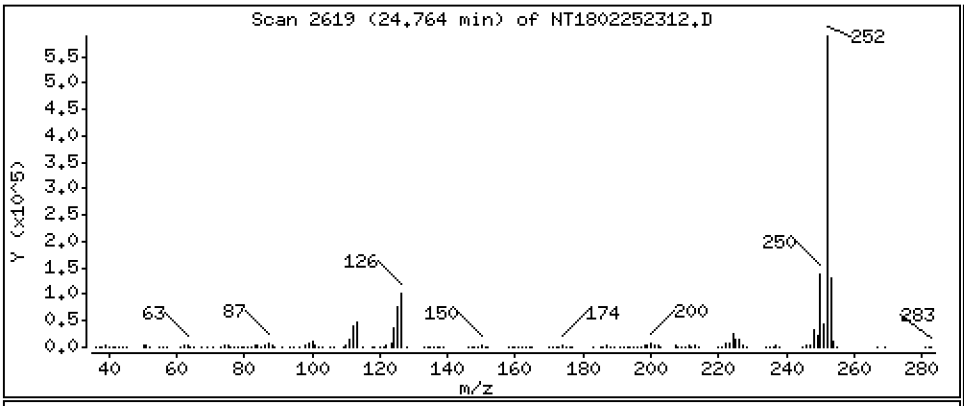
Operator: VTS

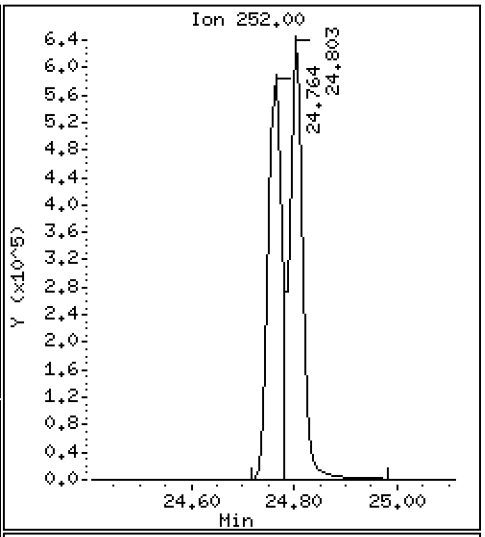
Column phase: ZB-5msi

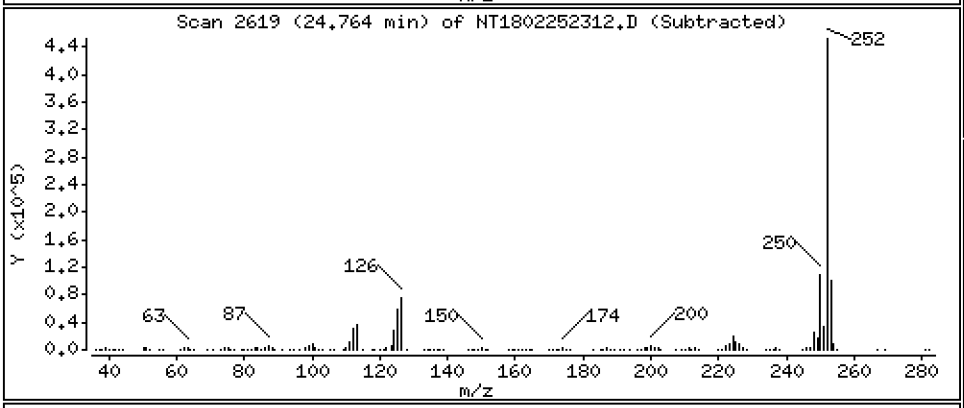
Column diameter: 0.25

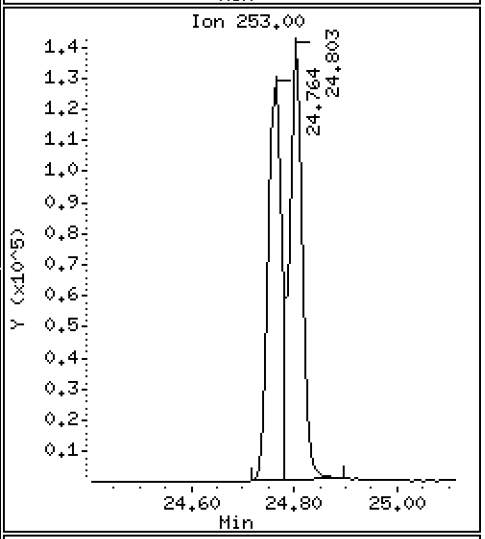
74 Benzo(b)fluoranthene

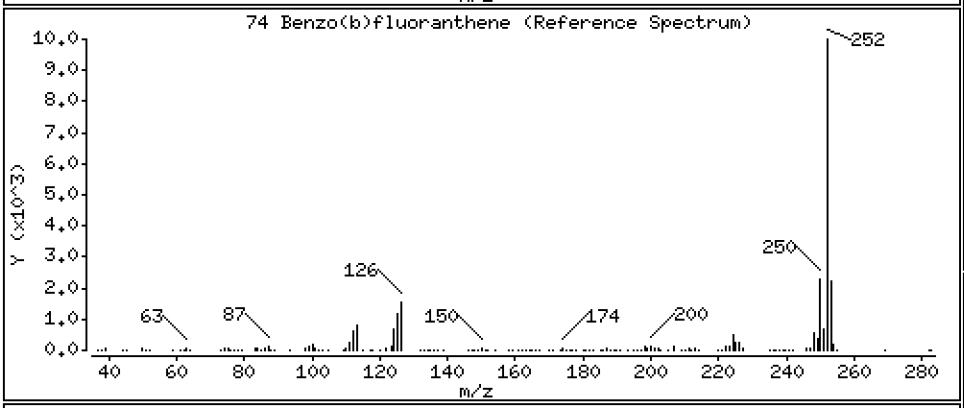
Concentration: 4.319 ug/mL

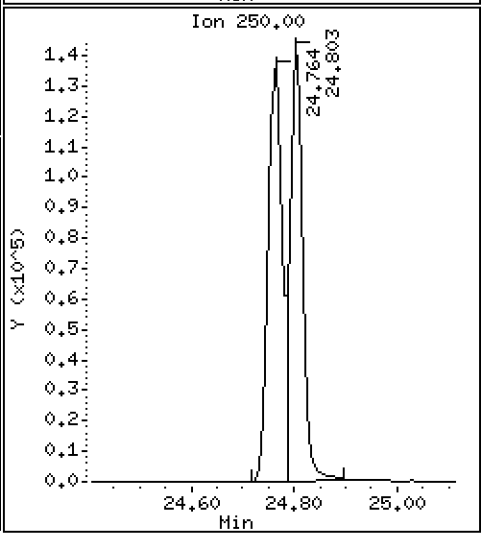


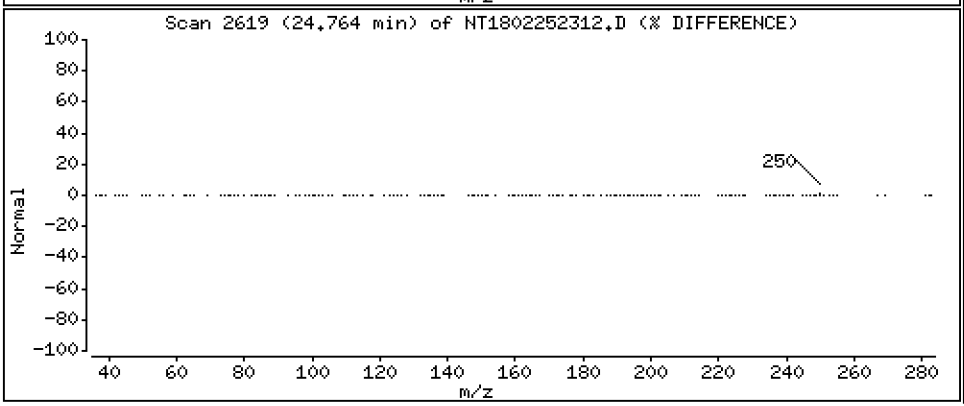












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

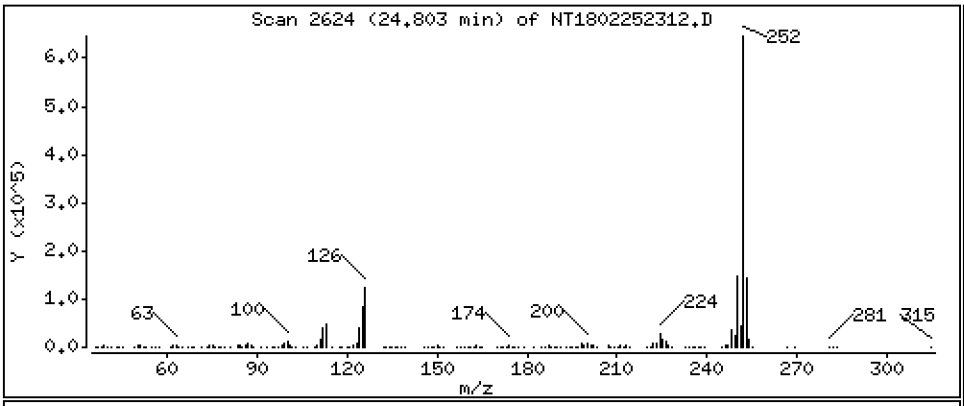
Operator: VTS

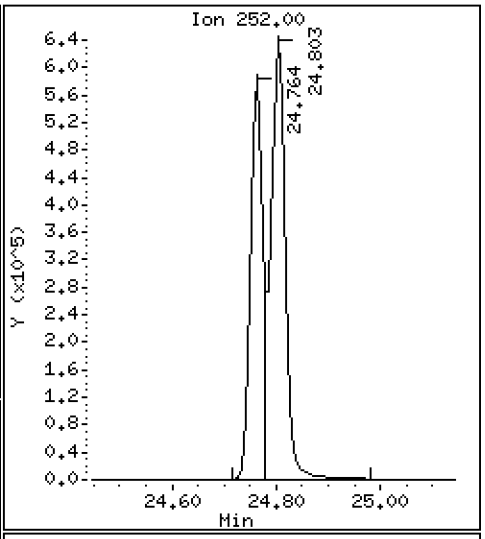
Column phase: ZB-5msi

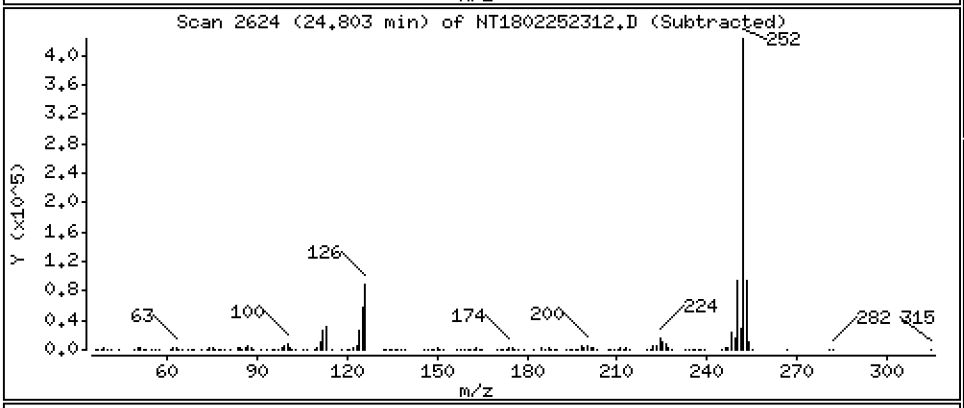
Column diameter: 0.25

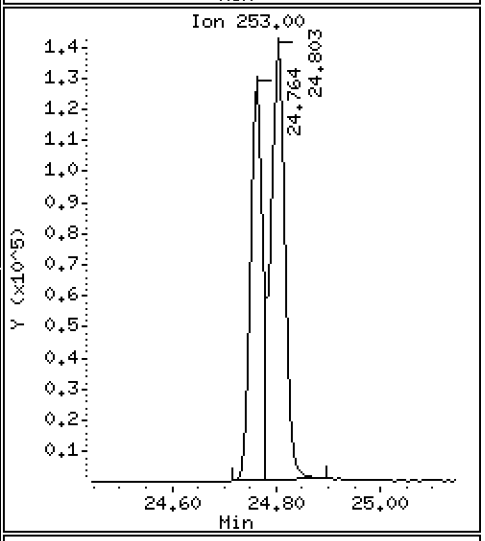
75 Benzo(k)fluoranthene

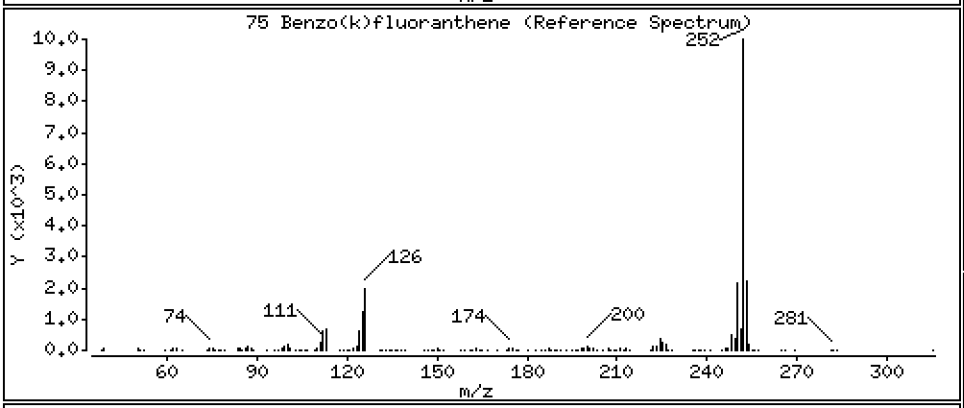
Concentration: 4.735 ug/mL

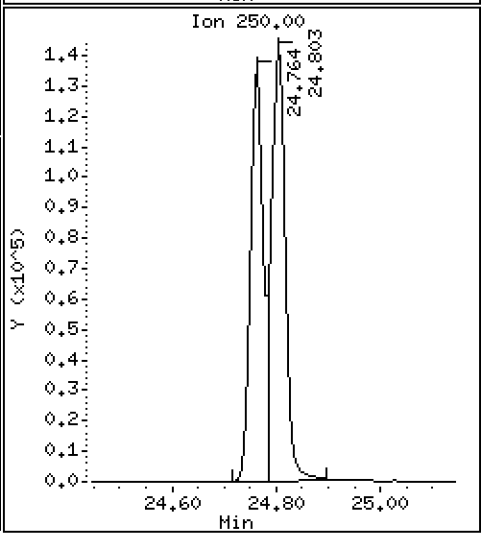


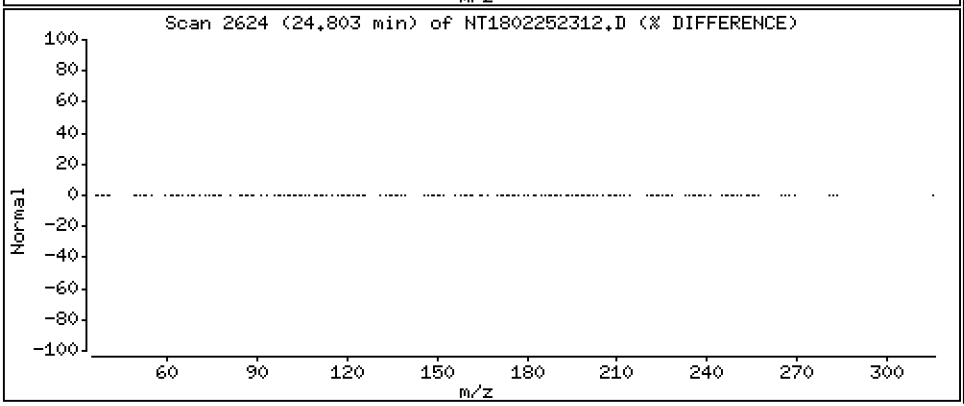












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

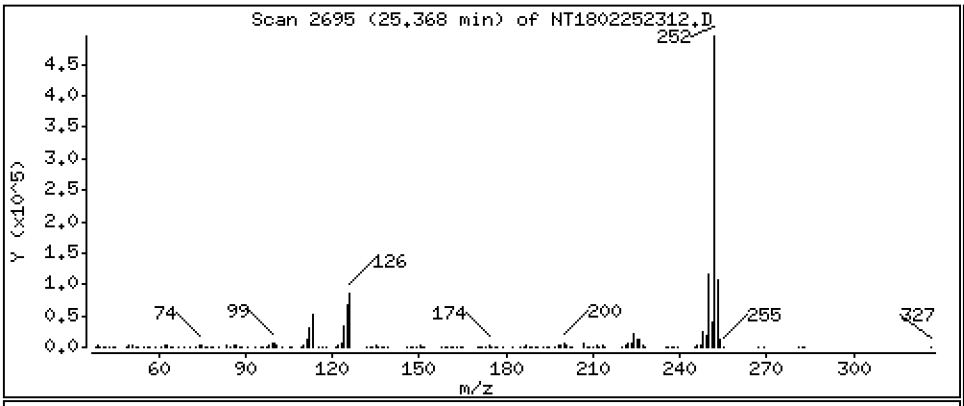
Operator: VTS

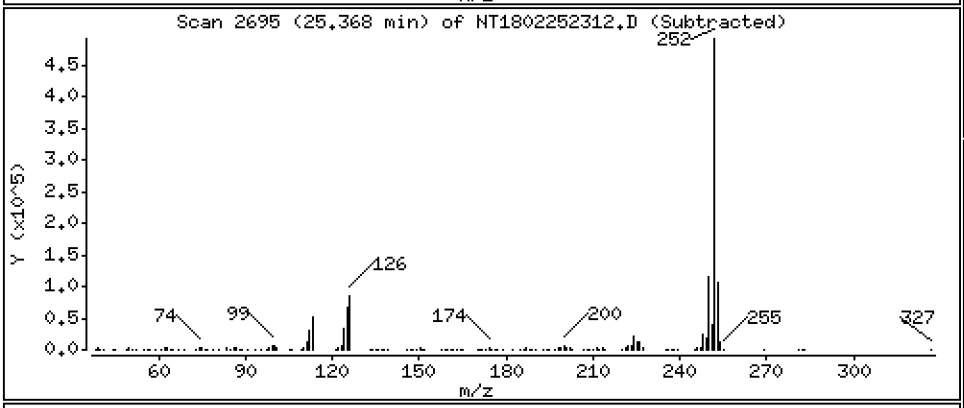
Column phase: ZB-5msi

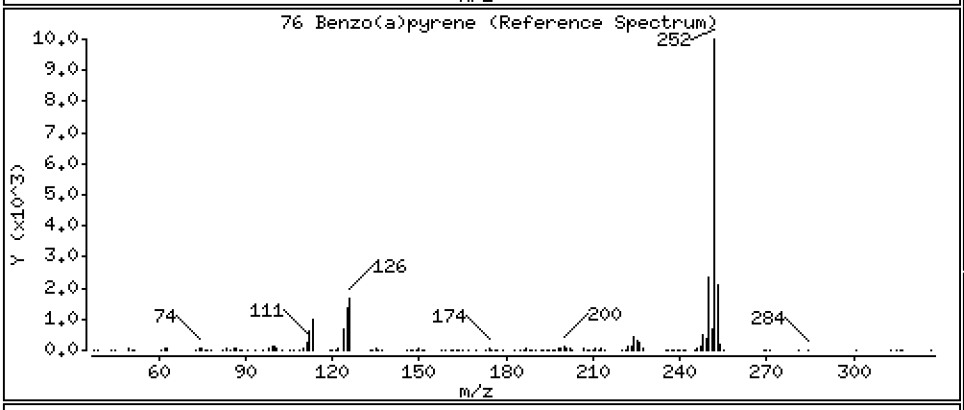
Column diameter: 0.25

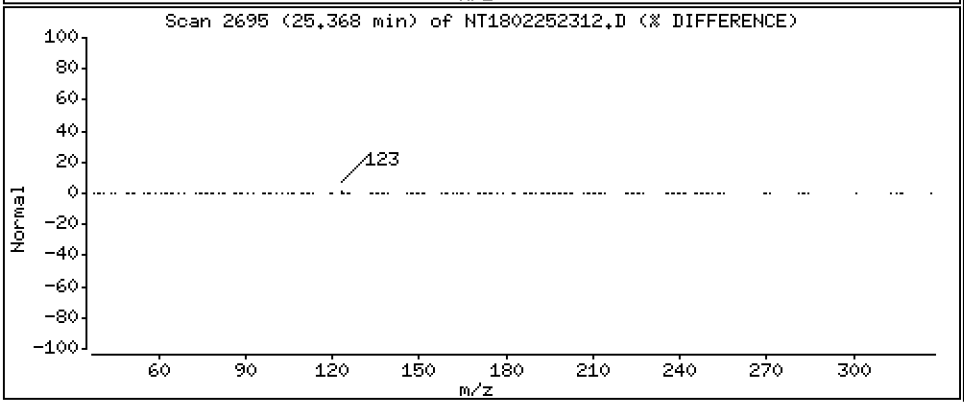
76 Benzo(a)pyrene

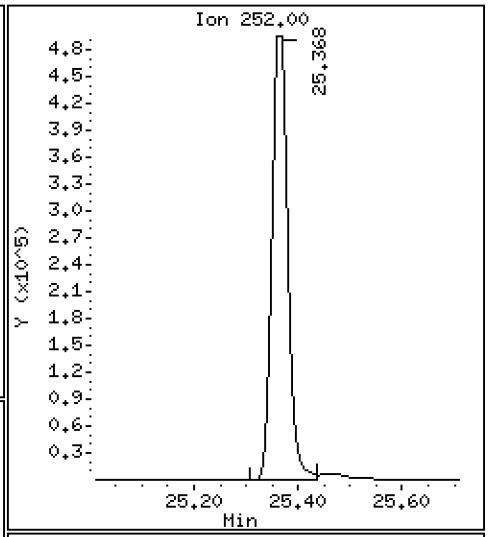
Concentration: 4.590 ug/mL

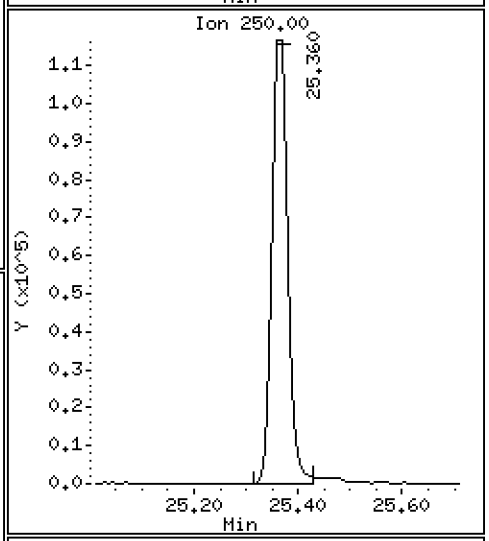


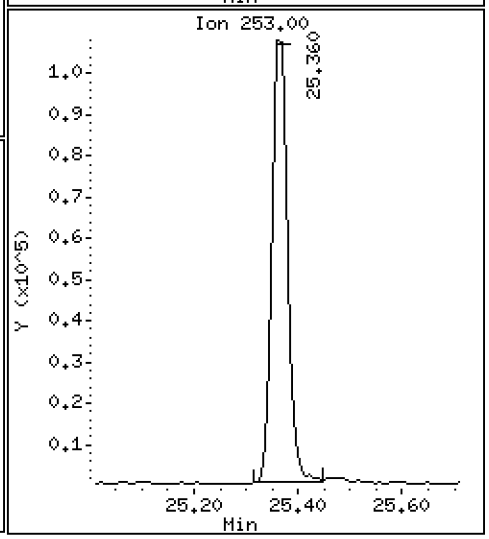












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

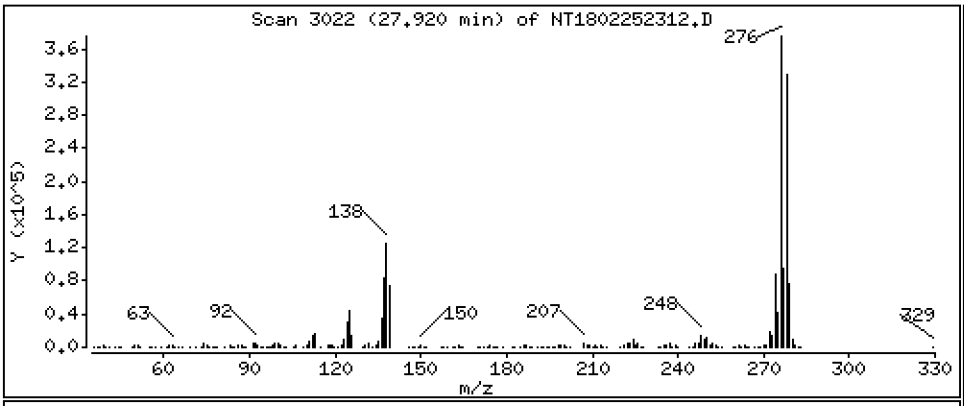
Operator: VTS

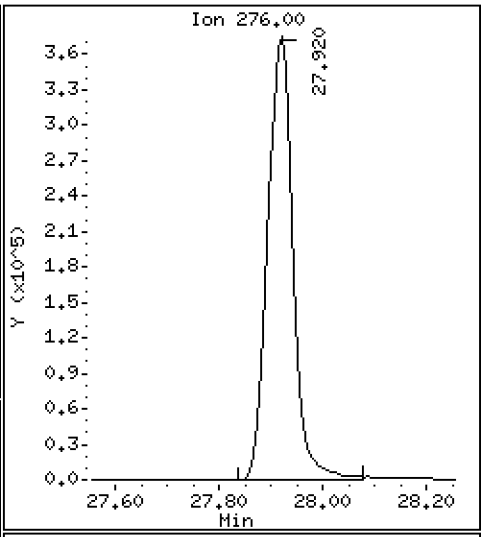
Column phase: ZB-5msi

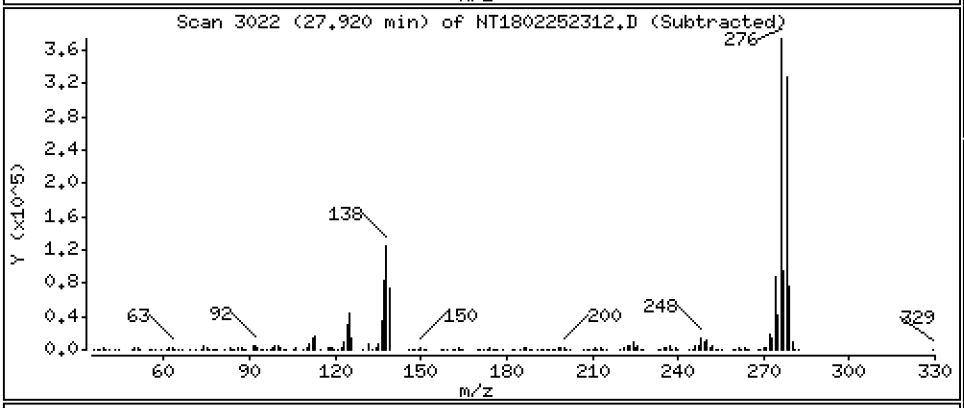
Column diameter: 0.25

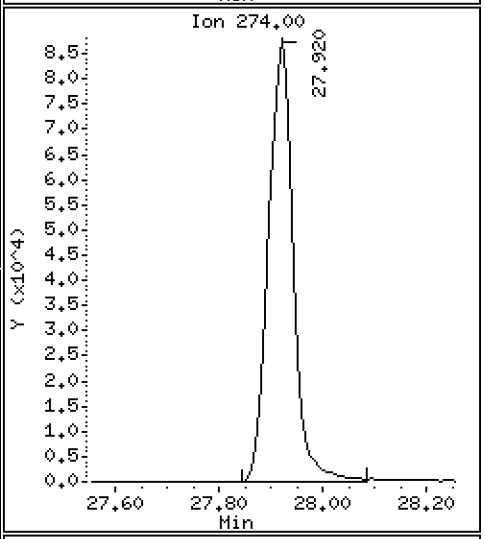
78 Indeno(1,2,3-cd)pyrene

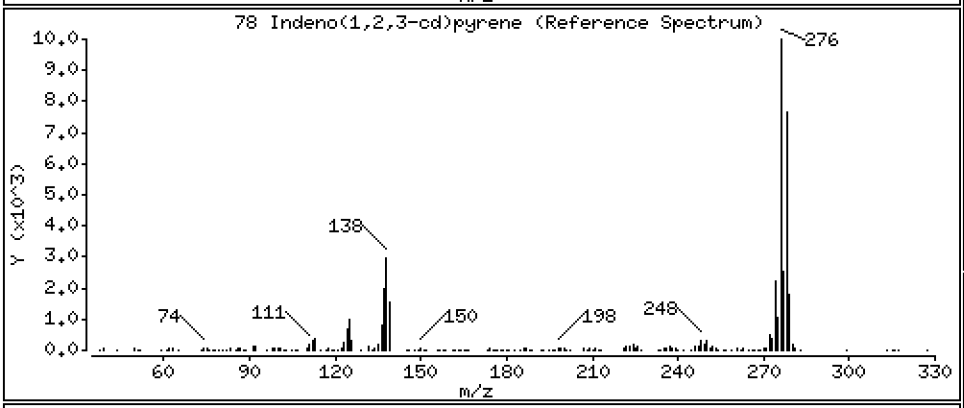
Concentration: 4.636 ug/mL

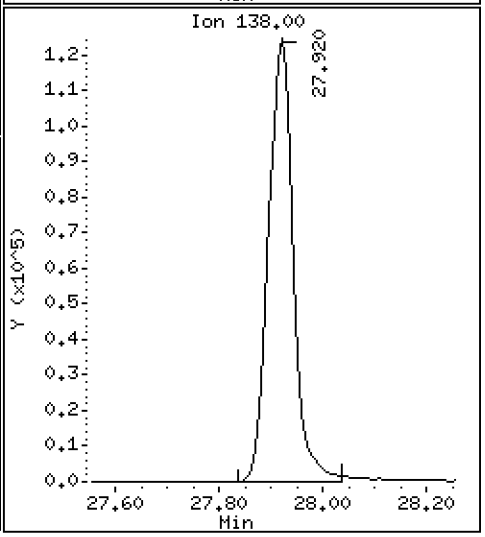


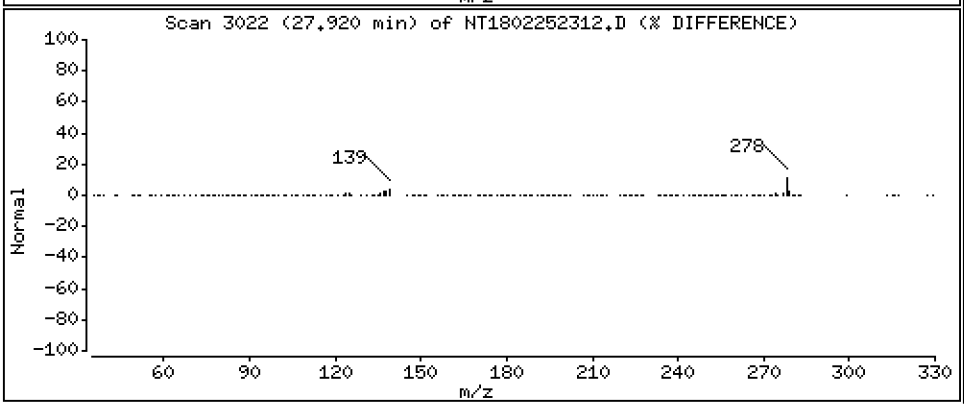












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

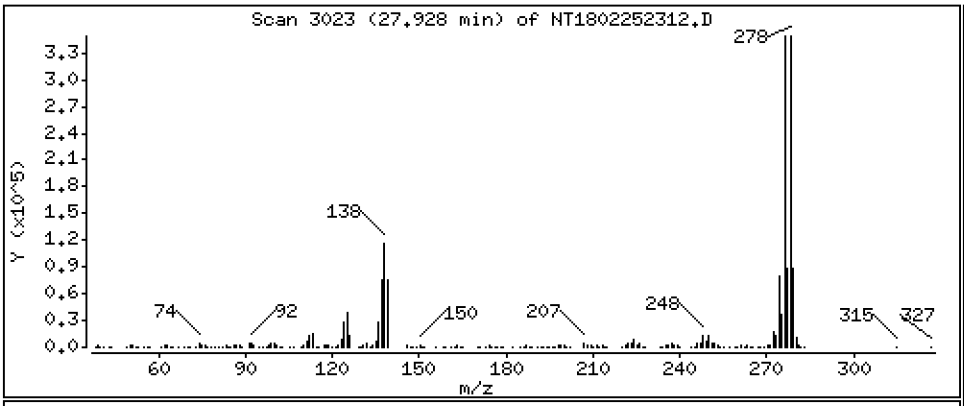
Operator: VTS

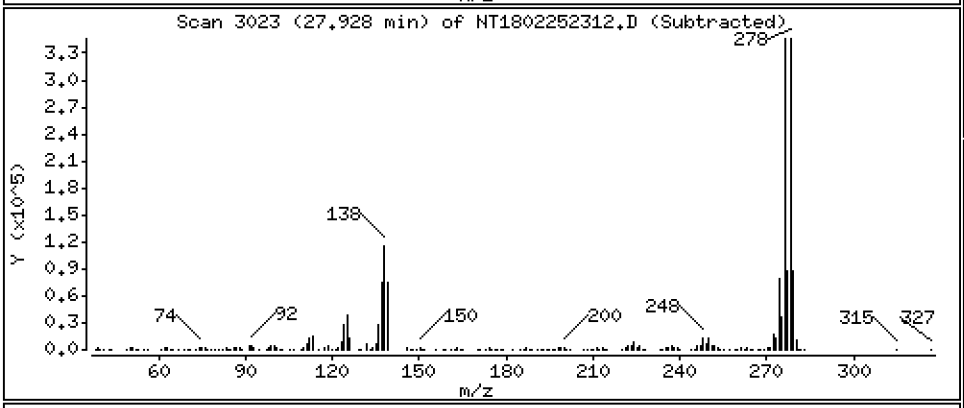
Column phase: ZB-5msi

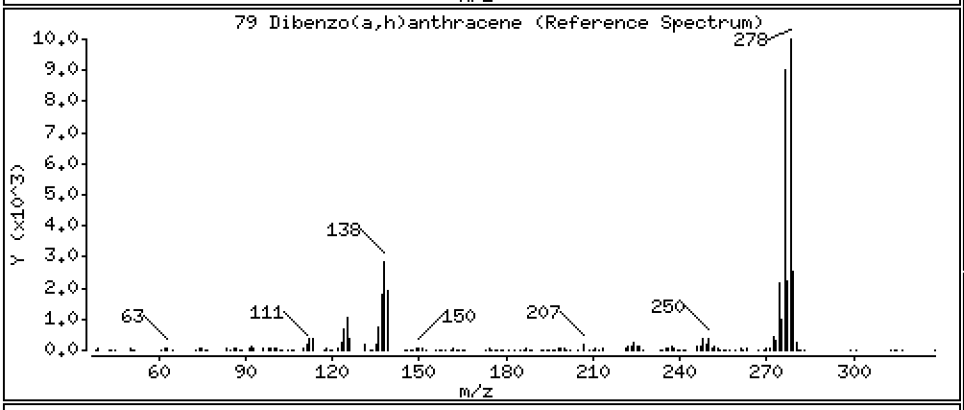
Column diameter: 0.25

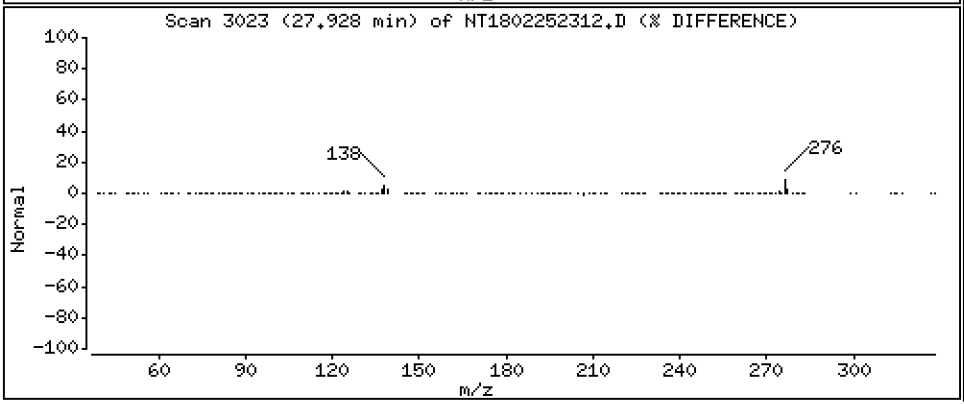
79 Dibenzo(a,h)anthracene

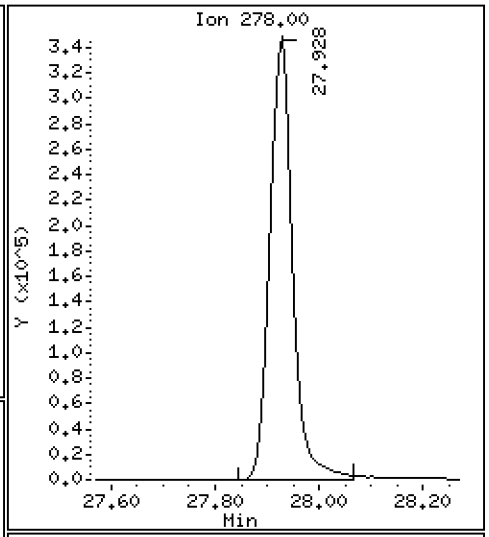
Concentration: 4.580 ug/mL

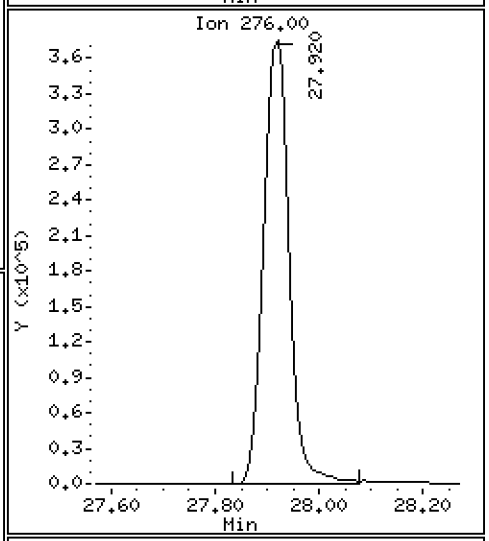


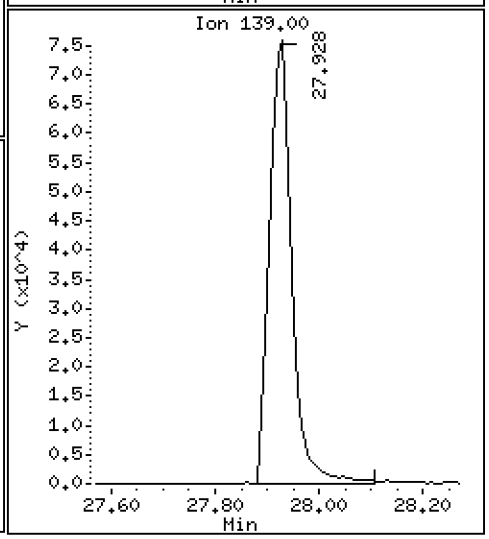












Date : 26-FEB-2023 04:06

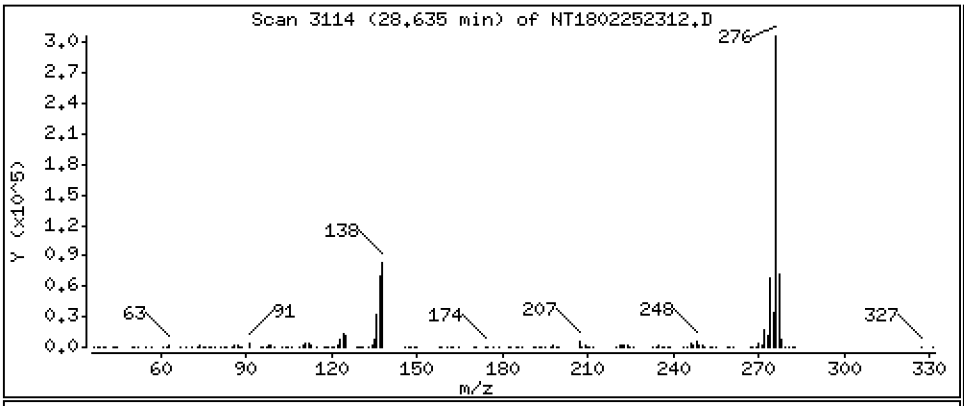
Client ID: Instrument: nt18.i

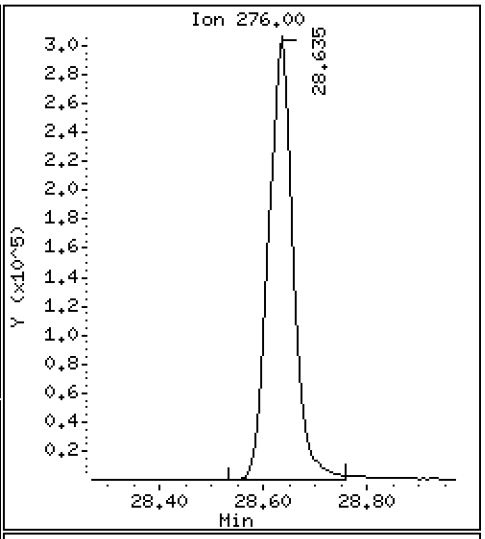
Sample Info: SLC0099-SCV1

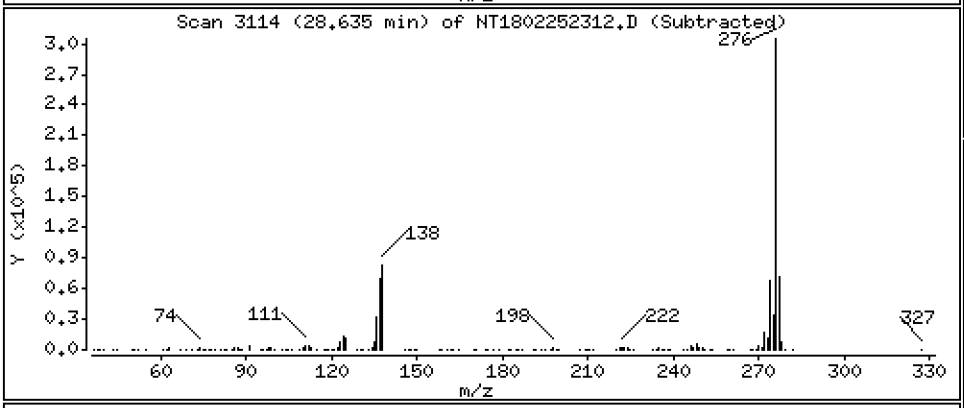
Operator: VTS

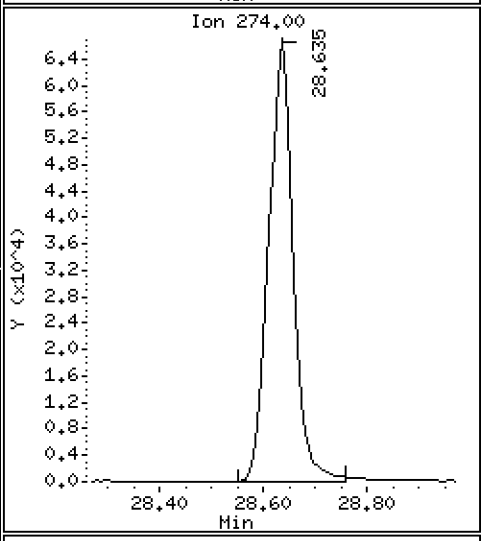
Column phase: ZB-5msi Column diameter: 0.25

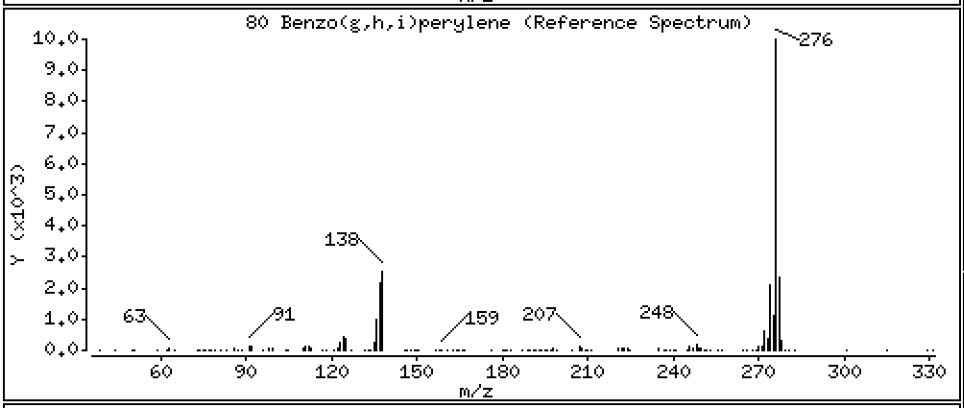
80 Benzo(g,h,i)perylene Concentration: 4.593 ug/mL

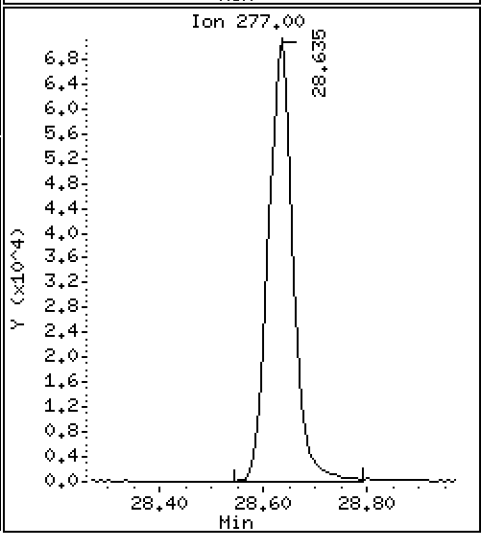


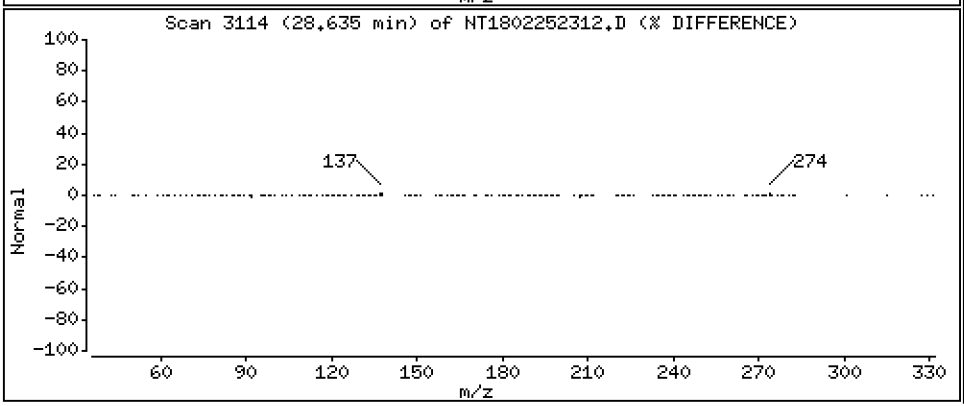












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

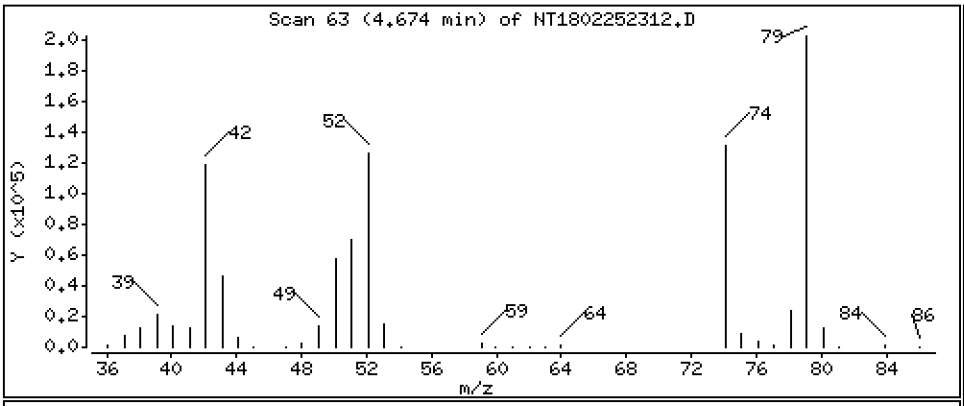
Operator: VTS

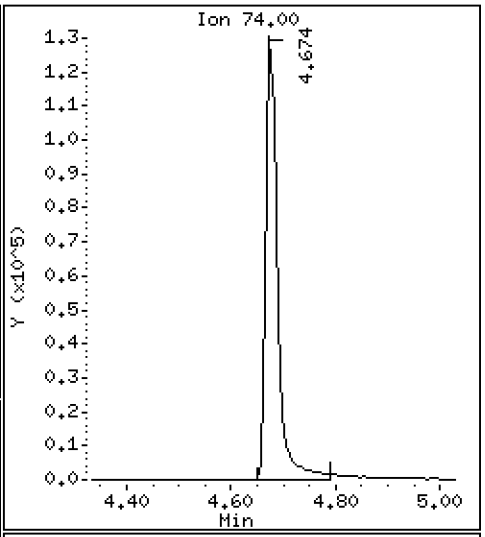
Column phase: ZB-5msi

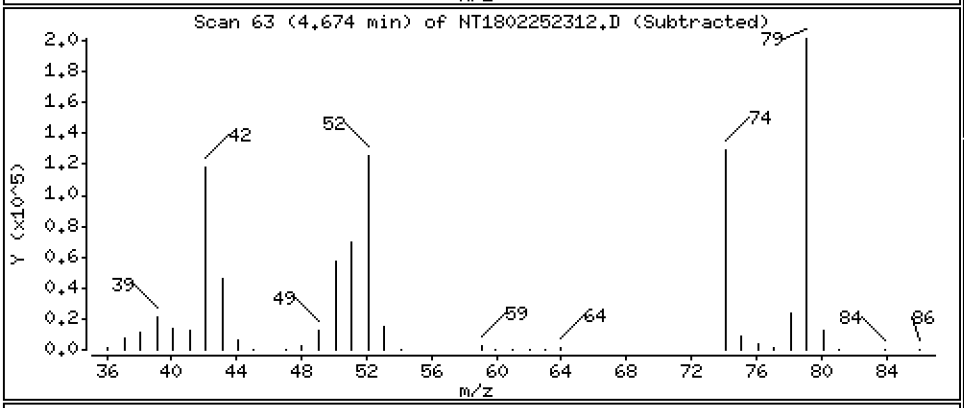
Column diameter: 0.25

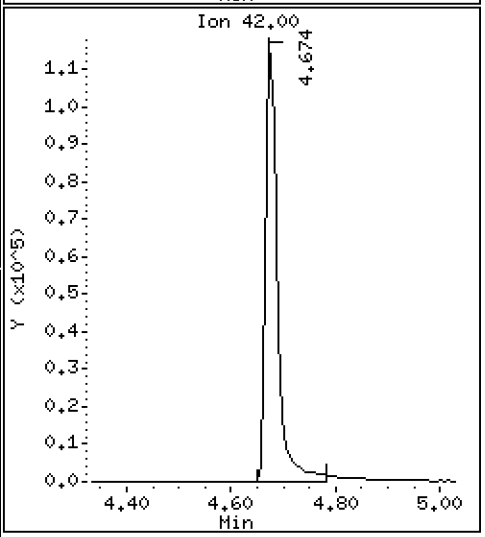
90 N-Nitrosodimethylamine

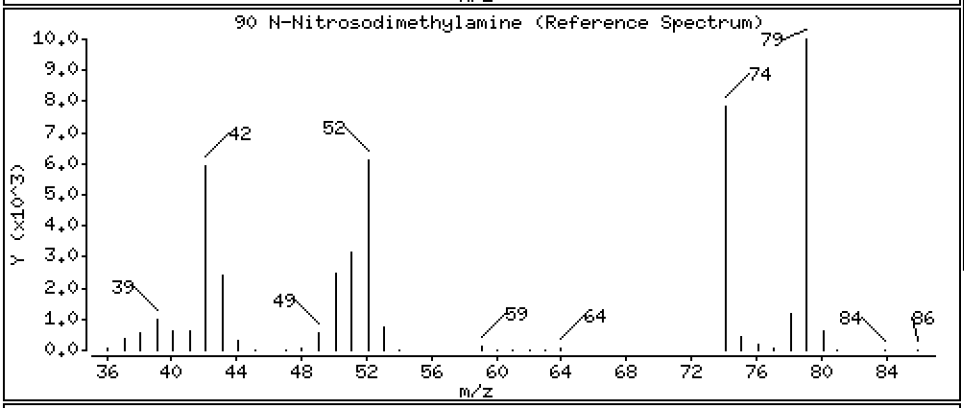
Concentration: 4.810 ug/mL

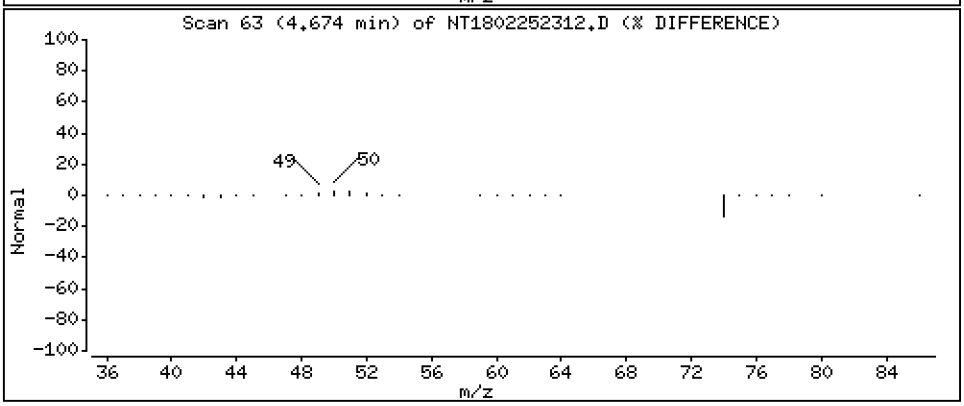












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

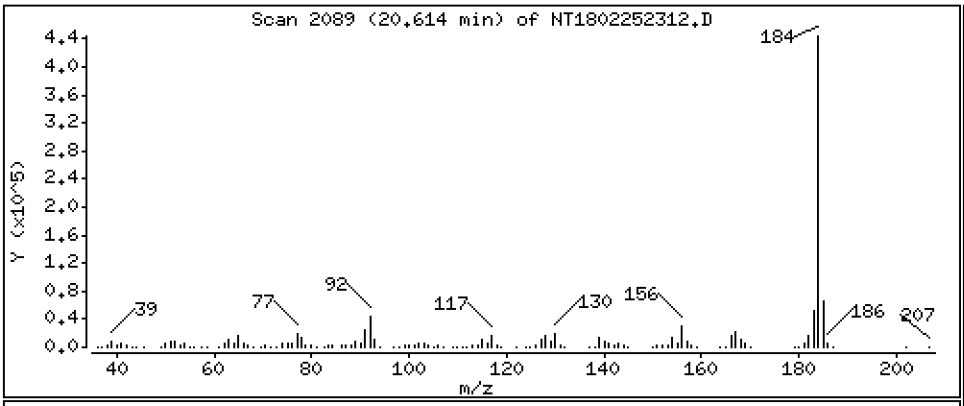
Operator: VTS

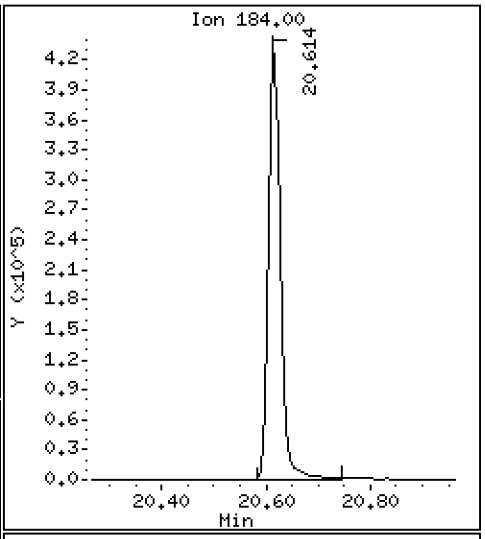
Column phase: ZB-5msi

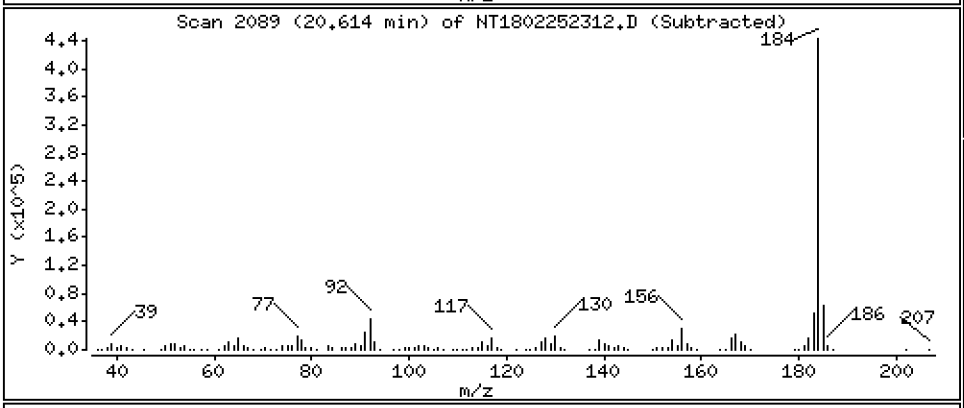
Column diameter: 0.25

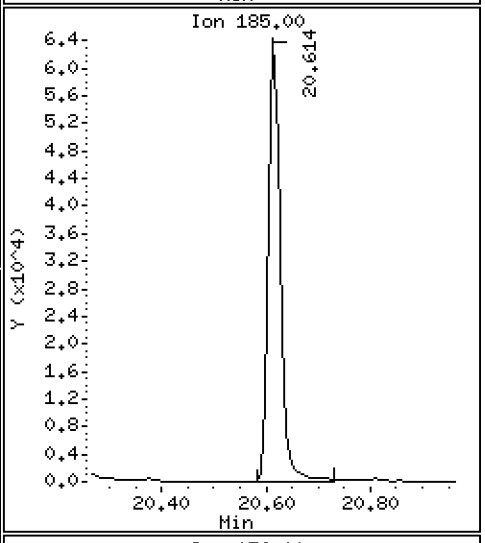
93 Benzidine

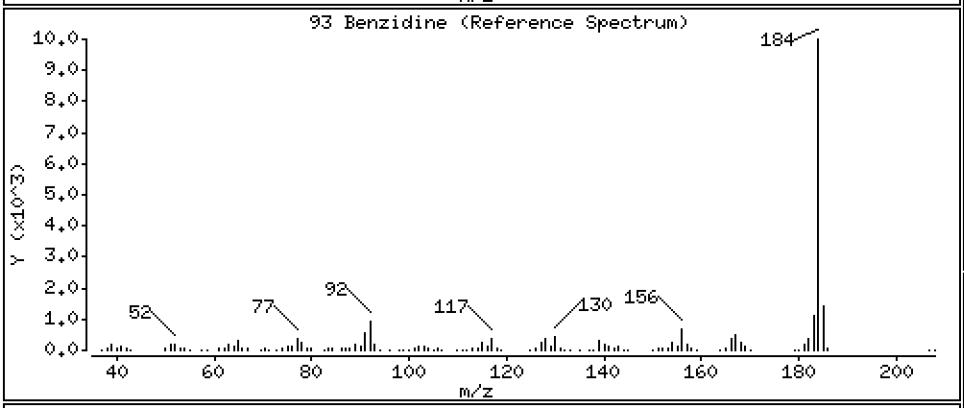
Concentration: 5.813 ug/mL

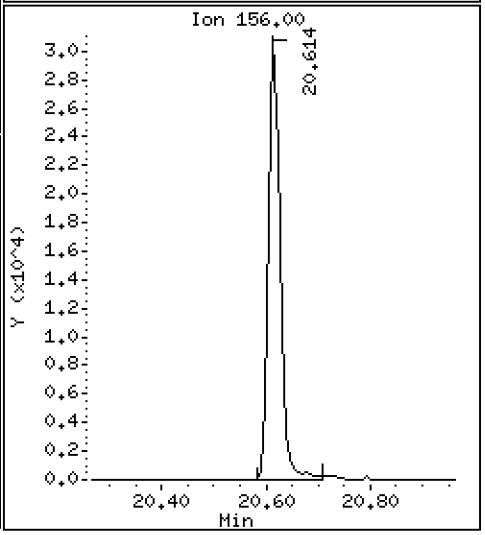


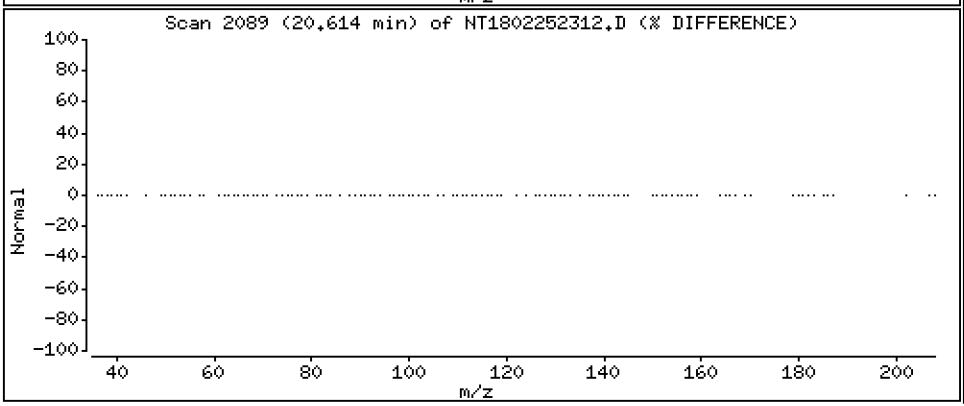












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

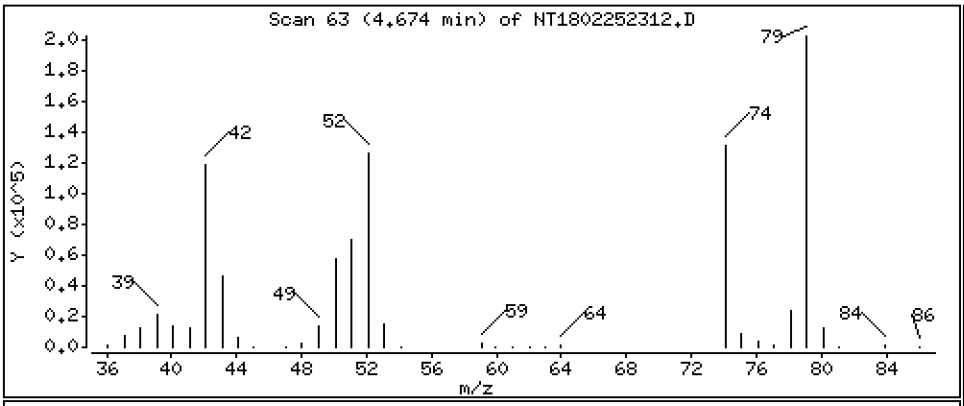
Operator: VTS

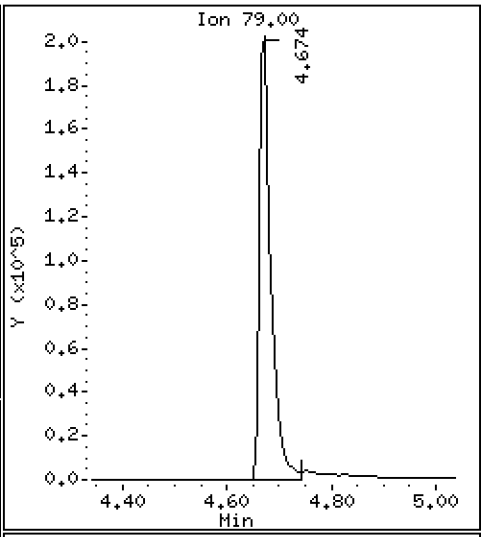
Column phase: ZB-5msi

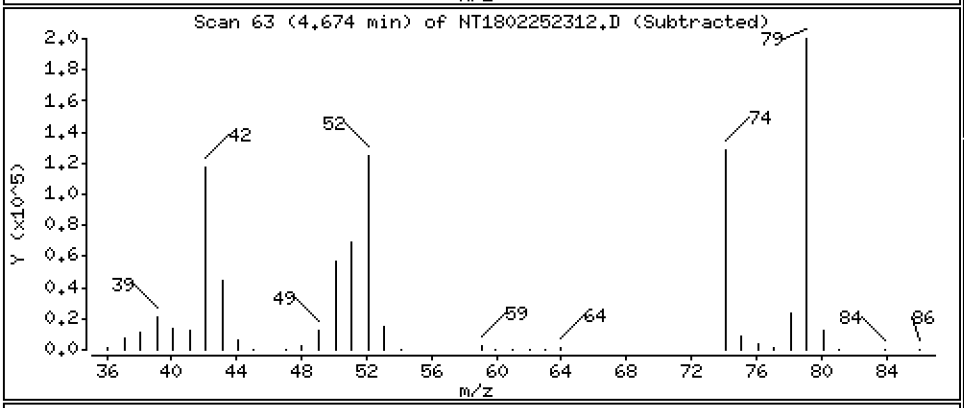
Column diameter: 0.25

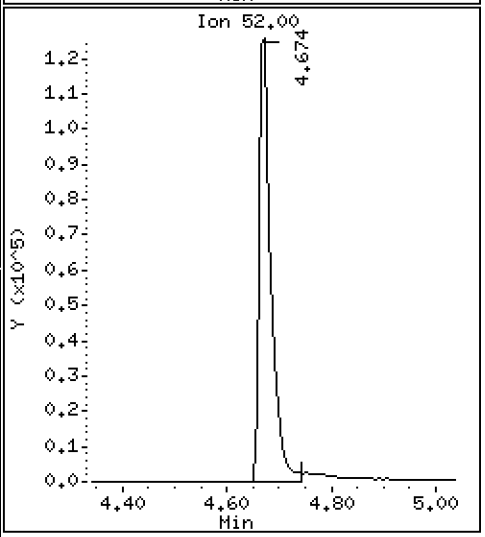
103 Pyridine

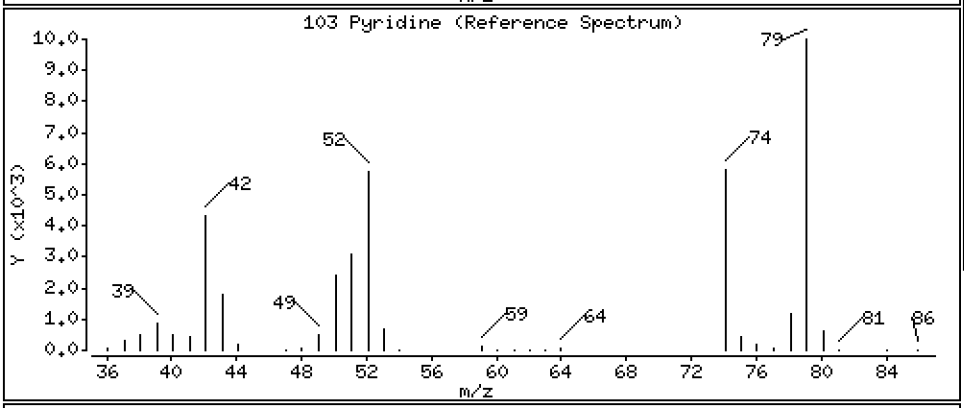
Concentration: 4.694 ug/mL

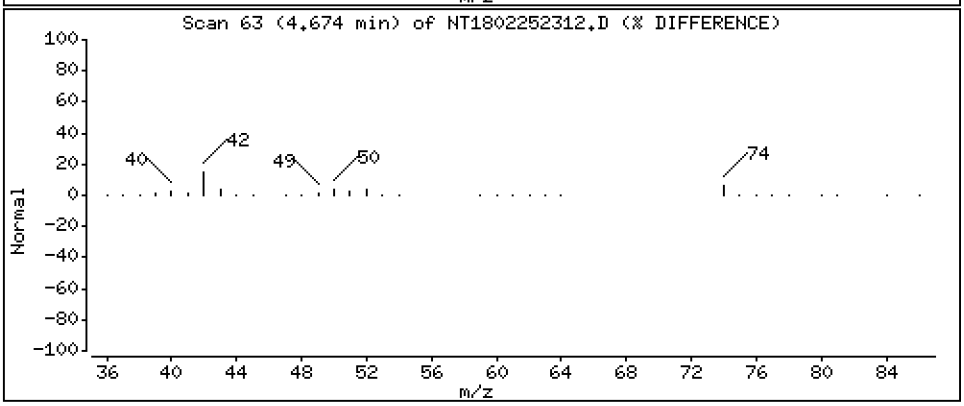












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

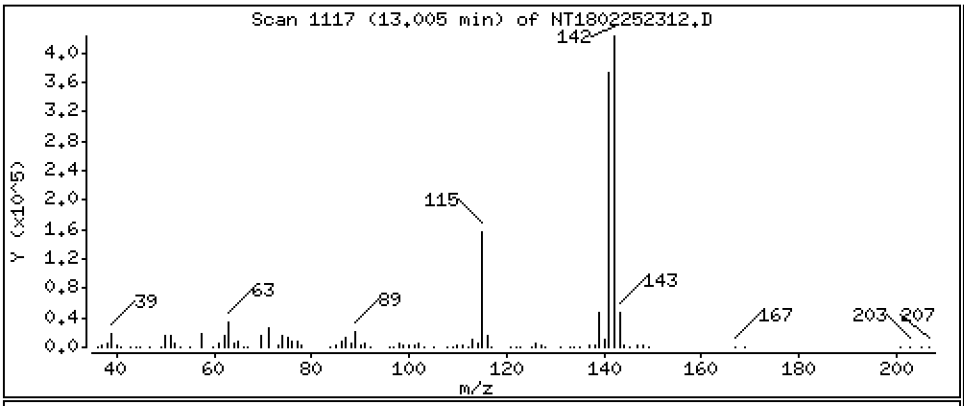
Operator: VTS

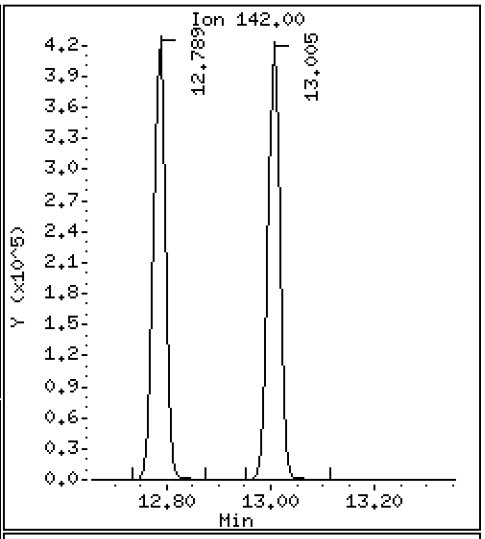
Column phase: ZB-5msi

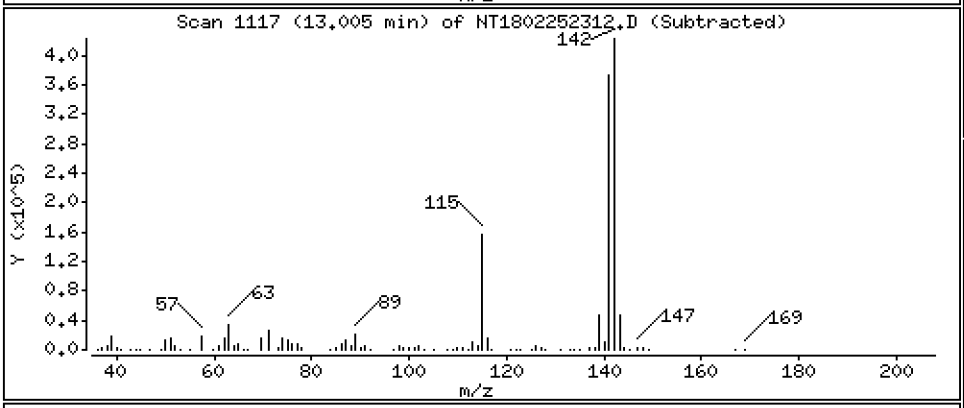
Column diameter: 0.25

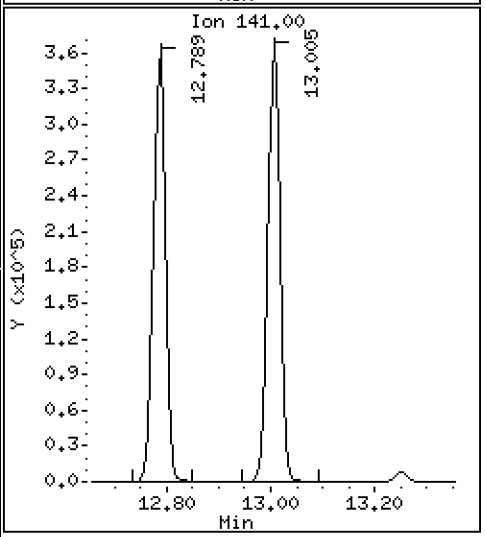
105 1-methylnaphthalene

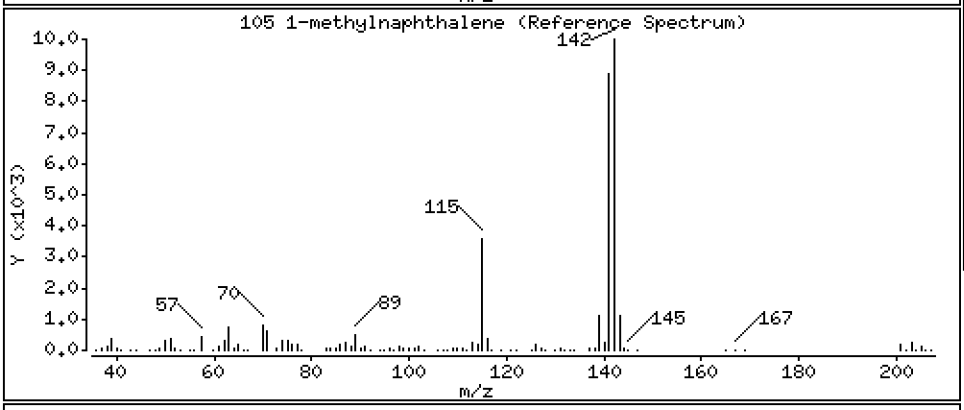
Concentration: 4.486 ug/mL

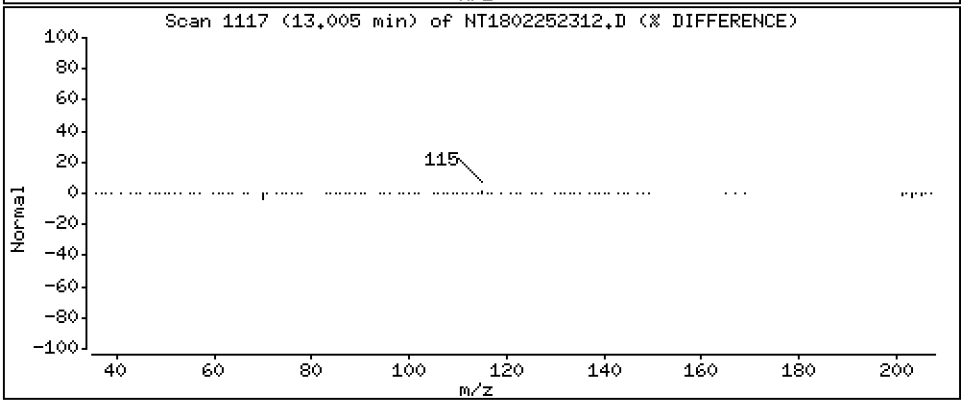












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

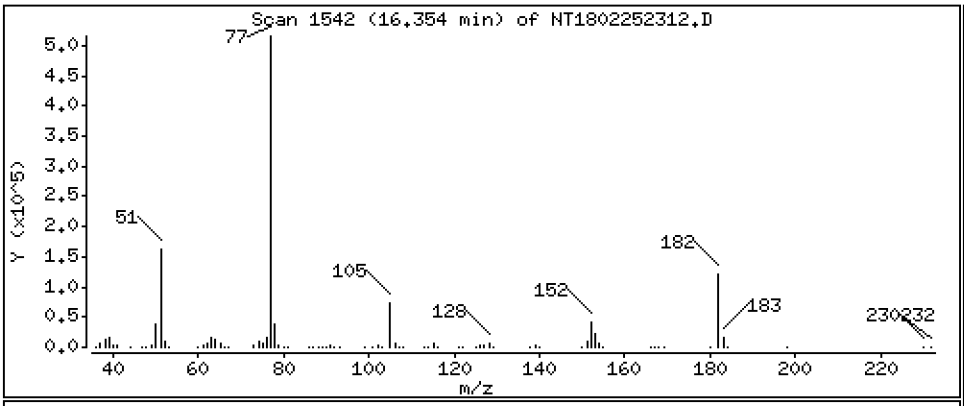
Operator: VTS

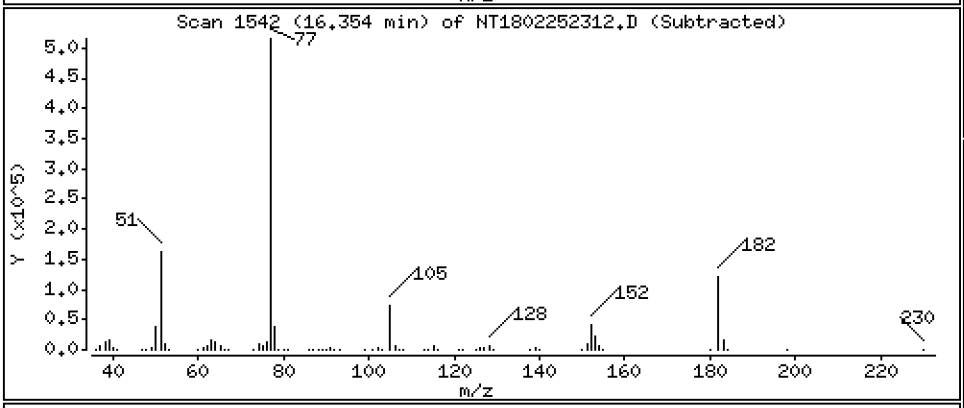
Column phase: ZB-5msi

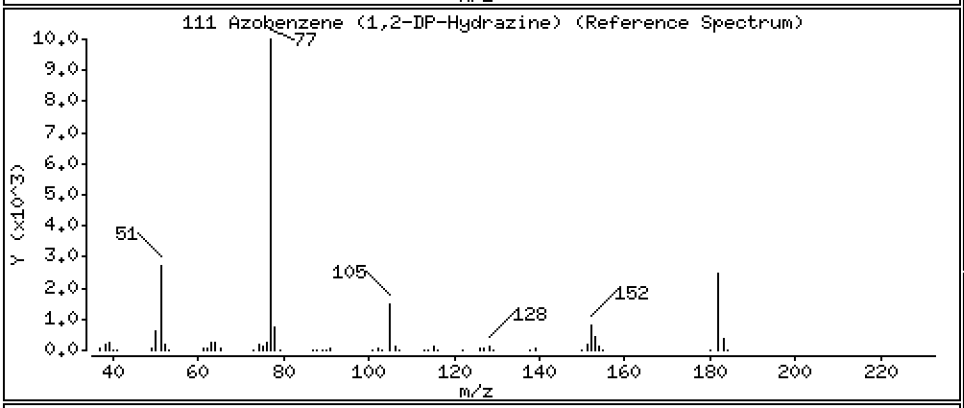
Column diameter: 0.25

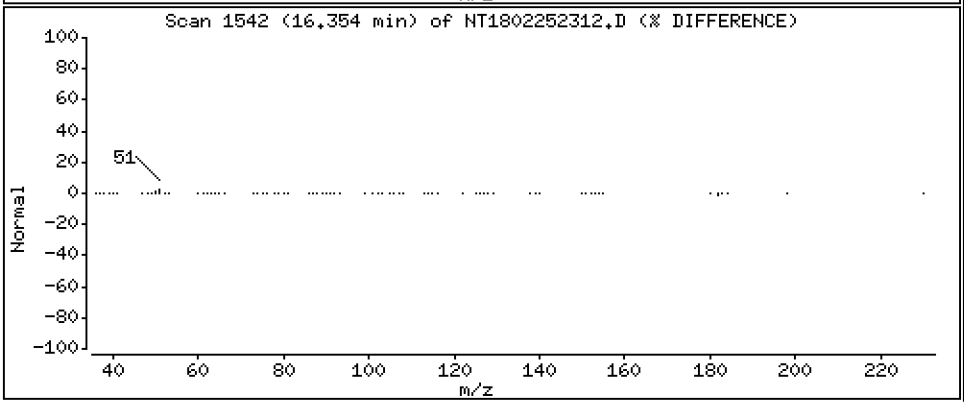
111 Azobenzene (1,2-DP-Hydrazine)

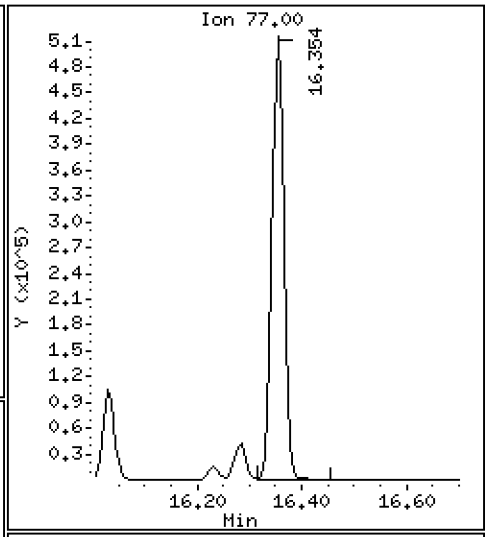
Concentration: 4.731 ug/mL

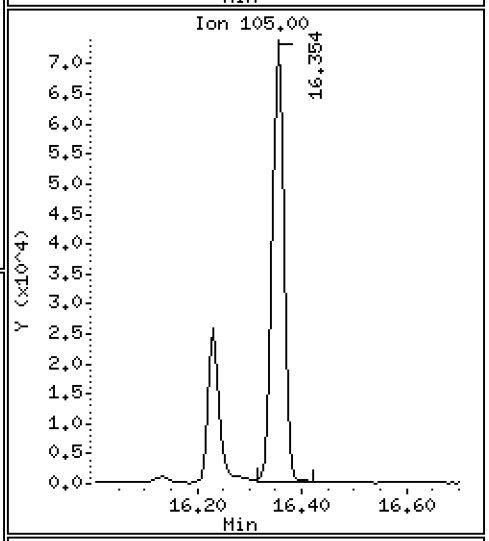


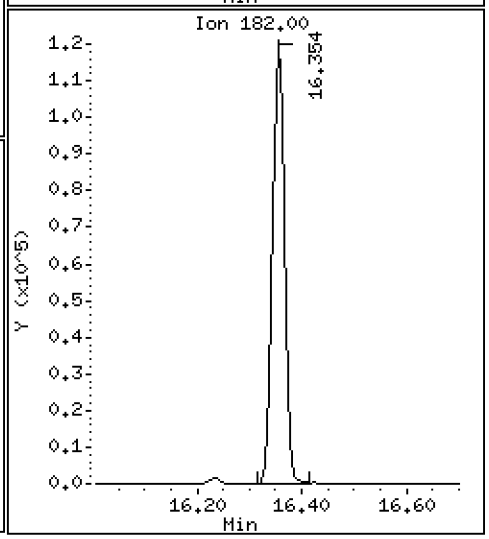












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

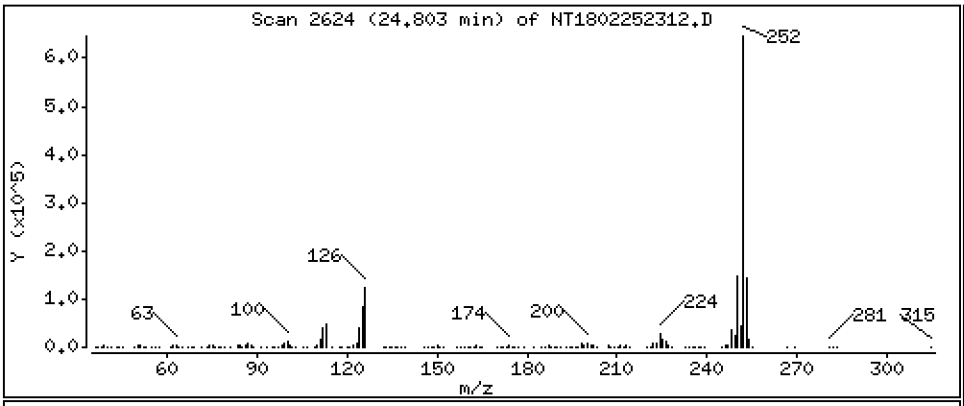
Operator: VTS

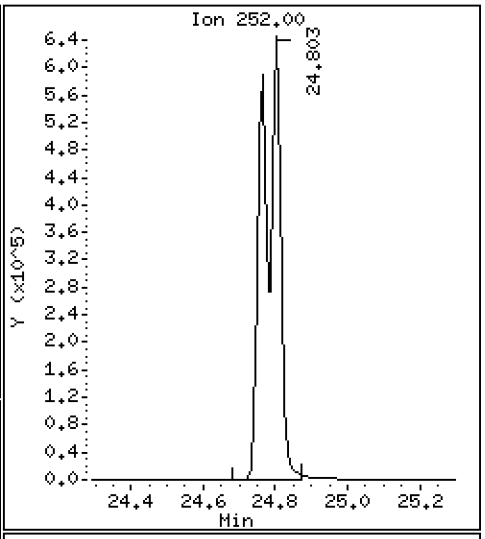
Column phase: ZB-5msi

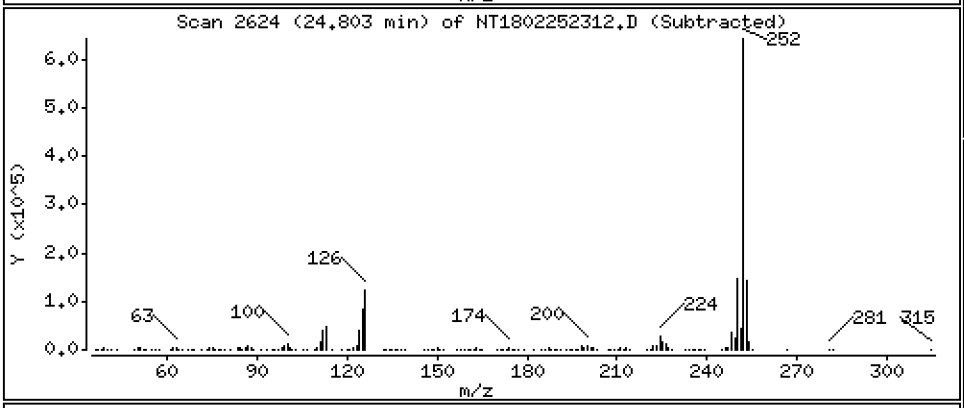
Column diameter: 0.25

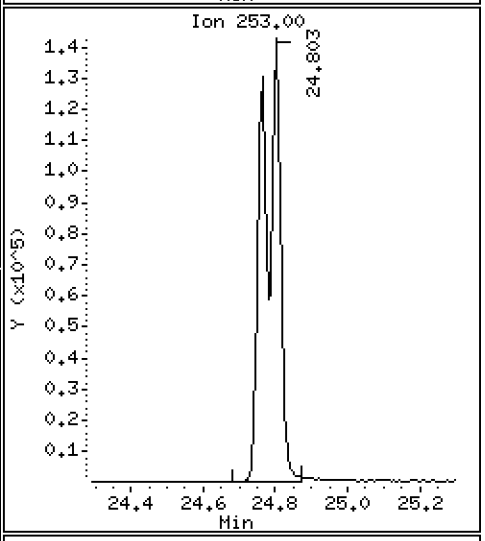
187 Total Benzofluoranthenes

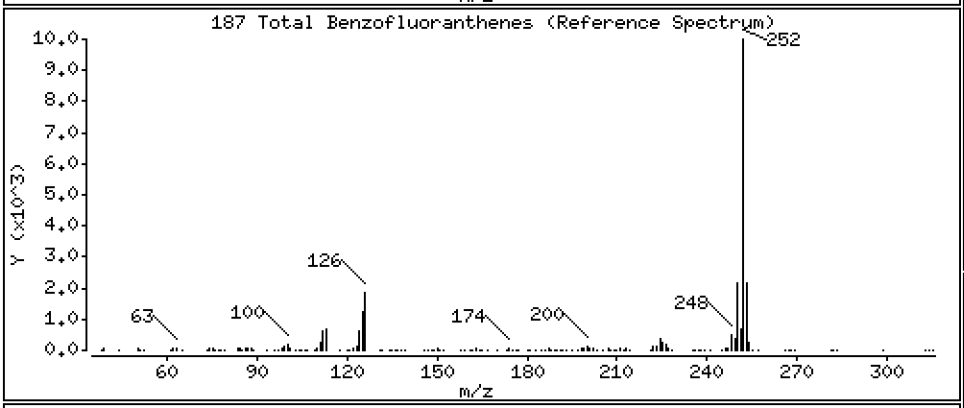
Concentration: 9.019 ug/mL

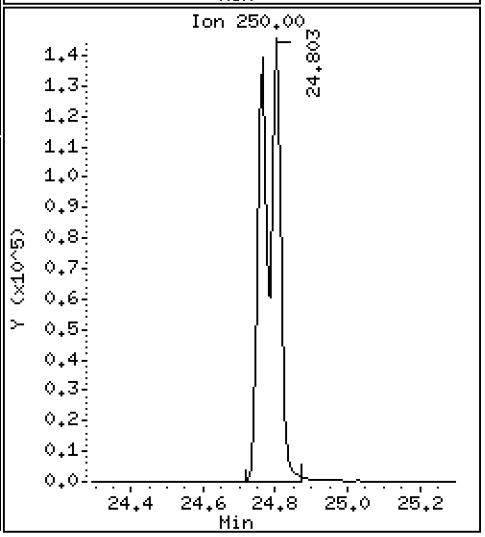


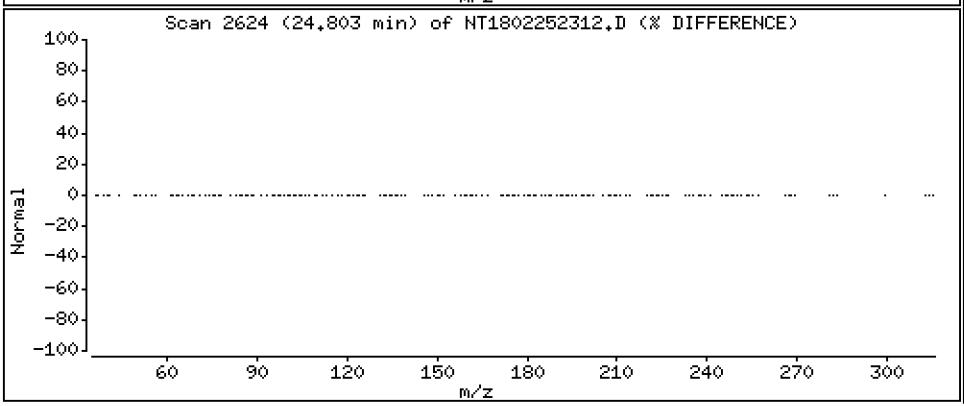












Data File: \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0099-SCV1

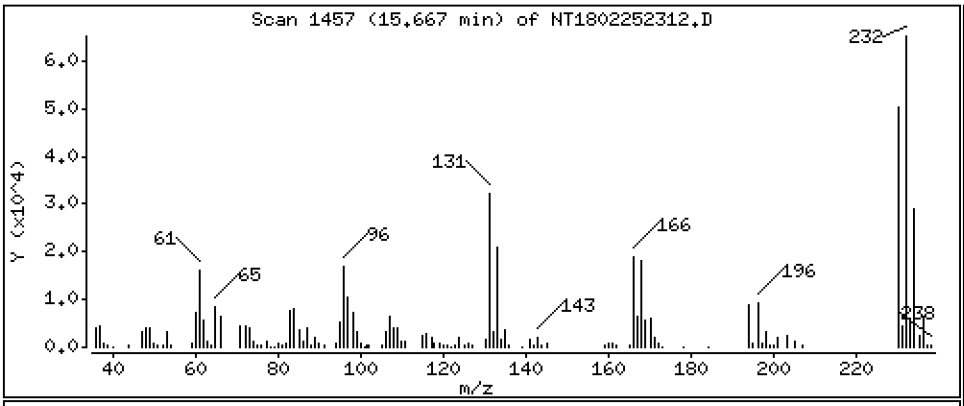
Operator: VTS

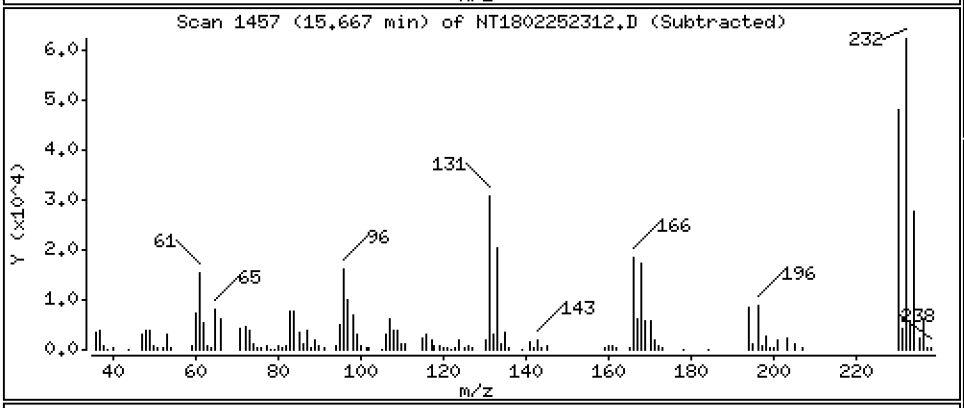
Column phase: ZB-5msi

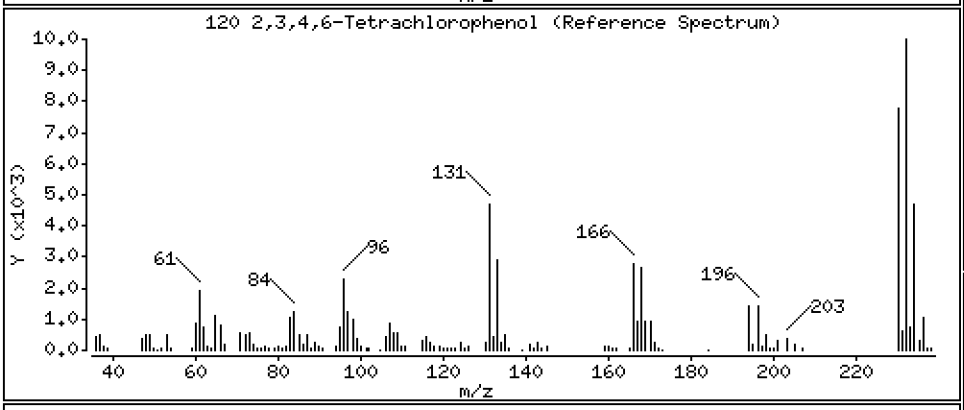
Column diameter: 0.25

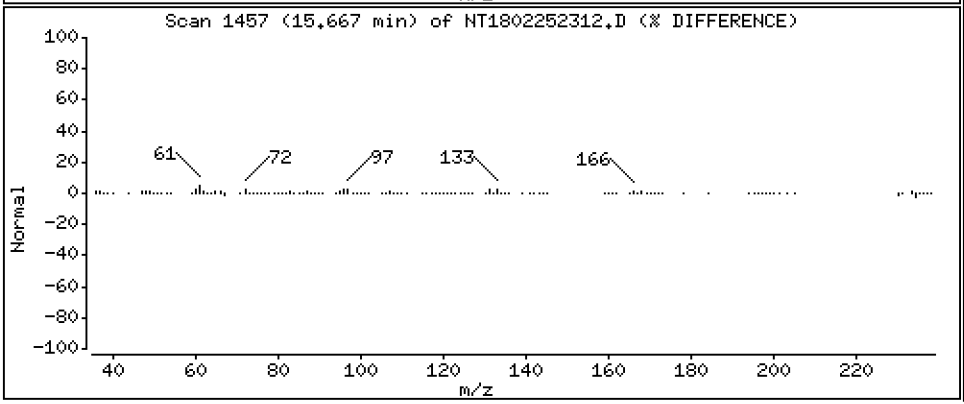
120 2,3,4,6-Tetrachlorophenol

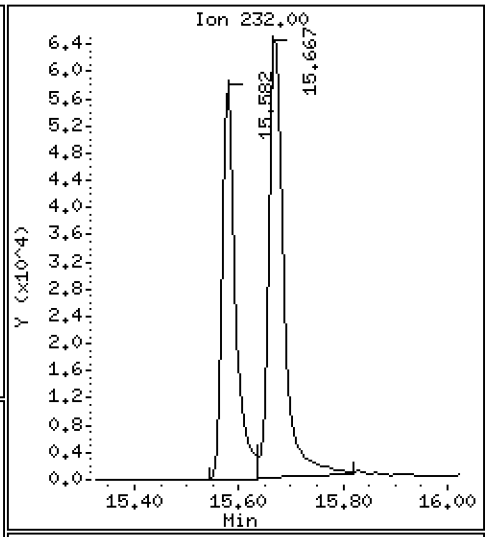
Concentration: 3.494 ug/mL

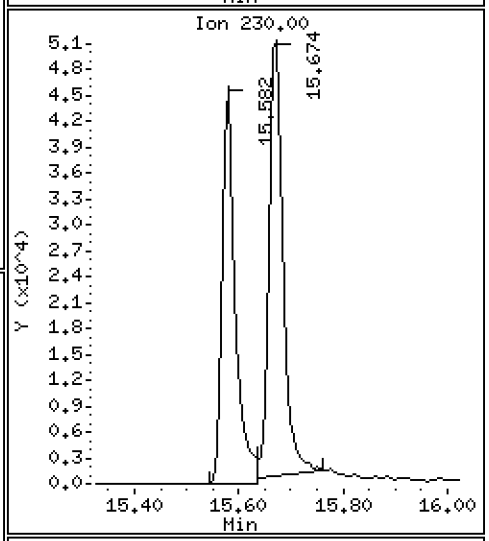


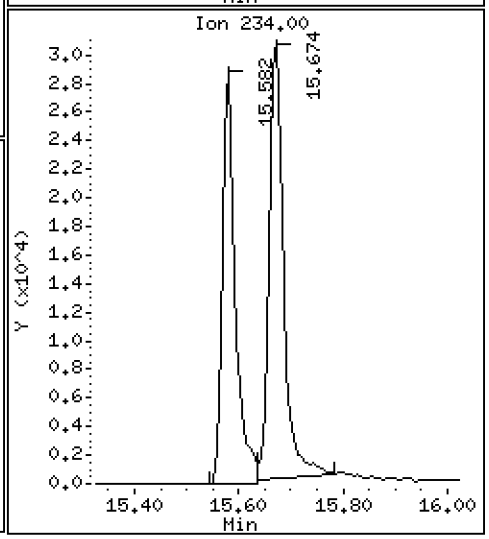












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230225.b\NT1802252312.D
Lab Smp Id: SLC0099-SCV1
Inj Date : 26-FEB-2023 04:06
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0099-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230225.b\ABN.m
Meth Date : 08-Mar-2023 14:50 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

								CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	Compound Not Detected.						
$	2 Phenol-d5	99	Compound Not Detected.						
	3 Phenol	94	8.312	8.319	(0.932)	370940		4.10851	4.109
$	5 2-Chlorophenol-d4	132	Compound Not Detected.						
	4 Bis(2-Chloroethyl)ether	93	8.474	8.474	(0.951)	304296		4.96248	4.962
	6 2-Chlorophenol	128	8.582	8.590	(0.963)	323041		4.16677	4.167
	7 1,3-Dichlorobenzene	146	8.845	8.853	(0.992)	378421		4.61495	4.615
*	8 1,4-Dichlorobenzene-d4	152	8.915	8.915	(1.000)	196803		4.00000	
	9 1,4-Dichlorobenzene	146	8.938	8.938	(1.003)	386214		4.62064	4.621
$	10 1,2-Dichlorobenzene-d4	152	Compound Not Detected.						
	12 1,2-Dichlorobenzene	146	9.295	9.295	(1.043)	366937		4.52355	4.524
	11 Benzyl alcohol	108	9.186	9.202	(1.030)	200760		4.67656	4.677
	14 2,2'-oxybis(1-Chloropropane)	121	9.481	9.481	(1.064)	98942		5.20483	5.205
	13 2-Methylphenol	108	9.411	9.419	(1.056)	279008		3.99508	3.995
	17 Hexachloroethane	117	9.869	9.877	(1.107)	154297		4.76884	4.769
	16 N-Nitroso-di-n-propylamine	70	9.737	9.737	(1.092)	246392		4.79947	4.799
	15 4-Methylphenol	108	9.683	9.683	(1.086)	298862		4.10580	4.106
$	18 Nitrobenzene-d5	82	Compound Not Detected.						
	19 Nitrobenzene	77	10.024	10.032	(0.882)	361585		4.69174	4.692
	20 Isophorone	82	10.467	10.467	(0.921)	632536		6.43324	6.433
	21 2-Nitrophenol	139	10.650	10.659	(0.937)	168023		4.43914	4.439
	22 2,4-Dimethylphenol	107	10.710	10.710	(0.942)	249516		3.45955	3.460
	23 Bis(2-Chloroethoxy)methane	93	10.896	10.905	(0.959)	369555		5.48879	5.489
	24 Benzoic acid	105	10.990	11.092	(0.967)	72051		2.61790	2.618(M)
	25 2,4-Dichlorophenol	162	11.100	11.100	(0.977)	292217		4.62098	4.621
	26 1,2,4-Trichlorobenzene	180	11.280	11.280	(0.993)	303141		4.43838	4.438
*	27 Naphthalene-d8	136	11.365	11.365	(1.000)	751242		4.00000	
	28 Naphthalene	128	11.403	11.403	(1.003)	1044410		4.52257	4.523
	29 4-Chloroaniline	127	11.535	11.542	(1.015)	318320		3.45878	3.459
	30 Hexachlorobutadiene	225	11.767	11.767	(1.035)	186397		4.65605	4.656
	31 4-Chloro-3-methylphenol	107	12.494	12.502	(1.099)	267666		4.42235	4.422
	32 2-Methylnaphthalene	142	12.788	12.788	(1.125)	663066		4.22545	4.225
	33 Hexachlorocyclopentadiene	237	13.252	13.252	(0.887)	87571		3.20191	3.202

		QUANT SIG					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	13.407	13.407	(0.897)	159887	4.14757	4.148
	35 2,4,5-Trichlorophenol	196	13.477	13.485	(0.902)	172217	4.09965	4.100
$	36 2-Fluorobiphenyl	172	Compound Not Detected.					
	37 2-Chloronaphthalene	162	13.771	13.771	(0.922)	597668	4.55180	4.552
	38 2-Nitroaniline	65	14.026	14.034	(0.939)	184700	4.49470	4.495
	39 Dimethylphthalate	163	14.468	14.460	(0.968)	668285	4.73886	4.739
	40 Acenaphthylene	152	14.630	14.630	(0.979)	1015081	4.59116	4.591
	41 2,6-Dinitrotoluene	165	14.599	14.591	(0.977)	156792	4.84977	4.850
*	42 Acenaphthene-d10	164	14.940	14.940	(1.000)	398556	4.00000	
	43 3-Nitroaniline	138	14.878	14.878	(0.996)	177578	4.64347	4.643
	44 Acenaphthene	153	15.009	15.001	(1.005)	633850	4.52979	4.530
	45 2,4-Dinitrophenol	184	15.094	15.094	(1.010)	21508	1.42564	1.426
	46 Dibenzofuran	168	15.334	15.334	(1.026)	882055	4.35510	4.355
	47 4-Nitrophenol	109	15.210	15.218	(1.018)	66995	4.34588	4.346
	48 2,4-Dinitrotoluene	165	15.396	15.396	(1.031)	202080	4.57277	4.573
	50 Diethylphthalate	149	15.906	15.906	(1.065)	777988	5.26498	5.265
	49 Fluorene	166	16.037	16.037	(1.073)	841063	5.18202	5.182
	51 4-Chlorophenyl-phenylether	204	16.029	16.029	(1.073)	367830	4.97548	4.975
	52 4-Nitroaniline	138	16.130	16.130	(1.080)	169269	4.60087	4.601
	53 4,6-Dinitro-2-methylphenol	198	16.230	16.230	(0.904)	91958	3.59564	3.596
	54 N-Nitrosodiphenylamine	169	16.284	16.276	(0.907)	494995	4.60237	4.602
$	55 2,4,6-Tribromophenol	330	Compound Not Detected.					
	56 4-Bromophenyl-phenylether	248	17.024	17.024	(0.948)	210814	4.88441	4.884
	57 Hexachlorobenzene	284	17.333	17.333	(0.966)	220372	4.42184	4.422
	58 Pentachlorophenol	266	17.697	17.697	(0.986)	32473	2.45386	2.454
*	59 Phenanthrene-d10	188	17.952	17.945	(1.000)	714786	4.00000	
	60 Phenanthrene	178	17.999	17.991	(1.003)	988459	4.39651	4.397
	61 Anthracene	178	18.092	18.084	(1.008)	848151	3.95863	3.959
	62 Carbazole	167	18.417	18.417	(1.026)	876153	4.46270	4.463
	63 Di-n-butylphthalate	149	19.229	19.229	(1.071)	1121126	5.15898	5.159
	64 Fluoranthene	202	20.374	20.374	(0.886)	1087530	4.81174	4.812
	65 Pyrene	202	20.800	20.800	(0.905)	1098967	4.55908	4.559
$	66 Terphenyl-d14	244	Compound Not Detected.					
	67 Butylbenzylphthalate	149	22.023	22.023	(0.958)	487079	5.32159	5.322
	68 Benzo(a)anthracene	228	22.952	22.952	(0.999)	1041421	4.47172	4.472
*	69 Chrysene-d12	240	22.983	22.975	(1.000)	645093	4.00000	
	70 3,3'-Dichlorobenzidine	252	22.913	22.906	(0.997)	856987	10.0002	10.00
	71 Chrysene	228	23.029	23.022	(1.002)	1072229	4.42756	4.428
	72 bis(2-Ethylhexyl)phthalate	149	23.053	23.045	(0.960)	743132	5.23131	5.231
*	134 Di-n-octylphthalate-d4	153	24.020	24.020	(1.000)	989444	4.00000	
	73 Di-n-octylphthalate	149	24.028	24.028	(1.000)	1326876	4.81262	4.813
	74 Benzo(b)fluoranthene	252	24.764	24.756	(0.972)	1013785	4.31859	4.319
	75 Benzo(k)fluoranthene	252	24.802	24.795	(0.974)	1259698	4.73494	4.735(H)
	76 Benzo(a)pyrene	252	25.368	25.360	(0.996)	998824	4.58976	4.590
*	77 Perylene-d12	264	25.468	25.468	(1.000)	719540	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	27.920	27.904	(1.096)	1266543	4.63606	4.636
	79 Dibenzo(a,h)anthracene	278	27.928	27.920	(1.097)	1043466	4.57975	4.580
	80 Benzo(g,h,i)perylene	276	28.634	28.619	(1.124)	1005990	4.59311	4.593
	90 N-Nitrosodimethylamine	74	4.673	4.681	(0.524)	189582	4.80958	4.810
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	20.614	20.614	(0.897)	641864	5.81258	5.813
	103 Pyridine	79	4.673	4.689	(0.524)	308261	4.69431	4.694
	105 1-methylnaphthalene	142	13.005	13.005	(1.144)	637254	4.48602	4.486
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.353	16.353	(1.095)	770064	4.73097	4.731

						CONCENTRATIONS	
	QUANT SIG					ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
187 Total Benzofluoranthenes	252	24.802	24.795	(0.974)	2140538	9.01877	9.019
120 2,3,4,6-Tetrachlorophenol	232	15.666	15.674	(1.049)	136871	3.49441	3.494

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252312.D
Lab Smp Id: SLC0099-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230225.b\ABN.m
Misc Info:

Calibration Date: 25-FEB-2023
Calibration Time: 22:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	213108	106554	426216	196803	-7.65
27 Naphthalene-d8	806946	403473	1613892	751242	-6.90
42 Acenaphthene-d10	424249	212125	848498	398556	-6.06
59 Phenanthrene-d10	758987	379494	1517974	714786	-5.82
69 Chrysene-d12	685237	342619	1370474	645093	-5.86
134 Di-n-octylphthala	1075410	537705	2150820	989444	-7.99
77 Perylene-d12	762553	381277	1525106	719540	-5.64

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.94	14.44	15.44	14.94	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	0.00
134 Di-n-octylphthala	24.02	23.52	24.52	24.02	0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252312.D

Lab ID: SLC0099-SCV1
nt18.i, ABN.m, 26-FEB-2023 04:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.967	0.000	0.9670	Benzoic acid
1.010	0.000	1.0103	2,4-Dinitrophenol
0.986	0.000	0.9858	Pentachlorophenol

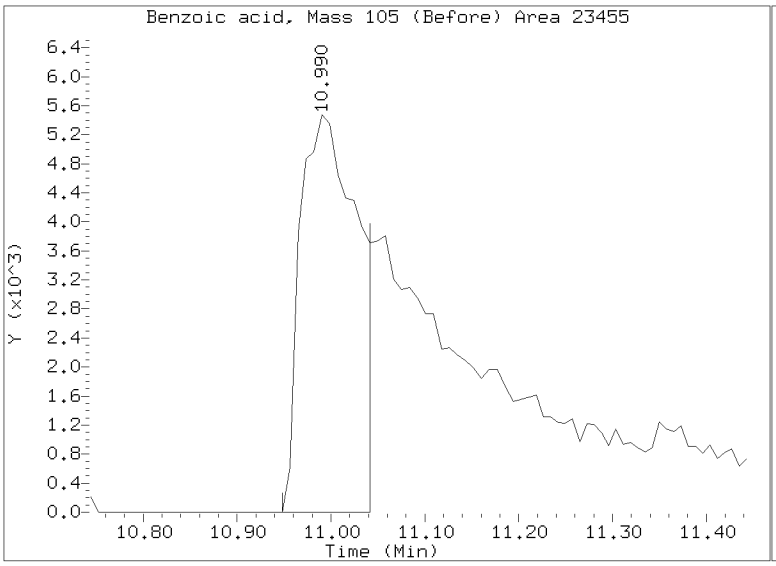
RRT check based on Ccal File: NT1802252308.D

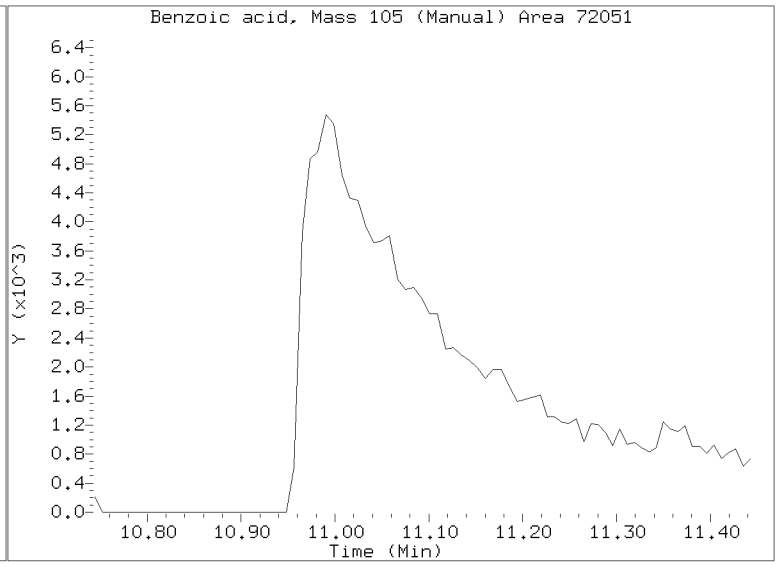
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230225.b/NT1802252312.D
Injection Date: 26-FEB-2023 04:06
Lab ID:SLC0099-SCV1 Client ID:
Report Date: 03/10/2023 07:50





Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00023
Lab File ID:	NT1802262326.D	Calibration Date:	02/25/2023
Sequence:	SLC0111	Injection Date:	02/27/23
Lab Sample ID:	SLC0111-CCV1	Injection Time:	04:36
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Phenol	A	5.0000	4.8	1.8350500	1.7536380		-4.4	+/-50	
4-Methylphenol	A	5.0000	4.8	1.4794550	1.4292590		-3.4	+/-50	
Naphthalene	A	5.0000	4.7	1.2296060	1.1483360		-6.6	+/-50	
2-Methylnaphthalene	A	5.0000	4.7	0.8355327	0.7899138		-5.5	+/-50	
Acenaphthylene	A	5.0000	5.3	2.2189590	2.3455440		5.7	+/-50	
Dimethylphthalate	A	5.0000	4.9	1.4153330	1.3958820		-1.4	+/-50	
Acenaphthene	A	5.0000	4.8	1.4043630	1.3377540		-4.7	+/-50	
Dibenzofuran	A	5.0000	4.8	2.0326750	1.9359790		-4.8	+/-50	
Fluorene	A	5.0000	5.0	1.6289200	1.6138530		-0.9	+/-50	
Phenanthrene	A	5.0000	4.7	1.2581570	1.1753740		-6.6	+/-50	
Anthracene	A	5.0000	5.0	1.1989790	1.1954010		-0.3	+/-50	
Fluoranthene	A	5.0000	5.2	1.4014480	1.4590850		4.1	+/-50	
Pyrene	A	5.0000	5.1	1.4946680	1.5098650		1.0	+/-50	
Butylbenzylphthalate	A	5.0000	6.0	0.5675390	0.6777018		19.4	+/-50	
Benzo(a)anthracene	A	5.0000	4.8	1.4440750	1.3942530		-3.5	+/-50	
Chrysene	A	5.0000	4.7	1.5016220	1.4093330		-6.1	+/-50	
bis(2-Ethylhexyl)phthalate	A	5.0000	5.2	0.5742806	0.6012530		4.7	+/-50	
Benzofluoranthenes, Total	A	10.000	13.6	1.3194130	1.7914100		35.8	+/-50	
Benzo(a)pyrene	A	5.0000	5.3	1.2097740	1.2759950		5.5	+/-50	
Indeno(1,2,3-cd)pyrene	A	5.0000	2.0	1.5187130	0.6168374		-59.4	+/-50	*
Dibenzo(a,h)anthracene	A	5.0000	2.2	1.2666050	0.5551943		-56.2	+/-50	*
Benzo(g,h,i)perylene	A	5.0000	1.6	1.2175640	0.3969923		-67.4	+/-50	*
2-Fluorophenol	A	7.5000	7.56	1.3647030	1.3755680		0.8	+/-50	
Phenol-d5	A	7.5000	7.24	1.7637020	1.7028790		-3.4	+/-50	
2-Chlorophenol-d4	A	7.5000	7.39	1.5347490	1.5118860		-1.5	+/-50	
1,2-Dichlorobenzene-d4	A	5.0000	4.61	1.0880180	1.0038870		-7.7	+/-50	
Nitrobenzene-d5	A	5.0000	4.86	0.4262932	0.4141982		-2.8	+/-50	
2-Fluorobiphenyl	A	5.0000	4.64	1.6864720	1.5664080		-7.1	+/-50	
2,4,6-Tribromophenol	A	7.5000	8.32	0.2004134	0.2333333		10.9	+/-50	
p-Terphenyl-d14	A	5.0000	5.06	1.1988160	1.2129430		1.2	+/-50	

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

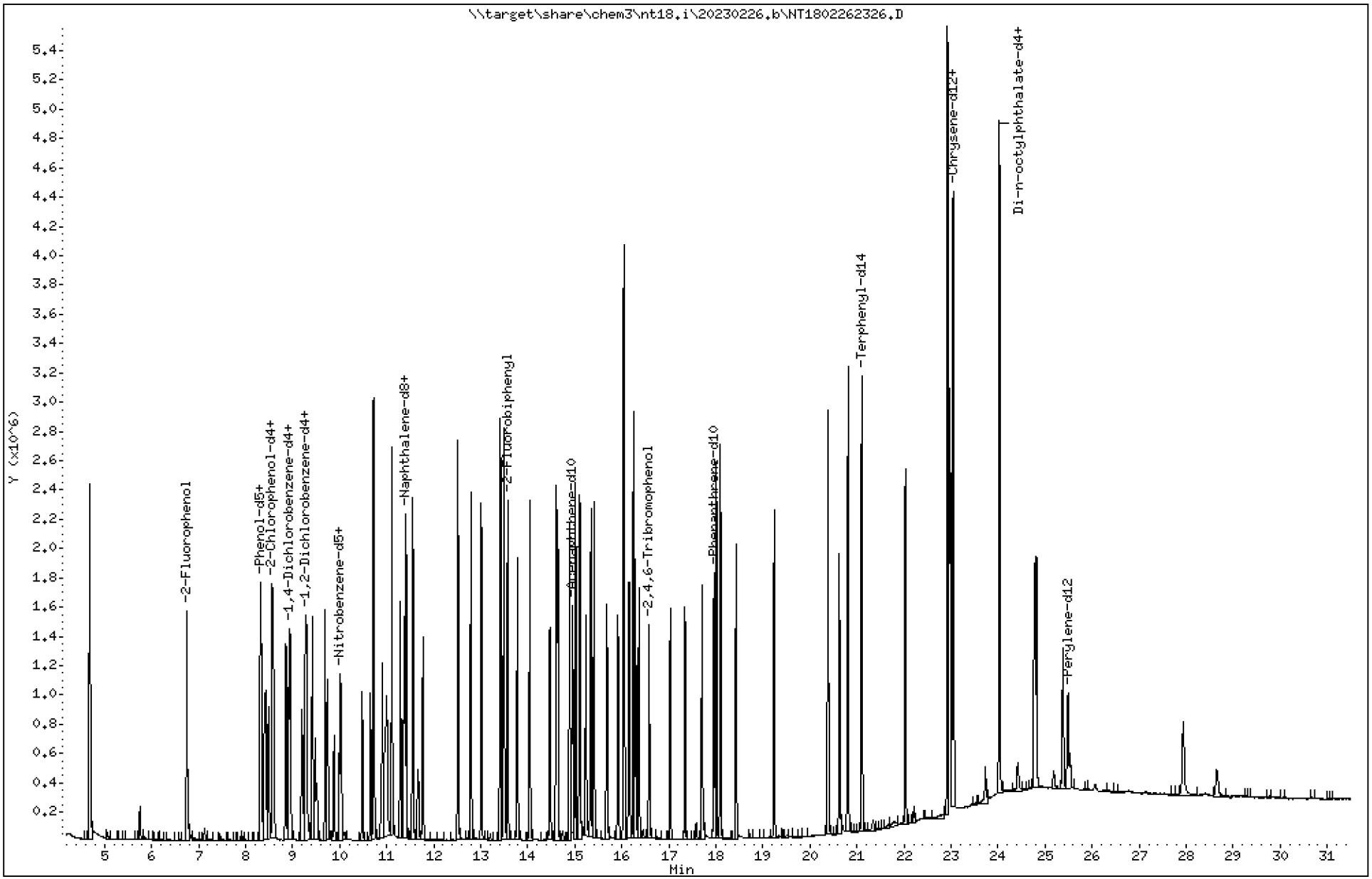
Instrument: nt18.i

Sample Info: SLC0111-CCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

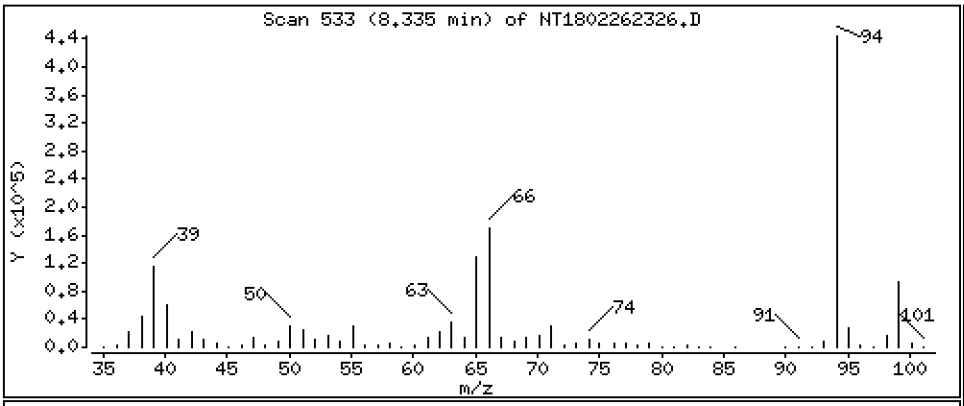
Operator: VTS

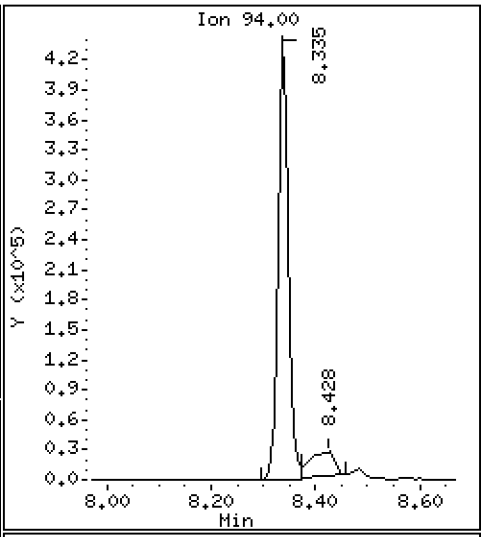
Column phase: ZB-5msi

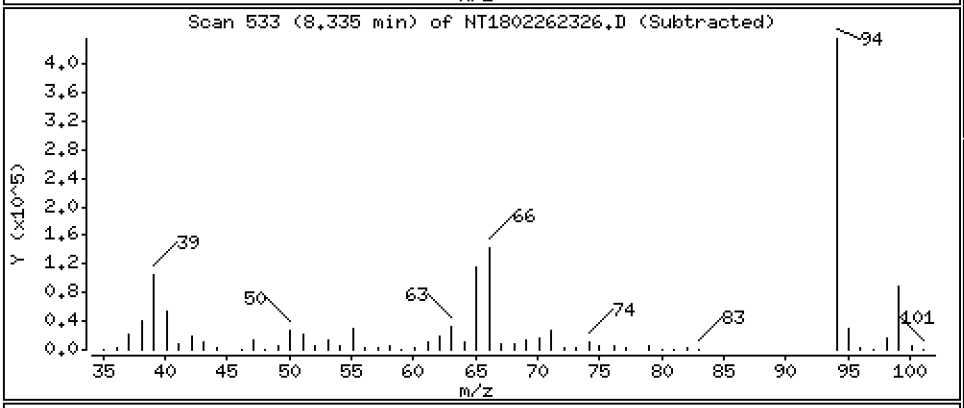
Column diameter: 0.25

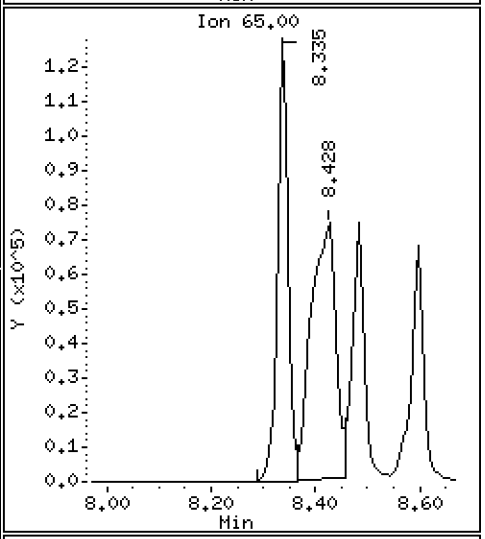
3 Phenol

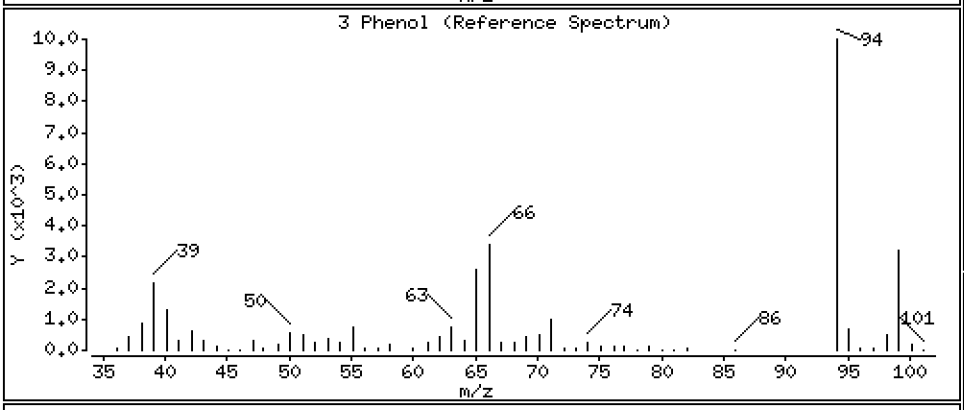
Concentration: 4.778 ug/mL

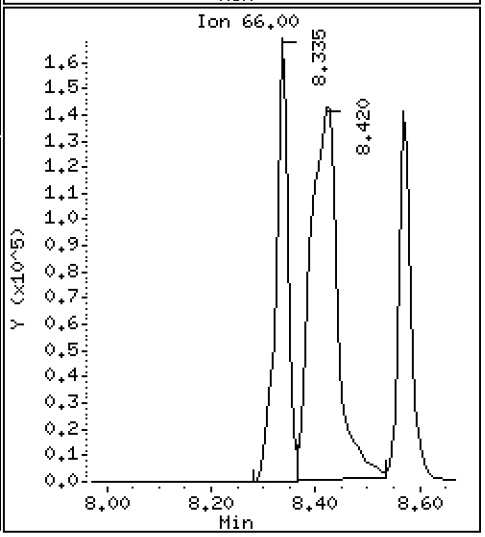


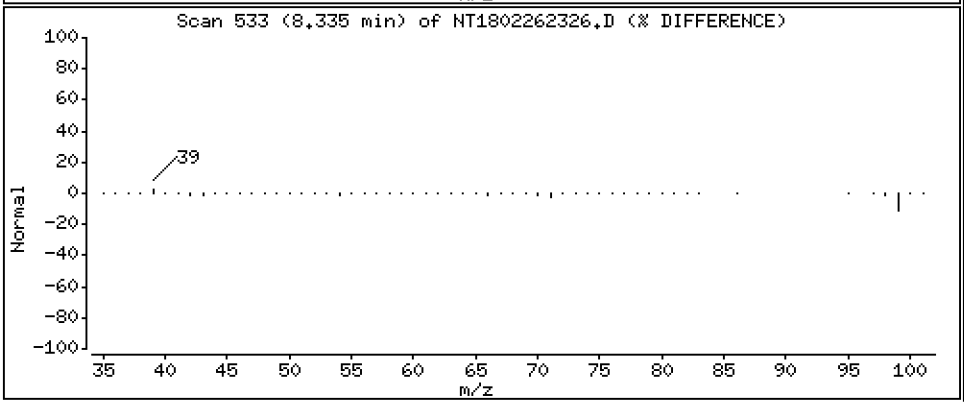












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

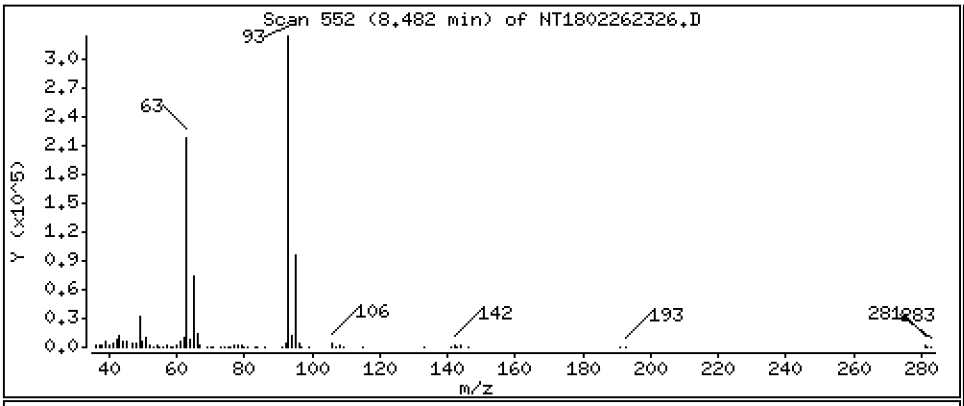
Operator: VTS

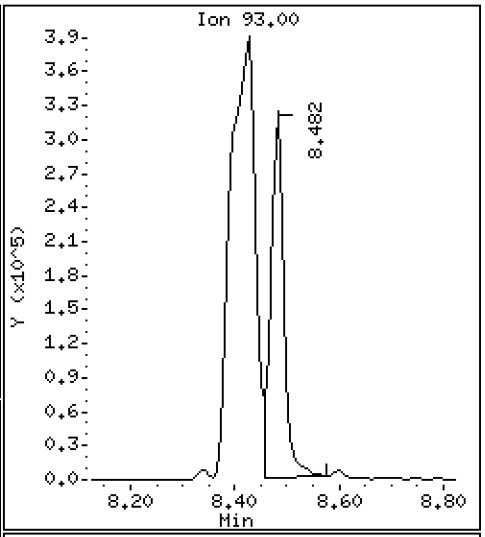
Column phase: ZB-5msi

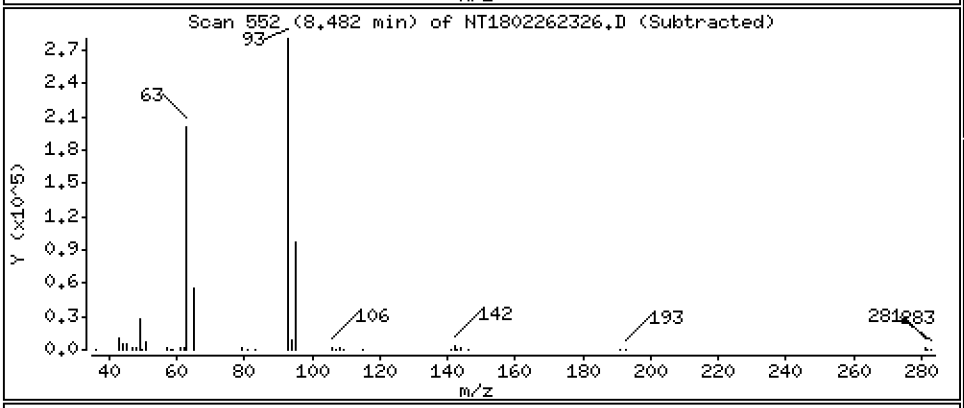
Column diameter: 0.25

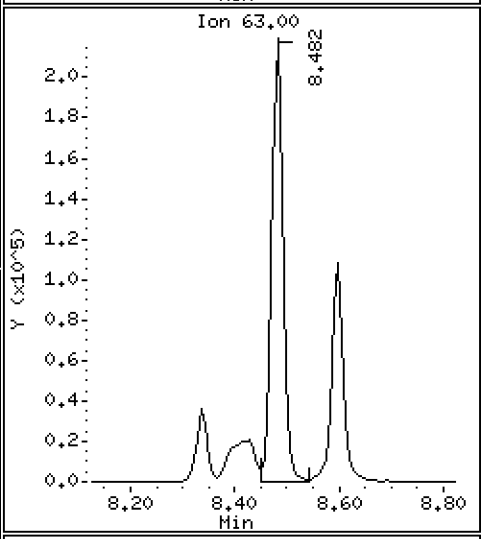
4 Bis(2-Chloroethyl)ether

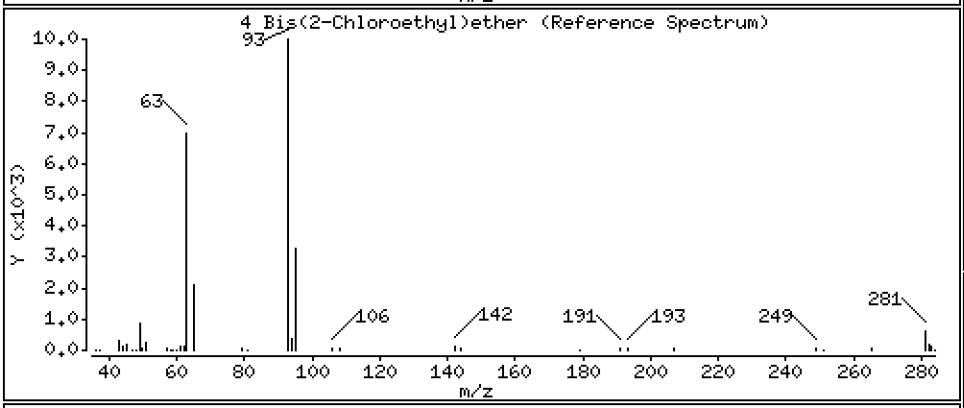
Concentration: 5.982 ug/mL

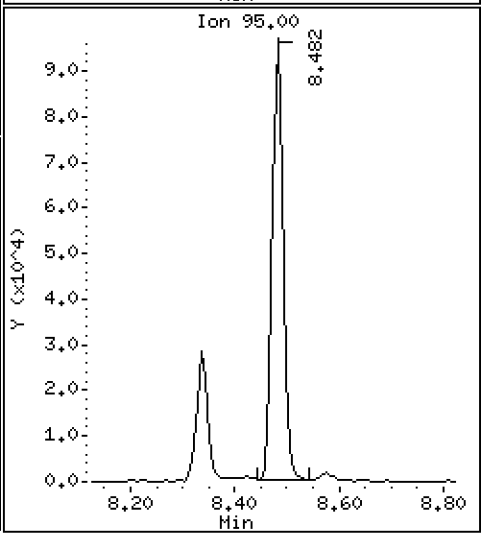


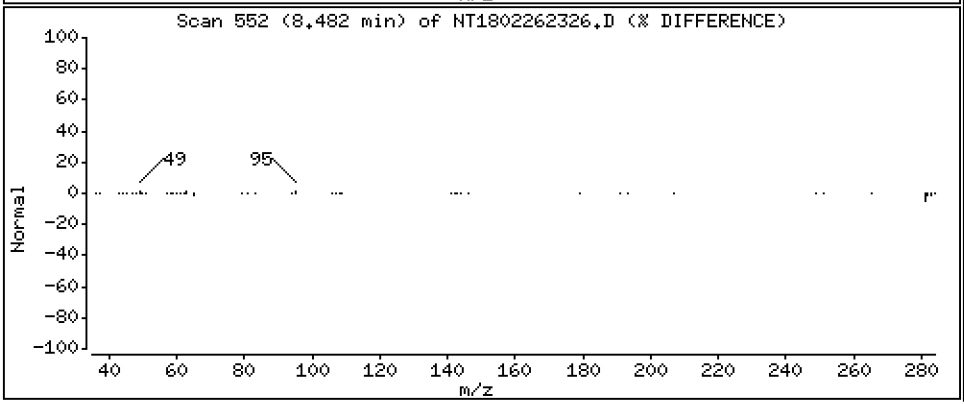












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

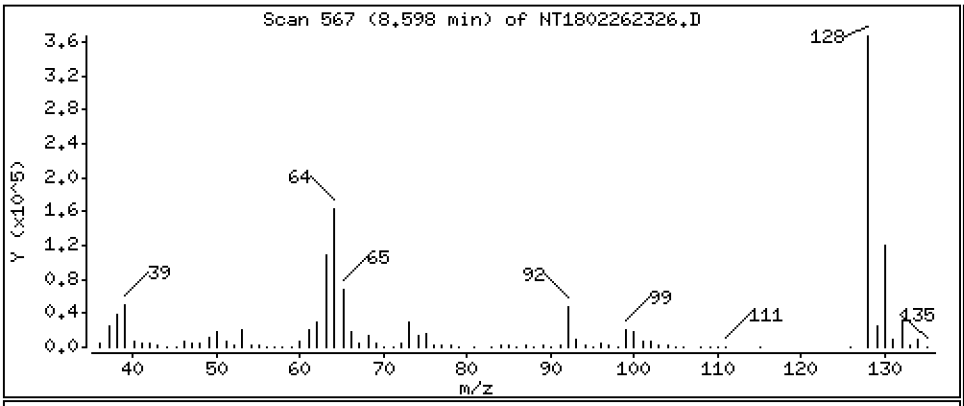
Operator: VTS

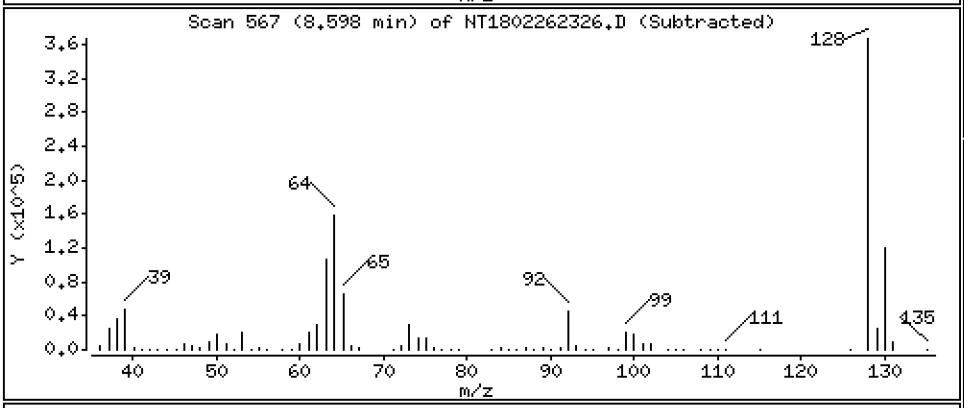
Column phase: ZB-5msi

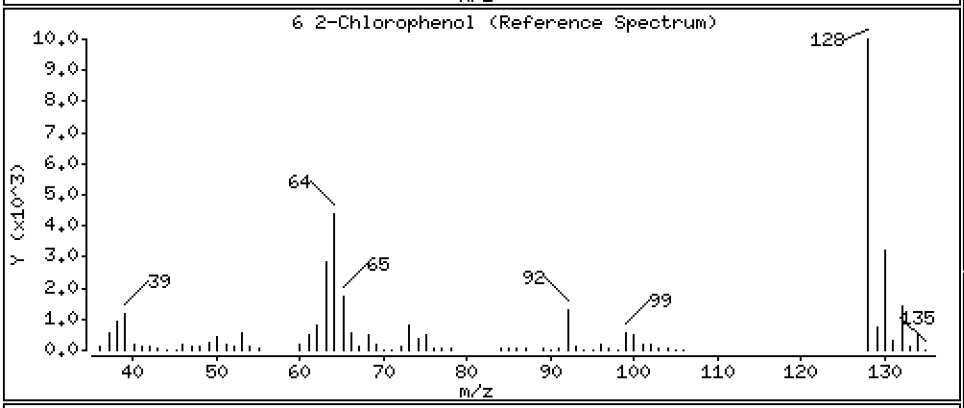
Column diameter: 0.25

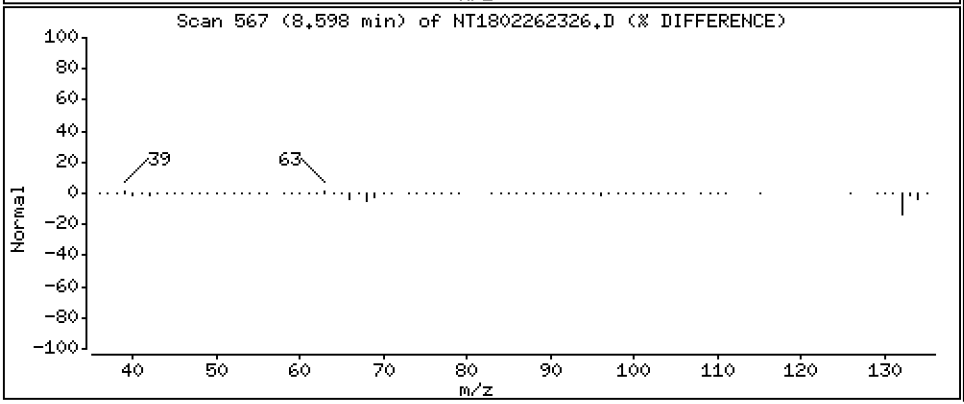
6 2-Chlorophenol

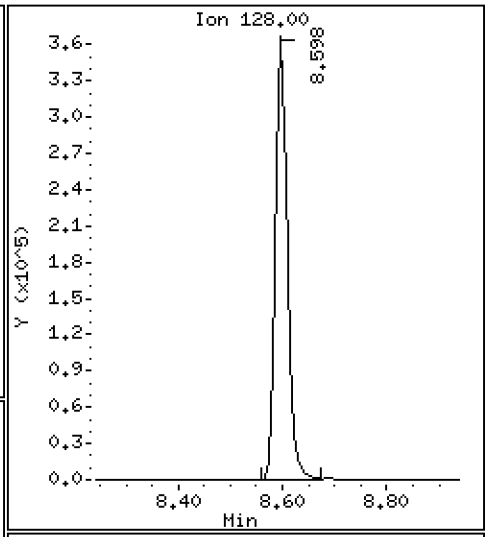
Concentration: 4.835 ug/mL

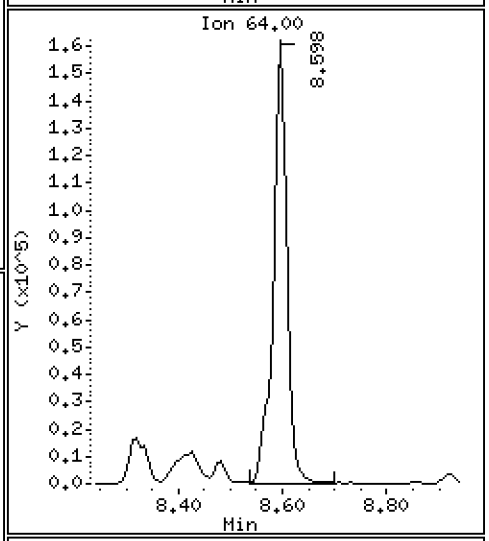


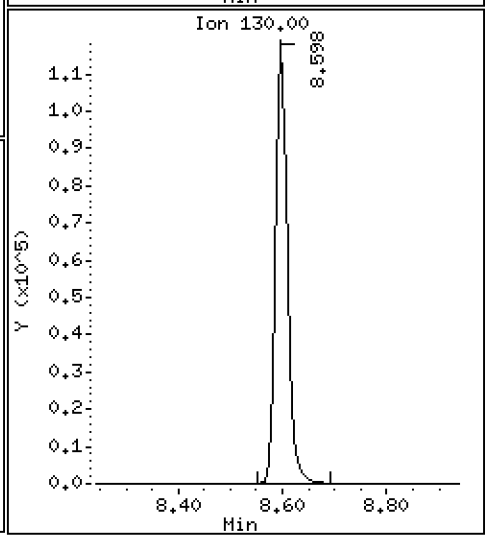












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

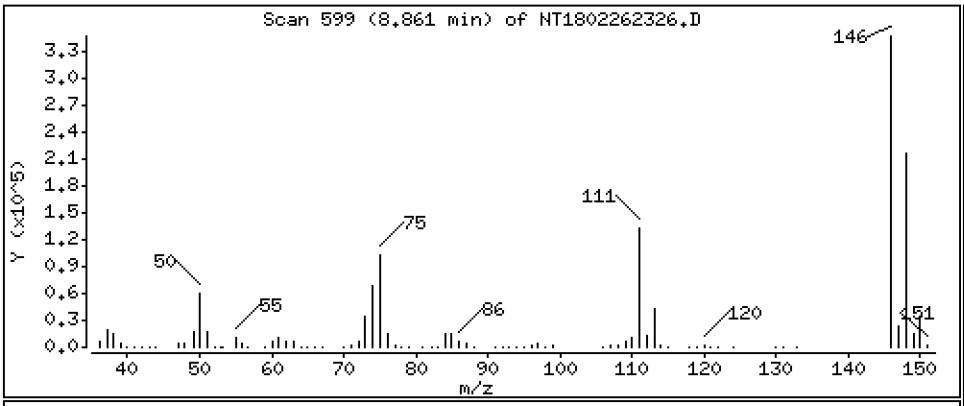
Operator: VTS

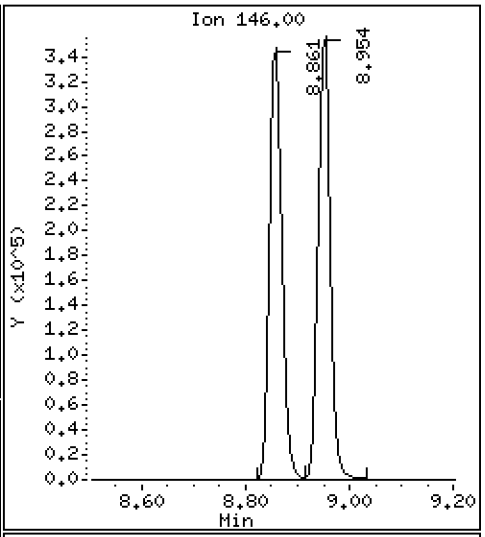
Column phase: ZB-5msi

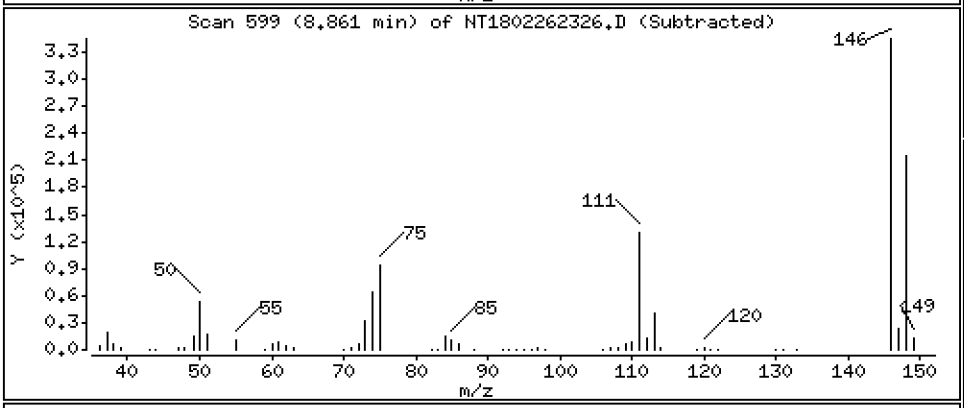
Column diameter: 0.25

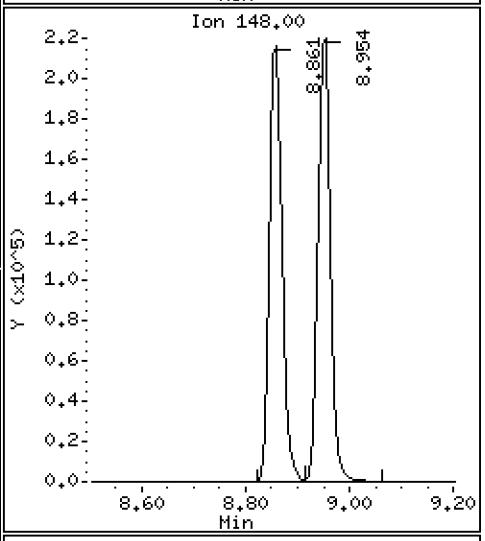
7 1,3-Dichlorobenzene

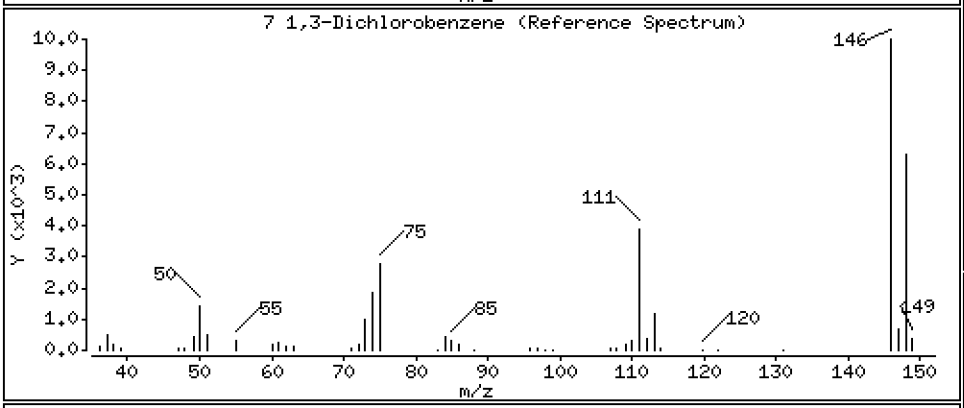
Concentration: 4.659 ug/mL

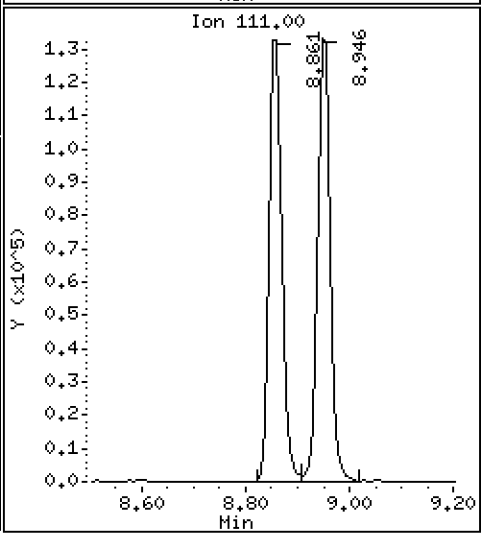


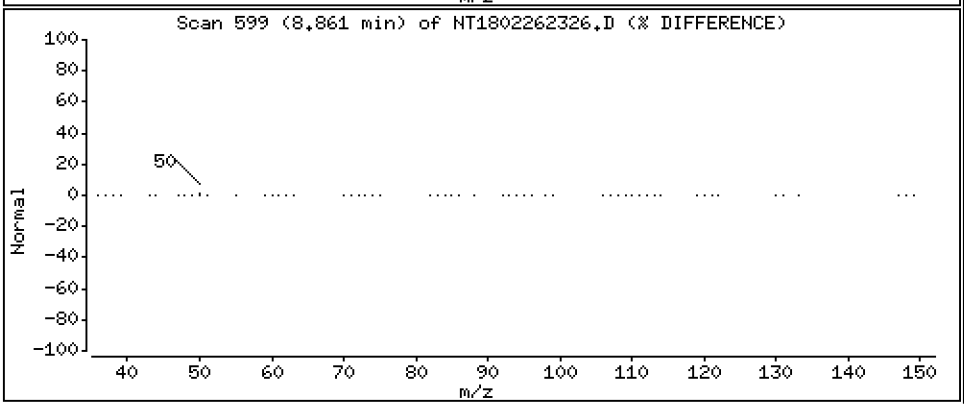












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

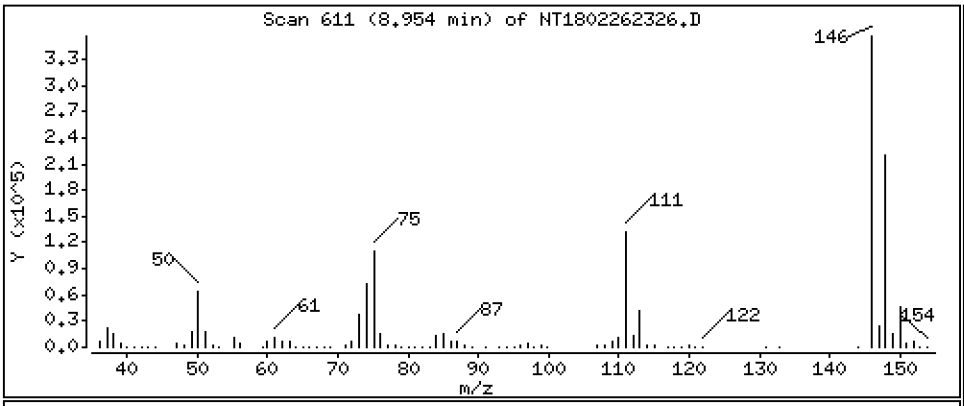
Operator: VTS

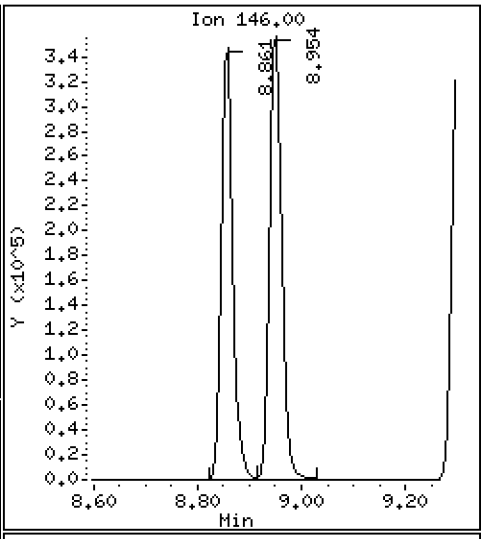
Column phase: ZB-5msi

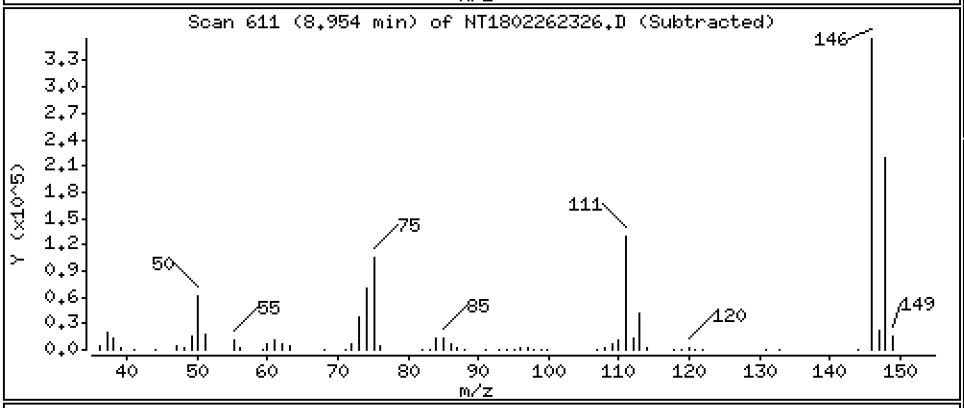
Column diameter: 0.25

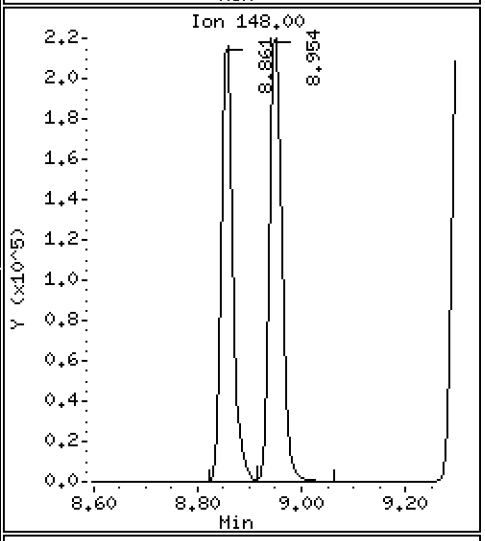
9 1,4-Dichlorobenzene

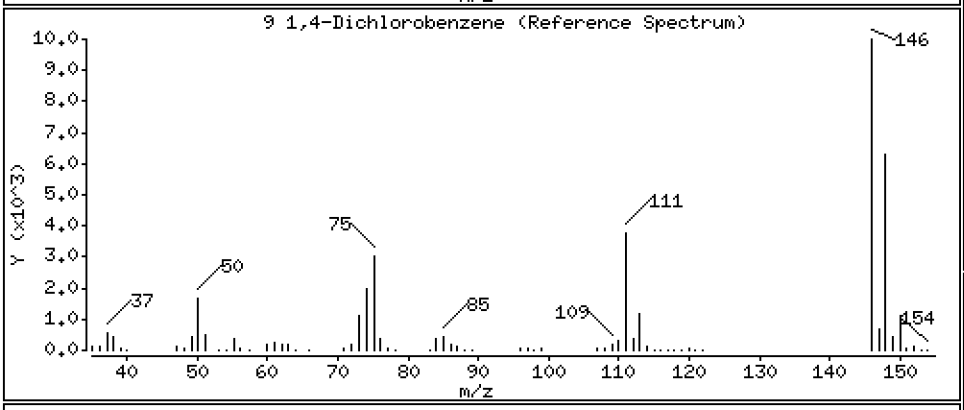
Concentration: 4.580 ug/mL

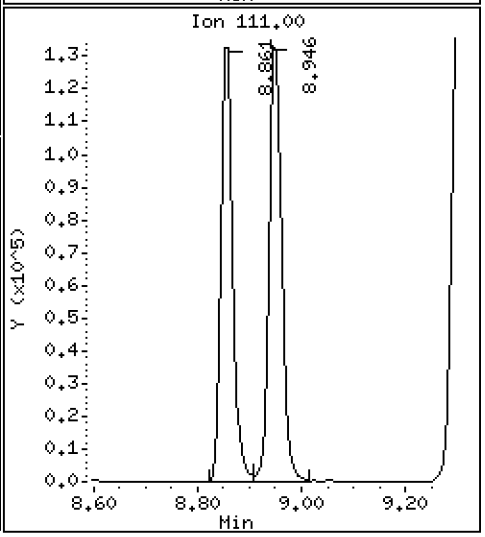


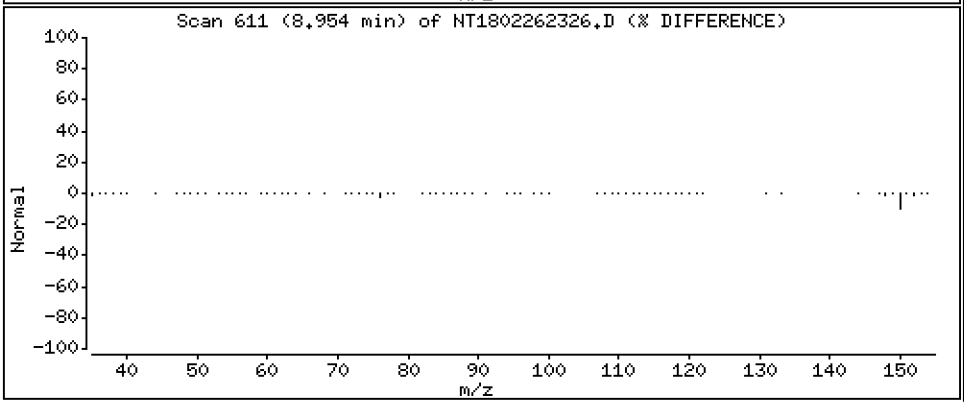












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

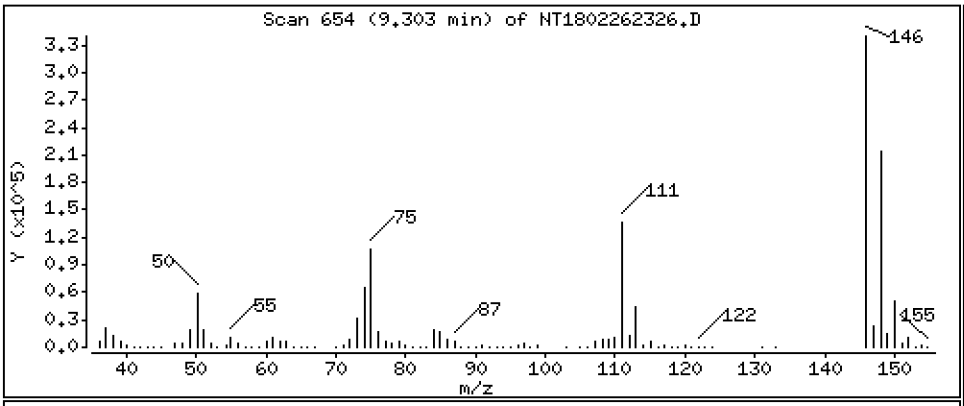
Operator: VTS

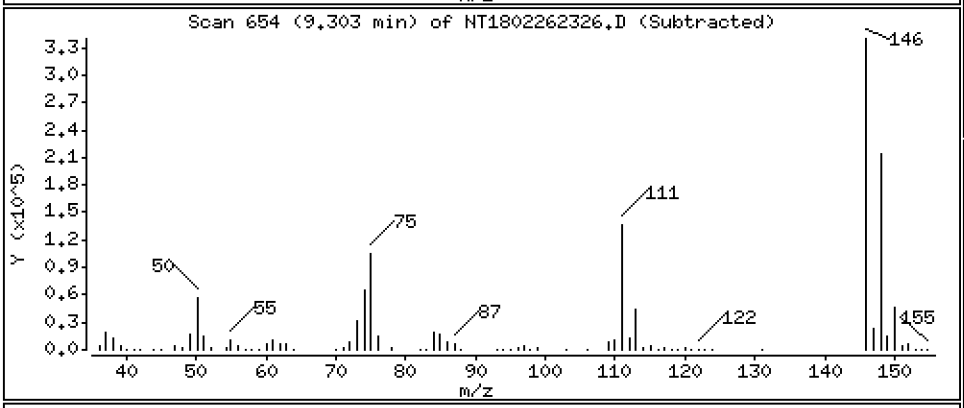
Column phase: ZB-5msi

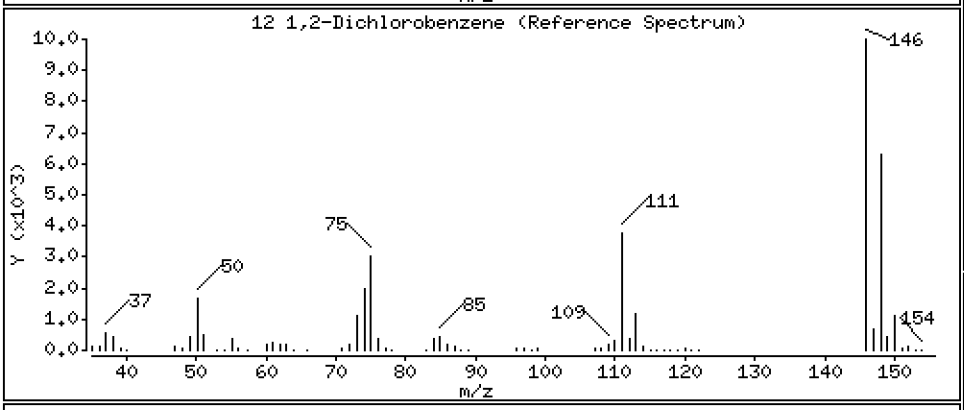
Column diameter: 0.25

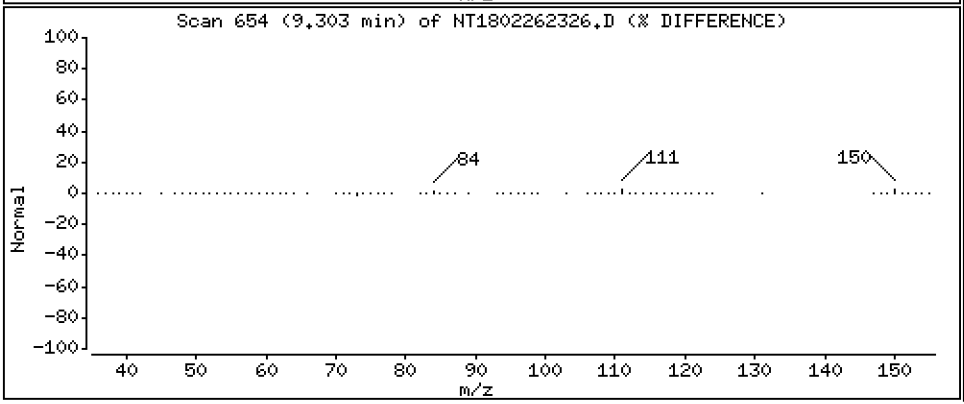
12 1,2-Dichlorobenzene

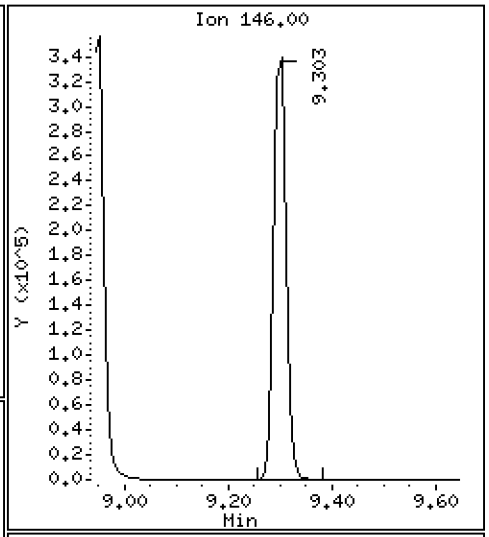
Concentration: 4.581 ug/mL

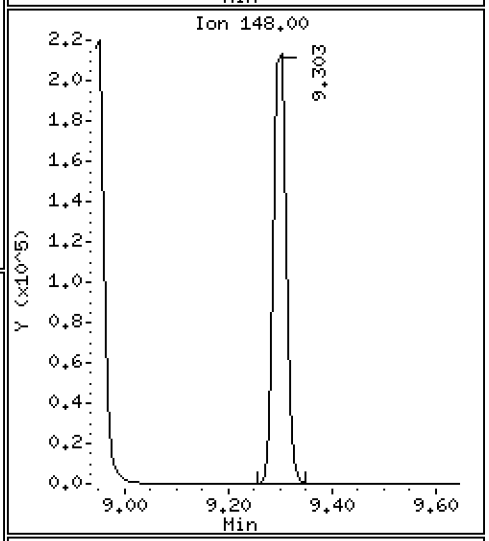


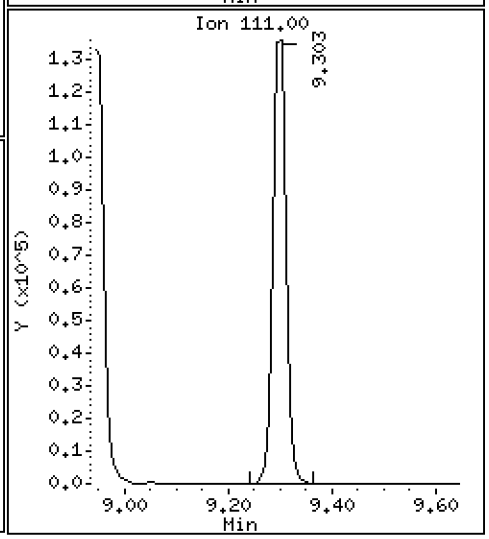












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

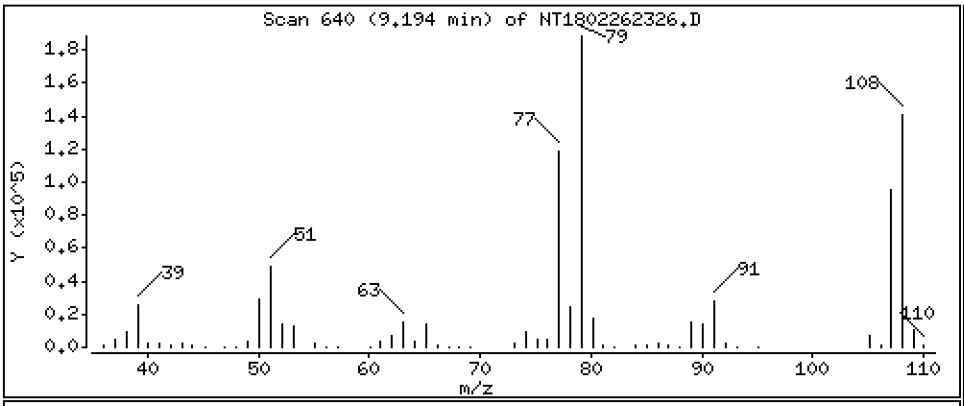
Operator: VTS

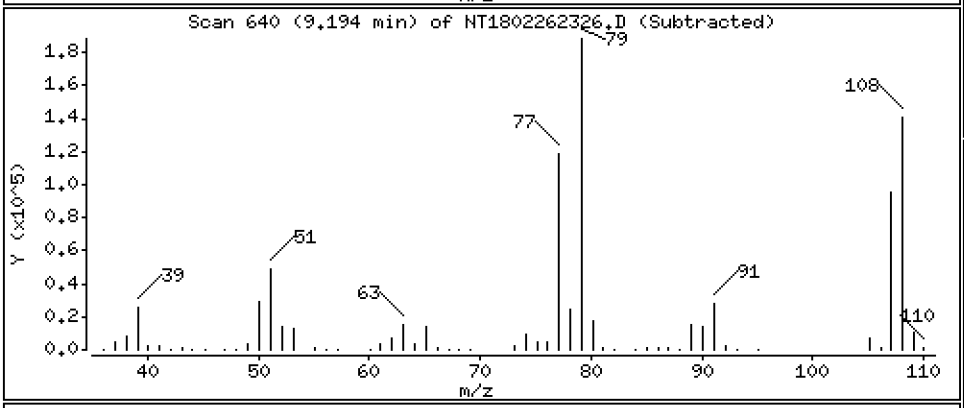
Column phase: ZB-5msi

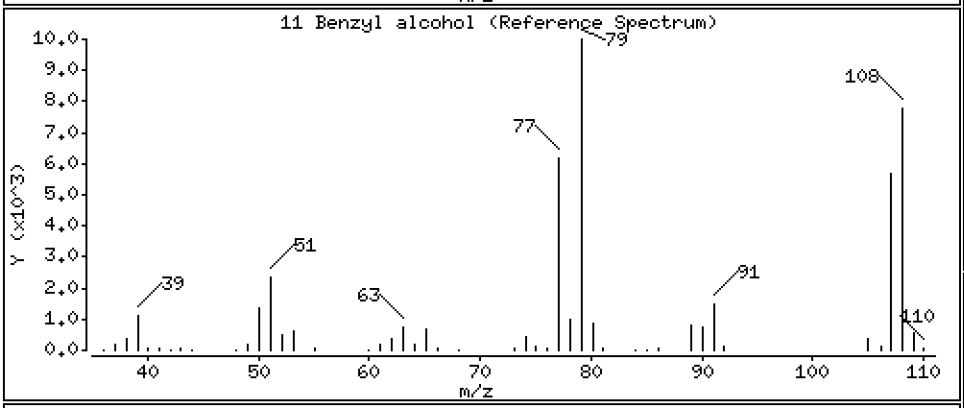
Column diameter: 0.25

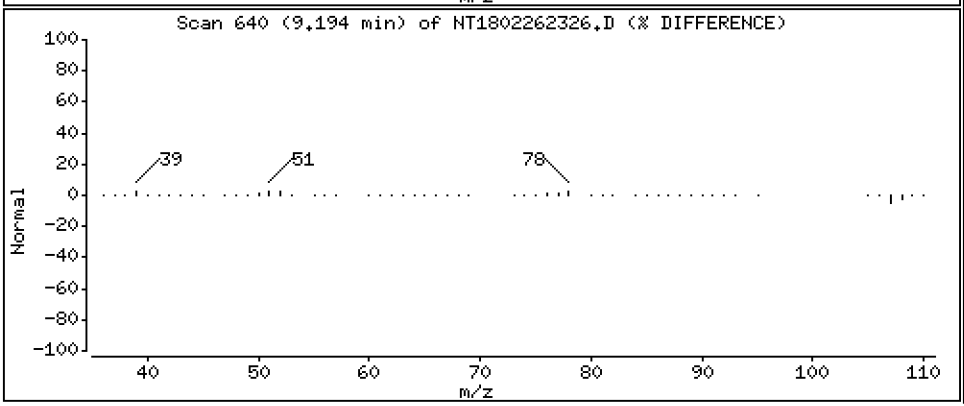
11 Benzyl alcohol

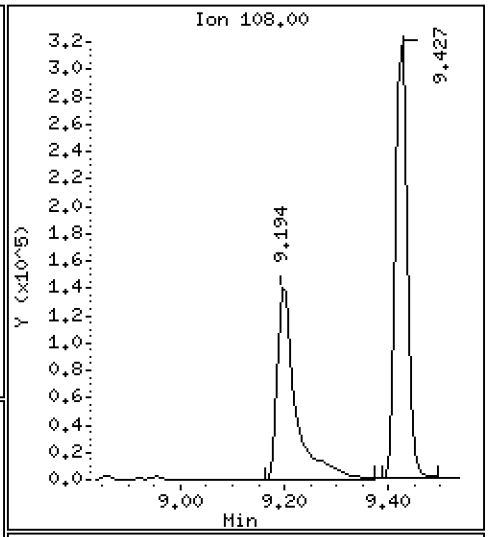
Concentration: 5.522 ug/mL

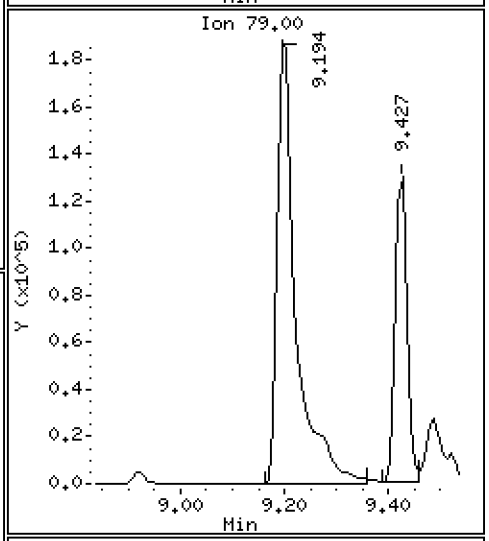


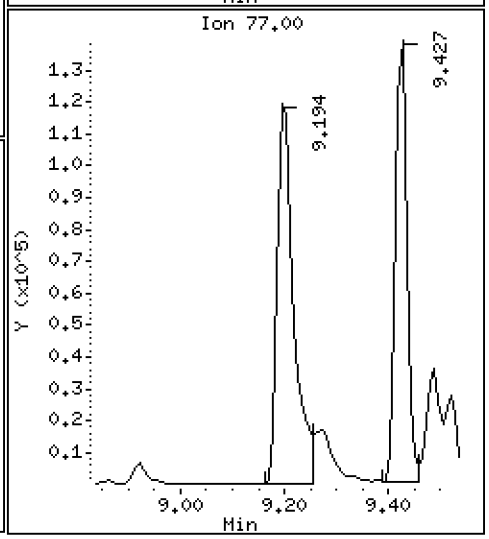












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

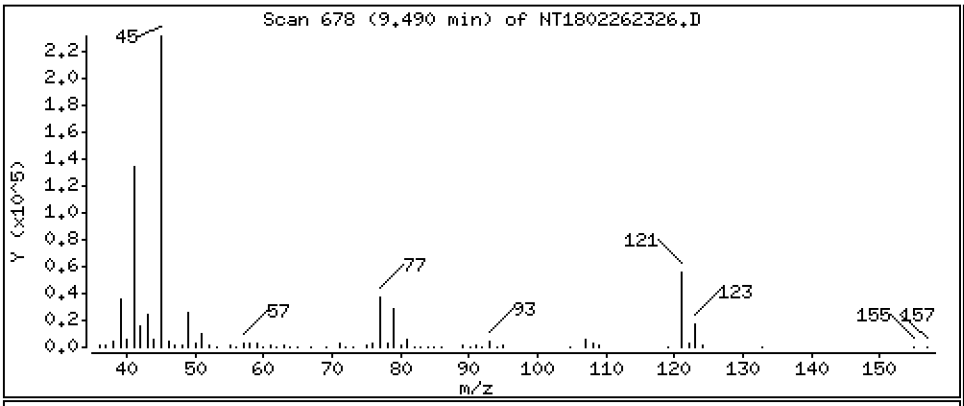
Operator: VTS

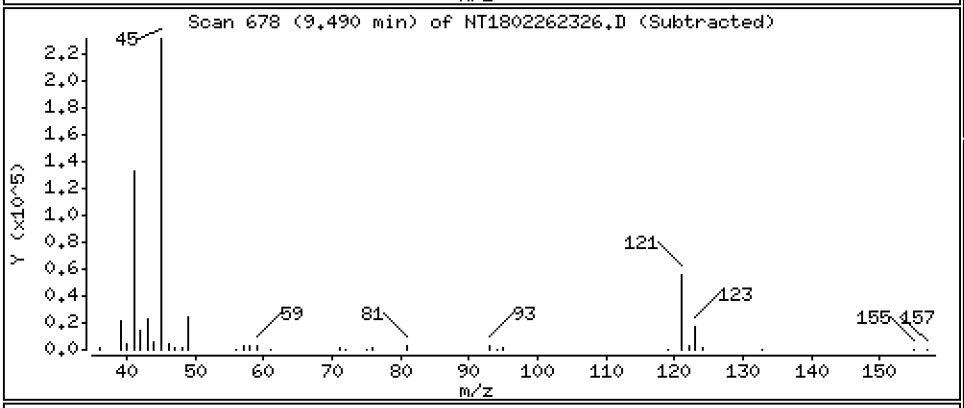
Column phase: ZB-5msi

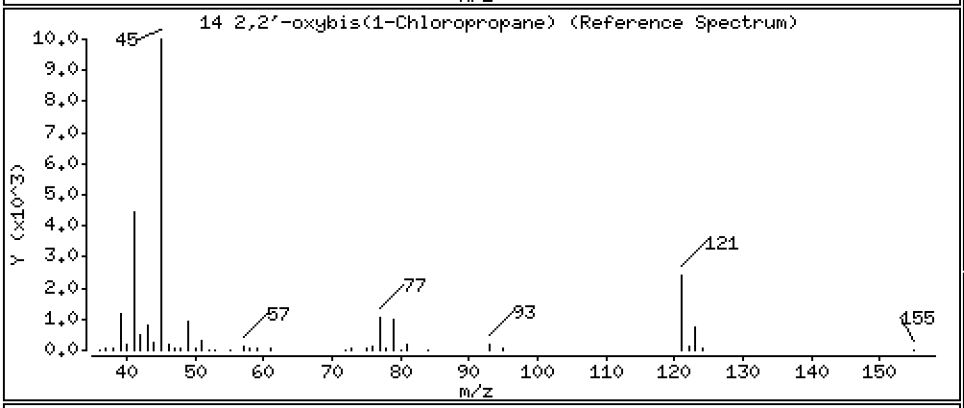
Column diameter: 0.25

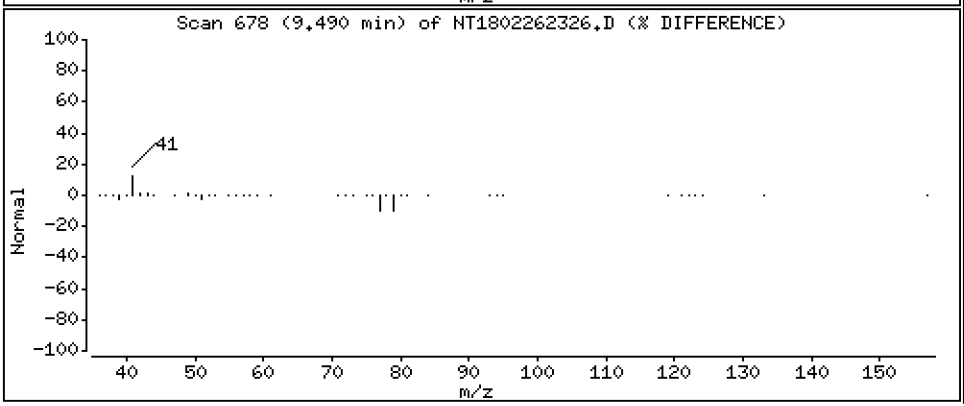
14 2,2'-oxybis(1-Chloropropane)

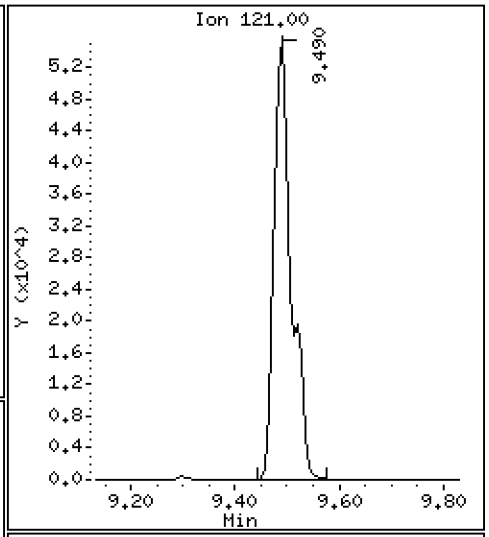
Concentration: 4.635 ug/mL

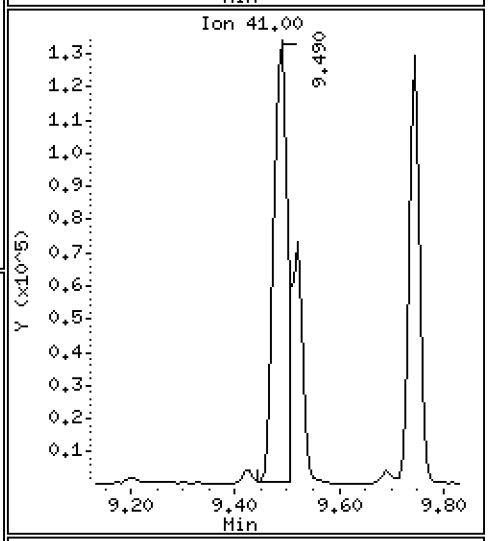


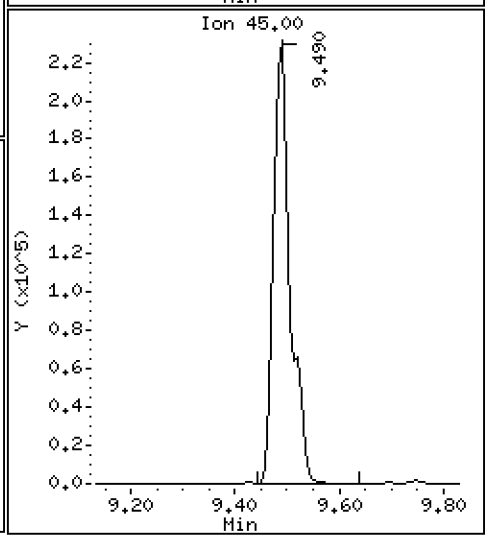












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

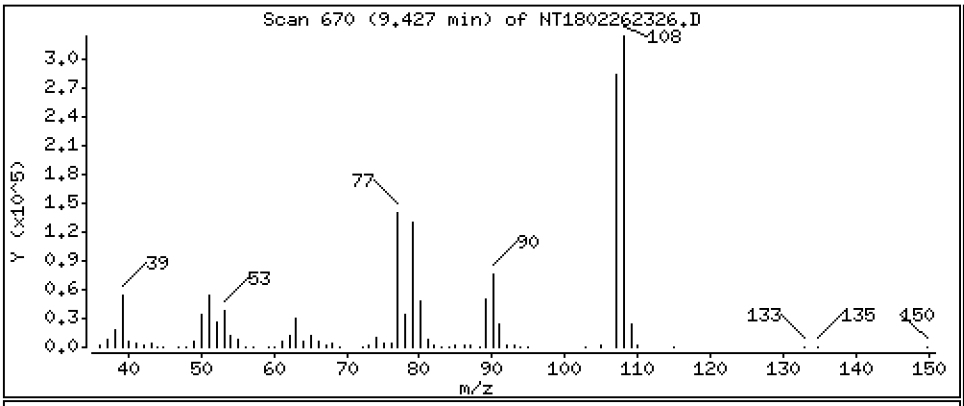
Operator: VTS

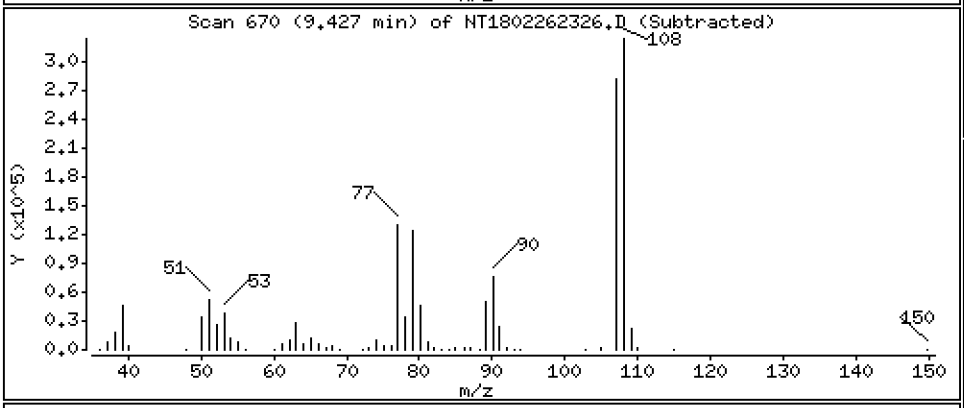
Column phase: ZB-5msi

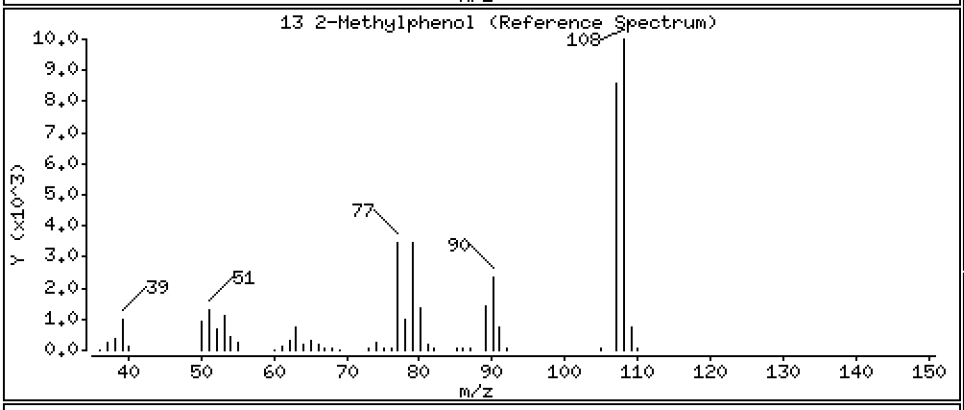
Column diameter: 0.25

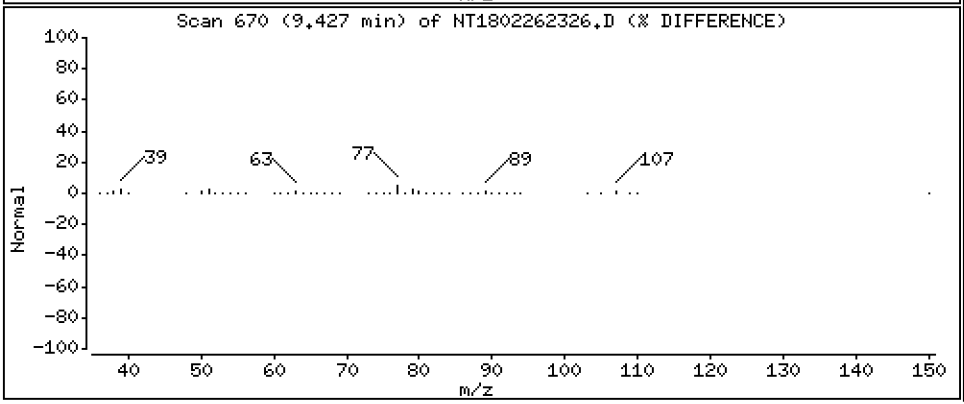
13 2-Methylphenol

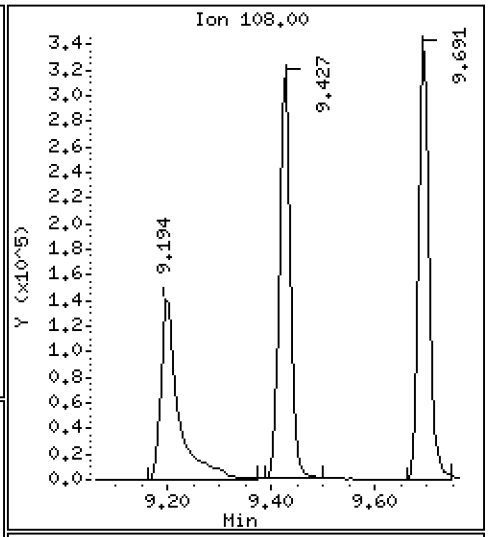
Concentration: 4.748 ug/mL

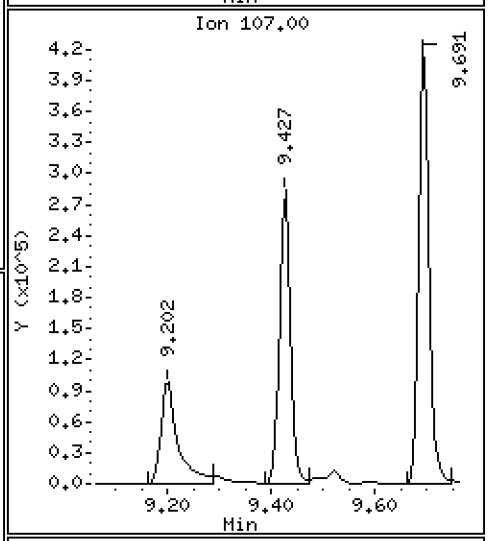


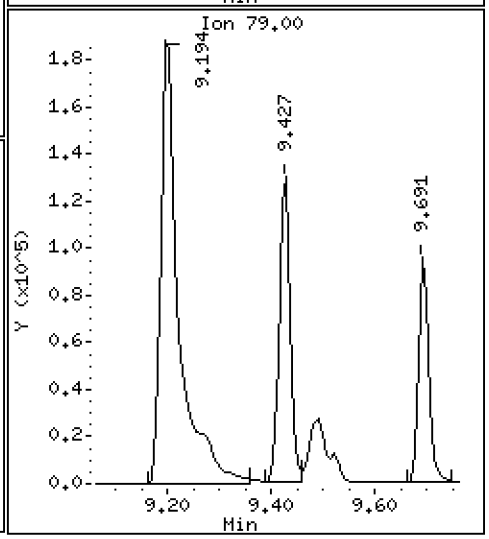












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

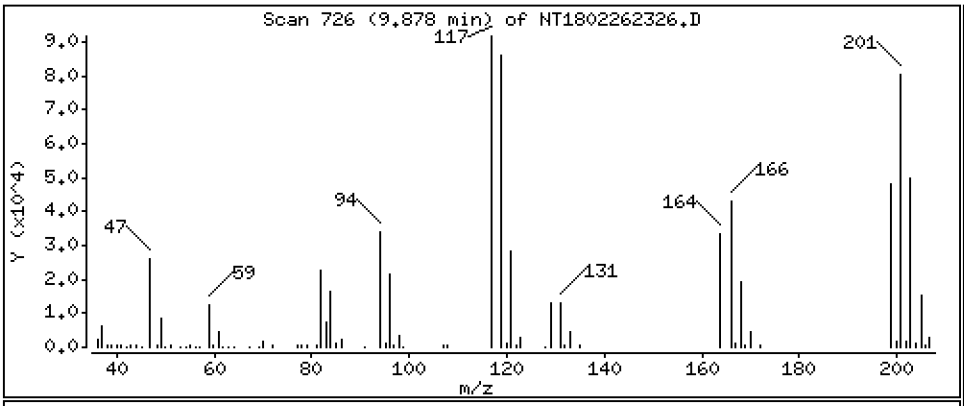
Operator: VTS

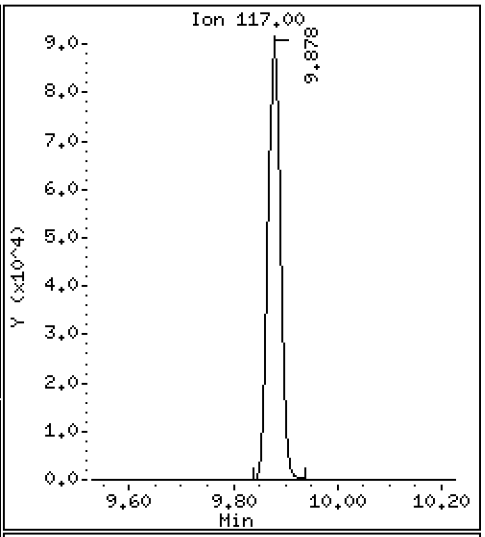
Column phase: ZB-5msi

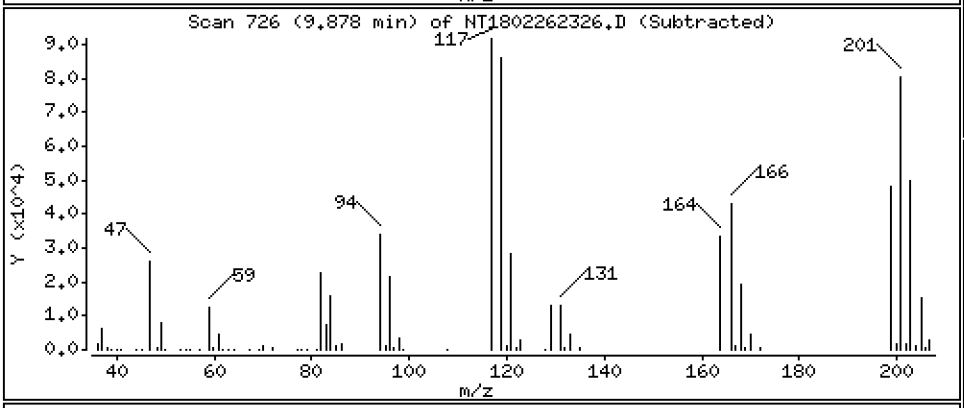
Column diameter: 0.25

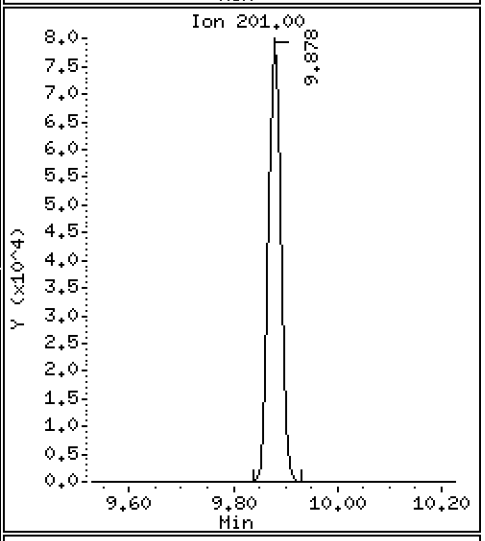
17 Hexachloroethane

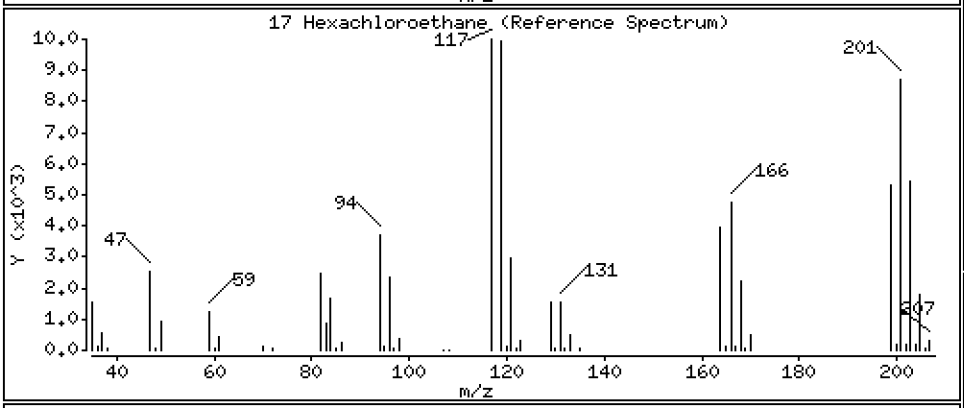
Concentration: 3.065 ug/mL

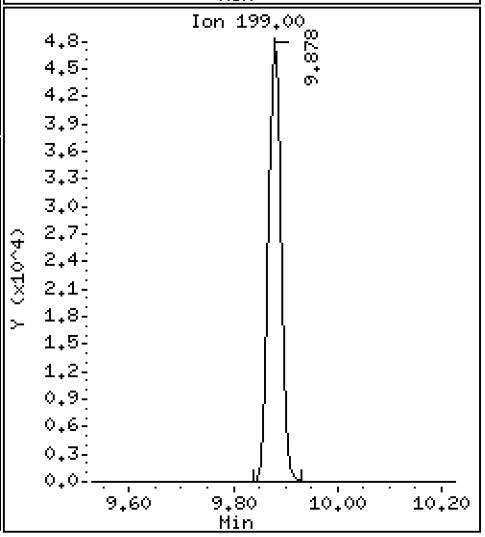


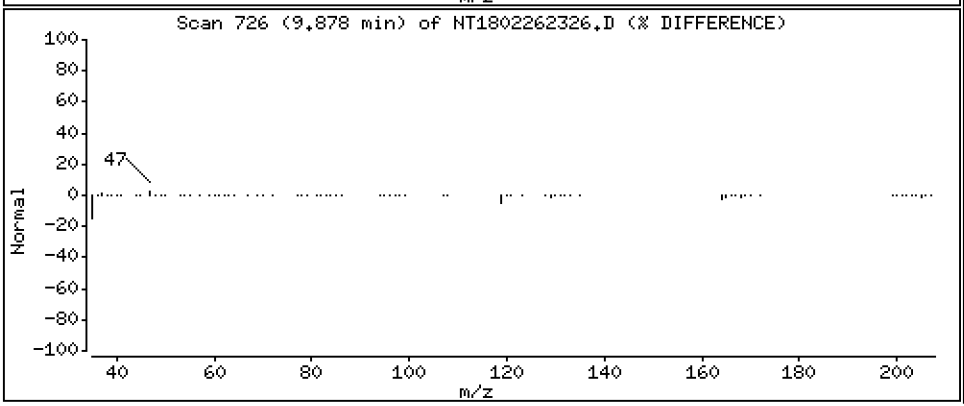












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

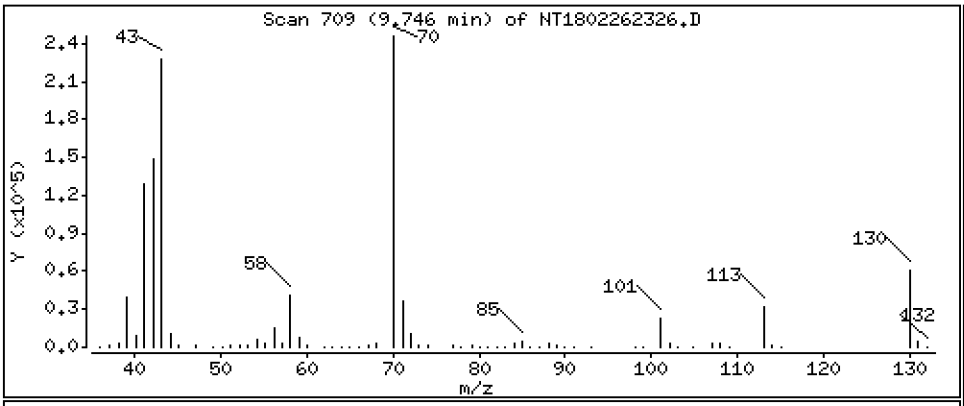
Operator: VTS

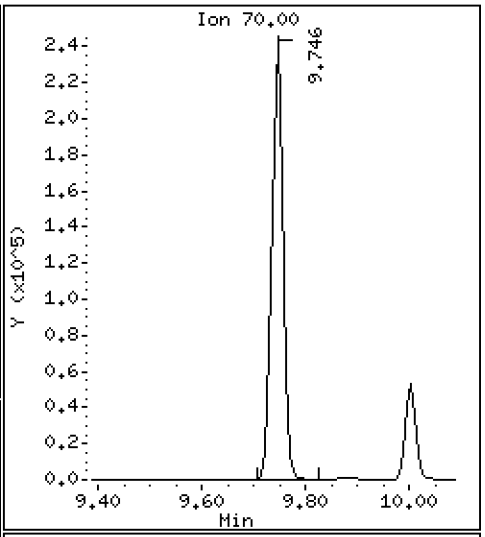
Column phase: ZB-5msi

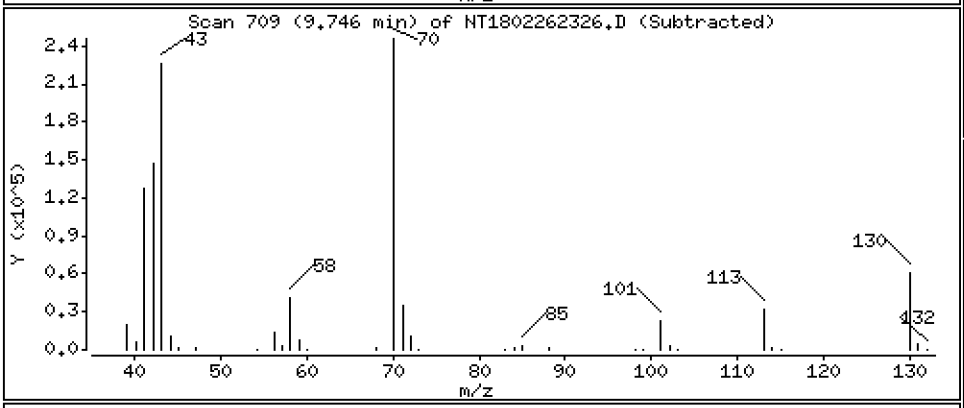
Column diameter: 0.25

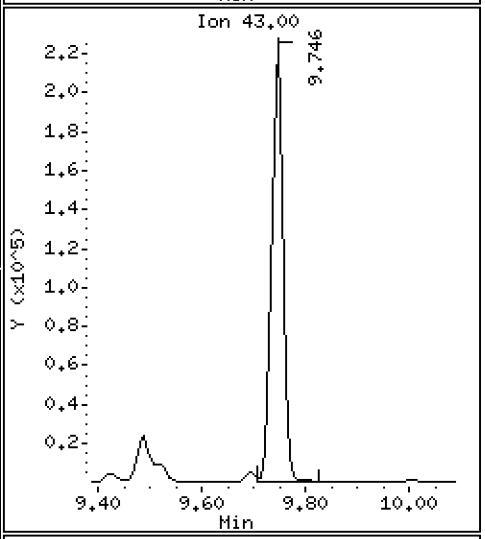
16 N-Nitroso-di-n-propylamine

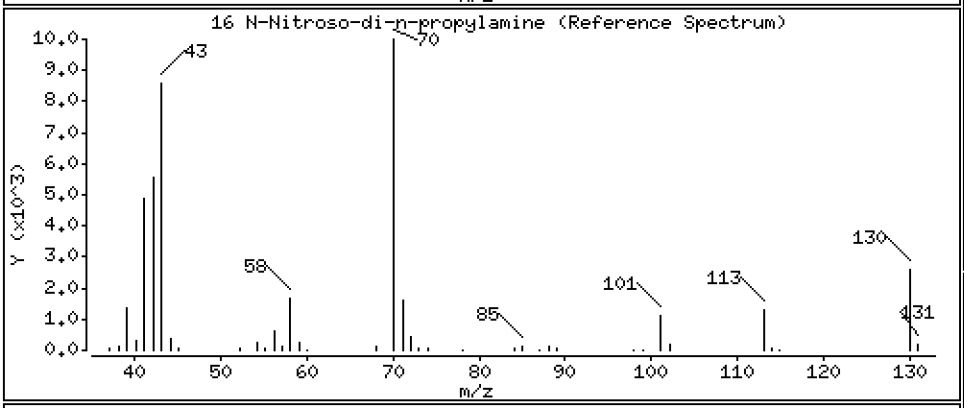
Concentration: 4.767 ug/mL

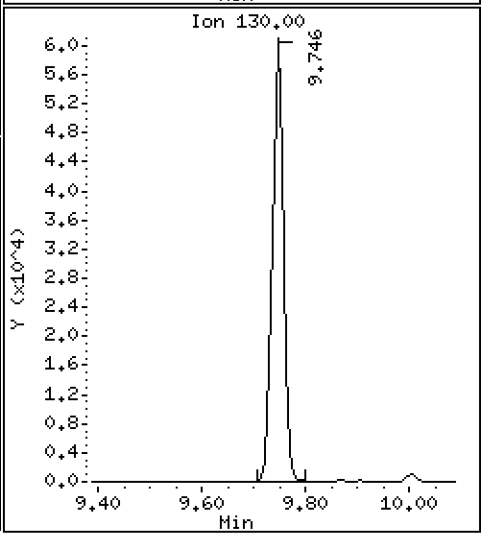


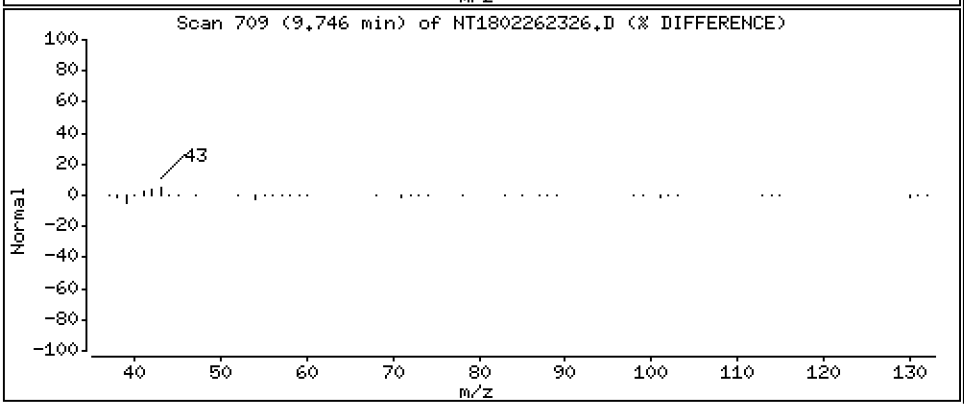












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

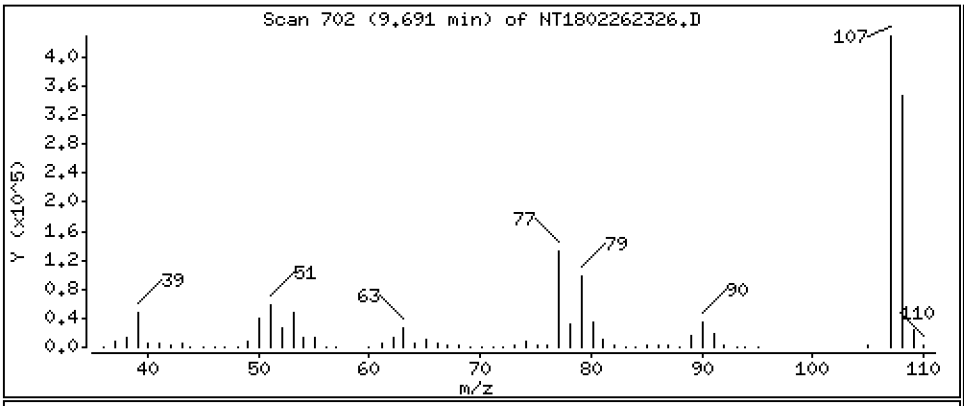
Operator: VTS

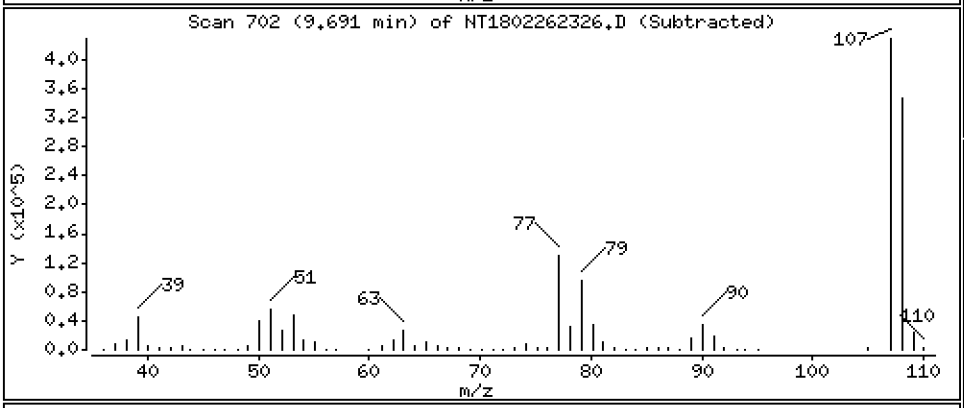
Column phase: ZB-5msi

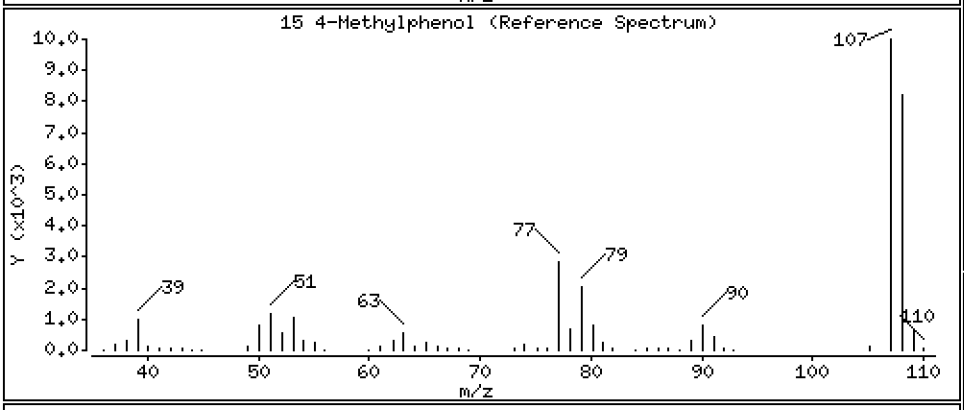
Column diameter: 0.25

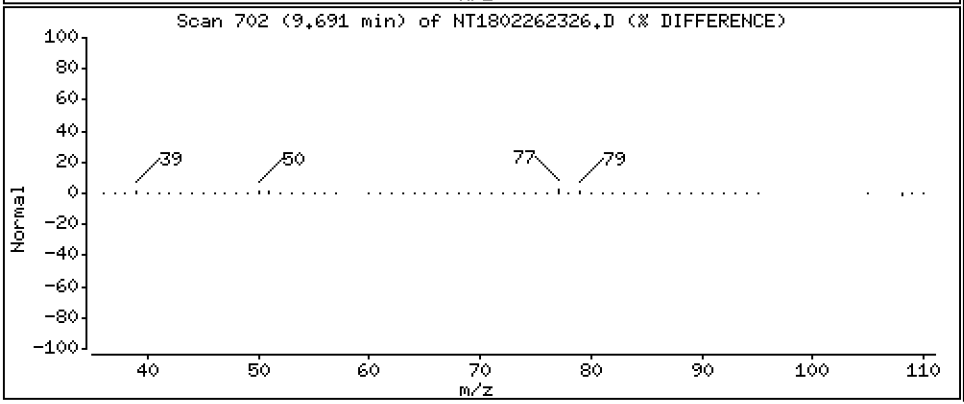
15 4-Methylphenol

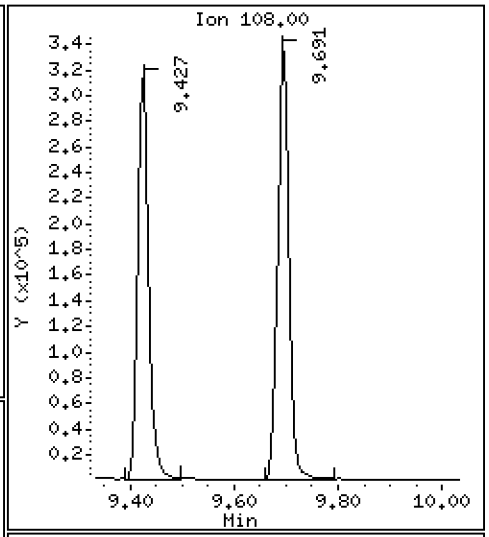
Concentration: 4.830 ug/mL

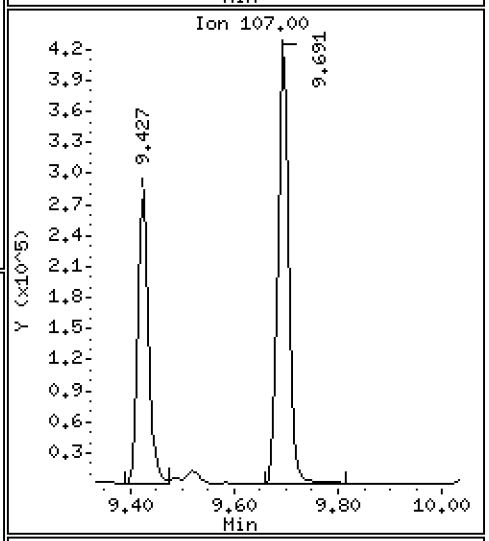


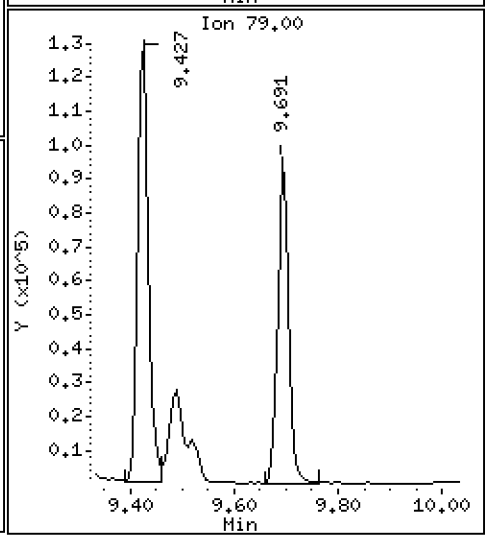












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

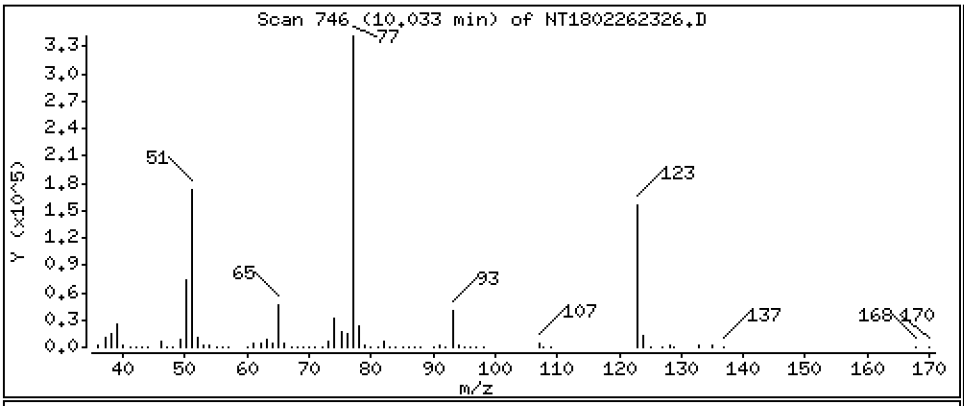
Operator: VTS

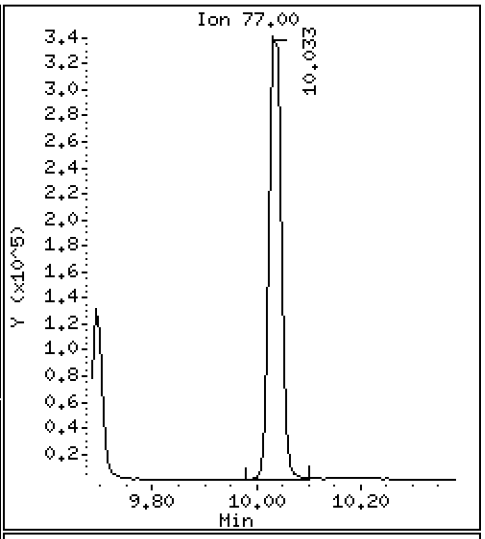
Column phase: ZB-5msi

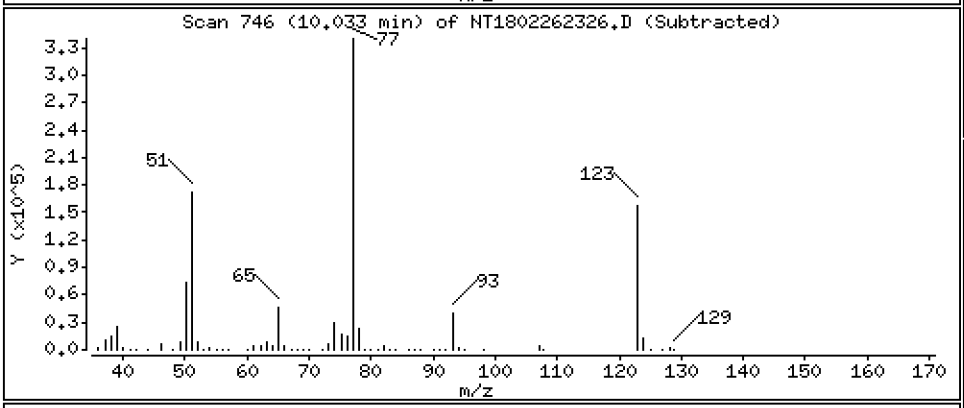
Column diameter: 0.25

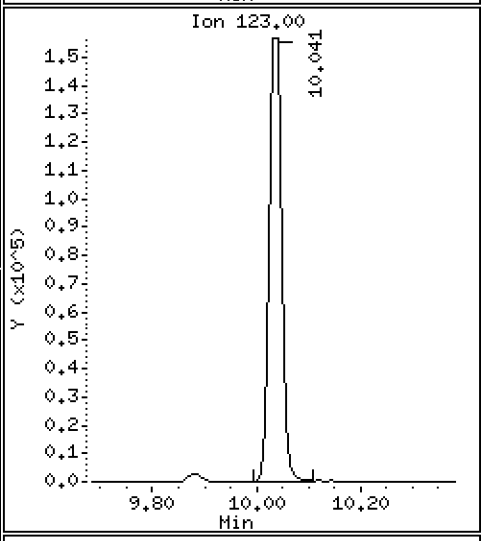
19 Nitrobenzene

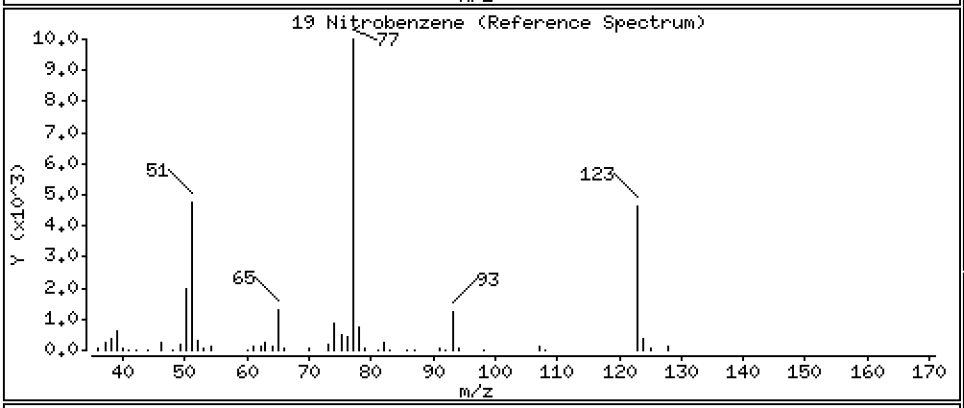
Concentration: 4.753 ug/mL

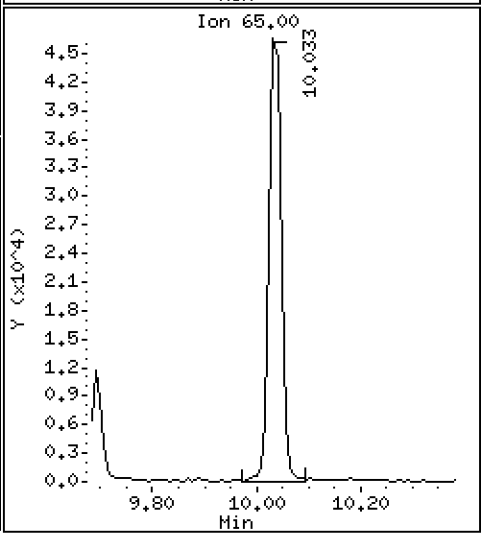


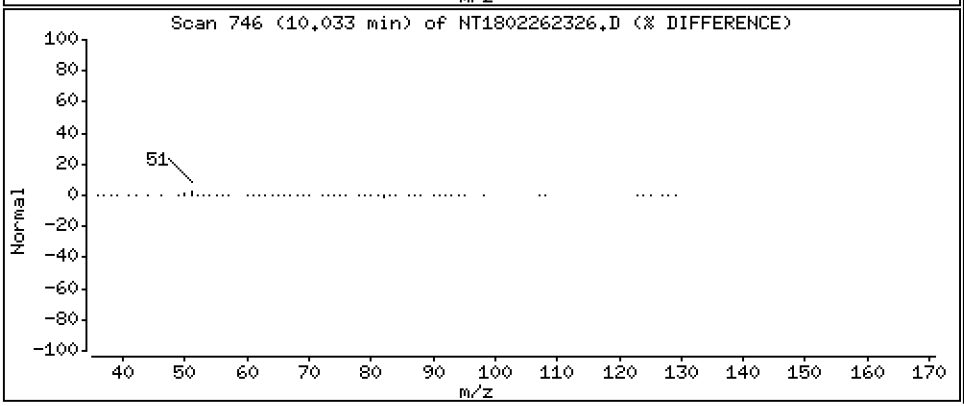












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

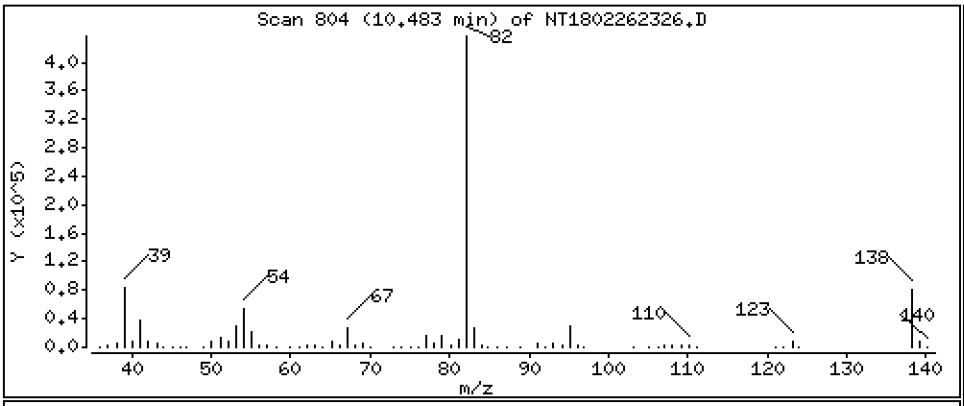
Operator: VTS

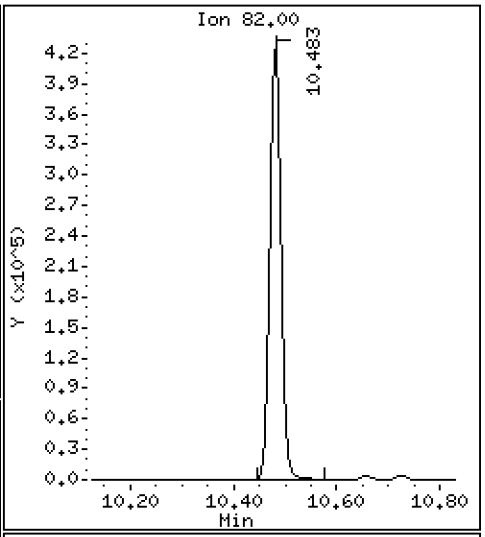
Column phase: ZB-5msi

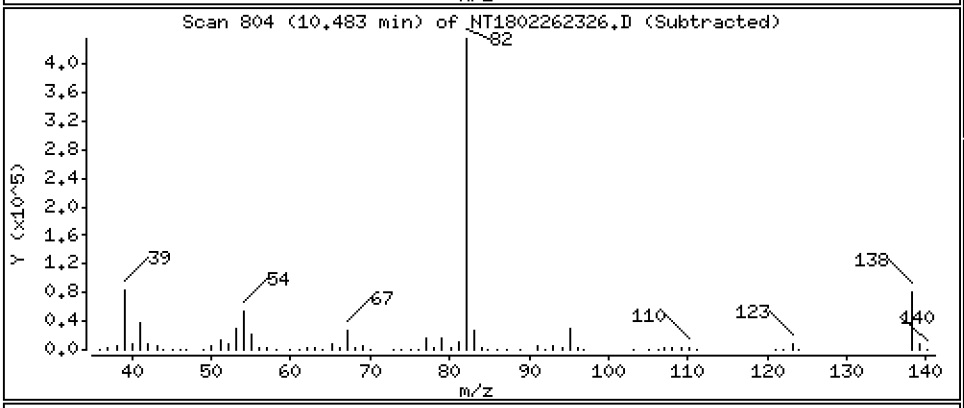
Column diameter: 0.25

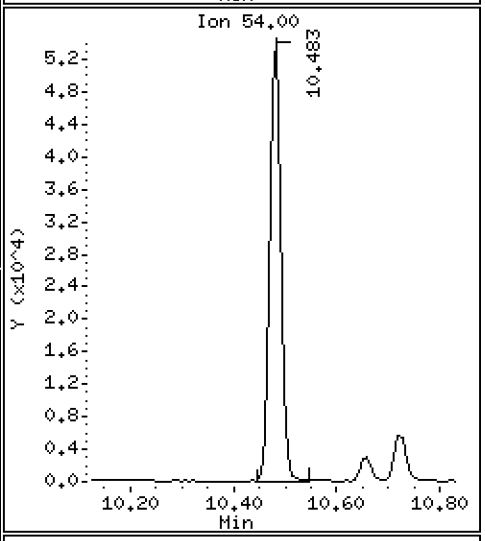
20 Isophorone

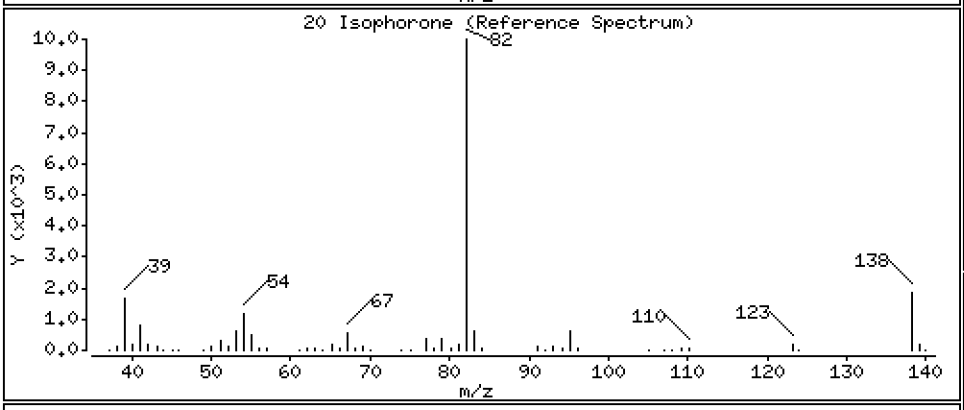
Concentration: 4.779 ug/mL

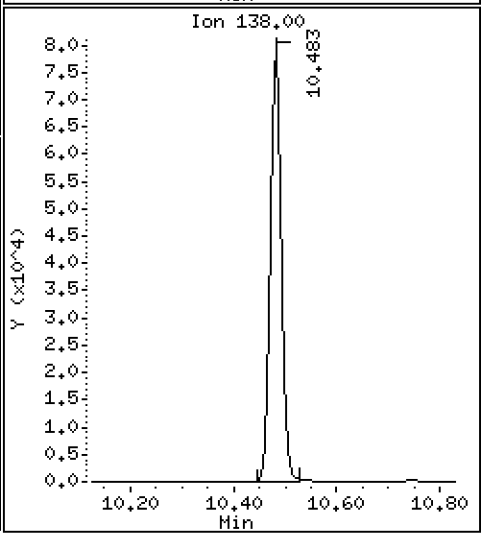


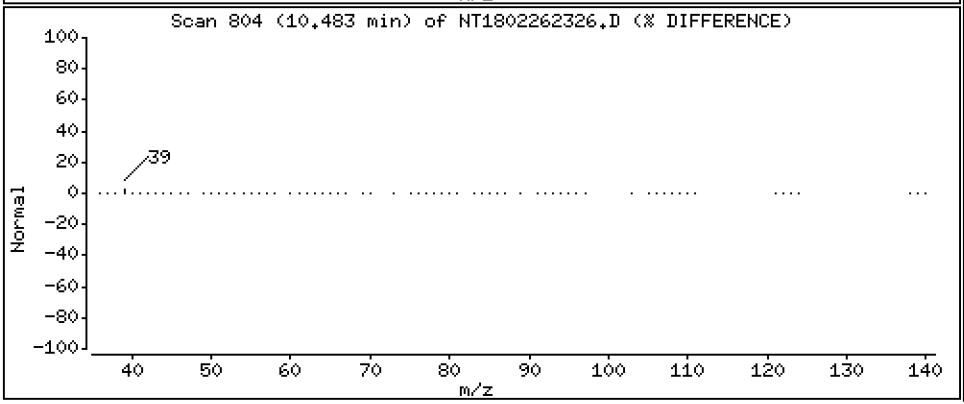












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

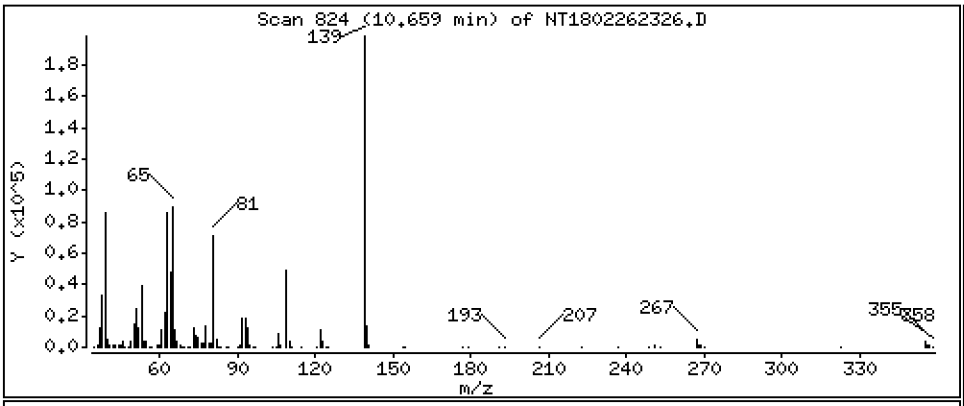
Operator: VTS

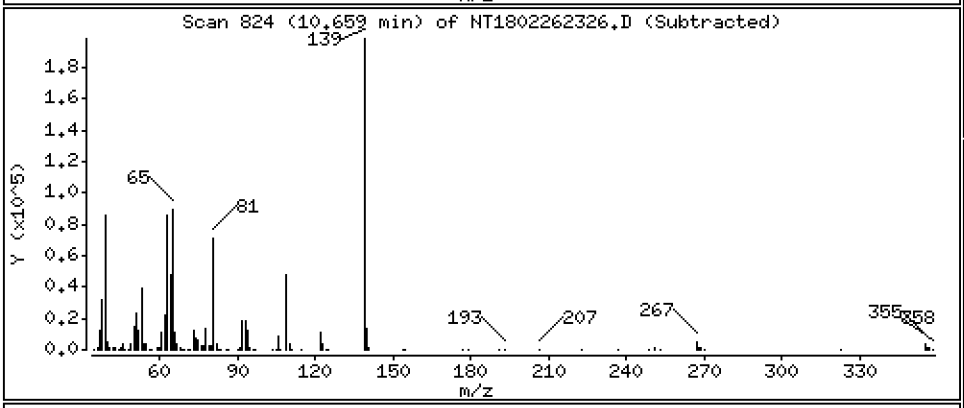
Column phase: ZB-5msi

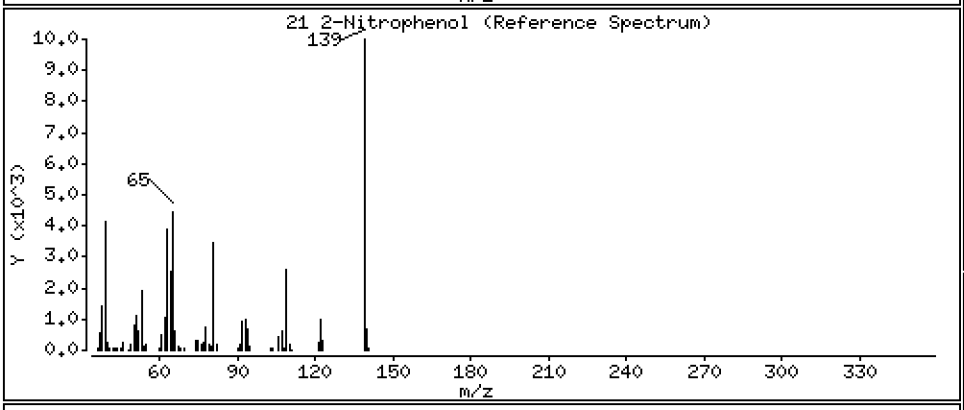
Column diameter: 0.25

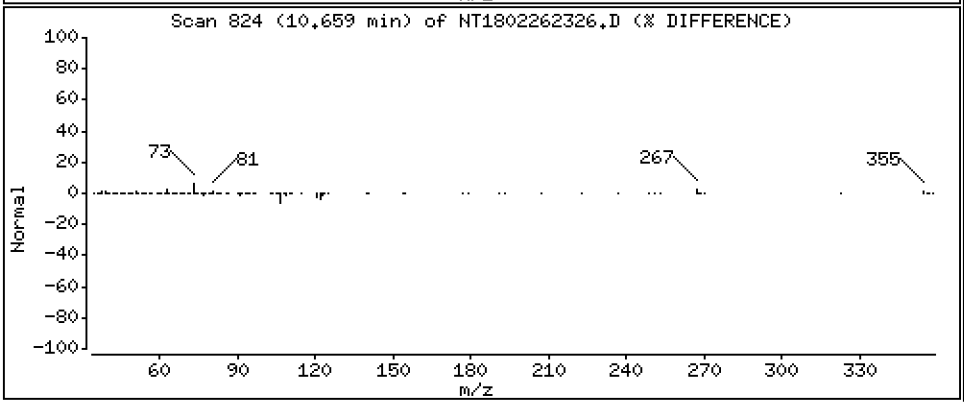
21 2-Nitrophenol

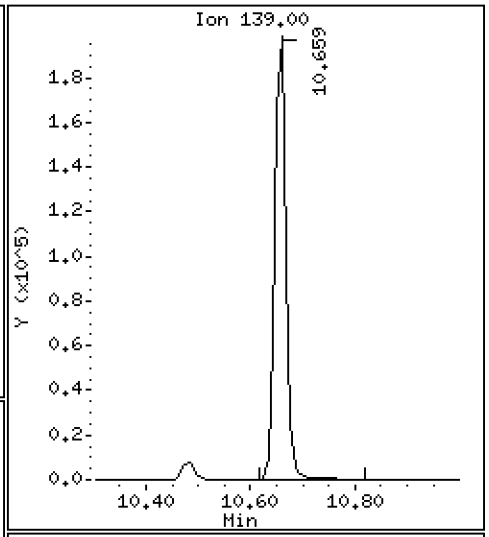
Concentration: 5.406 ug/mL

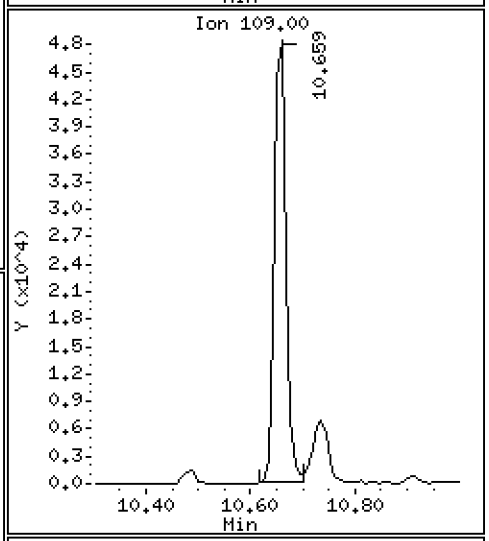


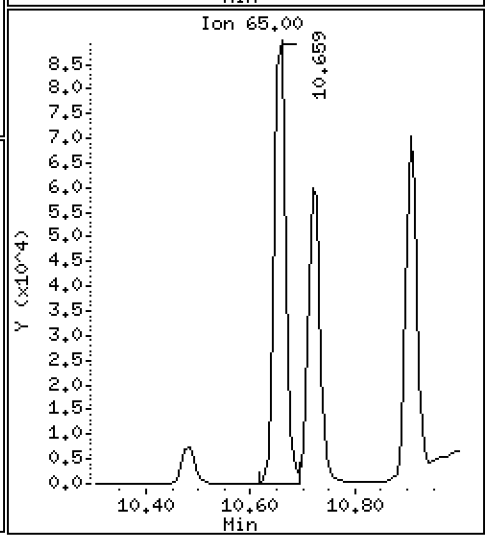












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

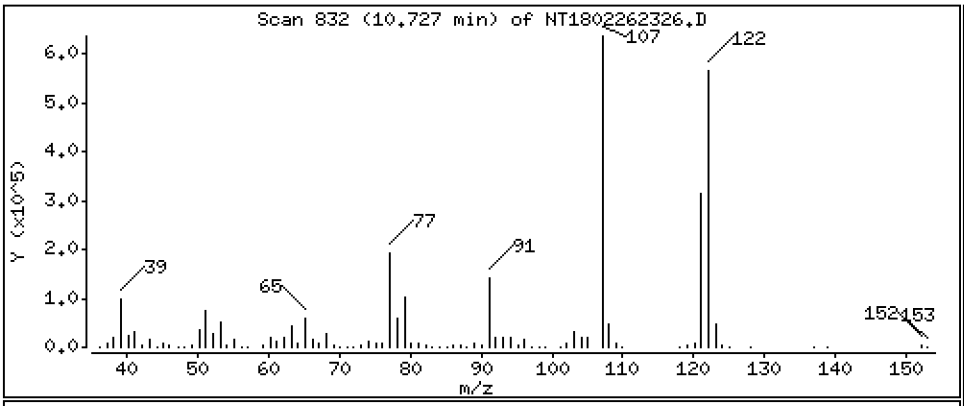
Operator: VTS

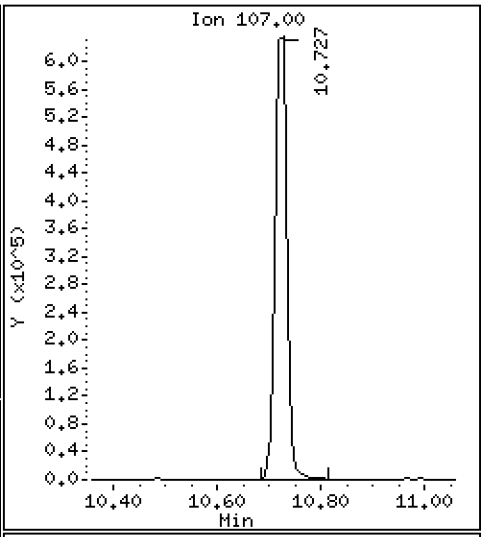
Column phase: ZB-5msi

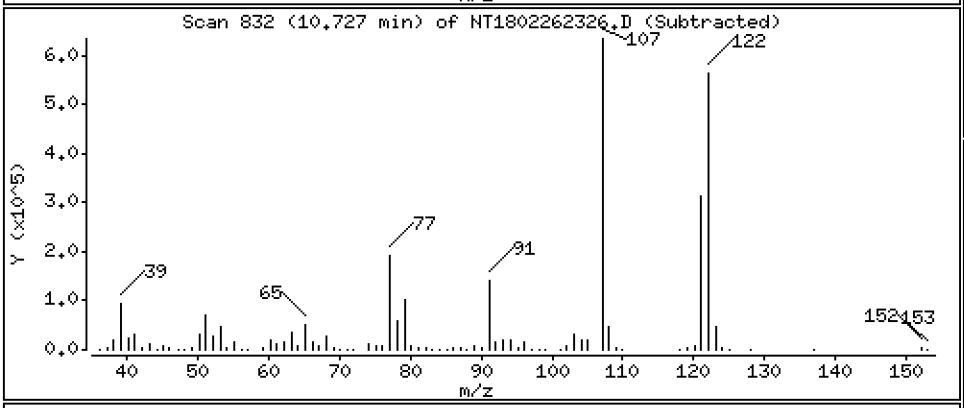
Column diameter: 0.25

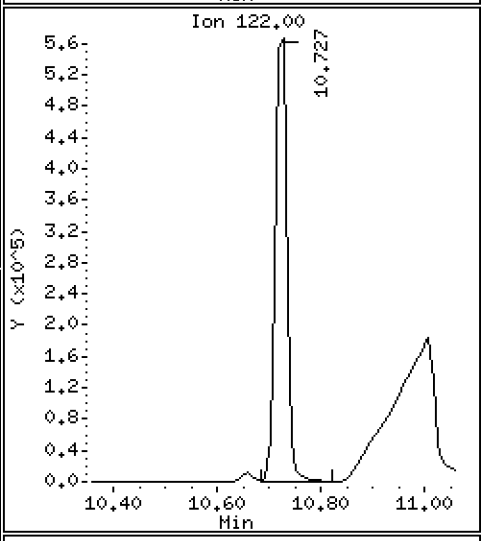
22 2,4-Dimethylphenol

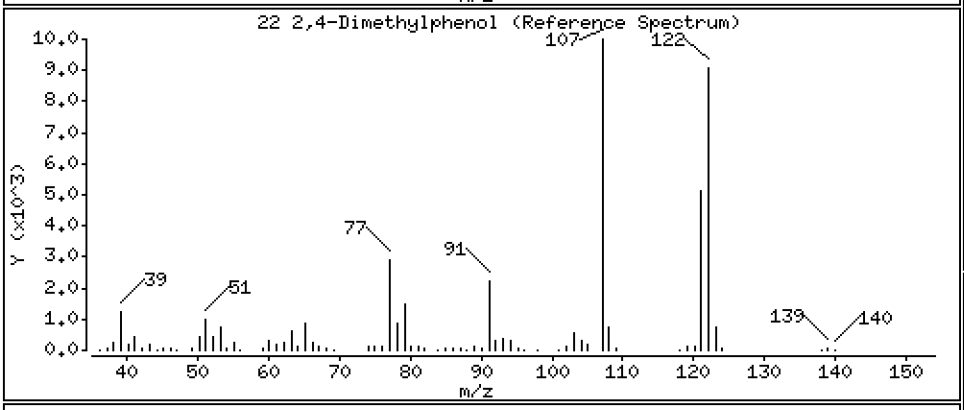
Concentration: 9.715 ug/mL

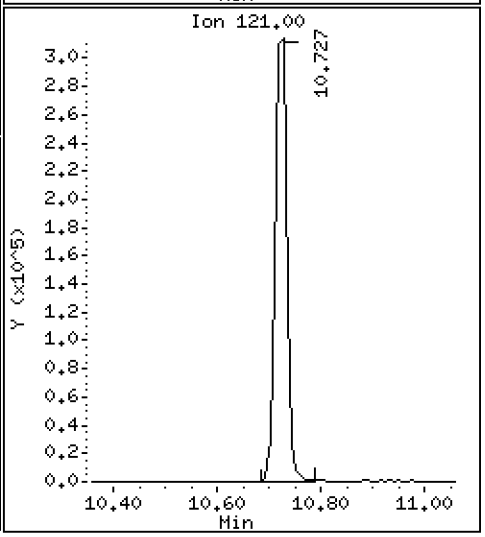


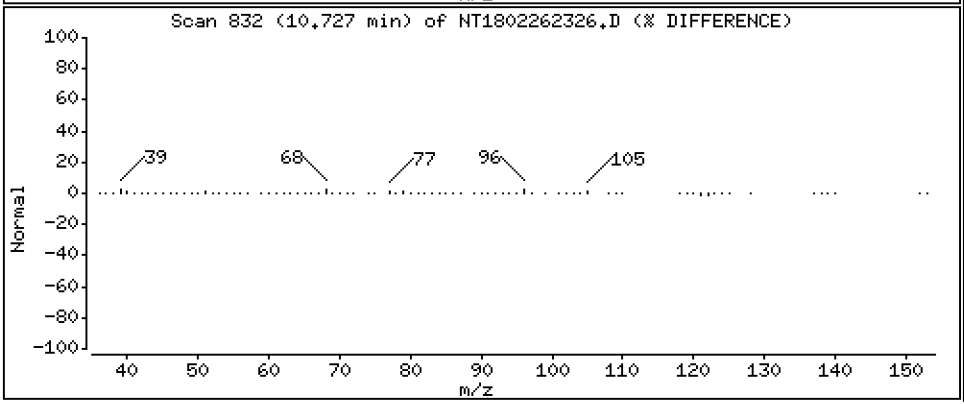












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

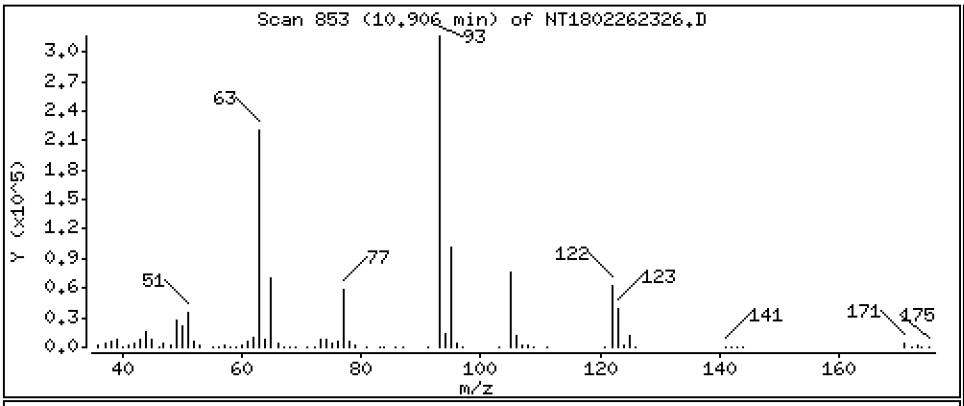
Operator: VTS

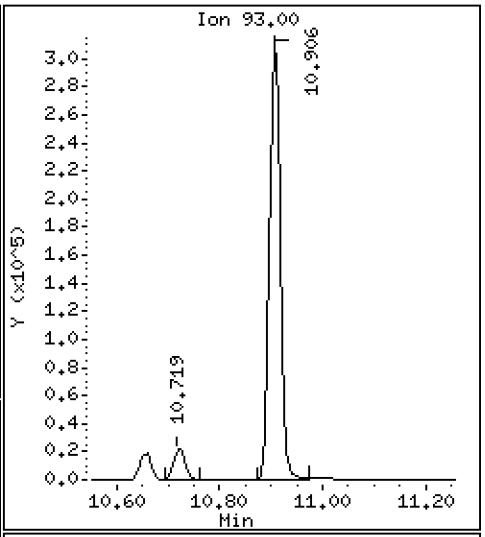
Column phase: ZB-5msi

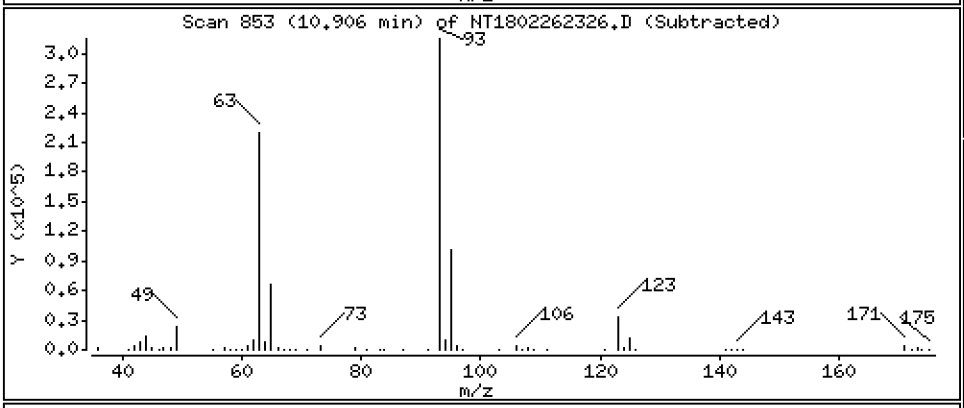
Column diameter: 0.25

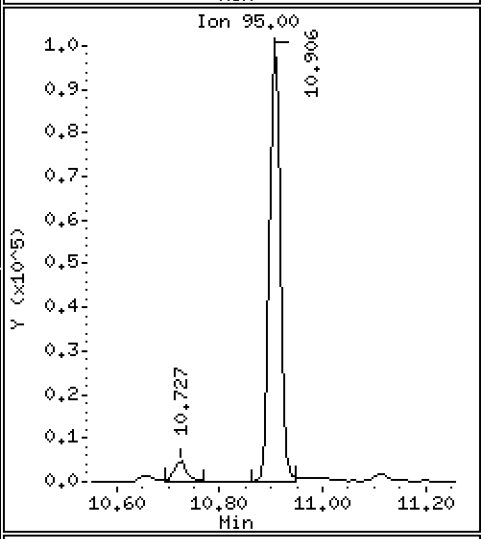
23 Bis(2-Chloroethoxy)methane

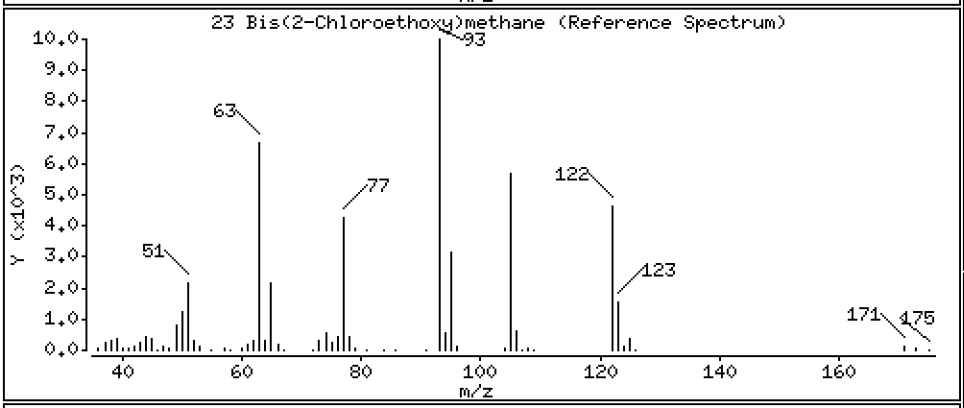
Concentration: 4.758 ug/mL

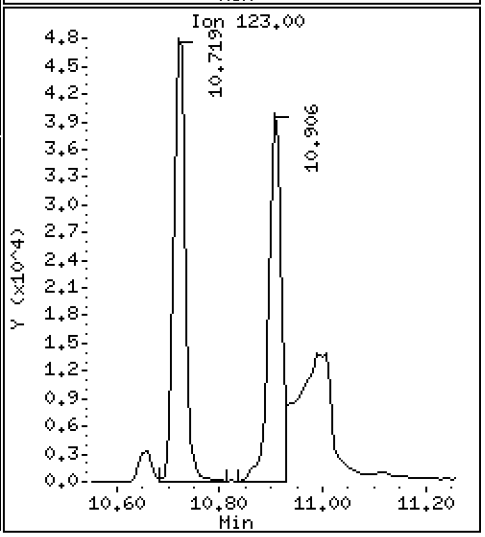


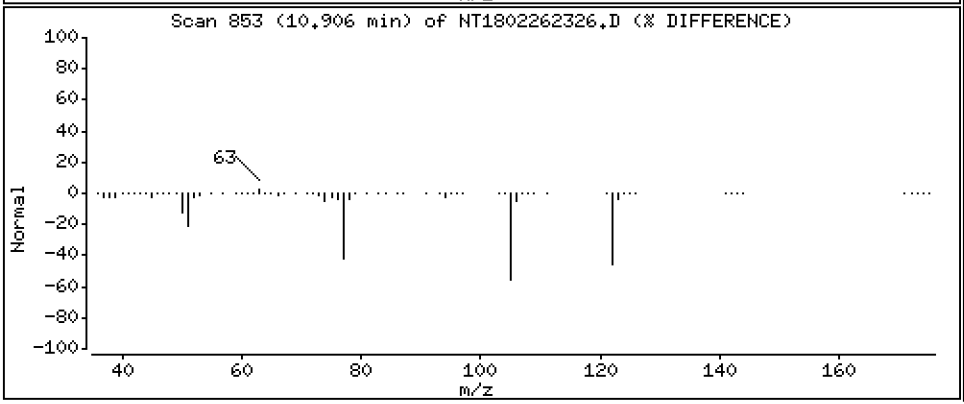












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

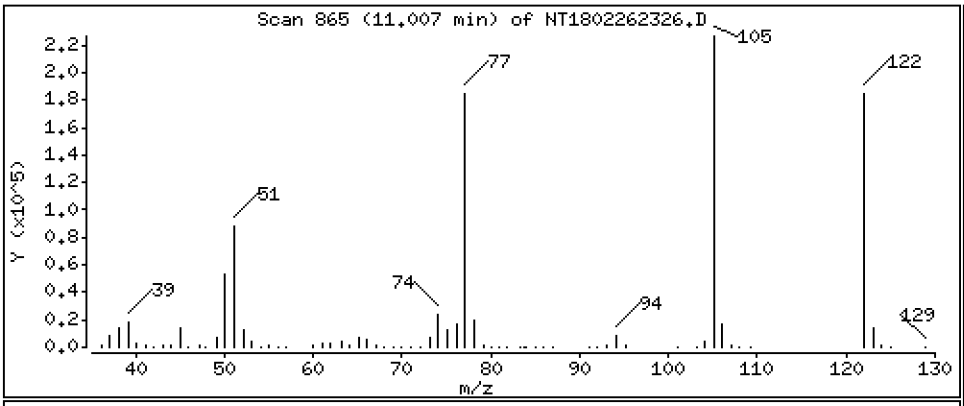
Operator: VTS

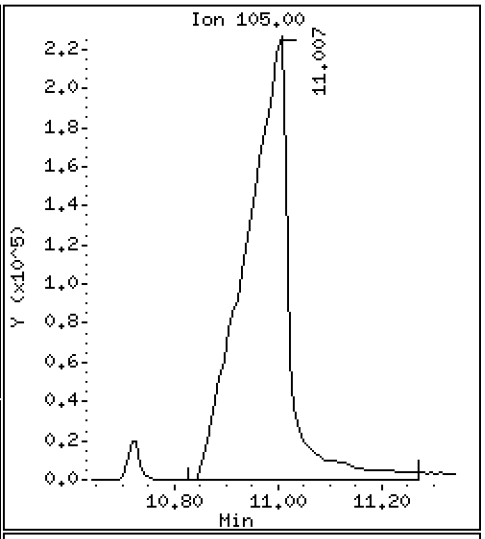
Column phase: ZB-5msi

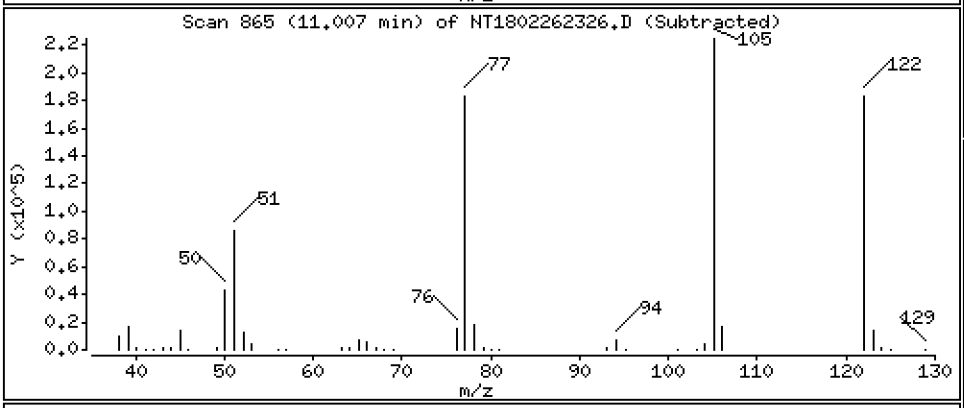
Column diameter: 0.25

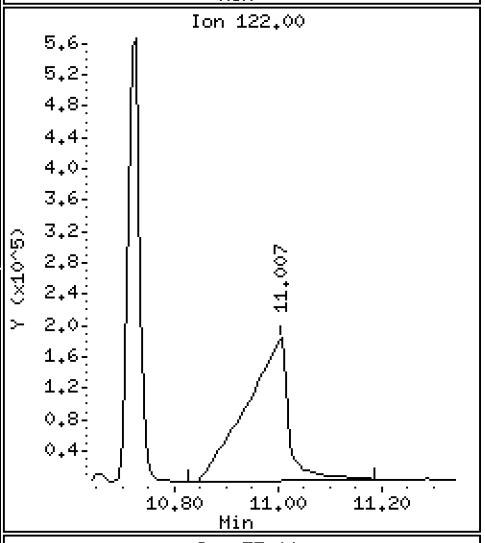
24 Benzoic acid

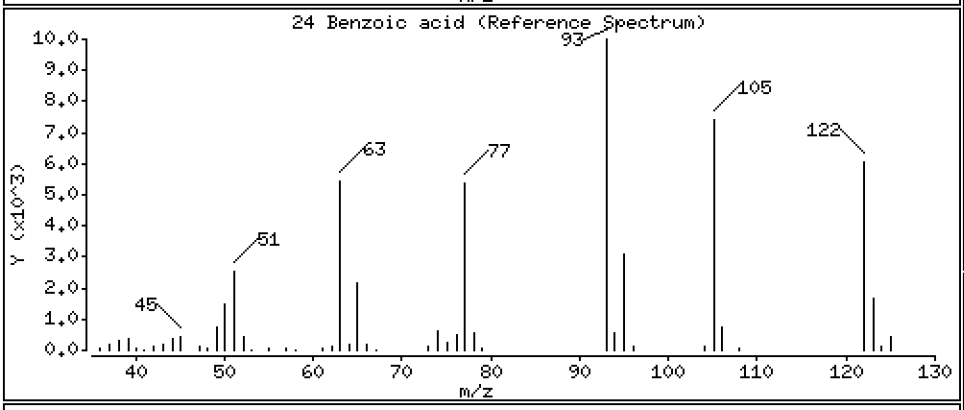
Concentration: 31.70 ug/mL

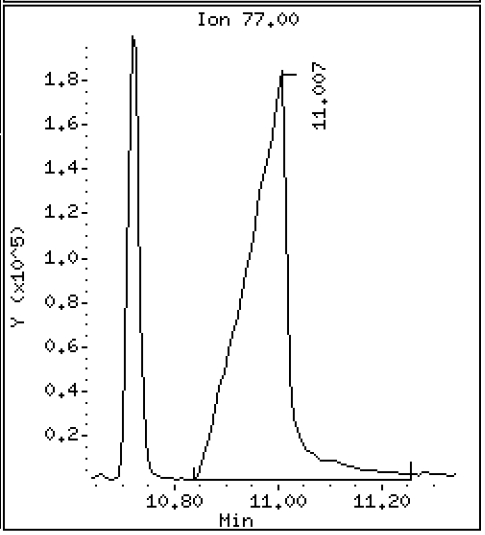


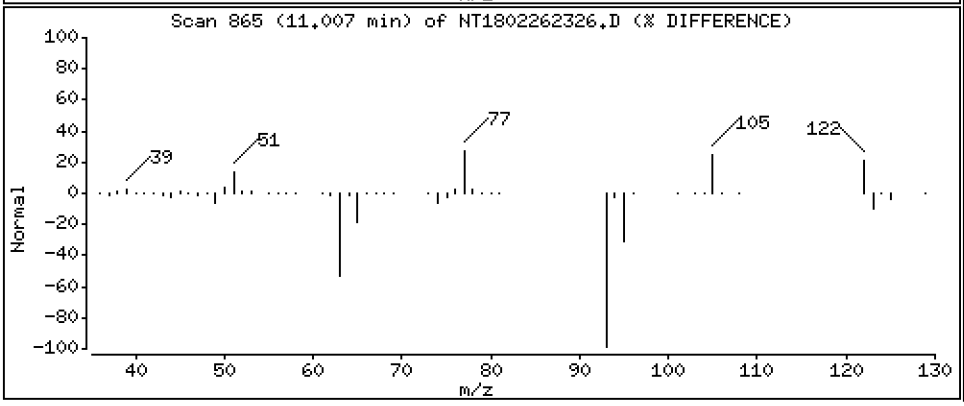












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

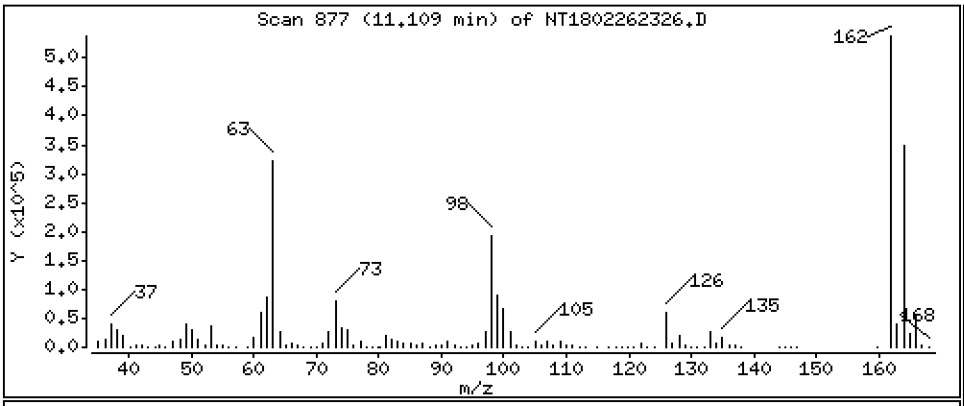
Operator: VTS

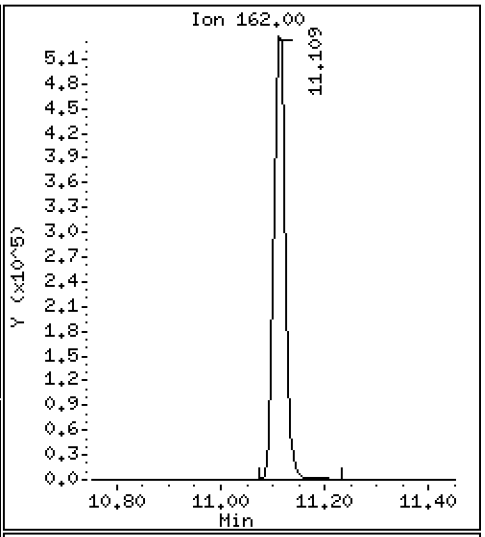
Column phase: ZB-5msi

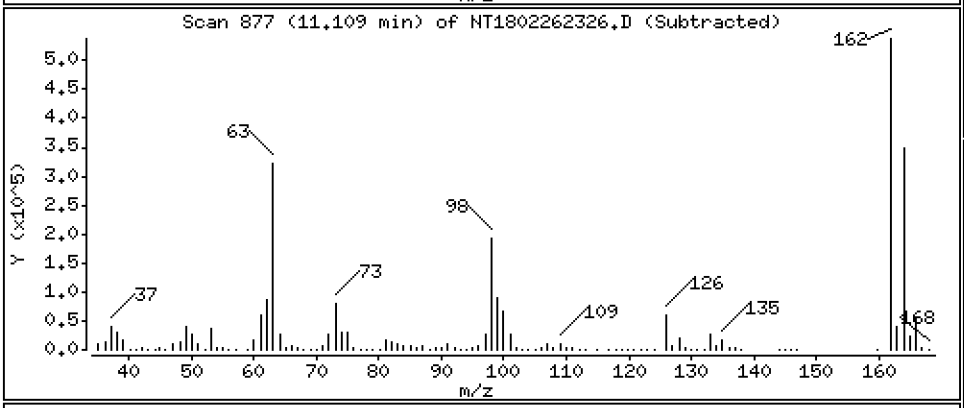
Column diameter: 0.25

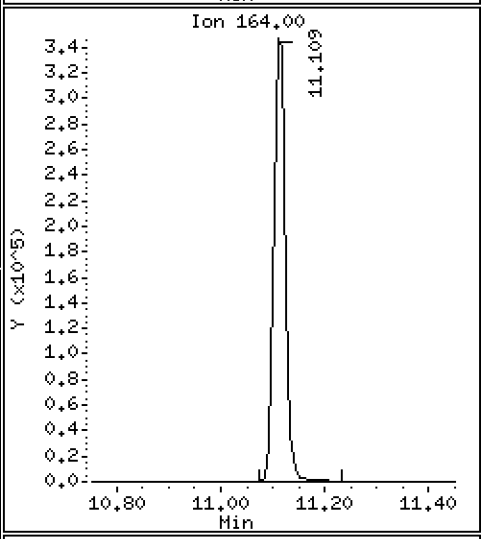
25 2,4-Dichlorophenol

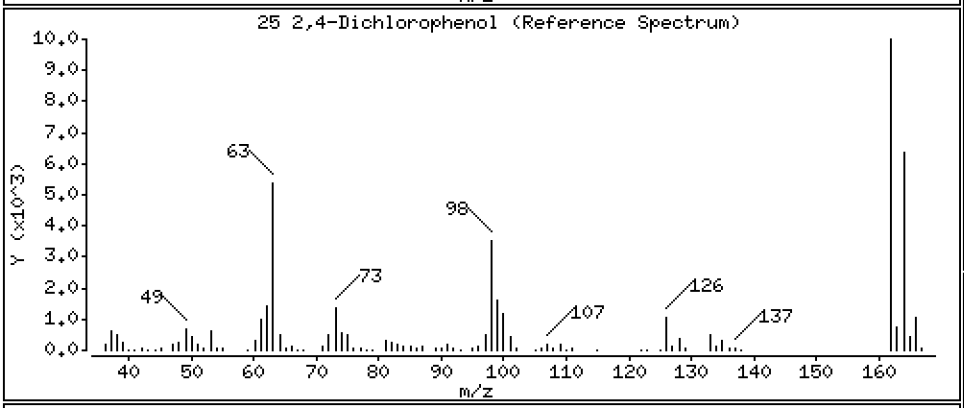
Concentration: 10.39 ug/mL

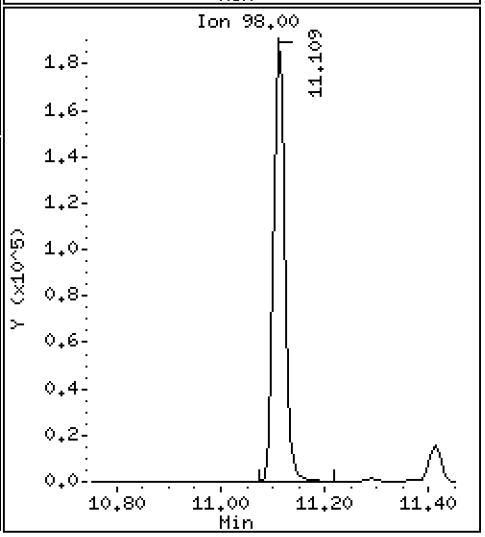


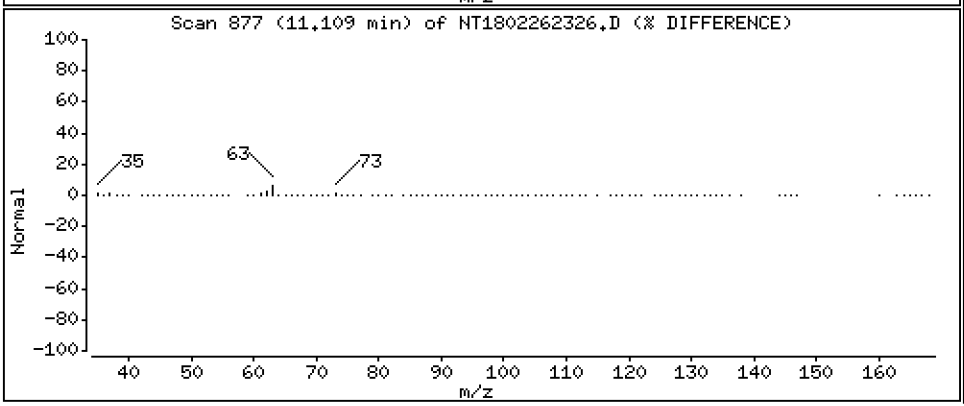












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

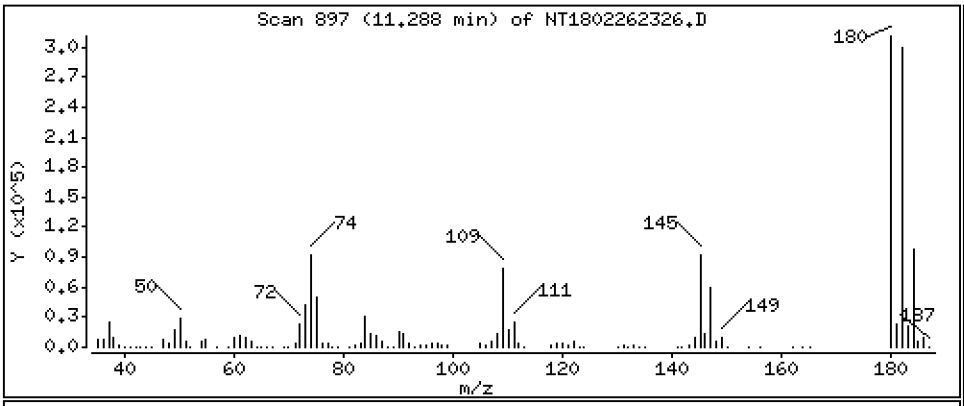
Operator: VTS

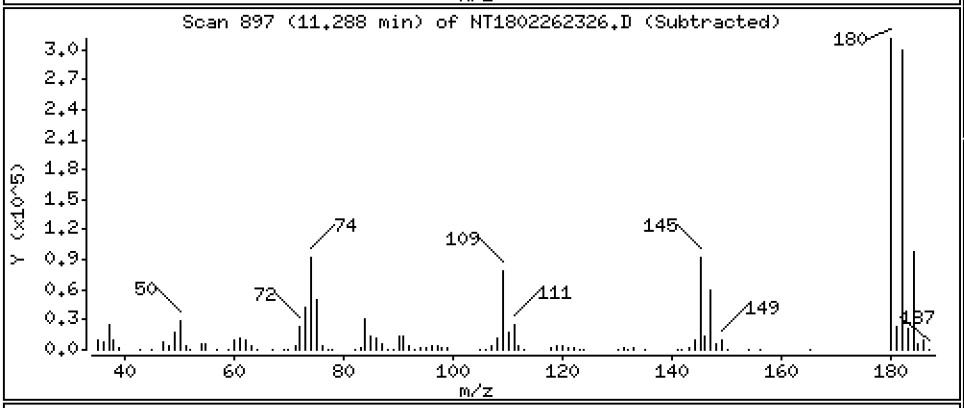
Column phase: ZB-5msi

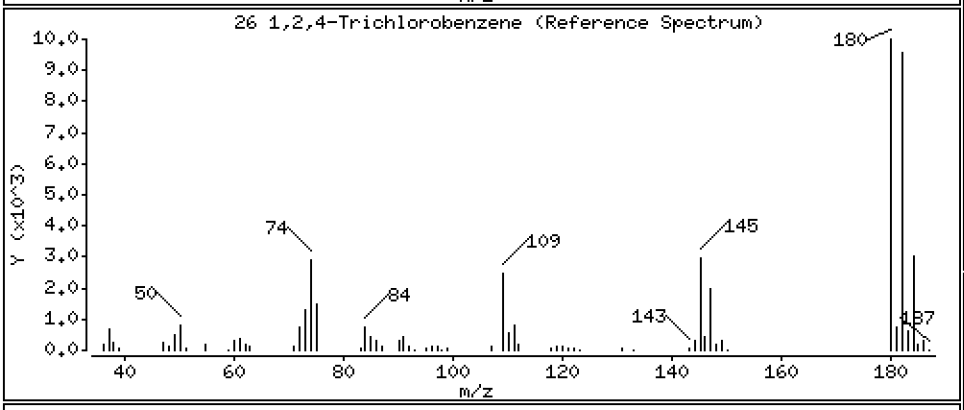
Column diameter: 0.25

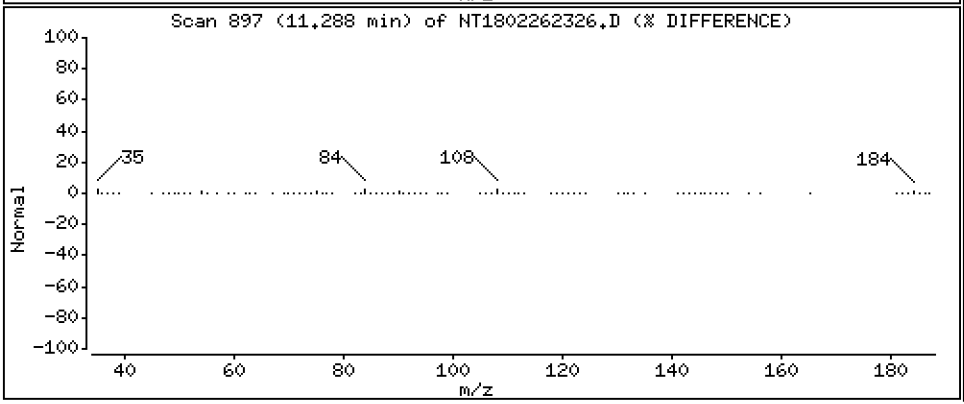
26 1,2,4-Trichlorobenzene

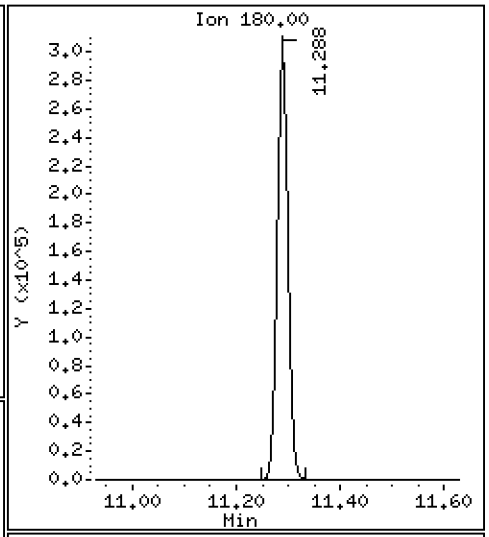
Concentration: 4.680 ug/mL

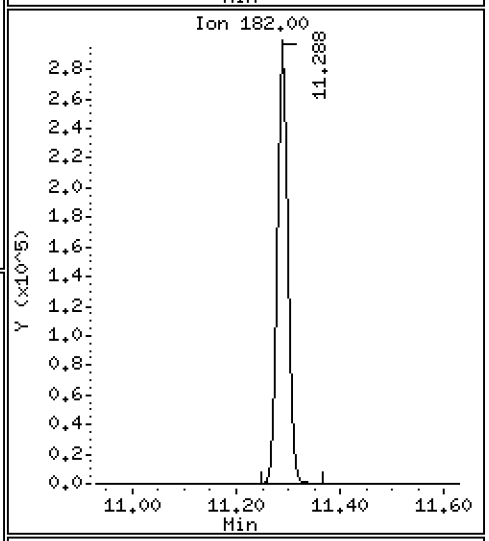


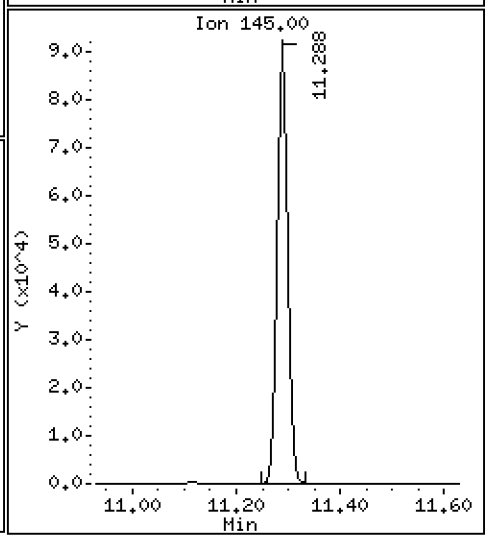












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

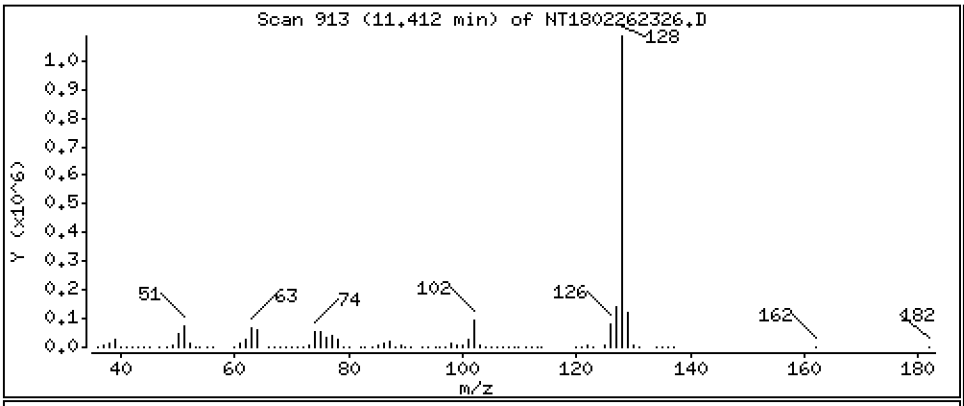
Operator: VTS

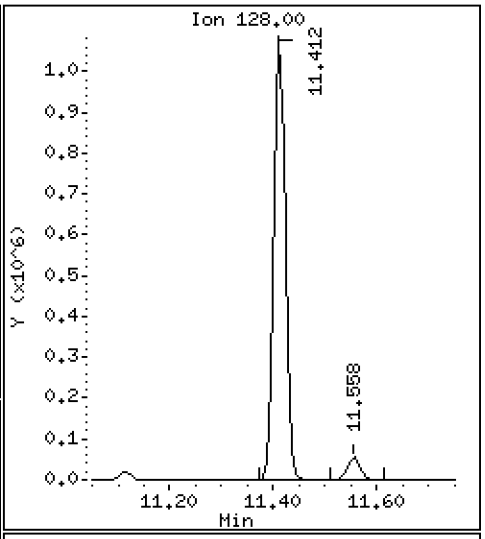
Column phase: ZB-5msi

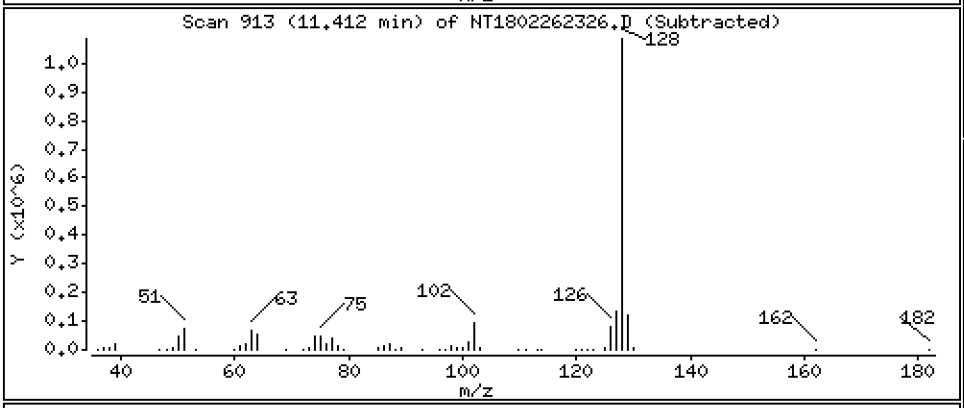
Column diameter: 0.25

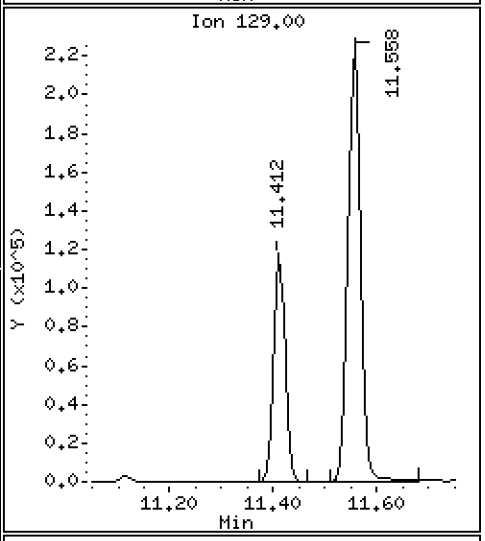
28 Naphthalene

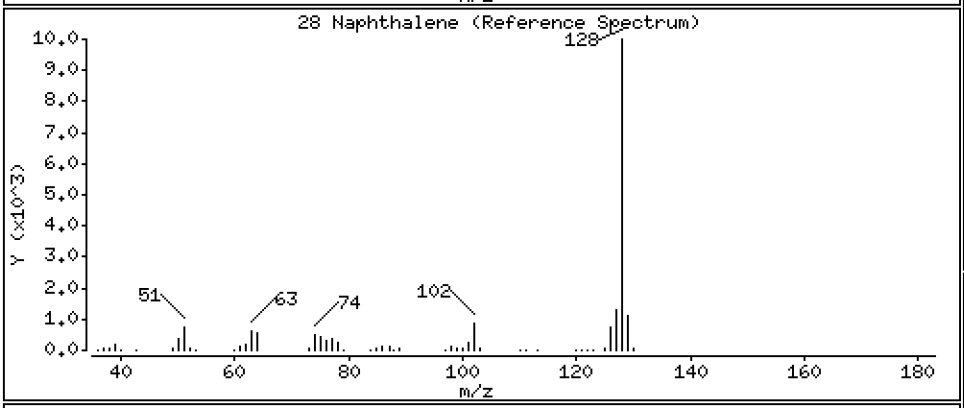
Concentration: 4.670 ug/mL

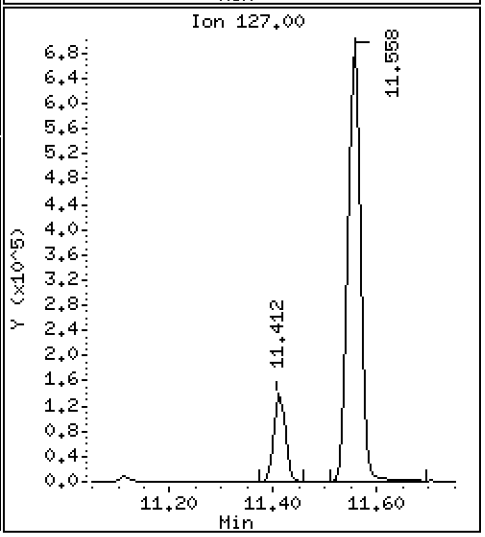


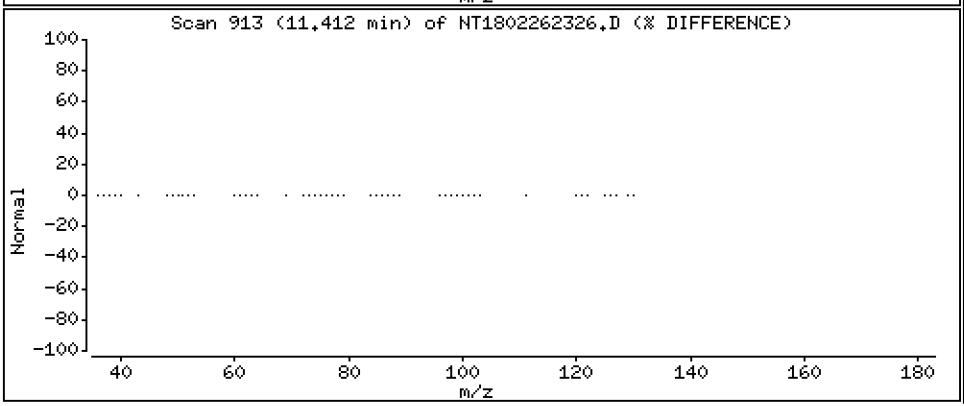












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

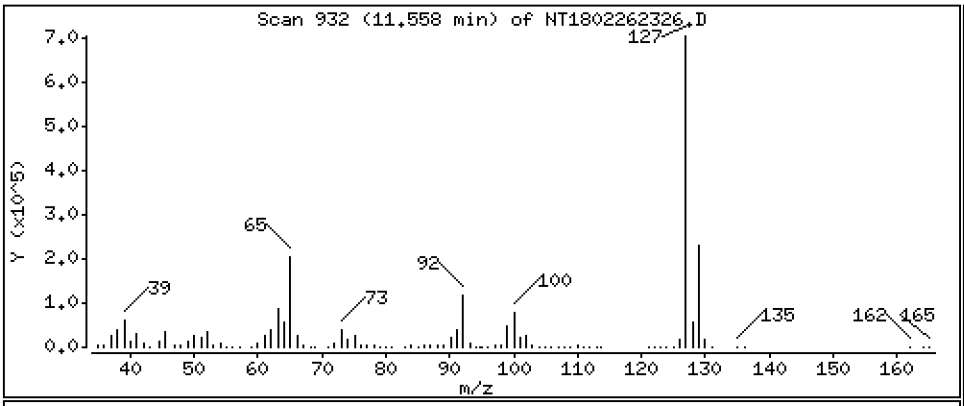
Operator: VTS

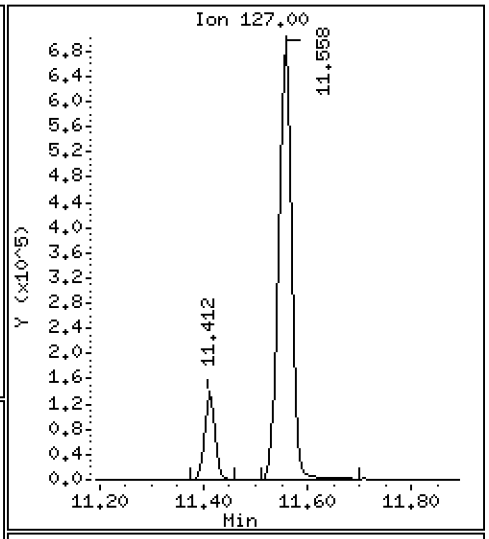
Column phase: ZB-5msi

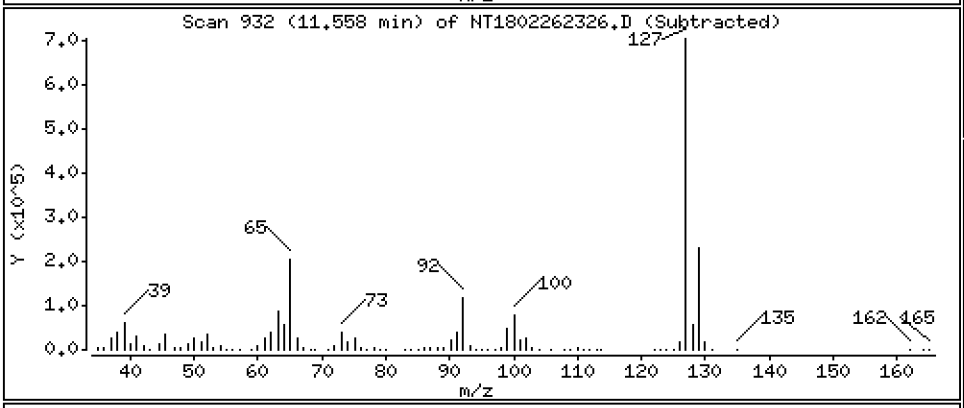
Column diameter: 0.25

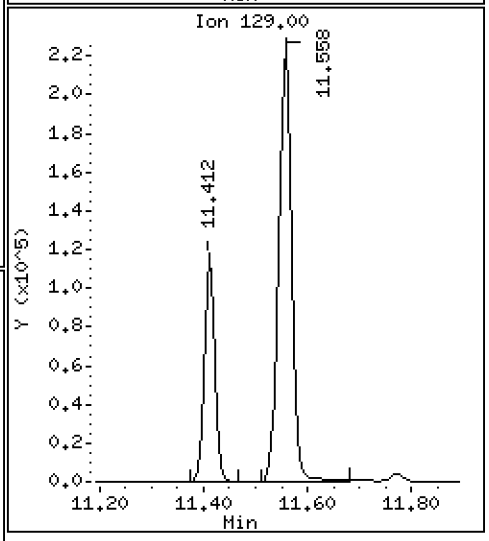
29 4-Chloroaniline

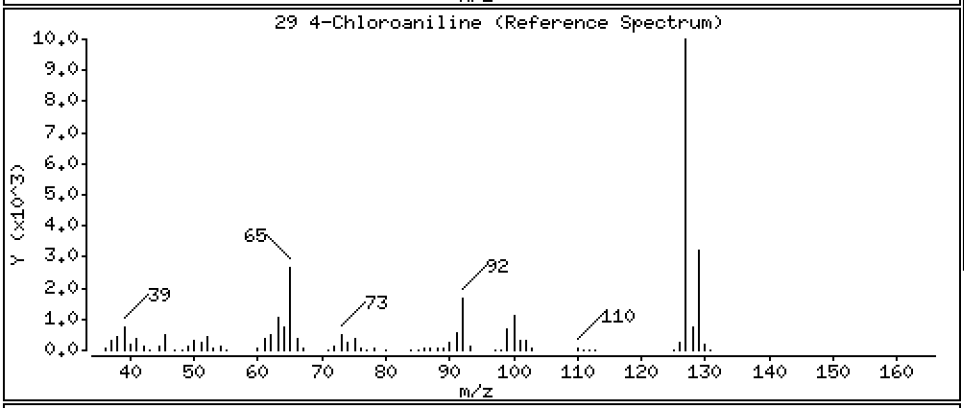
Concentration: 10.29 ug/mL

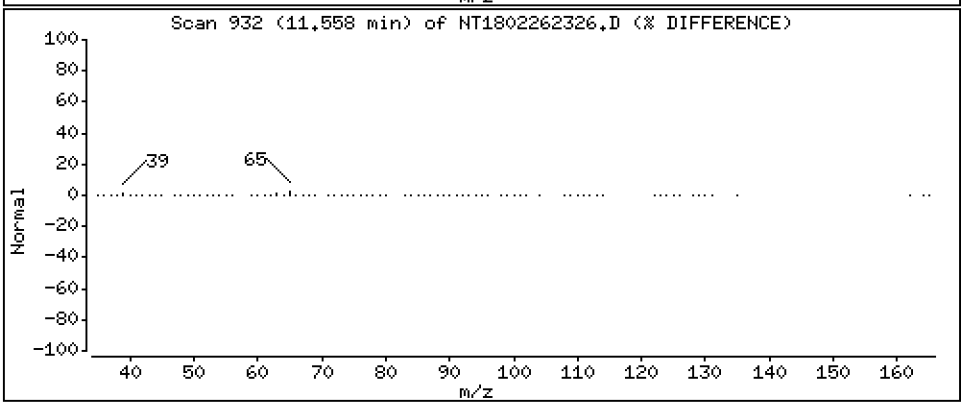












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

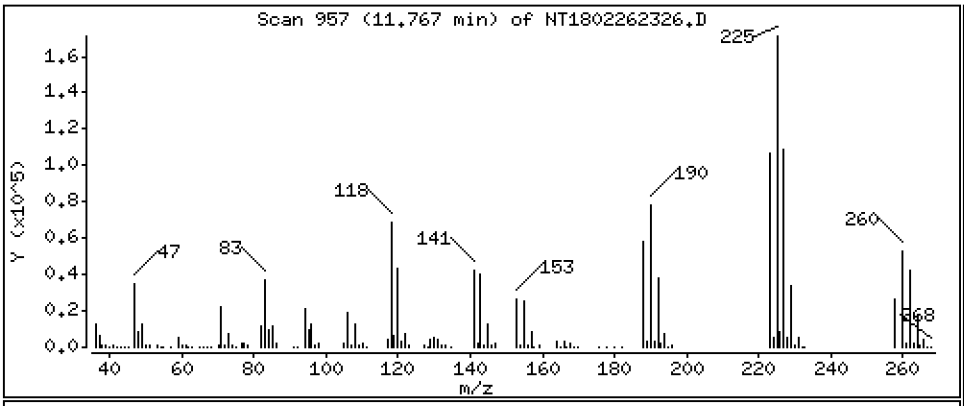
Operator: VTS

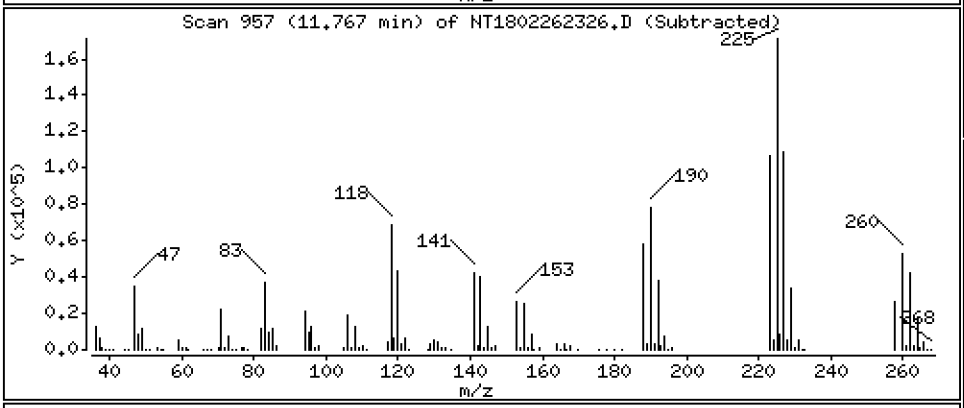
Column phase: ZB-5msi

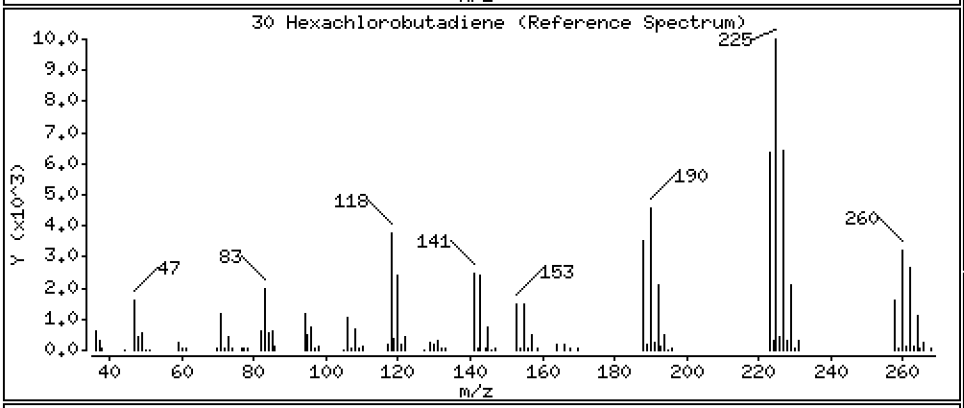
Column diameter: 0.25

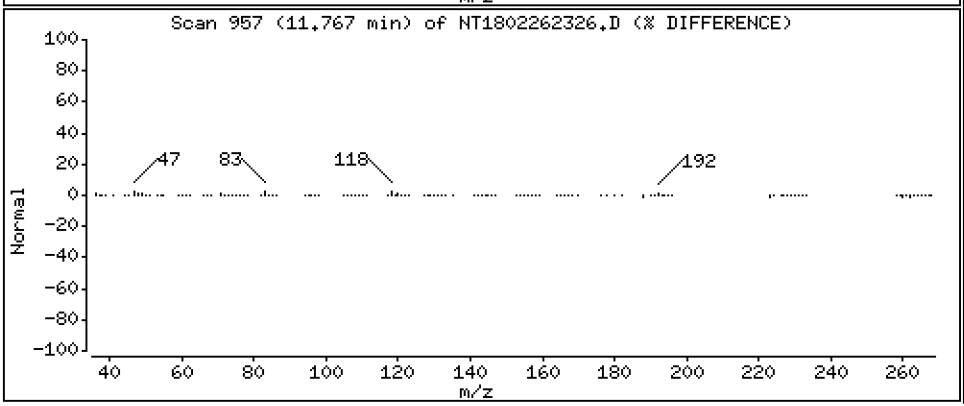
30 Hexachlorobutadiene

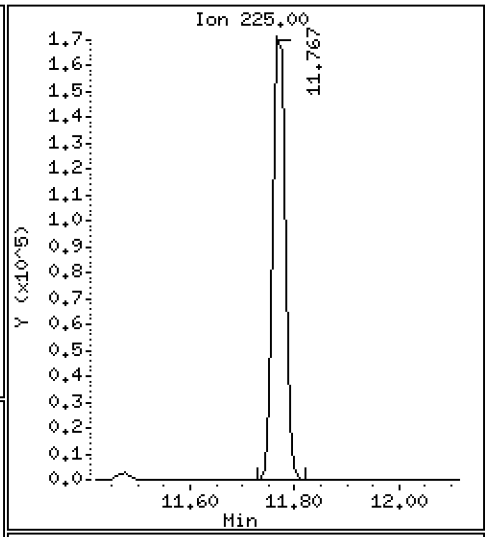
Concentration: 4.683 ug/mL

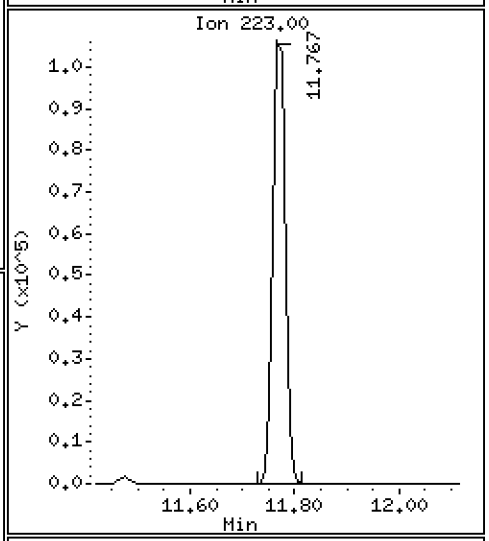


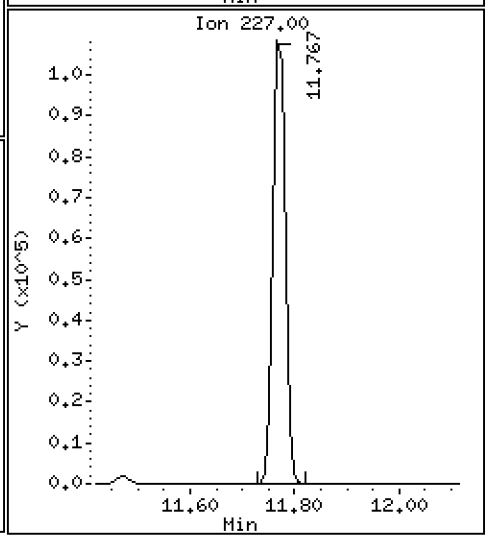












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

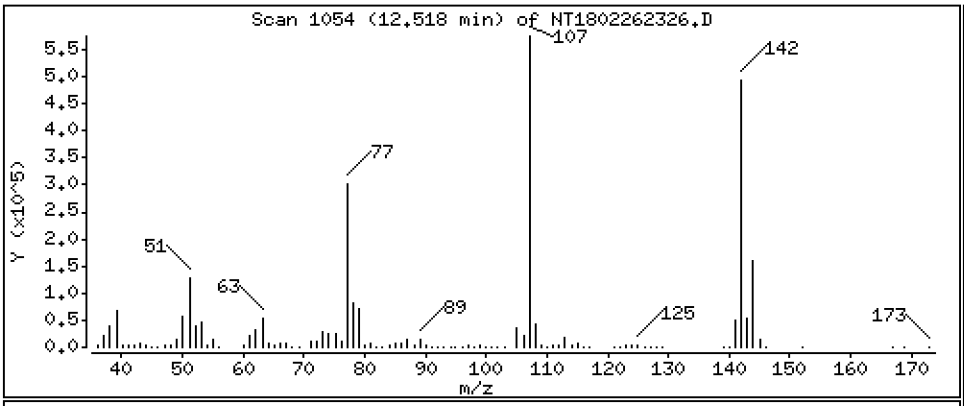
Operator: VTS

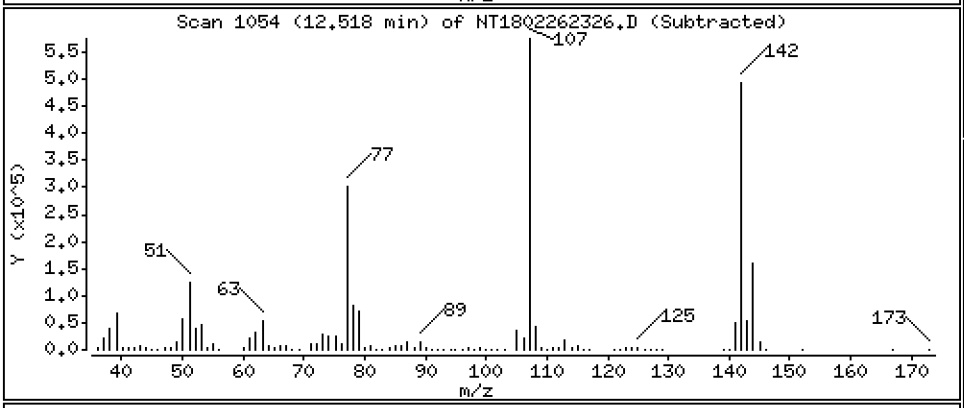
Column phase: ZB-5msi

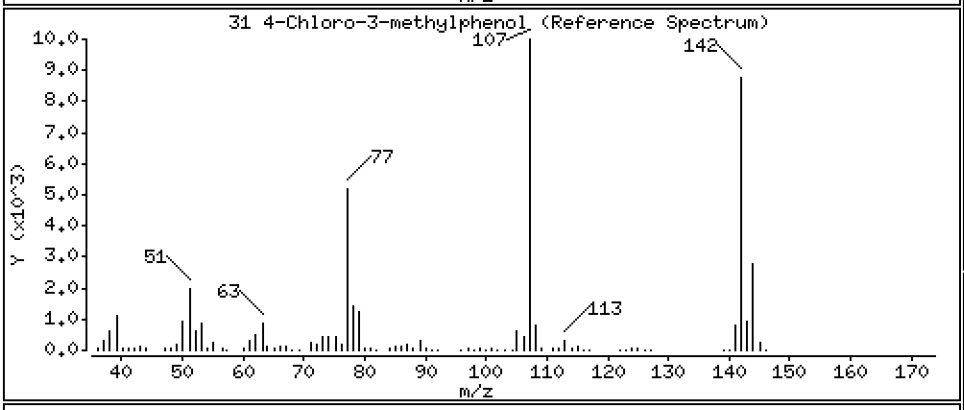
Column diameter: 0.25

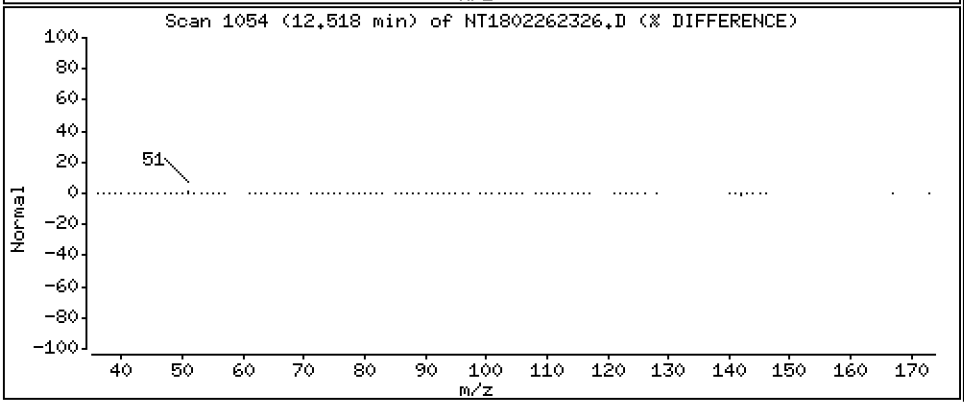
31 4-Chloro-3-methylphenol

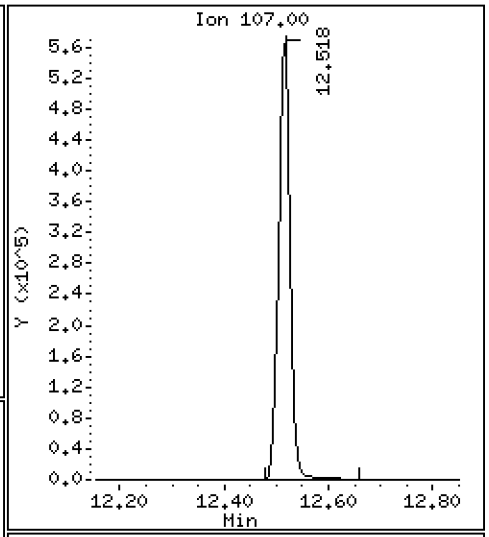
Concentration: 10.14 ug/mL

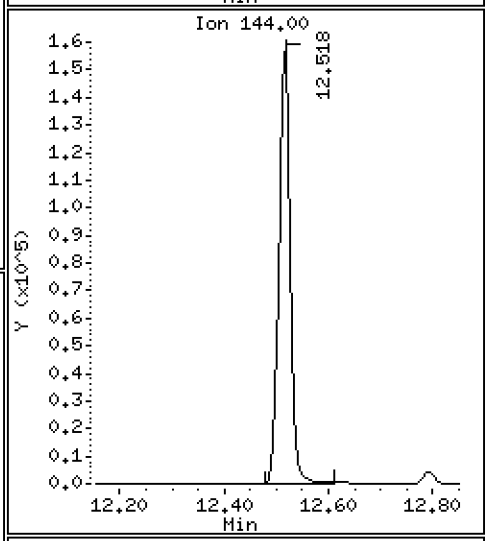


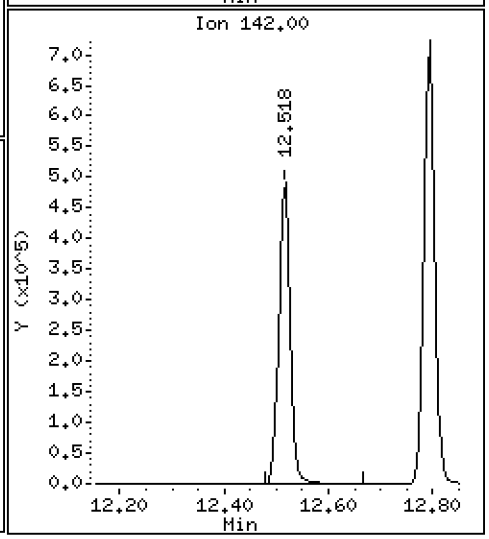












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

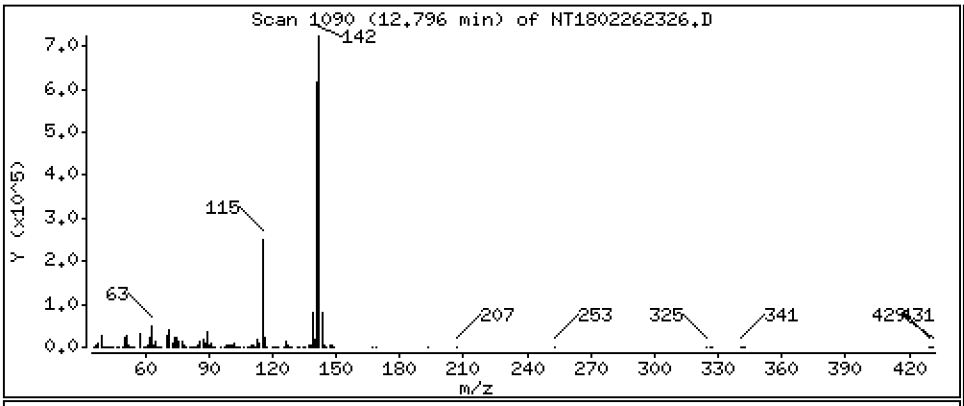
Operator: VTS

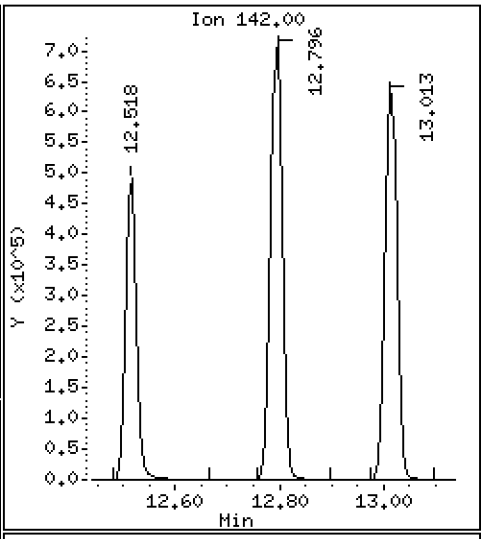
Column phase: ZB-5msi

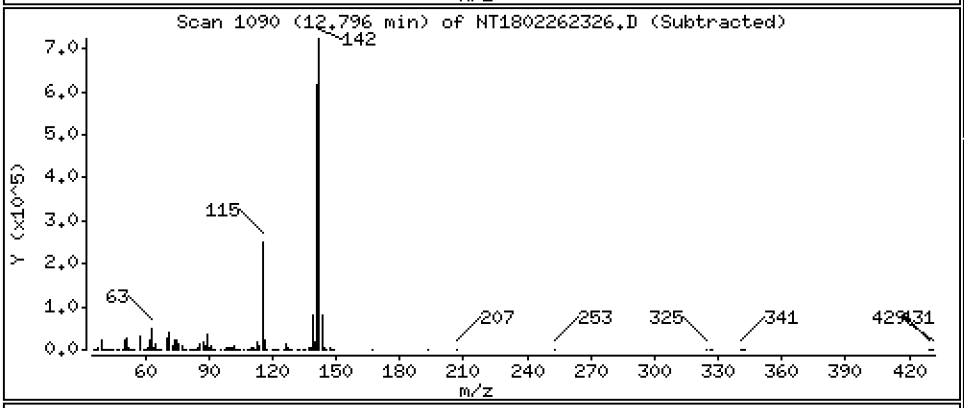
Column diameter: 0.25

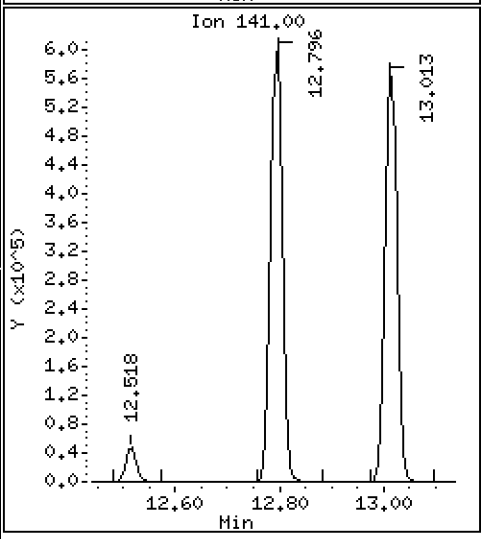
32 2-Methylnaphthalene

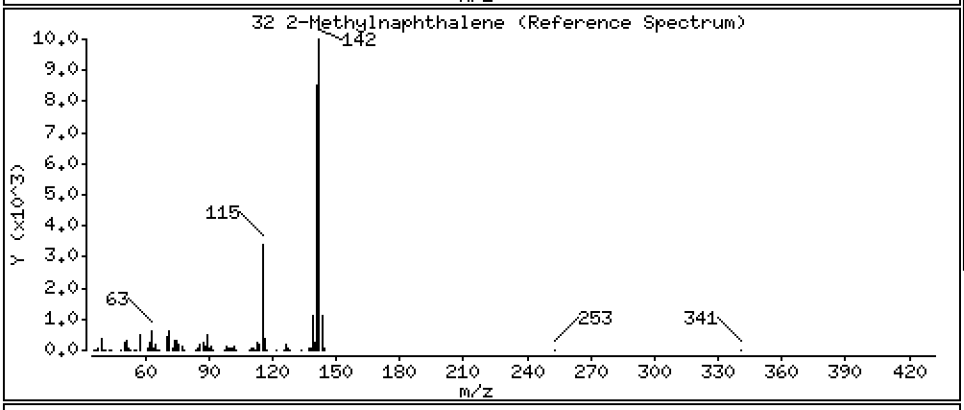
Concentration: 4.727 ug/mL

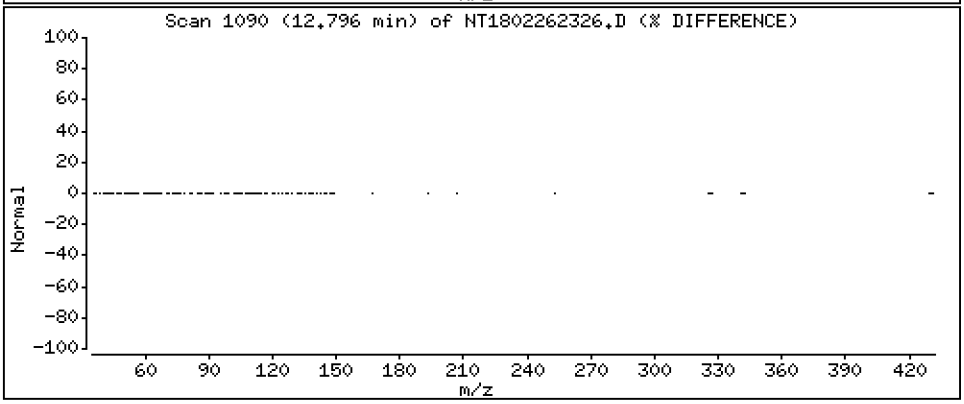












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

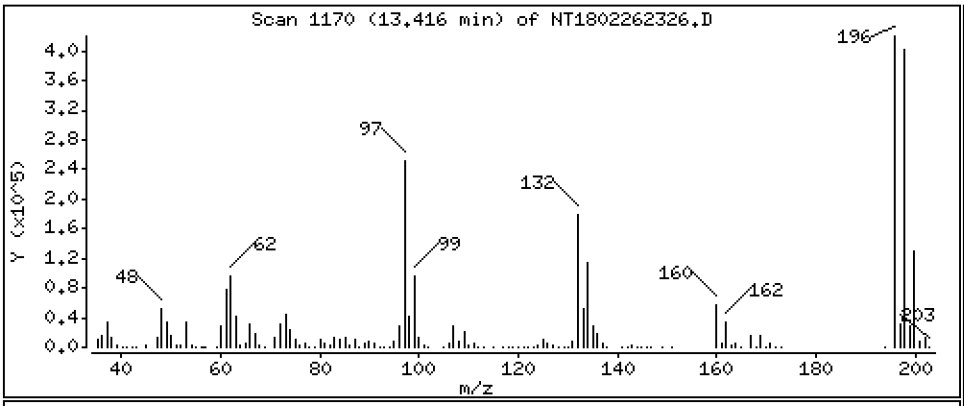
Operator: VTS

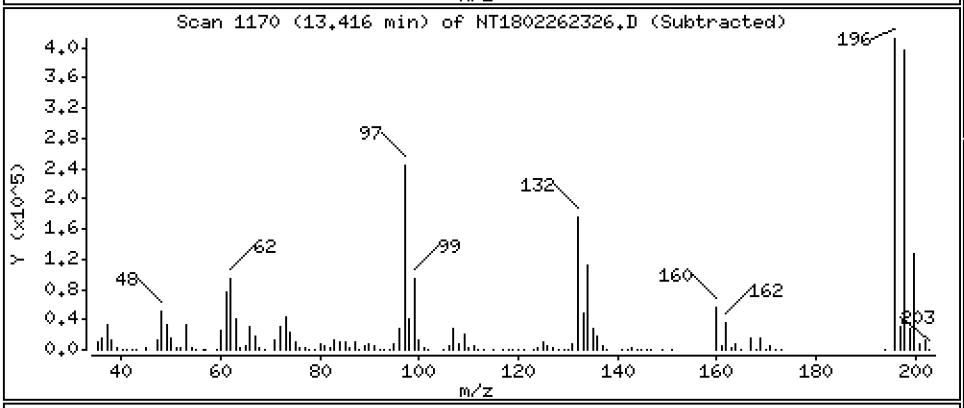
Column phase: ZB-5msi

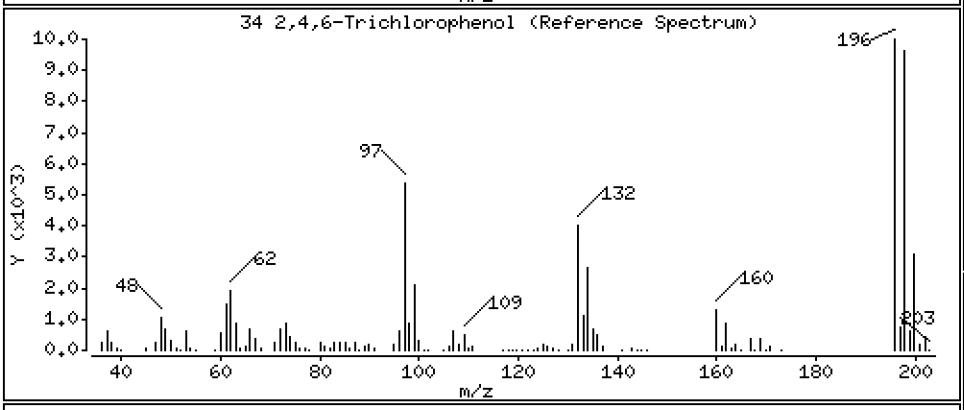
Column diameter: 0.25

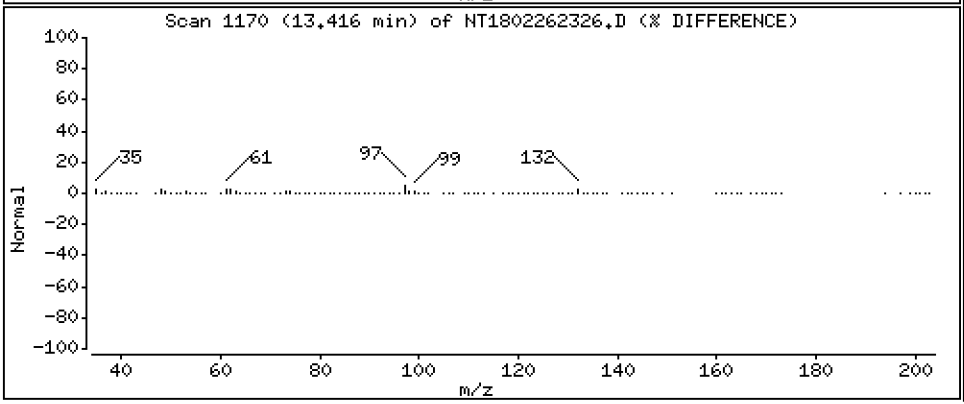
34 2,4,6-Trichlorophenol

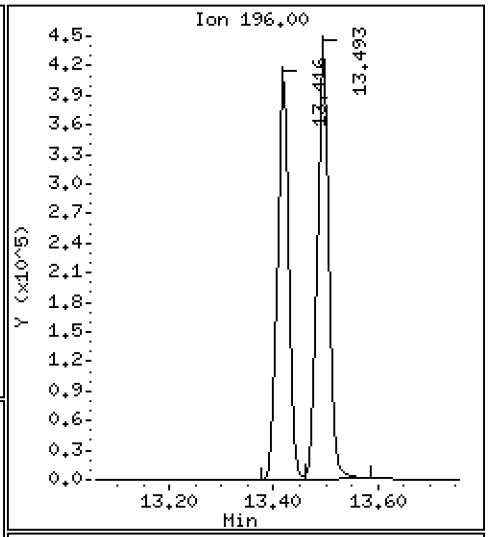
Concentration: 11.08 ug/mL

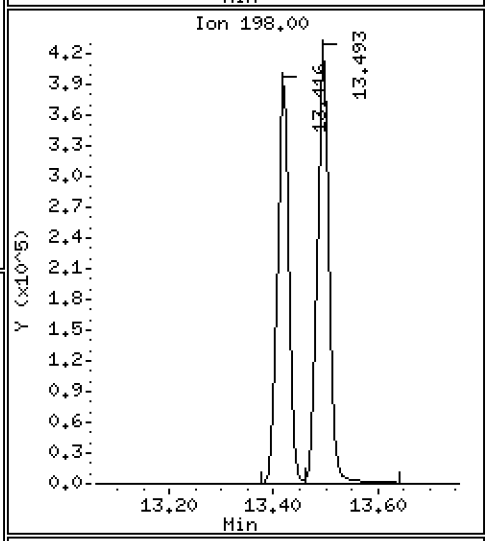


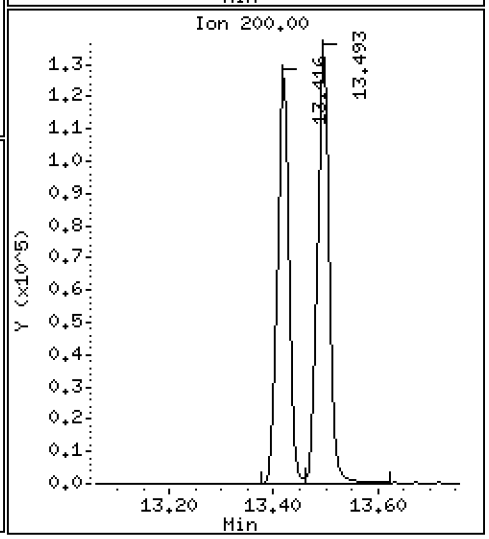












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

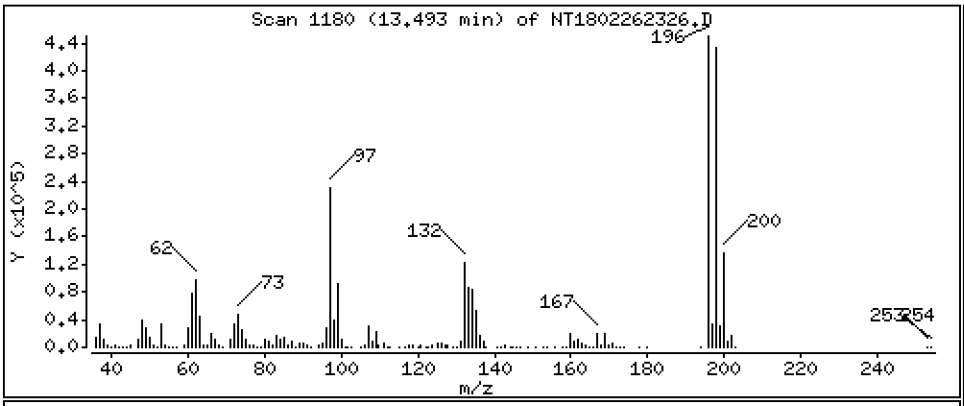
Operator: VTS

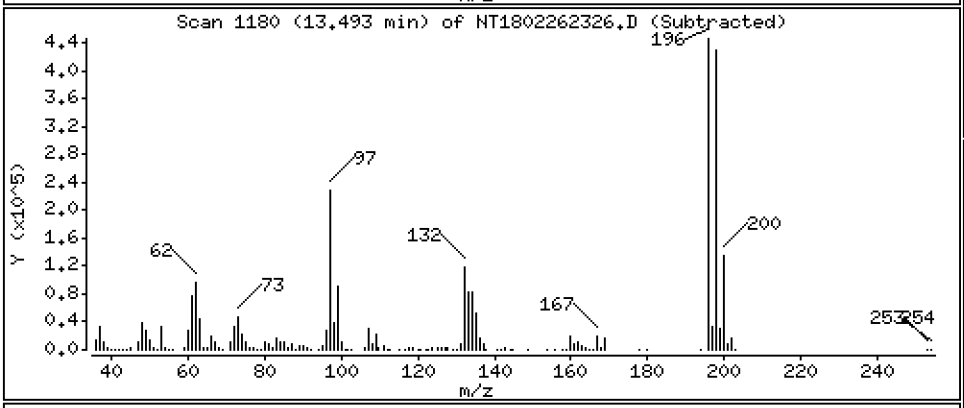
Column phase: ZB-5msi

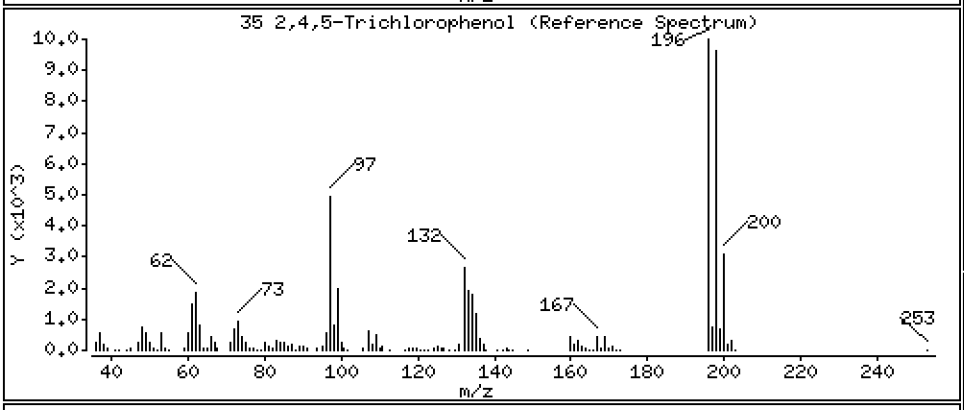
Column diameter: 0.25

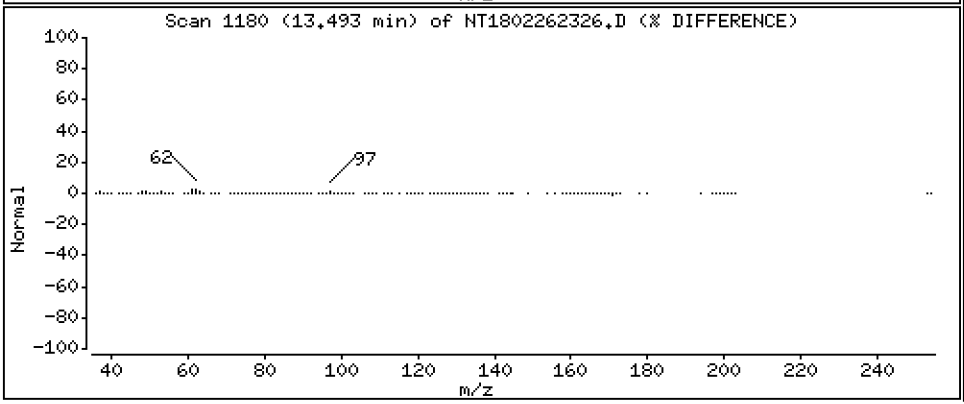
35 2,4,5-Trichlorophenol

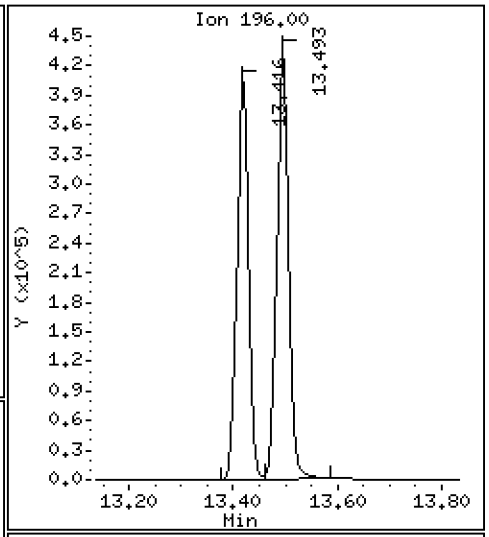
Concentration: 10.94 ug/mL

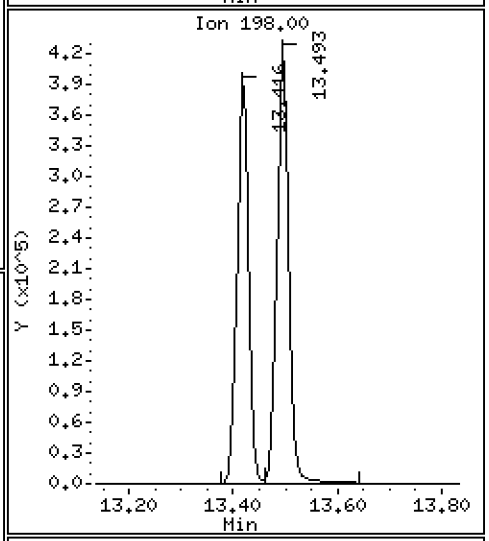


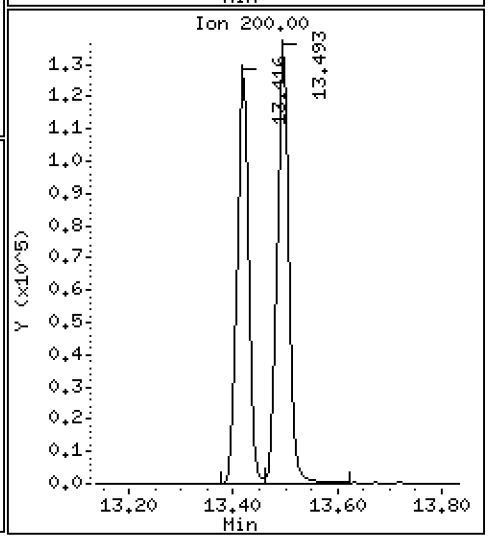












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

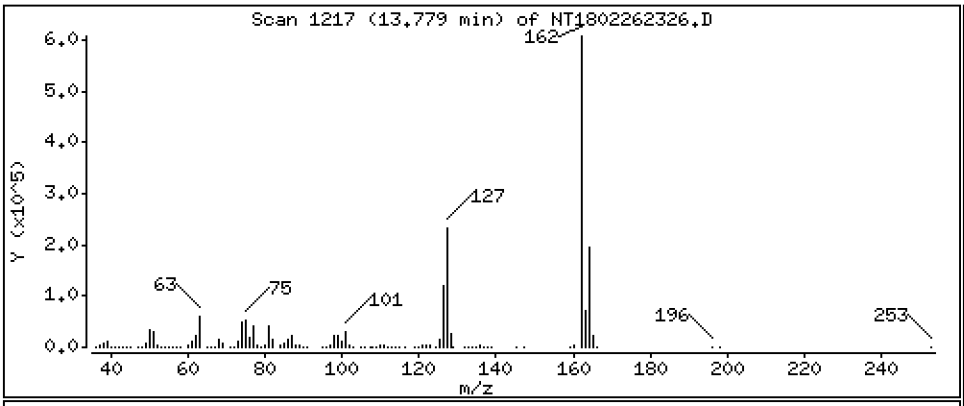
Operator: VTS

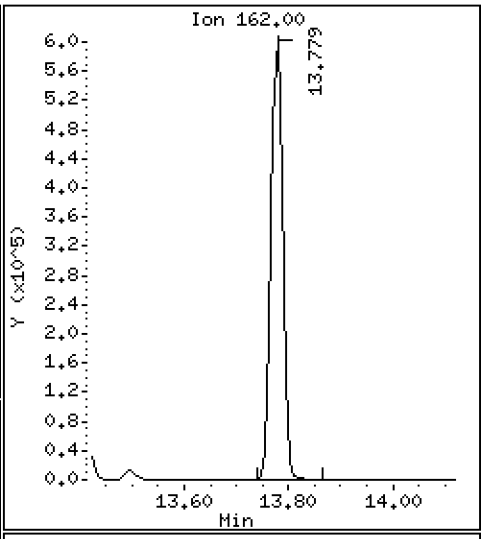
Column phase: ZB-5msi

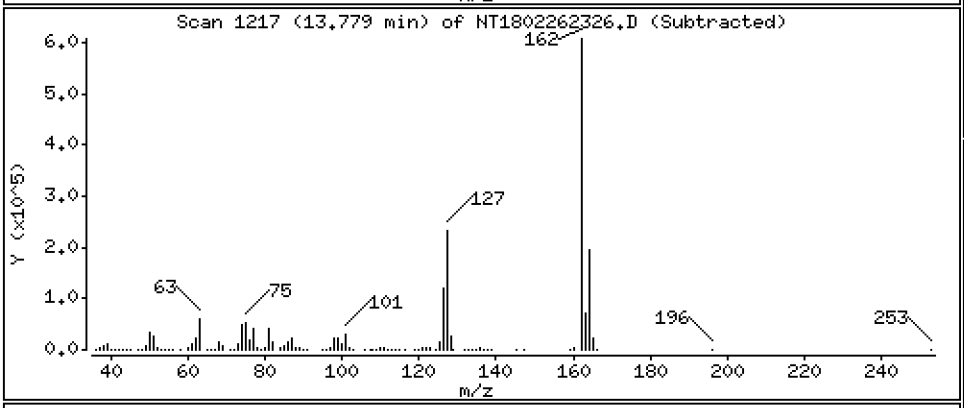
Column diameter: 0.25

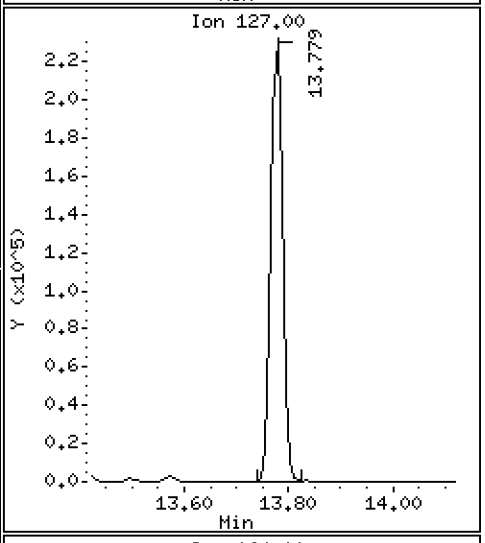
37 2-Chloronaphthalene

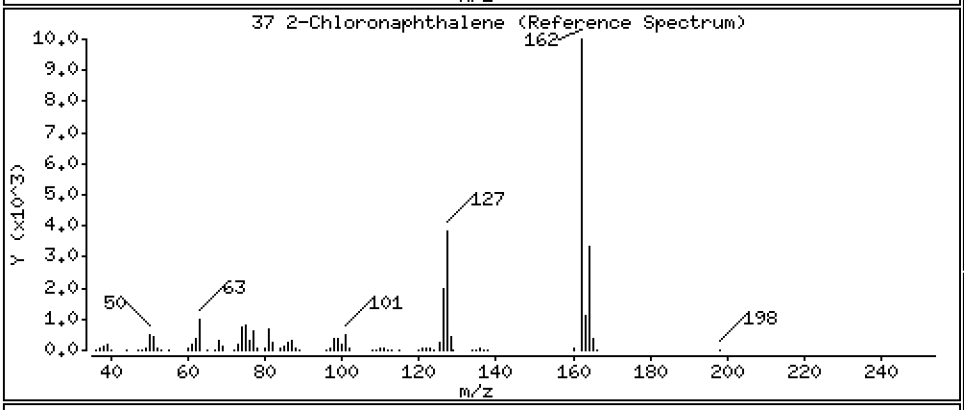
Concentration: 4.667 ug/mL

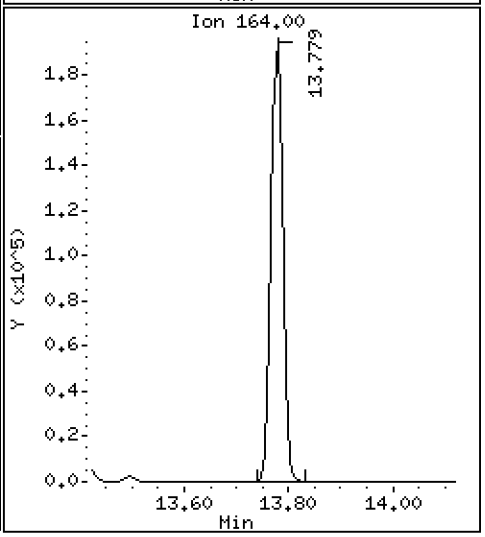


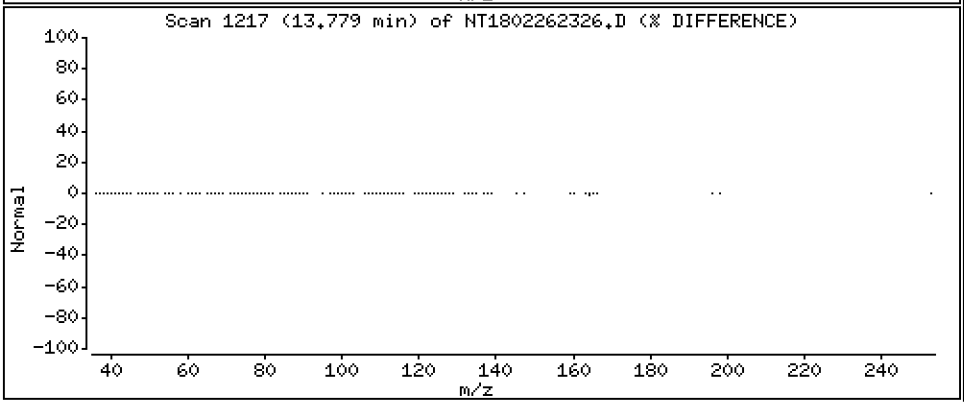












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

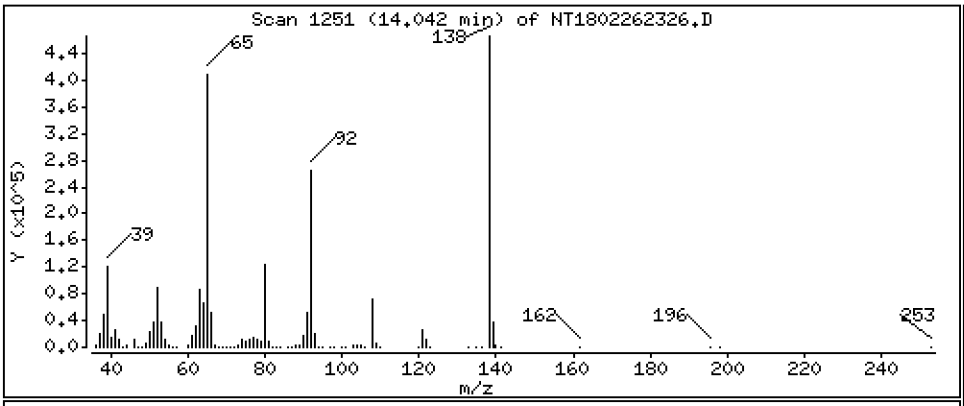
Operator: VTS

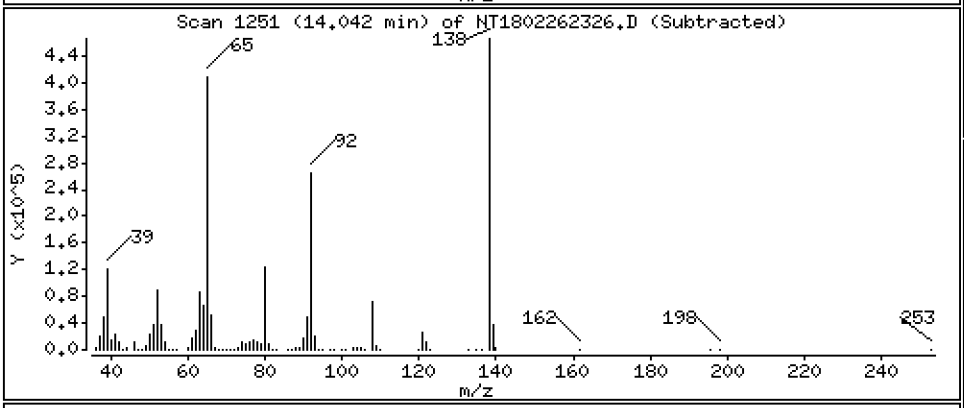
Column phase: ZB-5msi

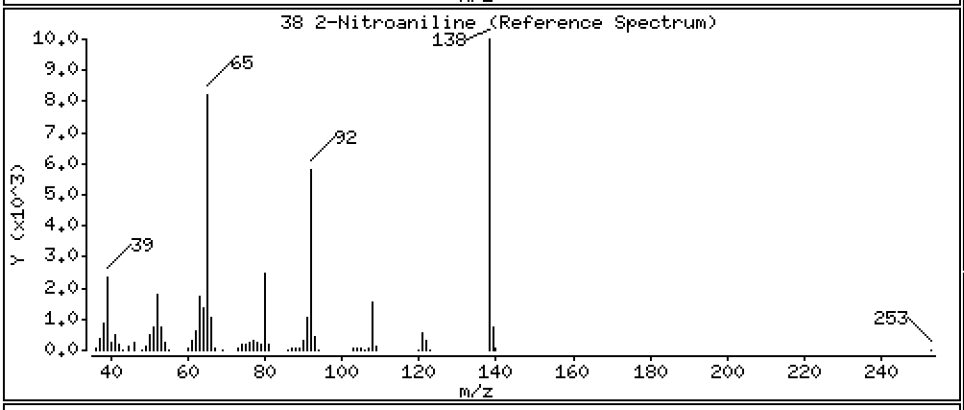
Column diameter: 0.25

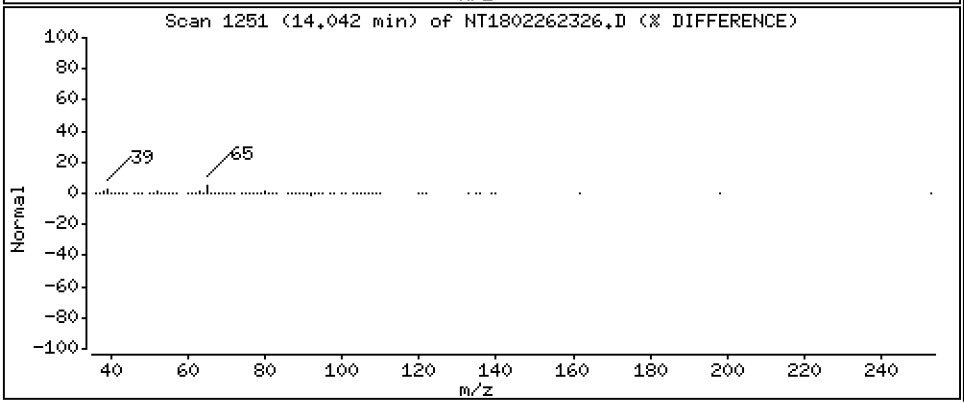
38 2-Nitroaniline

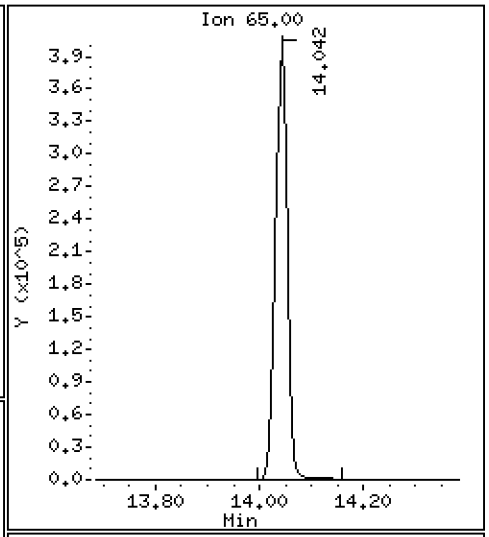
Concentration: 9.974 ug/mL

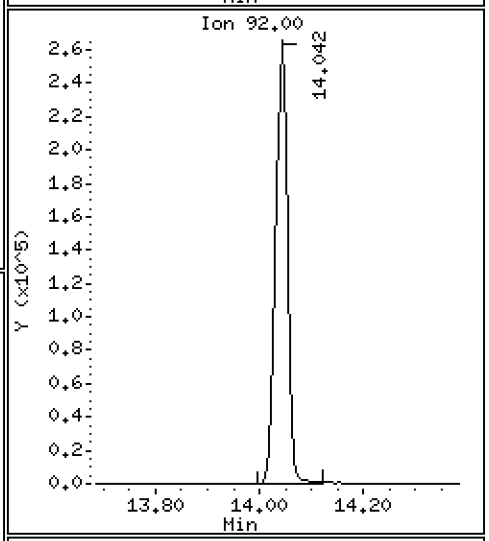


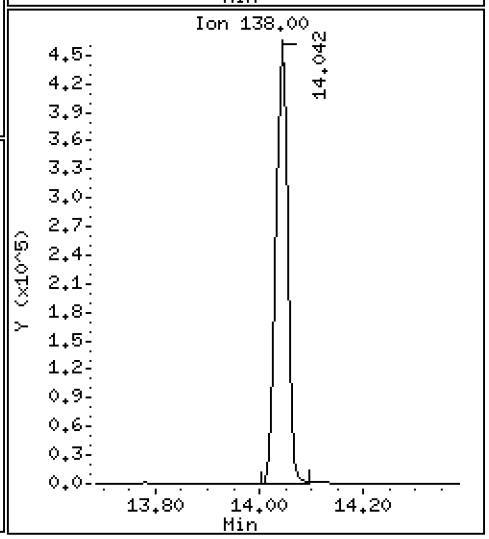












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

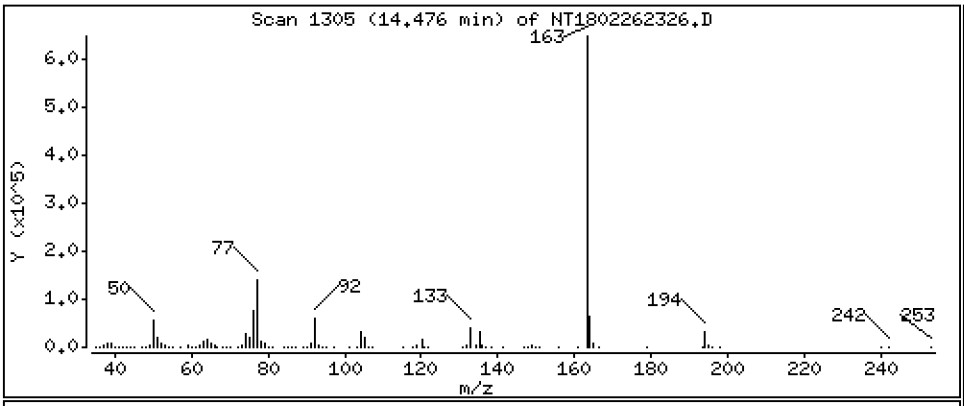
Operator: VTS

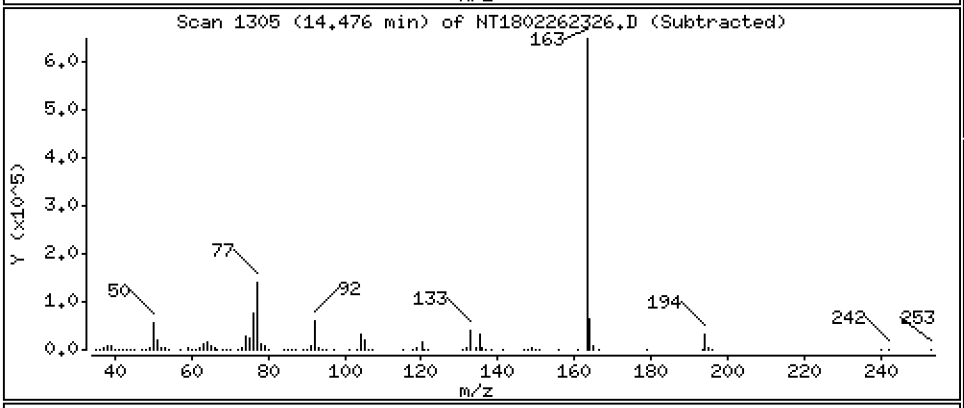
Column phase: ZB-5msi

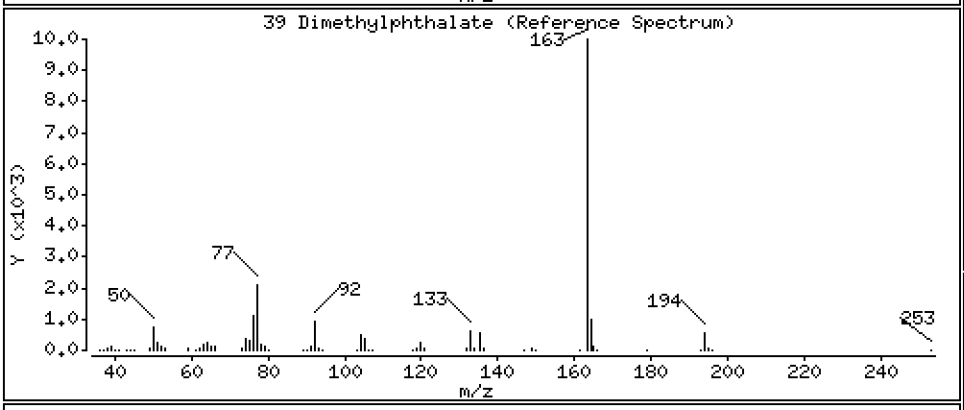
Column diameter: 0.25

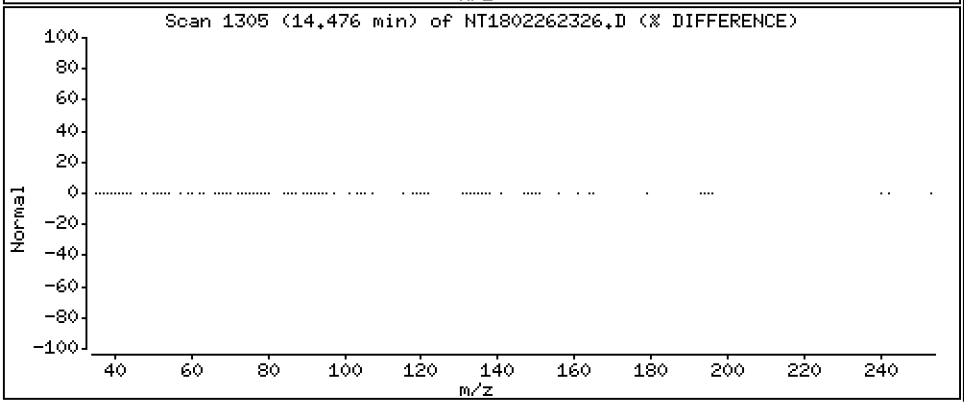
39 Dimethylphthalate

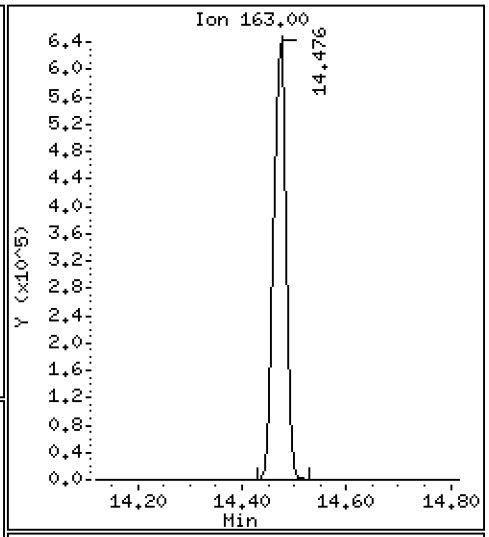
Concentration: 4.931 ug/mL

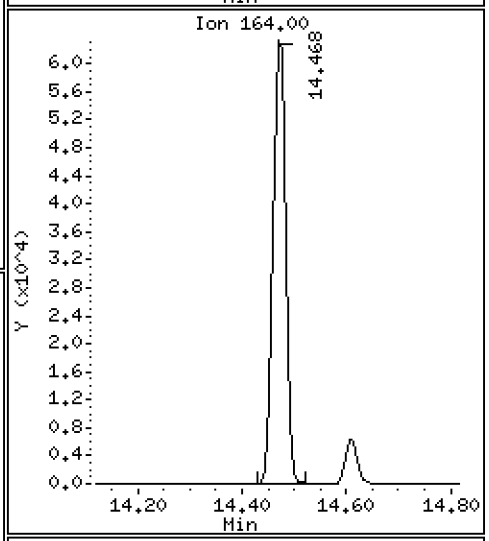


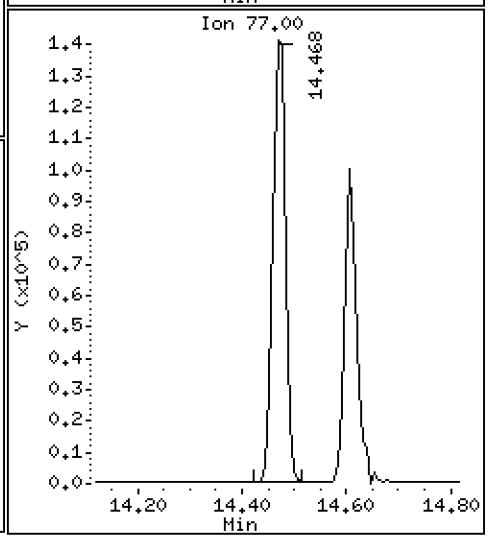












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

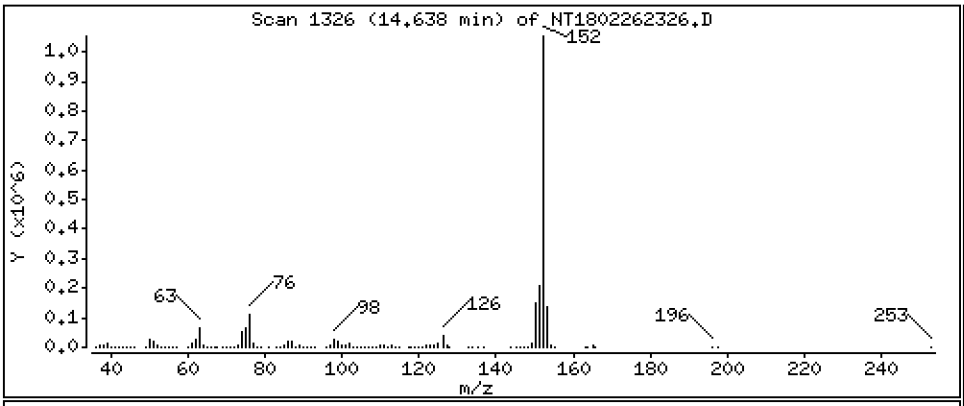
Operator: VTS

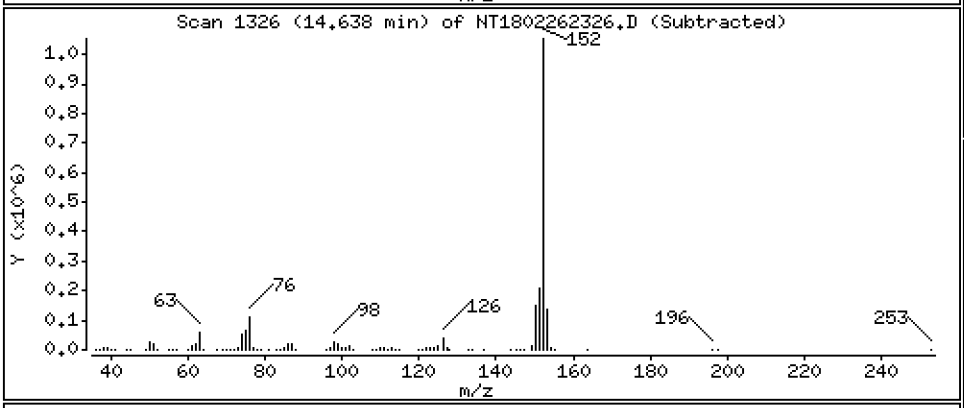
Column phase: ZB-5msi

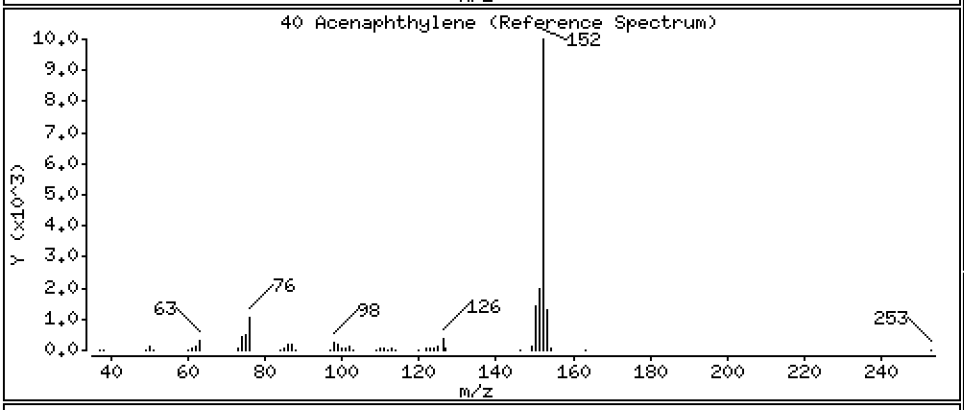
Column diameter: 0.25

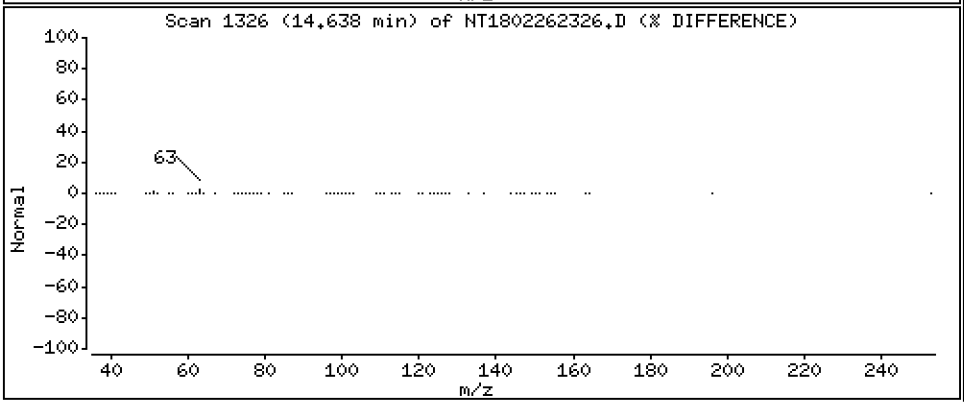
40 Acenaphthylene

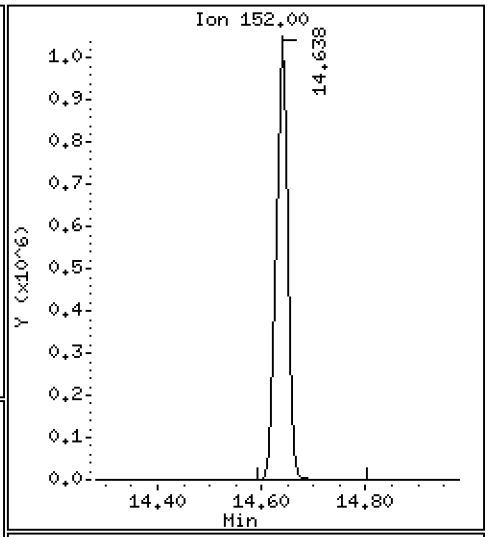
Concentration: 5.285 ug/mL

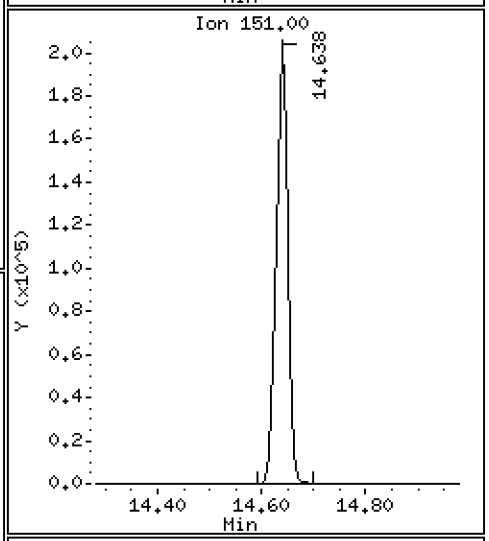


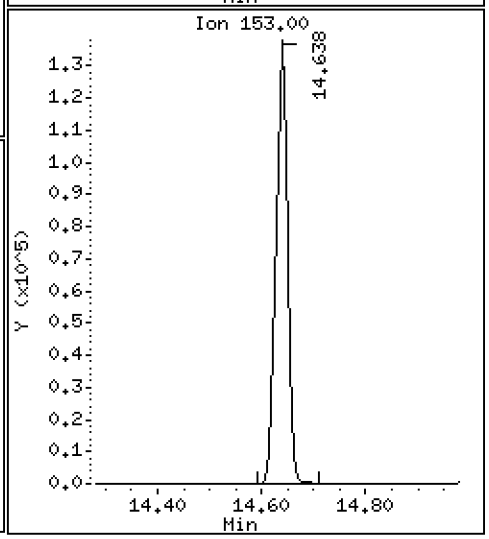












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

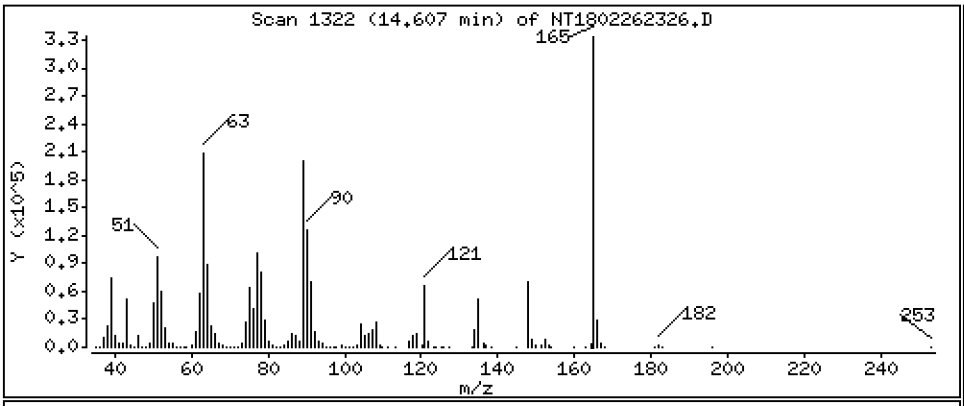
Operator: VTS

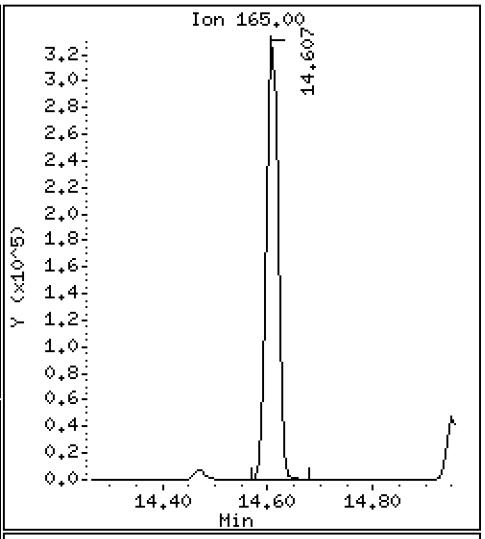
Column phase: ZB-5msi

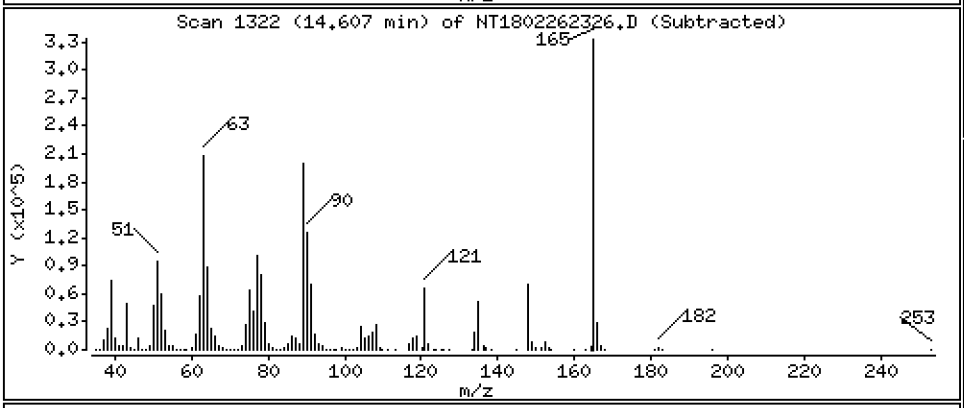
Column diameter: 0.25

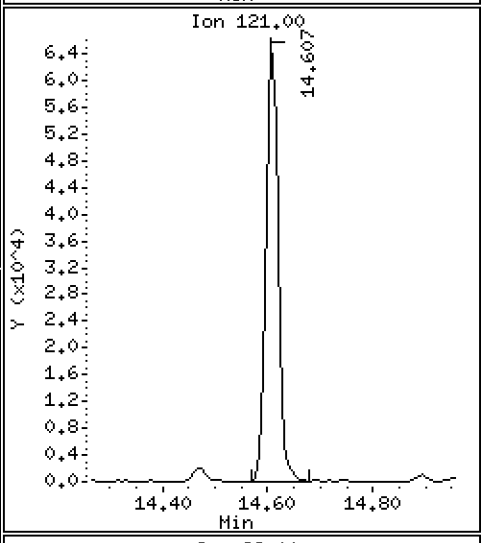
41 2,6-Dinitrotoluene

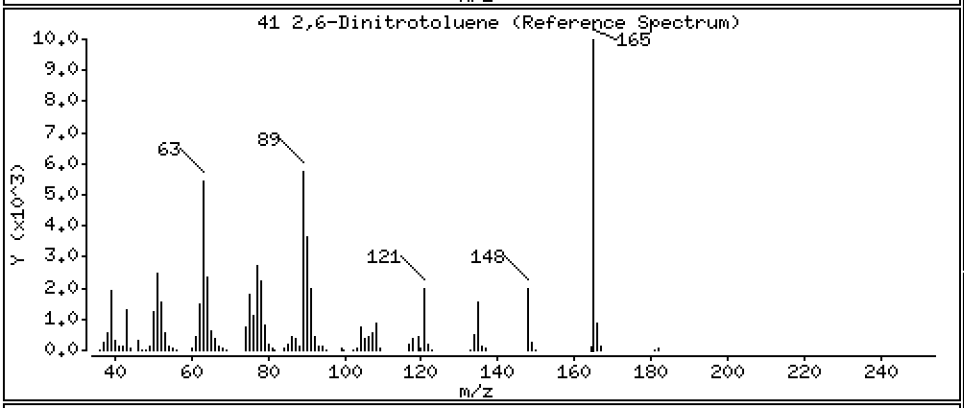
Concentration: 10.32 ug/mL

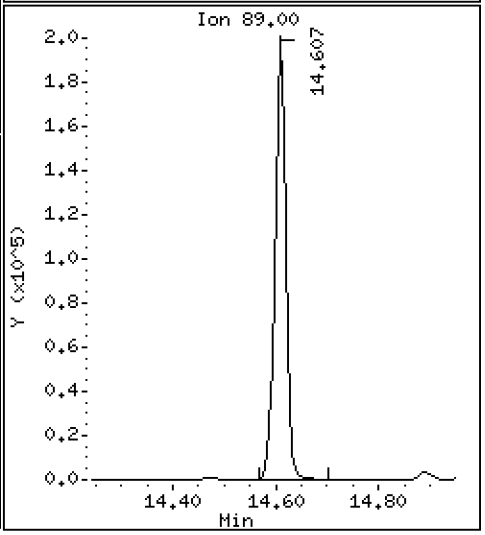


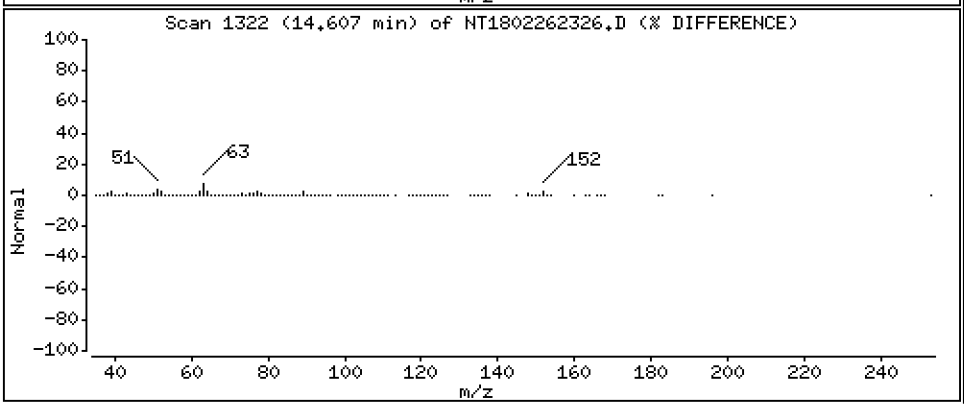












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

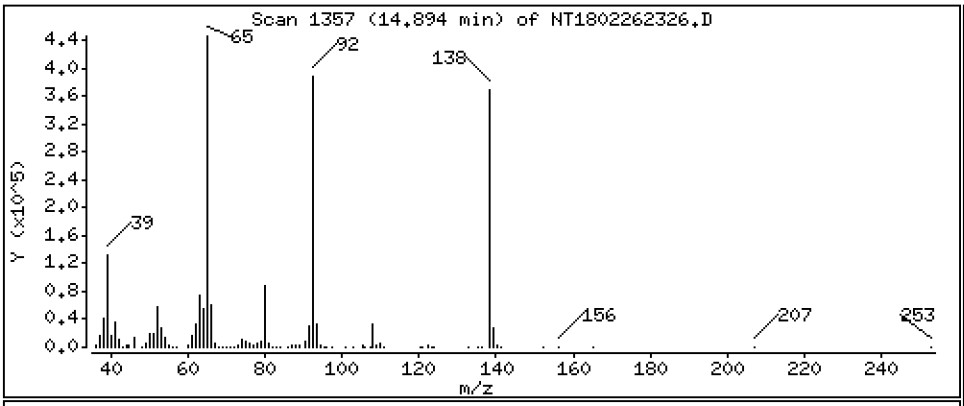
Operator: VTS

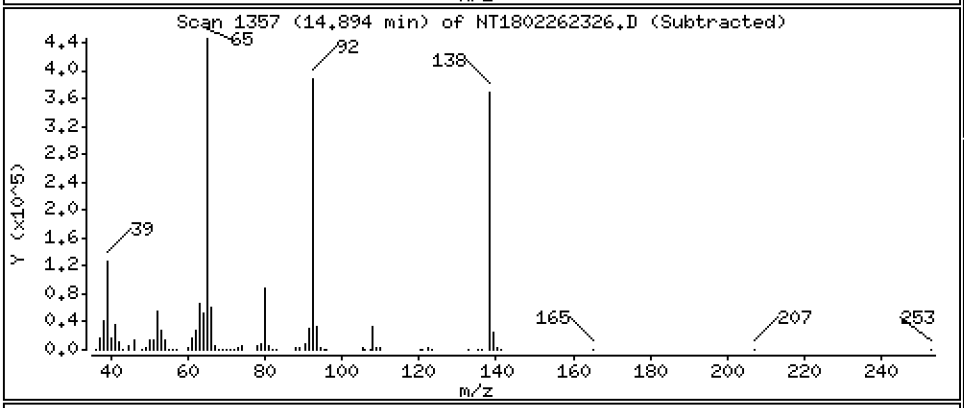
Column phase: ZB-5msi

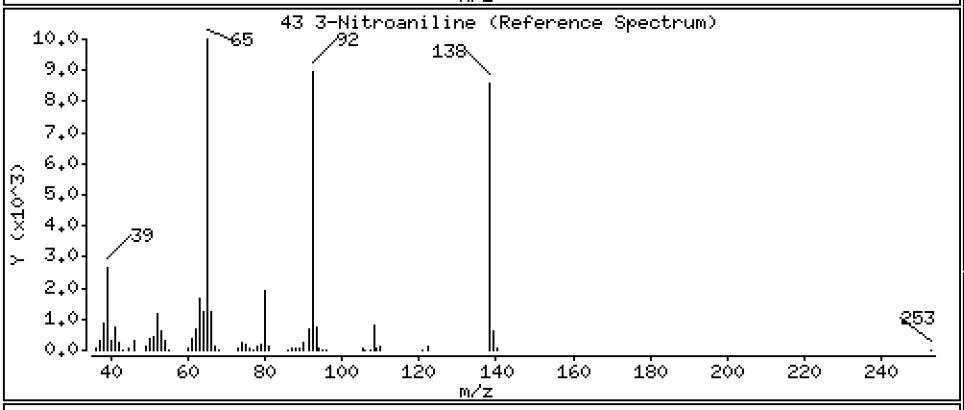
Column diameter: 0.25

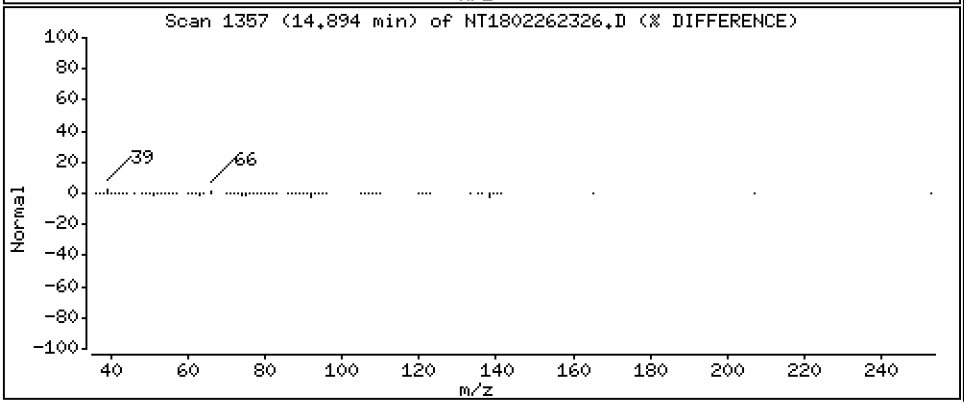
43 3-Nitroaniline

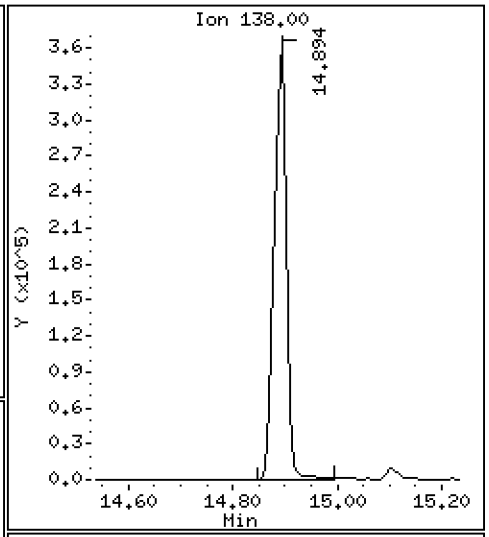
Concentration: 10.24 ug/mL

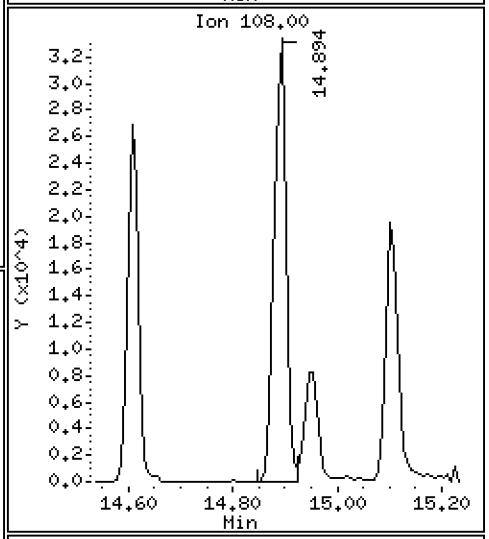


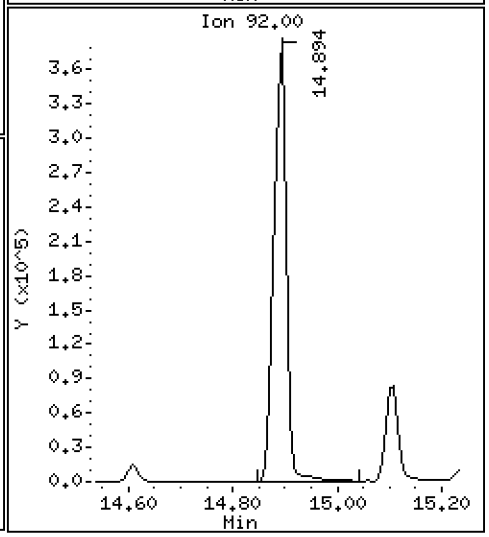












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

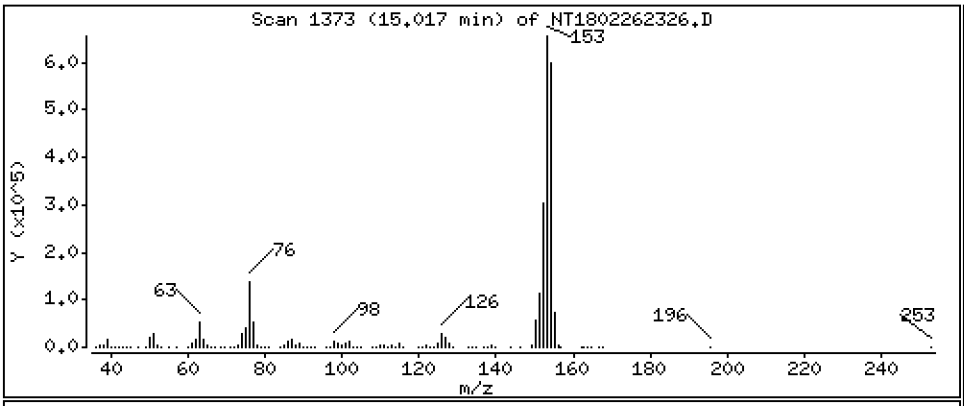
Operator: VTS

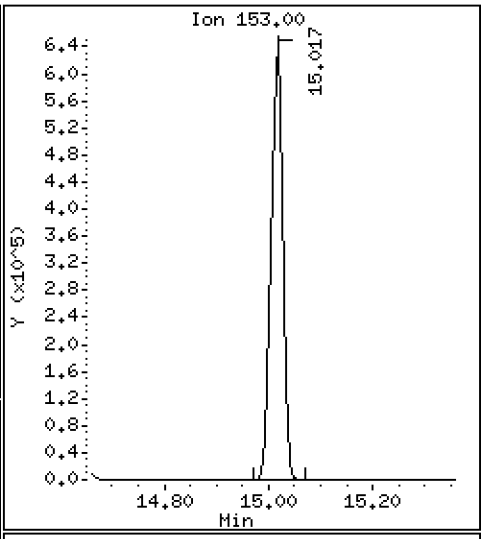
Column phase: ZB-5msi

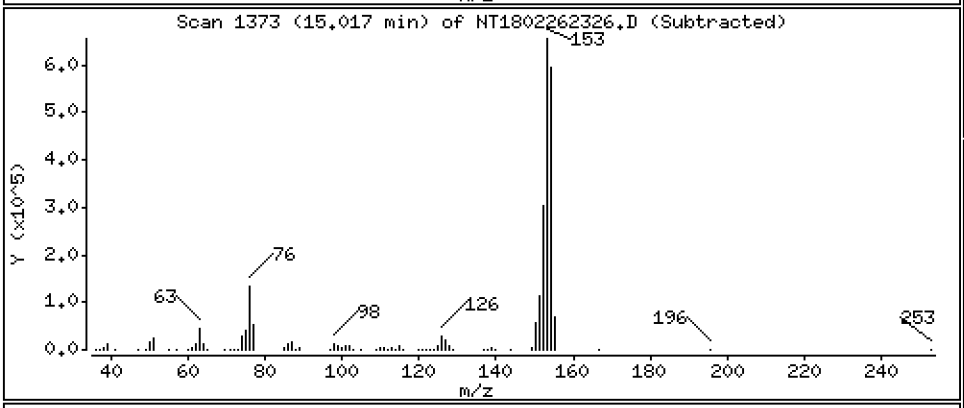
Column diameter: 0.25

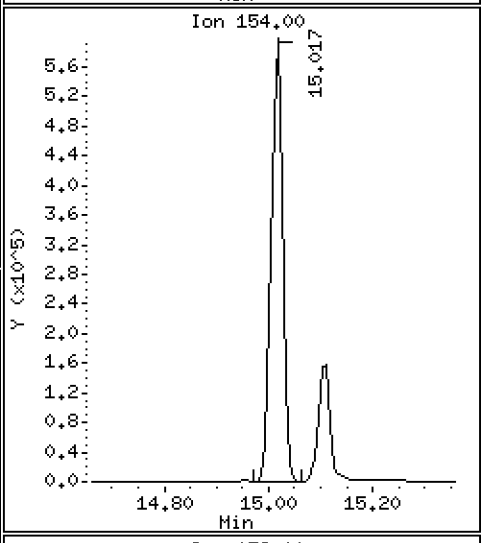
44 Acenaphthene

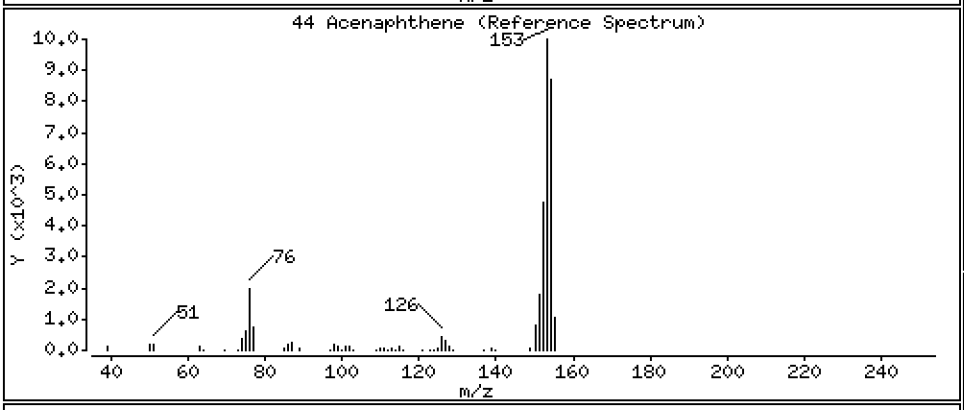
Concentration: 4.763 ug/mL

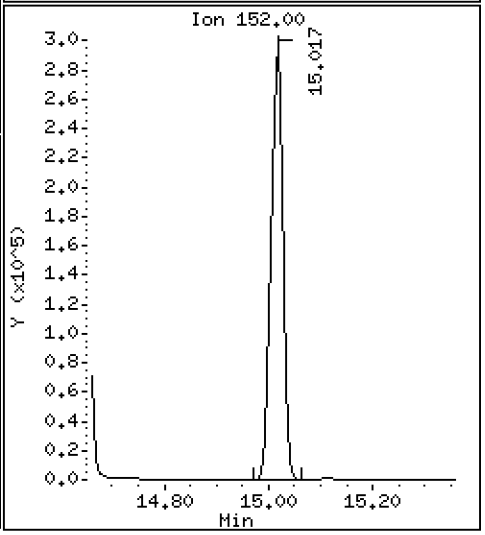


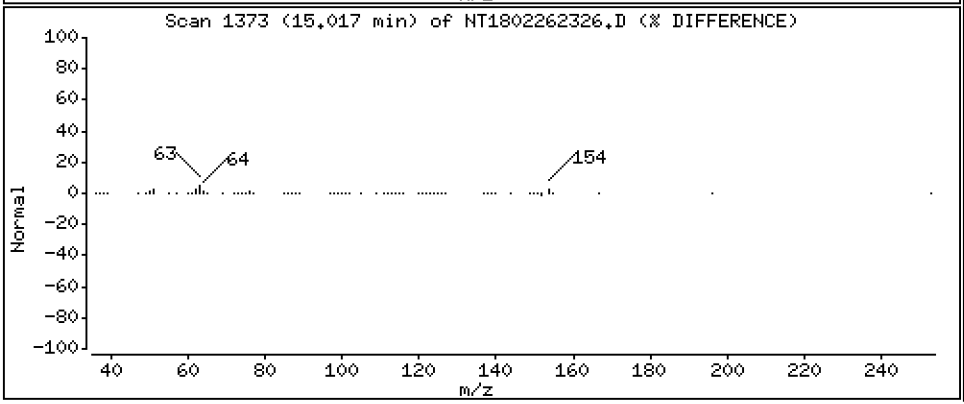












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

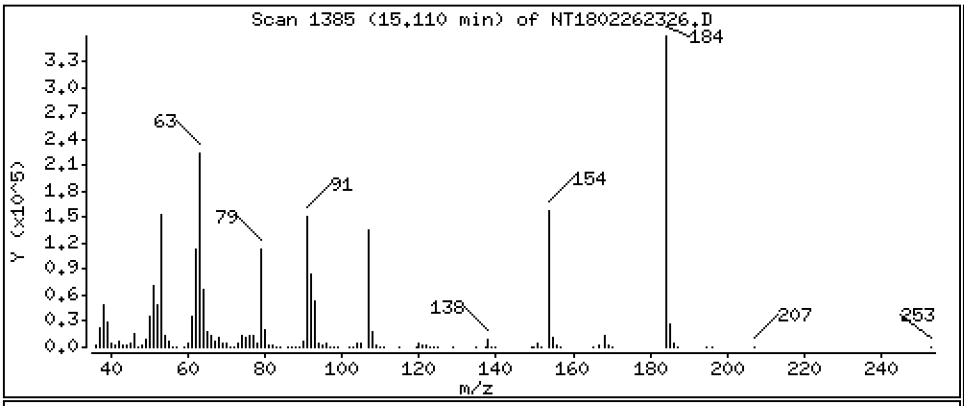
Operator: VTS

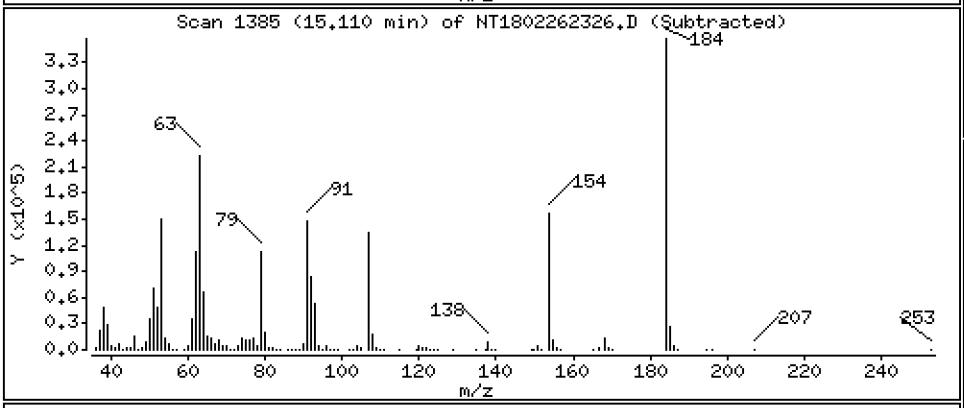
Column phase: ZB-5msi

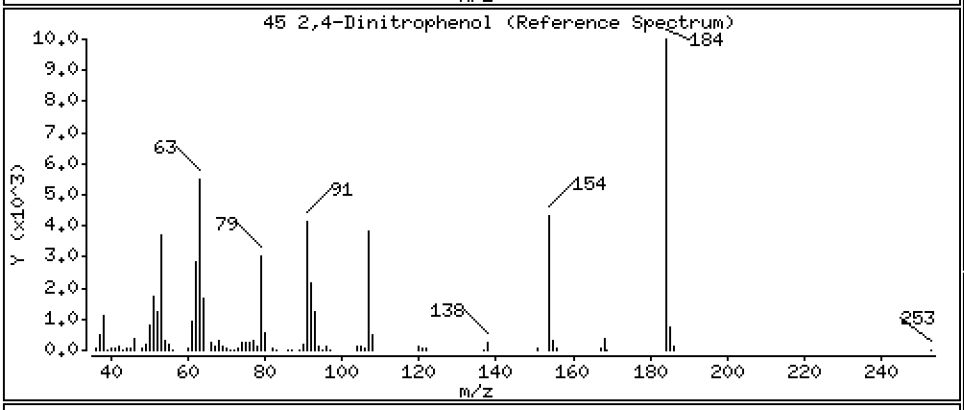
Column diameter: 0.25

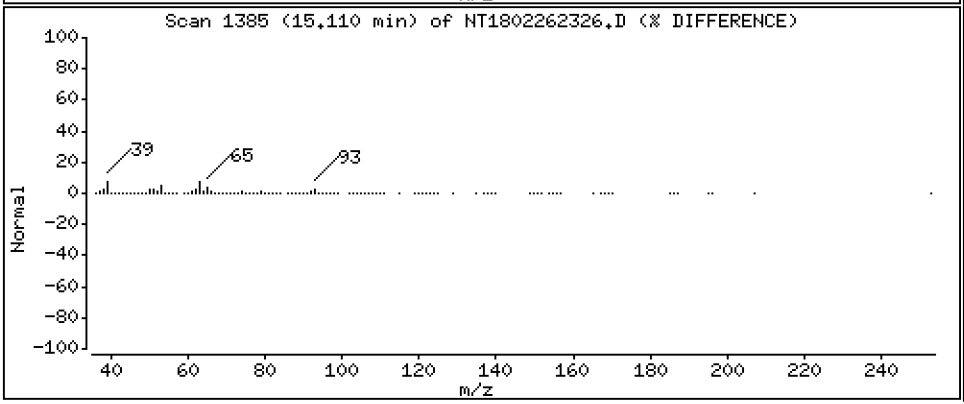
45 2,4-Dinitrophenol

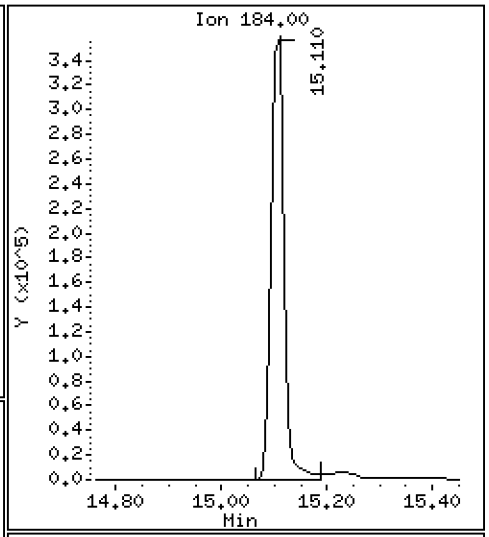
Concentration: 24.76 ug/mL

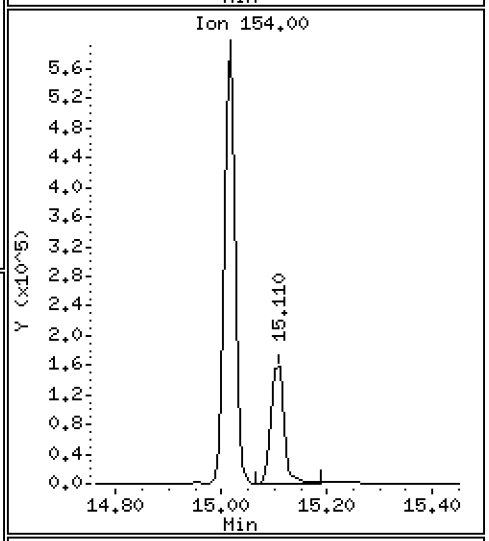


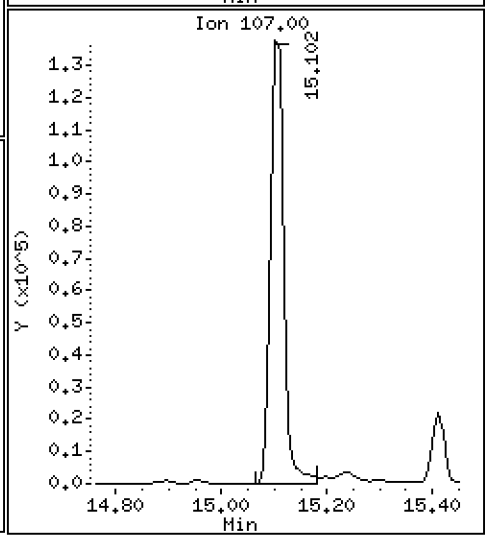












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

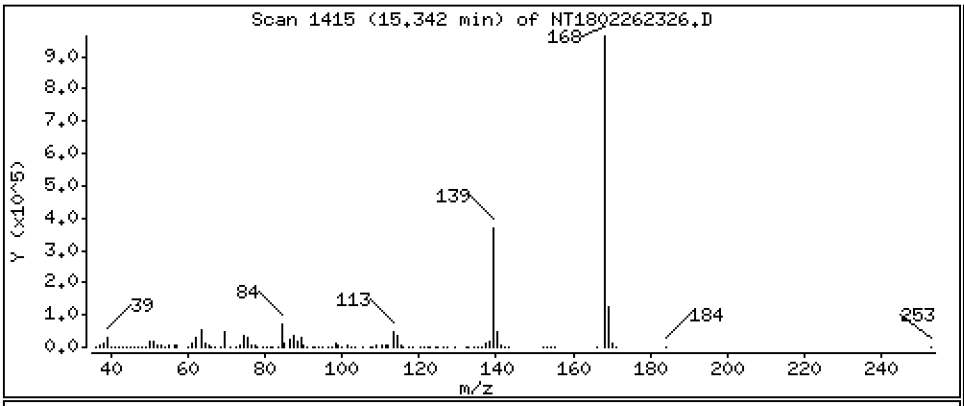
Operator: VTS

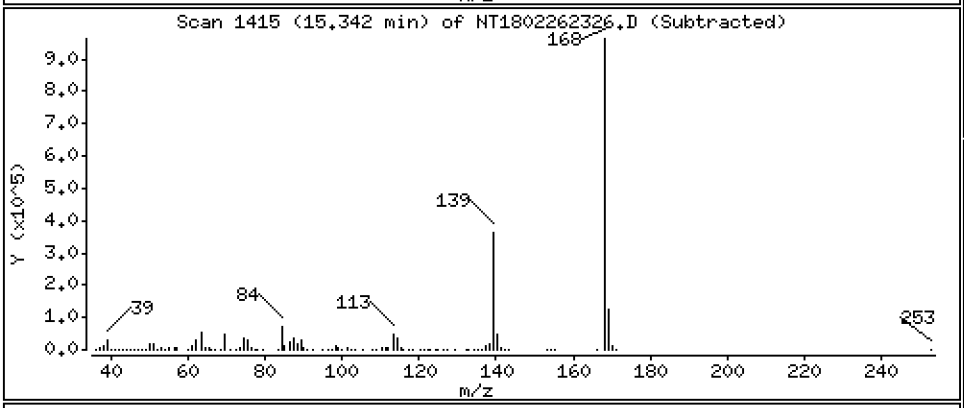
Column phase: ZB-5msi

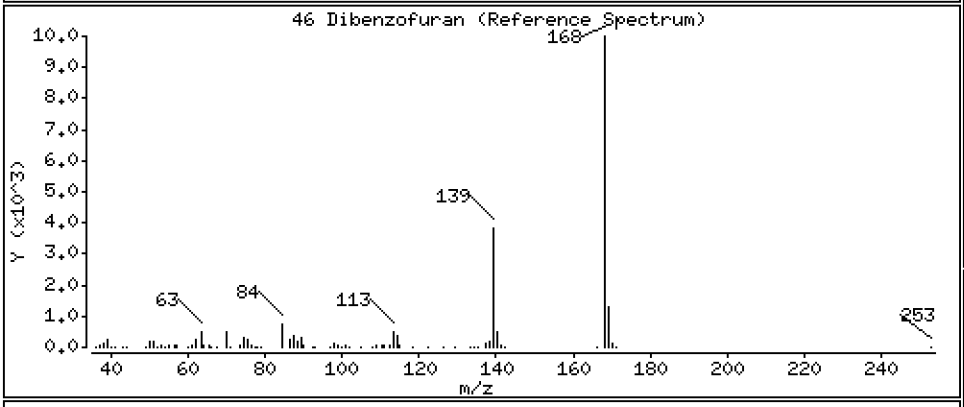
Column diameter: 0.25

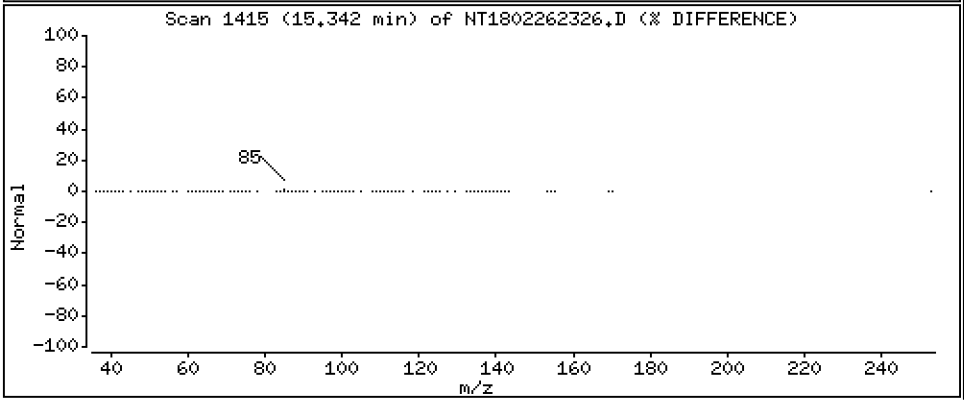
46 Dibenzofuran

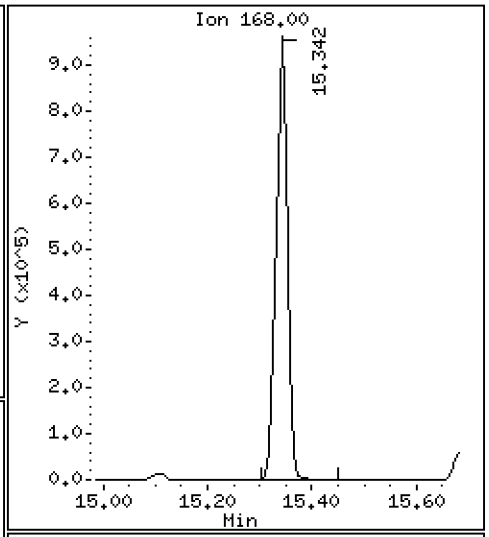
Concentration: 4.762 ug/mL

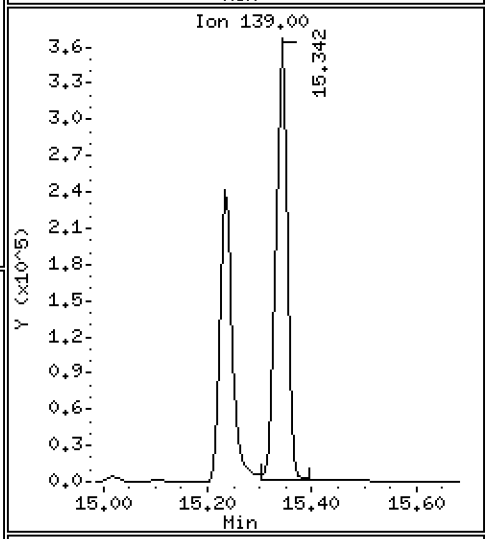


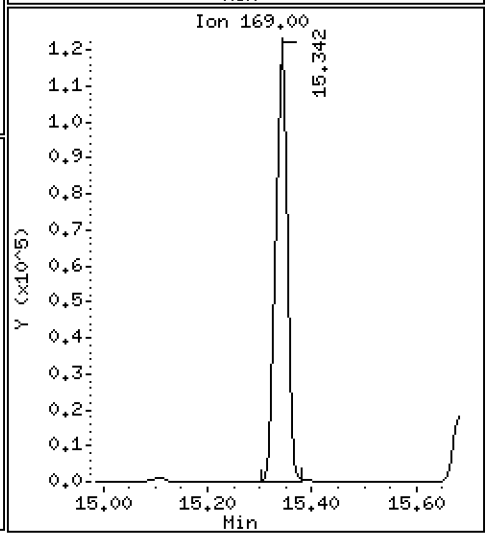












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

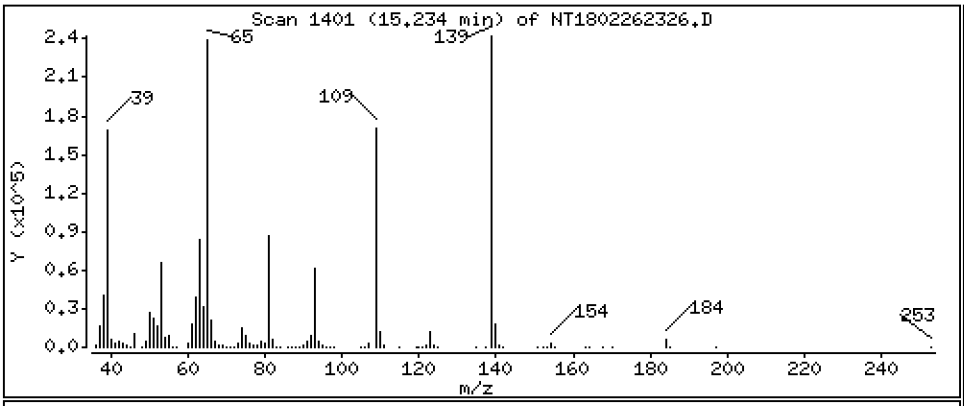
Operator: VTS

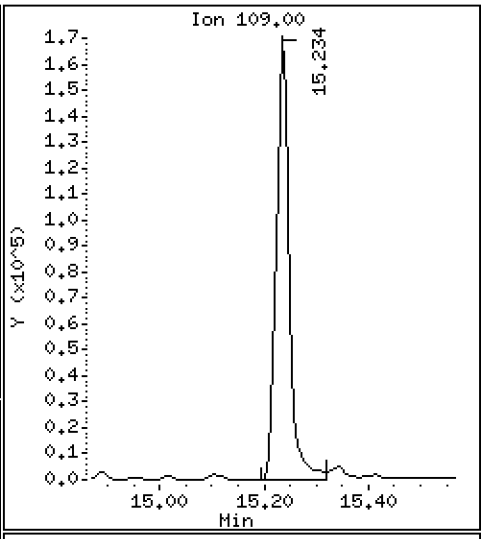
Column phase: ZB-5msi

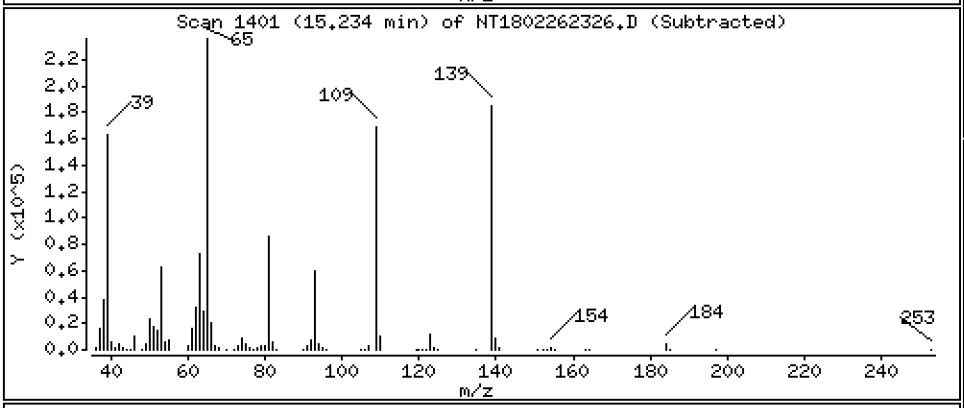
Column diameter: 0.25

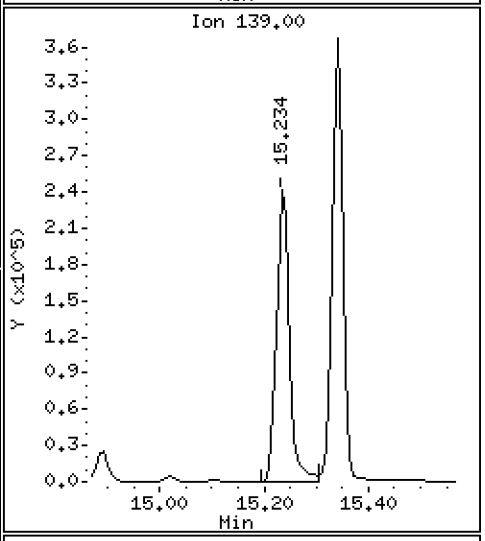
47 4-Nitrophenol

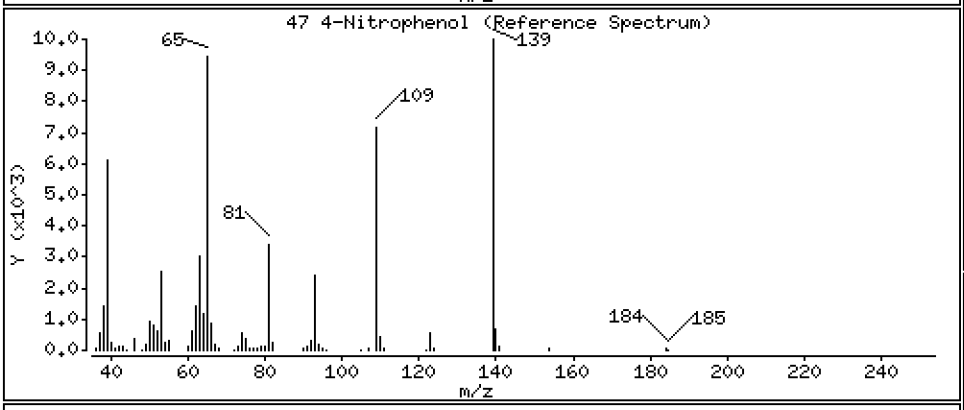
Concentration: 12.91 ug/mL

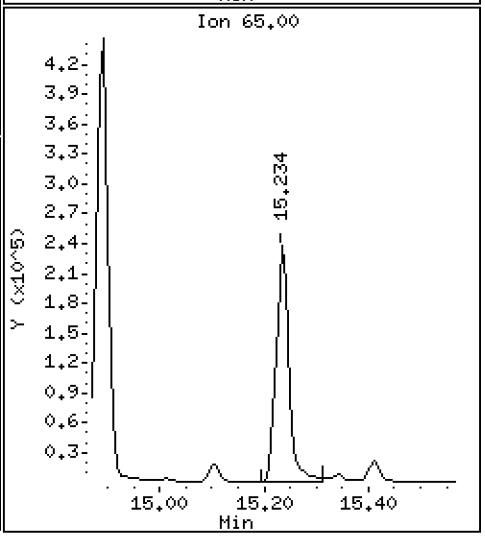


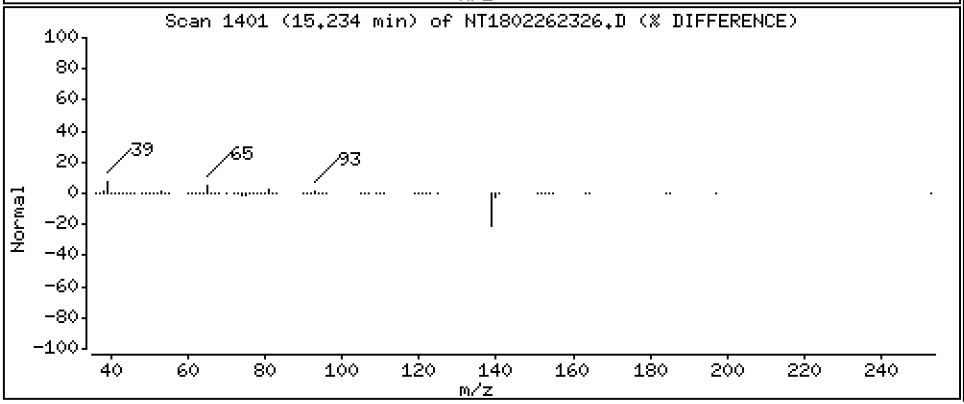












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

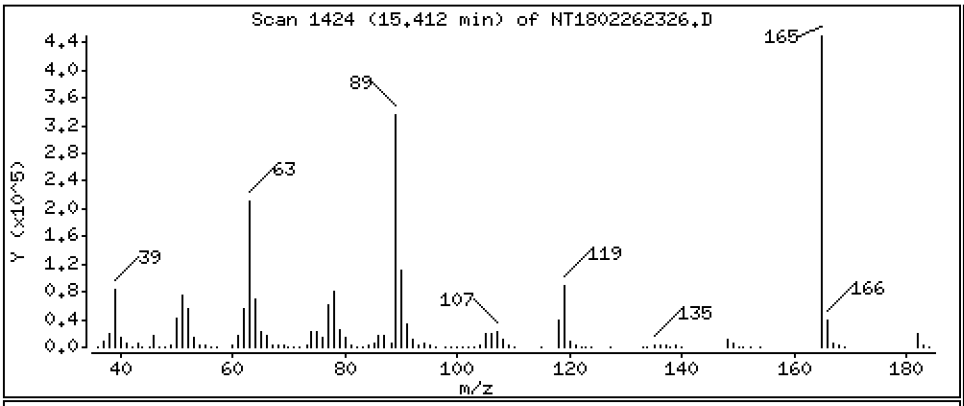
Operator: VTS

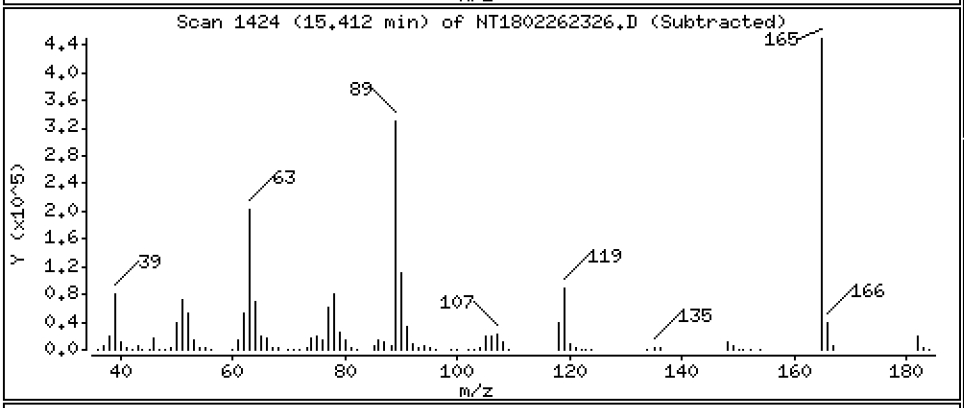
Column phase: ZB-5msi

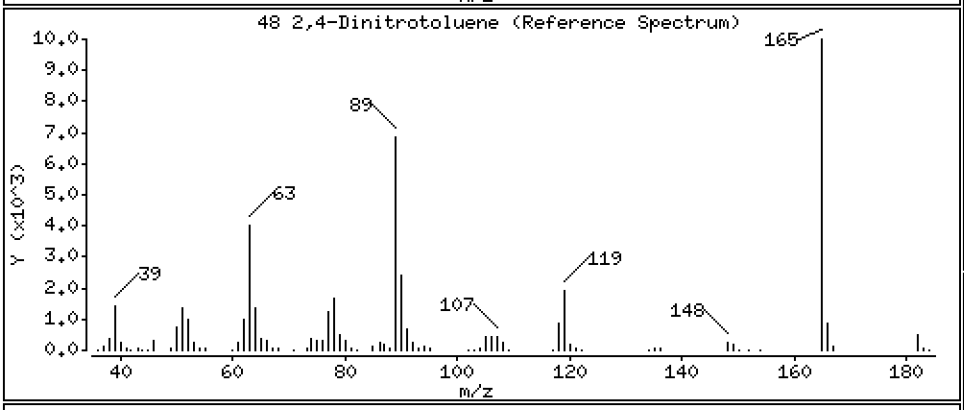
Column diameter: 0.25

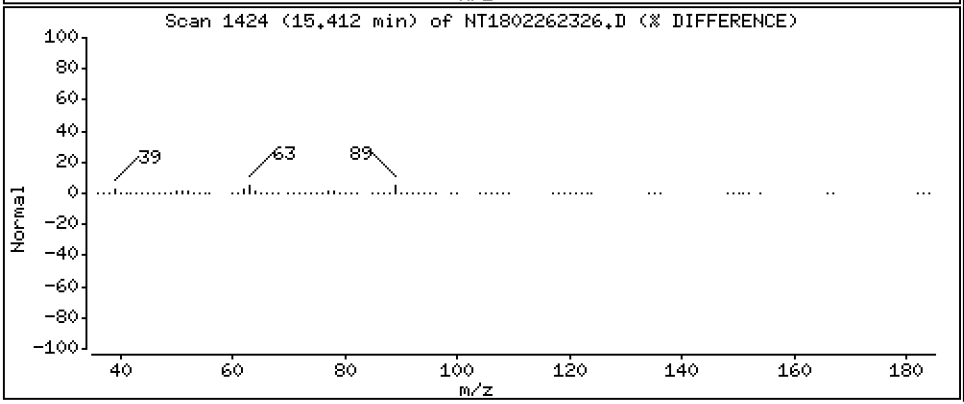
48 2,4-Dinitrotoluene

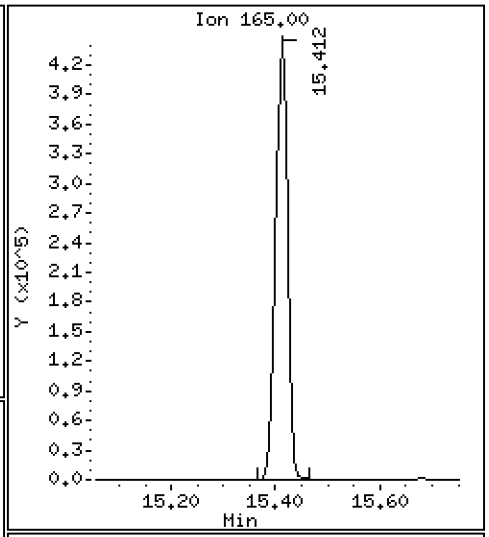
Concentration: 10.38 ug/mL

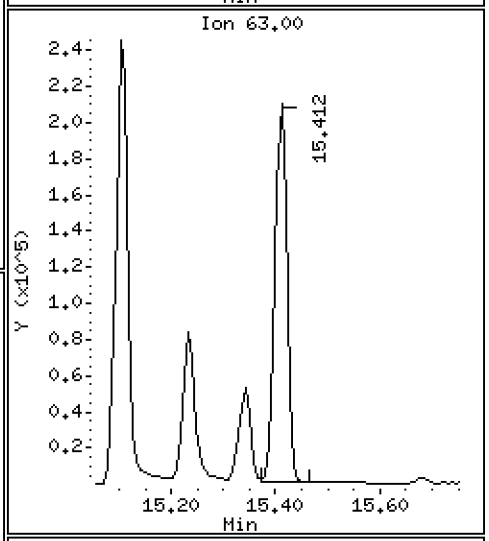


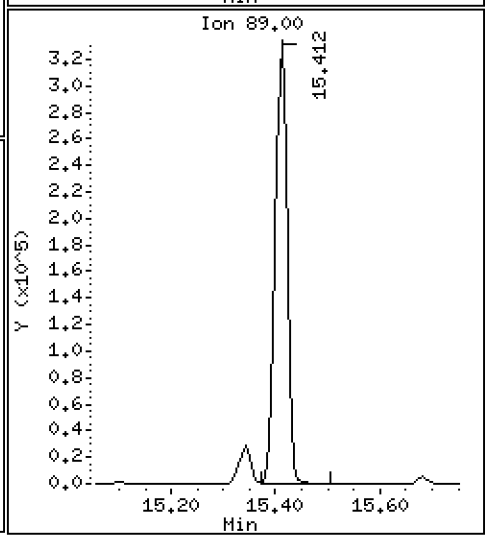












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

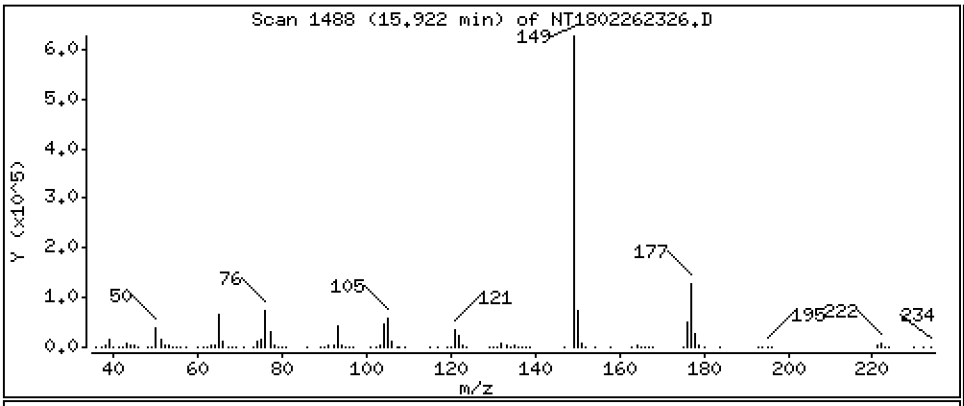
Operator: VTS

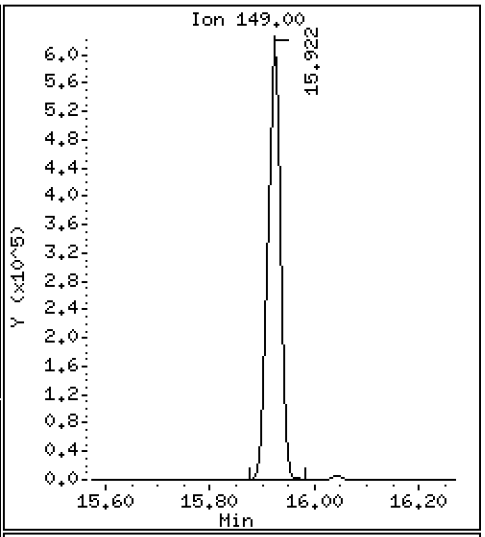
Column phase: ZB-5msi

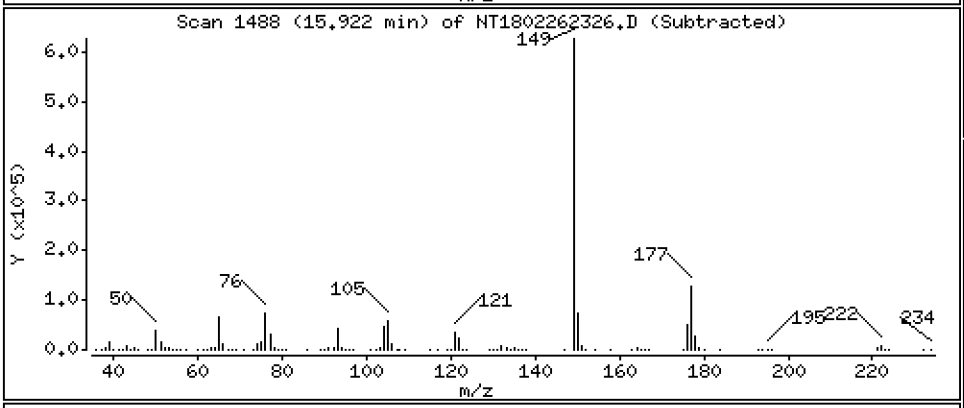
Column diameter: 0.25

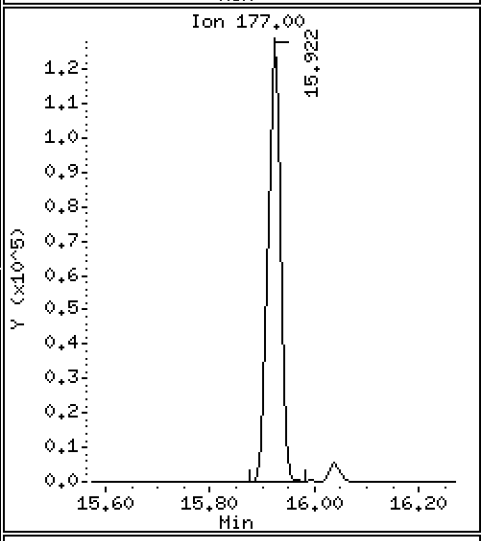
50 Diethylphthalate

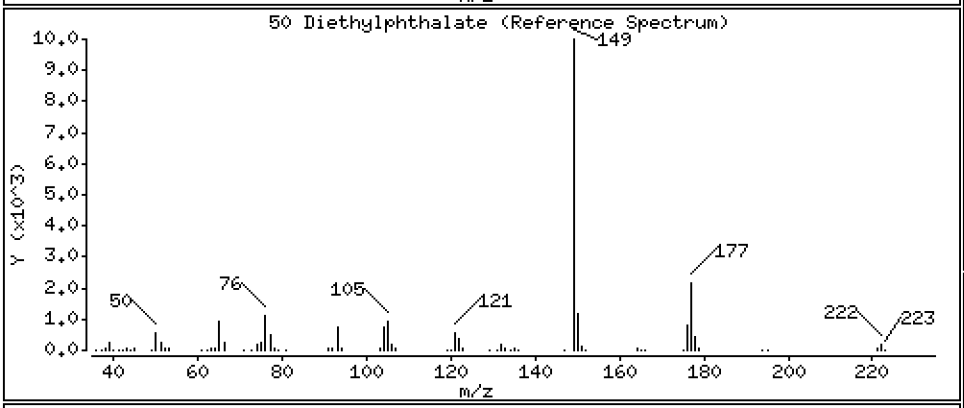
Concentration: 5.515 ug/mL

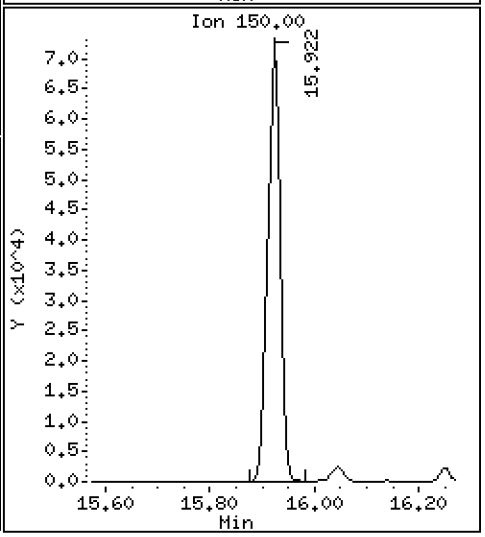


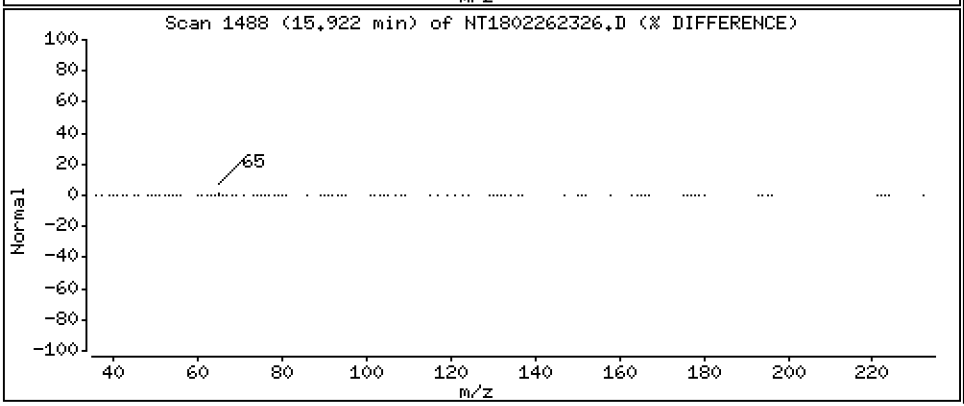












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

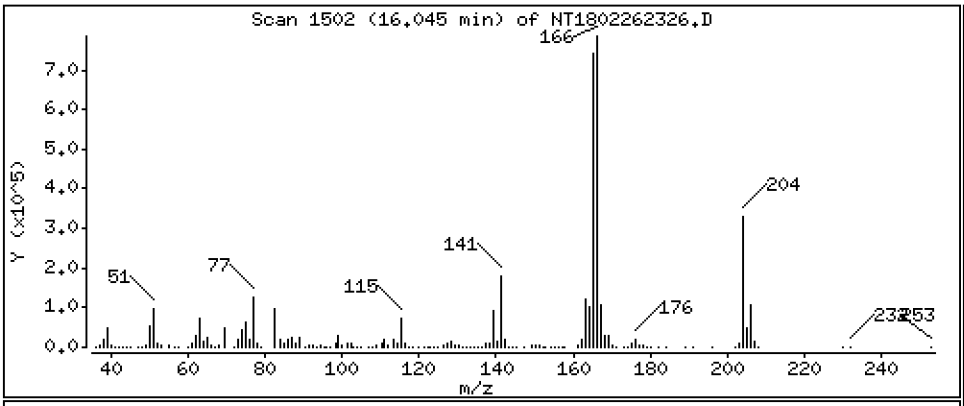
Operator: VTS

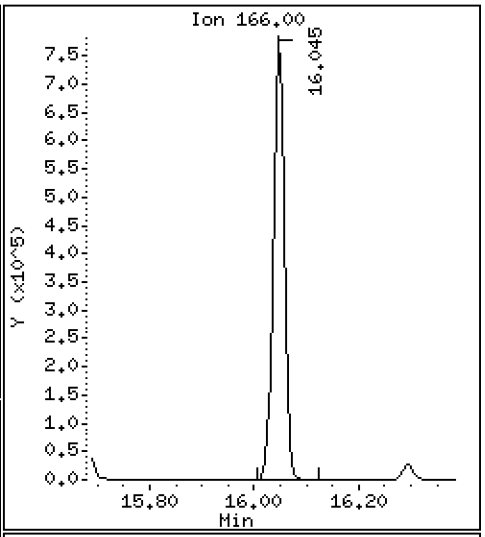
Column phase: ZB-5msi

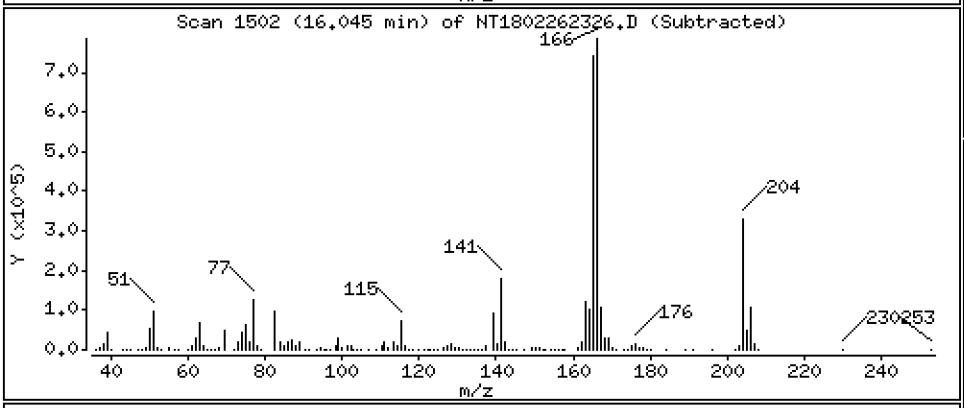
Column diameter: 0.25

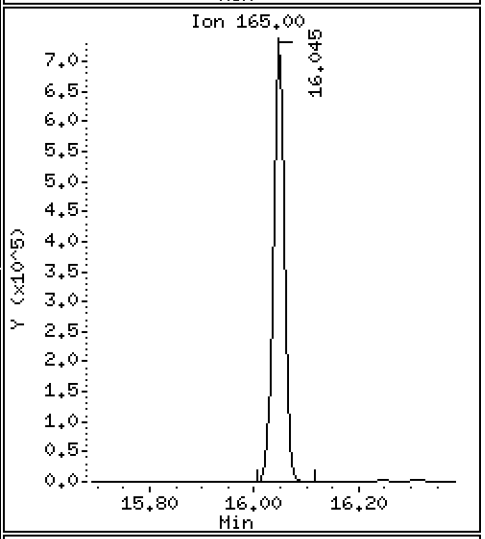
49 Fluorene

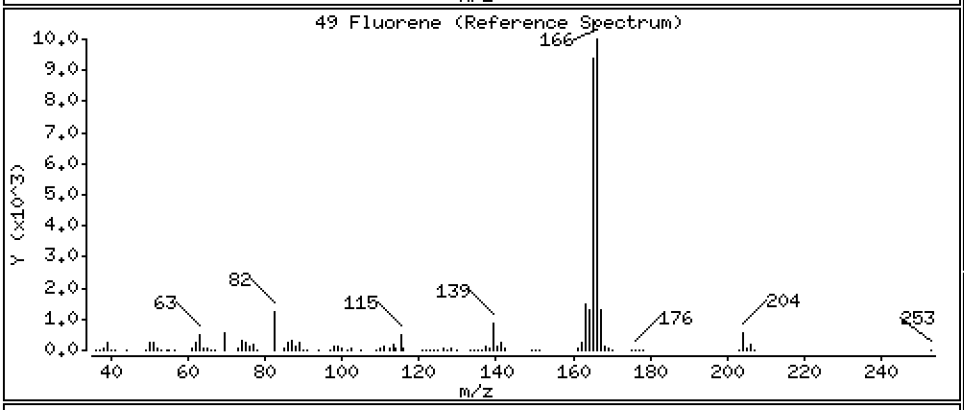
Concentration: 4.954 ug/mL

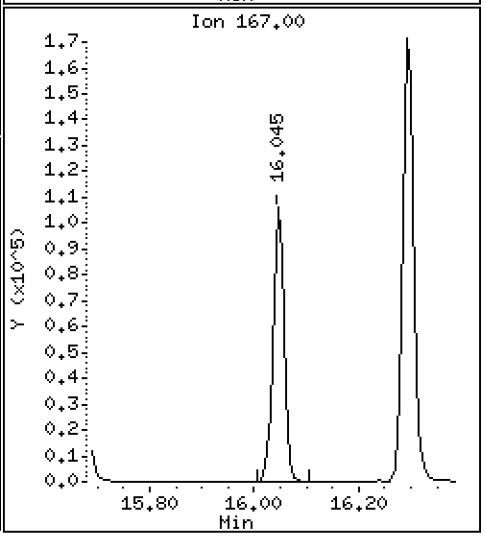


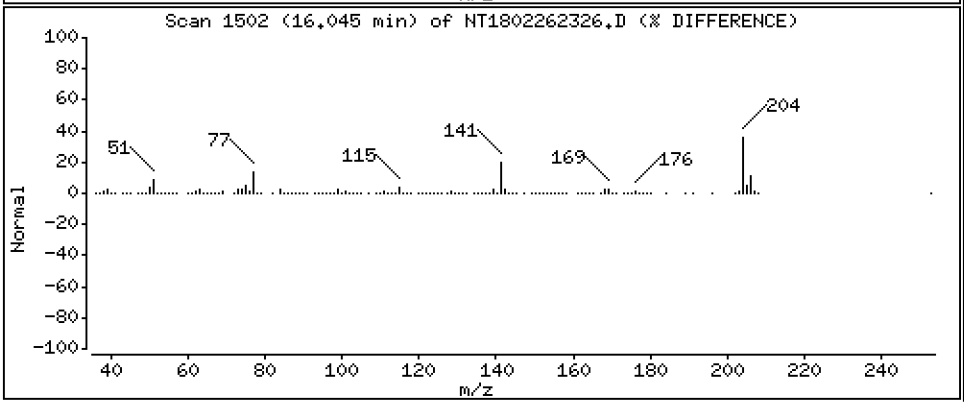












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

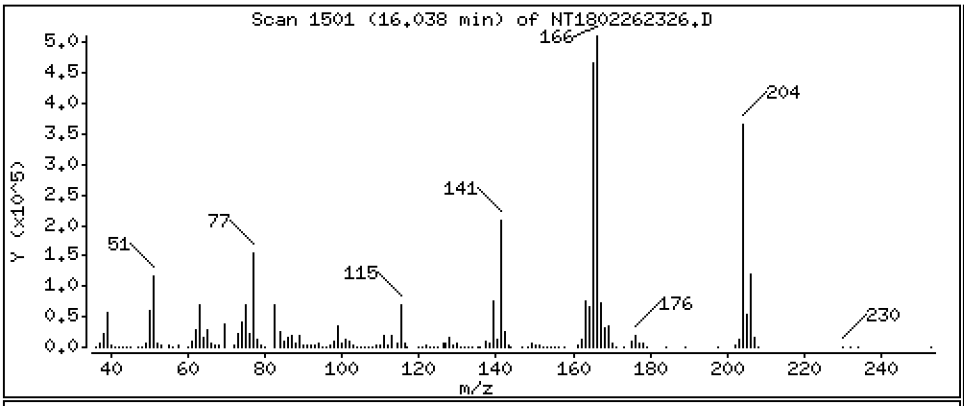
Operator: VTS

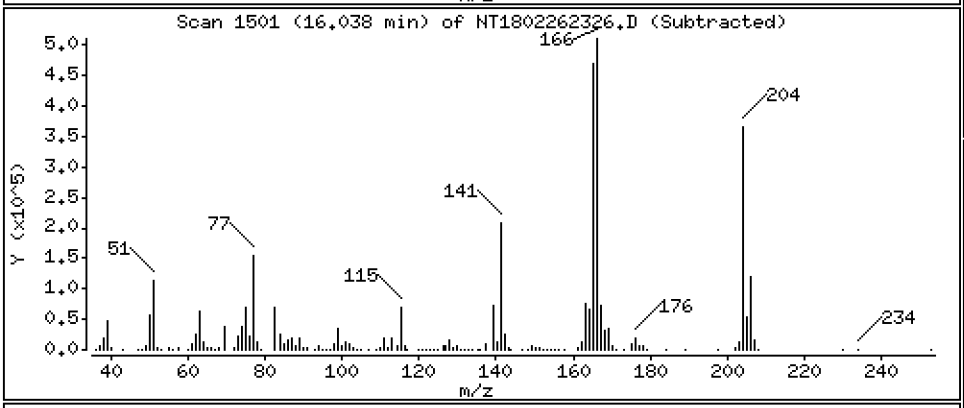
Column phase: ZB-5msi

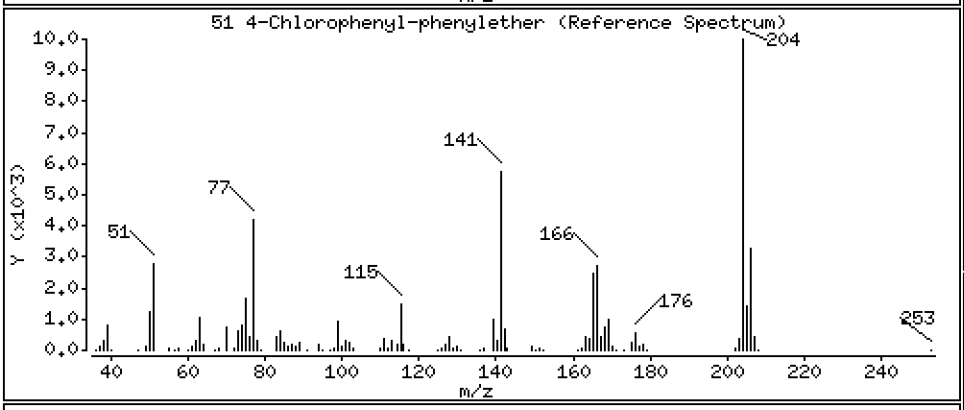
Column diameter: 0.25

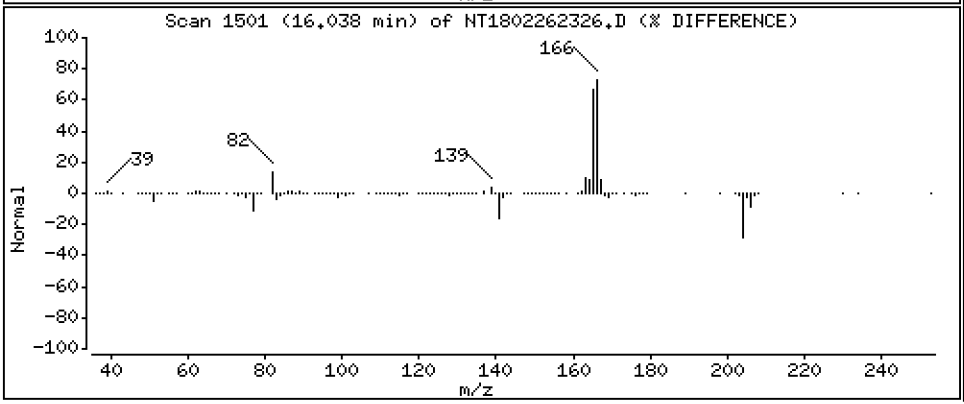
51 4-Chlorophenyl-phenylether

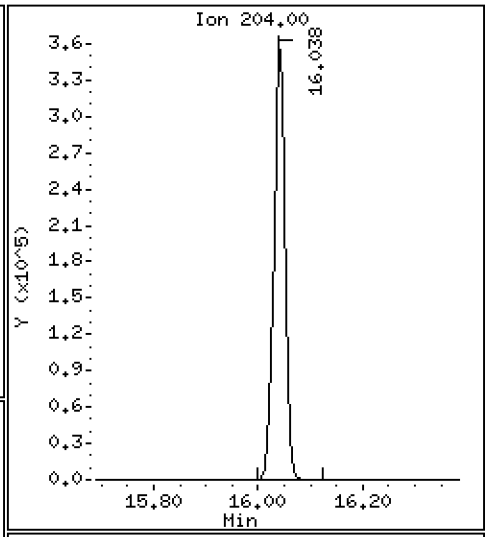
Concentration: 4.911 ug/mL

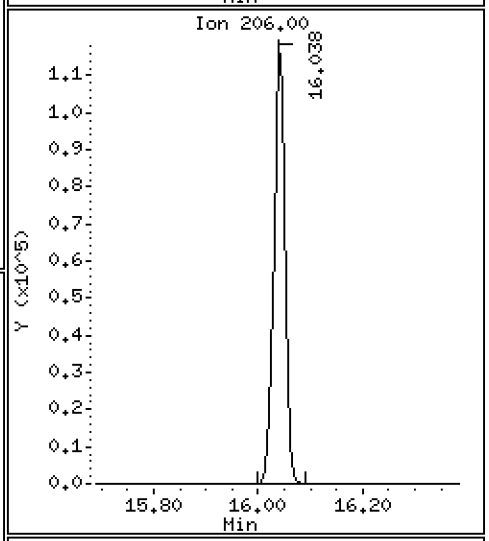


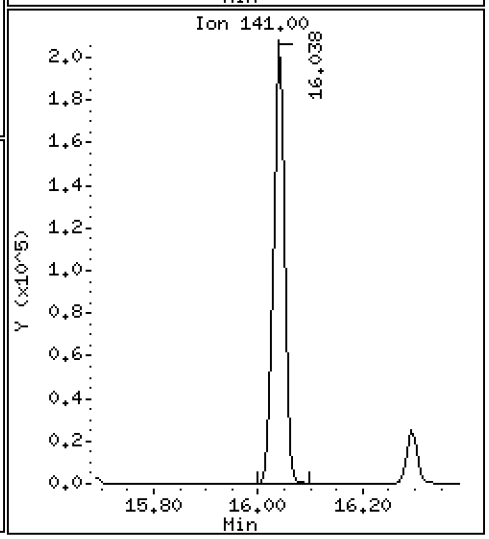












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

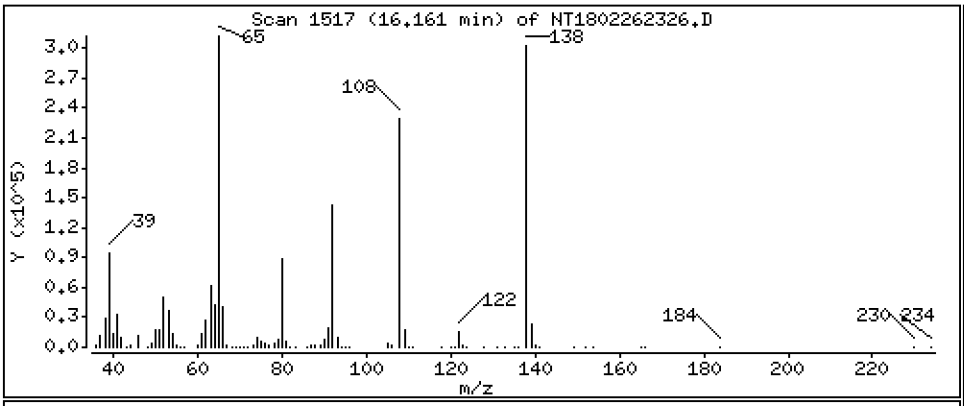
Operator: VTS

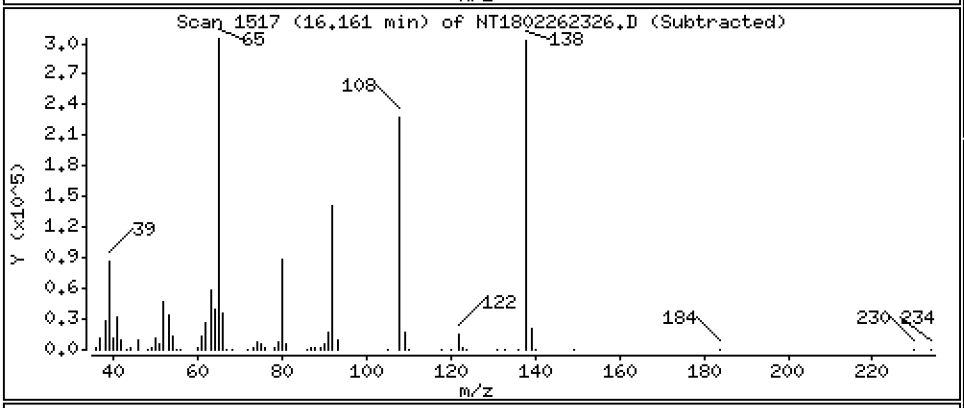
Column phase: ZB-5msi

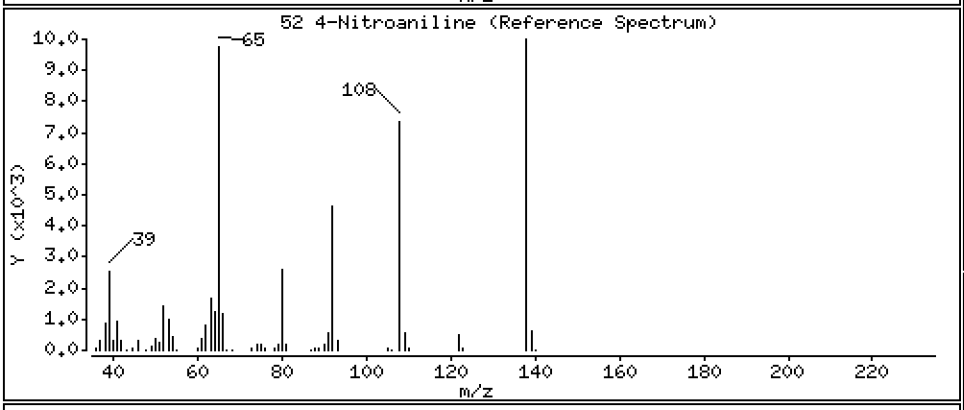
Column diameter: 0.25

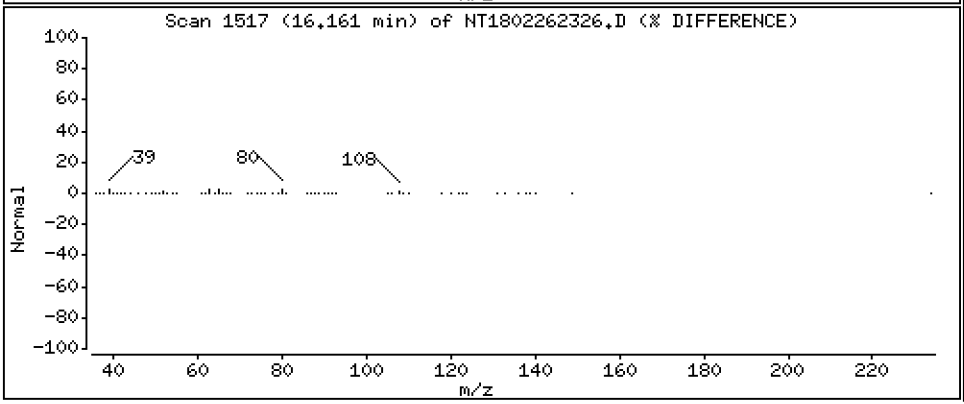
52 4-Nitroaniline

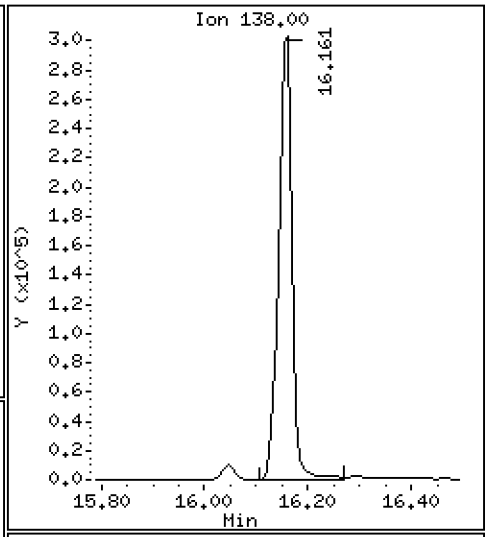
Concentration: 10.31 ug/mL

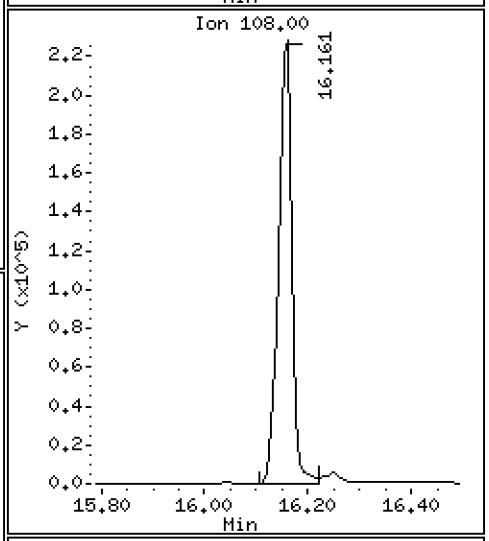


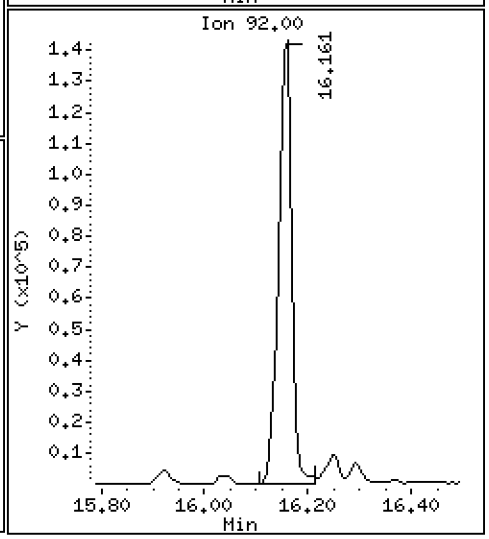












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

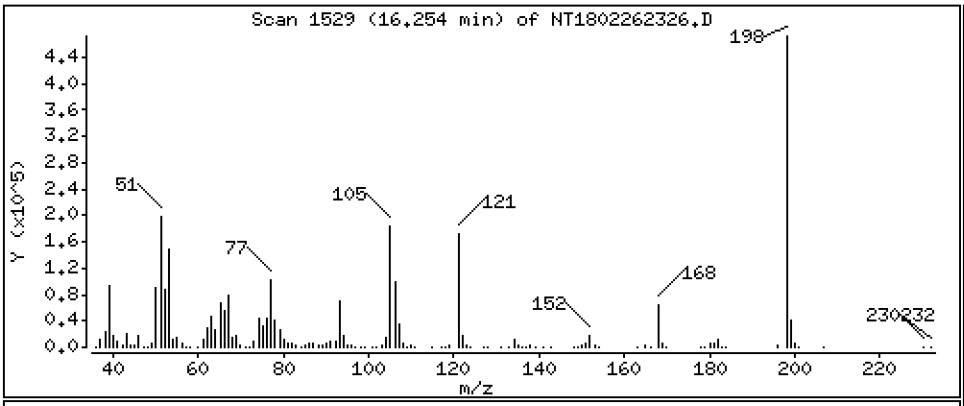
Operator: VTS

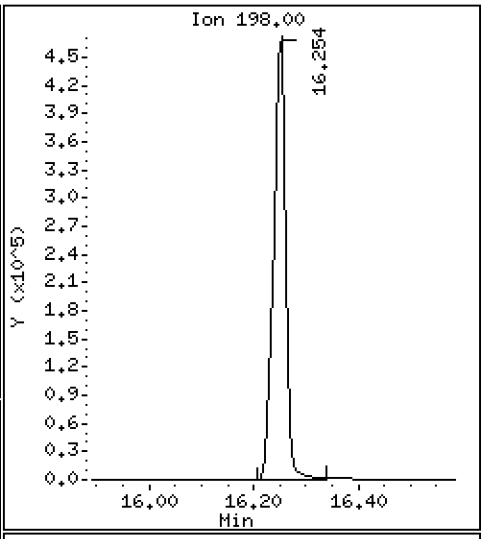
Column phase: ZB-5msi

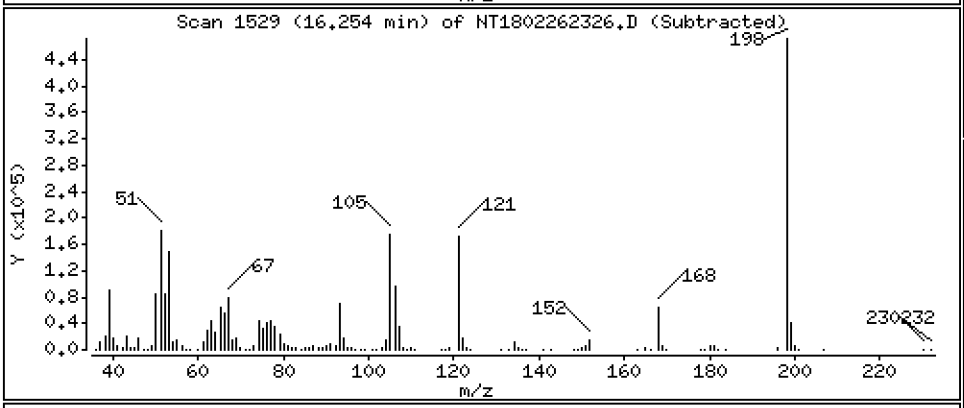
Column diameter: 0.25

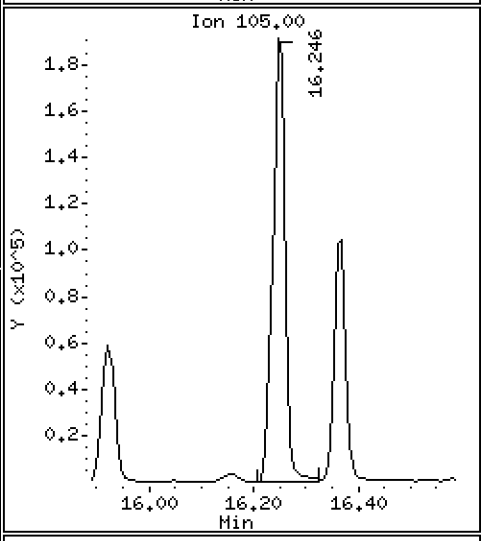
53 4,6-Dinitro-2-methylphenol

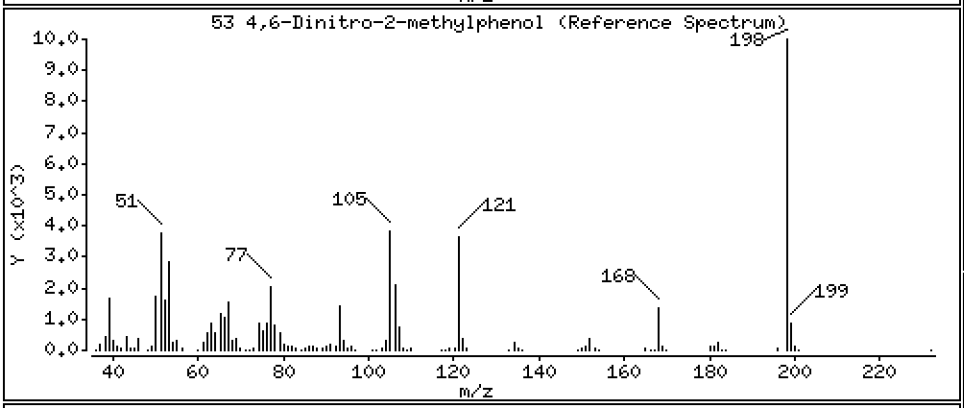
Concentration: 18.40 ug/mL

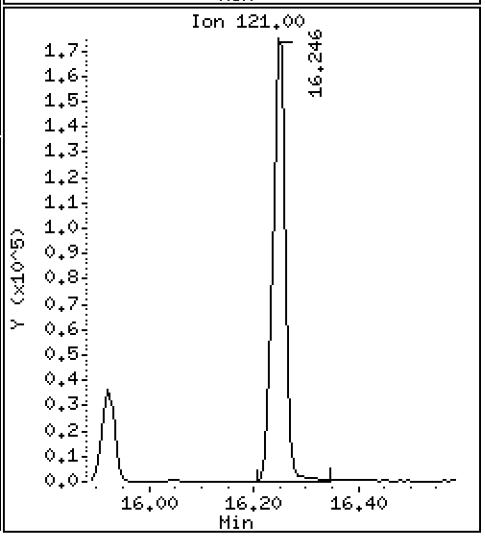


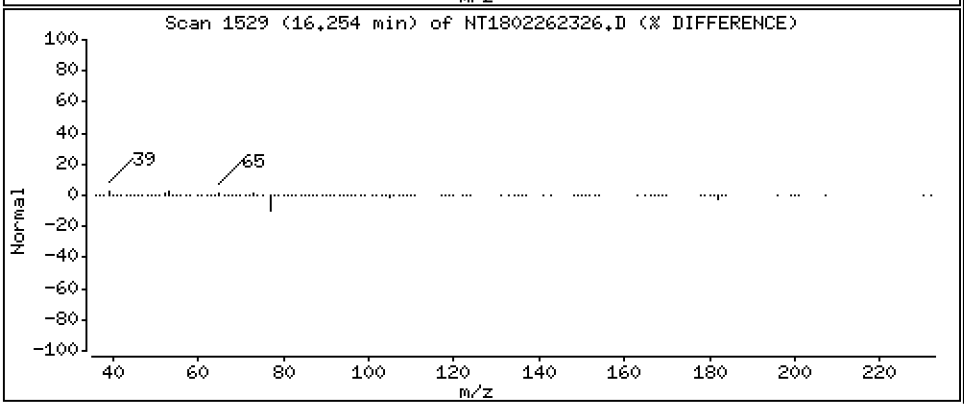












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

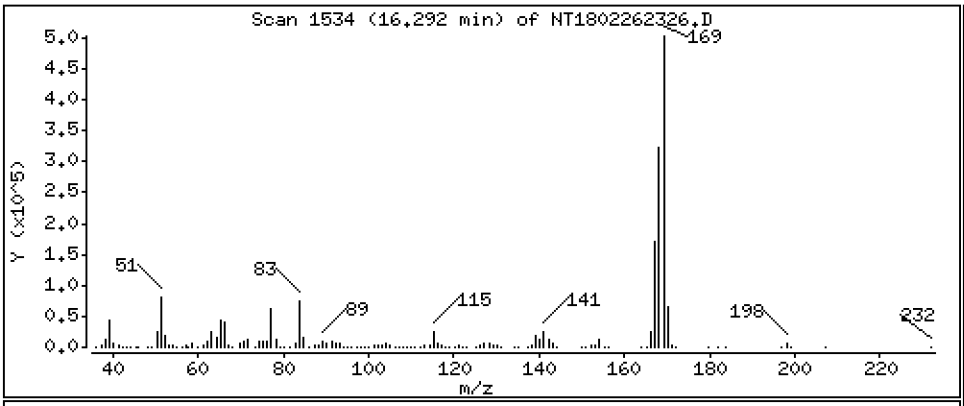
Operator: VTS

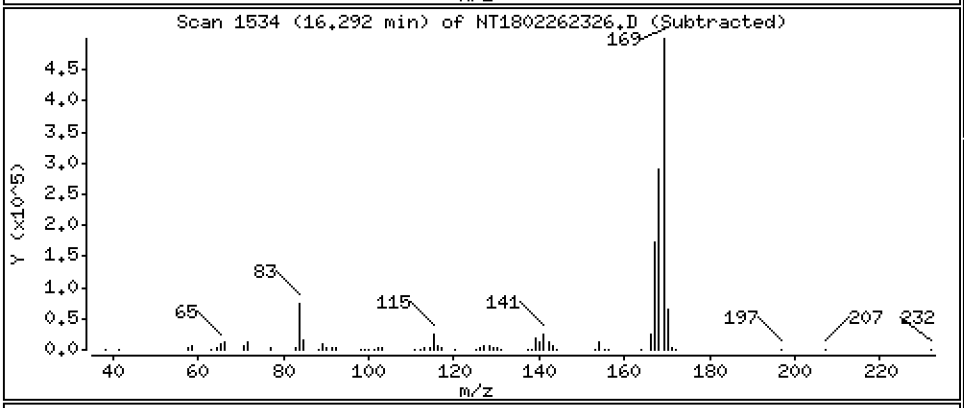
Column phase: ZB-5msi

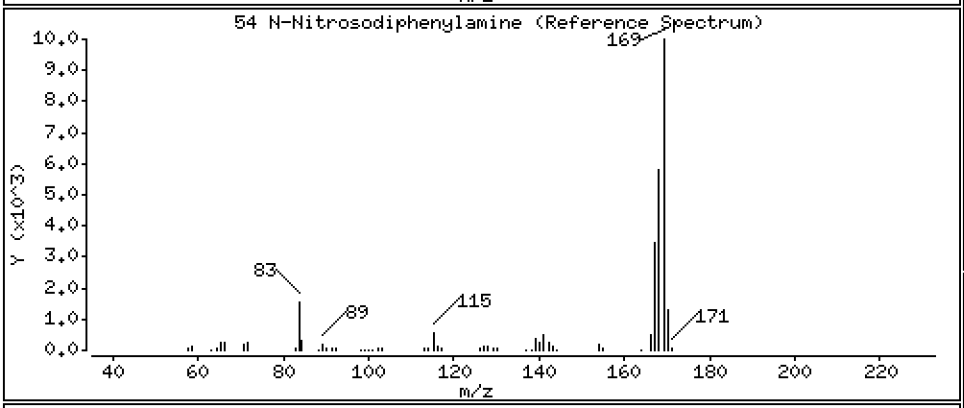
Column diameter: 0.25

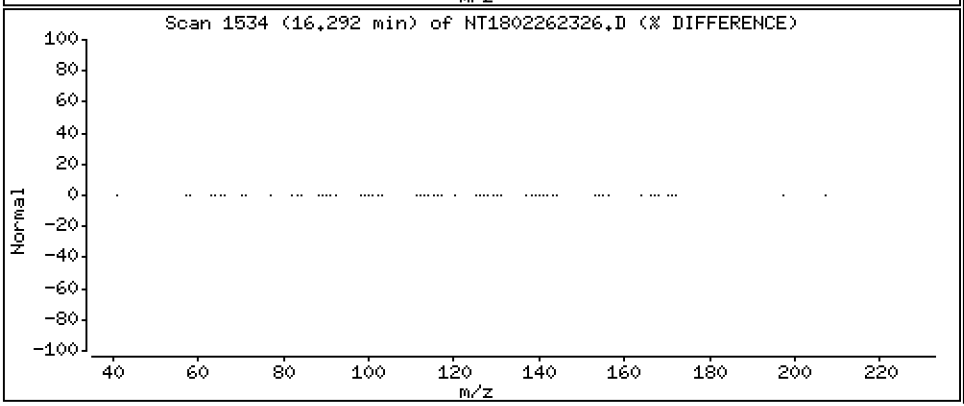
54 N-Nitrosodiphenylamine

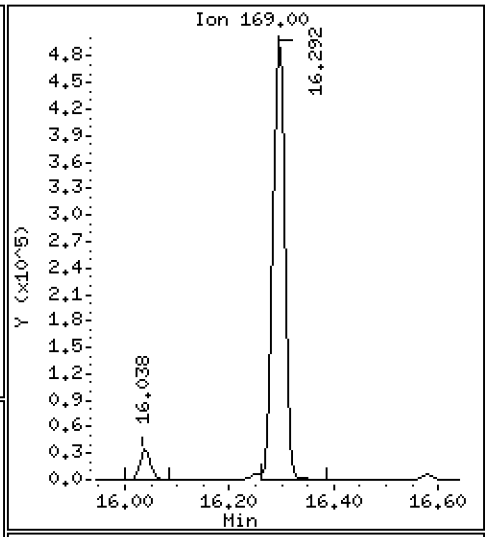
Concentration: 4.432 ug/mL

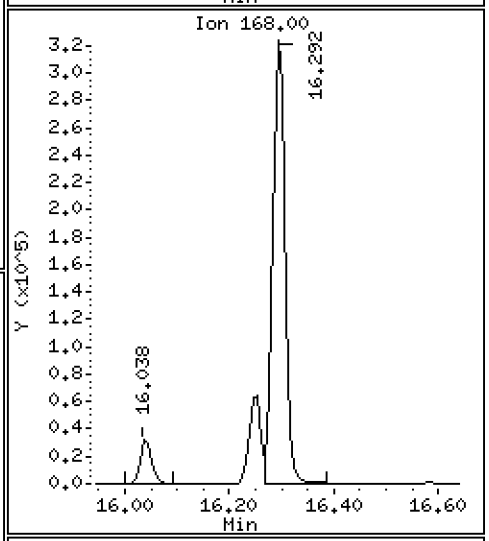


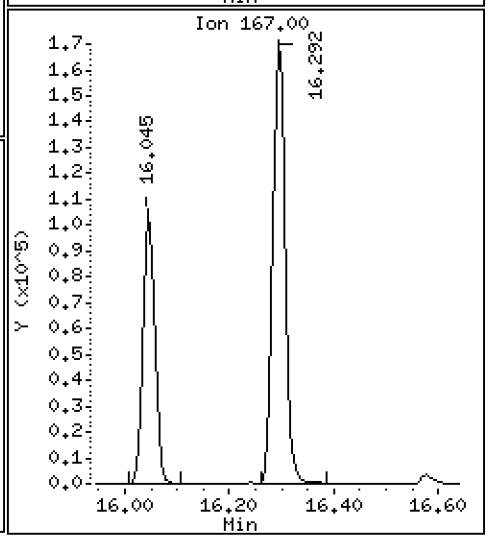












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

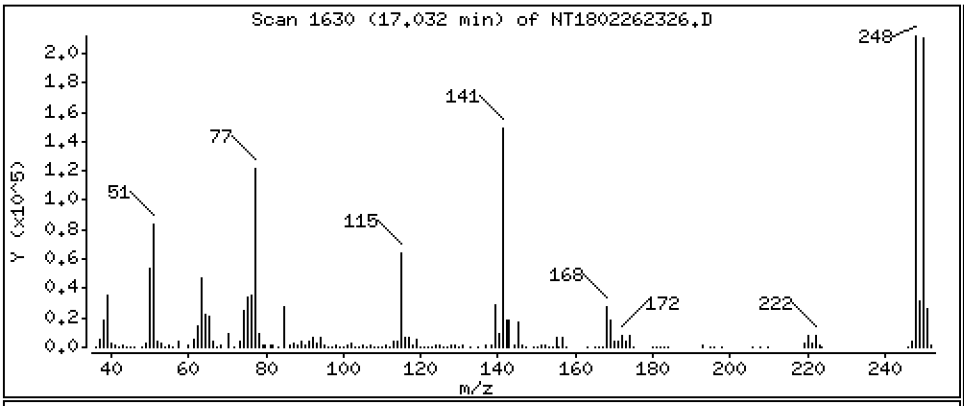
Operator: VTS

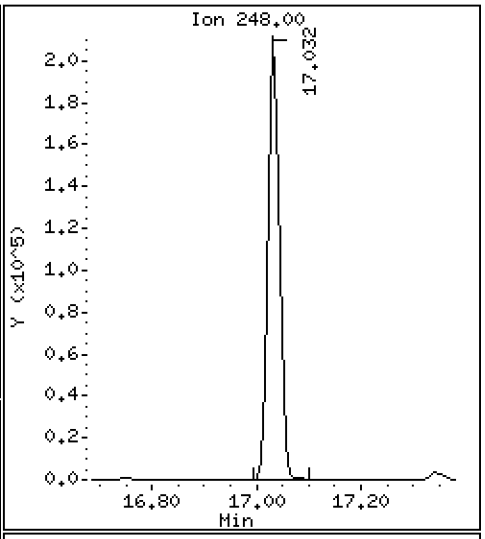
Column phase: ZB-5msi

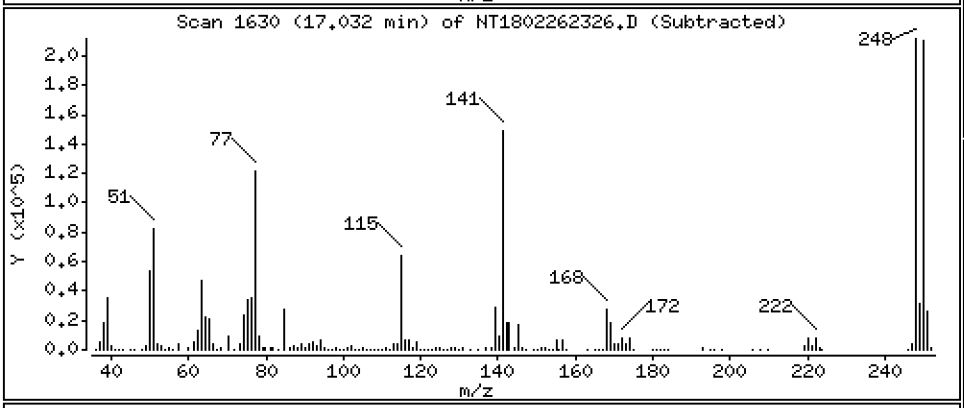
Column diameter: 0.25

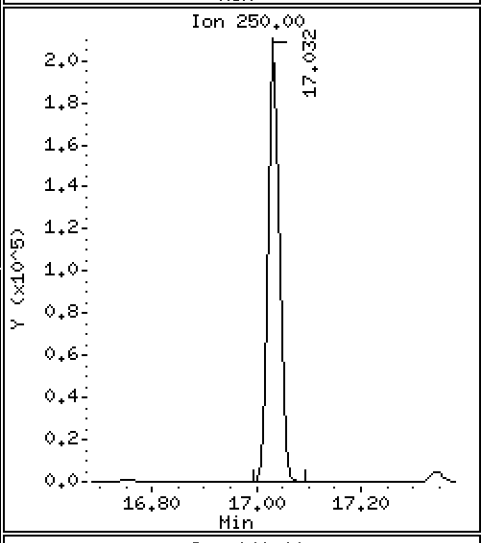
56 4-Bromophenyl-phenylether

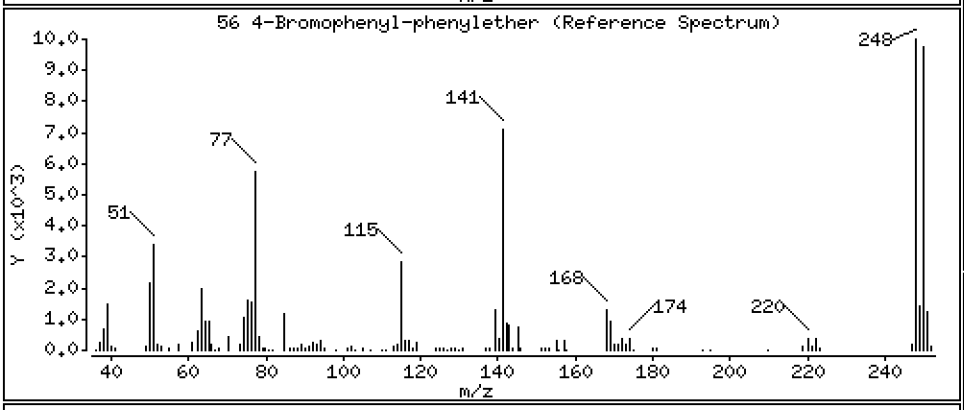
Concentration: 4.595 ug/mL

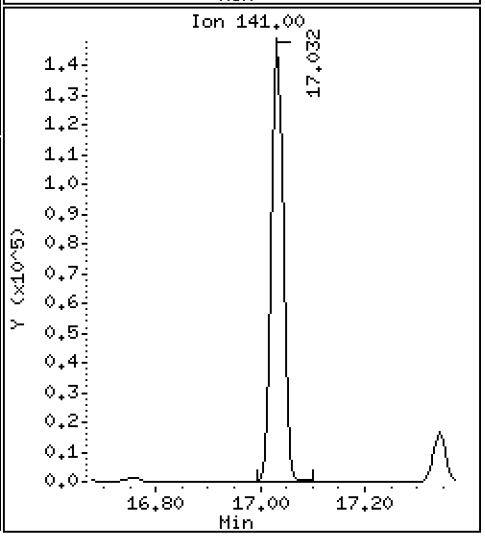


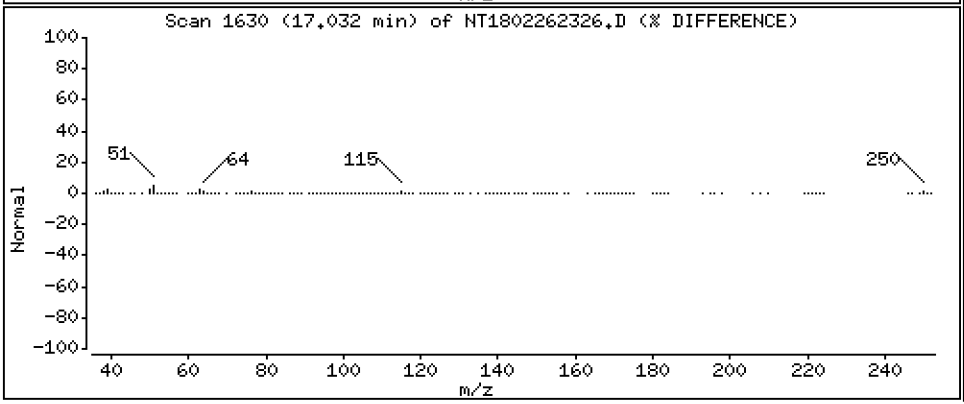












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

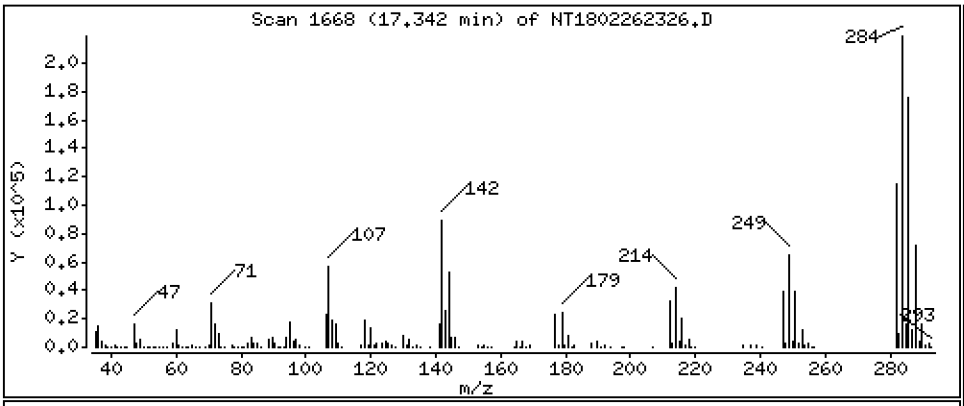
Operator: VTS

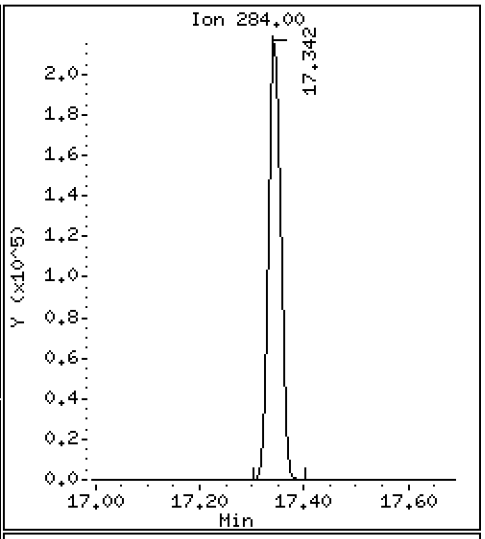
Column phase: ZB-5msi

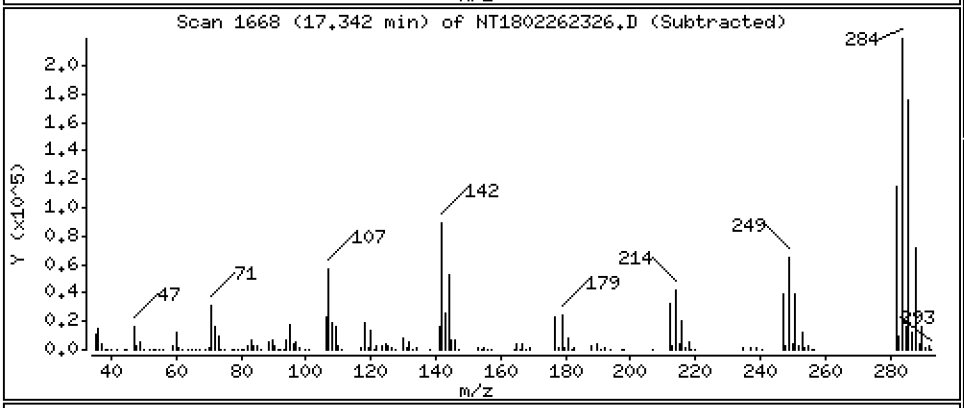
Column diameter: 0.25

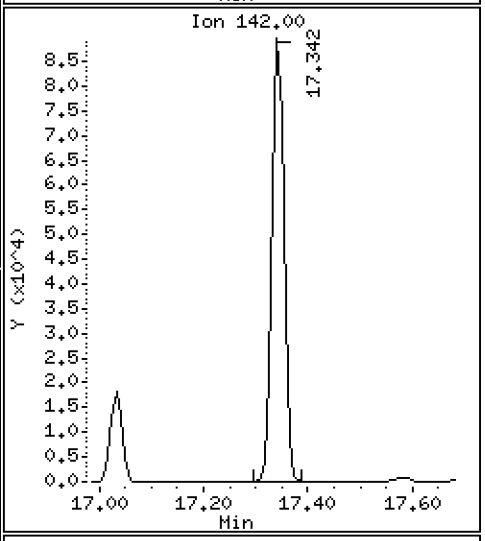
57 Hexachlorobenzene

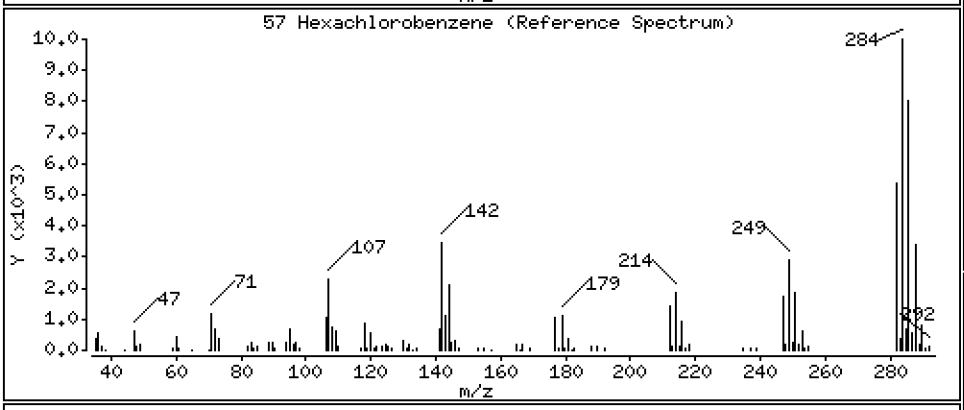
Concentration: 4.379 ug/mL

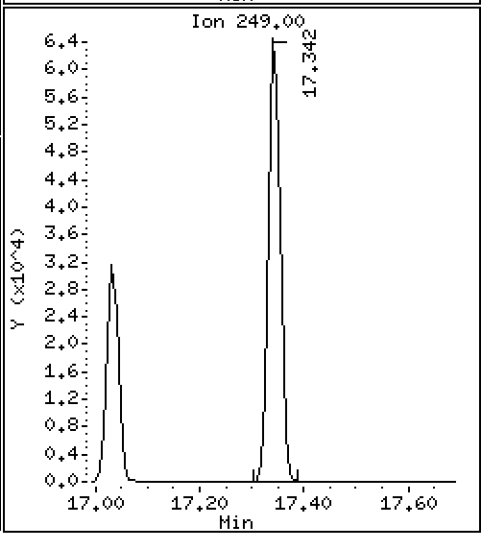


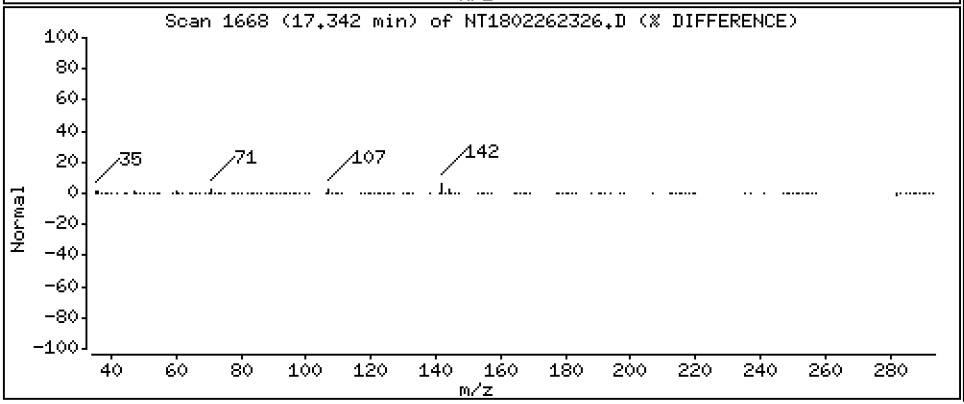












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

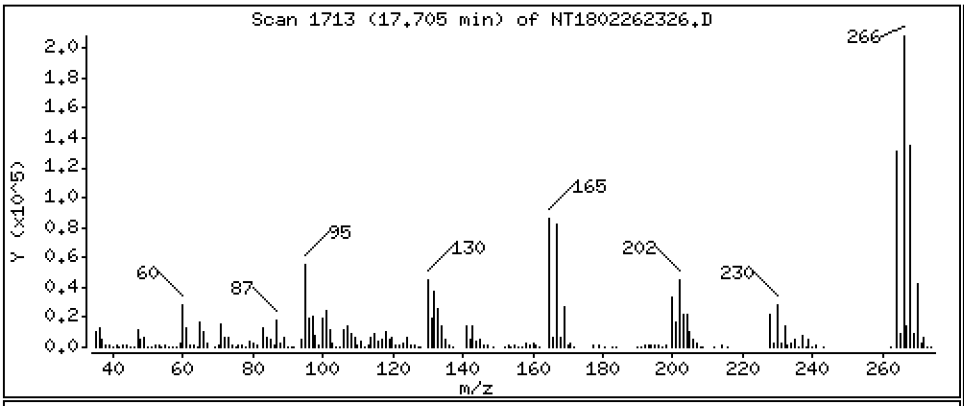
Operator: VTS

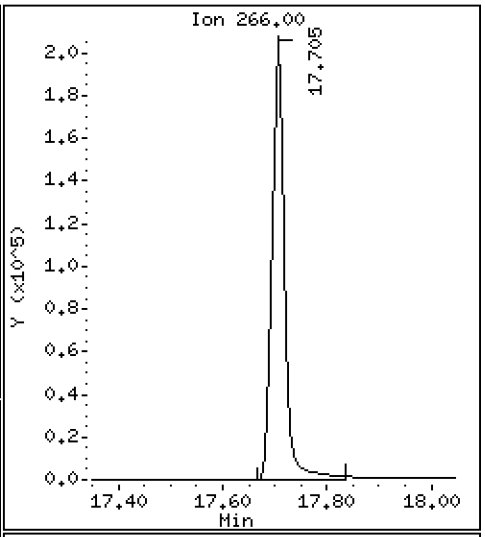
Column phase: ZB-5msi

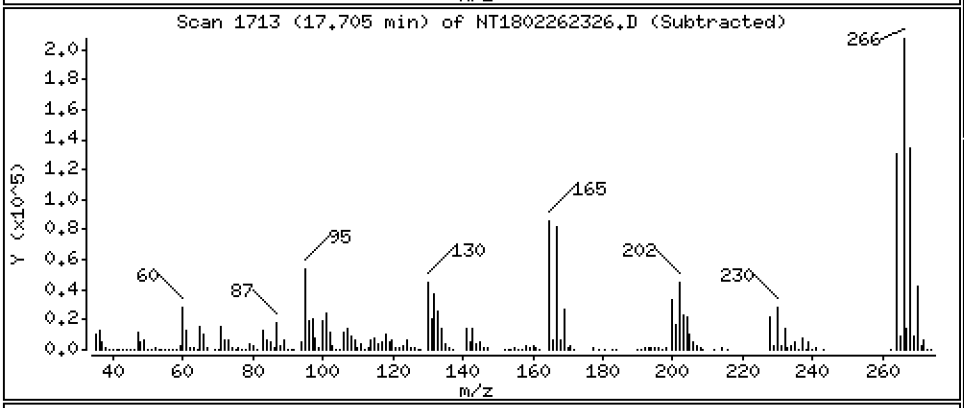
Column diameter: 0.25

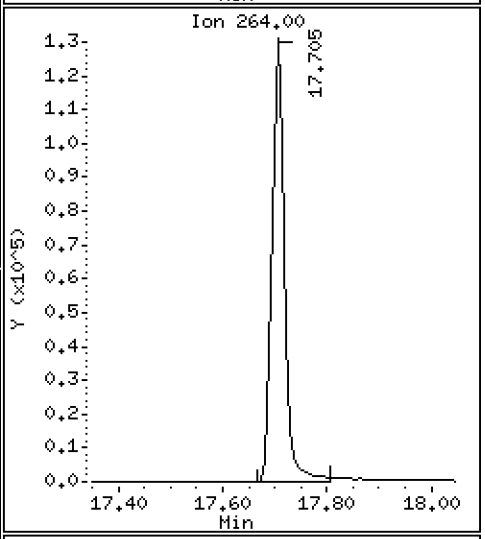
58 Pentachlorophenol

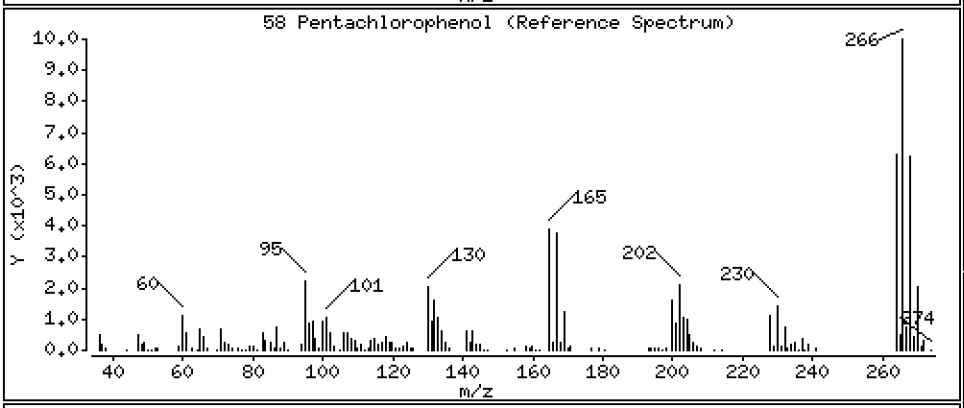
Concentration: 14.79 ug/mL

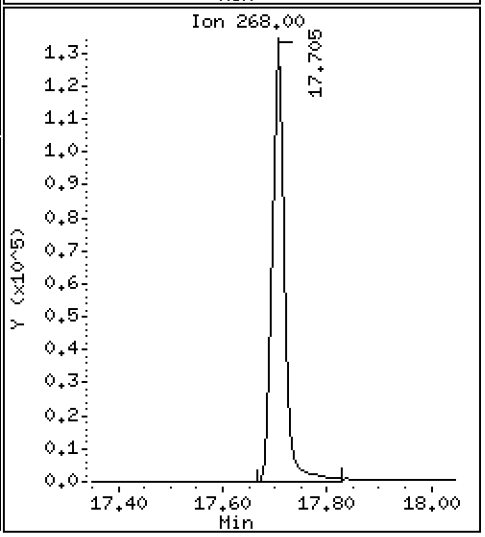


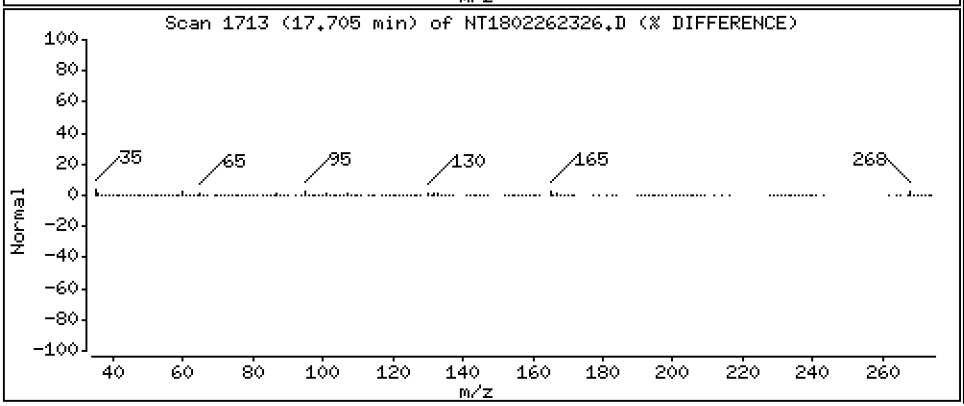












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

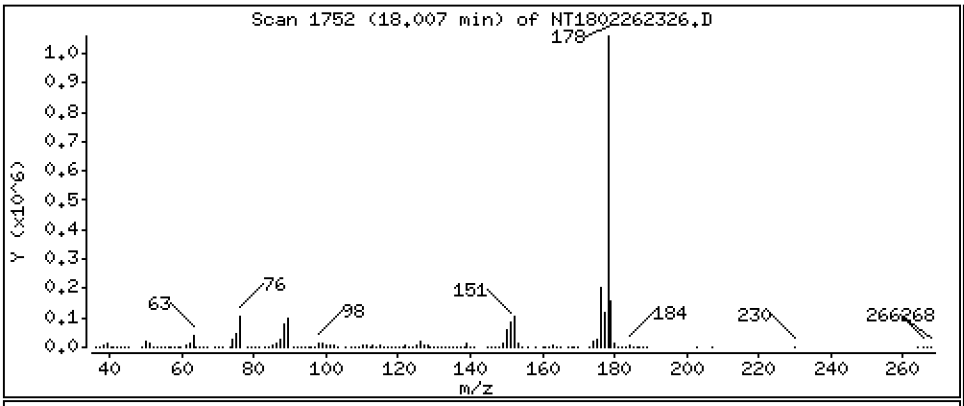
Operator: VTS

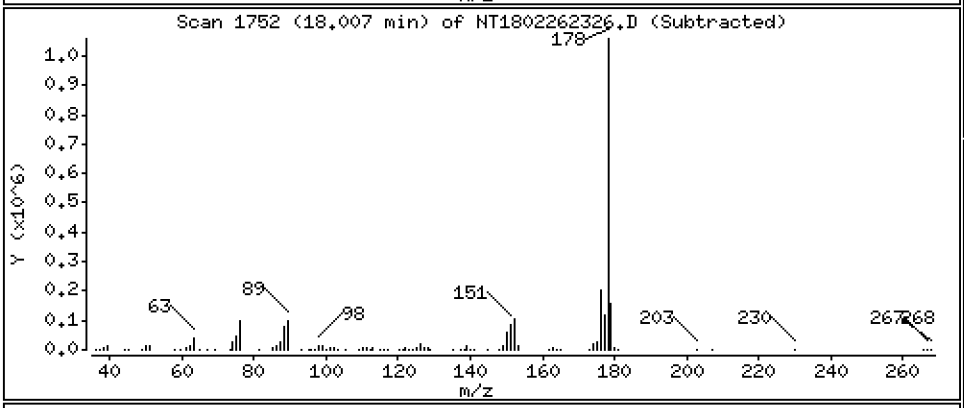
Column phase: ZB-5msi

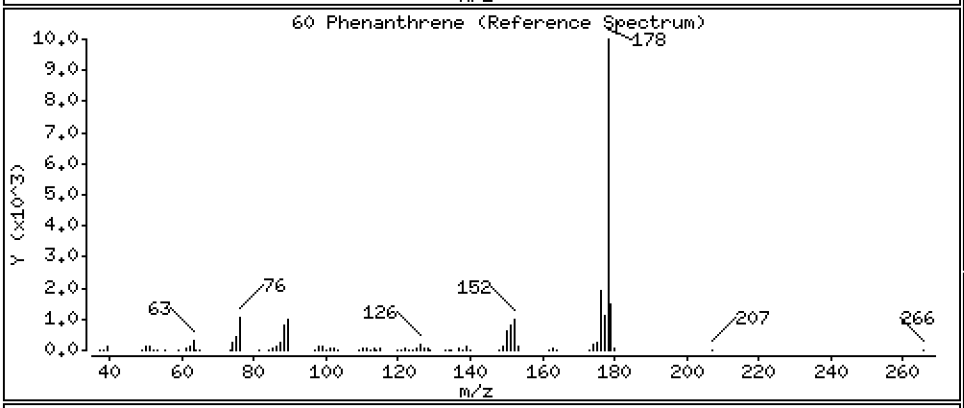
Column diameter: 0.25

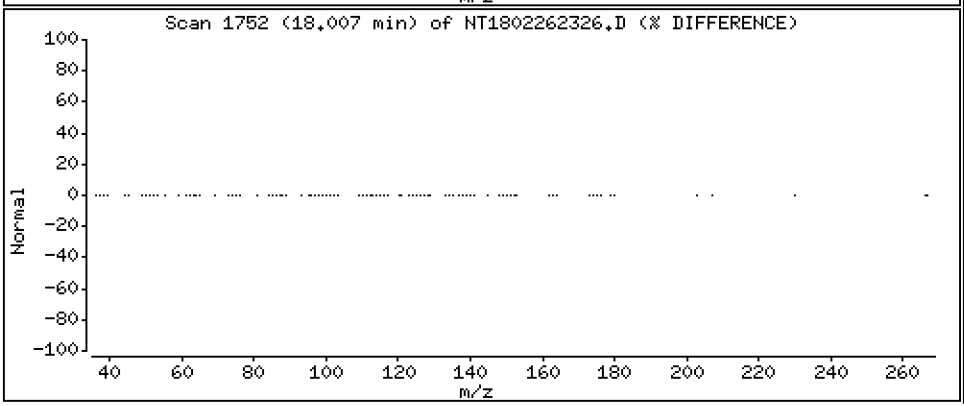
60 Phenanthrene

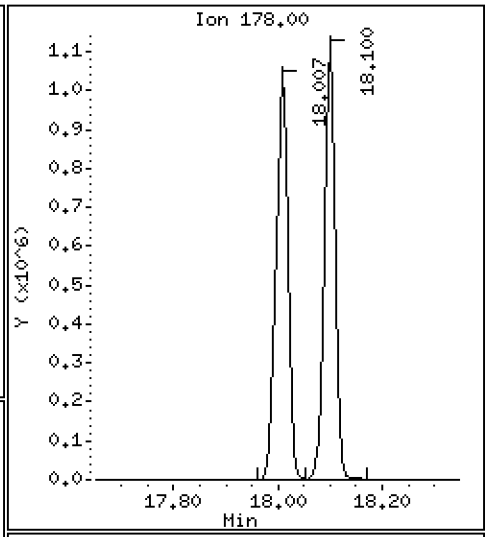
Concentration: 4.671 ug/mL

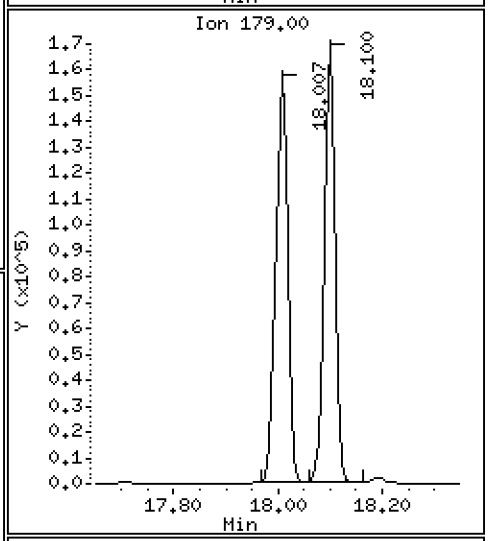


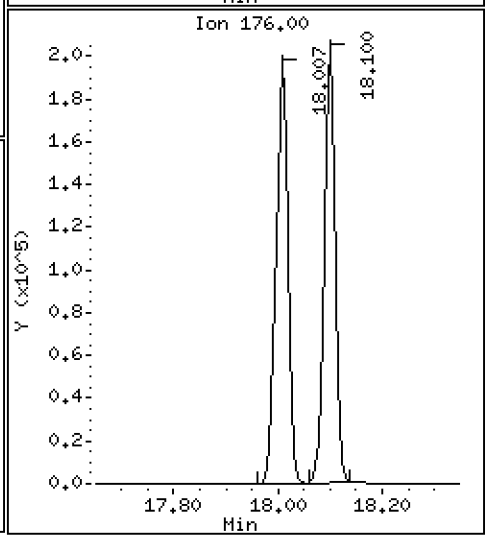












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

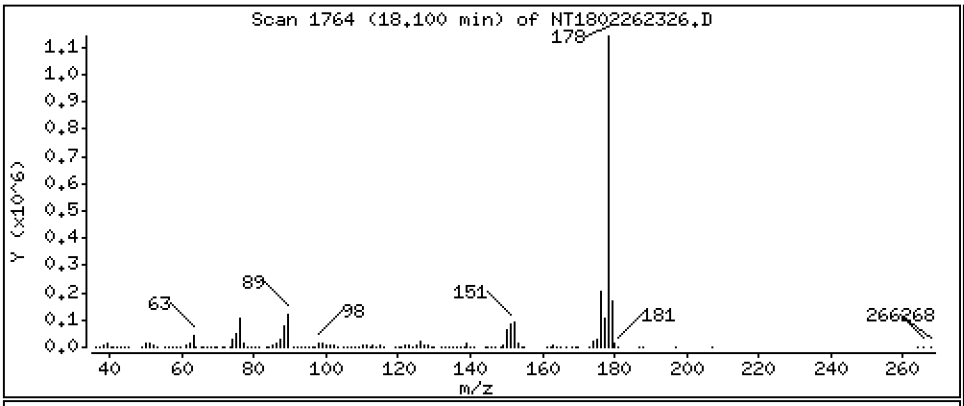
Operator: VTS

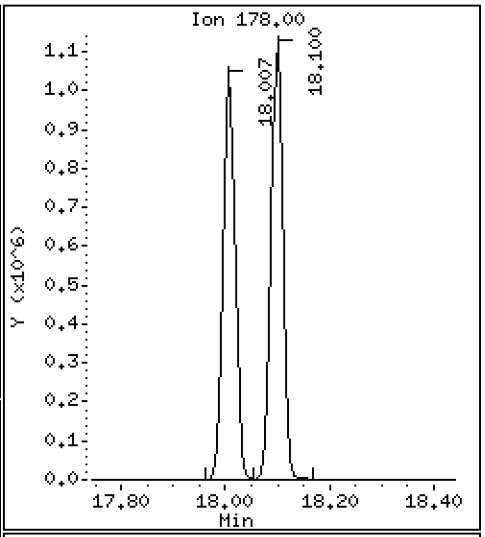
Column phase: ZB-5msi

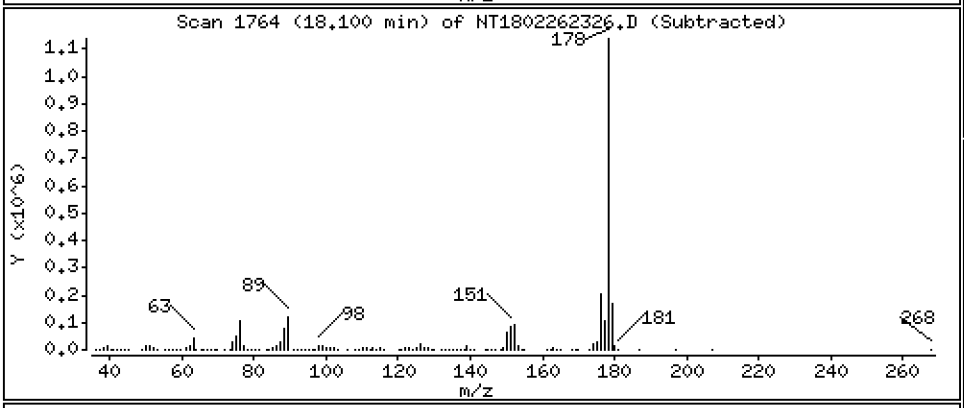
Column diameter: 0.25

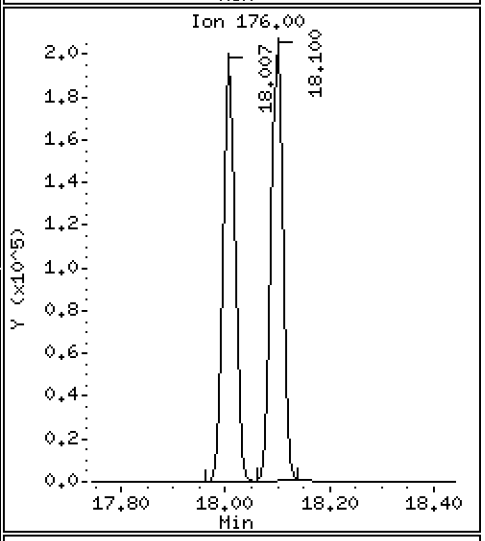
61 Anthracene

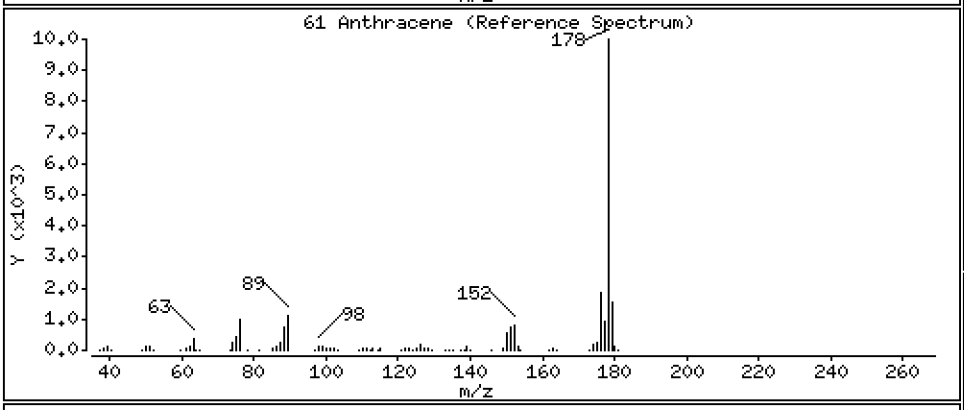
Concentration: 4.985 ug/mL

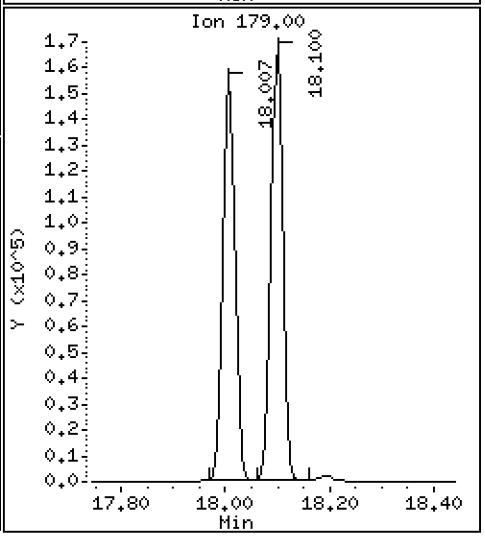


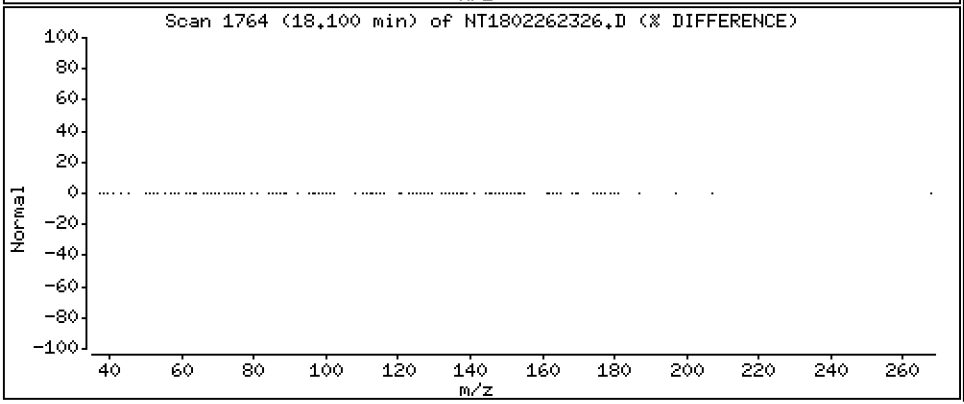












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

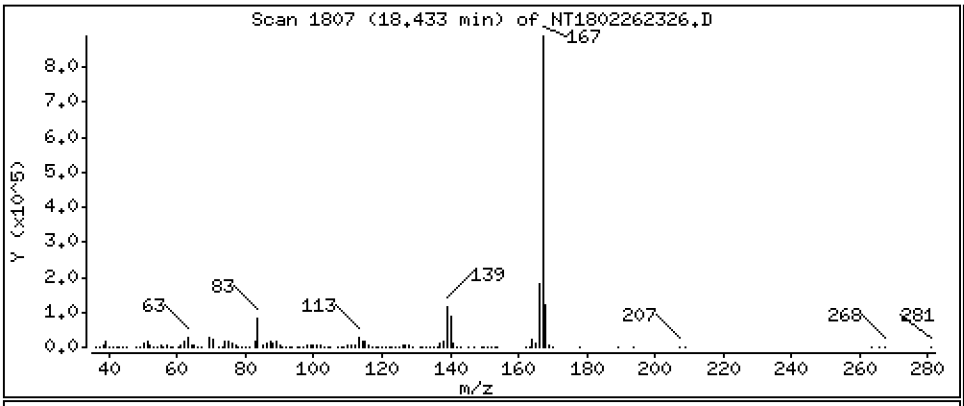
Operator: VTS

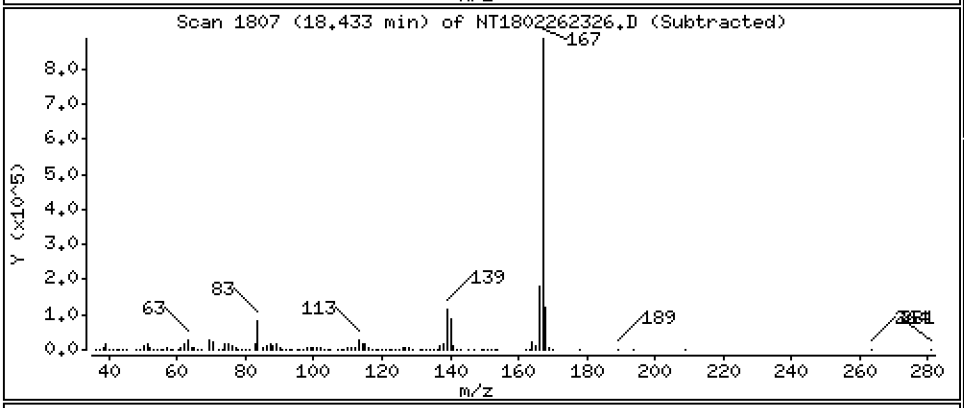
Column phase: ZB-5msi

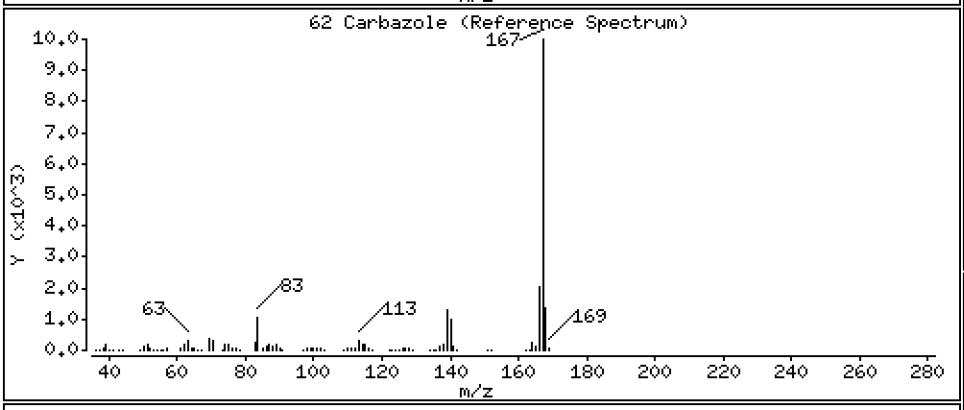
Column diameter: 0.25

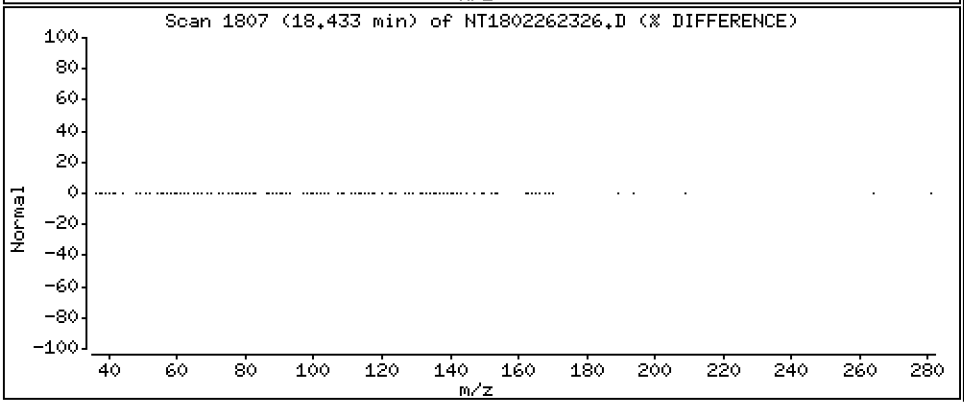
62 Carbazole

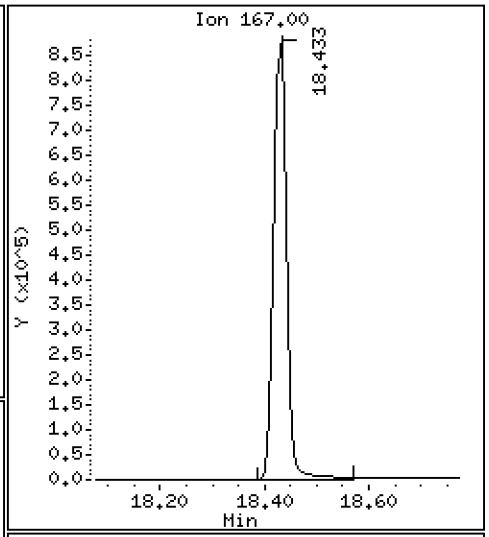
Concentration: 4.699 ug/mL

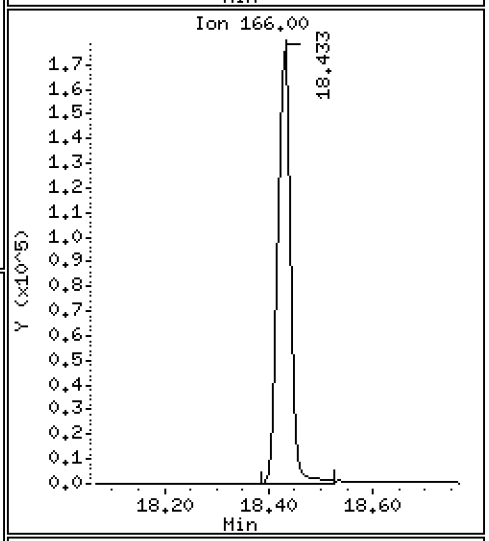


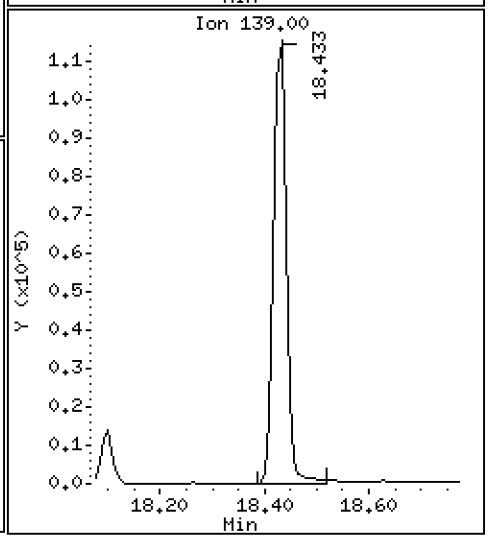












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

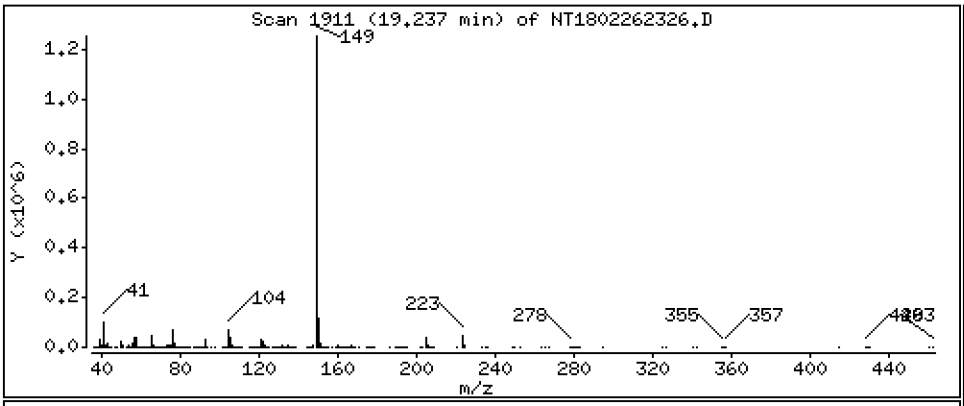
Operator: VTS

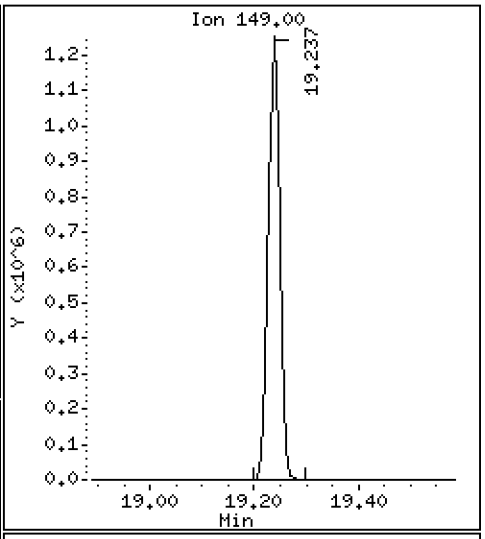
Column phase: ZB-5msi

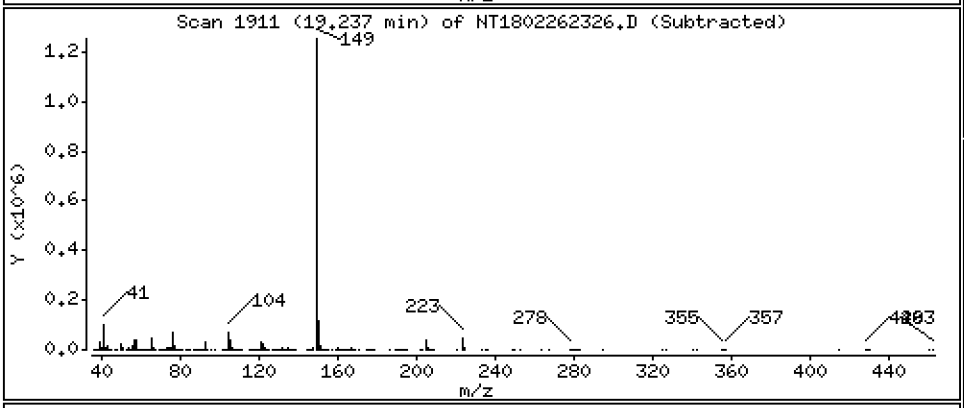
Column diameter: 0.25

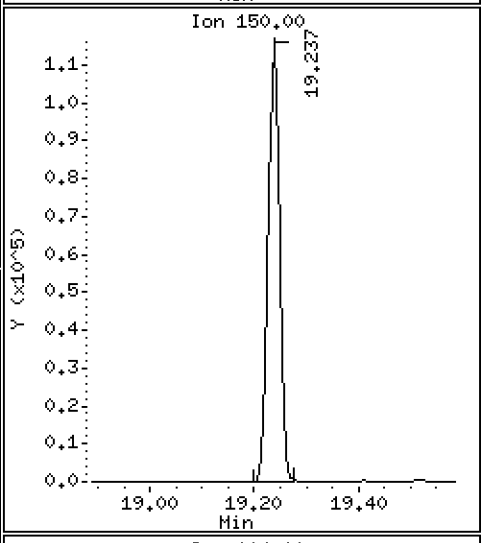
63 Di-n-butylphthalate

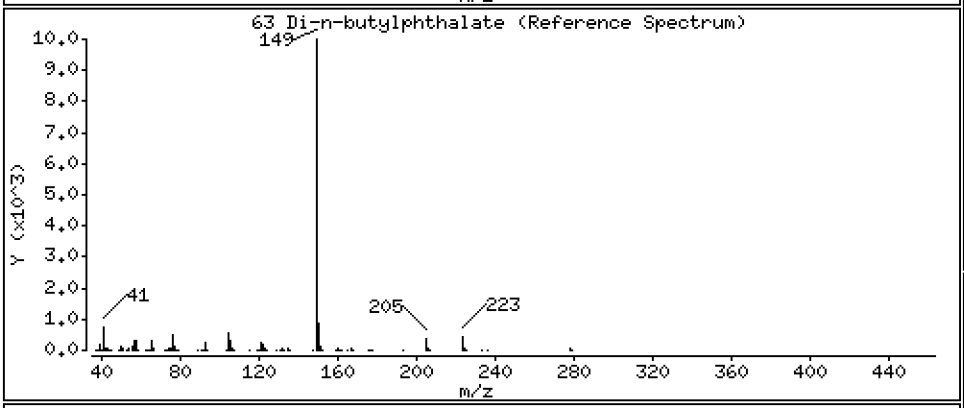
Concentration: 5.339 ug/mL

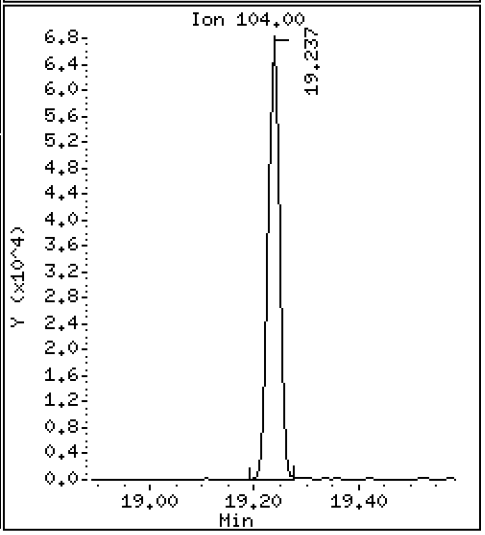


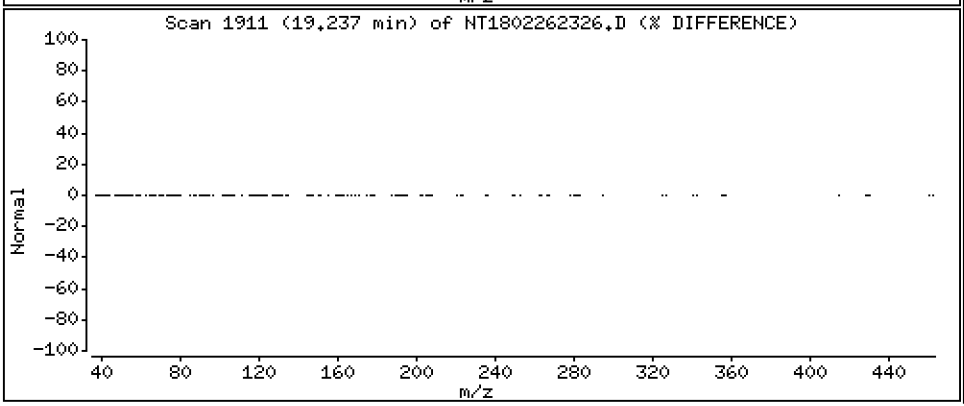












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

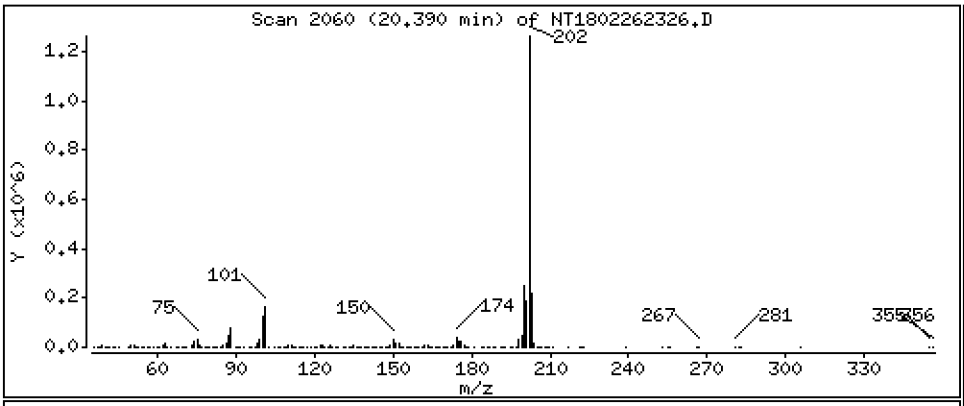
Operator: VTS

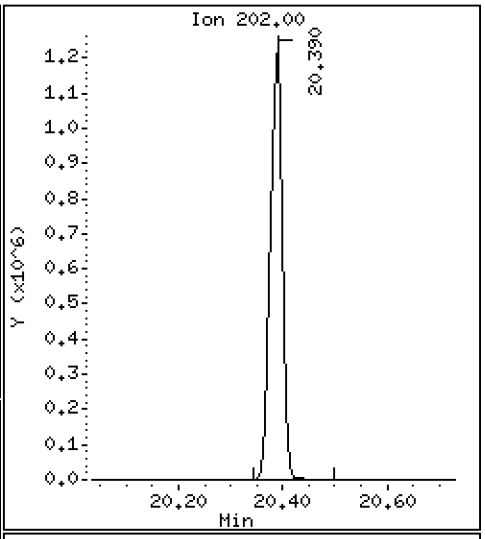
Column phase: ZB-5msi

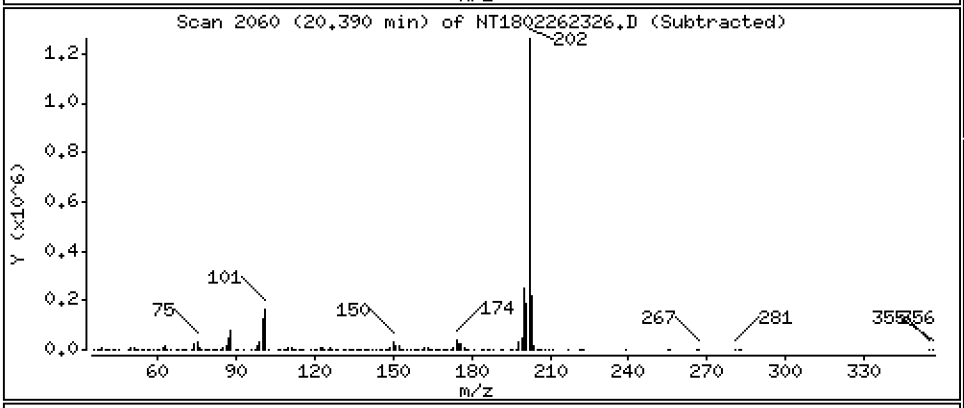
Column diameter: 0.25

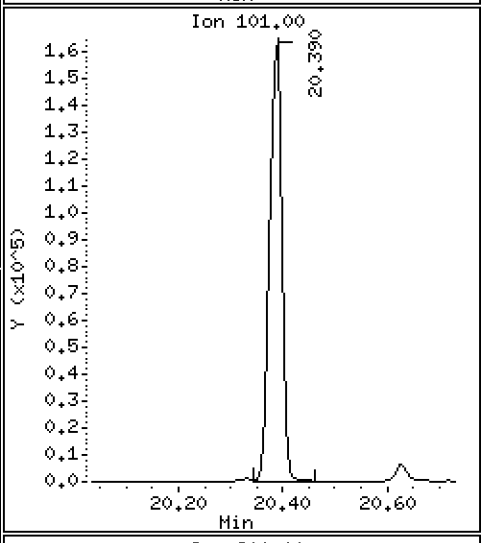
64 Fluoranthene

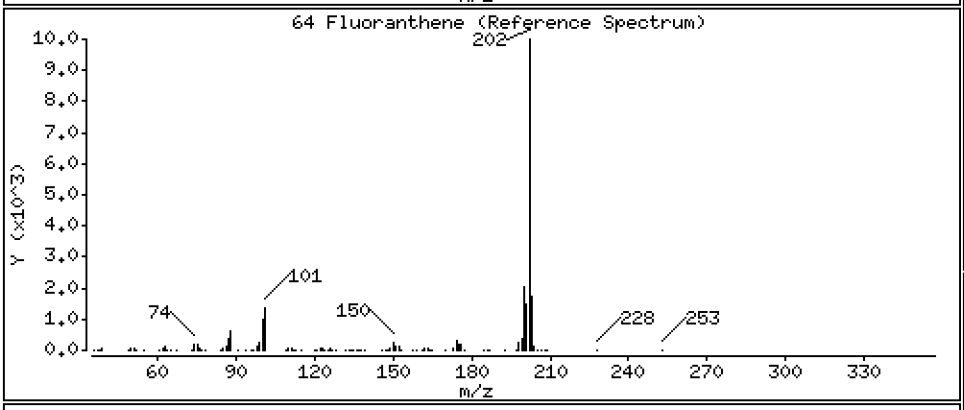
Concentration: 5.206 ug/mL

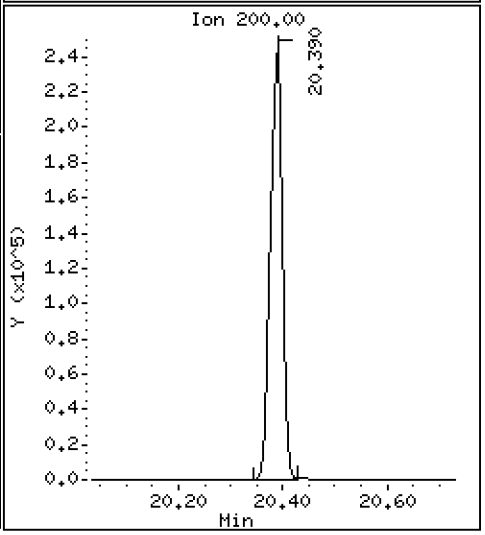


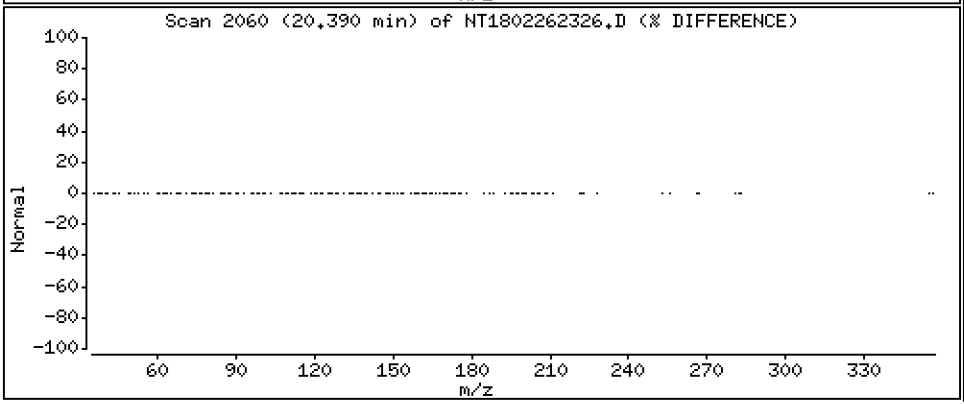












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

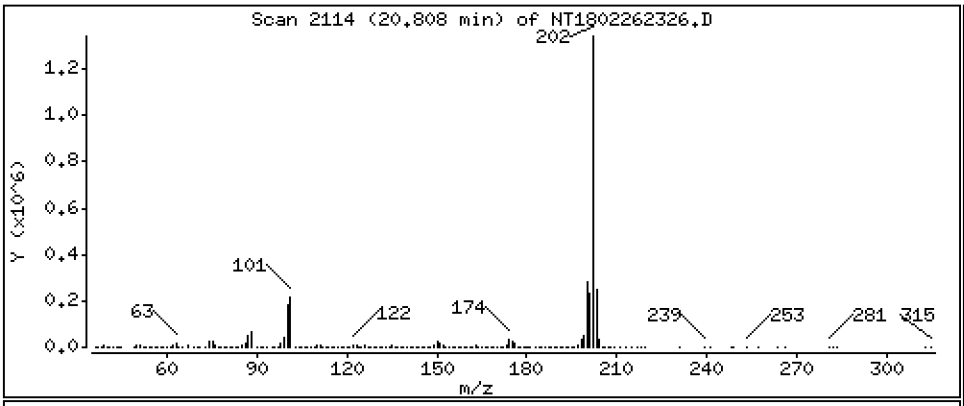
Operator: VTS

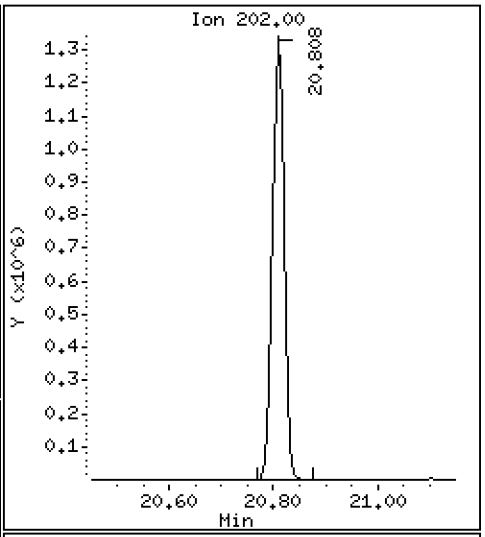
Column phase: ZB-5msi

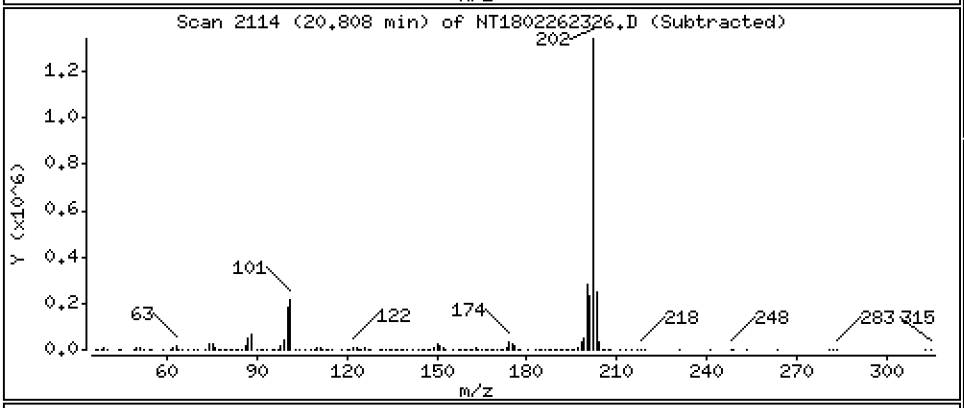
Column diameter: 0.25

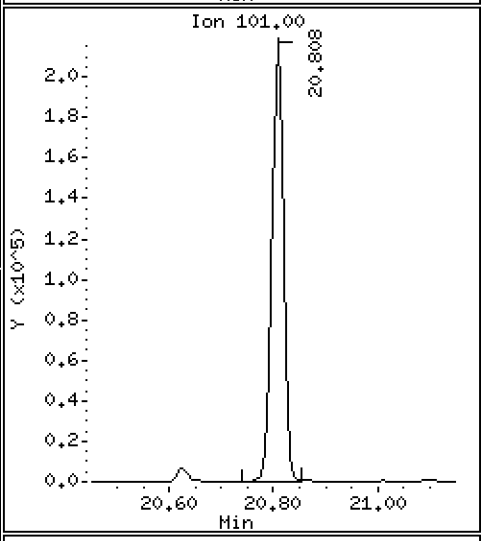
65 Pyrene

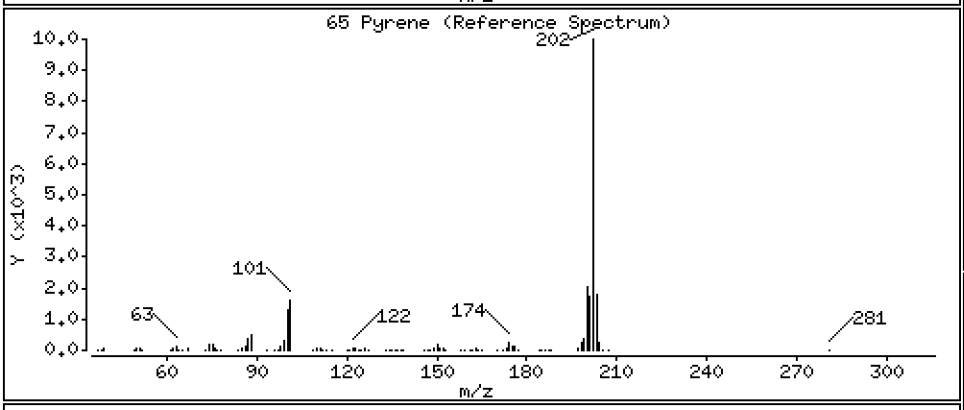
Concentration: 5.051 ug/mL

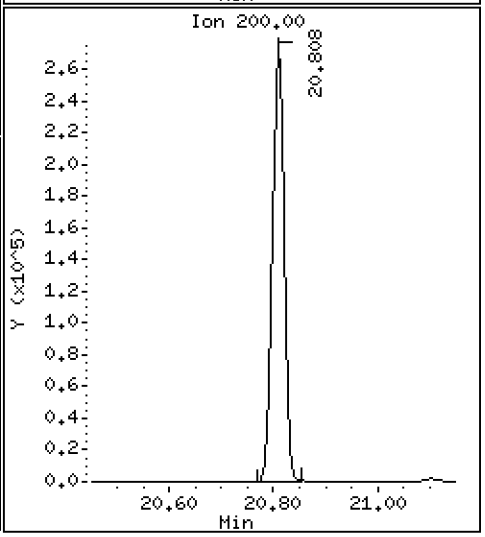


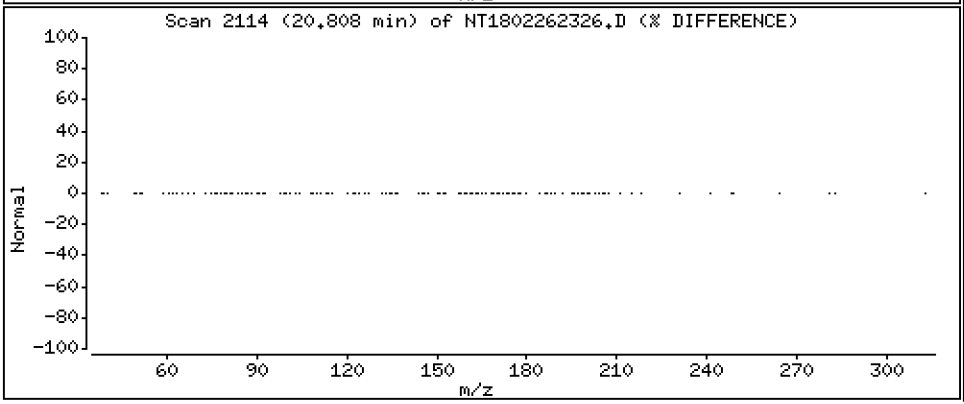












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

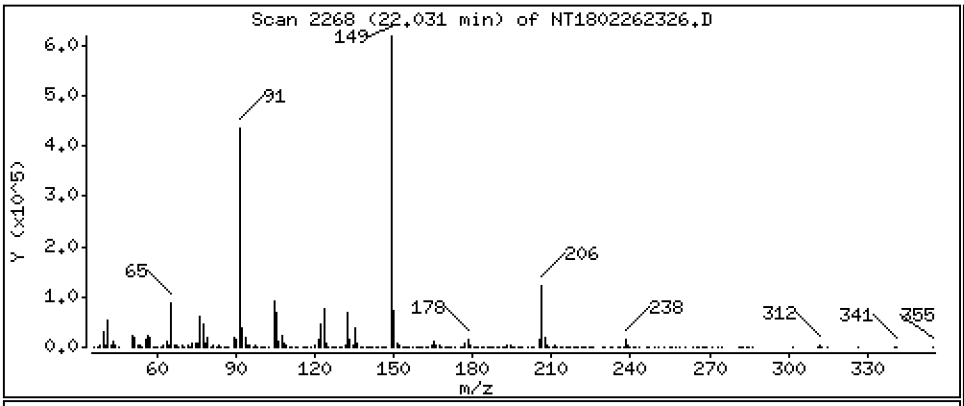
Operator: VTS

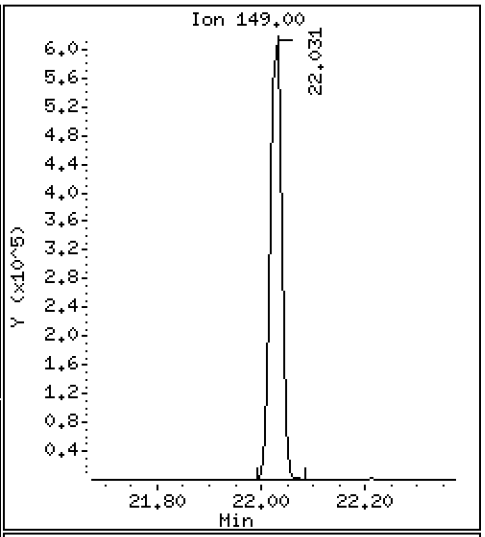
Column phase: ZB-5msi

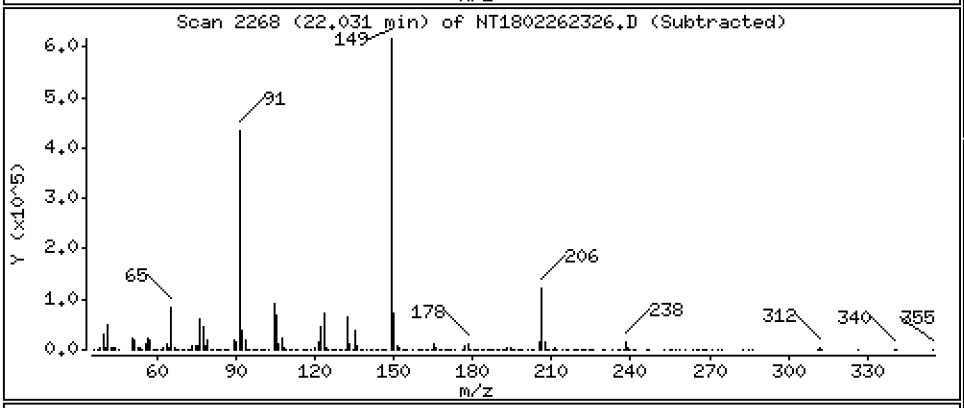
Column diameter: 0.25

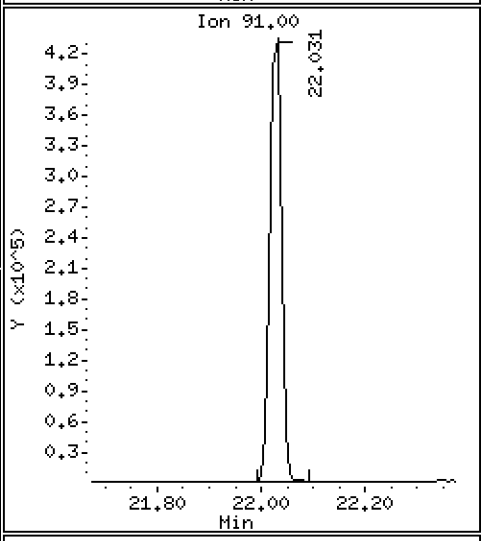
67 Butylbenzylphthalate

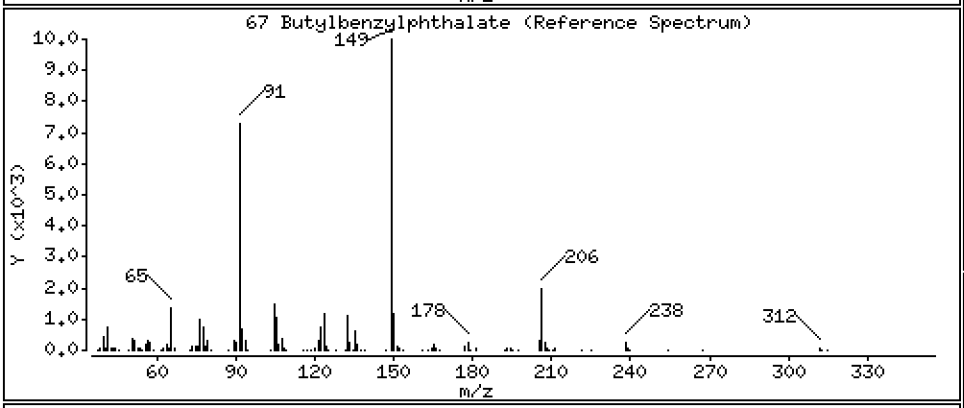
Concentration: 5.971 ug/mL

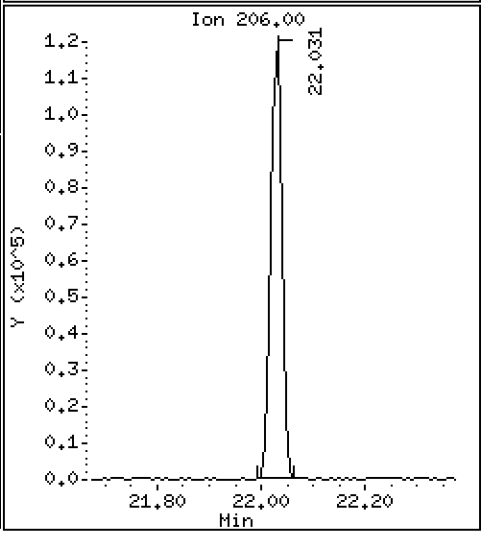


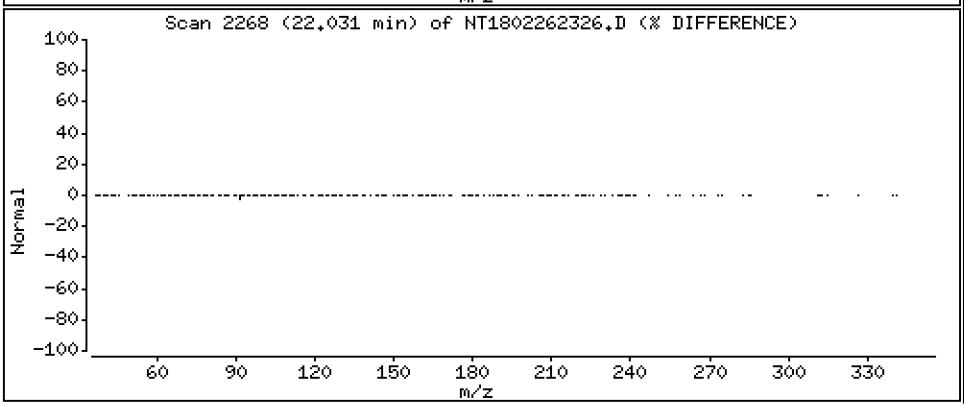












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

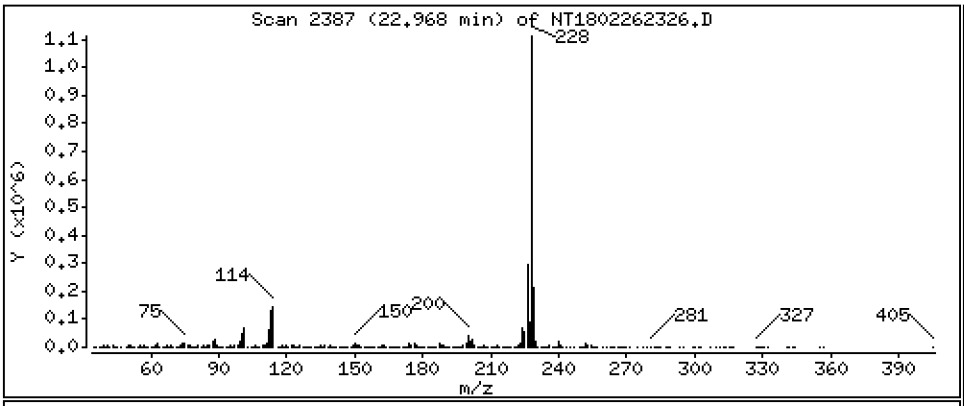
Operator: VTS

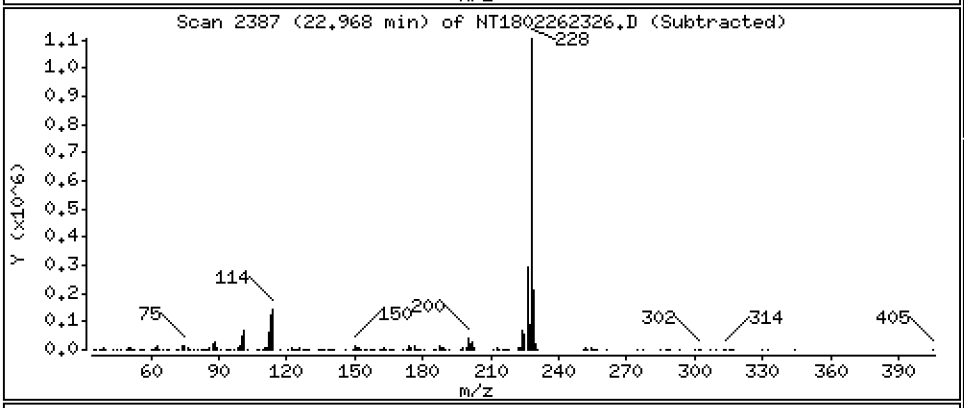
Column phase: ZB-5msi

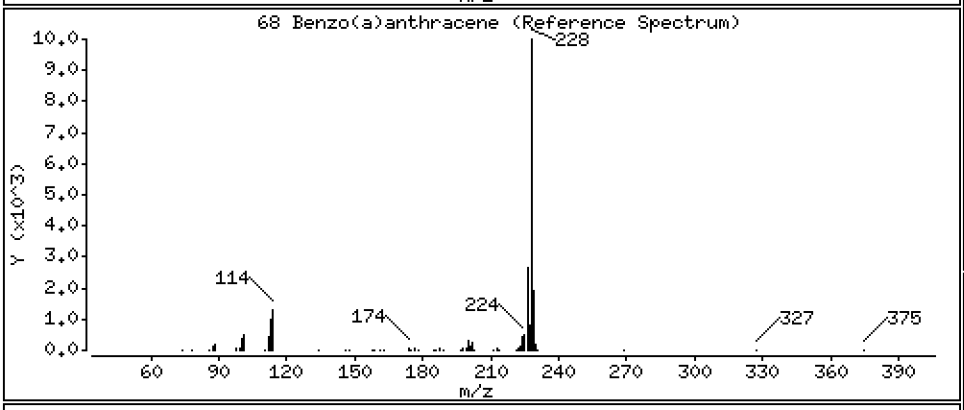
Column diameter: 0.25

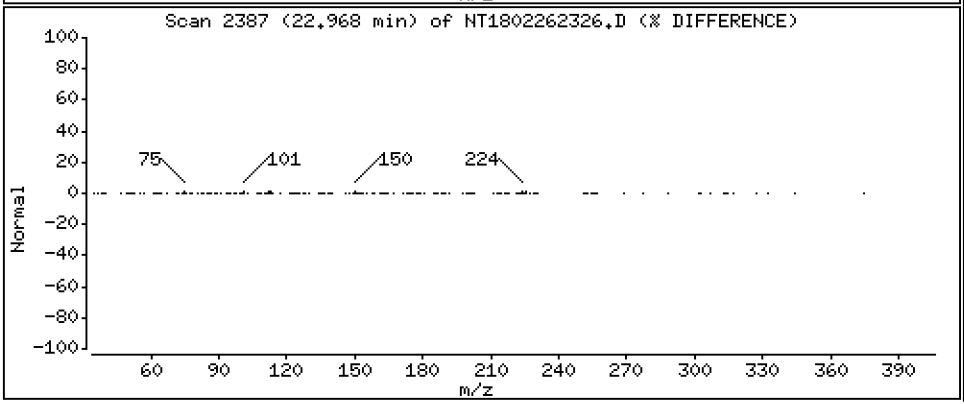
68 Benzo(a)anthracene

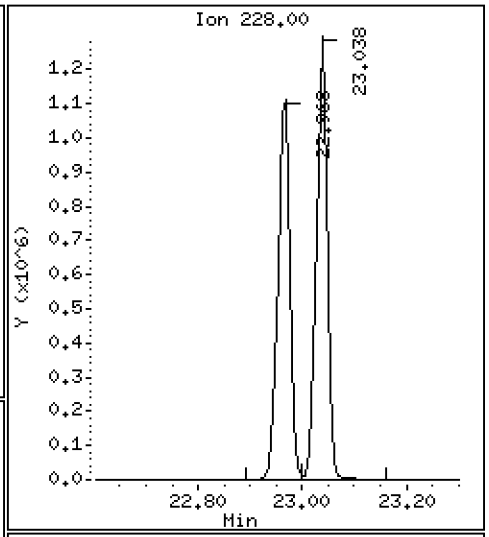
Concentration: 4.827 ug/mL

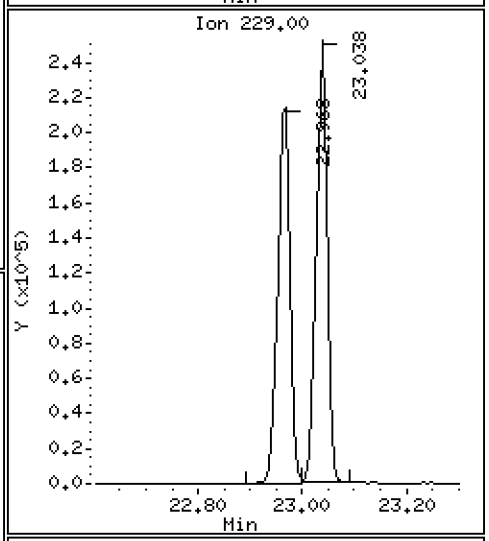


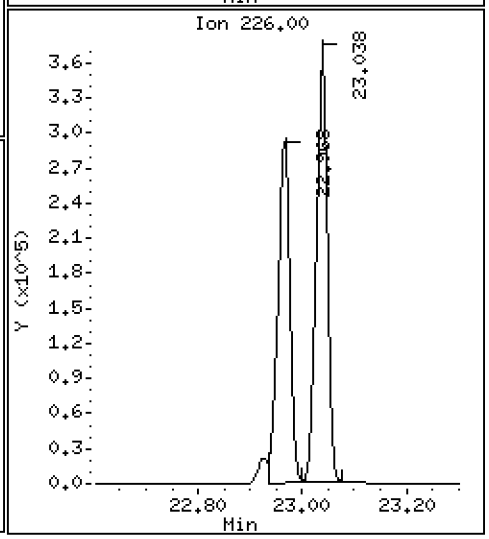












Date : 27-FEB-2023 04:36

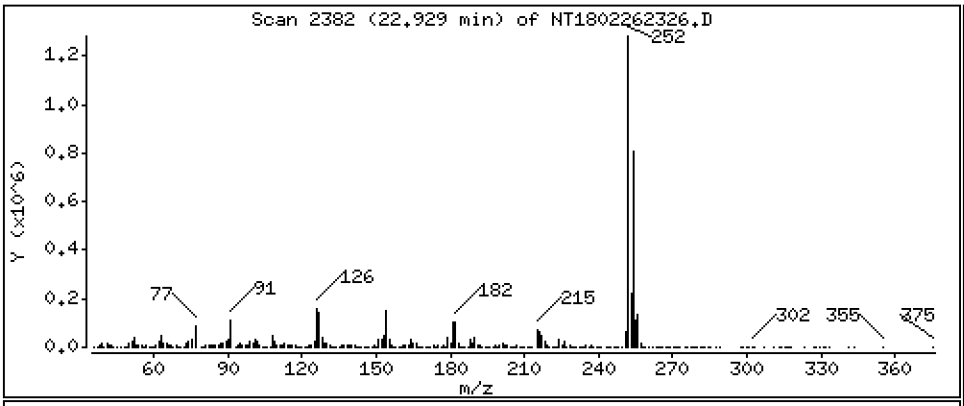
Client ID: Instrument: nt18.i

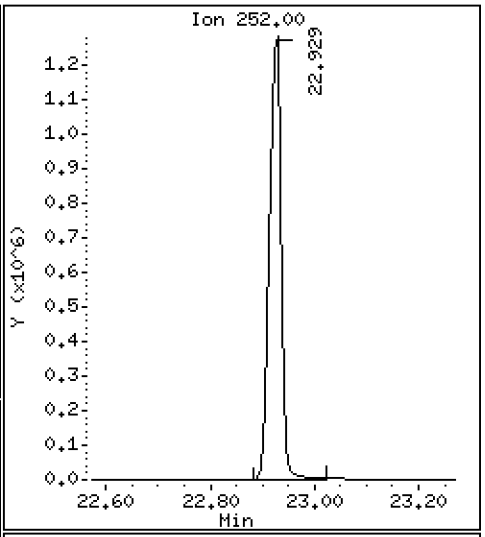
Sample Info: SLC0111-CCV1

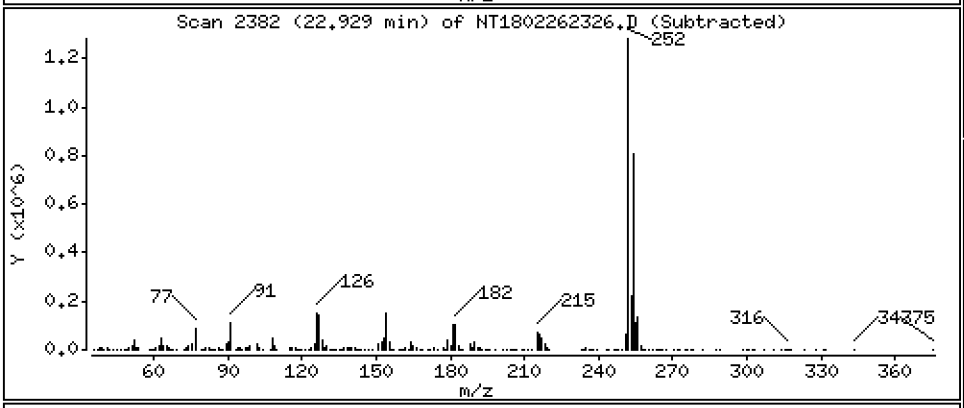
Operator: VTS

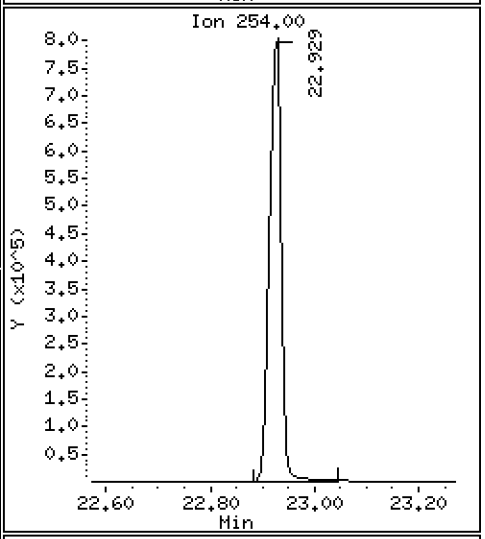
Column phase: ZB-5msi Column diameter: 0.25

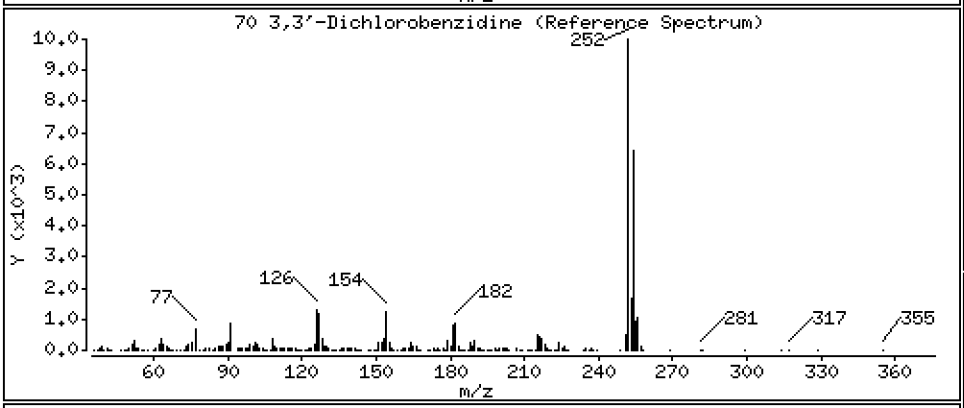
70 3,3'-Dichlorobenzidine Concentration: 13.88 ug/mL

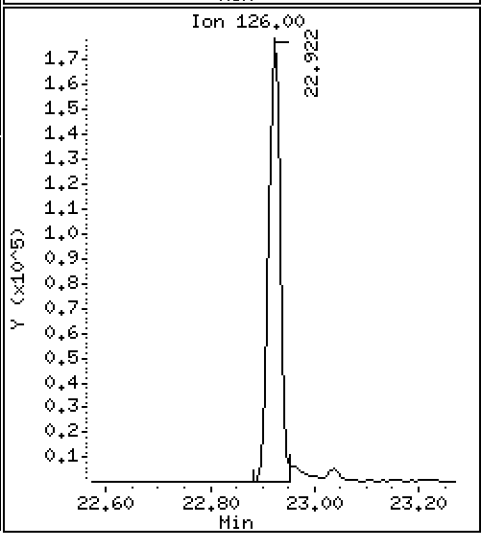


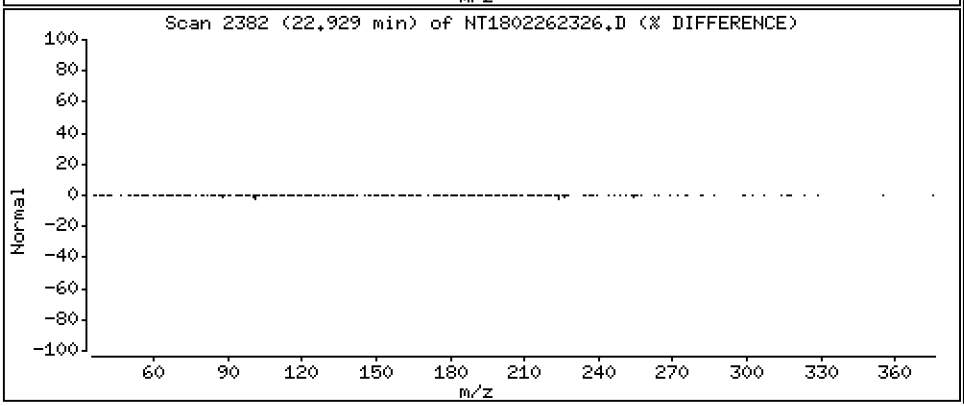












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

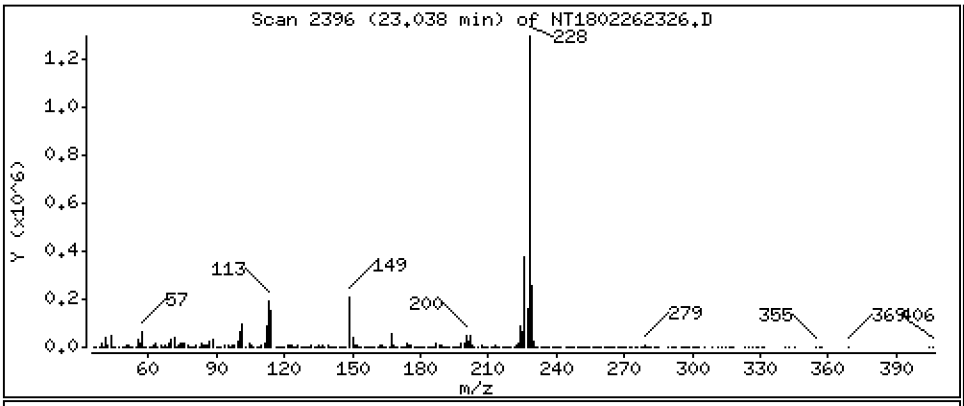
Operator: VTS

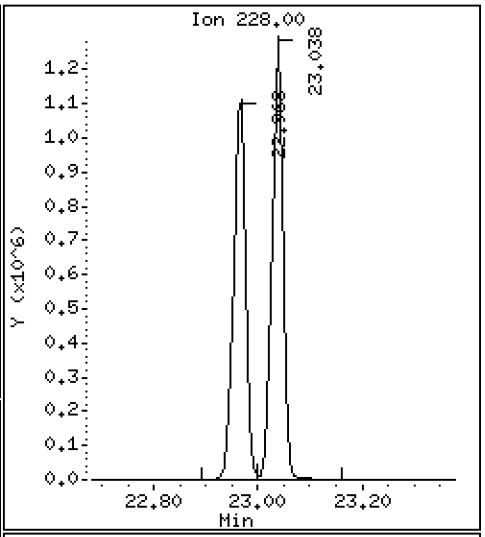
Column phase: ZB-5msi

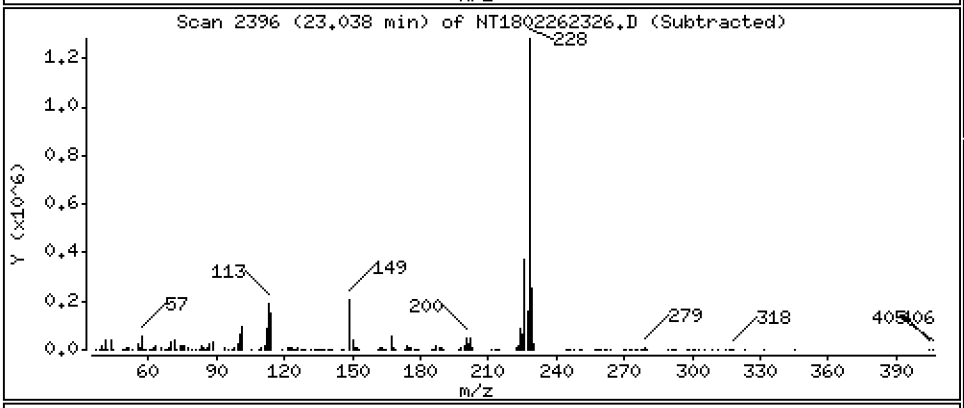
Column diameter: 0.25

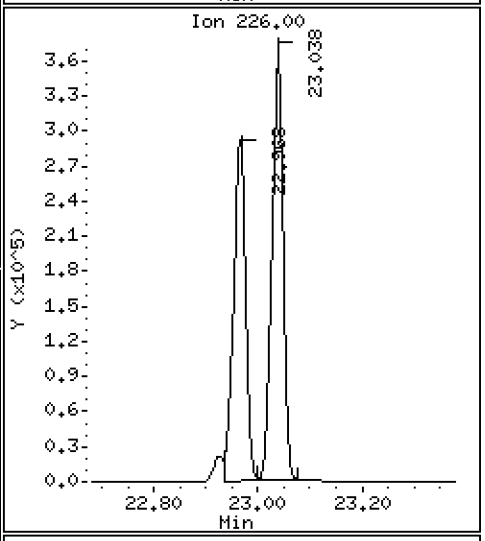
71 Chrysene

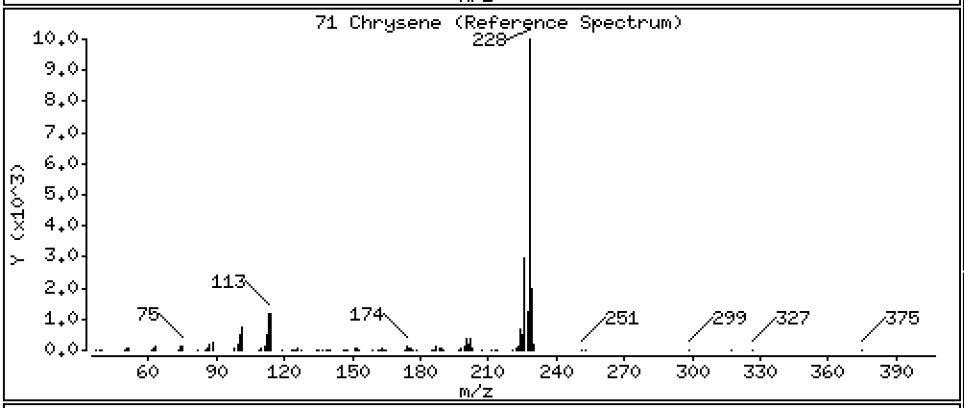
Concentration: 4.693 ug/mL

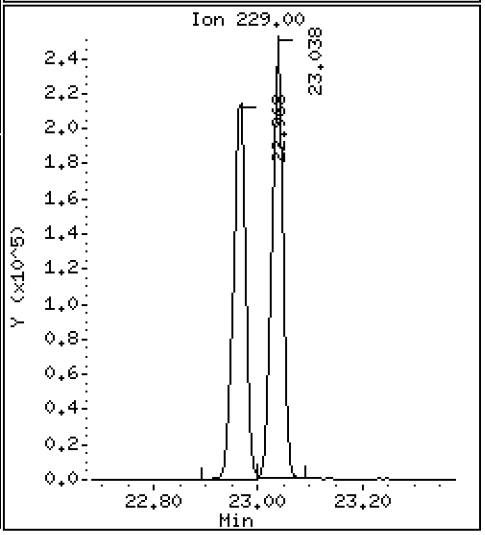


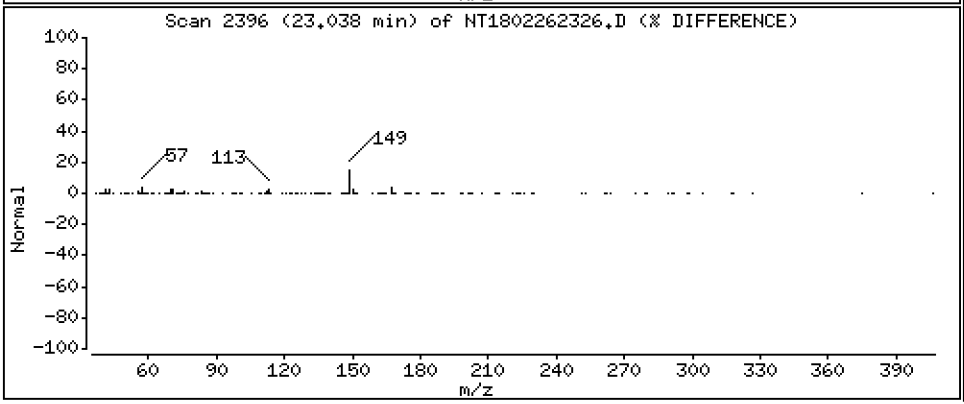












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

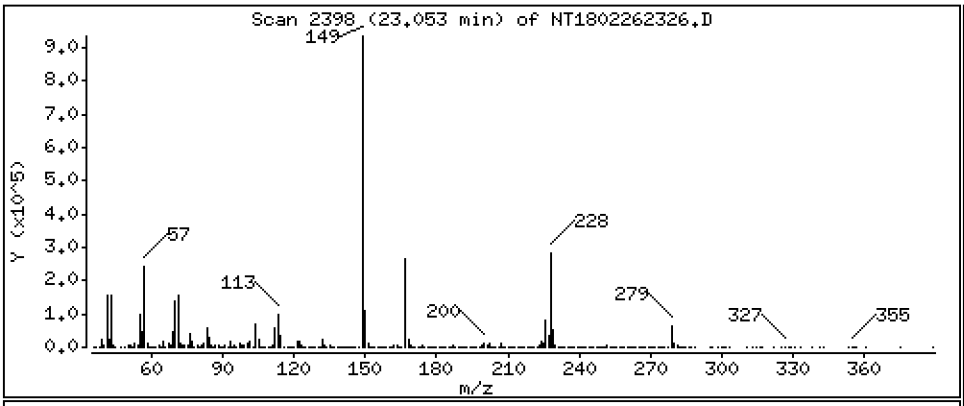
Operator: VTS

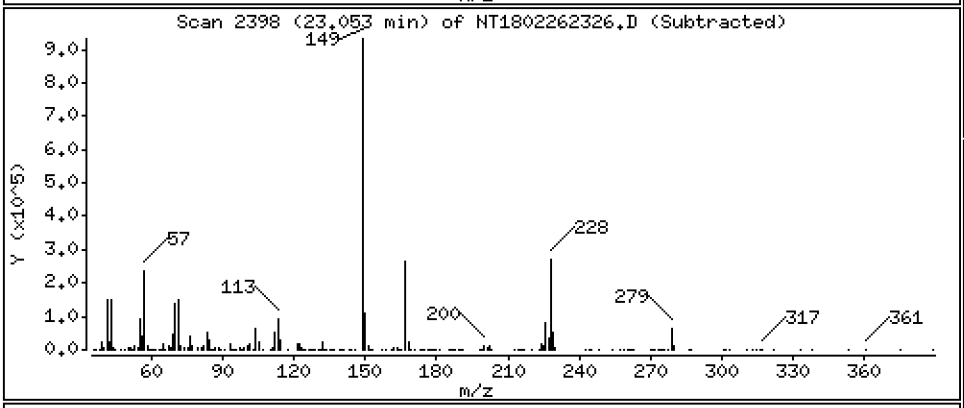
Column phase: ZB-5msi

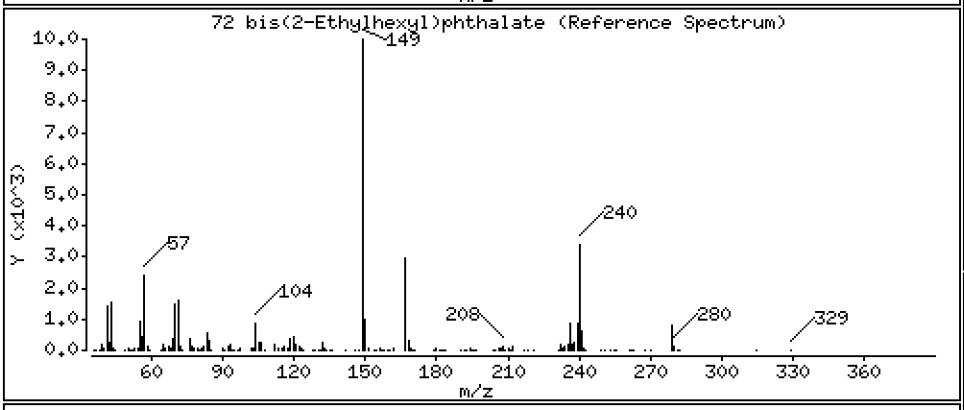
Column diameter: 0.25

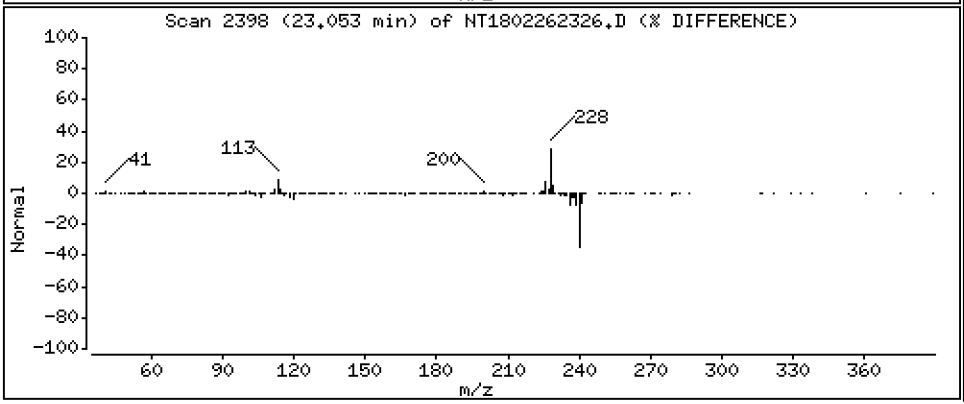
72 bis(2-Ethylhexyl)phthalate

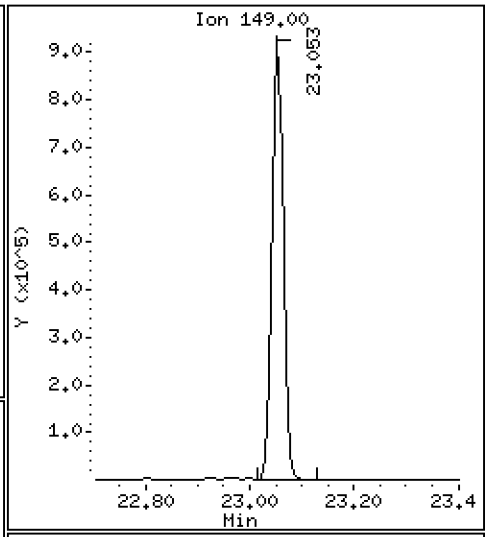
Concentration: 5.235 ug/mL

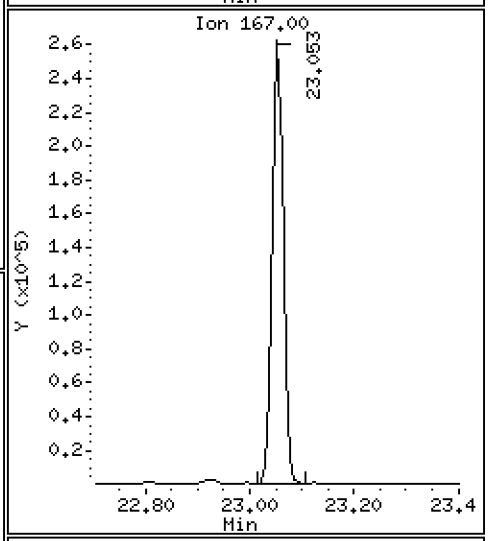


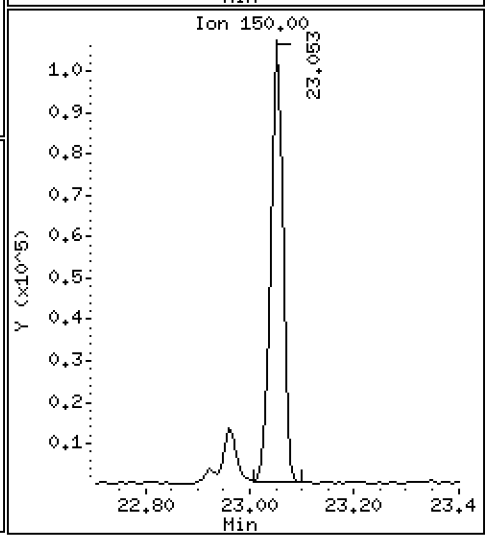












Date : 27-FEB-2023 04:36

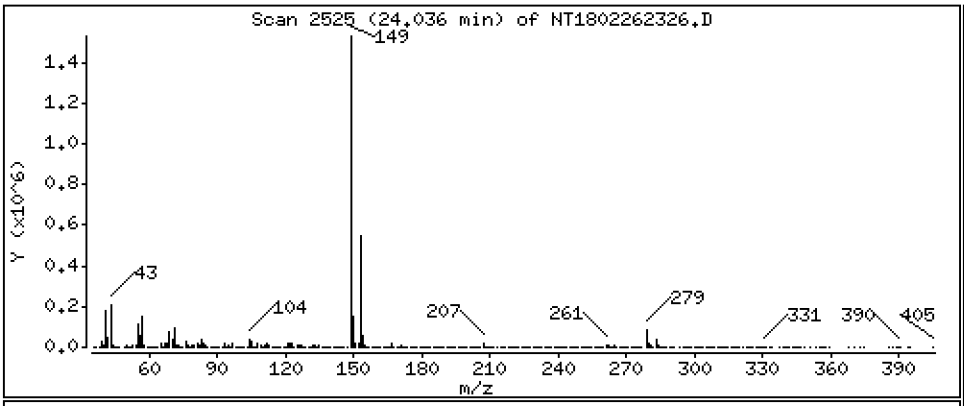
Client ID: Instrument: nt18.i

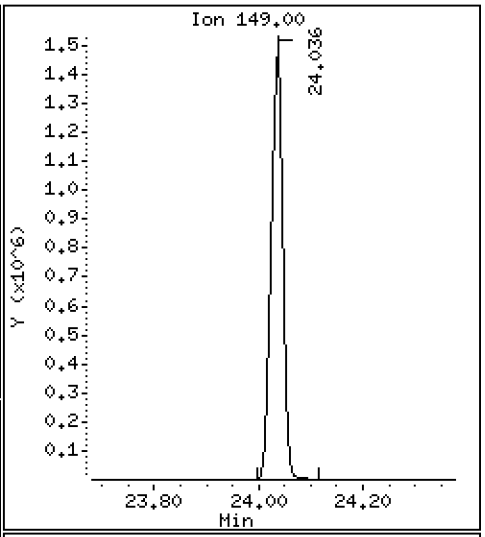
Sample Info: SLC0111-CCV1

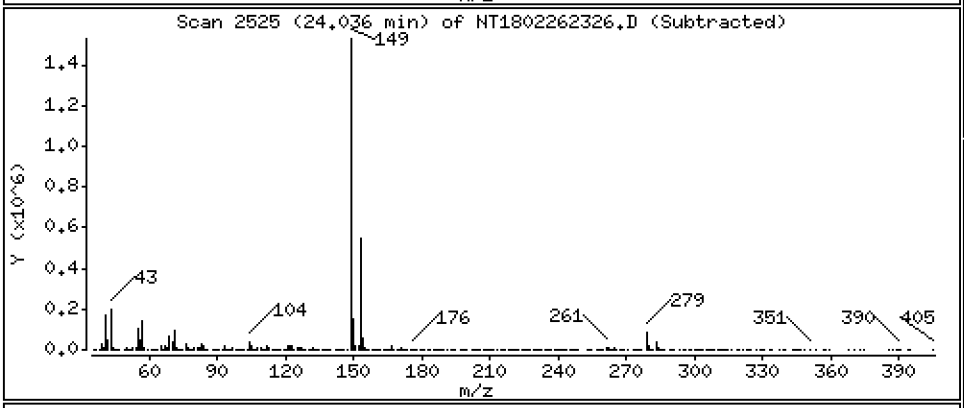
Operator: VTS

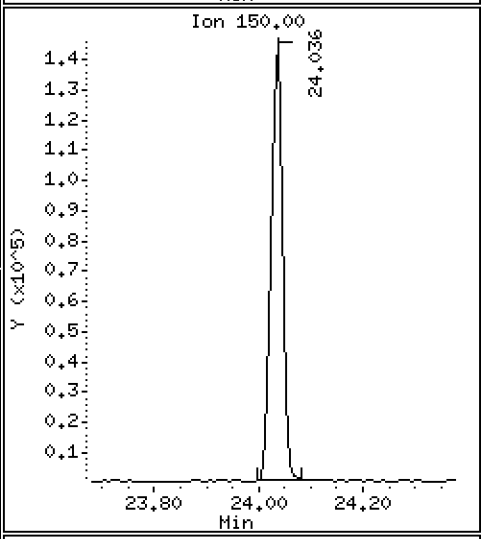
Column phase: ZB-5msi Column diameter: 0.25

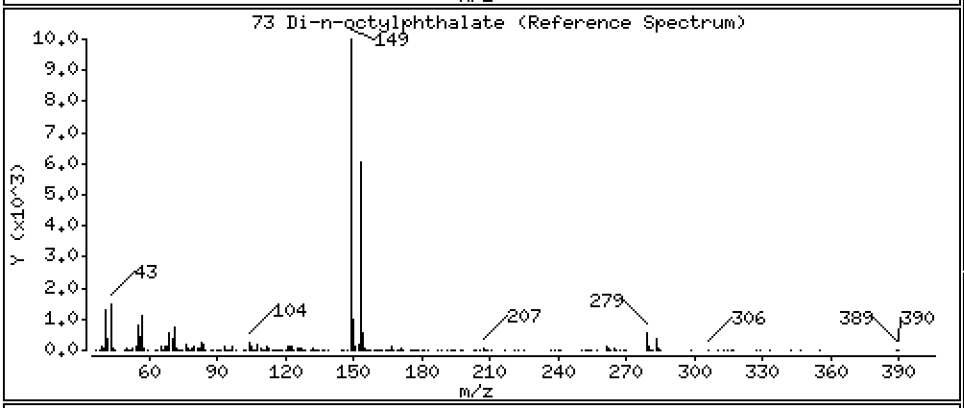
73 Di-n-octylphthalate Concentration: 4.633 ug/mL

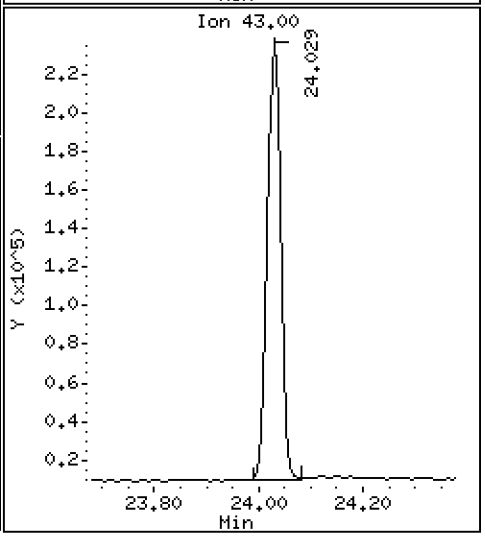


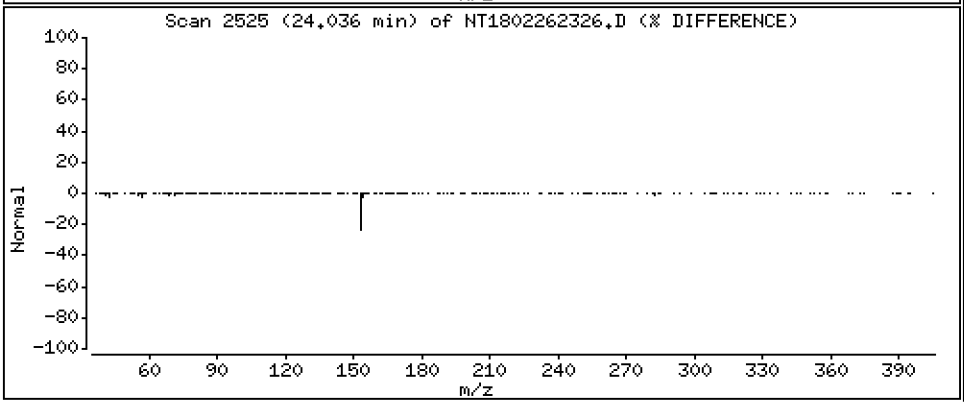












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

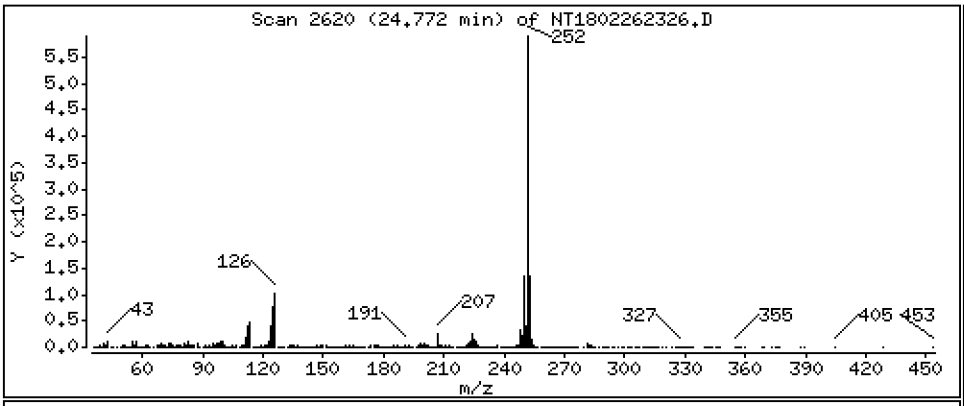
Operator: VTS

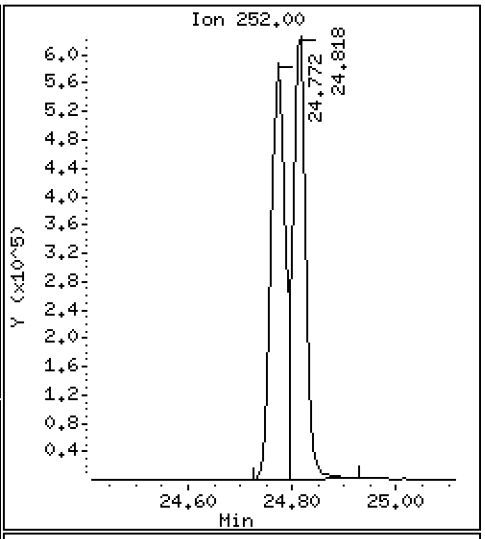
Column phase: ZB-5msi

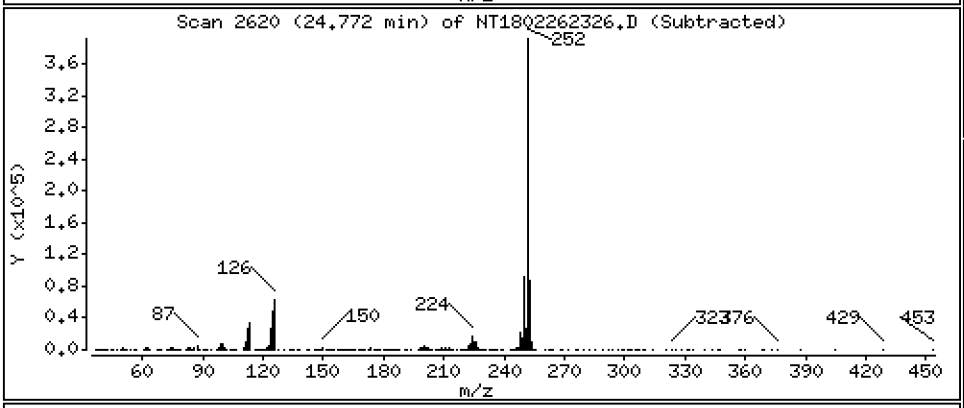
Column diameter: 0.25

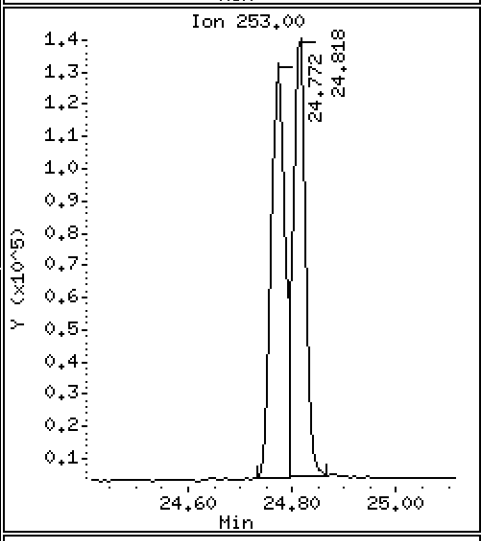
74 Benzo(b)fluoranthene

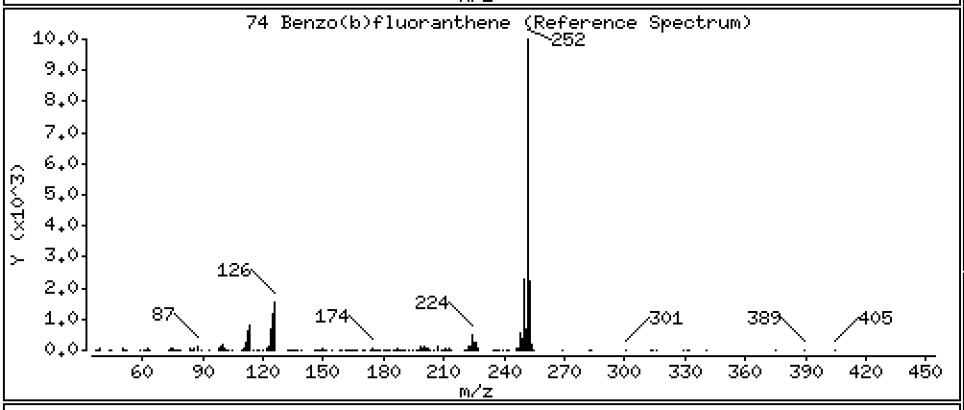
Concentration: 7.081 ug/mL

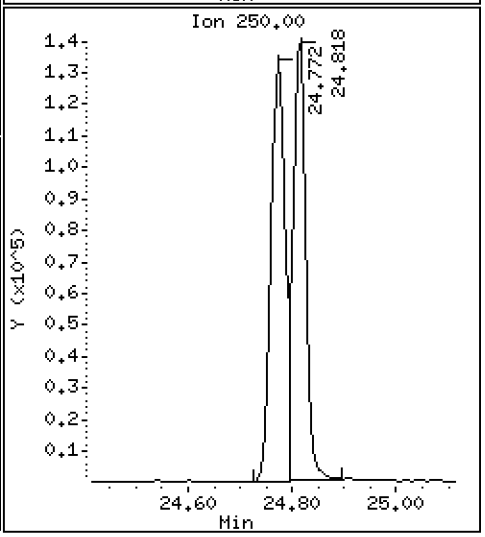


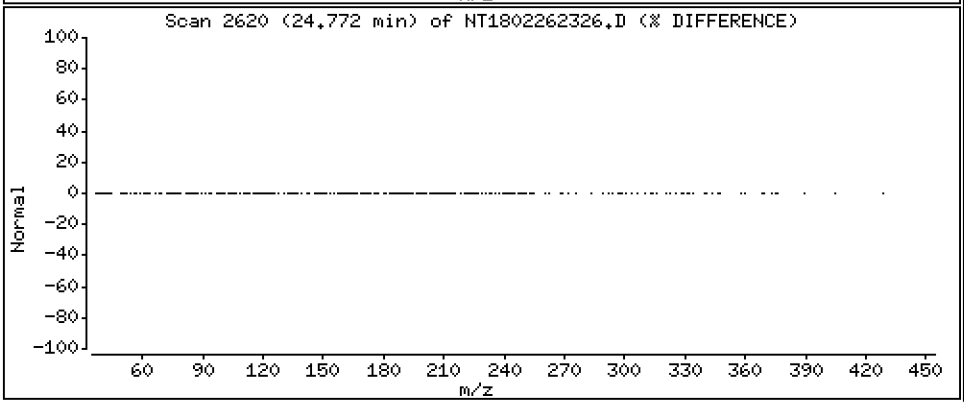












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

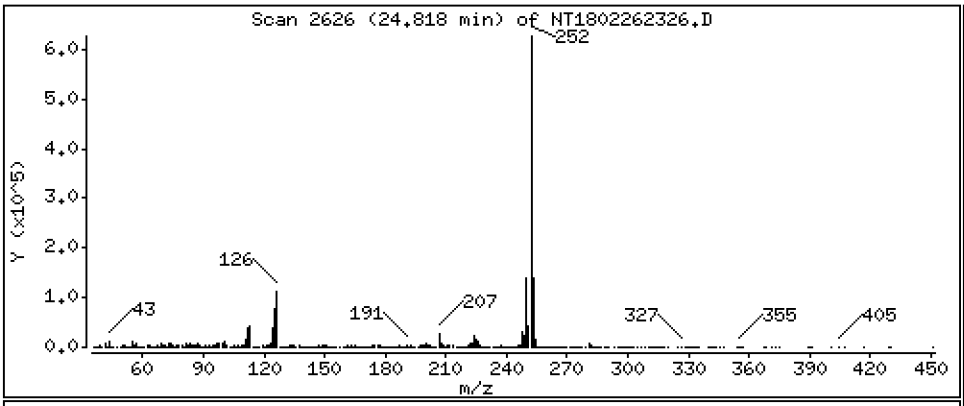
Operator: VTS

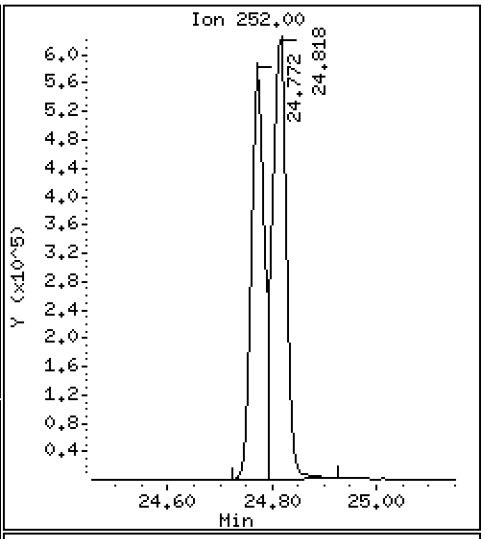
Column phase: ZB-5msi

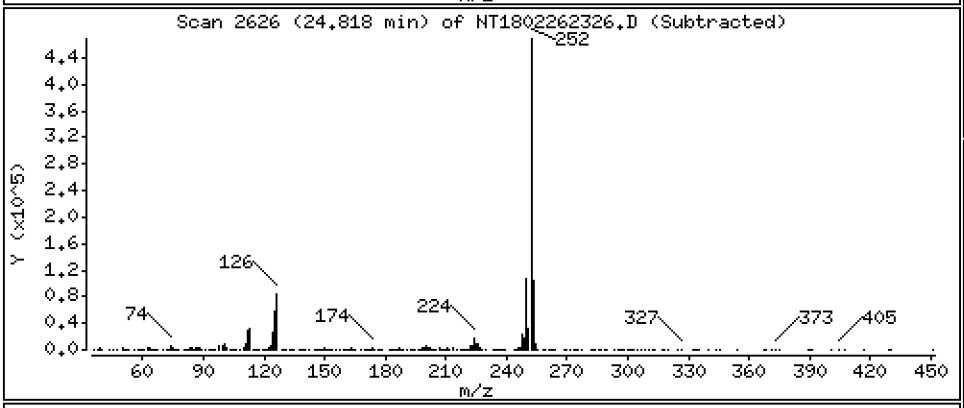
Column diameter: 0.25

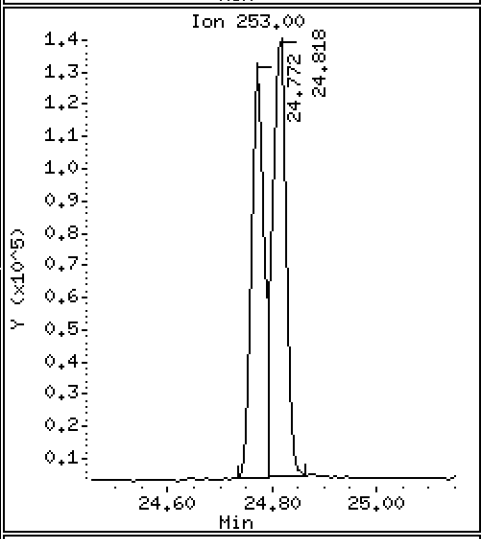
75 Benzo(k)fluoranthene

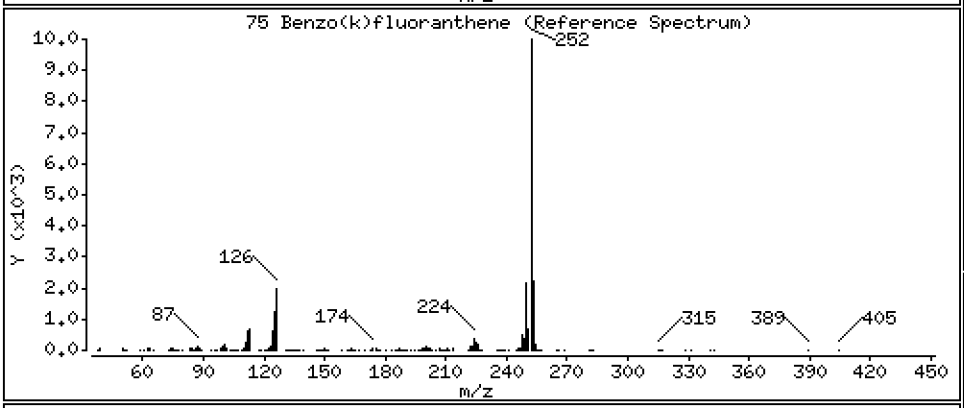
Concentration: 6.485 ug/mL

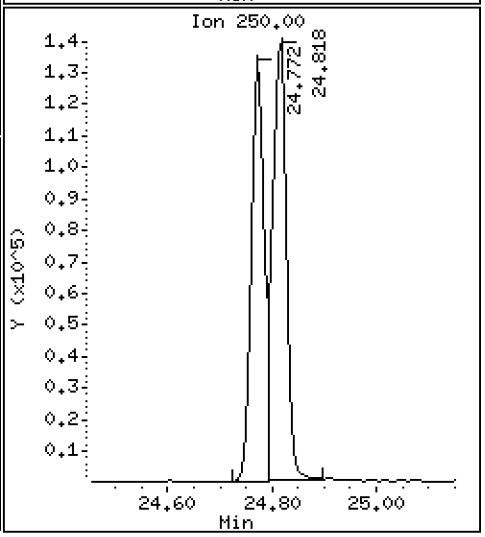


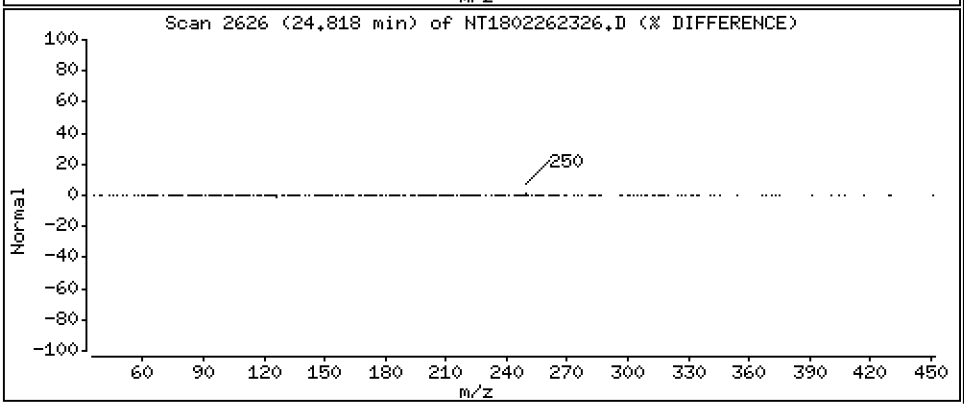












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

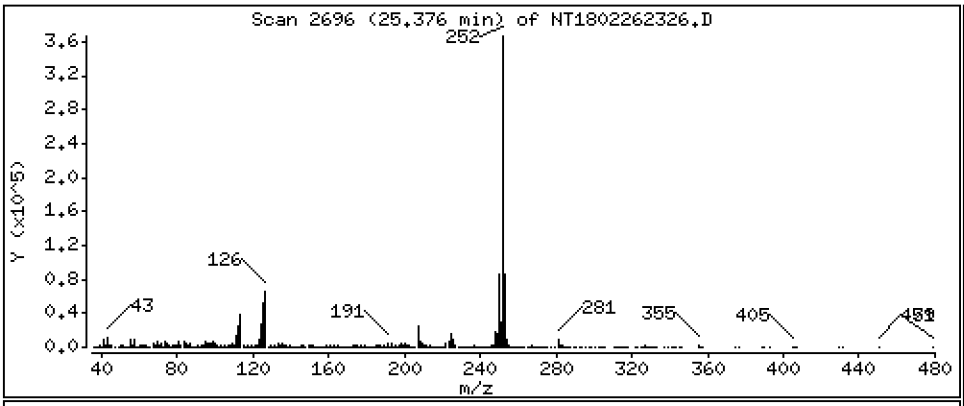
Operator: VTS

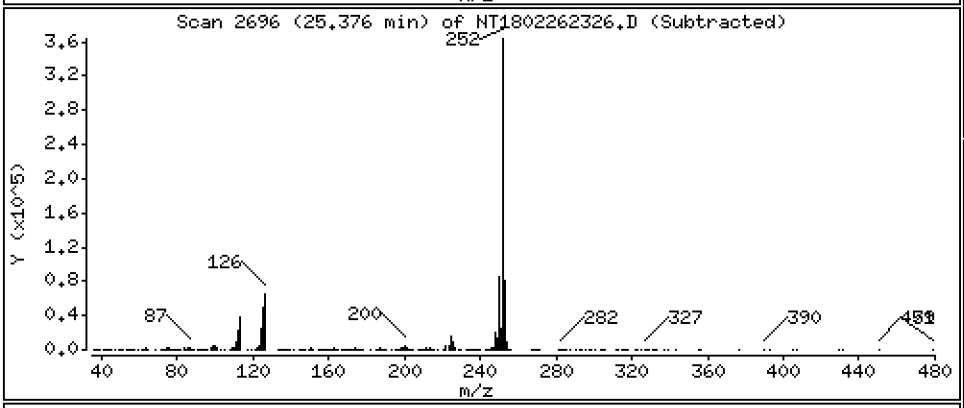
Column phase: ZB-5msi

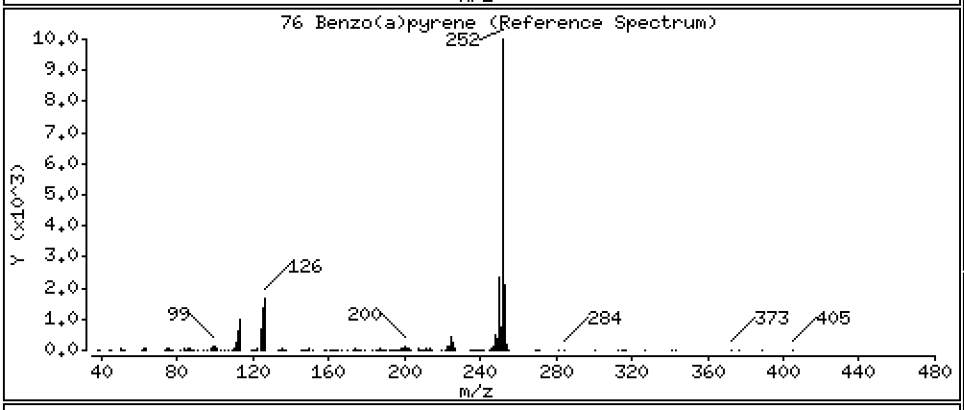
Column diameter: 0.25

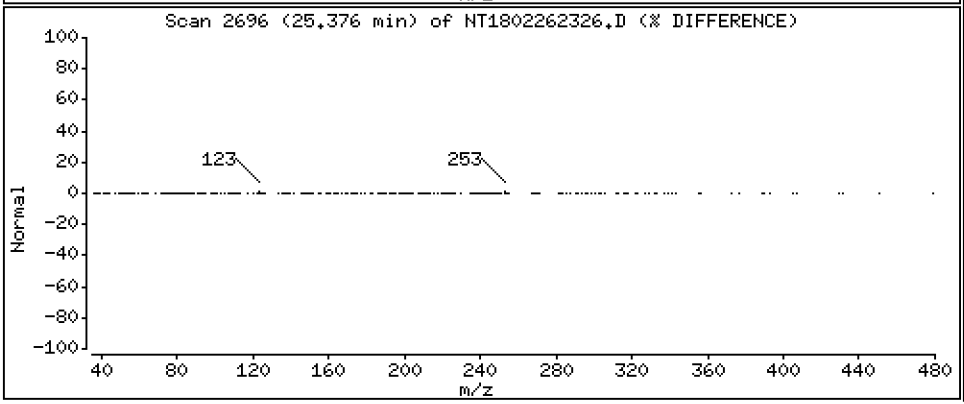
76 Benzo(a)pyrene

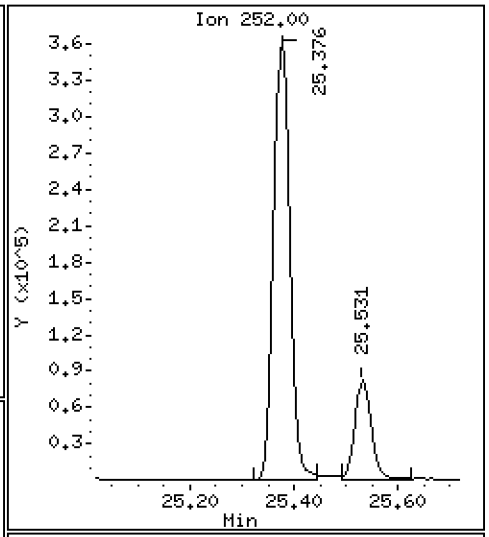
Concentration: 5.274 ug/mL

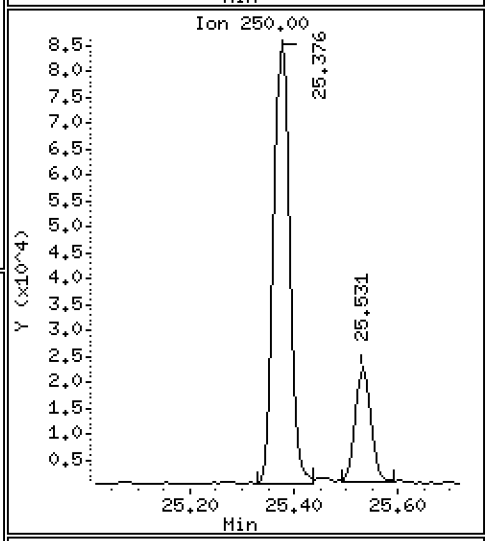


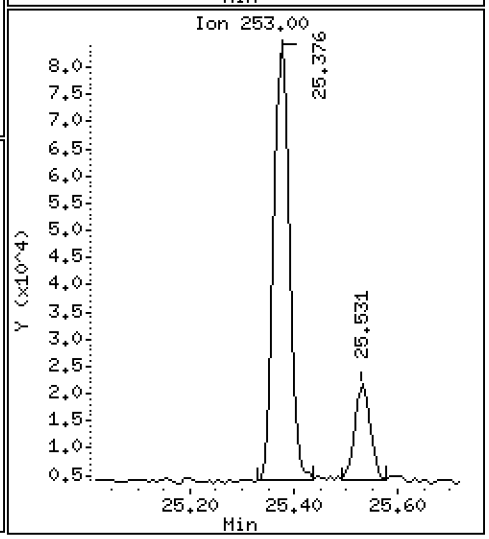












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

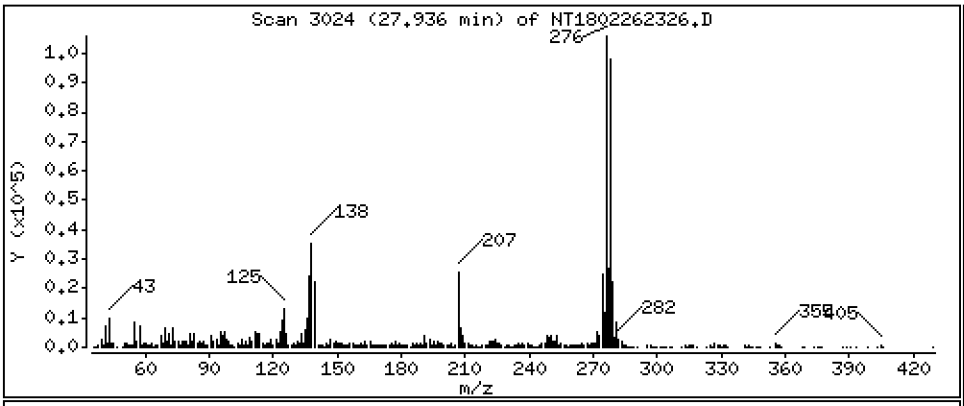
Operator: VTS

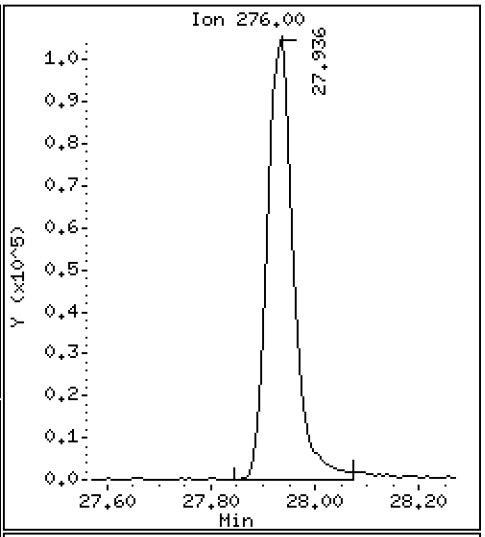
Column phase: ZB-5msi

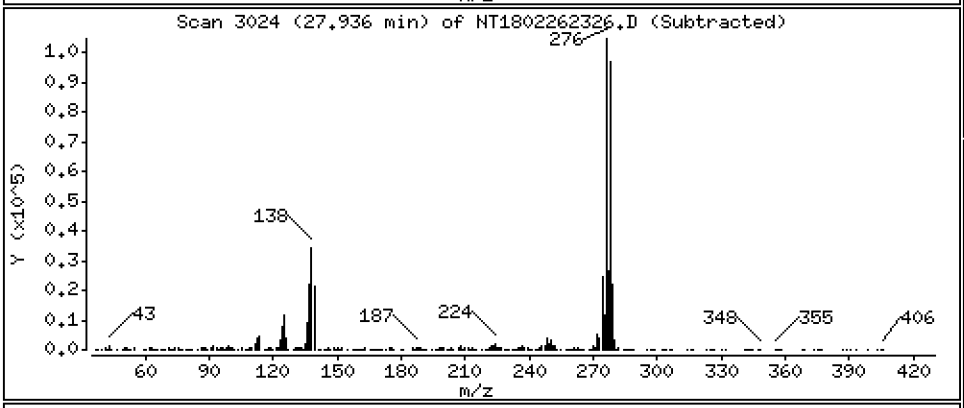
Column diameter: 0.25

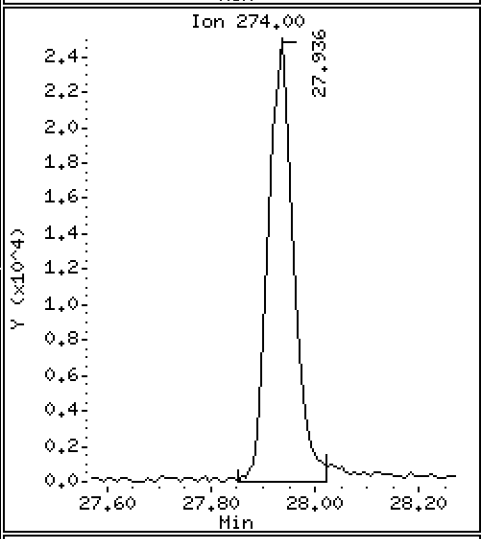
78 Indeno(1,2,3-cd)pyrene

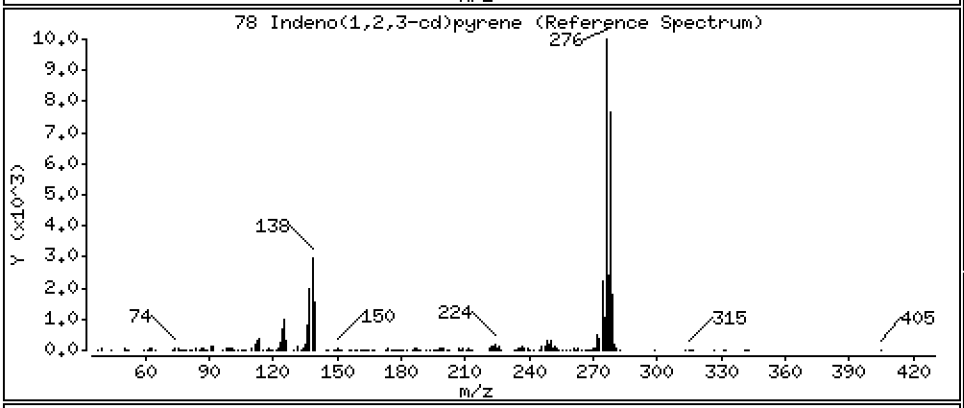
Concentration: 2.031 ug/mL

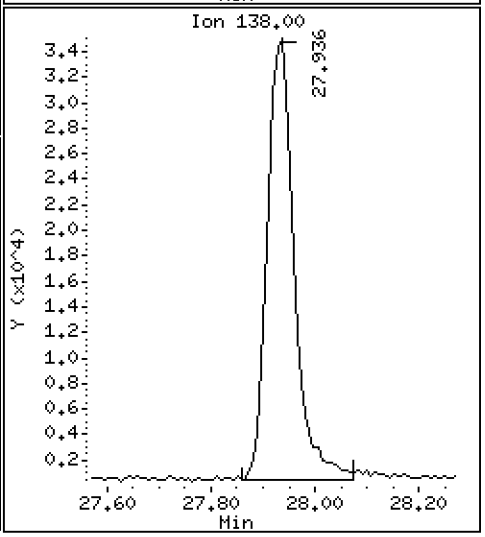


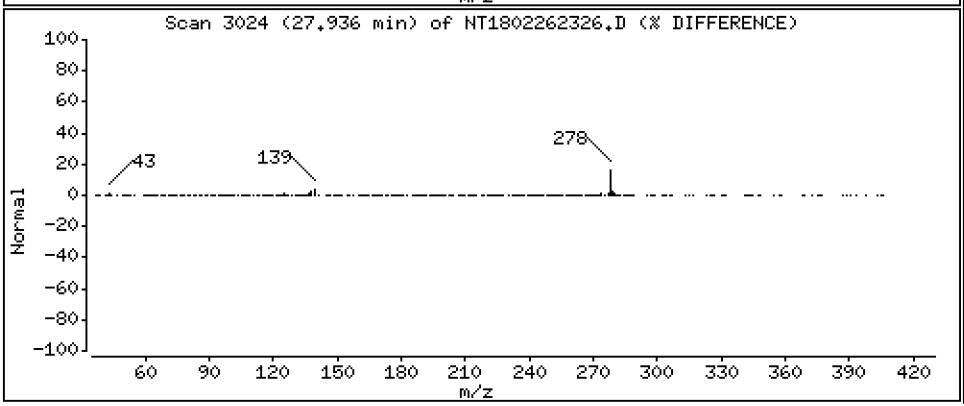












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

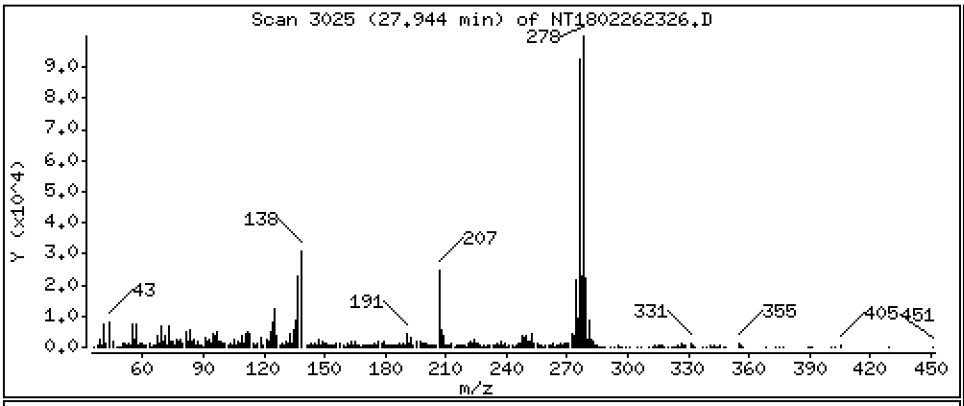
Operator: VTS

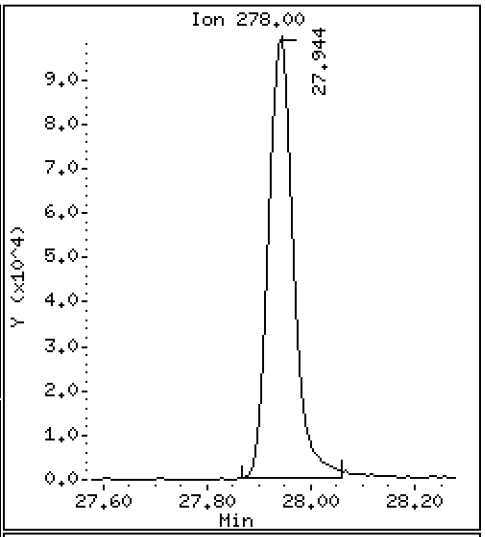
Column phase: ZB-5msi

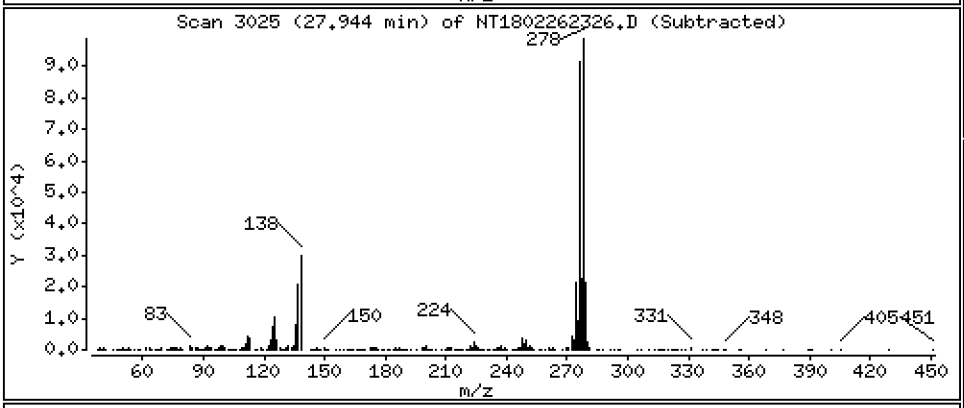
Column diameter: 0.25

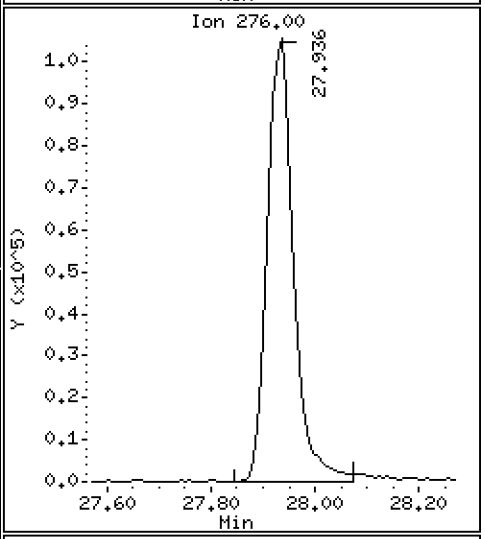
79 Dibenzo(a,h)anthracene

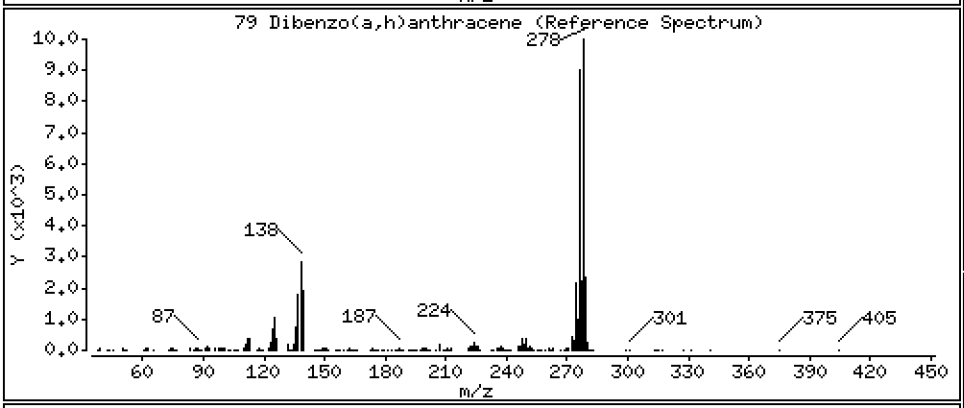
Concentration: 2.192 ug/mL

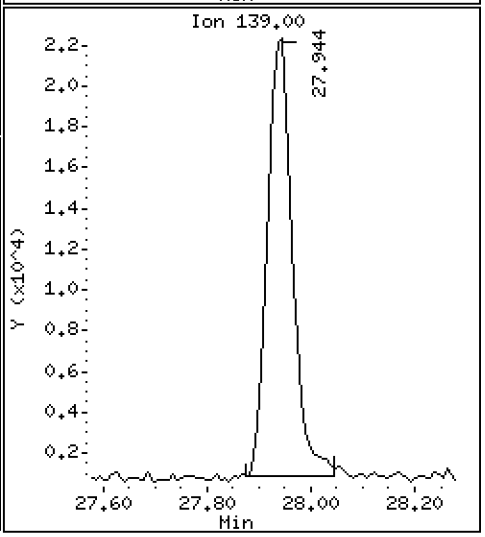


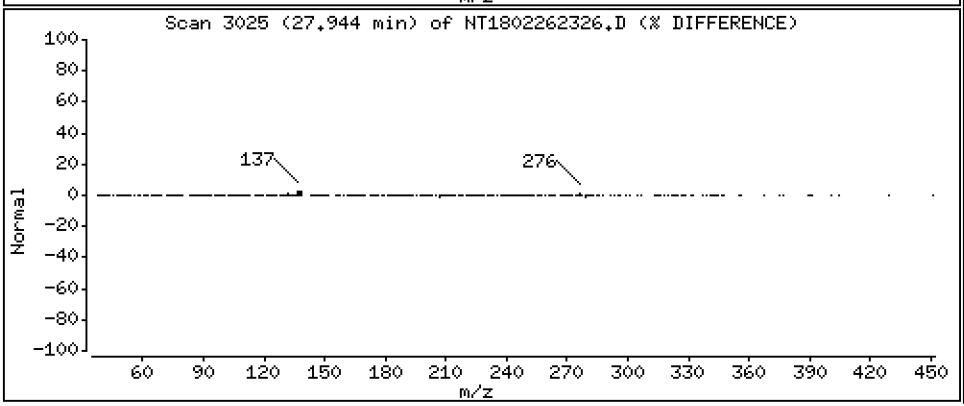












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

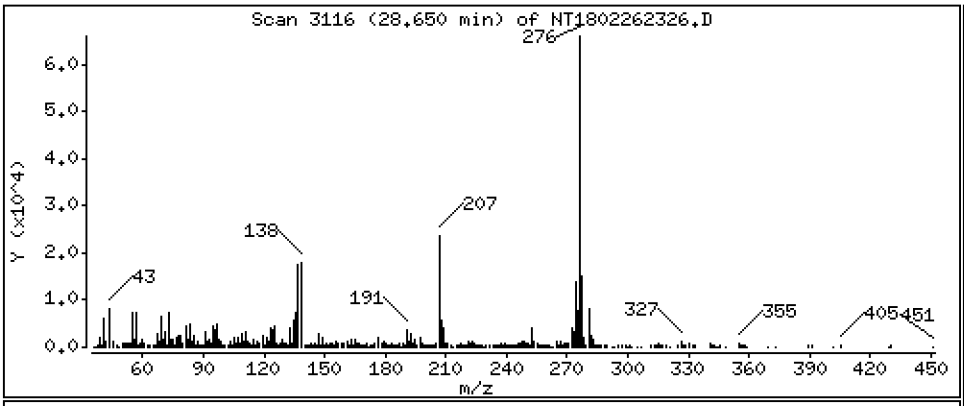
Operator: VTS

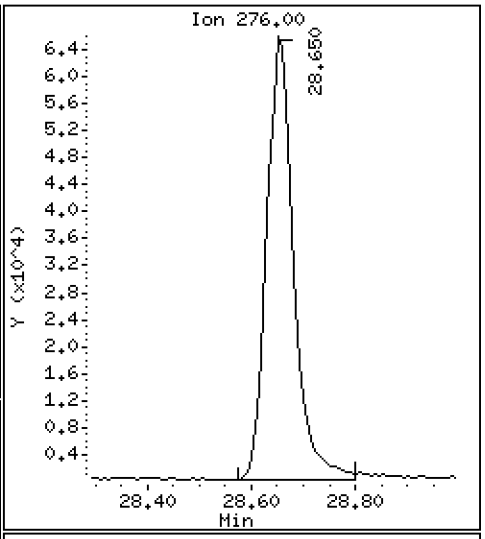
Column phase: ZB-5msi

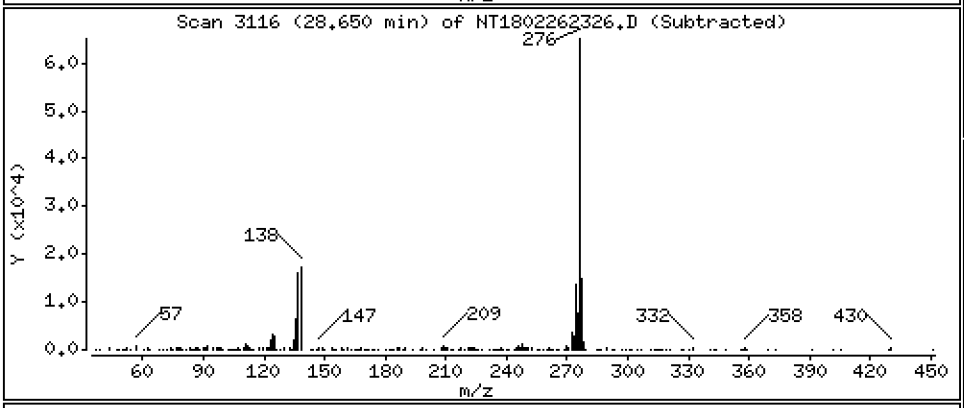
Column diameter: 0.25

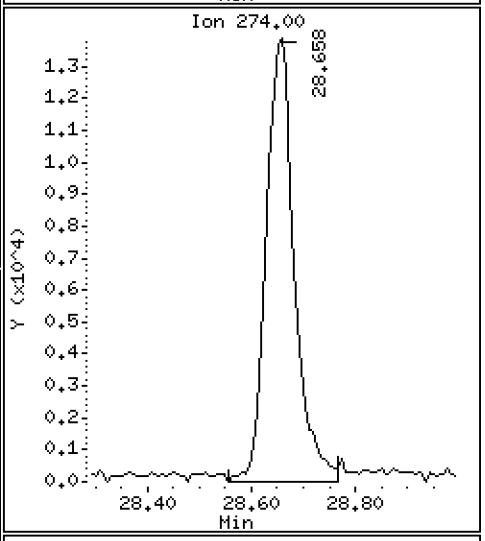
80 Benzo(g,h,i)perylene

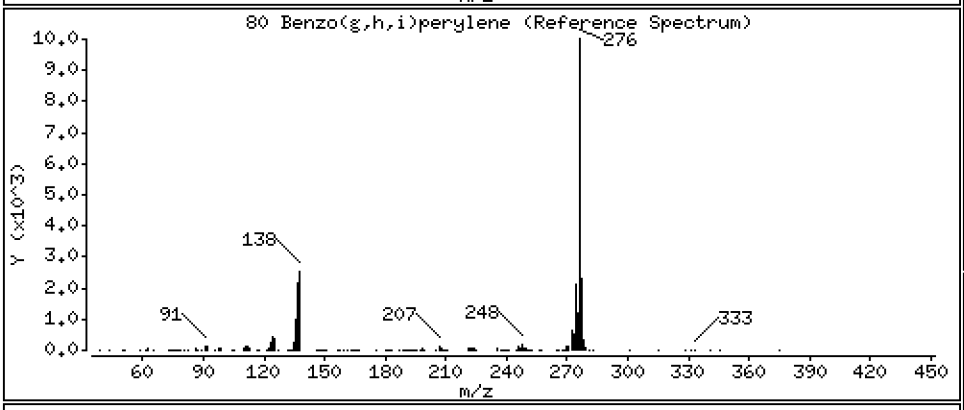
Concentration: 1.630 ug/mL

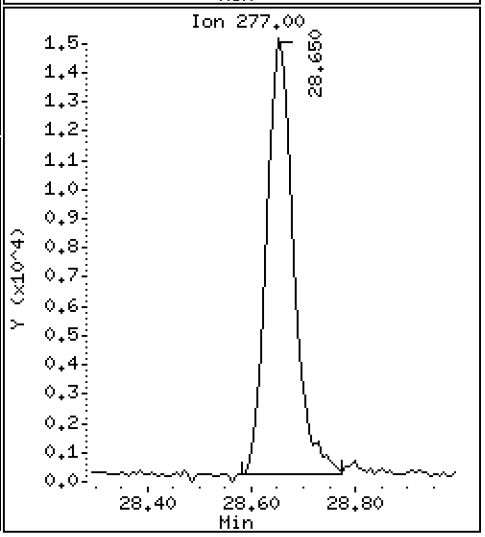


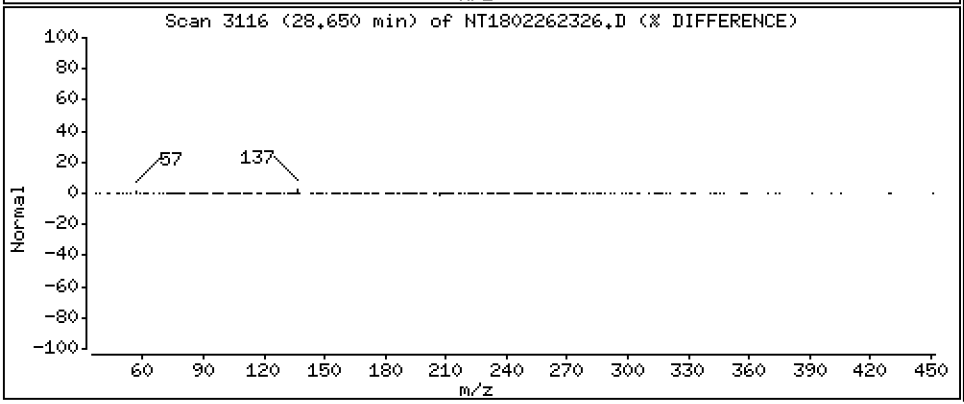












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

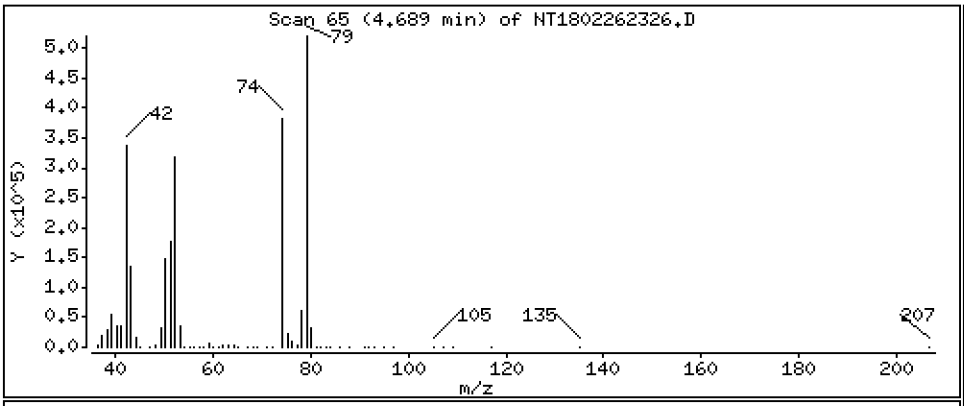
Operator: VTS

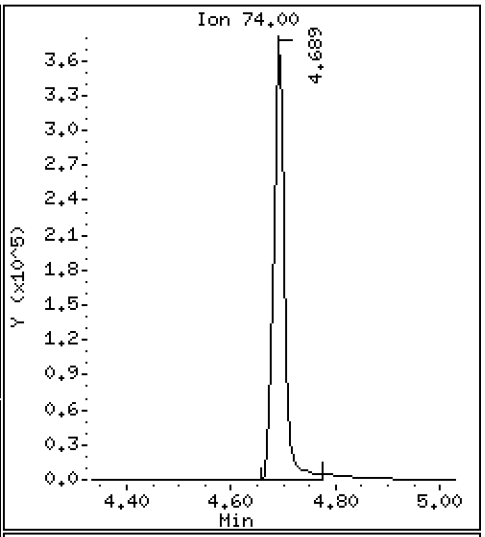
Column phase: ZB-5msi

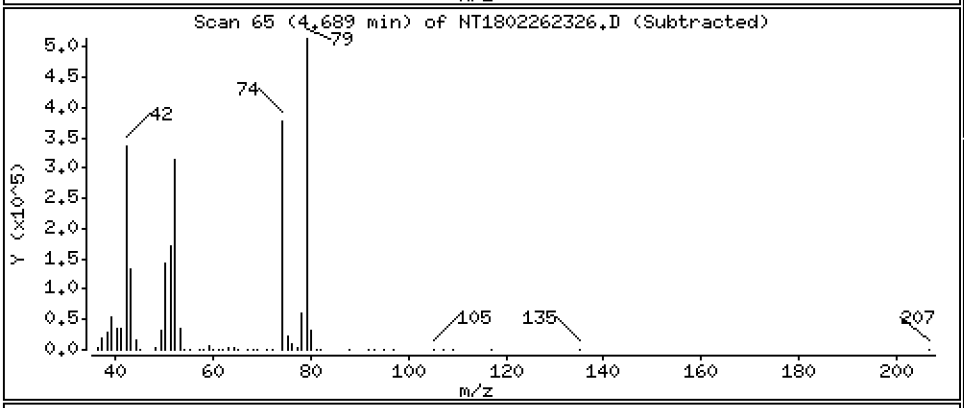
Column diameter: 0.25

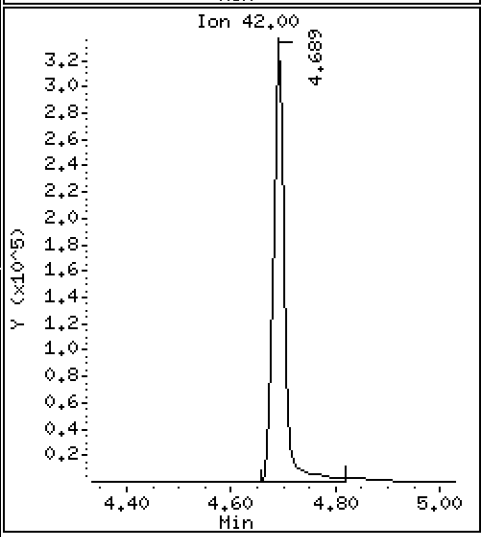
90 N-Nitrosodimethylamine

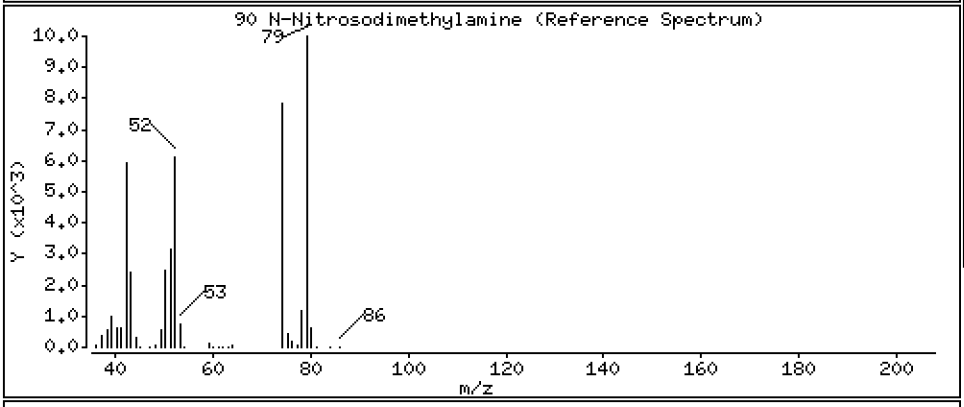
Concentration: 9.521 ug/mL

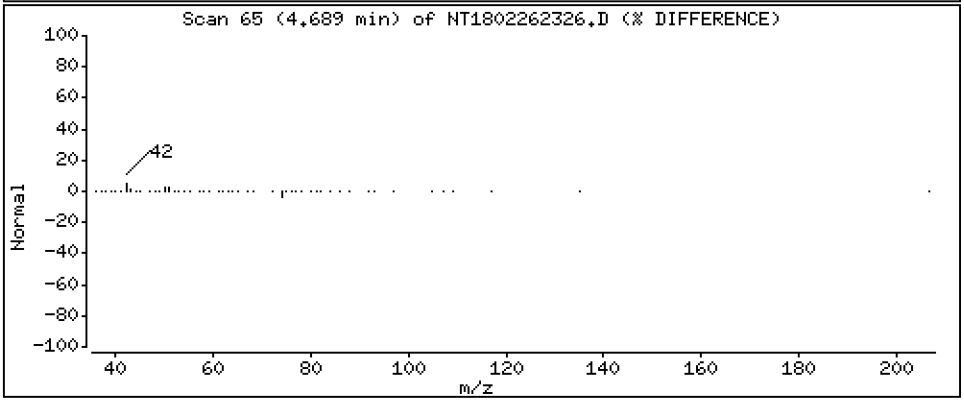












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

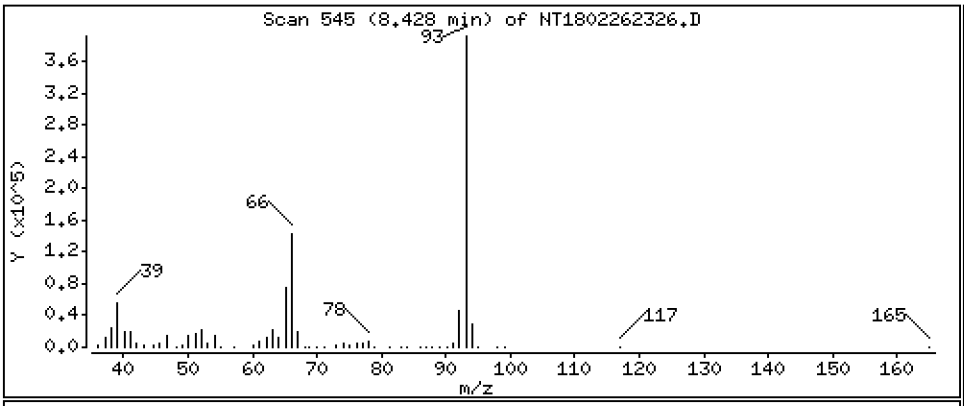
Operator: VTS

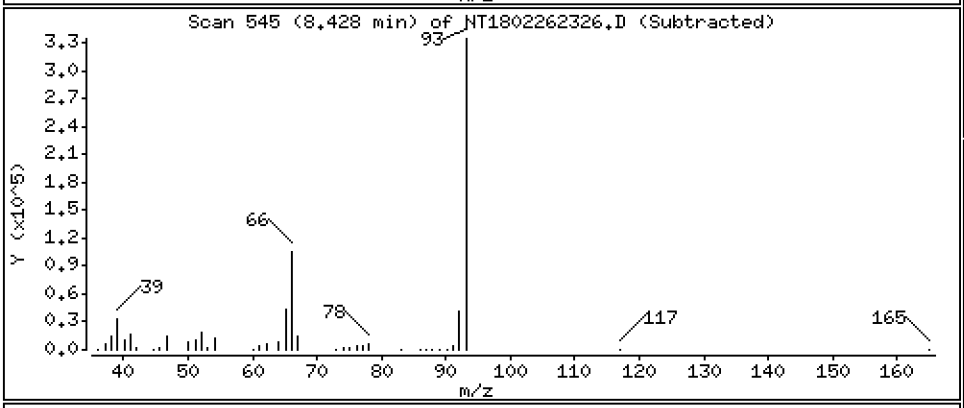
Column phase: ZB-5msi

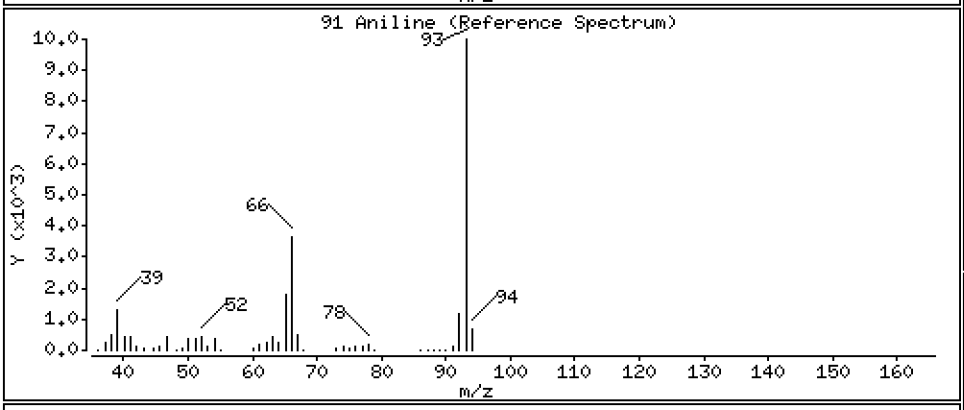
Column diameter: 0.25

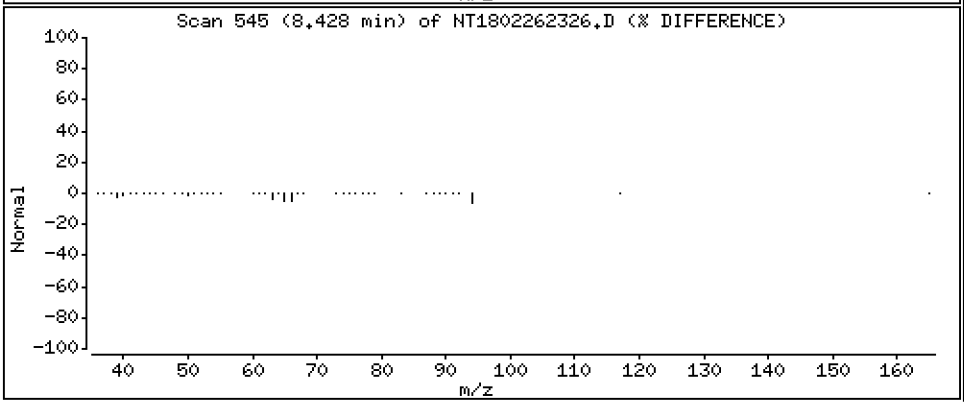
91 Aniline

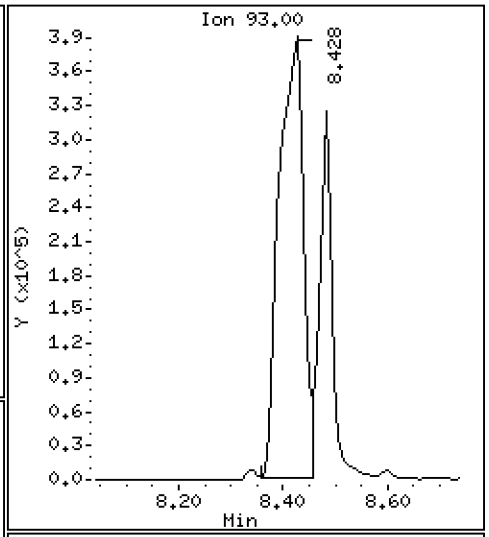
Concentration: 8.597 ug/mL

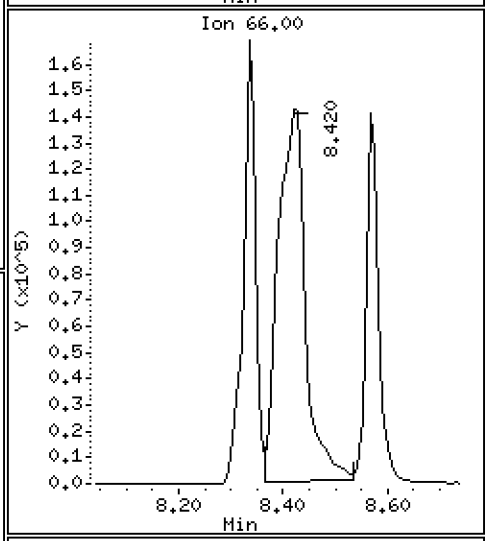


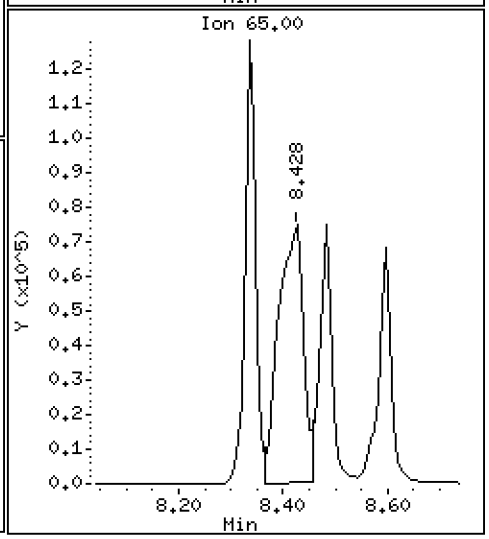












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

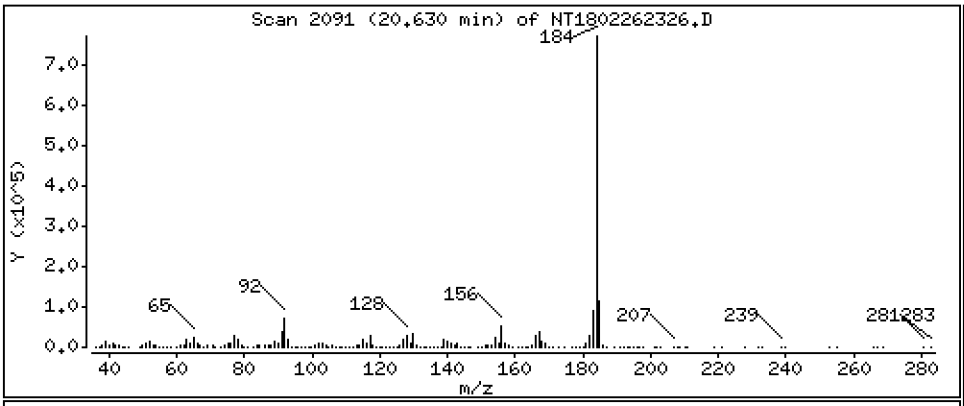
Operator: VTS

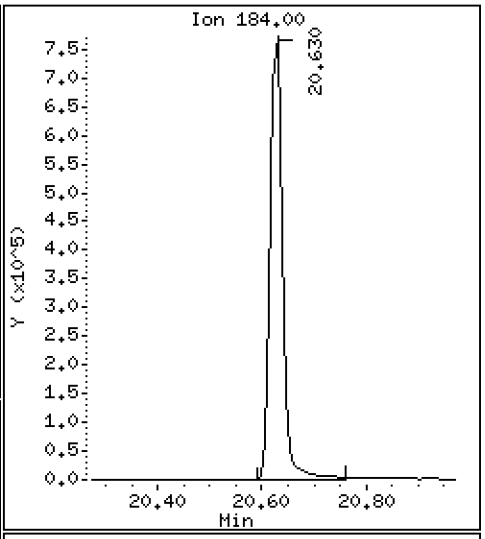
Column phase: ZB-5msi

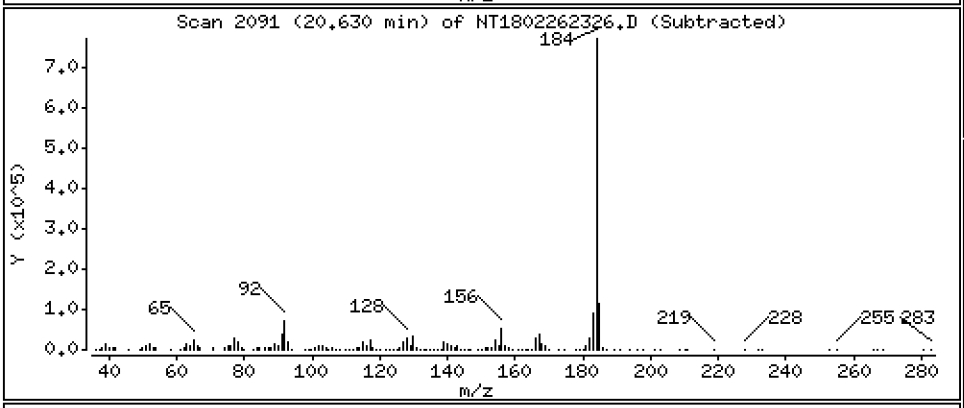
Column diameter: 0.25

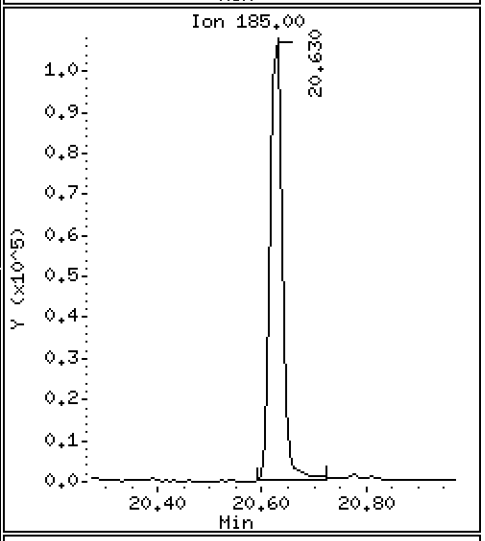
93 Benzidine

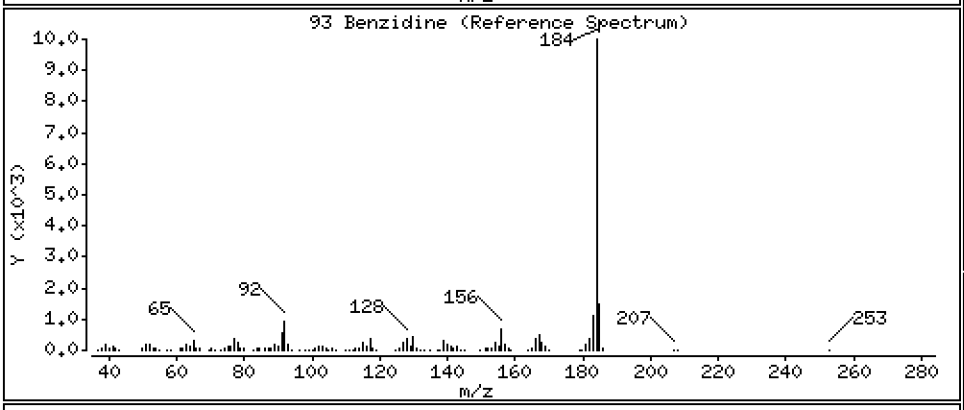
Concentration: 6.798 ug/mL

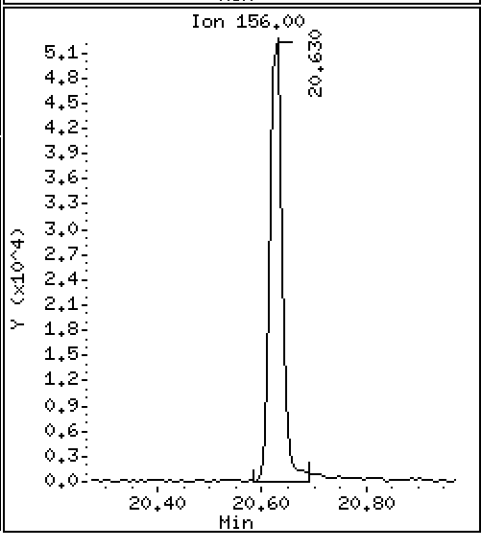


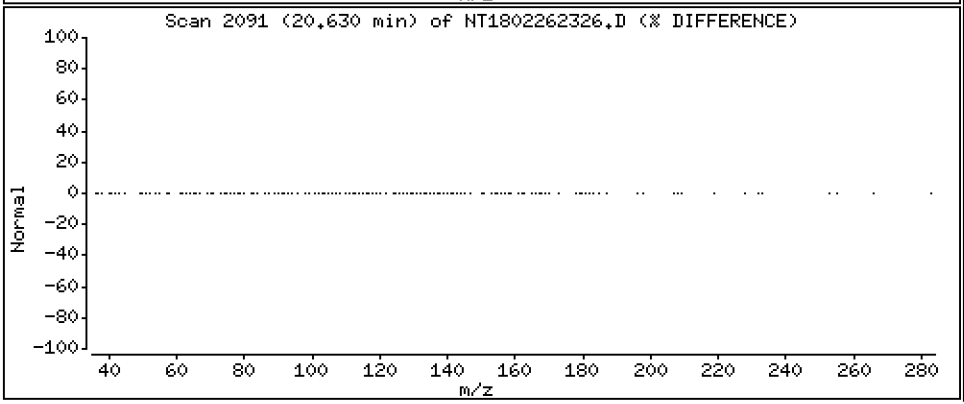












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

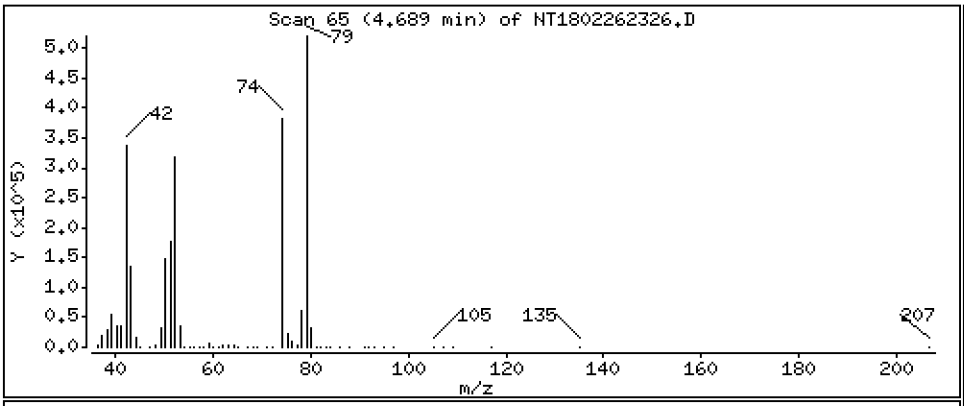
Operator: VTS

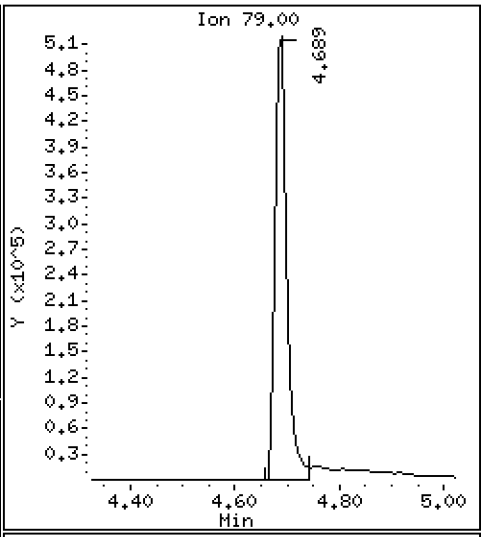
Column phase: ZB-5msi

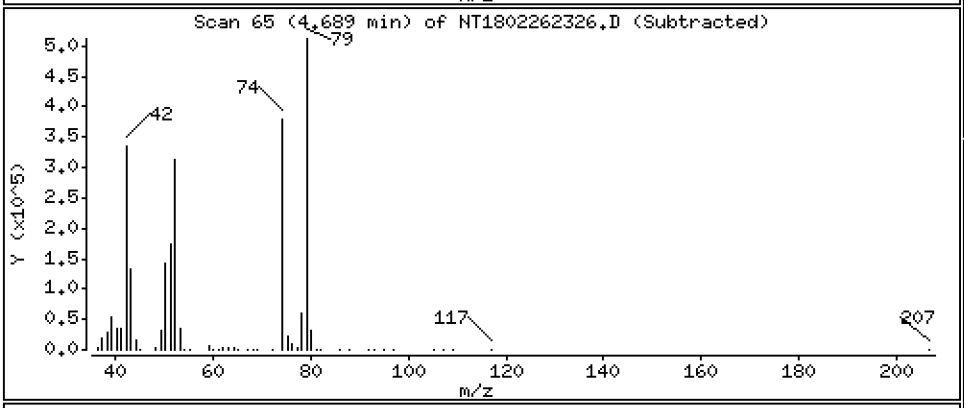
Column diameter: 0.25

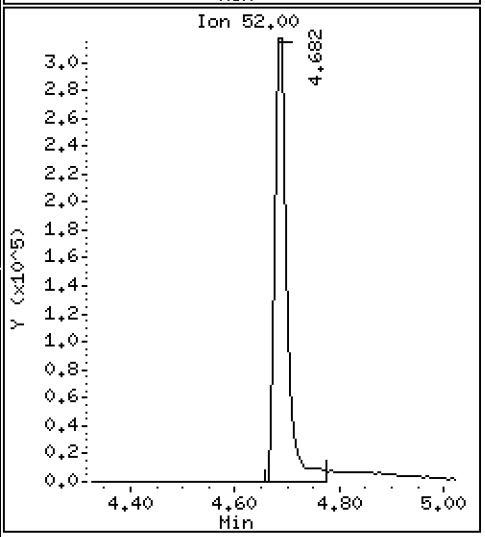
103 Pyridine

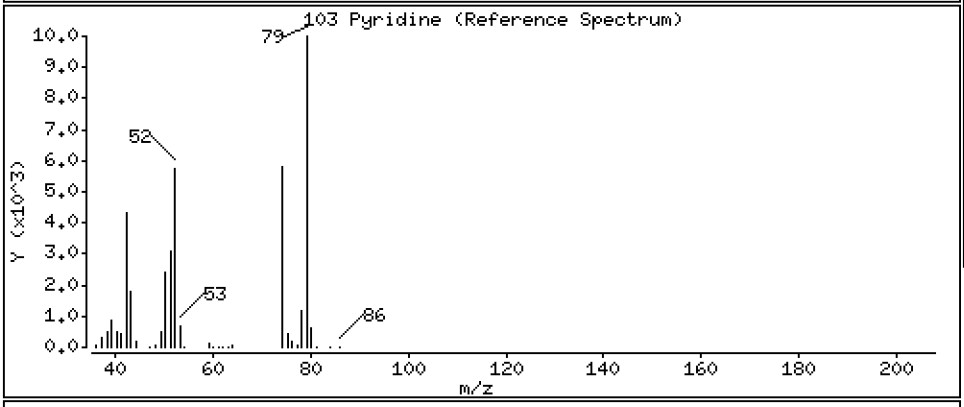
Concentration: 8.297 ug/mL

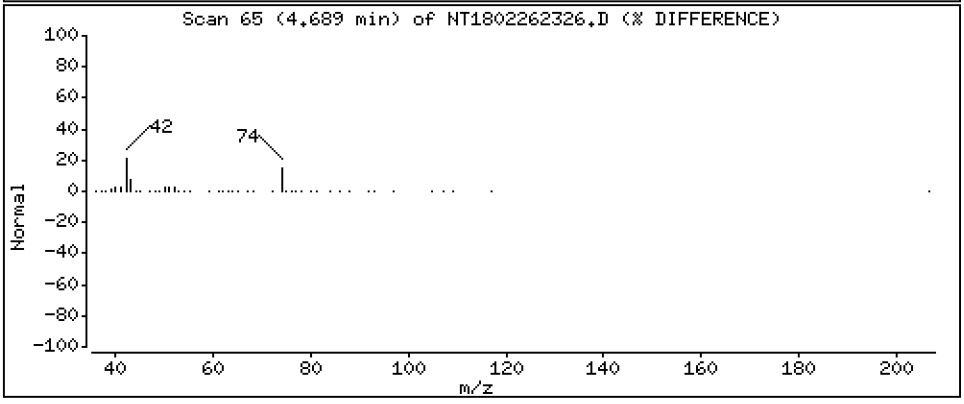












Data File: \\target\share\chem3\nt18.i\20230226.b\NT1802262326.D

Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

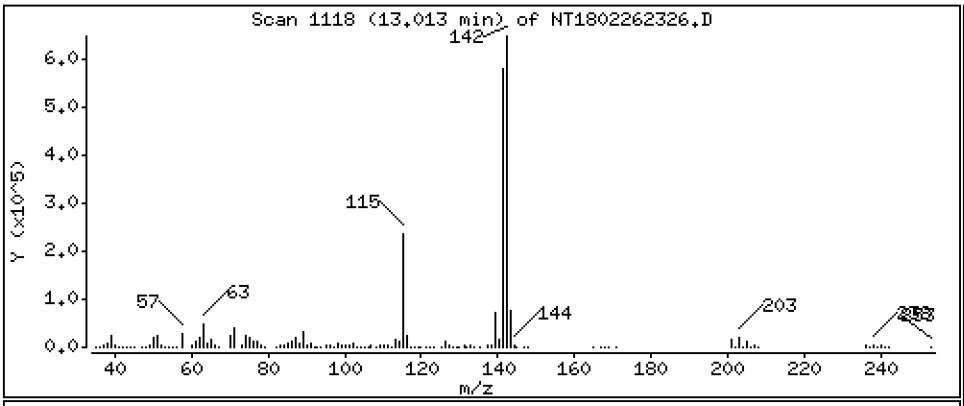
Operator: VTS

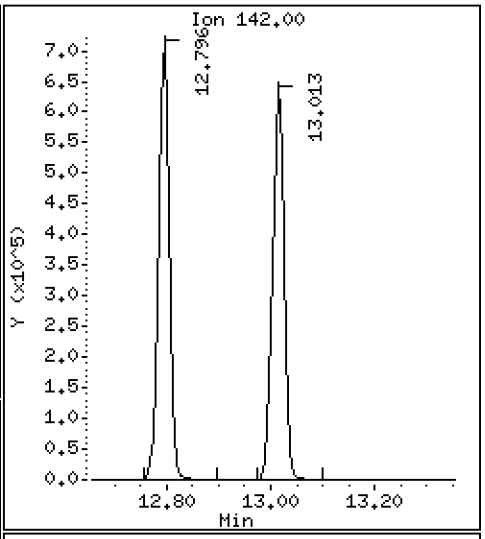
Column phase: ZB-5msi

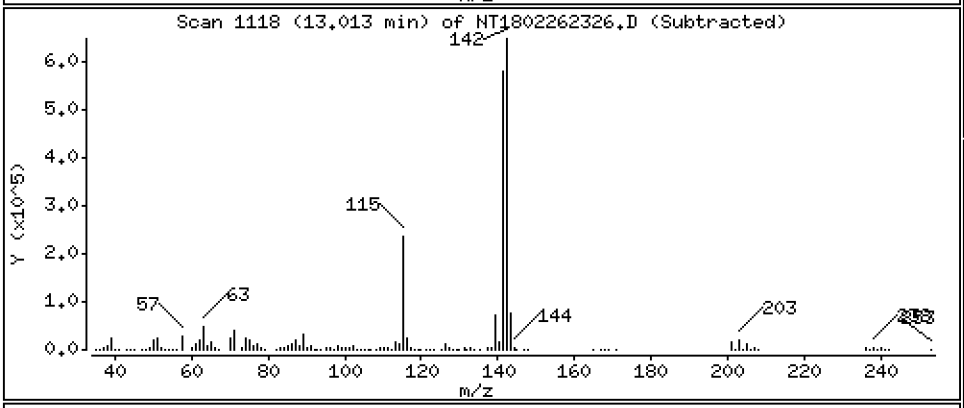
Column diameter: 0.25

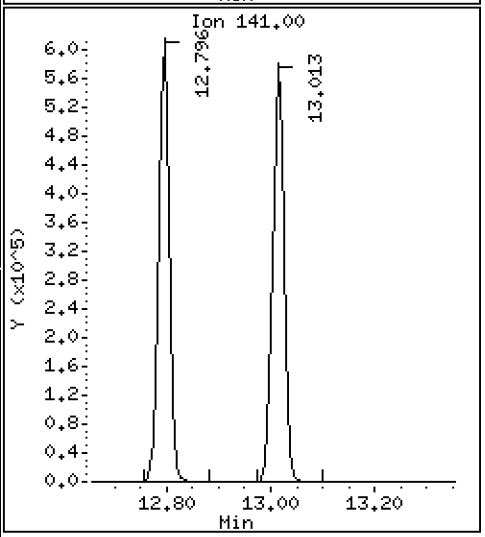
105 1-methylnaphthalene

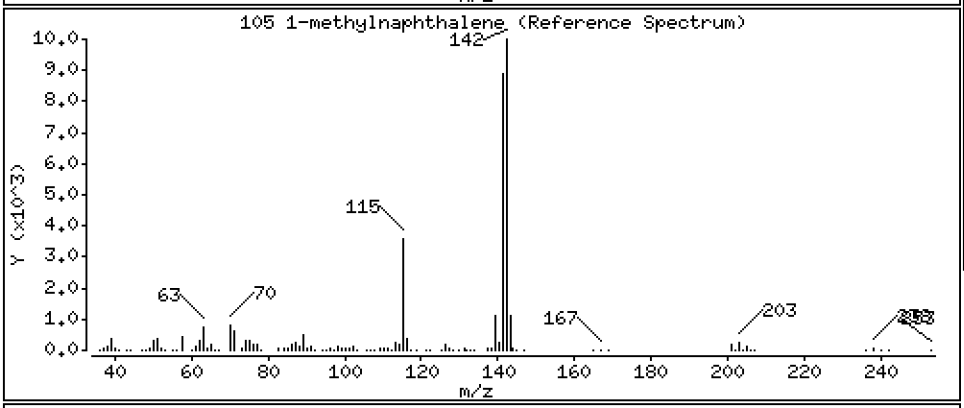
Concentration: 4.772 ug/mL

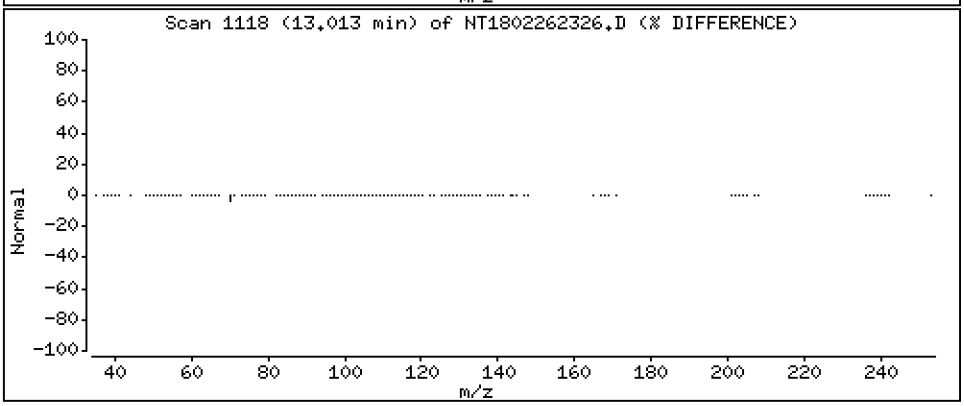












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

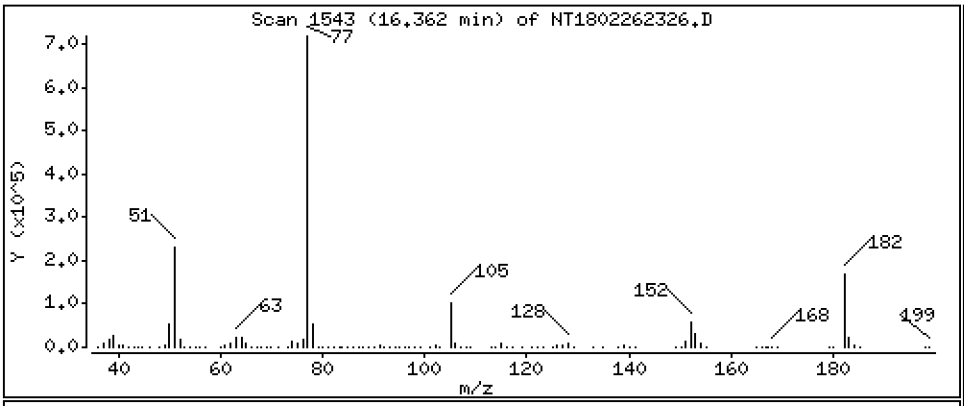
Operator: VTS

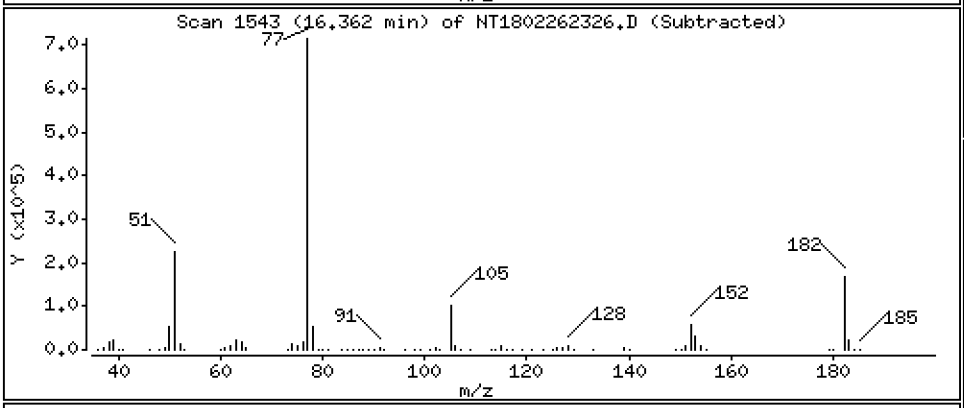
Column phase: ZB-5msi

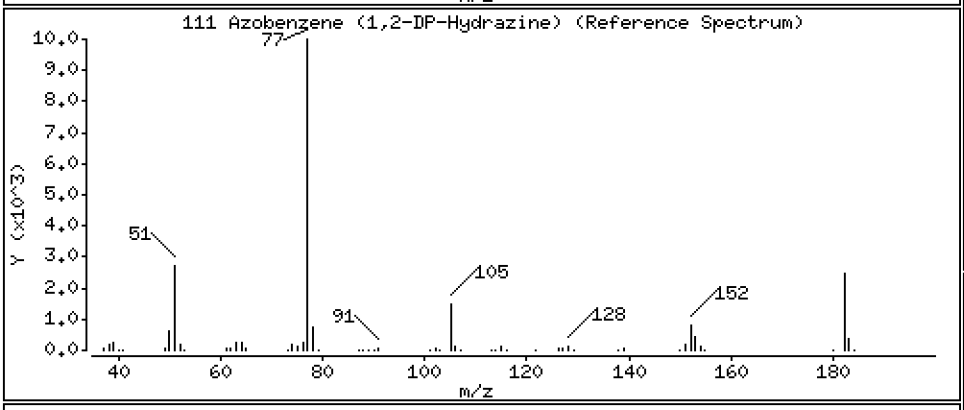
Column diameter: 0.25

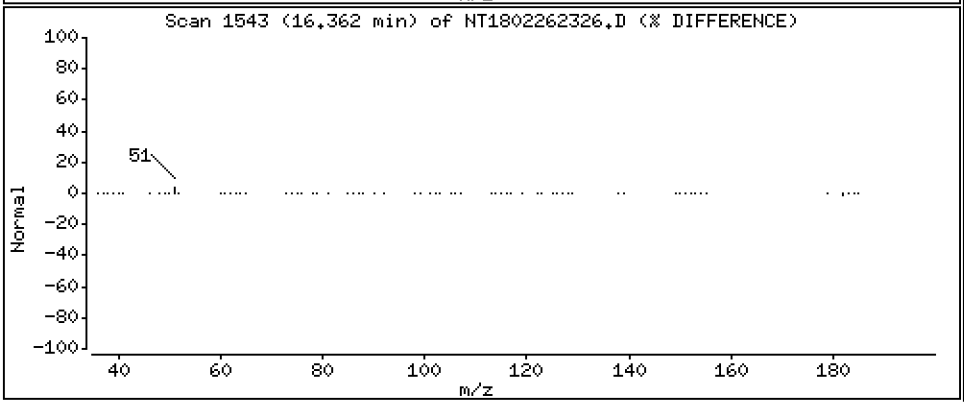
111 Azobenzene (1,2-DP-Hydrazine)

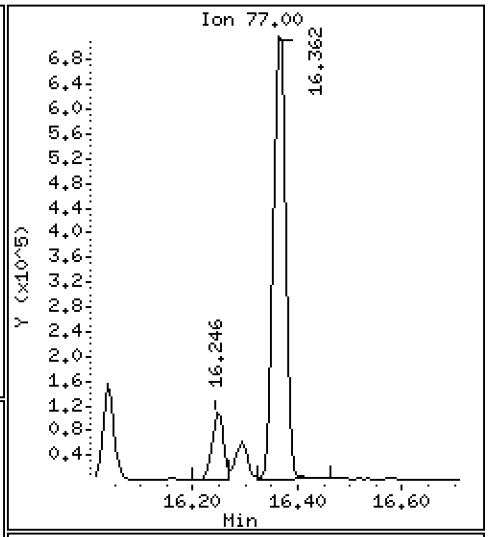
Concentration: 4.749 ug/mL

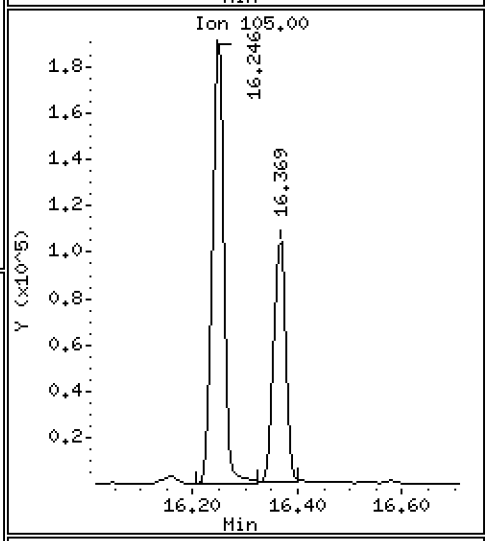


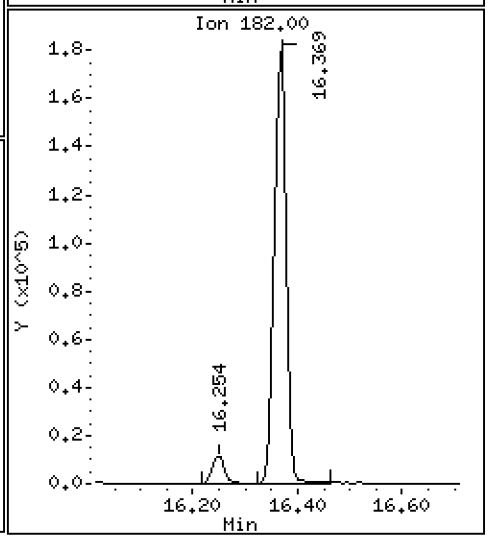












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

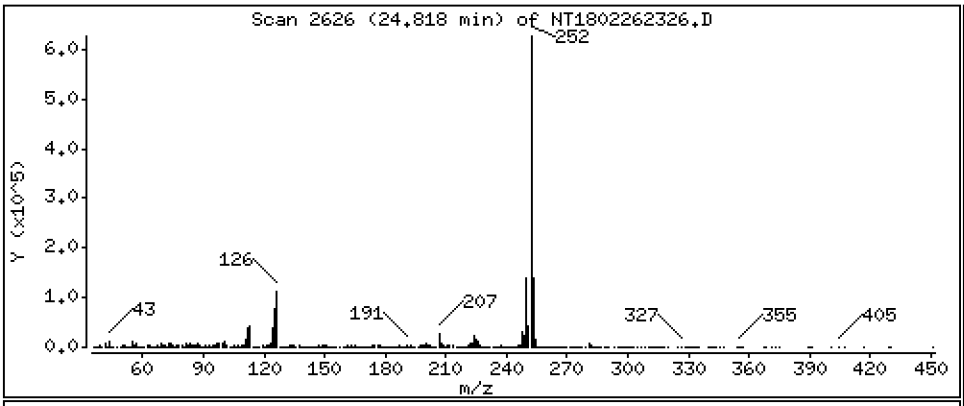
Operator: VTS

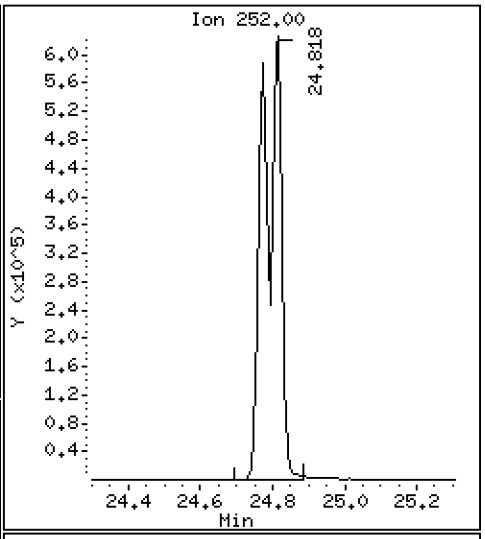
Column phase: ZB-5msi

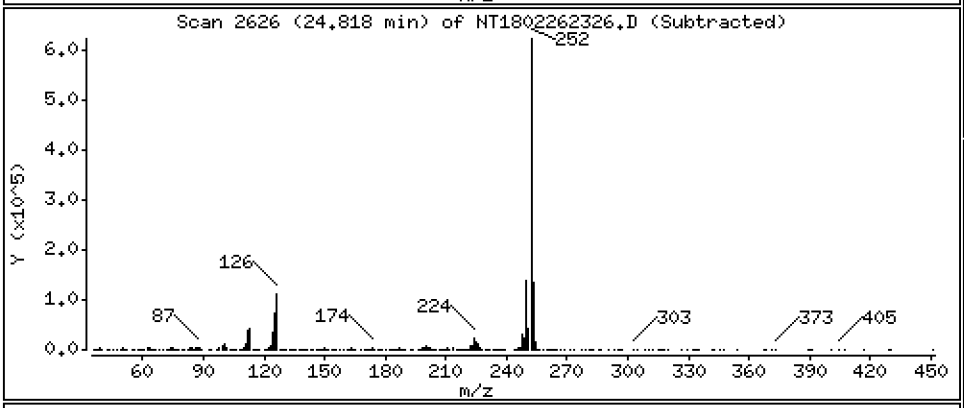
Column diameter: 0.25

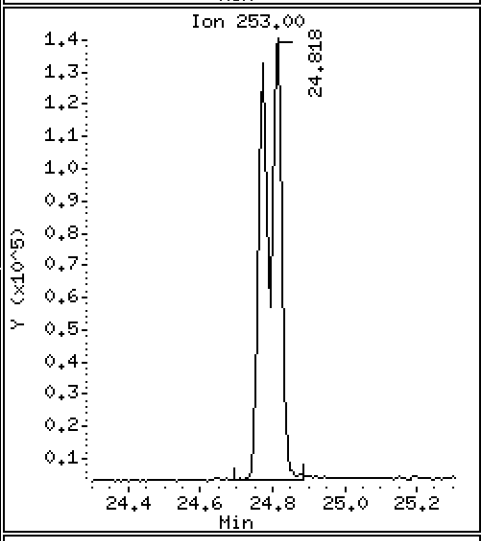
187 Total Benzofluoranthenes

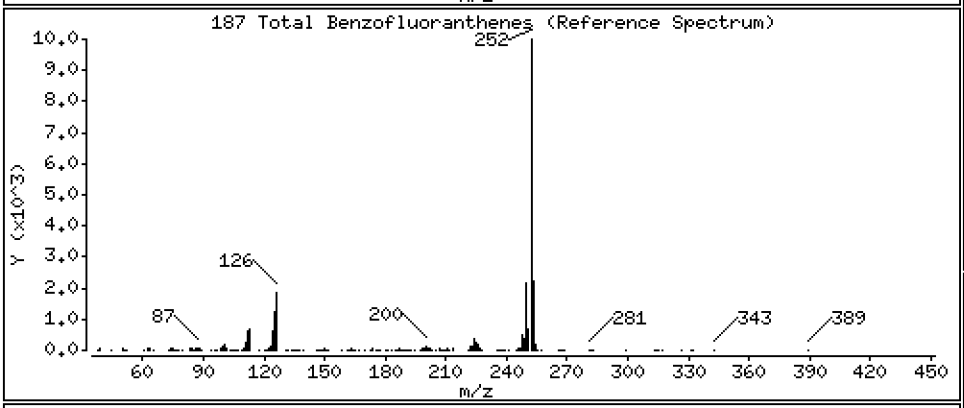
Concentration: 13.58 ug/mL

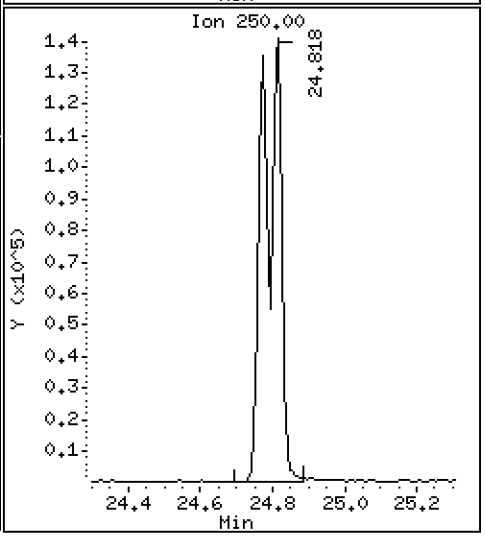


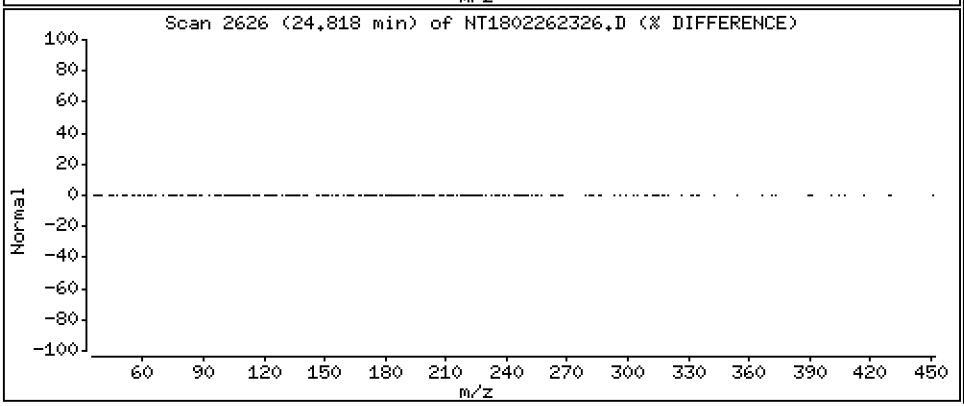












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Date : 27-FEB-2023 04:36

Client ID:

Instrument: nt18.i

Sample Info: SLC0111-CCV1

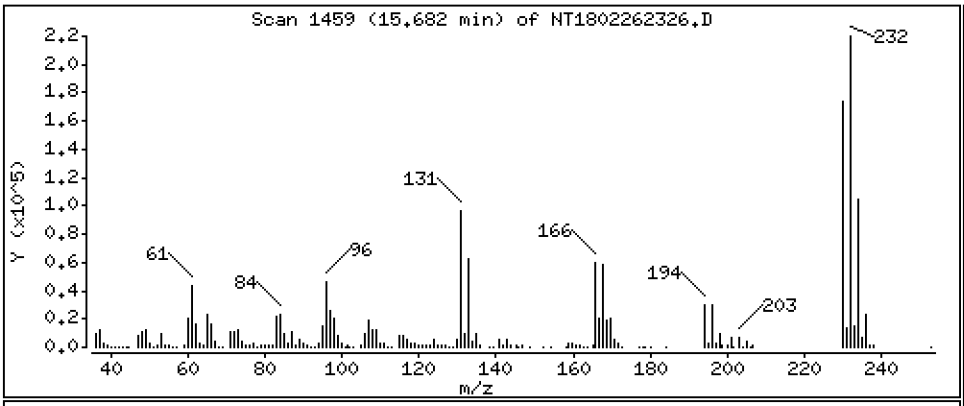
Operator: VTS

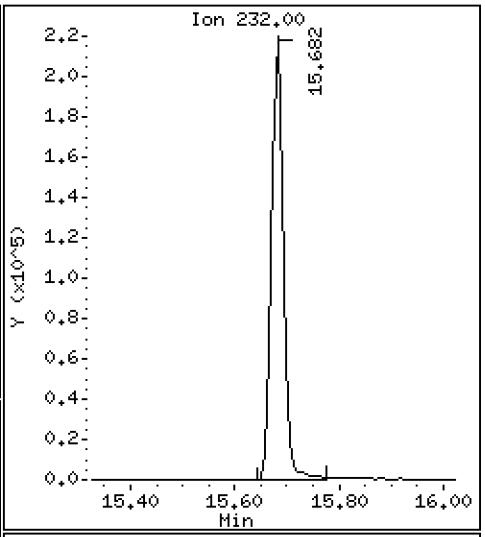
Column phase: ZB-5msi

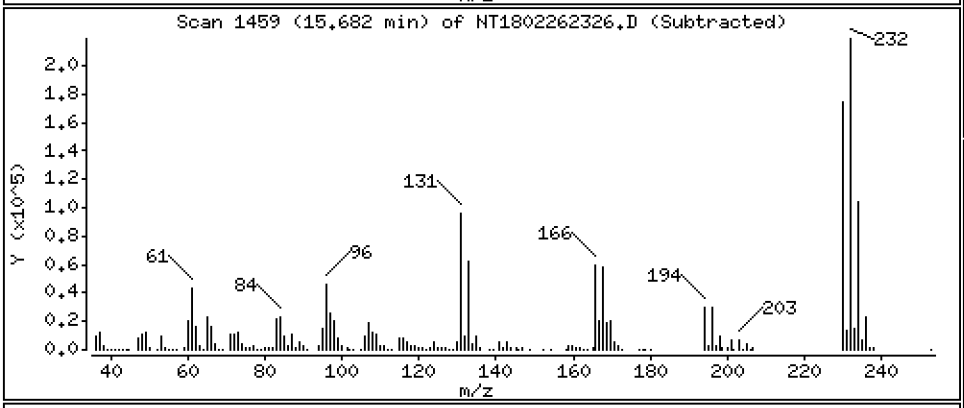
Column diameter: 0.25

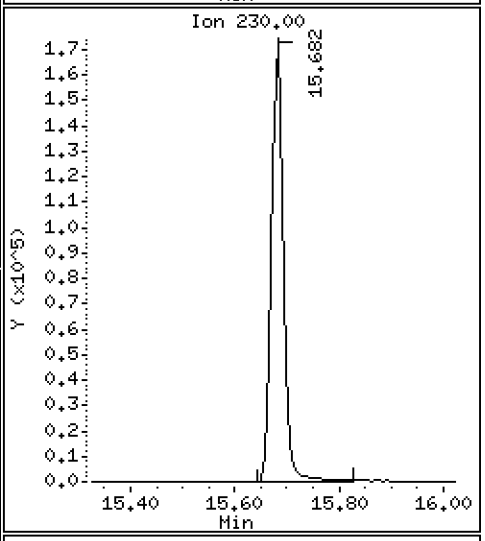
120 2,3,4,6-Tetrachlorophenol

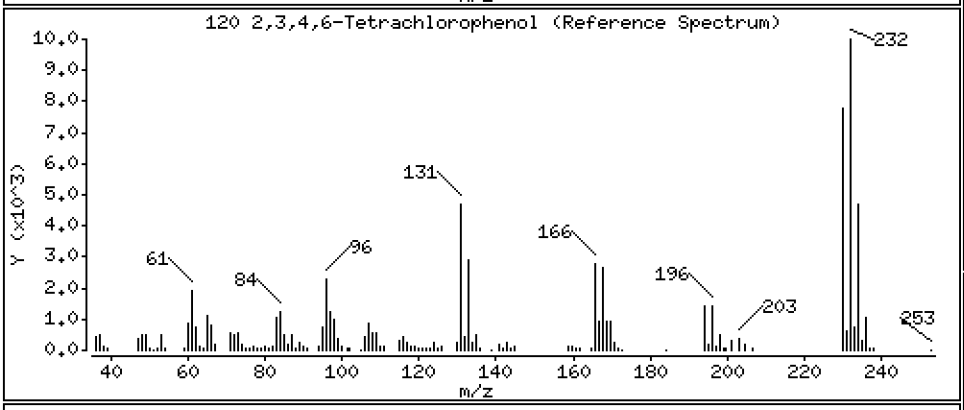
Concentration: 5.575 ug/mL

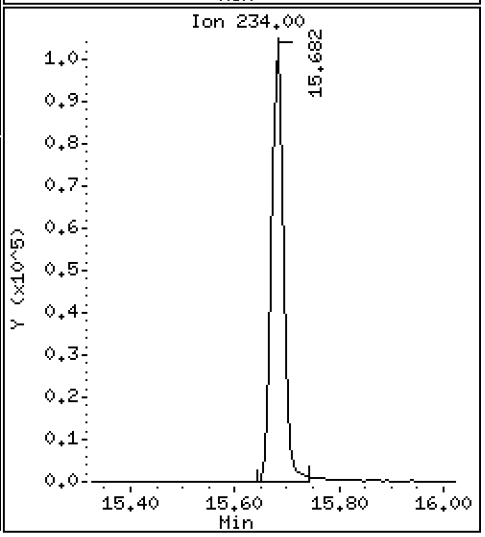


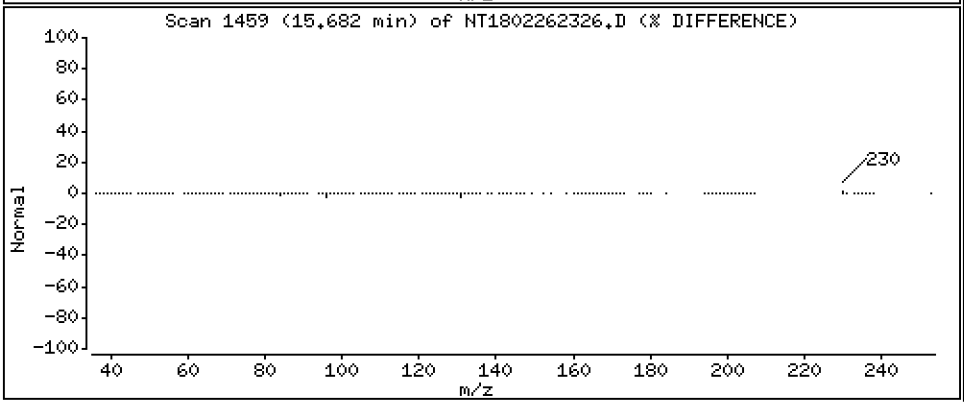












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Inj Date : 27-FEB-2023 04:36
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0111-CCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230226.b\ABN.m
Meth Date : 09-Mar-2023 15:10 van Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.751	6.743	(0.757)	732887	7.55971	7.560
$	2 Phenol-d5	99	8.312	8.296	(0.932)	907275	7.24136	7.241
	3 Phenol	94	8.335	8.319	(0.934)	622879	4.77817	4.778
$	5 2-Chlorophenol-d4	132	8.566	8.559	(0.960)	805516	7.38827	7.388
	4 Bis(2-Chloroethyl)ether	93	8.482	8.474	(0.951)	529582	5.98155	5.982
	6 2-Chlorophenol	128	8.597	8.590	(0.964)	541190	4.83470	4.835
	7 1,3-Dichlorobenzene	146	8.860	8.853	(0.993)	551604	4.65904	4.659
*	8 1,4-Dichlorobenzene-d4	152	8.922	8.915	(1.000)	284154	4.00000	
	9 1,4-Dichlorobenzene	146	8.953	8.946	(1.003)	552705	4.57979	4.580
$	10 1,2-Dichlorobenzene-d4	152	9.272	9.272	(1.039)	356573	4.61337	4.613
	12 1,2-Dichlorobenzene	146	9.303	9.295	(1.043)	536473	4.58051	4.581
	11 Benzyl alcohol	108	9.194	9.186	(1.030)	342240	5.52151	5.522
	14 2,2'-oxybis(1-Chloropropane)	121	9.489	9.481	(1.063)	127230	4.63547	4.635
	13 2-Methylphenol	108	9.427	9.411	(1.057)	478731	4.74765	4.748
	17 Hexachloroethane	117	9.877	9.877	(1.107)	143186	3.06502	3.065
	16 N-Nitroso-di-n-propylamine	70	9.745	9.737	(1.092)	353379	4.76744	4.767
	15 4-Methylphenol	108	9.691	9.683	(1.086)	507662	4.83036	4.830
$	18 Nitrobenzene-d5	82	10.001	9.993	(0.879)	556772	4.85814	4.858
	19 Nitrobenzene	77	10.032	10.032	(0.882)	524383	4.75327	4.753
	20 Isophorone	82	10.482	10.475	(0.922)	672569	4.77861	4.779
	21 2-Nitrophenol	139	10.659	10.650	(0.937)	292926	5.40641	5.406
	22 2,4-Dimethylphenol	107	10.727	10.710	(0.943)	1003027	9.71525	9.715
	23 Bis(2-Chloroethoxy)methane	93	10.905	10.905	(0.959)	458526	4.75754	4.758
	24 Benzoic acid	105	11.007	10.990	(0.968)	1370353	31.7037	31.70(M)
	25 2,4-Dichlorophenol	162	11.109	11.100	(0.977)	940319	10.3878	10.39
	26 1,2,4-Trichlorobenzene	180	11.288	11.280	(0.993)	457590	4.68034	4.680
*	27 Naphthalene-d8	136	11.373	11.365	(1.000)	1075373	4.00000	
	28 Naphthalene	128	11.411	11.403	(1.003)	1543612	4.66953	4.670
	29 4-Chloroaniline	127	11.558	11.542	(1.016)	1356027	10.2931	10.29
	30 Hexachlorobutadiene	225	11.767	11.767	(1.035)	268336	4.68250	4.683
	31 4-Chloro-3-methylphenol	107	12.517	12.502	(1.101)	878495	10.1396	10.14
	32 2-Methylnaphthalene	142	12.796	12.788	(1.125)	1061815	4.72701	4.727
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.415	13.407	(0.897)	623614	11.0814	11.08
35	2,4,5-Trichlorophenol	196	13.492	13.485	(0.903)	671074	10.9431	10.94
$ 36	2-Fluorobiphenyl	172	13.570	13.570	(0.908)	1139217	4.64404	4.644
37	2-Chloronaphthalene	162	13.779	13.771	(0.922)	894647	4.66737	4.667
38	2-Nitroaniline	65	14.042	14.034	(0.939)	598332	9.97409	9.974
39	Dimethylphthalate	163	14.475	14.468	(0.968)	1015197	4.93128	4.931
40	Acenaphthylene	152	14.638	14.630	(0.979)	1705867	5.28524	5.285
41	2,6-Dinitrotoluene	165	14.607	14.607	(0.977)	487109	10.3210	10.32
* 42	Acenaphthene-d10	164	14.947	14.947	(1.000)	581824	4.00000	
43	3-Nitroaniline	138	14.893	14.885	(0.996)	571529	10.2374	10.24
44	Acenaphthene	153	15.017	15.009	(1.005)	972922	4.76285	4.763
45	2,4-Dinitrophenol	184	15.110	15.102	(1.011)	577254	24.7563	24.76
46	Dibenzofuran	168	15.342	15.334	(1.026)	1407999	4.76215	4.762
47	4-Nitrophenol	109	15.233	15.218	(1.019)	290571	12.9117	12.91
48	2,4-Dinitrotoluene	165	15.411	15.403	(1.031)	669390	10.3761	10.38
50	Diethylphthalate	149	15.921	15.921	(1.065)	1189698	5.51516	5.515
49	Fluorene	166	16.045	16.037	(1.073)	1173723	4.95375	4.954
51	4-Chlorophenyl-phenylether	204	16.037	16.037	(1.073)	530031	4.91119	4.911
52	4-Nitroaniline	138	16.161	16.145	(1.081)	553983	10.3147	10.31
53	4,6-Dinitro-2-methylphenol	198	16.253	16.238	(0.905)	753132	18.4029	18.40
54	N-Nitrosodiphenylamine	169	16.292	16.292	(0.907)	746388	4.43238	4.432
$ 55	2,4,6-Tribromophenol	330	16.577	16.569	(1.109)	254548	8.31889	8.319
56	4-Bromophenyl-phenylether	248	17.032	17.032	(0.948)	310532	4.59527	4.595
57	Hexachlorobenzene	284	17.341	17.341	(0.966)	341710	4.37921	4.379
58	Pentachlorophenol	266	17.705	17.697	(0.986)	335304	14.7874	14.79
* 59	Phenanthrene-d10	188	17.960	17.952	(1.000)	1119140	4.00000	
60	Phenanthrene	178	18.007	17.999	(1.003)	1644260	4.67101	4.671
61	Anthracene	178	18.099	18.092	(1.008)	1672276	4.98508	4.985
62	Carbazole	167	18.432	18.424	(1.026)	1444526	4.69931	4.699
63	Di-n-butylphthalate	149	19.237	19.237	(1.071)	1816472	5.33862	5.339
64	Fluoranthene	202	20.390	20.382	(0.887)	1880482	5.20563	5.206
65	Pyrene	202	20.807	20.800	(0.905)	1945927	5.05084	5.051
$ 66	Terphenyl-d14	244	21.101	21.094	(0.918)	1563251	5.05892	5.059
67	Butylbenzylphthalate	149	22.031	22.023	(0.958)	873428	5.97053	5.971
68	Benzo(a)anthracene	228	22.968	22.952	(0.999)	1796925	4.82749	4.827
* 69	Chrysene-d12	240	22.991	22.983	(1.000)	1031047	4.00000	
70	3,3'-Dichlorobenzidine	252	22.929	22.921	(0.997)	1901214	13.8806	13.88
71	Chrysene	228	23.037	23.029	(1.002)	1816361	4.69270	4.693
72	bis(2-Ethylhexyl)phthalate	149	23.053	23.053	(0.959)	1291208	5.23484	5.235
* 134	Di-n-octylphthalate-d4	153	24.028	24.020	(1.000)	1718023	4.00000	
73	Di-n-octylphthalate	149	24.036	24.028	(1.000)	2217821	4.63276	4.633
74	Benzo(b)fluoranthene	252	24.771	24.764	(0.972)	1101476	7.08117	7.081
75	Benzo(k)fluoranthene	252	24.818	24.802	(0.974)	1143255	6.48522	6.485
76	Benzo(a)pyrene	252	25.375	25.368	(0.996)	760466	5.27369	5.274
* 77	Perylene-d12	264	25.484	25.476	(1.000)	476783	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.935	27.920	(1.096)	367622	2.03079	2.031
79	Dibenzo(a,h)anthracene	278	27.943	27.927	(1.097)	330884	2.19166	2.192
80	Benzo(g,h,i)perylene	276	28.650	28.642	(1.124)	236599	1.63027	1.630
90	N-Nitrosodimethylamine	74	4.689	4.681	(0.526)	541879	9.52117	9.521
91	Aniline	93	8.427	8.389	(0.945)	1275641	8.59719	8.597
93	Benzidine	184	20.629	20.622	(0.897)	1199796	6.79794	6.798
103	Pyridine	79	4.689	4.673	(0.526)	786667	8.29702	8.297
105	1-methylnaphthalene	142	13.013	13.005	(1.144)	970455	4.77249	4.772
111	Azobenzene (1,2-DP-Hydrazine)	77	16.361	16.361	(1.095)	1128557	4.74946	4.749

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.818	24.802	(0.974)	2135284	13.5773	13.58
120 2,3,4,6-Tetrachlorophenol	232	15.682	15.674	(1.049)	324318	5.57460	5.575

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262326.D
Lab Smp Id: SLC0111-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\ABN.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:08
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	244122	122061	488244	284154	16.40
27 Naphthalene-d8	943164	471582	1886328	1075373	14.02
42 Acenaphthene-d10	501893	250947	1003786	581824	15.93
59 Phenanthrene-d10	896502	448251	1793004	1119140	24.83
69 Chrysene-d12	842481	421241	1684962	1031047	22.38
134 Di-n-octylphthala	1278043	639022	2556086	1718023	34.43
77 Perylene-d12	915681	457841	1831362	476783	-47.93

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.09
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.07
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
134 Di-n-octylphthala	24.02	23.52	24.52	24.03	0.03
77 Perylene-d12	25.48	24.98	25.98	25.48	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262326.D

Lab ID: SLC0111-CCV1
nt18.i, ABN.m, 27-FEB-2023 04:36

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

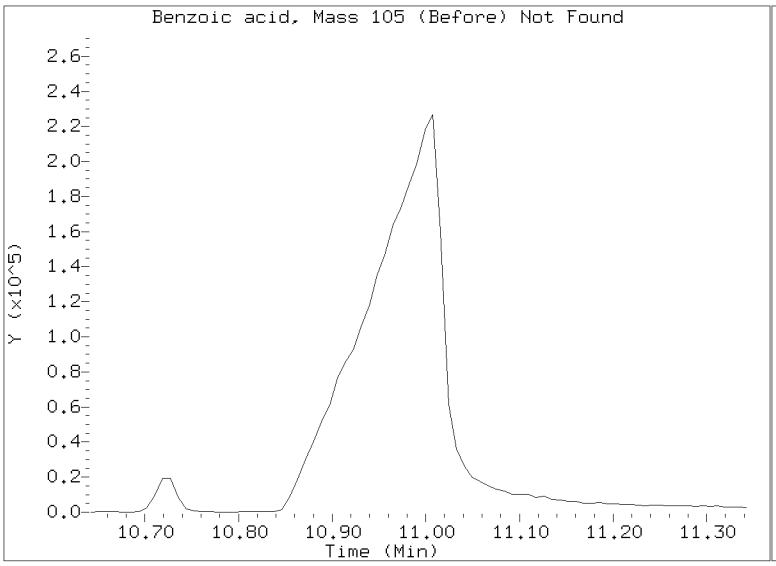
RRT check based on Ccal File: NT1802262302.D

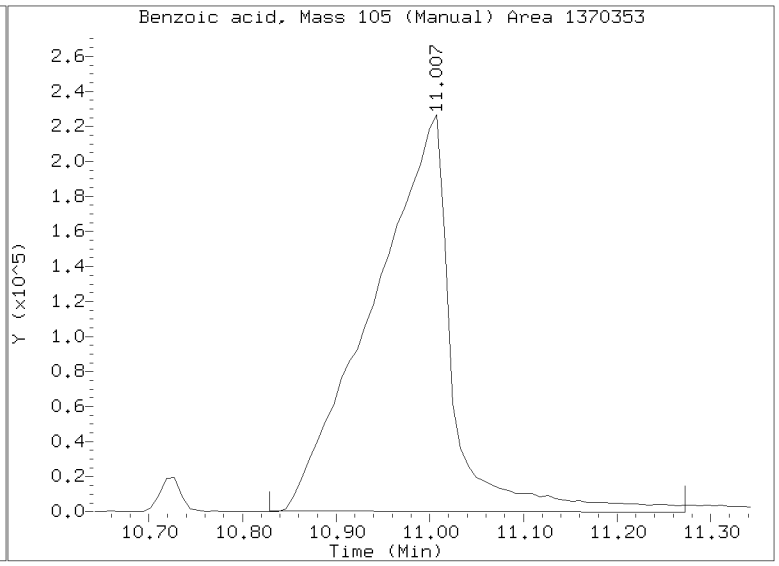
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/NT1802262326.D
Injection Date: 27-FEB-2023 04:36
Lab ID:SLC0111-CCV1 Client ID:
Report Date: 03/10/2023 07:47





Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00023
Lab File ID:	NT1802272322.D	Calibration Date:	02/25/2023
Sequence:	SLC0385	Injection Date:	02/28/23
Lab Sample ID:	SLC0385-CCV1	Injection Time:	13:15
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Phenol	A	5.0000	4.4	1.8350500	1.6209550		-11.7	+/-50	
4-Methylphenol	A	5.0000	4.7	1.4794550	1.3795920		-6.8	+/-50	
Naphthalene	A	5.0000	4.7	1.2296060	1.1522100		-6.3	+/-50	
2-Methylnaphthalene	A	5.0000	4.9	0.8355327	0.8113703		-2.9	+/-50	
Acenaphthylene	A	5.0000	4.7	2.2189590	2.0841560		-6.1	+/-50	
Dimethylphthalate	A	5.0000	4.7	1.4153330	1.3406480		-5.3	+/-50	
Acenaphthene	A	5.0000	4.6	1.4043630	1.2785420		-9.0	+/-50	
Dibenzofuran	A	5.0000	4.6	2.0326750	1.8856440		-7.2	+/-50	
Fluorene	A	5.0000	5.4	1.6289200	1.7683800		8.6	+/-50	
Phenanthrene	A	5.0000	4.6	1.2581570	1.1449650		-9.0	+/-50	
Anthracene	A	5.0000	4.9	1.1989790	1.1773460		-1.8	+/-50	
Fluoranthene	A	5.0000	6.1	1.4014480	1.6998390		21.3	+/-50	
Pyrene	A	5.0000	5.8	1.4946680	1.7405050		16.4	+/-50	
Butylbenzylphthalate	A	5.0000	6.2	0.5675390	0.7011946		23.6	+/-50	
Benzo(a)anthracene	A	5.0000	4.9	1.4440750	1.4277150		-1.1	+/-50	
Chrysene	A	5.0000	4.7	1.5016220	1.4187770		-5.5	+/-50	
bis(2-Ethylhexyl)phthalate	A	5.0000	5.6	0.5742806	0.6482055		12.9	+/-50	
Benzofluoranthenes, Total	A	10.000	14.3	1.3194130	1.8825150		42.7	+/-50	
Benzo(a)pyrene	A	5.0000	5.5	1.2097740	1.3349740		10.3	+/-50	
Indeno(1,2,3-cd)pyrene	A	5.0000	2.0	1.5187130	0.5954539		-60.8	+/-50	*
Dibenzo(a,h)anthracene	A	5.0000	2.0	1.2666050	0.5016911		-60.4	+/-50	*
Benzo(g,h,i)perylene	A	5.0000	1.7	1.2175640	0.4129046		-66.1	+/-50	*
2-Fluorophenol	A	7.5000	7.04	1.3647030	1.2818680		-6.1	+/-50	
Phenol-d5	A	7.5000	6.88	1.7637020	1.6173400		-8.3	+/-50	
2-Chlorophenol-d4	A	7.5000	7.21	1.5347490	1.4762540		-3.8	+/-50	
1,2-Dichlorobenzene-d4	A	5.0000	4.71	1.0880180	1.0253320		-5.8	+/-50	
Nitrobenzene-d5	A	5.0000	4.25	0.4262932	0.3625787		-14.9	+/-50	
2-Fluorobiphenyl	A	5.0000	4.49	1.6864720	1.5135490		-10.3	+/-50	
2,4,6-Tribromophenol	A	7.5000	6.78	0.2004134	0.1880364		-9.6	+/-50	
p-Terphenyl-d14	A	5.0000	5.78	1.1988160	1.3846730		15.5	+/-50	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272322.D
Date : 28-FEB-2023 13:15
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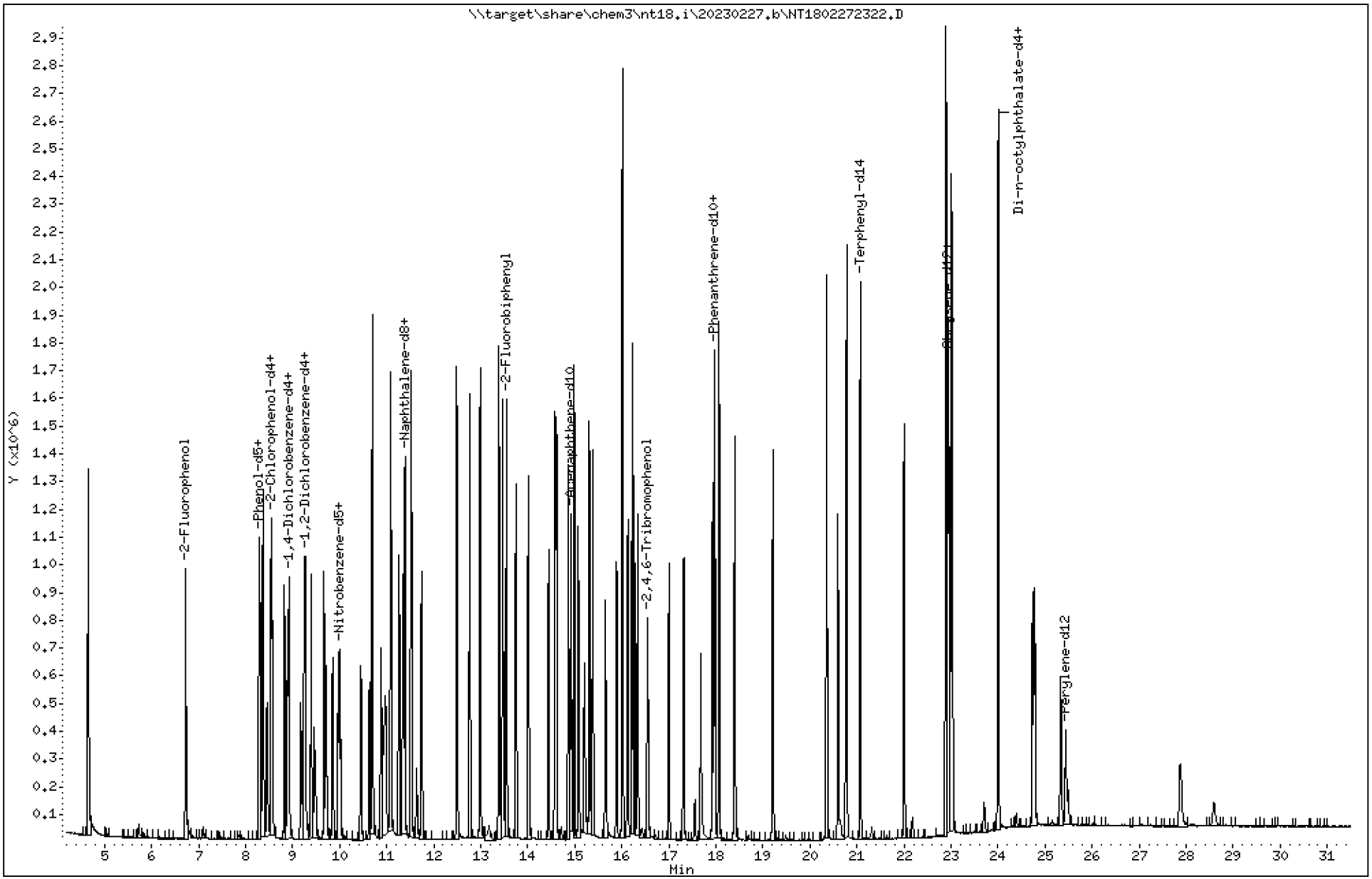
Sample Info: SLC0385-CCV1

Instrument: nt18.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

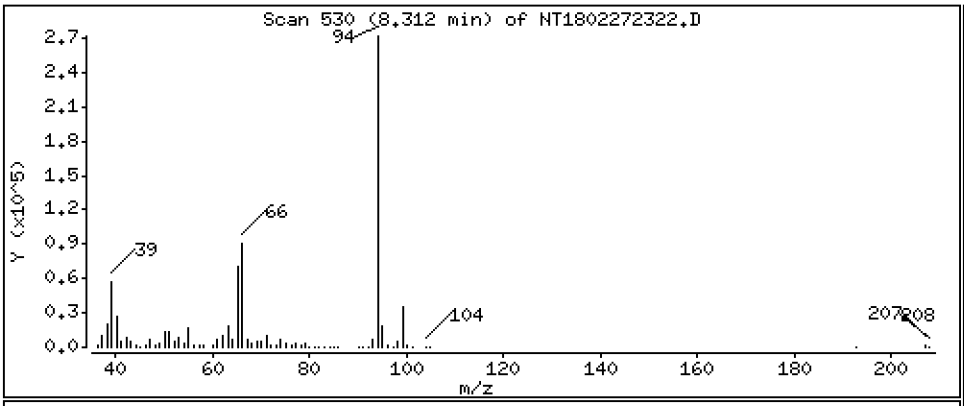
Operator: VTS

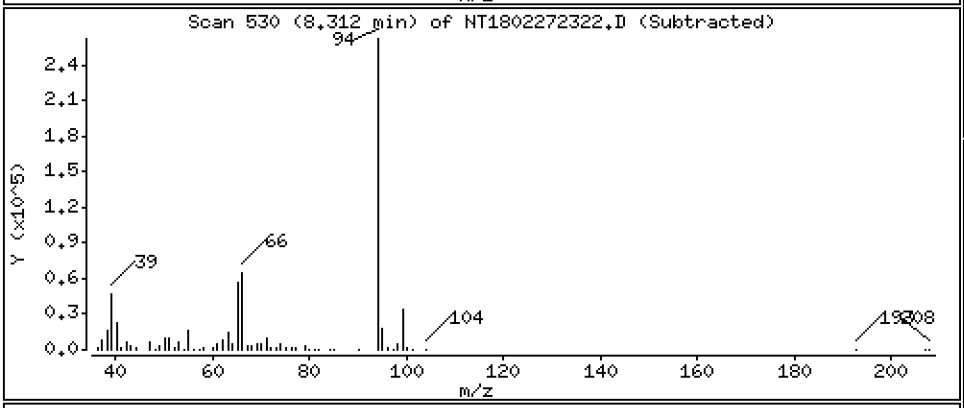
Column phase: ZB-5msi

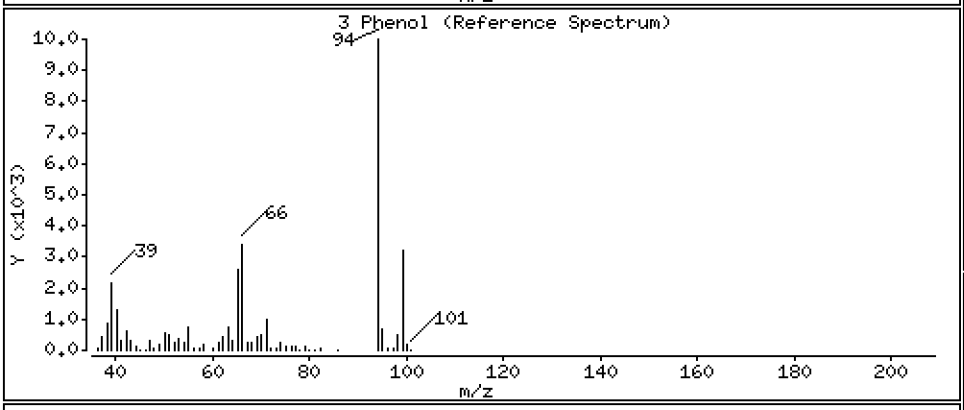
Column diameter: 0.25

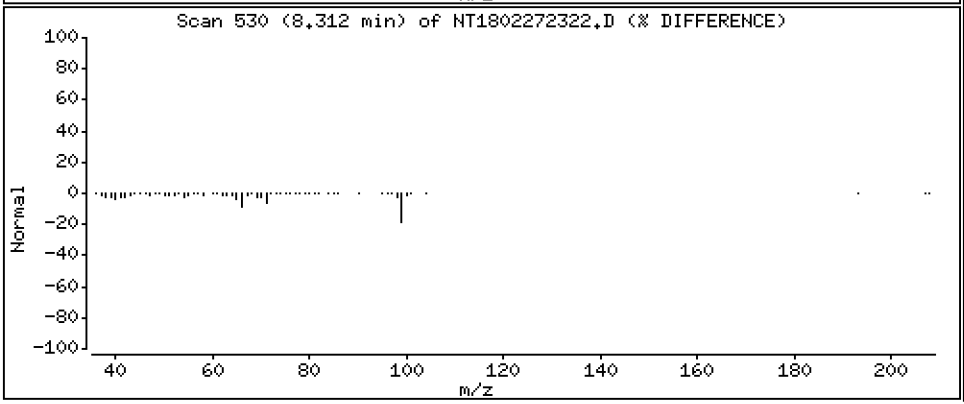
3 Phenol

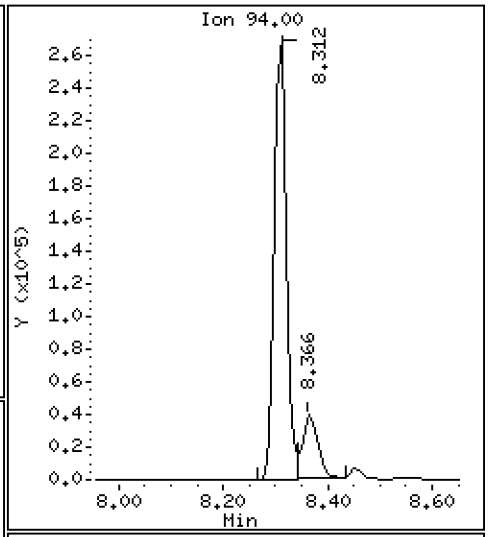
Concentration: 4.417 ug/mL

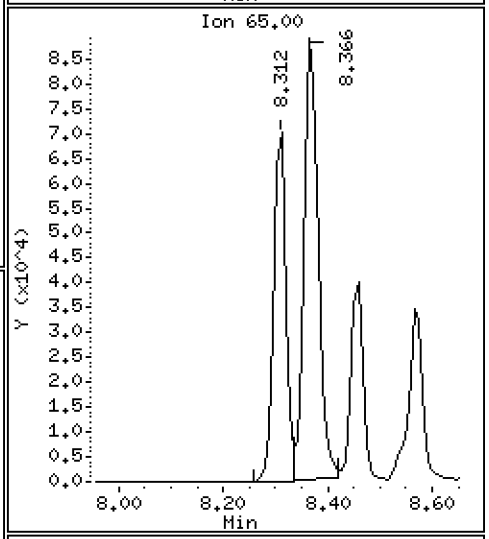


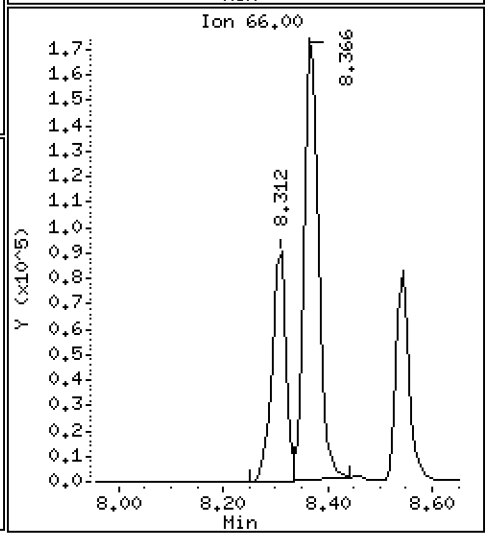












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

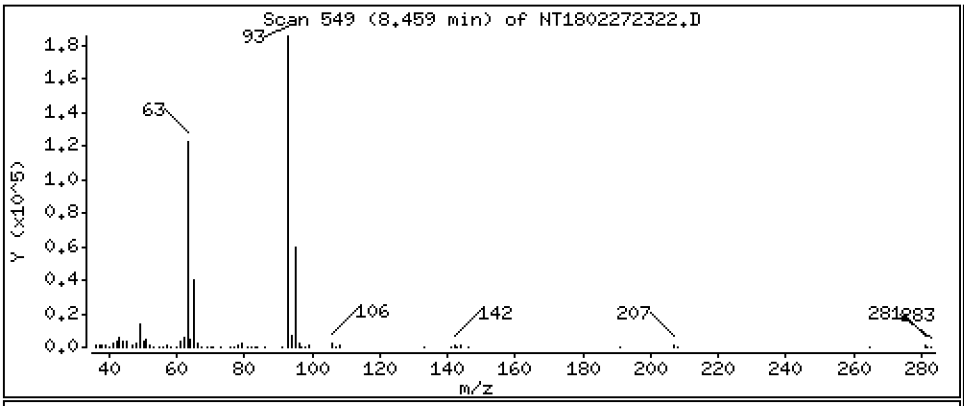
Operator: VTS

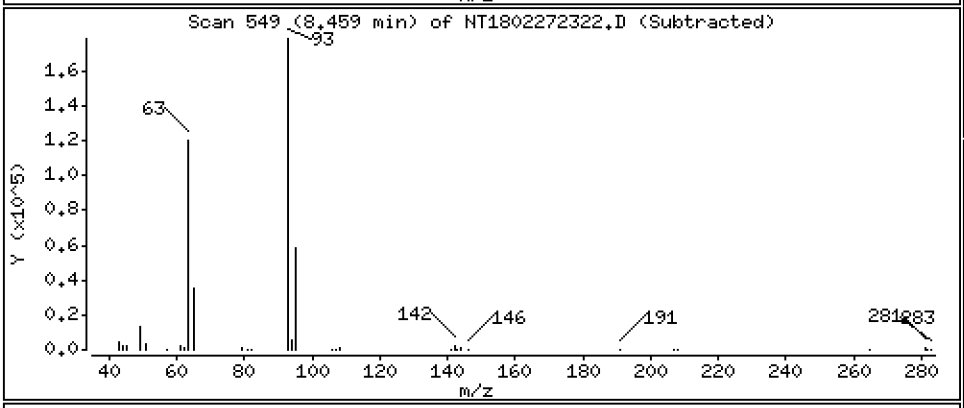
Column phase: ZB-5msi

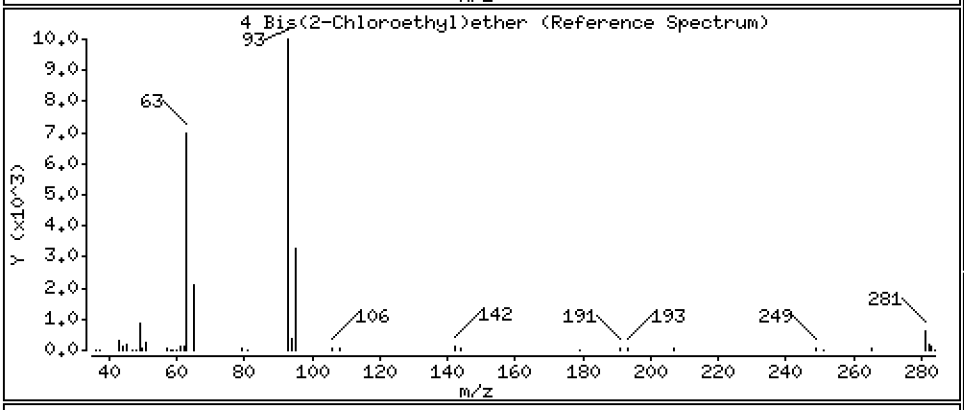
Column diameter: 0.25

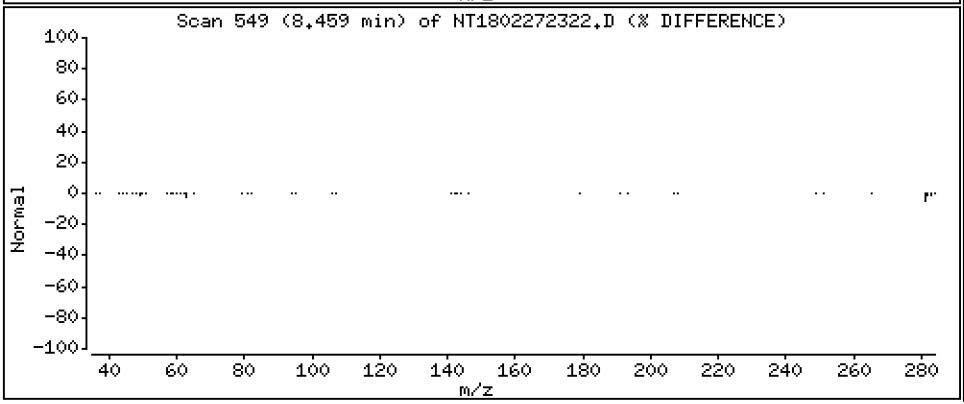
4 Bis(2-Chloroethyl)ether

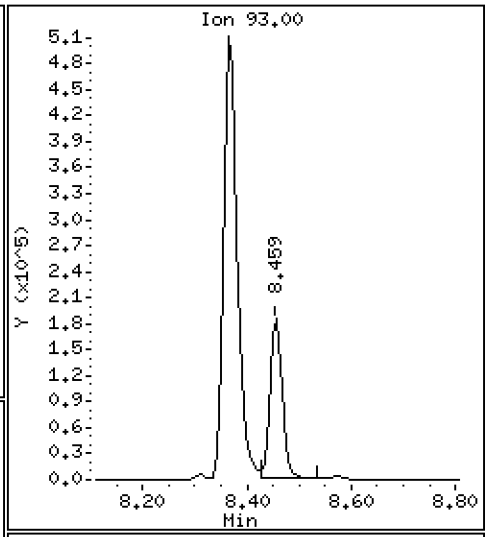
Concentration: 4.536 ug/mL

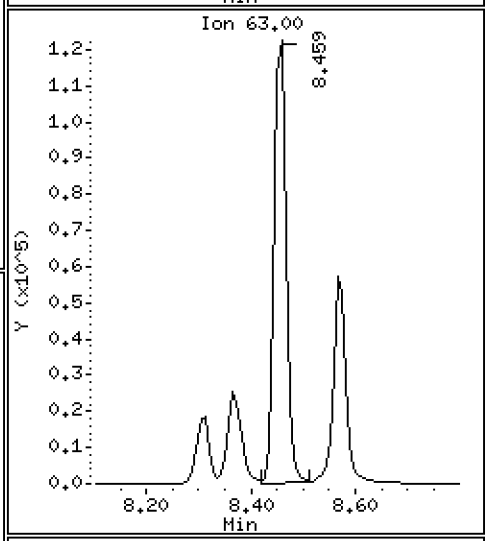


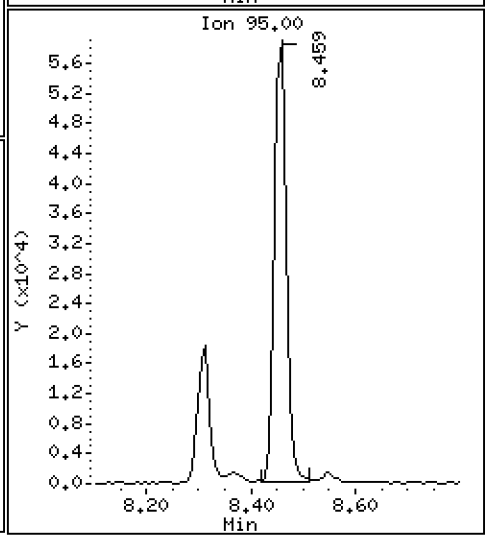












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

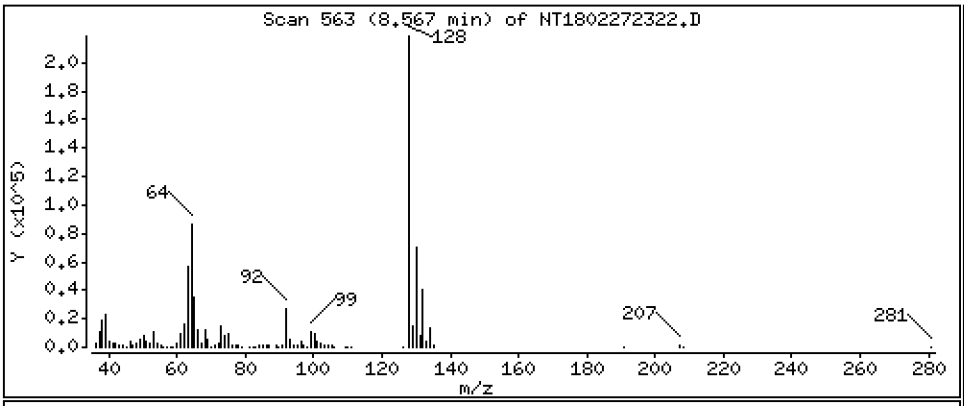
Operator: VTS

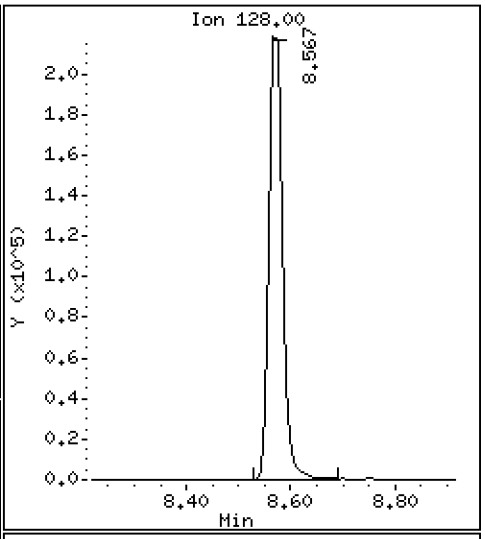
Column phase: ZB-5msi

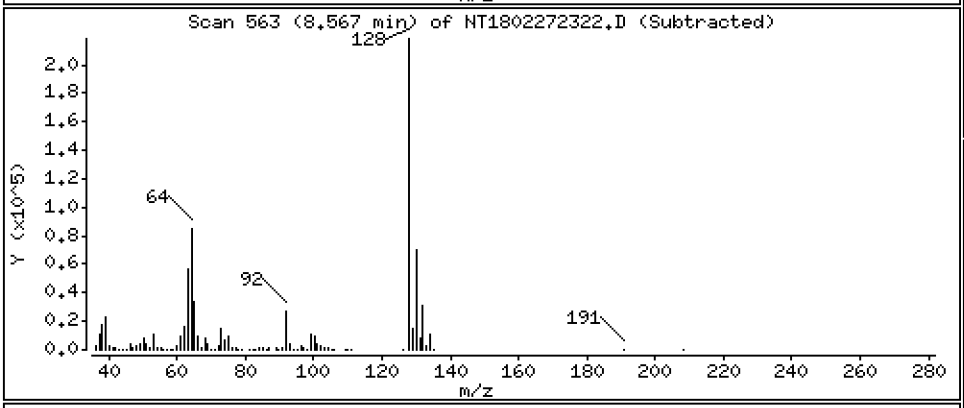
Column diameter: 0.25

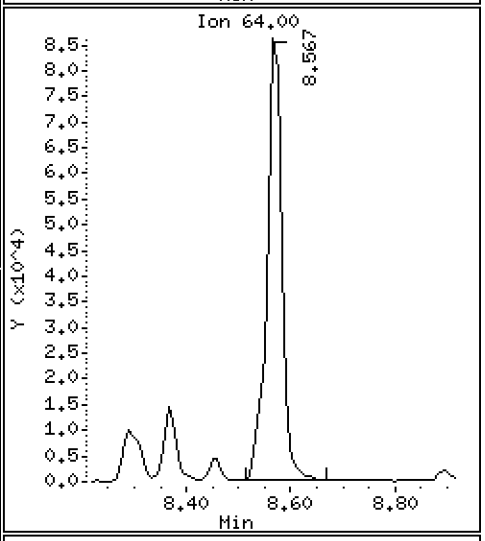
6 2-Chlorophenol

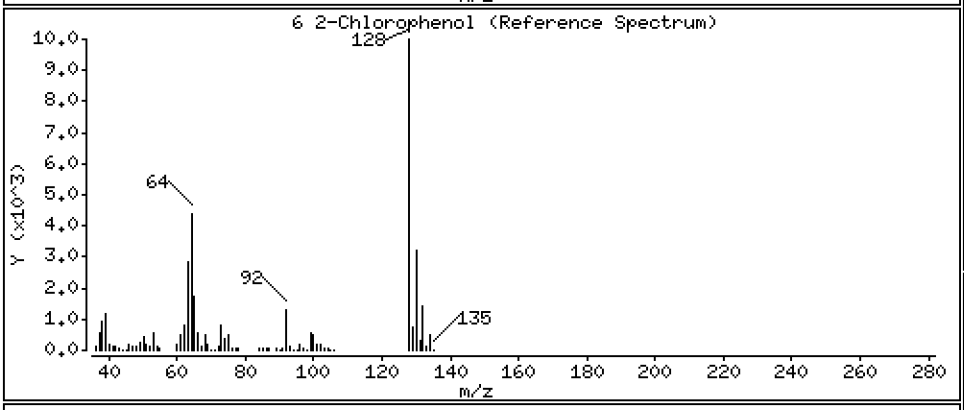
Concentration: 4.750 ug/mL

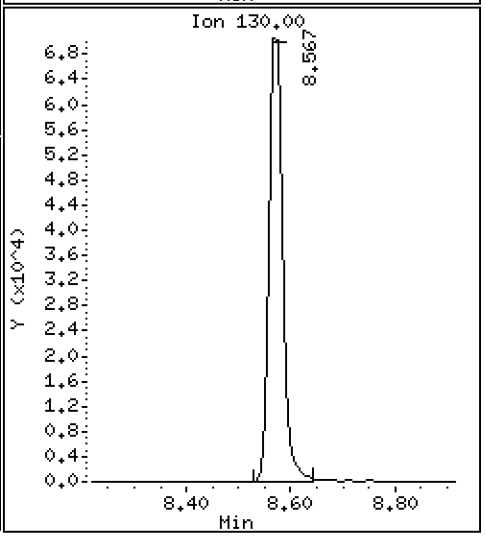


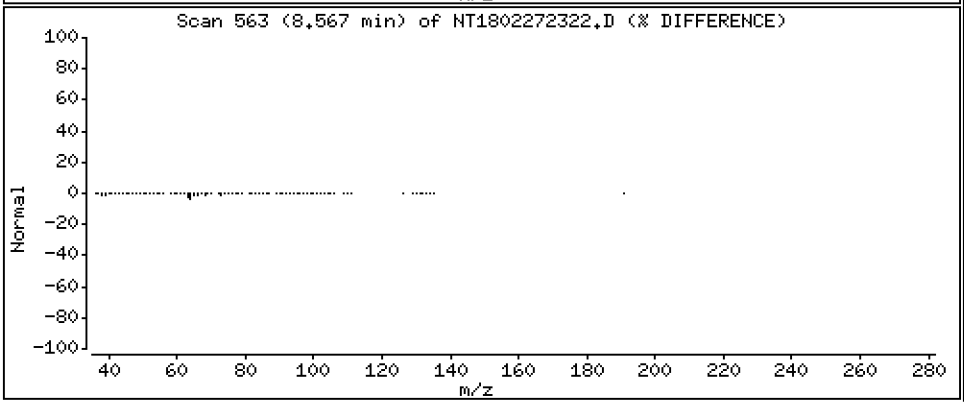












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

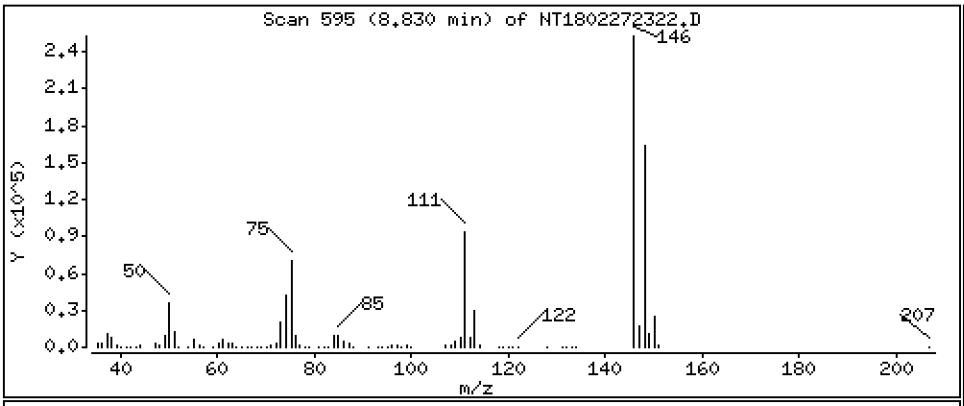
Operator: VTS

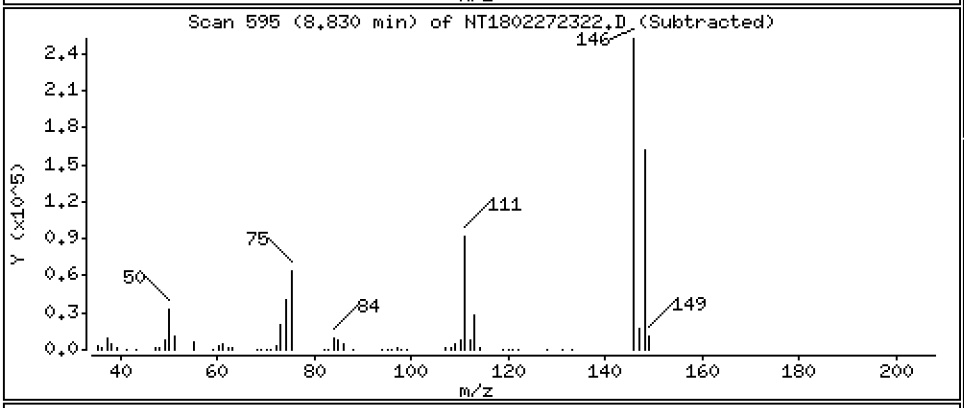
Column phase: ZB-5msi

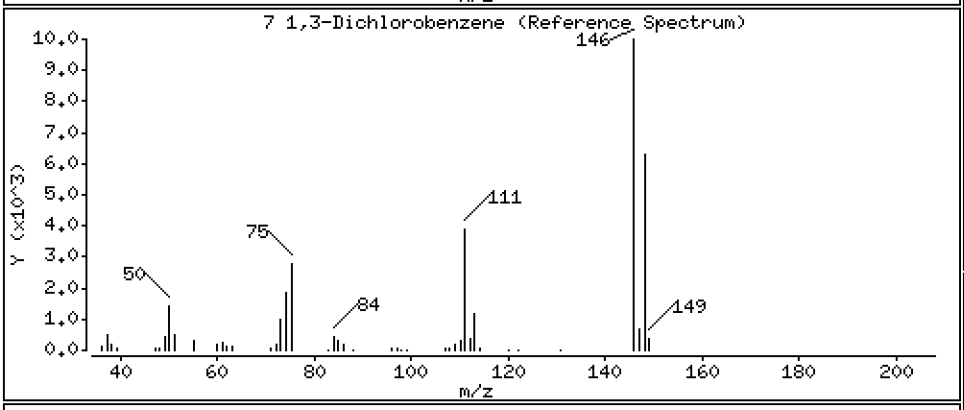
Column diameter: 0.25

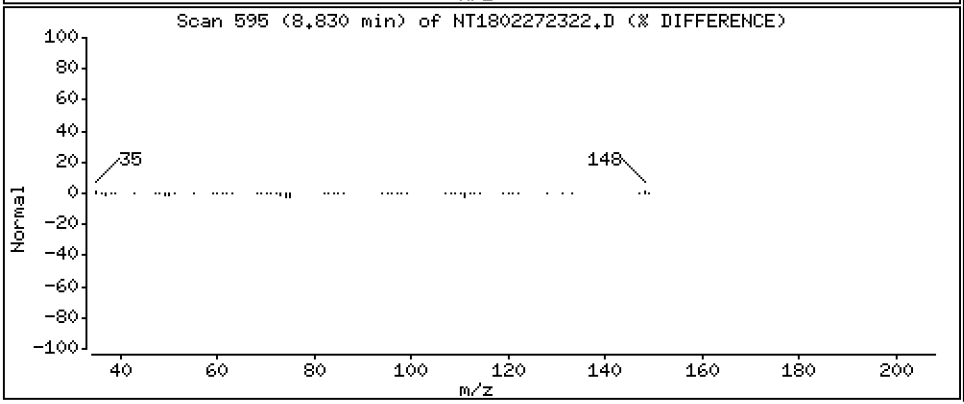
7 1,3-Dichlorobenzene

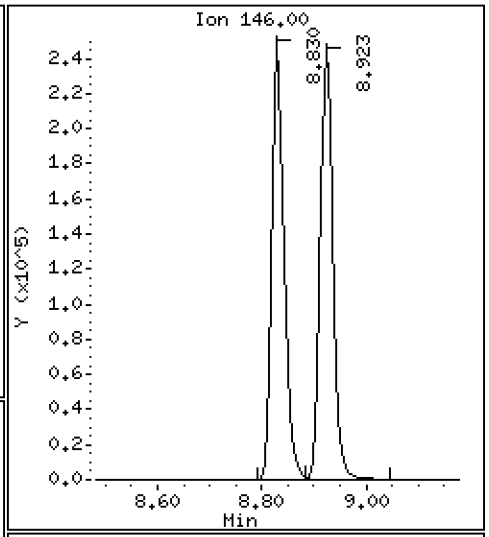
Concentration: 4.730 ug/mL

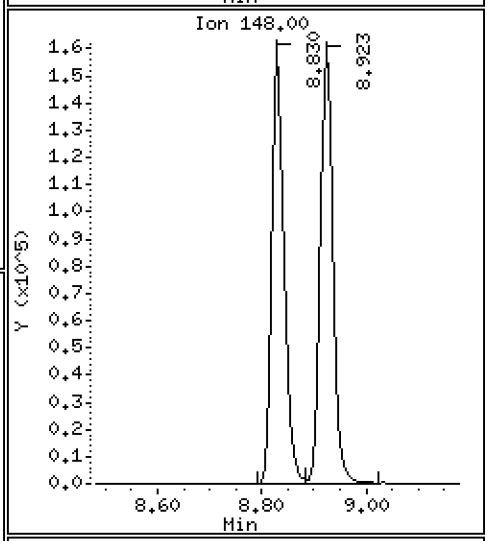


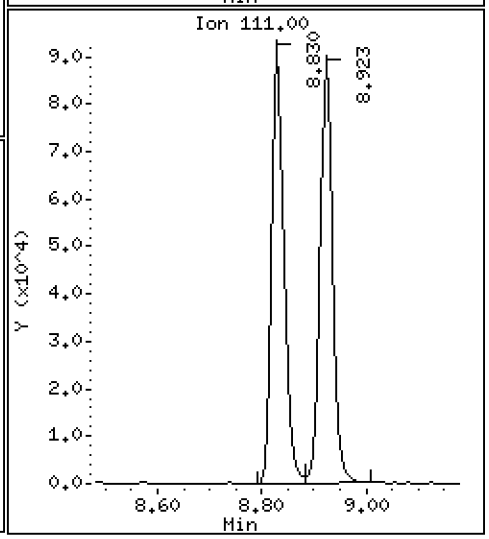












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

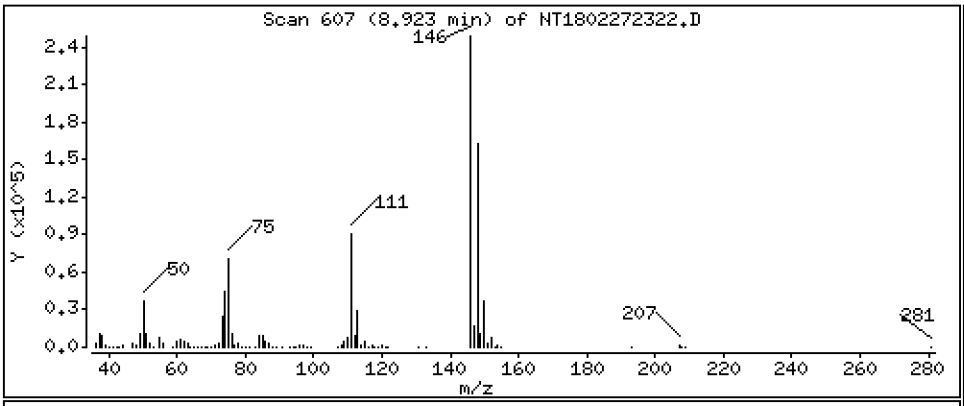
Operator: VTS

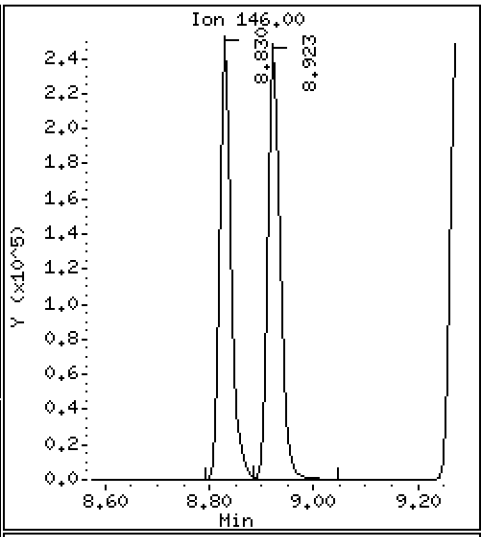
Column phase: ZB-5msi

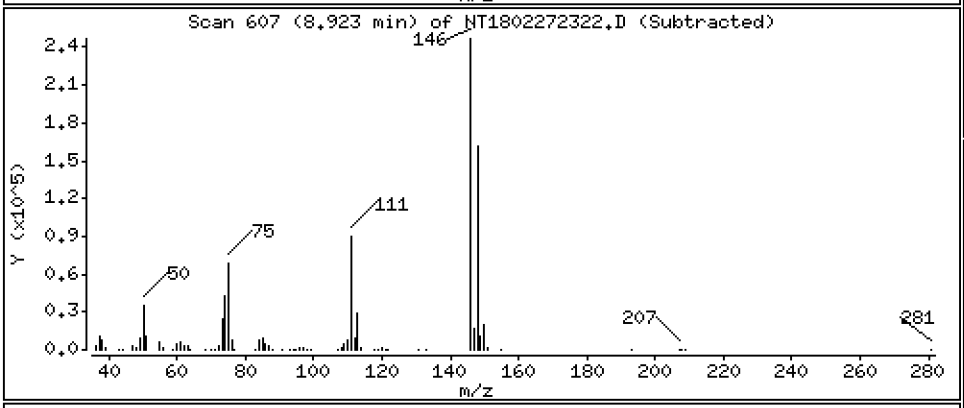
Column diameter: 0.25

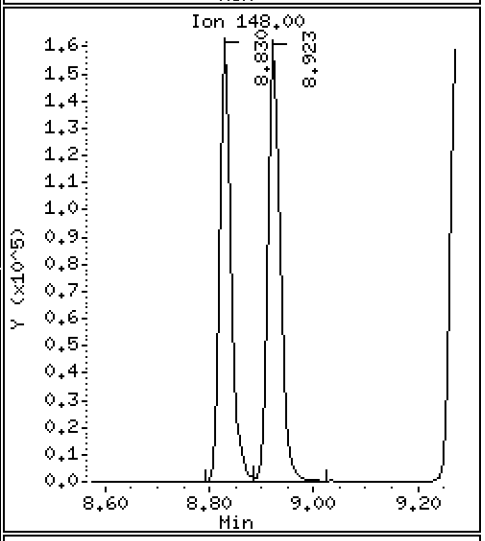
9 1,4-Dichlorobenzene

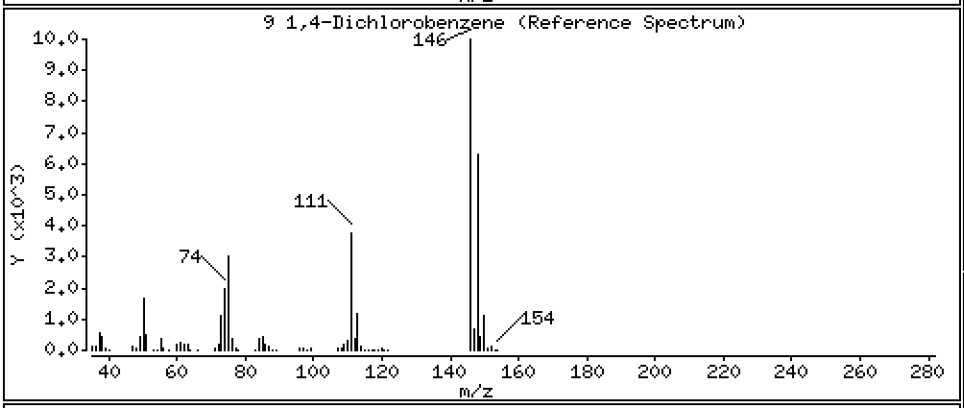
Concentration: 4.630 ug/mL

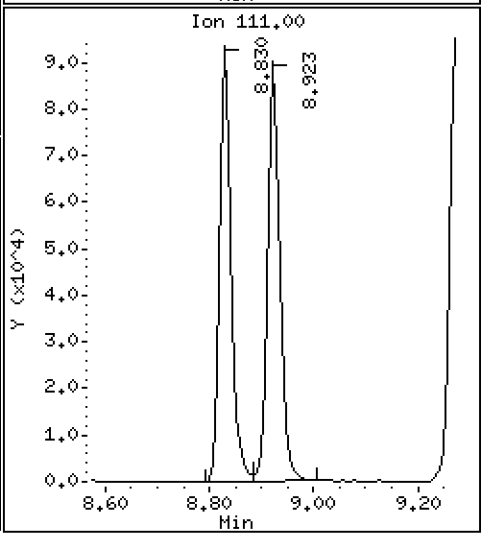


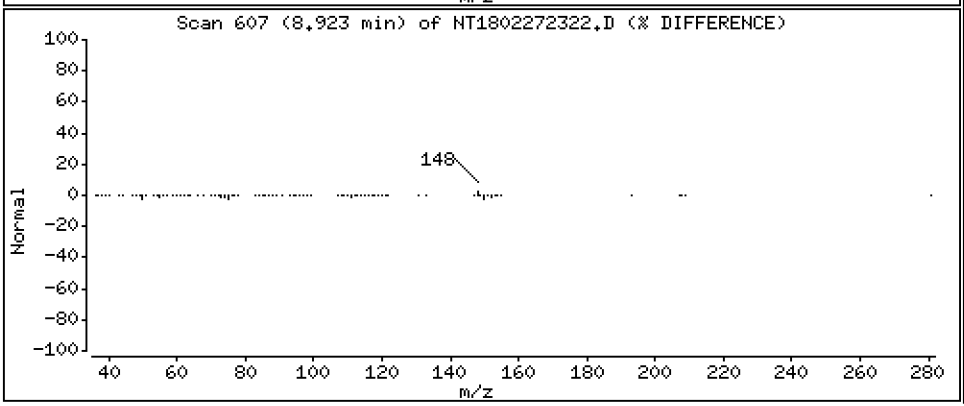












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

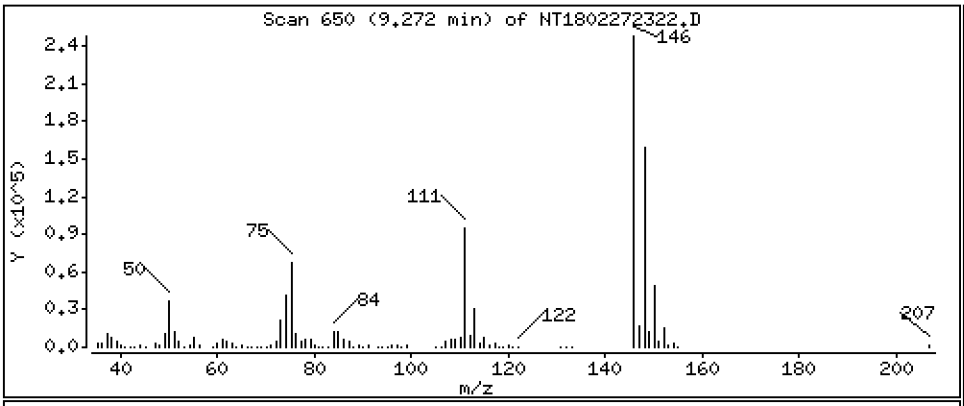
Operator: VTS

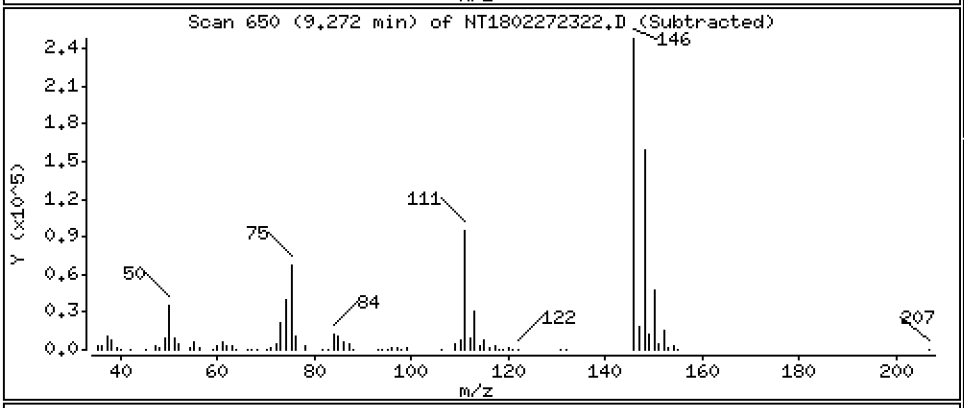
Column phase: ZB-5msi

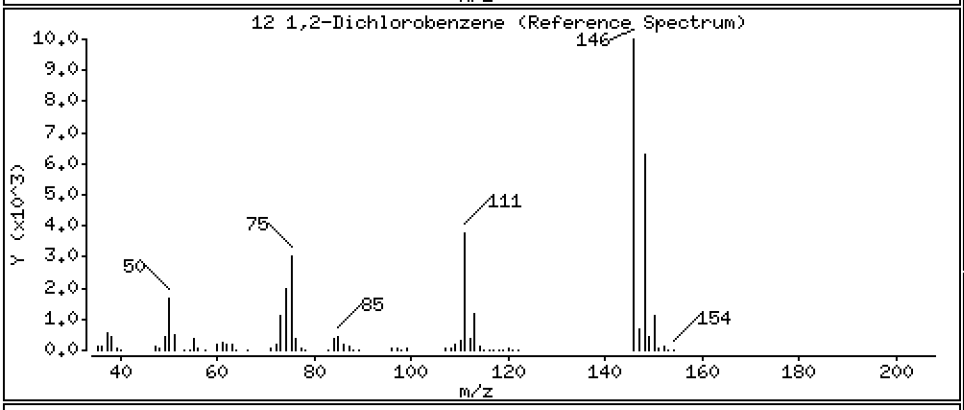
Column diameter: 0.25

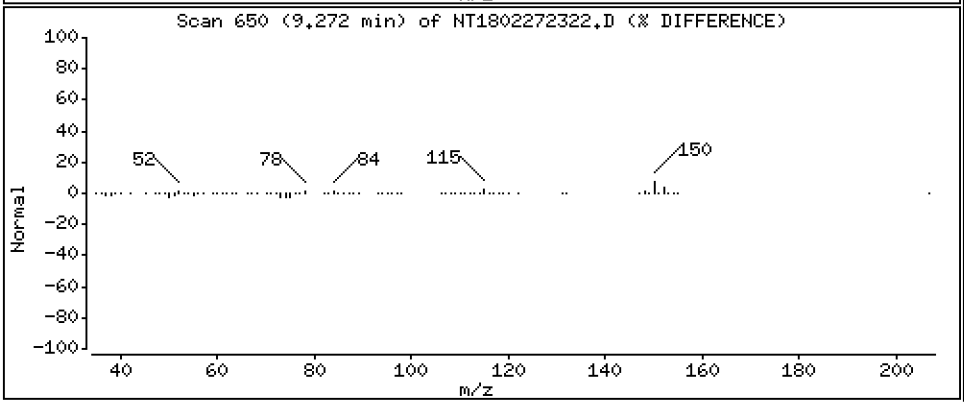
12 1,2-Dichlorobenzene

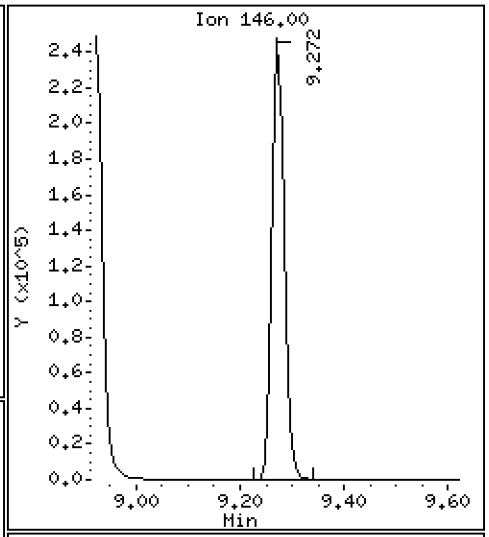
Concentration: 4.649 ug/mL

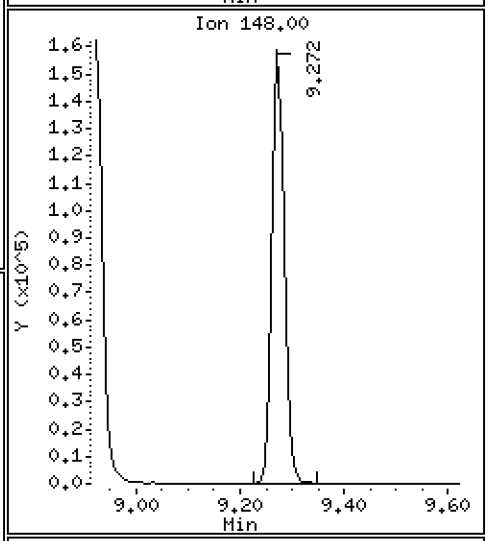


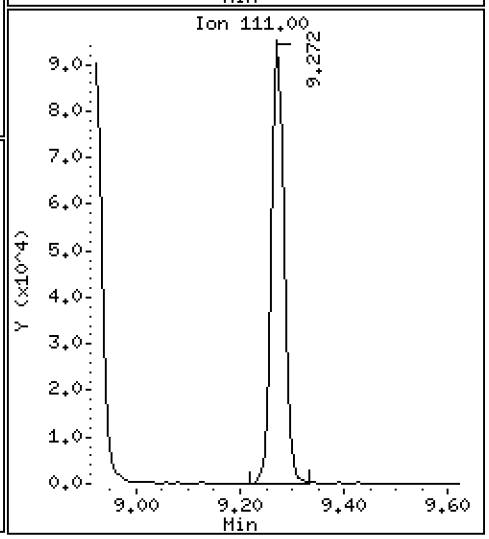












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

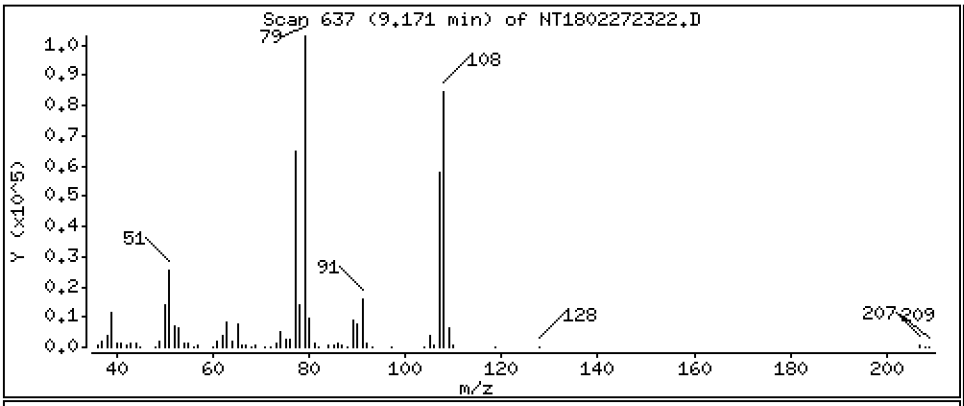
Operator: VTS

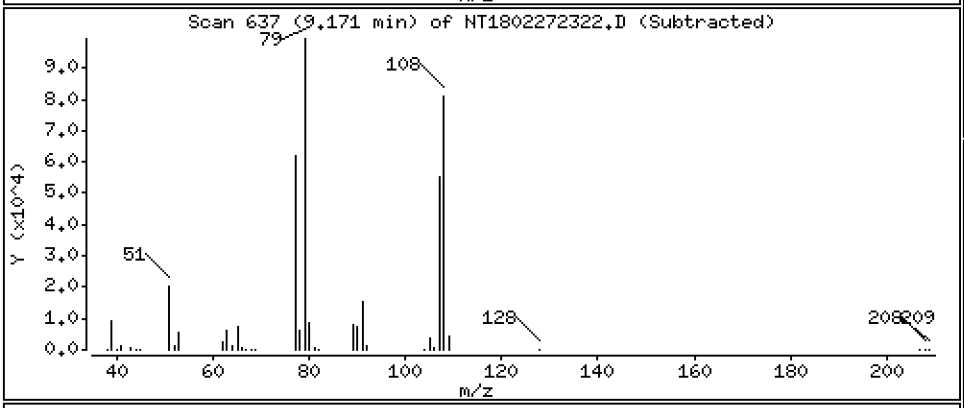
Column phase: ZB-5msi

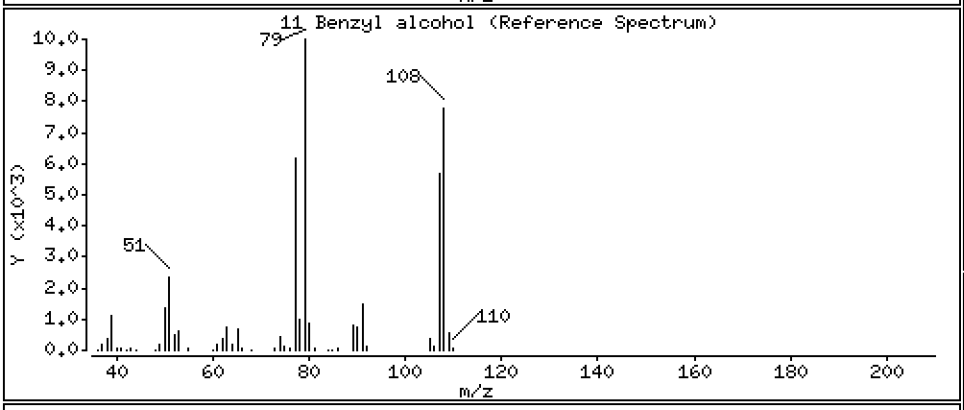
Column diameter: 0.25

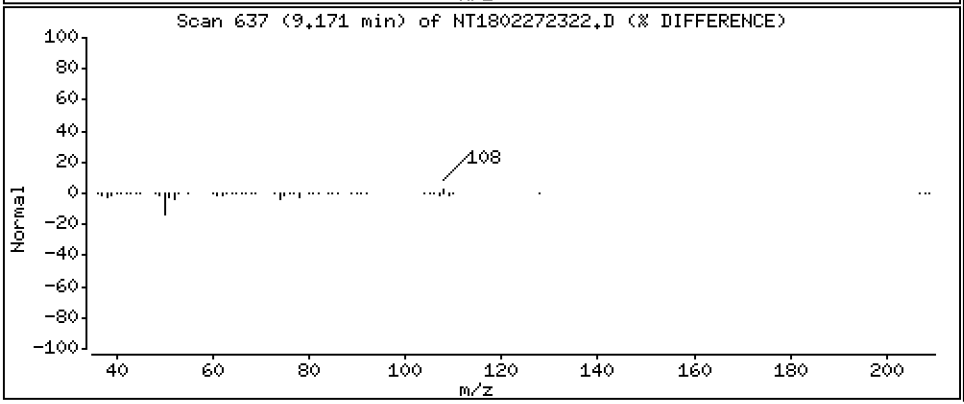
11 Benzyl alcohol

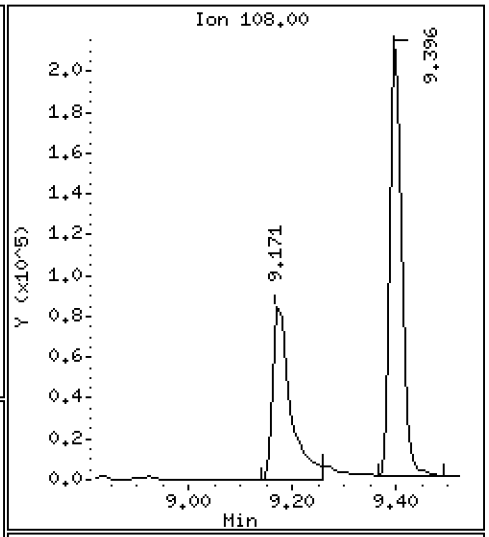
Concentration: 4.449 ug/mL

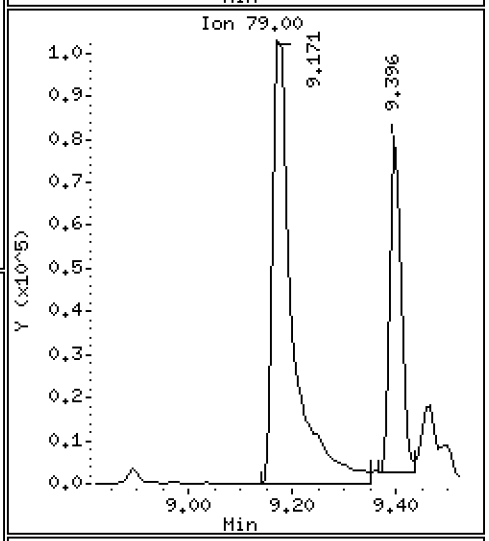


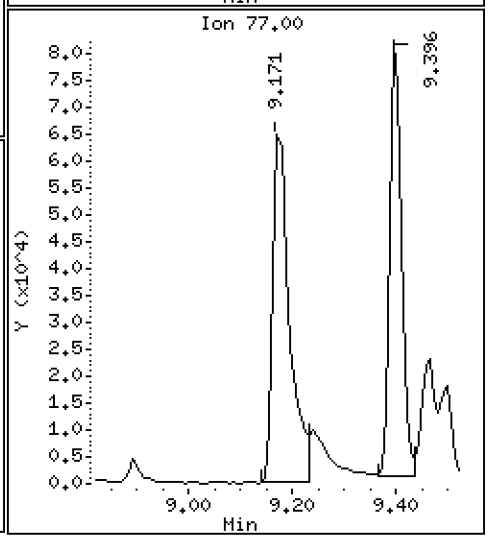












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

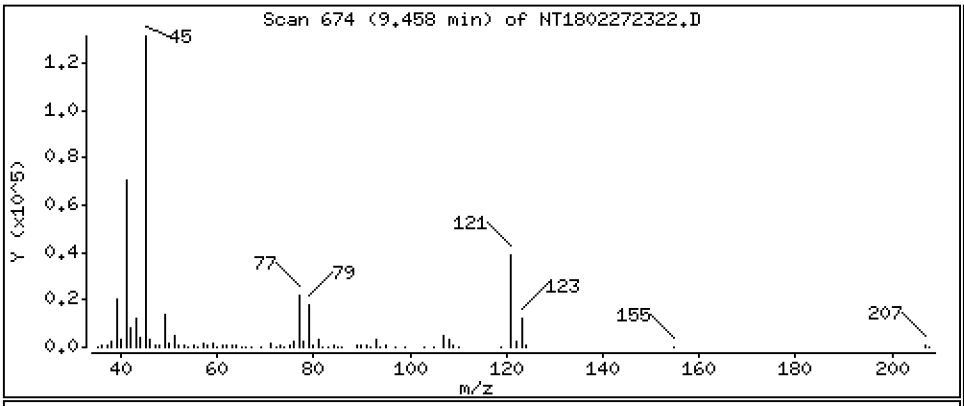
Operator: VTS

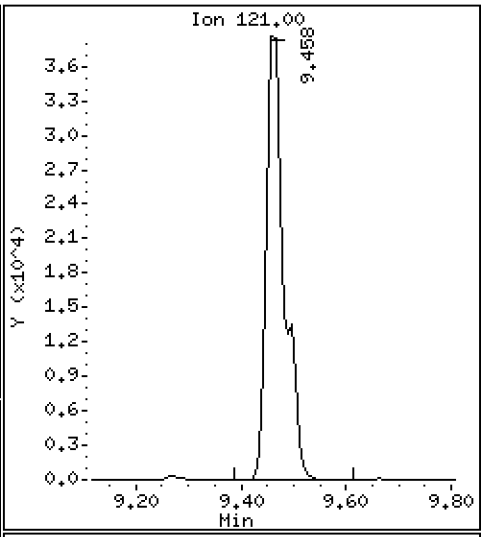
Column phase: ZB-5msi

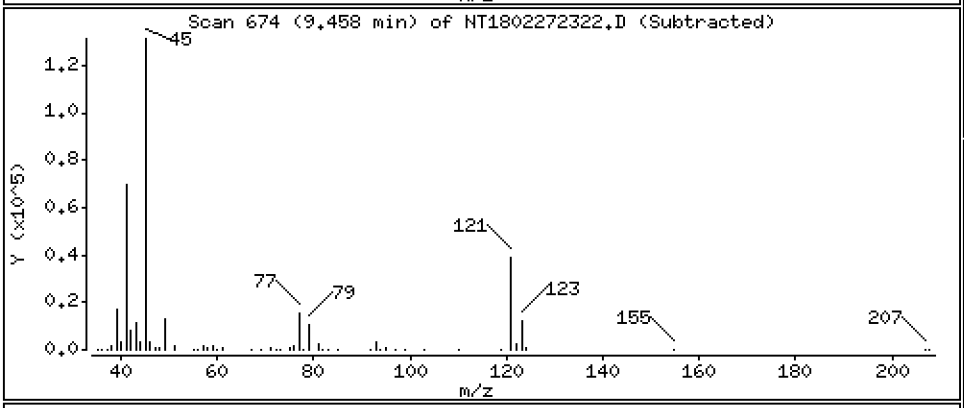
Column diameter: 0.25

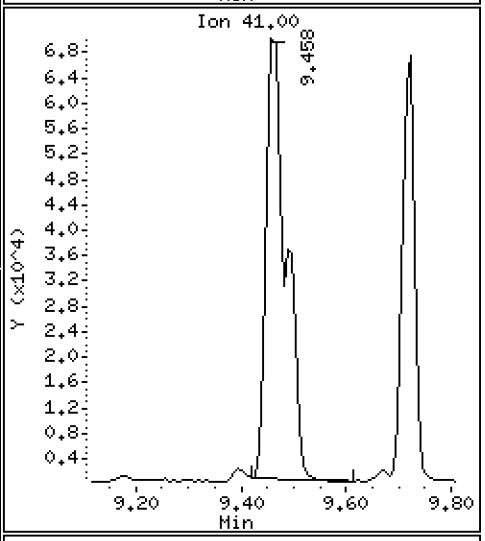
14 2,2'-oxybis(1-Chloropropane)

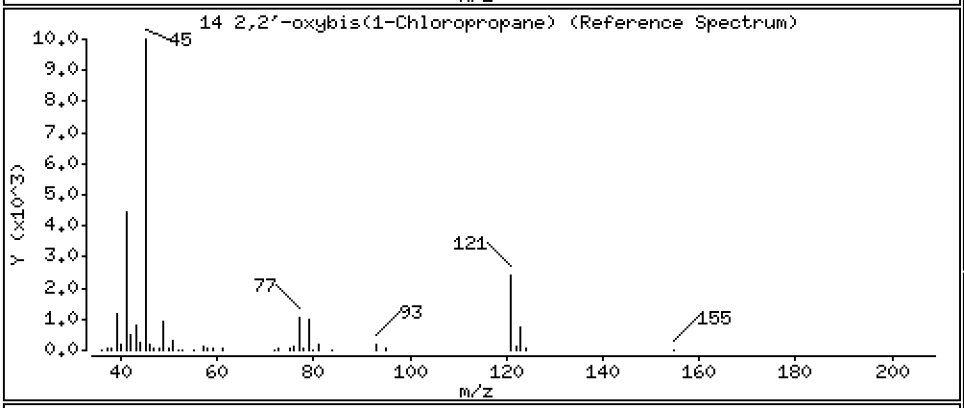
Concentration: 4.961 ug/mL

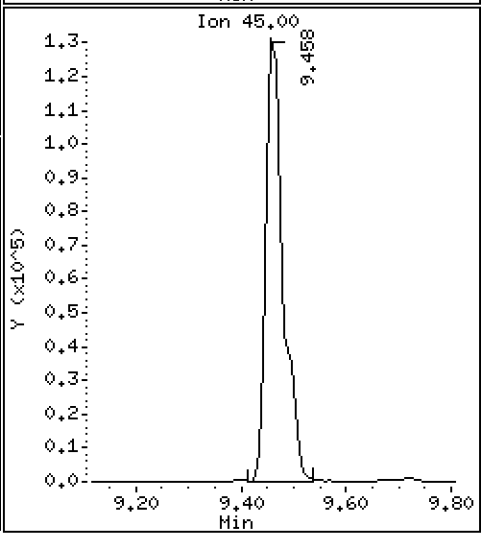


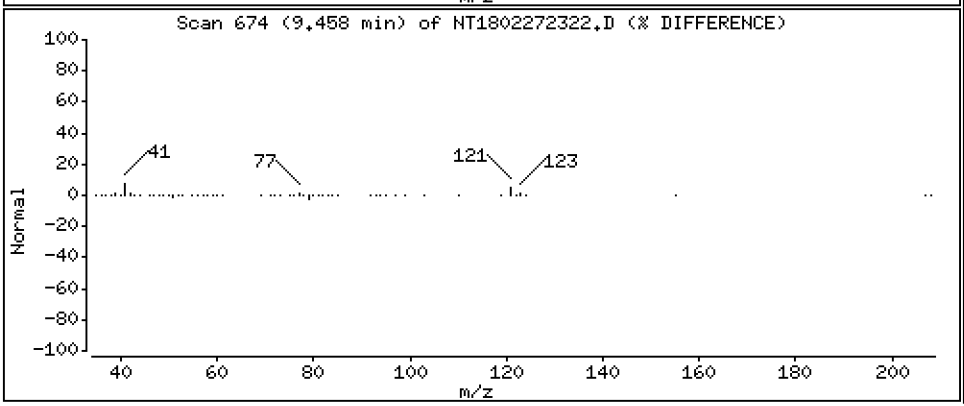












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

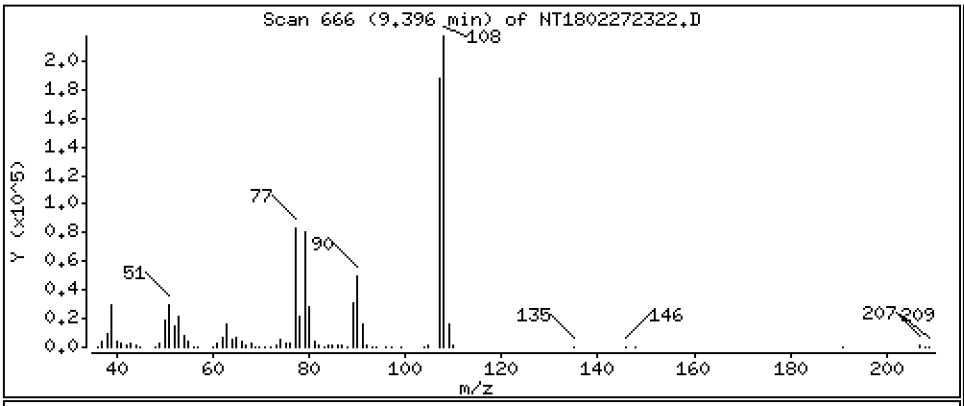
Operator: VTS

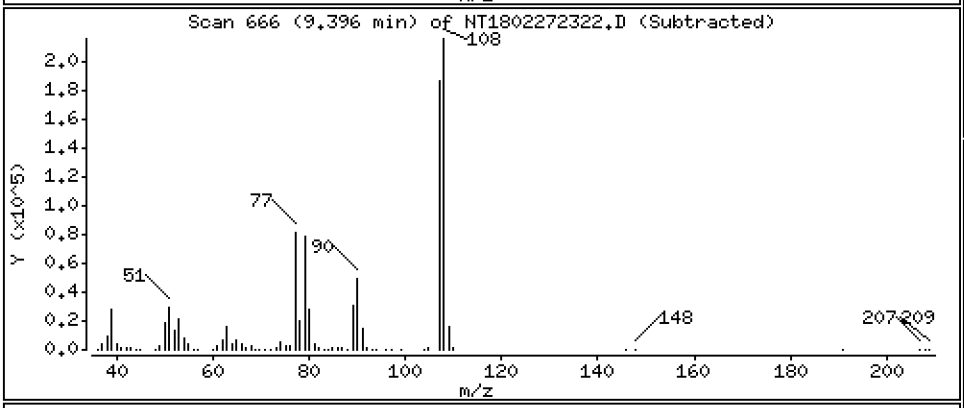
Column phase: ZB-5msi

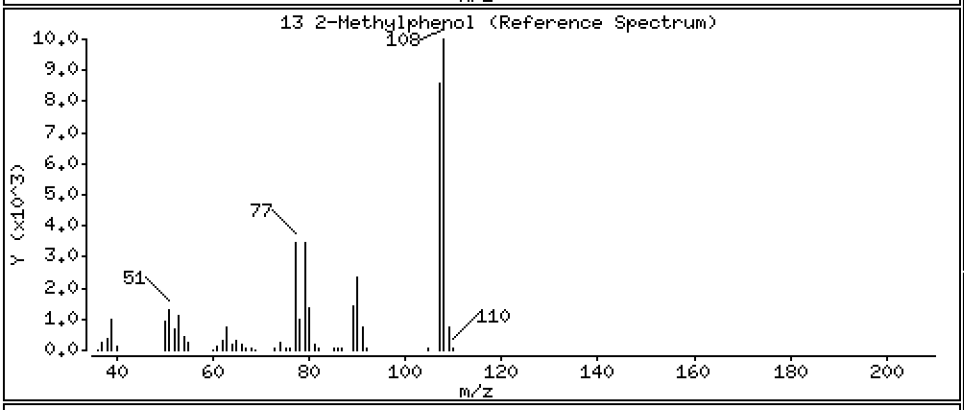
Column diameter: 0.25

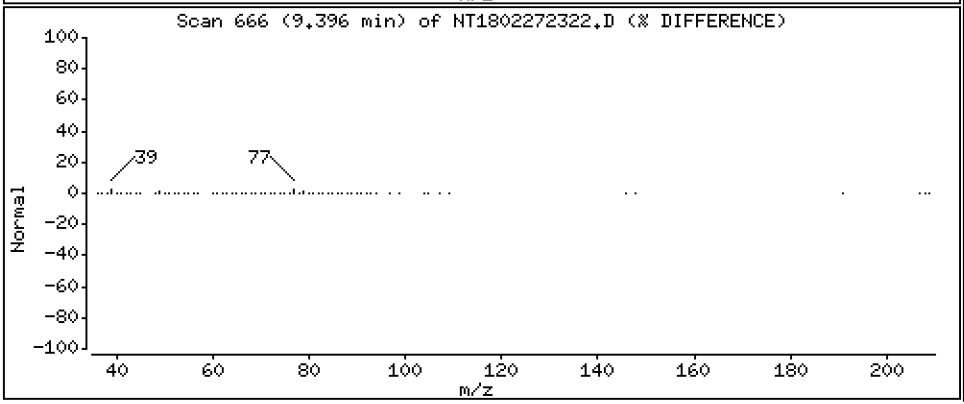
13 2-Methylphenol

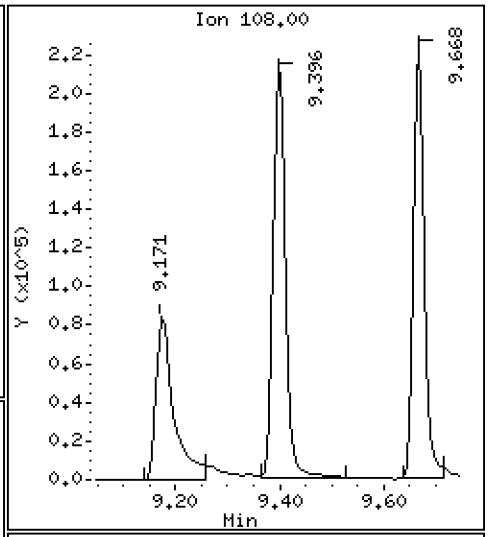
Concentration: 4.677 ug/mL

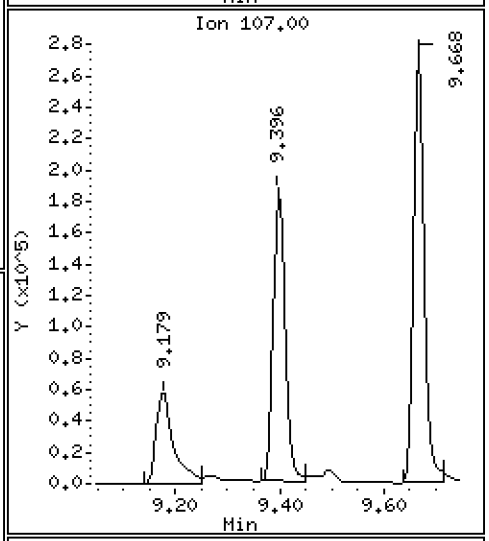


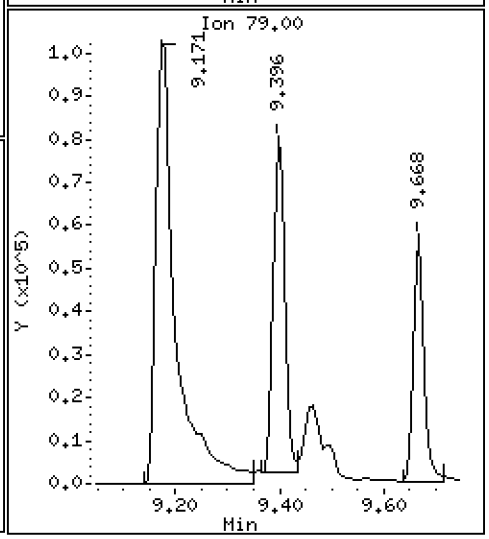












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

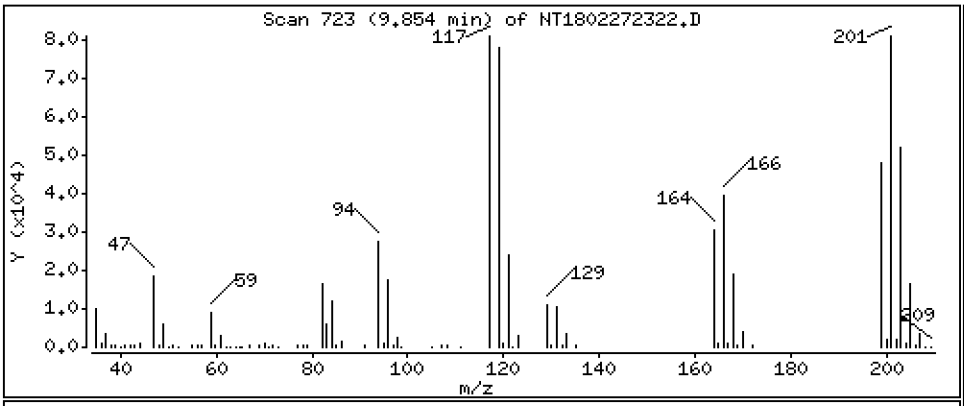
Operator: VTS

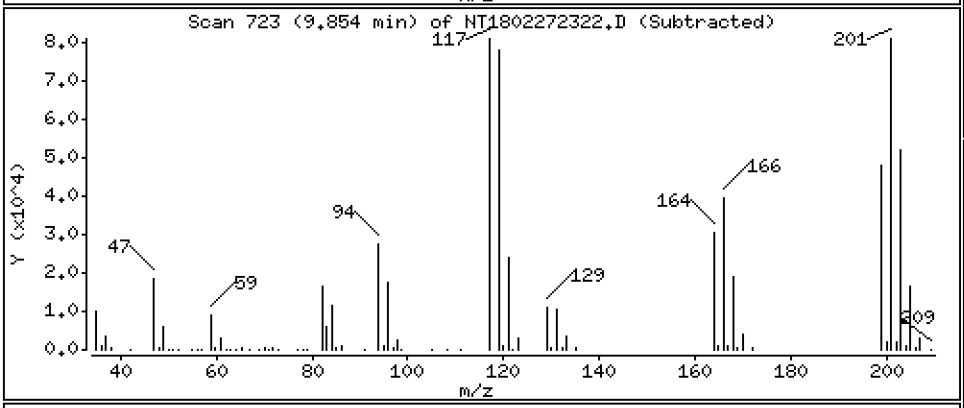
Column phase: ZB-5msi

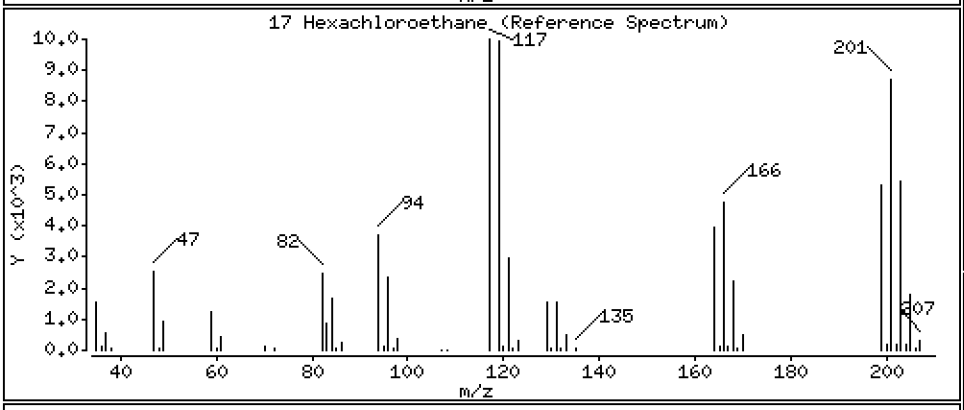
Column diameter: 0.25

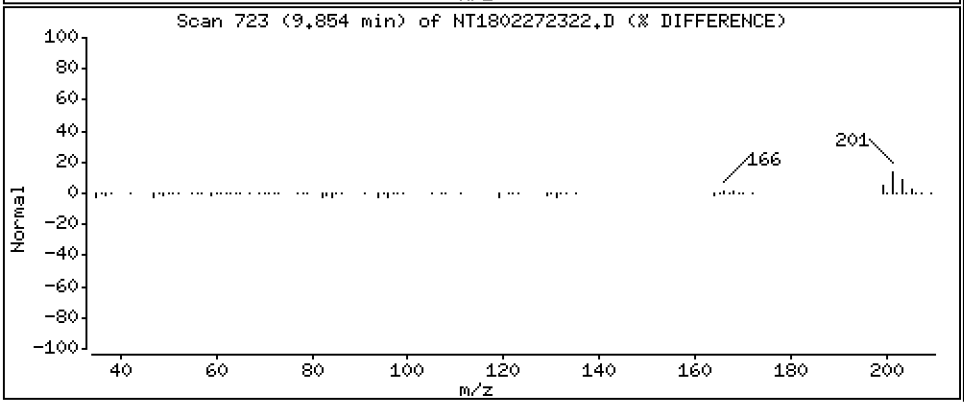
17 Hexachloroethane

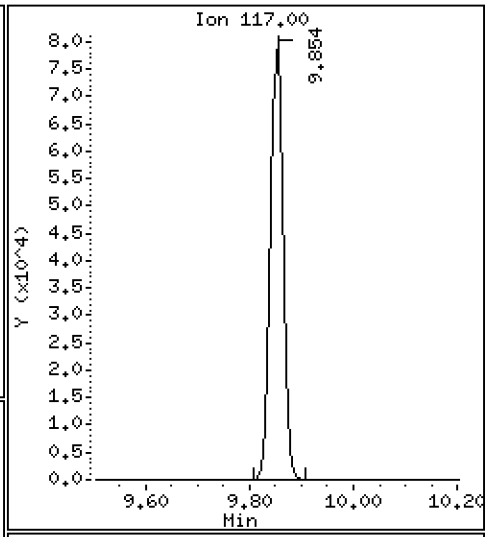
Concentration: 3.870 ug/mL

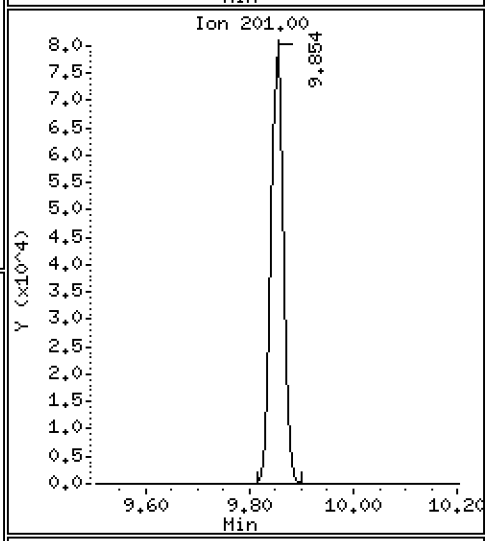


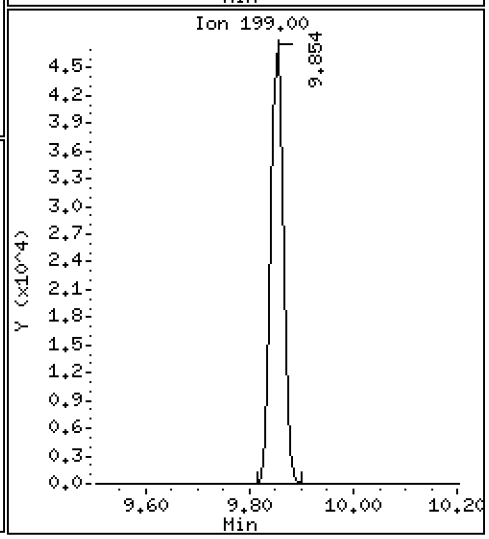












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

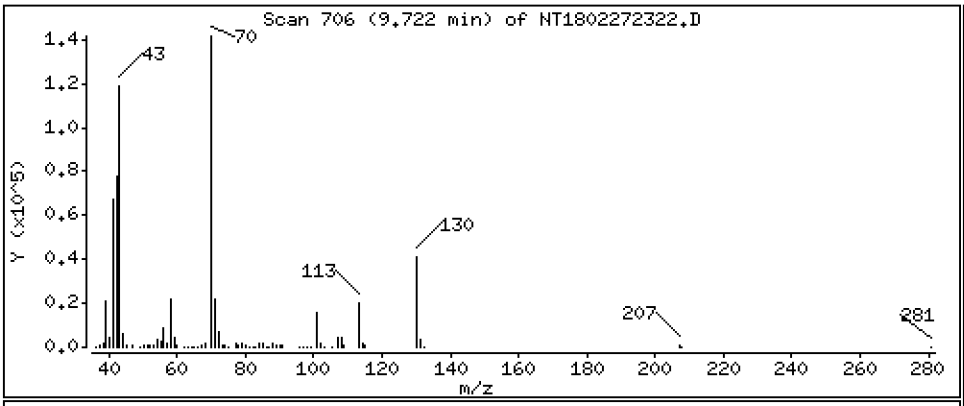
Operator: VTS

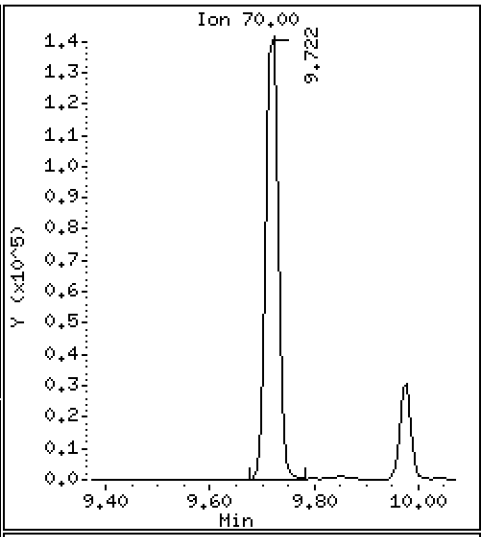
Column phase: ZB-5msi

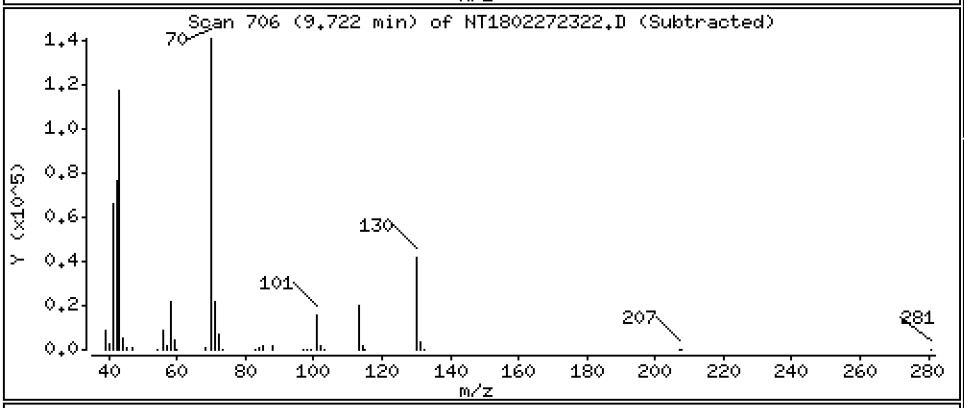
Column diameter: 0.25

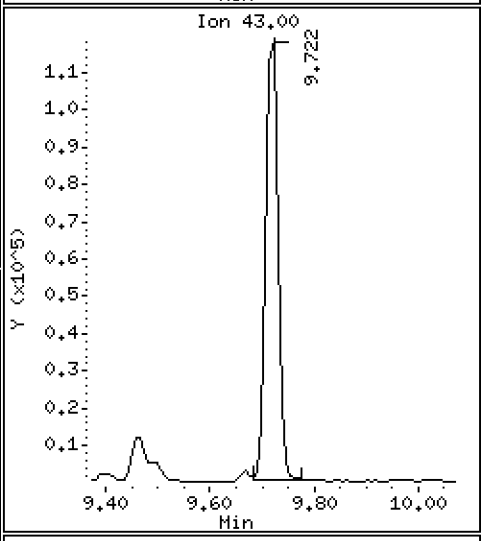
16 N-Nitroso-di-n-propylamine

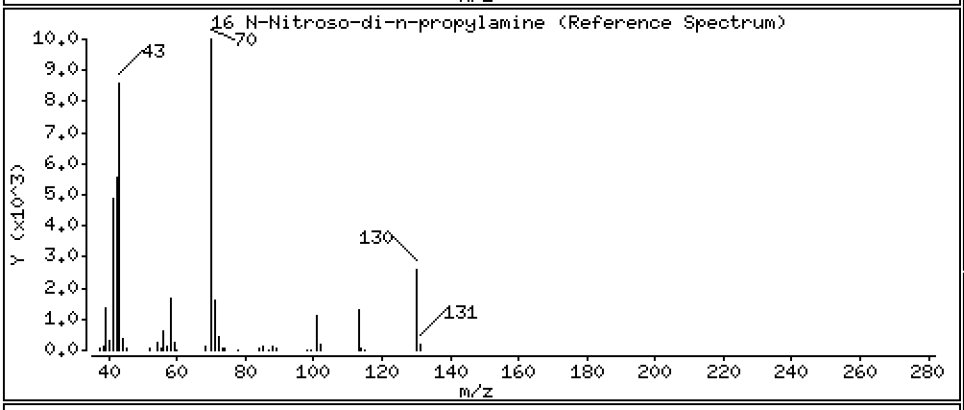
Concentration: 4.239 ug/mL

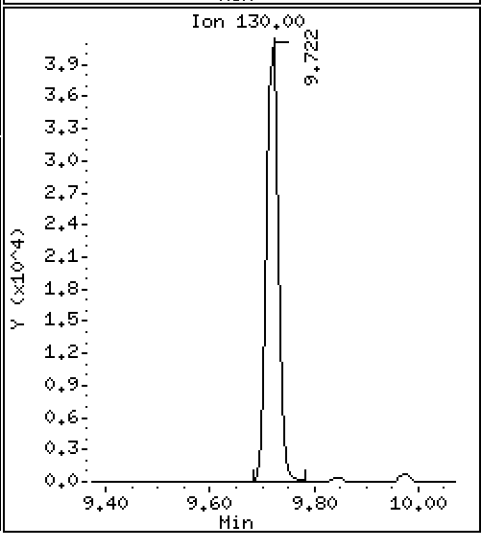


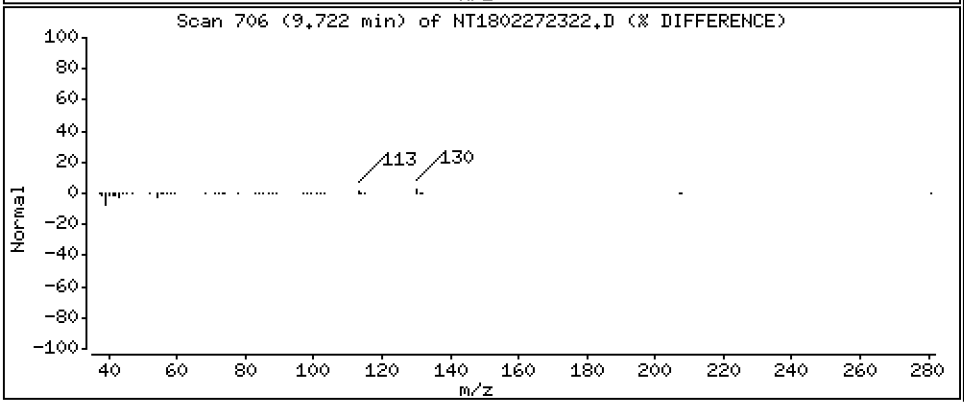












Date : 28-FEB-2023 13:15

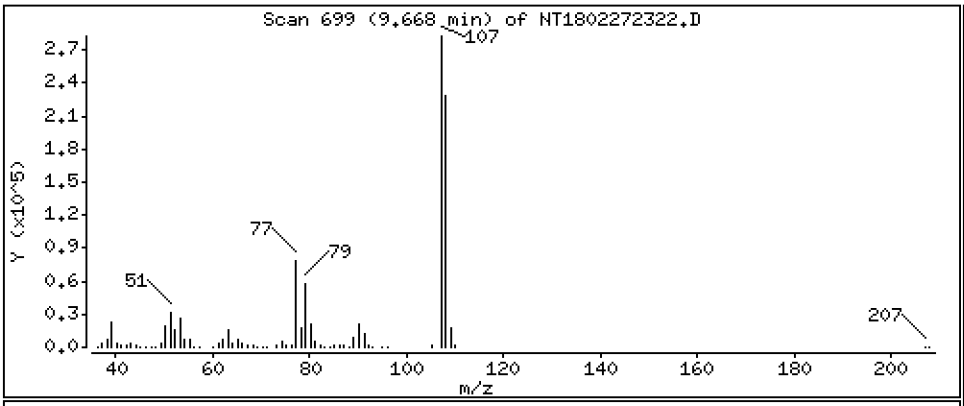
Client ID: Instrument: nt18.i

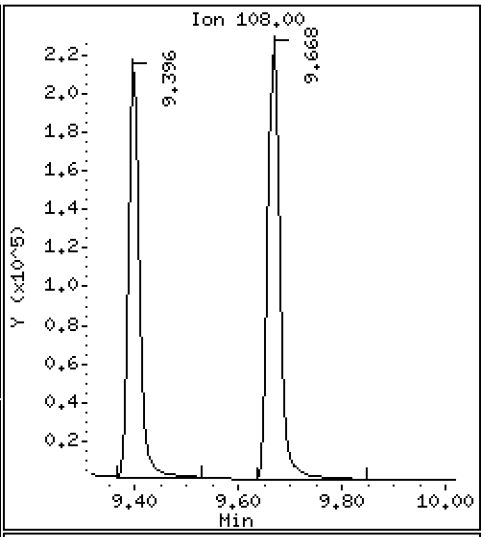
Sample Info: SLC0385-CCV1

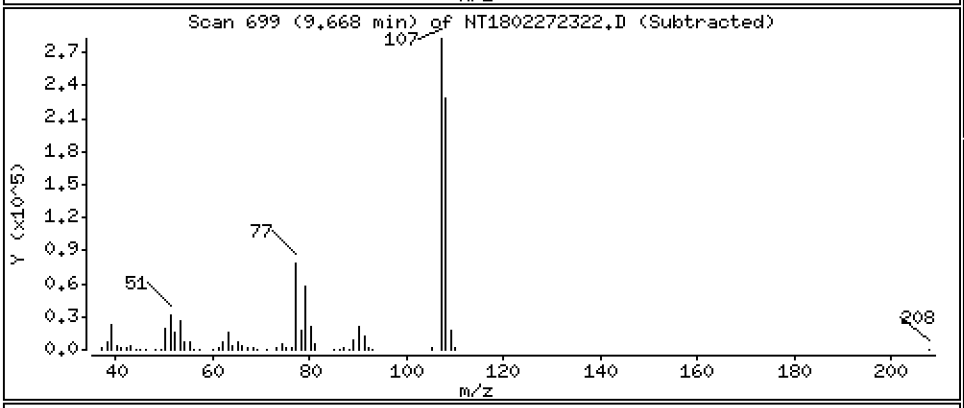
Operator: VTS

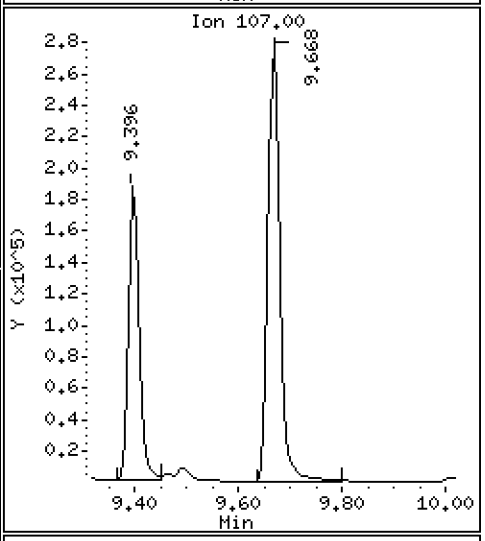
Column phase: ZB-5msi Column diameter: 0.25

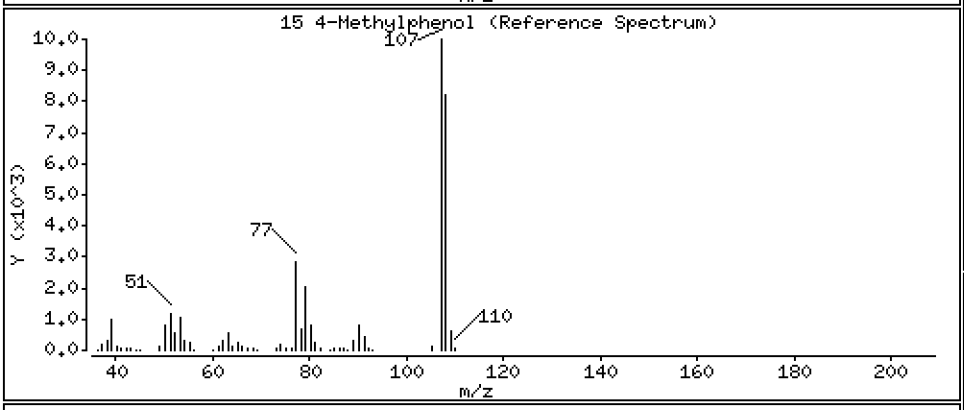
15 4-Methylphenol Concentration: 4.663 ug/mL

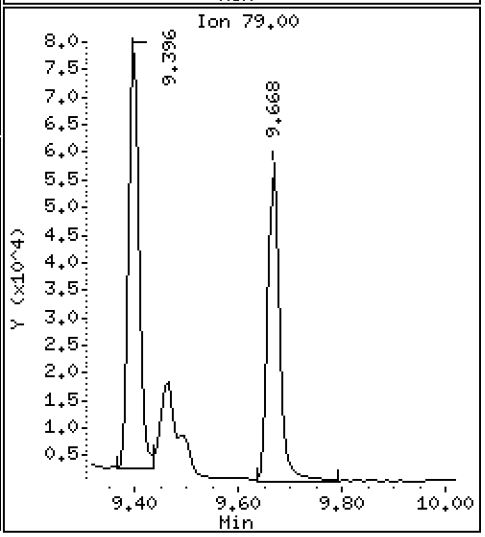


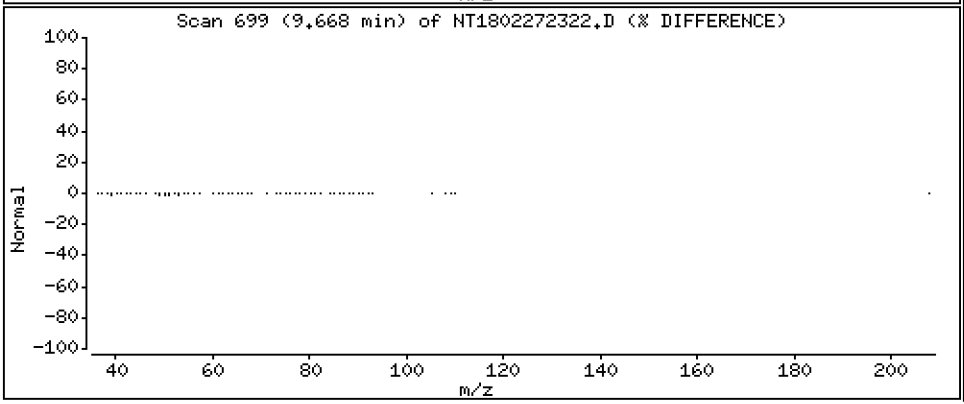












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

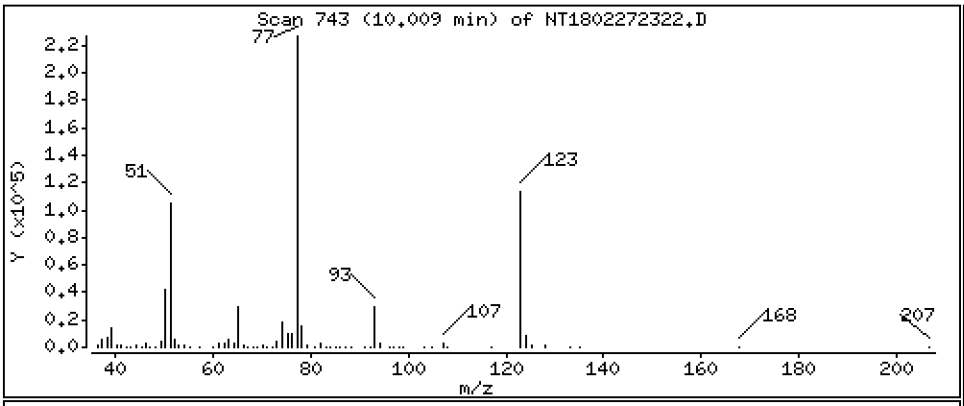
Operator: VTS

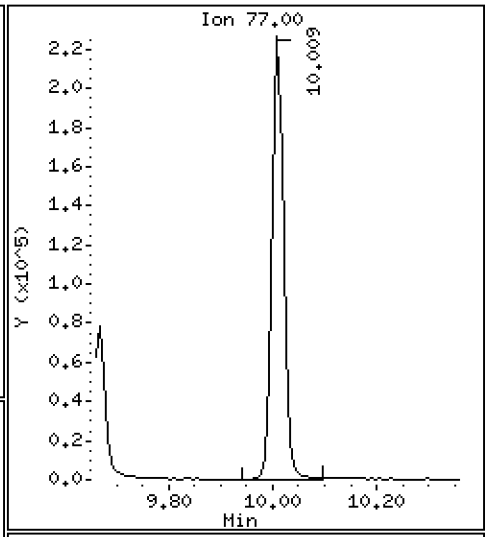
Column phase: ZB-5msi

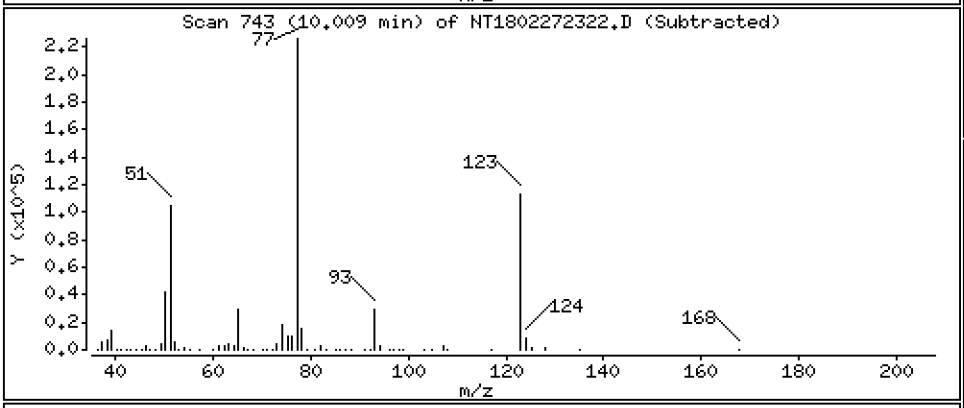
Column diameter: 0.25

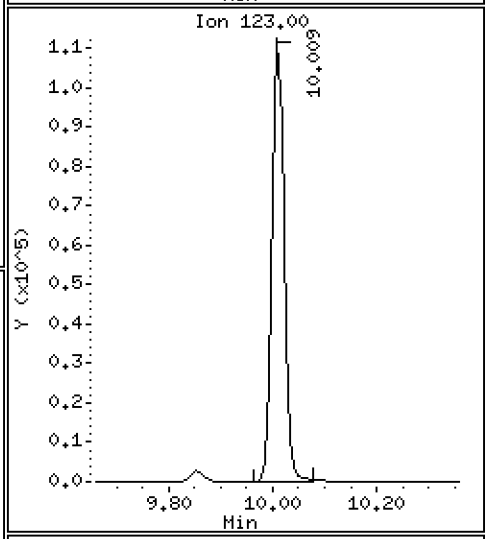
19 Nitrobenzene

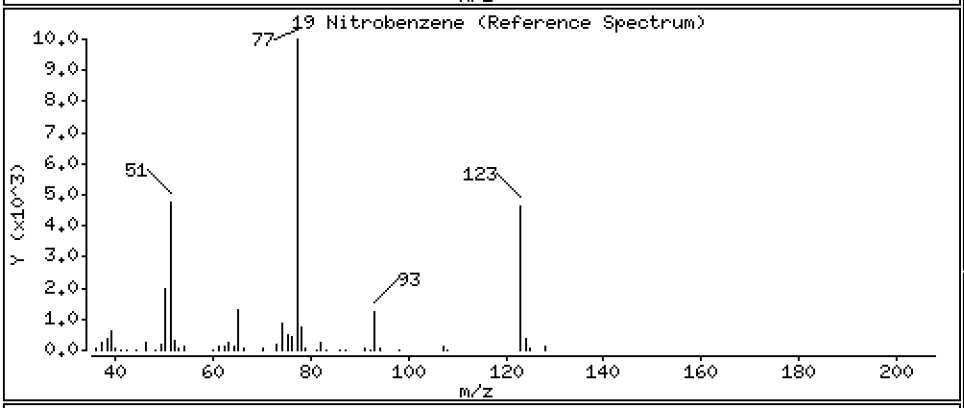
Concentration: 4.224 ug/mL

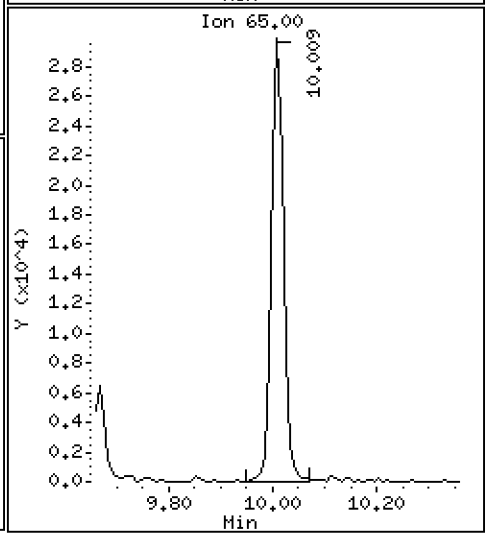


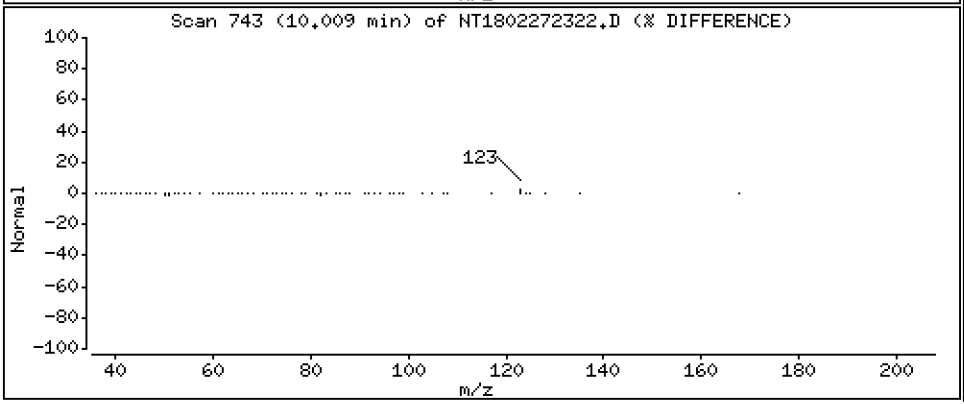












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

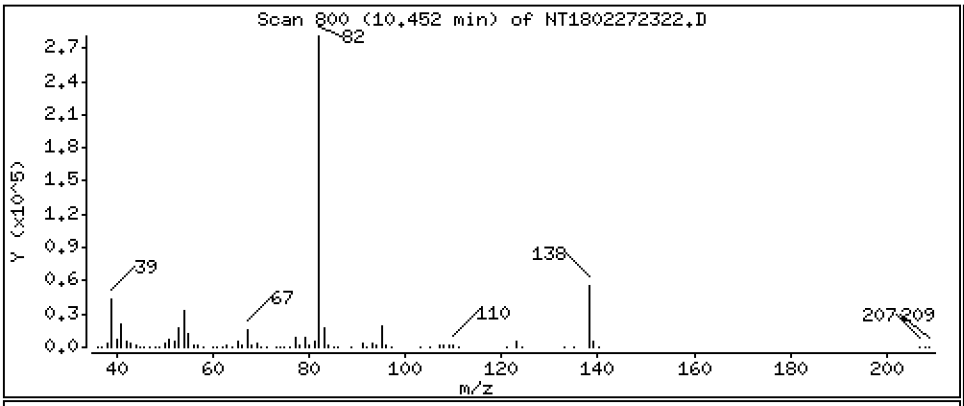
Operator: VTS

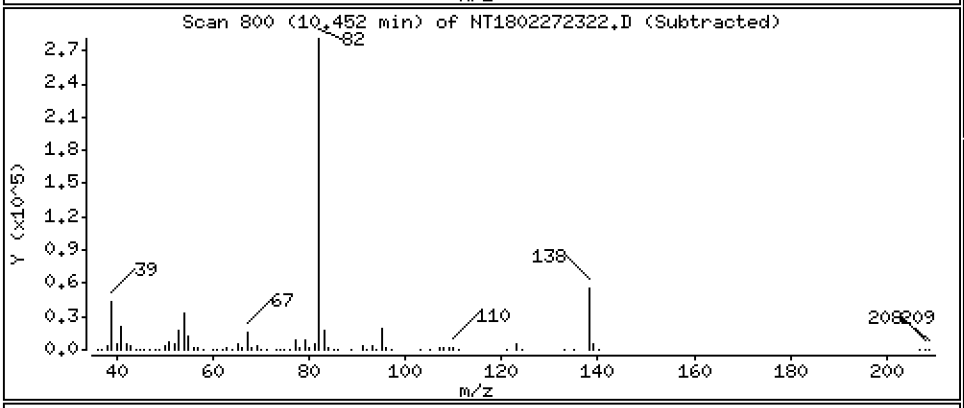
Column phase: ZB-5msi

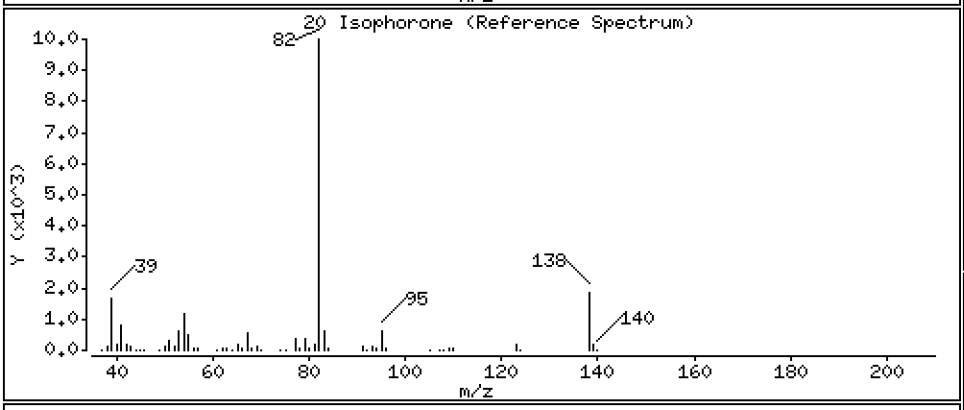
Column diameter: 0.25

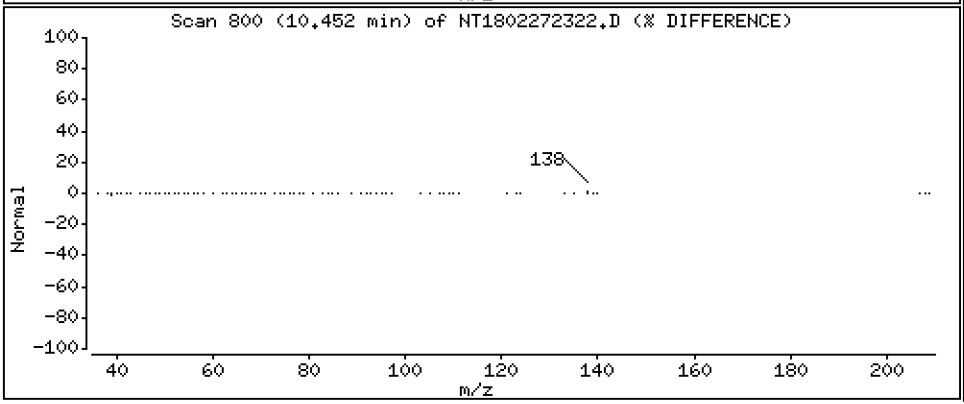
20 Isophorone

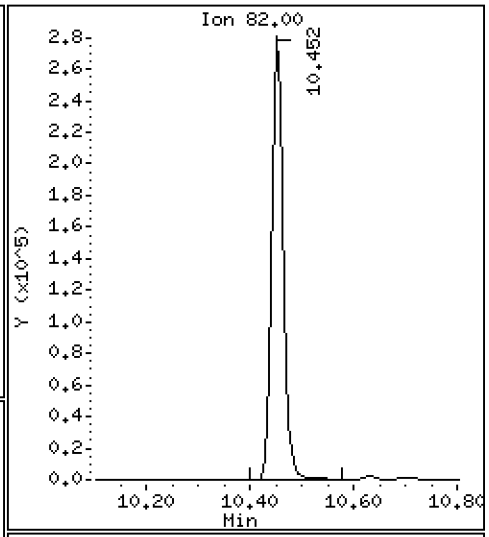
Concentration: 4.489 ug/mL

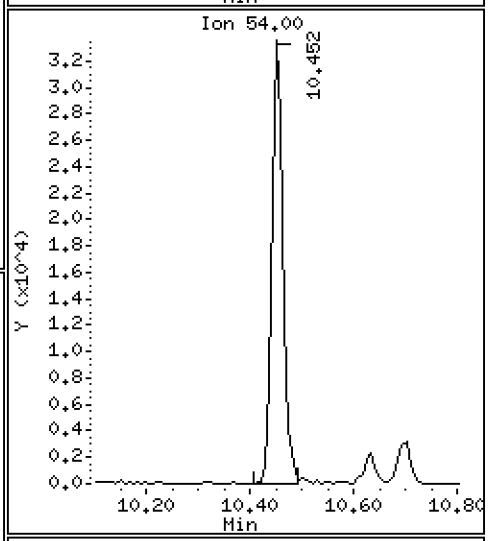


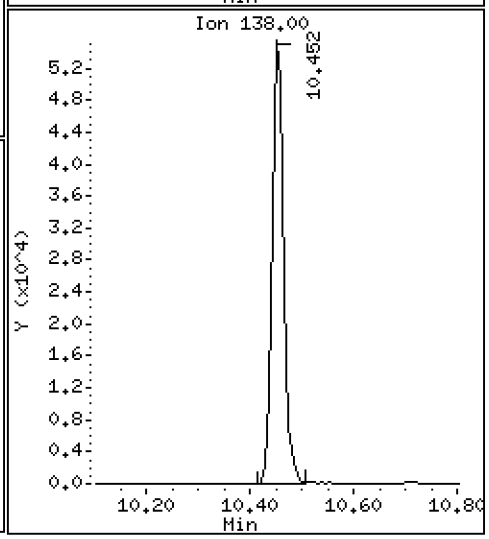












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

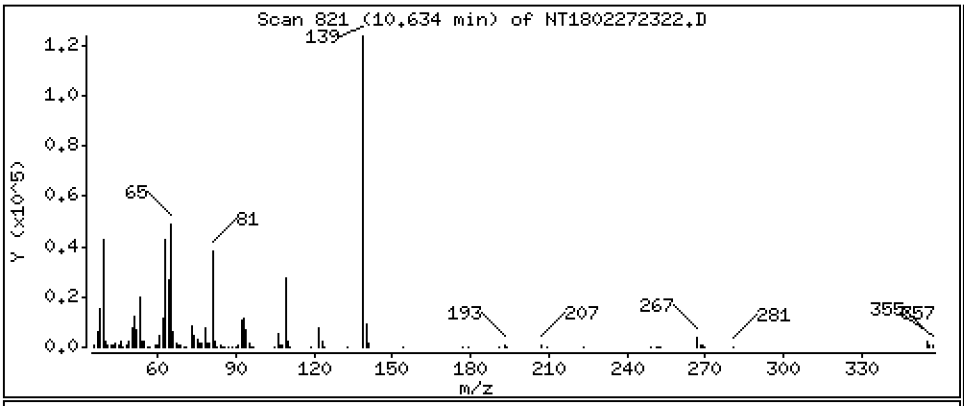
Operator: VTS

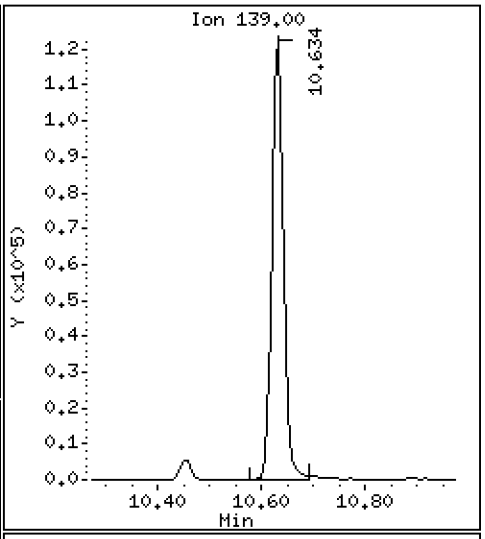
Column phase: ZB-5msi

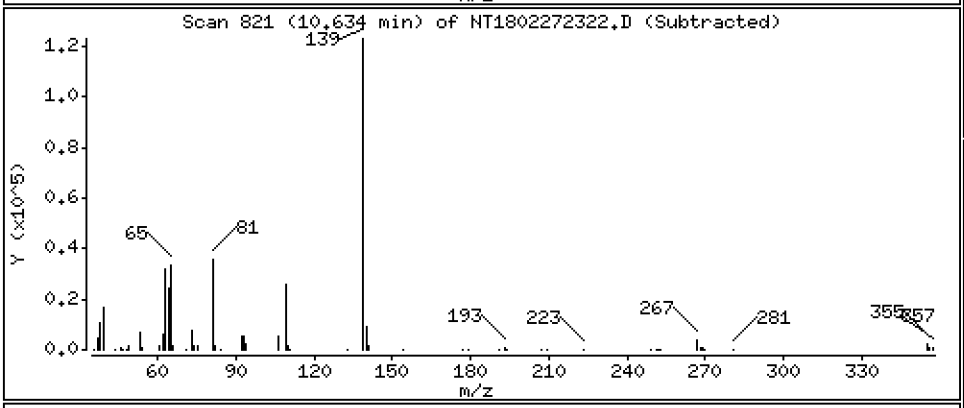
Column diameter: 0.25

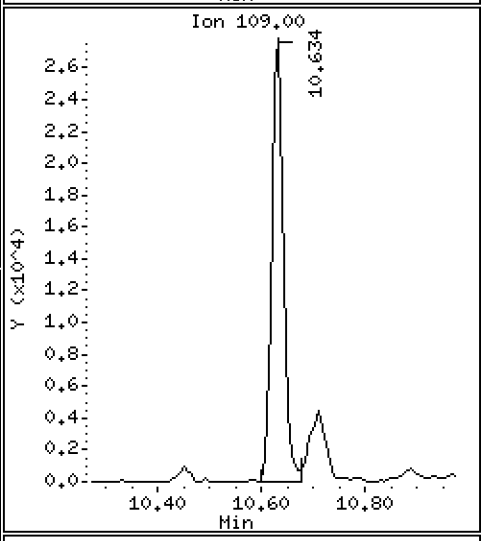
21 2-Nitrophenol

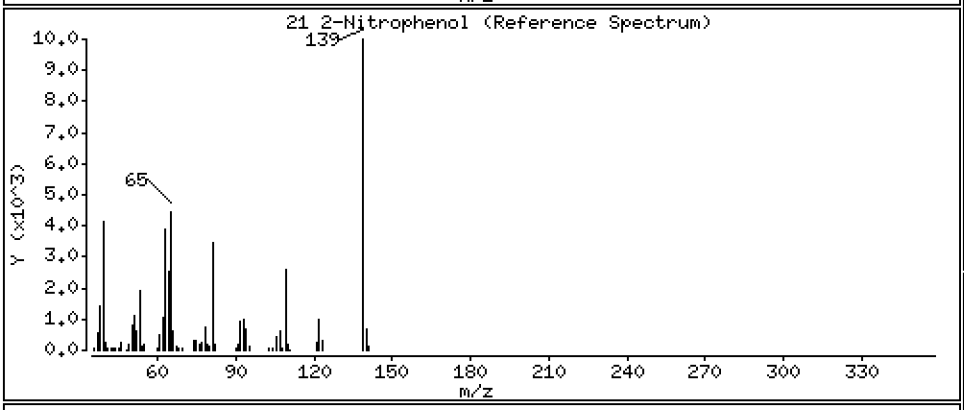
Concentration: 5.627 ug/mL

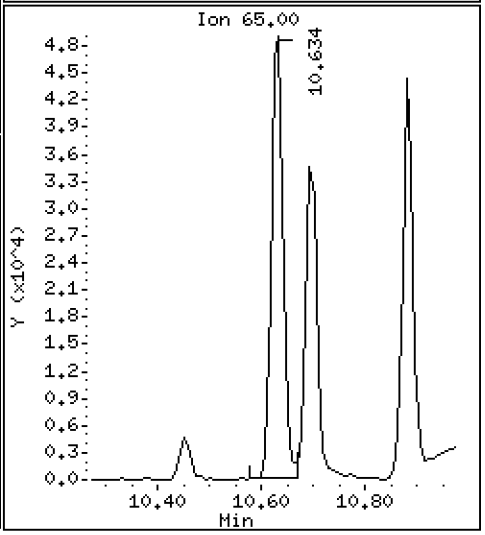


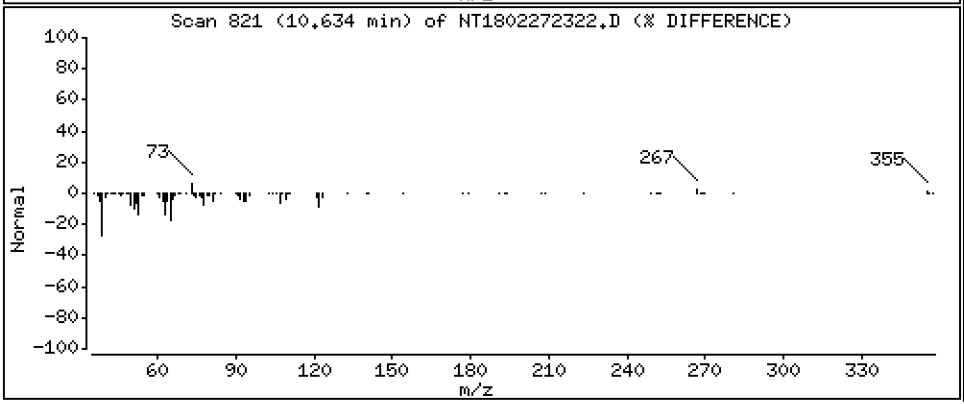












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

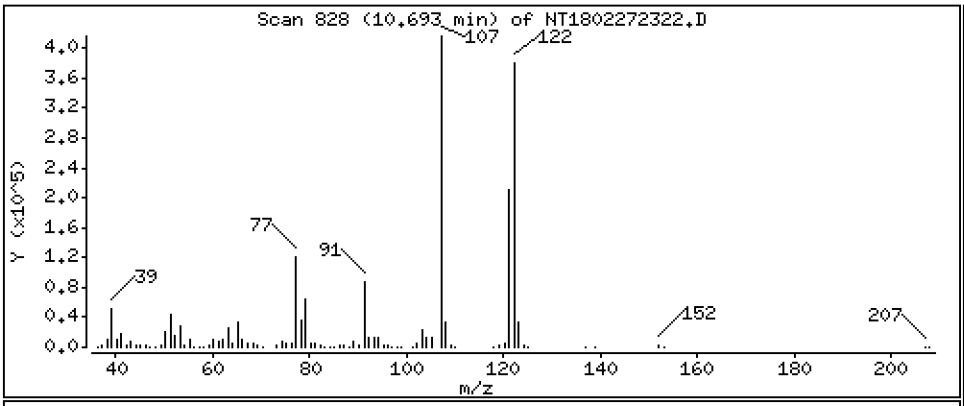
Operator: VTS

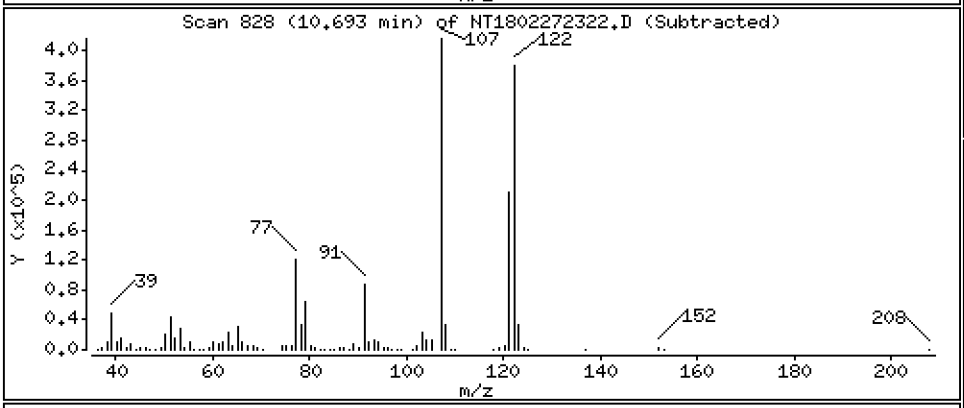
Column phase: ZB-5msi

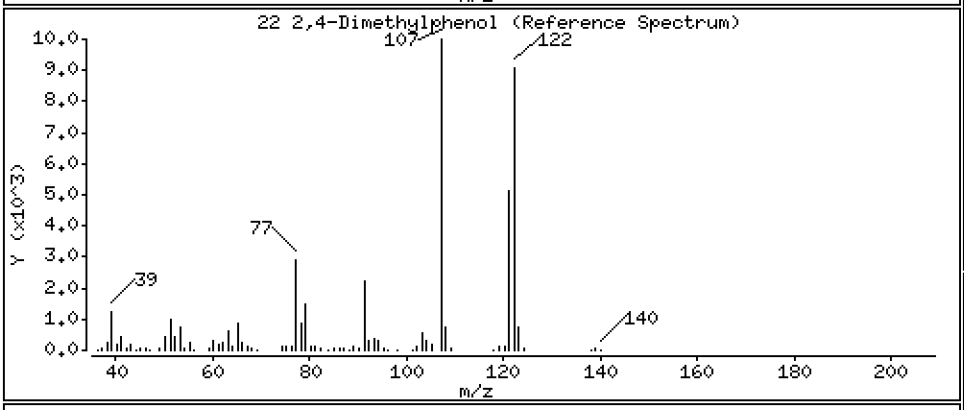
Column diameter: 0.25

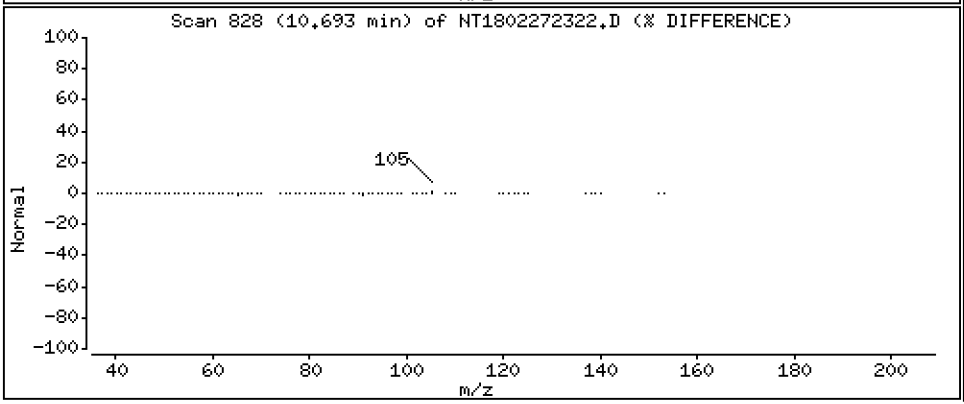
22 2,4-Dimethylphenol

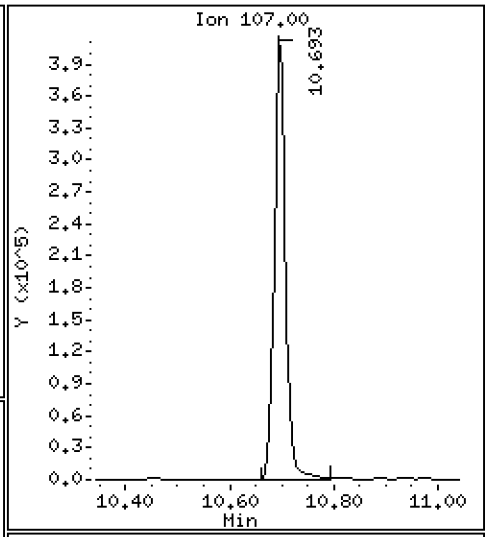
Concentration: 8.818 ug/mL

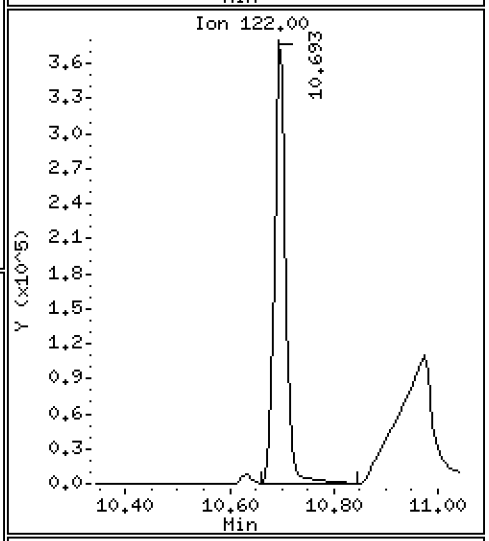


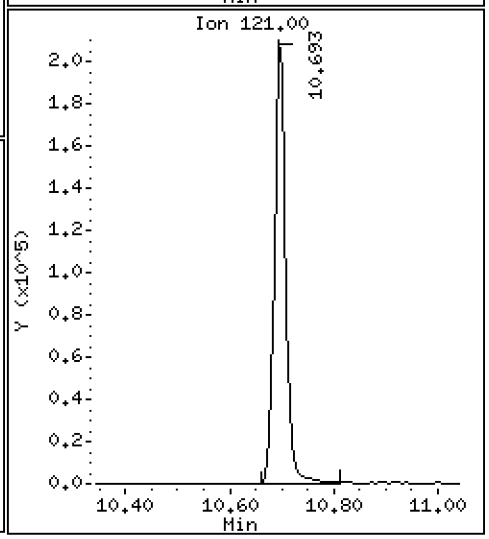












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

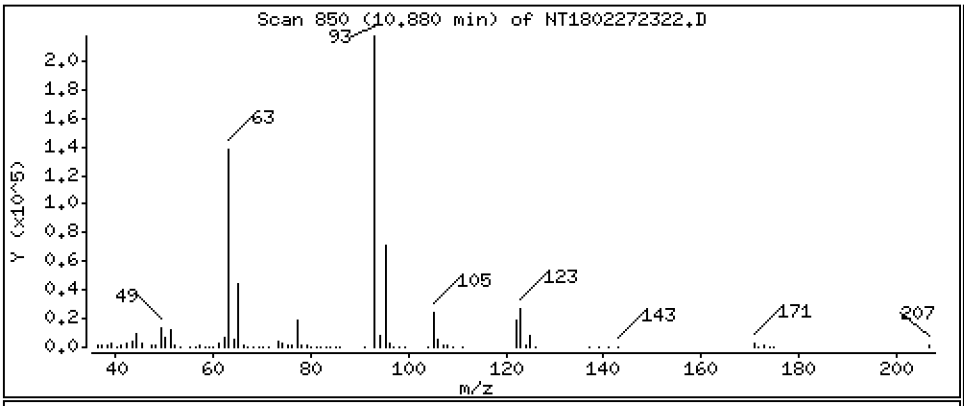
Operator: VTS

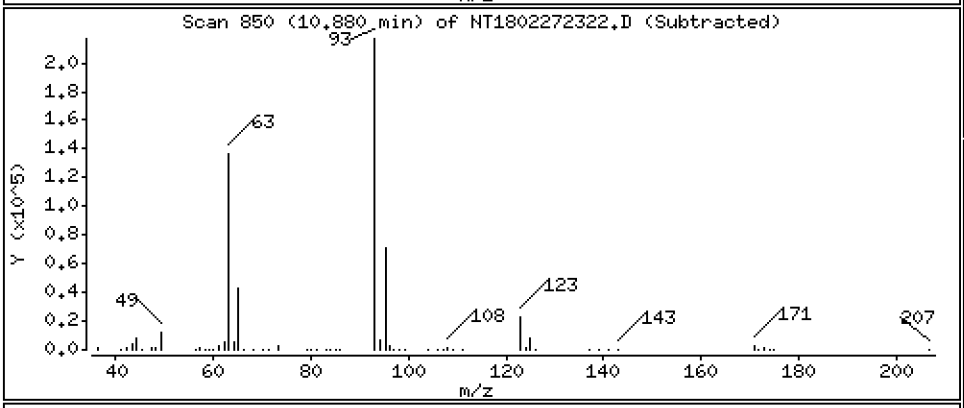
Column phase: ZB-5msi

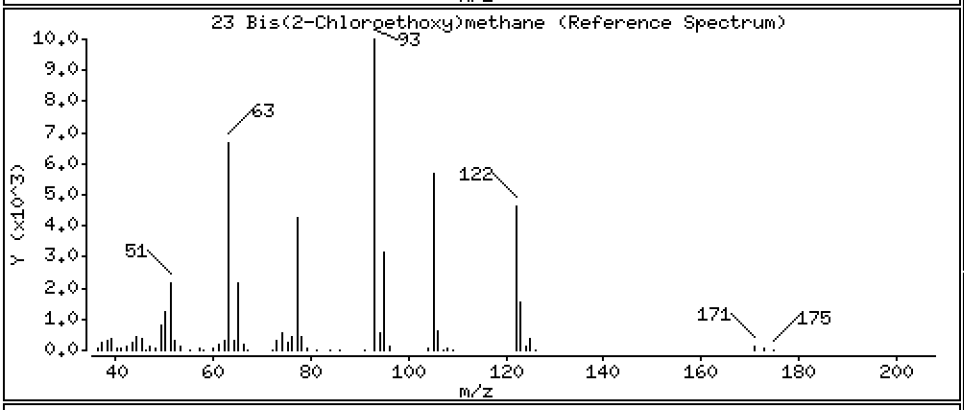
Column diameter: 0.25

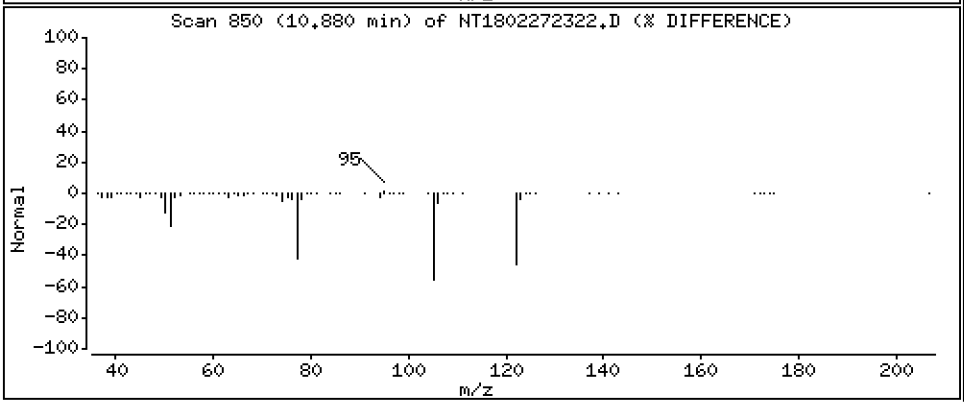
23 Bis(2-Chloroethoxy)methane

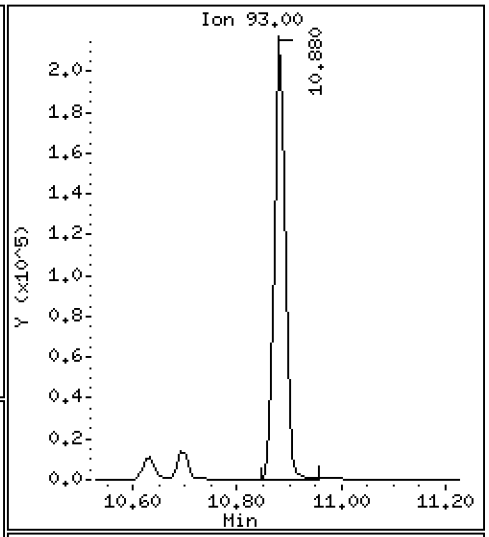
Concentration: 4.561 ug/mL

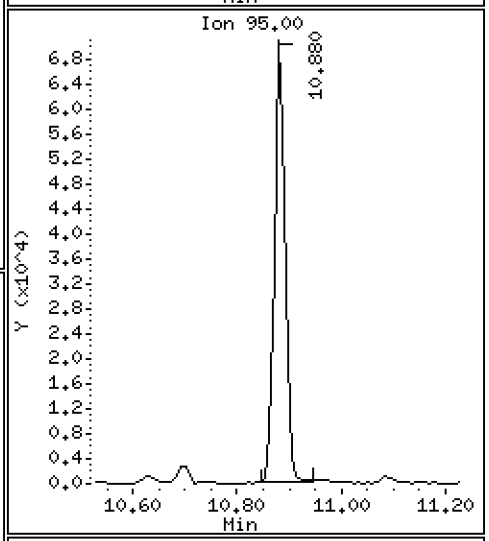


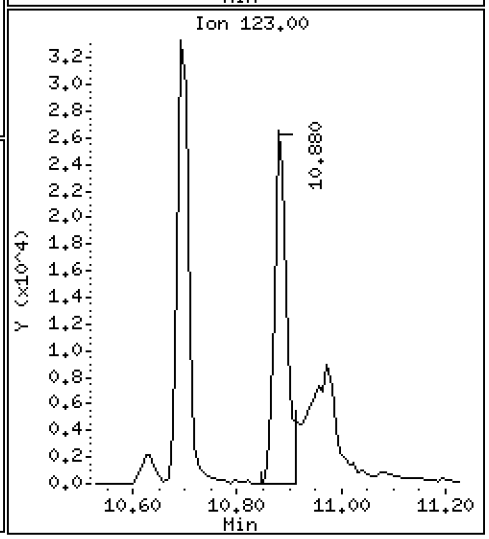












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

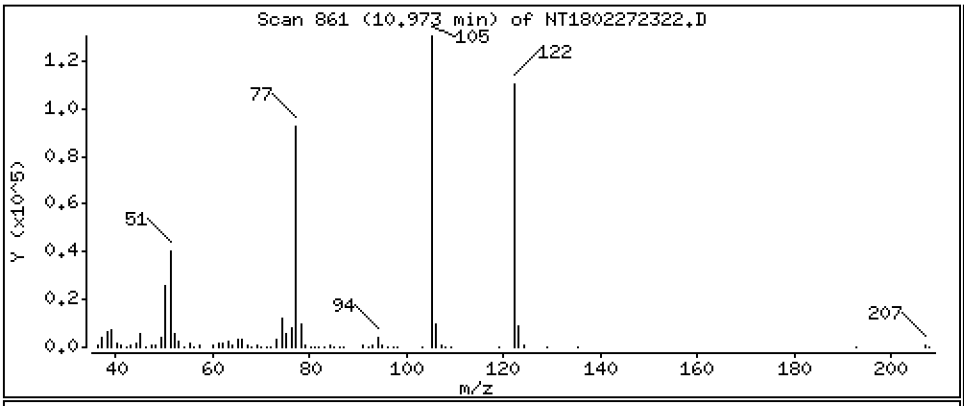
Operator: VTS

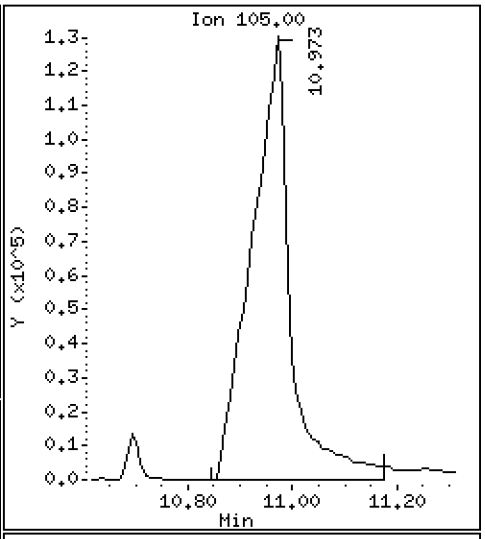
Column phase: ZB-5msi

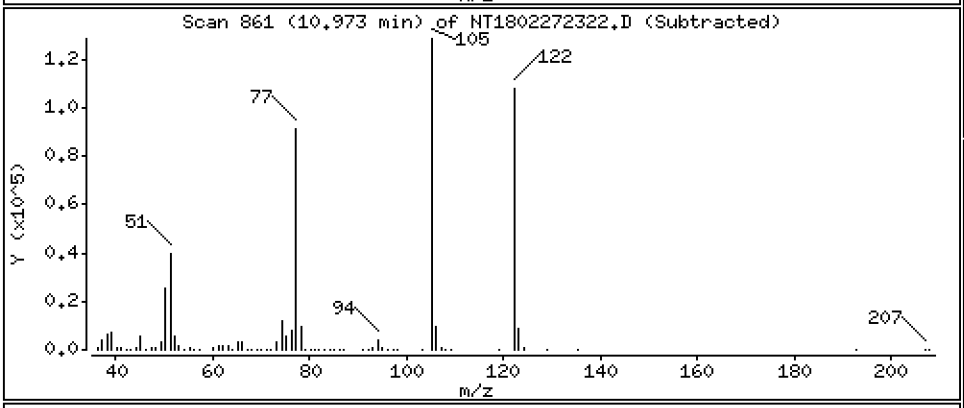
Column diameter: 0.25

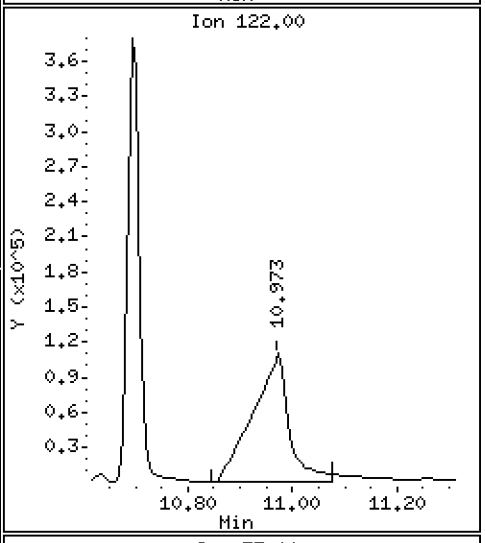
24 Benzoic acid

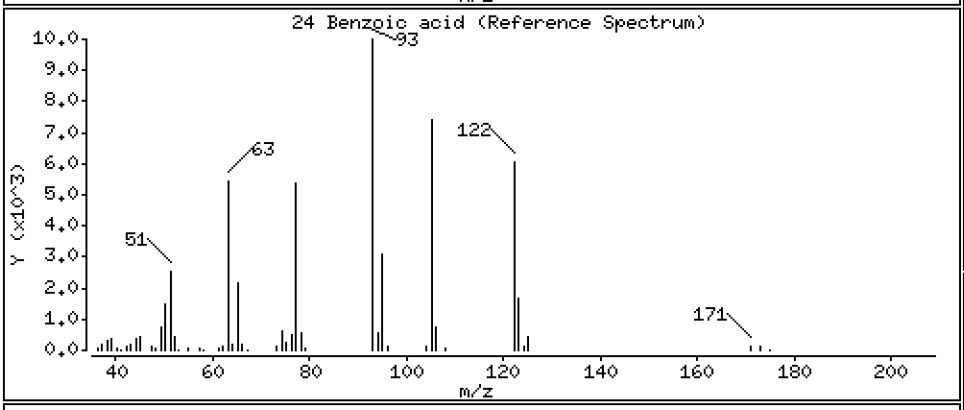
Concentration: 22.58 ug/mL

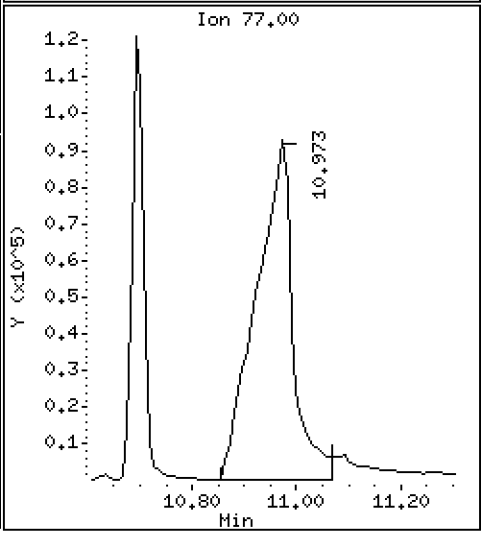


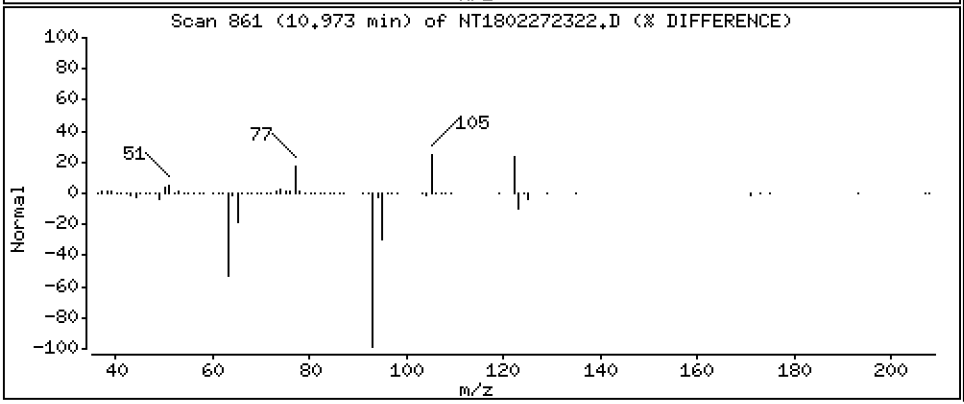












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

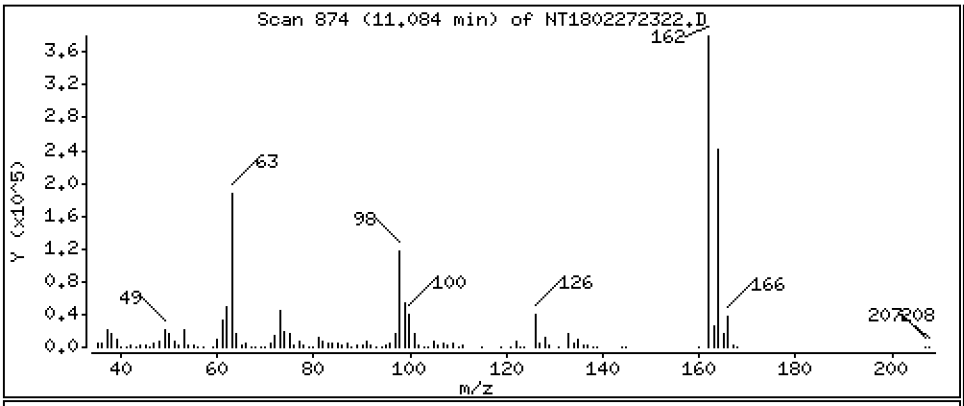
Operator: VTS

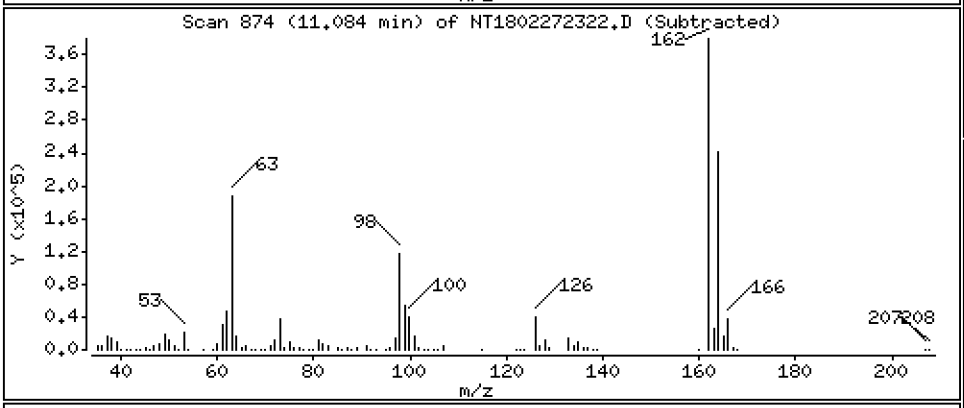
Column phase: ZB-5msi

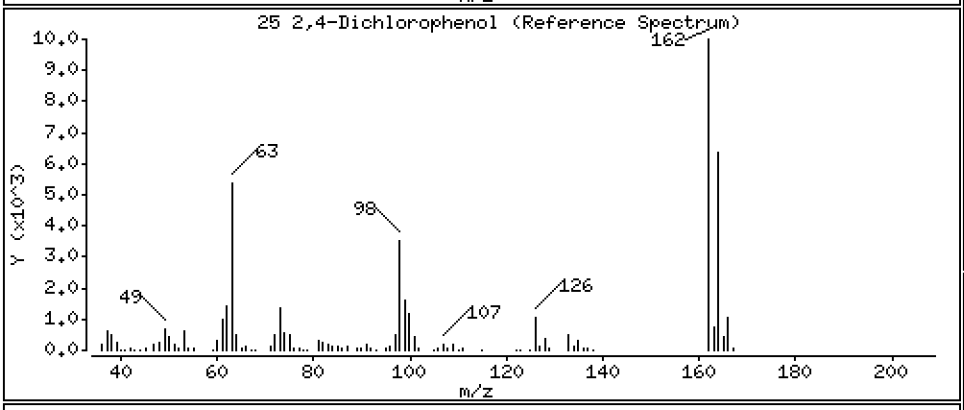
Column diameter: 0.25

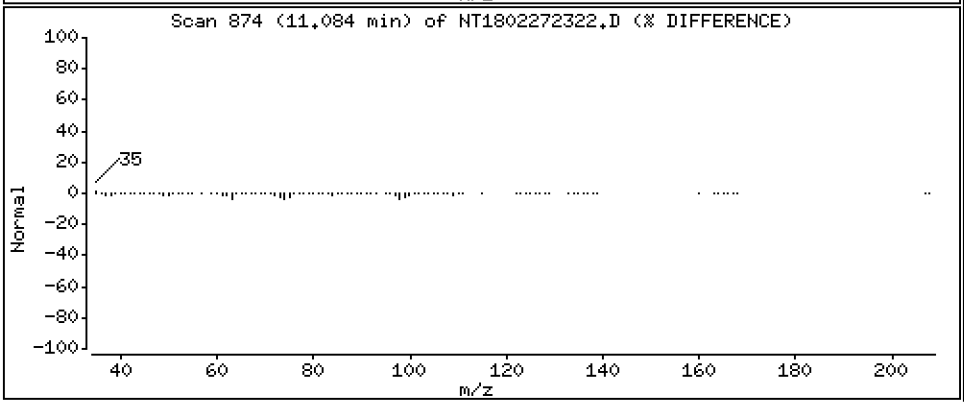
25 2,4-Dichlorophenol

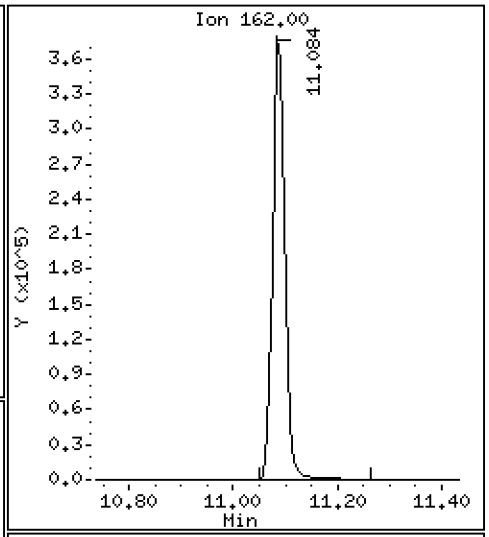
Concentration: 10.04 ug/mL

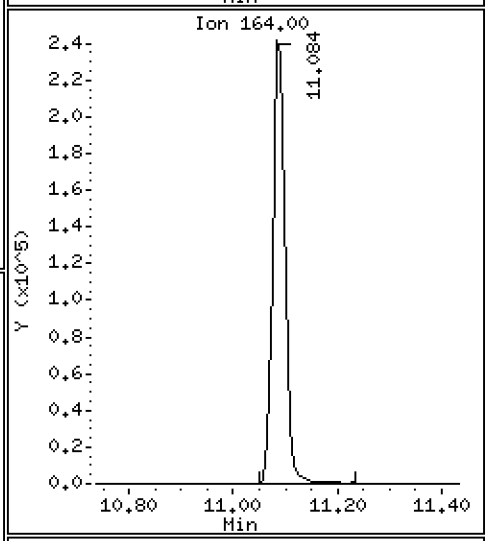


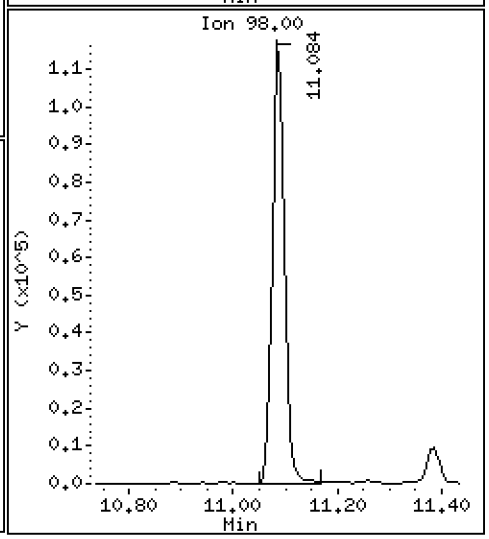












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

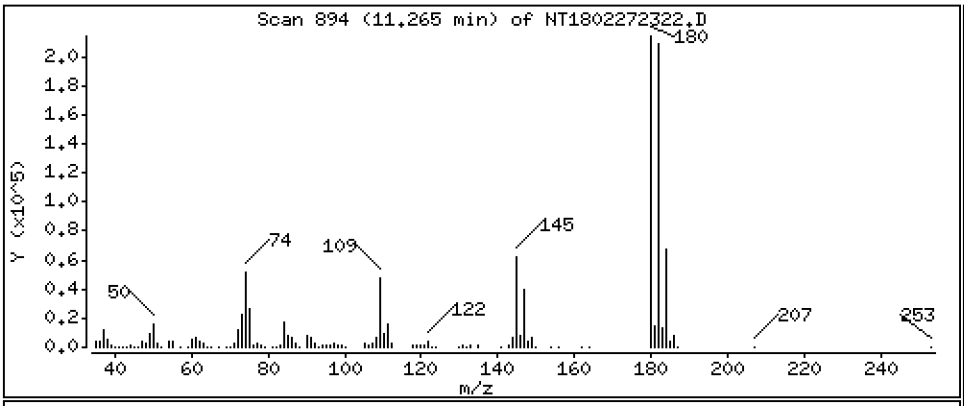
Operator: VTS

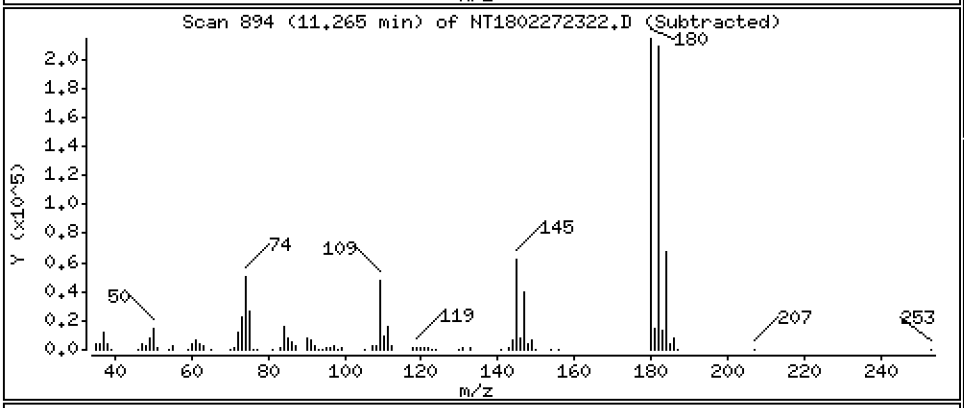
Column phase: ZB-5msi

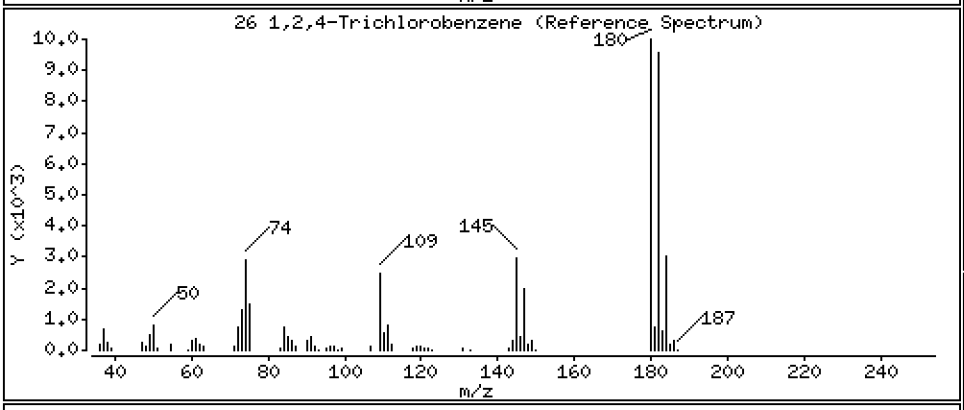
Column diameter: 0.25

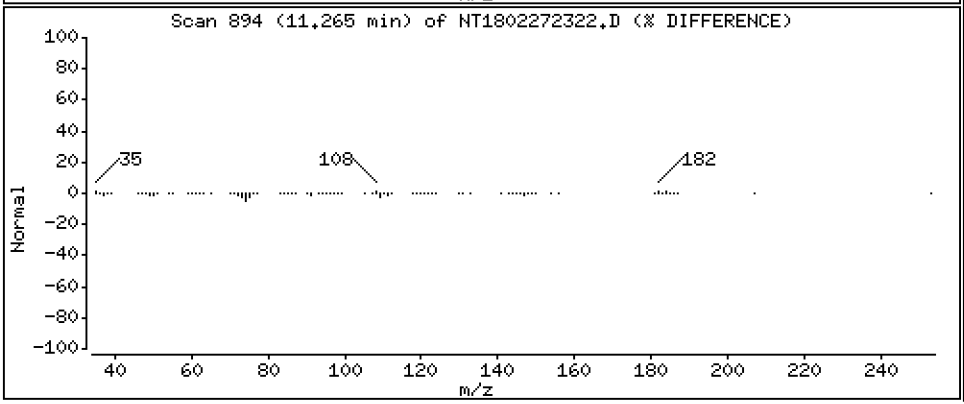
26 1,2,4-Trichlorobenzene

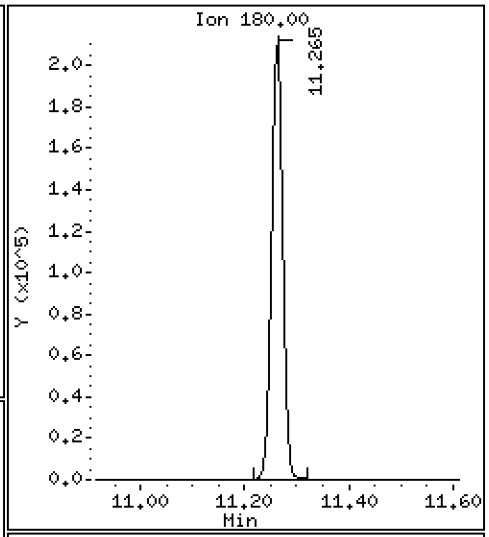
Concentration: 4.790 ug/mL

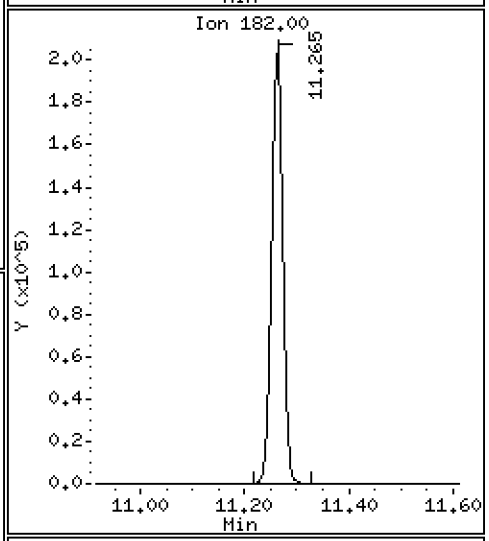


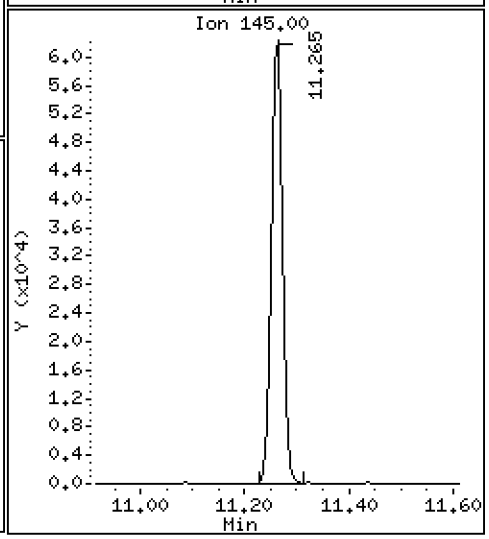












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

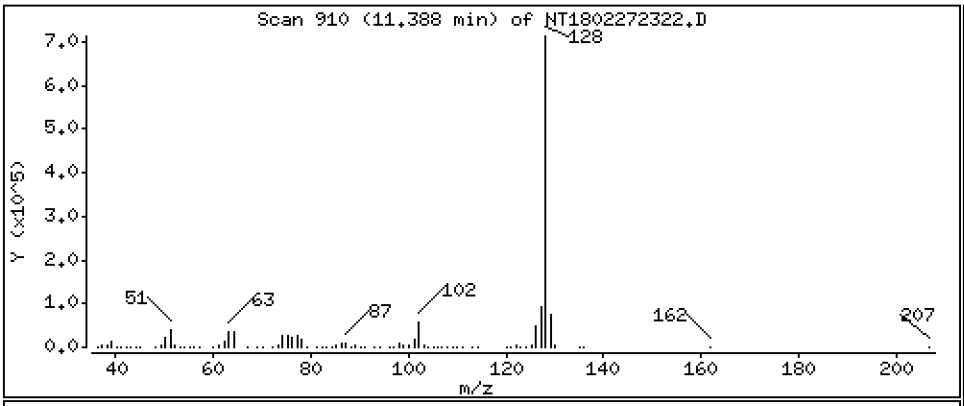
Operator: VTS

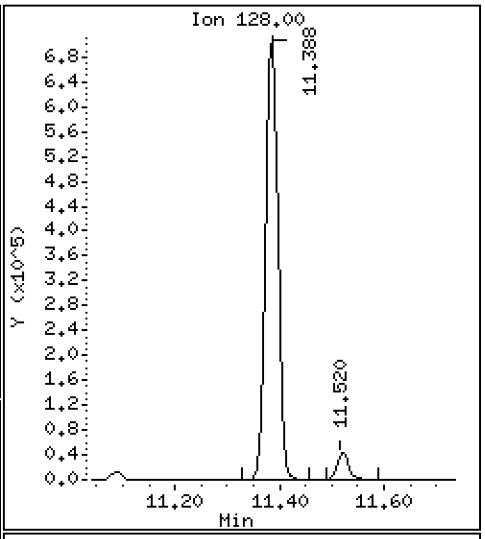
Column phase: ZB-5msi

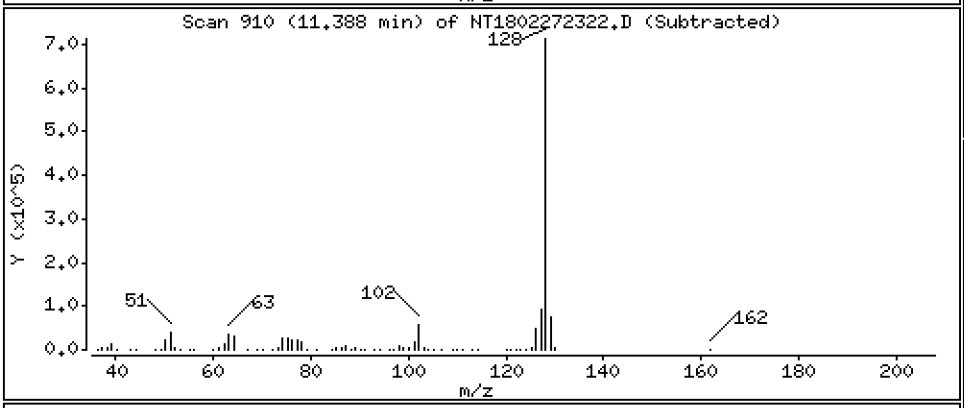
Column diameter: 0.25

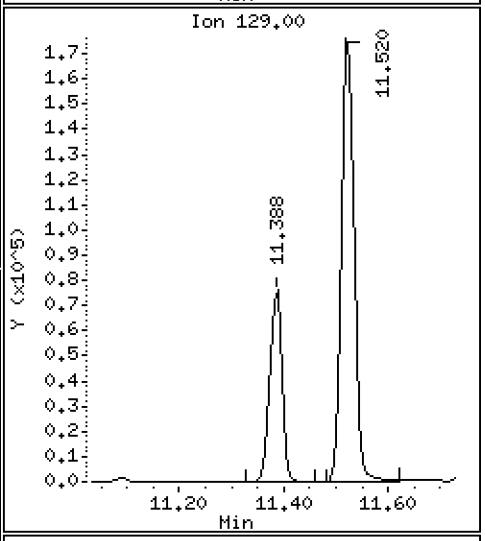
28 Naphthalene

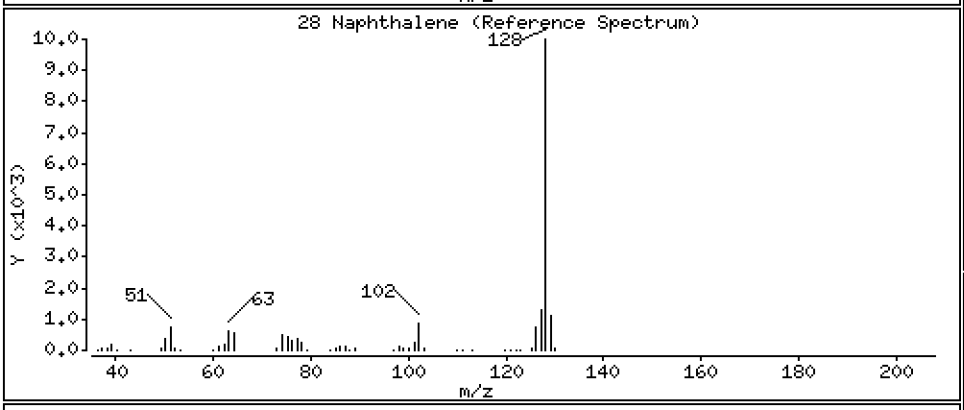
Concentration: 4.685 ug/mL

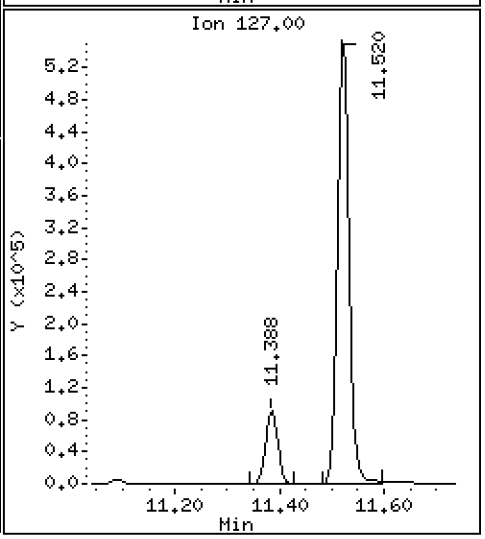


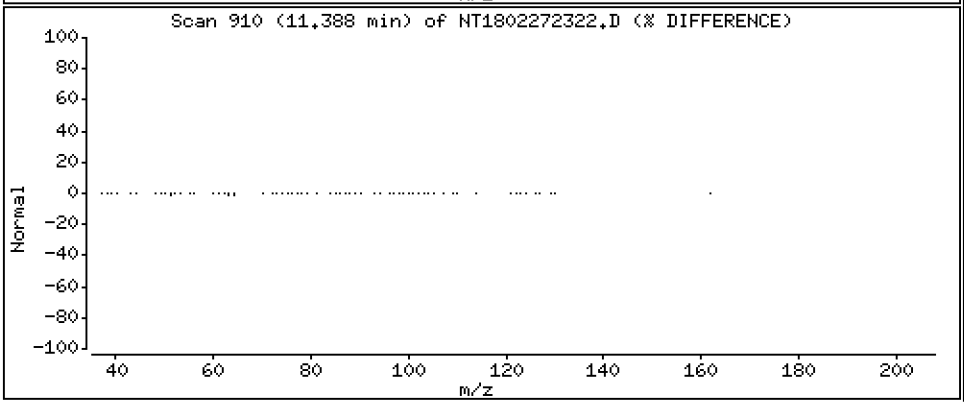












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

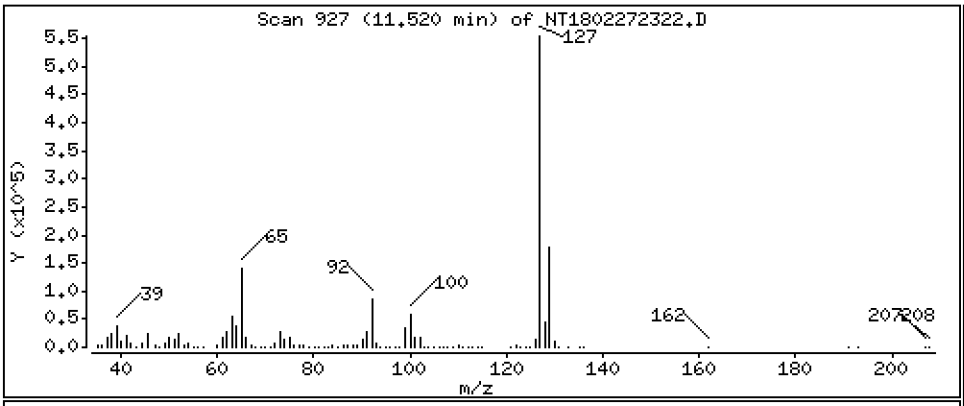
Operator: VTS

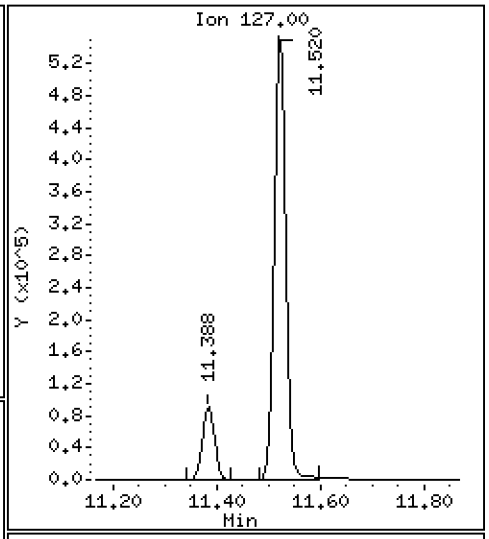
Column phase: ZB-5msi

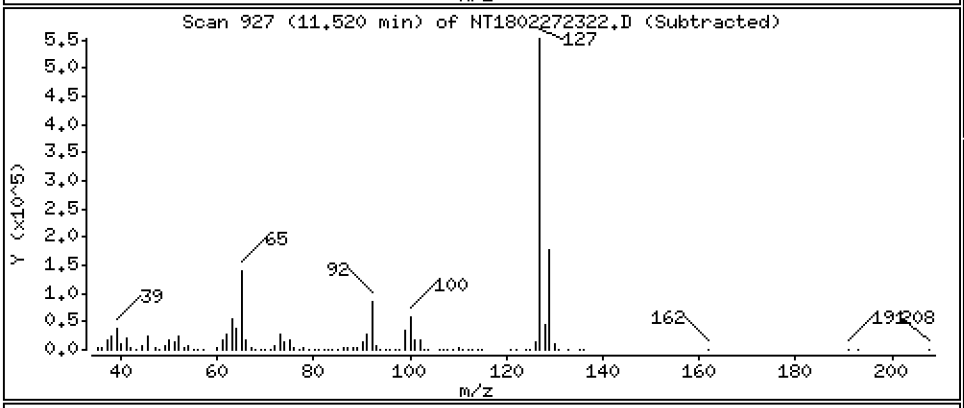
Column diameter: 0.25

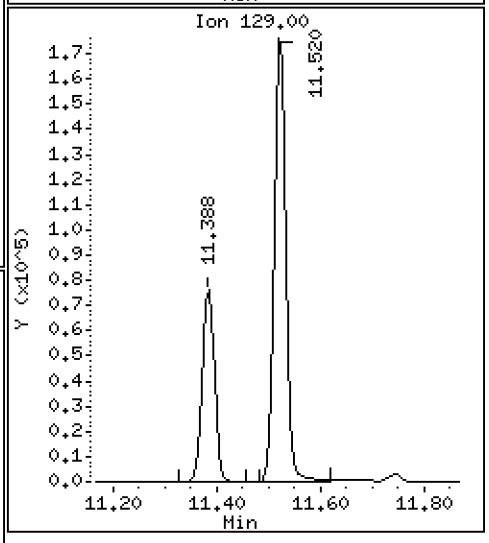
29 4-Chloroaniline

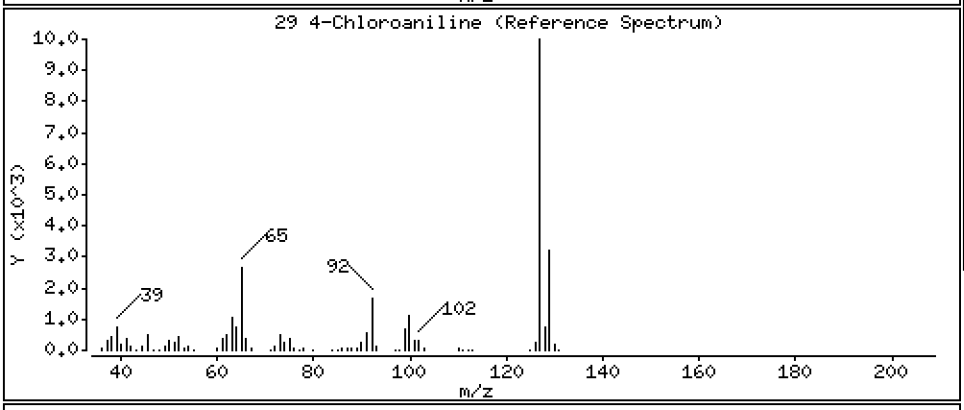
Concentration: 9.500 ug/mL

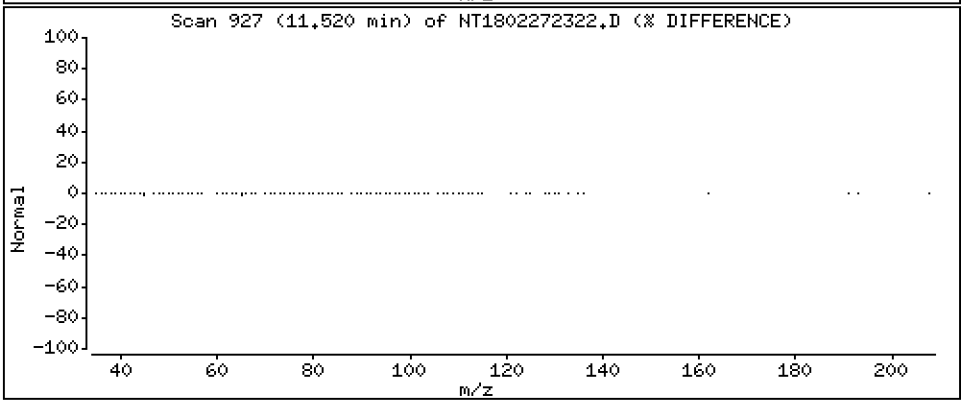












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

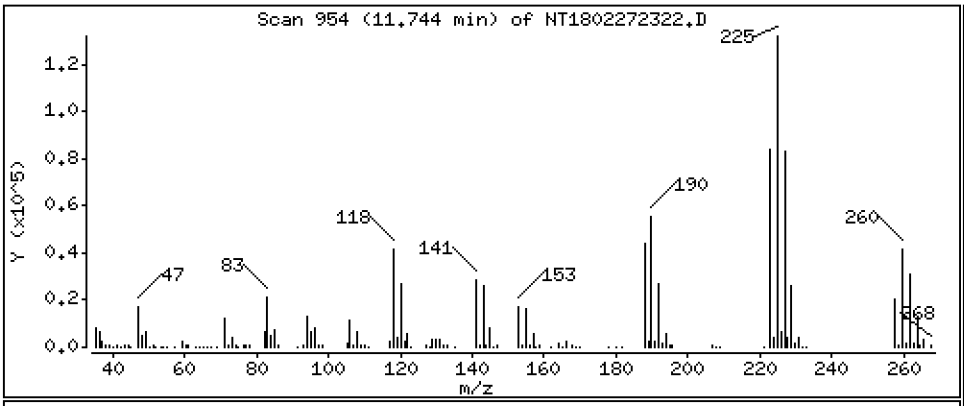
Operator: VTS

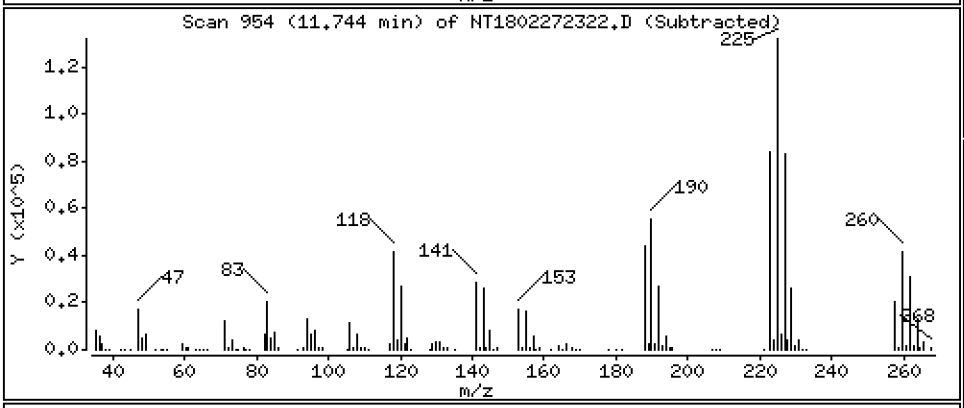
Column phase: ZB-5msi

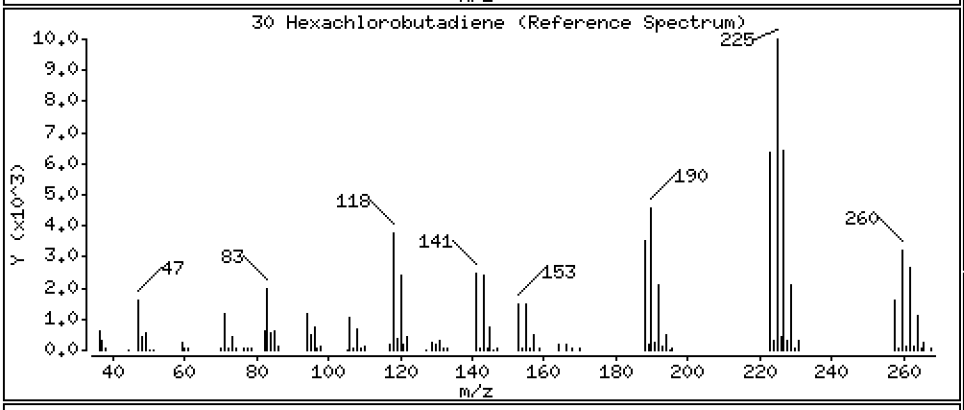
Column diameter: 0.25

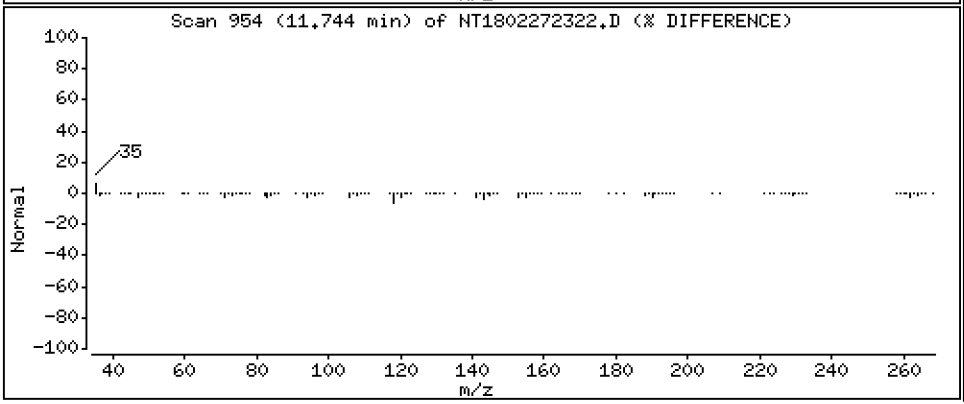
30 Hexachlorobutadiene

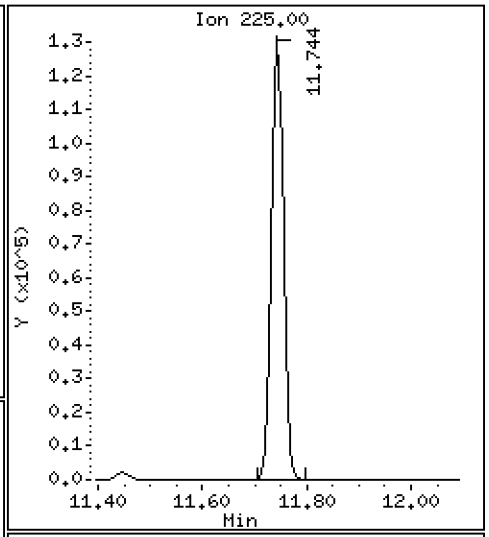
Concentration: 4.868 ug/mL

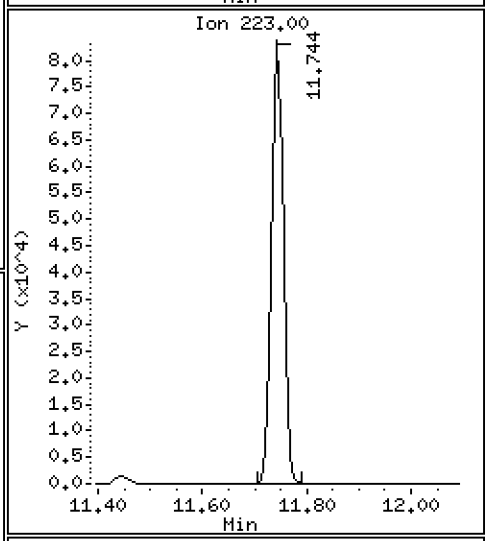


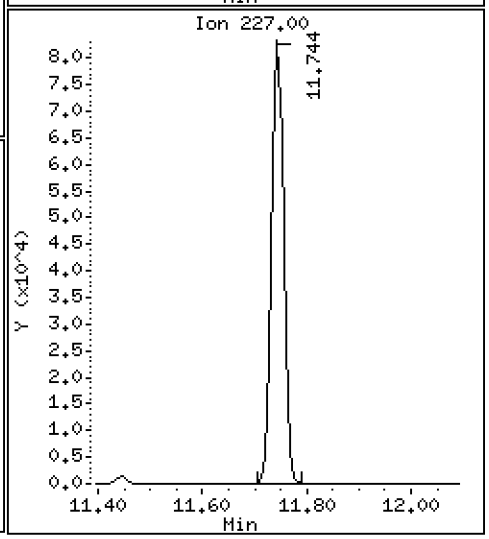












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

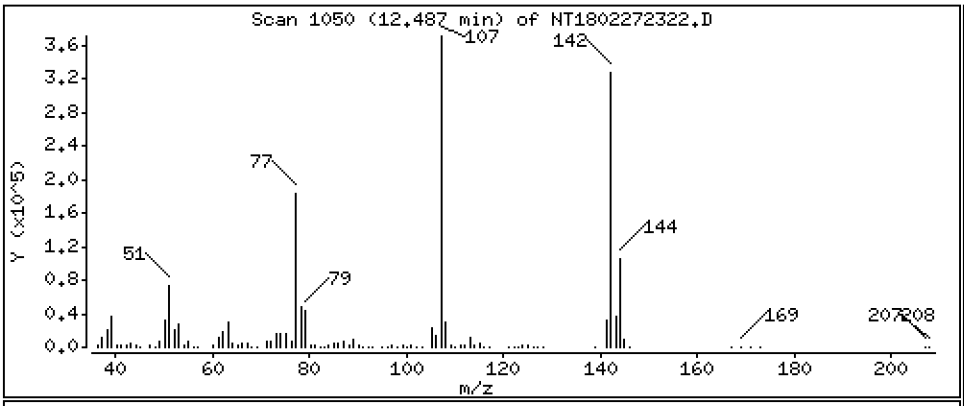
Operator: VTS

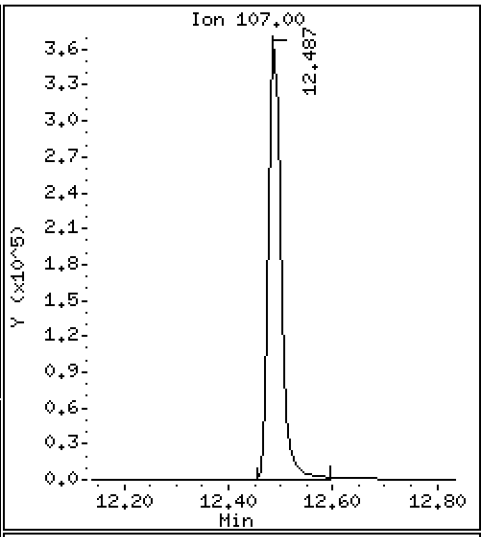
Column phase: ZB-5msi

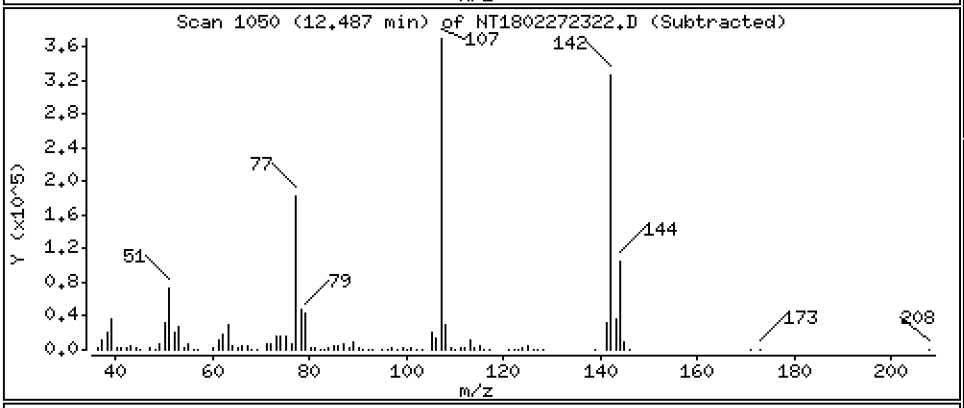
Column diameter: 0.25

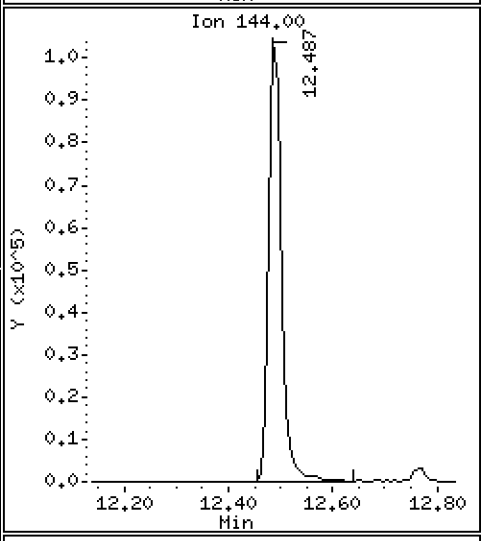
31 4-Chloro-3-methylphenol

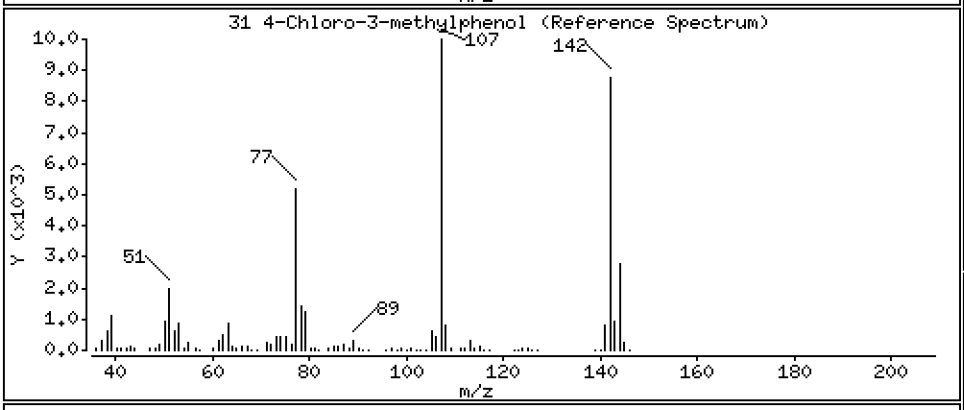
Concentration: 9.379 ug/mL

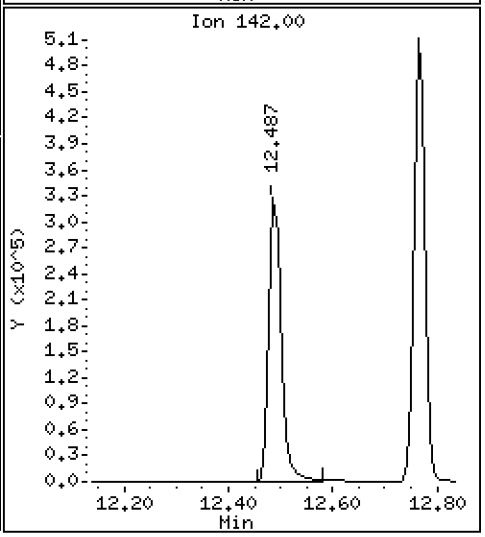


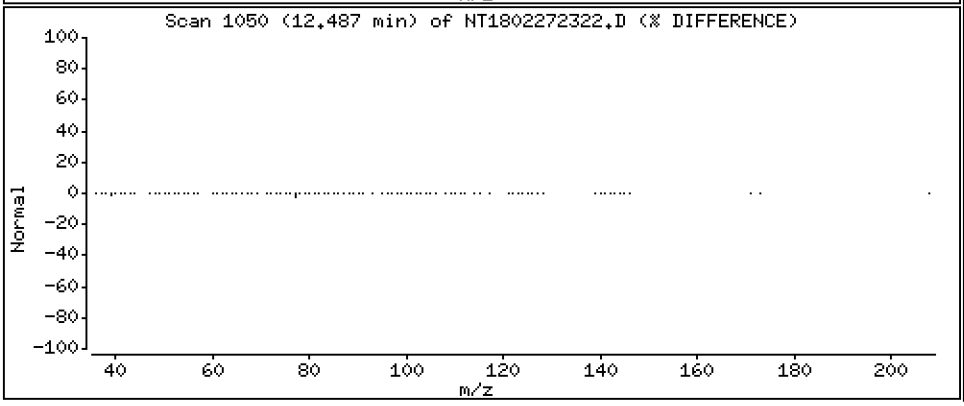












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

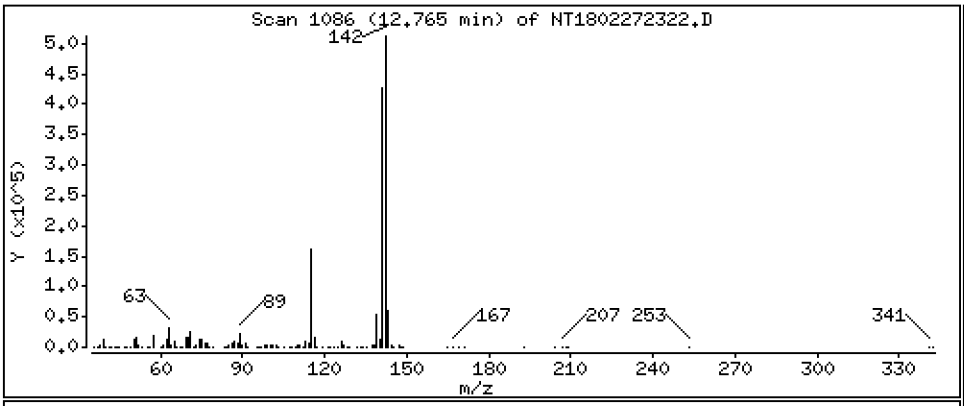
Operator: VTS

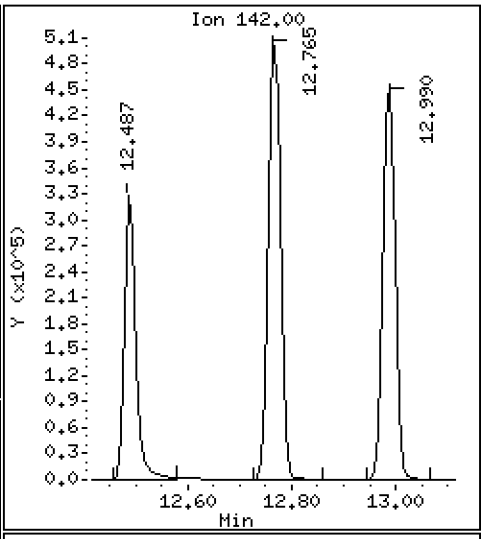
Column phase: ZB-5msi

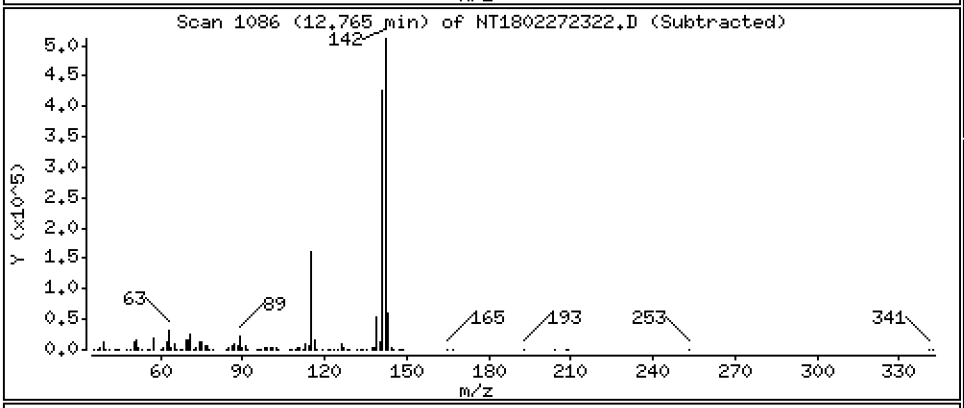
Column diameter: 0.25

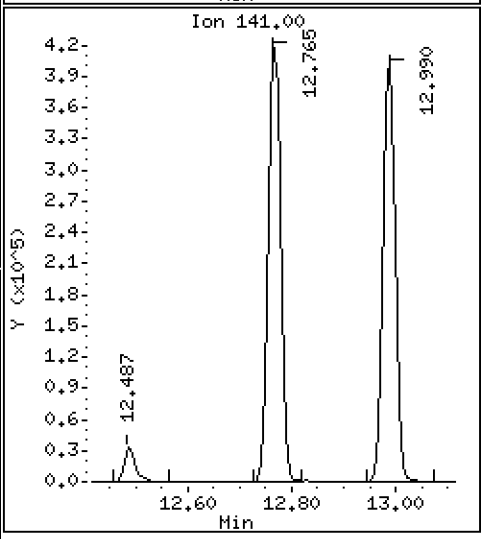
32 2-Methylnaphthalene

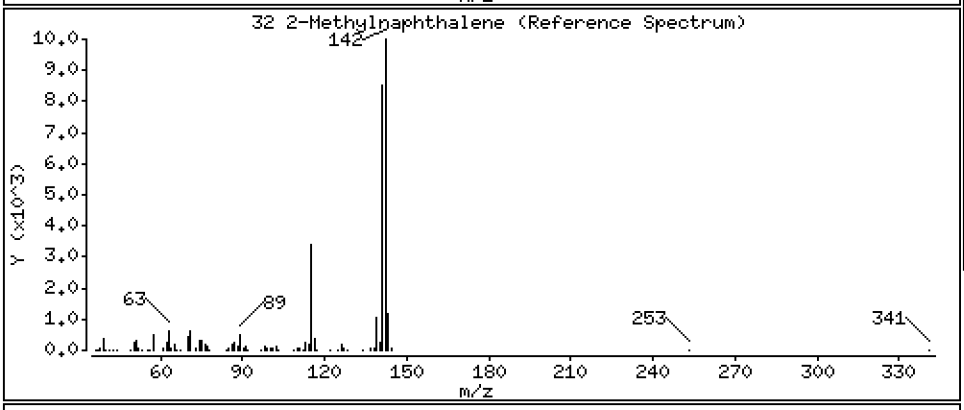
Concentration: 4.855 ug/mL

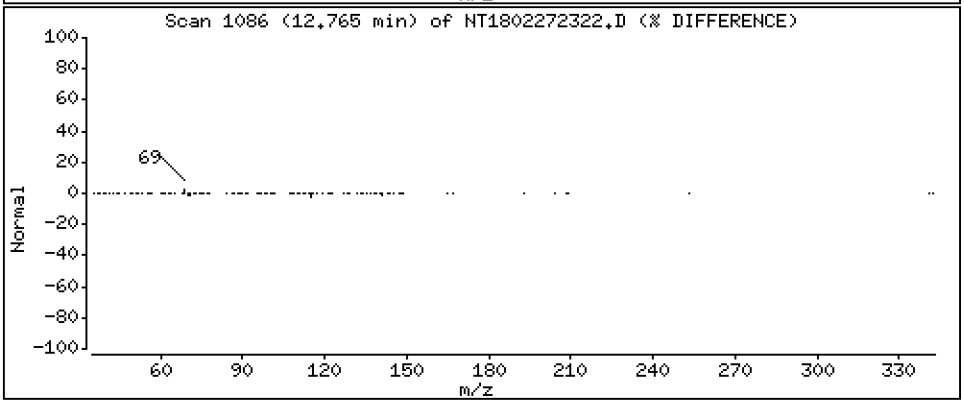












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272322.D

Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

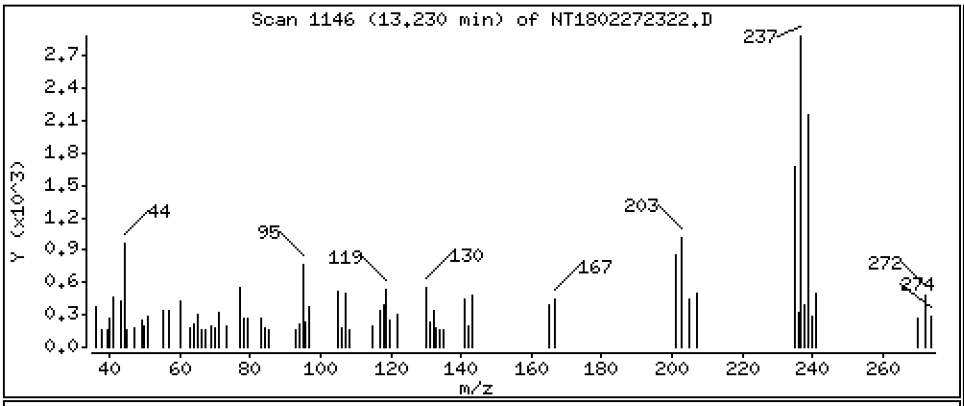
Operator: VTS

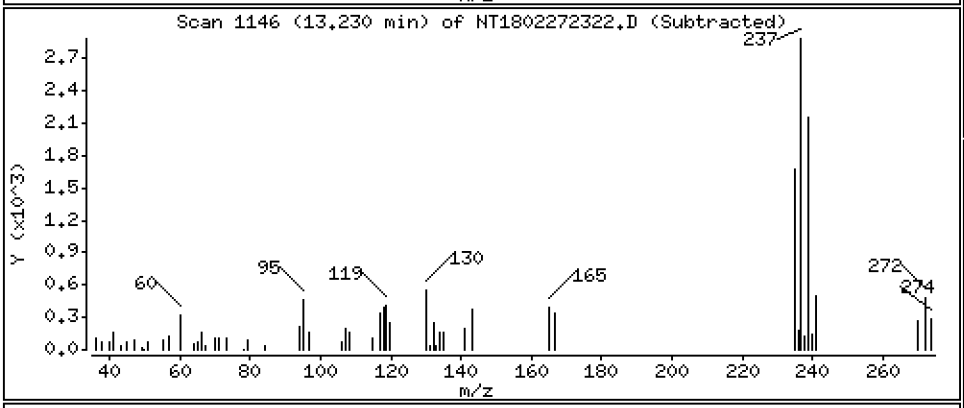
Column phase: ZB-5msi

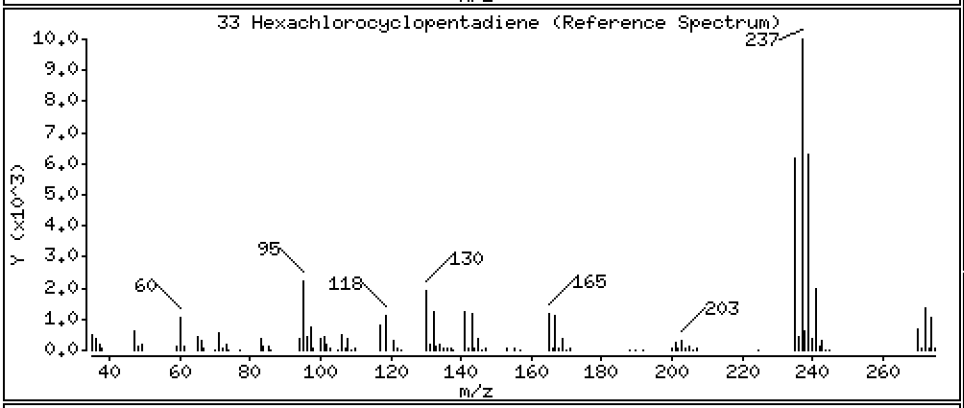
Column diameter: 0.25

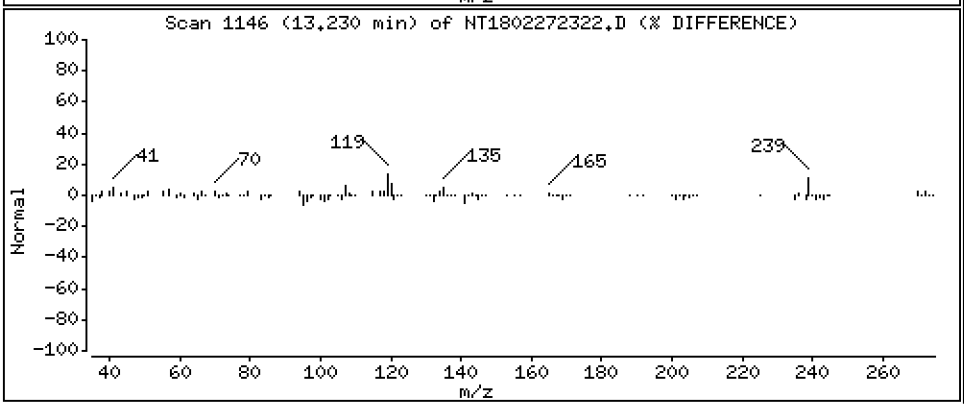
33 Hexachlorocyclopentadiene

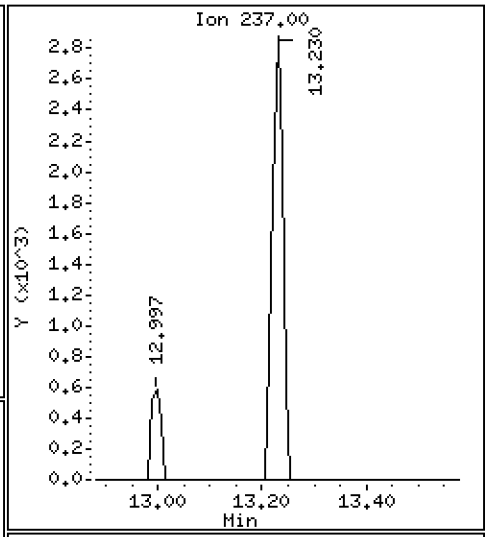
Concentration: 0.1294 ug/mL

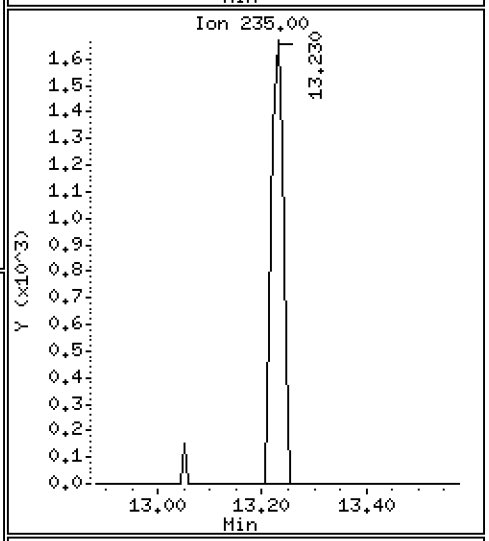


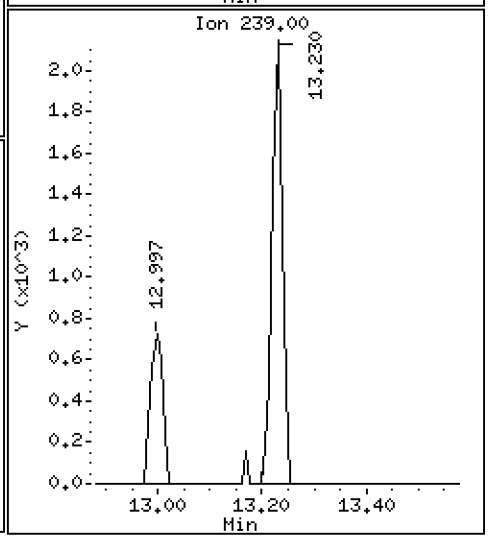












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

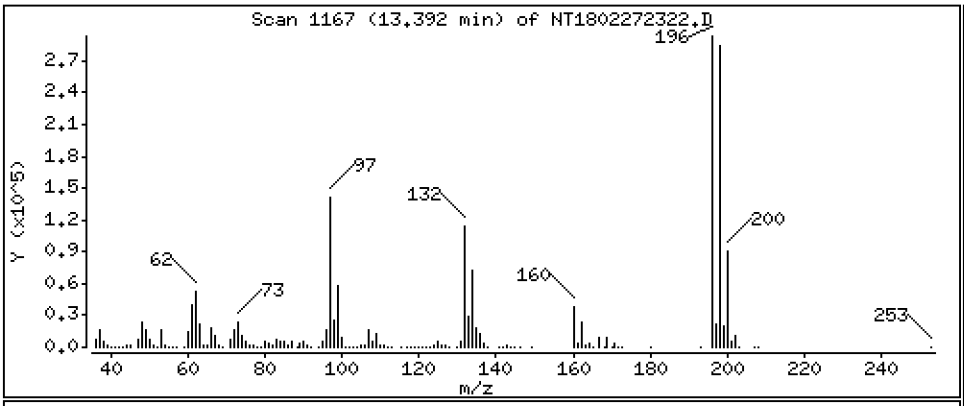
Operator: VTS

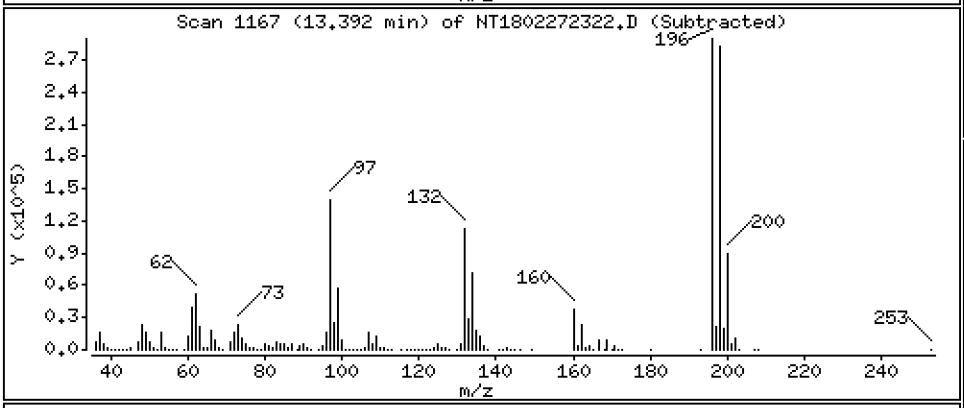
Column phase: ZB-5msi

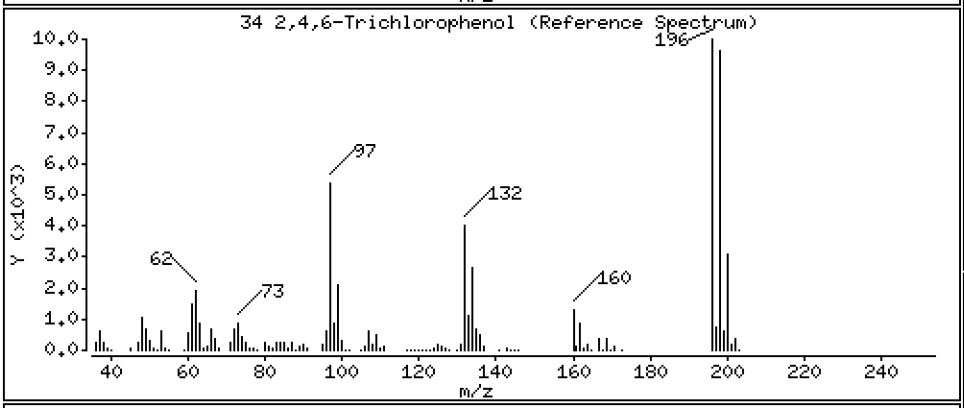
Column diameter: 0.25

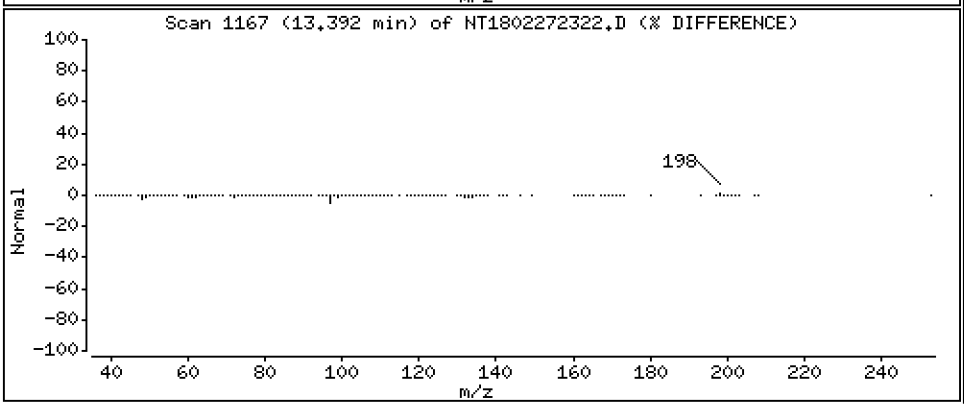
34 2,4,6-Trichlorophenol

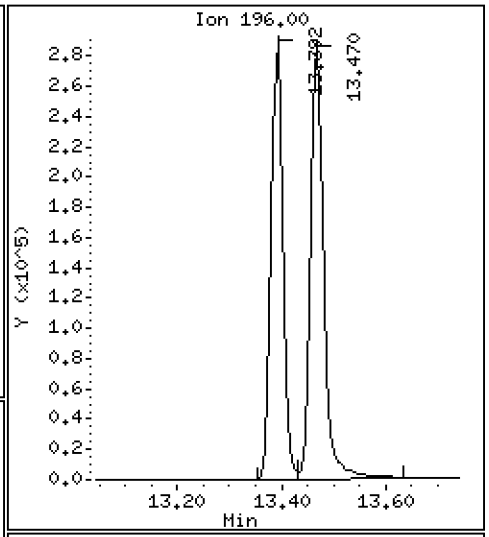
Concentration: 10.08 ug/mL

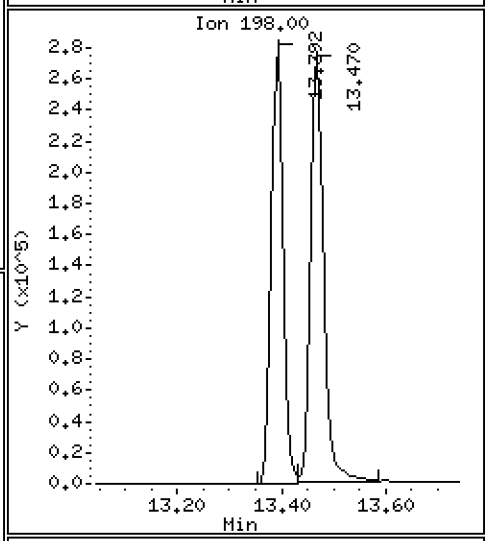


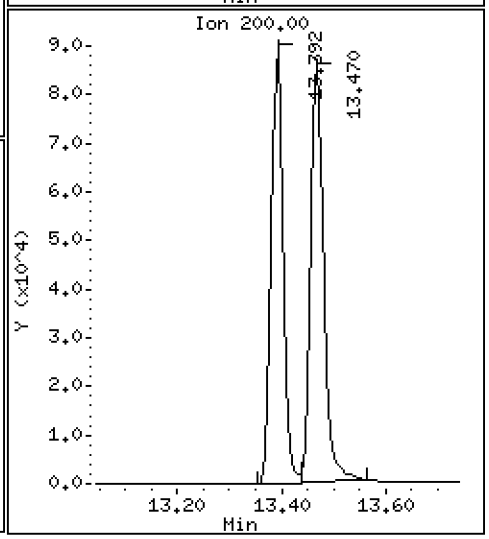












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

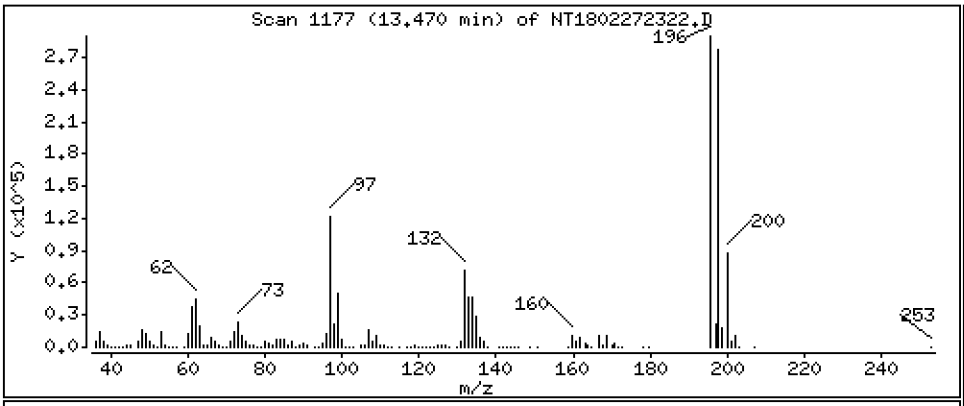
Operator: VTS

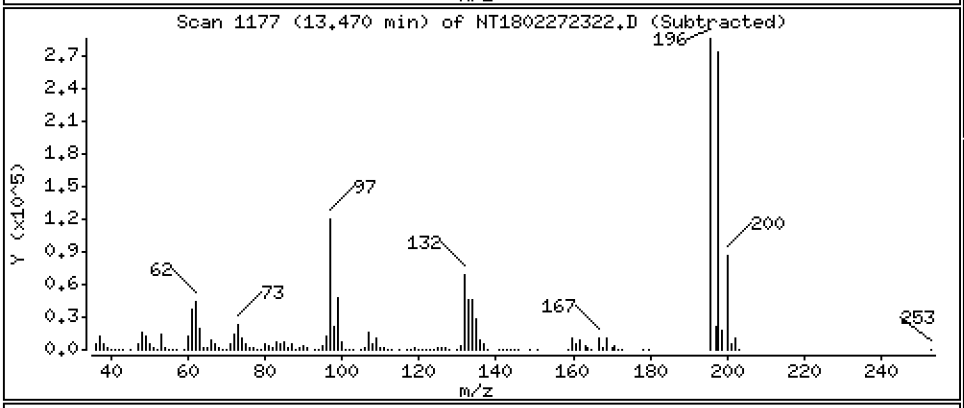
Column phase: ZB-5msi

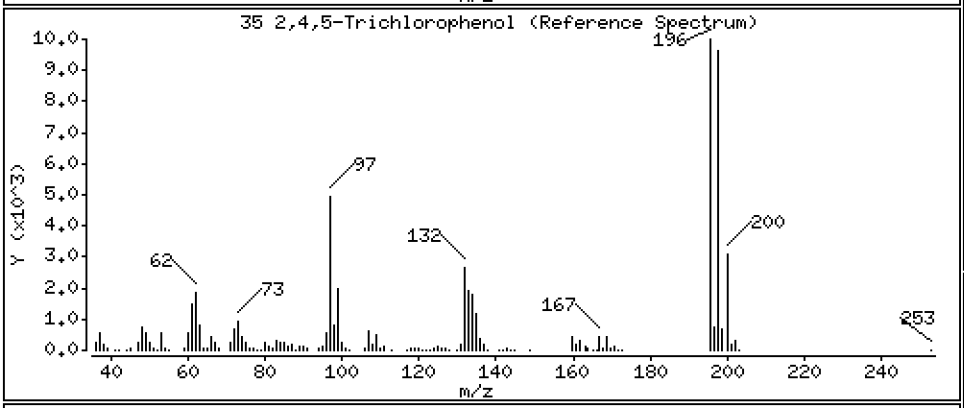
Column diameter: 0.25

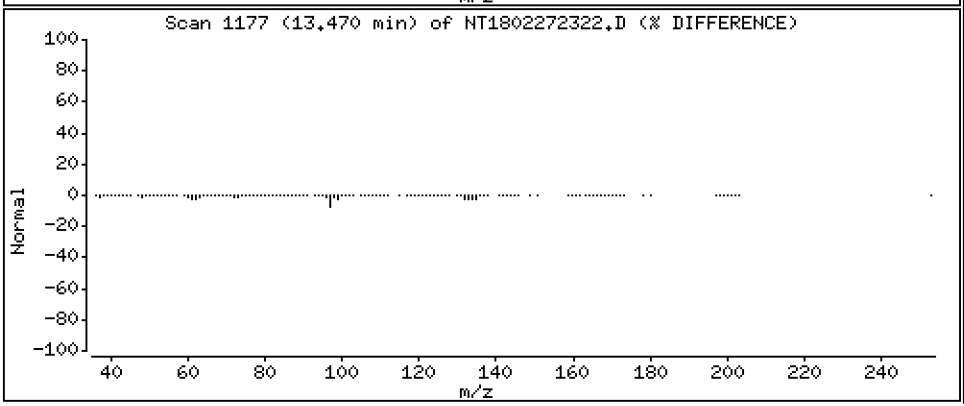
35 2,4,5-Trichlorophenol

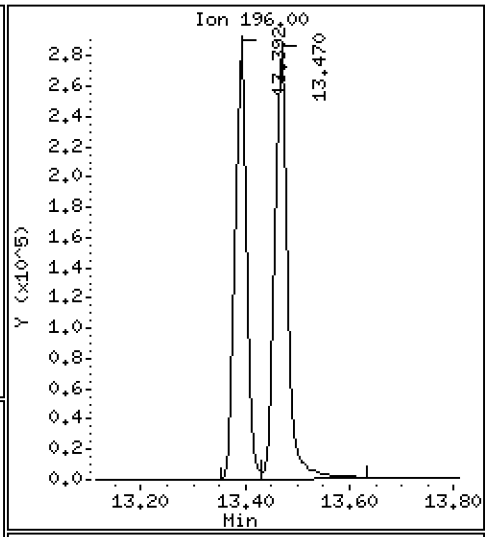
Concentration: 10.31 ug/mL

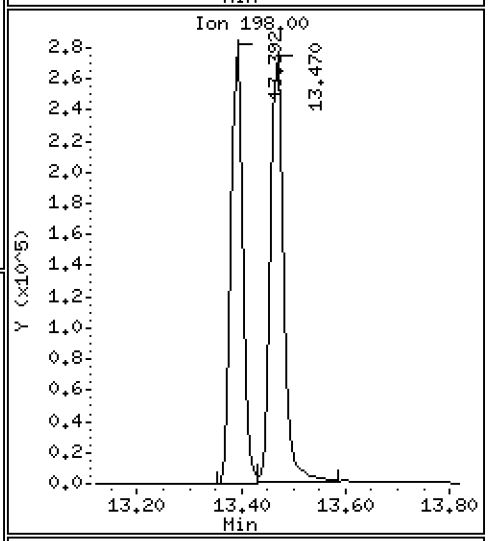


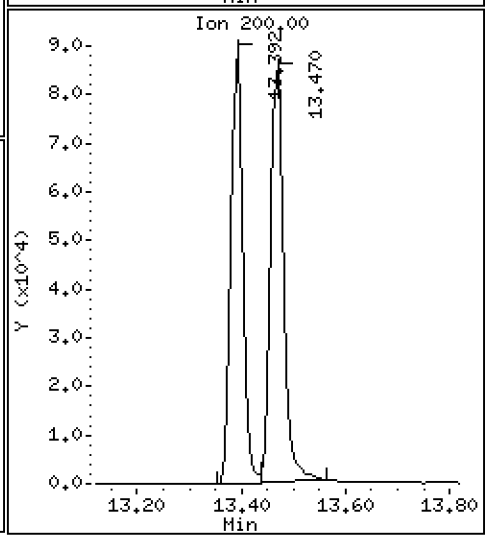












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

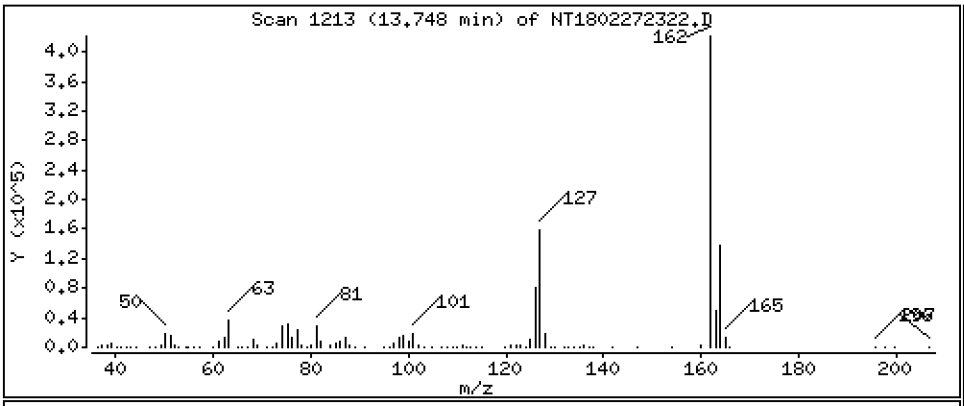
Operator: VTS

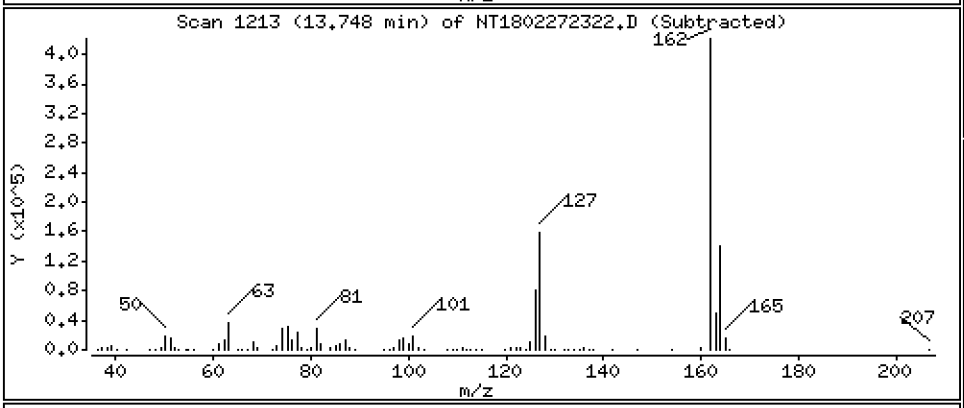
Column phase: ZB-5msi

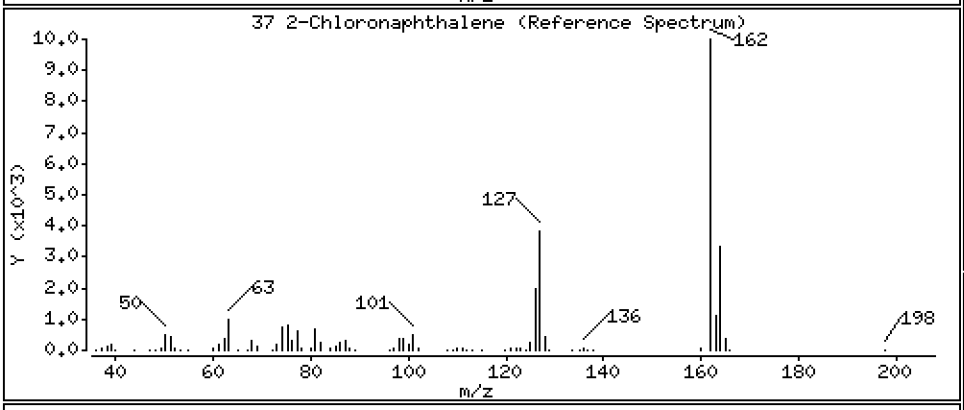
Column diameter: 0.25

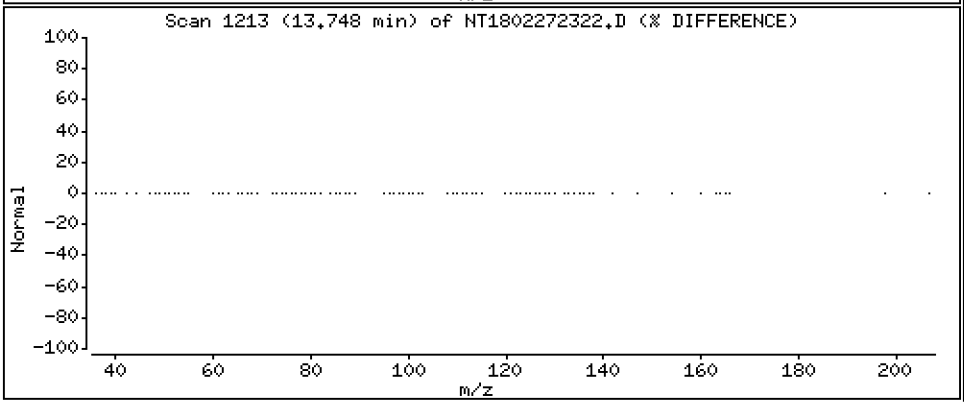
37 2-Chloronaphthalene

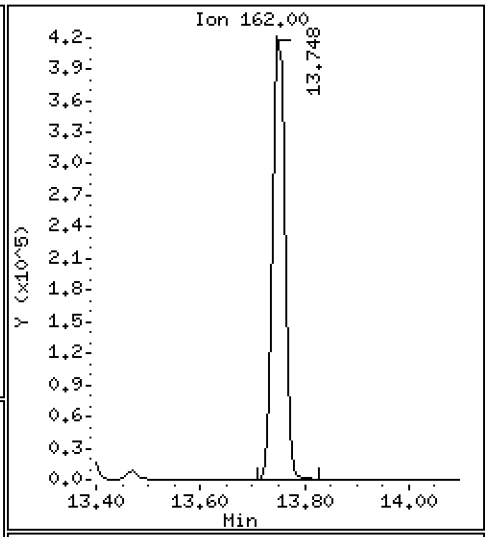
Concentration: 4.507 ug/mL

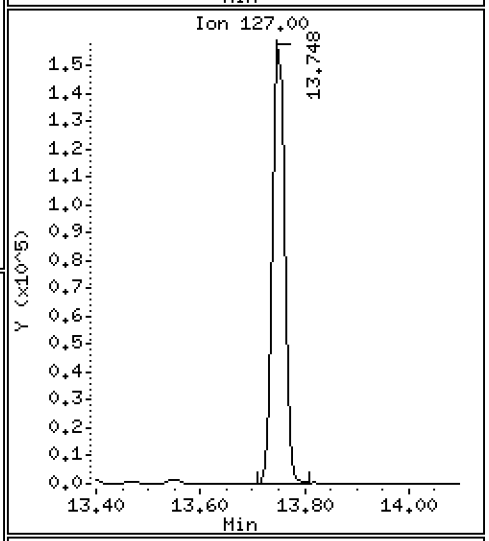


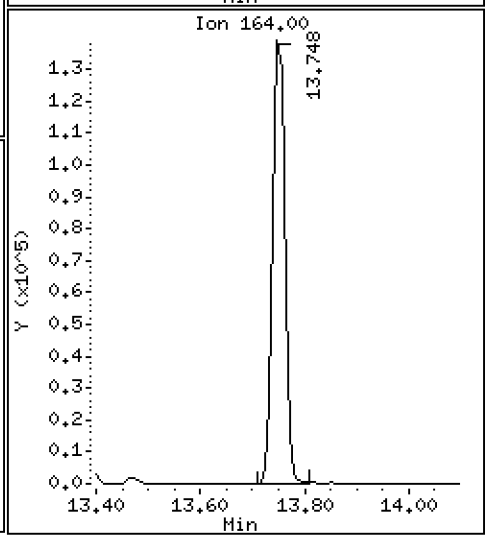












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

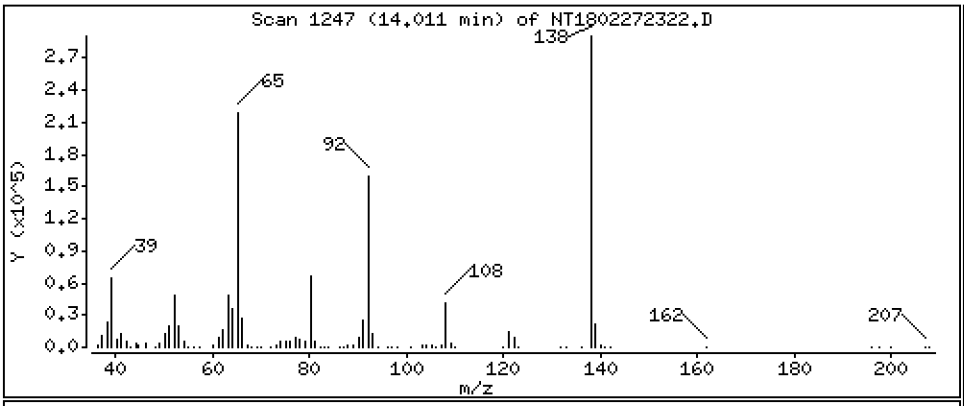
Operator: VTS

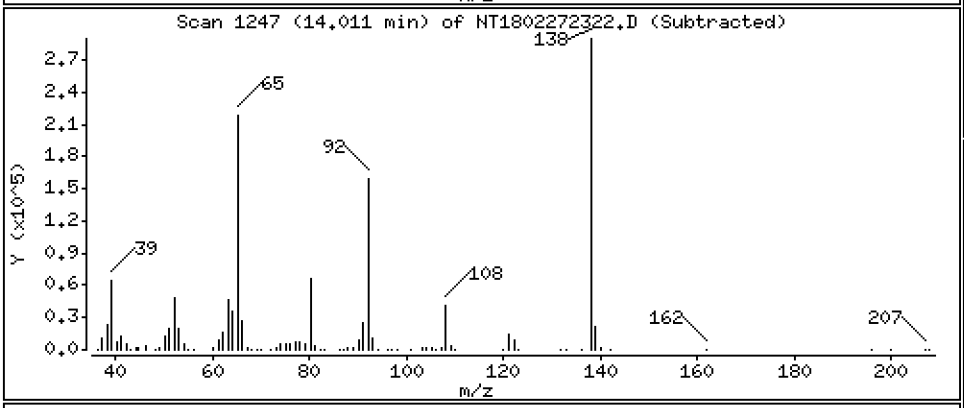
Column phase: ZB-5msi

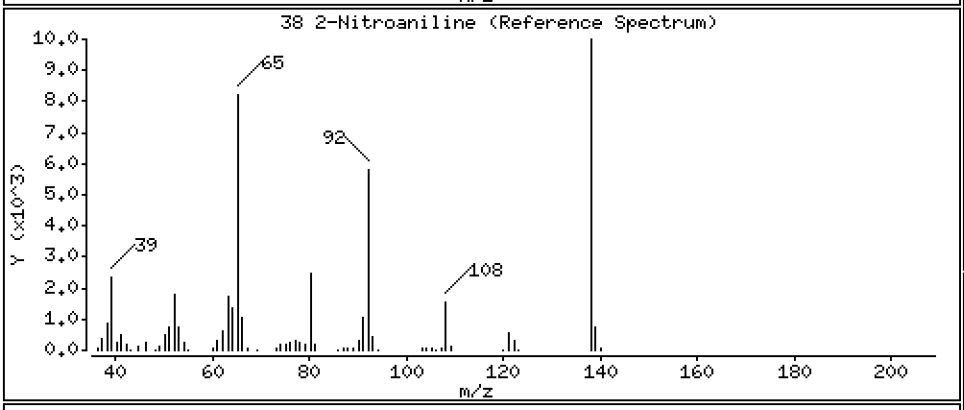
Column diameter: 0.25

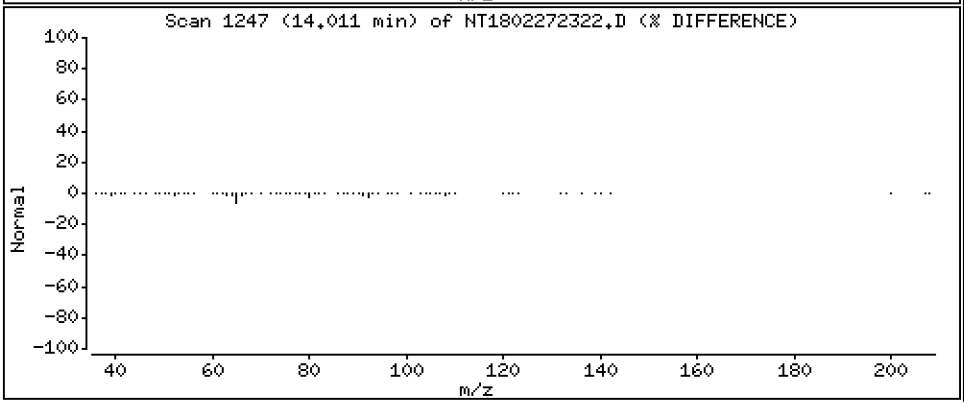
38 2-Nitroaniline

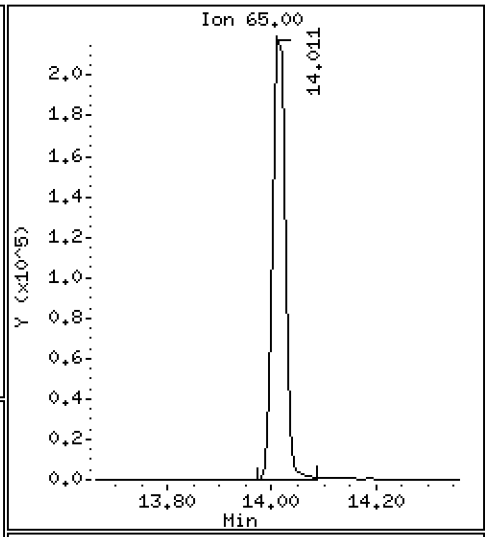
Concentration: 7.714 ug/mL

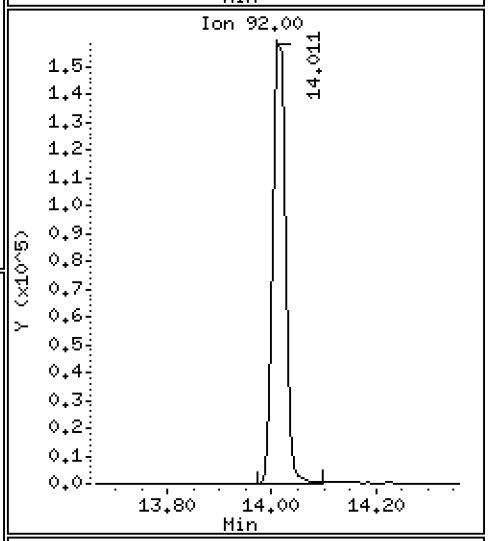


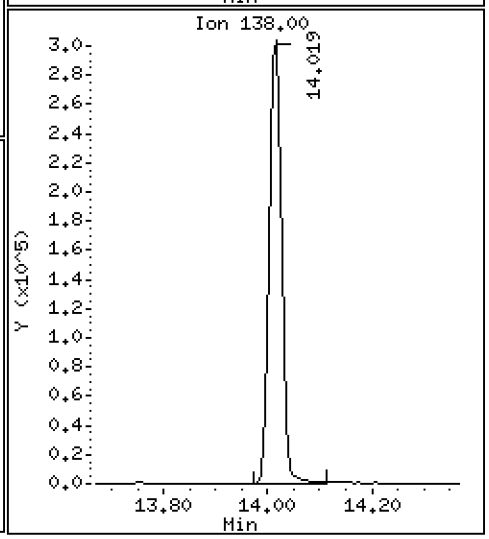












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

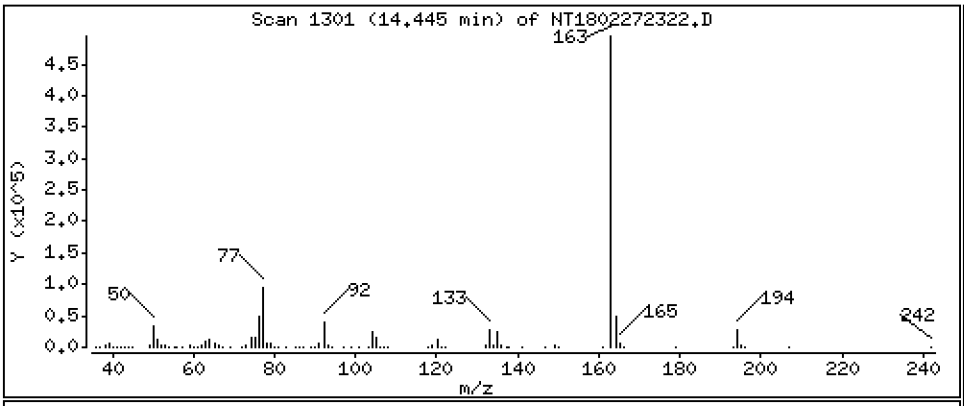
Operator: VTS

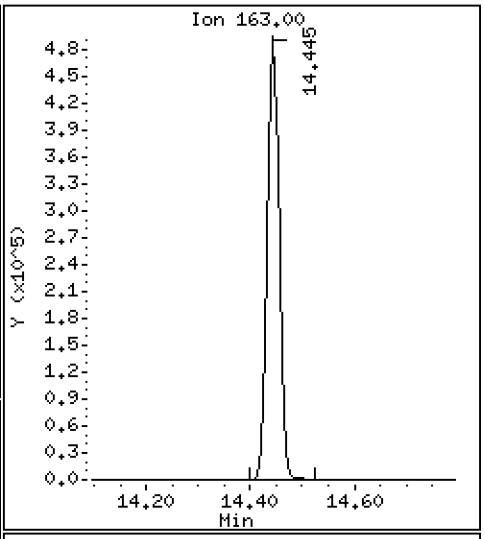
Column phase: ZB-5msi

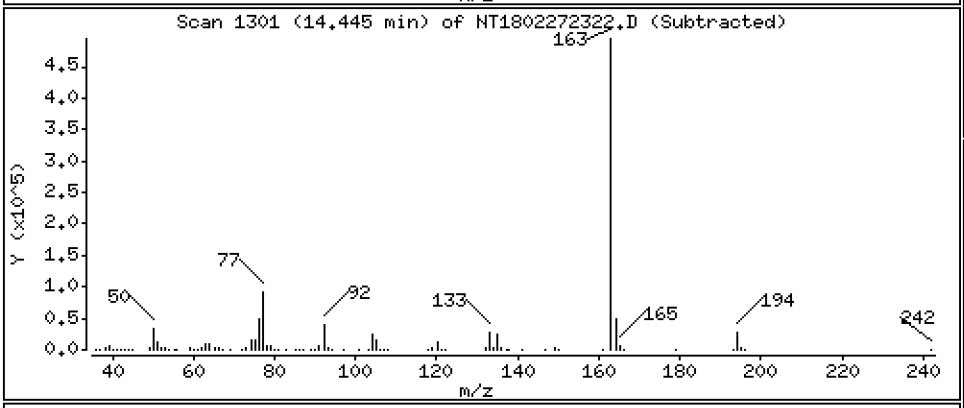
Column diameter: 0.25

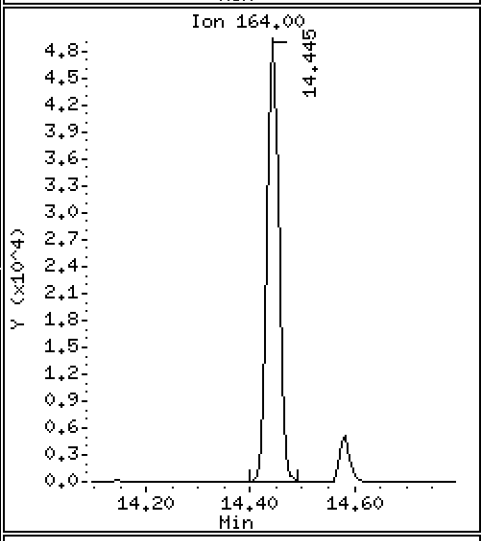
39 Dimethylphthalate

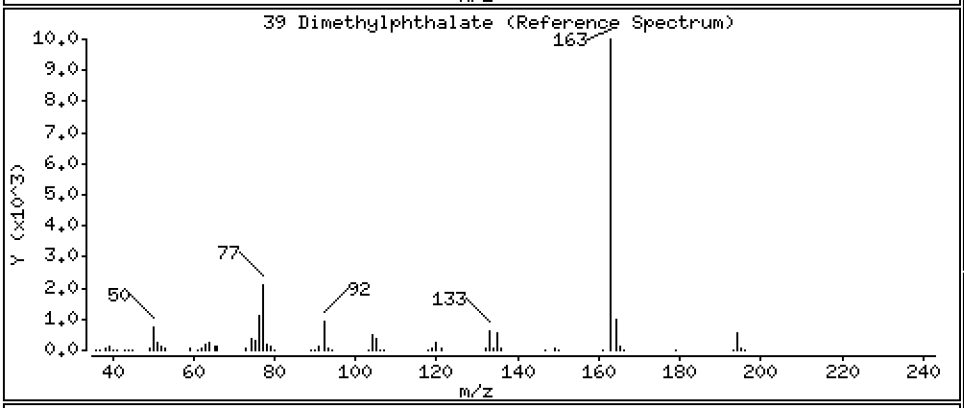
Concentration: 4.736 ug/mL

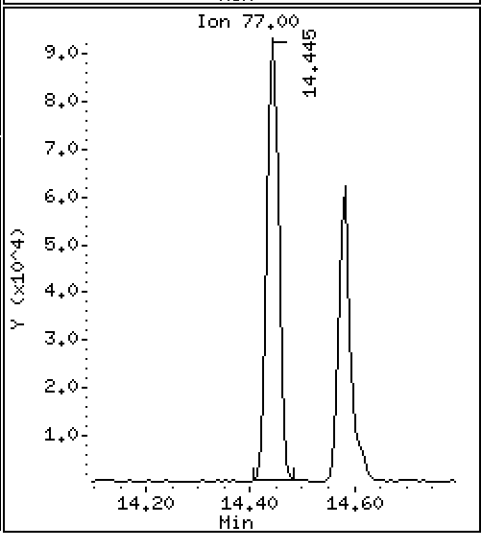


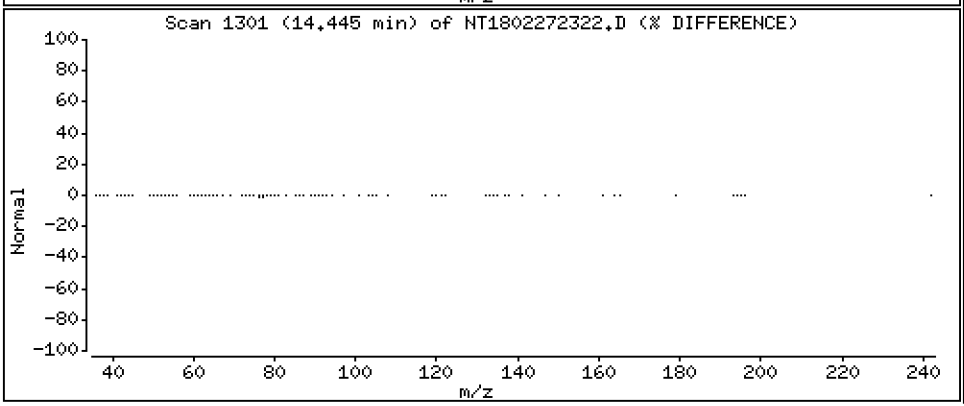












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

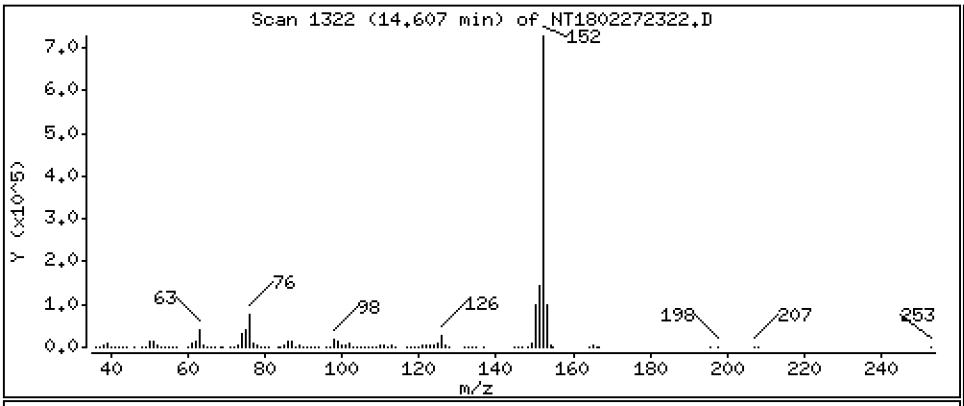
Operator: VTS

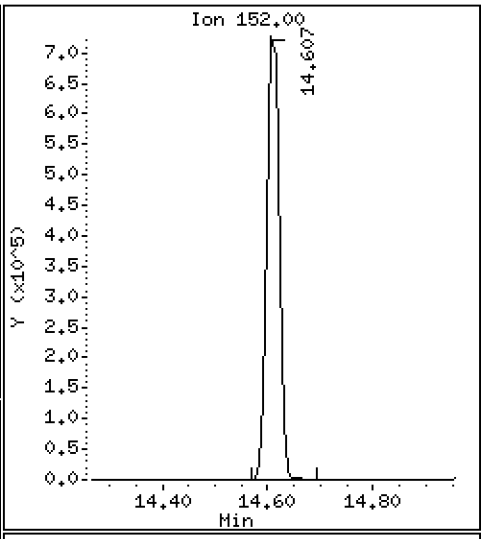
Column phase: ZB-5msi

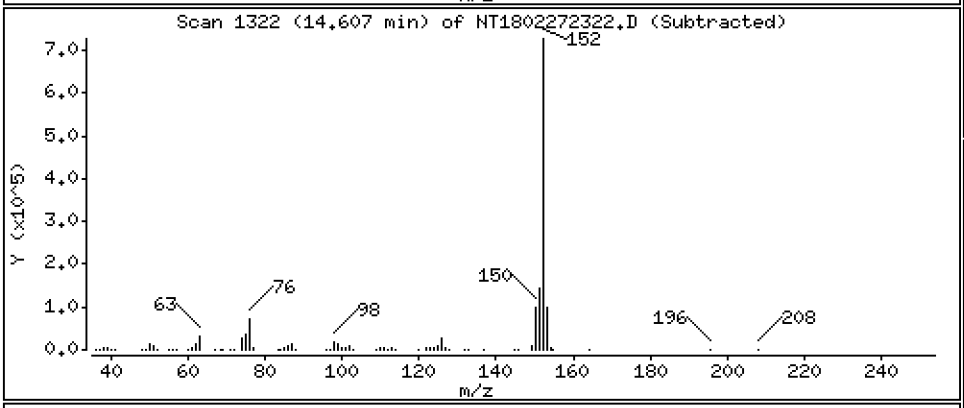
Column diameter: 0.25

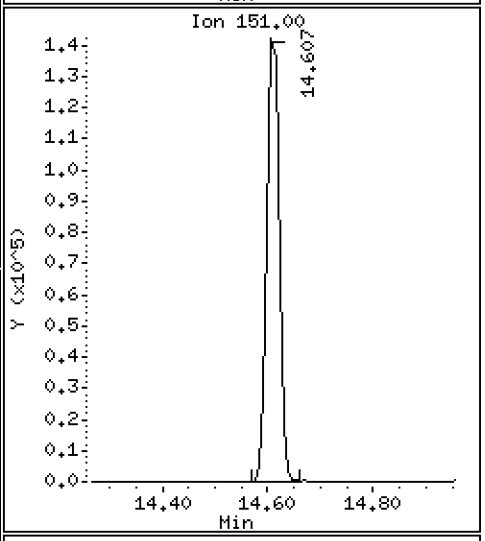
40 Acenaphthylene

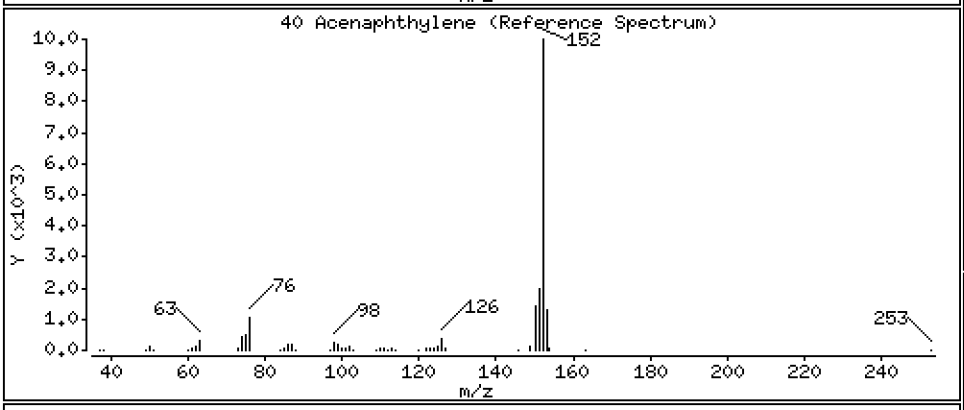
Concentration: 4.696 ug/mL

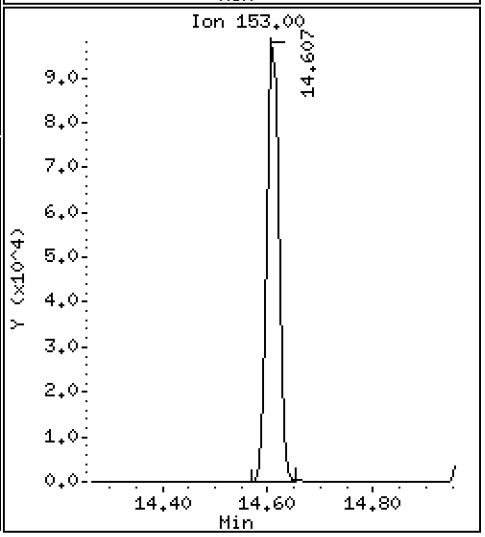


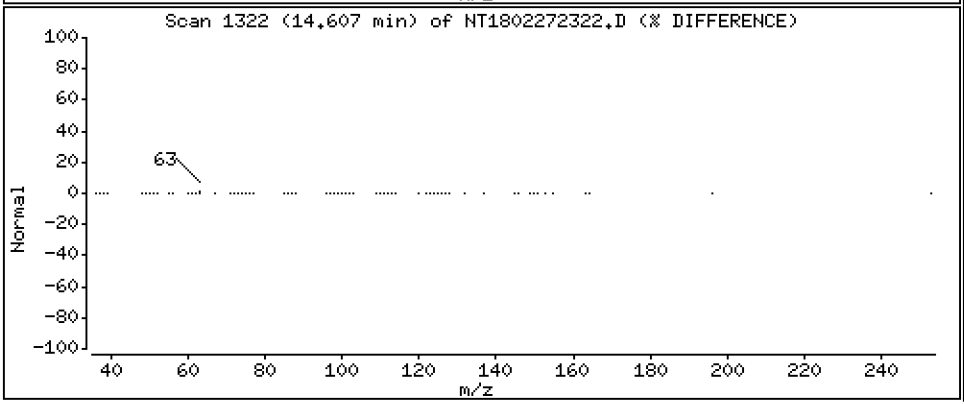












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

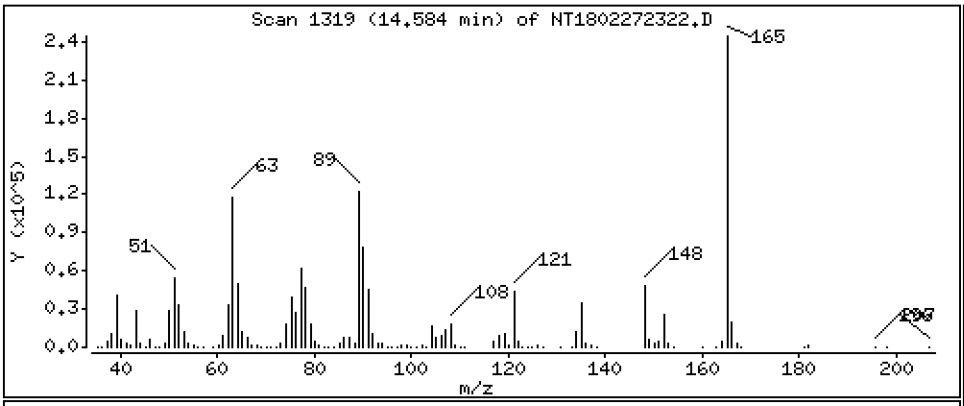
Operator: VTS

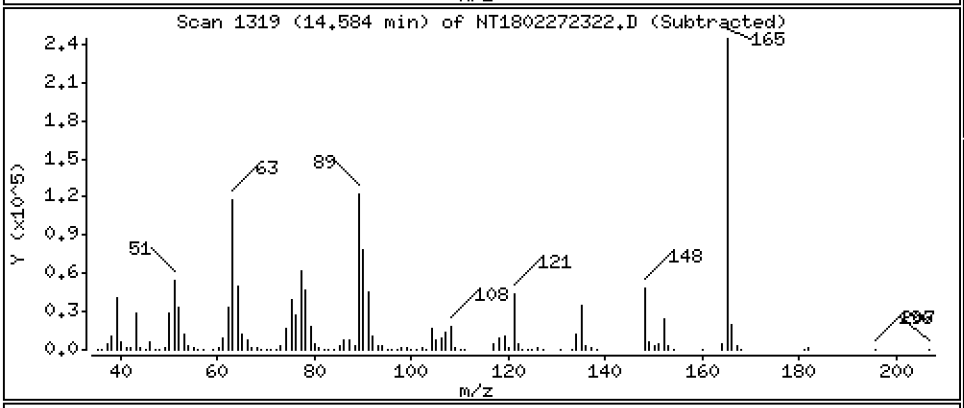
Column phase: ZB-5msi

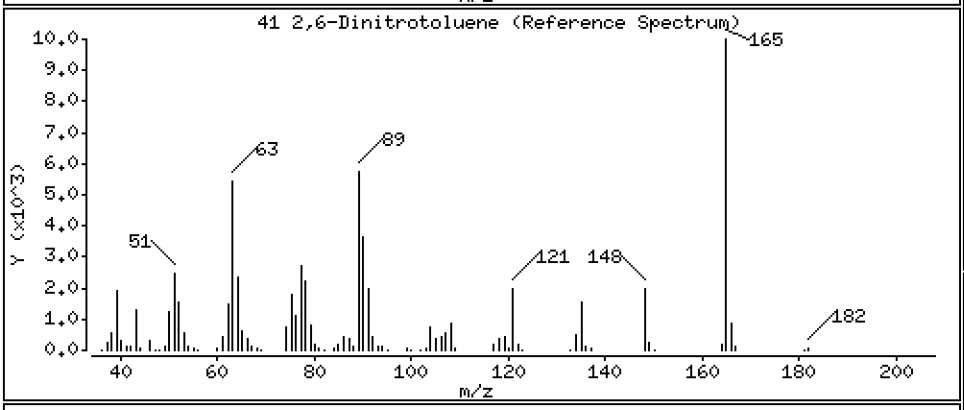
Column diameter: 0.25

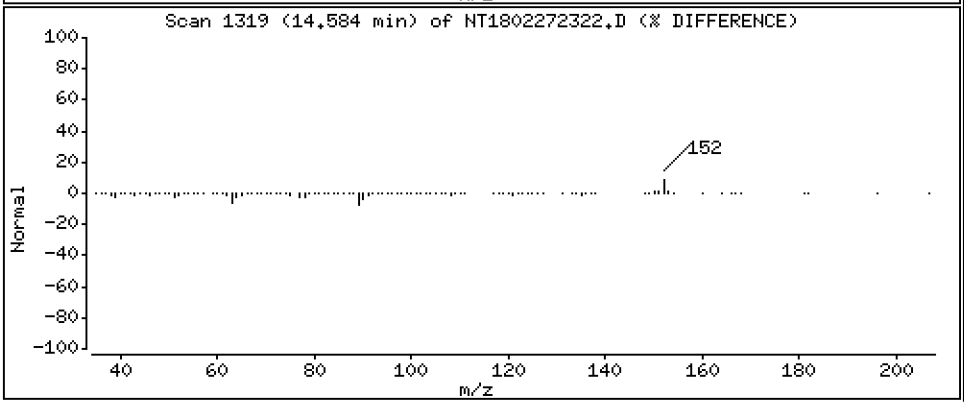
41 2,6-Dinitrotoluene

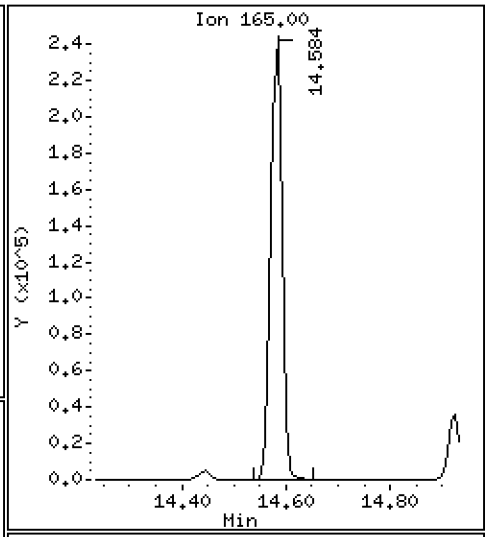
Concentration: 9.747 ug/mL

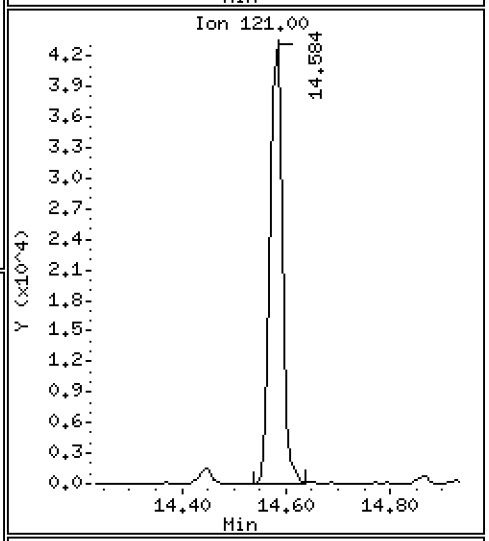


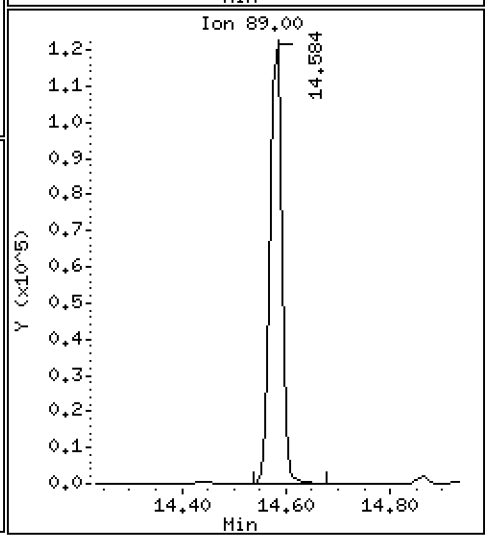












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272322.D

Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

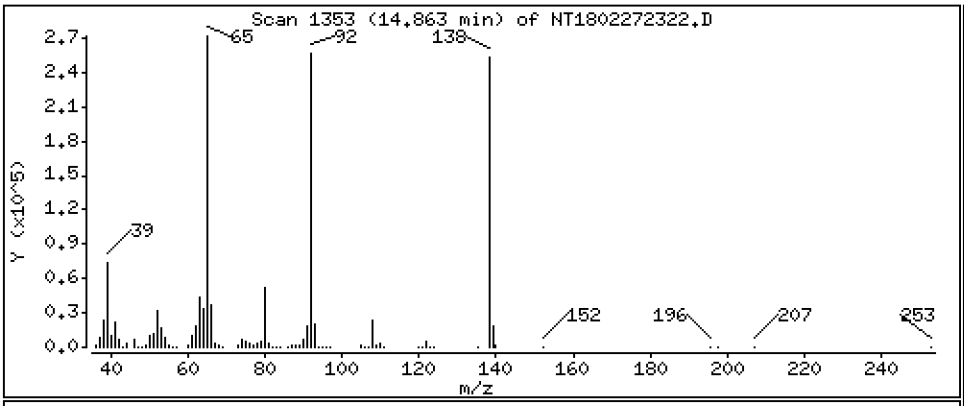
Operator: VTS

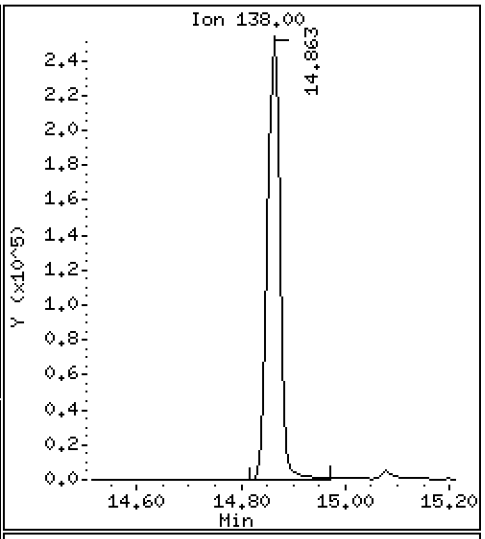
Column phase: ZB-5msi

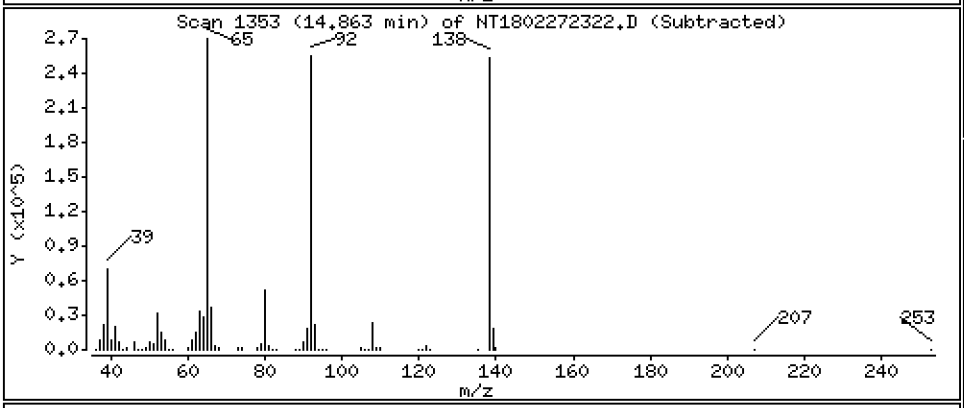
Column diameter: 0.25

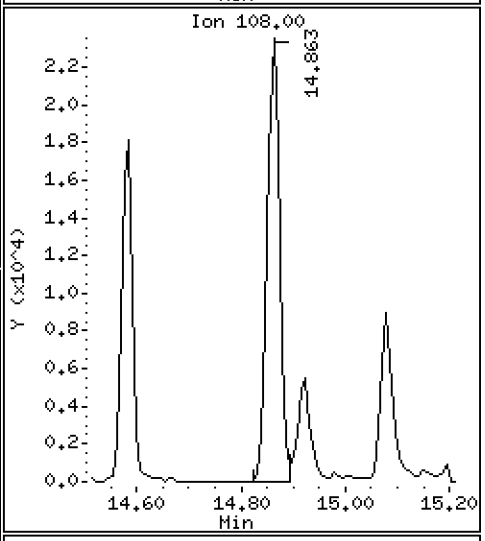
43 3-Nitroaniline

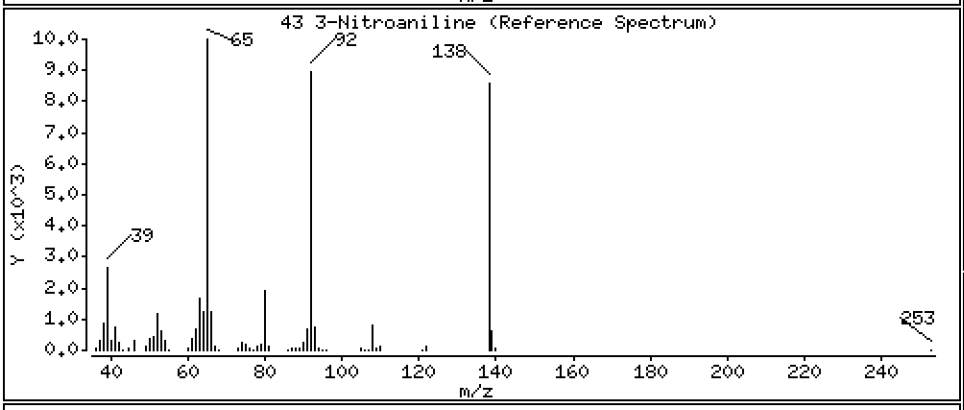
Concentration: 9.583 ug/mL

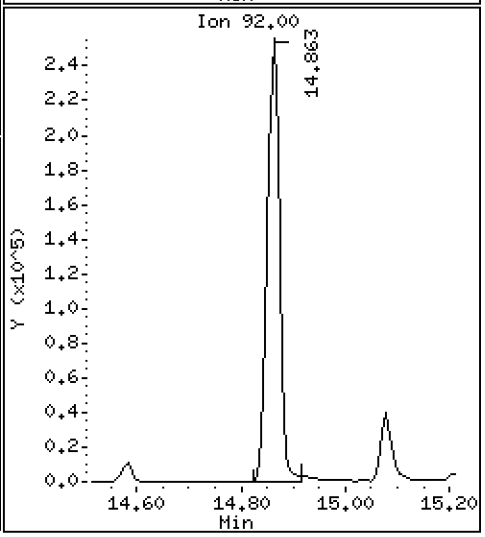


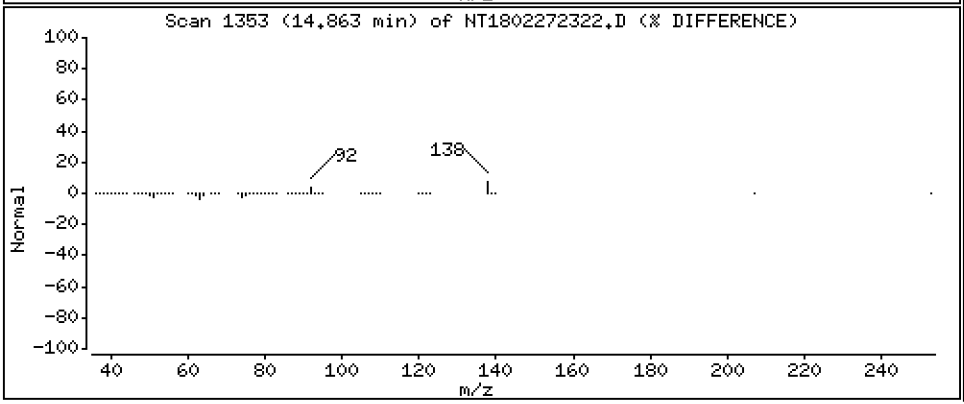












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

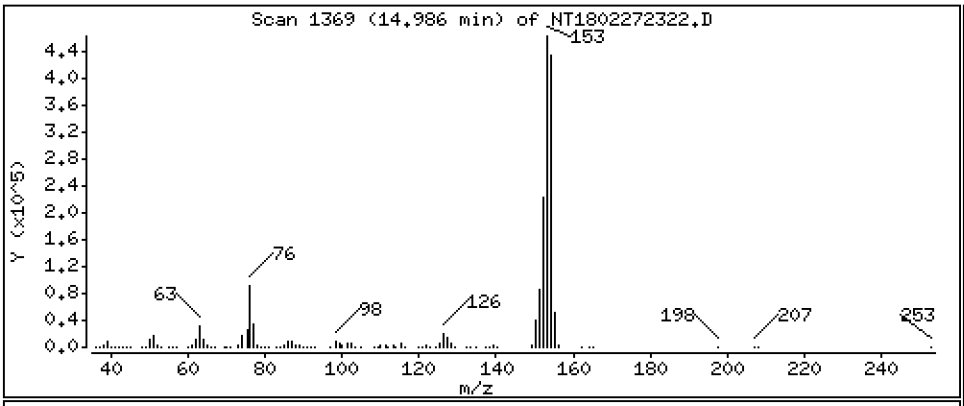
Operator: VTS

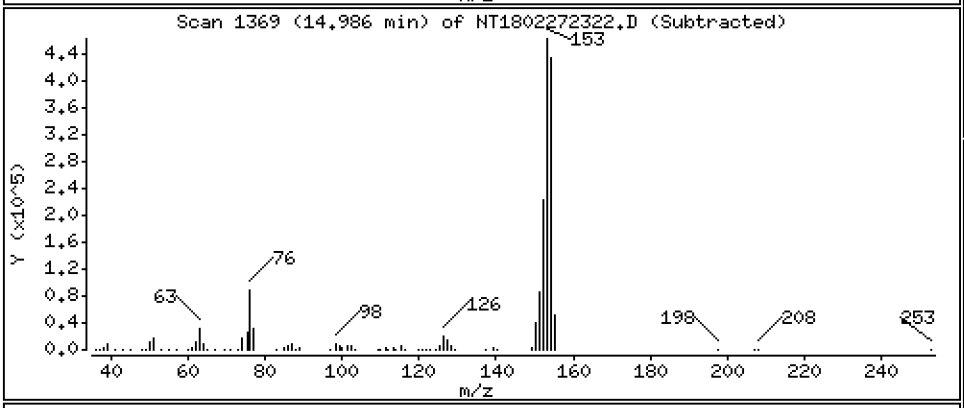
Column phase: ZB-5msi

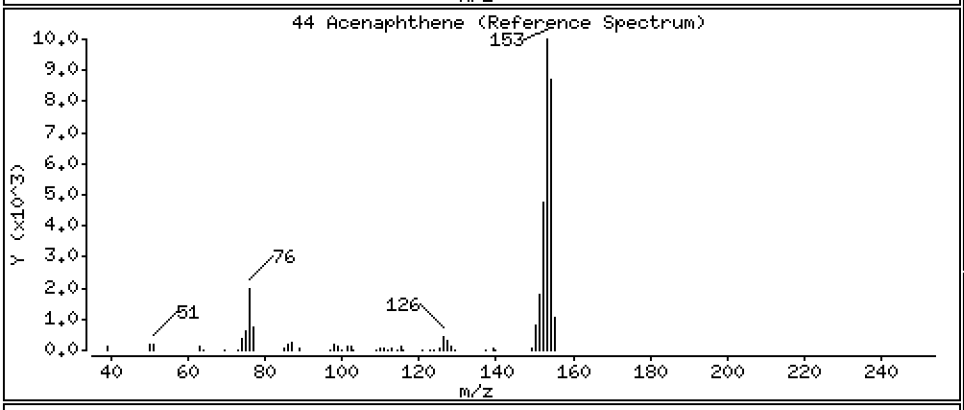
Column diameter: 0.25

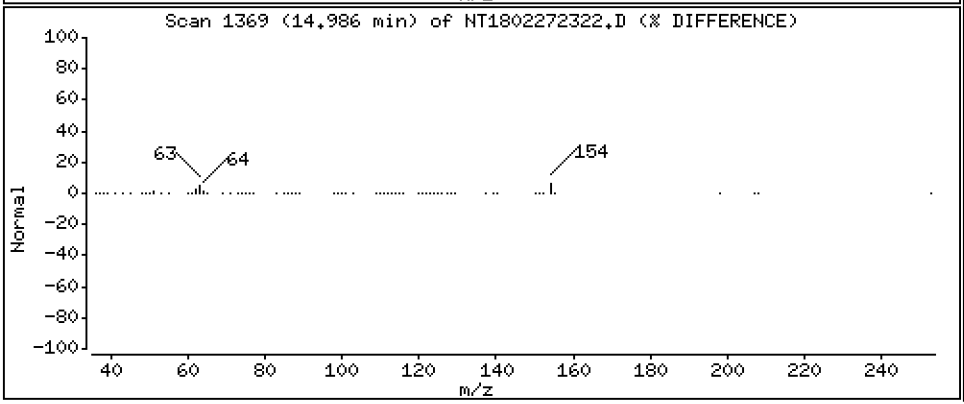
44 Acenaphthene

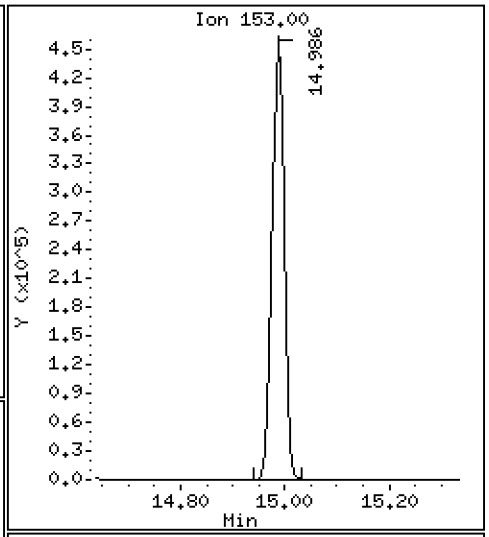
Concentration: 4.552 ug/mL

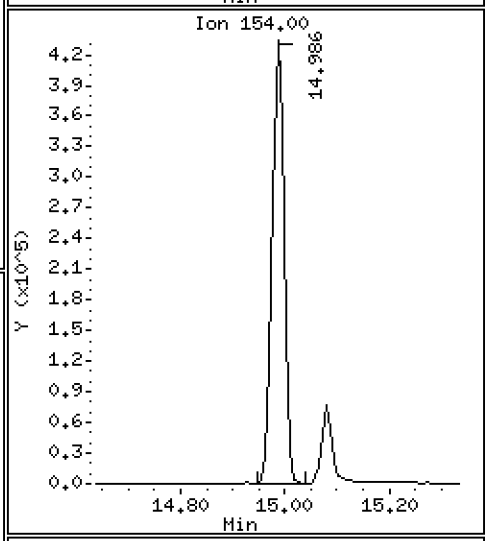


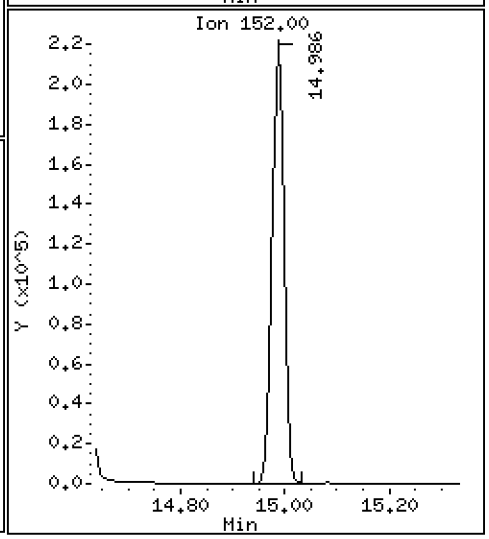












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

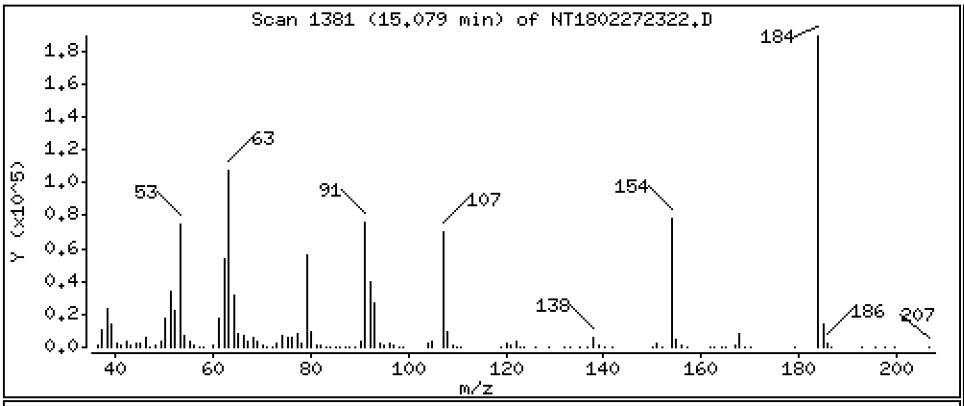
Operator: VTS

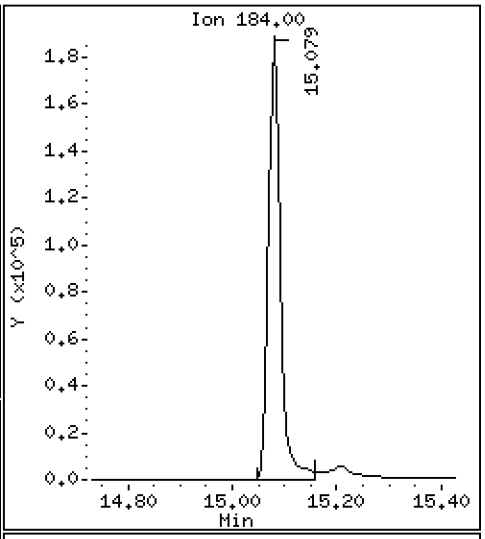
Column phase: ZB-5msi

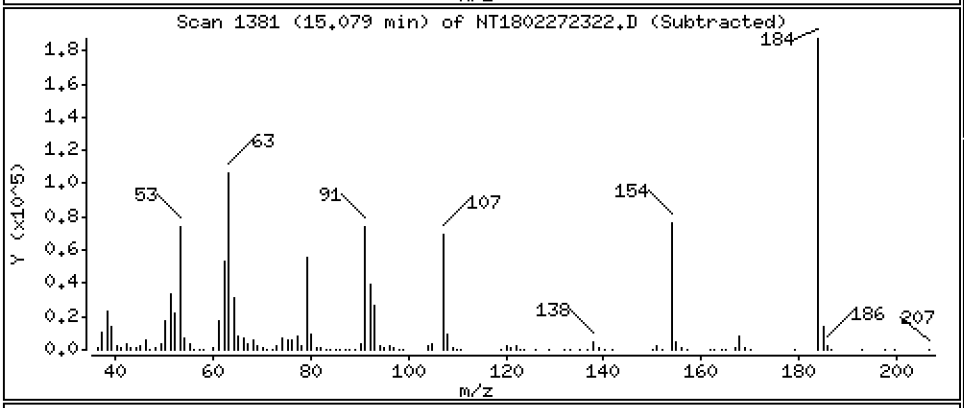
Column diameter: 0.25

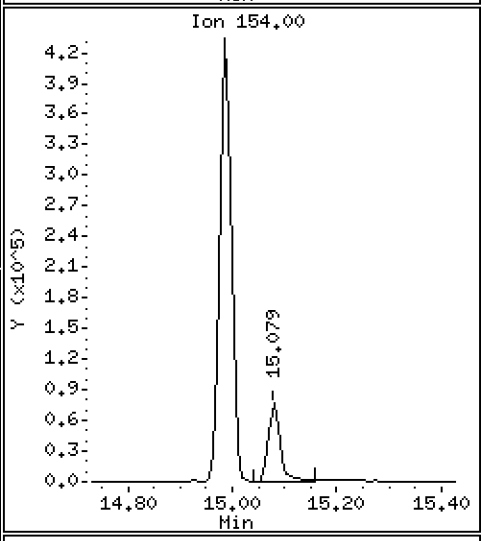
45 2,4-Dinitrophenol

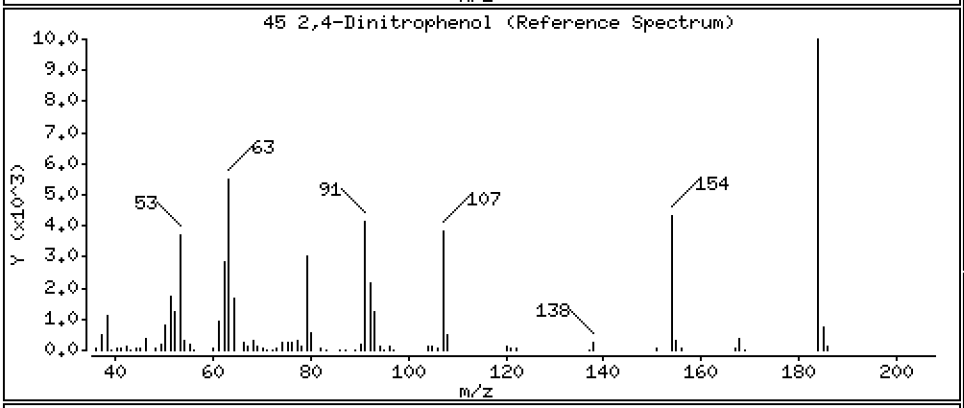
Concentration: 16.42 ug/mL

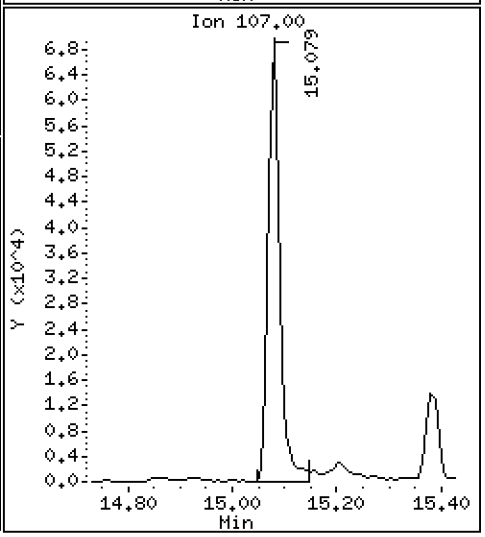


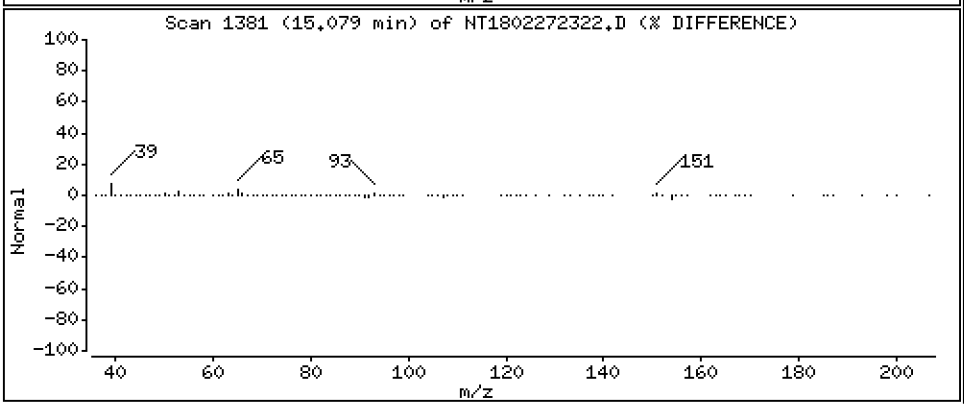












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

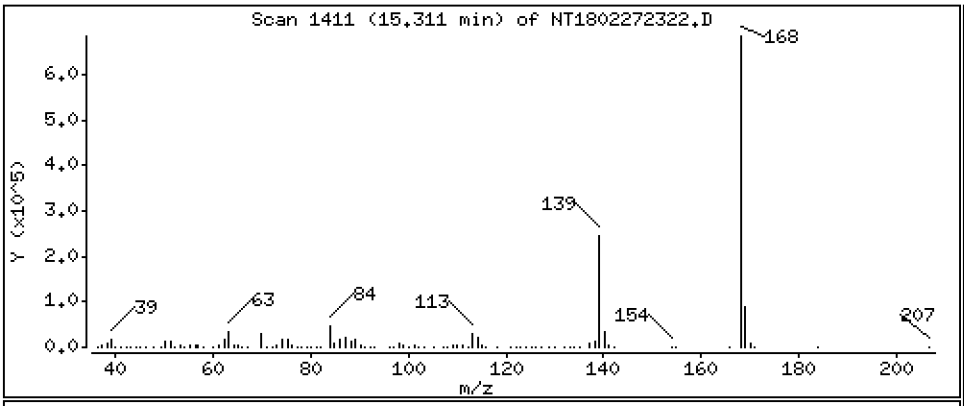
Operator: VTS

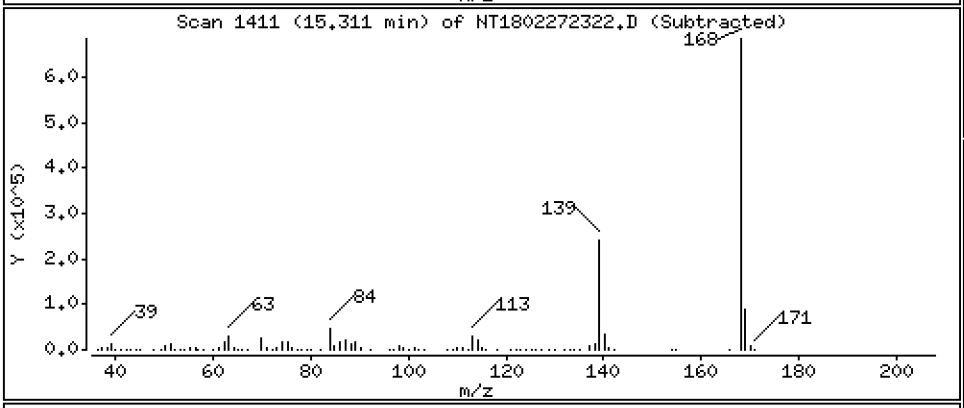
Column phase: ZB-5msi

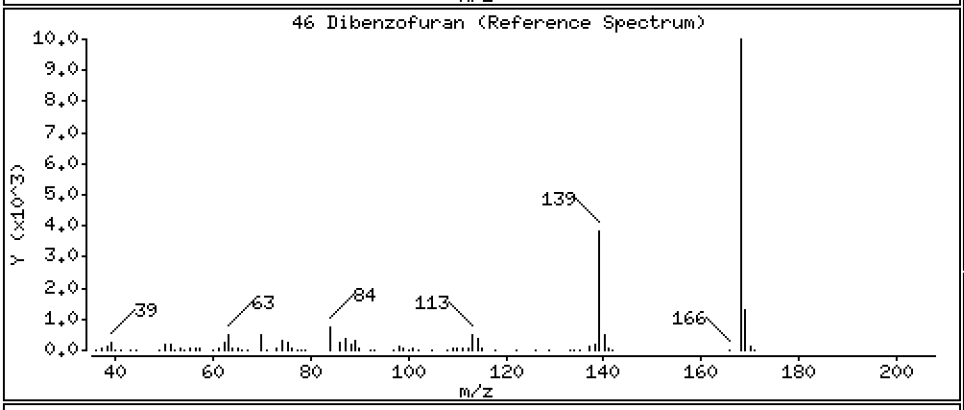
Column diameter: 0.25

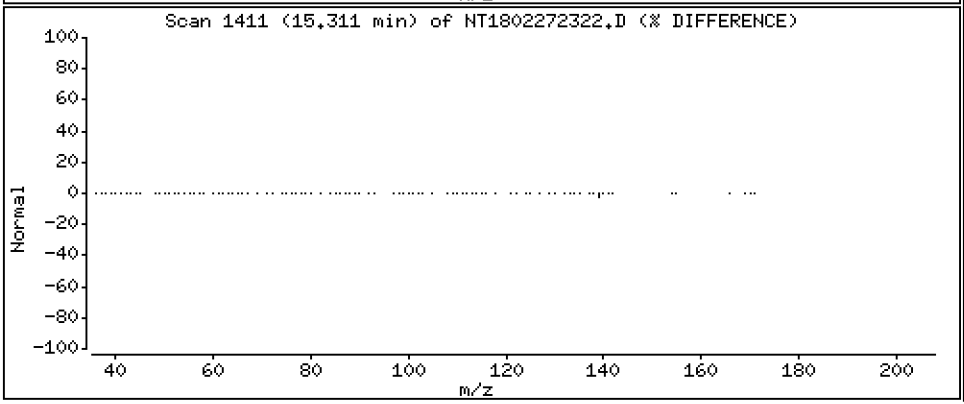
46 Dibenzofuran

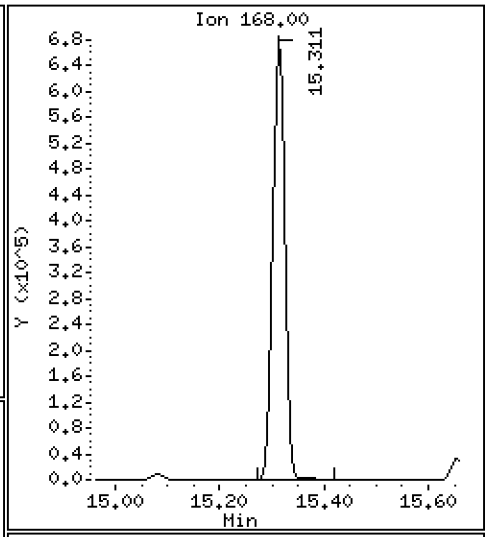
Concentration: 4.638 ug/mL

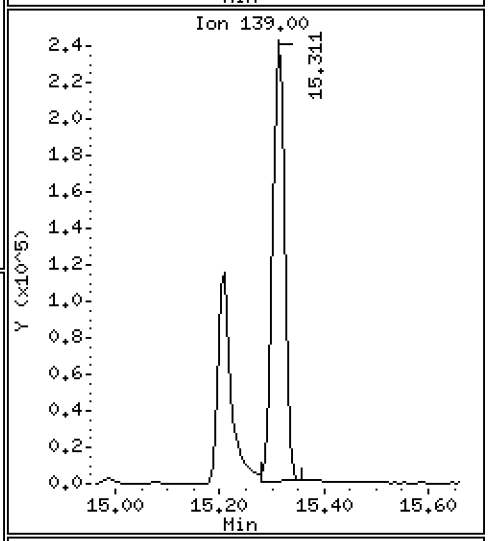


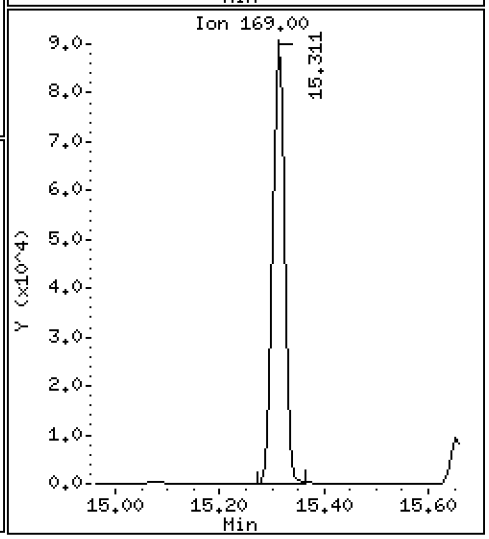












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

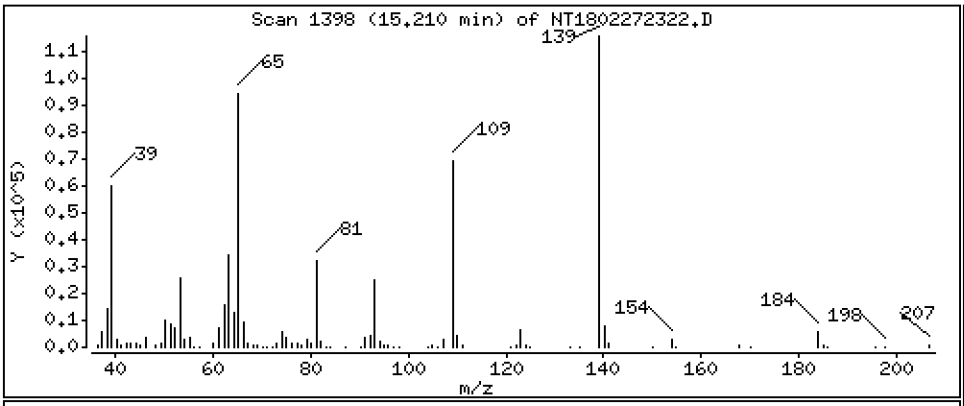
Operator: VTS

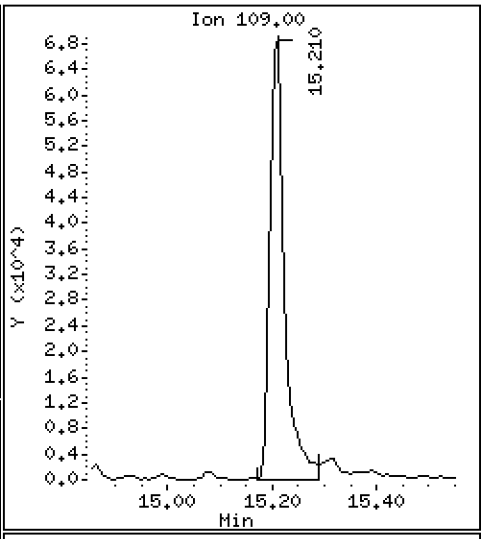
Column phase: ZB-5msi

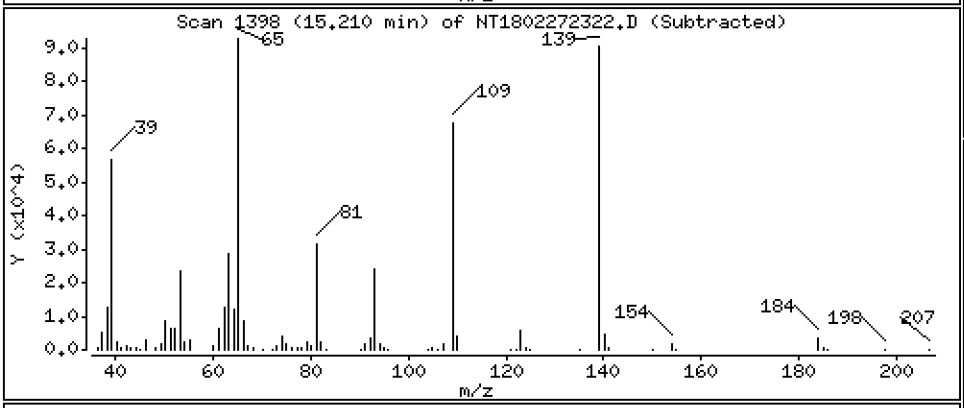
Column diameter: 0.25

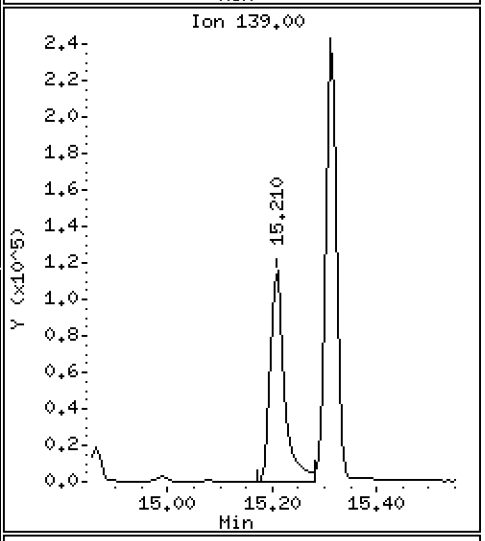
47 4-Nitrophenol

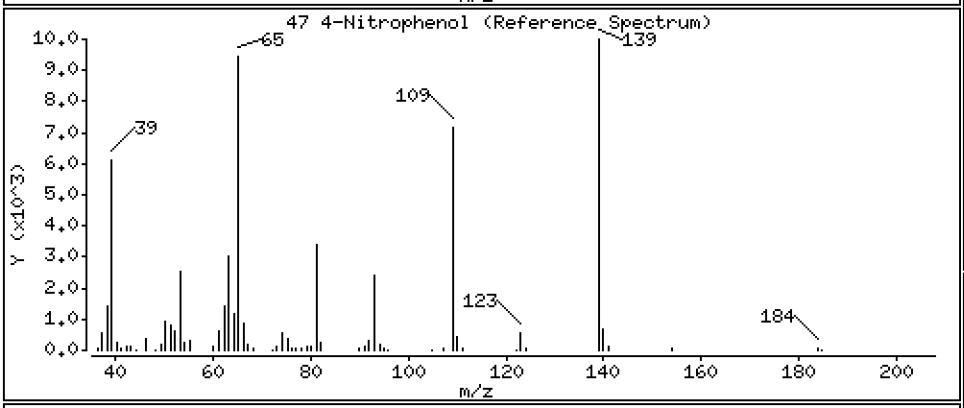
Concentration: 7.722 ug/mL

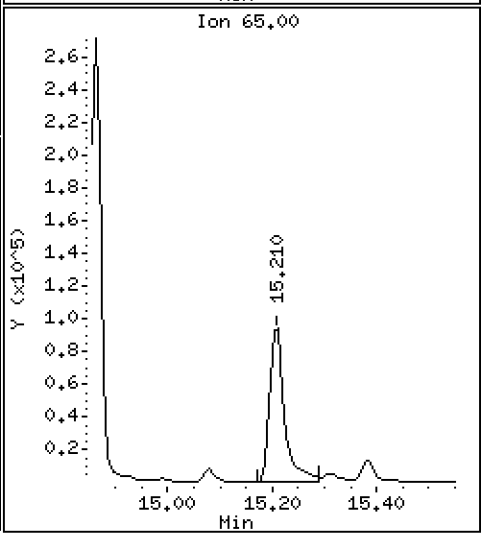


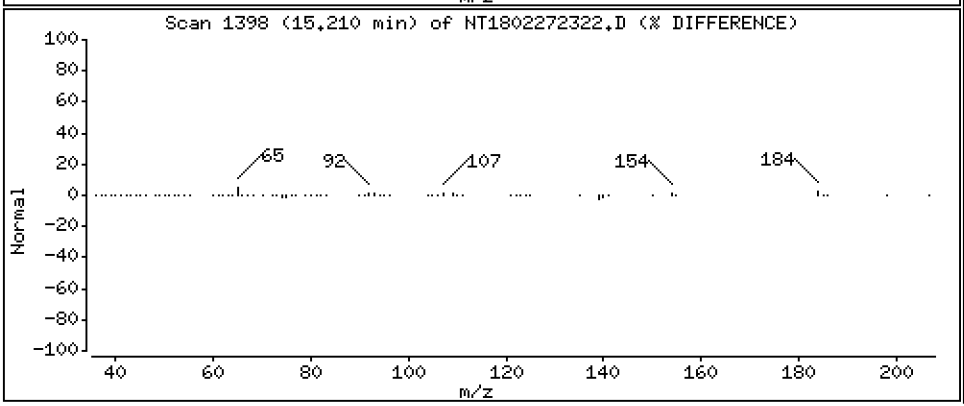












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

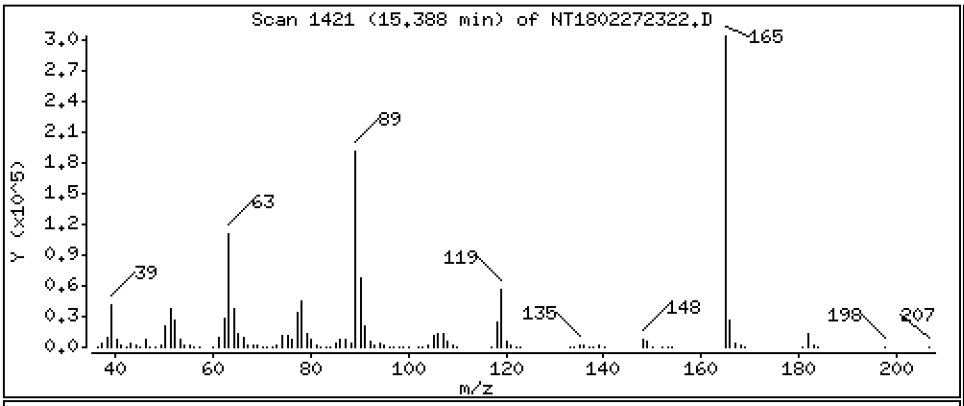
Operator: VTS

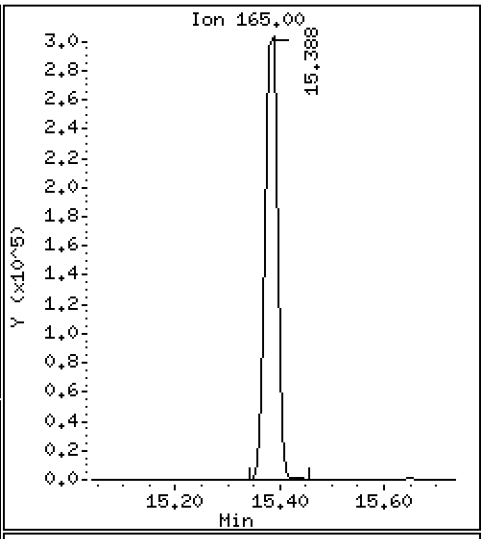
Column phase: ZB-5msi

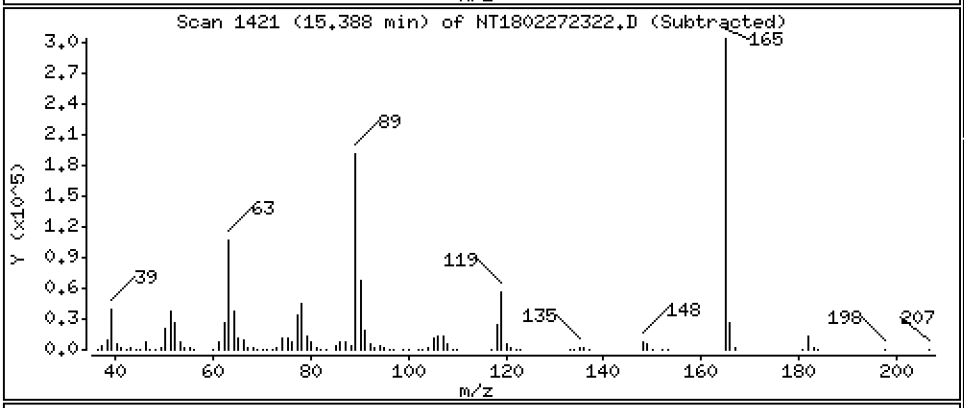
Column diameter: 0.25

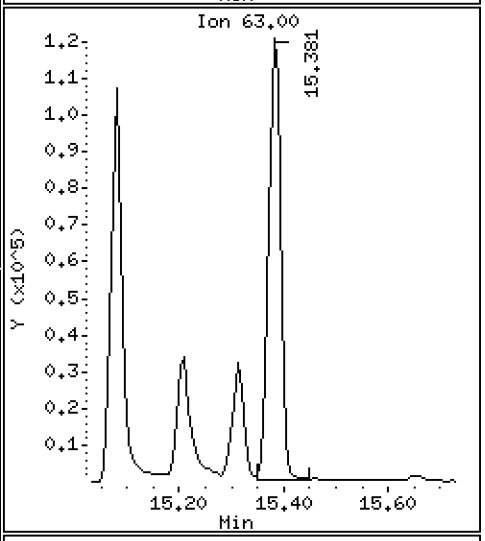
48 2,4-Dinitrotoluene

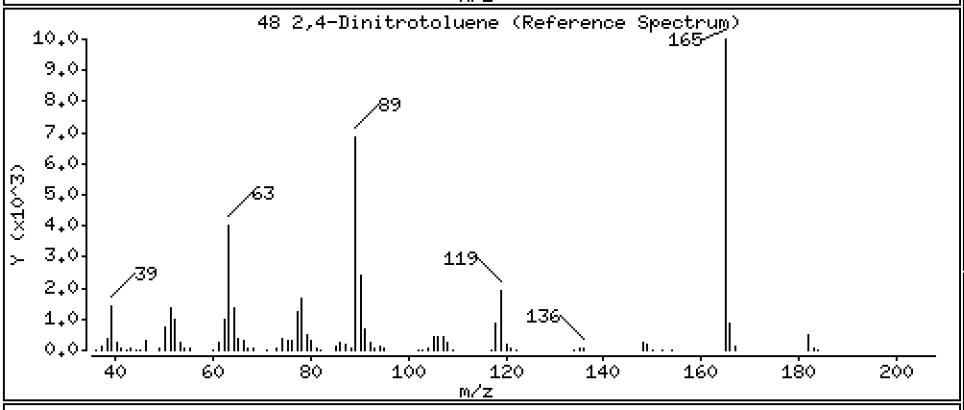
Concentration: 9.717 ug/mL

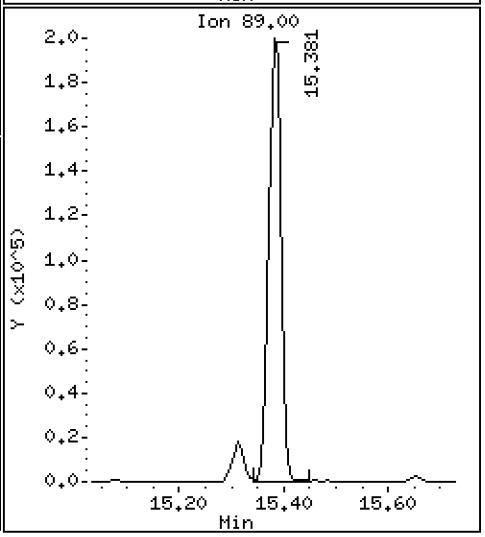


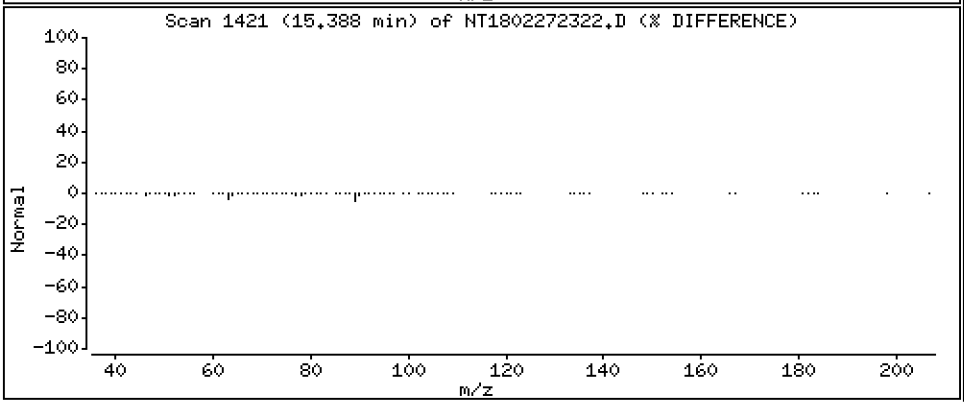












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

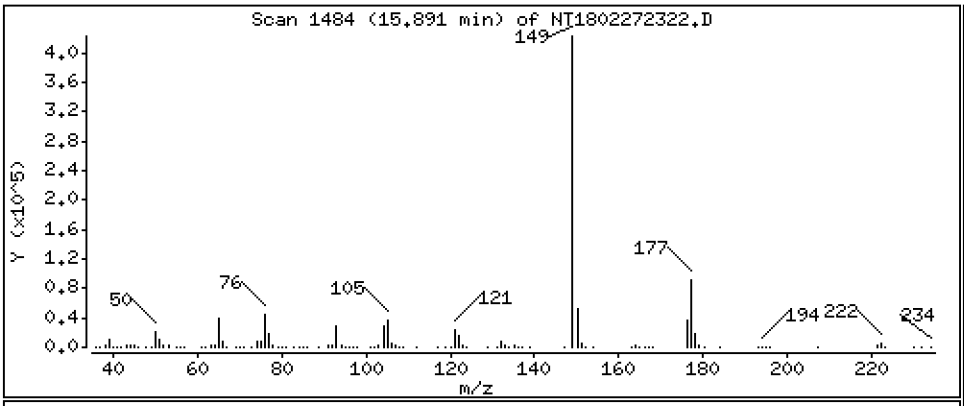
Operator: VTS

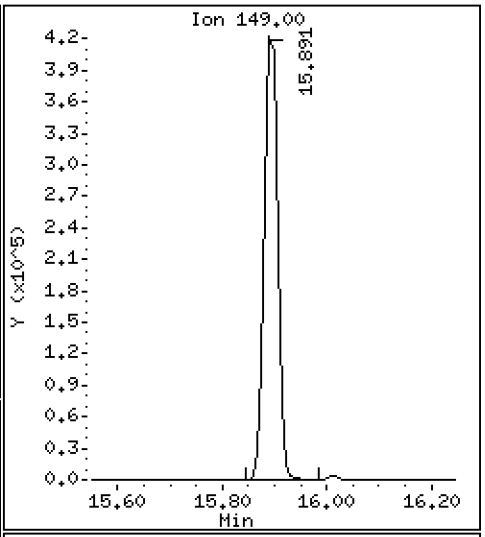
Column phase: ZB-5msi

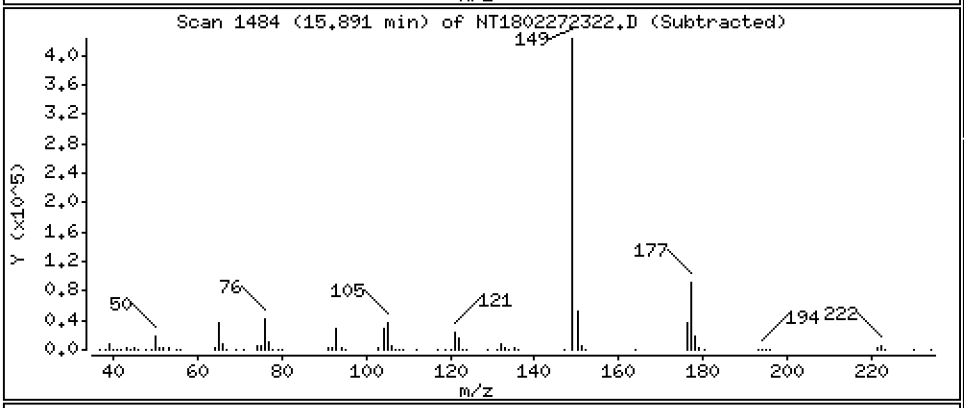
Column diameter: 0.25

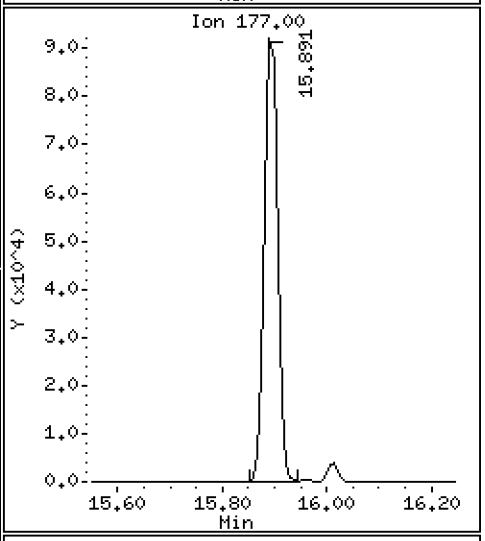
50 Diethylphthalate

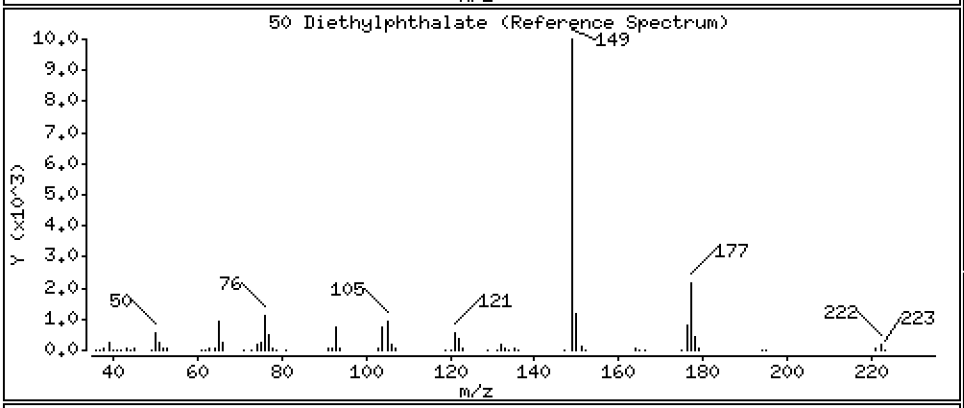
Concentration: 4.984 ug/mL

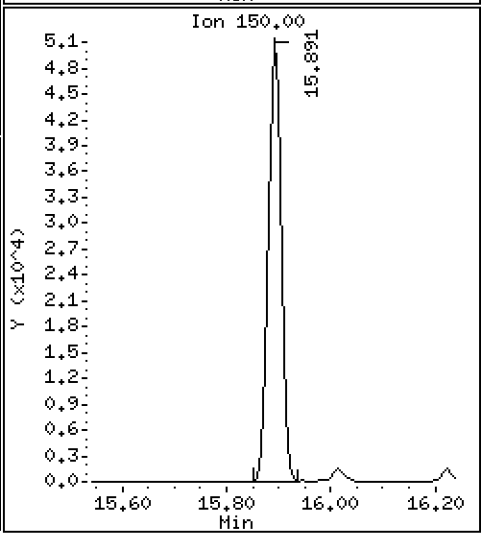


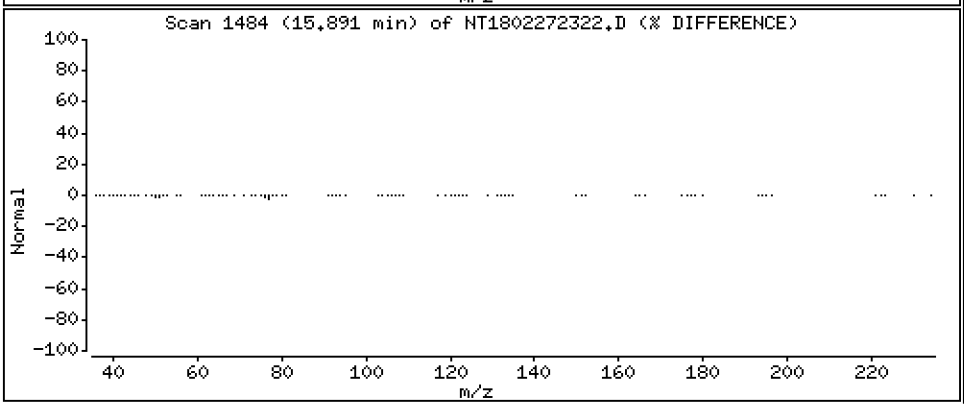












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272322.D

Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

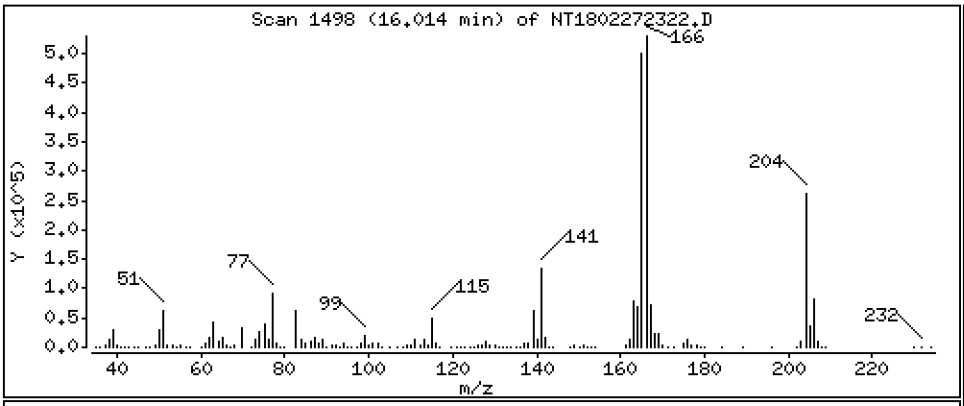
Operator: VTS

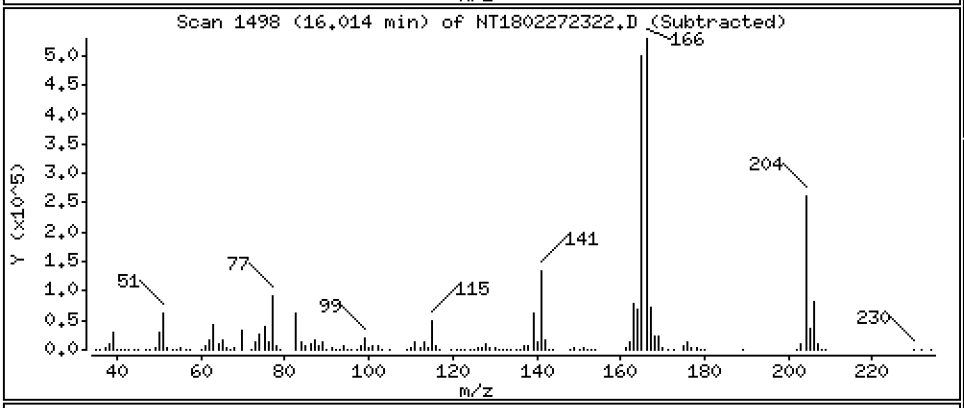
Column phase: ZB-5msi

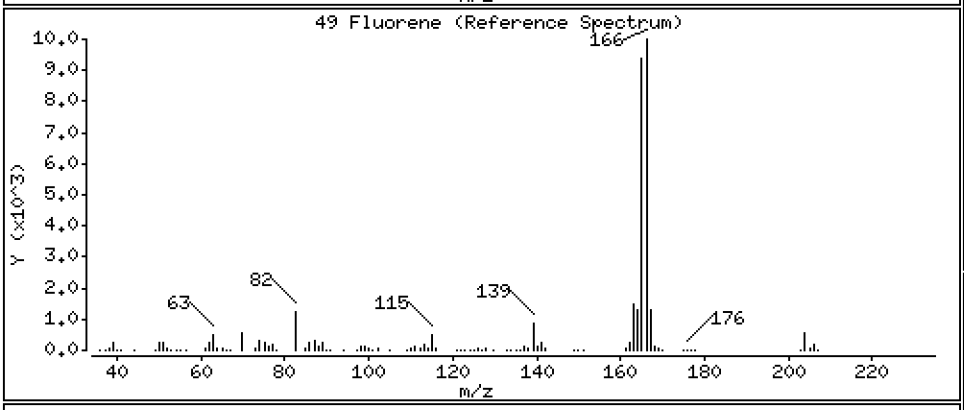
Column diameter: 0.25

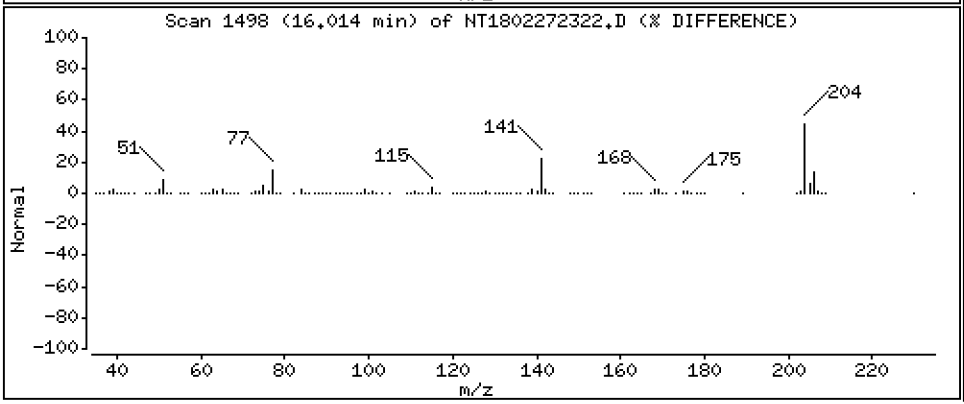
49 Fluorene

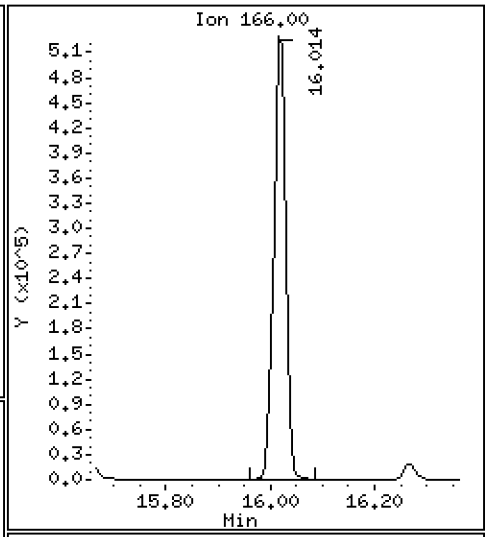
Concentration: 5.428 ug/mL

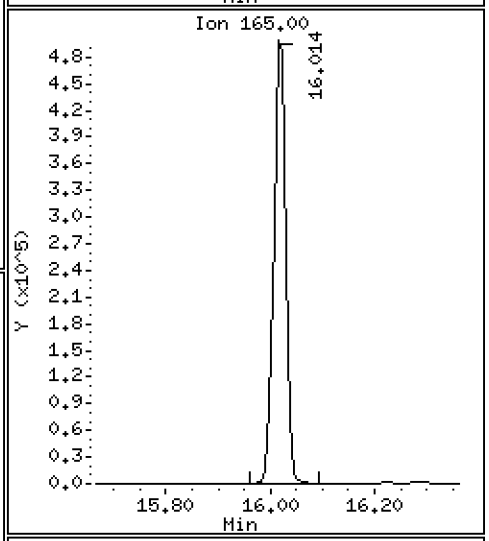


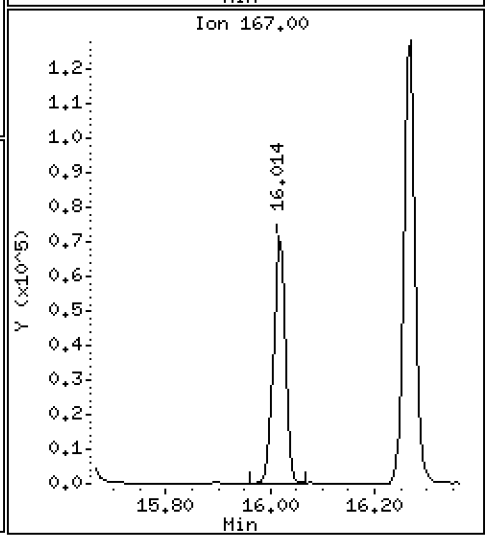












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

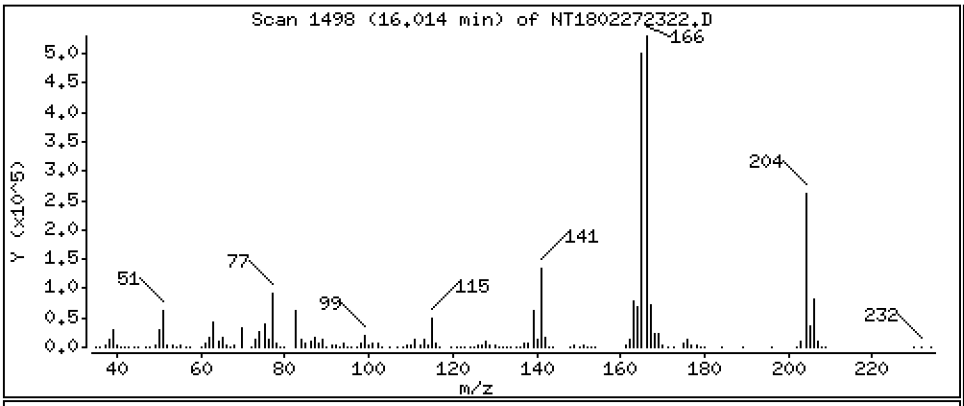
Operator: VTS

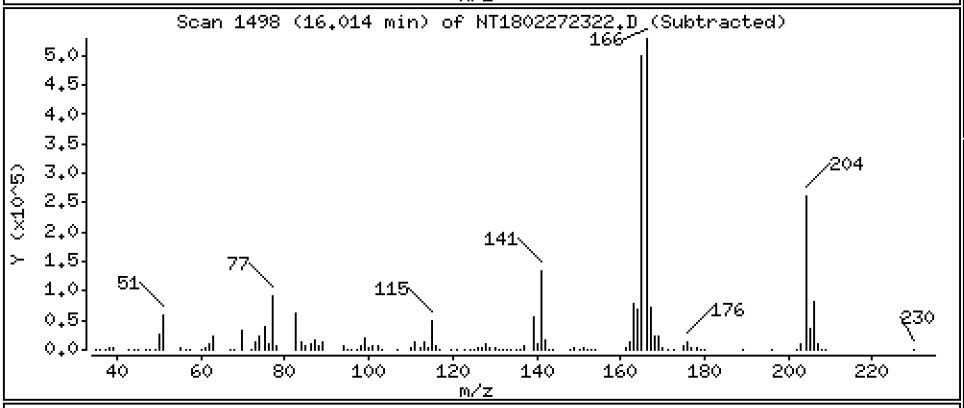
Column phase: ZB-5msi

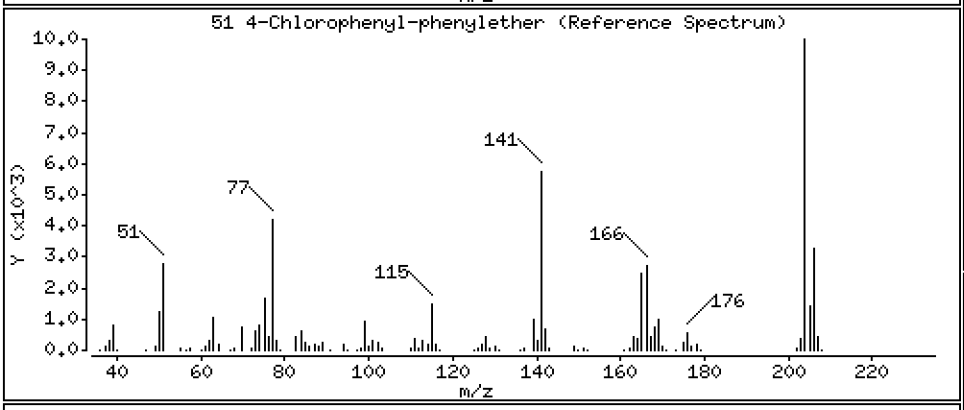
Column diameter: 0.25

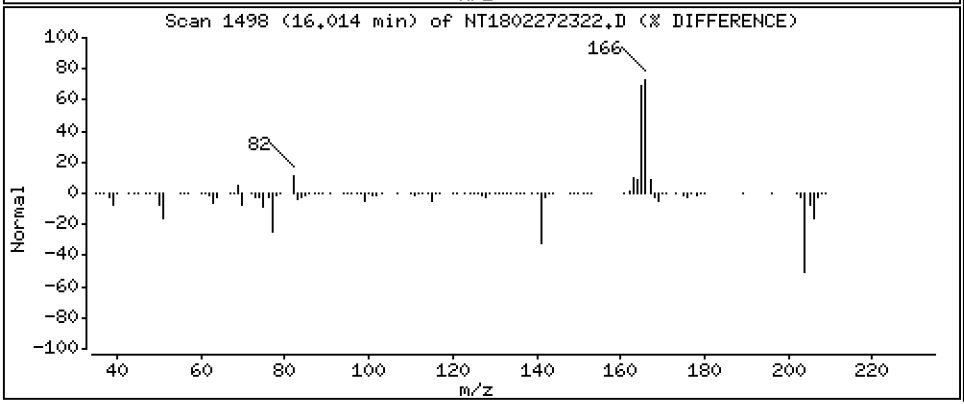
51 4-Chlorophenyl-phenylether

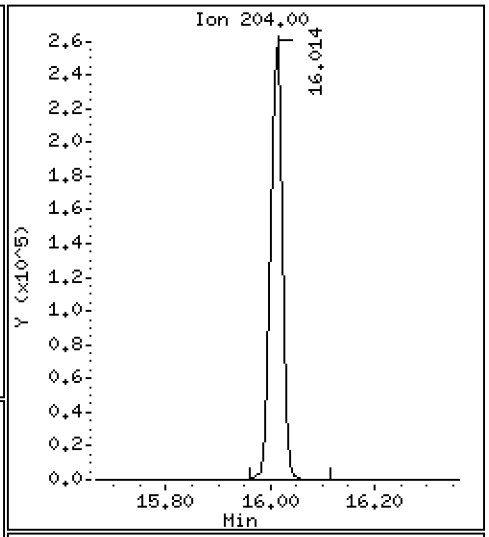
Concentration: 5.331 ug/mL

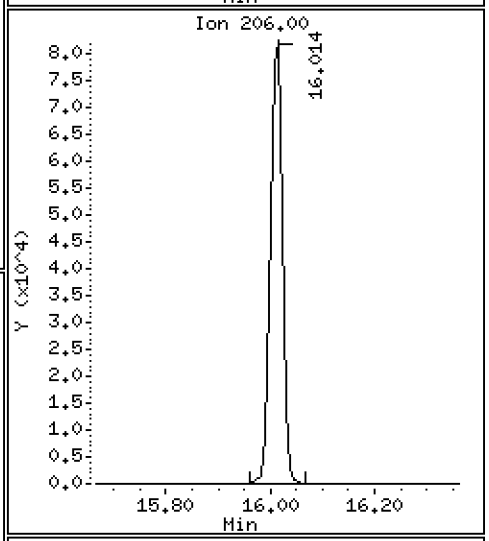


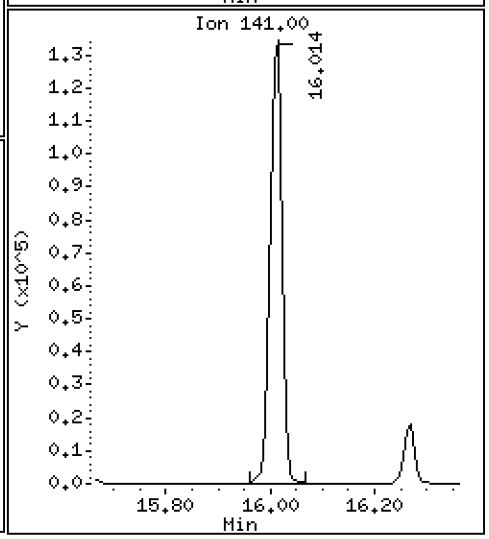












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272322.D

Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

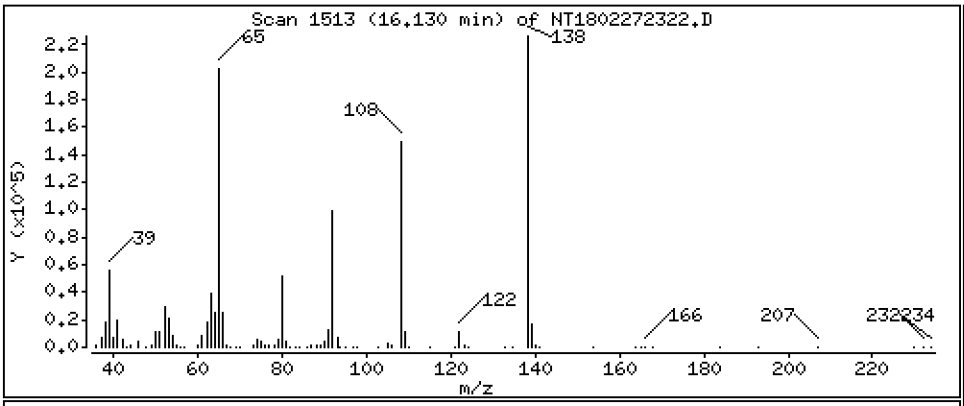
Operator: VTS

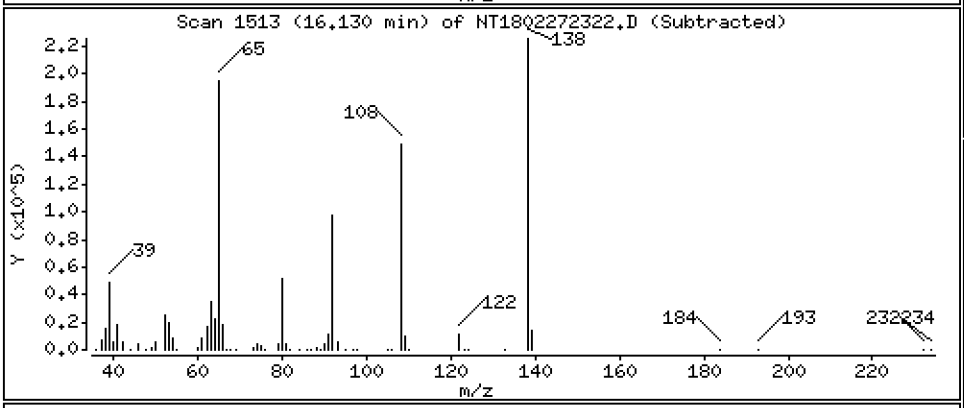
Column phase: ZB-5msi

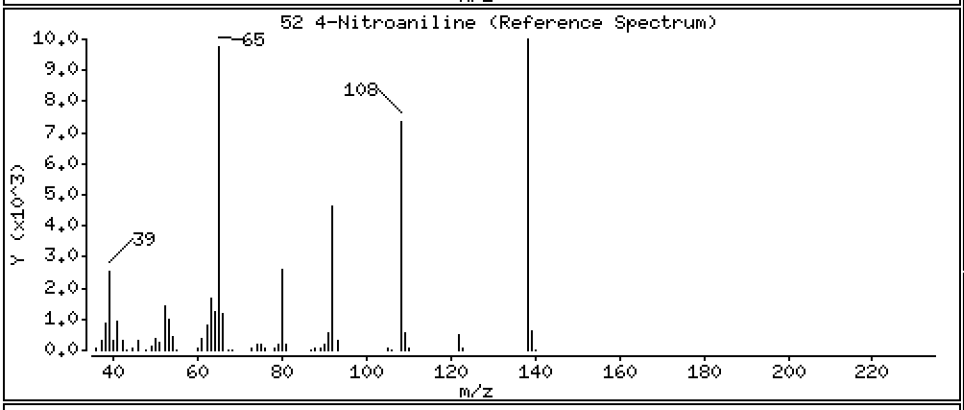
Column diameter: 0.25

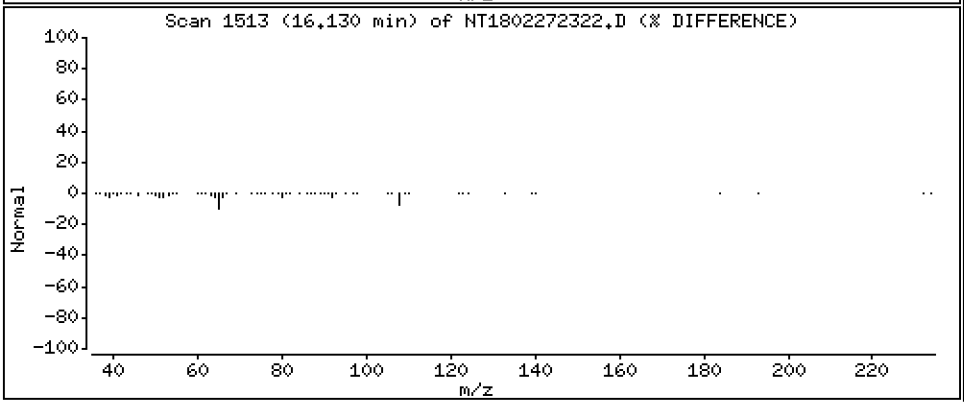
52 4-Nitroaniline

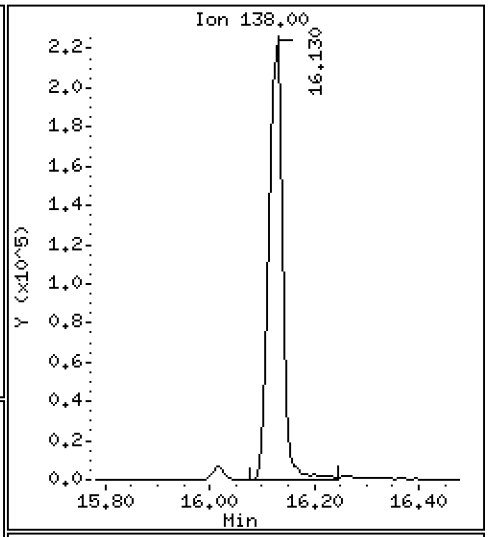
Concentration: 9.670 ug/mL

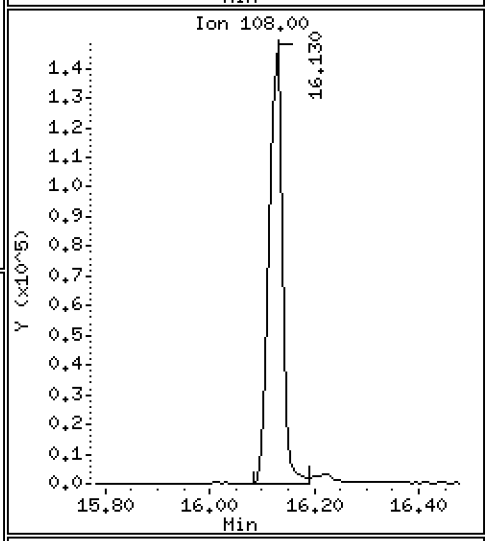


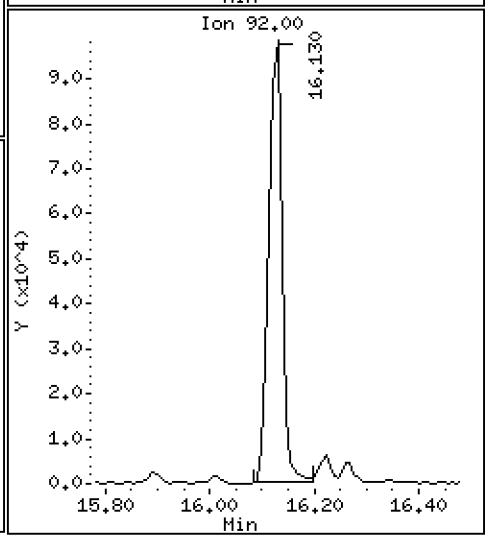












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

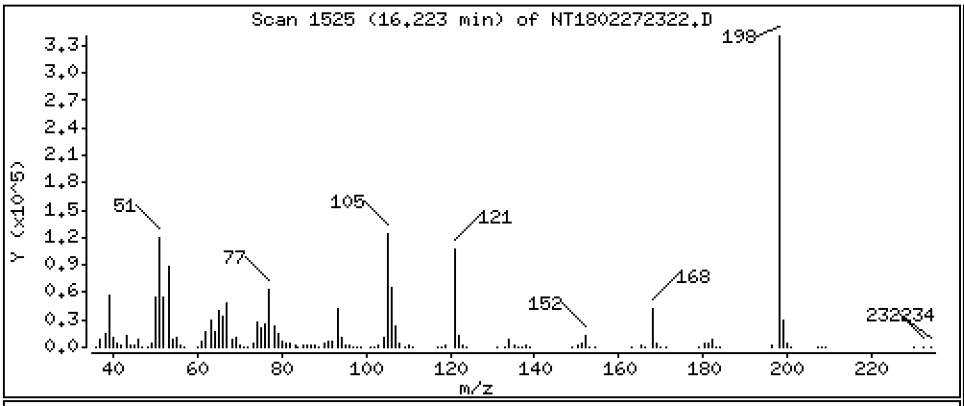
Operator: VTS

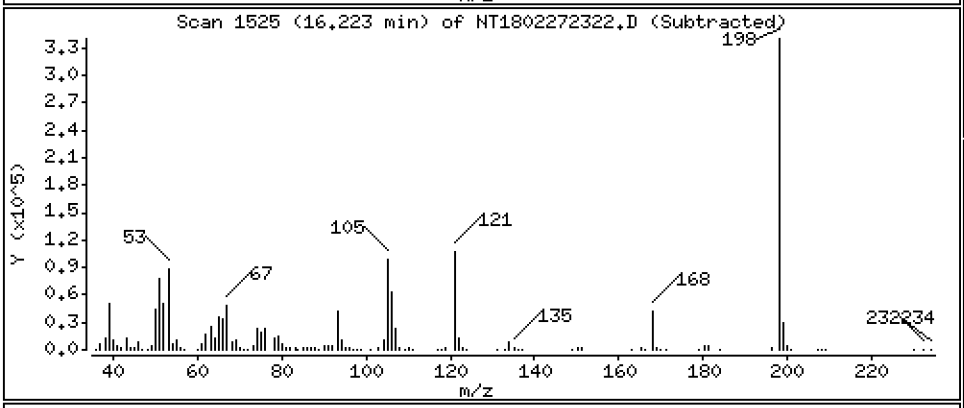
Column phase: ZB-5msi

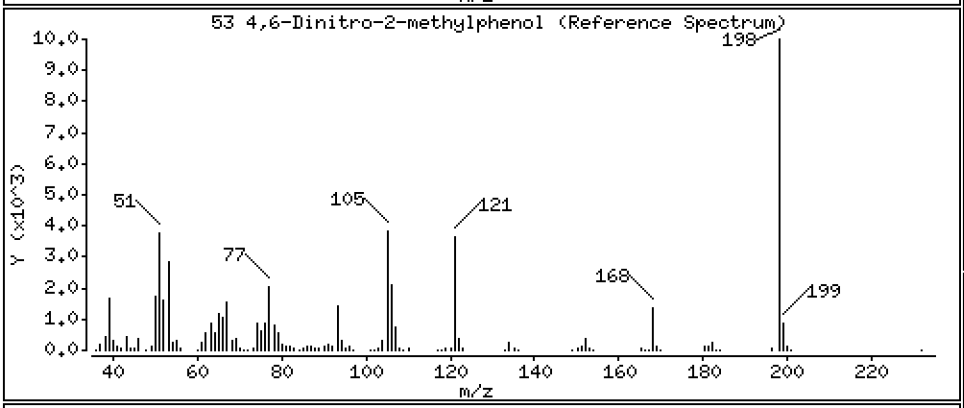
Column diameter: 0.25

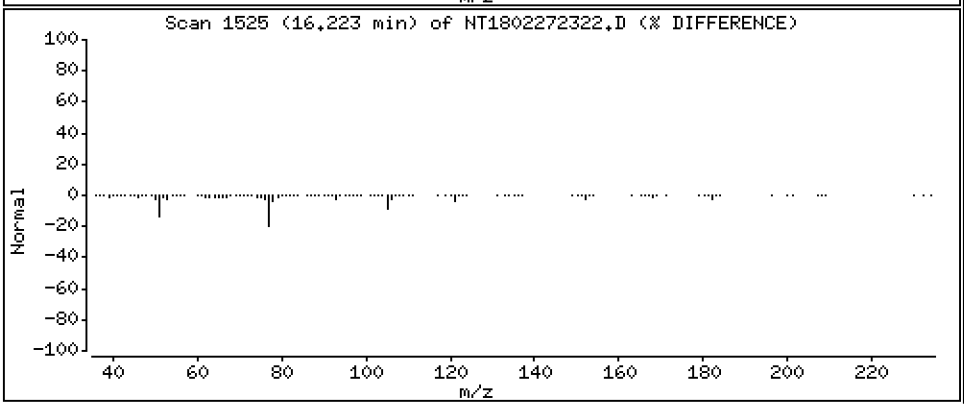
53 4,6-Dinitro-2-methylphenol

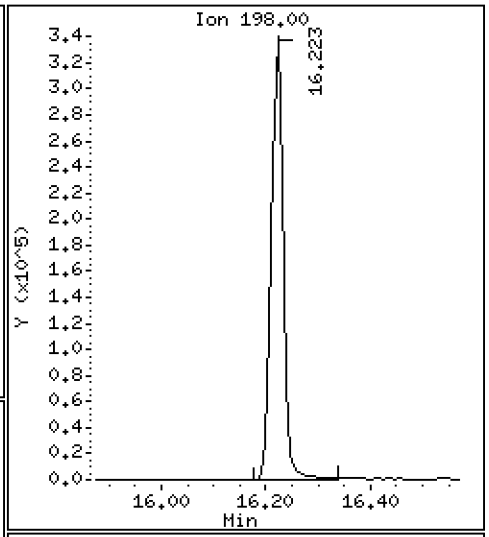
Concentration: 16.56 ug/mL

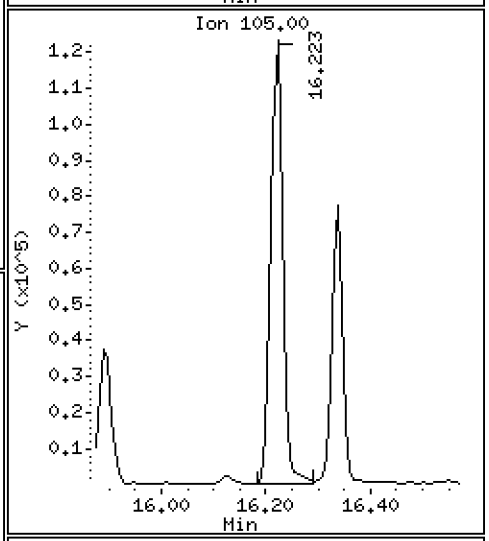


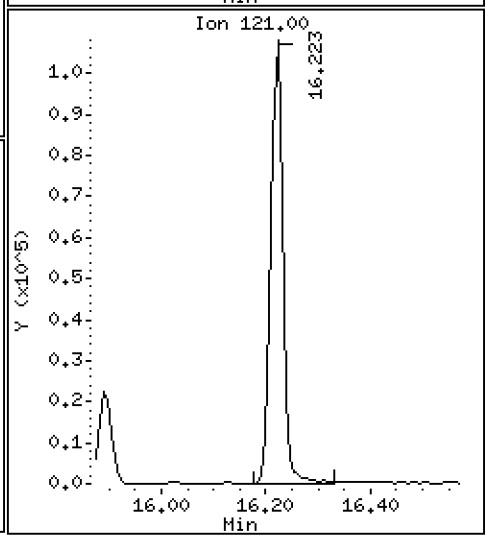












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

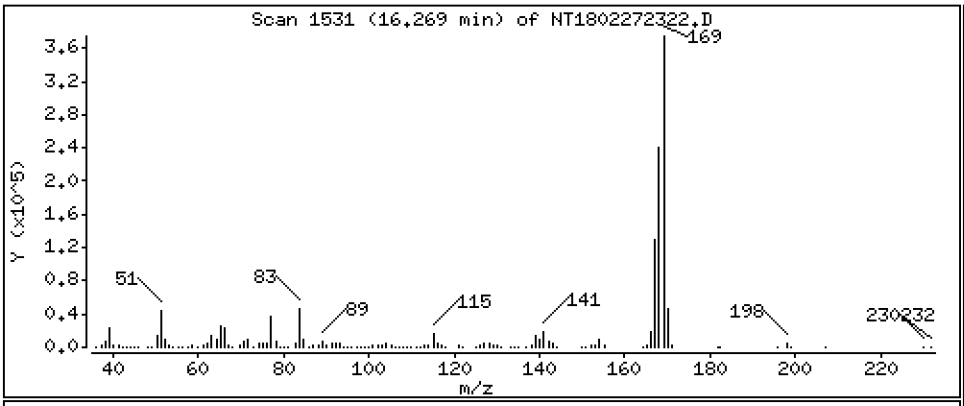
Operator: VTS

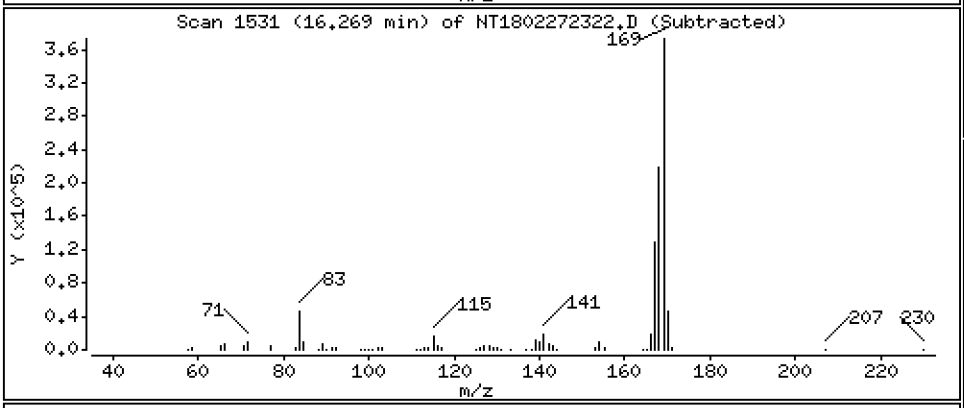
Column phase: ZB-5msi

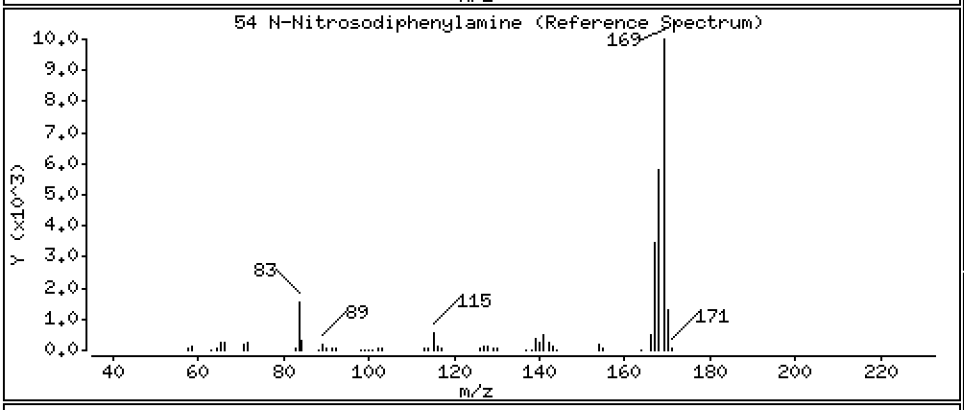
Column diameter: 0.25

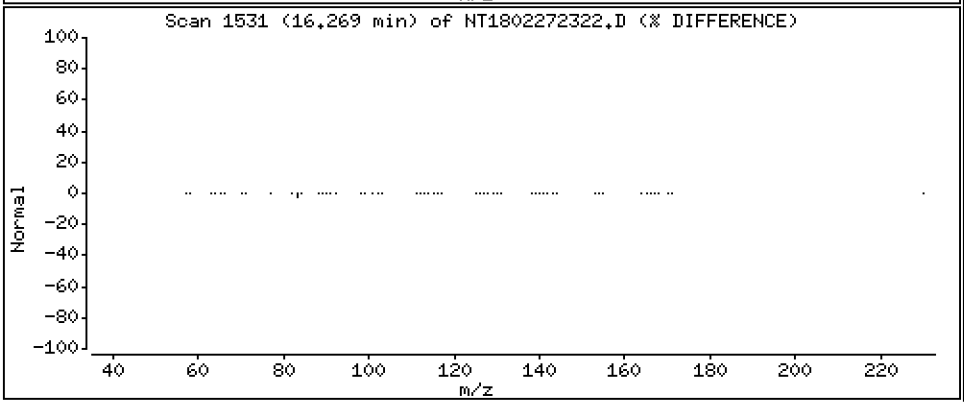
54 N-Nitrosodiphenylamine

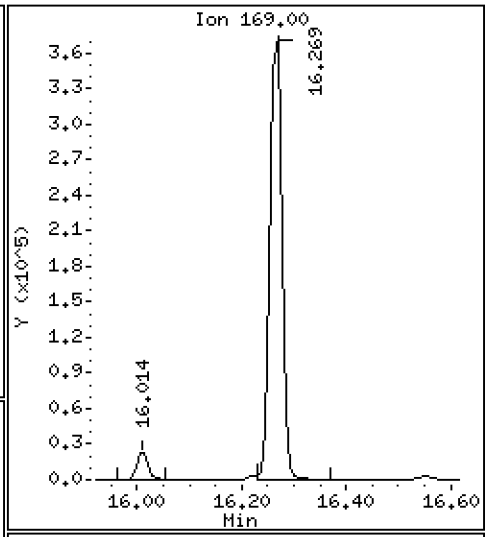
Concentration: 4.431 ug/mL

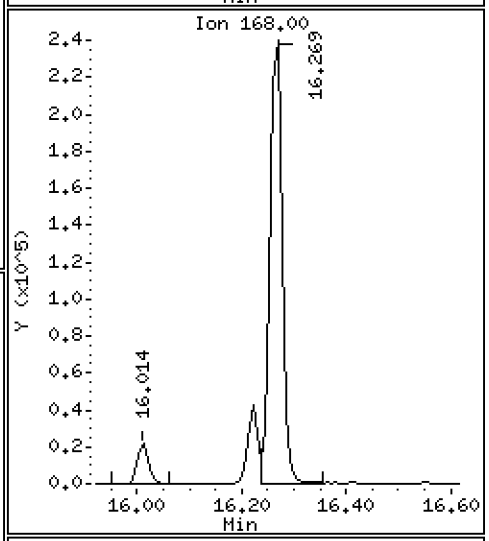


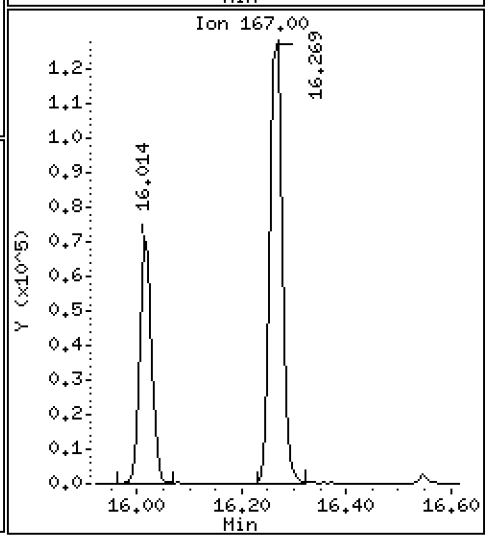












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

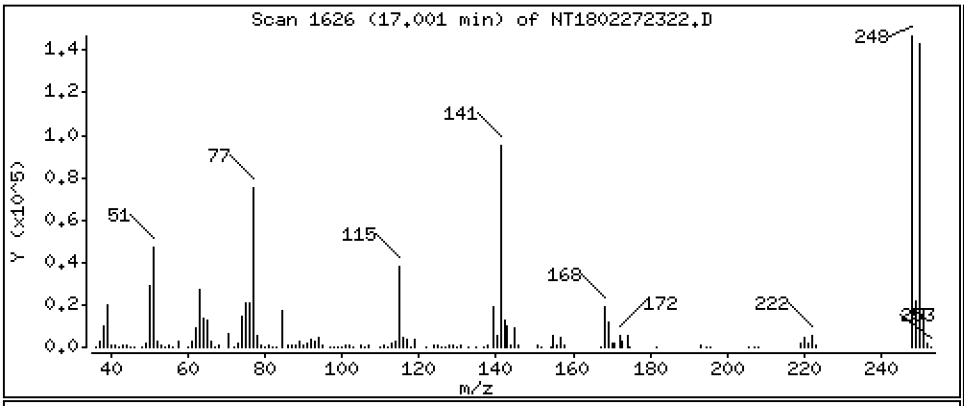
Operator: VTS

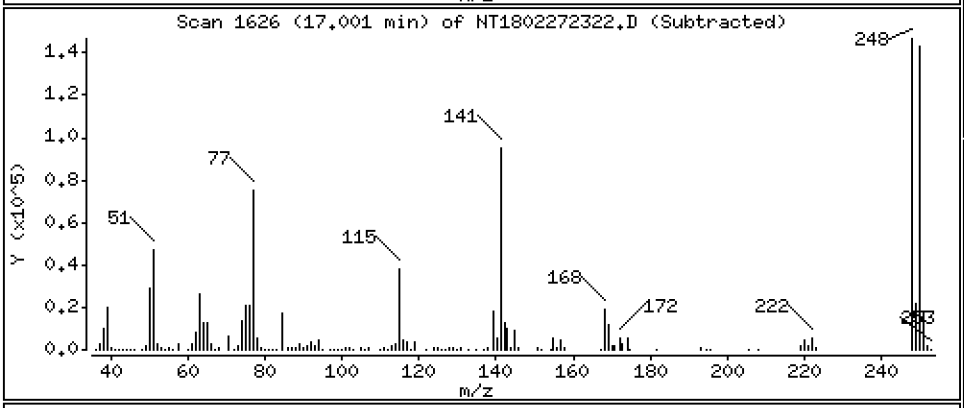
Column phase: ZB-5msi

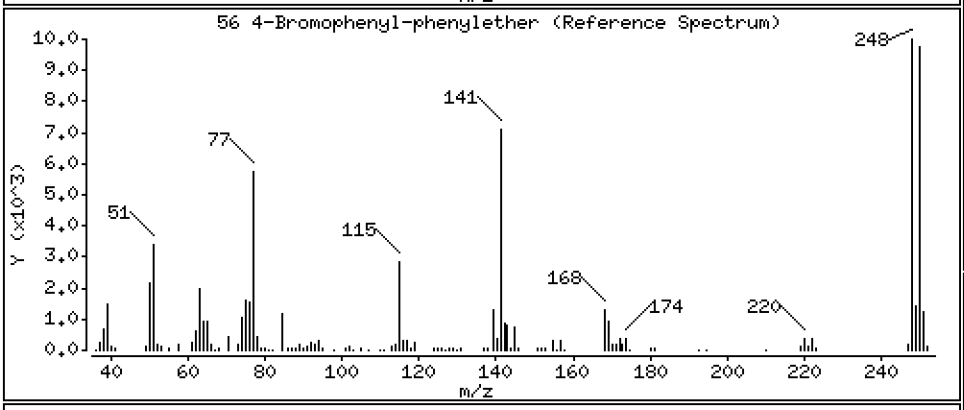
Column diameter: 0.25

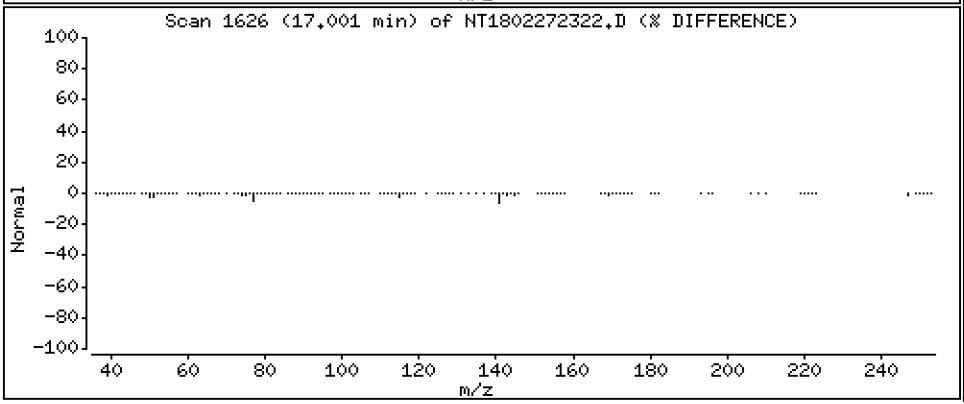
56 4-Bromophenyl-phenylether

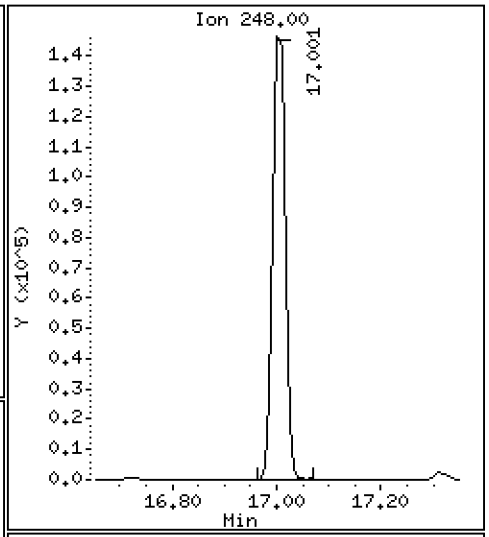
Concentration: 4.573 ug/mL

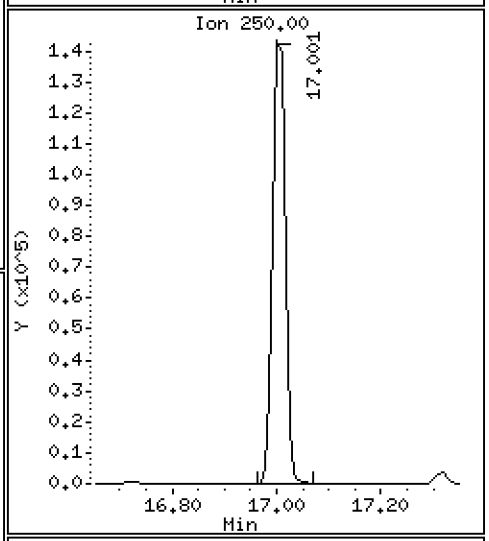


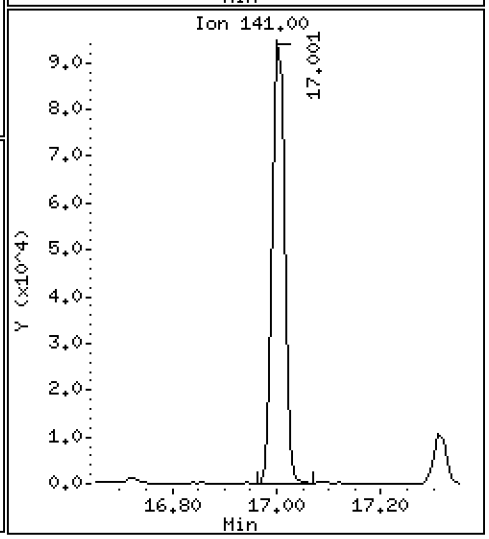












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

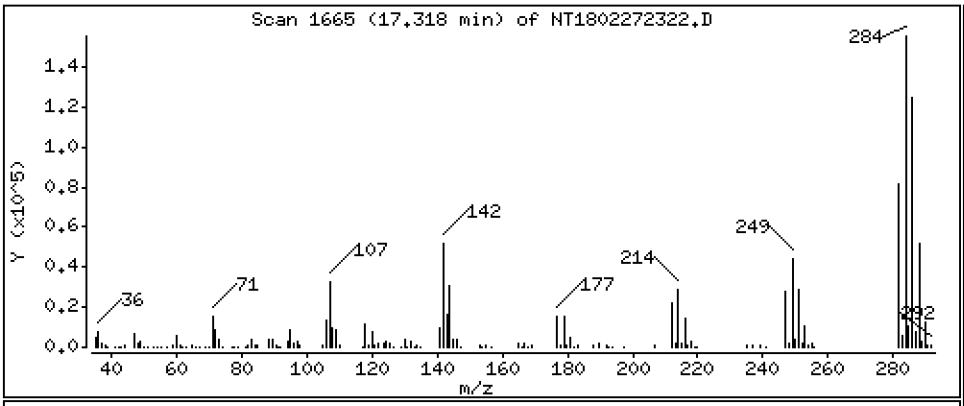
Operator: VTS

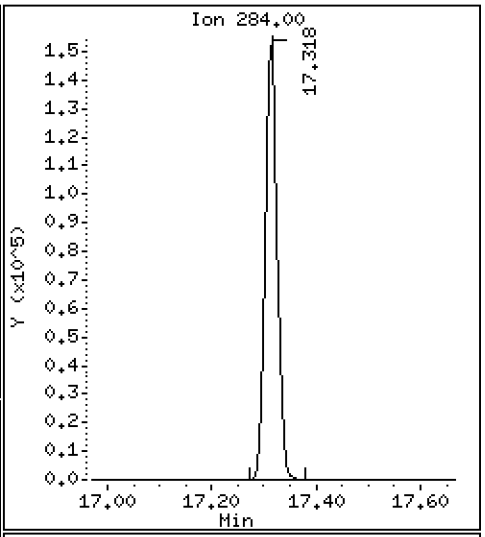
Column phase: ZB-5msi

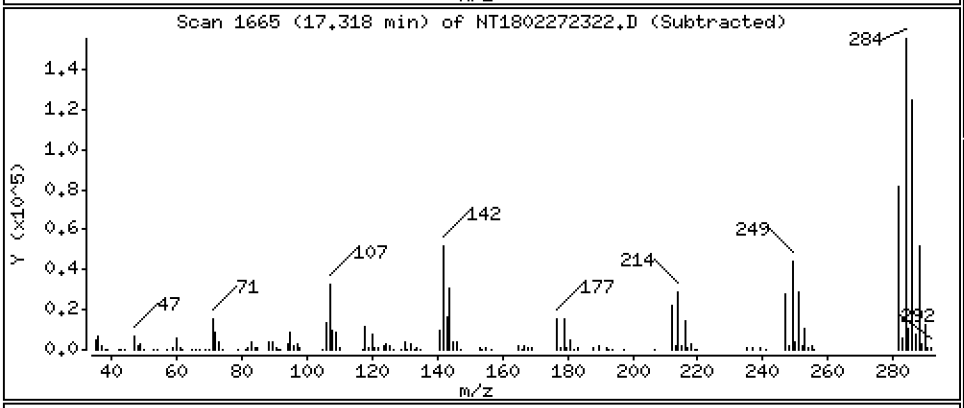
Column diameter: 0.25

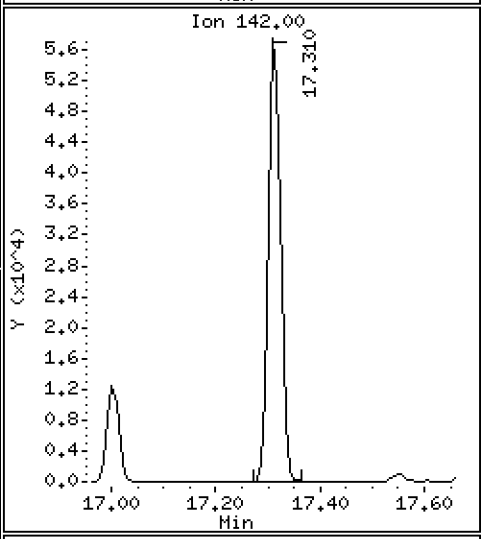
57 Hexachlorobenzene

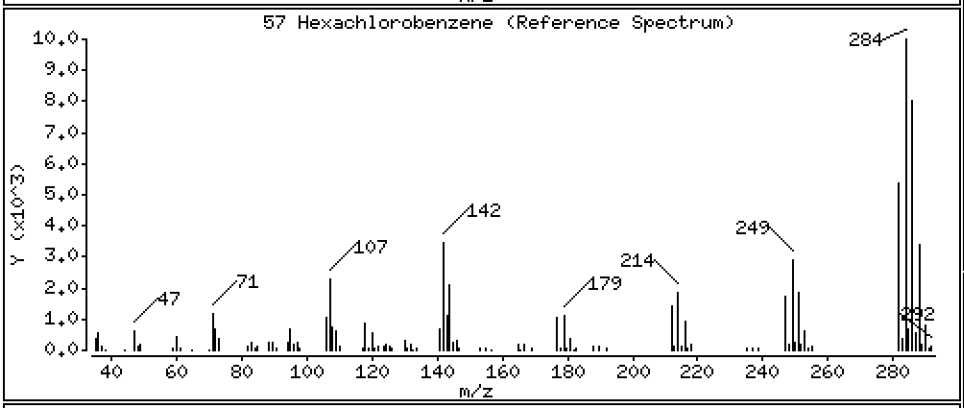
Concentration: 4.182 ug/mL

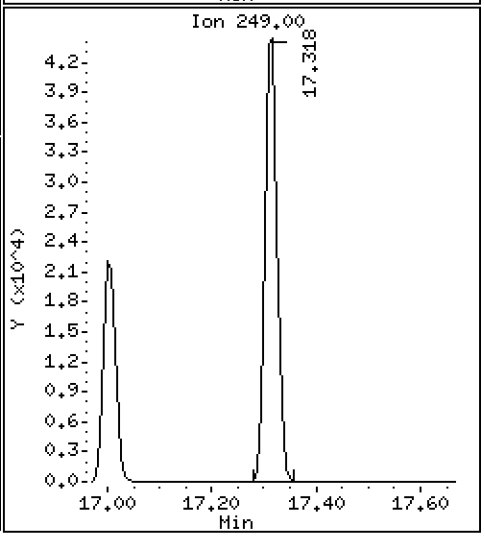


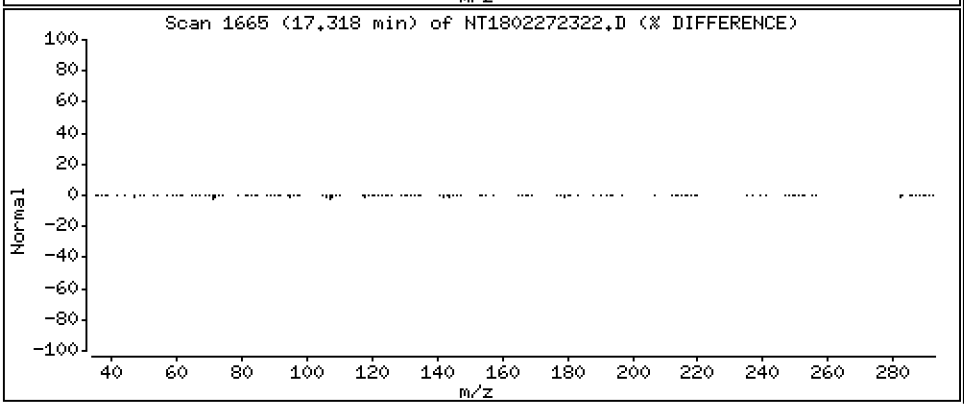












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

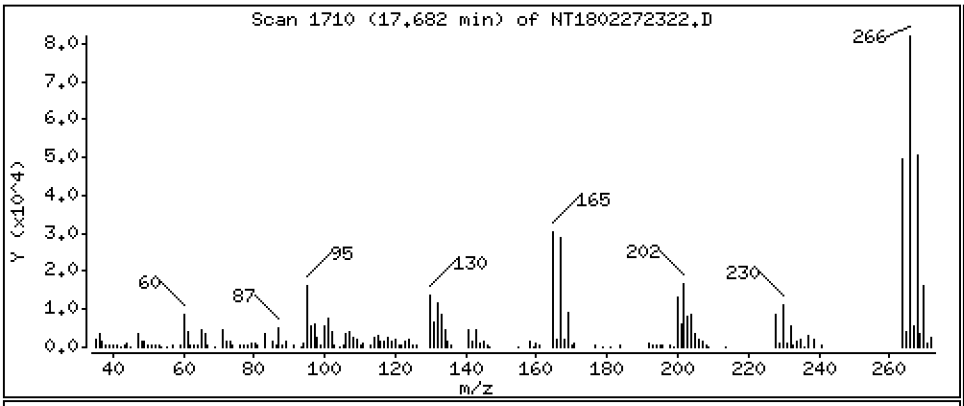
Operator: VTS

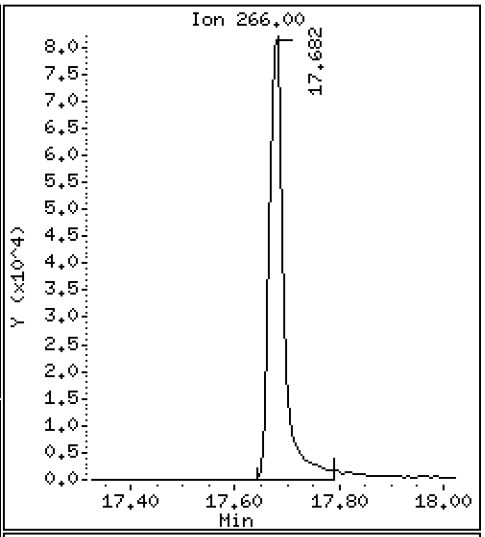
Column phase: ZB-5msi

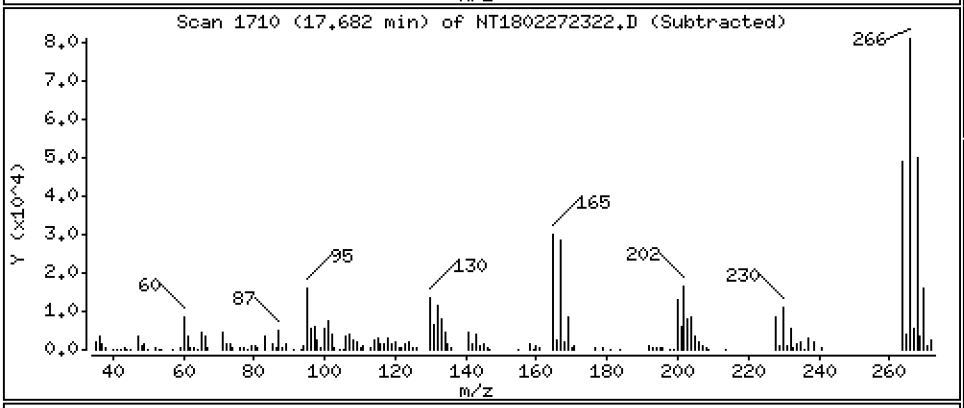
Column diameter: 0.25

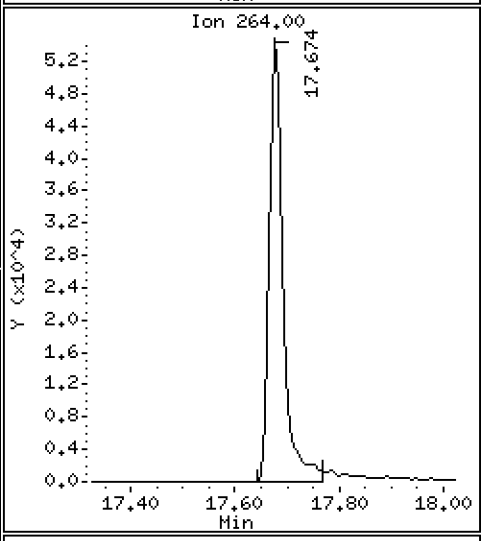
58 Pentachlorophenol

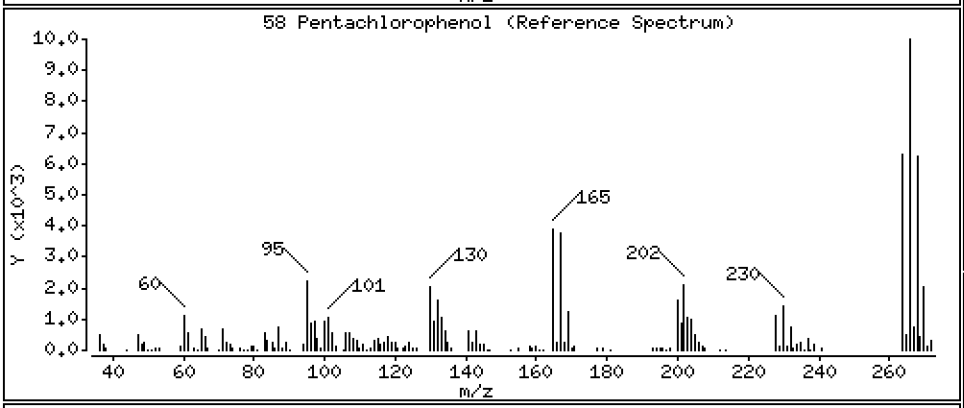
Concentration: 9.493 ug/mL

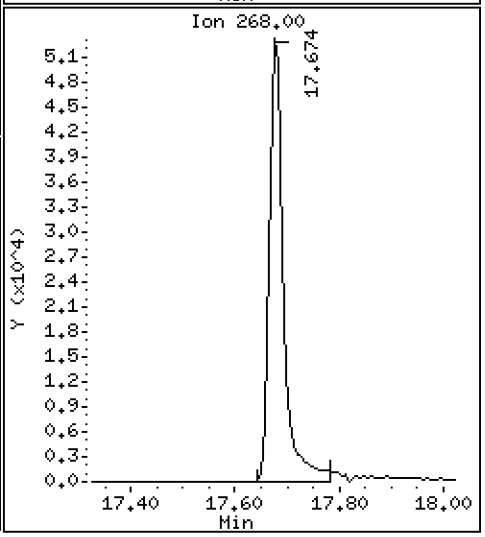


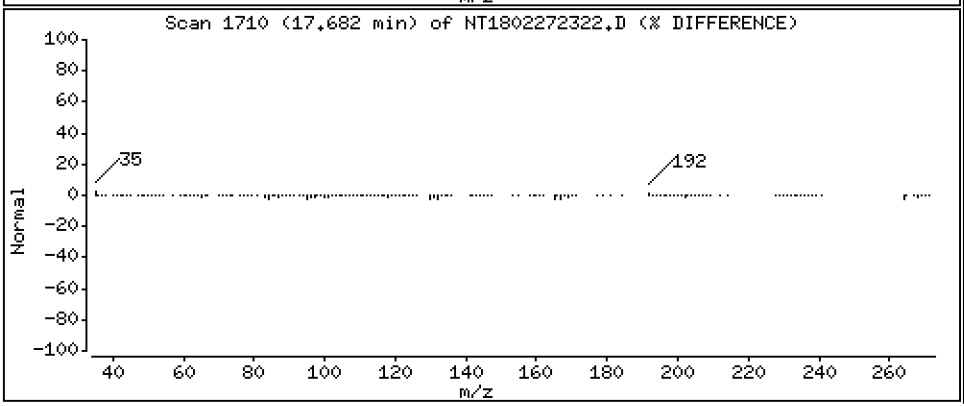












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

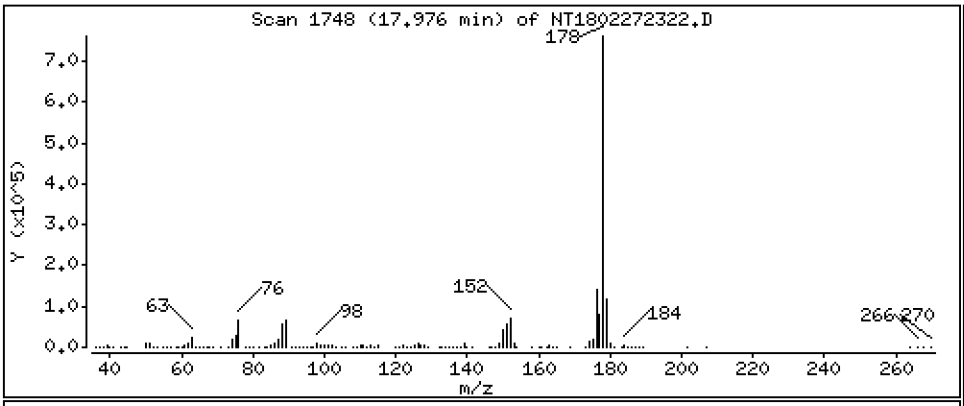
Operator: VTS

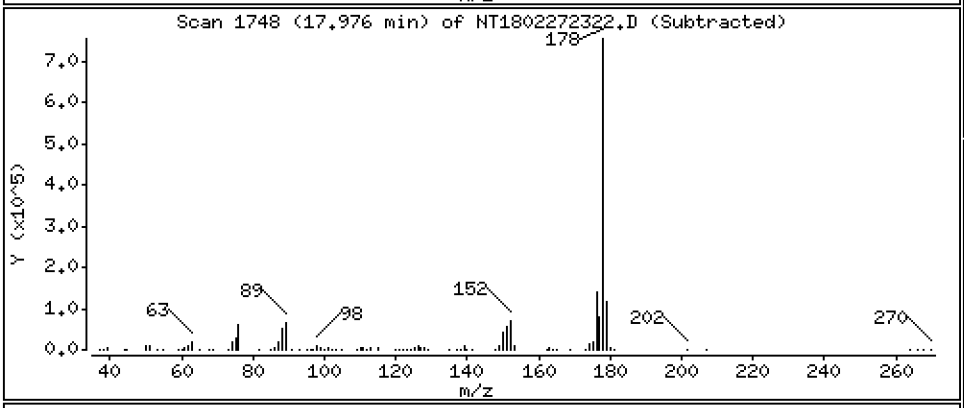
Column phase: ZB-5msi

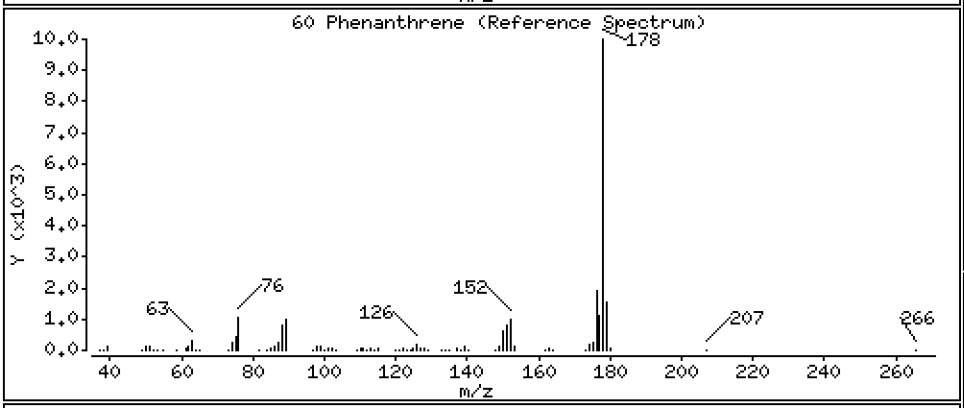
Column diameter: 0.25

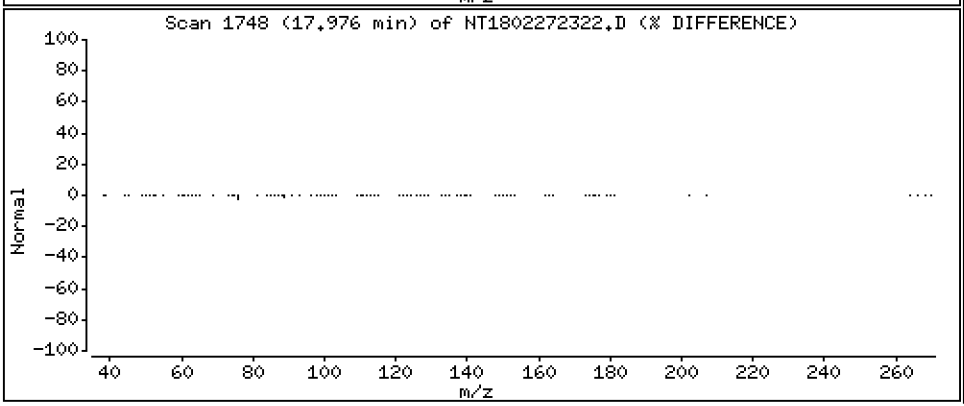
60 Phenanthrene

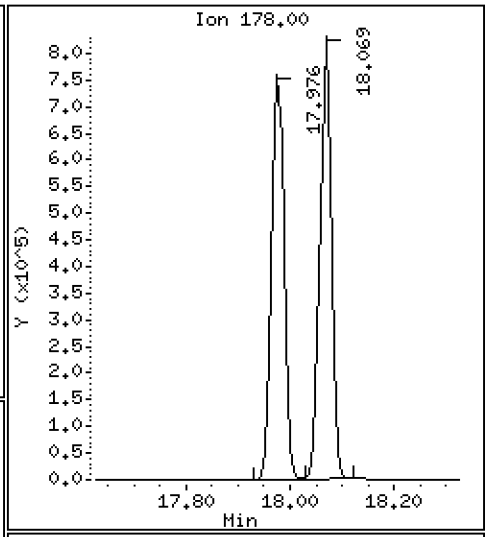
Concentration: 4.550 ug/mL

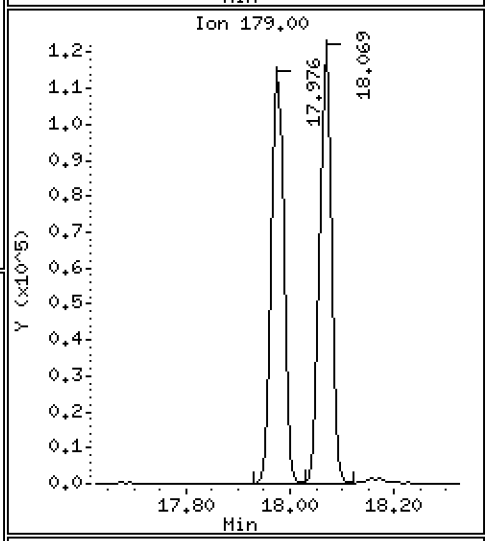


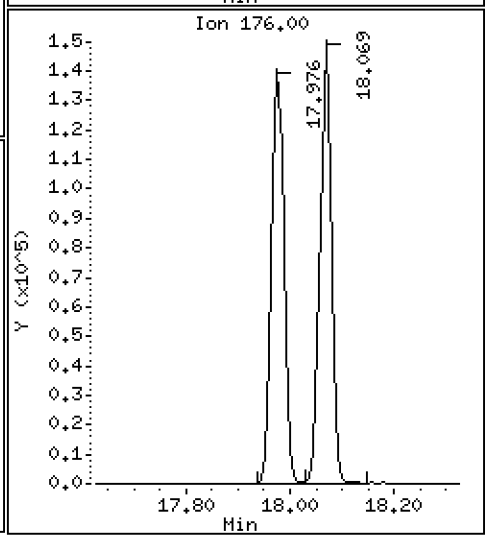












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

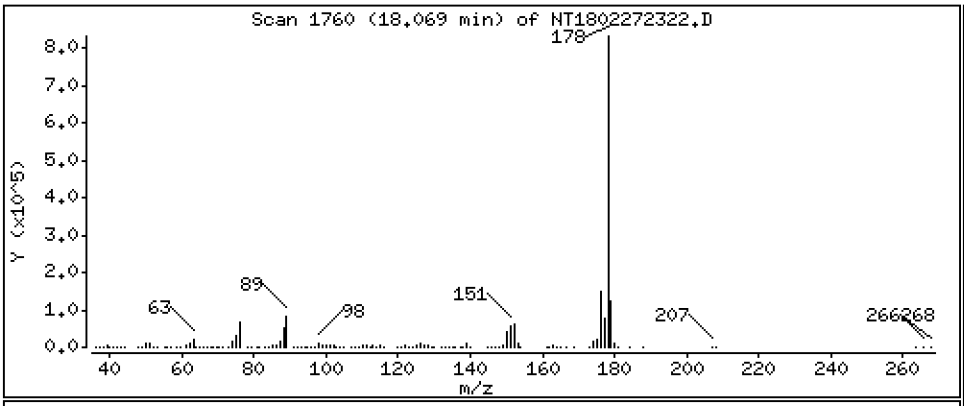
Operator: VTS

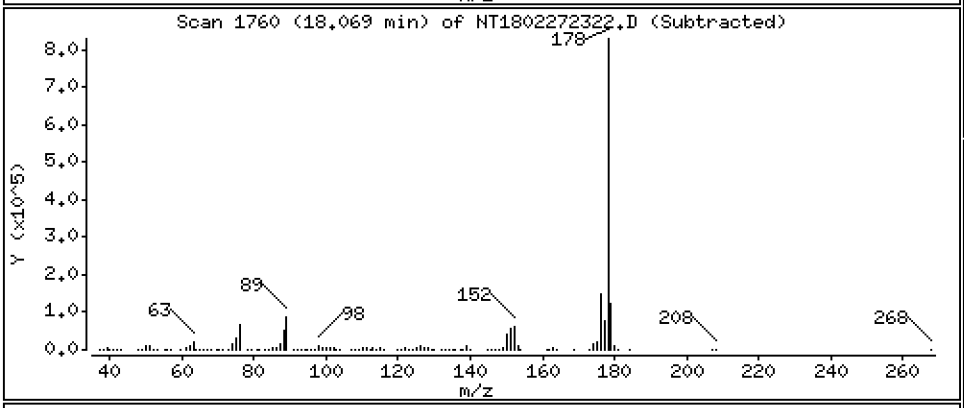
Column phase: ZB-5msi

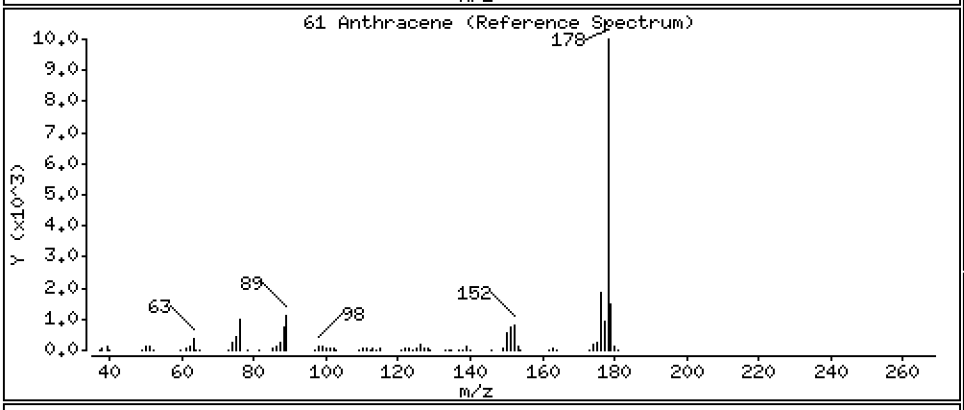
Column diameter: 0.25

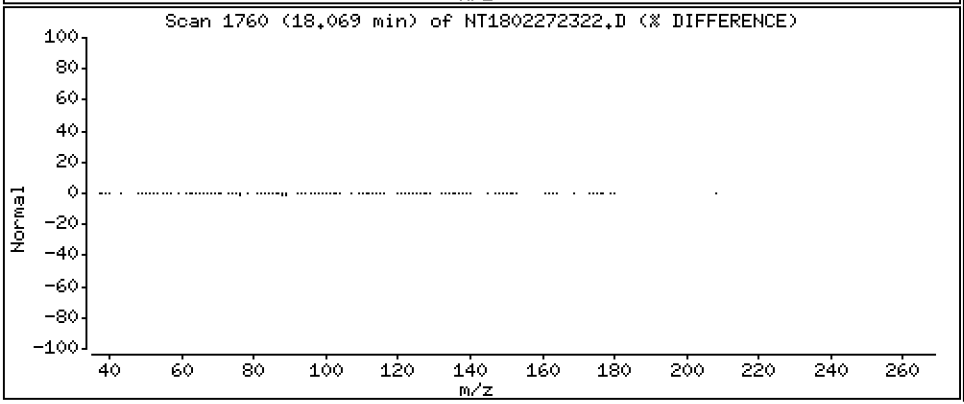
61 Anthracene

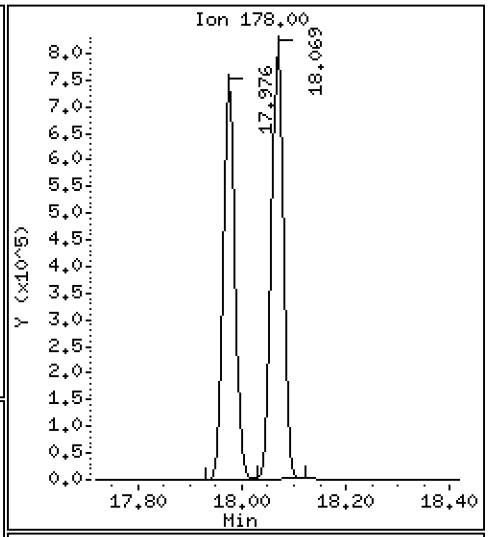
Concentration: 4.910 ug/mL

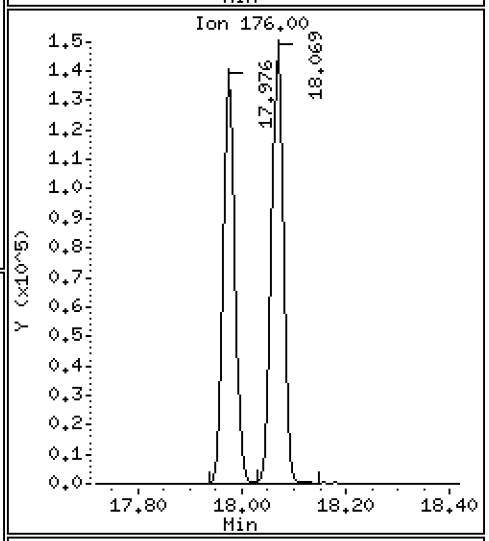


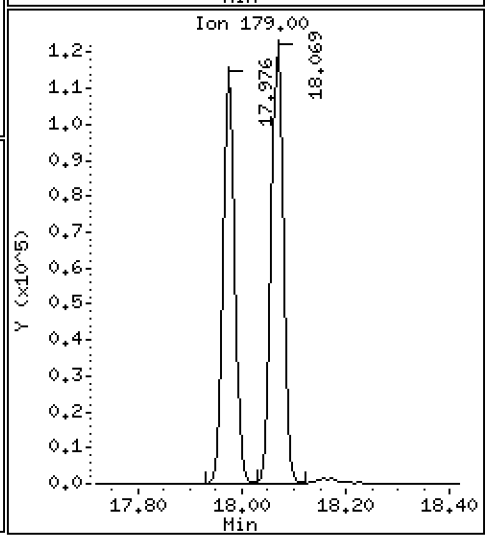












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

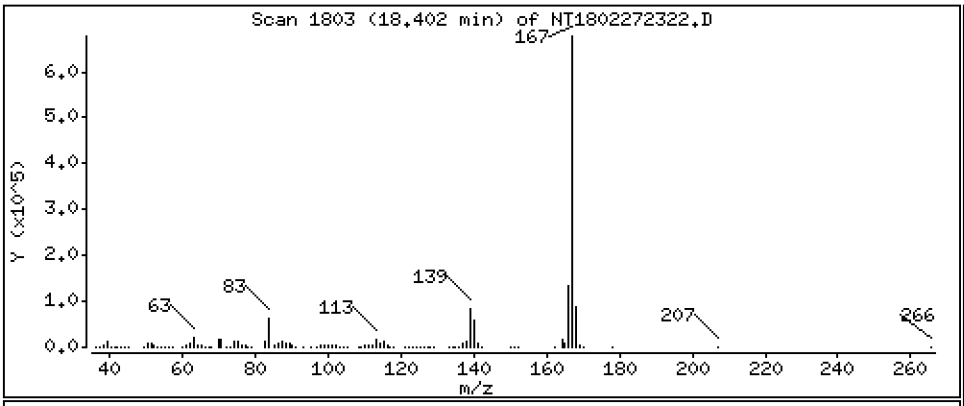
Operator: VTS

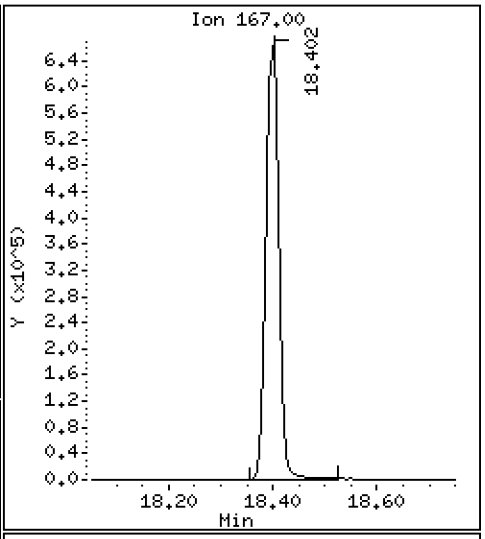
Column phase: ZB-5msi

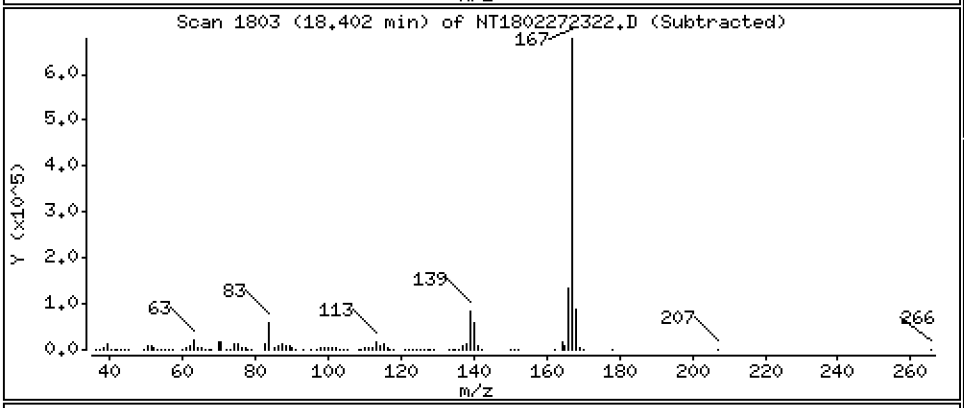
Column diameter: 0.25

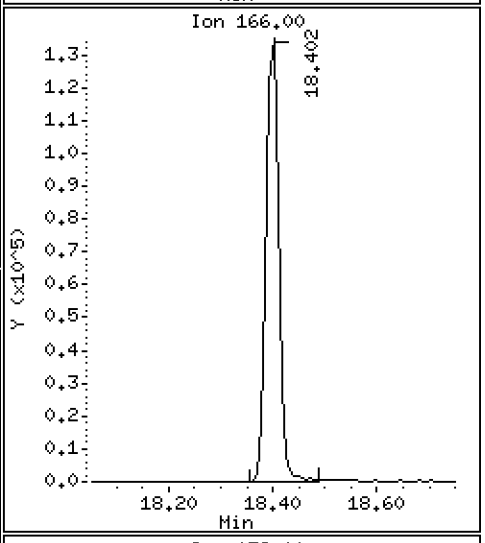
62 Carbazole

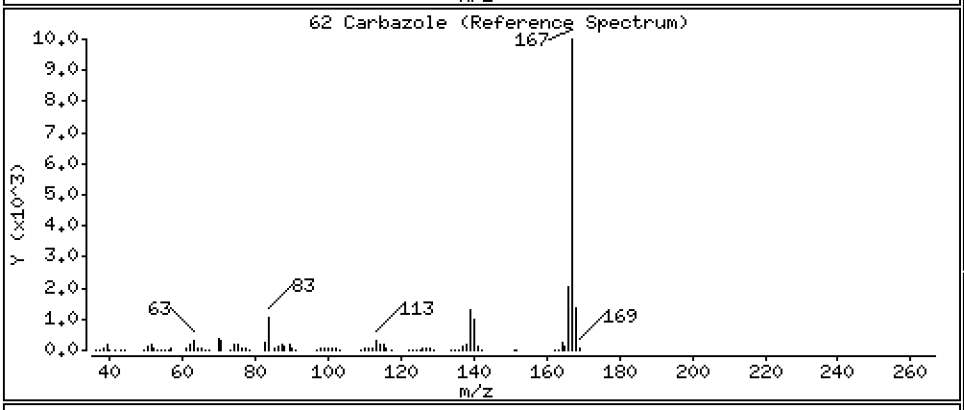
Concentration: 4.727 ug/mL

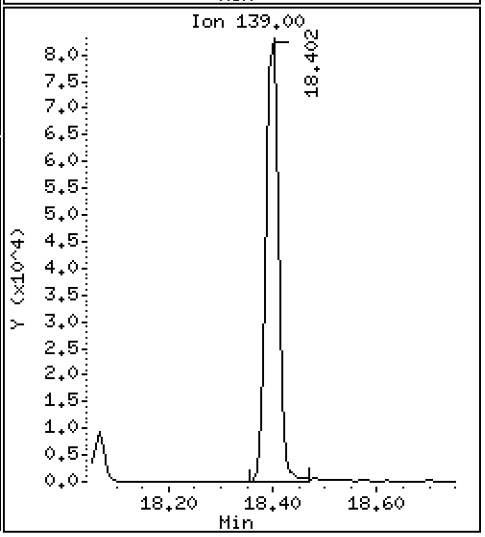


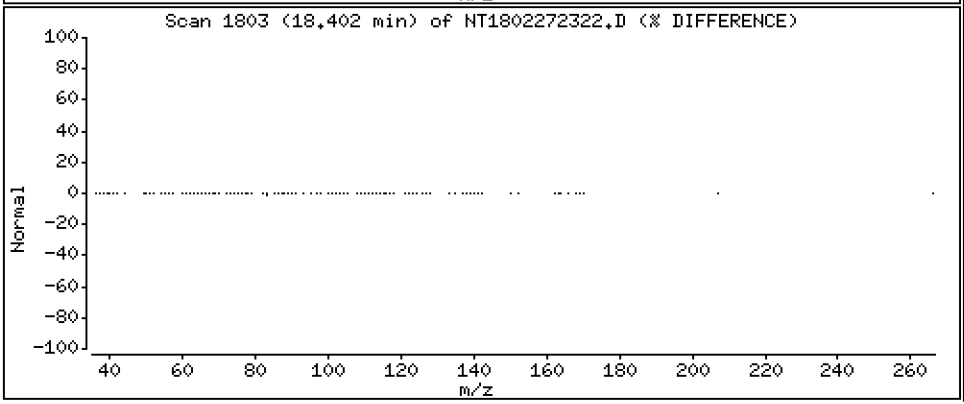












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

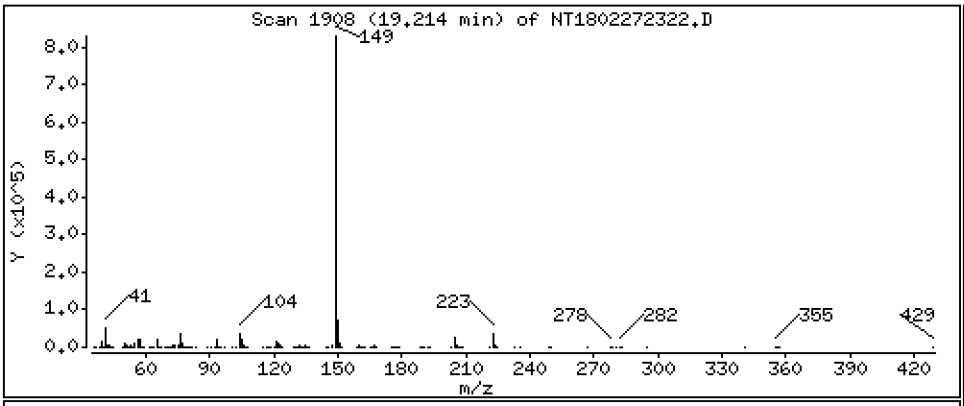
Operator: VTS

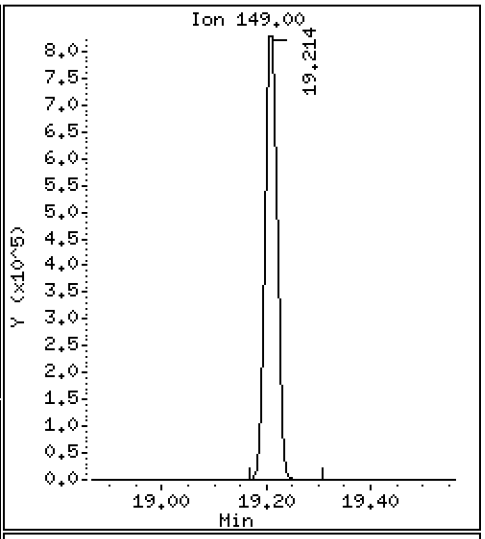
Column phase: ZB-5msi

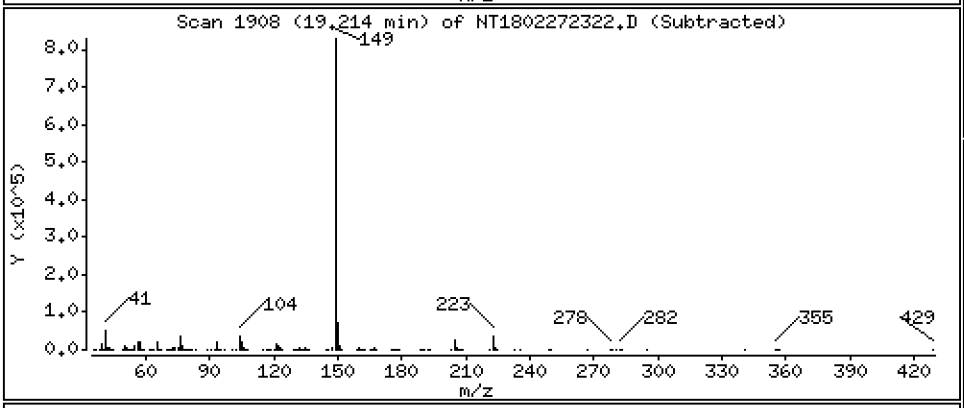
Column diameter: 0.25

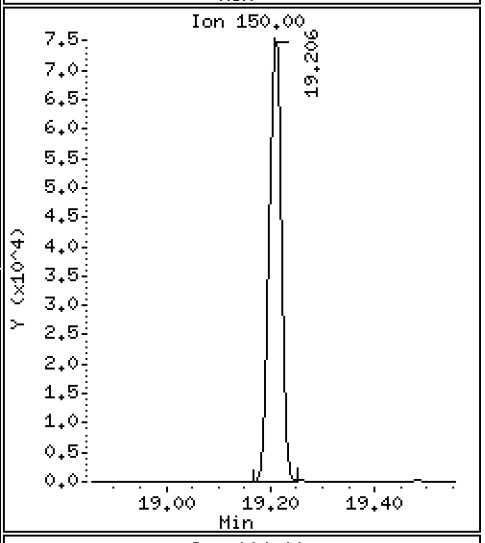
63 Di-n-butylphthalate

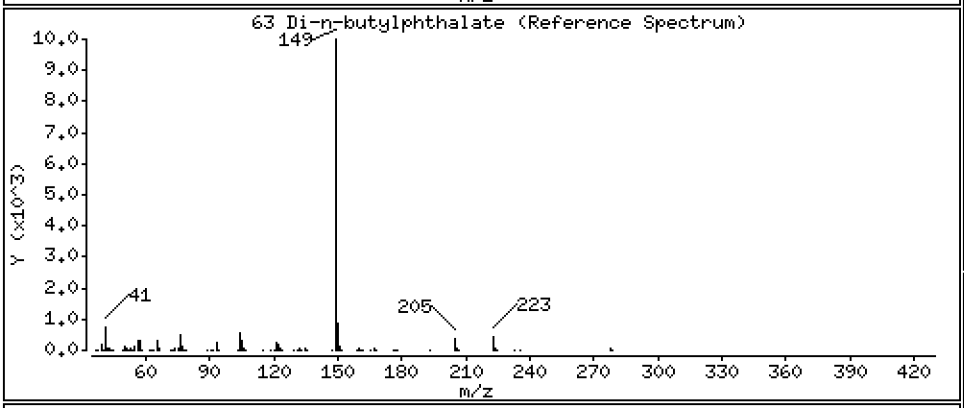
Concentration: 5.096 ug/mL

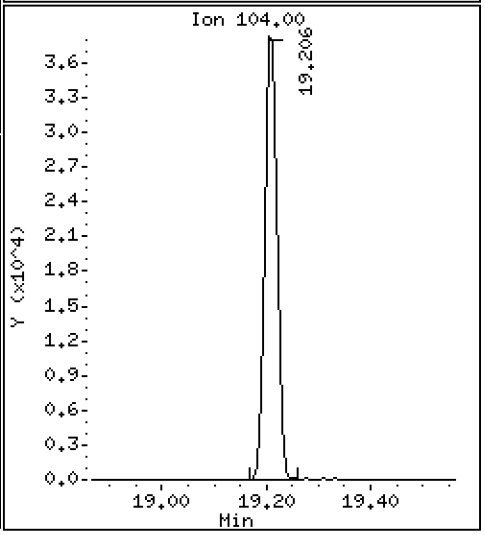


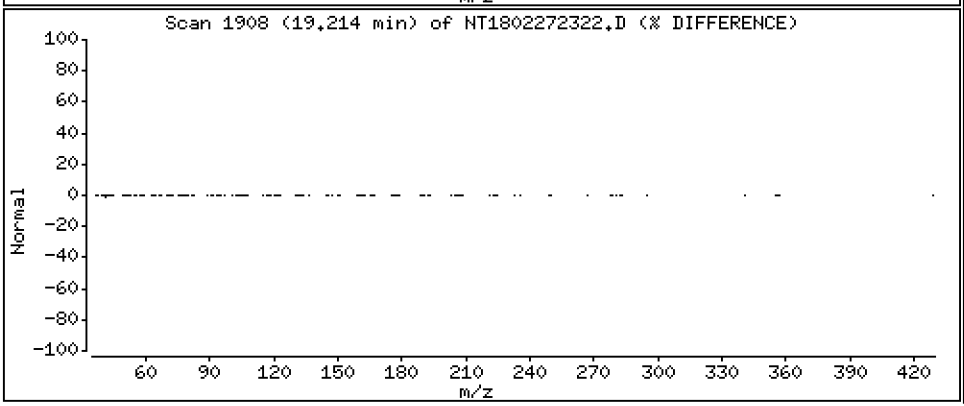












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

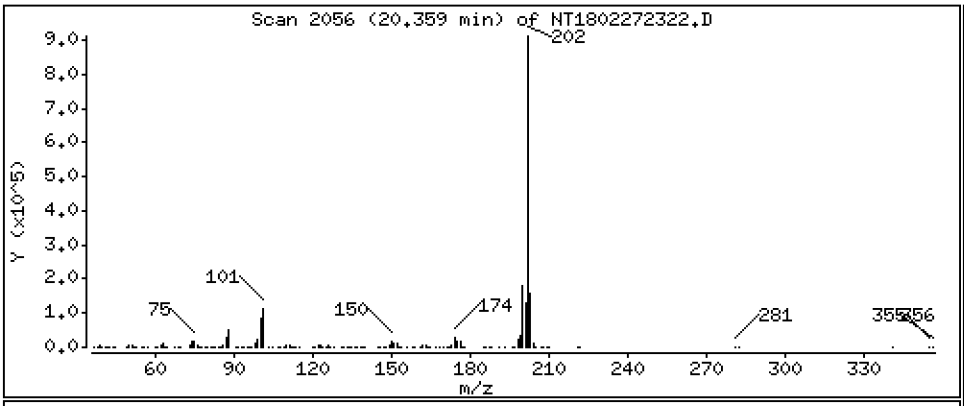
Operator: VTS

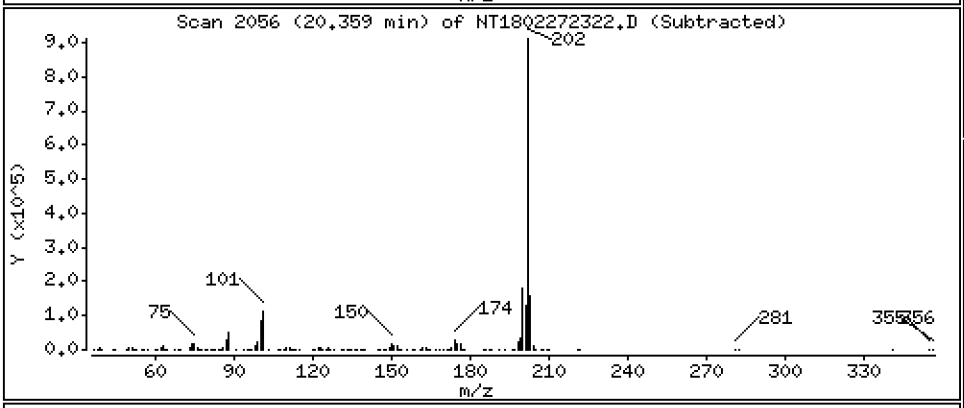
Column phase: ZB-5msi

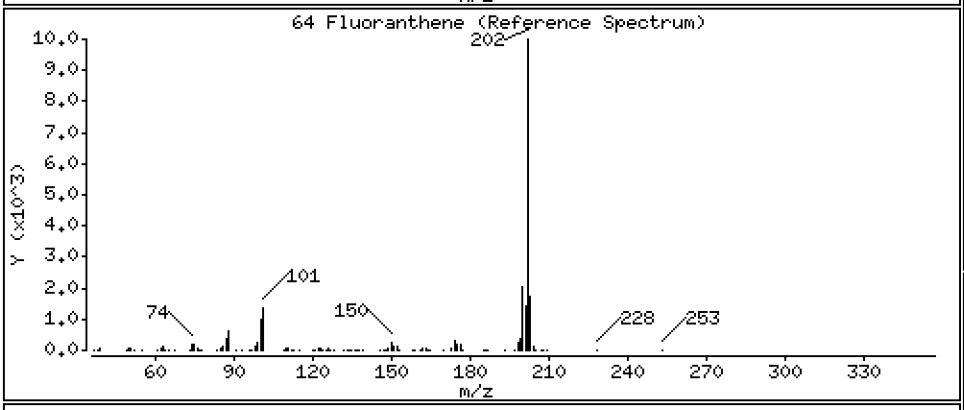
Column diameter: 0.25

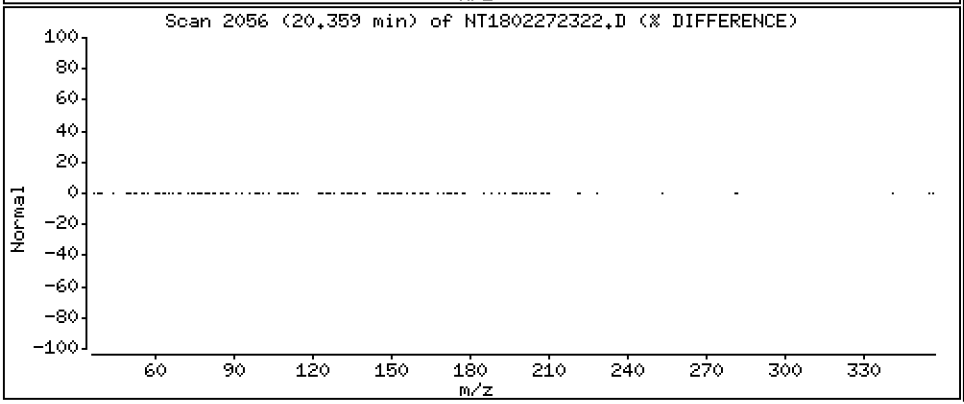
64 Fluoranthene

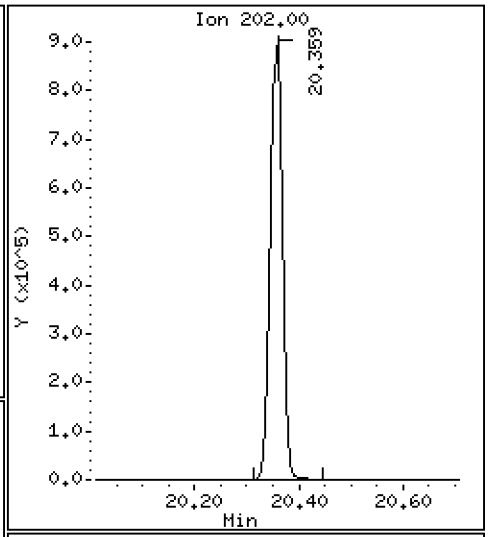
Concentration: 6.065 ug/mL

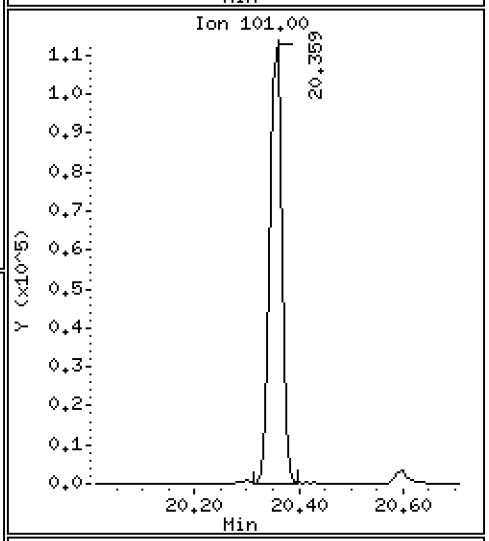


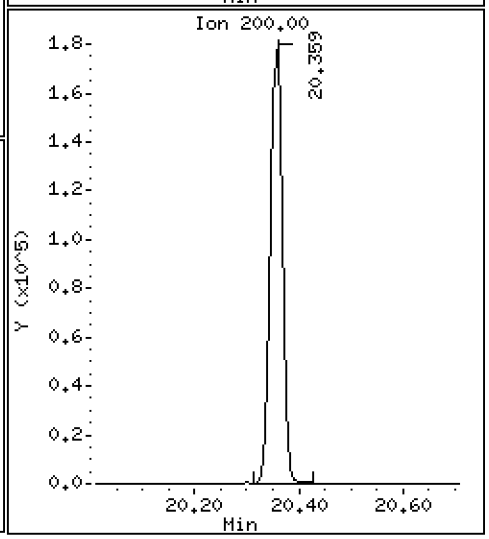












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

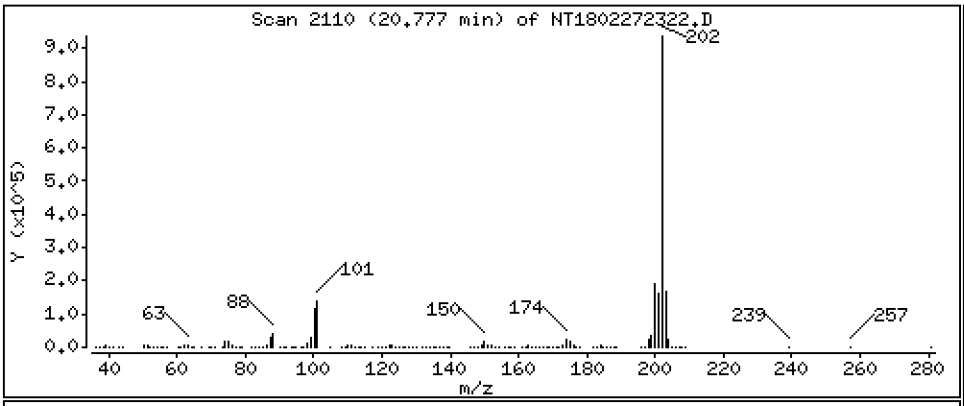
Operator: VTS

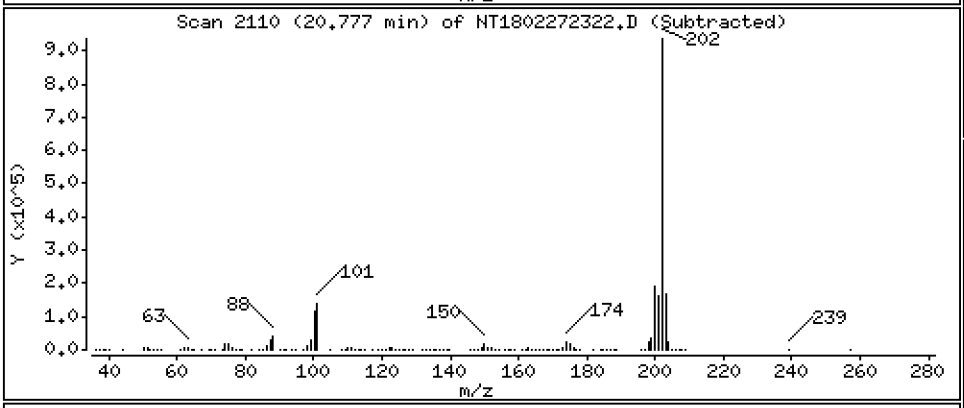
Column phase: ZB-5msi

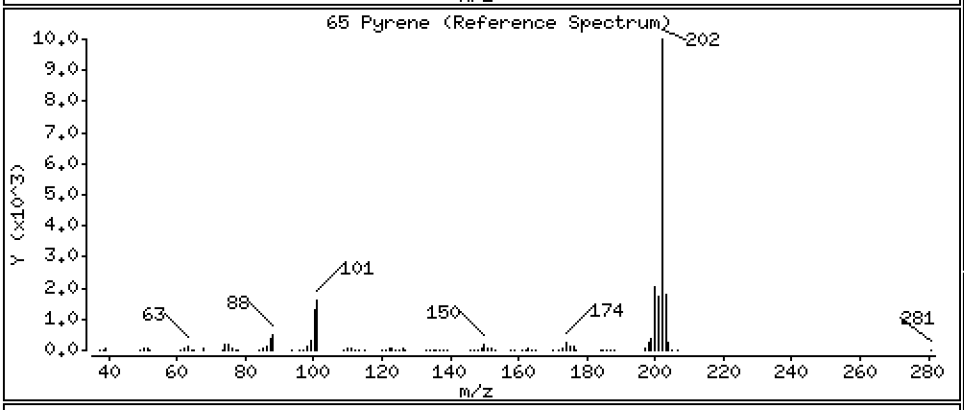
Column diameter: 0.25

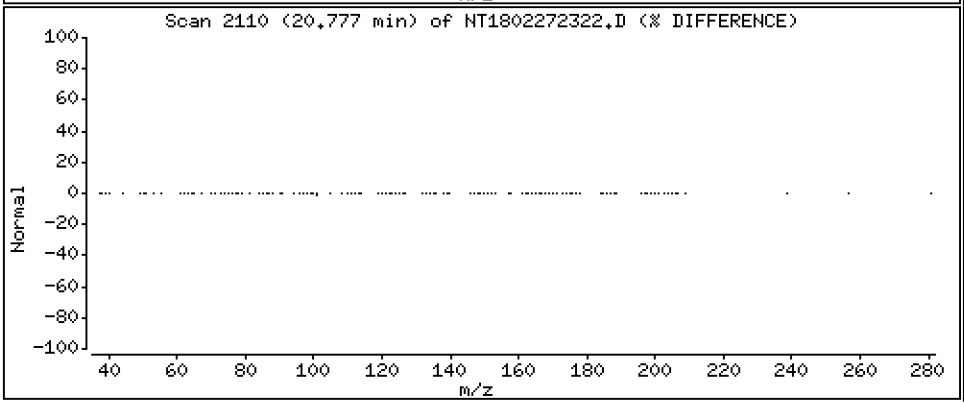
65 Pyrene

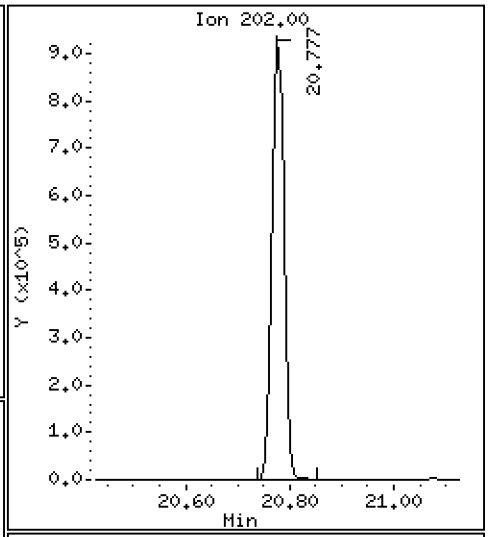
Concentration: 5.822 ug/mL

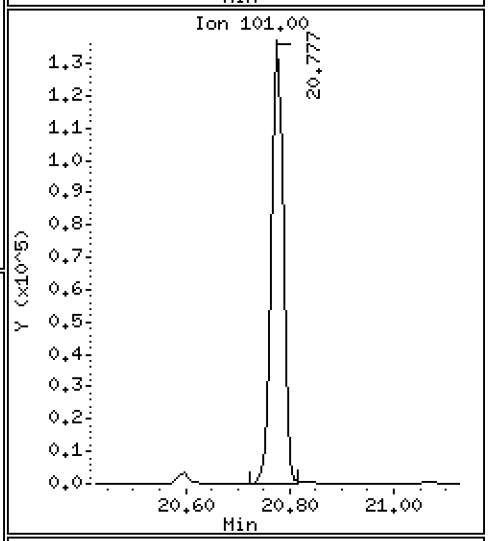


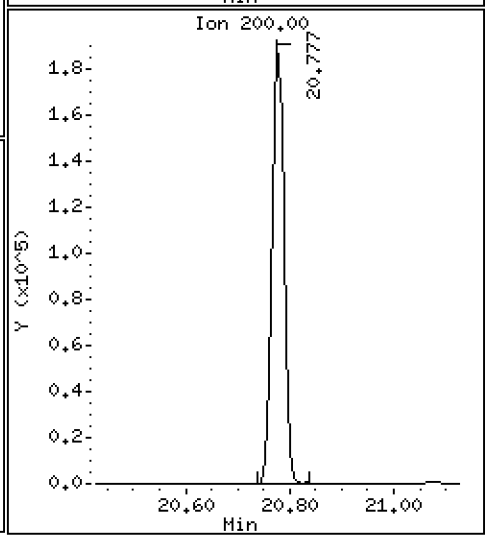












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272322.D

Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

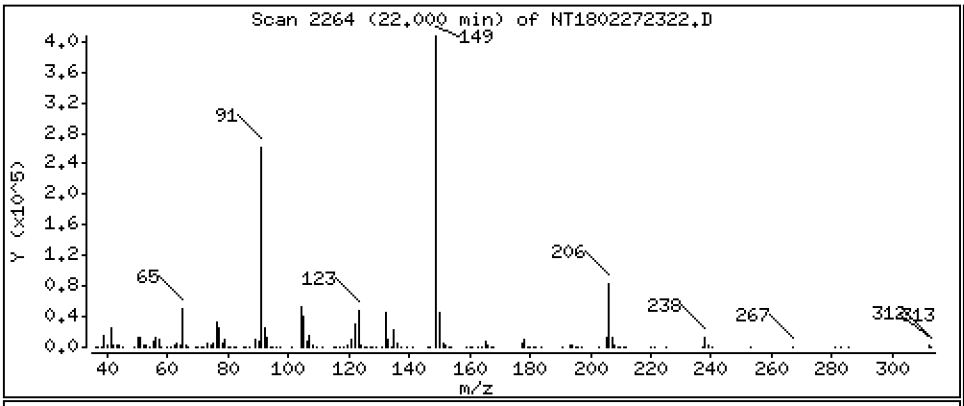
Operator: VTS

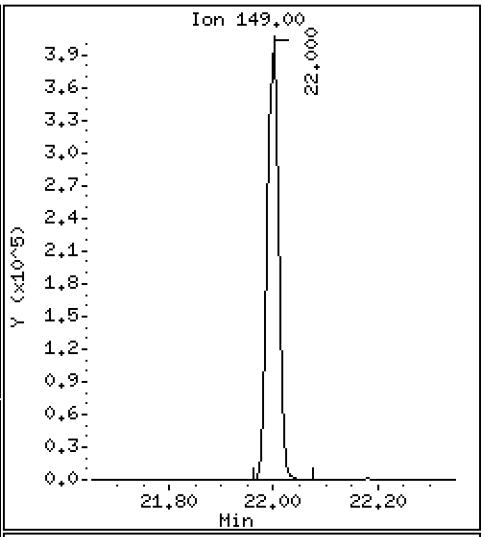
Column phase: ZB-5msi

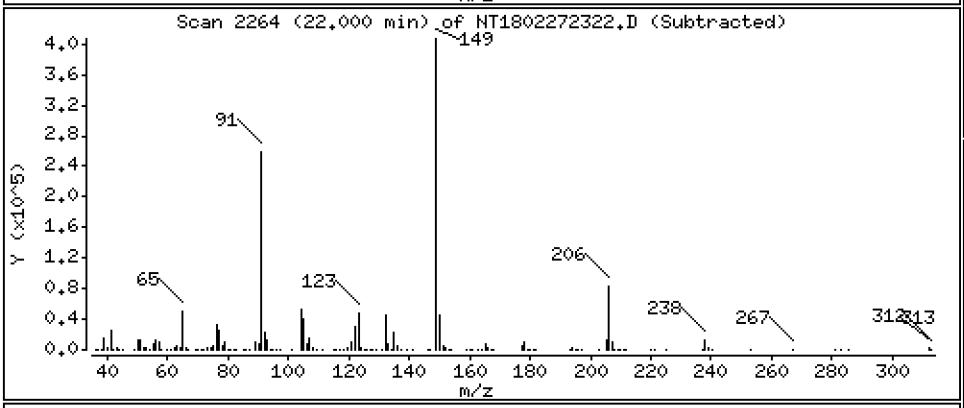
Column diameter: 0.25

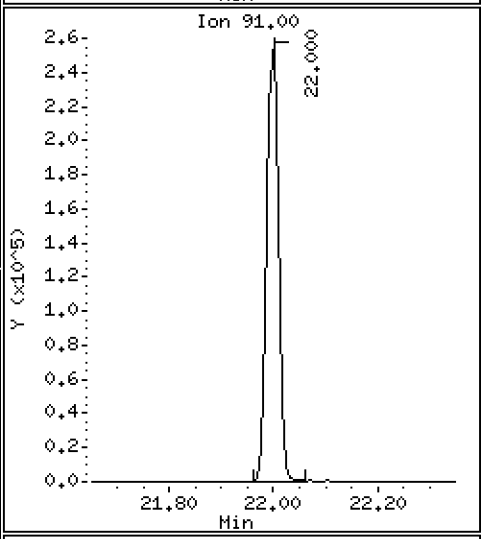
67 Butylbenzylphthalate

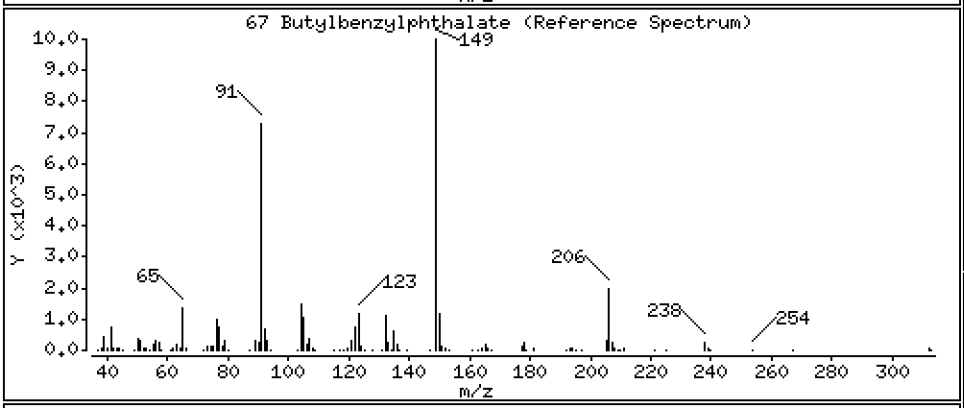
Concentration: 6.178 ug/mL

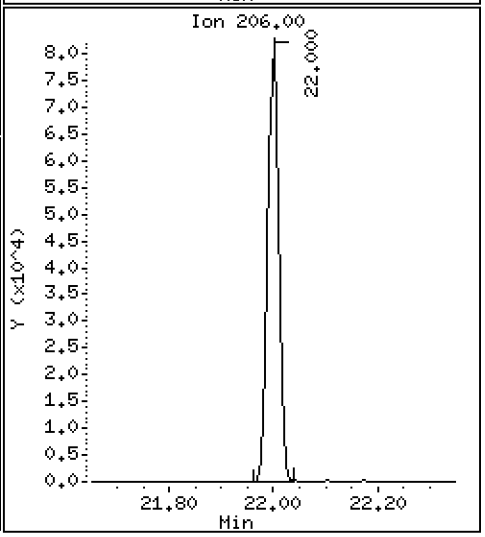


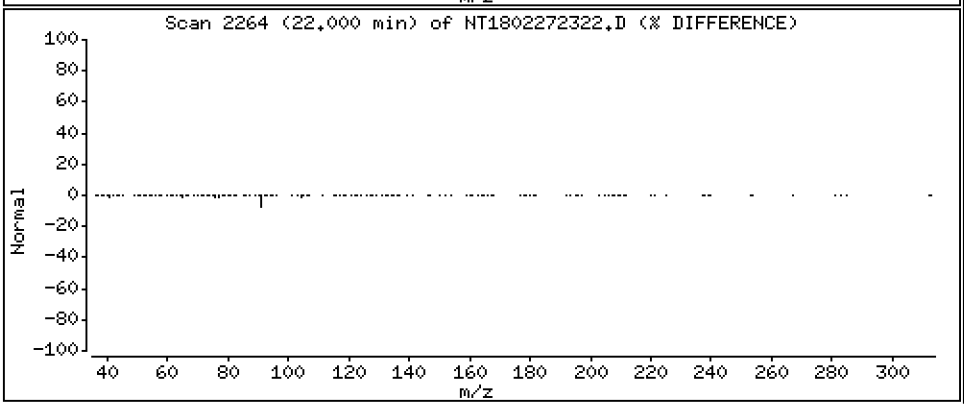












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

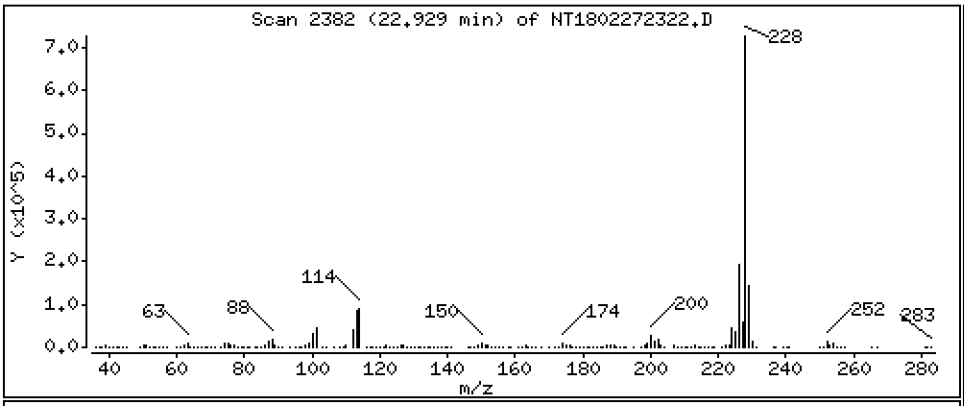
Operator: VTS

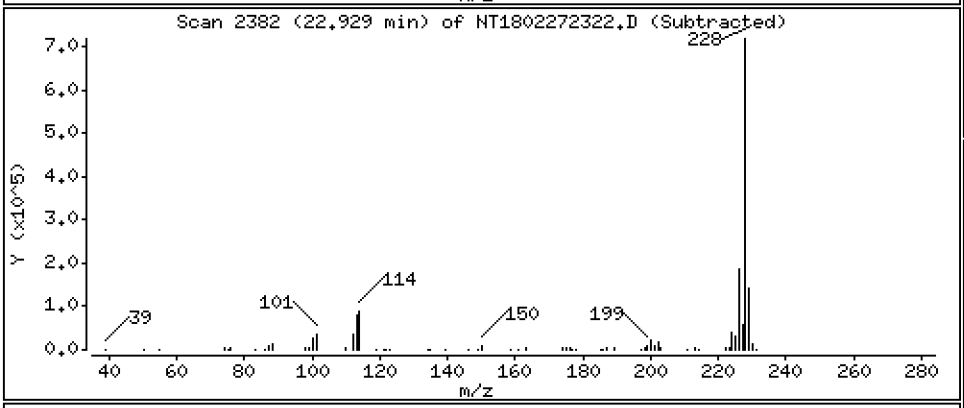
Column phase: ZB-5msi

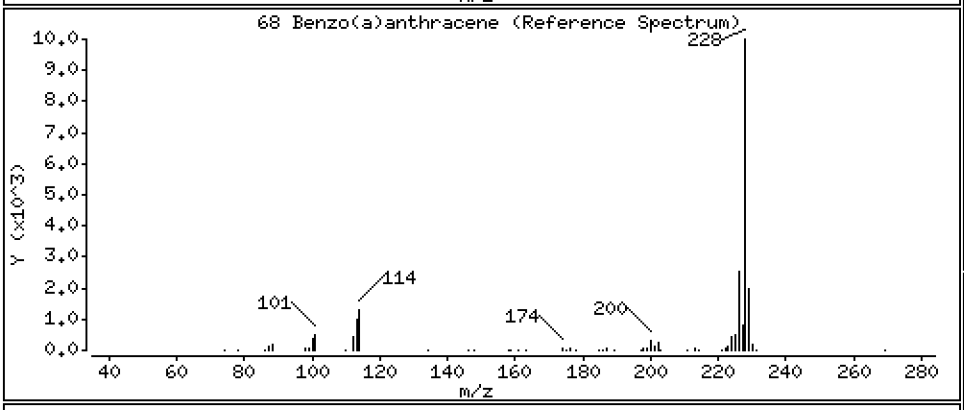
Column diameter: 0.25

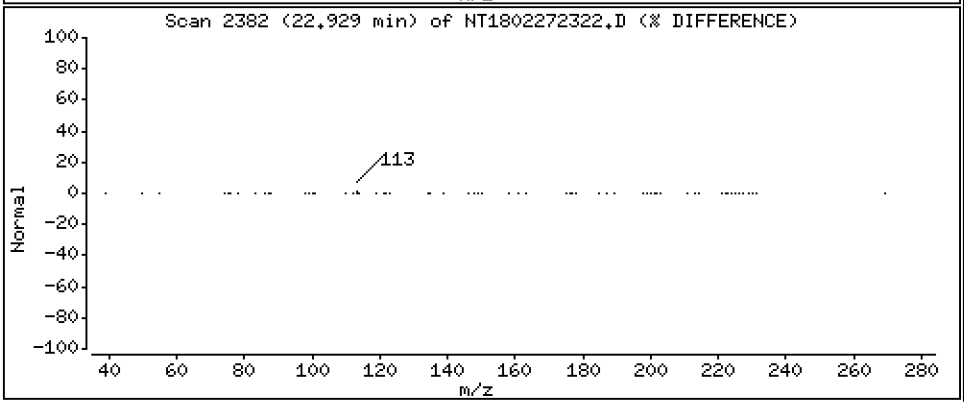
68 Benzo(a)anthracene

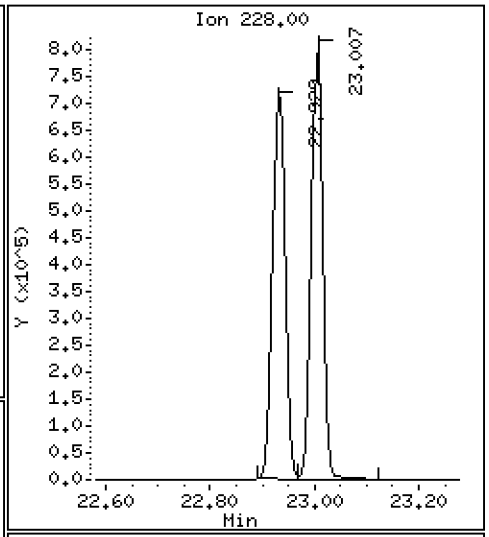
Concentration: 4.943 ug/mL

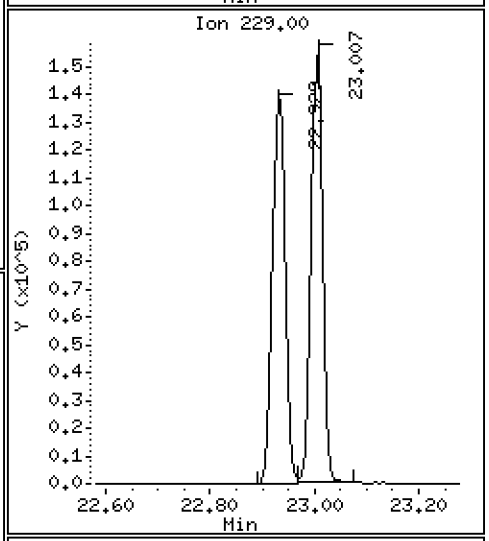


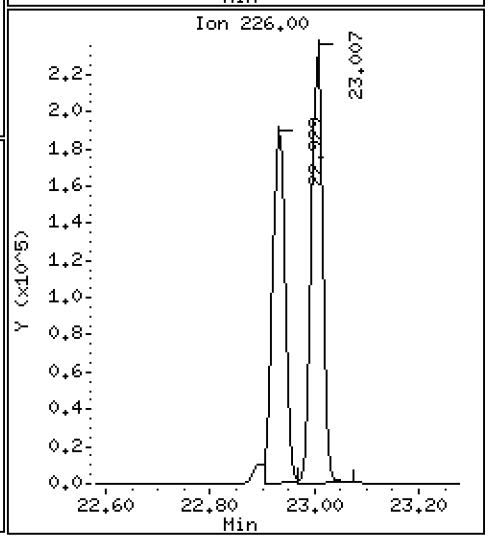












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

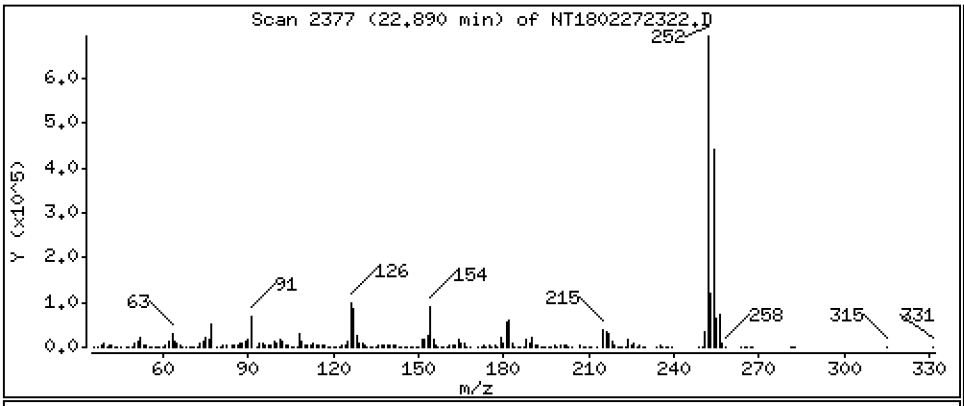
Operator: VTS

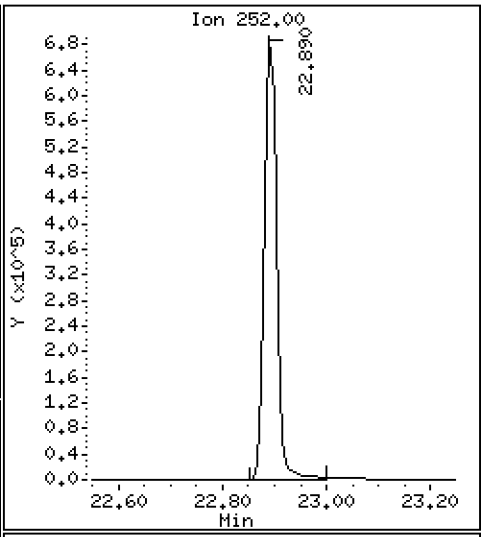
Column phase: ZB-5msi

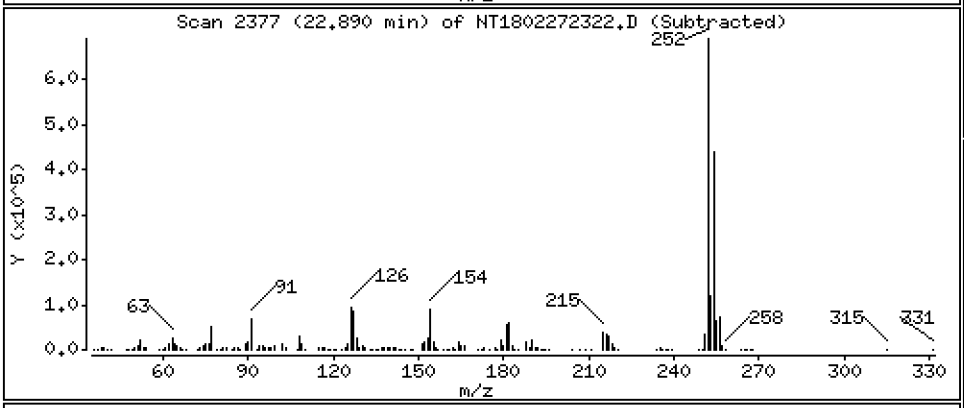
Column diameter: 0.25

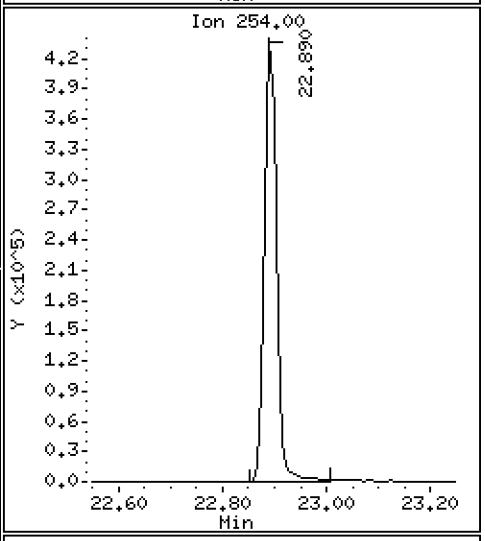
70 3,3'-Dichlorobenzidine

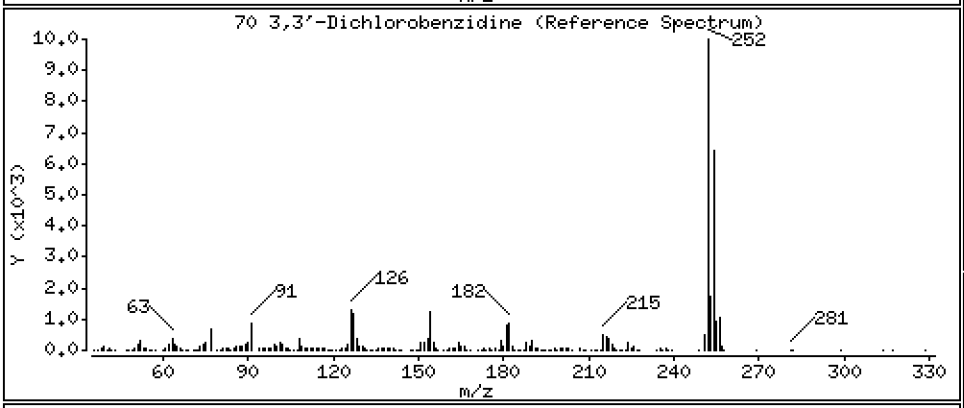
Concentration: 12.40 ug/mL

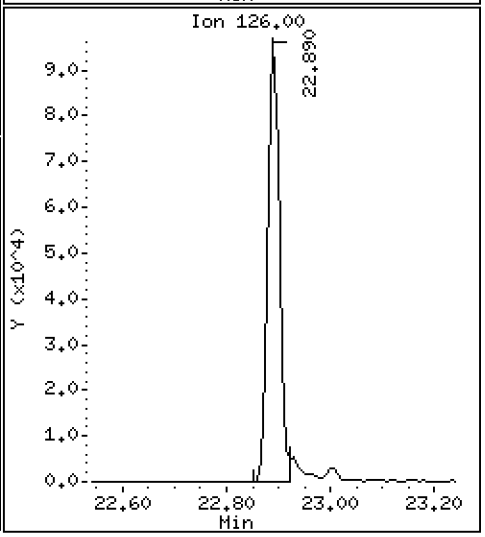


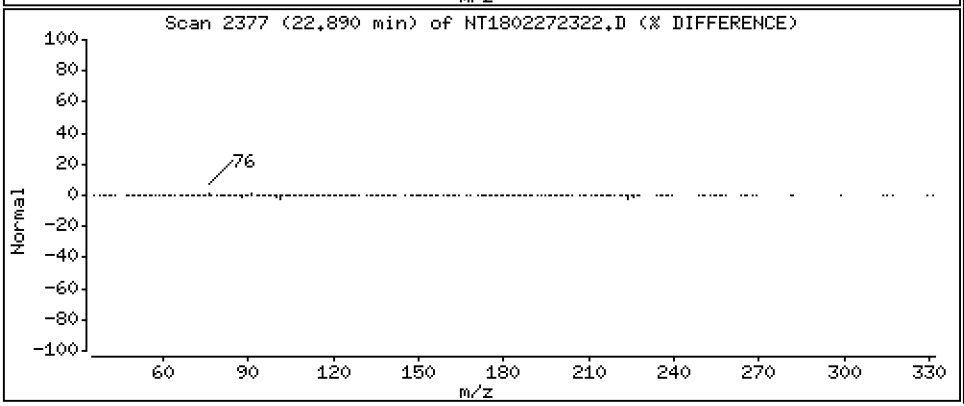












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

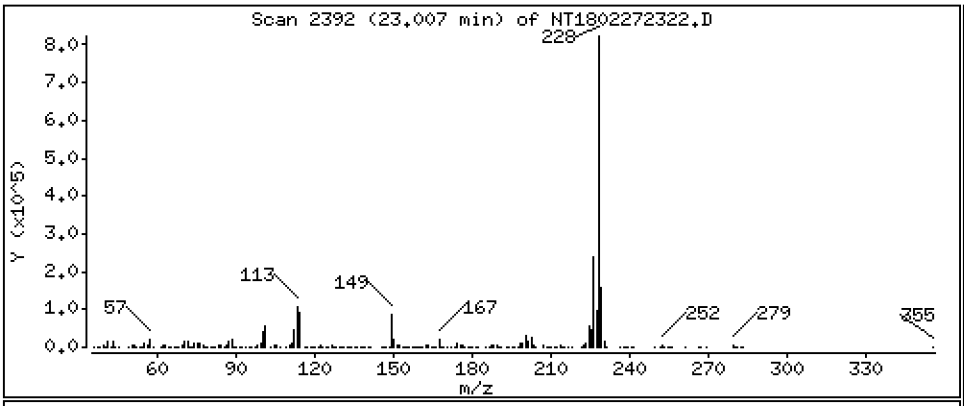
Operator: VTS

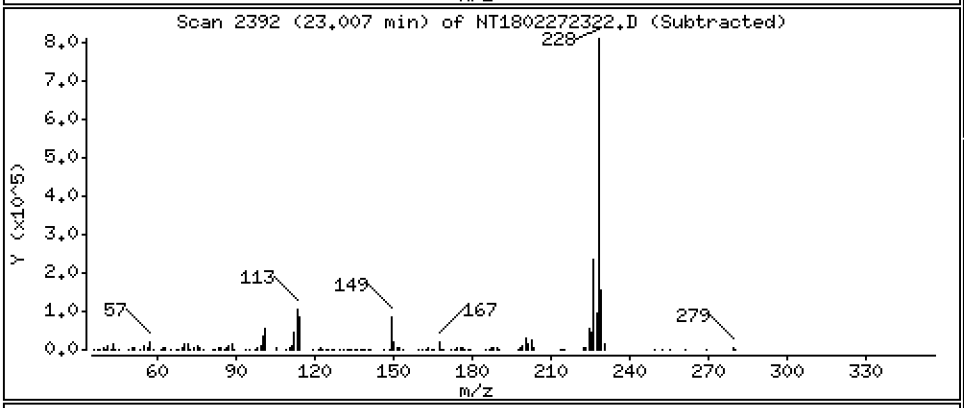
Column phase: ZB-5msi

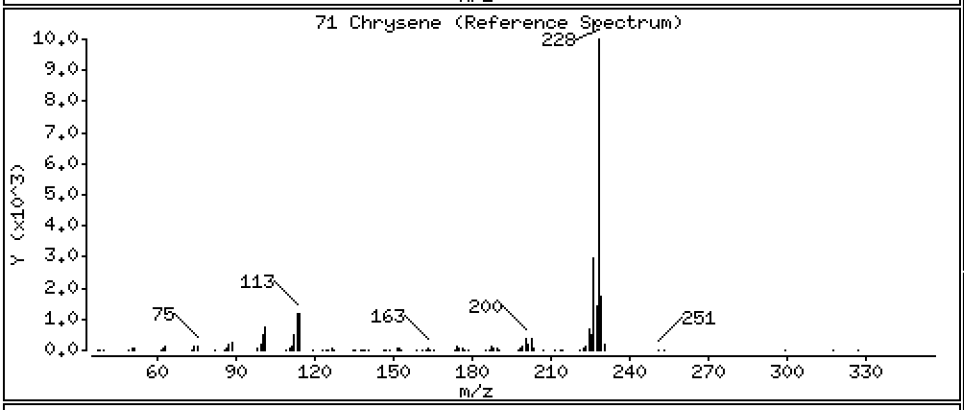
Column diameter: 0.25

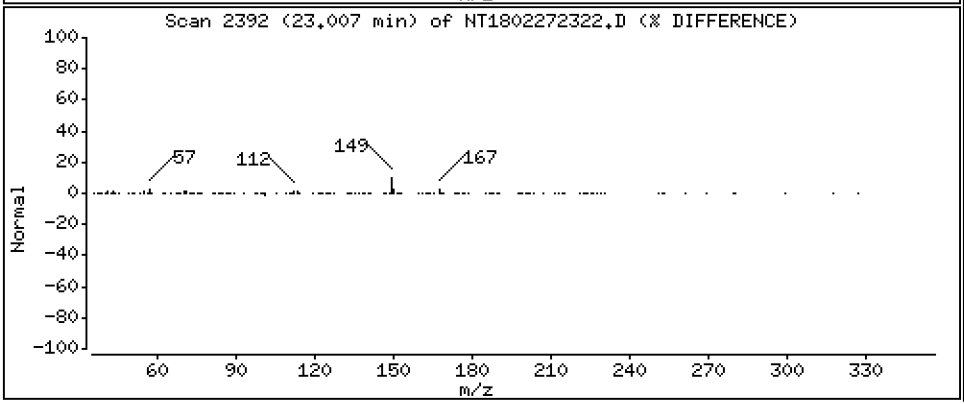
71 Chrysene

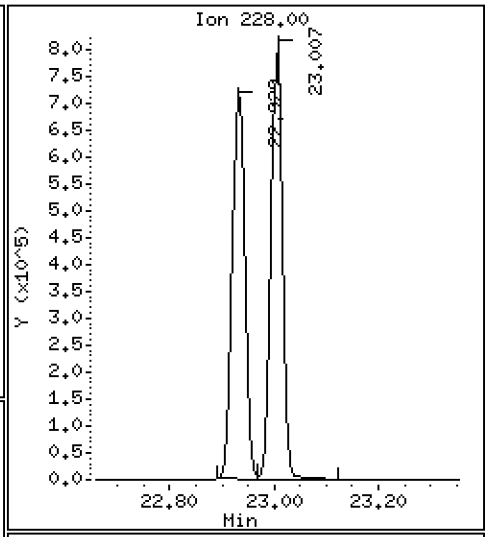
Concentration: 4.724 ug/mL

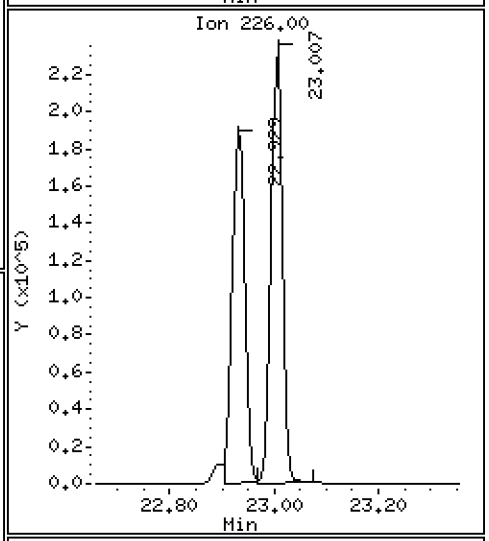


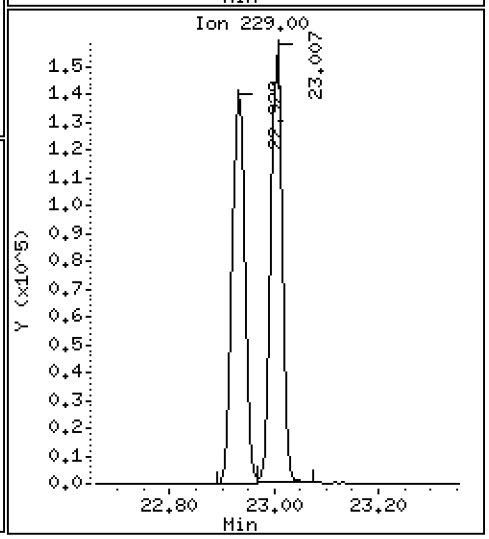












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

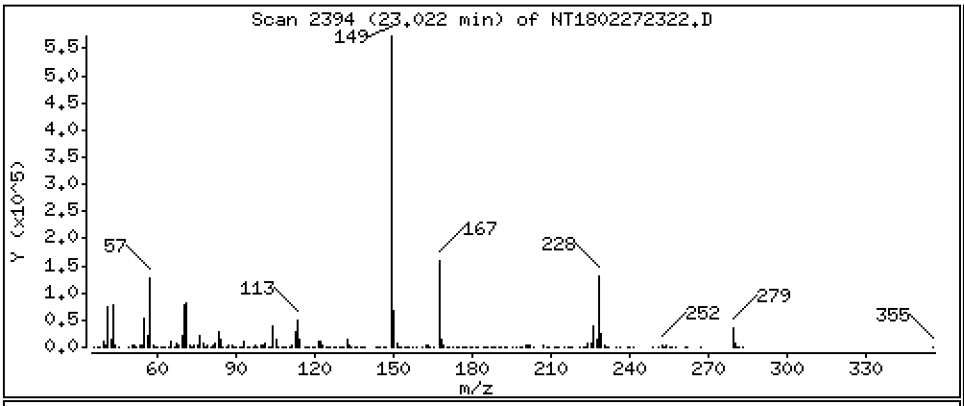
Operator: VTS

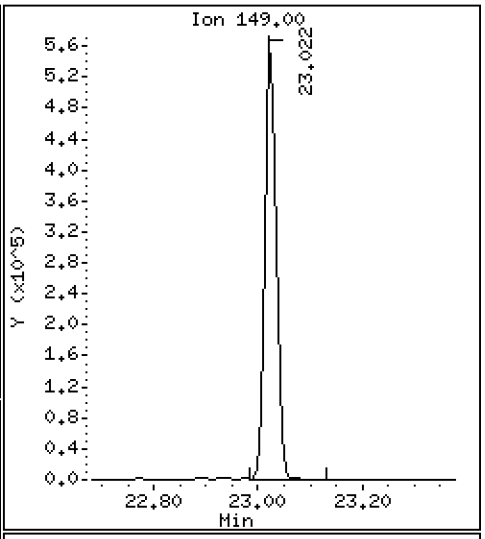
Column phase: ZB-5msi

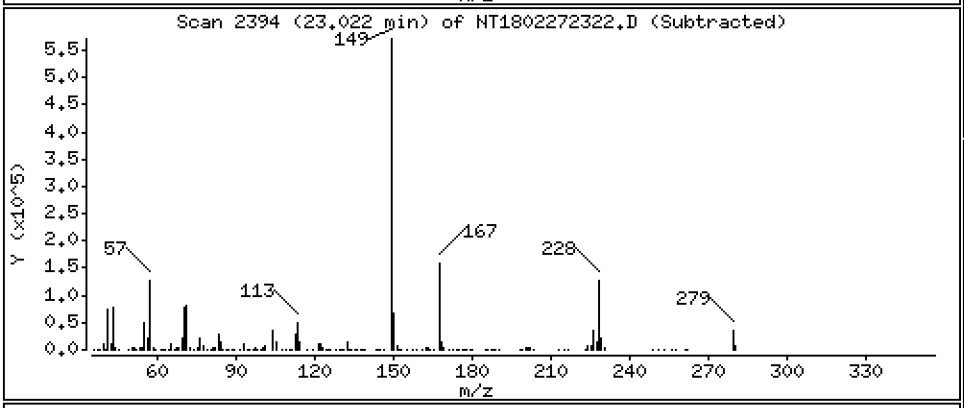
Column diameter: 0.25

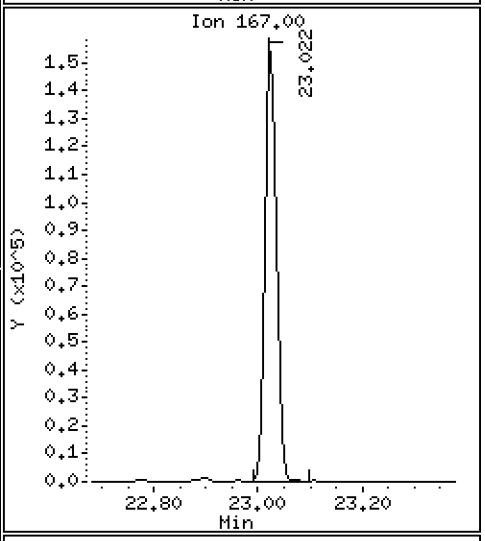
72 bis(2-Ethylhexyl)phthalate

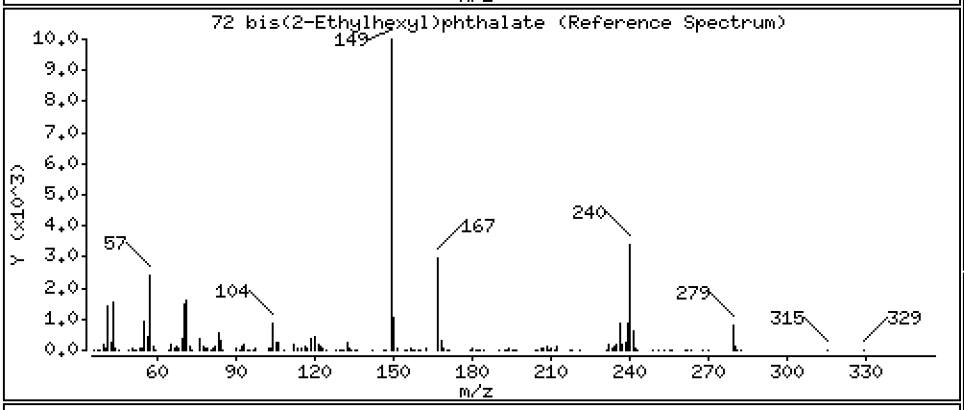
Concentration: 5.644 ug/mL

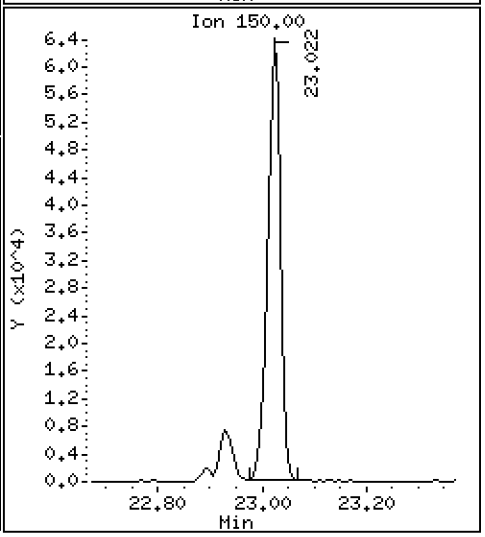


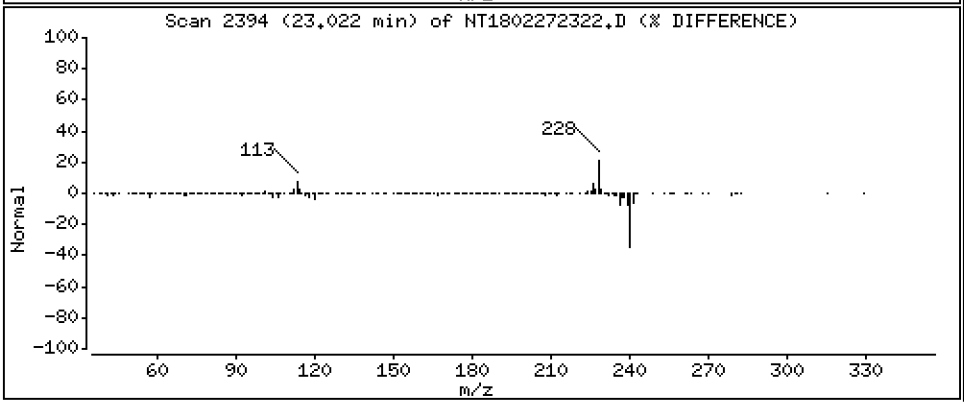












Date : 28-FEB-2023 13:15

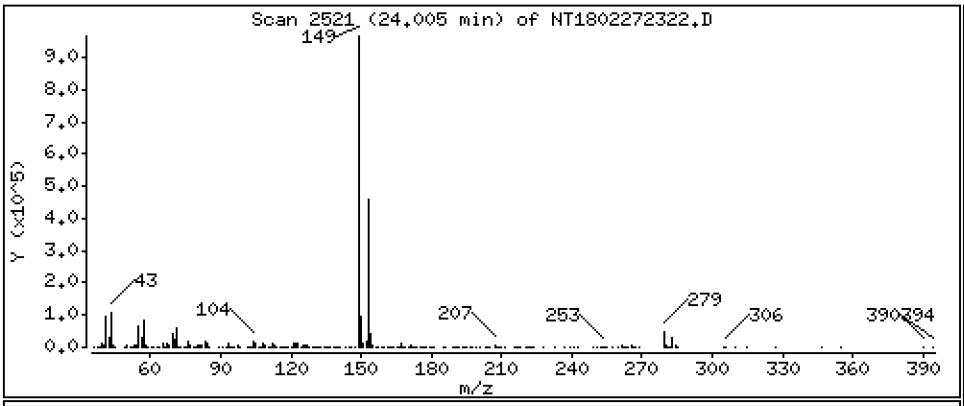
Client ID: Instrument: nt18.i

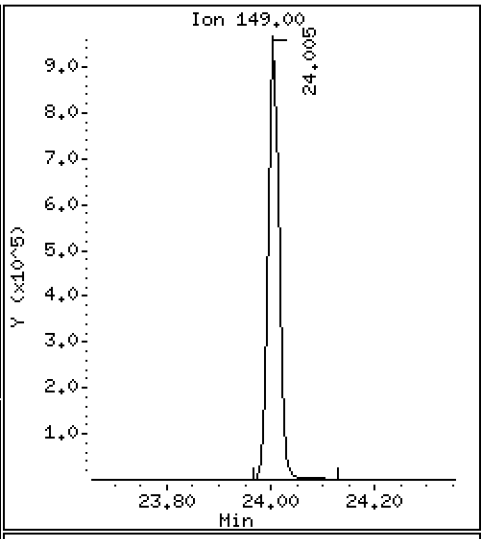
Sample Info: SLC0385-CCV1

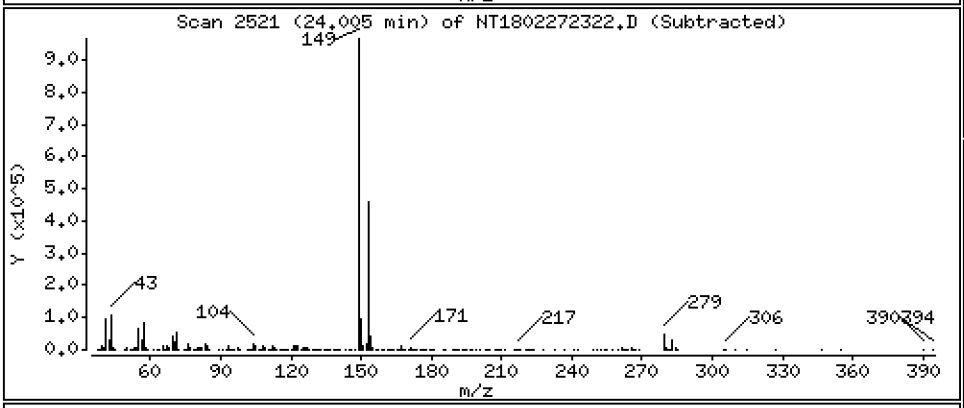
Operator: VTS

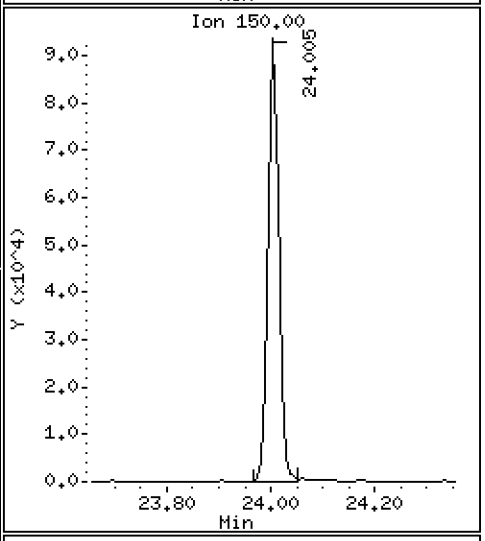
Column phase: ZB-5msi Column diameter: 0.25

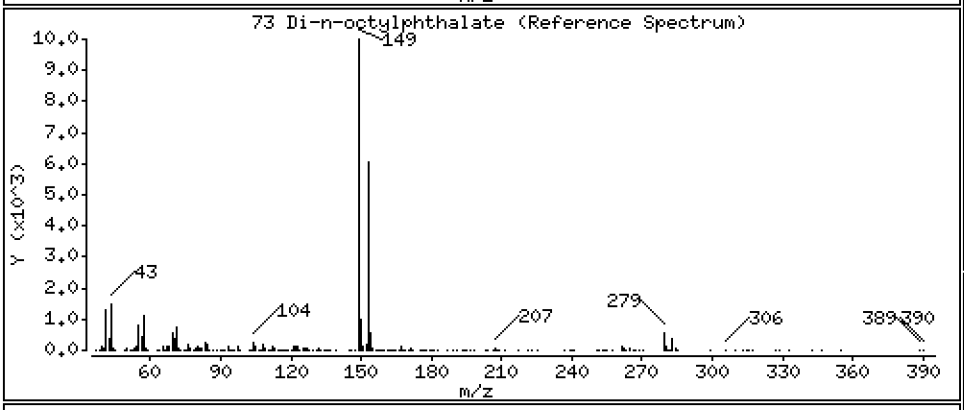
73 Di-n-octylphthalate Concentration: 4.588 ug/mL

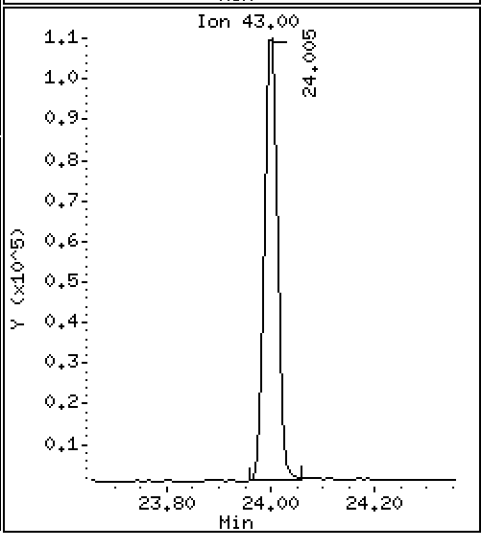


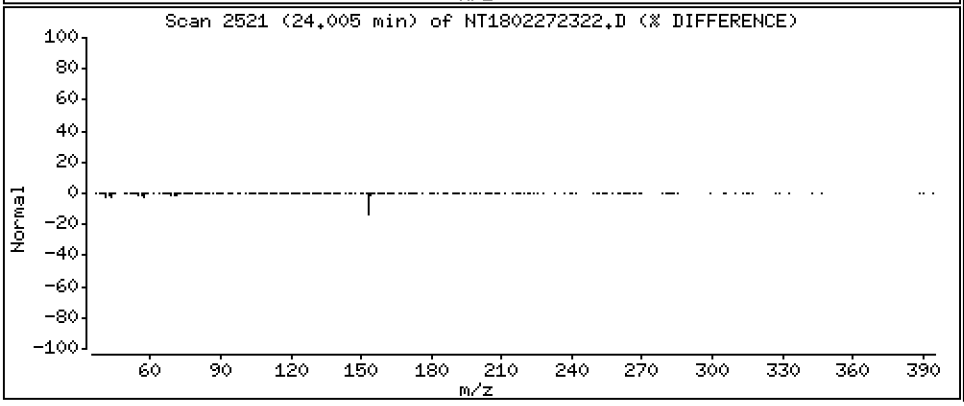












Date : 28-FEB-2023 13:15

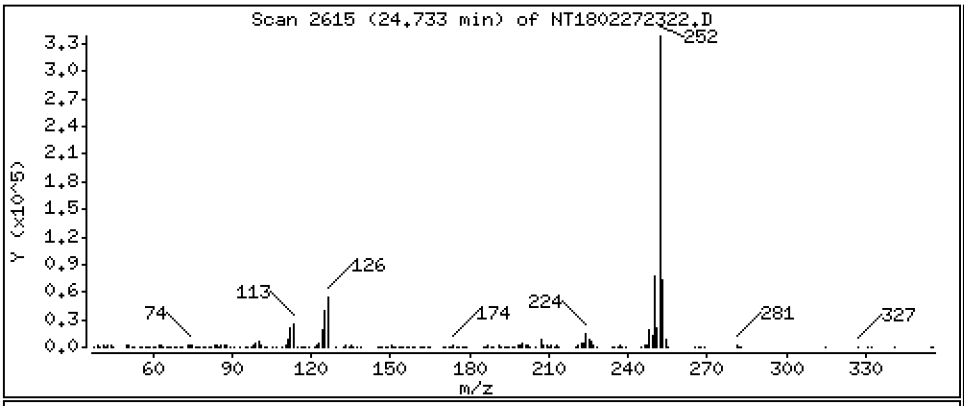
Client ID: Instrument: nt18.i

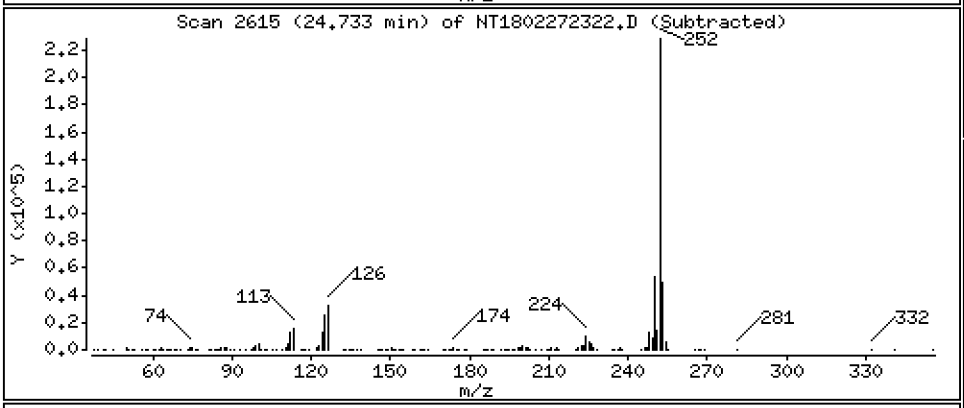
Sample Info: SLC0385-CCV1

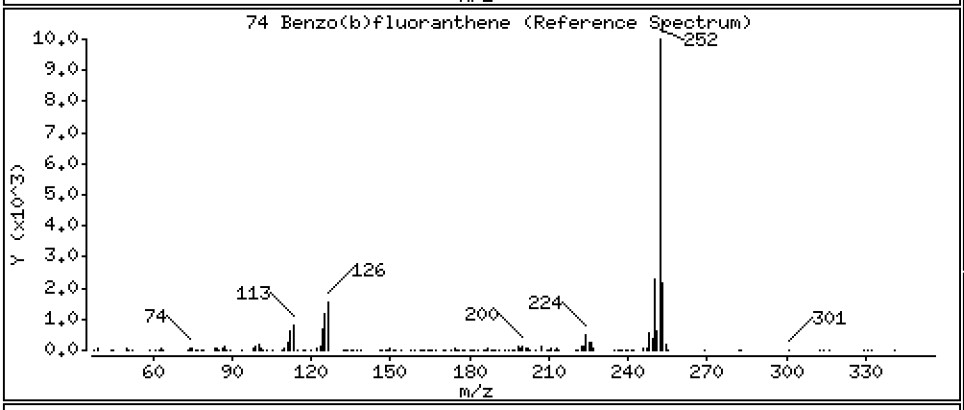
Operator: VTS

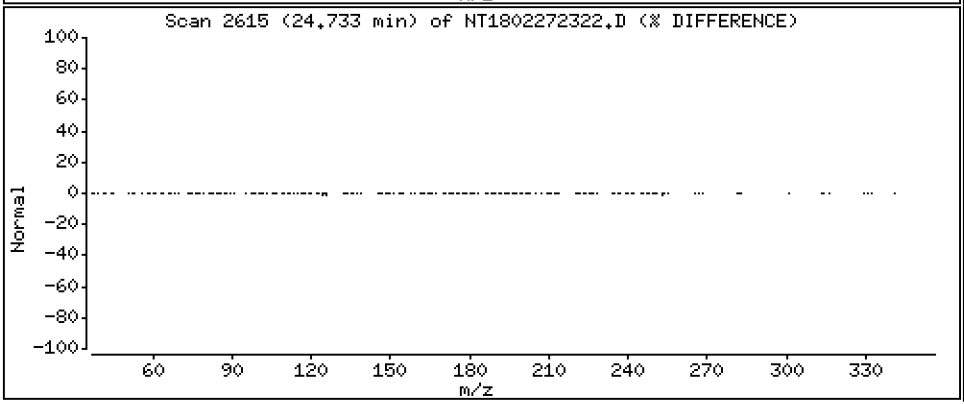
Column phase: ZB-5msi Column diameter: 0.25

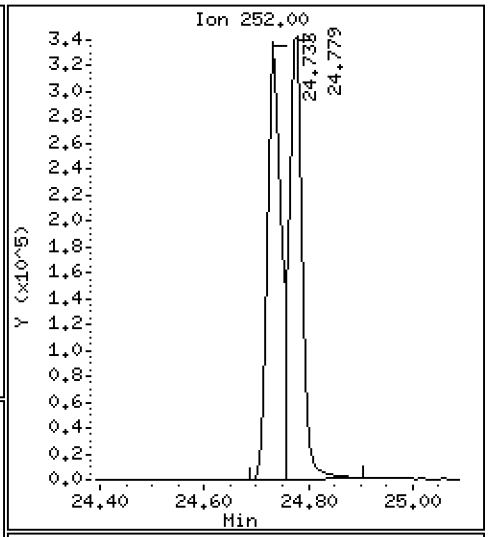
74 Benzo(b)fluoranthene Concentration: 7.427 ug/mL

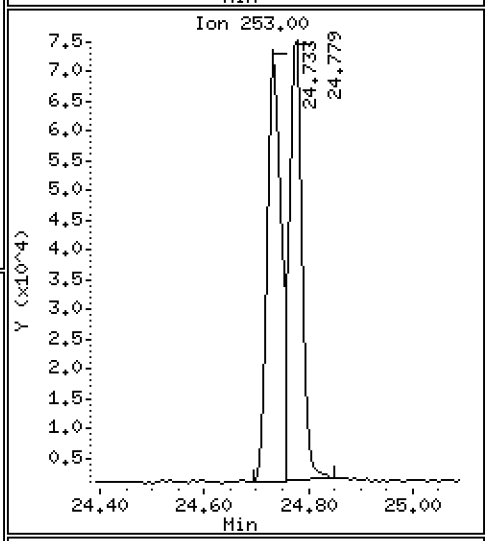


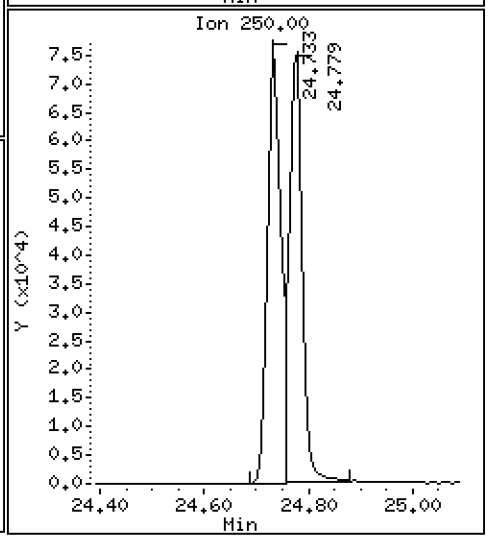












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272322.D

Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

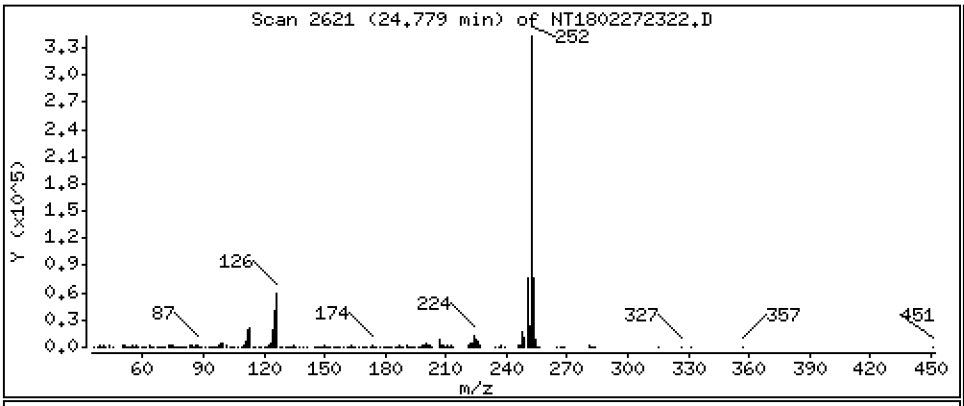
Operator: VTS

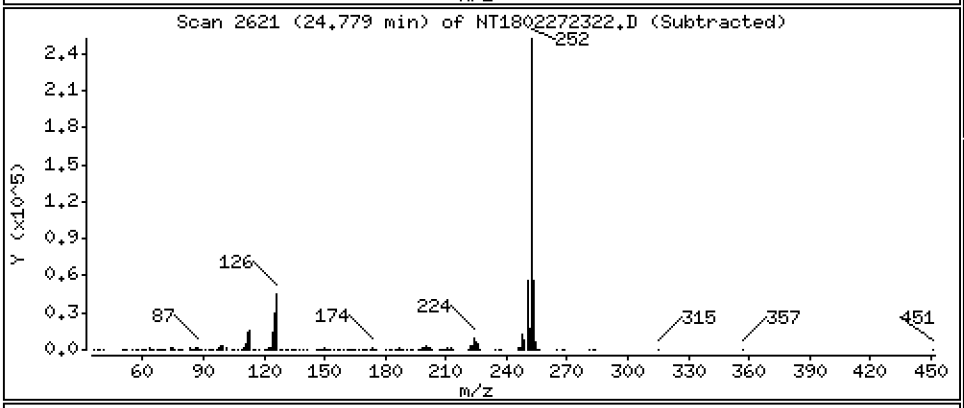
Column phase: ZB-5msi

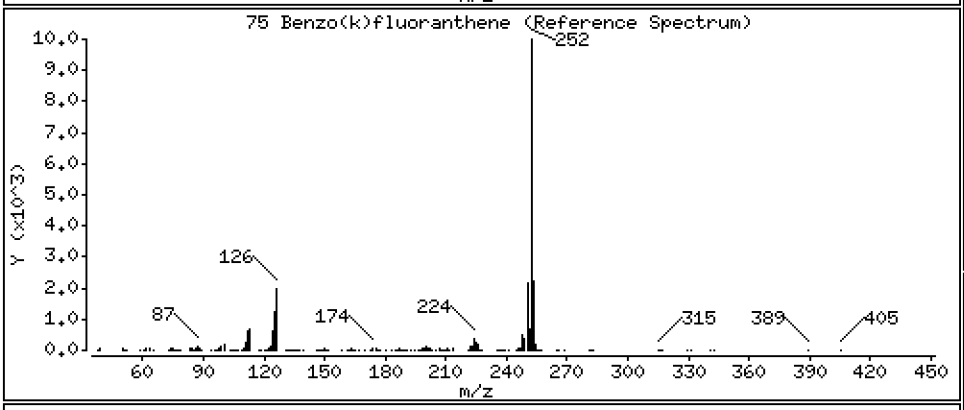
Column diameter: 0.25

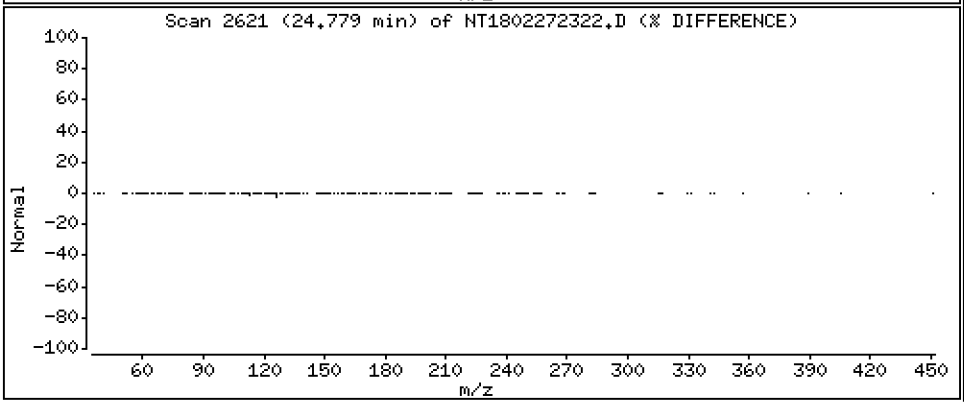
75 Benzo(k)fluoranthene

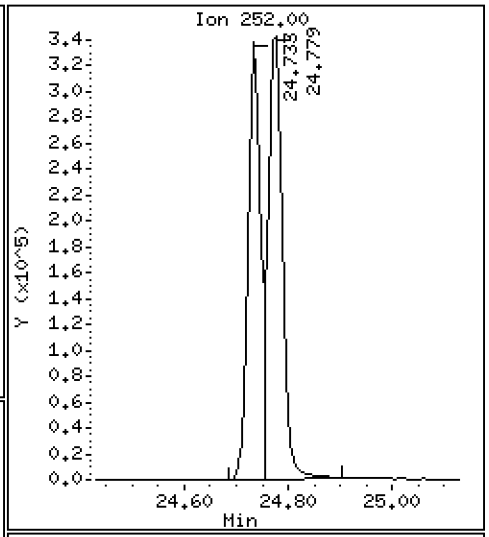
Concentration: 6.859 ug/mL

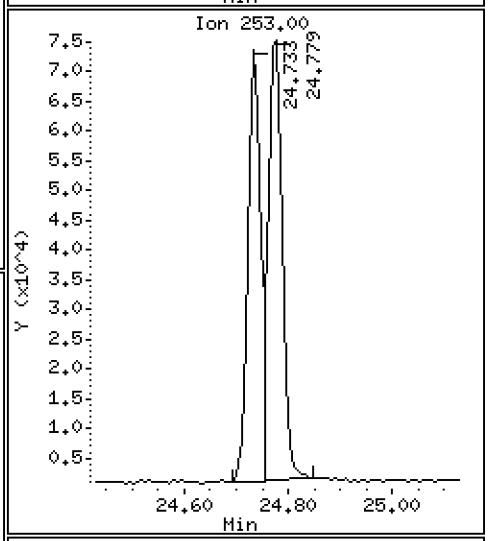


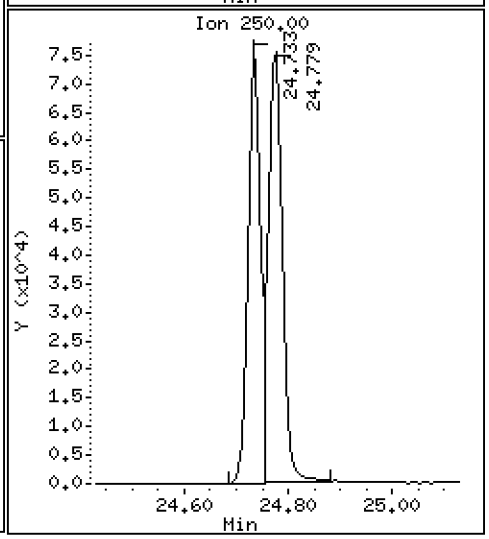












Date : 28-FEB-2023 13:15

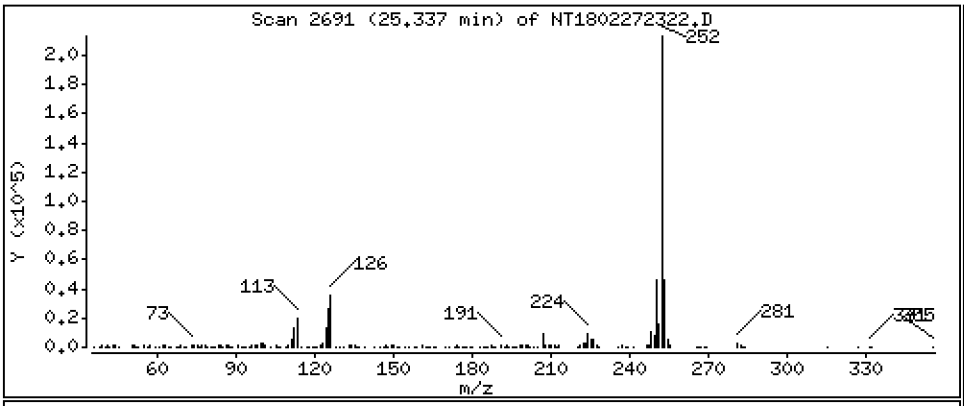
Client ID: Instrument: nt18.i

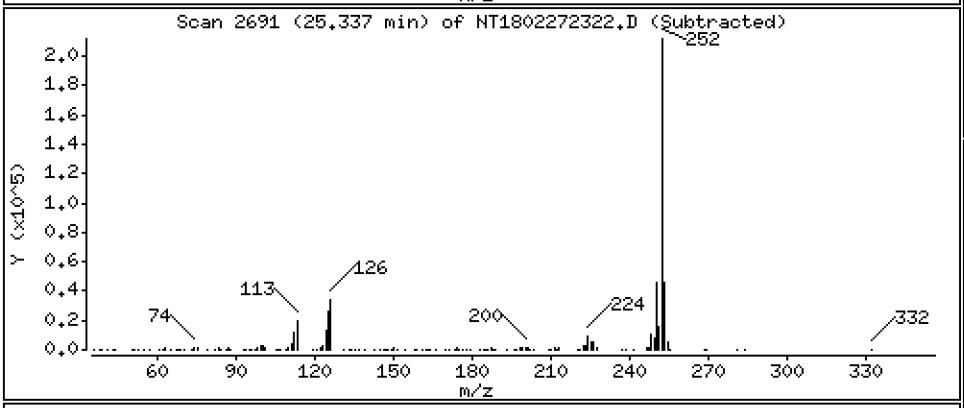
Sample Info: SLC0385-CCV1

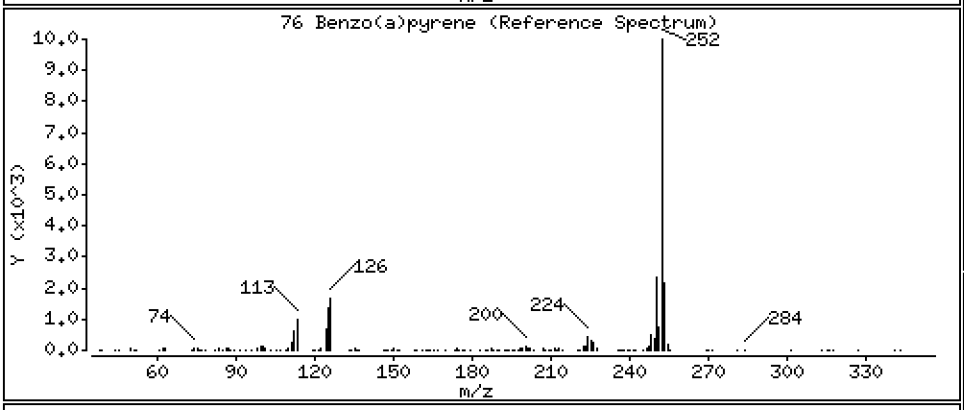
Operator: VTS

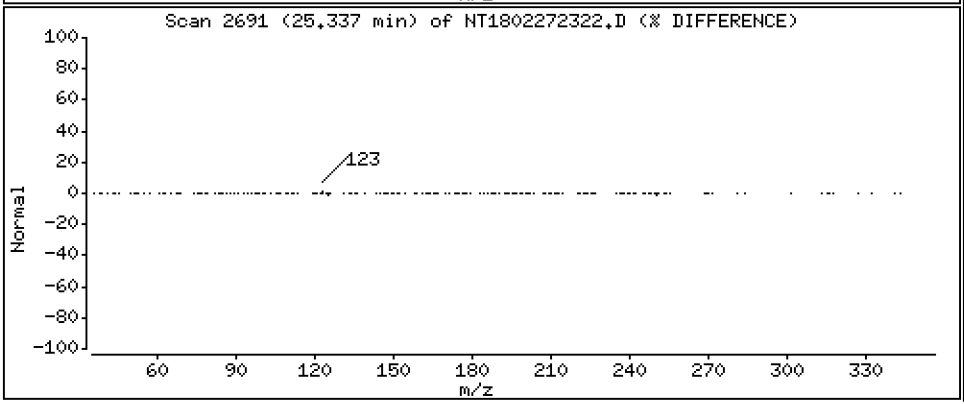
Column phase: ZB-5msi Column diameter: 0.25

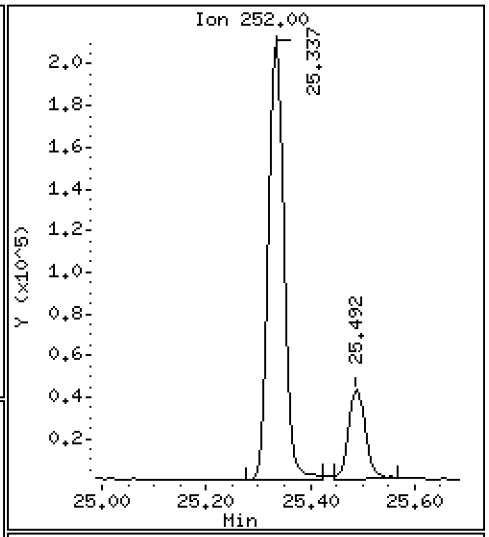
76 Benzo(a)pyrene Concentration: 5.517 ug/mL

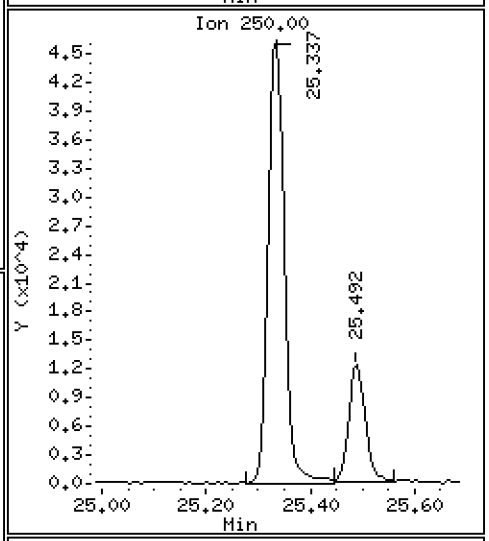


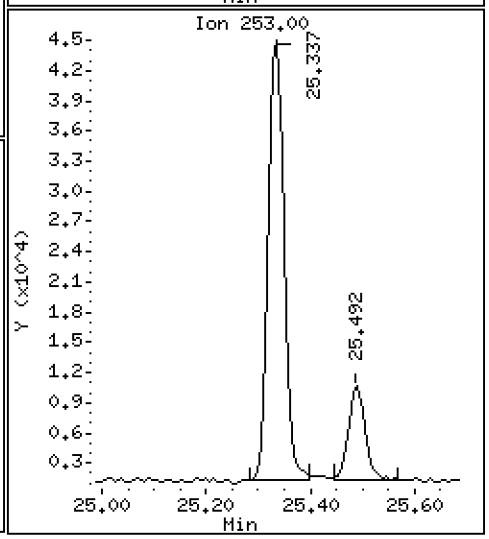












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272322.D

Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

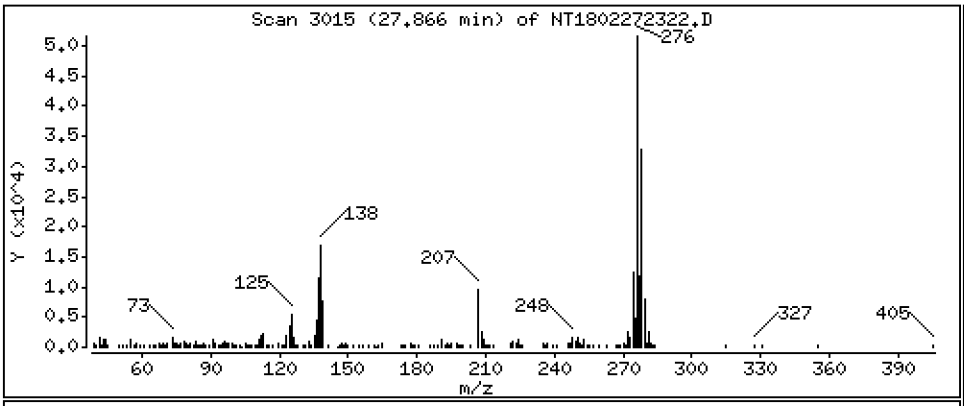
Operator: VTS

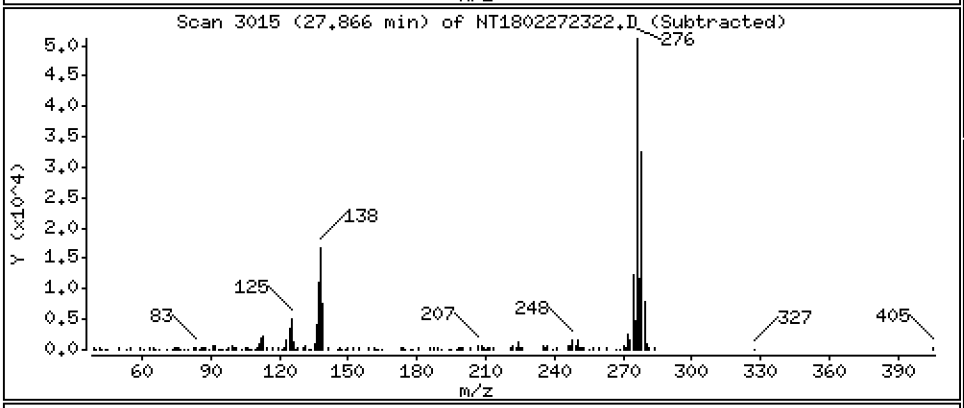
Column phase: ZB-5msi

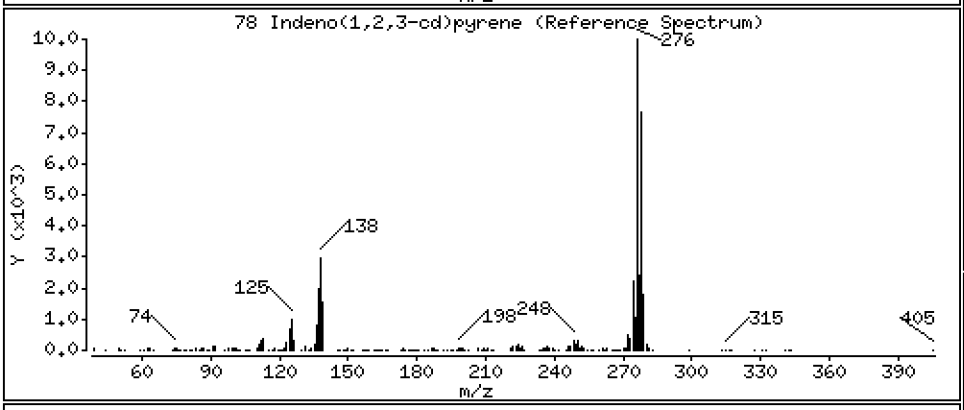
Column diameter: 0.25

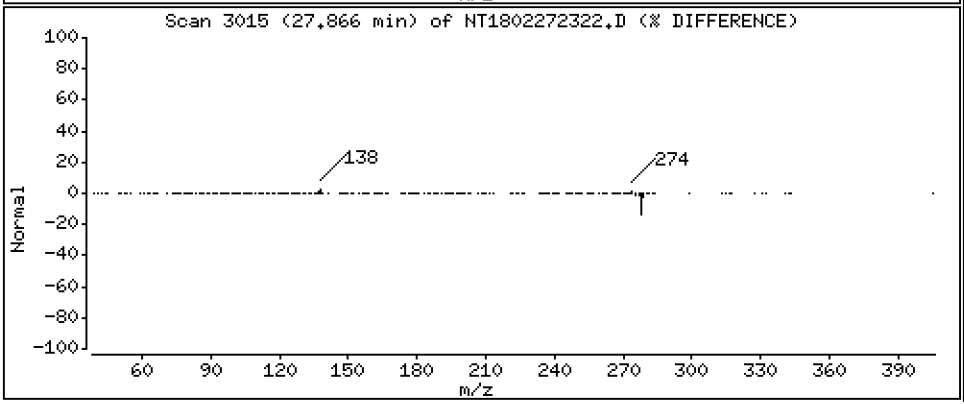
78 Indeno(1,2,3-cd)pyrene

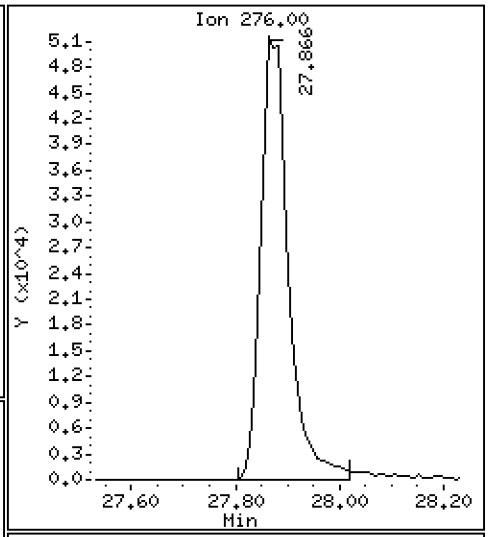
Concentration: 1.960 ug/mL

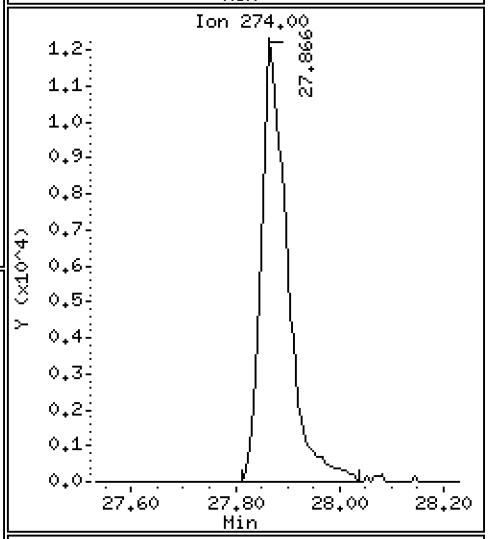


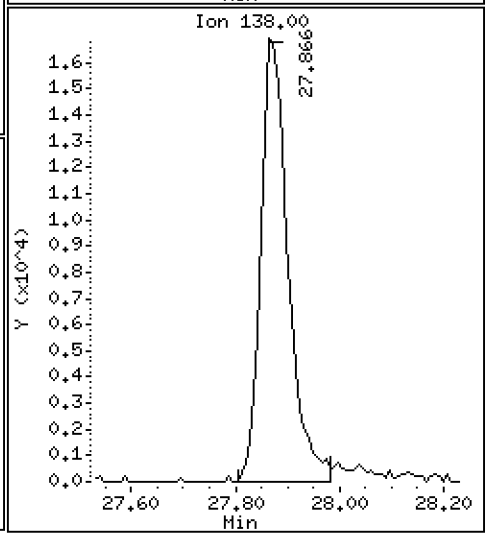












Date : 28-FEB-2023 13:15

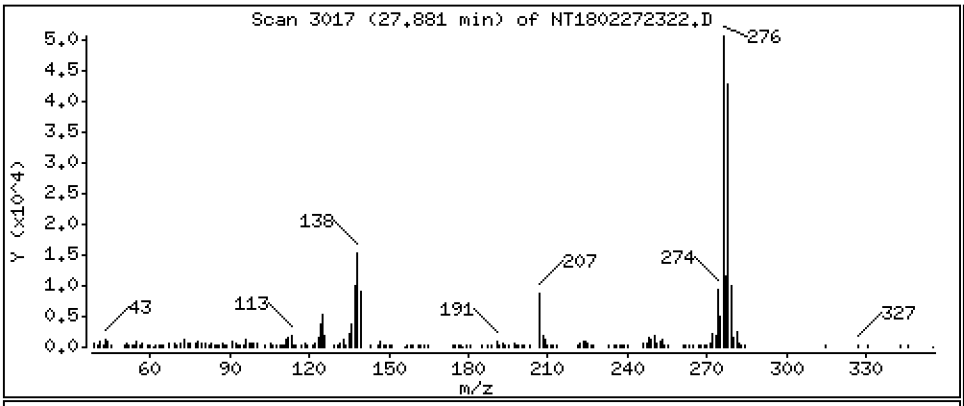
Client ID: Instrument: nt18.i

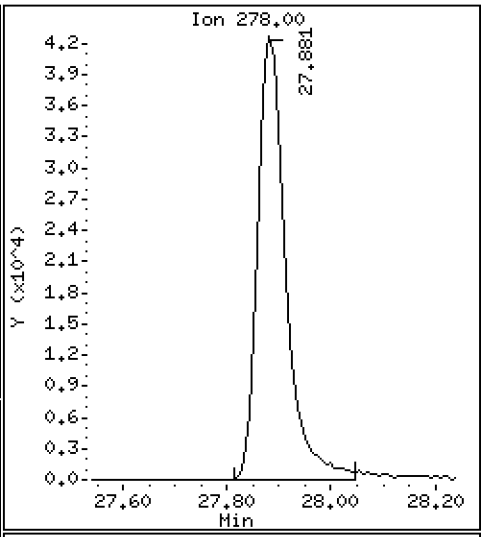
Sample Info: SLC0385-CCV1

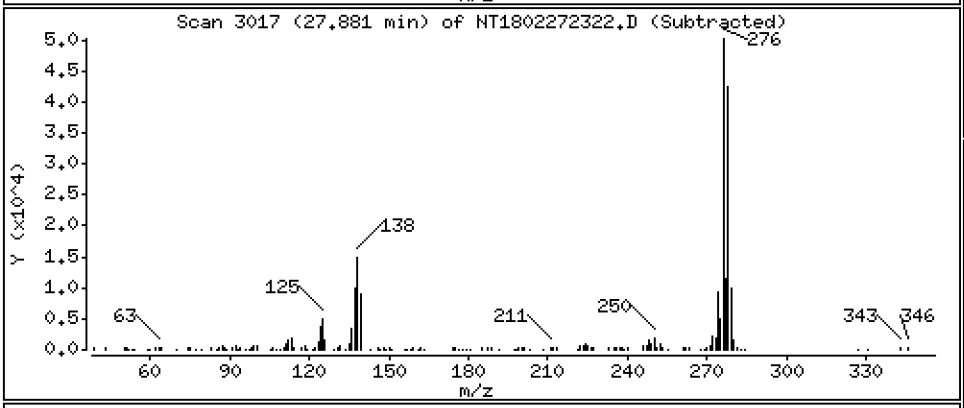
Operator: VTS

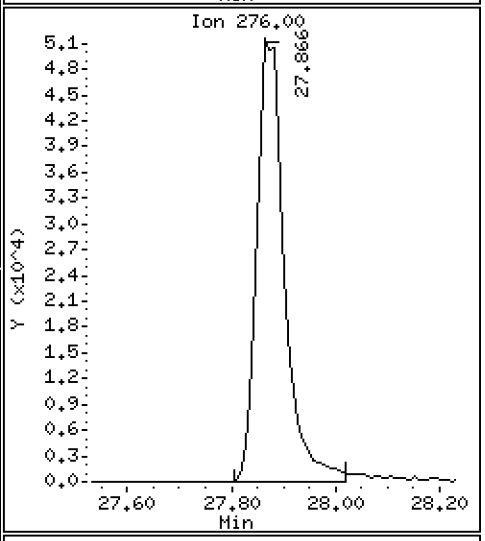
Column phase: ZB-5msi Column diameter: 0.25

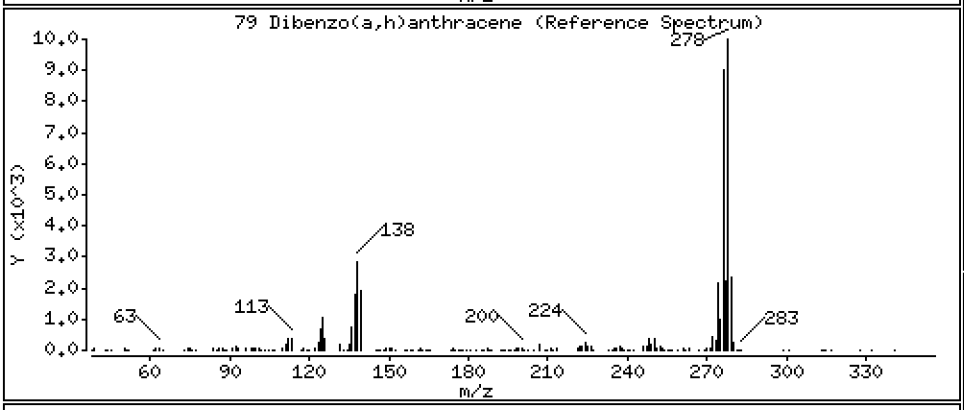
79 Dibenzo(a,h)anthracene Concentration: 1.980 ug/mL

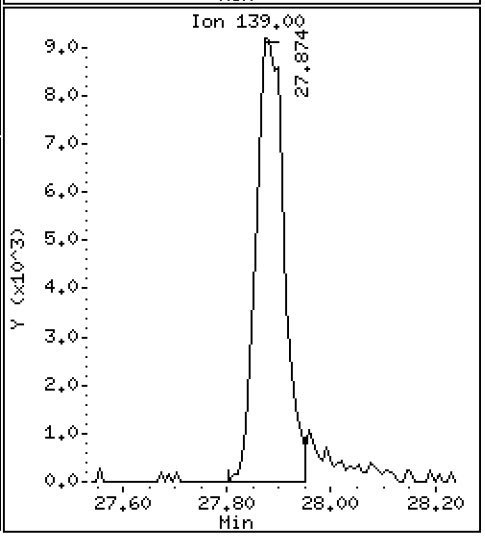


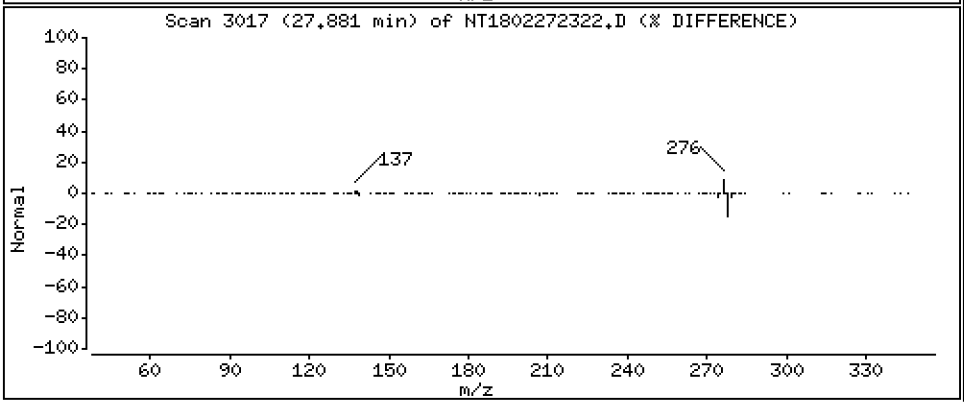












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

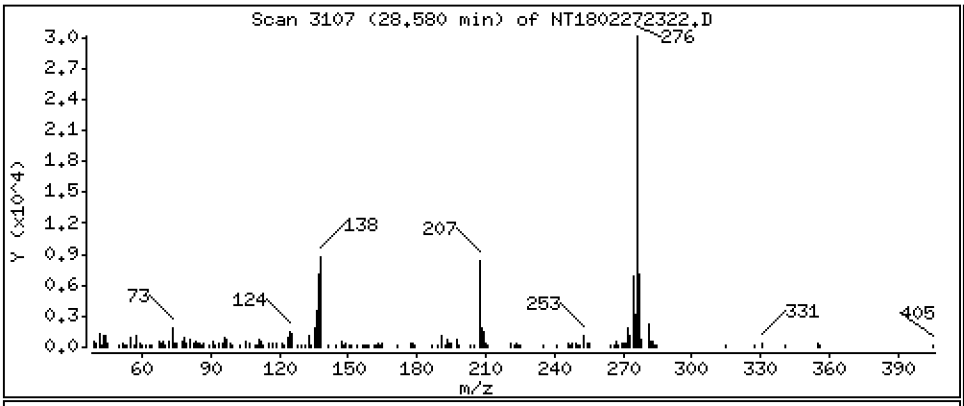
Operator: VTS

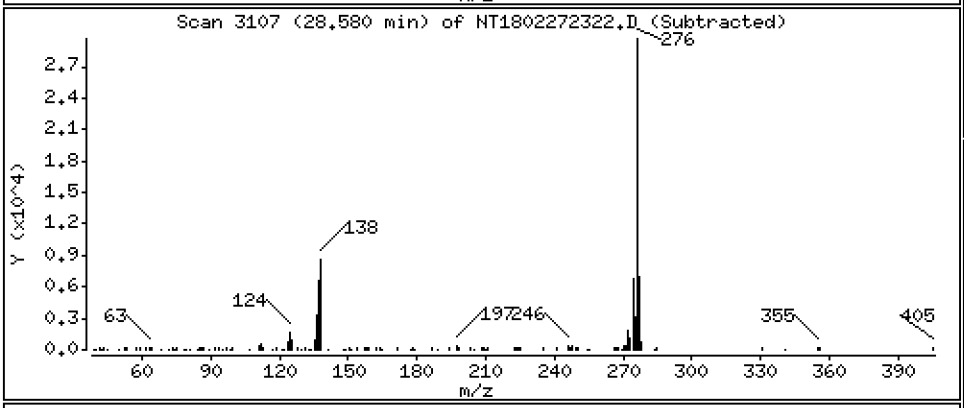
Column phase: ZB-5msi

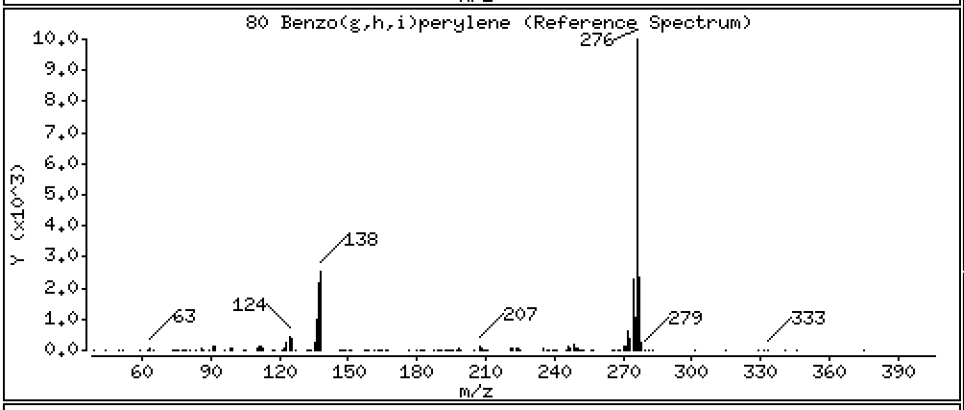
Column diameter: 0.25

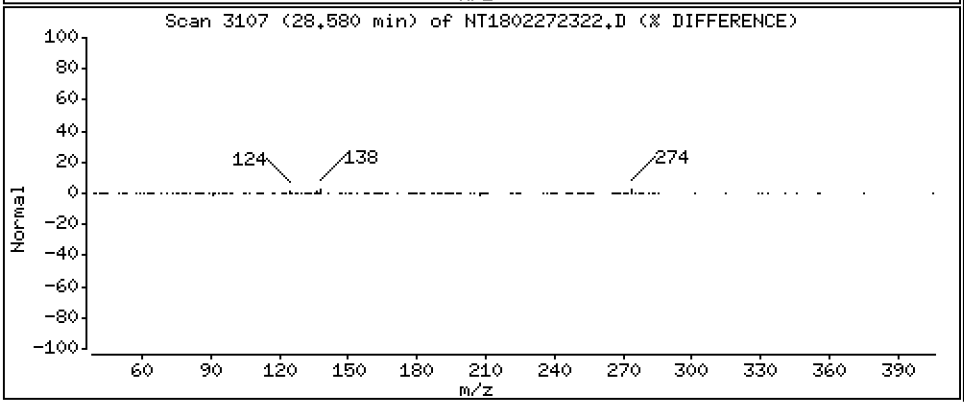
80 Benzo(g,h,i)perylene

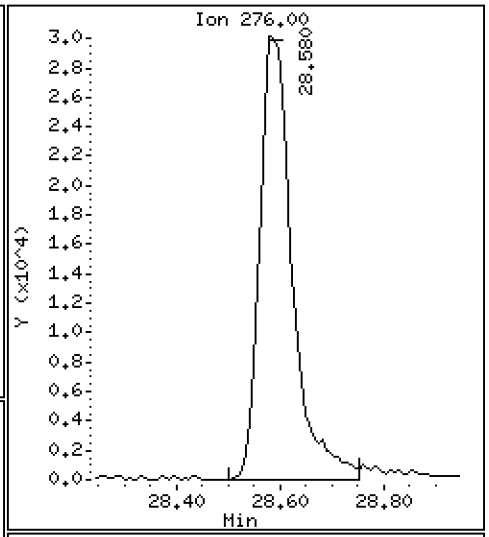
Concentration: 1.696 ug/mL

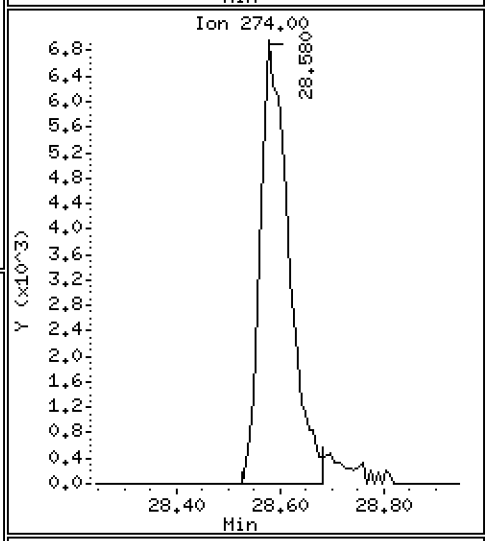


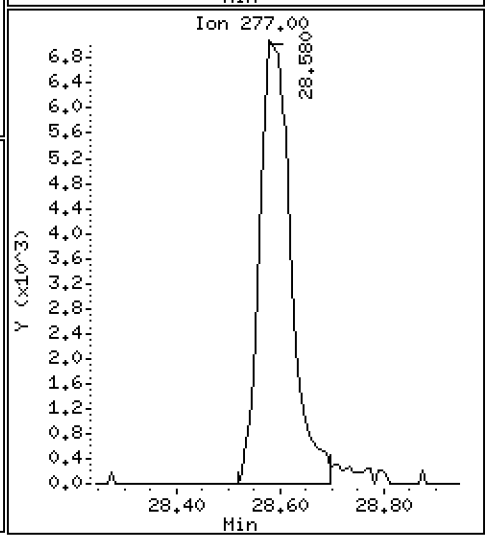












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

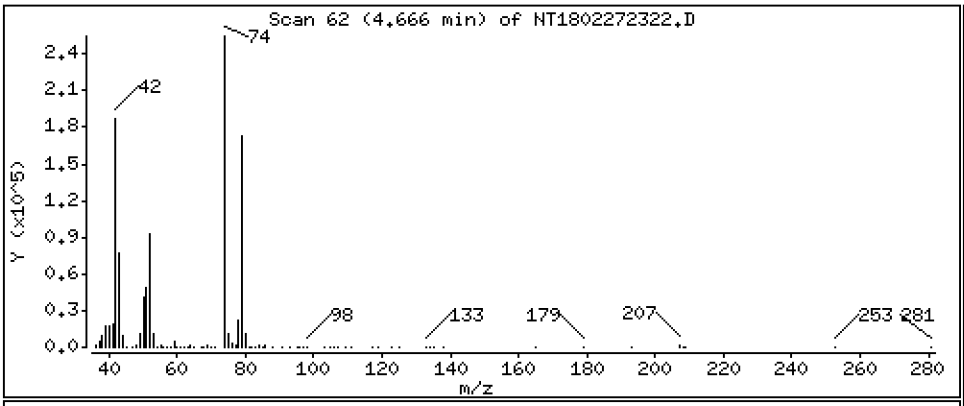
Operator: VTS

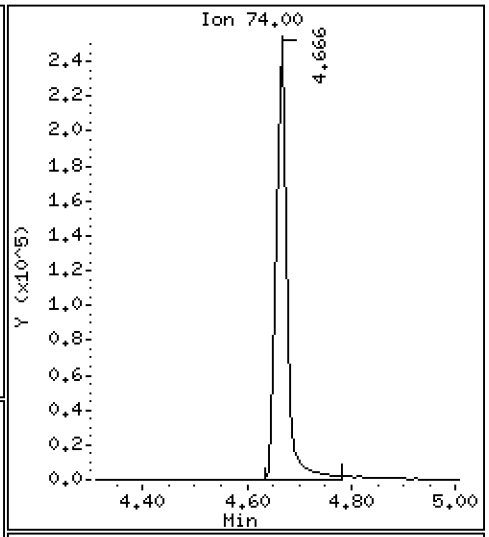
Column phase: ZB-5msi

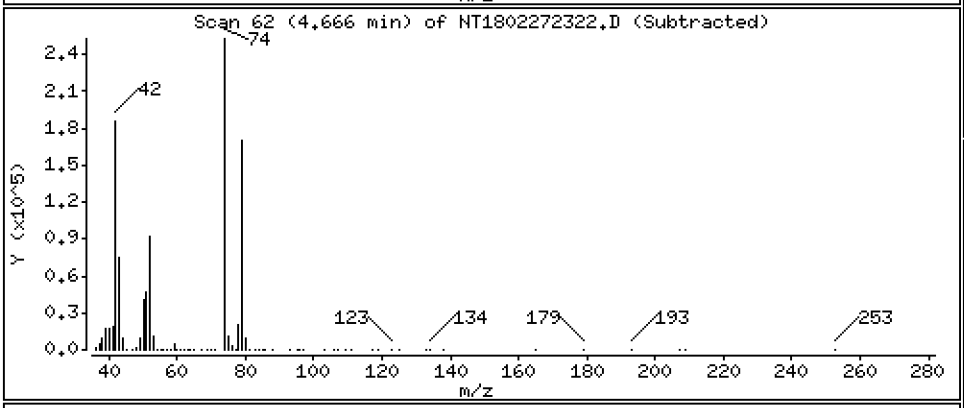
Column diameter: 0.25

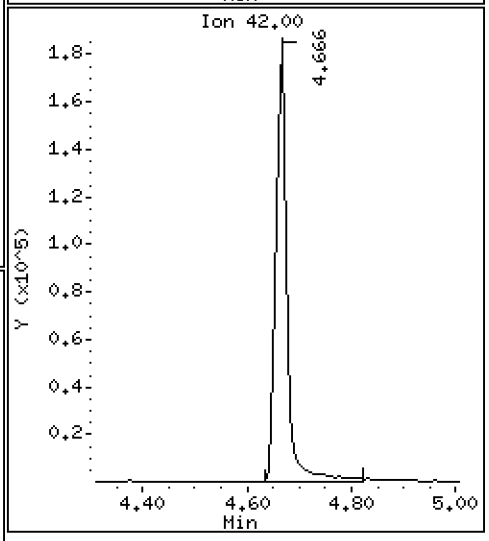
90 N-Nitrosodimethylamine

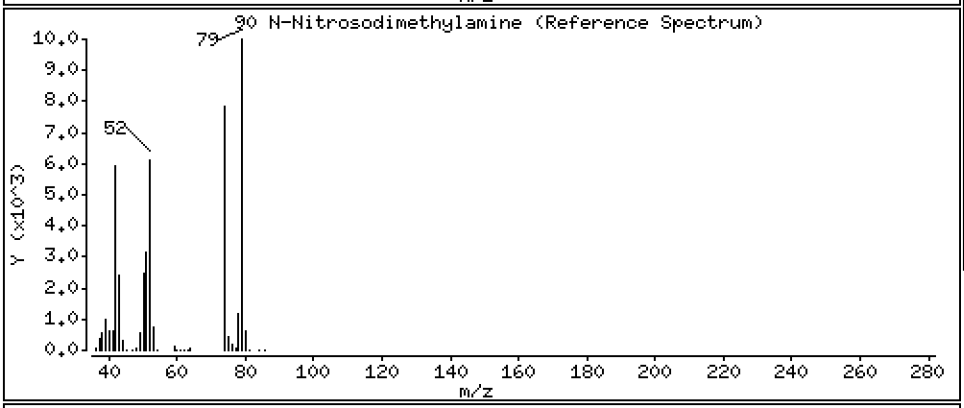
Concentration: 8.838 ug/mL

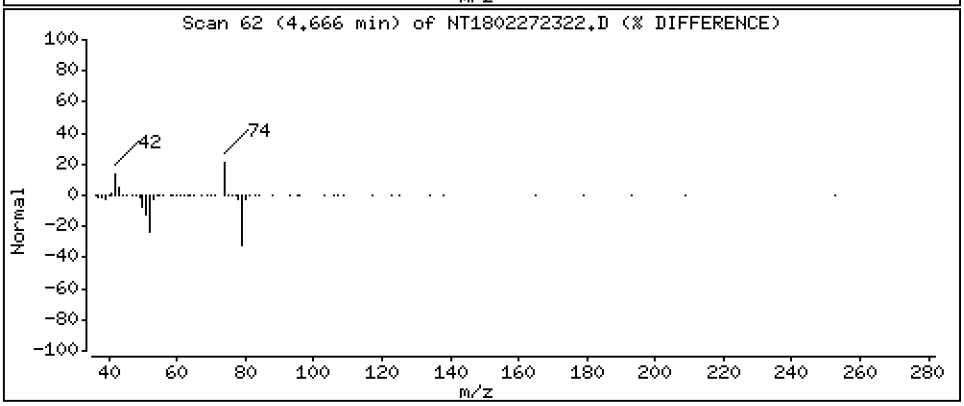












Date : 28-FEB-2023 13:15

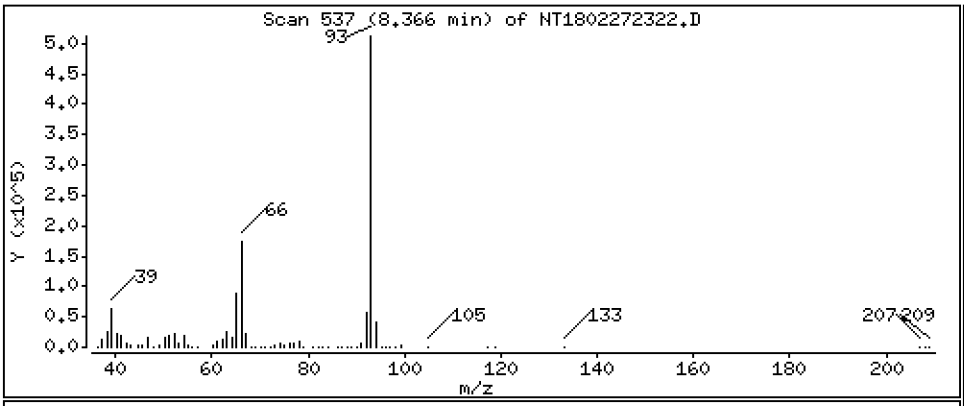
Client ID: Instrument: nt18.i

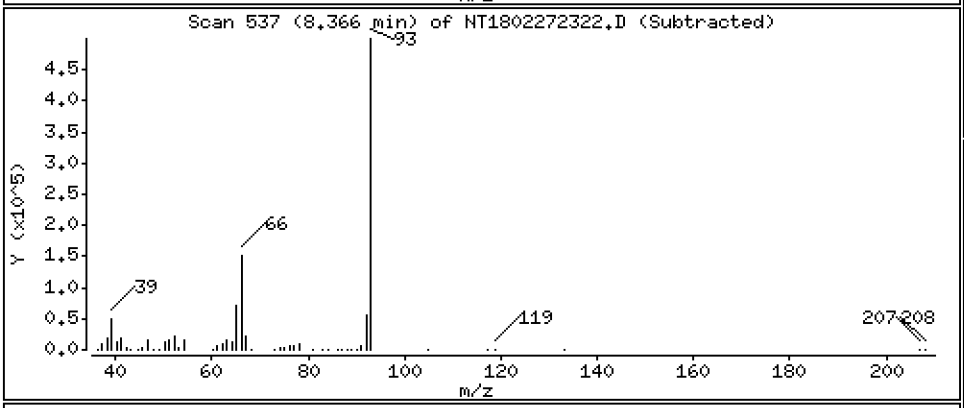
Sample Info: SLC0385-CCV1

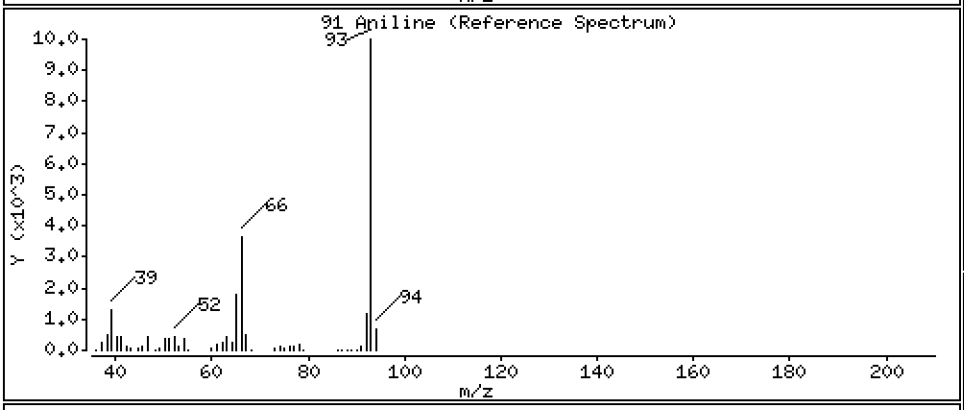
Operator: VTS

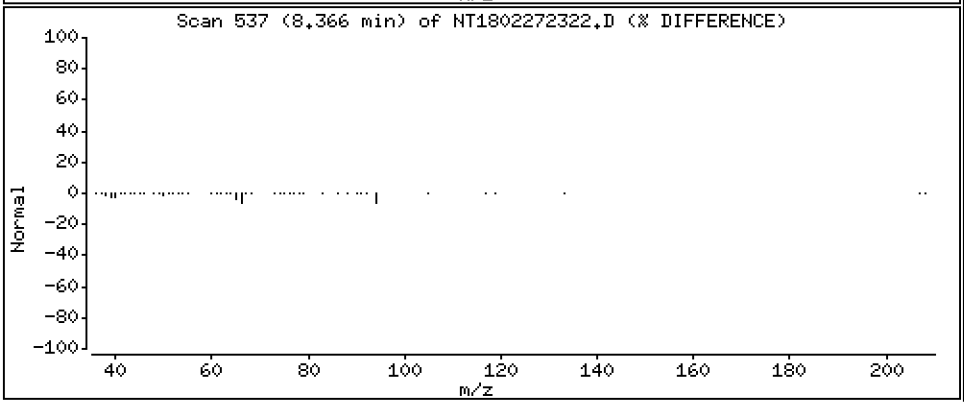
Column phase: ZB-5msi Column diameter: 0.25

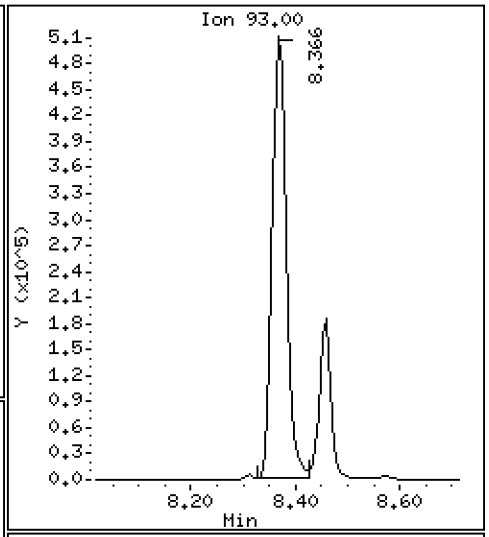
91 Aniline Concentration: 8.852 ug/mL

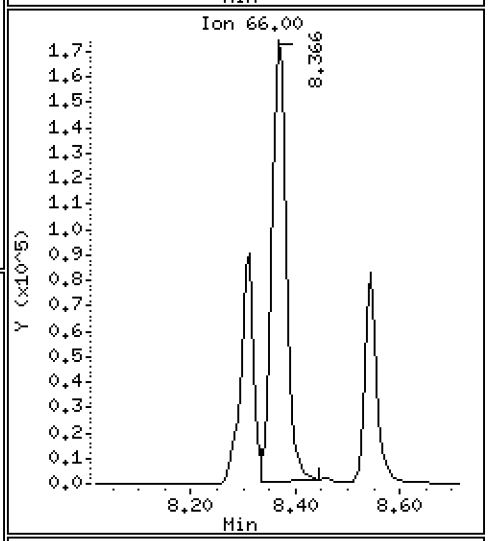


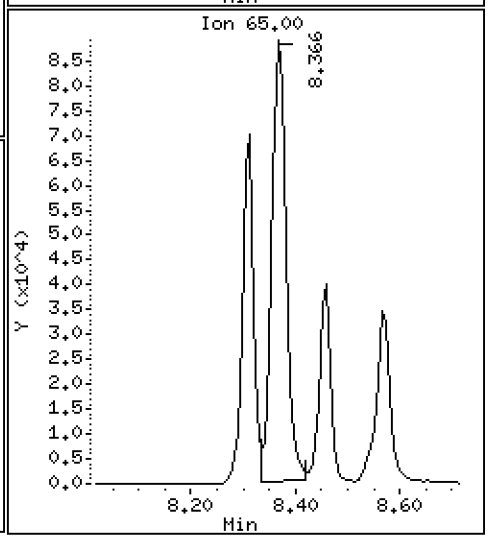












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

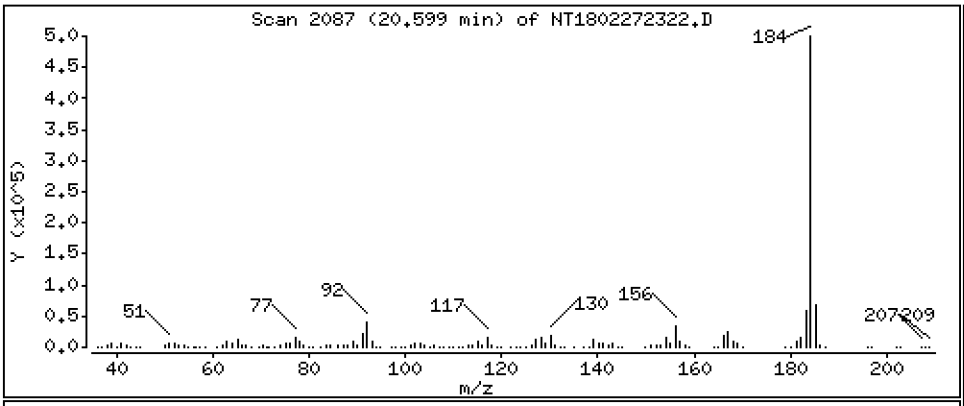
Operator: VTS

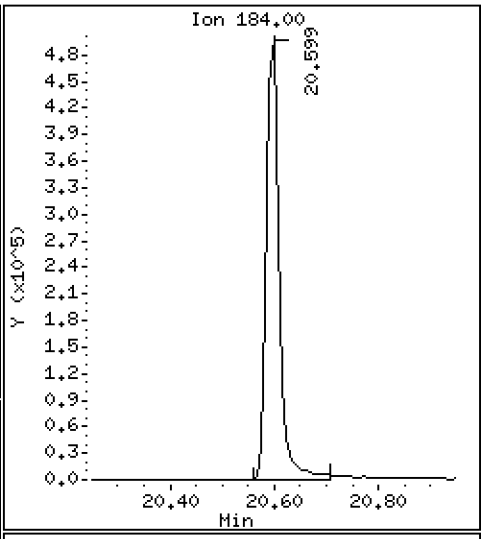
Column phase: ZB-5msi

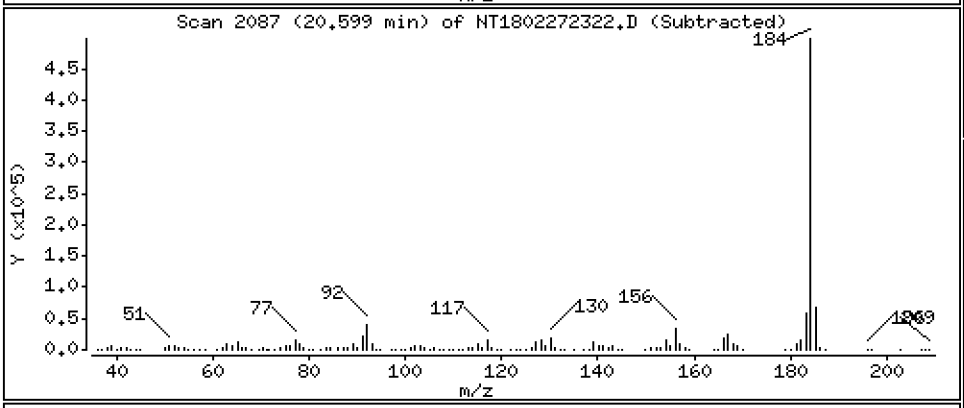
Column diameter: 0.25

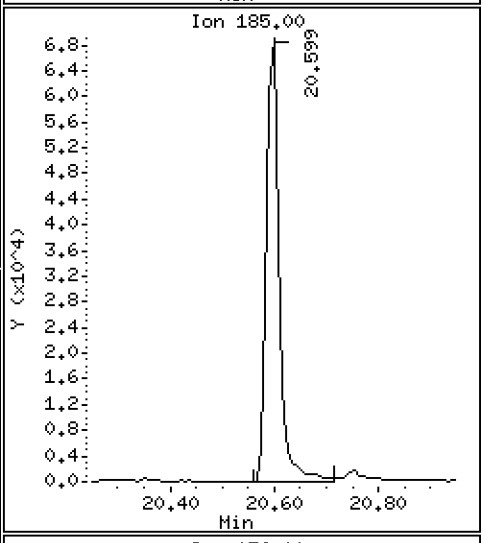
93 Benzidine

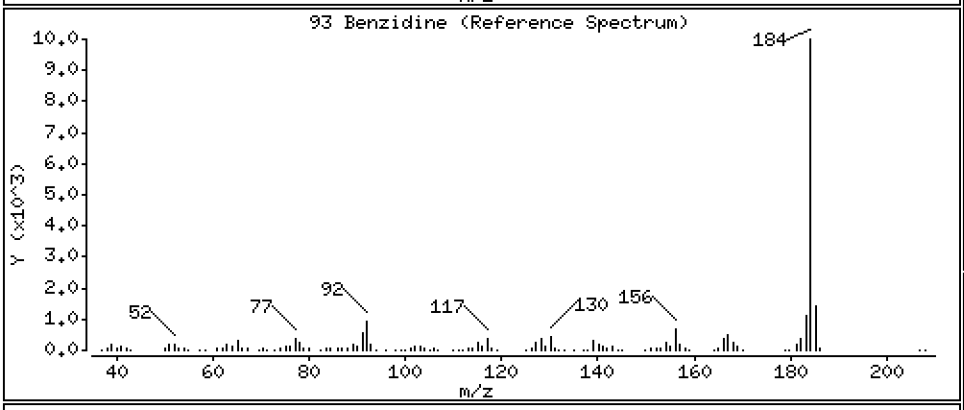
Concentration: 7.258 ug/mL

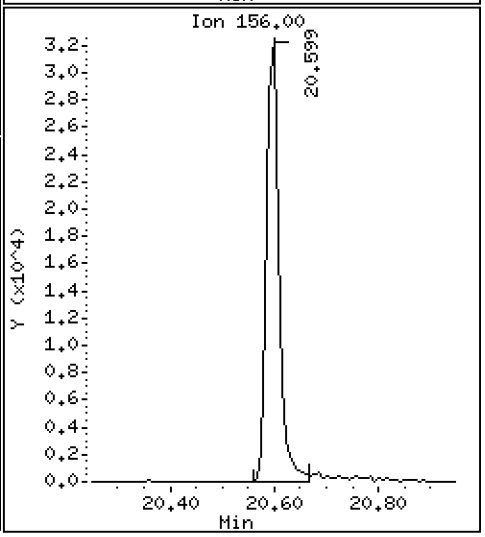


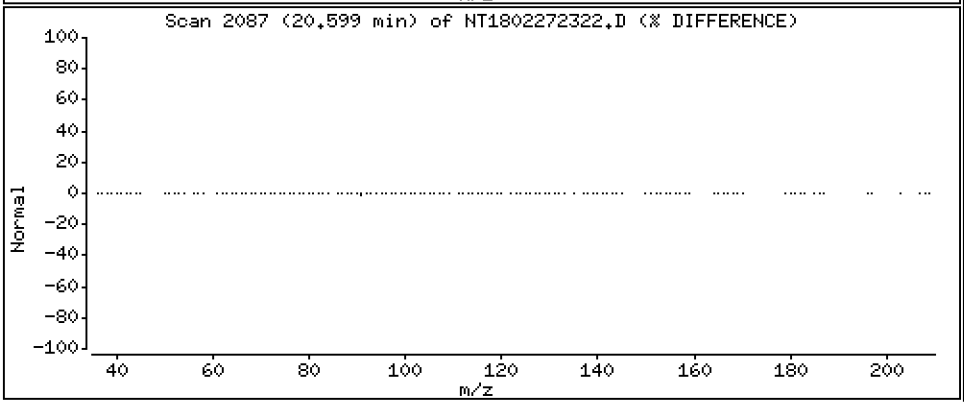












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

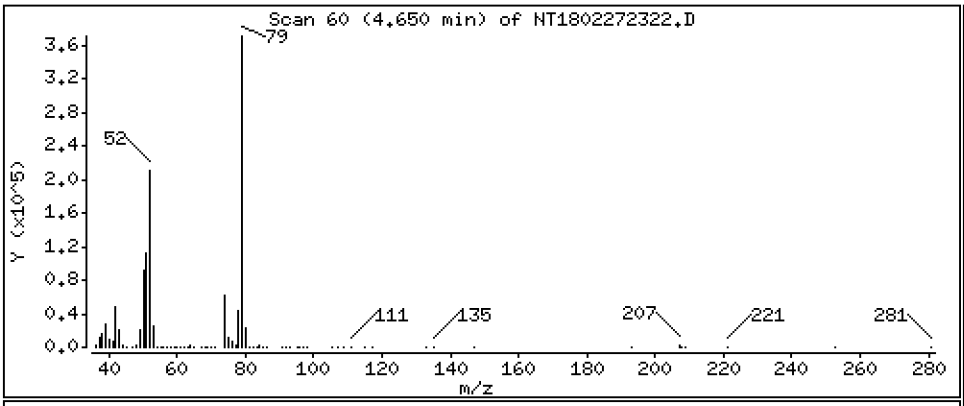
Operator: VTS

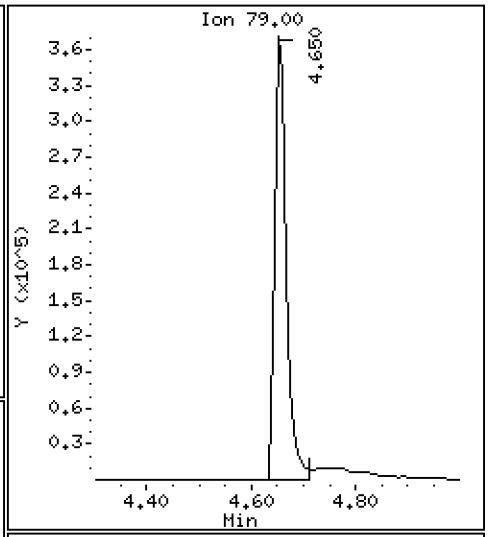
Column phase: ZB-5msi

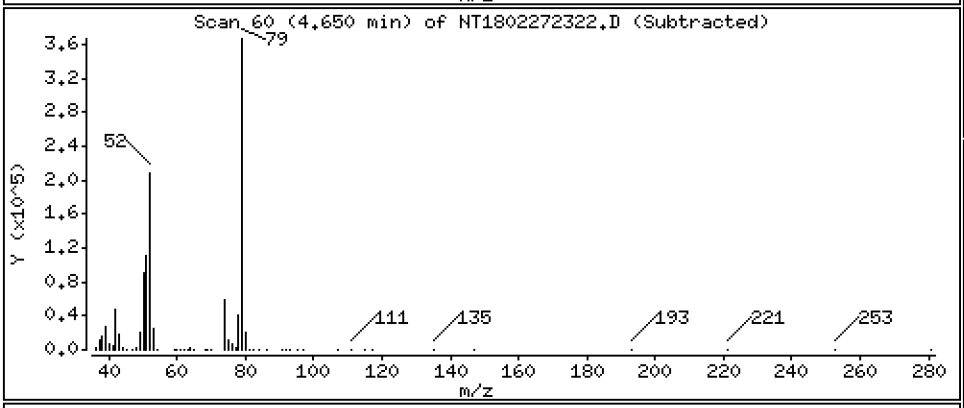
Column diameter: 0.25

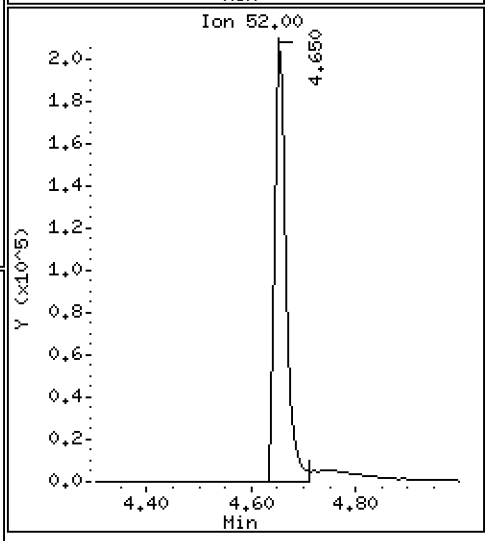
103 Pyridine

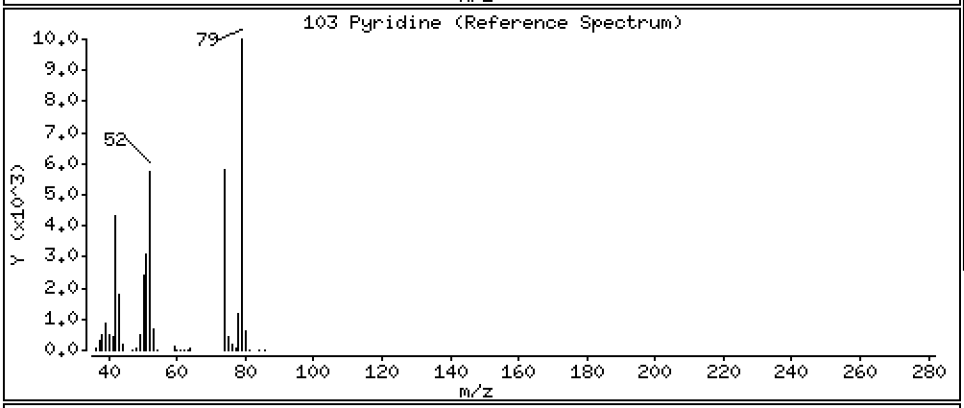
Concentration: 8.100 ug/mL

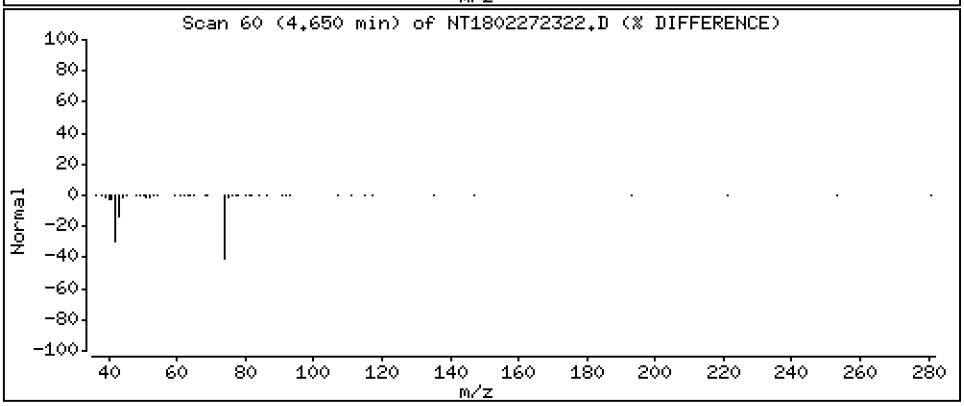












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272322.D

Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

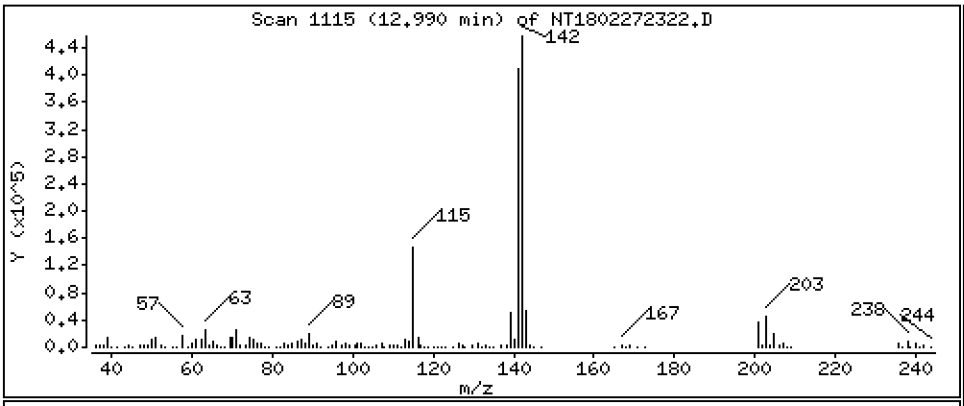
Operator: VTS

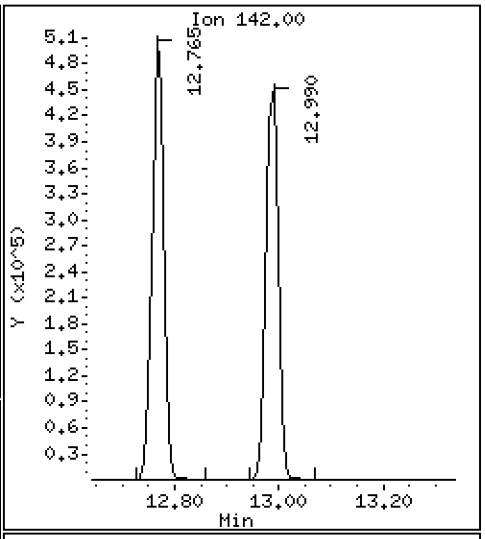
Column phase: ZB-5msi

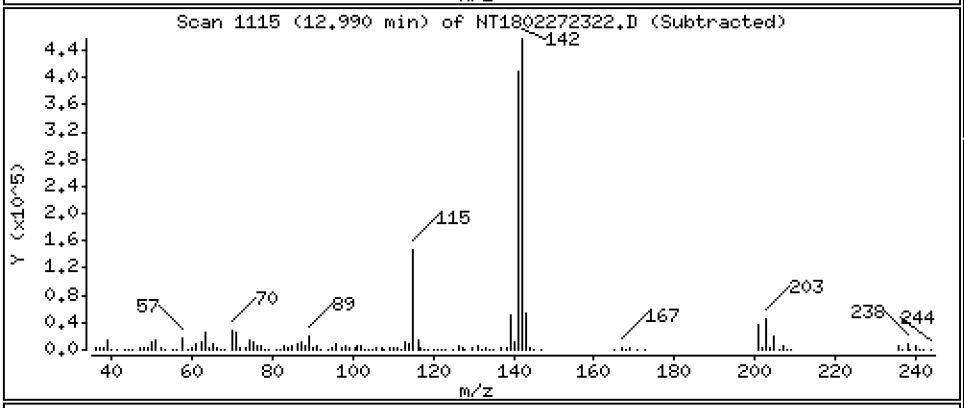
Column diameter: 0.25

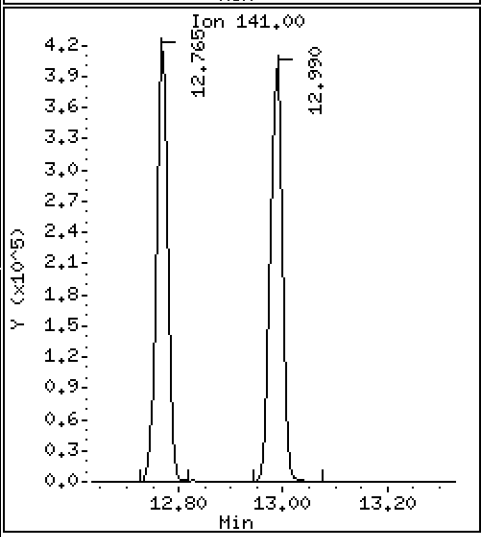
105 1-methylnaphthalene

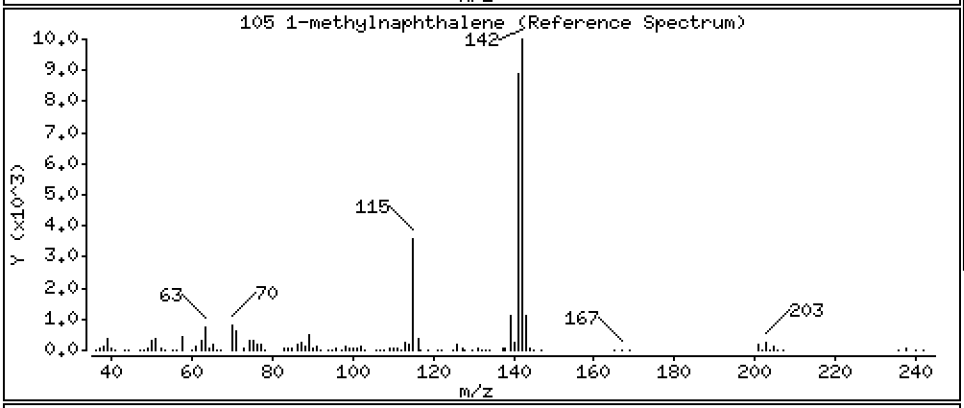
Concentration: 4.853 ug/mL

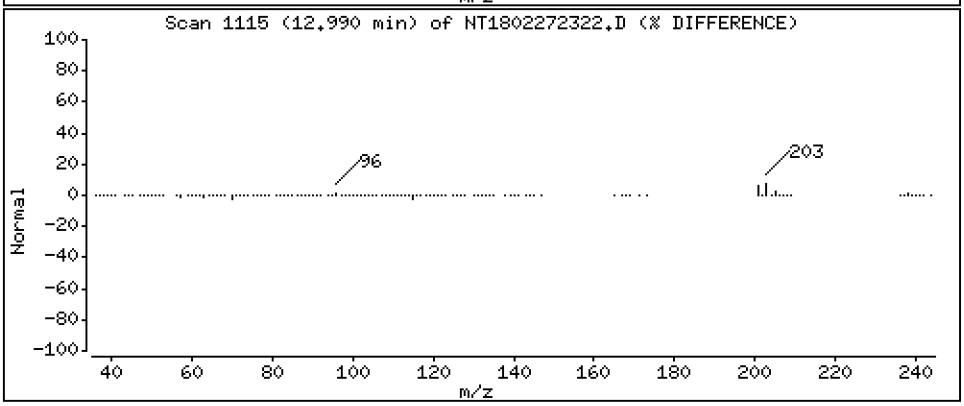












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

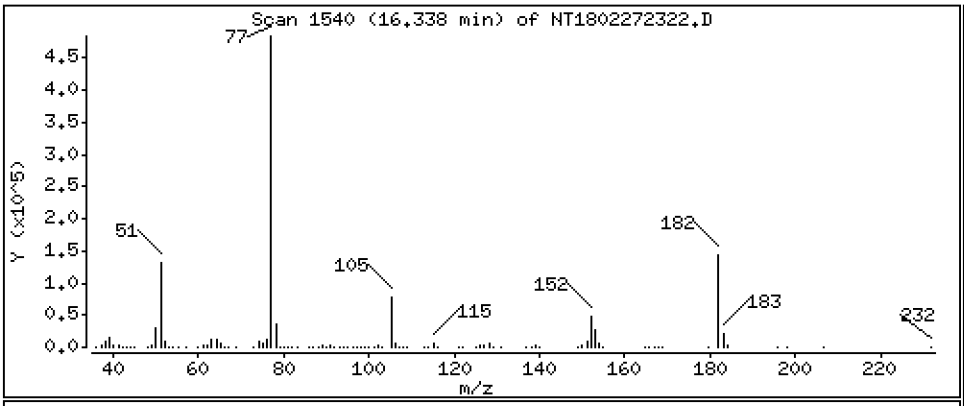
Operator: VTS

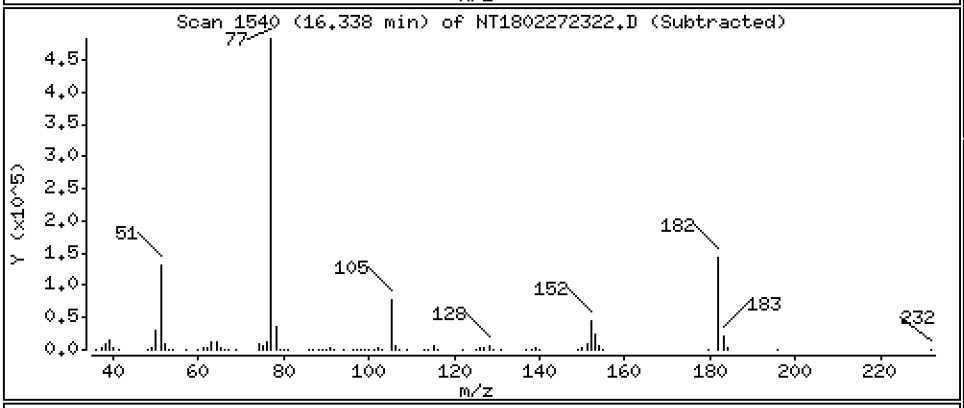
Column phase: ZB-5msi

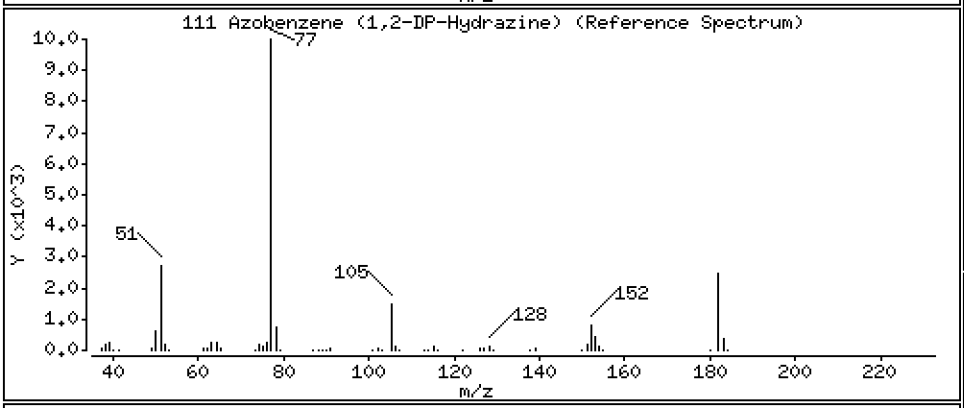
Column diameter: 0.25

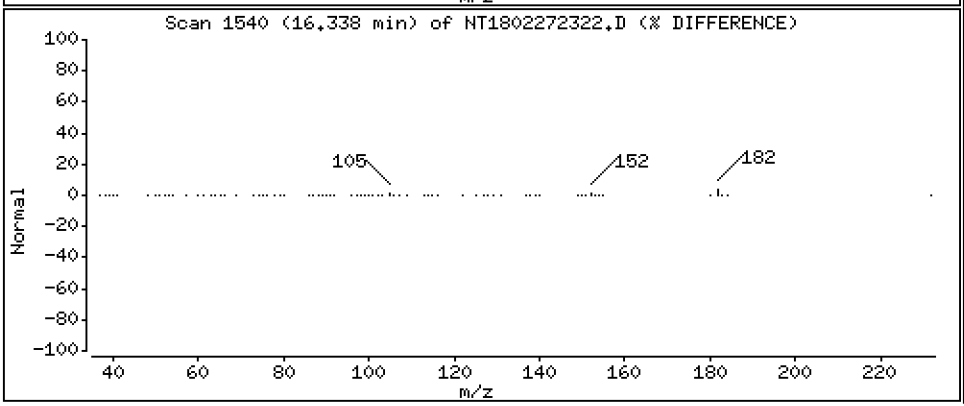
111 Azobenzene (1,2-DP-Hydrazine)

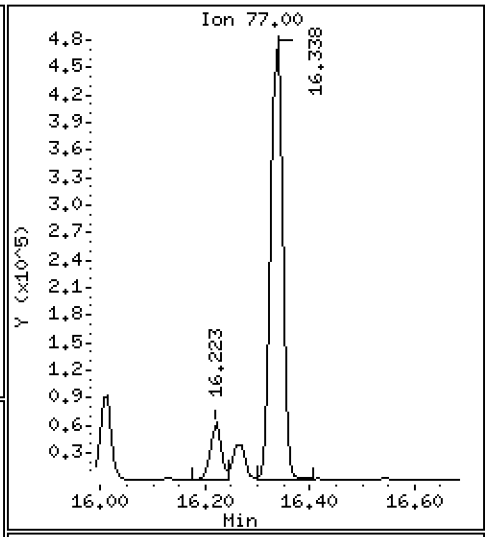
Concentration: 3.999 ug/mL

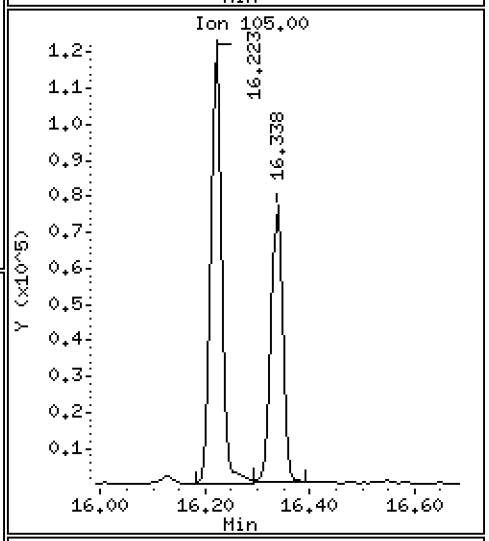


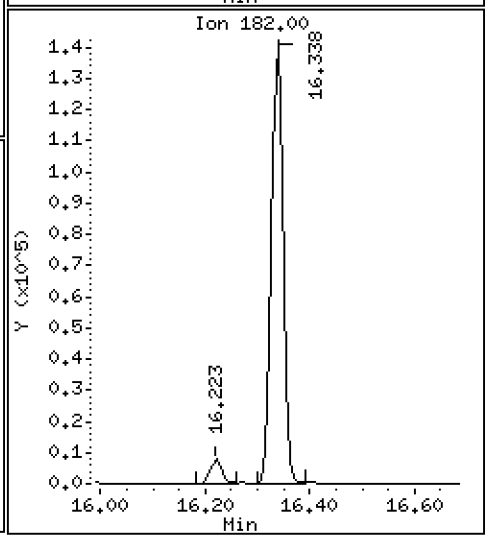












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

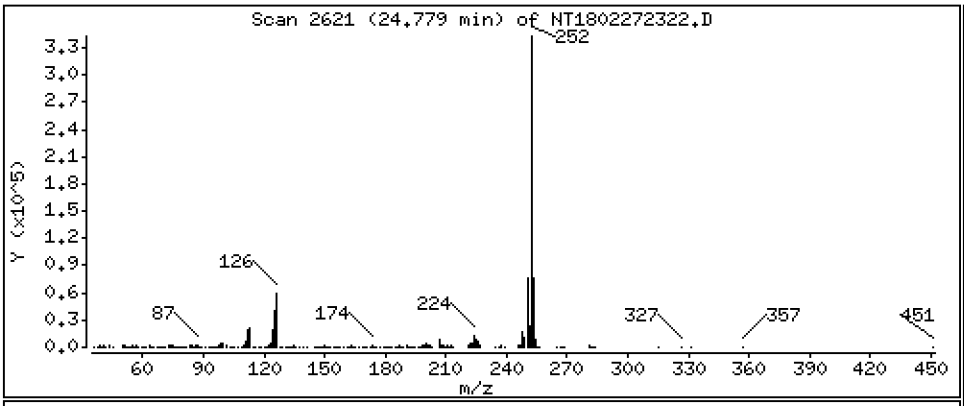
Operator: VTS

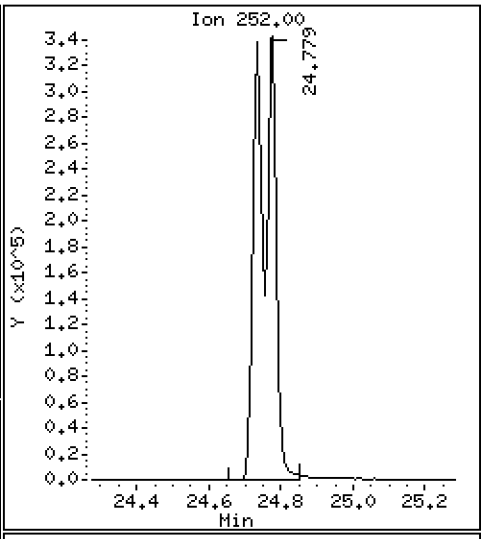
Column phase: ZB-5msi

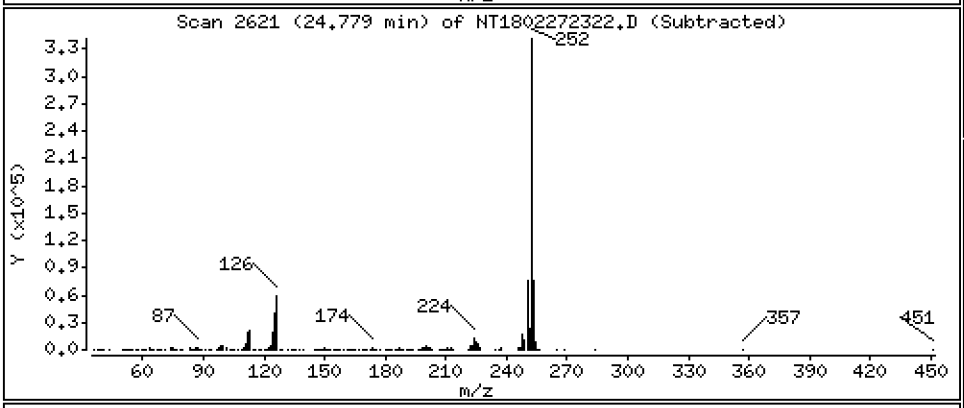
Column diameter: 0.25

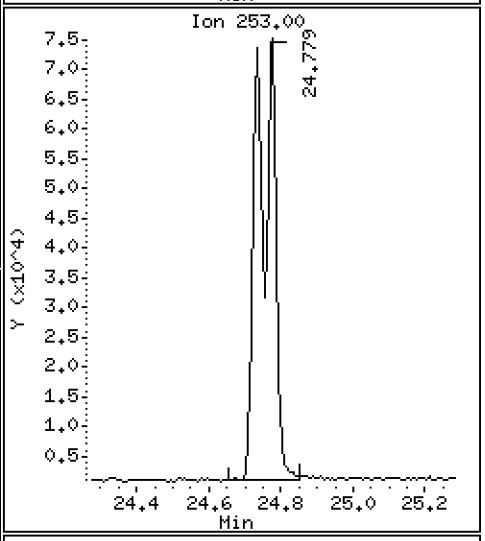
187 Total Benzofluoranthenes

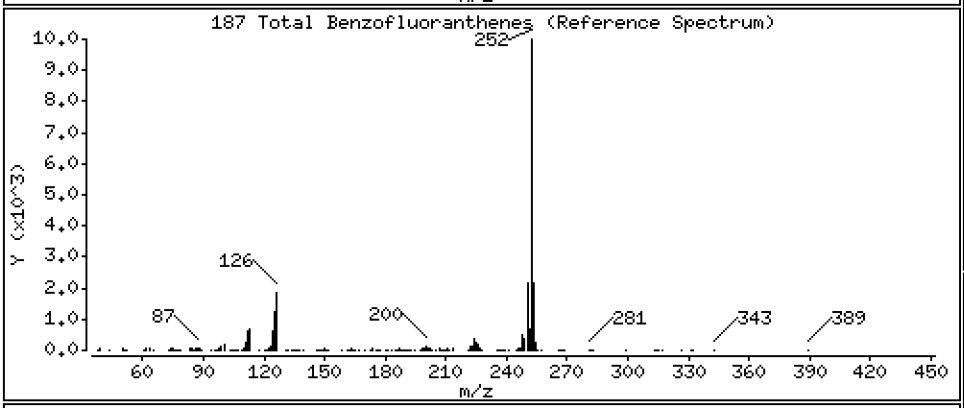
Concentration: 14.27 ug/mL

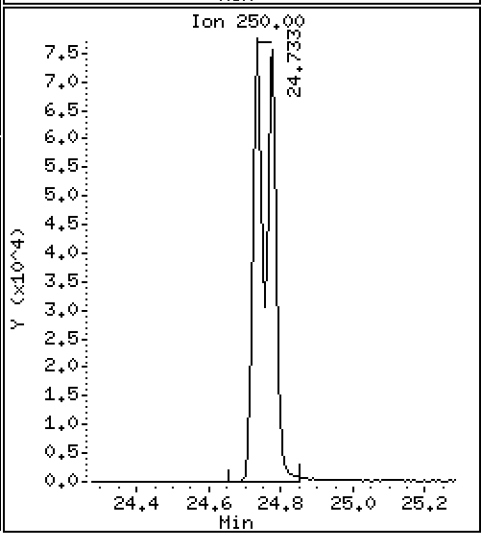


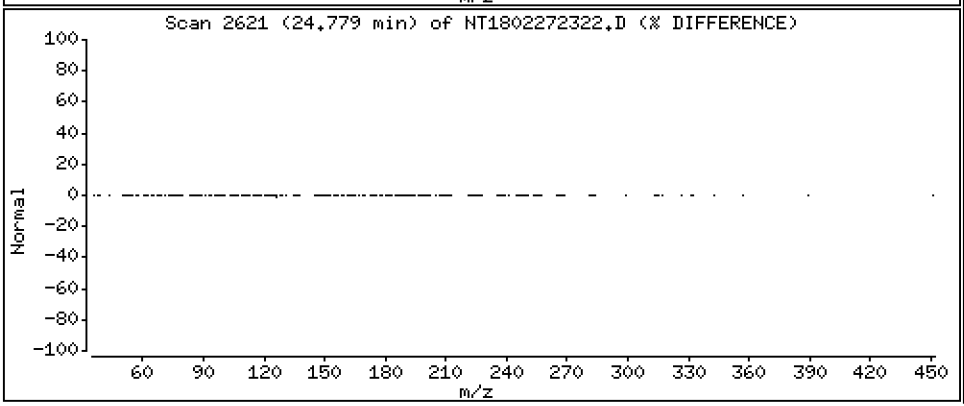












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Date : 28-FEB-2023 13:15

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-CCV1

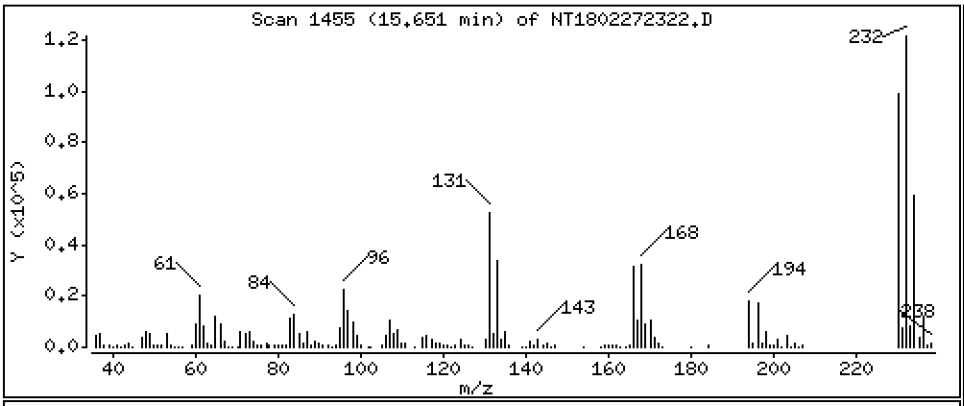
Operator: VTS

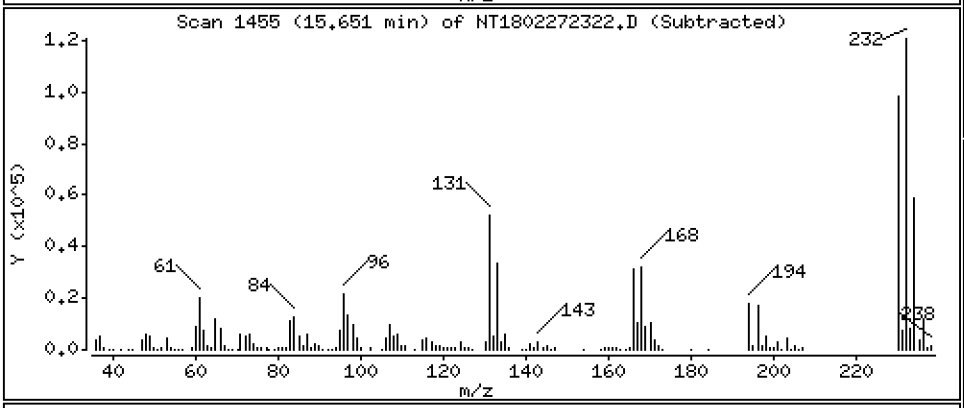
Column phase: ZB-5msi

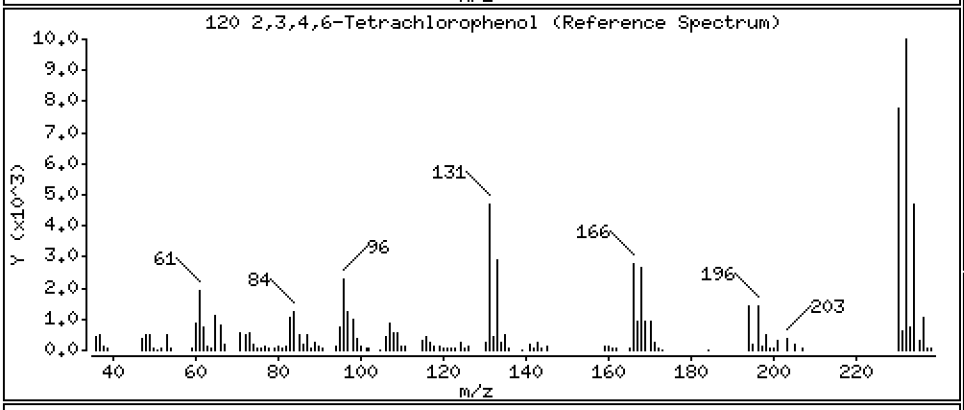
Column diameter: 0.25

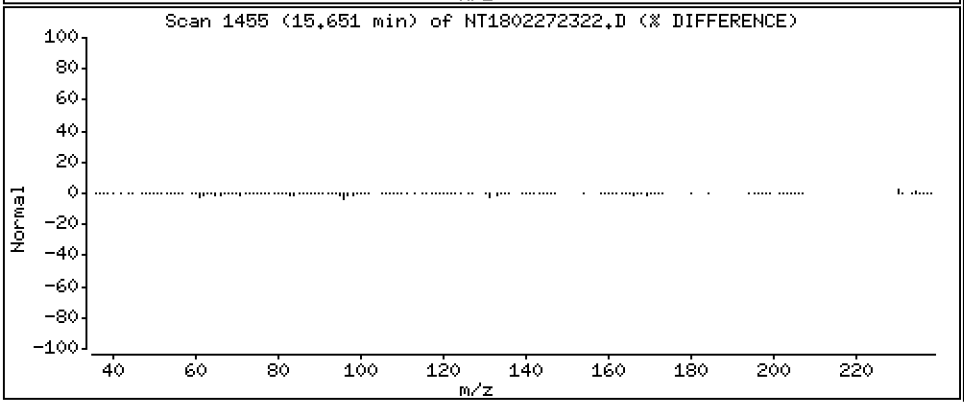
120 2,3,4,6-Tetrachlorophenol

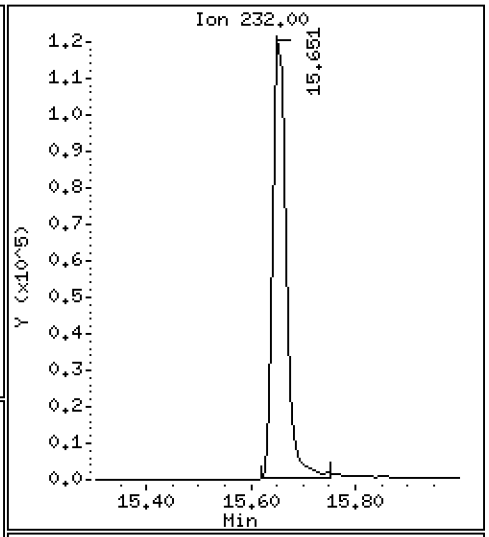
Concentration: 4.738 ug/mL

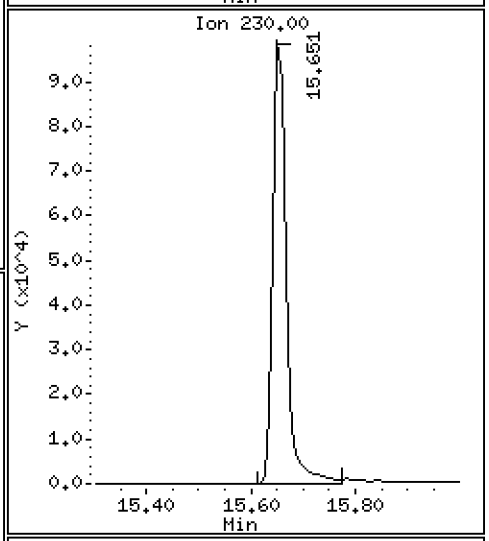


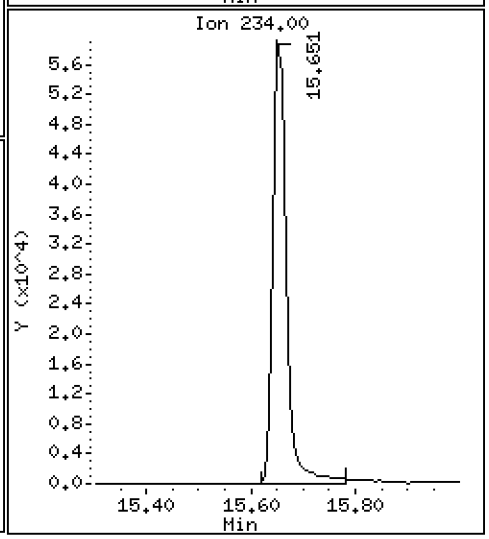












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt18.i\20230227.b\NT1802272322.D
Lab Smp Id: SLC0385-CCV1
Inj Date : 28-FEB-2023 13:15
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0385-CCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230227.b\ABN.m
Meth Date : 24-Mar-2023 10:19 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.728	6.728	(0.757)	483116	7.04476	7.045
$	2 Phenol-d5	99	8.288	8.288	(0.932)	609550	6.87761	6.878
	3 Phenol	94	8.311	8.304	(0.935)	407275	4.41665	4.417
$	5 2-Chlorophenol-d4	132	8.543	8.543	(0.961)	556377	7.21414	7.214
	4 Bis(2-Chloroethyl)ether	93	8.458	8.458	(0.951)	284069	4.53577	4.536
	6 2-Chlorophenol	128	8.566	8.566	(0.963)	376083	4.74953	4.750
	7 1,3-Dichlorobenzene	146	8.829	8.829	(0.993)	396128	4.72990	4.730
*	8 1,4-Dichlorobenzene-d4	152	8.891	8.891	(1.000)	201005	4.00000	
	9 1,4-Dichlorobenzene	146	8.922	8.922	(1.003)	395271	4.63014	4.630
$	10 1,2-Dichlorobenzene-d4	152	9.248	9.248	(1.040)	257621	4.71193	4.712
	12 1,2-Dichlorobenzene	146	9.271	9.271	(1.043)	385195	4.64936	4.649
	11 Benzyl alcohol	108	9.171	9.170	(1.031)	195064	4.44888	4.449
	14 2,2'-oxybis(1-Chloropropane)	121	9.458	9.458	(1.064)	96311	4.96052	4.961(M)
	13 2-Methylphenol	108	9.396	9.396	(1.057)	333625	4.67727	4.677
	17 Hexachloroethane	117	9.854	9.854	(1.108)	127894	3.87017	3.870
	16 N-Nitroso-di-n-propylamine	70	9.722	9.722	(1.093)	222269	4.23907	4.239
	15 4-Methylphenol	108	9.667	9.667	(1.087)	346631	4.66250	4.663
$	18 Nitrobenzene-d5	82	9.978	9.970	(0.880)	346976	4.25269	4.253
	19 Nitrobenzene	77	10.009	10.009	(0.882)	331726	4.22372	4.224
	20 Isophorone	82	10.451	10.451	(0.921)	449783	4.48890	4.489
	21 2-Nitrophenol	139	10.633	10.625	(0.938)	217059	5.62731	5.627
	22 2,4-Dimethylphenol	107	10.693	10.693	(0.943)	648104	8.81776	8.818
	23 Bis(2-Chloroethoxy)methane	93	10.879	10.879	(0.959)	312948	4.56103	4.561
	24 Benzoic acid	105	10.973	10.964	(0.967)	672832	22.5780	22.58
	25 2,4-Dichlorophenol	162	11.083	11.083	(0.977)	646998	10.0398	10.04
	26 1,2,4-Trichlorobenzene	180	11.264	11.264	(0.993)	333371	4.78961	4.790
*	27 Naphthalene-d8	136	11.342	11.342	(1.000)	765574	4.00000	
	28 Naphthalene	128	11.388	11.388	(1.004)	1102628	4.68528	4.685
	29 4-Chloroaniline	127	11.519	11.519	(1.016)	890962	9.49972	9.500
	30 Hexachlorobutadiene	225	11.743	11.743	(1.035)	198584	4.86760	4.868
	31 4-Chloro-3-methylphenol	107	12.486	12.486	(1.101)	578486	9.37876	9.379
	32 2-Methylnaphthalene	142	12.765	12.765	(1.125)	776455	4.85541	4.855
	33 Hexachlorocyclopentadiene	237	13.229	13.229	(0.886)	3838	0.12943	0.1294

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	13.392	13.392	(0.897)	427461	10.0751	10.08
35	2,4,5-Trichlorophenol	196	13.469	13.461	(0.903)	476747	10.3118	10.31
$ 36	2-Fluorobiphenyl	172	13.546	13.546	(0.908)	829892	4.48732	4.487
37	2-Chloronaphthalene	162	13.748	13.748	(0.921)	651327	4.50709	4.507
38	2-Nitroaniline	65	14.011	14.011	(0.939)	348867	7.71379	7.714
39	Dimethylphthalate	163	14.444	14.444	(0.968)	735089	4.73616	4.736
40	Acenaphthylene	152	14.607	14.607	(0.979)	1142761	4.69625	4.696
41	2,6-Dinitrotoluene	165	14.584	14.584	(0.977)	346817	9.74702	9.747
* 42	Acenaphthene-d10	164	14.924	14.924	(1.000)	438647	4.00000	
43	3-Nitroaniline	138	14.862	14.862	(0.996)	403335	9.58282	9.583
44	Acenaphthene	153	14.986	14.986	(1.004)	701036	4.55204	4.552
45	2,4-Dinitrophenol	184	15.079	15.079	(1.010)	282440	16.4168	16.42
46	Dibenzofuran	168	15.310	15.310	(1.026)	1033915	4.63833	4.638
47	4-Nitrophenol	109	15.210	15.202	(1.019)	131014	7.72195	7.722
48	2,4-Dinitrotoluene	165	15.388	15.388	(1.031)	472601	9.71683	9.717
50	Diethylphthalate	149	15.890	15.898	(1.065)	810488	4.98362	4.984
49	Fluorene	166	16.014	16.014	(1.073)	969618	5.42807	5.428
51	4-Chlorophenyl-phenylether	204	16.014	16.014	(1.073)	433734	5.33072	5.331
52	4-Nitroaniline	138	16.130	16.130	(1.081)	391572	9.67048	9.670
53	4,6-Dinitro-2-methylphenol	198	16.222	16.222	(0.905)	506432	16.5612	16.56
54	N-Nitrosodiphenylamine	169	16.268	16.268	(0.907)	559048	4.43064	4.431
$ 55	2,4,6-Tribromophenol	330	16.546	16.546	(1.109)	154653	6.77827	6.778
56	4-Bromophenyl-phenylether	248	17.001	17.001	(0.948)	231570	4.57332	4.573
57	Hexachlorobenzene	284	17.318	17.318	(0.966)	244526	4.18223	4.182
58	Pentachlorophenol	266	17.682	17.674	(0.986)	154670	9.49267	9.493
* 59	Phenanthrene-d10	188	17.929	17.929	(1.000)	838571	4.00000	
60	Phenanthrene	178	17.976	17.975	(1.003)	1200168	4.55017	4.550
61	Anthracene	178	18.068	18.068	(1.008)	1234110	4.90978	4.910
62	Carbazole	167	18.401	18.401	(1.026)	1088752	4.72697	4.727
63	Di-n-butylphthalate	149	19.213	19.213	(1.072)	1299297	5.09628	5.096
64	Fluoranthene	202	20.358	20.358	(0.887)	1371668	6.06458	6.065
65	Pyrene	202	20.776	20.776	(0.905)	1404483	5.82238	5.822
$ 66	Terphenyl-d14	244	21.070	21.070	(0.918)	1117348	5.77517	5.775
67	Butylbenzylphthalate	149	22.000	21.999	(0.958)	565822	6.17750	6.178
68	Benzo(a)anthracene	228	22.929	22.929	(0.999)	1152080	4.94335	4.943
* 69	Chrysene-d12	240	22.960	22.960	(1.000)	645552	4.00000	
70	3,3'-Dichlorobenzidine	252	22.890	22.898	(0.997)	1063545	12.4017	12.40
71	Chrysene	228	23.006	23.006	(1.002)	1144868	4.72415	4.724
72	bis(2-Ethylhexyl)phthalate	149	23.022	23.029	(0.959)	817153	5.64363	5.644
* 134	Di-n-octylphthalate-d4	153	23.997	23.997	(1.000)	1008511	4.00000	
73	Di-n-octylphthalate	149	24.005	24.005	(1.000)	1289391	4.58824	4.588
74	Benzo(b)fluoranthene	252	24.732	24.740	(0.972)	616250	7.42703	7.427
75	Benzo(k)fluoranthene	252	24.779	24.779	(0.974)	644972	6.85884	6.859
76	Benzo(a)pyrene	252	25.336	25.336	(0.996)	424400	5.51745	5.517
* 77	Perylene-d12	264	25.437	25.445	(1.000)	254327	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.865	27.881	(1.095)	189300	1.96039	1.960
79	Dibenzo(a,h)anthracene	278	27.881	27.889	(1.096)	159492	1.98046	1.980
80	Benzo(g,h,i)perylene	276	28.580	28.595	(1.124)	131266	1.69562	1.696
90	N-Nitrosodimethylamine	74	4.665	4.658	(0.525)	355810	8.83798	8.838
91	Aniline	93	8.365	8.365	(0.941)	929062	8.85156	8.852
93	Benzidine	184	20.598	20.598	(0.897)	802047	7.25800	7.258
103	Pyridine	79	4.650	4.650	(0.523)	543252	8.09990	8.100
105	1-methylnaphthalene	142	12.989	12.989	(1.145)	702601	4.85345	4.853
111	Azobenzene (1,2-DP-Hydrazine)	77	16.338	16.338	(1.095)	716457	3.99933	3.999

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.779	24.779	(0.974)	1196936	14.2678	14.27
120 2,3,4,6-Tetrachlorophenol	232	15.651	15.651	(1.049)	206363	4.73829	4.738

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272322.D
Lab Smp Id: SLC0385-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230227.b\ABN.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:03
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	269759	134880	539518	201005	-25.49
27 Naphthalene-d8	1037039	518520	2074078	765574	-26.18
42 Acenaphthene-d10	556159	278080	1112318	438647	-21.13
59 Phenanthrene-d10	1021294	510647	2042588	838571	-17.89
69 Chrysene-d12	922264	461132	1844528	645552	-30.00
134 Di-n-octylphthala	1611284	805642	3222568	1008511	-37.41
77 Perylene-d12	948357	474179	1896714	254327	-73.18 <-

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.89	8.39	9.39	8.89	0.00
27 Naphthalene-d8	11.34	10.84	11.84	11.34	0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.92	0.00
59 Phenanthrene-d10	17.93	17.43	18.43	17.93	0.00
69 Chrysene-d12	22.96	22.46	23.46	22.96	0.00
134 Di-n-octylphthala	24.00	23.50	24.50	24.00	0.00
77 Perylene-d12	25.45	24.95	25.95	25.44	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272322.D

Lab ID: SLC0385-CCV1
nt18.i, ABN.m, 28-FEB-2023 13:15

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

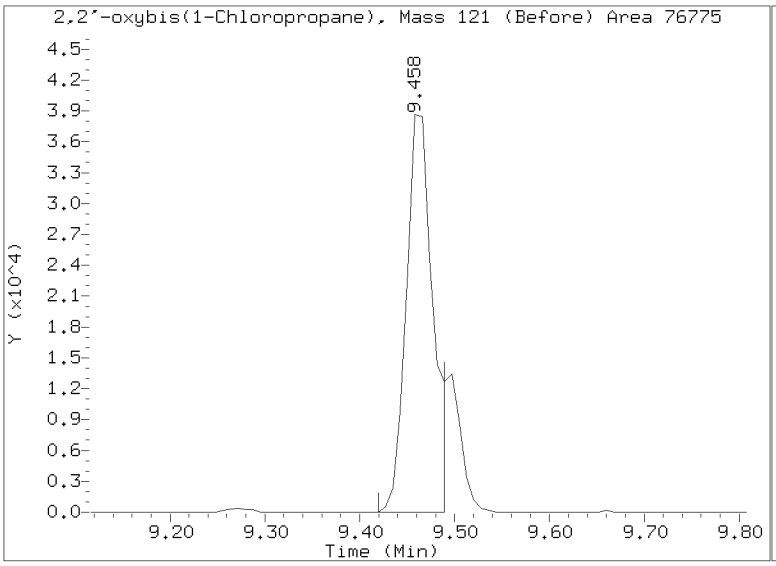
RRT check based on Ccal File: NT1802272302.D

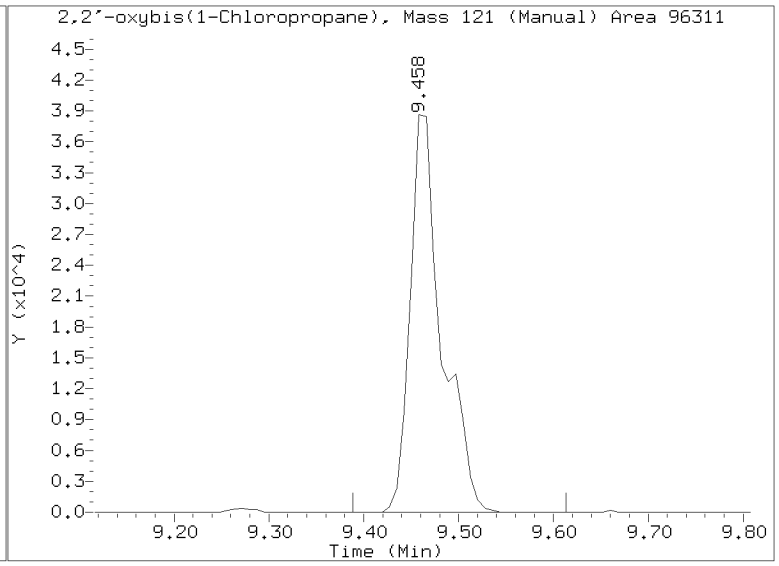
On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230227.b/NT1802272322.D
Injection Date: 28-FEB-2023 13:15
Lab ID:SLC0385-CCV1 Client ID:
Report Date: 03/24/2023 10:42





APPROVED

By Deenay Dunmore at 10:44 am, Mar 24, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

LOW-CONCENTRATION CONTINUING CALIBRATION CHECK

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00023
Lab File ID:	NT1802272304.D	Calibration Date:	02/25/2023
Sequence:	SLC0385	Injection Date:	02/27/23
Lab Sample ID:	SLC0385-LCV1	Injection Time:	19:10
Sequence Name:	ABN 0.2		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	0.20000	0.2	1.8350500	1.7582210		-4.2	+/-50
4-Methylphenol	A	0.20000	0.2	1.4794550	1.6211290		9.6	+/-50
Naphthalene	A	0.20000	0.2	1.2296060	1.3954800		13.5	+/-50
2-Methylnaphthalene	A	0.20000	0.2	0.8355327	0.9567800		14.5	+/-50
Acenaphthylene	A	0.20000	0.2	2.2189590	2.3835020		7.4	+/-50
Dimethylphthalate	A	0.20000	0.2	1.4153330	1.5472650		9.3	+/-50
Acenaphthene	A	0.20000	0.2	1.4043630	1.5794990		12.5	+/-50
Dibenzofuran	A	0.20000	0.2	2.0326750	2.2539230		10.9	+/-50
Fluorene	A	0.20000	0.2	1.6289200	1.9717690		21.1	+/-50
Phenanthrene	A	0.20000	0.2	1.2581570	1.3589520		8.0	+/-50
Anthracene	A	0.20000	0.2	1.1989790	1.2650000		5.5	+/-50
Fluoranthene	A	0.20000	0.2	1.4014480	1.6163560		15.3	+/-50
Pyrene	A	0.20000	0.2	1.4946680	1.6813740		12.5	+/-50
Butylbenzylphthalate	A	0.20000	0.3	0.5675390	0.7247905		27.7	+/-50
Benzo(a)anthracene	A	0.20000	0.2	1.4440750	1.6119930		11.6	+/-50
Chrysene	A	0.20000	0.2	1.5016220	1.5970950		6.4	+/-50
bis(2-Ethylhexyl)phthalate	A	0.20000	0.2	0.5742806	0.6212942		8.2	+/-50
Benzofluoranthenes, Total	A	0.40000	0.4	1.3194130	1.4485230		9.8	+/-50
Benzo(a)pyrene	A	0.20000	0.2	1.2097740	1.3405410		10.8	+/-50
Indeno(1,2,3-cd)pyrene	A	0.20000	0.2	1.5187130	1.4612980		-3.8	+/-50
Dibenzo(a,h)anthracene	A	0.20000	0.2	1.2666050	1.1656480		-8.0	+/-50
Benzo(g,h,i)perylene	A	0.20000	0.2	1.2175640	1.3104800		7.6	+/-50
2-Fluorophenol	A	0.30000	0.330	1.3647030	1.5027860		10.1	+/-50
Phenol-d5	A	0.30000	0.312	1.7637020	1.8339030		4.0	+/-50
2-Chlorophenol-d4	A	0.30000	0.328	1.5347490	1.6804080		9.5	+/-50
1,2-Dichlorobenzene-d4	A	0.20000	0.227	1.0880180	1.2339020		13.4	+/-50
Nitrobenzene-d5	A	0.20000	0.208	0.4262932	0.4422849		3.8	+/-50
2-Fluorobiphenyl	A	0.20000	0.211	1.6864720	1.7776110		5.4	+/-50
2,4,6-Tribromophenol	A	0.30000	0.267	0.2004134	0.1776369		-10.9	+/-50
p-Terphenyl-d14	A	0.20000	0.210	1.1988160	1.2586740		5.0	+/-50

* Values outside of QC limits

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Date : 27-FEB-2023 19:10

Client ID:

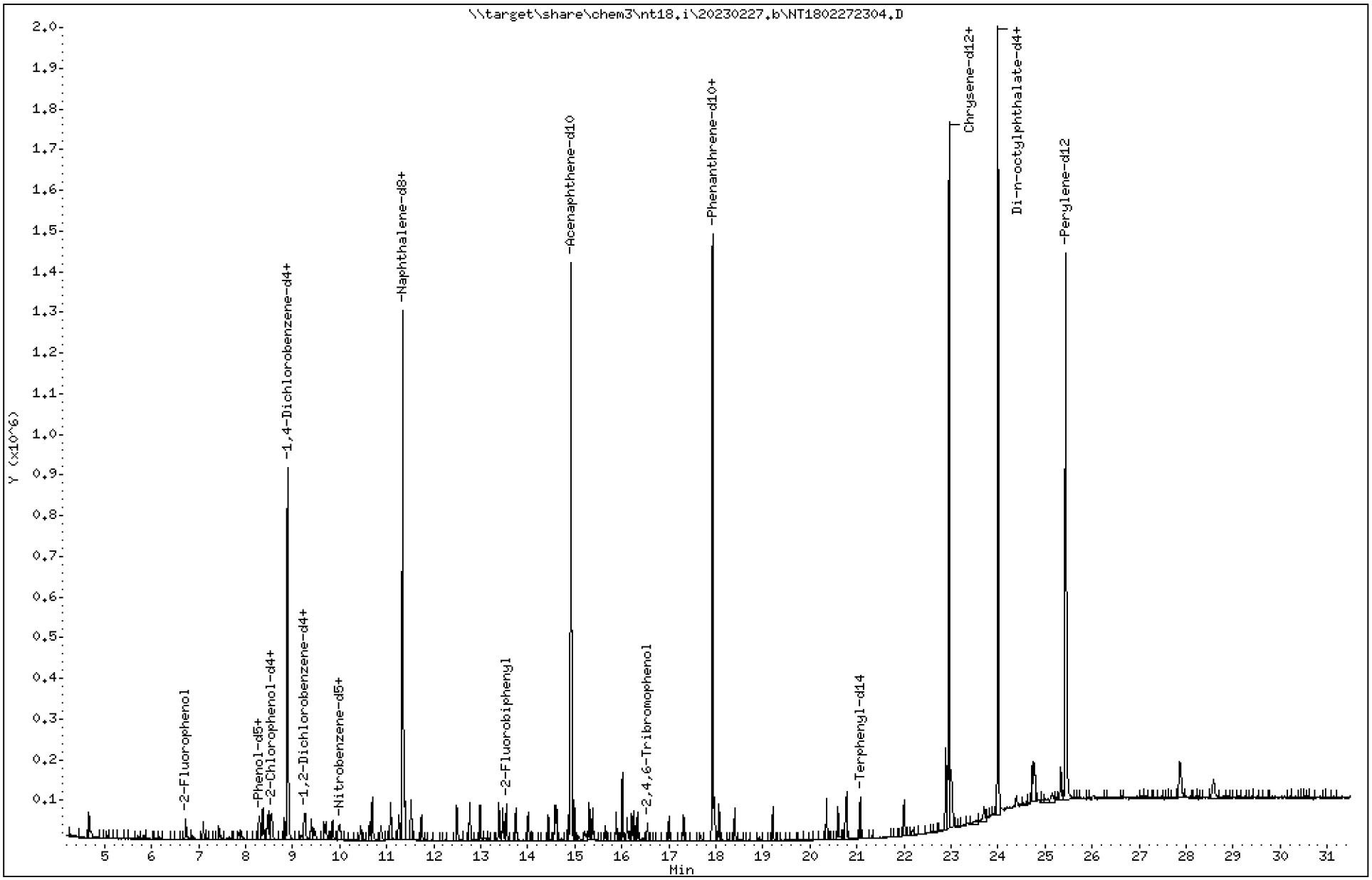
Instrument: nt18.i

Sample Info: SLC0385-LCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

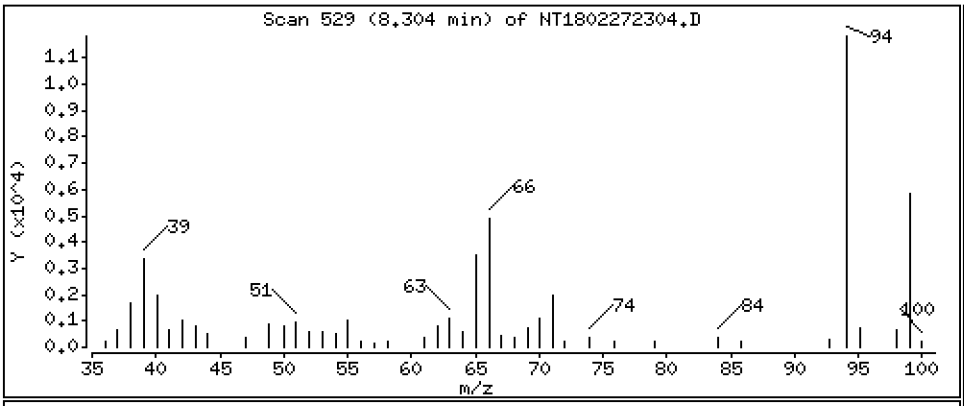
Operator: VTS

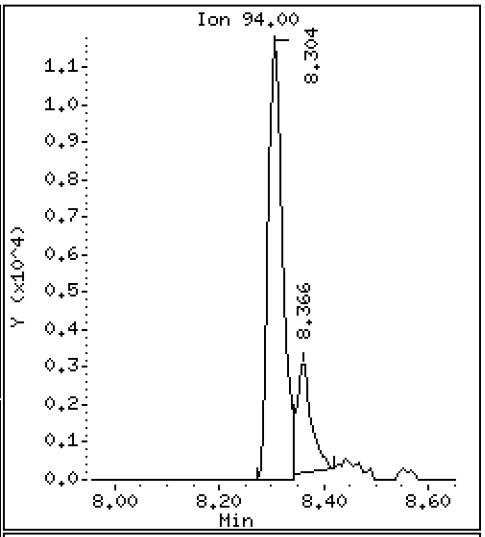
Column phase: ZB-5msi

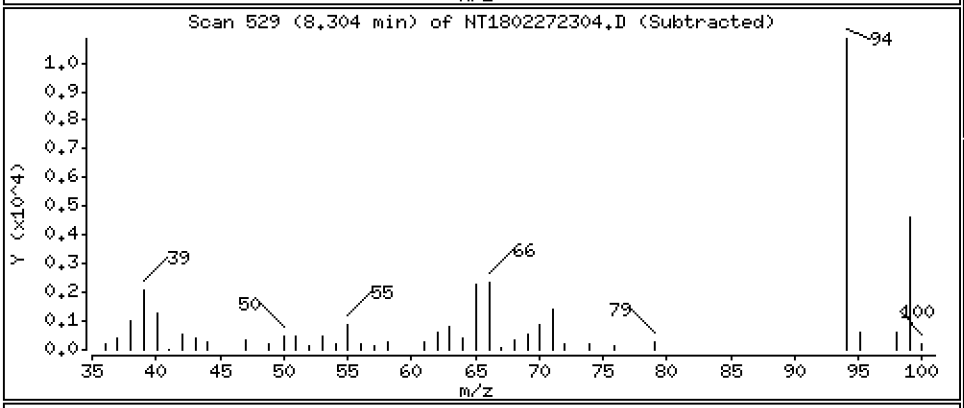
Column diameter: 0.25

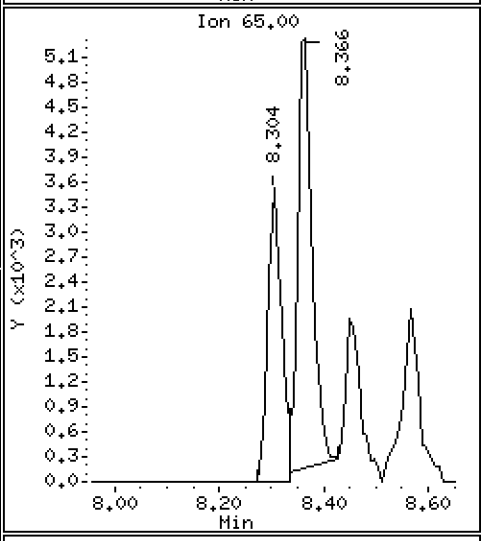
3 Phenol

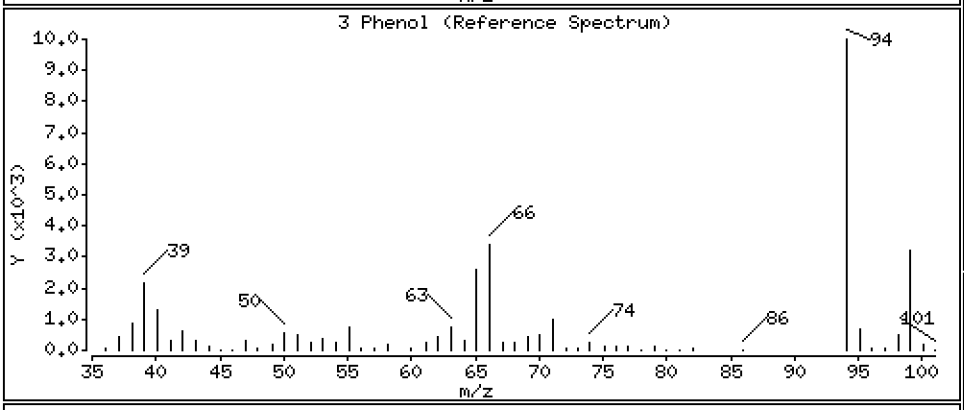
Concentration: 0.1916 ug/mL

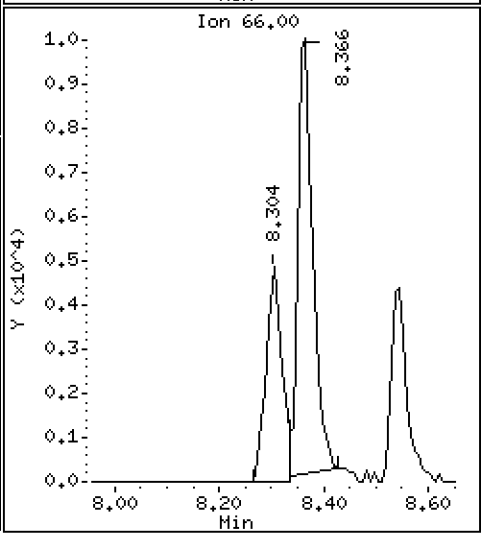


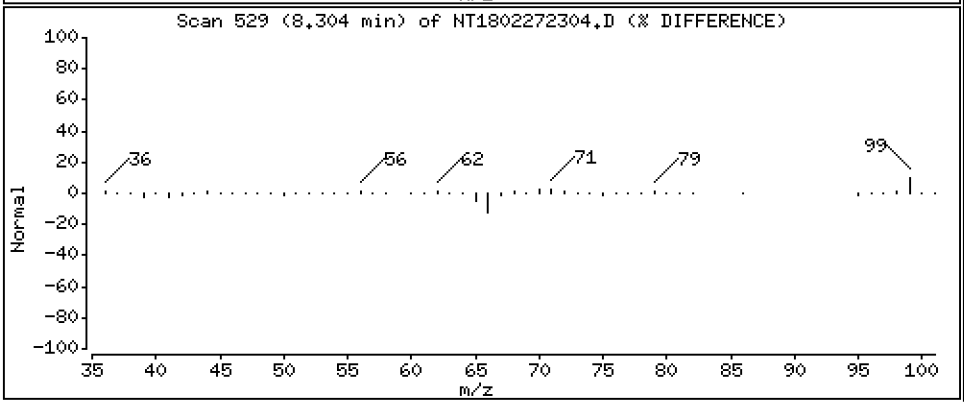












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

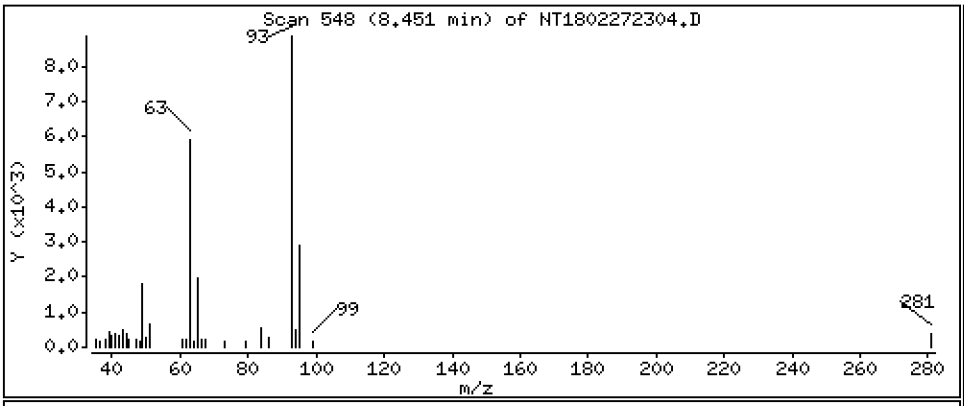
Operator: VTS

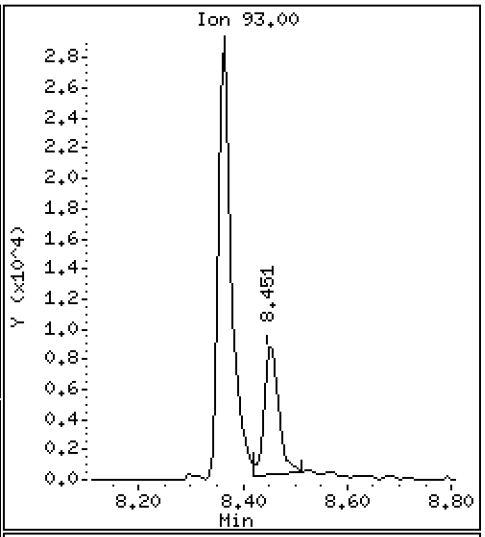
Column phase: ZB-5msi

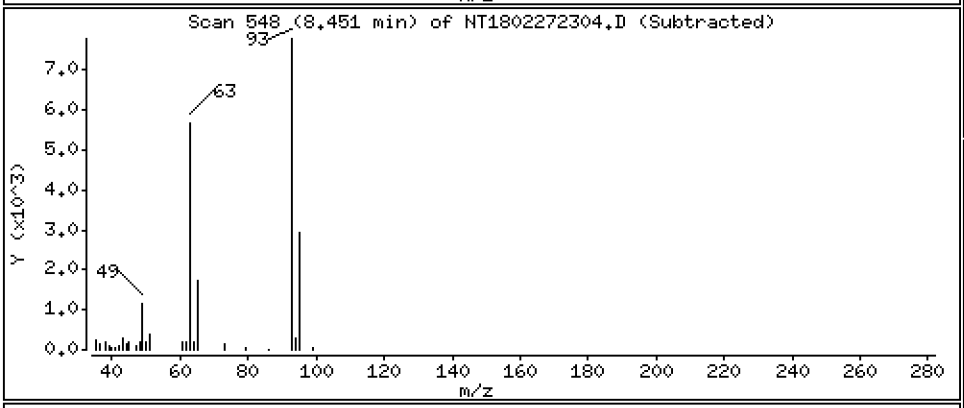
Column diameter: 0.25

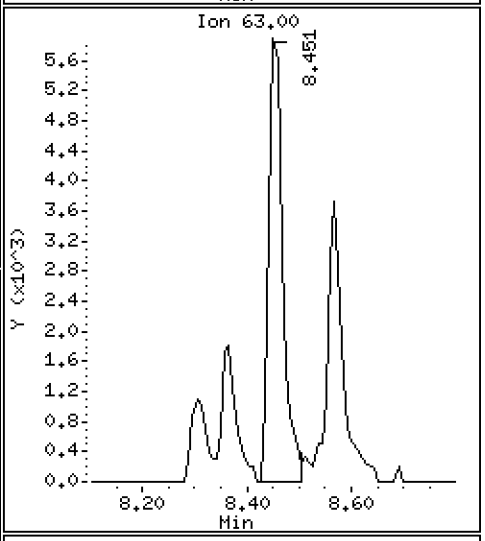
4 Bis(2-Chloroethyl)ether

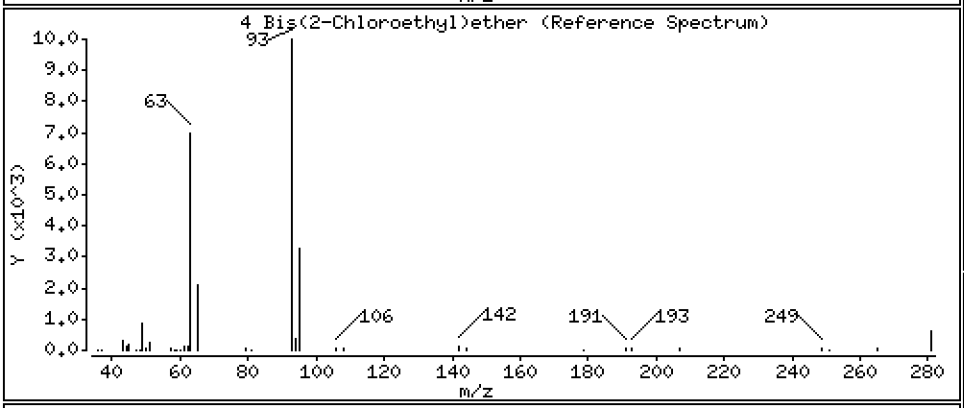
Concentration: 0.2024 ug/mL

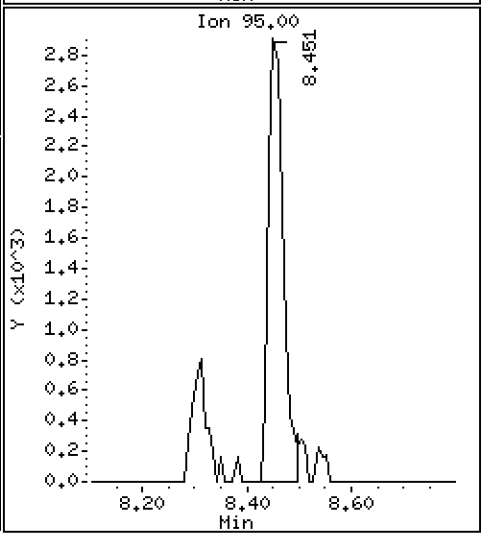


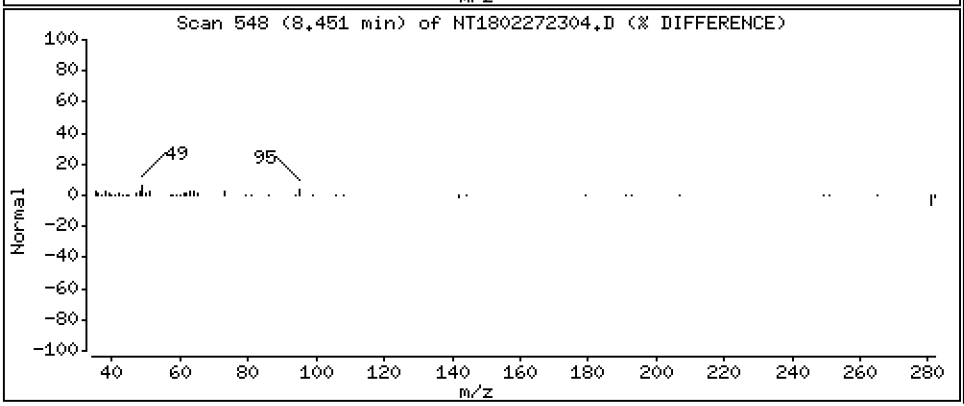












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

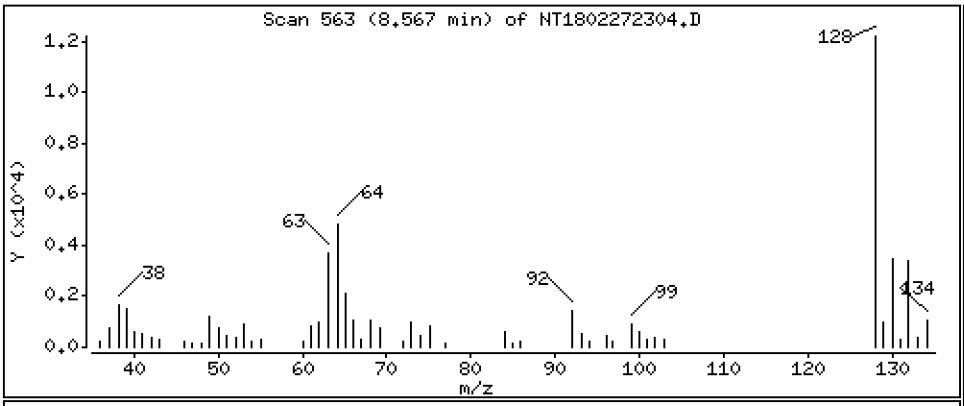
Operator: VTS

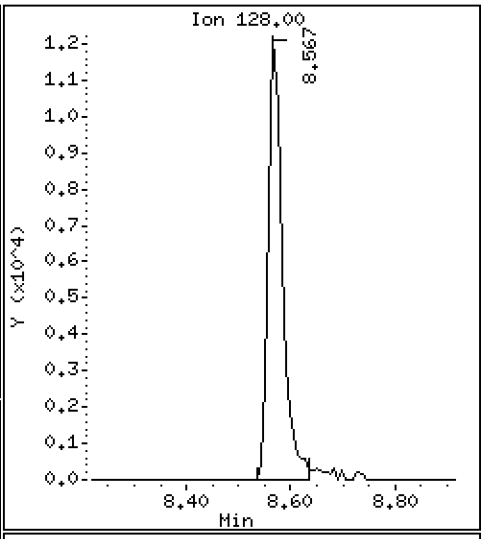
Column phase: ZB-5msi

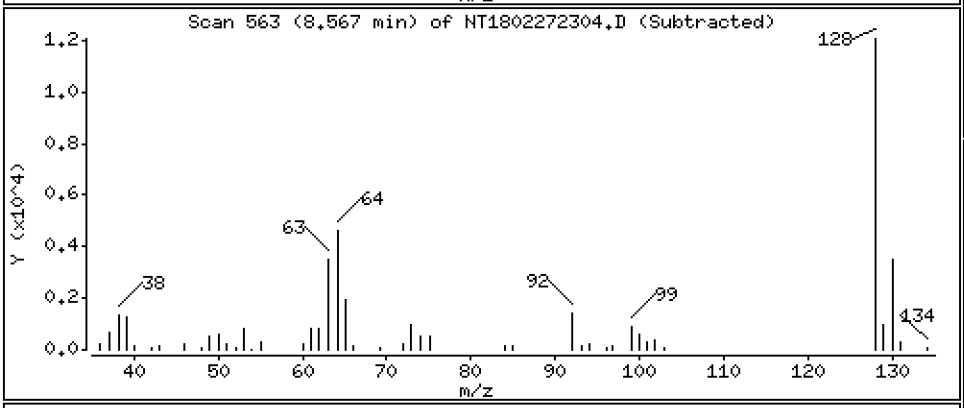
Column diameter: 0.25

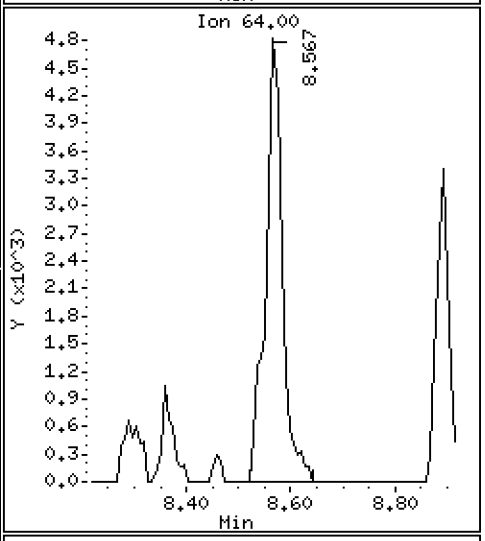
6 2-Chlorophenol

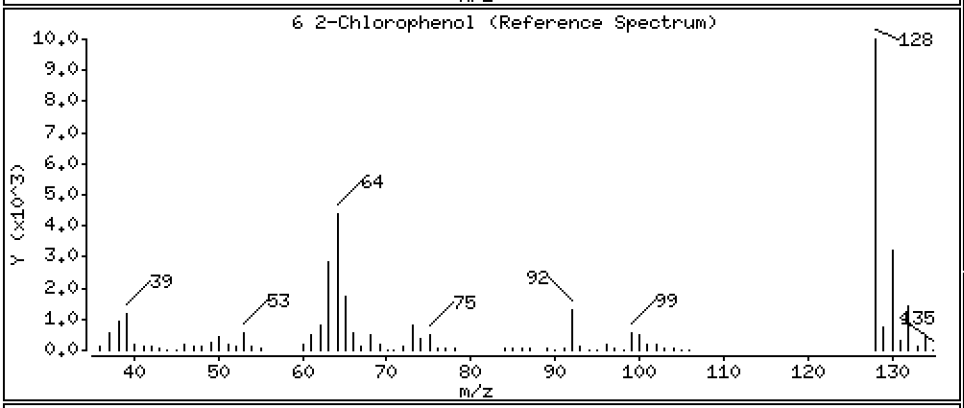
Concentration: 0.2232 ug/mL

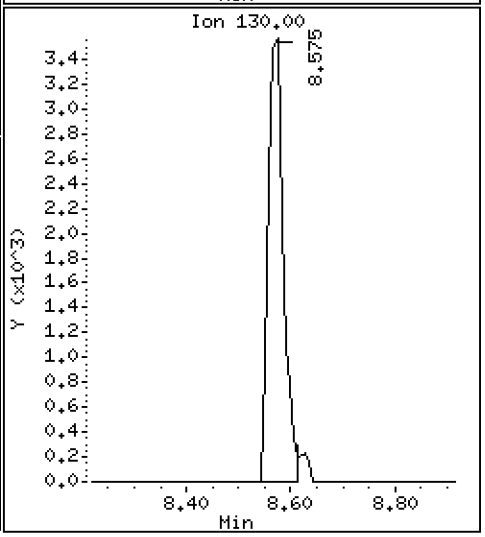


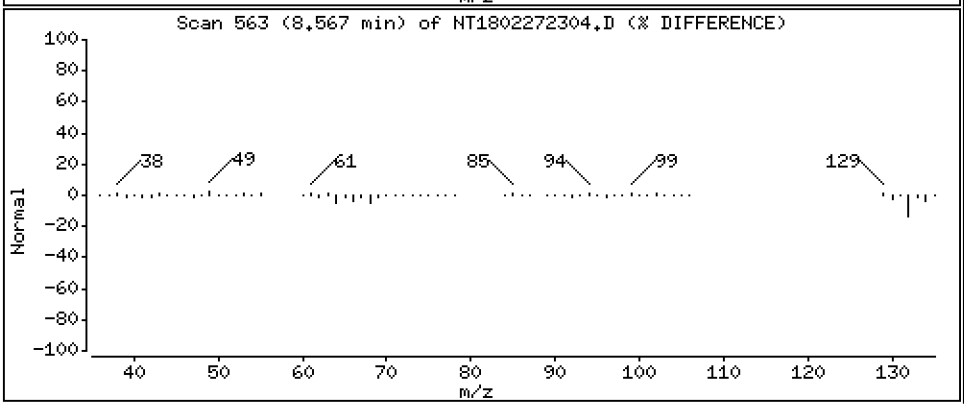












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

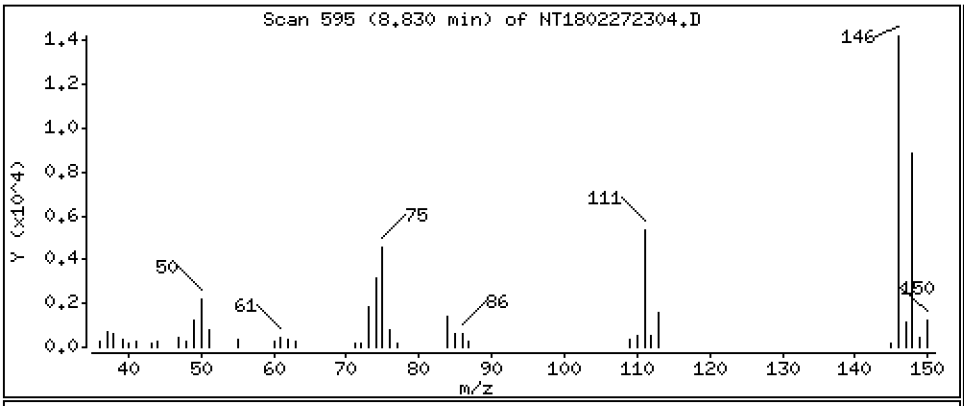
Operator: VTS

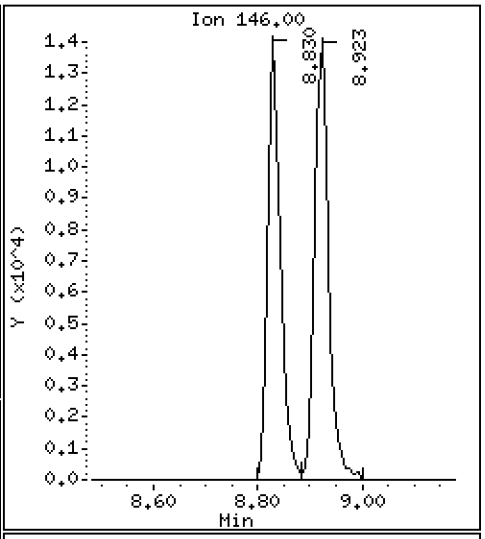
Column phase: ZB-5msi

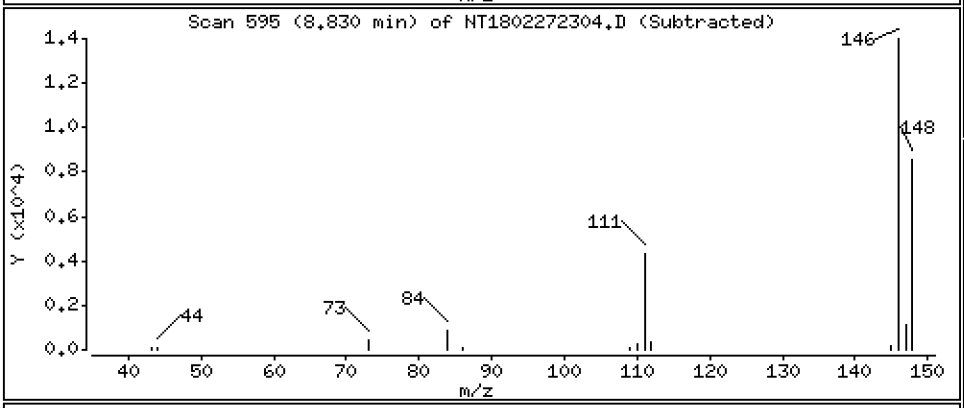
Column diameter: 0.25

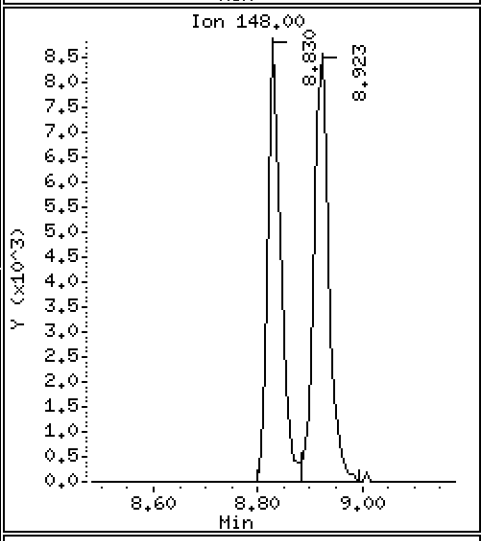
7 1,3-Dichlorobenzene

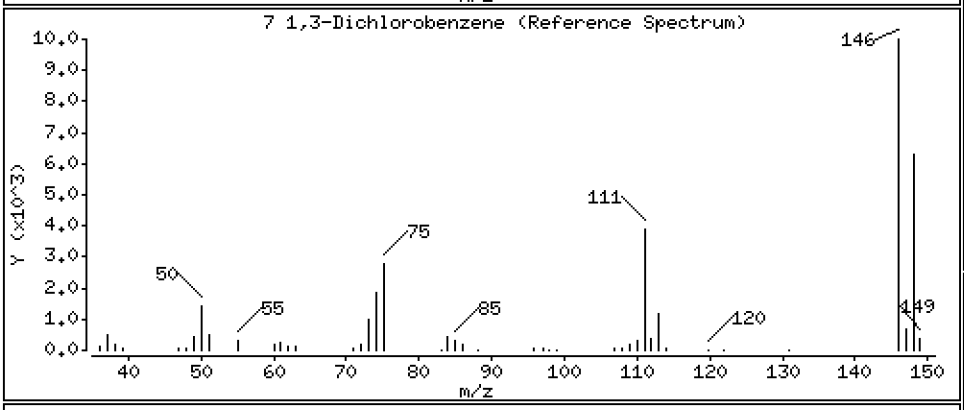
Concentration: 0.2258 ug/mL

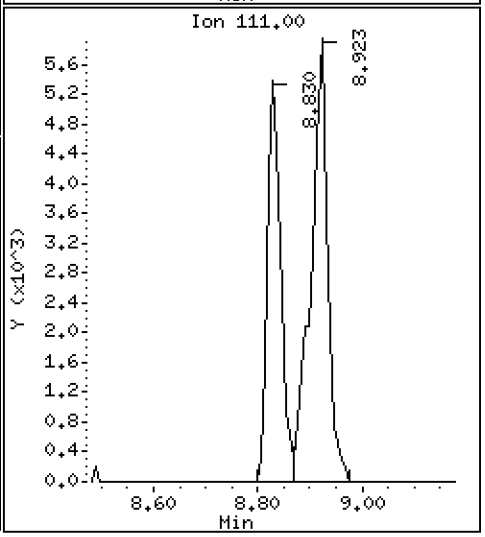


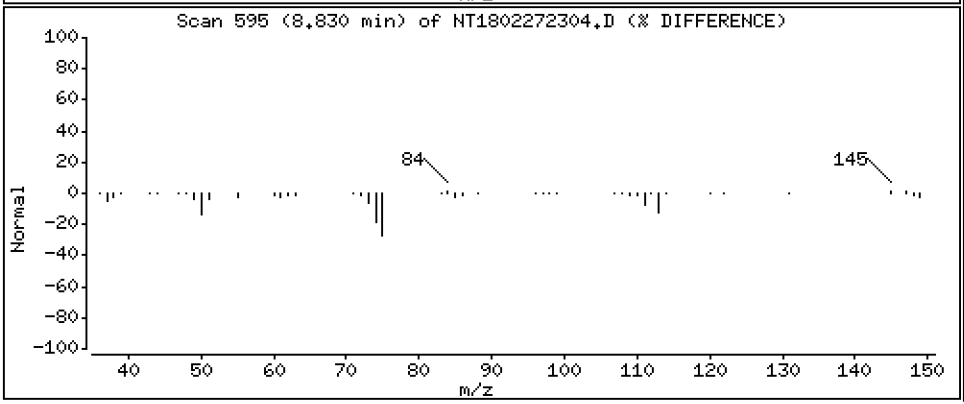












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

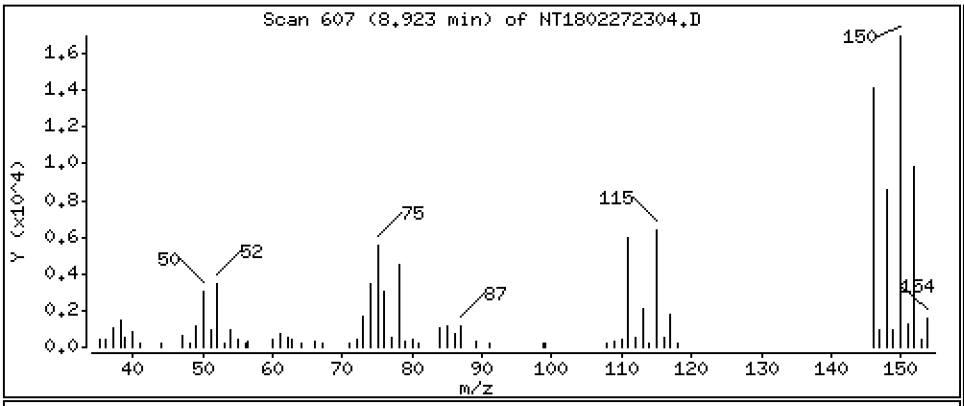
Operator: VTS

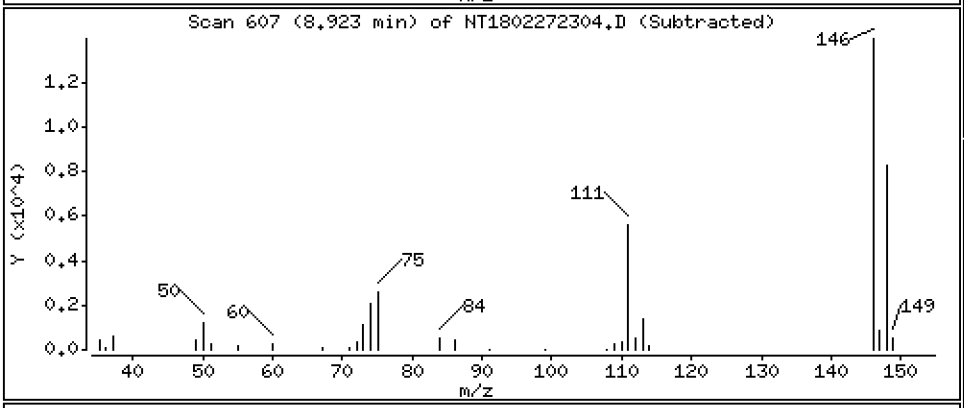
Column phase: ZB-5msi

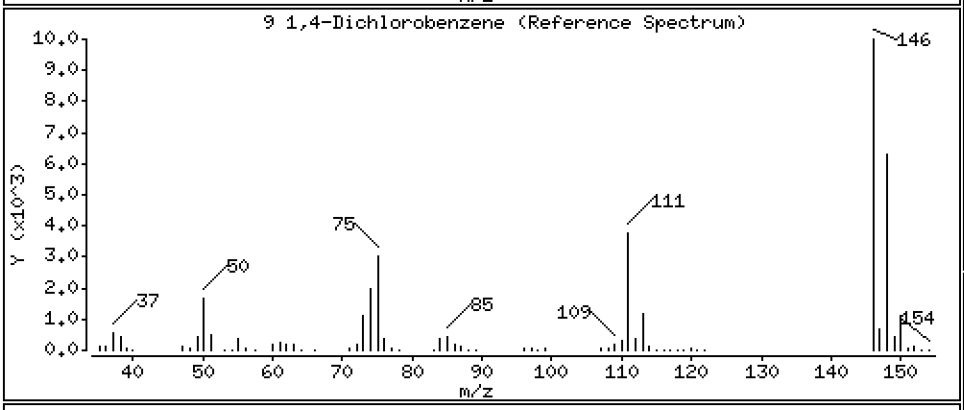
Column diameter: 0.25

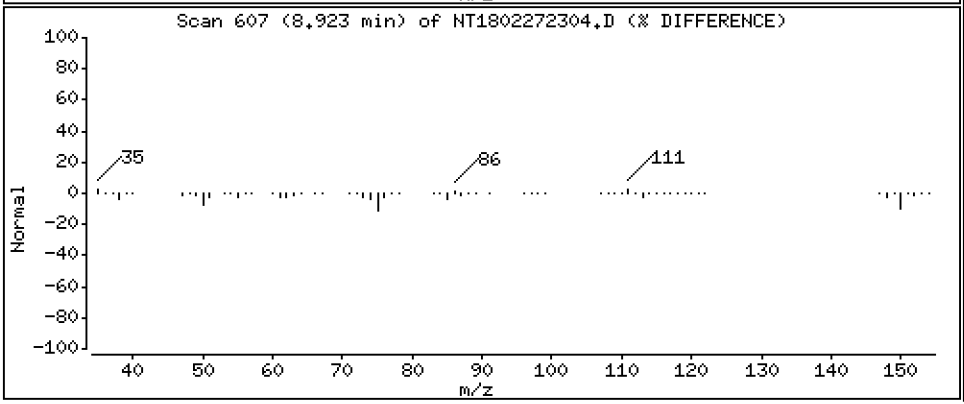
9 1,4-Dichlorobenzene

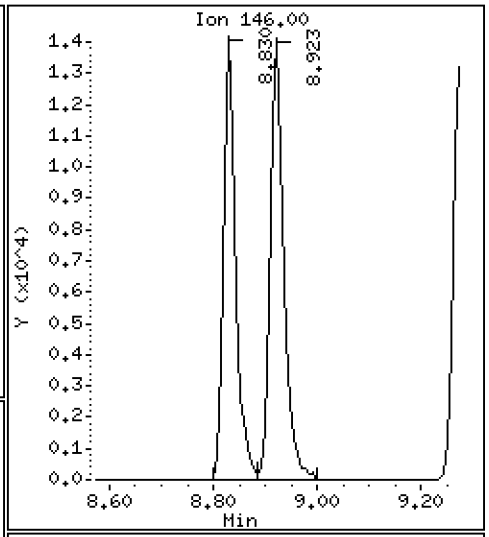
Concentration: 0.2372 ug/mL

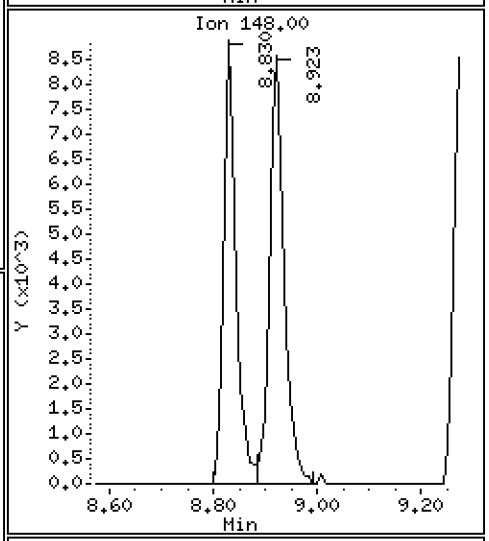


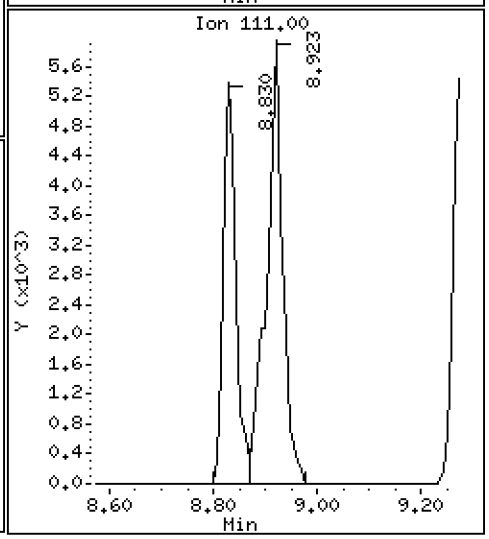












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

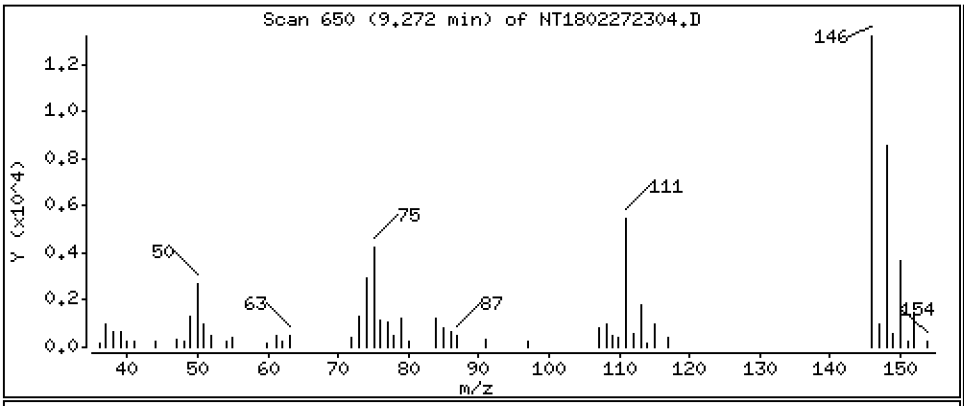
Operator: VTS

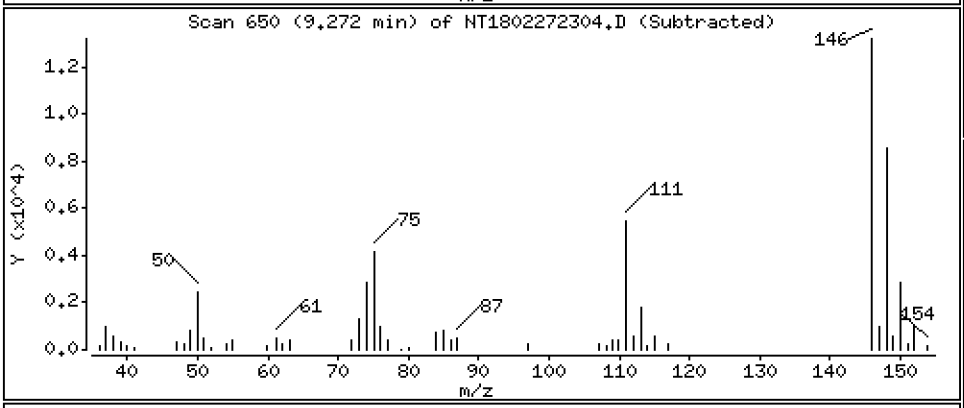
Column phase: ZB-5msi

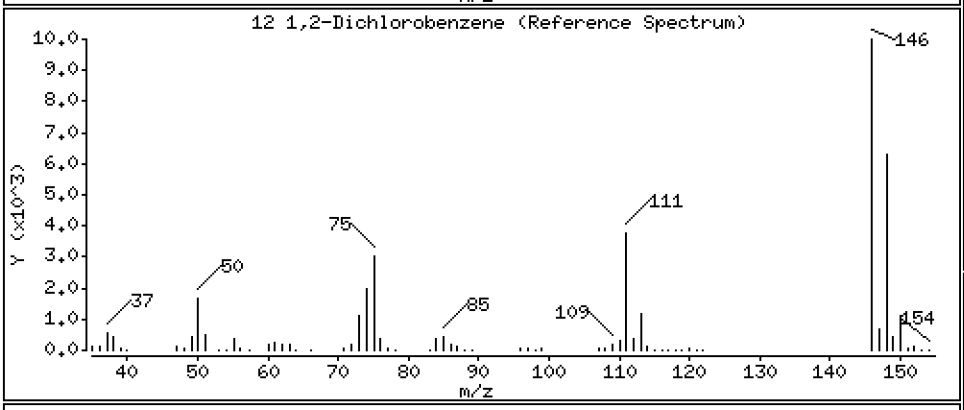
Column diameter: 0.25

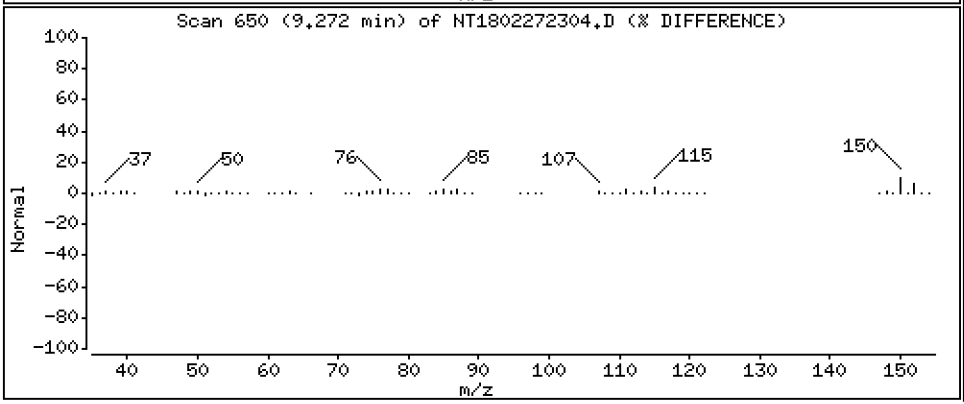
12 1,2-Dichlorobenzene

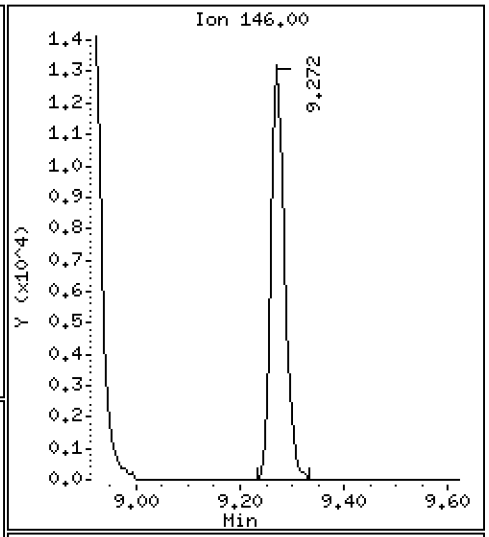
Concentration: 0.2219 ug/mL

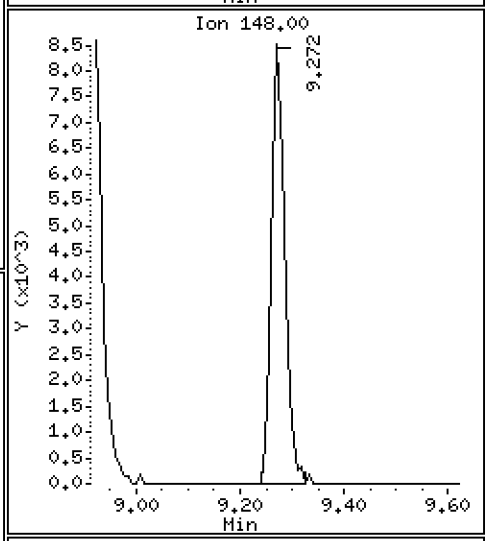


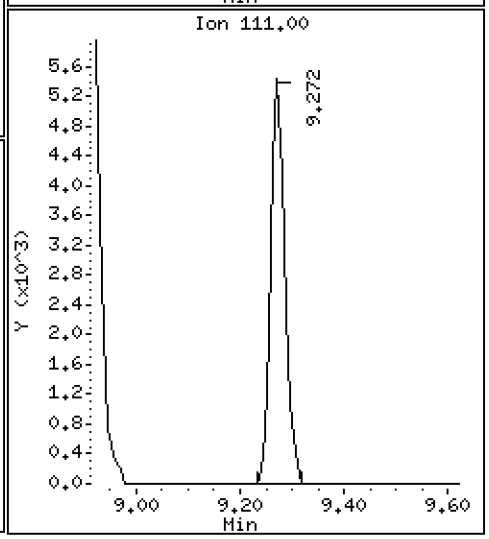












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

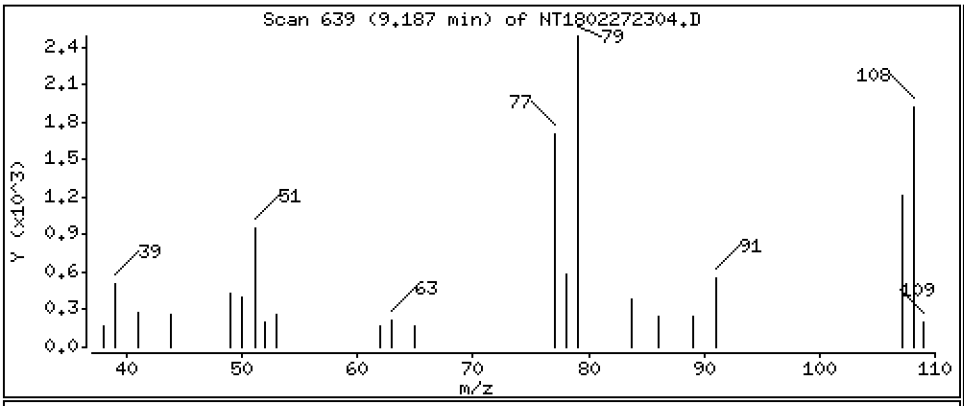
Operator: VTS

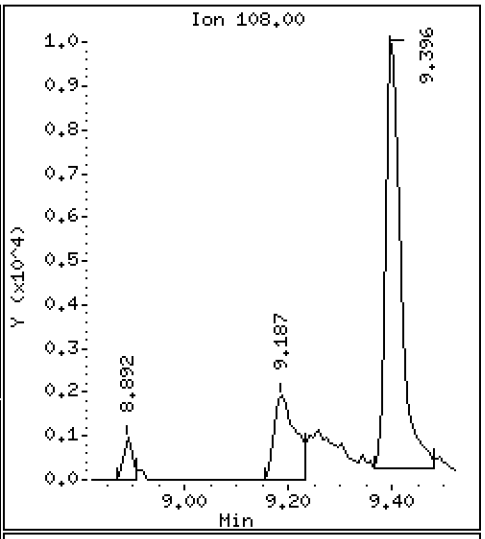
Column phase: ZB-5msi

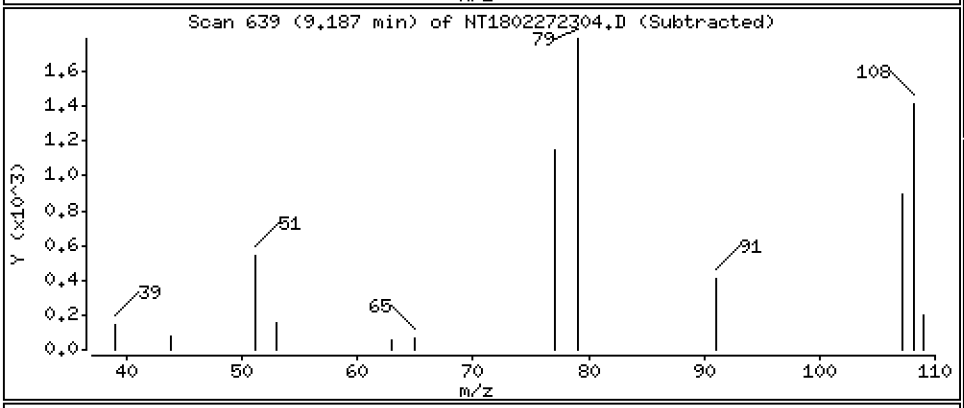
Column diameter: 0.25

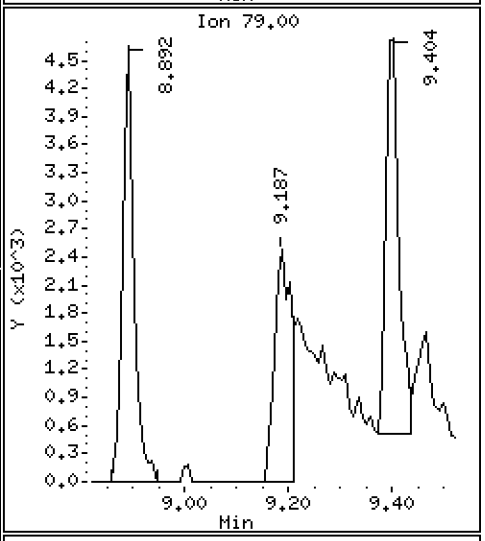
11 Benzyl alcohol

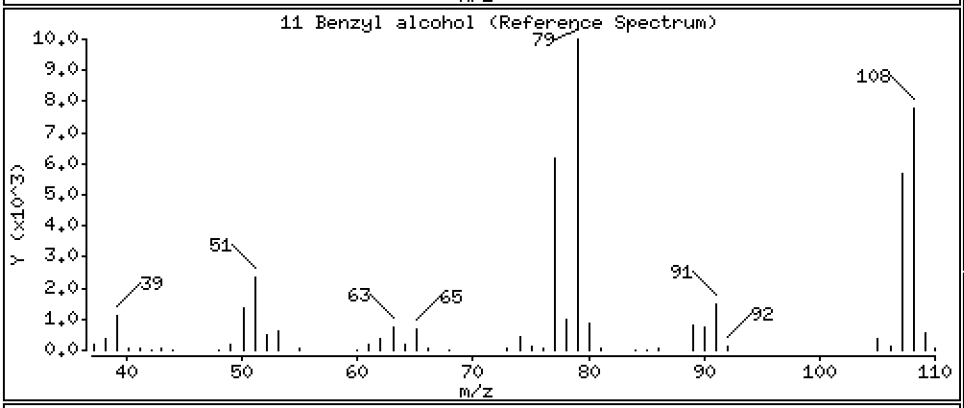
Concentration: 0.1013 ug/mL

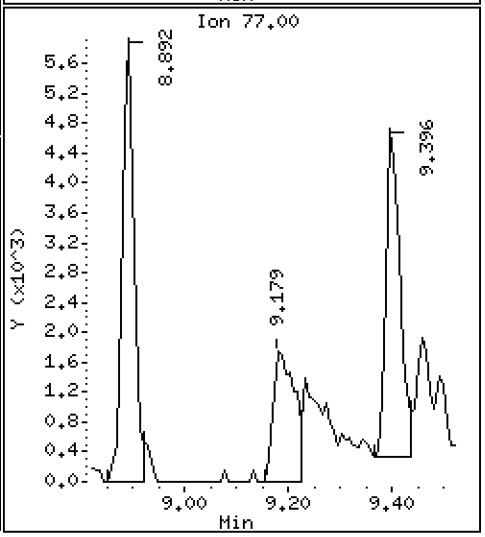


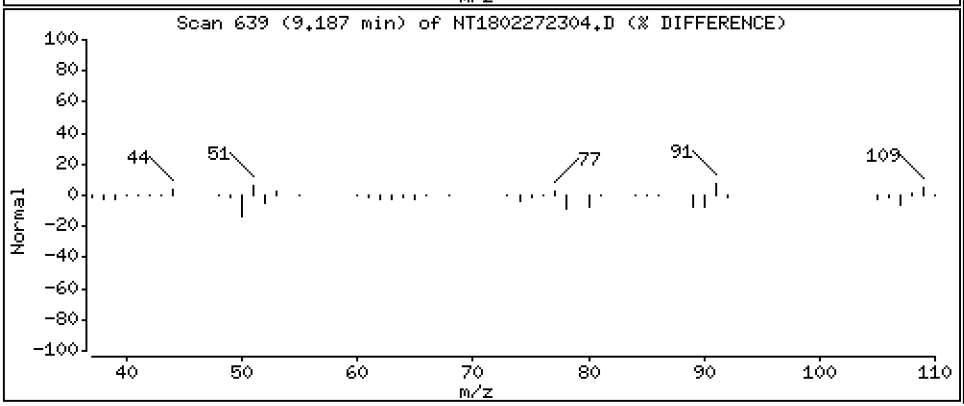












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

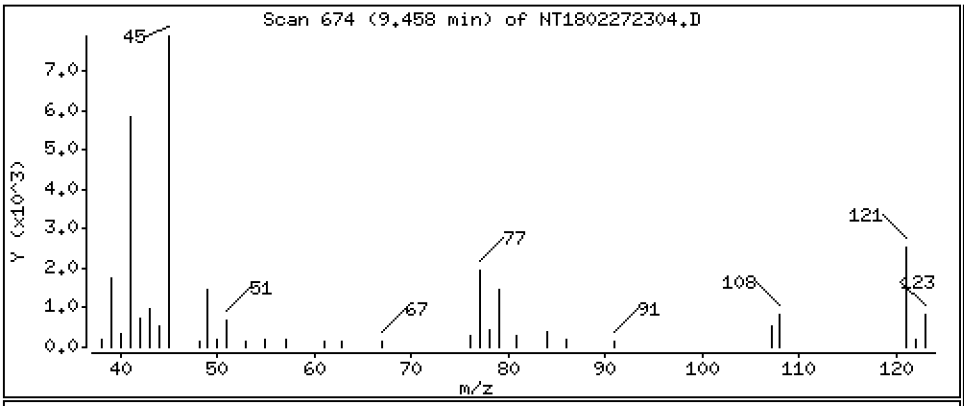
Operator: VTS

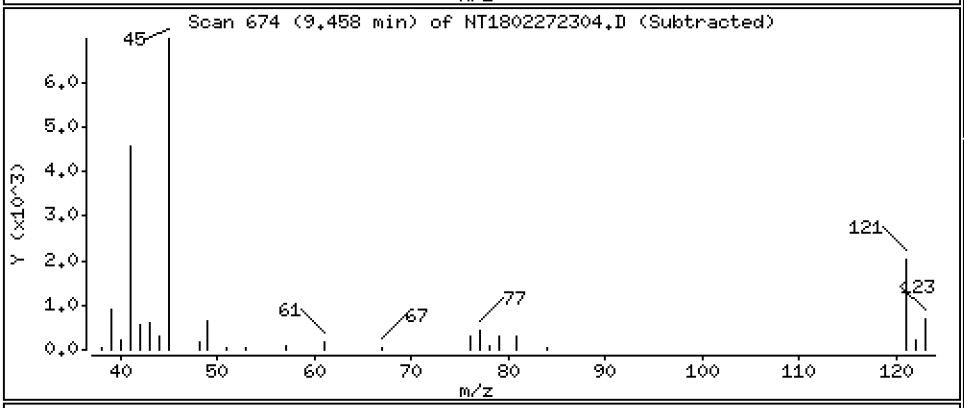
Column phase: ZB-5msi

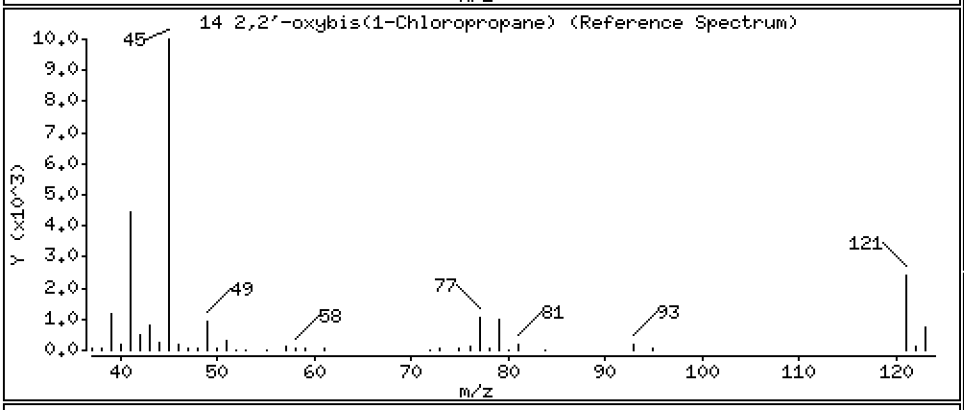
Column diameter: 0.25

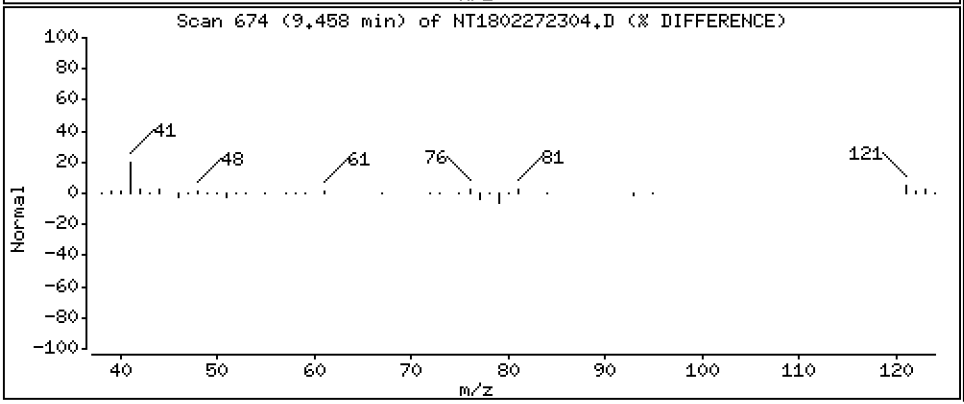
14 2,2'-oxybis(1-Chloropropane)

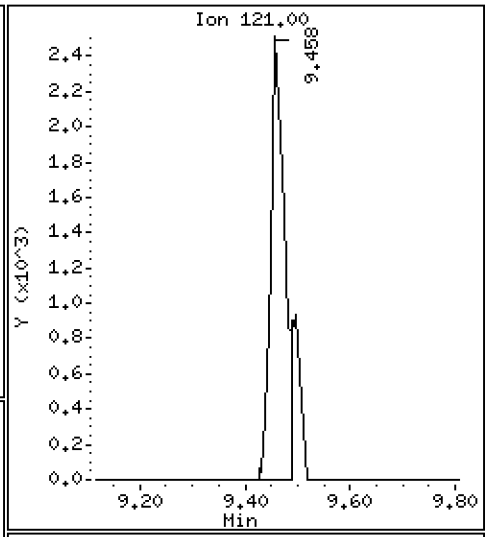
Concentration: 0.1860 ug/mL

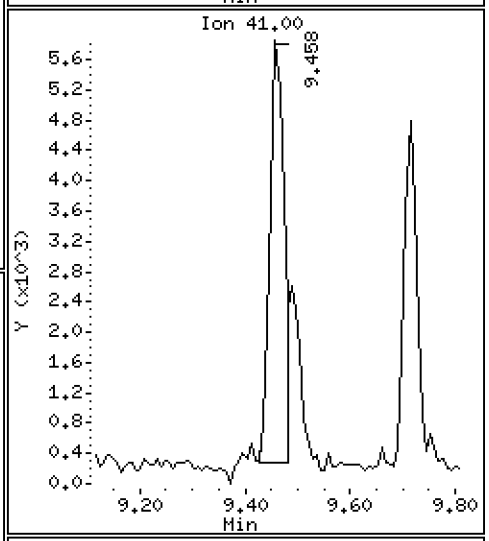


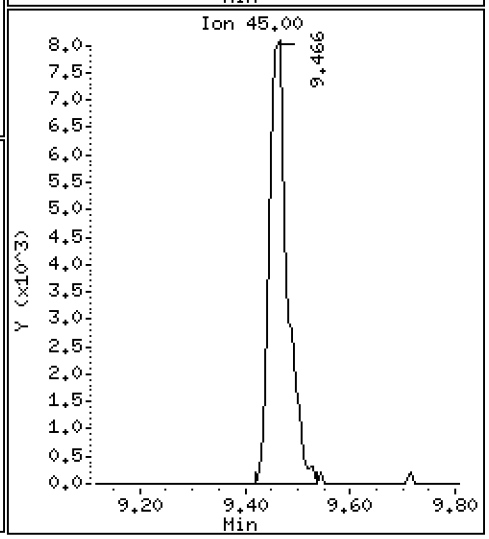












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

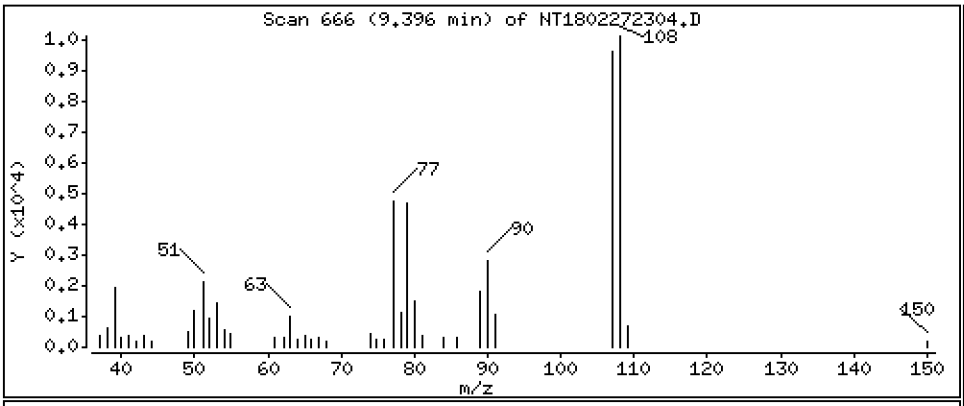
Operator: VTS

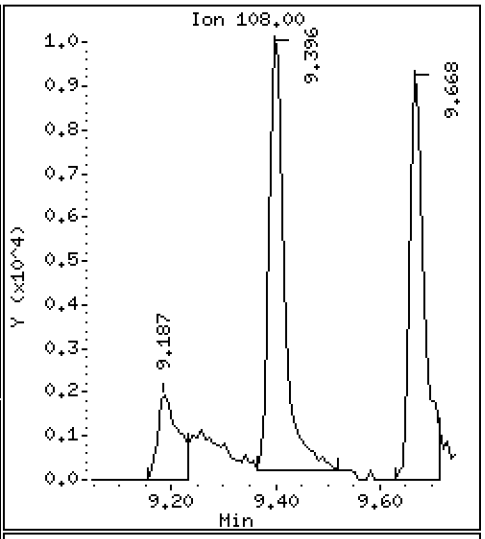
Column phase: ZB-5msi

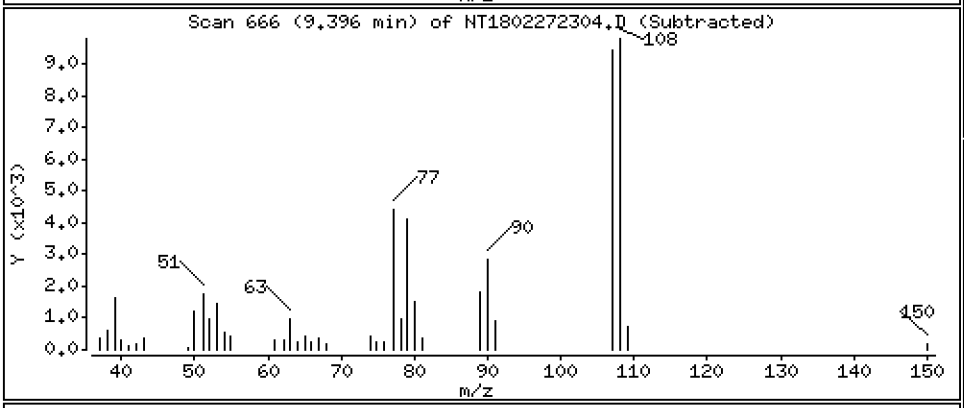
Column diameter: 0.25

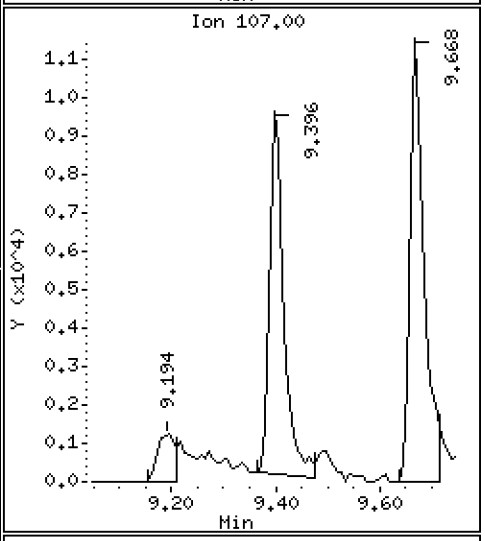
13 2-Methylphenol

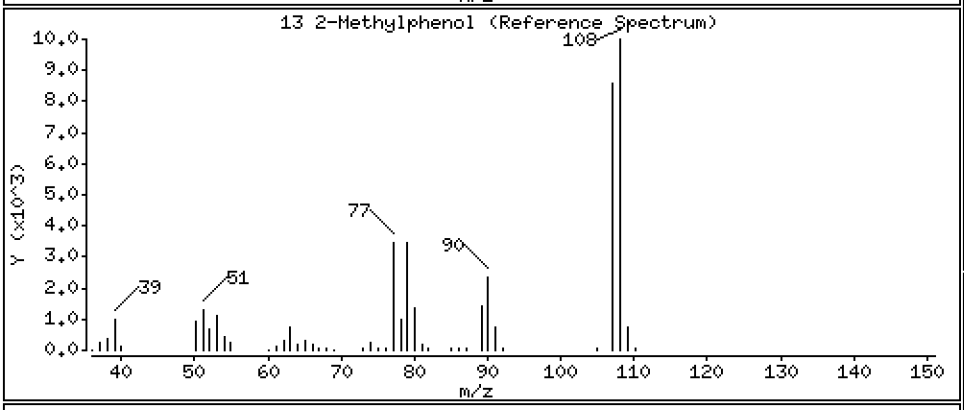
Concentration: 0.2230 ug/mL

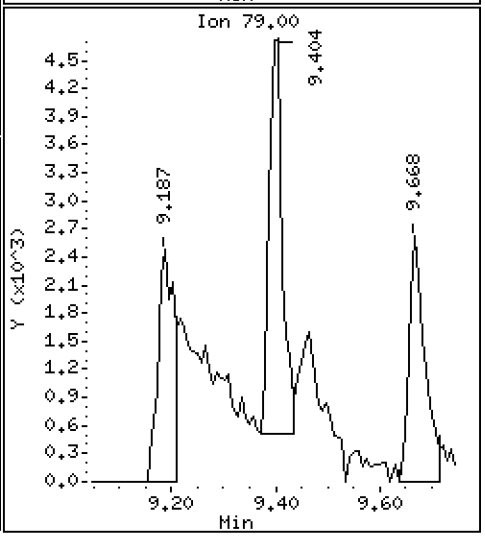


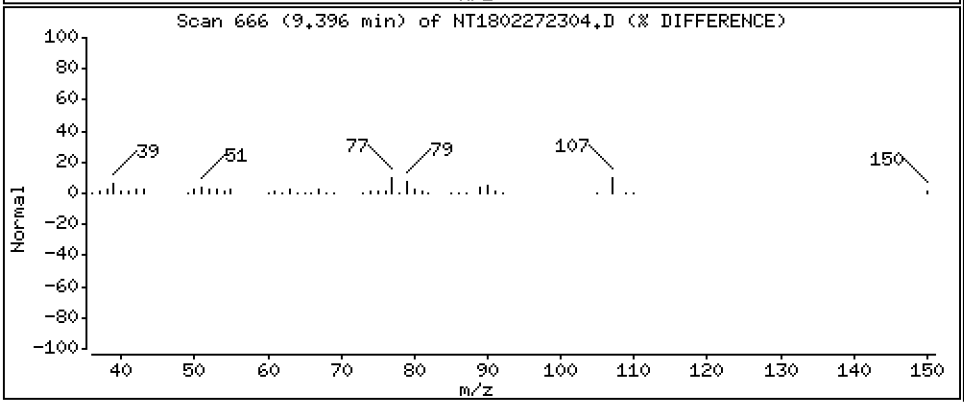












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

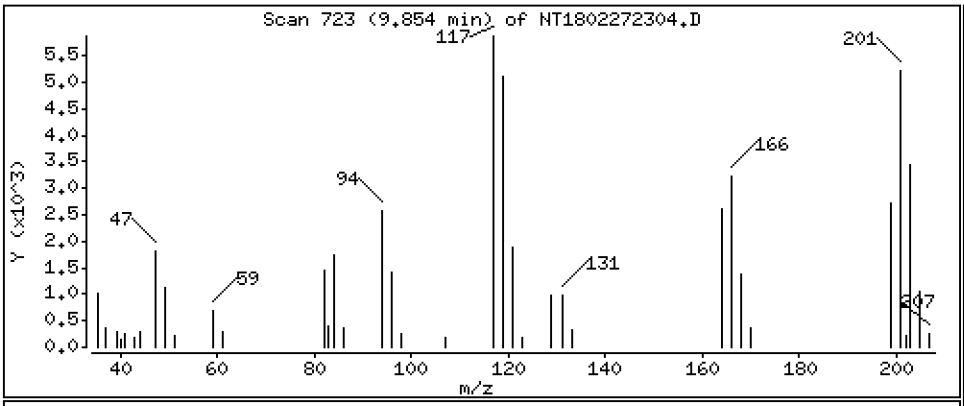
Operator: VTS

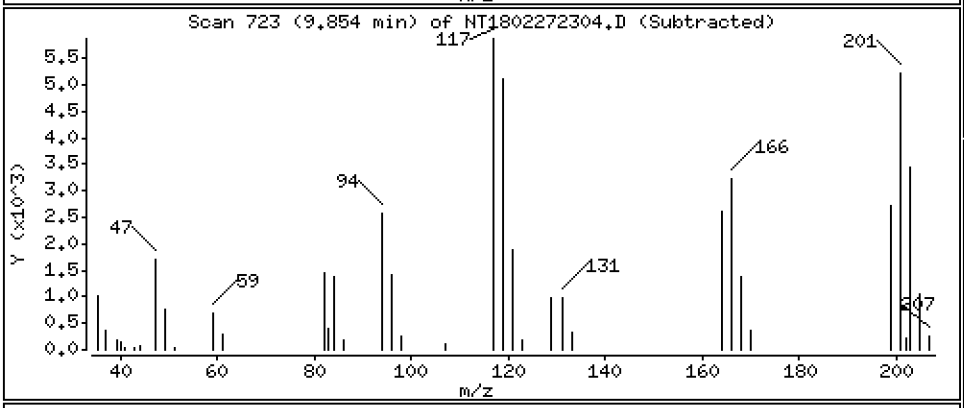
Column phase: ZB-5msi

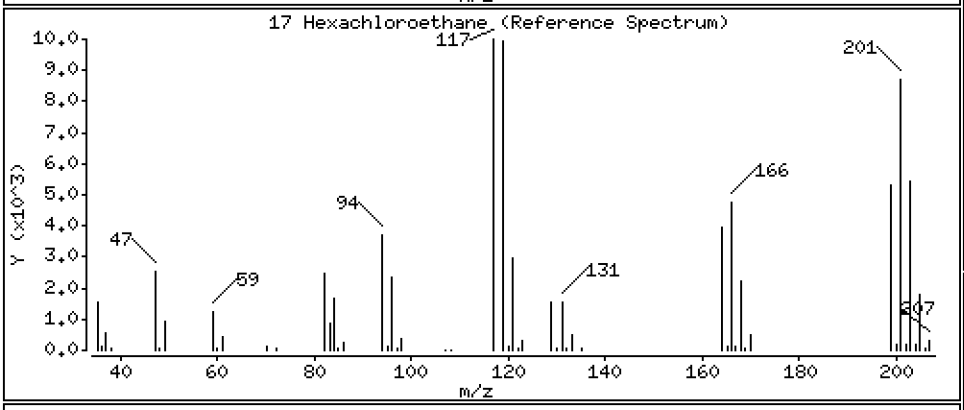
Column diameter: 0.25

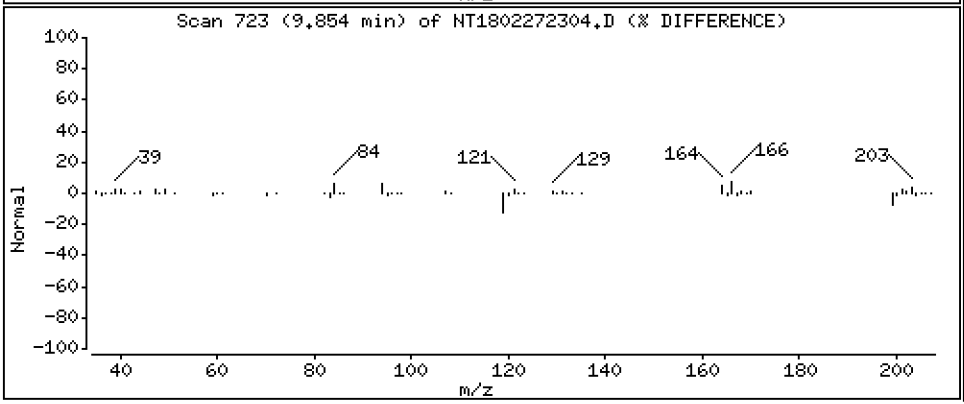
17 Hexachloroethane

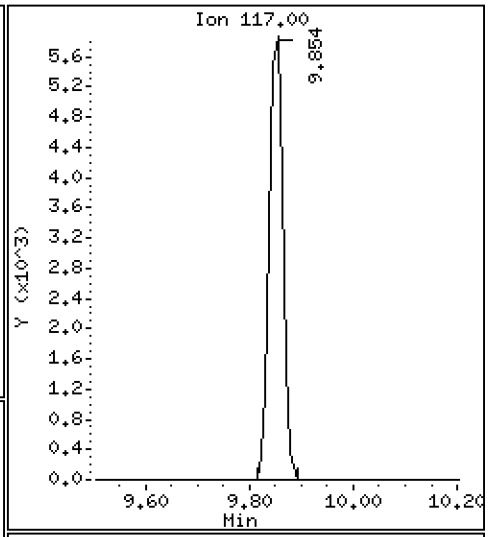
Concentration: 0.2496 ug/mL

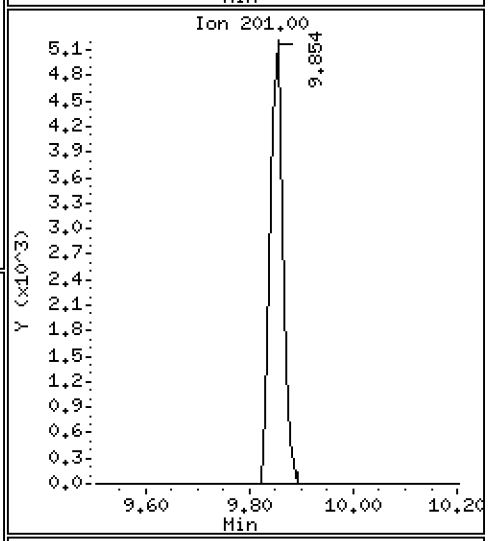


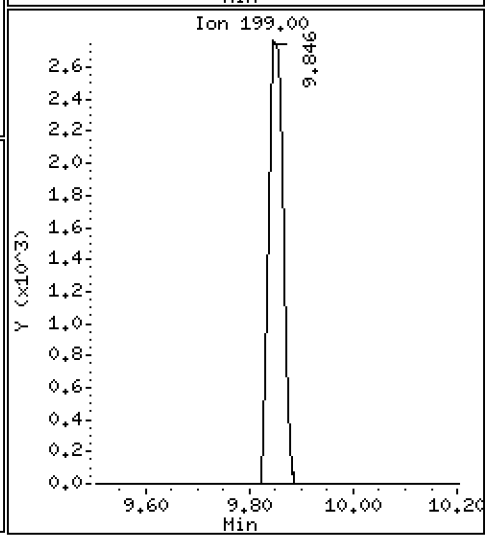












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

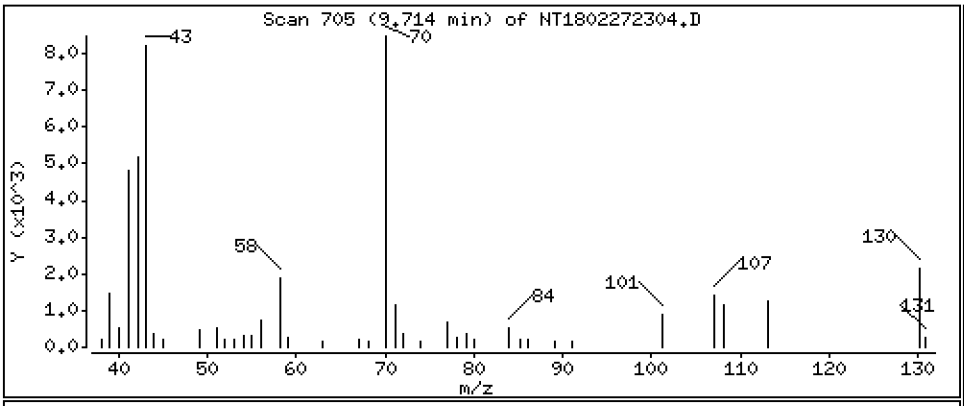
Operator: VTS

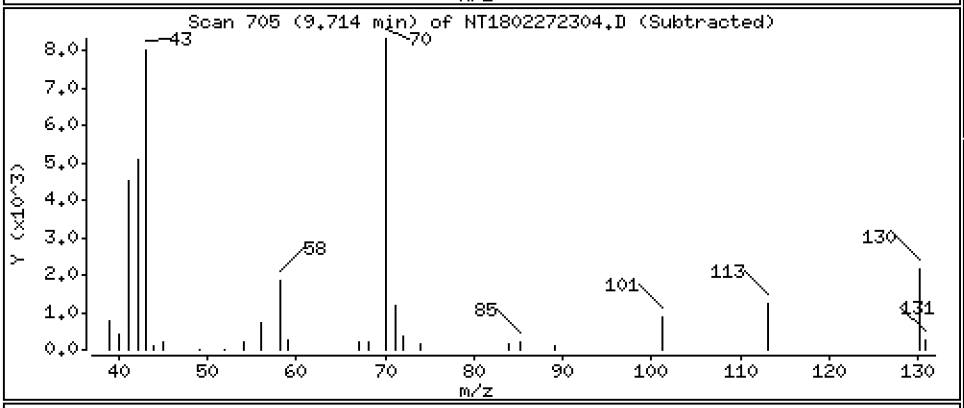
Column phase: ZB-5msi

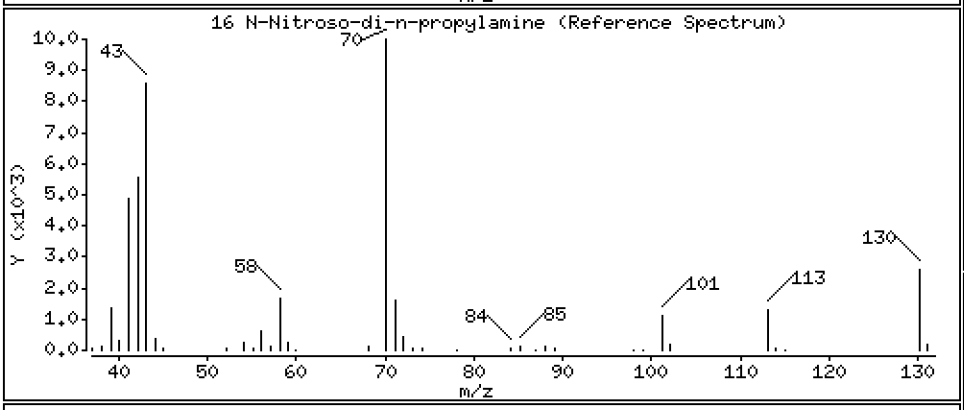
Column diameter: 0.25

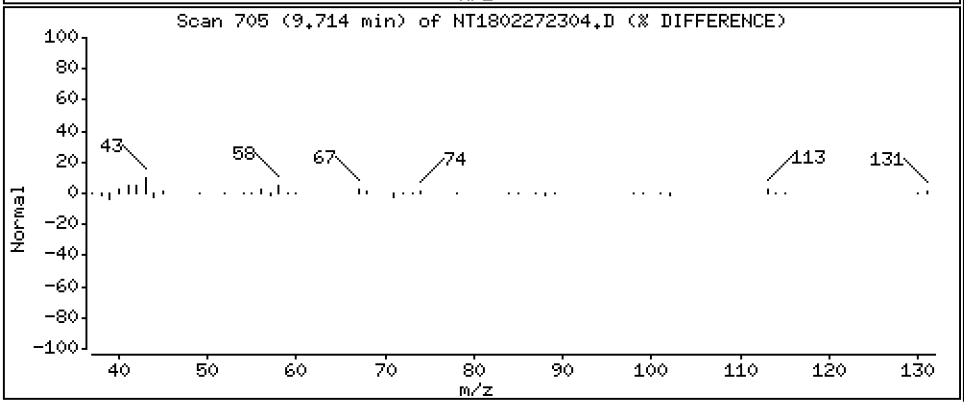
16 N-Nitroso-di-n-propylamine

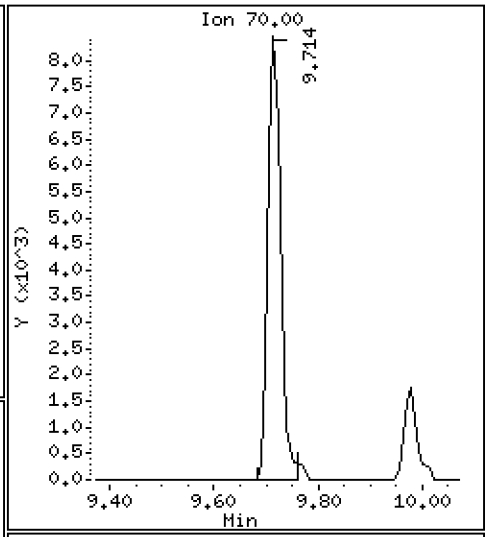
Concentration: 0.2116 ug/mL

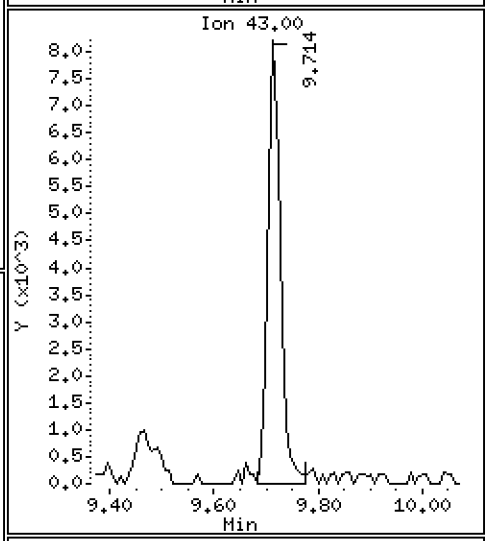


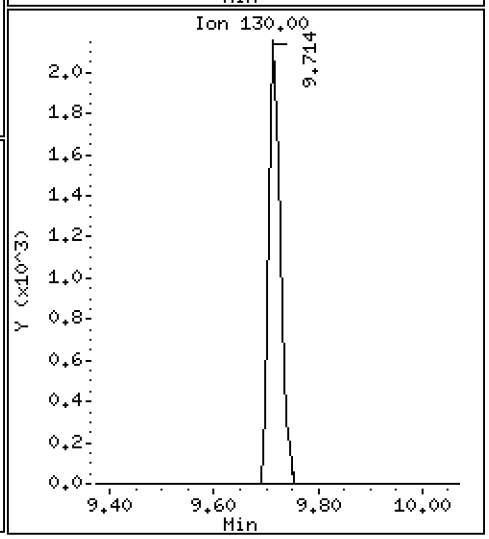












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

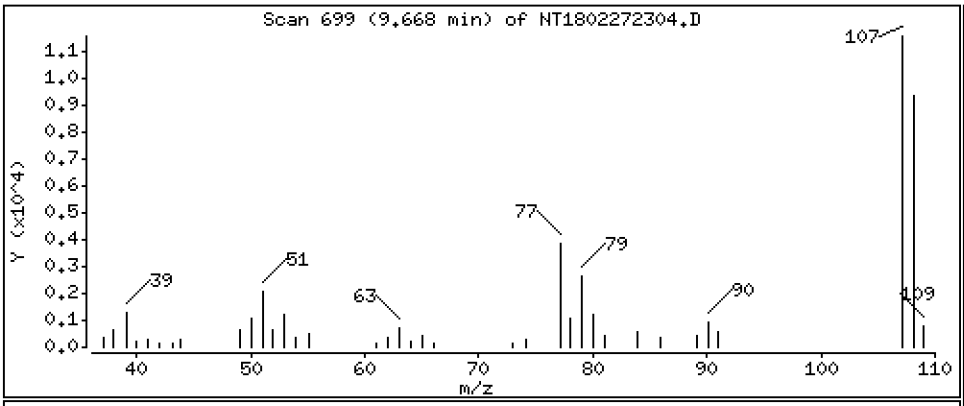
Operator: VTS

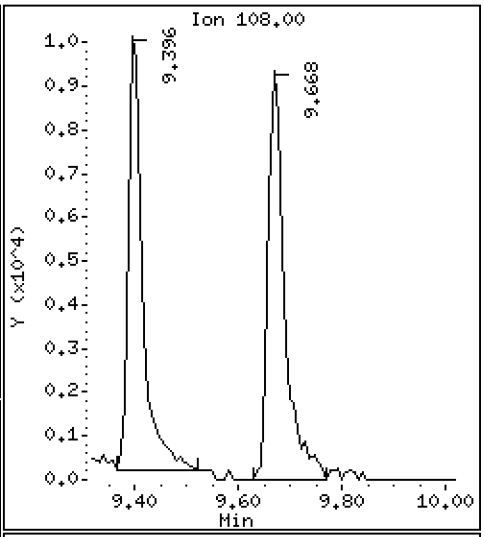
Column phase: ZB-5msi

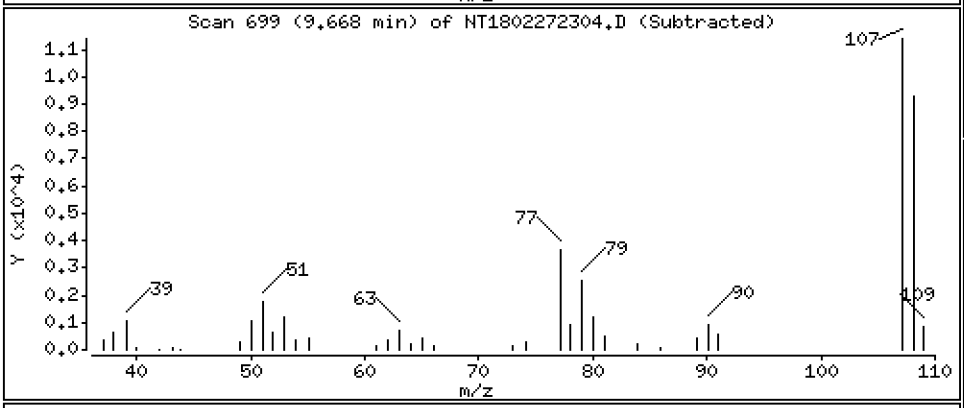
Column diameter: 0.25

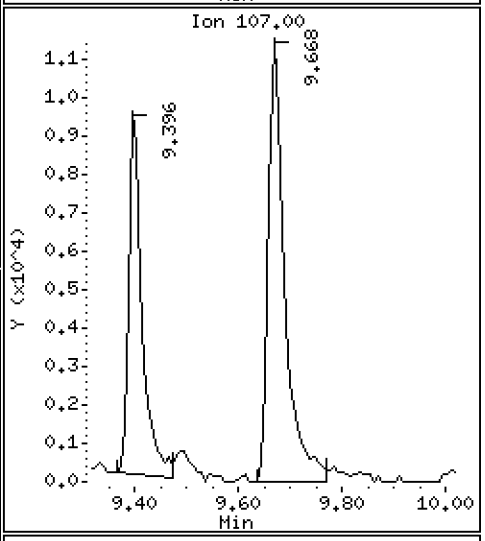
15 4-Methylphenol

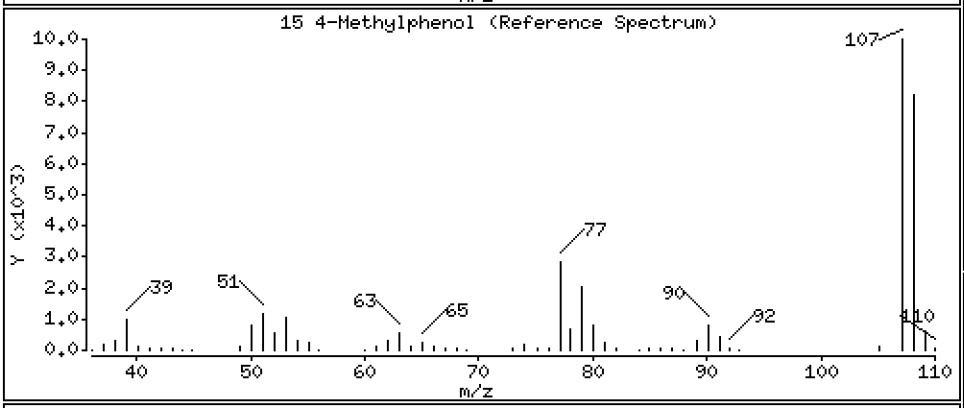
Concentration: 0.2192 ug/mL

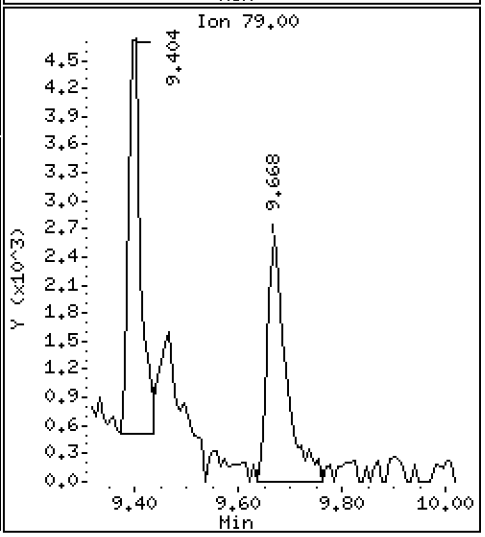


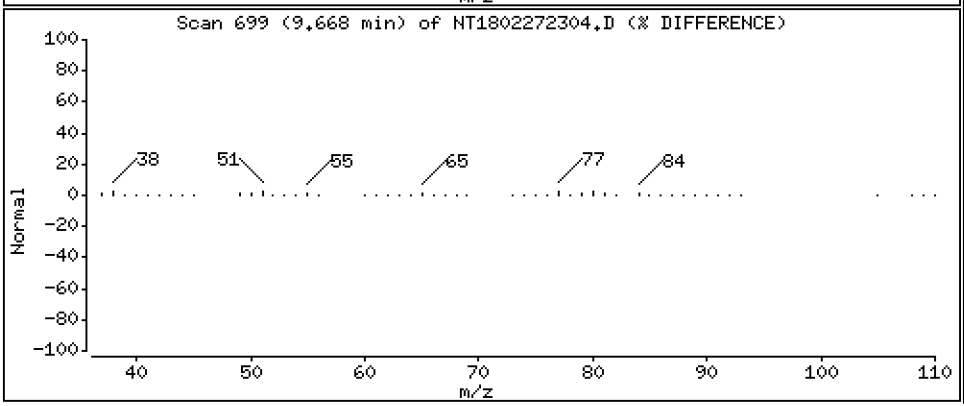












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

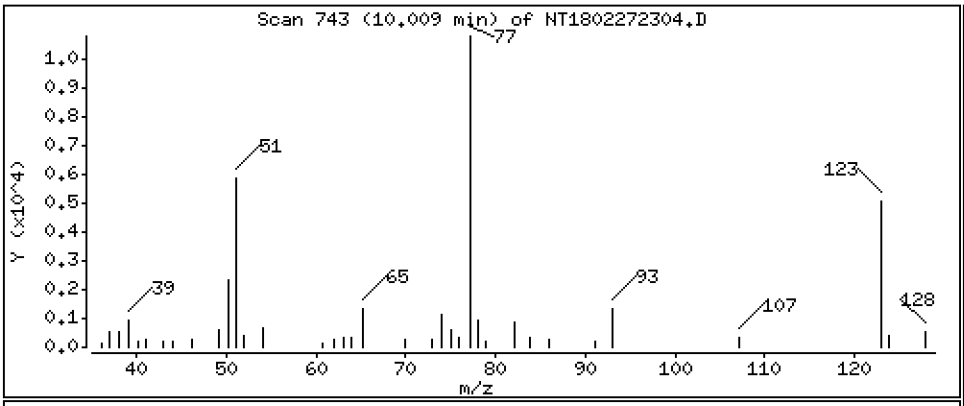
Operator: VTS

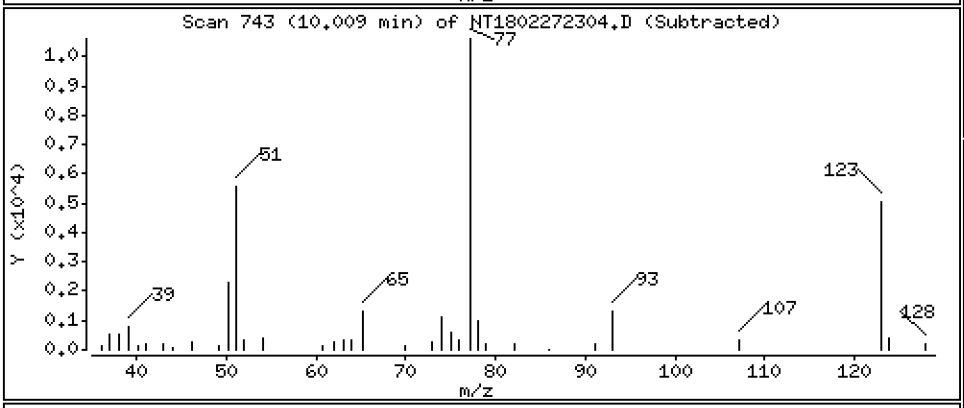
Column phase: ZB-5msi

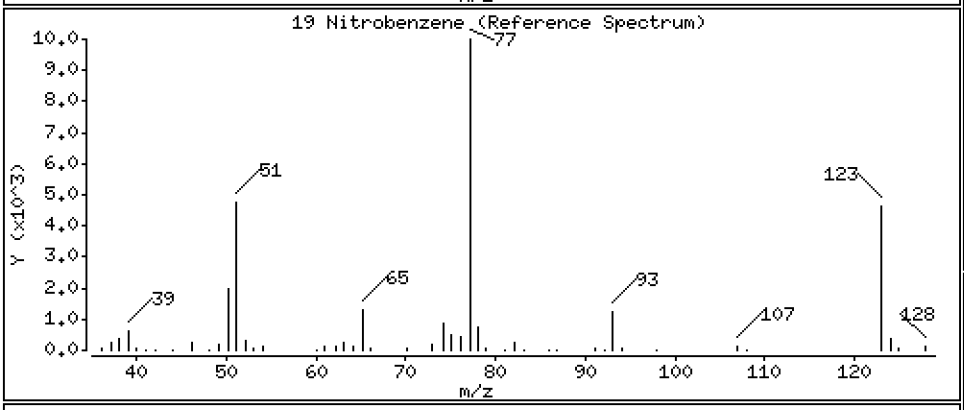
Column diameter: 0.25

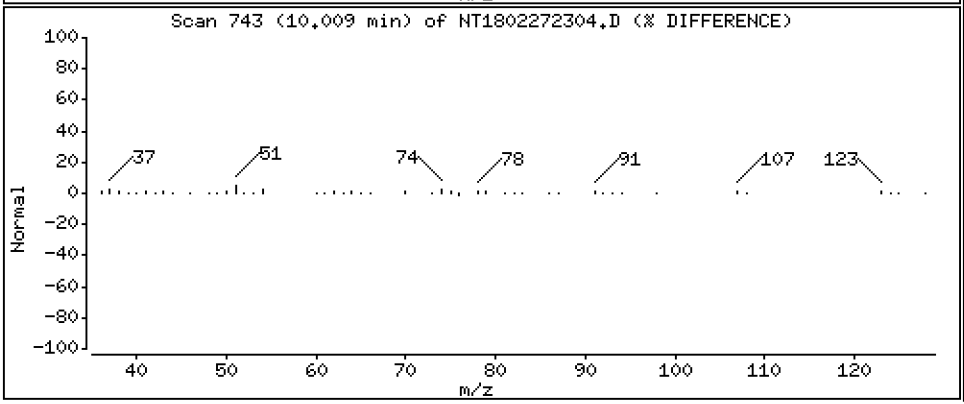
19 Nitrobenzene

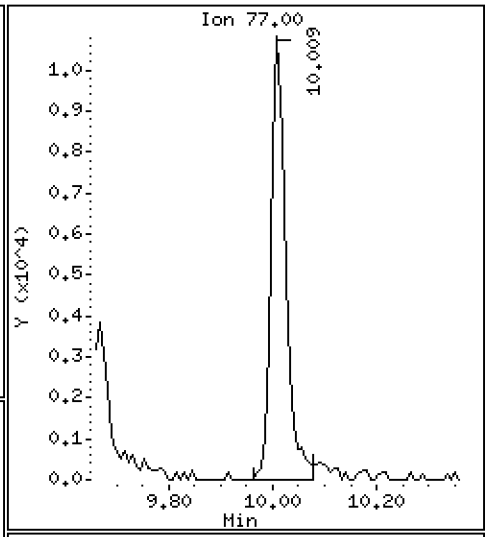
Concentration: 0.2054 ug/mL

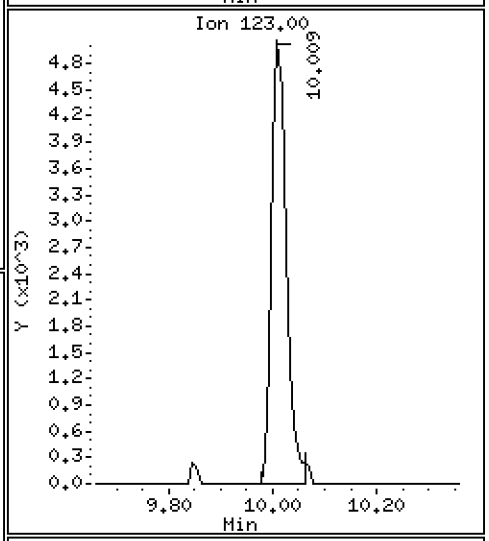


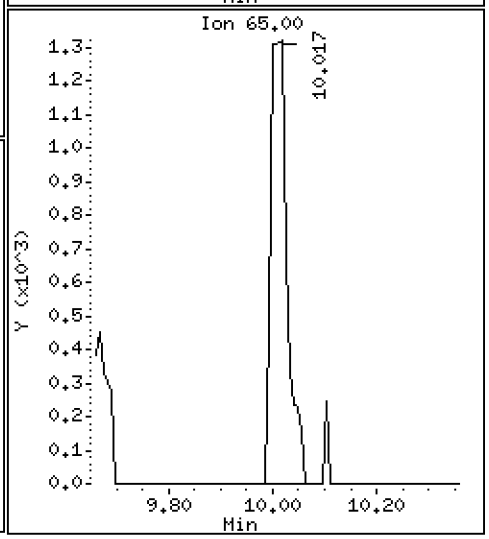












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

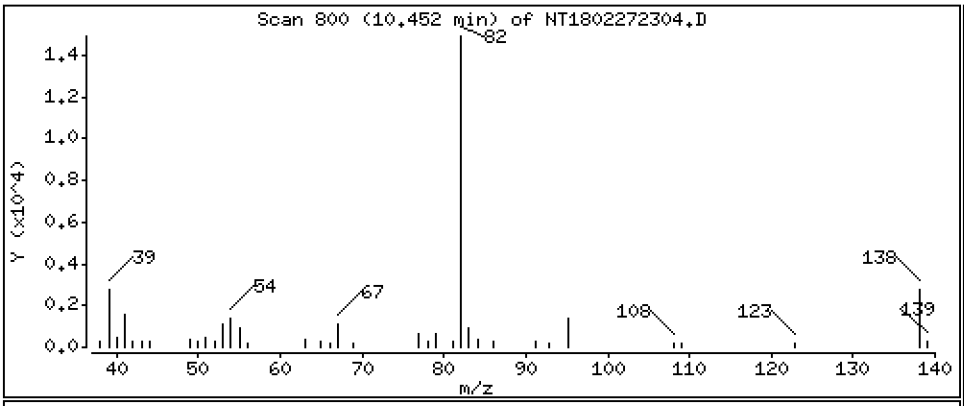
Operator: VTS

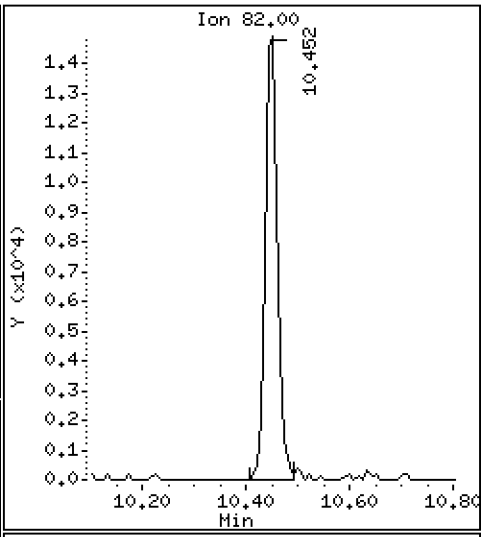
Column phase: ZB-5msi

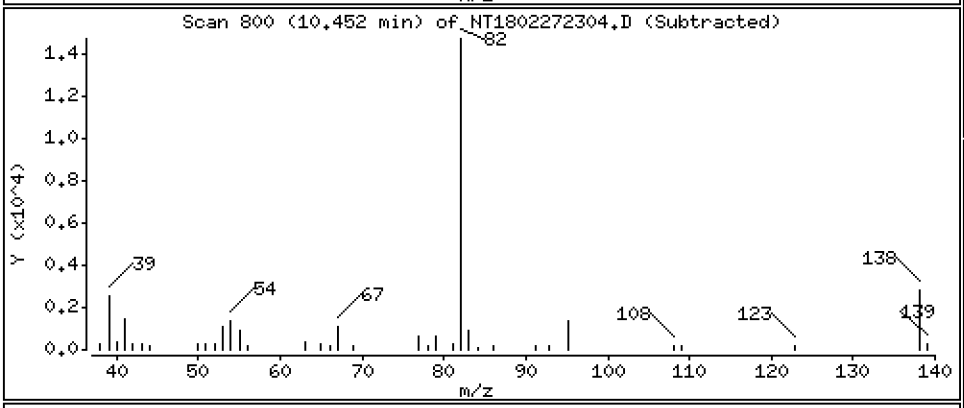
Column diameter: 0.25

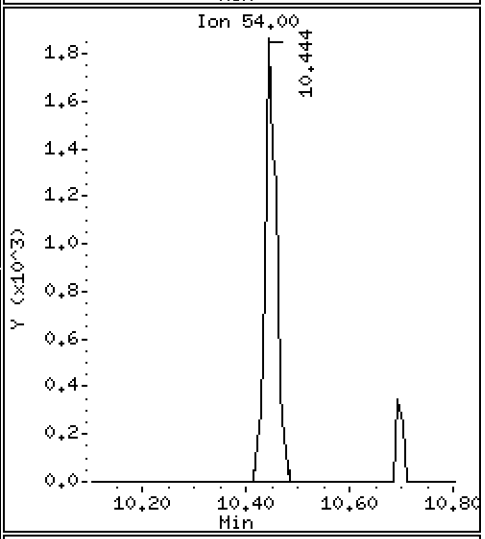
20 Isophorone

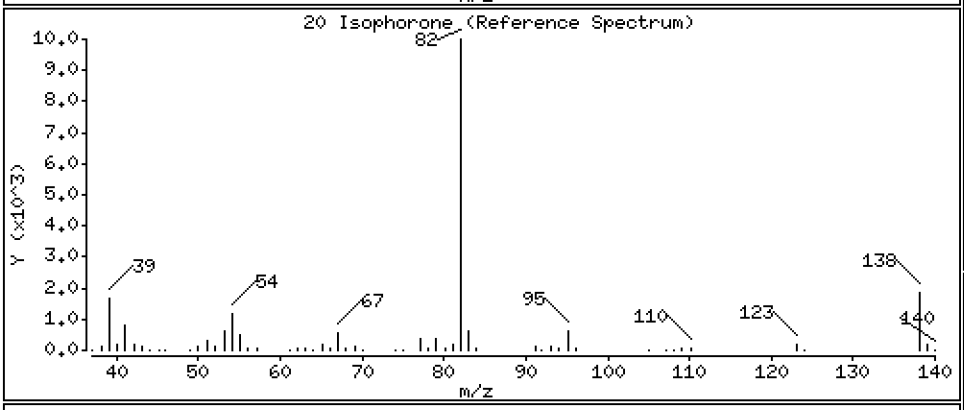
Concentration: 0.2003 ug/mL

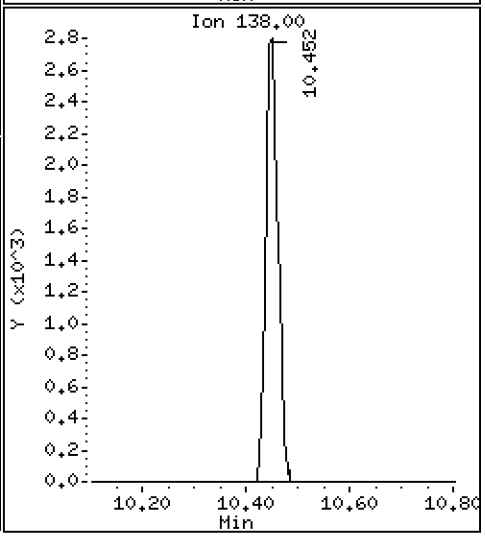


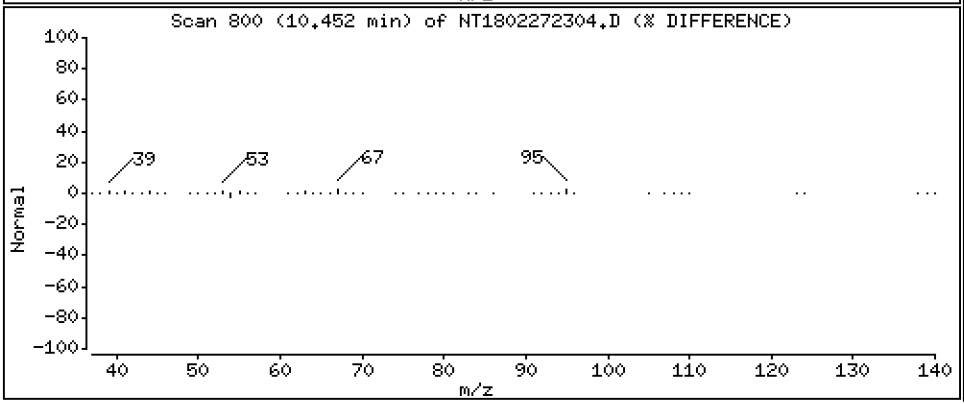












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

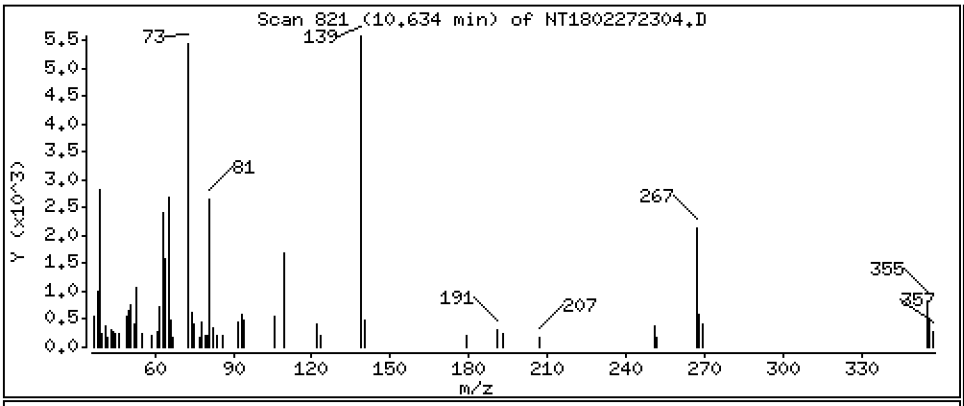
Operator: VTS

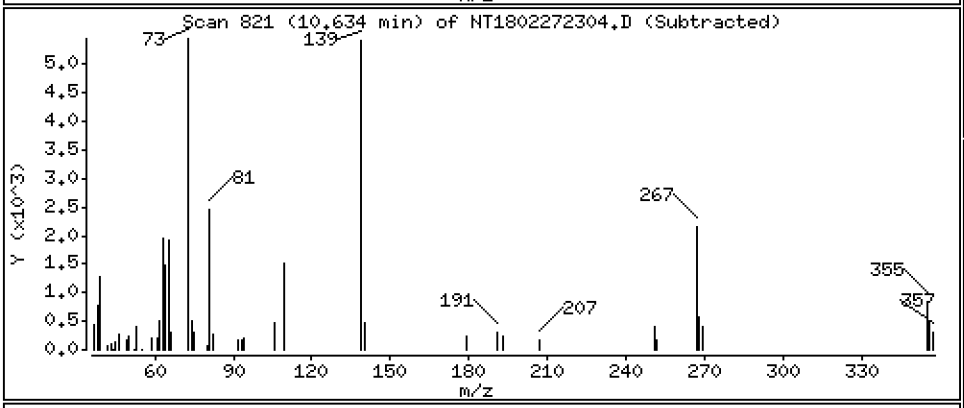
Column phase: ZB-5msi

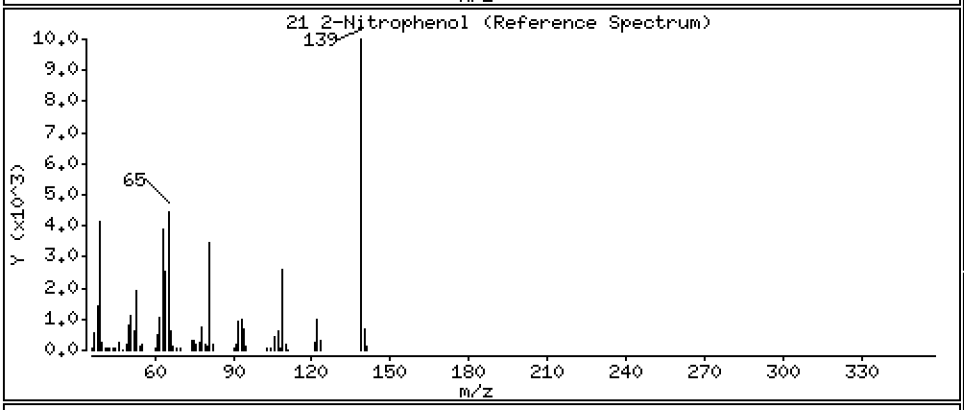
Column diameter: 0.25

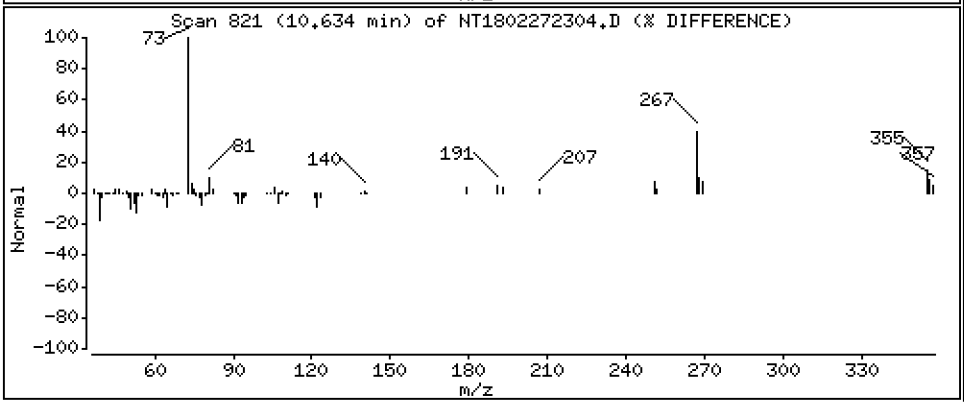
21 2-Nitrophenol

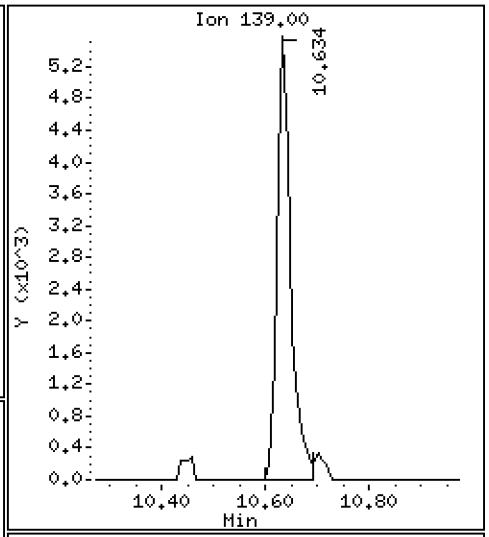
Concentration: 0.2076 ug/mL

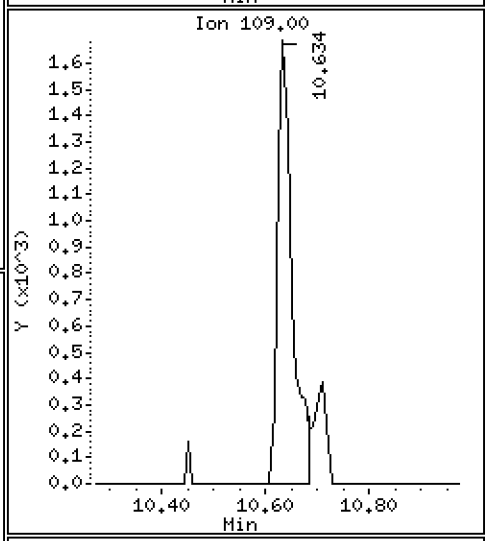


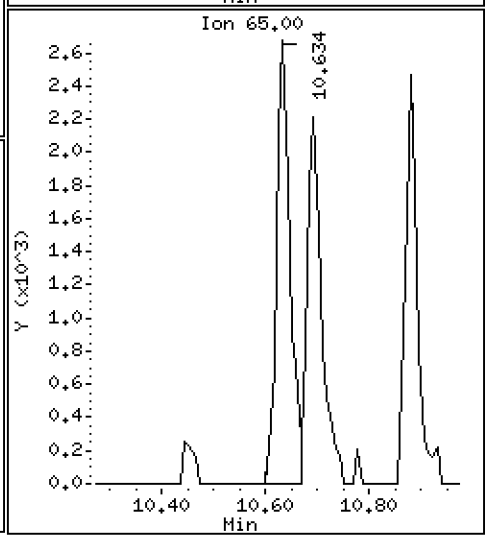












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

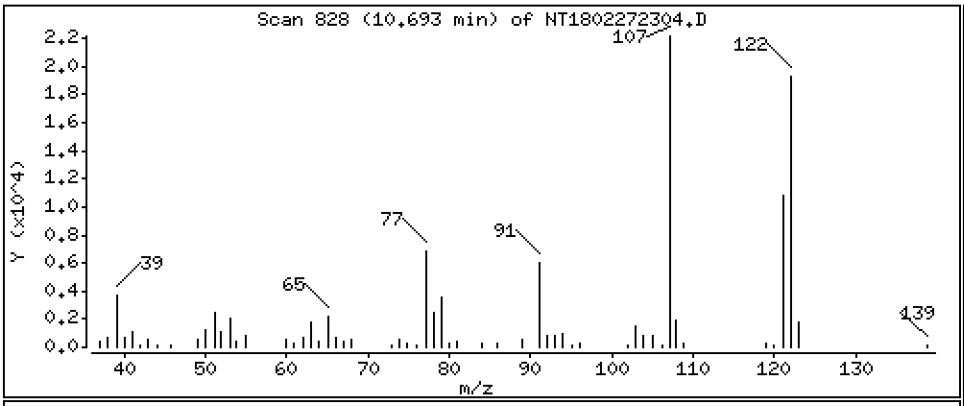
Operator: VTS

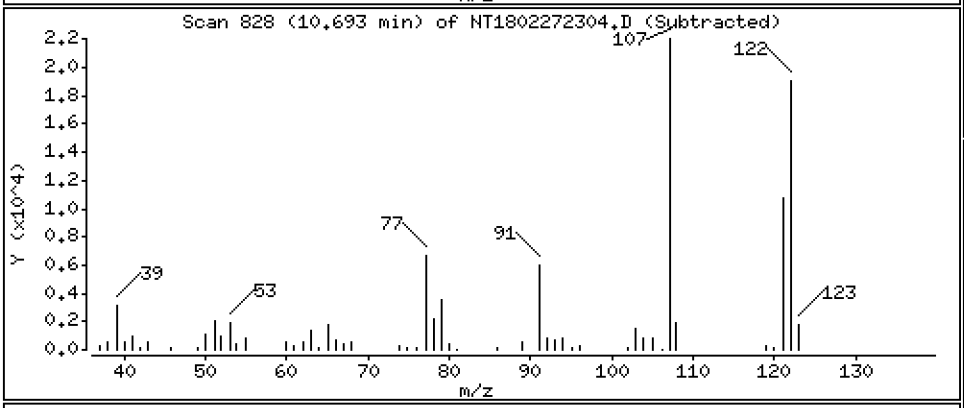
Column phase: ZB-5msi

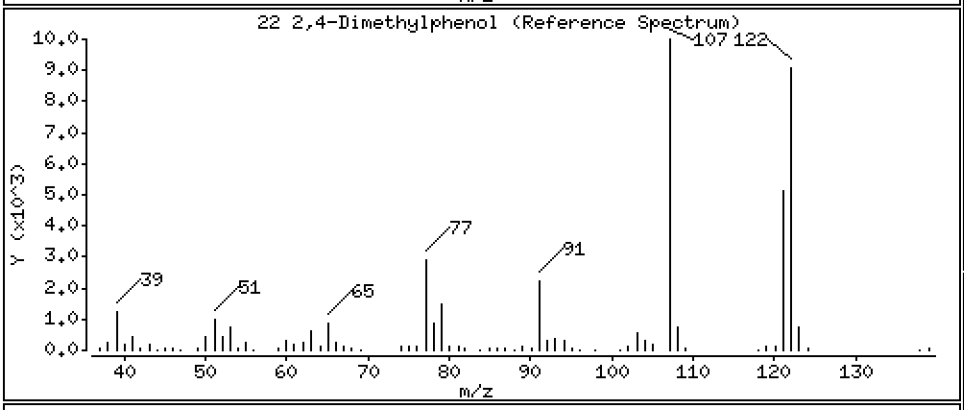
Column diameter: 0.25

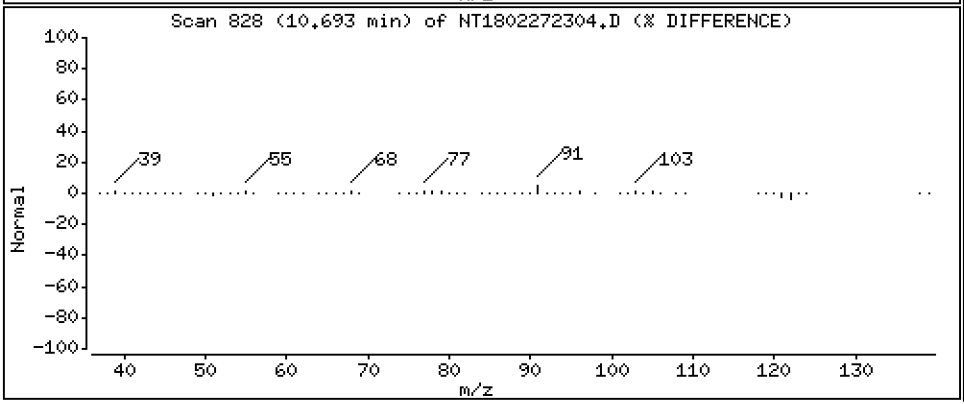
22 2,4-Dimethylphenol

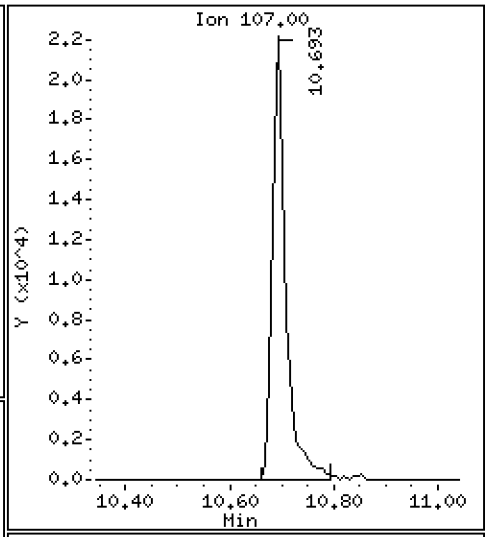
Concentration: 0.4403 ug/mL

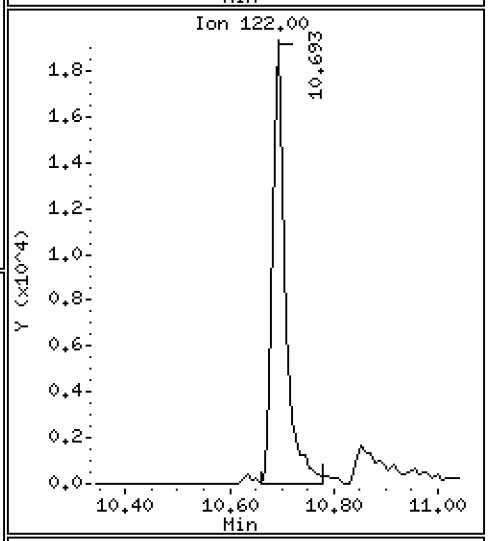


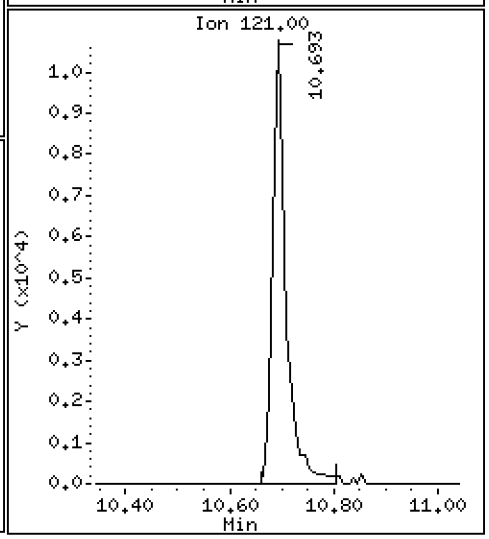












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

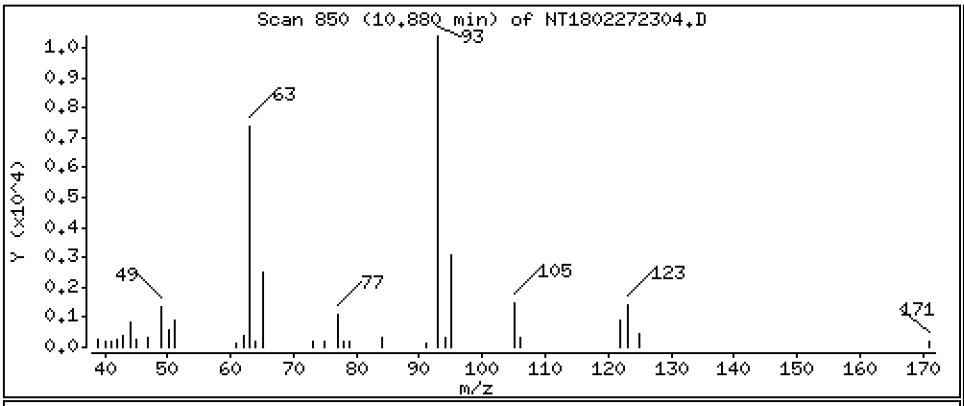
Operator: VTS

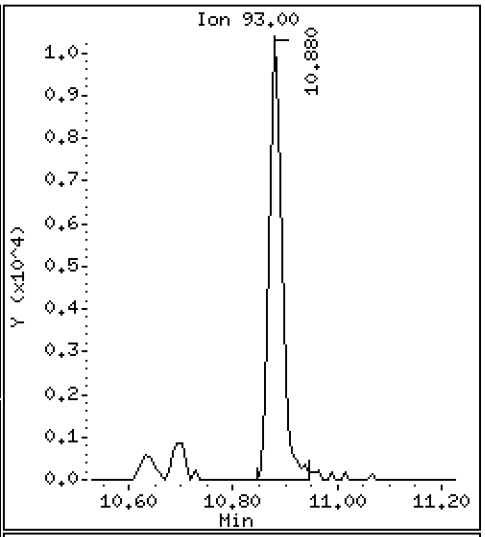
Column phase: ZB-5msi

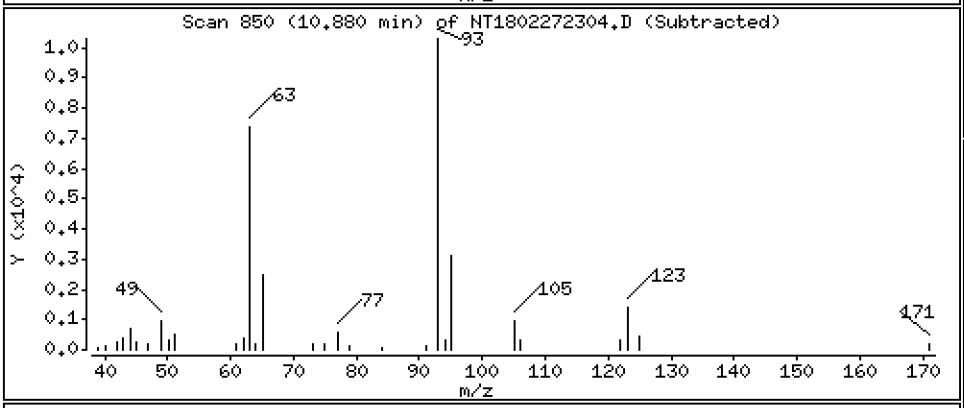
Column diameter: 0.25

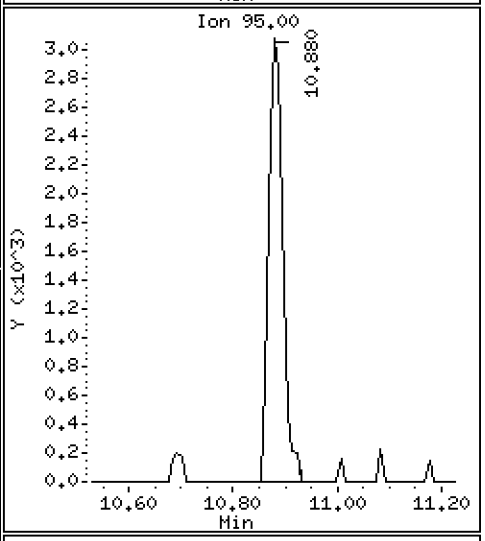
23 Bis(2-Chloroethoxy)methane

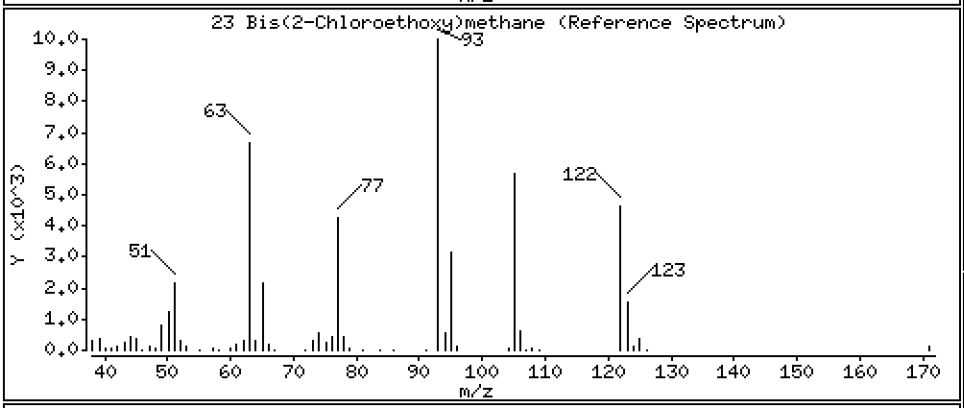
Concentration: 0.2050 ug/mL

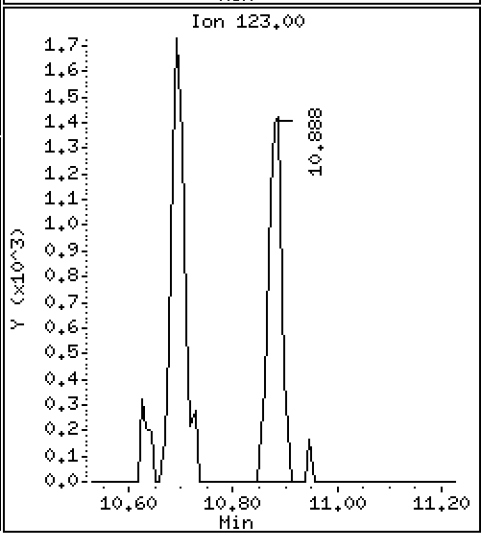


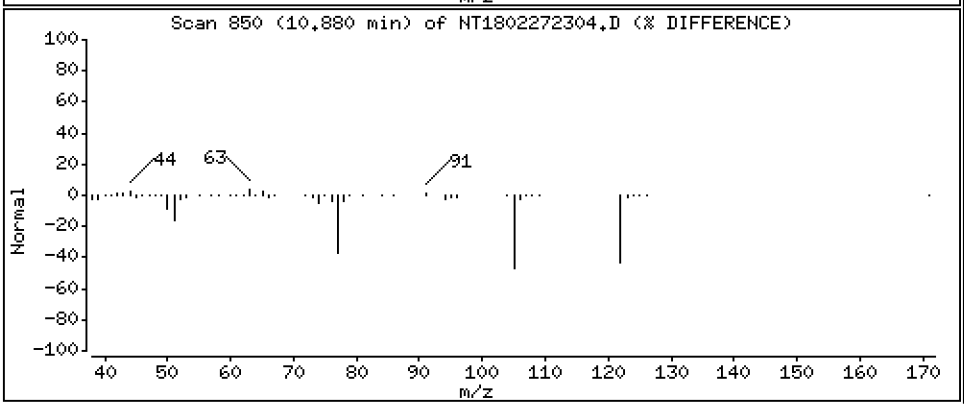












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

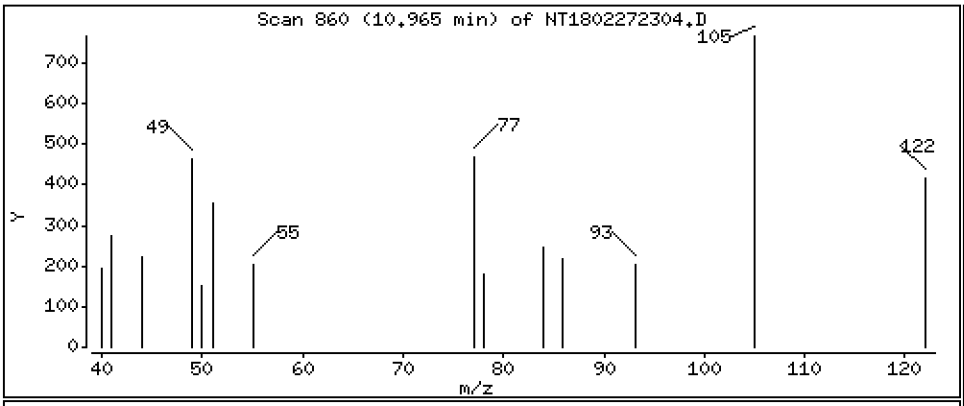
Operator: VTS

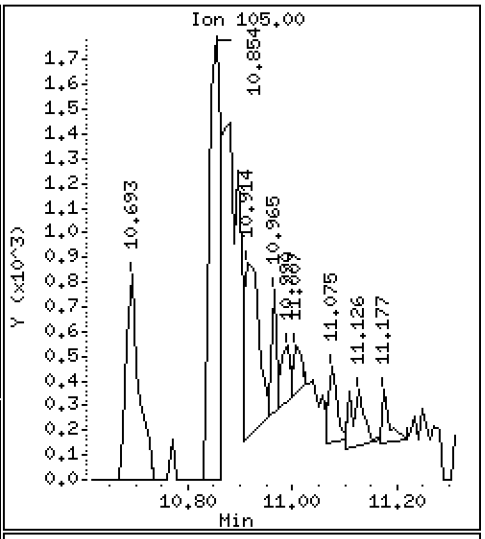
Column phase: ZB-5msi

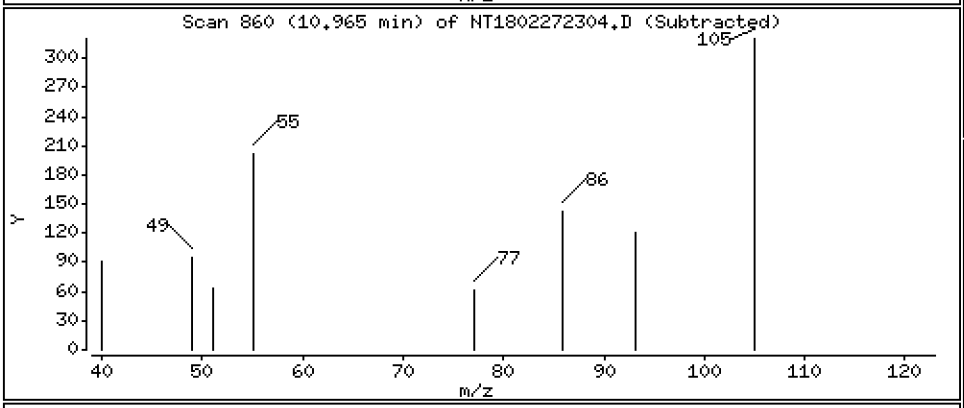
Column diameter: 0.25

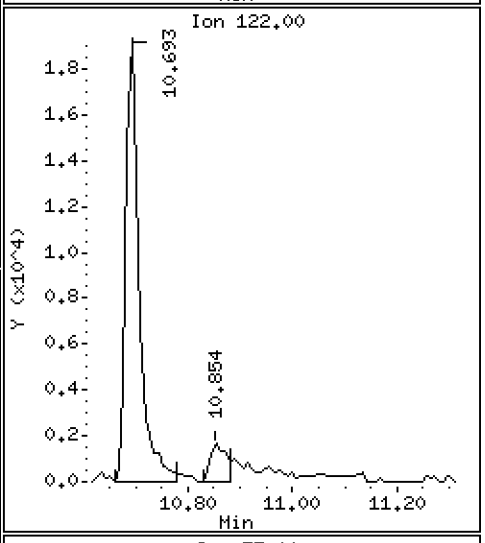
24 Benzoic acid

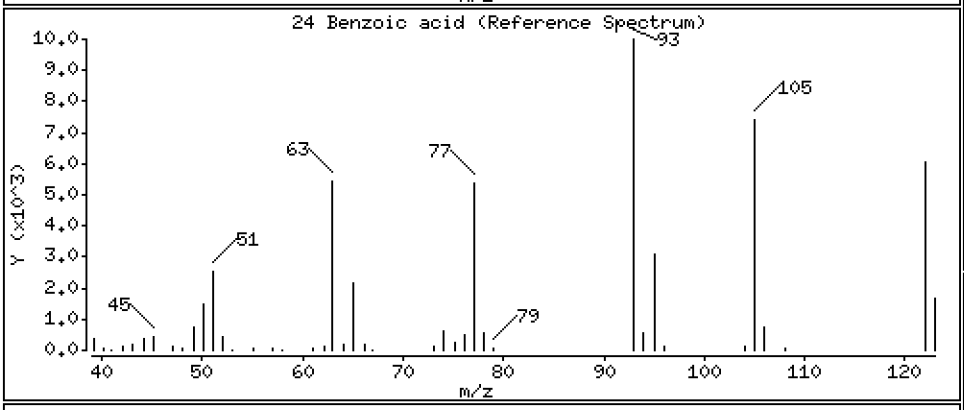
Concentration: 0.009657 ug/mL

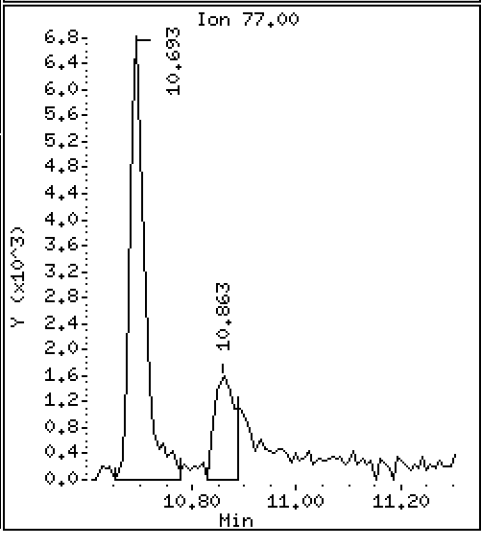


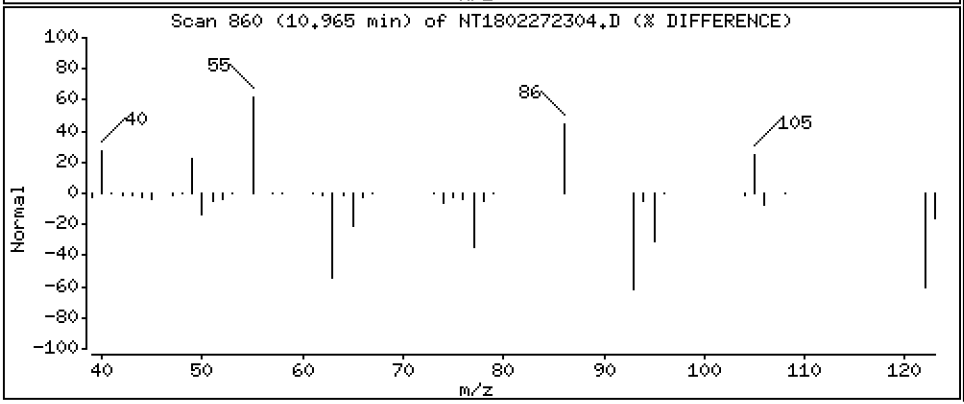












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

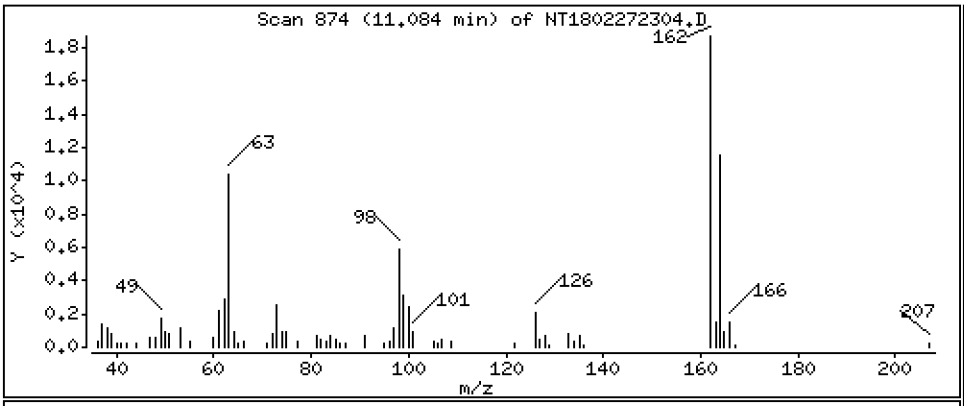
Operator: VTS

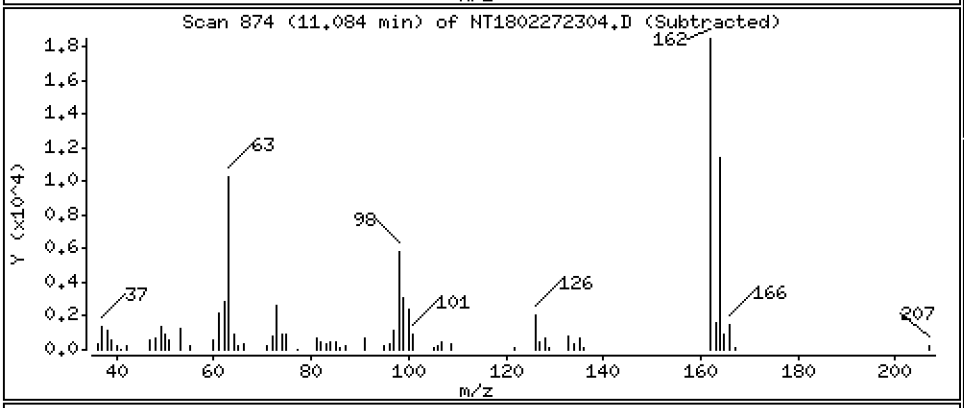
Column phase: ZB-5msi

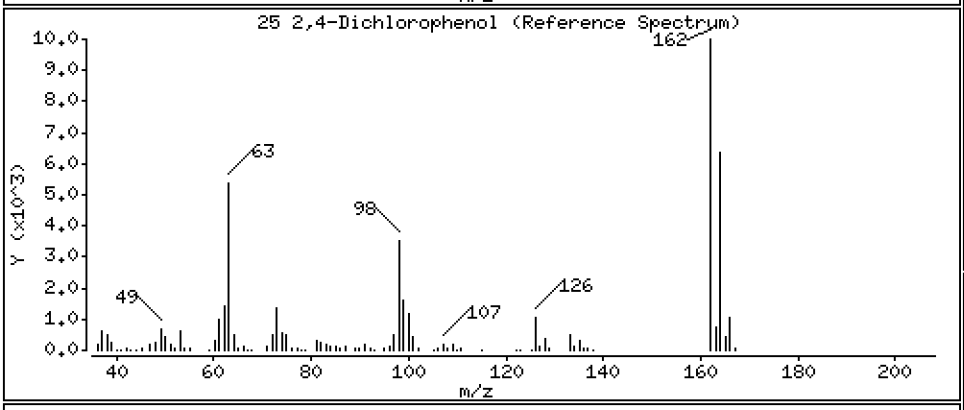
Column diameter: 0.25

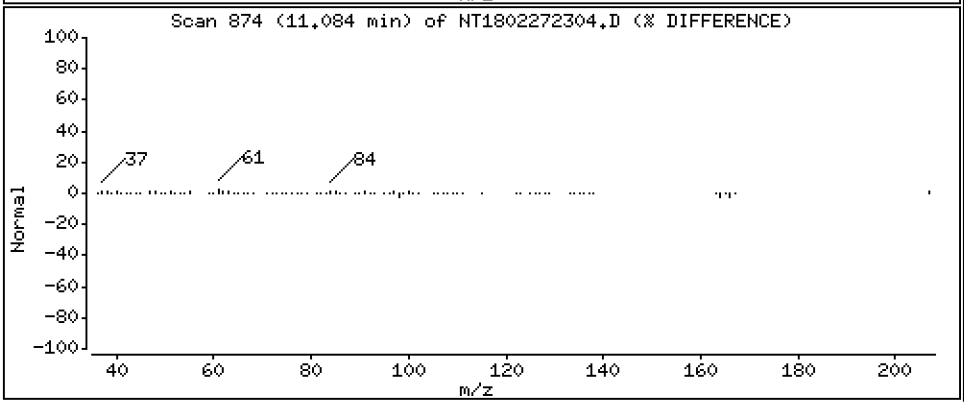
25 2,4-Dichlorophenol

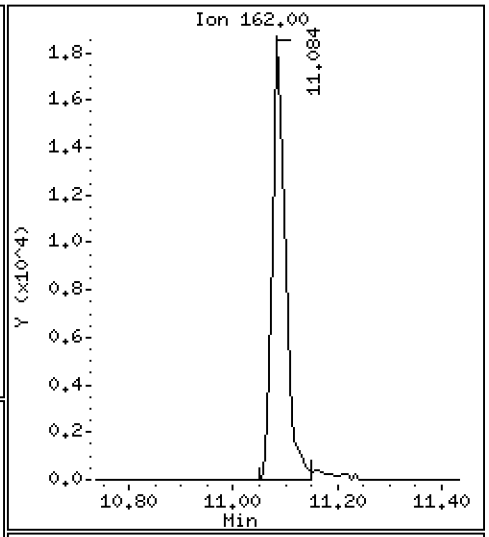
Concentration: 0.3998 ug/mL

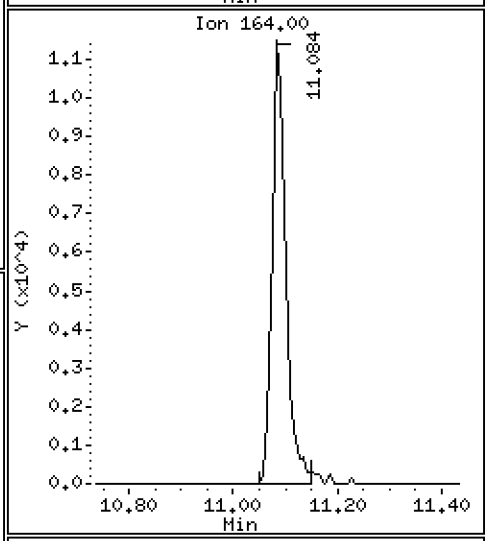


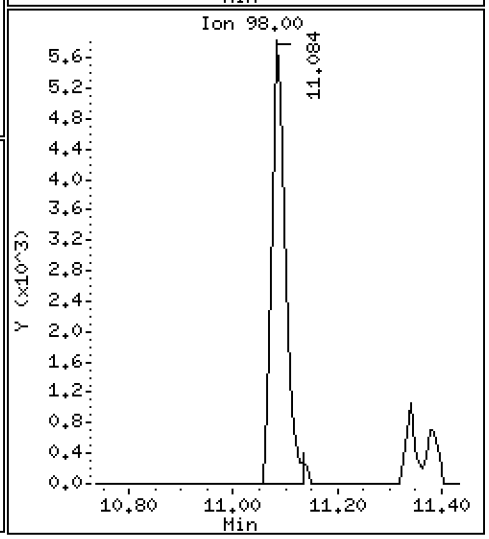












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

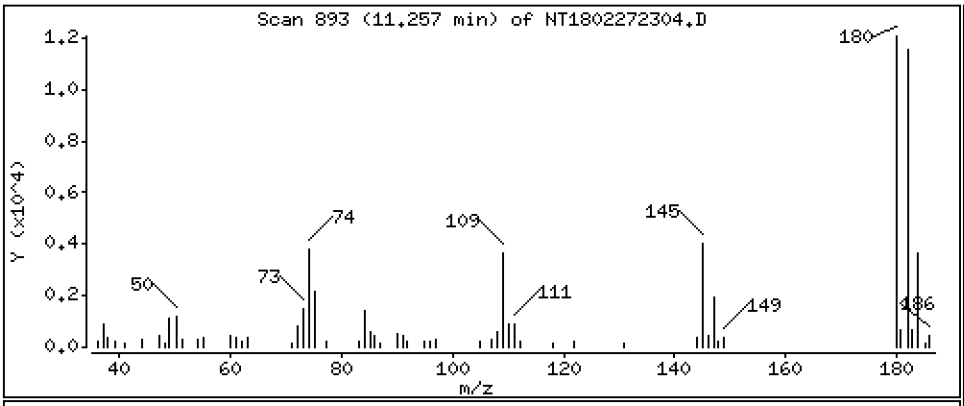
Operator: VTS

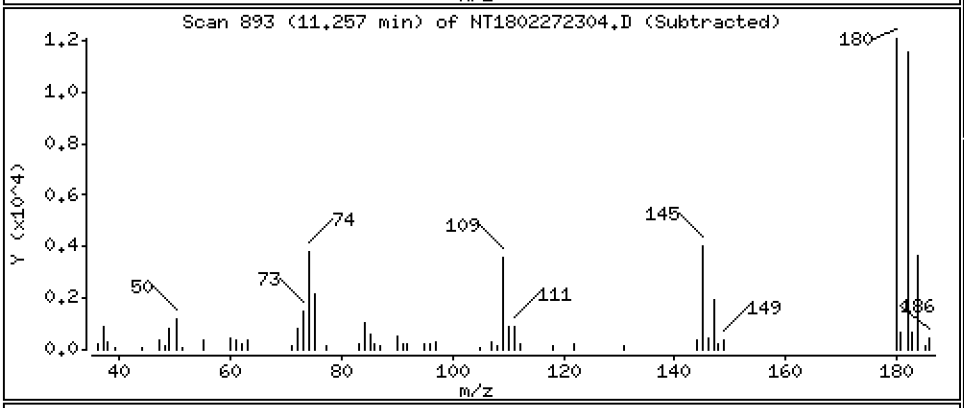
Column phase: ZB-5msi

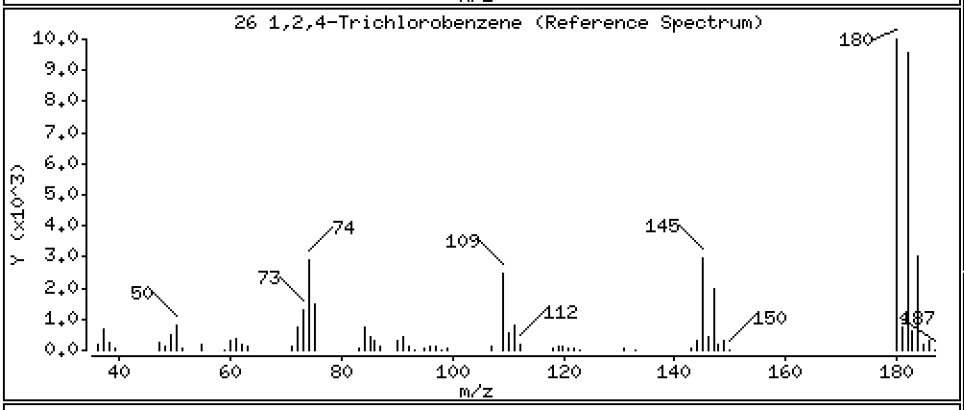
Column diameter: 0.25

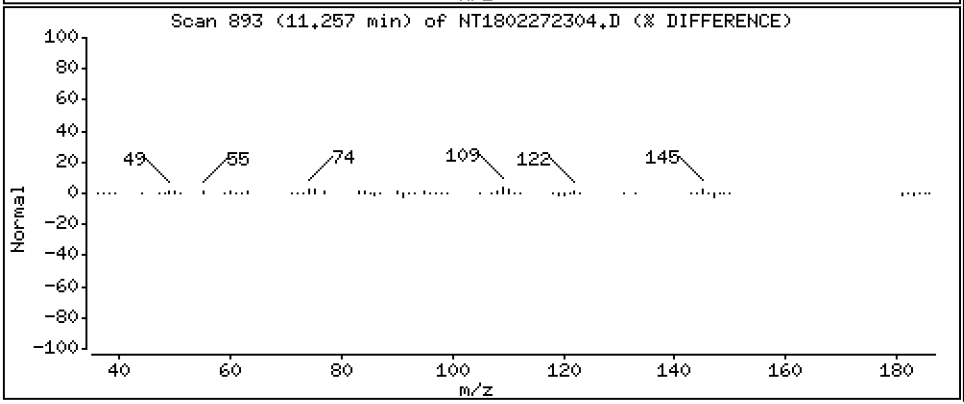
26 1,2,4-Trichlorobenzene

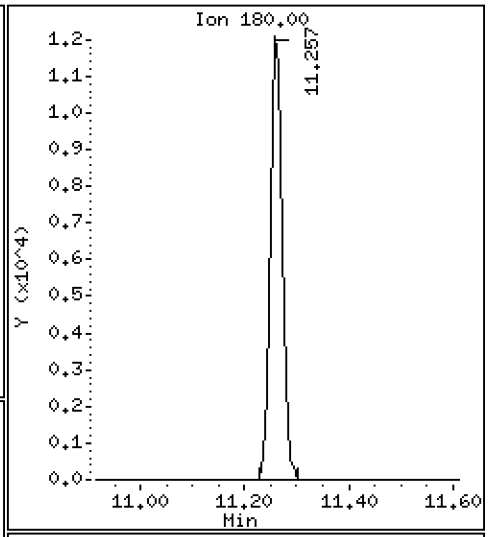
Concentration: 0.2292 ug/mL

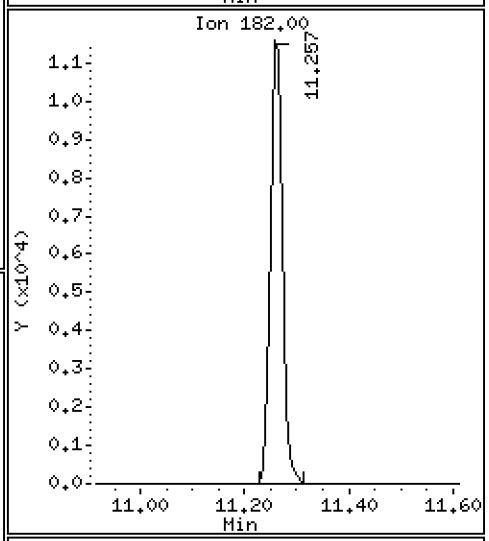


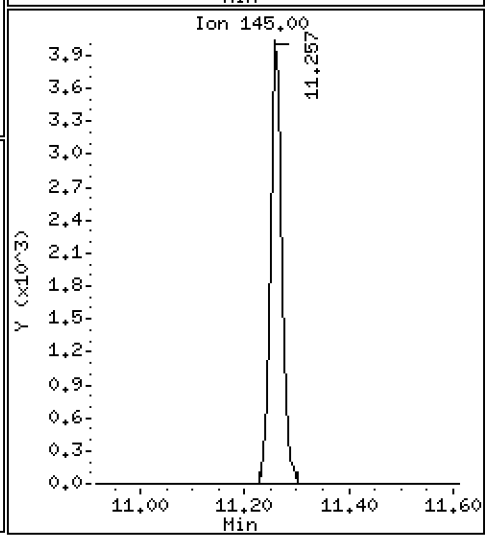












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

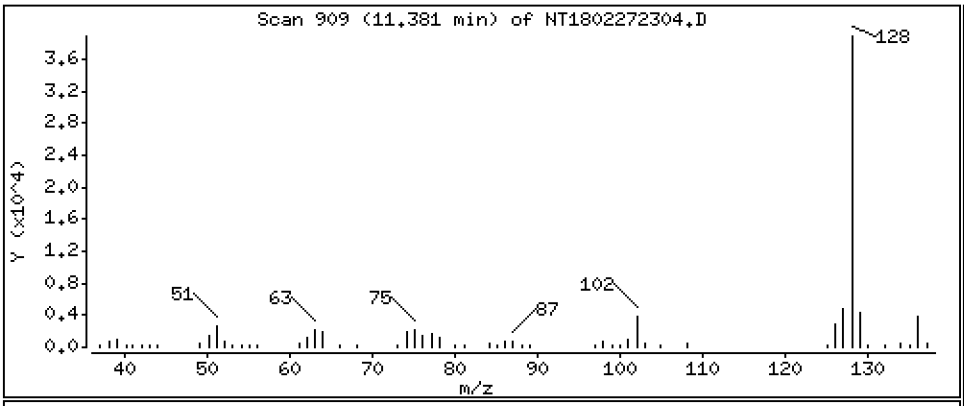
Operator: VTS

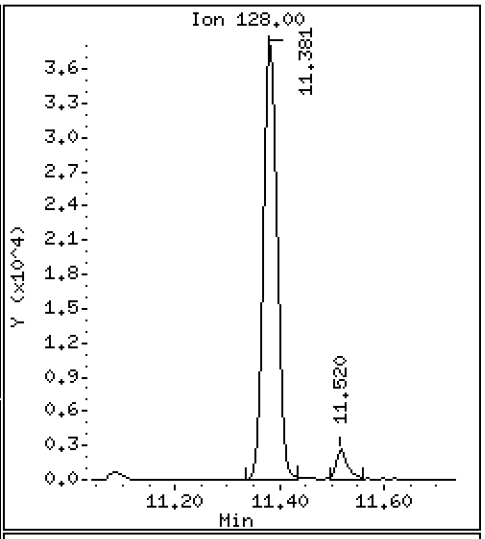
Column phase: ZB-5msi

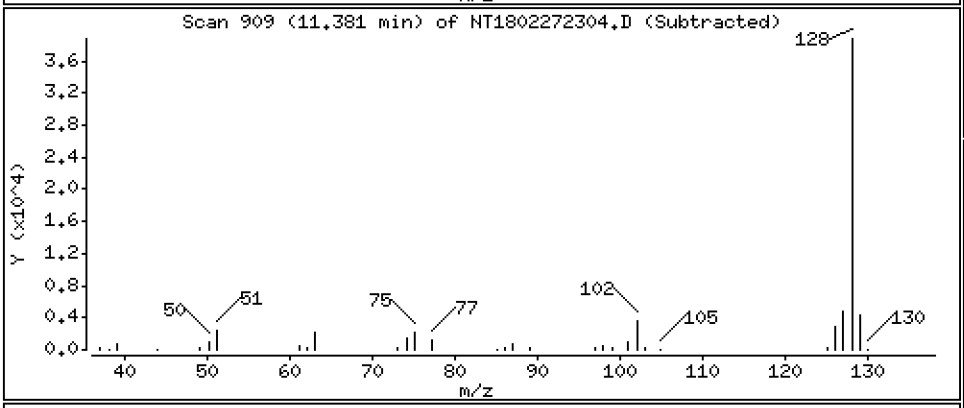
Column diameter: 0.25

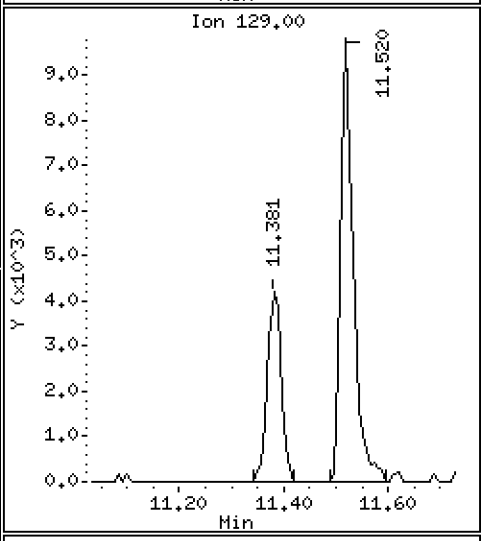
28 Naphthalene

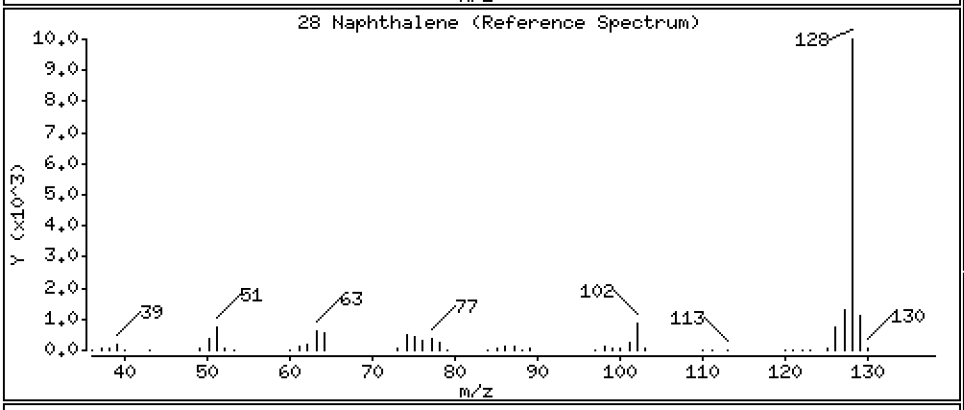
Concentration: 0.2270 ug/mL

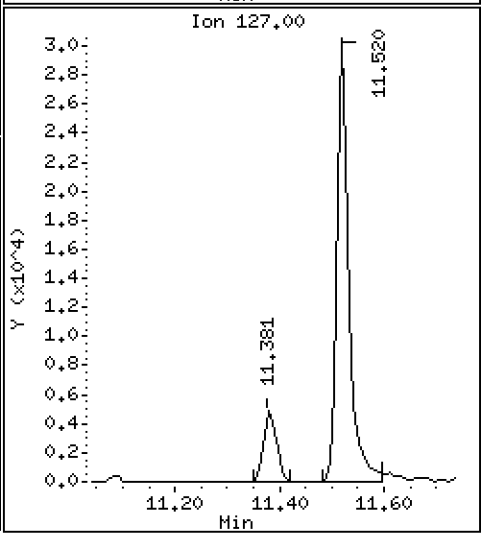


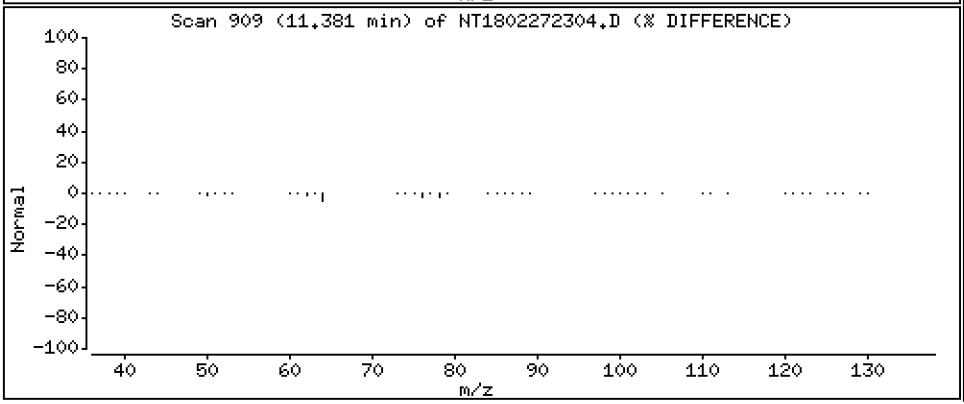












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

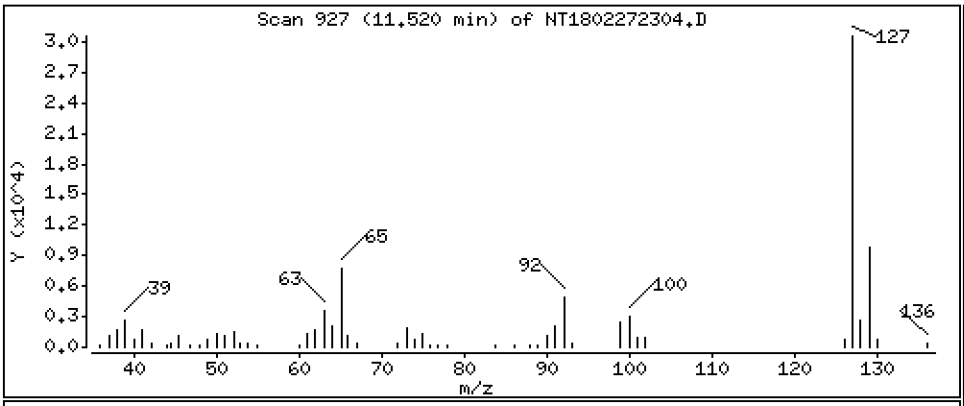
Operator: VTS

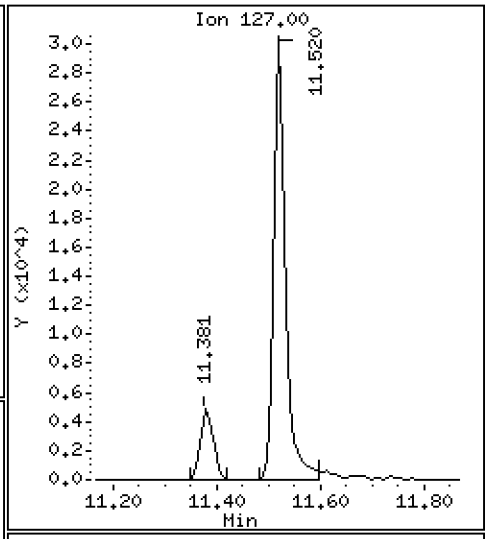
Column phase: ZB-5msi

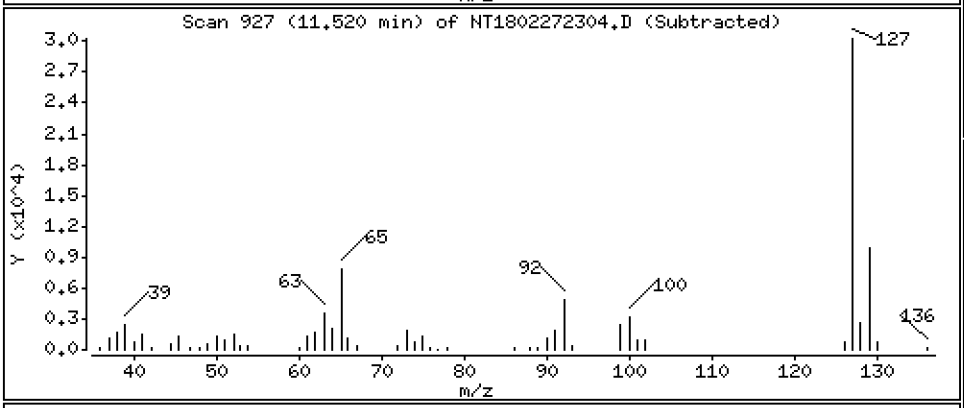
Column diameter: 0.25

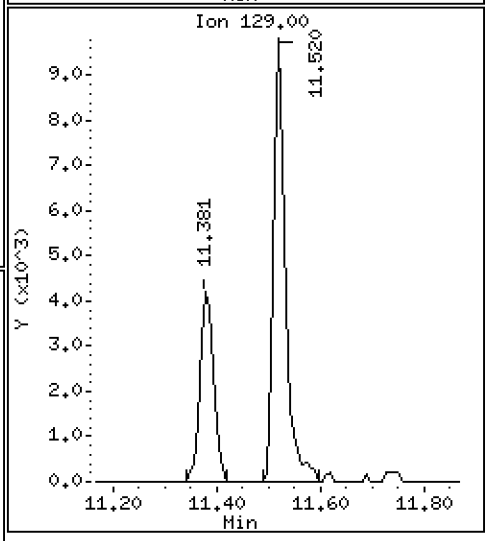
29 4-Chloroaniline

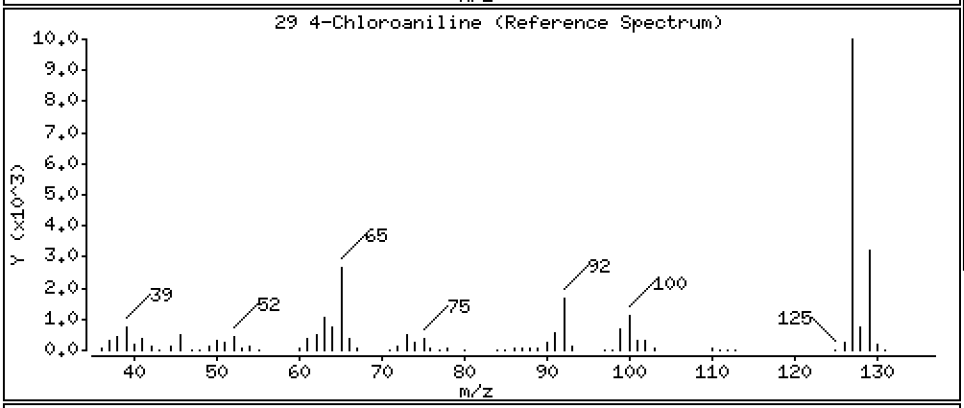
Concentration: 0.4169 ug/mL

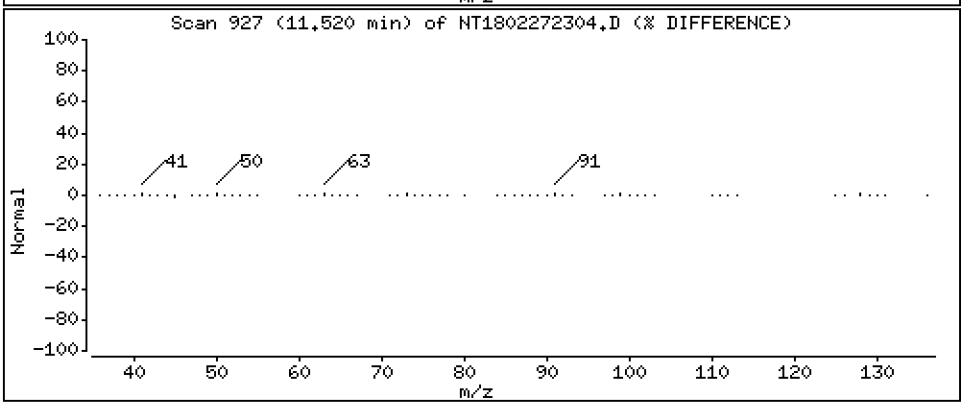












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

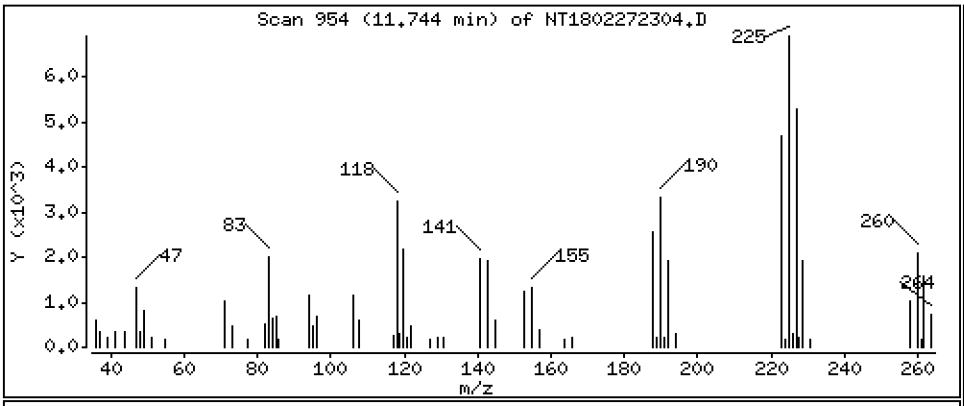
Operator: VTS

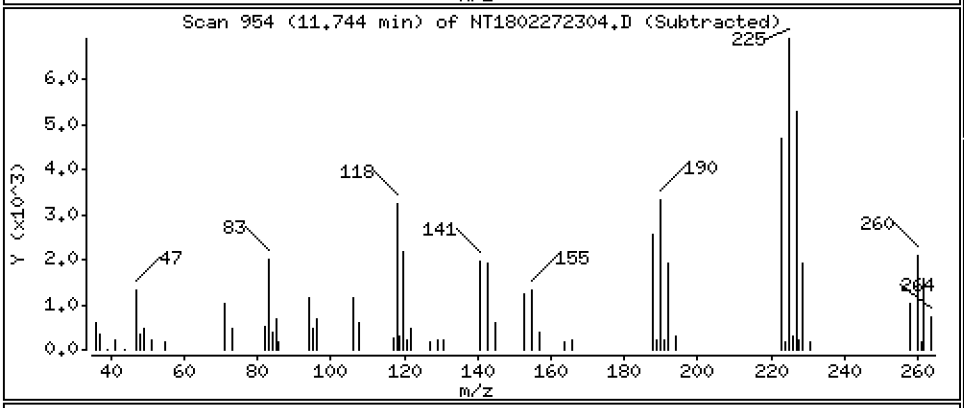
Column phase: ZB-5msi

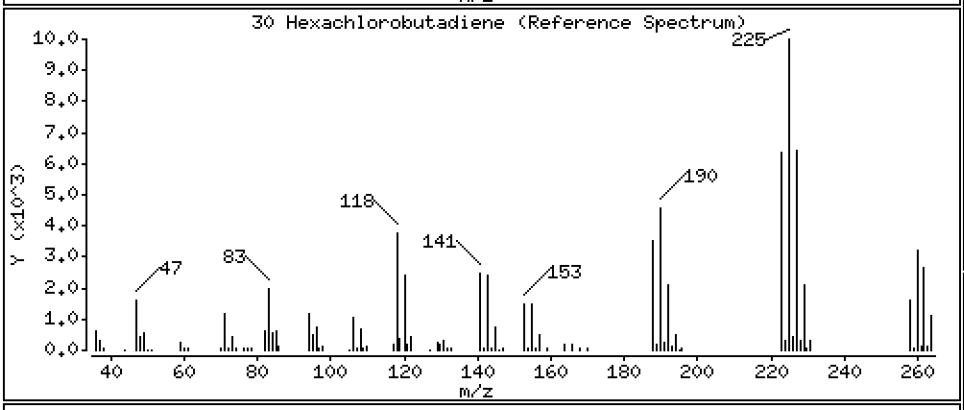
Column diameter: 0.25

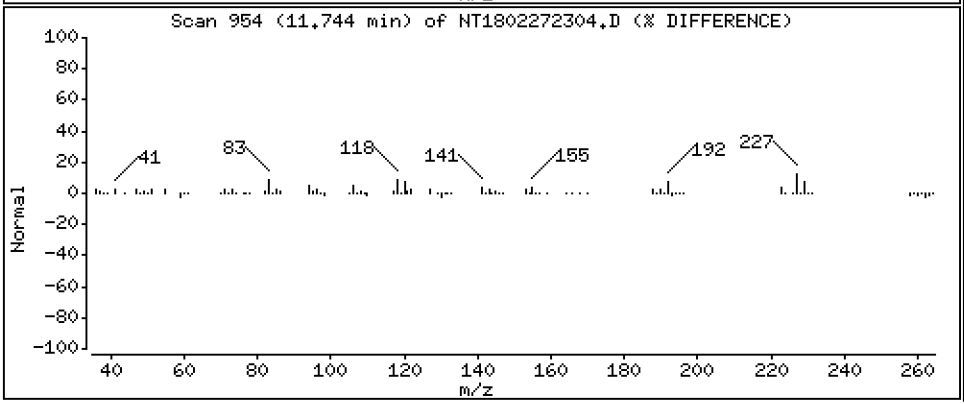
30 Hexachlorobutadiene

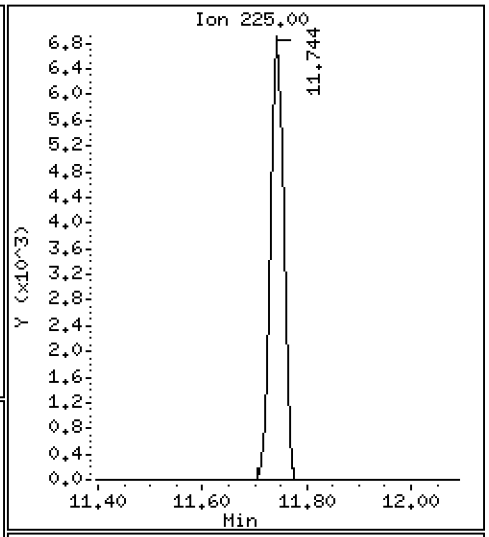
Concentration: 0.2220 ug/mL

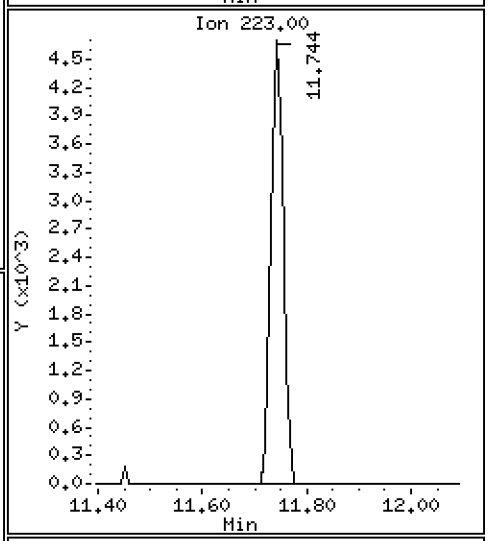


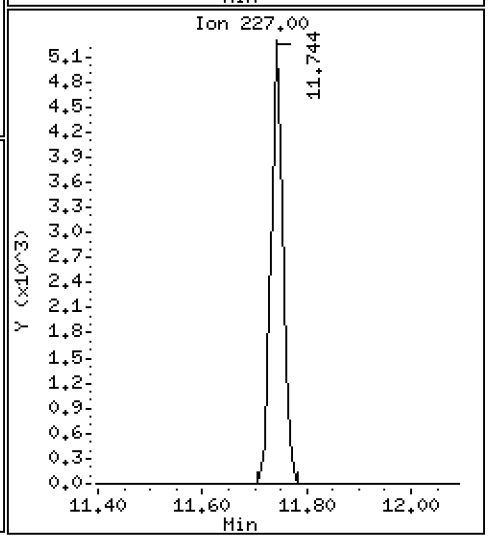












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

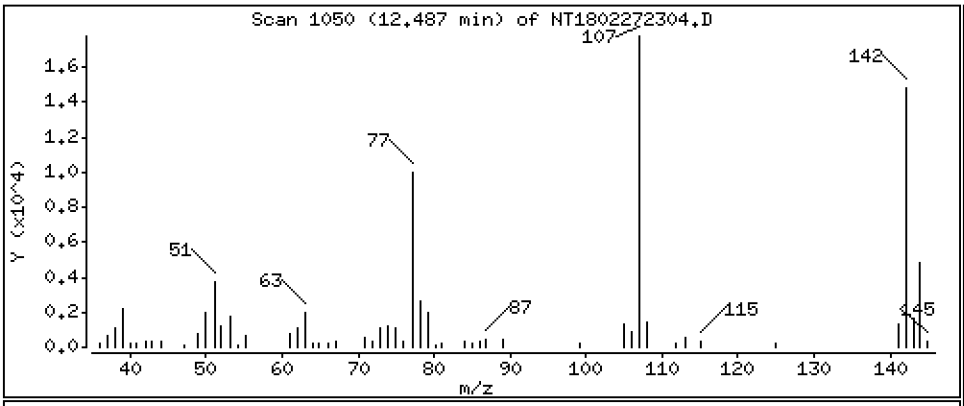
Operator: VTS

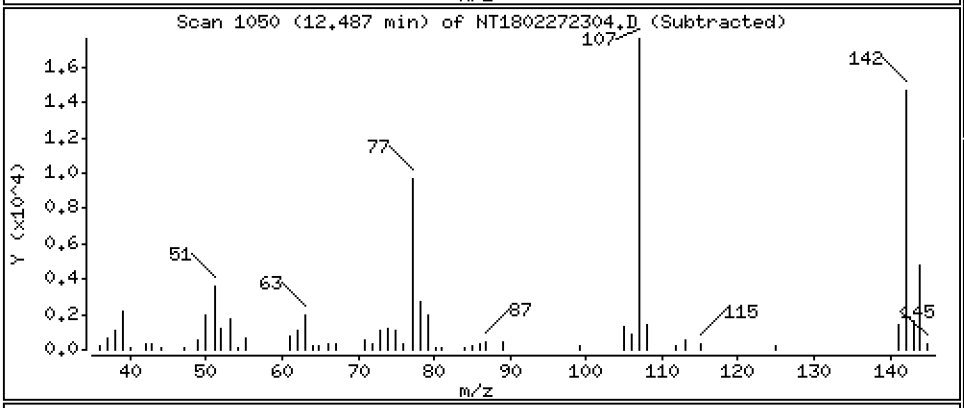
Column phase: ZB-5msi

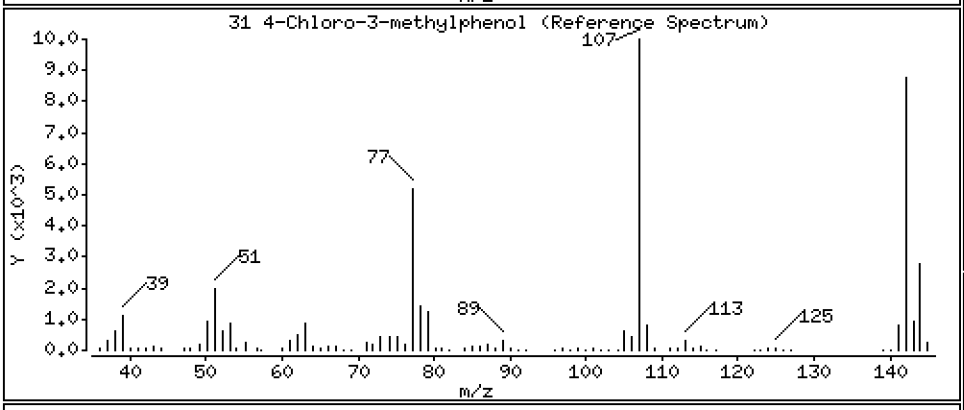
Column diameter: 0.25

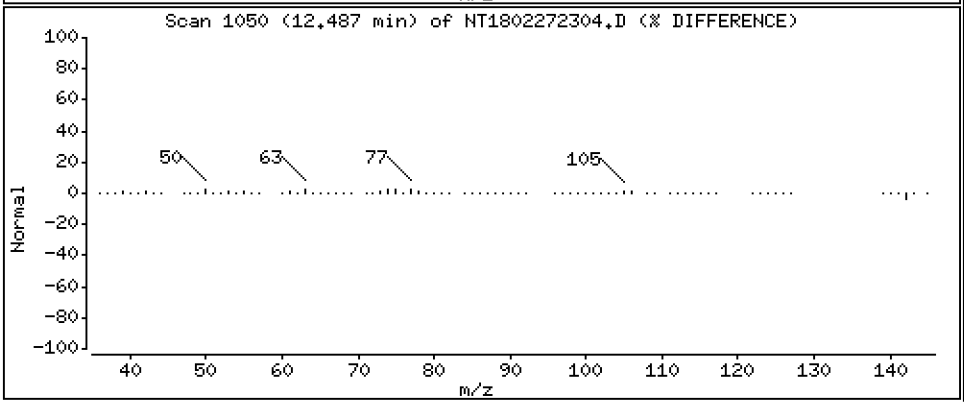
31 4-Chloro-3-methylphenol

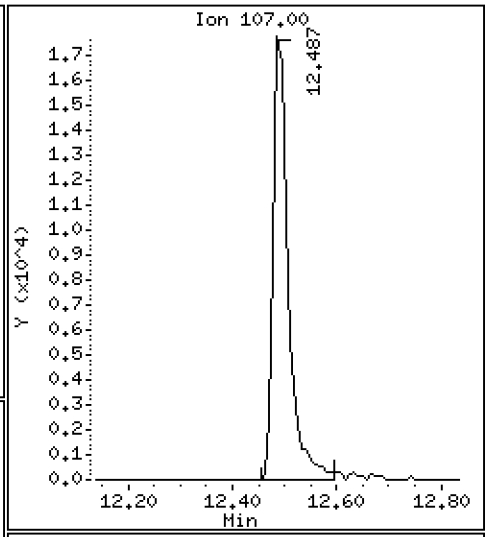
Concentration: 0.4421 ug/mL

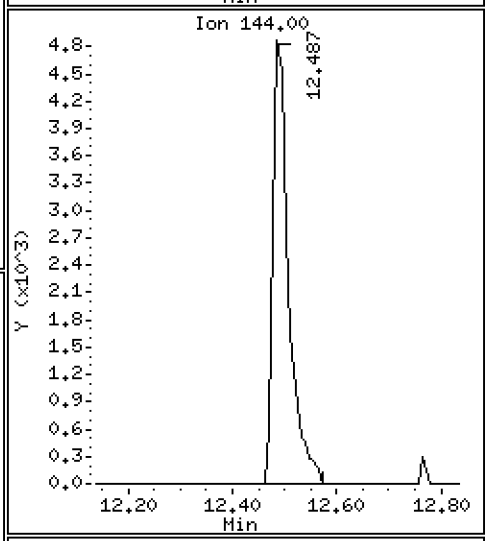


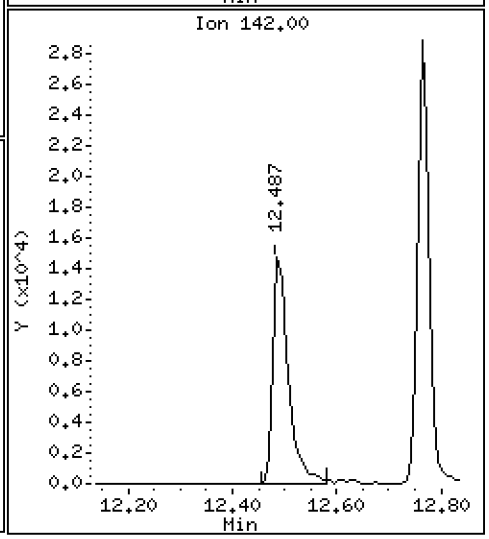












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

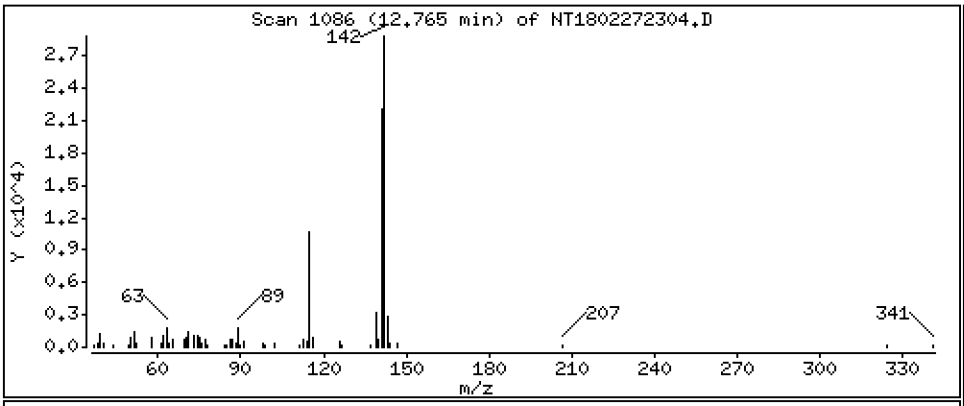
Operator: VTS

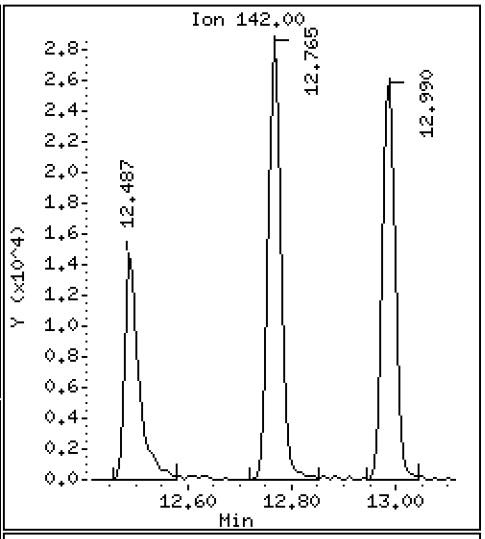
Column phase: ZB-5msi

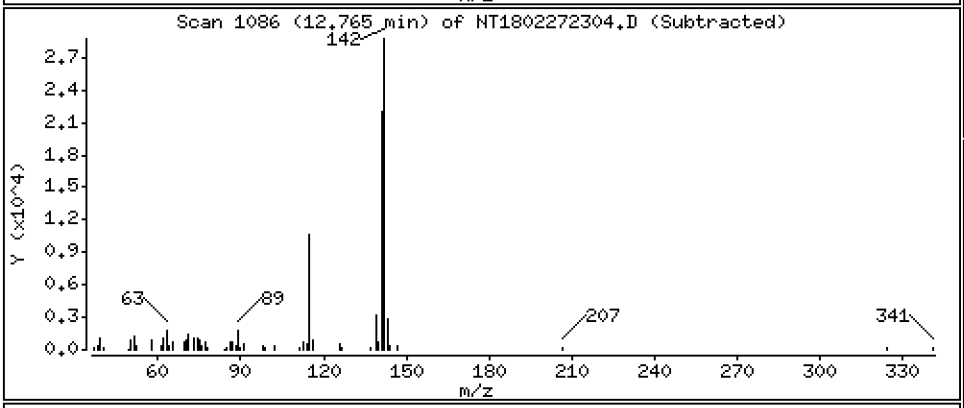
Column diameter: 0.25

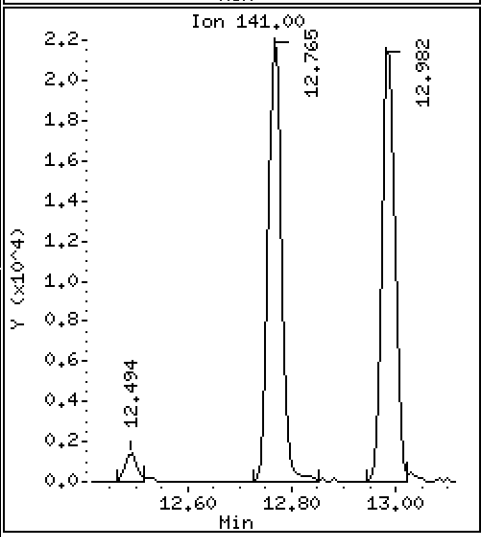
32 2-Methylnaphthalene

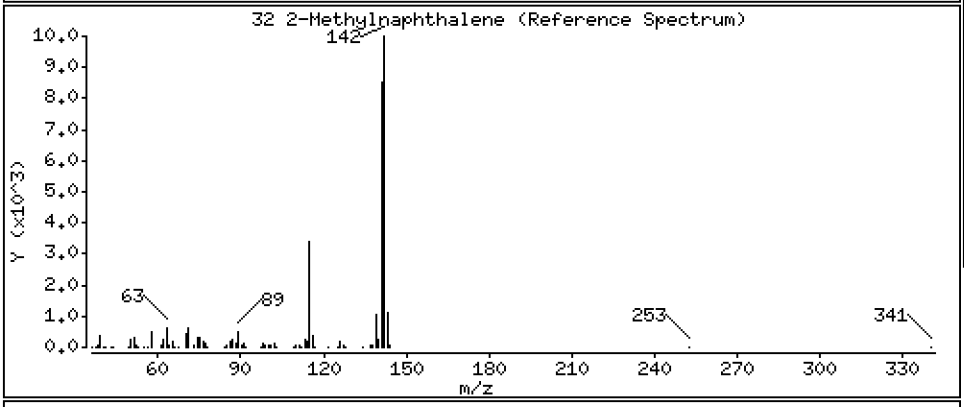
Concentration: 0.2290 ug/mL

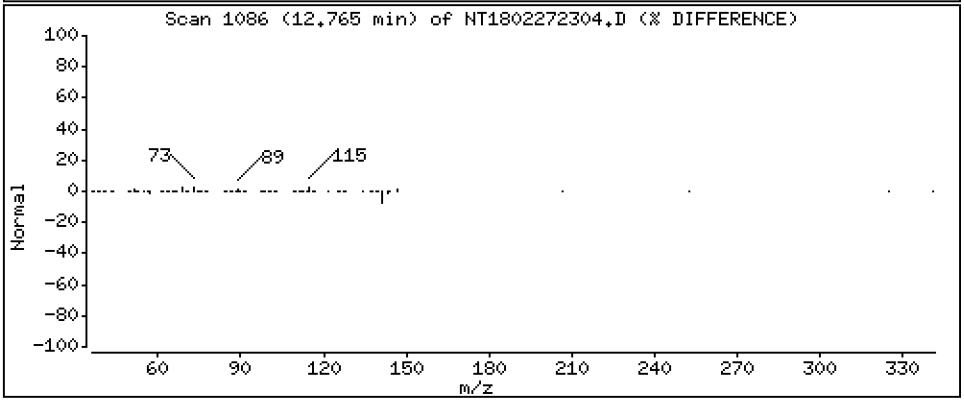












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

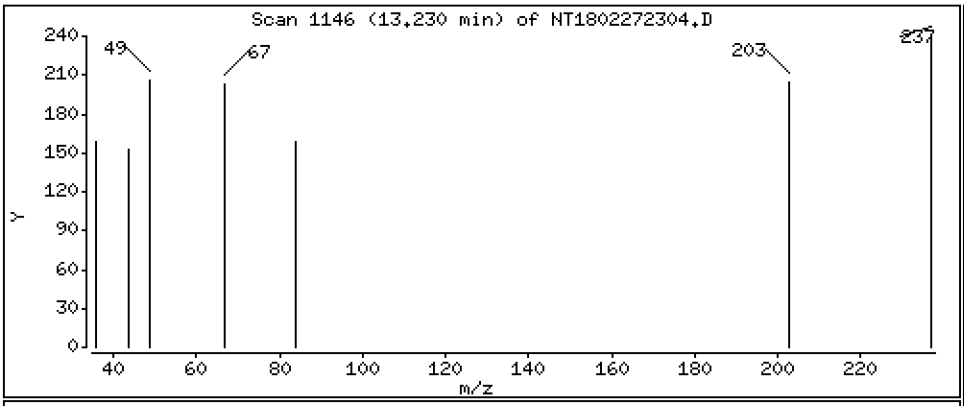
Operator: VTS

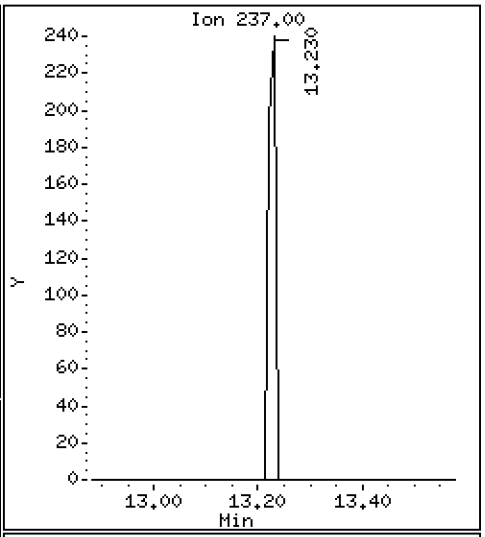
Column phase: ZB-5msi

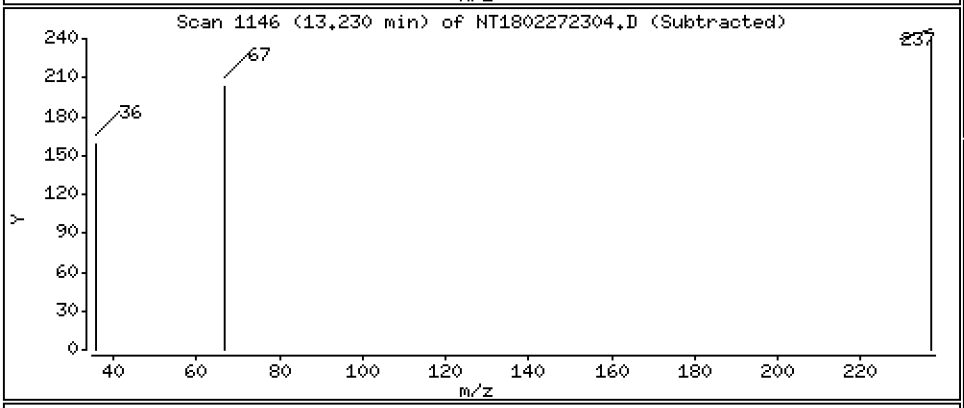
Column diameter: 0.25

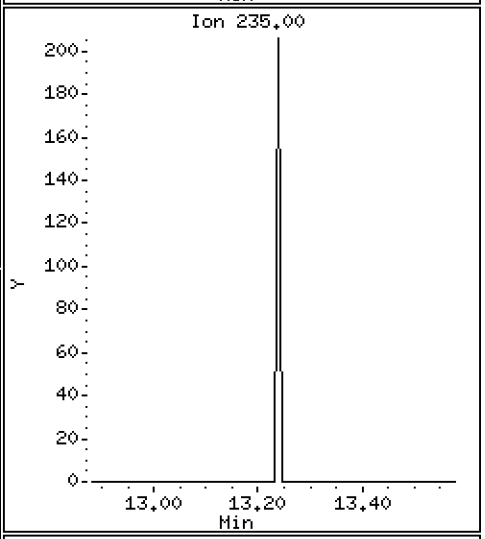
33 Hexachlorocyclopentadiene

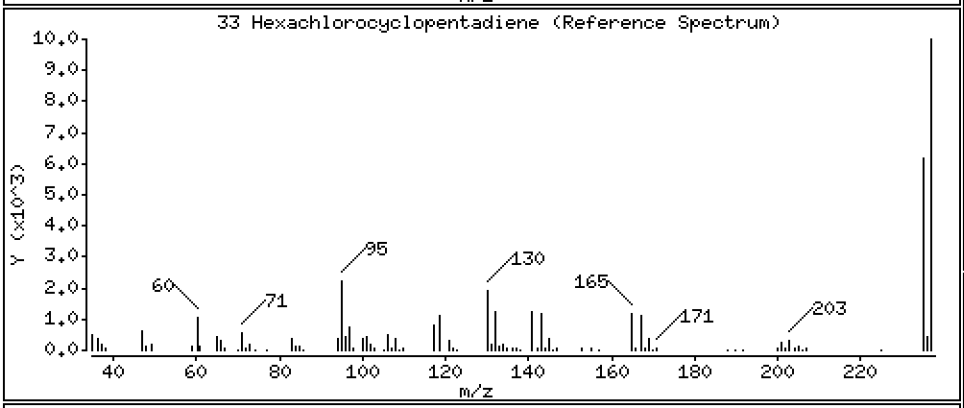
Concentration: 0.005654 ug/mL

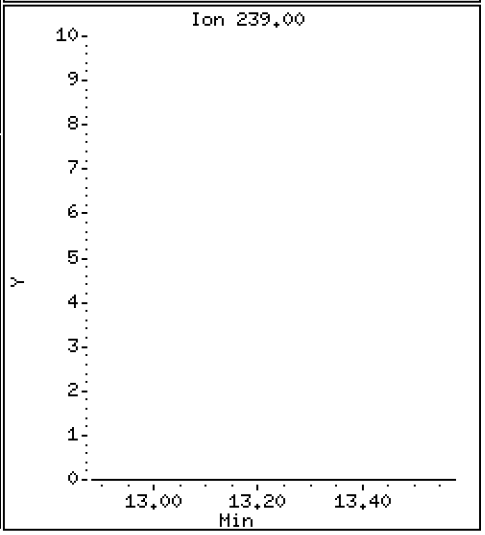


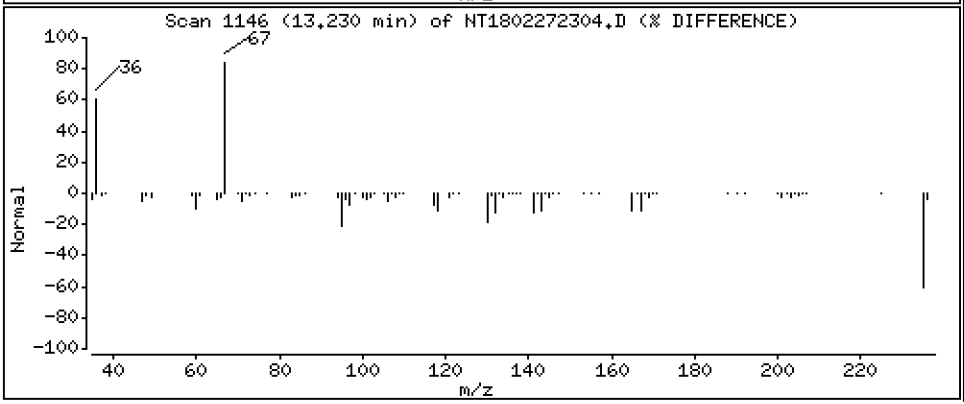












Date : 27-FEB-2023 19:10

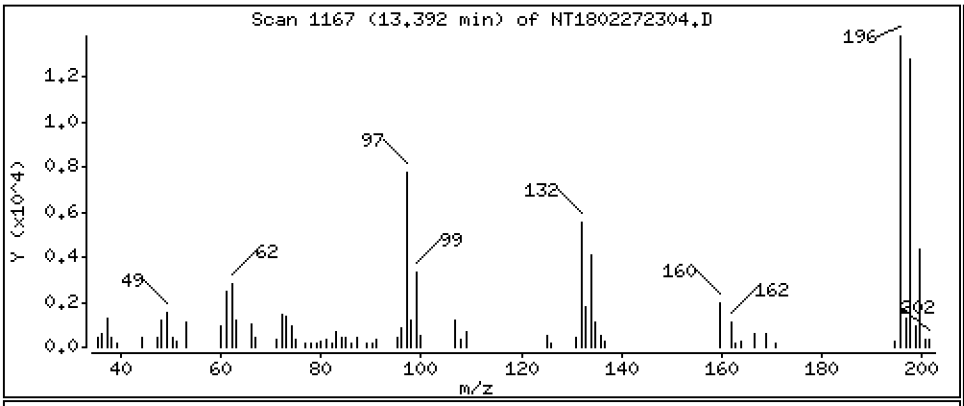
Client ID: Instrument: nt18.i

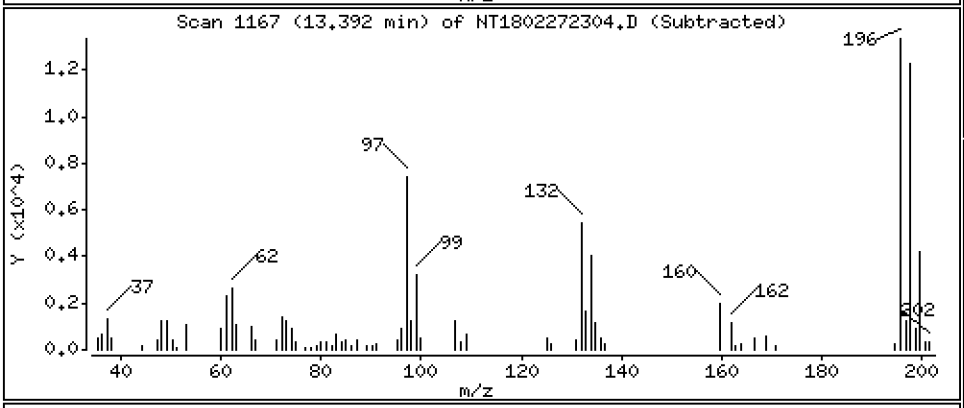
Sample Info: SLC0385-LCV1

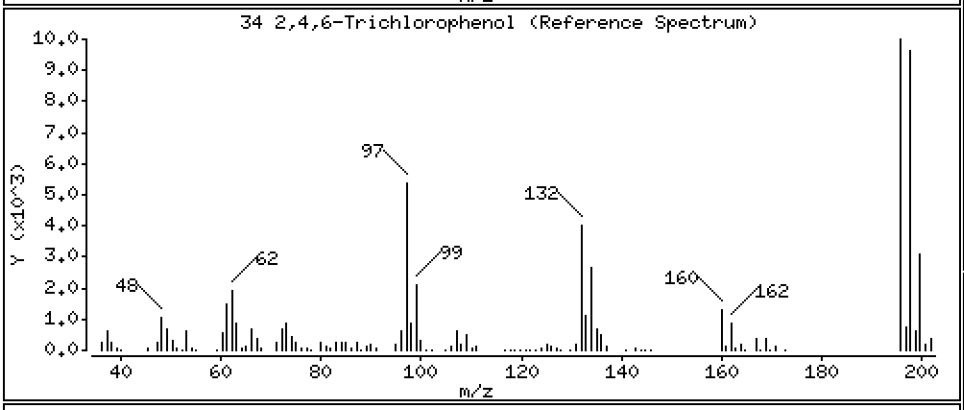
Operator: VTS

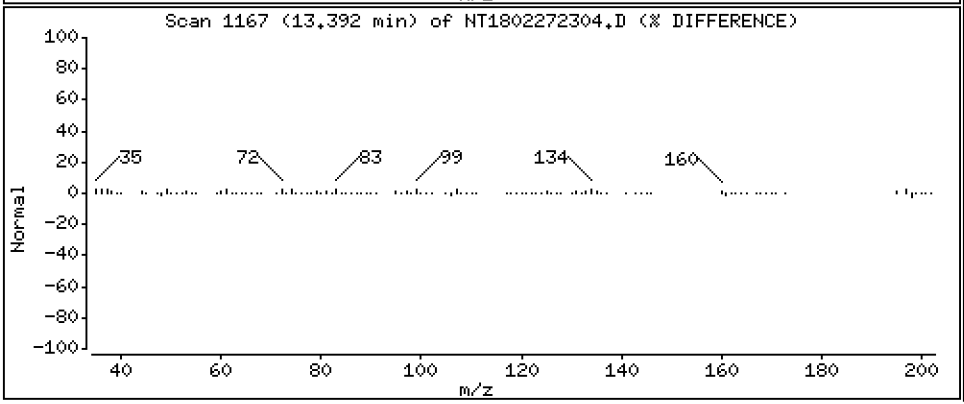
Column phase: ZB-5msi Column diameter: 0.25

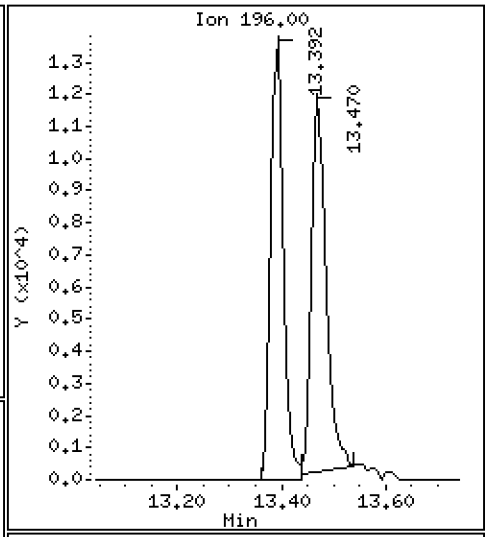
34 2,4,6-Trichlorophenol Concentration: 0.4306 ug/mL

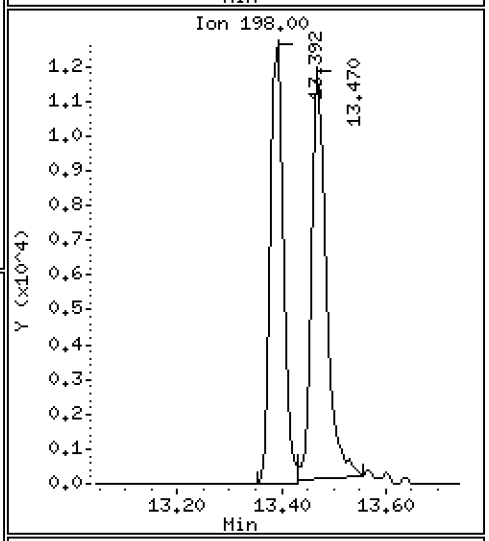


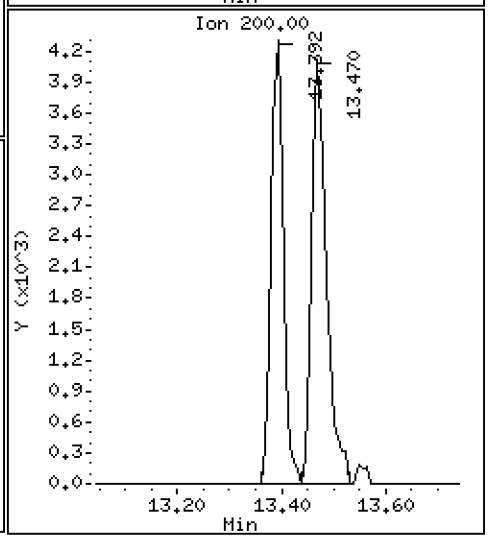












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

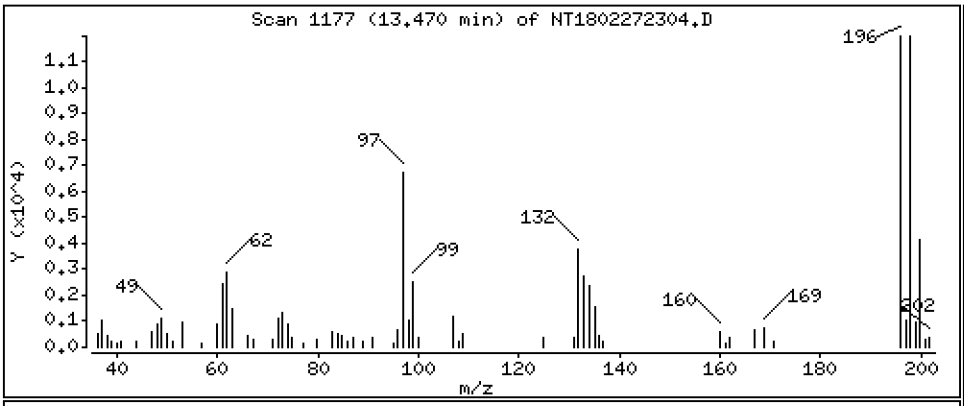
Operator: VTS

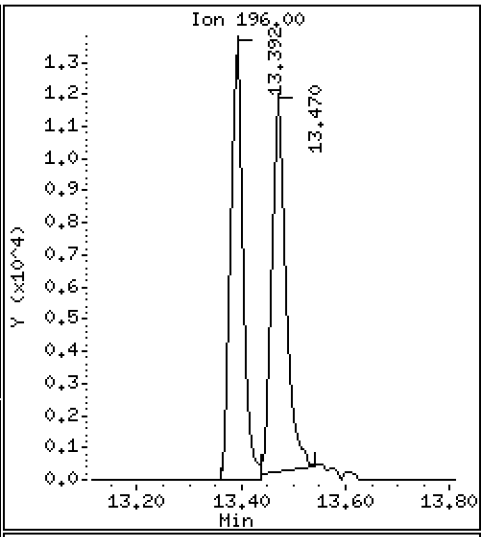
Column phase: ZB-5msi

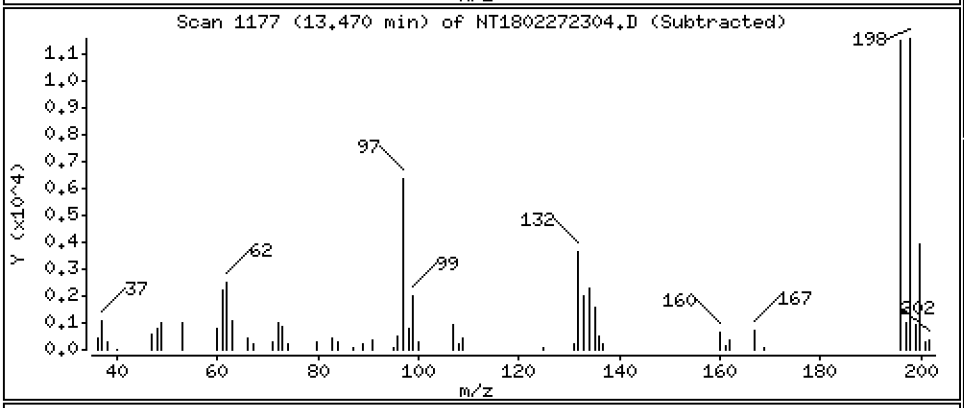
Column diameter: 0.25

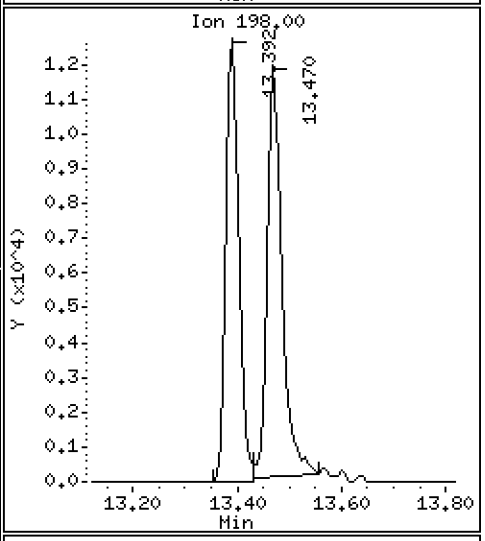
35 2,4,5-Trichlorophenol

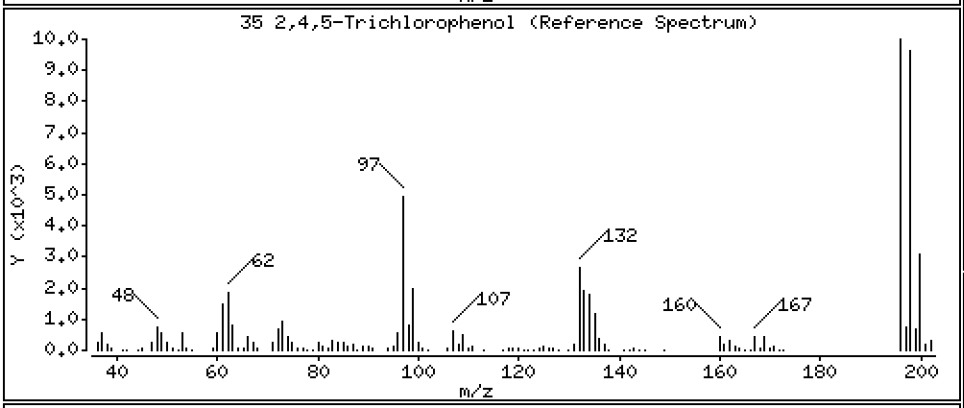
Concentration: 0.3892 ug/mL

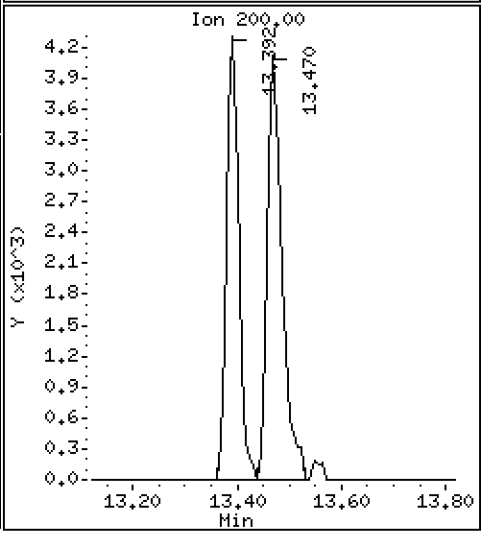


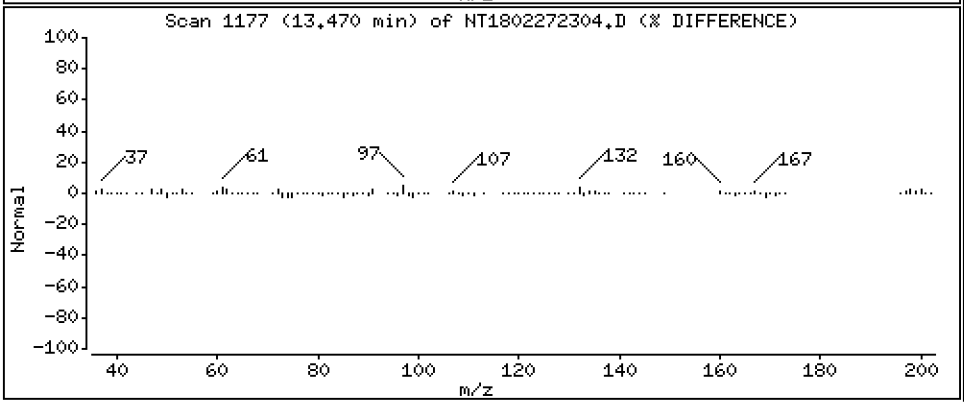












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

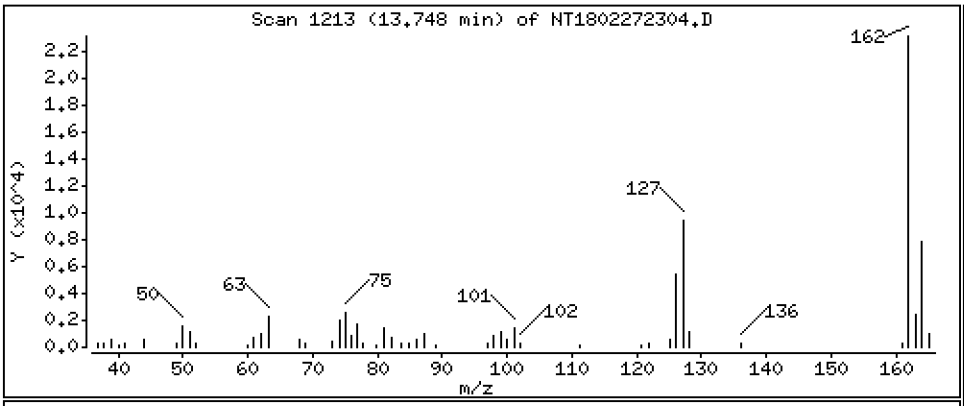
Operator: VTS

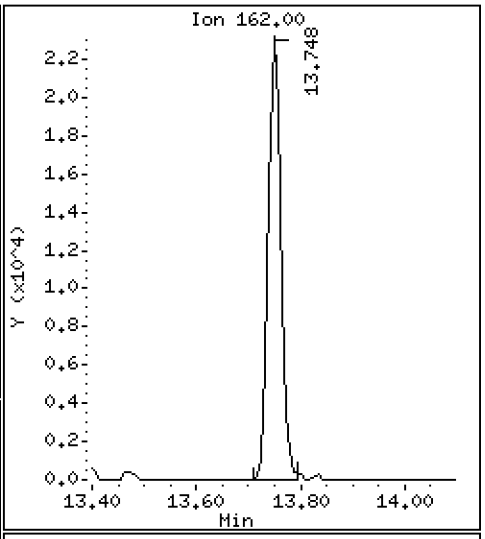
Column phase: ZB-5msi

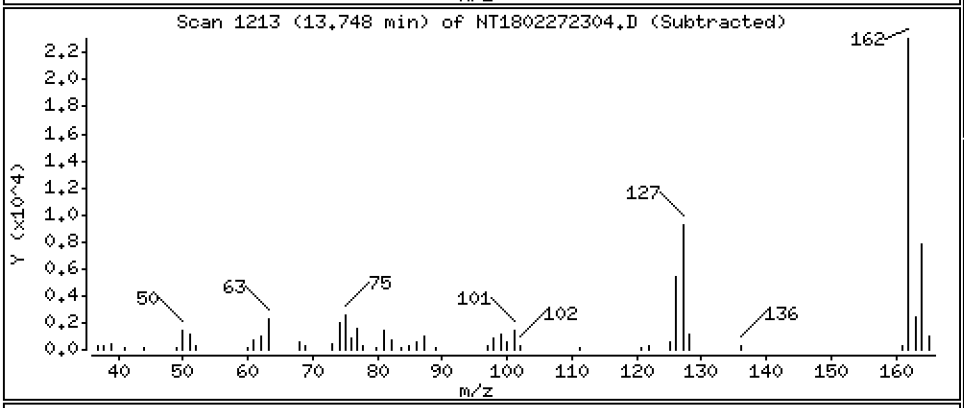
Column diameter: 0.25

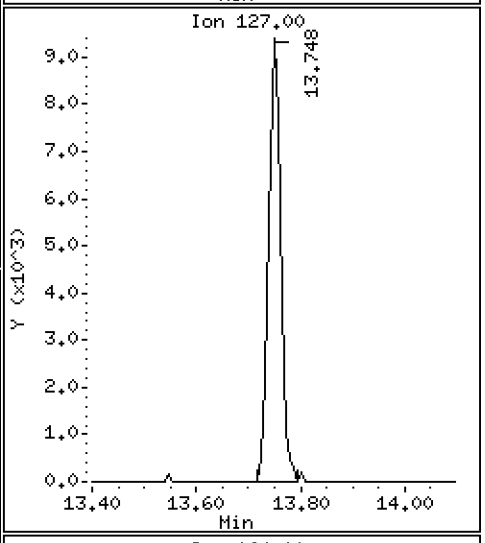
37 2-Chloronaphthalene

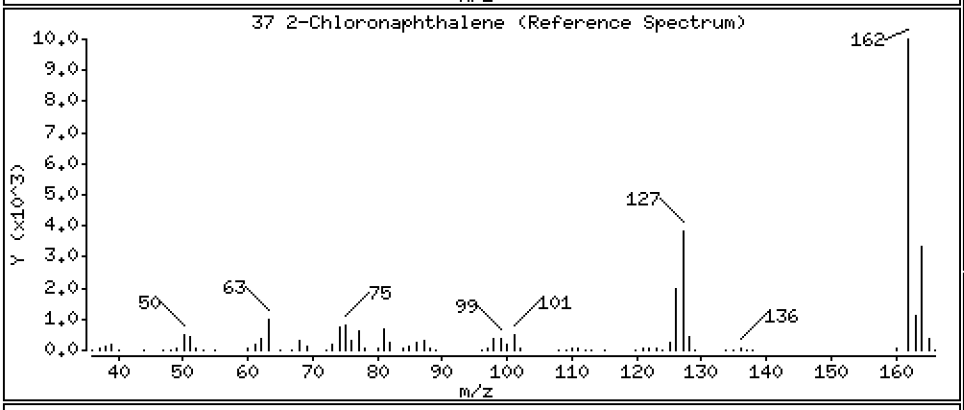
Concentration: 0.2158 ug/mL

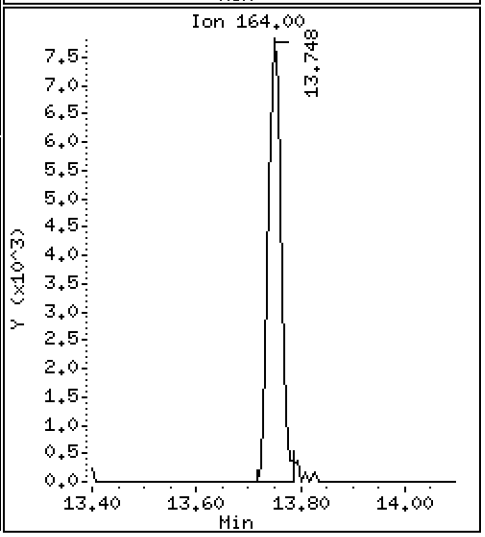


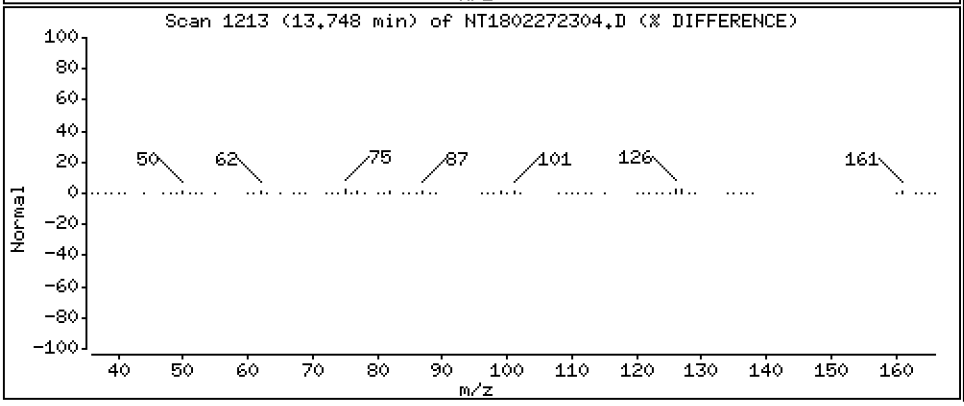












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

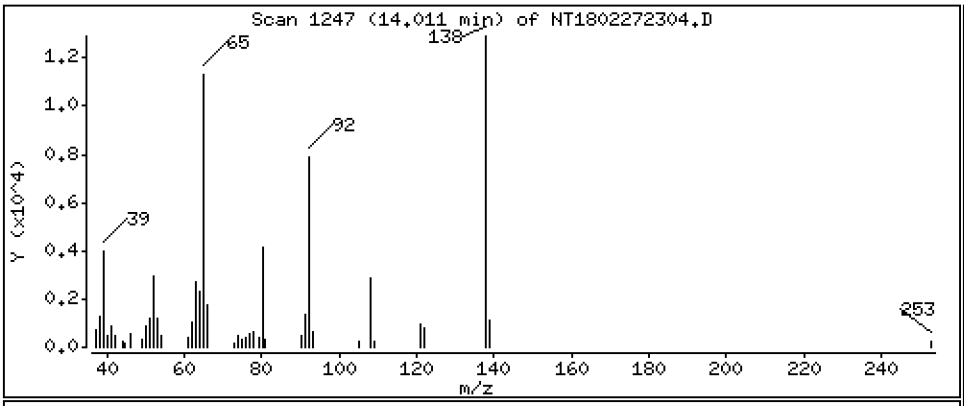
Operator: VTS

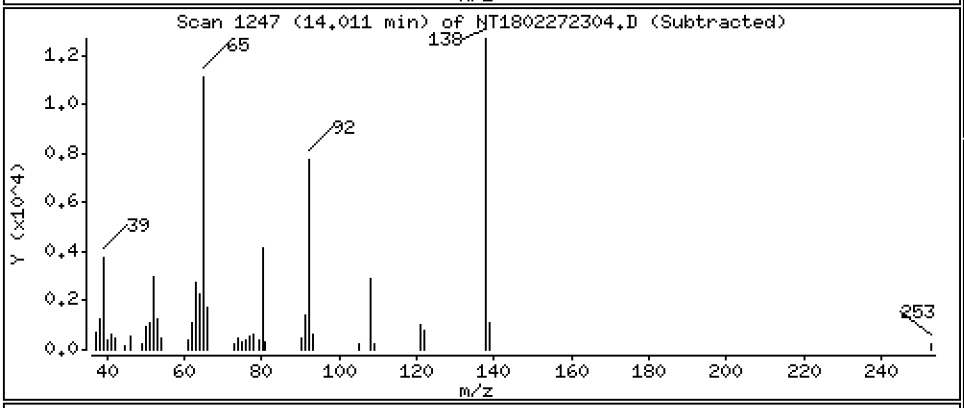
Column phase: ZB-5msi

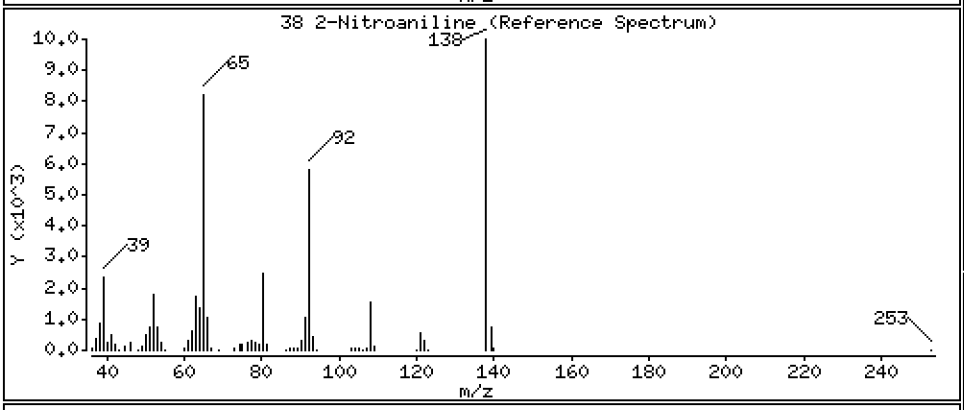
Column diameter: 0.25

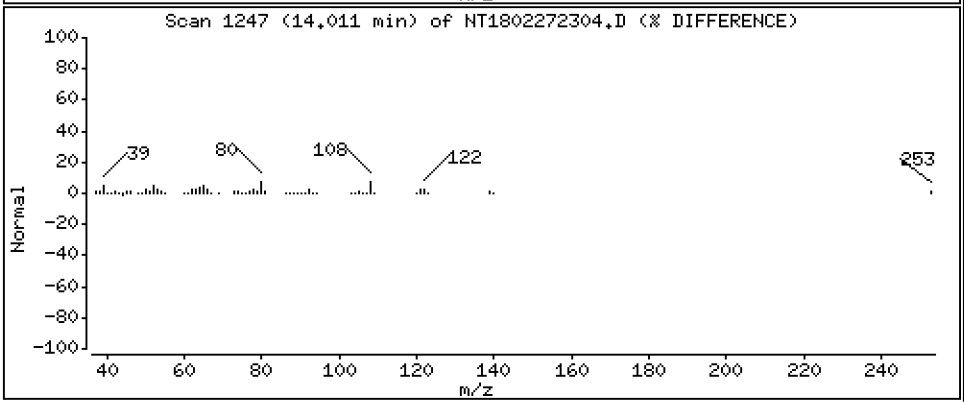
38 2-Nitroaniline

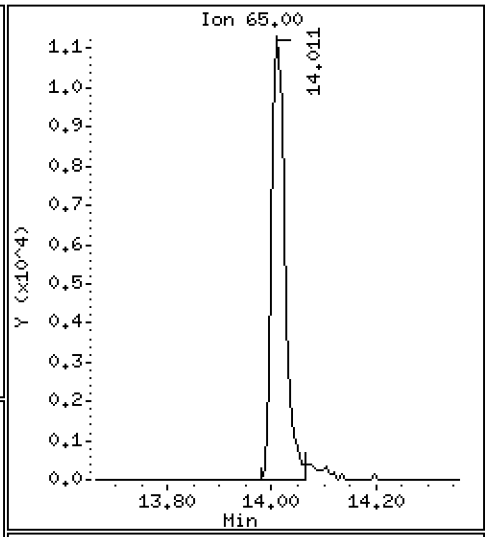
Concentration: 0.3572 ug/mL

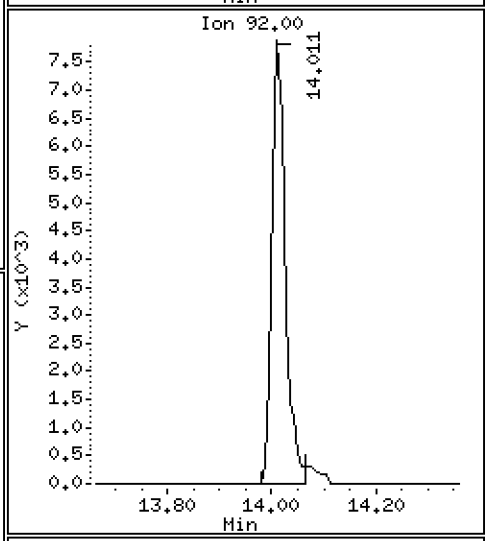


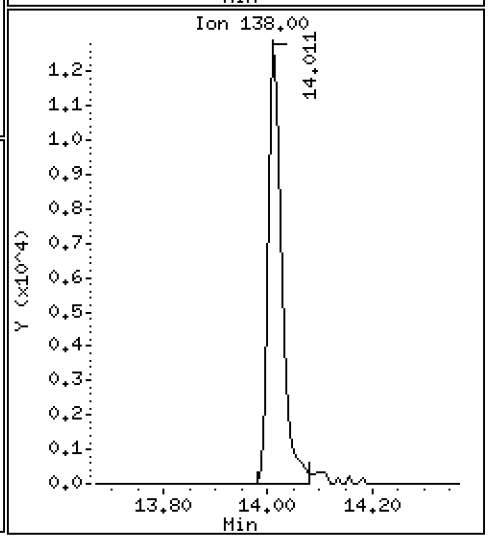












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

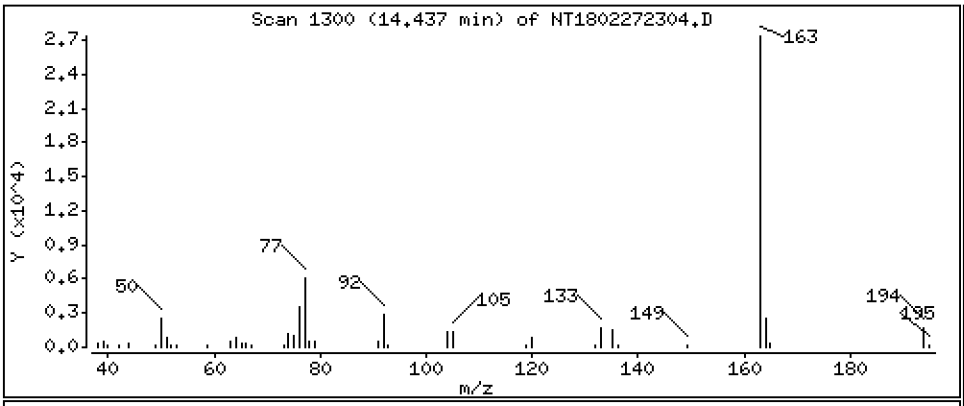
Operator: VTS

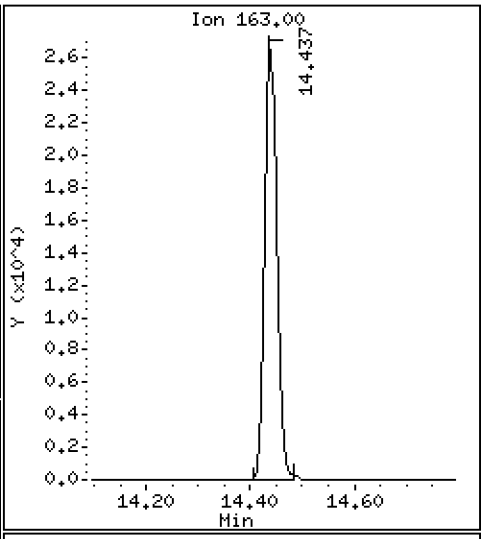
Column phase: ZB-5msi

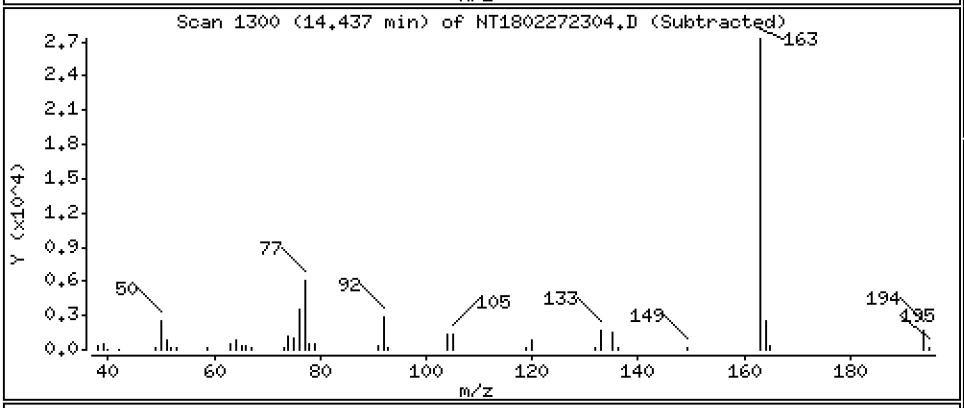
Column diameter: 0.25

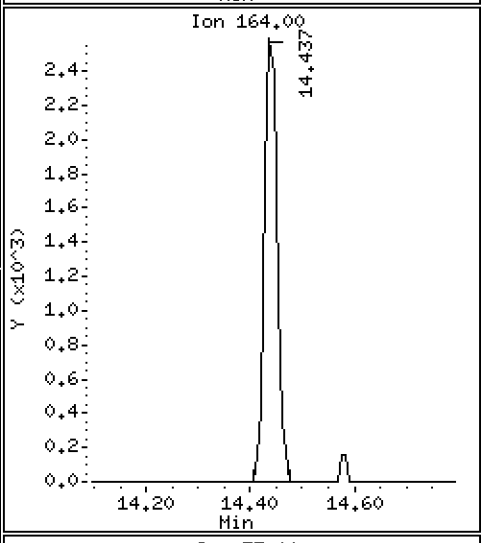
39 Dimethylphthalate

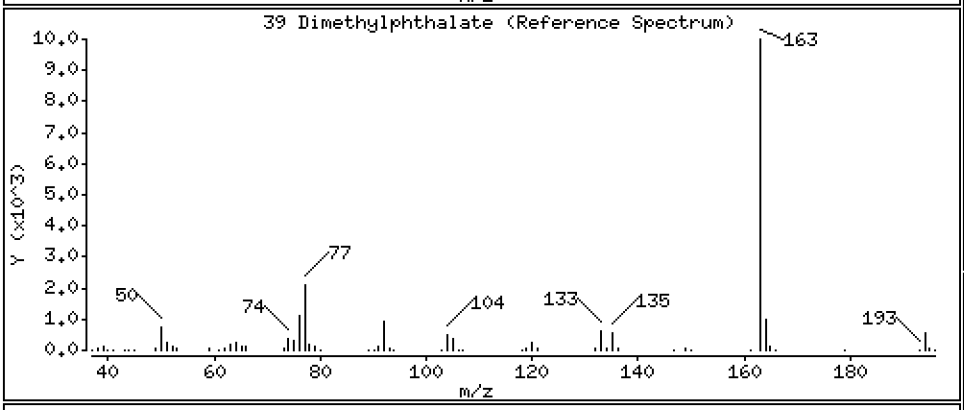
Concentration: 0.2186 ug/mL

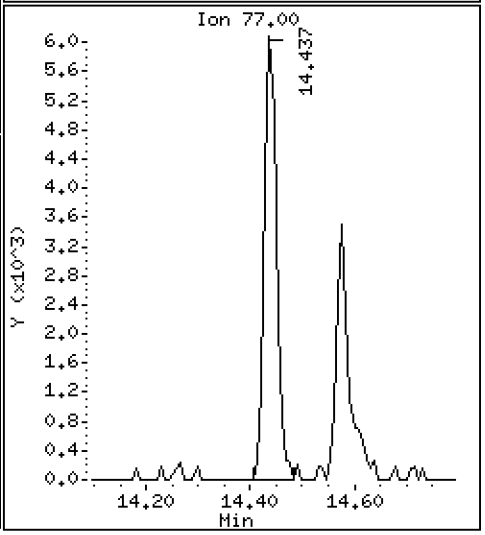


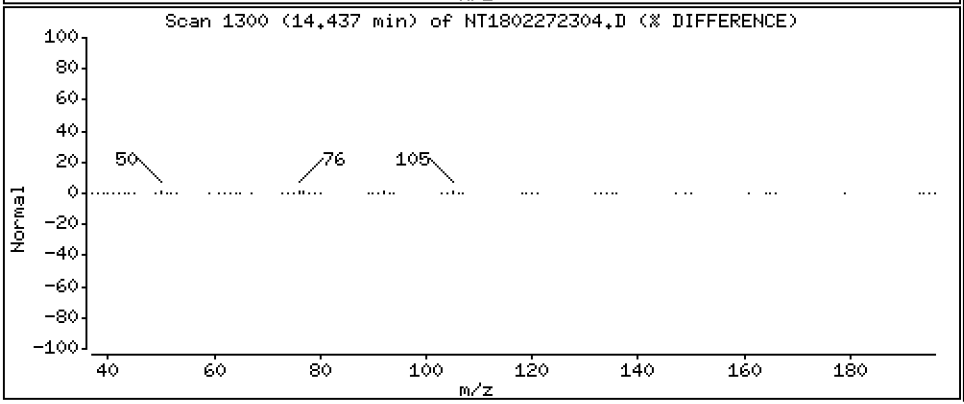












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

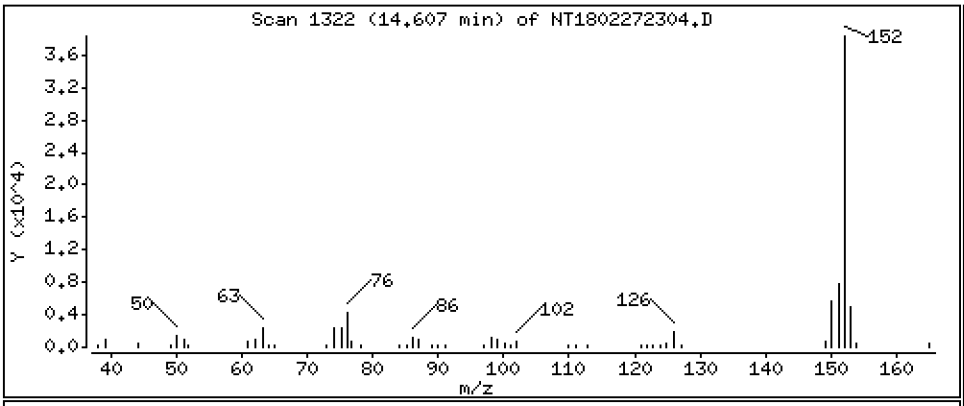
Operator: VTS

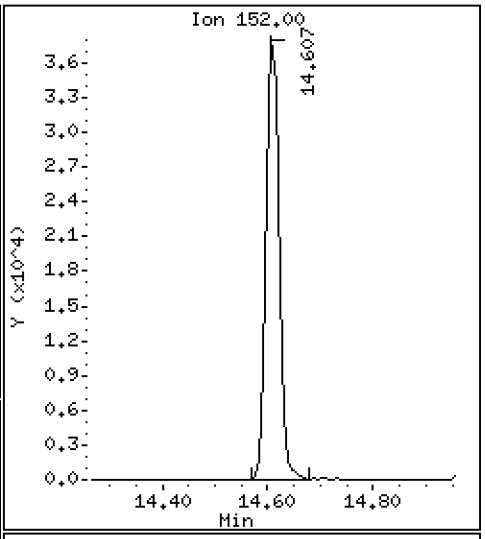
Column phase: ZB-5msi

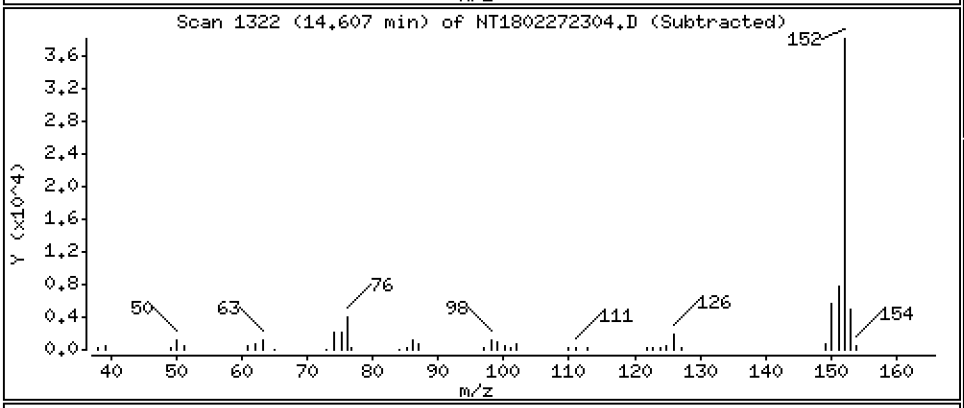
Column diameter: 0.25

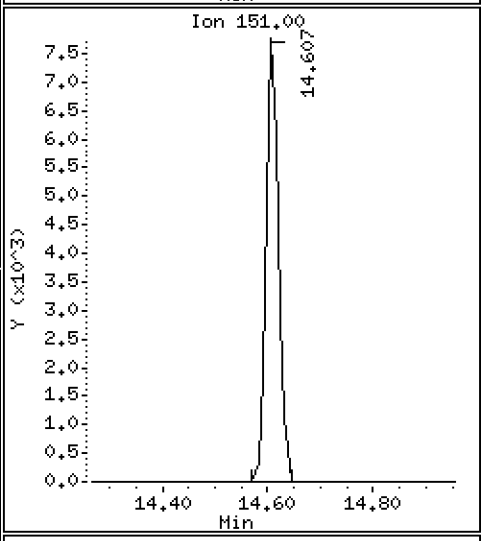
40 Acenaphthylene

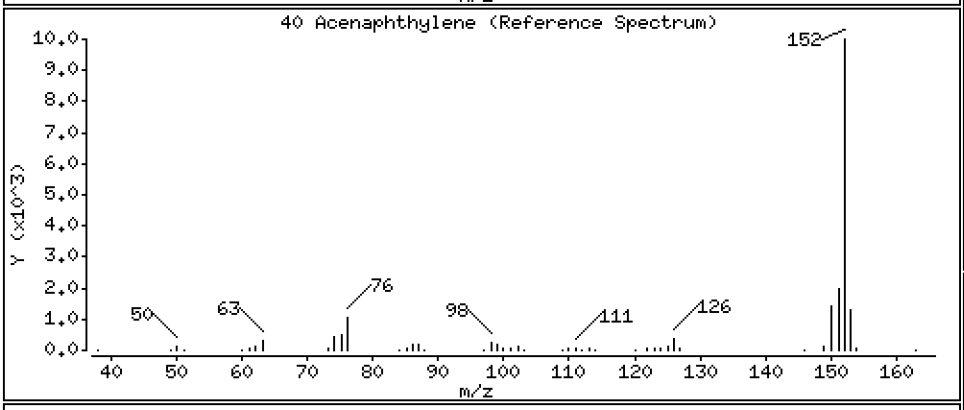
Concentration: 0.2148 ug/mL

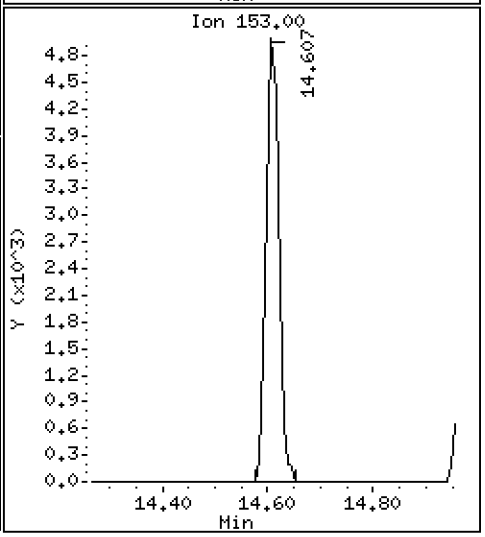


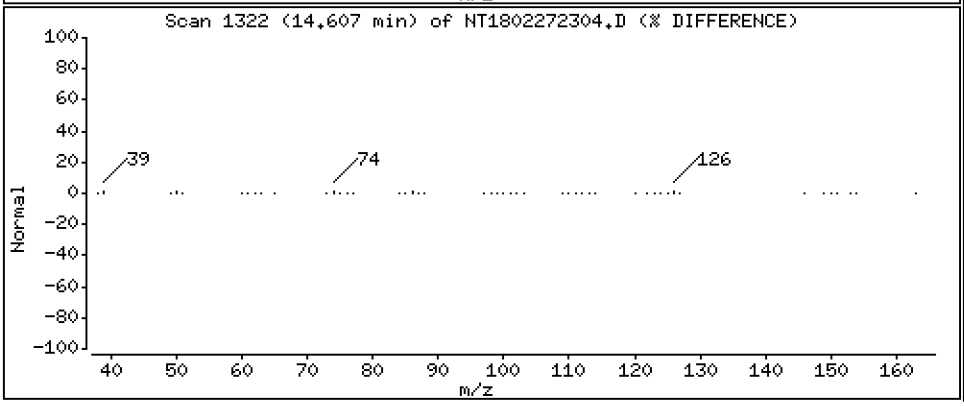












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

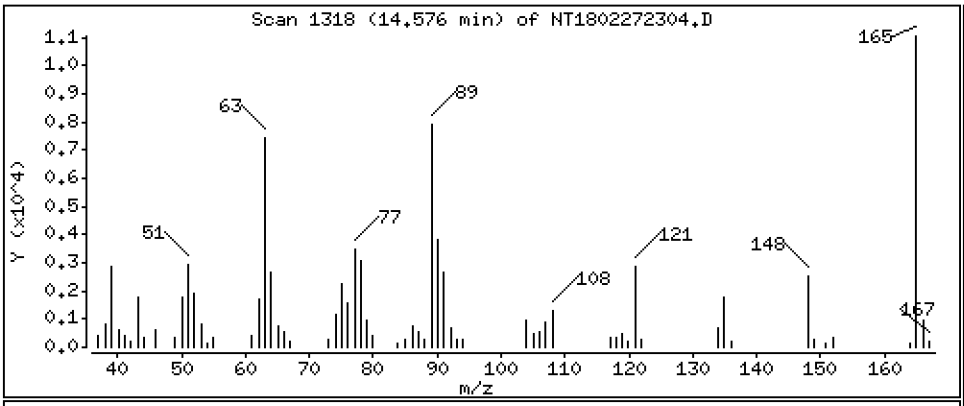
Operator: VTS

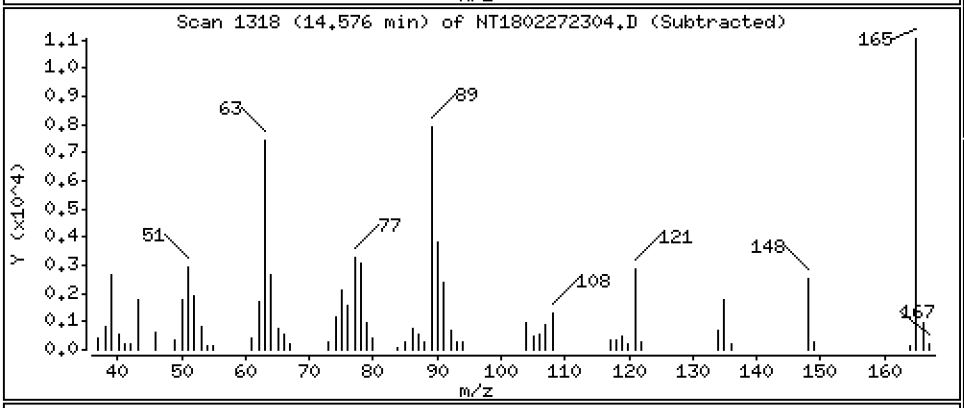
Column phase: ZB-5msi

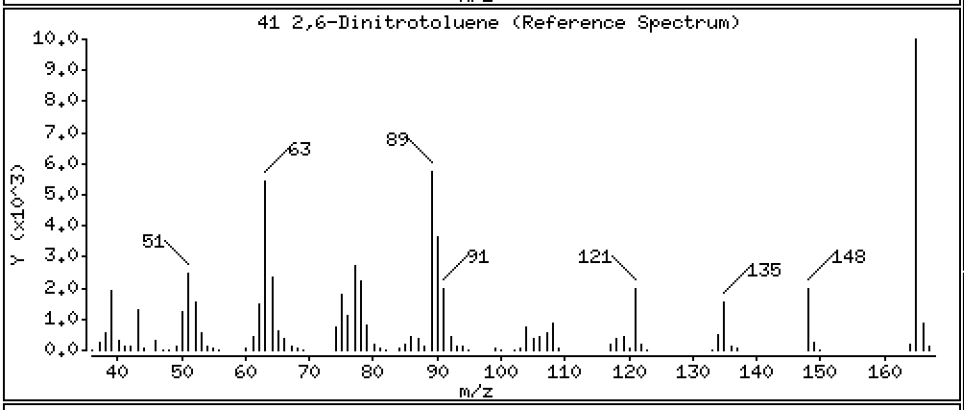
Column diameter: 0.25

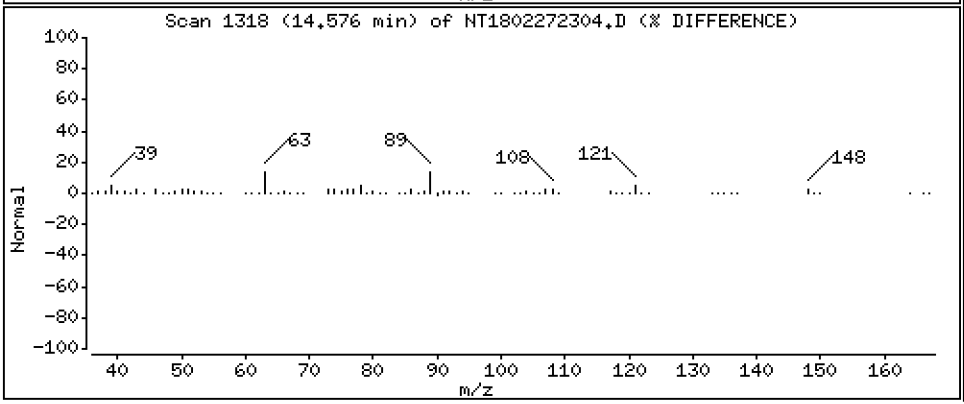
41 2,6-Dinitrotoluene

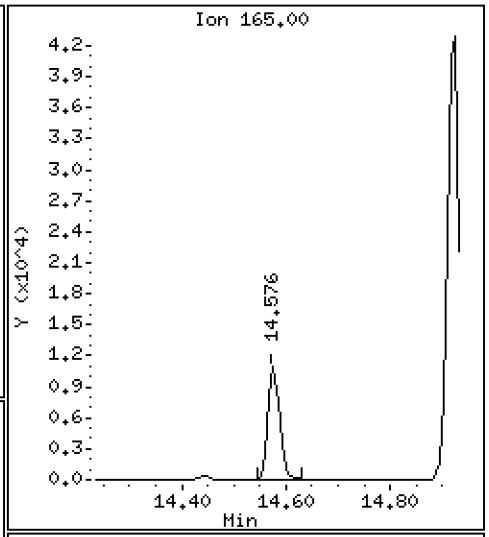
Concentration: 0.3789 ug/mL

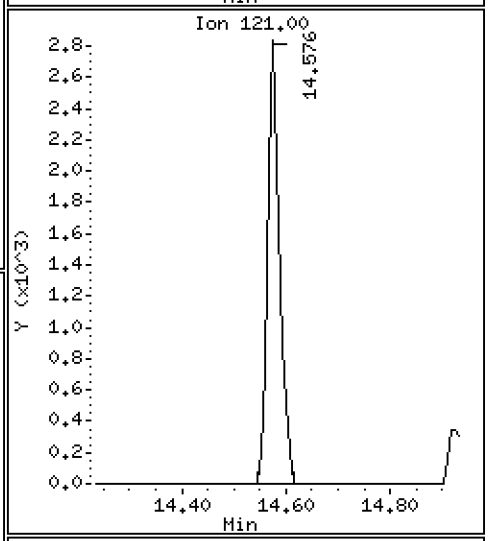


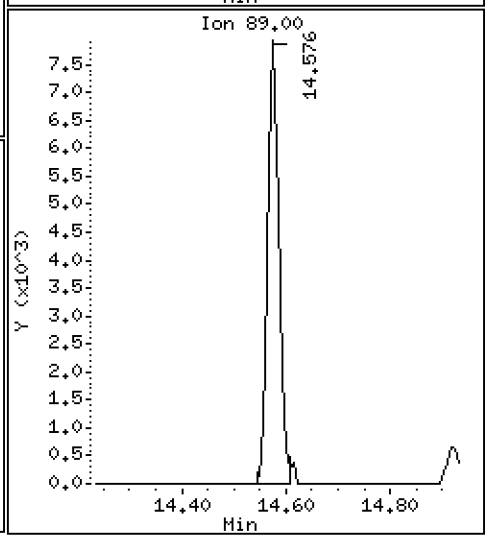












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

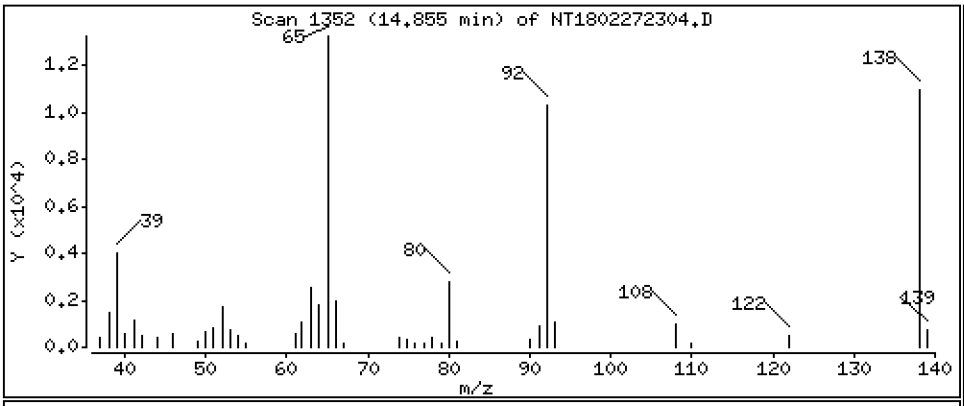
Operator: VTS

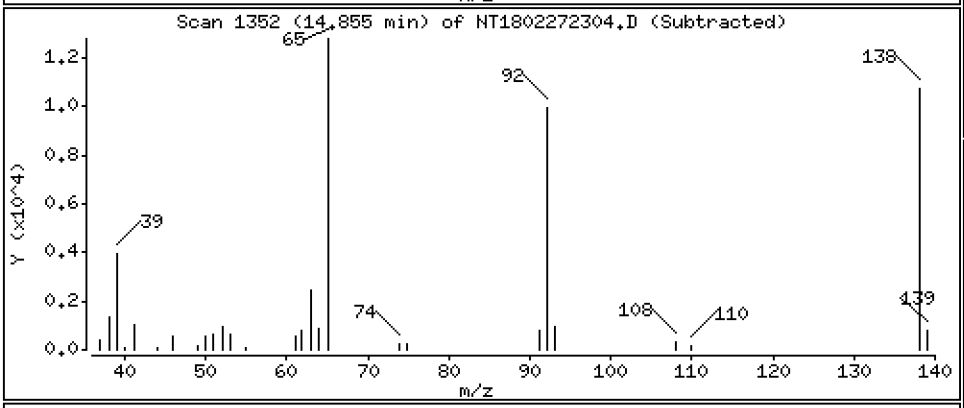
Column phase: ZB-5msi

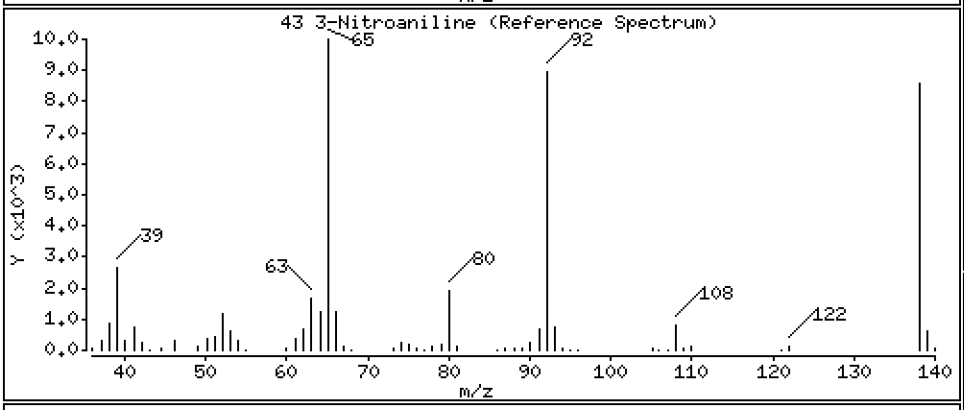
Column diameter: 0.25

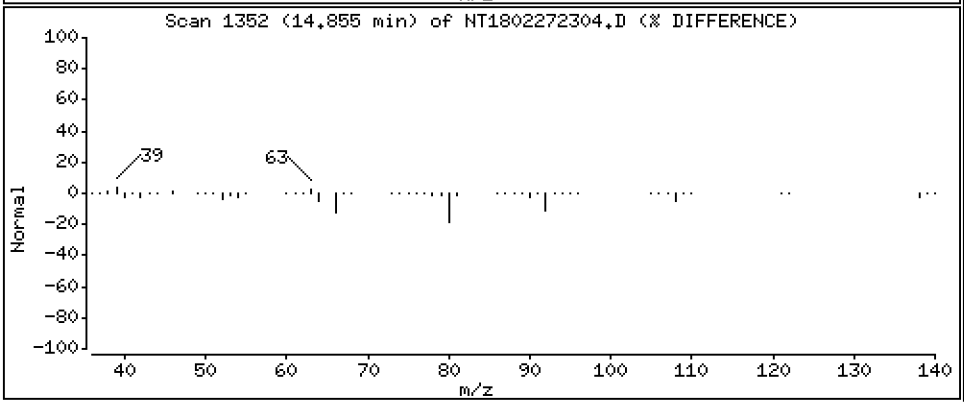
43 3-Nitroaniline

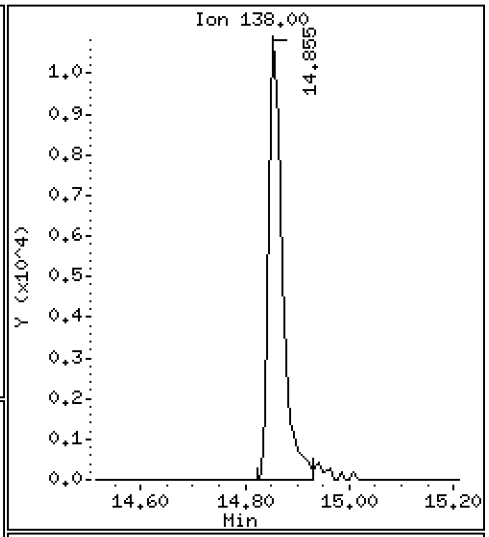
Concentration: 0.3811 ug/mL

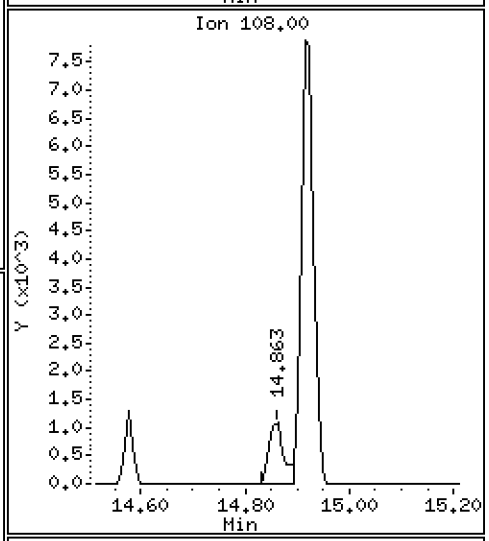


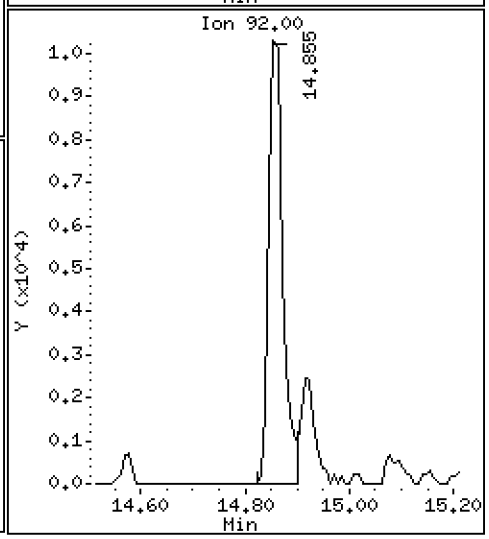












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

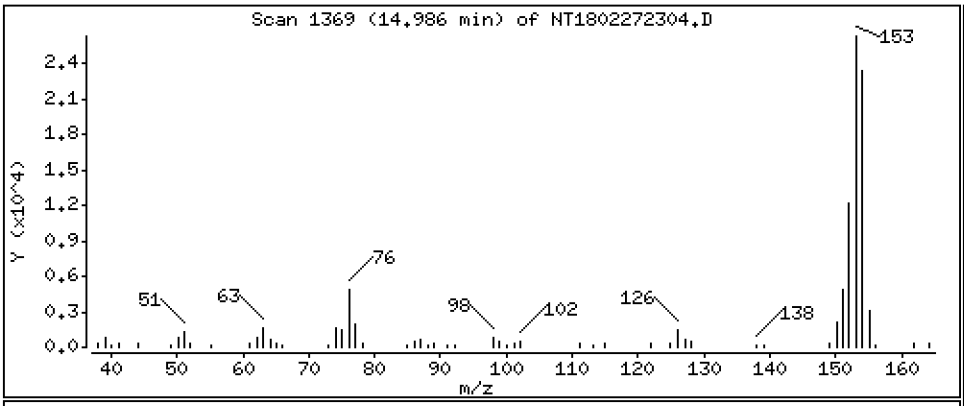
Operator: VTS

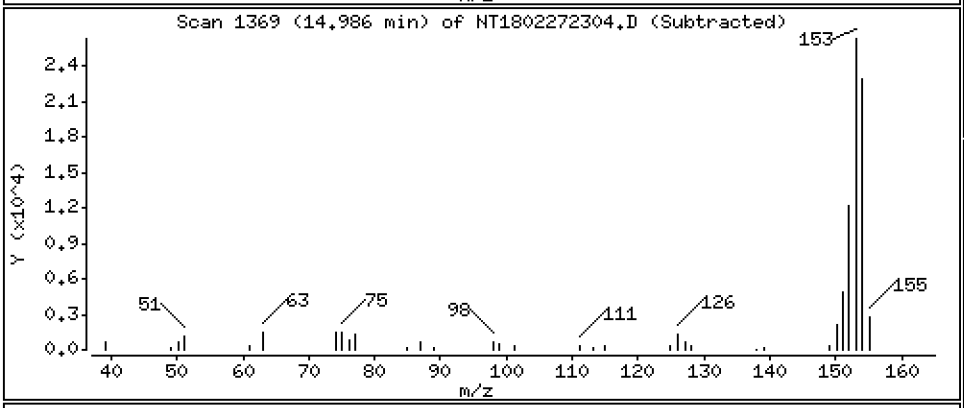
Column phase: ZB-5msi

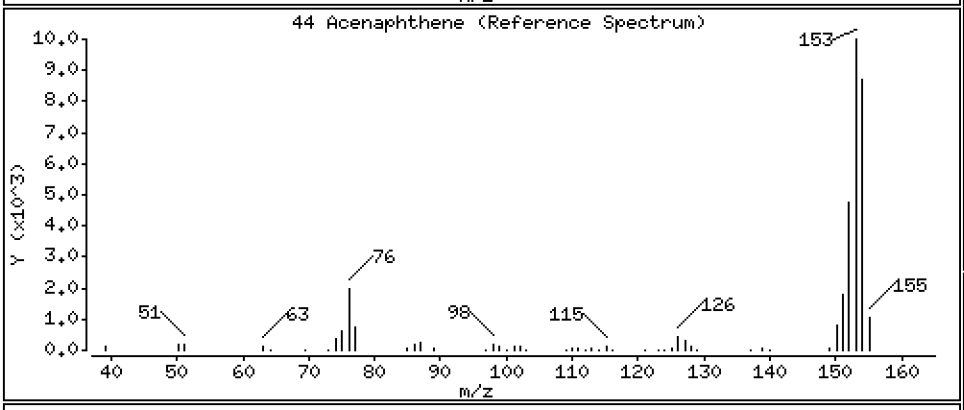
Column diameter: 0.25

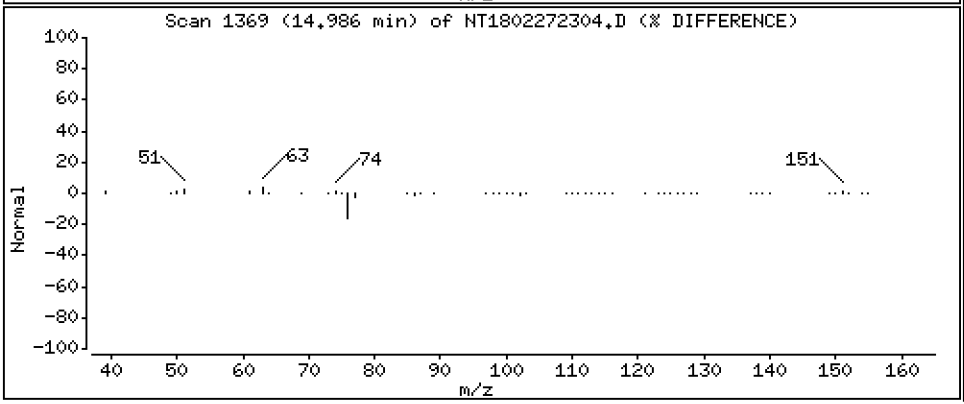
44 Acenaphthene

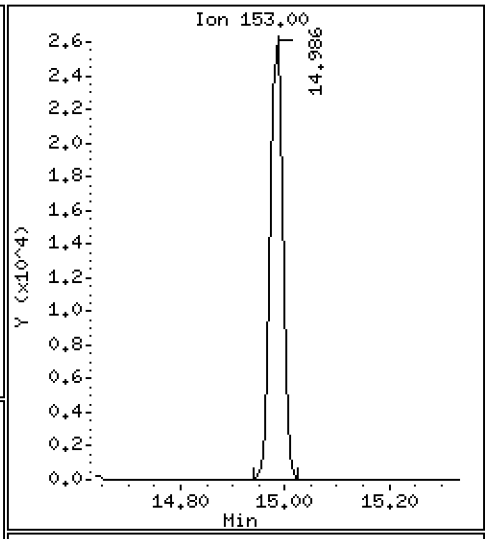
Concentration: 0.2249 ug/mL

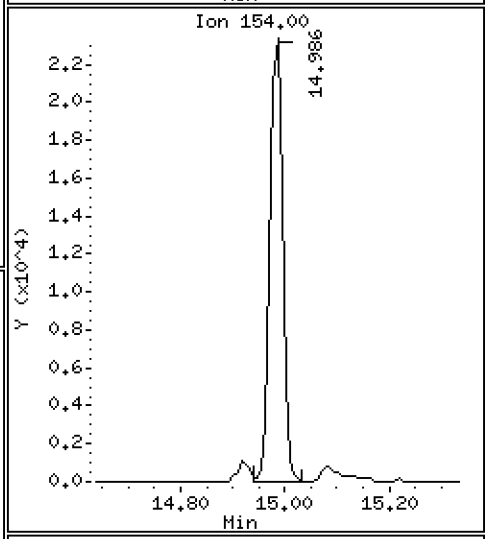


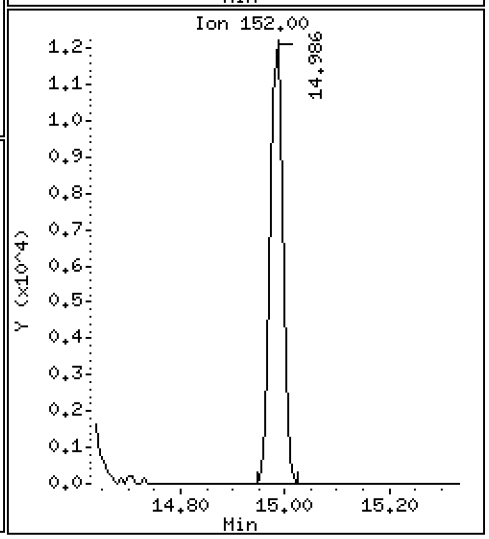












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

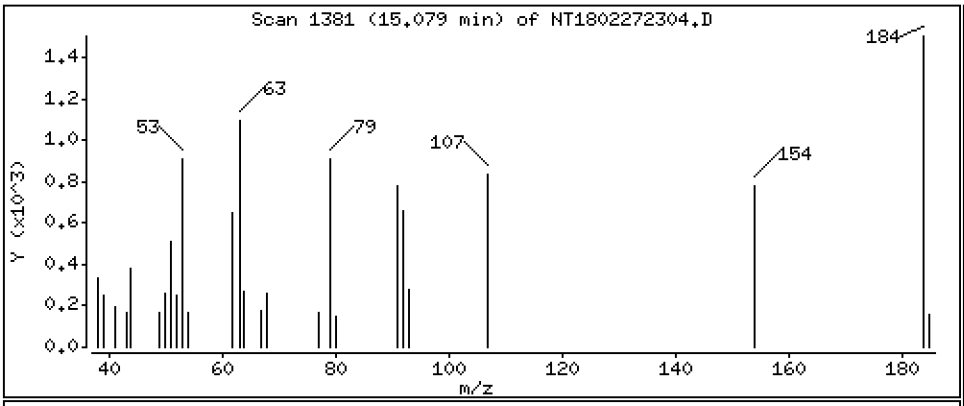
Operator: VTS

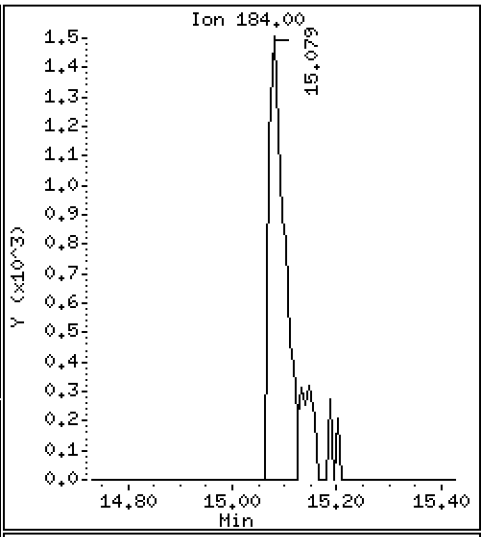
Column phase: ZB-5msi

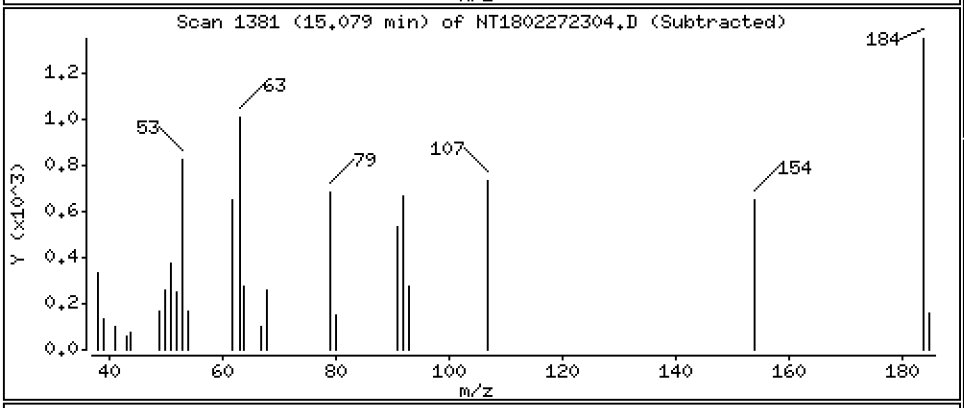
Column diameter: 0.25

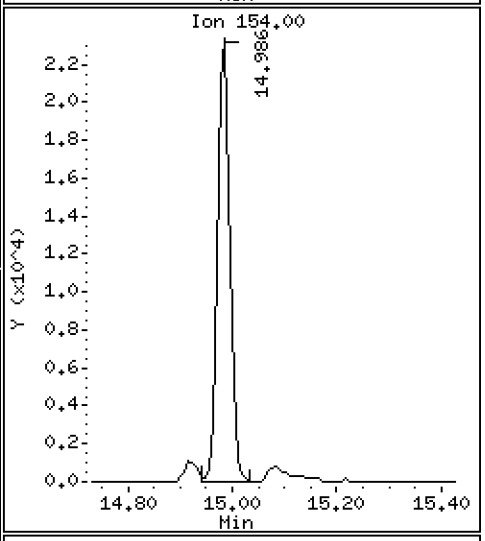
45 2,4-Dinitrophenol

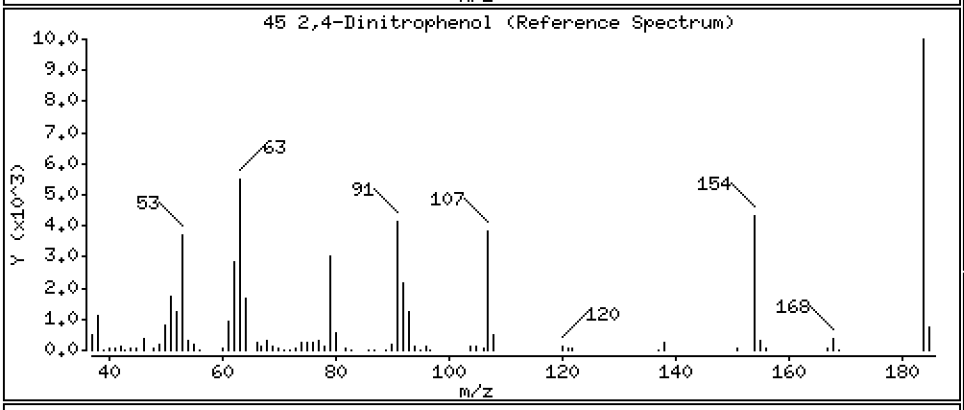
Concentration: 0.1544 ug/mL

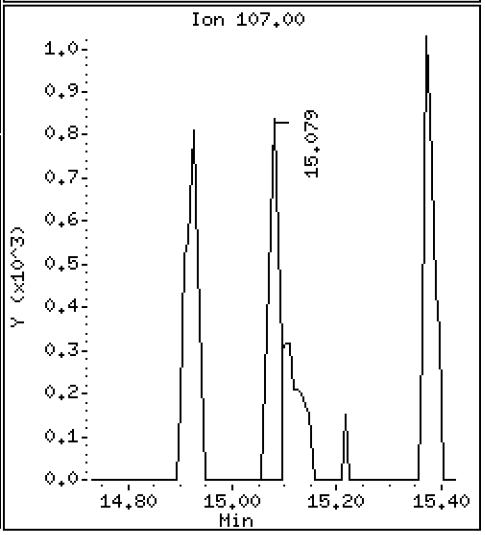


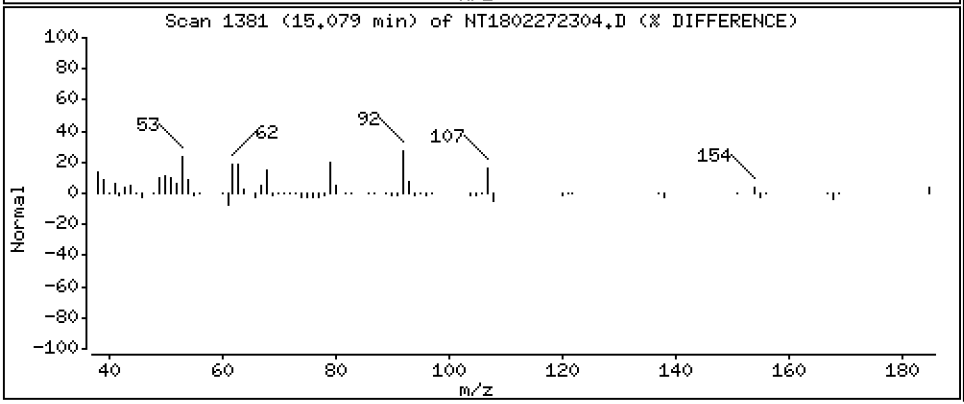












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

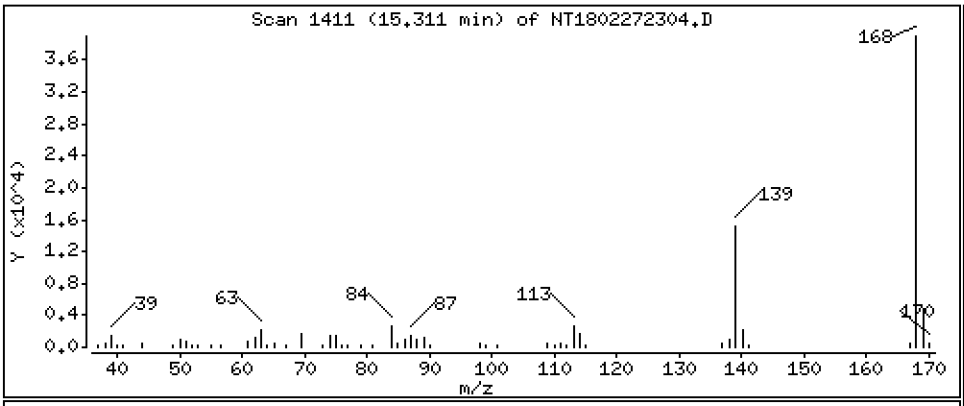
Operator: VTS

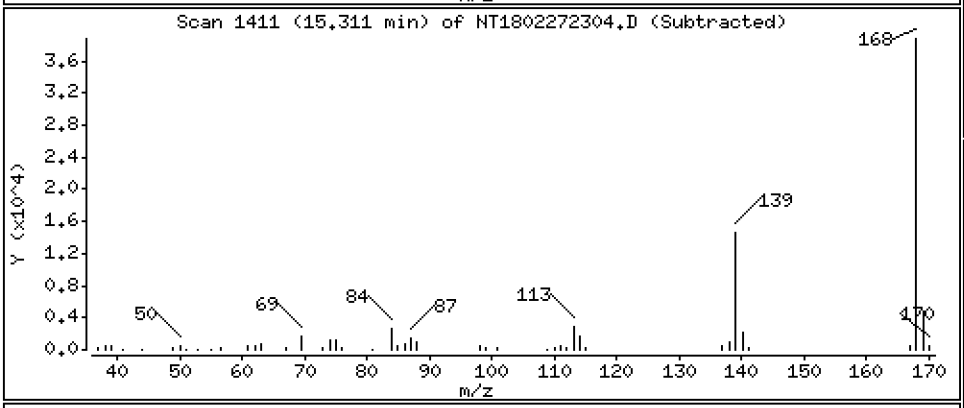
Column phase: ZB-5msi

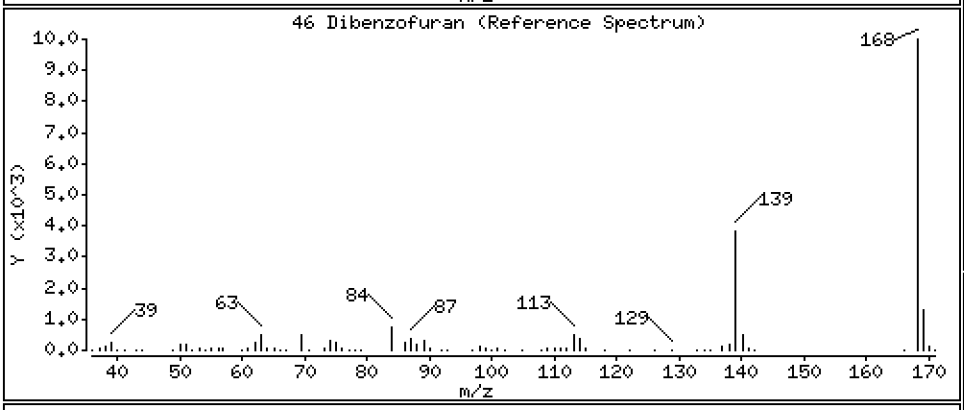
Column diameter: 0.25

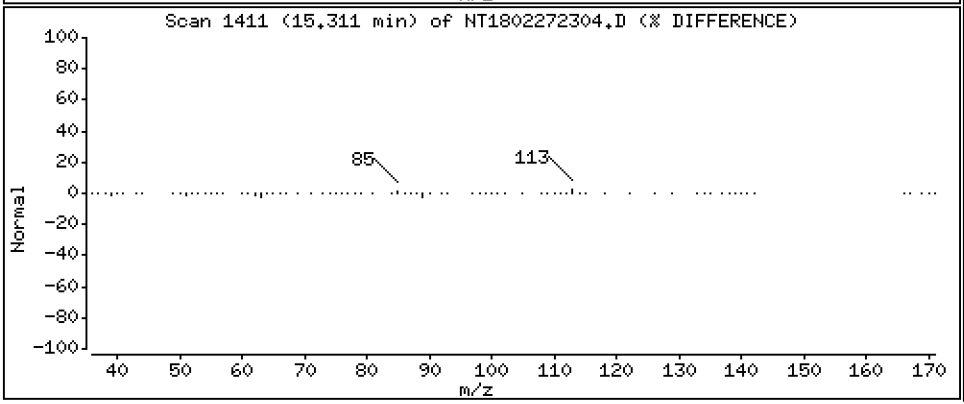
46 Dibenzofuran

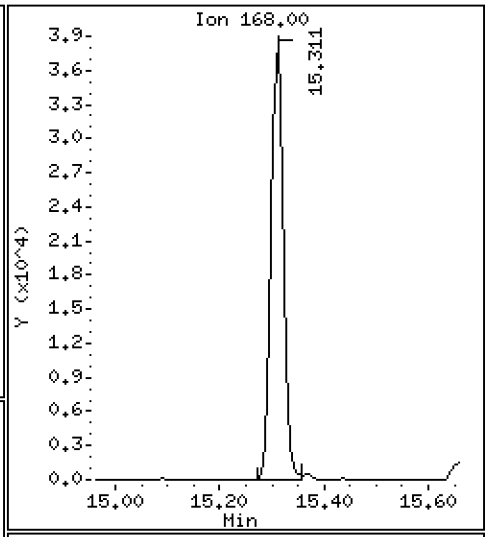
Concentration: 0.2218 ug/mL

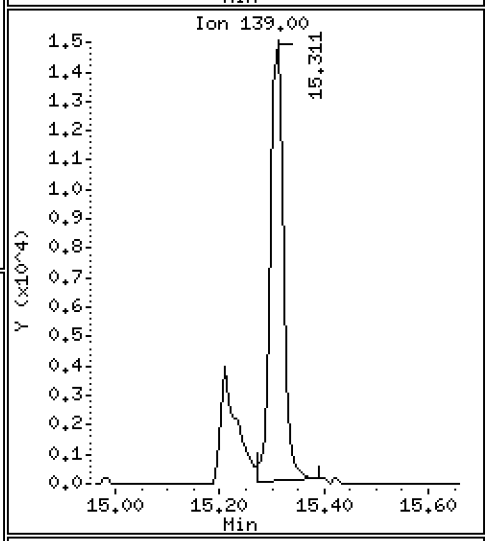


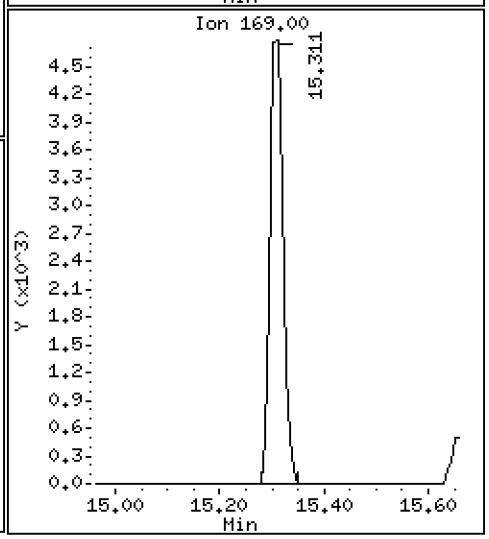












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

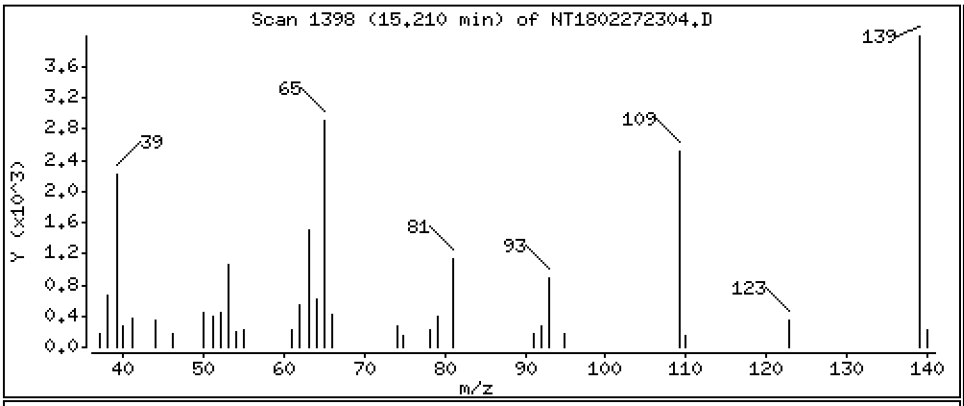
Operator: VTS

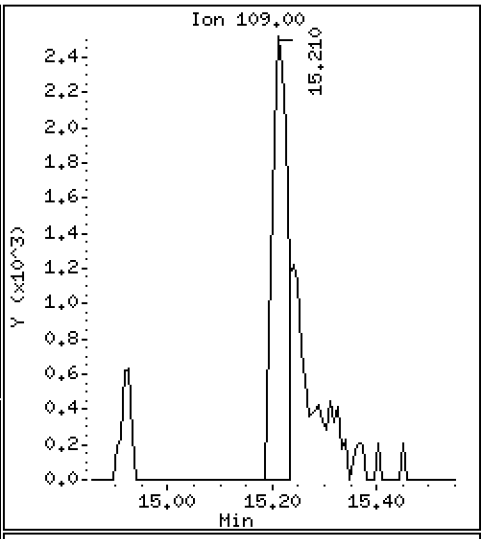
Column phase: ZB-5msi

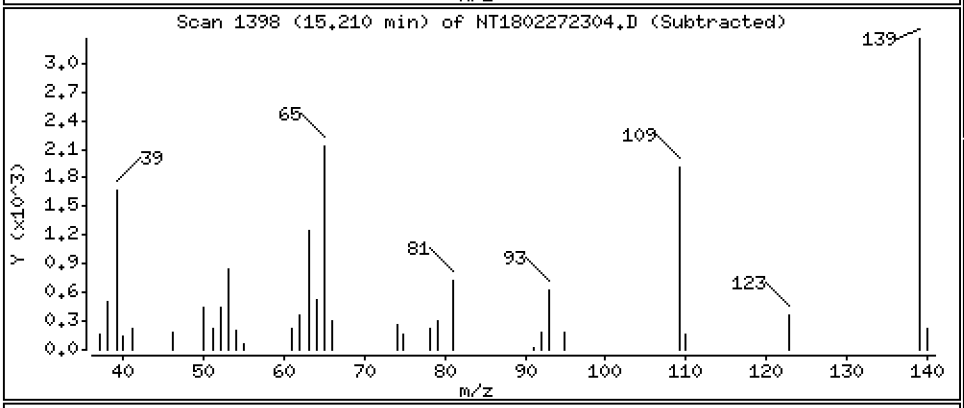
Column diameter: 0.25

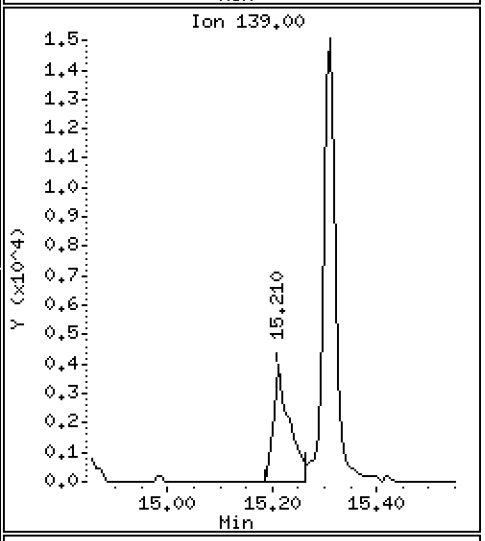
47 4-Nitrophenol

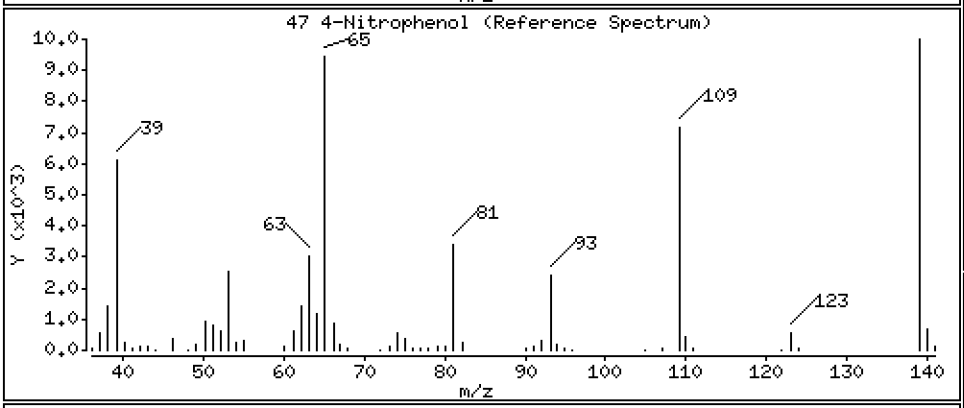
Concentration: 0.2462 ug/mL

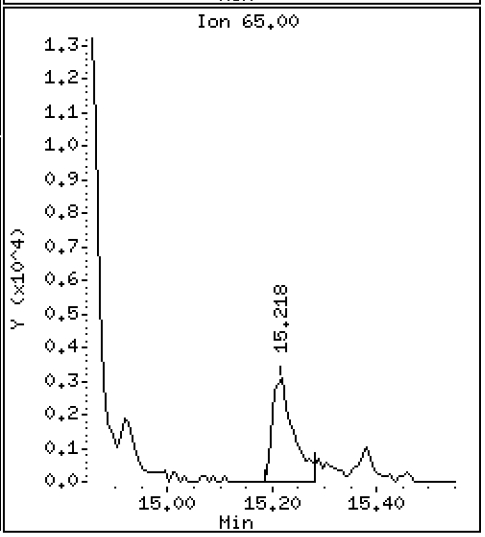


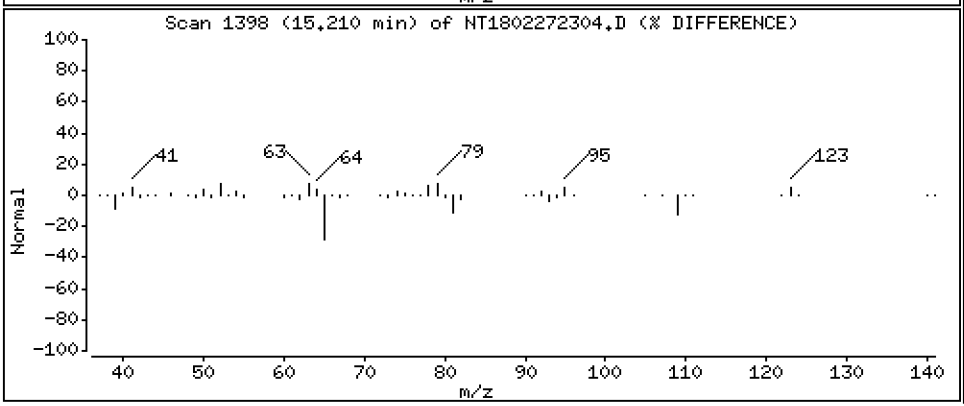












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

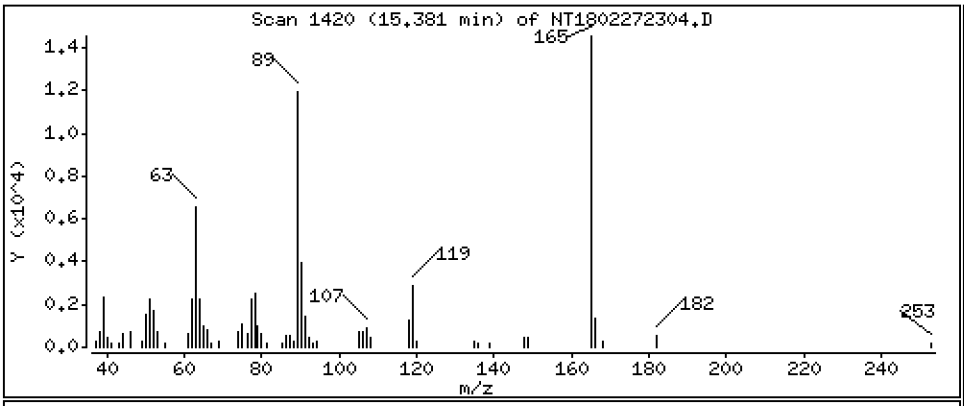
Operator: VTS

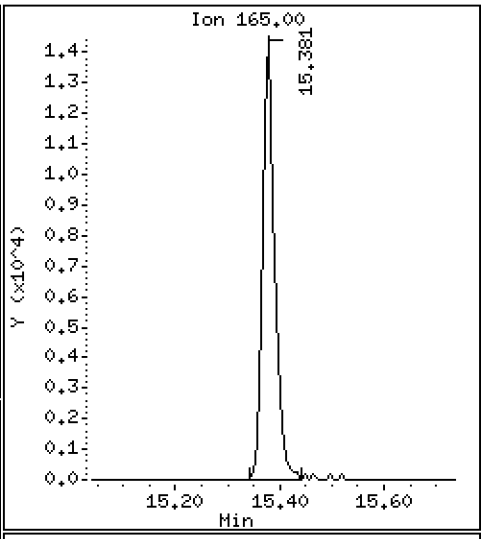
Column phase: ZB-5msi

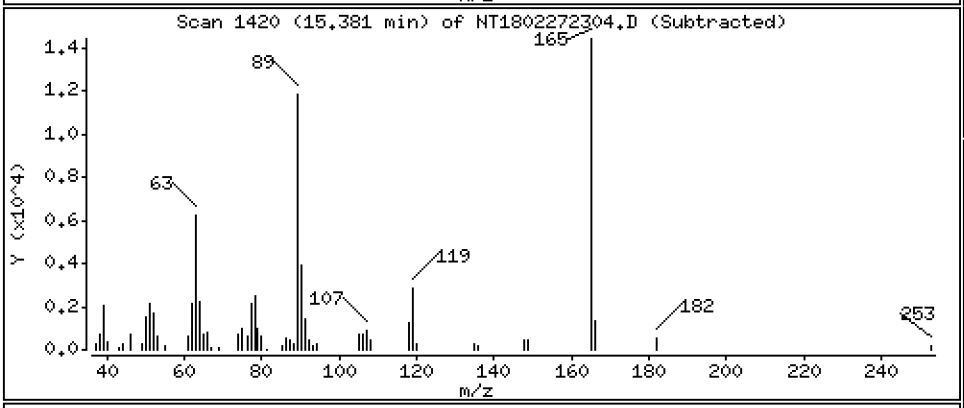
Column diameter: 0.25

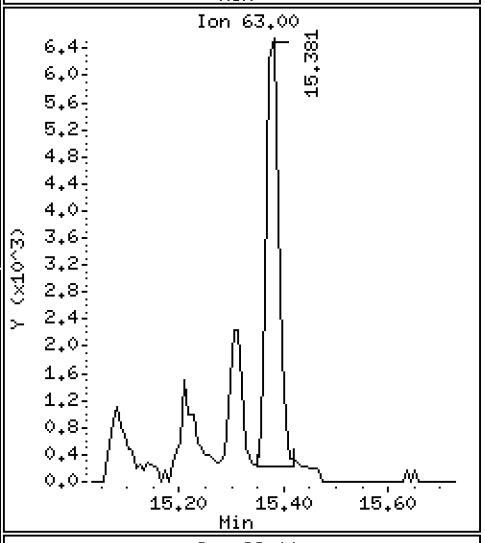
48 2,4-Dinitrotoluene

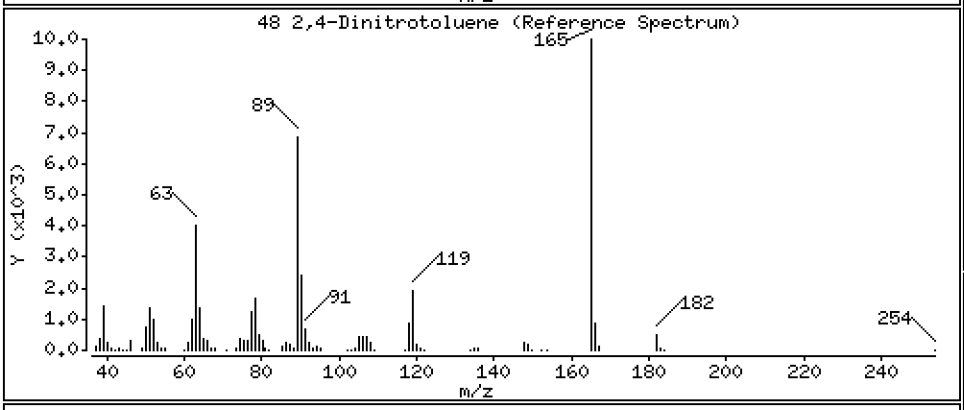
Concentration: 0.3915 ug/mL

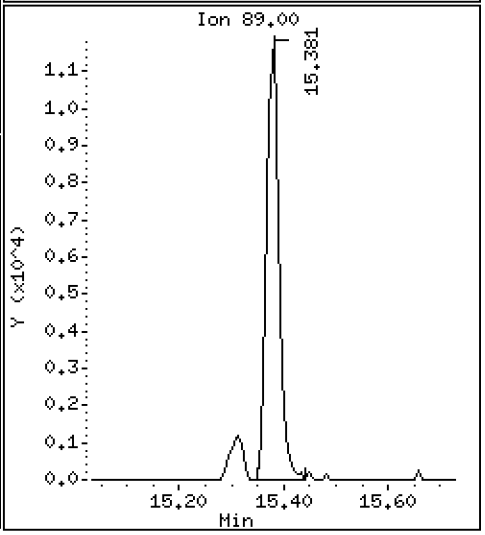


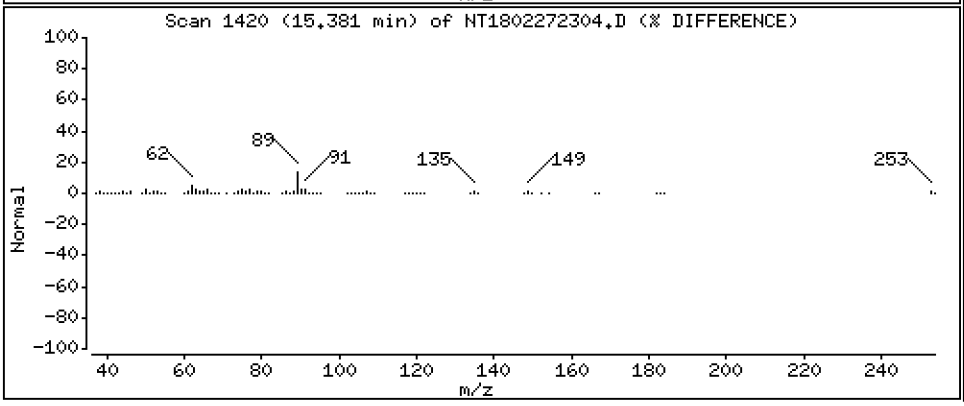












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

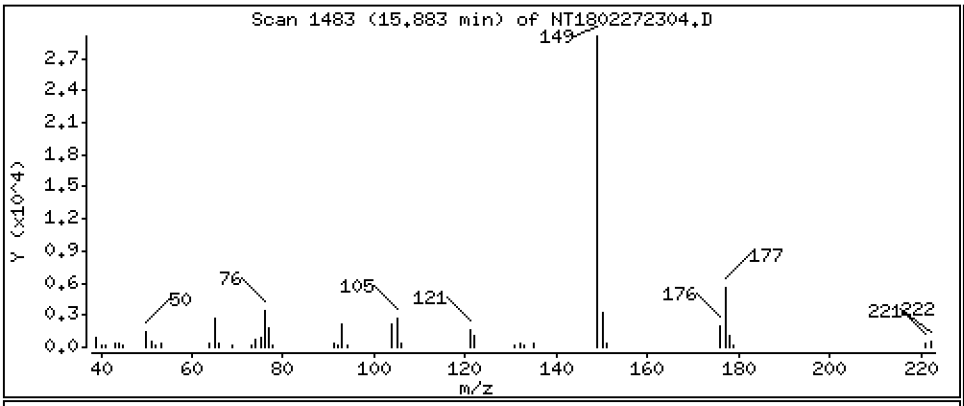
Operator: VTS

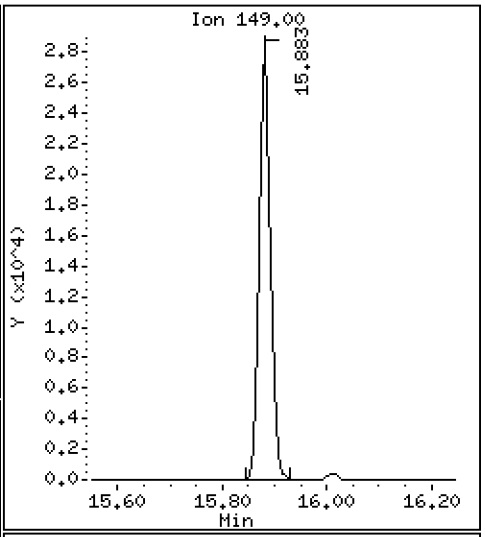
Column phase: ZB-5msi

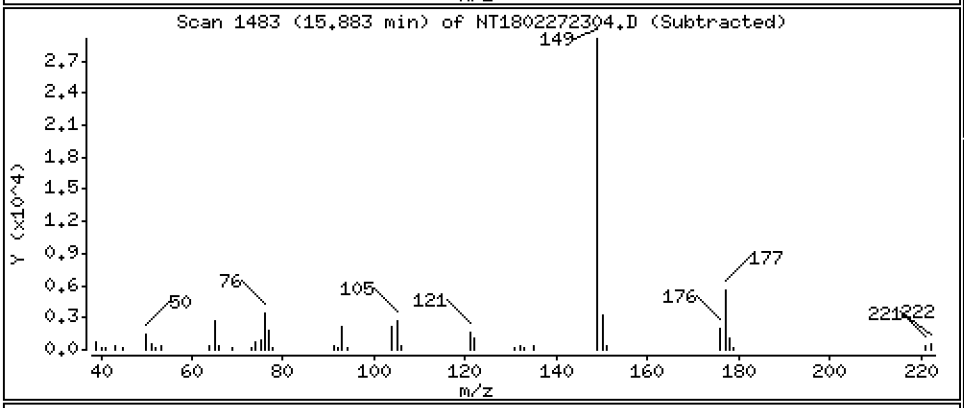
Column diameter: 0.25

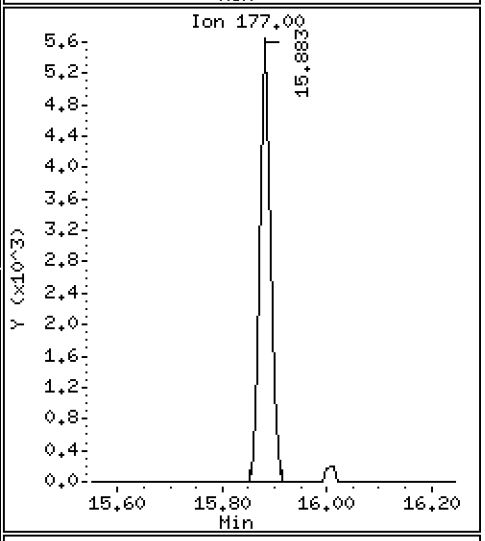
50 Diethylphthalate

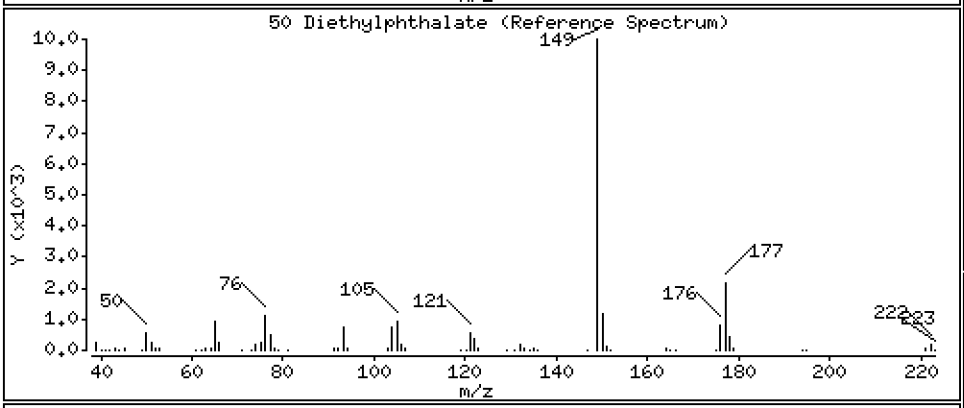
Concentration: 0.2128 ug/mL

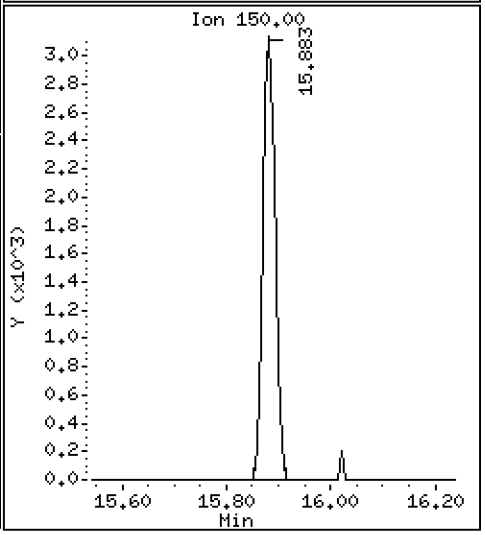


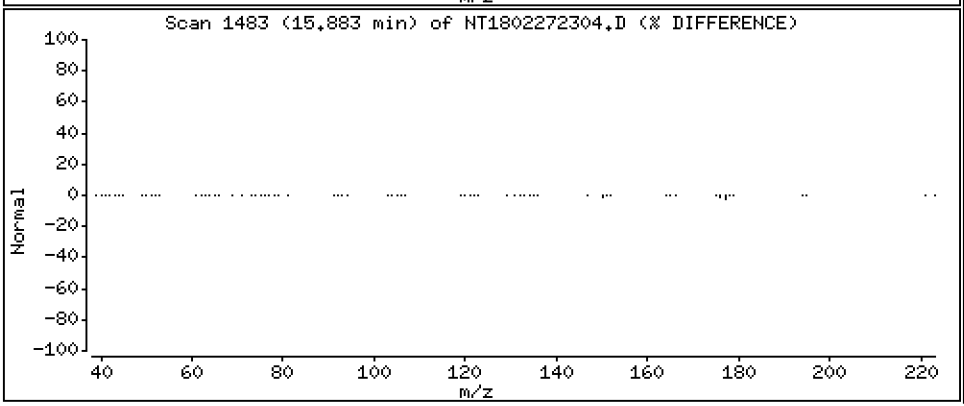












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

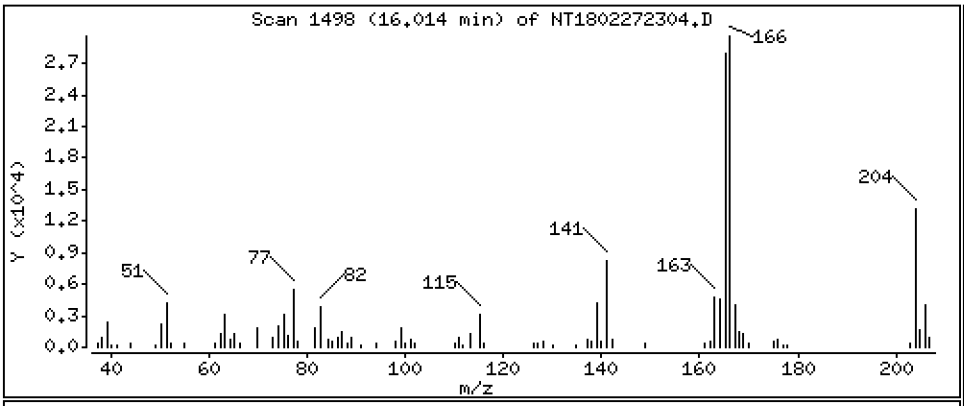
Operator: VTS

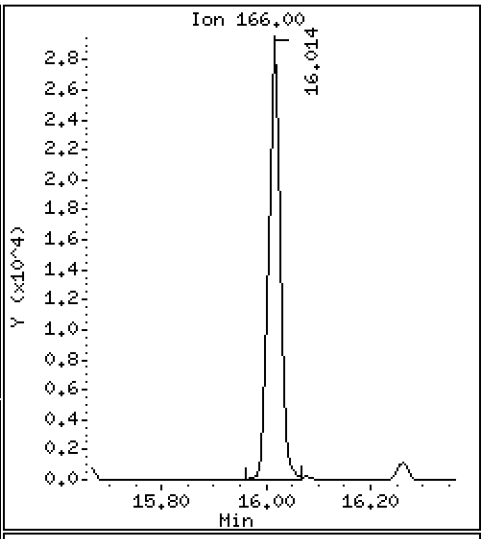
Column phase: ZB-5msi

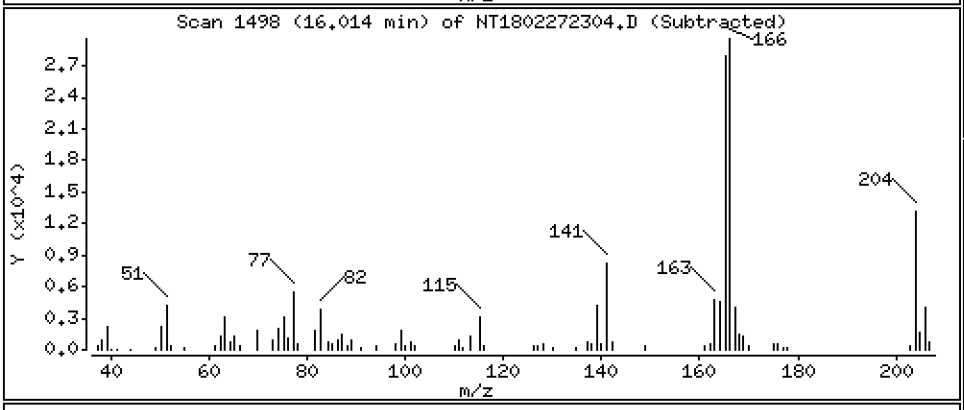
Column diameter: 0.25

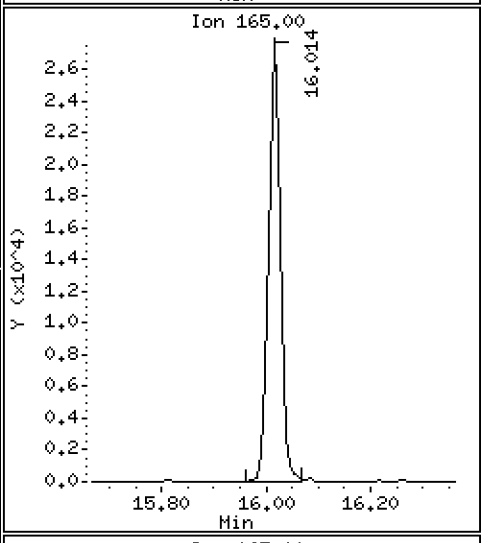
49 Fluorene

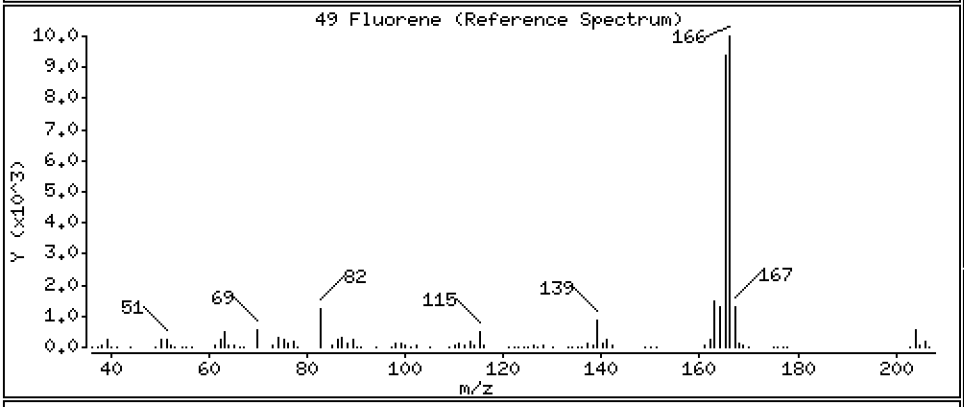
Concentration: 0.2421 ug/mL

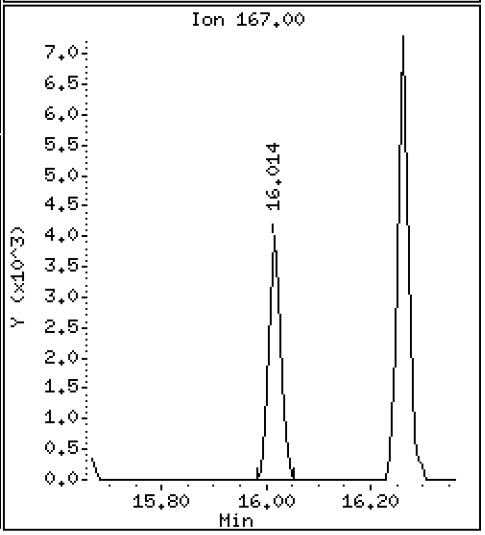


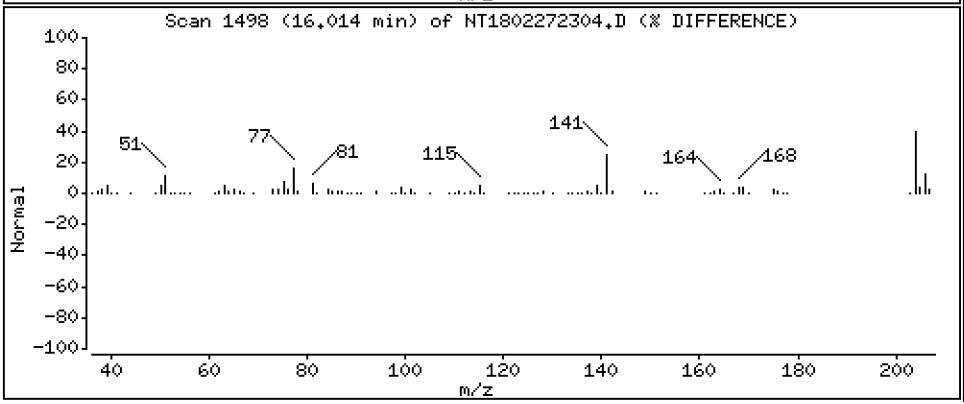












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

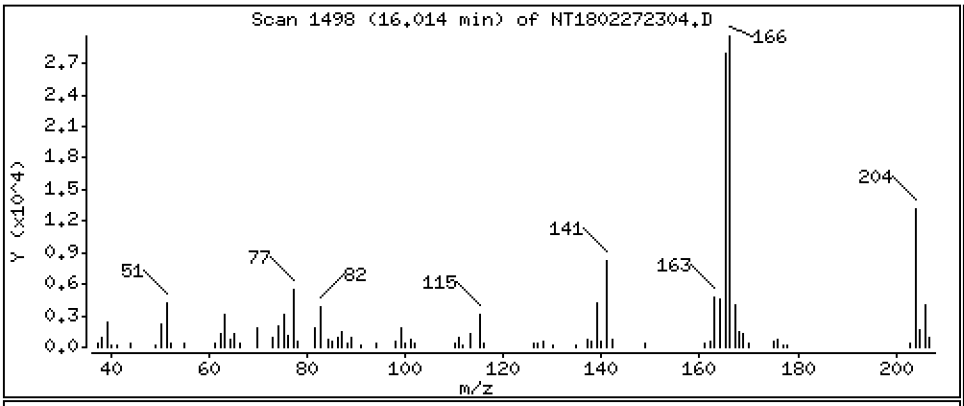
Operator: VTS

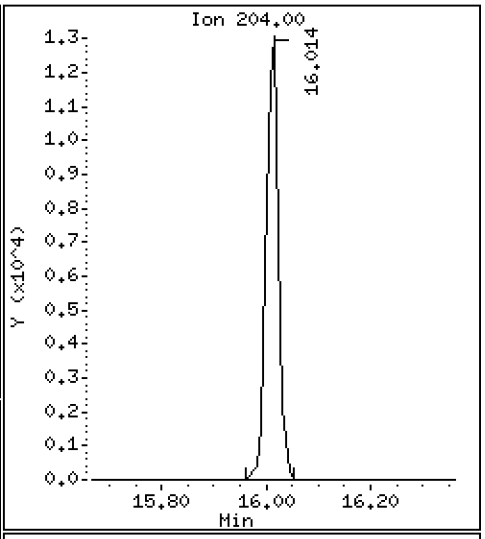
Column phase: ZB-5msi

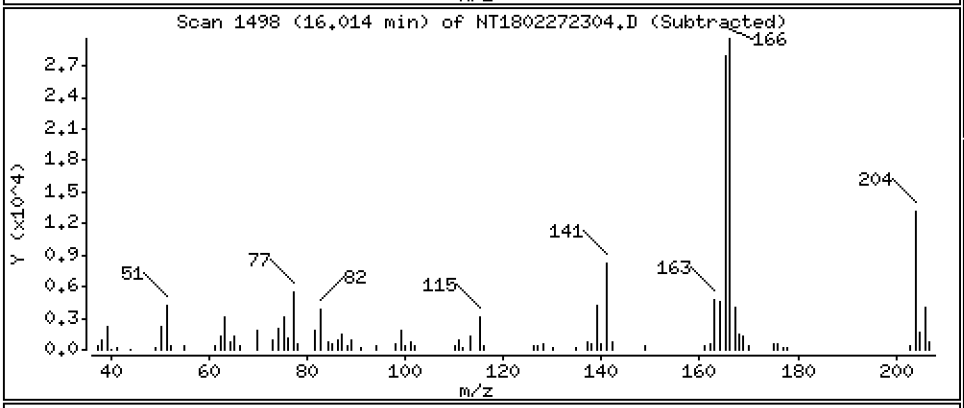
Column diameter: 0.25

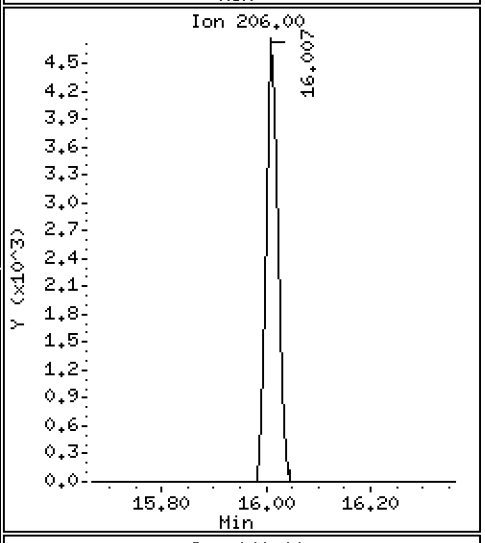
51 4-Chlorophenyl-phenylether

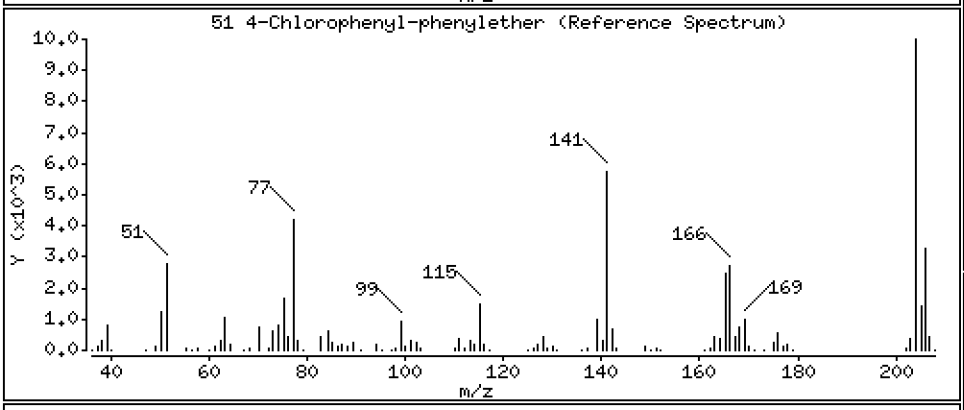
Concentration: 0.2488 ug/mL

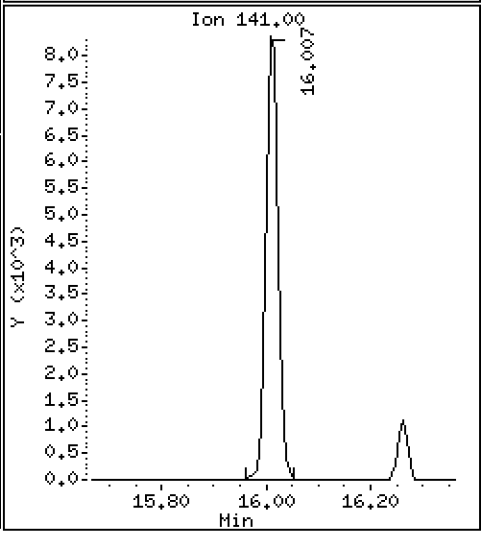


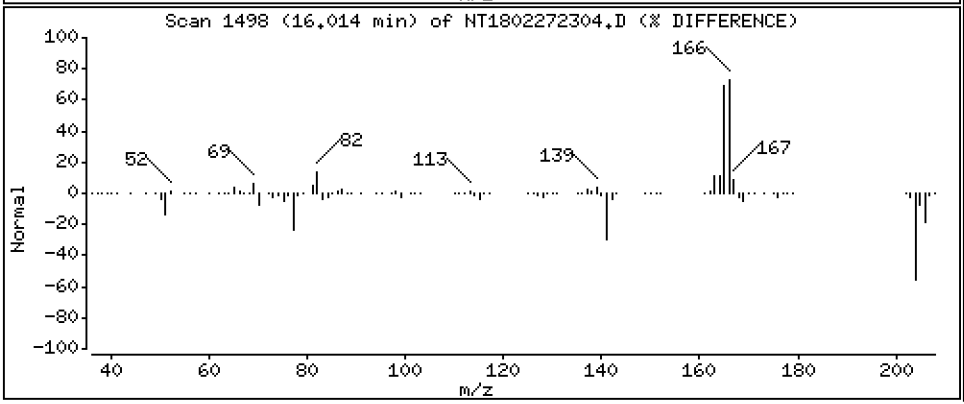












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

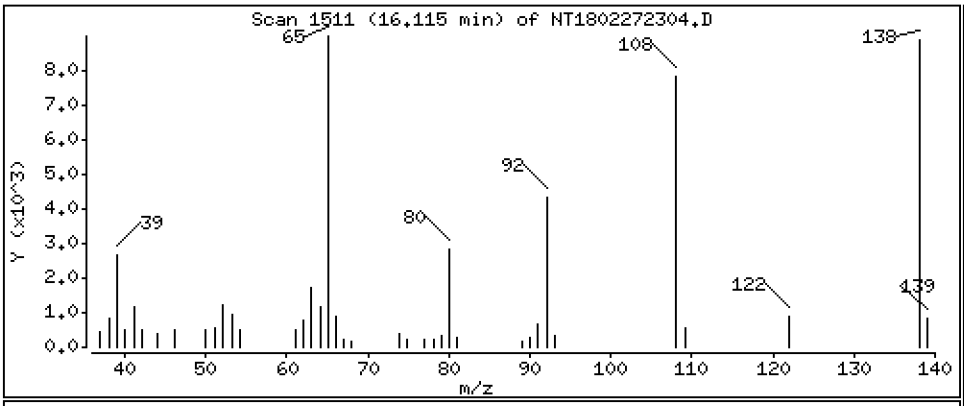
Operator: VTS

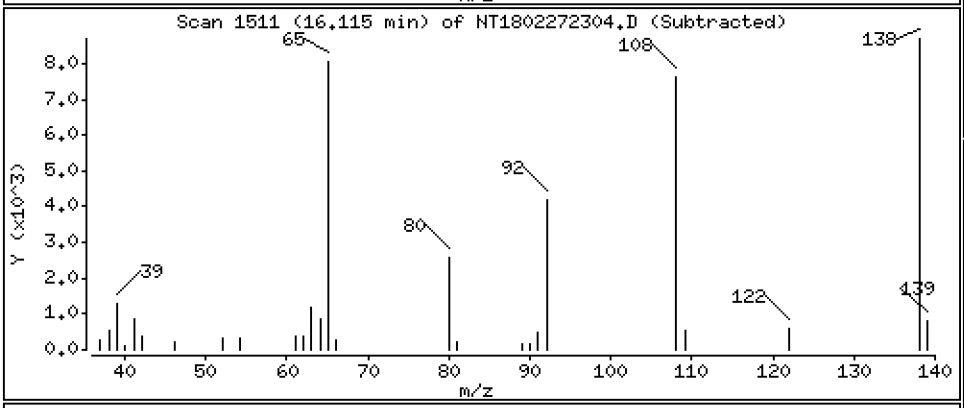
Column phase: ZB-5msi

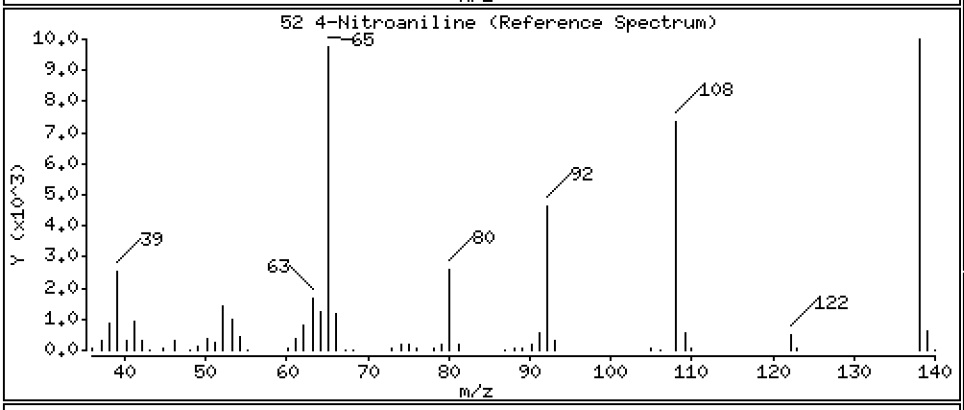
Column diameter: 0.25

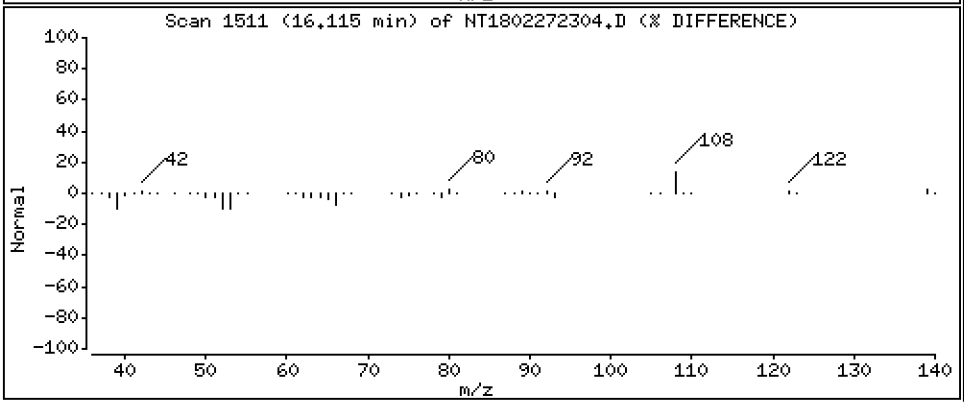
52 4-Nitroaniline

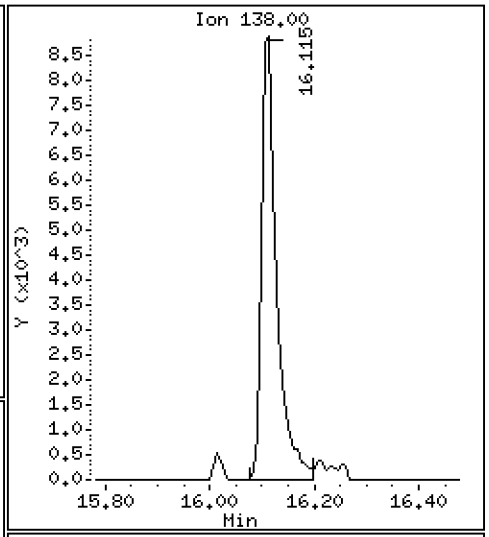
Concentration: 0.3673 ug/mL

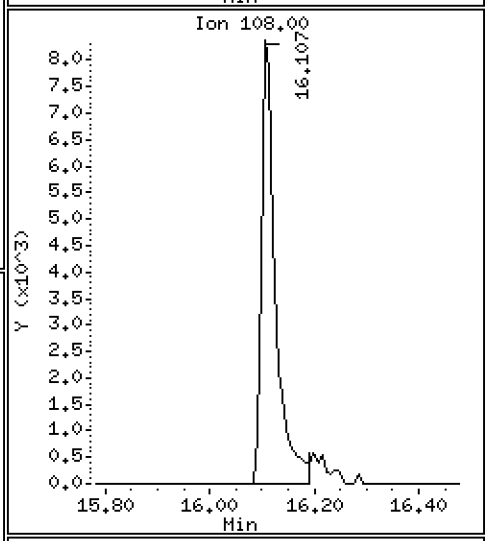


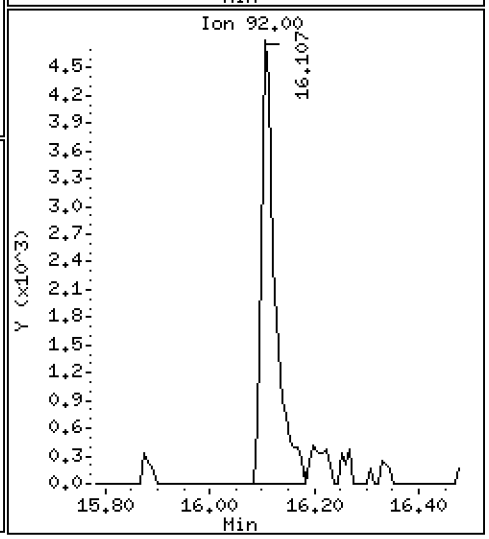












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

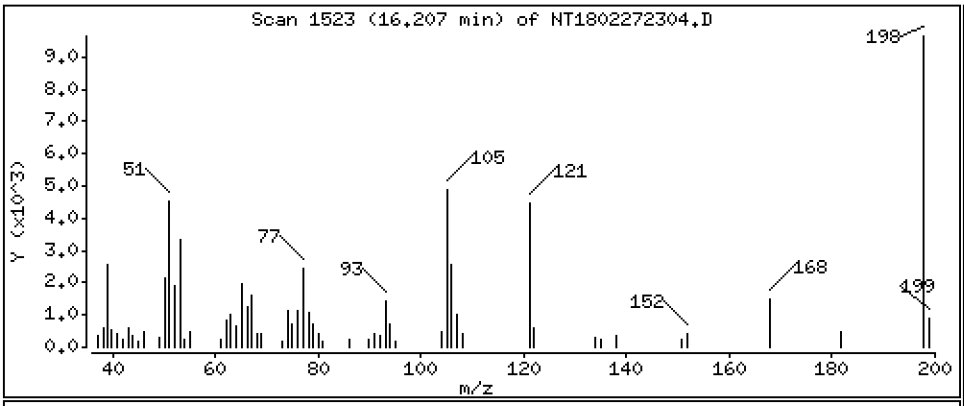
Operator: VTS

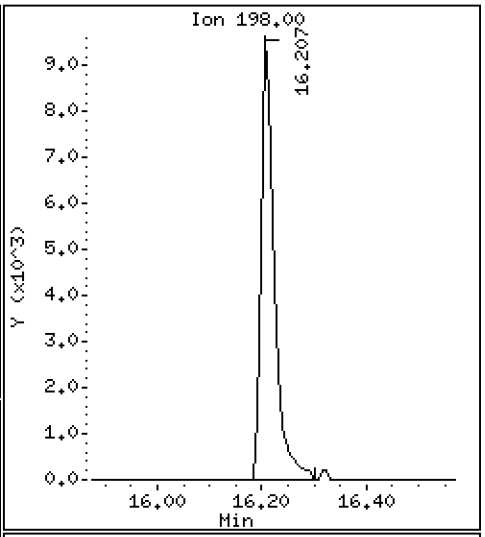
Column phase: ZB-5msi

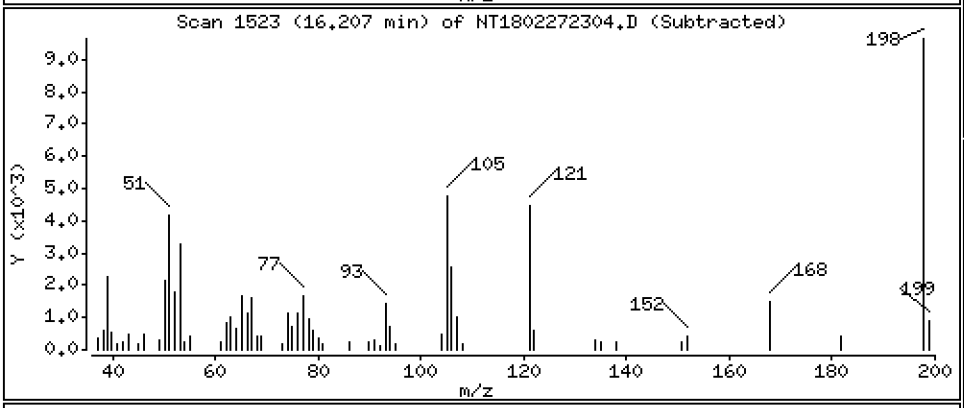
Column diameter: 0.25

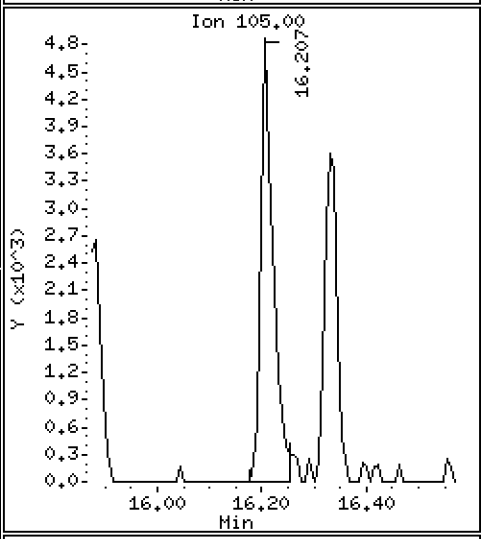
53 4,6-Dinitro-2-methylphenol

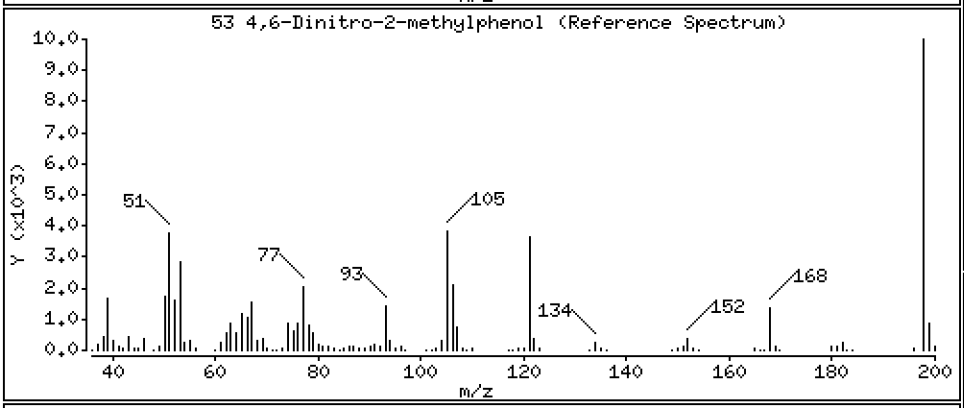
Concentration: 0.4690 ug/mL

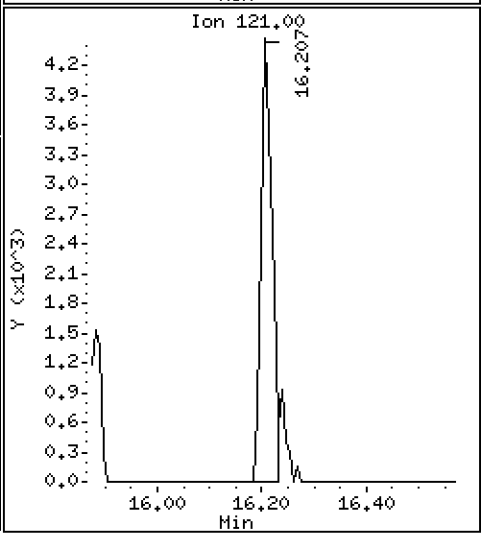


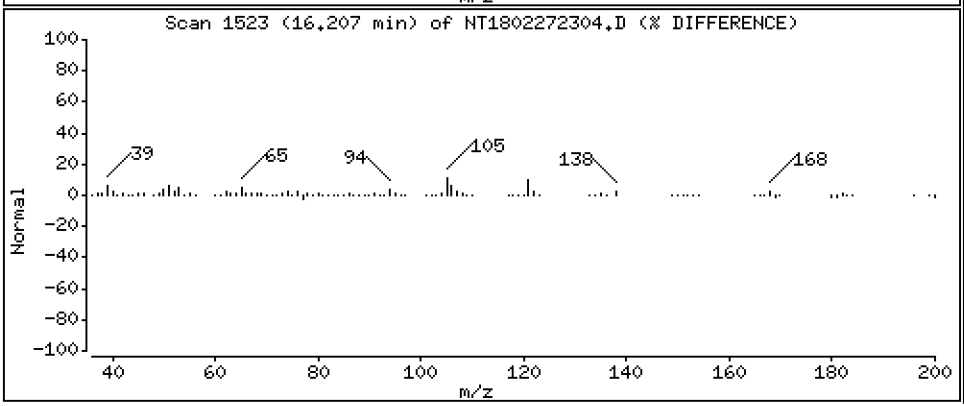












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

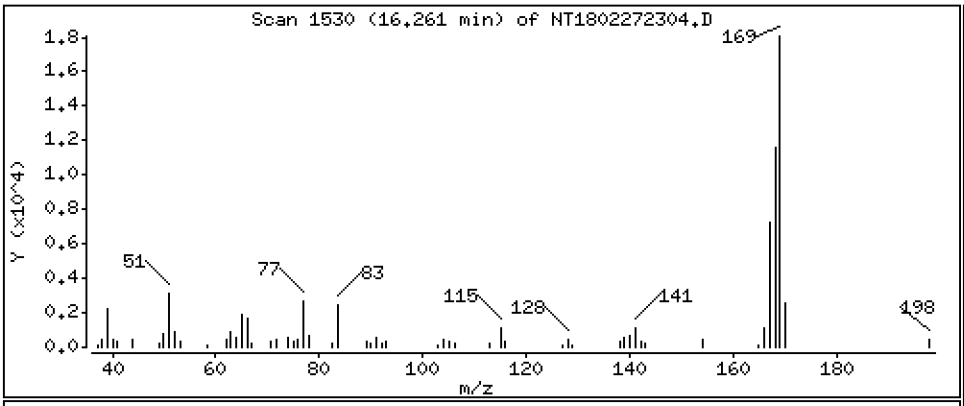
Operator: VTS

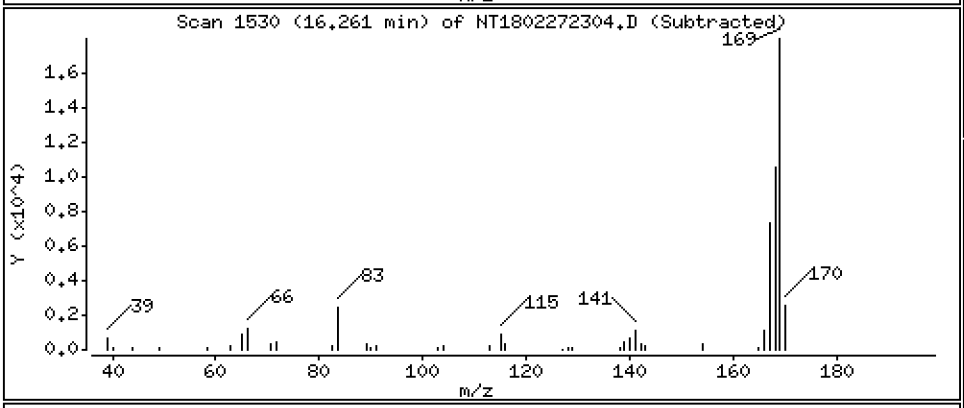
Column phase: ZB-5msi

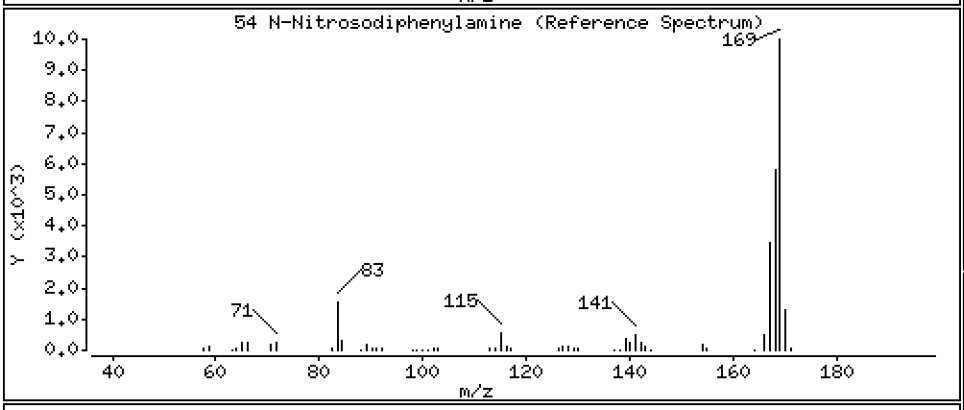
Column diameter: 0.25

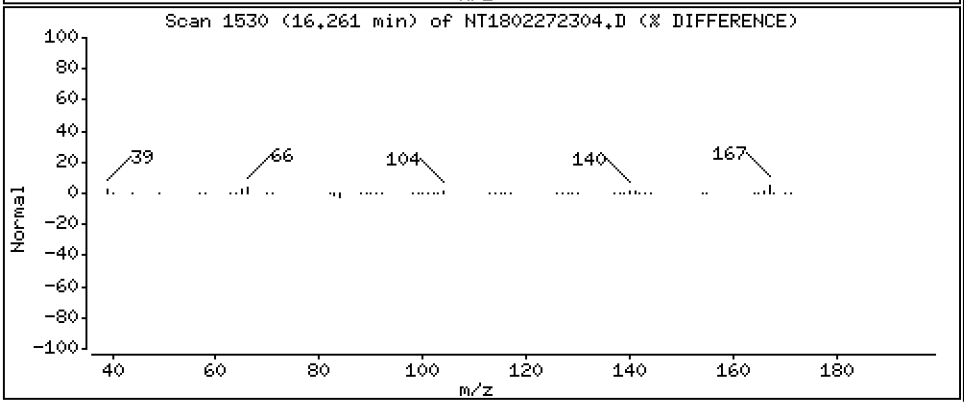
54 N-Nitrosodiphenylamine

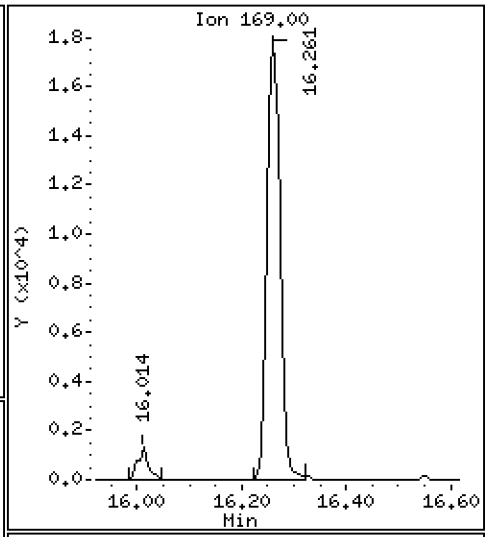
Concentration: 0.2029 ug/mL

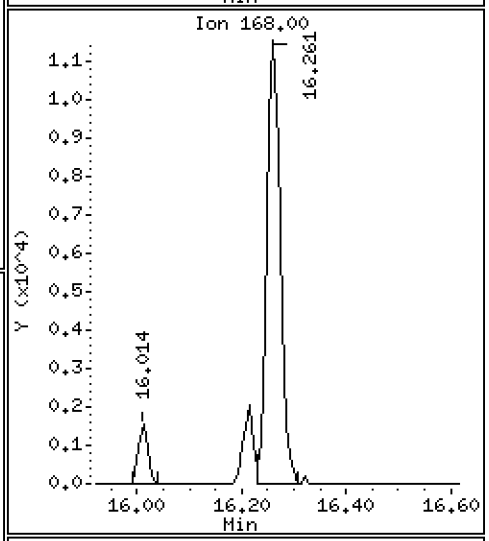


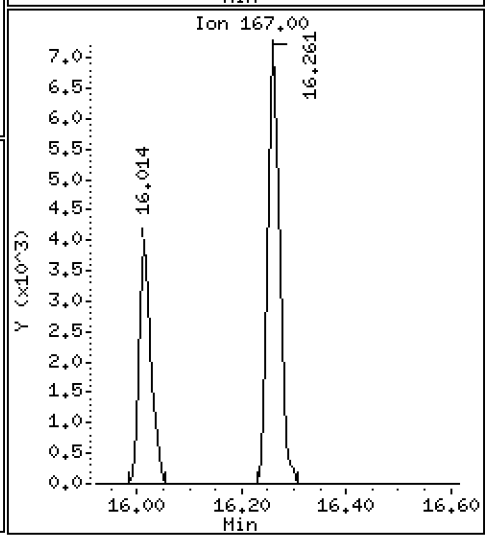












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

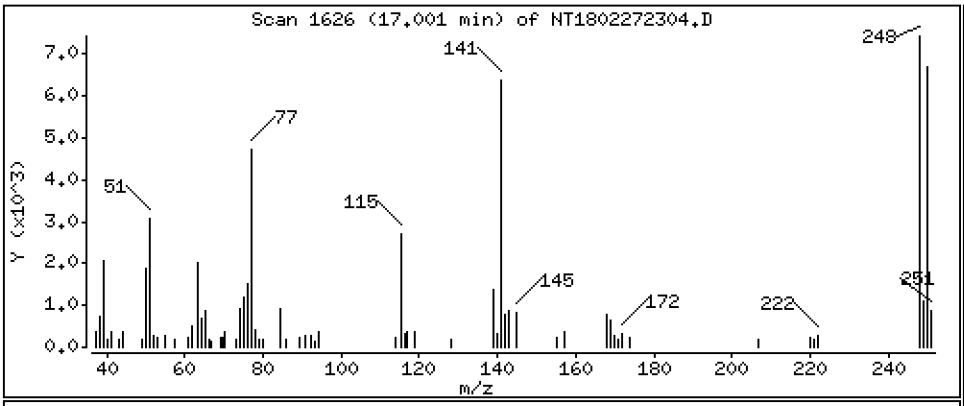
Operator: VTS

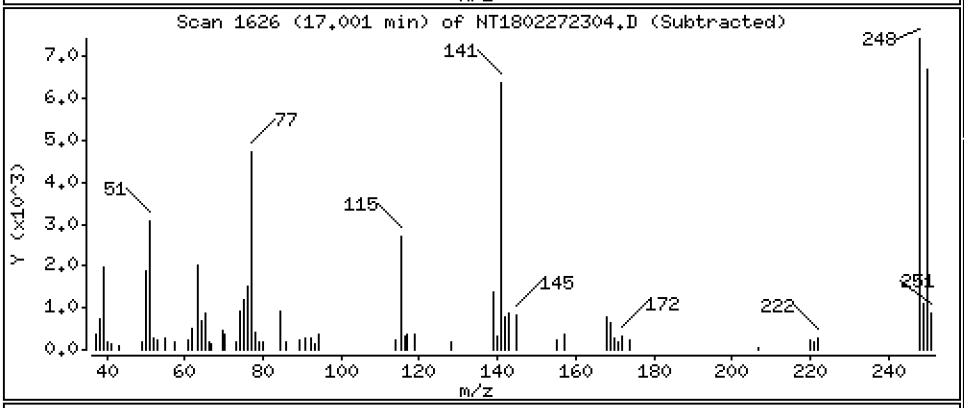
Column phase: ZB-5msi

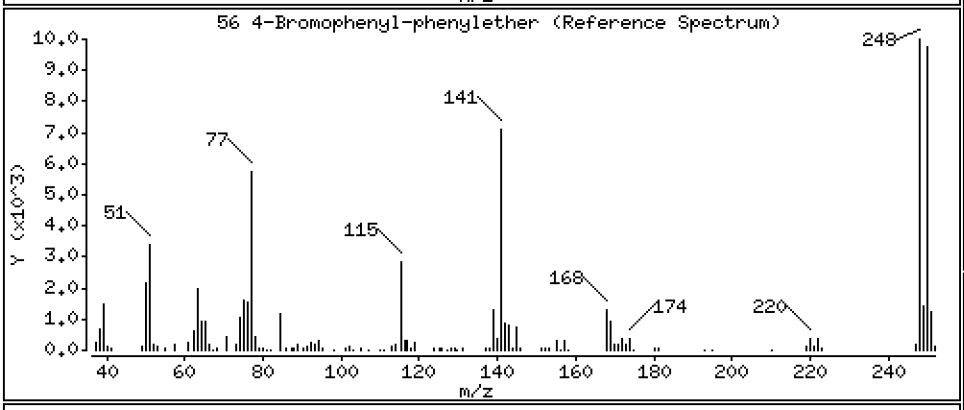
Column diameter: 0.25

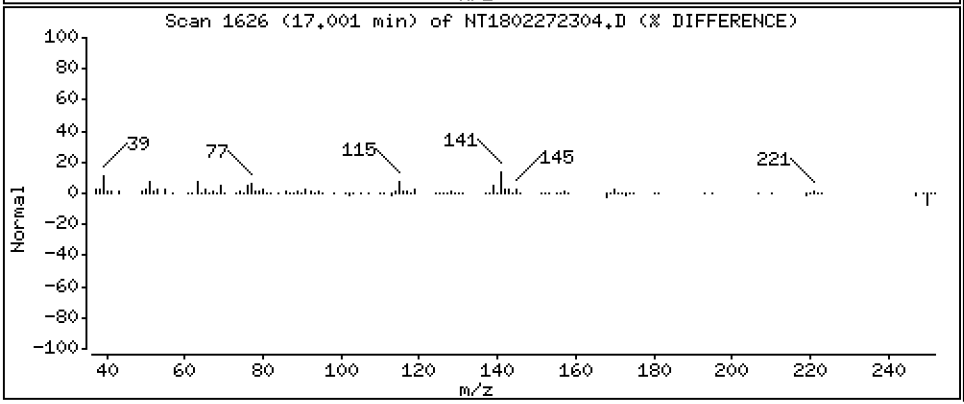
56 4-Bromophenyl-phenylether

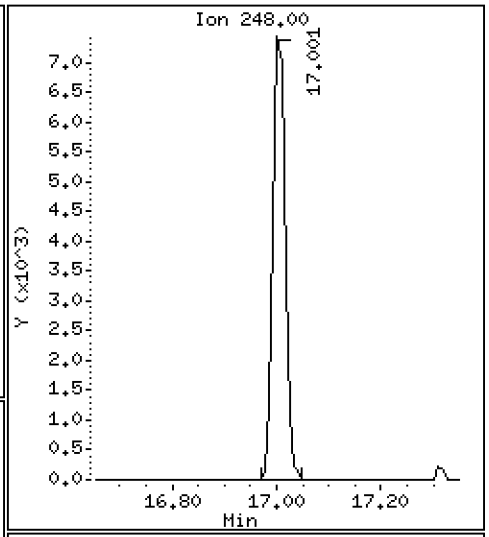
Concentration: 0.1968 ug/mL

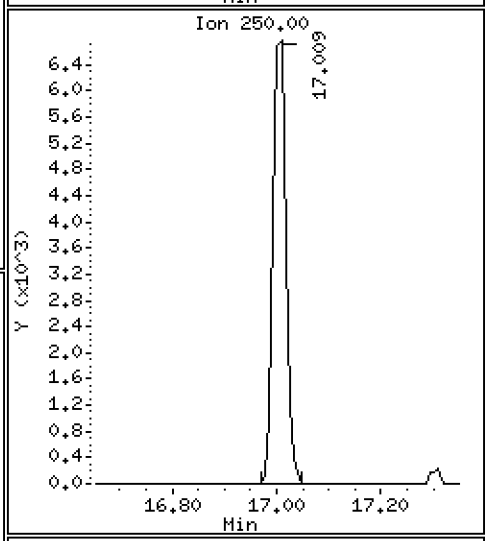


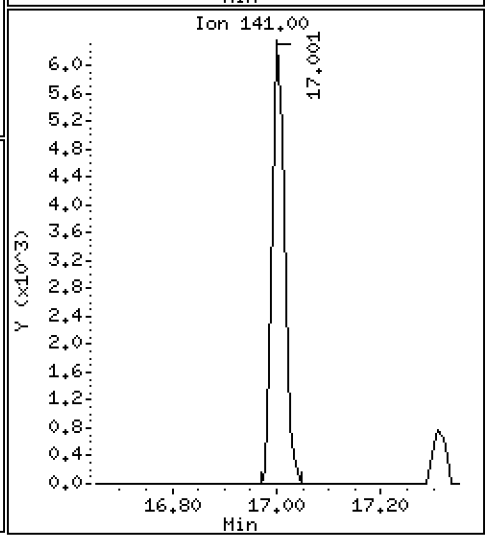












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

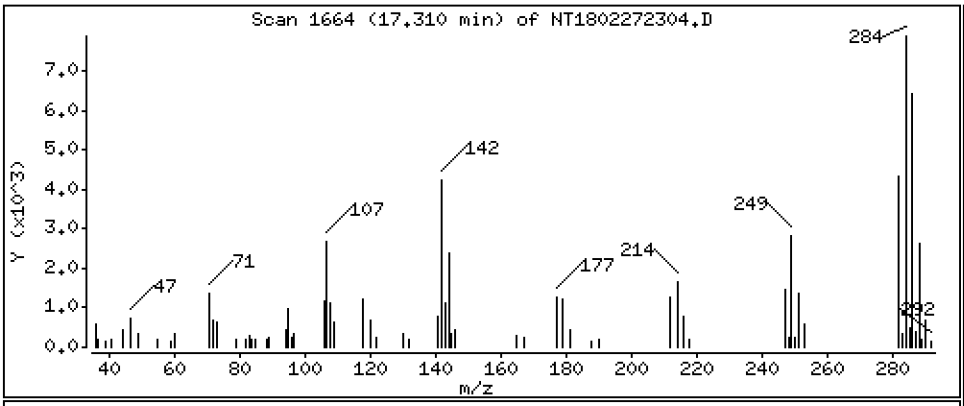
Operator: VTS

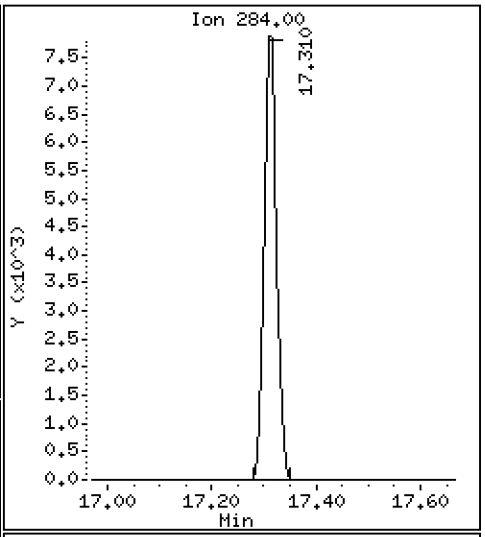
Column phase: ZB-5msi

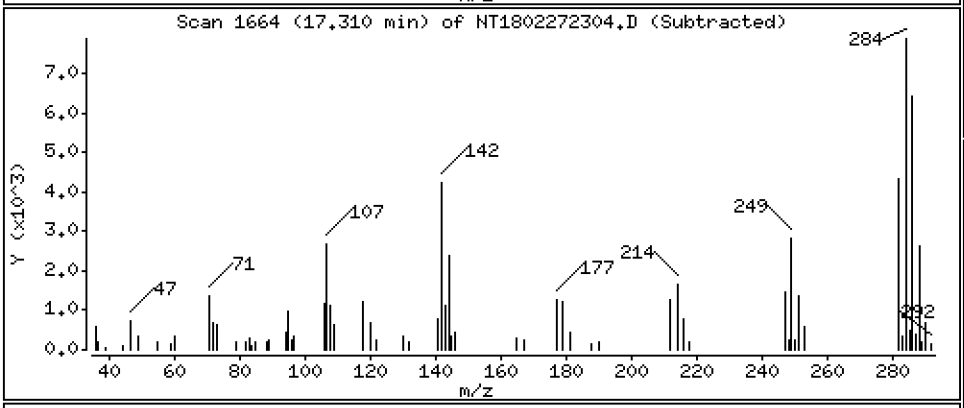
Column diameter: 0.25

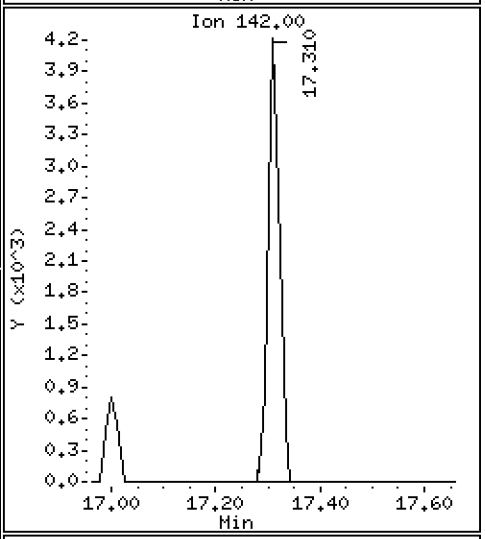
57 Hexachlorobenzene

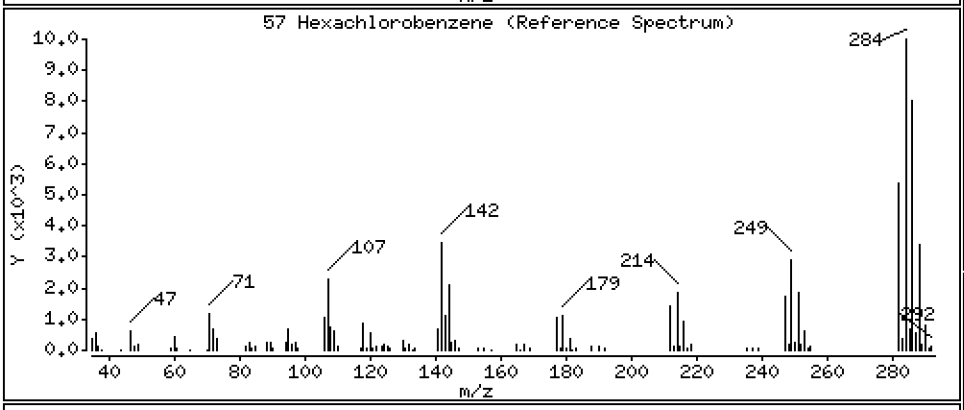
Concentration: 0.1948 ug/mL

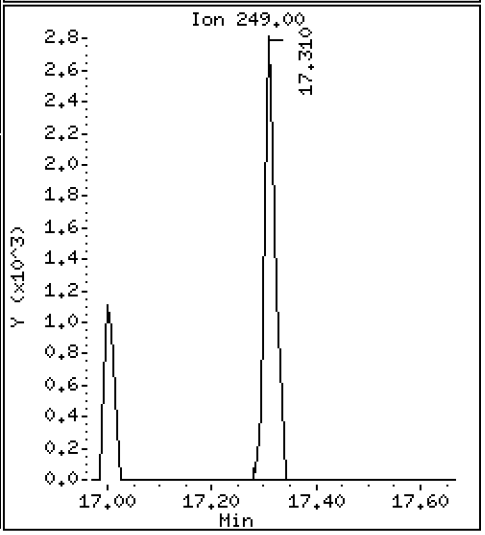


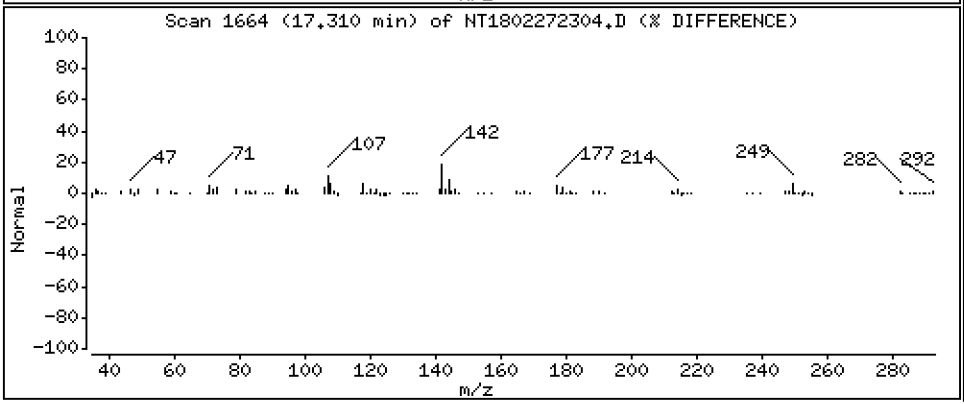












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

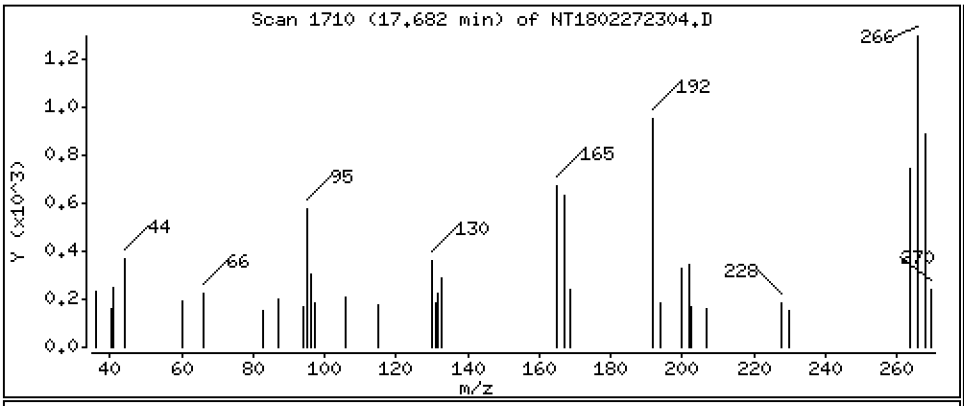
Operator: VTS

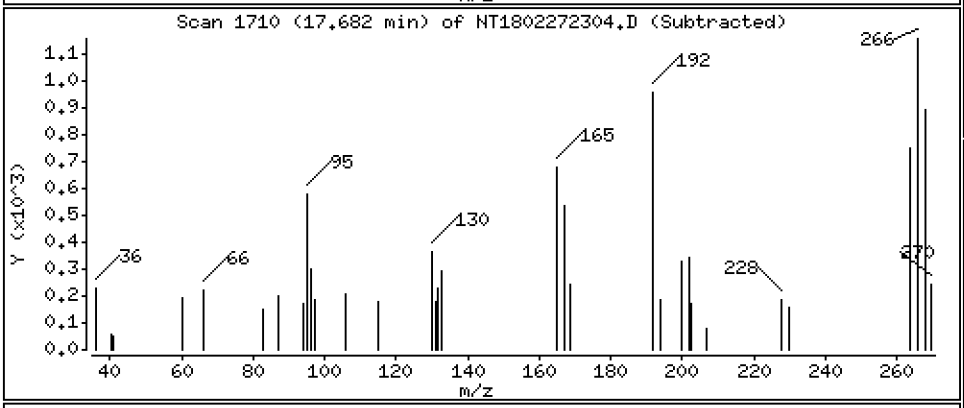
Column phase: ZB-5msi

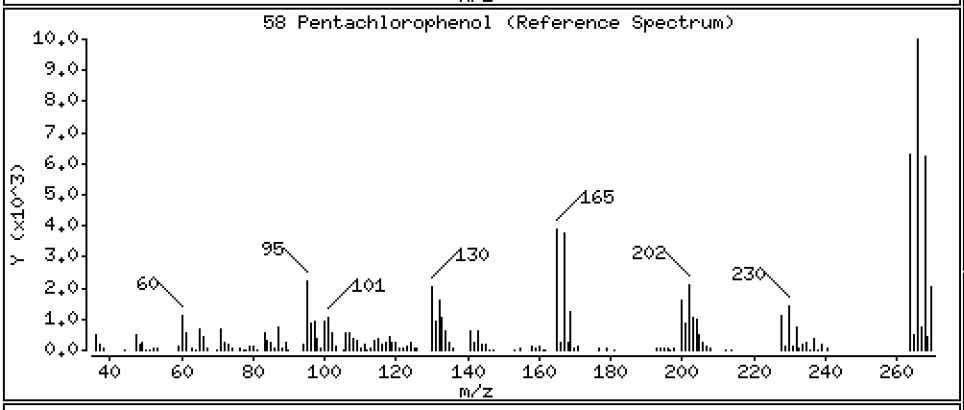
Column diameter: 0.25

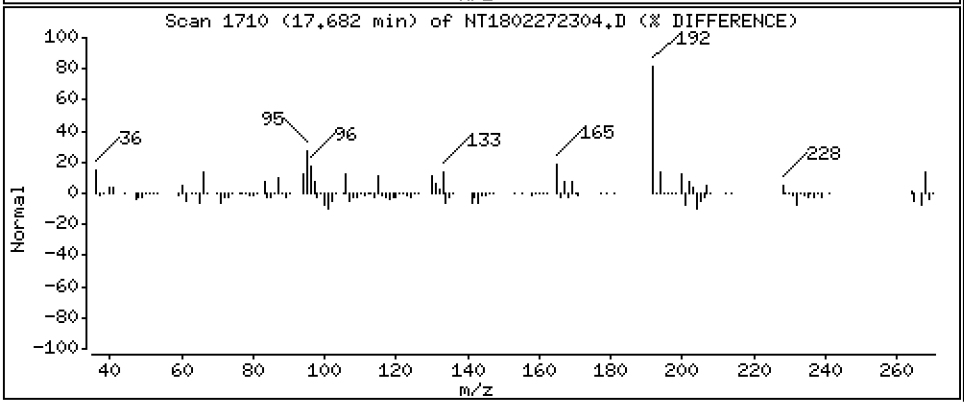
58 Pentachlorophenol

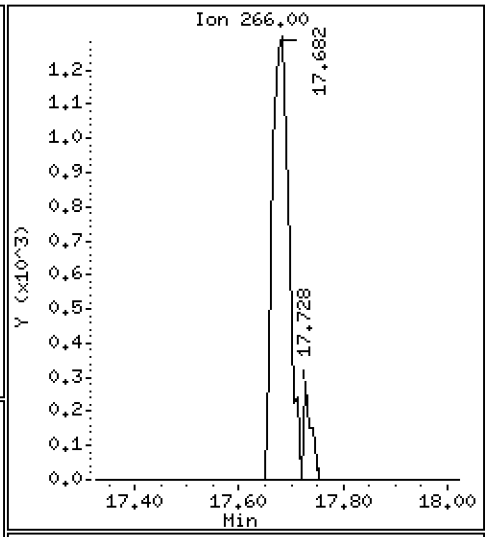
Concentration: 0.1573 ug/mL

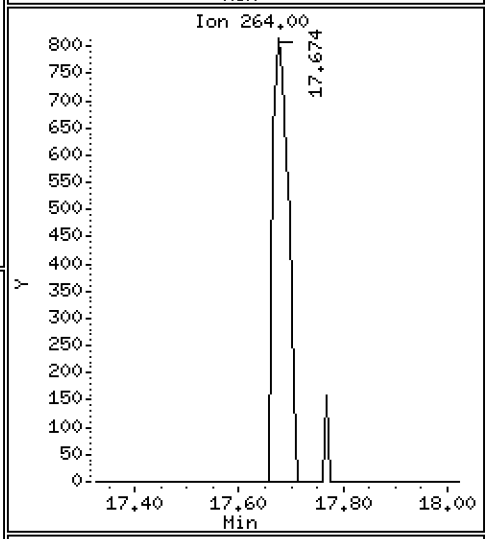


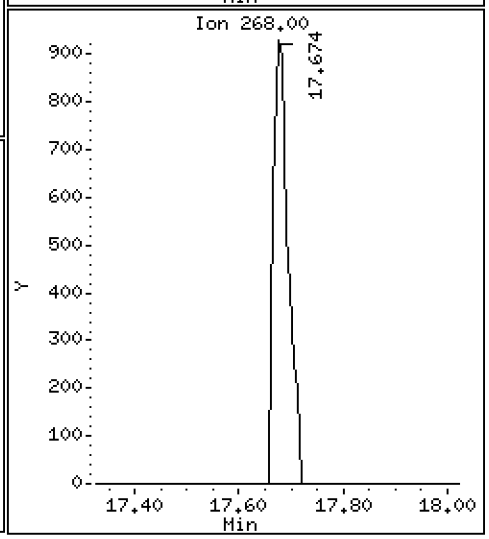












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

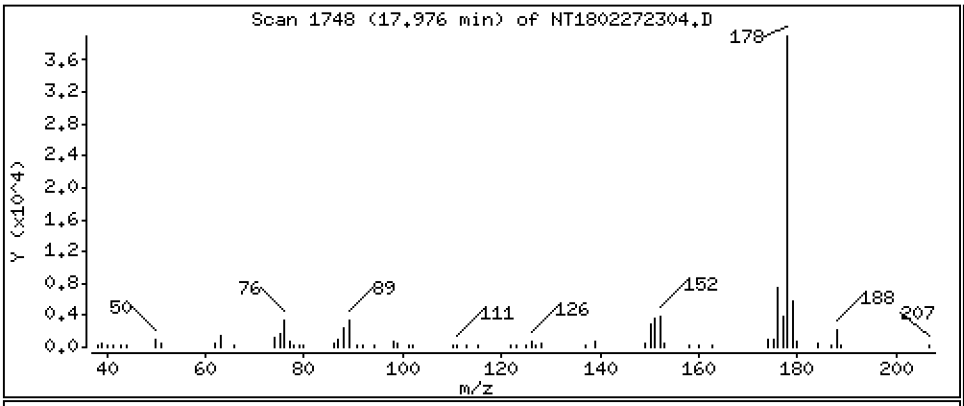
Operator: VTS

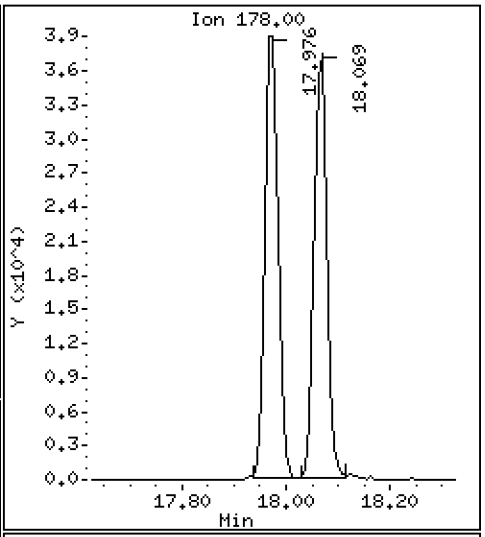
Column phase: ZB-5msi

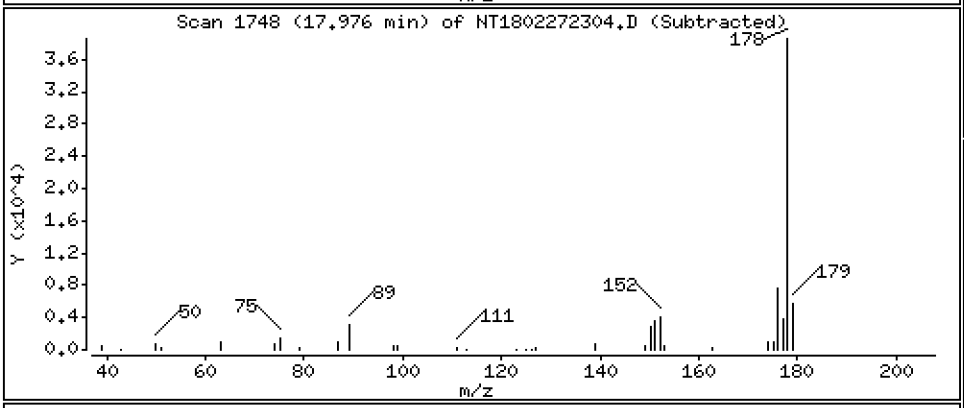
Column diameter: 0.25

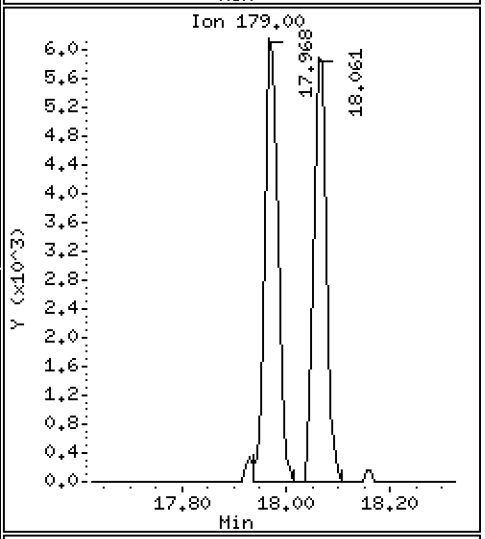
60 Phenanthrene

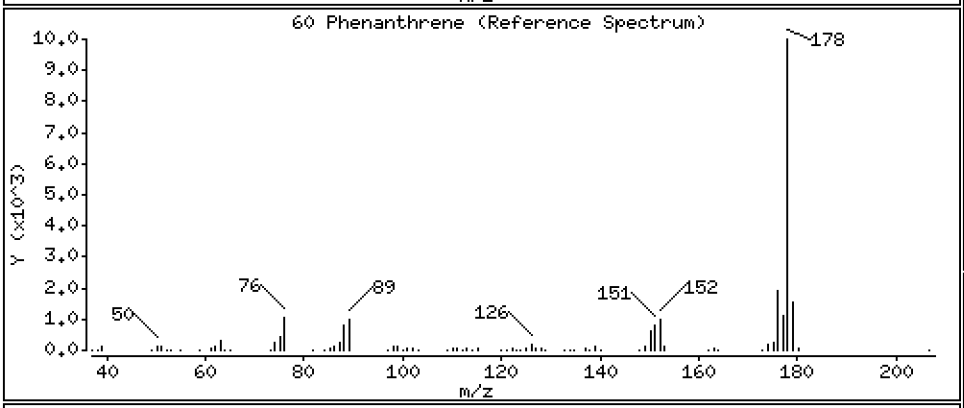
Concentration: 0.2160 ug/mL

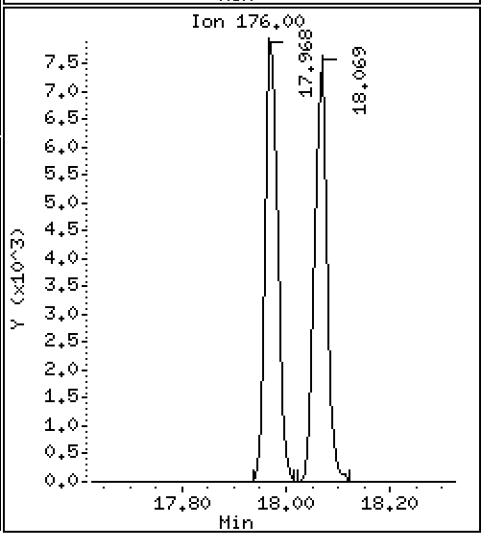


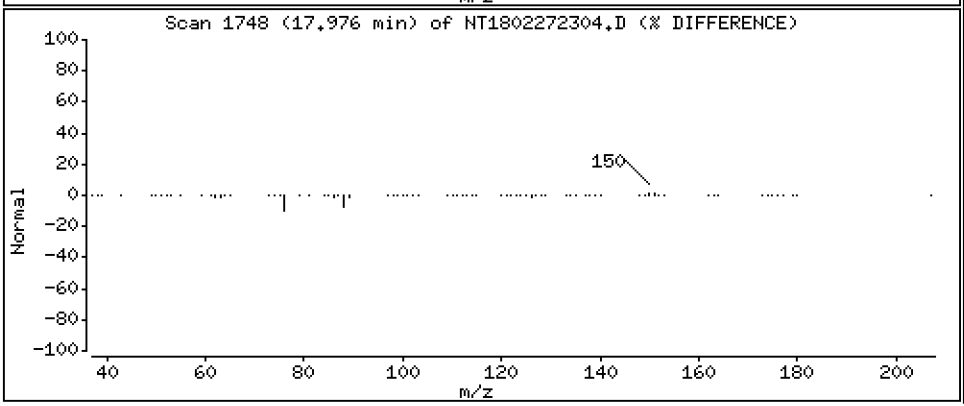












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

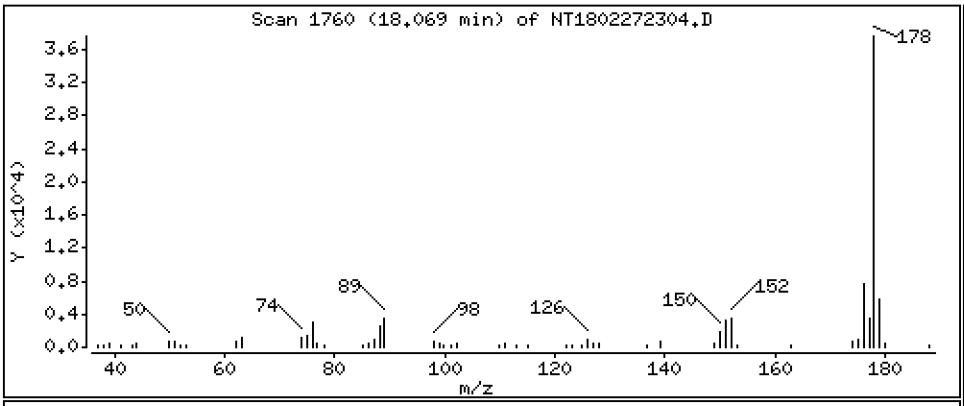
Operator: VTS

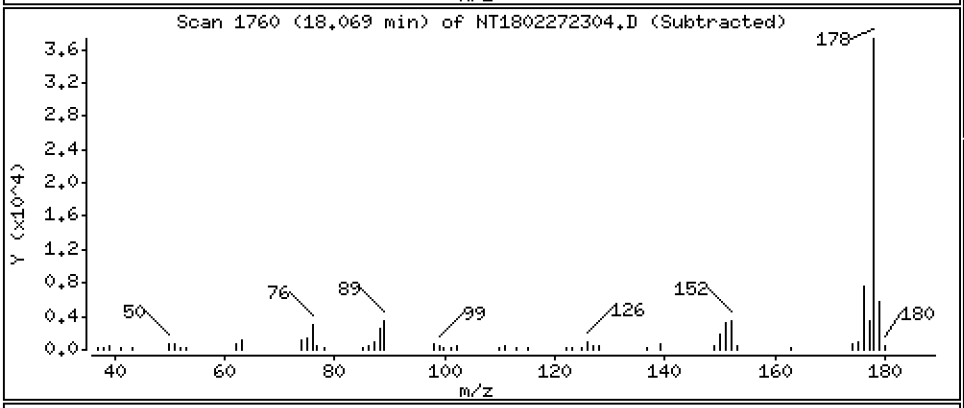
Column phase: ZB-5msi

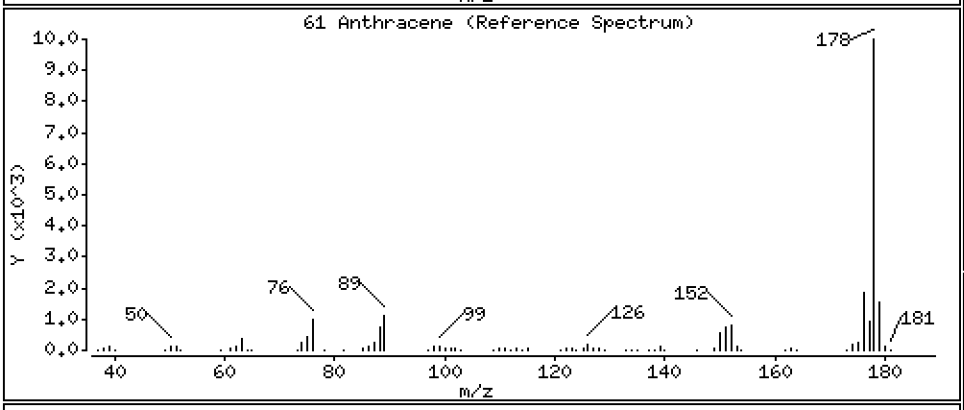
Column diameter: 0.25

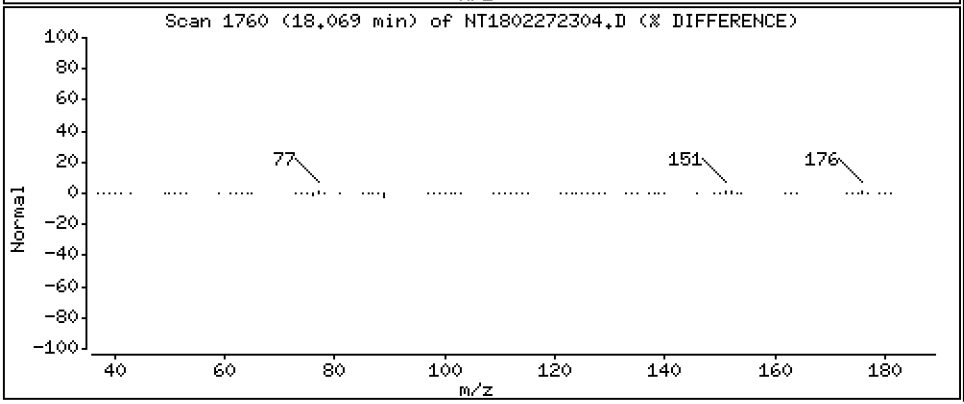
61 Anthracene

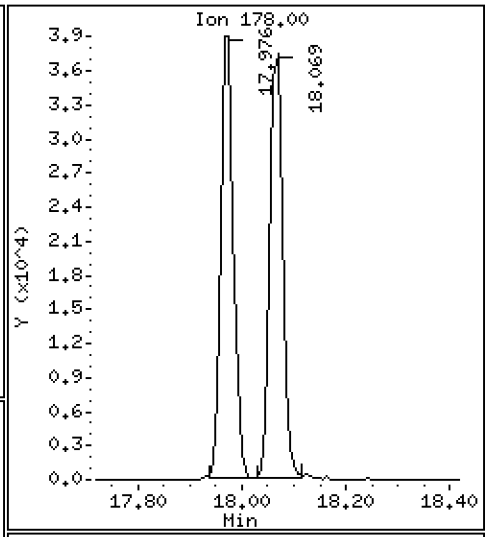
Concentration: 0.2110 ug/mL

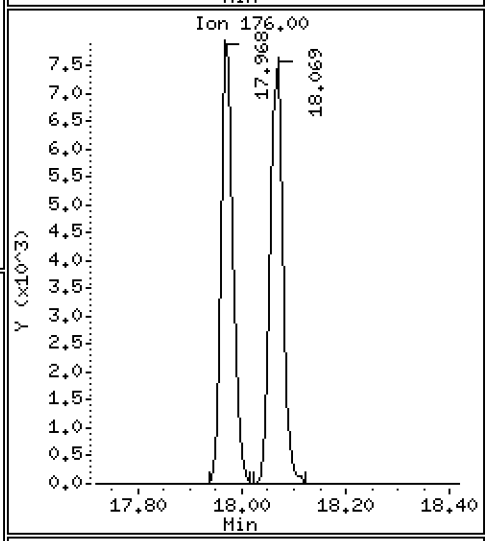


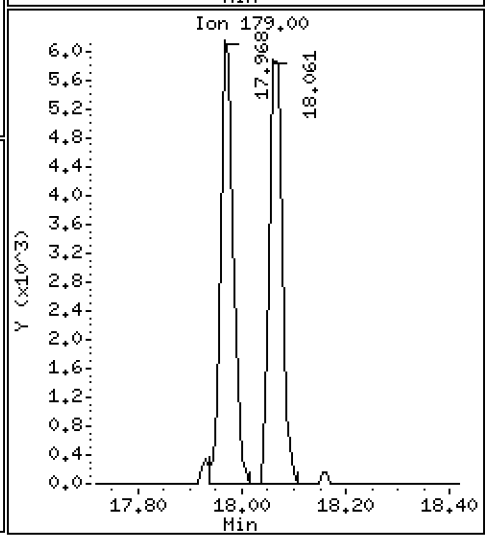












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

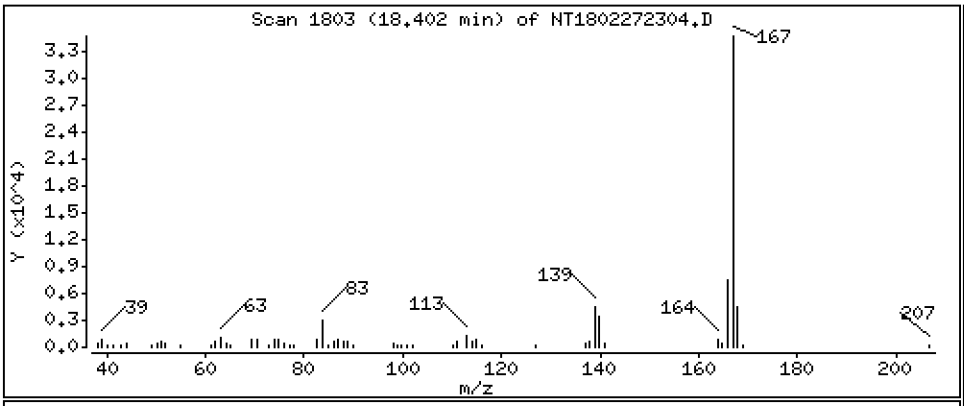
Operator: VTS

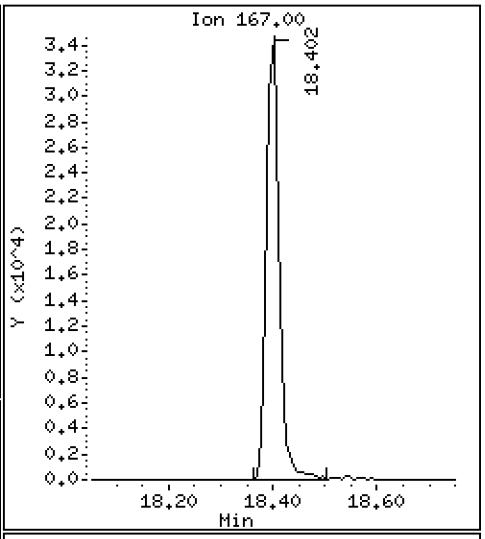
Column phase: ZB-5msi

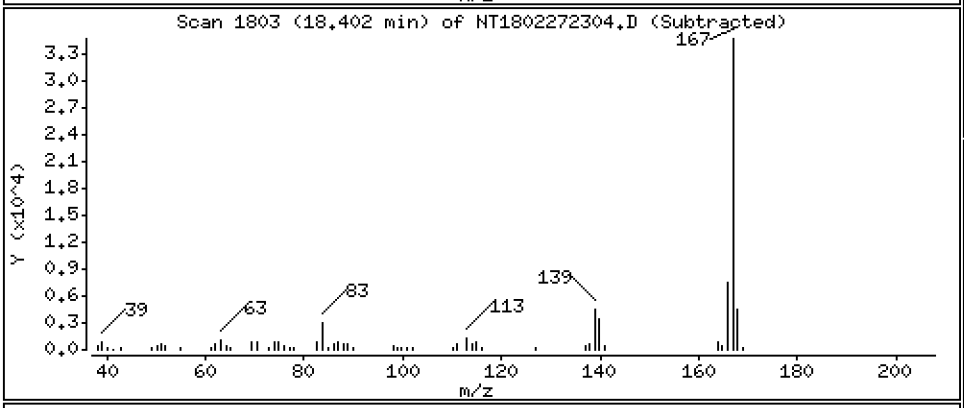
Column diameter: 0.25

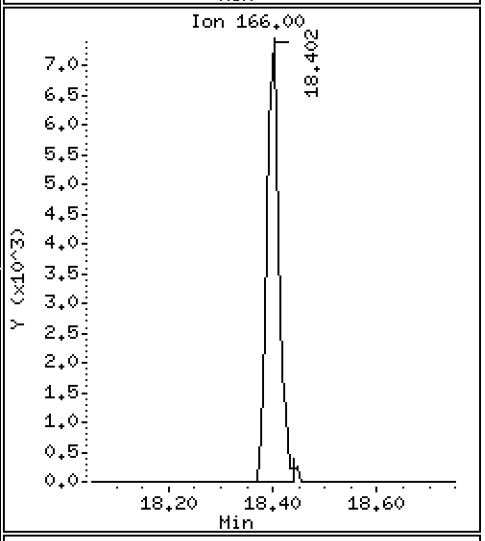
62 Carbazole

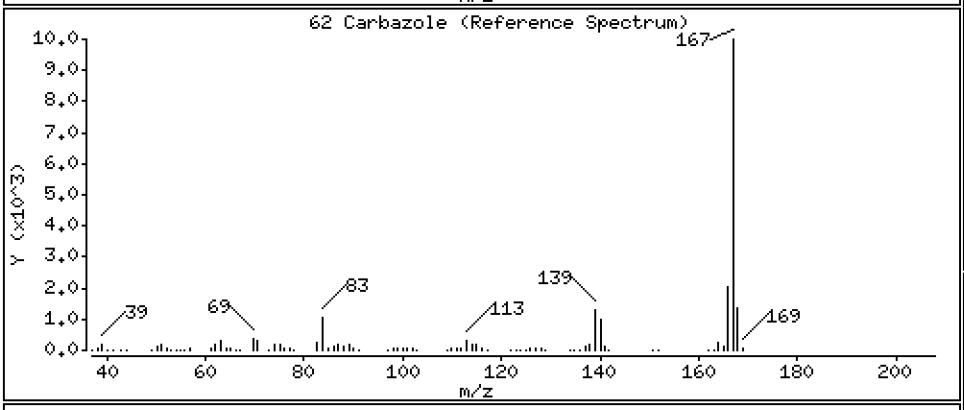
Concentration: 0.2094 ug/mL

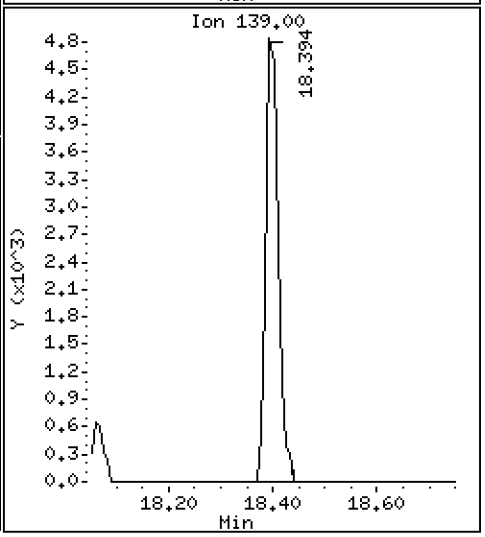


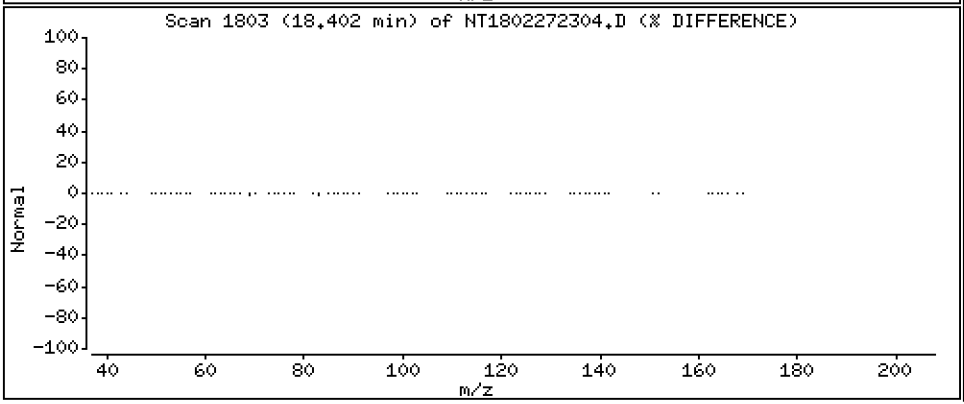












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

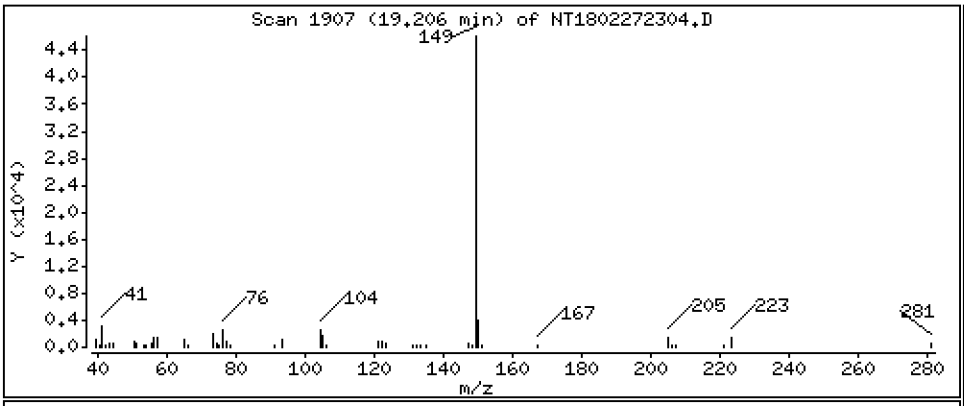
Operator: VTS

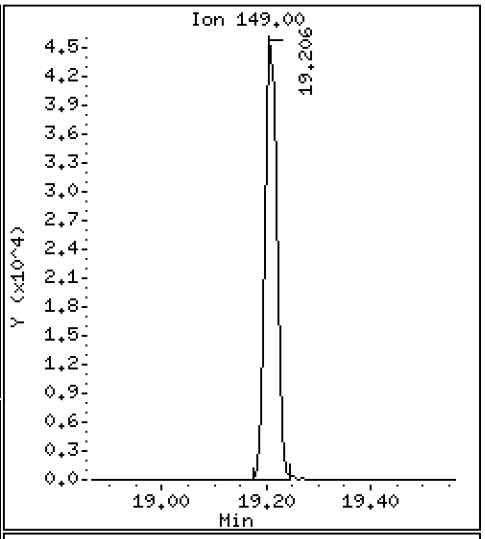
Column phase: ZB-5msi

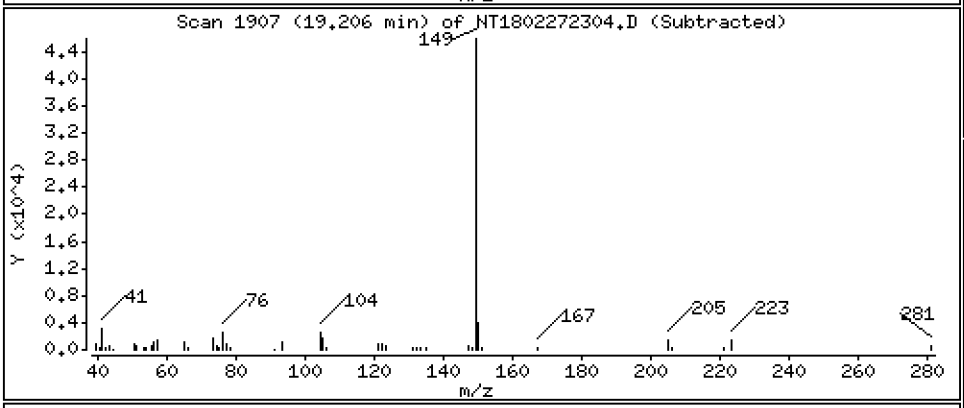
Column diameter: 0.25

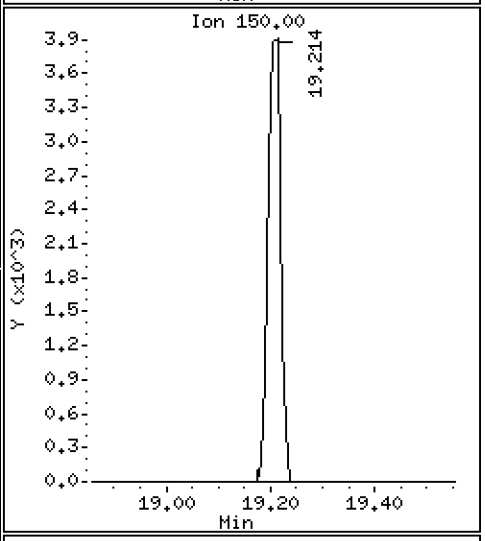
63 Di-n-butylphthalate

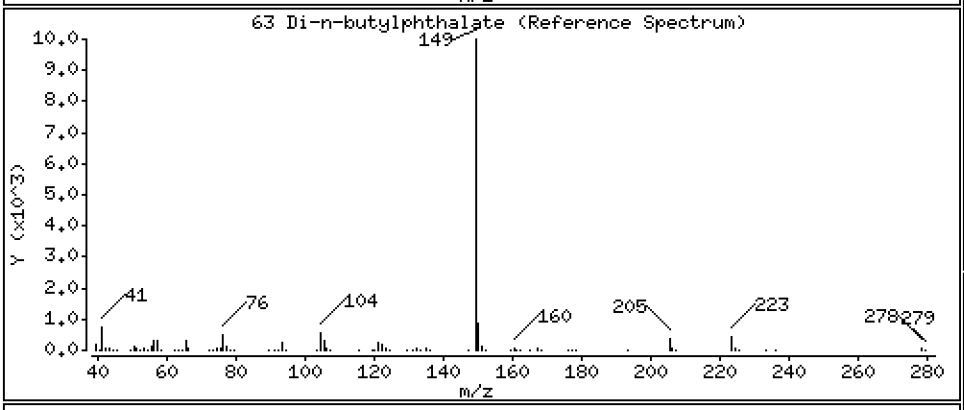
Concentration: 0.2308 ug/mL

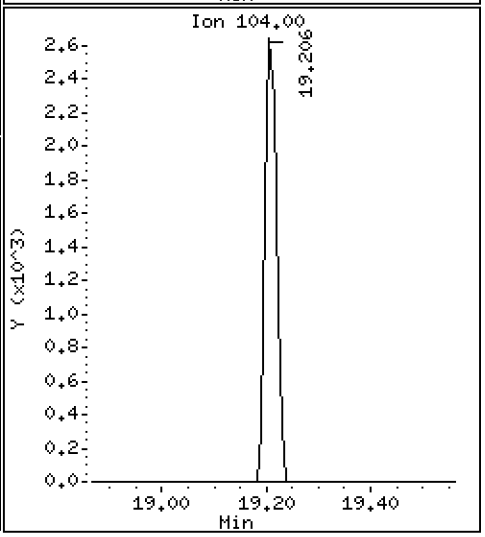


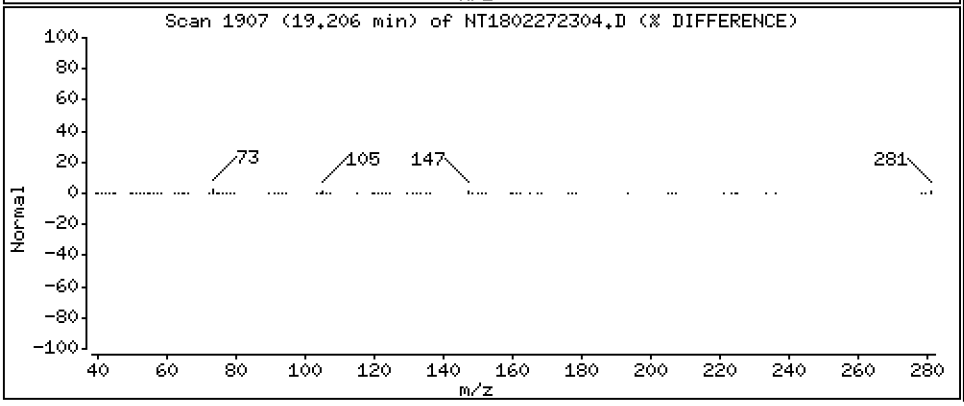












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

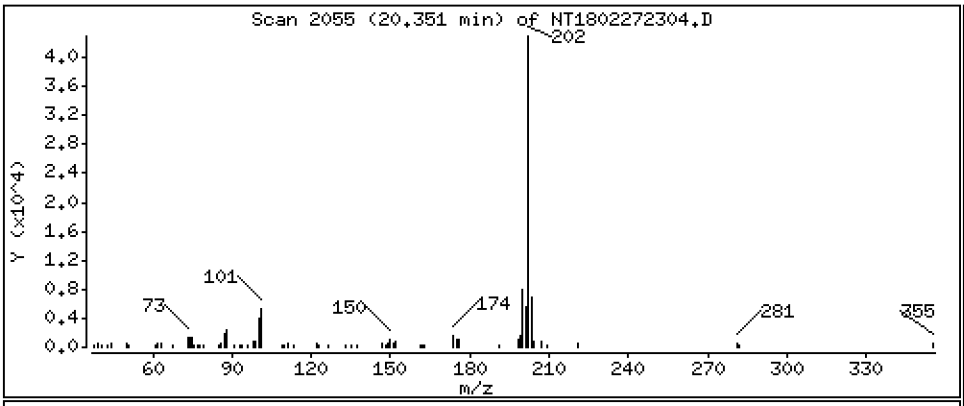
Operator: VTS

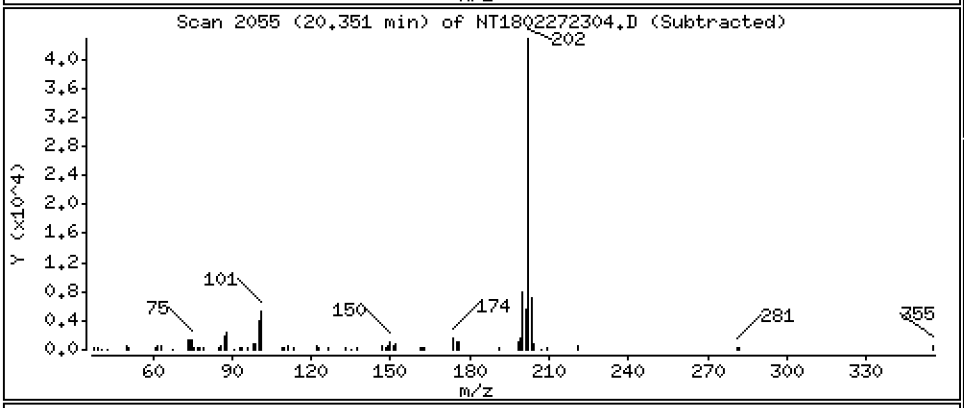
Column phase: ZB-5msi

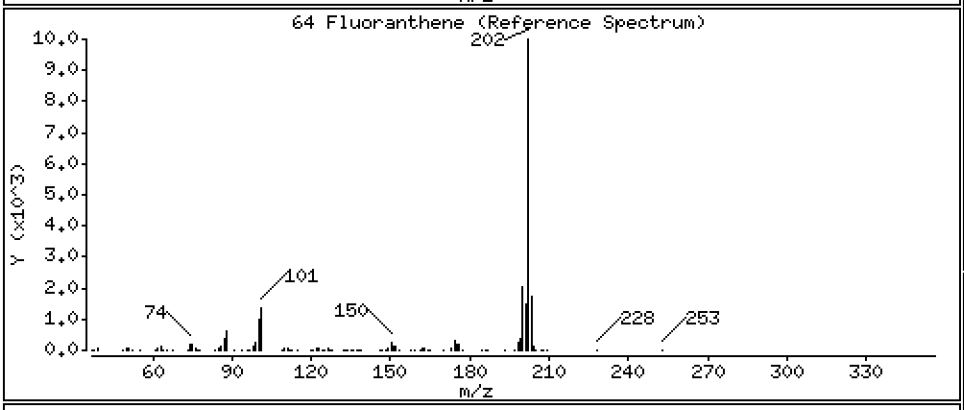
Column diameter: 0.25

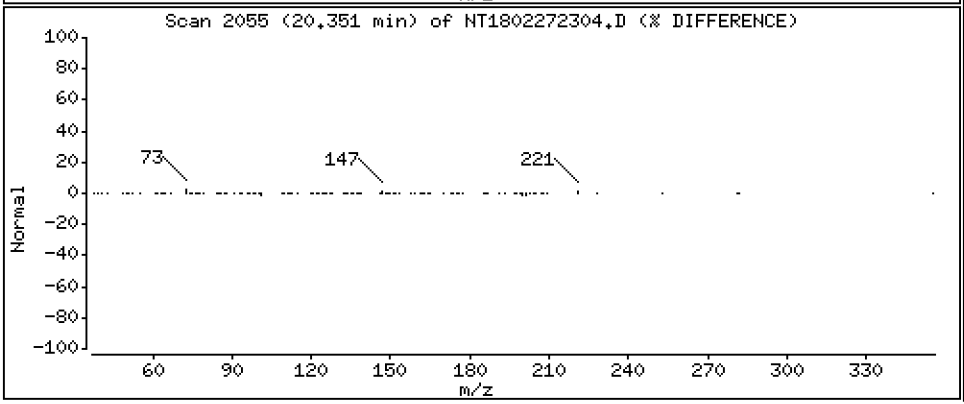
64 Fluoranthene

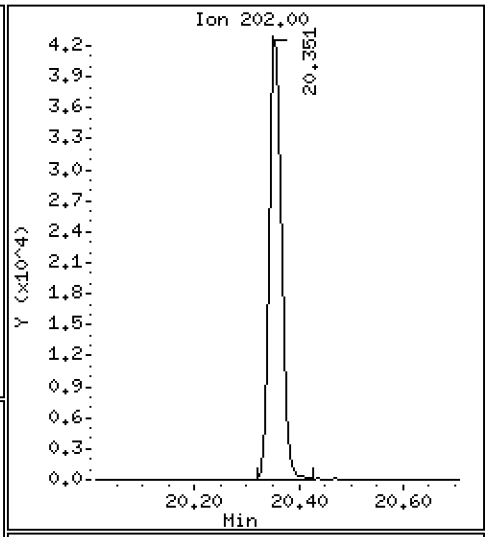
Concentration: 0.2307 ug/mL

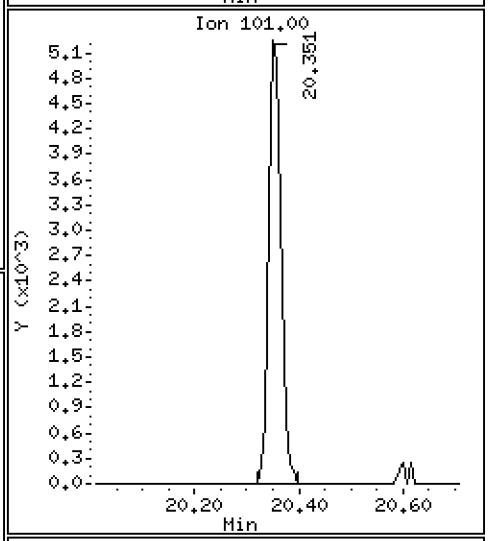


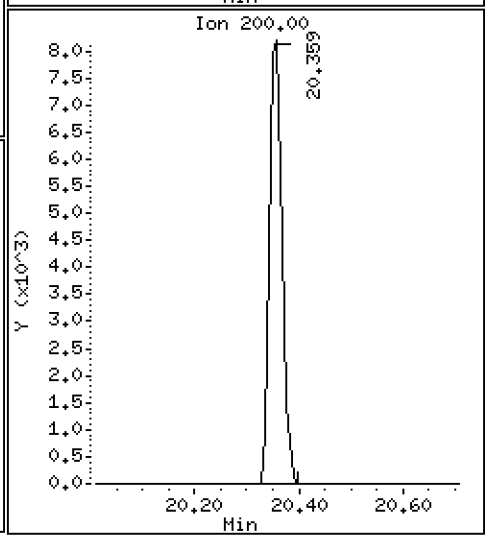












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

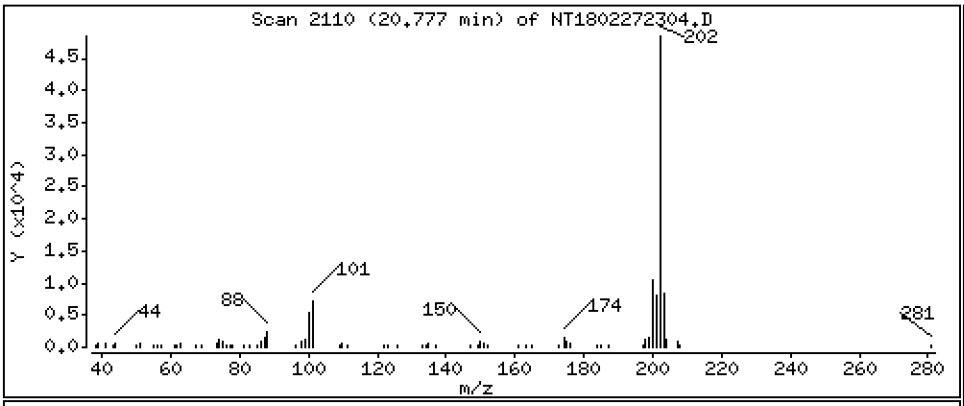
Operator: VTS

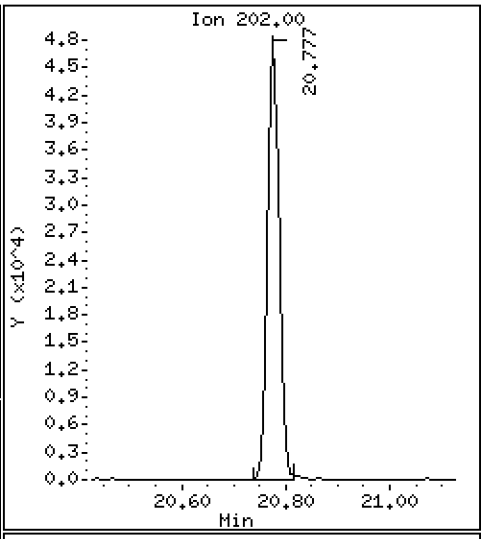
Column phase: ZB-5msi

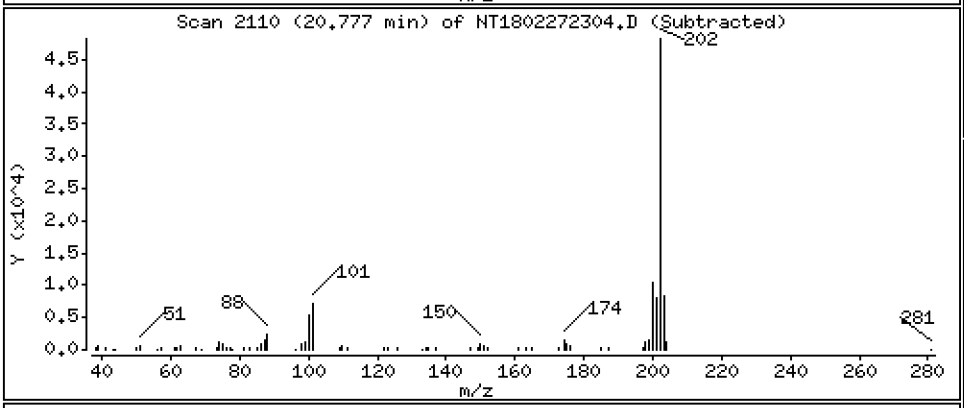
Column diameter: 0.25

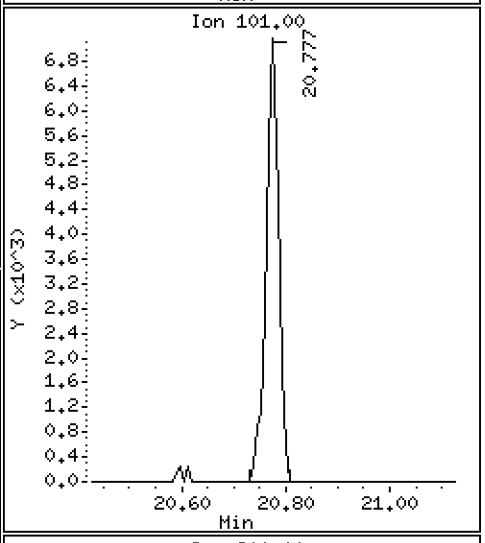
65 Pyrene

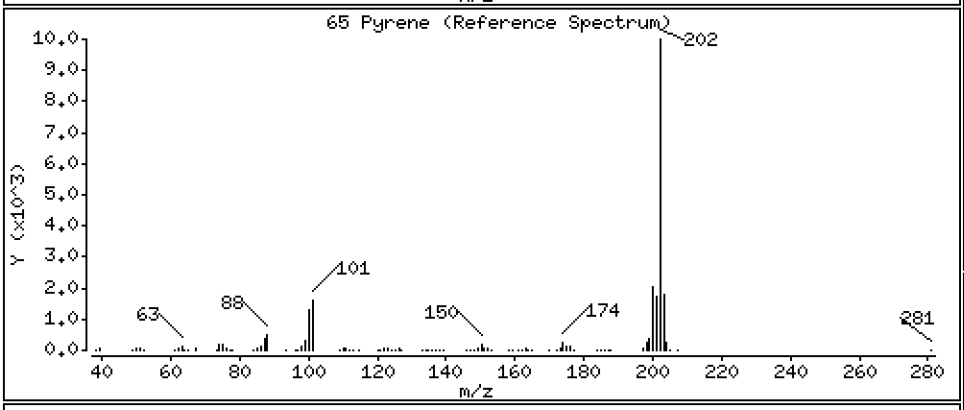
Concentration: 0.2250 ug/mL

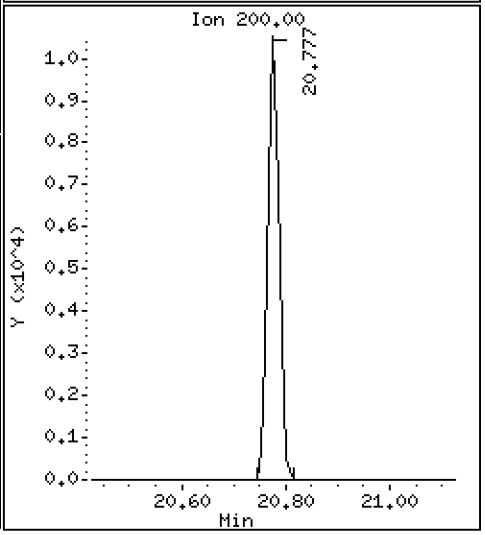


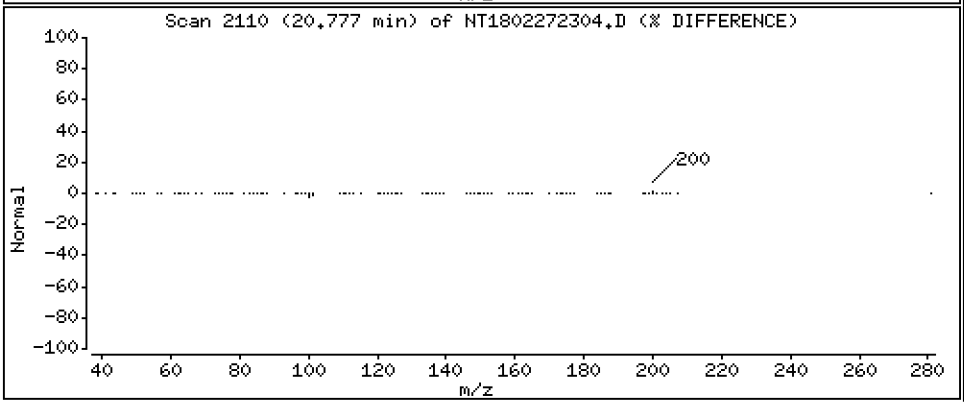












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

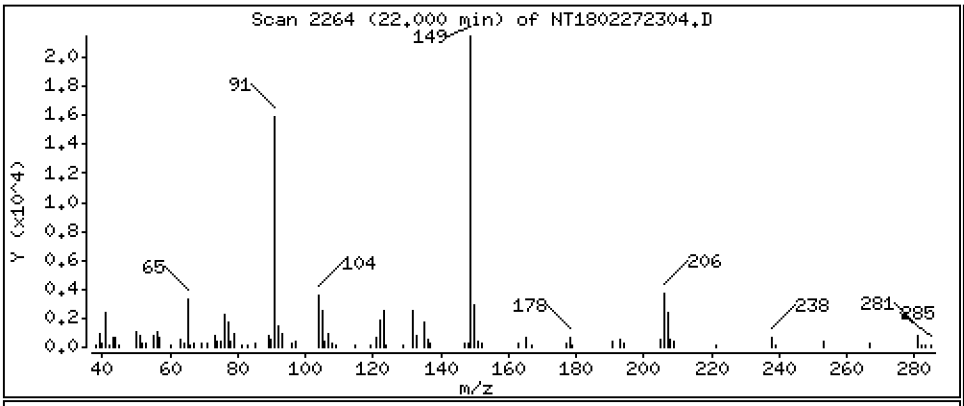
Operator: VTS

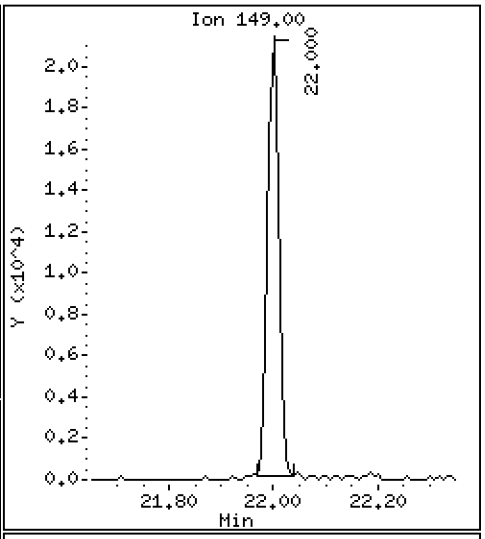
Column phase: ZB-5msi

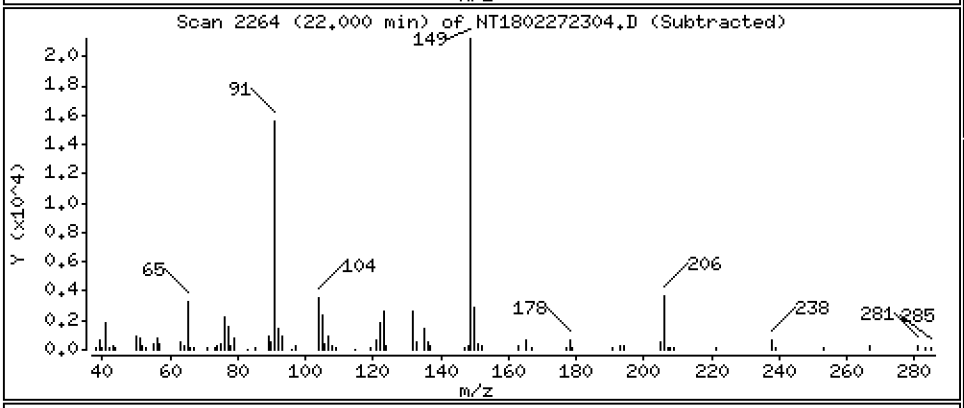
Column diameter: 0.25

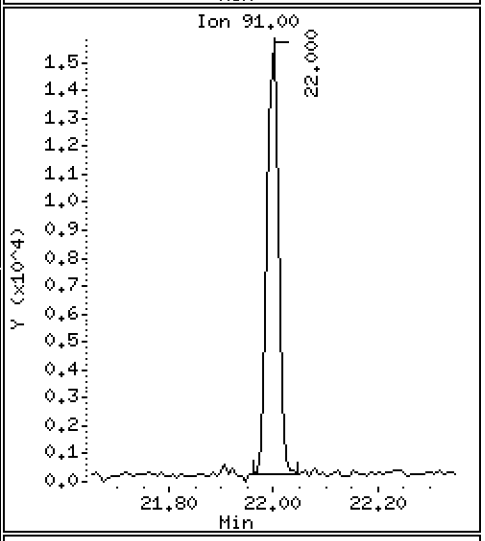
67 Butylbenzylphthalate

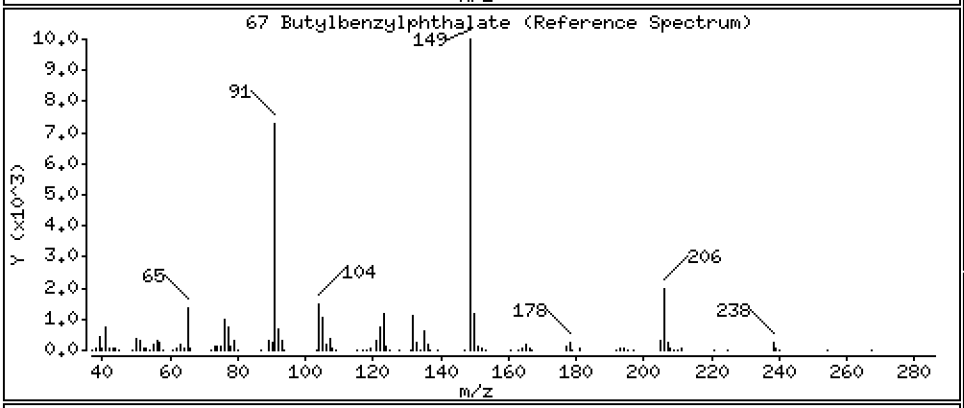
Concentration: 0.2554 ug/mL

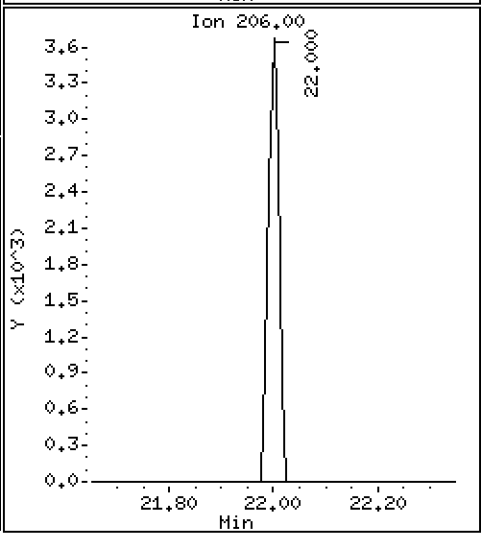


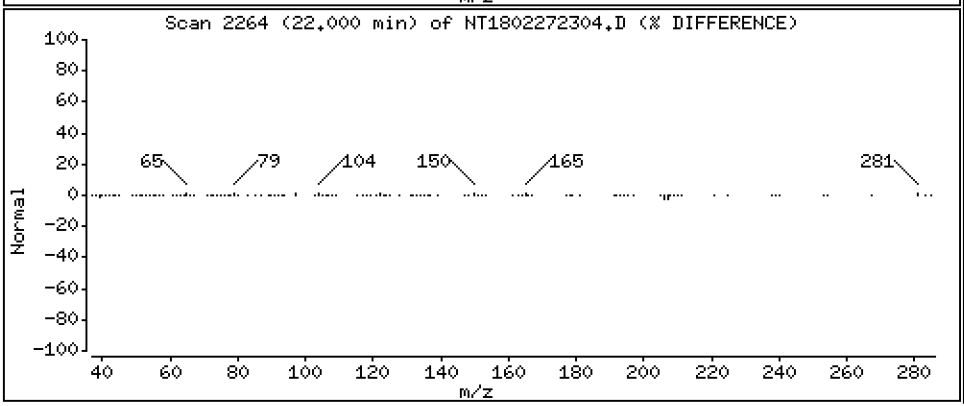












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

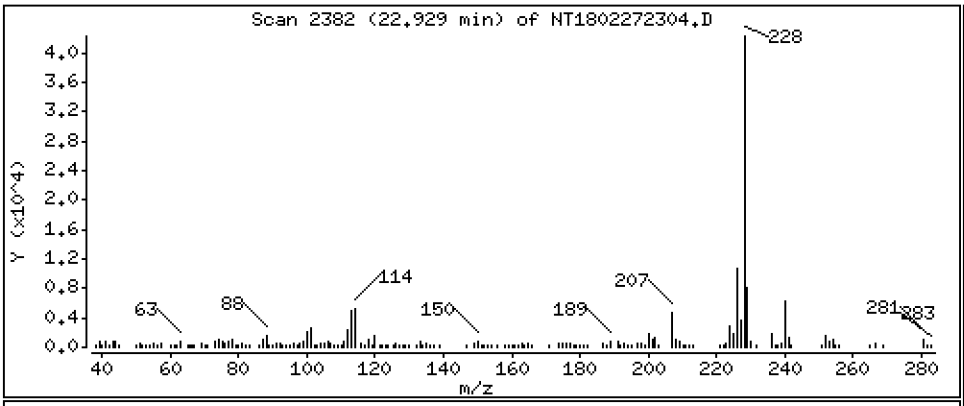
Operator: VTS

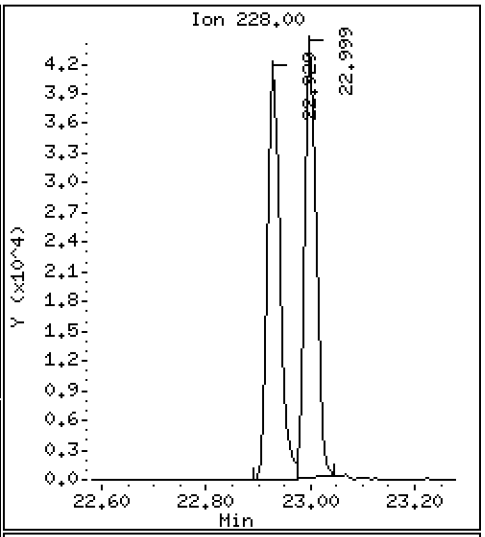
Column phase: ZB-5msi

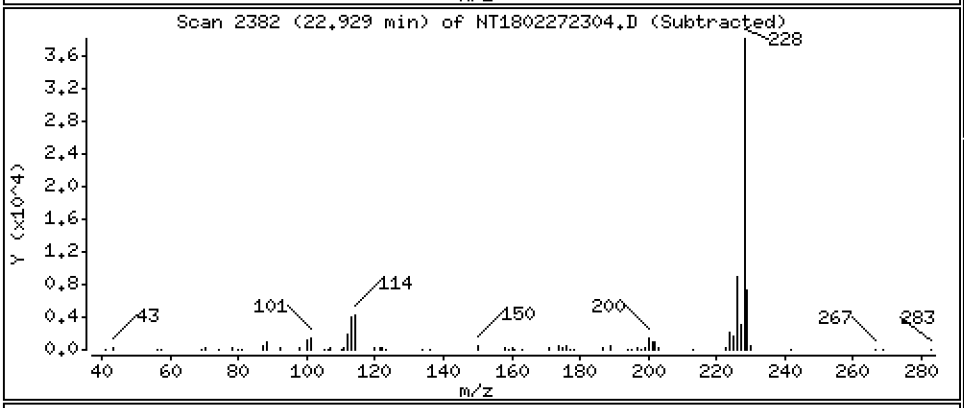
Column diameter: 0.25

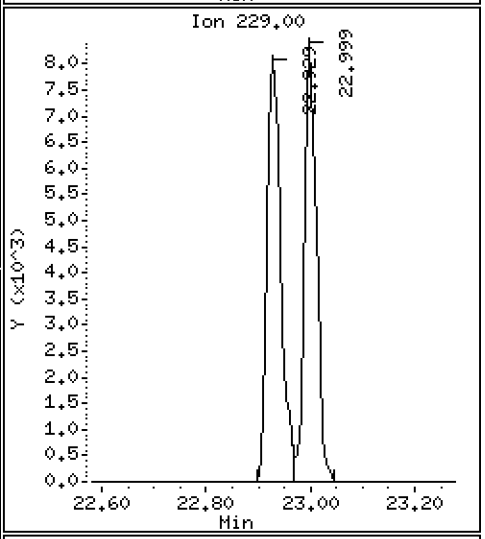
68 Benzo(a)anthracene

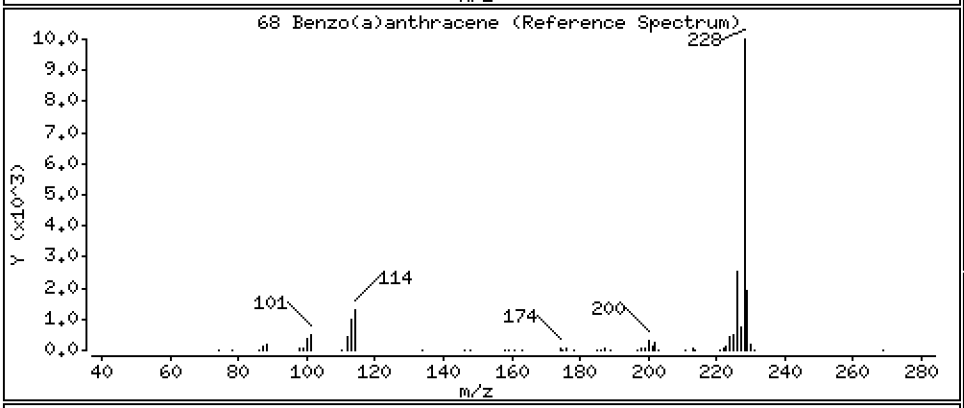
Concentration: 0.2233 ug/mL

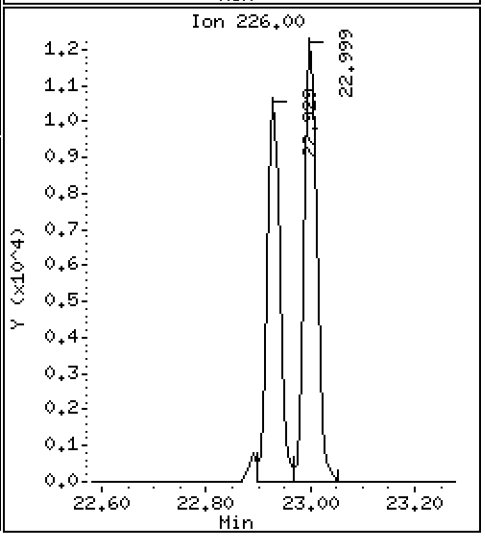


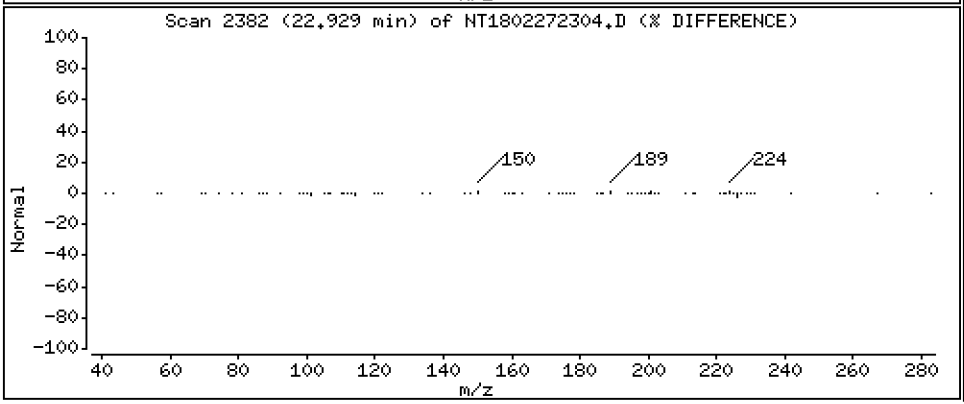












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

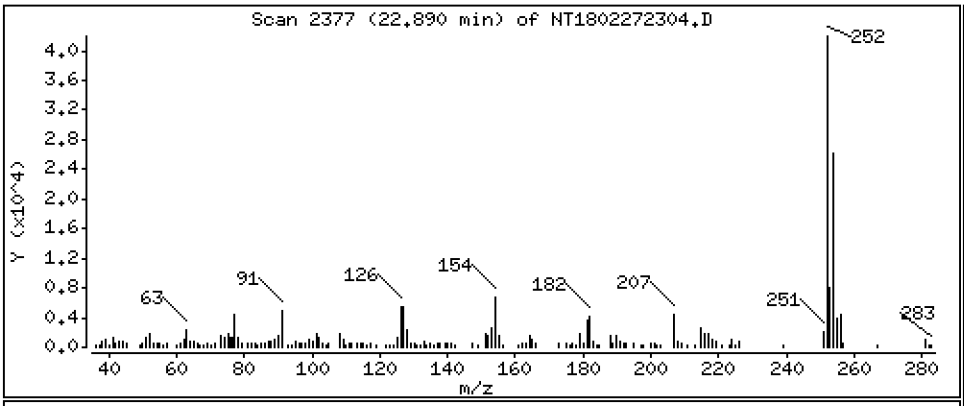
Operator: VTS

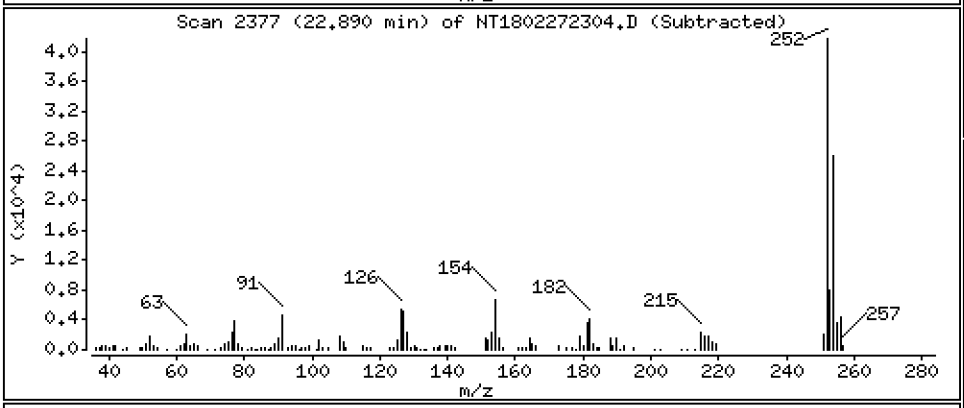
Column phase: ZB-5msi

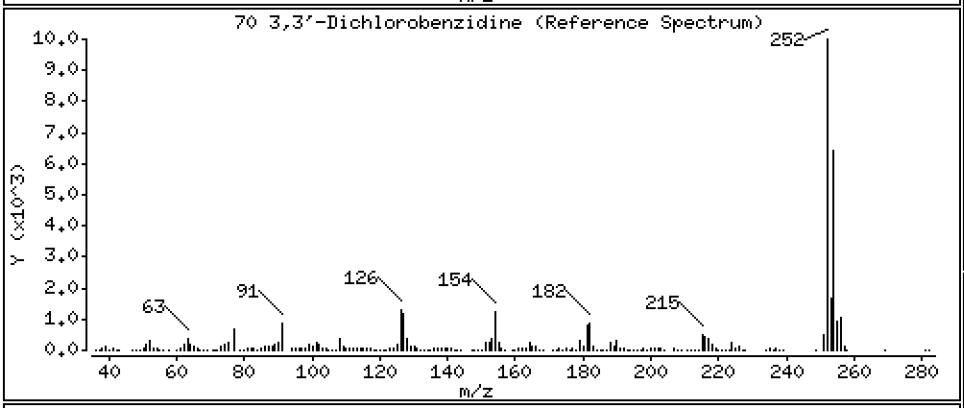
Column diameter: 0.25

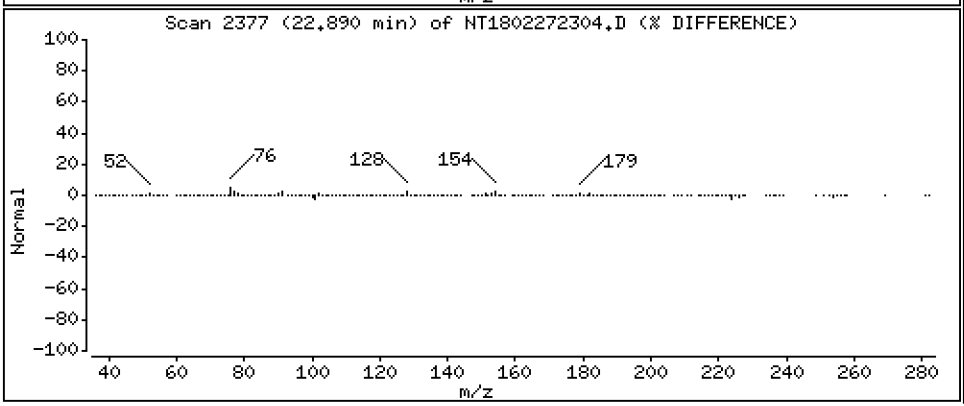
70 3,3'-Dichlorobenzidine

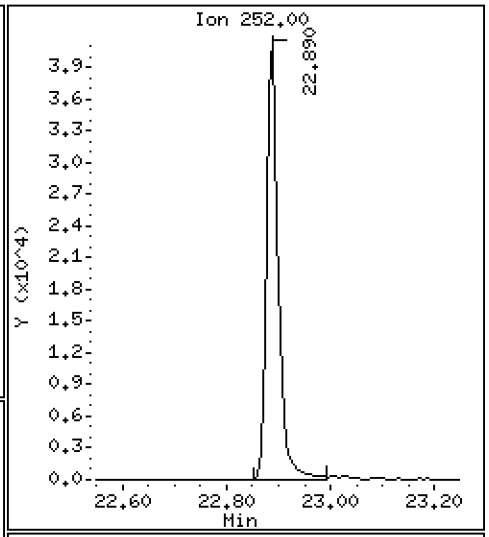
Concentration: 0.5845 ug/mL

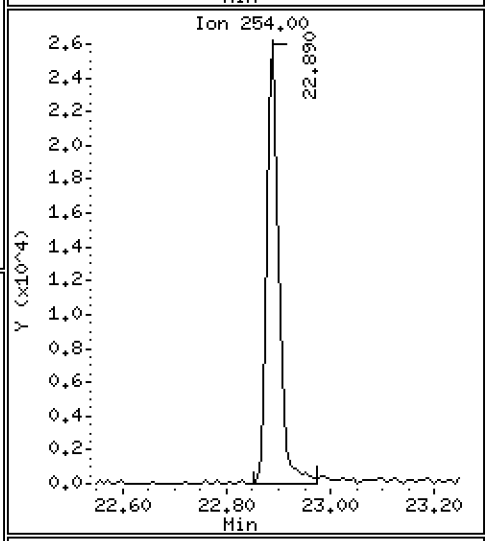


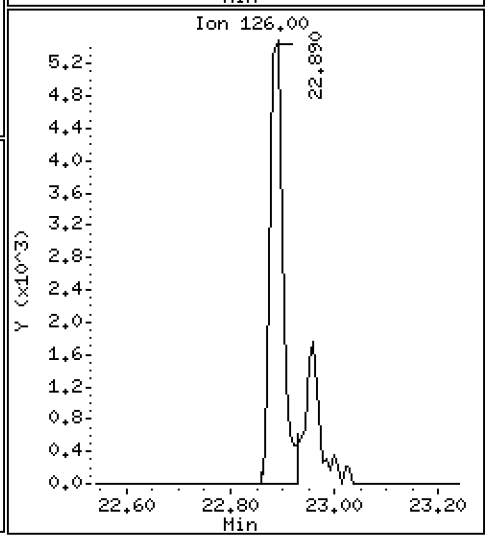












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

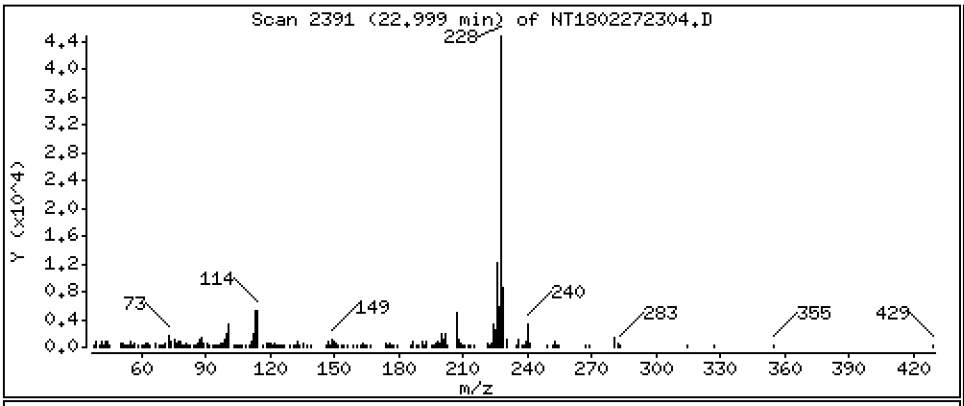
Operator: VTS

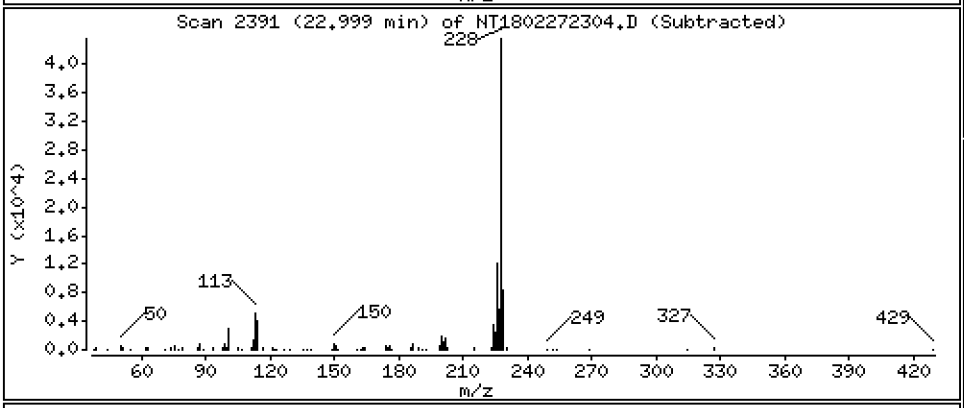
Column phase: ZB-5msi

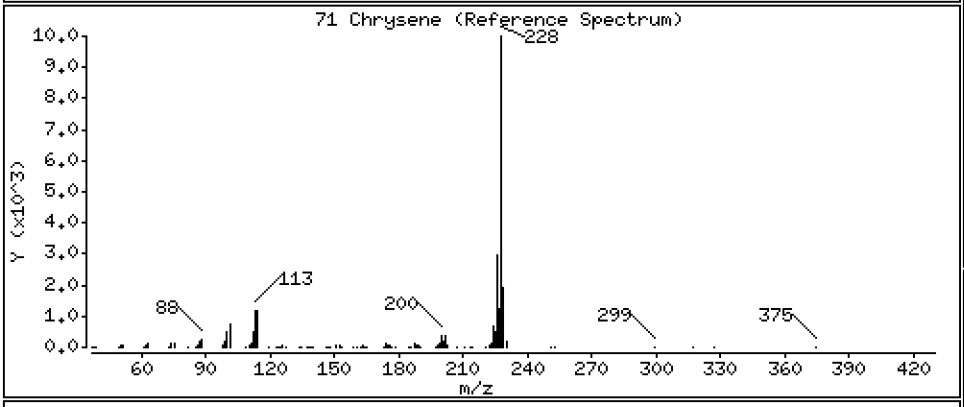
Column diameter: 0.25

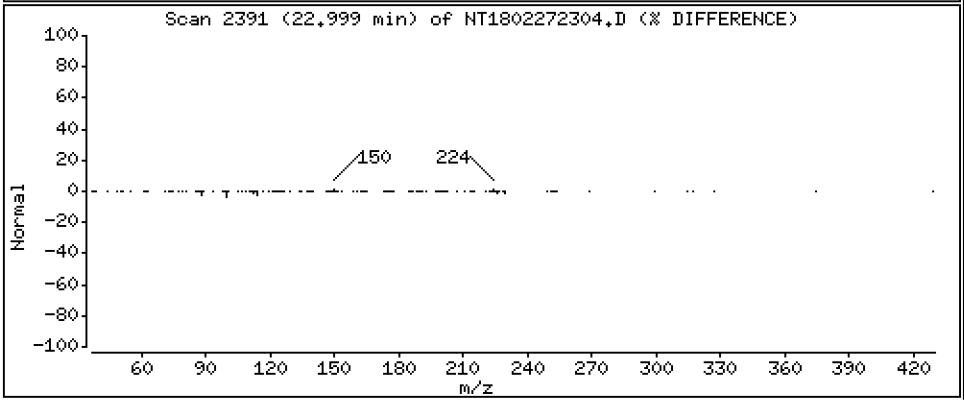
71 Chrysene

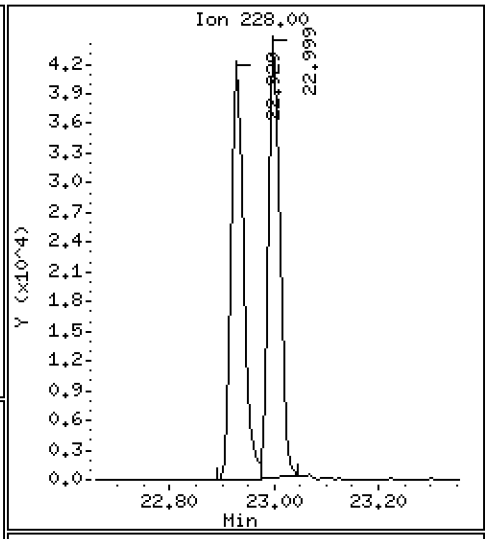
Concentration: 0.2127 ug/mL

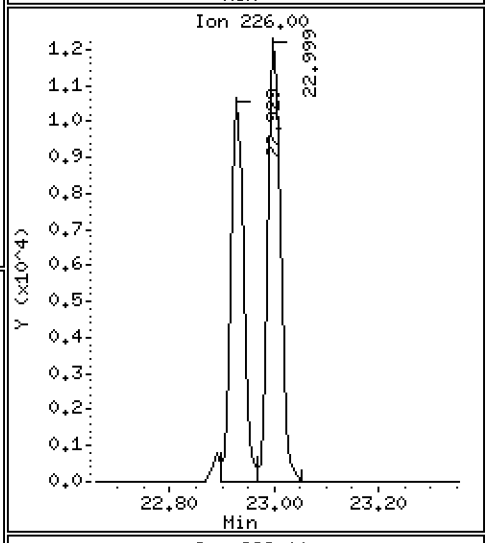


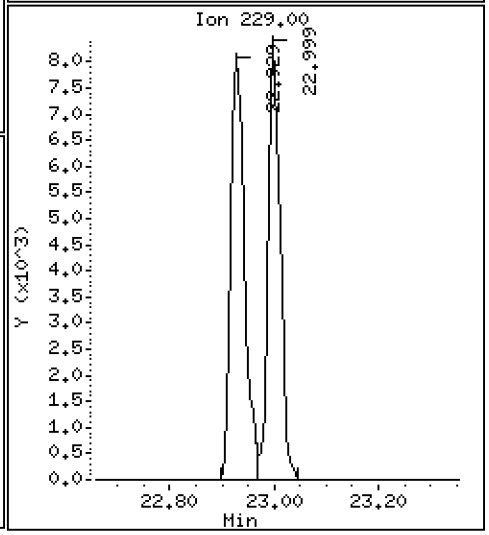












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

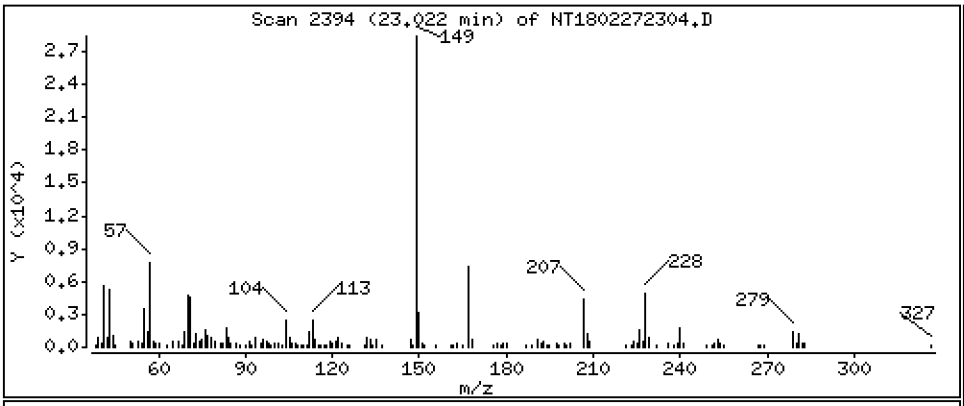
Operator: VTS

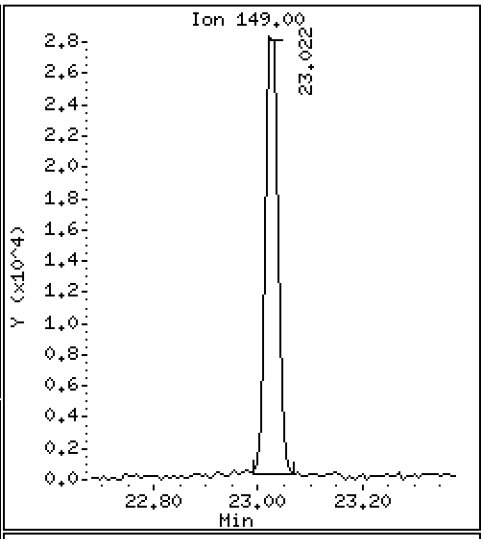
Column phase: ZB-5msi

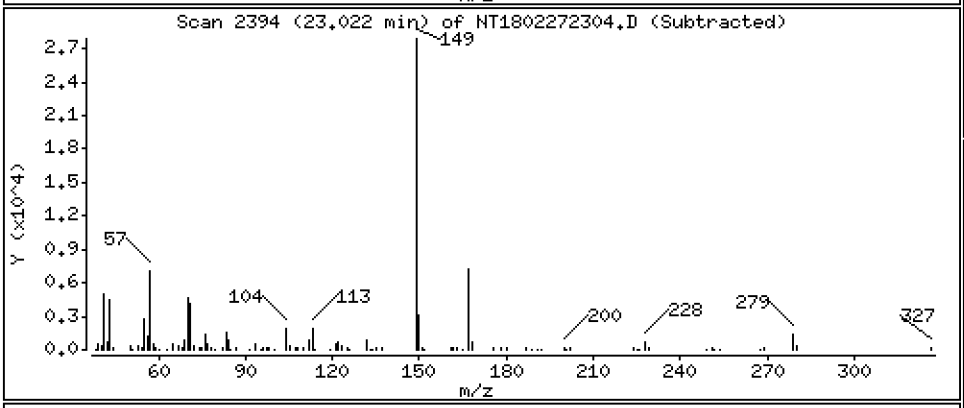
Column diameter: 0.25

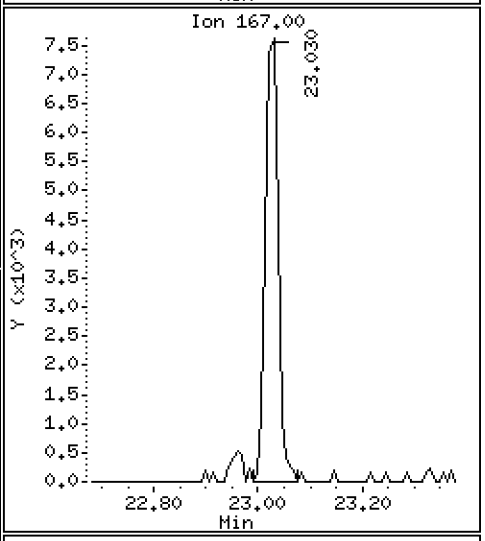
72 bis(2-Ethylhexyl)phthalate

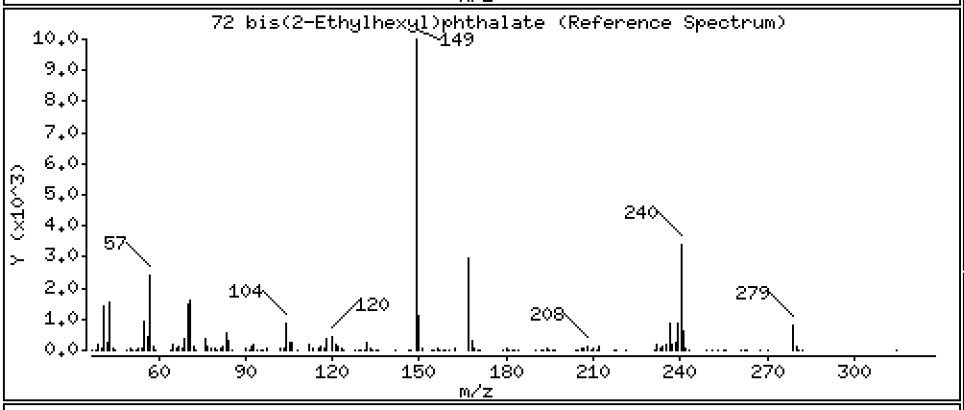
Concentration: 0.2164 ug/mL

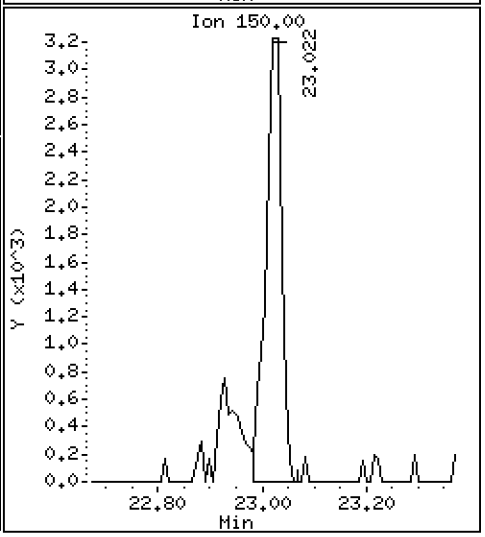


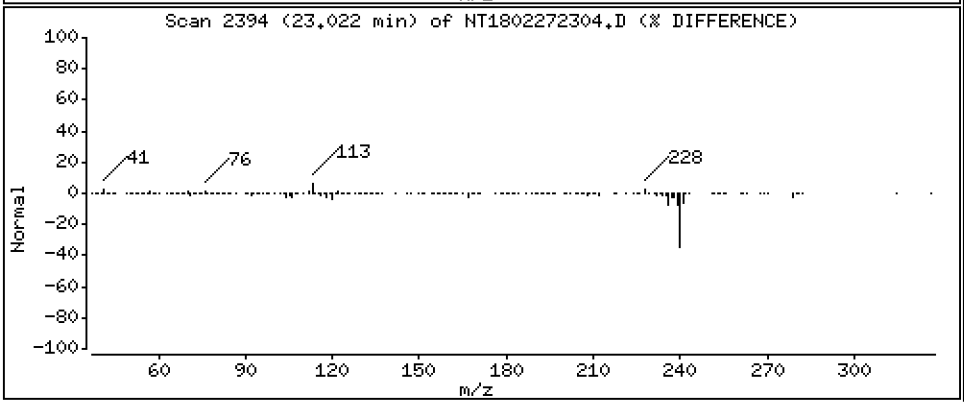












Date : 27-FEB-2023 19:10

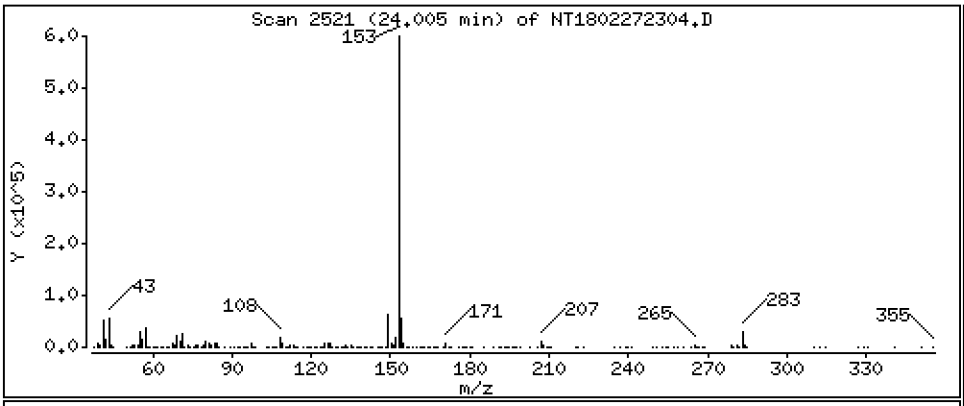
Client ID: Instrument: nt18.i

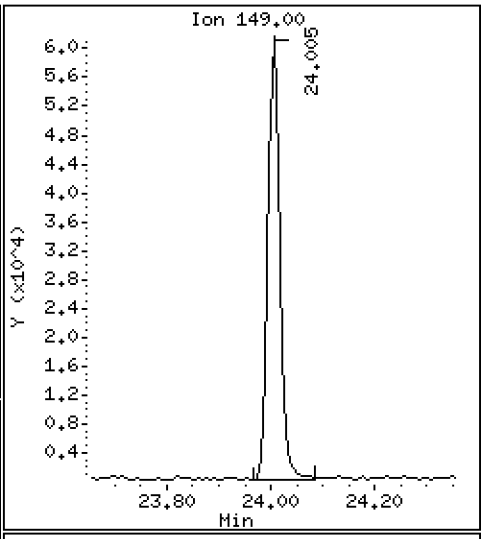
Sample Info: SLC0385-LCV1

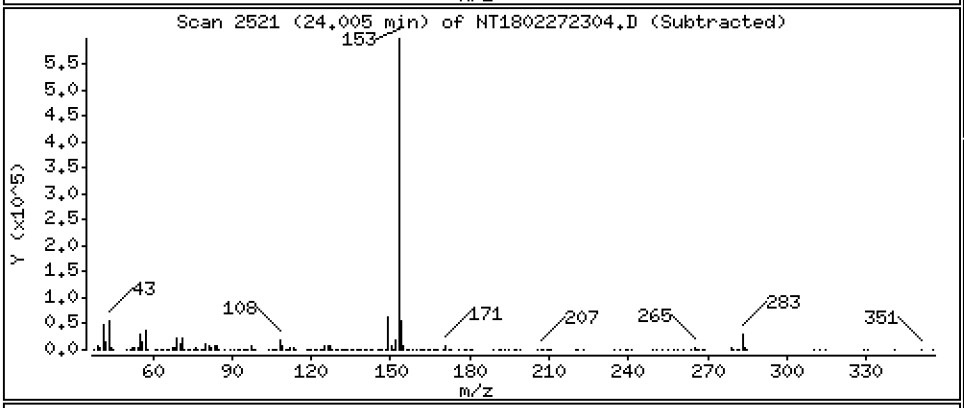
Operator: VTS

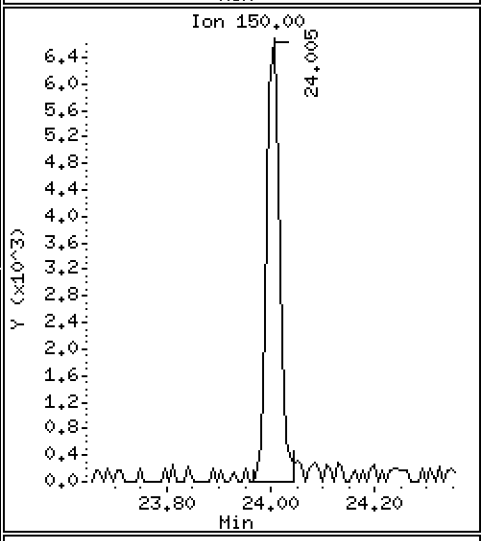
Column phase: ZB-5msi Column diameter: 0.25

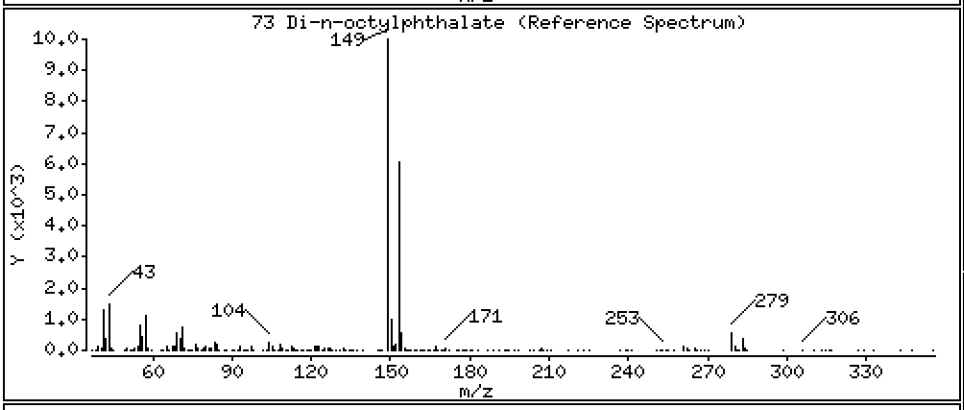
73 Di-n-octylphthalate Concentration: 0.2309 ug/mL

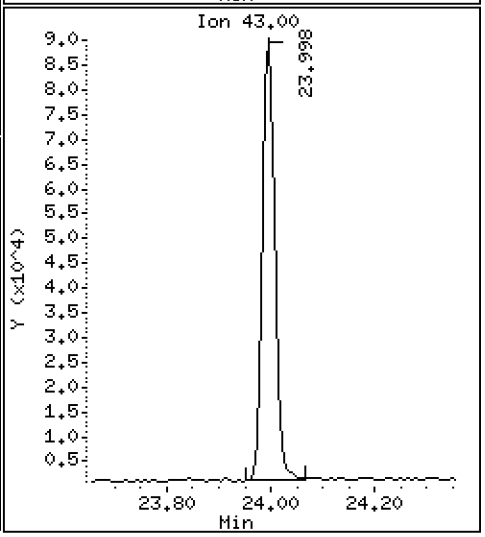


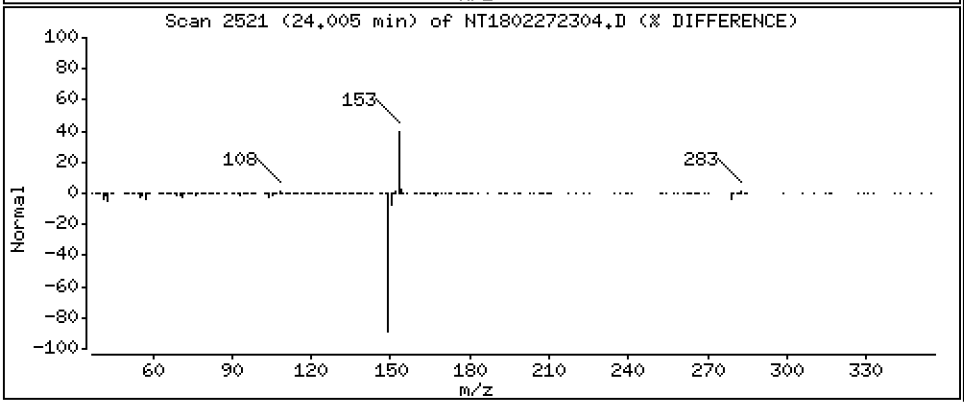












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

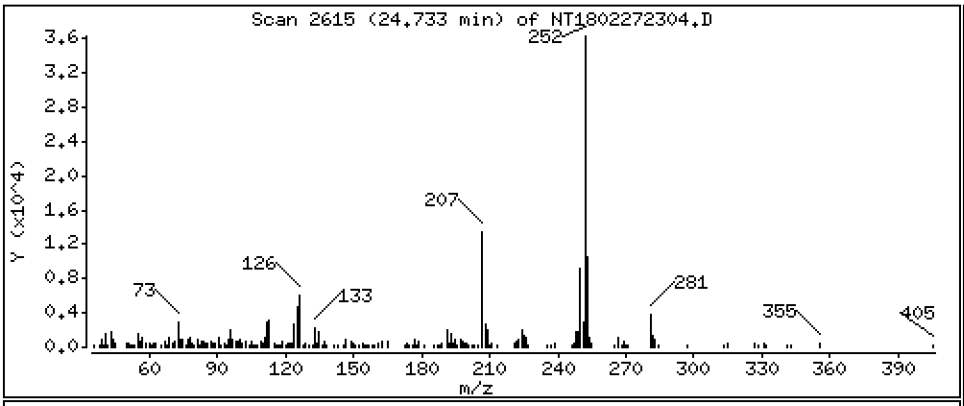
Operator: VTS

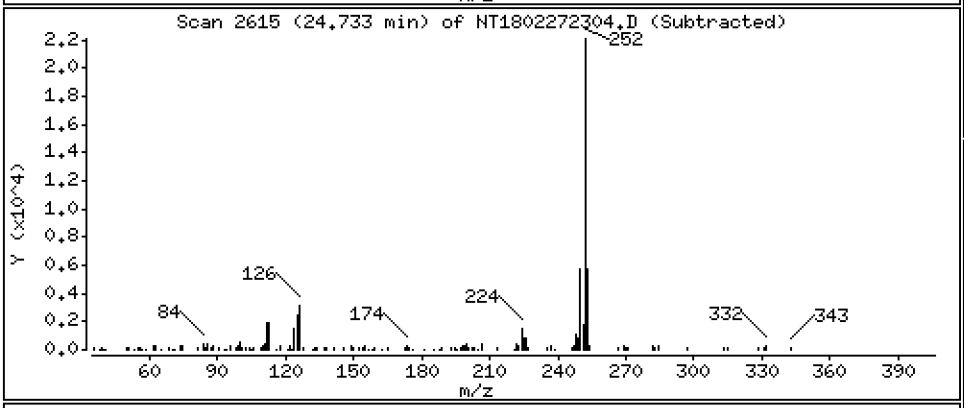
Column phase: ZB-5msi

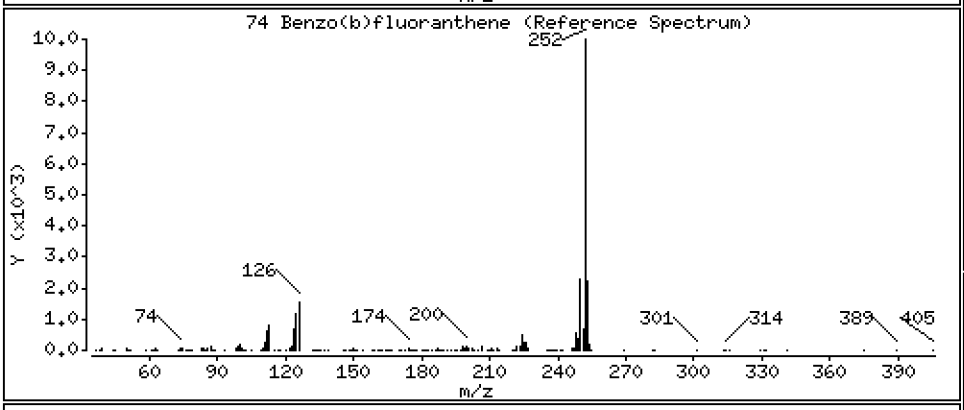
Column diameter: 0.25

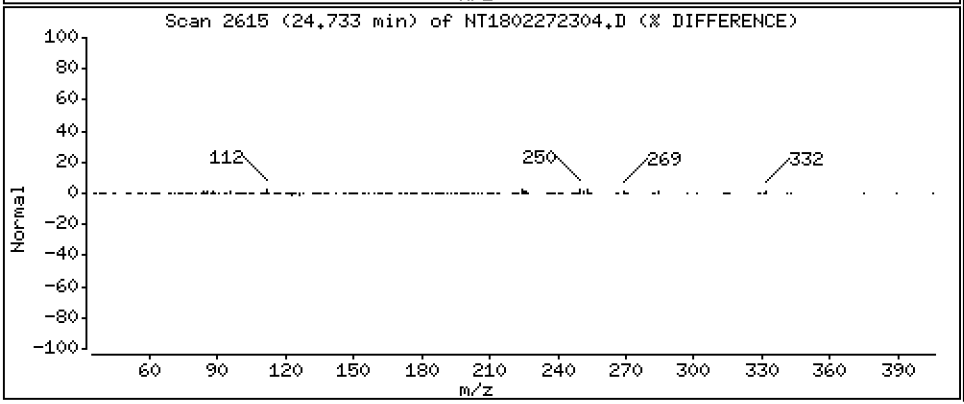
74 Benzo(b)fluoranthene

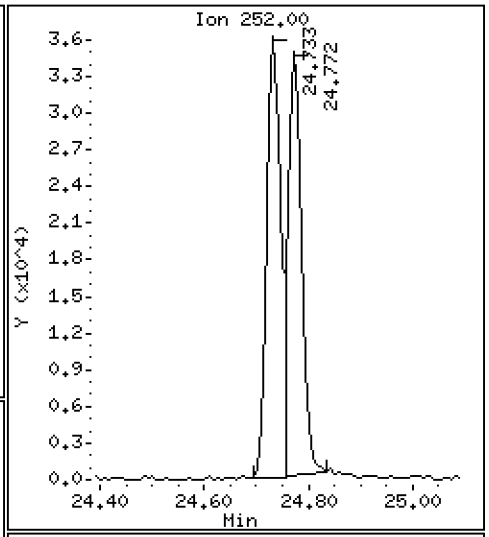
Concentration: 0.2332 ug/mL

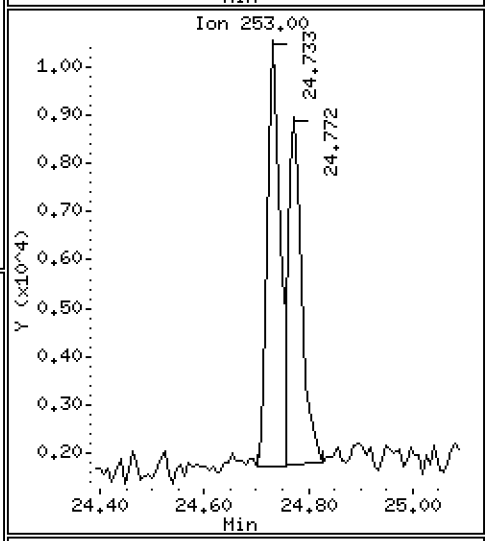


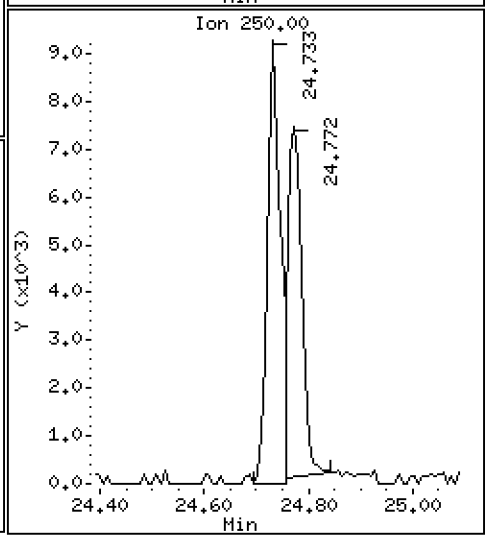












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

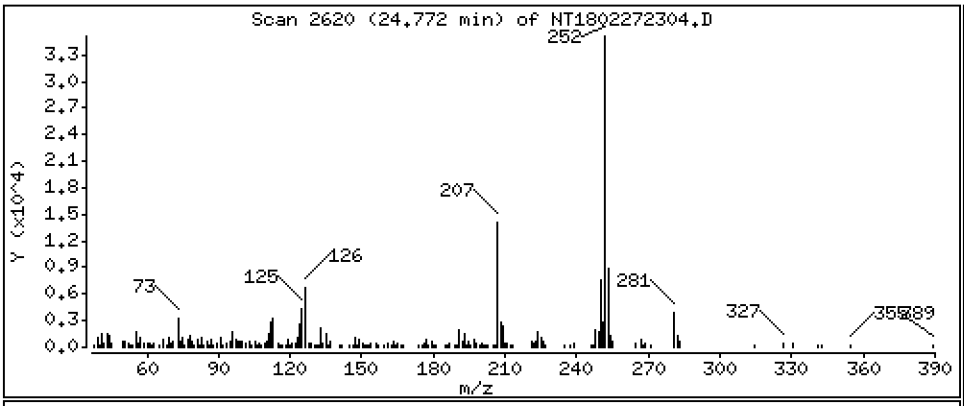
Operator: VTS

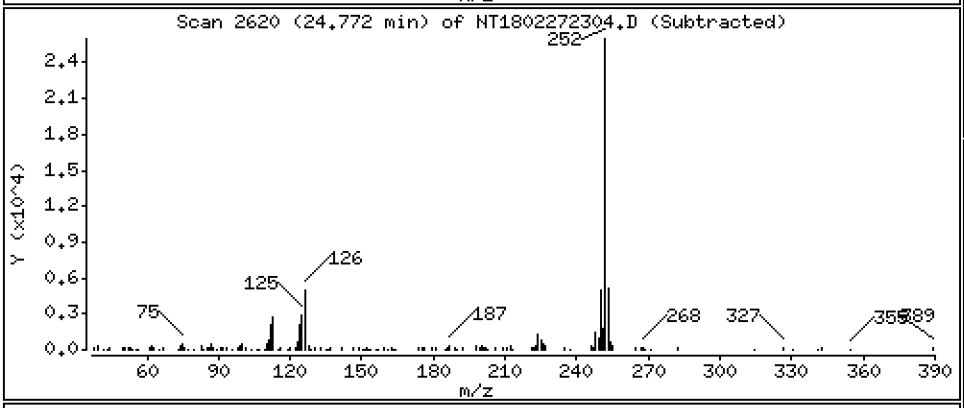
Column phase: ZB-5msi

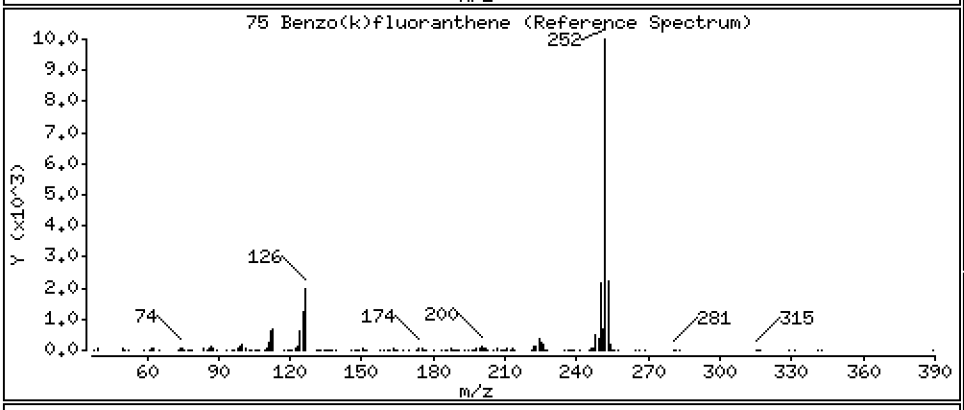
Column diameter: 0.25

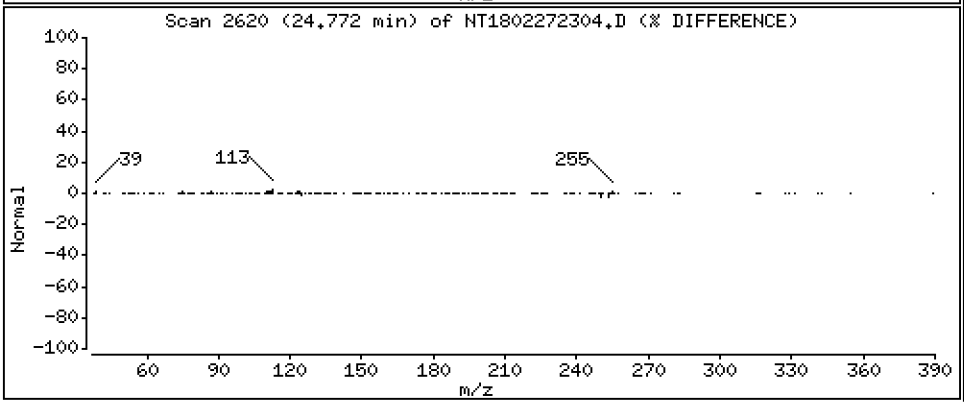
75 Benzo(k)fluoranthene

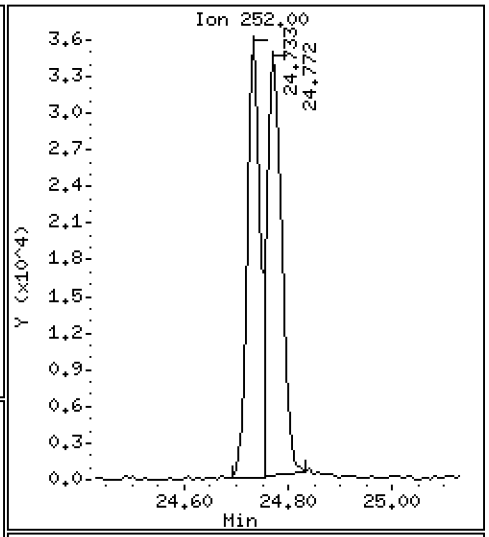
Concentration: 0.2008 ug/mL

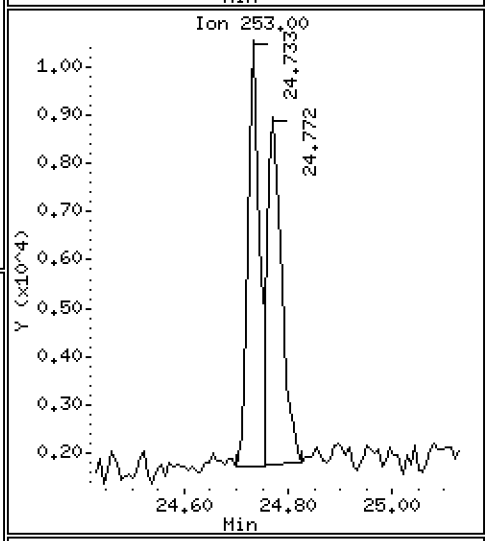


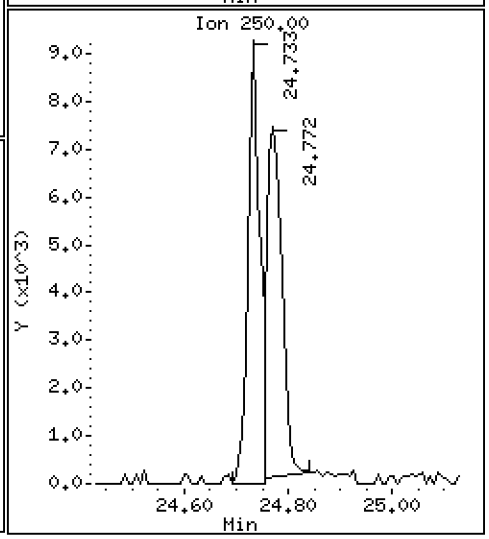












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

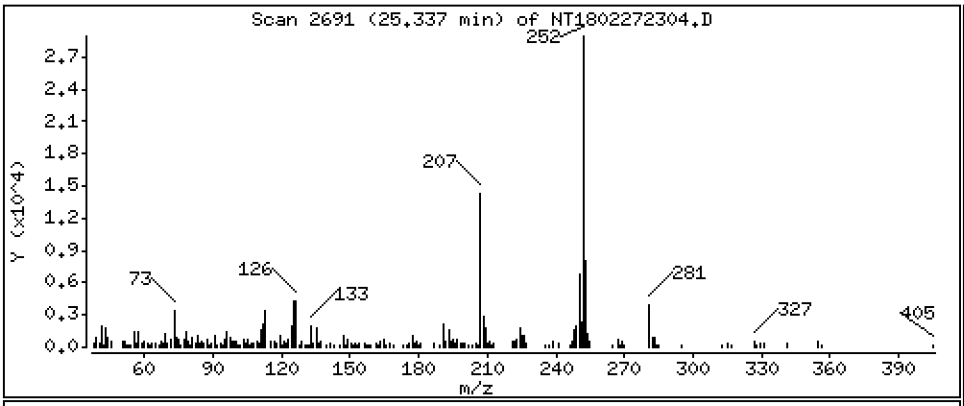
Operator: VTS

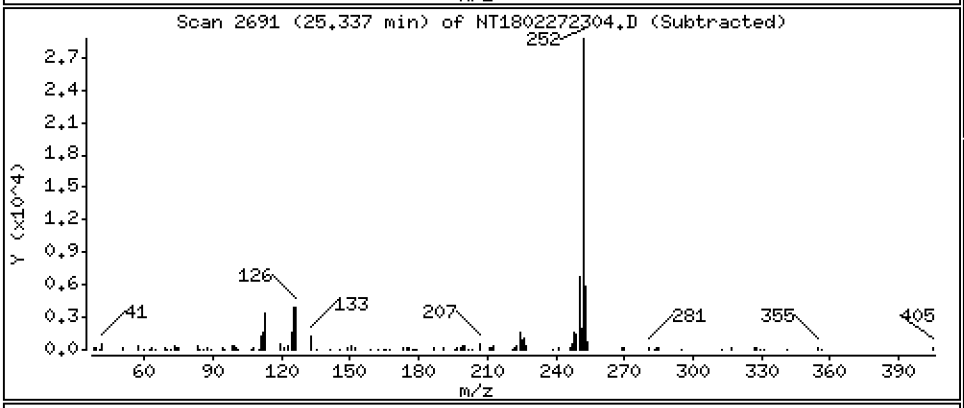
Column phase: ZB-5msi

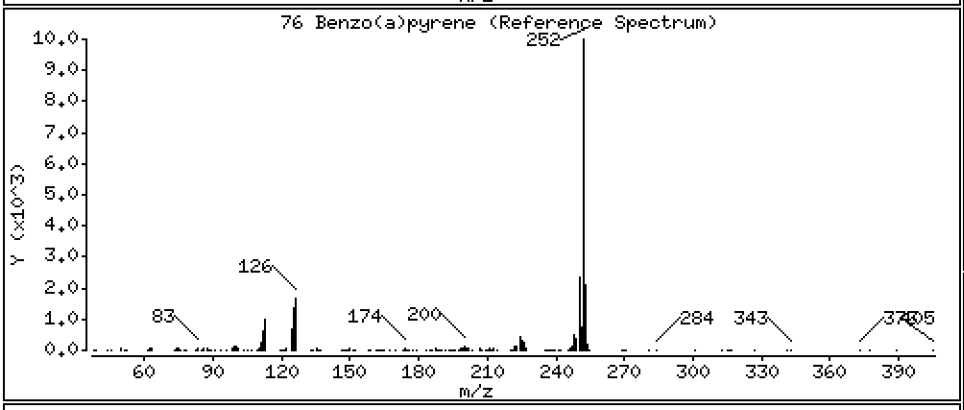
Column diameter: 0.25

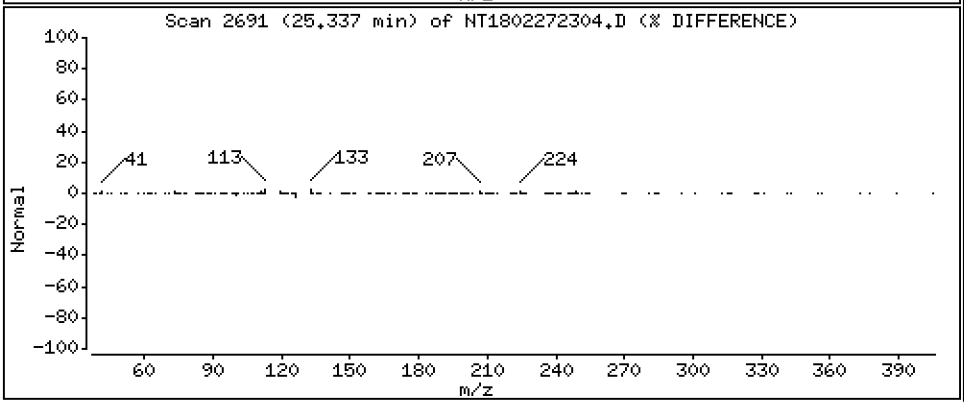
76 Benzo(a)pyrene

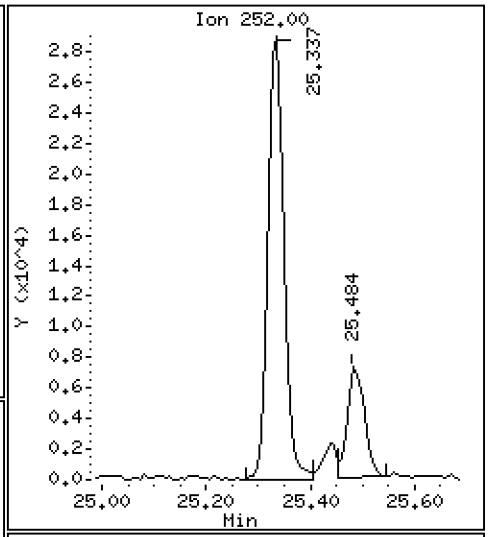
Concentration: 0.2216 ug/mL

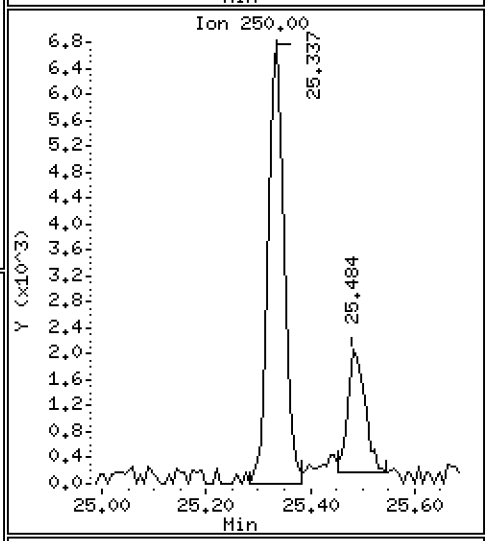


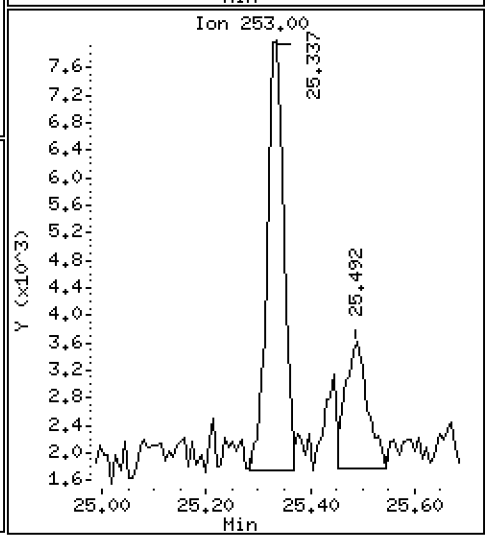












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

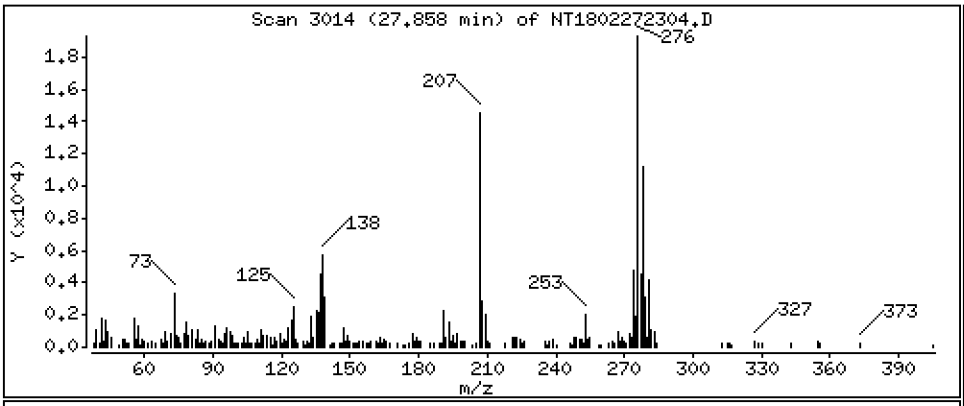
Operator: VTS

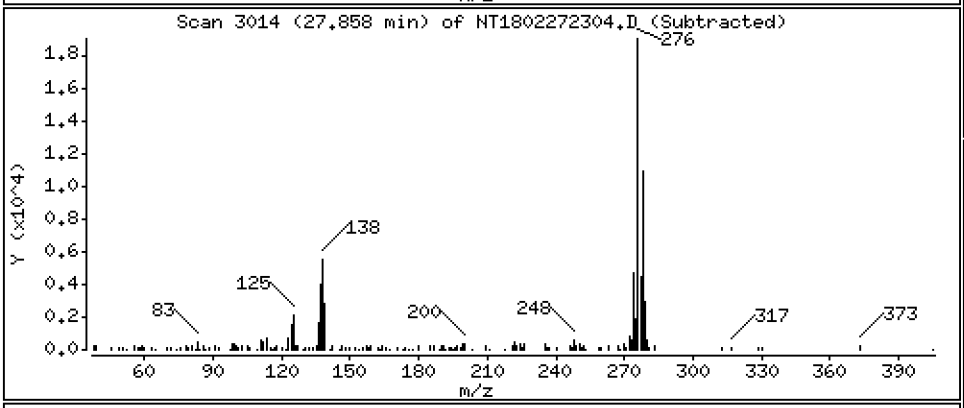
Column phase: ZB-5msi

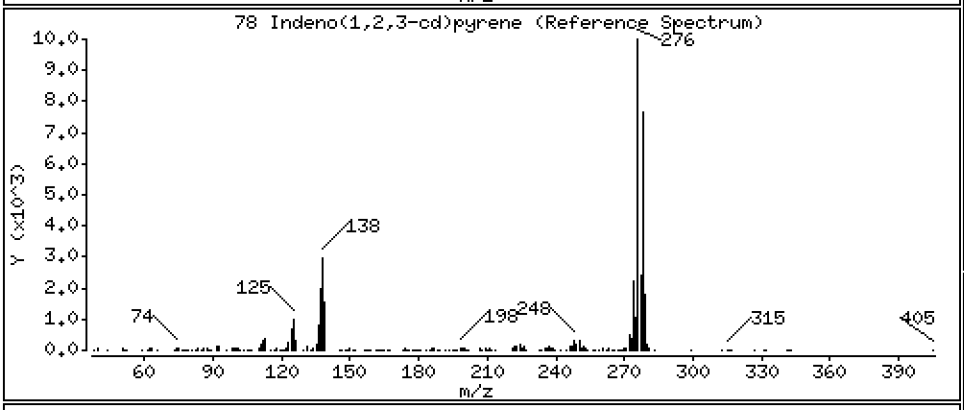
Column diameter: 0.25

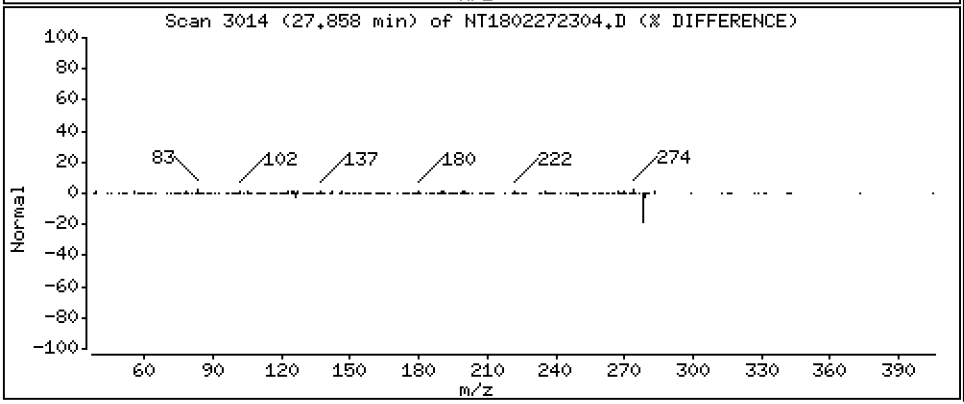
78 Indeno(1,2,3-cd)pyrene

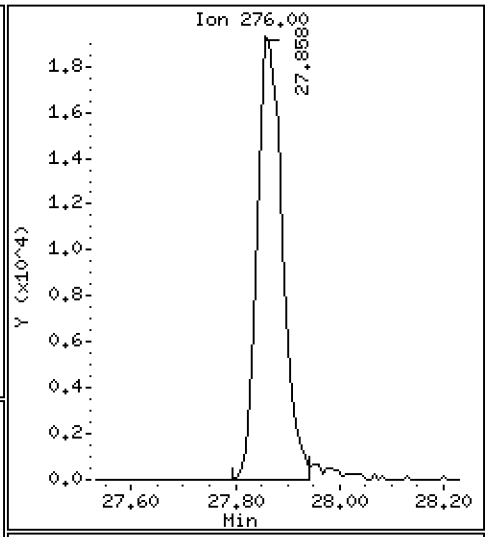
Concentration: 0.1924 ug/mL

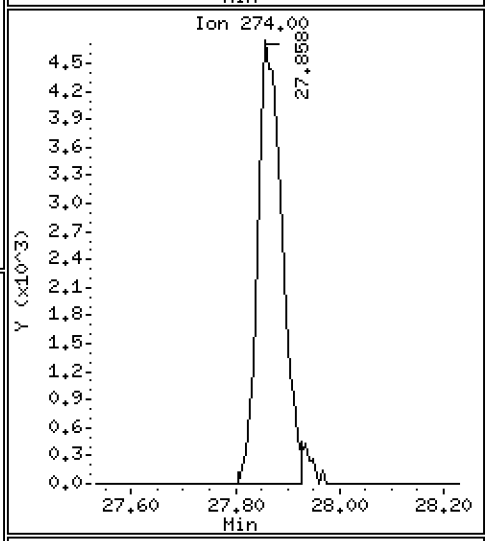


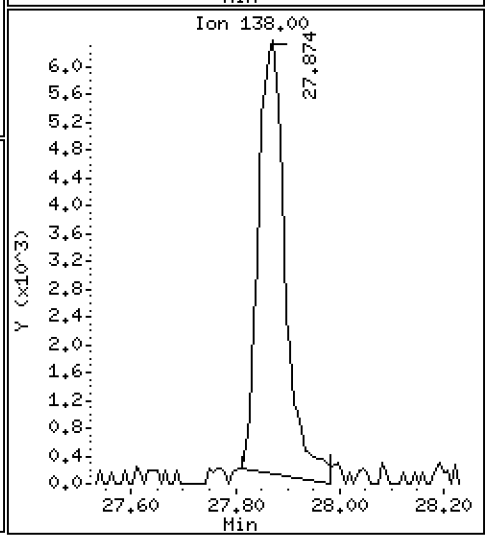












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

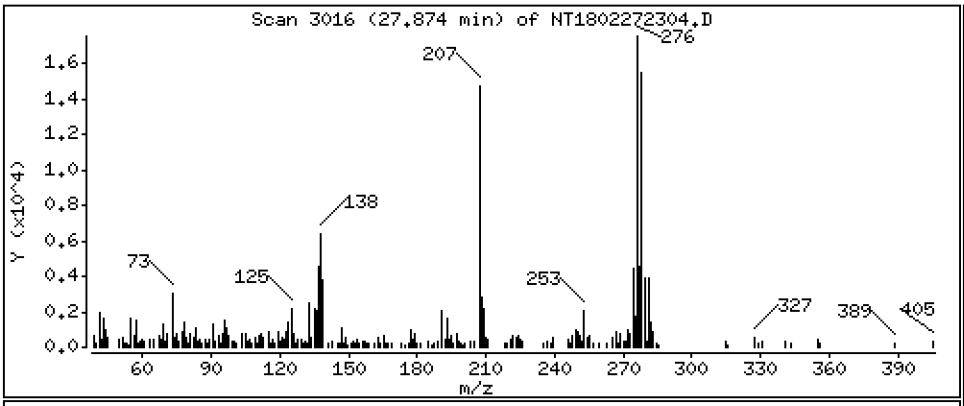
Operator: VTS

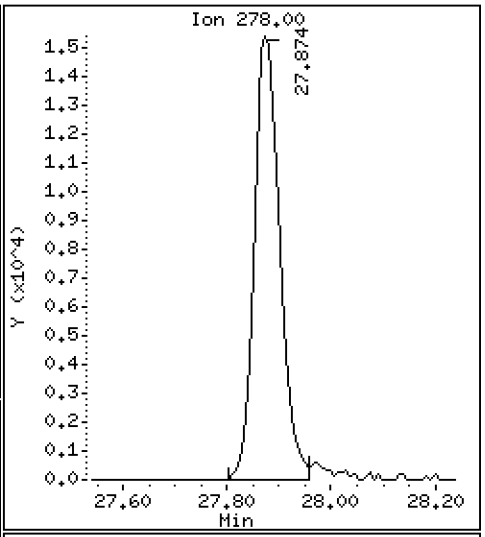
Column phase: ZB-5msi

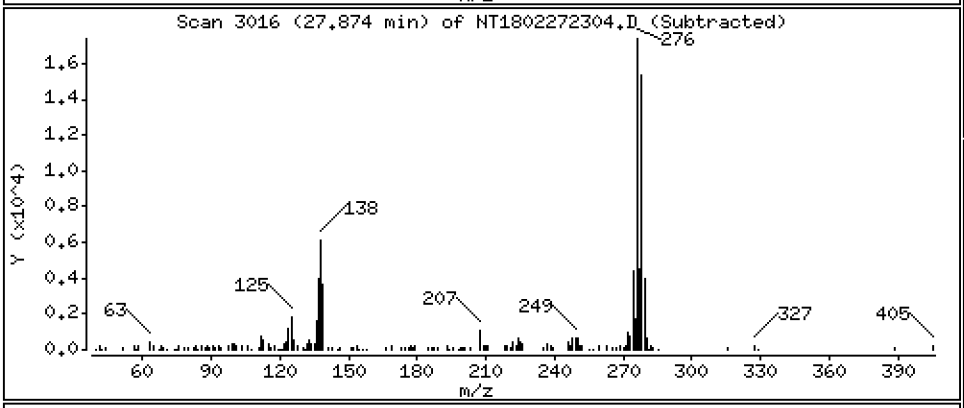
Column diameter: 0.25

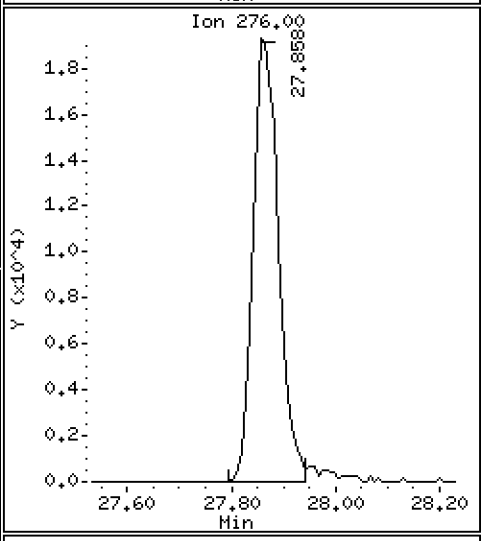
79 Dibenzo(a,h)anthracene

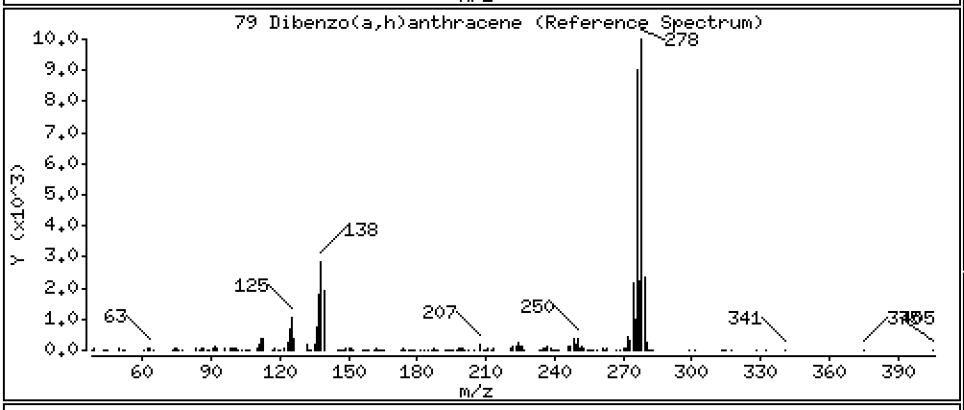
Concentration: 0.1841 ug/mL

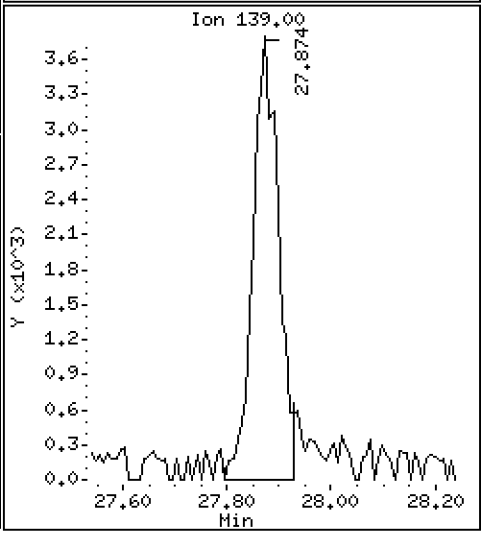


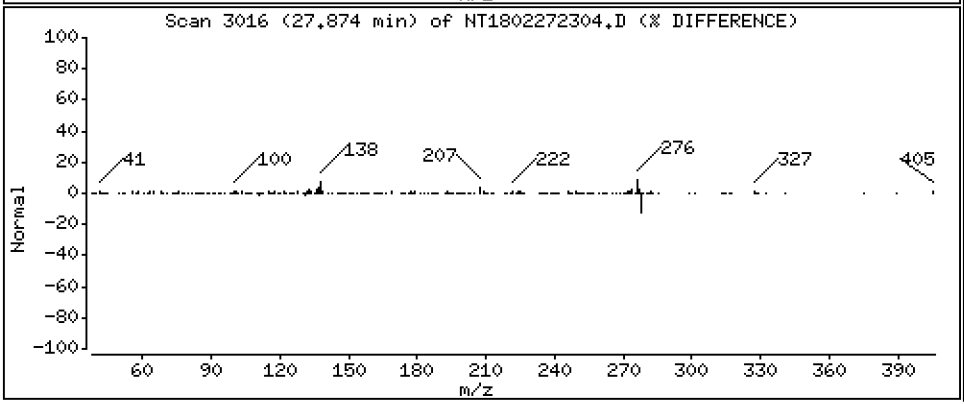












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

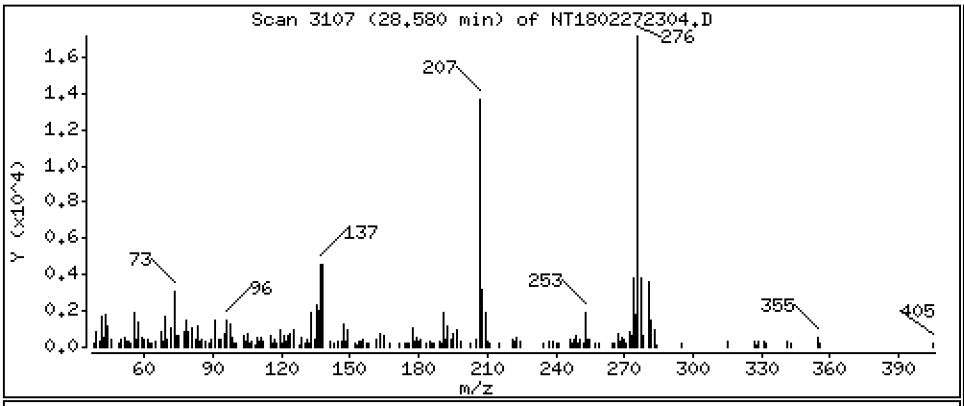
Operator: VTS

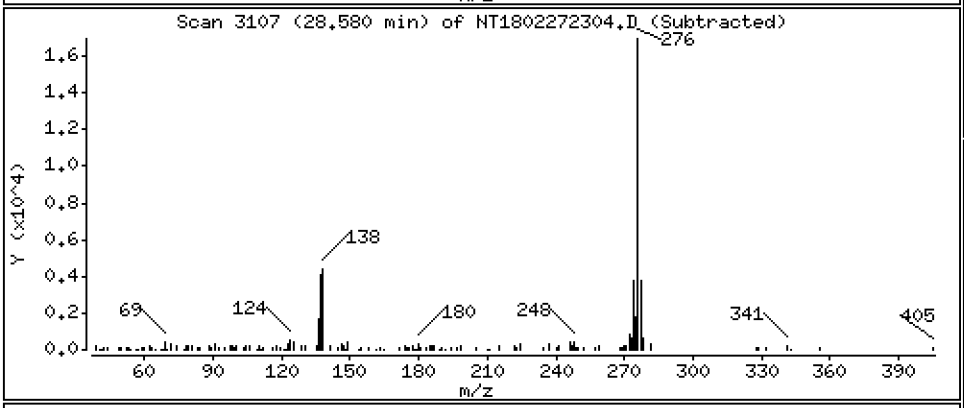
Column phase: ZB-5msi

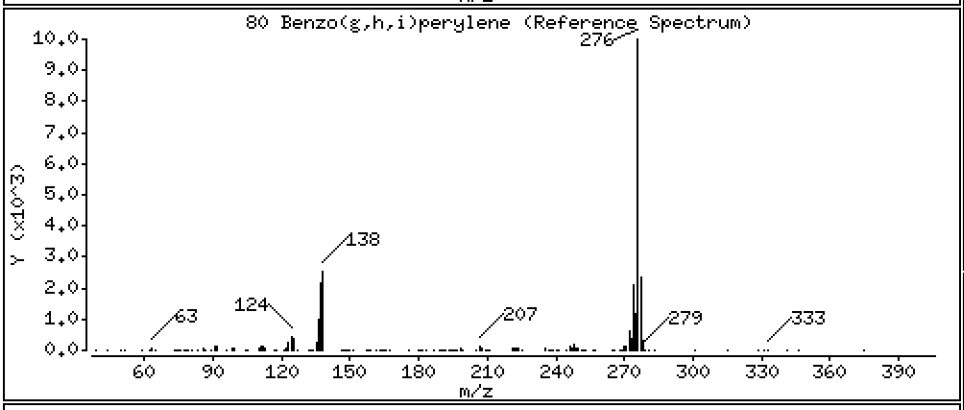
Column diameter: 0.25

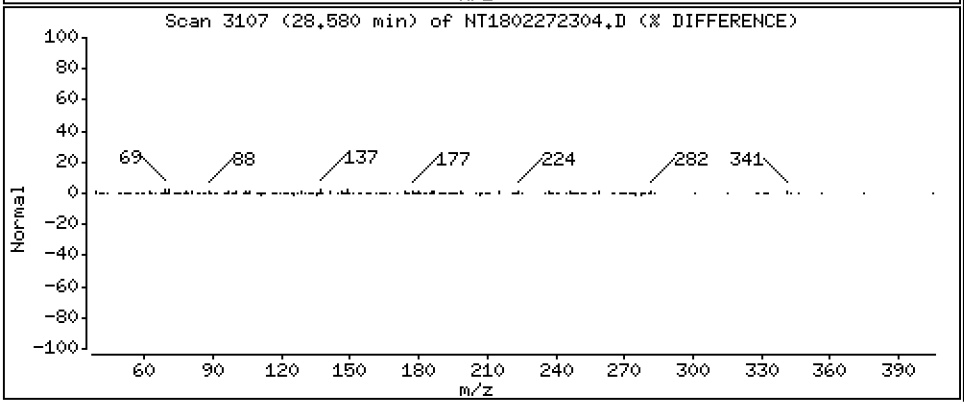
80 Benzo(g,h,i)perylene

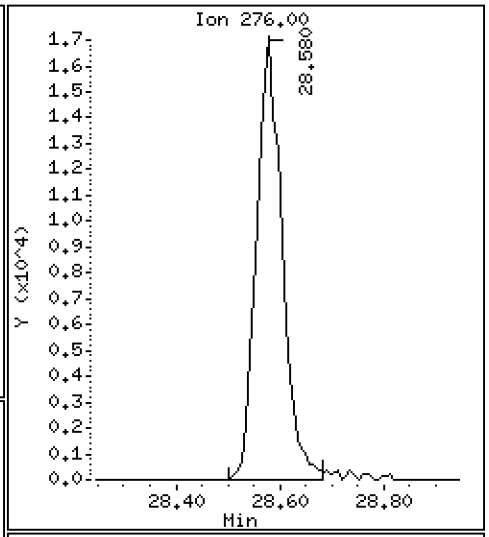
Concentration: 0.2153 ug/mL

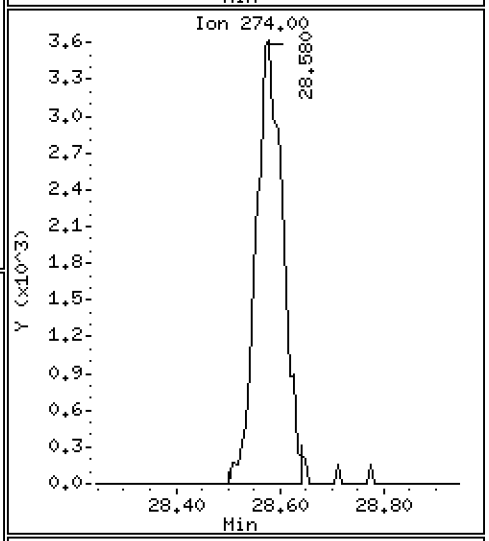


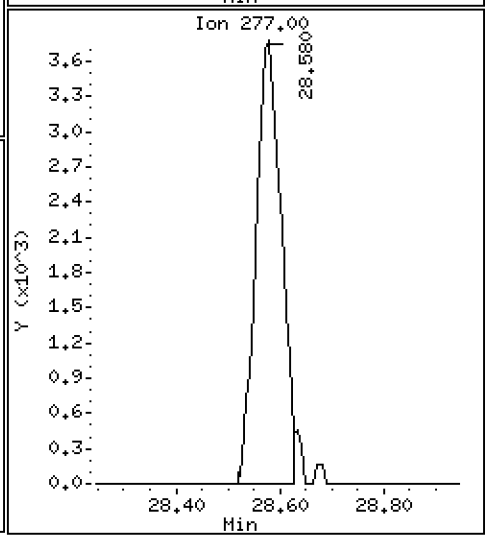












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

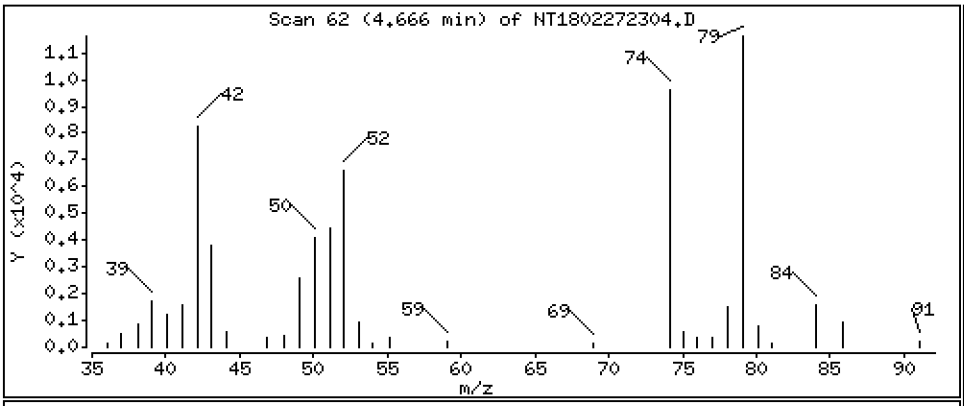
Operator: VTS

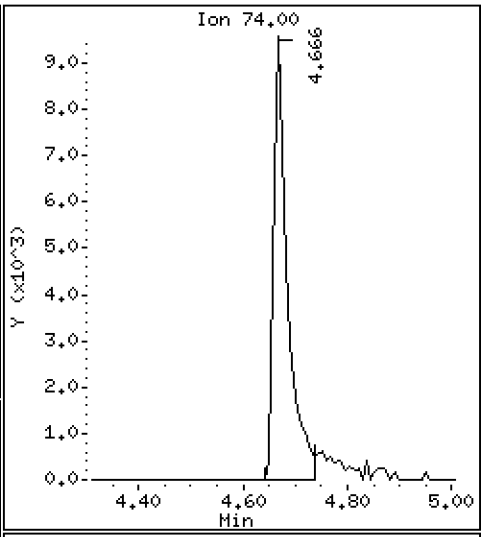
Column phase: ZB-5msi

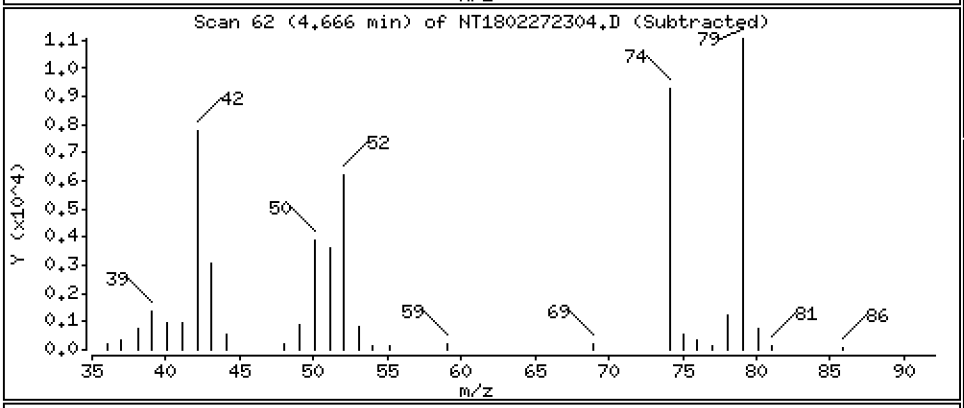
Column diameter: 0.25

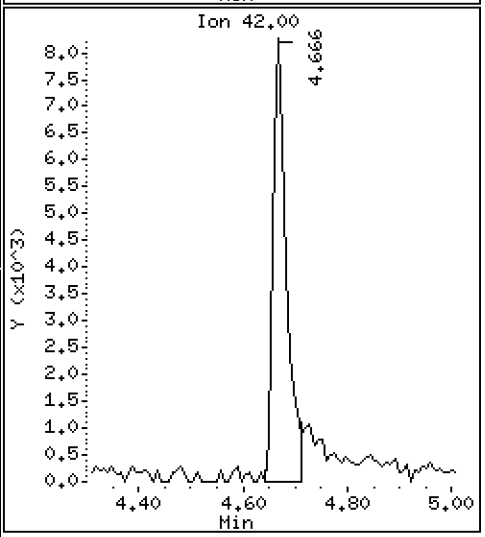
90 N-Nitrosodimethylamine

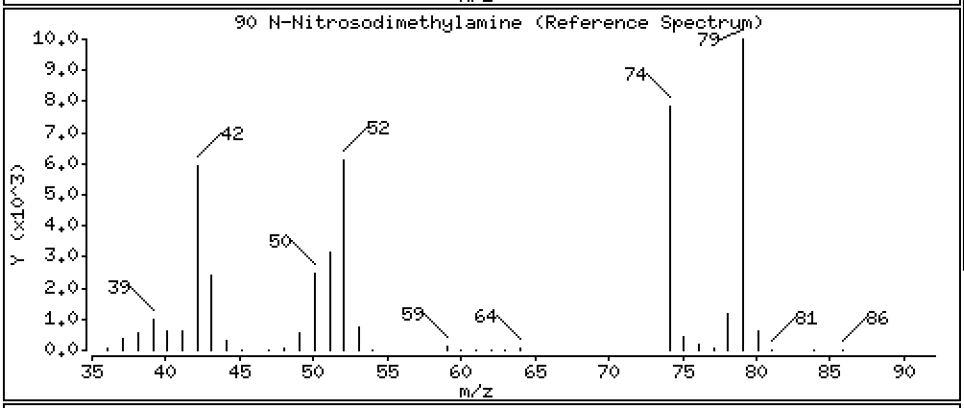
Concentration: 0.3551 ug/mL

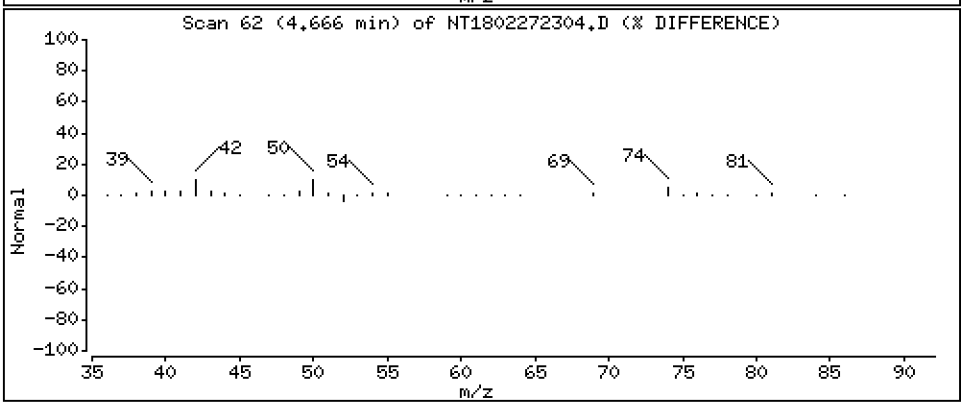












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

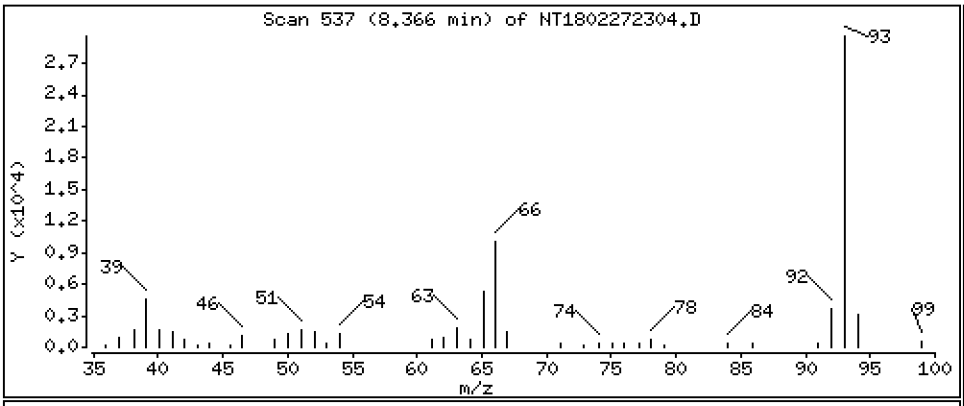
Operator: VTS

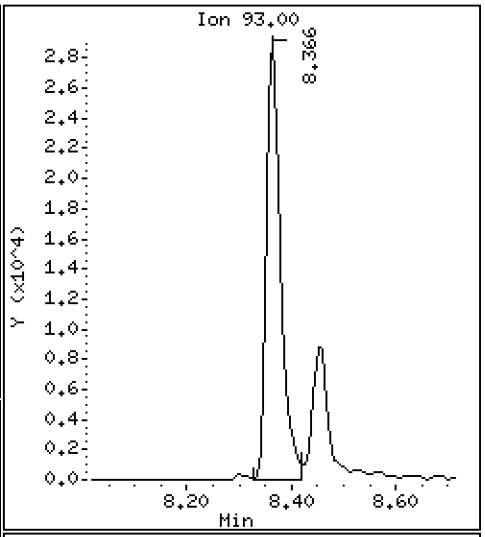
Column phase: ZB-5msi

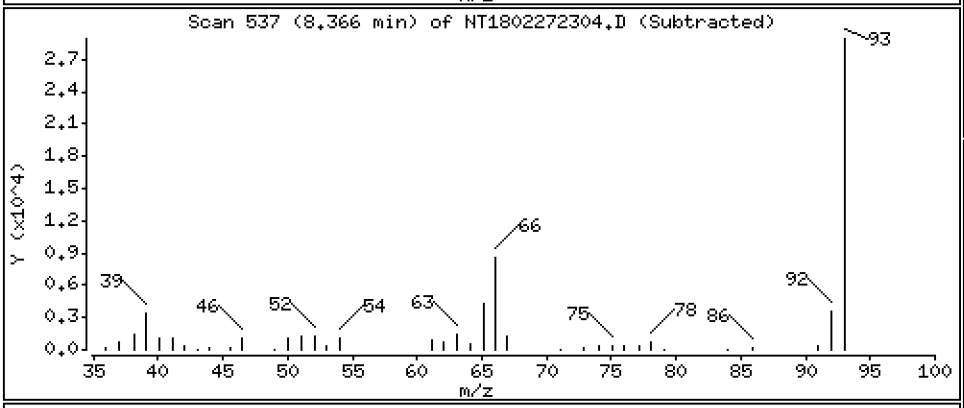
Column diameter: 0.25

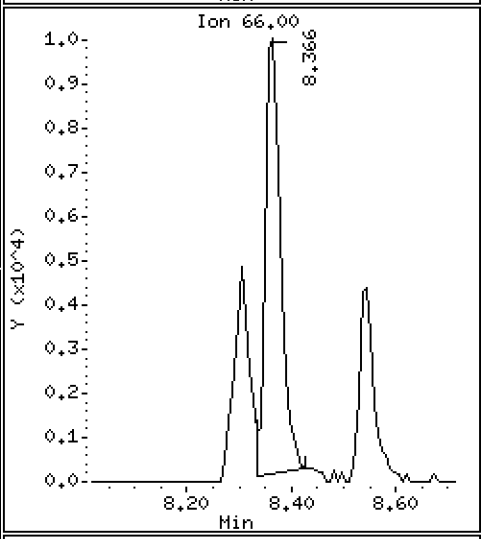
91 Aniline

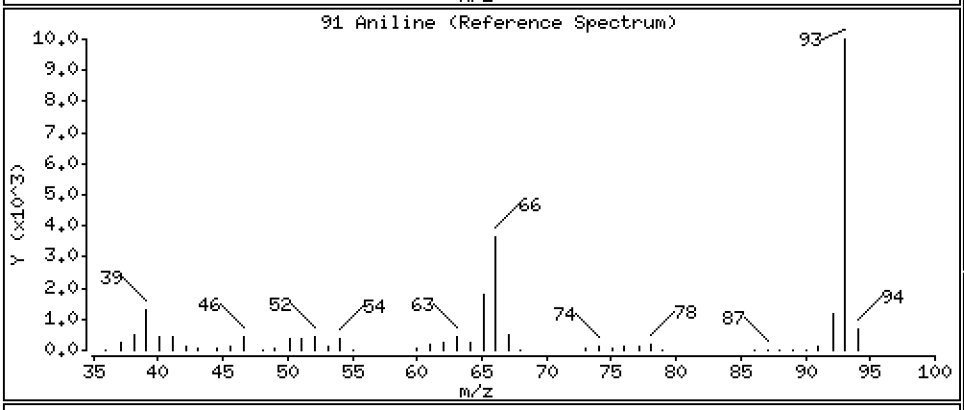
Concentration: 0.4033 ug/mL

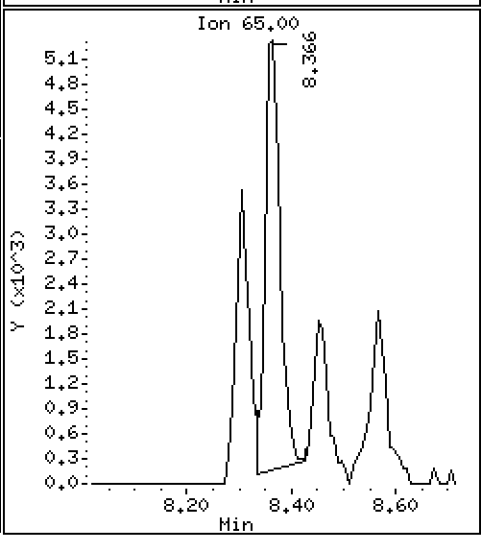


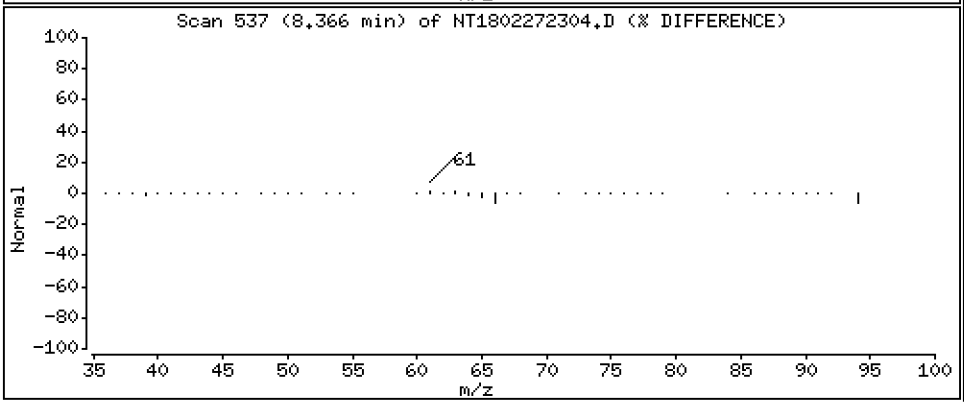












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

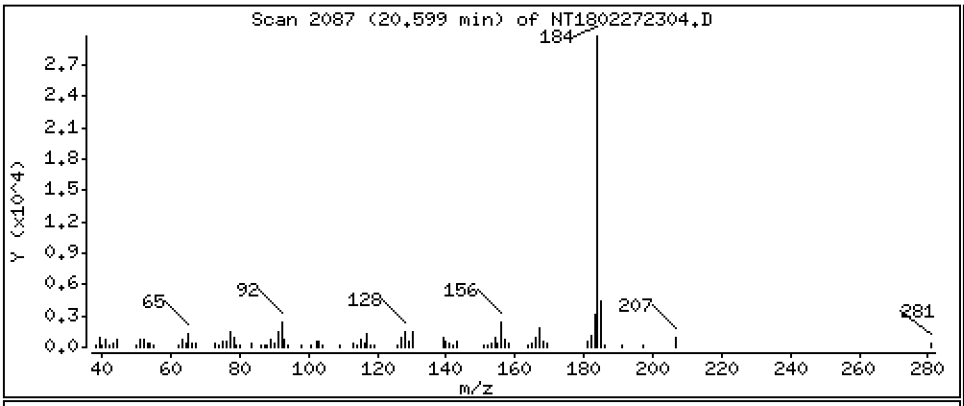
Operator: VTS

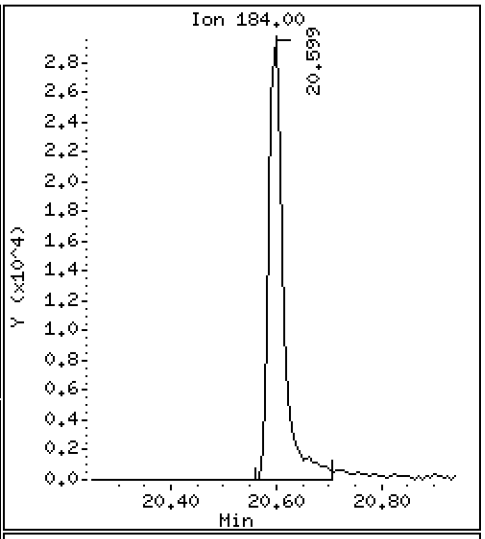
Column phase: ZB-5msi

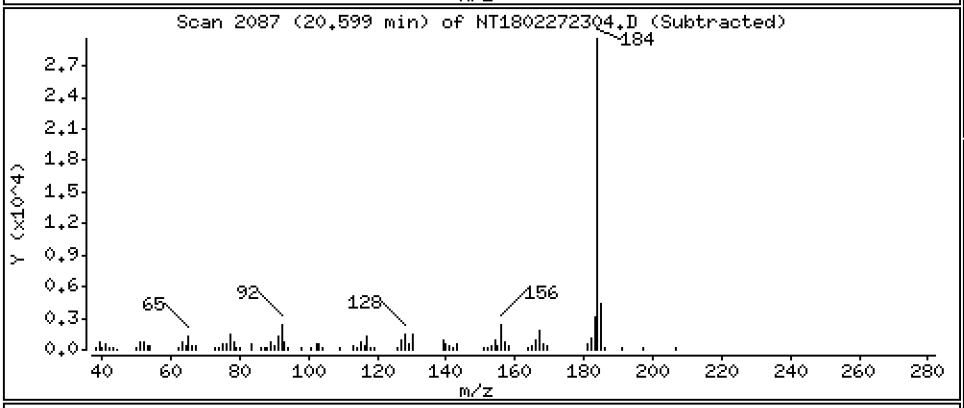
Column diameter: 0.25

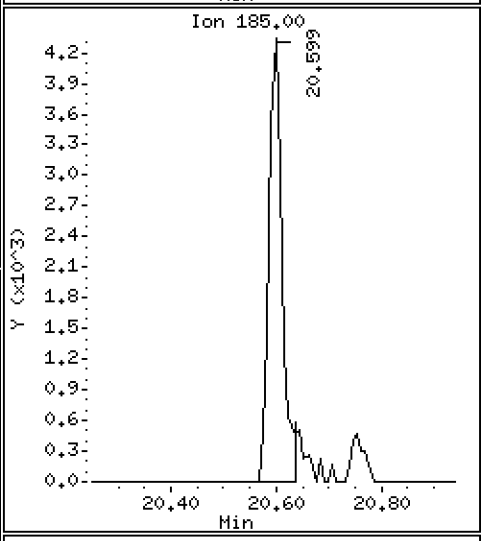
93 Benzidine

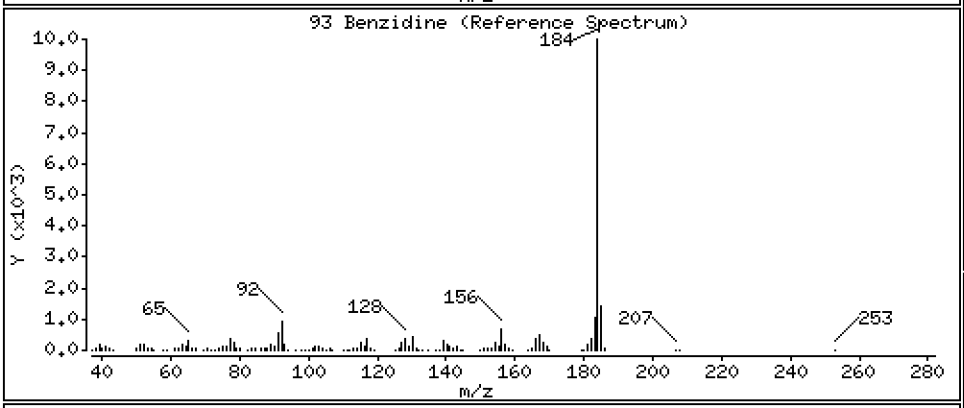
Concentration: 0.3930 ug/mL

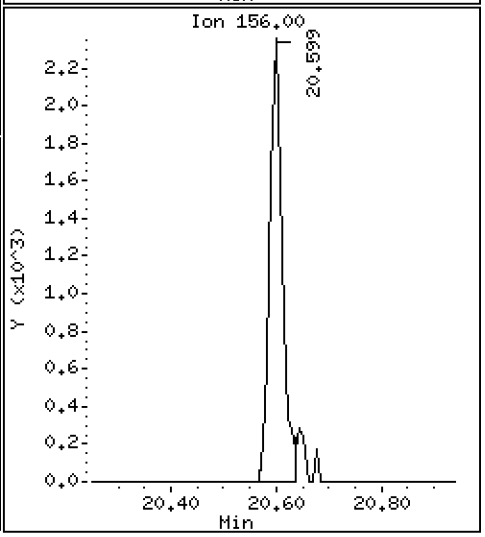


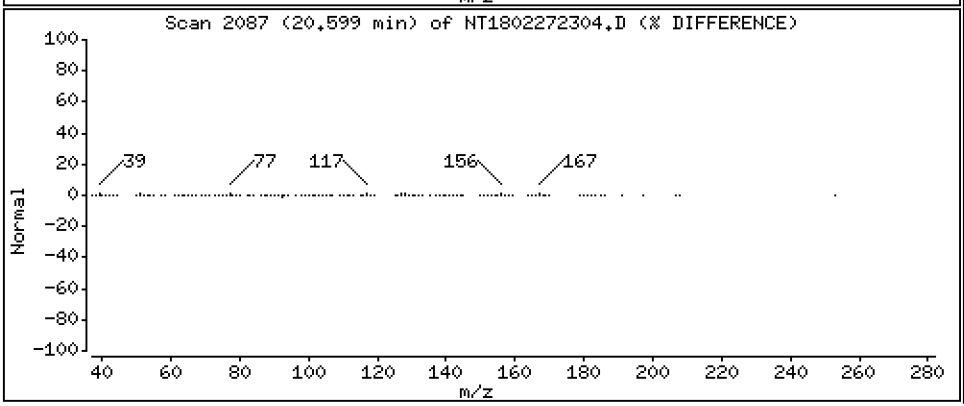












Date : 27-FEB-2023 19:10

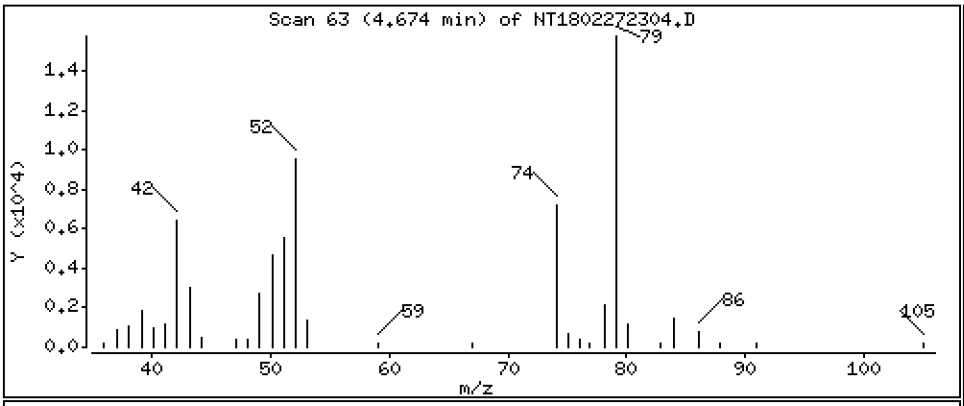
Client ID: Instrument: nt18.i

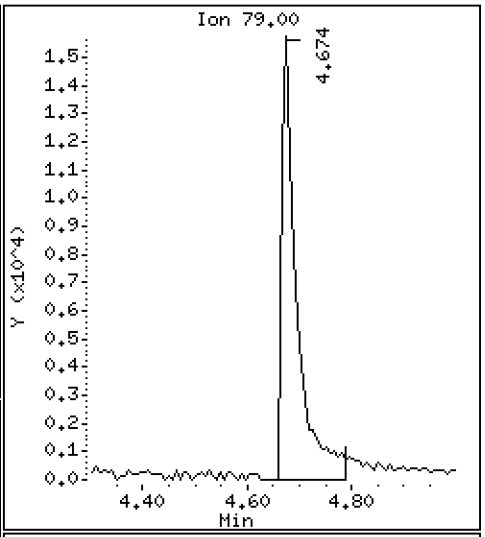
Sample Info: SLC0385-LCV1

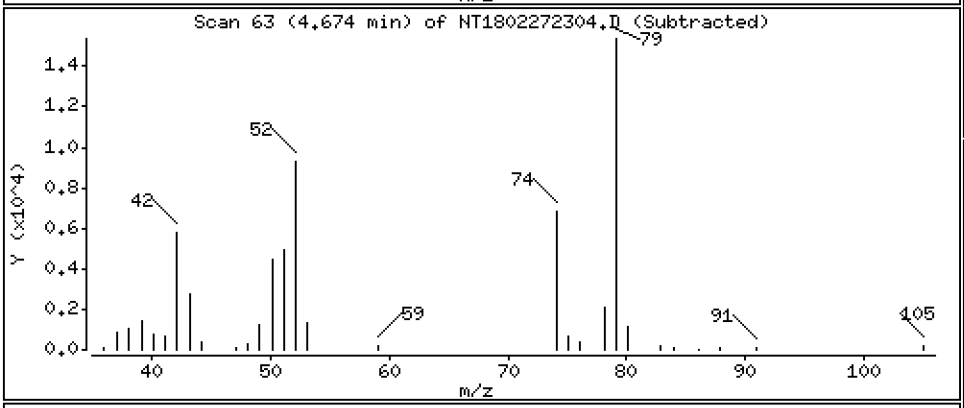
Operator: VTS

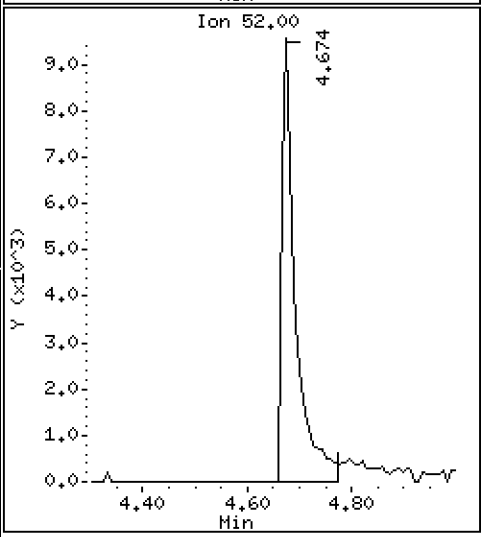
Column phase: ZB-5msi Column diameter: 0.25

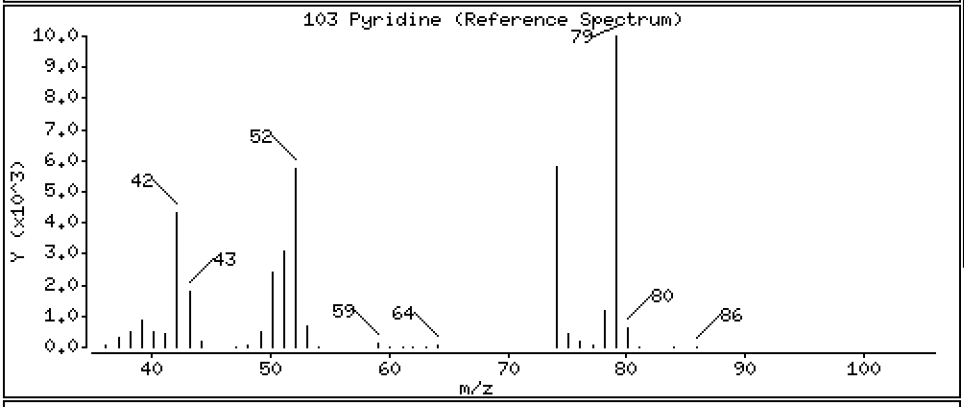
103 Pyridine Concentration: 0.3957 ug/mL

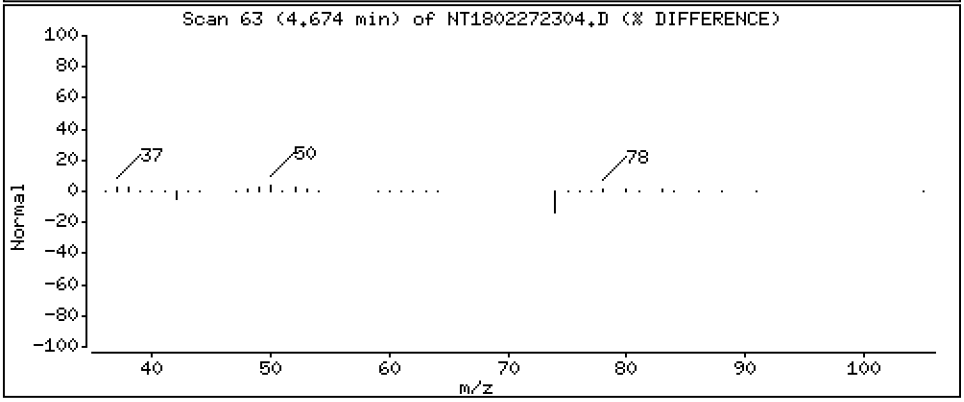












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

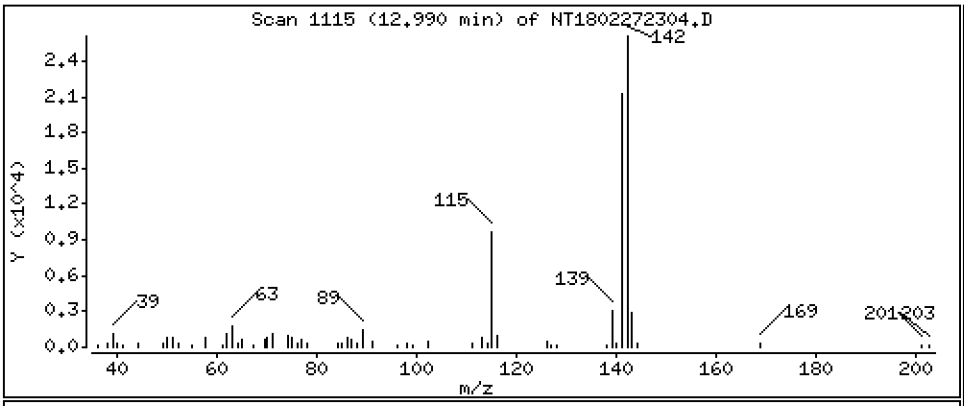
Operator: VTS

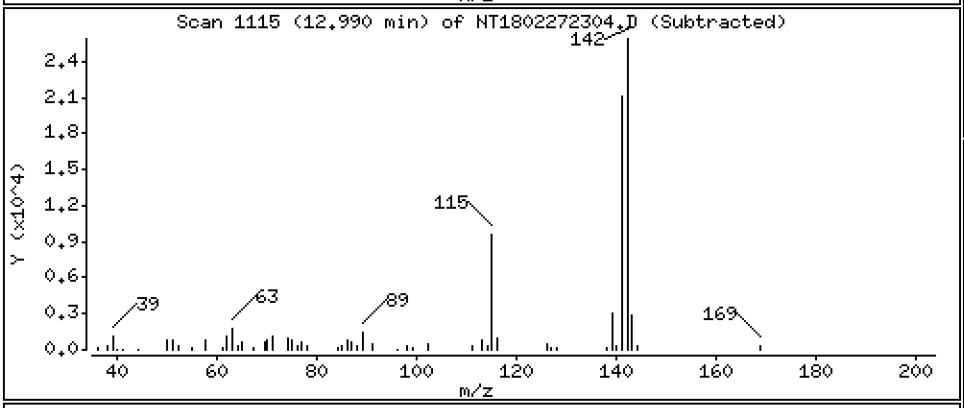
Column phase: ZB-5msi

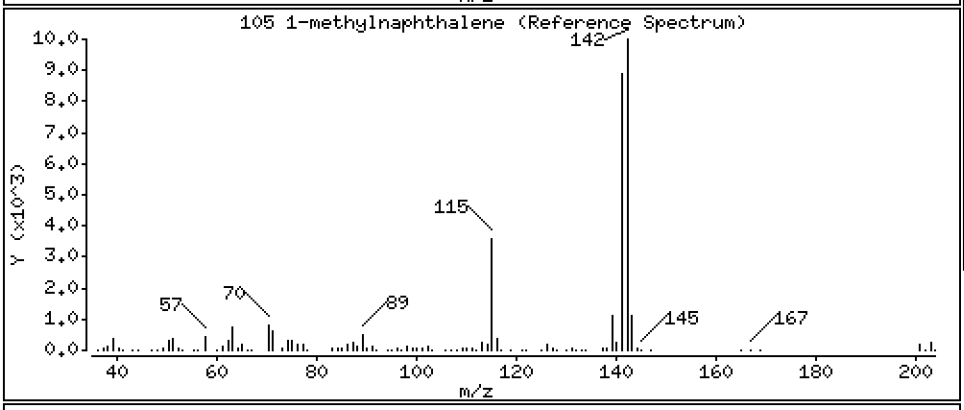
Column diameter: 0.25

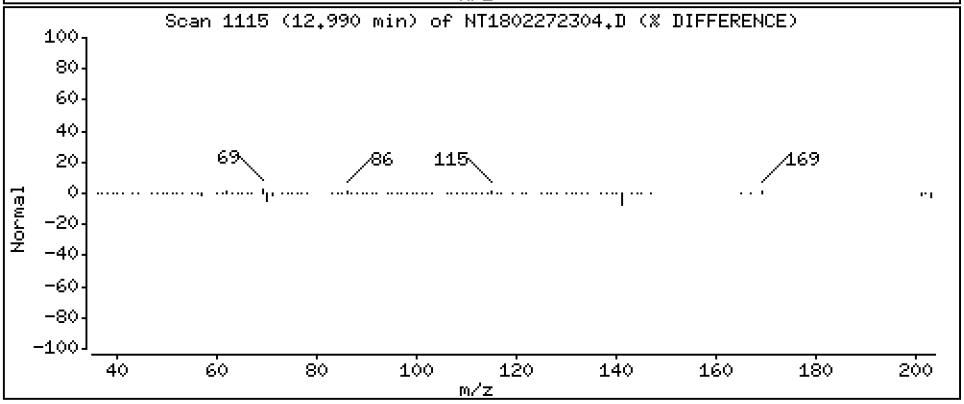
105 1-methylnaphthalene

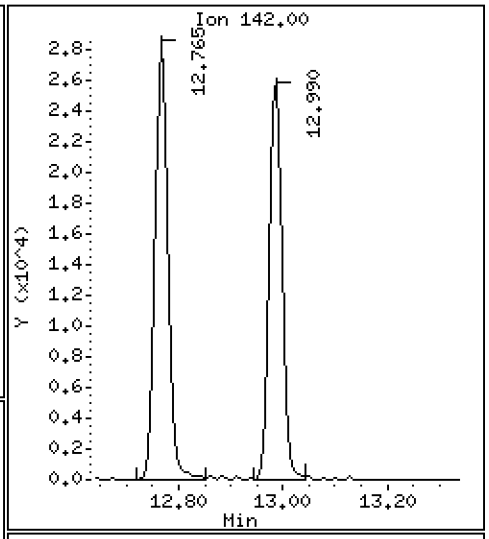
Concentration: 0.2338 ug/mL

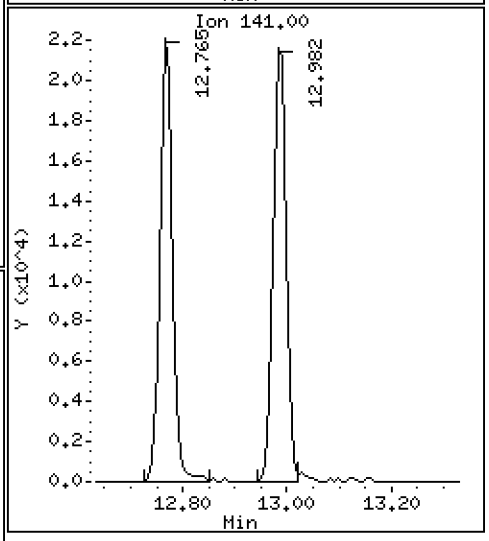












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

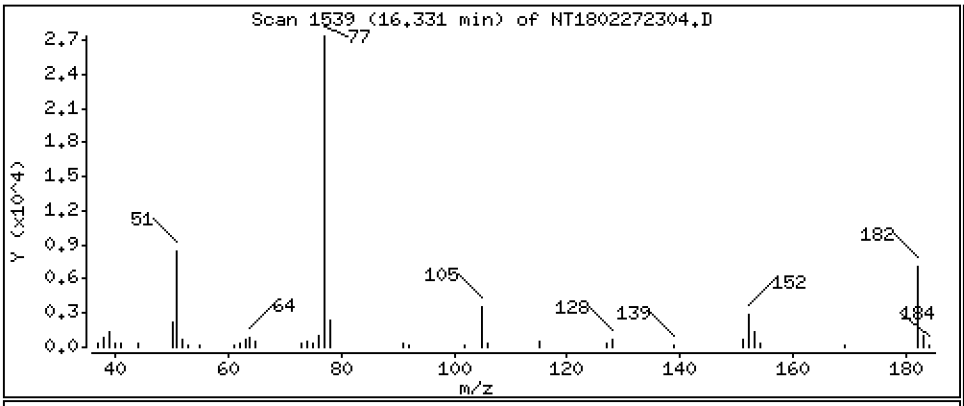
Operator: VTS

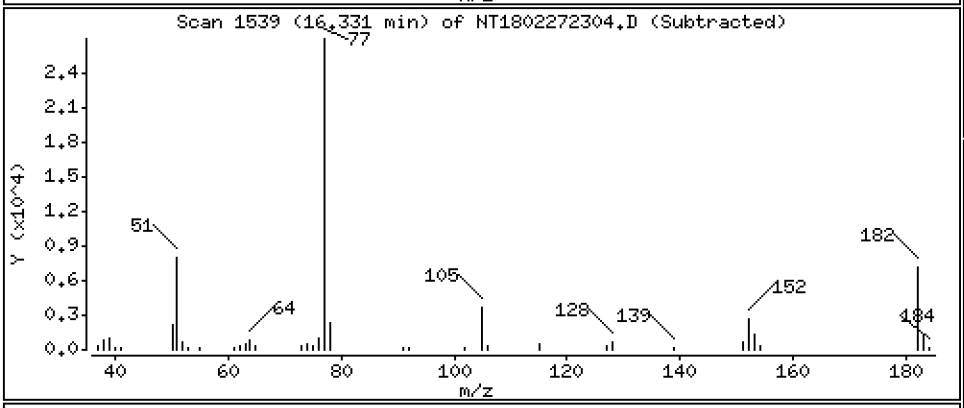
Column phase: ZB-5msi

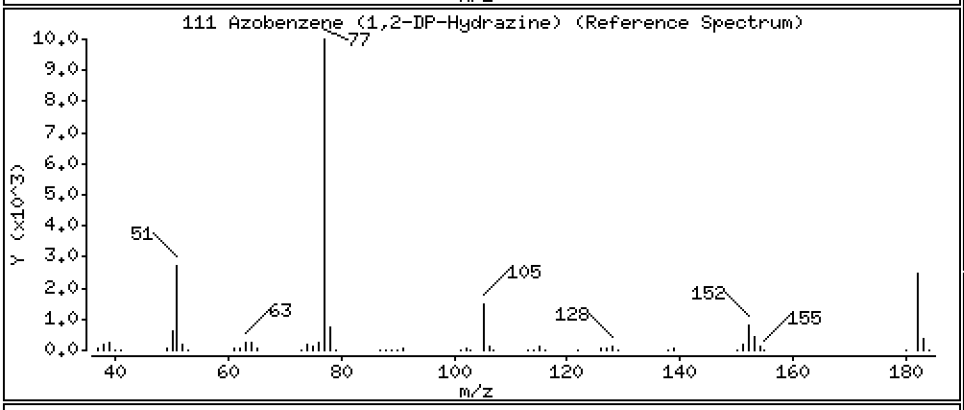
Column diameter: 0.25

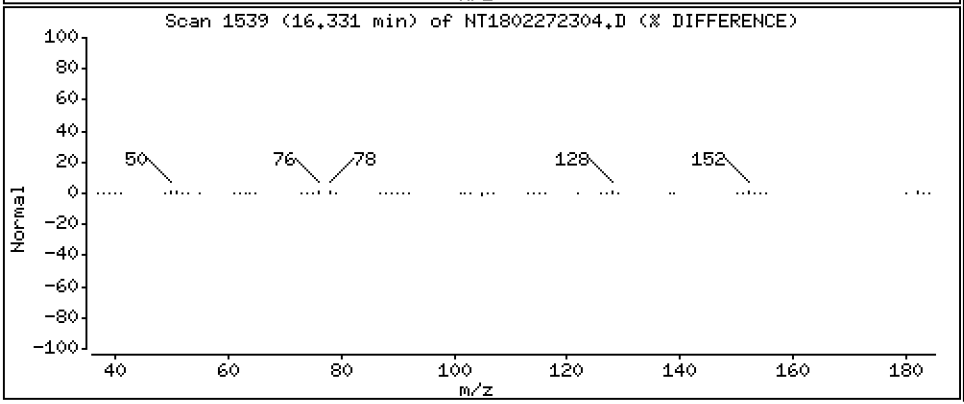
111 Azobenzene (1,2-DP-Hydrazine)

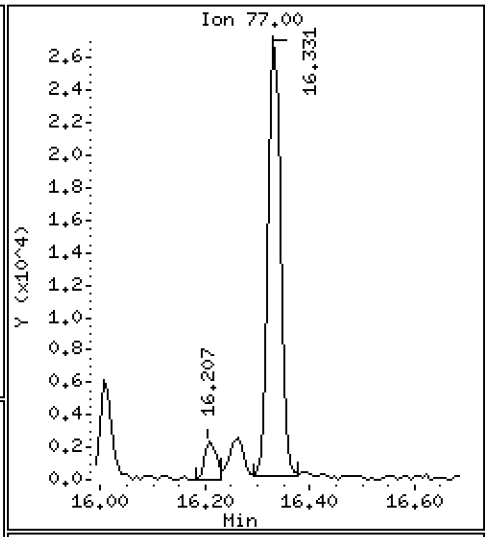
Concentration: 0.1965 ug/mL

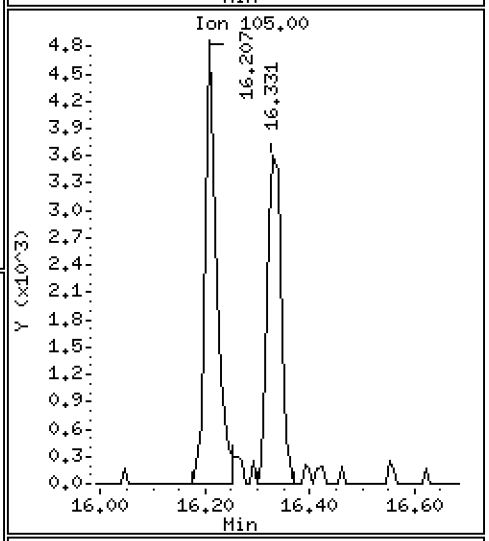


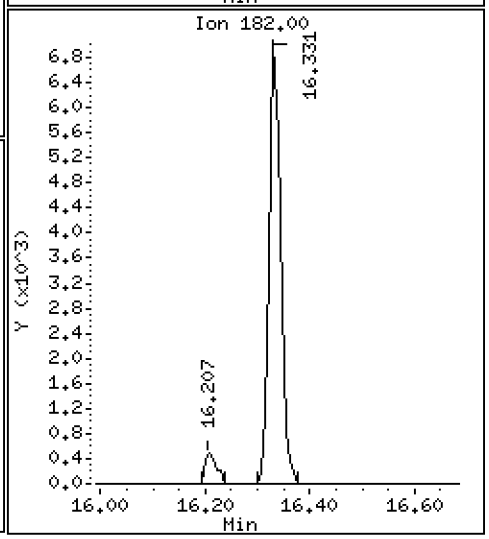












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Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

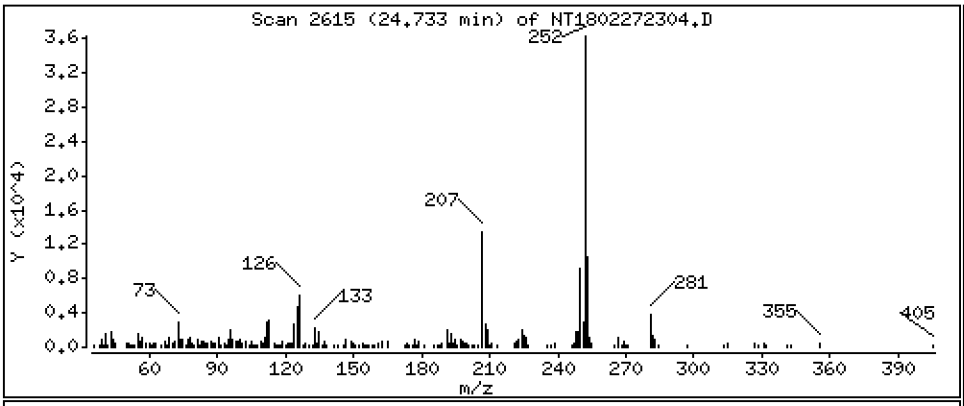
Operator: VTS

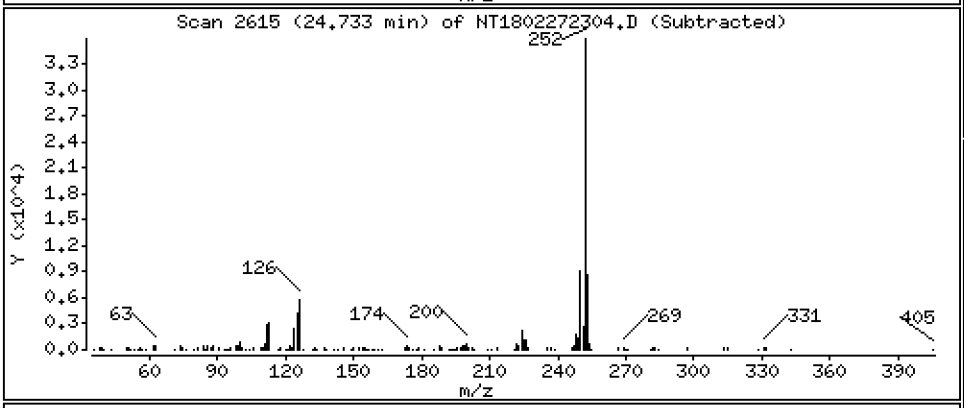
Column phase: ZB-5msi

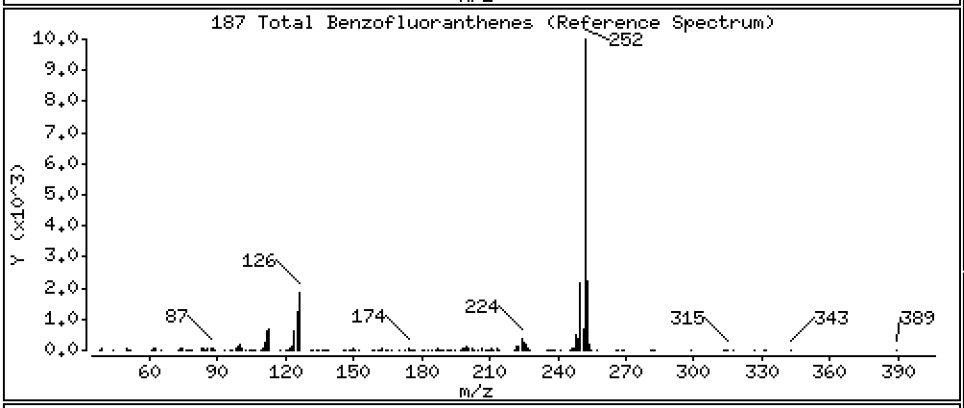
Column diameter: 0.25

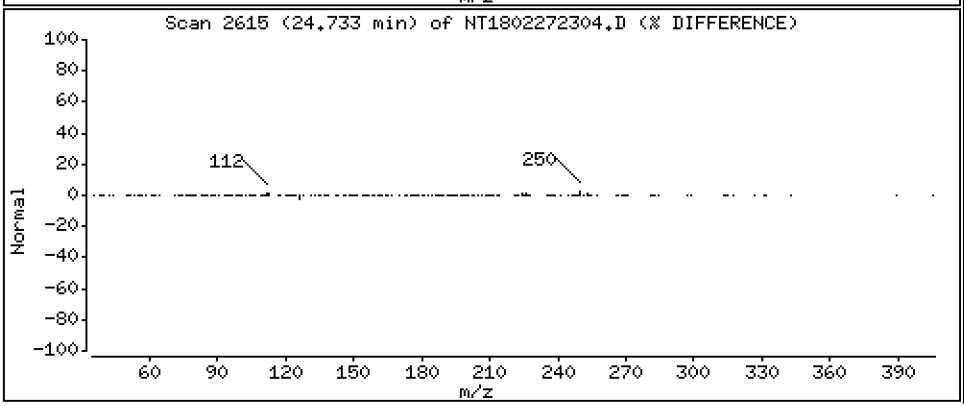
187 Total Benzofluoranthenes

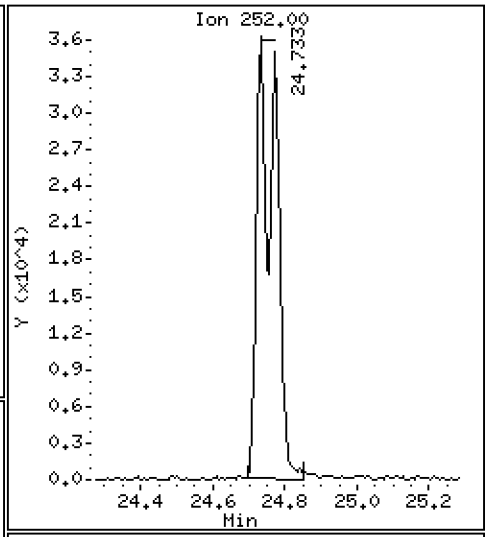
Concentration: 0.4391 ug/mL

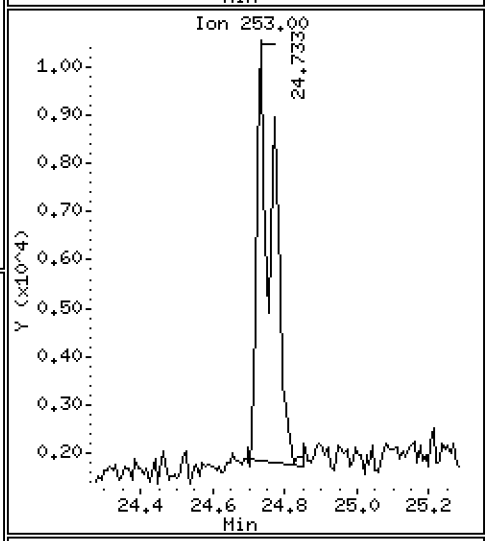


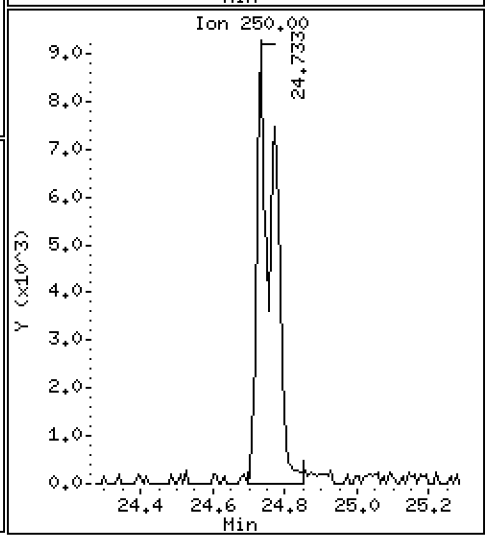












Data File: \\target\share\chem3\nt18.i\20230227.b\NT1802272304.D

Date : 27-FEB-2023 19:10

Client ID:

Instrument: nt18.i

Sample Info: SLC0385-LCV1

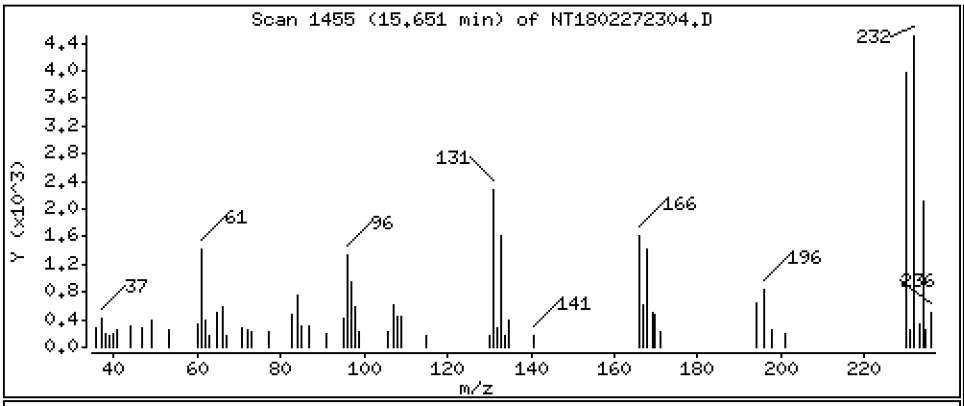
Operator: VTS

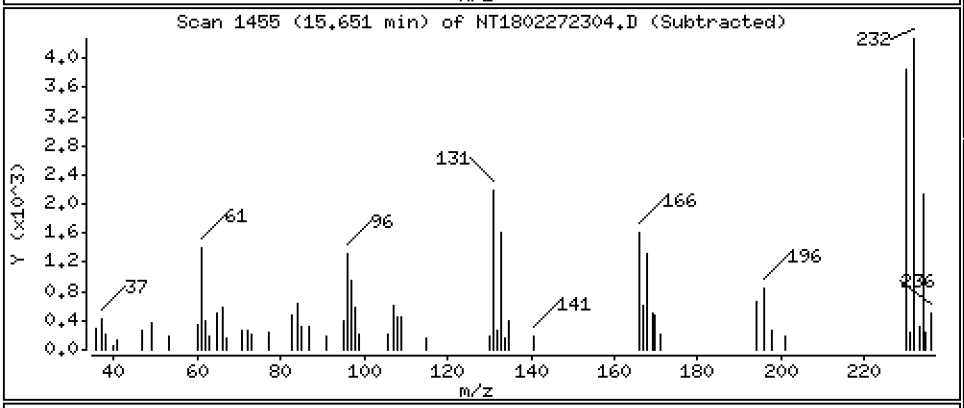
Column phase: ZB-5msi

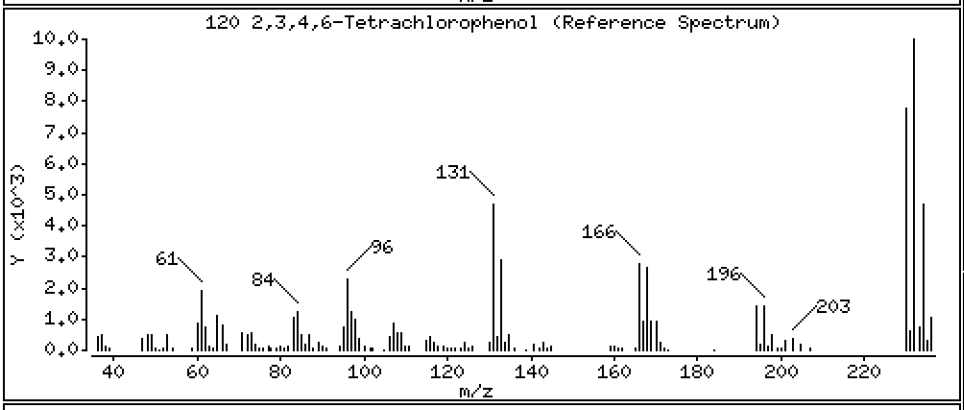
Column diameter: 0.25

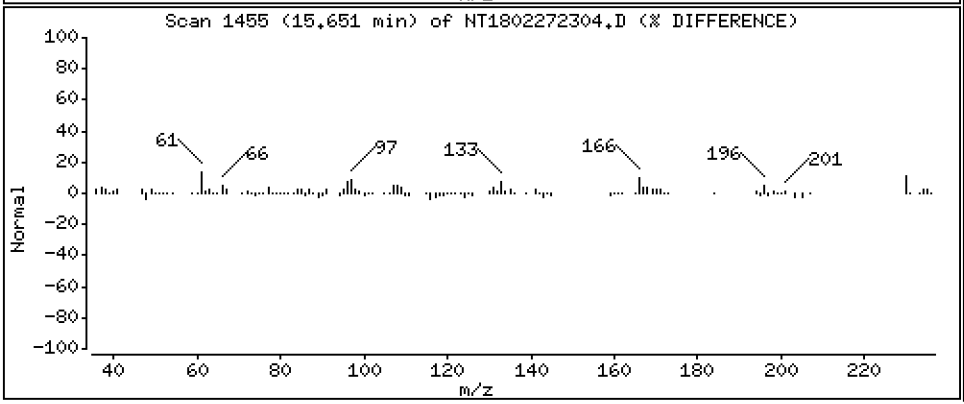
120 2,3,4,6-Tetrachlorophenol

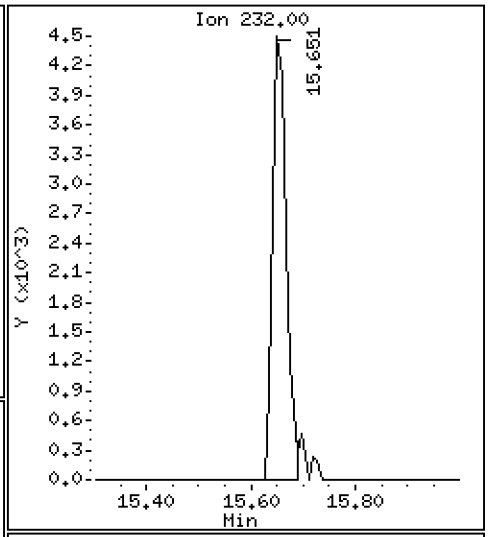
Concentration: 0.1549 ug/mL

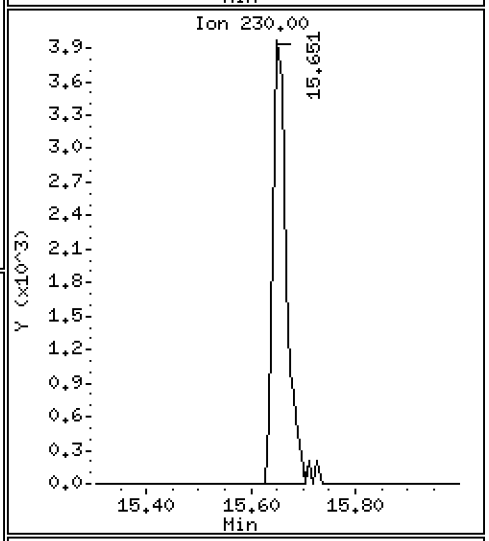


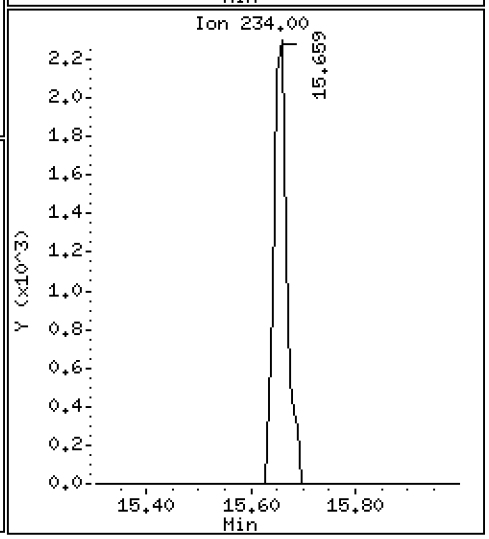












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Lab Smp Id: SLC0385-LCV1
Inj Date : 27-FEB-2023 19:10
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0385-LCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt18.i\20230227.b\ABN.m
Meth Date : 24-Mar-2023 10:19 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 01:24 Cal File: NT1802252308.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.728	6.728	(0.757)	28216	0.33035	0.3304
$	2 Phenol-d5	99	8.281	8.288	(0.931)	34433	0.31194	0.3119
	3 Phenol	94	8.304	8.304	(0.934)	22008	0.19163	0.1916
$	5 2-Chlorophenol-d4	132	8.543	8.543	(0.961)	31551	0.32847	0.3285
	4 Bis(2-Chloroethyl)ether	93	8.450	8.458	(0.950)	15785	0.20237	0.2024
	6 2-Chlorophenol	128	8.566	8.566	(0.963)	22012	0.22320	0.2232
	7 1,3-Dichlorobenzene	146	8.829	8.829	(0.993)	23552	0.22579	0.2258
*	8 1,4-Dichlorobenzene-d4	152	8.891	8.891	(1.000)	250344	4.00000	
	9 1,4-Dichlorobenzene	146	8.922	8.922	(1.003)	25221	0.23721	0.2372
$	10 1,2-Dichlorobenzene-d4	152	9.248	9.248	(1.040)	15445	0.22682	0.2268
	12 1,2-Dichlorobenzene	146	9.271	9.271	(1.043)	22901	0.22194	0.2219
	11 Benzyl alcohol	108	9.186	9.170	(1.033)	5531	0.10129	0.1013
	14 2,2'-oxybis(1-Chloropropane)	121	9.458	9.458	(1.064)	4498	0.18601	0.1860
	13 2-Methylphenol	108	9.396	9.396	(1.057)	19810	0.22299	0.2230
	17 Hexachloroethane	117	9.854	9.854	(1.108)	10274	0.24963	0.2496
	16 N-Nitroso-di-n-propylamine	70	9.714	9.722	(1.093)	13819	0.21161	0.2116
	15 4-Methylphenol	108	9.667	9.667	(1.087)	20292	0.21915	0.2192
$	18 Nitrobenzene-d5	82	9.978	9.970	(0.880)	21468	0.20750	0.2075
	19 Nitrobenzene	77	10.009	10.009	(0.882)	20456	0.20540	0.2054
	20 Isophorone	82	10.451	10.451	(0.921)	25455	0.20034	0.2003
	21 2-Nitrophenol	139	10.633	10.625	(0.938)	10153	0.20758	0.2076
	22 2,4-Dimethylphenol	107	10.693	10.693	(0.943)	41032	0.44025	0.4403
	23 Bis(2-Chloroethoxy)methane	93	10.879	10.879	(0.959)	17839	0.20504	0.2050
	24 Benzoic acid	105	10.964	10.964	(0.967)	341	0.00966	0.009657
	25 2,4-Dichlorophenol	162	11.083	11.083	(0.977)	32669	0.39978	0.3998
	26 1,2,4-Trichlorobenzene	180	11.257	11.264	(0.993)	20231	0.22922	0.2292
*	27 Naphthalene-d8	136	11.342	11.342	(1.000)	970777	4.00000	
	28 Naphthalene	128	11.380	11.388	(1.003)	67735	0.22698	0.2270
	29 4-Chloroaniline	127	11.519	11.519	(1.016)	49581	0.41690	0.4169
	30 Hexachlorobutadiene	225	11.743	11.743	(1.035)	11482	0.22195	0.2220
	31 4-Chloro-3-methylphenol	107	12.486	12.486	(1.101)	34577	0.44209	0.4421
	32 2-Methylnaphthalene	142	12.765	12.765	(1.125)	46441	0.22902	0.2290
	33 Hexachlorocyclopentadiene	237	13.229	13.229	(0.886)	201	0.00565	0.005654

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	13.392	13.392	(0.897)	21912	0.43055	0.4306
35	2,4,5-Trichlorophenol	196	13.469	13.461	(0.903)	21582	0.38916	0.3892
$ 36	2-Fluorobiphenyl	172	13.539	13.546	(0.907)	46766	0.21081	0.2108
37	2-Chloronaphthalene	162	13.748	13.748	(0.921)	37412	0.21582	0.2158
38	2-Nitroaniline	65	14.011	14.011	(0.939)	19376	0.35716	0.3572
39	Dimethylphthalate	163	14.436	14.444	(0.967)	40706	0.21864	0.2186
40	Acenaphthylene	152	14.607	14.607	(0.979)	62706	0.21483	0.2148
41	2,6-Dinitrotoluene	165	14.576	14.584	(0.977)	16170	0.37886	0.3789
* 42	Acenaphthene-d10	164	14.924	14.924	(1.000)	526167	4.00000	
43	3-Nitroaniline	138	14.854	14.862	(0.995)	19242	0.38113	0.3811
44	Acenaphthene	153	14.986	14.986	(1.004)	41554	0.22494	0.2249
45	2,4-Dinitrophenol	184	15.079	15.079	(1.010)	3066	0.15438	0.1544
46	Dibenzofuran	168	15.310	15.310	(1.026)	59297	0.22177	0.2218
47	4-Nitrophenol	109	15.210	15.202	(1.019)	5010	0.24617	0.2462
48	2,4-Dinitrotoluene	165	15.380	15.388	(1.031)	22842	0.39152	0.3915
50	Diethylphthalate	149	15.883	15.898	(1.064)	41522	0.21285	0.2128
49	Fluorene	166	16.014	16.014	(1.073)	51874	0.24210	0.2421
51	4-Chlorophenyl-phenylether	204	16.014	16.014	(1.073)	24282	0.24879	0.2488
52	4-Nitroaniline	138	16.114	16.130	(1.080)	17842	0.36734	0.3673
53	4,6-Dinitro-2-methylphenol	198	16.207	16.222	(0.904)	16171	0.46900	0.4690
54	N-Nitrosodiphenylamine	169	16.261	16.268	(0.907)	29557	0.20294	0.2029
$ 55	2,4,6-Tribromophenol	330	16.546	16.546	(1.109)	7010	0.26735	0.2674
56	4-Bromophenyl-phenylether	248	17.001	17.001	(0.948)	11500	0.19676	0.1968
57	Hexachlorobenzene	284	17.310	17.318	(0.965)	13147	0.19481	0.1948
58	Pentachlorophenol	266	17.682	17.674	(0.986)	2779	0.15732	0.1573
* 59	Phenanthrene-d10	188	17.929	17.929	(1.000)	967937	4.00000	
60	Phenanthrene	178	17.976	17.975	(1.003)	65769	0.21602	0.2160
61	Anthracene	178	18.068	18.068	(1.008)	61222	0.21101	0.2110
62	Carbazole	167	18.401	18.401	(1.026)	55683	0.20944	0.2094
63	Di-n-butylphthalate	149	19.206	19.213	(1.071)	67928	0.23083	0.2308
64	Fluoranthene	202	20.351	20.358	(0.886)	67048	0.23067	0.2307
65	Pyrene	202	20.776	20.776	(0.905)	69745	0.22498	0.2250
$ 66	Terphenyl-d14	244	21.070	21.070	(0.918)	52211	0.20999	0.2100
67	Butylbenzylphthalate	149	22.000	21.999	(0.958)	30065	0.25542	0.2554
68	Benzo(a)anthracene	228	22.929	22.929	(0.999)	66867	0.22326	0.2233
* 69	Chrysene-d12	240	22.960	22.960	(1.000)	829619	4.00000	
70	3,3'-Dichlorobenzidine	252	22.890	22.898	(0.997)	64418	0.58450	0.5845
71	Chrysene	228	22.998	23.006	(1.002)	66249	0.21272	0.2127
72	bis(2-Ethylhexyl)phthalate	149	23.022	23.029	(0.959)	44078	0.21637	0.2164
* 134	Di-n-octylphthalate-d4	153	23.997	23.997	(1.000)	1418909	4.00000	
73	Di-n-octylphthalate	149	24.005	24.005	(1.000)	91287	0.23089	0.2309
74	Benzo(b)fluoranthene	252	24.733	24.740	(0.972)	68146	0.23325	0.2332
75	Benzo(k)fluoranthene	252	24.771	24.779	(0.974)	66502	0.20085	0.2008
76	Benzo(a)pyrene	252	25.336	25.336	(0.996)	60024	0.22162	0.2216
* 77	Perylene-d12	264	25.437	25.445	(1.000)	895519	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	27.858	27.881	(1.095)	65431	0.19244	0.1924
79	Dibenzo(a,h)anthracene	278	27.873	27.889	(1.096)	52193	0.18406	0.1841
80	Benzo(g,h,i)perylene	276	28.580	28.595	(1.124)	58678	0.21526	0.2153
90	N-Nitrosodimethylamine	74	4.665	4.658	(0.525)	17806	0.35512	0.3551
91	Aniline	93	8.366	8.365	(0.941)	52725	0.40333	0.4033
93	Benzidine	184	20.598	20.598	(0.897)	55813	0.39301	0.3930
103	Pyridine	79	4.673	4.650	(0.526)	33053	0.39569	0.3957
105	1-methylnaphthalene	142	12.989	12.989	(1.145)	42914	0.23378	0.2338
111	Azobenzene (1,2-DP-Hydrazine)	77	16.330	16.338	(1.094)	42235	0.19654	0.1965

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	24.733	24.779	(0.972)	129718	0.43914	0.4391
120 2,3,4,6-Tetrachlorophenol	232	15.651	15.651	(1.049)	7806	0.15494	0.1549

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272304.D
Lab Smp Id: SLC0385-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230227.b\ABN.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:03
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	269759	134880	539518	250344	-7.20
27 Naphthalene-d8	1037039	518520	2074078	970777	-6.39
42 Acenaphthene-d10	556159	278080	1112318	526167	-5.39
59 Phenanthrene-d10	1021294	510647	2042588	967937	-5.22
69 Chrysene-d12	922264	461132	1844528	829619	-10.05
134 Di-n-octylphthala	1611284	805642	3222568	1418909	-11.94
77 Perylene-d12	948357	474179	1896714	895519	-5.57

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.89	8.39	9.39	8.89	0.00
27 Naphthalene-d8	11.34	10.84	11.84	11.34	0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.92	0.00
59 Phenanthrene-d10	17.93	17.43	18.43	17.93	0.00
69 Chrysene-d12	22.96	22.46	23.46	22.96	0.00
134 Di-n-octylphthala	24.00	23.50	24.50	24.00	0.00
77 Perylene-d12	25.45	24.95	25.95	25.44	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272304.D

Lab ID: SLC0385-LCV1
nt18.i, ABN.m, 27-FEB-2023 19:10

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1802272302.D

On Column LOD for nt18.i, ABN.m, ICAL.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0099	Instrument:	NT18
		Calibration:	GC00023

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0099-TUN1	NT1802252301.D	NA	02/25/23 20:42
ABN 20	SLC0099-CAL7	NT1802252302.D	NA	02/25/23 21:23
ABN 10	SLC0099-CAL6	NT1802252303.D	NA	02/25/23 22:03
ABN 5	SLC0099-CAL5	NT1802252304.D	NA	02/25/23 22:43
ABN 2.5	SLC0099-CAL4	NT1802252305.D	NA	02/25/23 23:24
ABN 1.0	SLC0099-CAL3	NT1802252306.D	NA	02/26/23 00:04
ABN 0.5	SLC0099-CAL2	NT1802252307.D	NA	02/26/23 00:44
ABN 0.2	SLC0099-CAL1	NT1802252308.D	NA	02/26/23 01:24
Initial Cal Blank	SLC0099-ICB1	NT1802252311.D	NA	02/26/23 03:26
SCV 5.0	SLC0099-SCV1	NT1802252312.D	NA	02/26/23 04:06

Printed: 3/9/2023 7:31:43AM

ANALYSIS SEQUENCE

SLC0099

Instrument ID: NT18
Calibration ID: GC00023
MS EM Level: 1153 EV

GCMS Description: Agilent 6890N/5975
GCMS Column ID: L001046

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0099-TUN1	MS Tune	QC		1	K004775		02/25/2023 20:42	NT1802252301.D	VTS	
SLC0099-CAL7	ABN 20	QC		2	K011111	K010831	02/25/2023 21:23	NT1802252302.D	VTS	
SLC0099-CAL6	ABN 10	QC		3	K011110	K010831	02/25/2023 22:03	NT1802252303.D	VTS	
SLC0099-CAL5	ABN 5	QC		4	K011109	K010831	02/25/2023 22:43	NT1802252304.D	VTS	
SLC0099-CAL4	ABN 2.5	QC		5	K011108	K010831	02/25/2023 23:24	NT1802252305.D	VTS	
SLC0099-CAL3	ABN 1.0	QC		6	K011107	K010831	02/26/2023 00:04	NT1802252306.D	VTS	
SLC0099-CAL2	ABN 0.5	QC		7	K011106	K010831	02/26/2023 00:44	NT1802252307.D	VTS	
SLC0099-CAL1	ABN 0.2	QC		8	K011105	K010831	02/26/2023 01:24	NT1802252308.D	VTS	
SLC0099-ICB1	Initial Cal Blank	QC		9	K005156	K010831	02/26/2023 03:26	NT1802252311.D	VTS	
SLC0099-SCV1	SCV 5.0	QC		10	L002576	K010831	02/26/2023 04:06	NT1802252312.D	VTS	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230225.b

	Time	Filename	LabID	ClientId	DF														
1	2042	NT1802252301.D	SLC0099-TUN1		1	NO ISTDS FOUND													
2	2123	NT1802252302.D	SLC0099-CAL7		1	8.92	227200	11.37	879826	14.95	460093	17.96	797797	22.99	801796	25.48	822041	24.03	1234737
3	2203	NT1802252303.D	SLC0099-CAL6		1	8.92	198251	11.37	749393	14.95	400878	17.95	703042	22.98	658368	25.48	698677	24.02	1034200
4	2243	NT1802252304.D	SLC0099-CAL5		1	8.91	213108	11.37	806946	14.94	424249	17.95	758987	22.98	685237	25.47	762553	24.02	1075410
5	2324	NT1802252305.D	SLC0099-CAL4		1	8.92	134104	11.37	513388	14.94	270155	17.95	481445	22.98	424314	25.47	458969	24.02	618169
6	0004	NT1802252306.D	SLC0099-CAL3		1	8.91	219306	11.37	838313	14.94	448096	17.95	796201	22.98	700696	25.47	784566	24.02	1033193
7	0044	NT1802252307.D	SLC0099-CAL2		1	8.92	208805	11.37	794748	14.94	424597	17.95	755611	22.98	667306	25.47	735979	24.02	935988
8	0124	NT1802252308.D	SLC0099-CAL1		1	8.92	193315	11.37	740480	14.94	397571	17.95	704464	22.98	629152	25.47	703181	24.02	865119
9	0205	NT1802252309.D			1	8.92	193634	11.37	746108	14.94	393280	17.95	714005	22.98	627812	25.47	697200	24.02	848270
10	0245	NT1802252310.D			1	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
11	0326	NT1802252311.D	SLC0099-ICB1		1	8.92	195957	11.37	721335	14.94	373490	17.95	681936	22.98	584972	25.47	668327	24.02	770361
12	0406	NT1802252312.D	SLC0099-SCV1		1	8.92	196803	11.37	751242	14.94	398556	17.95	714786	22.98	645093	25.47	719540	24.02	989444

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230225.b

Instrument: nt18.i Date: 25-FEB-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
2042	NT1802252301.D	SLC0099-TUN1	1	NO MANUAL INTEGRATION
2123	NT1802252302.D	SLC0099-CAL7	1	Benzoic acid, Fluoranthene,
2203	NT1802252303.D	SLC0099-CAL6	1	2,2'-oxybis(1-Chloropropane), Benzoic acid, Fluoranthene,
2243	NT1802252304.D	SLC0099-CAL5	1	2,2'-oxybis(1-Chloropropane), Benzoic acid, Fluoranthene,
2324	NT1802252305.D	SLC0099-CAL4	1	Benzoic acid, Fluoranthene,
0004	NT1802252306.D	SLC0099-CAL3	1	Benzoic acid, Pentachlorophenol, Fluoranthene,
0044	NT1802252307.D	SLC0099-CAL2	1	2,2'-oxybis(1-Chloropropane), Benzoic acid, 4-Nitrophenol, Pentachlorophenol, Fluoranthene,
0124	NT1802252308.D	SLC0099-CAL1	1	4-Nitrophenol, Fluoranthene, 2,3,4,6-Tetrachlorophenol,
0205	NT1802252309.D		1	NO MANUAL INTEGRATION
0245	NT1802252310.D		1	NO MANUAL INTEGRATION
0326	NT1802252311.D	SLC0099-ICB1	1	NO MANUAL INTEGRATION
0406	NT1802252312.D	SLC0099-SCV1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 09-Mar-2023 07:33

NT1802252301.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252302.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252303.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252304.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252305.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252306.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252307.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252308.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252309.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252310.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252311.D	Data Locked	van, 09-Mar-2023 07:33
NT1802252312.D	Data Locked	van, 09-Mar-2023 07:33

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0111	Instrument:	NT18
		Calibration:	GC00023

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0111-TUN1	NT1802262301.D	NA	02/26/23 11:52
Initial Cal Check	SLC0111-ICV1	NT1802262302.D	NA	02/26/23 12:08
Blank	BLA0410-BLK1	NT1802262306.D	Solid	02/26/23 15:11
LCS	BLA0410-BS1	NT1802262307.D	Solid	02/26/23 15:52
LCS Dup	BLA0410-BSD1	NT1802262308.D	Solid	02/26/23 16:32
Reference	BLA0410-SRM1	NT1802262309.D	Solid	02/26/23 17:12
LDW23-SS1205	23A0134-01	NT1802262310.D	Solid	02/26/23 17:52
LDW23-SS1188	23A0134-02	NT1802262311.D	Solid	02/26/23 18:32
LDW23-SS1179	23A0134-03	NT1802262312.D	Solid	02/26/23 19:12
LDW23-SS1242	23A0134-04	NT1802262313.D	Solid	02/26/23 19:53
LDW23-SS1173	23A0134-05	NT1802262314.D	Solid	02/26/23 20:33
LDW23-SS1160	23A0134-06	NT1802262315.D	Solid	02/26/23 21:13
LDW23-SS1152	23A0134-07	NT1802262316.D	Solid	02/26/23 21:53
LDW23-SS1131	23A0134-08	NT1802262317.D	Solid	02/26/23 22:33
LDW23-SS1129	23A0134-09	NT1802262318.D	Solid	02/26/23 23:14
LDW23-SS1124	23A0134-10	NT1802262319.D	Solid	02/26/23 23:54
LDW23-SS1123	23A0134-11	NT1802262320.D	Solid	02/27/23 00:34
Calibration Check	SLC0111-CCV1	NT1802262326.D	NA	02/27/23 04:36

Printed: 3/10/2023 9:17:28AM

ANALYSIS SEQUENCE

SLC0111

Instrument ID: NT18
Calibration ID: GC00023
MS EM Level: 1153 EV

GCMS Description: Agilent 6890N/5975
GCMS Column ID: L001046

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0111-TUN1	MS Tune	QC		1	K004775		02/26/2023 11:52	NT1802262301.D	VTS	
SLC0111-ICV1	Initial Cal Check	QC		2	K011109	K010831	02/26/2023 12:08	NT1802262302.D	VTS	
BLA0410-BLK1	Blank	QC		3		K010831	02/26/2023 15:11	NT1802262306.D	VTS	
BLA0410-BS1	LCS	QC		4		K010831	02/26/2023 15:52	NT1802262307.D	VTS	
BLA0410-BSD1	LCS Dup	QC		5		K010831	02/26/2023 16:32	NT1802262308.D	VTS	
BLA0410-SRM1	Reference	QC		6		K010831	02/26/2023 17:12	NT1802262309.D	VTS	
23A0134-01	LDW23-SS1205	(20ug/kg solid or 0.2ug/L l	C 02	7		K010831	02/26/2023 17:52	NT1802262310.D	VTS	
23A0134-02	LDW23-SS1188	(20ug/kg solid or 0.2ug/L l	C 02	8		K010831	02/26/2023 18:32	NT1802262311.D	VTS	
23A0134-03	LDW23-SS1179	(20ug/kg solid or 0.2ug/L l	C 02	9		K010831	02/26/2023 19:12	NT1802262312.D	VTS	
23A0134-04	LDW23-SS1242	(20ug/kg solid or 0.2ug/L l	C 02	10		K010831	02/26/2023 19:53	NT1802262313.D	VTS	
23A0134-05	LDW23-SS1173	(20ug/kg solid or 0.2ug/L l	C 02	11		K010831	02/26/2023 20:33	NT1802262314.D	VTS	
23A0134-06	LDW23-SS1160	(20ug/kg solid or 0.2ug/L l	C 02	12		K010831	02/26/2023 21:13	NT1802262315.D	VTS	
23A0134-07	LDW23-SS1152	(20ug/kg solid or 0.2ug/L l	C 02	13		K010831	02/26/2023 21:53	NT1802262316.D	VTS	
23A0134-08	LDW23-SS1131	(20ug/kg solid or 0.2ug/L l	C 02	14		K010831	02/26/2023 22:33	NT1802262317.D	VTS	
23A0134-09	LDW23-SS1129	(20ug/kg solid or 0.2ug/L l	C 02	15		K010831	02/26/2023 23:14	NT1802262318.D	VTS	
23A0134-10	LDW23-SS1124	(20ug/kg solid or 0.2ug/L l	C 02	16		K010831	02/26/2023 23:54	NT1802262319.D	VTS	
SLC0111-CCV1	Calibration Check	QC		17	K011109	K010831	02/27/2023 04:36	NT1802262326.D	VTS	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230226.b

	Time	Filename	LabID	ClientId	DF																			
1	1152	NT1802262301.D	SEQ-TUN1		1	NO ISTDS FOUND																		
2	1208	NT1802262302.D	SLC0111-ICV1		1	8.92	244122	11.37	943164	14.95	501893	17.95	896502	22.98	842481	25.48	915681	24.02	1278043					
3	1248	NT1802262303.D	SIM -ICV		1	8.92	258584	11.37	993981	14.94	528415	17.95	950487	22.98	851949	25.47	961200	24.02	1244146					
4	1351	NT1802262304.D	SIM LCV		1	8.92	227242	11.37	875039	14.95	469986	17.95	840428	22.98	753043	25.47	848711	24.02	1038326					
5	1431	NT1802262305.D	SIM LCV		1	8.92	228864	11.37	886693	14.94	467112	17.95	844136	22.98	755214	25.47	847468	24.02	1009373					
6	1511	NT1802262306.D	BLA0410-BLK1		1	8.92	244536	11.37	917111	14.94	487134	17.95	894181	22.98	795833	25.47	843260	24.02	1184006					
7	1552	NT1802262307.D	BLA0410-BS1		1	8.92	257132	11.37	981883	14.95	522636	17.95	932364	22.98	846375	25.47	901138	24.02	1337207					
8	1632	NT1802262308.D	BLA0410-BSD1		1	8.92	260510	11.37	997833	14.95	522836	17.95	932428	22.98	847114	25.48	902626	24.02	1339708					
9	1712	NT1802262309.D	BLA0410-SRM1		1	8.91	250376	11.37	948526	14.94	501284	17.95	897833	22.98	824416	25.47	828963	24.02	1315452					
10	1752	NT1802262310.D	23A0134-01		1	8.92	259114	11.37	950101	14.94	505016	17.95	994180	22.99	1006722	25.48	1116679	24.02	1563332					
11	1832	NT1802262311.D	23A0134-02		1	8.91	261869	11.37	989150	14.95	529116	17.95	1011676	22.99	1124043	25.49	1184980	24.03	1696842					
12	1912	NT1802262312.D	23A0134-03		1	8.92	266790	11.37	985574	14.95	530046	17.95	1102776	23.00	1204859	25.50	1054654	24.03	1762598					
13	1953	NT1802262313.D	23A0134-04		1	8.92	269849	11.37	996392	14.95	541587	17.96	1114726	23.00	1139581	25.50	974079	24.03	1709976					
14	2033	NT1802262314.D	23A0134-05		1	8.92	255665	11.37	946109	14.95	511330	17.95	1044038	23.00	1137568	25.50	897024	24.03	1724830					
15	2113	NT1802262315.D	23A0134-06		1	8.91	252087	11.37	924178	14.95	499279	17.95	946583	22.99	1023554	25.48	875205	24.02	1625598					
16	2153	NT1802262316.D	23A0134-07		1	8.91	256229	11.37	957414	14.95	516620	17.95	991802	22.99	1088086	25.48	860190	24.03	1687180					
17	2233	NT1802262317.D	23A0134-08		1	8.92	266839	11.37	1003350	14.95	549008	17.95	1100646	23.00	1151391	25.49	839352	24.03	1771376					
18	2314	NT1802262318.D	23A0134-09		1	8.92	265386	11.37	982393	14.95	537514	17.96	1085820	23.00	1171717	25.50	809934	24.03	1779595					
19	2354	NT1802262319.D	23A0134-10		1	8.92	259808	11.37	966998	14.95	533103	17.96	1097408	23.00	1119364	25.50	696203	24.03	1715607					
20	0034	NT1802262320.D	23A0134-11		1	8.91	250542	11.37	935827	14.95	505143	17.96	1041436	23.00	1085535	25.50	683638	24.03	1688607					

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230226.b

	Time	Filename	LabID	ClientId	DF																
21	0114	NT1802262321.D			1	8.92	252835	11.37	939102	14.95	507769	17.96	1033190	23.00	1041195	25.49	633999	24.03	1647946
22	0154	NT1802262322.D			1	8.92	254960	11.37	975266	14.95	558520	17.97	1198677	23.02	1144227	25.53	684941	24.05	1542559
23	0235	NT1802262323.D			1	8.92	265877	11.37	1029513	14.96	583687	17.97	1234973	23.03	1057607	25.54	617995	24.05	1300930
24	0315	NT1802262324.D			1	8.92	270144	11.37	1052603	14.96	594952	17.98	1267021	23.03	1111483	25.54	612593	24.05	1413551
25	0355	NT1802262325.D			1	8.92	269044	11.37	1019091	14.95	556230	17.96	1138395	23.01	1102369	25.51	533973	24.04	1775866
26	0436	NT1802262326.D	SLC0111-CCV1		1	8.92	284154	11.37	1075373	14.95	581824	17.96	1119140	22.99	1031047	25.48	476783	24.03	1718023

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230226.b

Instrument: nt18.i Date: 26-FEB-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1152	NT1802262301.D	SEQ-TUN1	1	dftpp,
1208	NT1802262302.D	SLC0111-ICV1	1	2,2'-oxybis(1-Chloropropane), Benzoic acid,
1248	NT1802262303.D	SIM -ICV	1	Benzoic acid,
1351	NT1802262304.D	SIM LCV	1	NO MANUAL INTEGRATION
1431	NT1802262305.D	SIM LCV	1	NO MANUAL INTEGRATION
1511	NT1802262306.D	BLA0410-BLK1	1	NO MANUAL INTEGRATION
1552	NT1802262307.D	BLA0410-BS1	1	NO MANUAL INTEGRATION
1632	NT1802262308.D	BLA0410-BSD1	1	NO MANUAL INTEGRATION
1712	NT1802262309.D	BLA0410-SRM1	1	NO MANUAL INTEGRATION
1752	NT1802262310.D	23A0134-01	1	Benzoic acid,
1832	NT1802262311.D	23A0134-02	1	Benzoic acid,
1912	NT1802262312.D	23A0134-03	1	Benzoic acid, Benzo(k)fluoranthene,
1953	NT1802262313.D	23A0134-04	1	Benzoic acid,
2033	NT1802262314.D	23A0134-05	1	Benzoic acid, Benzo(k)fluoranthene,
2113	NT1802262315.D	23A0134-06	1	Benzoic acid,
2153	NT1802262316.D	23A0134-07	1	Benzoic acid,
2233	NT1802262317.D	23A0134-08	1	Benzoic acid,

Instrument: nt18.i Date: 26-FEB-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
2314	NT1802262318.D	23A0134-09	1	Benzoic acid, Benzo(k)fluoranthene,
2354	NT1802262319.D	23A0134-10	1	Benzoic acid, Benzo(k)fluoranthene,
0034	NT1802262320.D	23A0134-11	1	Benzoic acid,
0114	NT1802262321.D		1	Benzoic acid,
0154	NT1802262322.D		1	Benzoic acid, Benzo(k)fluoranthene,
0235	NT1802262323.D		1	3,3'-Dichlorobenzidine, Di-n-octylphthalate,
0315	NT1802262324.D		1	Di-n-octylphthalate,
0355	NT1802262325.D		1	Benzoic acid, Benzo(k)fluoranthene,
0436	NT1802262326.D	SLC0111-CCV1	1	Benzoic acid,

Security Status Report

Date: 10-Mar-2023 09:18

NT1802262301.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262302.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262303.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262304.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262305.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262306.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262307.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262308.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262309.D	Data Locked	van, 10-Mar-2023 09:18
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NT1802262312.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262313.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262314.D	Data Locked	van, 10-Mar-2023 09:18
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NT1802262316.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262317.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262318.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262319.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262320.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262321.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262322.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262323.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262324.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262325.D	Data Locked	van, 10-Mar-2023 09:18
NT1802262326.D	Data Locked	van, 10-Mar-2023 09:18

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0385	Instrument:	NT18
		Calibration:	GC00023

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0385-TUN1	NT1802272301.D	NA	02/27/23 16:45
Initial Cal Check	SLC0385-ICV1	NT1802272302.D	NA	02/27/23 17:03
ABN 0.2	SLC0385-LCV1	NT1802272304.D	NA	02/27/23 19:10
LDW23-SS1116	23A0134-12	NT1802272307.D	Solid	02/27/23 21:11
LDW23-IT1210	23A0134-13	NT1802272308.D	Solid	02/27/23 21:51
LDW23-IT1210	BLA0410-MS1	NT1802272309.D	Solid	02/27/23 22:32
LDW23-IT1210	BLA0410-MSD1	NT1802272310.D	Solid	02/27/23 23:12
LDW23-SC1249	23A0134-15	NT1802272311.D	Solid	02/27/23 23:53
Calibration Check	SLC0385-CCV1	NT1802272322.D	NA	02/28/23 13:15

Printed: 3/24/2023 10:48:47AM

ANALYSIS SEQUENCE

SLC0385

Instrument ID: NT18
Calibration ID: GC00023
MS EM Level: EV

GCMS Description: Agilent 6890N/5975
GCMS Column ID: ZB-5MS

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0385-TUN1	MS Tune	QC		1	L002618		02/27/2023 16:45	NT1802272301.D	VTS	
SLC0385-ICV1	Initial Cal Check	QC		2	K011109	K010831	02/27/2023 17:03	NT1802272302.D	VTS	
SLC0385-LCV1	ABN 0.2	QC		3	K011105	K010831	02/27/2023 19:10	NT1802272304.D	VTS	
23A0134-12	LDW23-SS1116	(20ug/kg solid or 0.2ug/L l	C 04	4		K010831	02/27/2023 21:11	NT1802272307.D	VTS	
23A0134-13	LDW23-IT1210	(20ug/kg solid or 0.2ug/L l	C 04	5		K010831	02/27/2023 21:51	NT1802272308.D	VTS	
23A0134-15	LDW23-SC1249	(20ug/kg solid or 0.2ug/L l	C 04	6		K010831	02/27/2023 23:53	NT1802272311.D	VTS	
BLA0410-MS1	Matrix Spike	QC		7		K010831	02/27/2023 22:32	NT1802272309.D	VTS	
BLA0410-MSD1	Matrix Spike Dup	QC		8		K010831	02/27/2023 23:12	NT1802272310.D	VTS	
SLC0385-CCV1	Calibration Check	QC		9	K011109	K010831	02/28/2023 13:15	NT1802272322.D	VTS	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230227.b

	Time	Filename	LabID	ClientId	DF																			
1	1645	NT1802272301.D	SLC0385-TUN1		1	|NO ISTDS FOUND||																		
2	1703	NT1802272302.D	SLC0385-ICV1		1	| 8.89	269759	11.34	1037039	14.92	556159	17.93	1021294	22.96	922264	25.45	948357	24.00	1611284 |					
3	1743	NT1802272303.D	SEQ-ICVSIM		1	| 8.89	287285	11.34	1130662	14.92	605591	17.92	1100995	22.96	962504	25.44	1040949	24.00	1681265 |					
4	1910	NT1802272304.D	SLC0385-LCV1		1	| 8.89	250344	11.34	970777	14.92	526167	17.93	967937	22.96	829619	25.44	895519	24.00	1418909 |					
5	1950	NT1802272305.D	SEQ-LCV1		1	| 8.89	258129	11.34	1013706	14.92	534802	17.92	983636	22.95	845671	25.44	910945	24.00	1442029 |					
6	2030	NT1802272306.D	SEQ-LCV3		1	| 8.89	280935	11.34	1088899	14.92	586170	17.92	1074361	22.96	908947	25.44	989433	24.00	1549343 |					
7	2111	NT1802272307.D	23A0134-12		1	| 8.89	263083	11.34	994677	14.92	534970	17.93	1080409	22.97	1000454	25.45	943619	24.00	1680018 |					
8	2151	NT1802272308.D	23A0134-13		1	| 8.89	242907	11.34	952232	14.92	555342	17.94	1209774	22.99	1436831	25.48	972187	24.02	1908006 |					
9	2232	NT1802272309.D	BLA0410-MS1		1	| 8.89	269794	11.34	1071124	14.93	620139	17.95	1395191	23.00	1474048	25.49	822147	24.02	1728411 |					
10	2312	NT1802272310.D	BLA0410-MSD1		1	| 8.89	272731	11.35	1060656	14.92	611705	17.95	1357765	23.00	1479392	25.49	809459	24.02	1813504 |					
11	2353	NT1802272311.D	23A0134-15		1	| 8.89	276045	11.34	1054994	14.92	575479	17.93	1183309	22.98	1157424	25.47	654770	24.01	1939637 |					
12	0033	NT1802272312.D	BLA0554-BLK1		1	| 8.89	278146	11.34	1067494	14.92	542818	17.93	1051442	22.96	911744	25.44	628831	24.00	1714425 |					
13	0114	NT1802272313.D	BLA0554-BS1		1	| 8.89	289360	11.34	1118883	14.92	606930	17.93	1112407	22.96	972706	25.45	638149	24.00	1775276 |					
14	0154	NT1802272314.D	BLA0554-BSD1		1	| 8.89	293234	11.34	1140105	14.92	608086	17.93	1129294	22.96	986154	25.45	628899	24.00	1794348 |					
15	0235	NT1802272315.D	BLA0554-SRM1		1	| 8.89	279561	11.34	1091433	14.92	578024	17.93	1086265	22.96	956474	25.45	644897	24.00	1713691 |					
16	0315	NT1802272316.D	23A0158-04		1	| 8.89	295186	11.34	1120763	14.92	606360	17.93	1264664	22.98	1214378	25.46	656792	24.01	2042582 |					
17	0356	NT1802272317.D	23A0158-05		1	| 8.89	280215	11.34	1062147	14.92	570172	17.93	1162984	22.97	1080281	25.46	593744	24.01	1922403 |					
18	1315	NT1802272322.D	SLC0385-CCV1		1	| 8.89	201005	11.34	765574	14.92	438647	17.93	838571	22.96	645552	25.44	254327	24.00	1008511 |					

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230227.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt18.i Date: 27-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1645	NT1802272301.D	SLC0385-TUN1		1	NO MANUAL INTEGRATION
1703	NT1802272302.D	SLC0385-ICV1		1	2,2'-oxybis(1-Chloropropane), Benzoic acid,
1743	NT1802272303.D	SEQ-ICVSIM		1	NO MANUAL INTEGRATION
1910	NT1802272304.D	SLC0385-LCV1		1	NO MANUAL INTEGRATION
1950	NT1802272305.D	SEQ-LCV1		1	NO MANUAL INTEGRATION
2030	NT1802272306.D	SEQ-LCV3		1	Benzoic acid,
2111	NT1802272307.D	23A0134-12		1	NO MANUAL INTEGRATION
2151	NT1802272308.D	23A0134-13		1	Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
2232	NT1802272309.D	BLA0410-MS1		1	Di-n-octylphthalate,
2312	NT1802272310.D	BLA0410-MSD1		1	Di-n-octylphthalate,
2353	NT1802272311.D	23A0134-15		1	Dibenzo(a,h)anthracene,
0033	NT1802272312.D	BLA0554-BLK1		1	NO MANUAL INTEGRATION
0114	NT1802272313.D	BLA0554-BS1		1	NO MANUAL INTEGRATION
0154	NT1802272314.D	BLA0554-BSD1		1	NO MANUAL INTEGRATION
0235	NT1802272315.D	BLA0554-SRM1		1	NO MANUAL INTEGRATION
0315	NT1802272316.D	23A0158-04		1	NO MANUAL INTEGRATION
0356	NT1802272317.D	23A0158-05		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230227.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1315	NT1802272322.D	SLC0385-CCV1		1	2,2'-oxybis(1-Chloropropane),

Security Status Report

Date: 24-Mar-2023 10:47

NT1802272301.D	Data Locked	deenayd, 24-
NT1802272302.D	Data Locked	deenayd, 24-
NT1802272303.D	Data Locked	deenayd, 24-
NT1802272304.D	Data Locked	deenayd, 24-
NT1802272305.D	Data Locked	deenayd, 24-
NT1802272306.D	Data Locked	deenayd, 24-
NT1802272307.D	Data Locked	deenayd, 24-
NT1802272308.D	Data Locked	deenayd, 24-
NT1802272309.D	Data Locked	deenayd, 24-
NT1802272310.D	Data Locked	deenayd, 24-
NT1802272311.D	Data Locked	deenayd, 24-
NT1802272312.D	Data Locked	deenayd, 24-
NT1802272313.D	Data Locked	deenayd, 24-
NT1802272314.D	Data Locked	deenayd, 24-
NT1802272315.D	Data Locked	deenayd, 24-
NT1802272316.D	Data Locked	deenayd, 24-
NT1802272317.D	Data Locked	deenayd, 24-
NT1802272322.D	Data Locked	deenayd, 24-

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0099	Instrument:	NT18
Calibration:	GC00023	Calibration Date:	02/26/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0099-ICB1 (Water)			Lab File ID: NT1802252311.D			Analyzed: 02/26/23 03:26		
2-Fluorophenol	7.5000	88.3	30 - 160	6.735	6.739572	-0.0046	N/A	
Phenol-d5	7.5000	88.9	30 - 160	8.288	8.298143	-0.0101	N/A	
2-Chlorophenol-d4	7.5000	86.9	30 - 160	8.559	8.56	-0.0010	N/A	
1,2-Dichlorobenzene-d4	5.0000	84.4	30 - 160	9.264	9.266286	-0.0023	N/A	
Nitrobenzene-d5	5.0000	89.0	30 - 160	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	5.0000	89.0	30 - 160	13.562	13.56529	-0.0033	N/A	
2,4,6-Tribromophenol	7.5000	62.7	30 - 160	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	5.0000	93.4	30 - 160	21.094	21.095	-0.0010	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0111
Instrument: NT18
Calibration: GC00023
Calibration Date: 02/26/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0111-ICV1 (Solid)			Lab File ID: NT1802262302.D			Analyzed: 02/26/23 12:08		
2-Fluorophenol	7.5000	99.4	80 - 120	6.743	6.739572	0.0034	N/A	
Phenol-d5	7.5000	98.6	80 - 120	8.296	8.298143	-0.0021	N/A	
2-Chlorophenol-d4	7.5000	97.6	80 - 120	8.559	8.56	-0.0010	N/A	
1,2-Dichlorobenzene-d4	5.0000	94.1	80 - 120	9.272	9.266286	0.0057	N/A	
Nitrobenzene-d5	5.0000	99.4	80 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	5.0000	93.6	80 - 120	13.57	13.56529	0.0047	N/A	
2,4,6-Tribromophenol	7.5000	94.4	80 - 120	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	5.0000	96.2	80 - 120	21.094	21.095	-0.0010	N/A	
BLA0410-BLK1 (Solid)			Lab File ID: NT1802262306.D			Analyzed: 02/26/23 15:11		
2-Fluorophenol	750.00	53.6	27 - 120	6.759	6.739572	0.0194	N/A	
Phenol-d5	750.00	60.3	29 - 120	8.304	8.298143	0.0059	N/A	
2-Chlorophenol-d4	750.00	59.1	31 - 120	8.566	8.56	0.0060	N/A	
1,2-Dichlorobenzene-d4	500.00	59.2	32 - 120	9.264	9.266286	-0.0023	N/A	
Nitrobenzene-d5	500.00	66.5	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	500.00	63.6	35 - 120	13.562	13.56529	-0.0033	N/A	
2,4,6-Tribromophenol	750.00	41.8	24 - 134	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	500.00	84.0	37 - 120	21.094	21.095	-0.0010	N/A	
BLA0410-BS1 (Solid)			Lab File ID: NT1802262307.D			Analyzed: 02/26/23 15:52		
2-Fluorophenol	750.00	67.5	27 - 120	6.759	6.739572	0.0194	N/A	
Phenol-d5	750.00	69.3	29 - 120	8.304	8.298143	0.0059	N/A	
2-Chlorophenol-d4	750.00	69.1	31 - 120	8.566	8.56	0.0060	N/A	
1,2-Dichlorobenzene-d4	500.00	62.5	32 - 120	9.264	9.266286	-0.0023	N/A	
Nitrobenzene-d5	500.00	69.5	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	500.00	68.0	35 - 120	13.562	13.56529	-0.0033	N/A	
2,4,6-Tribromophenol	750.00	72.2	24 - 134	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	500.00	83.6	37 - 120	21.094	21.095	-0.0010	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0111	Instrument:	NT18
Calibration:	GC00023	Calibration Date:	02/26/2023

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLA0410-BSD1 (Solid)			Lab File ID: NT1802262308.D			Analyzed: 02/26/23 16:32		
2-Fluorophenol	750.00	68.0	27 - 120	6.759	6.739572	0.0194	N/A	
Phenol-d5	750.00	69.2	29 - 120	8.304	8.298143	0.0059	N/A	
2-Chlorophenol-d4	750.00	68.7	31 - 120	8.566	8.56	0.0060	N/A	
1,2-Dichlorobenzene-d4	500.00	61.8	32 - 120	9.272	9.266286	0.0057	N/A	
Nitrobenzene-d5	500.00	69.7	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	500.00	68.8	35 - 120	13.57	13.56529	0.0047	N/A	
2,4,6-Tribromophenol	750.00	74.9	24 - 134	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	500.00	81.3	37 - 120	21.094	21.095	-0.0010	N/A	
BLA0410-SRM1 (Solid)			Lab File ID: NT1802262309.D			Analyzed: 02/26/23 17:12		
2-Fluorophenol	7500.0	69.2	27 - 120	6.766	6.739572	0.0264	N/A	
Phenol-d5	7500.0	70.2	29 - 120	8.304	8.298143	0.0059	N/A	
2-Chlorophenol-d4	7500.0	69.2	31 - 120	8.566	8.56	0.0060	N/A	
1,2-Dichlorobenzene-d4	5000.0	59.0	32 - 120	9.271	9.266286	0.0047	N/A	
Nitrobenzene-d5	5000.0	68.8	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	5000.0	67.3	35 - 120	13.562	13.56529	-0.0033	N/A	
2,4,6-Tribromophenol	7500.0	83.2	24 - 134	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	5000.0	87.8	37 - 120	21.094	21.095	-0.0010	N/A	
23A0134-01 (Solid)			Lab File ID: NT1802262310.D			Analyzed: 02/26/23 17:52		
2-Fluorophenol	748.18	73.9	27 - 120	6.766	6.739572	0.0264	N/A	
Phenol-d5	748.18	74.7	29 - 120	8.304	8.298143	0.0059	N/A	
2-Chlorophenol-d4	748.18	72.8	31 - 120	8.566	8.56	0.0060	N/A	
1,2-Dichlorobenzene-d4	498.79	63.7	32 - 120	9.264	9.266286	-0.0023	N/A	
Nitrobenzene-d5	498.79	73.6	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	498.79	72.7	35 - 120	13.562	13.56529	-0.0033	N/A	
2,4,6-Tribromophenol	748.18	91.5	24 - 134	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	498.79	73.4	37 - 120	21.101	21.095	0.0060	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0111
Instrument: NT18
Calibration: GC00023
Calibration Date: 02/26/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0134-02 (Solid)			Lab File ID: NT1802262311.D			Analyzed: 02/26/23 18:32		
2-Fluorophenol	746.26	74.2	27 - 120	6.766	6.739572	0.0264	N/A	
Phenol-d5	746.26	75.0	29 - 120	8.311	8.298143	0.0129	N/A	
2-Chlorophenol-d4	746.26	74.3	31 - 120	8.566	8.56	0.0060	N/A	
1,2-Dichlorobenzene-d4	497.51	63.8	32 - 120	9.271	9.266286	0.0047	N/A	
Nitrobenzene-d5	497.51	73.0	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	497.51	71.9	35 - 120	13.562	13.56529	-0.0033	N/A	
2,4,6-Tribromophenol	746.26	94.5	24 - 134	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	497.51	77.0	37 - 120	21.101	21.095	0.0060	N/A	
23A0134-03 (Solid)			Lab File ID: NT1802262312.D			Analyzed: 02/26/23 19:12		
2-Fluorophenol	741.17	72.1	27 - 120	6.766	6.739572	0.0264	N/A	
Phenol-d5	741.17	75.3	29 - 120	8.312	8.298143	0.0139	N/A	
2-Chlorophenol-d4	741.17	73.9	31 - 120	8.566	8.56	0.0060	N/A	
1,2-Dichlorobenzene-d4	494.11	63.4	32 - 120	9.272	9.266286	0.0057	N/A	
Nitrobenzene-d5	494.11	75.3	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	494.11	75.5	35 - 120	13.562	13.56529	-0.0033	N/A	
2,4,6-Tribromophenol	741.17	102	24 - 134	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	494.11	76.9	37 - 120	21.109	21.095	0.0140	N/A	
23A0134-04 (Solid)			Lab File ID: NT1802262313.D			Analyzed: 02/26/23 19:53		
2-Fluorophenol	747.42	66.1	27 - 120	6.766	6.739572	0.0264	N/A	
Phenol-d5	747.42	67.8	29 - 120	8.312	8.298143	0.0139	N/A	
2-Chlorophenol-d4	747.42	67.5	31 - 120	8.566	8.56	0.0060	N/A	
1,2-Dichlorobenzene-d4	498.28	59.4	32 - 120	9.272	9.266286	0.0057	N/A	
Nitrobenzene-d5	498.28	68.5	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	498.28	69.0	35 - 120	13.562	13.56529	-0.0033	N/A	
2,4,6-Tribromophenol	747.42	96.4	24 - 134	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	498.28	77.9	37 - 120	21.117	21.095	0.0220	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0111	Instrument:	NT18
Calibration:	GC00023	Calibration Date:	02/26/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0134-05 (Solid)			Lab File ID: NT1802262314.D			Analyzed: 02/26/23 20:33		
2-Fluorophenol	728.84	73.3	27 - 120	6.766	6.739572	0.0264	N/A	
Phenol-d5	728.84	74.6	29 - 120	8.312	8.298143	0.0139	N/A	
2-Chlorophenol-d4	728.84	74.5	31 - 120	8.566	8.56	0.0060	N/A	
1,2-Dichlorobenzene-d4	485.89	64.9	32 - 120	9.272	9.266286	0.0057	N/A	
Nitrobenzene-d5	485.89	75.2	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	485.89	74.6	35 - 120	13.57	13.56529	0.0047	N/A	
2,4,6-Tribromophenol	728.84	101	24 - 134	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	485.89	79.9	37 - 120	21.109	21.095	0.0140	N/A	
23A0134-06 (Solid)			Lab File ID: NT1802262315.D			Analyzed: 02/26/23 21:13		
2-Fluorophenol	742.89	74.2	27 - 120	6.766	6.739572	0.0264	N/A	
Phenol-d5	742.89	74.1	29 - 120	8.311	8.298143	0.0129	N/A	
2-Chlorophenol-d4	742.89	76.3	31 - 120	8.566	8.56	0.0060	N/A	
1,2-Dichlorobenzene-d4	495.26	65.7	32 - 120	9.271	9.266286	0.0047	N/A	
Nitrobenzene-d5	495.26	75.6	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	495.26	76.4	35 - 120	13.57	13.56529	0.0047	N/A	
2,4,6-Tribromophenol	742.89	102	24 - 134	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	495.26	85.5	37 - 120	21.101	21.095	0.0060	N/A	
23A0134-07 (Solid)			Lab File ID: NT1802262316.D			Analyzed: 02/26/23 21:53		
2-Fluorophenol	737.90	71.9	27 - 120	6.766	6.739572	0.0264	N/A	
Phenol-d5	737.90	71.1	29 - 120	8.311	8.298143	0.0129	N/A	
2-Chlorophenol-d4	737.90	71.3	31 - 120	8.566	8.56	0.0060	N/A	
1,2-Dichlorobenzene-d4	491.93	63.6	32 - 120	9.271	9.266286	0.0047	N/A	
Nitrobenzene-d5	491.93	71.8	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	491.93	71.3	35 - 120	13.57	13.56529	0.0047	N/A	
2,4,6-Tribromophenol	737.90	92.5	24 - 134	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	491.93	78.3	37 - 120	21.101	21.095	0.0060	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0111
Instrument: NT18
Calibration: GC00023
Calibration Date: 02/26/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0134-08 (Solid)			Lab File ID: NT1802262317.D				Analyzed: 02/26/23 22:33	
2-Fluorophenol	733.60	70.1	27 - 120	6.774	6.739572	0.0344	N/A	
Phenol-d5	733.60	70.3	29 - 120	8.311	8.298143	0.0129	N/A	
2-Chlorophenol-d4	733.60	70.7	31 - 120	8.566	8.56	0.0060	N/A	
1,2-Dichlorobenzene-d4	489.07	61.6	32 - 120	9.271	9.266286	0.0047	N/A	
Nitrobenzene-d5	489.07	70.1	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	489.07	68.6	35 - 120	13.57	13.56529	0.0047	N/A	
2,4,6-Tribromophenol	733.60	93.6	24 - 134	16.569	16.5705	-0.0015	N/A	
p-Terphenyl-d14	489.07	76.7	37 - 120	21.109	21.095	0.0140	N/A	
23A0134-09 (Solid)			Lab File ID: NT1802262318.D				Analyzed: 02/26/23 23:14	
2-Fluorophenol	730.56	71.0	27 - 120	6.774	6.739572	0.0344	N/A	
Phenol-d5	730.56	71.3	29 - 120	8.319	8.298143	0.0209	N/A	
2-Chlorophenol-d4	730.56	72.1	31 - 120	8.574	8.56	0.0140	N/A	
1,2-Dichlorobenzene-d4	487.04	64.0	32 - 120	9.272	9.266286	0.0057	N/A	
Nitrobenzene-d5	487.04	74.0	30 - 120	9.994	9.995429	-0.0014	N/A	
2-Fluorobiphenyl	487.04	72.6	35 - 120	13.57	13.56529	0.0047	N/A	
2,4,6-Tribromophenol	730.56	94.1	24 - 134	16.577	16.5705	0.0065	N/A	
p-Terphenyl-d14	487.04	80.1	37 - 120	21.109	21.095	0.0140	N/A	
23A0134-10 (Solid)			Lab File ID: NT1802262319.D				Analyzed: 02/26/23 23:54	
2-Fluorophenol	749.99	64.8	27 - 120	6.774	6.739572	0.0344	N/A	
Phenol-d5	749.99	68.8	29 - 120	8.312	8.298143	0.0139	N/A	
2-Chlorophenol-d4	749.99	67.1	31 - 120	8.574	8.56	0.0140	N/A	
1,2-Dichlorobenzene-d4	500.00	58.4	32 - 120	9.272	9.266286	0.0057	N/A	
Nitrobenzene-d5	500.00	68.7	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	500.00	68.5	35 - 120	13.57	13.56529	0.0047	N/A	
2,4,6-Tribromophenol	749.99	94.4	24 - 134	16.577	16.5705	0.0065	N/A	
p-Terphenyl-d14	500.00	79.1	37 - 120	21.125	21.095	0.0300	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0111	Instrument:	NT18
Calibration:	GC00023	Calibration Date:	02/26/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0134-11 (Solid)			Lab File ID: NT1802262320.D			Analyzed: 02/27/23 00:34		
2-Fluorophenol	748.80	73.0	27 - 120	6.782	6.739572	0.0424	N/A	
Phenol-d5	748.80	74.0	29 - 120	8.319	8.298143	0.0209	N/A	
2-Chlorophenol-d4	748.80	72.8	31 - 120	8.574	8.56	0.0140	N/A	
1,2-Dichlorobenzene-d4	499.20	63.3	32 - 120	9.271	9.266286	0.0047	N/A	
Nitrobenzene-d5	499.20	72.7	30 - 120	9.993	9.995429	-0.0024	N/A	
2-Fluorobiphenyl	499.20	72.1	35 - 120	13.57	13.56529	0.0047	N/A	
2,4,6-Tribromophenol	748.80	95.9	24 - 134	16.577	16.5705	0.0065	N/A	
p-Terphenyl-d14	499.20	78.1	37 - 120	21.109	21.095	0.0140	N/A	
SLC0111-CCV1 (Solid)			Lab File ID: NT1802262326.D			Analyzed: 02/27/23 04:36		
2-Fluorophenol	7.5000	101	50 - 150	6.751	6.739572	0.0114	N/A	
Phenol-d5	7.5000	96.6	50 - 150	8.312	8.298143	0.0139	N/A	
2-Chlorophenol-d4	7.5000	98.5	50 - 150	8.566	8.56	0.0060	N/A	
1,2-Dichlorobenzene-d4	5.0000	92.3	50 - 150	9.272	9.266286	0.0057	N/A	
Nitrobenzene-d5	5.0000	97.2	50 - 150	10.001	9.995429	0.0056	N/A	
2-Fluorobiphenyl	5.0000	92.9	50 - 150	13.57	13.56529	0.0047	N/A	
2,4,6-Tribromophenol	7.5000	111	50 - 150	16.577	16.5705	0.0065	N/A	
p-Terphenyl-d14	5.0000	101	50 - 150	21.101	21.095	0.0060	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0385	Instrument:	NT18
Calibration:	GC00023	Calibration Date:	02/26/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0385-ICV1 (Solid)			Lab File ID: NT1802272302.D			Analyzed: 02/27/23 17:03		
2-Fluorophenol	7.5000	96.6	80 - 120	6.728	6.739572	-0.0116	N/A	
Phenol-d5	7.5000	92.3	80 - 120	8.288	8.298143	-0.0101	N/A	
2-Chlorophenol-d4	7.5000	99.0	80 - 120	8.543	8.56	-0.0170	N/A	
1,2-Dichlorobenzene-d4	5.0000	93.5	80 - 120	9.248	9.266286	-0.0183	N/A	
Nitrobenzene-d5	5.0000	93.1	80 - 120	9.97	9.995429	-0.0254	N/A	
2-Fluorobiphenyl	5.0000	92.5	80 - 120	13.546	13.56529	-0.0193	N/A	
2,4,6-Tribromophenol	7.5000	92.7	80 - 120	16.546	16.5705	-0.0245	N/A	
p-Terphenyl-d14	5.0000	94.4	80 - 120	21.07	21.095	-0.0250	N/A	
SLC0385-LCV1 (Solid)			Lab File ID: NT1802272304.D			Analyzed: 02/27/23 19:10		
2-Fluorophenol	0.30000	110	50 - 150	6.728	6.739572	-0.0116	N/A	
Phenol-d5	0.30000	104	50 - 150	8.281	8.298143	-0.0171	N/A	
2-Chlorophenol-d4	0.30000	109	50 - 150	8.543	8.56	-0.0170	N/A	
1,2-Dichlorobenzene-d4	0.20000	113	50 - 150	9.248	9.266286	-0.0183	N/A	
Nitrobenzene-d5	0.20000	104	50 - 150	9.978	9.995429	-0.0174	N/A	
2-Fluorobiphenyl	0.20000	105	50 - 150	13.539	13.56529	-0.0263	N/A	
2,4,6-Tribromophenol	0.30000	89.1	50 - 150	16.546	16.5705	-0.0245	N/A	
p-Terphenyl-d14	0.20000	105	50 - 150	21.07	21.095	-0.0250	N/A	
23A0134-12 (Solid)			Lab File ID: NT1802272307.D			Analyzed: 02/27/23 21:11		
2-Fluorophenol	744.05	73.2	27 - 120	6.743	6.739572	0.0034	N/A	
Phenol-d5	744.05	71.0	29 - 120	8.288	8.298143	-0.0101	N/A	
2-Chlorophenol-d4	744.05	76.0	31 - 120	8.543	8.56	-0.0170	N/A	
1,2-Dichlorobenzene-d4	496.03	67.4	32 - 120	9.248	9.266286	-0.0183	N/A	
Nitrobenzene-d5	496.03	72.5	30 - 120	9.97	9.995429	-0.0254	N/A	
2-Fluorobiphenyl	496.03	73.1	35 - 120	13.539	13.56529	-0.0263	N/A	
2,4,6-Tribromophenol	744.05	83.6	24 - 134	16.546	16.5705	-0.0245	N/A	
p-Terphenyl-d14	496.03	77.4	37 - 120	21.078	21.095	-0.0170	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0385
Instrument: NT18
Calibration: GC00023
Calibration Date: 02/26/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0134-13 (Solid)			Lab File ID: NT1802272308.D			Analyzed: 02/27/23 21:51		
2-Fluorophenol	750.05	68.9	27 - 120	6.743	6.739572	0.0034	N/A	
Phenol-d5	750.05	69.8	29 - 120	8.288	8.298143	-0.0101	N/A	
2-Chlorophenol-d4	750.05	72.9	31 - 120	8.543	8.56	-0.0170	N/A	
1,2-Dichlorobenzene-d4	500.04	61.2	32 - 120	9.248	9.266286	-0.0183	N/A	
Nitrobenzene-d5	500.04	67.2	30 - 120	9.97	9.995429	-0.0254	N/A	
2-Fluorobiphenyl	500.04	65.8	35 - 120	13.546	13.56529	-0.0193	N/A	
2,4,6-Tribromophenol	750.05	85.9	24 - 134	16.546	16.5705	-0.0245	N/A	
p-Terphenyl-d14	500.04	73.9	37 - 120	21.101	21.095	0.0060	N/A	
BLA0410-MS1 (Solid)			Lab File ID: NT1802272309.D			Analyzed: 02/27/23 22:32		
2-Fluorophenol	750.05	66.3	27 - 120	6.751	6.739572	0.0114	N/A	
Phenol-d5	750.05	69.4	29 - 120	8.288	8.298143	-0.0101	N/A	
2-Chlorophenol-d4	750.05	71.2	31 - 120	8.543	8.56	-0.0170	N/A	
1,2-Dichlorobenzene-d4	500.04	59.5	32 - 120	9.248	9.266286	-0.0183	N/A	
Nitrobenzene-d5	500.04	65.1	30 - 120	9.97	9.995429	-0.0254	N/A	
2-Fluorobiphenyl	500.04	67.1	35 - 120	13.547	13.56529	-0.0183	N/A	
2,4,6-Tribromophenol	750.05	91.2	24 - 134	16.554	16.5705	-0.0165	N/A	
p-Terphenyl-d14	500.04	84.9	37 - 120	21.109	21.095	0.0140	N/A	
BLA0410-MSD1 (Solid)			Lab File ID: NT1802272310.D			Analyzed: 02/27/23 23:12		
2-Fluorophenol	750.05	65.7	27 - 120	6.751	6.739572	0.0114	N/A	
Phenol-d5	750.05	67.4	29 - 120	8.296	8.298143	-0.0021	N/A	
2-Chlorophenol-d4	750.05	69.6	31 - 120	8.543	8.56	-0.0170	N/A	
1,2-Dichlorobenzene-d4	500.04	60.5	32 - 120	9.248	9.266286	-0.0183	N/A	
Nitrobenzene-d5	500.04	64.9	30 - 120	9.97	9.995429	-0.0254	N/A	
2-Fluorobiphenyl	500.04	66.4	35 - 120	13.546	13.56529	-0.0193	N/A	
2,4,6-Tribromophenol	750.05	89.2	24 - 134	16.554	16.5705	-0.0165	N/A	
p-Terphenyl-d14	500.04	83.7	37 - 120	21.109	21.095	0.0140	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0385	Instrument:	NT18
Calibration:	GC00023	Calibration Date:	02/26/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0134-15 (Solid)			Lab File ID: NT1802272311.D			Analyzed: 02/27/23 23:53		
2-Fluorophenol	731.82	72.9	27 - 120	6.751	6.739572	0.0114	N/A	
Phenol-d5	731.82	72.5	29 - 120	8.296	8.298143	-0.0021	N/A	
2-Chlorophenol-d4	731.82	75.2	31 - 120	8.551	8.56	-0.0090	N/A	
1,2-Dichlorobenzene-d4	487.88	65.4	32 - 120	9.248	9.266286	-0.0183	N/A	
Nitrobenzene-d5	487.88	69.3	30 - 120	9.97	9.995429	-0.0254	N/A	
2-Fluorobiphenyl	487.88	70.9	35 - 120	13.546	13.56529	-0.0193	N/A	
2,4,6-Tribromophenol	731.82	87.8	24 - 134	16.546	16.5705	-0.0245	N/A	
p-Terphenyl-d14	487.88	81.3	37 - 120	21.094	21.095	-0.0010	N/A	
SLC0385-CCV1 (Solid)			Lab File ID: NT1802272322.D			Analyzed: 02/28/23 13:15		
2-Fluorophenol	7.5000	93.9	50 - 150	6.728	6.739572	-0.0116	N/A	
Phenol-d5	7.5000	91.7	50 - 150	8.288	8.298143	-0.0101	N/A	
2-Chlorophenol-d4	7.5000	96.2	50 - 150	8.543	8.56	-0.0170	N/A	
1,2-Dichlorobenzene-d4	5.0000	94.2	50 - 150	9.248	9.266286	-0.0183	N/A	
Nitrobenzene-d5	5.0000	85.1	50 - 150	9.978	9.995429	-0.0174	N/A	
2-Fluorobiphenyl	5.0000	89.7	50 - 150	13.546	13.56529	-0.0193	N/A	
2,4,6-Tribromophenol	7.5000	90.4	50 - 150	16.546	16.5705	-0.0245	N/A	
p-Terphenyl-d14	5.0000	116	50 - 150	21.07	21.095	-0.0250	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0099	Instrument:	NT18
		Calibration:	GC00023

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Blank (SLC0099-ICB1)		(Water)		Lab File ID: NT1802252311.D				Analyzed: 02/26/23 03:26	
1,4-Dichlorobenzene-d4	195957	8.915	219306	8.907	89	50 - 200	0.008	+/-0.50	
Naphthalene-d8	721335	11.365	838313	11.365	86	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	373490	14.939	448096	14.939	83	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	681936	17.945	796201	17.945	86	50 - 200	0.000	+/-0.50	
Chrysene-d12	584972	22.975	700696	22.983	83	50 - 200	-0.008	+/-0.50	
Di-n-Octylphthalate-d4	770361	24.02	1033193	24.02	75	50 - 200	0.000	+/-0.50	
Perylene-d12	668327	25.468	784566	25.468	85	50 - 200	0.000	+/-0.50	
Secondary Cal Check (SLC0099-SCV1)		(Water)		Lab File ID: NT1802252312.D				Analyzed: 02/26/23 04:06	
1,4-Dichlorobenzene-d4	196803	8.915	219306	8.907	90	50 - 200	0.008	+/-0.50	
Naphthalene-d8	751242	11.365	838313	11.365	90	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	398556	14.94	448096	14.939	89	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	714786	17.952	796201	17.945	90	50 - 200	0.007	+/-0.50	
Chrysene-d12	645093	22.983	700696	22.983	92	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	989444	24.02	1033193	24.02	96	50 - 200	0.000	+/-0.50	
Perylene-d12	719540	25.468	784566	25.468	92	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0111	Instrument:	NT18
		Calibration:	GC00023

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0111-ICV1)		(Solid)	Lab File ID: NT1802262302.D				Analyzed: 02/26/23 12:08		
1,4-Dichlorobenzene-d4	244122	8.915	244122	8.915	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	943164	11.365	943164	11.365	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	501893	14.947	501893	14.947	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	896502	17.952	896502	17.952	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	842481	22.983	842481	22.983	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1278043	24.02	1278043	24.02	100	50 - 200	0.000	+/-0.50	
Perylene-d12	915681	25.476	915681	25.476	100	50 - 200	0.000	+/-0.50	
Blank (BLA0410-BLK1)		(Solid)	Lab File ID: NT1802262306.D				Analyzed: 02/26/23 15:11		
1,4-Dichlorobenzene-d4	244536	8.915	244122	8.915	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	917111	11.365	943164	11.365	97	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	487134	14.939	501893	14.947	97	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	894181	17.945	896502	17.952	100	50 - 200	-0.007	+/-0.50	
Chrysene-d12	795833	22.983	842481	22.983	94	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1184006	24.02	1278043	24.02	93	50 - 200	0.000	+/-0.50	
Perylene-d12	843260	25.468	915681	25.476	92	50 - 200	-0.008	+/-0.50	
LCS (BLA0410-BS1)		(Solid)	Lab File ID: NT1802262307.D				Analyzed: 02/26/23 15:52		
1,4-Dichlorobenzene-d4	257132	8.915	244122	8.915	105	50 - 200	0.000	+/-0.50	
Naphthalene-d8	981883	11.365	943164	11.365	104	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	522636	14.947	501893	14.947	104	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	932364	17.952	896502	17.952	104	50 - 200	0.000	+/-0.50	
Chrysene-d12	846375	22.983	842481	22.983	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1337207	24.02	1278043	24.02	105	50 - 200	0.000	+/-0.50	
Perylene-d12	901138	25.468	915681	25.476	98	50 - 200	-0.008	+/-0.50	
LCS Dup (BLA0410-BSD1)		(Solid)	Lab File ID: NT1802262308.D				Analyzed: 02/26/23 16:32		
1,4-Dichlorobenzene-d4	260510	8.915	244122	8.915	107	50 - 200	0.000	+/-0.50	
Naphthalene-d8	997833	11.365	943164	11.365	106	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	522836	14.947	501893	14.947	104	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	932428	17.952	896502	17.952	104	50 - 200	0.000	+/-0.50	
Chrysene-d12	847114	22.983	842481	22.983	101	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1339708	24.02	1278043	24.02	105	50 - 200	0.000	+/-0.50	
Perylene-d12	902626	25.476	915681	25.476	99	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0111

SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: NT18
Calibration: GC00023

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Reference (BLA0410-SRM1)		(Solid)	Lab File ID: NT1802262309.D				Analyzed: 02/26/23 17:12		
1,4-Dichlorobenzene-d4	250376	8.914	244122	8.915	103	50 - 200	-0.001	+/-0.50	
Naphthalene-d8	948526	11.365	943164	11.365	101	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	501284	14.939	501893	14.947	100	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	897833	17.952	896502	17.952	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	824416	22.983	842481	22.983	98	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1315452	24.02	1278043	24.02	103	50 - 200	0.000	+/-0.50	
Perylene-d12	828963	25.468	915681	25.476	91	50 - 200	-0.008	+/-0.50	
LDW23-SS1205 (23A0134-01)		(Solid)	Lab File ID: NT1802262310.D				Analyzed: 02/26/23 17:52		
1,4-Dichlorobenzene-d4	259114	8.915	244122	8.915	106	50 - 200	0.000	+/-0.50	
Naphthalene-d8	950101	11.365	943164	11.365	101	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	505016	14.939	501893	14.947	101	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	994180	17.952	896502	17.952	111	50 - 200	0.000	+/-0.50	
Chrysene-d12	1006722	22.991	842481	22.983	119	50 - 200	0.008	+/-0.50	
Di-n-Octylphthalate-d4	1563332	24.02	1278043	24.02	122	50 - 200	0.000	+/-0.50	
Perylene-d12	1116679	25.484	915681	25.476	122	50 - 200	0.008	+/-0.50	
LDW23-SS1188 (23A0134-02)		(Solid)	Lab File ID: NT1802262311.D				Analyzed: 02/26/23 18:32		
1,4-Dichlorobenzene-d4	261869	8.914	244122	8.915	107	50 - 200	-0.001	+/-0.50	
Naphthalene-d8	989150	11.365	943164	11.365	105	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	529116	14.947	501893	14.947	105	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1011676	17.952	896502	17.952	113	50 - 200	0.000	+/-0.50	
Chrysene-d12	1124043	22.991	842481	22.983	133	50 - 200	0.008	+/-0.50	
Di-n-Octylphthalate-d4	1696842	24.028	1278043	24.02	133	50 - 200	0.008	+/-0.50	
Perylene-d12	1184980	25.491	915681	25.476	129	50 - 200	0.015	+/-0.50	
LDW23-SS1179 (23A0134-03)		(Solid)	Lab File ID: NT1802262312.D				Analyzed: 02/26/23 19:12		
1,4-Dichlorobenzene-d4	266790	8.915	244122	8.915	109	50 - 200	0.000	+/-0.50	
Naphthalene-d8	985574	11.365	943164	11.365	104	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	530046	14.947	501893	14.947	106	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1102776	17.952	896502	17.952	123	50 - 200	0.000	+/-0.50	
Chrysene-d12	1204859	22.999	842481	22.983	143	50 - 200	0.016	+/-0.50	
Di-n-Octylphthalate-d4	1762598	24.028	1278043	24.02	138	50 - 200	0.008	+/-0.50	
Perylene-d12	1054654	25.499	915681	25.476	115	50 - 200	0.023	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0111	Instrument:	NT18
		Calibration:	GC00023

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1242 (23A0134-04)		(Solid)		Lab File ID: NT1802262313.D				Analyzed: 02/26/23 19:53	
1,4-Dichlorobenzene-d4	269849	8.915	244122	8.915	111	50 - 200	0.000	+/-0.50	
Naphthalene-d8	996392	11.365	943164	11.365	106	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	541587	14.947	501893	14.947	108	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1114726	17.96	896502	17.952	124	50 - 200	0.008	+/-0.50	
Chrysene-d12	1139581	22.998	842481	22.983	135	50 - 200	0.015	+/-0.50	
Di-n-Octylphthalate-d4	1709976	24.028	1278043	24.02	134	50 - 200	0.008	+/-0.50	
Perylene-d12	974079	25.499	915681	25.476	106	50 - 200	0.023	+/-0.50	
LDW23-SS1173 (23A0134-05)		(Solid)		Lab File ID: NT1802262314.D				Analyzed: 02/26/23 20:33	
1,4-Dichlorobenzene-d4	255665	8.915	244122	8.915	105	50 - 200	0.000	+/-0.50	
Naphthalene-d8	946109	11.365	943164	11.365	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	511330	14.947	501893	14.947	102	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1044038	17.952	896502	17.952	116	50 - 200	0.000	+/-0.50	
Chrysene-d12	1137568	22.998	842481	22.983	135	50 - 200	0.015	+/-0.50	
Di-n-Octylphthalate-d4	1724830	24.028	1278043	24.02	135	50 - 200	0.008	+/-0.50	
Perylene-d12	897024	25.499	915681	25.476	98	50 - 200	0.023	+/-0.50	
LDW23-SS1160 (23A0134-06)		(Solid)		Lab File ID: NT1802262315.D				Analyzed: 02/26/23 21:13	
1,4-Dichlorobenzene-d4	252087	8.914	244122	8.915	103	50 - 200	-0.001	+/-0.50	
Naphthalene-d8	924178	11.365	943164	11.365	98	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	499279	14.947	501893	14.947	99	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	946583	17.952	896502	17.952	106	50 - 200	0.000	+/-0.50	
Chrysene-d12	1023554	22.991	842481	22.983	121	50 - 200	0.008	+/-0.50	
Di-n-Octylphthalate-d4	1625598	24.02	1278043	24.02	127	50 - 200	0.000	+/-0.50	
Perylene-d12	875205	25.484	915681	25.476	96	50 - 200	0.008	+/-0.50	
LDW23-SS1152 (23A0134-07)		(Solid)		Lab File ID: NT1802262316.D				Analyzed: 02/26/23 21:53	
1,4-Dichlorobenzene-d4	256229	8.914	244122	8.915	105	50 - 200	-0.001	+/-0.50	
Naphthalene-d8	957414	11.365	943164	11.365	102	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	516620	14.947	501893	14.947	103	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	991802	17.952	896502	17.952	111	50 - 200	0.000	+/-0.50	
Chrysene-d12	1088086	22.991	842481	22.983	129	50 - 200	0.008	+/-0.50	
Di-n-Octylphthalate-d4	1687180	24.028	1278043	24.02	132	50 - 200	0.008	+/-0.50	
Perylene-d12	860190	25.484	915681	25.476	94	50 - 200	0.008	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0111	Instrument:	NT18
		Calibration:	GC00023

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1131 (23A0134-08)		(Solid)	Lab File ID: NT1802262317.D				Analyzed: 02/26/23 22:33		
1,4-Dichlorobenzene-d4	266839	8.915	244122	8.915	109	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1003350	11.365	943164	11.365	106	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	549008	14.947	501893	14.947	109	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1100646	17.952	896502	17.952	123	50 - 200	0.000	+/-0.50	
Chrysene-d12	1151391	22.998	842481	22.983	137	50 - 200	0.015	+/-0.50	
Di-n-Octylphthalate-d4	1771376	24.028	1278043	24.02	139	50 - 200	0.008	+/-0.50	
Perylene-d12	839352	25.491	915681	25.476	92	50 - 200	0.015	+/-0.50	
LDW23-SS1129 (23A0134-09)		(Solid)	Lab File ID: NT1802262318.D				Analyzed: 02/26/23 23:14		
1,4-Dichlorobenzene-d4	265386	8.915	244122	8.915	109	50 - 200	0.000	+/-0.50	
Naphthalene-d8	982393	11.365	943164	11.365	104	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	537514	14.947	501893	14.947	107	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1085820	17.96	896502	17.952	121	50 - 200	0.008	+/-0.50	
Chrysene-d12	1171717	22.999	842481	22.983	139	50 - 200	0.016	+/-0.50	
Di-n-Octylphthalate-d4	1779595	24.028	1278043	24.02	139	50 - 200	0.008	+/-0.50	
Perylene-d12	809934	25.499	915681	25.476	88	50 - 200	0.023	+/-0.50	
LDW23-SS1124 (23A0134-10)		(Solid)	Lab File ID: NT1802262319.D				Analyzed: 02/26/23 23:54		
1,4-Dichlorobenzene-d4	259808	8.915	244122	8.915	106	50 - 200	0.000	+/-0.50	
Naphthalene-d8	966998	11.365	943164	11.365	103	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	533103	14.947	501893	14.947	106	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1097408	17.96	896502	17.952	122	50 - 200	0.008	+/-0.50	
Chrysene-d12	1119364	22.998	842481	22.983	133	50 - 200	0.015	+/-0.50	
Di-n-Octylphthalate-d4	1715607	24.028	1278043	24.02	134	50 - 200	0.008	+/-0.50	
Perylene-d12	696203	25.499	915681	25.476	76	50 - 200	0.023	+/-0.50	
LDW23-SS1123 (23A0134-11)		(Solid)	Lab File ID: NT1802262320.D				Analyzed: 02/27/23 00:34		
1,4-Dichlorobenzene-d4	250542	8.914	244122	8.915	103	50 - 200	-0.001	+/-0.50	
Naphthalene-d8	935827	11.365	943164	11.365	99	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	505143	14.947	501893	14.947	101	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1041436	17.96	896502	17.952	116	50 - 200	0.008	+/-0.50	
Chrysene-d12	1085535	22.998	842481	22.983	129	50 - 200	0.015	+/-0.50	
Di-n-Octylphthalate-d4	1688607	24.028	1278043	24.02	132	50 - 200	0.008	+/-0.50	
Perylene-d12	683638	25.499	915681	25.476	75	50 - 200	0.023	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0385	Instrument:	NT18
		Calibration:	GC00023

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0385-ICV1)		(Solid)	Lab File ID: NT1802272302.D				Analyzed: 02/27/23 17:03		
1,4-Dichlorobenzene-d4	269759	8.891	269759	8.891	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1037039	11.342	1037039	11.342	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	556159	14.924	556159	14.924	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1021294	17.929	1021294	17.929	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	922264	22.96	922264	22.96	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1611284	23.997	1611284	23.997	100	50 - 200	0.000	+/-0.50	
Perylene-d12	948357	25.445	948357	25.445	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0385-LCV1)		(Solid)	Lab File ID: NT1802272304.D				Analyzed: 02/27/23 19:10		
1,4-Dichlorobenzene-d4	250344	8.891	269759	8.891	93	50 - 200	0.000	+/-0.50	
Naphthalene-d8	970777	11.342	1037039	11.342	94	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	526167	14.924	556159	14.924	95	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	967937	17.929	1021294	17.929	95	50 - 200	0.000	+/-0.50	
Chrysene-d12	829619	22.96	922264	22.96	90	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1418909	23.997	1611284	23.997	88	50 - 200	0.000	+/-0.50	
Perylene-d12	895519	25.437	948357	25.445	94	50 - 200	-0.008	+/-0.50	
LDW23-SS1116 (23A0134-12)		(Solid)	Lab File ID: NT1802272307.D				Analyzed: 02/27/23 21:11		
1,4-Dichlorobenzene-d4	263083	8.891	269759	8.891	98	50 - 200	0.000	+/-0.50	
Naphthalene-d8	994677	11.342	1037039	11.342	96	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	534970	14.916	556159	14.924	96	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	1080409	17.929	1021294	17.929	106	50 - 200	0.000	+/-0.50	
Chrysene-d12	1000454	22.967	922264	22.96	108	50 - 200	0.007	+/-0.50	
Di-n-Octylphthalate-d4	1680018	23.997	1611284	23.997	104	50 - 200	0.000	+/-0.50	
Perylene-d12	943619	25.453	948357	25.445	100	50 - 200	0.008	+/-0.50	
LDW23-IT1210 (23A0134-13)		(Solid)	Lab File ID: NT1802272308.D				Analyzed: 02/27/23 21:51		
1,4-Dichlorobenzene-d4	242907	8.891	269759	8.891	90	50 - 200	0.000	+/-0.50	
Naphthalene-d8	952232	11.342	1037039	11.342	92	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	555342	14.924	556159	14.924	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1209774	17.937	1021294	17.929	118	50 - 200	0.008	+/-0.50	
Chrysene-d12	1436831	22.991	922264	22.96	156	50 - 200	0.031	+/-0.50	
Di-n-Octylphthalate-d4	1908006	24.02	1611284	23.997	118	50 - 200	0.023	+/-0.50	
Perylene-d12	972187	25.484	948357	25.445	103	50 - 200	0.039	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0385

SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: NT18
Calibration: GC00023

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike (BLA0410-MS1)		(Solid)	Lab File ID: NT1802272309.D				Analyzed: 02/27/23 22:32		
1,4-Dichlorobenzene-d4	269794	8.891	269759	8.891	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1071124	11.342	1037039	11.342	103	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	620139	14.932	556159	14.924	112	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1395191	17.945	1021294	17.929	137	50 - 200	0.016	+/-0.50	
Chrysene-d12	1474048	22.998	922264	22.96	160	50 - 200	0.038	+/-0.50	
Di-n-Octylphthalate-d4	1728411	24.02	1611284	23.997	107	50 - 200	0.023	+/-0.50	
Perylene-d12	822147	25.491	948357	25.445	87	50 - 200	0.046	+/-0.50	
Matrix Spike Dup (BLA0410-MSD1)		(Solid)	Lab File ID: NT1802272310.D				Analyzed: 02/27/23 23:12		
1,4-Dichlorobenzene-d4	272731	8.891	269759	8.891	101	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1060656	11.349	1037039	11.342	102	50 - 200	0.007	+/-0.50	
Acenaphthene-d10	611705	14.924	556159	14.924	110	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1357765	17.945	1021294	17.929	133	50 - 200	0.016	+/-0.50	
Chrysene-d12	1479392	22.998	922264	22.96	160	50 - 200	0.038	+/-0.50	
Di-n-Octylphthalate-d4	1813504	24.02	1611284	23.997	113	50 - 200	0.023	+/-0.50	
Perylene-d12	809459	25.491	948357	25.445	85	50 - 200	0.046	+/-0.50	
LDW23-SC1249 (23A0134-15)		(Solid)	Lab File ID: NT1802272311.D				Analyzed: 02/27/23 23:53		
1,4-Dichlorobenzene-d4	276045	8.891	269759	8.891	102	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1054994	11.342	1037039	11.342	102	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	575479	14.924	556159	14.924	103	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1183309	17.929	1021294	17.929	116	50 - 200	0.000	+/-0.50	
Chrysene-d12	1157424	22.975	922264	22.96	125	50 - 200	0.015	+/-0.50	
Di-n-Octylphthalate-d4	1939637	24.005	1611284	23.997	120	50 - 200	0.008	+/-0.50	
Perylene-d12	654770	25.468	948357	25.445	69	50 - 200	0.023	+/-0.50	

HOLDING TIME SUMMARY

Analysis: EPA 8270E

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1205 23A0134-01	01/06/23 08:28	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 17:52	38	40	
LDW23-SS1188 23A0134-02	01/06/23 09:36	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 18:32	38	40	
LDW23-SS1179 23A0134-03	01/06/23 09:52	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 19:12	38	40	
LDW23-SS1242 23A0134-04	01/06/23 11:04	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 19:53	38	40	
LDW23-SS1173 23A0134-05	01/06/23 11:22	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 20:33	38	40	
LDW23-SS1160 23A0134-06	01/06/23 11:41	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 21:13	38	40	
LDW23-SS1152 23A0134-07	01/06/23 12:29	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 21:53	38	40	
LDW23-SS1131 23A0134-08	01/06/23 12:43	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 22:33	38	40	
LDW23-SS1129 23A0134-09	01/06/23 12:57	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 23:14	38	40	
LDW23-SS1124 23A0134-10	01/06/23 13:15	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 23:54	38	40	
LDW23-SS1123 23A0134-11	01/06/23 13:29	01/06/23 17:26	01/19/23 13:35	13	365	02/27/23 00:34	38	40	
LDW23-SS1116 23A0134-12	01/06/23 13:44	01/06/23 17:26	01/19/23 13:35	12	365	02/27/23 21:11	39	40	
LDW23-IT1210 23A0134-13	01/06/23 14:12	01/06/23 17:26	01/19/23 13:35	12	365	02/27/23 21:51	39	40	
LDW23-SC1249 23A0134-15	01/06/23 13:46	01/06/23 17:26	01/19/23 13:35	12	365	02/27/23 23:53	39	40	
Matrix Spike BLA0410-MS1	01/06/23 14:12	01/06/23 17:26	01/19/23 13:35	12	365	02/27/23 22:32	39	40	
Matrix Spike Dup BLA0410-MSD1	01/06/23 14:12	01/06/23 17:26	01/19/23 13:35	12	365	02/27/23 23:12	39	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT18

Analyte	MDL	RL	Units
Phenol	4.4	20.0	ug/kg
4-Methylphenol	7.4	20.0	ug/kg
Naphthalene	4.2	20.0	ug/kg
2-Methylnaphthalene	4.5	20.0	ug/kg
Acenaphthylene	6.2	20.0	ug/kg
Dimethylphthalate	4.4	20.0	ug/kg
Acenaphthene	5.2	20.0	ug/kg
Dibenzofuran	14.1	20.0	ug/kg
Fluorene	14.6	20.0	ug/kg
Phenanthrene	8.7	20.0	ug/kg
Anthracene	7.2	20.0	ug/kg
Fluoranthene	6.1	20.0	ug/kg
Pyrene	5.7	20.0	ug/kg
Butylbenzylphthalate	9.4	20.0	ug/kg
Benzo(a)anthracene	6.0	20.0	ug/kg
Chrysene	6.1	20.0	ug/kg
bis(2-Ethylhexyl)phthalate	5.5	50.0	ug/kg
Benzofluoranthenes, Total	10.0	40.0	ug/kg
Benzo(a)pyrene	4.2	20.0	ug/kg
Indeno(1,2,3-cd)pyrene	14.7	20.0	ug/kg
Dibenzo(a,h)anthracene	17.2	20.0	ug/kg
Benzo(g,h,i)perylene	13.6	20.0	ug/kg

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: NA

Chemical: Tributyl Phosphate

Manufacturer: Chemservice

Product #: O-916

Lot #: 59-57A

Purity: 99%

Analyst: VB

Element: B000954

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001873

Printed: 9/23/2013 11:47:03AM

Description:	SVOC 4,4 DDT	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	23-Sep-13
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 11:46 by JZ
Vendor:	Chem Service	Lot #:	198-128A
Vendor Catalog #:			

Comments

Neat, Purity @ 99.2%. (ARI#: 790A)

Analyte	CAS Number	Concentration	Units
4,4'-DDT	50-29-3	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,4' DDT

Manufacturer: Chem Service

Product #: _____

Lot #: 198-128A

Purity: 99.2%

Analyst: AB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001875

Printed: 9/23/2013 12:13:55PM

Description:	SVOC alpha-Terpineol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 12:13 by JZ
Vendor:	ACROS Organics	Lot #:	AD16481201
Vendor Catalog #:			

Comments

Neat, Purity @ 98%. (ARI#: I1582A)

Analyte	CAS Number	Concentration	Units
alpha-Terpineol	98-55-5	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: alpha-Terpineol

Manufacturer: Acros Organics

Product #: _____

Lot #: A0648170 1

Purity: 98%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001885

Printed: 9/23/2013 3:45:57PM

Description:	SVOA Dibutyl Phenyl phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 15:45 by JZ
Vendor:	Monsanto	Lot #:	N/A
Vendor Catalog #:			

Comments

Neat, Purity @ 98.9%.

Analyte	CAS Number	Concentration	Units
Dibutyl Phenyl Phosphate	2528-36-1	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Dibutyl Phenyl Phosphate

Manufacturer: Monsanto

Product #: N/A

Lot #: N/A

Purity: 98.9%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001886

Printed: 9/23/2013 3:59:35PM

Description:	SVOC Triphenyl Phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 15:59 by JZ
Vendor:	Aldrich	Lot #:	04902CM
Vendor Catalog #:			

Comments

Neat, Purity @ 99%.

Analyte	CAS Number	Concentration	Units
Triphenyl Phosphate	115-86-6	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Triphenyl Phosphate

Manufacturer: Aldrich

Product #: _____

Lot #: 04907CM

Purity: 99%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001887

Printed: 9/23/2013 4:18:55PM

Description:	SVOC Butylated Hydroxytoluene	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 16:18 by JZ
Vendor:	SIGMA	Lot #:	39F-0197
Vendor Catalog #:			

Comments

neat,Purity @ 99.9%.

Analyte	CAS Number	Concentration	Units
Butylated Hydroxytoluene	128-37-0	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butylated Hydroxytoluene

Manufacturer: Sigma

Product #: _____

Lot #: 39F-0197

Purity: 99.8%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001890

Printed: 9/23/2013 5:02:53PM

Description:	SVOC Butyl Diphenyl Phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 17:02 by JZ
Vendor:	Monsanto	Lot #:	N/A
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Butyl Diphenyl Phosphate	2752-95-6	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butyl Diphenyl Phosphate

Manufacturer: Monsanto

Product #: NA

Lot #: NA

Purity: 98%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001941

Printed: 9/25/2013 1:45:31PM

Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941
SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: _____

Lot #: bEH 502 1

Purity: 90 ~ 94%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001945

Printed: 9/25/2013 3:23:22PM

Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945
SVOC Benzoic Acid
Expires 12/31/2029
Prepared By Jianqing Zhou 12/31/2012

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0214339

Purity: 98%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001948

Printed: 9/25/2013 3:37:51PM

Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948
SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: KB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002054

Printed: 10/4/2013 6:32:21PM

Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL

B002054
SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 67-53

Purity: 99%

Analyst: AZ

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002135

Printed: 10/15/2013 12:07:39PM

Description:	SVOA Benzidine	Expires:	31-Dec-29
Standard Type:	Analyte Spike	Prepared:	15-Oct-13
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	15-Oct-13 12:07 by JZ
Vendor:	SIGMA	Lot #:	18C0024
Vendor Catalog #:			

Comments

Purity @ 95%. ARI#: 0467.

Analyte	CAS Number	Concentration	Units
Benzidine	92-87-5	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzidine

Manufacturer: Sigma

Product #: B-3503

Lot #: 18C0024

Purity: 98%

Analyst: [signature]

Certificate of Analysis

Product Name:	1,2,4,5-Tetrachlorobenzene
Product Description:	98%
Product Brand:	Sigma-Aldrich
Product Number:	131857
Molecular Weight:	215.89
CAS Number:	95-94-3

TEST	SPECIFICATION	LOT 19309JR RESULTS
APPEARANCE	WHITE POWDER, CHIPS OR CRYSTALS	WHITE CHIPS
INFRARED SPECTRUM	CONFORMS TO STRUCTURE.	CONFORMS TO STRUCTURE AND STANDARD AS
** **		ILLUSTRATED ON PAGE 1011C OF EDITION I,
** **		VOLUME 1 OF "THE ALDRICH LIBRARY OF FT-IR
** **		SPECTRA".
GAS LIQUID	97.5% (MINIMUM)	99.9 %
QUALITY CONTROL		JULY 1997

Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

F009172
SVOC 1,2,4,5-Tetrachlorobenzene
Expires 12/31/2079
Prepared By Joshua Rains 10/6/2017

H000691

Data File: \\target\share\chem2\fid4a.i\20230317.b\423C1703.D

Page 1

Date : 17-MAR-2023 10:46

Client ID:

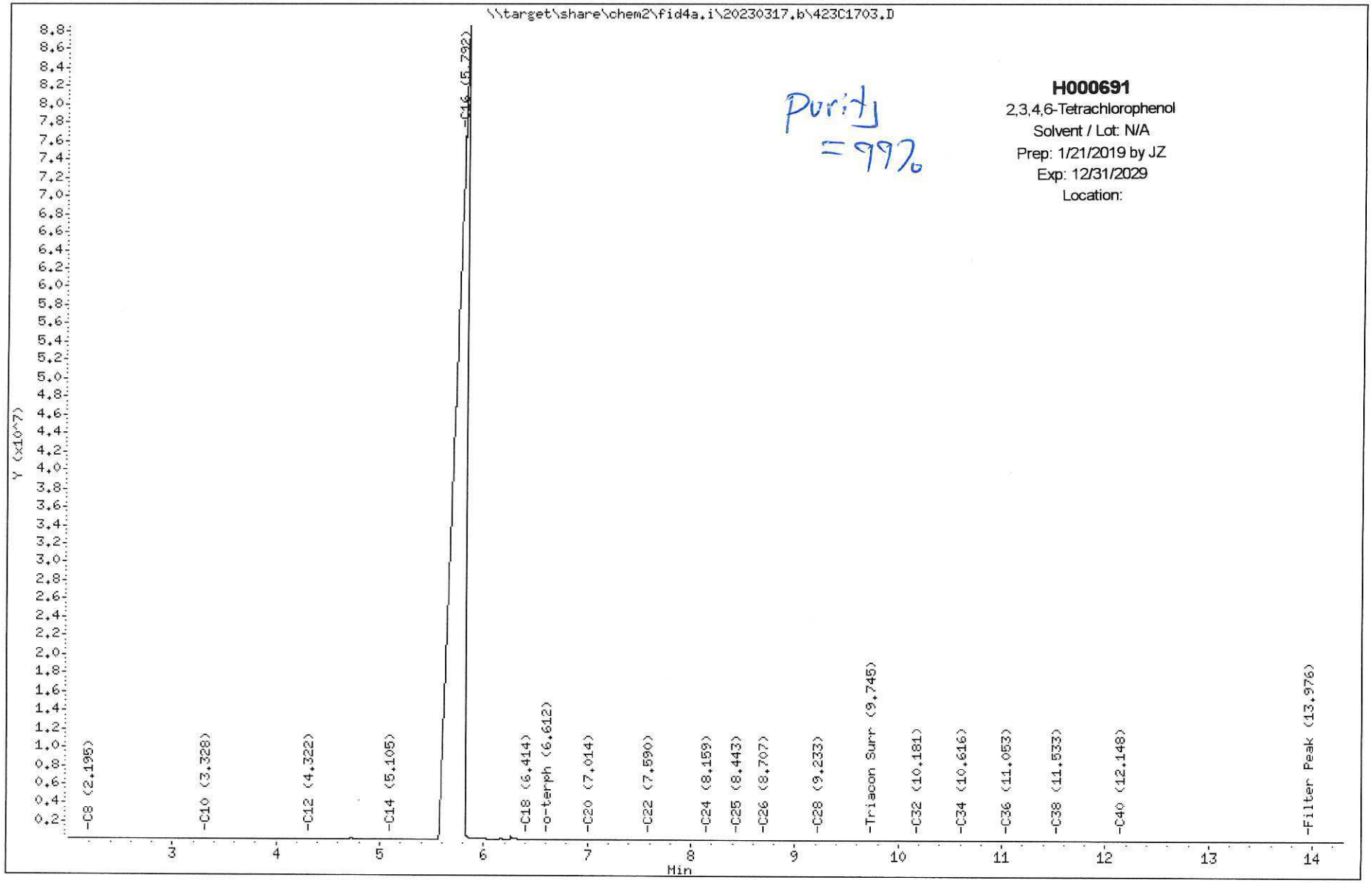
Instrument: fid4a.i

Sample Info: K007226

Operator: AA

Column phase: RTX-1

Column diameter: 0.25



Purity = 99%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
Lab Smp Id: K007226
Inj Date : 17-MAR-2023 10:46
Operator : AA Inst ID: fid4a.i
Smp Info : K007226
Misc Info :
Comment   :
Method   : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: tph.sub
Target Version: 4.14
Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
5.228	2027	2354	1.162	0.000	
5.276	4673	2682	0.574	0.000	
5.322	195	844	4.328	0.000	
5.331	977	1203	1.231	0.000	
5.356	490	993	2.027	0.000	
5.361	814	1044	1.283	0.000	
5.382	115	387	3.351	0.000	
5.399	619	960	1.551	0.000	
5.406	402	1035	2.576	0.000	
5.410	378	1122	2.968	0.000	
5.423	1663	1555	0.935	0.000	
5.452	5951	5020	0.844	0.000	
5.501	290	797	2.753	0.000	
5.523	2317	2472	1.067	0.000	
5.538	5946	6823	1.147	0.000	
5.792	501855376	76456669	0.152	74.449	6 C16
5.807	79757019	82319946	1.032	11.775	
5.823	77929961	88539160	1.136	11.505	
5.962	75333	84828	1.126	0.011	
5.986	474748	124326	0.262	0.070	
6.070	17103	57180	3.343	0.002	
6.074	120761	57565	0.477	0.017	
6.113	90233	47140	0.522	0.013	
6.165	407438	218439	0.536	0.060	
6.263	944101	374166	0.396	0.139	
6.414	114839	39498	0.344	0.016	7 C18
6.464	53190	31177	0.586	0.007	
6.523	31509	25870	0.821	0.004	
6.551	4785	23963	5.008	0.000	
6.559	51194	25409	0.496	0.007	
6.590	21354	21666	1.015	0.003	
6.612	35061	21127	0.603	0.005	$ 8 o-terph
6.638	17712	19934	1.125	0.002	
6.672	22159	19651	0.887	0.003	
6.683	26846	19268	0.718	0.003	
6.708	5413	18142	3.351	0.000	
6.713	24941	18247	0.732	0.003	
6.747	50657	18478	0.365	0.007	
6.795	23973	17444	0.728	0.003	
6.814	28457	17895	0.629	0.004	
6.837	10746	15445	1.437	0.001	
6.871	29974	21406	0.714	0.004	
6.874	4287	21471	5.009	0.000	
6.882	20520	21675	1.056	0.003	
6.944	32864	17445	0.531	0.004	
6.978	9138	15347	1.679	0.001	
7.014	4130	13830	3.348	0.000	9 C20
7.025	12567	14083	1.121	0.001	
7.038	4952	14274	2.882	0.000	
7.044	6508	14578	2.240	0.000	
7.050	25344	14736	0.581	0.003	
7.099	5531	12365	2.236	0.000	
7.108	16440	12371	0.752	0.002	
7.129	9415	11275	1.198	0.001	
7.175	3589	10327	2.878	0.000	
7.182	7285	10474	1.438	0.001	
7.212	11252	10002	0.889	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
	677340272	268782821		100.000	

Total unknown % area = 25.478

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAC9813
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9813.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005199
SVOA-ABN BASE STOCK-200-800ug/ml
Expires 5/31/2023
Prepared By Jianqing Zhou 5/18/2021

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE CAS# 91-94-1	802	µg/mL	99.9	LC27068
2,4-DINITROTOLUENE CAS# 121-14-2	802	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	801	µg/mL	99.9	LB79891
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	802	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	801	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	201	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	803	µg/mL	100.0	10126MG
4-CHLOROANILINE CAS# 106-47-8	803	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	802	µg/mL	99.9	LC05068
3-NITROANILINE CAS# 99-09-2	802	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	802	µg/mL	99.9	LC11400
PYRIDINE (LOW WATER) CAS# 110-86-1	802	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 12-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9813.01	12-May-2021	Original Release Date

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Certificate of Composition - Analytical Standard

ACID STOC"

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005200
SVOA-ABN ACID STOCK-200-800ug/ml
Solvent / Lot: DCM
Prep: 5/18/2021 by JZ
Exp: 5/31/2023
Location:

JZ 5/18/21

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate of Analysis

J008074
SVOA PAH STD 2000ug/ml
Expires 6/30/2023
Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Number: 0006540449

Lot Issue Date: 11-Jun-2020

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ISO 17025 Cert No. AT-1937

Certificate of Analysis

Product Number: US-106N-1 **Lot Number:** 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16062
Certification Date: November 19, 2020
Expiration Date: November 30, 2030

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310
Benzidines std @2000ug/ml
Expires 11/30/2030
Prepared By Van Spohn 8/12/2021

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

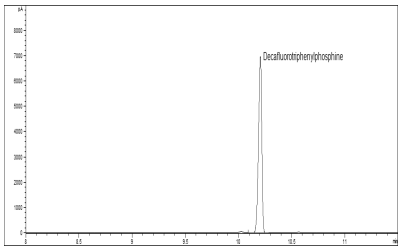
References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis - Certified Reference Material

Decafluorotriphenylphosphine solution

Product no.: 48724-U
Lot no.: LRAD0628
Expiry Date: October 2024
Manufacturing Date: September 2021
Storage: ROOM TEMPERATURE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0628.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

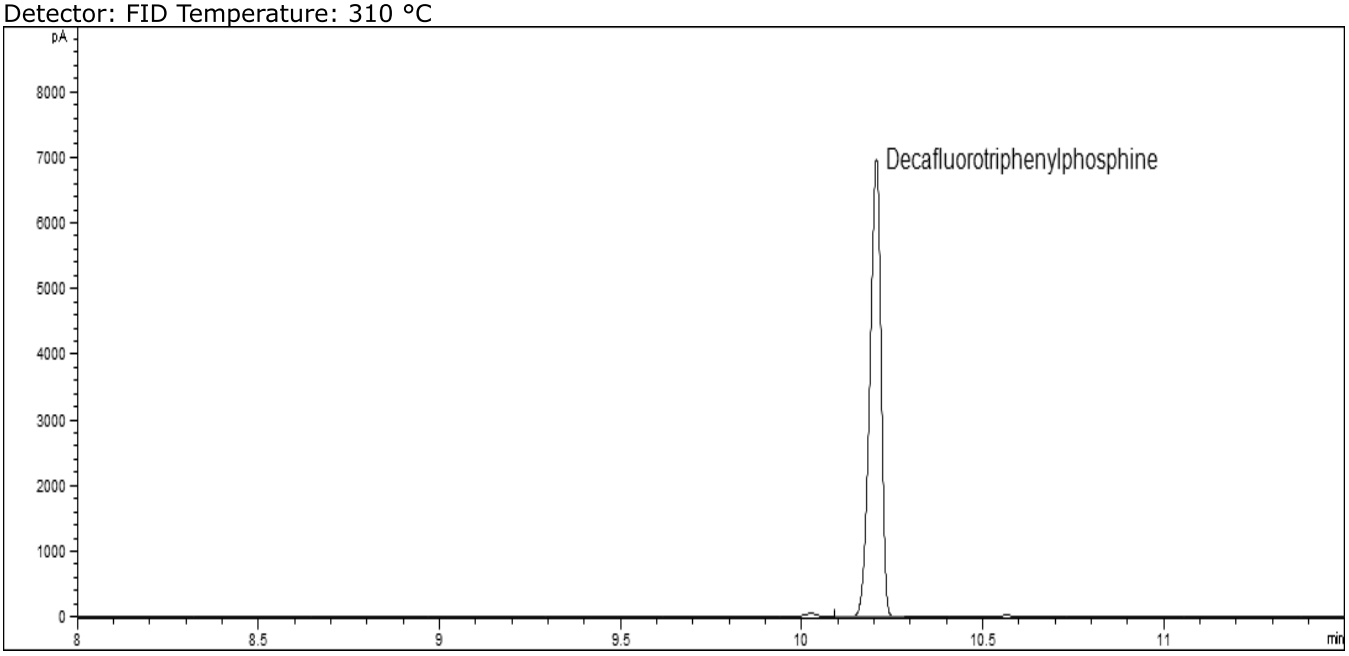


Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
DFTPP CAS# 5074-71-5	25.2 ± 2.6	mg/mL	97.0	10220909

ASSAY Method

METHOD: GC (BELLEFONTE)
Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.3 mL/min
Inlet Temperature: 250 °C Injection Volume: 1 µL
Injection Mode: 25:1
Temperature Program: 120 °C (Hold 0 min) @ 12 °C/min to 260 °C (Hold 0 min)
Detector: FID Temperature: 310 °C



Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Elution details:

EO	RT(MIN)	ANALYTE
1	10.206	Decafluorotriphenylphosphine

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Minimum sample size: 1 µL

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 30-Sep-2021

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0628.01	30-Sep-2021	Original Release Date

.

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246
Description: Benzoic Acid
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16693
Certification Date: May 6, 2021
Expiration Date: April 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 4.383%

K3238

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Reference Material Producer
Certicate No. 2427.02

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2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 25 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443
Description: Aniline
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17696
Certification Date: December 14, 2021
Expiration Date: December 31, 2029

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 0.760%

K 3239

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Reference Material Producer
Certicate No. 2427.02

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2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
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[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	*Units*	*Certified Value* [1,4]
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4ºC.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4ºC. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4ºC.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID	CRM143-50G
Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.

Description

Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

***k*:** Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date	January 05, 2021
Version	0-152021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Certificate of Analysis

Phenova Certified Reference Materials are sold by Phenomenex.
411 Madrid Ave., Torrance, CA 90501 USA ▪ Tel: 310-212-0555 ▪ Fax: 310-328-7768 ▪ info@phenomenex.com
Access your MSDS and digital C of A at **www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards**

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101291	**Lot Number:**	CL11000
Description:	GC/MS Tuning Mix	**Certification Date:**	May 9, 2014
Storage:	4 °C	**Expiration Date:**	December 31, 2023
Provided As:	1 mL in 2 mL Ampoule in Methylene chloride	**Revision Date:**	August 5, 2015

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

K003891
GC/MS Tune solution-1000ug/ml
Solvent / Lot: CL11000
Prep: 4/22/2022 by VS
Exp: 12/31/2023
Location:

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL111110613_us

Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-103N-1 **Lot Issue Date:** 25-May-2021

Lot Number: 0006609664 **Expiration Date:** 30-Jun-2024

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
benzoic acid	000065-85-0	RM01884	2005 ± 10 µg/mL
o-cresol	000095-48-7	RM12877	2005 ± 10 µg/mL
p-cresol	000106-44-5	RM01988	2005 ± 10 µg/mL
2,4,5-trichlorophenol	000095-95-4	NT00344	2004 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

5/11/22

K004539
toxic sub mix#1
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 6/30/2024
Location:

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Phenols Standard
Product Number: US-107N-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006648297
Lot Issue Date: 17-Nov-2021
Expiration Date: 31-Dec-2024

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
4-chloro-3-methylphenol	2006 ±	10 µg/mL	000059-50-7	RM01885
2-chlorophenol	2007 ±	10 µg/mL	000095-57-8	RM01871
2,4-dichlorophenol	2005 ±	10 µg/mL	000120-83-2	RM13878
2,4-dimethylphenol	2006 ±	10 µg/mL	000105-67-9	RM13009
2,4-dinitrophenol	2006 ±	10 µg/mL	000051-28-5	RM02112
2-methyl-4,6-dinitrophenol	2005 ±	10 µg/mL	000534-52-1	RM02292
2-nitrophenol	2007 ±	10 µg/mL	000088-75-5	RM13445
4-nitrophenol	2006 ±	10 µg/mL	000100-02-7	RM03752
pentachlorophenol	2006 ±	10 µg/mL	000087-86-5	RM02474
phenol	2006 ±	10 µg/mL	000108-95-2	RM11471
2,4,6-trichlorophenol	2006 ±	10 µg/mL	000088-06-2	RM18096

Matrix: methylene chloride (dichloromethane)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

5/11/22

CSD-QA-015.1

K004540
phenols mix
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 12/31/2024
Location:

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: PAH Standard
Product Number: US-106N-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006627349
Lot Issue Date: 17-Sep-2021
Expiration Date: 31-Oct-2024

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
acenaphthene	2007 ±	10 µg/mL	000083-32-9	RM10879
acenaphthylene	2004 ±	10 µg/mL	000208-96-8	RM10891
anthracene	2006 ±	10 µg/mL	000120-12-7	RM14212
benz[a]anthracene	2006 ±	10 µg/mL	000056-55-3	RM16072
benzo[b]fluoranthene	2006 ±	10 µg/mL	000205-99-2	RM14571
benzo[k]fluoranthene	2006 ±	10 µg/mL	000207-08-9	RM18376
benzo[ghi]perylene	2006 ±	10 µg/mL	000191-24-2	RM15761
benzo[a]pyrene	2006 ±	10 µg/mL	000050-32-8	RM17573
chrysene	2007 ±	10 µg/mL	000218-01-9	RM13771
dibenz[a,h]anthracene	2006 ±	10 µg/mL	000053-70-3	RM06786
fluoranthene	2006 ±	10 µg/mL	000206-44-0	RM12277
fluorene	2006 ±	10 µg/mL	000086-73-7	RM09441
indeno[1,2,3-cd]pyrene	2006 ±	10 µg/mL	000193-39-5	RM14192
naphthalene	2007 ±	10 µg/mL	000091-20-3	RM10445
phenanthrene	2005 ±	10 µg/mL	000085-01-8	RM10495
pyrene	2005 ±	10 µg/mL	000129-00-0	RM16126

Matrix: methylene chloride/benzene (1:1)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

K004541
SVOA PAH STD 2000ug/ml
Solvent / Lot: DCM/BENZENE
Prep: 5/11/2022 by JZ
Exp: 10/31/2024
Location: Fridge 19

CSD-QA-015.1

11/22

Reference Materials Producer
Cert #2495.01

Certificate of Analysis

Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics**® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Mora

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory , please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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ACCREDITED
Reference Materials Producer
Cert #2495.01

ECS

Certificate of Analysis

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Nave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Agilent

Certificate of Analysis

Product Name: 1-Methylnaphthalene Standard

Product Number: EPA-1225-1 **Lot Issue Date:** 19-Jul-2021

Lot Number: 0006624769 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-methylnaphthalene	000090-12-0	RM07712	999.3 ± 5.0 µg/mL

Matrix: methanol (methyl alcohol)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

K004543
1-Methylnaphthalene
Solvent / Lot: MEOH
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

5/11/22

Sample lot approver:
Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026
Page: 1 of 1
www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert
No. AT-1937

Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1 **Lot Issue Date:** 02-Jul-2021

Lot Number: 0006620643 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544
toxic sub mix#2
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

05/11/22

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0181243

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Elution Order	Compound	Gr (weig					
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ2508) **Purity** 99%	1,50				µg/mL	Stressed
				+/-	53.3632	µg/mL	Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot PR-31262) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,510.0	µg/mL	+/-	8.9689	µg/mL	Gravimetric
				+/-	44.1050	µg/mL	Unstressed
				+/-	53.5049	µg/mL	Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32542/022621DB1 **Purity** 99%	1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
				+/-	29.3255	µg/mL	Unstressed
				+/-	35.5754	µg/mL	Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,008.0	µg/mL	+/-	5.9872	µg/mL	Gravimetric
				+/-	29.4423	µg/mL	Unstressed
				+/-	35.7172	µg/mL	Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 19169) **Purity** 99%	1,006.0	µg/mL	+/-	5.9753	µg/mL	Gravimetric
				+/-	29.3839	µg/mL	Unstressed
				+/-	35.6463	µg/mL	Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

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Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246
Description: Benzoic Acid
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17953
Certification Date: January 31, 2022
Expiration Date: January 31, 2032

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603
Benzoic Acid @2000ug/ml
Solvent / Lot: N/A
Prep: 5/13/2022 by JZ
Exp: 1/31/2032
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

phenova Certified Reference Materials | A Phenomenex Company

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

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6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17662
Certification Date: December 2, 2021
Expiration Date: November 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604
Benzidines std @2000ug/ml
Solvent / Lot: MeCl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

phenova Certified Reference Materials | A Phenomenex Company

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

Supelco®

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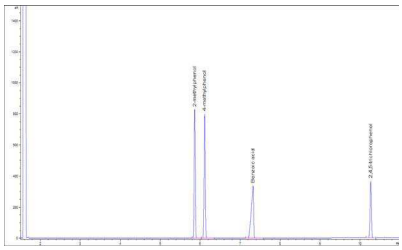
Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

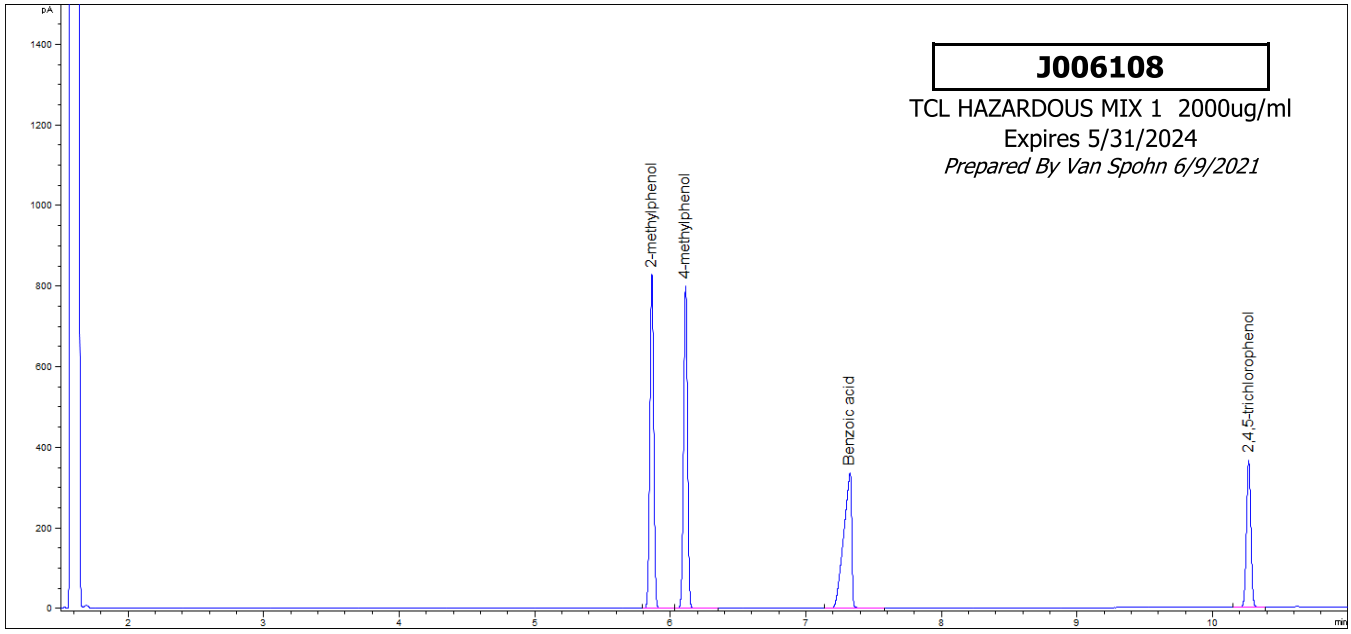
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Elution order*	*Raw Material Lot*
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:
Analytical Method Parameters:
Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
Carrier Gas: H2, Flow: 4.5 mL/min
Inlet Temperature: 170 °C, Injection Volume: 1 µL
Injection Mode: Split, Split Ratio: 20:1

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

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Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

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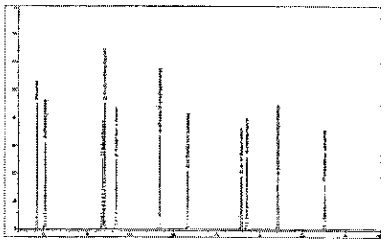
www.sigmaaldrich.com

Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



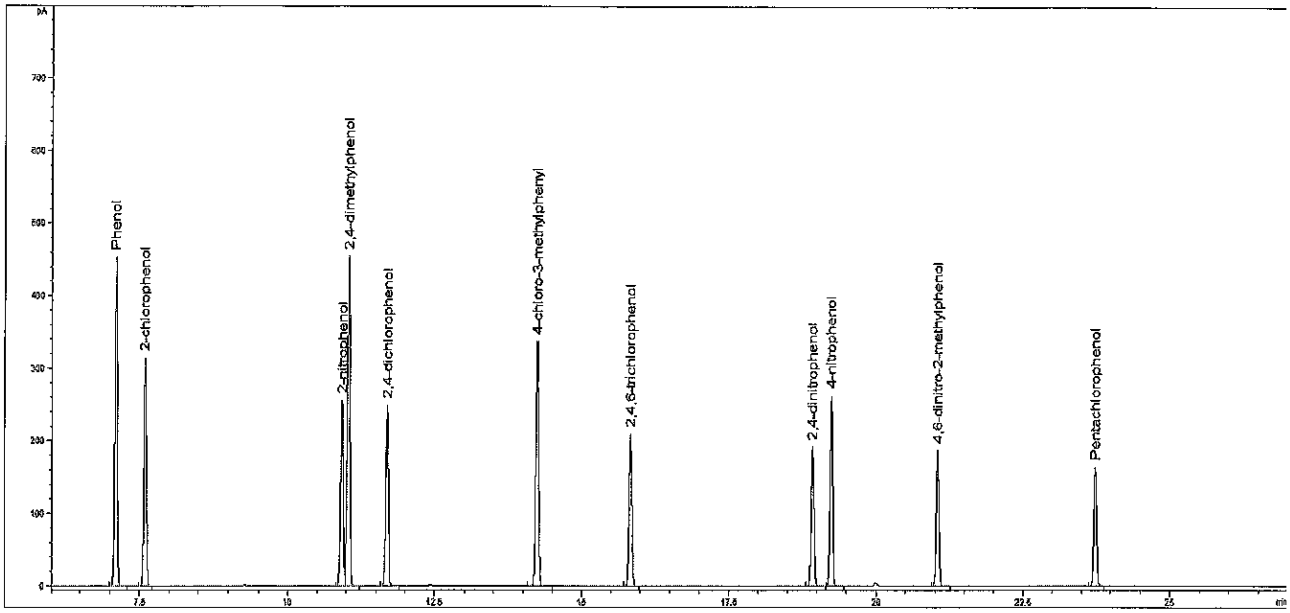
Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597
TCL Phenols Mix 2000ug/ml
Solvent / Lot: LRAD0139
Prep: 12/30/2021 by VS
Exp: 7/31/2024
Location:

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.



METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.5 mL/min
Inlet Temperature: 200 °C Injection Volume: 1.0 µL
Injection Mode: 25:1
Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)
Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorphenol
6	14.242	4-chloro-3-m3thylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{hom\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

K007194
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO187400
Prep: 8/5/2022 by VS
Exp: 4/30/2026
Location:

Certificate of Analysis

IAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0187400

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2026 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ3299) **Purity** 99%	1,508.0 µg/mL	+/- 8.9571 µg/mL +/- 44.0466 µg/mL +/- 53.4340 µg/mL	Gravimetric Unstressed Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot SL210831) **Purity** 99%	1,510.0 µg/mL	+/- 8.9689 µg/mL +/- 44.1050 µg/mL +/- 53.5049 µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,512.0 µg/mL	+/- 8.9808 µg/mL +/- 44.1635 µg/mL +/- 53.5758 µg/mL	Gravimetric Unstressed Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32597) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 29.3255 µg/mL +/- 35.5754 µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 29.3255 µg/mL +/- 35.5754 µg/mL	Gravimetric Unstressed Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 00021384) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 29.3255 µg/mL +/- 35.5754 µg/mL	Gravimetric Unstressed Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,502.0 µg/mL	+/- 8.9214 µg/mL +/- 43.8714 µg/mL +/- 53.2214 µg/mL	Gravimetric Unstressed Stressed

8	p-Terphenyl-d14		1,002.0	µg/mL	+/-	5.9516	µg/mL	Gravimetric
	CAS # 1718-51-0	(Lot PR-30504)			+/-	29.2671	µg/mL	Unstressed
	Purity 99%				+/-	35.5046	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

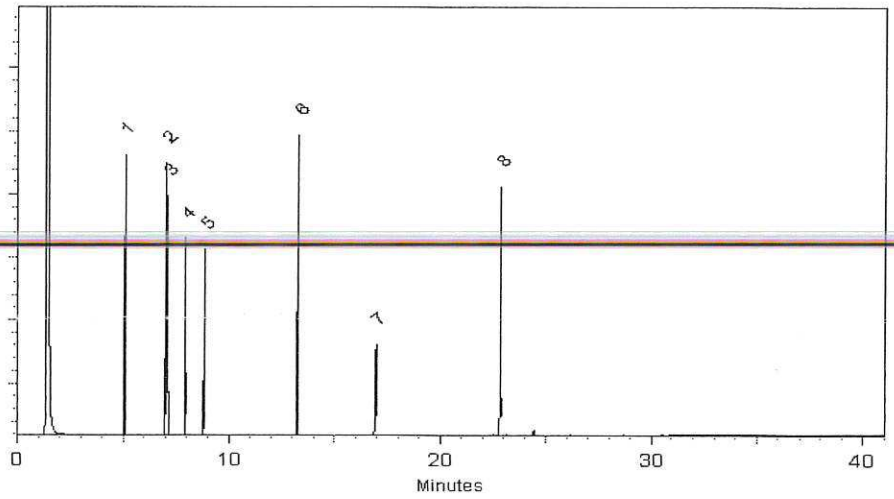
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bryan Snyder - Operations Tech I

Date Mixed: 17-Jul-2022 **Balance:** 1128353505

Christie Mills - Operations Tech II - ARM QC

Date Passed: 21-Jul-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18355
Certification Date: July 25, 2022
Expiration Date: August 31, 2023

K007995
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: N/A
Prep: 8/29/2022 by JZ
Exp: 8/31/2023
Location: FREEZER 44

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

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Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

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Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

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Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroiospropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 03 JUN 2022

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1205

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-01 C	SDG:	23A0134
Sampled:	01/06/23 08:28	Prepared:	01/19/23 13:35	File ID:	NT1802262310S.D
% Solids:	57.38	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 17:52
Batch:	BLA0410	Sequence:	SLC0389	Initial/Final:	17.47 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	5.0	U	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	6.7	J	2.5	20.0
65-85-0	Benzoic acid	1	80.1	J	13.4	99.8
105-67-9	2,4-Dimethylphenol	1	2.9	J	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	4.9	J	2.1	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	748.18	587	78.5	27 - 120	
p-Terphenyl-d14	498.79	378	75.8	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623105.D

Page 1

Date : 26-FEB-2023 17:52

Client ID:

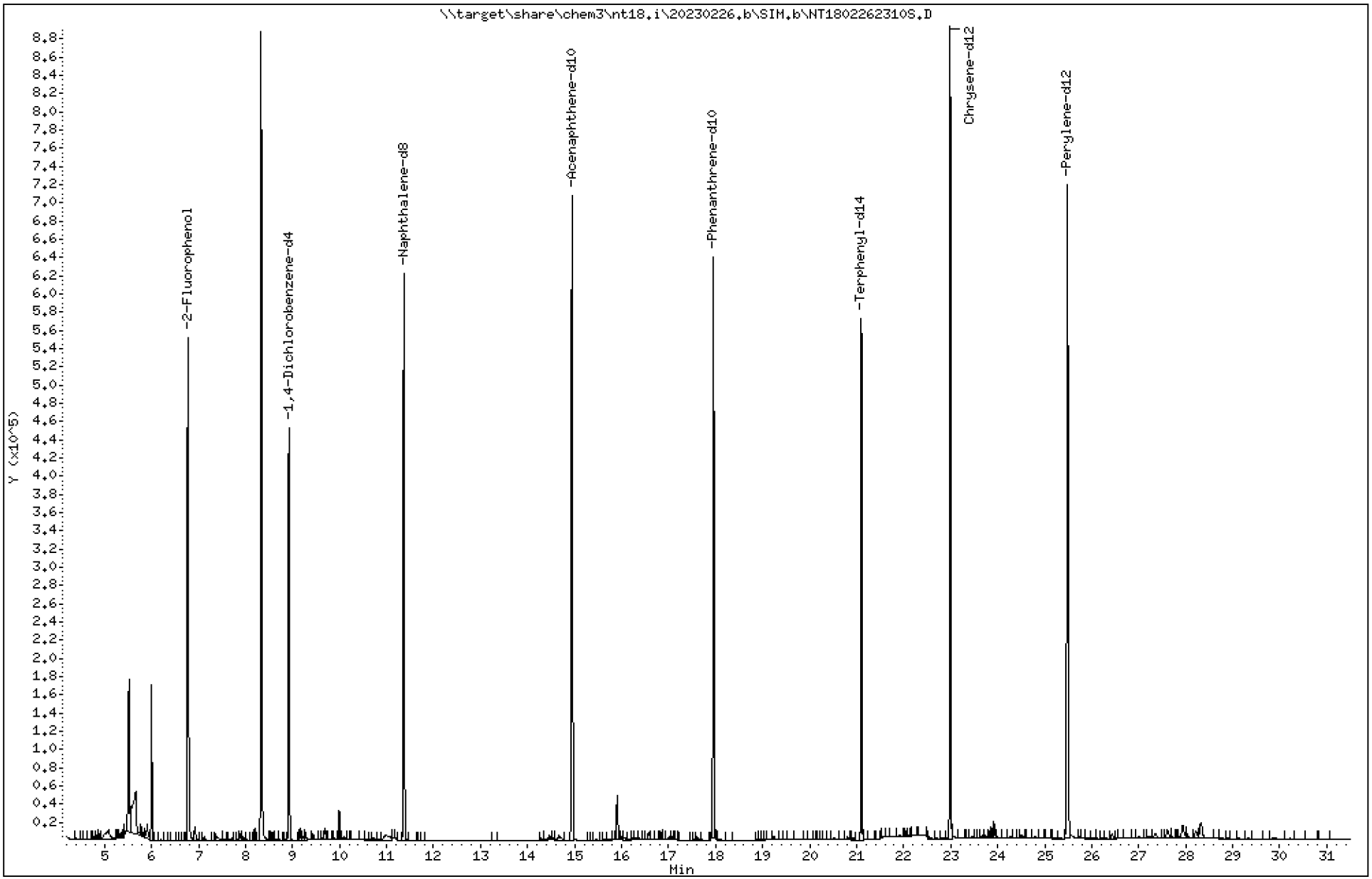
Instrument: nt18.i

Sample Info: 23A0134-01

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

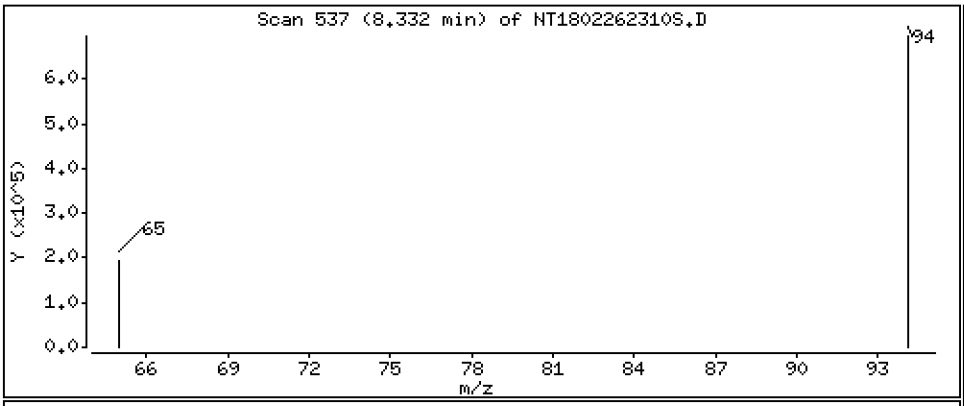
Operator: YZ

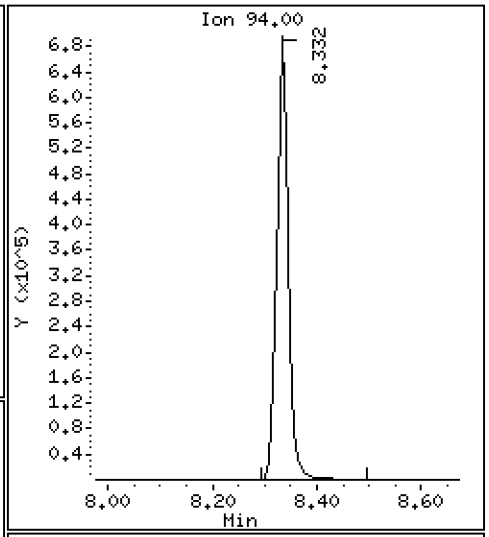
Column phase: ZB-5msi

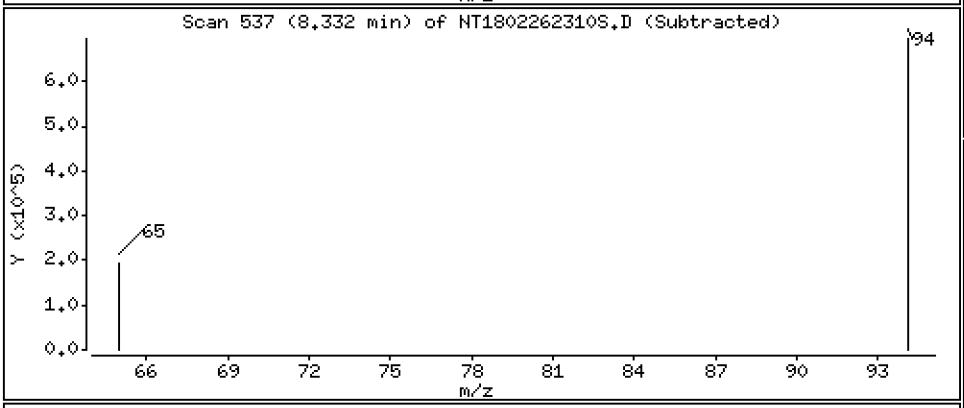
Column diameter: 0.25

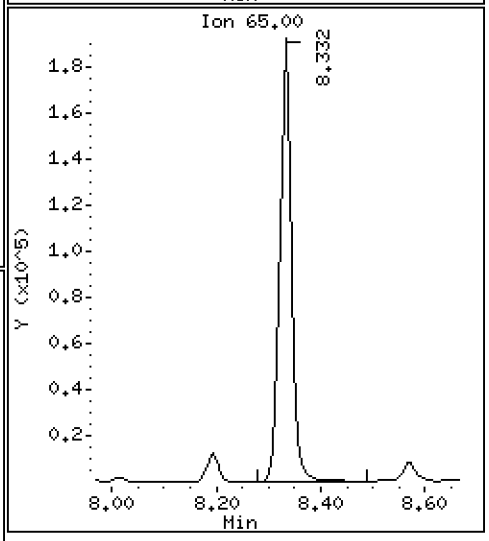
3 Phenol

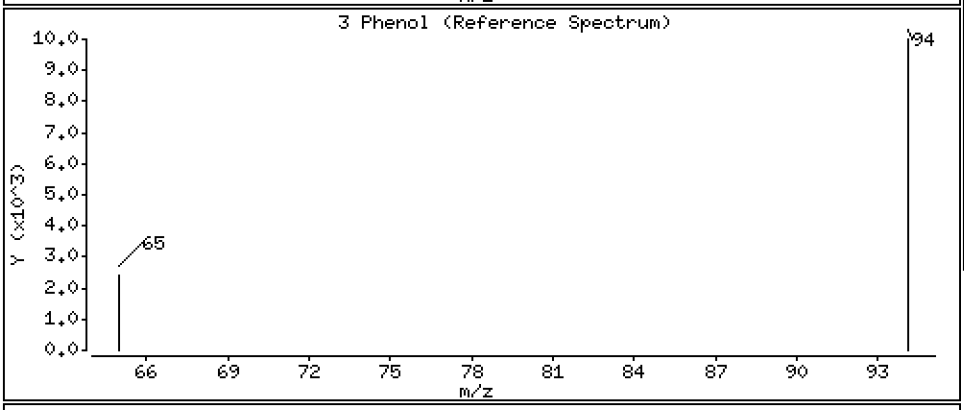
Concentration: 8.991 ug/mL

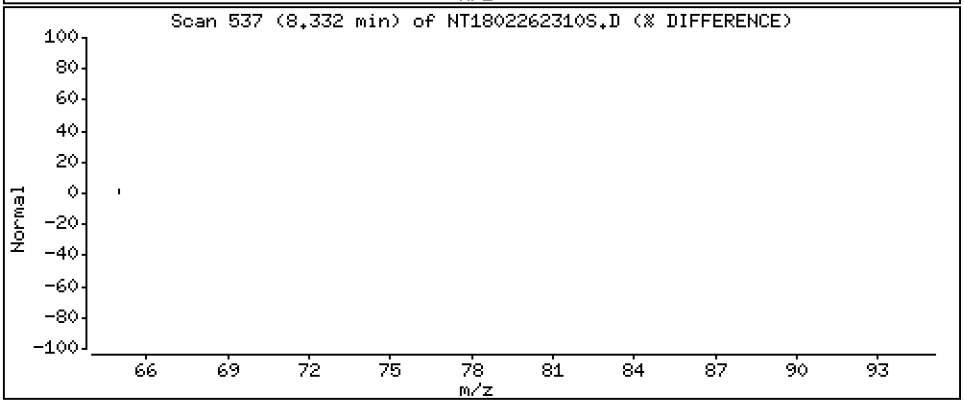












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

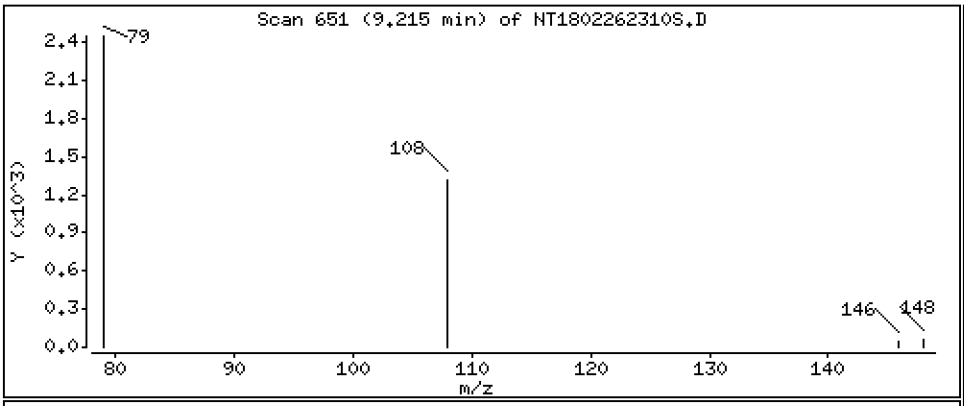
Operator: YZ

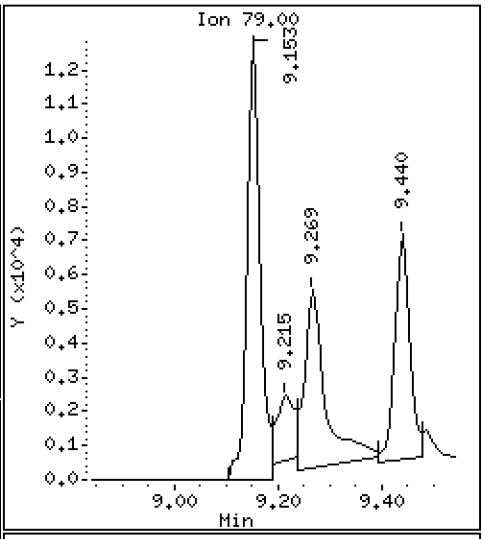
Column phase: ZB-5msi

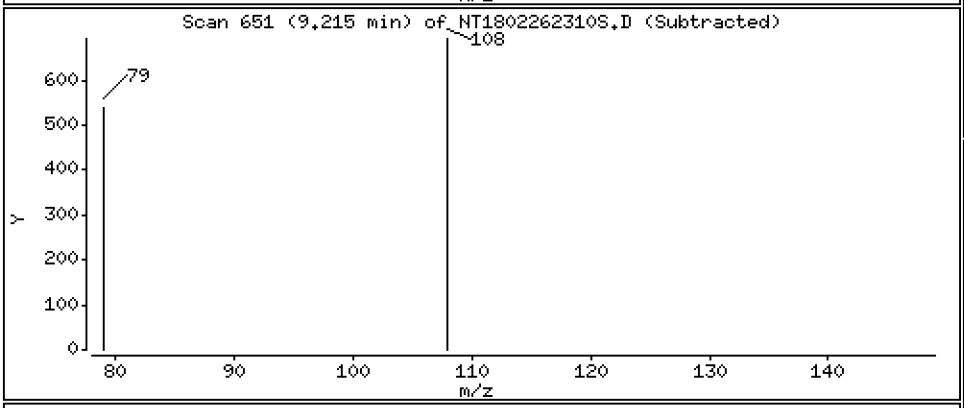
Column diameter: 0.25

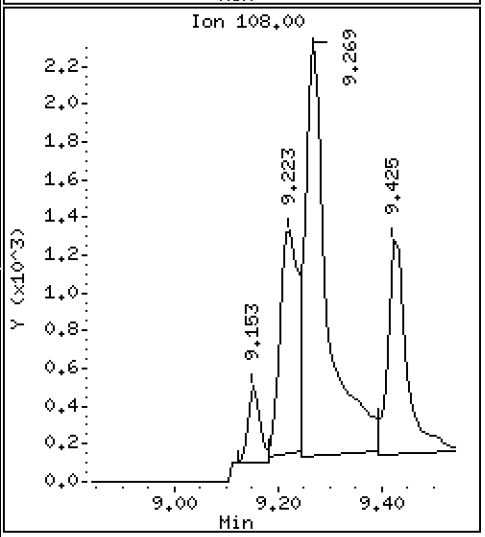
11 Benzyl alcohol

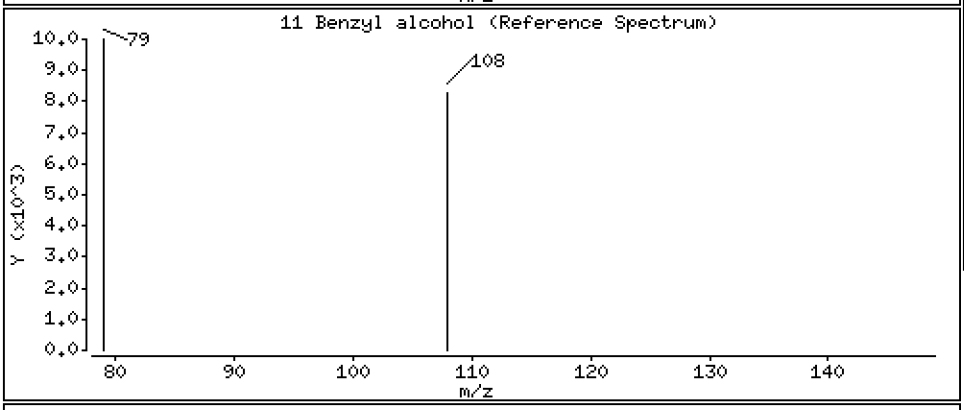
Concentration: 0.06708 ug/mL

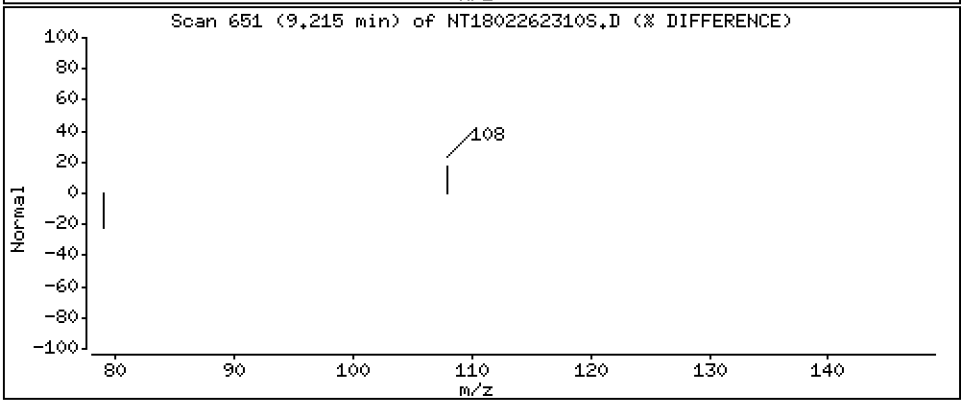












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

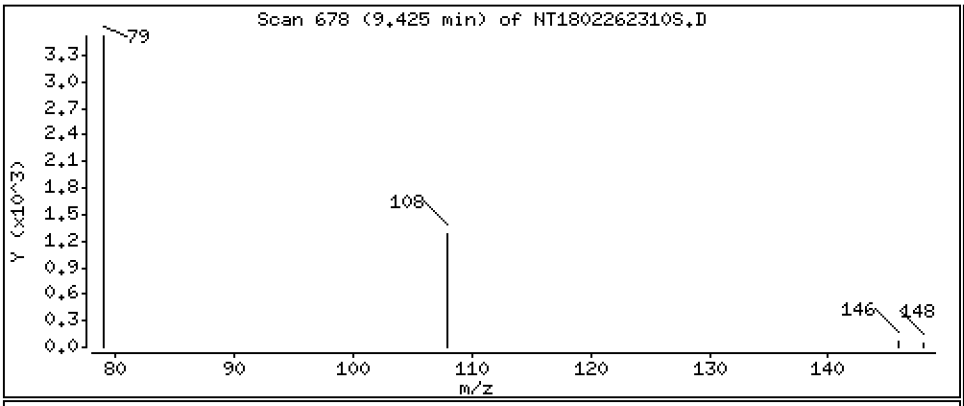
Operator: YZ

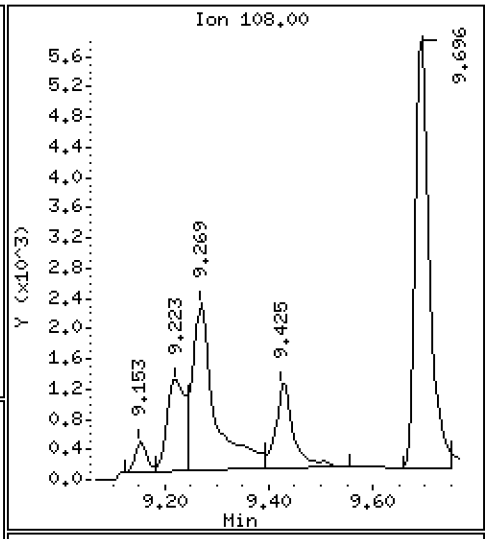
Column phase: ZB-5msi

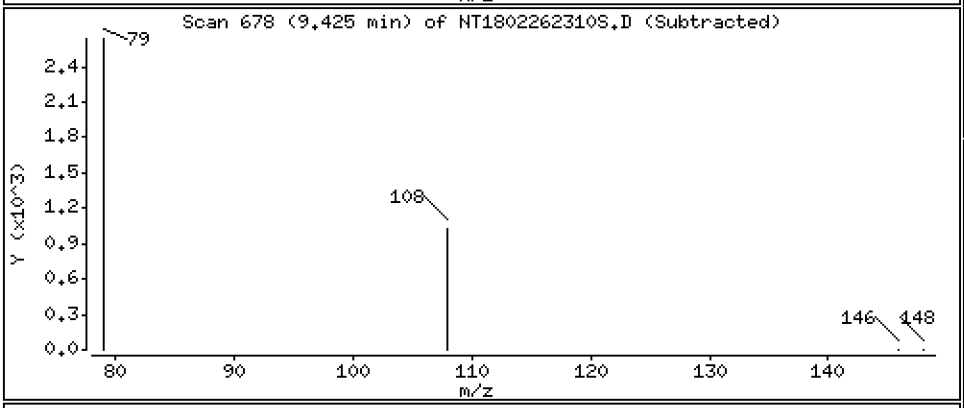
Column diameter: 0.25

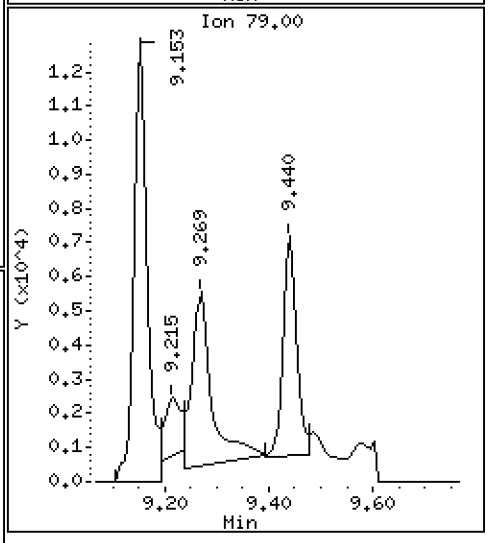
13 2-Methylphenol

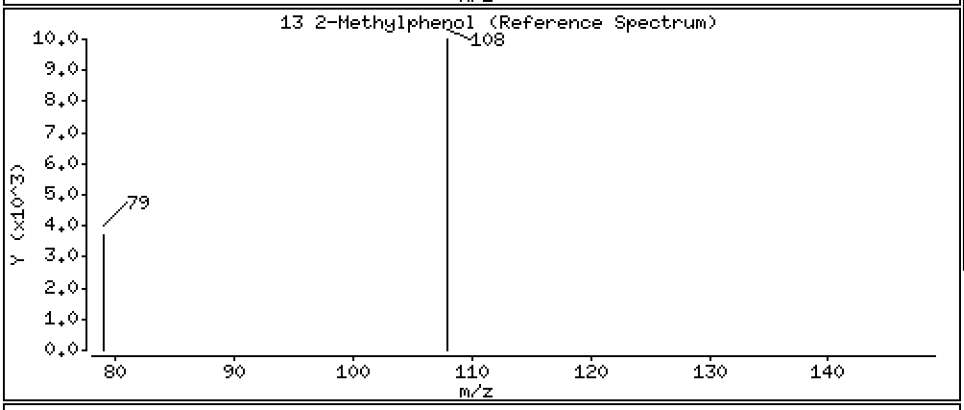
Concentration: 0.02952 ug/mL

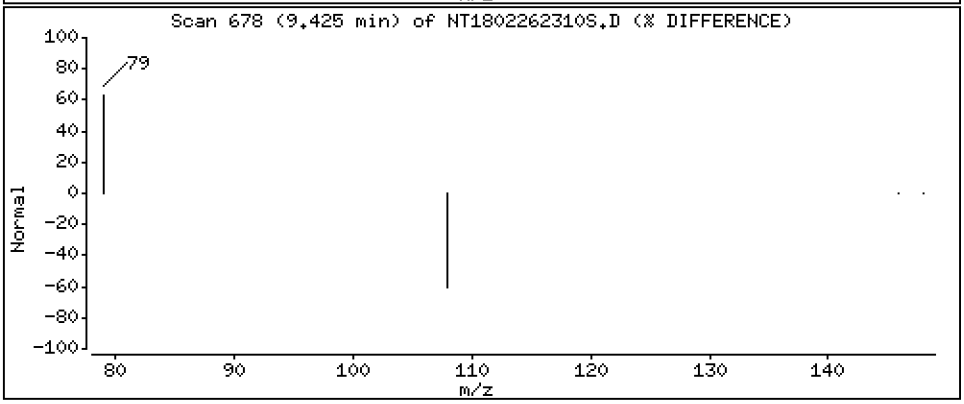












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

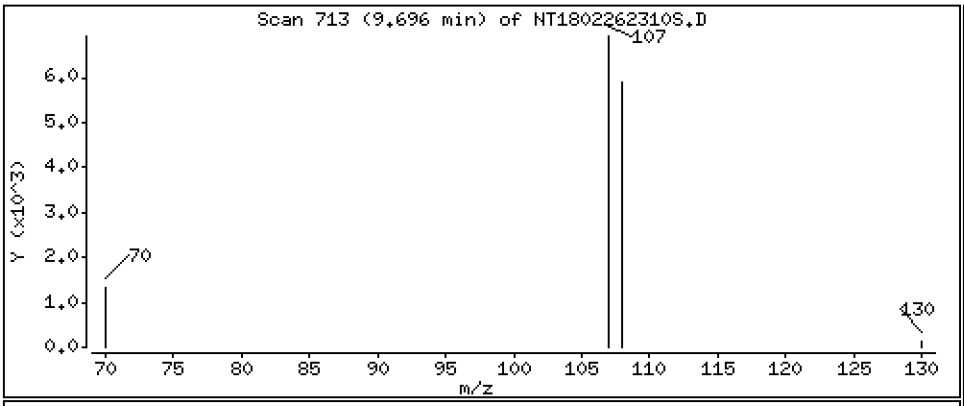
Operator: YZ

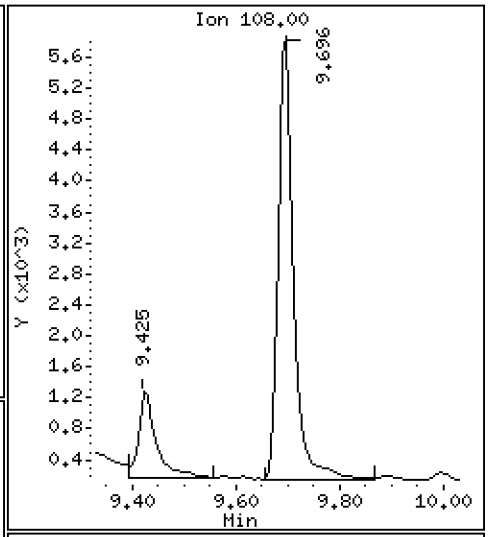
Column phase: ZB-5msi

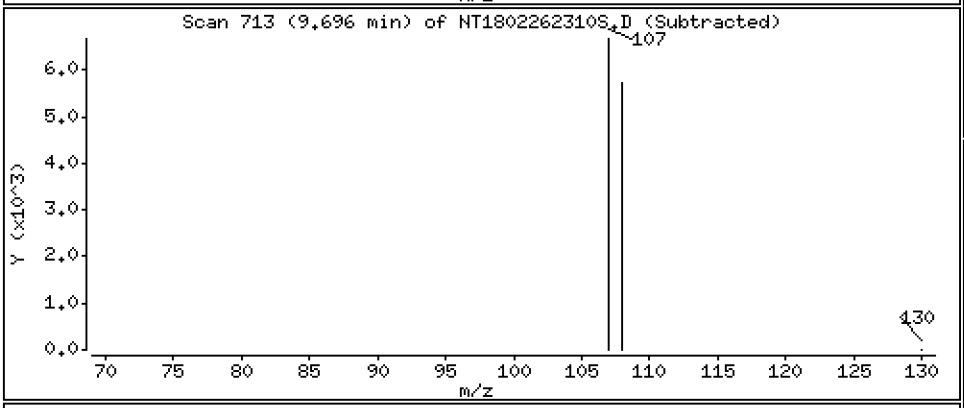
Column diameter: 0.25

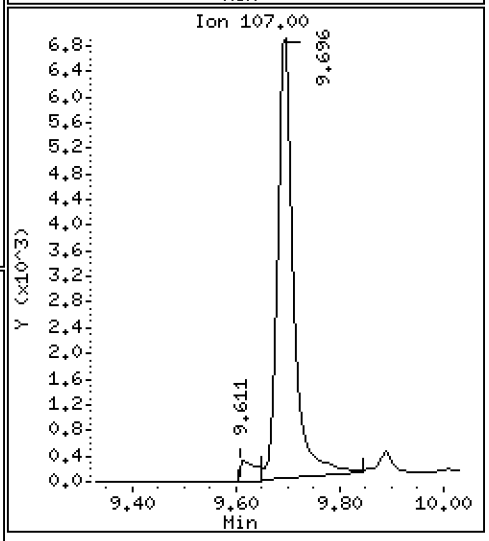
15 4-Methylphenol

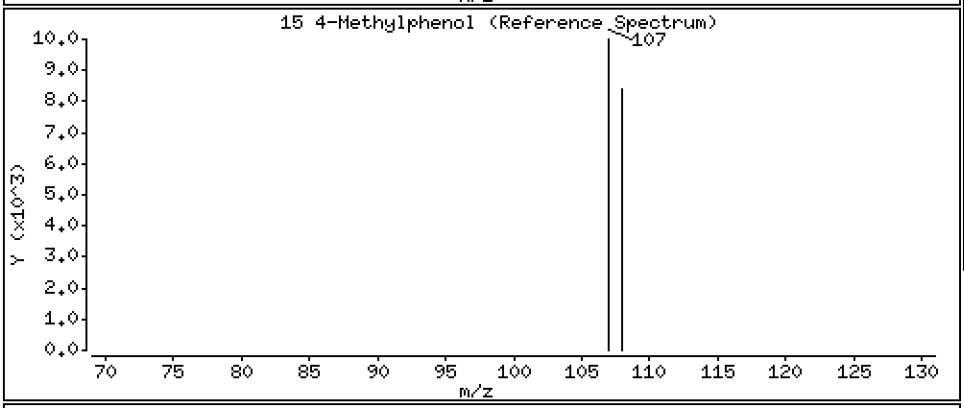
Concentration: 0.1233 ug/mL

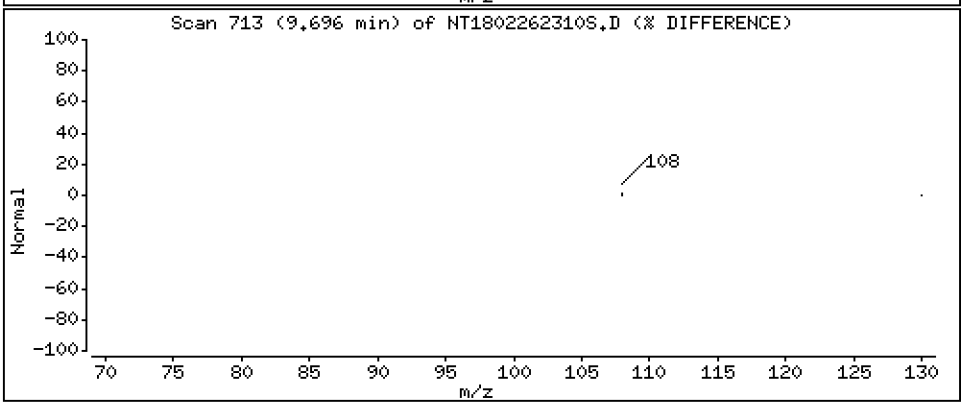












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

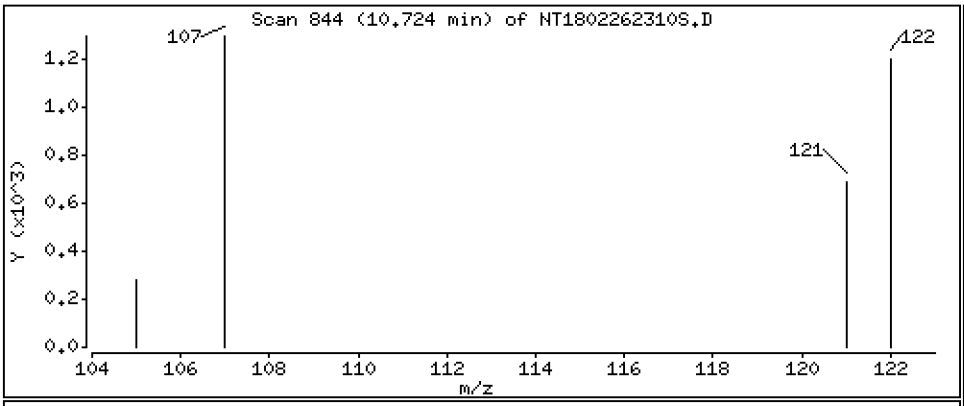
Operator: YZ

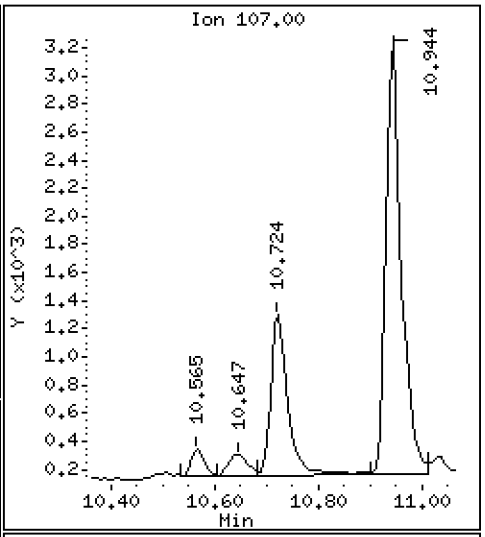
Column phase: ZB-5msi

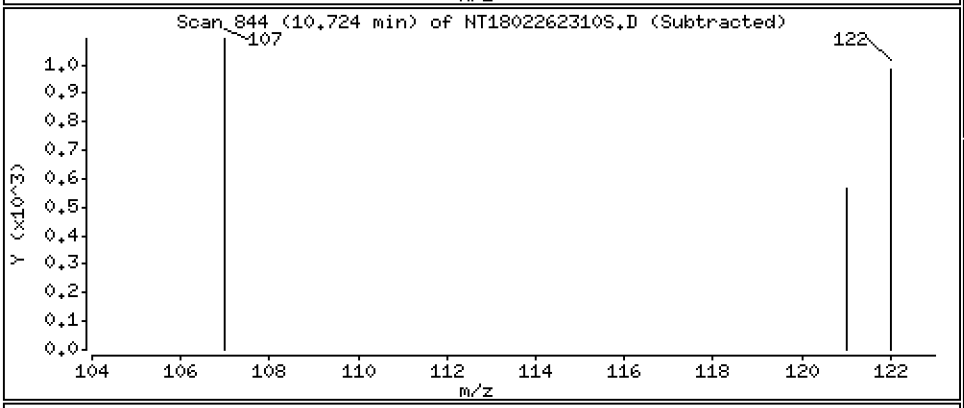
Column diameter: 0.25

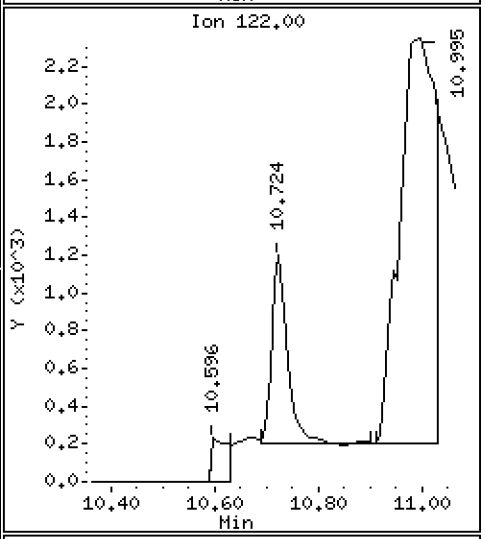
22 2,4-Dimethylphenol

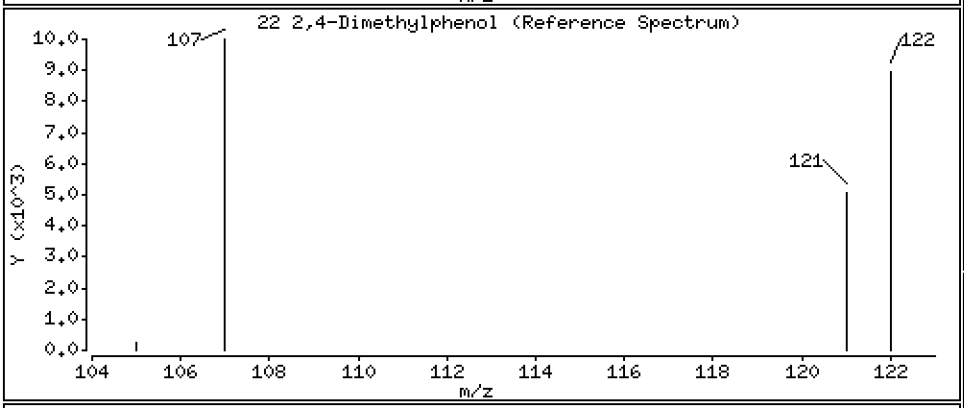
Concentration: 0.02870 ug/mL

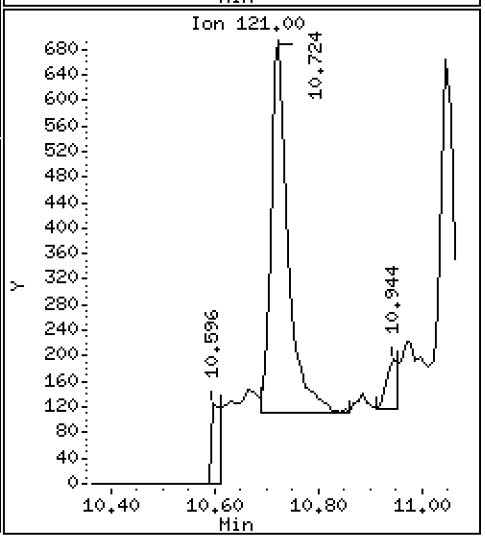


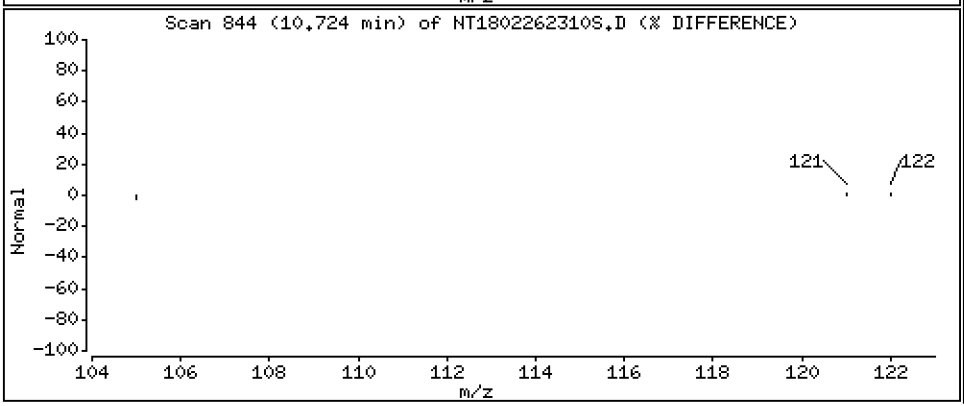












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Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

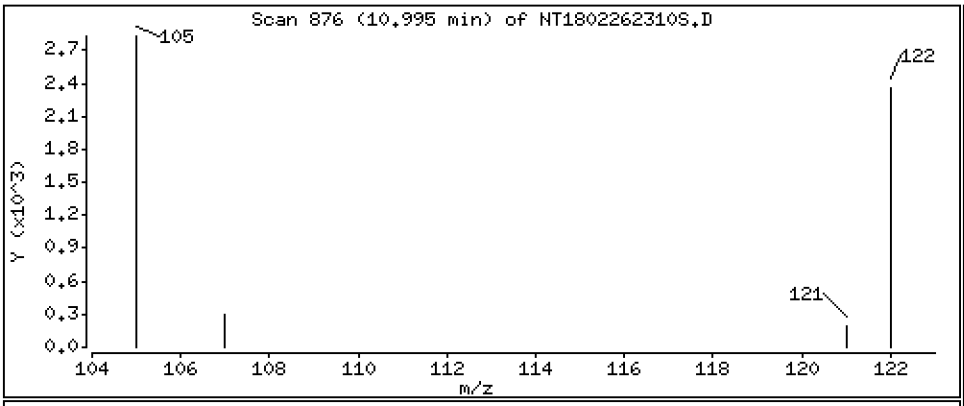
Operator: YZ

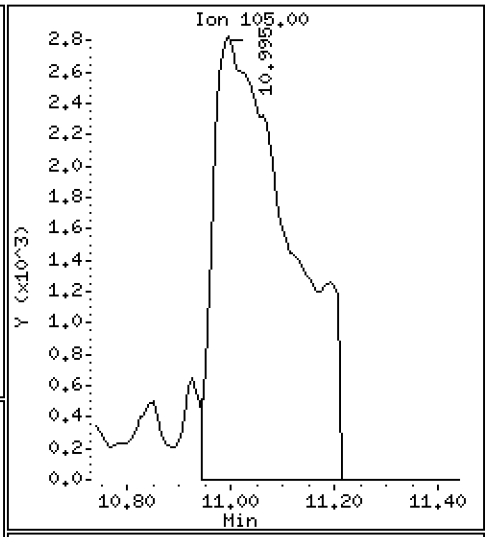
Column phase: ZB-5msi

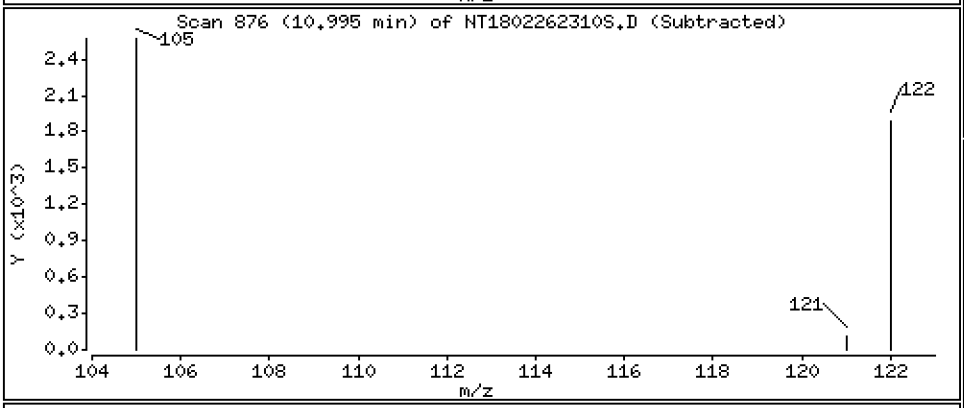
Column diameter: 0.25

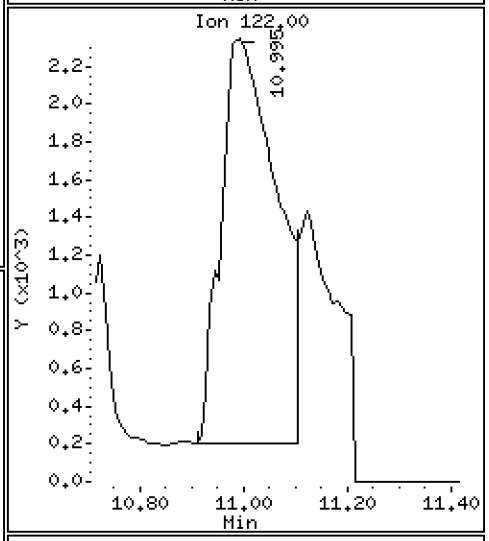
24 Benzoic acid

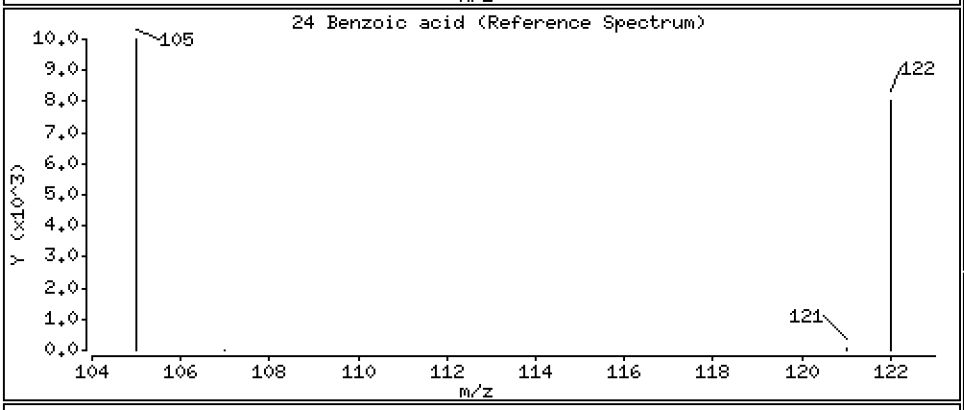
Concentration: 0.8031 ug/mL

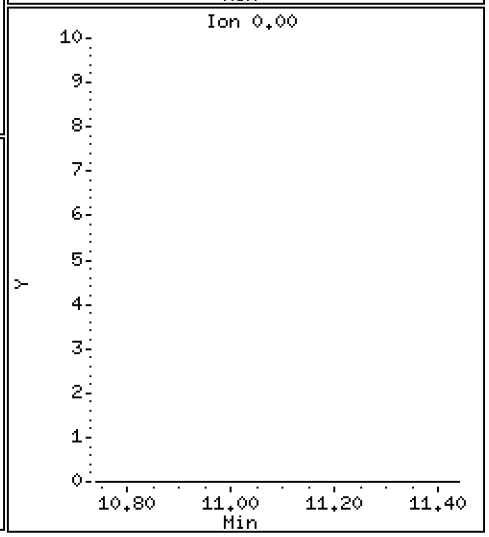


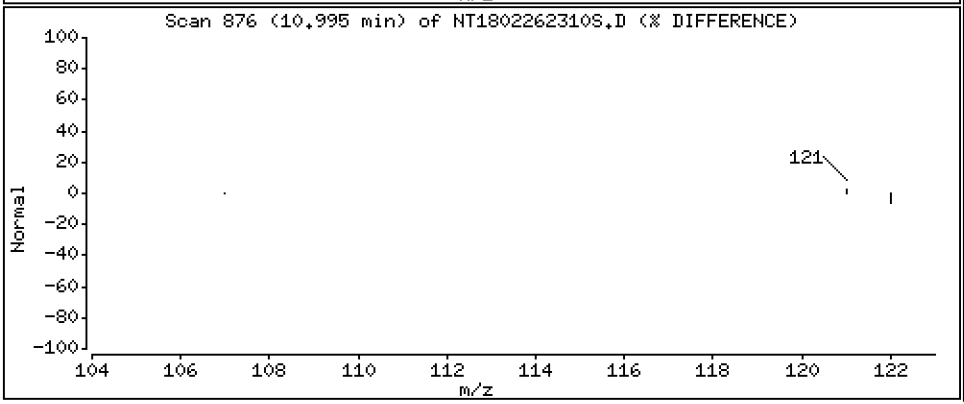












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262310S.D

Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

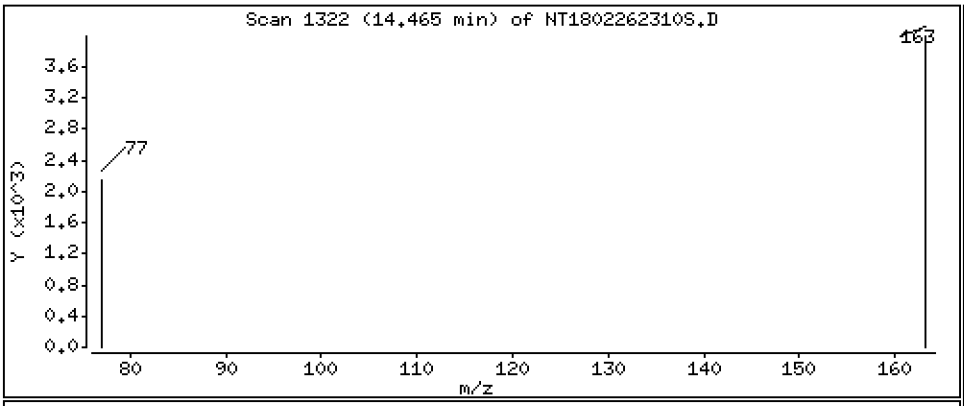
Operator: YZ

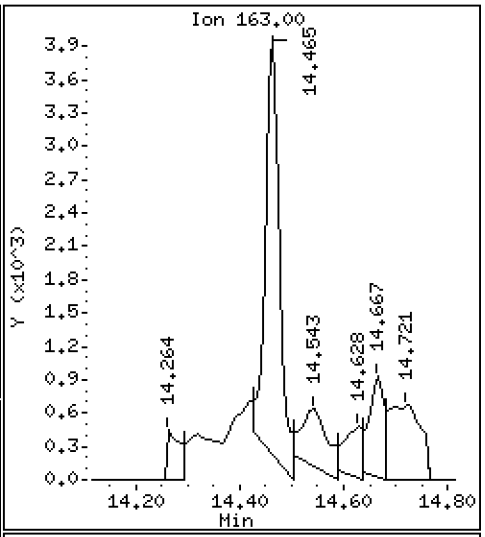
Column phase: ZB-5msi

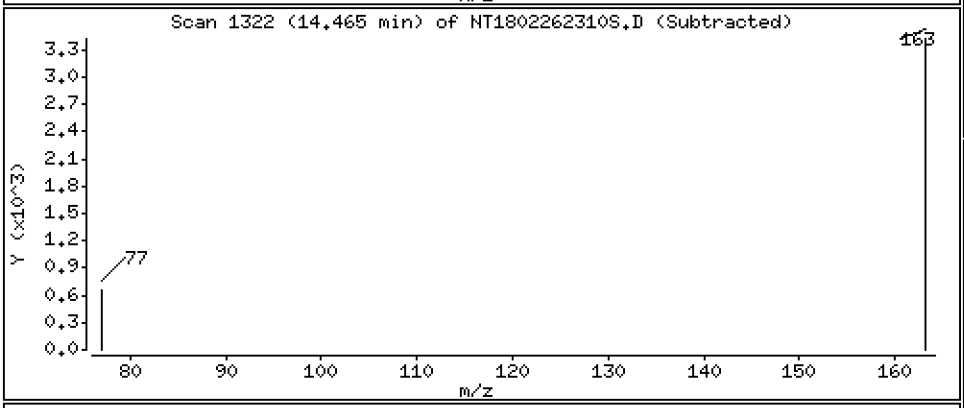
Column diameter: 0.25

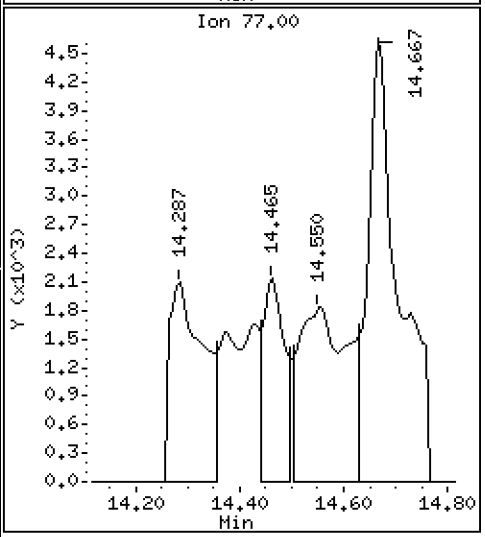
39 Dimethylphthalate

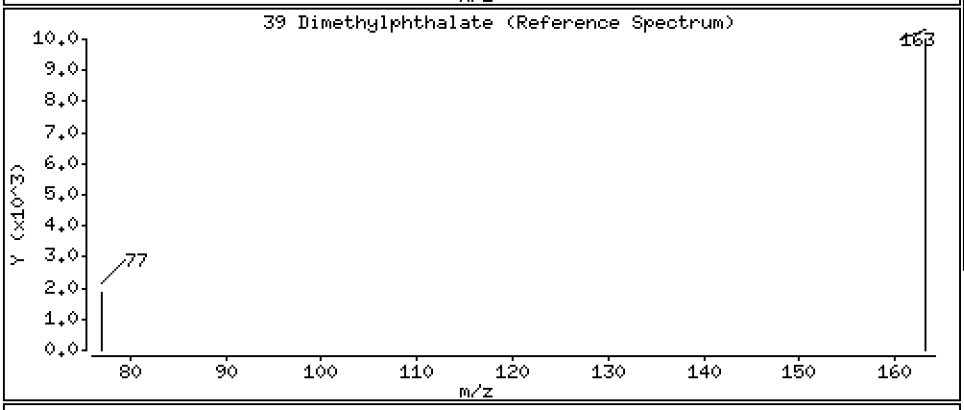
Concentration: 0.03395 ug/mL

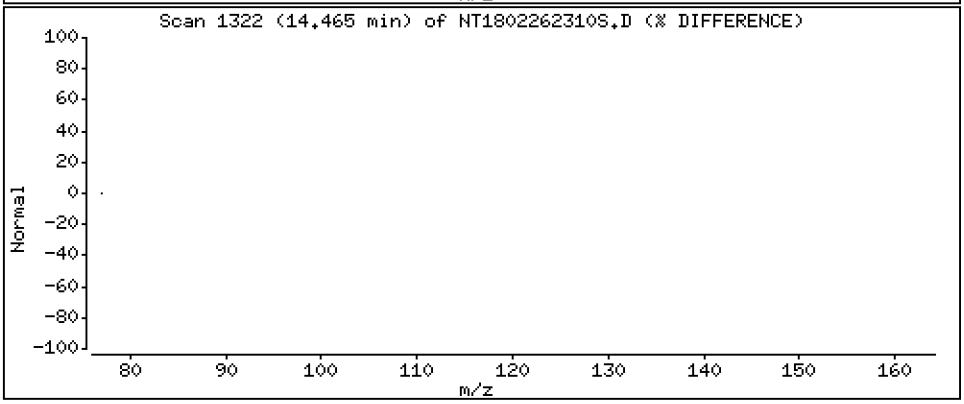












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262310S.D

Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

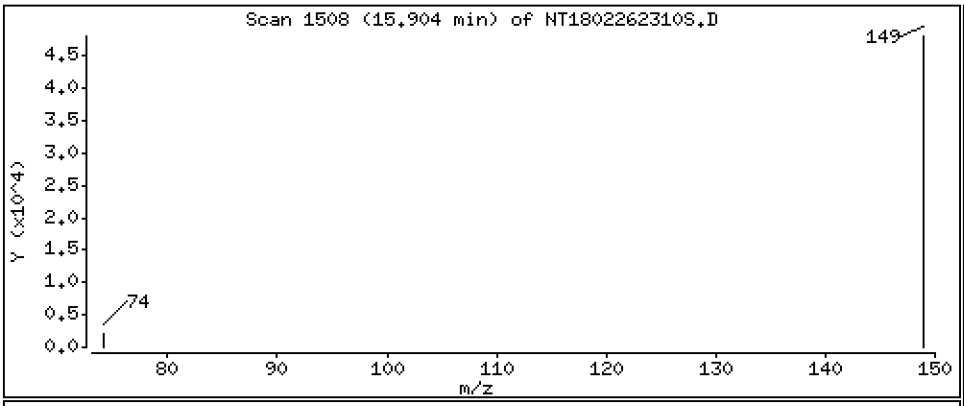
Operator: YZ

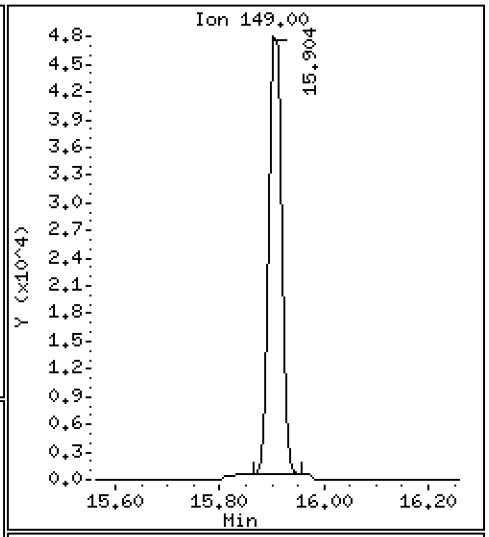
Column phase: ZB-5msi

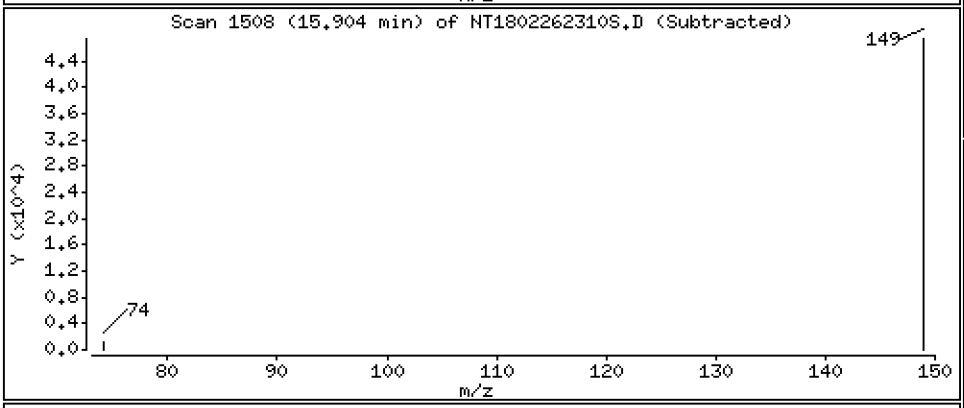
Column diameter: 0.25

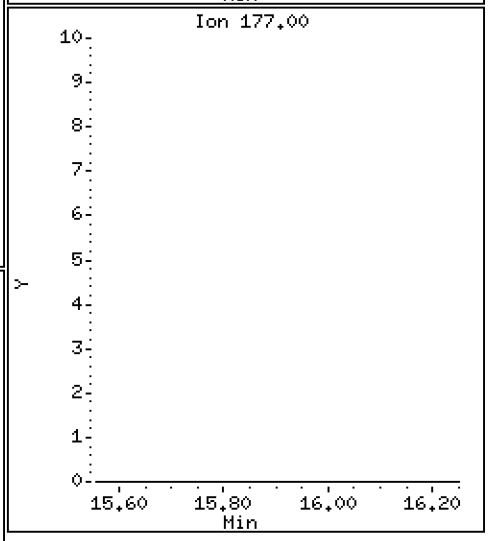
50 Diethylphthalate

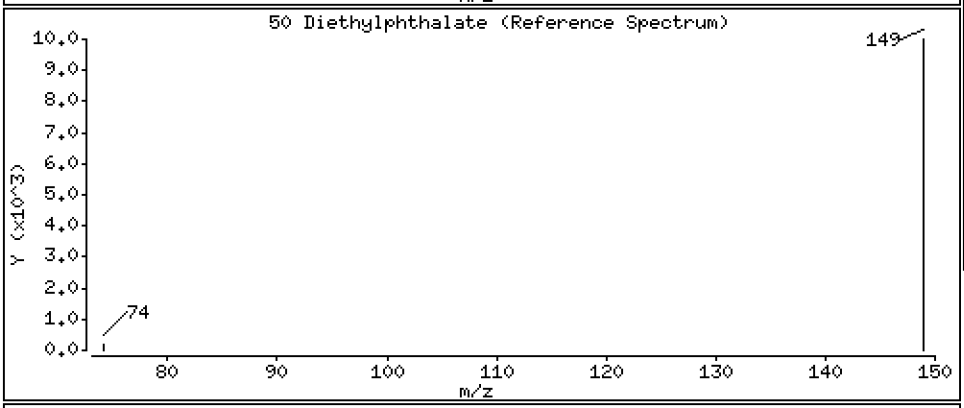
Concentration: 0.4127 ug/mL

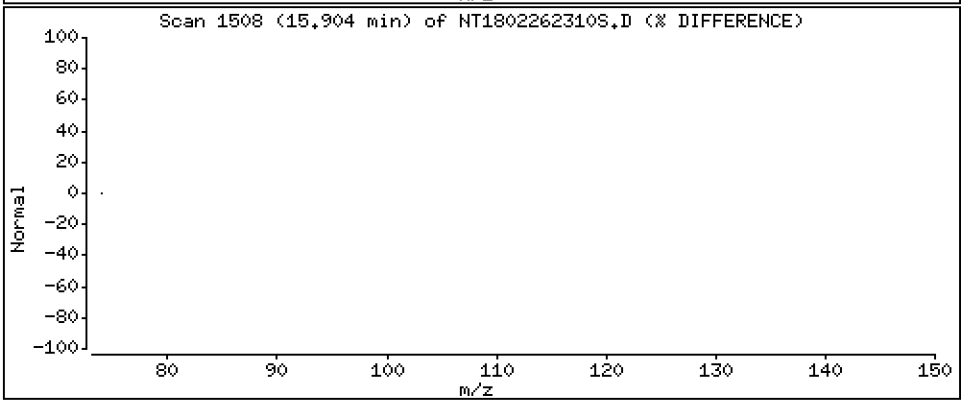












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262310S.D

Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

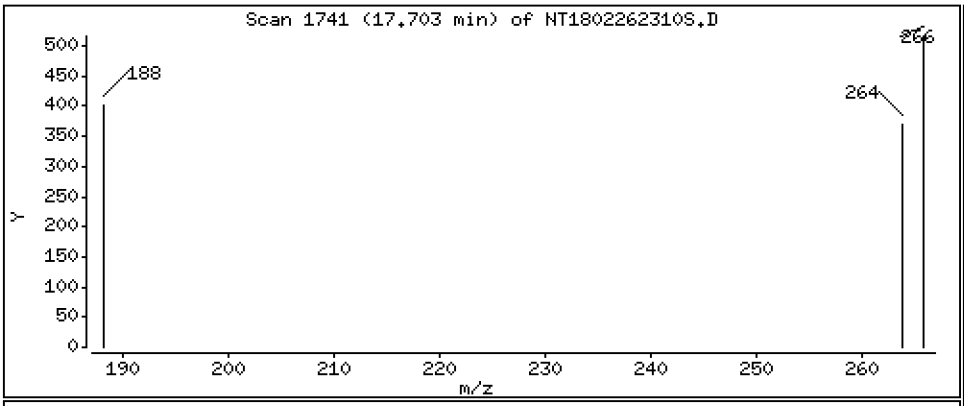
Operator: YZ

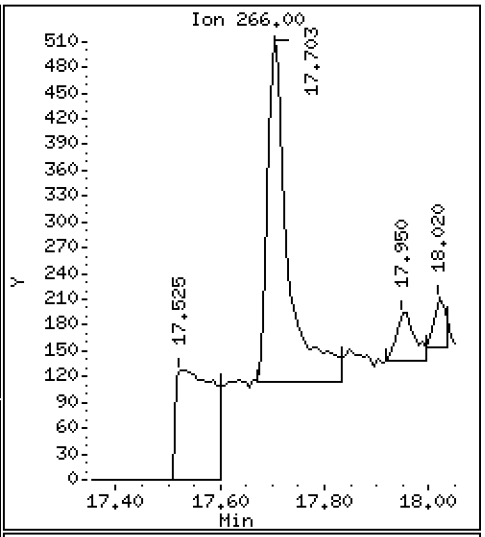
Column phase: ZB-5msi

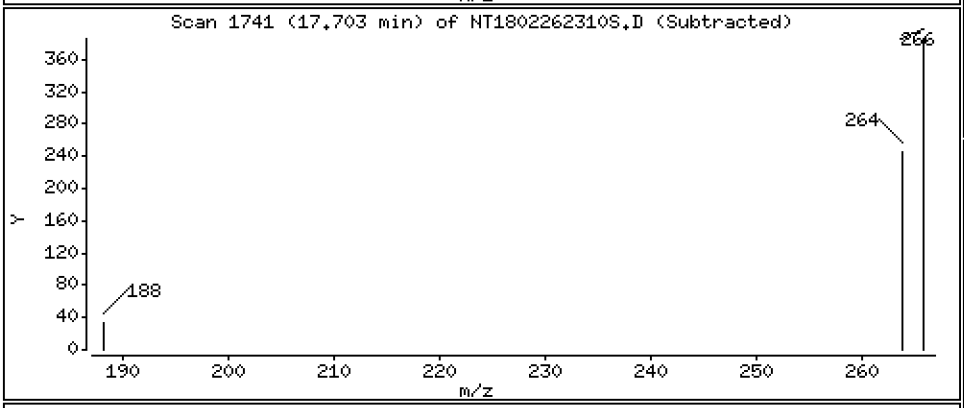
Column diameter: 0.25

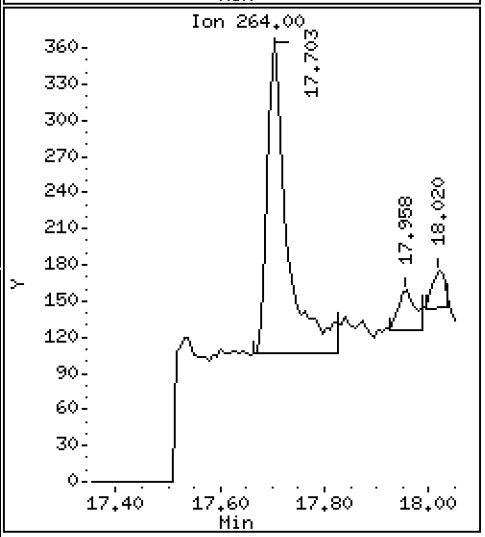
58 Pentachlorophenol

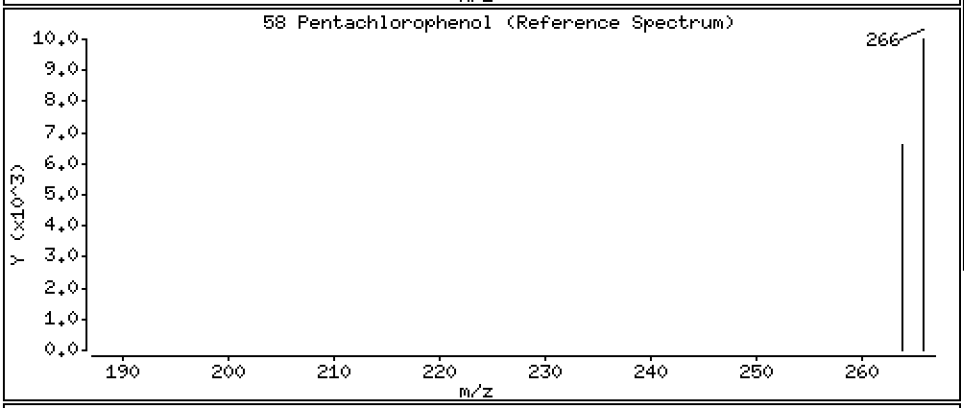
Concentration: 0.04916 ug/mL

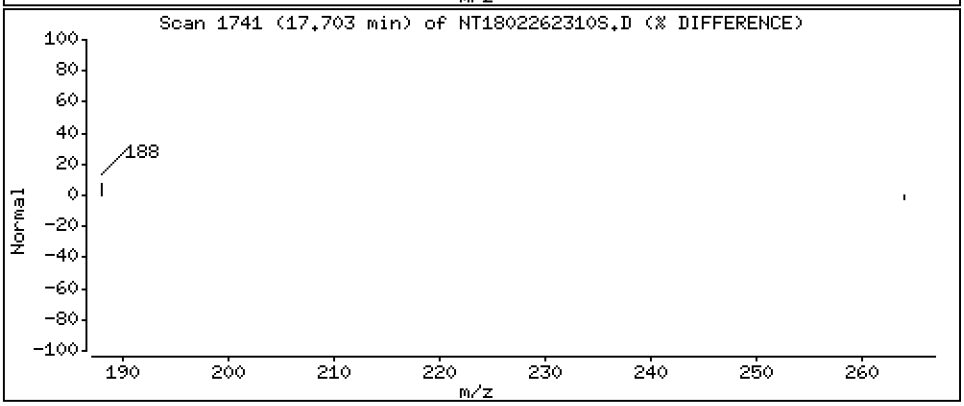












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262310S.D

Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

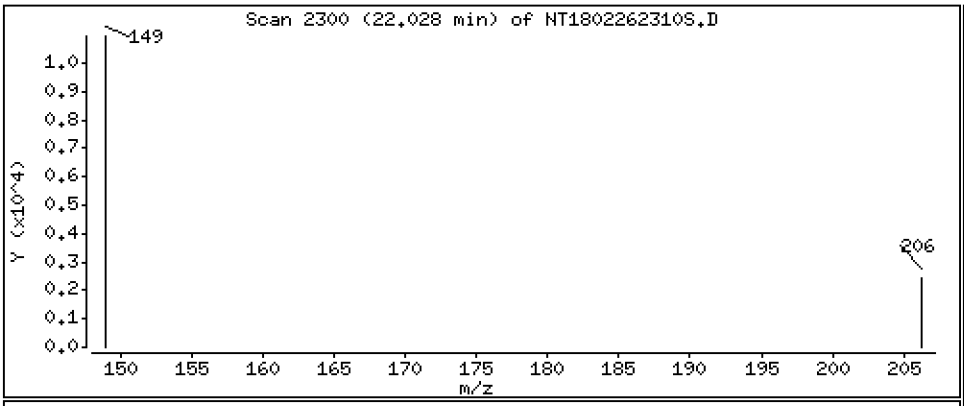
Operator: YZ

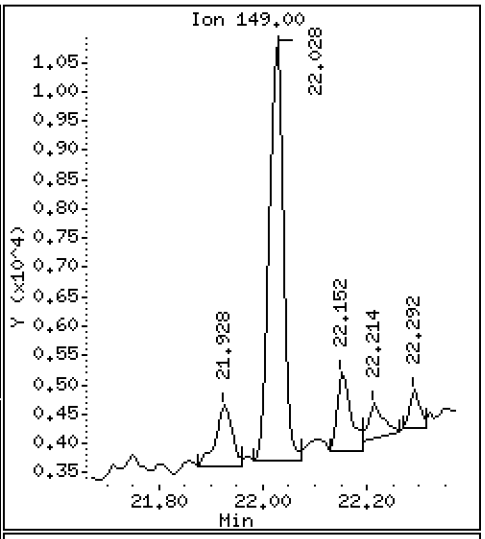
Column phase: ZB-5msi

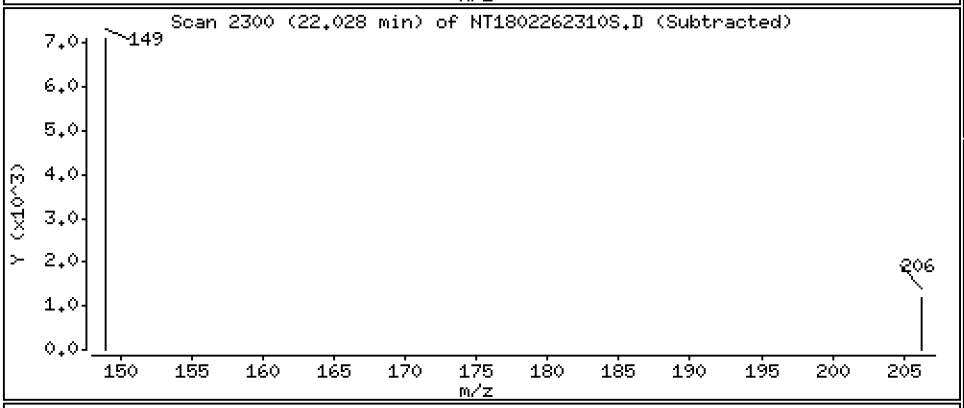
Column diameter: 0.25

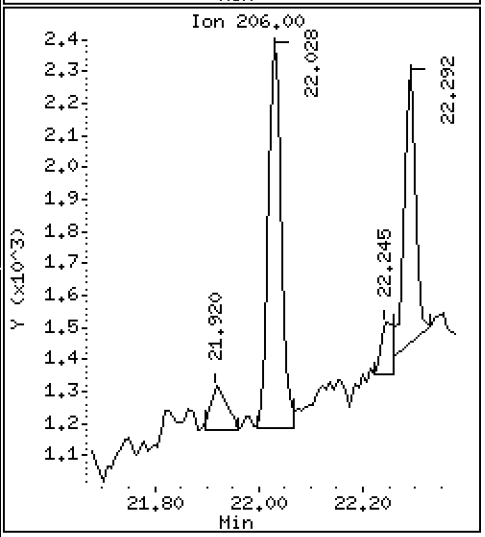
67 Butylbenzylphthalate

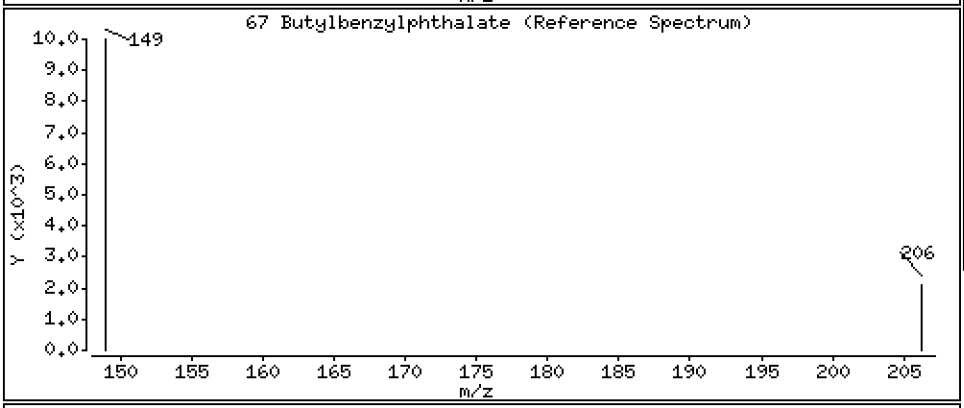
Concentration: 0.07371 ug/mL

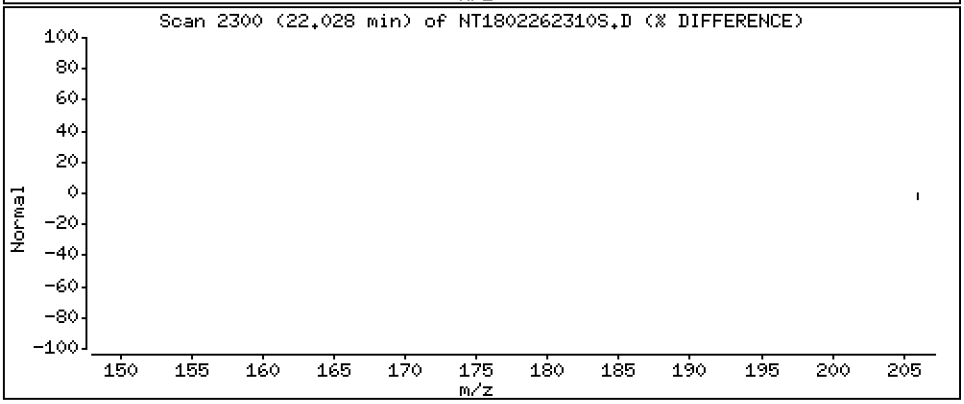












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262310S.D

Date : 26-FEB-2023 17:52

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-01

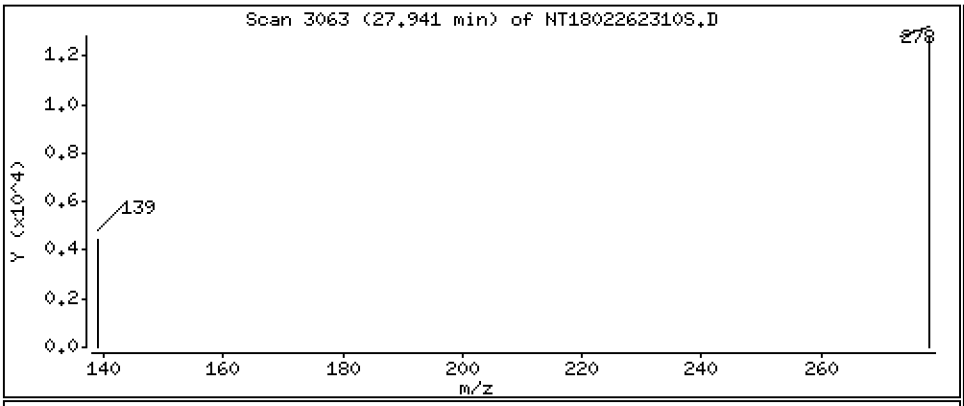
Operator: YZ

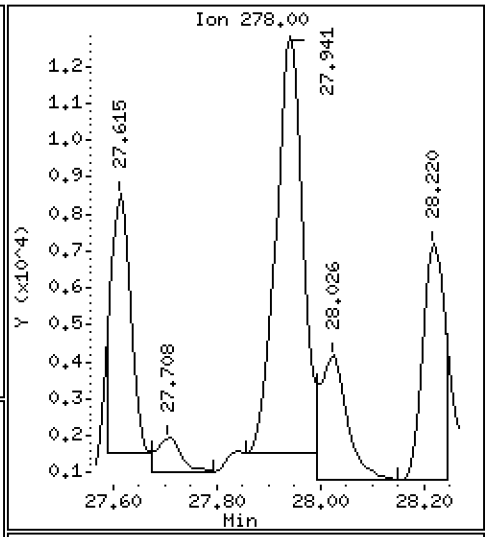
Column phase: ZB-5msi

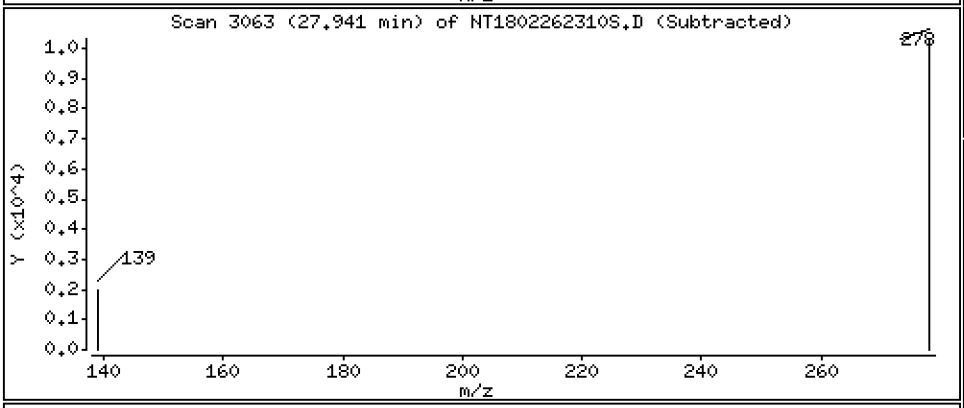
Column diameter: 0.25

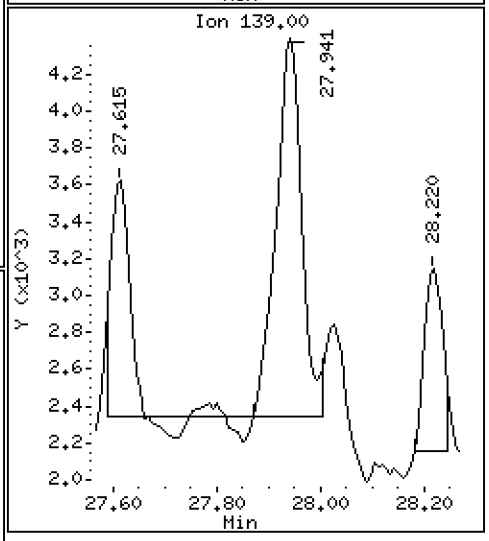
79 Dibenzo(a,h)anthracene

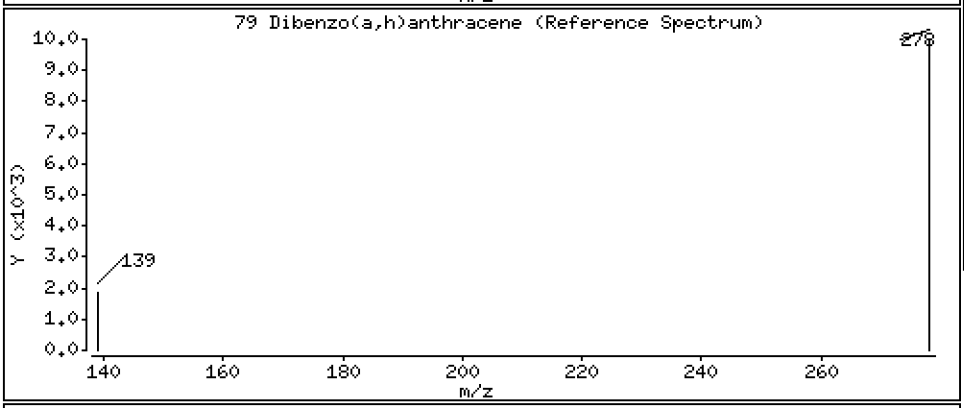
Concentration: 0.1147 ug/mL

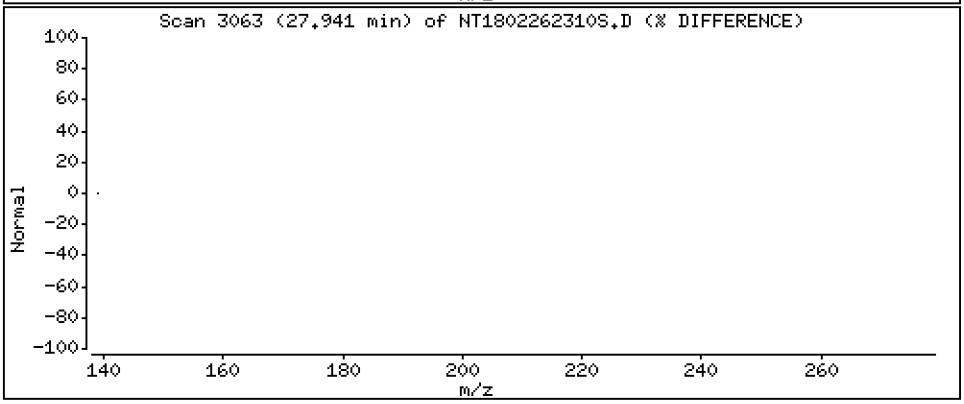












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262310S.D
Lab Smp Id: 23A0134-01
Inj Date : 26-FEB-2023 17:52
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-01
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	6.771	6.748	(0.759)	520607	5.88900	5.889(R)
	3 Phenol	94	8.332	8.324	(0.934)	1036887	8.99092	8.991
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	273905	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	9.214	9.191	(1.033)	4960	0.06708	0.06708
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	9.424	9.416	(1.057)	2800	0.02952	0.02952
	15 4-Methylphenol	108	9.696	9.680	(1.087)	11737	0.12334	0.1233
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.723	10.715	(0.944)	2608	0.02870	0.02870
	24 Benzoic acid	105	10.995	11.088	(0.968)	29469	0.80313	0.8031
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.362	11.370	(1.000)	1018352	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.465	14.465	(0.968)	6856	0.03395	0.03395
*	42 Acenaphthene-d10	162	14.945	14.945	(1.000)	525682	4.00000	
	50 Diethylphthalate	149	15.903	15.911	(1.064)	76173	0.41275	0.4127
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	17.702	17.702	(0.986)	1049	0.04916	0.04916
*	59 Phenanthrene-d10	188	17.950	17.950	(1.000)	1049091	4.00000	
$	66 Terphenyl-d14	244	21.099	21.091	(0.918)	735166	3.78979	3.790(R)
	67 Butylbenzylphthalate	149	22.028	22.020	(0.958)	13078	0.07371	0.07371
*	69 Chrysene-d12	240	22.988	22.980	(1.000)	1071324	4.00000	
*	77 Perylene-d12	264	25.481	25.473	(1.000)	1210320	4.00000	
	79 Dibenzo(a,h)anthracene	278	27.940	27.917	(1.097)	41254	0.11471	0.1147
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262310S.D
Lab Smp Id: 23A0134-01
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	273905	-1.99
27 Naphthalene-d8	1065527	532764	2131054	1018352	-4.43
42 Acenaphthene-d10	544290	272145	1088580	525682	-3.42
59 Phenanthrene-d10	1003412	501706	2006824	1049091	4.55
69 Chrysene-d12	936975	468488	1873950	1071324	14.34
77 Perylene-d12	1057771	528886	2115542	1210320	14.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.36	-0.07
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	-0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.00
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
77 Perylene-d12	25.47	24.97	25.97	25.48	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262310S.D

Lab ID: 23A0134-01
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 17:52

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.968	0.975	-0.0075	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1188

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-02 C	SDG:	23A0134
Sampled:	01/06/23 09:36	Prepared:	01/19/23 13:35	File ID:	NT1802262311S.D
% Solids:	46.55	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 18:32
Batch:	BLA0410	Sequence:	SLC0389	Initial/Final:	21.59 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	5.0	U	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	24.7		2.5	19.9
65-85-0	Benzoic acid	1	71.7	J	13.3	99.5
105-67-9	2,4-Dimethylphenol	1	2.2	J	2.2	19.9
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	4.4	J	2.1	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	746.26	583	78.1	27 - 120	
p-Terphenyl-d14	497.51	405	81.3	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623115.D

Date : 26-FEB-2023 18:32

Client ID:

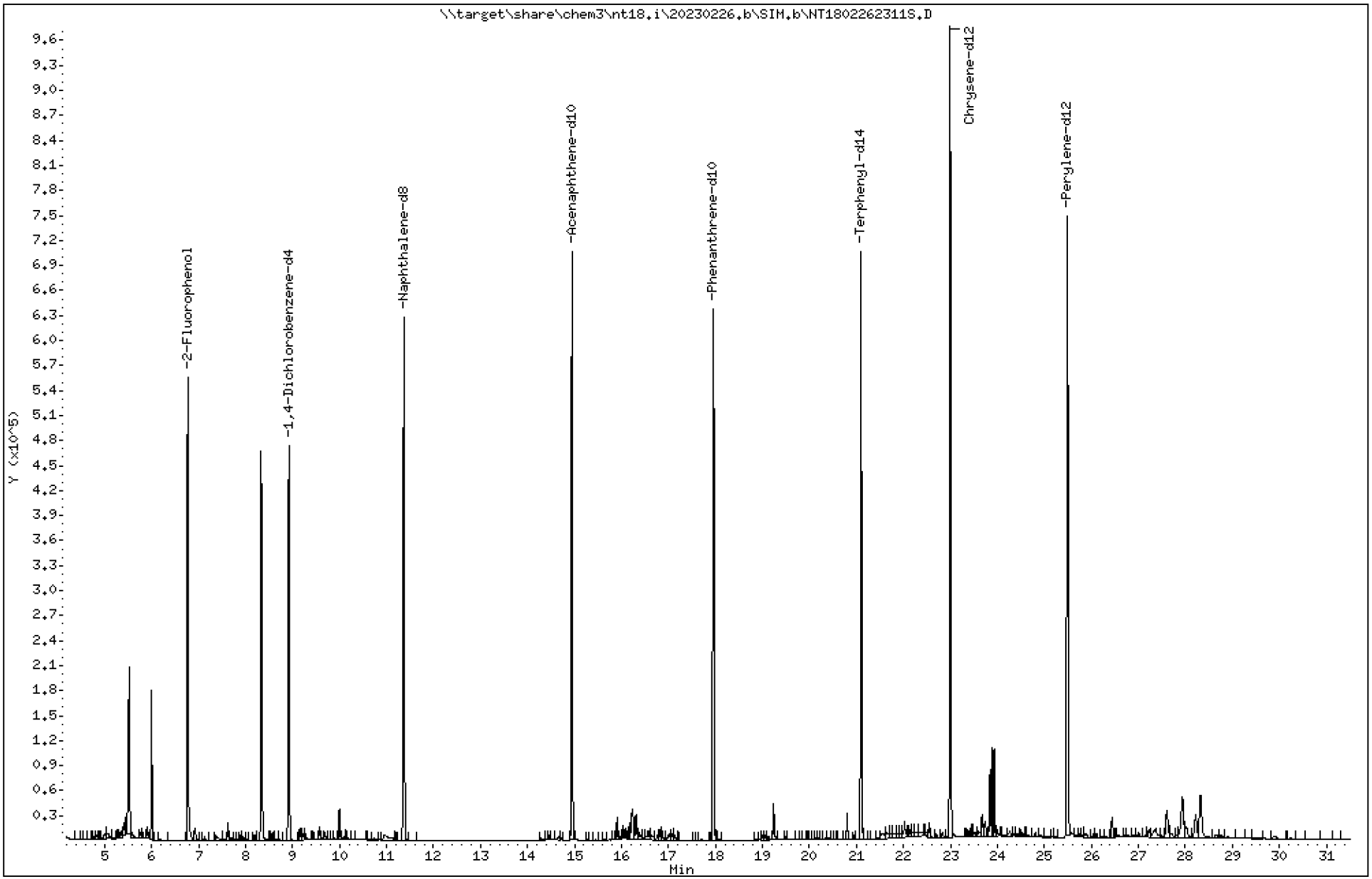
Instrument: nt18.i

Sample Info: 23A0134-02

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

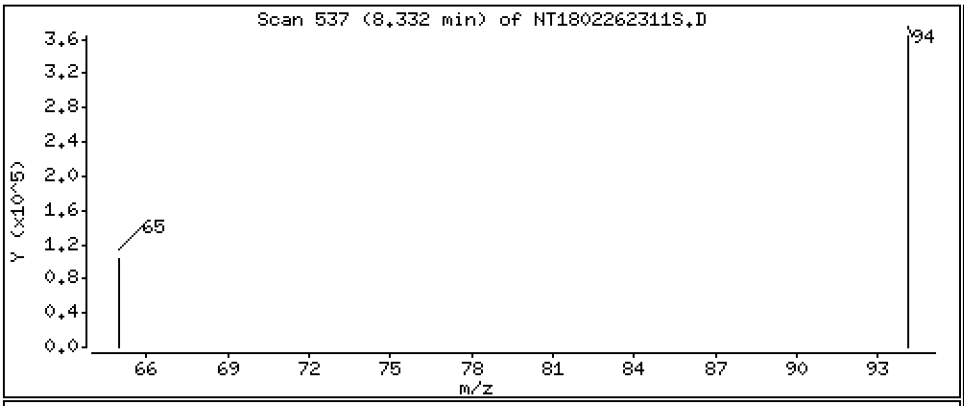
Operator: YZ

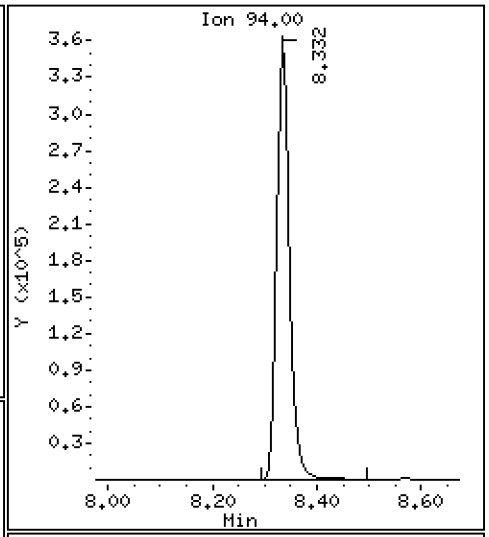
Column phase: ZB-5msi

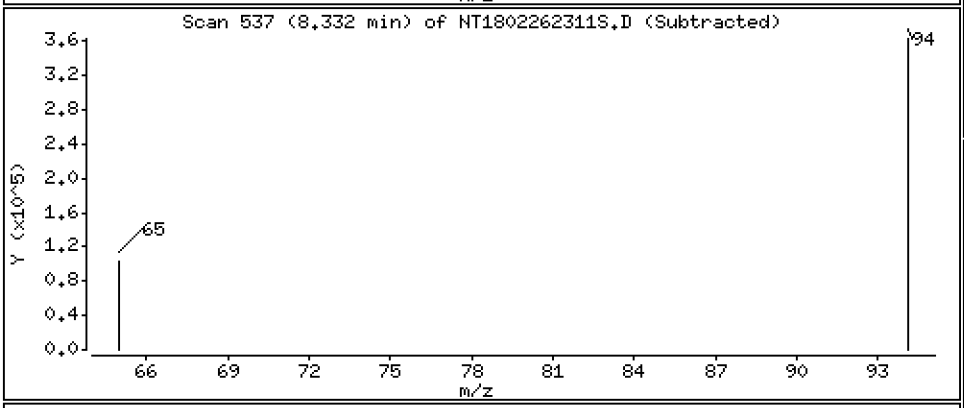
Column diameter: 0.25

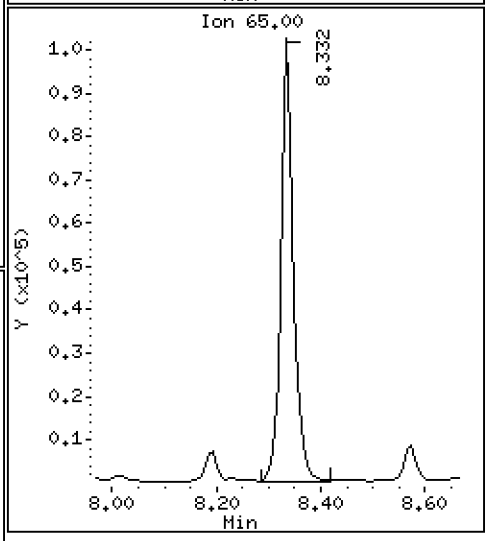
3 Phenol

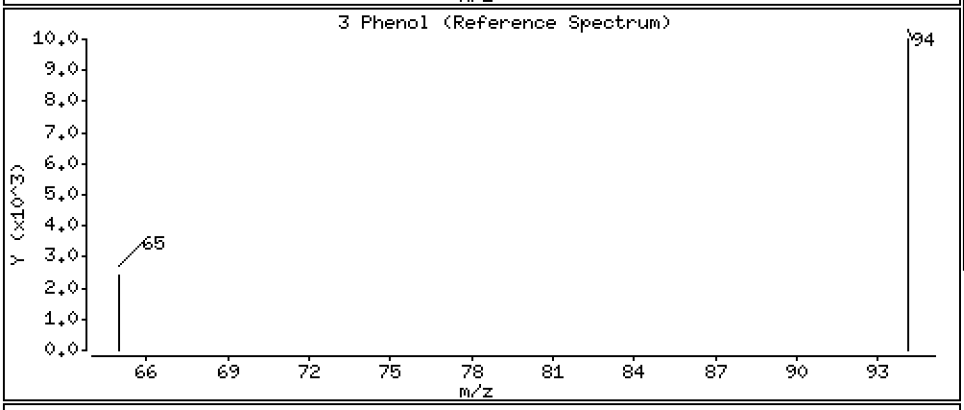
Concentration: 4.899 ug/mL

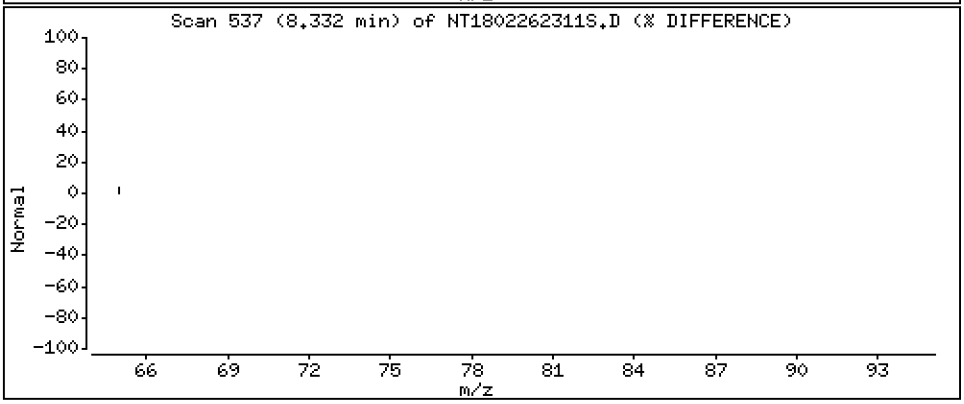












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

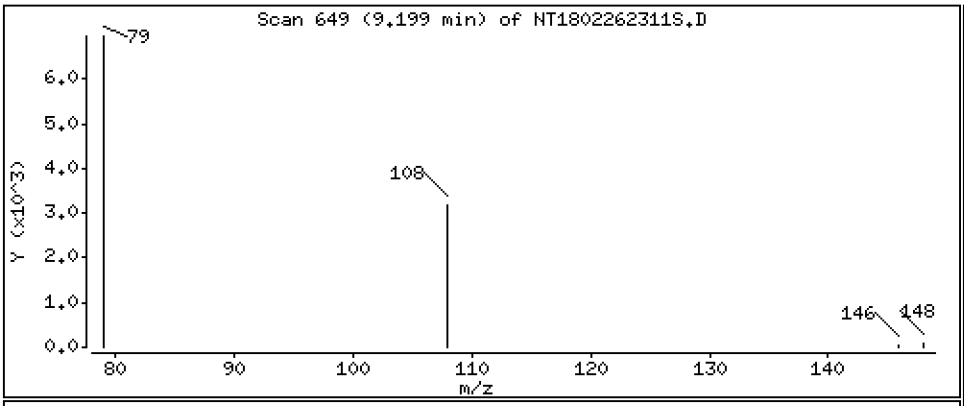
Operator: YZ

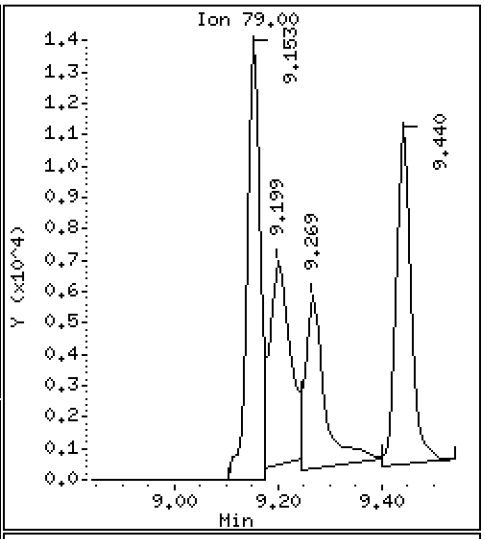
Column phase: ZB-5msi

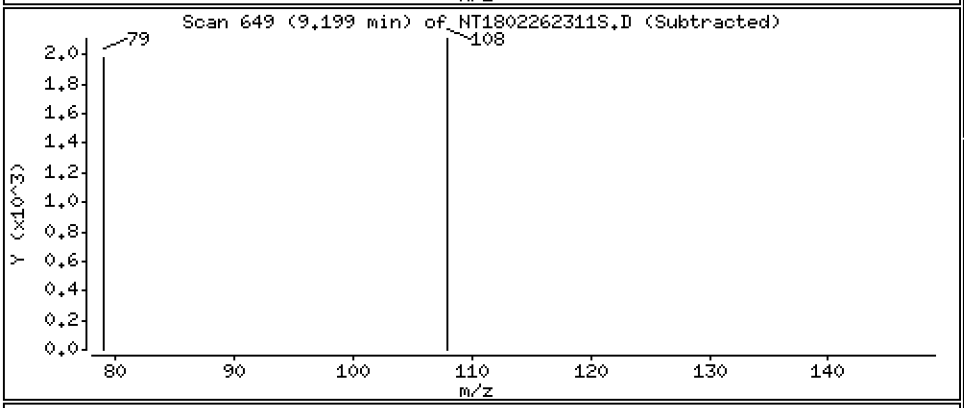
Column diameter: 0.25

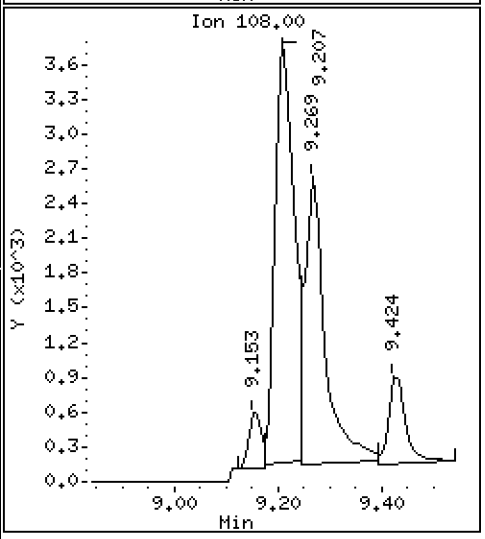
11 Benzyl alcohol

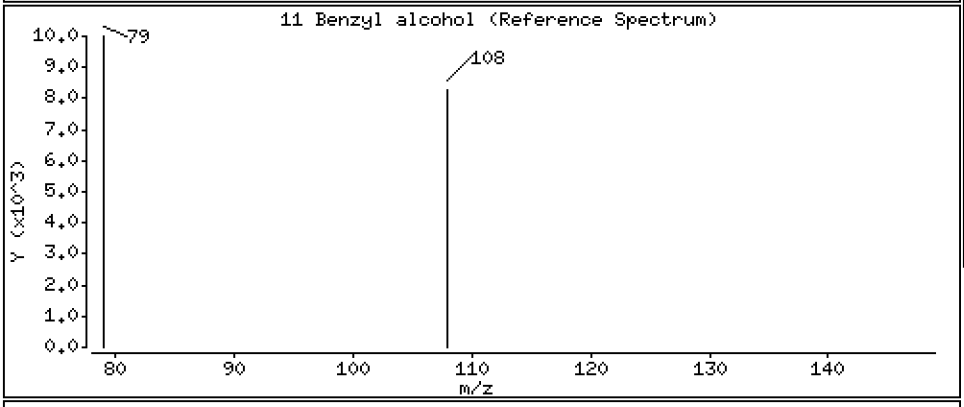
Concentration: 0.2478 ug/mL

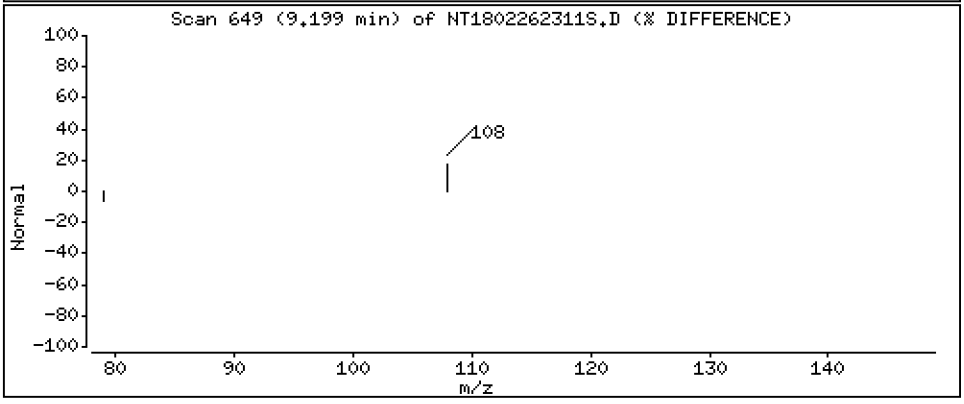












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

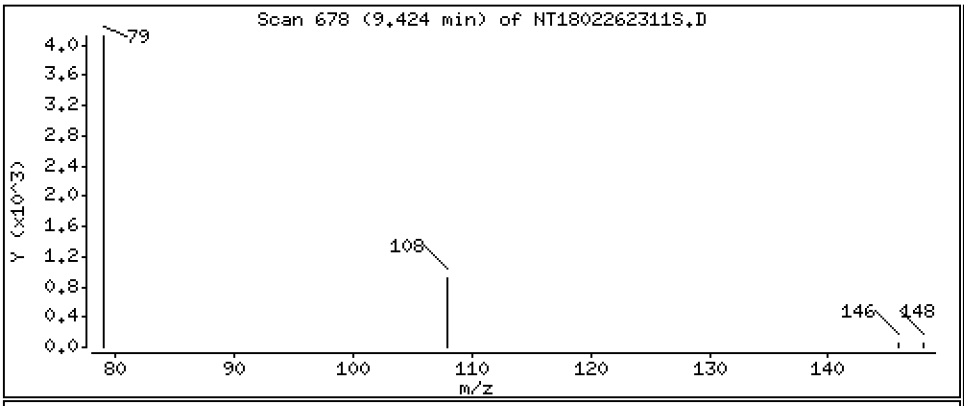
Operator: YZ

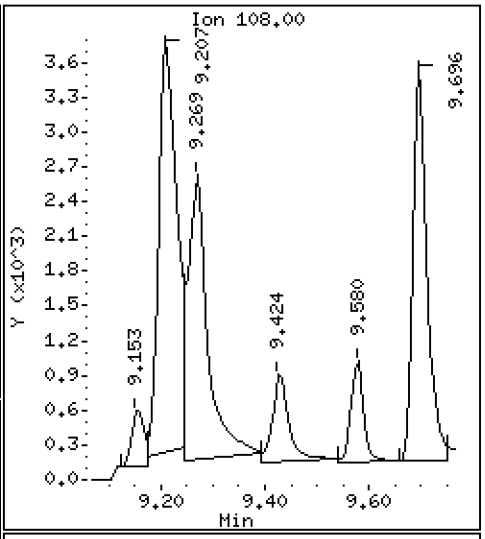
Column phase: ZB-5msi

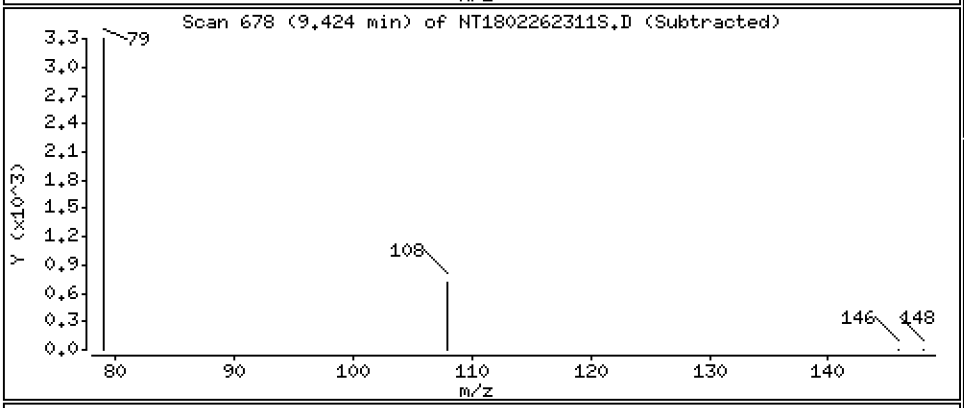
Column diameter: 0.25

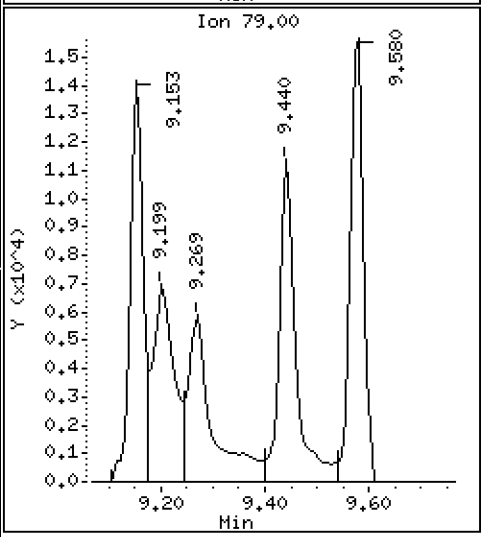
13 2-Methylphenol

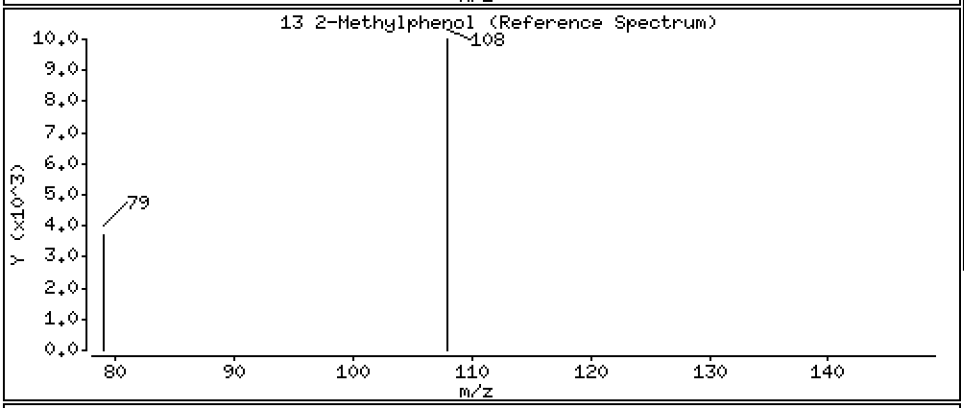
Concentration: 0.01722 ug/mL

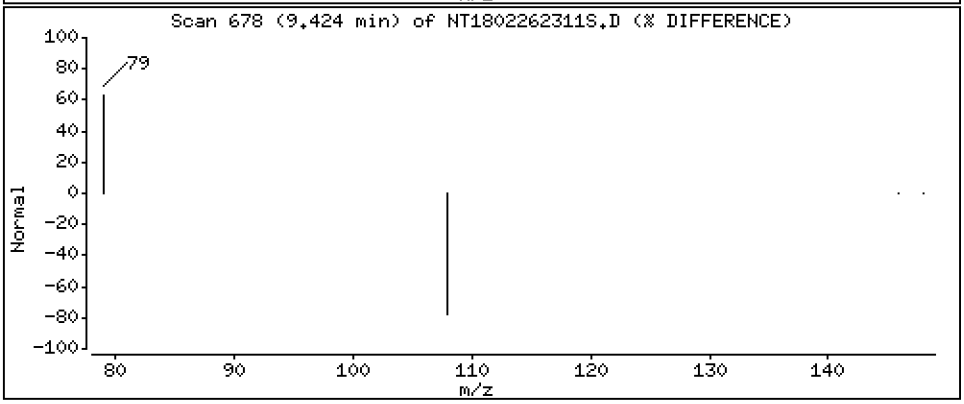












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

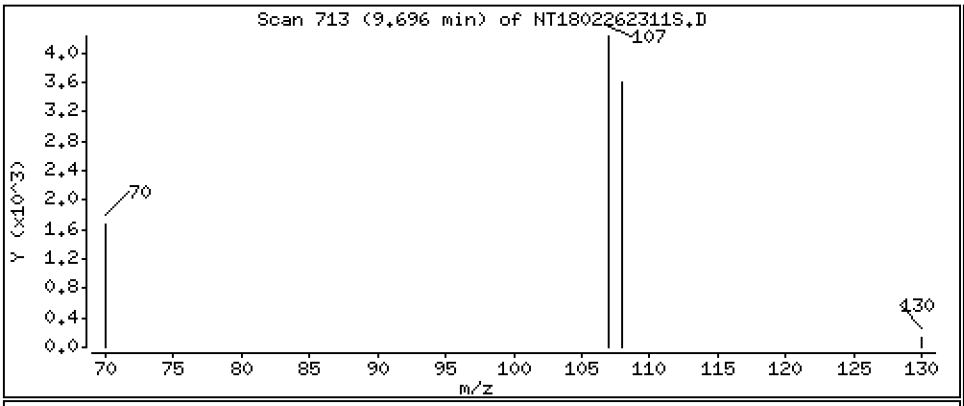
Operator: YZ

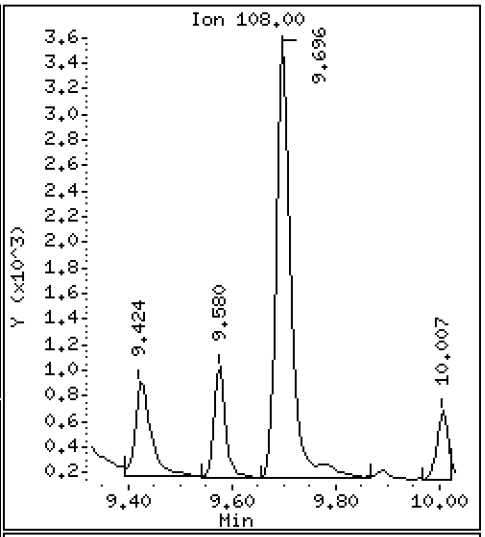
Column phase: ZB-5msi

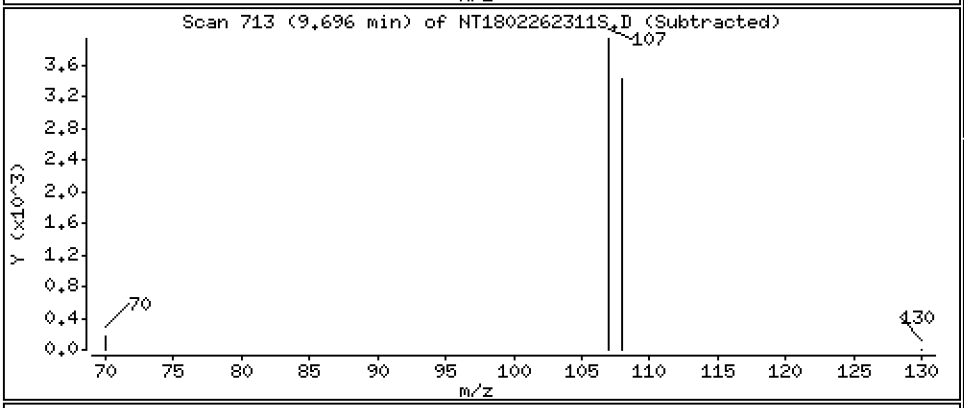
Column diameter: 0.25

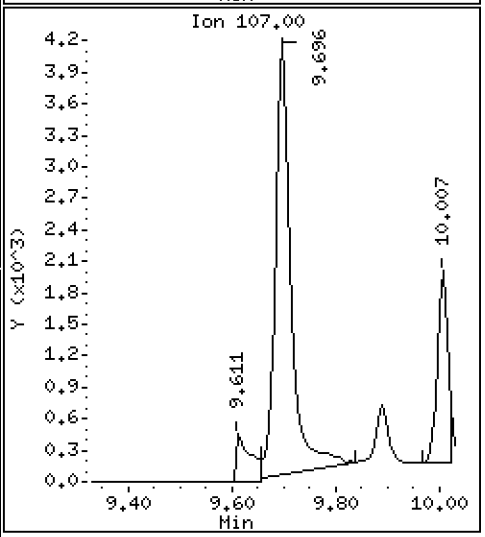
15 4-Methylphenol

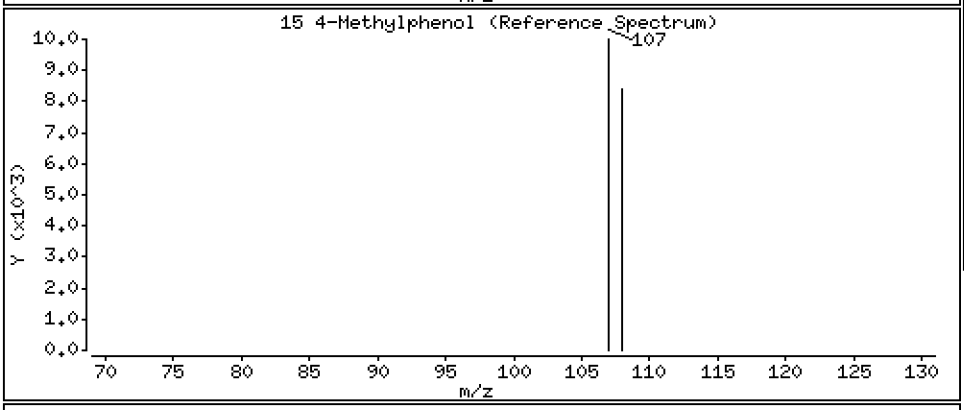
Concentration: 0.07019 ug/mL

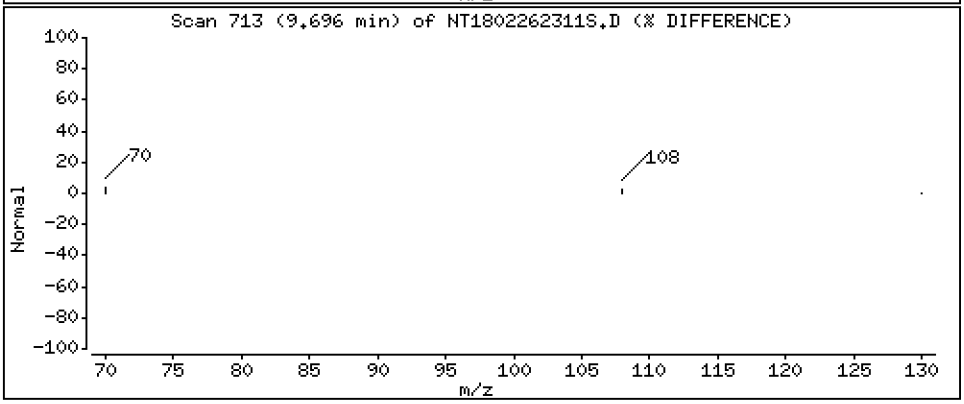












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

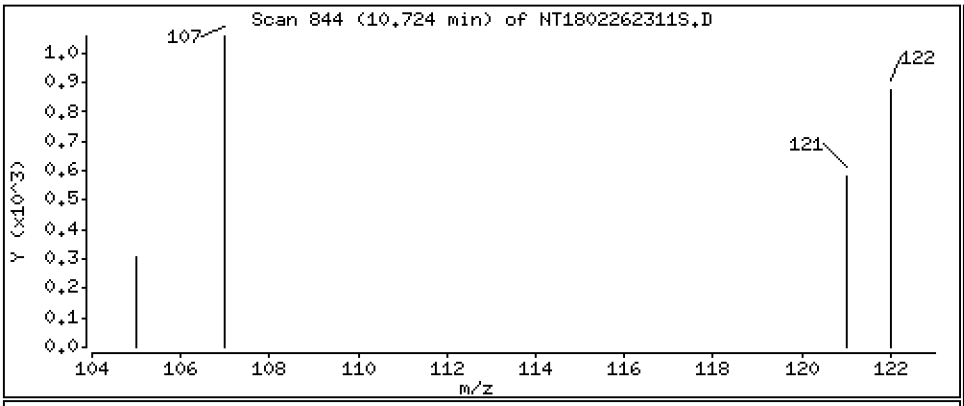
Operator: YZ

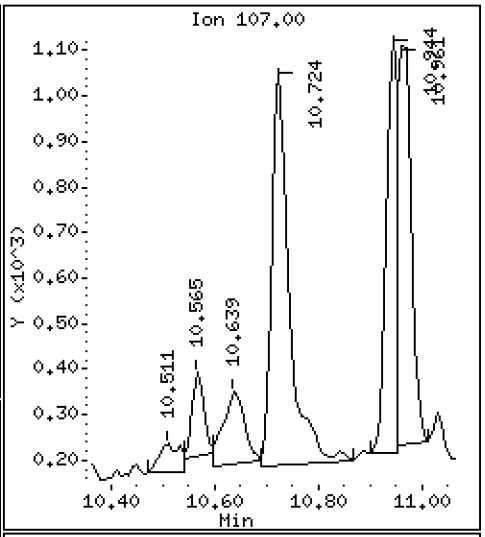
Column phase: ZB-5msi

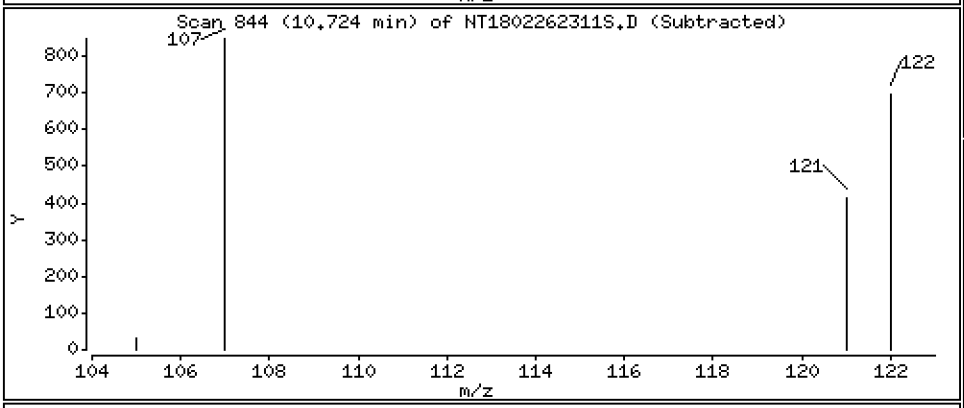
Column diameter: 0.25

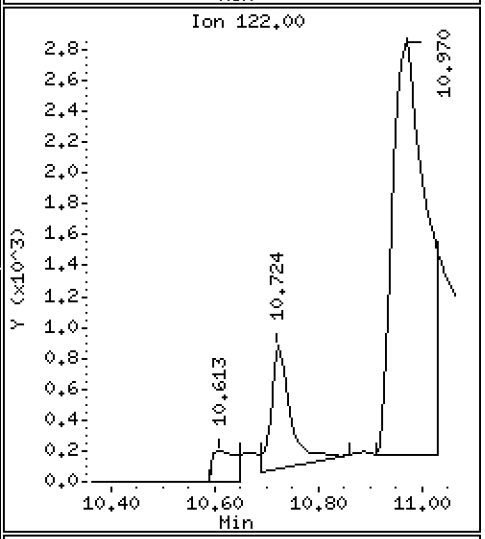
22 2,4-Dimethylphenol

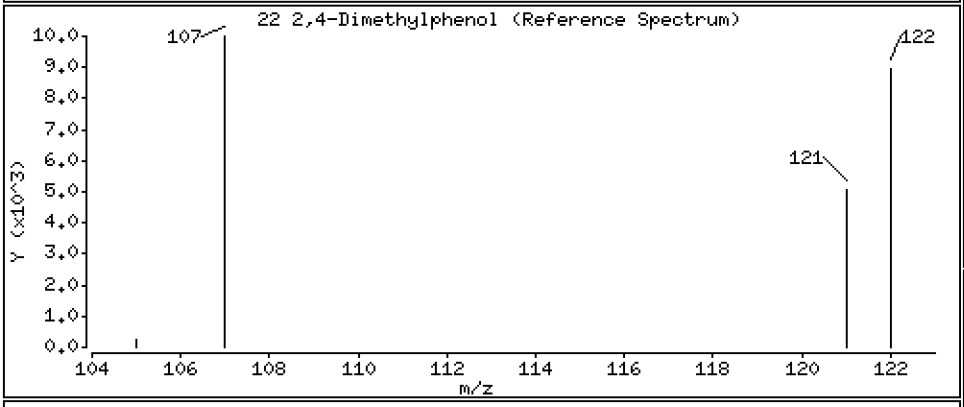
Concentration: 0.02186 ug/mL

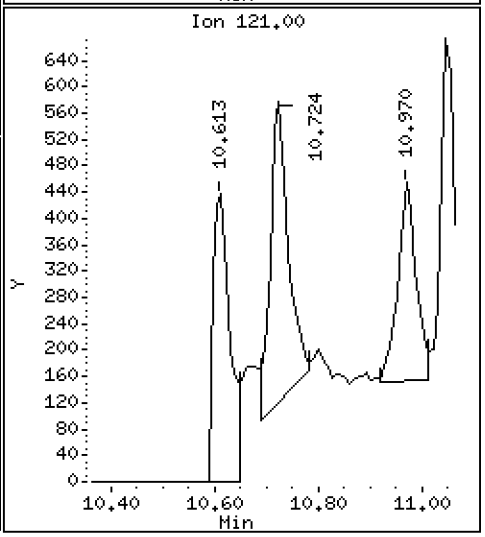


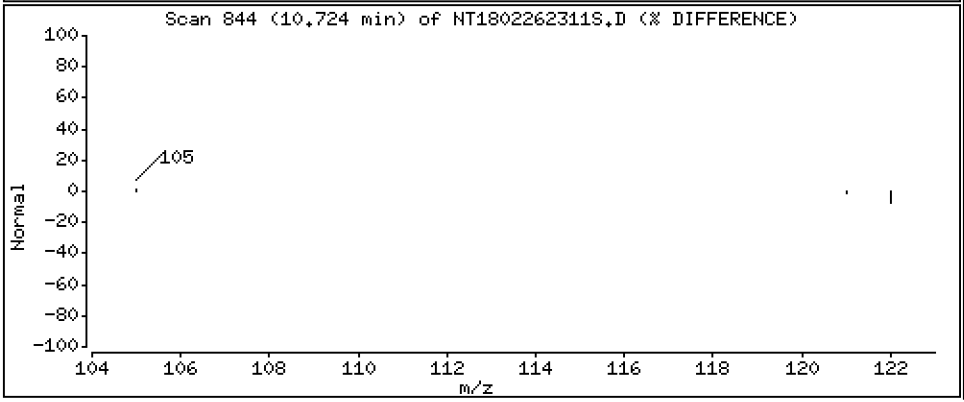












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

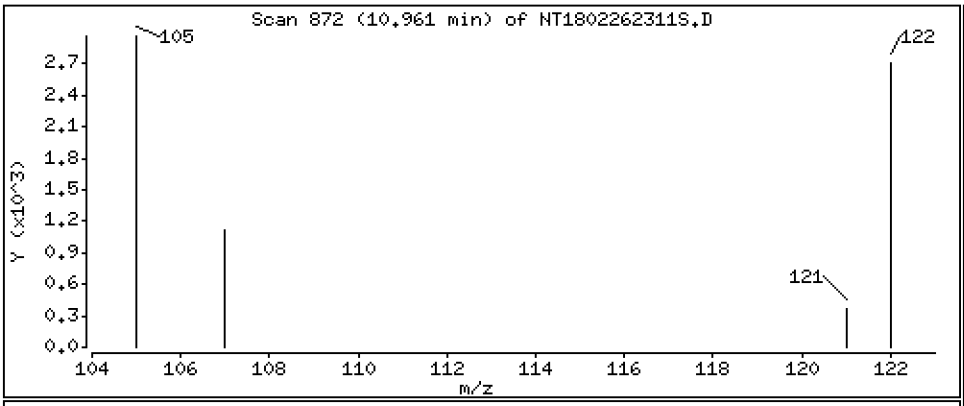
Operator: YZ

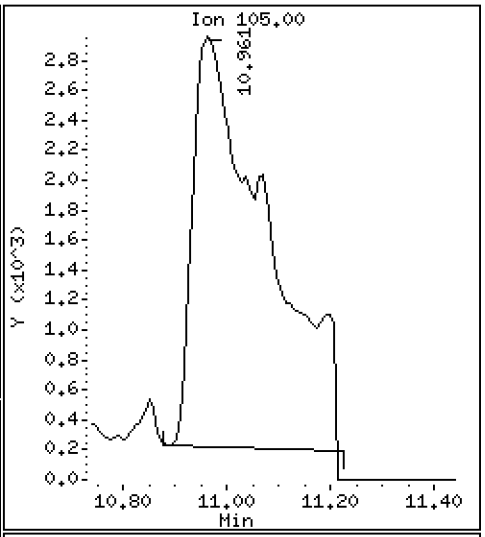
Column phase: ZB-5msi

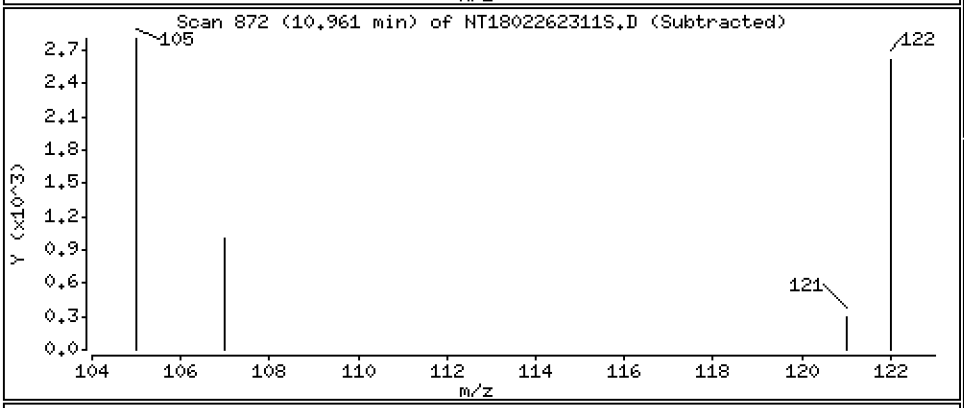
Column diameter: 0.25

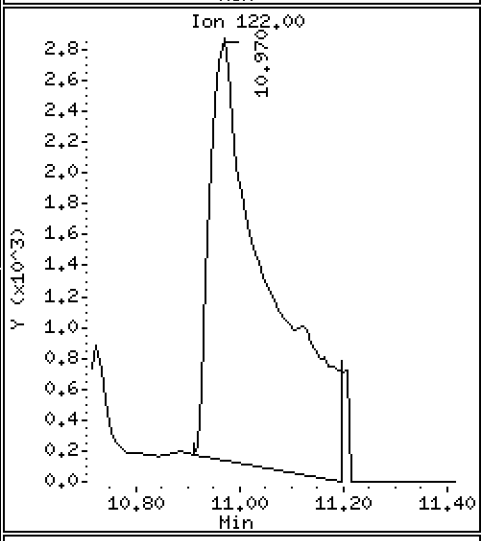
24 Benzoic acid

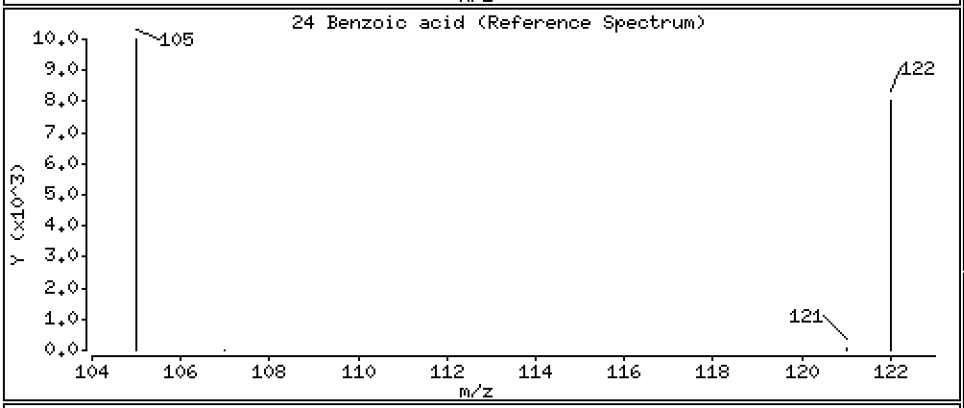
Concentration: 0.7201 ug/mL

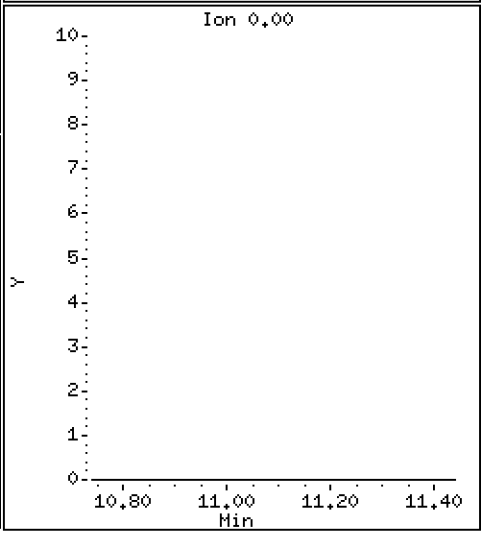


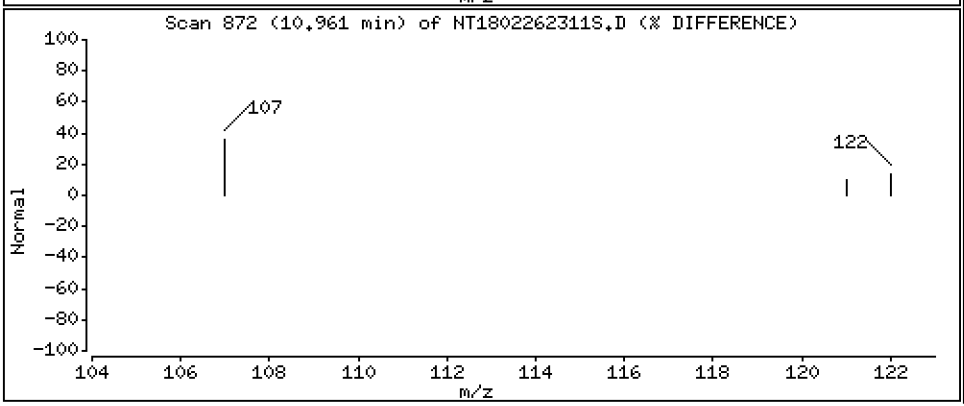












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Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

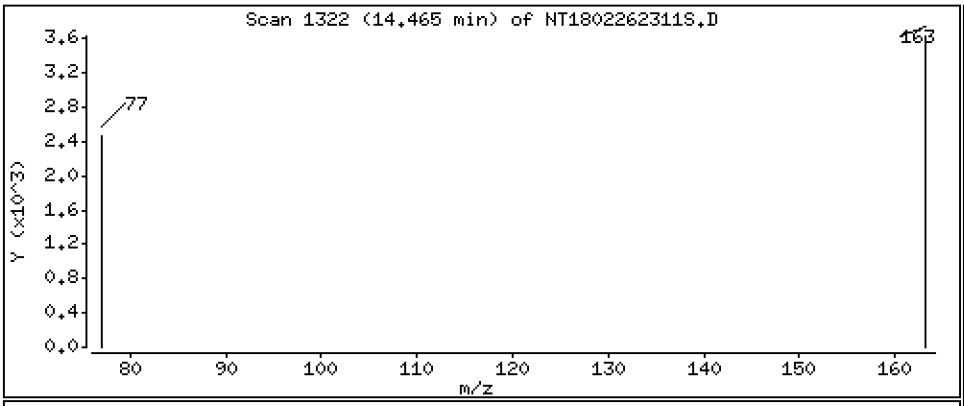
Operator: YZ

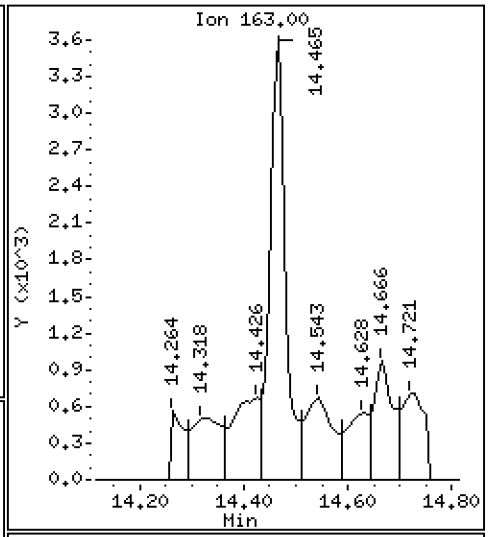
Column phase: ZB-5msi

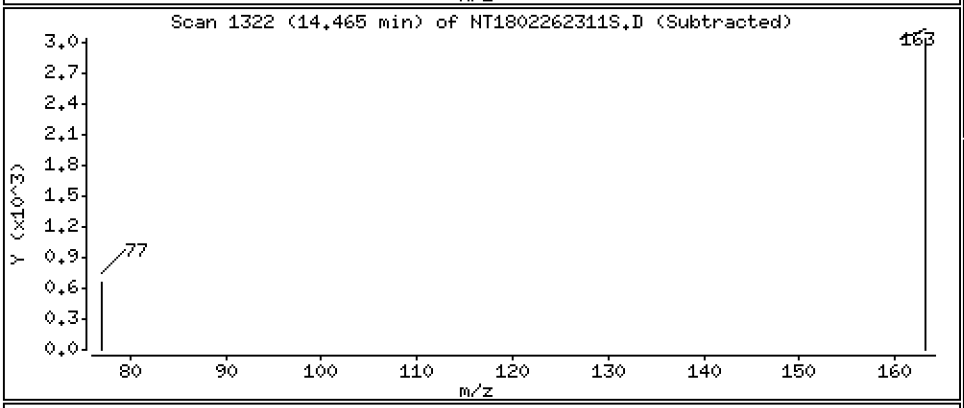
Column diameter: 0.25

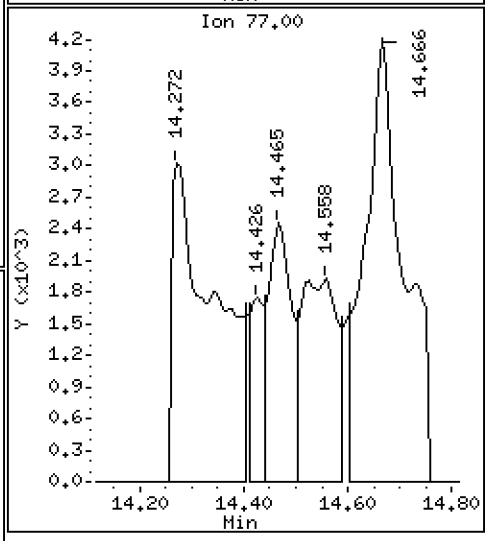
39 Dimethylphthalate

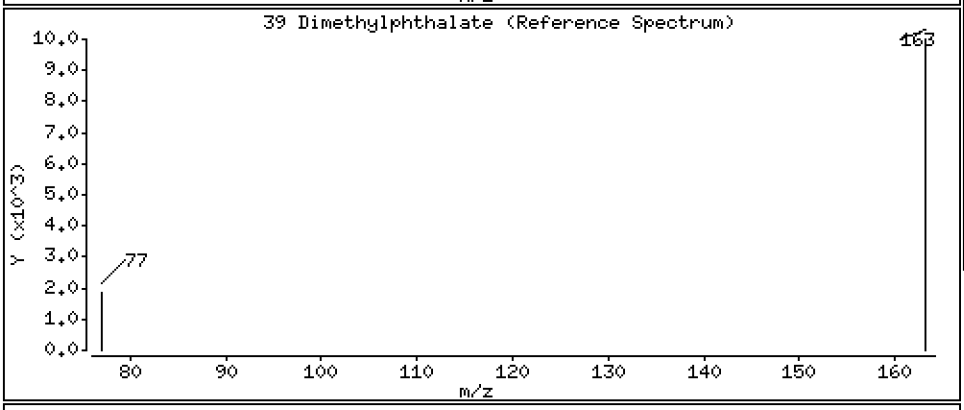
Concentration: 0.03528 ug/mL

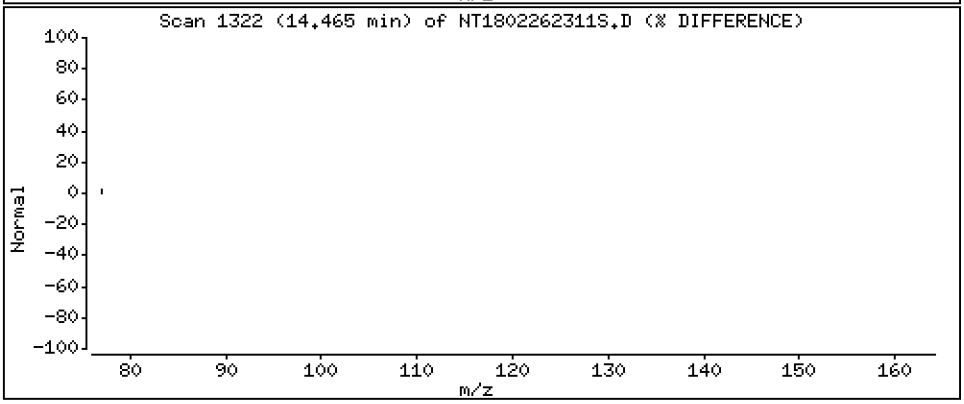












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262311S.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

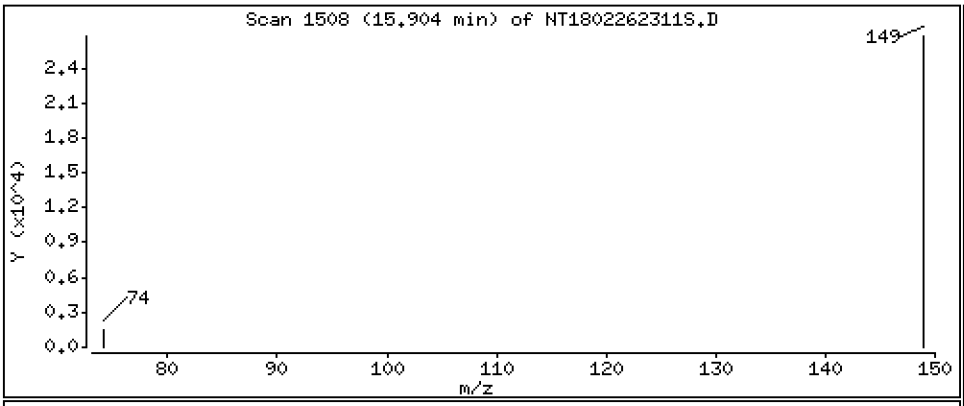
Operator: YZ

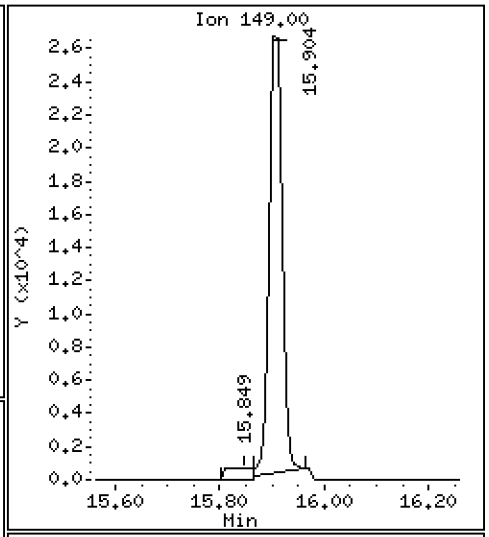
Column phase: ZB-5msi

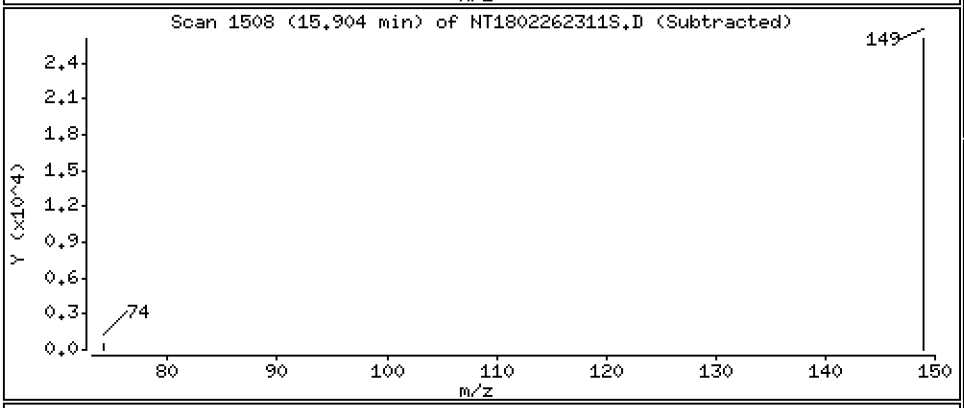
Column diameter: 0.25

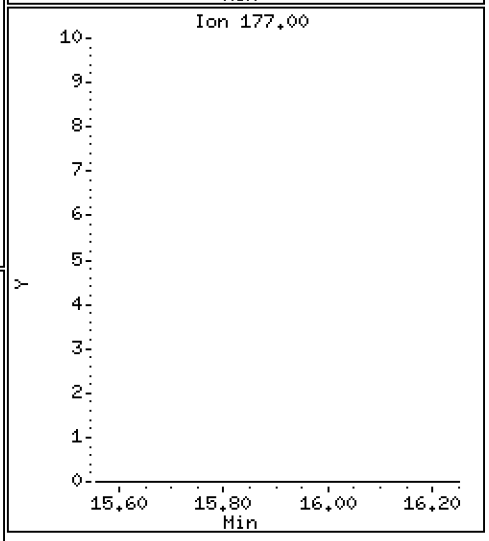
50 Diethylphthalate

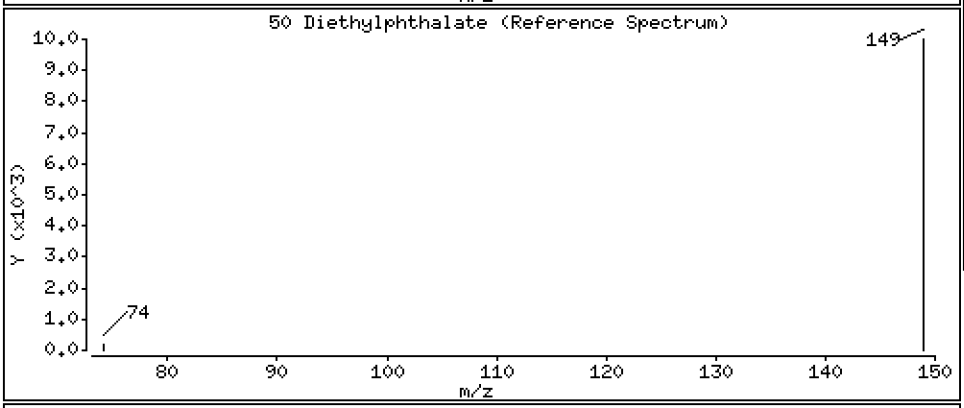
Concentration: 0.2232 ug/mL

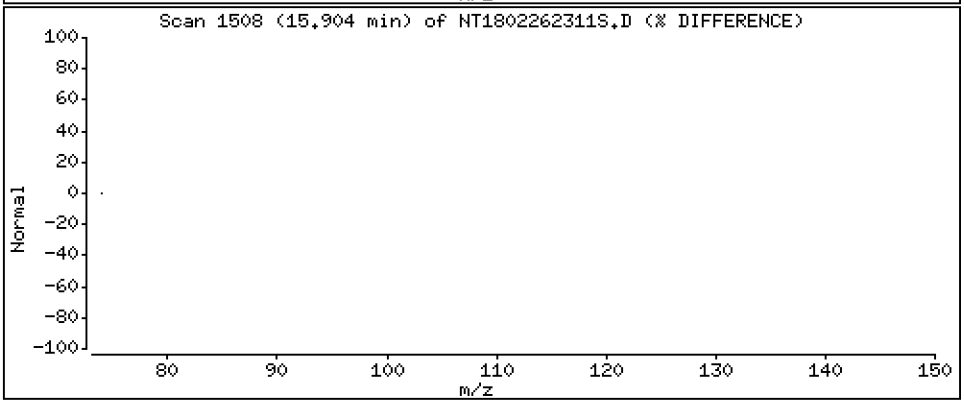












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262311S.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

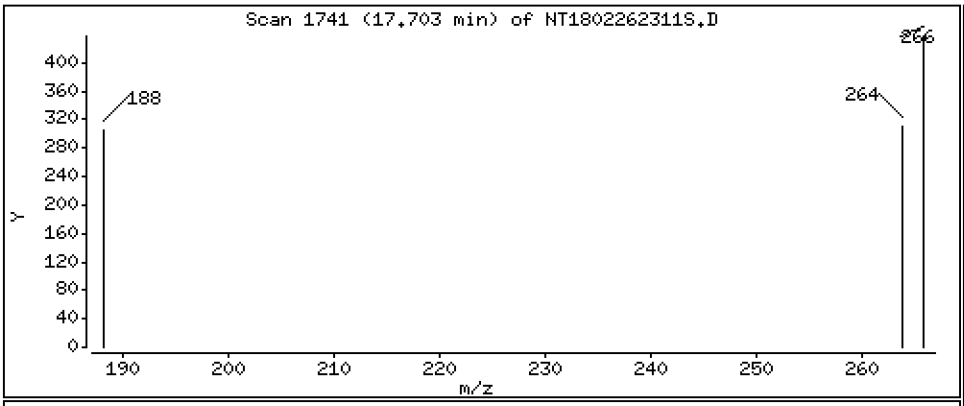
Operator: YZ

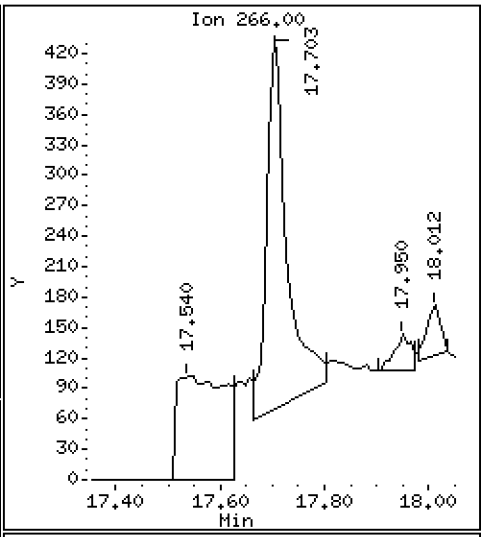
Column phase: ZB-5msi

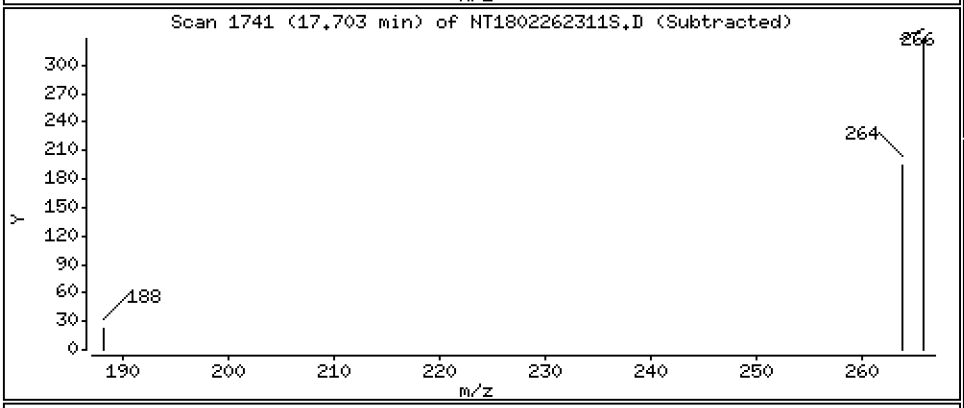
Column diameter: 0.25

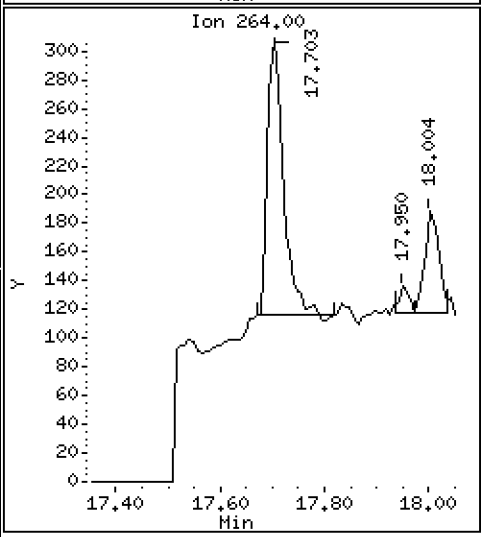
58 Pentachlorophenol

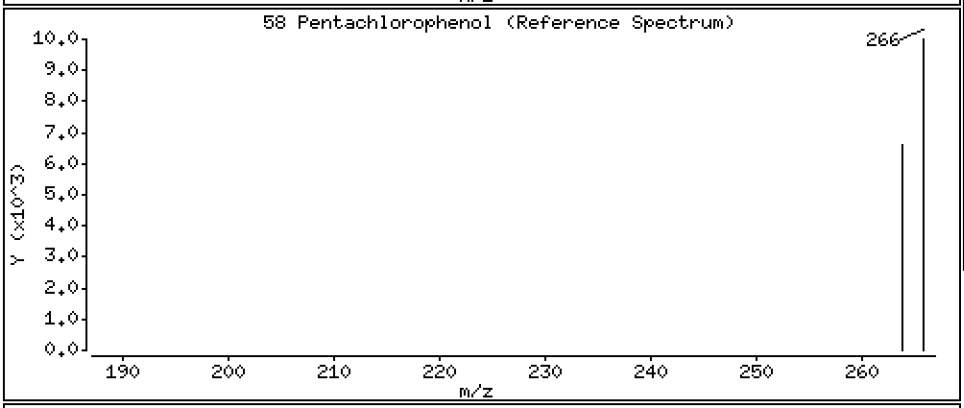
Concentration: 0.04444 ug/mL

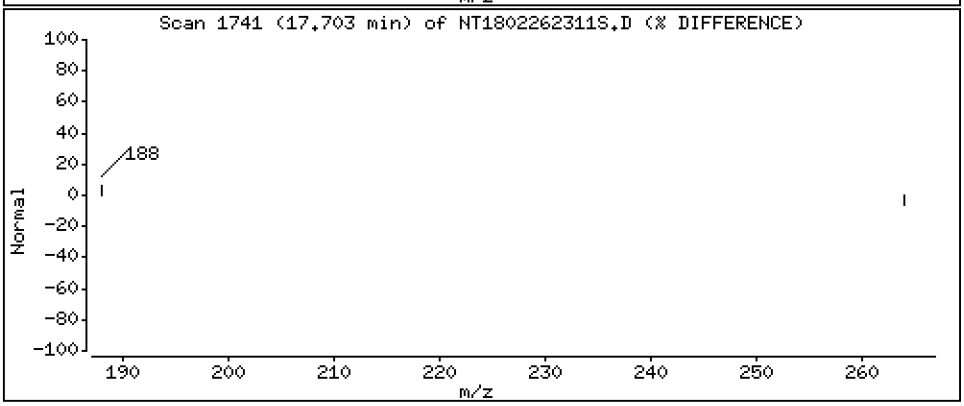












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623115.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

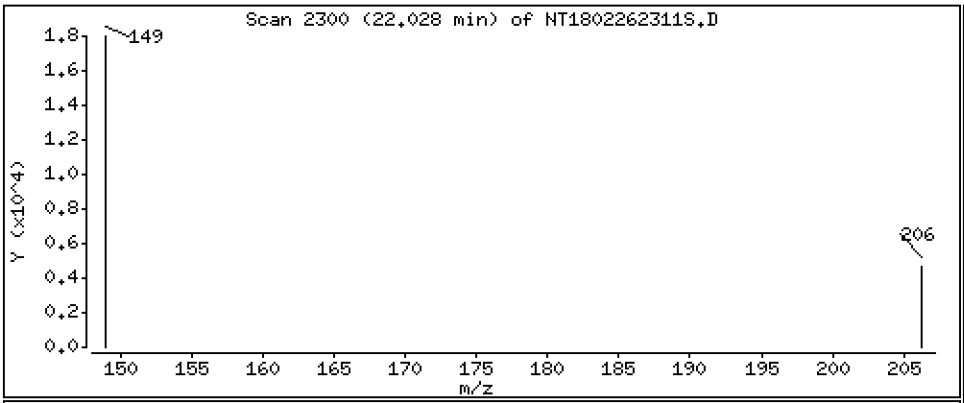
Operator: YZ

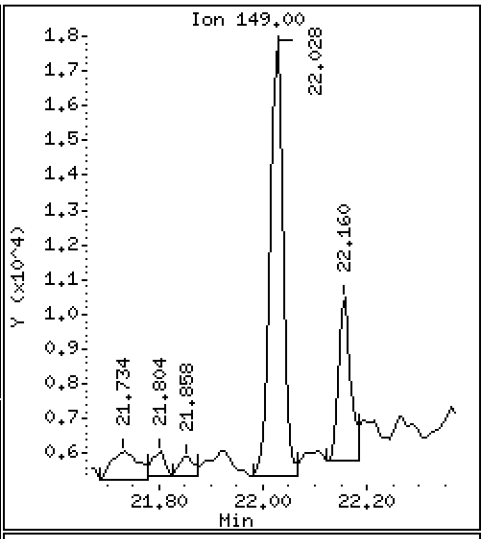
Column phase: ZB-5msi

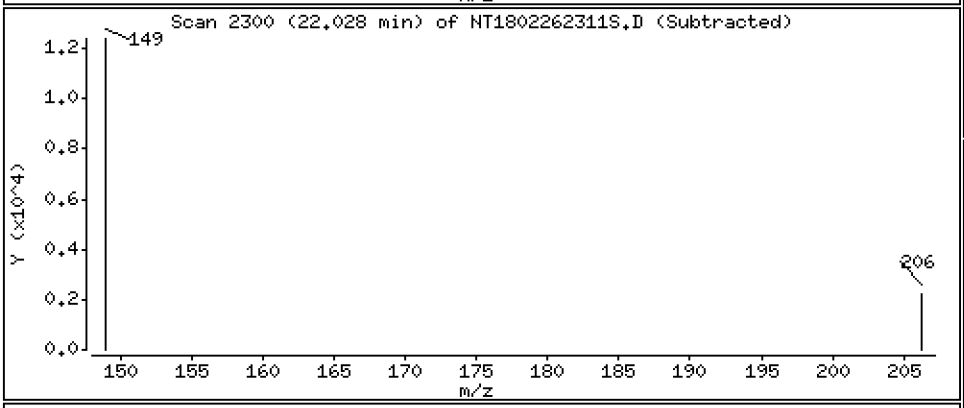
Column diameter: 0.25

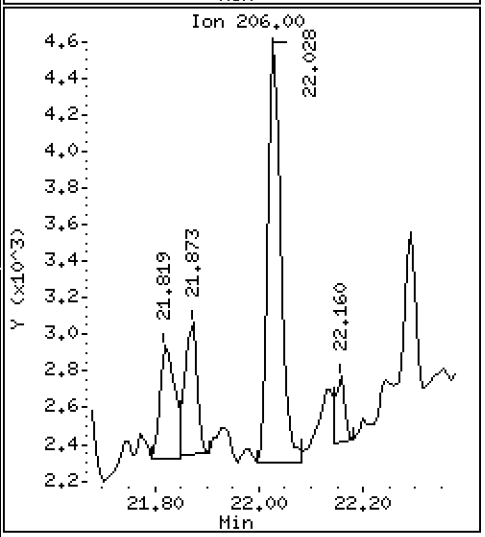
67 Butylbenzylphthalate

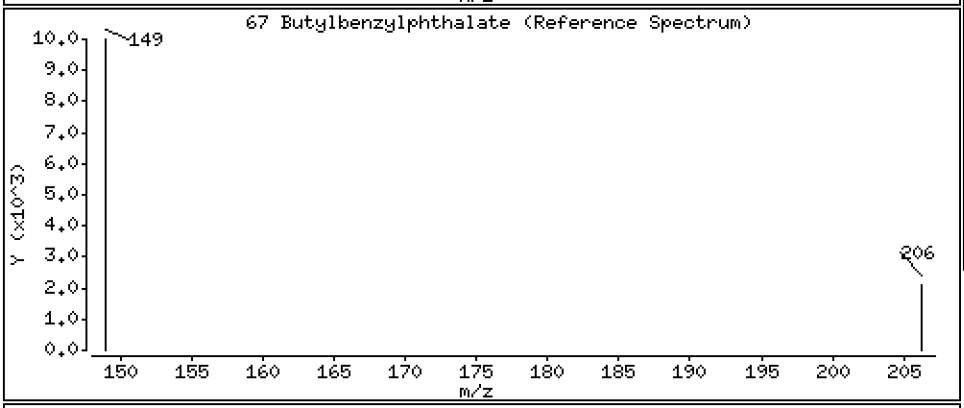
Concentration: 0.1047 ug/mL

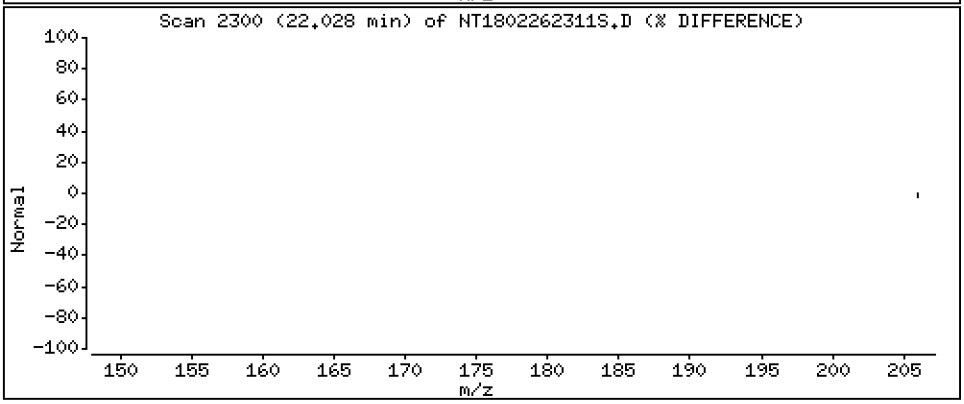












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262311S.D

Date : 26-FEB-2023 18:32

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-02

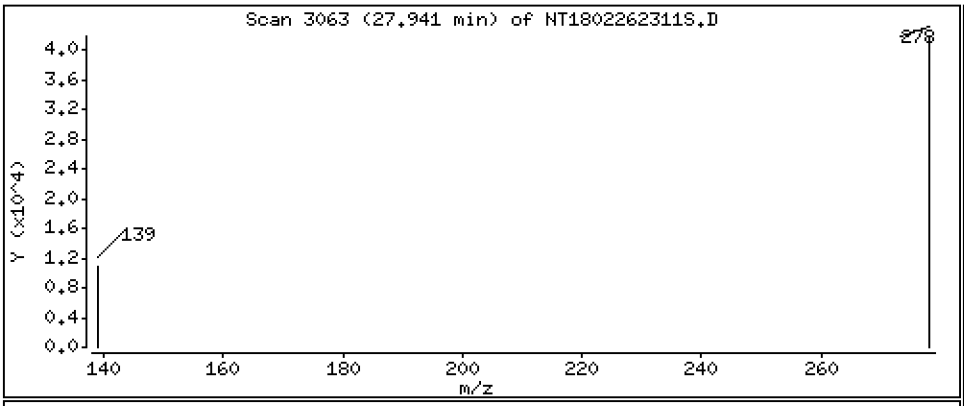
Operator: YZ

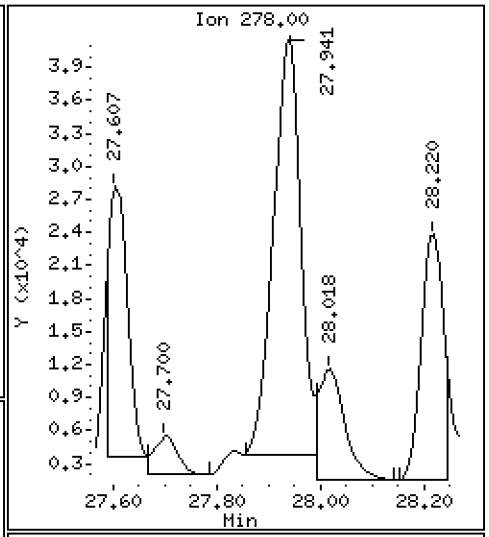
Column phase: ZB-5msi

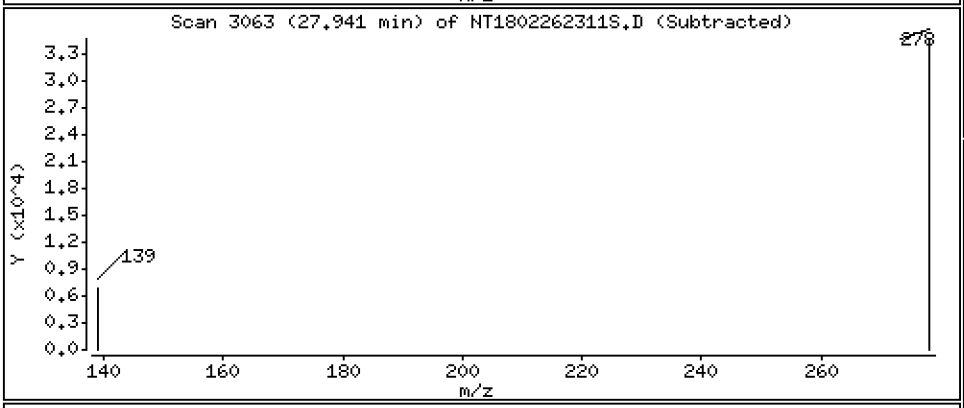
Column diameter: 0.25

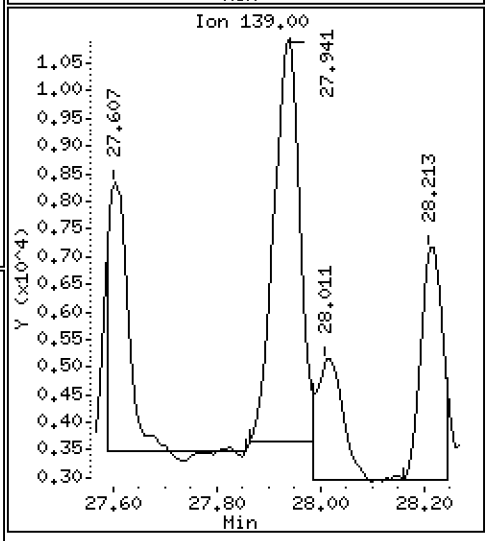
79 Dibenzo(a,h)anthracene

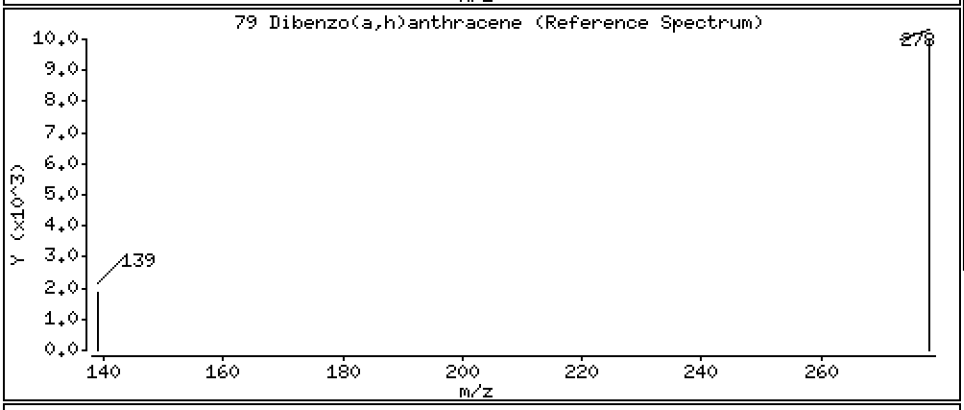
Concentration: 0.3661 ug/mL

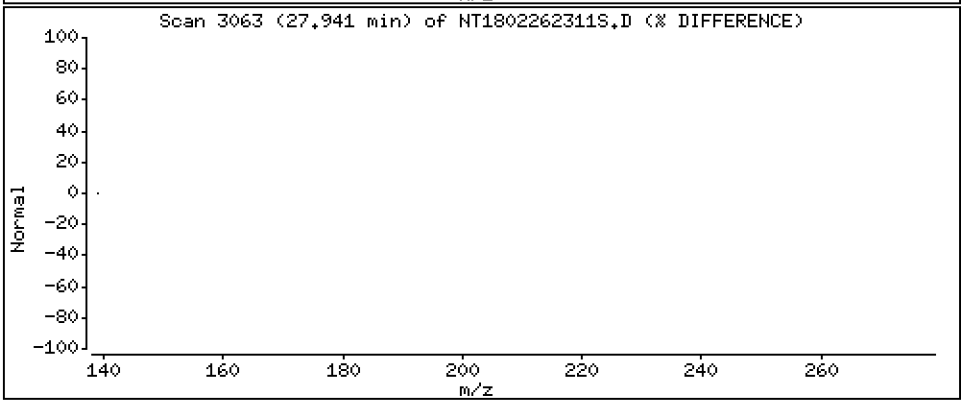












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262311S.D
Lab Smp Id: 23A0134-02
Inj Date : 26-FEB-2023 18:32
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-02
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)	
$	1	2-Fluorophenol	112	6.771	6.748	(0.759)	529929	5.85635	5.856	(R)
	3	Phenol	94	8.332	8.324	(0.934)	578346	4.89934	4.899	
	7	1,3-Dichlorobenzene	146	Compound Not Detected.						
*	8	1,4-Dichlorobenzene-d4	152	8.919	8.920	(1.000)	280364	4.00000		
	9	1,4-Dichlorobenzene	146	Compound Not Detected.						
	11	Benzyl alcohol	79	9.199	9.191	(1.031)	18752	0.24778	0.2478	(H)
	12	1,2-Dichlorobenzene	146	Compound Not Detected.						
	13	2-Methylphenol	108	9.424	9.416	(1.057)	1672	0.01722	0.01722	
	15	4-Methylphenol	108	9.696	9.680	(1.087)	6837	0.07019	0.07019	
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.						
	22	2,4-Dimethylphenol	107	10.723	10.715	(0.944)	2035	0.02186	0.02186	
	24	Benzoic acid	105	10.961	11.088	(0.965)	27065	0.72013	0.7201	(M)
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	27	Naphthalene-d8	136	11.362	11.370	(1.000)	1043302	4.00000		
	30	Hexachlorobutadiene	225	Compound Not Detected.						
	39	Dimethylphthalate	163	14.465	14.465	(0.968)	7383	0.03528	0.03528	
*	42	Acenaphthene-d10	162	14.944	14.945	(1.000)	544667	4.00000		
	50	Diethylphthalate	149	15.903	15.911	(1.064)	42687	0.22324	0.2232	
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57	Hexachlorobenzene	284	Compound Not Detected.						
	58	Pentachlorophenol	266	17.702	17.702	(0.986)	966	0.04444	0.04444	
*	59	Phenanthrene-d10	188	17.957	17.950	(1.000)	1068852	4.00000		
$	66	Terphenyl-d14	244	21.099	21.091	(0.918)	866734	4.06651	4.067	(R)
	67	Butylbenzylphthalate	149	22.028	22.020	(0.958)	20414	0.10475	0.1047	
*	69	Chrysene-d12	240	22.996	22.980	(1.000)	1177104	4.00000		
*	77	Perylene-d12	264	25.489	25.473	(1.000)	1289130	4.00000		
	79	Dibenzo(a,h)anthracene	278	27.940	27.917	(1.096)	140240	0.36612	0.3661	
	90	N-Nitrosodimethylamine	74	Compound Not Detected.						

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262311S.D
Lab Smp Id: 23A0134-02
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	280364	0.32
27 Naphthalene-d8	1065527	532764	2131054	1043302	-2.09
42 Acenaphthene-d10	544290	272145	1088580	544667	0.07
59 Phenanthrene-d10	1003412	501706	2006824	1068852	6.52
69 Chrysene-d12	936975	468488	1873950	1177104	25.63
77 Perylene-d12	1057771	528886	2115542	1289130	21.87

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.36	-0.07
42 Acenaphthene-d10	14.95	14.45	15.45	14.94	-0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.07
77 Perylene-d12	25.47	24.97	25.97	25.49	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262311S.D

Lab ID: 23A0134-02
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 18:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.965	0.975	-0.0105	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

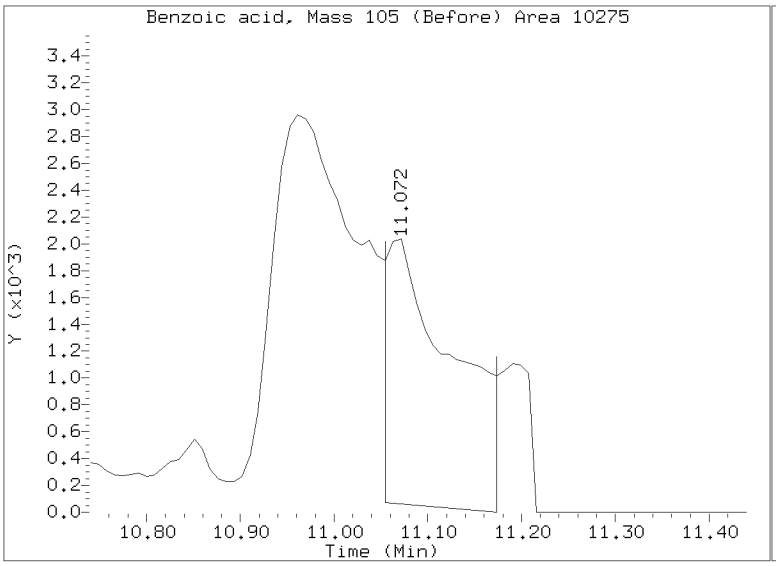
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

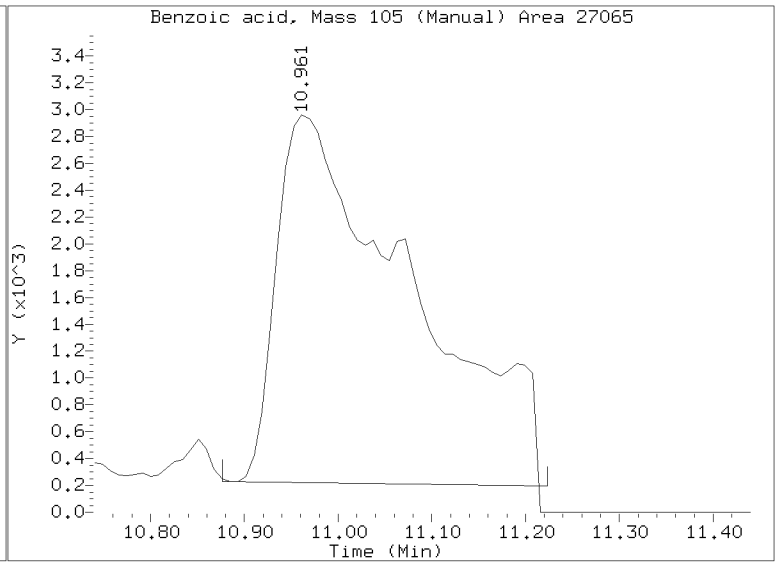
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/SIM.b/NT1802262311S.D
Injection Date: 26-FEB-2023 18:32
Lab ID:23A0134-02 Client ID:
Report Date: 03/24/2023 11:53





APPROVED

By Deenay Dunmore at 12:04 pm, Mar 24, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1179

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-03 C	SDG:	23A0134
Sampled:	01/06/23 09:52	Prepared:	01/19/23 13:35	File ID:	NT1802262312S.D
% Solids:	47.33	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 19:12
Batch:	BLA0410	Sequence:	SLC0389	Initial/Final:	21.38 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

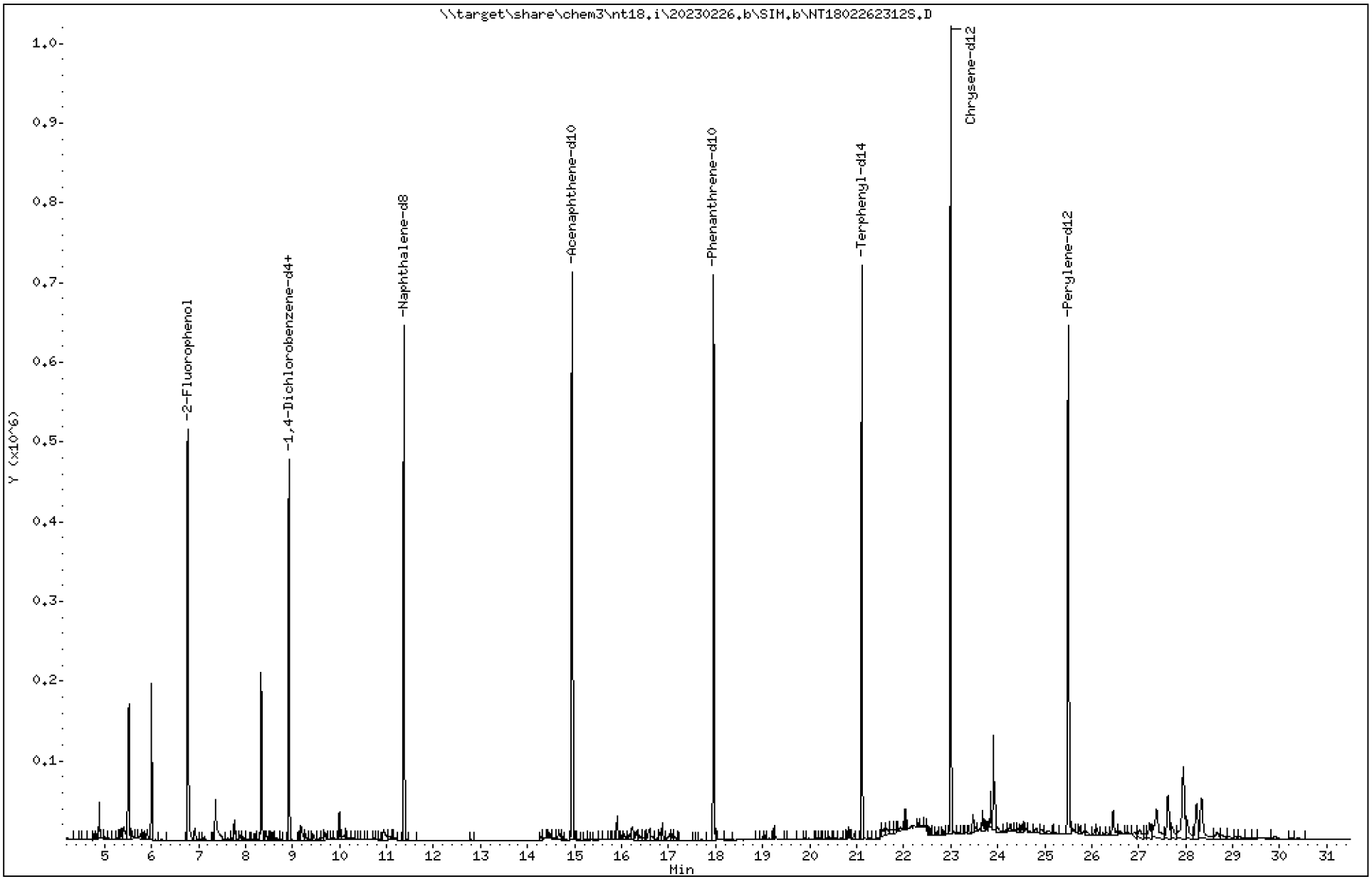
CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.2	J	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	4.9	U	0.7	4.9
100-51-6	Benzyl Alcohol	1	38.2		2.5	19.8
65-85-0	Benzoic acid	1	108	Q	13.2	98.8
105-67-9	2,4-Dimethylphenol	1	19.8	U	2.1	19.8
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	2.4	J	2.1	19.8

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	741.17	575	77.6	27 - 120	
p-Terphenyl-d14	494.11	401	81.1	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623128.D
Date : 26-FEB-2023 19:12
Client ID:
Sample Info: 23A0134-03

Instrument: nt18.i
Operator: YZ
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

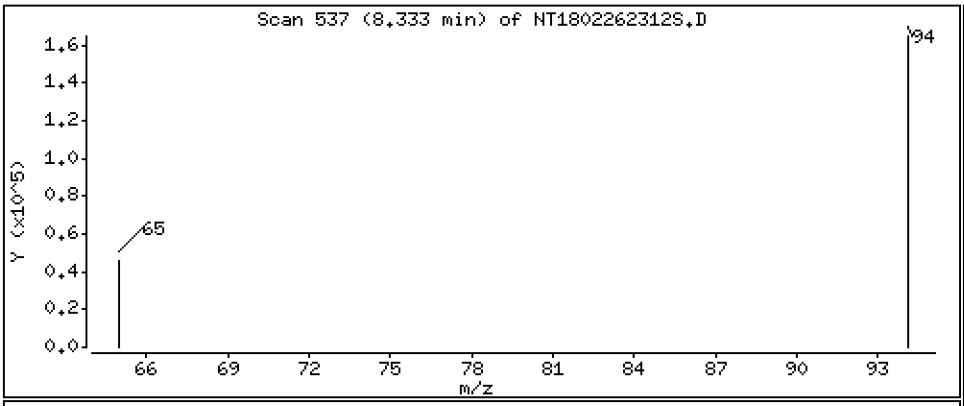
Operator: YZ

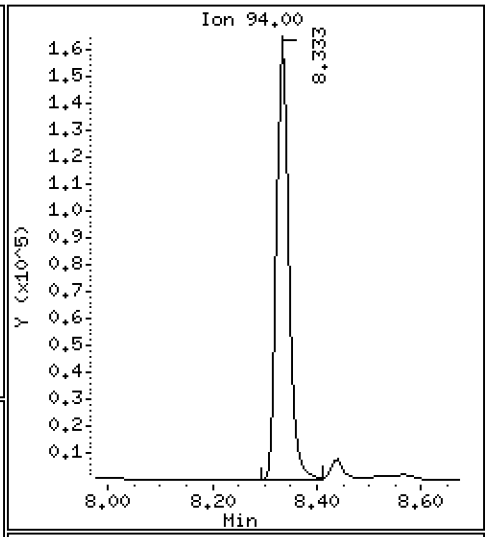
Column phase: ZB-5msi

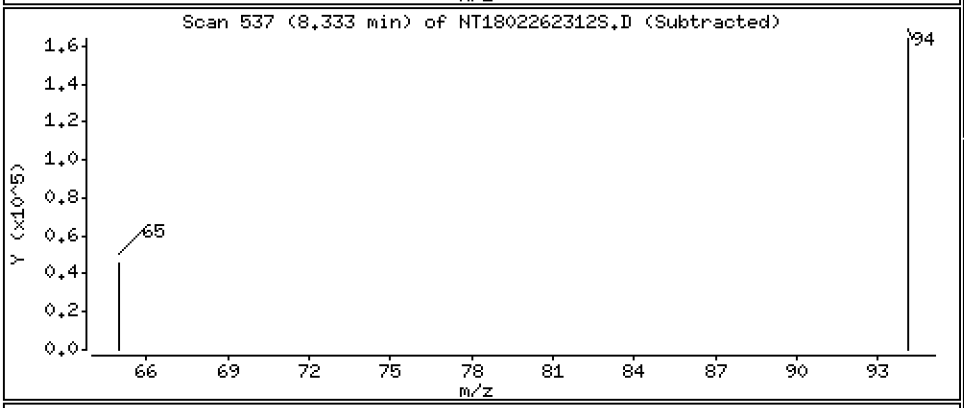
Column diameter: 0.25

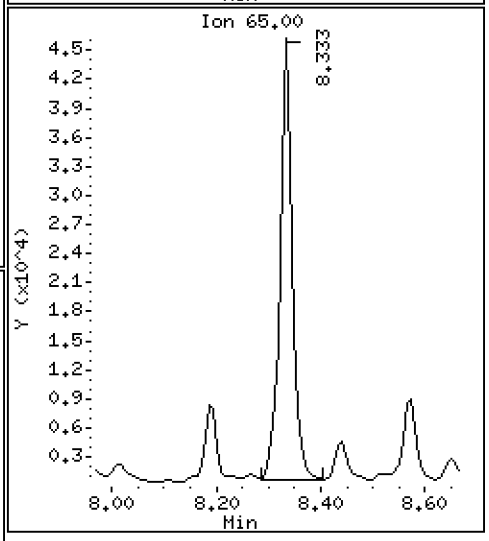
3 Phenol

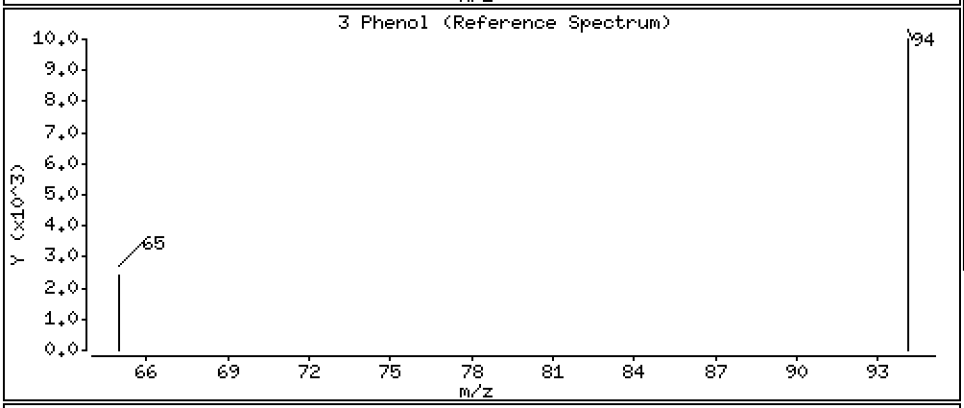
Concentration: 2.145 ug/mL

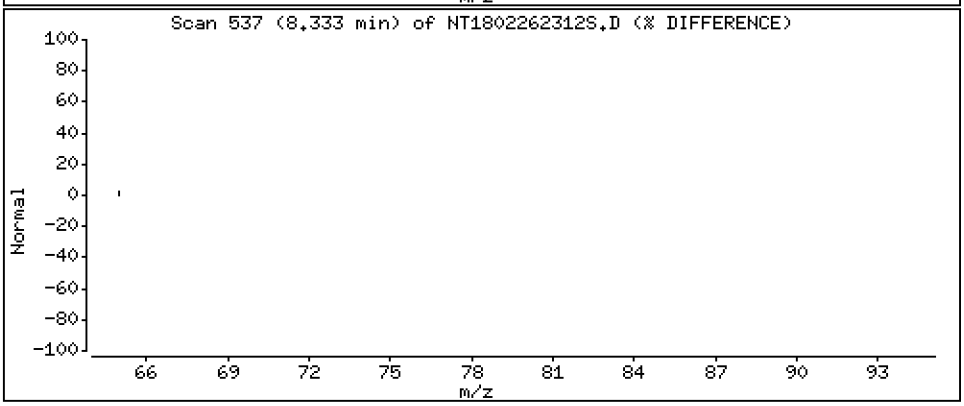












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623125.D

Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

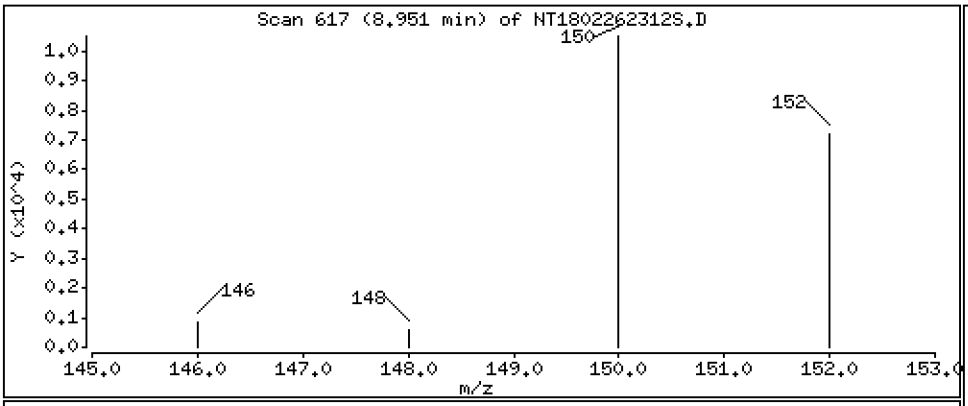
Operator: YZ

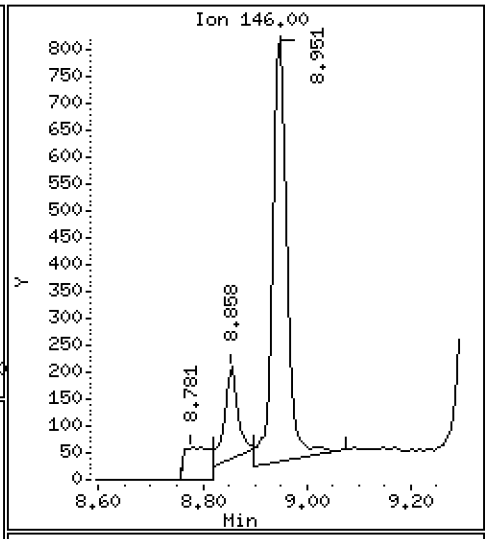
Column phase: ZB-5msi

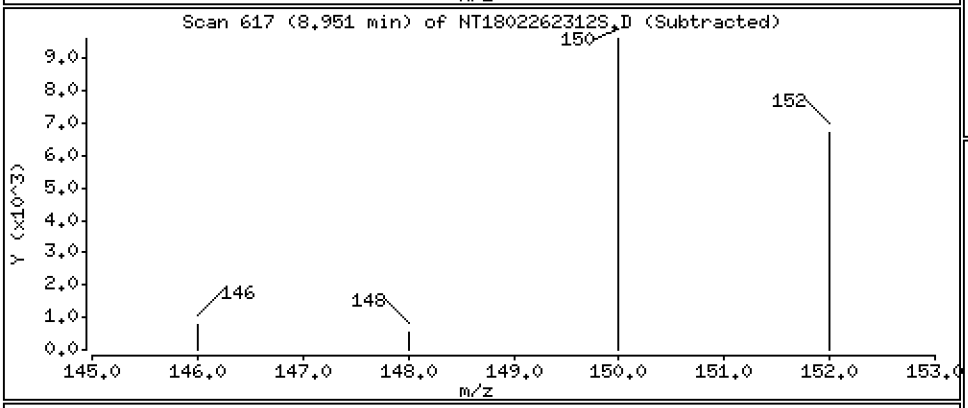
Column diameter: 0.25

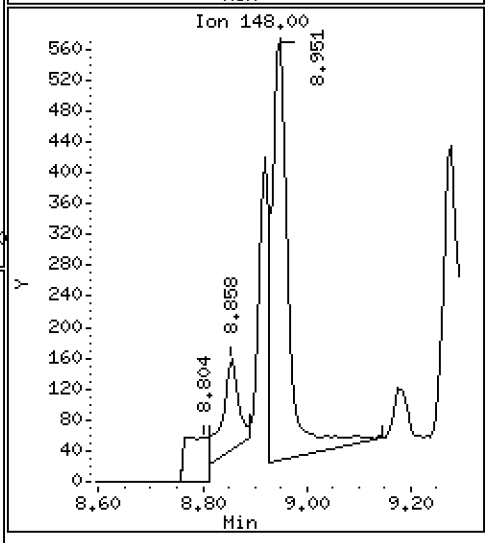
9 1,4-Dichlorobenzene

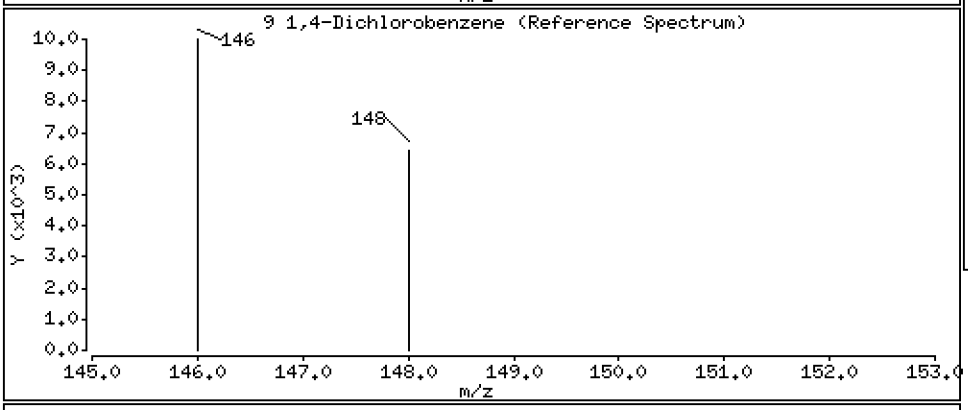
Concentration: 0.01198 ug/mL

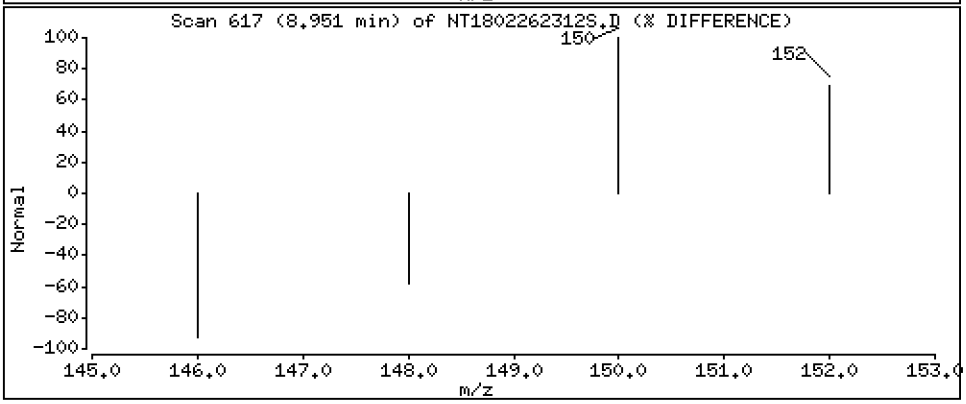












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623125.D

Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

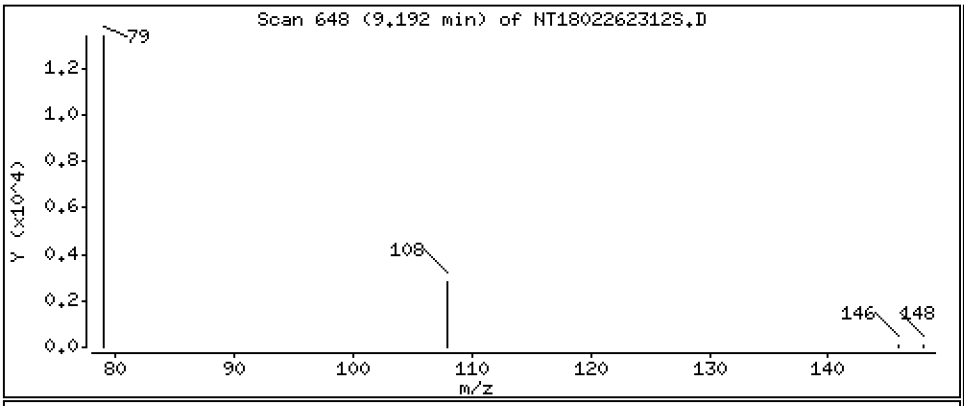
Operator: YZ

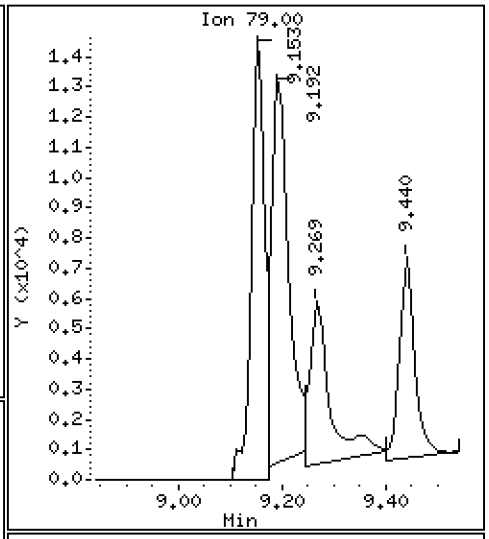
Column phase: ZB-5msi

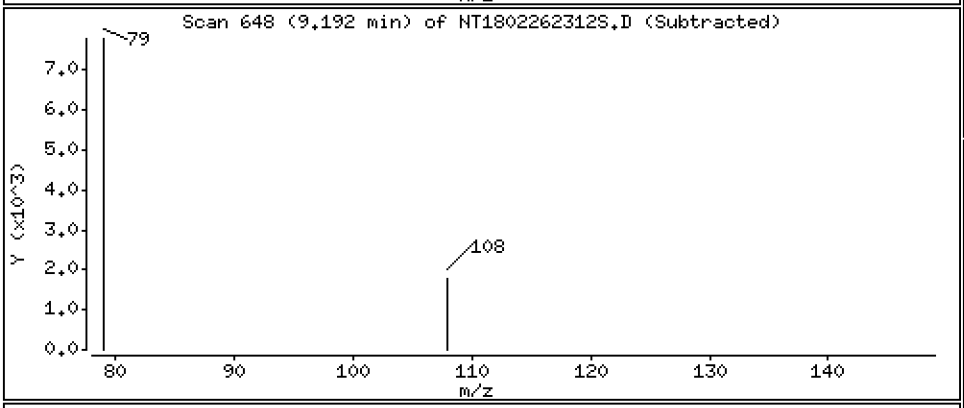
Column diameter: 0.25

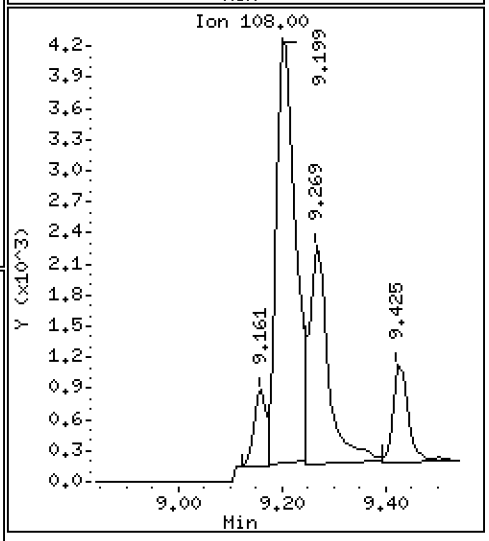
11 Benzyl alcohol

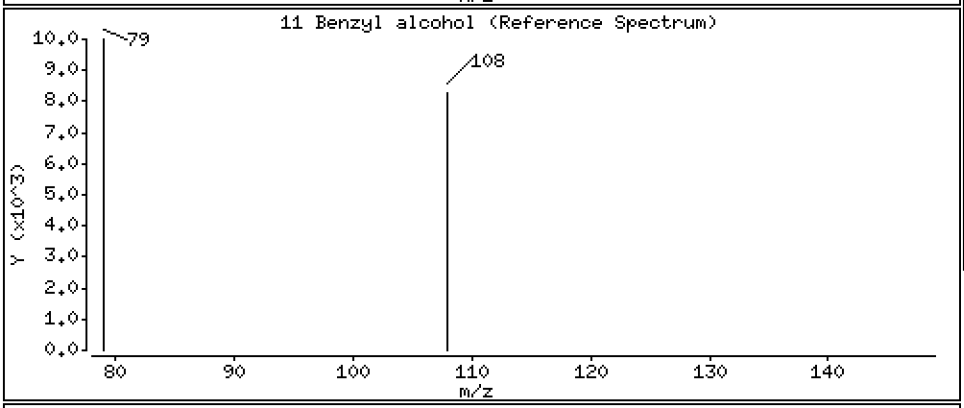
Concentration: 0.3867 ug/mL

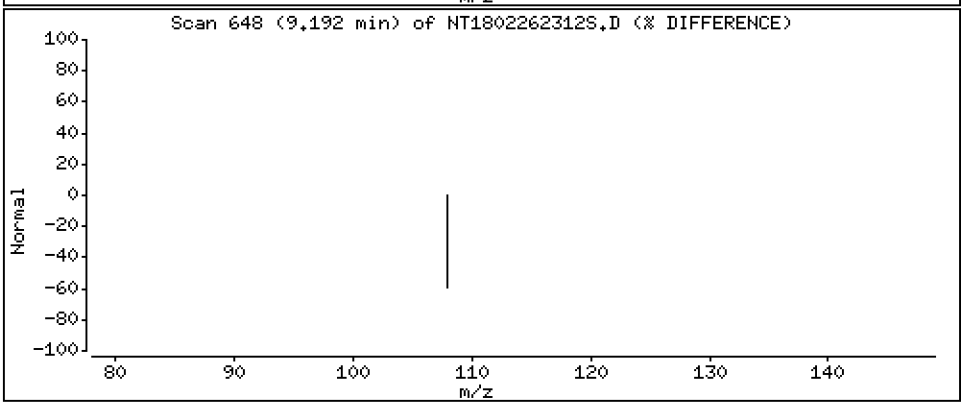












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

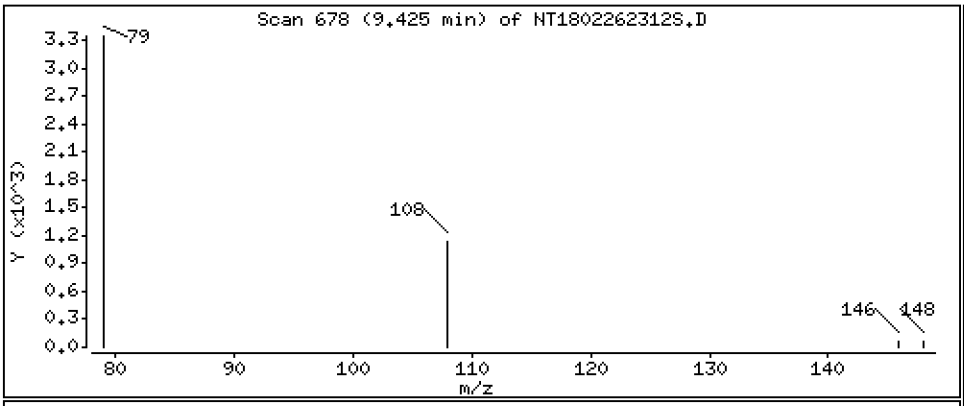
Operator: YZ

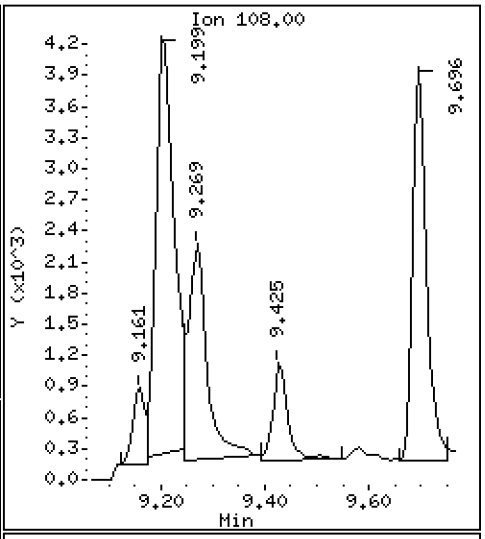
Column phase: ZB-5msi

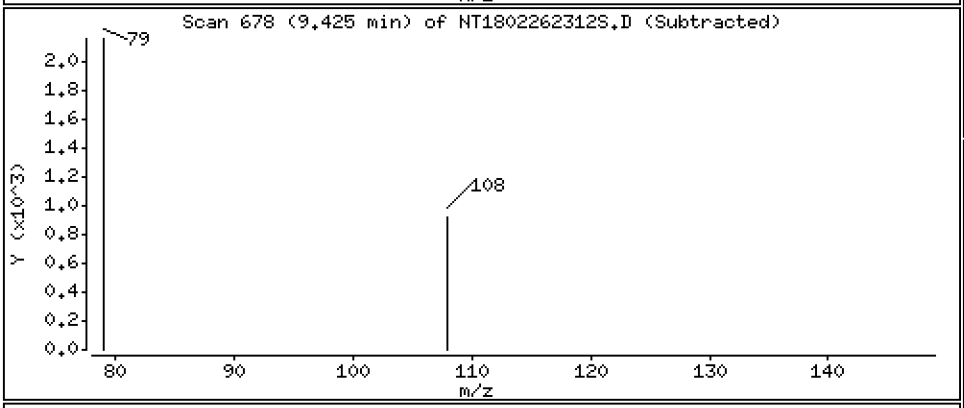
Column diameter: 0.25

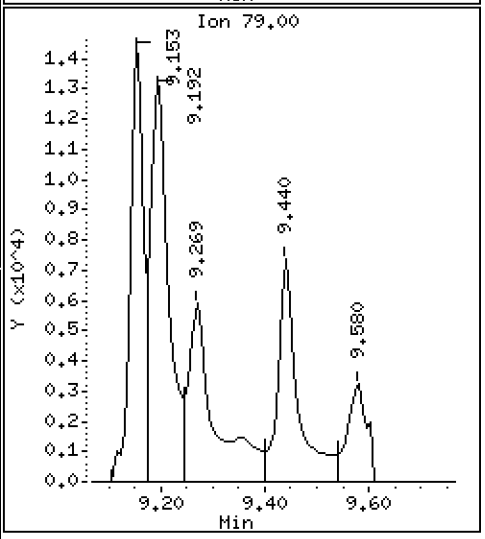
13 2-Methylphenol

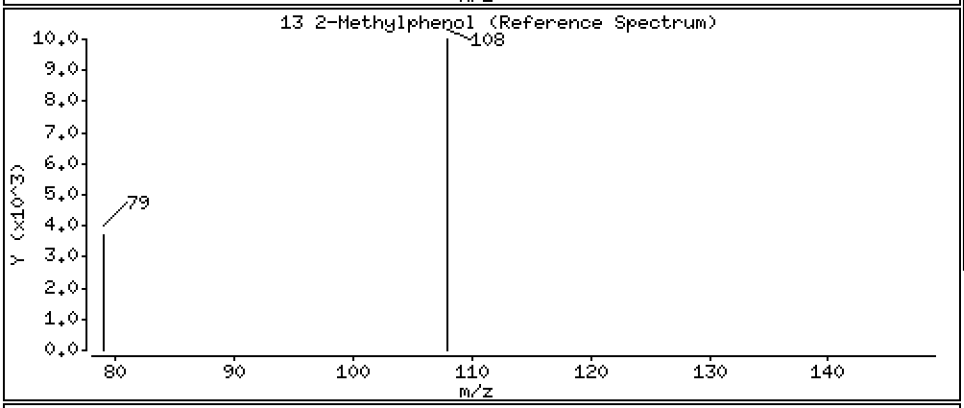
Concentration: 0.01969 ug/mL

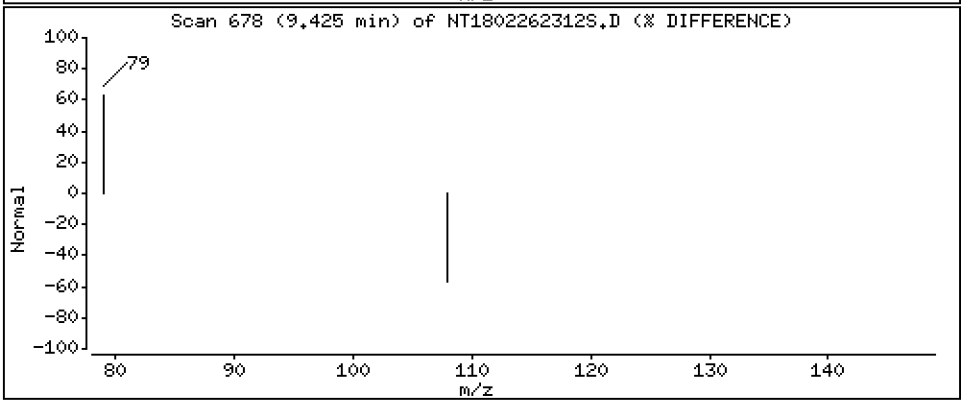












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623125.D

Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

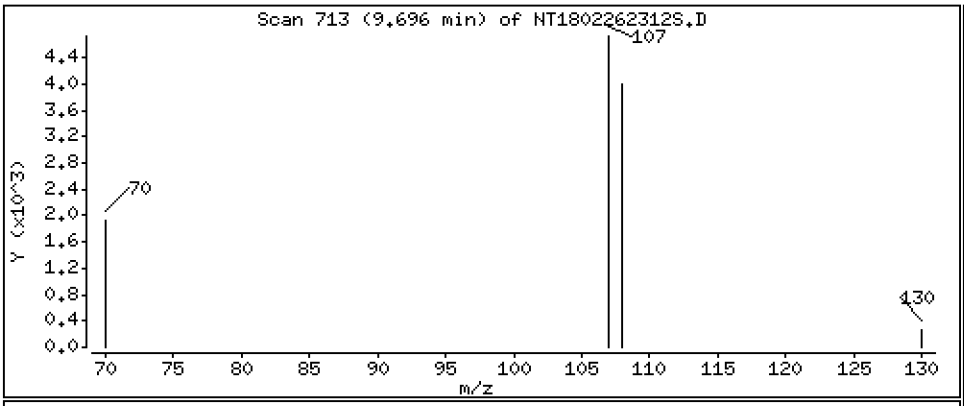
Operator: YZ

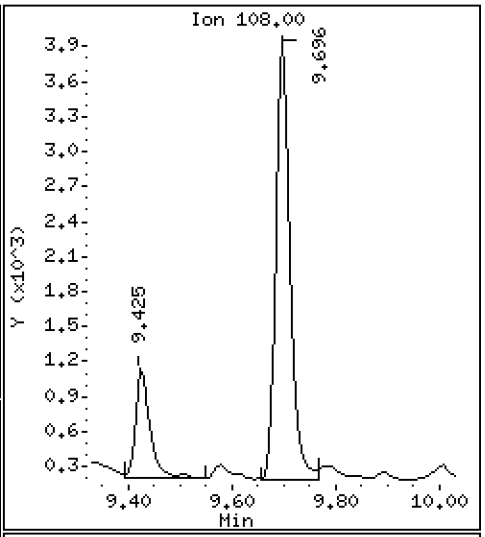
Column phase: ZB-5msi

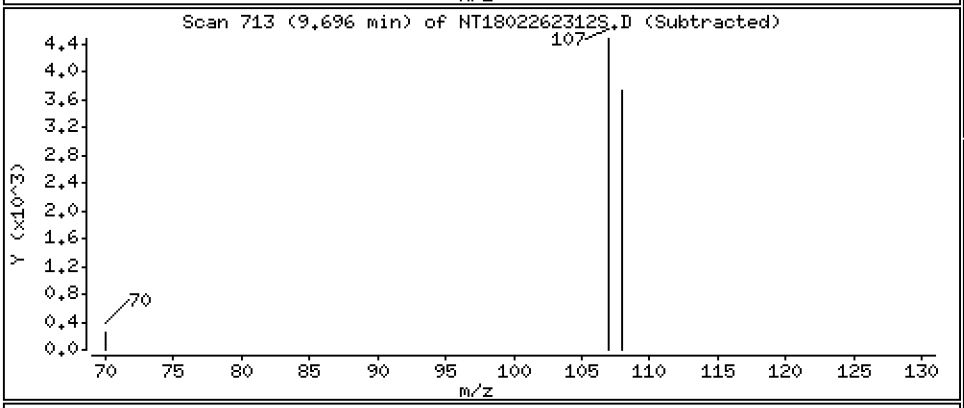
Column diameter: 0.25

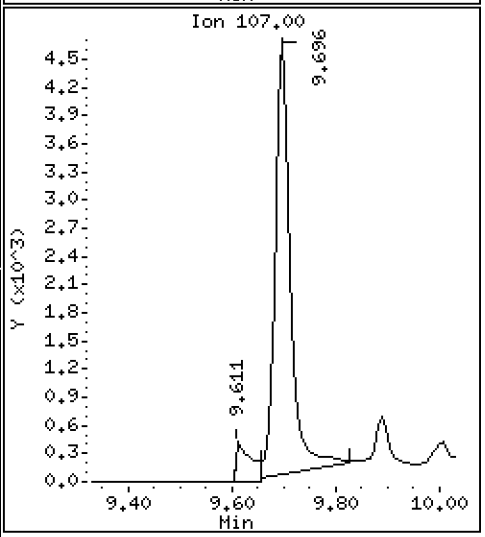
15 4-Methylphenol

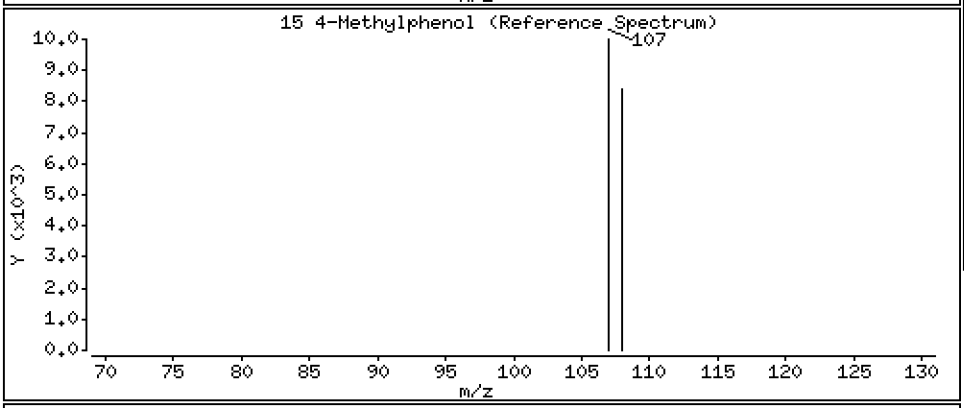
Concentration: 0.07502 ug/mL

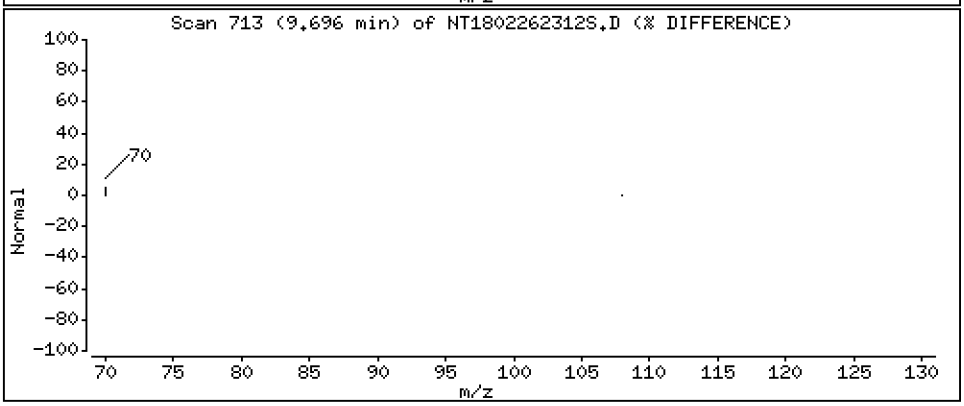












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

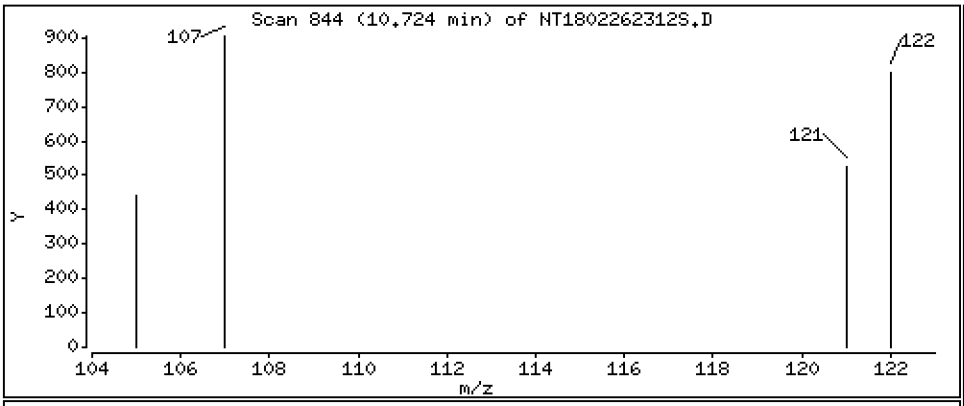
Operator: YZ

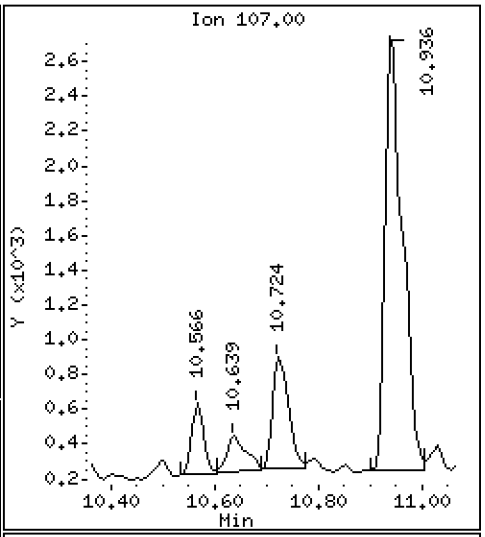
Column phase: ZB-5msi

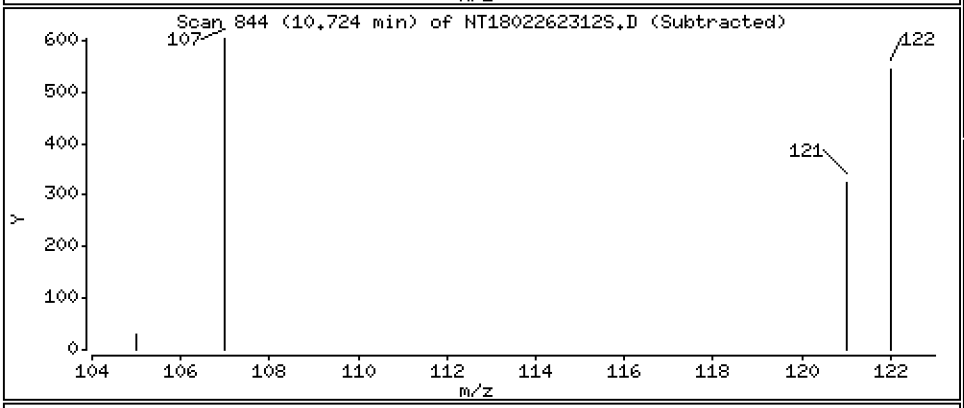
Column diameter: 0.25

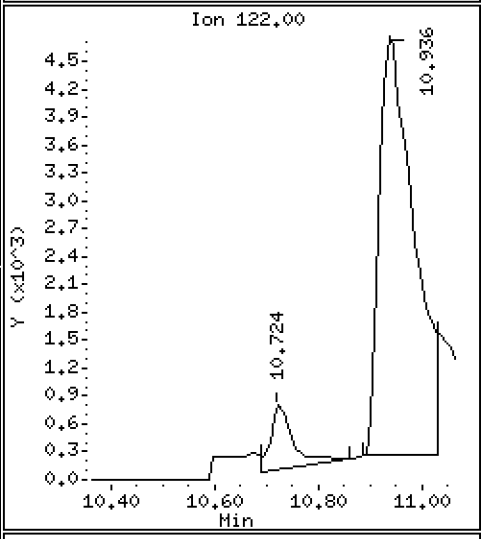
22 2,4-Dimethylphenol

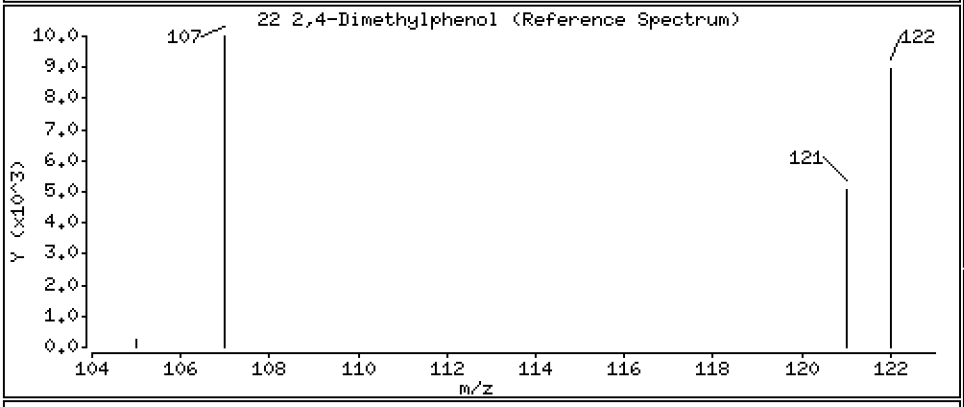
Concentration: 0.01463 ug/mL

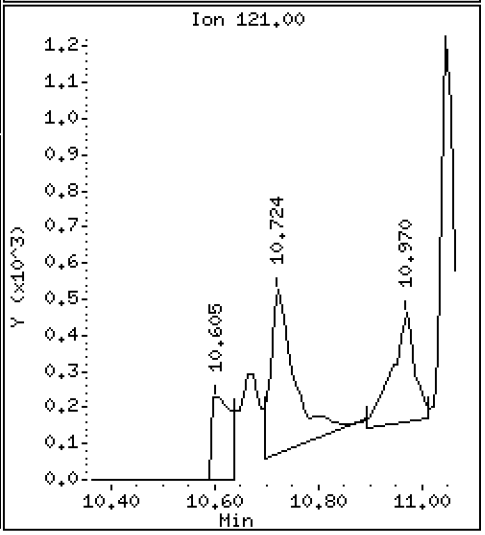


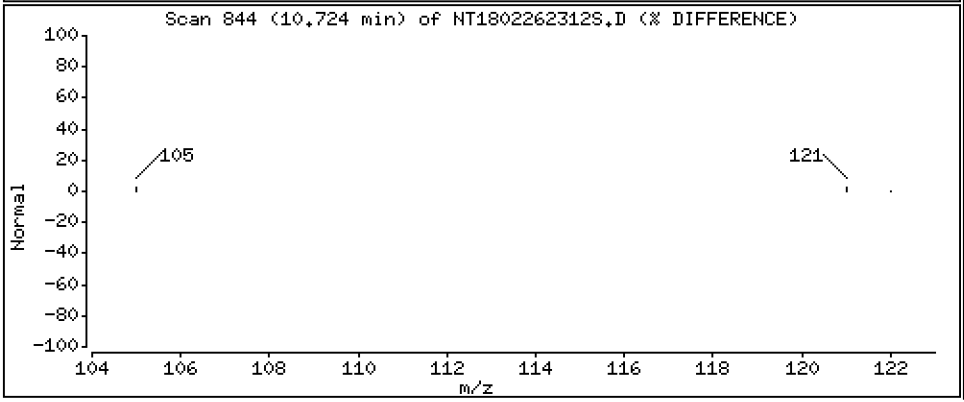












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

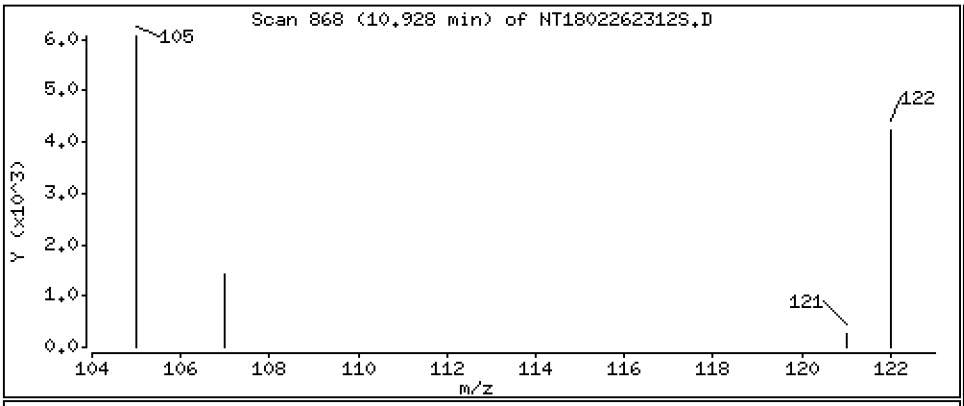
Operator: YZ

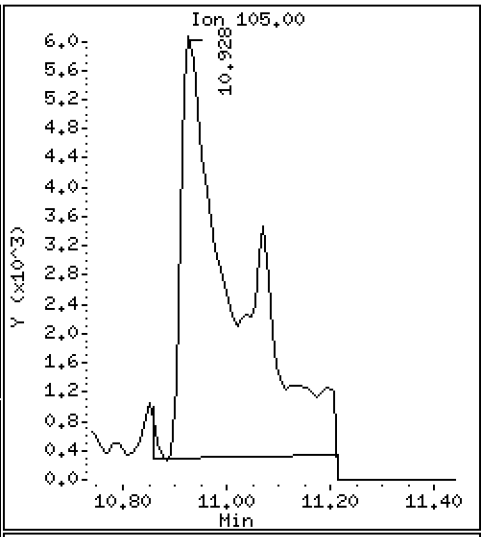
Column phase: ZB-5msi

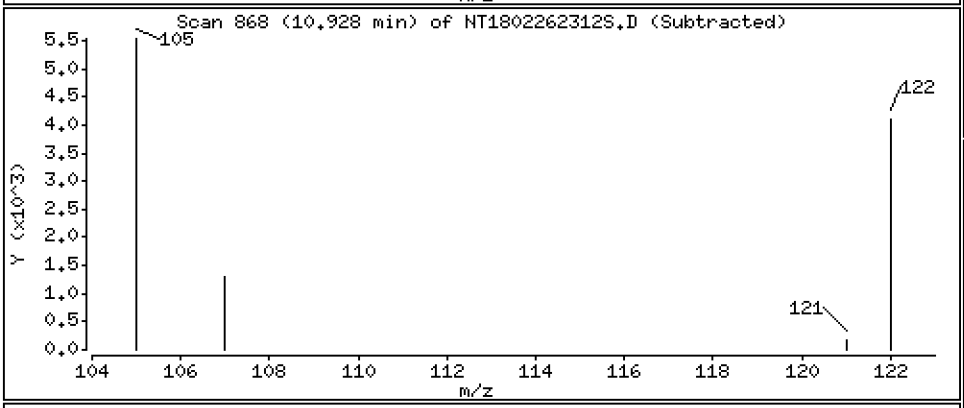
Column diameter: 0.25

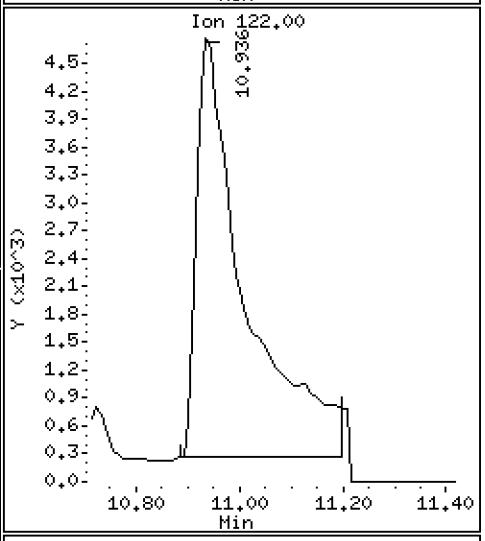
24 Benzoic acid

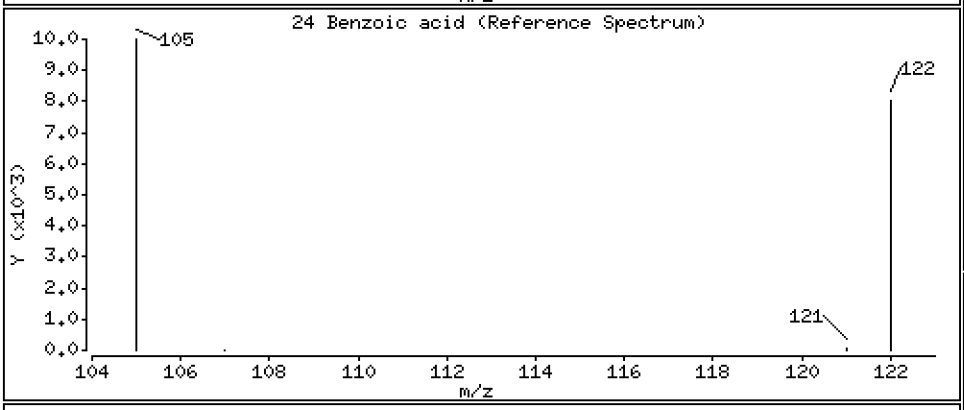
Concentration: 1.095 ug/mL

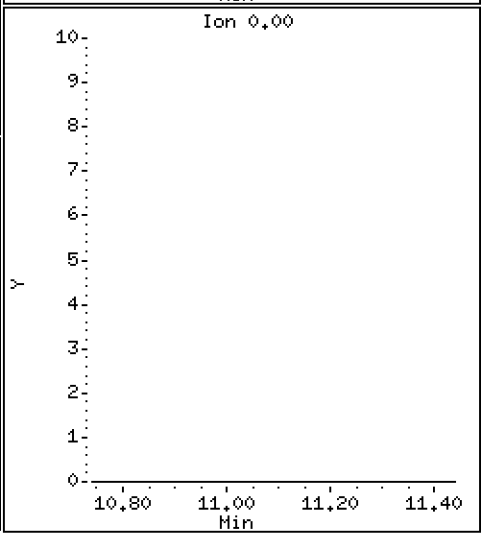


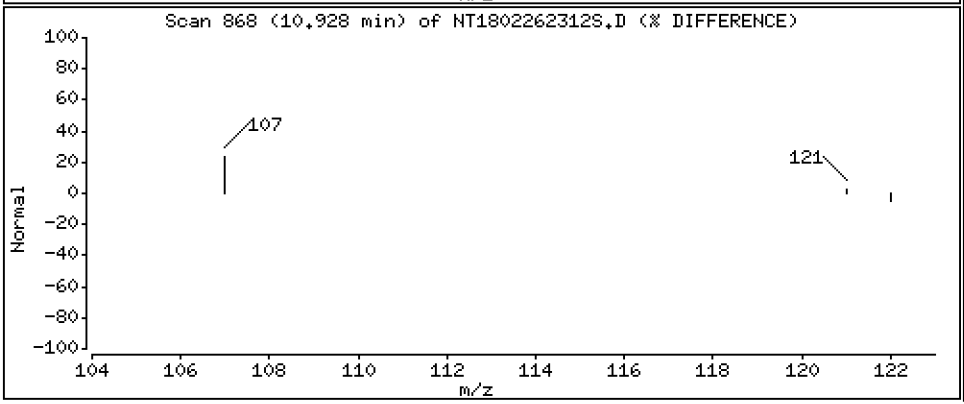












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

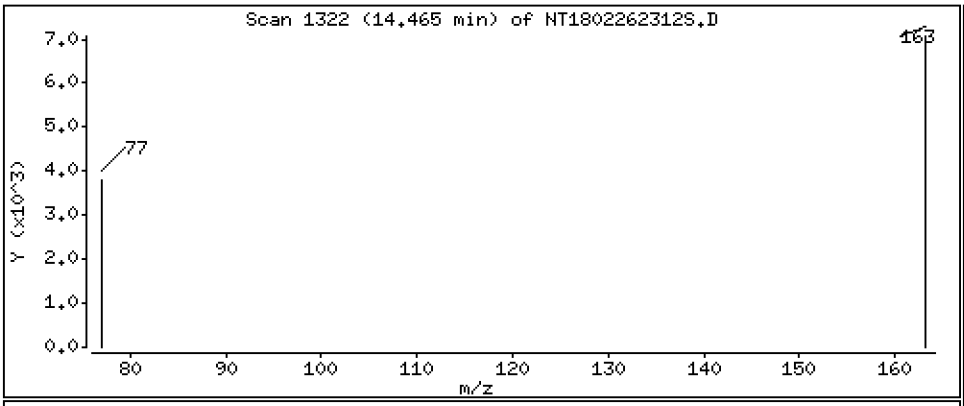
Operator: YZ

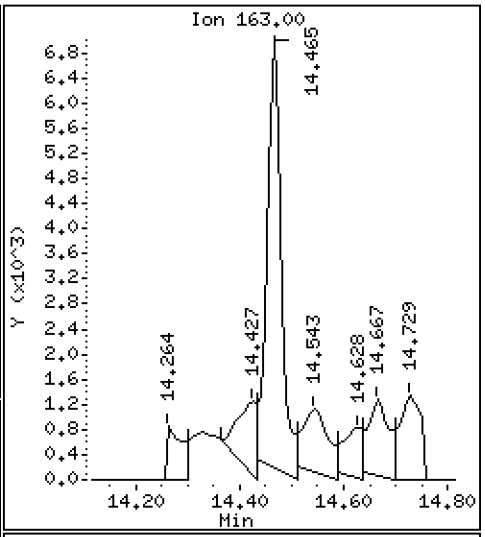
Column phase: ZB-5msi

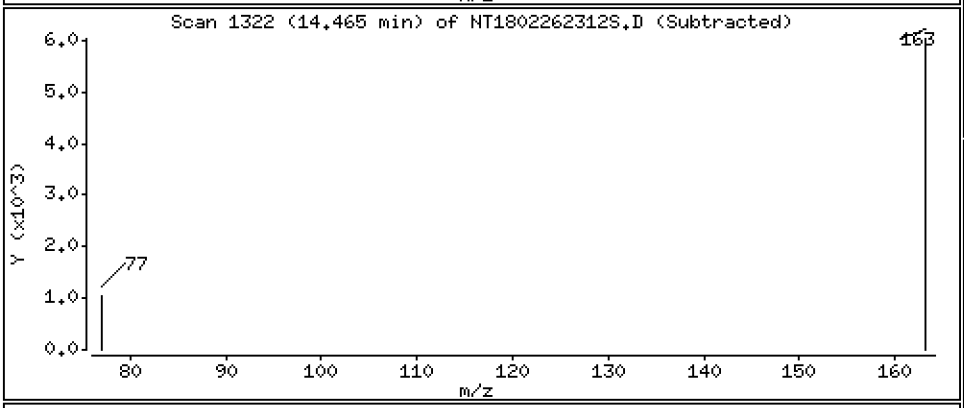
Column diameter: 0.25

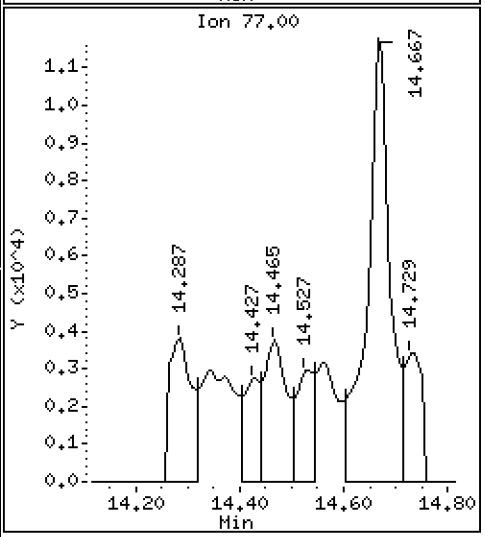
39 Dimethylphthalate

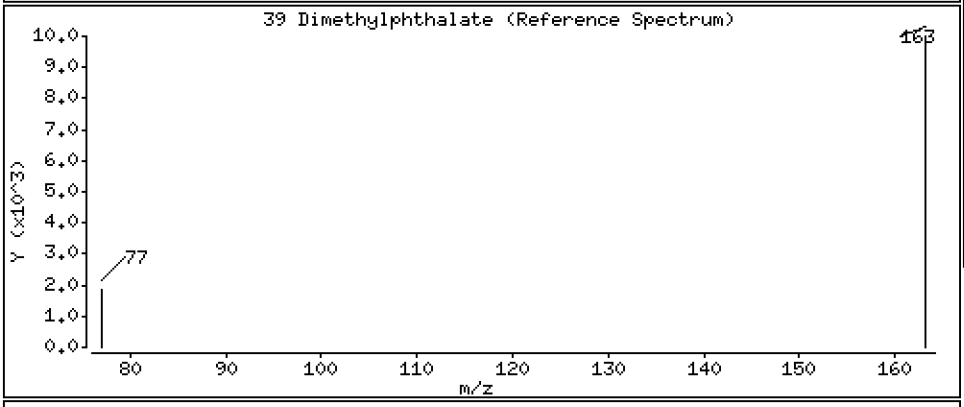
Concentration: 0.05908 ug/mL

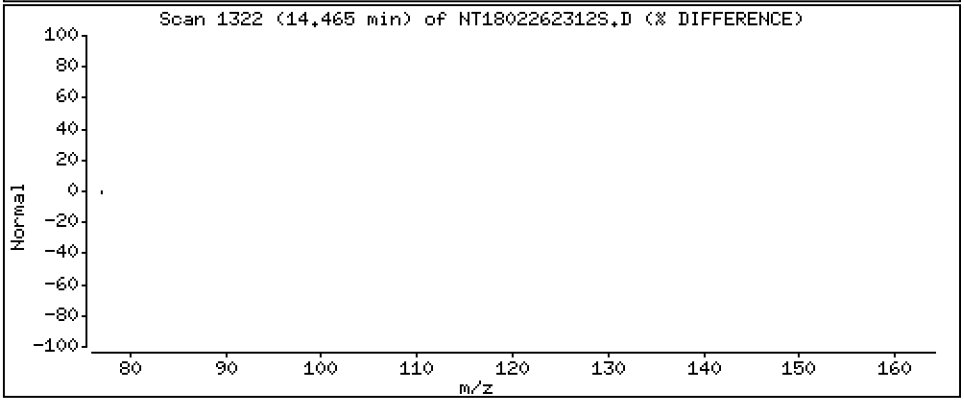












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Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

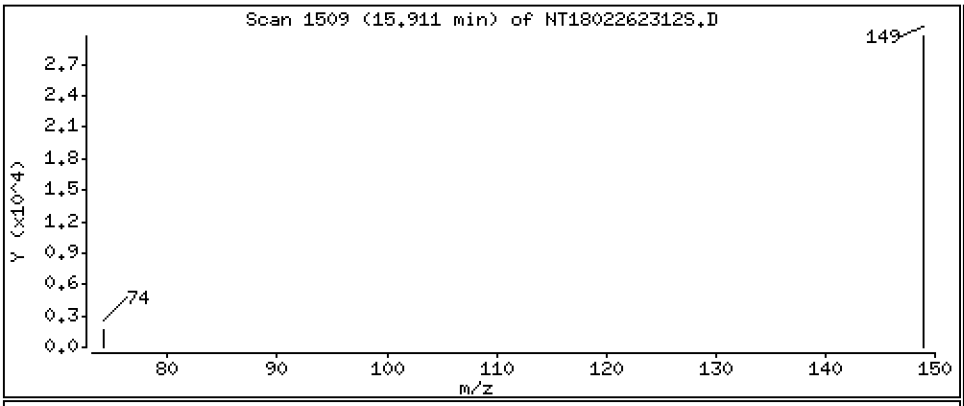
Operator: YZ

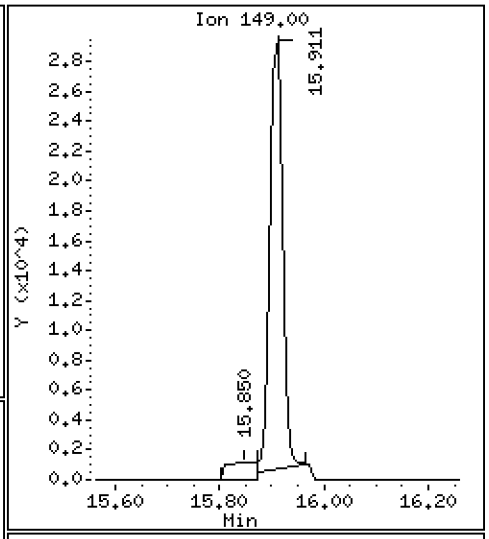
Column phase: ZB-5msi

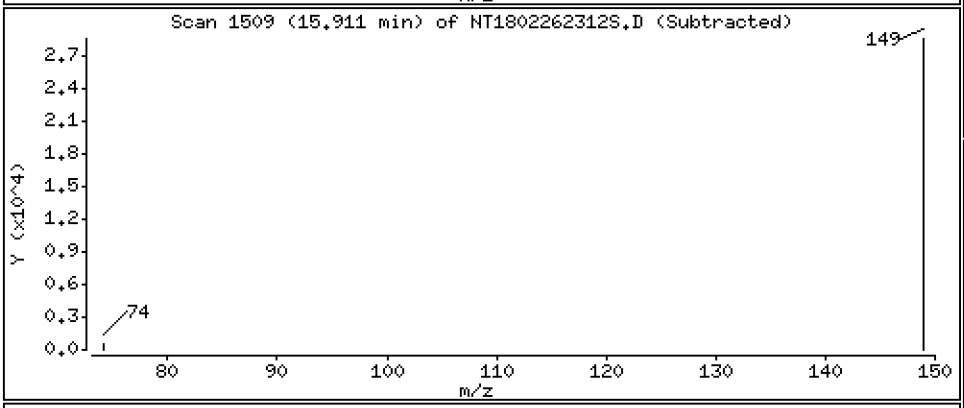
Column diameter: 0.25

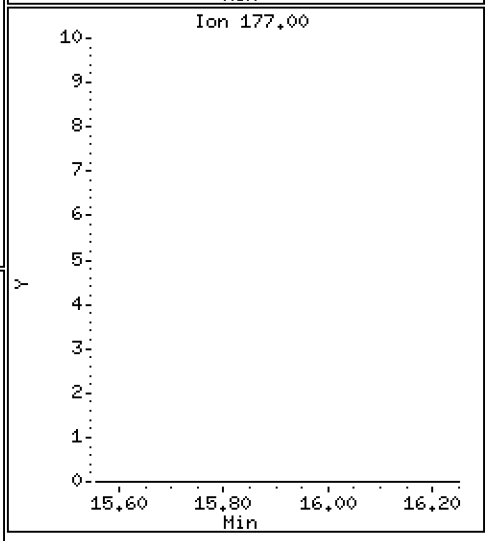
50 Diethylphthalate

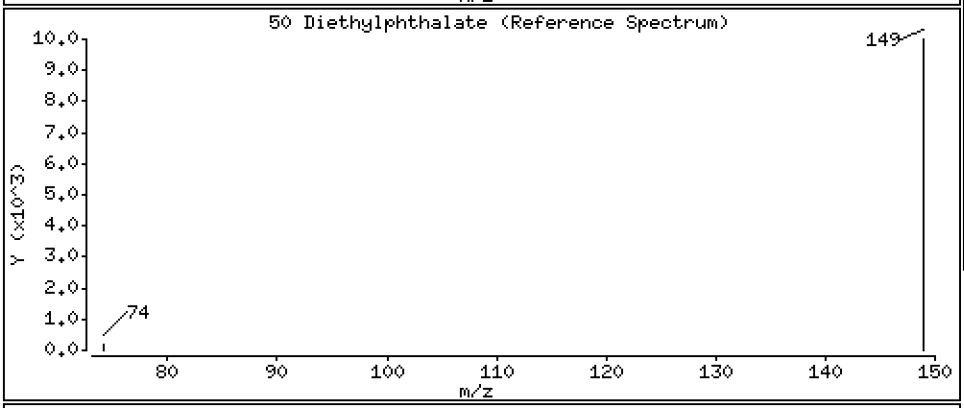
Concentration: 0.2353 ug/mL

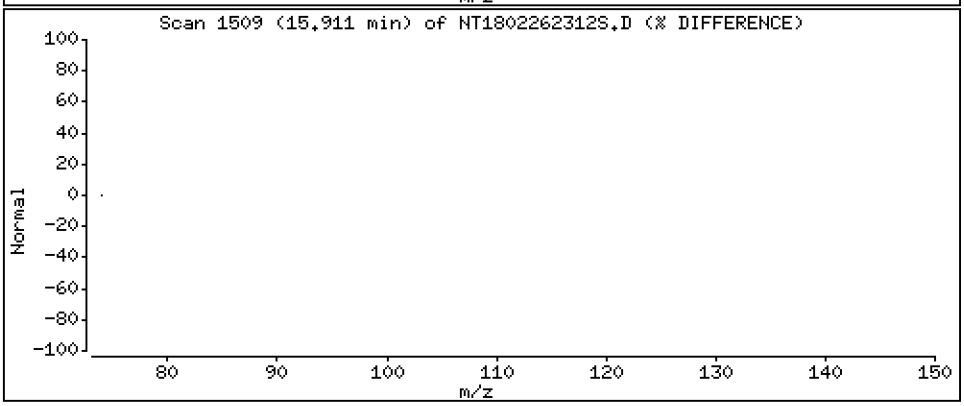












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623125.D

Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

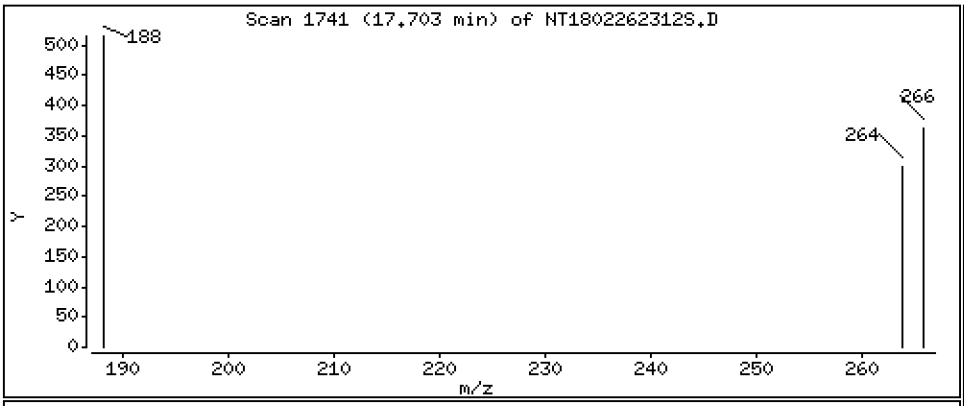
Operator: YZ

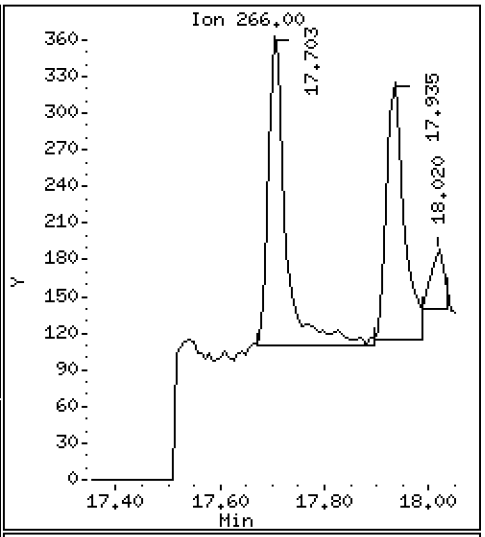
Column phase: ZB-5msi

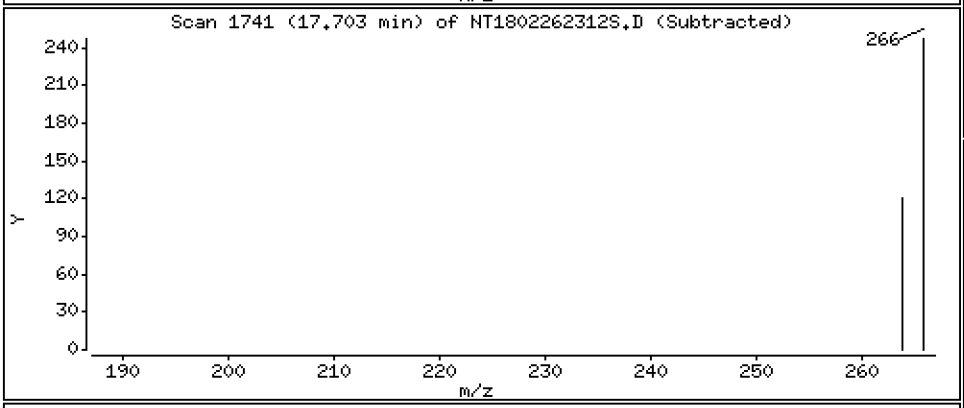
Column diameter: 0.25

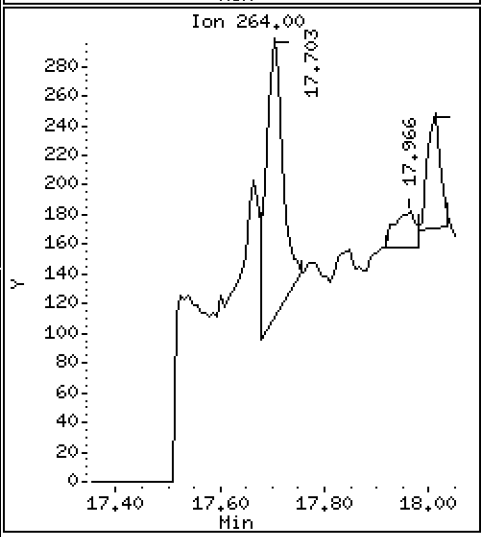
58 Pentachlorophenol

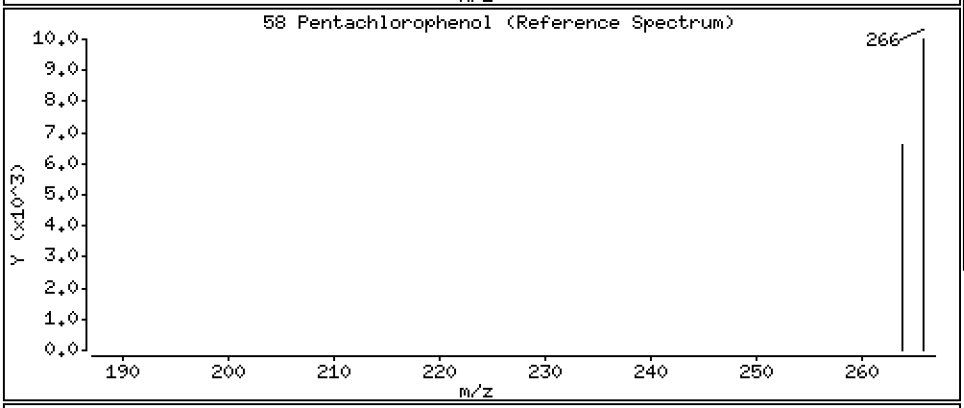
Concentration: 0.02445 ug/mL

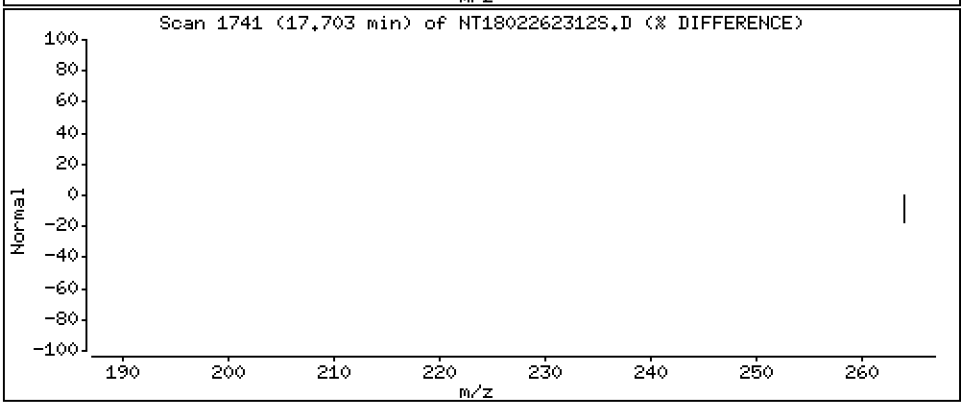












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623125.D

Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

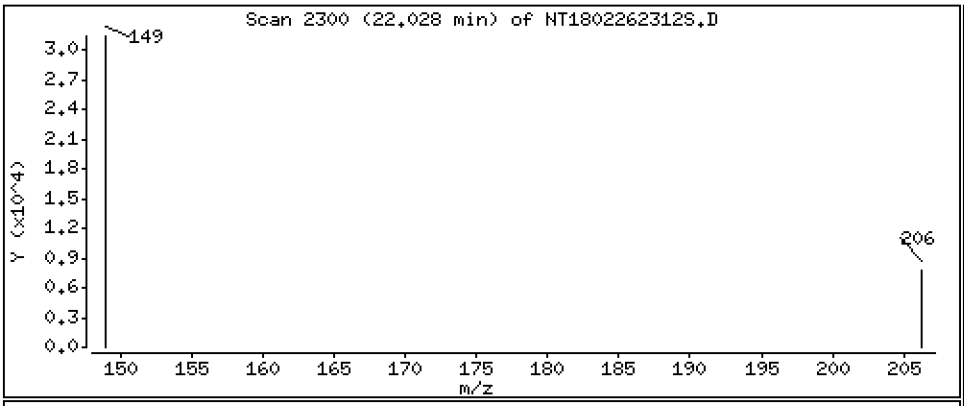
Operator: YZ

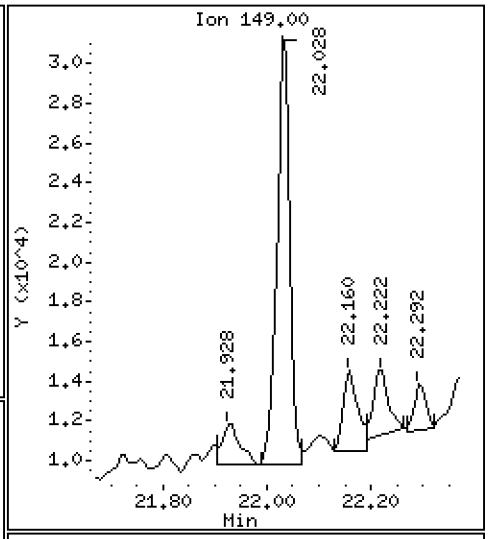
Column phase: ZB-5msi

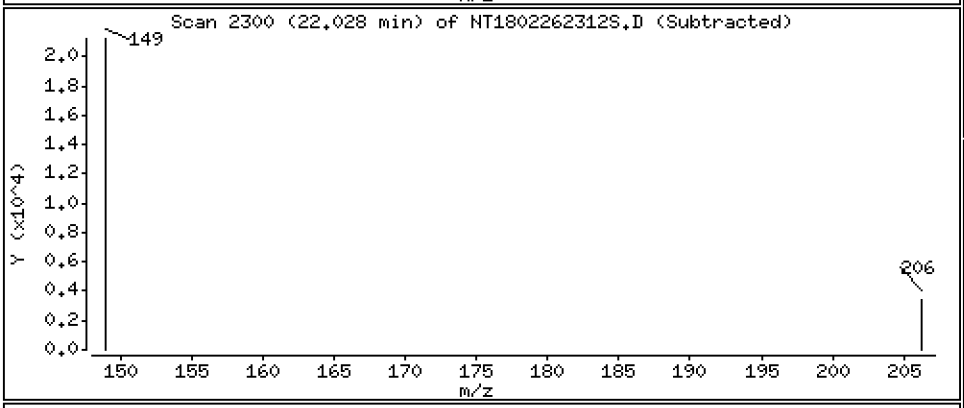
Column diameter: 0.25

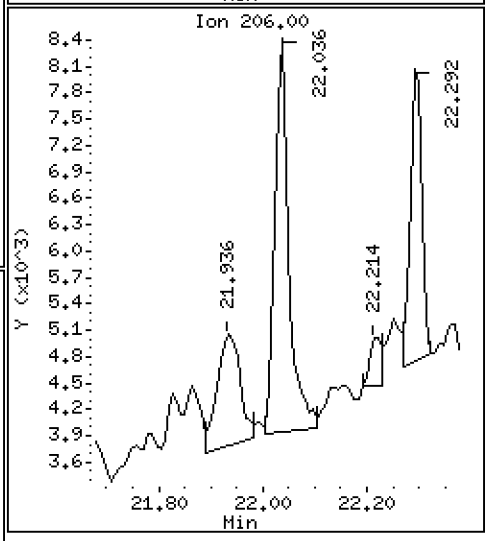
67 Butylbenzylphthalate

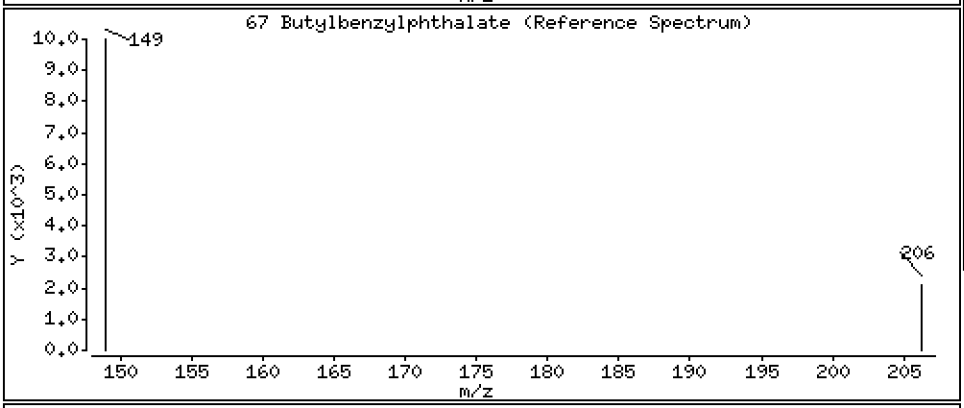
Concentration: 0.1748 ug/mL

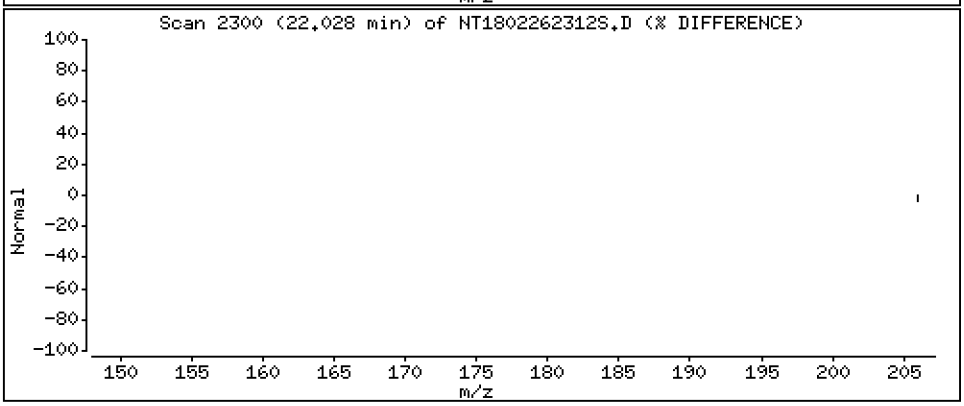












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623125.D

Date : 26-FEB-2023 19:12

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-03

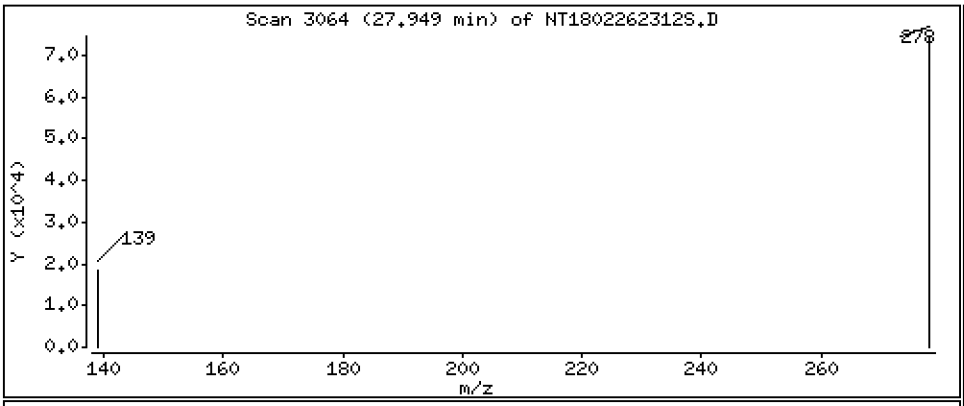
Operator: YZ

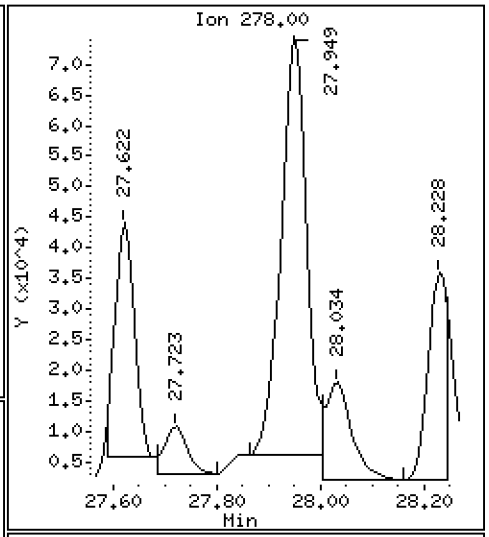
Column phase: ZB-5msi

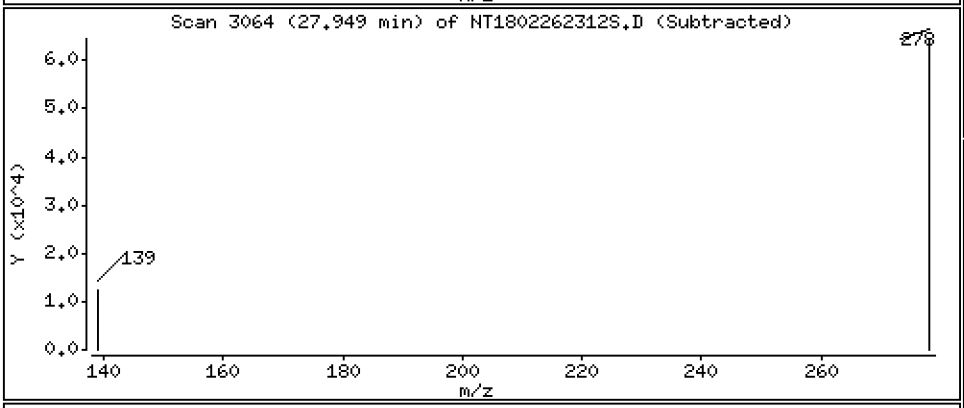
Column diameter: 0.25

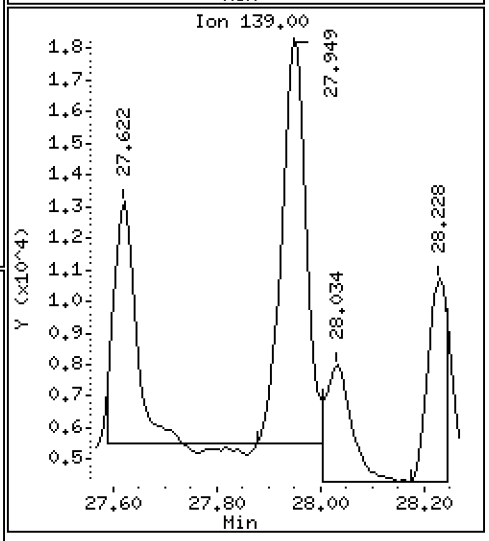
79 Dibenzo(a,h)anthracene

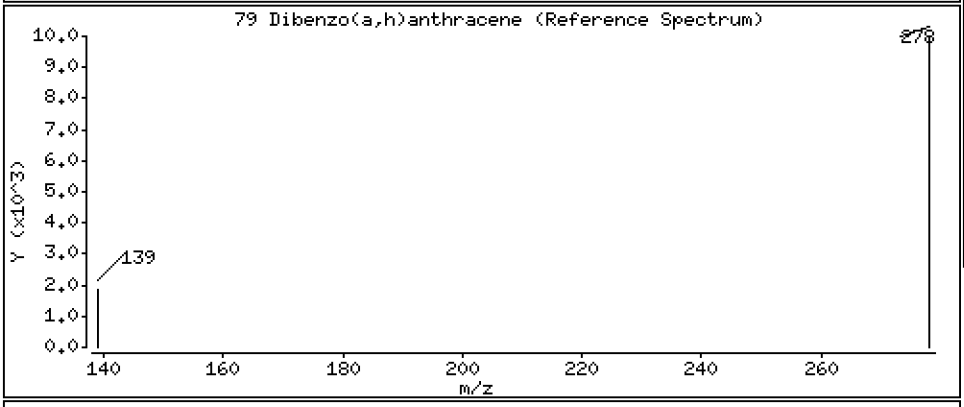
Concentration: 0.7081 ug/mL

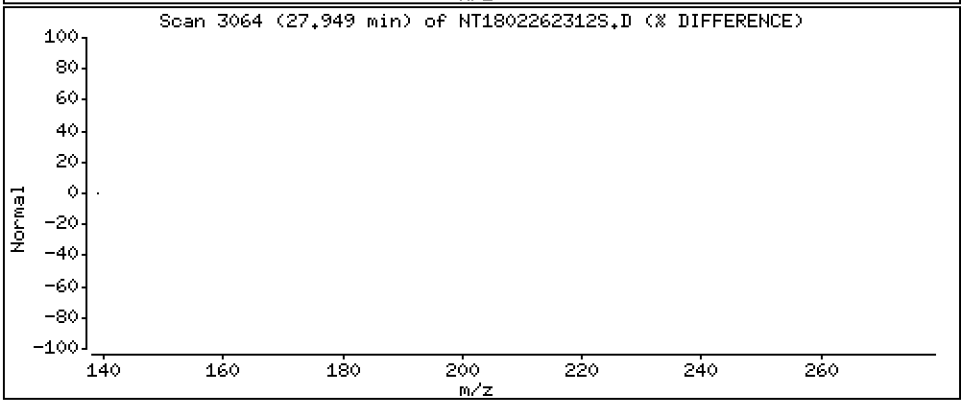












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262312S.D
Lab Smp Id: 23A0134-03
Inj Date : 26-FEB-2023 19:12
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-03
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.771	6.748	(0.759)	524482	5.81657	5.817(R)
	3	Phenol	94	8.332	8.324	(0.934)	252357	2.14532	2.145
	7	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8	1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	279380	4.00000	
	9	1,4-Dichlorobenzene	146	8.951	8.943	(1.003)	1473	0.01198	0.01198
	11	Benzyl alcohol	79	9.191	9.191	(1.030)	29166	0.38674	0.3867(H)
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	13	2-Methylphenol	108	9.424	9.416	(1.057)	1905	0.01969	0.01969
	15	4-Methylphenol	108	9.696	9.680	(1.087)	7281	0.07502	0.07502
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	10.723	10.715	(0.943)	1372	0.01463	0.01463
	24	Benzoic acid	105	10.927	11.088	(0.961)	41485	1.09481	1.095(M)
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.370	11.370	(1.000)	1050871	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	14.465	14.465	(0.968)	12641	0.05908	0.05908
*	42	Acenaphthene-d10	162	14.945	14.945	(1.000)	556876	4.00000	
	50	Diethylphthalate	149	15.911	15.911	(1.065)	46008	0.23533	0.2353
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	17.702	17.702	(0.986)	571	0.02445	0.02445
*	59	Phenanthrene-d10	188	17.958	17.950	(1.000)	1148131	4.00000	
$	66	Terphenyl-d14	244	21.114	21.091	(0.918)	931856	4.05448	4.054(R)
	67	Butylbenzylphthalate	149	22.028	22.020	(0.958)	36712	0.17482	0.1748
*	69	Chrysene-d12	240	22.996	22.980	(1.000)	1269300	4.00000	
*	77	Perylene-d12	264	25.504	25.473	(1.000)	1131402	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.948	27.917	(1.096)	238057	0.70814	0.7081
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262312S.D
Lab Smp Id: 23A0134-03
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	279380	-0.03
27 Naphthalene-d8	1065527	532764	2131054	1050871	-1.38
42 Acenaphthene-d10	544290	272145	1088580	556876	2.31
59 Phenanthrene-d10	1003412	501706	2006824	1148131	14.42
69 Chrysene-d12	936975	468488	1873950	1269300	35.47
77 Perylene-d12	1057771	528886	2115542	1131402	6.96

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.07
77 Perylene-d12	25.47	24.97	25.97	25.50	0.12

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262312S.D

Lab ID: 23A0134-03
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 19:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.961	0.975	-0.0142	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

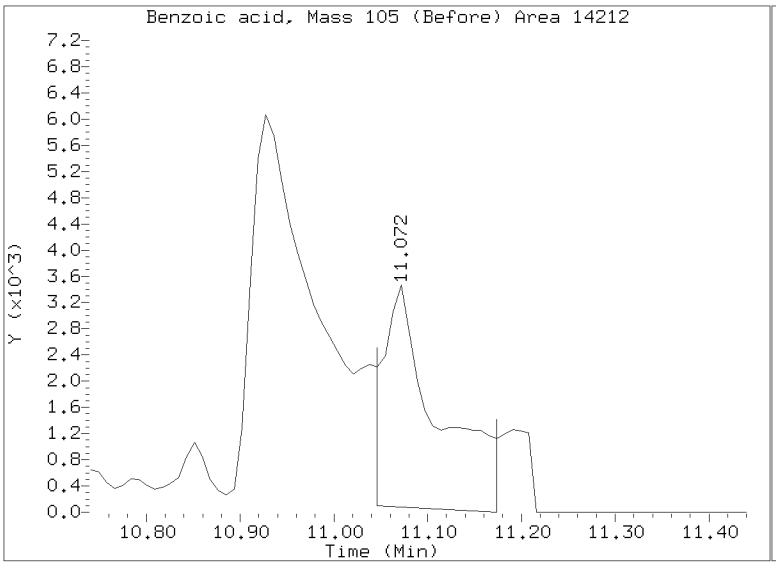
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

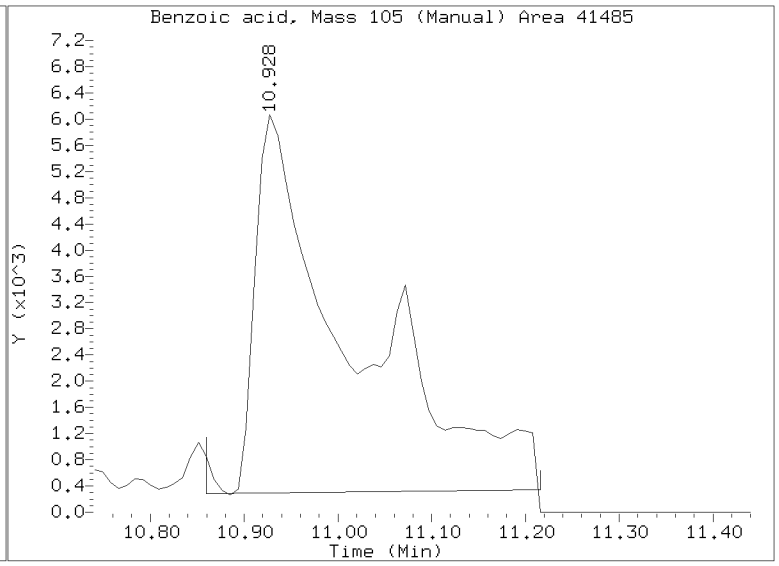
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/SIM.b/NT1802262312S.D
Injection Date: 26-FEB-2023 19:12
Lab ID:23A0134-03 Client ID:
Report Date: 03/24/2023 11:53





APPROVED

By Deenay Dunmore at 12:04 pm, Mar 24, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1242

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-04 C	SDG:	23A0134
Sampled:	01/06/23 11:04	Prepared:	01/19/23 13:35	File ID:	NT1802262313S.D
% Solids:	46.37	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 19:53
Batch:	BLA0410	Sequence:	SLC0389	Initial/Final:	21.64 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.3	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	26.6		2.5	19.9
65-85-0	Benzoic acid	1	115	Q	13.4	99.7
105-67-9	2,4-Dimethylphenol	1	19.9	U	2.2	19.9
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	19.9	U	2.1	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	747.42	530	70.9	27 - 120	
p-Terphenyl-d14	498.28	405	81.2	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623135.D

Date : 26-FEB-2023 19:53

Client ID:

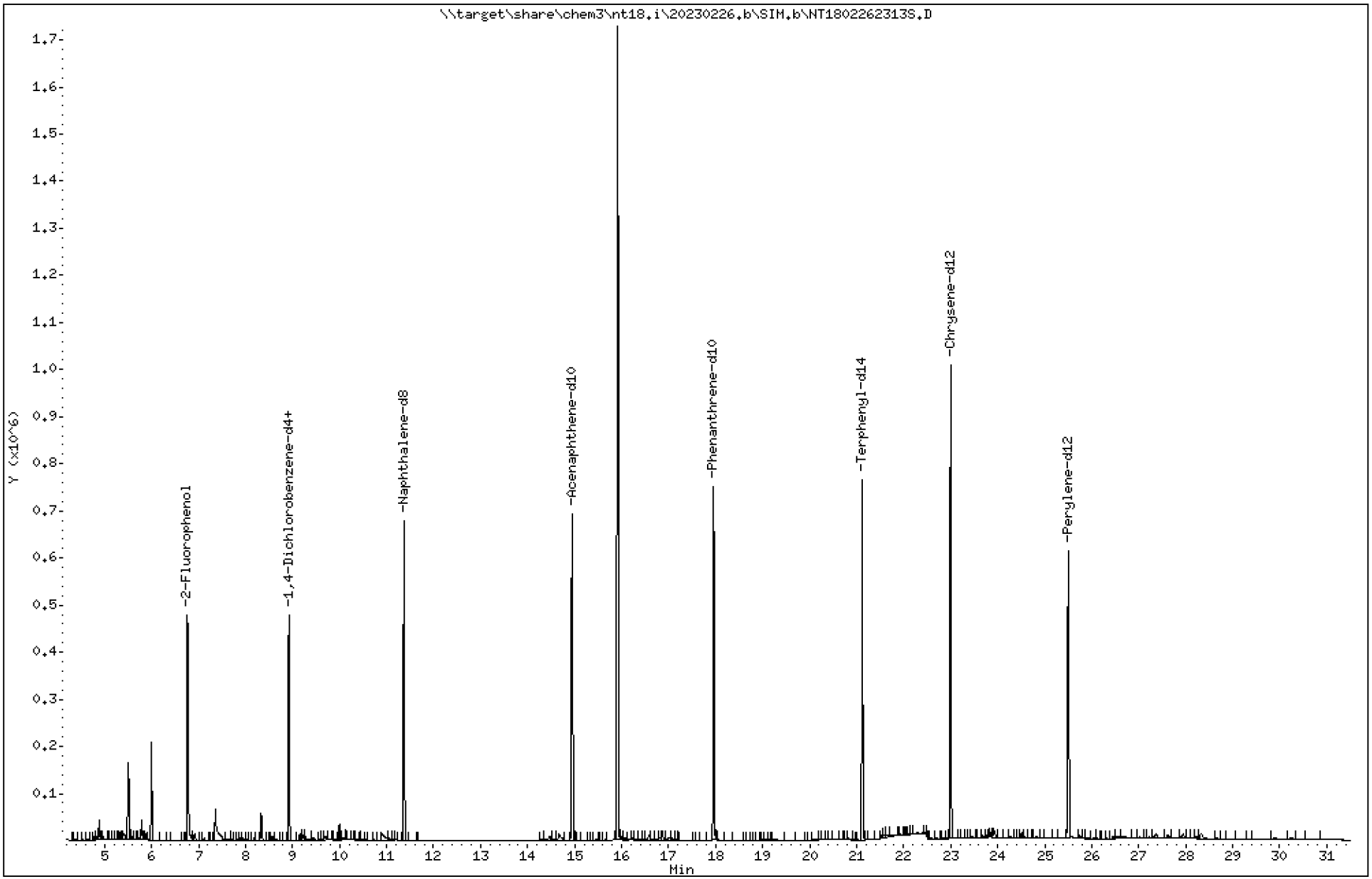
Sample Info: 23A0134-04

Column phase: ZB-5msi

Instrument: nt18.i

Operator: YZ

Column diameter: 0.25



Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262313S.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

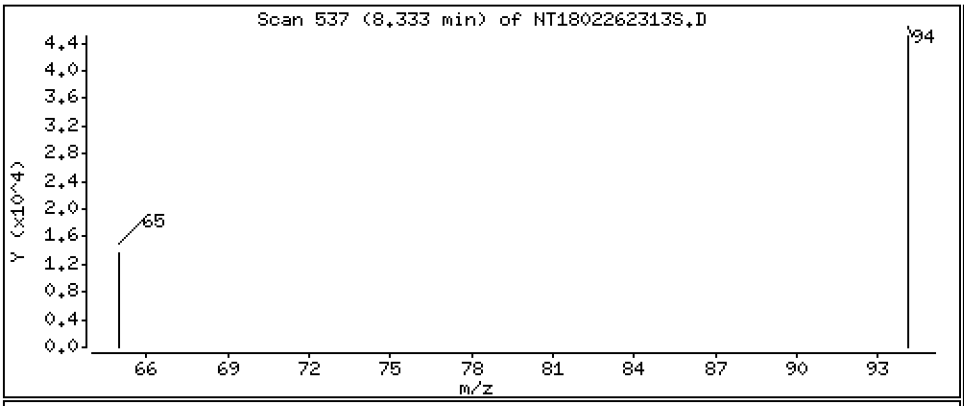
Operator: YZ

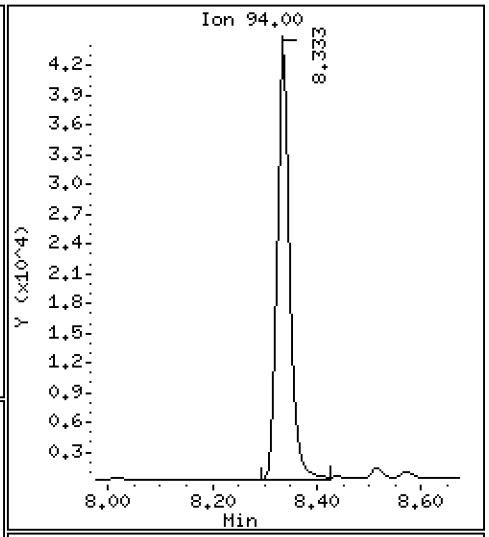
Column phase: ZB-5msi

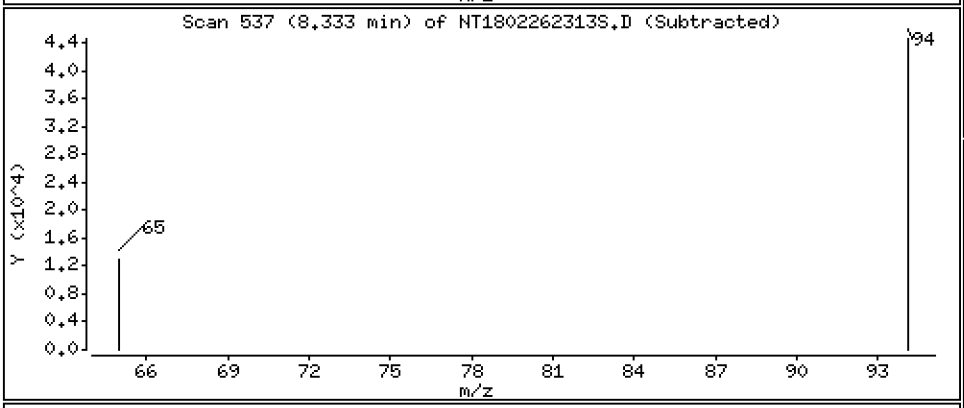
Column diameter: 0.25

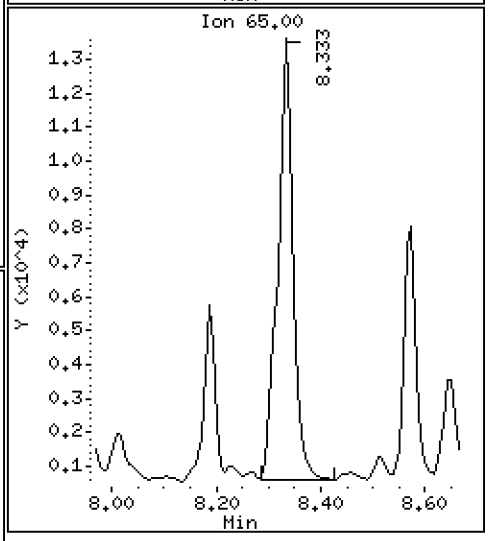
3 Phenol

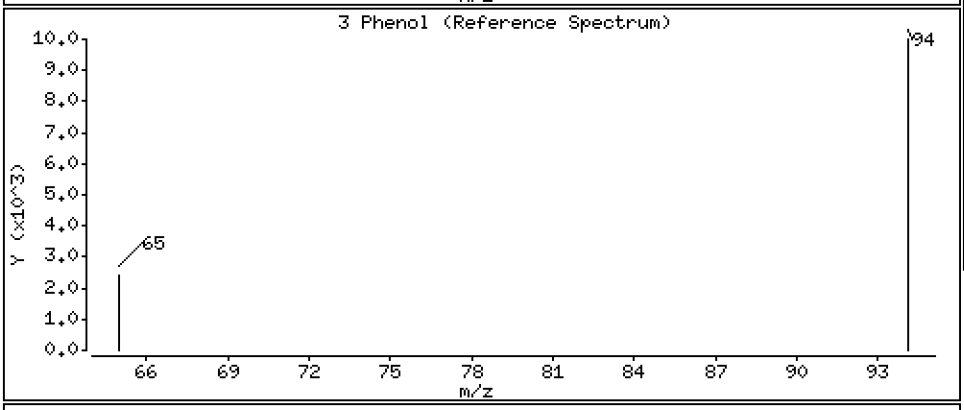
Concentration: 0.6032 ug/mL

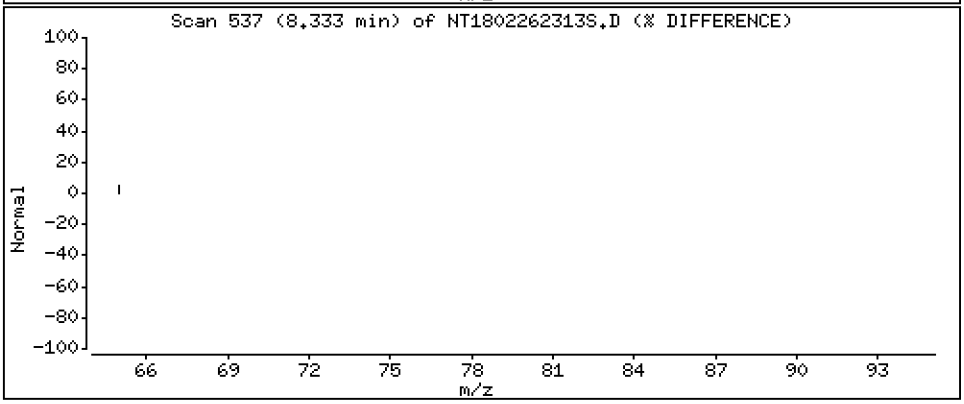












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262313S.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

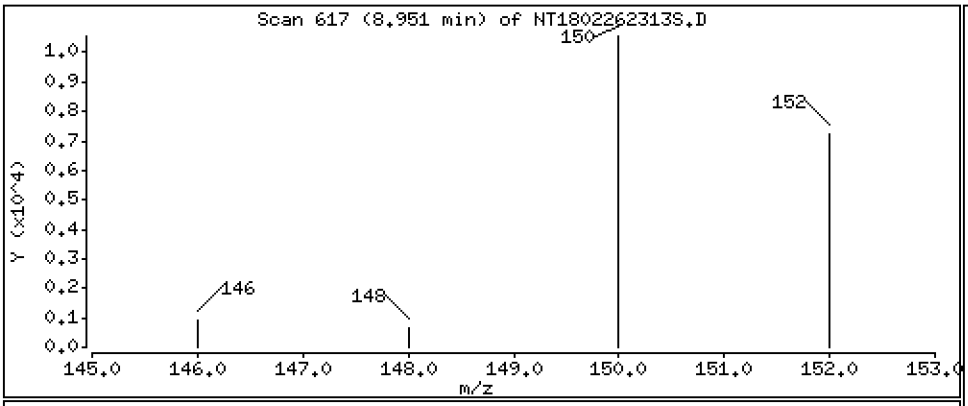
Operator: YZ

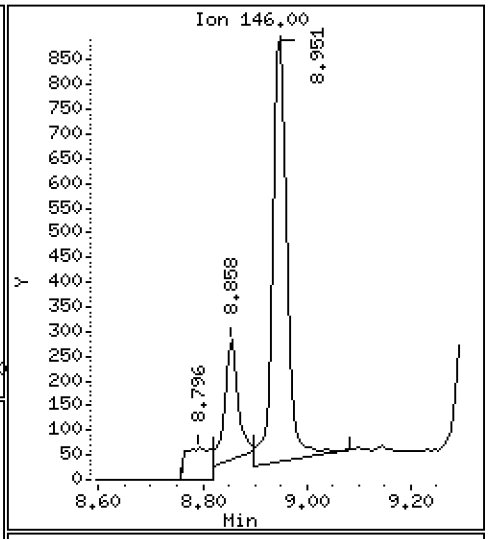
Column phase: ZB-5msi

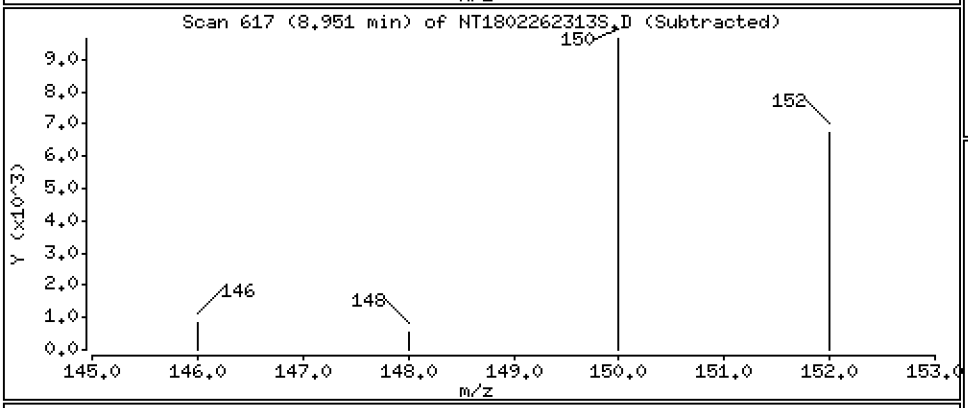
Column diameter: 0.25

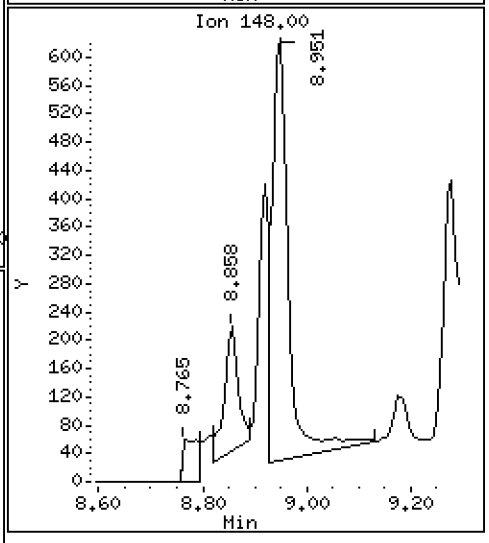
9 1,4-Dichlorobenzene

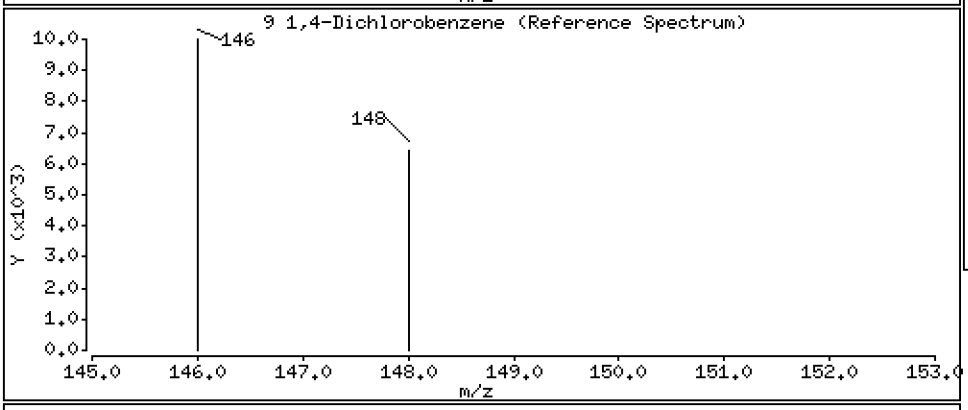
Concentration: 0.01271 ug/mL

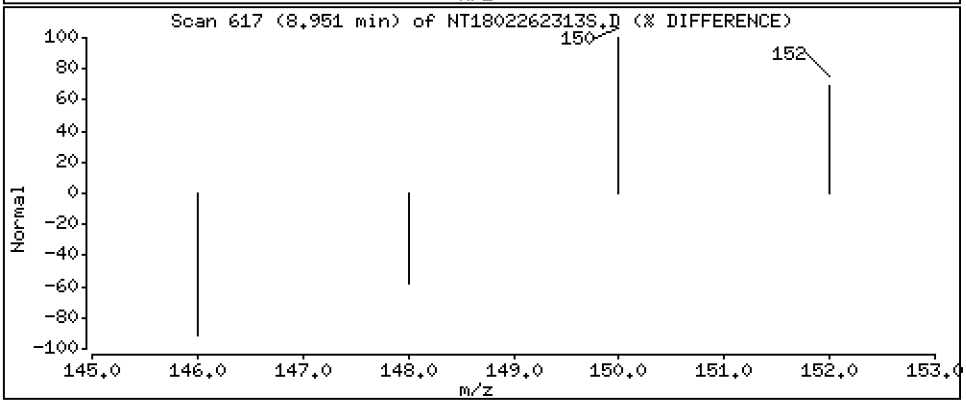












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262313S.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

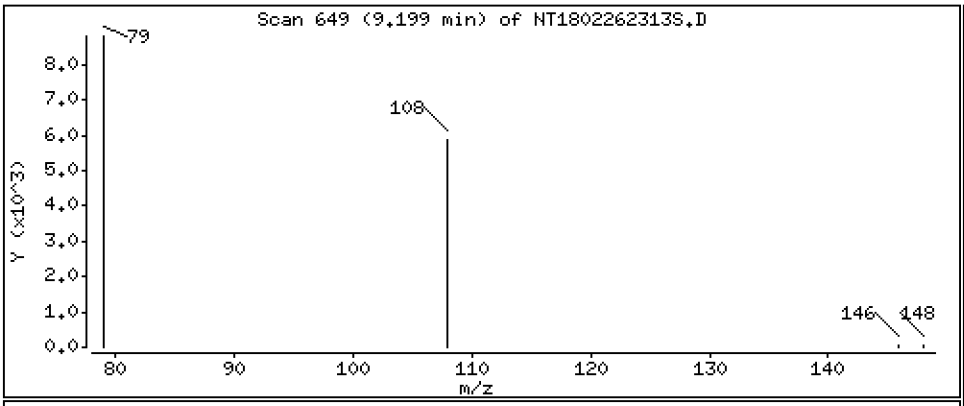
Operator: YZ

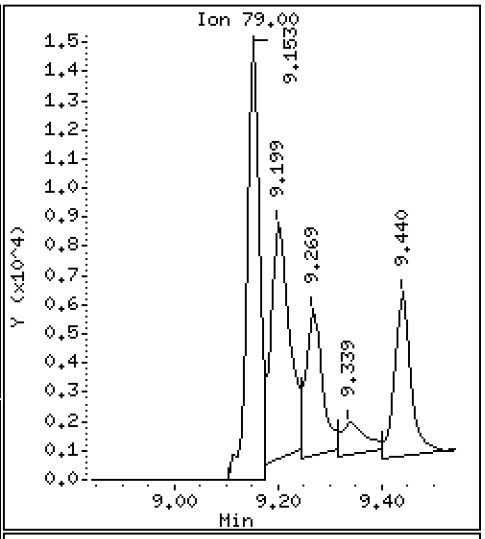
Column phase: ZB-5msi

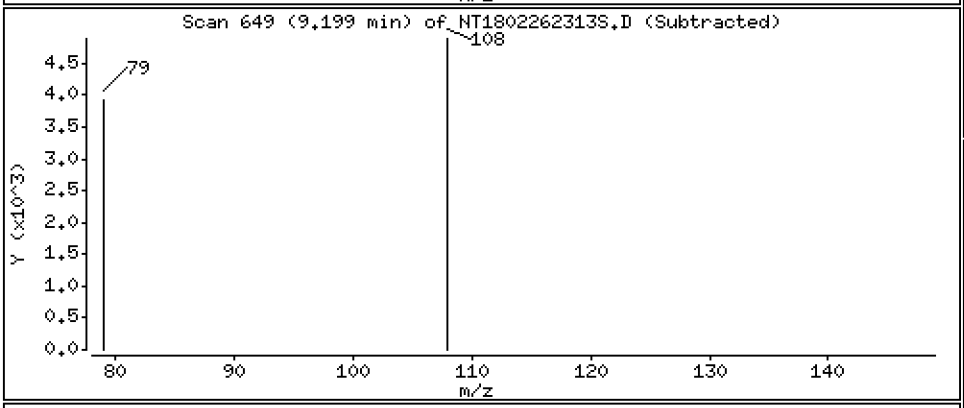
Column diameter: 0.25

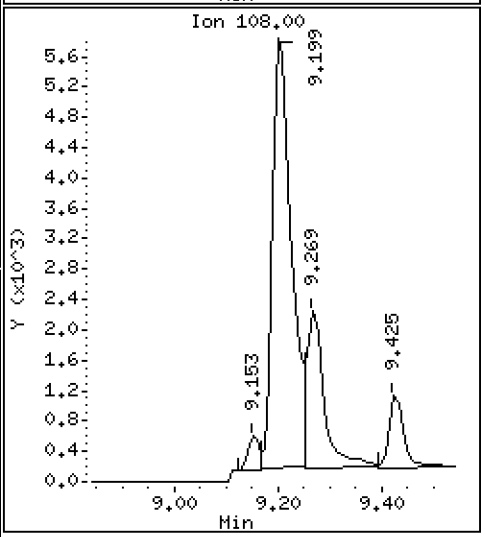
11 Benzyl alcohol

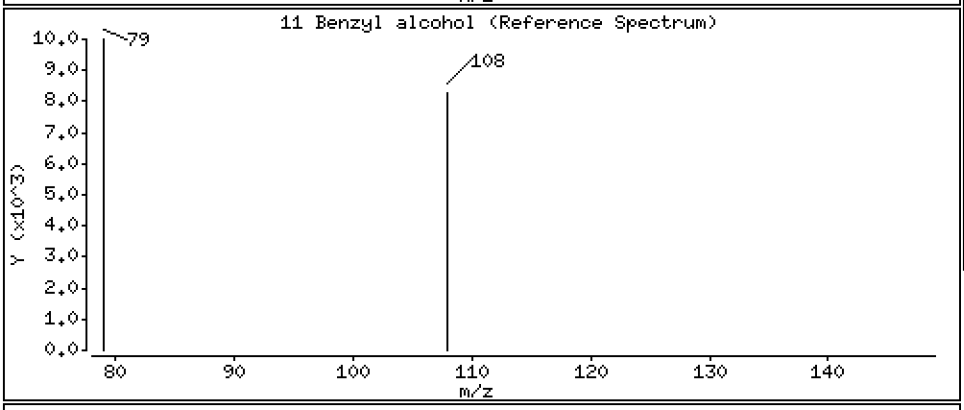
Concentration: 0.2665 ug/mL

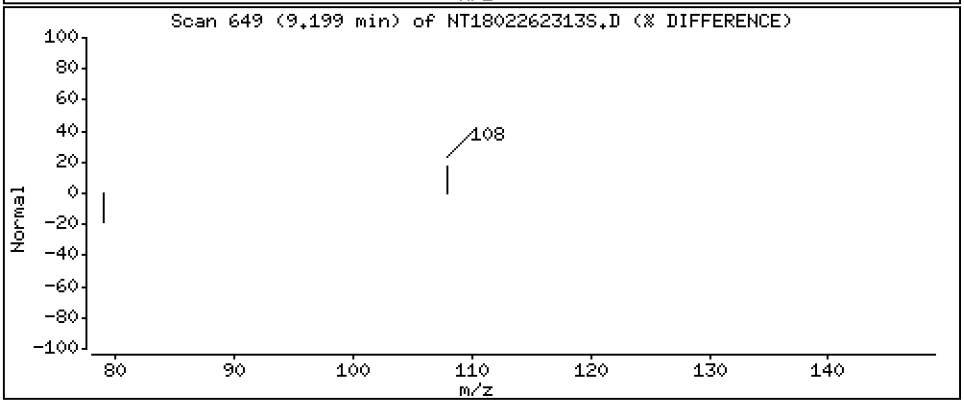












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262313S.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

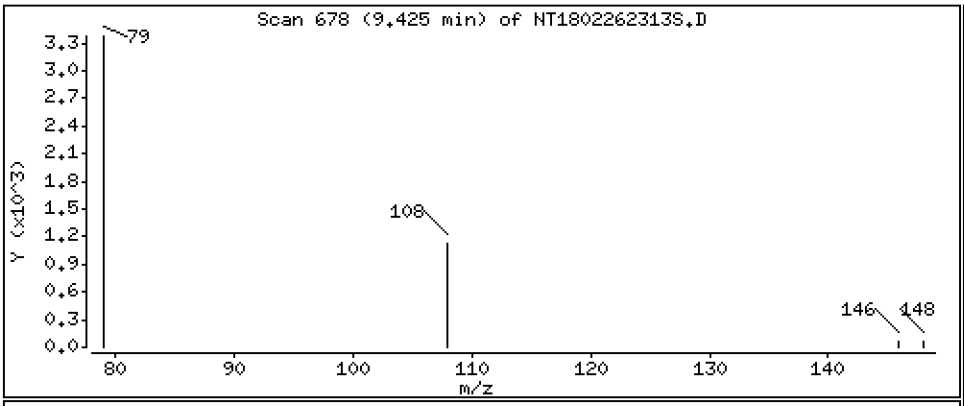
Operator: YZ

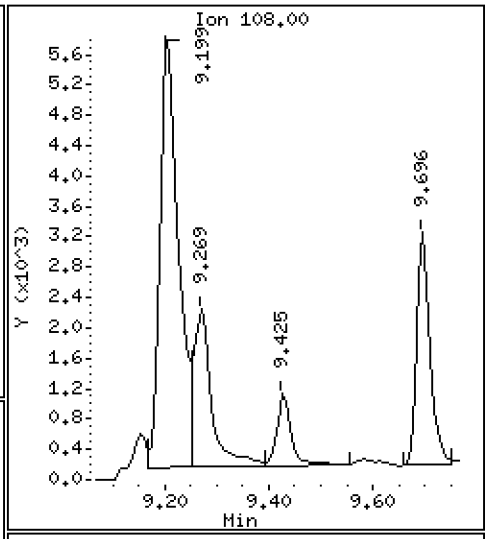
Column phase: ZB-5msi

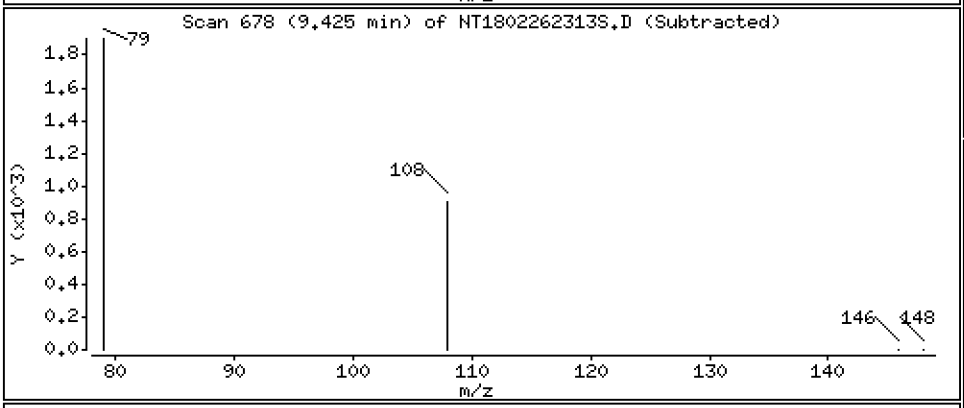
Column diameter: 0.25

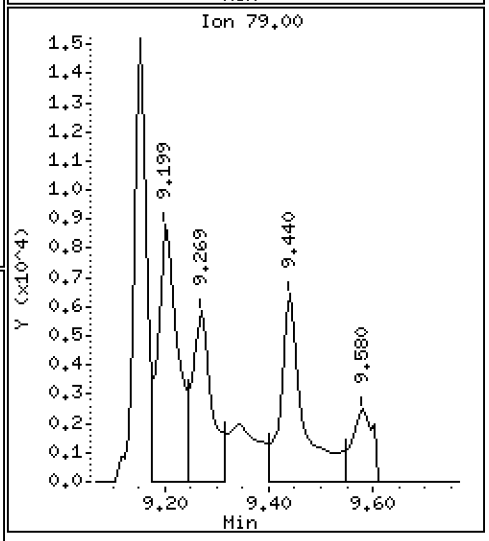
13 2-Methylphenol

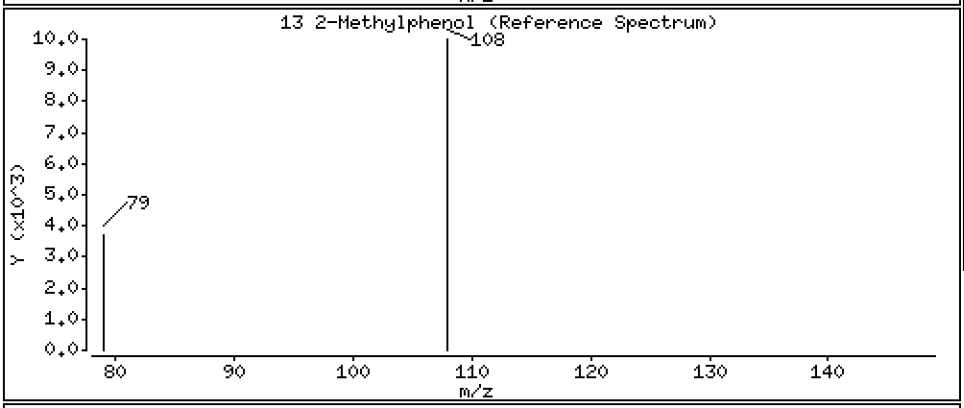
Concentration: 0.01810 ug/mL

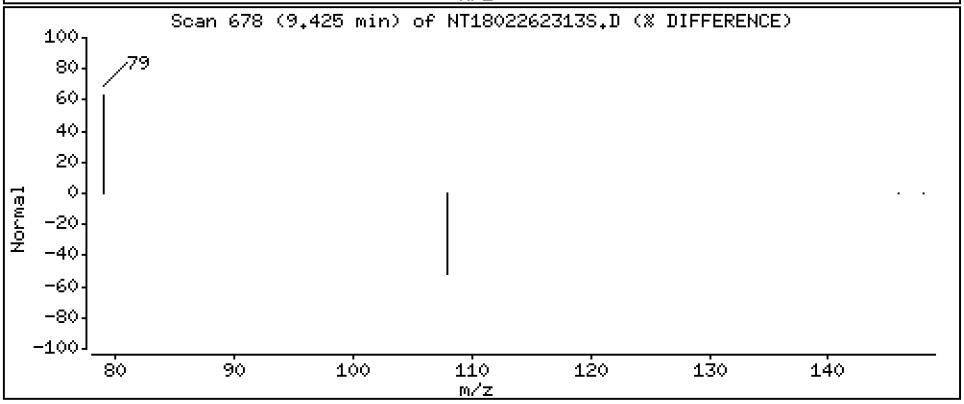












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262313S.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

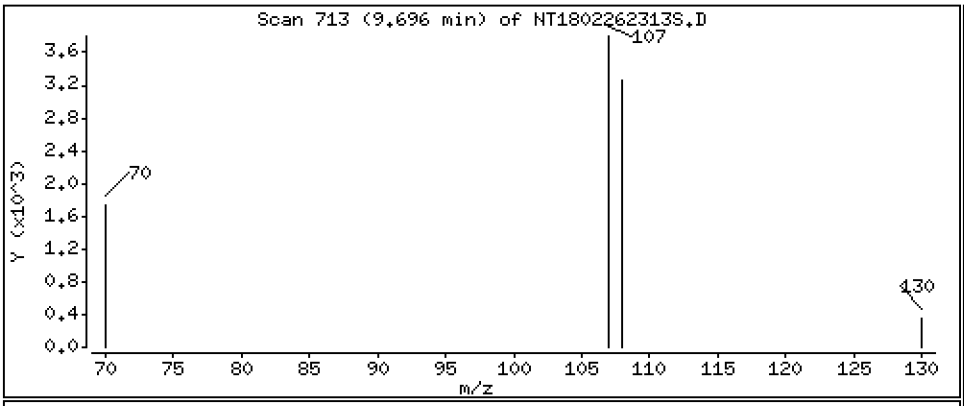
Operator: YZ

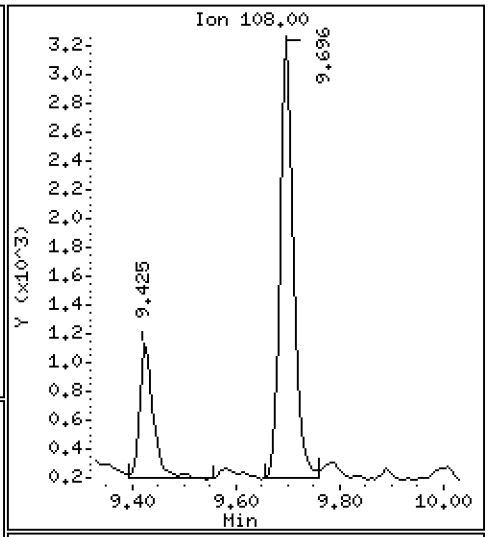
Column phase: ZB-5msi

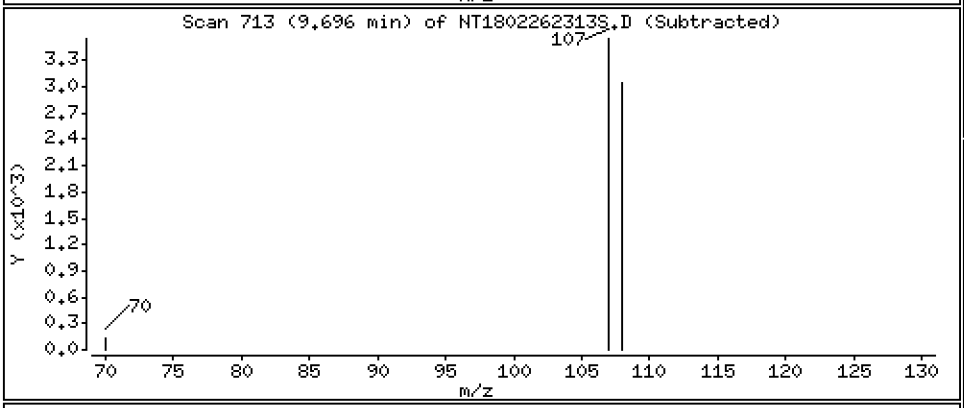
Column diameter: 0.25

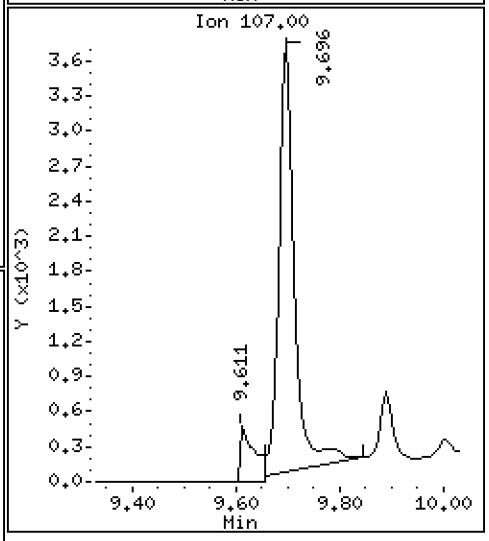
15 4-Methylphenol

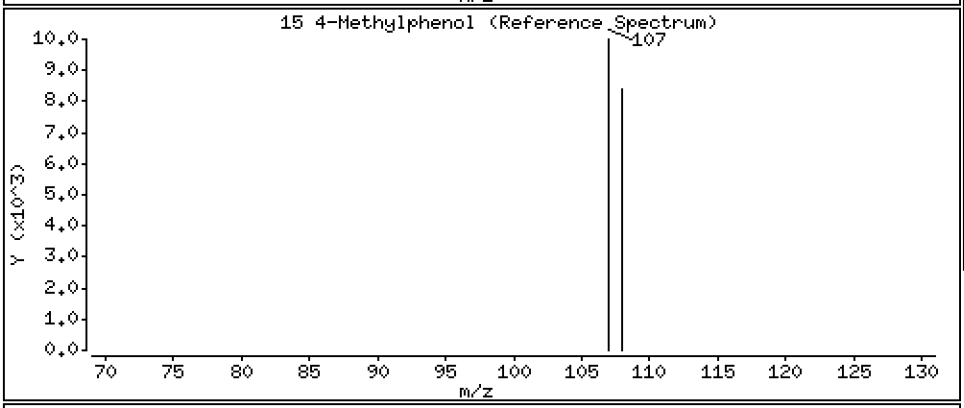
Concentration: 0.05667 ug/mL

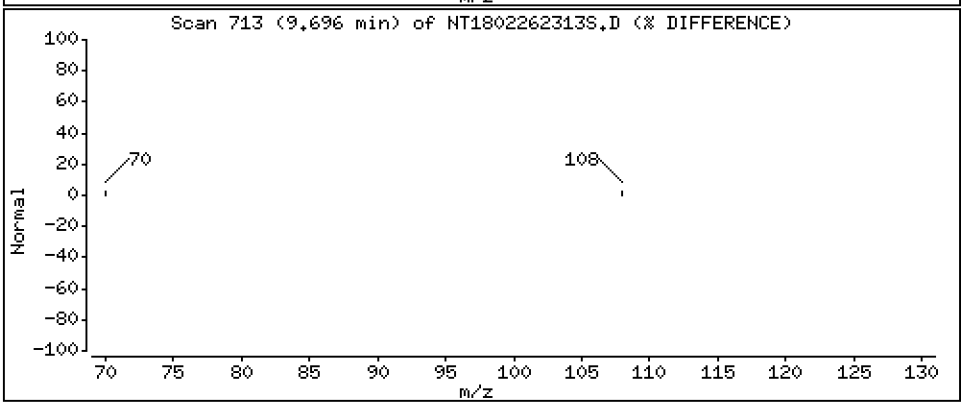












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623135.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

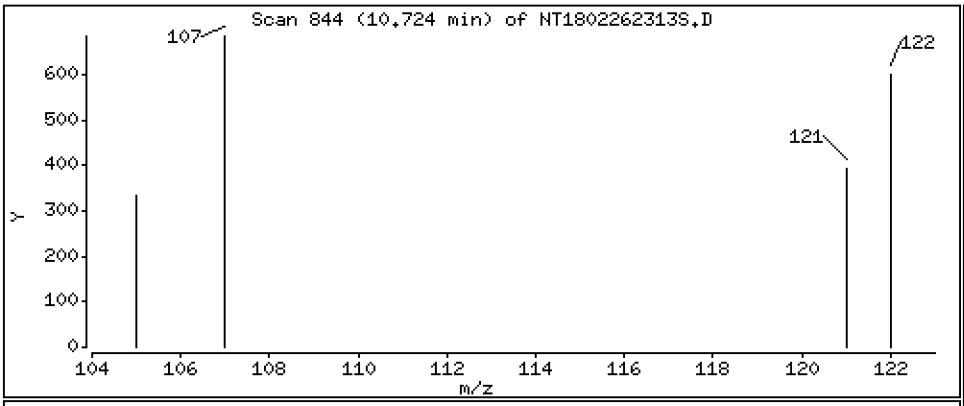
Operator: YZ

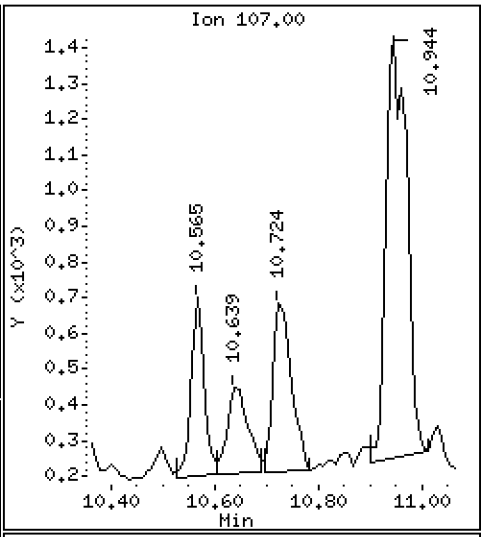
Column phase: ZB-5msi

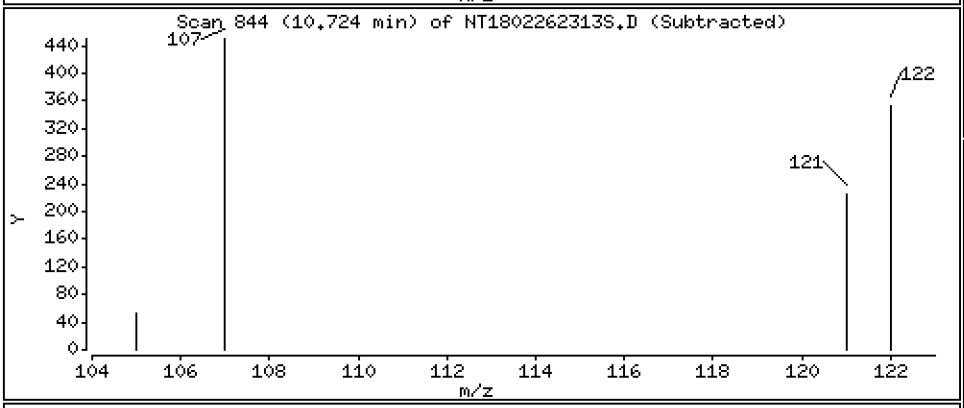
Column diameter: 0.25

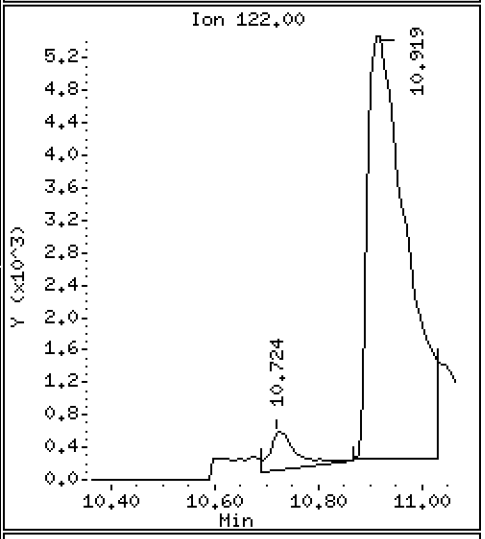
22 2,4-Dimethylphenol

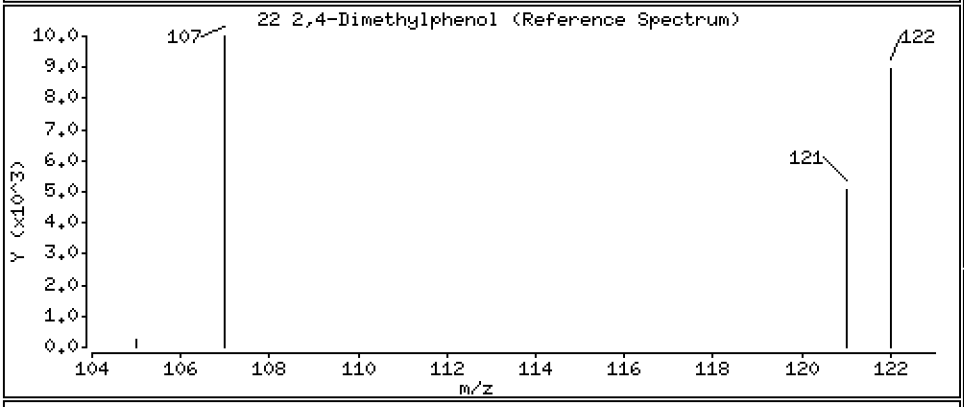
Concentration: 0.01253 ug/mL

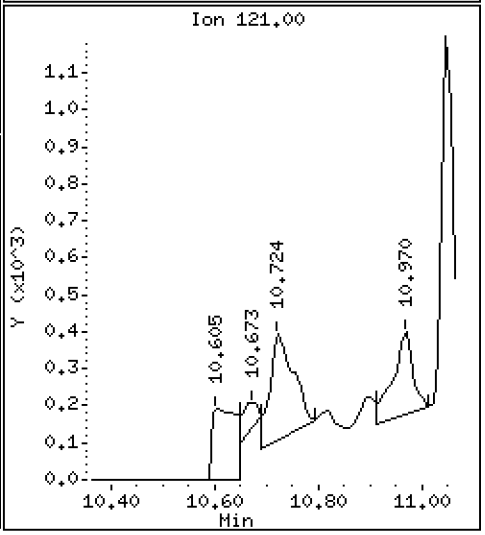


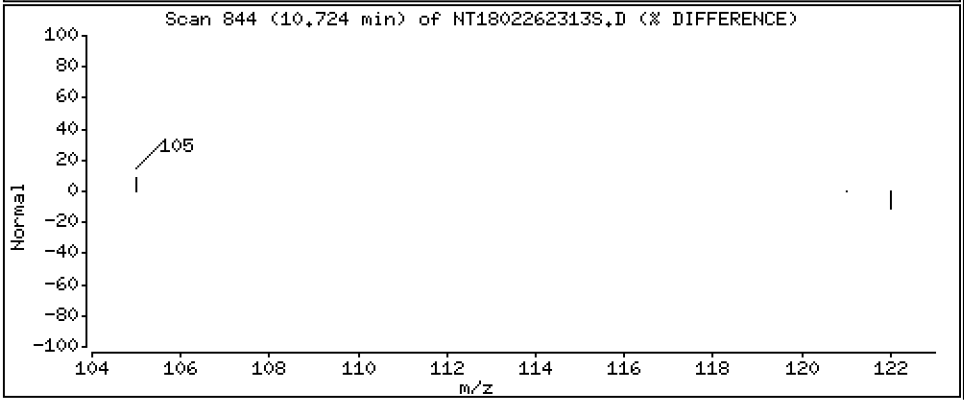












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262313S.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

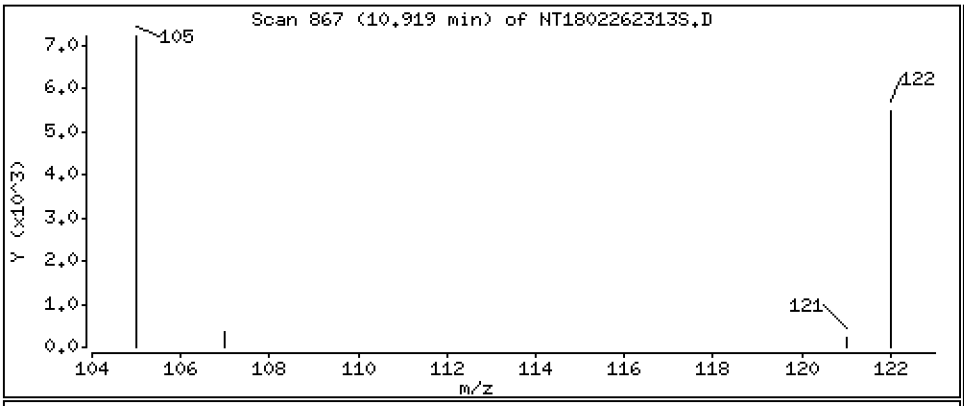
Operator: YZ

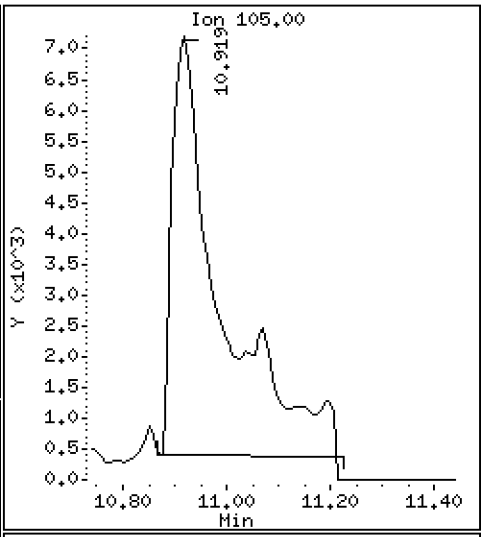
Column phase: ZB-5msi

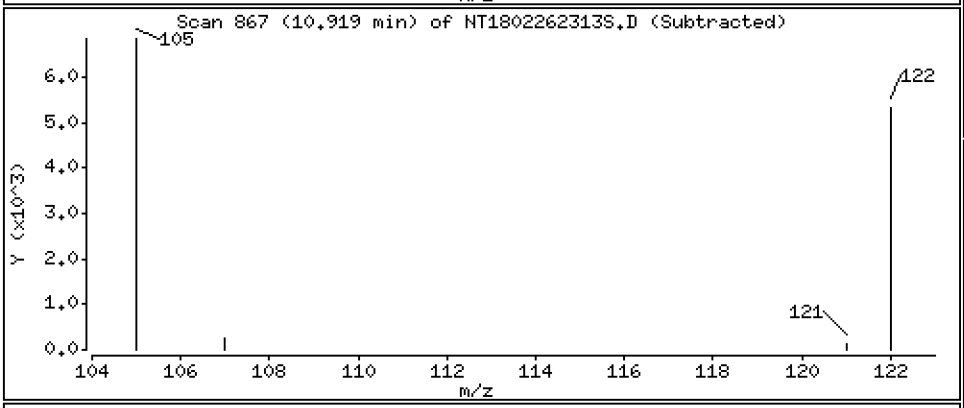
Column diameter: 0.25

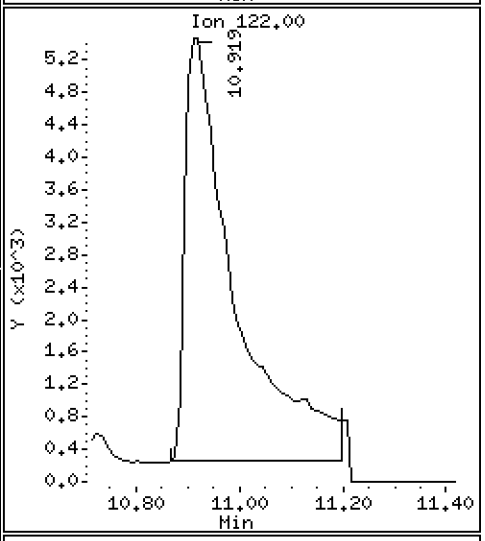
24 Benzoic acid

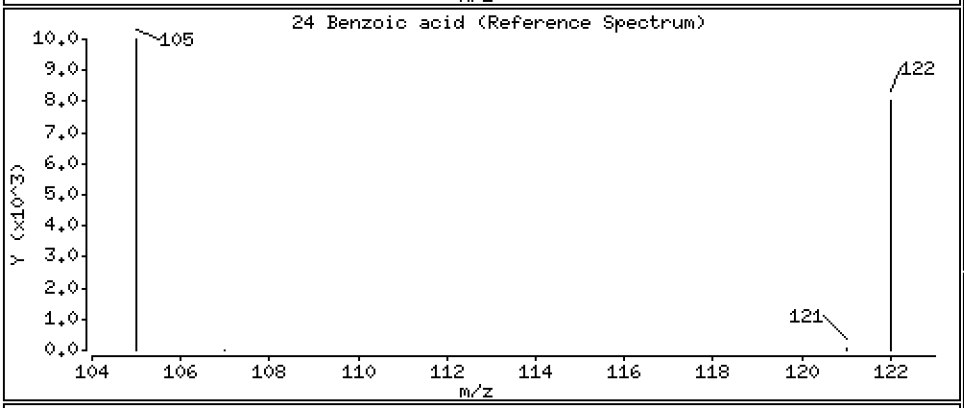
Concentration: 1.149 ug/mL

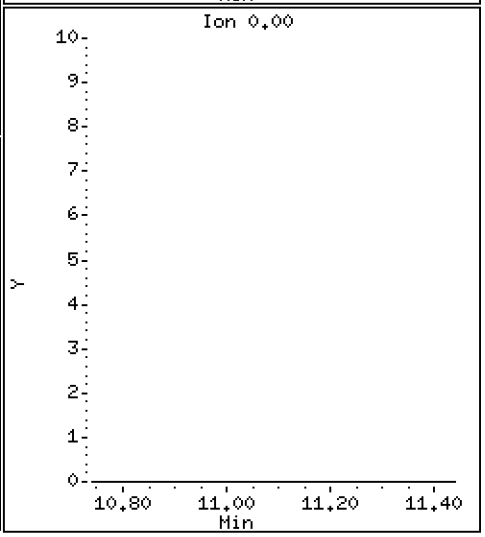


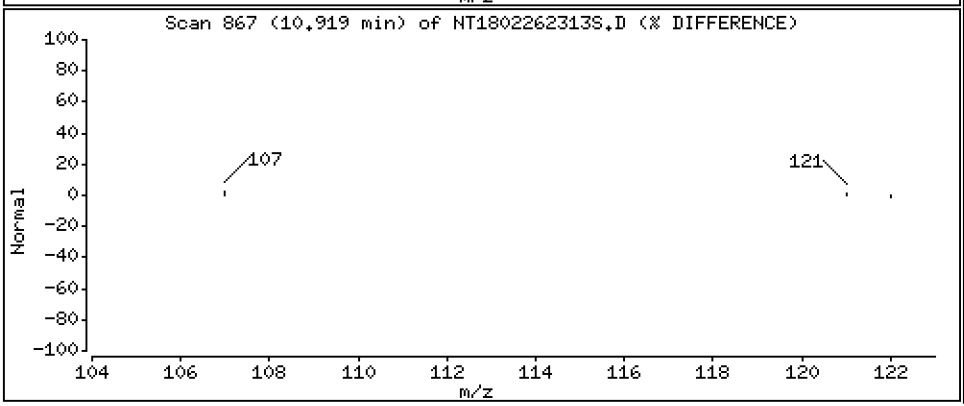












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262313S.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

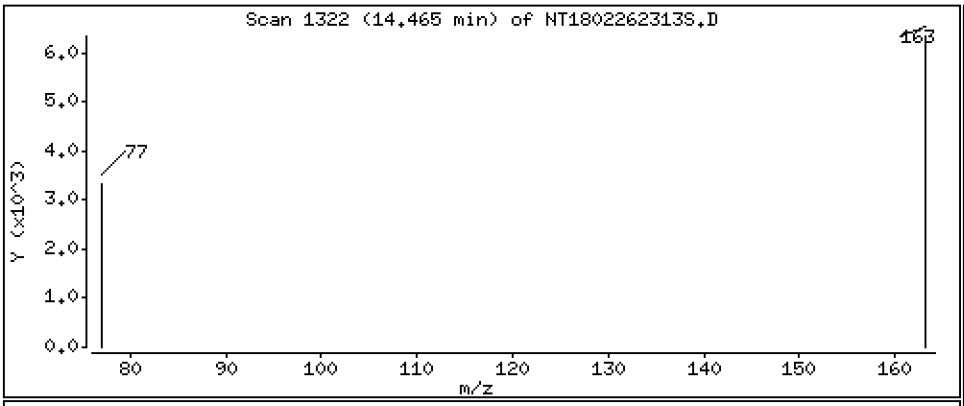
Operator: YZ

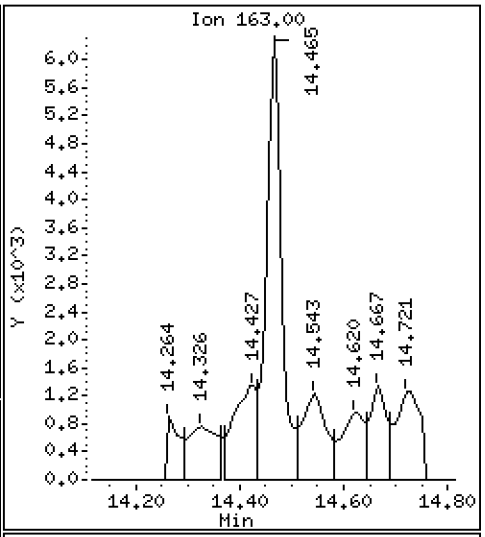
Column phase: ZB-5msi

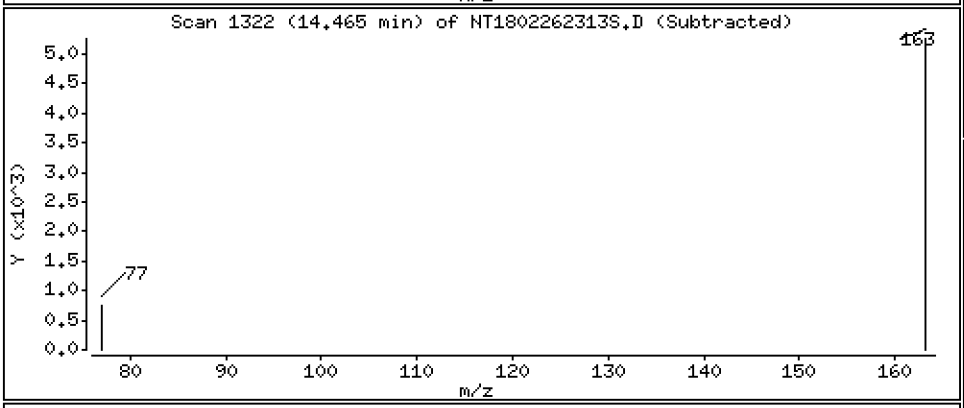
Column diameter: 0.25

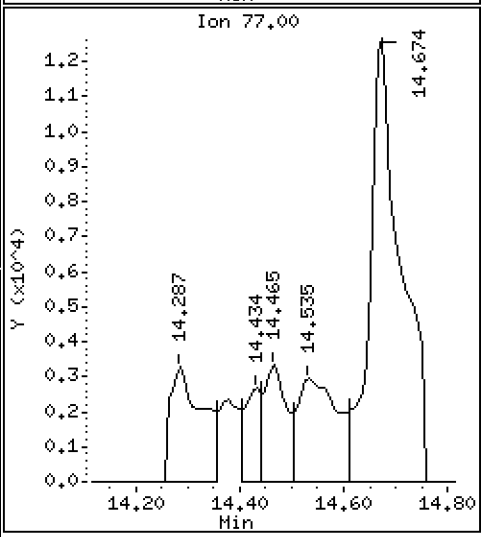
39 Dimethylphthalate

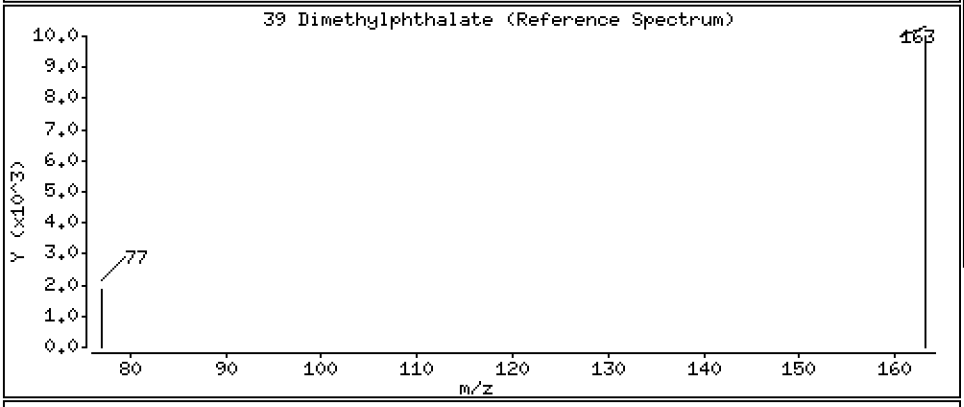
Concentration: 0.05894 ug/mL

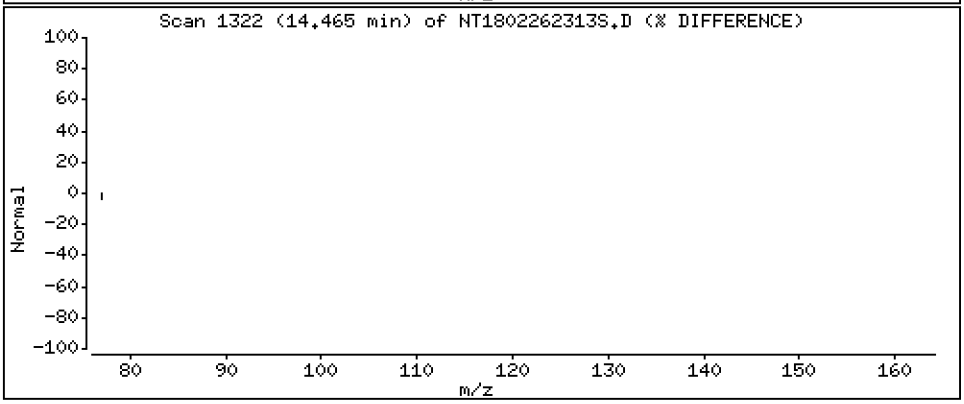












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262313S.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

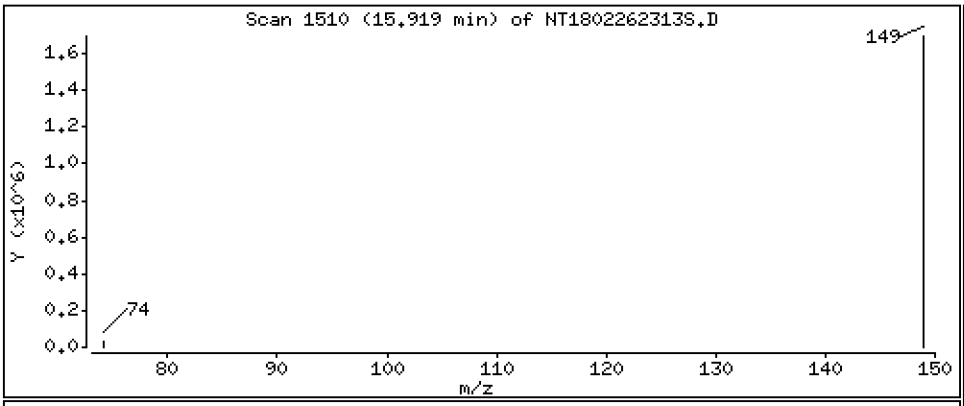
Operator: YZ

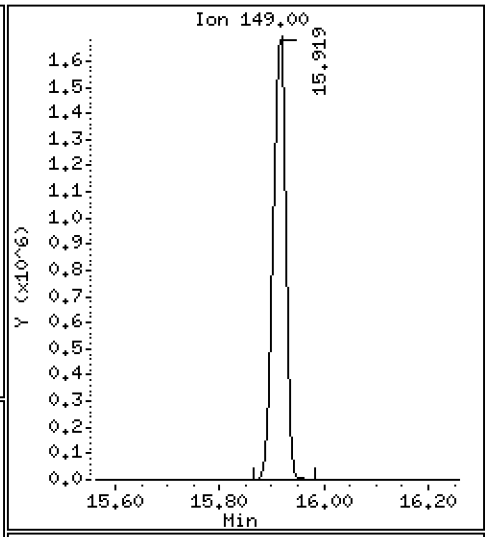
Column phase: ZB-5msi

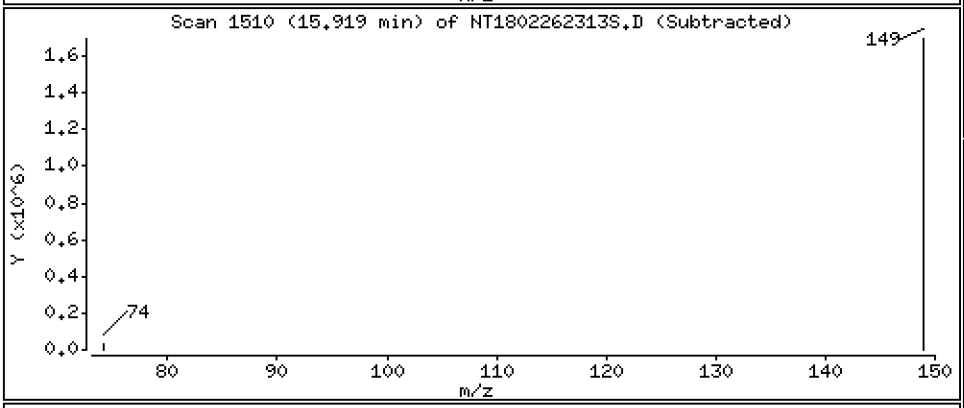
Column diameter: 0.25

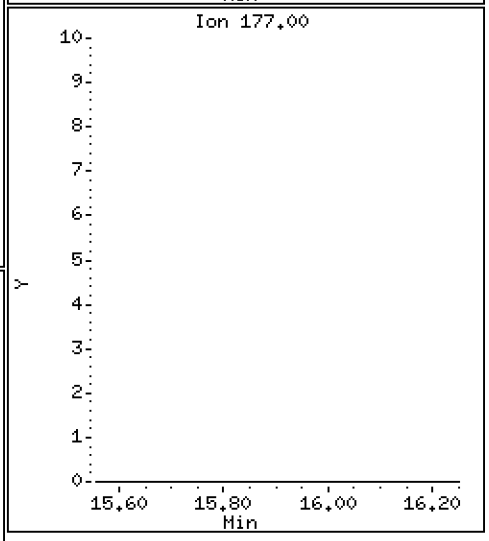
50 Diethylphthalate

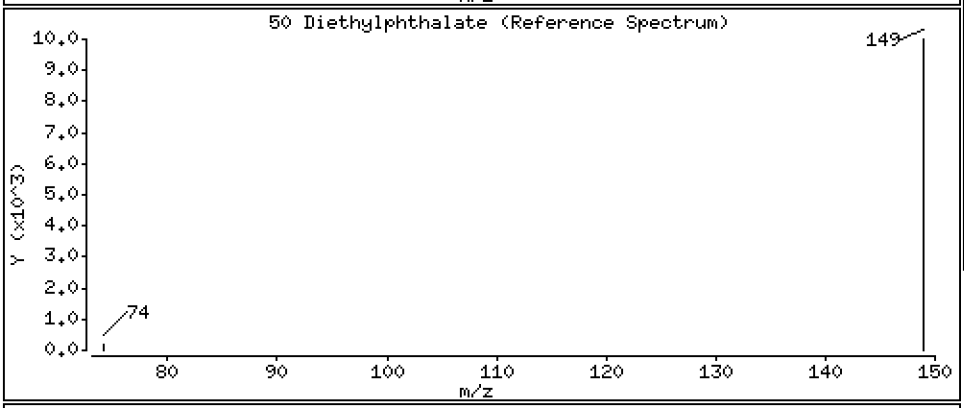
Concentration: 14.02 ug/mL

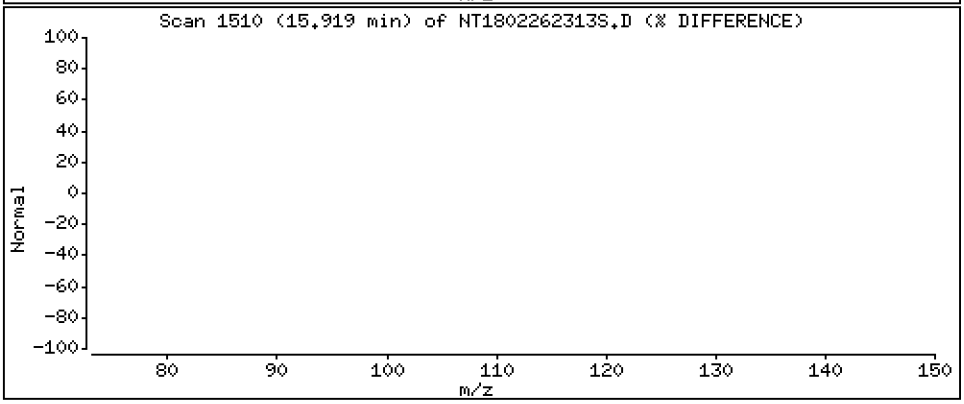












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262313S.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

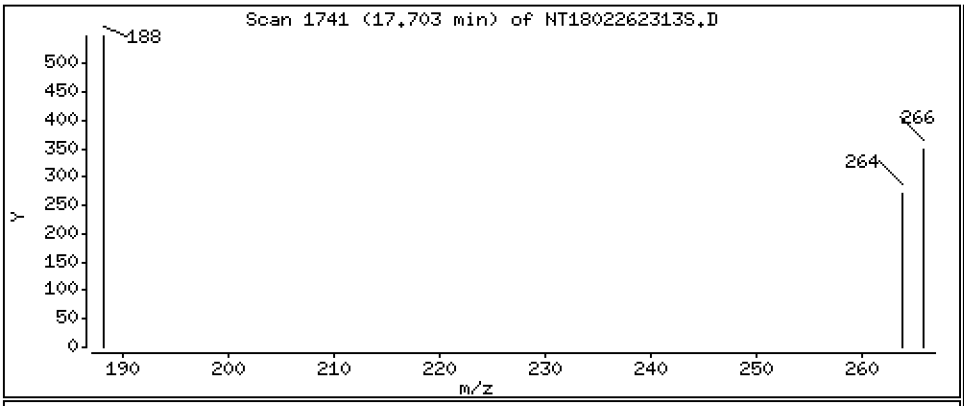
Operator: YZ

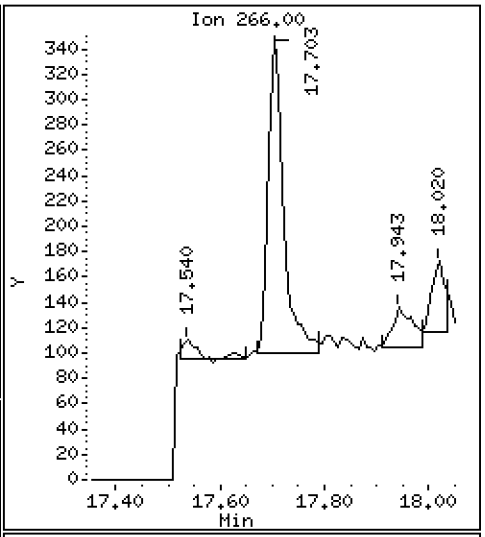
Column phase: ZB-5msi

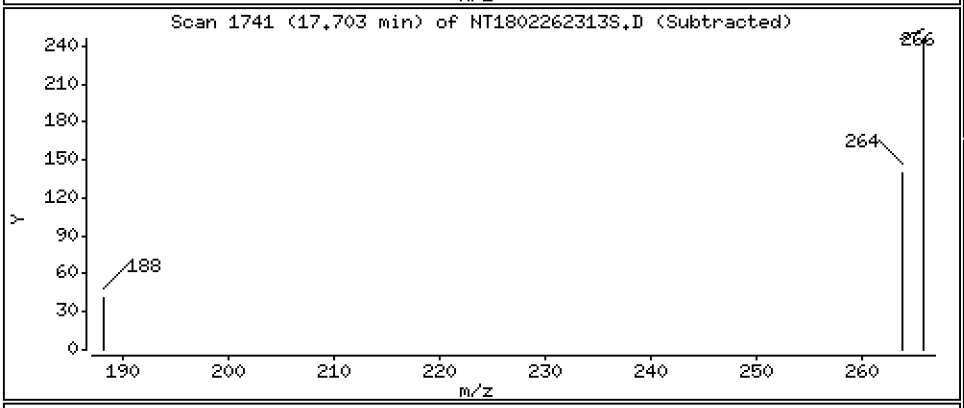
Column diameter: 0.25

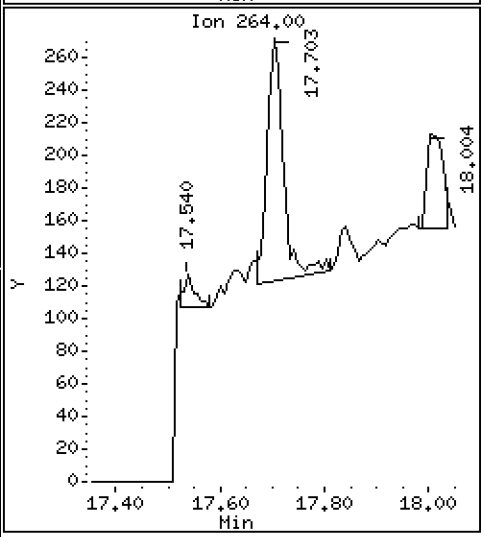
58 Pentachlorophenol

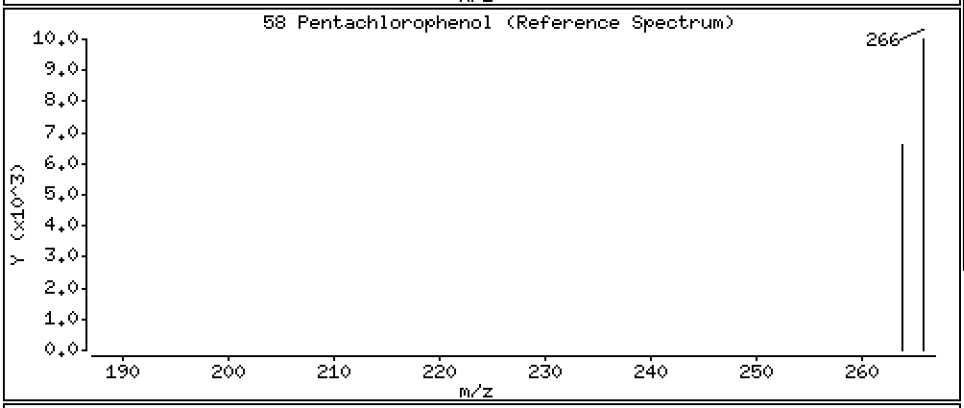
Concentration: 0.02062 ug/mL

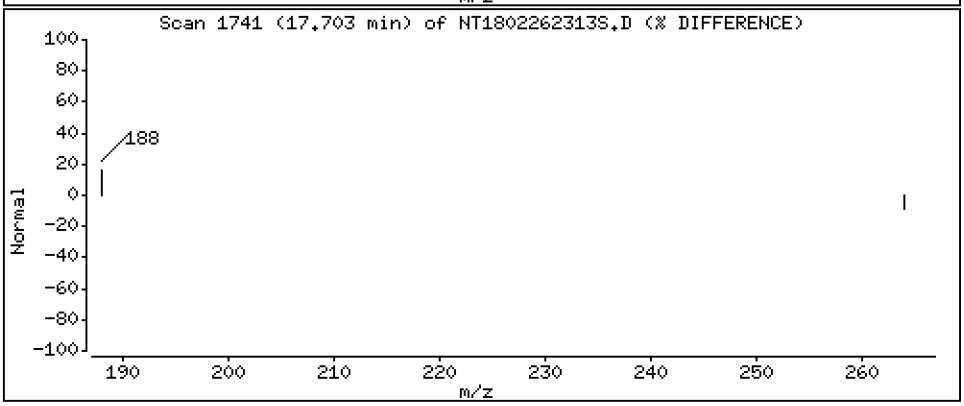












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Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

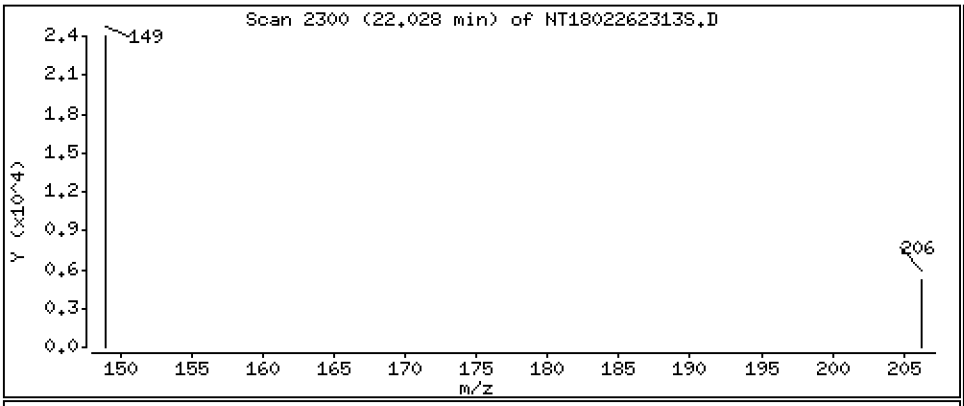
Operator: YZ

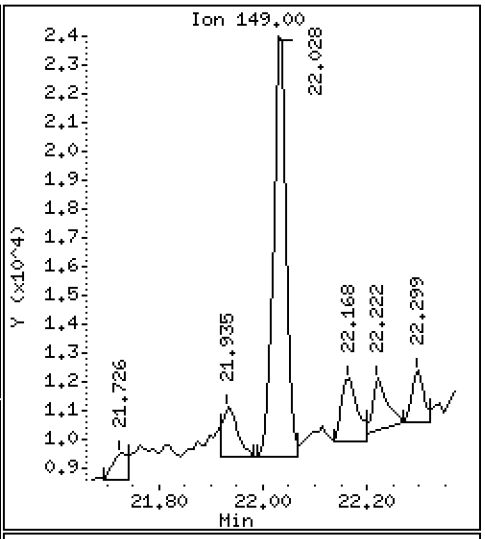
Column phase: ZB-5msi

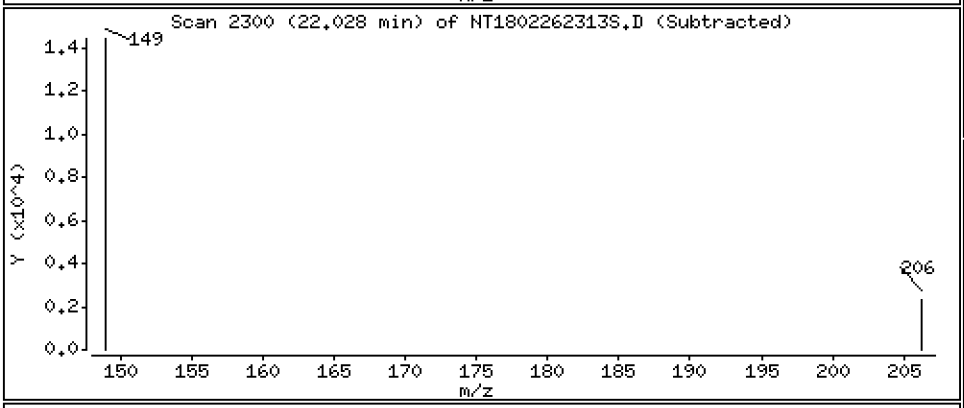
Column diameter: 0.25

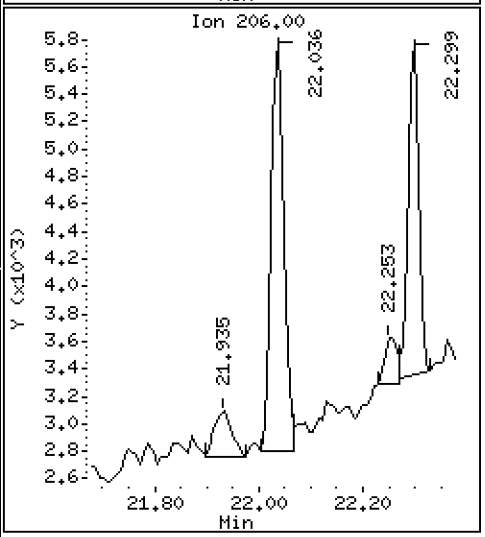
67 Butylbenzylphthalate

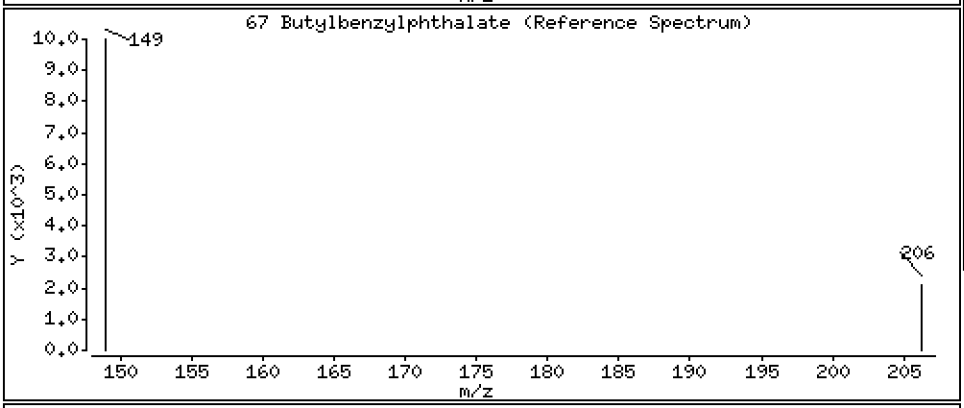
Concentration: 0.1225 ug/mL

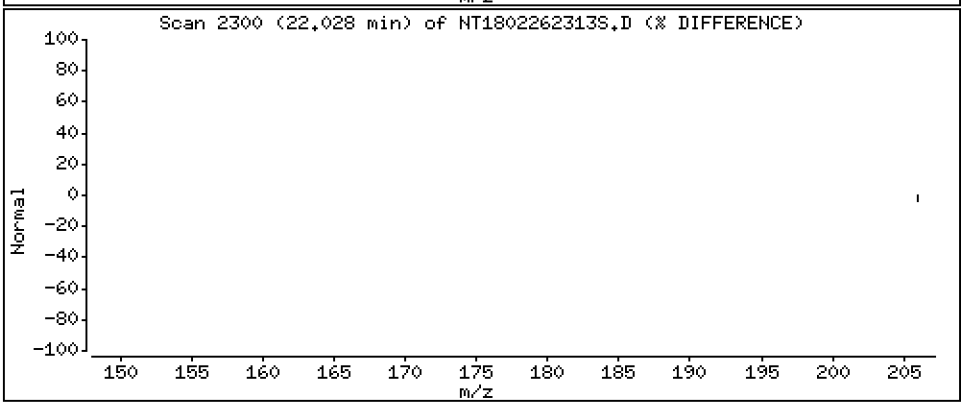












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262313S.D

Date : 26-FEB-2023 19:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-04

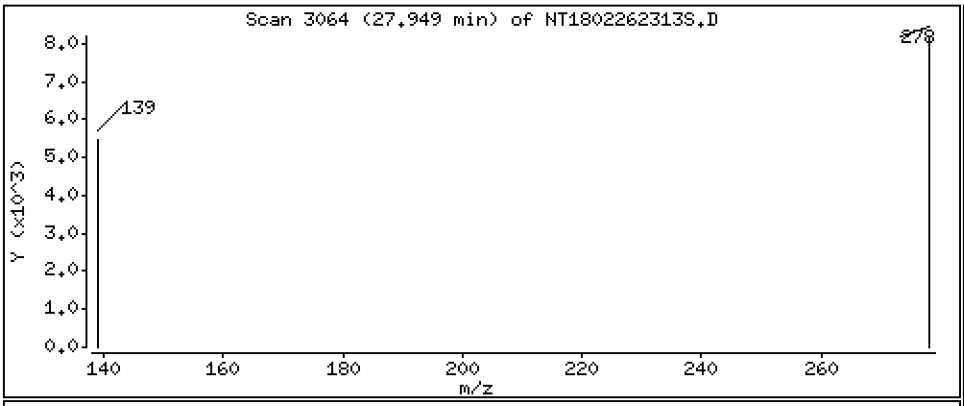
Operator: YZ

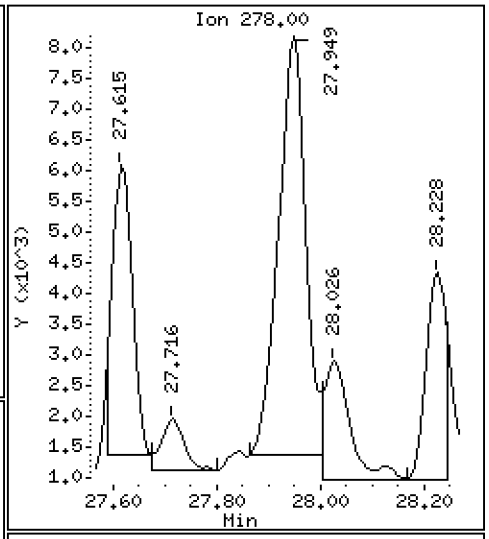
Column phase: ZB-5msi

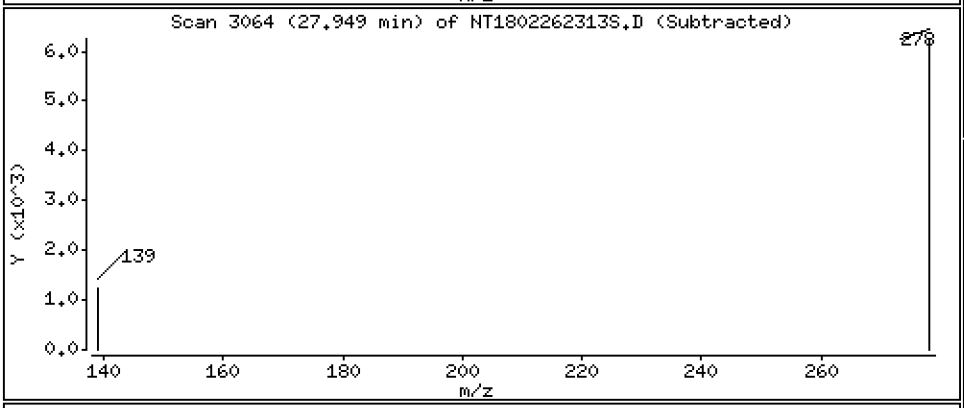
Column diameter: 0.25

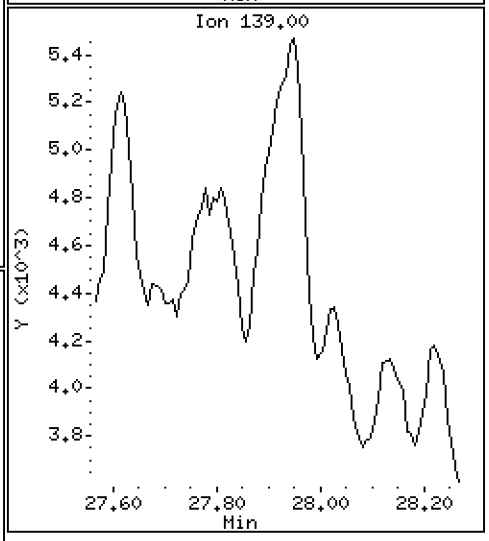
79 Dibenzo(a,h)anthracene

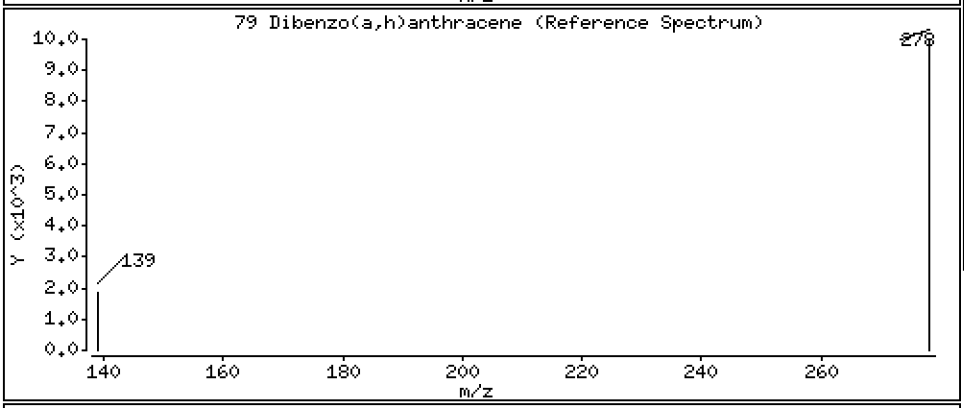
Concentration: 0.07961 ug/mL

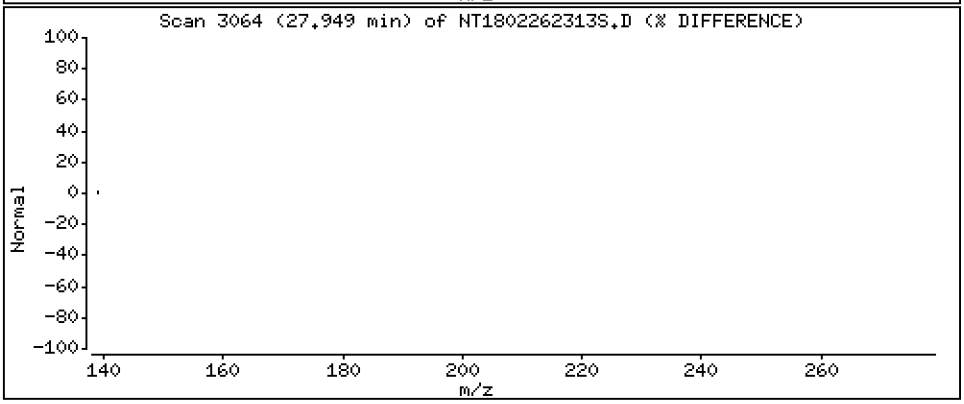












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262313S.D
Lab Smp Id: 23A0134-04
Inj Date : 26-FEB-2023 19:53
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-04
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.764	6.748	(0.758)	489550	5.31991	5.320(R)
	3	Phenol	94	8.332	8.324	(0.934)	72416	0.60323	0.6032
	7	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8	1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	285118	4.00000	
	9	1,4-Dichlorobenzene	146	8.951	8.943	(1.003)	1596	0.01271	0.01271
	11	Benzyl alcohol	79	9.199	9.191	(1.031)	20514	0.26654	0.2665(H)
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	13	2-Methylphenol	108	9.424	9.416	(1.057)	1787	0.01810	0.01810
	15	4-Methylphenol	108	9.696	9.680	(1.087)	5613	0.05667	0.05667
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	10.723	10.715	(0.943)	1192	0.01253	0.01253
	24	Benzoic acid	105	10.919	11.088	(0.960)	44212	1.14949	1.149(M)
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.370	11.370	(1.000)	1066525	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	14.465	14.465	(0.968)	12587	0.05894	0.05894
*	42	Acenaphthene-d10	162	14.945	14.945	(1.000)	555873	4.00000	
	50	Diethylphthalate	149	15.919	15.911	(1.065)	2736072	14.0203	14.02
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	17.702	17.702	(0.986)	489	0.02062	0.02062
*	59	Phenanthrene-d10	188	17.957	17.950	(1.000)	1166366	4.00000	
$	66	Terphenyl-d14	244	21.122	21.091	(0.919)	901021	4.06087	4.061(R)
	67	Butylbenzylphthalate	149	22.028	22.020	(0.958)	24847	0.12250	0.1225
*	69	Chrysene-d12	240	22.996	22.980	(1.000)	1225366	4.00000	
*	77	Perylene-d12	264	25.504	25.473	(1.000)	1058519	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.948	27.917	(1.096)	25038	0.07961	0.07961
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262313S.D
Lab Smp Id: 23A0134-04
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	285118	2.02
27 Naphthalene-d8	1065527	532764	2131054	1066525	0.09
42 Acenaphthene-d10	544290	272145	1088580	555873	2.13
59 Phenanthrene-d10	1003412	501706	2006824	1166366	16.24
69 Chrysene-d12	936975	468488	1873950	1225366	30.78
77 Perylene-d12	1057771	528886	2115542	1058519	0.07

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.07
77 Perylene-d12	25.47	24.97	25.97	25.50	0.12

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262313S.D

Lab ID: 23A0134-04
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 19:53

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.960	0.975	-0.0149	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

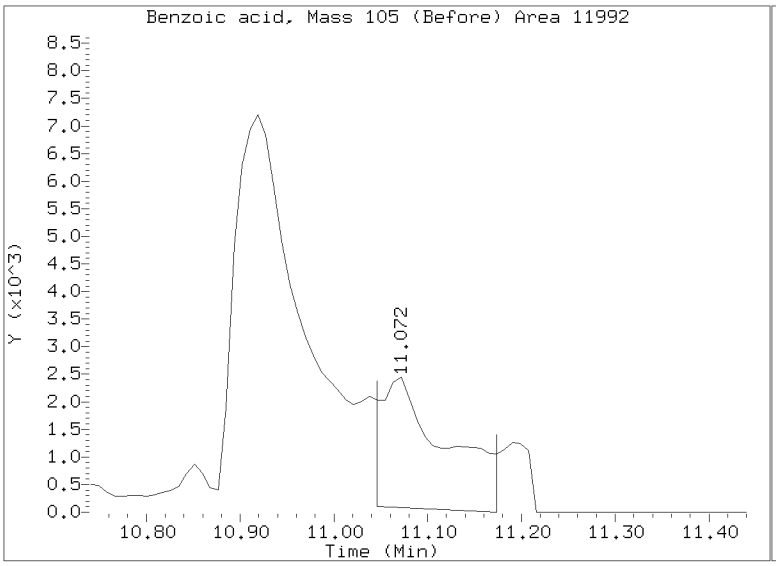
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

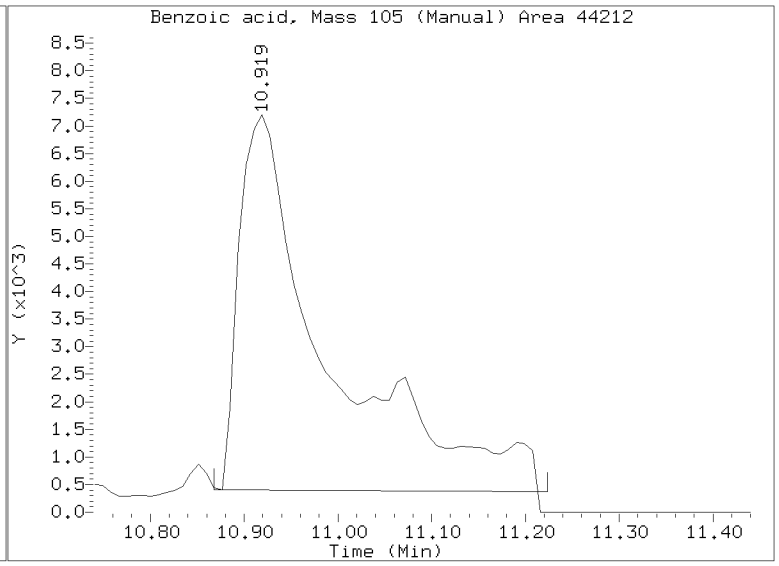
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/SIM.b/NT1802262313S.D
Injection Date: 26-FEB-2023 19:53
Lab ID:23A0134-04 Client ID:
Report Date: 03/24/2023 11:53





APPROVED

By Deenay Dunmore at 12:04 pm, Mar 24, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1173

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-05 C	SDG:	23A0134
Sampled:	01/06/23 11:22	Prepared:	01/19/23 13:35	File ID:	NT1802262314S.D
% Solids:	47.16	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 20:33
Batch:	BLA0410	Sequence:	SLC0389	Initial/Final:	21.82 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.5	J	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	4.9	U	0.7	4.9
100-51-6	Benzyl Alcohol	1	39.0		2.4	19.4
65-85-0	Benzoic acid	1	171	Q	13.0	97.2
105-67-9	2,4-Dimethylphenol	1	19.4	U	2.1	19.4
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	6.7	J	2.1	19.4

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	728.84	572	78.5	27 - 120	
p-Terphenyl-d14	485.89	410	84.5	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623145.D

Page 1

Date : 26-FEB-2023 20:33

Client ID:

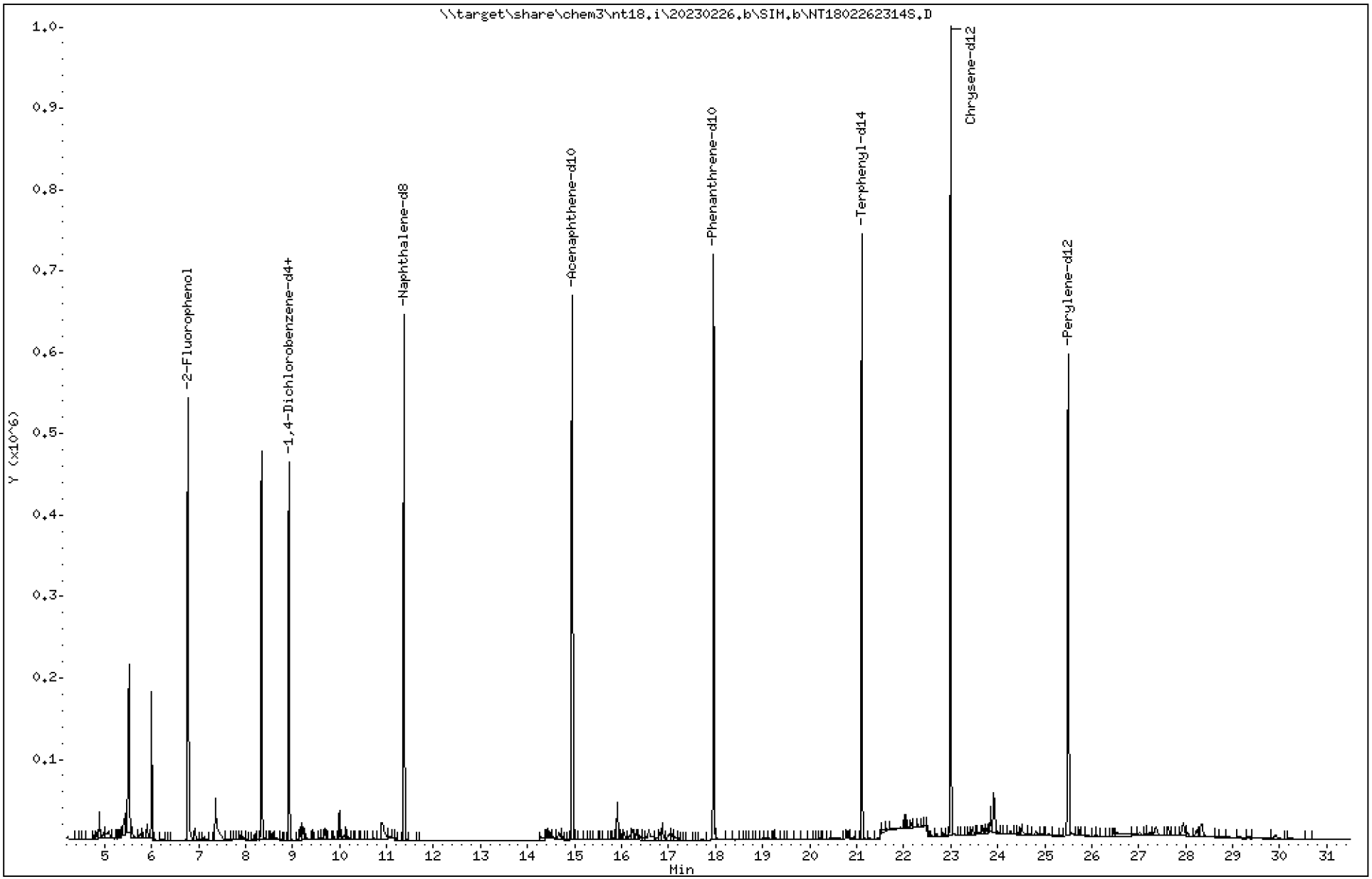
Instrument: nt18.i

Sample Info: 23A0134-05

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

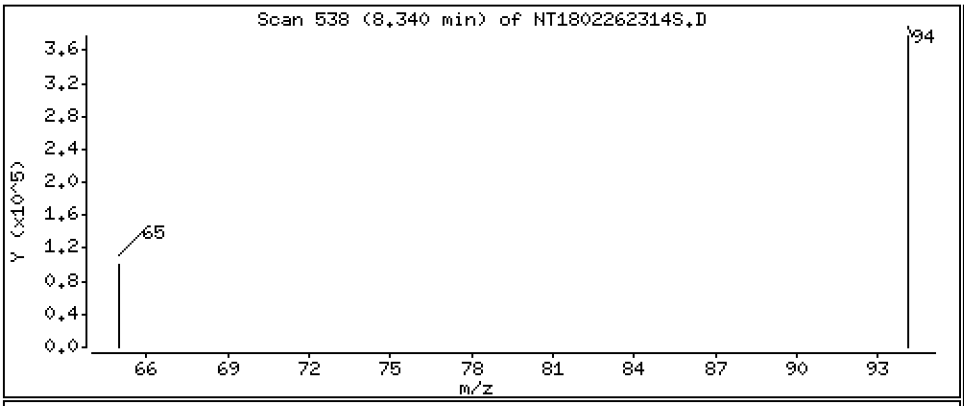
Operator: YZ

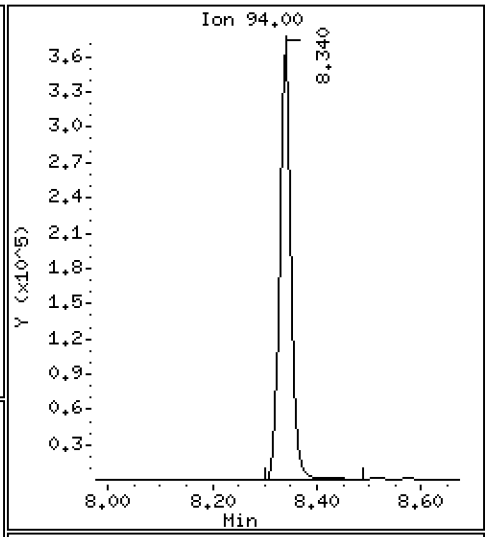
Column phase: ZB-5msi

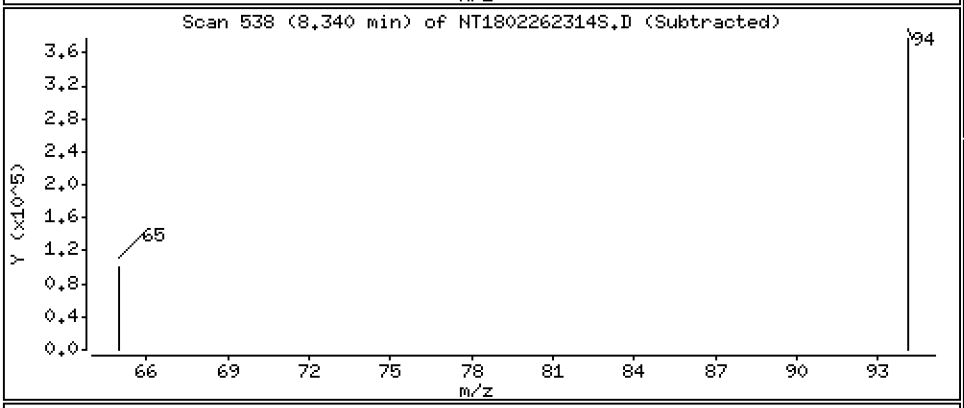
Column diameter: 0.25

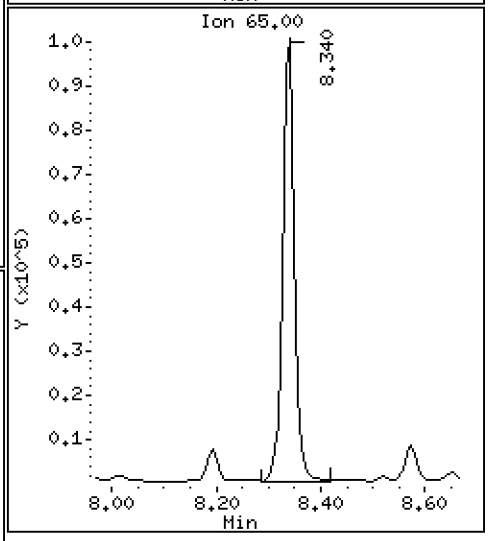
3 Phenol

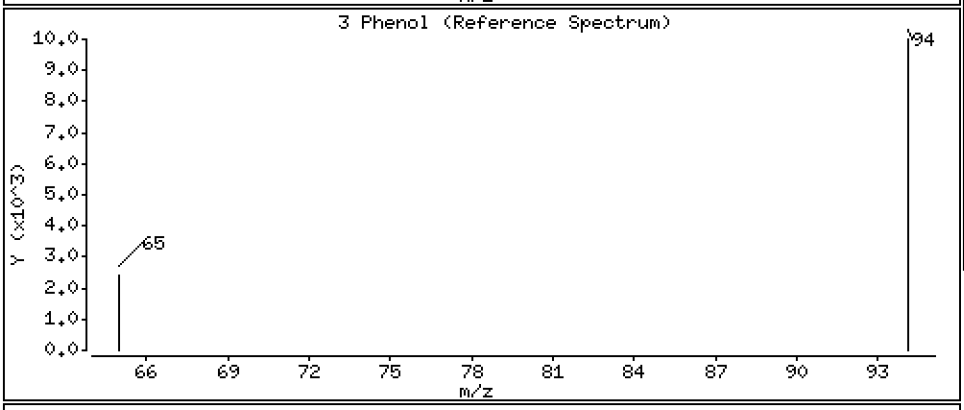
Concentration: 4.900 ug/mL

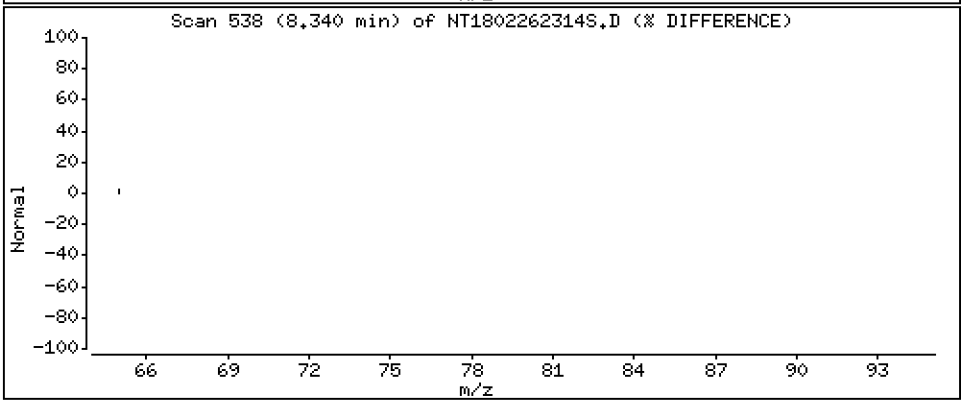












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623145.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

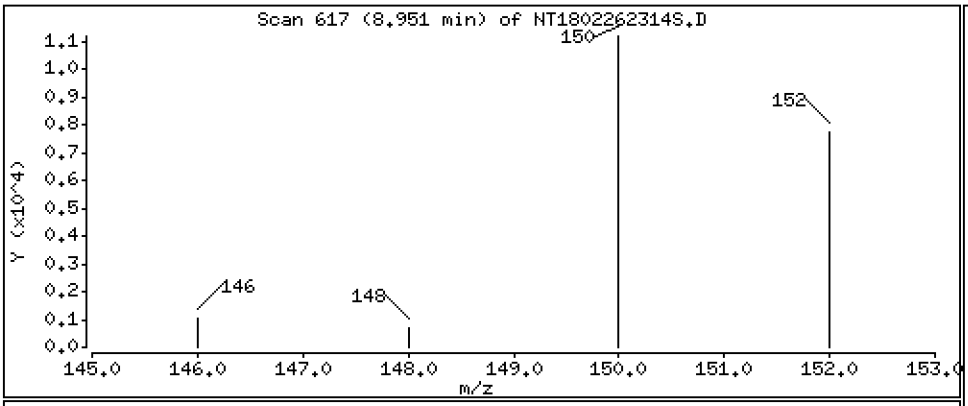
Operator: YZ

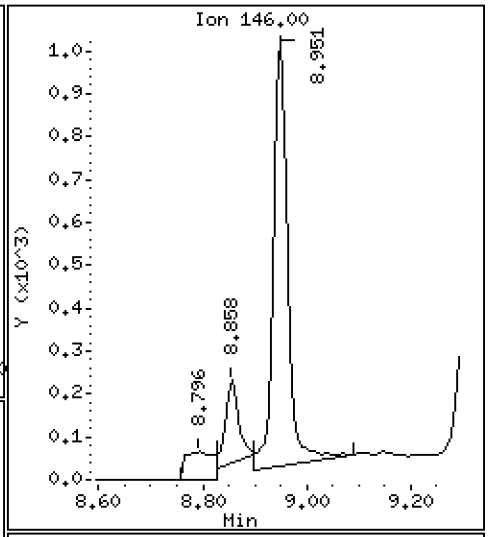
Column phase: ZB-5msi

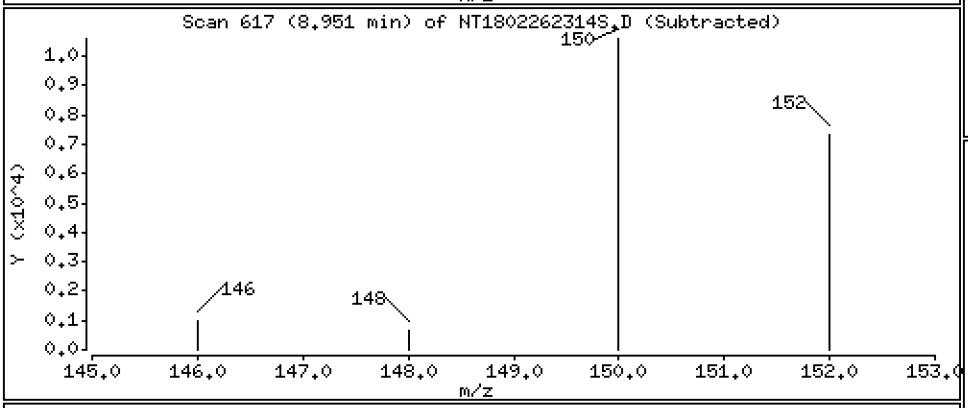
Column diameter: 0.25

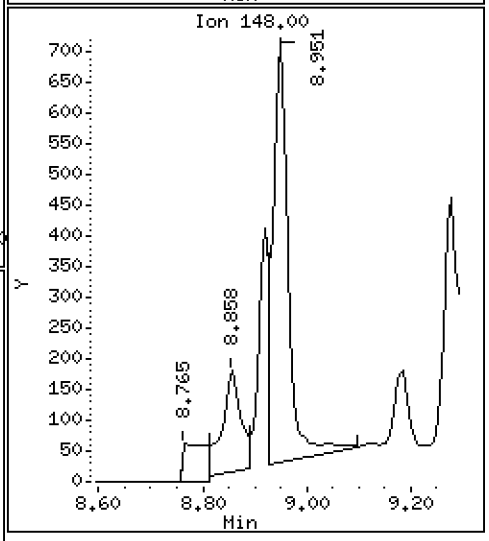
9 1,4-Dichlorobenzene

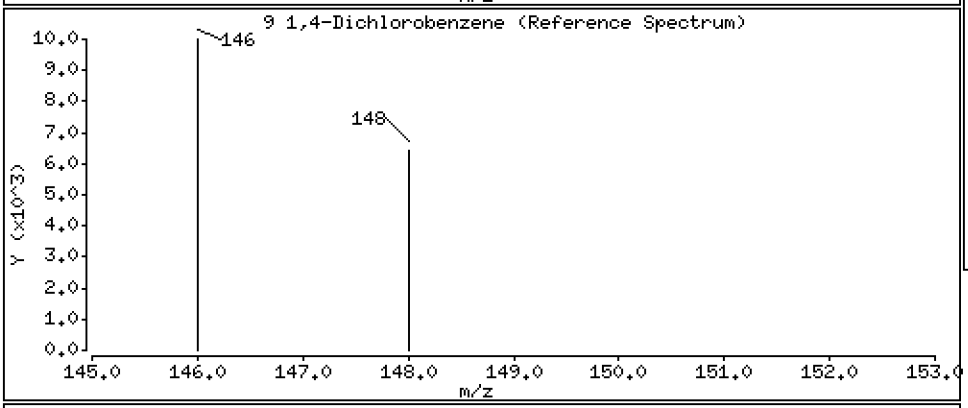
Concentration: 0.01511 ug/mL

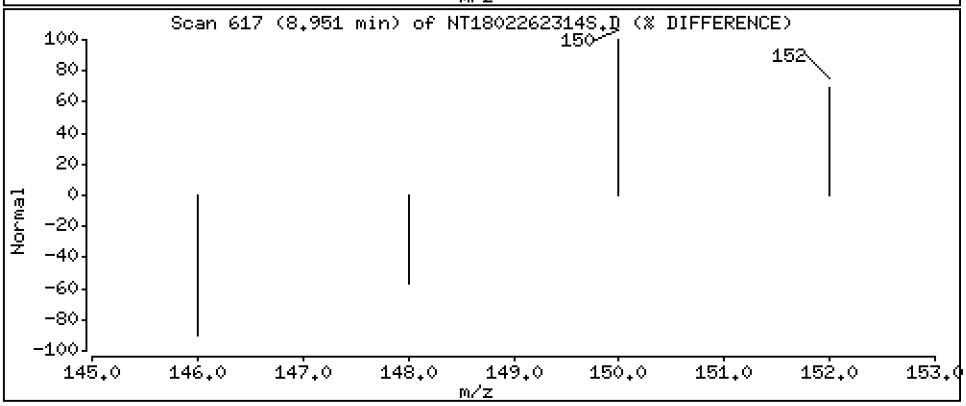












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262314S.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

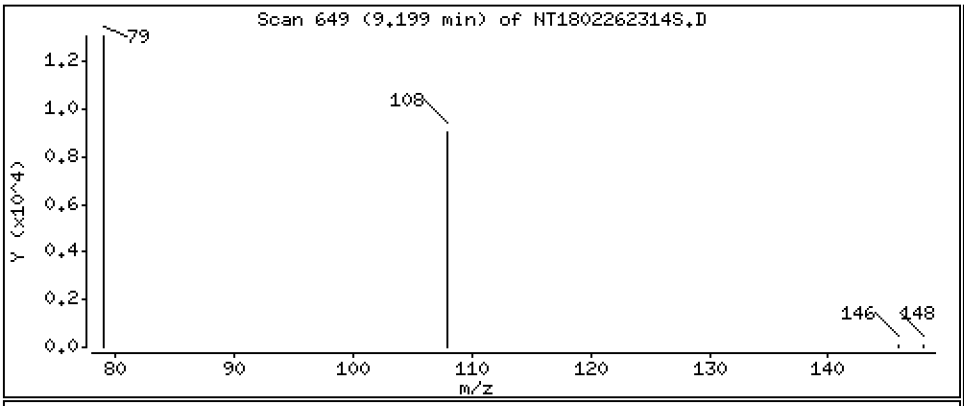
Operator: YZ

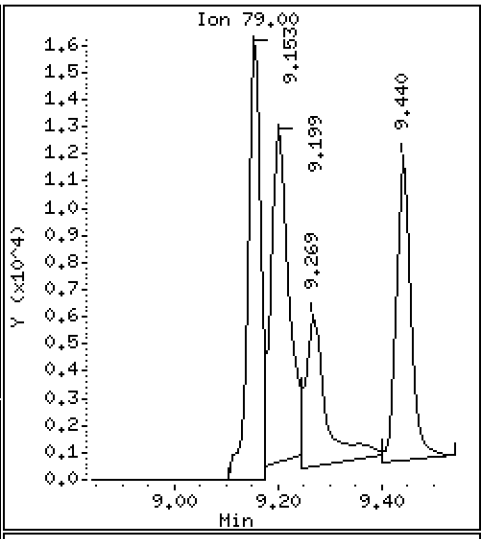
Column phase: ZB-5msi

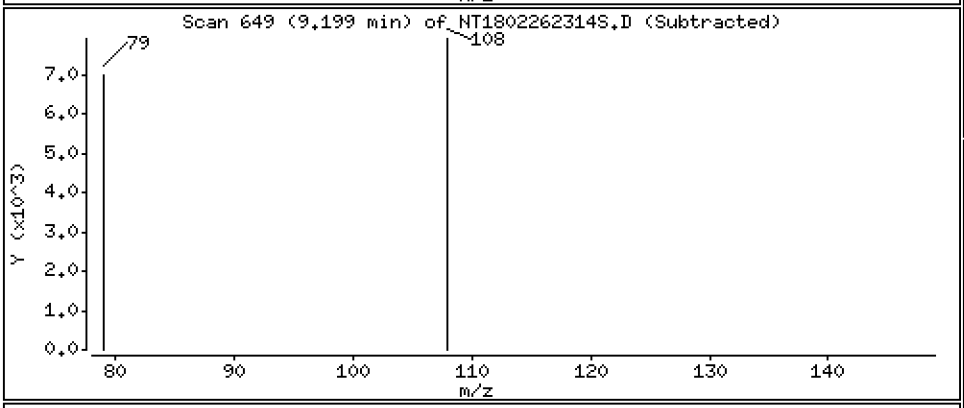
Column diameter: 0.25

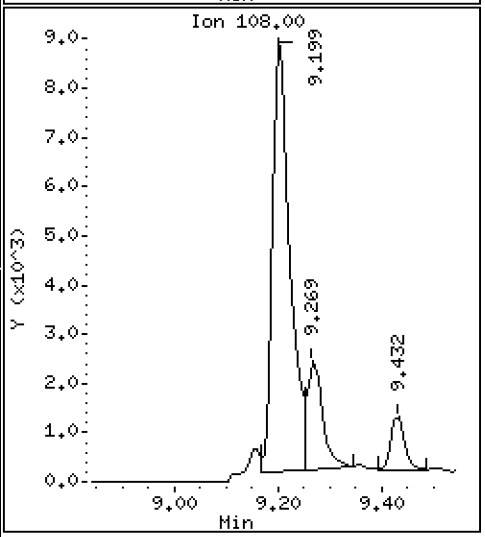
11 Benzyl alcohol

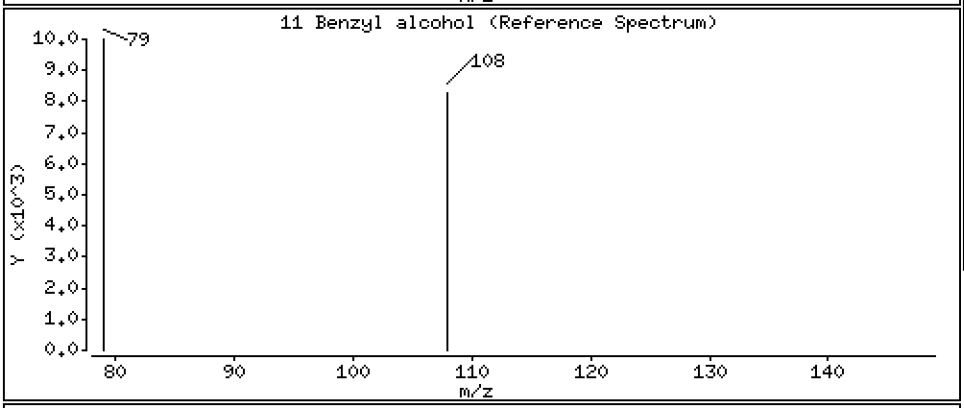
Concentration: 0.4014 ug/mL

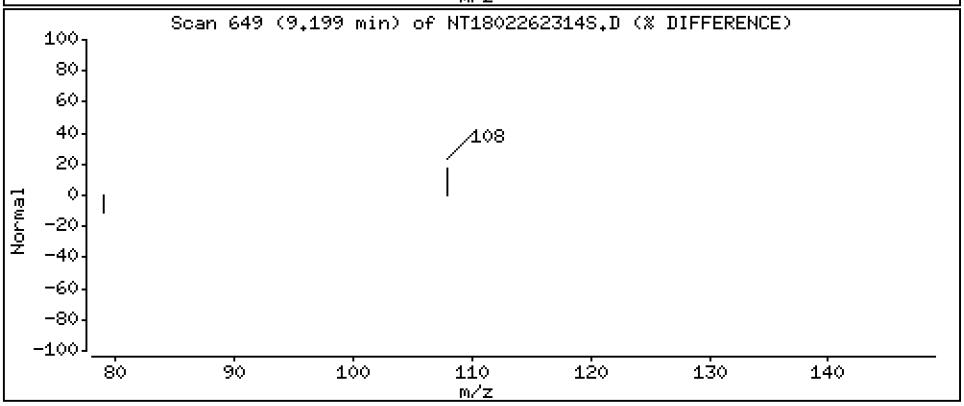












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262314S.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

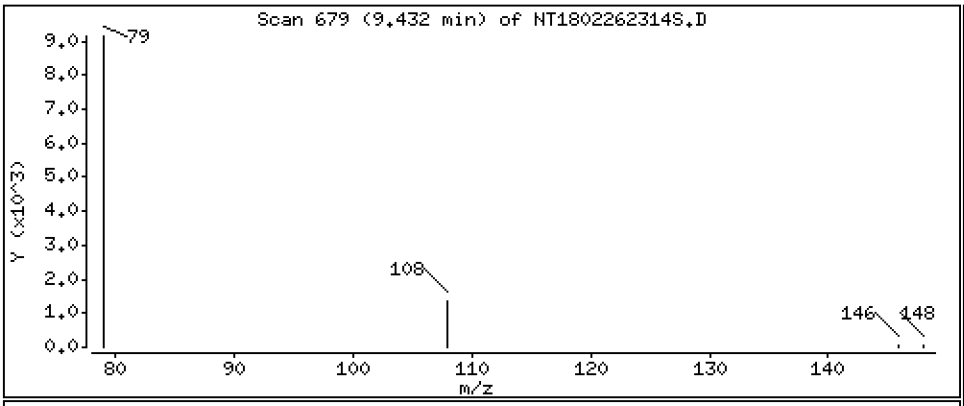
Operator: YZ

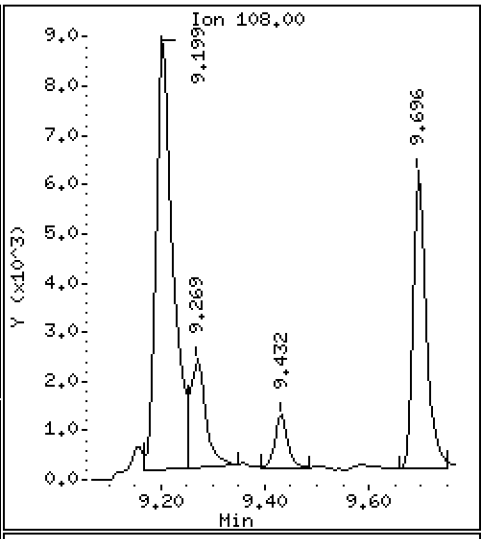
Column phase: ZB-5msi

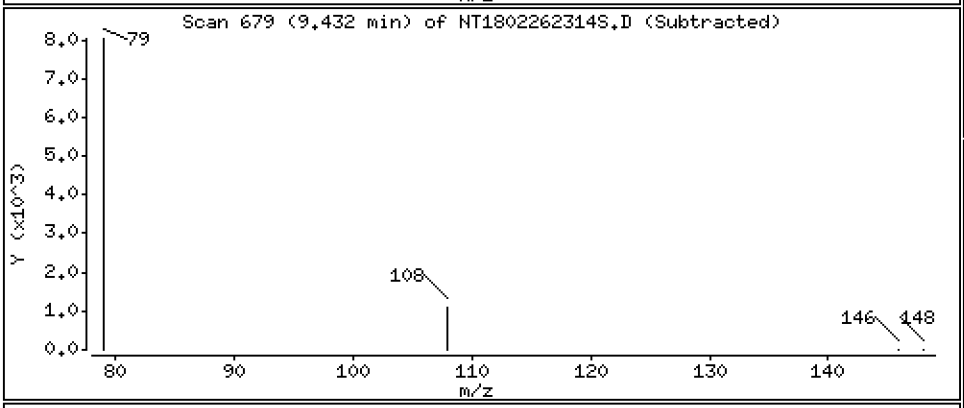
Column diameter: 0.25

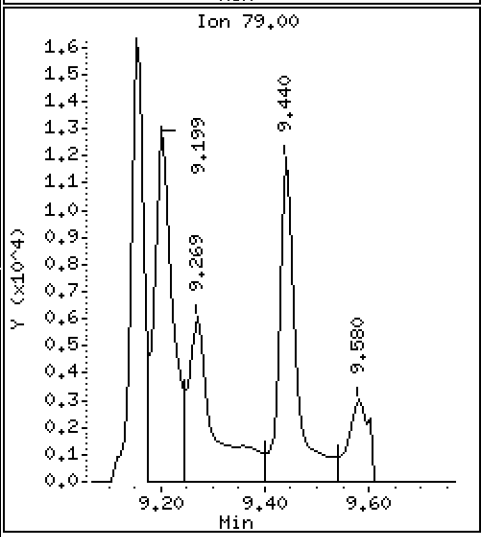
13 2-Methylphenol

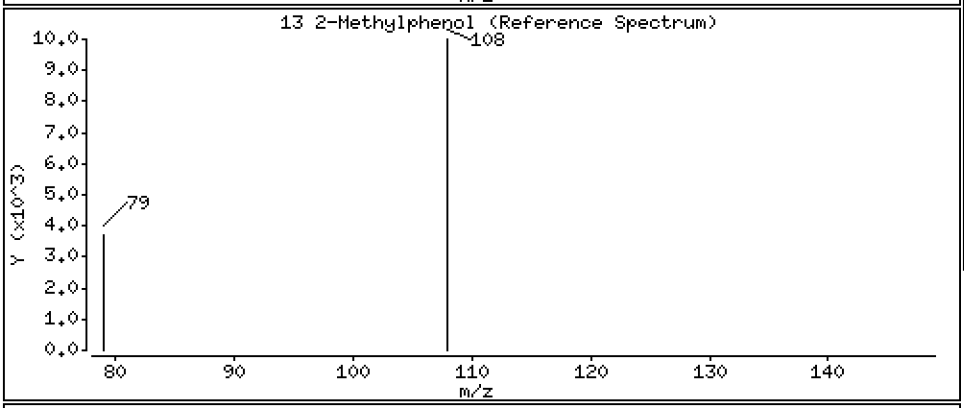
Concentration: 0.02006 ug/mL

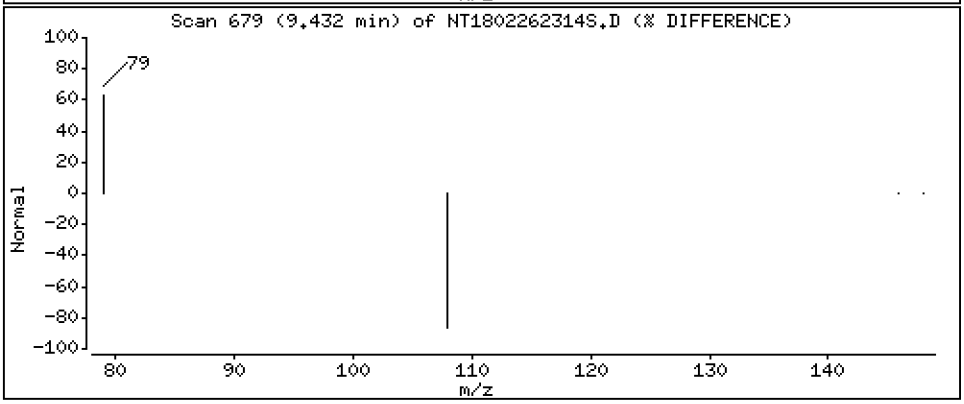












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262314S.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

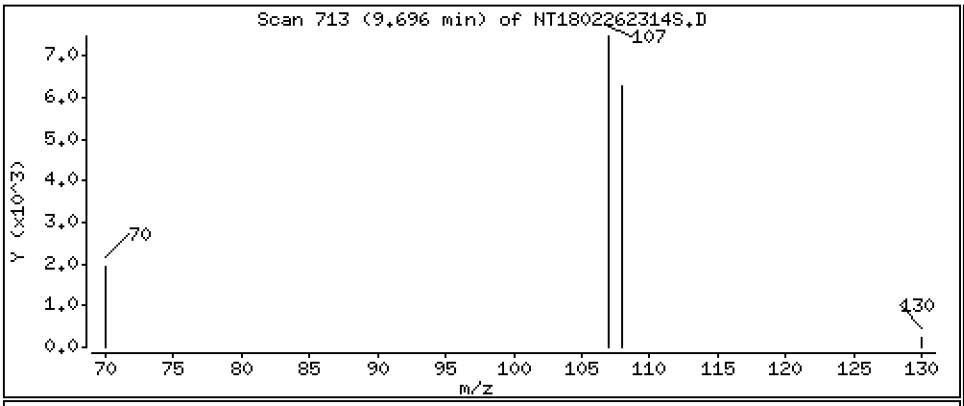
Operator: YZ

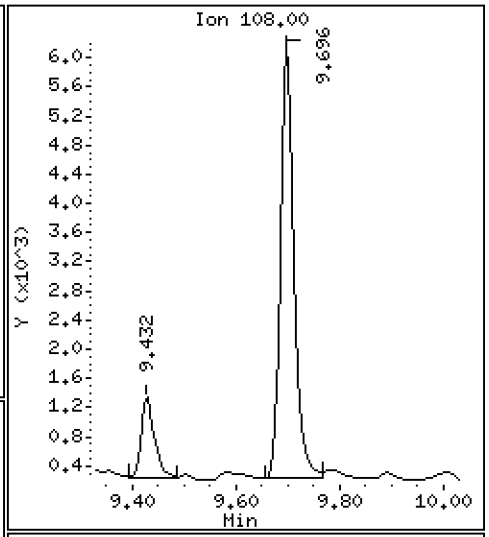
Column phase: ZB-5msi

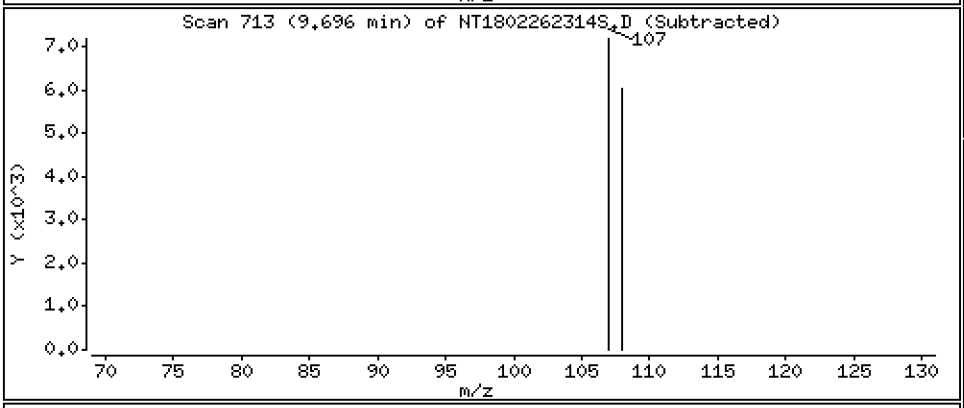
Column diameter: 0.25

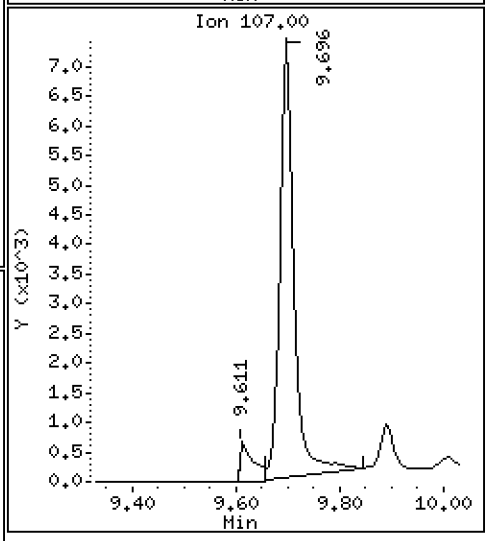
15 4-Methylphenol

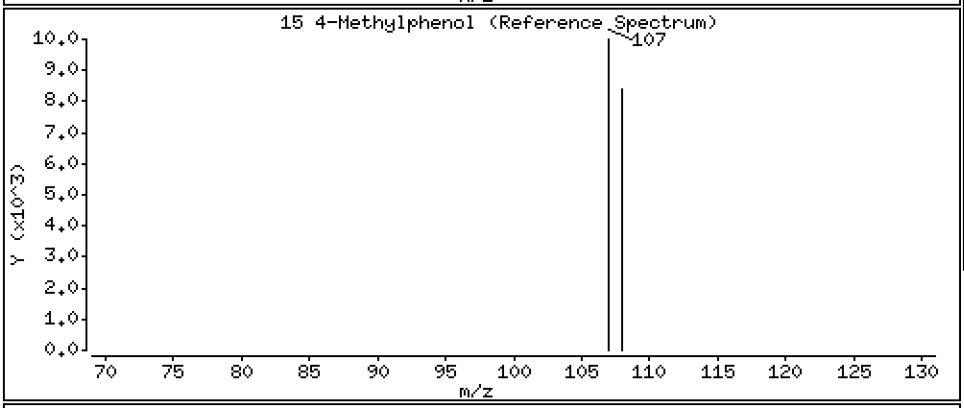
Concentration: 0.1155 ug/mL

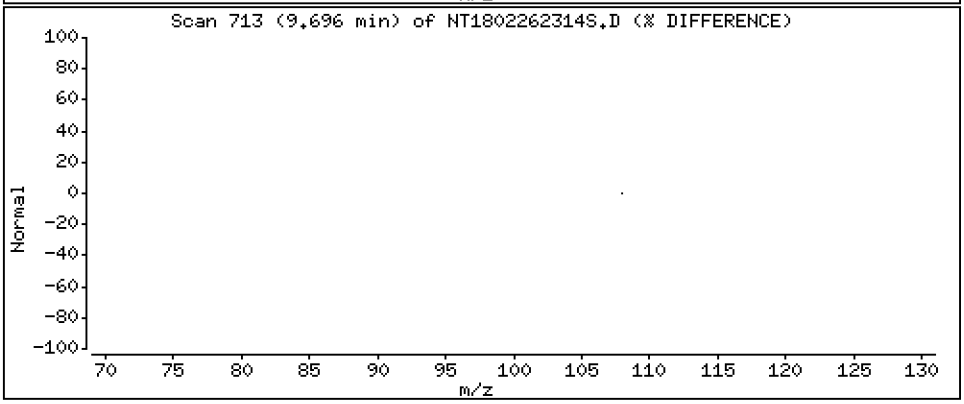












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623145.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

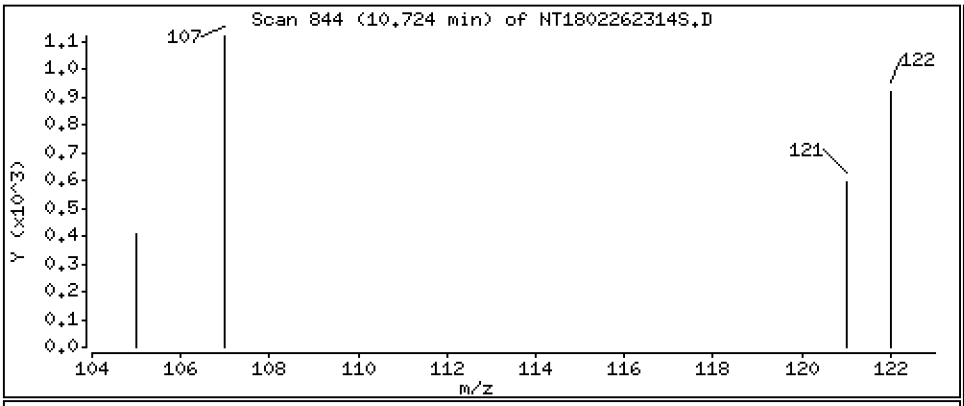
Operator: YZ

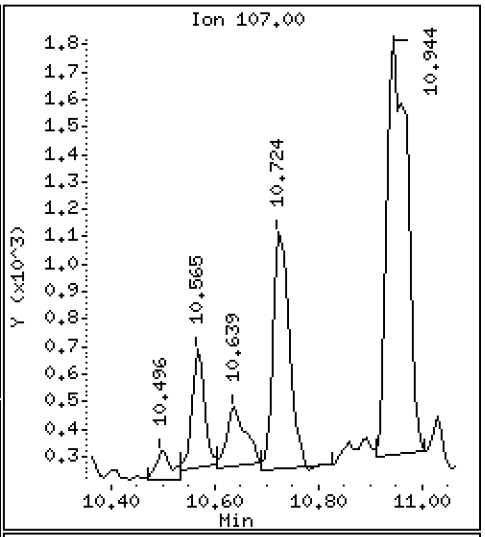
Column phase: ZB-5msi

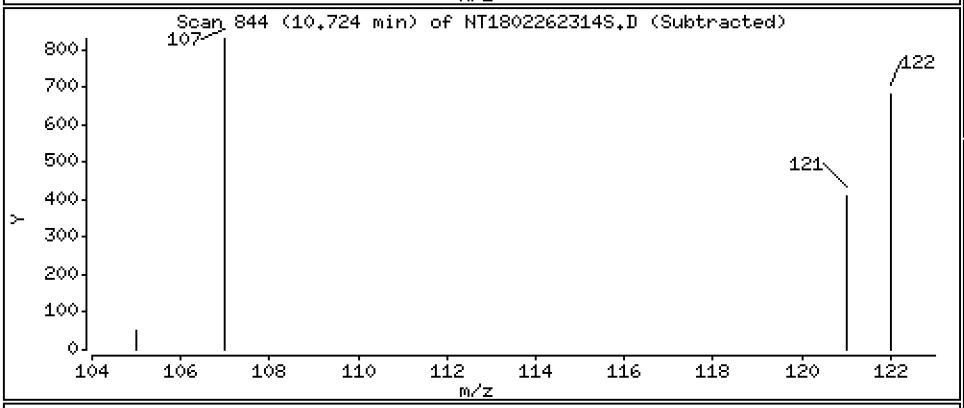
Column diameter: 0.25

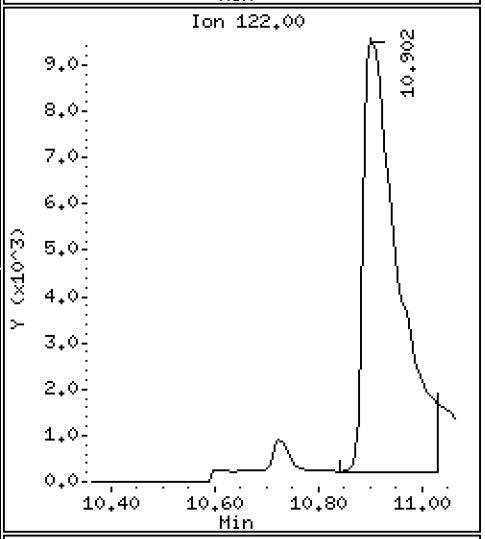
22 2,4-Dimethylphenol

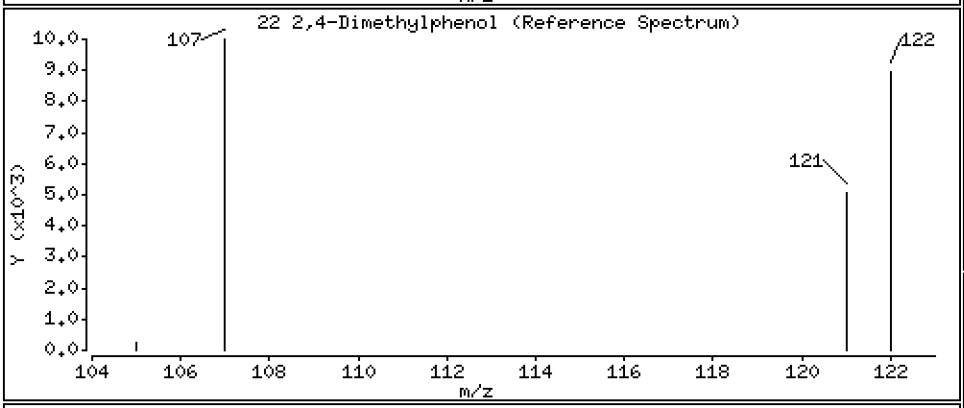
Concentration: 0.02119 ug/mL

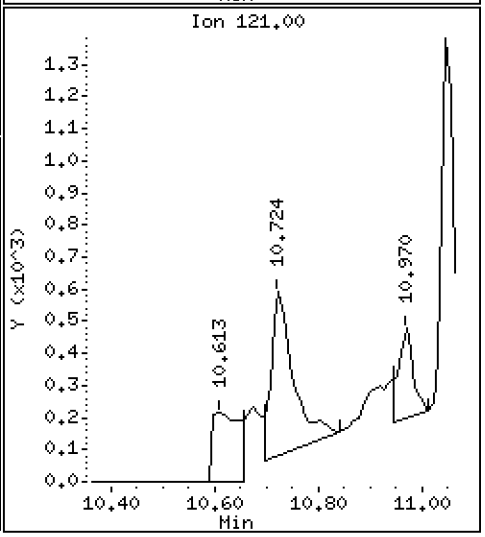


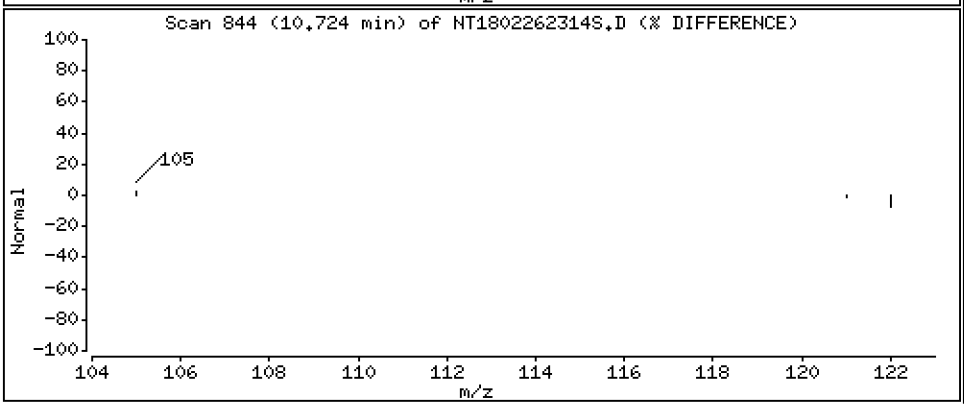












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

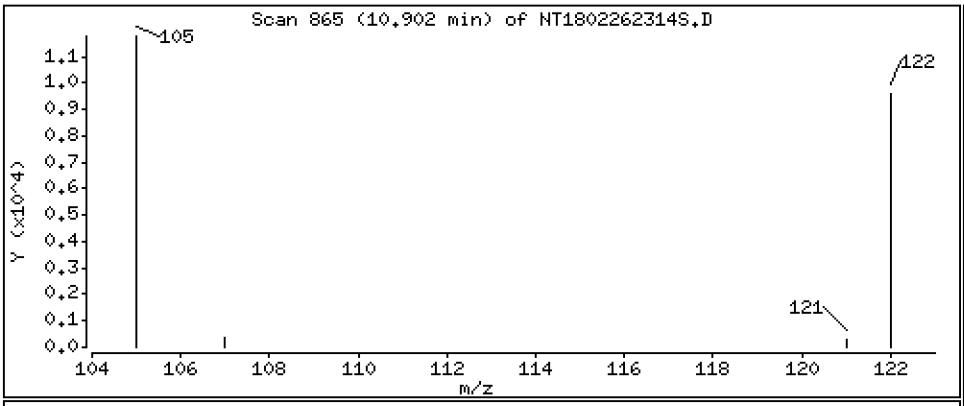
Operator: YZ

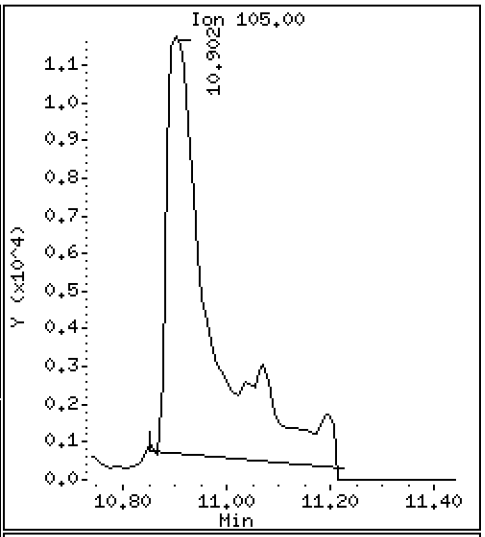
Column phase: ZB-5msi

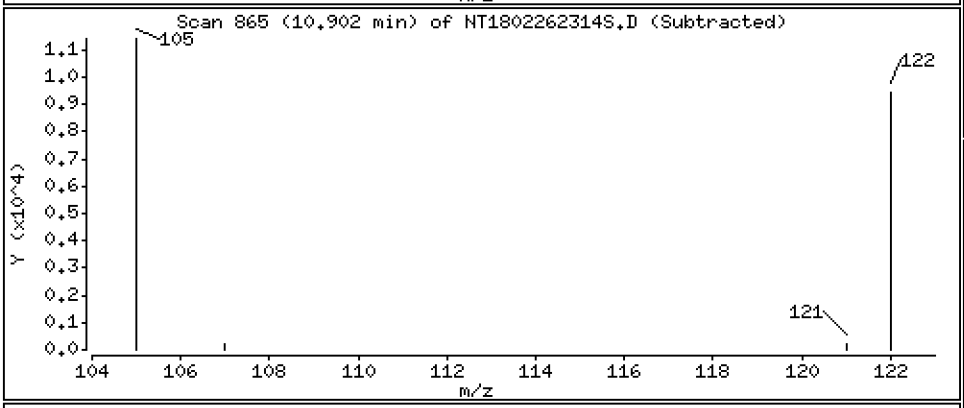
Column diameter: 0.25

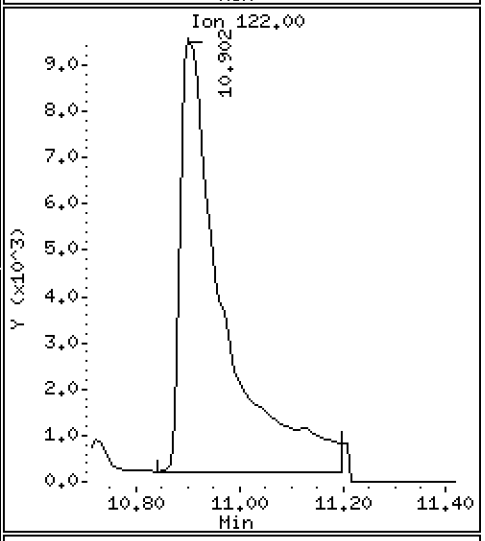
24 Benzoic acid

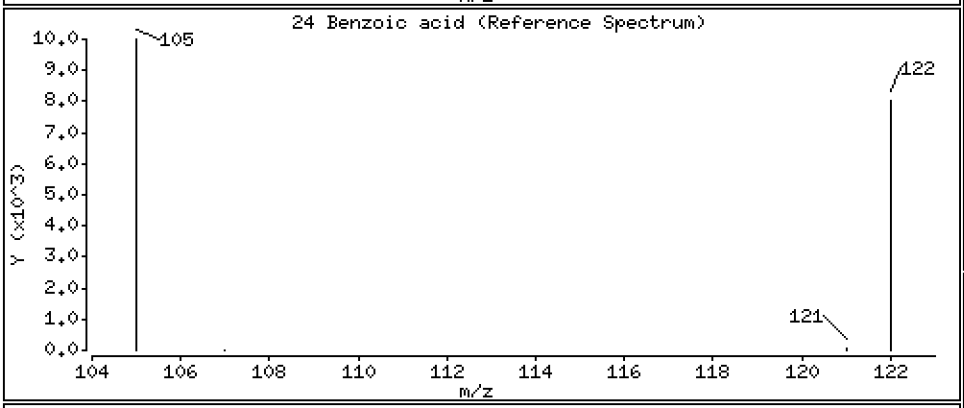
Concentration: 1.763 ug/mL

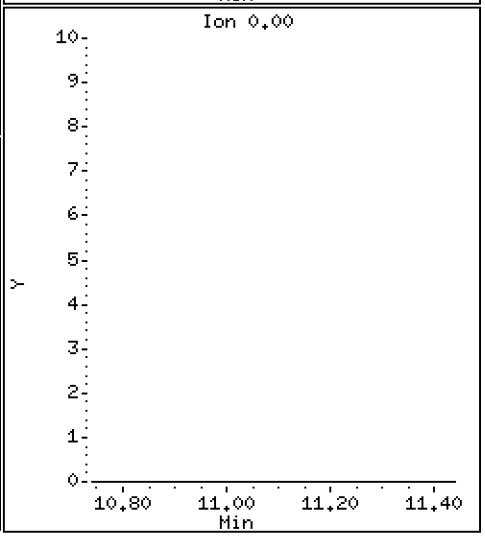


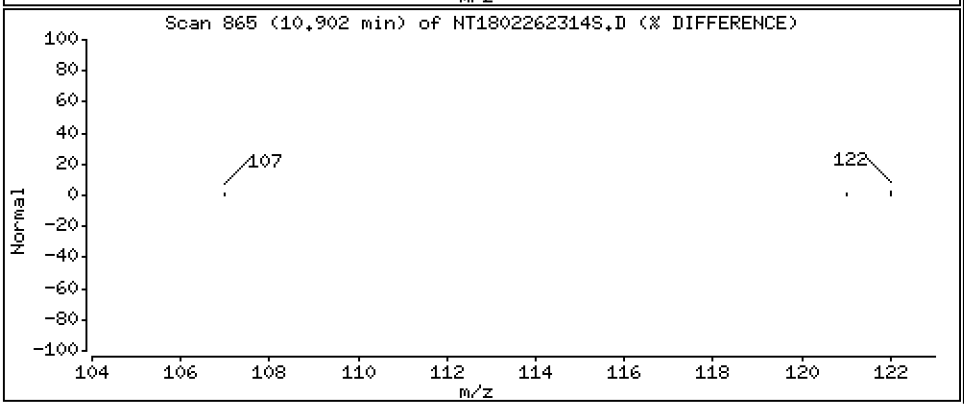












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Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

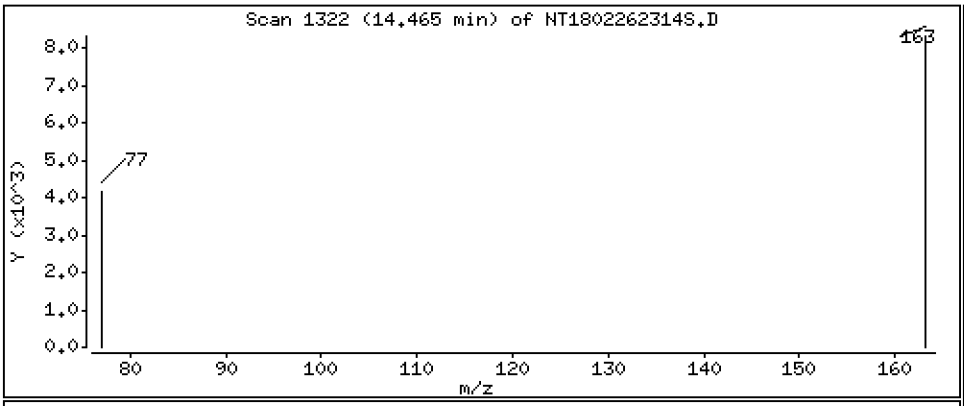
Operator: YZ

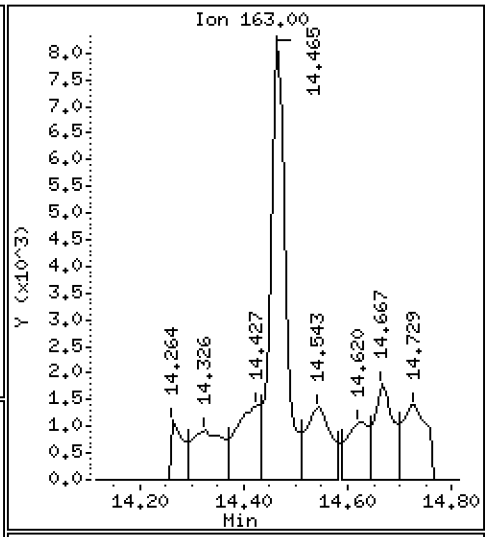
Column phase: ZB-5msi

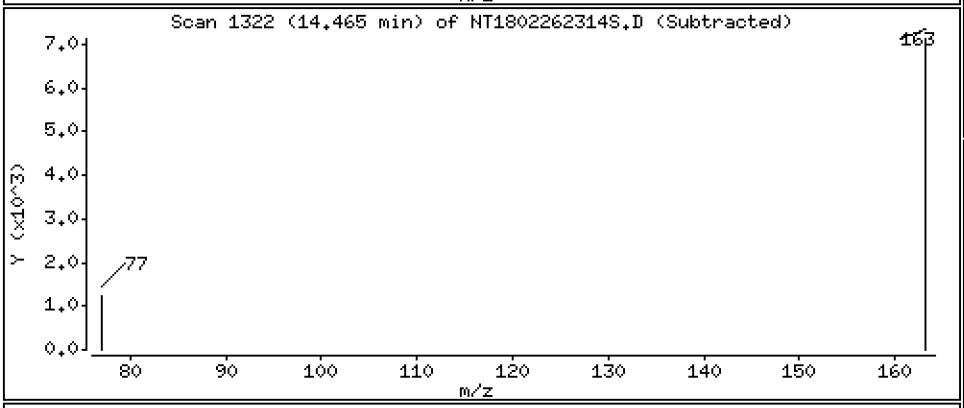
Column diameter: 0.25

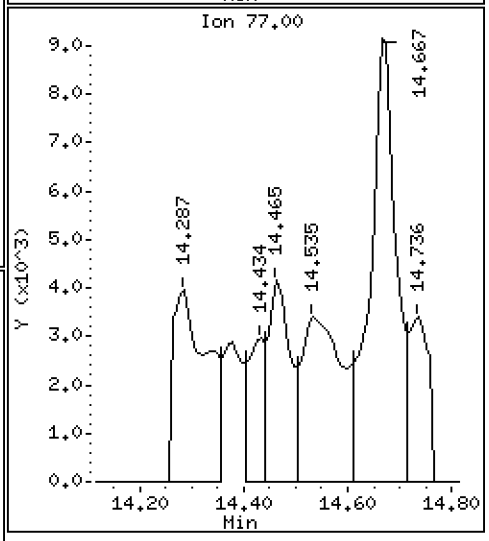
39 Dimethylphthalate

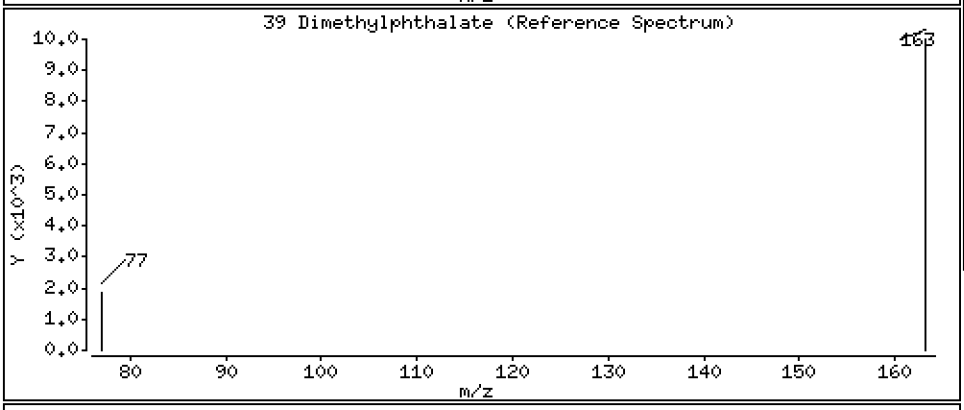
Concentration: 0.07443 ug/mL

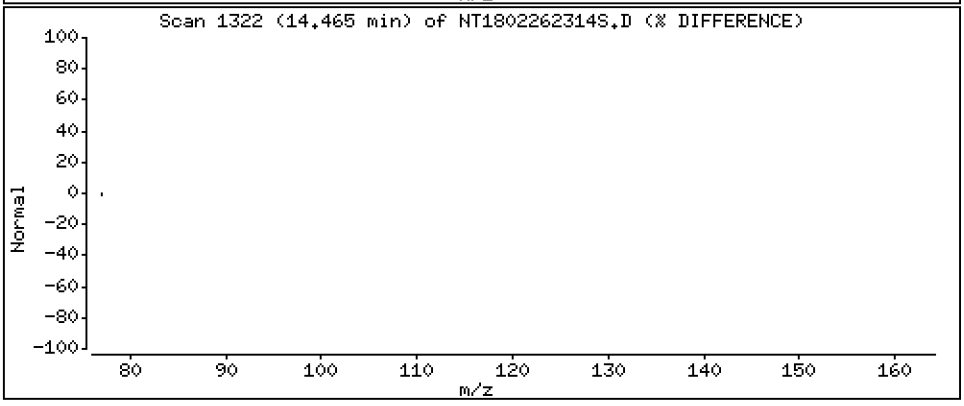












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262314S.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

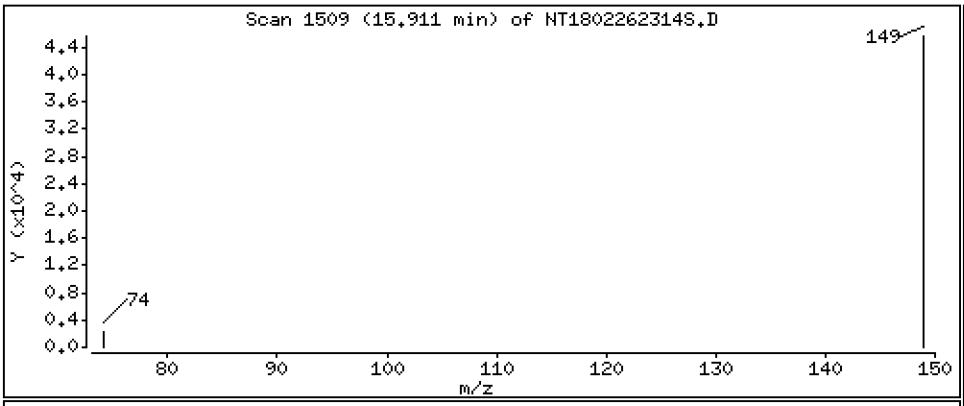
Operator: YZ

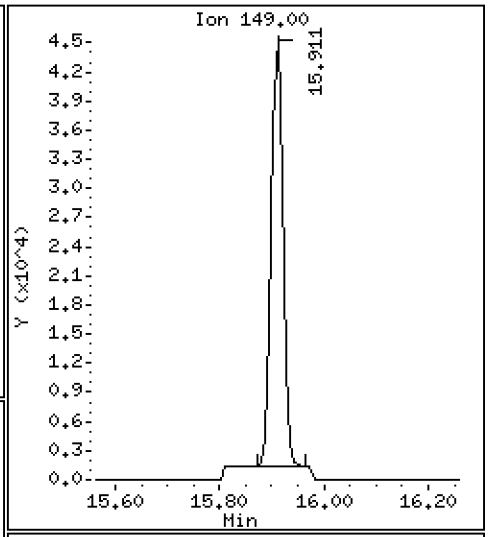
Column phase: ZB-5msi

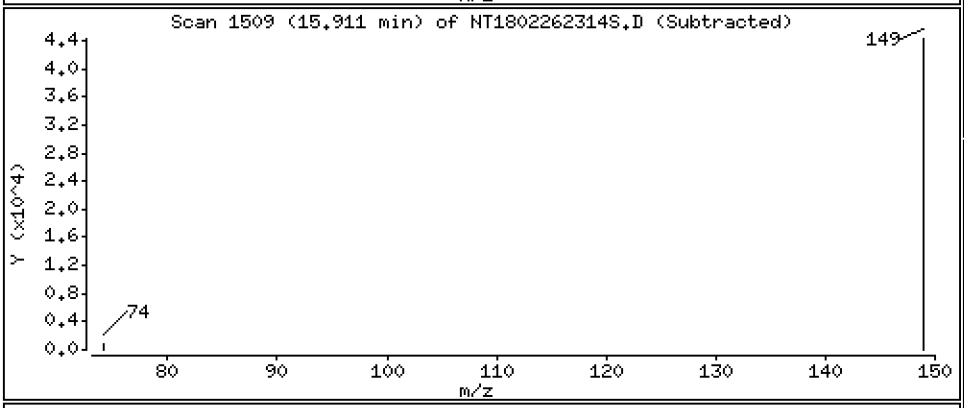
Column diameter: 0.25

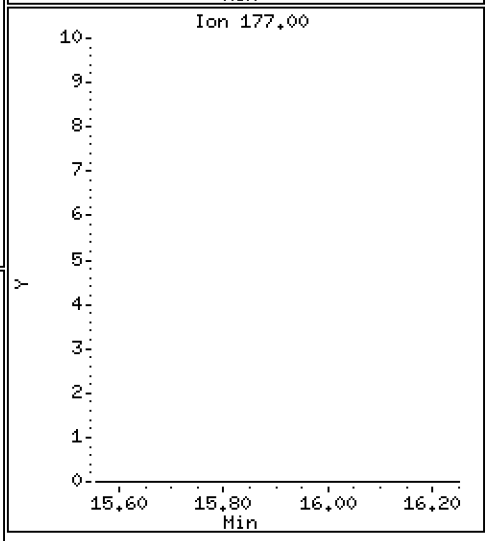
50 Diethylphthalate

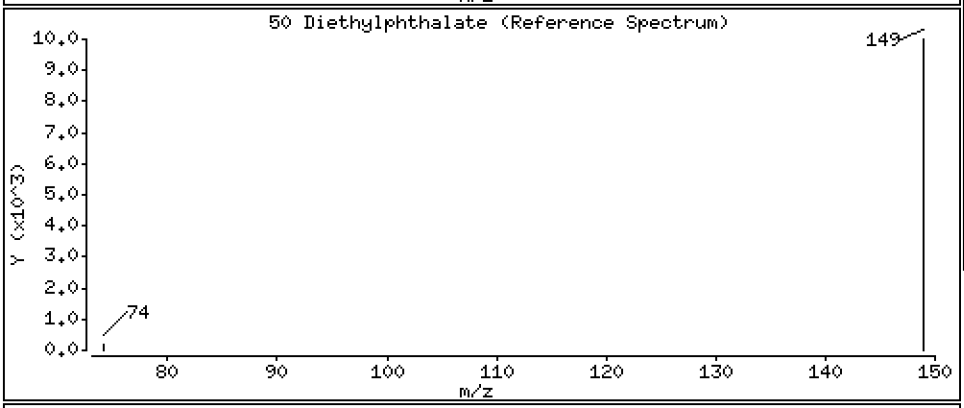
Concentration: 0.3298 ug/mL

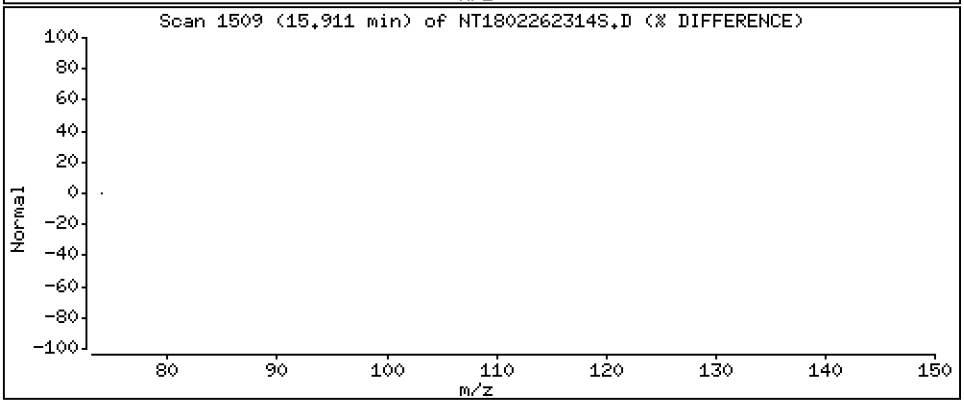












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262314S.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

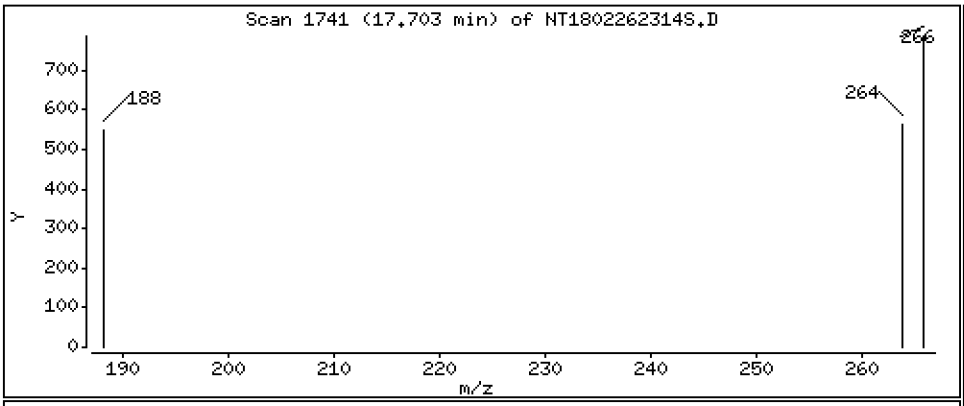
Operator: YZ

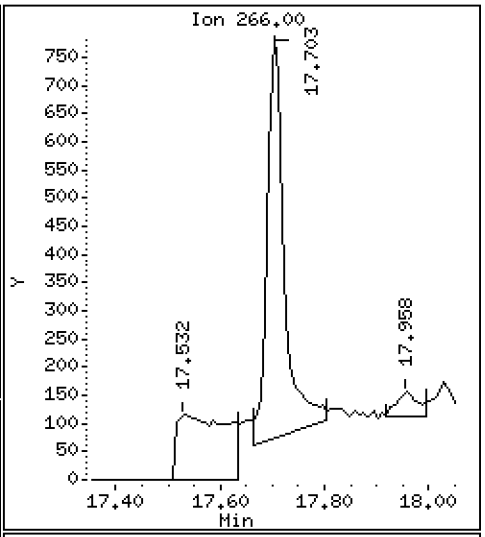
Column phase: ZB-5msi

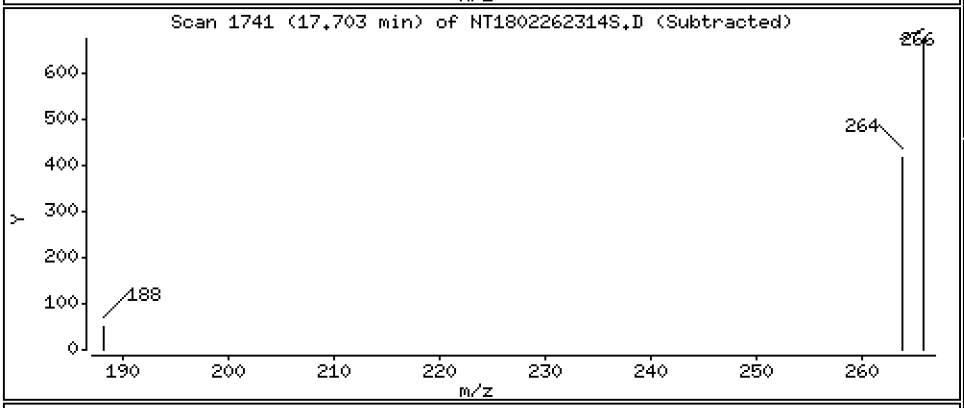
Column diameter: 0.25

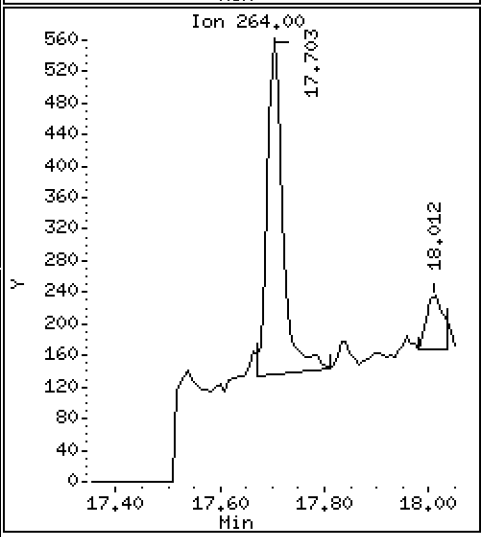
58 Pentachlorophenol

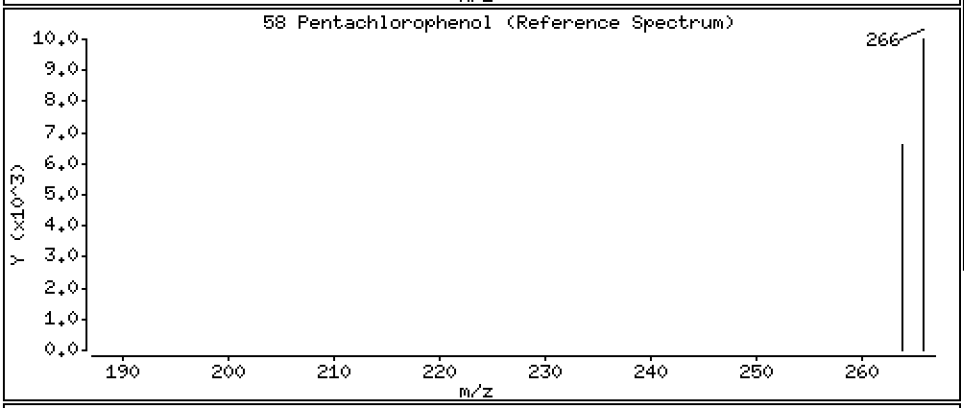
Concentration: 0.06908 ug/mL

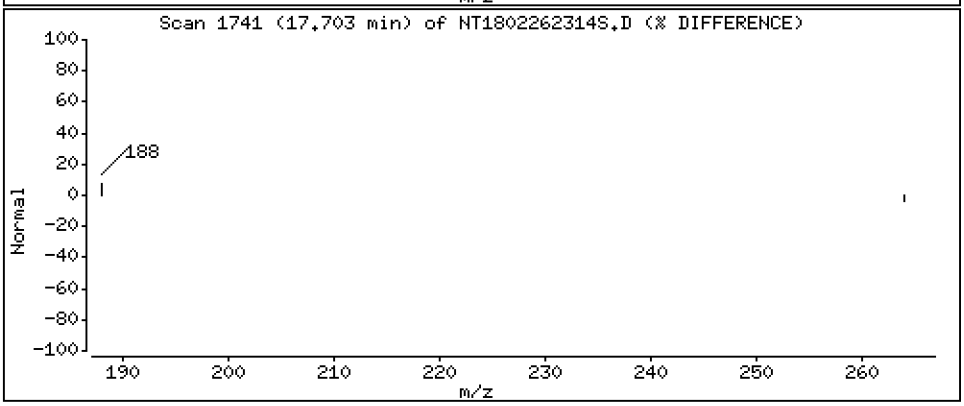












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262314S.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

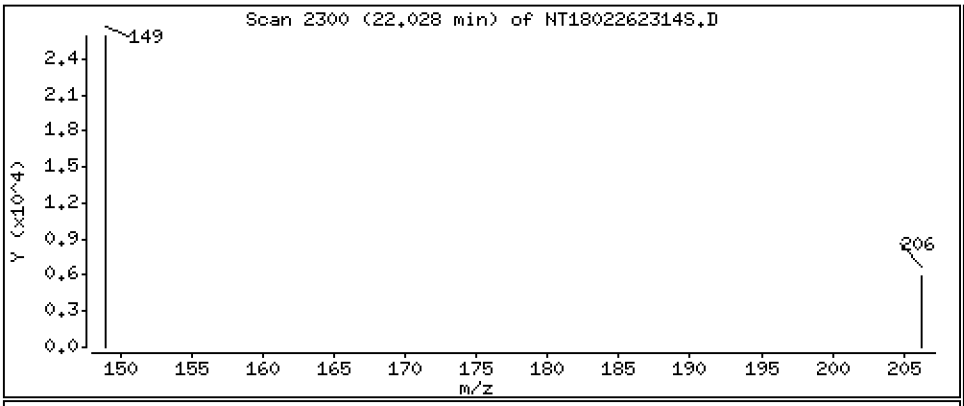
Operator: YZ

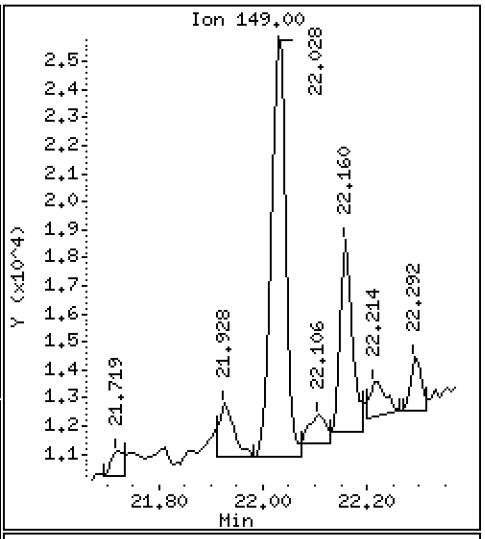
Column phase: ZB-5msi

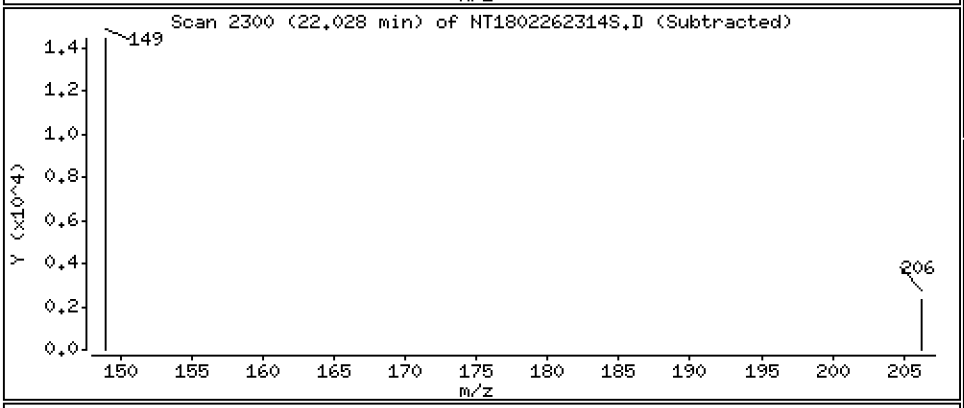
Column diameter: 0.25

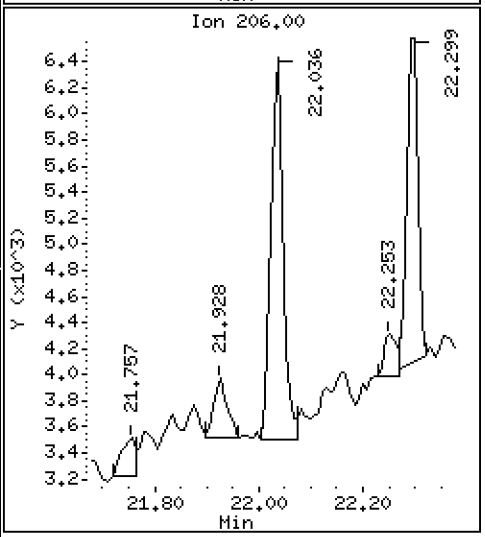
67 Butylbenzylphthalate

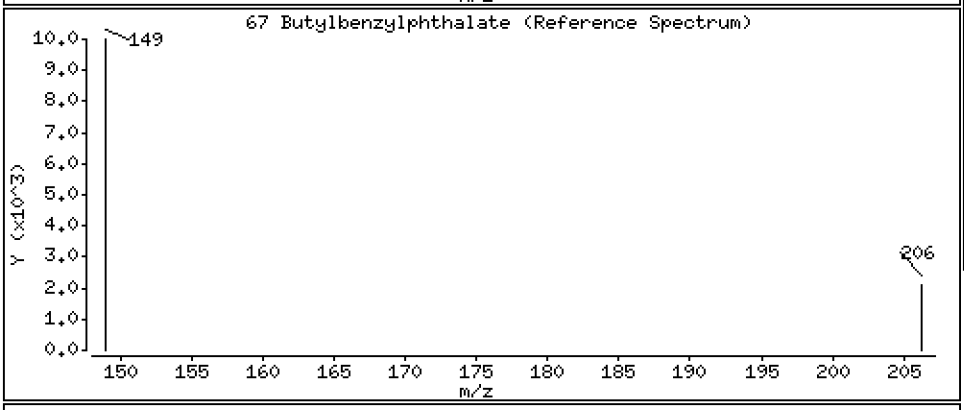
Concentration: 0.1388 ug/mL

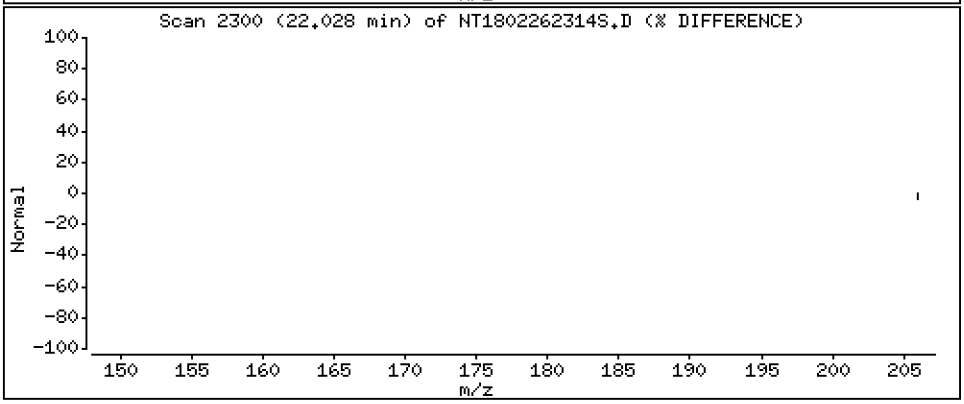












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262314S.D

Date : 26-FEB-2023 20:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-05

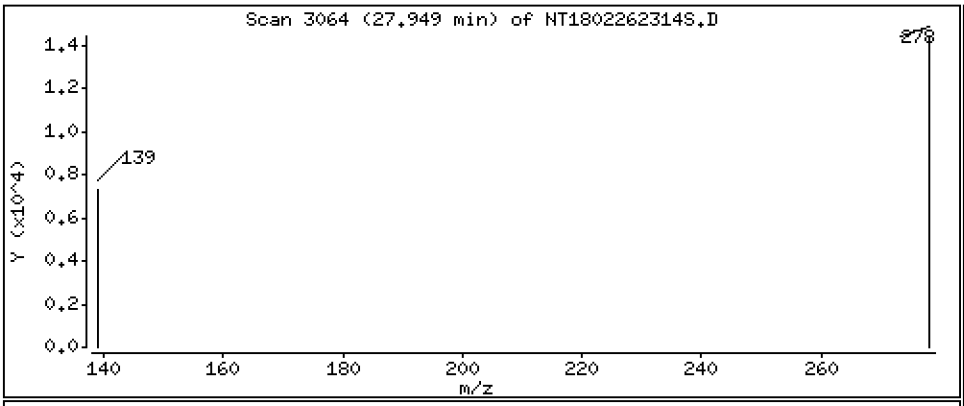
Operator: YZ

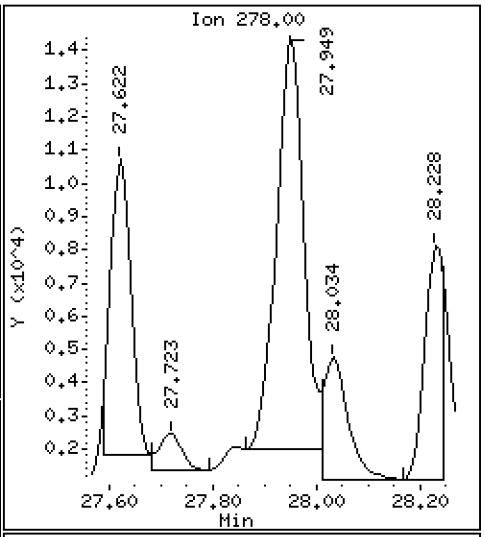
Column phase: ZB-5msi

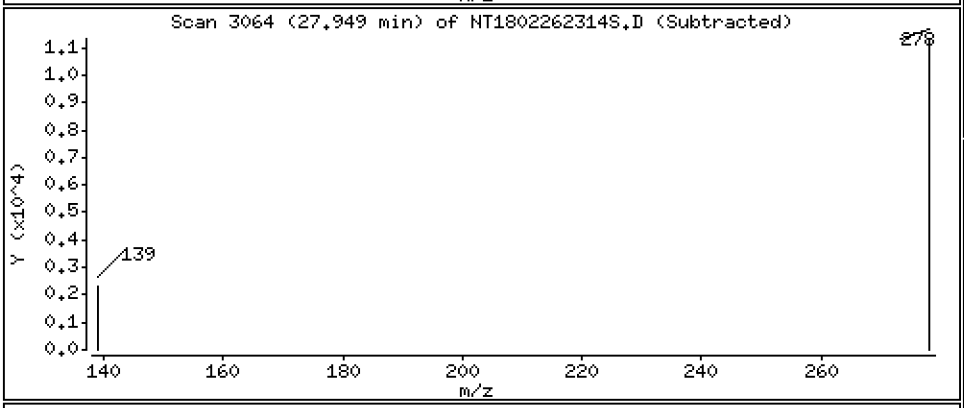
Column diameter: 0.25

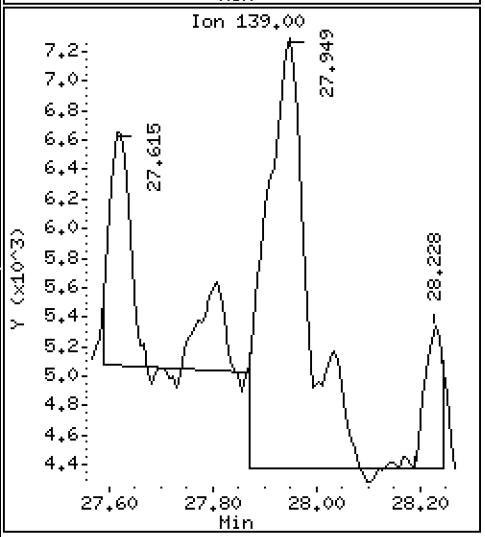
79 Dibenzo(a,h)anthracene

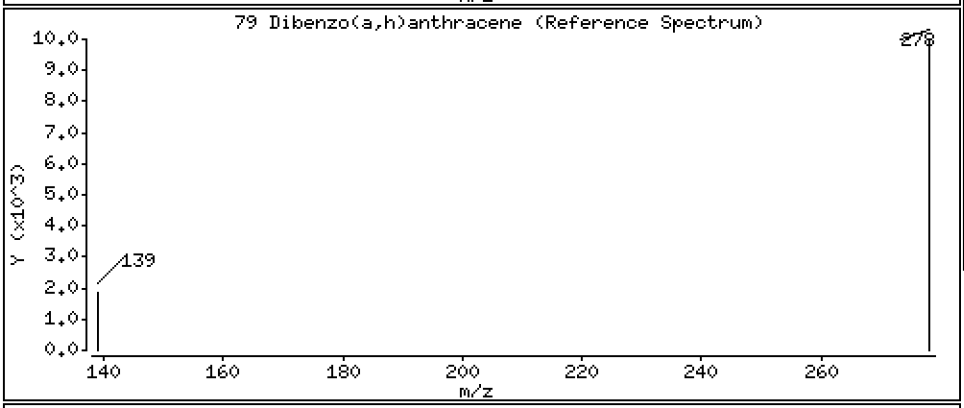
Concentration: 0.1610 ug/mL

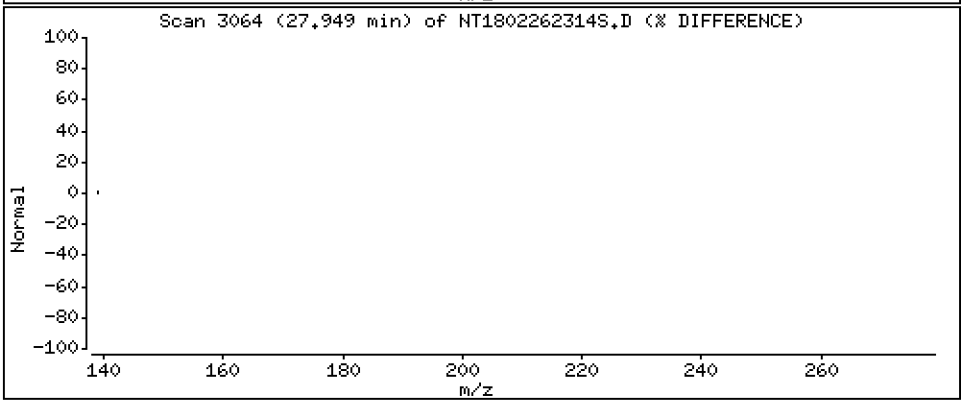












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262314S.D
Lab Smp Id: 23A0134-05
Inj Date : 26-FEB-2023 20:33
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-05
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.771	6.748	(0.759)	517845	5.88915	5.889(R)
	3	Phenol	94	8.340	8.324	(0.935)	562116	4.90027	4.900
	7	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8	1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	272445	4.00000	
	9	1,4-Dichlorobenzene	146	8.951	8.943	(1.003)	1812	0.01511	0.01511
	11	Benzyl alcohol	79	9.199	9.191	(1.031)	29522	0.40143	0.4014(H)
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	13	2-Methylphenol	108	9.432	9.416	(1.057)	1892	0.02006	0.02006
	15	4-Methylphenol	108	9.696	9.680	(1.087)	10931	0.11549	0.1155
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	10.723	10.715	(0.943)	1920	0.02119	0.02119
	24	Benzoic acid	105	10.902	11.088	(0.959)	64660	1.76268	1.763(M)
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.370	11.370	(1.000)	1015577	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	14.465	14.465	(0.968)	15990	0.07443	0.07443
*	42	Acenaphthene-d10	162	14.945	14.945	(1.000)	559199	4.00000	
	50	Diethylphthalate	149	15.911	15.911	(1.065)	64754	0.32984	0.3298
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	17.702	17.702	(0.986)	1569	0.06908	0.06908
*	59	Phenanthrene-d10	188	17.957	17.950	(1.000)	1116618	4.00000	
$	66	Terphenyl-d14	244	21.106	21.091	(0.918)	924453	4.22413	4.224(R)
	67	Butylbenzylphthalate	149	22.028	22.020	(0.958)	27761	0.13878	0.1388
*	69	Chrysene-d12	240	22.996	22.980	(1.000)	1208643	4.00000	
*	77	Perylene-d12	264	25.497	25.473	(1.000)	972994	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.948	27.917	(1.096)	46558	0.16104	0.1610
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262314S.D
Lab Smp Id: 23A0134-05
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	272445	-2.52
27 Naphthalene-d8	1065527	532764	2131054	1015577	-4.69
42 Acenaphthene-d10	544290	272145	1088580	559199	2.74
59 Phenanthrene-d10	1003412	501706	2006824	1116618	11.28
69 Chrysene-d12	936975	468488	1873950	1208643	28.99
77 Perylene-d12	1057771	528886	2115542	972994	-8.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.07
77 Perylene-d12	25.47	24.97	25.97	25.50	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262314S.D

Lab ID: 23A0134-05
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 20:33

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.959	0.975	-0.0164	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

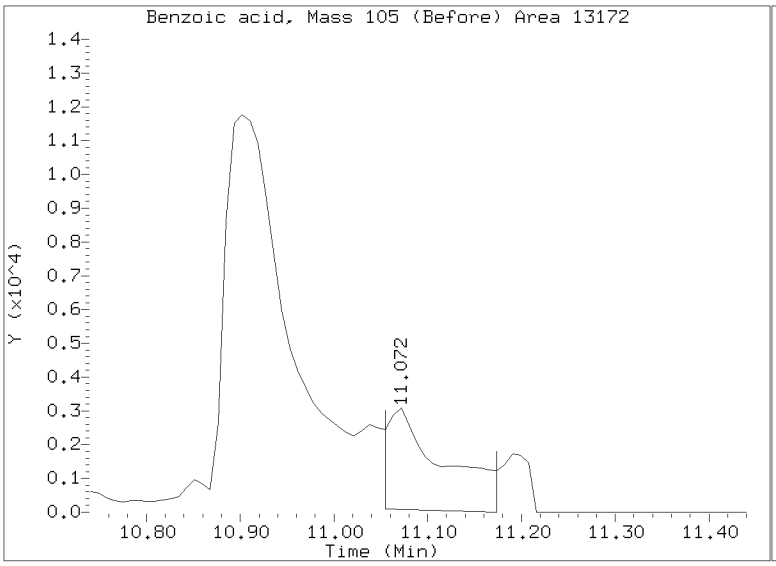
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

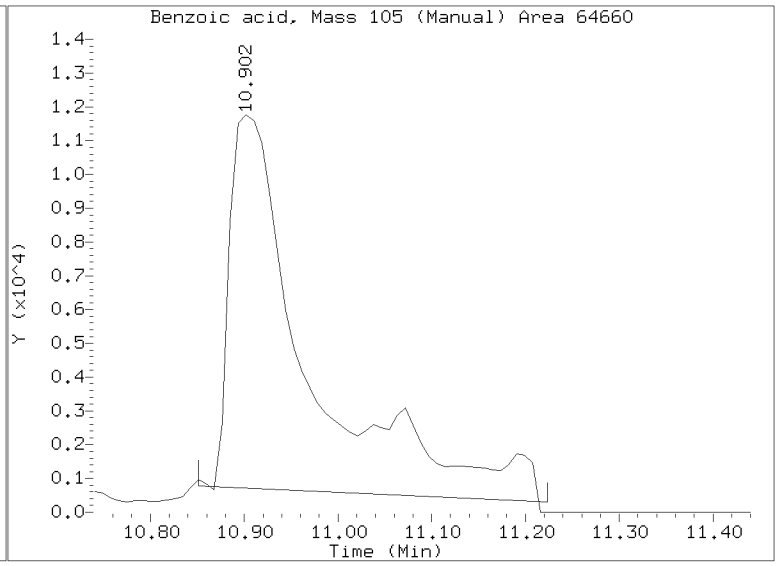
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/SIM.b/NT1802262314S.D
Injection Date: 26-FEB-2023 20:33
Lab ID:23A0134-05 Client ID:
Report Date: 03/24/2023 11:53





APPROVED

By Deenay Dunmore at 12:04 pm, Mar 24, 2023

LDW23-SS1160

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-06 C	SDG:	23A0134
Sampled:	01/06/23 11:41	Prepared:	01/19/23 13:35	File ID:	NT1802262315S.D
% Solids:	40.27	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 21:13
Batch:	BLA0410	Sequence:	SLC0389	Initial/Final:	25.07 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	5.0	U	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	19.1	J	2.5	19.8
65-85-0	Benzoic acid	1	115	Q	13.3	99.1
105-67-9	2,4-Dimethylphenol	1	19.8	U	2.1	19.8
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	11.7	J	2.1	19.8

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	742.89	588	79.2	27 - 120	
p-Terphenyl-d14	495.26	434	87.7	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623158.D

Date : 26-FEB-2023 21:13

Client ID:

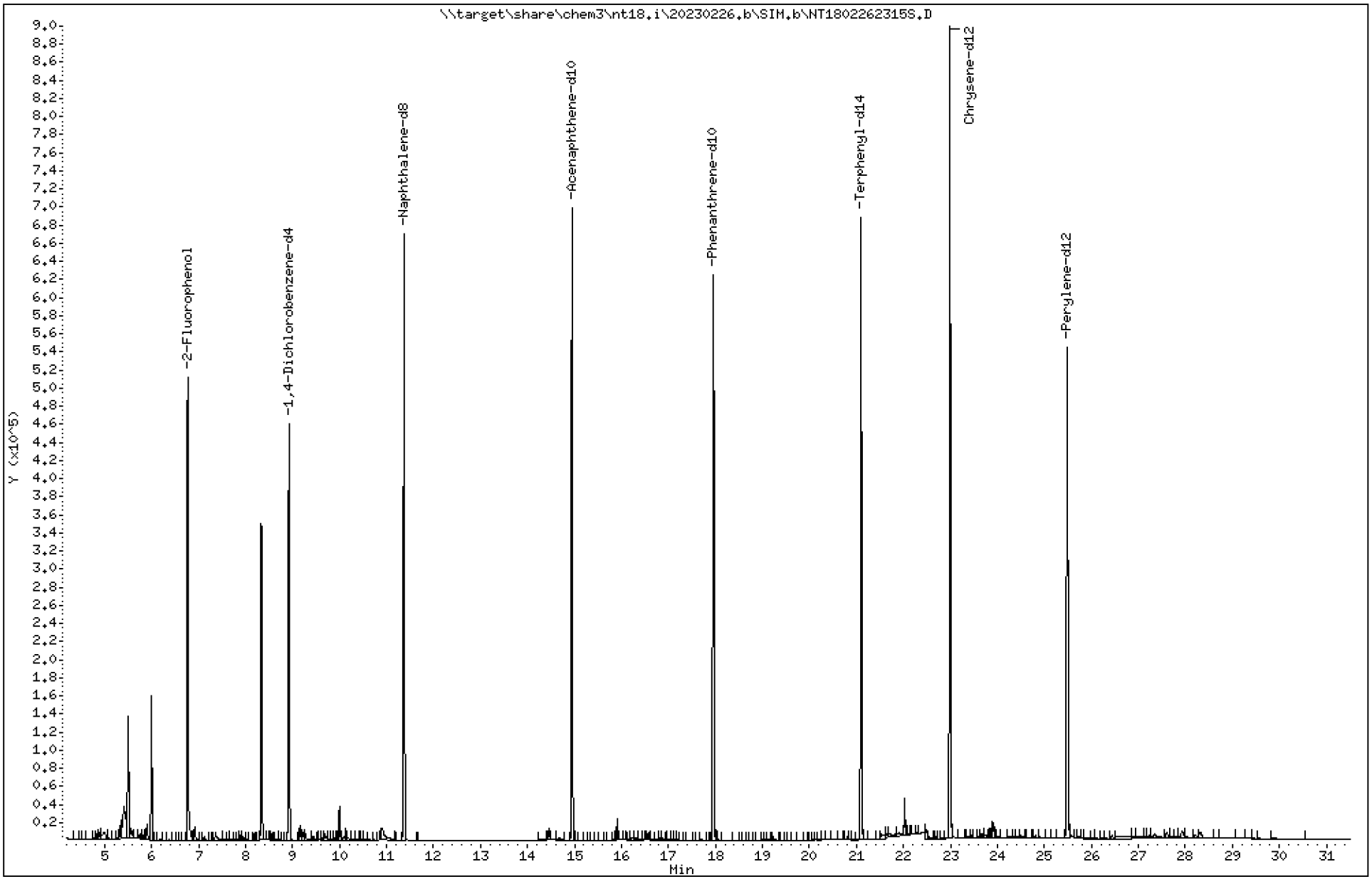
Instrument: nt18.i

Sample Info: 23A0134-06

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623155.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

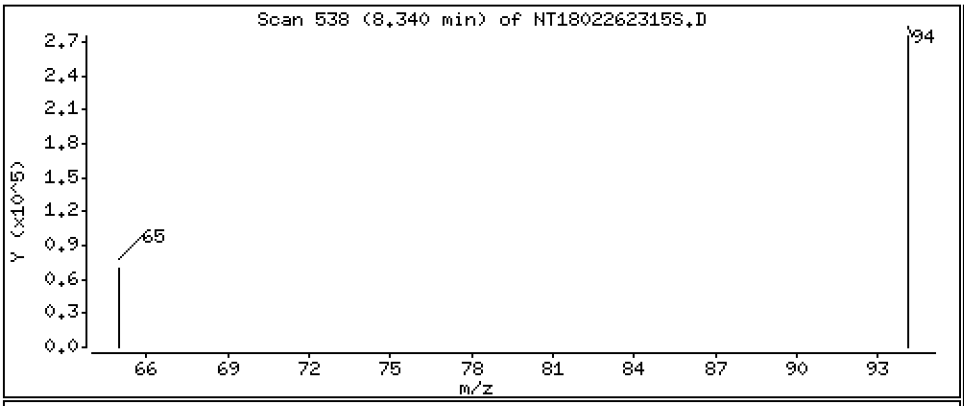
Operator: YZ

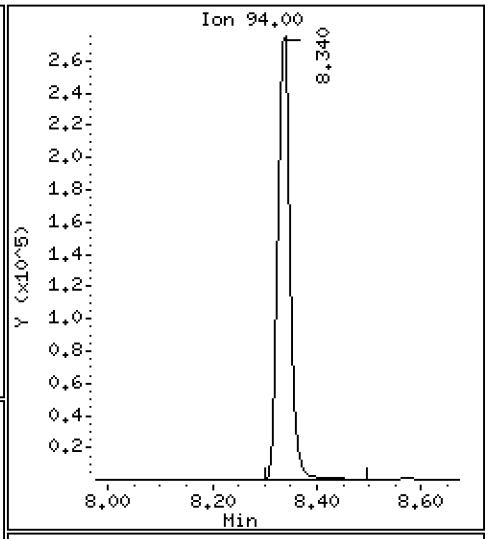
Column phase: ZB-5msi

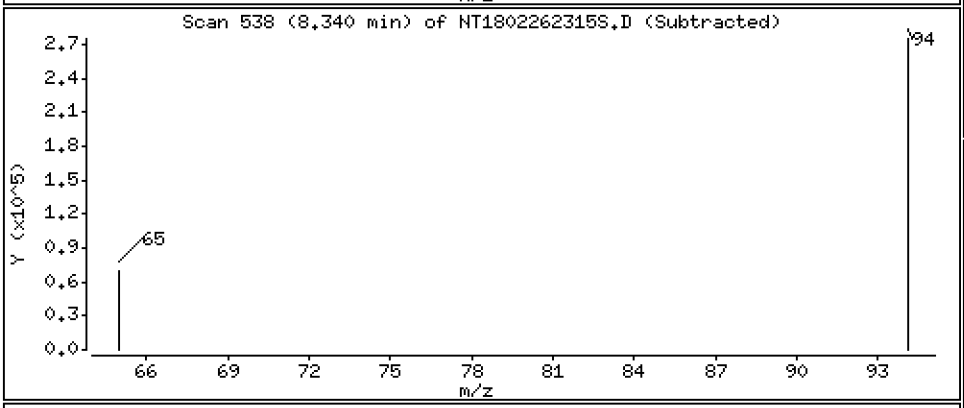
Column diameter: 0.25

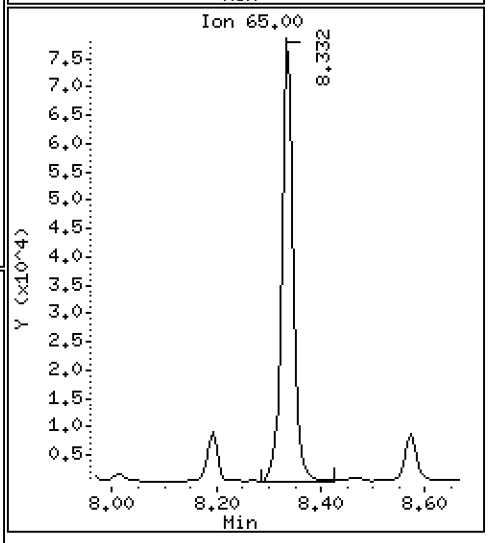
3 Phenol

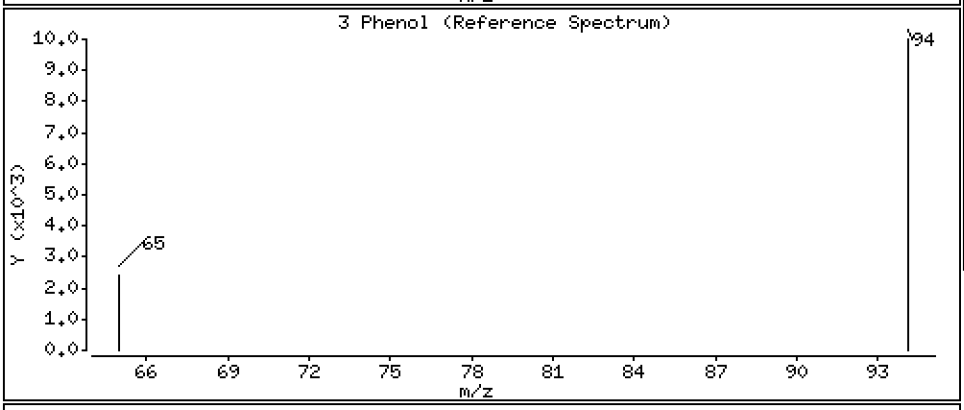
Concentration: 3.819 ug/mL

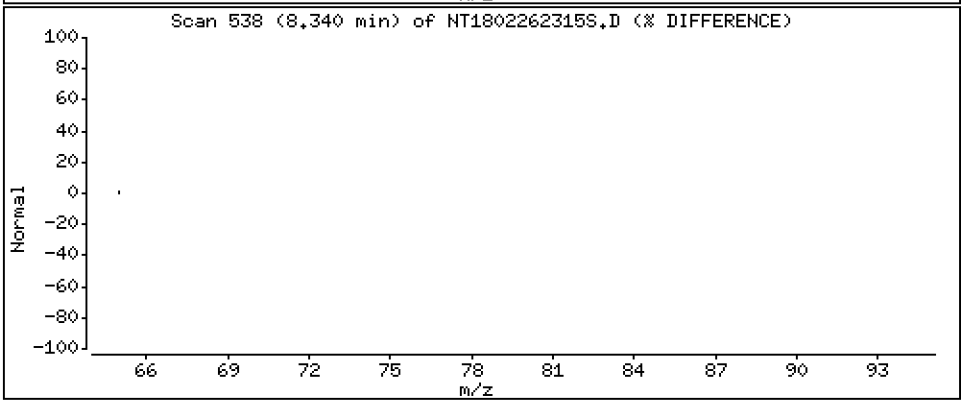












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623155.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

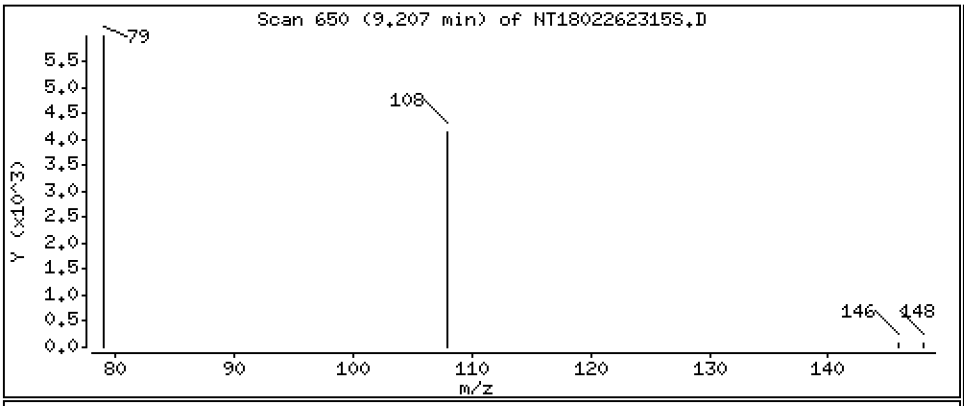
Operator: YZ

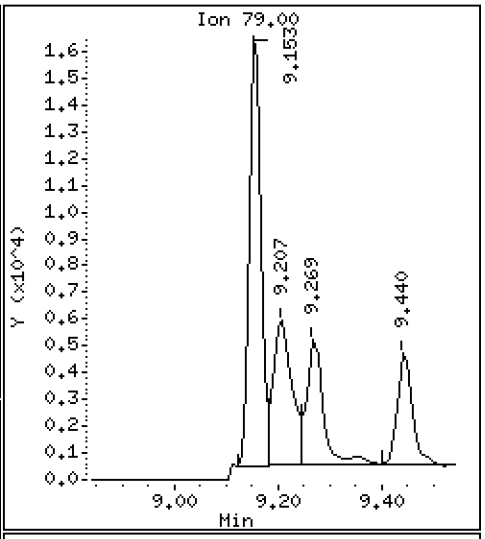
Column phase: ZB-5msi

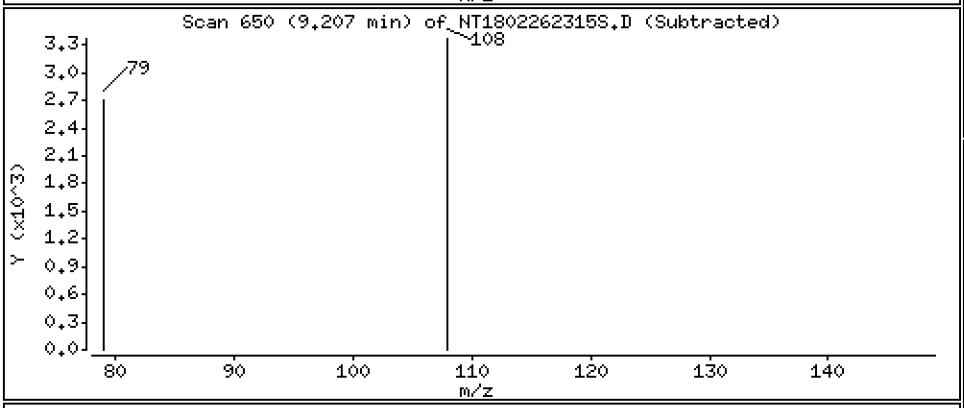
Column diameter: 0.25

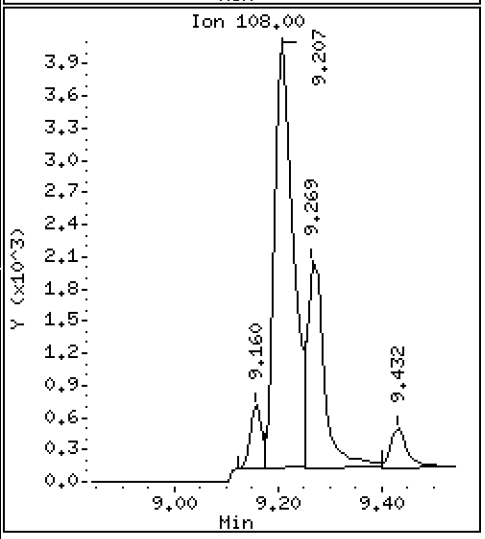
11 Benzyl alcohol

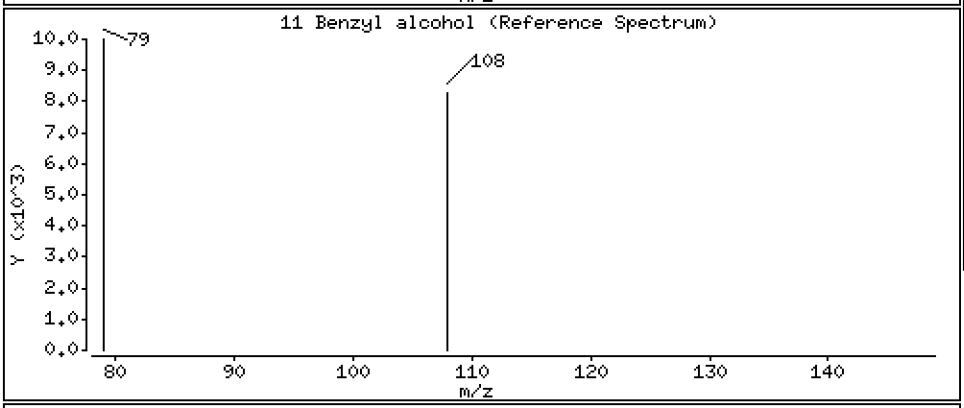
Concentration: 0.1930 ug/mL

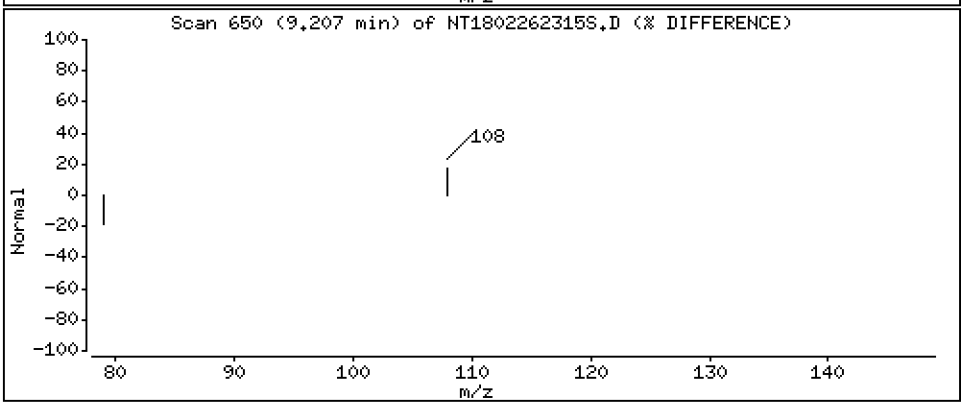












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623155.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

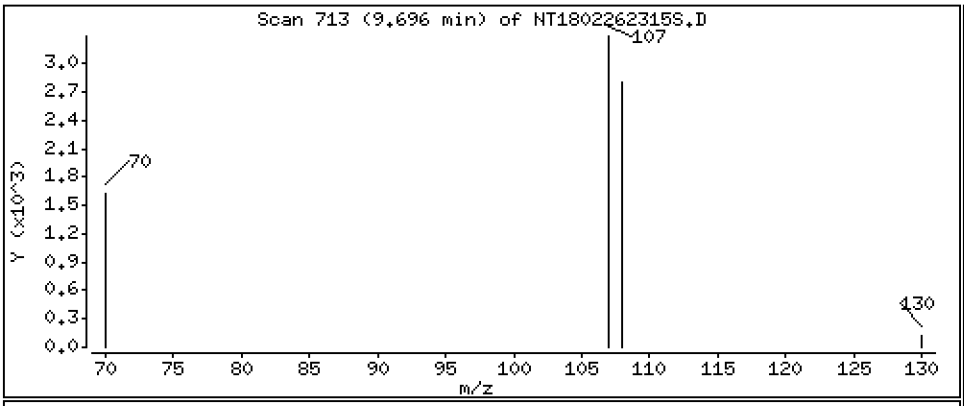
Operator: YZ

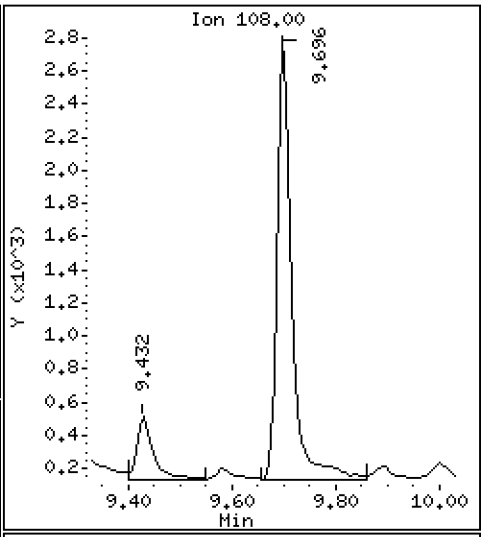
Column phase: ZB-5msi

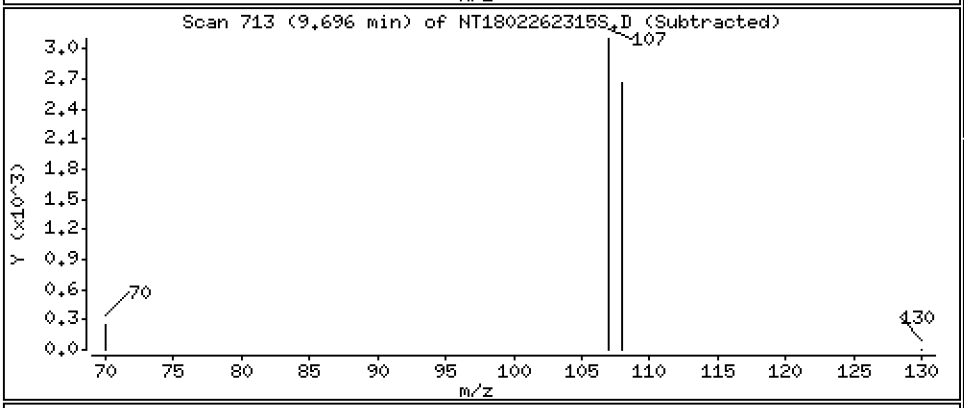
Column diameter: 0.25

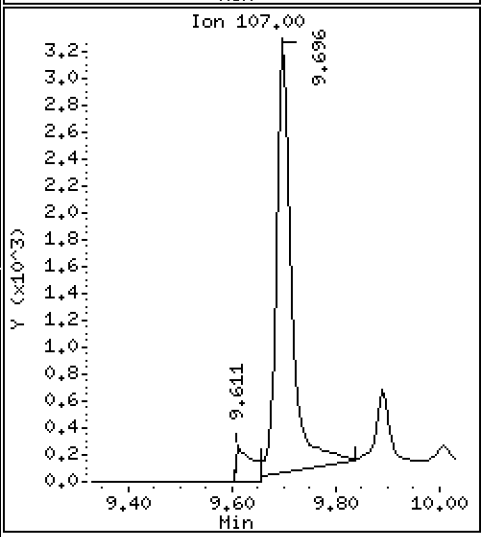
15 4-Methylphenol

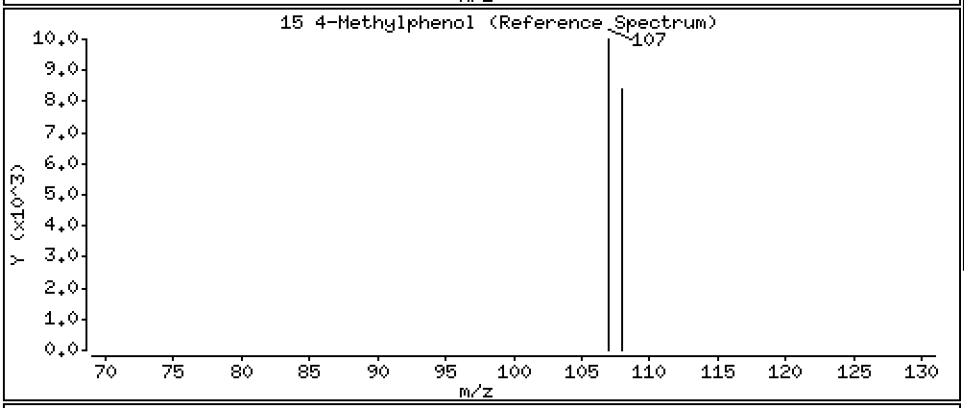
Concentration: 0.05779 ug/mL

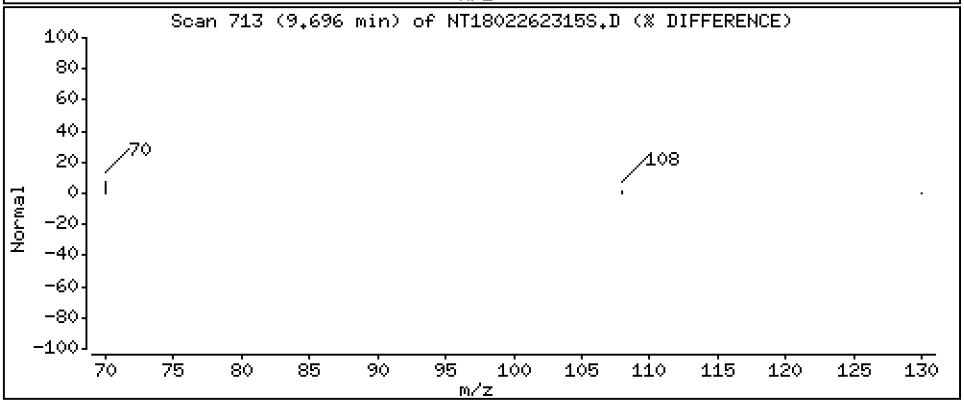












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623155.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

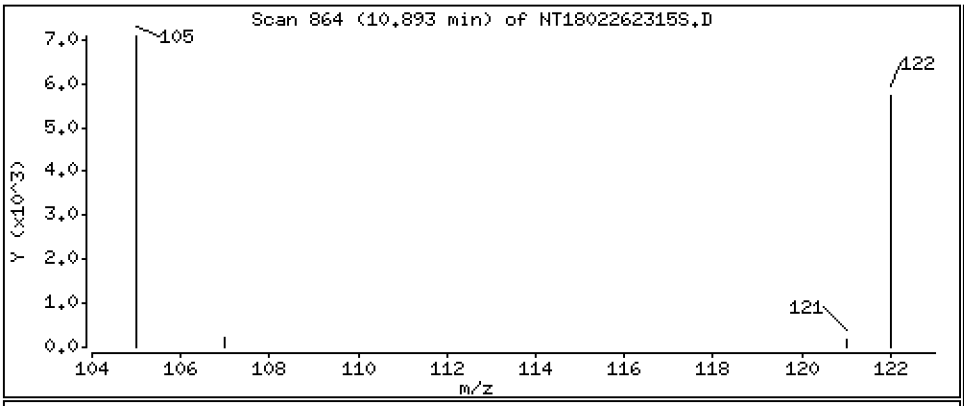
Operator: YZ

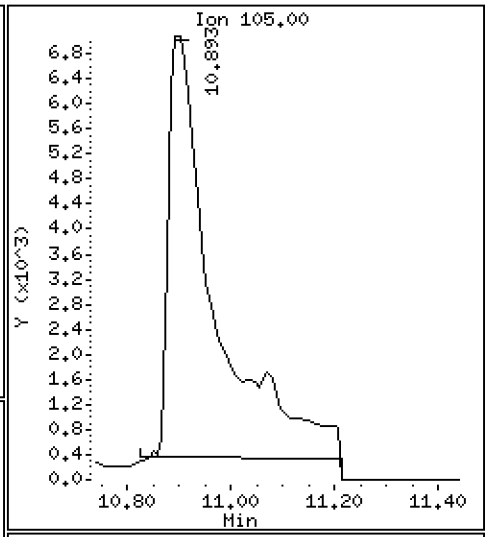
Column phase: ZB-5msi

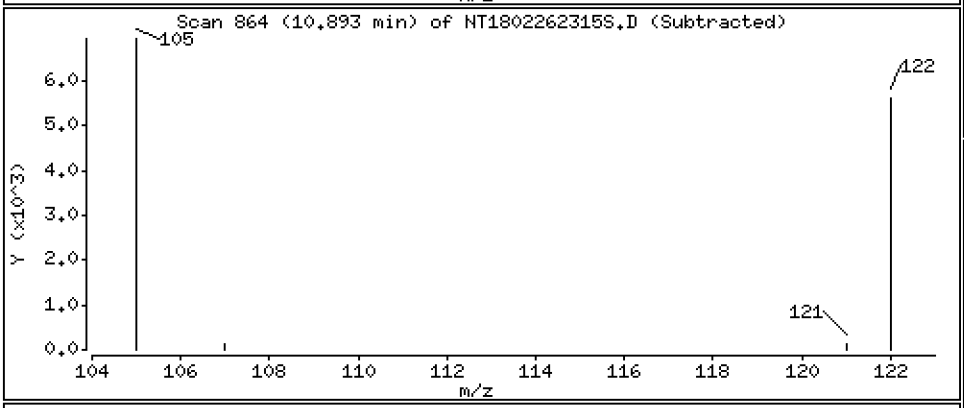
Column diameter: 0.25

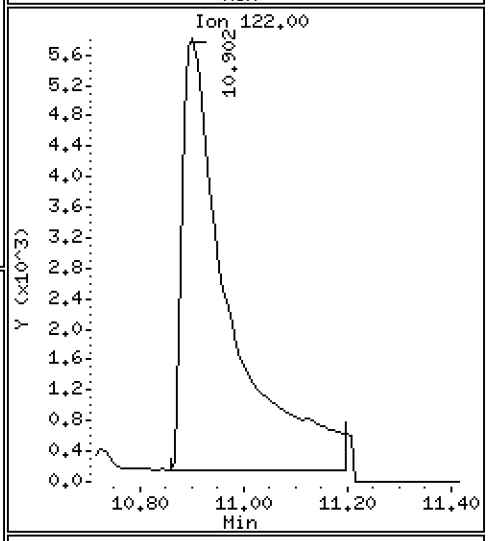
24 Benzoic acid

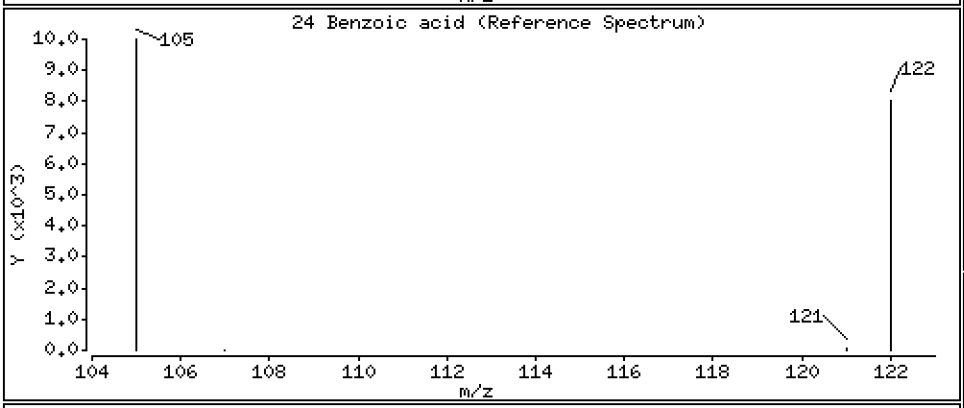
Concentration: 1.160 ug/mL

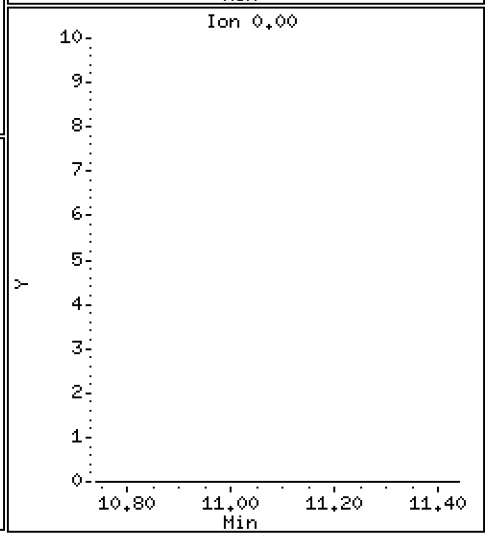


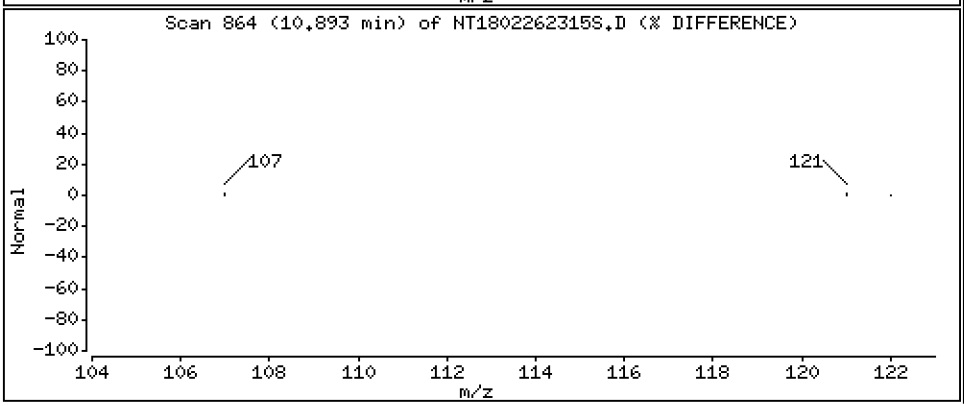












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262315S.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

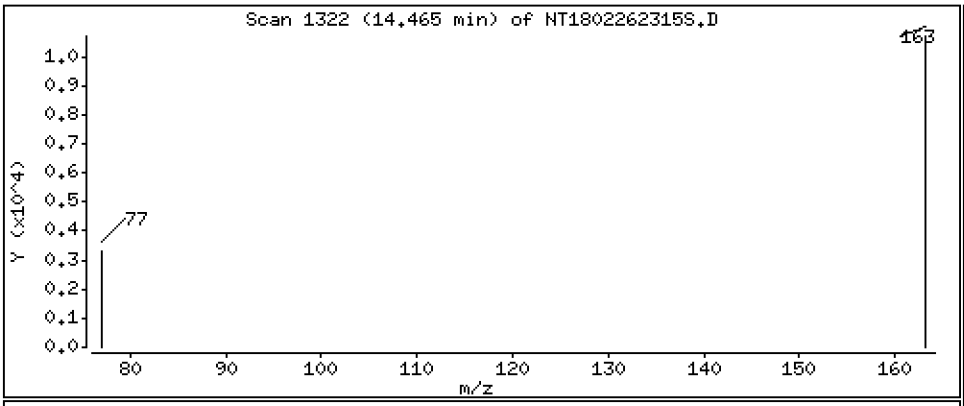
Operator: YZ

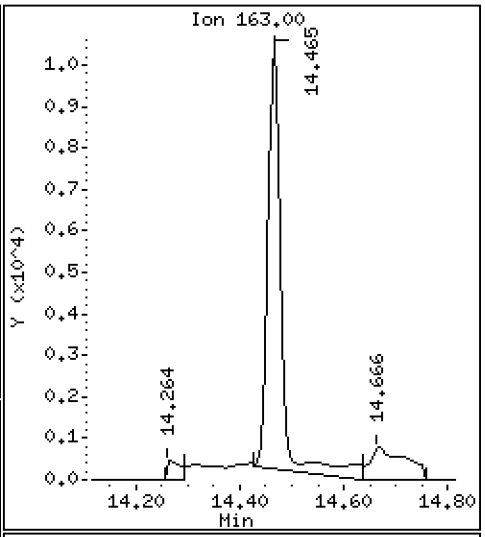
Column phase: ZB-5msi

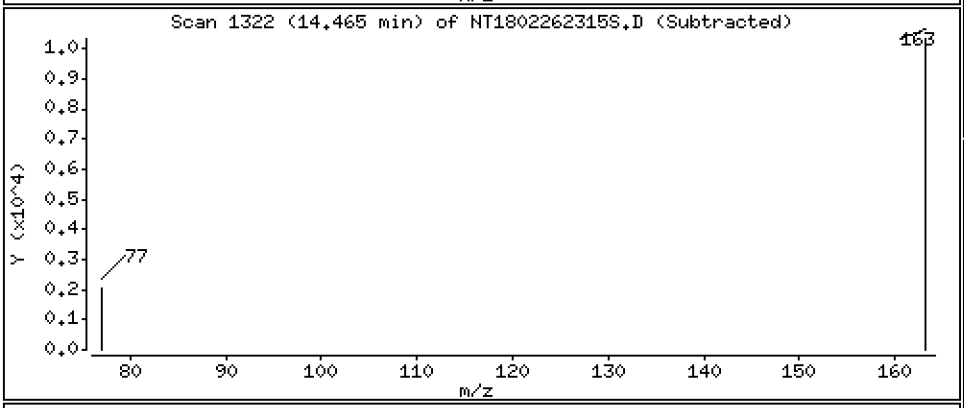
Column diameter: 0.25

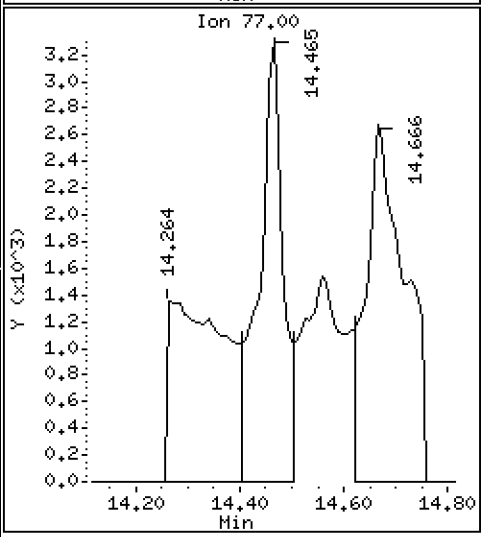
39 Dimethylphthalate

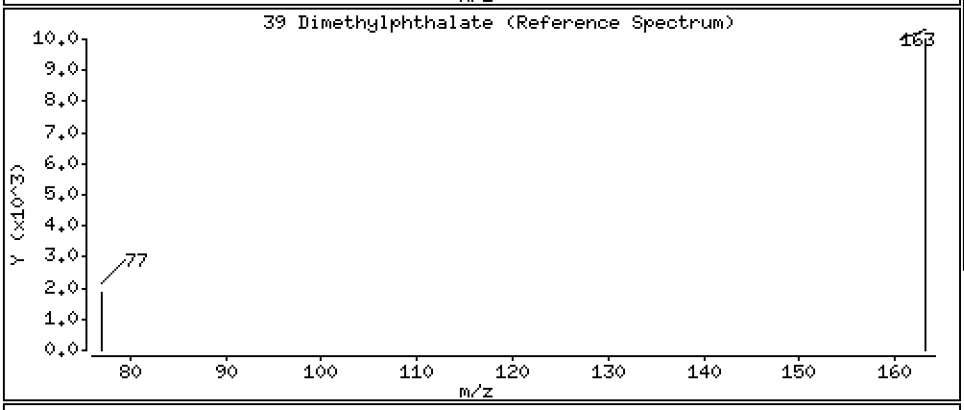
Concentration: 0.08804 ug/mL

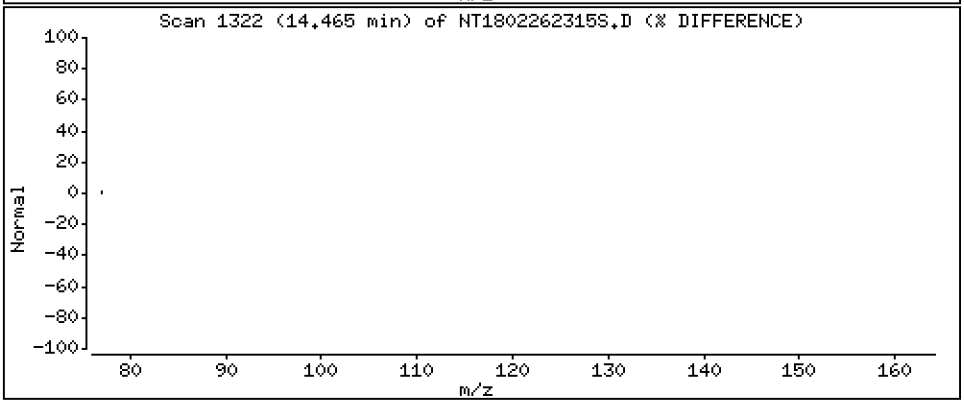












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623155.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

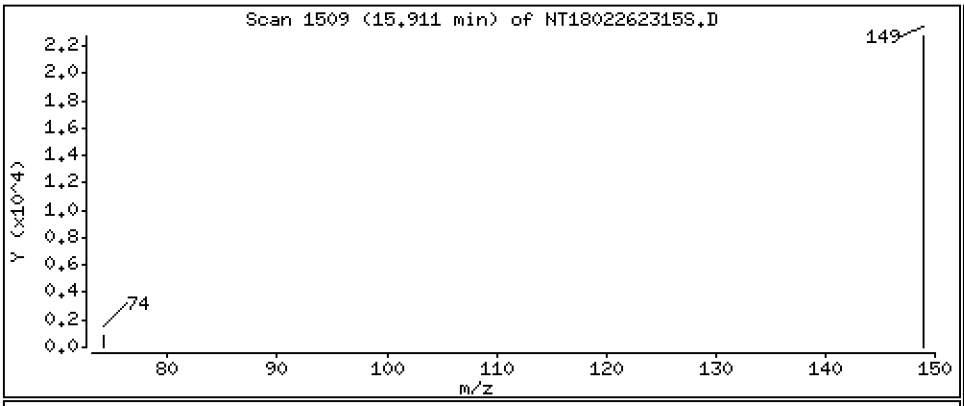
Operator: YZ

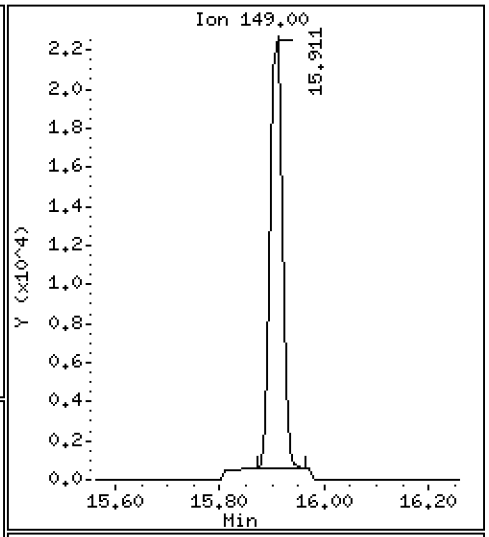
Column phase: ZB-5msi

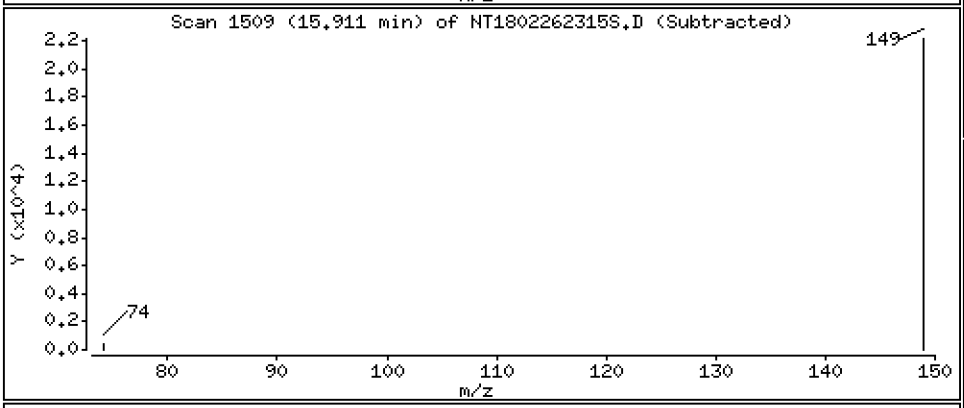
Column diameter: 0.25

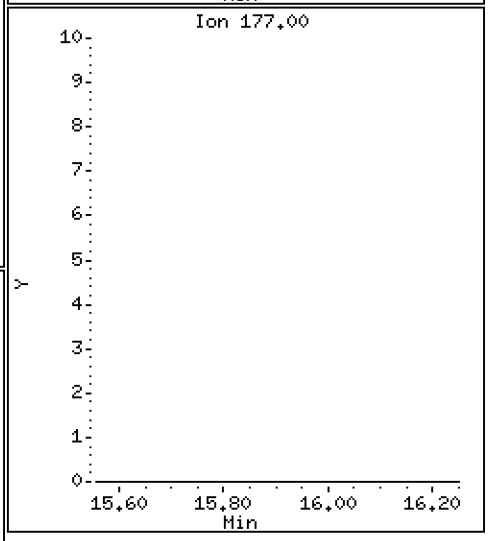
50 Diethylphthalate

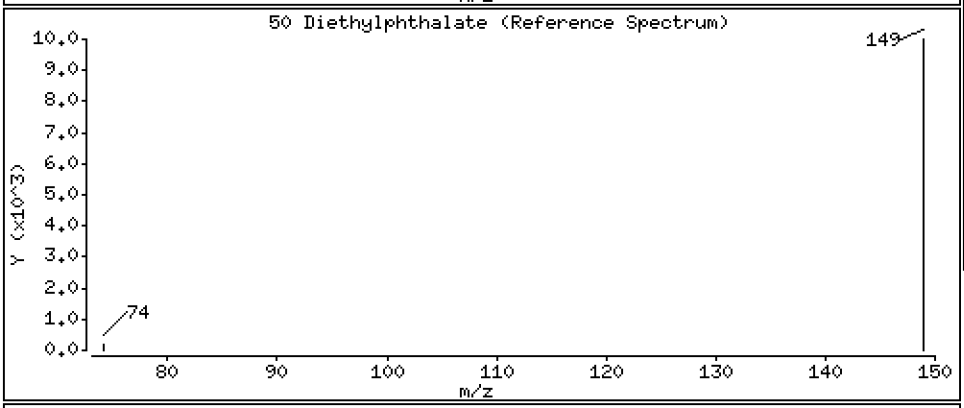
Concentration: 0.1875 ug/mL

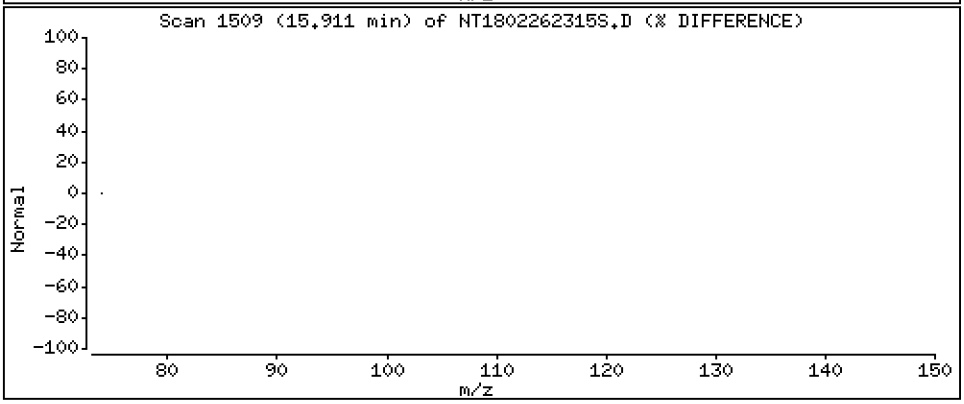












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262315S.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

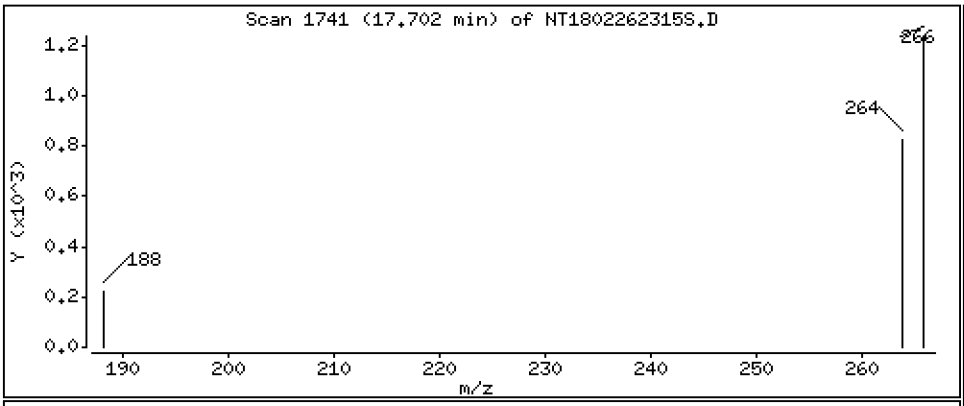
Operator: YZ

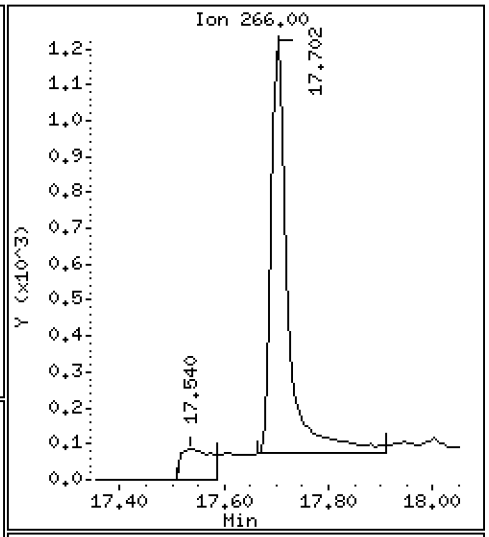
Column phase: ZB-5msi

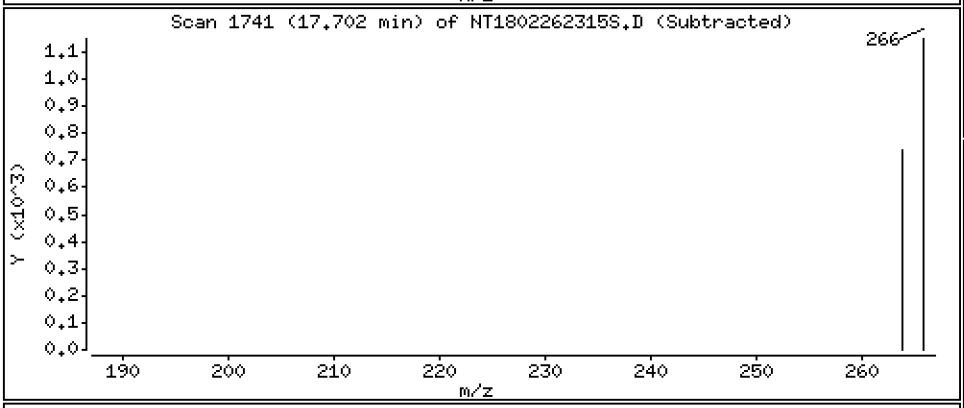
Column diameter: 0.25

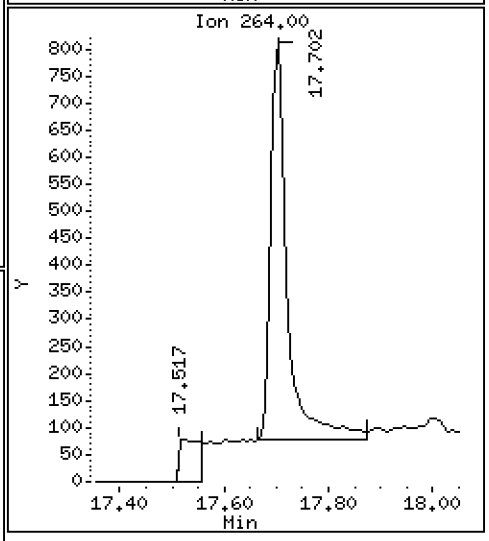
58 Pentachlorophenol

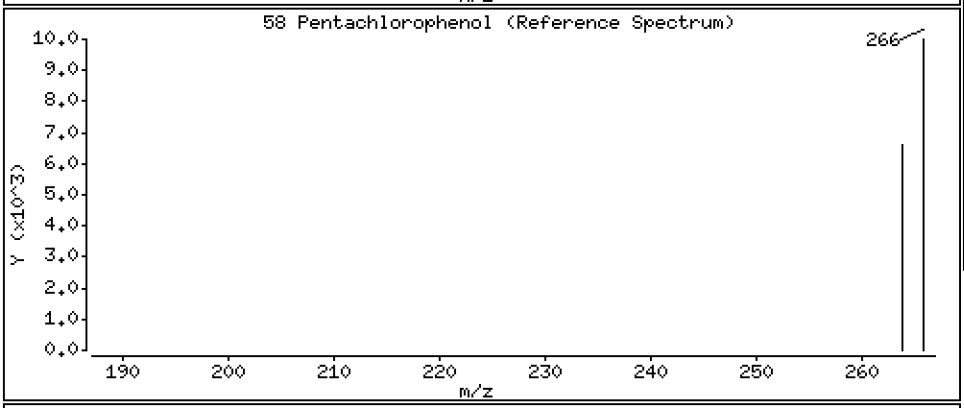
Concentration: 0.1178 ug/mL

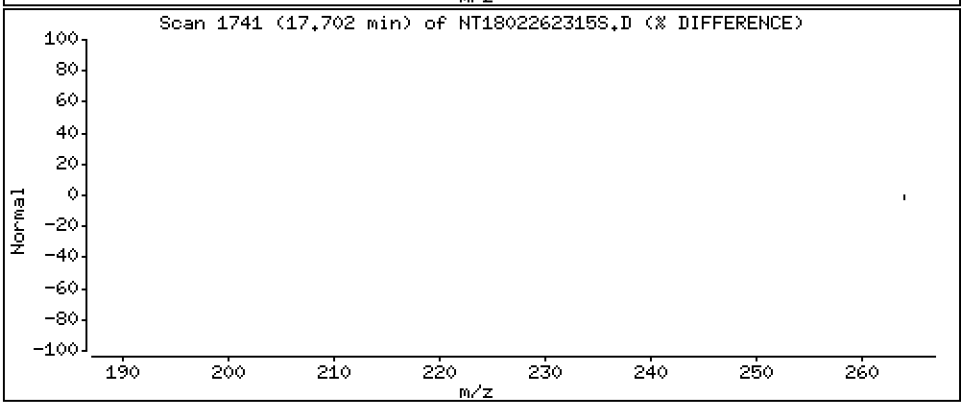












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262315S.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

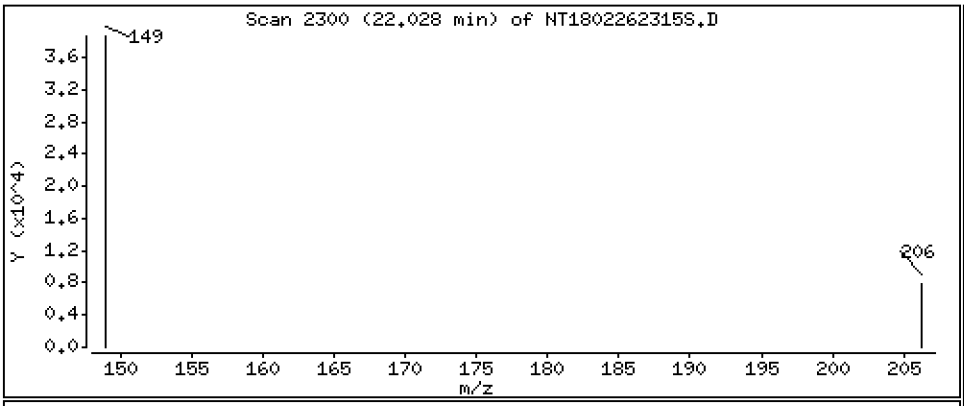
Operator: YZ

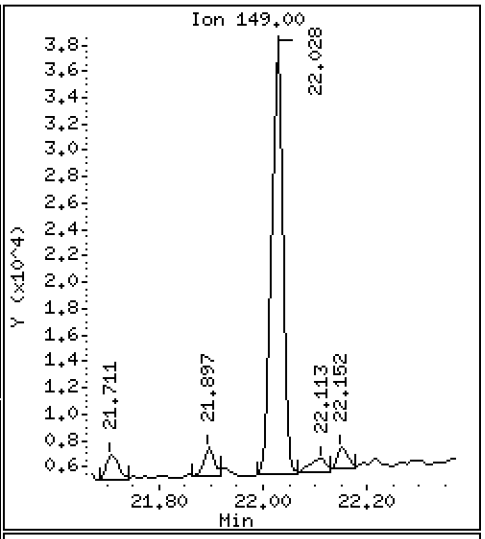
Column phase: ZB-5msi

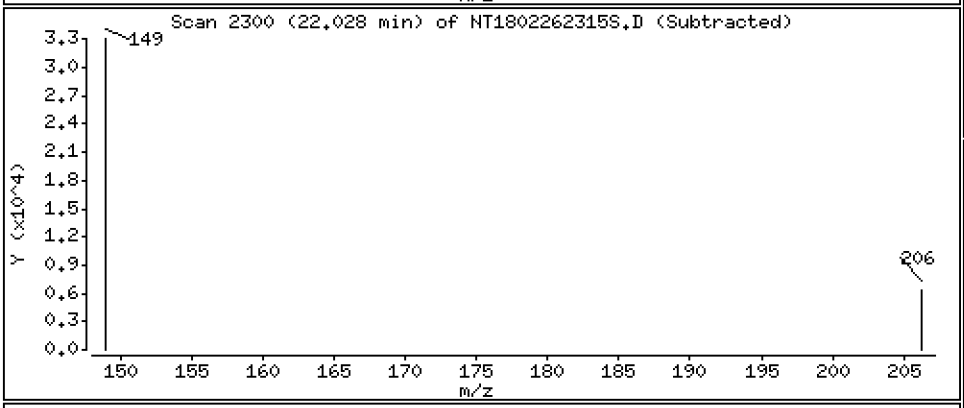
Column diameter: 0.25

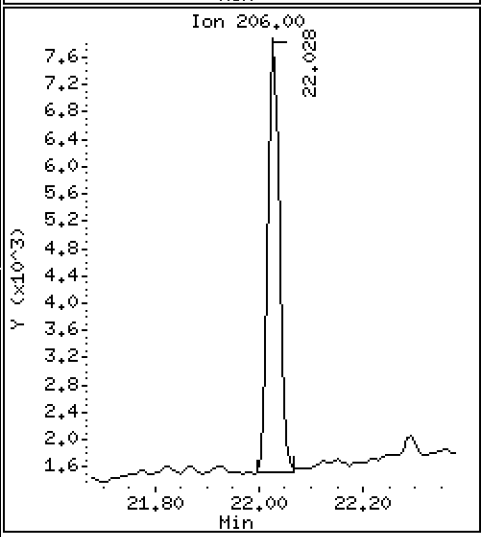
67 Butylbenzylphthalate

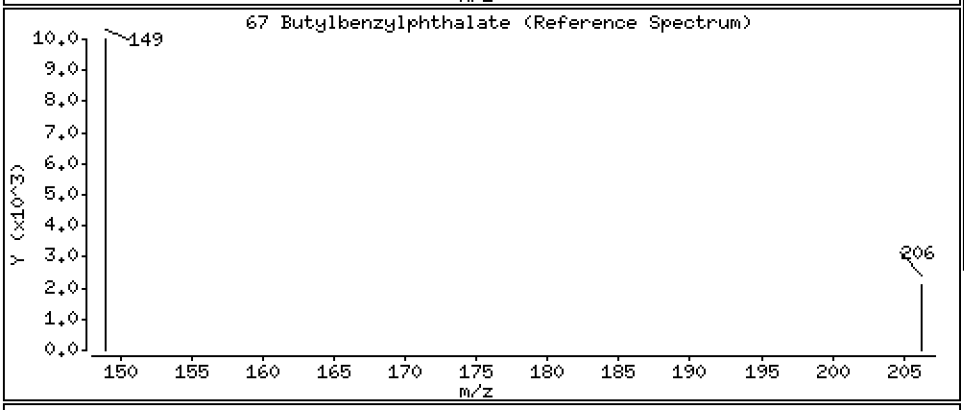
Concentration: 0.2650 ug/mL

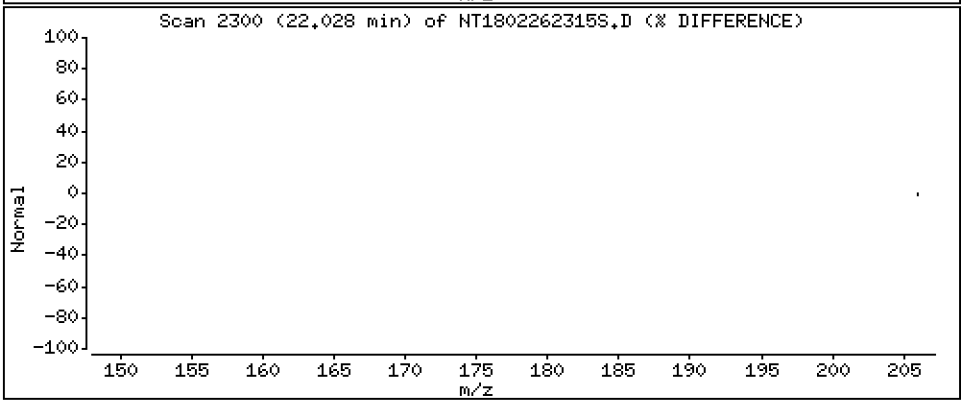












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262315S.D

Date : 26-FEB-2023 21:13

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-06

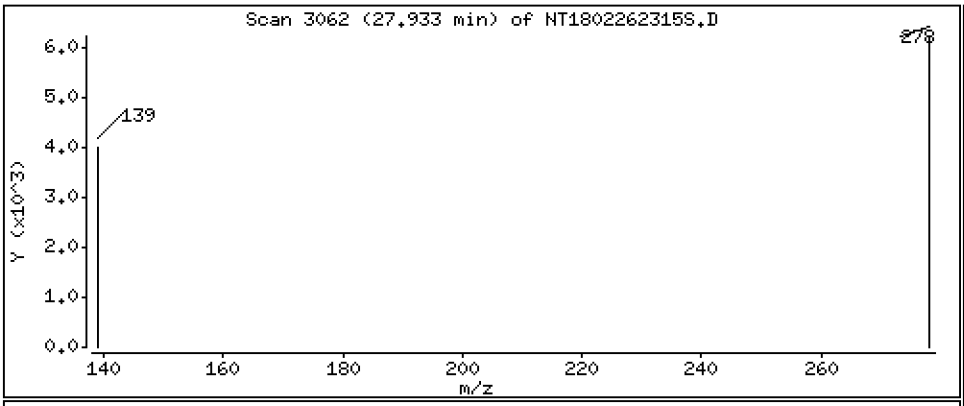
Operator: YZ

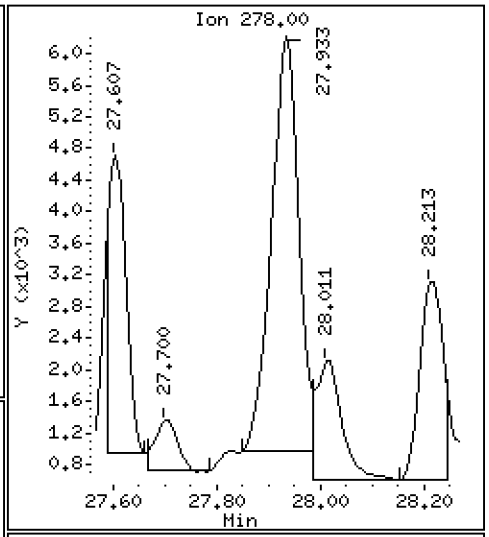
Column phase: ZB-5msi

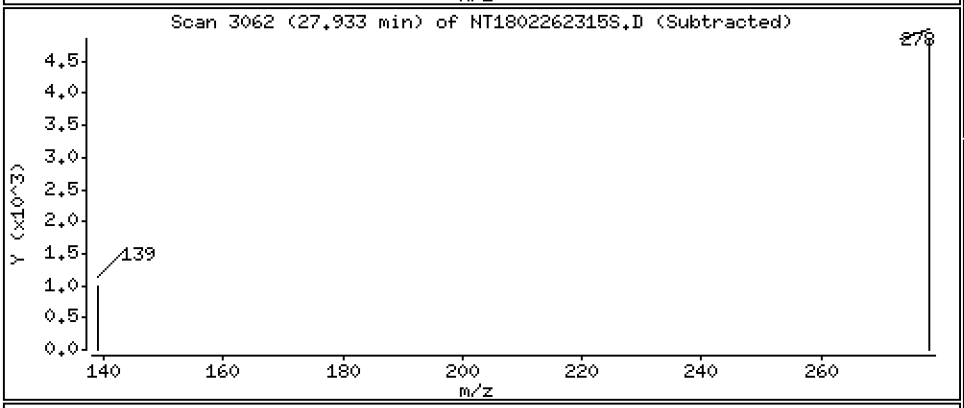
Column diameter: 0.25

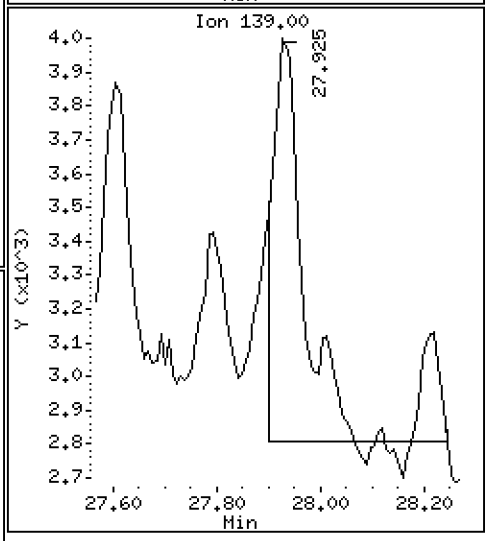
79 Dibenzo(a,h)anthracene

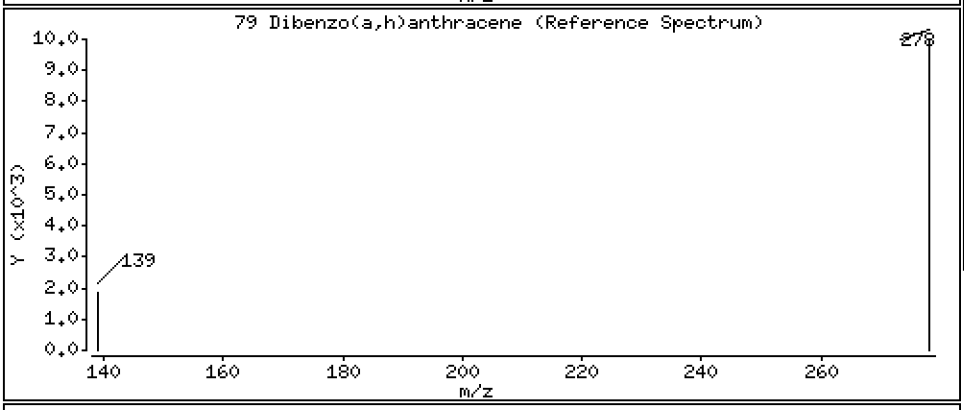
Concentration: 0.06817 ug/mL

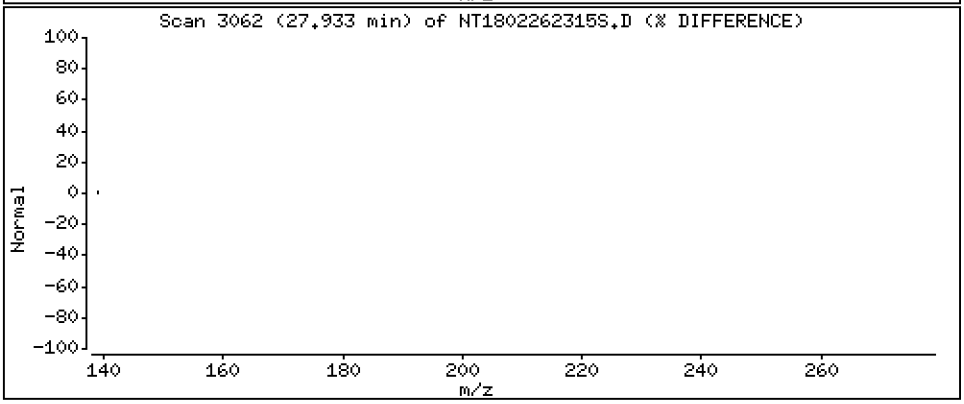












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262315S.D
Lab Smp Id: 23A0134-06
Inj Date : 26-FEB-2023 21:13
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-06
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.771	6.748	(0.759)	512294	5.93774	5.938(R)
	3	Phenol	94	8.340	8.324	(0.935)	429806	3.81870	3.819
	7	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8	1,4-Dichlorobenzene-d4	152	8.919	8.920	(1.000)	267319	4.00000	
	9	1,4-Dichlorobenzene	146	Compound Not Detected.					
	11	Benzyl alcohol	79	9.207	9.191	(1.032)	13927	0.19301	0.1930(H)
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	13	2-Methylphenol	108	Compound Not Detected.					
	15	4-Methylphenol	108	9.696	9.680	(1.087)	5367	0.05779	0.05779
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	Compound Not Detected.					
	24	Benzoic acid	105	10.893	11.088	(0.958)	41722	1.16014	1.160(M)
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.370	11.370	(1.000)	997192	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	14.465	14.465	(0.968)	17388	0.08804	0.08804
*	42	Acenaphthene-d10	162	14.944	14.945	(1.000)	514084	4.00000	
	50	Diethylphthalate	149	15.911	15.911	(1.065)	33844	0.18752	0.1875
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	17.702	17.702	(0.986)	2447	0.11777	0.1178
*	59	Phenanthrene-d10	188	17.957	17.950	(1.000)	1021135	4.00000	
$	66	Terphenyl-d14	244	21.099	21.091	(0.918)	865816	4.38280	4.383(R)
	67	Butylbenzylphthalate	149	22.028	22.020	(0.958)	47793	0.26501	0.2650
*	69	Chrysene-d12	240	22.988	22.980	(1.000)	1091000	4.00000	
*	77	Perylene-d12	264	25.481	25.473	(1.000)	961118	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.932	27.917	(1.096)	19469	0.06817	0.06817
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262315S.D
Lab Smp Id: 23A0134-06
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	267319	-4.35
27 Naphthalene-d8	1065527	532764	2131054	997192	-6.41
42 Acenaphthene-d10	544290	272145	1088580	514084	-5.55
59 Phenanthrene-d10	1003412	501706	2006824	1021135	1.77
69 Chrysene-d12	936975	468488	1873950	1091000	16.44
77 Perylene-d12	1057771	528886	2115542	961118	-9.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.94	-0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
77 Perylene-d12	25.47	24.97	25.97	25.48	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262315S.D

Lab ID: 23A0134-06
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 21:13

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.958	0.975	-0.0172	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

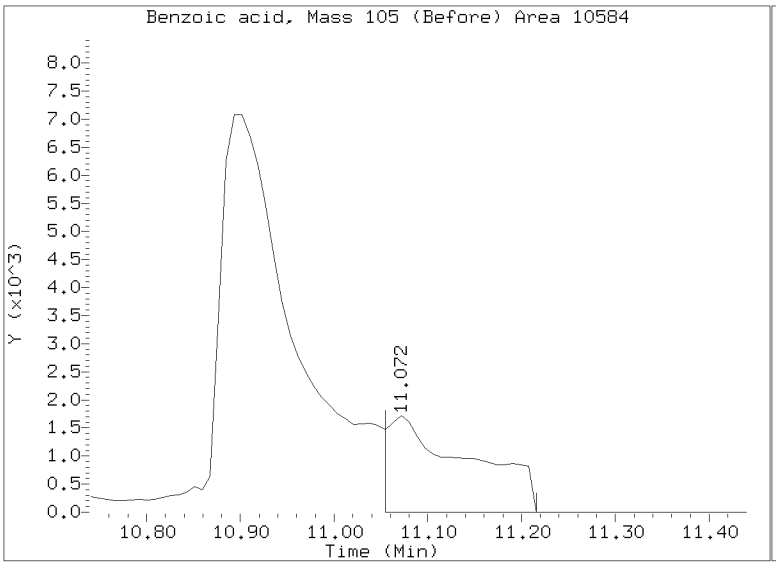
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

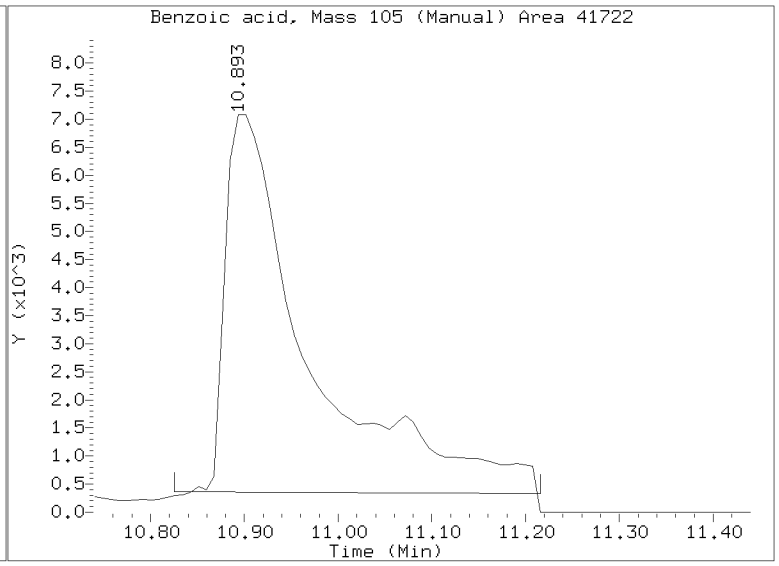
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/SIM.b/NT1802262315S.D
Injection Date: 26-FEB-2023 21:13
Lab ID:23A0134-06 Client ID:
Report Date: 03/24/2023 11:53





APPROVED

By Deenay Dunmore at 12:04 pm, Mar 24, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1152

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-07 C	SDG:	23A0134
Sampled:	01/06/23 12:29	Prepared:	01/19/23 13:35	File ID:	NT1802262316S.D
% Solids:	43.66	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 21:53
Batch:	BLA0410	Sequence:	SLC0389	Initial/Final:	23.28 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	4.9	U	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	4.9	U	0.7	4.9
100-51-6	Benzyl Alcohol	1	17.5	J	2.4	19.7
65-85-0	Benzoic acid	1	112	Q	13.2	98.4
105-67-9	2,4-Dimethylphenol	1	19.7	U	2.1	19.7
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	2.6	J	2.1	19.7

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	737.90	555	75.2	27 - 120	
p-Terphenyl-d14	491.93	403	81.9	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623165.D

Page 1

Date : 26-FEB-2023 21:53

Client ID:

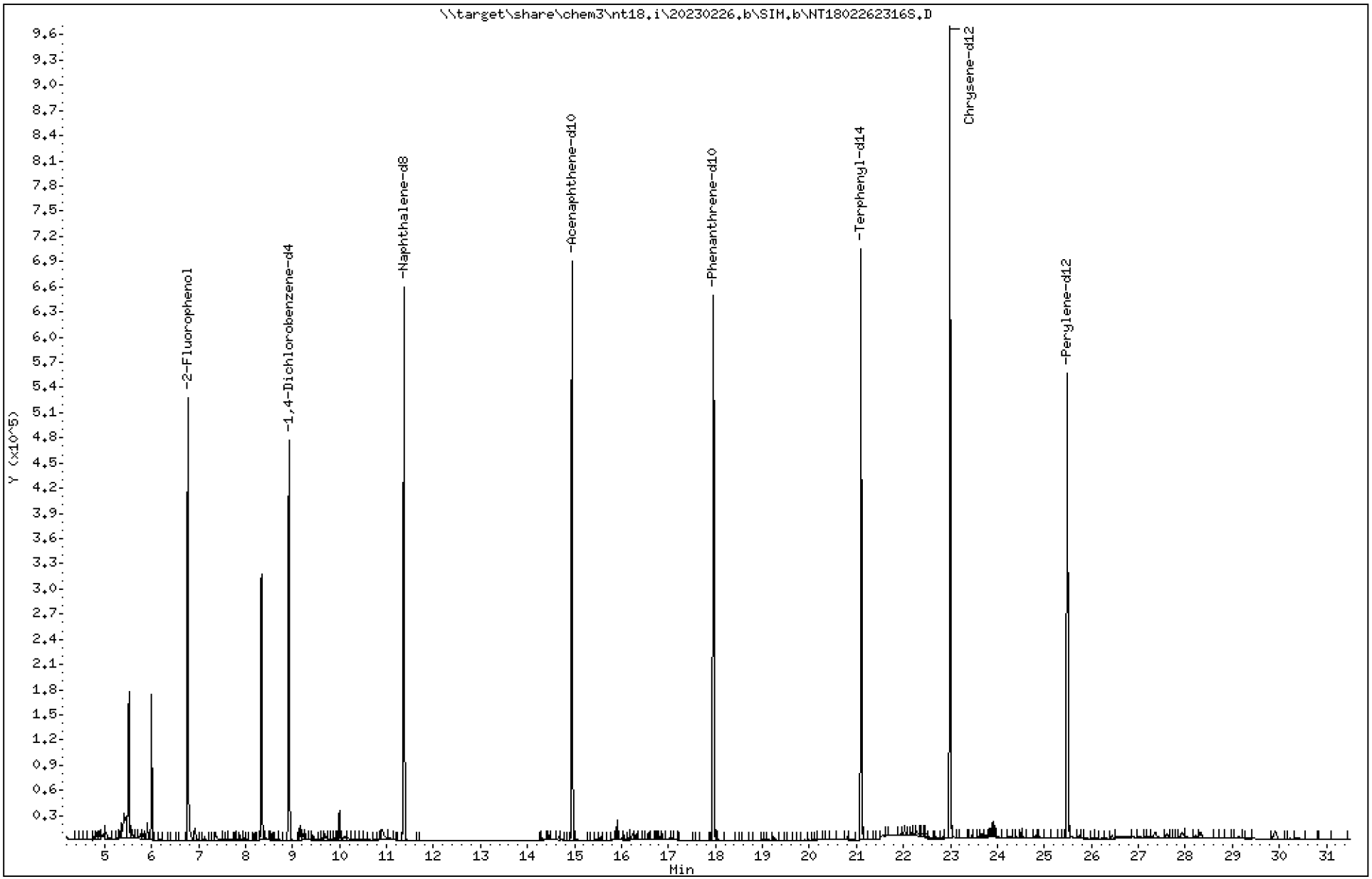
Instrument: nt18.i

Sample Info: 23A0134-07

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

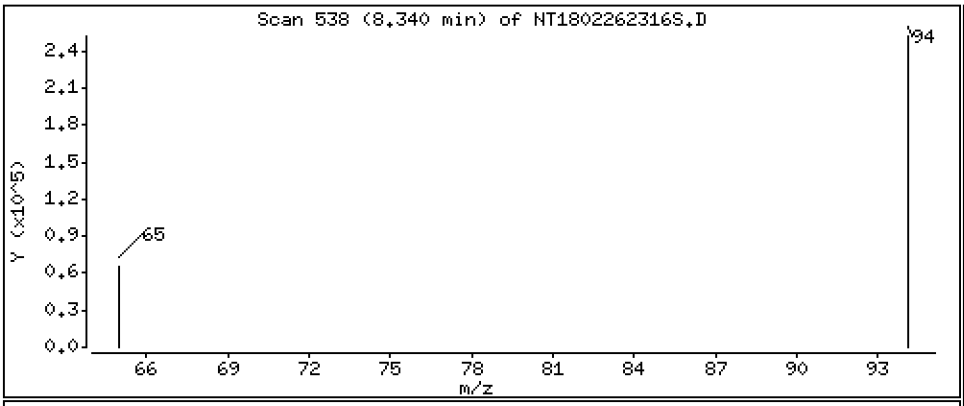
Operator: YZ

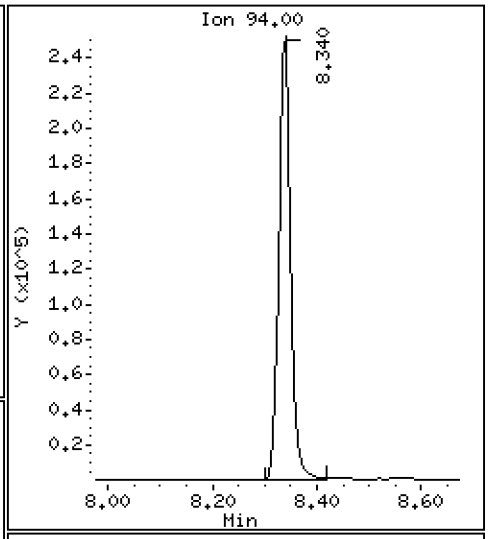
Column phase: ZB-5msi

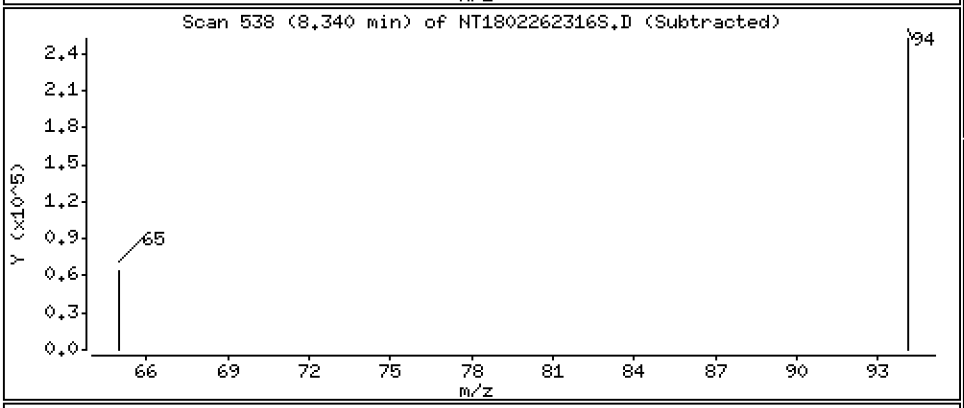
Column diameter: 0.25

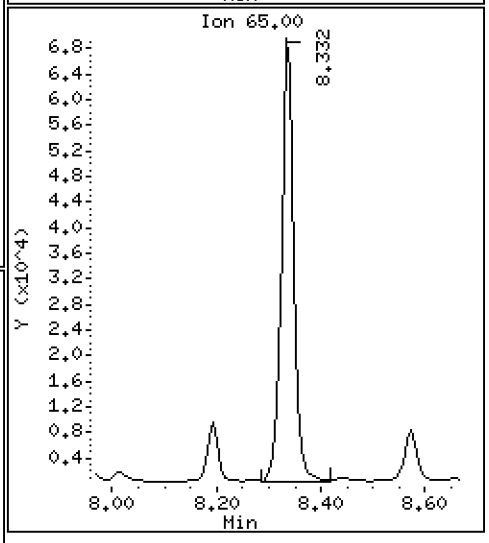
3 Phenol

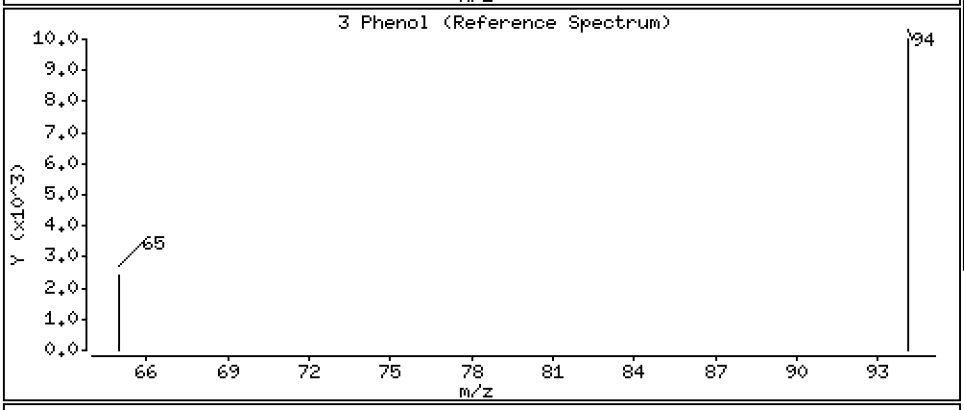
Concentration: 3.407 ug/mL

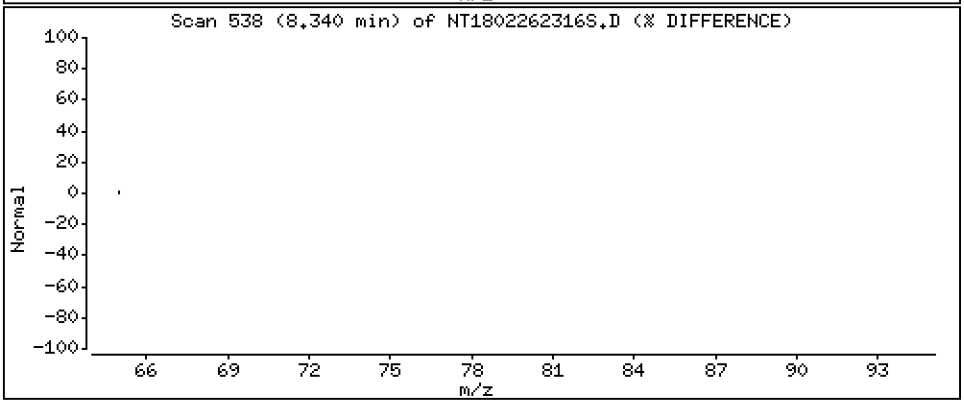












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

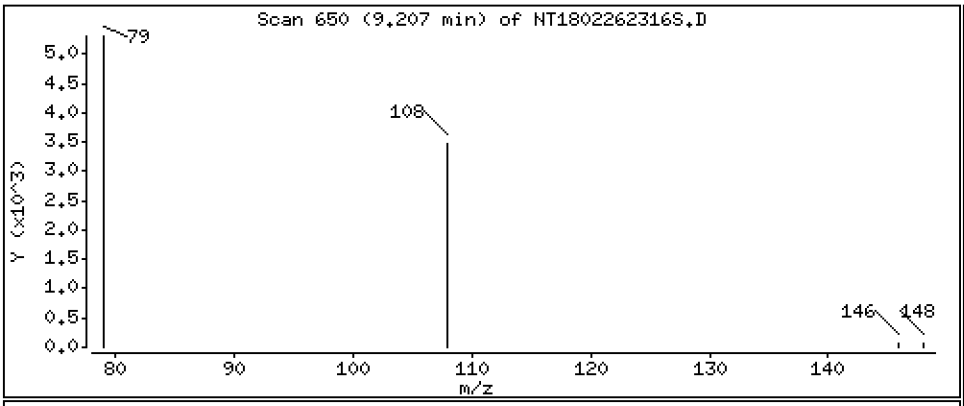
Operator: YZ

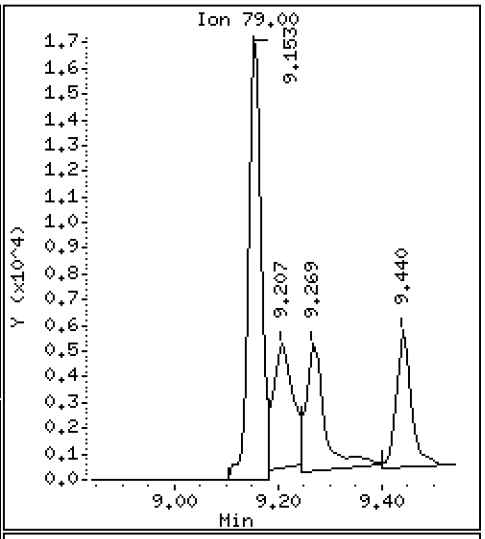
Column phase: ZB-5msi

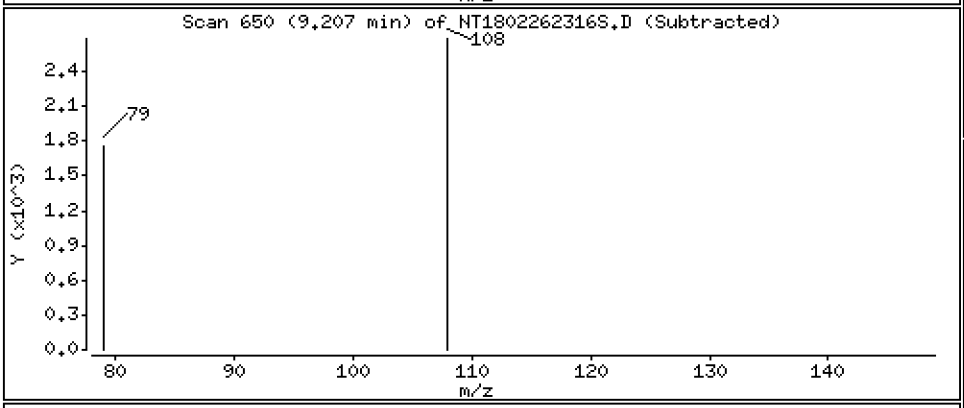
Column diameter: 0.25

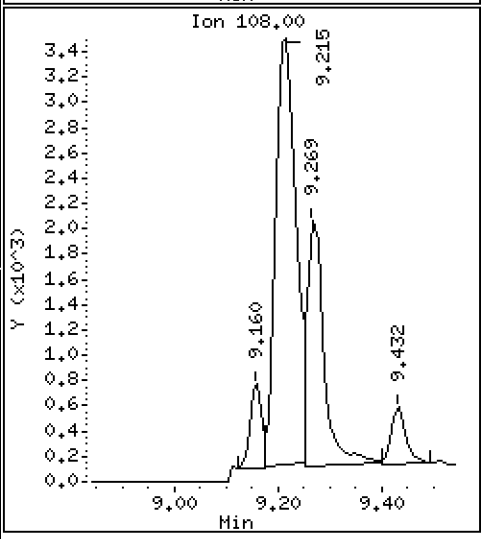
11 Benzyl alcohol

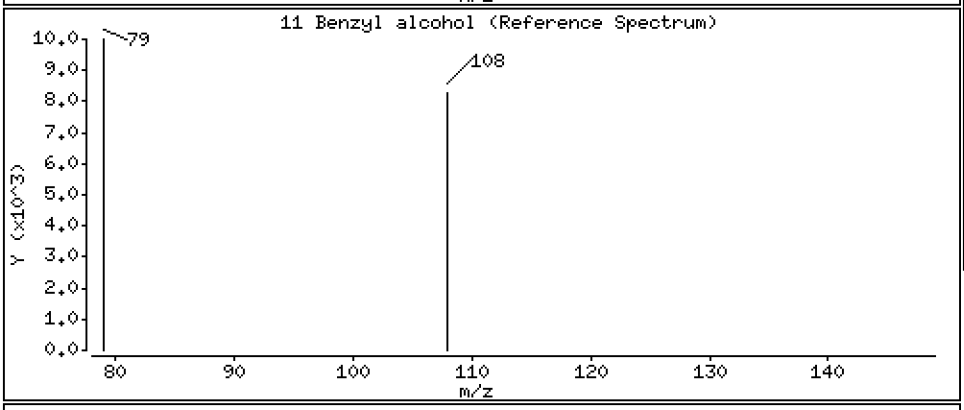
Concentration: 0.1779 ug/mL

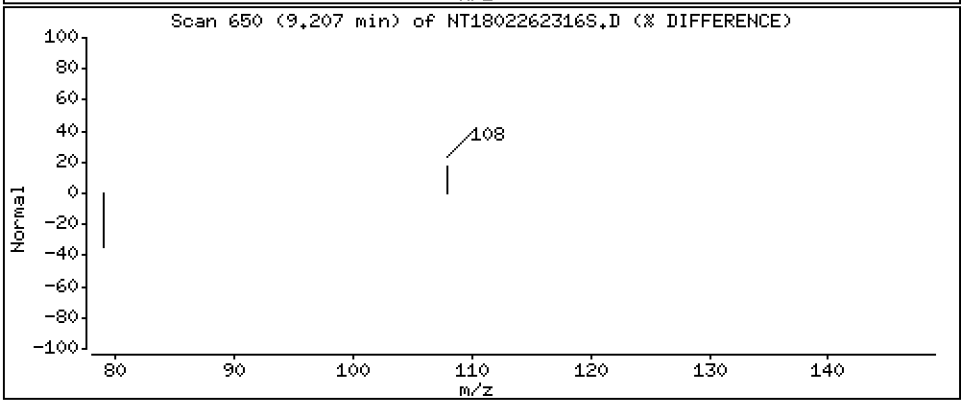












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

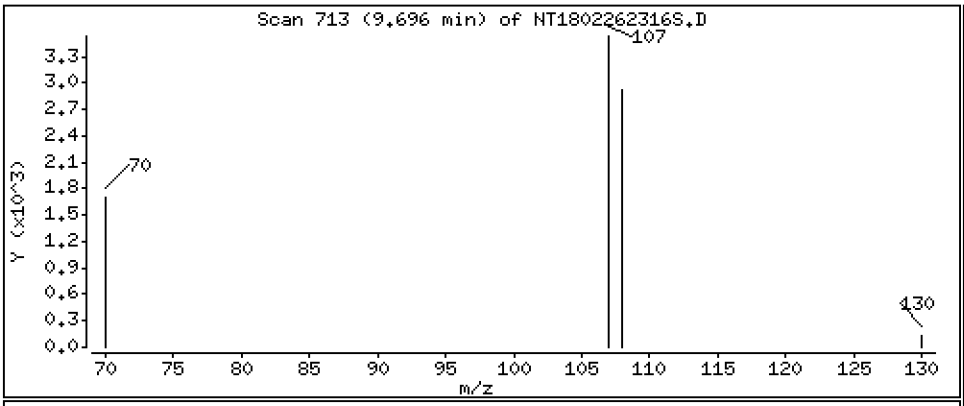
Operator: YZ

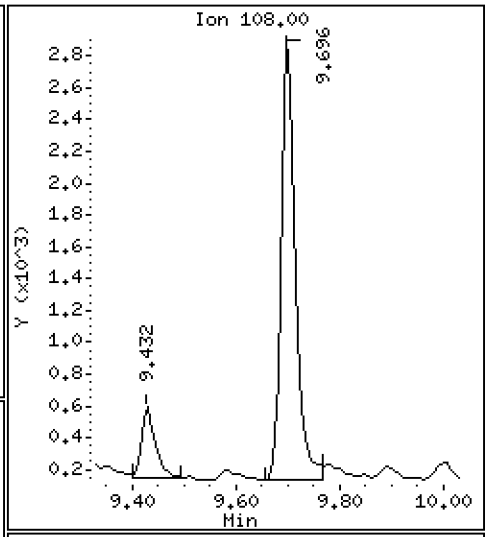
Column phase: ZB-5msi

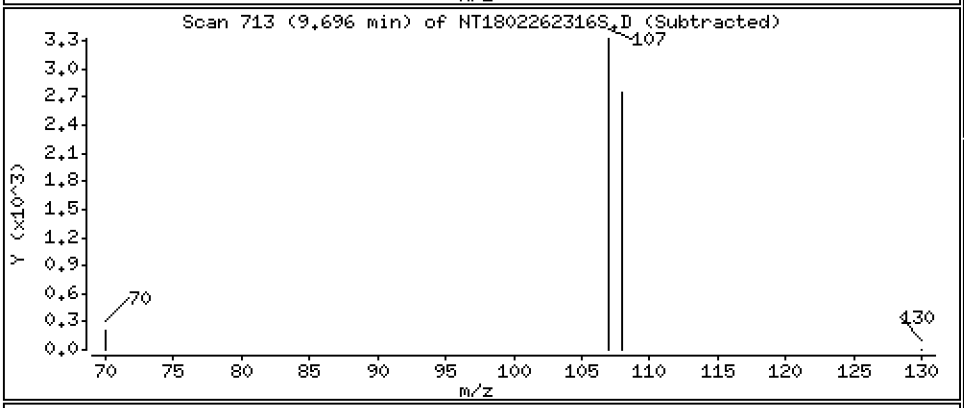
Column diameter: 0.25

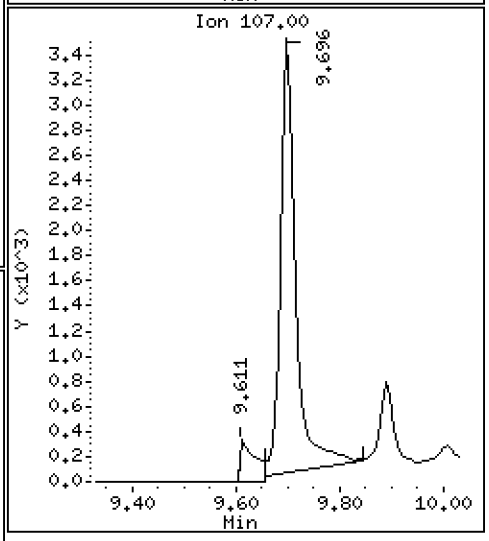
15 4-Methylphenol

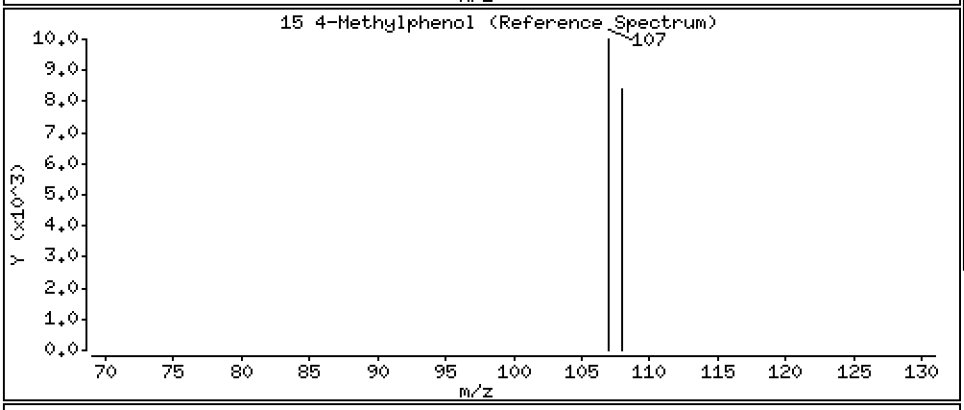
Concentration: 0.05600 ug/mL

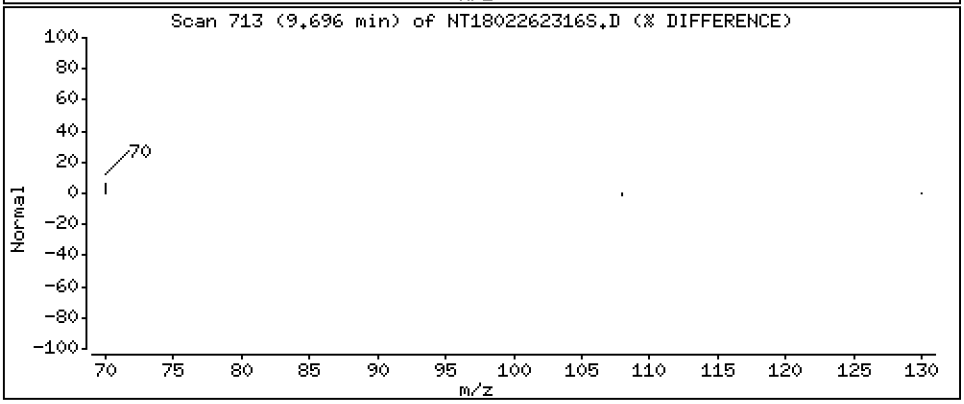












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Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

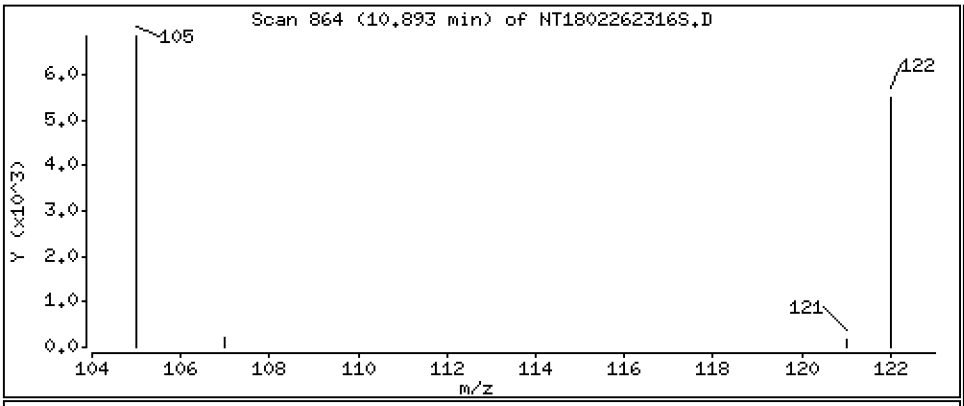
Operator: YZ

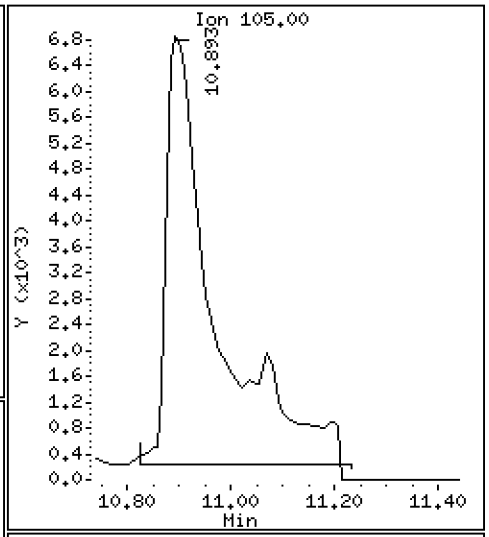
Column phase: ZB-5msi

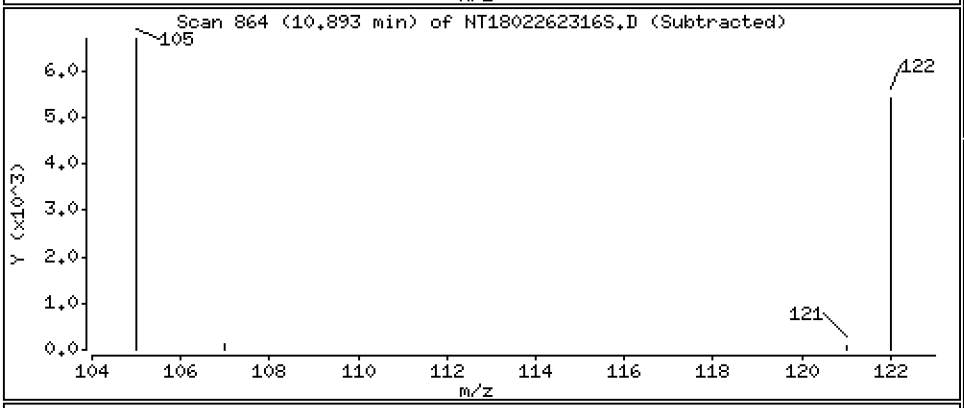
Column diameter: 0.25

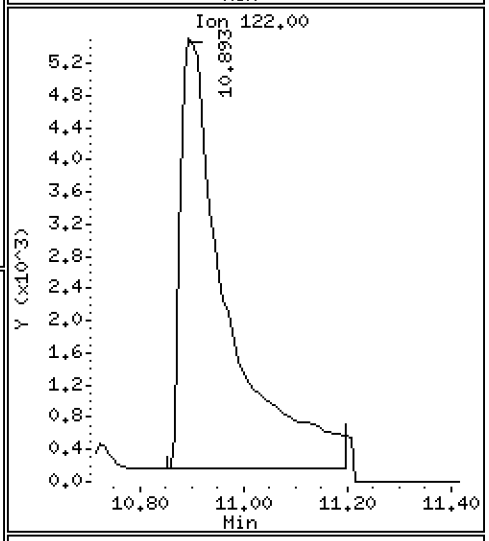
24 Benzoic acid

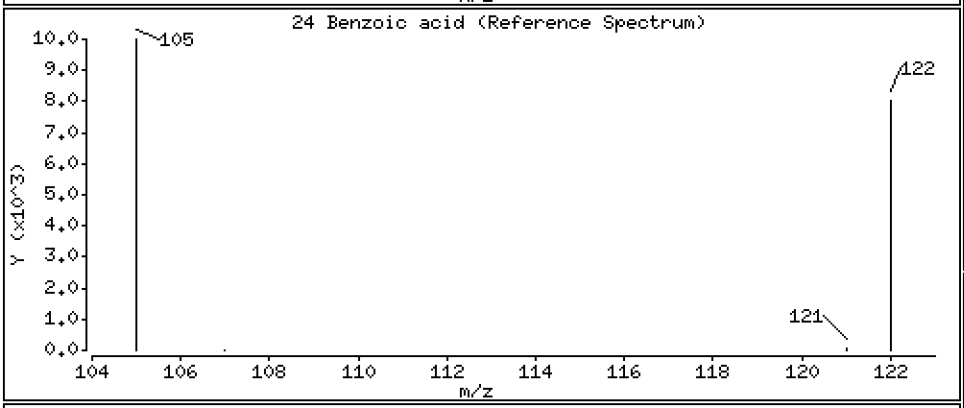
Concentration: 1.141 ug/mL

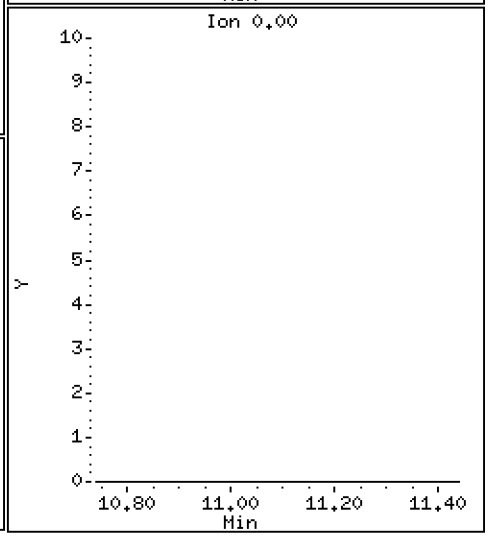


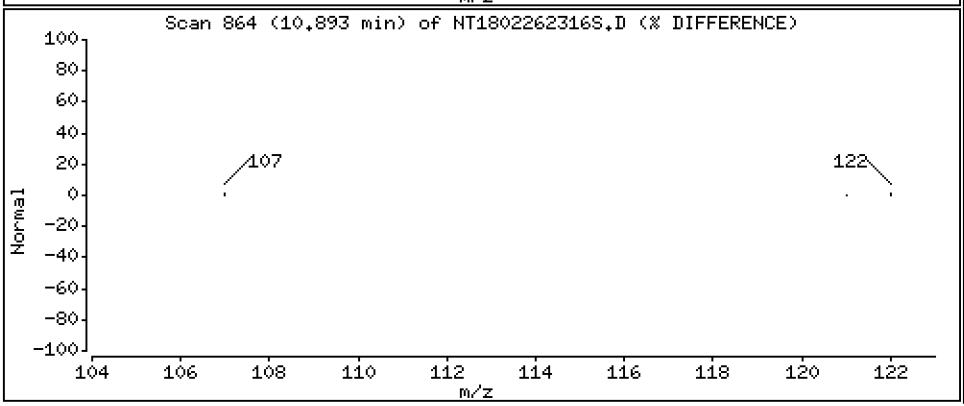












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262316S.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

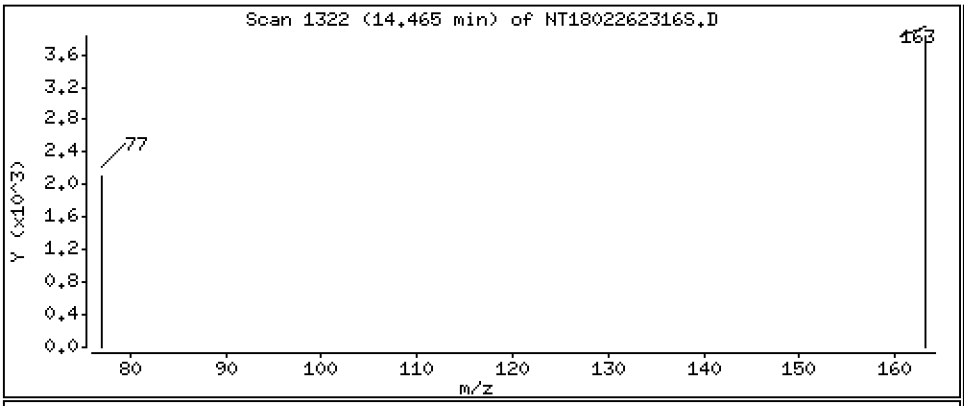
Operator: YZ

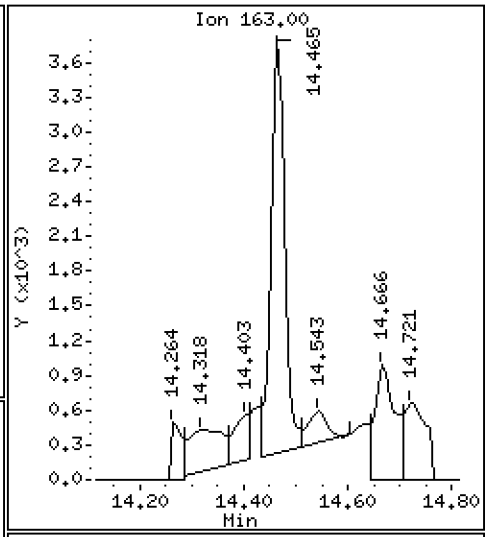
Column phase: ZB-5msi

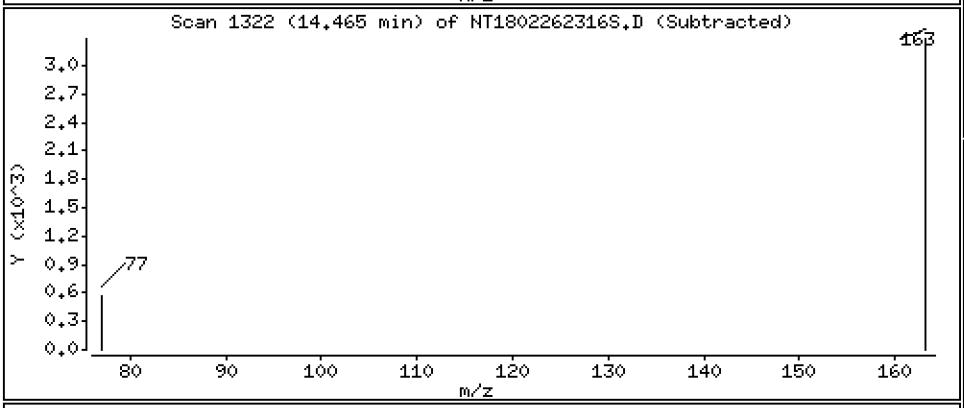
Column diameter: 0.25

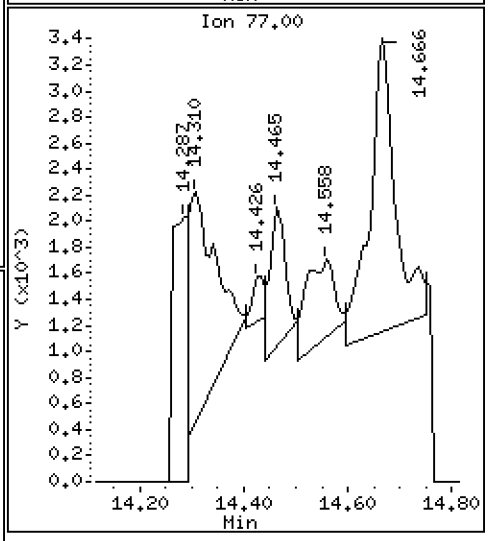
39 Dimethylphthalate

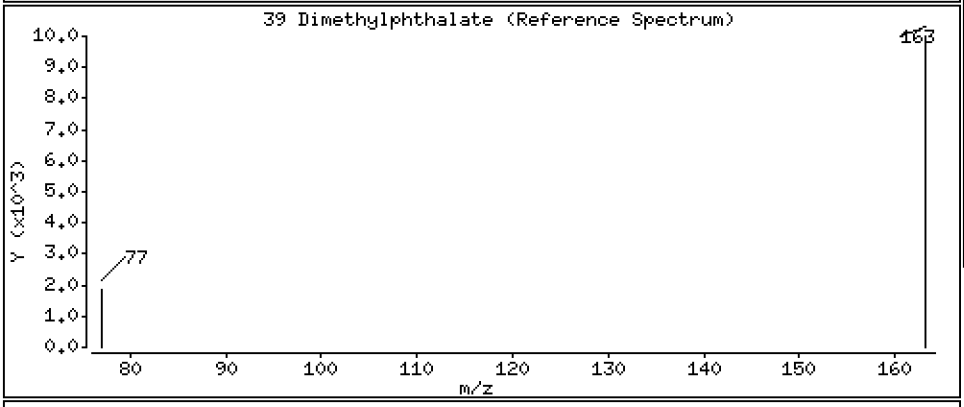
Concentration: 0.02957 ug/mL

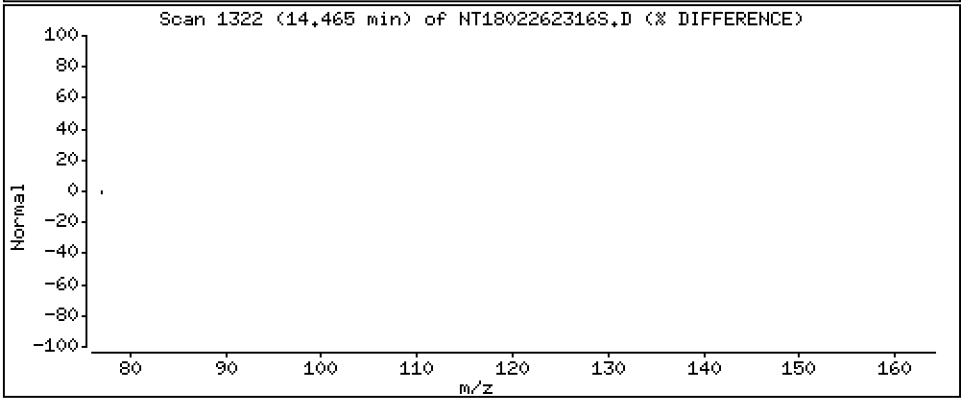












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262316S.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

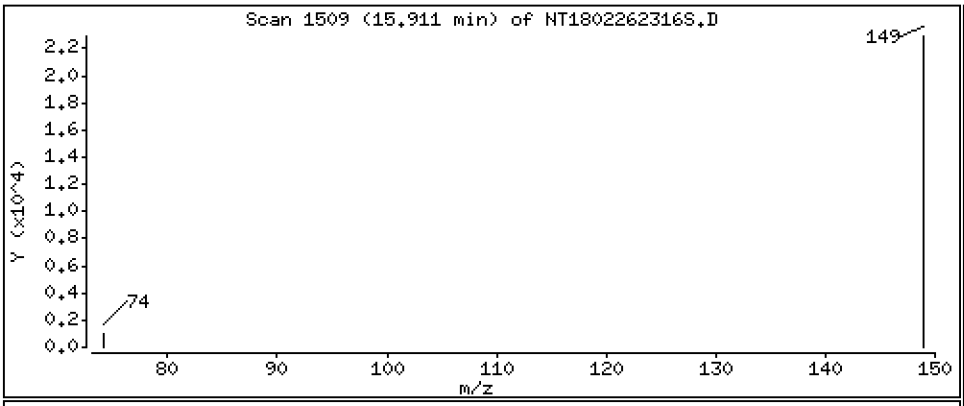
Operator: YZ

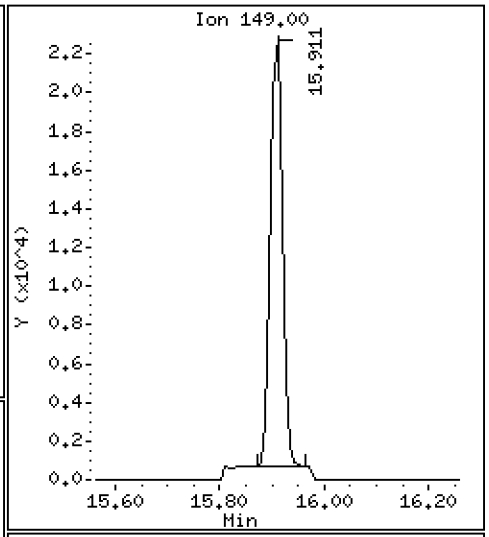
Column phase: ZB-5msi

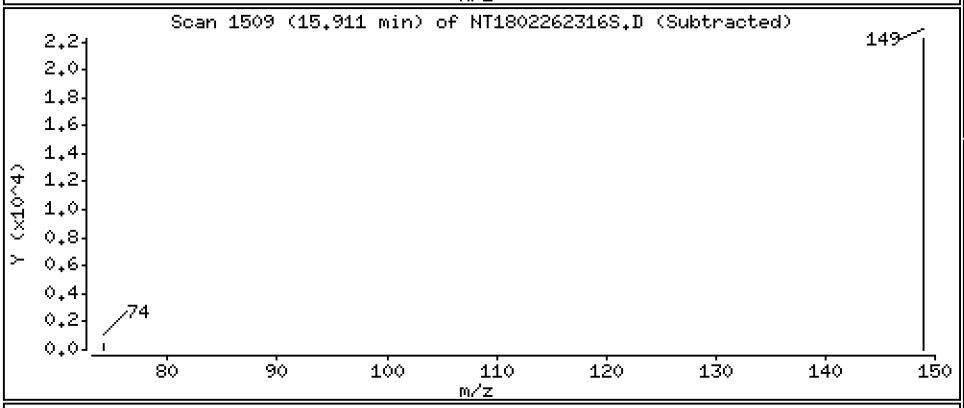
Column diameter: 0.25

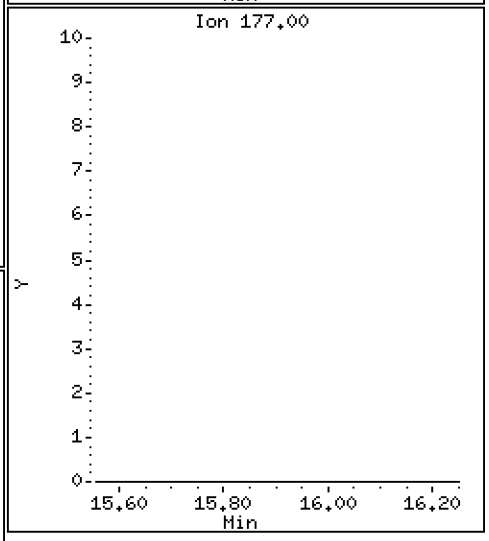
50 Diethylphthalate

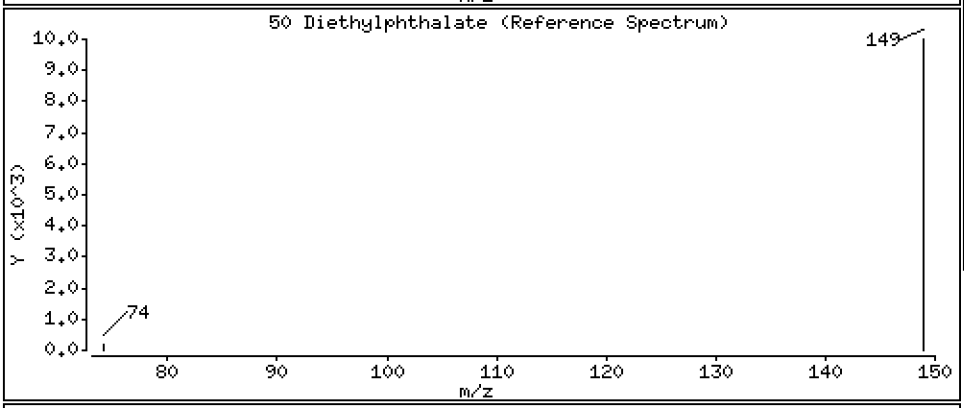
Concentration: 0.1763 ug/mL

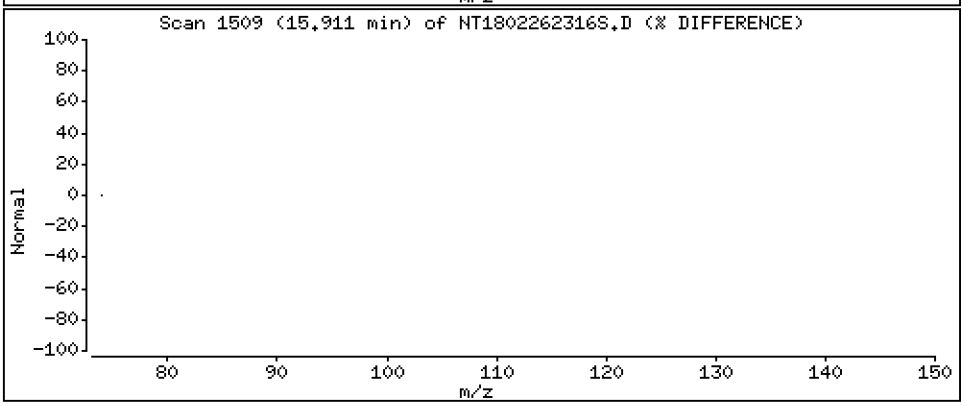












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262316S.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

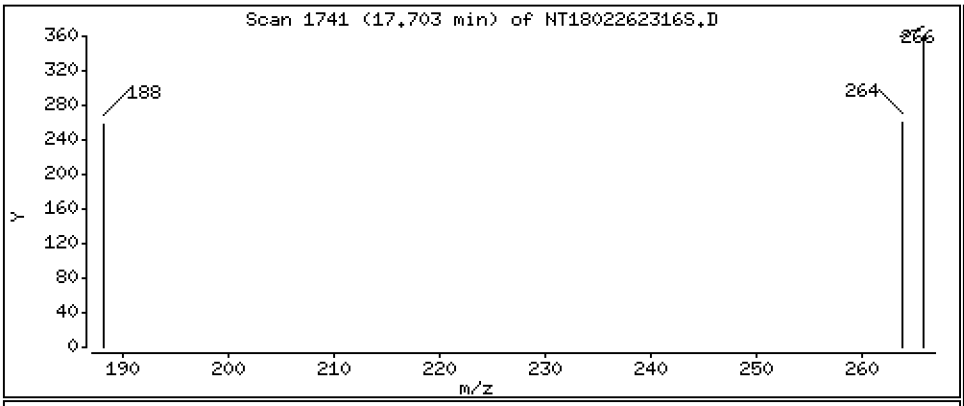
Operator: YZ

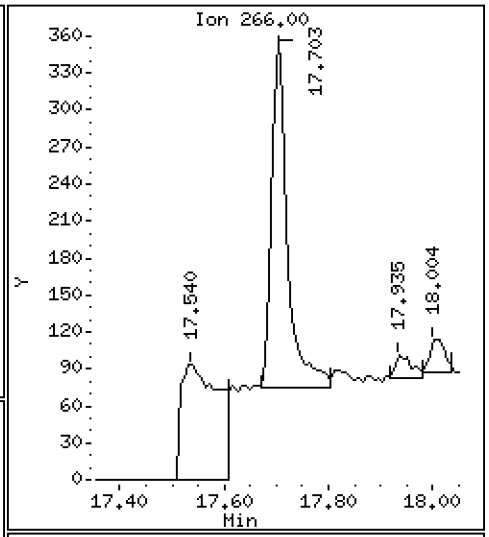
Column phase: ZB-5msi

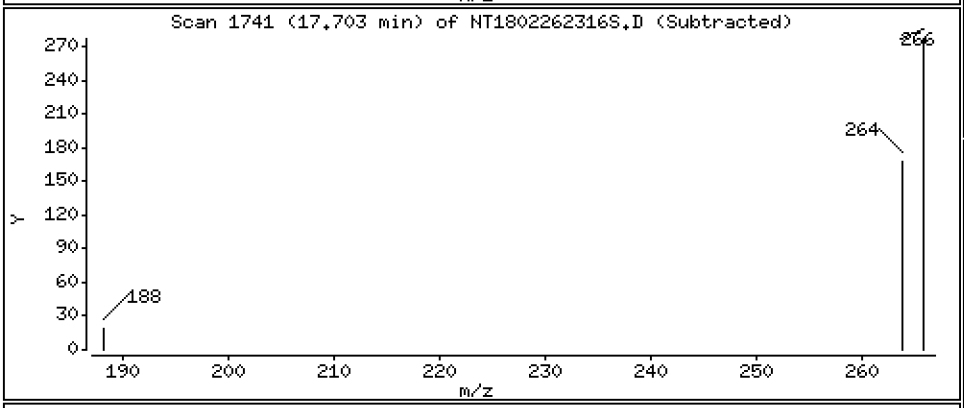
Column diameter: 0.25

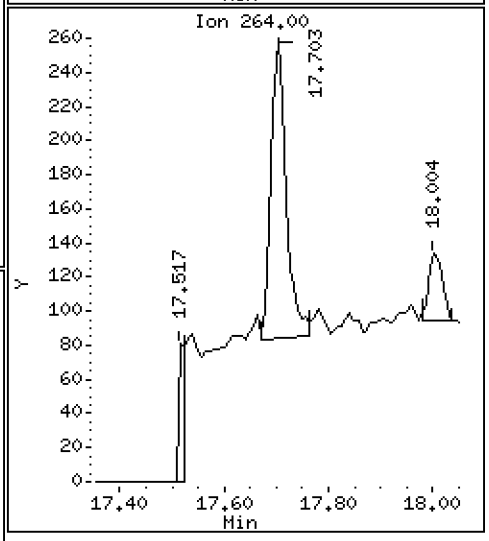
58 Pentachlorophenol

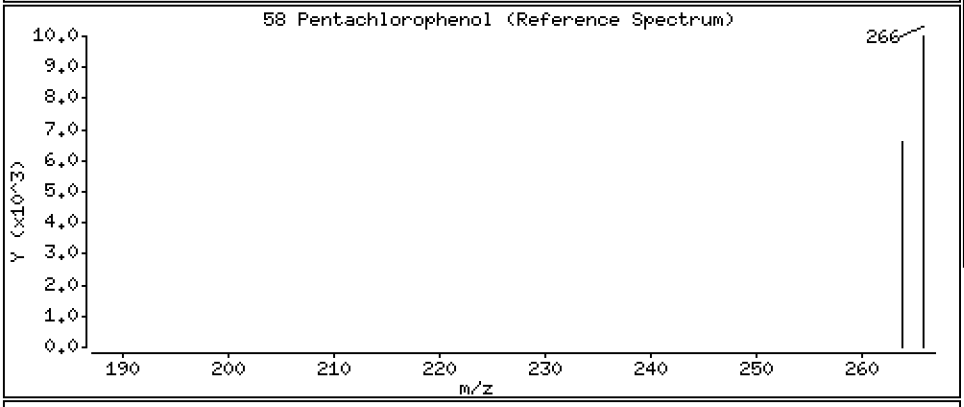
Concentration: 0.02628 ug/mL

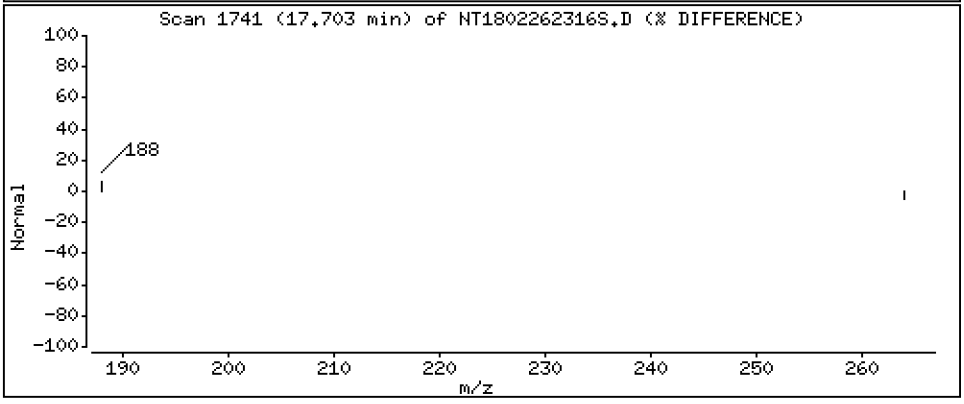












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262316S.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

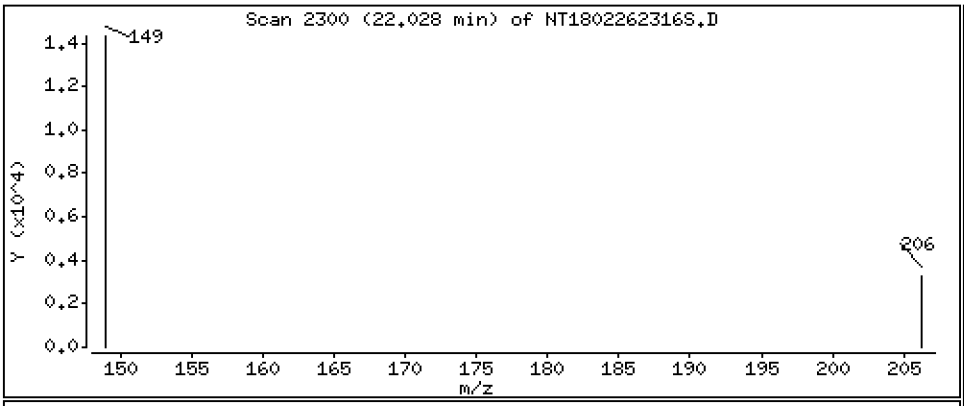
Operator: YZ

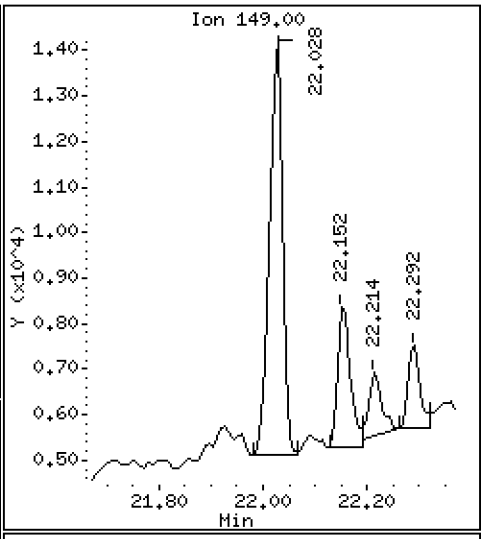
Column phase: ZB-5msi

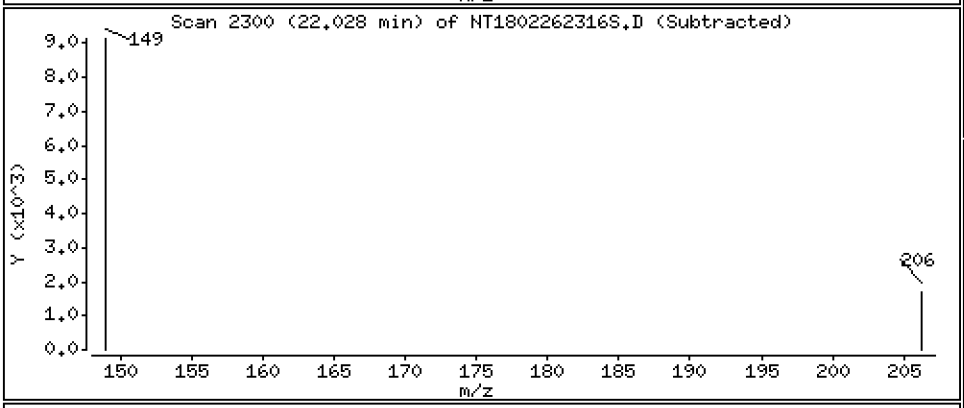
Column diameter: 0.25

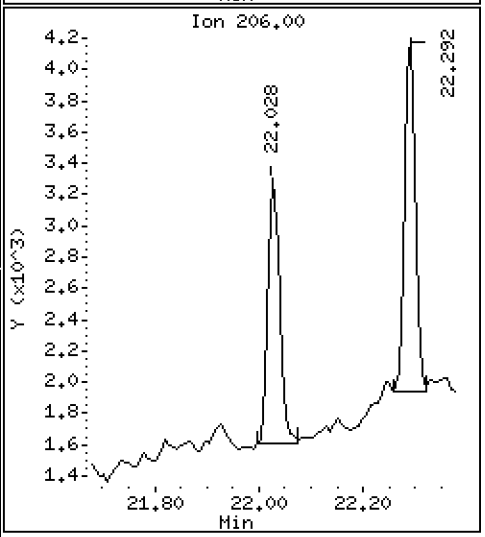
67 Butylbenzylphthalate

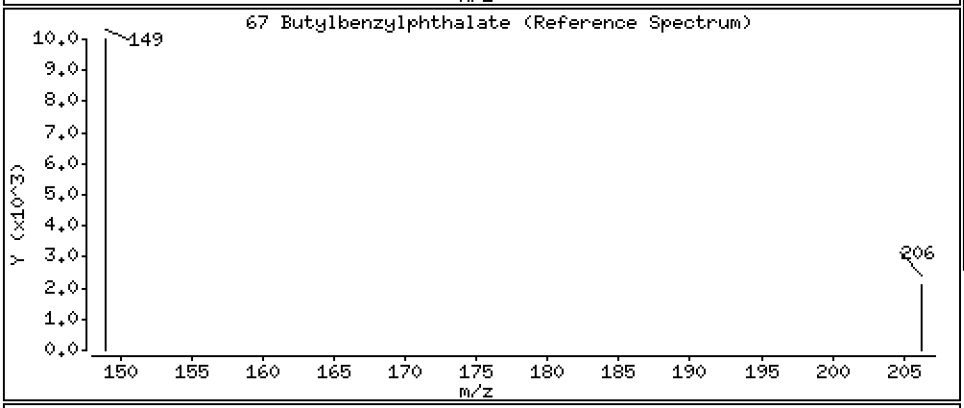
Concentration: 0.08056 ug/mL

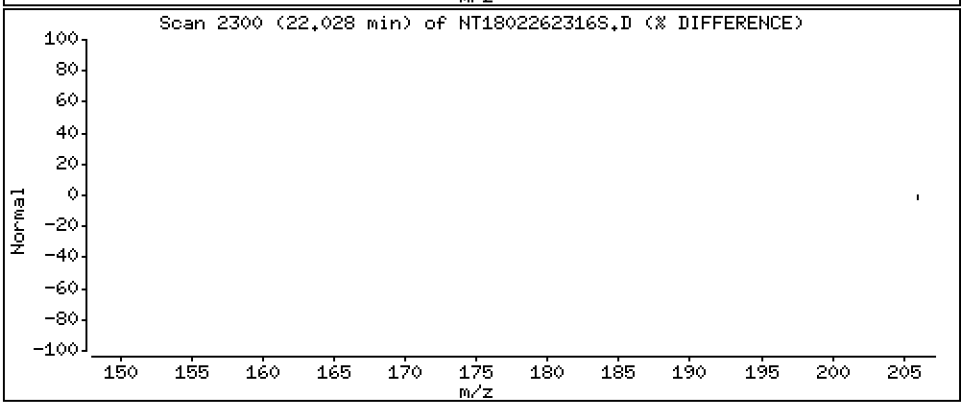












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262316S.D

Date : 26-FEB-2023 21:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-07

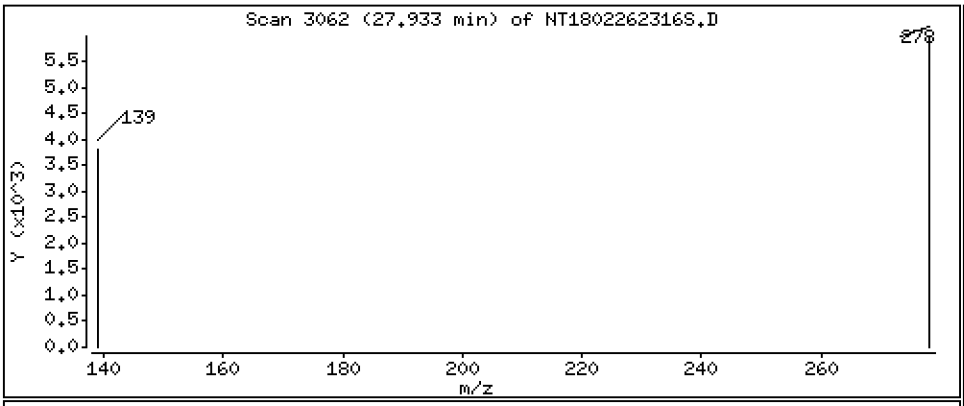
Operator: YZ

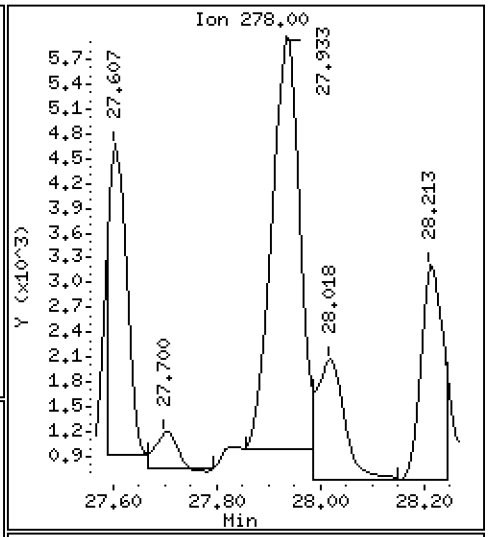
Column phase: ZB-5msi

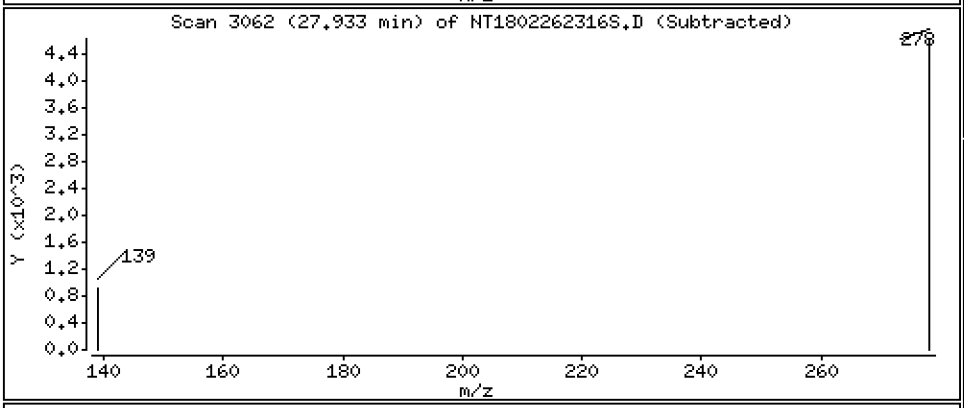
Column diameter: 0.25

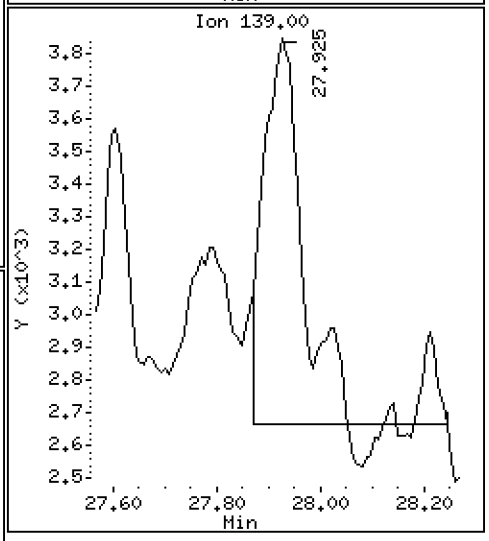
79 Dibenzo(a,h)anthracene

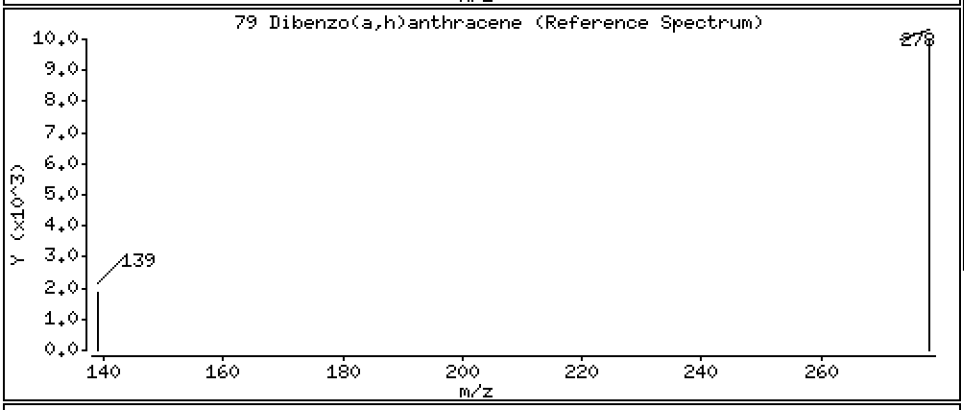
Concentration: 0.06608 ug/mL

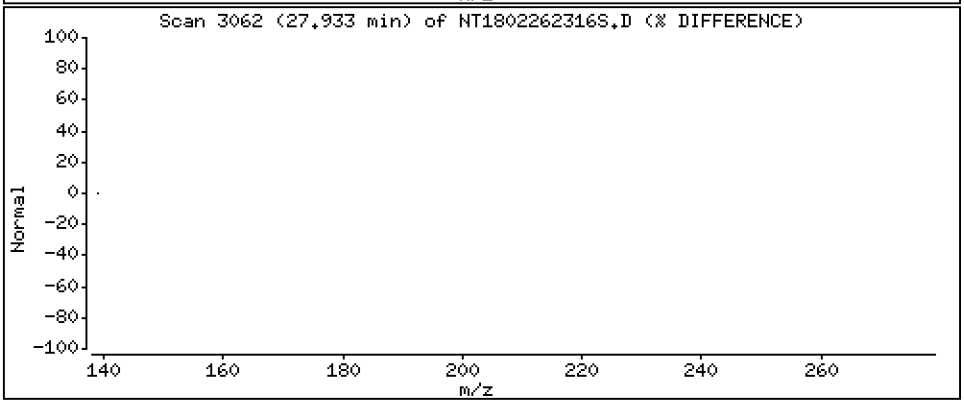












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262316S.D
Lab Smp Id: 23A0134-07
Inj Date : 26-FEB-2023 21:53
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-07
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)	
$	1	2-Fluorophenol	112	6.771	6.748	(0.759)	502910	5.64016	5.640	(R)
	3	Phenol	94	8.340	8.324	(0.935)	396323	3.40715	3.407	
	7	1,3-Dichlorobenzene	146	Compound Not Detected.						
*	8	1,4-Dichlorobenzene-d4	152	8.919	8.920	(1.000)	276268	4.00000		
	9	1,4-Dichlorobenzene	146	Compound Not Detected.						
	11	Benzyl alcohol	79	9.207	9.191	(1.032)	13269	0.17793	0.1779	(H)
	12	1,2-Dichlorobenzene	146	Compound Not Detected.						
	13	2-Methylphenol	108	Compound Not Detected.						
	15	4-Methylphenol	108	9.696	9.680	(1.087)	5375	0.05600	0.05600	
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.						
	22	2,4-Dimethylphenol	107	Compound Not Detected.						
	24	Benzoic acid	105	10.893	11.088	(0.958)	42387	1.14076	1.141	(M)
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	27	Naphthalene-d8	136	11.370	11.370	(1.000)	1030347	4.00000		
	30	Hexachlorobutadiene	225	Compound Not Detected.						
	39	Dimethylphthalate	163	14.465	14.465	(0.968)	6190	0.02957	0.02957	
*	42	Acenaphthene-d10	162	14.944	14.945	(1.000)	544884	4.00000		
	50	Diethylphthalate	149	15.911	15.911	(1.065)	33726	0.17631	0.1763	
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57	Hexachlorobenzene	284	Compound Not Detected.						
	58	Pentachlorophenol	266	17.702	17.702	(0.986)	568	0.02628	0.02628	
*	59	Phenanthrene-d10	188	17.957	17.950	(1.000)	1062814	4.00000		
$	66	Terphenyl-d14	244	21.099	21.091	(0.918)	853891	4.09728	4.097	(R)
	67	Butylbenzylphthalate	149	22.028	22.020	(0.958)	15355	0.08056	0.08056	
*	69	Chrysene-d12	240	22.988	22.980	(1.000)	1150952	4.00000		
*	77	Perylene-d12	264	25.489	25.473	(1.000)	947474	4.00000		
	79	Dibenzo(a,h)anthracene	278	27.932	27.917	(1.096)	18604	0.06608	0.06608	
	90	N-Nitrosodimethylamine	74	Compound Not Detected.						

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262316S.D
Lab Smp Id: 23A0134-07
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	276268	-1.15
27 Naphthalene-d8	1065527	532764	2131054	1030347	-3.30
42 Acenaphthene-d10	544290	272145	1088580	544884	0.11
59 Phenanthrene-d10	1003412	501706	2006824	1062814	5.92
69 Chrysene-d12	936975	468488	1873950	1150952	22.84
77 Perylene-d12	1057771	528886	2115542	947474	-10.43

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.94	-0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
77 Perylene-d12	25.47	24.97	25.97	25.49	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262316S.D

Lab ID: 23A0134-07
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 21:53

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.958	0.975	-0.0172	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

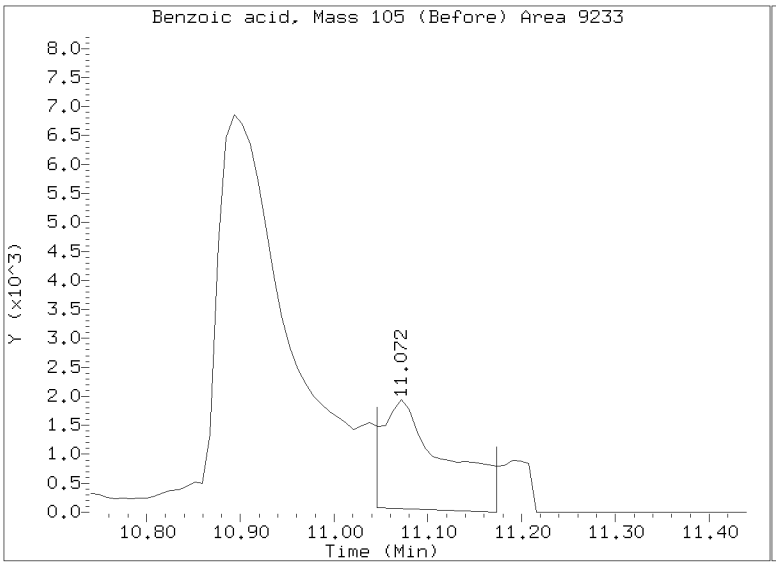
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

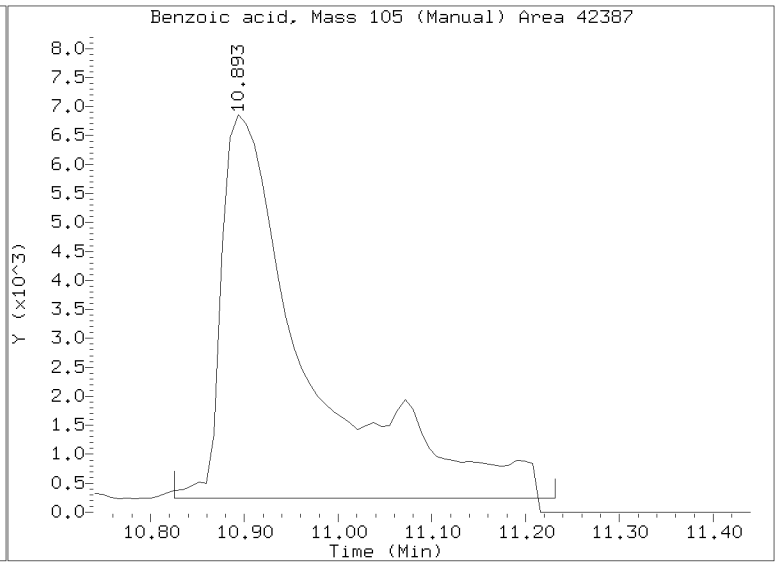
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/SIM.b/NT1802262316S.D
Injection Date: 26-FEB-2023 21:53
Lab ID:23A0134-07 Client ID:
Report Date: 03/24/2023 11:53





APPROVED

By Deenay Dunmore at 12:04 pm, Mar 24, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1131

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-08 C	SDG:	23A0134
Sampled:	01/06/23 12:43	Prepared:	01/19/23 13:35	File ID:	NT1802262317S.D
% Solids:	54.73	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 22:33
Batch:	BLA0410	Sequence:	SLC0389	Initial/Final:	18.68 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

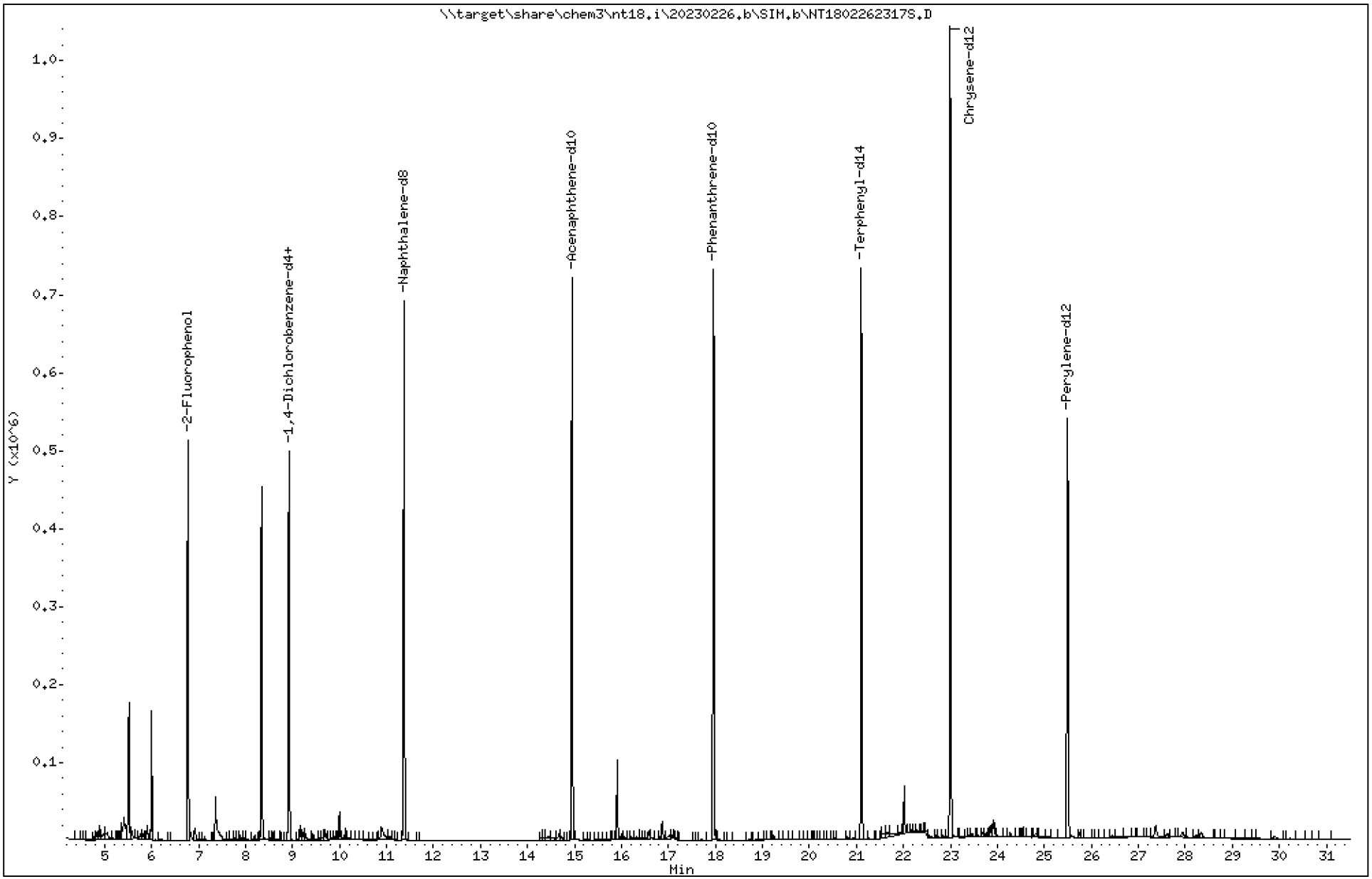
CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.3	J	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	4.9	U	0.7	4.9
100-51-6	Benzyl Alcohol	1	19.6		2.4	19.6
65-85-0	Benzoic acid	1	145	Q	13.1	97.8
105-67-9	2,4-Dimethylphenol	1	19.6	U	2.1	19.6
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	2.5	J	2.1	19.6

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	733.60	539	73.5	27 - 120	
p-Terphenyl-d14	489.07	387	79.1	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623175.D
Date : 26-FEB-2023 22:33
Client ID:
Sample Info: 23A0134-08

Instrument: nt18.i
Operator: YZ
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

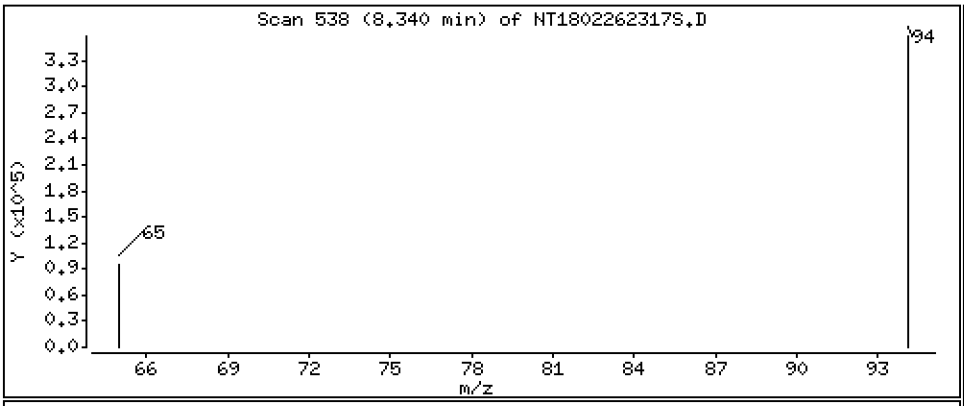
Operator: YZ

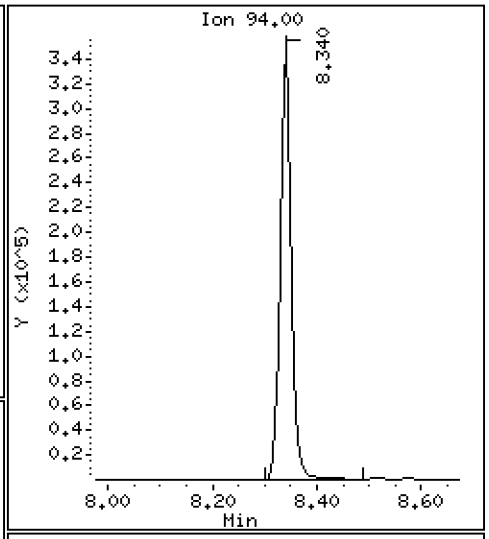
Column phase: ZB-5msi

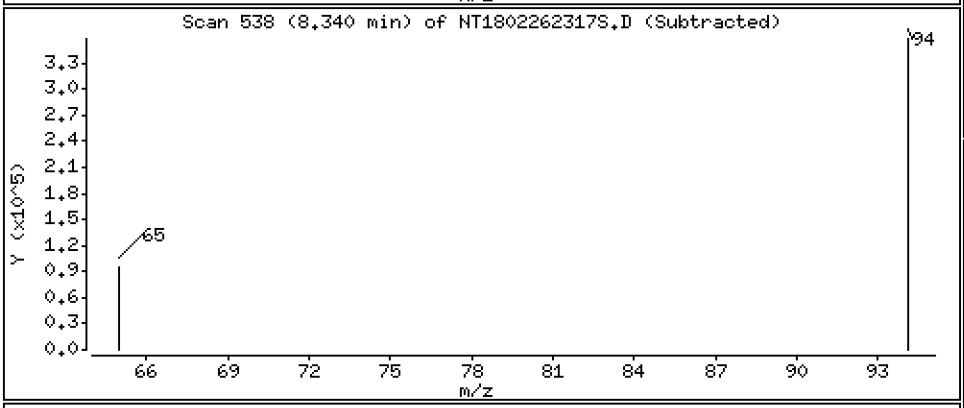
Column diameter: 0.25

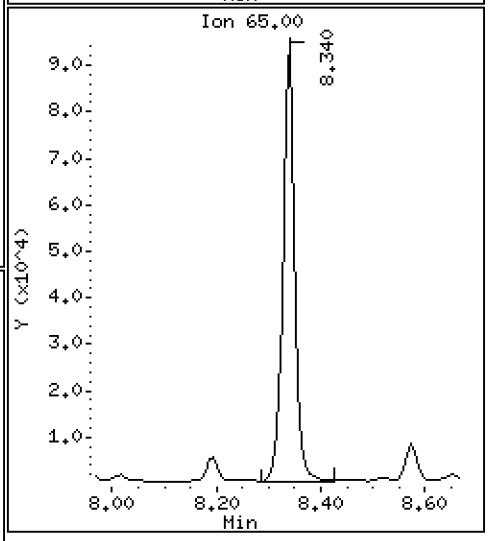
3 Phenol

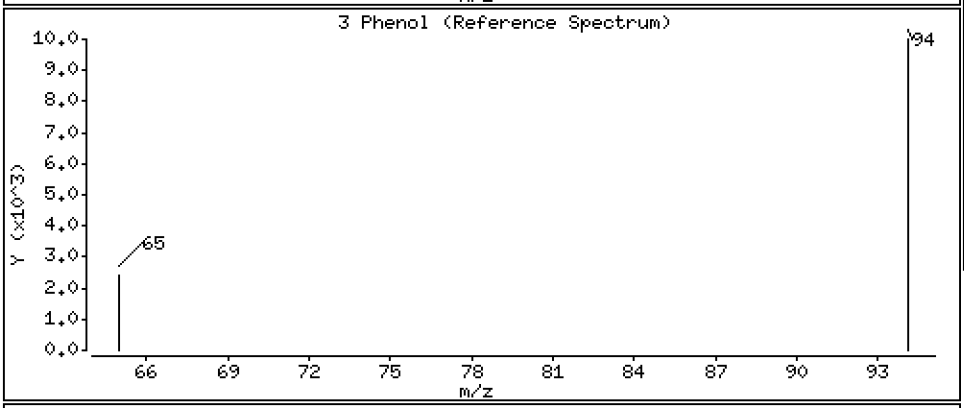
Concentration: 4.289 ug/mL

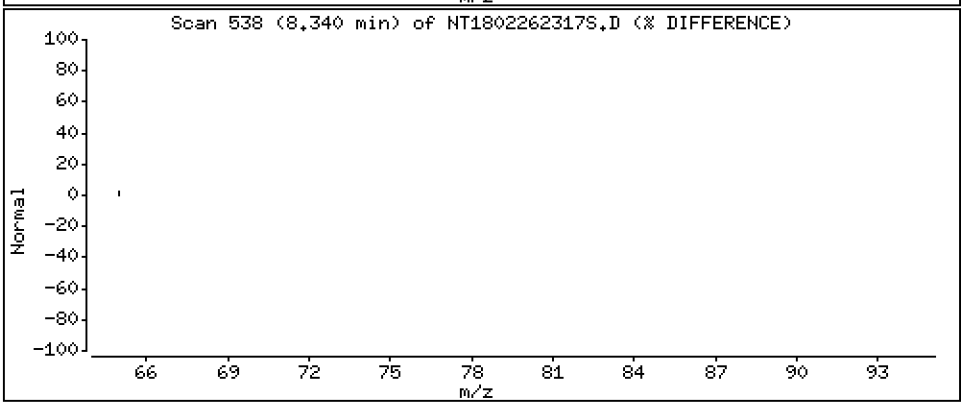












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

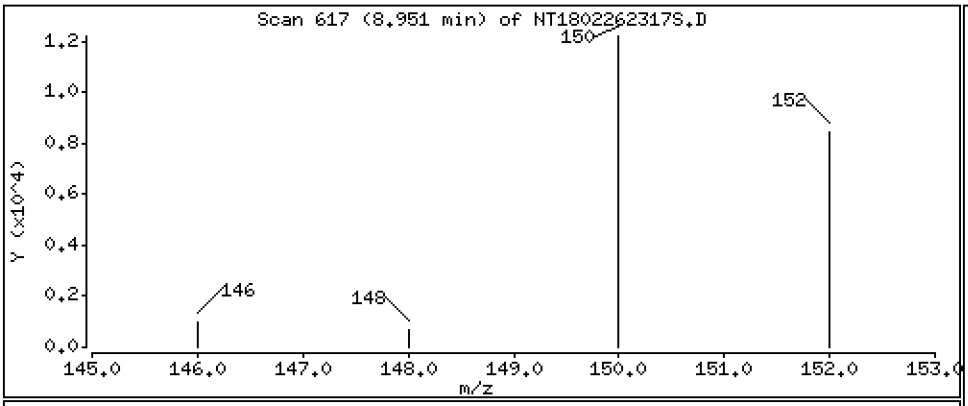
Operator: YZ

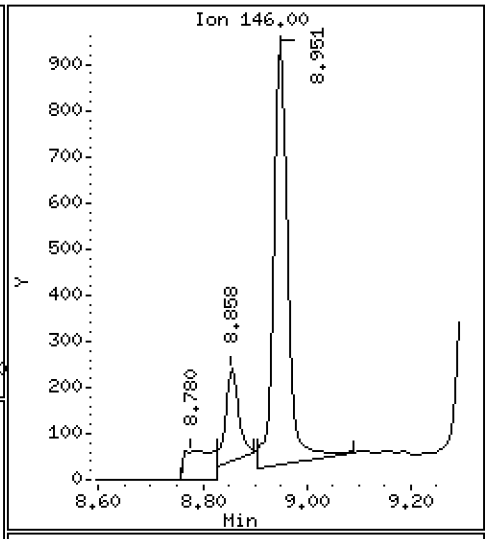
Column phase: ZB-5msi

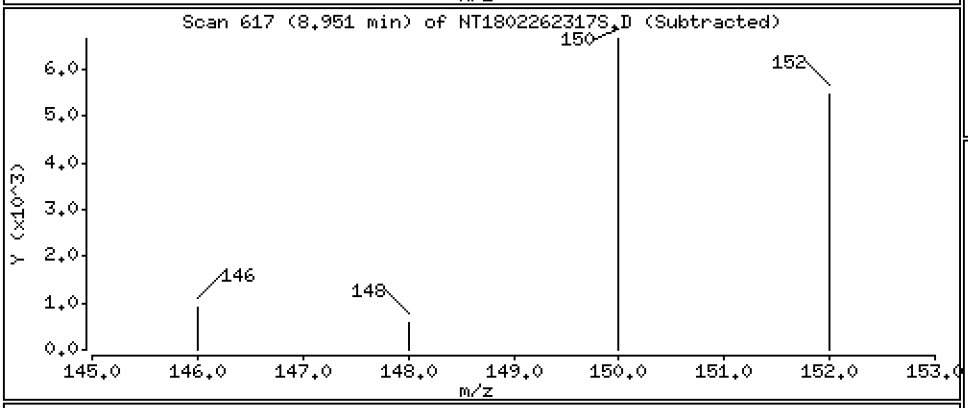
Column diameter: 0.25

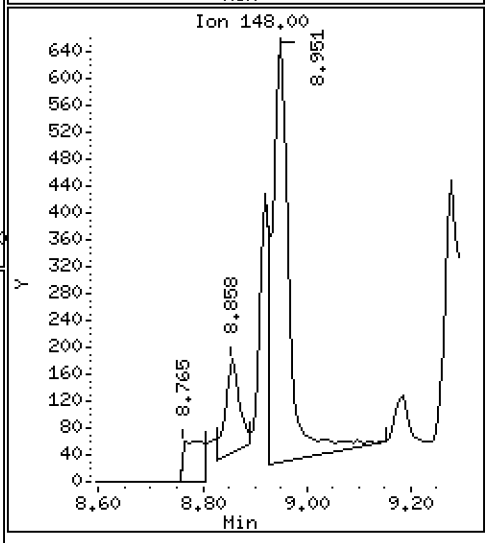
9 1,4-Dichlorobenzene

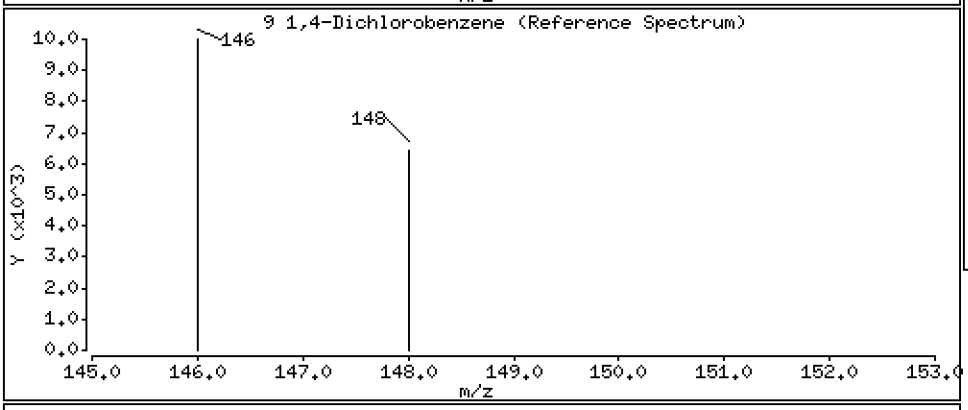
Concentration: 0.01299 ug/mL

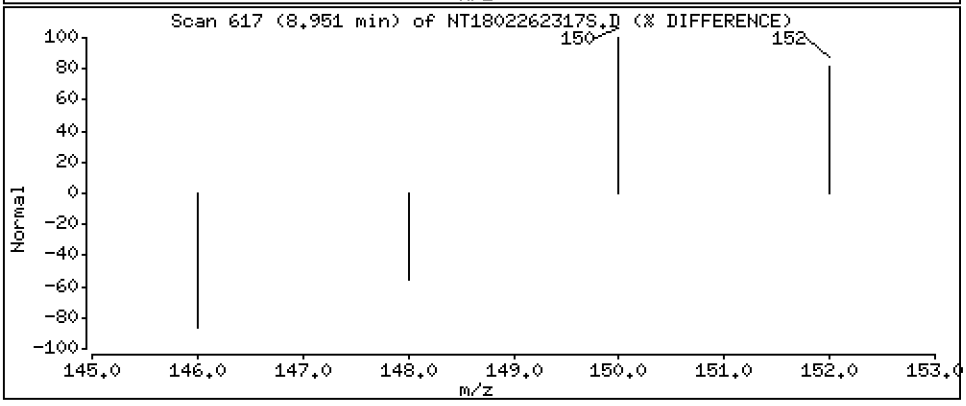












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

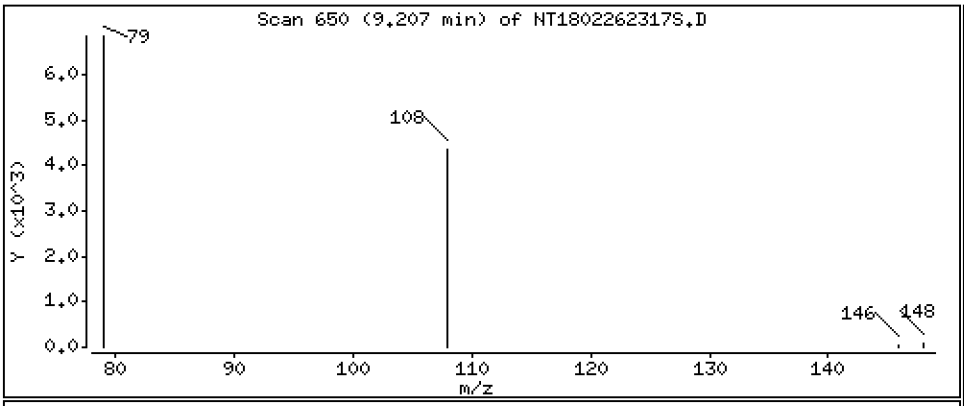
Operator: YZ

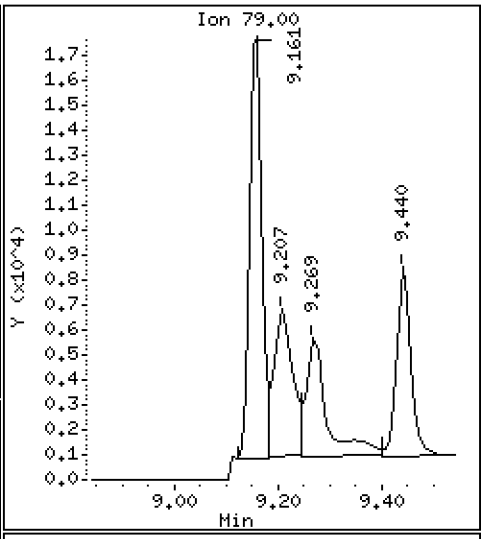
Column phase: ZB-5msi

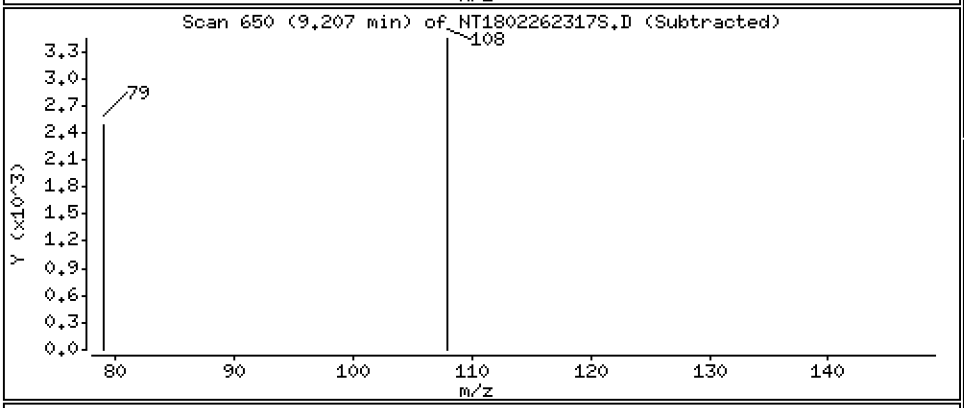
Column diameter: 0.25

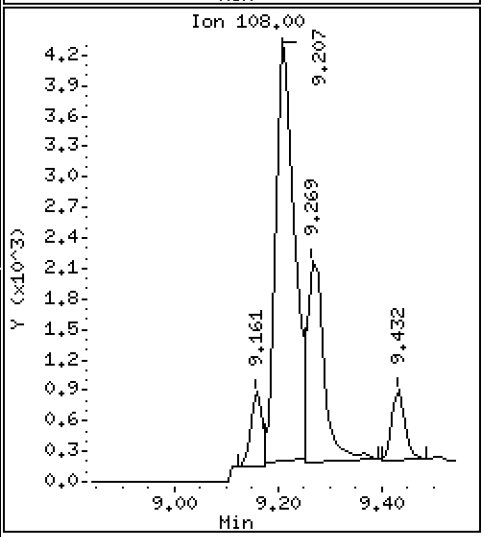
11 Benzyl alcohol

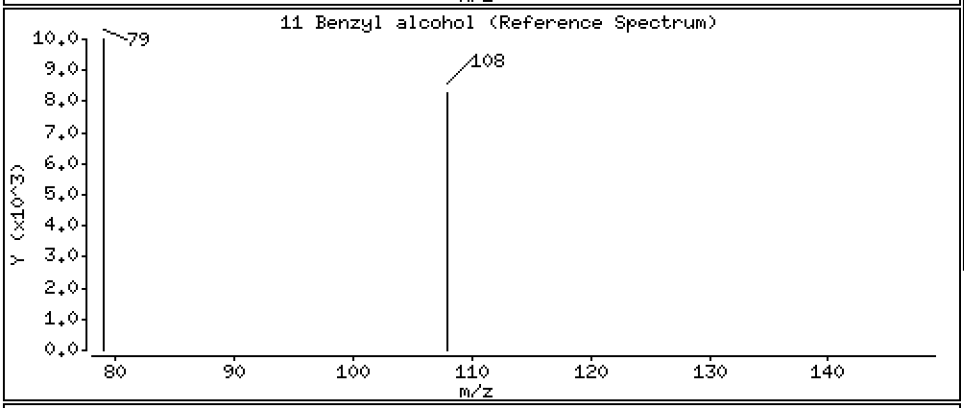
Concentration: 0.2003 ug/mL

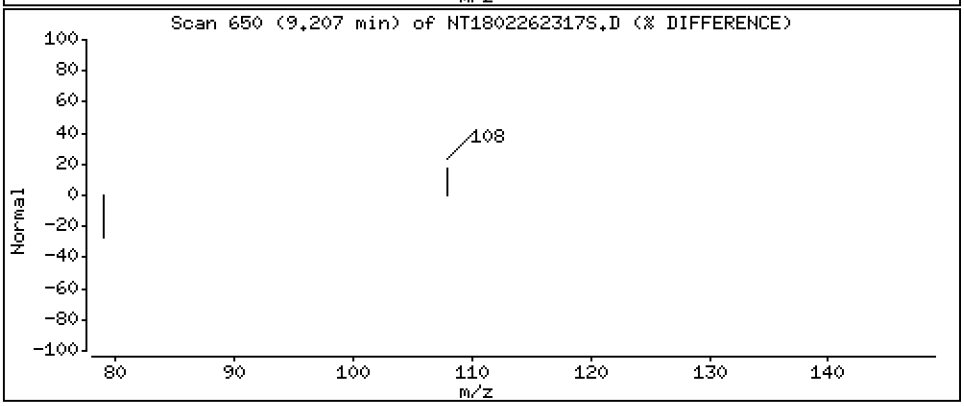












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Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

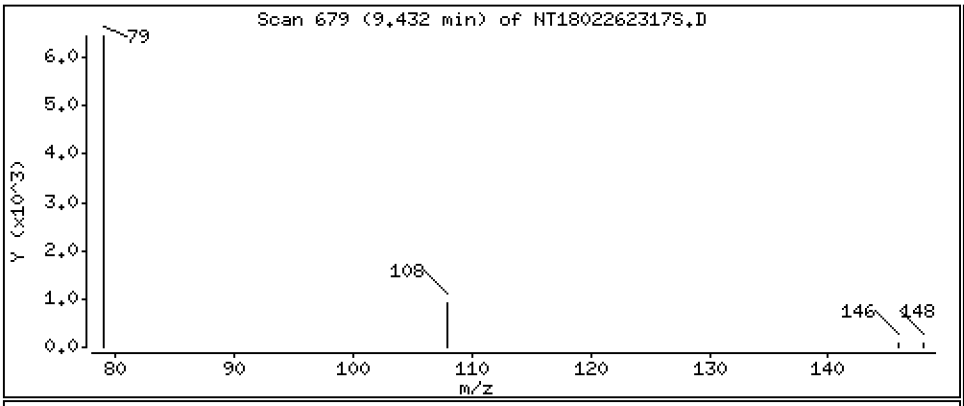
Operator: YZ

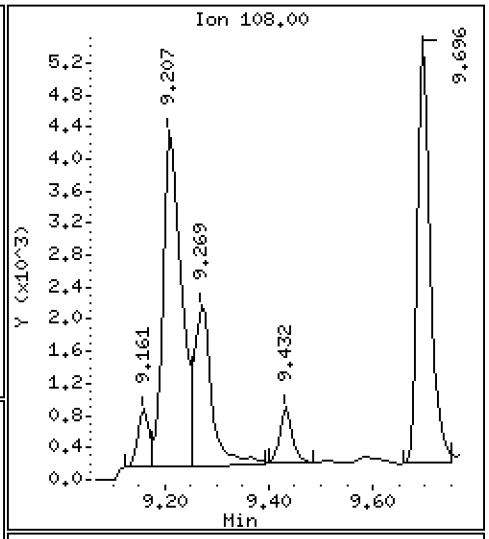
Column phase: ZB-5msi

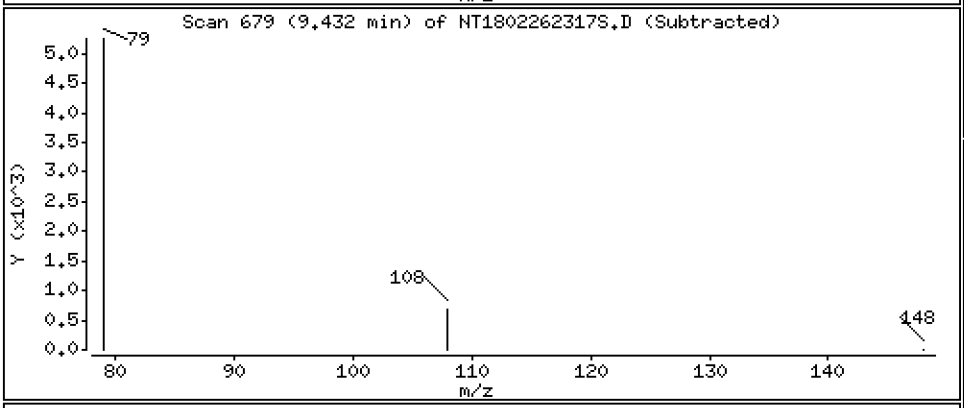
Column diameter: 0.25

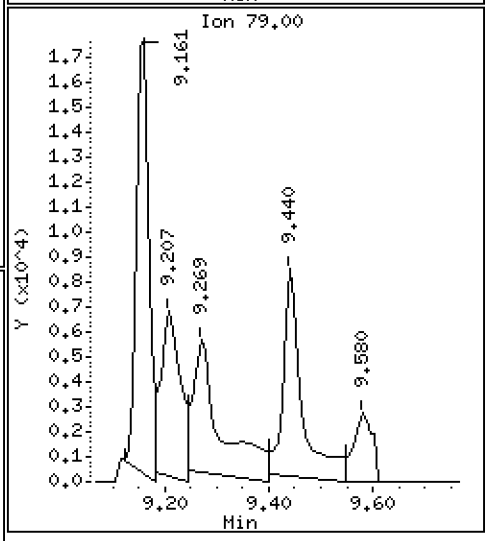
13 2-Methylphenol

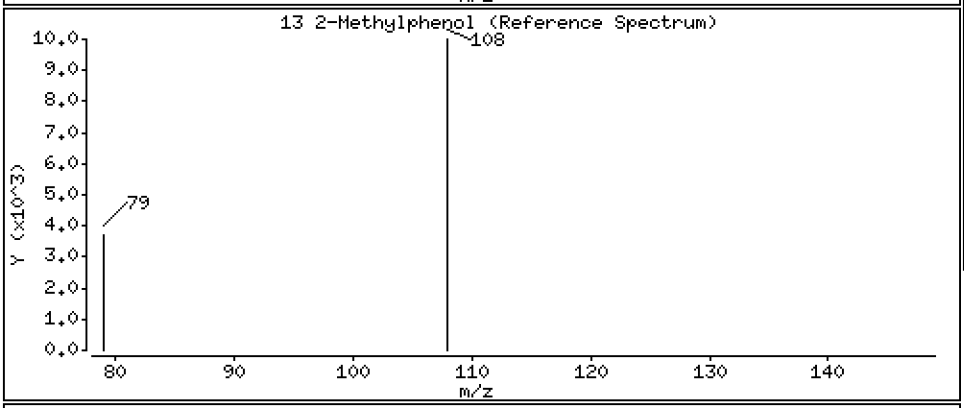
Concentration: 0.01171 ug/mL

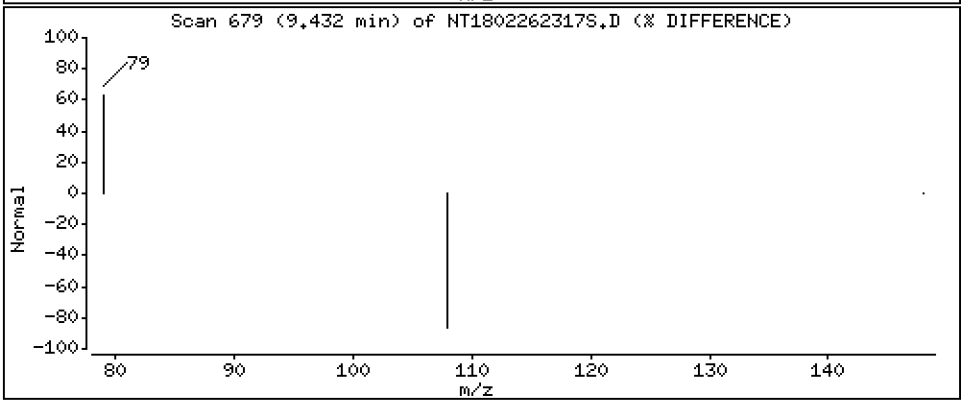












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

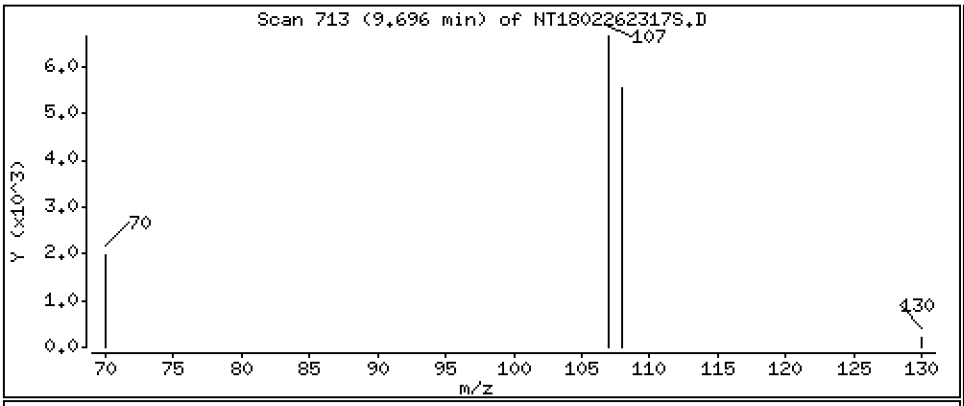
Operator: YZ

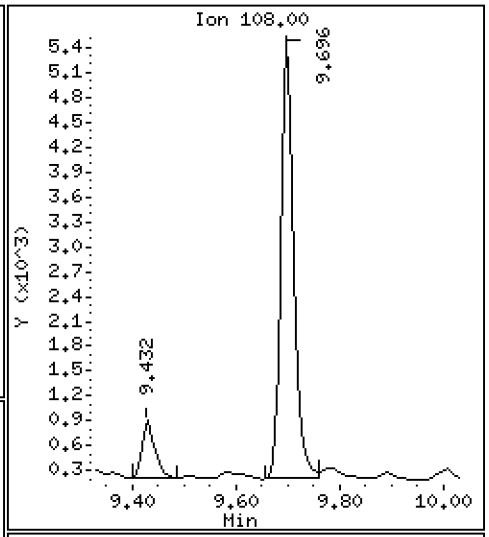
Column phase: ZB-5msi

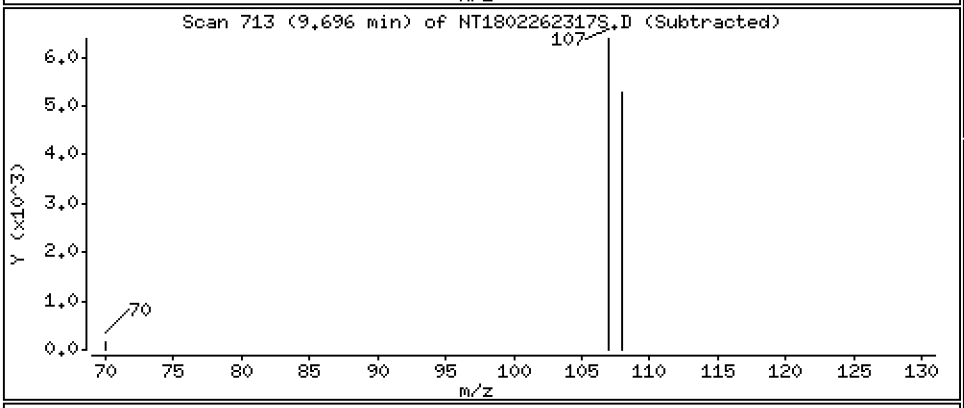
Column diameter: 0.25

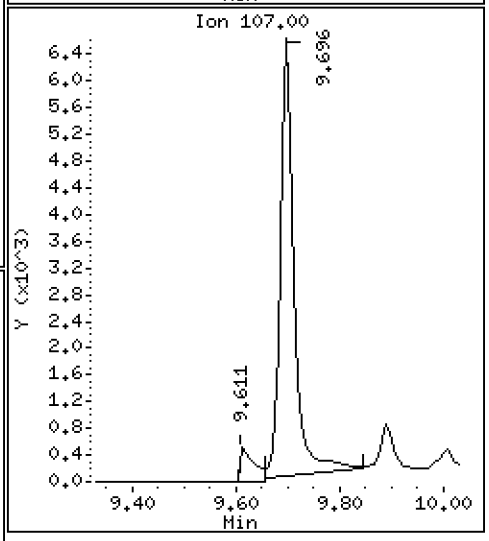
15 4-Methylphenol

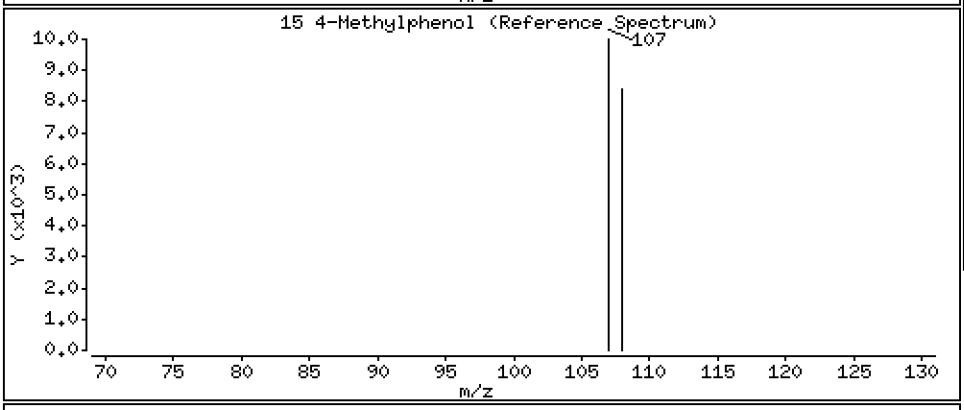
Concentration: 0.09316 ug/mL

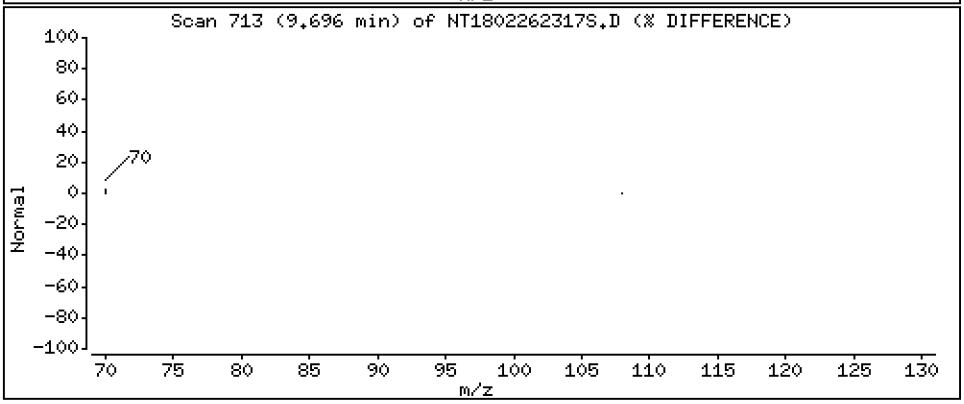












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

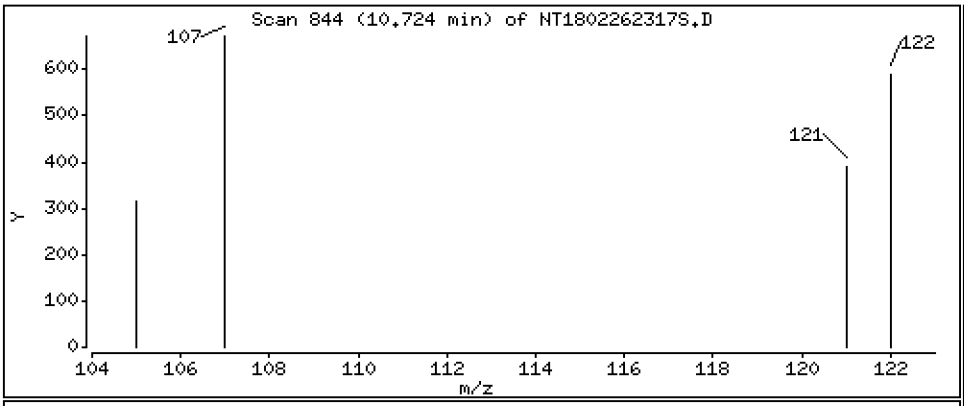
Operator: YZ

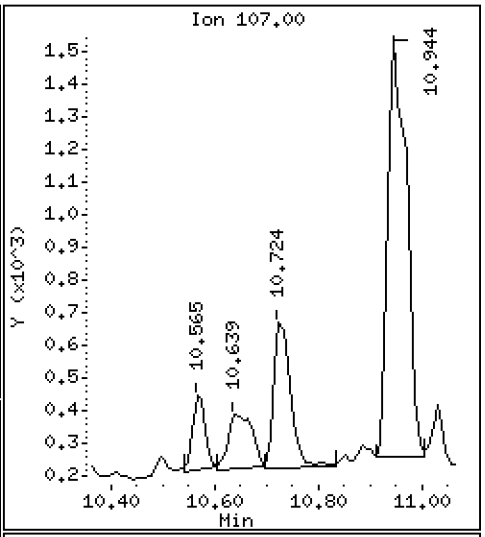
Column phase: ZB-5msi

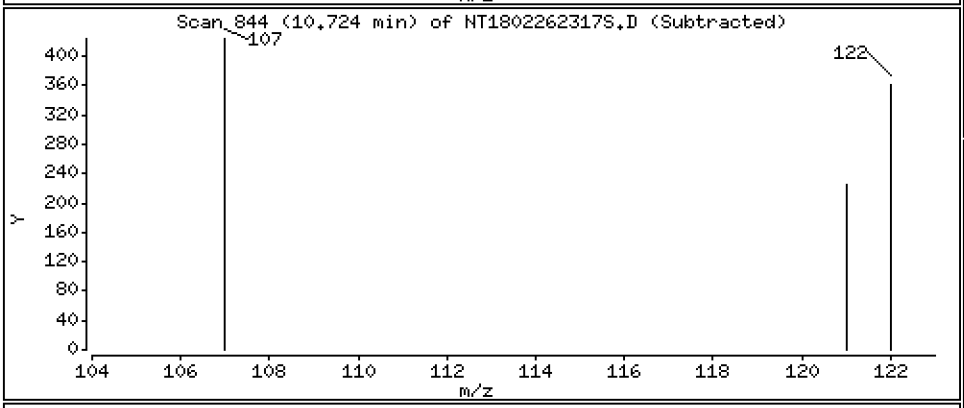
Column diameter: 0.25

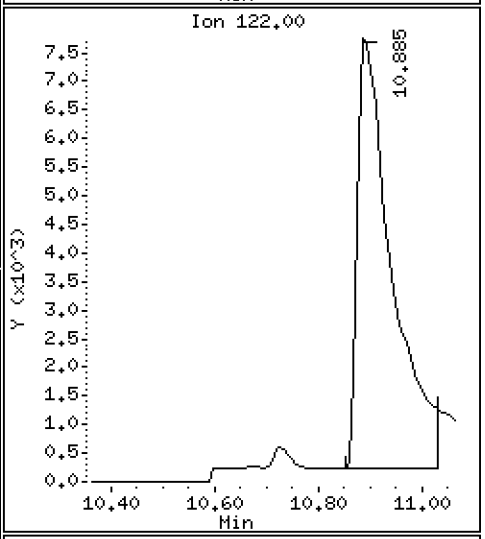
22 2,4-Dimethylphenol

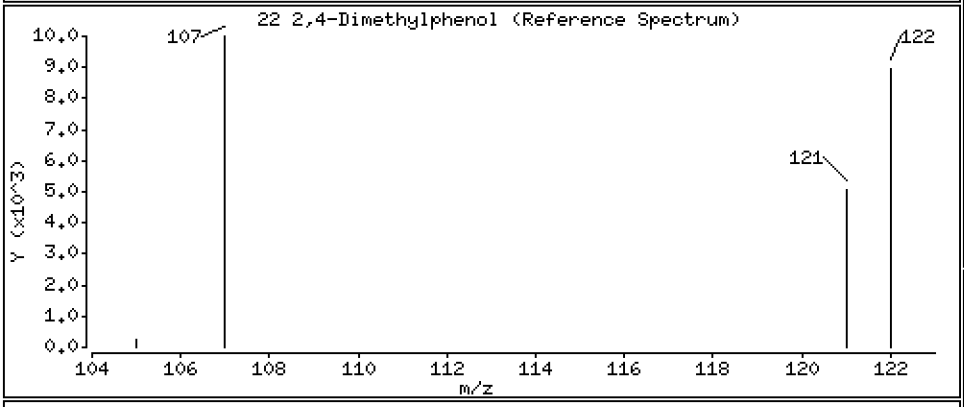
Concentration: 0.01076 ug/mL

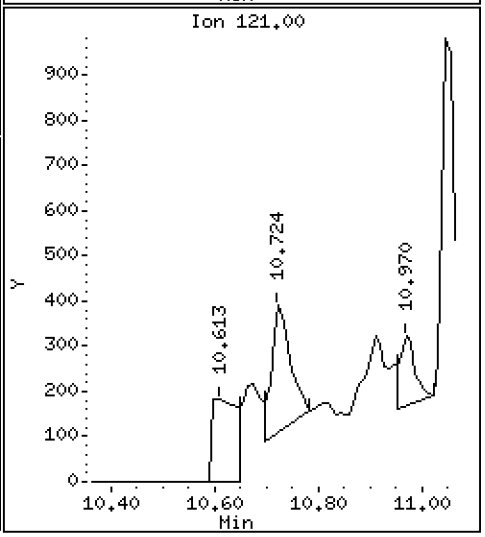


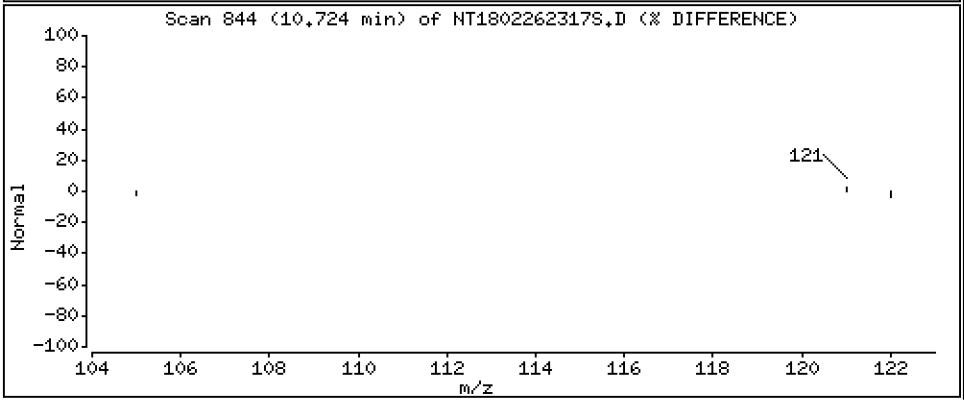












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Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

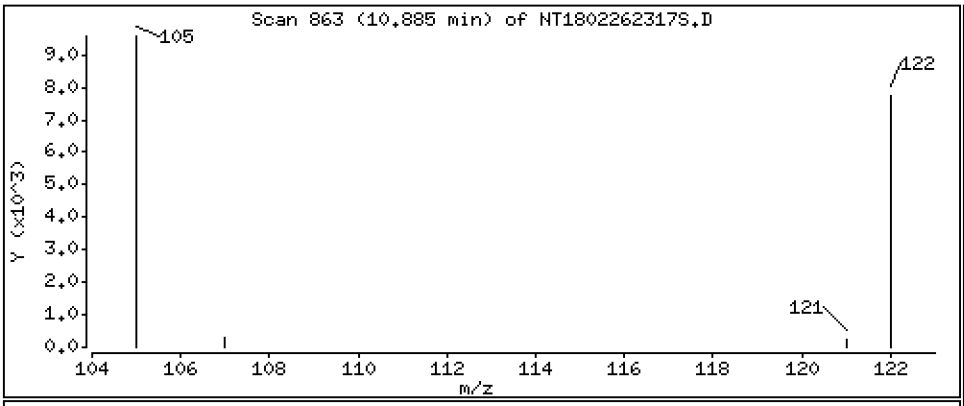
Operator: YZ

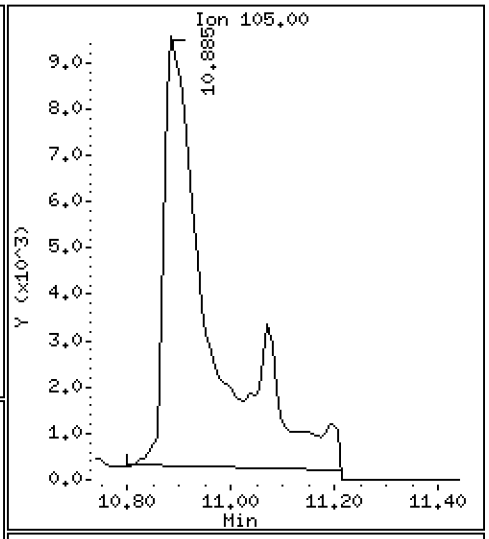
Column phase: ZB-5msi

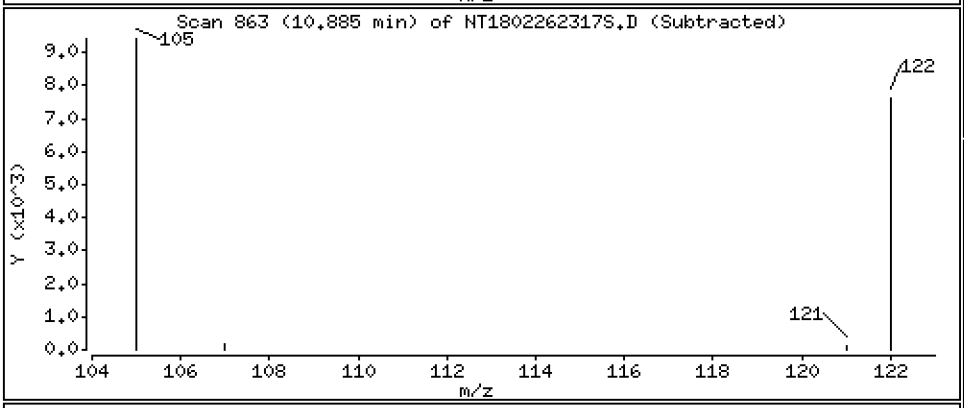
Column diameter: 0.25

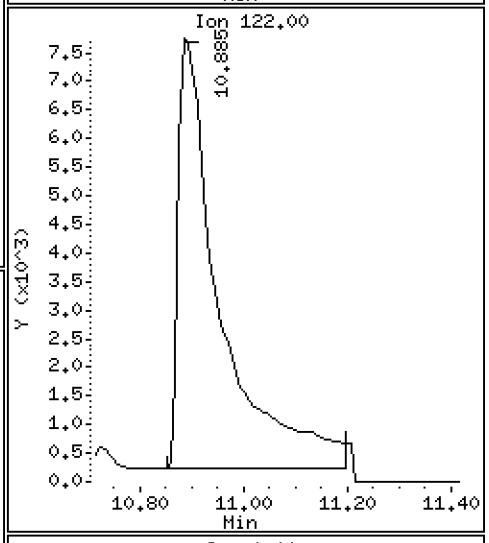
24 Benzoic acid

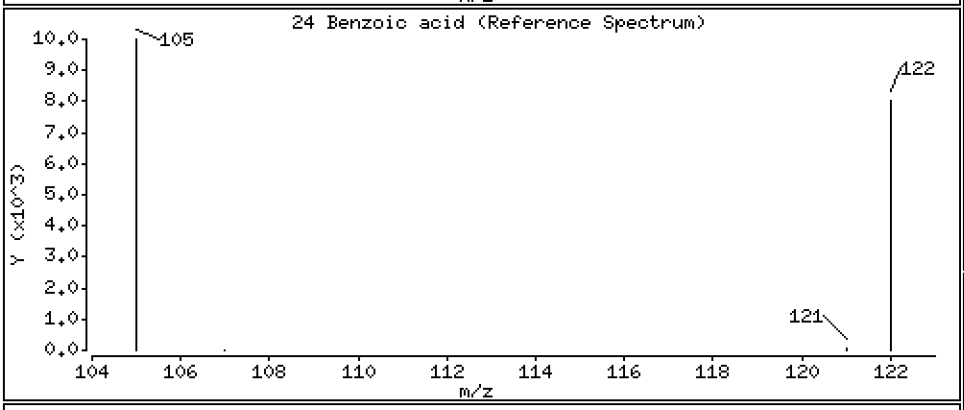
Concentration: 1.479 ug/mL

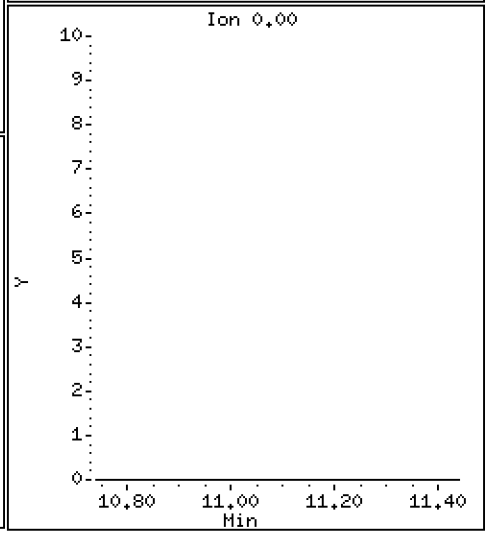


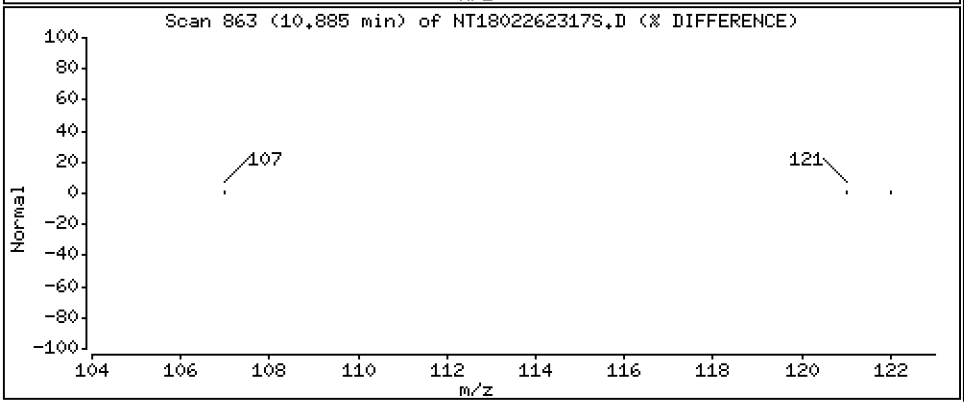












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Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

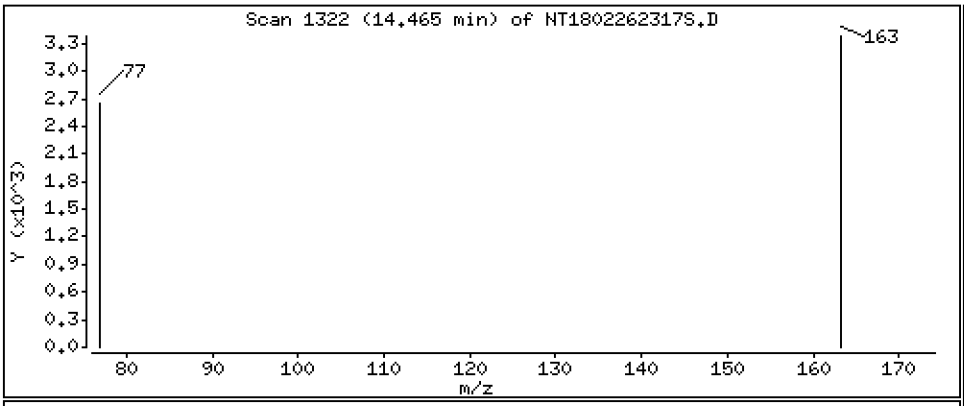
Operator: YZ

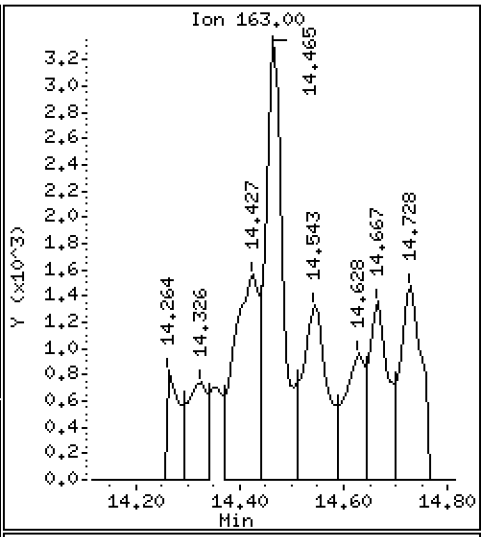
Column phase: ZB-5msi

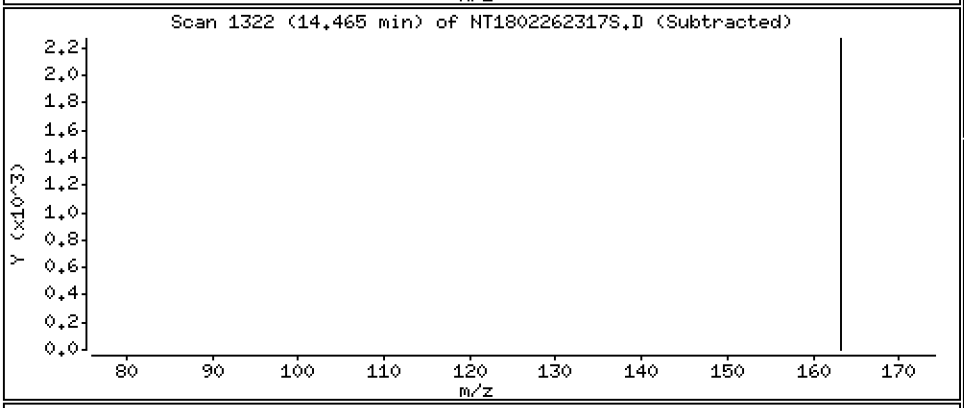
Column diameter: 0.25

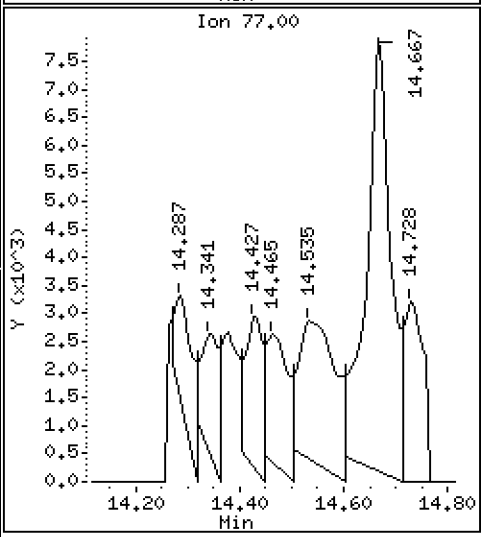
39 Dimethylphthalate

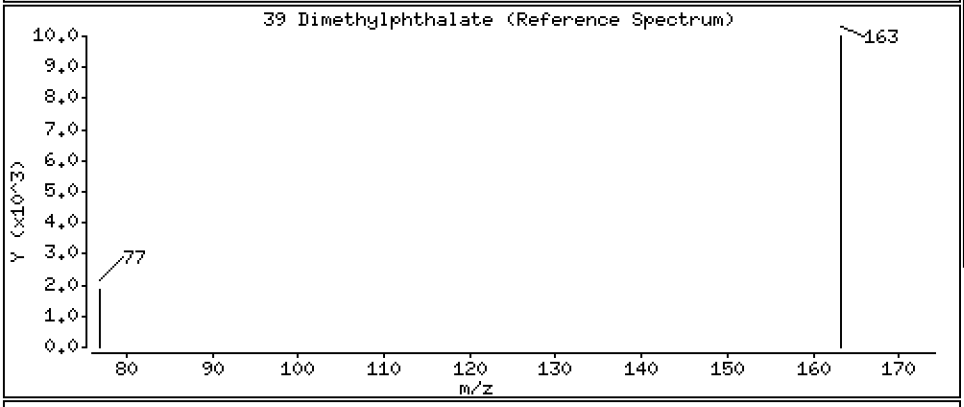
Concentration: 0.03604 ug/mL

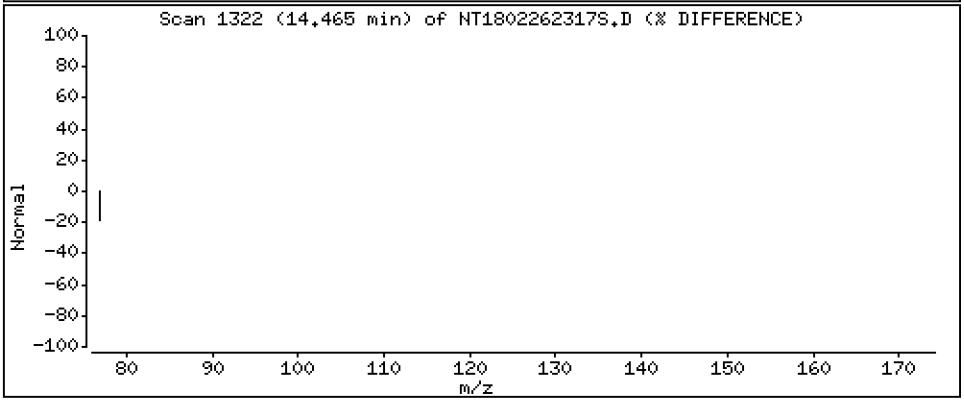












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262317S.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

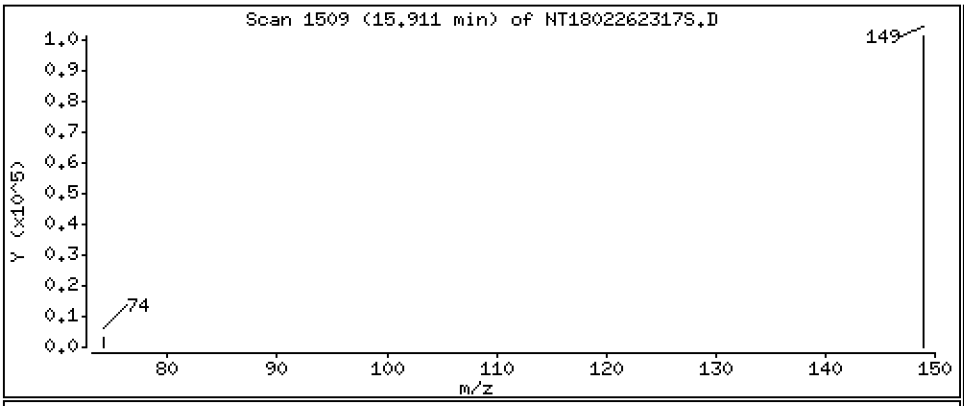
Operator: YZ

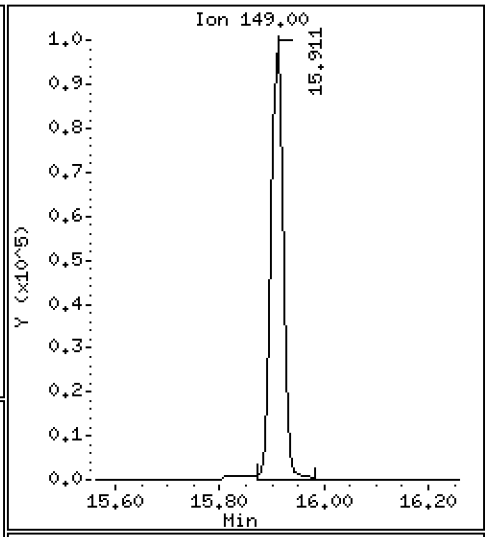
Column phase: ZB-5msi

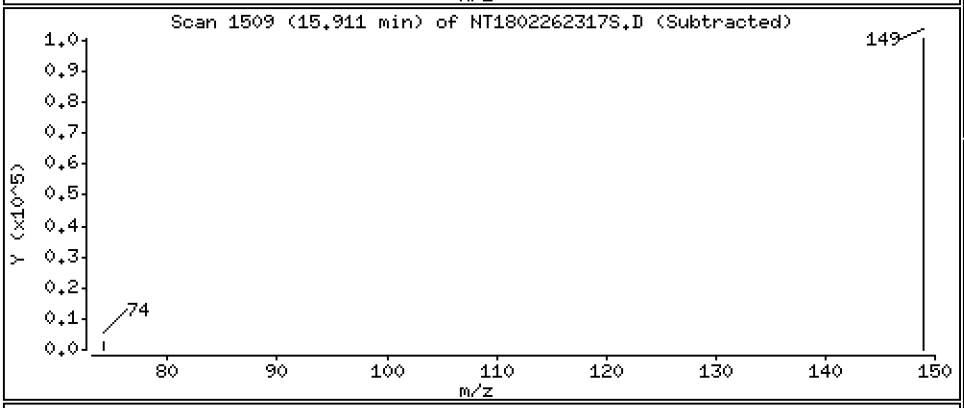
Column diameter: 0.25

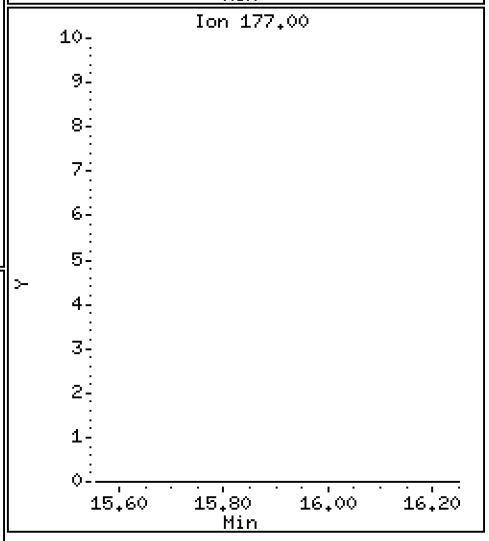
50 Diethylphthalate

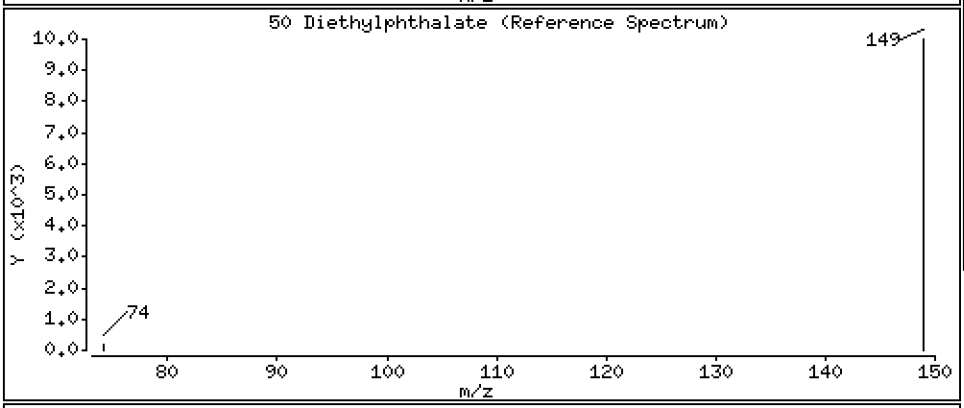
Concentration: 0.7716 ug/mL

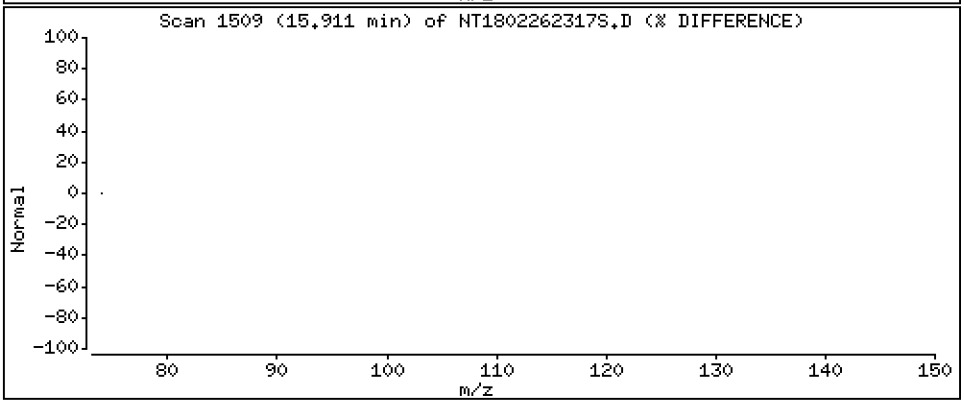












Date : 26-FEB-2023 22:33

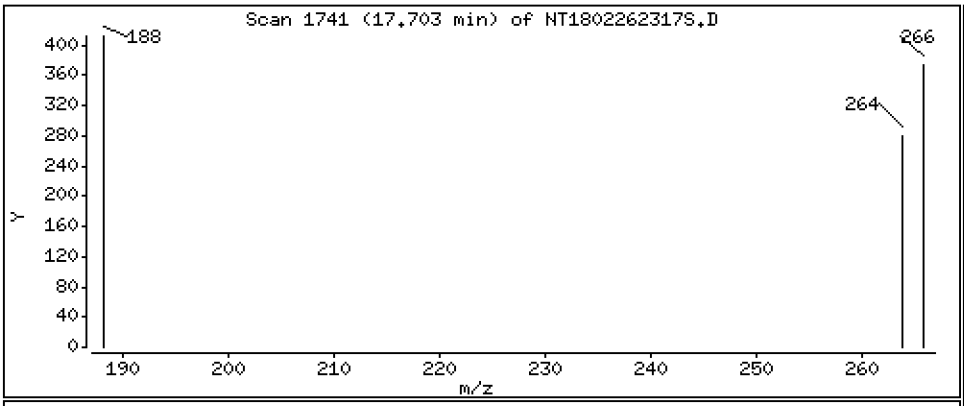
Client ID: Instrument: nt18.i

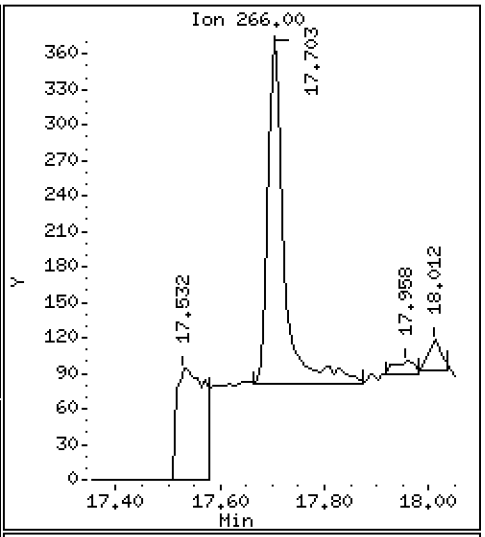
Sample Info: 23A0134-08

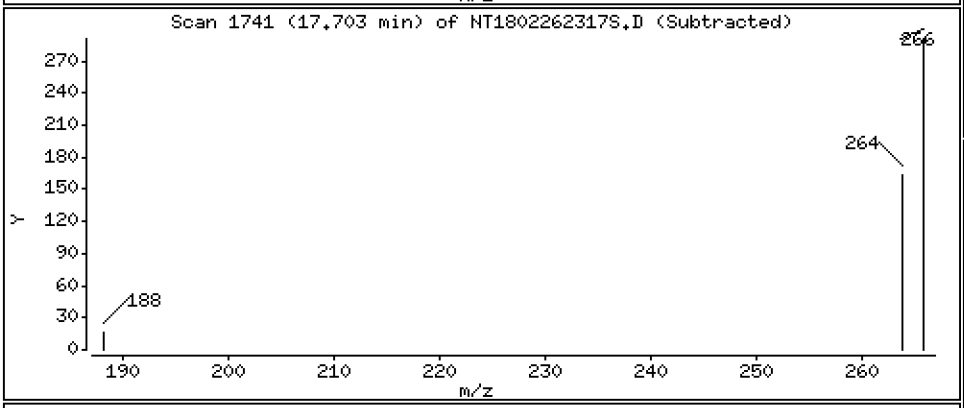
Operator: YZ

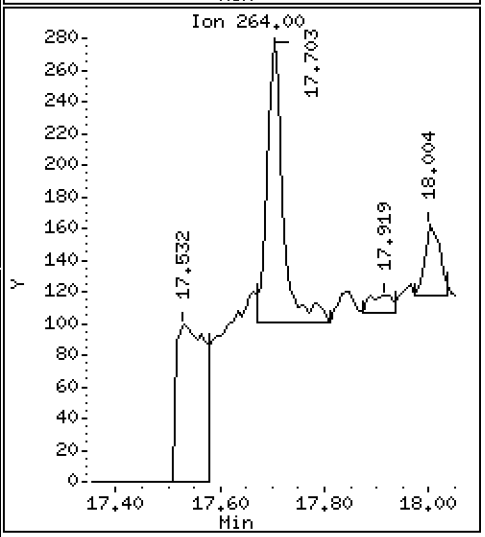
Column phase: ZB-5msi Column diameter: 0.25

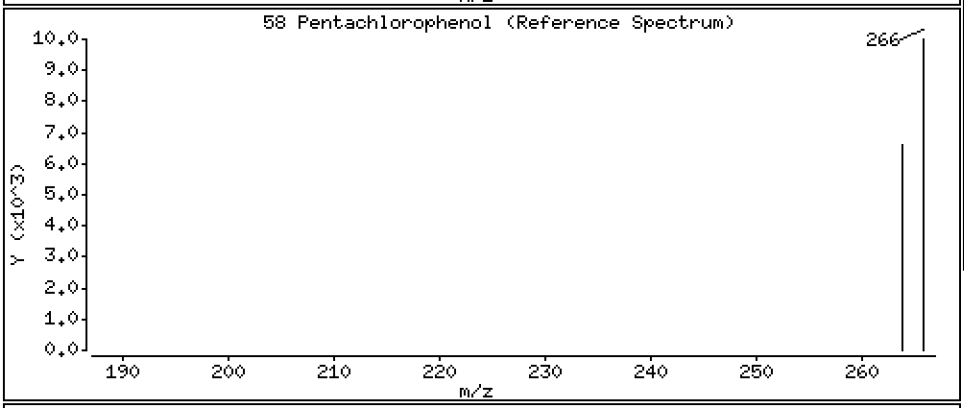
58 Pentachlorophenol Concentration: 0.02559 ug/mL

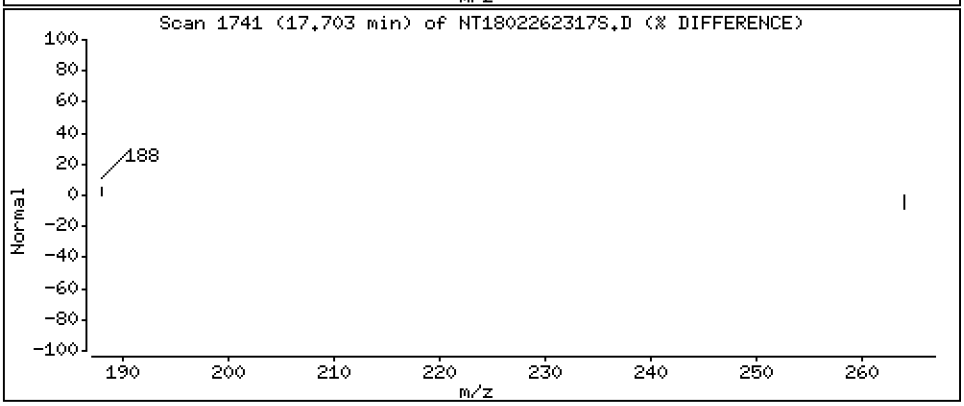












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262317S.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

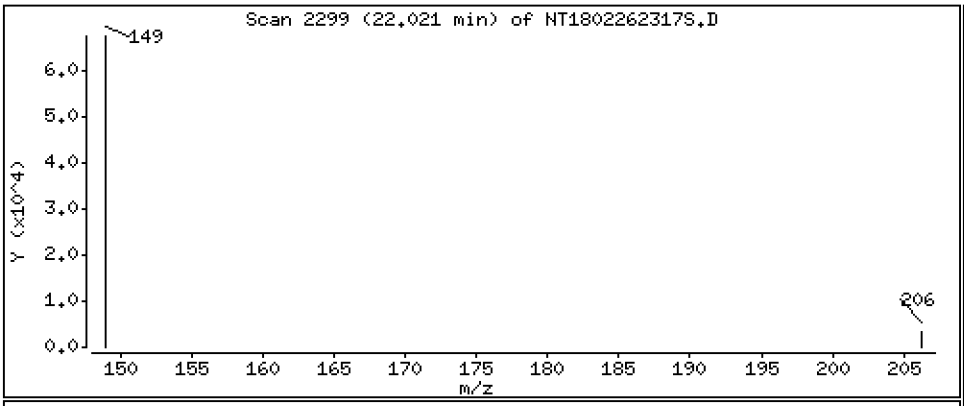
Operator: YZ

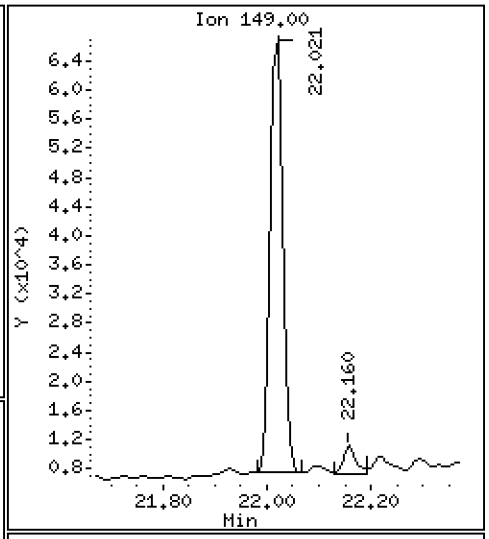
Column phase: ZB-5msi

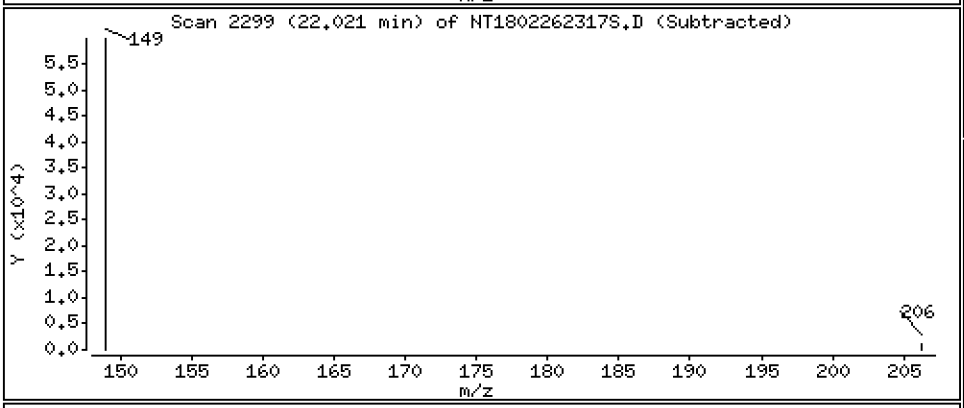
Column diameter: 0.25

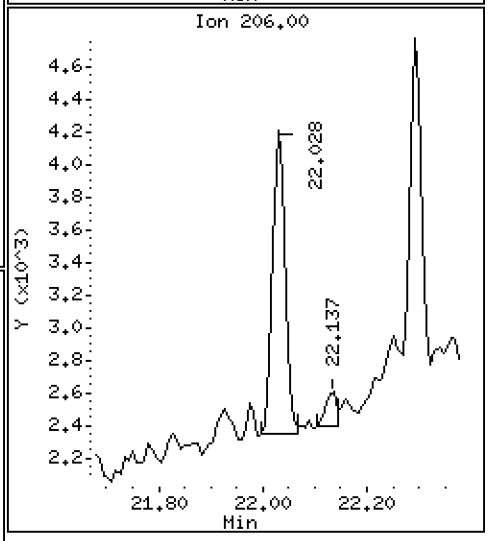
67 Butylbenzylphthalate

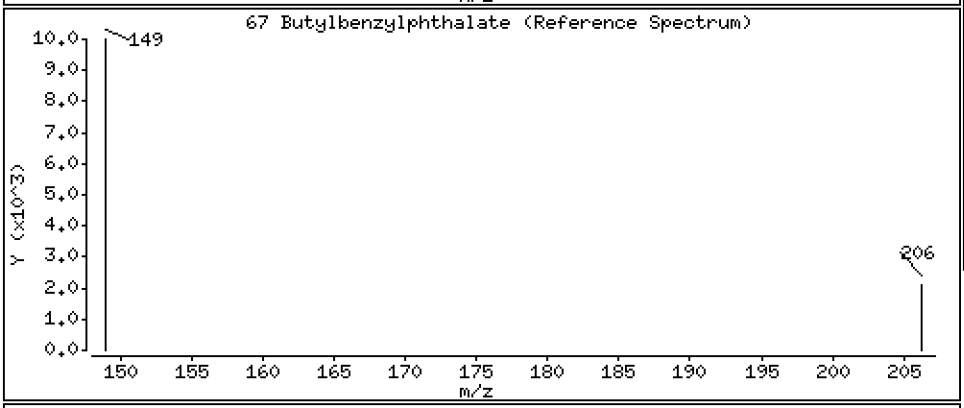
Concentration: 0.4720 ug/mL

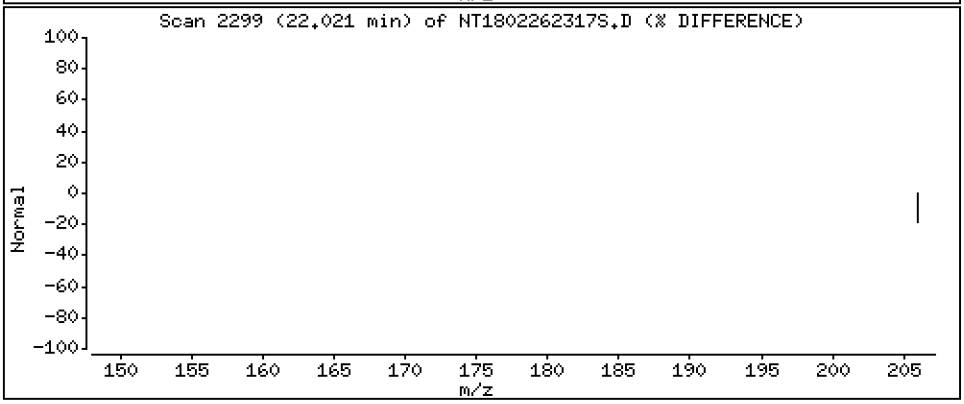












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262317S.D

Date : 26-FEB-2023 22:33

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-08

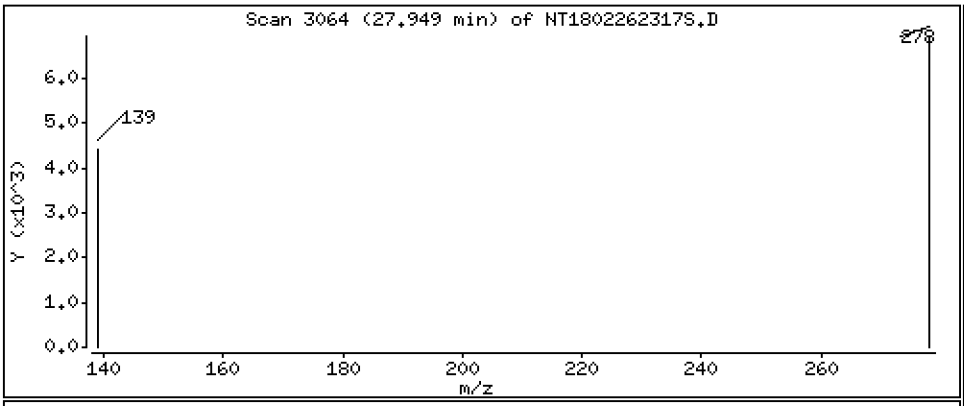
Operator: YZ

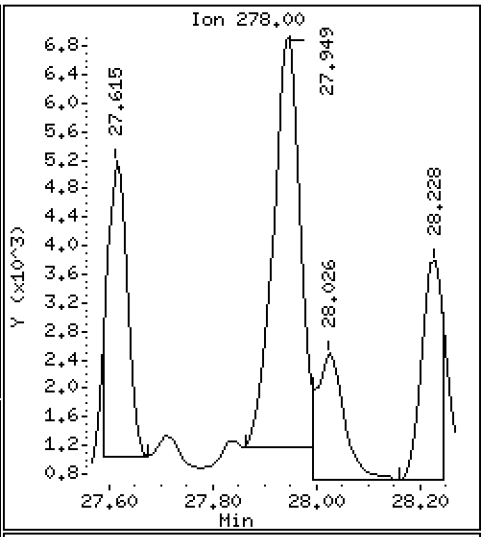
Column phase: ZB-5msi

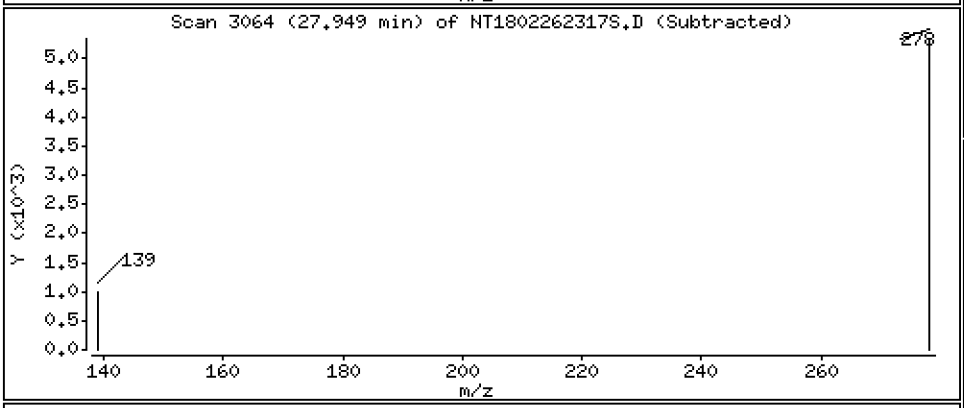
Column diameter: 0.25

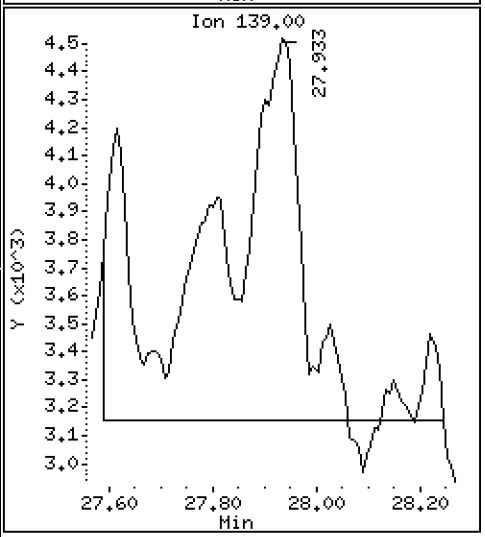
79 Dibenzo(a,h)anthracene

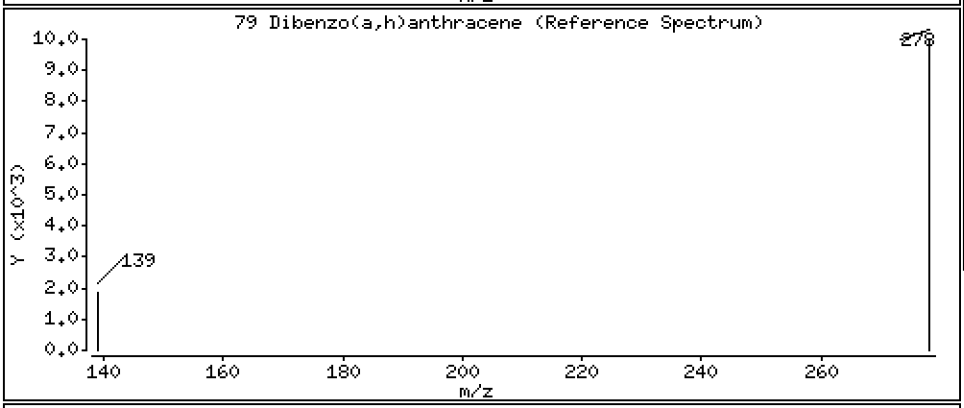
Concentration: 0.07676 ug/mL

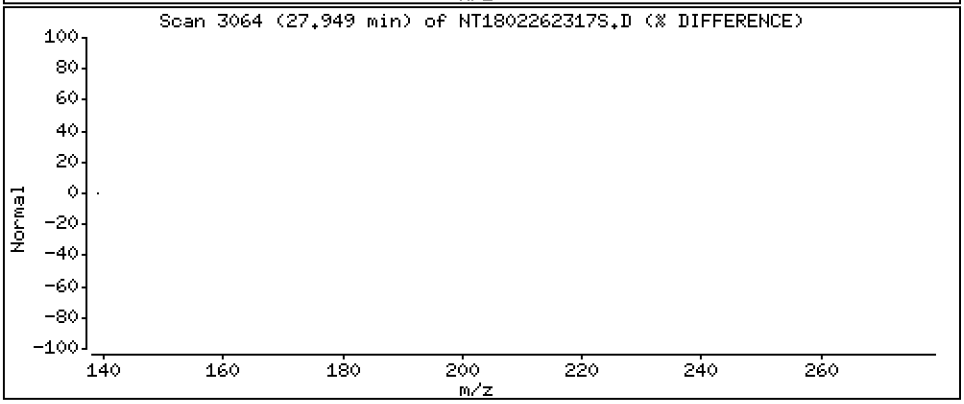












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262317S.D
Lab Smp Id: 23A0134-08
Inj Date : 26-FEB-2023 22:33
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-08
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.771	6.748	(0.759)	511120	5.50889	5.509(R)
	3	Phenol	94	8.340	8.324	(0.935)	519103	4.28879	4.289
	7	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8	1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	287469	4.00000	
	9	1,4-Dichlorobenzene	146	8.951	8.943	(1.003)	1644	0.01299	0.01299
	11	Benzyl alcohol	79	9.207	9.191	(1.032)	15542	0.20029	0.2003
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	13	2-Methylphenol	108	9.432	9.416	(1.057)	1166	0.01171	0.01171
	15	4-Methylphenol	108	9.696	9.680	(1.087)	9304	0.09316	0.09316
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	10.723	10.715	(0.943)	1031	0.01076	0.01076
	24	Benzoic acid	105	10.884	11.088	(0.957)	57336	1.47863	1.479(M)
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.370	11.370	(1.000)	1074326	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	14.465	14.465	(0.967)	7824	0.03604	0.03604
*	42	Acenaphthene-d10	162	14.952	14.945	(1.000)	565008	4.00000	
	50	Diethylphthalate	149	15.911	15.911	(1.064)	153061	0.77164	0.7716
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	17.702	17.702	(0.986)	607	0.02559	0.02559
*	59	Phenanthrene-d10	188	17.957	17.950	(1.000)	1166404	4.00000	
$	66	Terphenyl-d14	244	21.106	21.091	(0.918)	878221	3.95702	3.957(R)
	67	Butylbenzylphthalate	149	22.020	22.020	(0.958)	95442	0.47202	0.4720
*	69	Chrysene-d12	240	22.996	22.980	(1.000)	1225705	4.00000	
*	77	Perylene-d12	264	25.496	25.473	(1.000)	921587	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.948	27.917	(1.096)	21020	0.07676	0.07676
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262317S.D
Lab Smp Id: 23A0134-08
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	287469	2.86
27 Naphthalene-d8	1065527	532764	2131054	1074326	0.83
42 Acenaphthene-d10	544290	272145	1088580	565008	3.81
59 Phenanthrene-d10	1003412	501706	2006824	1166404	16.24
69 Chrysene-d12	936975	468488	1873950	1225705	30.82
77 Perylene-d12	1057771	528886	2115542	921587	-12.87

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.05
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.07
77 Perylene-d12	25.47	24.97	25.97	25.50	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262317S.D

Lab ID: 23A0134-08
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 22:33

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.975	-0.0179	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

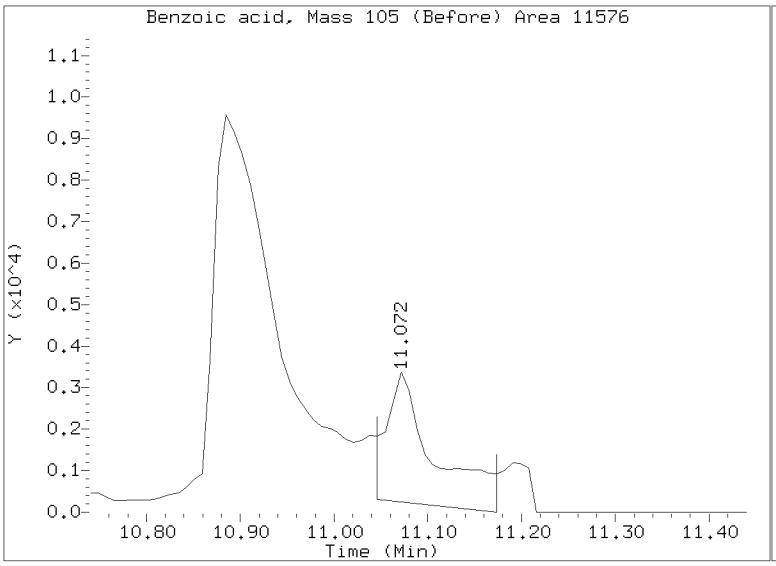
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

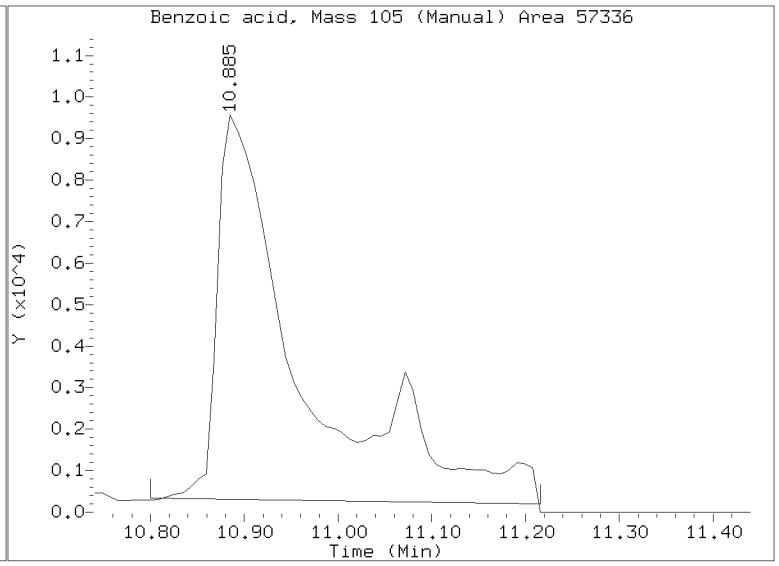
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/SIM.b/NT1802262317S.D
Injection Date: 26-FEB-2023 22:33
Lab ID:23A0134-08 Client ID:
Report Date: 03/24/2023 11:53





APPROVED

By Deenay Dunmore at 12:06 pm, Mar 24, 2023

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-09 C	SDG:	23A0134
Sampled:	01/06/23 12:57	Prepared:	01/19/23 13:35	File ID:	NT1802262318S.D
% Solids:	48.04	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 23:14
Batch:	BLA0410	Sequence:	SLC0389	Initial/Final:	21.37 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.7	J	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	4.9	U	0.7	4.9
100-51-6	Benzyl Alcohol	1	22.0		2.4	19.5
65-85-0	Benzoic acid	1	184	Q	13.1	97.4
105-67-9	2,4-Dimethylphenol	1	19.5	U	2.1	19.5
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	9.3	J	2.1	19.5

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	730.56	555	75.9	27 - 120	
p-Terphenyl-d14	487.04	412	84.6	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623185.D

Date : 26-FEB-2023 23:14

Client ID:

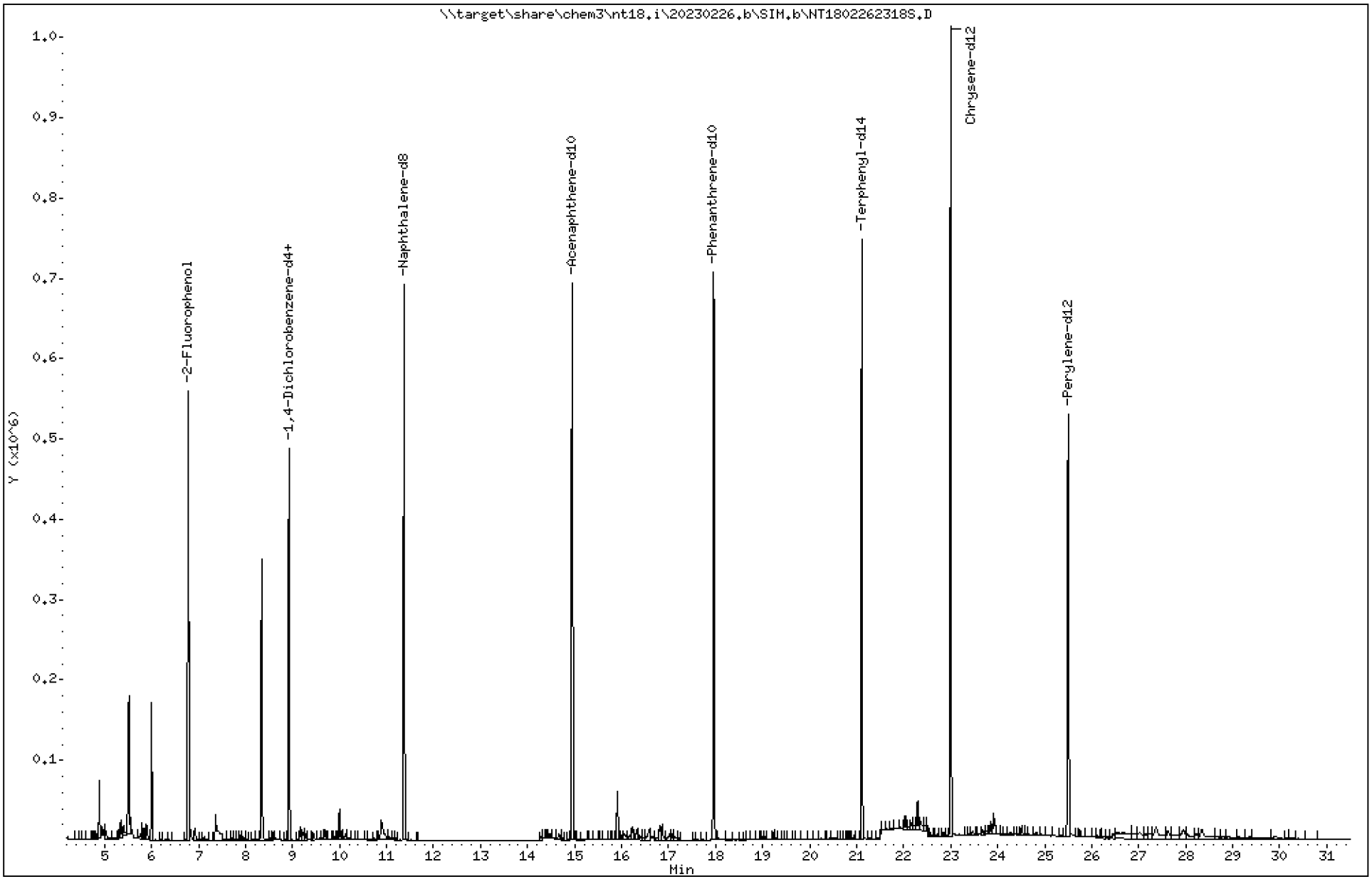
Sample Info: 23A0134-09

Instrument: nt18.i

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623185.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

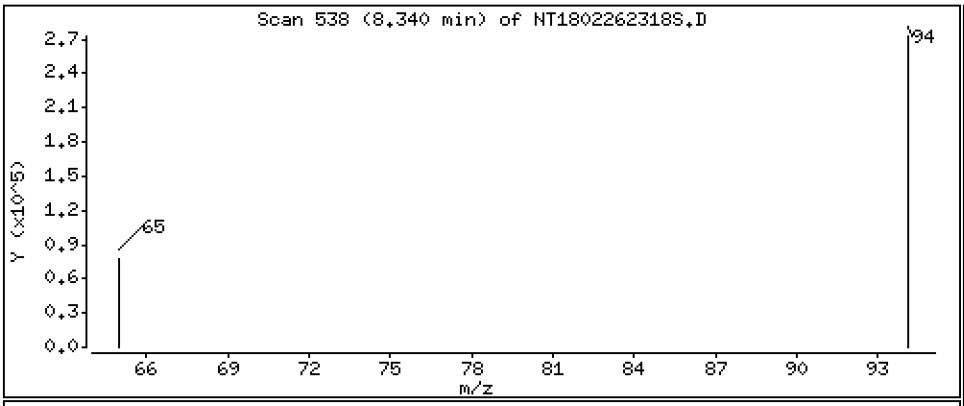
Operator: YZ

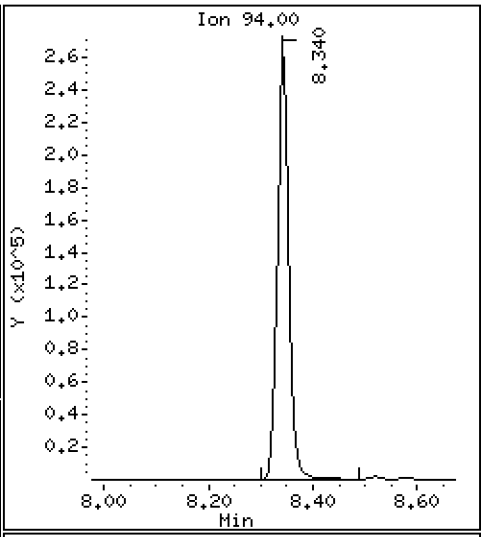
Column phase: ZB-5msi

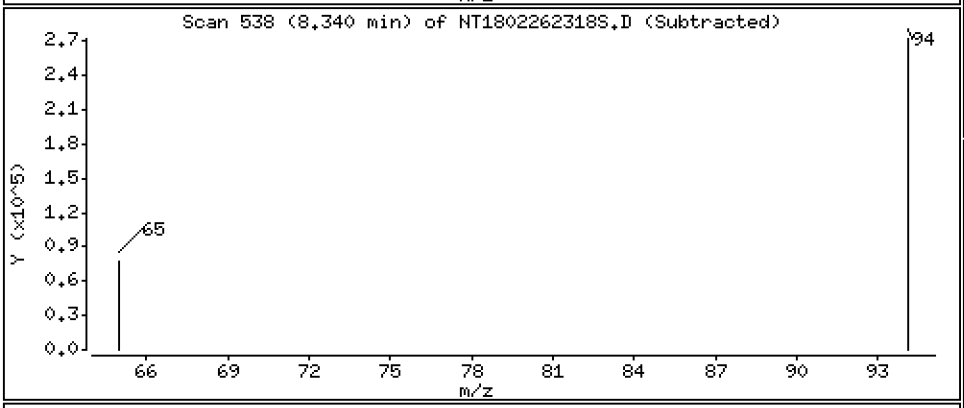
Column diameter: 0.25

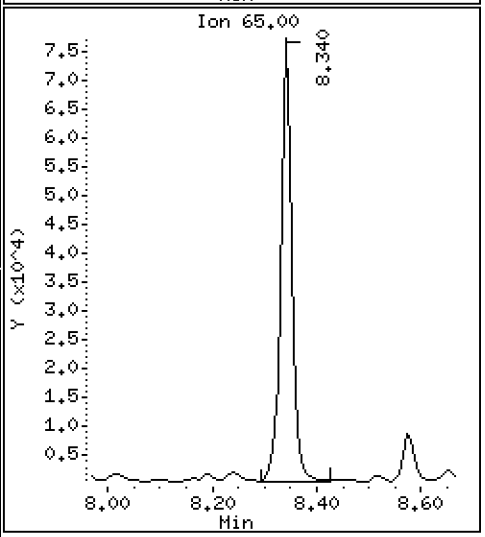
3 Phenol

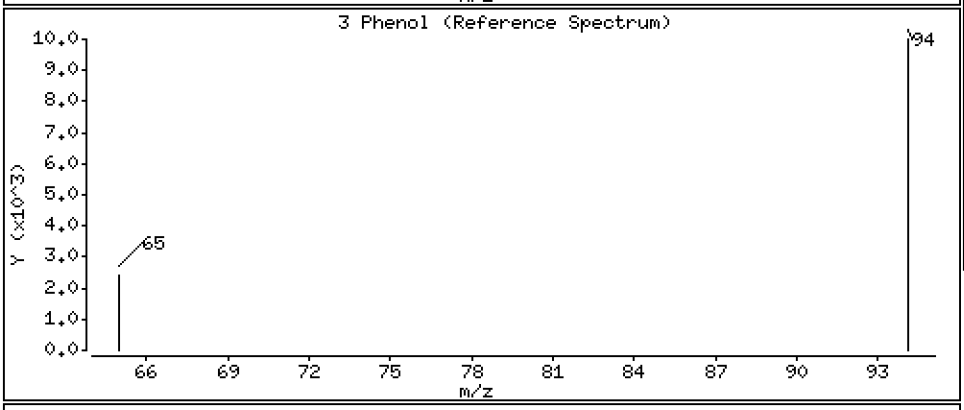
Concentration: 3.361 ug/mL

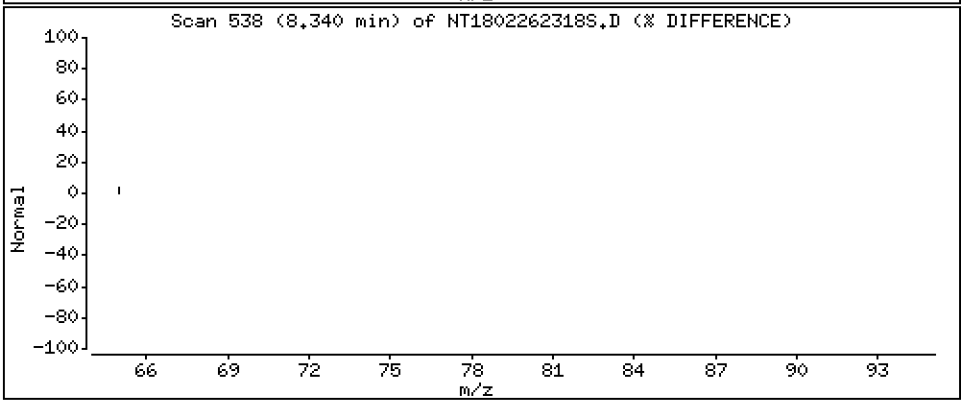












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623185.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

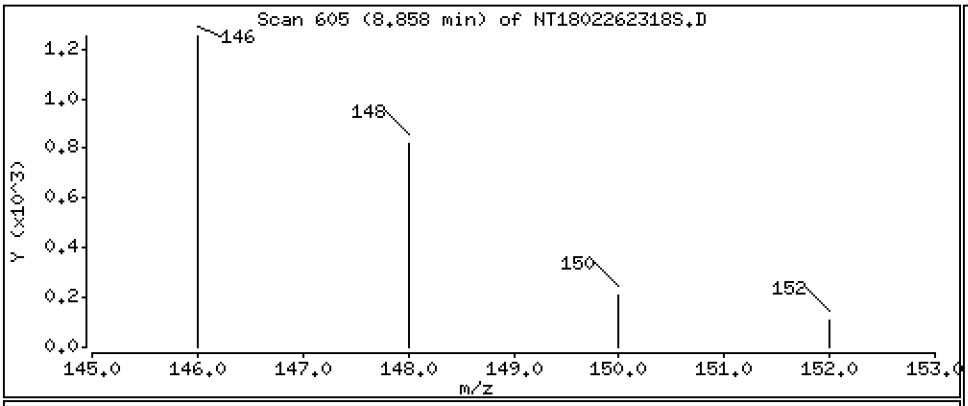
Operator: YZ

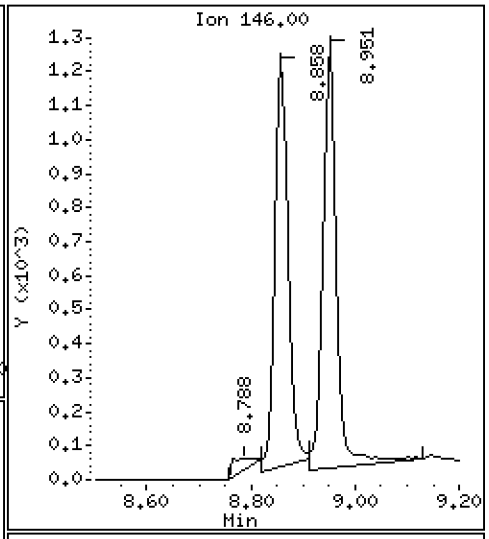
Column phase: ZB-5msi

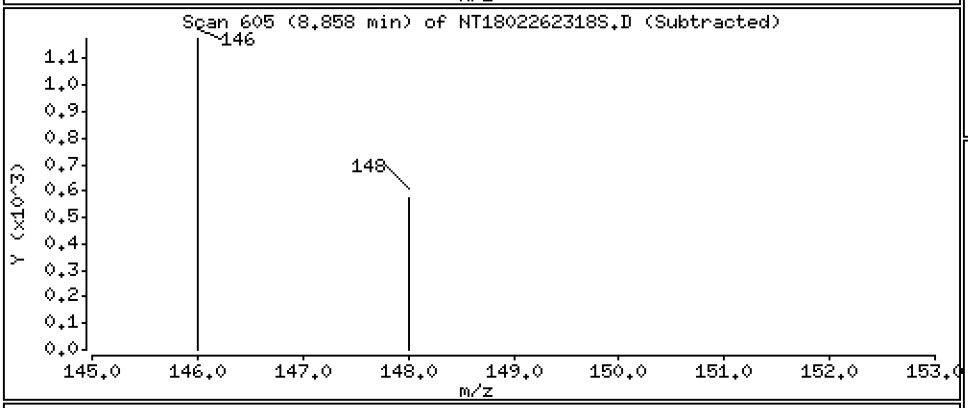
Column diameter: 0.25

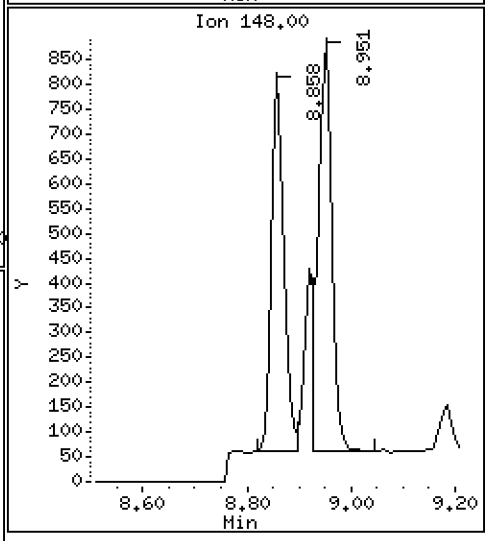
7 1,3-Dichlorobenzene

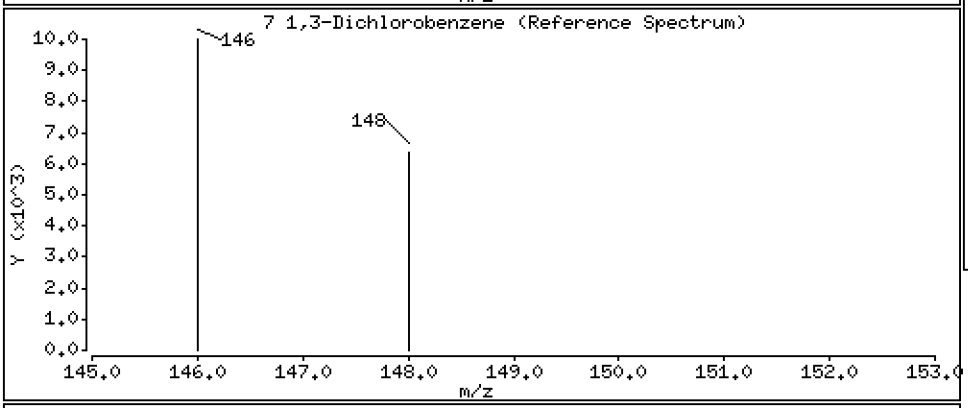
Concentration: 0.01685 ug/mL

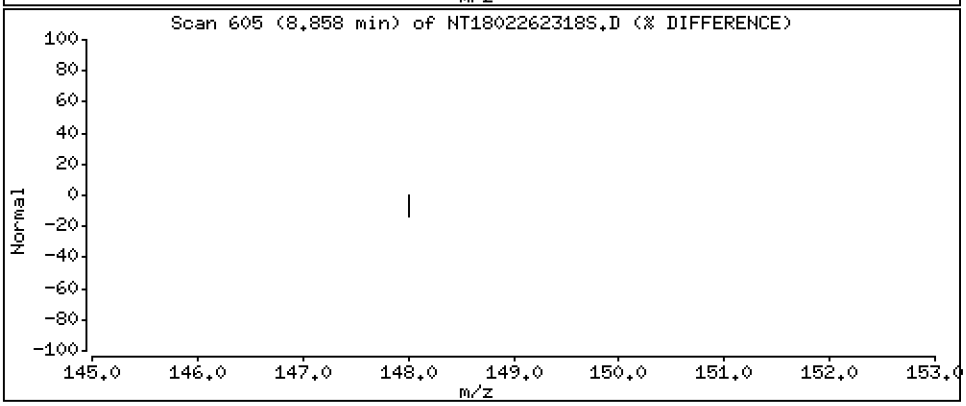












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623185.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

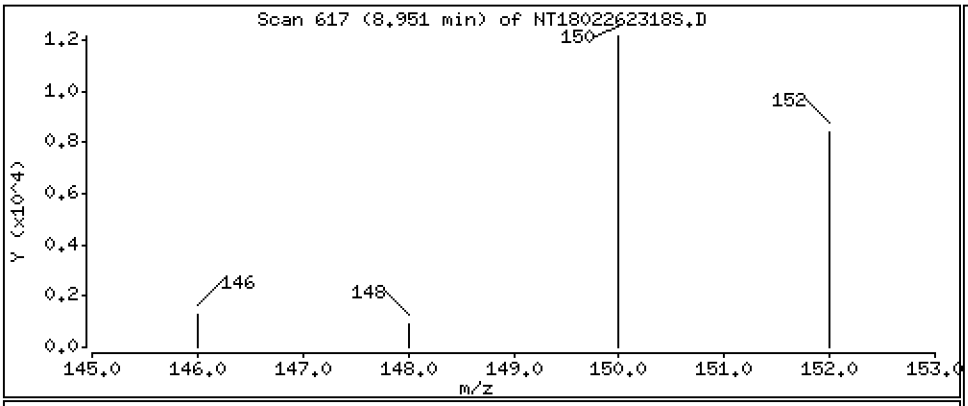
Operator: YZ

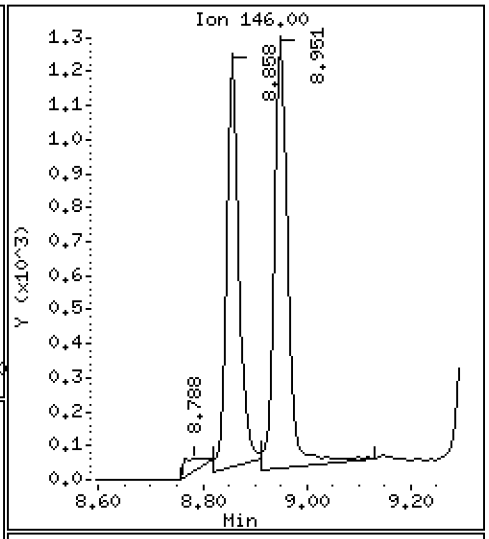
Column phase: ZB-5msi

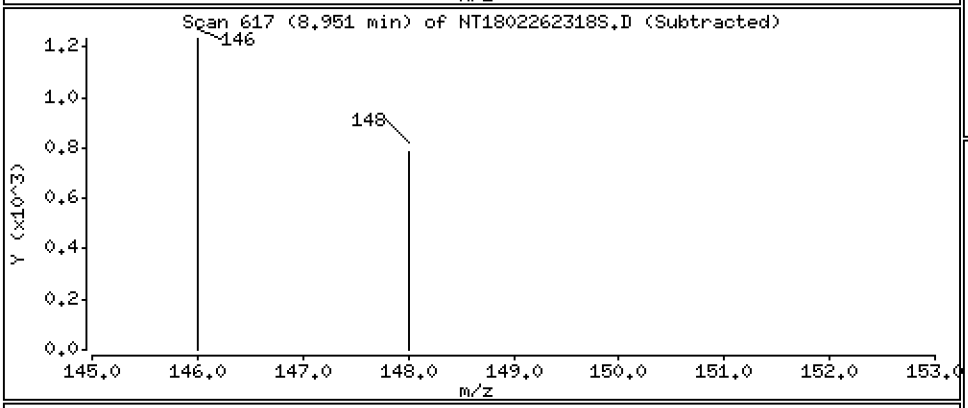
Column diameter: 0.25

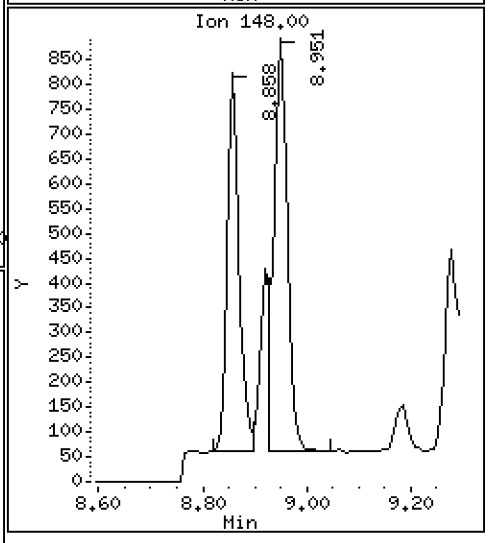
9 1,4-Dichlorobenzene

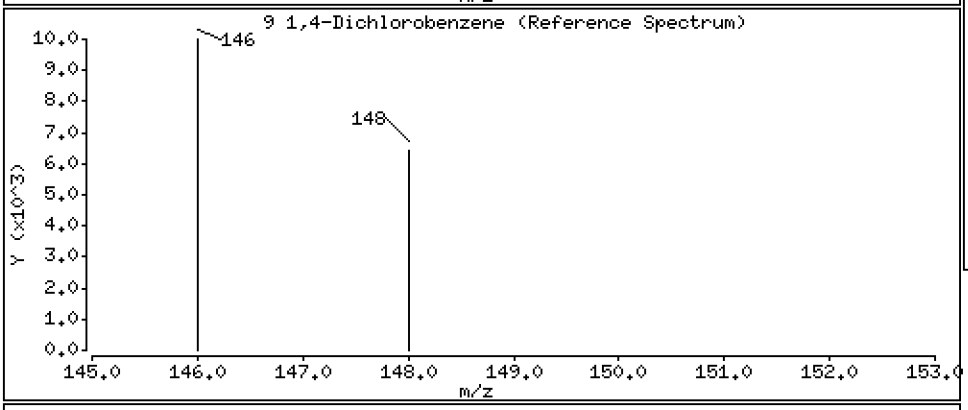
Concentration: 0.01772 ug/mL

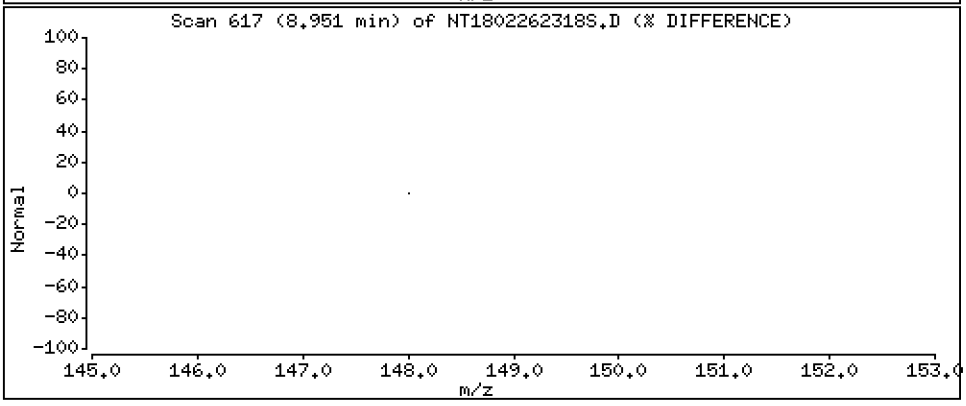












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623185.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

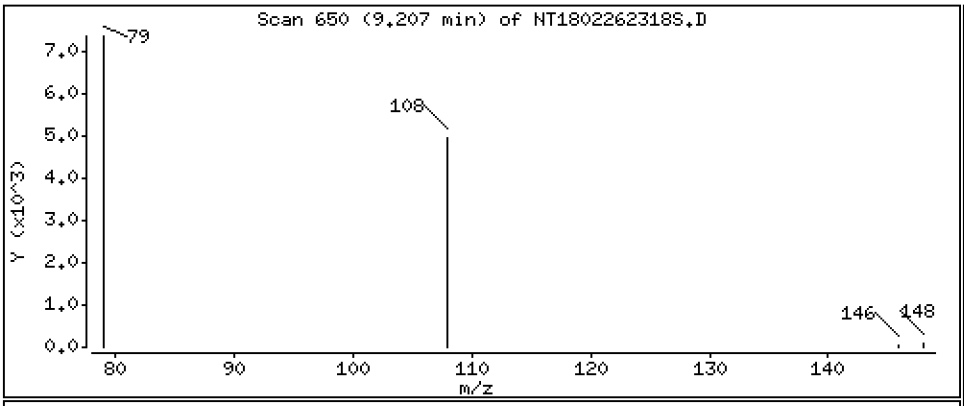
Operator: YZ

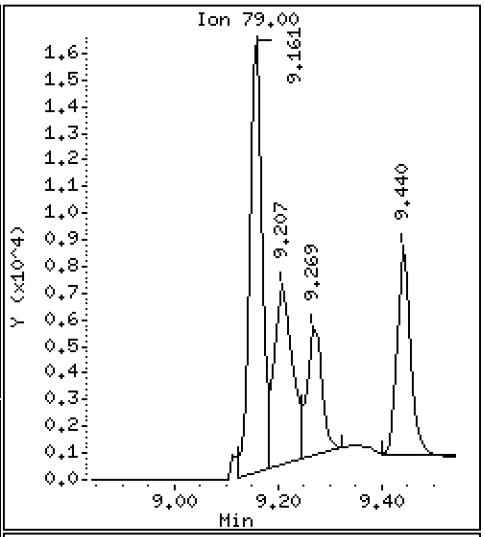
Column phase: ZB-5msi

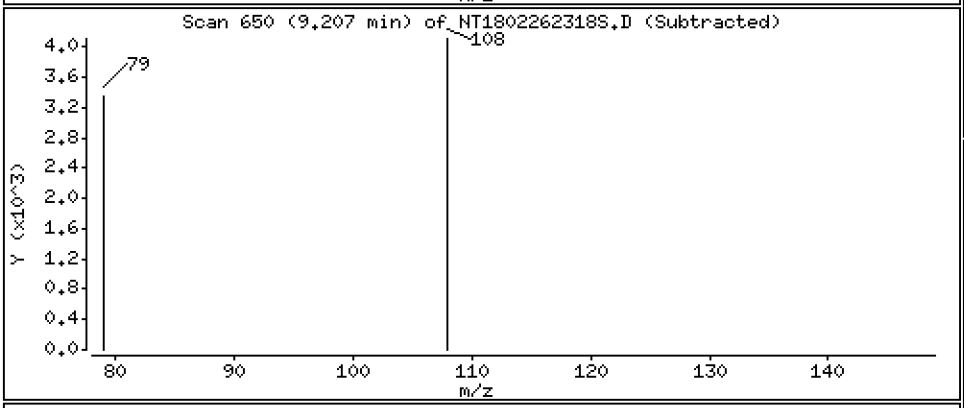
Column diameter: 0.25

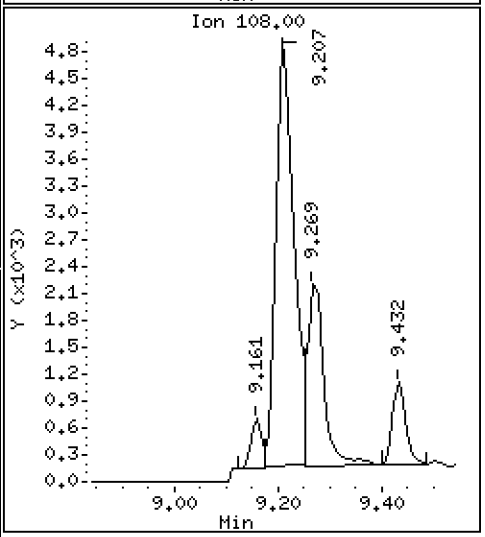
11 Benzyl alcohol

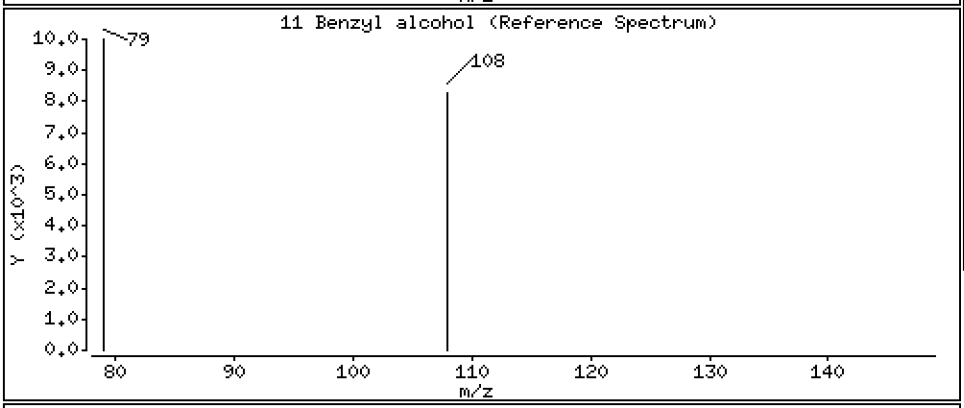
Concentration: 0.2263 ug/mL

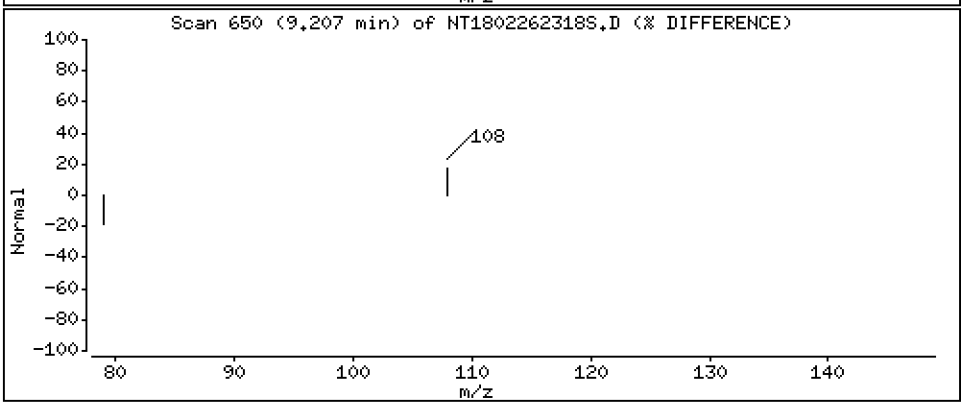












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623185.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

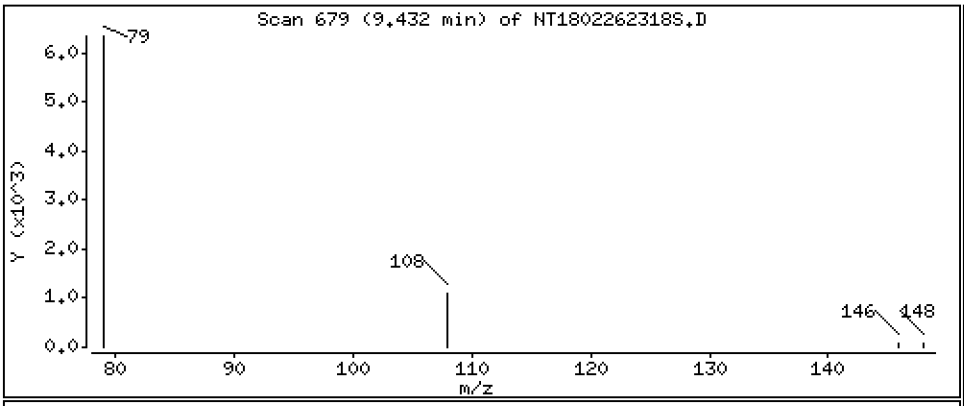
Operator: YZ

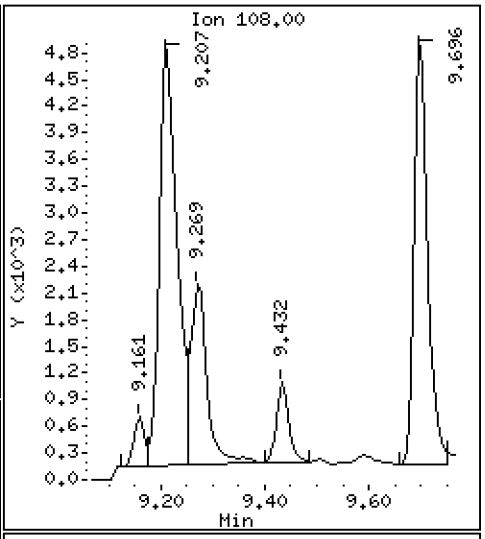
Column phase: ZB-5msi

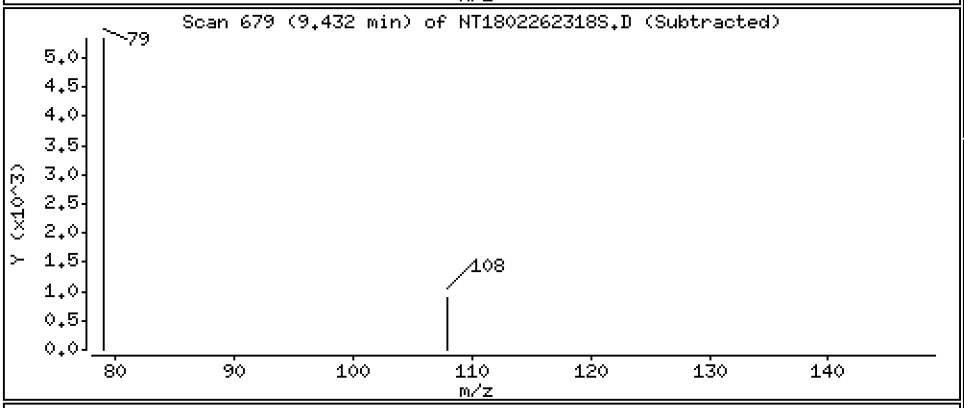
Column diameter: 0.25

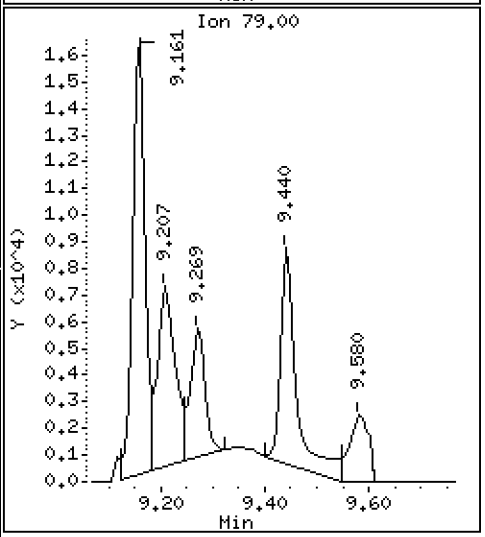
13 2-Methylphenol

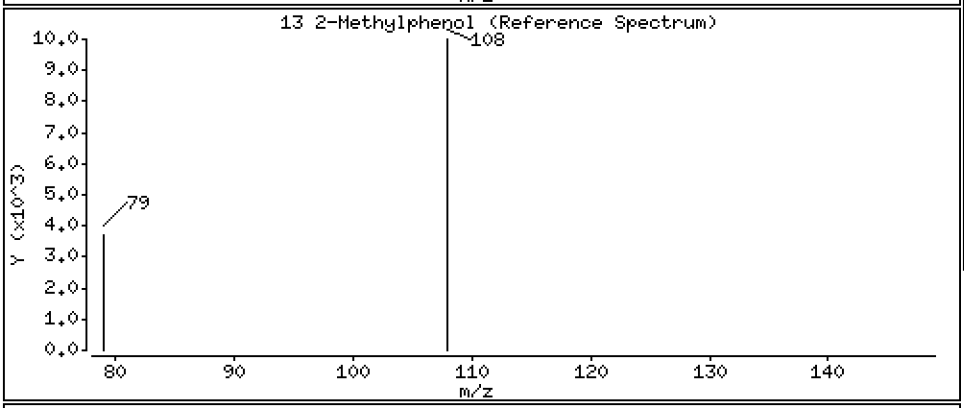
Concentration: 0.01557 ug/mL

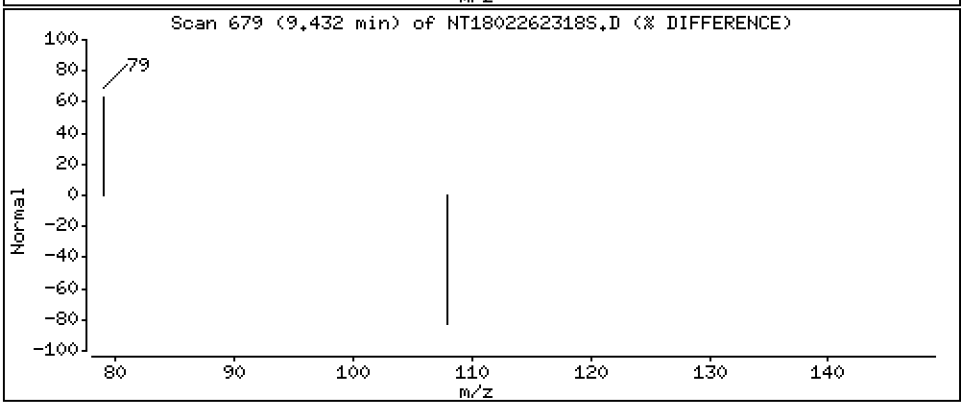












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623185.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

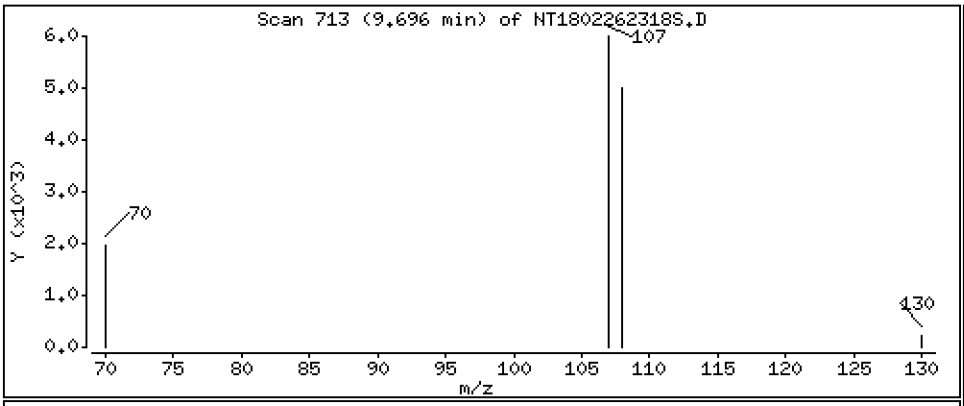
Operator: YZ

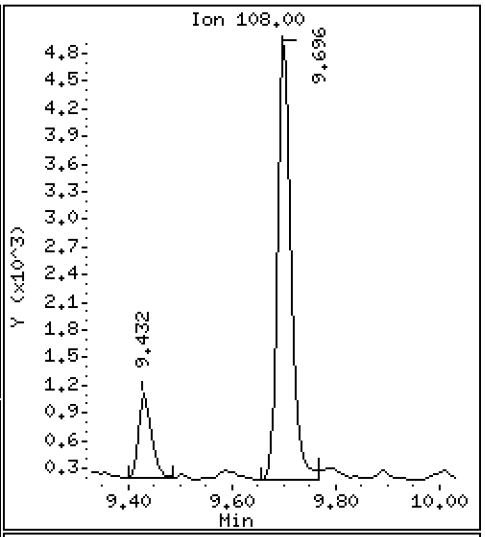
Column phase: ZB-5msi

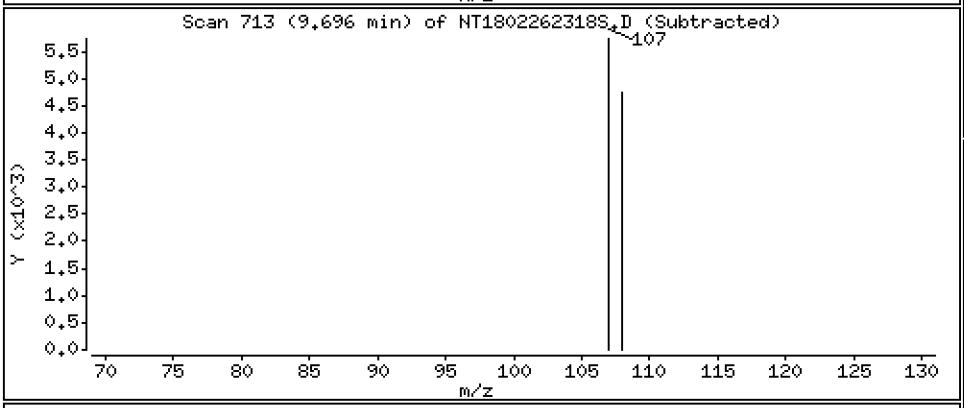
Column diameter: 0.25

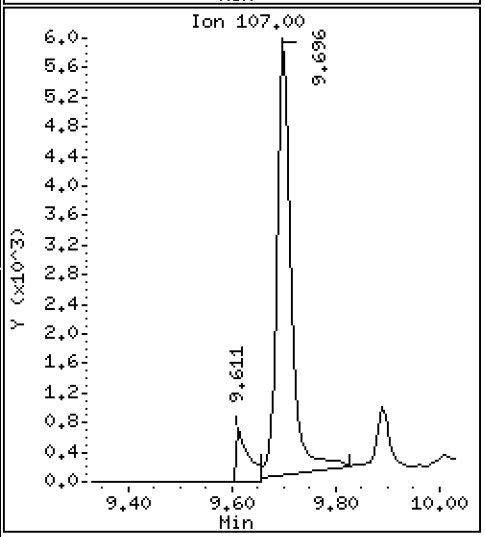
15 4-Methylphenol

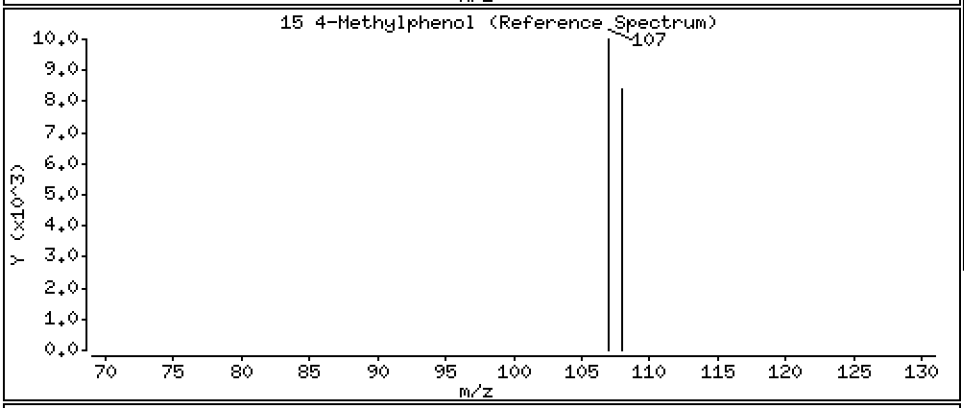
Concentration: 0.09131 ug/mL

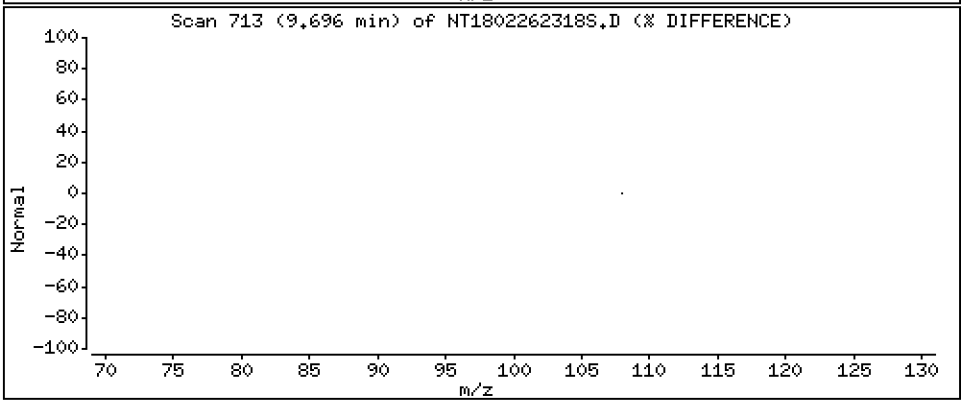












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623185.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

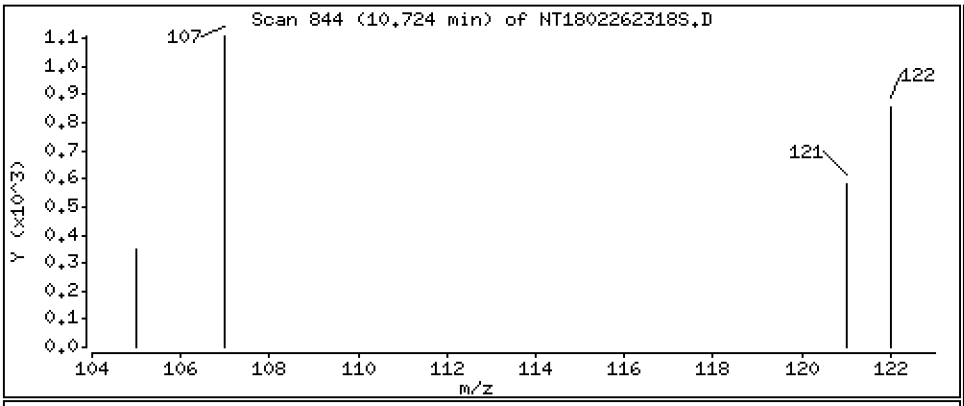
Operator: YZ

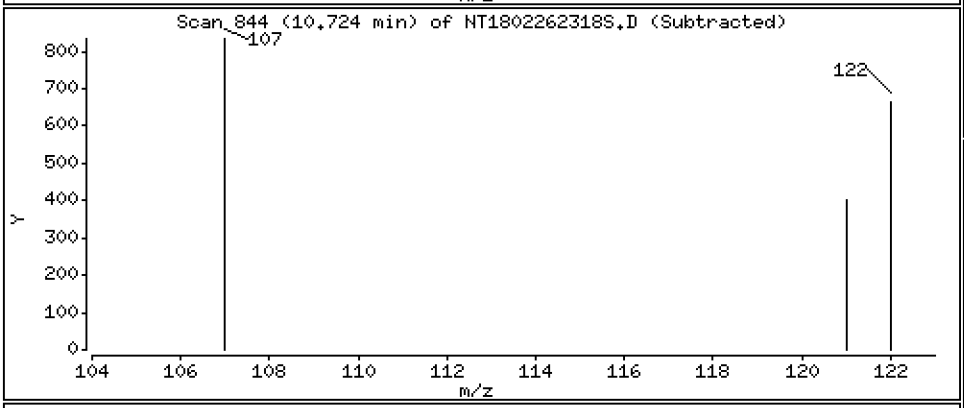
Column phase: ZB-5msi

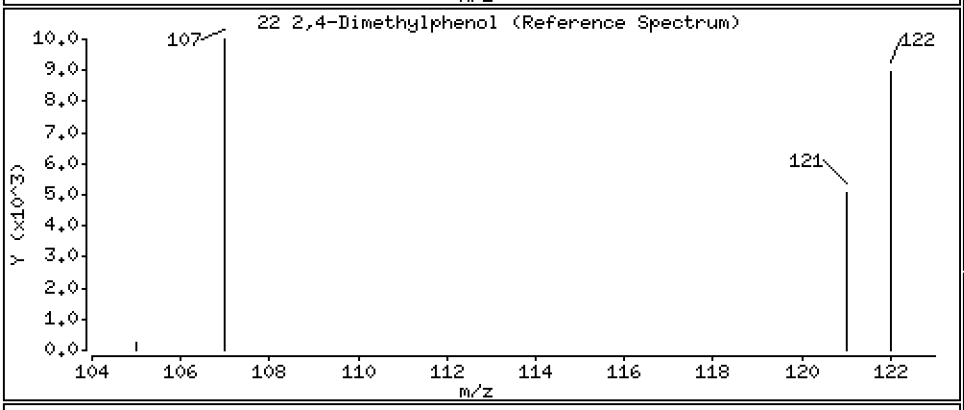
Column diameter: 0.25

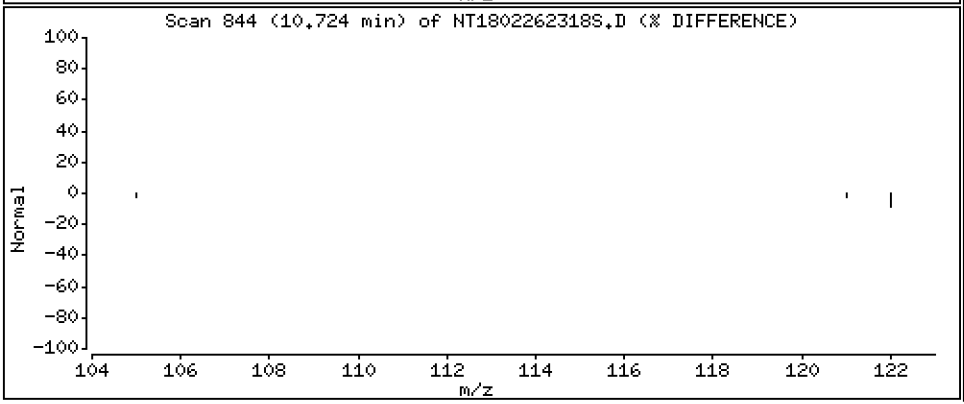
22 2,4-Dimethylphenol

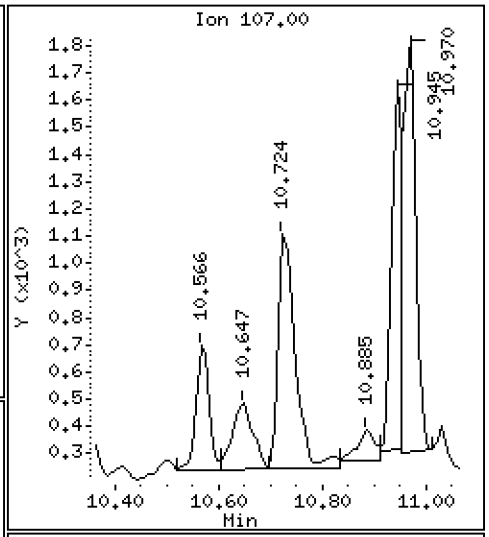
Concentration: 0.02117 ug/mL

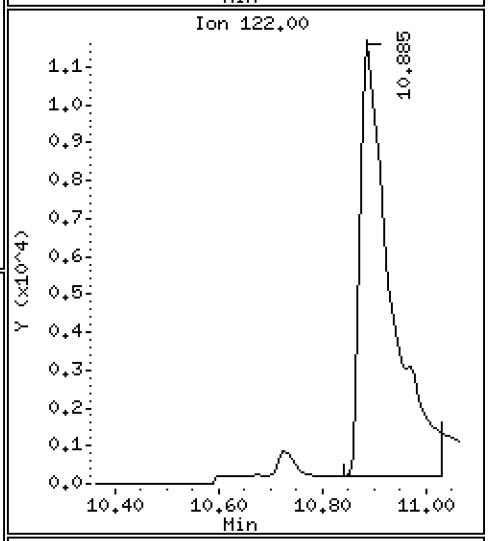


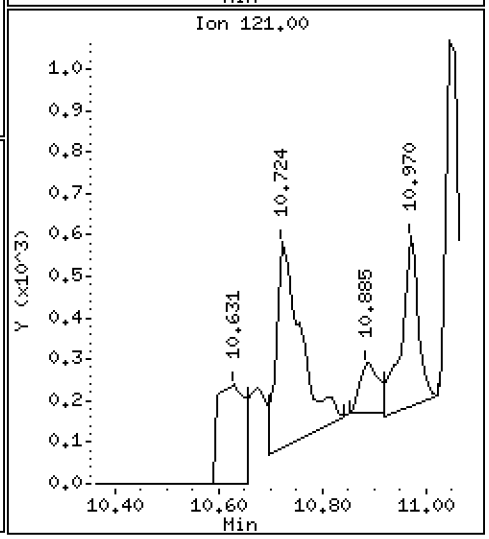












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623185.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

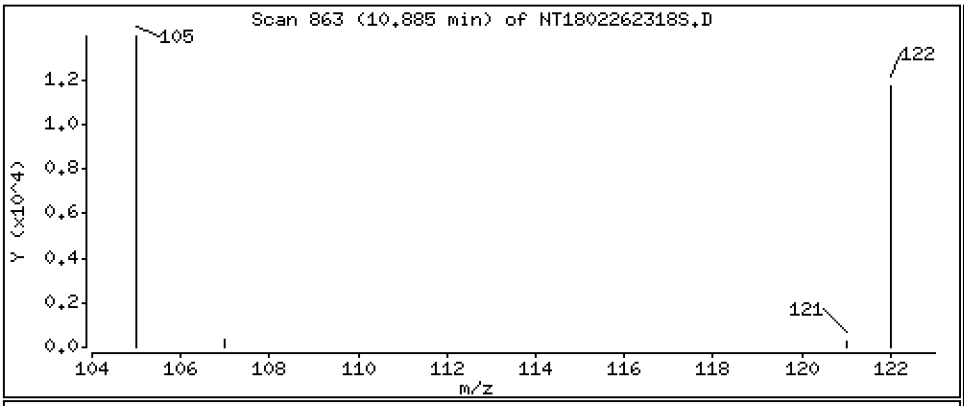
Operator: YZ

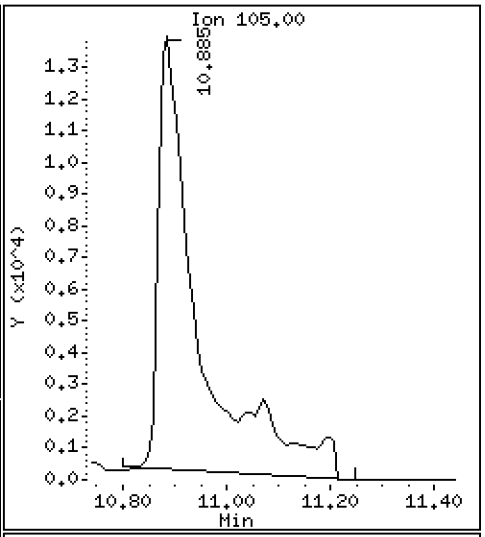
Column phase: ZB-5msi

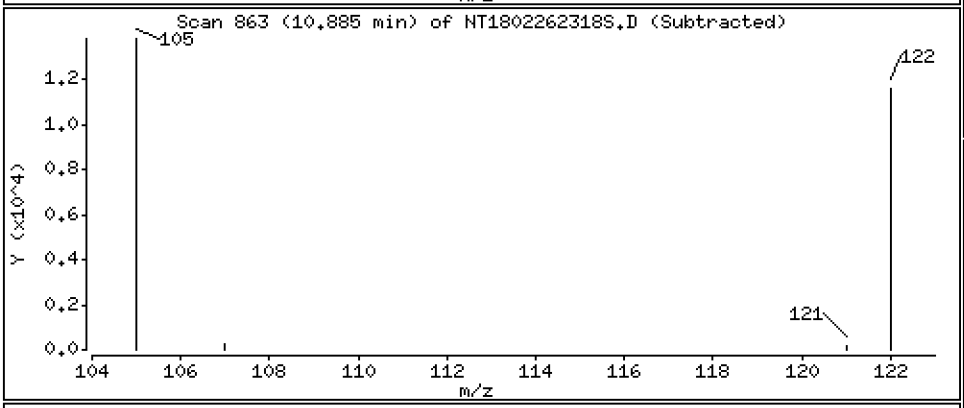
Column diameter: 0.25

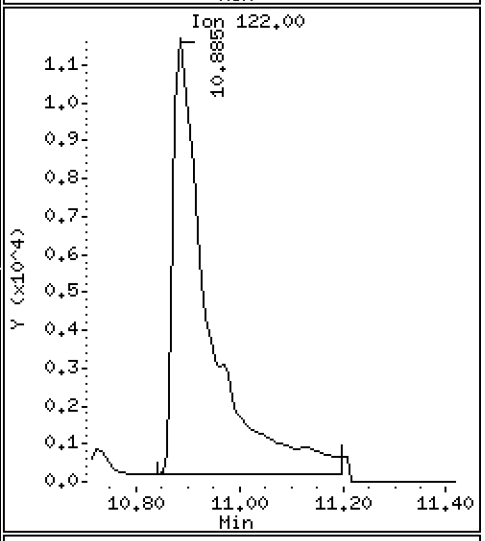
24 Benzoic acid

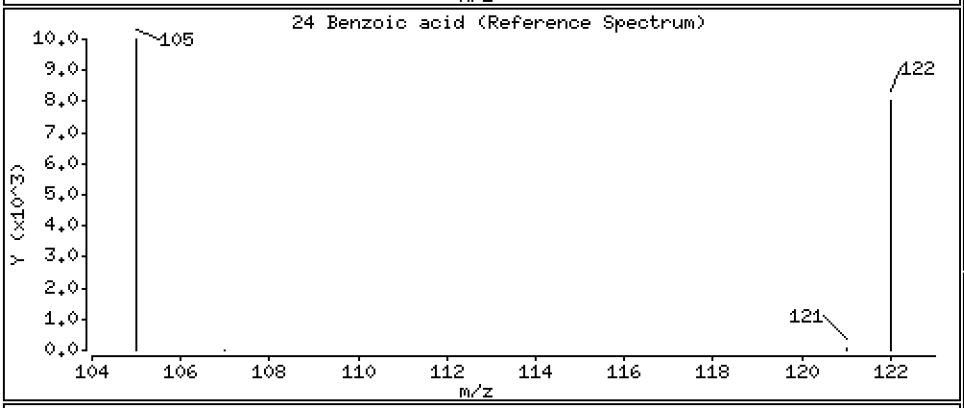
Concentration: 1.885 ug/mL

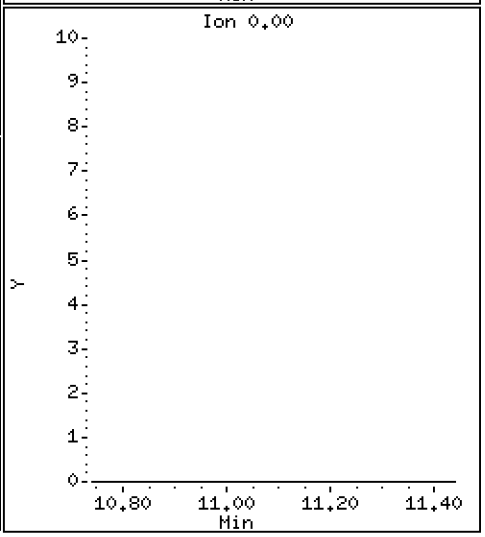


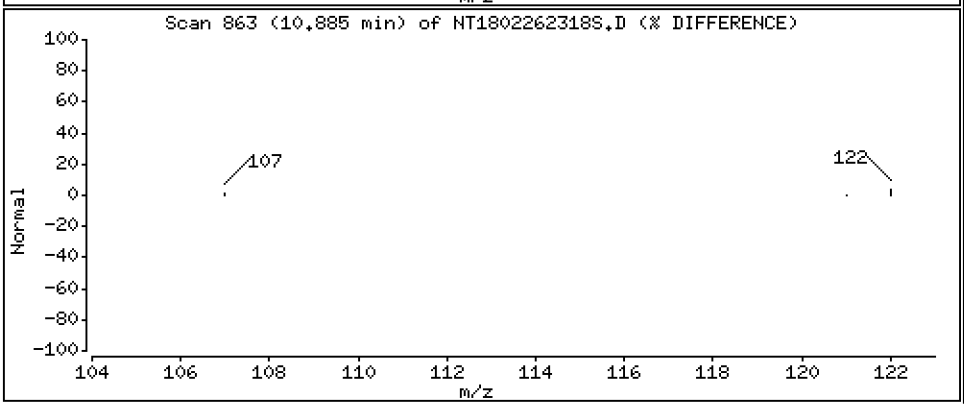












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262318S.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

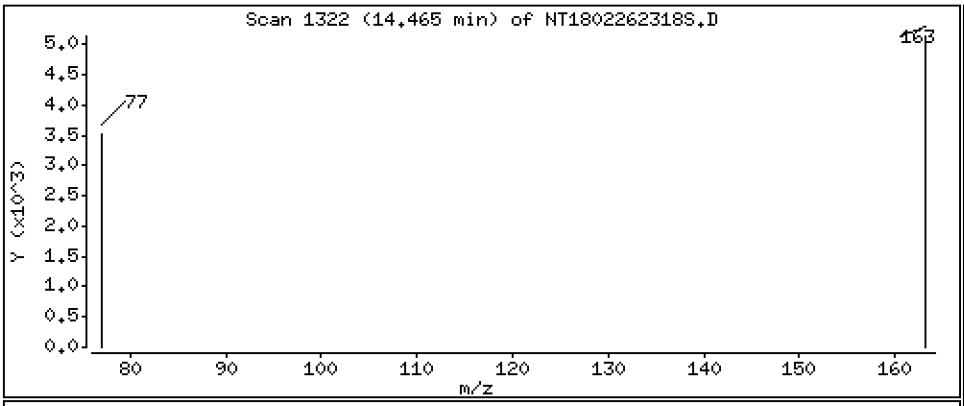
Operator: YZ

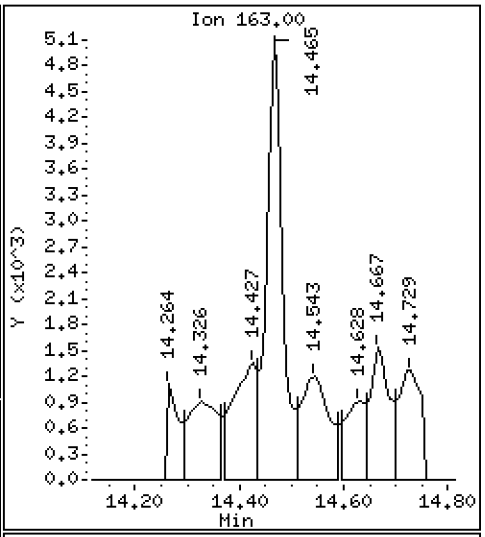
Column phase: ZB-5msi

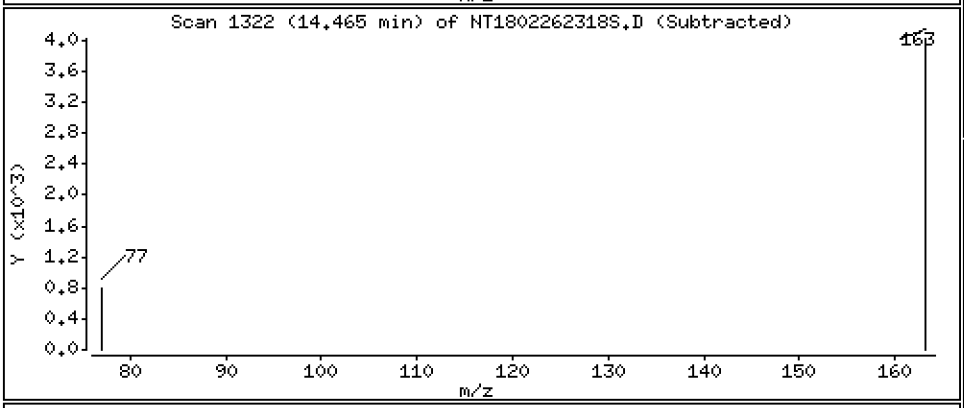
Column diameter: 0.25

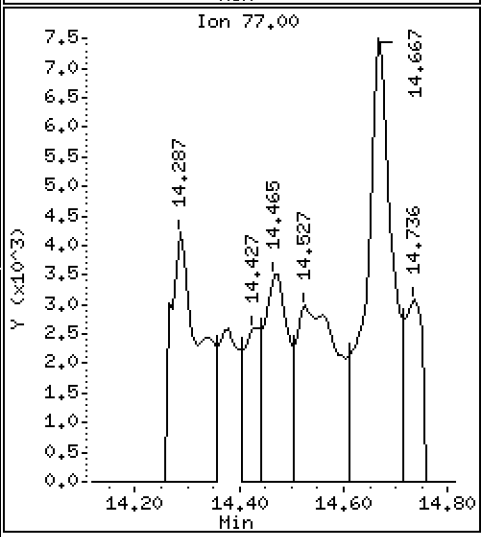
39 Dimethylphthalate

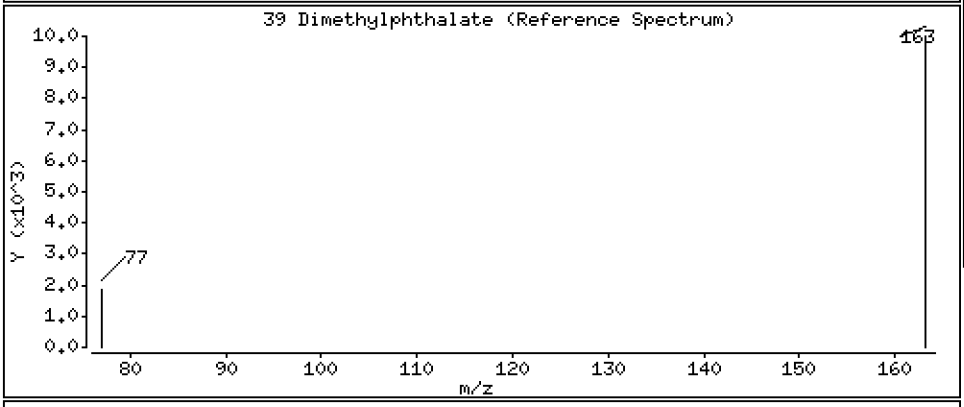
Concentration: 0.05217 ug/mL

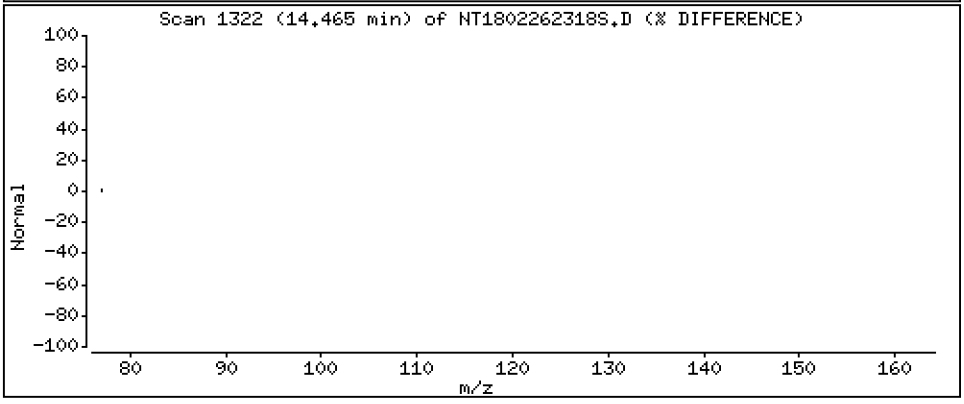












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262318S.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

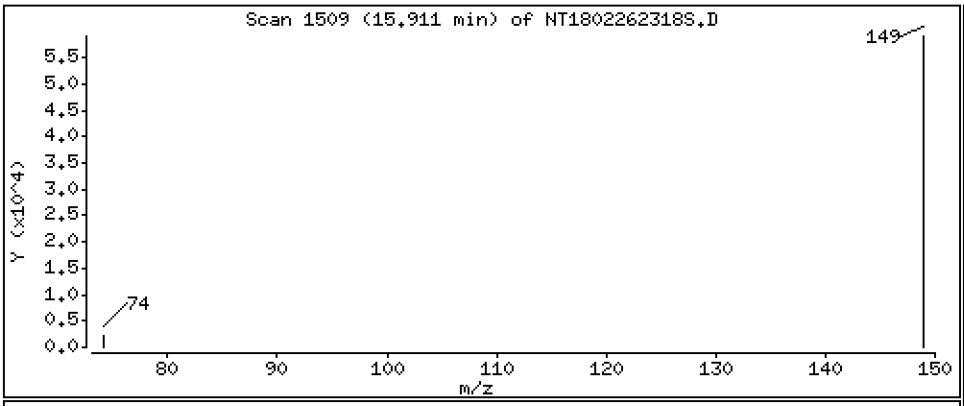
Operator: YZ

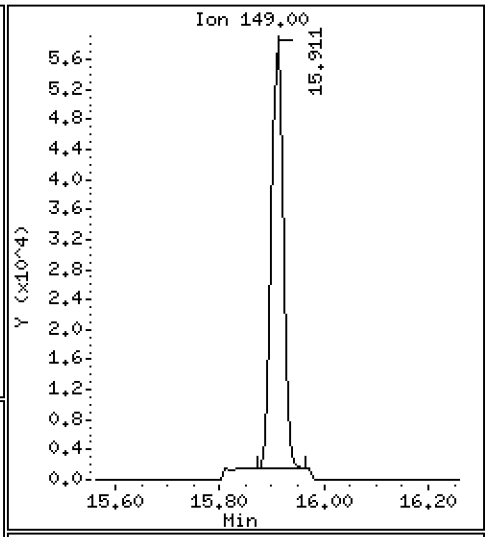
Column phase: ZB-5msi

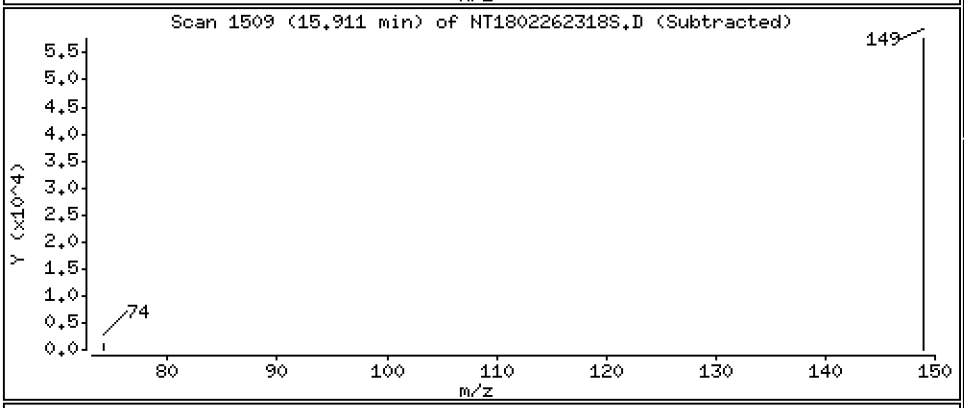
Column diameter: 0.25

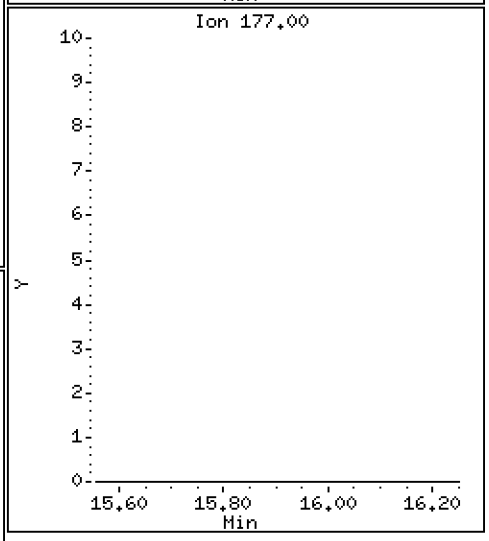
50 Diethylphthalate

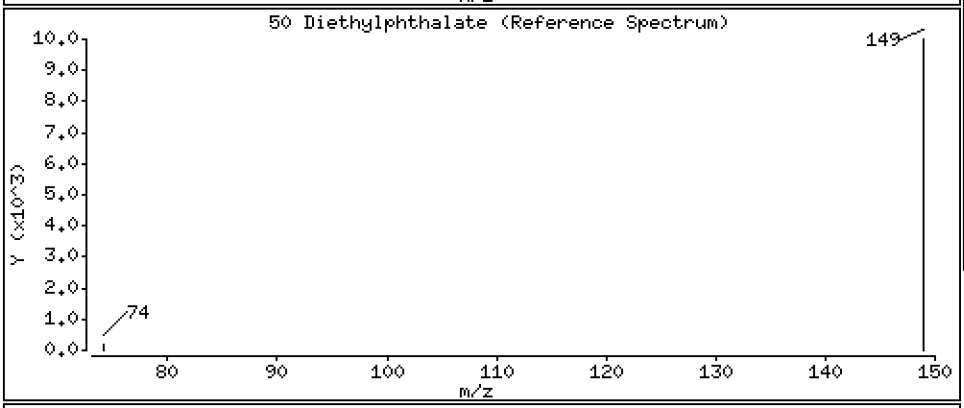
Concentration: 0.4419 ug/mL

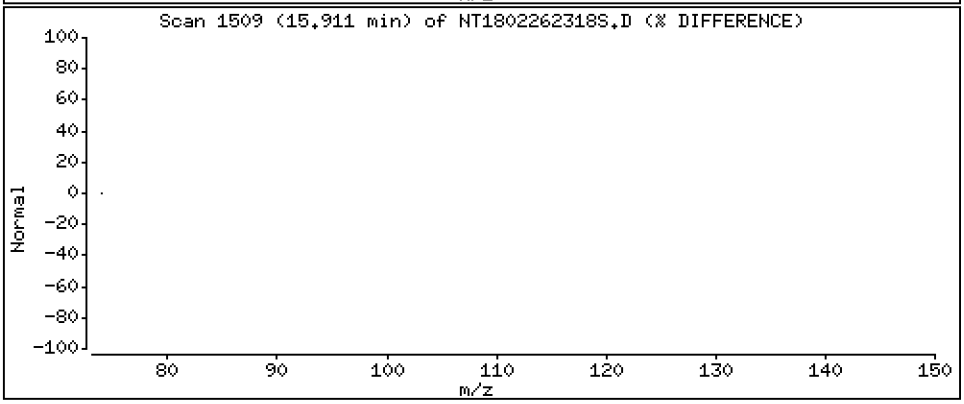












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262318S.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

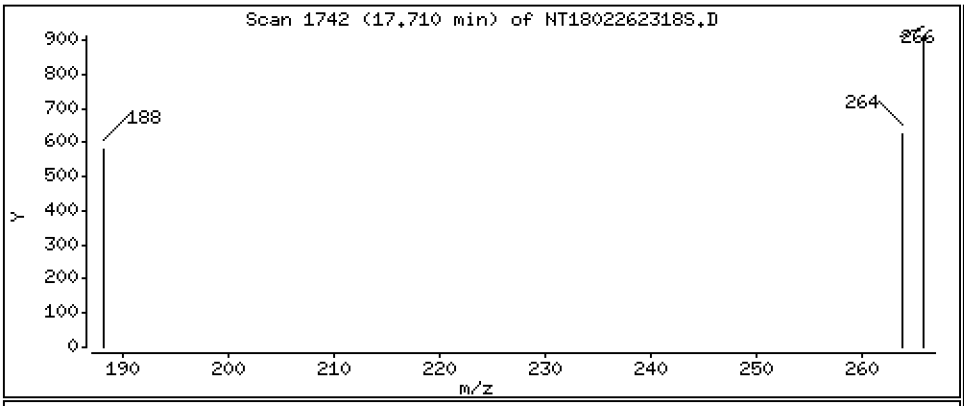
Operator: YZ

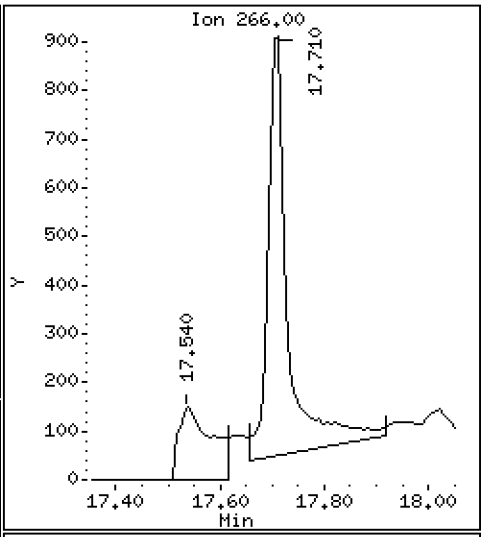
Column phase: ZB-5msi

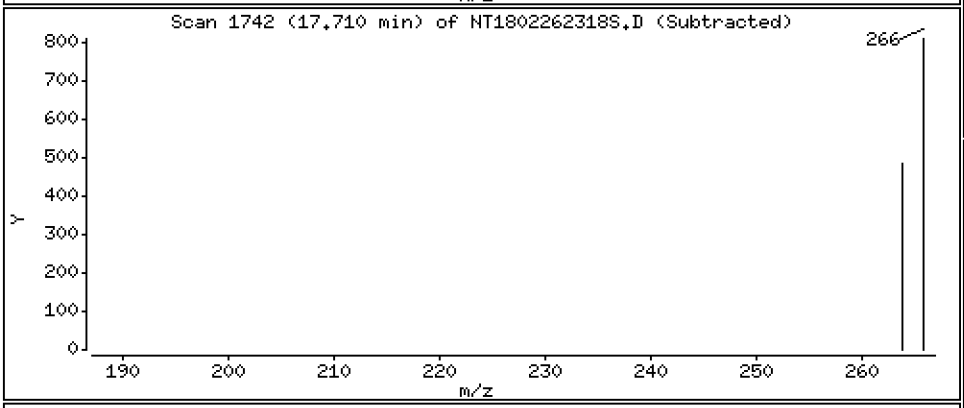
Column diameter: 0.25

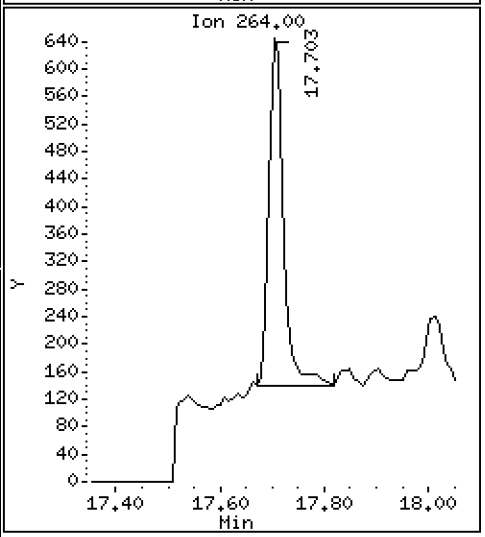
58 Pentachlorophenol

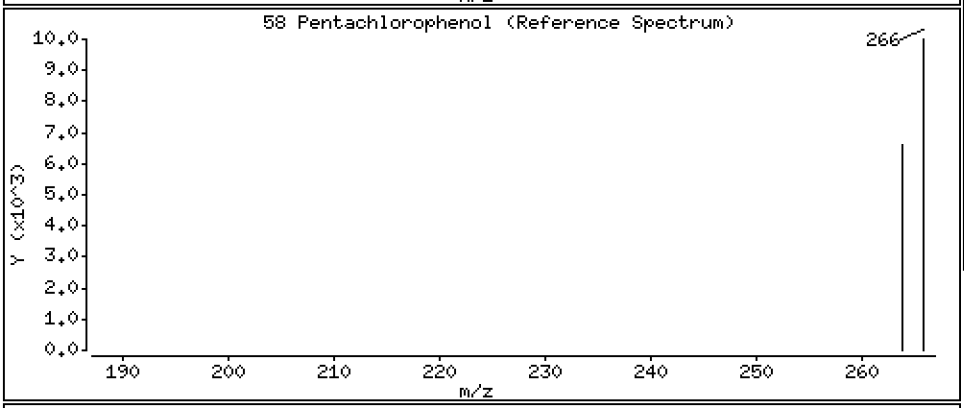
Concentration: 0.09572 ug/mL

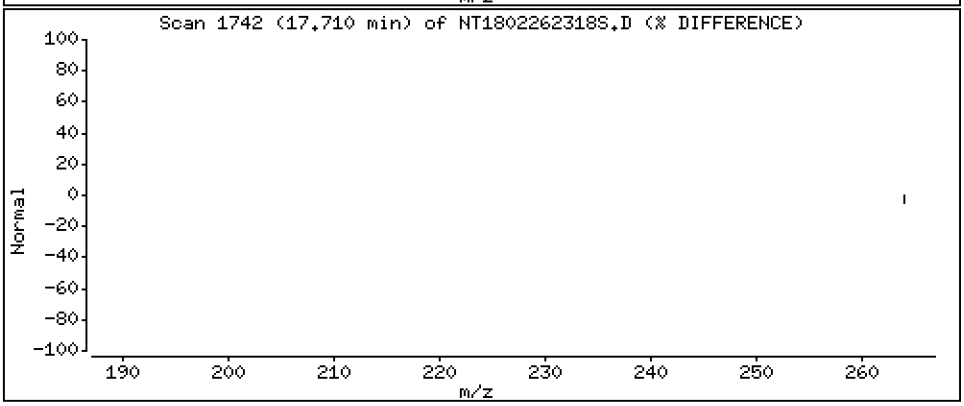












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623185.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

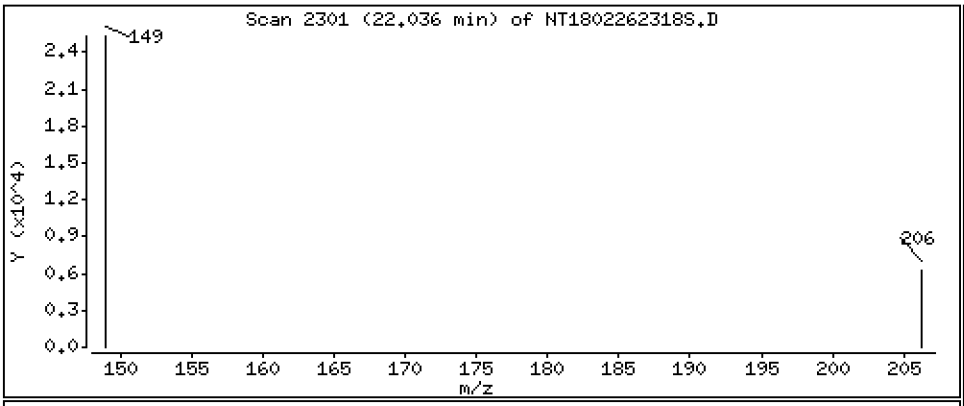
Operator: YZ

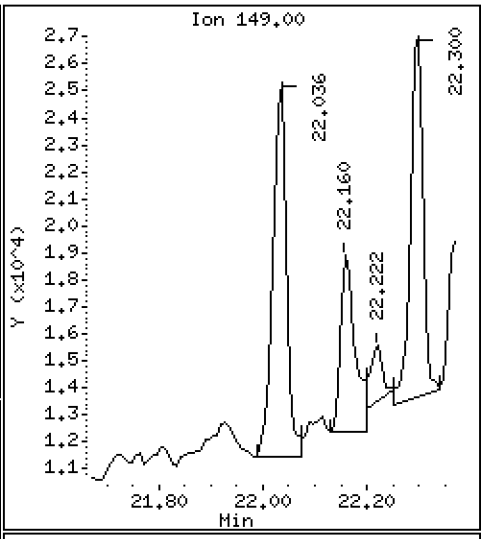
Column phase: ZB-5msi

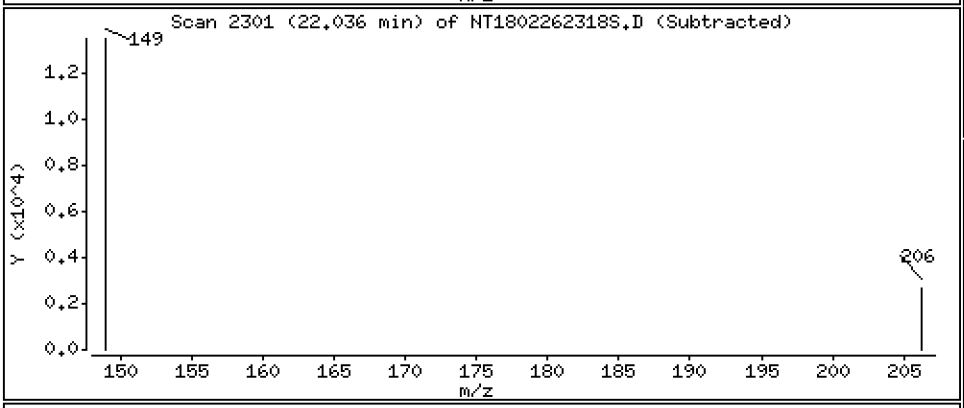
Column diameter: 0.25

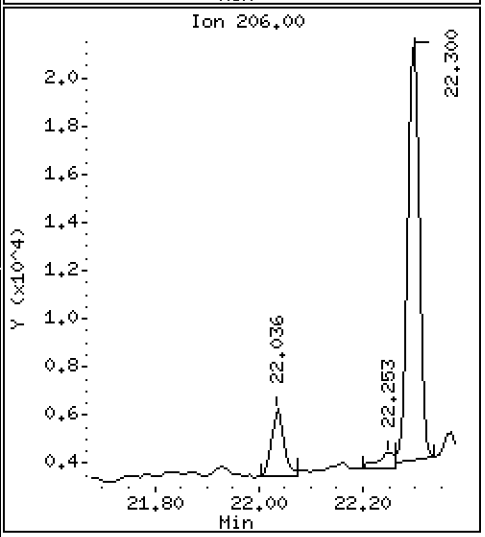
67 Butylbenzylphthalate

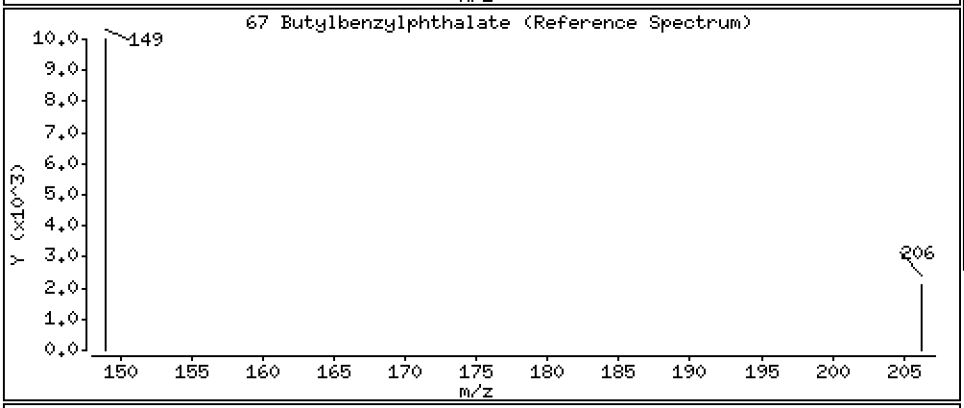
Concentration: 0.1180 ug/mL

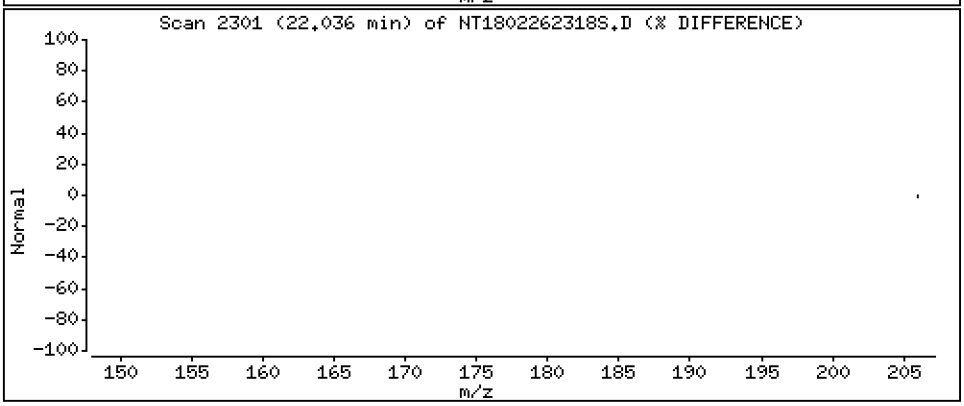












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262318S.D

Date : 26-FEB-2023 23:14

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-09

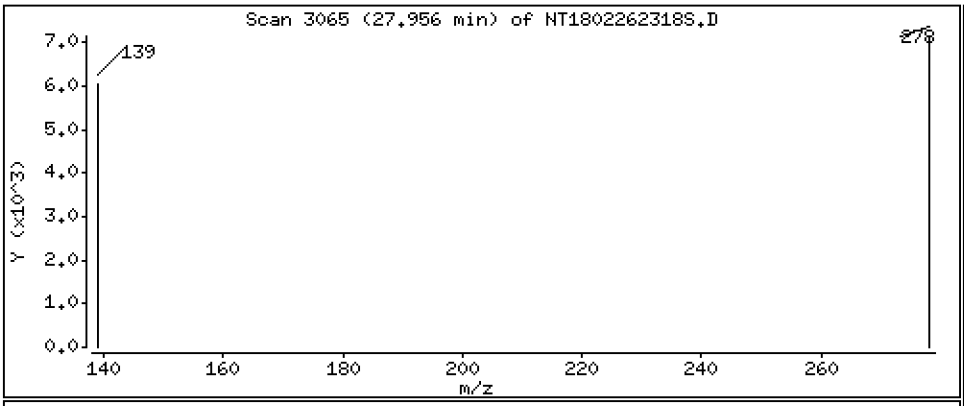
Operator: YZ

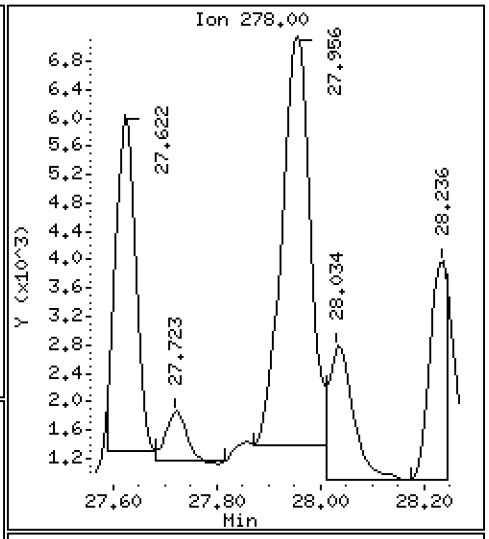
Column phase: ZB-5msi

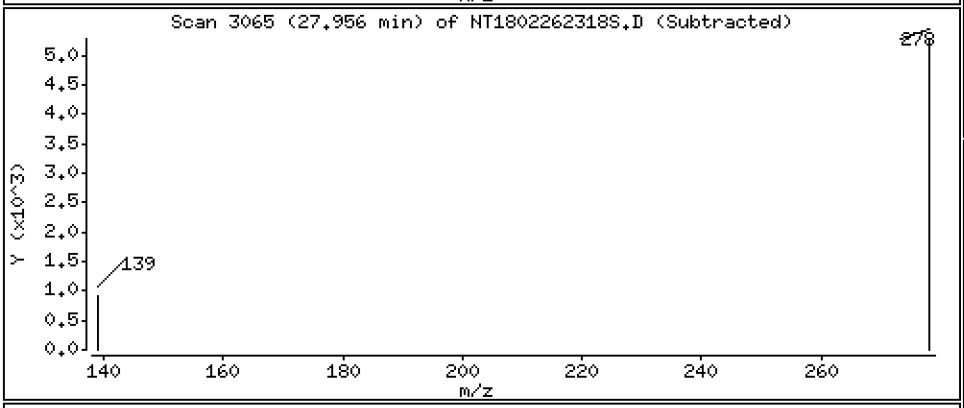
Column diameter: 0.25

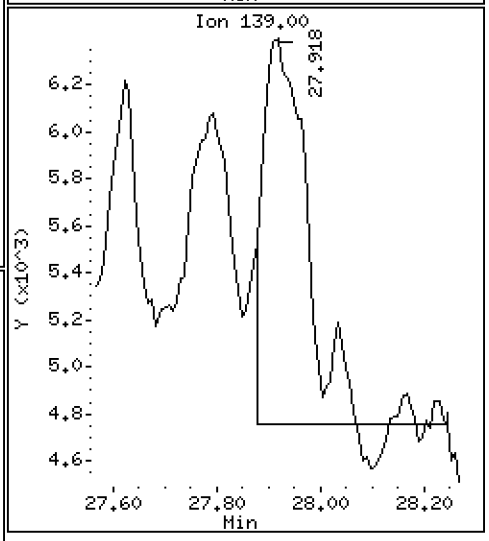
79 Dibenzo(a,h)anthracene

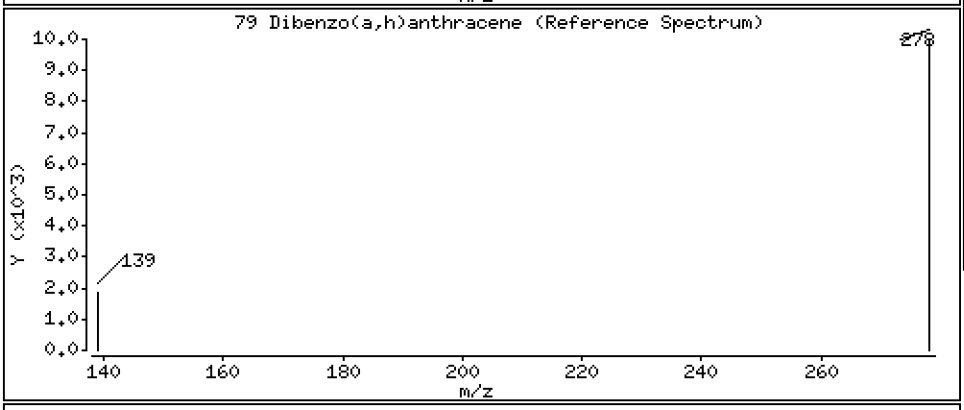
Concentration: 0.08516 ug/mL

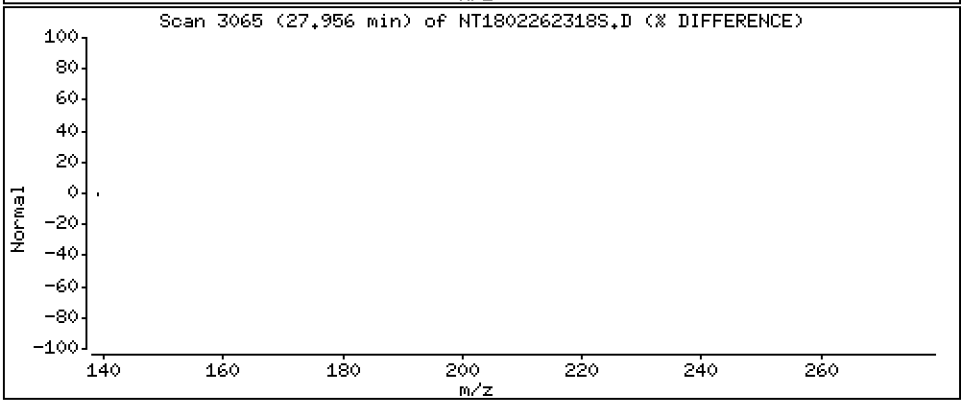












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262318S.D
Lab Smp Id: 23A0134-09
Inj Date : 26-FEB-2023 23:14
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-09
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.779	6.748	(0.760)	517772	5.69622	5.696(R)
	3	Phenol	94	8.340	8.324	(0.935)	398510	3.36069	3.361
	7	1,3-Dichlorobenzene	146	8.858	8.850	(0.993)	2000	0.01685	0.01685
*	8	1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	281633	4.00000	
	9	1,4-Dichlorobenzene	146	8.951	8.943	(1.003)	2197	0.01772	0.01772
	11	Benzyl alcohol	79	9.207	9.191	(1.032)	17203	0.22629	0.2263
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	13	2-Methylphenol	108	9.432	9.416	(1.057)	1518	0.01557	0.01557
	15	4-Methylphenol	108	9.696	9.680	(1.087)	8934	0.09131	0.09131
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	10.723	10.715	(0.943)	1992	0.02117	0.02117
	24	Benzoic acid	105	10.885	11.088	(0.957)	71832	1.88466	1.885(M)
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.370	11.370	(1.000)	1054869	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	14.465	14.465	(0.967)	11016	0.05217	0.05217
*	42	Acenaphthene-d10	162	14.952	14.945	(1.000)	549573	4.00000	
	50	Diethylphthalate	149	15.911	15.911	(1.064)	85253	0.44187	0.4419
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	17.710	17.702	(0.986)	2237	0.09572	0.09572
*	59	Phenanthrene-d10	188	17.958	17.950	(1.000)	1148681	4.00000	
$	66	Terphenyl-d14	244	21.107	21.091	(0.918)	951422	4.22901	4.229(R)
	67	Butylbenzylphthalate	149	22.036	22.020	(0.958)	24273	0.11801	0.1180
*	69	Chrysene-d12	240	22.996	22.980	(1.000)	1242466	4.00000	
*	77	Perylene-d12	264	25.497	25.473	(1.000)	882037	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.956	27.917	(1.096)	22320	0.08516	0.08516
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262318S.D
Lab Smp Id: 23A0134-09
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	281633	0.77
27 Naphthalene-d8	1065527	532764	2131054	1054869	-1.00
42 Acenaphthene-d10	544290	272145	1088580	549573	0.97
59 Phenanthrene-d10	1003412	501706	2006824	1148681	14.48
69 Chrysene-d12	936975	468488	1873950	1242466	32.60
77 Perylene-d12	1057771	528886	2115542	882037	-16.61

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.05
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.07
77 Perylene-d12	25.47	24.97	25.97	25.50	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262318S.D

Lab ID: 23A0134-09
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 23:14

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.975	-0.0179	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

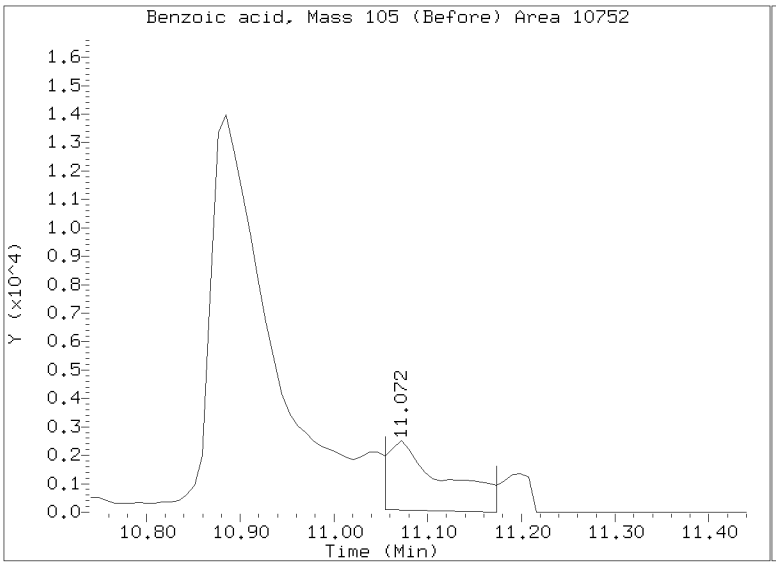
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

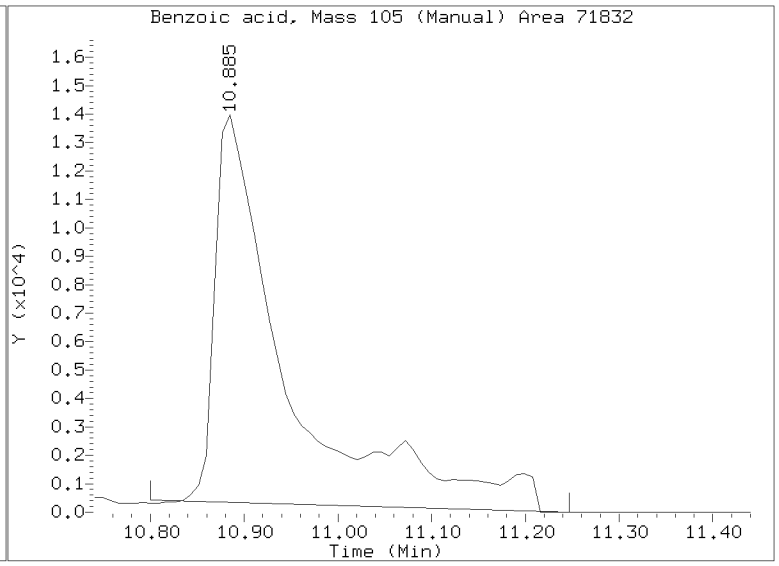
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/SIM.b/NT1802262318S.D
Injection Date: 26-FEB-2023 23:14
Lab ID:23A0134-09 Client ID:
Report Date: 03/24/2023 11:53





APPROVED

By Deenay Dunmore at 12:06 pm, Mar 24, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1124

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-10 C	SDG:	23A0134
Sampled:	01/06/23 13:15	Prepared:	01/19/23 13:35	File ID:	NT1802262319S.D
% Solids:	48.45	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/26/23 23:54
Batch:	BLA0410	Sequence:	SLC0389	Initial/Final:	20.64 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.7	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	64.8		2.5	20.0
65-85-0	Benzoic acid	1	257	Q	13.4	100
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	2.9	J	2.1	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.99	523	69.7	27 - 120	
p-Terphenyl-d14	500.00	430	86.0	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623195.D

Date : 26-FEB-2023 23:54

Client ID:

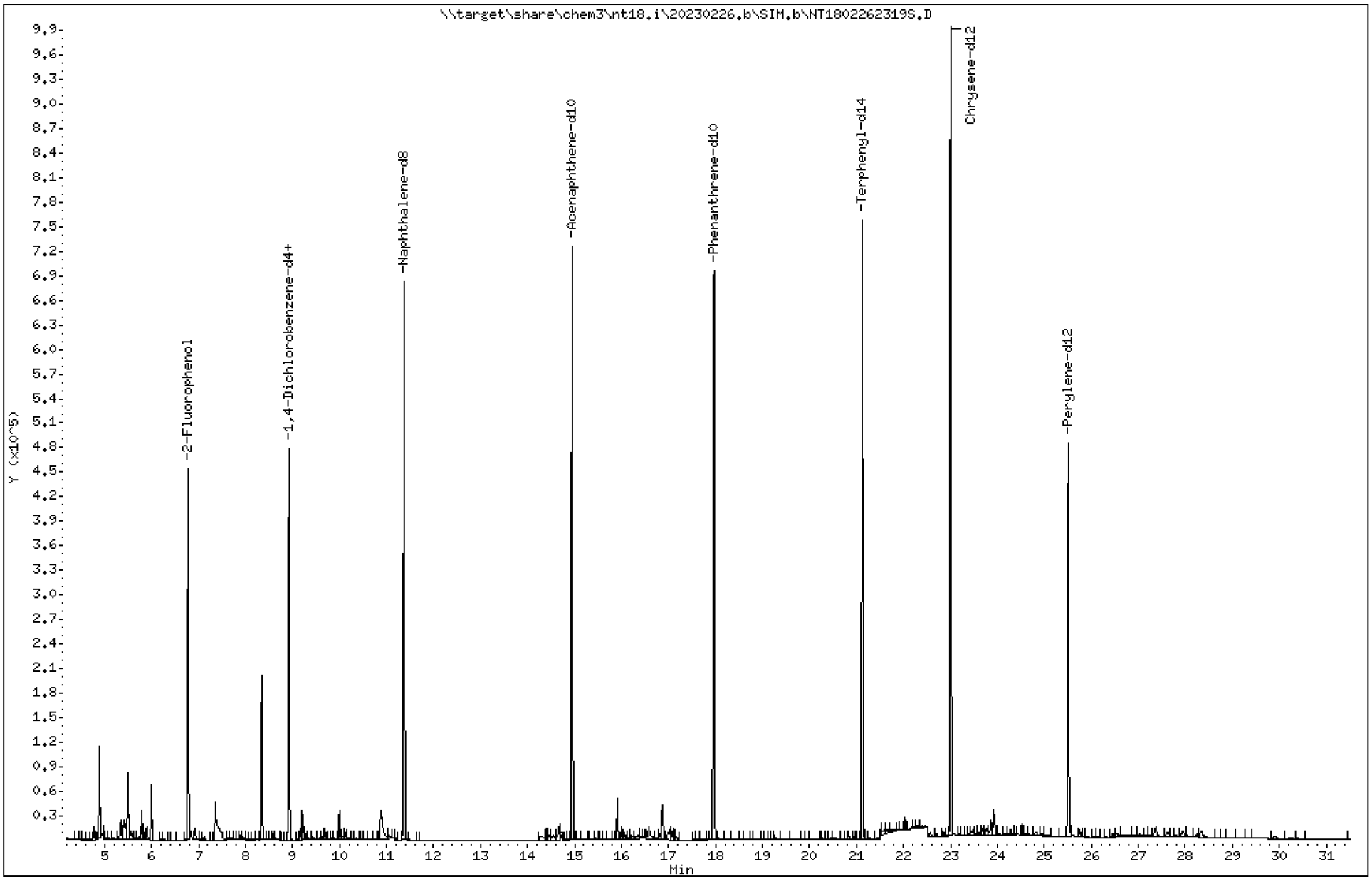
Instrument: nt18.i

Sample Info: 23A0134-10

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

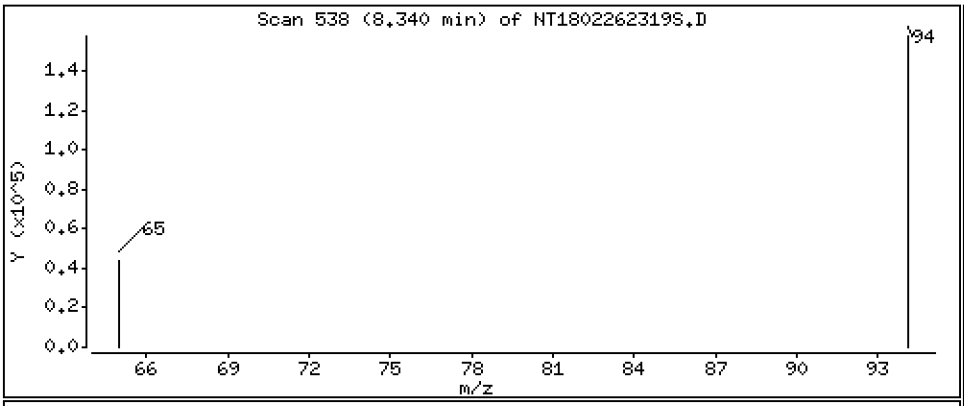
Operator: YZ

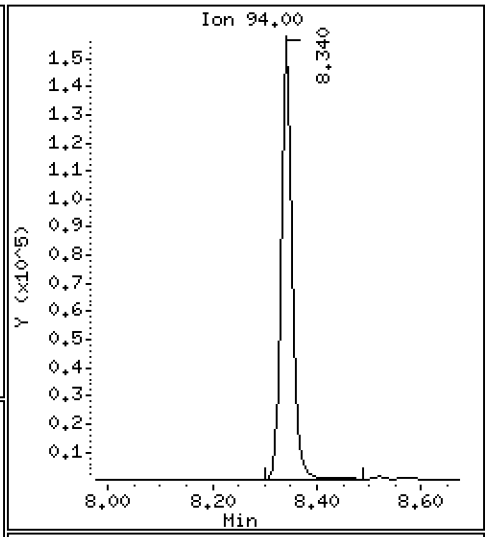
Column phase: ZB-5msi

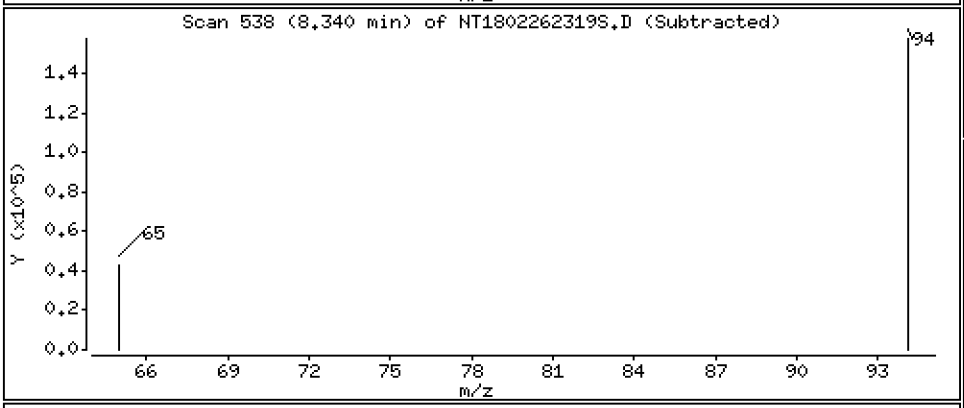
Column diameter: 0.25

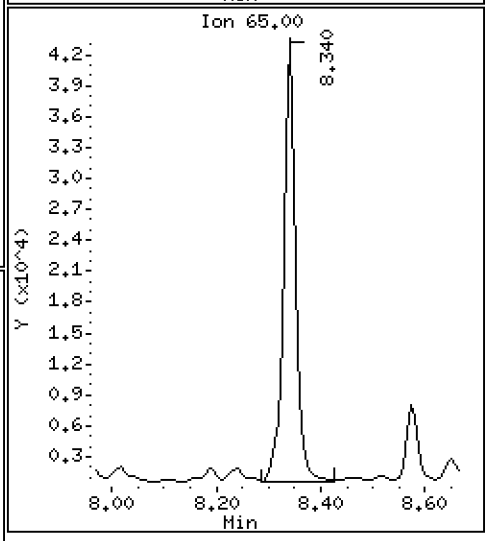
3 Phenol

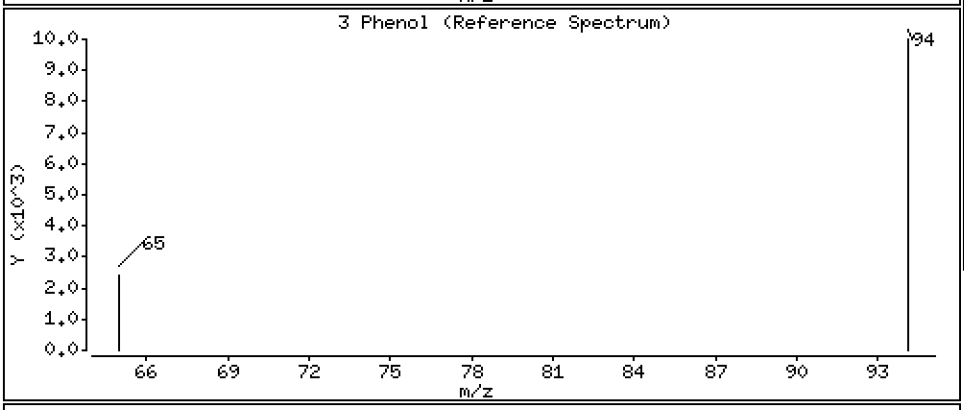
Concentration: 2.014 ug/mL

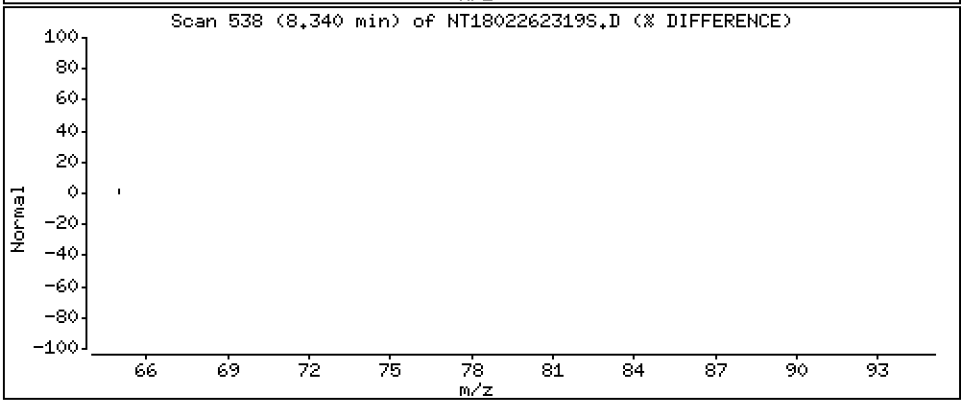












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

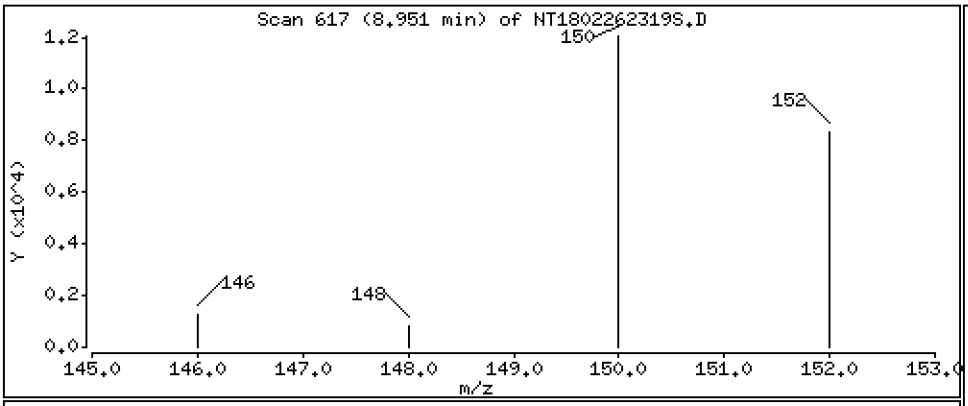
Operator: YZ

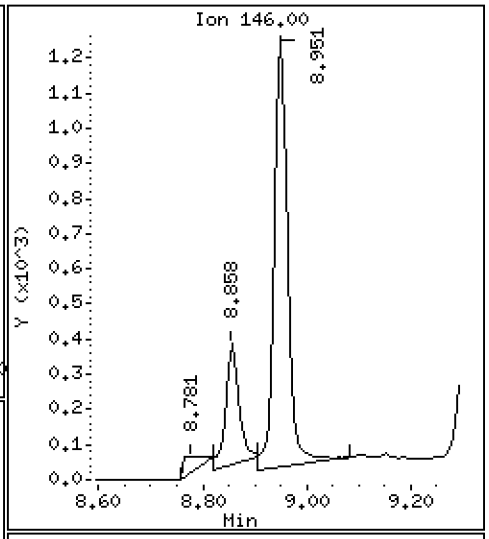
Column phase: ZB-5msi

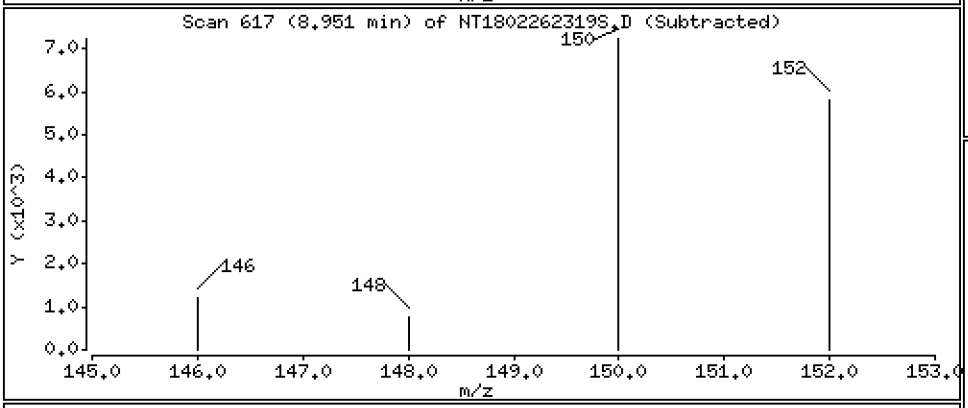
Column diameter: 0.25

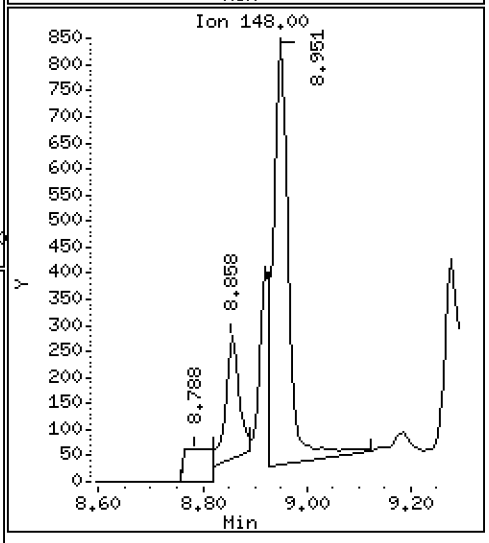
9 1,4-Dichlorobenzene

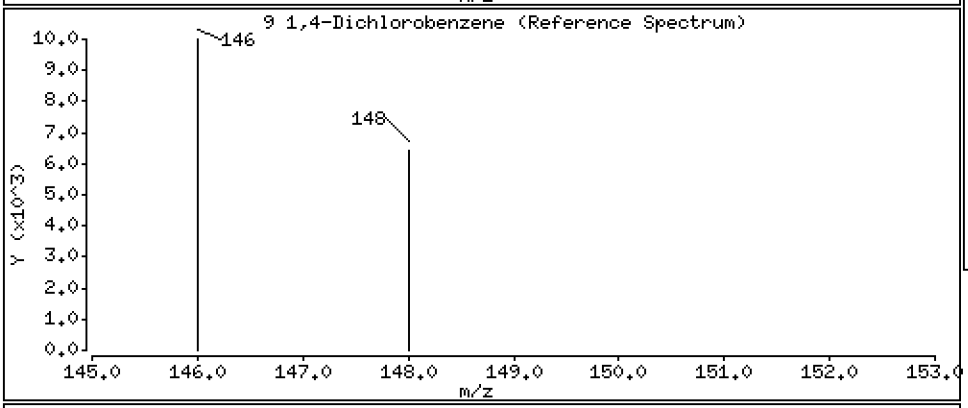
Concentration: 0.01714 ug/mL

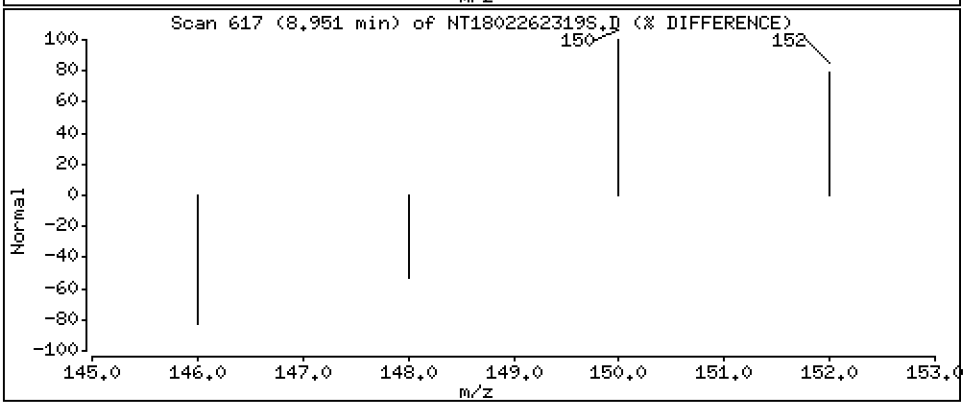












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

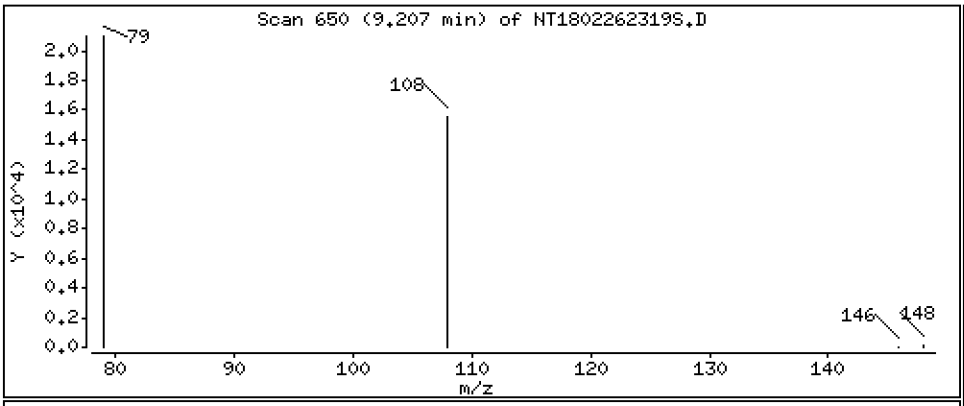
Operator: YZ

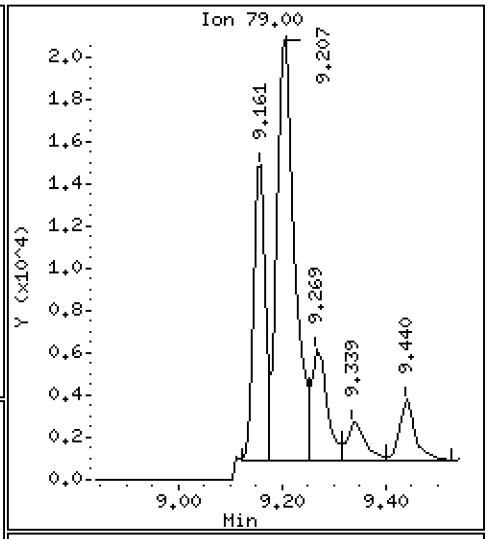
Column phase: ZB-5msi

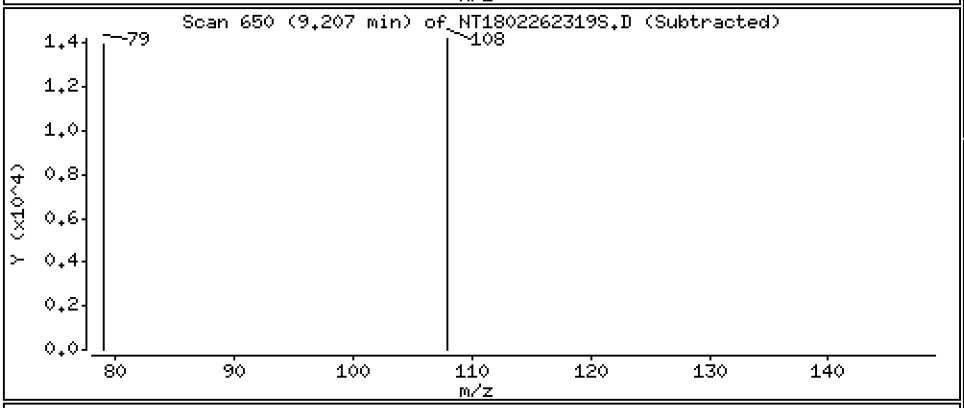
Column diameter: 0.25

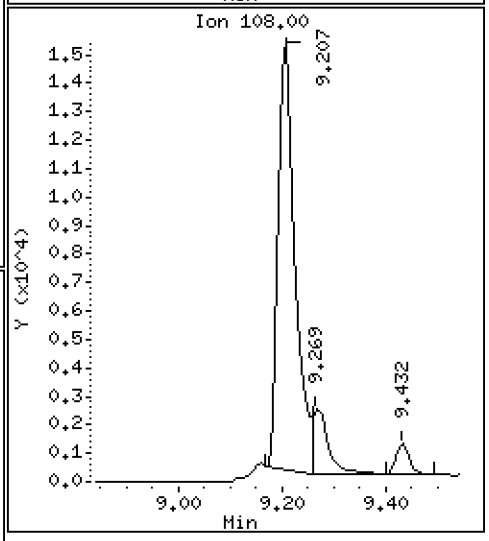
11 Benzyl alcohol

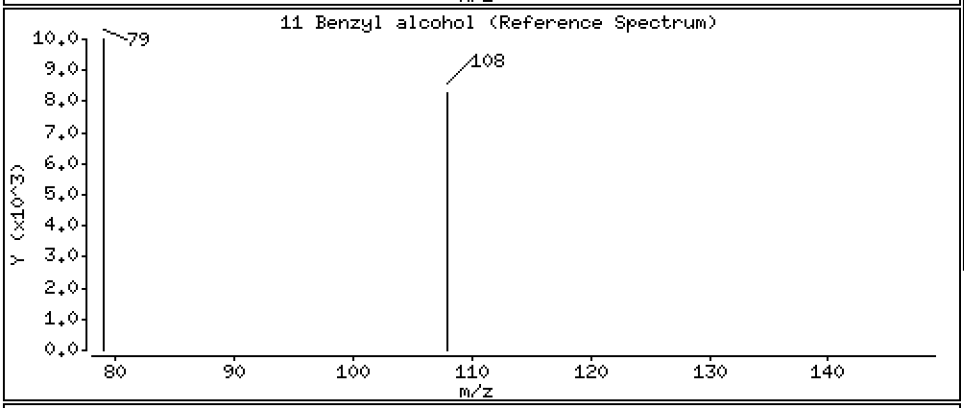
Concentration: 0.6483 ug/mL

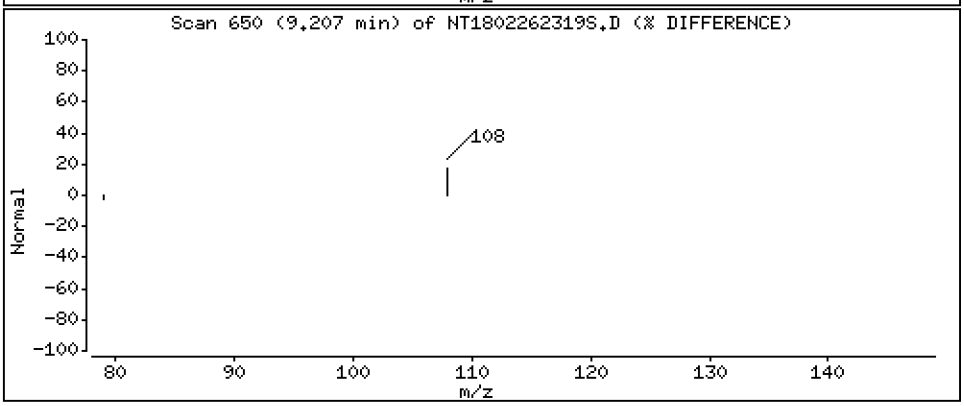












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623195.D

Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

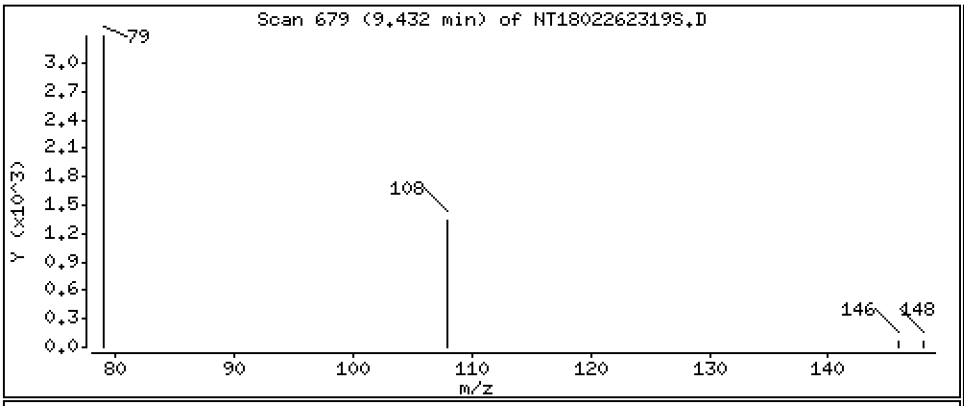
Operator: YZ

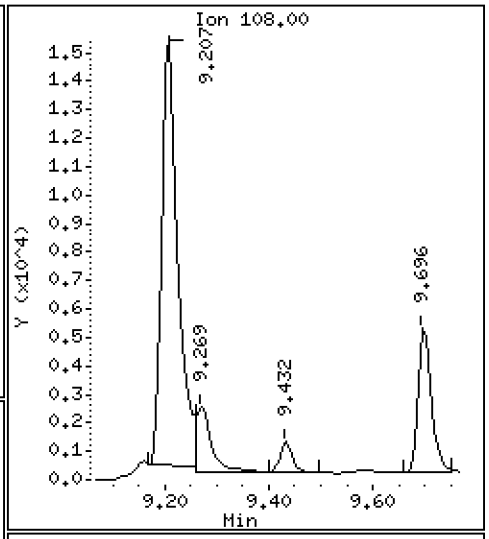
Column phase: ZB-5msi

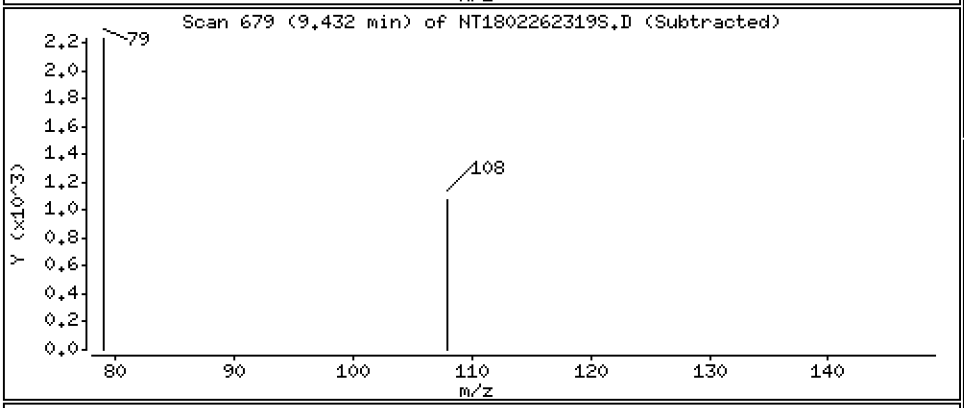
Column diameter: 0.25

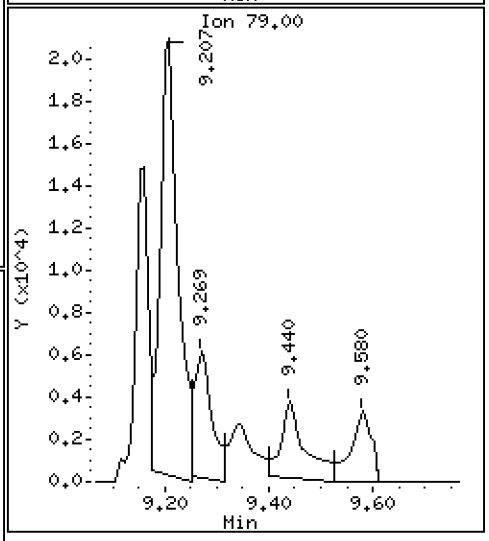
13 2-Methylphenol

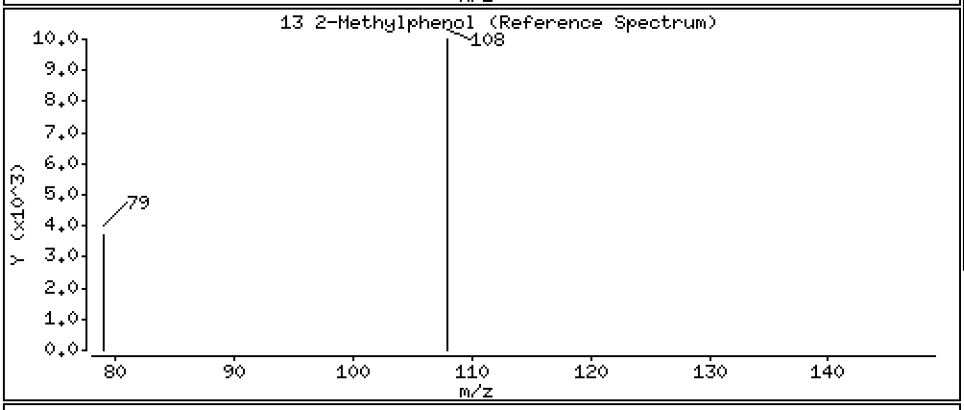
Concentration: 0.01916 ug/mL

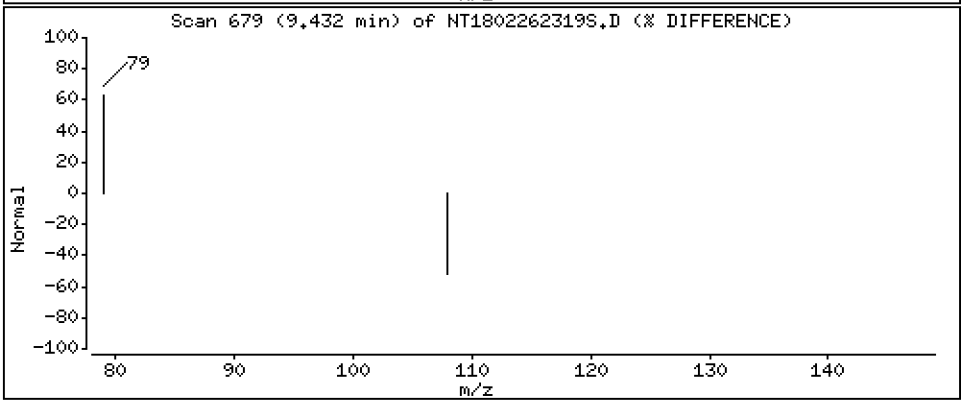












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

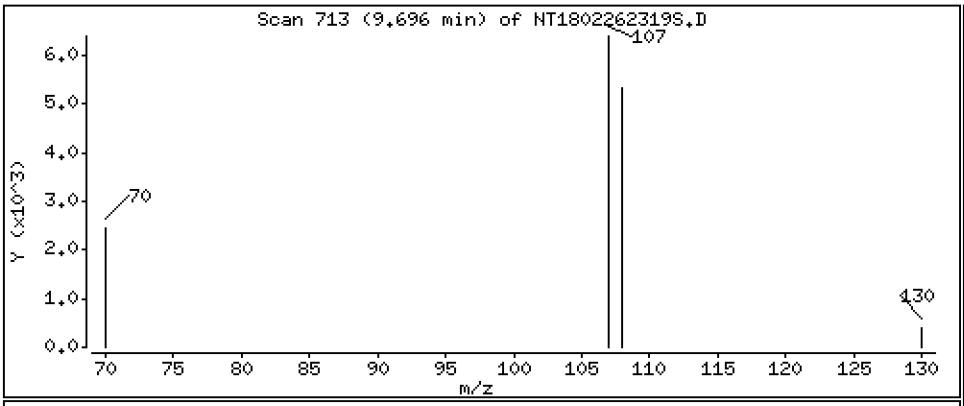
Operator: YZ

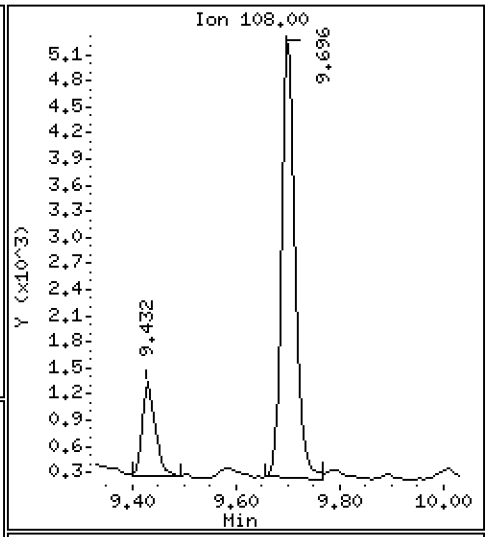
Column phase: ZB-5msi

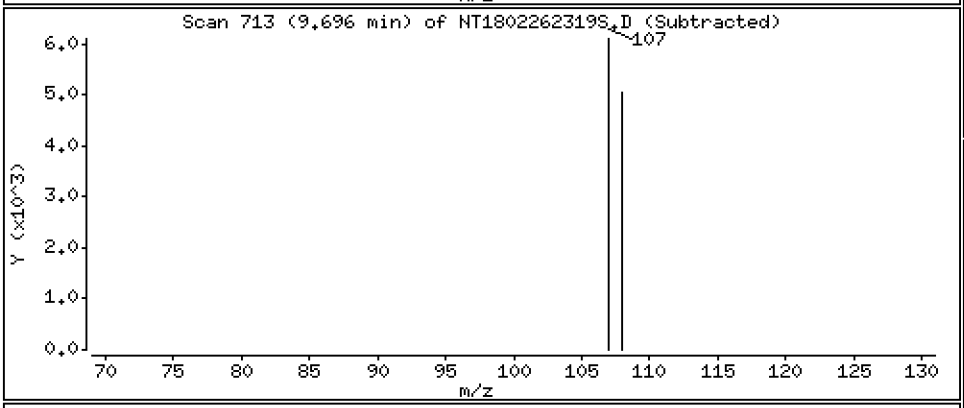
Column diameter: 0.25

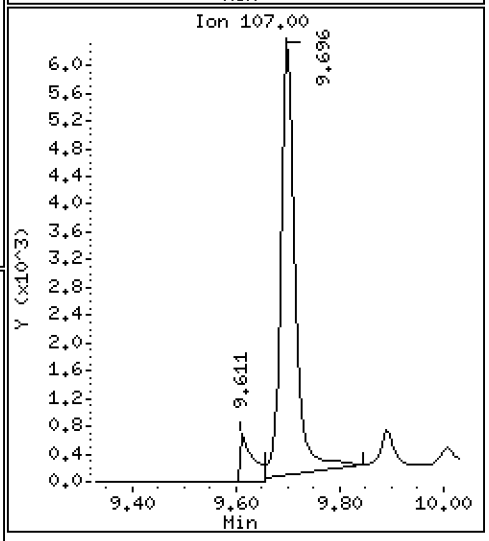
15 4-Methylphenol

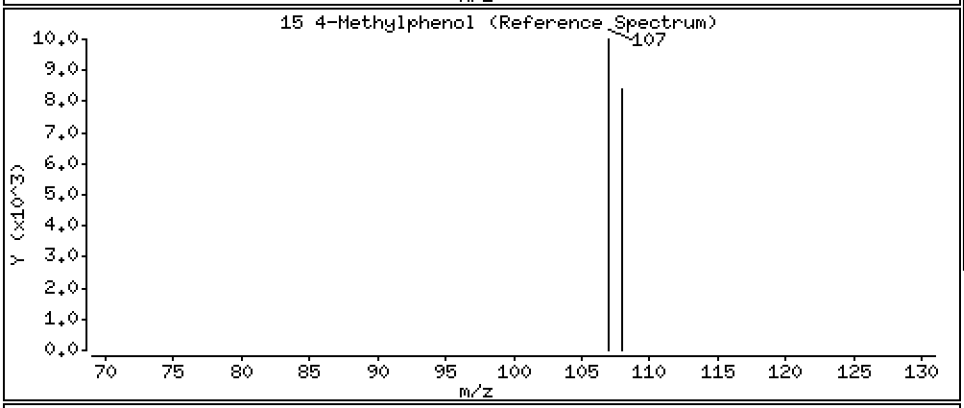
Concentration: 0.09808 ug/mL

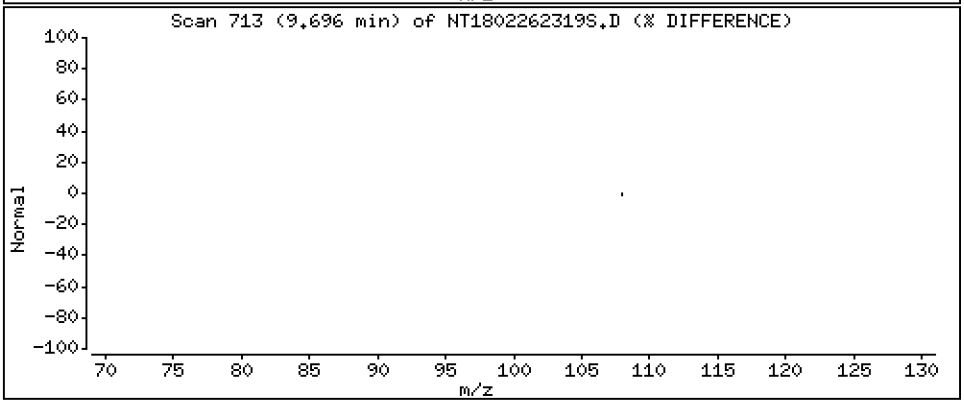












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

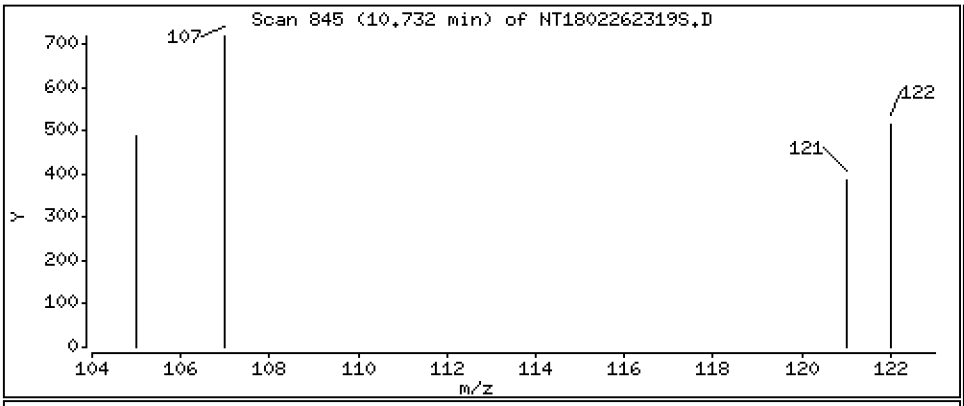
Operator: YZ

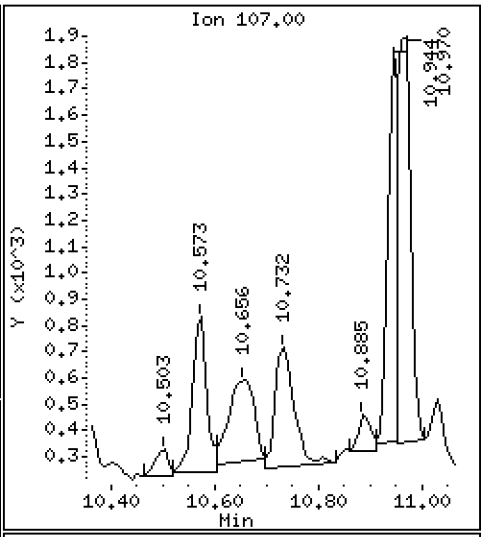
Column phase: ZB-5msi

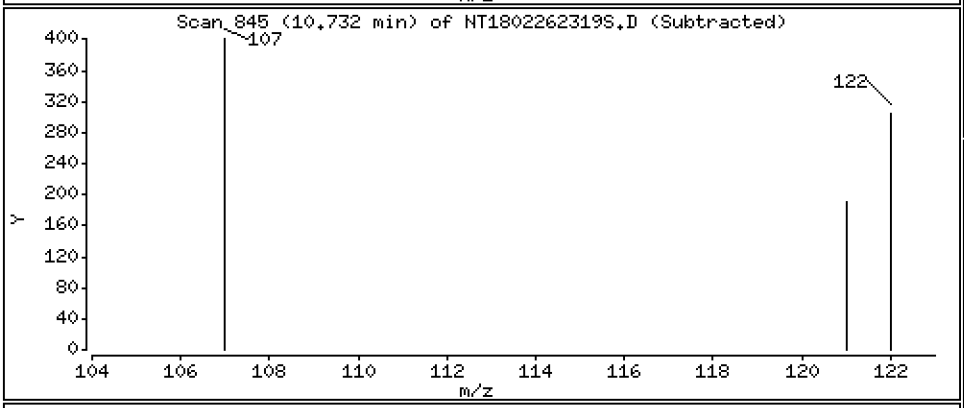
Column diameter: 0.25

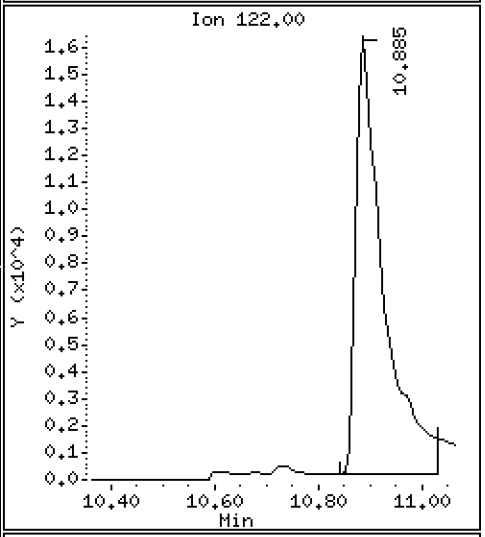
22 2,4-Dimethylphenol

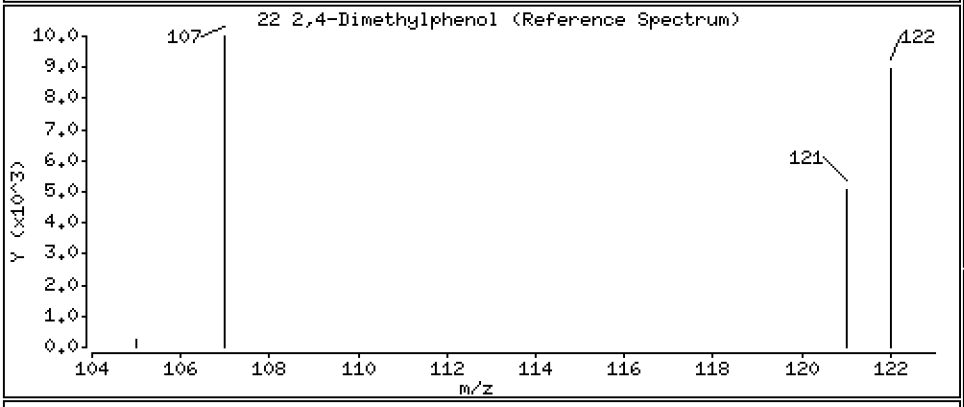
Concentration: 0.01273 ug/mL

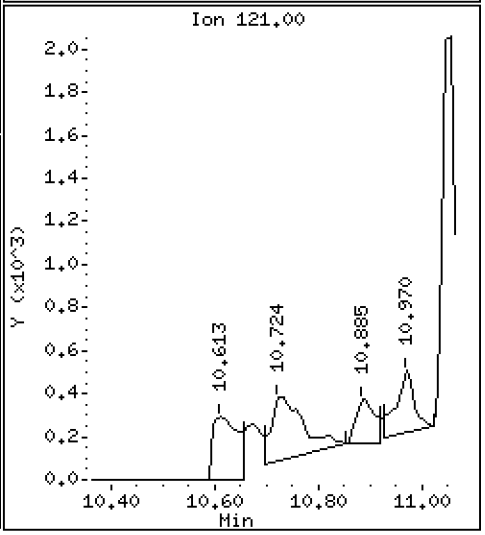


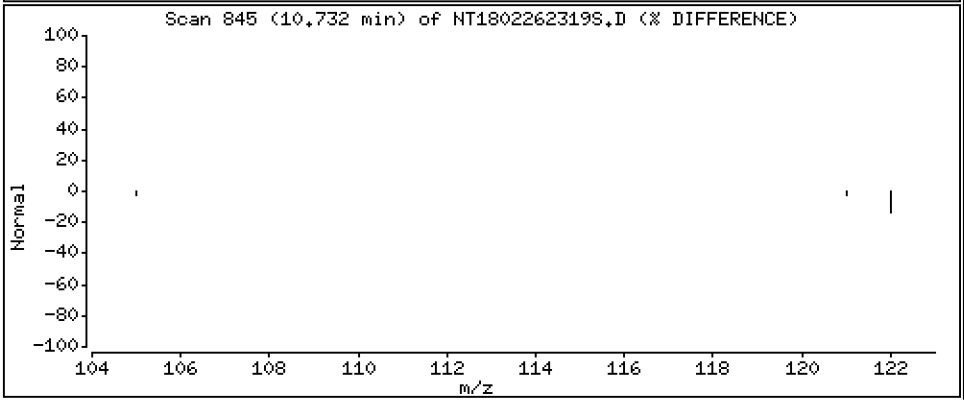












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

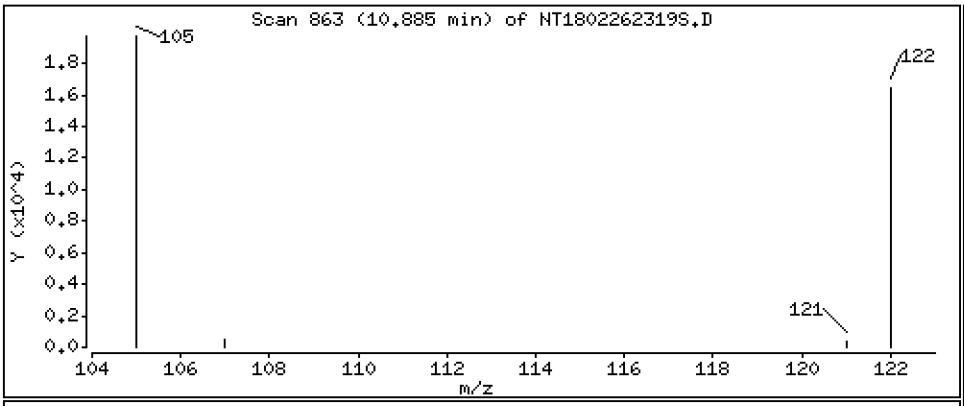
Operator: YZ

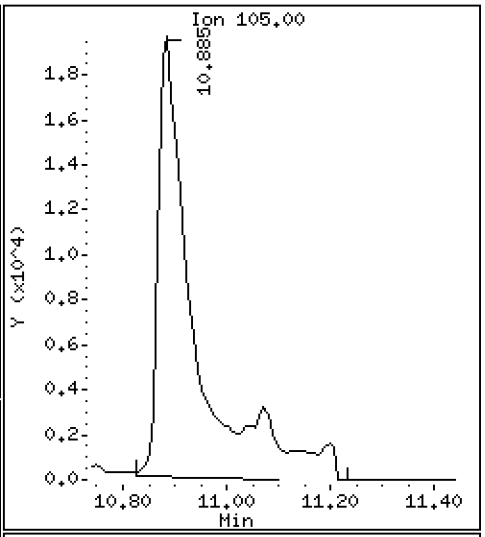
Column phase: ZB-5msi

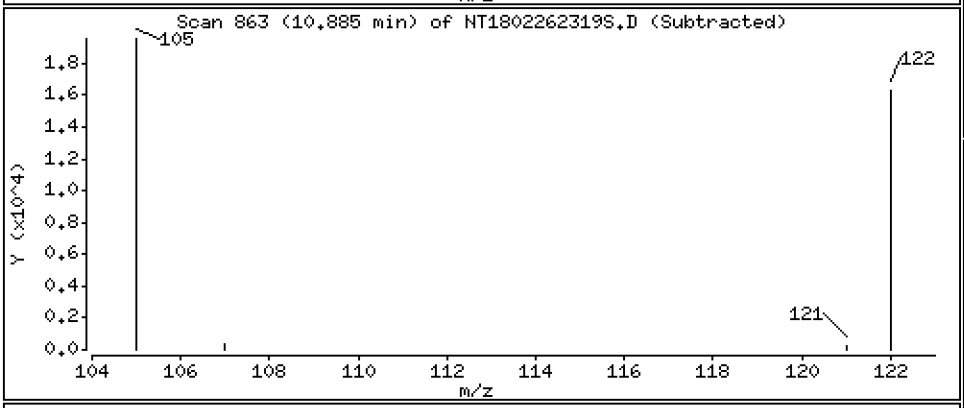
Column diameter: 0.25

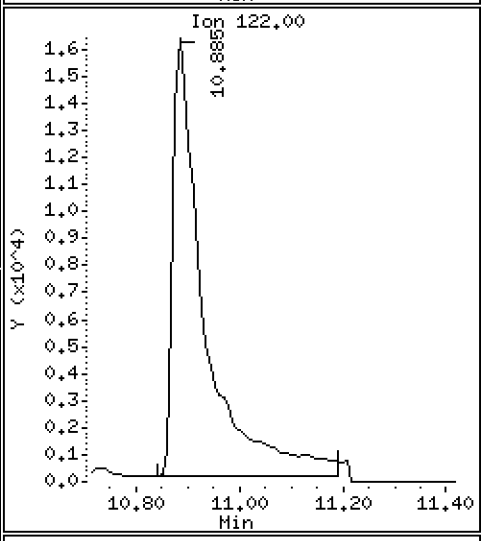
24 Benzoic acid

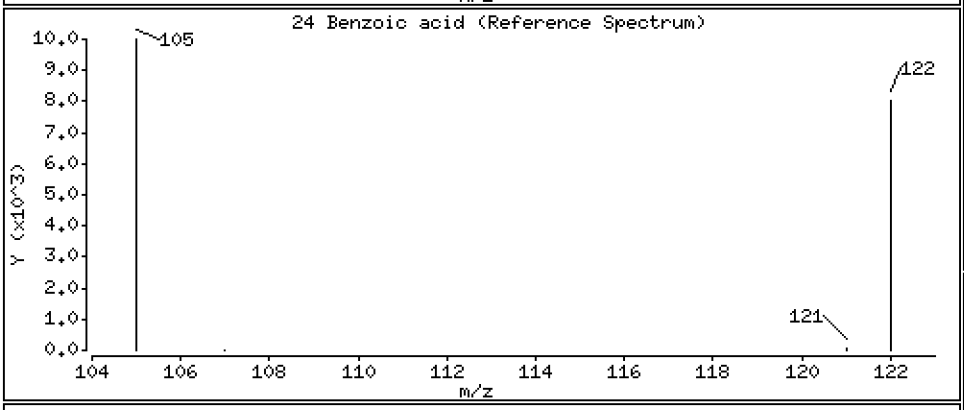
Concentration: 2.571 ug/mL

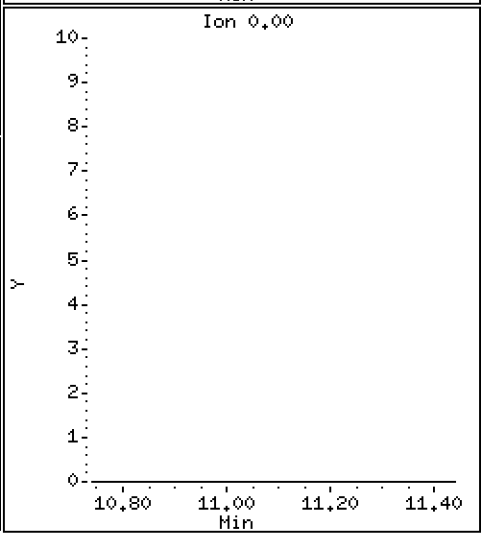


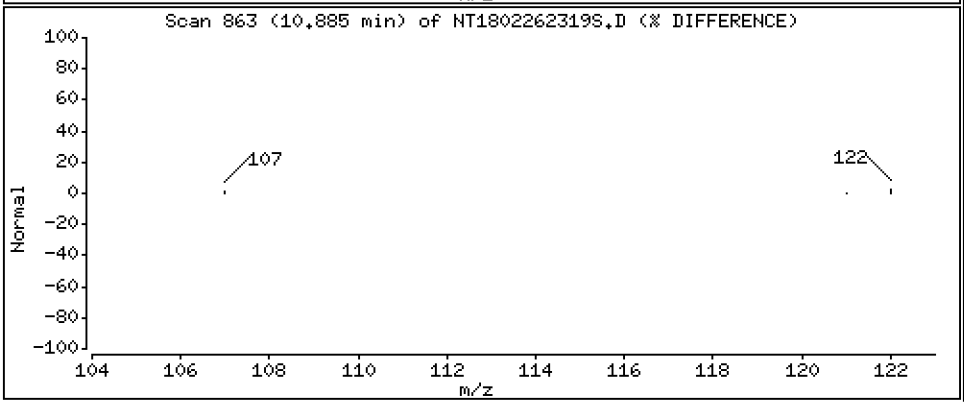












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Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

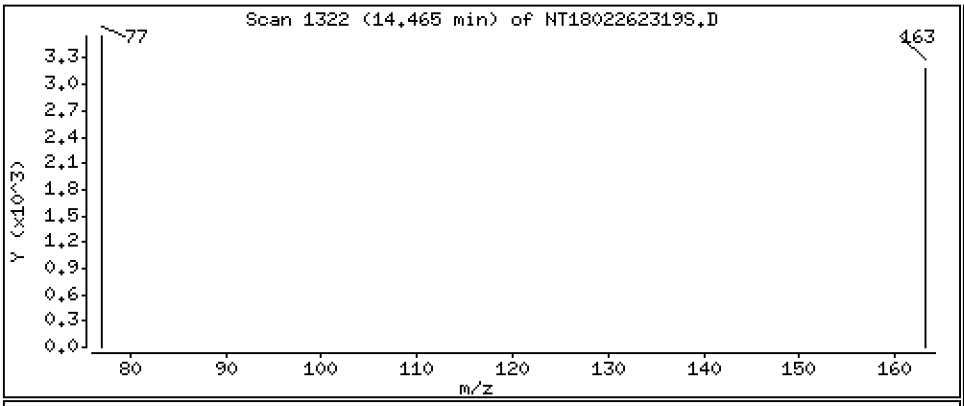
Operator: YZ

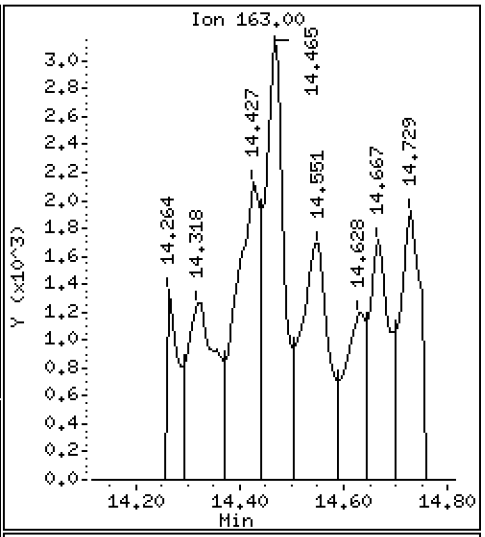
Column phase: ZB-5msi

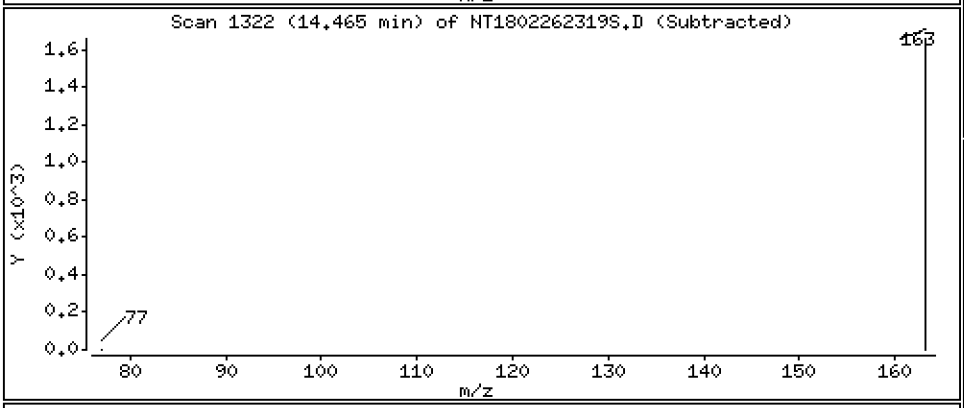
Column diameter: 0.25

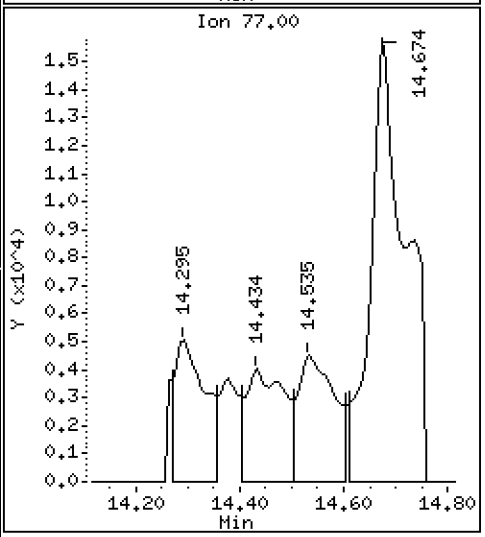
39 Dimethylphthalate

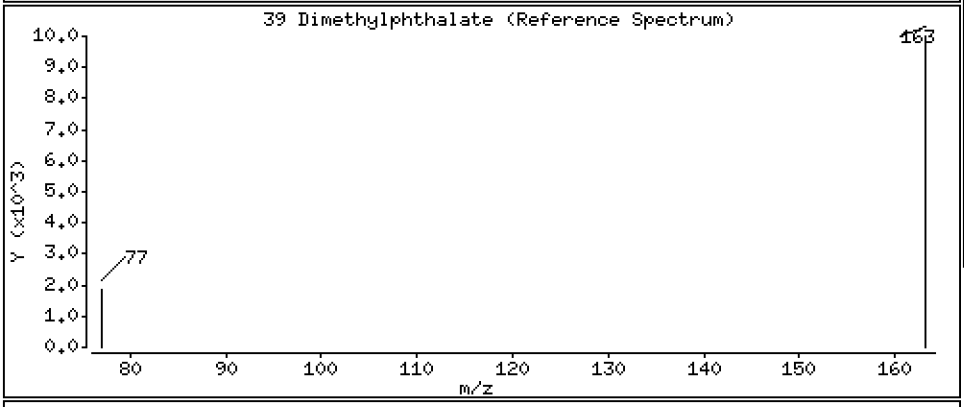
Concentration: 0.03849 ug/mL

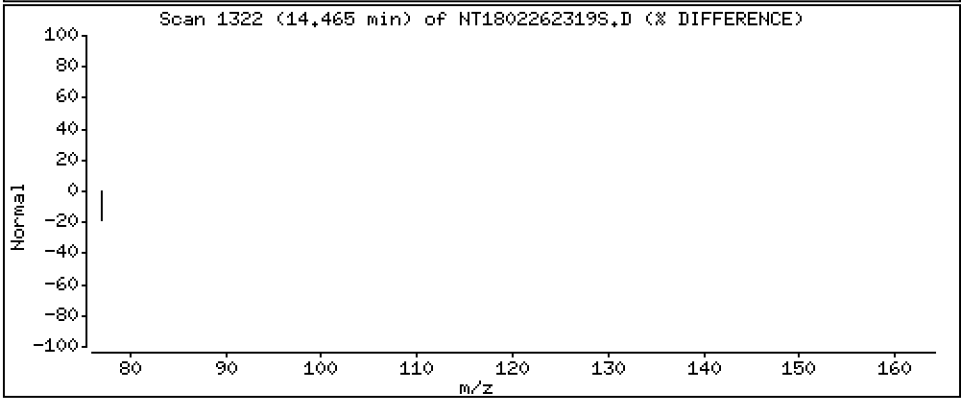












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262319S.D

Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

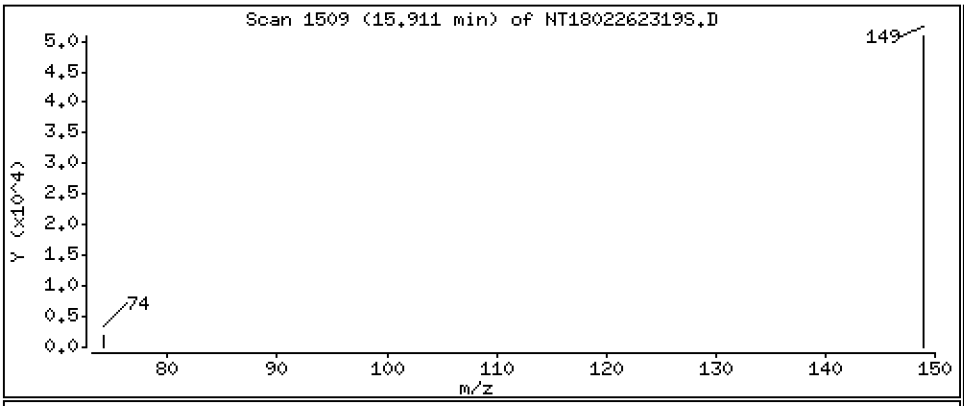
Operator: YZ

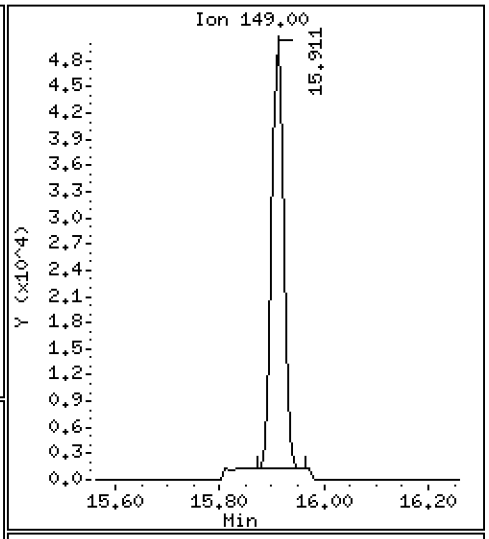
Column phase: ZB-5msi

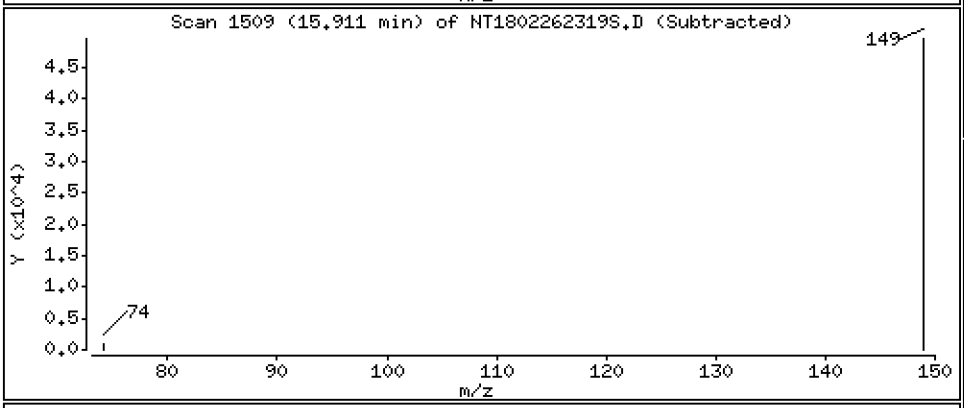
Column diameter: 0.25

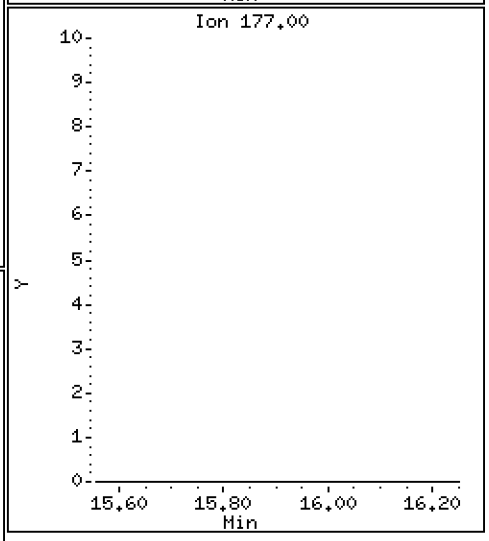
50 Diethylphthalate

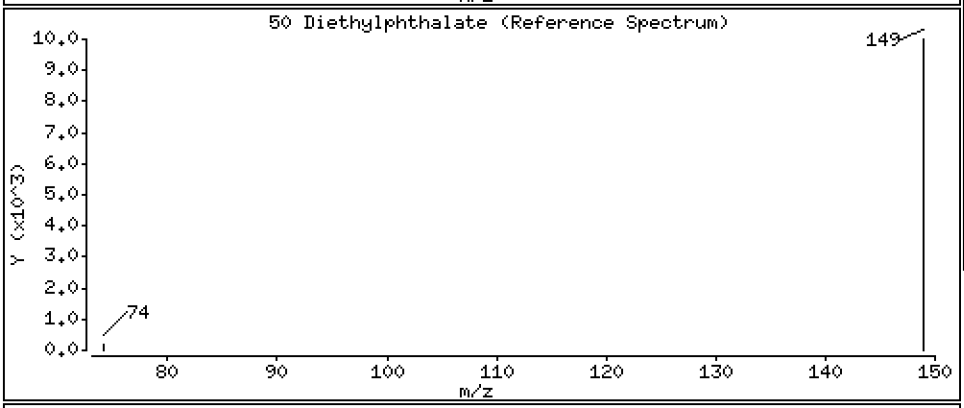
Concentration: 0.3808 ug/mL

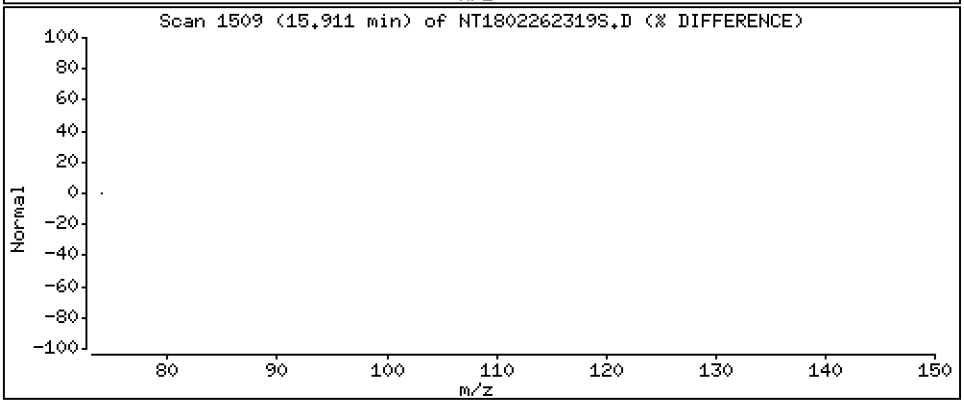












Date : 26-FEB-2023 23:54

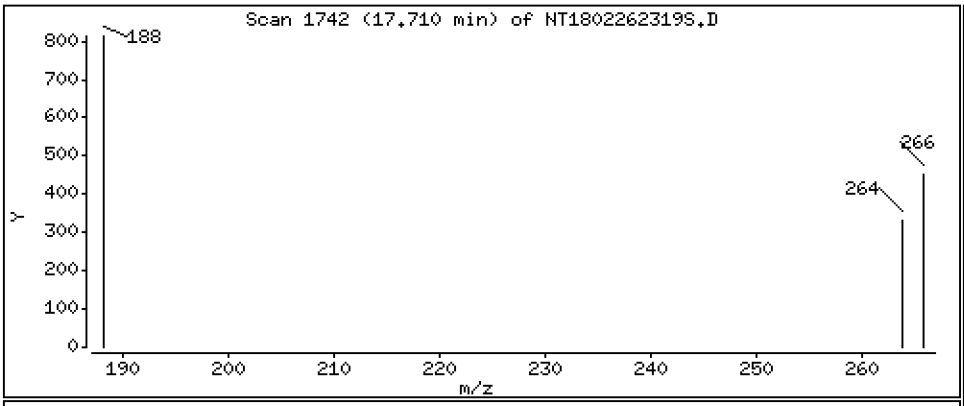
Client ID: Instrument: nt18.i

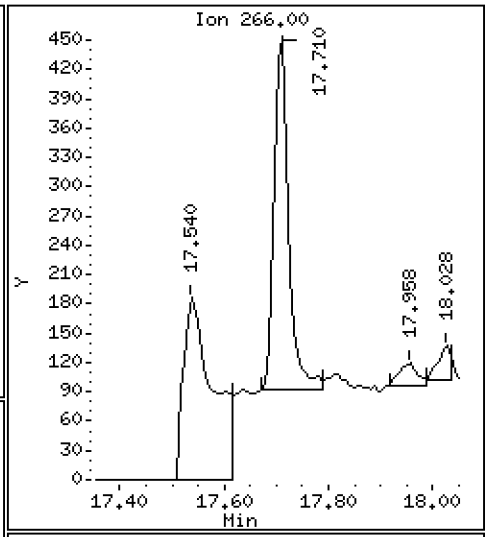
Sample Info: 23A0134-10

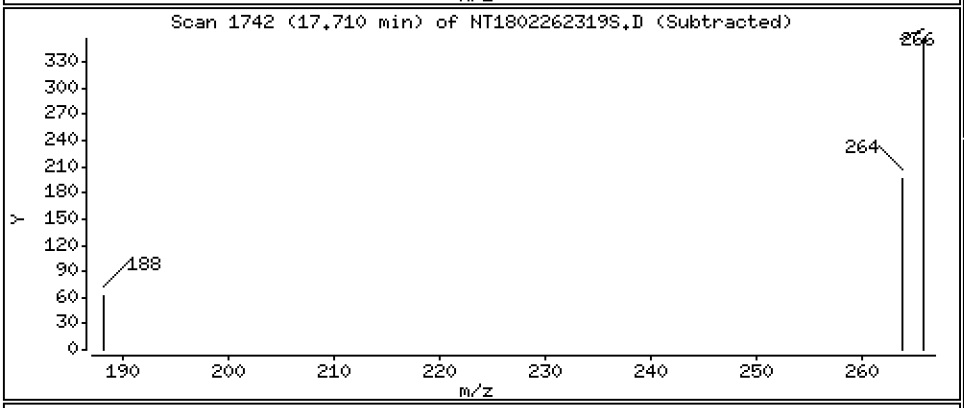
Operator: YZ

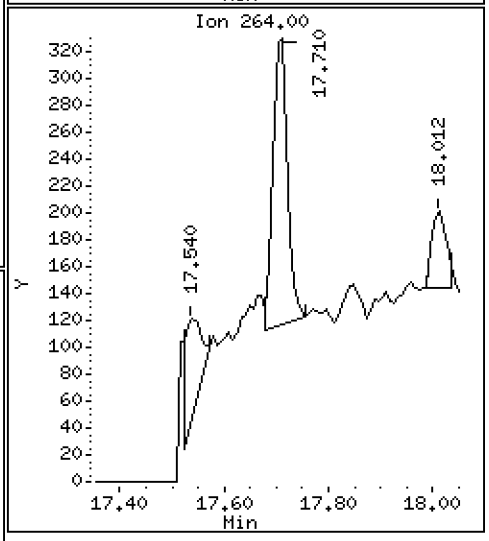
Column phase: ZB-5msi Column diameter: 0.25

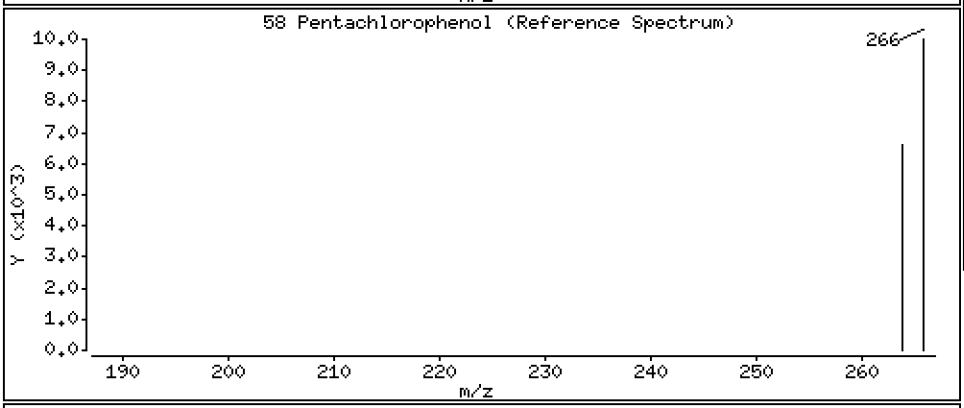
58 Pentachlorophenol Concentration: 0.02852 ug/mL

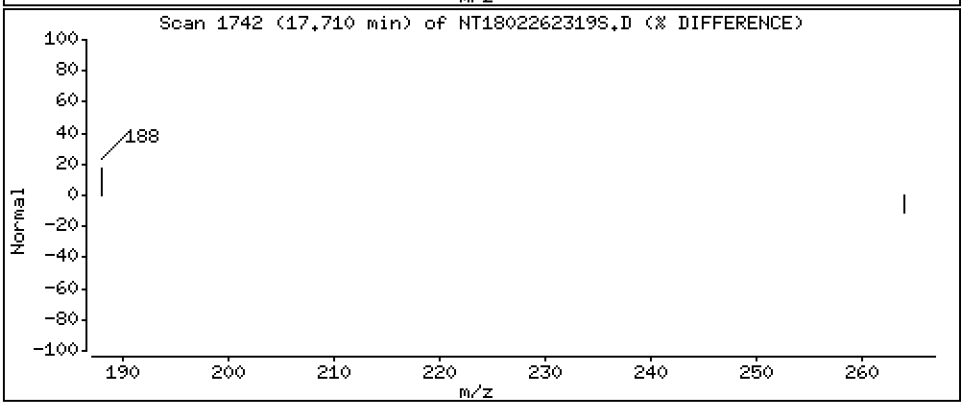












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262319S.D

Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

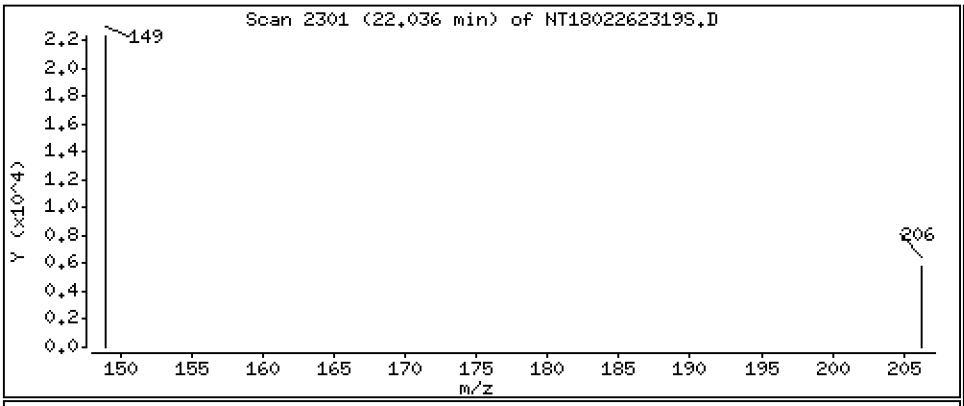
Operator: YZ

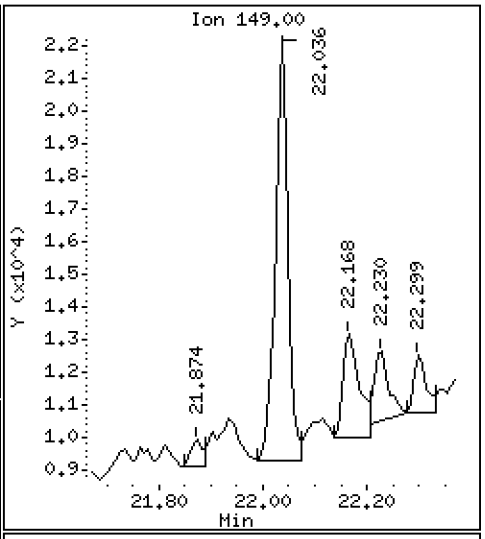
Column phase: ZB-5msi

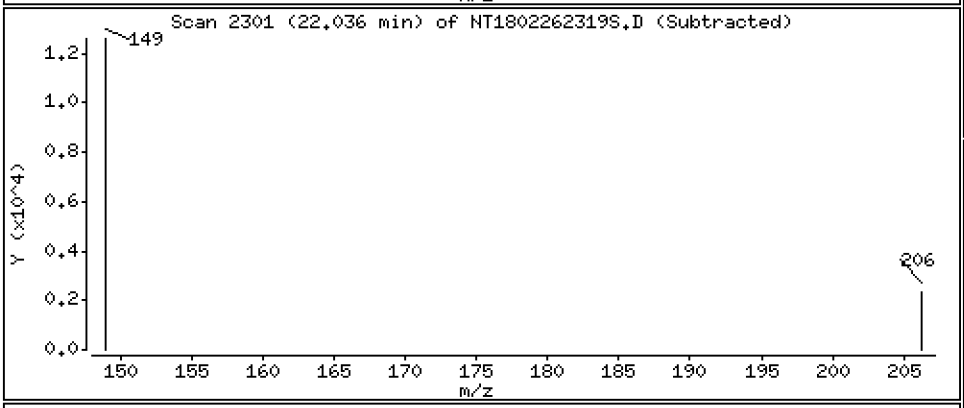
Column diameter: 0.25

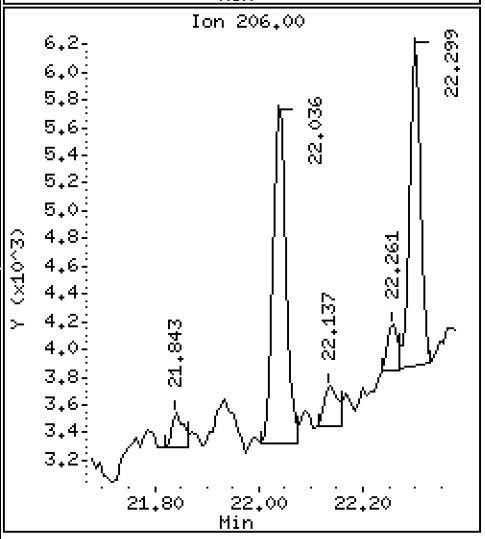
67 Butylbenzylphthalate

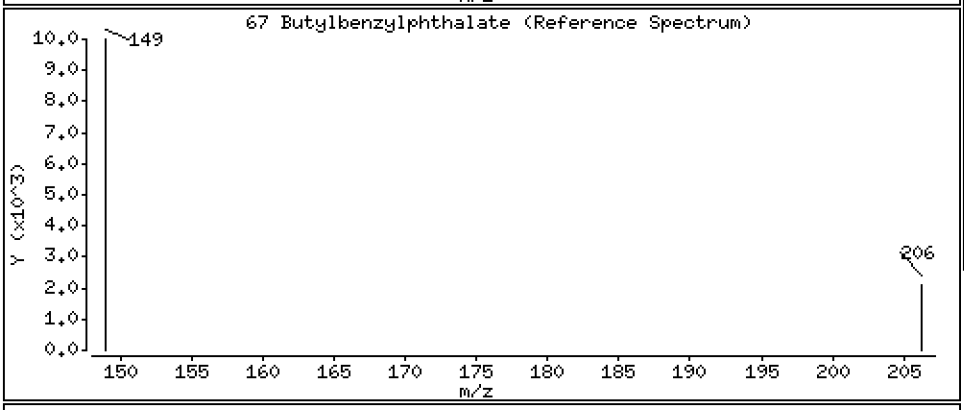
Concentration: 0.1131 ug/mL

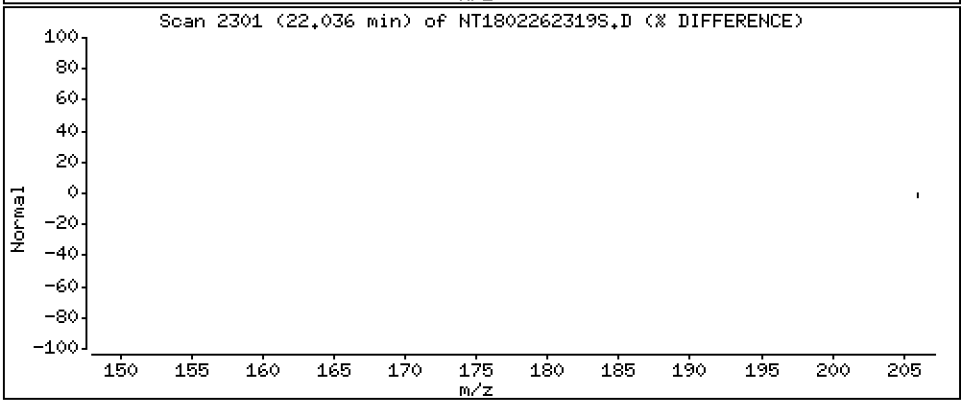












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262319S.D

Date : 26-FEB-2023 23:54

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-10

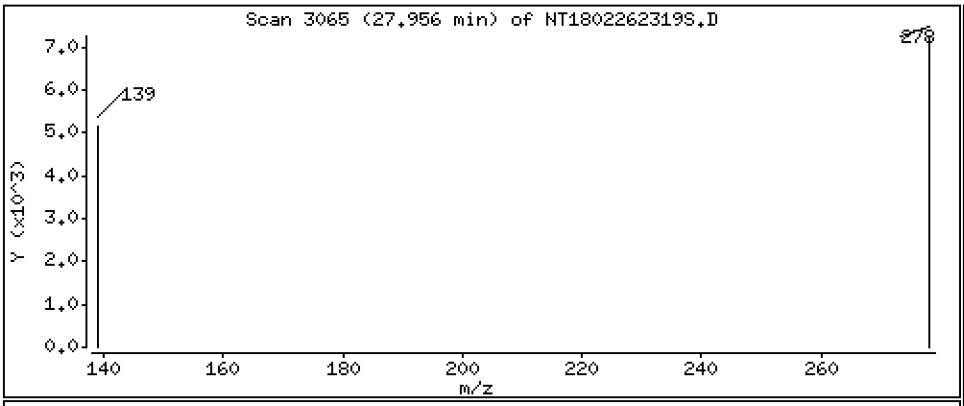
Operator: YZ

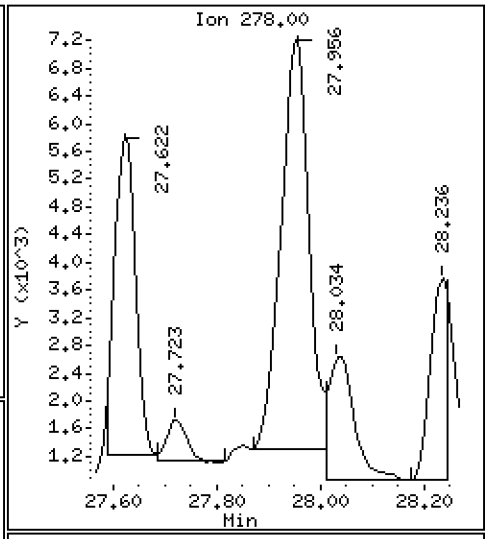
Column phase: ZB-5msi

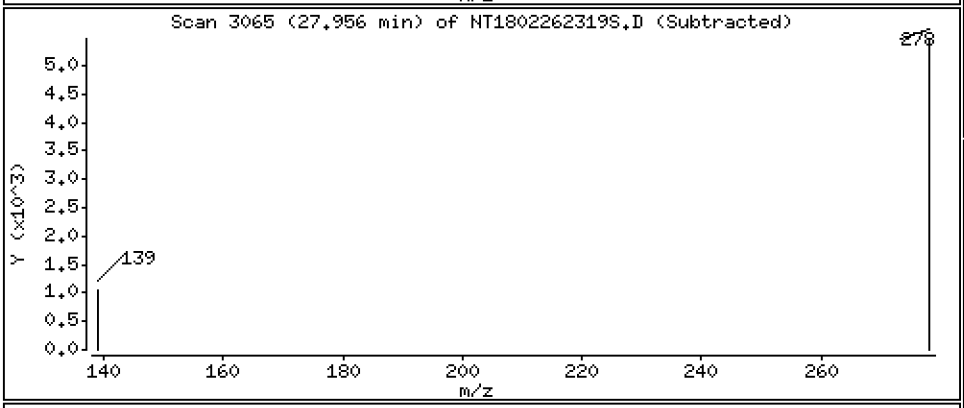
Column diameter: 0.25

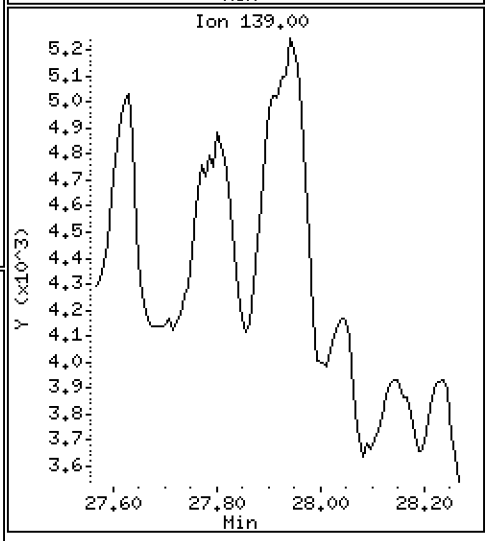
79 Dibenzo(a,h)anthracene

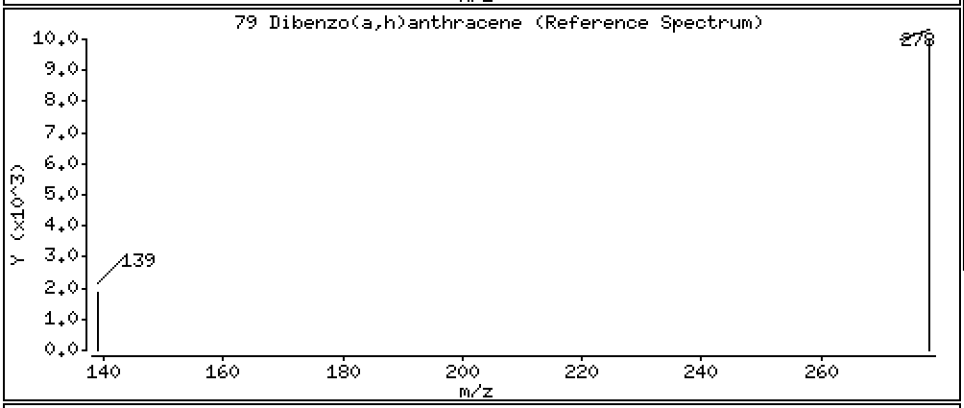
Concentration: 0.09884 ug/mL

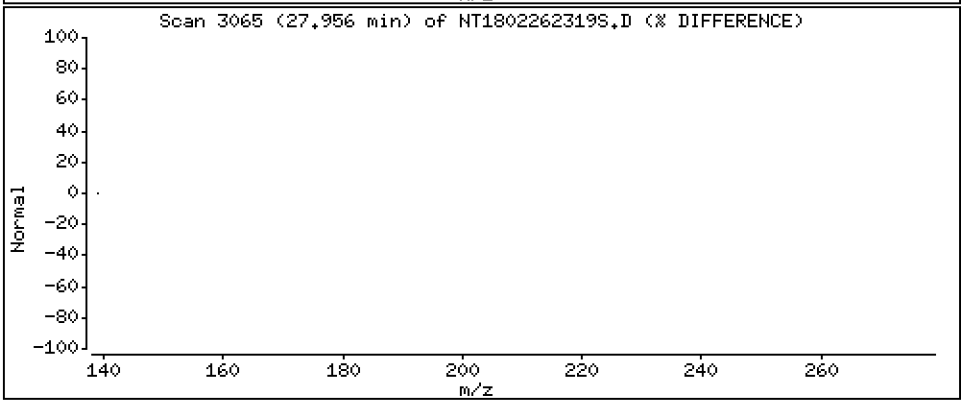












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262319S.D
Lab Smp Id: 23A0134-10
Inj Date : 26-FEB-2023 23:54
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-10
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	6.779	6.748	(0.760)	465265	5.22618	5.226(R)
3	Phenol	94	8.340	8.324	(0.935)	233849	2.01354	2.014
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	275834	4.00000	
9	1,4-Dichlorobenzene	146	8.951	8.943	(1.003)	2081	0.01714	0.01714
11	Benzyl alcohol	79	9.207	9.191	(1.032)	48267	0.64825	0.6483
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	108	9.432	9.416	(1.057)	1830	0.01916	0.01916
15	4-Methylphenol	108	9.696	9.680	(1.087)	9399	0.09808	0.09808
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	10.732	10.715	(0.944)	1180	0.01273	0.01273
24	Benzoic acid	105	10.885	11.088	(0.957)	96705	2.57141	2.571(M)
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.370	11.370	(1.000)	1039013	4.00000	
30	Hexachlorobutadiene	225	Compound Not Detected.					
39	Dimethylphthalate	163	14.465	14.465	(0.967)	8174	0.03849	0.03849
* 42	Acenaphthene-d10	162	14.952	14.945	(1.000)	552723	4.00000	
50	Diethylphthalate	149	15.911	15.911	(1.064)	73893	0.38080	0.3808
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	17.710	17.702	(0.986)	671	0.02852	0.02852
* 59	Phenanthrene-d10	188	17.965	17.950	(1.000)	1156910	4.00000	
$ 66	Terphenyl-d14	244	21.122	21.091	(0.918)	914956	4.30037	4.300(R)
67	Butylbenzylphthalate	149	22.036	22.020	(0.958)	22000	0.11310	0.1131
* 69	Chrysene-d12	240	23.004	22.980	(1.000)	1175020	4.00000	
* 77	Perylene-d12	264	25.504	25.473	(1.000)	763486	4.00000	
79	Dibenzo(a,h)anthracene	278	27.956	27.917	(1.096)	22423	0.09884	0.09884
90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262319S.D
Lab Smp Id: 23A0134-10
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	275834	-1.30
27 Naphthalene-d8	1065527	532764	2131054	1039013	-2.49
42 Acenaphthene-d10	544290	272145	1088580	552723	1.55
59 Phenanthrene-d10	1003412	501706	2006824	1156910	15.30
69 Chrysene-d12	936975	468488	1873950	1175020	25.41
77 Perylene-d12	1057771	528886	2115542	763486	-27.82

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.05
59 Phenanthrene-d10	17.95	17.45	18.45	17.97	0.09
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.10
77 Perylene-d12	25.47	24.97	25.97	25.50	0.12

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262319S.D

Lab ID: 23A0134-10
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 23:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.975	-0.0179	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

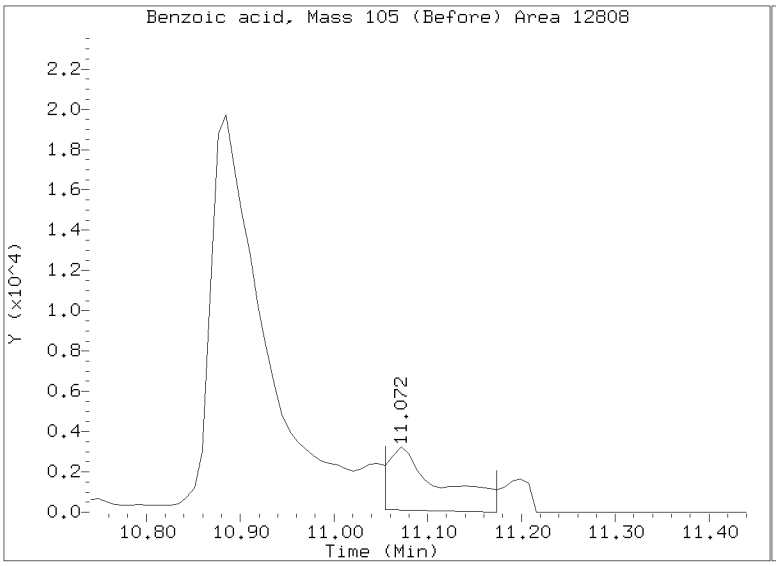
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

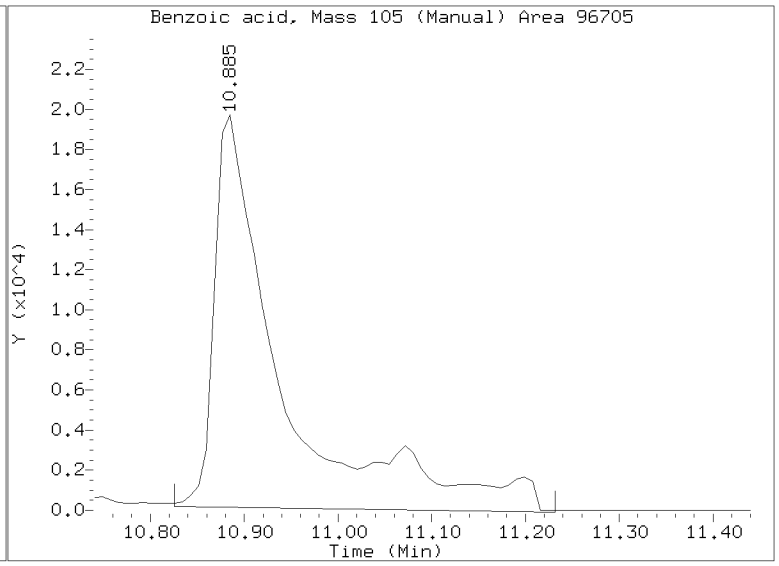
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/SIM.b/NT1802262319S.D
Injection Date: 26-FEB-2023 23:54
Lab ID:23A0134-10 Client ID:
Report Date: 03/24/2023 11:53





APPROVED

By Deenay Dunmore at 12:06 pm, Mar 24, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1123

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

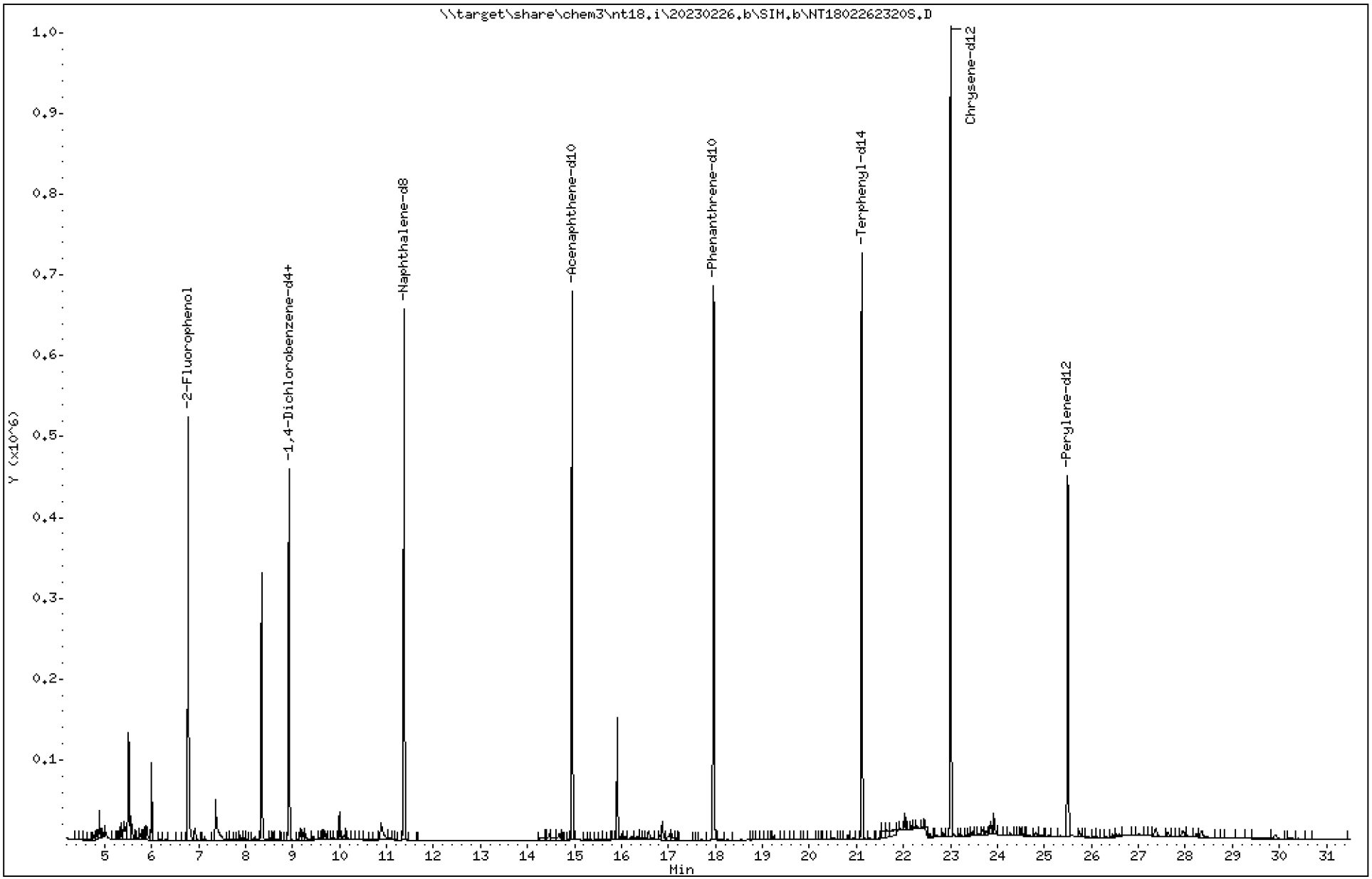
Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-11 C	SDG:	23A0134
Sampled:	01/06/23 13:29	Prepared:	01/19/23 13:35	File ID:	NT1802262320S.D
% Solids:	51.95	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/27/23 00:34
Batch:	BLA0410	Sequence:	SLC0389	Initial/Final:	19.28 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.5	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	23.1		2.5	20.0
65-85-0	Benzoic acid	1	162	Q	13.4	99.8
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	3.7	J	2.1	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	748.80	576	76.9	27 - 120	
p-Terphenyl-d14	499.20	410	82.1	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623205.D
Date : 27-FEB-2023 00:34
Client ID:
Sample Info: 23A0134-11

Instrument: nt18.i
Operator: YZ
Column phase: ZB-5msi
Column diameter: 0.25



Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262320S.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

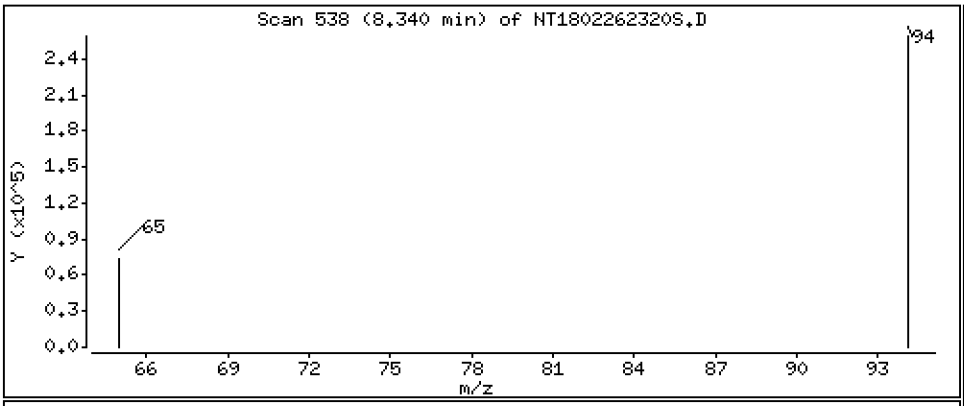
Operator: YZ

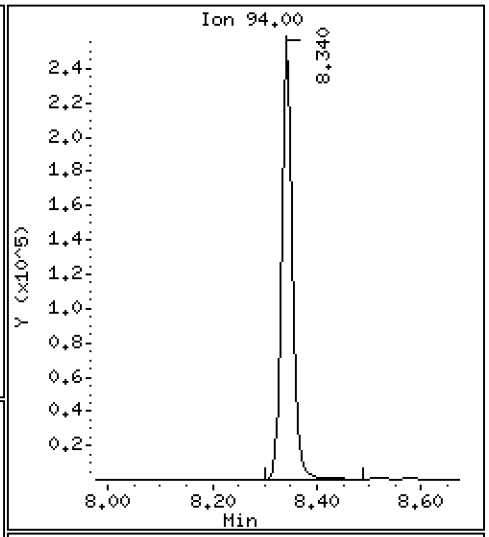
Column phase: ZB-5msi

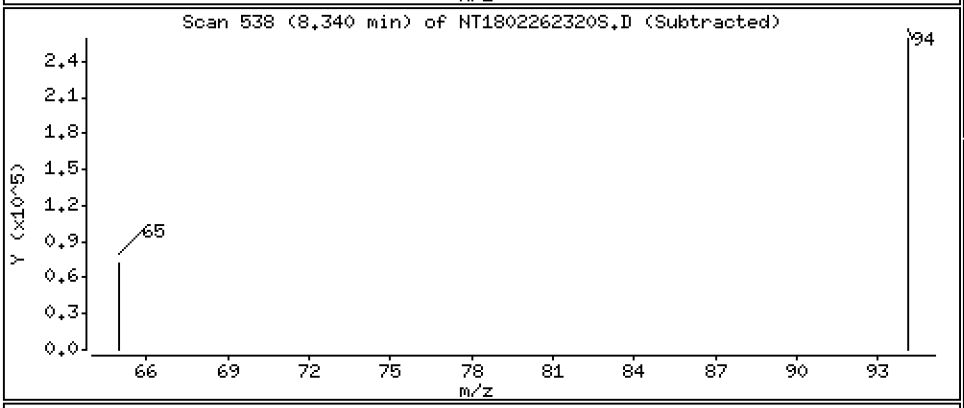
Column diameter: 0.25

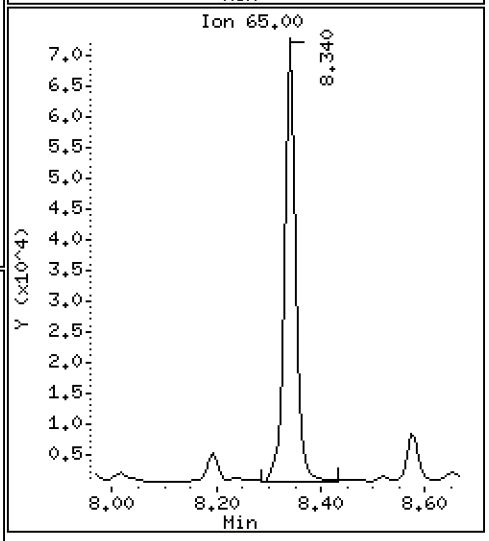
3 Phenol

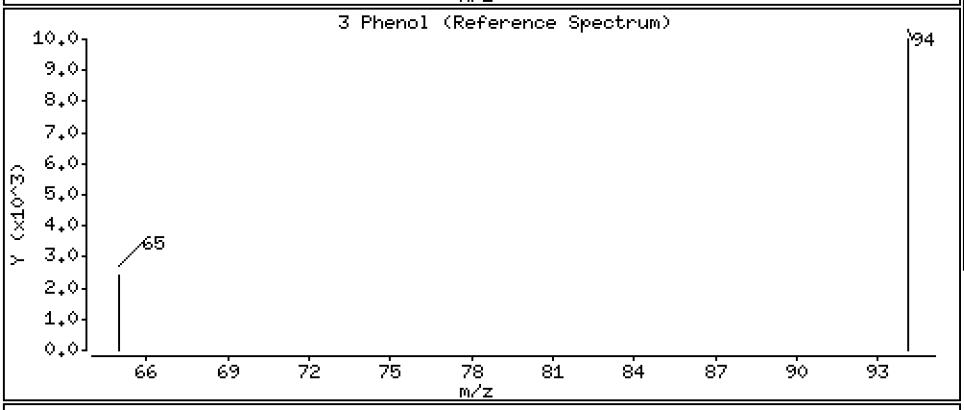
Concentration: 3.339 ug/mL

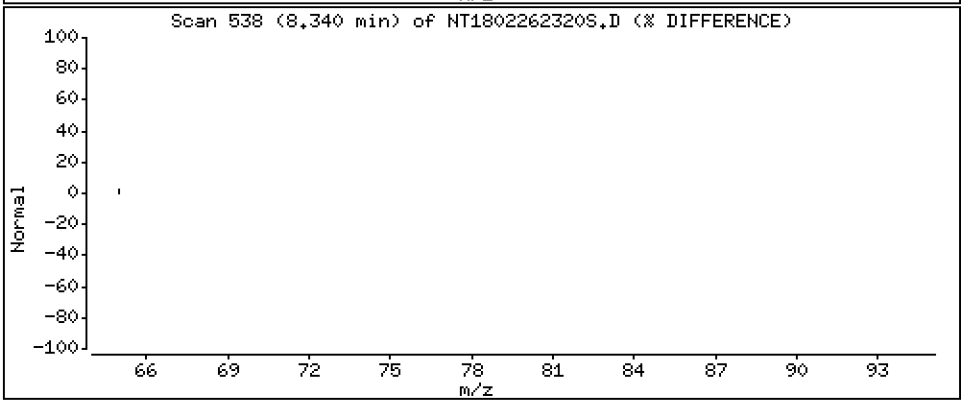












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

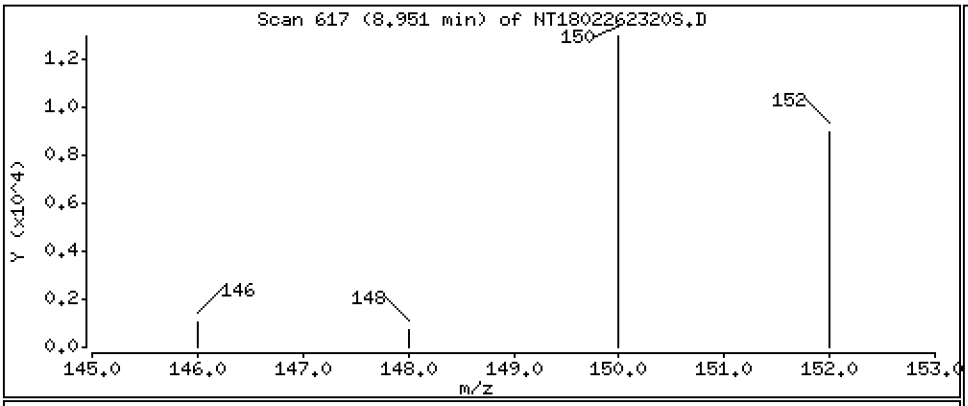
Operator: YZ

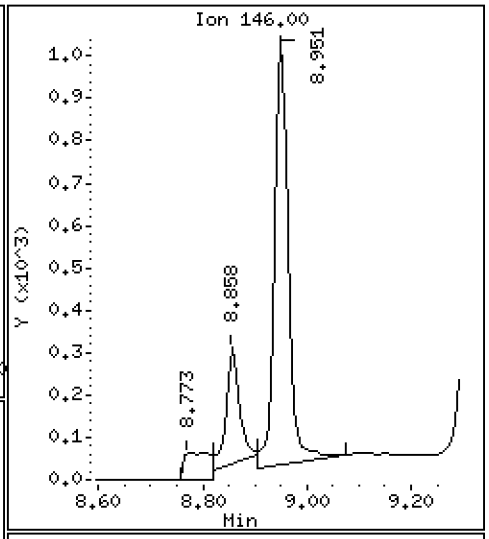
Column phase: ZB-5msi

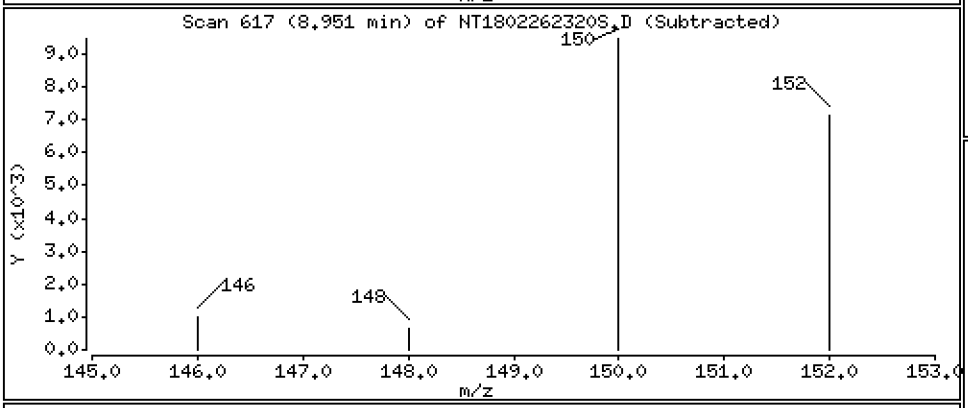
Column diameter: 0.25

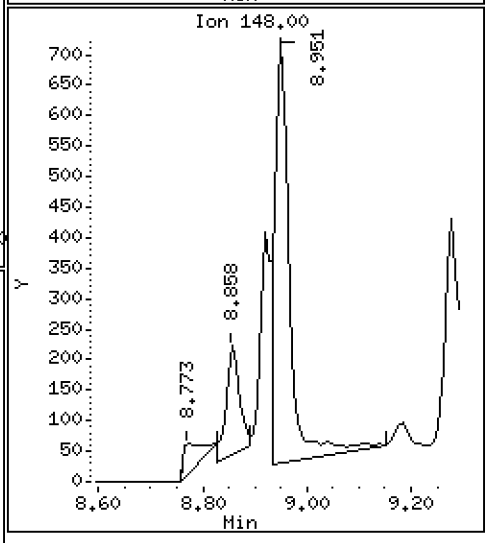
9 1,4-Dichlorobenzene

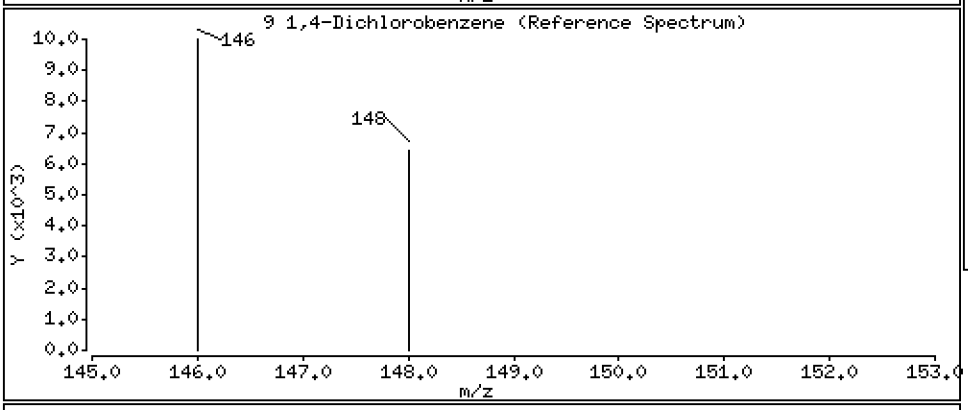
Concentration: 0.01496 ug/mL

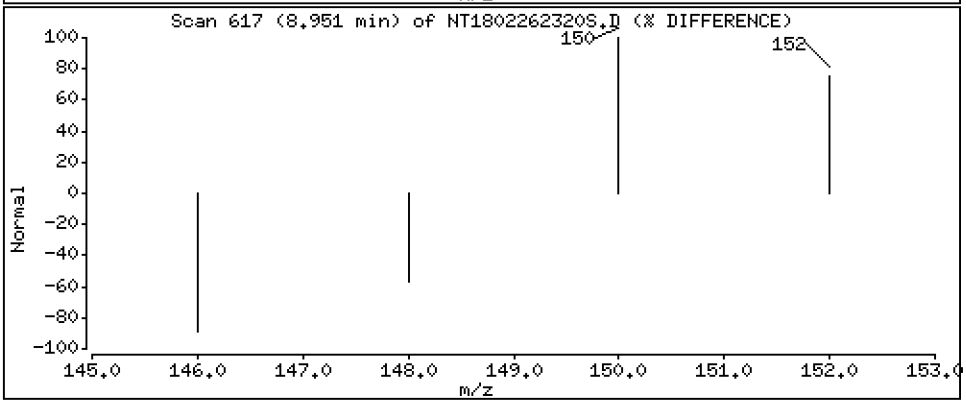












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

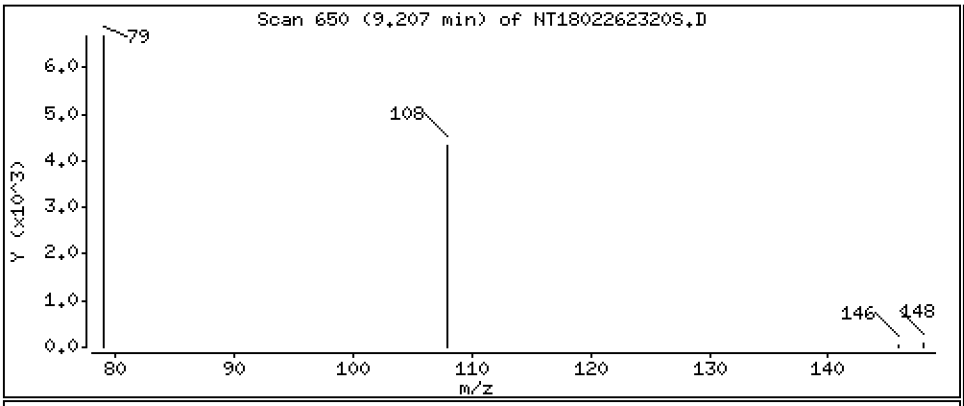
Operator: YZ

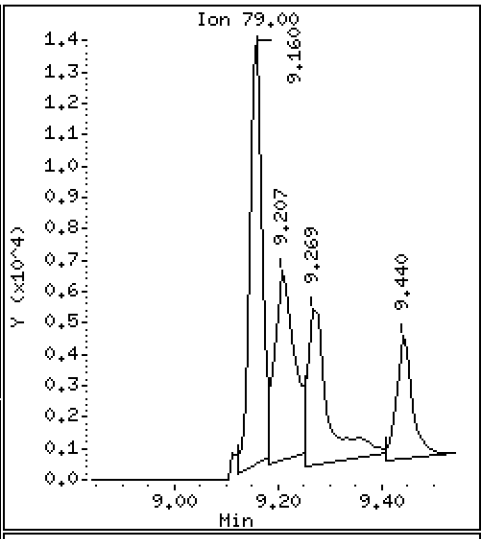
Column phase: ZB-5msi

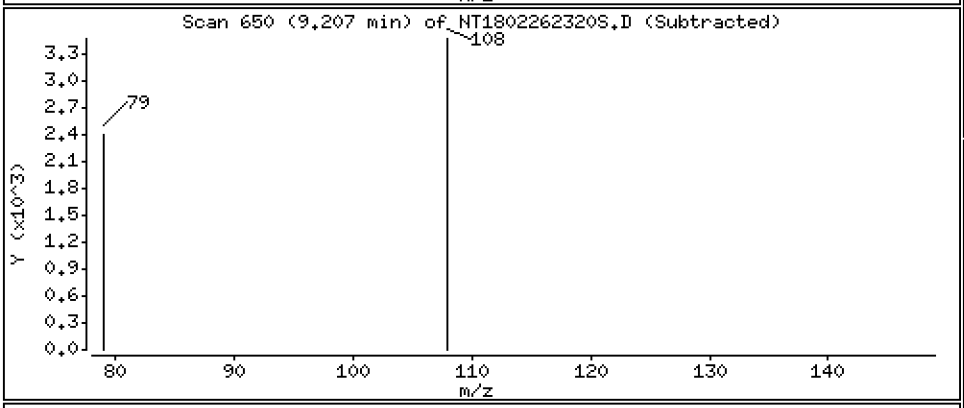
Column diameter: 0.25

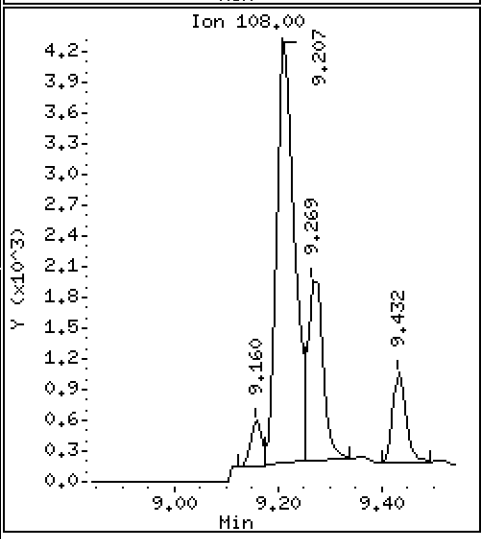
11 Benzyl alcohol

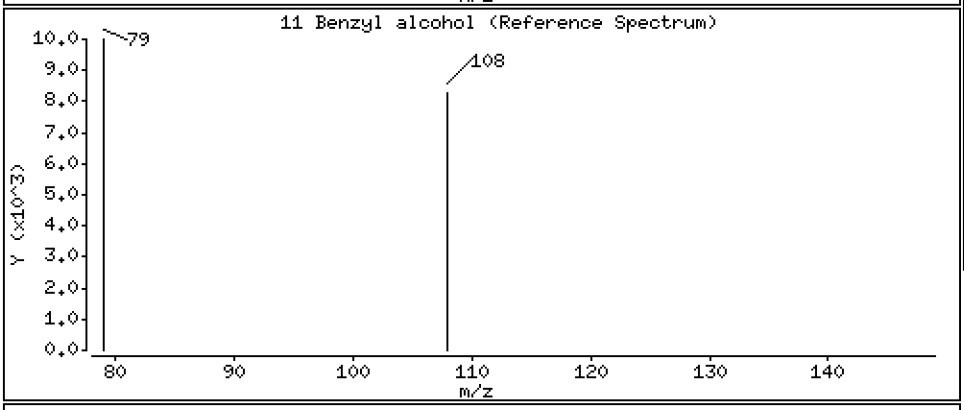
Concentration: 0.2311 ug/mL

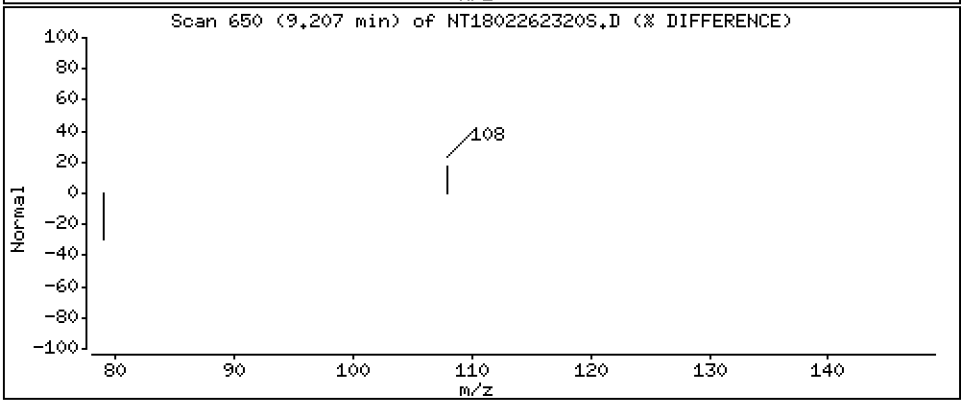












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262320S.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

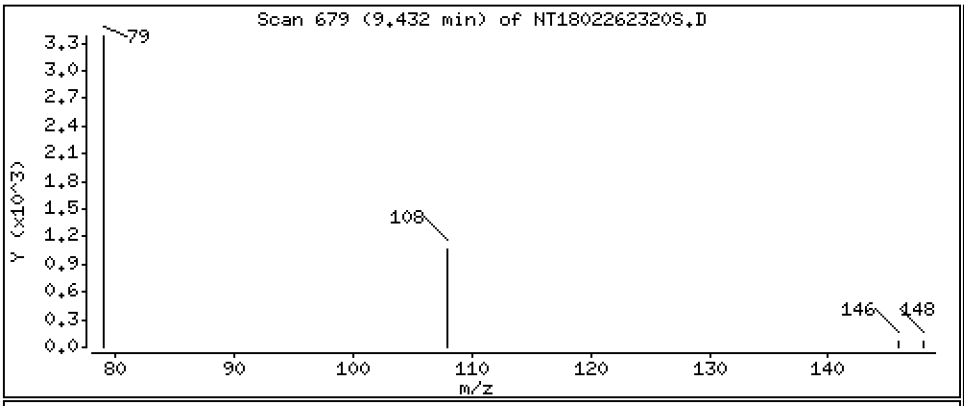
Operator: YZ

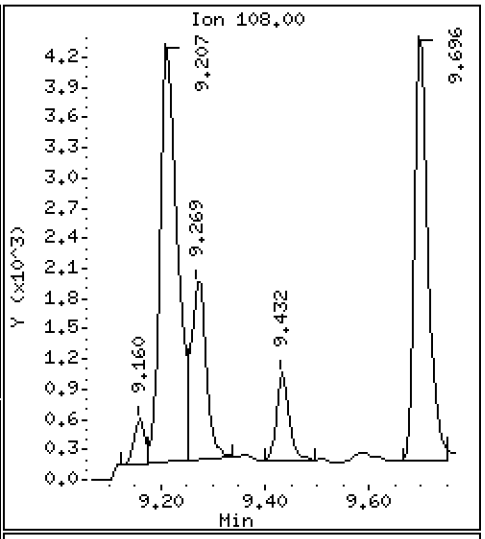
Column phase: ZB-5msi

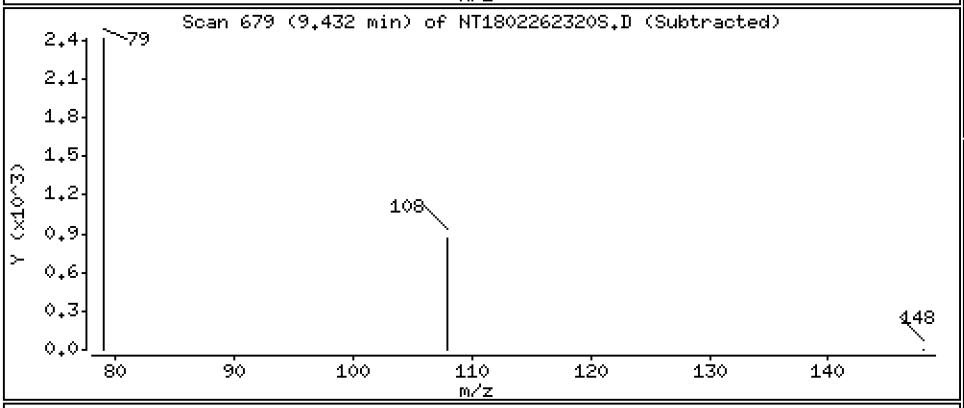
Column diameter: 0.25

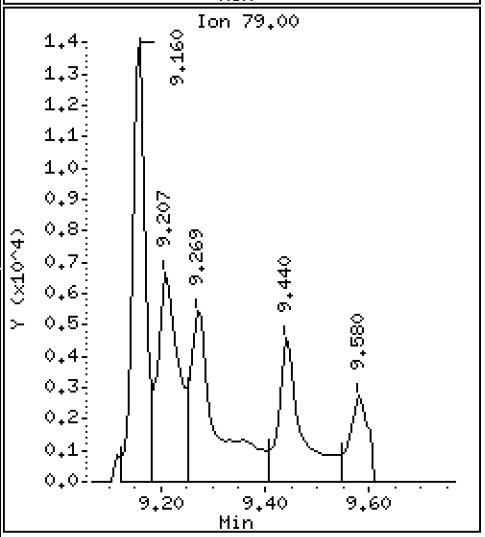
13 2-Methylphenol

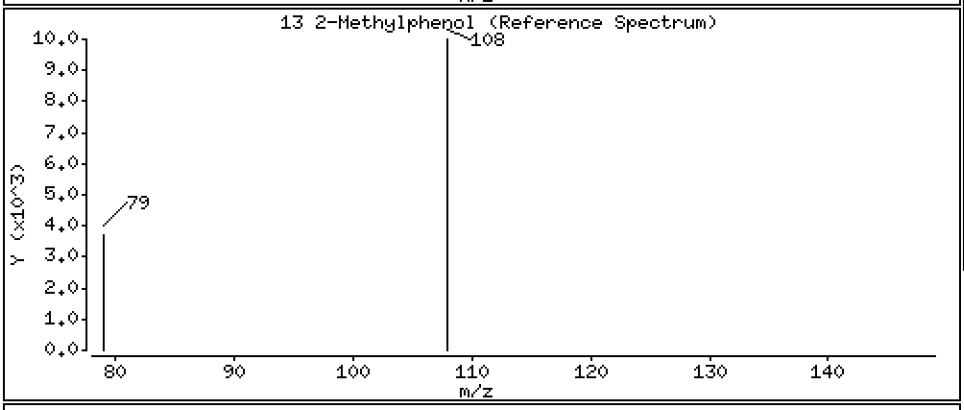
Concentration: 0.01618 ug/mL

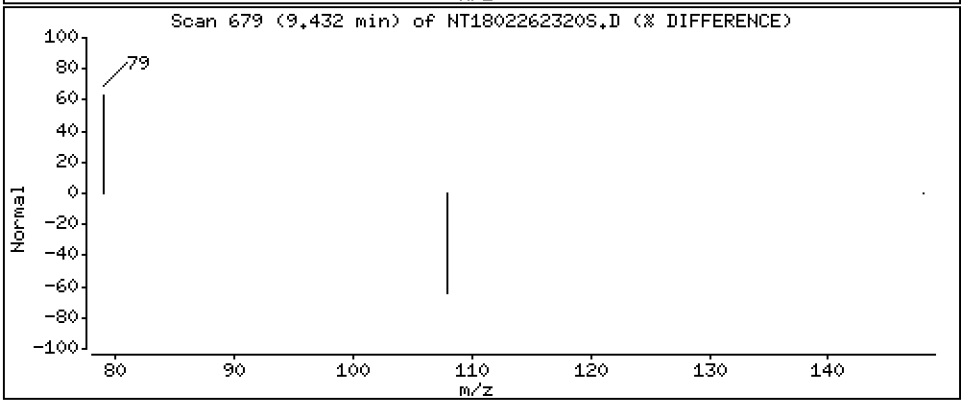












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

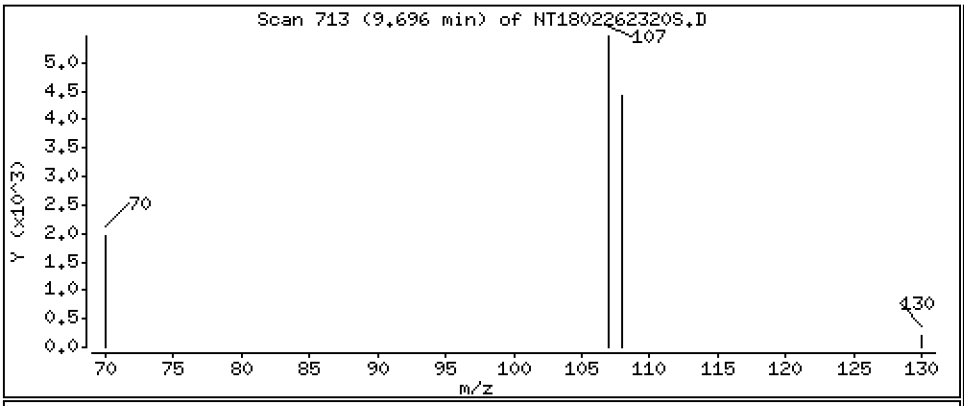
Operator: YZ

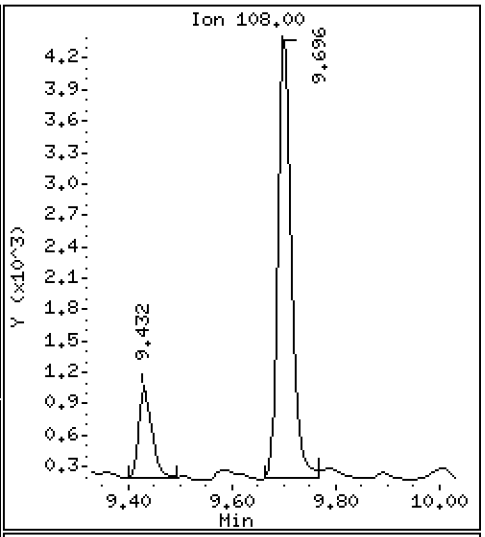
Column phase: ZB-5msi

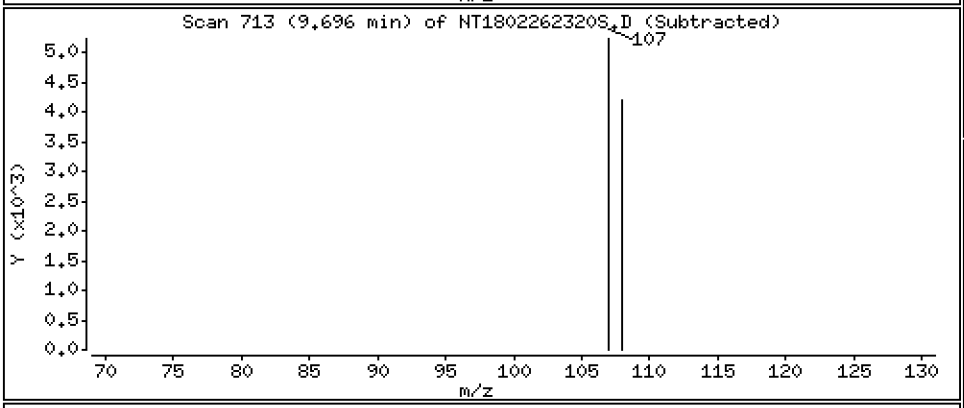
Column diameter: 0.25

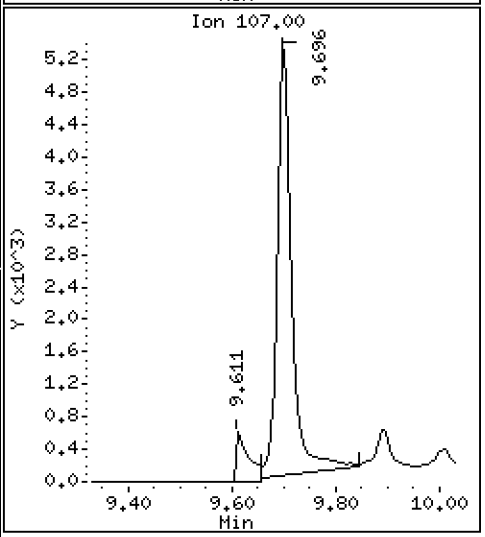
15 4-Methylphenol

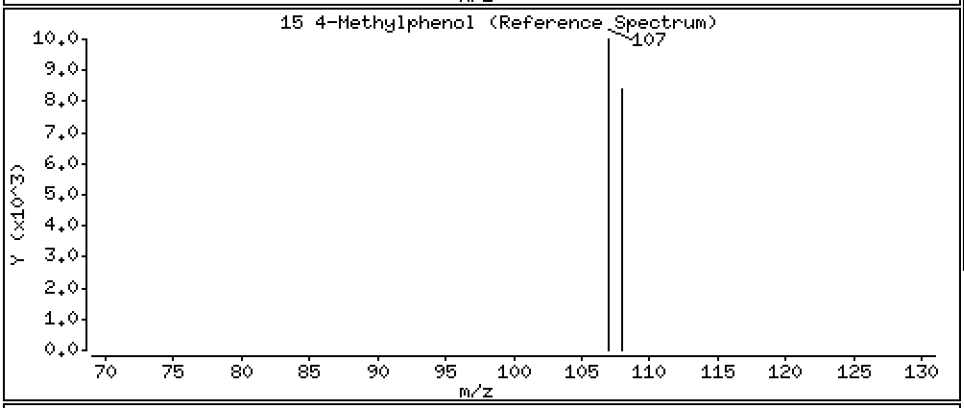
Concentration: 0.08423 ug/mL

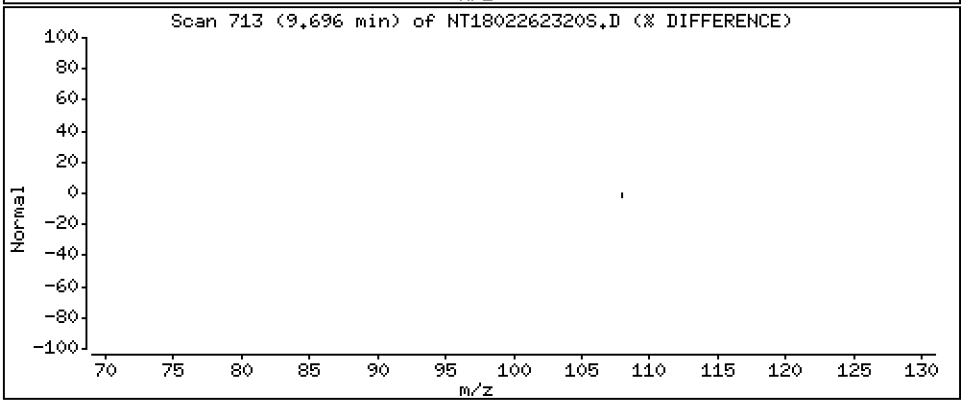












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Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

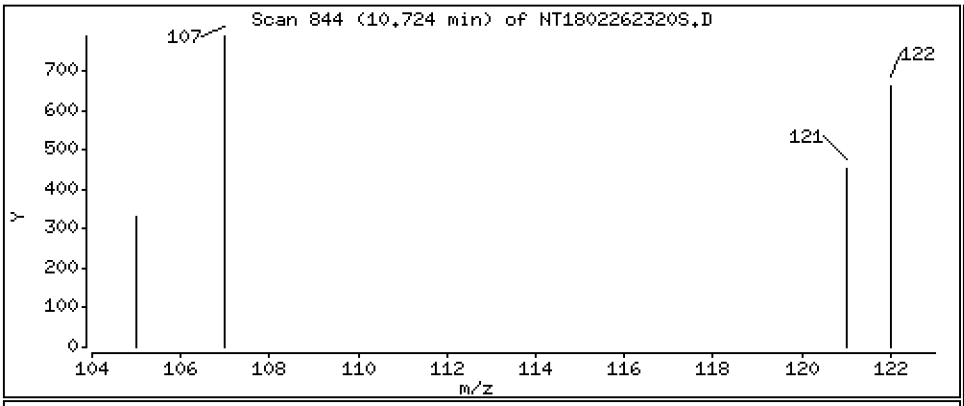
Operator: YZ

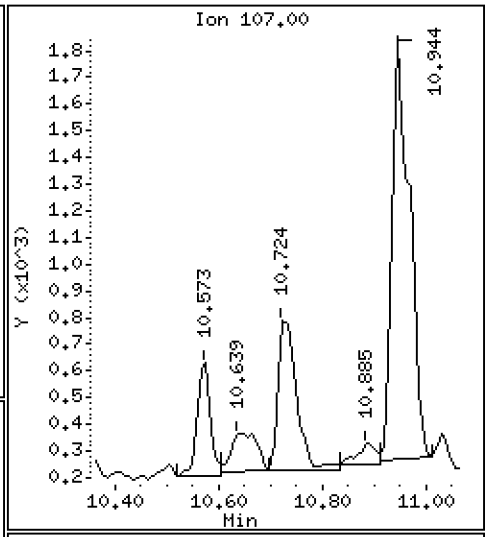
Column phase: ZB-5msi

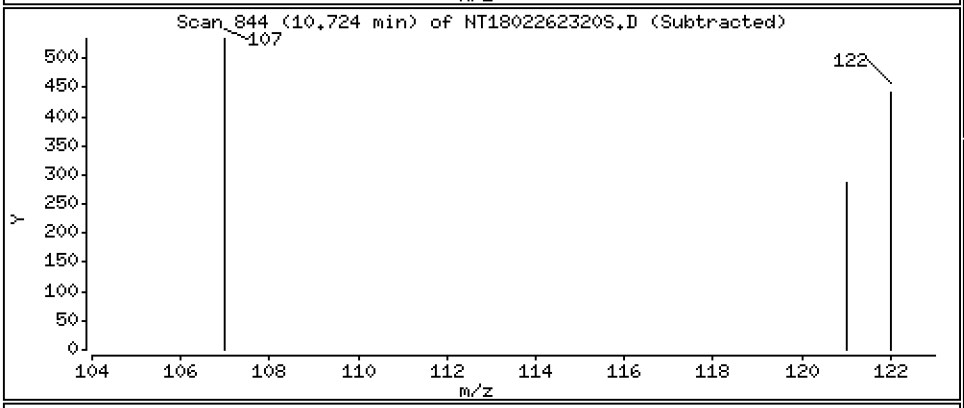
Column diameter: 0.25

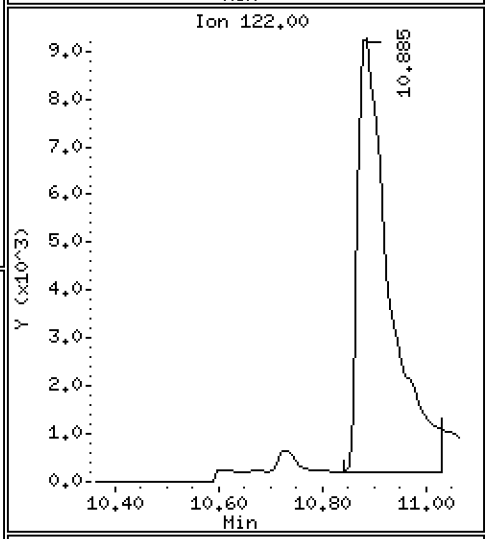
22 2,4-Dimethylphenol

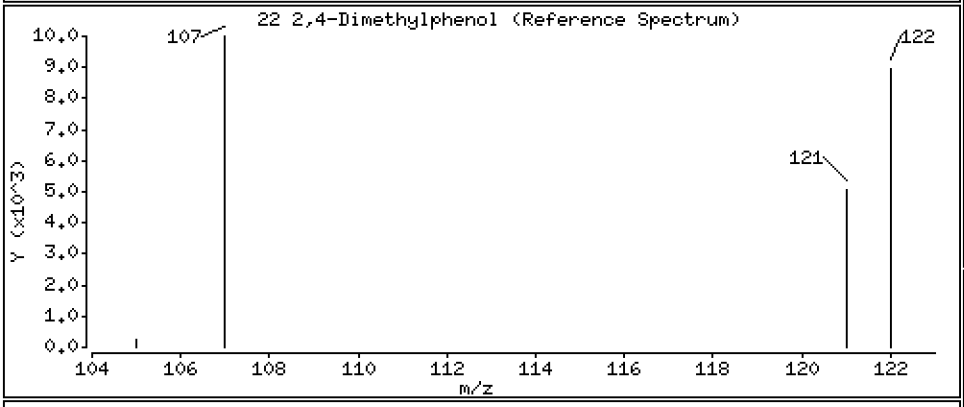
Concentration: 0.01542 ug/mL

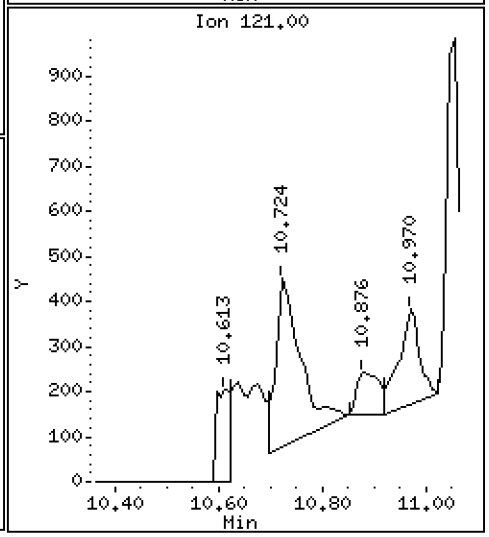


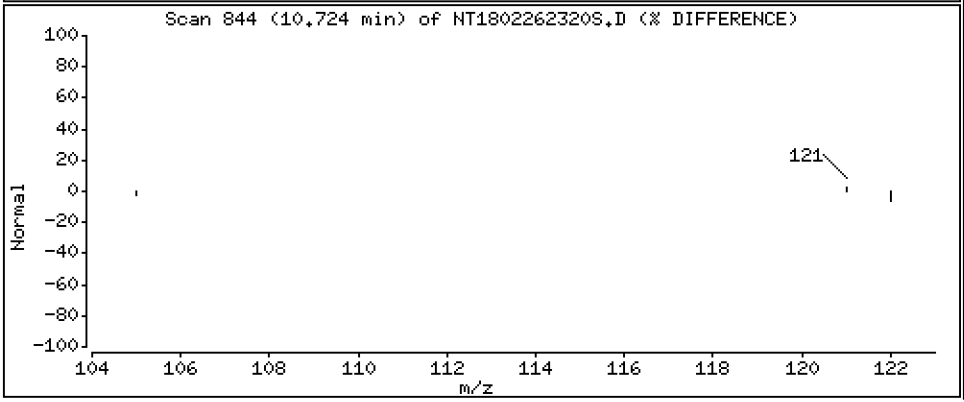












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262320S.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

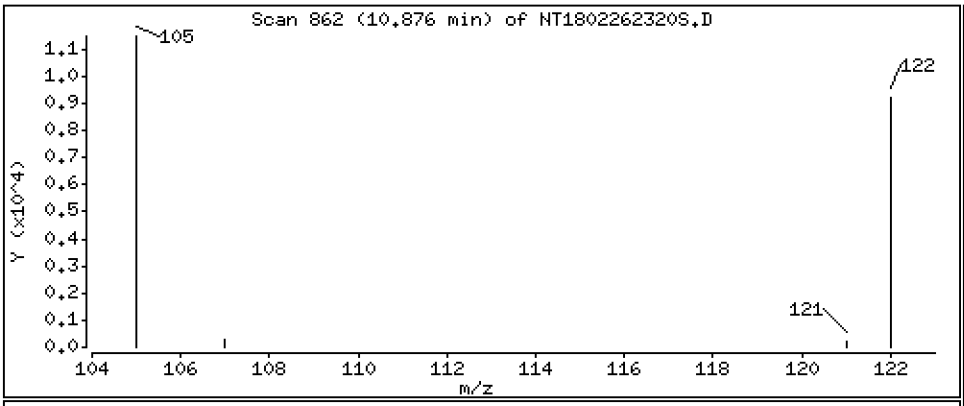
Operator: YZ

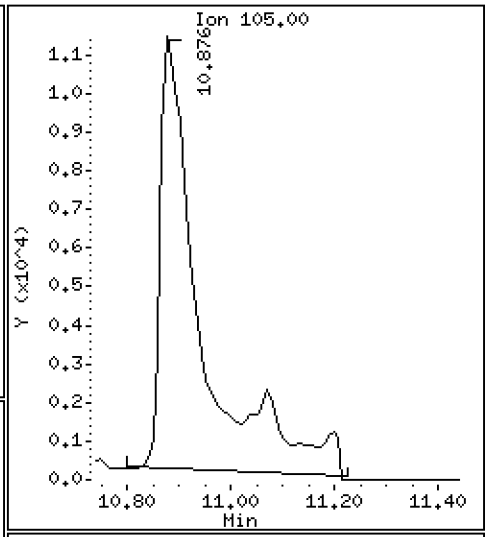
Column phase: ZB-5msi

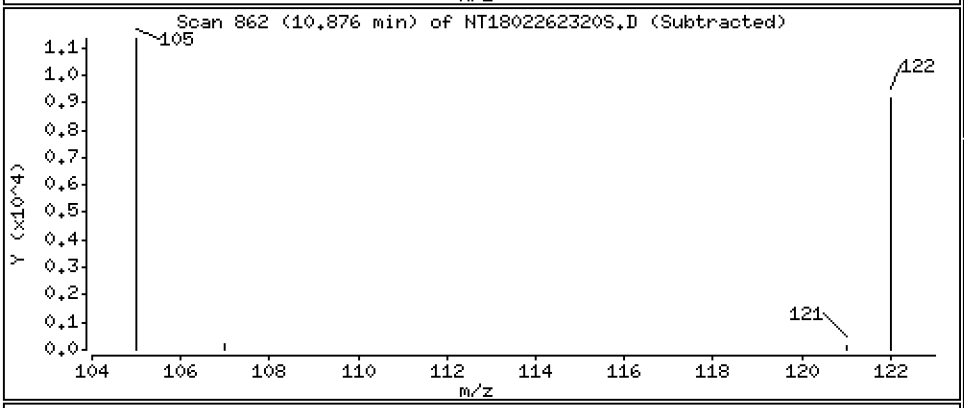
Column diameter: 0.25

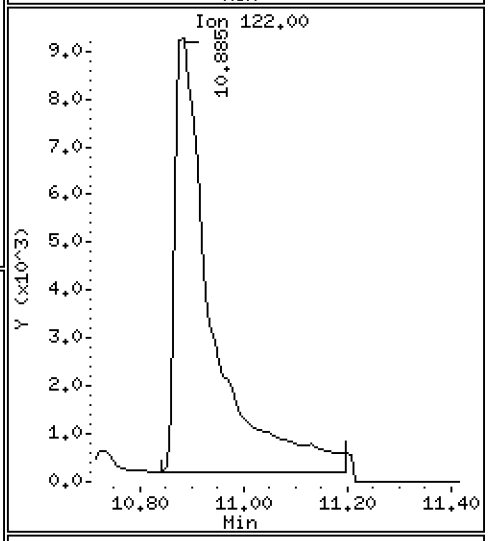
24 Benzoic acid

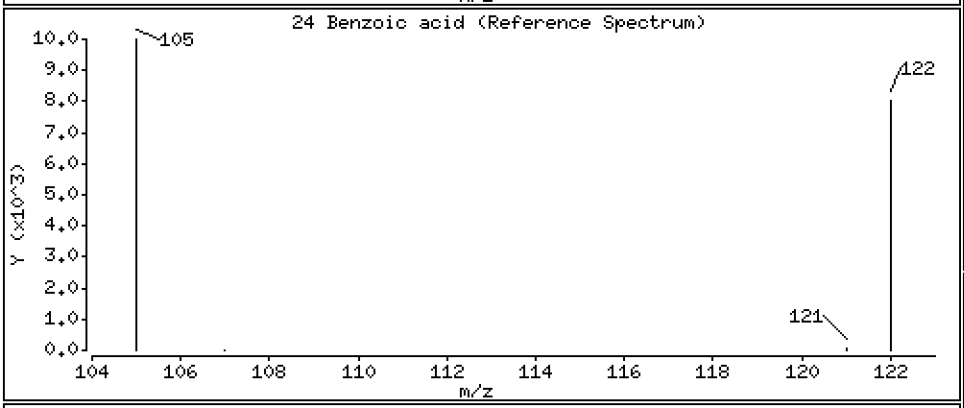
Concentration: 1.627 ug/mL

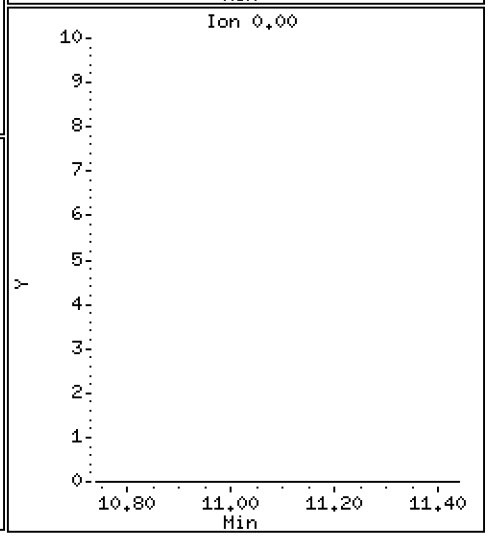


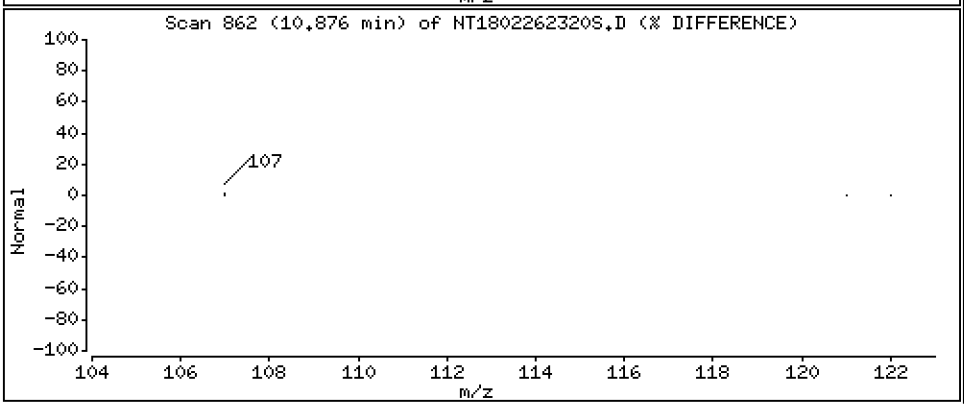












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262320S.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

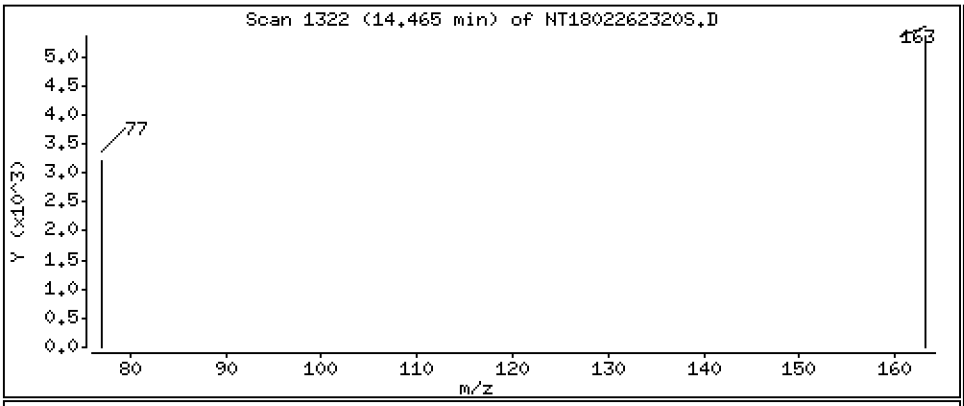
Operator: YZ

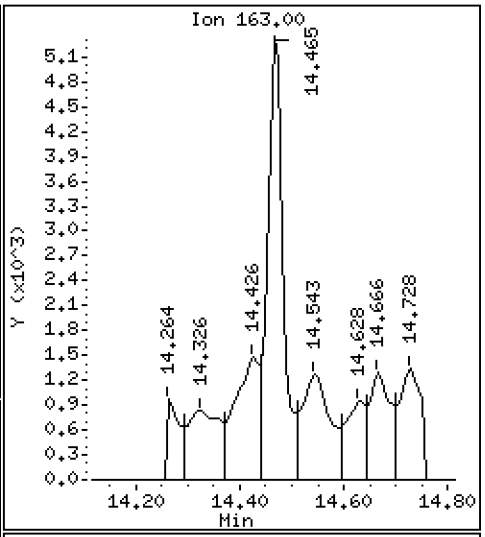
Column phase: ZB-5msi

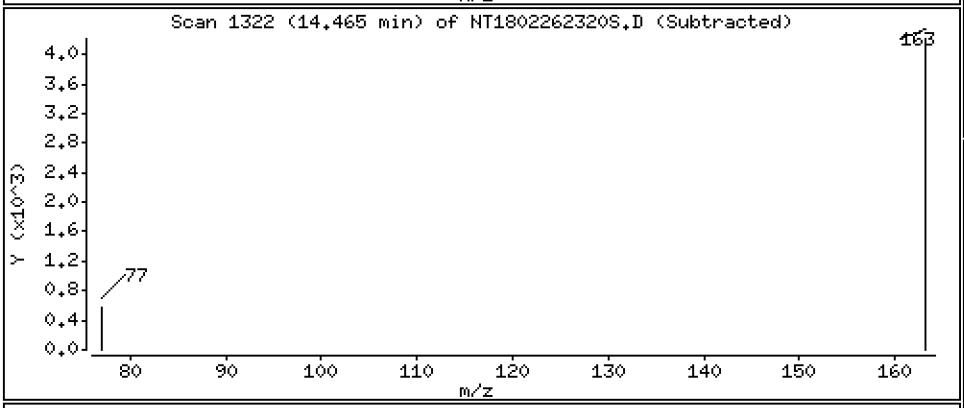
Column diameter: 0.25

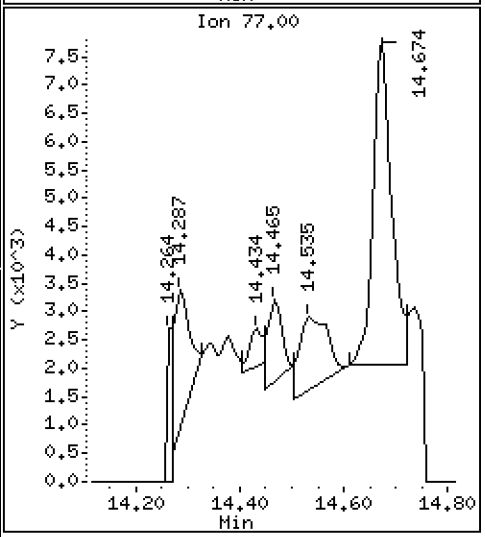
39 Dimethylphthalate

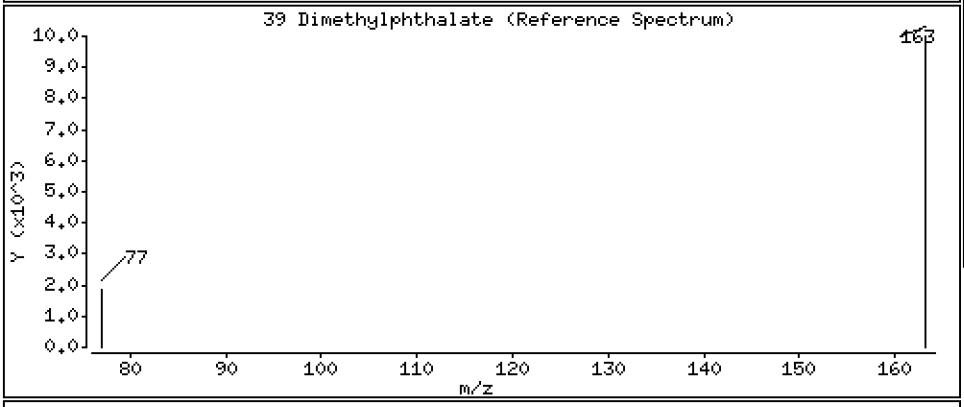
Concentration: 0.05453 ug/mL

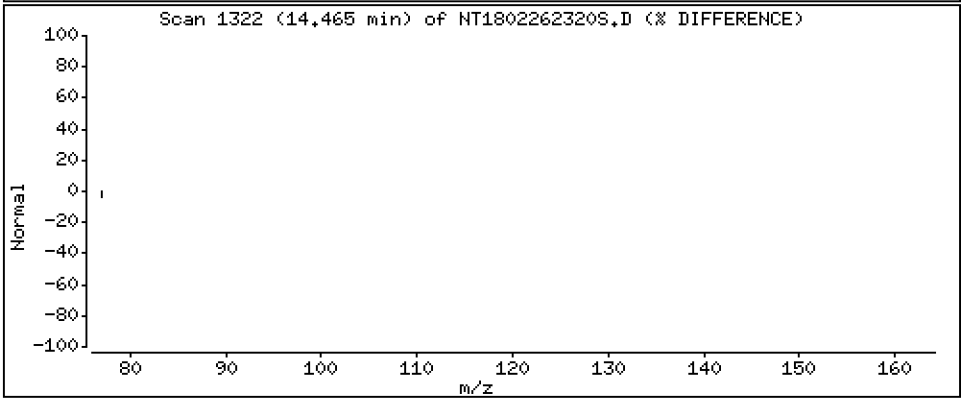












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262320S.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

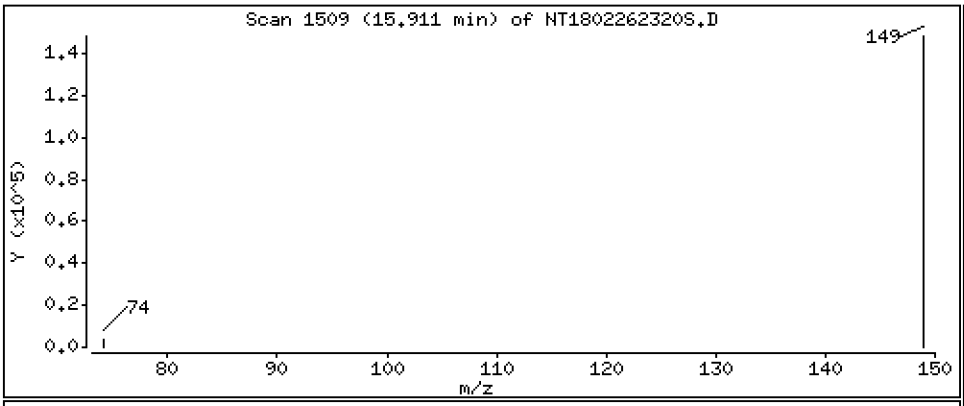
Operator: YZ

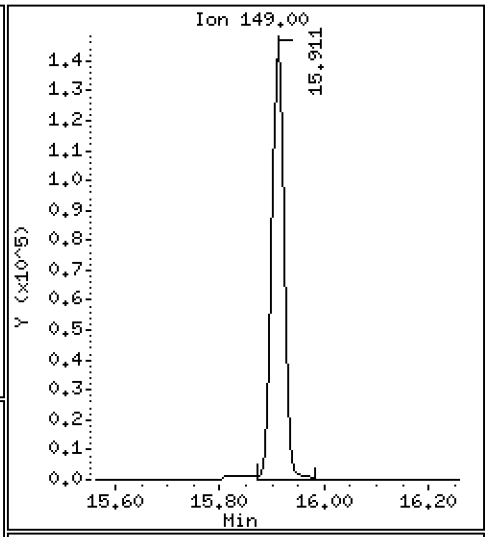
Column phase: ZB-5msi

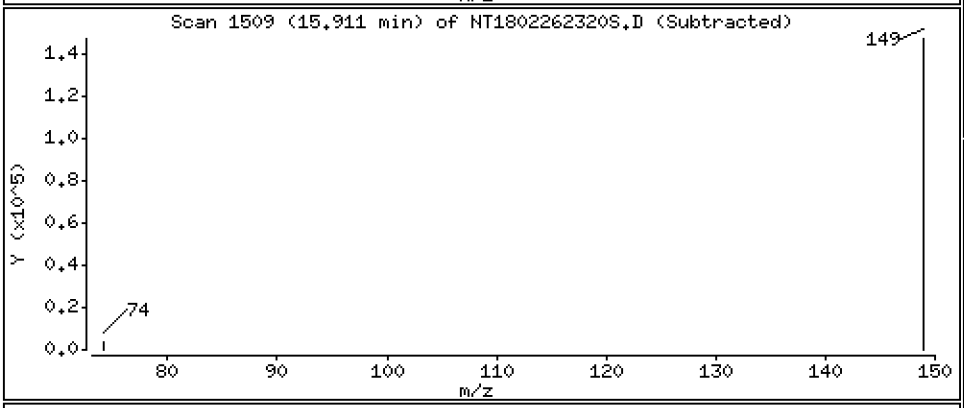
Column diameter: 0.25

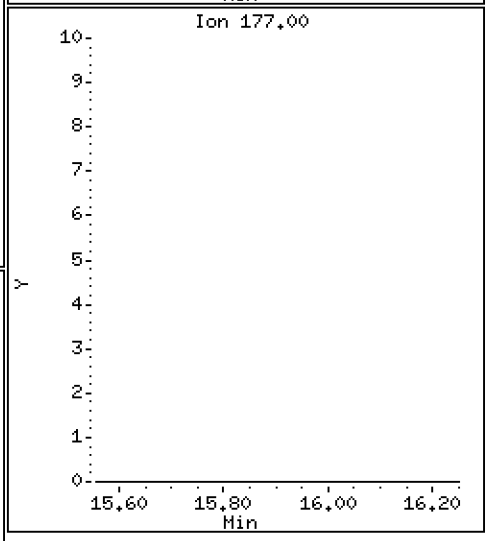
50 Diethylphthalate

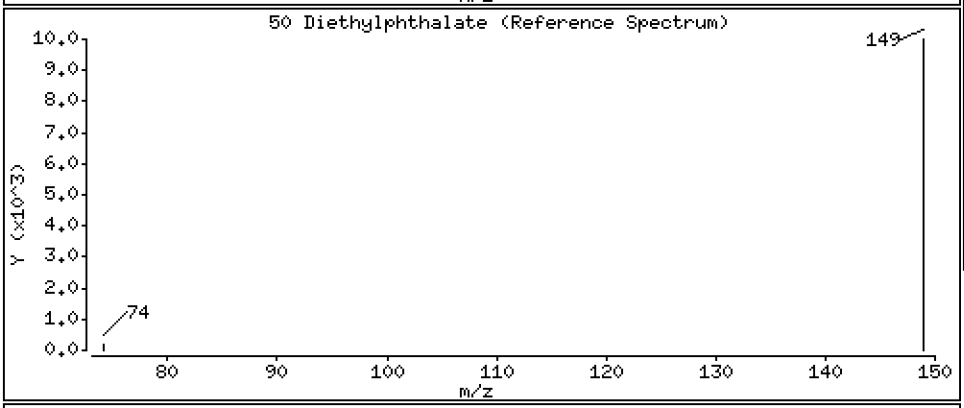
Concentration: 1.224 ug/mL

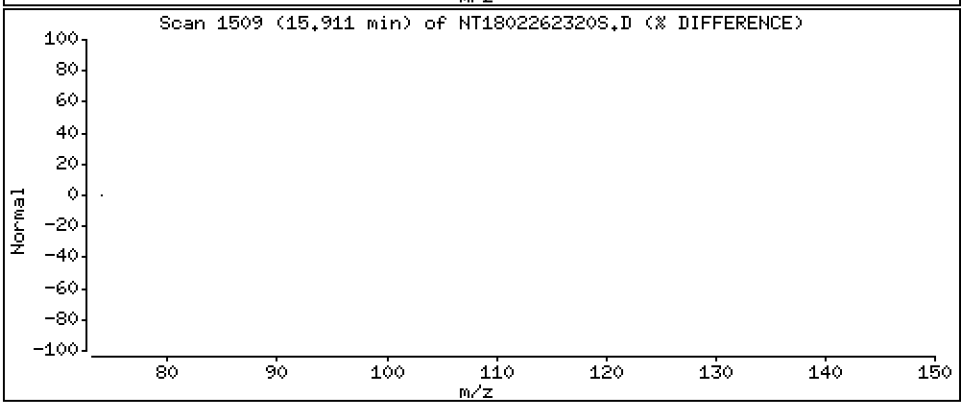












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262320S.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

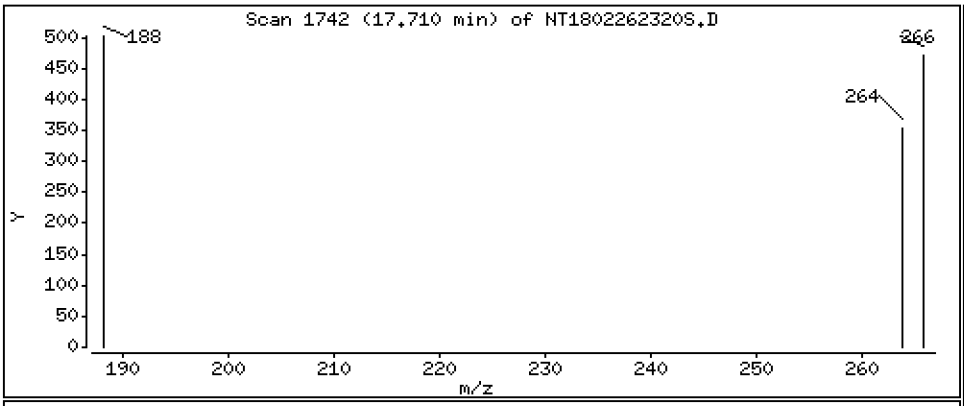
Operator: YZ

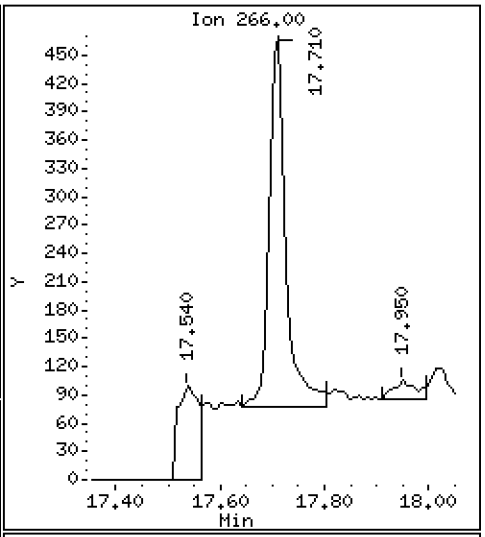
Column phase: ZB-5msi

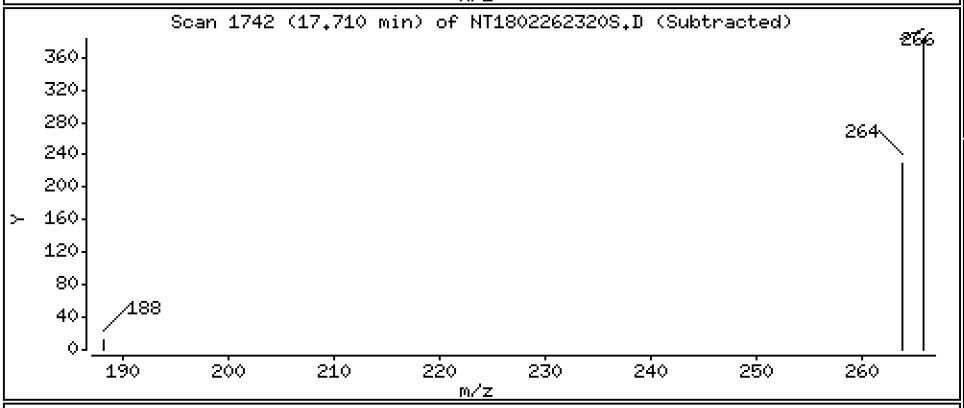
Column diameter: 0.25

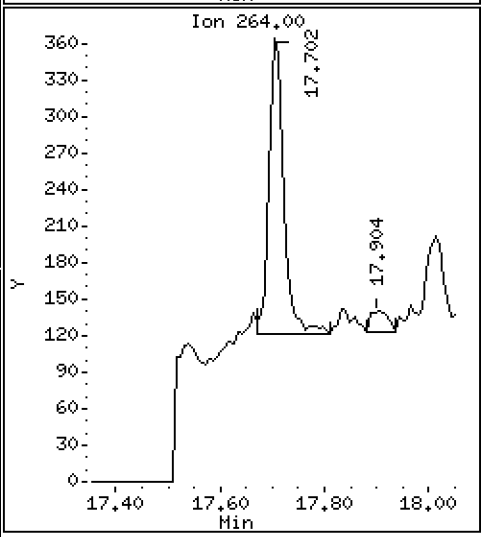
58 Pentachlorophenol

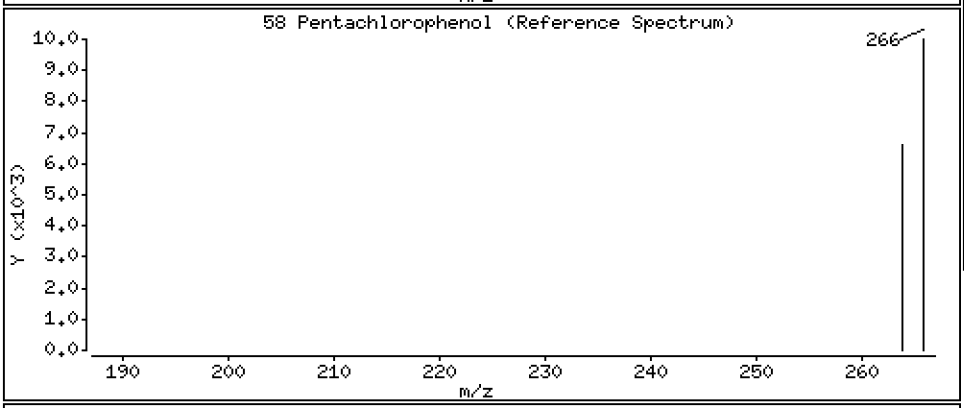
Concentration: 0.03706 ug/mL

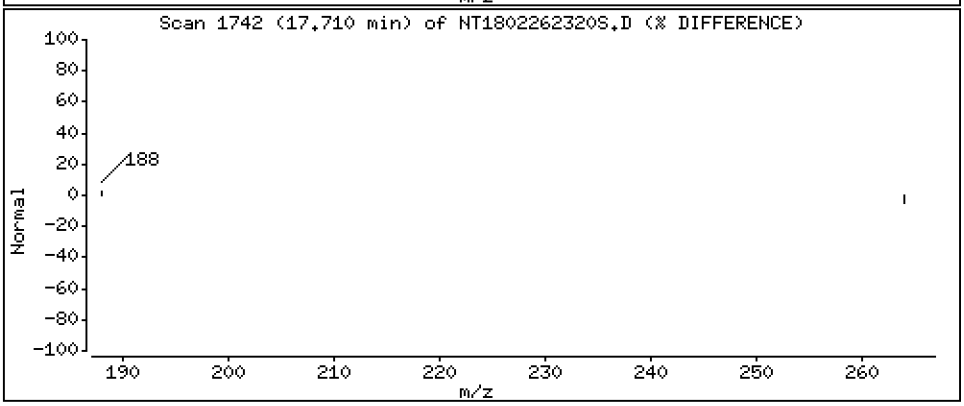












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262320S.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

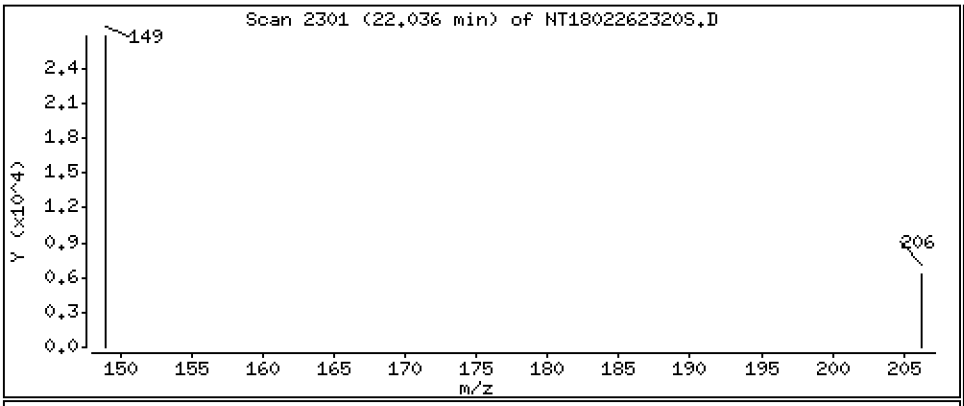
Operator: YZ

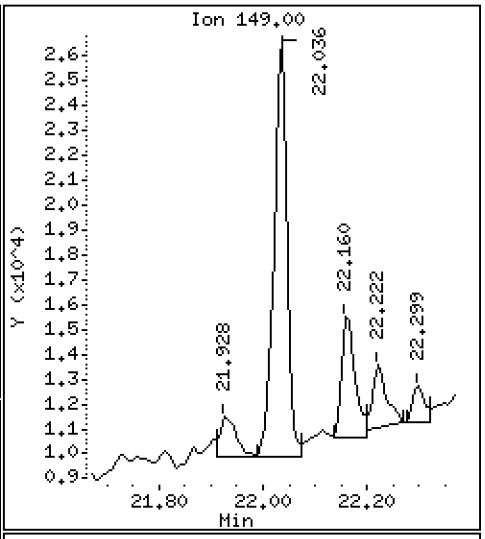
Column phase: ZB-5msi

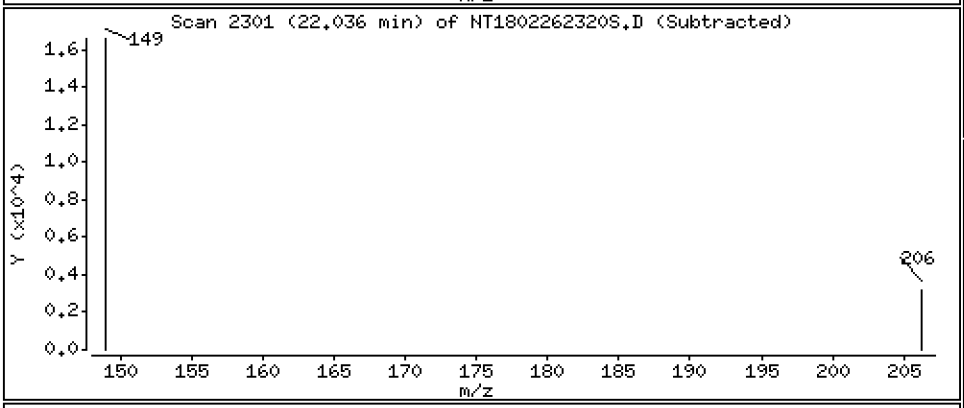
Column diameter: 0.25

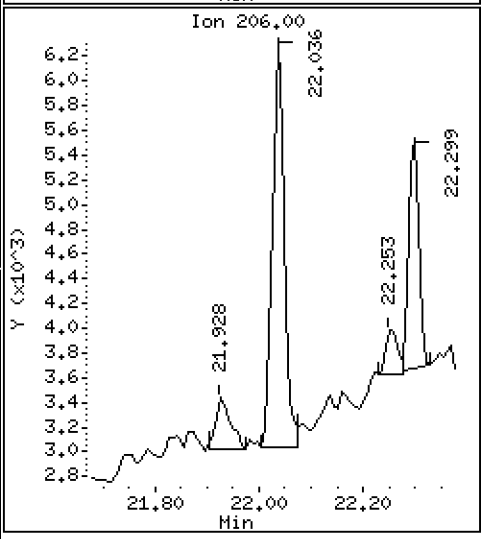
67 Butylbenzylphthalate

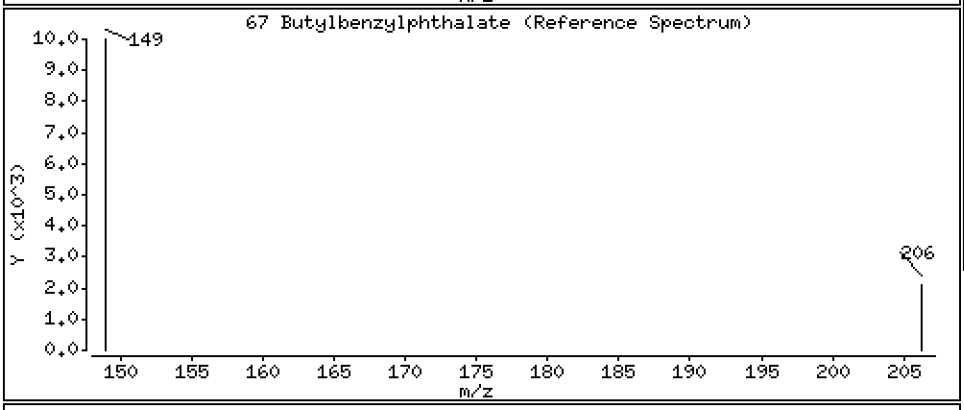
Concentration: 0.1522 ug/mL

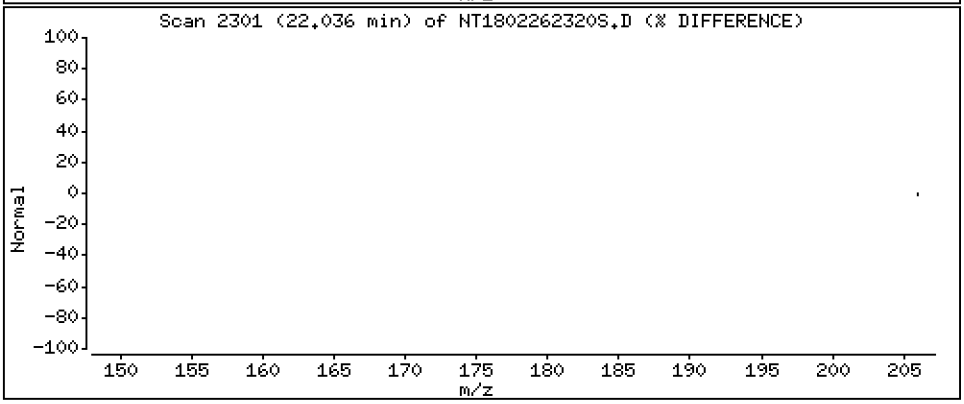












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262320S.D

Date : 27-FEB-2023 00:34

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-11

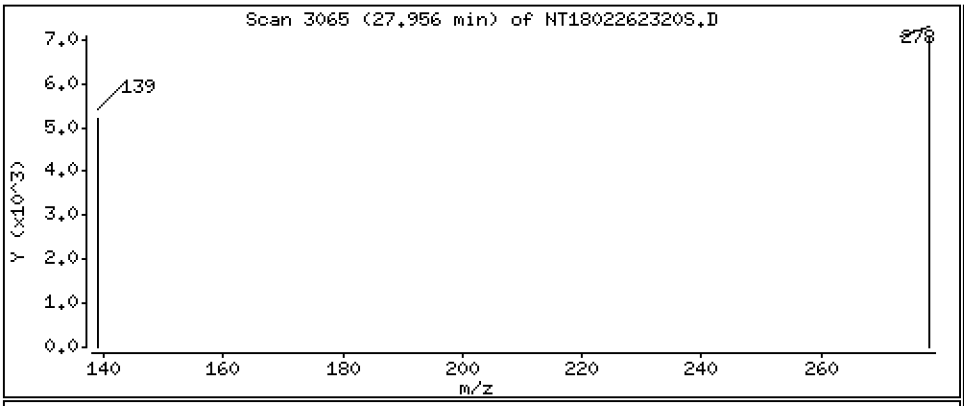
Operator: YZ

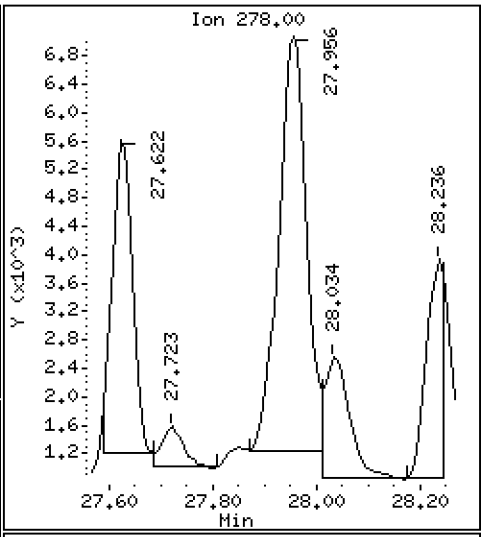
Column phase: ZB-5msi

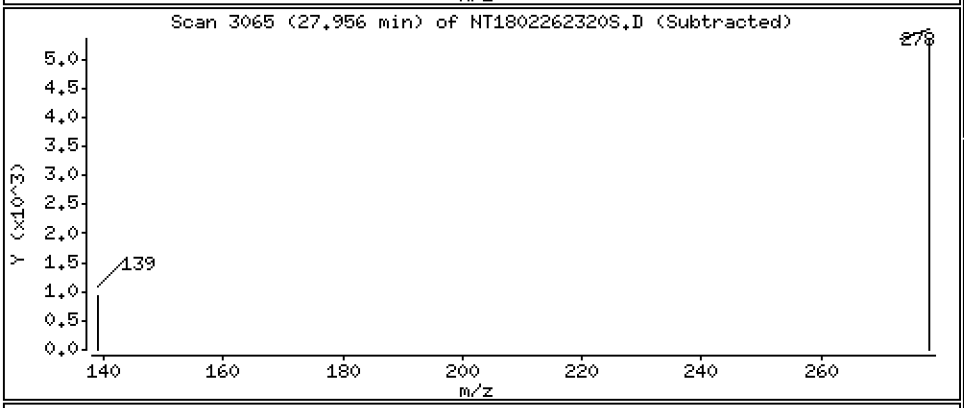
Column diameter: 0.25

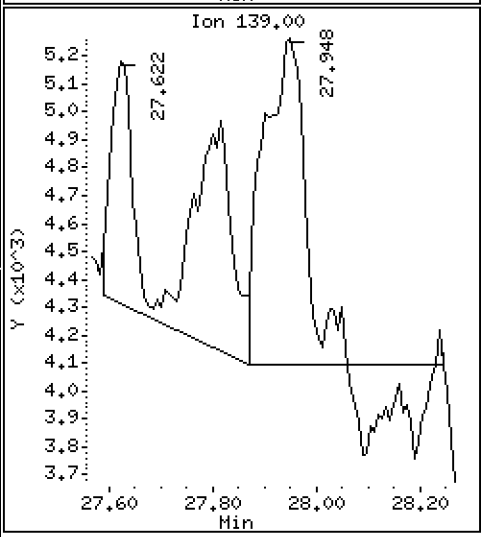
79 Dibenzo(a,h)anthracene

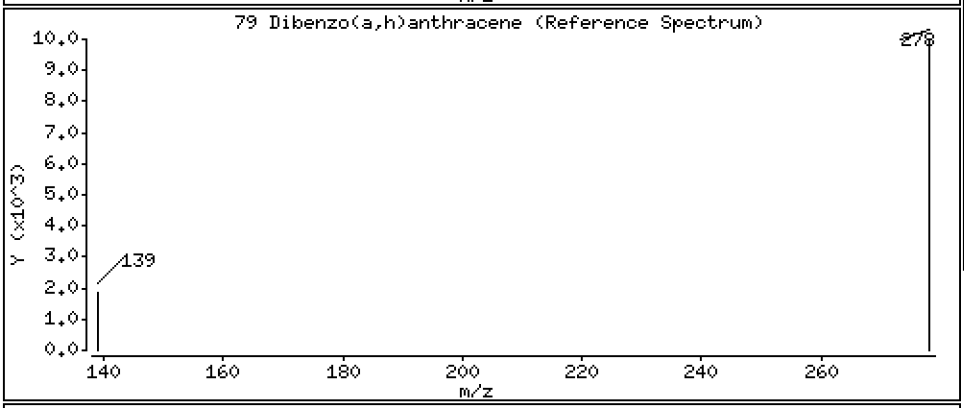
Concentration: 0.1003 ug/mL

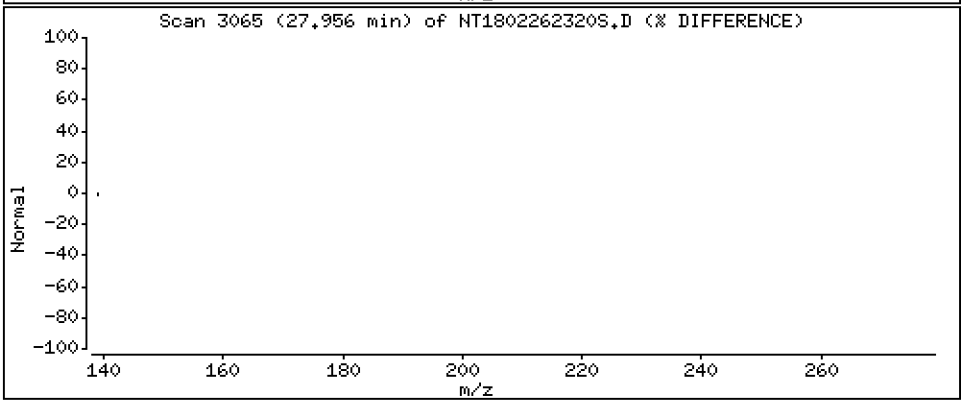












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262320S.D
Lab Smp Id: 23A0134-11
Inj Date : 27-FEB-2023 00:34
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-11
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.779	6.748	(0.760)	501735	5.76988	5.770(R)
	3 Phenol	94	8.340	8.324	(0.935)	378737	3.33865	3.339
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.919	8.920	(1.000)	269426	4.00000	
	9 1,4-Dichlorobenzene	146	8.950	8.943	(1.003)	1774	0.01496	0.01496
	11 Benzyl alcohol	79	9.207	9.191	(1.032)	16807	0.23110	0.2311(H)
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	9.432	9.416	(1.057)	1509	0.01618	0.01618
	15 4-Methylphenol	108	9.696	9.680	(1.087)	7884	0.08423	0.08423
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.723	10.715	(0.943)	1396	0.01542	0.01542
	24 Benzoic acid	105	10.876	11.088	(0.957)	59598	1.62659	1.627(M)
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.370	11.370	(1.000)	1014744	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.465	14.465	(0.967)	11014	0.05453	0.05453
*	42 Acenaphthene-d10	162	14.952	14.945	(1.000)	525751	4.00000	
	50 Diethylphthalate	149	15.911	15.911	(1.064)	225919	1.22399	1.224
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	17.710	17.702	(0.986)	836	0.03706	0.03706
*	59 Phenanthrene-d10	188	17.957	17.950	(1.000)	1109249	4.00000	
$	66 Terphenyl-d14	244	21.114	21.091	(0.918)	863327	4.10498	4.105(R)
	67 Butylbenzylphthalate	149	22.035	22.020	(0.958)	29253	0.15219	0.1522
*	69 Chrysene-d12	240	23.003	22.980	(1.000)	1161488	4.00000	
*	77 Perylene-d12	264	25.496	25.473	(1.000)	747791	4.00000	
	79 Dibenzo(a,h)anthracene	278	27.956	27.917	(1.096)	22276	0.10026	0.1003
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262320S.D
Lab Smp Id: 23A0134-11
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	269426	-3.60
27 Naphthalene-d8	1065527	532764	2131054	1014744	-4.77
42 Acenaphthene-d10	544290	272145	1088580	525751	-3.41
59 Phenanthrene-d10	1003412	501706	2006824	1109249	10.55
69 Chrysene-d12	936975	468488	1873950	1161488	23.96
77 Perylene-d12	1057771	528886	2115542	747791	-29.31

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.05
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	23.00	0.10
77 Perylene-d12	25.47	24.97	25.97	25.50	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262320S.D

Lab ID: 23A0134-11
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   27-FEB-2023 00:34

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.975	-0.0187	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

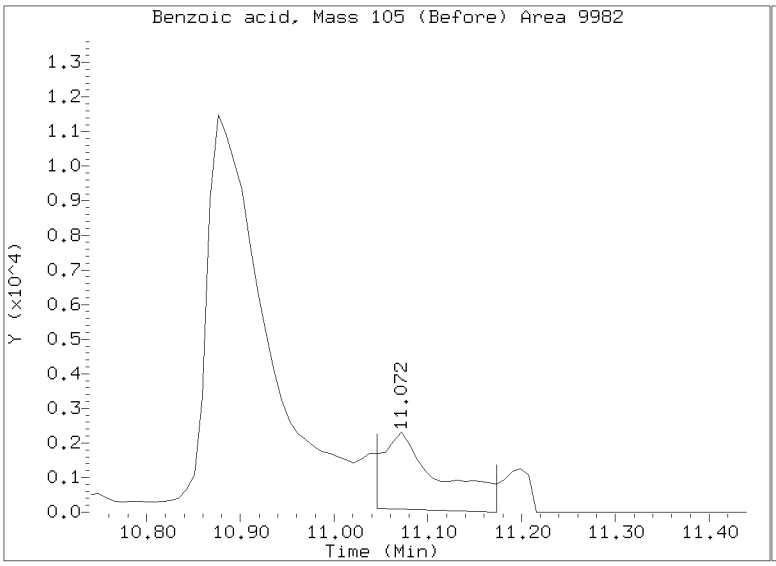
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

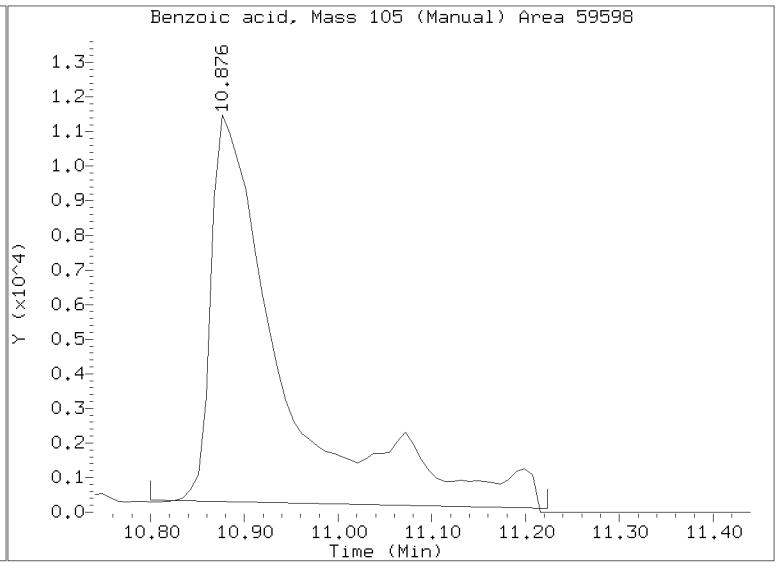
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/SIM.b/NT1802262320S.D
Injection Date: 27-FEB-2023 00:34
Lab ID:23A0134-11 Client ID:
Report Date: 03/24/2023 12:46





APPROVED

By Deenay Dunmore at 12:56 pm, Mar 24, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1116

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-12 C	SDG:	23A0134
Sampled:	01/06/23 13:44	Prepared:	01/19/23 13:35	File ID:	NT1802272307S.D
% Solids:	58.81	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/27/23 21:11
Batch:	BLA0410	Sequence:	SLC0396	Initial/Final:	17.14 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	5.0	U	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	34.5		2.5	19.8
65-85-0	Benzoic acid	1	125	Q	13.3	99.2
105-67-9	2,4-Dimethylphenol	1	19.8	U	2.2	19.8
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	2.3	J	2.1	19.8

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	744.05	557	74.8	27 - 120	
p-Terphenyl-d14	496.03	359	72.4	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723075.D

Date : 27-FEB-2023 21:11

Client ID:

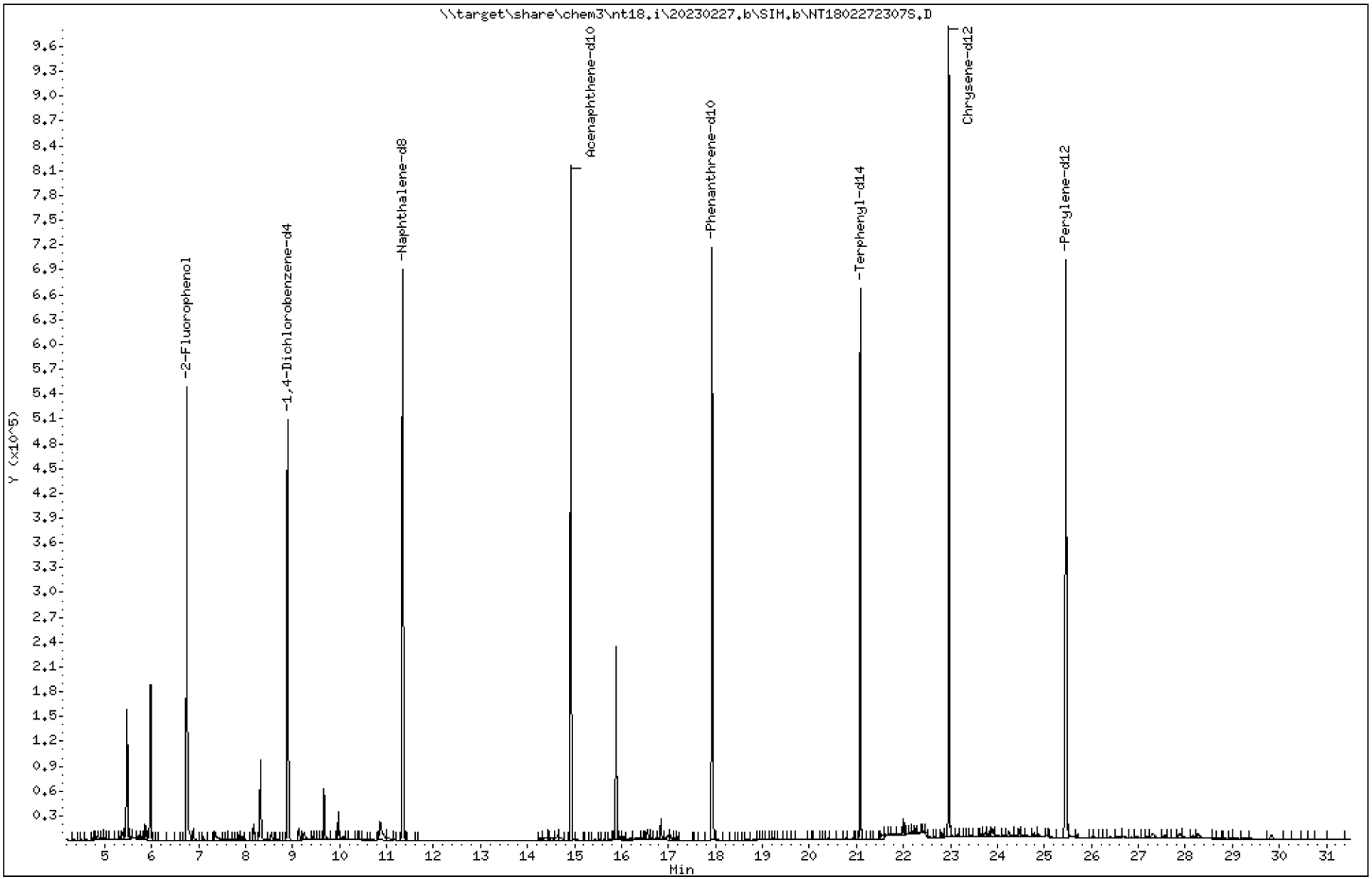
Sample Info: 23A0134-12

Column phase: ZB-5msi

Instrument: nt18.i

Operator: YZ

Column diameter: 0.25



Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723075.D

Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

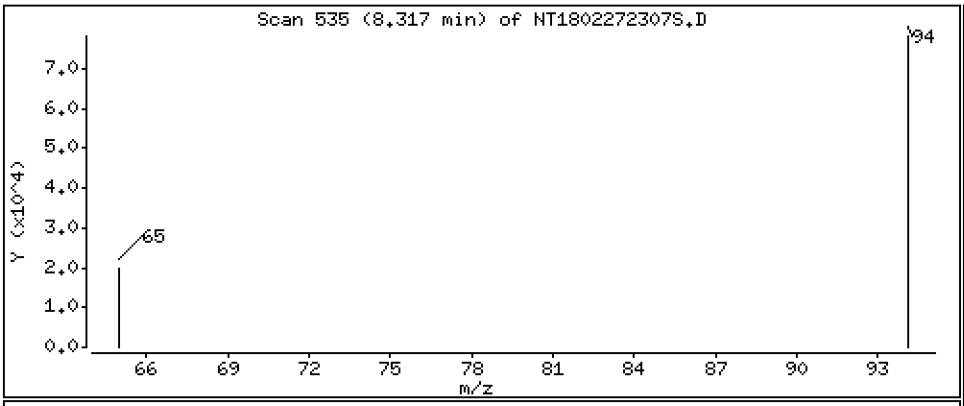
Operator: YZ

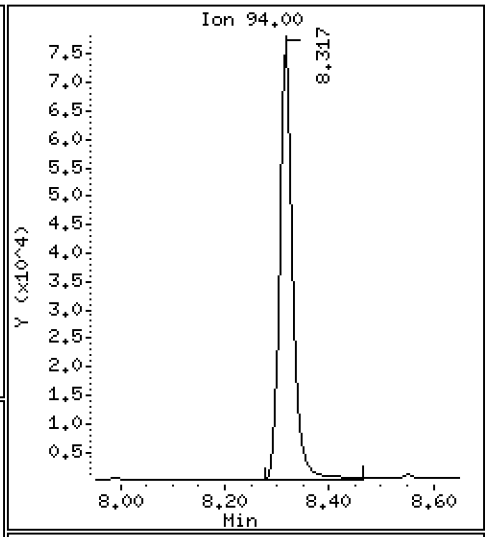
Column phase: ZB-5msi

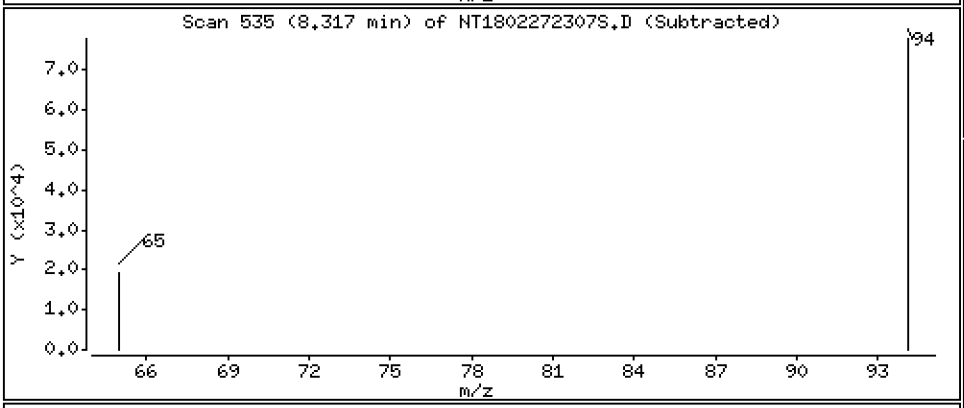
Column diameter: 0.25

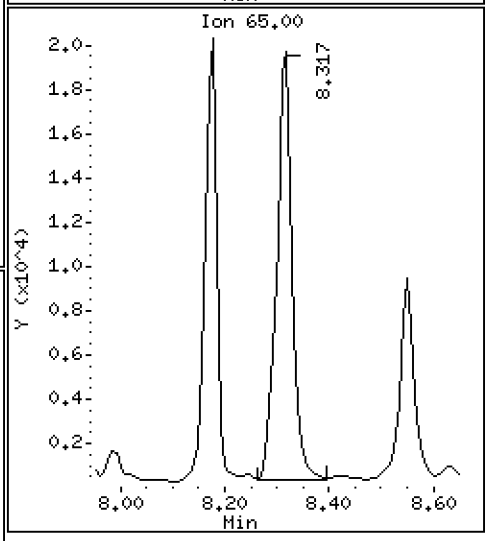
3 Phenol

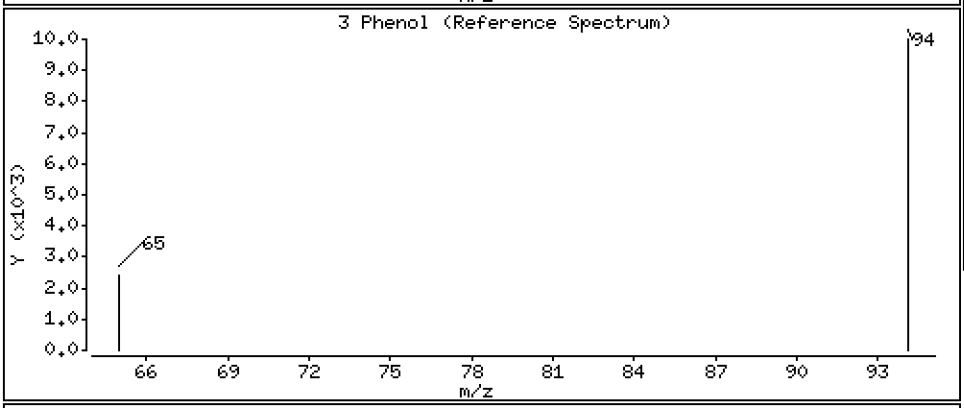
Concentration: 1.056 ug/mL

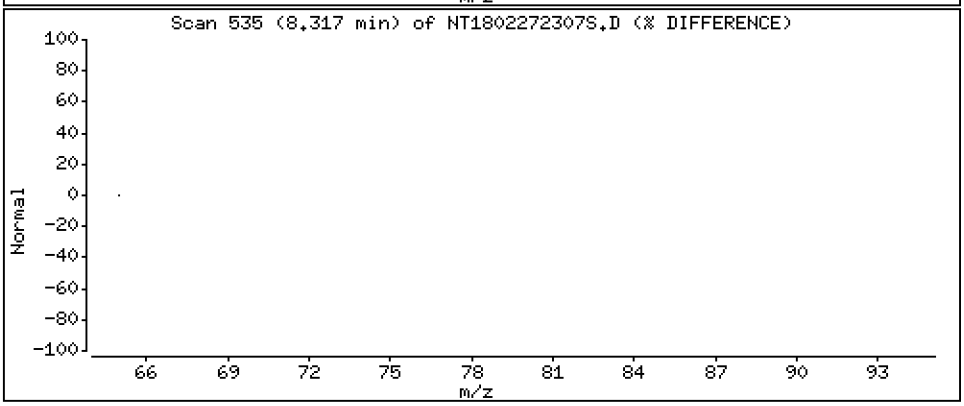












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723075.D

Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

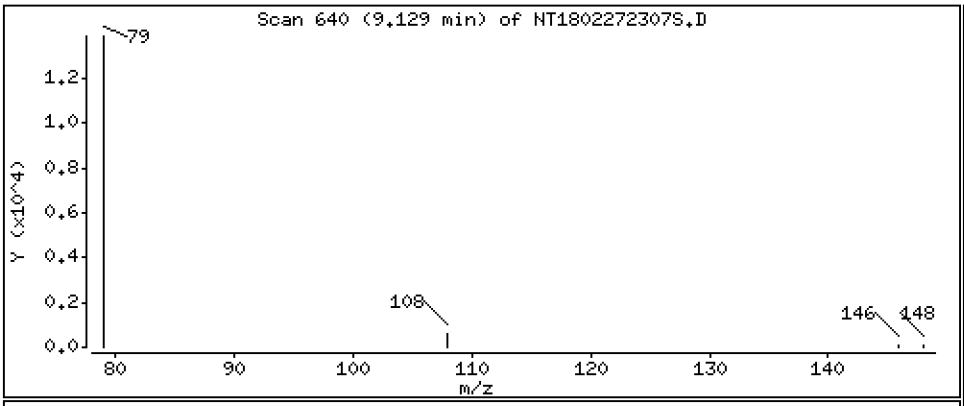
Operator: YZ

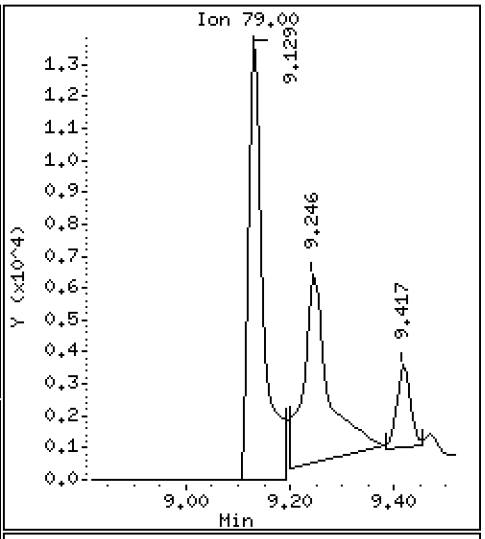
Column phase: ZB-5msi

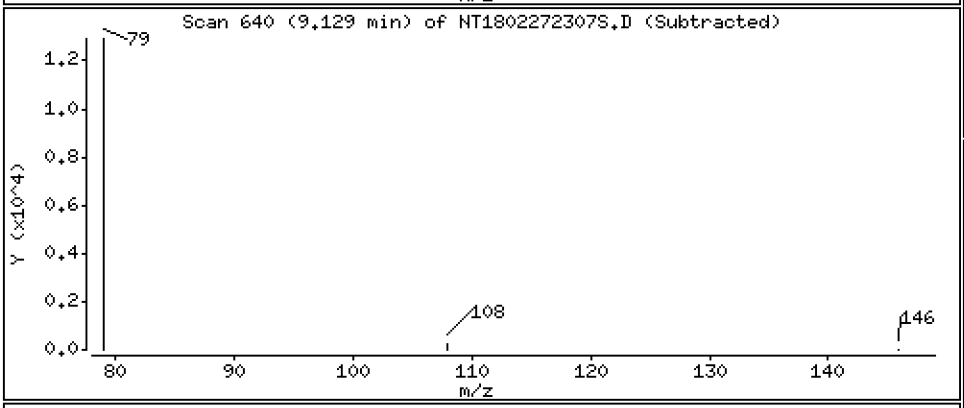
Column diameter: 0.25

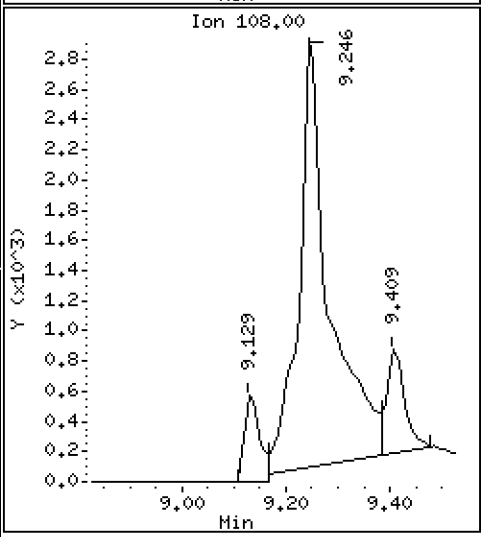
11 Benzyl alcohol

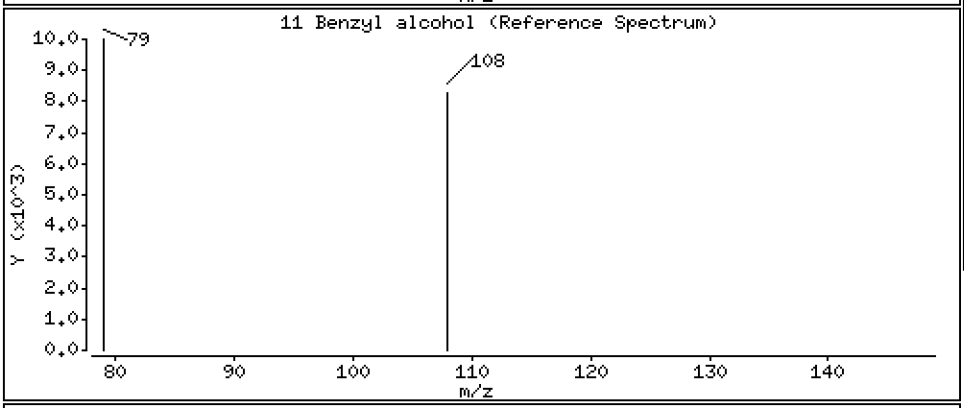
Concentration: 0.3478 ug/mL

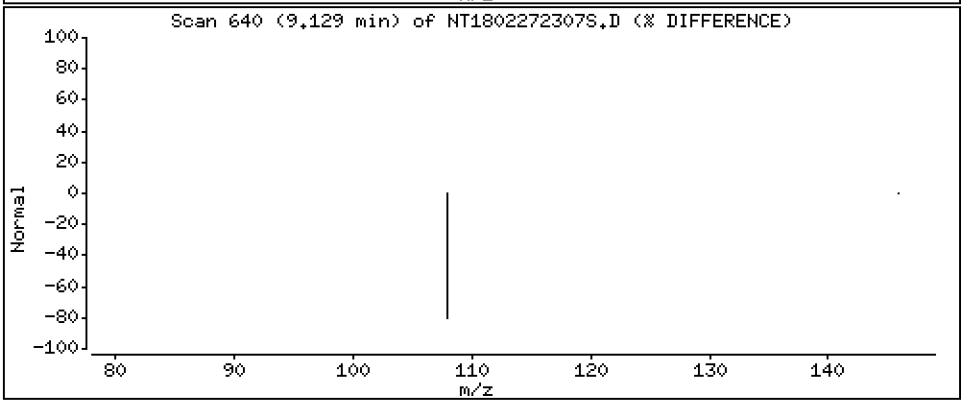












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

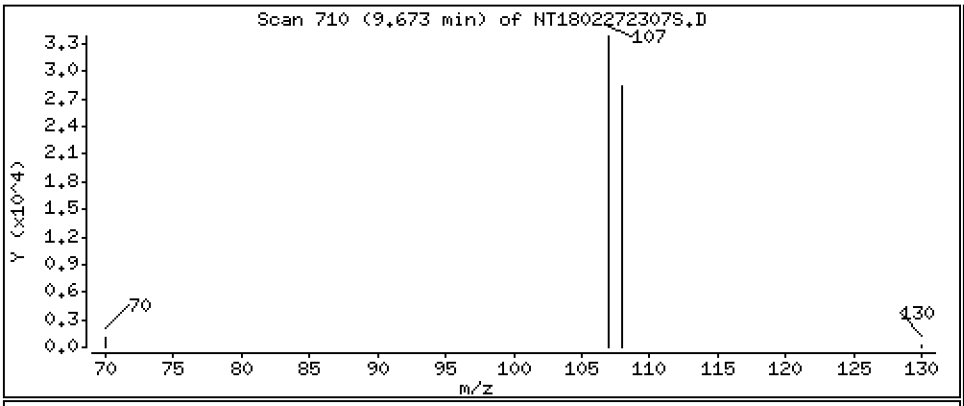
Operator: YZ

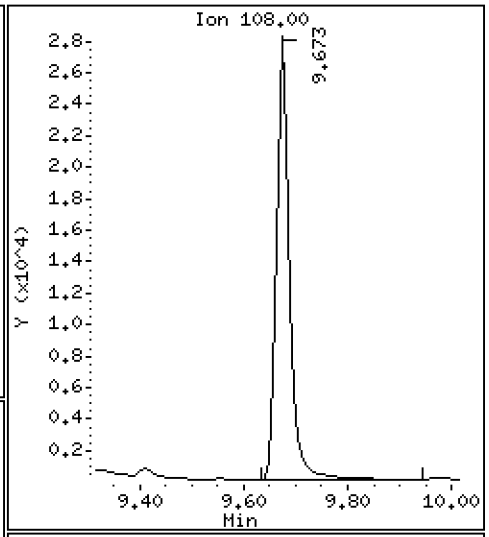
Column phase: ZB-5msi

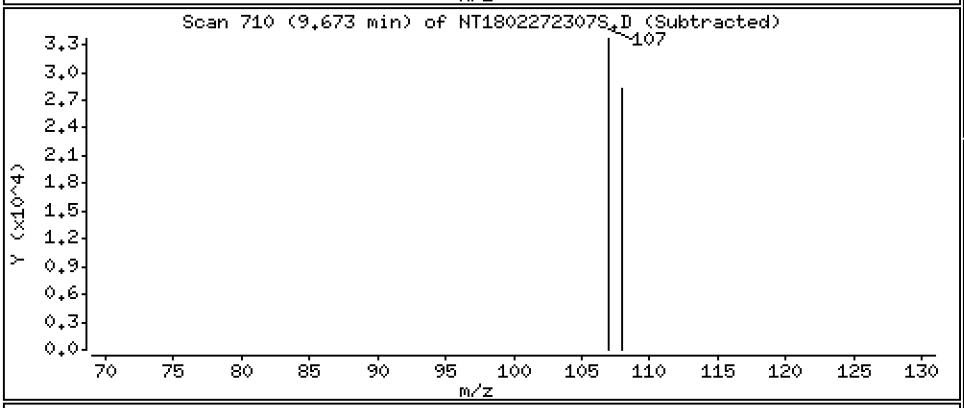
Column diameter: 0.25

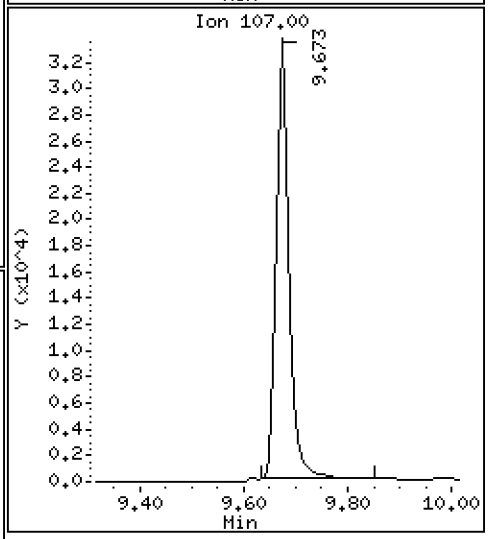
15 4-Methylphenol

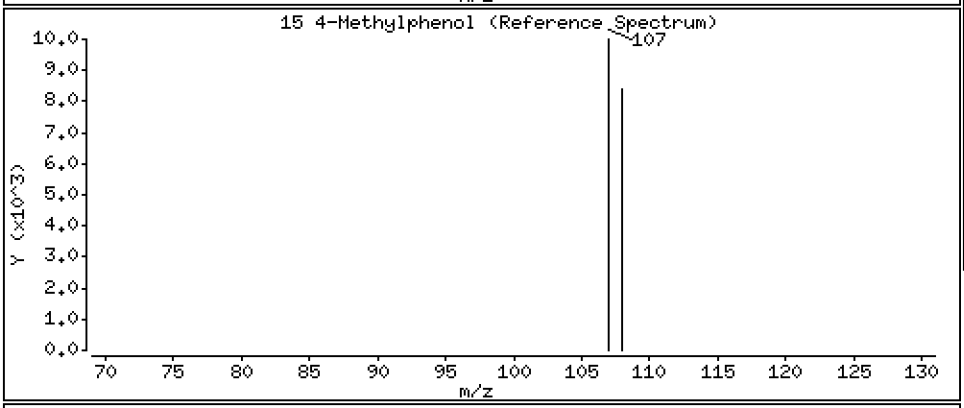
Concentration: 0.4563 ug/mL

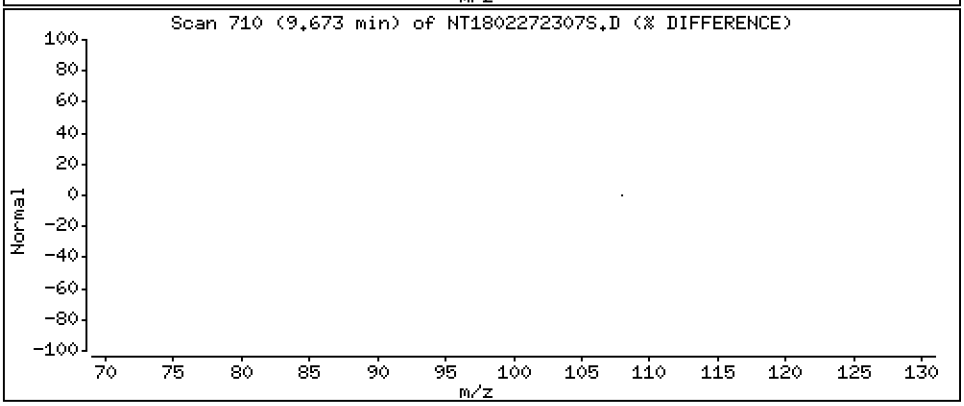












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

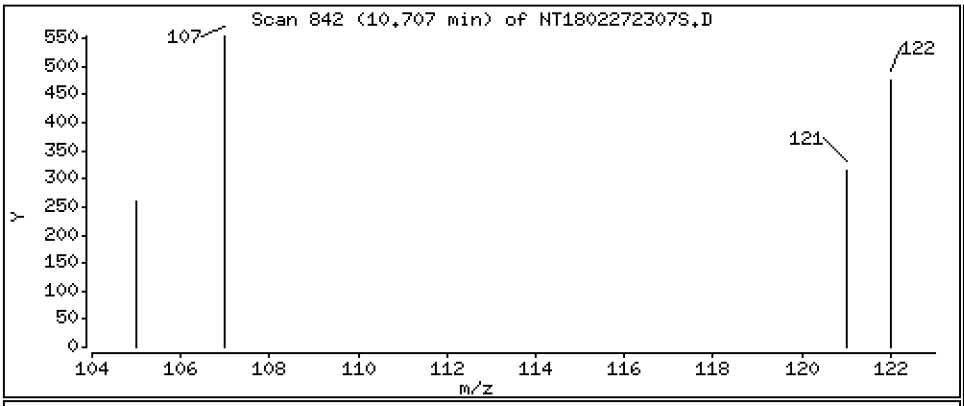
Operator: YZ

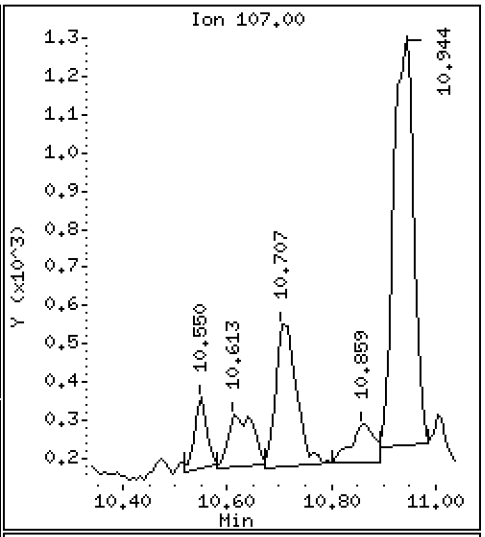
Column phase: ZB-5msi

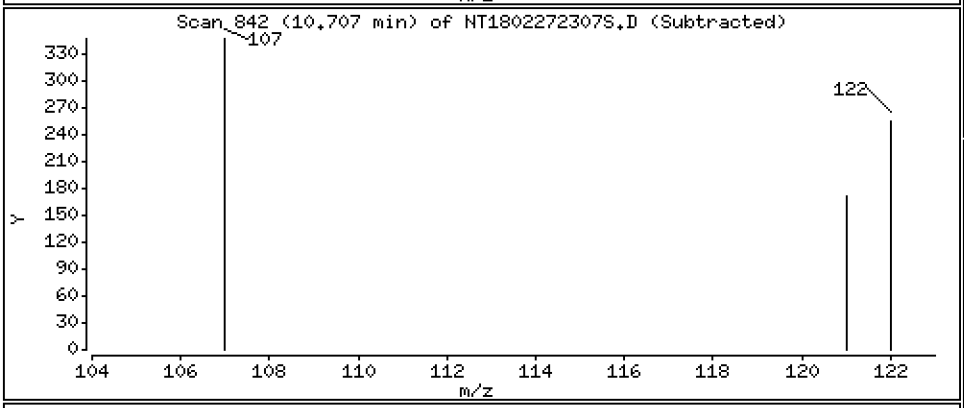
Column diameter: 0.25

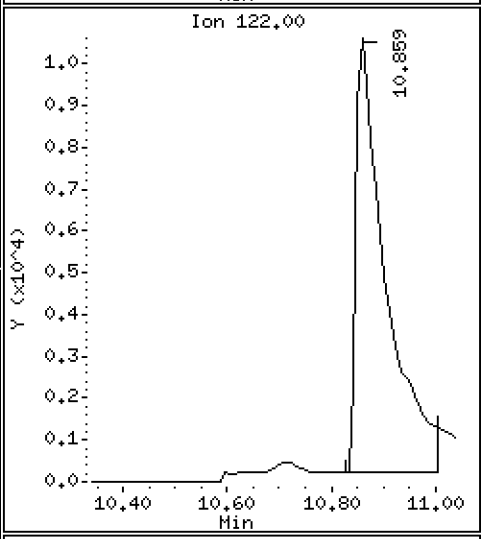
22 2,4-Dimethylphenol

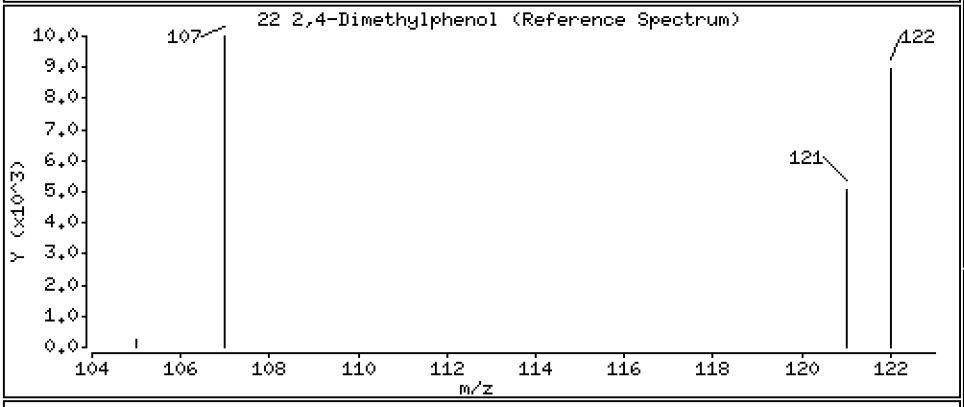
Concentration: 0.01028 ug/mL

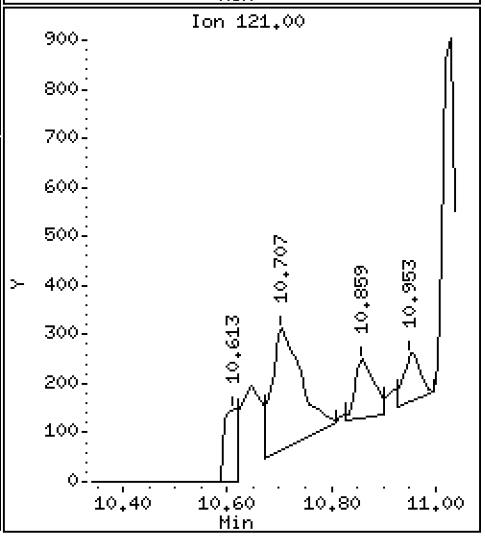


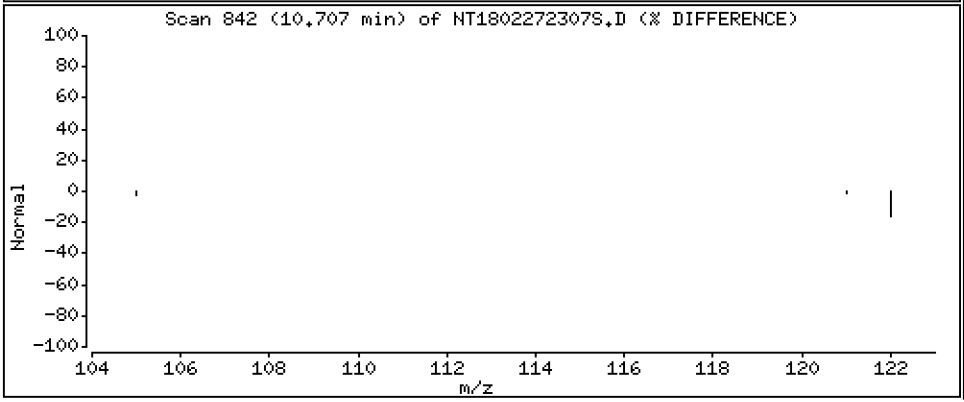












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

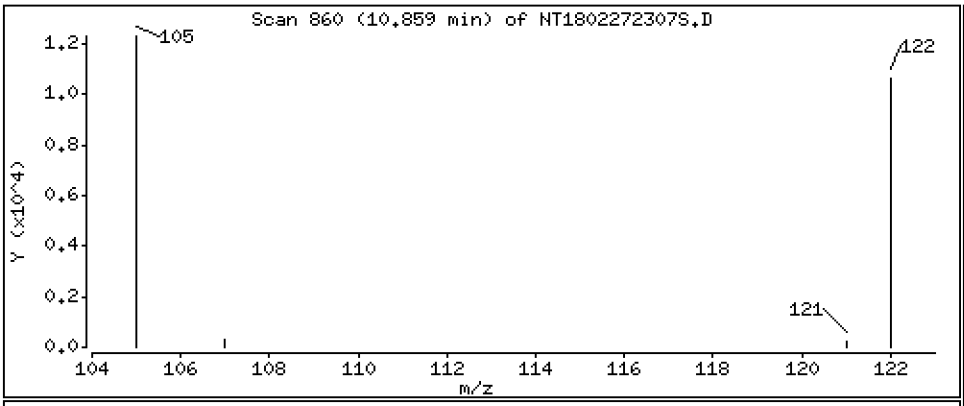
Operator: YZ

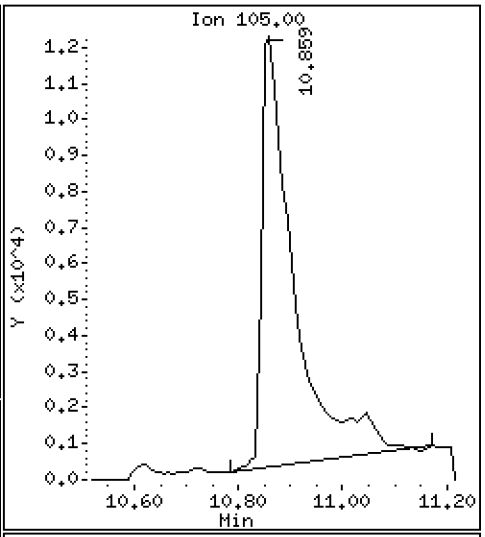
Column phase: ZB-5msi

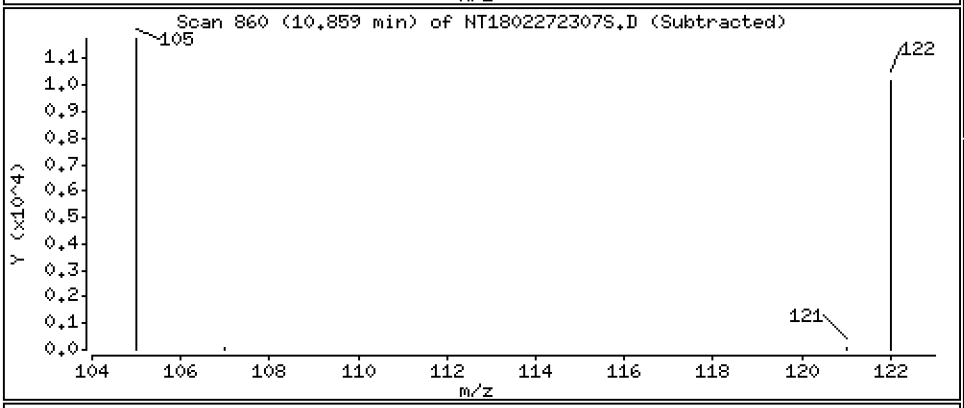
Column diameter: 0.25

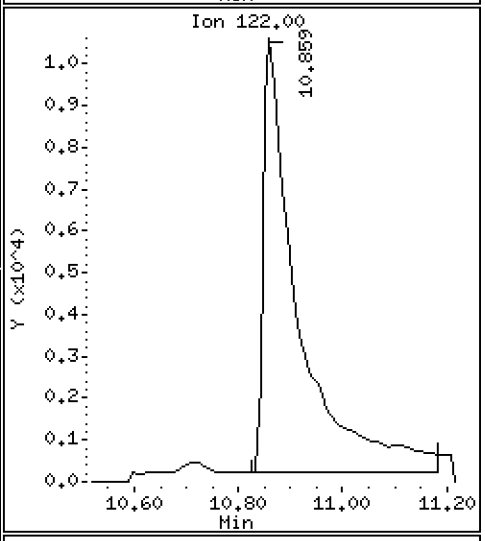
24 Benzoic acid

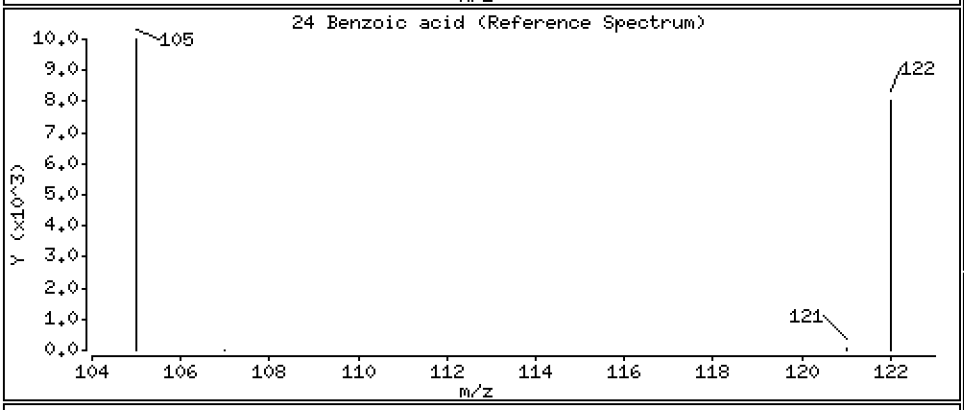
Concentration: 1.257 ug/mL

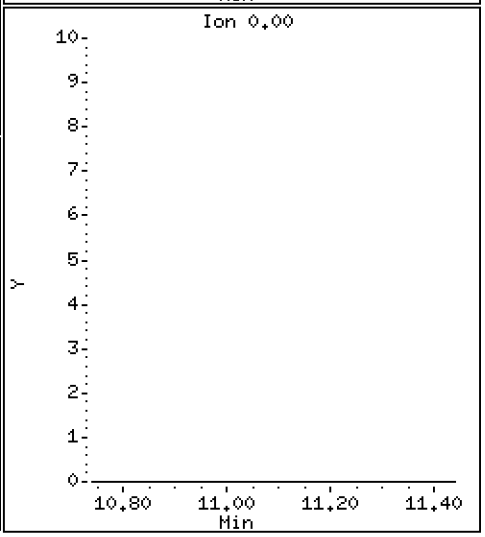


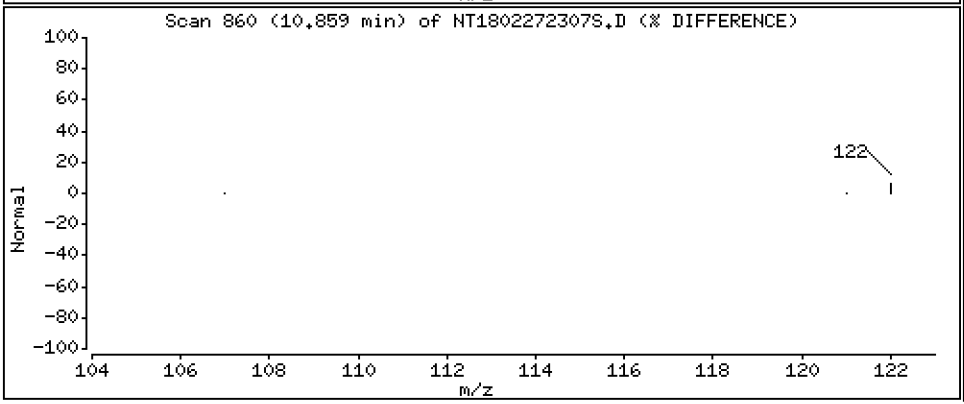












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Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

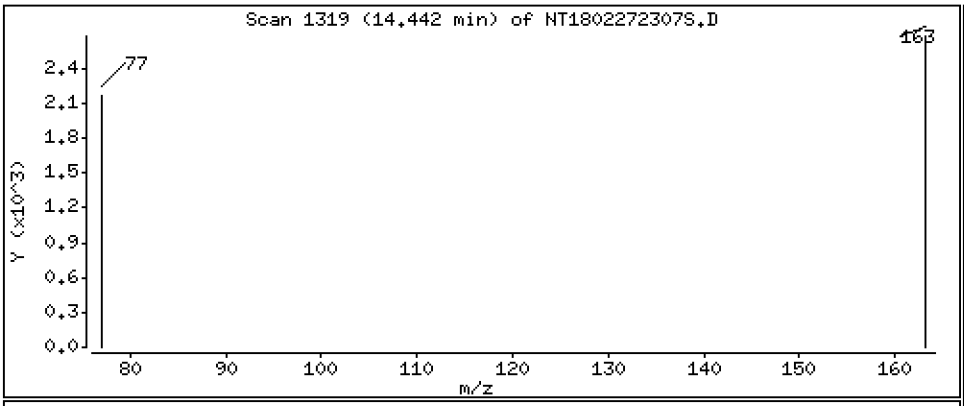
Operator: YZ

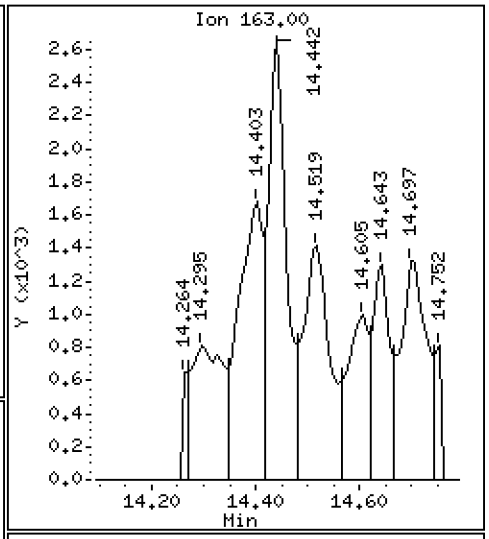
Column phase: ZB-5msi

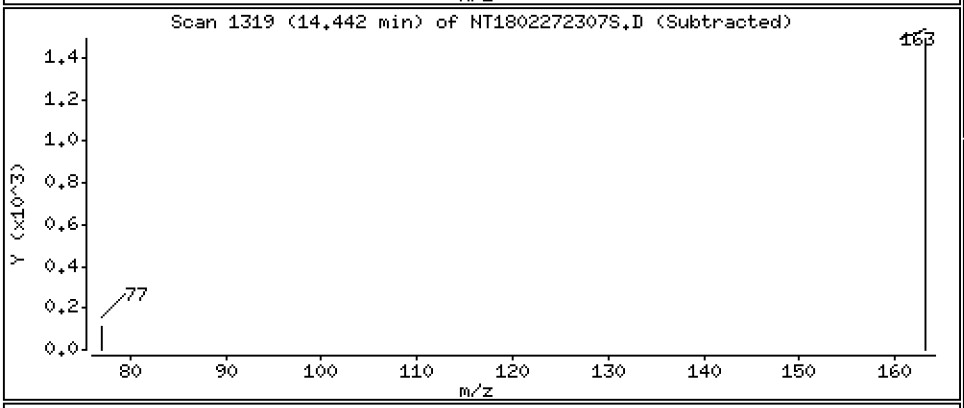
Column diameter: 0.25

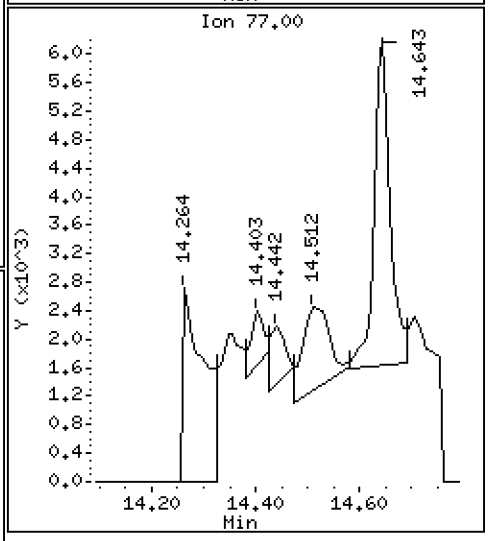
39 Dimethylphthalate

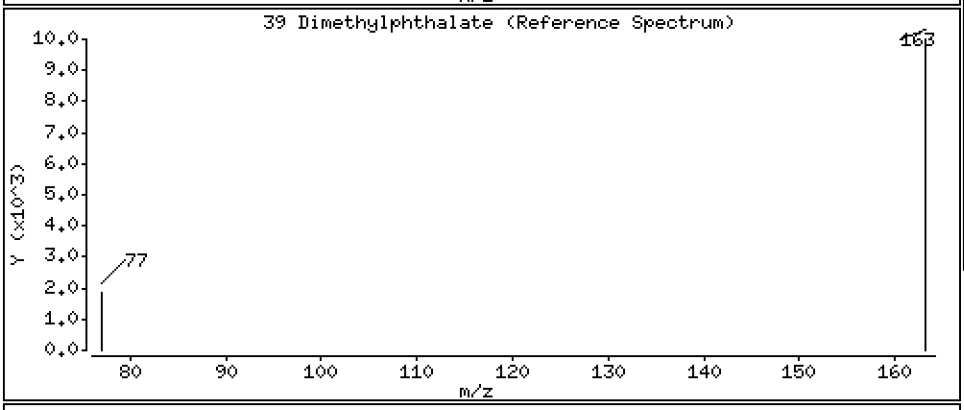
Concentration: 0.02980 ug/mL

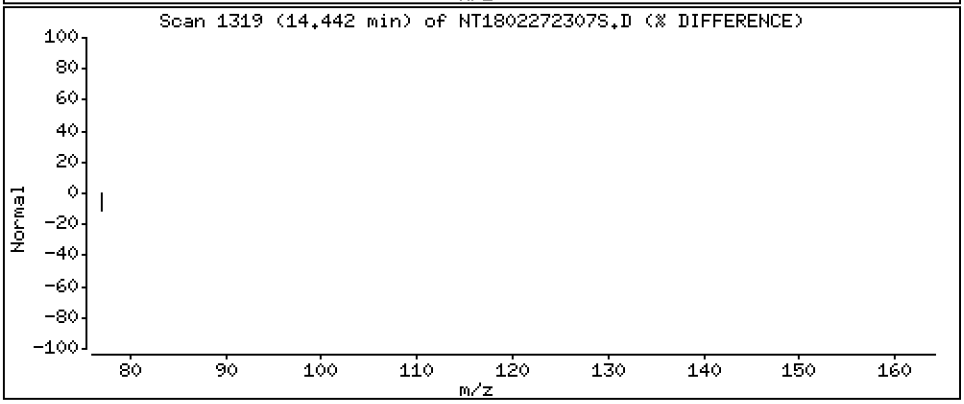












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272307S.D

Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

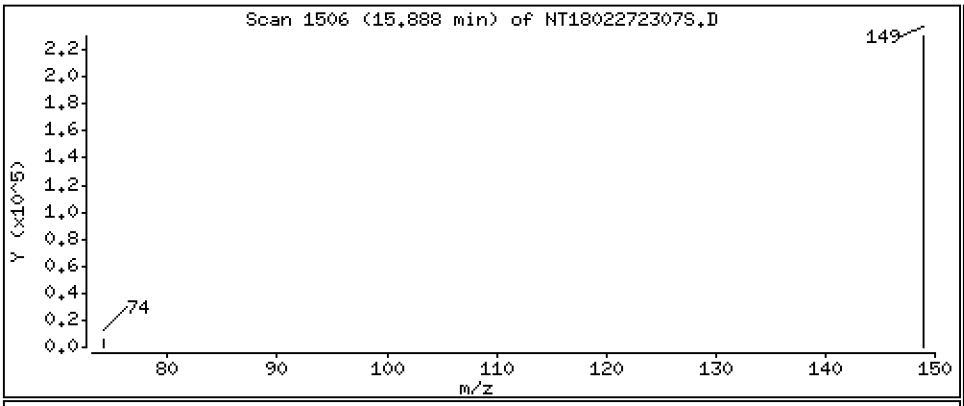
Operator: YZ

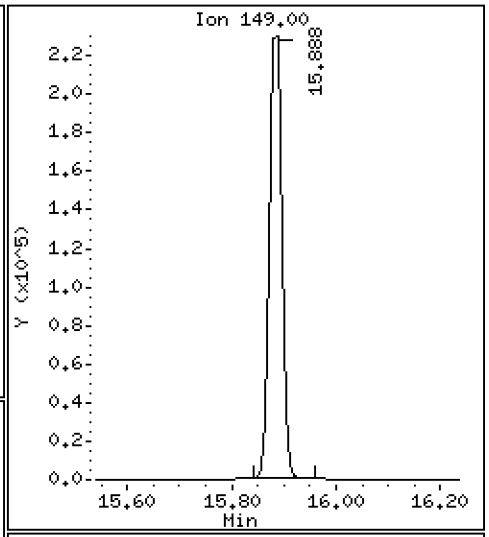
Column phase: ZB-5msi

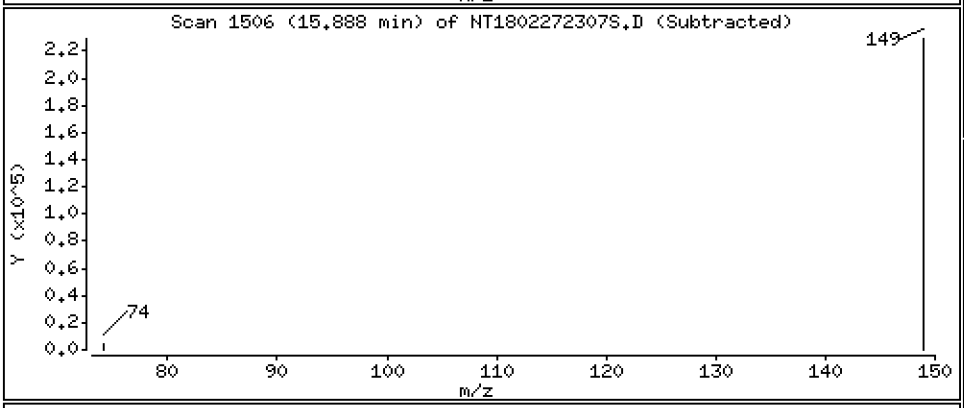
Column diameter: 0.25

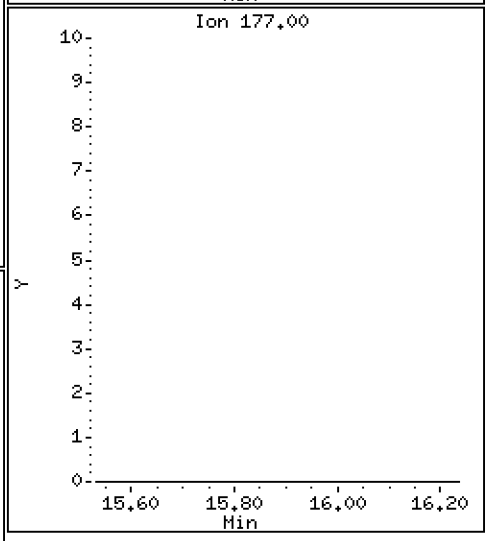
50 Diethylphthalate

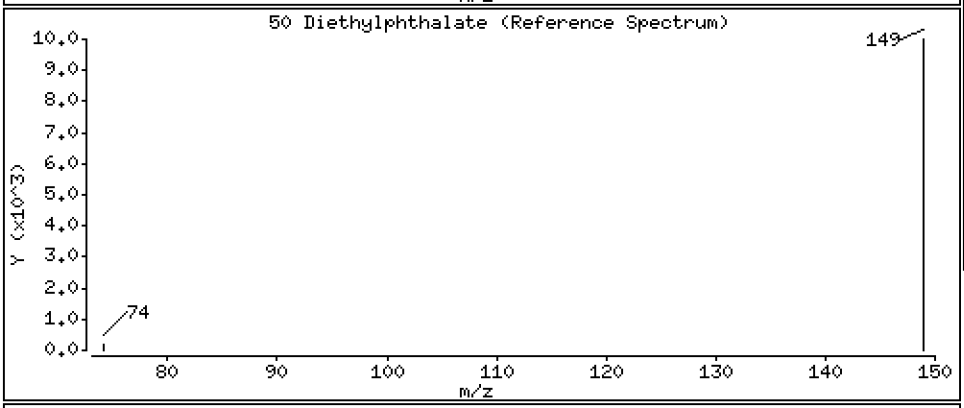
Concentration: 1.759 ug/mL

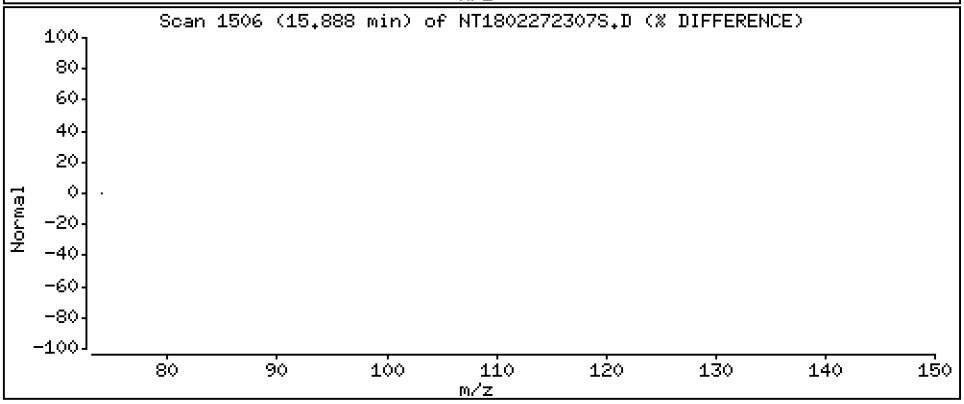












Date : 27-FEB-2023 21:11

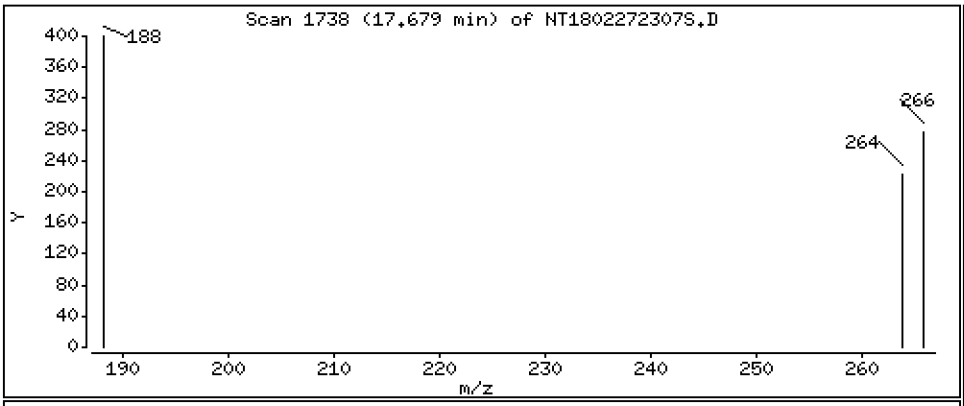
Client ID: Instrument: nt18.i

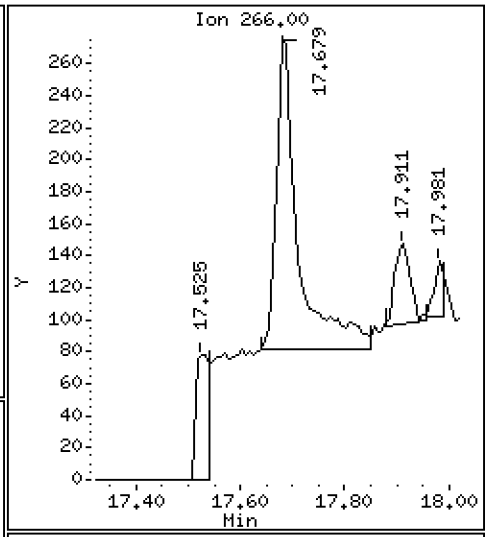
Sample Info: 23A0134-12

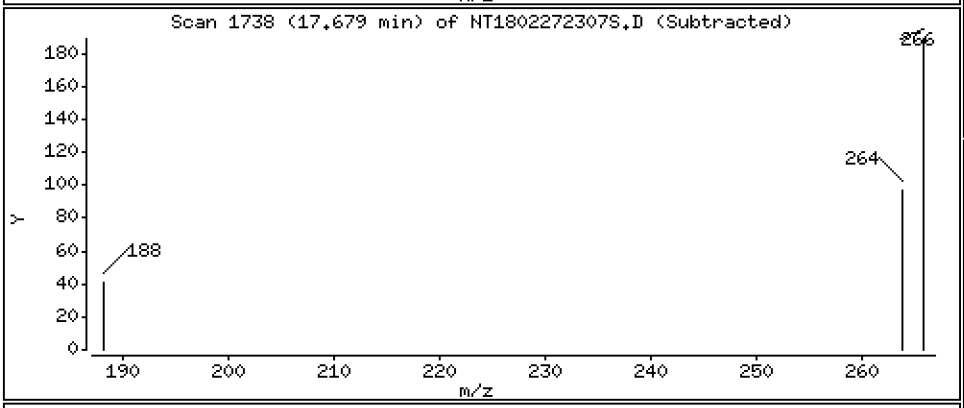
Operator: YZ

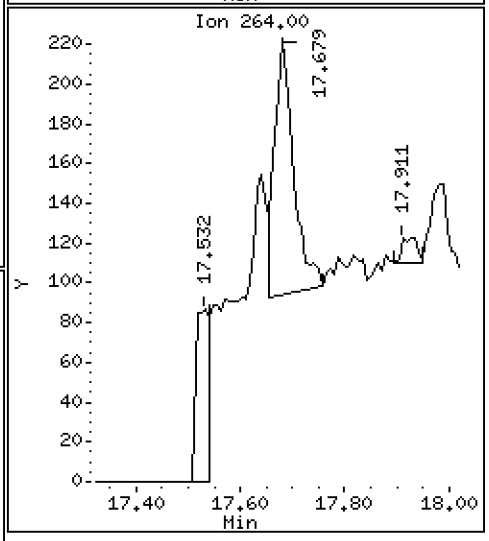
Column phase: ZB-5msi Column diameter: 0.25

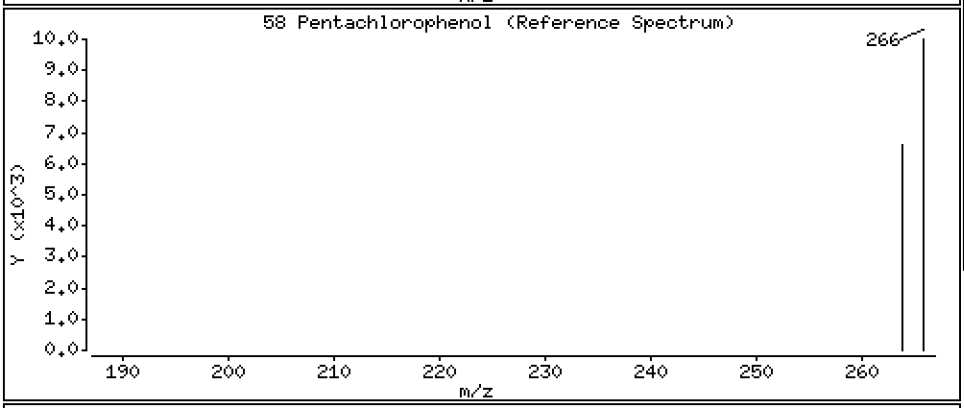
58 Pentachlorophenol Concentration: 0.02342 ug/mL

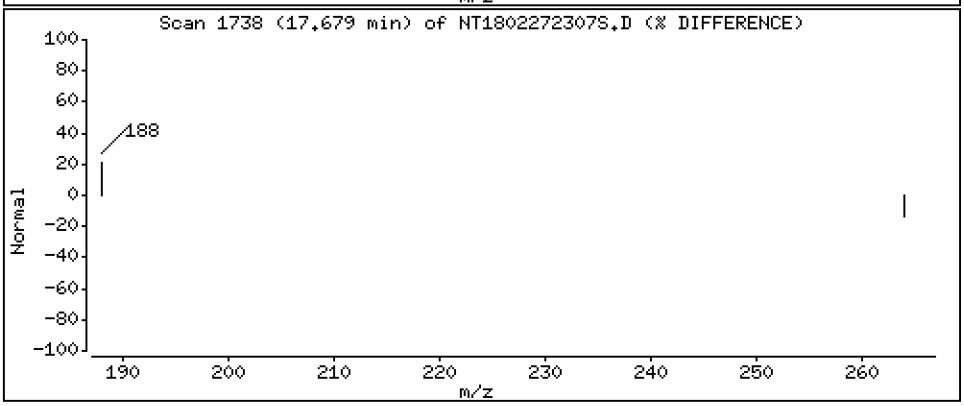












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272307S.D

Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

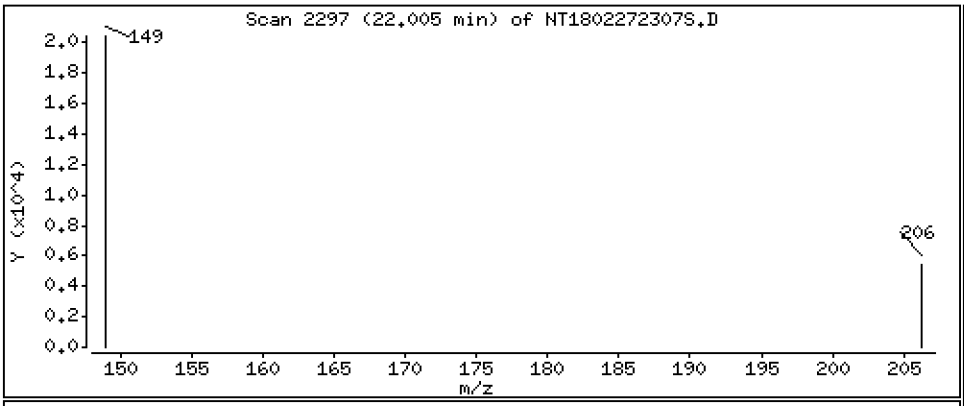
Operator: YZ

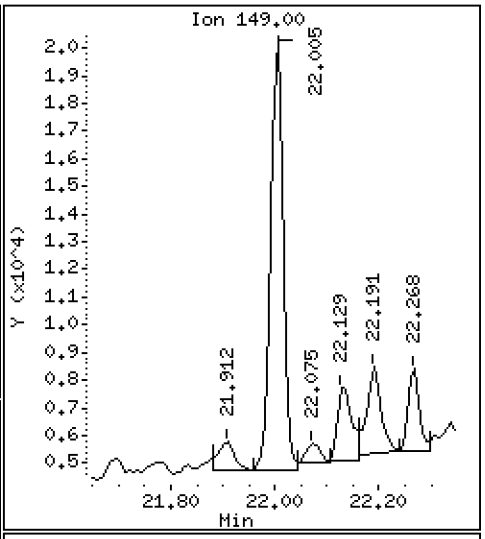
Column phase: ZB-5msi

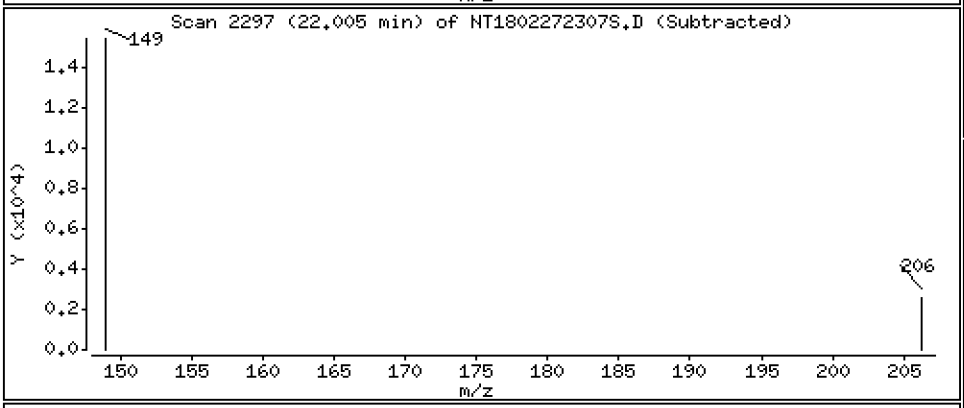
Column diameter: 0.25

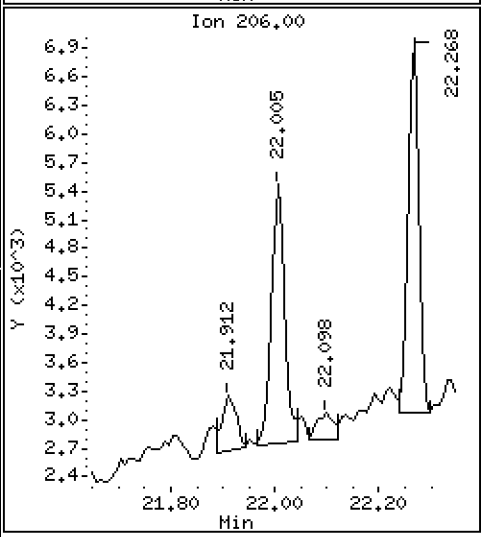
67 Butylbenzylphthalate

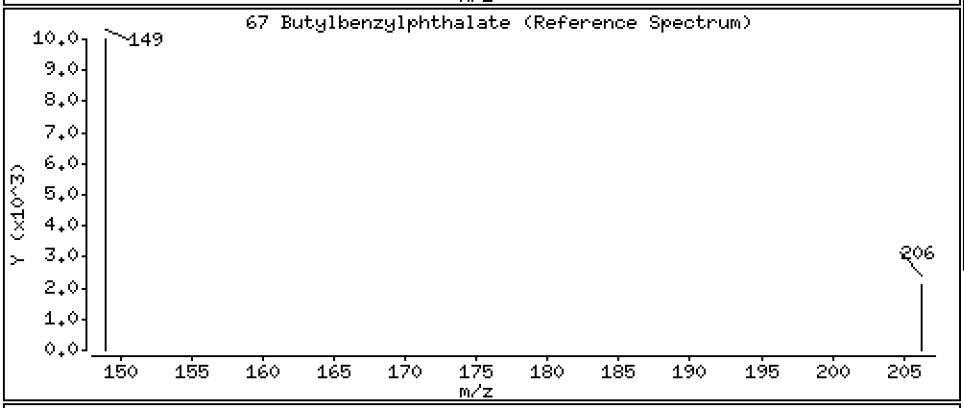
Concentration: 0.1251 ug/mL

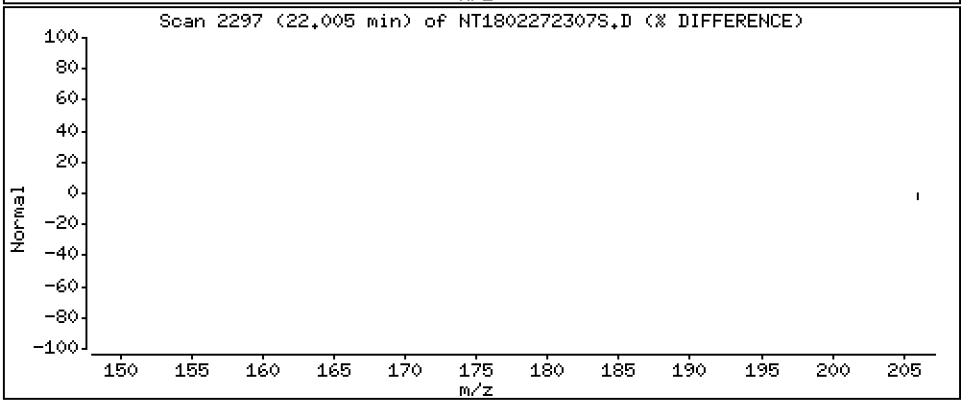












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272307S.D

Date : 27-FEB-2023 21:11

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-12

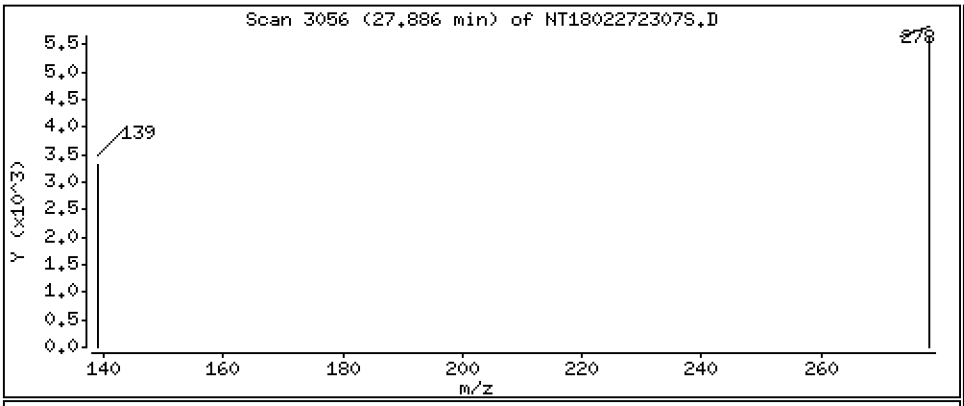
Operator: YZ

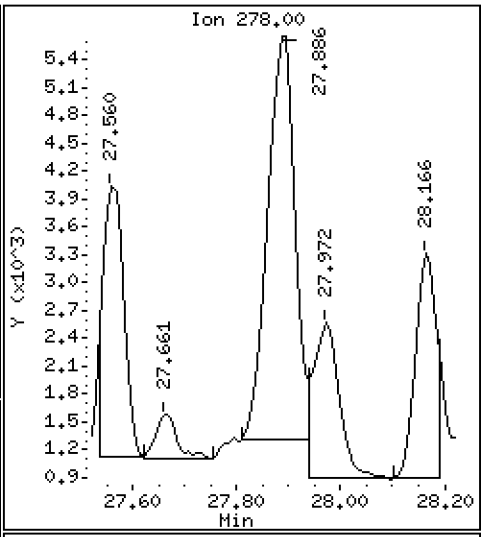
Column phase: ZB-5msi

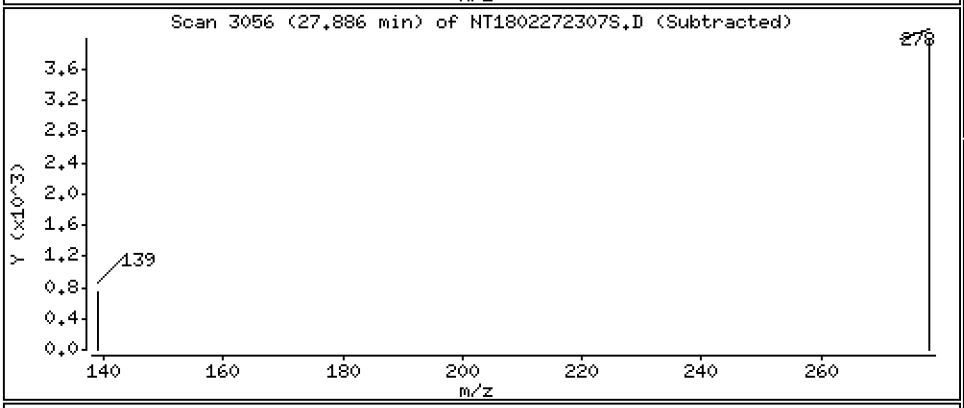
Column diameter: 0.25

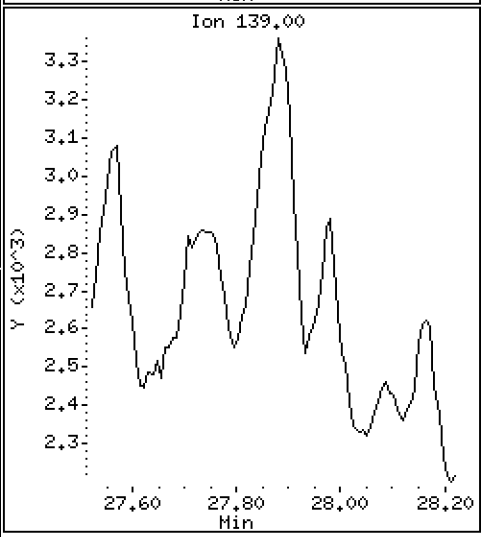
79 Dibenzo(a,h)anthracene

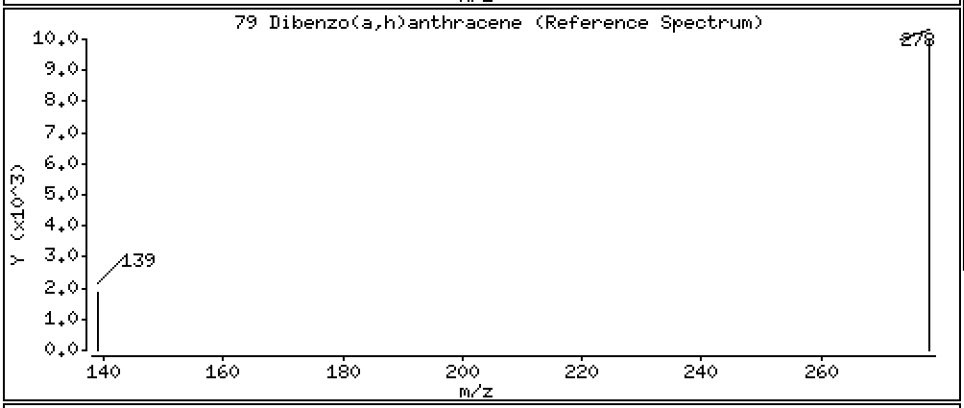
Concentration: 0.04717 ug/mL

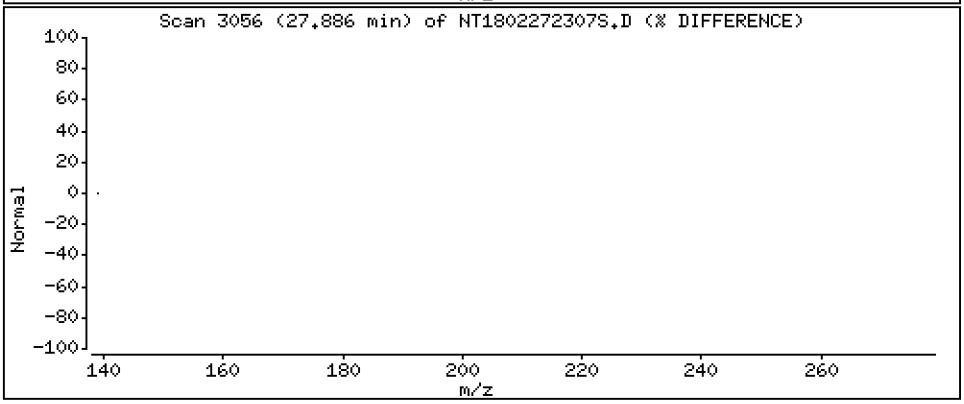












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272307S.D
Lab Smp Id: 23A0134-12
Inj Date : 27-FEB-2023 21:11
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-12
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 13:42 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.748	6.725	(0.759)	548035	5.61194	5.612(R)
	3	Phenol	94	8.316	8.301	(0.935)	134578	1.05638	1.056
	7	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8	1,4-Dichlorobenzene-d4	152	8.896	8.896	(1.000)	302571	4.00000	
	9	1,4-Dichlorobenzene	146	Compound Not Detected.					
	11	Benzyl alcohol	79	9.129	9.168	(1.026)	28410	0.34785	0.3478
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	13	2-Methylphenol	108	Compound Not Detected.					
	15	4-Methylphenol	108	9.672	9.665	(1.087)	47963	0.45628	0.4563
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	10.706	10.689	(0.944)	1029	0.01028	0.01028
	24	Benzoic acid	105	10.859	10.868	(0.957)	50862	1.25685	1.257(M)
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.347	11.347	(1.000)	1121830	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	14.441	14.442	(0.968)	6625	0.02980	0.02980
*	42	Acenaphthene-d10	162	14.921	14.921	(1.000)	578626	4.00000	
	50	Diethylphthalate	149	15.888	15.888	(1.065)	357271	1.75876	1.759
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	17.679	17.671	(0.986)	567	0.02342	0.02342
*	59	Phenanthrene-d10	188	17.926	17.927	(1.000)	1190397	4.00000	
$	66	Terphenyl-d14	244	21.083	21.068	(0.918)	769663	3.62139	3.621(R)
	67	Butylbenzylphthalate	149	22.005	21.997	(0.958)	24300	0.12507	0.1251
*	69	Chrysene-d12	240	22.965	22.957	(1.000)	1173751	4.00000	
*	77	Perylene-d12	264	25.458	25.442	(1.000)	1131971	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.886	27.871	(1.095)	15866	0.04717	0.04717
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272307S.D
Lab Smp Id: 23A0134-12
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	334128	167064	668256	302571	-9.44
27 Naphthalene-d8	1260796	630398	2521592	1121830	-11.02
42 Acenaphthene-d10	648152	324076	1296304	578626	-10.73
59 Phenanthrene-d10	1231995	615998	2463990	1190397	-3.38
69 Chrysene-d12	1126974	563487	2253948	1173751	4.15
77 Perylene-d12	1243668	621834	2487336	1131971	-8.98

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.35	10.85	11.85	11.35	-0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.92	-0.00
59 Phenanthrene-d10	17.93	17.43	18.43	17.93	-0.00
69 Chrysene-d12	22.96	22.46	23.46	22.97	0.03
77 Perylene-d12	25.44	24.94	25.94	25.46	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272307S.D

Lab ID: 23A0134-12
nt18.i, 20230227.b\SIM.b\SIMABN2.m,   27-FEB-2023 21:11

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1802272303S.D

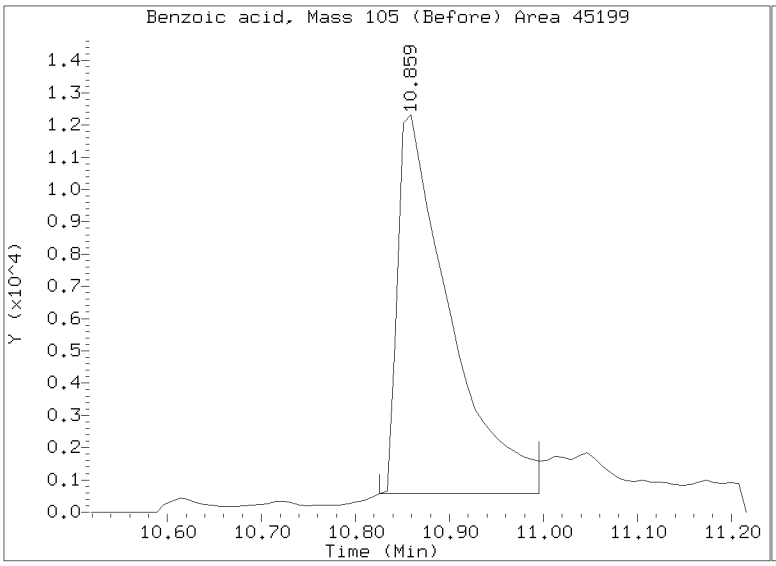
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

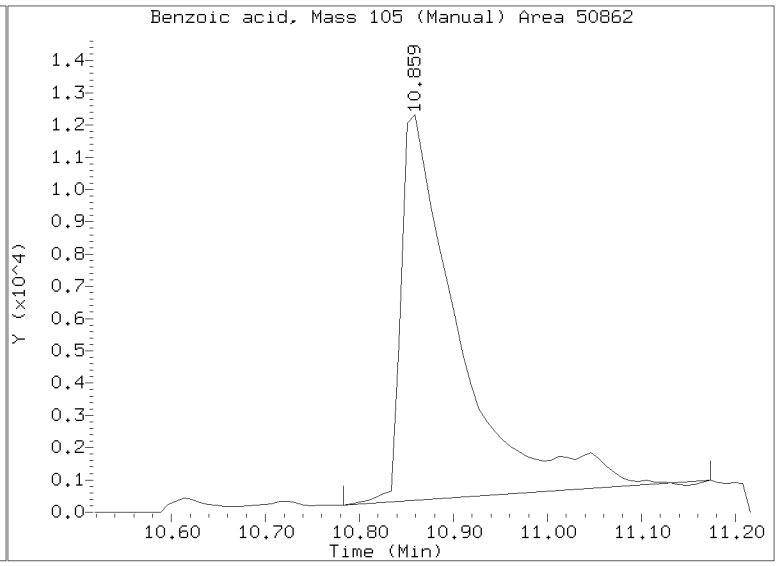
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230227.b/SIM.b/NT1802272307S.D
Injection Date: 27-FEB-2023 21:11
Lab ID:23A0134-12 Client ID:
Report Date: 03/24/2023 13:42





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-IT1210

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-13 C	SDG:	23A0134
Sampled:	01/06/23 14:12	Prepared:	01/19/23 13:35	File ID:	NT1802272308S.D
% Solids:	55.49	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/27/23 21:51
Batch:	BLA0410	Sequence:	SLC0396	Initial/Final:	18.02 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	5.6		0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	2.8	J	0.7	5.0
100-51-6	Benzyl Alcohol	1	39.5		2.5	20.0
65-85-0	Benzoic acid	1	64.6	J	13.4	100
105-67-9	2,4-Dimethylphenol	1	3.5	J	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	5.4	J	2.1	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	750.05	522	69.6	27 - 120	
p-Terphenyl-d14	500.04	363	72.7	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723085.D

Date : 27-FEB-2023 21:51

Client ID:

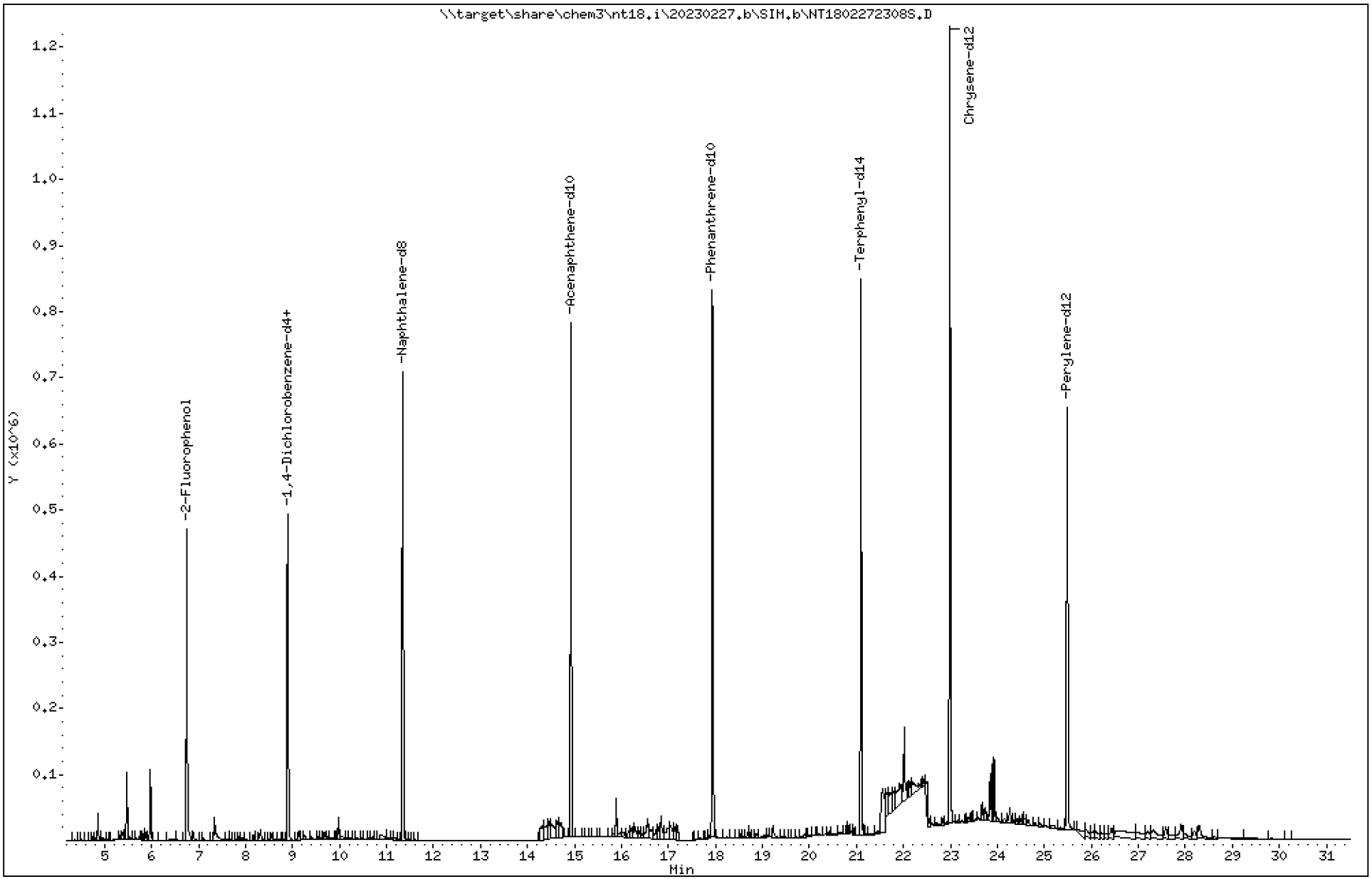
Sample Info: 23A0134-13

Instrument: nt18.i

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

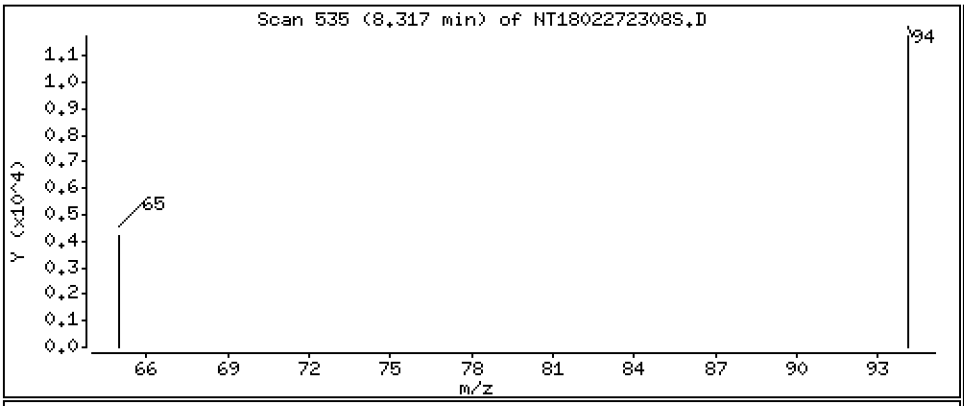
Operator: YZ

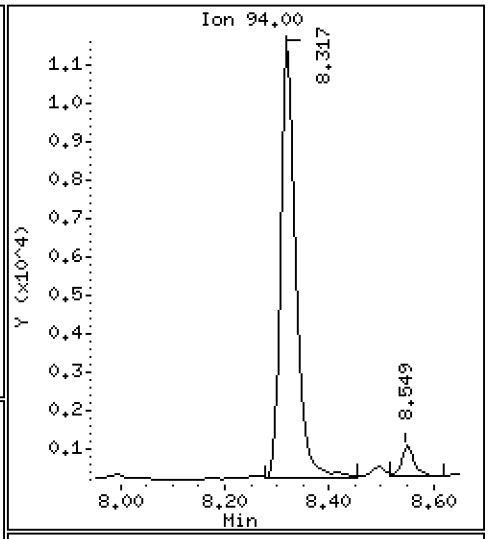
Column phase: ZB-5msi

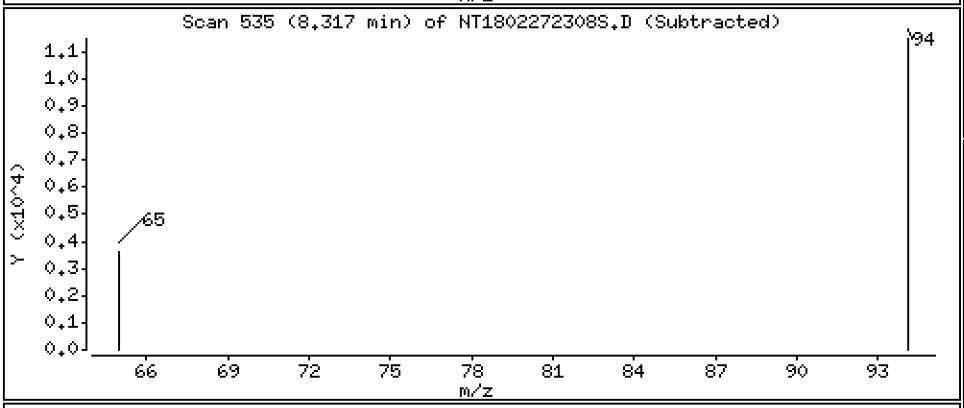
Column diameter: 0.25

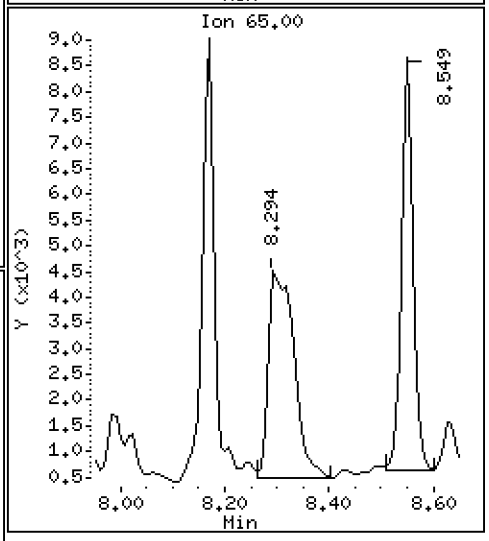
3 Phenol

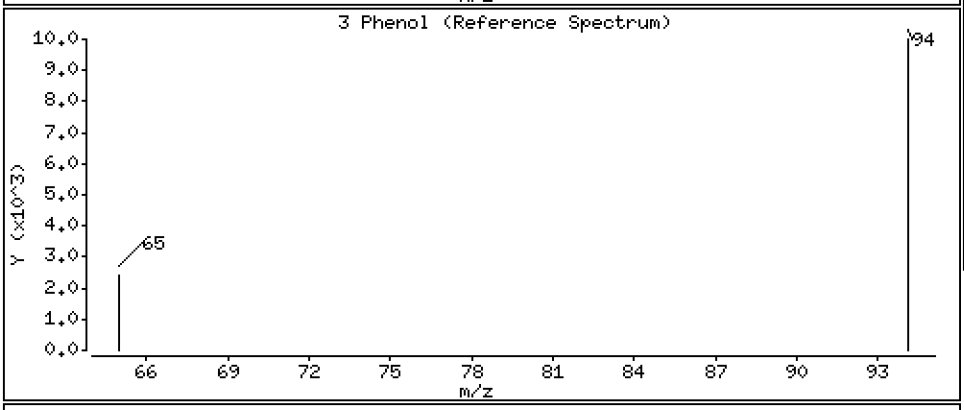
Concentration: 0.1939 ug/mL

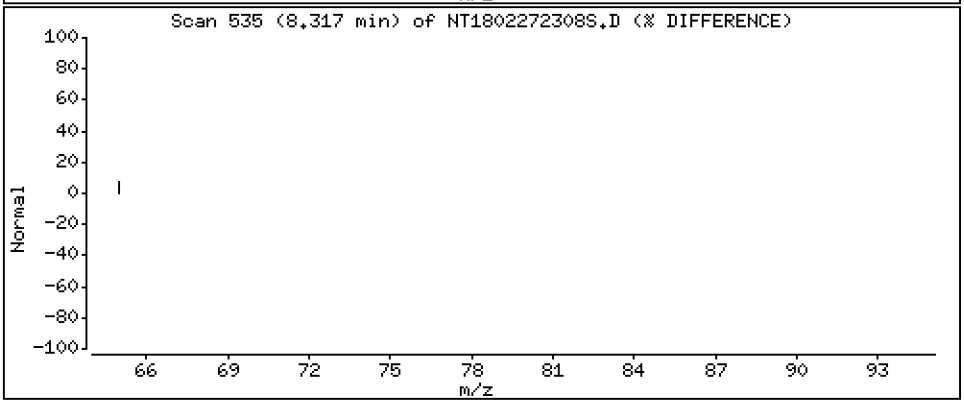












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272308S.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

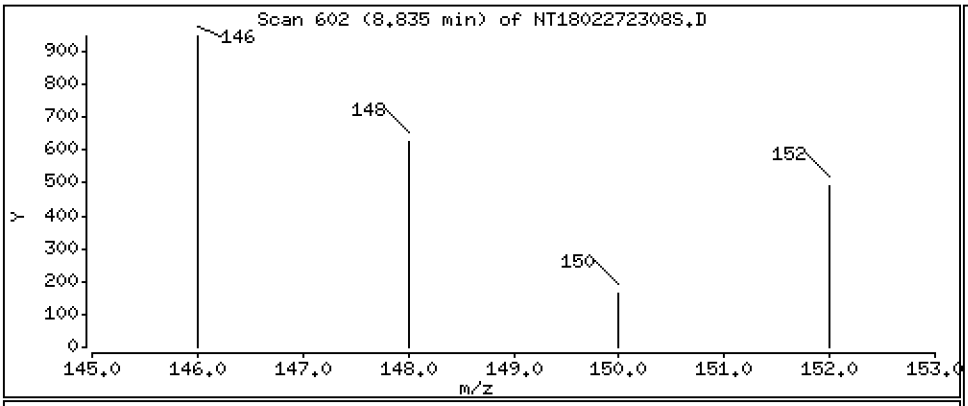
Operator: YZ

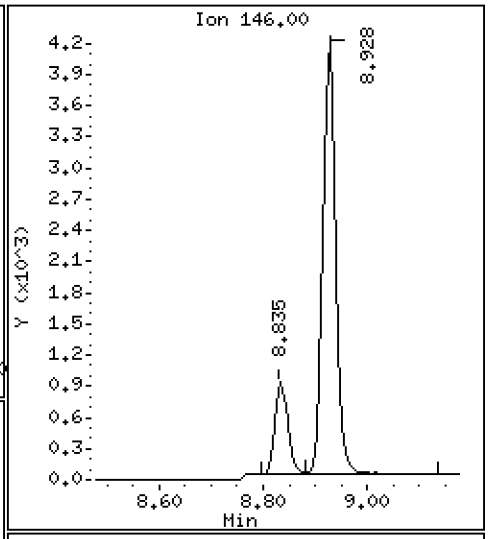
Column phase: ZB-5msi

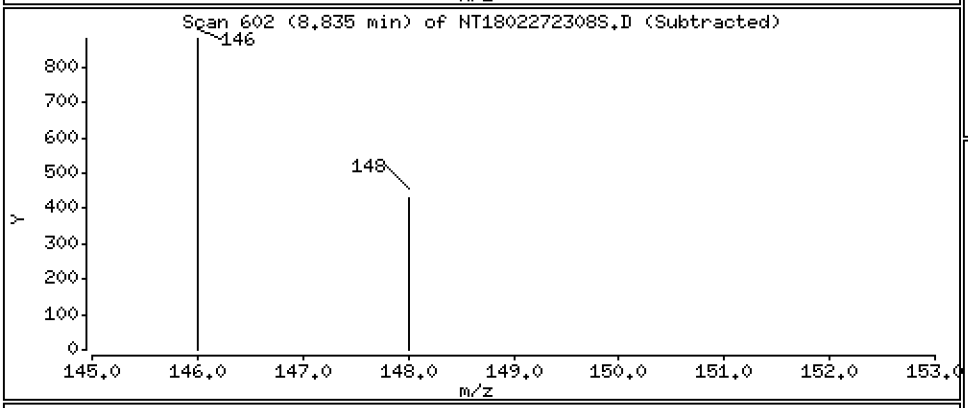
Column diameter: 0.25

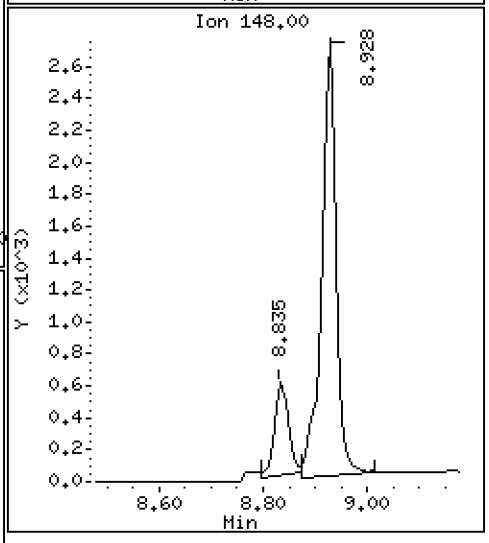
7 1,3-Dichlorobenzene

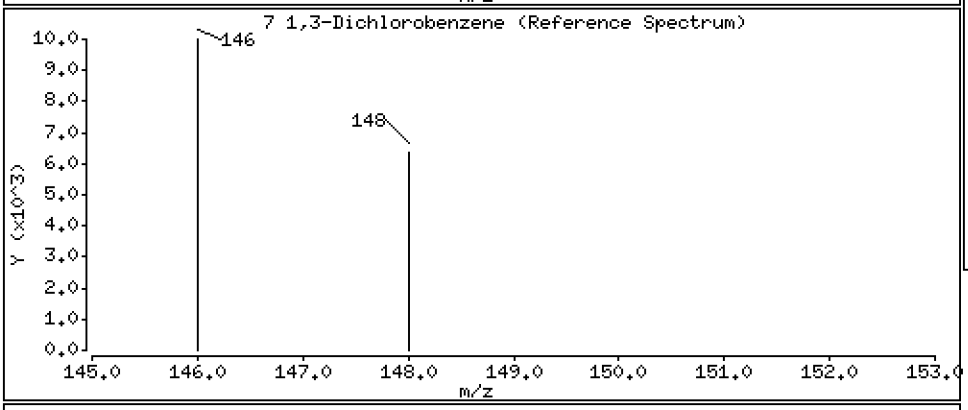
Concentration: 0.01214 ug/mL

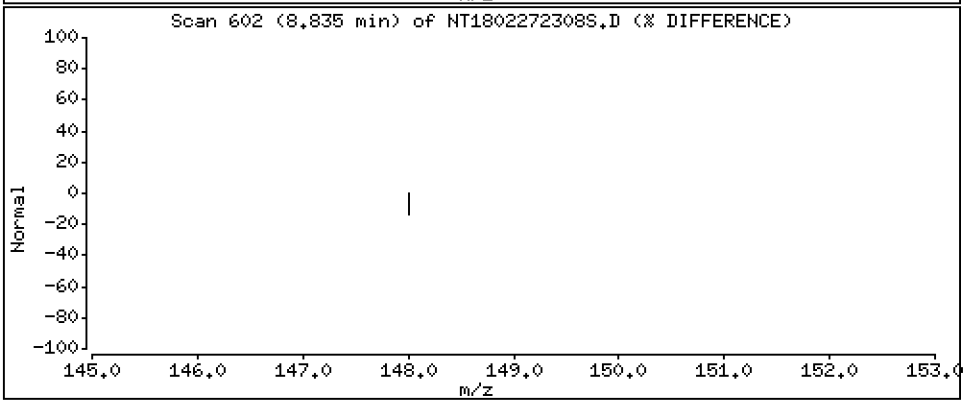












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272308S.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

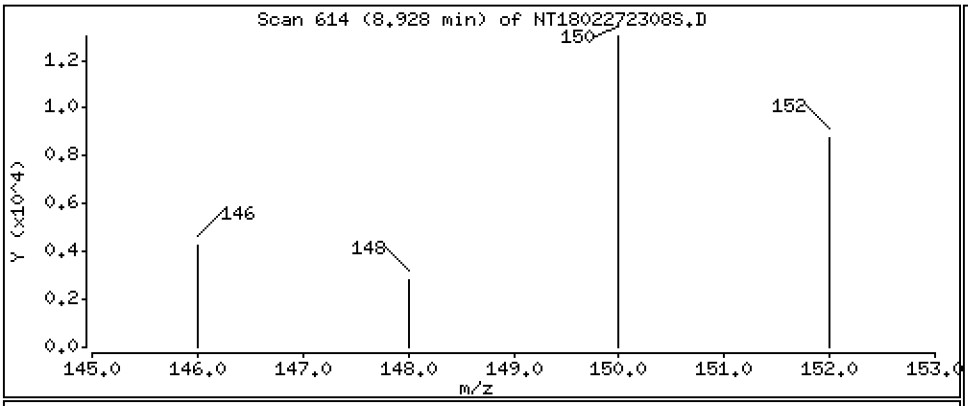
Operator: YZ

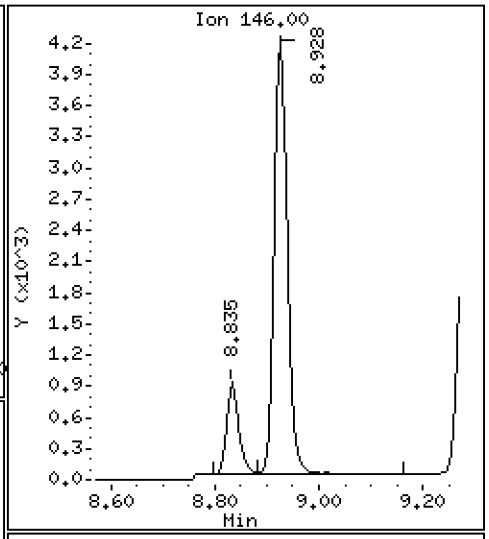
Column phase: ZB-5msi

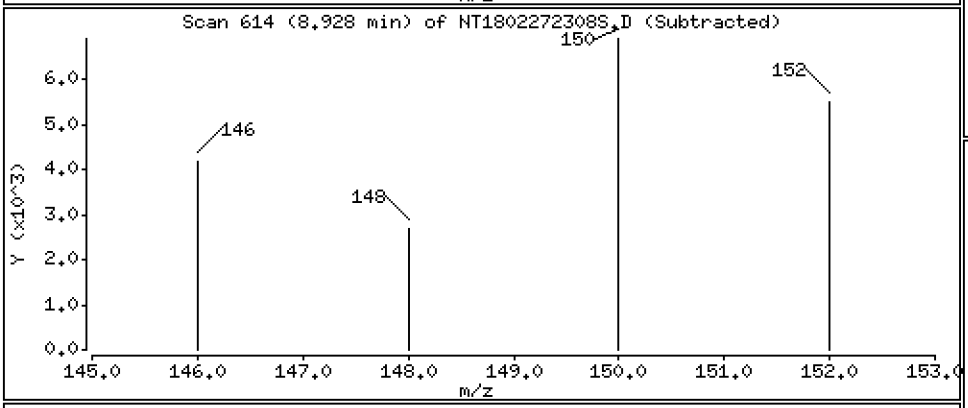
Column diameter: 0.25

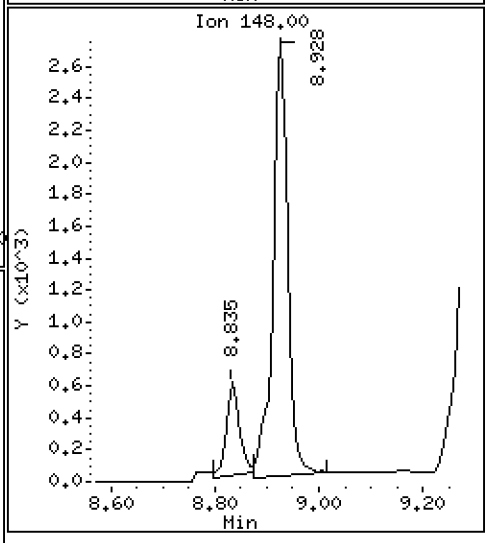
9 1,4-Dichlorobenzene

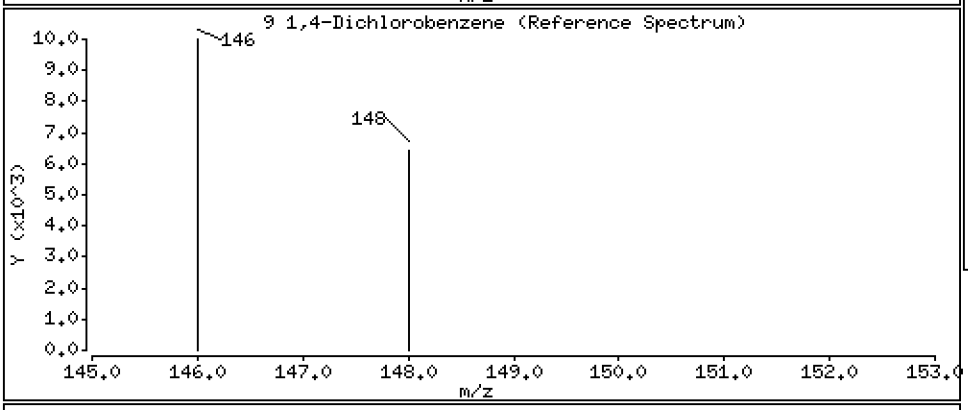
Concentration: 0.05575 ug/mL

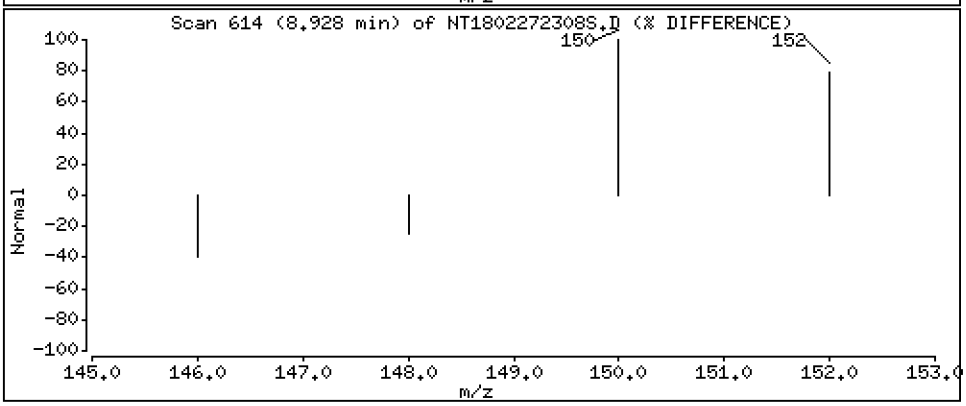












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723085.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

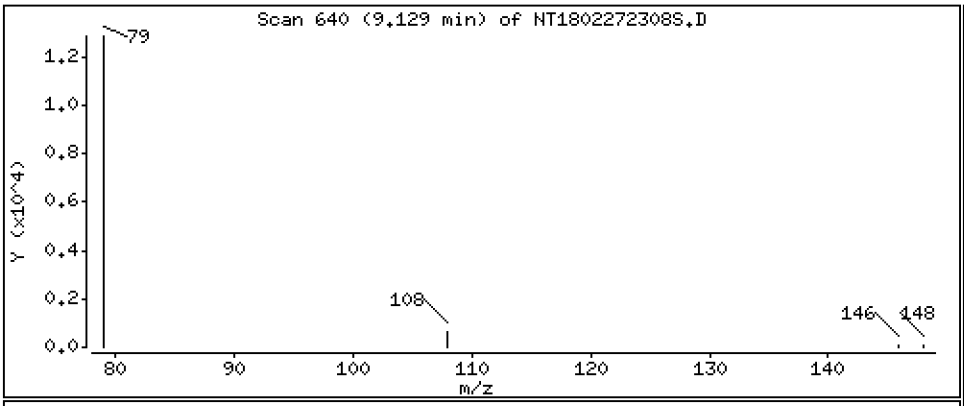
Operator: YZ

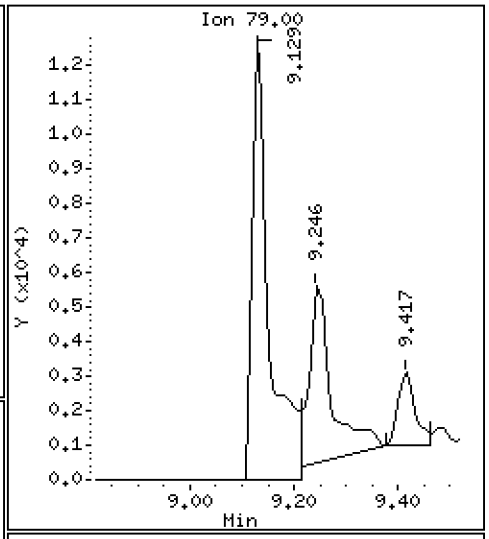
Column phase: ZB-5msi

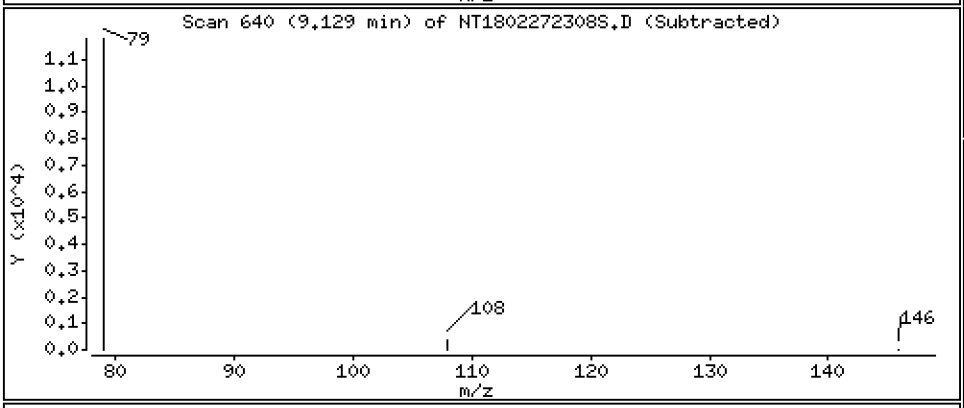
Column diameter: 0.25

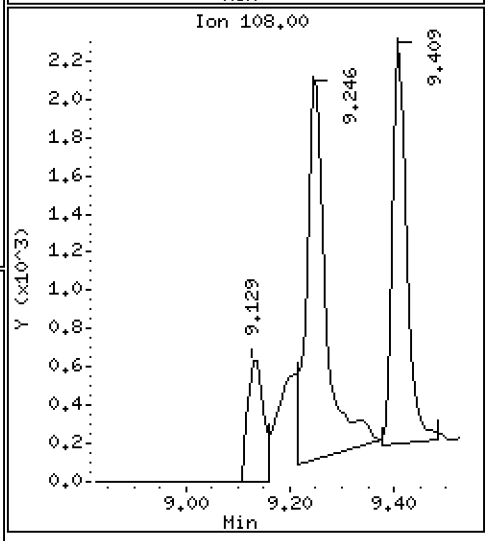
11 Benzyl alcohol

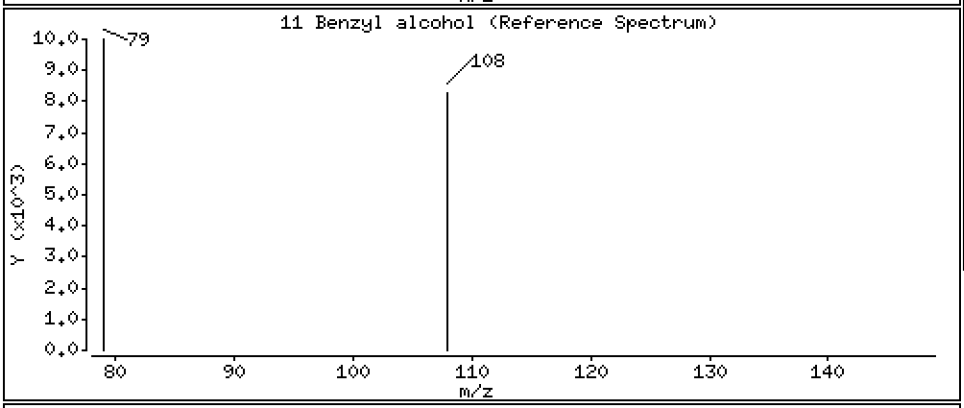
Concentration: 0.3947 ug/mL

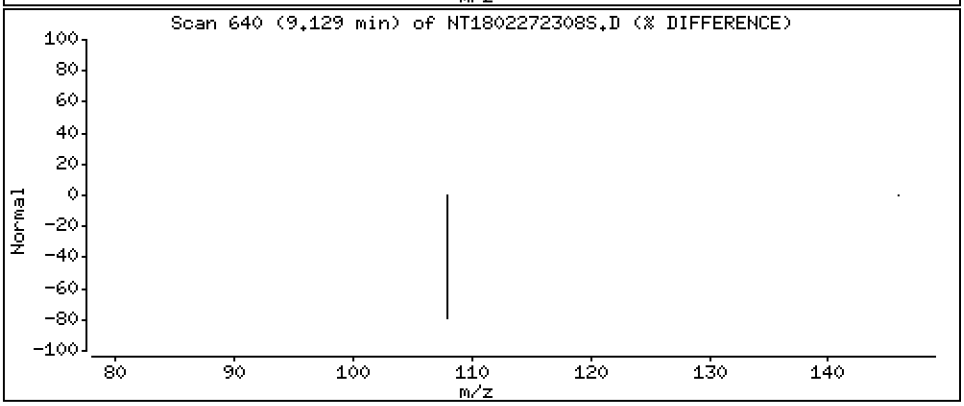












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723085.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

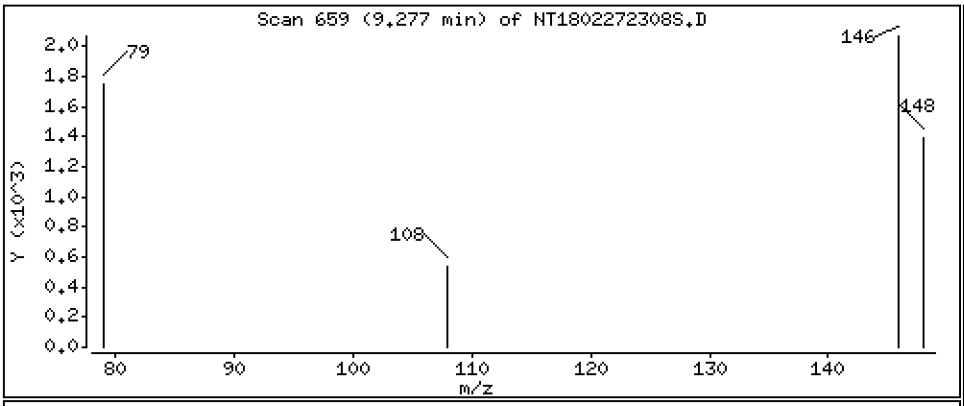
Operator: YZ

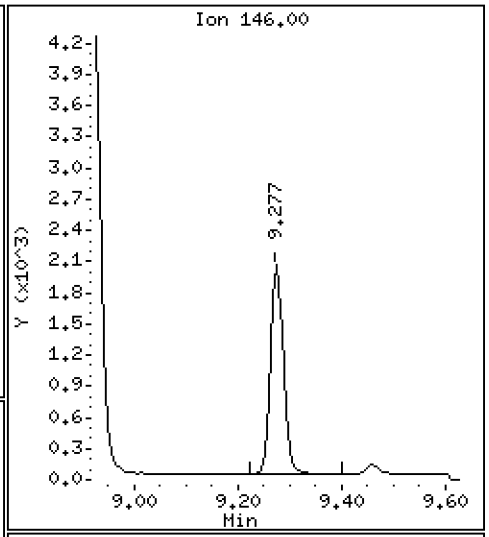
Column phase: ZB-5msi

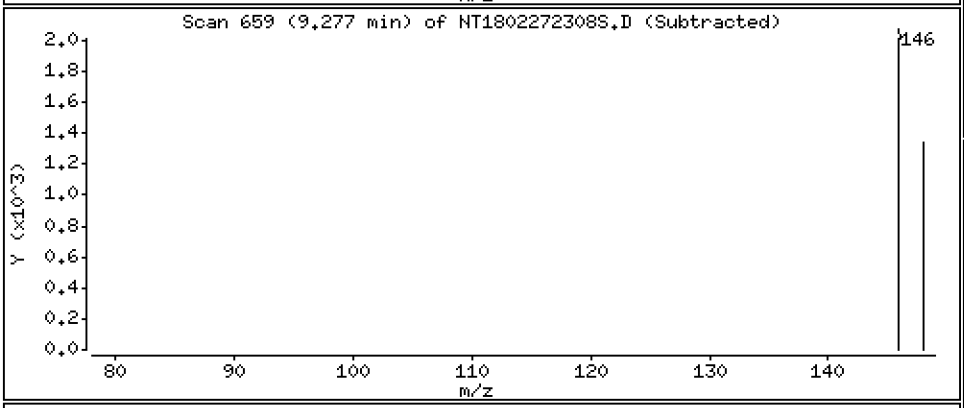
Column diameter: 0.25

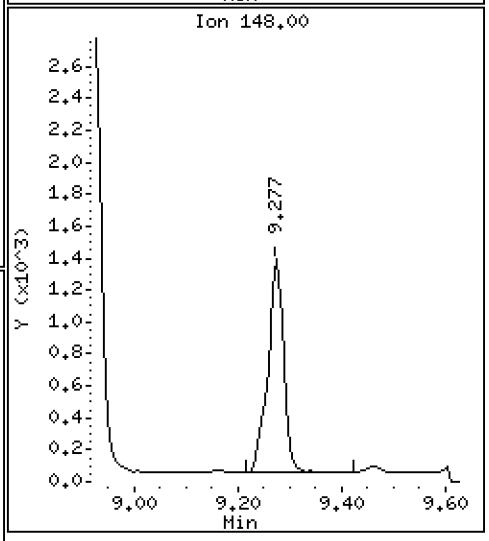
12 1,2-Dichlorobenzene

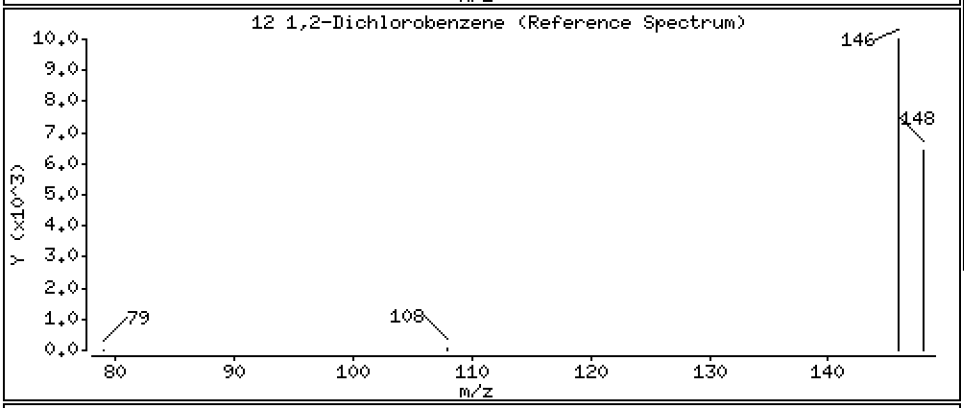
Concentration: 0.02764 ug/mL

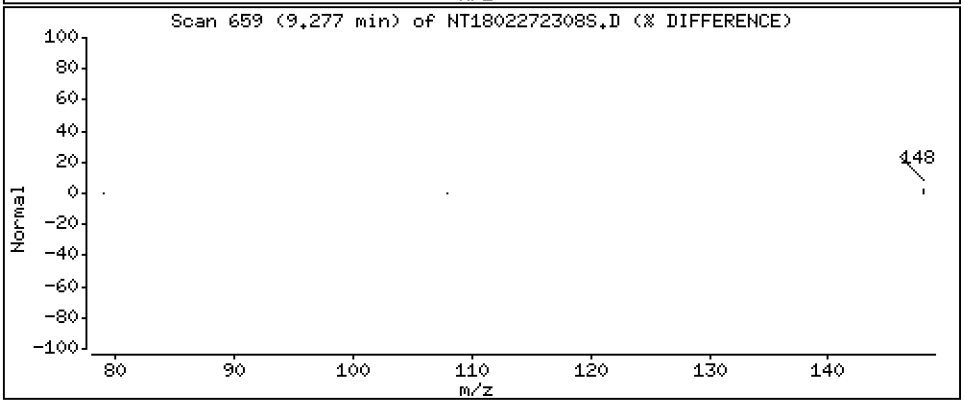












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

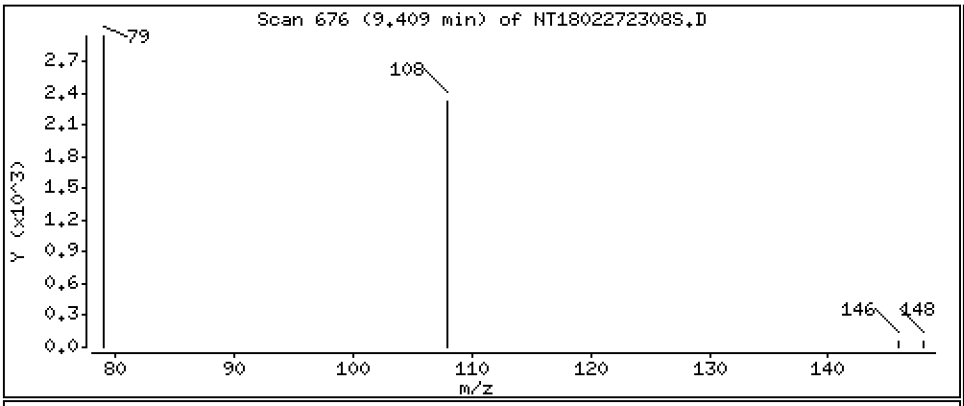
Operator: YZ

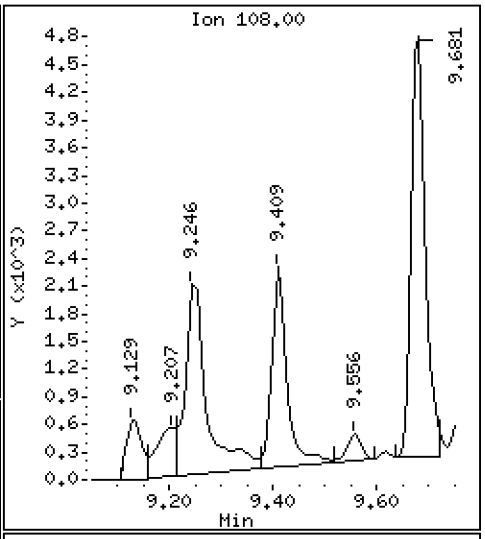
Column phase: ZB-5msi

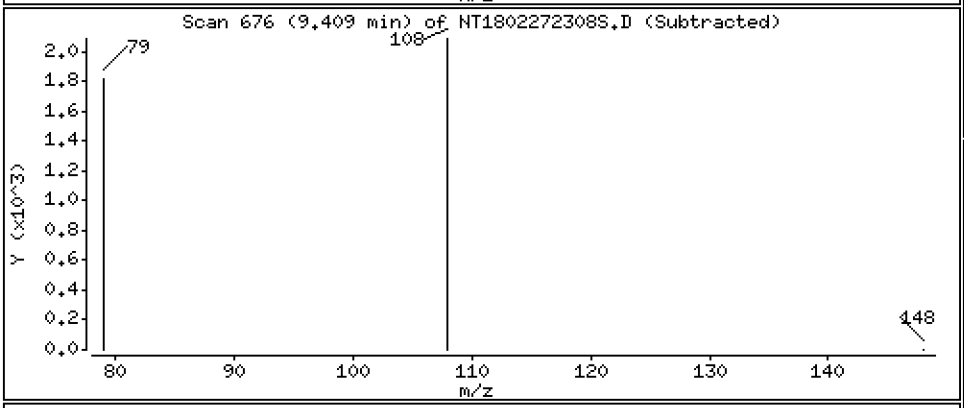
Column diameter: 0.25

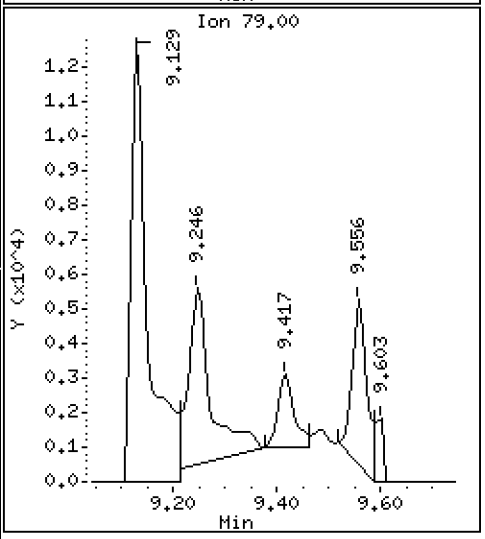
13 2-Methylphenol

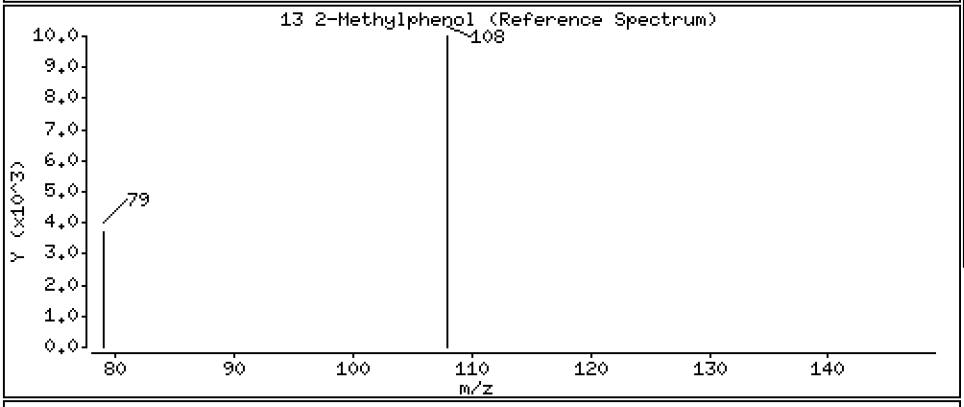
Concentration: 0.04351 ug/mL

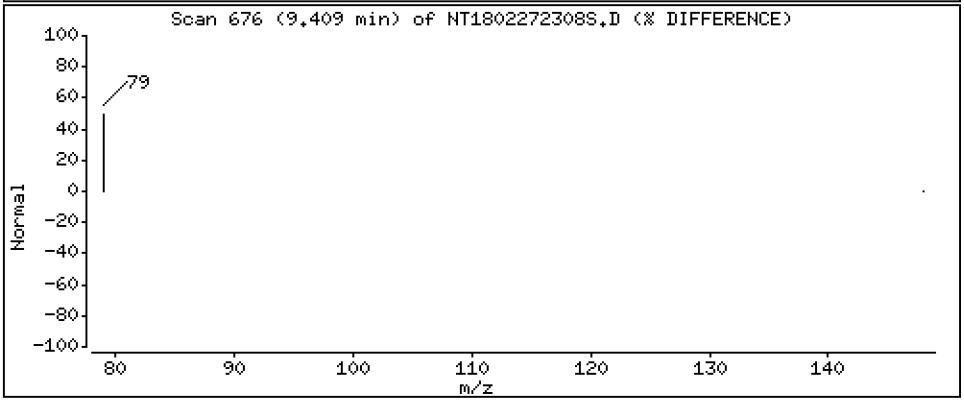












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272308S.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

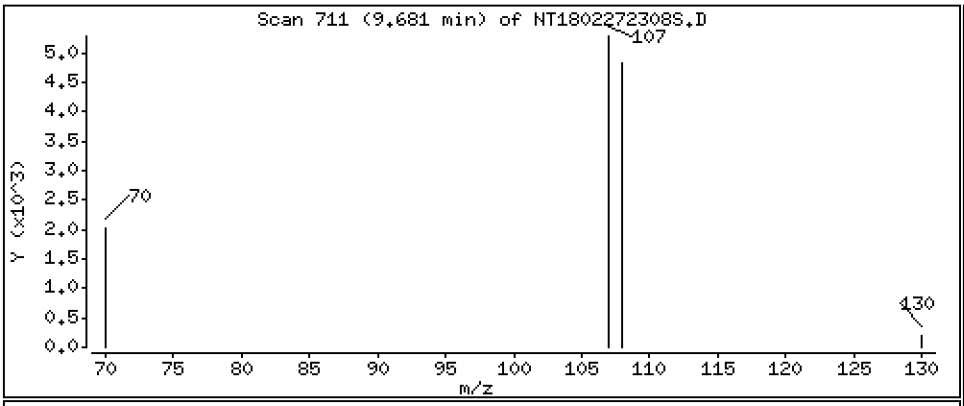
Operator: YZ

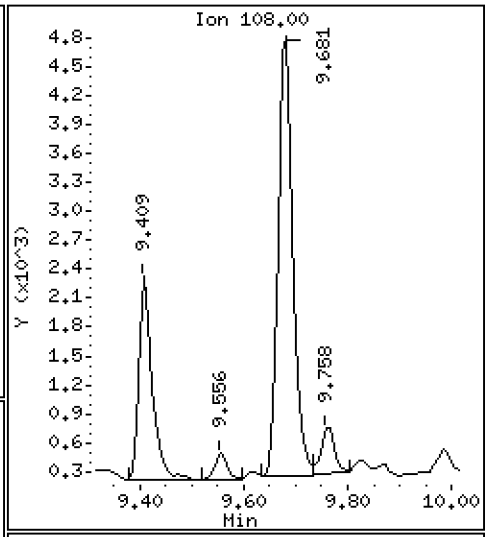
Column phase: ZB-5msi

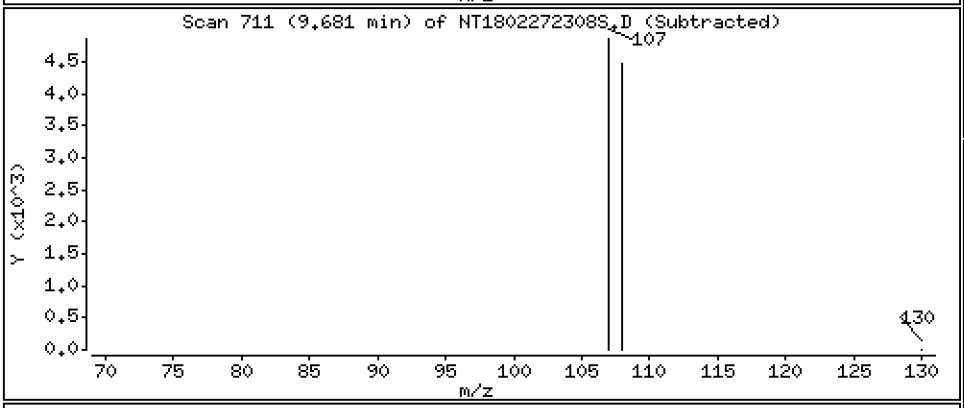
Column diameter: 0.25

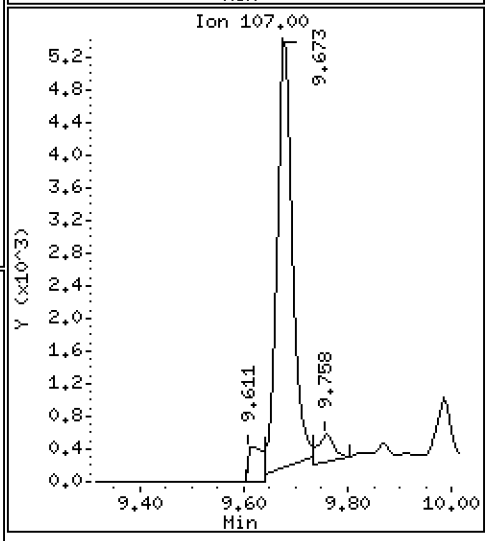
15 4-Methylphenol

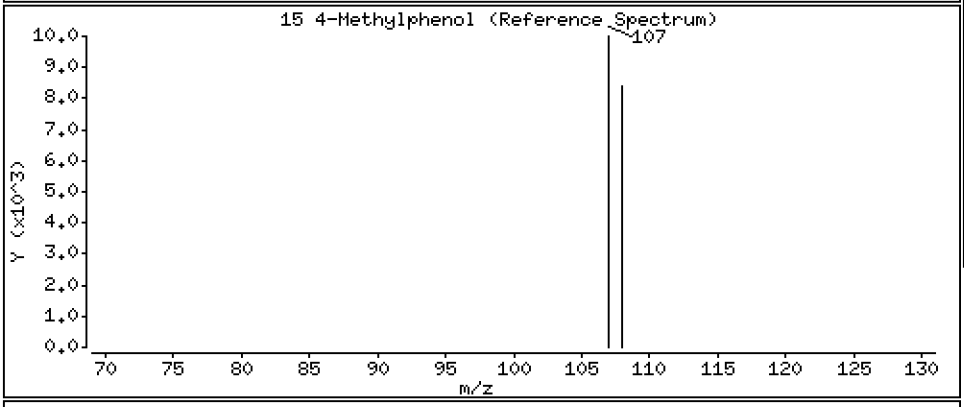
Concentration: 0.09134 ug/mL

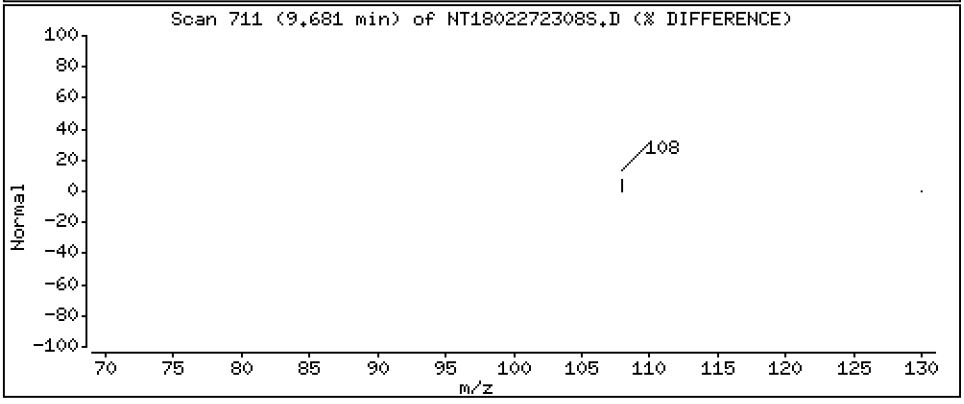












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272308S.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

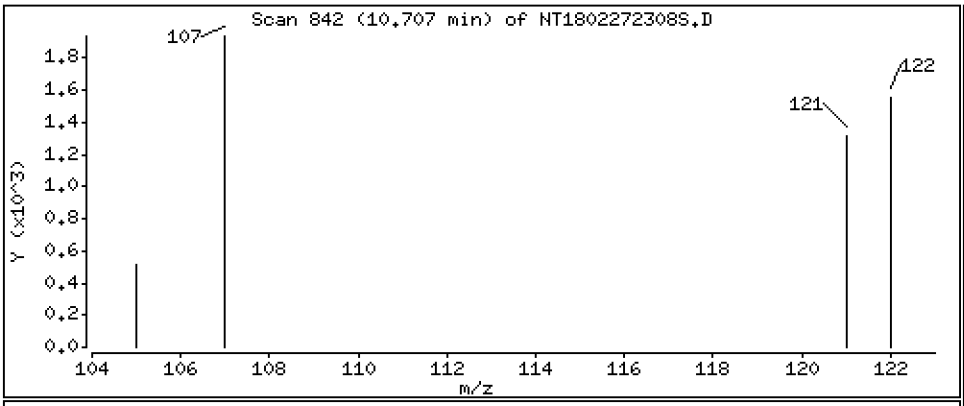
Operator: YZ

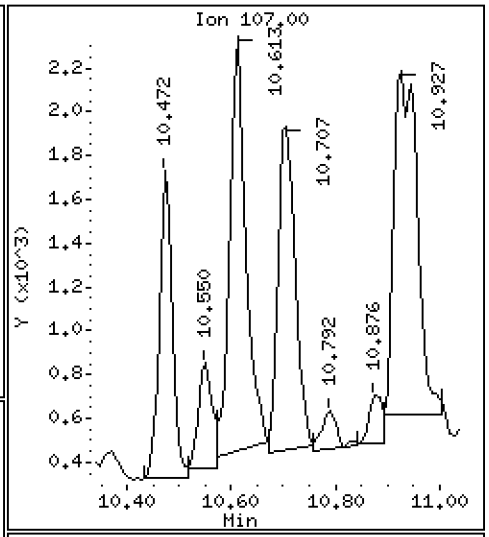
Column phase: ZB-5msi

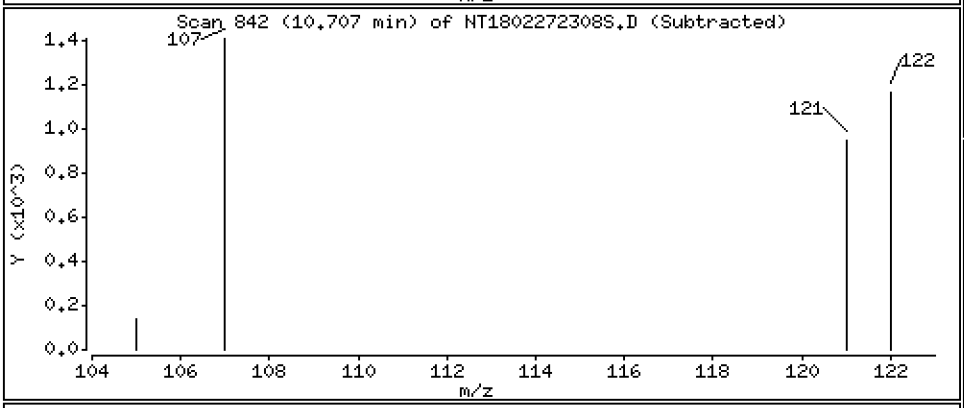
Column diameter: 0.25

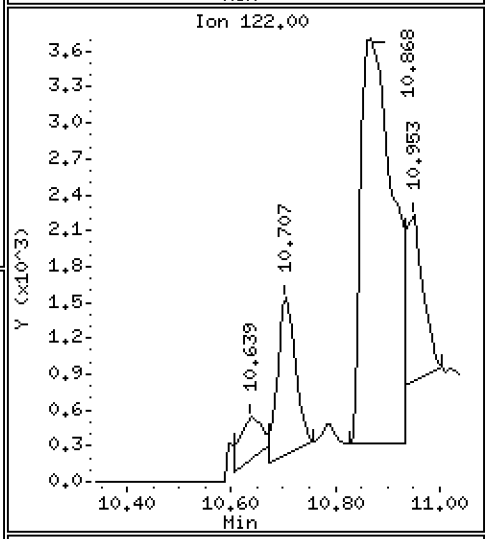
22 2,4-Dimethylphenol

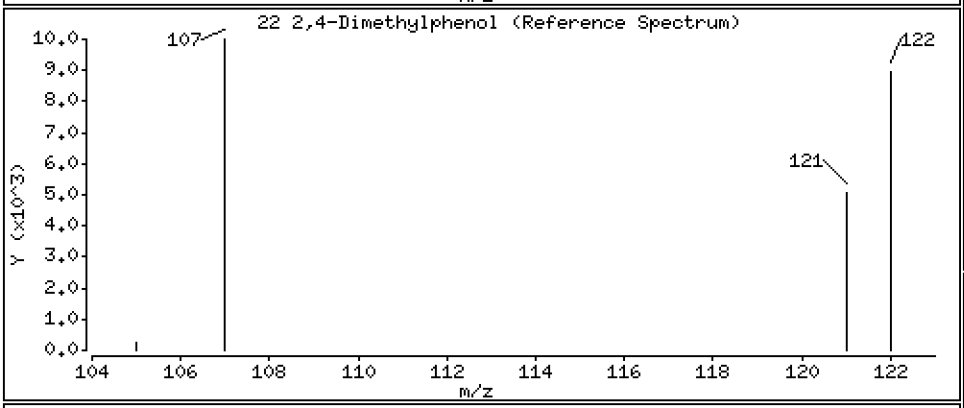
Concentration: 0.03531 ug/mL

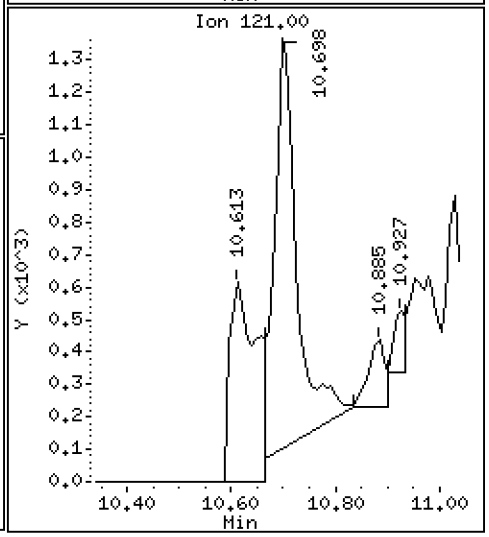


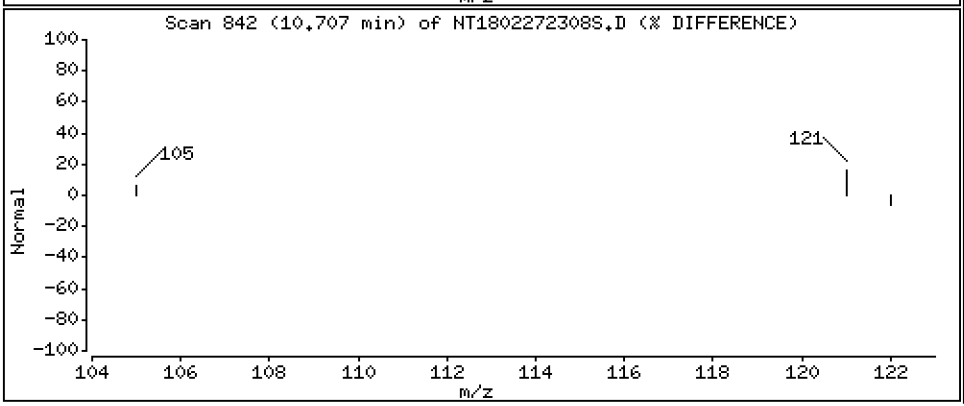












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

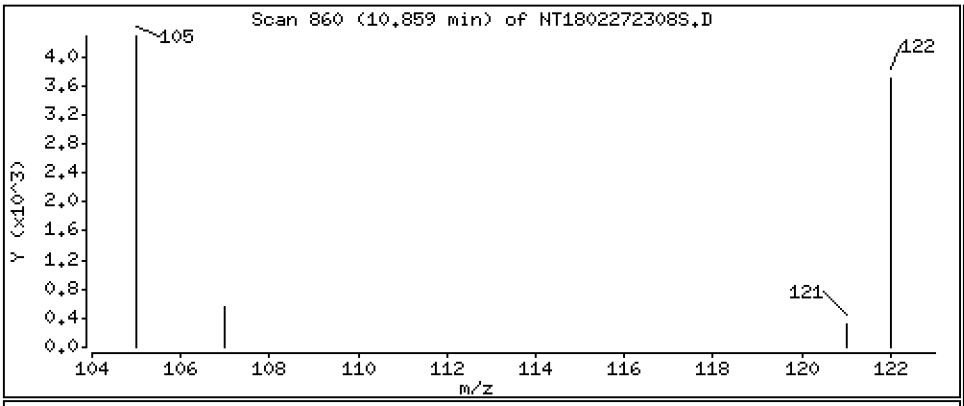
Operator: YZ

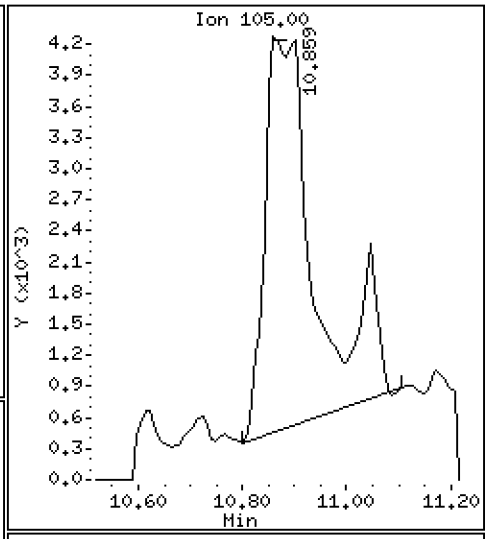
Column phase: ZB-5msi

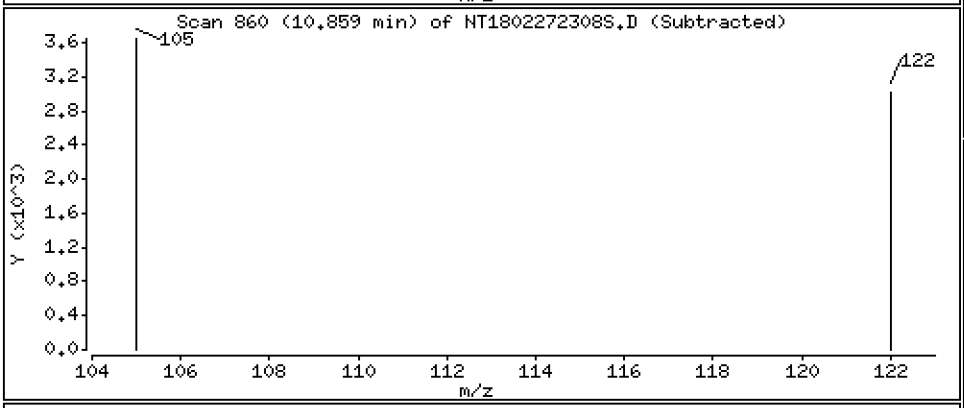
Column diameter: 0.25

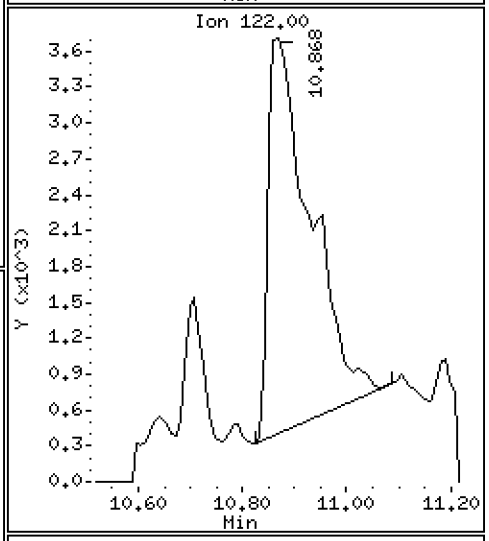
24 Benzoic acid

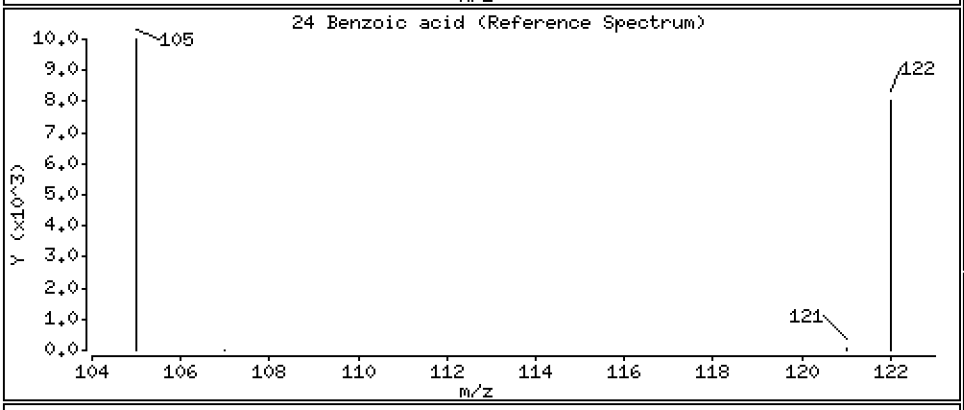
Concentration: 0.6457 ug/mL

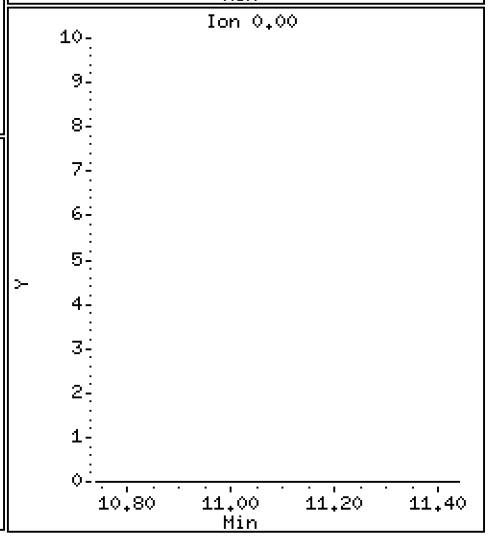


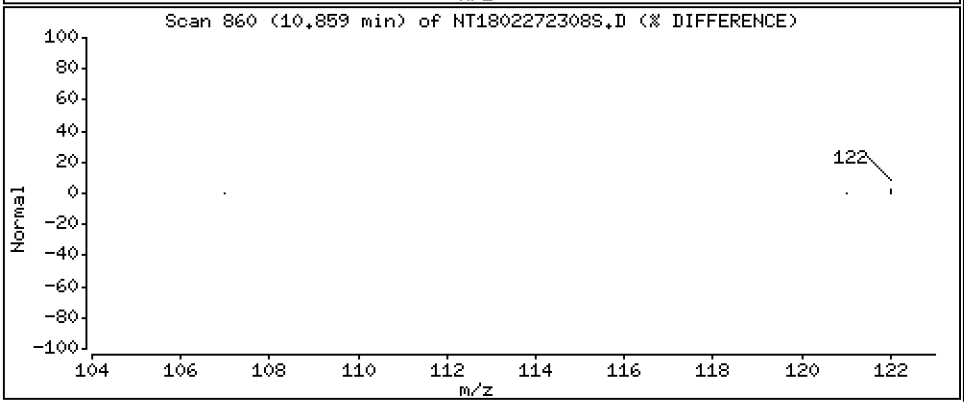












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272308S.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

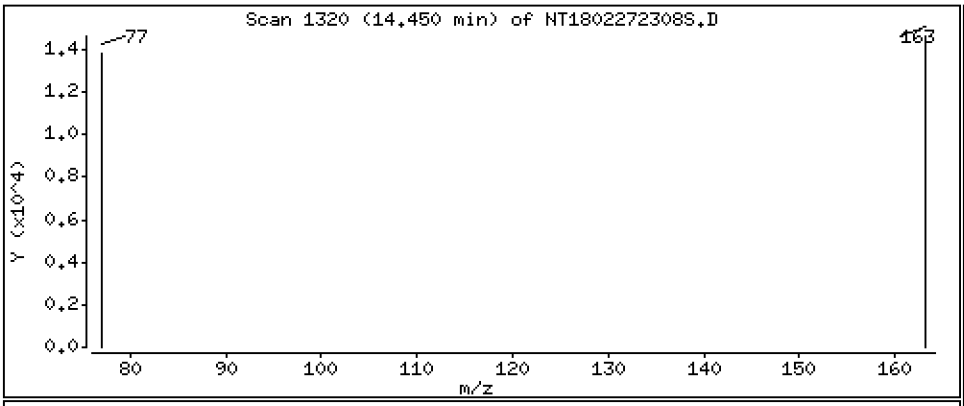
Operator: YZ

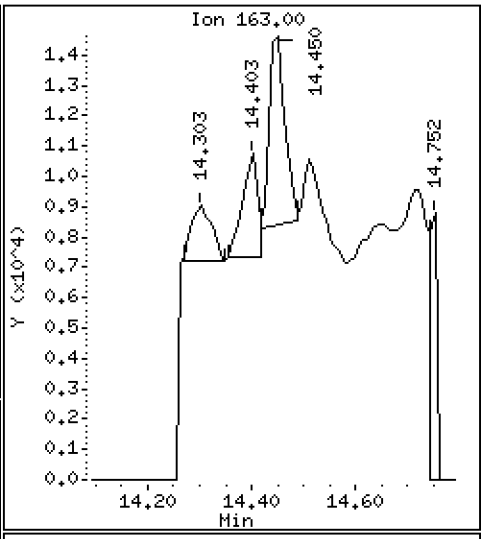
Column phase: ZB-5msi

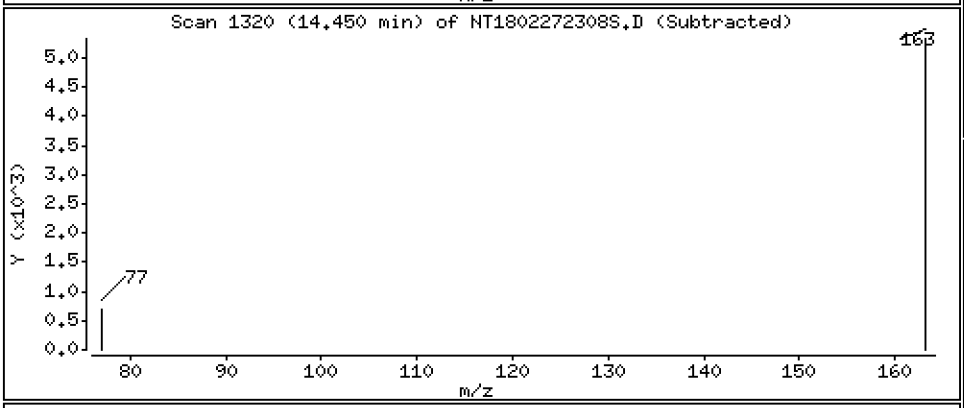
Column diameter: 0.25

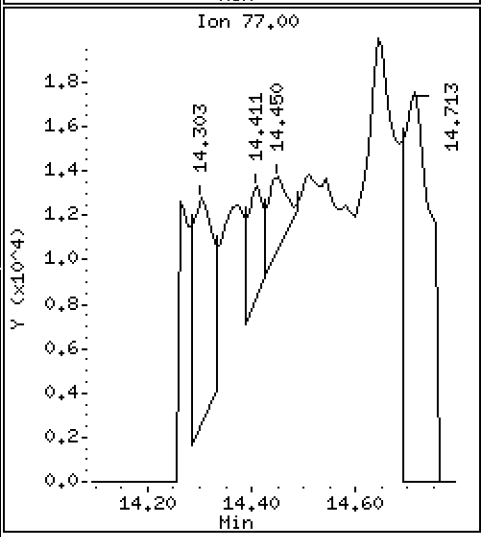
39 Dimethylphthalate

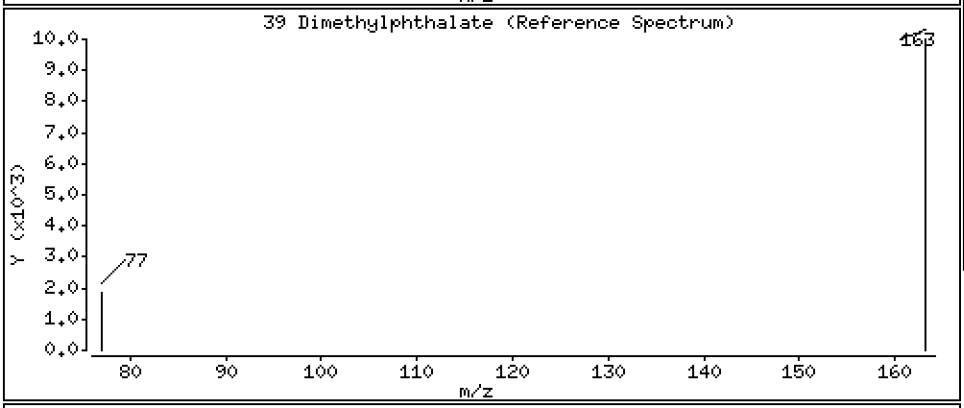
Concentration: 0.05464 ug/mL

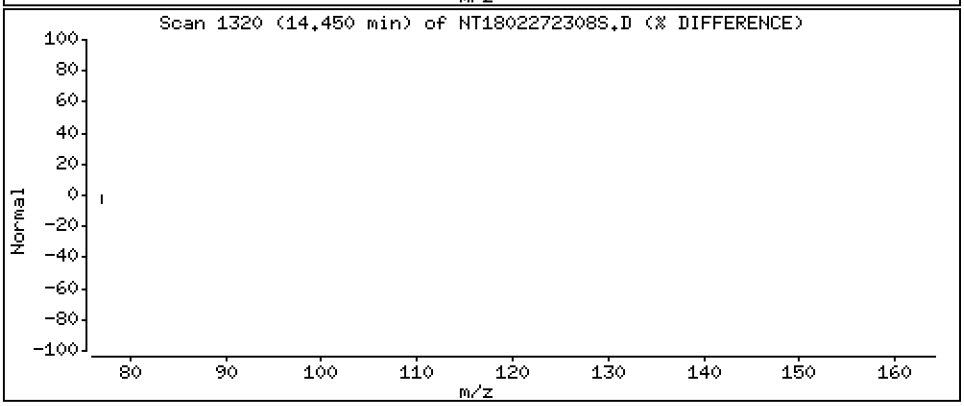












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272308S.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

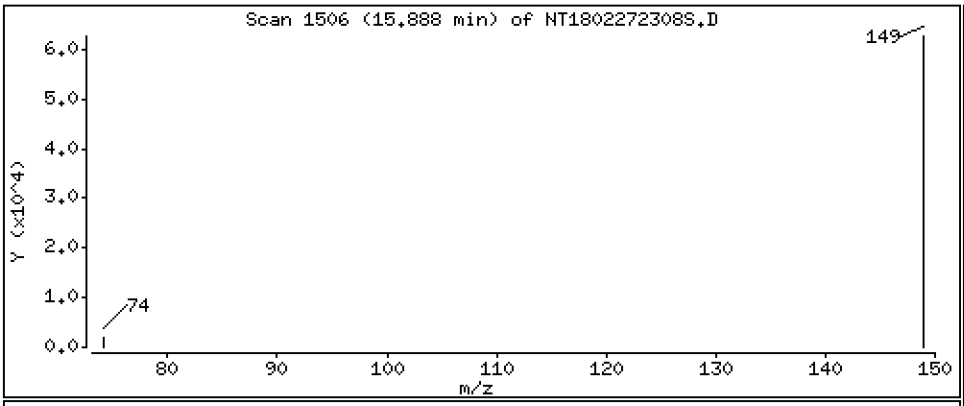
Operator: YZ

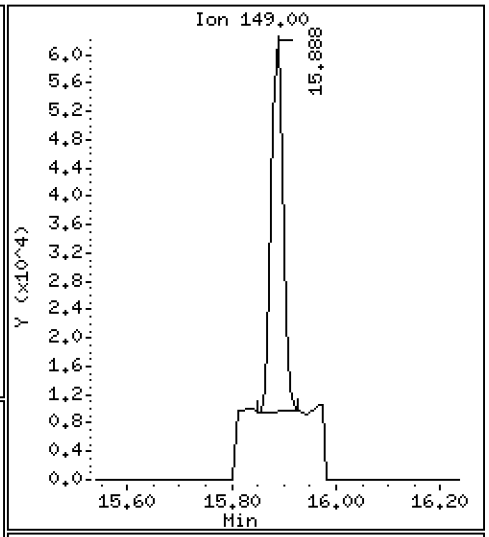
Column phase: ZB-5msi

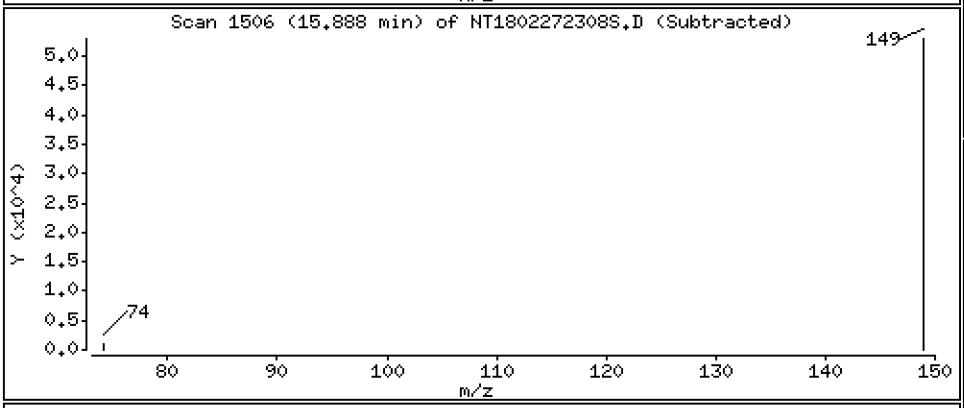
Column diameter: 0.25

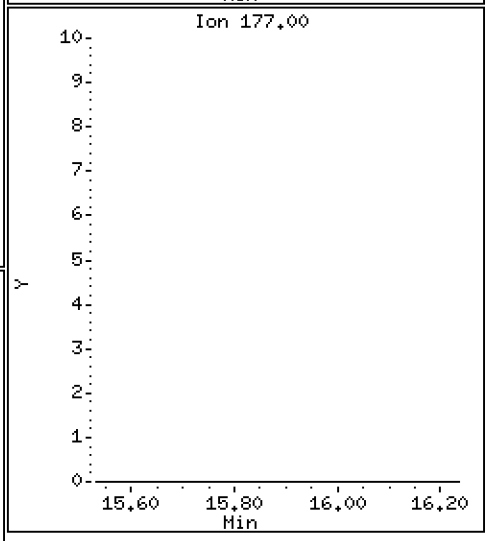
50 Diethylphthalate

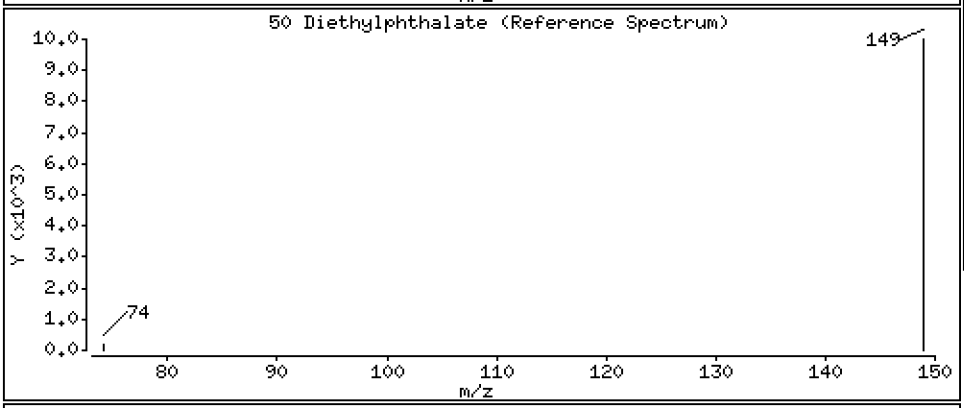
Concentration: 0.3742 ug/mL

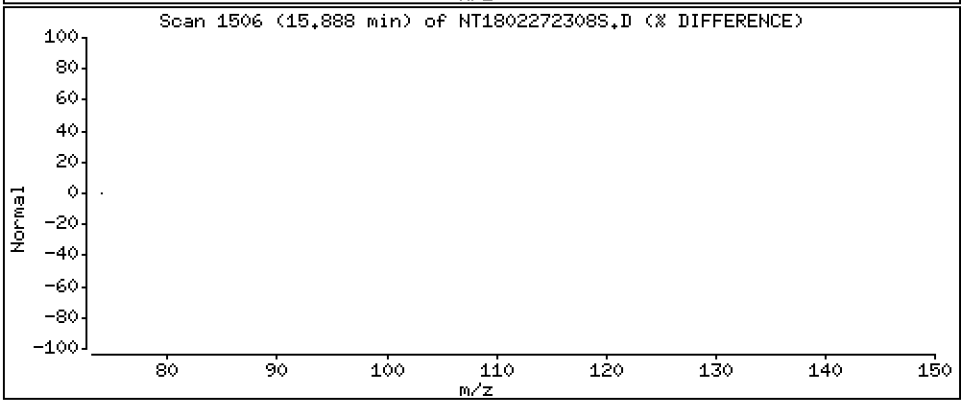












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Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

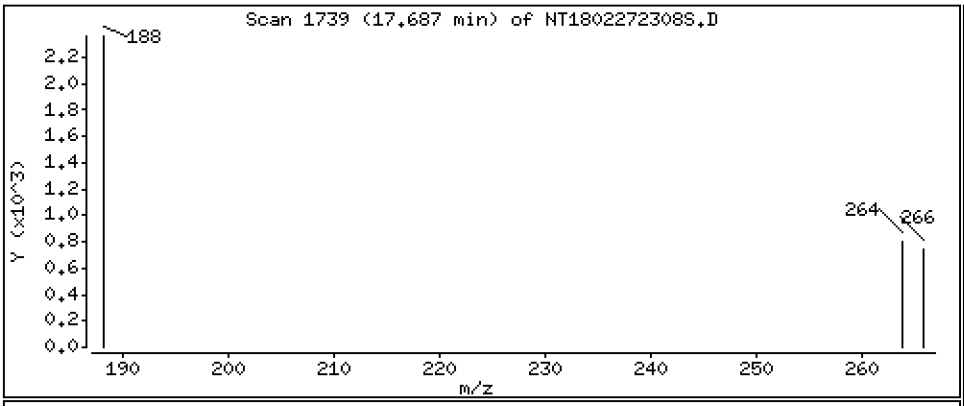
Operator: YZ

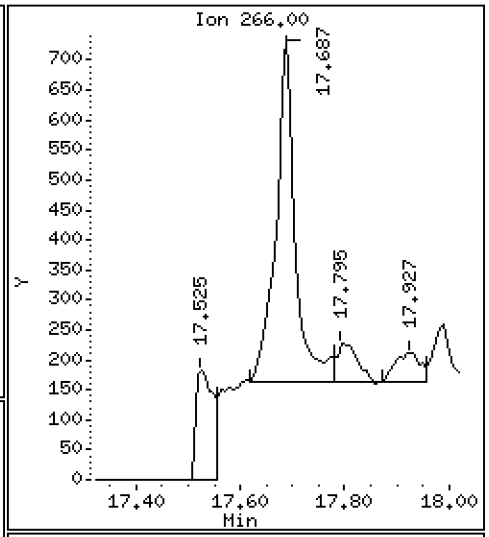
Column phase: ZB-5msi

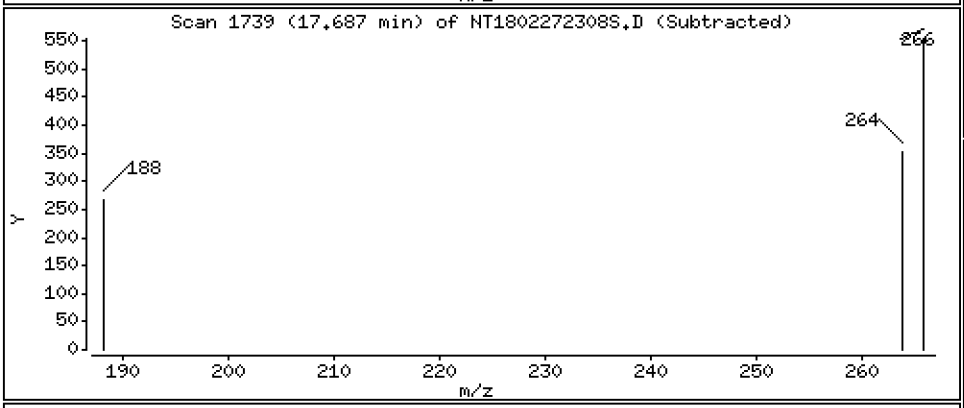
Column diameter: 0.25

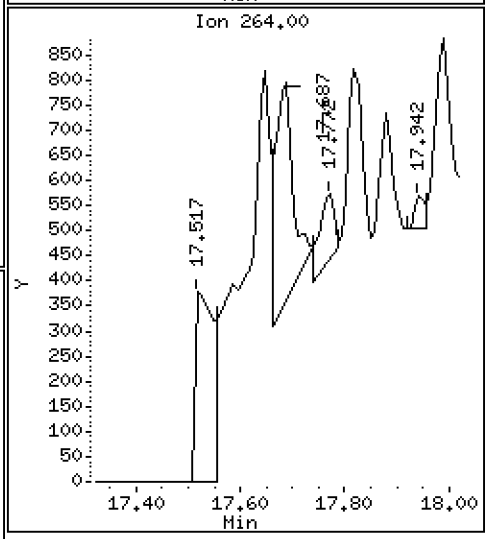
58 Pentachlorophenol

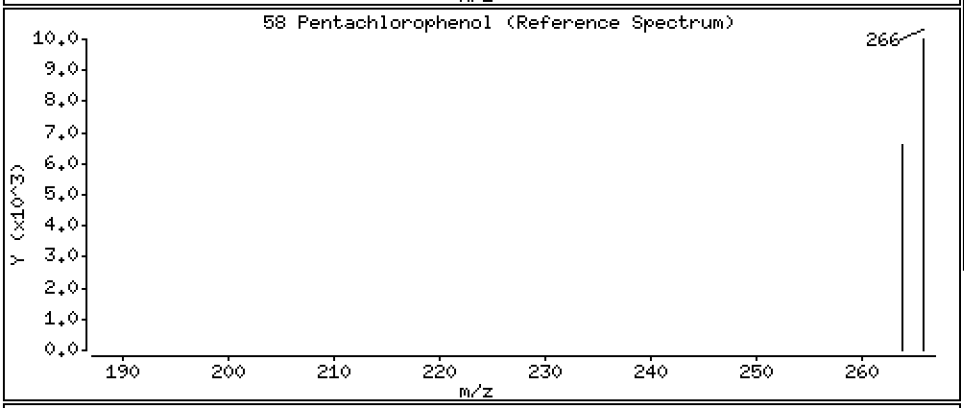
Concentration: 0.05375 ug/mL

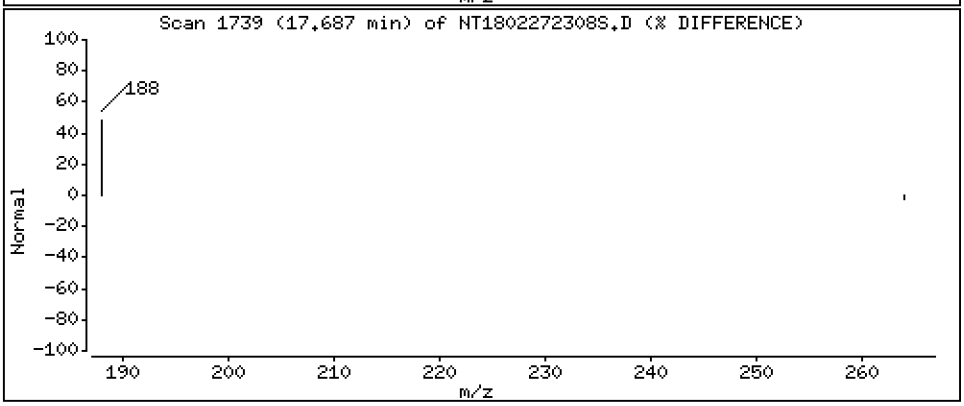












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272308S.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

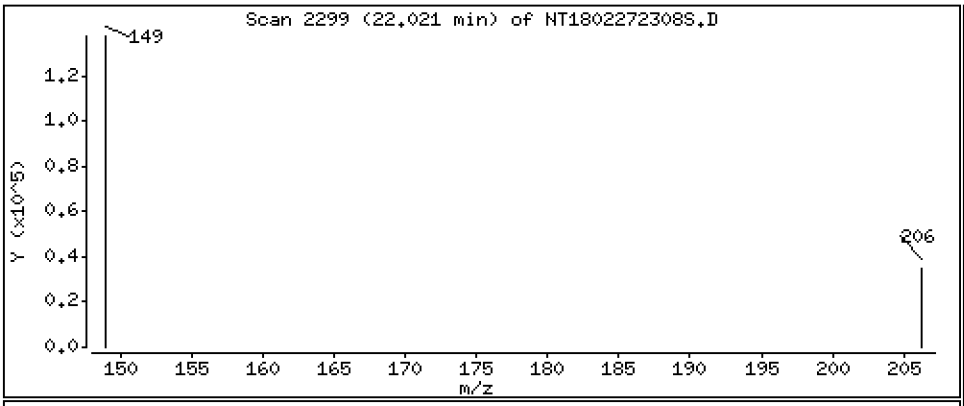
Operator: YZ

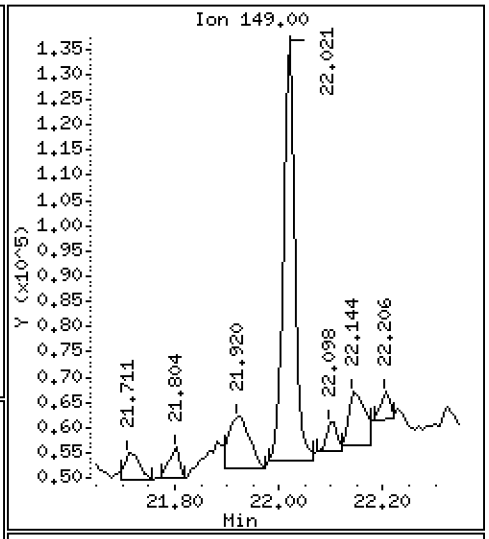
Column phase: ZB-5msi

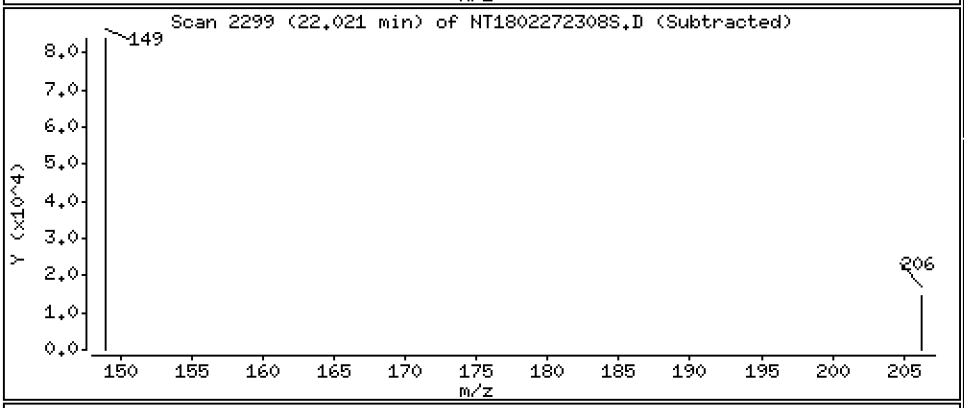
Column diameter: 0.25

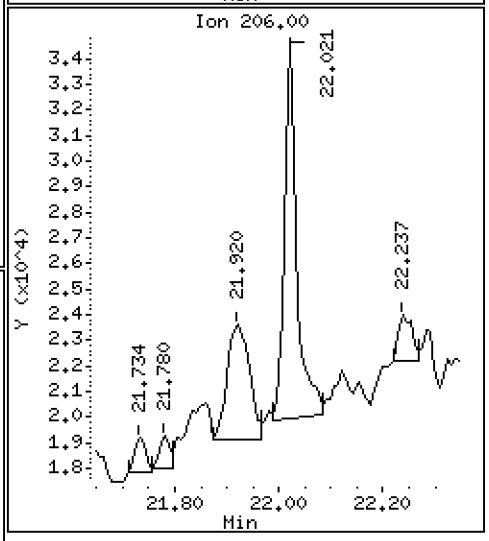
67 Butylbenzylphthalate

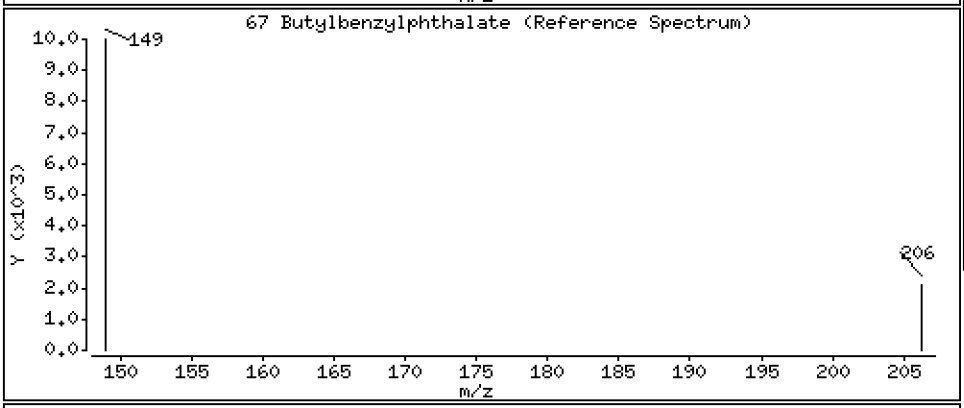
Concentration: 0.5083 ug/mL

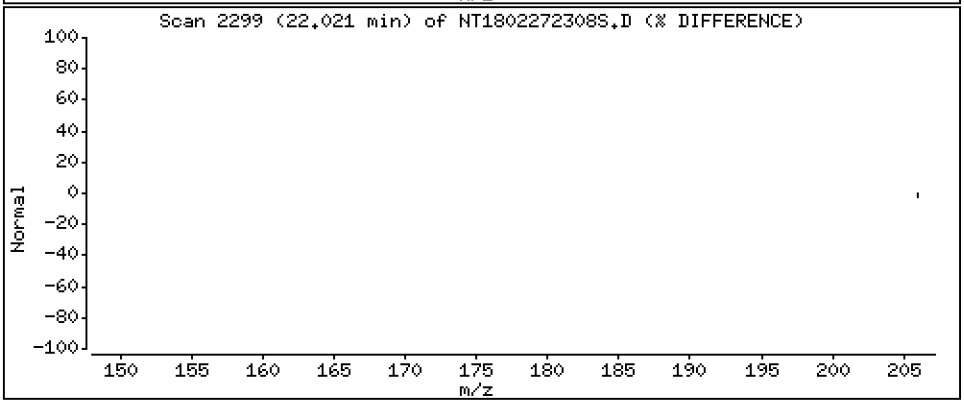












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272308S.D

Date : 27-FEB-2023 21:51

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-13

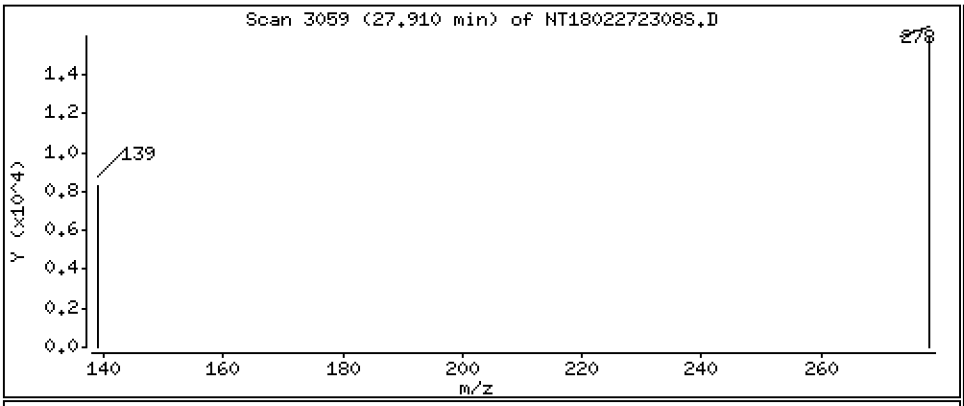
Operator: YZ

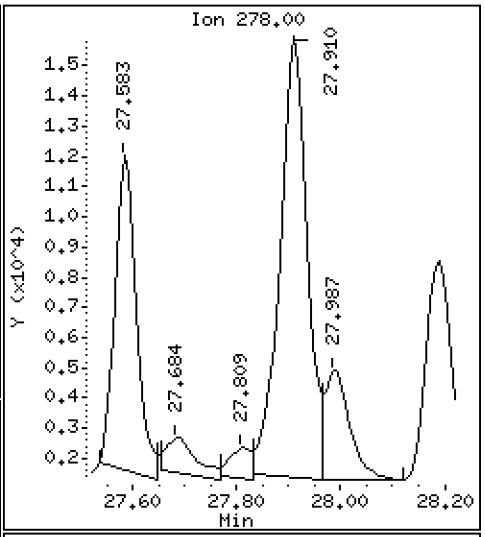
Column phase: ZB-5msi

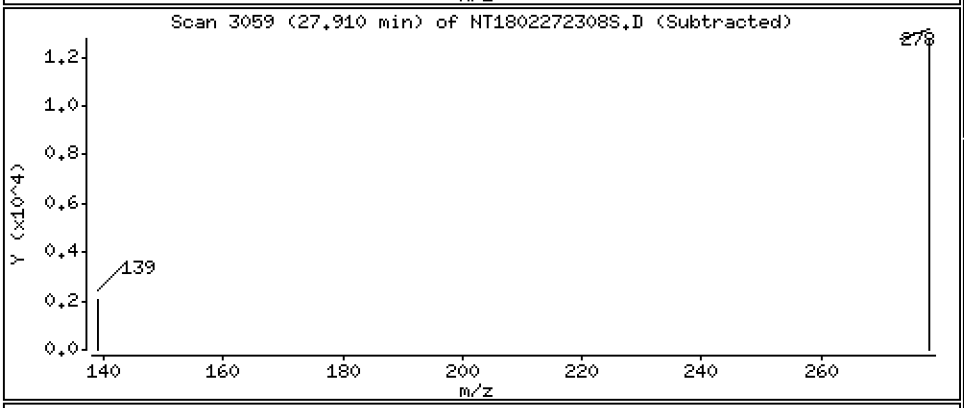
Column diameter: 0.25

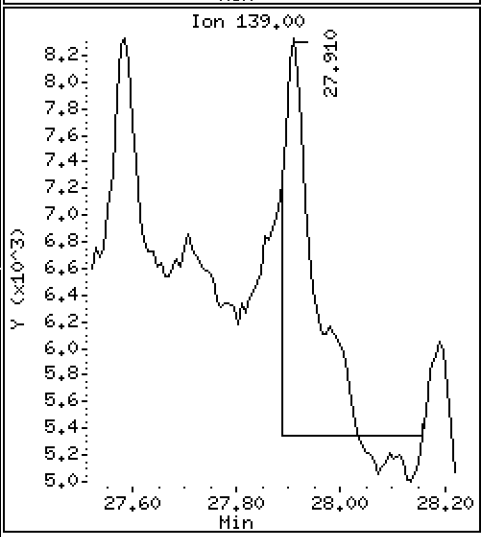
79 Dibenzo(a,h)anthracene

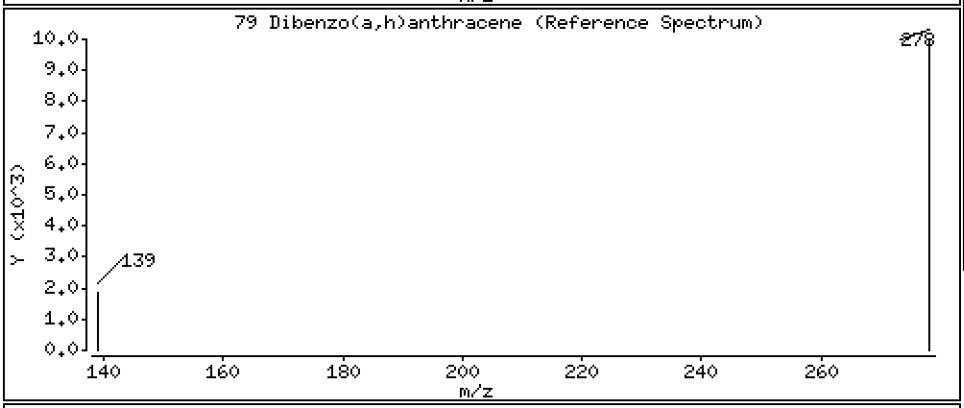
Concentration: 0.1625 ug/mL

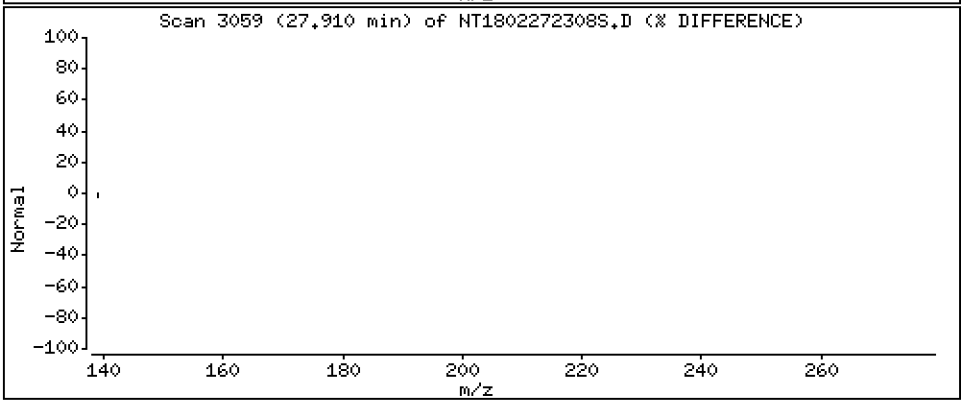












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272308S.D
Lab Smp Id: 23A0134-13
Inj Date : 27-FEB-2023 21:51
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-13
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 13:42 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1	2-Fluorophenol	112	6.748	6.725	(0.759)	479953	5.22278	5.223(R)
	3	Phenol	94	8.316	8.301	(0.935)	23249	0.19393	0.1939
	7	1,3-Dichlorobenzene	146	8.834	8.827	(0.993)	1457	0.01214	0.01214(H)
*	8	1,4-Dichlorobenzene-d4	152	8.896	8.896	(1.000)	284727	4.00000	
	9	1,4-Dichlorobenzene	146	8.927	8.920	(1.003)	6989	0.05575	0.05575
	11	Benzyl alcohol	79	9.129	9.168	(1.026)	30339	0.39474	0.3947
	12	1,2-Dichlorobenzene	146	9.276	9.277	(1.043)	3299	0.02764	0.02764
	13	2-Methylphenol	108	9.408	9.401	(1.058)	4290	0.04351	0.04351
	15	4-Methylphenol	108	9.680	9.665	(1.088)	9035	0.09134	0.09134
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	10.706	10.689	(0.944)	3374	0.03531	0.03531
	24	Benzoic acid	105	10.859	10.868	(0.957)	24907	0.64572	0.6457(M)
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.347	11.347	(1.000)	1070959	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	14.449	14.442	(0.968)	12450	0.05464	0.05464
*	42	Acenaphthene-d10	162	14.921	14.921	(1.000)	593078	4.00000	
	50	Diethylphthalate	149	15.888	15.888	(1.065)	77916	0.37422	0.3742(M)
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	17.687	17.671	(0.986)	1475	0.05375	0.05375
*	59	Phenanthrene-d10	188	17.934	17.927	(1.000)	1349245	4.00000	
$	66	Terphenyl-d14	244	21.099	21.068	(0.918)	1004807	3.63353	3.634(R)
	67	Butylbenzylphthalate	149	22.020	21.997	(0.958)	128009	0.50827	0.5083
*	69	Chrysene-d12	240	22.988	22.957	(1.000)	1527229	4.00000	
*	77	Perylene-d12	264	25.481	25.442	(1.000)	1133677	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.909	27.871	(1.095)	54729	0.16247	0.1625
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

Report Date: 24-Mar-2023 13:42

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272308S.D
Lab Smp Id: 23A0134-13
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	334128	167064	668256	284727	-14.79
27 Naphthalene-d8	1260796	630398	2521592	1070959	-15.06
42 Acenaphthene-d10	648152	324076	1296304	593078	-8.50
59 Phenanthrene-d10	1231995	615998	2463990	1349245	9.52
69 Chrysene-d12	1126974	563487	2253948	1527229	35.52
77 Perylene-d12	1243668	621834	2487336	1133677	-8.84

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.35	10.85	11.85	11.35	-0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.92	-0.00
59 Phenanthrene-d10	17.93	17.43	18.43	17.93	0.04
69 Chrysene-d12	22.96	22.46	23.46	22.99	0.13
77 Perylene-d12	25.44	24.94	25.94	25.48	0.15

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272308S.D

Lab ID: 23A0134-13
nt18.i, 20230227.b\SIM.b\SIMABN2.m,   27-FEB-2023 21:51

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1802272303S.D

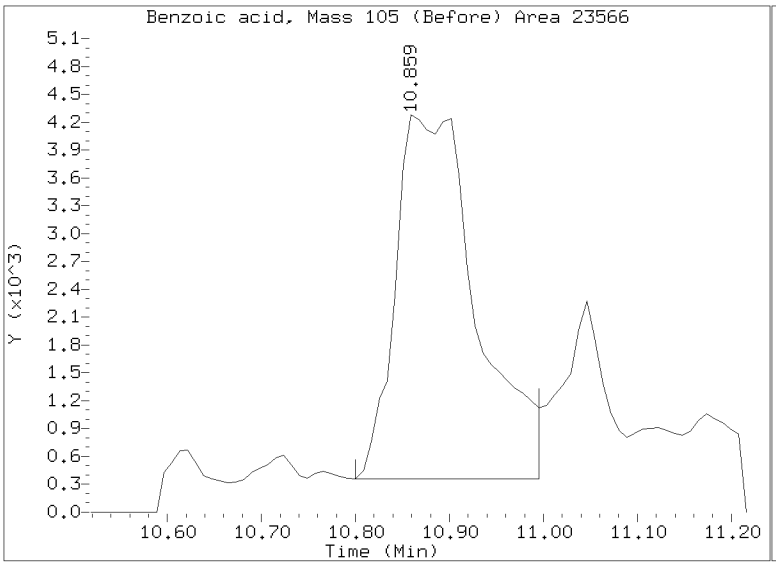
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

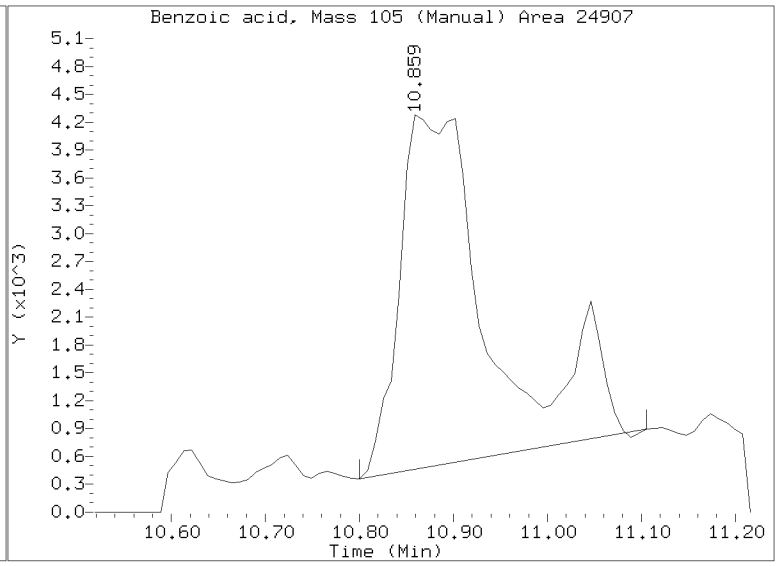
Exception: 1,2,4-Trichlorobenzene 0.0010

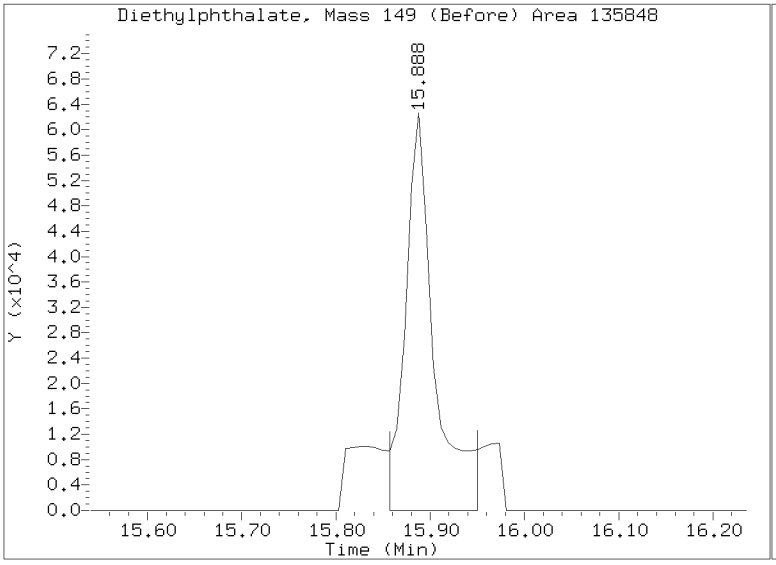
* Only compounds listed in the work order have been verified by the analyst *

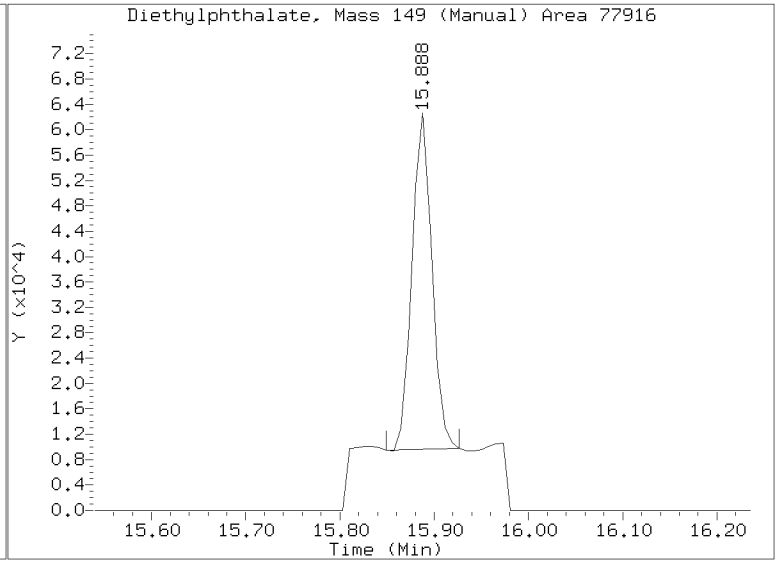
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230227.b/SIM.b/NT1802272308S.D
Injection Date: 27-FEB-2023 21:51
Lab ID:23A0134-13 Client ID:
Report Date: 03/24/2023 13:42









APPROVED

By Deenay Dunmore at 2:29 pm, Mar 24, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-IT1194

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

Polynuclear Aromatic Hydrocarbons

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-14 C	SDG:	23A0134
Sampled:	01/06/23 14:41	Prepared:	01/19/23 10:45	File ID:	N823012807.D
% Solids:	73.05	Preparation:	EPA 3546 (Microwave)	Analyzed:	01/25/23 17:15
Batch:	BLA0411	Sequence:	SLA0285	Initial/Final:	13.69 g Wet / 0.5 mL
Instrument:	NT8	Column:	RXI-17Sil ms	Calibration:	GA00050
Cleanups:	GPC, Silica Gel				

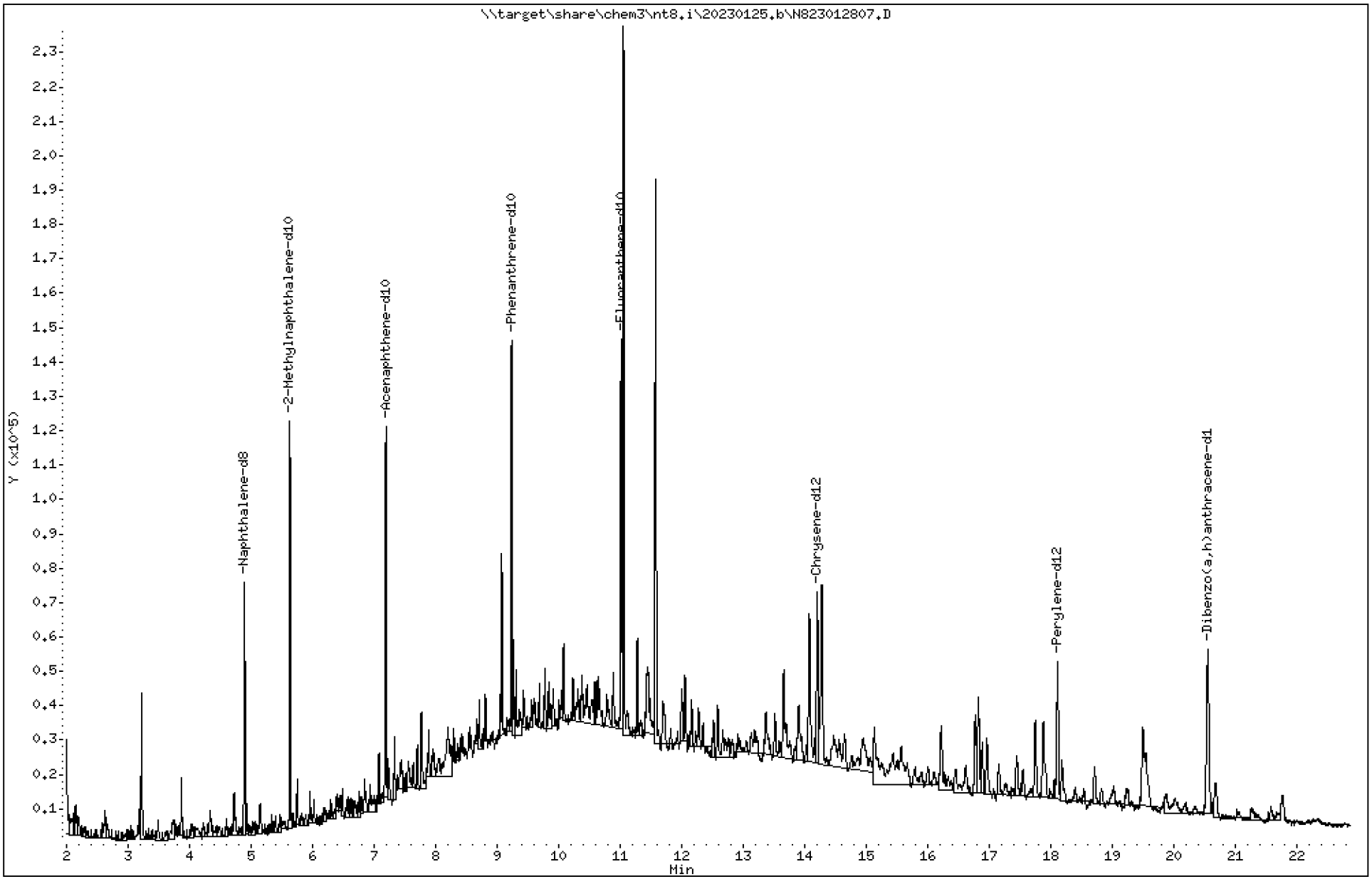
CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
56-55-3	Benzo(a)anthracene	1	68.7		0.82	5.00
218-01-9	Chrysene	1	114		1.05	5.00
205-99-2	Benzo(b)fluoranthene	1	68.3		1.37	5.00
207-08-9	Benzo(k)fluoranthene	1	37.1		0.76	5.00
50-32-8	Benzo(a)pyrene	1	52.9		0.61	5.00
193-39-5	Indeno(1,2,3-cd)pyrene	1	32.1		1.05	5.00
53-70-3	Dibenzo(a,h)anthracene	1	9.56		0.89	5.00

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Methylnaphthalene-d10	149.99	137	91.3	32 - 120	
Dibenzo[a,h]anthracene-d14	149.99	206	137	21 - 133	*
Fluoranthene-d10	149.99	147	98.3	36 - 134	

Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D
Date : 25-JAN-2023 17:15
Client ID:
Sample Info: 23A0134-14

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D

Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

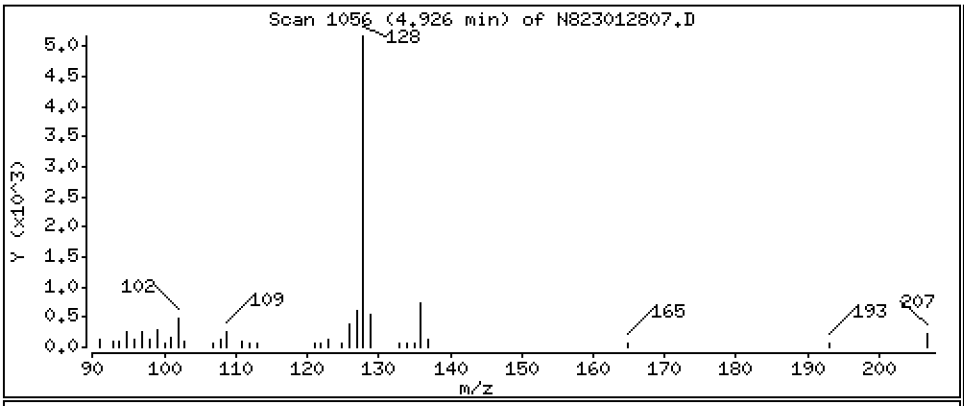
Operator: JZ

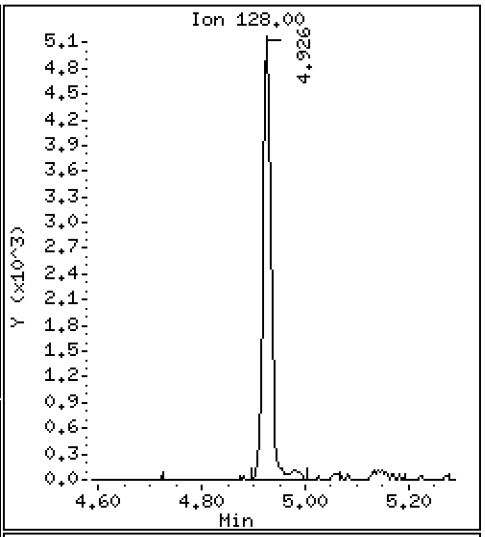
Column phase: Rxi-17sil

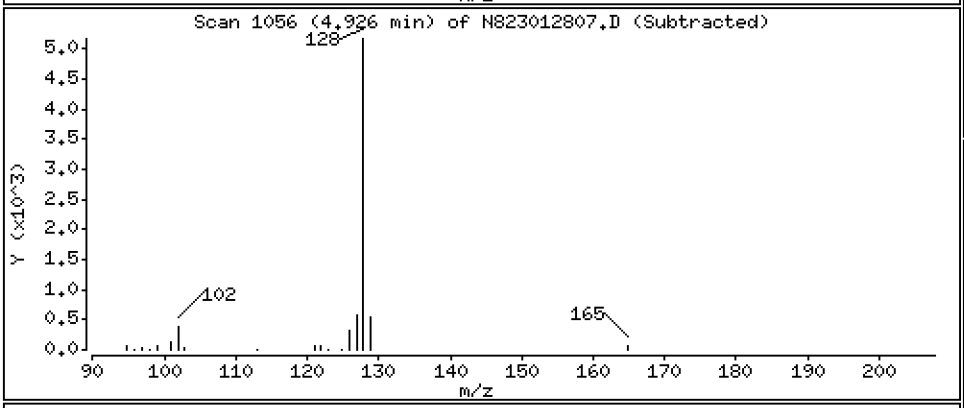
Column diameter: 0.25

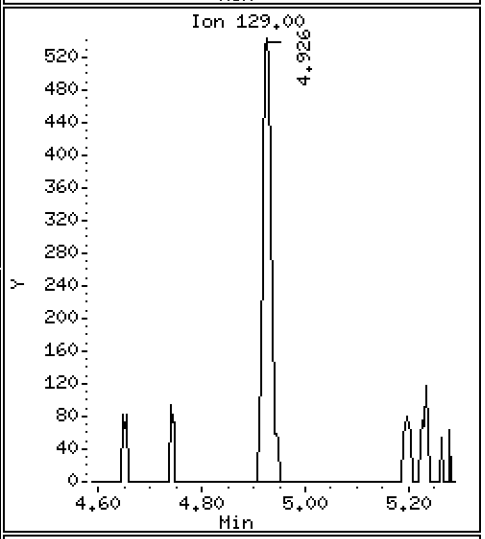
2 Naphthalene

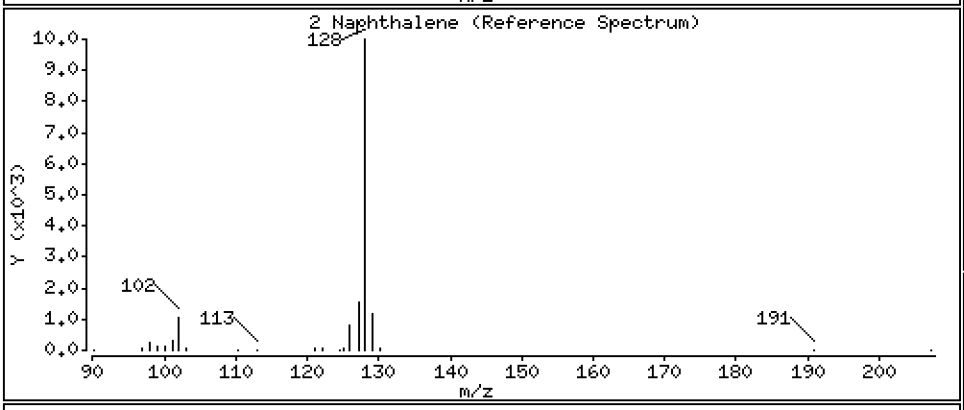
Concentration: 0.2275 ug/mL

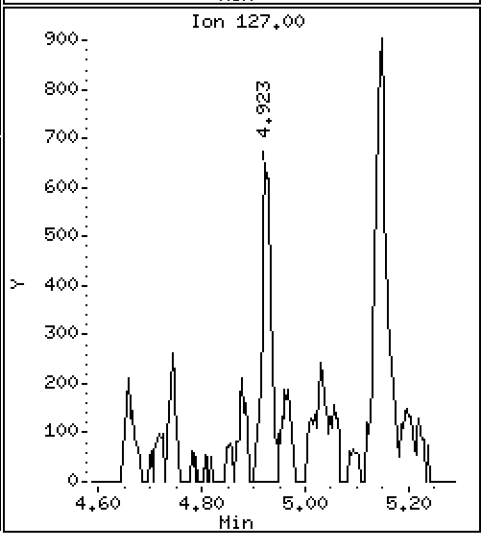


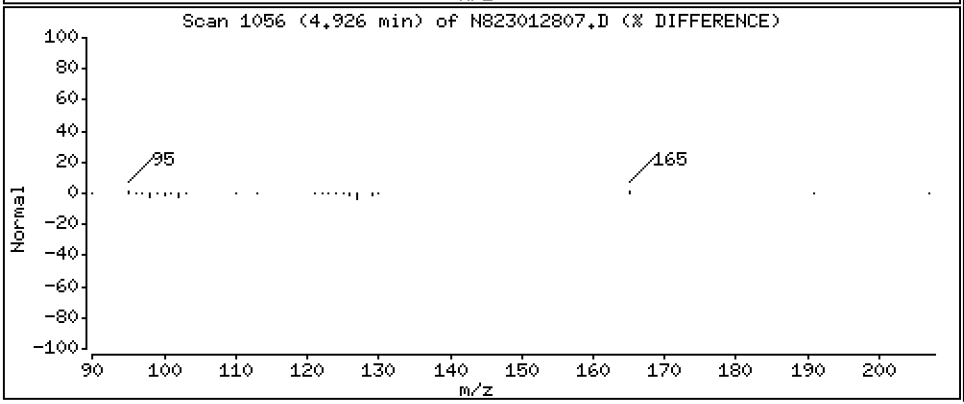












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D

Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

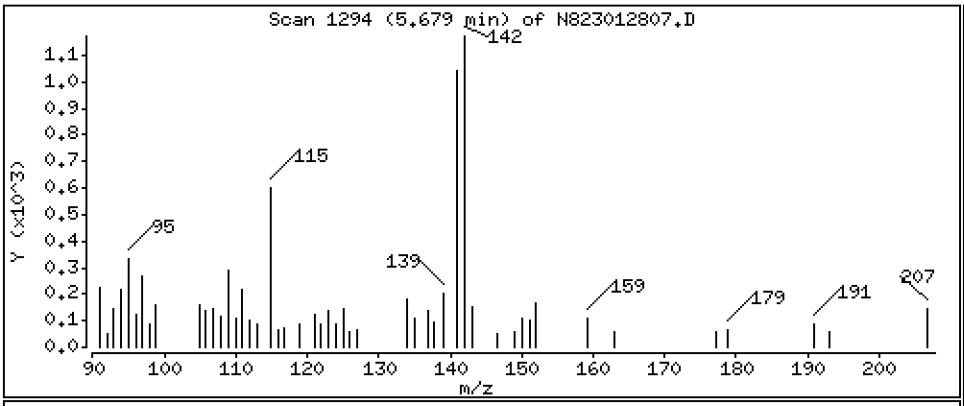
Operator: JZ

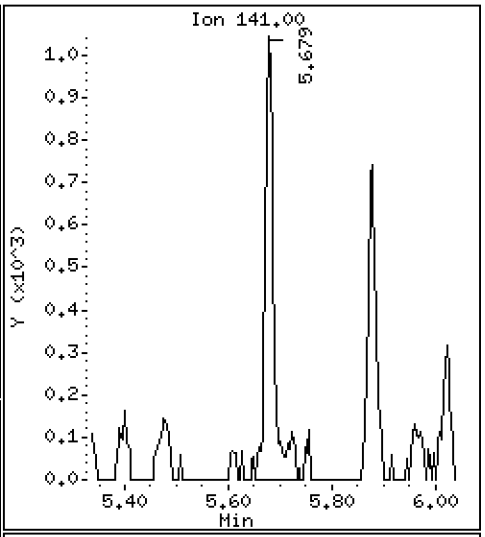
Column phase: Rxi-17sil

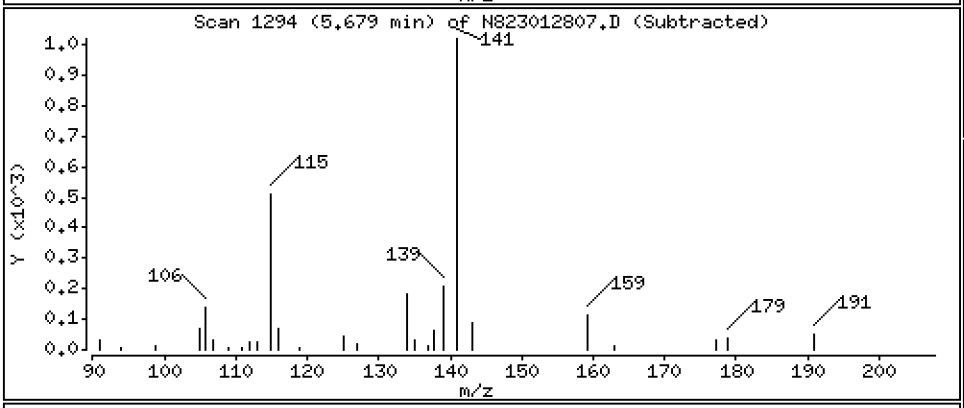
Column diameter: 0.25

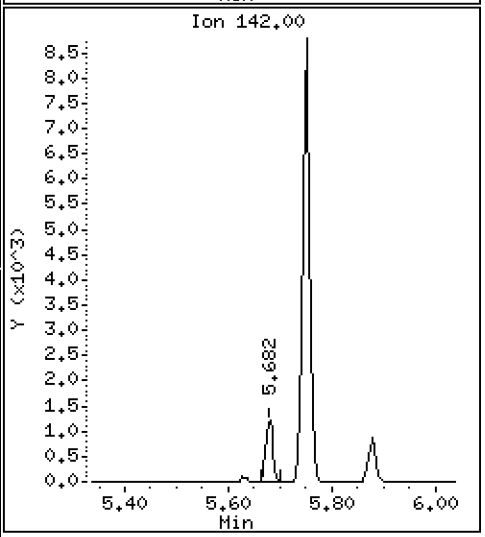
4 2-Methylnaphthalene

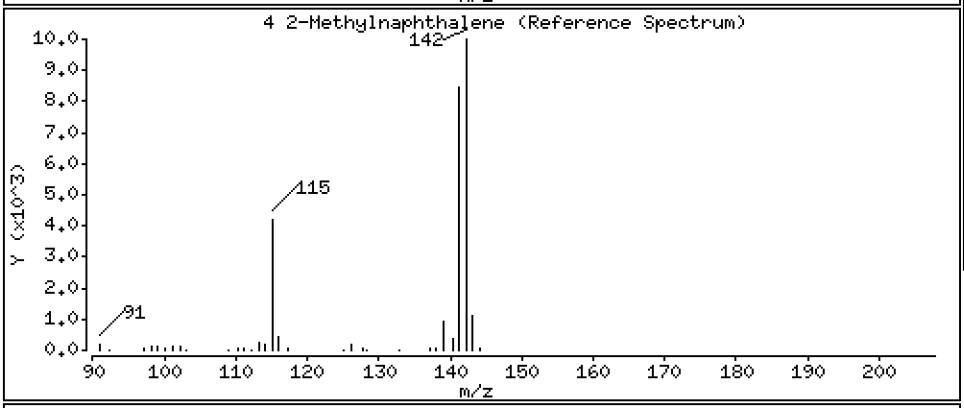
Concentration: 0.09269 ug/mL

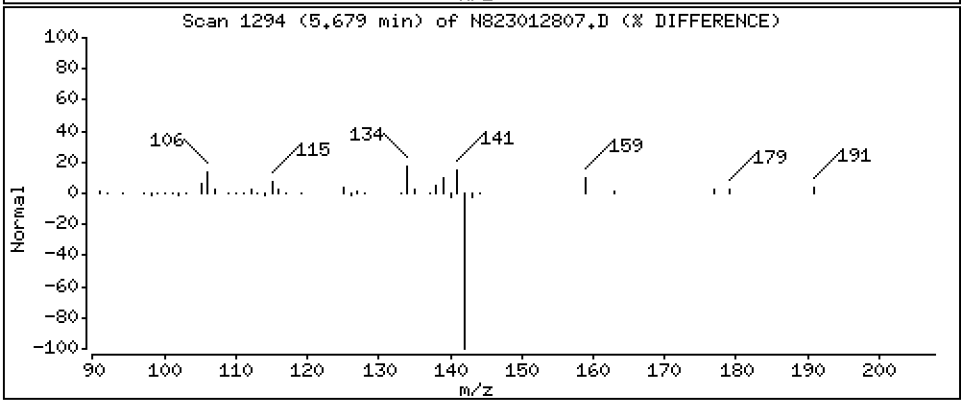












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Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

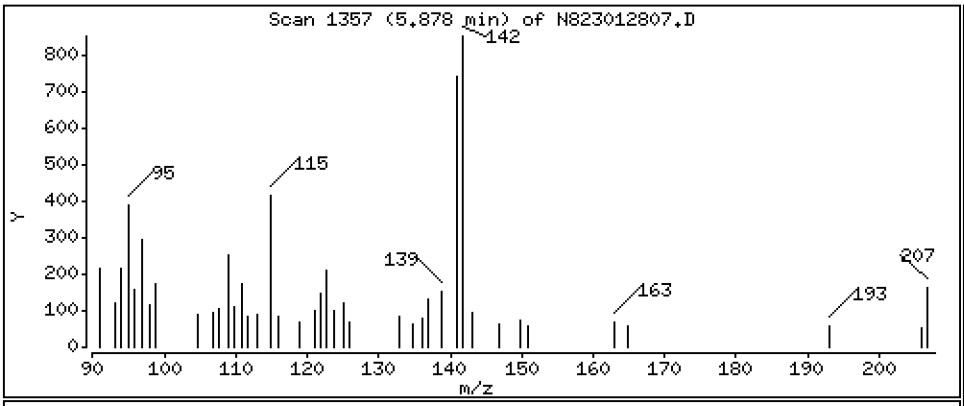
Operator: JZ

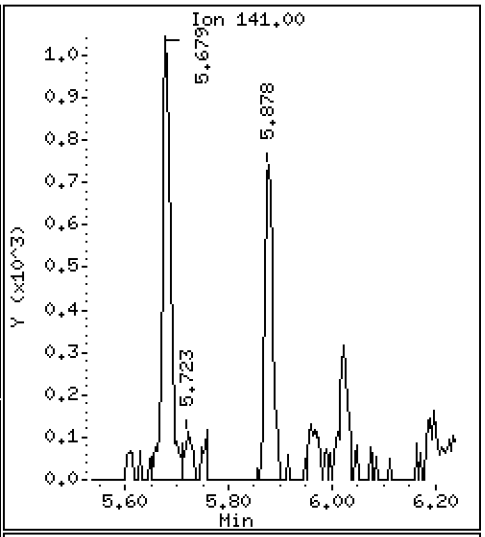
Column phase: Rxi-17sil

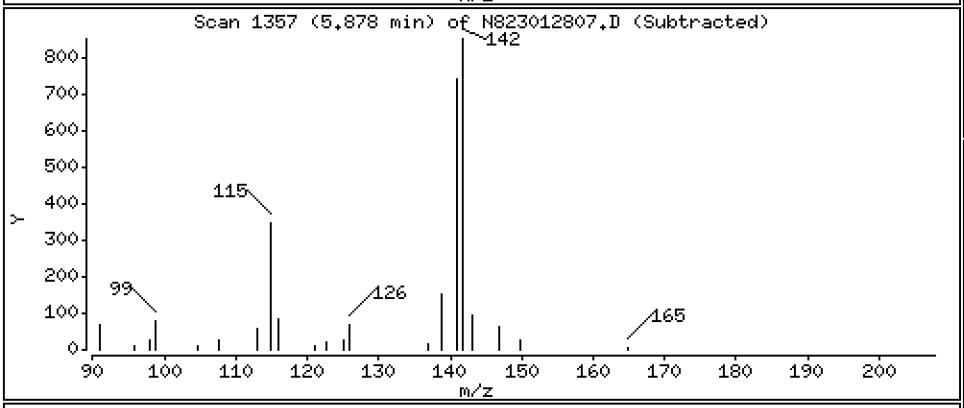
Column diameter: 0.25

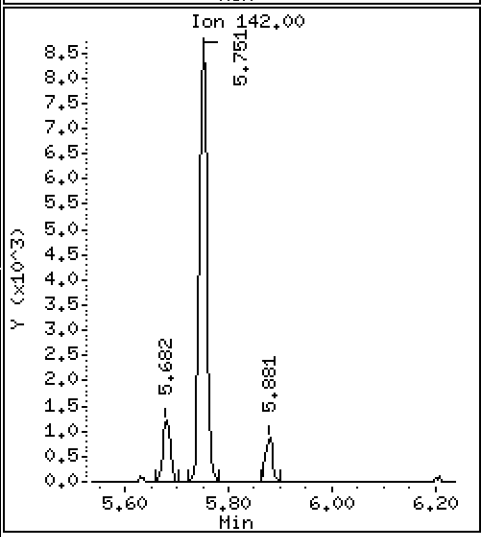
5 1-methylnaphthalene

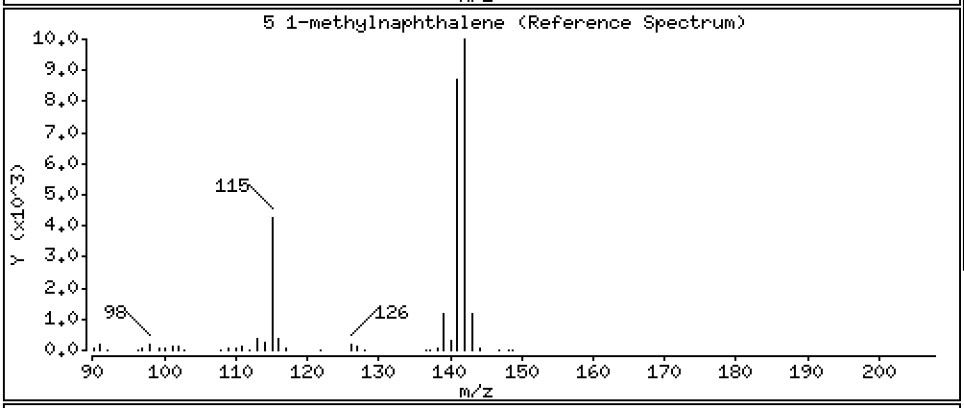
Concentration: 0.05917 ug/mL

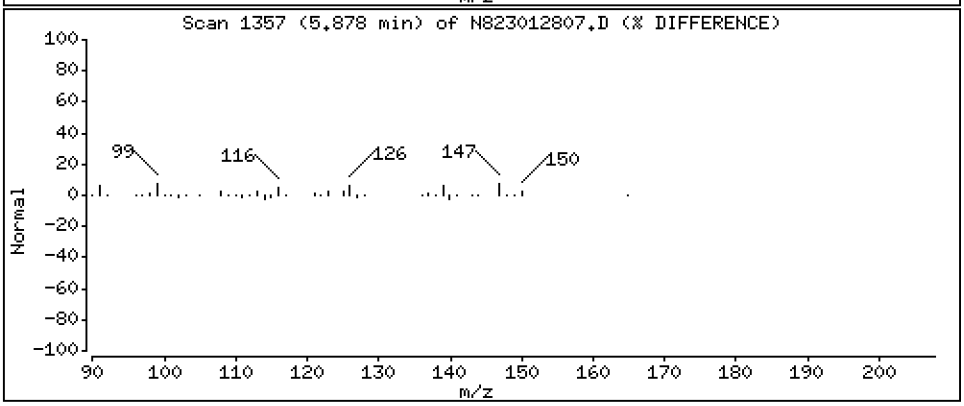












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Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

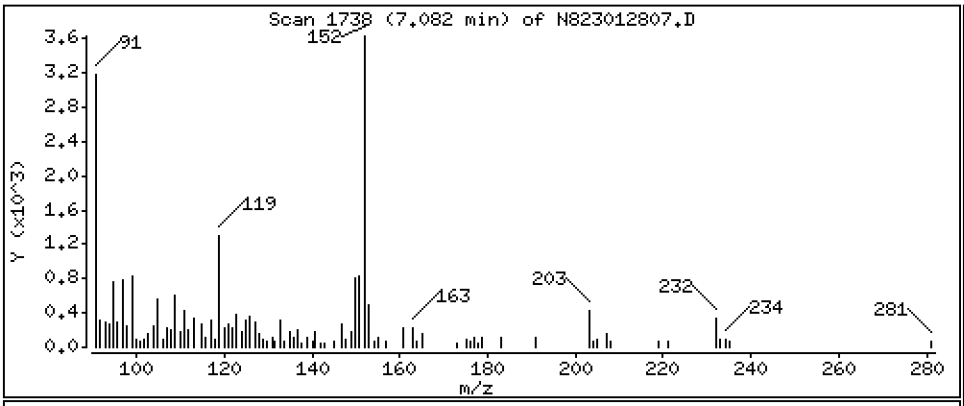
Operator: JZ

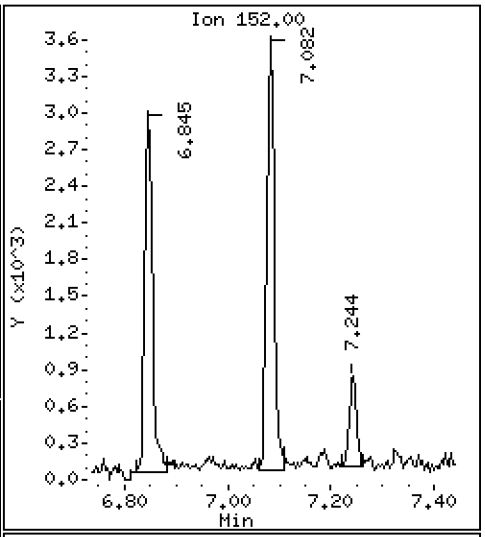
Column phase: Rxi-17sil

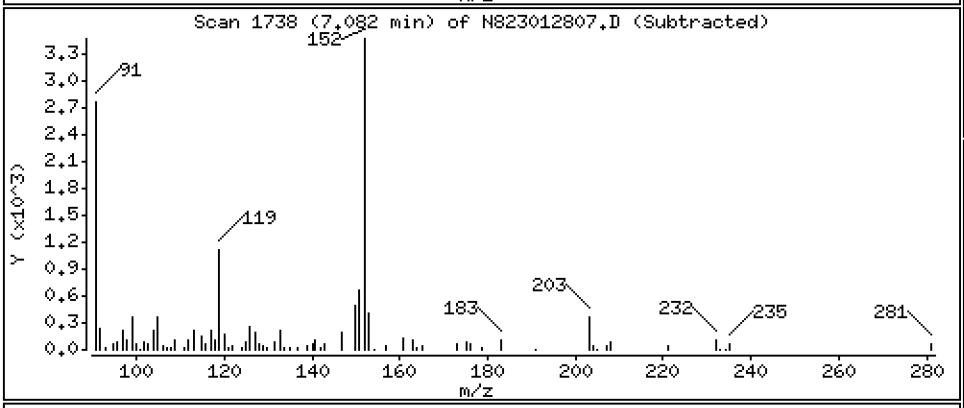
Column diameter: 0.25

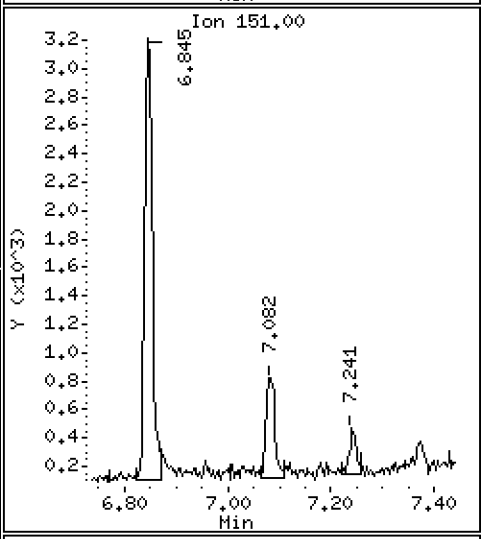
9 Acenaphthylene

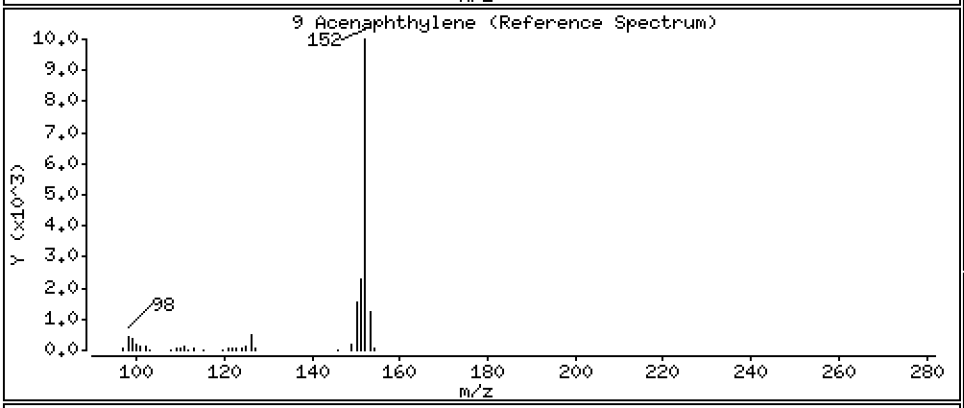
Concentration: 0.1500 ug/mL

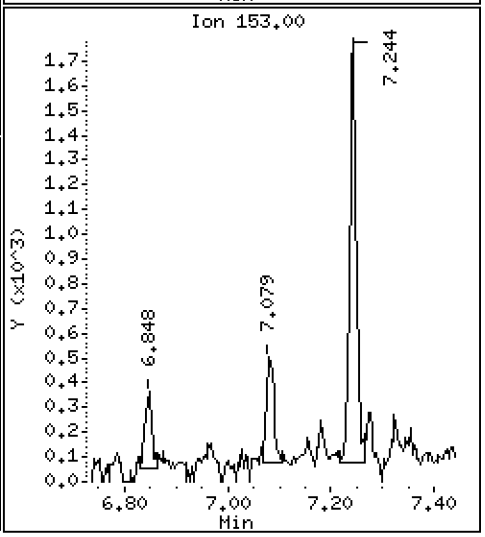


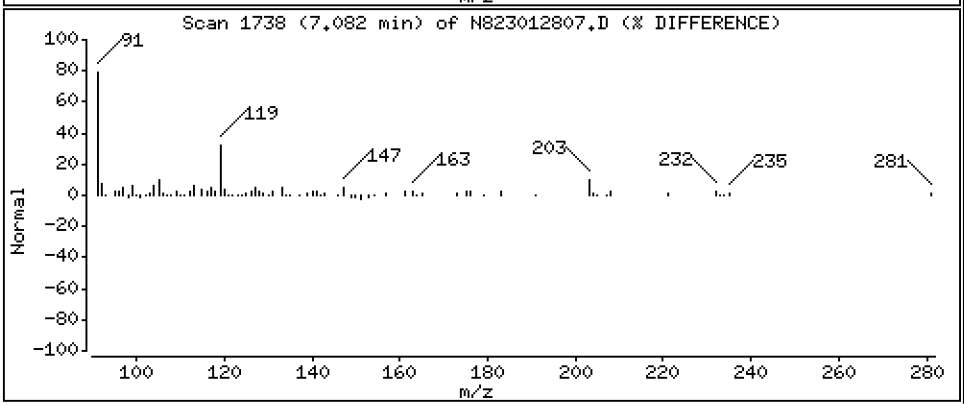












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Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

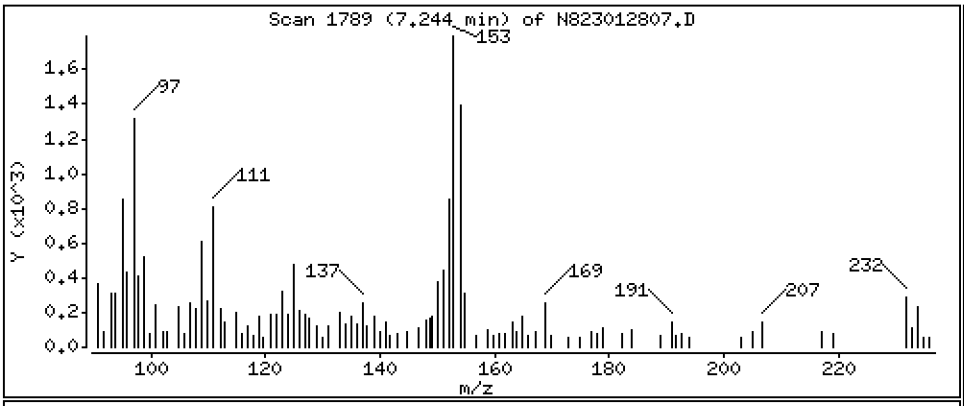
Operator: JZ

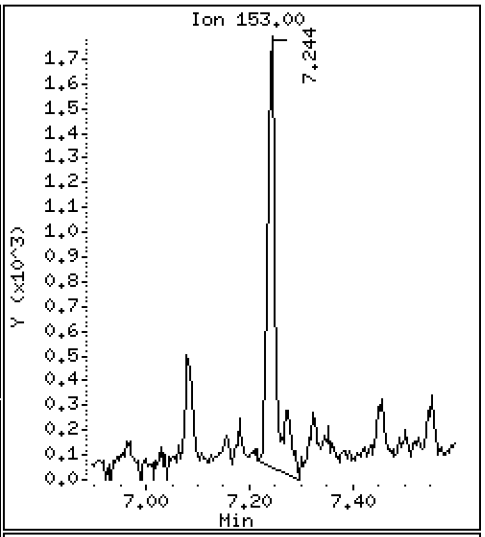
Column phase: Rxi-17sil

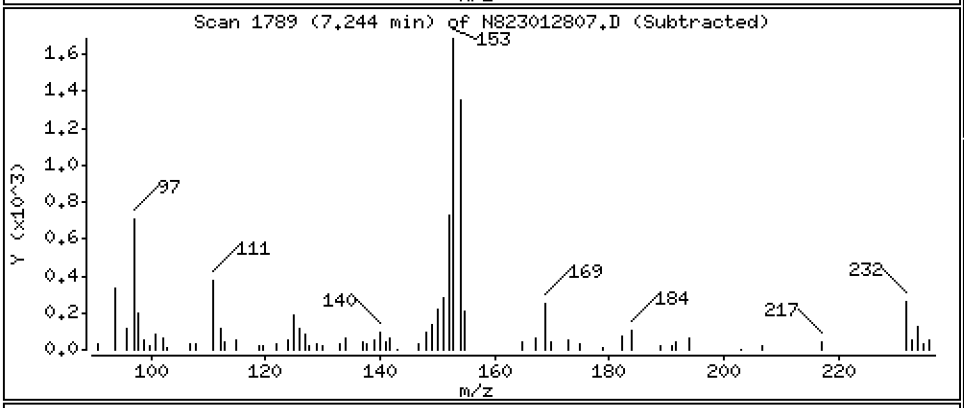
Column diameter: 0.25

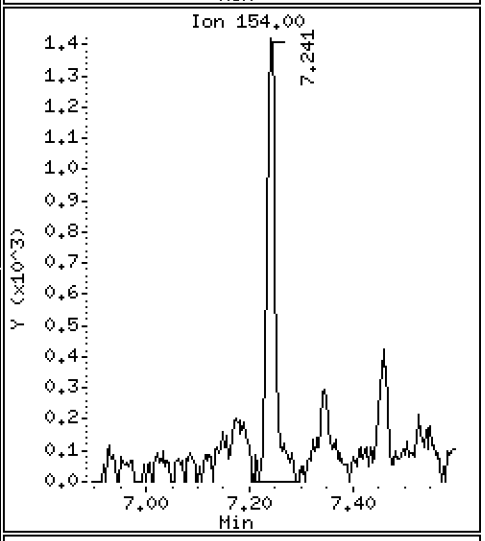
11 Acenaphthene

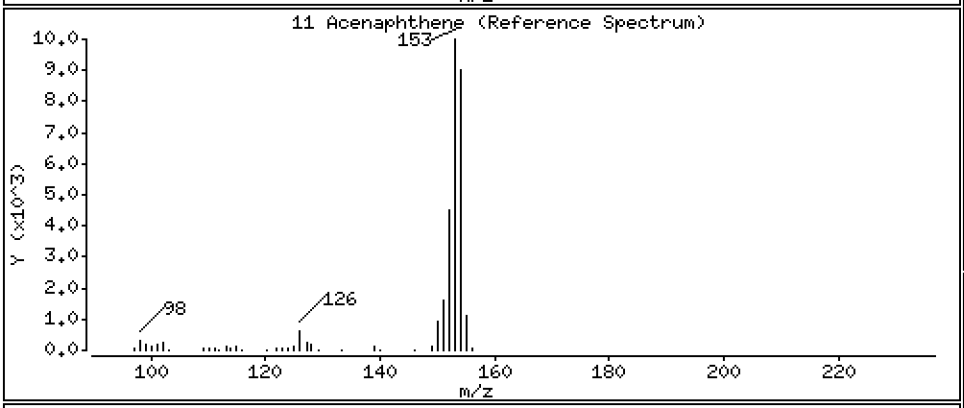
Concentration: 0.1231 ug/mL

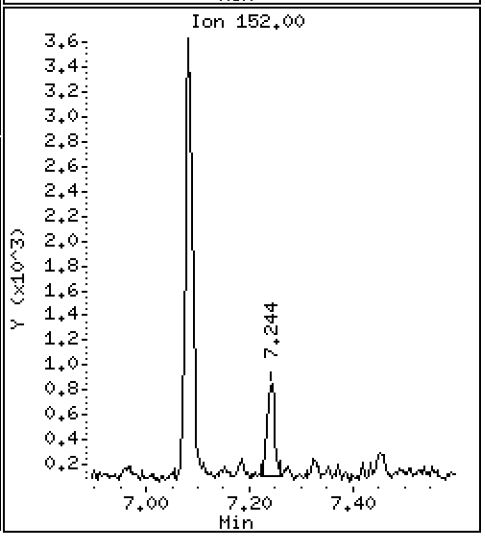


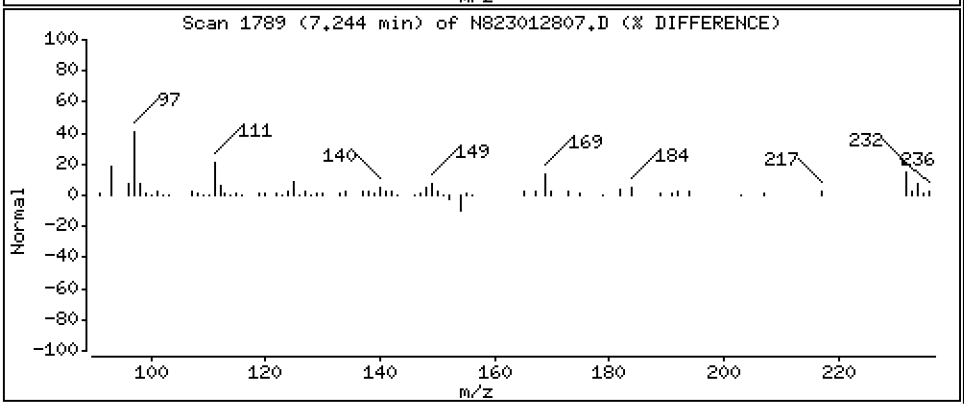












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Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

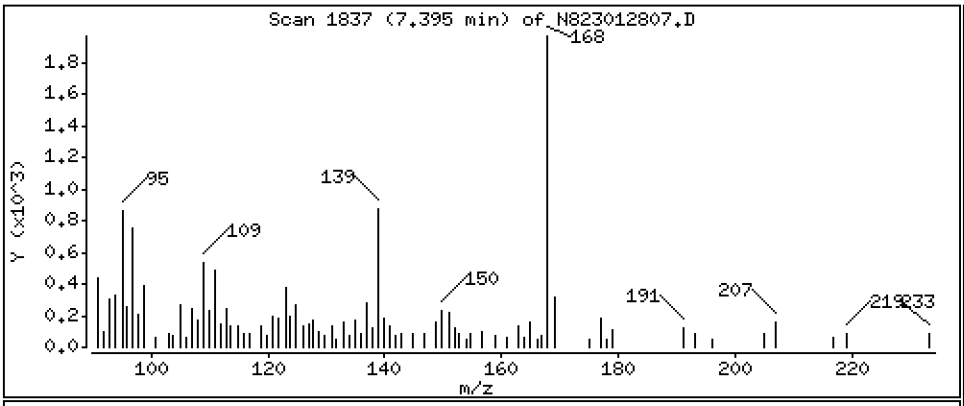
Operator: JZ

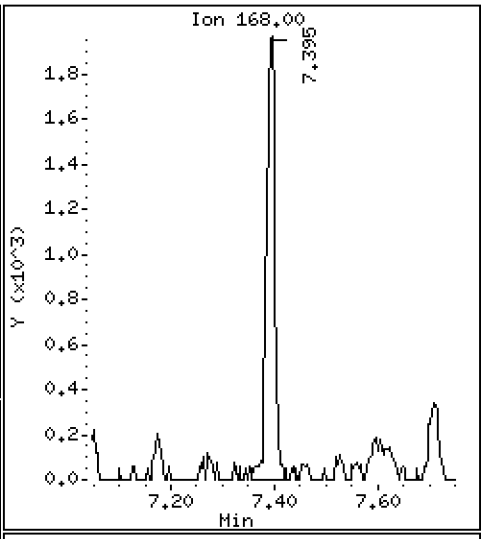
Column phase: Rxi-17sil

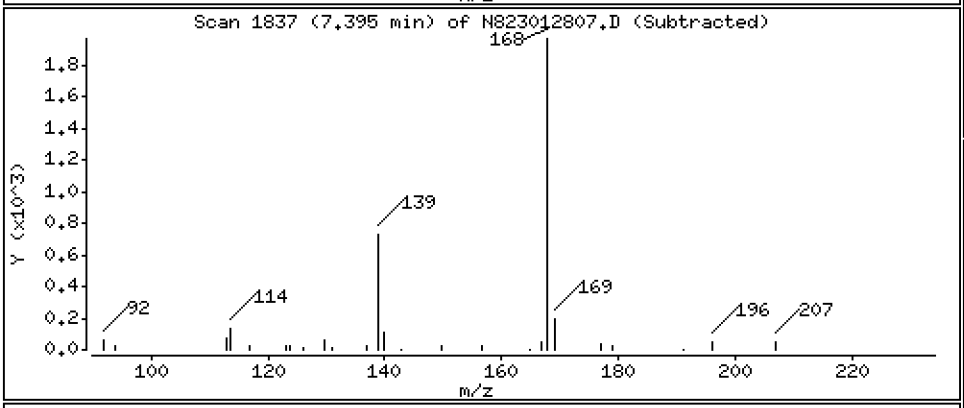
Column diameter: 0.25

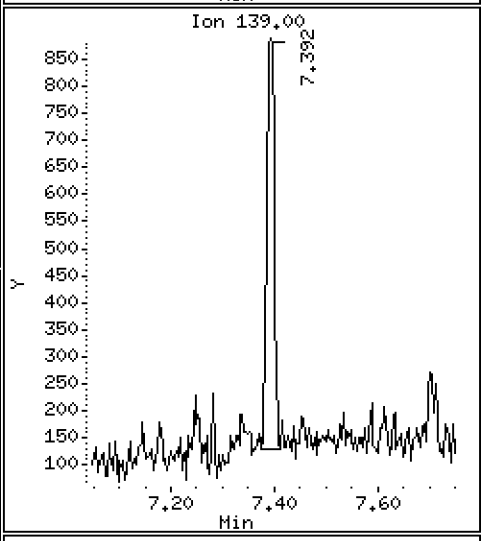
12 Dibenzofuran

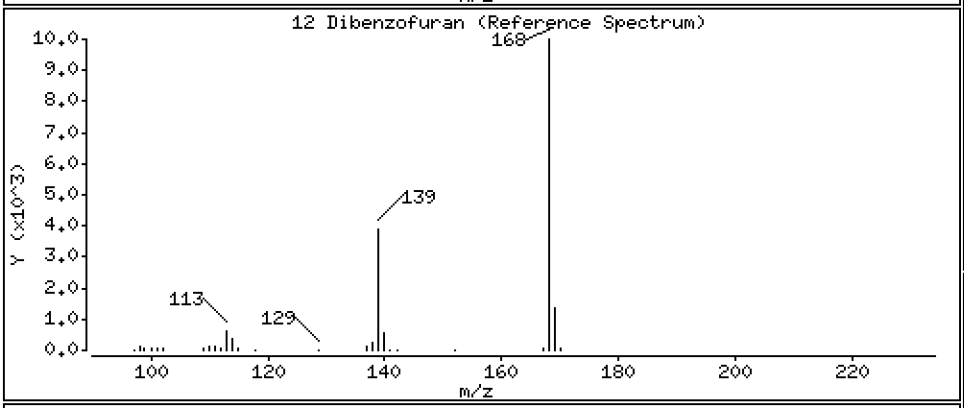
Concentration: 0.09333 ug/mL

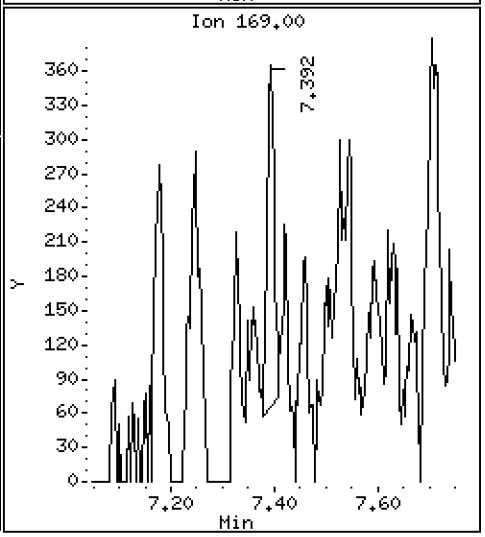


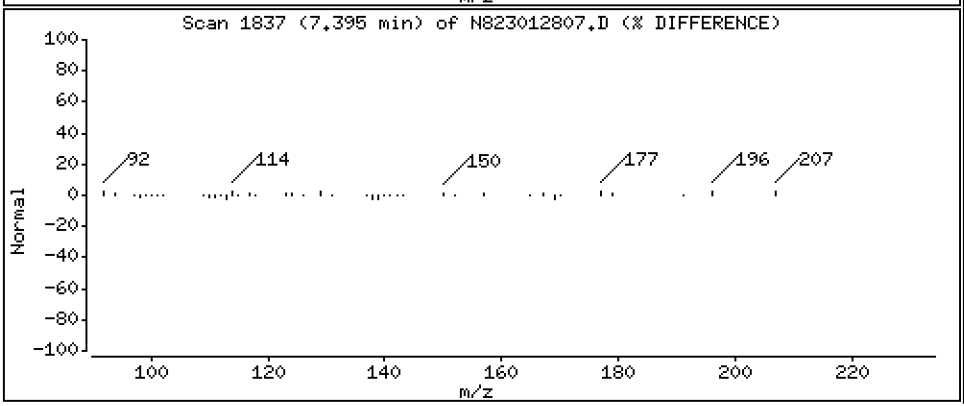












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Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

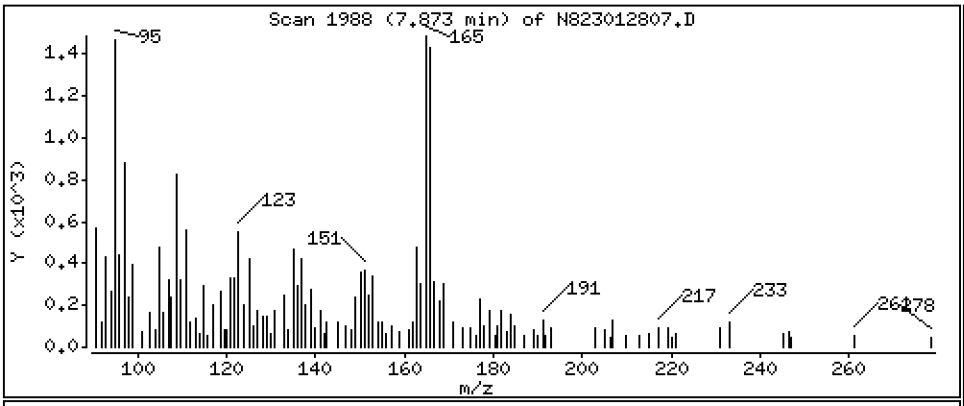
Operator: JZ

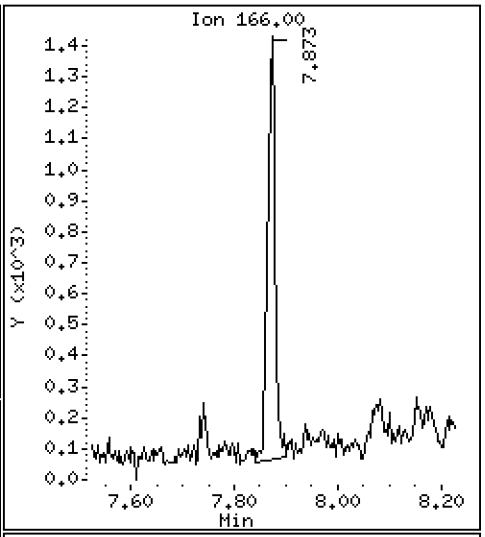
Column phase: Rxi-17sil

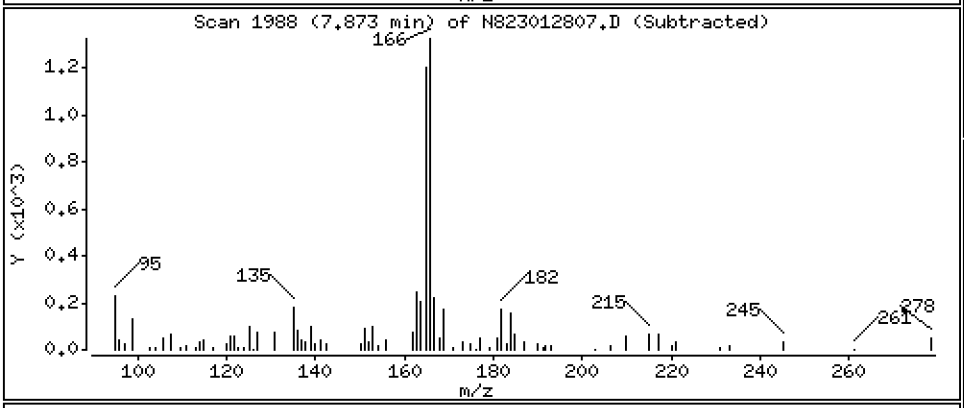
Column diameter: 0.25

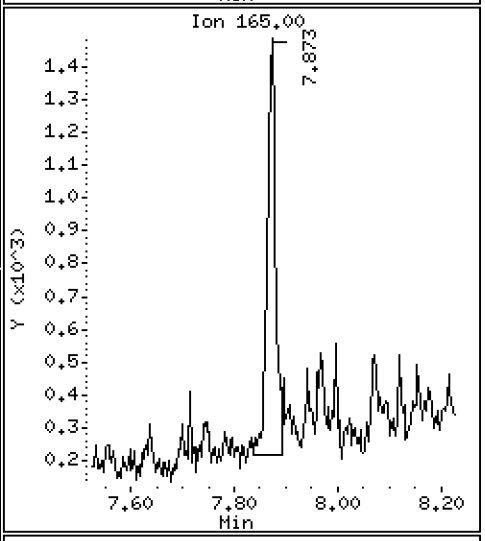
14 Fluorene

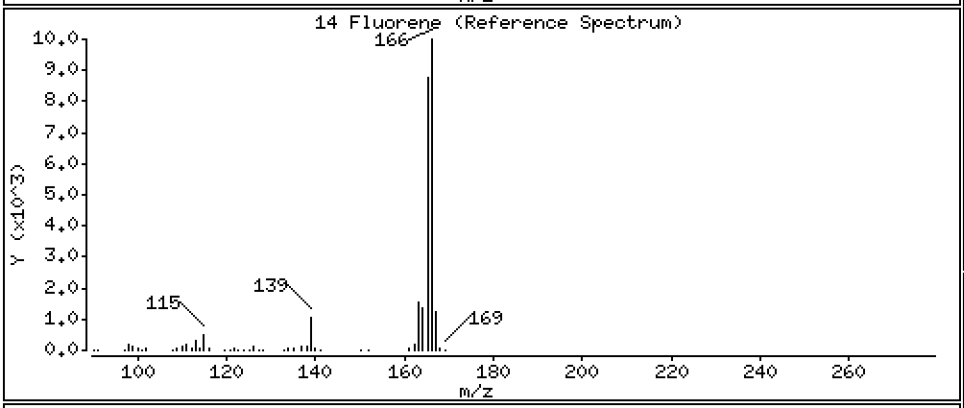
Concentration: 0.07566 ug/mL

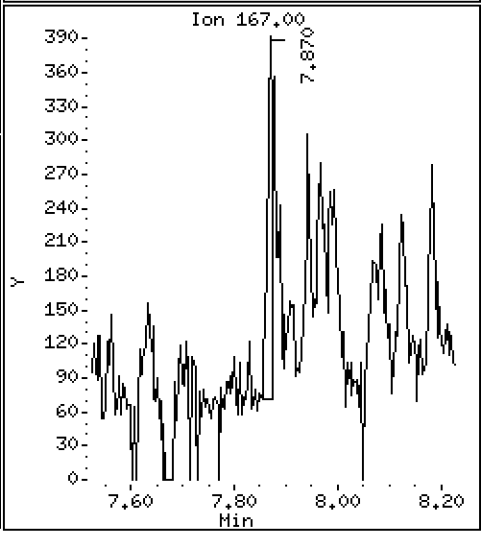


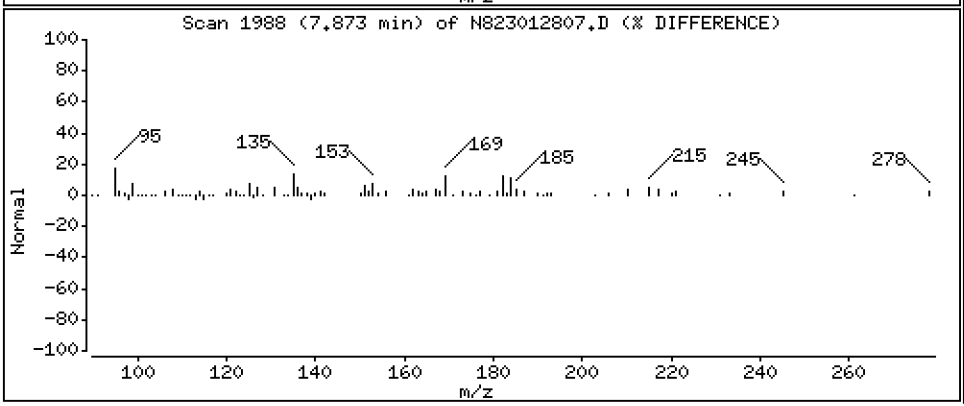












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D

Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

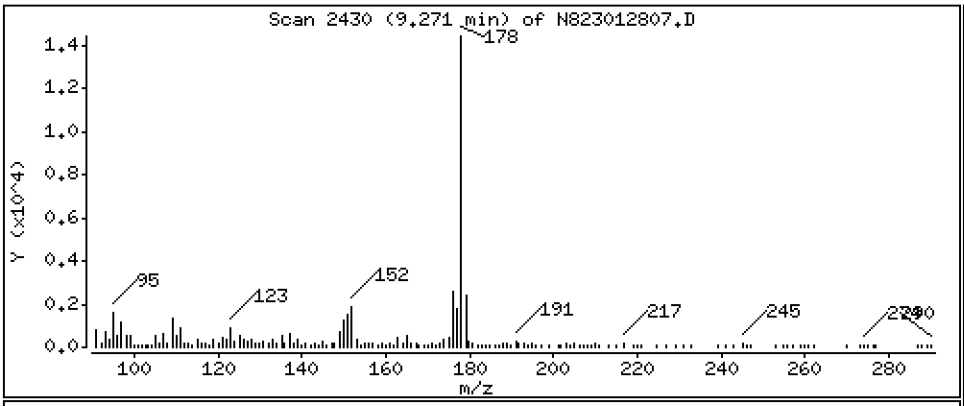
Operator: JZ

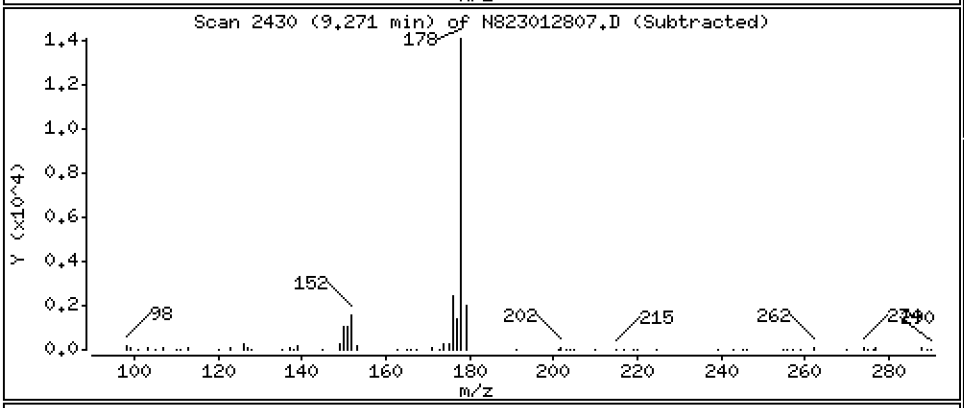
Column phase: Rxi-17sil

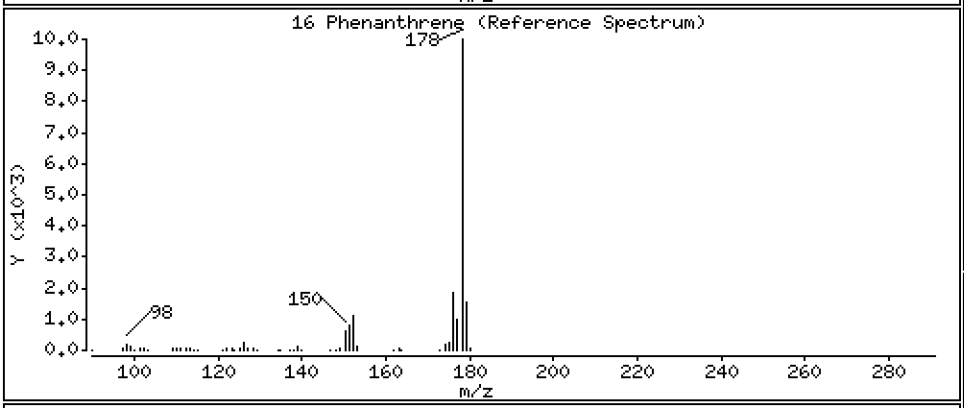
Column diameter: 0.25

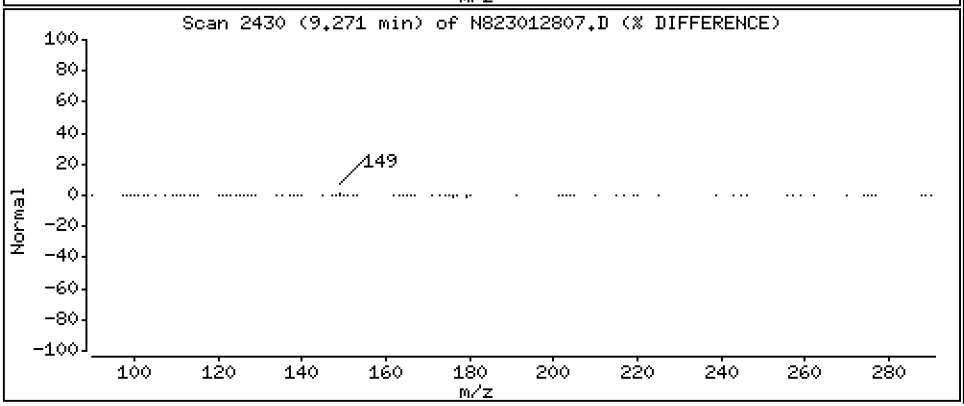
16 Phenanthrene

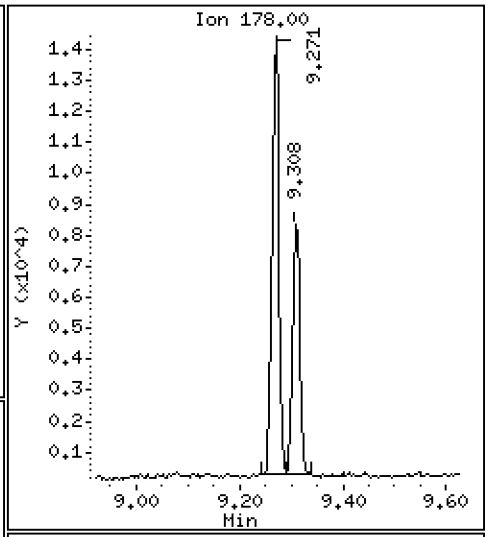
Concentration: 0.5248 ug/mL

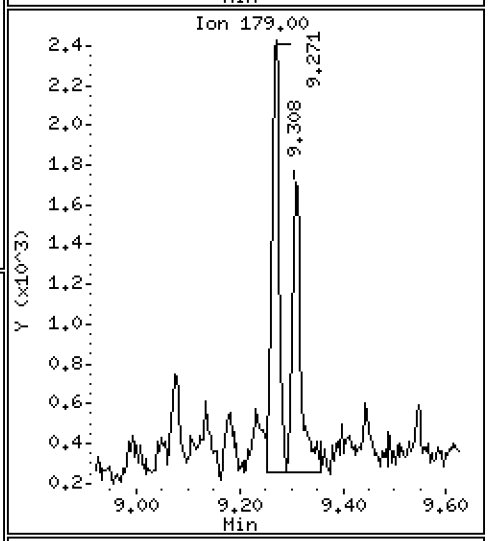


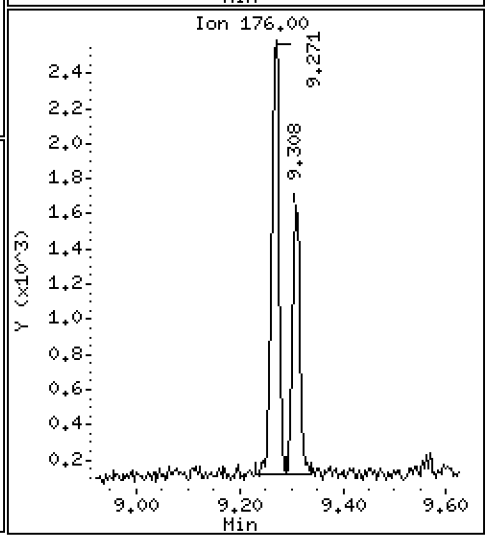












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D

Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

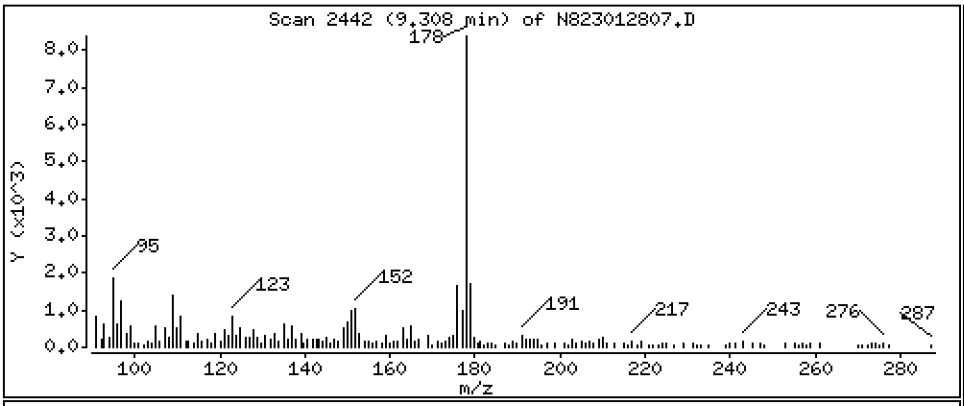
Operator: JZ

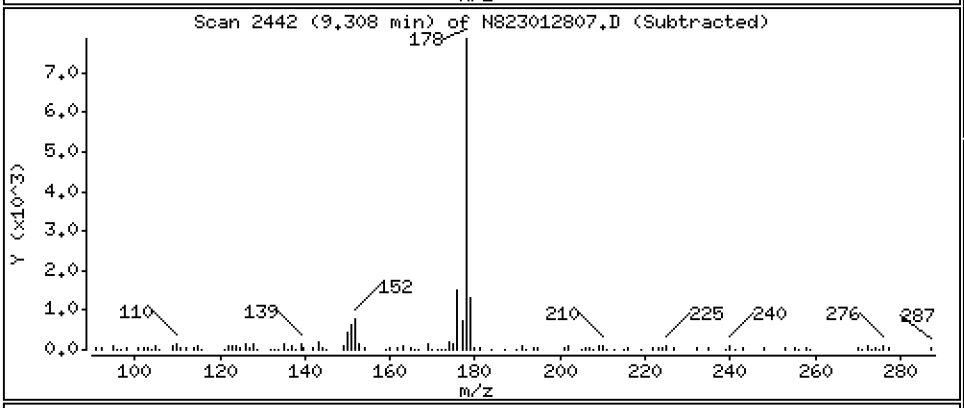
Column phase: Rxi-17sil

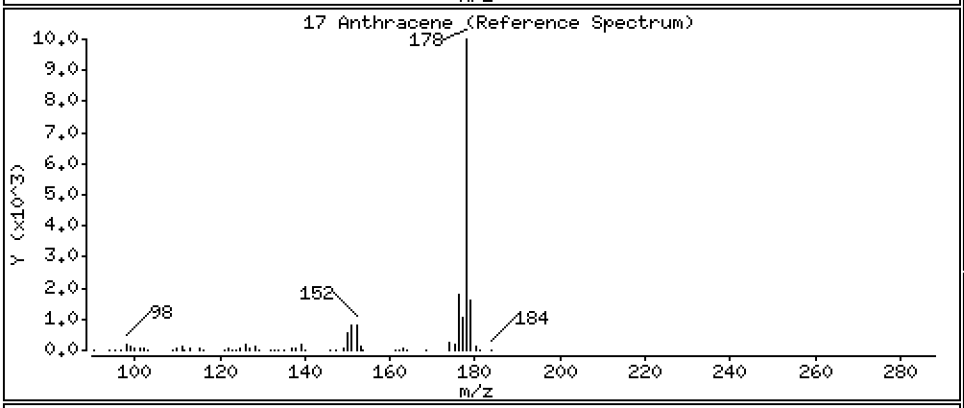
Column diameter: 0.25

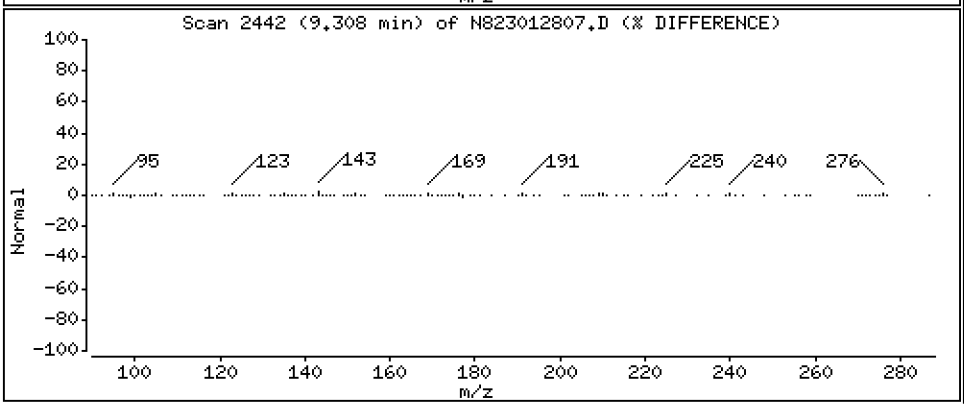
17 Anthracene

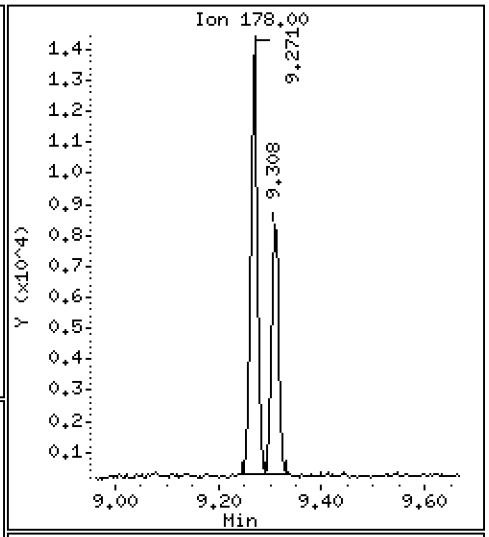
Concentration: 0.3443 ug/mL

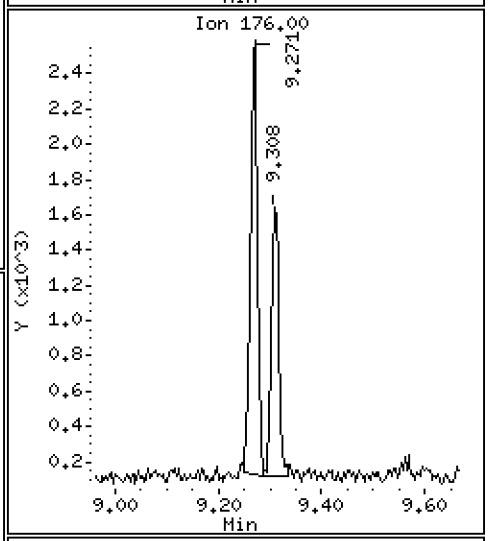


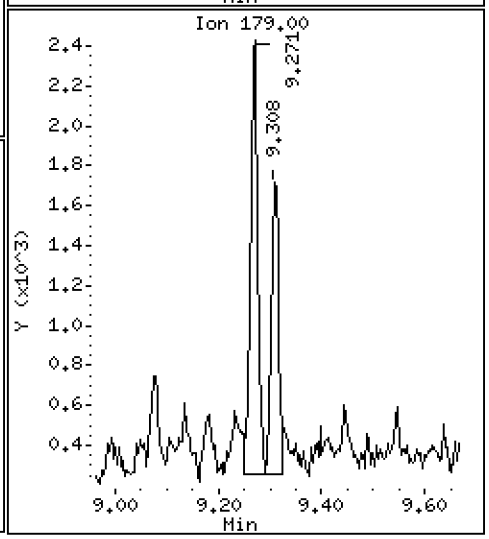












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D

Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

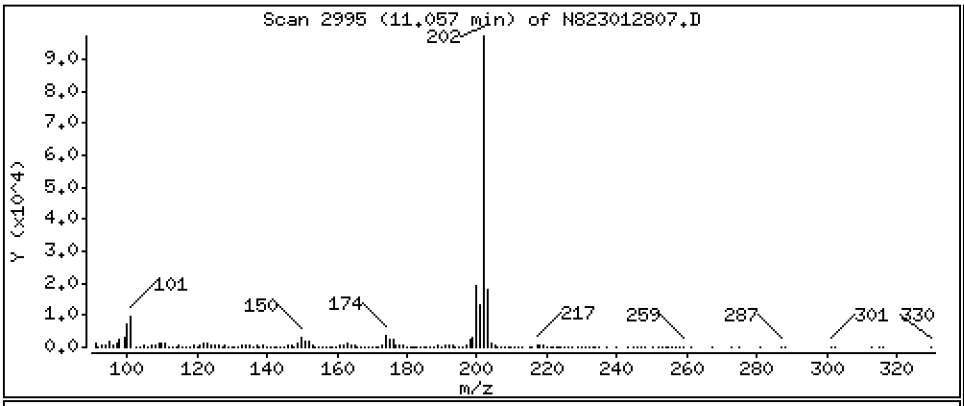
Operator: JZ

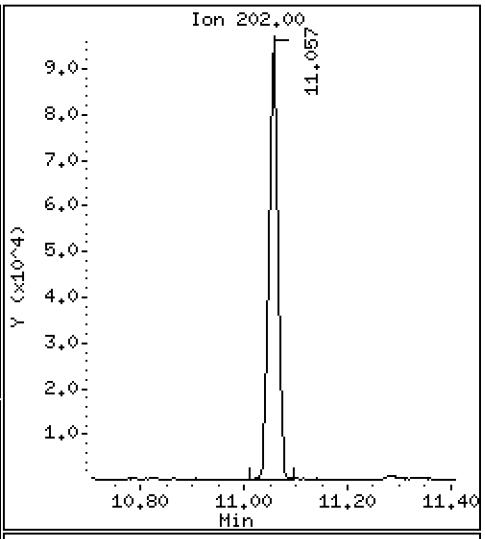
Column phase: Rxi-17sil

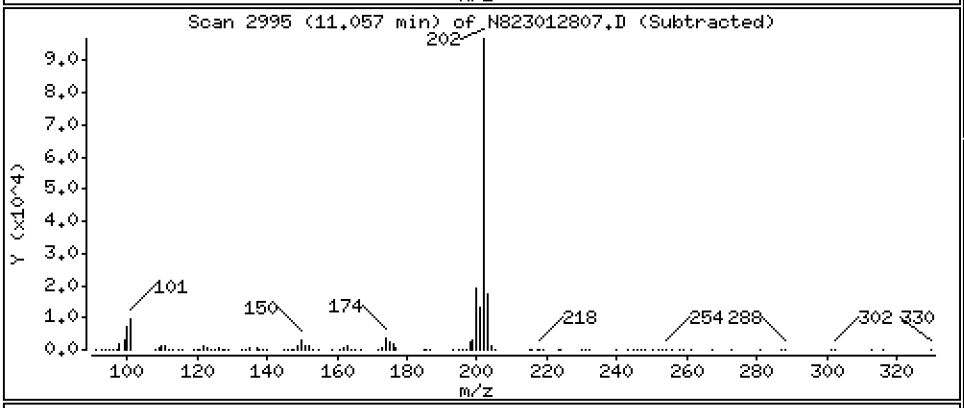
Column diameter: 0.25

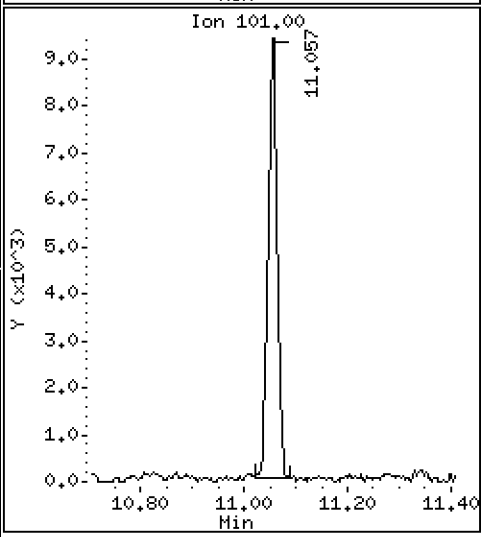
22 Fluoranthene

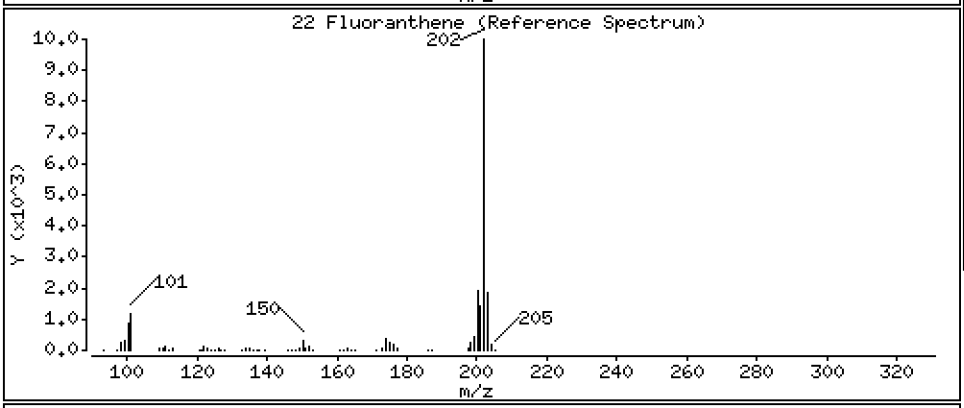
Concentration: 4.418 ug/mL

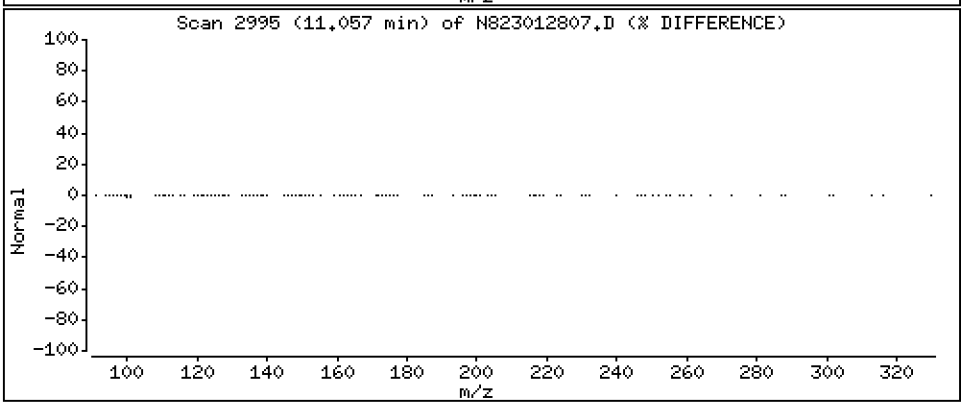












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D

Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

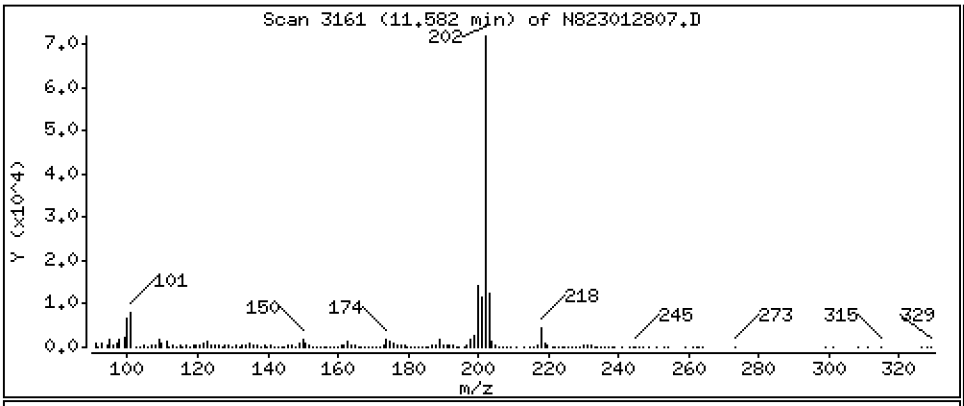
Operator: JZ

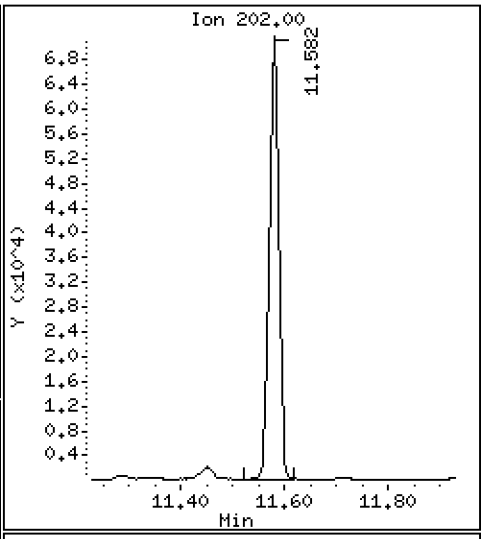
Column phase: Rxi-17sil

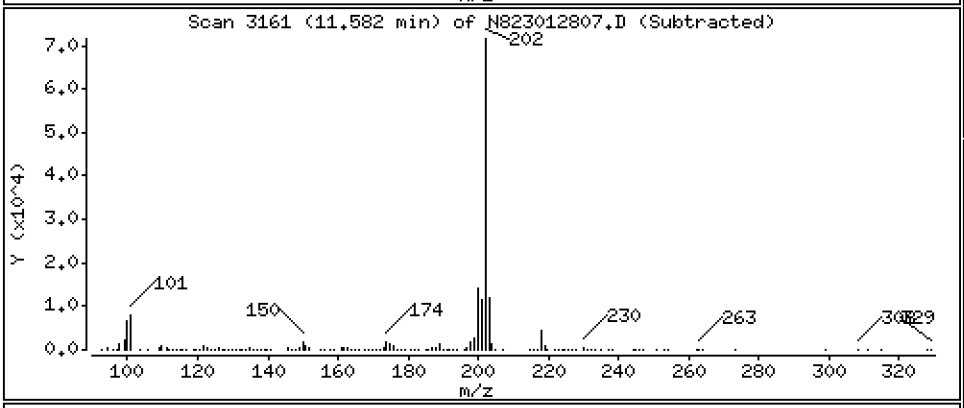
Column diameter: 0.25

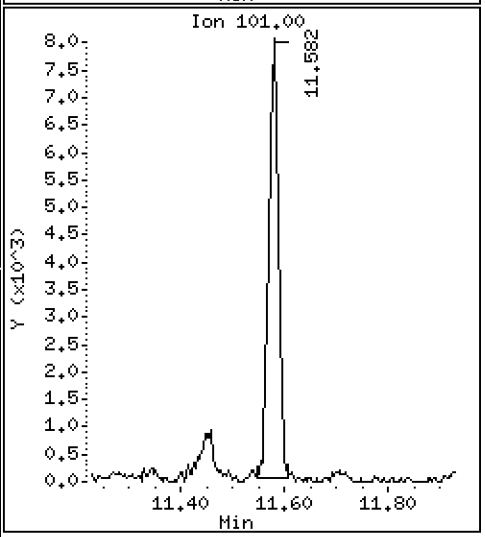
23 Pyrene

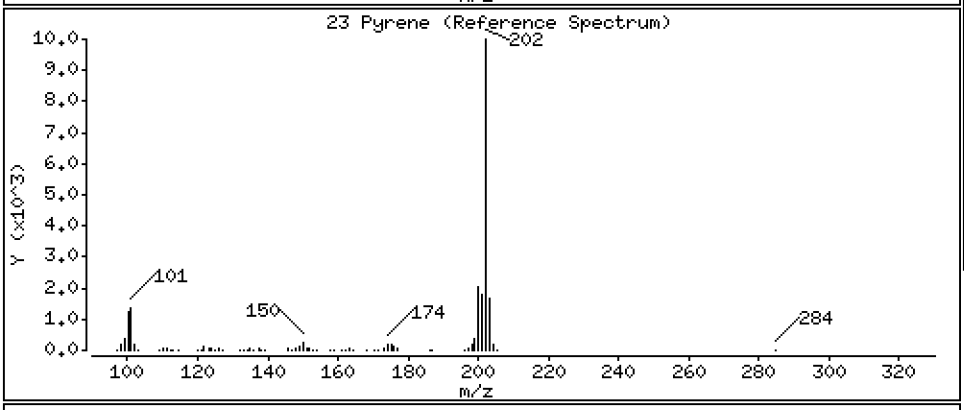
Concentration: 5.214 ug/mL

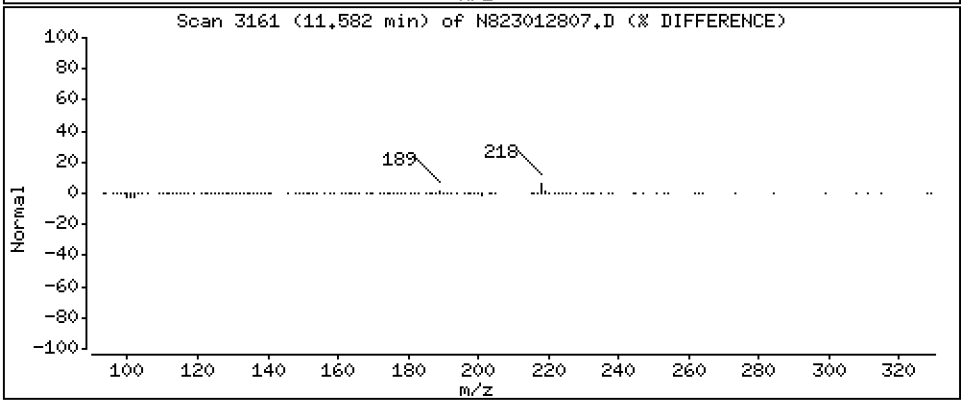












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D

Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

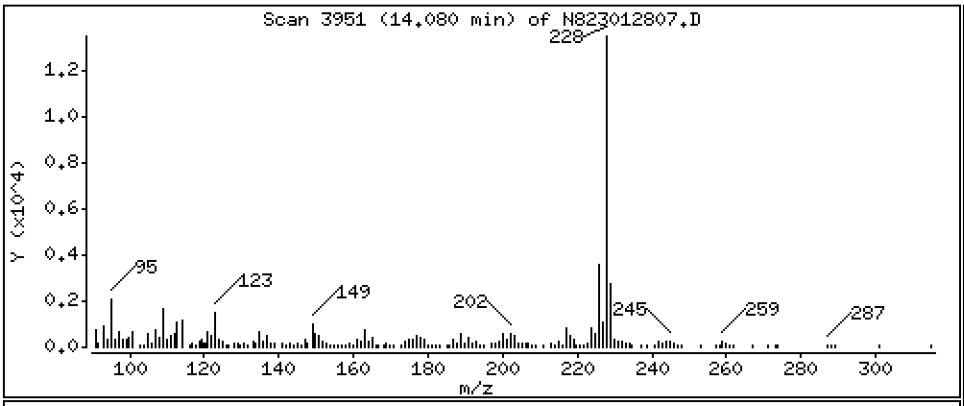
Operator: JZ

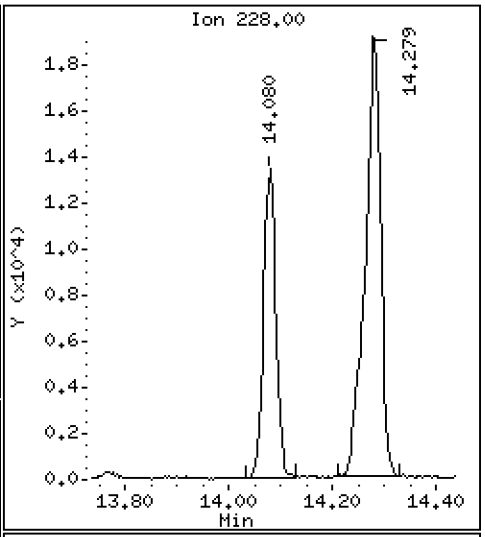
Column phase: Rxi-17sil

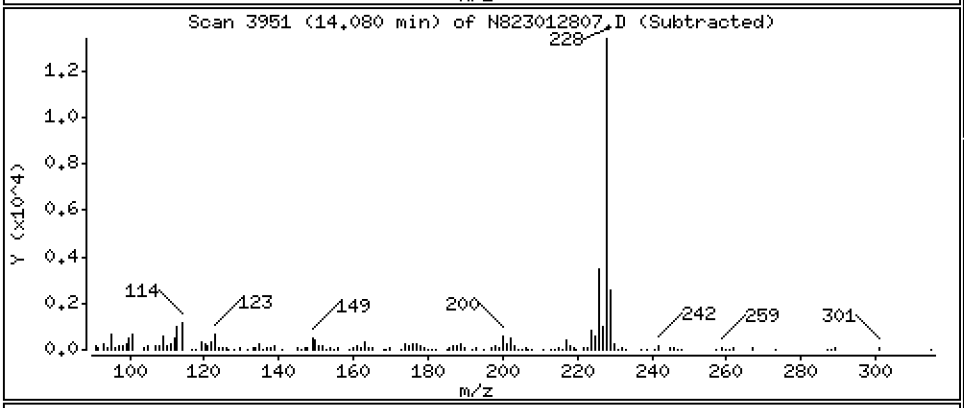
Column diameter: 0.25

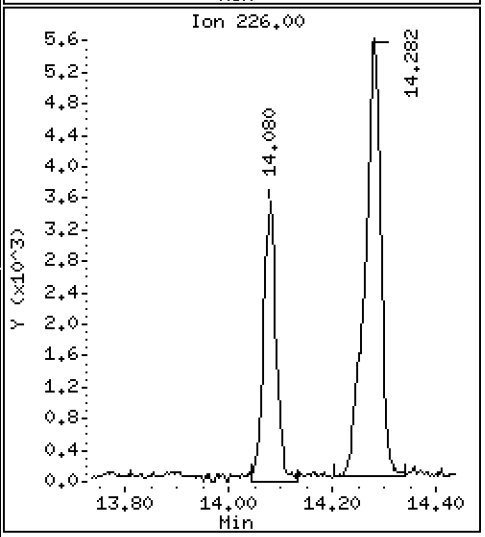
24 Benzo(a)anthracene

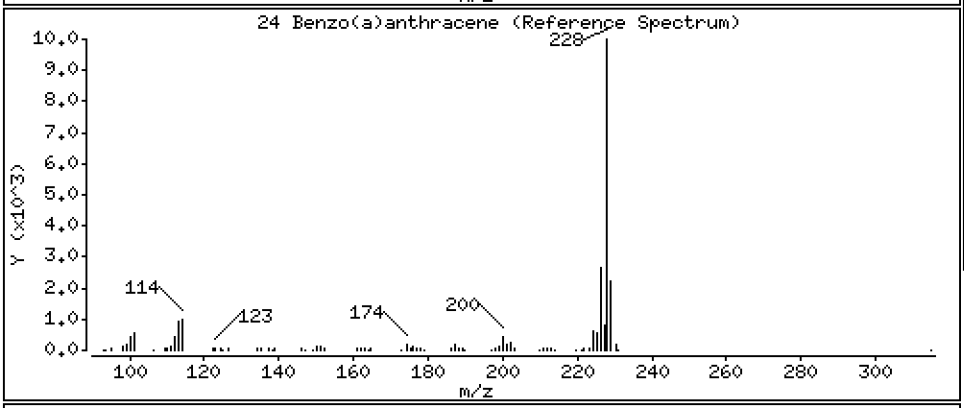
Concentration: 1.373 ug/mL

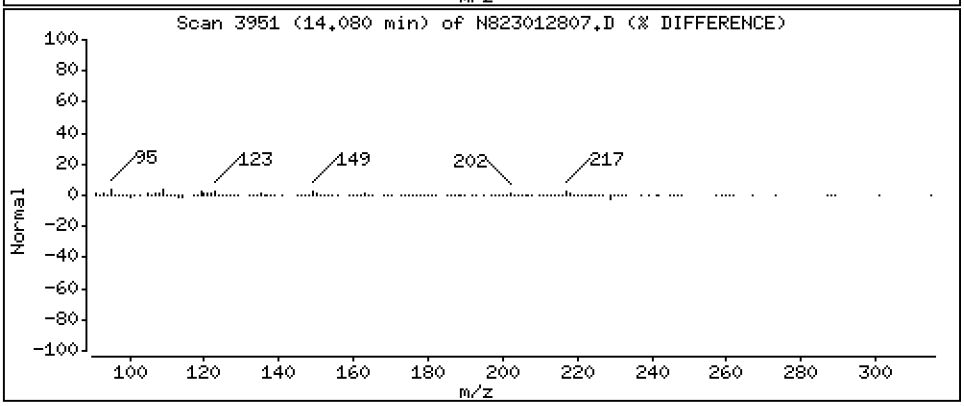












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D

Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

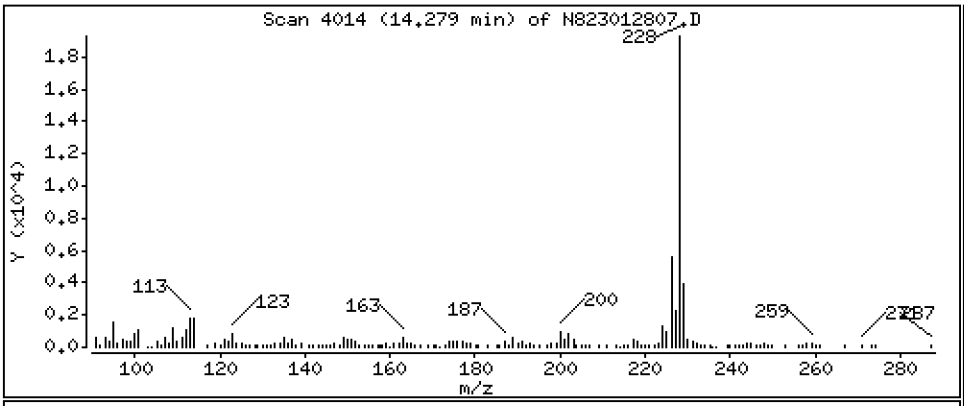
Operator: JZ

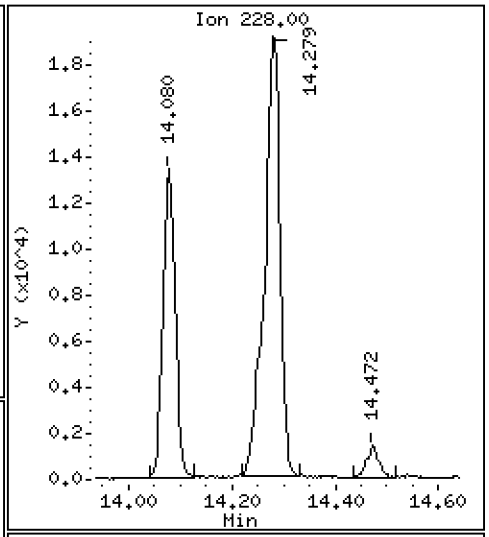
Column phase: Rxi-17sil

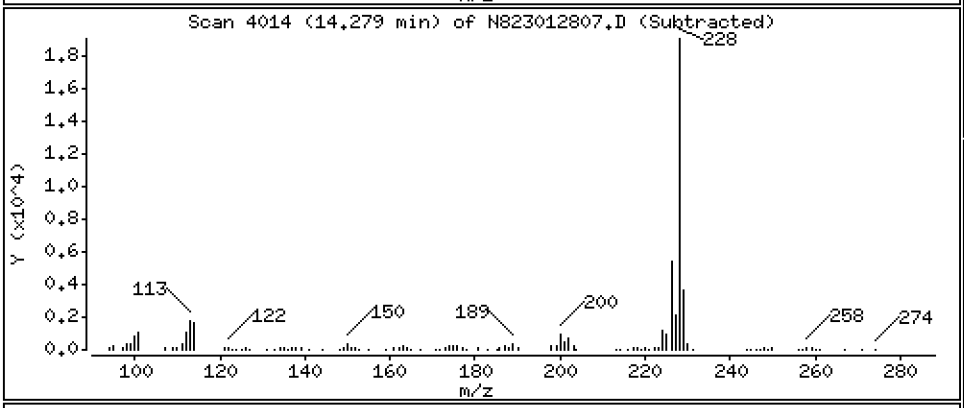
Column diameter: 0.25

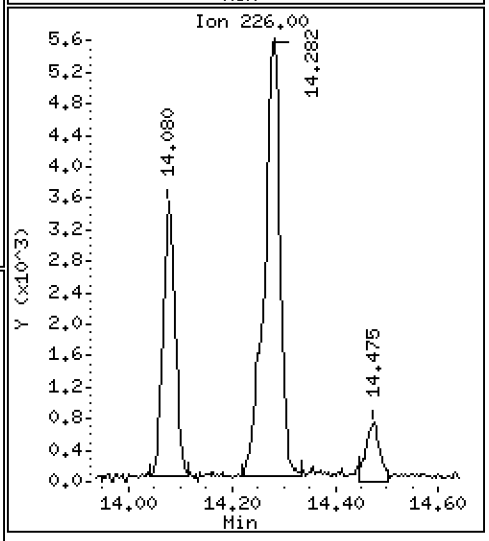
27 Chrysene

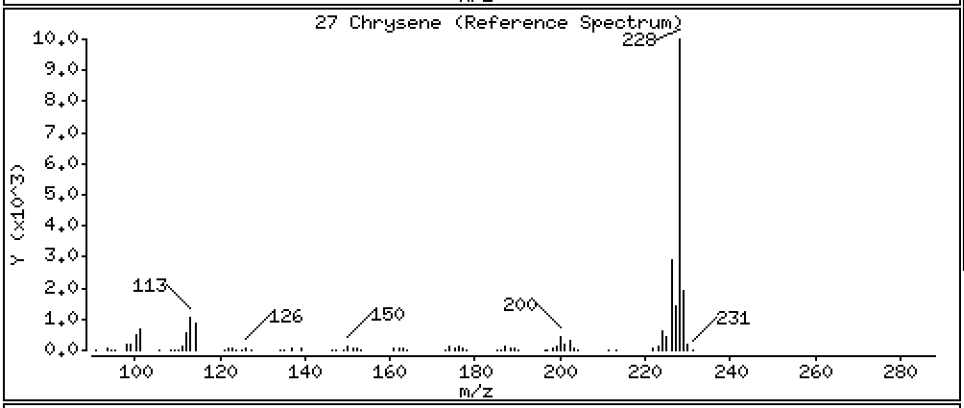
Concentration: 2.290 ug/mL

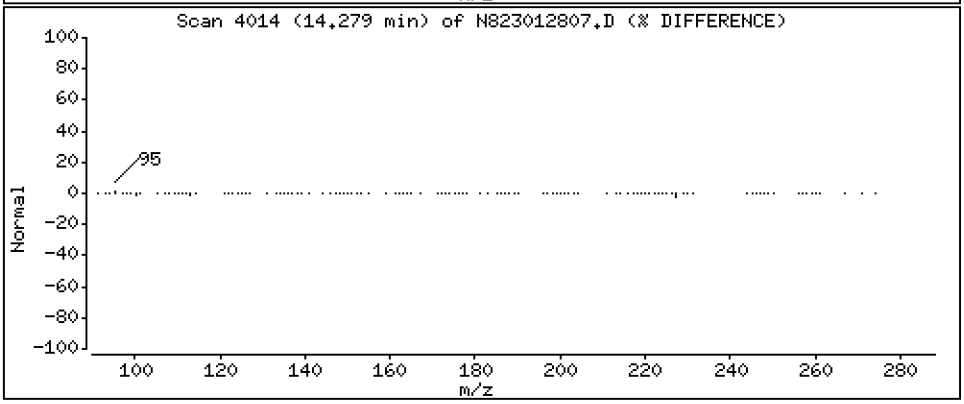












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D

Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

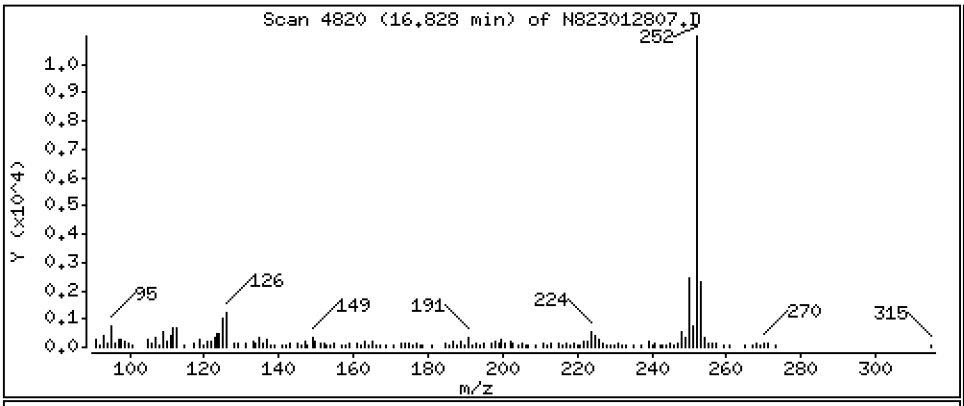
Operator: JZ

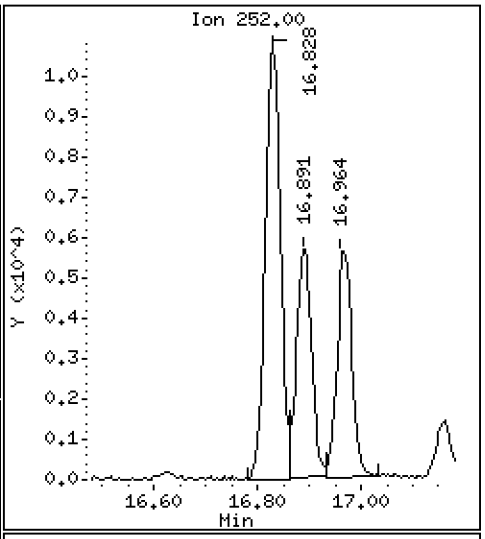
Column phase: Rxi-17sil

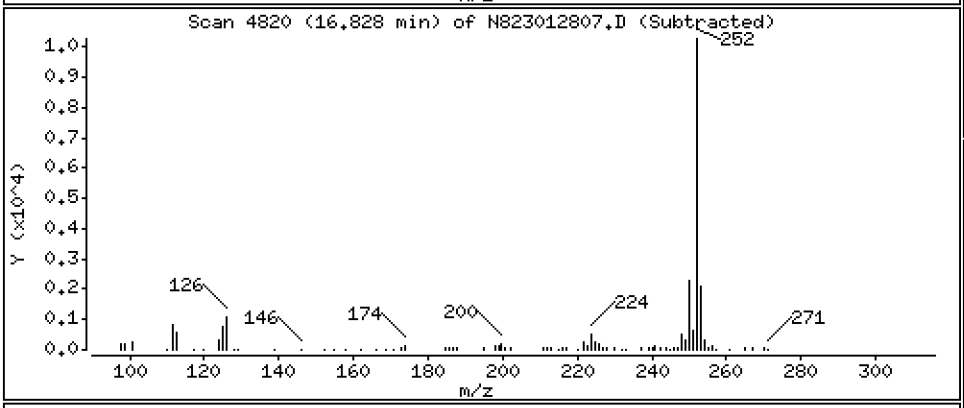
Column diameter: 0.25

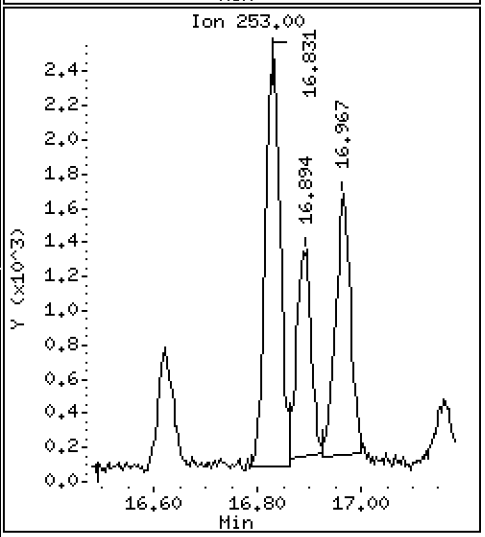
28 Benzo(b)fluoranthene

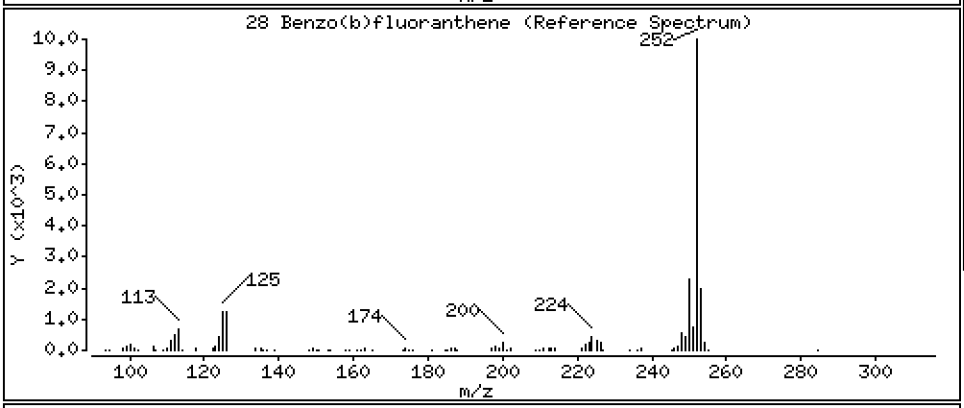
Concentration: 1.367 ug/mL

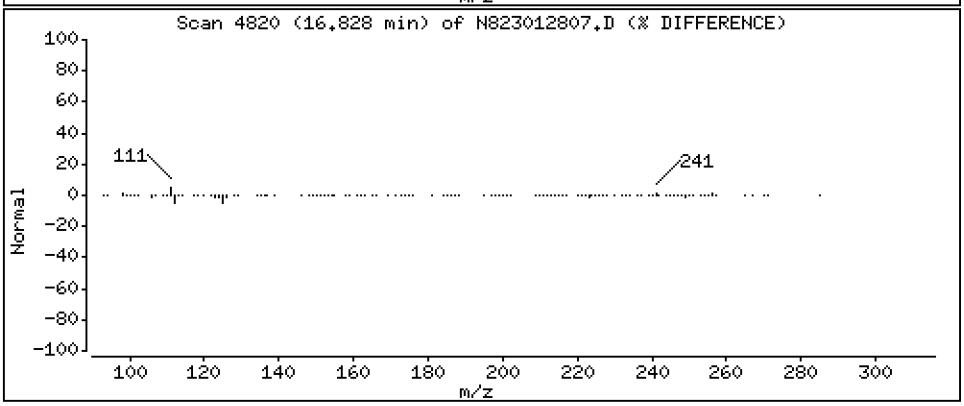












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D

Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

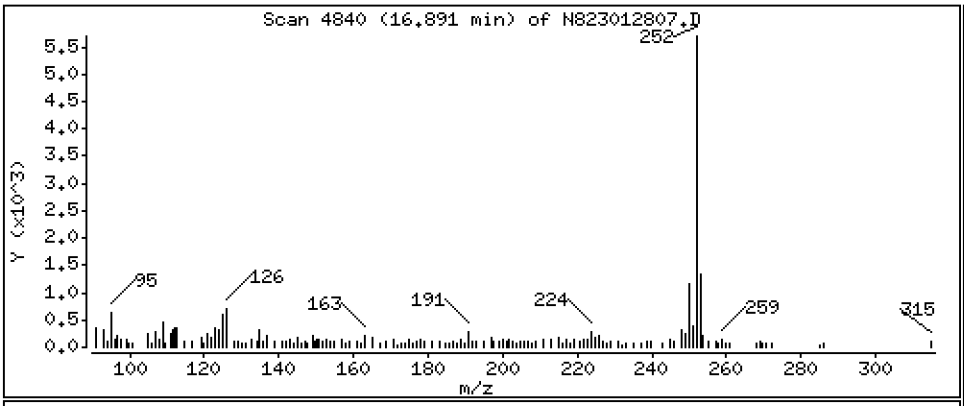
Operator: JZ

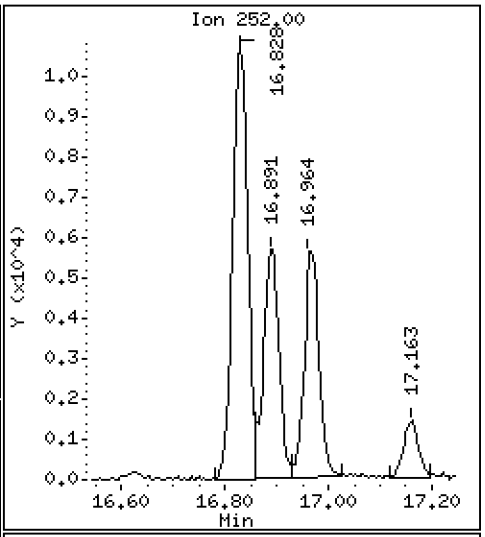
Column phase: Rxi-17sil

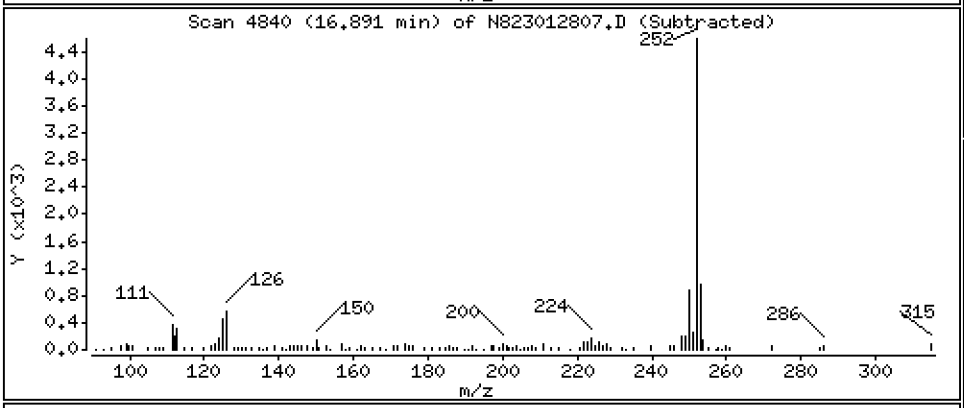
Column diameter: 0.25

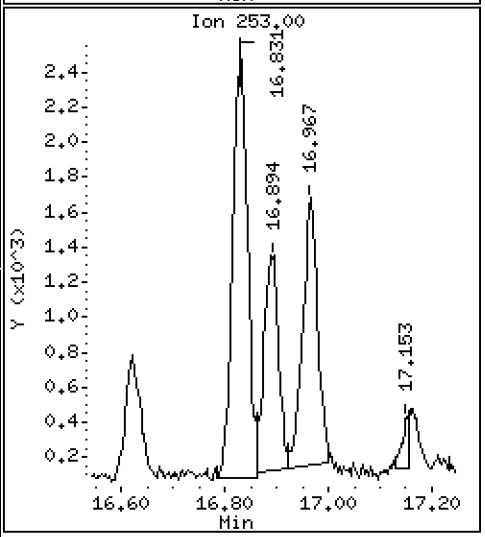
29 Benzo(k)fluoranthene

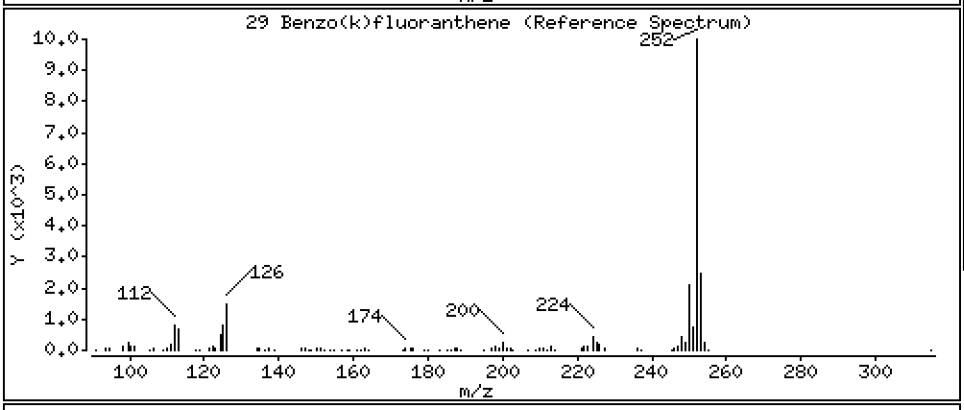
Concentration: 0.7420 ug/mL

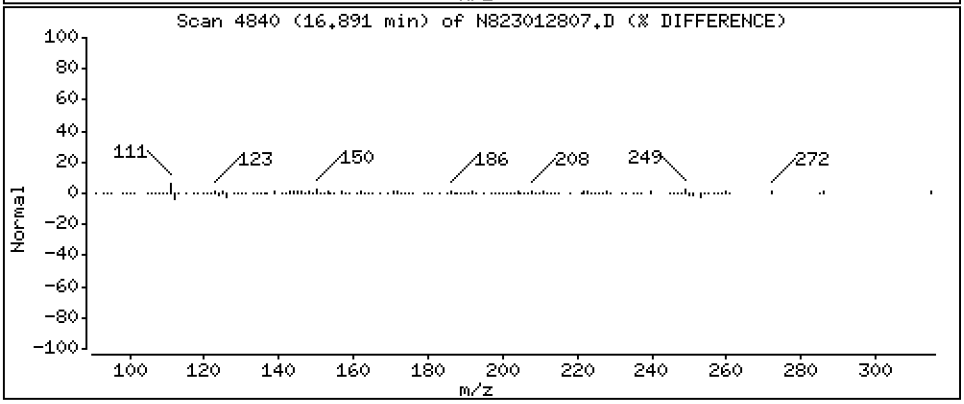












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D

Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

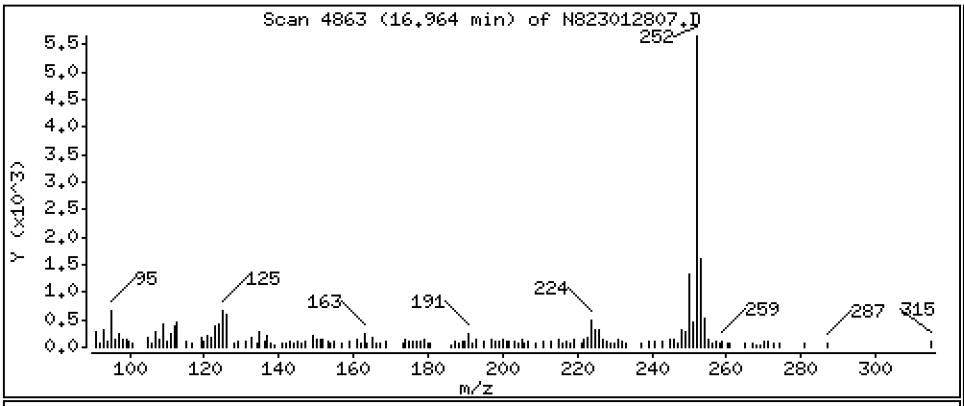
Operator: JZ

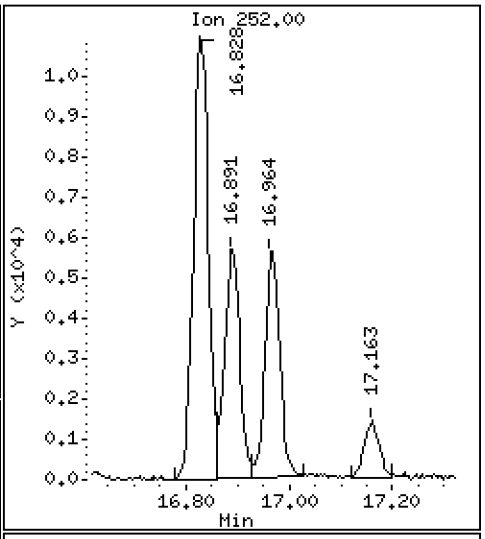
Column phase: Rxi-17sil

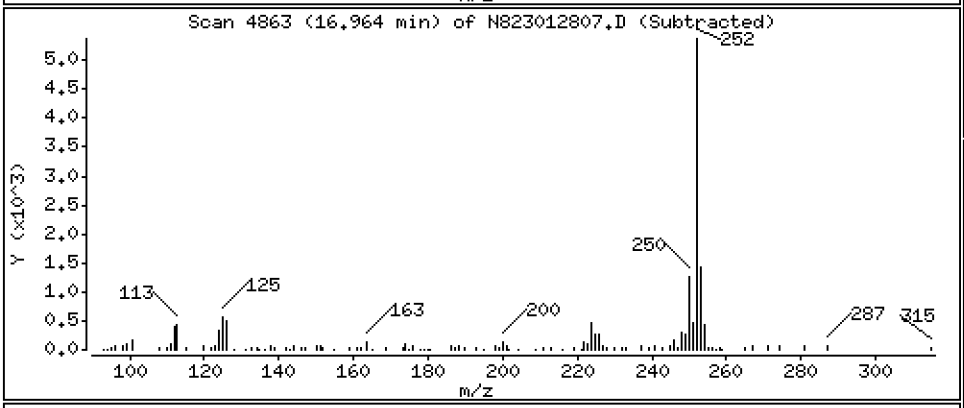
Column diameter: 0.25

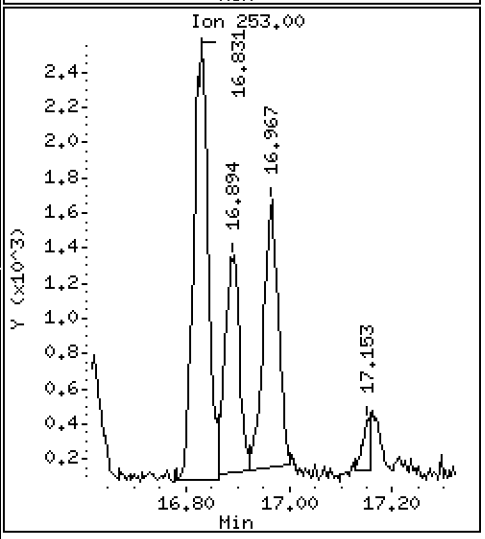
30 Benzo(j)fluoranthene

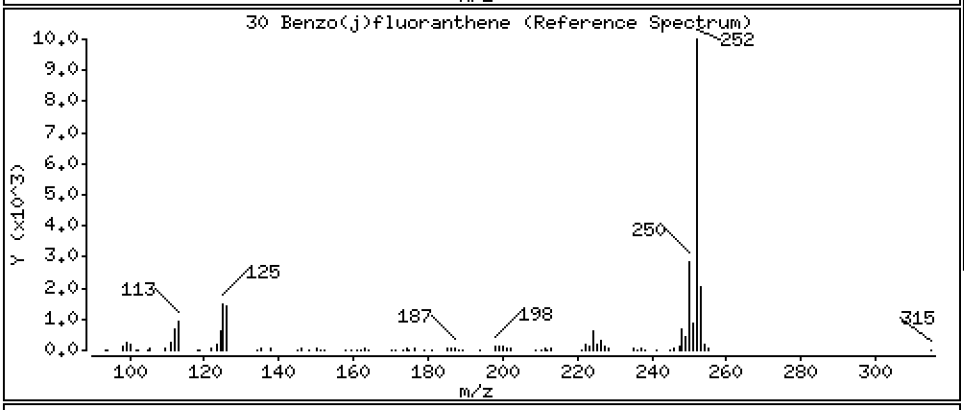
Concentration: 0.7685 ug/mL

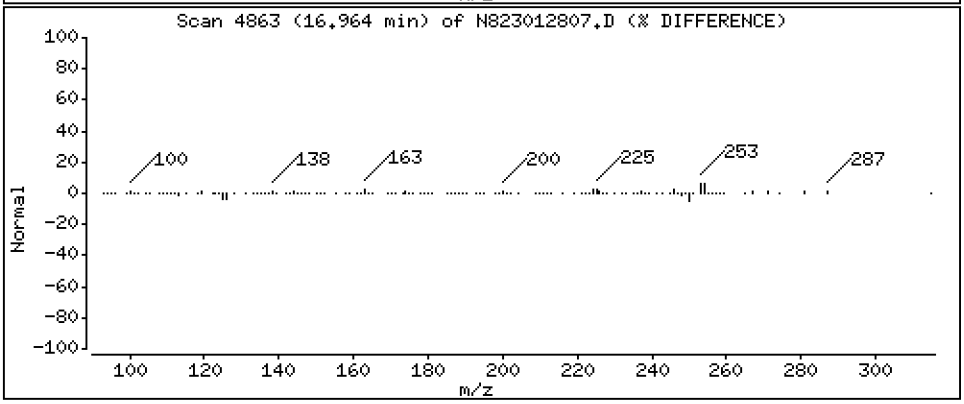












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D

Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

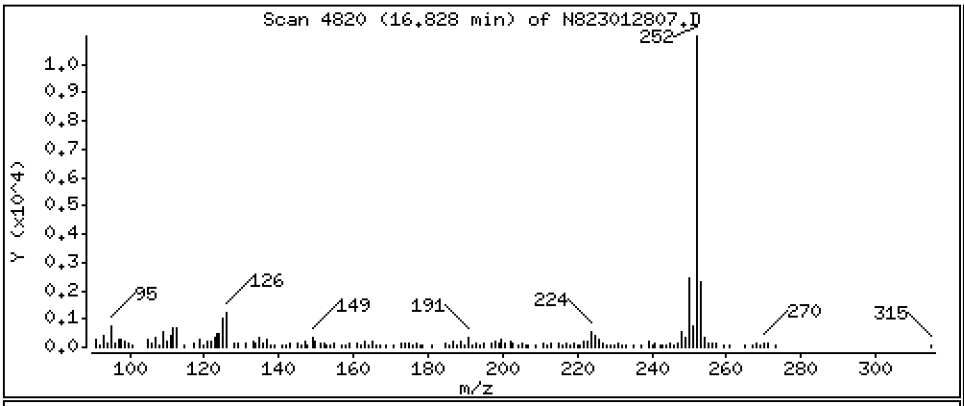
Operator: JZ

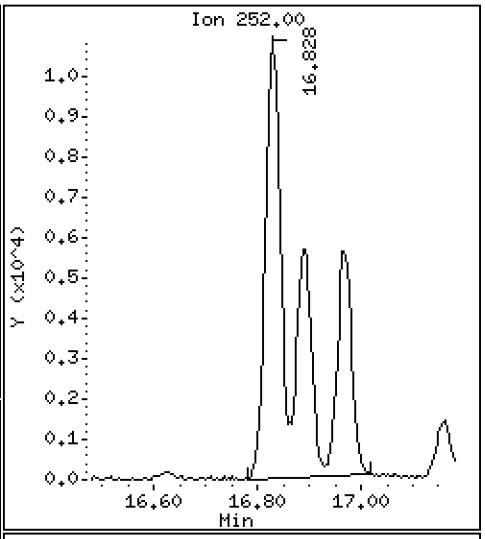
Column phase: Rxi-17sil

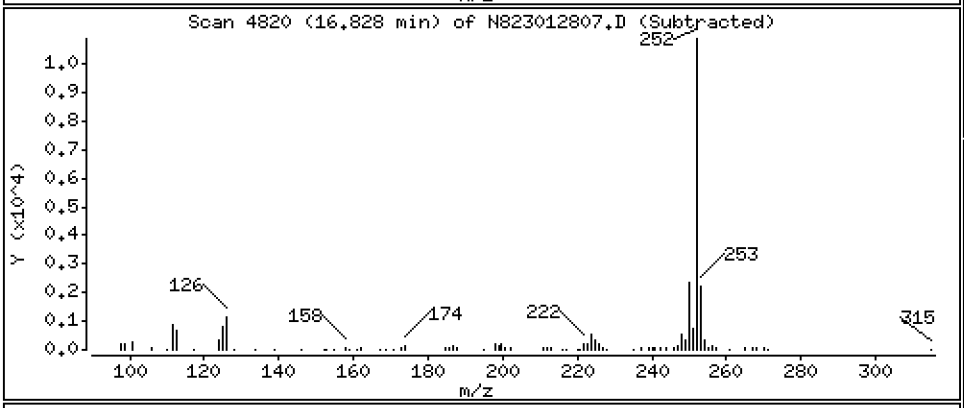
Column diameter: 0.25

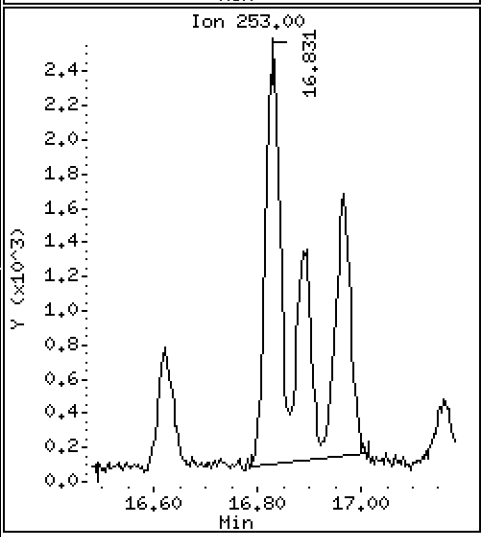
31 Total Benzofluoranthenes

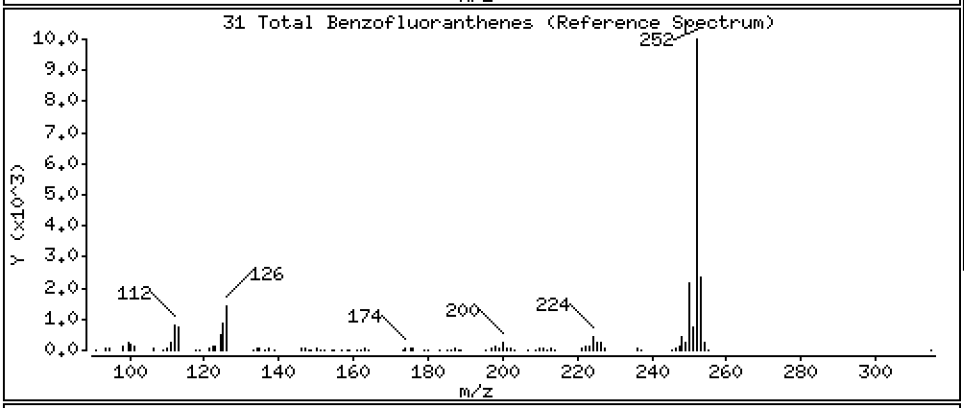
Concentration: 2.860 ug/mL

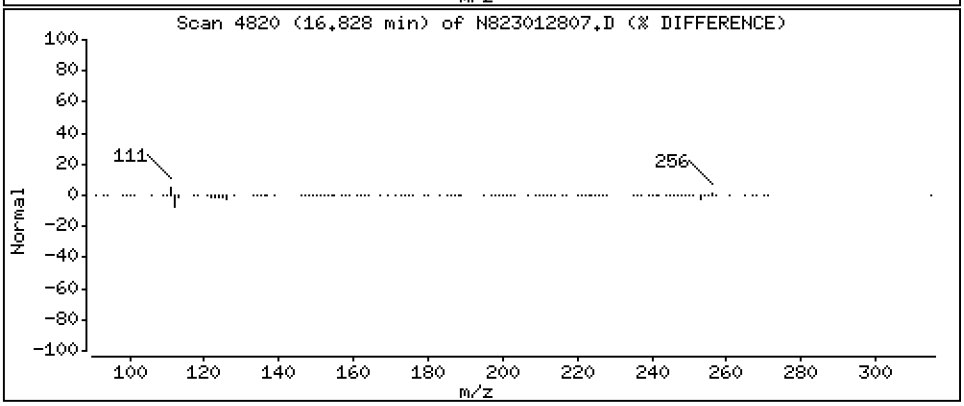












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012807.D

Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

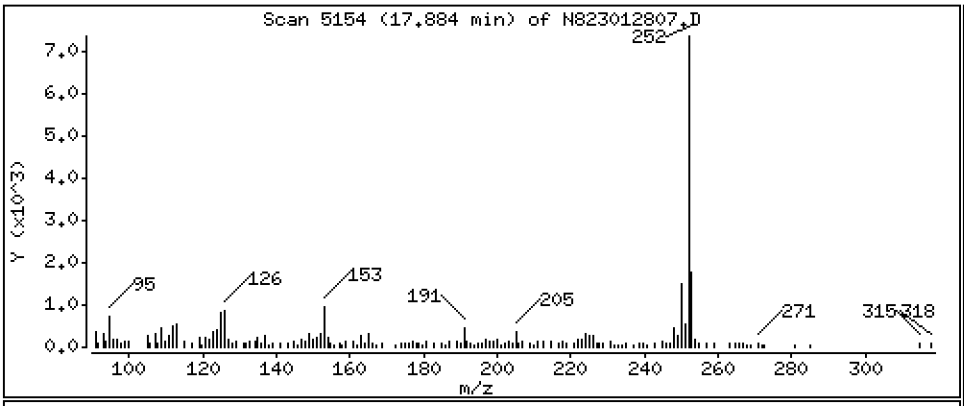
Operator: JZ

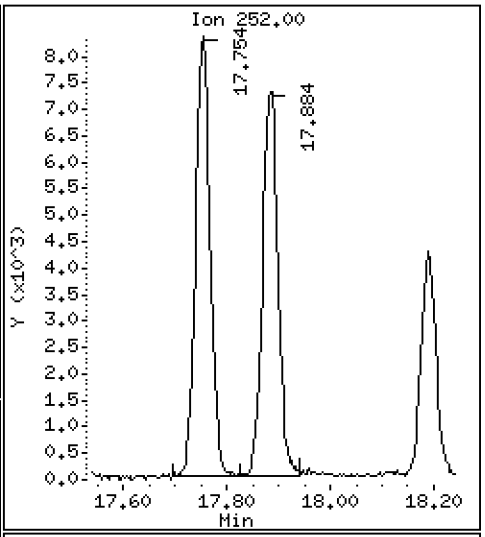
Column phase: Rxi-17sil

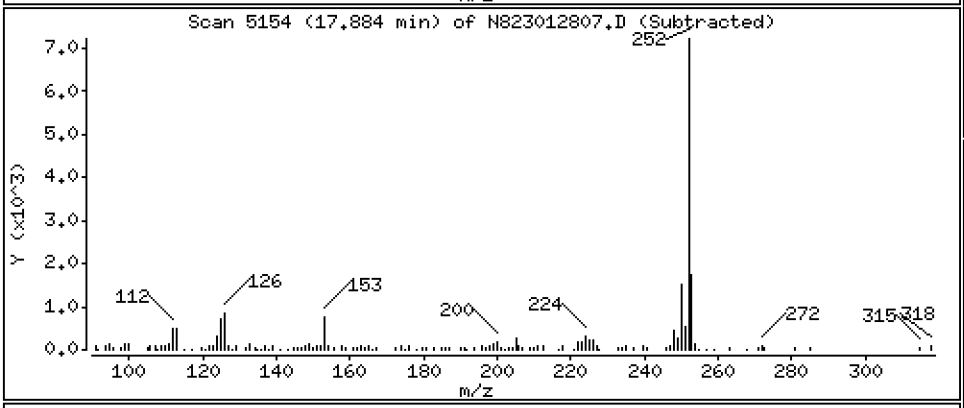
Column diameter: 0.25

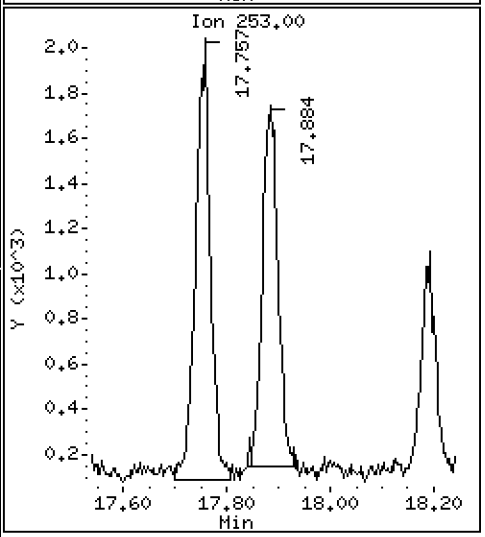
32 Benzo(a)pyrene

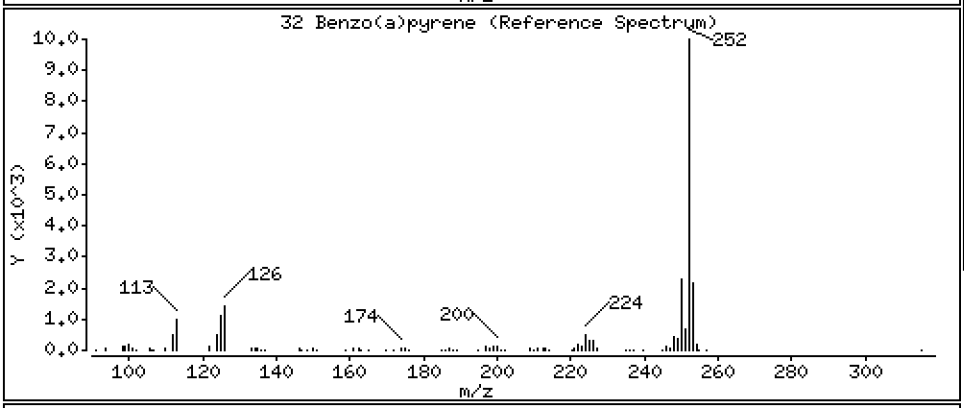
Concentration: 1.057 ug/mL

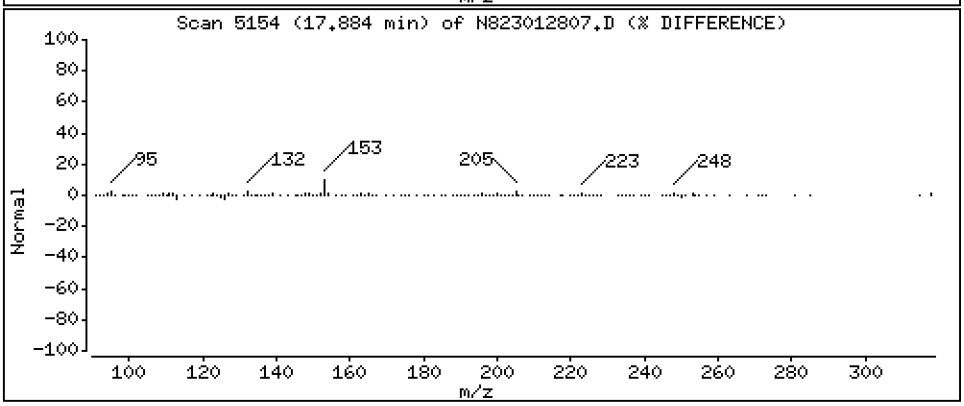












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Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

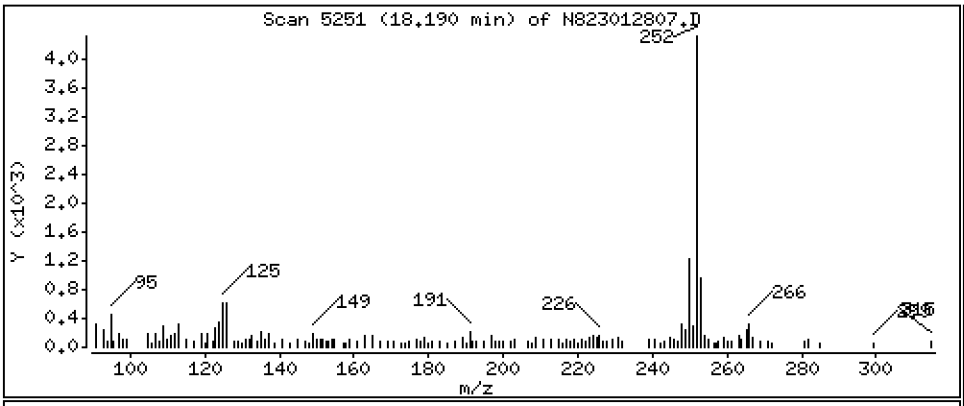
Operator: JZ

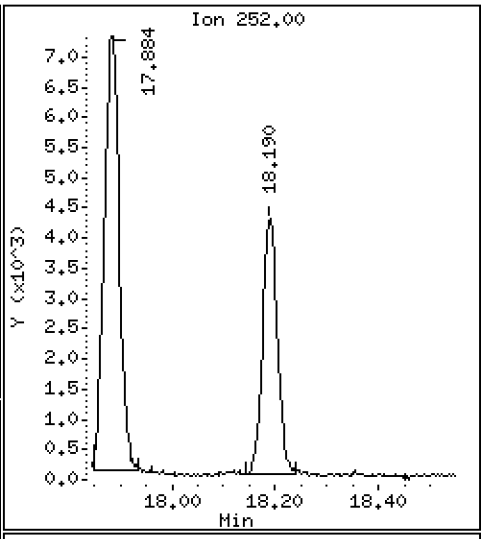
Column phase: Rxi-17sil

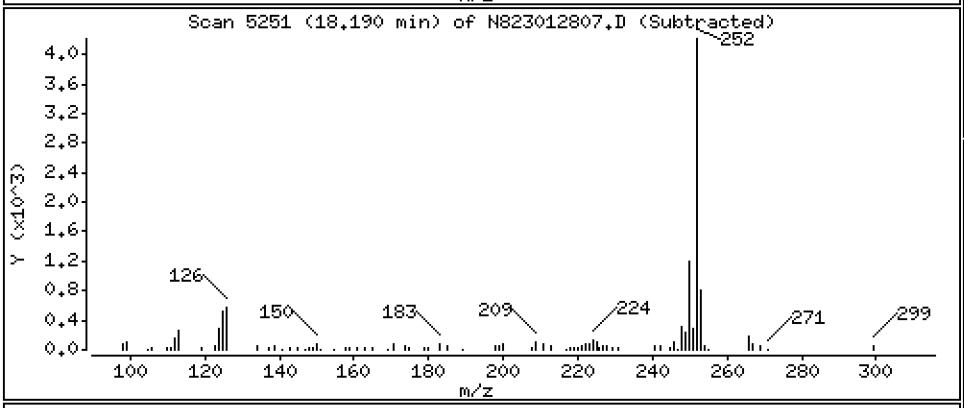
Column diameter: 0.25

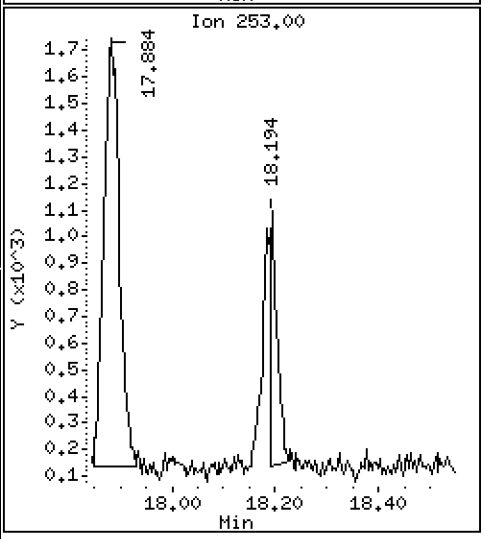
35 Perylene

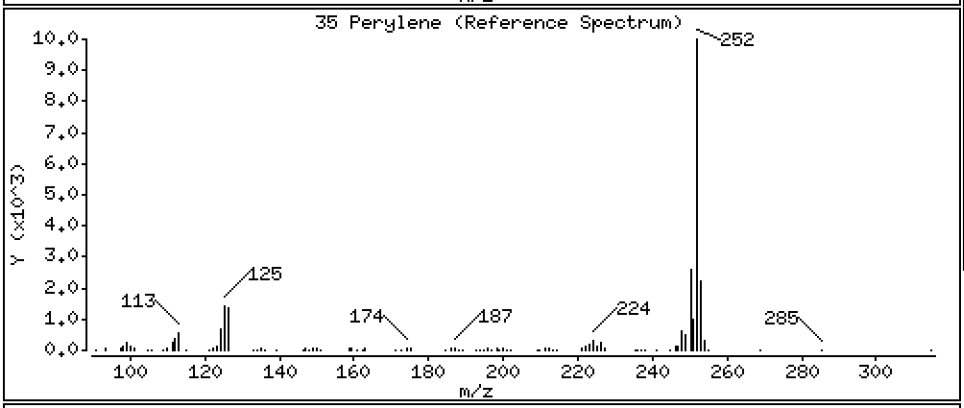
Concentration: 0.5486 ug/mL

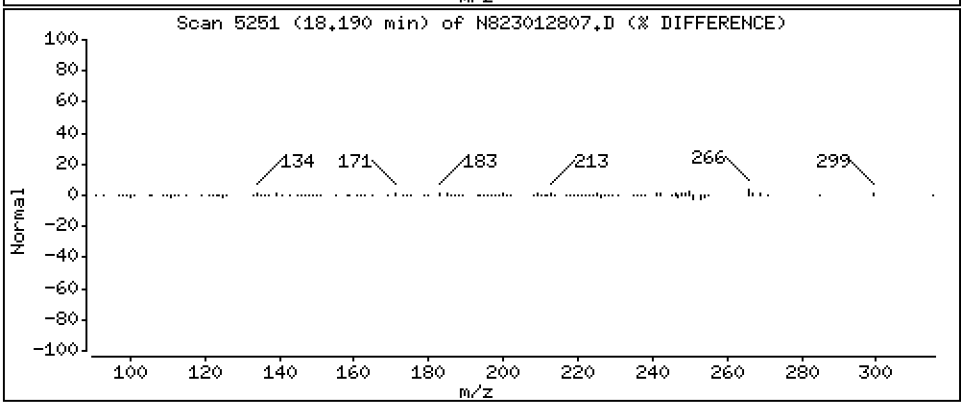












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Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

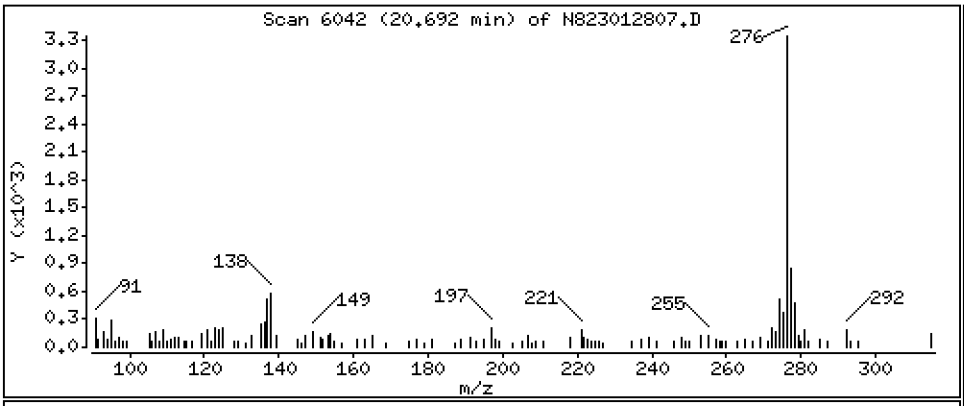
Operator: JZ

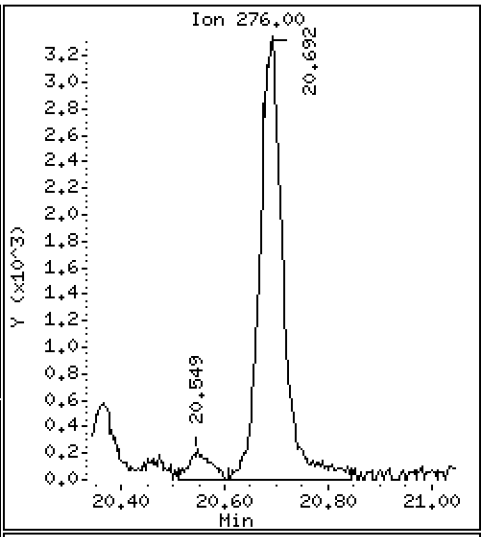
Column phase: Rxi-17sil

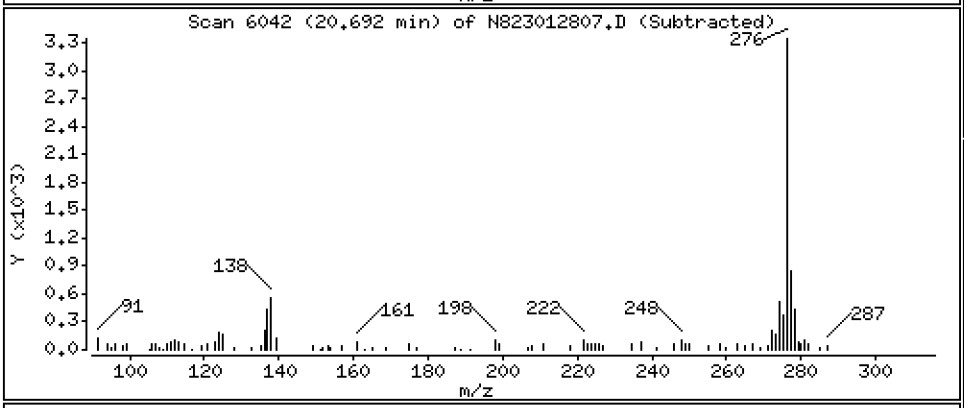
Column diameter: 0.25

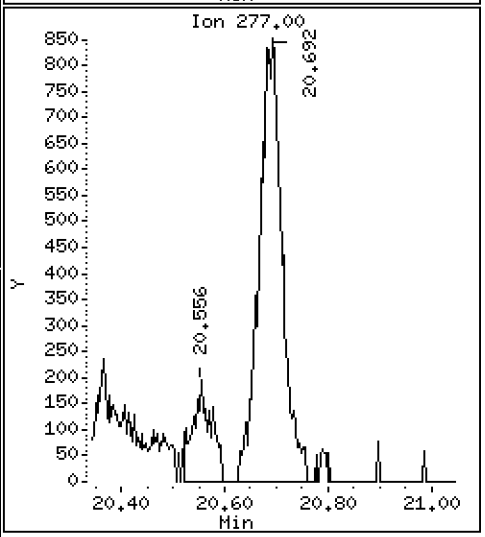
37 Indeno(1,2,3-cd)pyrene

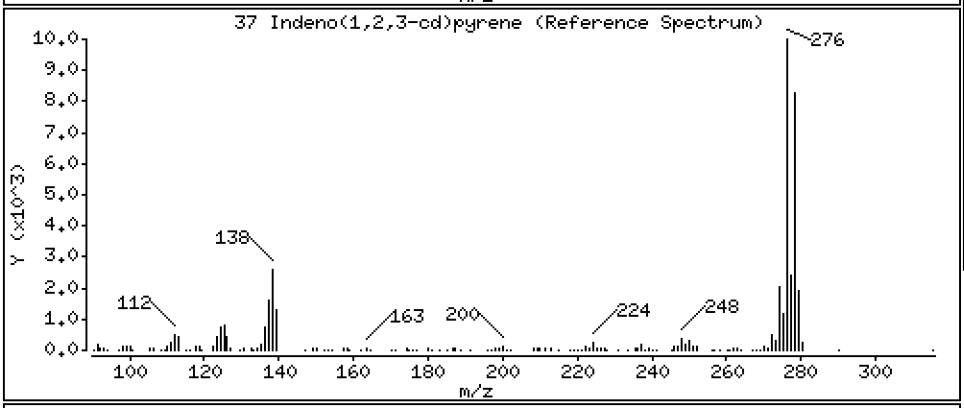
Concentration: 0.6412 ug/mL

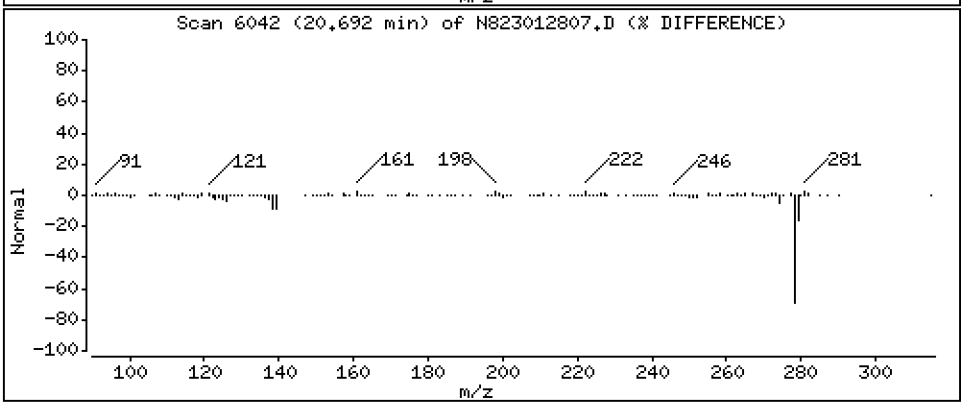












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Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

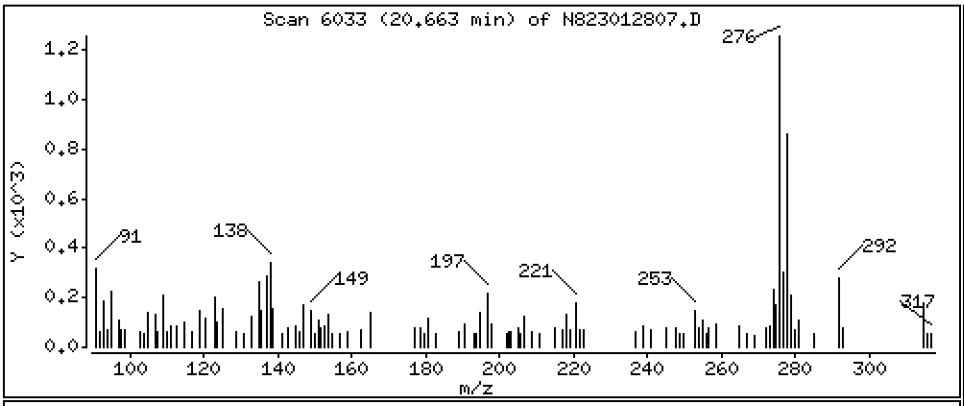
Operator: JZ

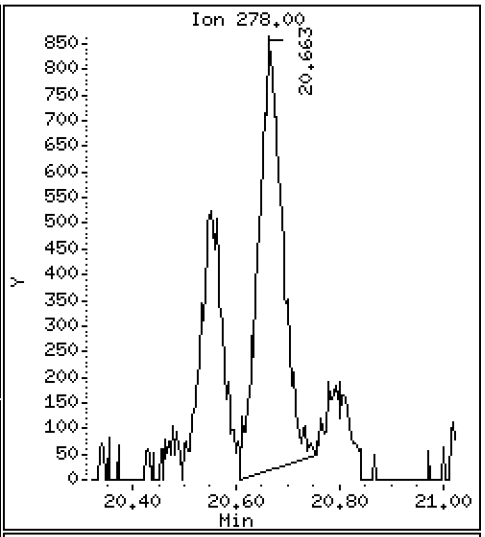
Column phase: Rxi-17sil

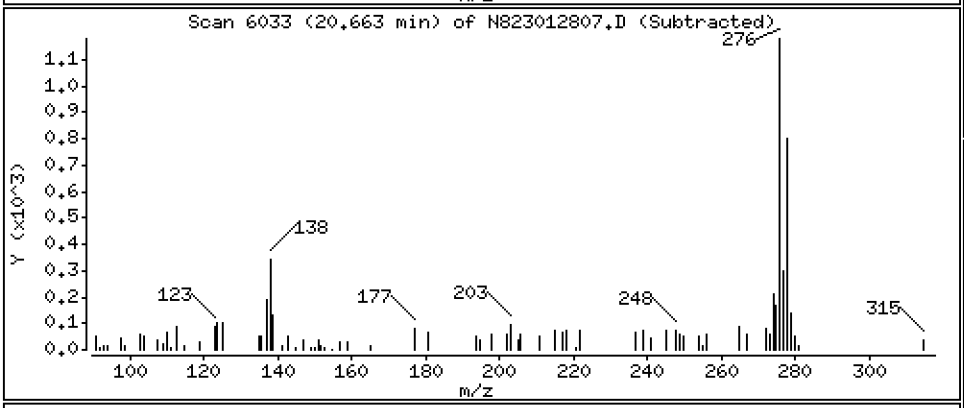
Column diameter: 0.25

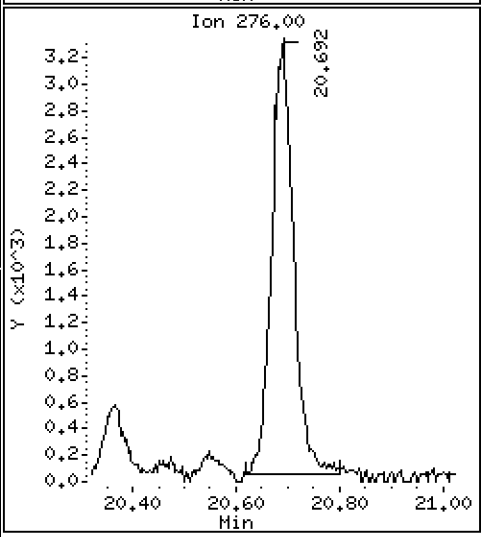
38 Dibenzo(a,h)anthracene

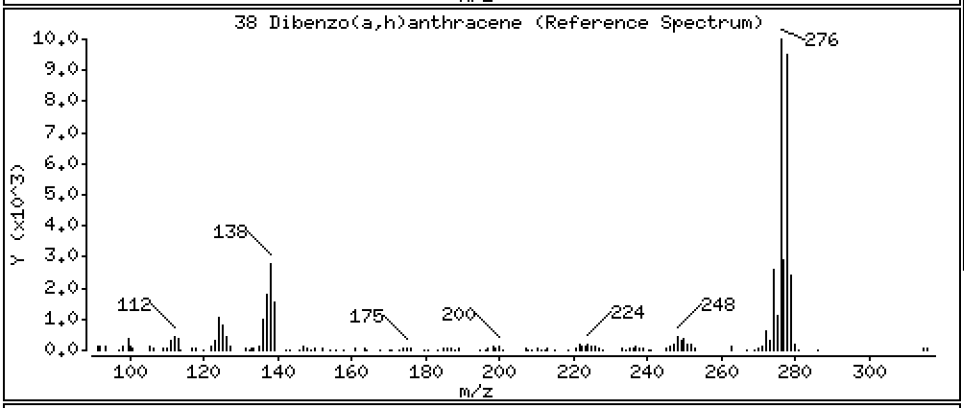
Concentration: 0.1913 ug/mL

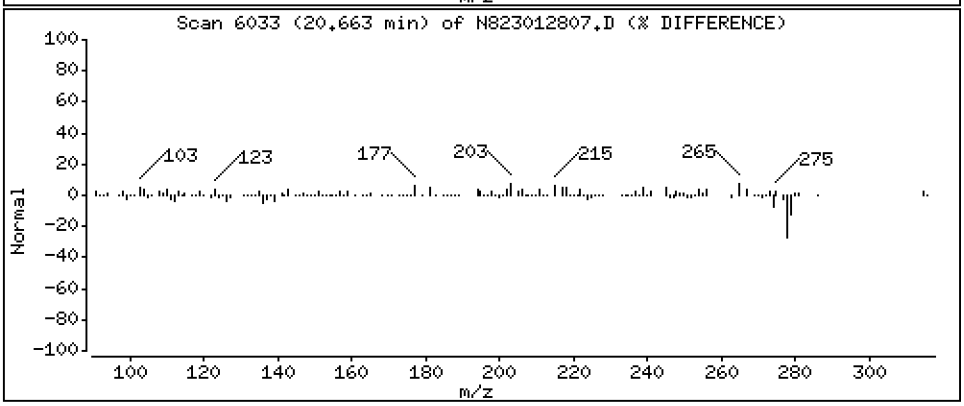












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Date : 25-JAN-2023 17:15

Client ID:

Instrument: nt8.i

Sample Info: 23A0134-14

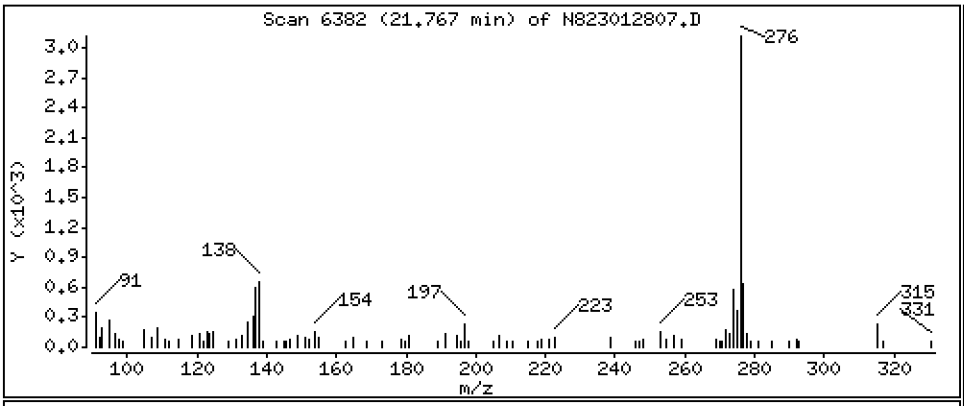
Operator: JZ

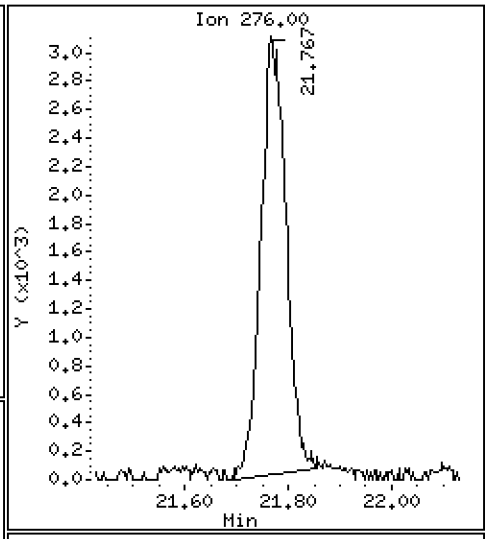
Column phase: Rxi-17sil

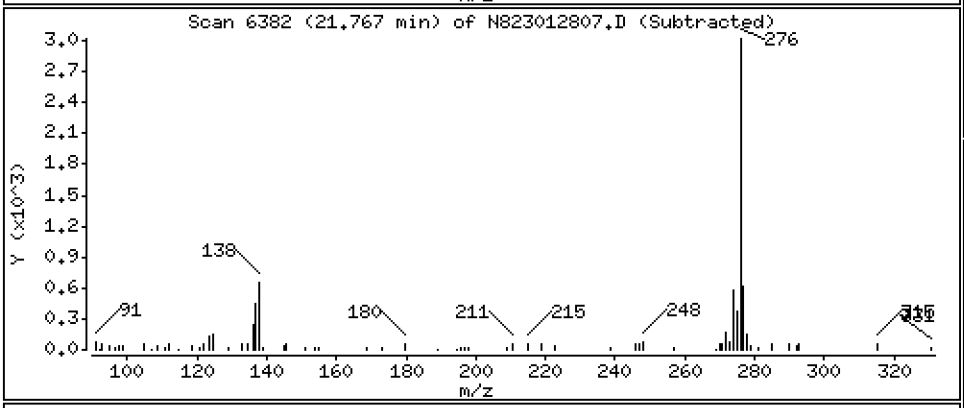
Column diameter: 0.25

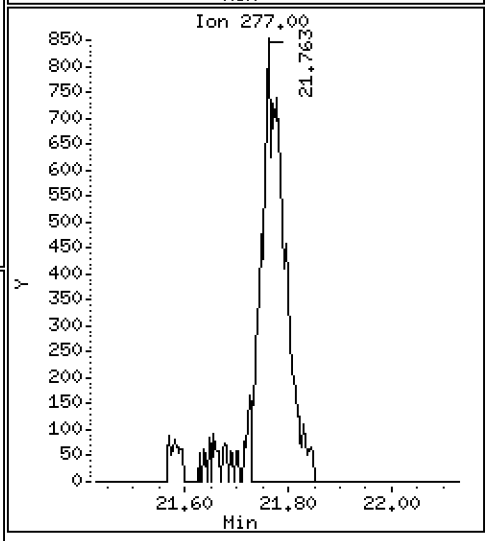
39 Benzo(g,h,i)perylene

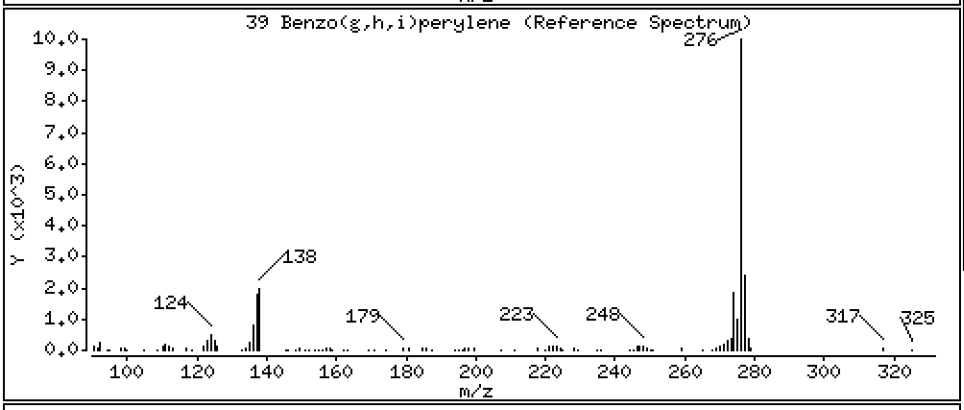
Concentration: 0.7029 ug/mL

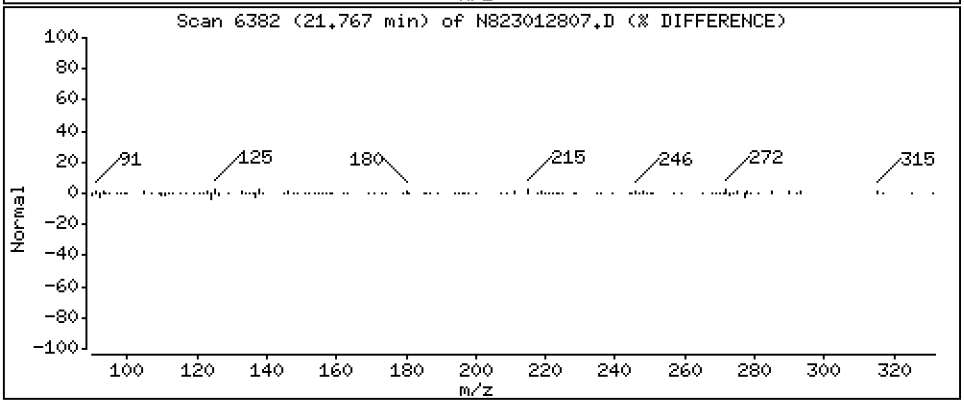












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230125.b\N823012807.D
Lab Smp Id: 23A0134-14
Inj Date : 25-JAN-2023 17:15
Operator : JZ Inst ID: nt8.i
Smp Info : 23A0134-14
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Meth Date : 26-Jan-2023 09:27 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PNAXMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.897	4.907	(1.000)	53069	2.00000	
	2 Naphthalene	128	4.925	4.938	(1.006)	5614	0.22752	0.2275(M)
$	3 2-Methylnaphthalene-d10	152	5.634	5.640	(1.150)	39646	2.73926	2.739
	4 2-Methylnaphthalene	141	5.678	5.687	(1.159)	1258	0.09269	0.09269(M)
	5 1-methylnaphthalene	141	5.877	5.886	(1.200)	815	0.05917	0.05917
	9 Acenaphthylene	152	7.082	7.088	(0.985)	3466	0.14998	0.1500
*	10 Acenaphthene-d10	164	7.193	7.199	(1.000)	30603	2.00000	
	11 Acenaphthene	153	7.243	7.246	(1.007)	1906	0.12310	0.1231(M)
	12 Dibenzofuran	168	7.395	7.398	(1.028)	2195	0.09333	0.09333(M)
	14 Fluorene	166	7.872	7.875	(1.095)	1382	0.07566	0.07566(M)
*	15 Phenanthrene-d10	188	9.235	9.238	(1.000)	50078	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	12838	0.52481	0.5248
	17 Anthracene	178	9.308	9.314	(1.008)	7650	0.34425	0.3443
	22 Fluoranthene	202	11.057	11.056	(1.197)	117628	4.41760	4.418
$	21 Fluoranthene-d10	212	11.019	11.018	(1.193)	65167	2.94950	2.950
	23 Pyrene	202	11.581	11.578	(0.815)	93842	5.21416	5.214
	24 Benzo(a)anthracene	228	14.079	14.085	(0.991)	22400	1.37317	1.373
*	25 Chrysene-d12	240	14.206	14.212	(1.000)	29029	2.00000	
	27 Chrysene	228	14.279	14.288	(1.005)	39762	2.28969	2.290
	28 Benzo(b)fluoranthene	252	16.827	16.830	(0.929)	22500	1.36662	1.367
	29 Benzo(k)fluoranthene	252	16.890	16.893	(0.932)	11966	0.74201	0.7420
	30 Benzo(j)fluoranthene	252	16.963	16.969	(0.936)	11157	0.76851	0.7685
	31 Total Benzofluoranthenes	252	16.827	16.830	(0.929)	44591	2.85981	2.860(M)
	32 Benzo(a)pyrene	252	17.883	17.889	(0.987)	15319	1.05734	1.057
*	33 Perylene-d12	264	18.117	18.120	(1.000)	28269	2.00000	
	35 Perylene	252	18.190	18.196	(1.004)	8530	0.54865	0.5486
$	36 Dibenzo(a,h)anthracene-d14	292	20.558	20.565	(1.135)	45616	4.11830	4.118
	37 Indeno(1,2,3-cd)pyrene	276	20.691	20.694	(1.142)	10583	0.64118	0.6412
	38 Dibenzo(a,h)anthracene	278	20.663	20.672	(1.140)	2717	0.19128	0.1913(M)
	39 Benzo(g,h,i)perylene	276	21.766	21.779	(1.201)	10511	0.70287	0.7029(M)

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823012807.D
Lab Smp Id: 23A0134-14
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 25-JAN-2023
Calibration Time: 14:49
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	46976	23488	93952	53069	12.97
10 Acenaphthene-d10	27652	13826	55304	30603	10.67
15 Phenanthrene-d10	51738	25869	103476	50078	-3.21
25 Chrysene-d12	45383	22692	90766	29029	-36.04
33 Perylene-d12	41344	20672	82688	28269	-31.62

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.90	-0.19
10 Acenaphthene-d10	7.20	6.70	7.70	7.19	-0.08
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	-0.03
25 Chrysene-d12	14.21	13.71	14.71	14.21	-0.04
33 Perylene-d12	18.12	17.62	18.62	18.12	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823012807.D

Lab ID: 23A0134-14
nt8.i, 20230125.b\FSIMPNA230119.m,   25-JAN-2023 17:15

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

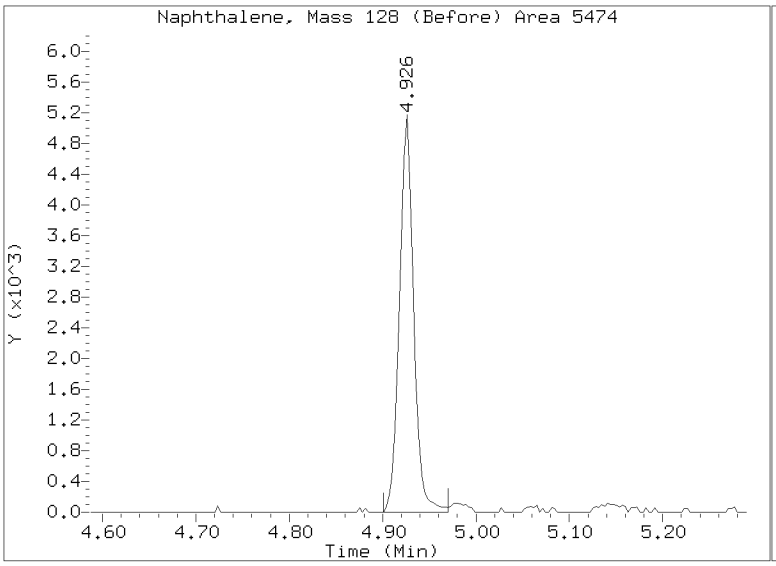
No RRT check performed

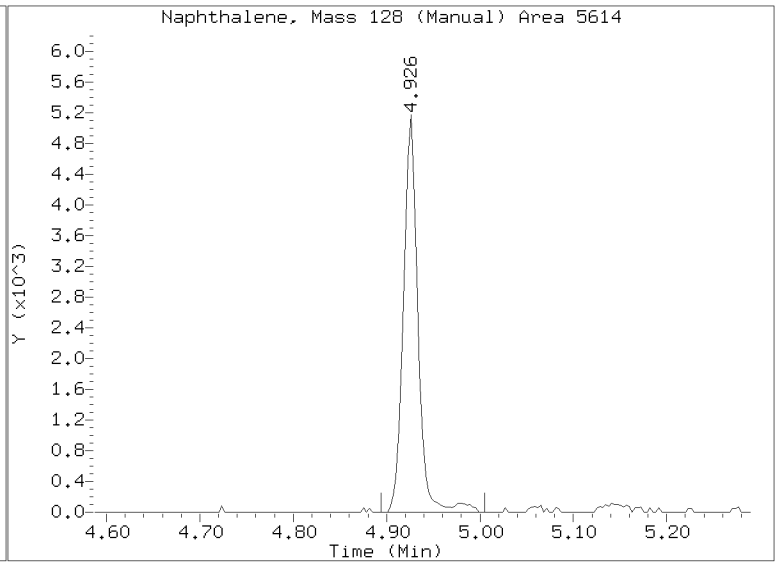
On Column LOD for nt8.i, 20230125.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

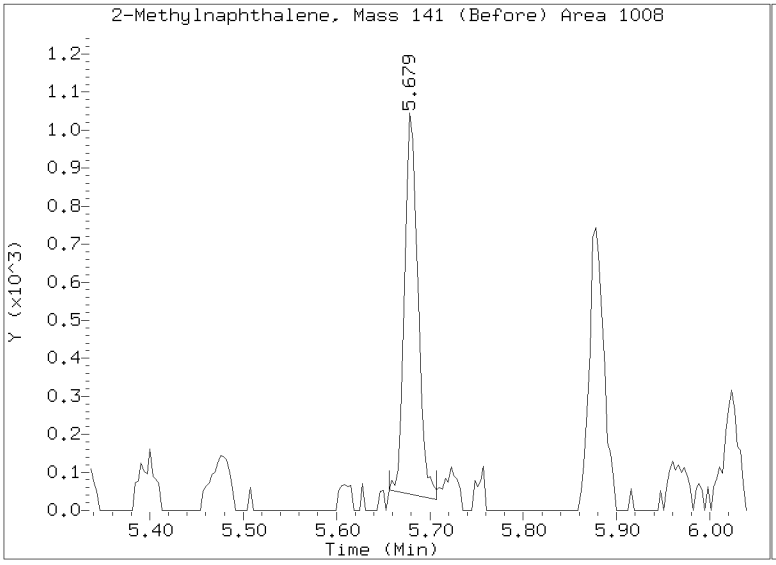
* Only compounds listed in the work order have been verified by the analyst *

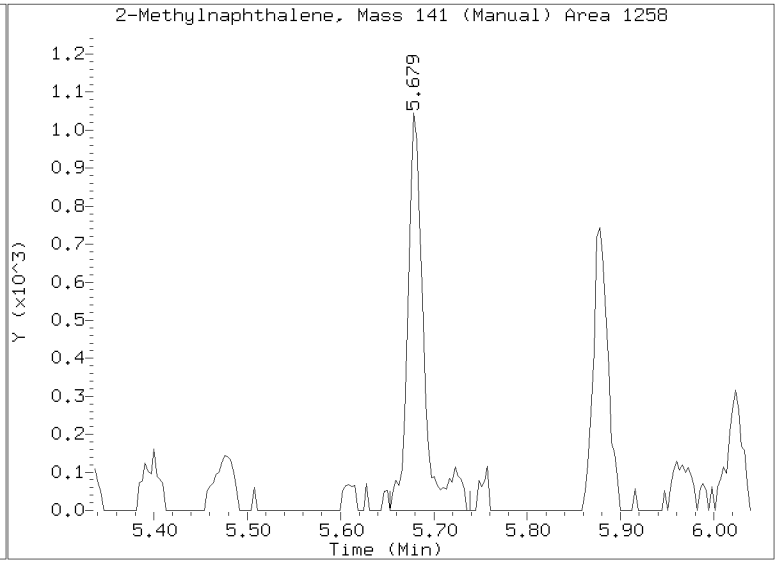
Quant Ion Manual Peak Adjustment Report

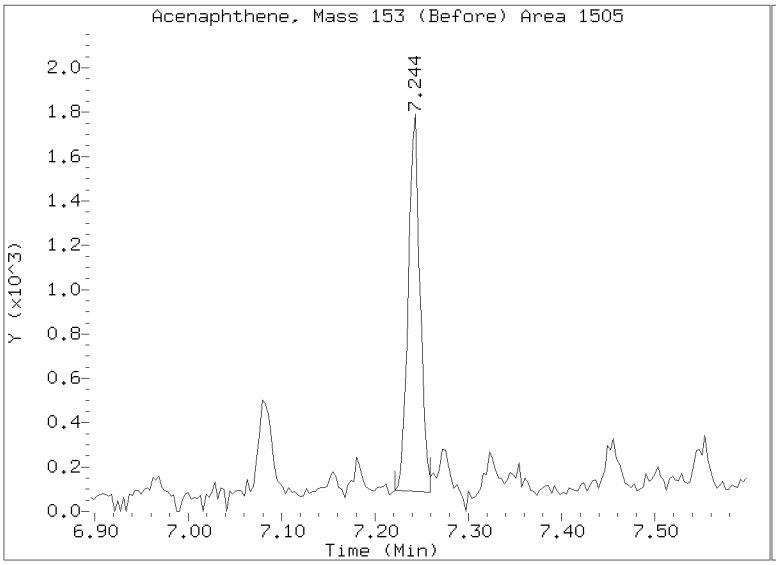
Datafile: //target/share/chem3/nt8.i/20230125.b/N823012807.D
Injection Date: 25-JAN-2023 17:15
Lab ID:23A0134-14 Client ID:
Report Date: 01/26/2023 09:47

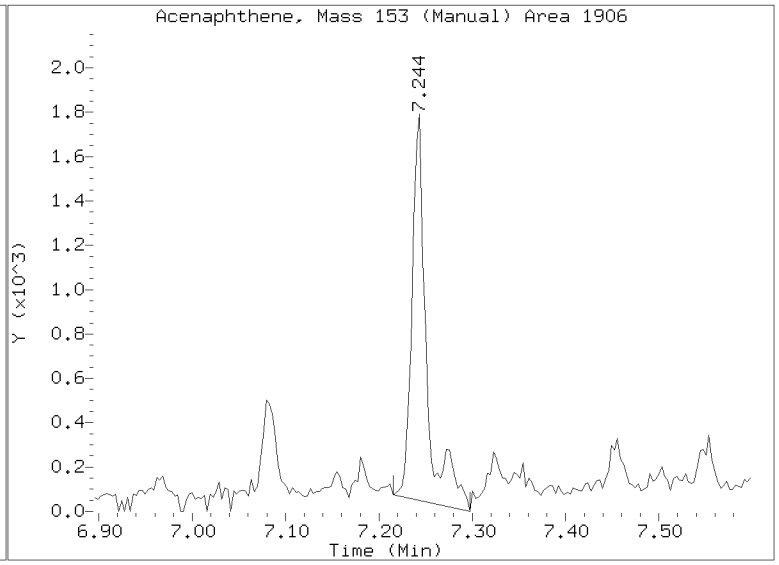












Quant Ion Manual Peak Adjustment Report

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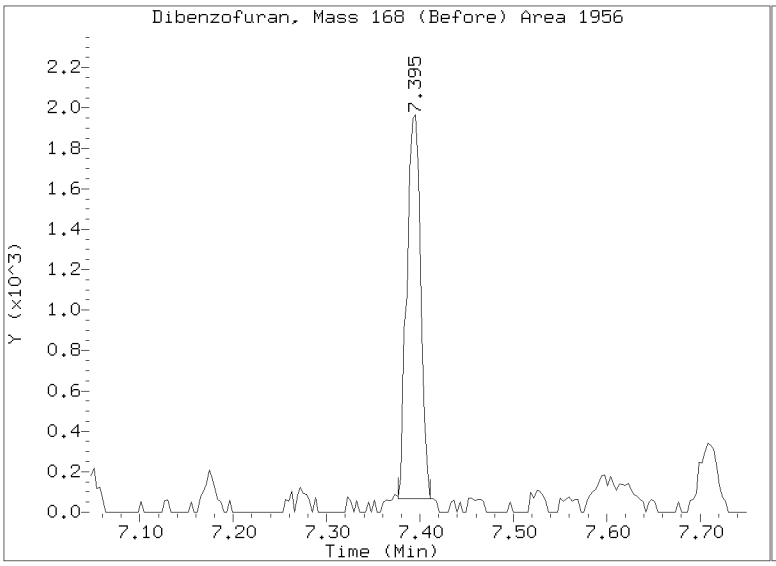
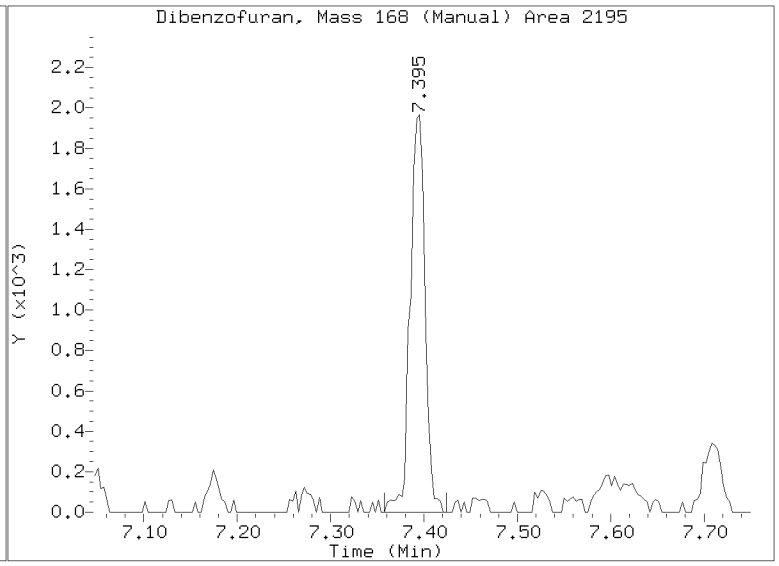
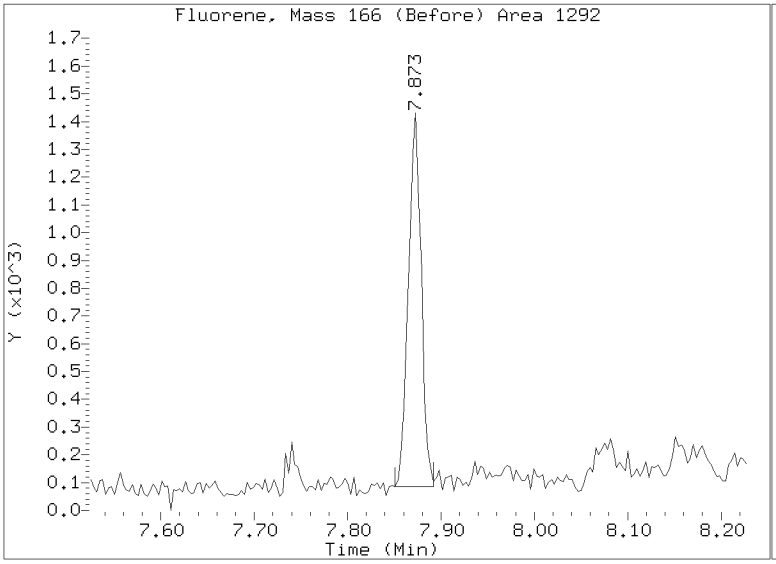
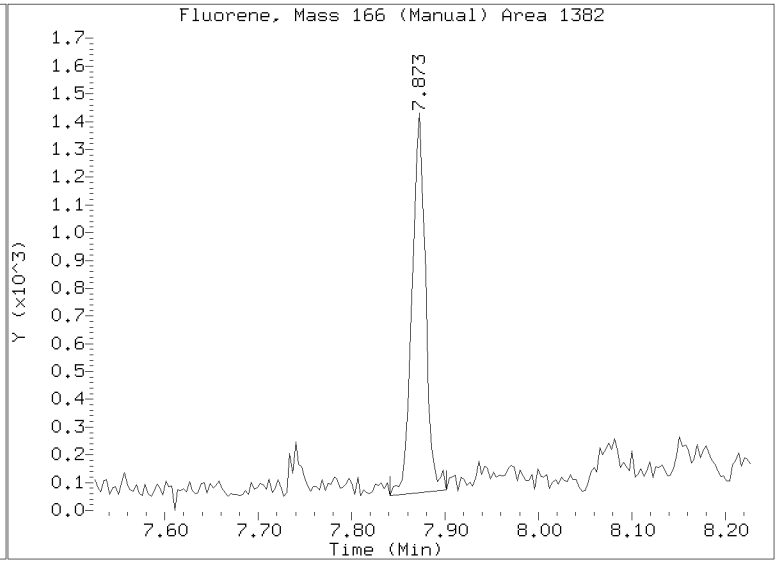
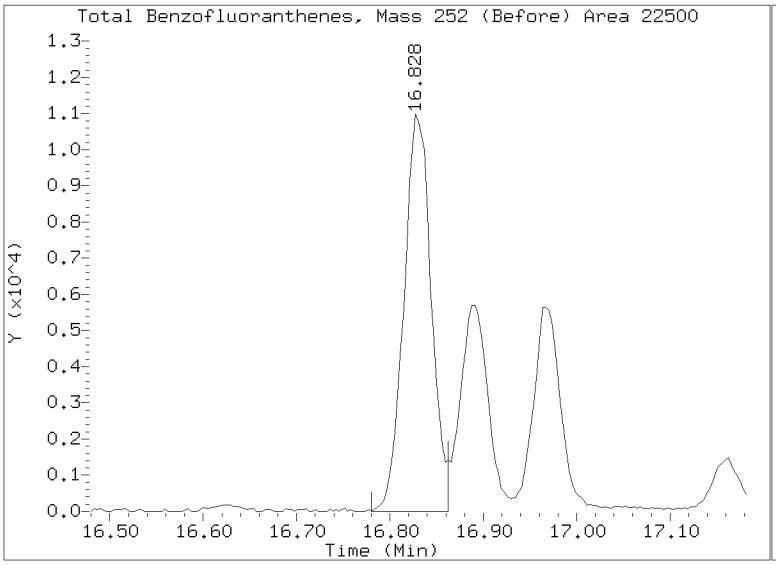
Injection Date: 25-JAN-2023 17:15
Lab ID:23A0134-14 Client ID:
Report Date: 01/26/2023 09:47

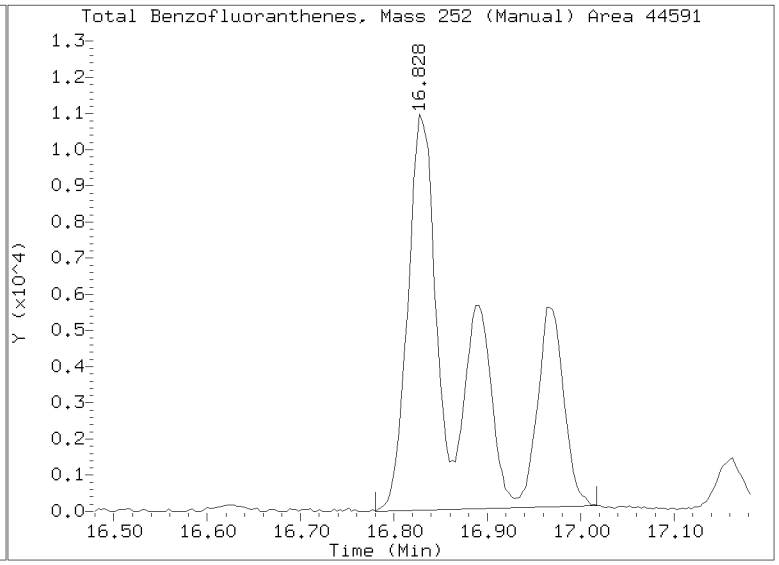






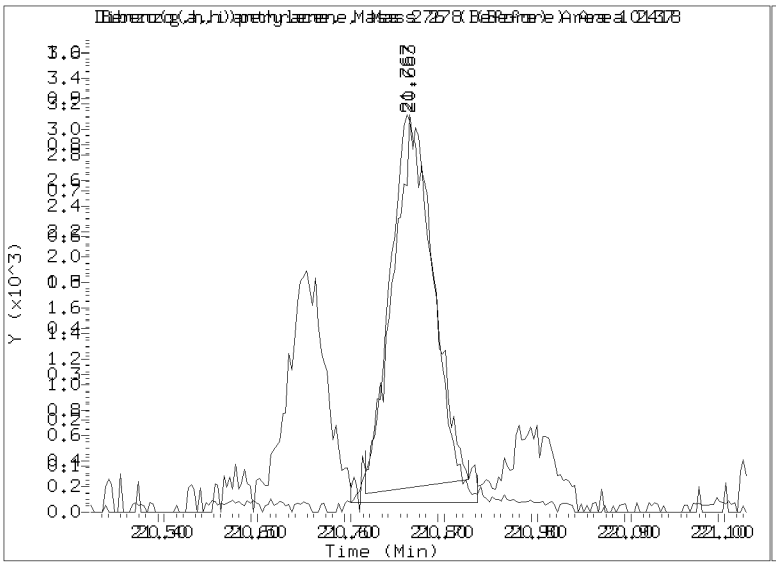


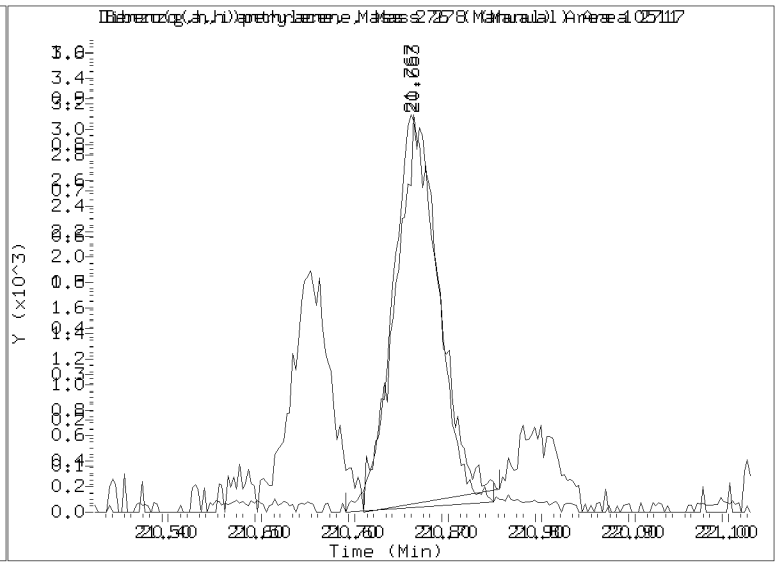


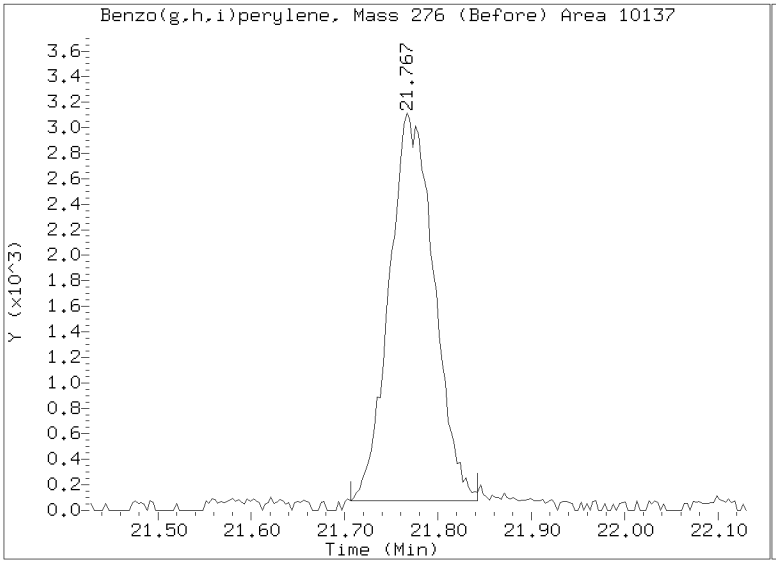


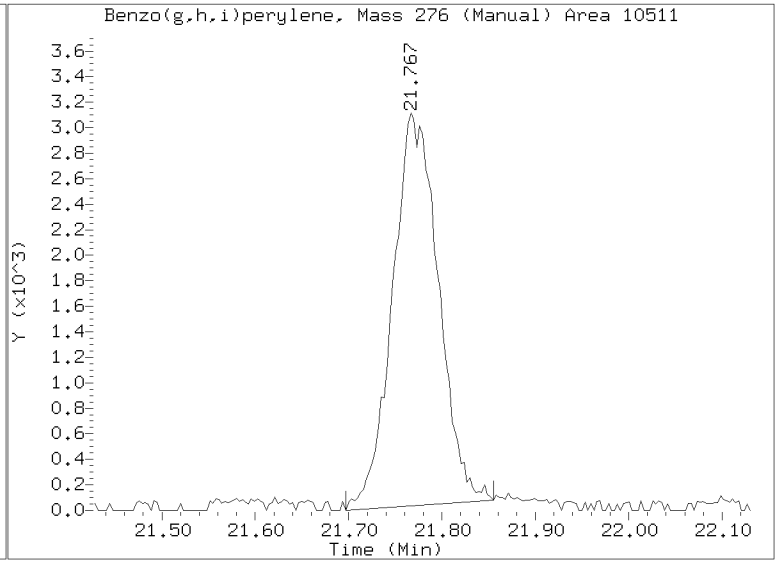
Quant Ion Manual Peak Adjustment Report

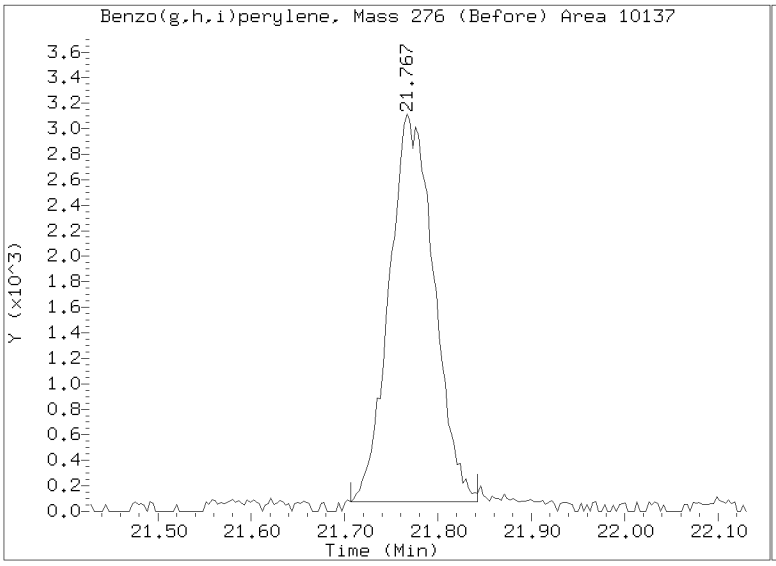
Datafile: //target/share/chem3/nt8.i/20230125.b/N823012807.D
Injection Date: 25-JAN-2023 17:15
Lab ID:23A0134-14 Client ID:
Report Date: 01/26/2023 09:47

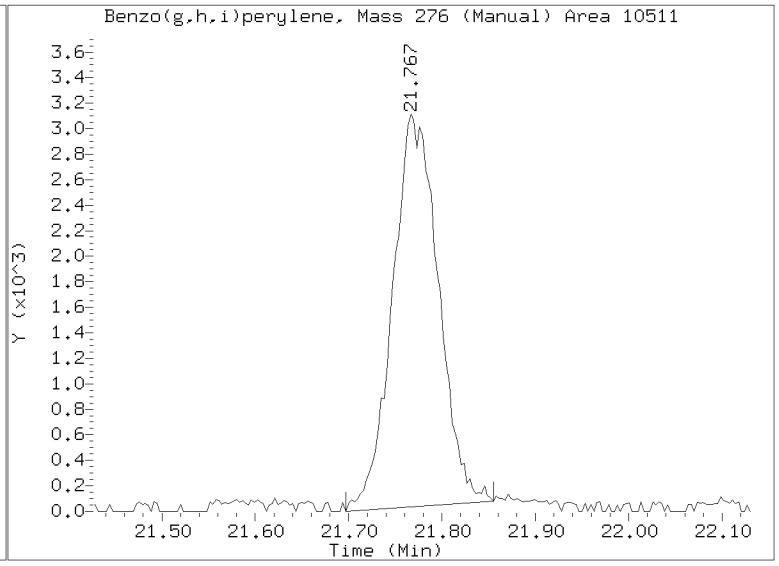












LDW23-SC1249

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-15 C	SDG:	23A0134
Sampled:	01/06/23 13:46	Prepared:	01/19/23 13:35	File ID:	NT1802272311S.D
% Solids:	50.09	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/27/23 23:53
Batch:	BLA0410	Sequence:	SLC0396	Initial/Final:	20.46 g Wet / 1 mL
Instrument:	NT18	Column:	ZB-5MS	Calibration:	GC00036
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	2.1	J	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	4.9	U	0.7	4.9
100-51-6	Benzyl Alcohol	1	30.2		2.4	19.5
65-85-0	Benzoic acid	1	121	Q	13.1	97.6
105-67-9	2,4-Dimethylphenol	1	3.2	J	2.1	19.5
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	4.9	J	2.1	19.5

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	731.82	546	74.6	27 - 120	
p-Terphenyl-d14	487.88	395	81.0	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723115.D

Date : 27-FEB-2023 23:53

Client ID:

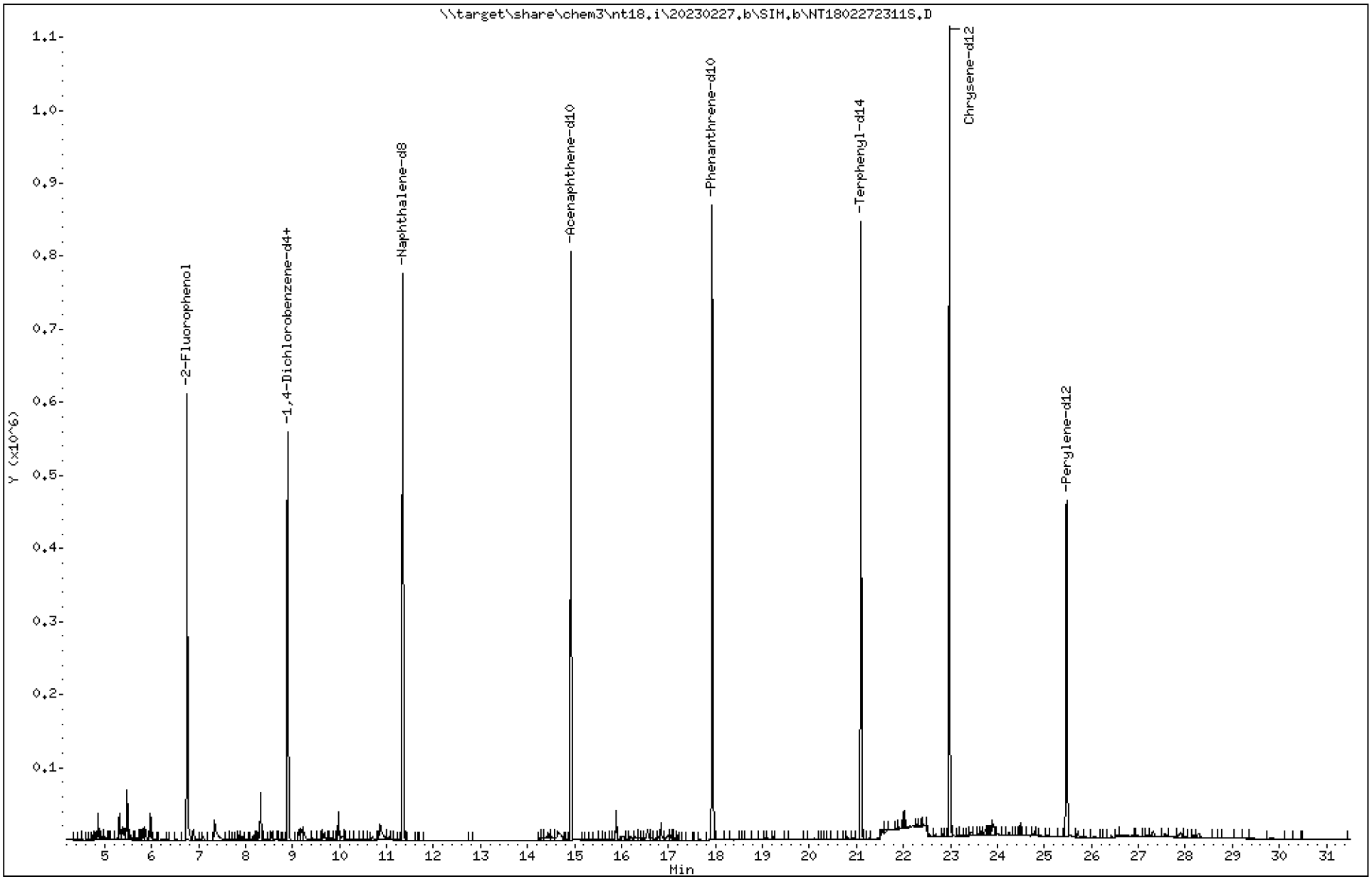
Instrument: nt18.i

Sample Info: 23A0134-15

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

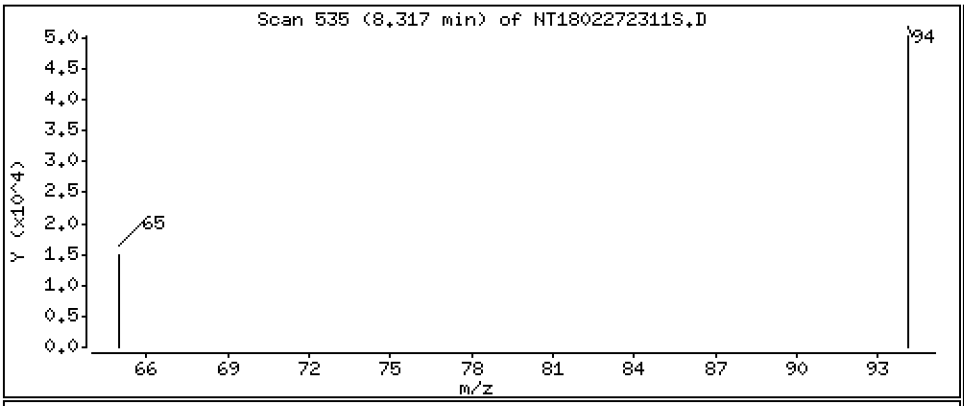
Operator: YZ

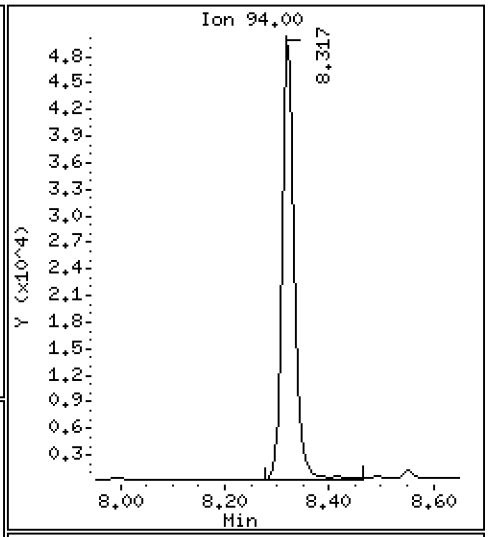
Column phase: ZB-5msi

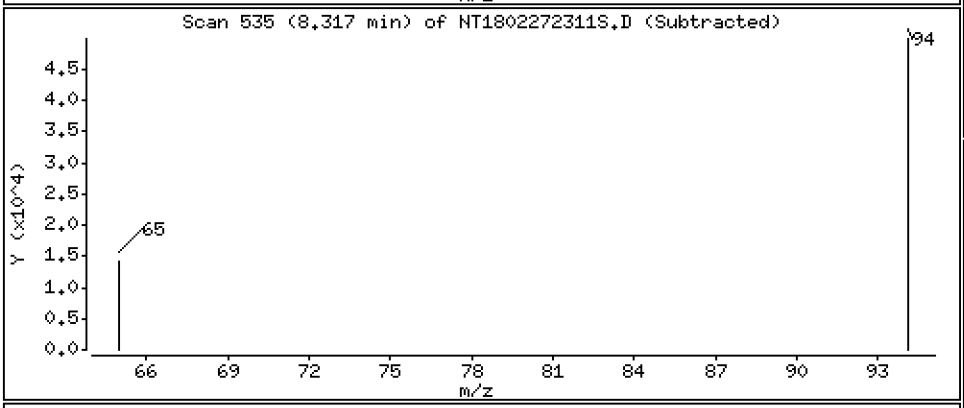
Column diameter: 0.25

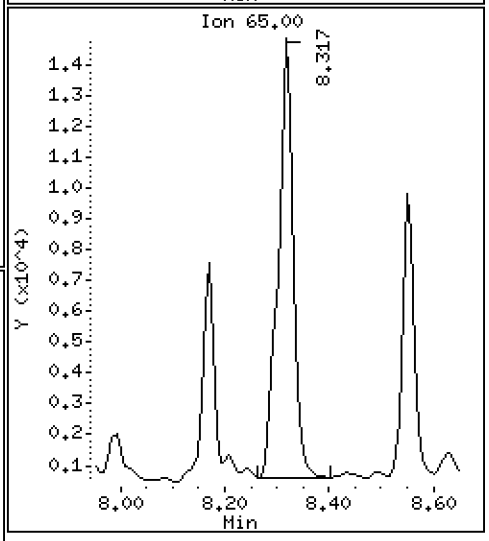
3 Phenol

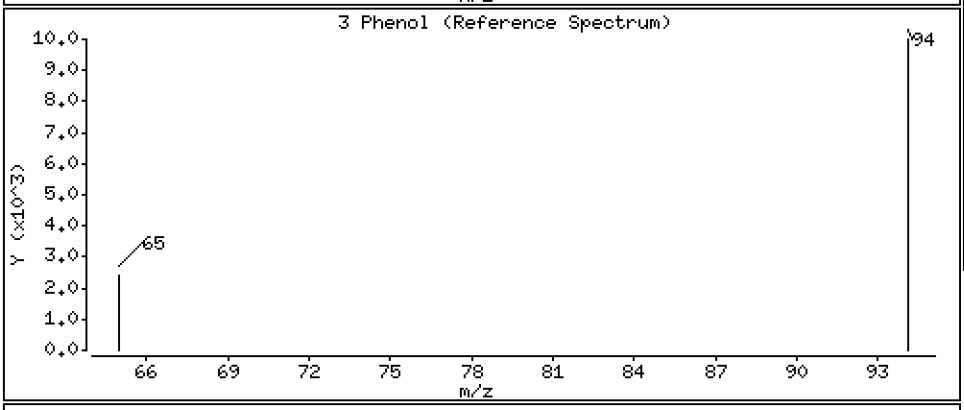
Concentration: 0.6173 ug/mL

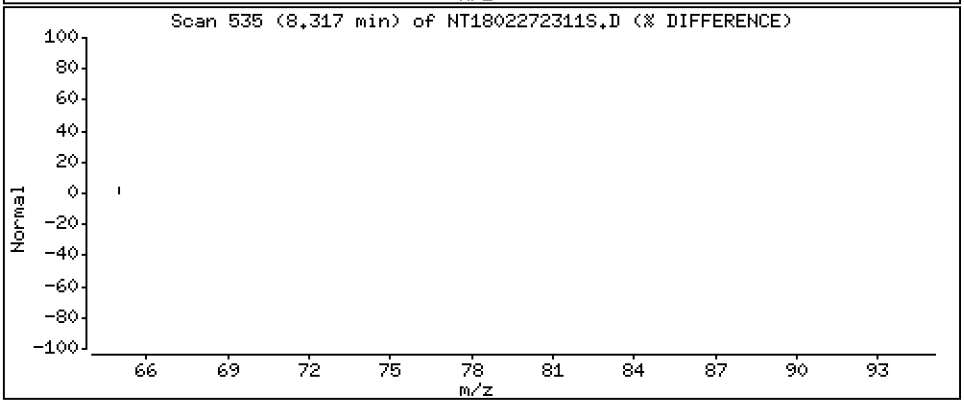












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

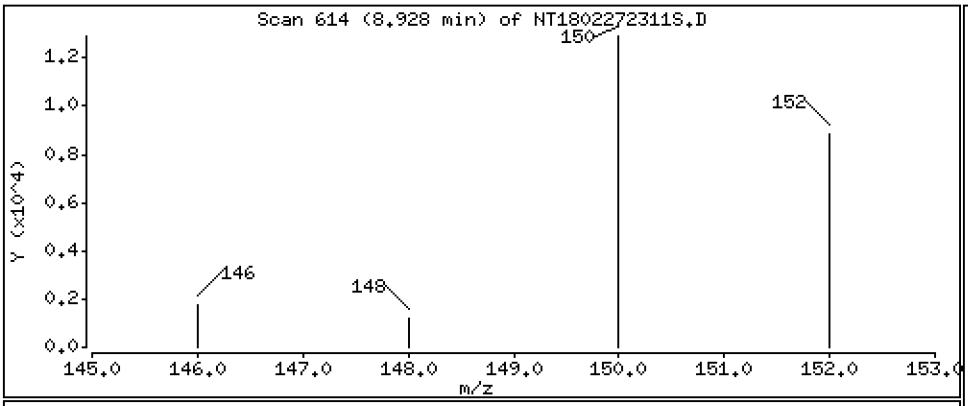
Operator: YZ

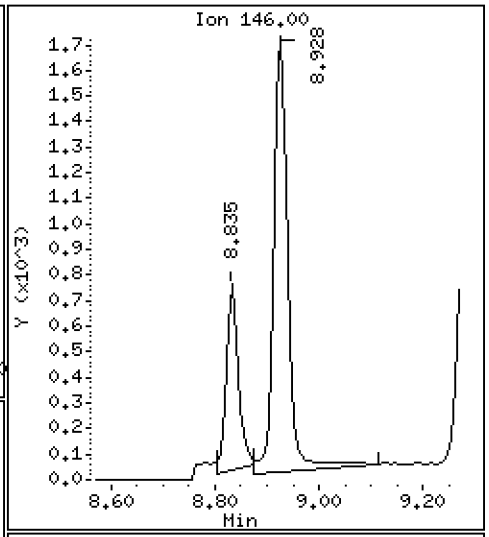
Column phase: ZB-5msi

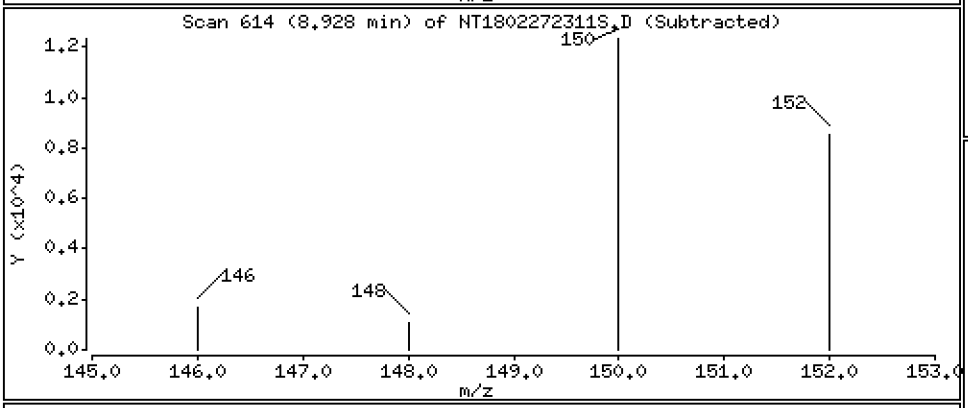
Column diameter: 0.25

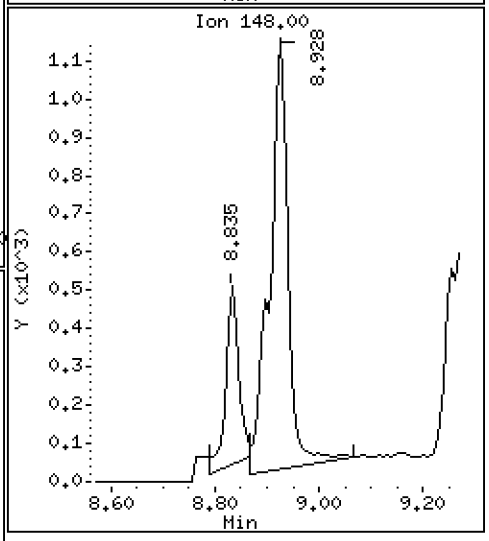
9 1,4-Dichlorobenzene

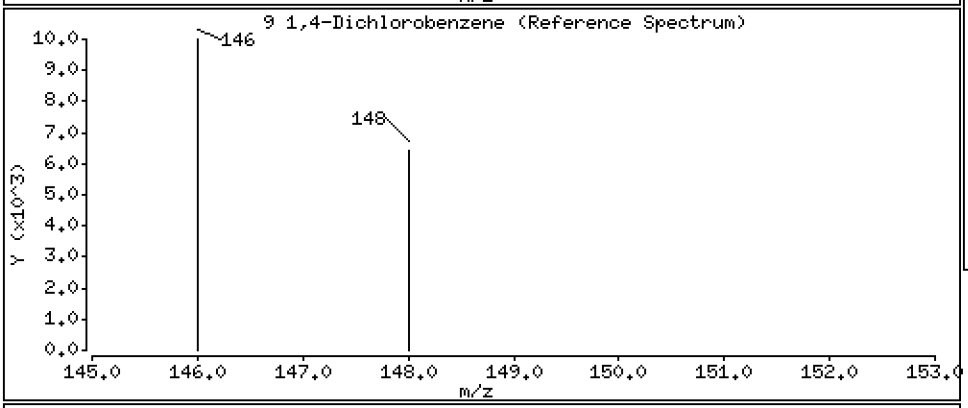
Concentration: 0.02157 ug/mL

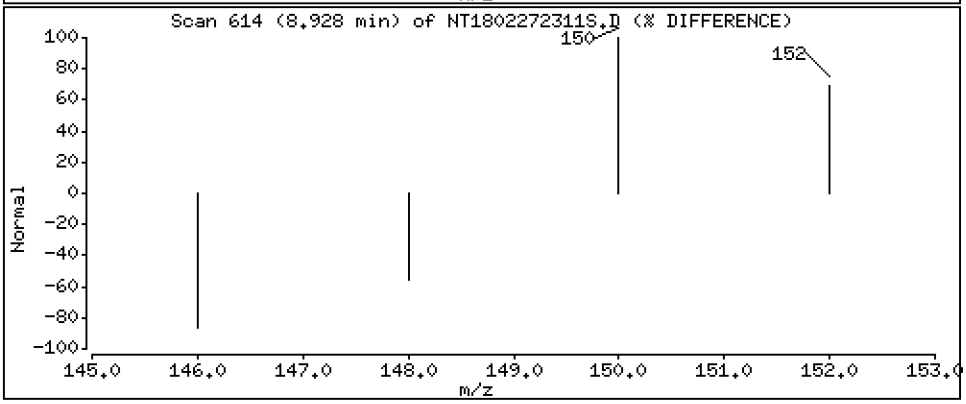












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723115.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

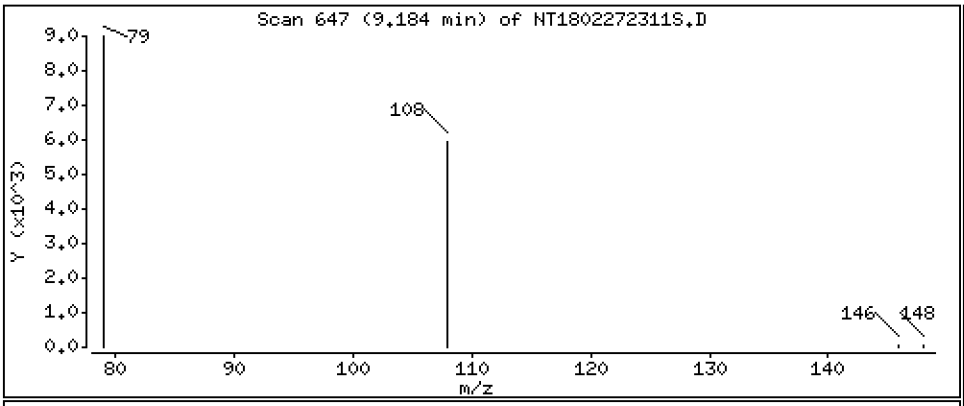
Operator: YZ

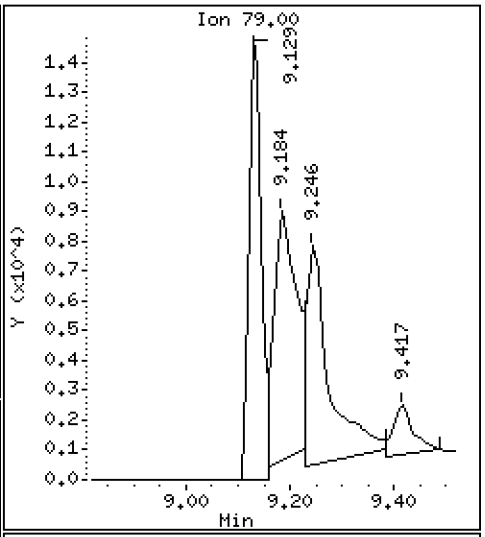
Column phase: ZB-5msi

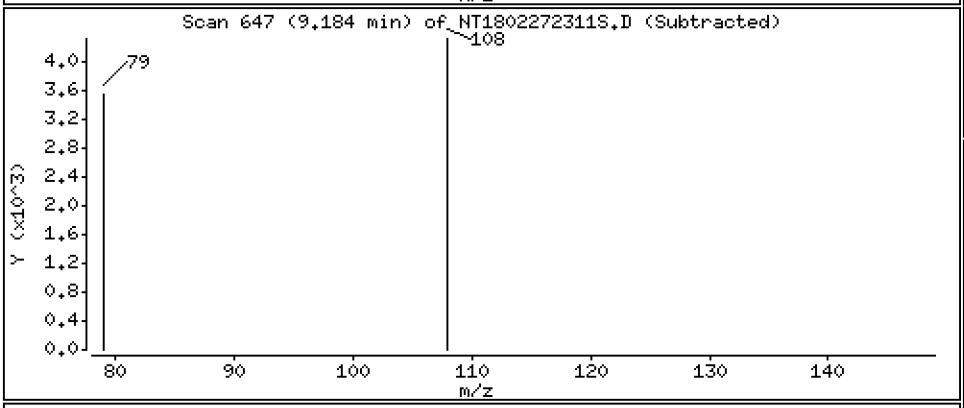
Column diameter: 0.25

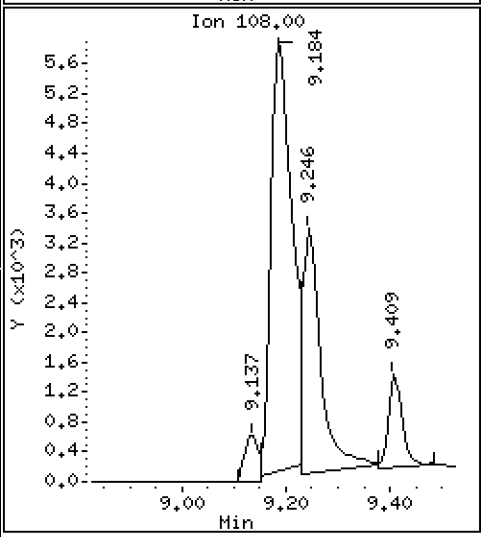
11 Benzyl alcohol

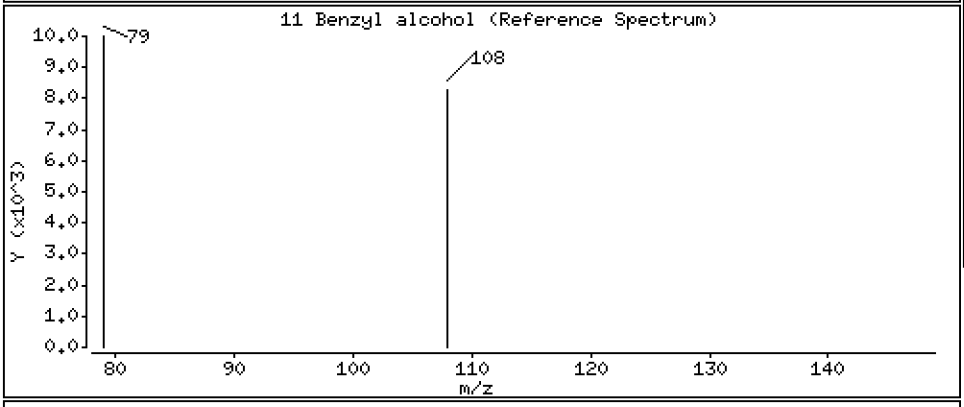
Concentration: 0.3096 ug/mL

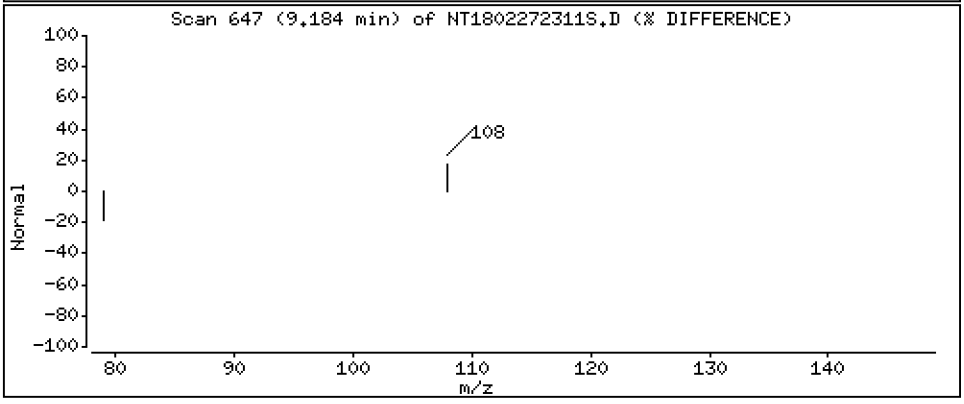












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

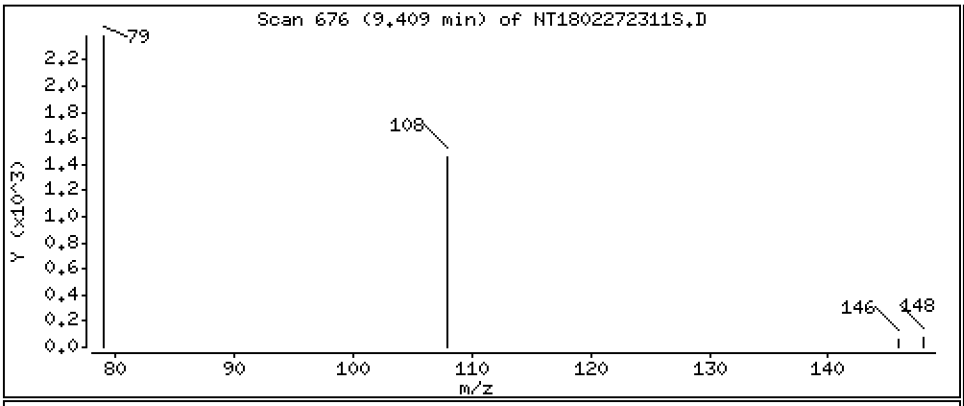
Operator: YZ

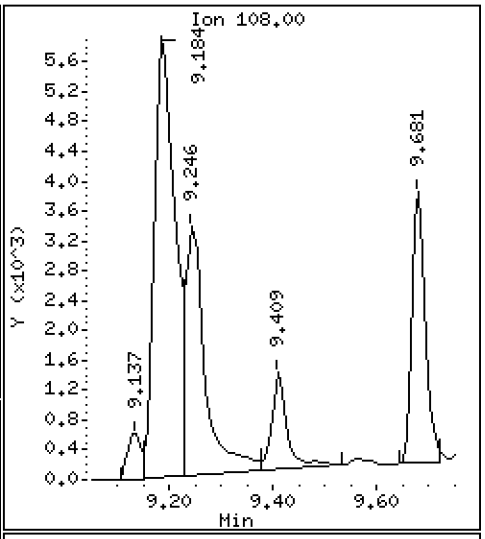
Column phase: ZB-5msi

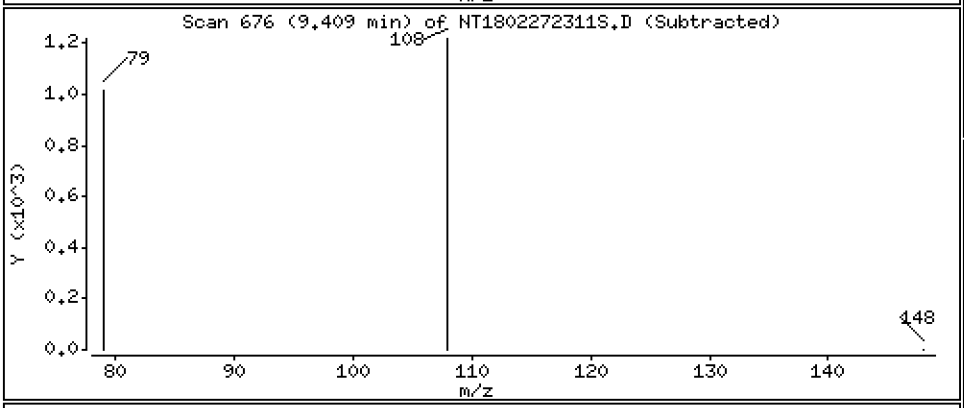
Column diameter: 0.25

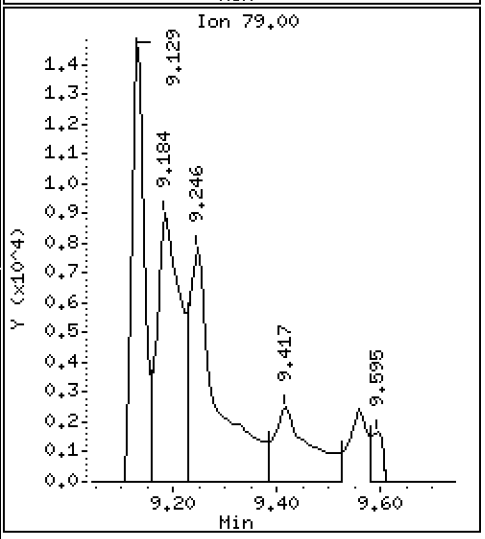
13 2-Methylphenol

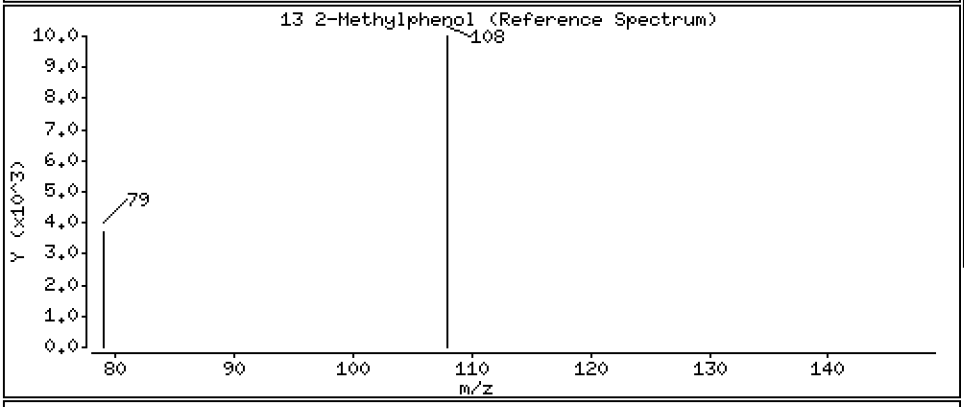
Concentration: 0.02304 ug/mL

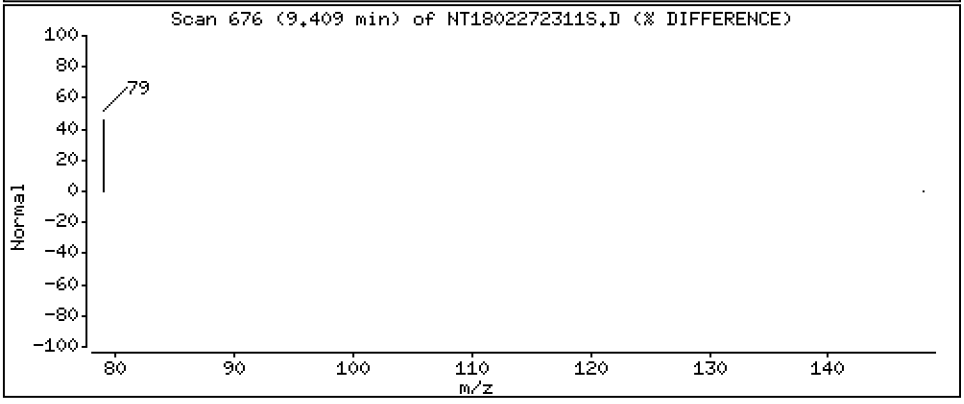












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272311S.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

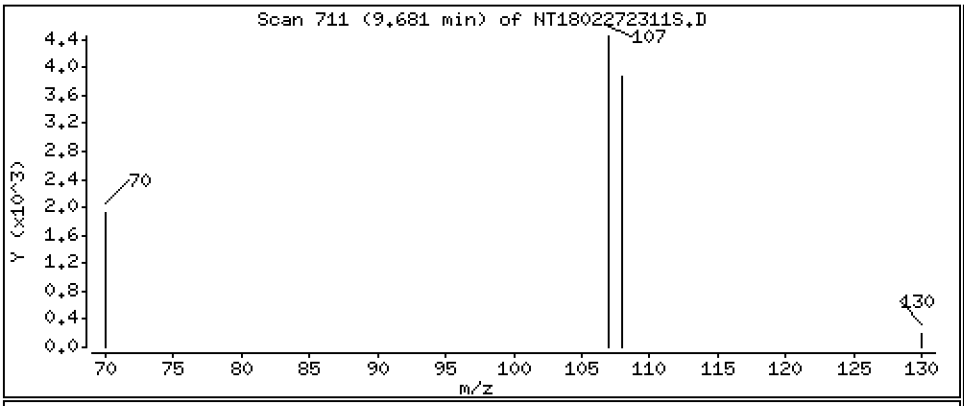
Operator: YZ

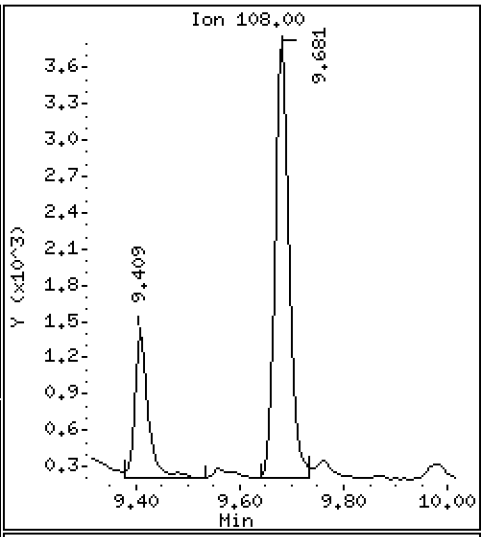
Column phase: ZB-5msi

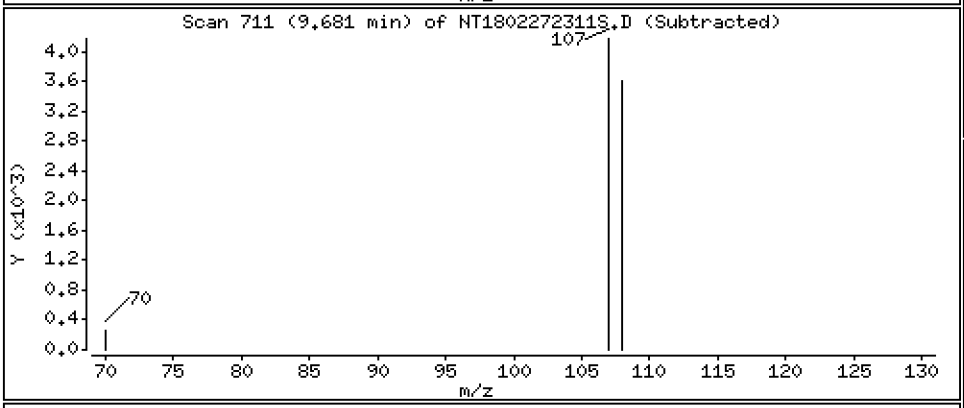
Column diameter: 0.25

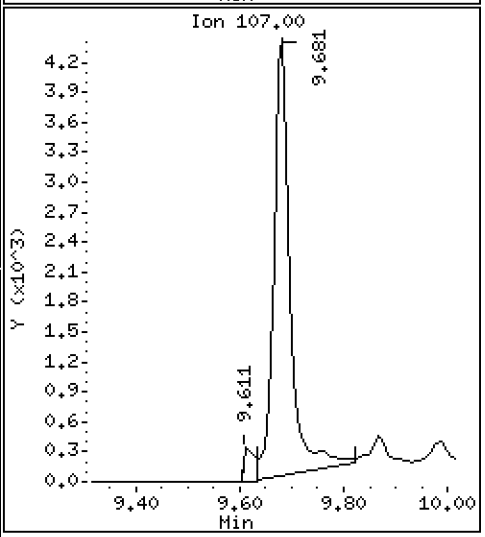
15 4-Methylphenol

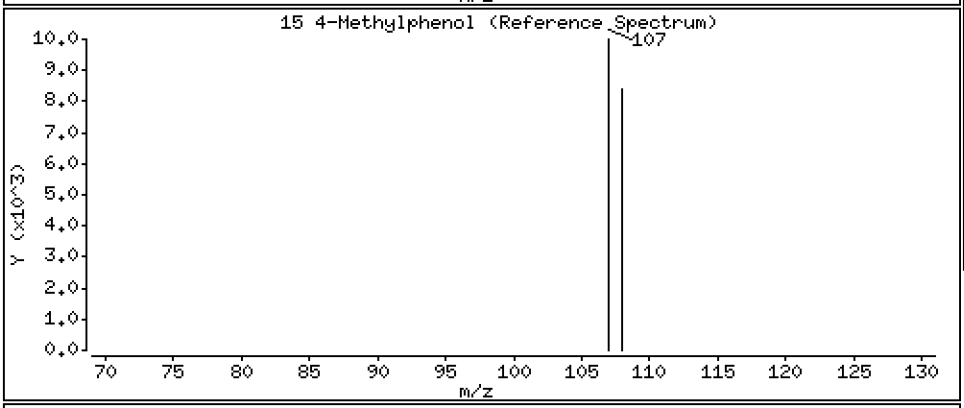
Concentration: 0.06219 ug/mL

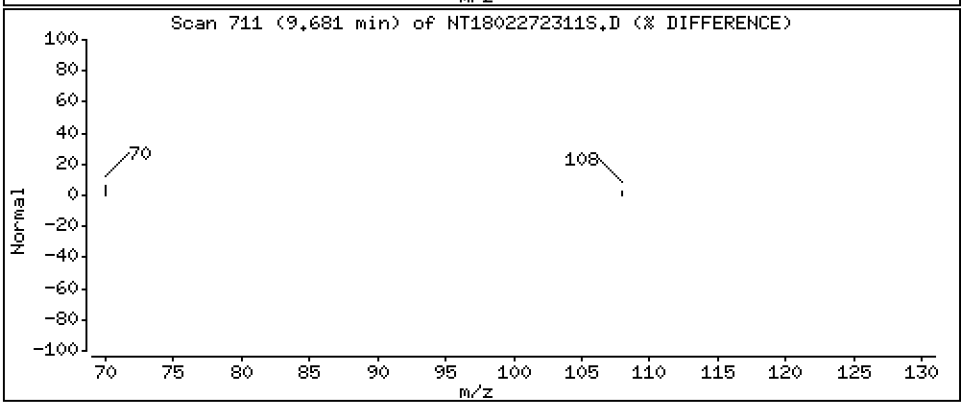












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

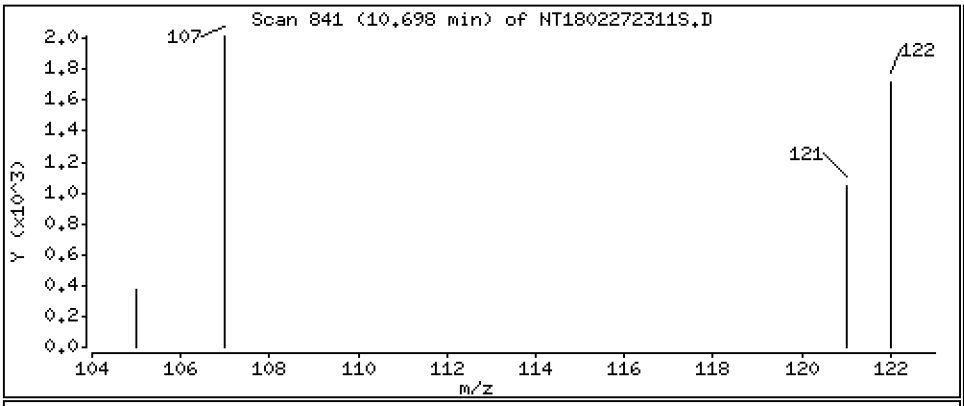
Operator: YZ

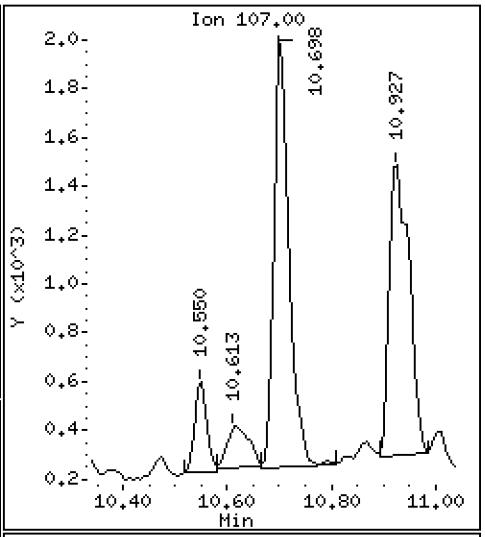
Column phase: ZB-5msi

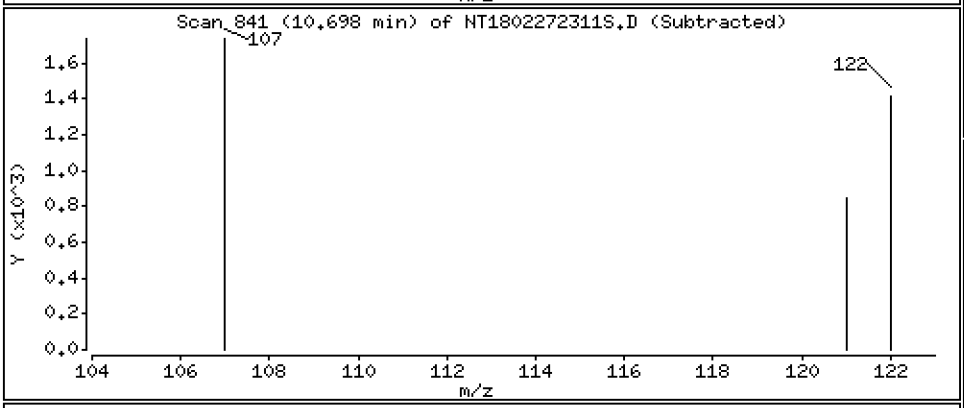
Column diameter: 0.25

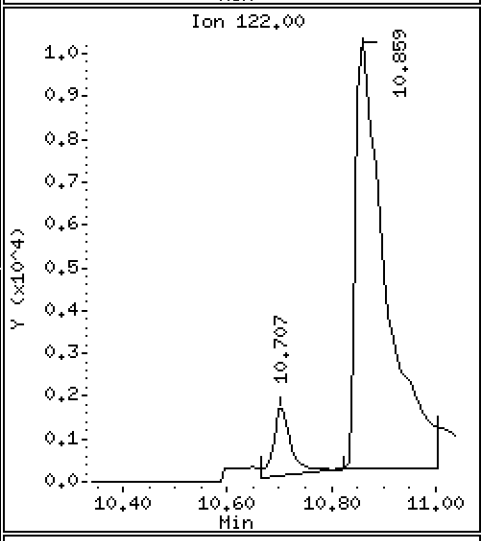
22 2,4-Dimethylphenol

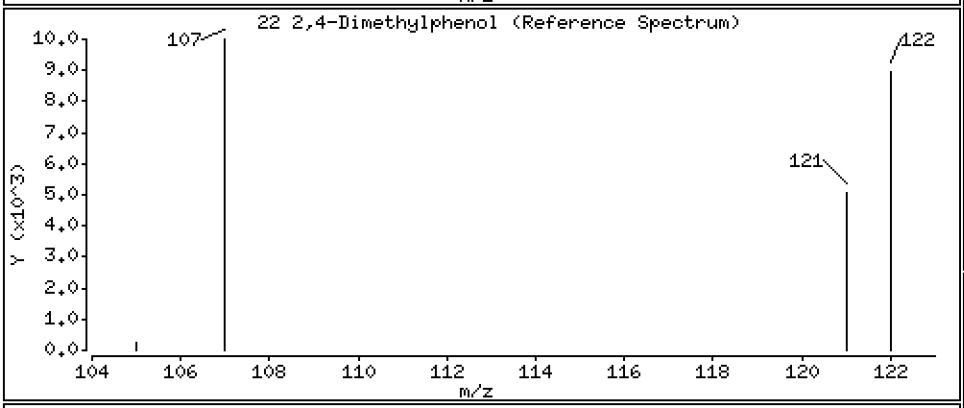
Concentration: 0.03274 ug/mL

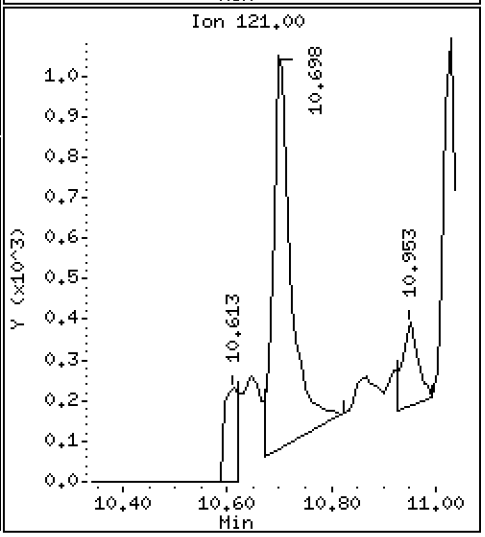


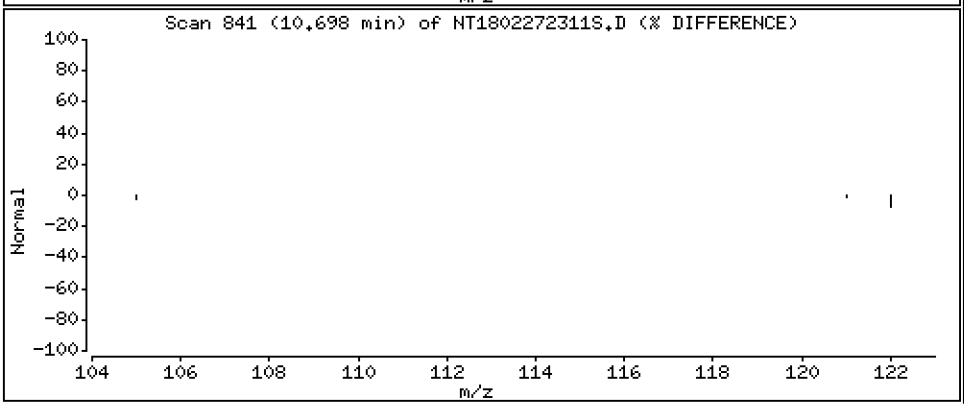












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

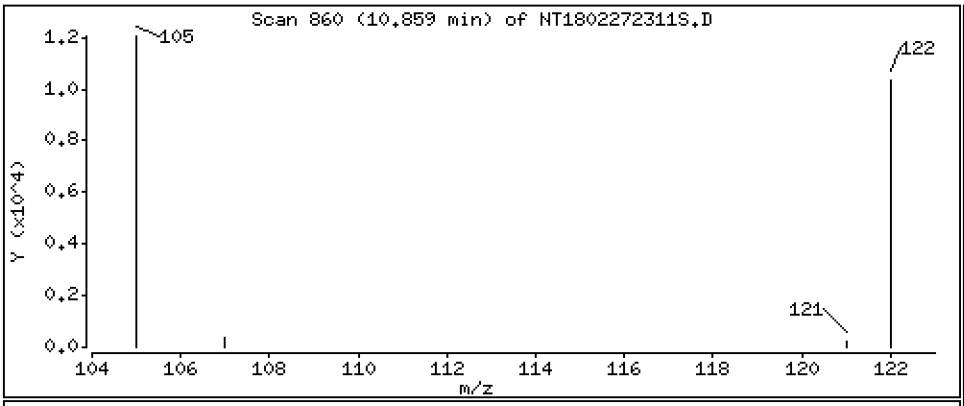
Operator: YZ

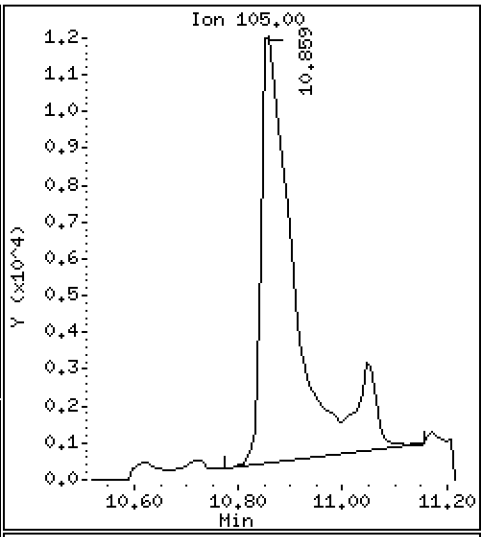
Column phase: ZB-5msi

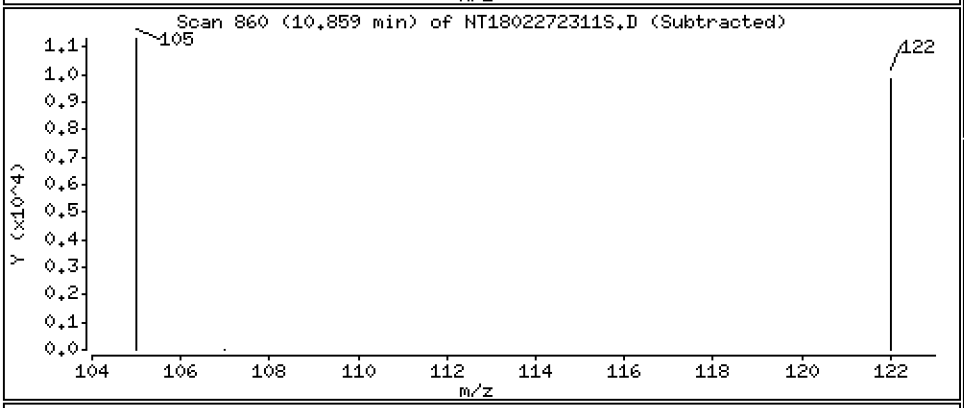
Column diameter: 0.25

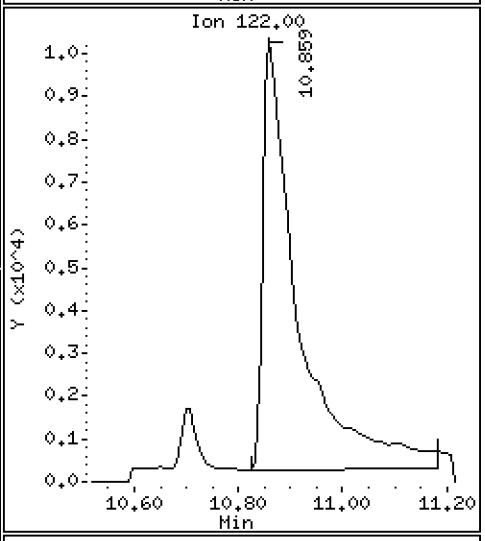
24 Benzoic acid

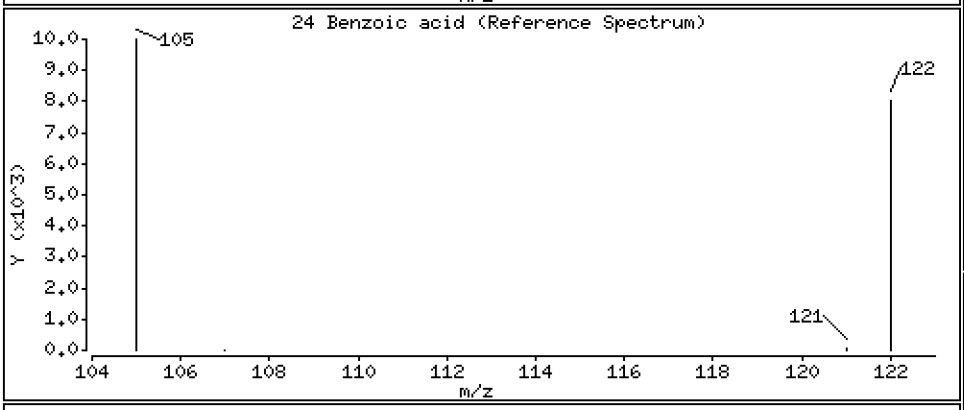
Concentration: 1.235 ug/mL

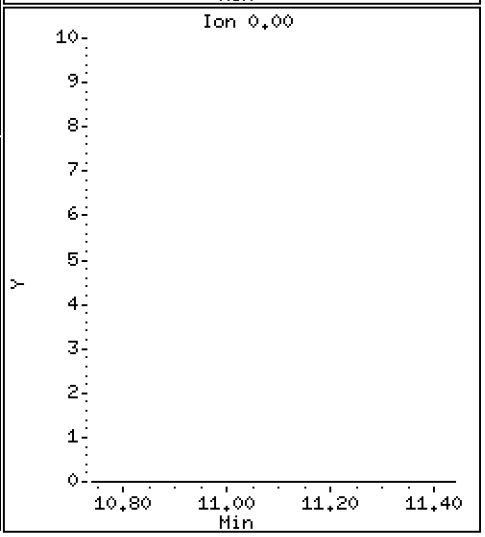


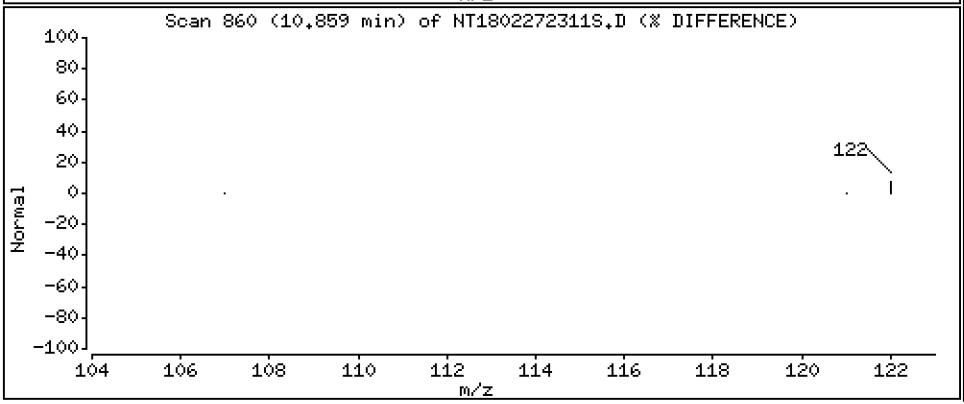












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

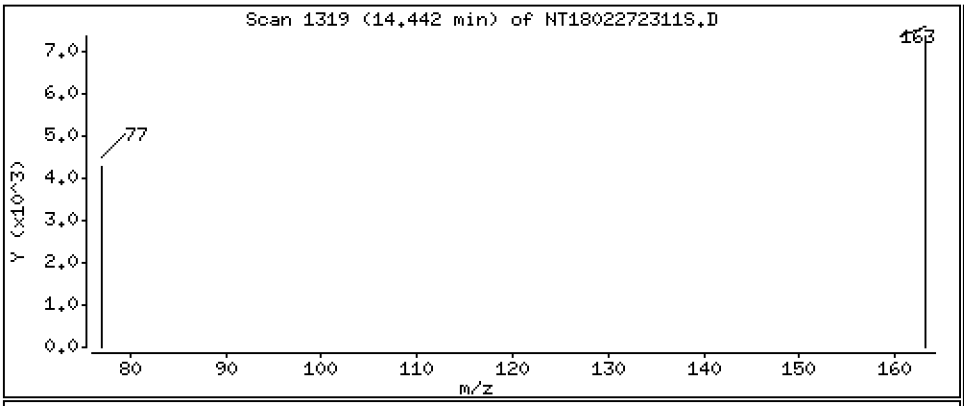
Operator: YZ

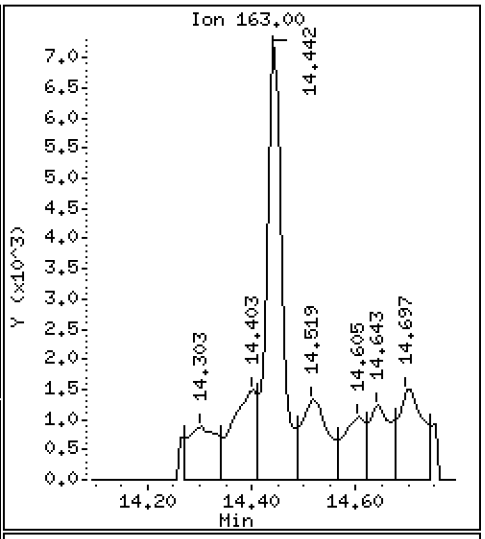
Column phase: ZB-5msi

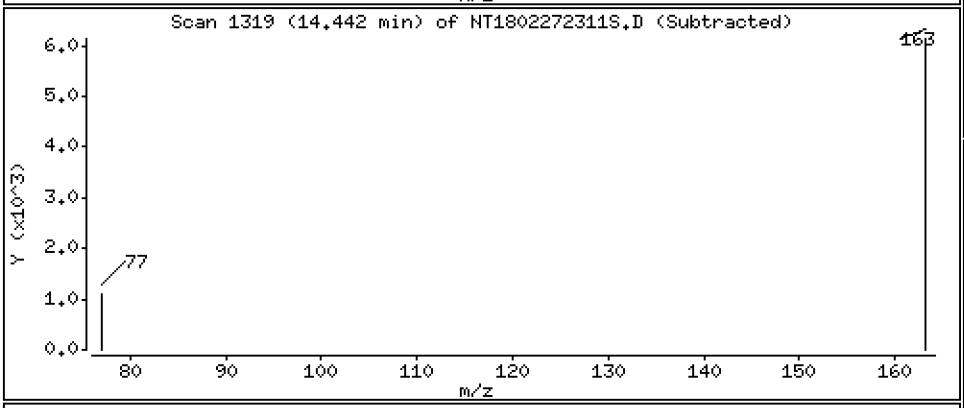
Column diameter: 0.25

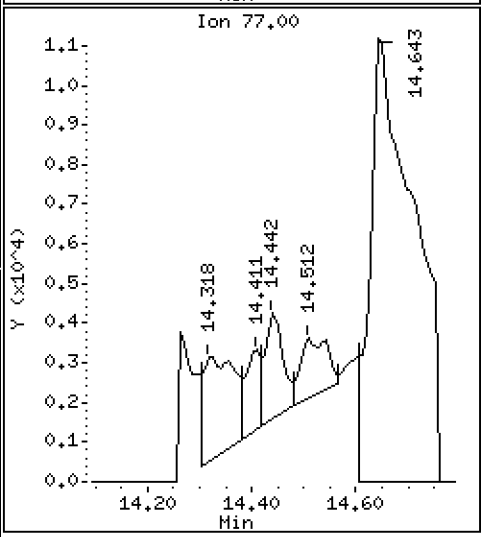
39 Dimethylphthalate

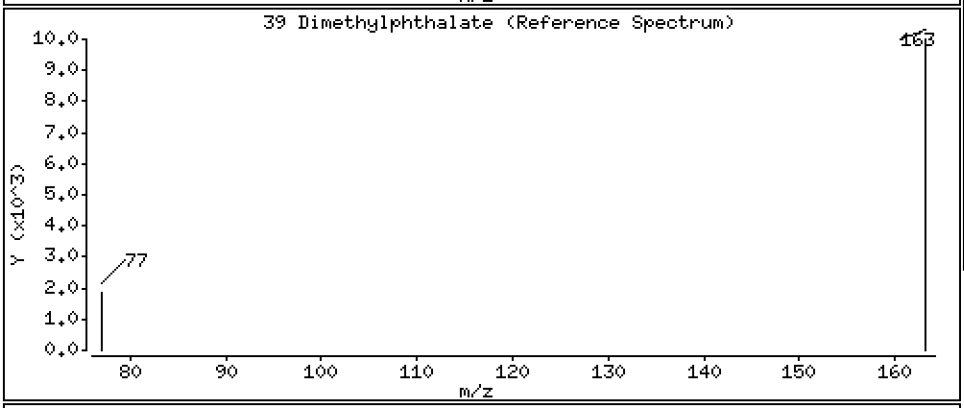
Concentration: 0.06103 ug/mL

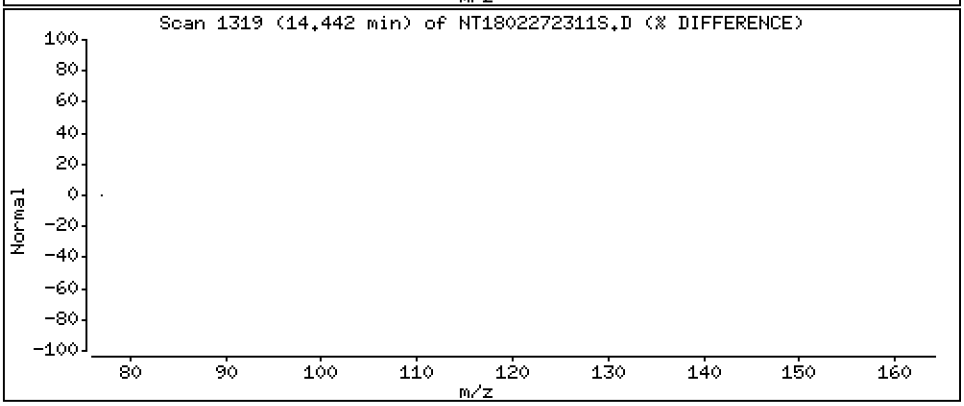












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272311S.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

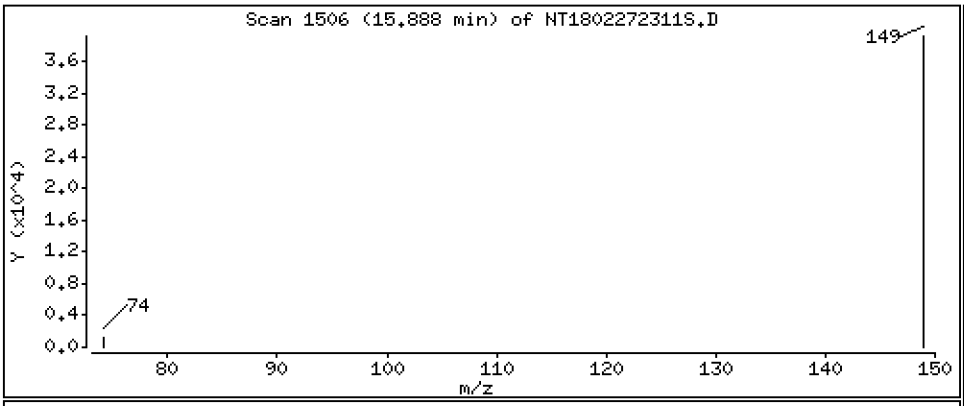
Operator: YZ

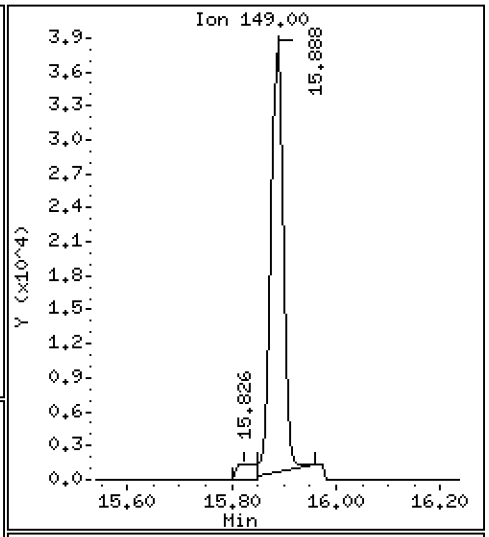
Column phase: ZB-5msi

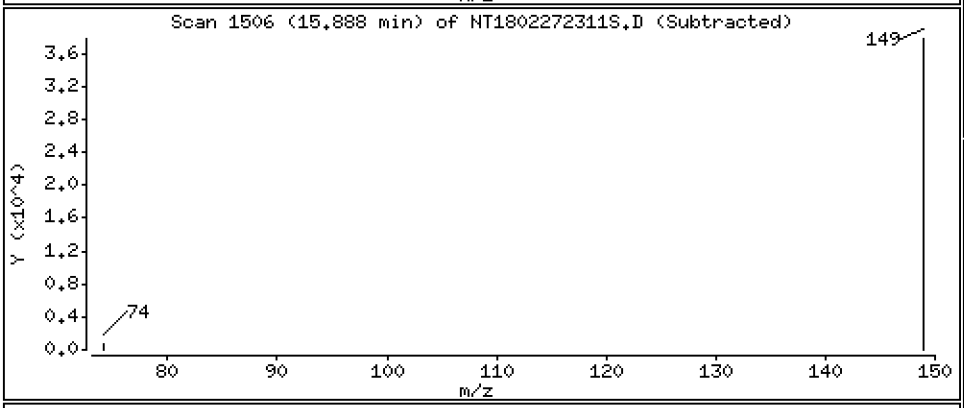
Column diameter: 0.25

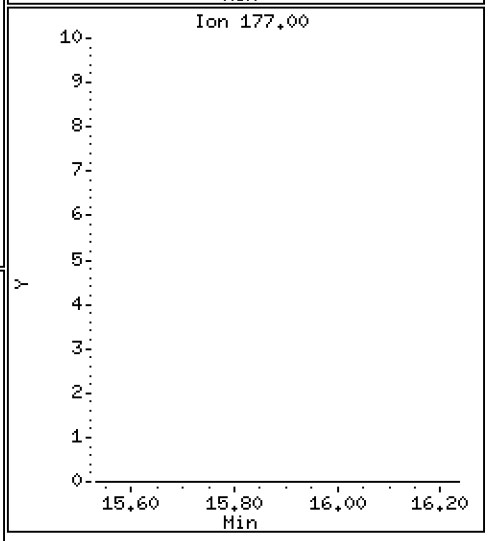
50 Diethylphthalate

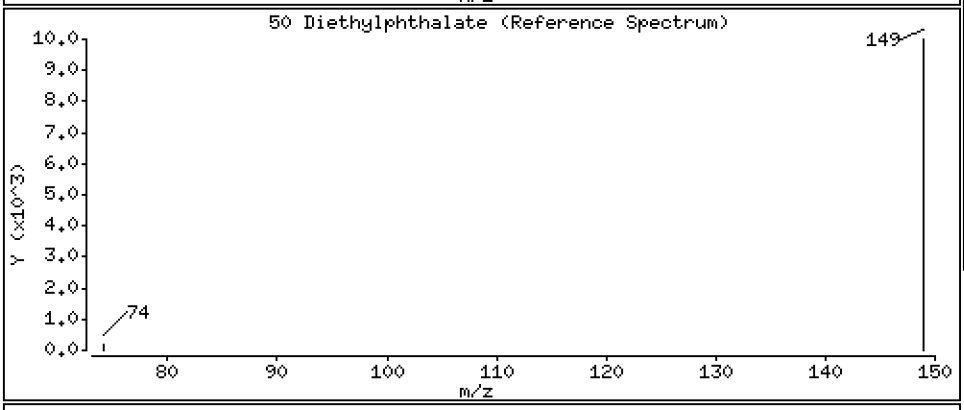
Concentration: 0.2705 ug/mL

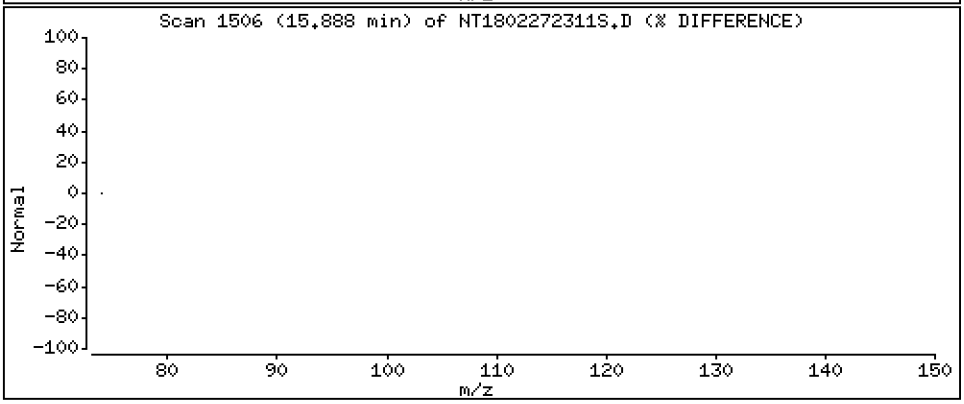












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Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

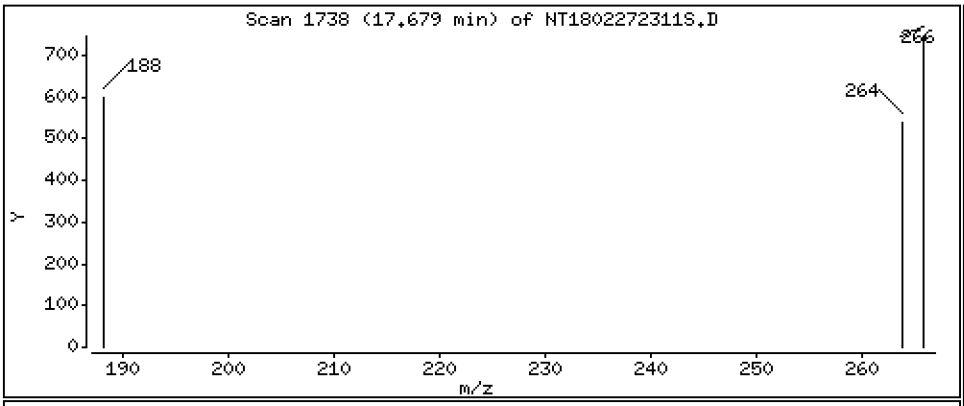
Operator: YZ

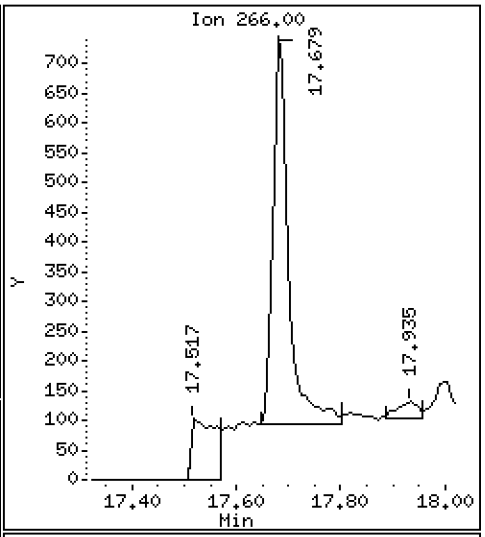
Column phase: ZB-5msi

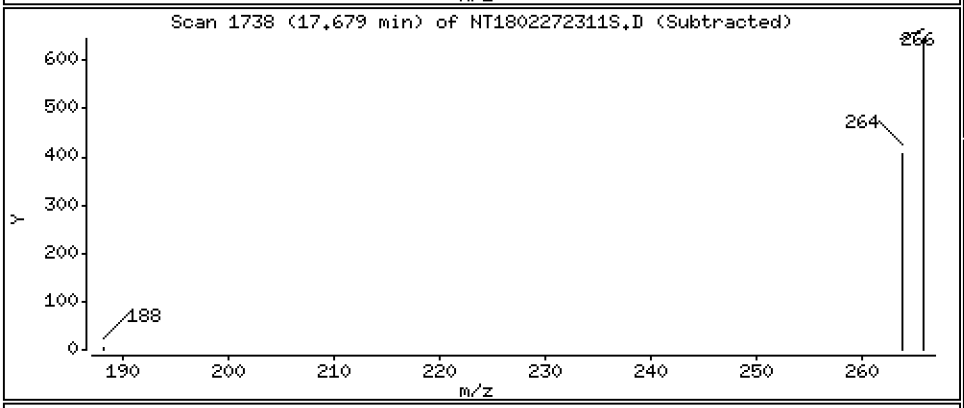
Column diameter: 0.25

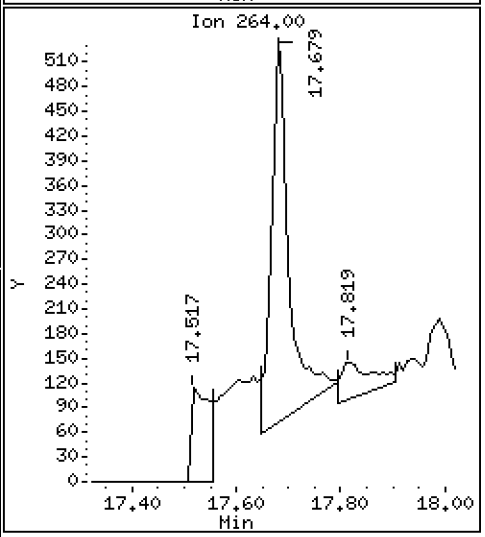
58 Pentachlorophenol

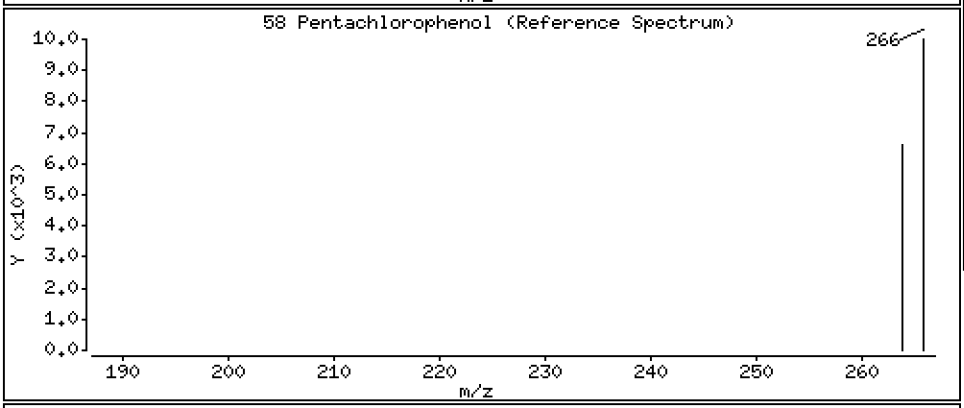
Concentration: 0.04978 ug/mL

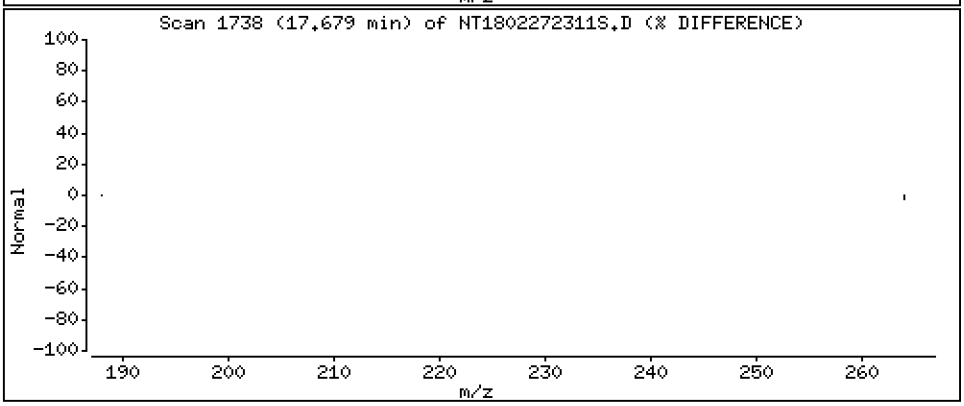












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723115.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

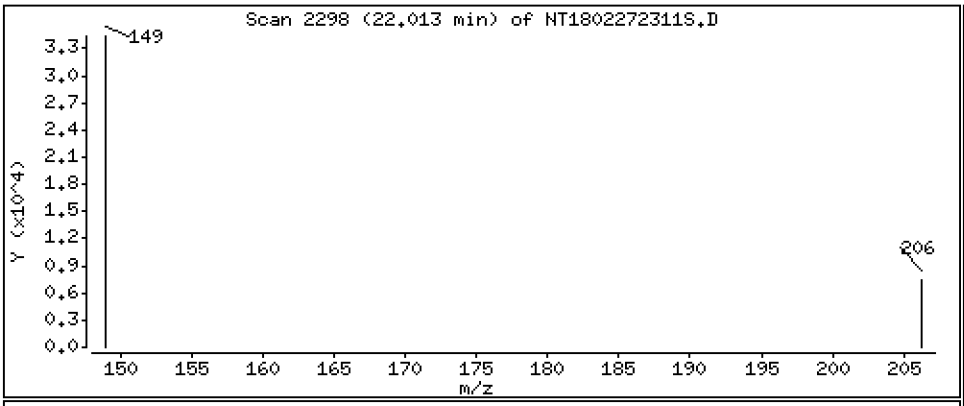
Operator: YZ

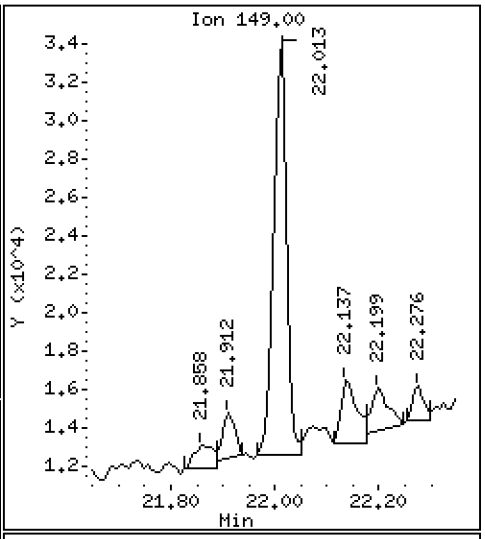
Column phase: ZB-5msi

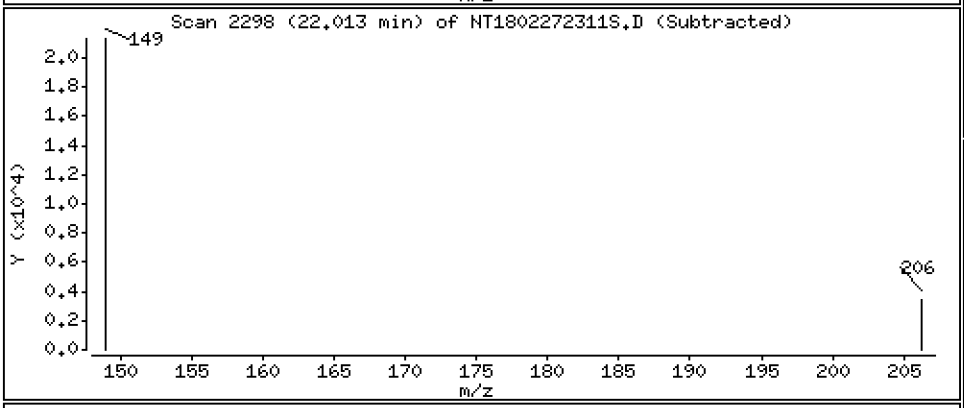
Column diameter: 0.25

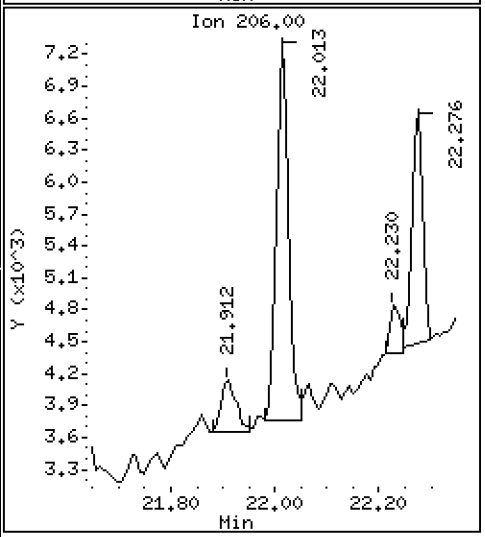
67 Butylbenzylphthalate

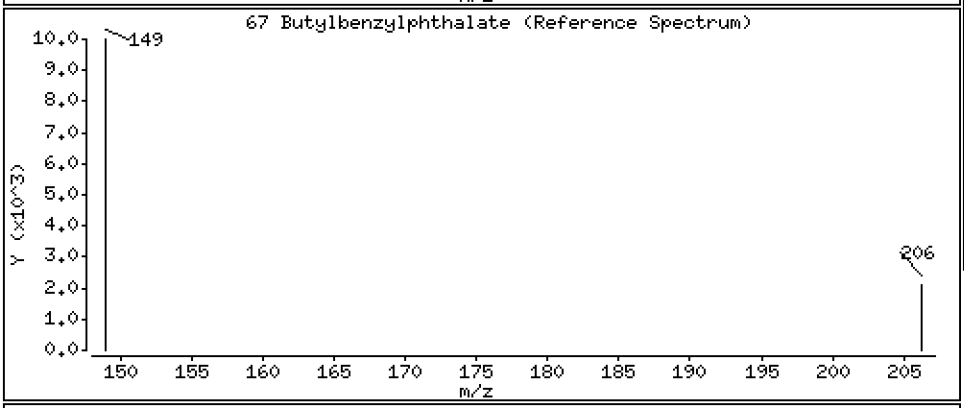
Concentration: 0.1623 ug/mL

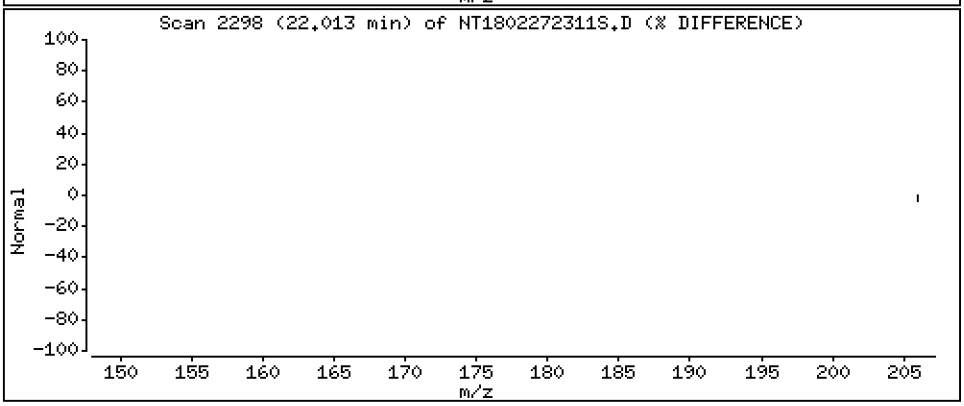












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272311S.D

Date : 27-FEB-2023 23:53

Client ID:

Instrument: nt18.i

Sample Info: 23A0134-15

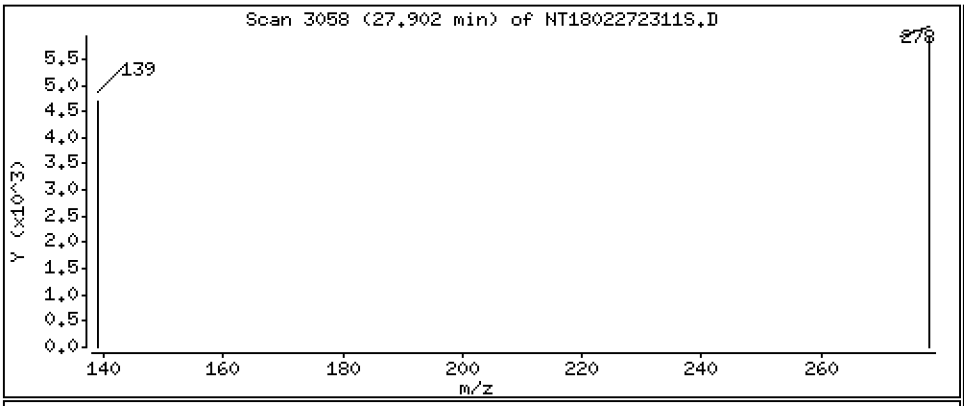
Operator: YZ

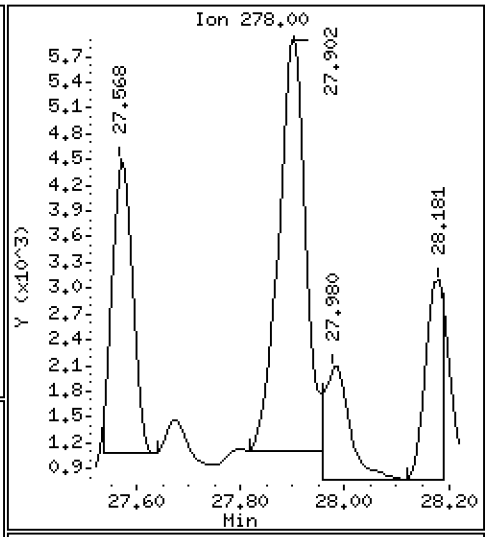
Column phase: ZB-5msi

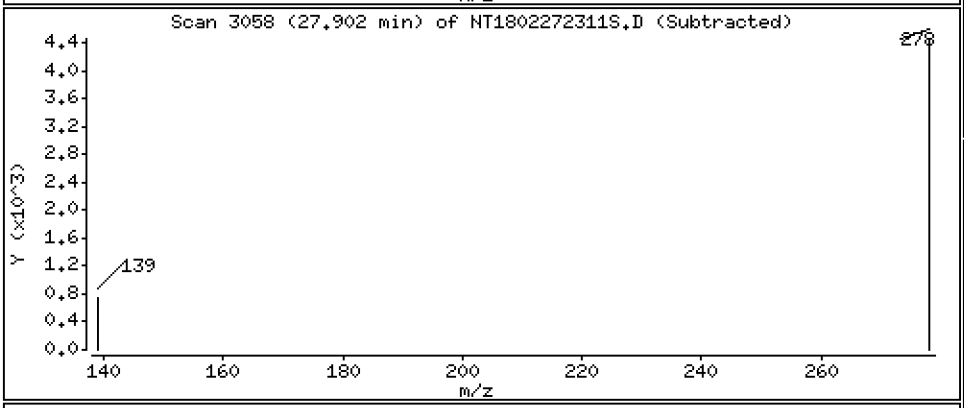
Column diameter: 0.25

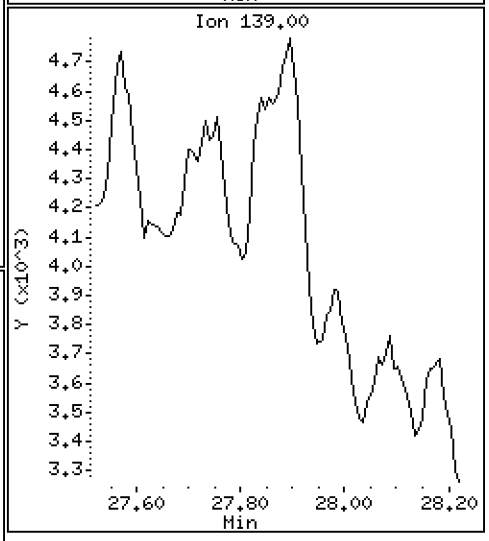
79 Dibenzo(a,h)anthracene

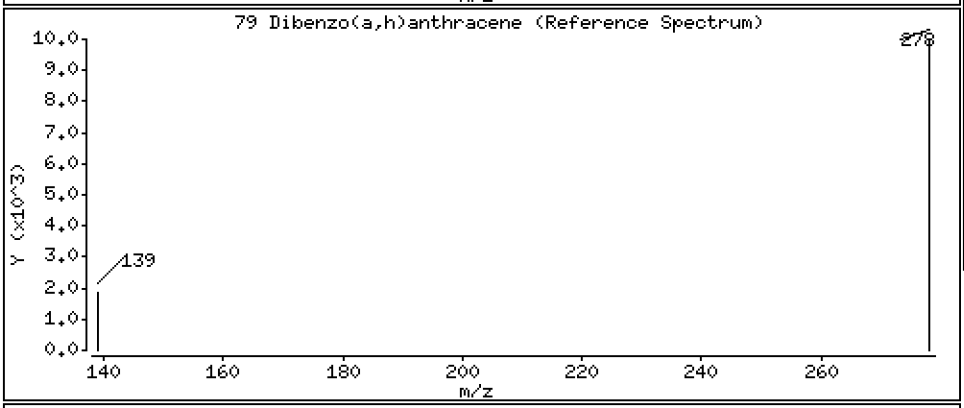
Concentration: 0.07562 ug/mL

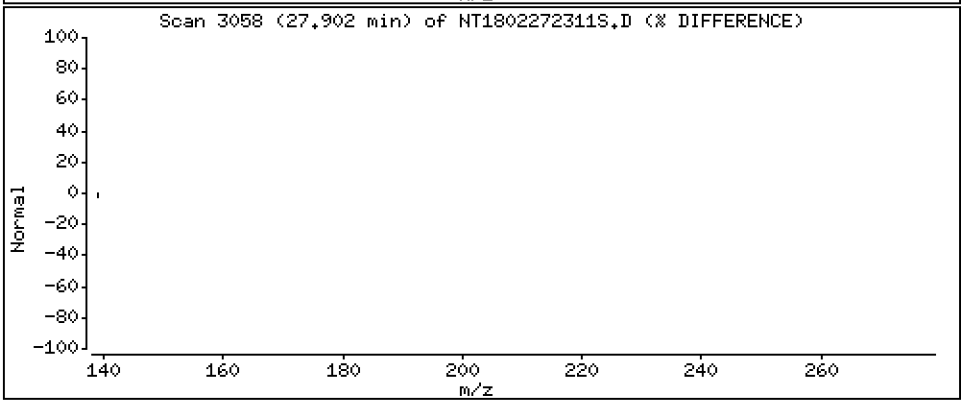












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272311S.D
Lab Smp Id: 23A0134-15
Inj Date : 27-FEB-2023 23:53
Operator : YZ Inst ID: nt18.i
Smp Info : 23A0134-15
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 13:42 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

								CONCENTRATIONS	
		QUANT SIG						ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	6.756	6.725	(0.759)	581680		5.59800	5.598(R)
	3 Phenol	94	8.316	8.301	(0.935)	83679		0.61731	0.6173
	7 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	8 1,4-Dichlorobenzene-d4	152	8.896	8.896	(1.000)	321946		4.00000	
	9 1,4-Dichlorobenzene	146	8.927	8.920	(1.003)	3058		0.02157	0.02157
	11 Benzyl alcohol	79	9.183	9.168	(1.032)	26905		0.30959	0.3096(H)
	12 1,2-Dichlorobenzene	146	Compound Not Detected.						
	13 2-Methylphenol	108	9.408	9.401	(1.058)	2568		0.02304	0.02304
	15 4-Methylphenol	108	9.680	9.665	(1.088)	6956		0.06219	0.06219
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.						
	22 2,4-Dimethylphenol	107	10.698	10.689	(0.943)	3504		0.03274	0.03274
	24 Benzoic acid	105	10.859	10.868	(0.957)	53441		1.23521	1.235(M)
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	27 Naphthalene-d8	136	11.347	11.347	(1.000)	1199423		4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.						
	39 Dimethylphthalate	163	14.441	14.442	(0.968)	14565		0.06103	0.06103
*	42 Acenaphthene-d10	162	14.921	14.921	(1.000)	621153		4.00000	
	50 Diethylphthalate	149	15.888	15.888	(1.065)	58978		0.27046	0.2705
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57 Hexachlorobenzene	284	Compound Not Detected.						
	58 Pentachlorophenol	266	17.679	17.671	(0.986)	1347		0.04978	0.04978
*	59 Phenanthrene-d10	188	17.934	17.927	(1.000)	1330293		4.00000	
$	66 Terphenyl-d14	244	21.099	21.068	(0.918)	974779		4.04987	4.050(R)
	67 Butylbenzylphthalate	149	22.012	21.997	(0.958)	35690		0.16226	0.1623
*	69 Chrysene-d12	240	22.980	22.957	(1.000)	1329279		4.00000	
*	77 Perylene-d12	264	25.473	25.442	(1.000)	784597		4.00000	
	79 Dibenzo(a,h)anthracene	278	27.901	27.871	(1.095)	17630		0.07562	0.07562
	90 N-Nitrosodimethylamine	74	Compound Not Detected.						

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272311S.D
Lab Smp Id: 23A0134-15
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	334128	167064	668256	321946	-3.65
27 Naphthalene-d8	1260796	630398	2521592	1199423	-4.87
42 Acenaphthene-d10	648152	324076	1296304	621153	-4.17
59 Phenanthrene-d10	1231995	615998	2463990	1330293	7.98
69 Chrysene-d12	1126974	563487	2253948	1329279	17.95
77 Perylene-d12	1243668	621834	2487336	784597	-36.91

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.35	10.85	11.85	11.35	-0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.92	-0.00
59 Phenanthrene-d10	17.93	17.43	18.43	17.93	0.04
69 Chrysene-d12	22.96	22.46	23.46	22.98	0.10
77 Perylene-d12	25.44	24.94	25.94	25.47	0.12

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272311S.D

Lab ID: 23A0134-15
nt18.i, 20230227.b\SIM.b\SIMABN2.m,   27-FEB-2023 23:53

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1802272303S.D

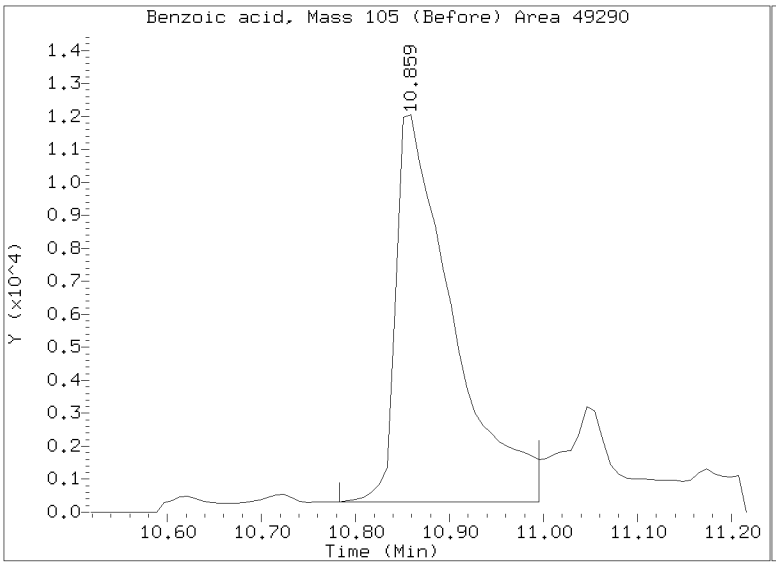
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

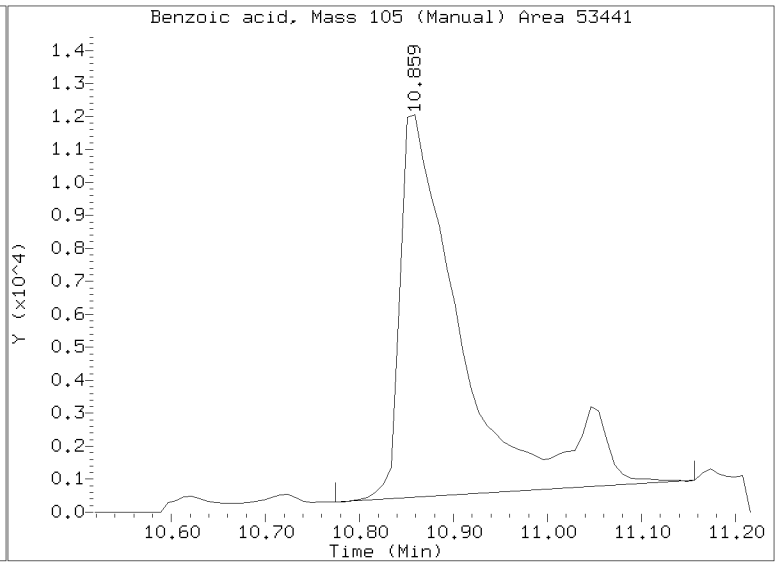
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230227.b/SIM.b/NT1802272311S.D
Injection Date: 27-FEB-2023 23:53
Lab ID:23A0134-15 Client ID:
Report Date: 03/24/2023 13:42





APPROVED

By Deenay Dunmore at 2:28 pm, Mar 24, 2023

PREPARATION BATCH SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Batch: BLA0410 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1205	23A0134-01	NT1802262310S.D	01/19/23 13:35	
LDW23-SS1188	23A0134-02	NT1802262311S.D	01/19/23 13:35	
LDW23-SS1179	23A0134-03	NT1802262312S.D	01/19/23 13:35	
LDW23-SS1242	23A0134-04	NT1802262313S.D	01/19/23 13:35	
LDW23-SS1173	23A0134-05	NT1802262314S.D	01/19/23 13:35	
LDW23-SS1160	23A0134-06	NT1802262315S.D	01/19/23 13:35	
LDW23-SS1152	23A0134-07	NT1802262316S.D	01/19/23 13:35	
LDW23-SS1131	23A0134-08	NT1802262317S.D	01/19/23 13:35	
LDW23-SS1129	23A0134-09	NT1802262318S.D	01/19/23 13:35	
LDW23-SS1124	23A0134-10	NT1802262319S.D	01/19/23 13:35	
LDW23-SS1123	23A0134-11	NT1802262320S.D	01/19/23 13:35	
LDW23-SS1116	23A0134-12	NT1802272307S.D	01/19/23 13:35	
LDW23-IT1210	23A0134-13	NT1802272308S.D	01/19/23 13:35	
LDW23-SC1249	23A0134-15	NT1802272311S.D	01/19/23 13:35	
Blank	BLA0410-BLK2	NT1802262306S.D	01/19/23 13:35	
LCS	BLA0410-BS2	NT1802262307S.D	01/19/23 13:35	
LCS Dup	BLA0410-BSD2	NT1802262308S.D	01/19/23 13:35	
LDW23-IT1210	BLA0410-MS2	NT1802272309S.D	01/19/23 13:35	
LDW23-IT1210	BLA0410-MSD2	NT1802272310S.D	01/19/23 13:35	
Reference	BLA0410-SRM2	NT1802262309S.D	01/19/23 13:35	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0410

Prepared using: EPA 3546 (Microwave)

8270E SVOC (20ug/kg solid or 0.2ug/L low H2O Sepf) in Solid (Version:AOC4 List)

Matrix: Solid Date Prepared: 1/19/23 Balance ID: B139298002 Set Up By: CR 1/17/23

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
39	Benzidine Spike
QLS 14	QLS Spike (Freezer)

Analysis: 8270E SVOC (20ug/kg solid or 0.2ug/L low H2O Sepf)

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet)	Actual	(REQ) GPC C/U (1:1) 1 (2) 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0134-01 C	57.4	(17.43)	17.47	(1:1)	1mL	1	0.5	
23A0134-02 C	46.6	(21.48)	21.59	(1:1)	1mL	1	0.5	
23A0134-03 C	47.3	(21.13)	21.38	(1:1)	1mL	1	0.5	
23A0134-04 C	46.4	(21.57)	21.64	(1:1)	1mL	1	0.5	
23A0134-05 C	47.2	(21.20)	21.82	(1:1)	1mL	1	0.5	
23A0134-06 C	40.3	(24.83)	25.07	(1:1)	1mL	1	0.5	
23A0134-07 C	43.7	(22.90)	23.28	(1:1)	1mL	1	0.5	
23A0134-08 C	54.7	(18.27)	18.68	(1:1)	1mL	1	0.5	
23A0134-09 C	48.0	(20.82)	21.37	(1:1)	1mL	1	0.5	
23A0134-10 C	48.5	(20.64)	20.64	(1:1)	1mL	1	0.5	
23A0134-11 C	52.0	(19.25)	19.28	(1:1)	1mL	1	0.5	
23A0134-12 C	58.8	(17.00)	17.14	(1:1)	1mL	1	0.5	
23A0134-13 C	55.5	(18.02)	18.02	(1:1)	1mL	1	0.5	
23A0134-15 C	50.1	(19.96)	20.46	(1:1)	1mL	1	0.5	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet)	Actual	(REQ) GPC C/U (1:1) 1 (2) 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0410-BLK1	100.0	(10.00)	10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0410-BS1	100.0	(10.00)	10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0410-BSD1	100.0	(10.00)	10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0410-MS1	55.5	(18.02)	18.02	(1:1)	1mL	1	0.5	Use 23A0134-13
BLA0410-MSD1	55.5	(18.02)	18.02	(1:1)	1mL	1	0.5	Use 23A0134-13
BLA0410-SRM1	100.0	~~(10.00)~~ (1.00)	1.00	(1:1)	1mL	1	0.5	Use K003477

CR 1/19/23 — Client ID verified By / Date

JWC 2/2/23 — Preparation Reviewed By / Date

CR 1/19/23 13:35 — Extraction Date and Time

Printed: 1/17/2023 10:17:34AM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0410

Prepared using: EPA 3546 (Microwave)

8270E SVOC (20ug/kg solid or 0.2ug/L low H2O Sepf) in Solid (Version:AOC4 List)

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps

Microwave
1 2 3
CR / 1/19/23
Analyst/Date

Pre-GPC KD
100°C
Exchange to Hexane
(add 10 mL to KD)
0 2 4 5 6
LJ 1/24/23
Analyst/Date

TurboVap
Pre GPC
1 2 3 4 5
TWC 1/24/23
Analyst/Date

Post GPC KD
80-85°C
0 2 4 5 6
TWC 1/26/23
Analyst/Date

TurboVap
1 2 3 4 5
TWC 2/2/23
Analyst/Date

Water Wash
TWC 2/2/23
Analyst/Date

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: CR Date: 1/19/23	
Anhydrous Sodium Sulfate	L000092
1:1 Methylene Chloride/Acetone	L000281
Methylene Chloride	K005942
Pre-Deactivated Glass Wool	K010195
Pre GPC KD Analyst: LJ Date: 1/24/23	
Pre-Deactivated Glass Wool	
Anhydrous Sodium Sulfate	L000453
Methylene Chloride	K005942
Hexane	K009310
GPC Filter Prep Analyst: TWC Date: 1/24/23	
Methylene Chloride	L000008
GPC Analyst: TWC Date: 1/24/23	
Methylene Chloride	L000008
GPC Calibration File	CLA0166
Post GPC KD Analyst: TWC Date: 1/26/23	
Methylene Chloride	L000308
Vialing Analyst: TWC Date: 2/2/23	
Methylene Chloride	L000308

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 100/150µg/mL	A K010466 Exp Date: 5/9/23	50µL	CR	CT
Full List Spike (Freezer) 100µg/mL	7 K011369 (V) Exp K011297 Date: 8/31/23	50µL	CR	CT
Base Spike 200µg/mL	56 K011369 (V) Exp K003759 Date: 4/19/23	50µL	CR	CT
Acid Spike 100/200µg/mL	38 K011369 (V) Exp K003760 Date: 4/19/23	50µL	CR	CT

MANUALLY ENTER EXPIRATION DATES!

(V) indicates a virtual standard combining two or more physical standards. In these cases the Standard ID refers to the virtual standard, not the parent standards.

If a Standard ID is missing, but should be present, check the standard definition in Element LIMS to be sure Standard Info 6 has the correct letter or number designator matching the vial designator inthe Standard ID column. If it is correct, check the batch and bench sheet in Element LIMS to be sure the correct standards are selected for surrogate(s) and spike(s).

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0410

Prepared using: EPA 3546 (Microwave)

8270E SVOC (20ug/kg solid or 0.2ug/L low H2O Sepf) in Solid (Version:AOC4 List)

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM J009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessel. 3. Add DCM ONLY to the vessels (until solvent is 3 inches above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 10-15 min in Refridgerator 05. Re-homogenize while cool. 7. Decant DCM into Erlenmeyer flask with a funnel containing pre-deactivated glasswool. 8. Rinse with DCM 9. Microwave a 2nd time using 1:1 DCM/ACE. 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with DCM. 11. KD: Add 10 mL Hexane directly to extract in the KD. 12. GPC REQUIRED 100°C water bath (CLP) KD to 5mL. 13. Vialers to take 1:5 Split Pre- GPC. 14. (After GPC): KD at 80°C. 15. TurboVap to 1mL in DCM. 16. WATER WASH REQUIRED: 16a. Vial 1mL of all extracts in 2mL amber vials in DCM. 16b. Add ~0.5mL DI water and vortex for ~5 seconds each. 16c. Centrifuge extracts for 5 minutes at 1500-2000rpm. 16d. Transfer and vial 0.5mL to new 2mL amber vials (Avoiding collecting water in syringe and cleaning syringe with Acetone and DCM between each vial). 17. Archive water wahed vials and deliever new vials to GC Department for analysis. A. Need Total Solids Y /(N) B. Archive/Freeze (Y)/ N	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SVOA Extraction Batch: BLA0418

Total Solids Batch: BLA0362 Work Order(s): 23A0134 01-16

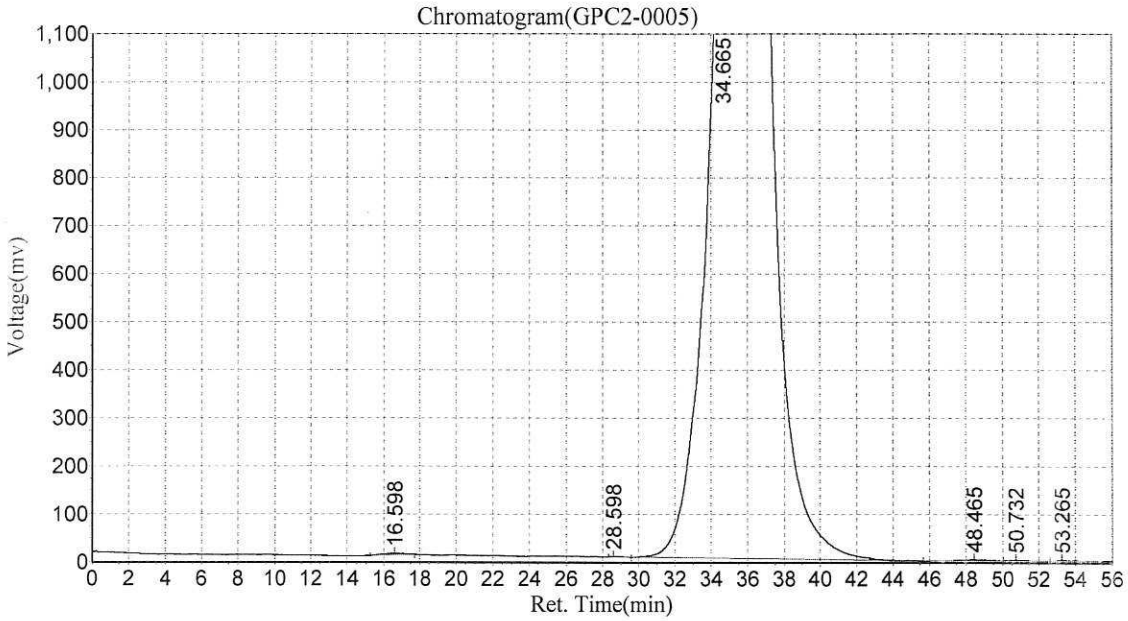
Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-16	CR 1/16/23
☒ Standing Water Decanted (Not shared)= 01-16	CR 1/16/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen =01-16	CR 1/16/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☒ Other Notes/Comments= (Note problems, concerns, corrective actions).	
A bit of SRM1 spilled while pouring it to KD	LS 1/24/23
☒ Share Samples Y / (N)	CR 1/16/23
☒ Multiple Jars Y / (N)	CR 1/16/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

-Blk1

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-24,11:17:16 PM
Data File:c:\n2000\data\gpc2\012423\GPC2-0005
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-24,11:17:17 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.598	3175.660	269942.906	0.0744
2		28.598	2156.396	135603.375	0.0374
3		34.665	1366038.500	361591264.000	99.6893
4		48.465	2872.257	400753.969	0.1105
5		50.732	1925.703	165146.563	0.0455
6		53.265	1894.554	155337.969	0.0428
Total			1378063.069	362718048.781	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,12:14:57 AM
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Method File:E:\GPC2_InHouse.mtd

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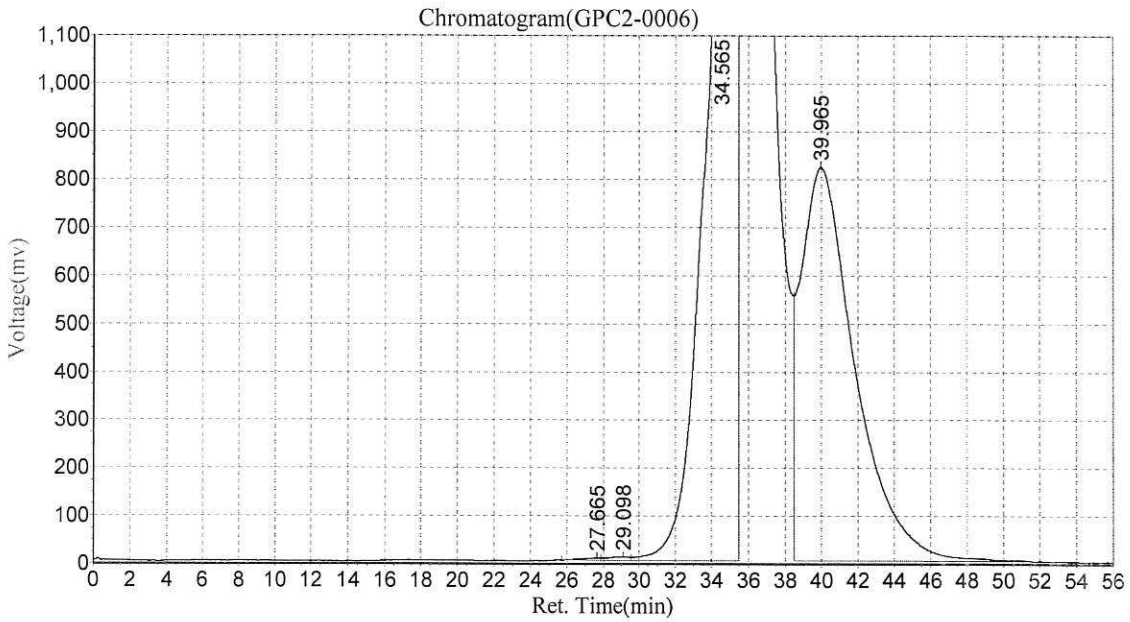
Date/Time2023-01-25,12:14:58 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		27.665	5980.925	498743.813	0.1411
2		29.098	7867.149	718788.563	0.2033
3		34.565	1368221.000	182126816.000	51.5177
4		39.965	819447.250	170178800.000	48.1380
Total			2201516.324	353523148.375	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,1:12:40 AM
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Method File:E:\GPC2_InHouse.mtd

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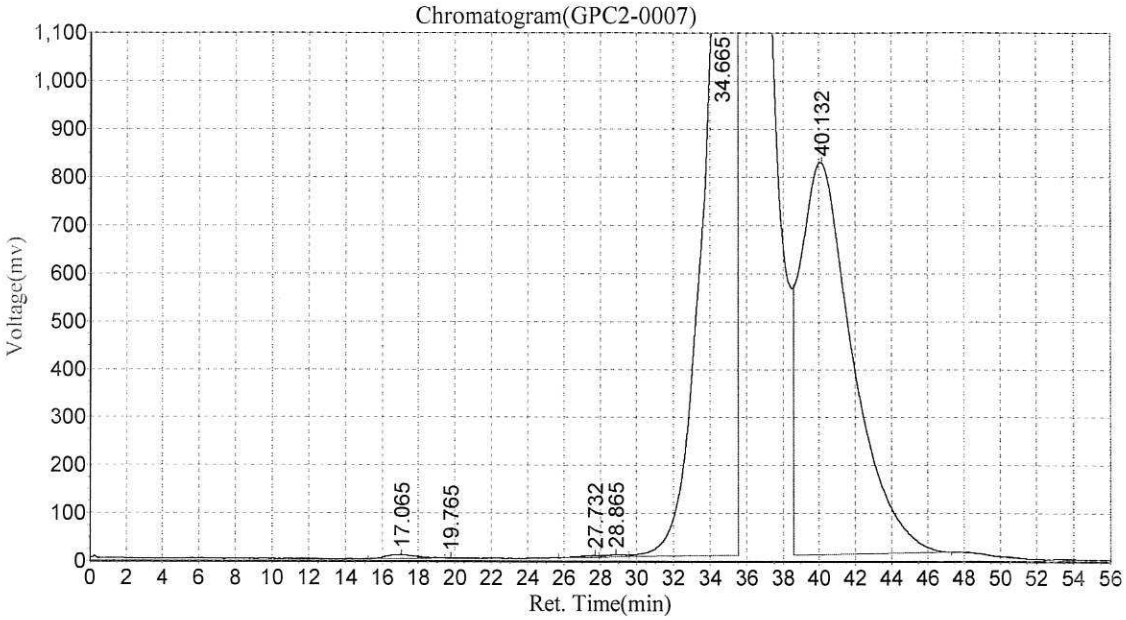
Date/Time2023-01-25,1:12:41 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.065	8486.873	992203.813	0.2897
2		19.765	2324.800	202842.953	0.0592
3		27.732	3875.198	320051.938	0.0935
4		28.865	5050.425	432694.625	0.1263
5		34.665	1361825.000	176113440.000	51.4245
6		40.132	814670.500	164408720.000	48.0068
Total			2196232.796	342469953.328	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,2:10:22 AM
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Method File:E:\GPC2_InHouse.mtd

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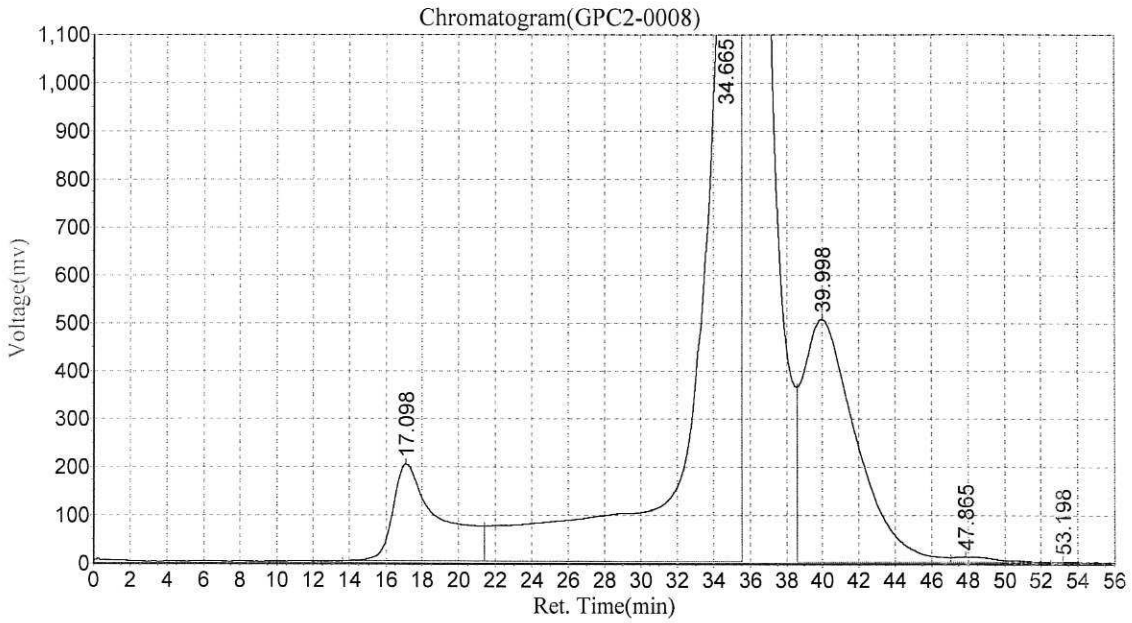
Date/Time2023-01-25,2:10:23 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.098	201255.922	36685976.000	9.8647
2		34.665	1370073.500	229975680.000	61.8394
3		39.998	504112.281	103088480.000	27.7200
4		47.865	11387.064	2033499.500	0.5468
5		53.198	1623.861	108287.430	0.0291
Total			2088452.629	371891922.930	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

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Method File:E:\GPC2_InHouse.mtd

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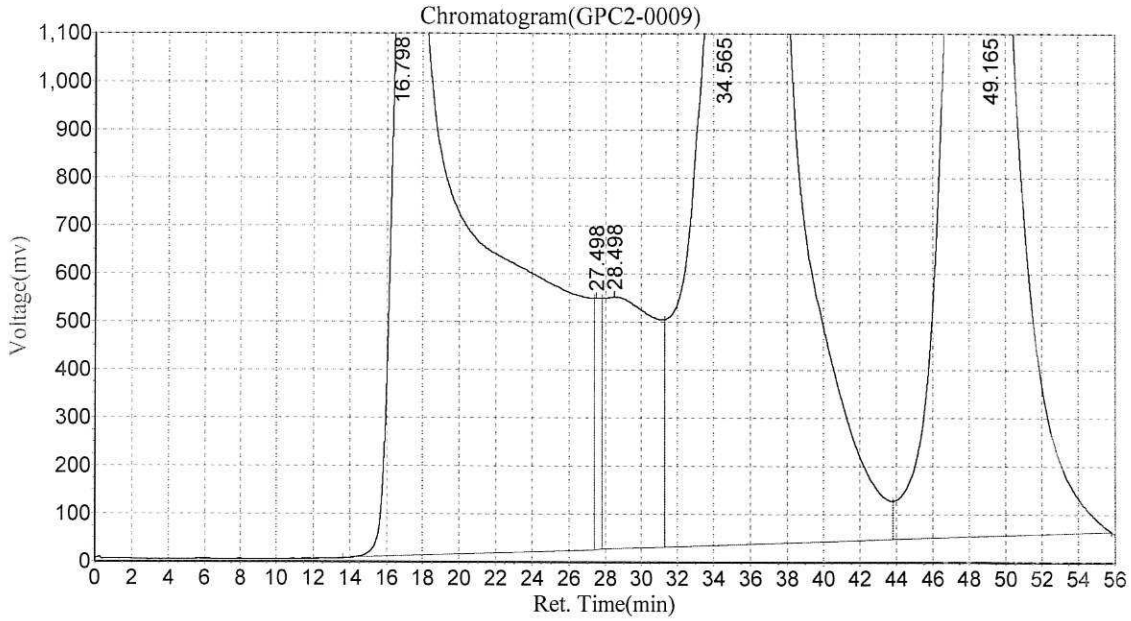

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.798	1366684.375	518114752.000	31.6220
2		27.498	522693.906	13583018.000	0.8290
3		28.498	523590.375	104461936.000	6.3756
4		34.565	1337585.625	575744000.000	35.1393
5		49.165	1321534.500	426560032.000	26.0341
Total			5072088.781	1638463738.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,4:05:47 AM
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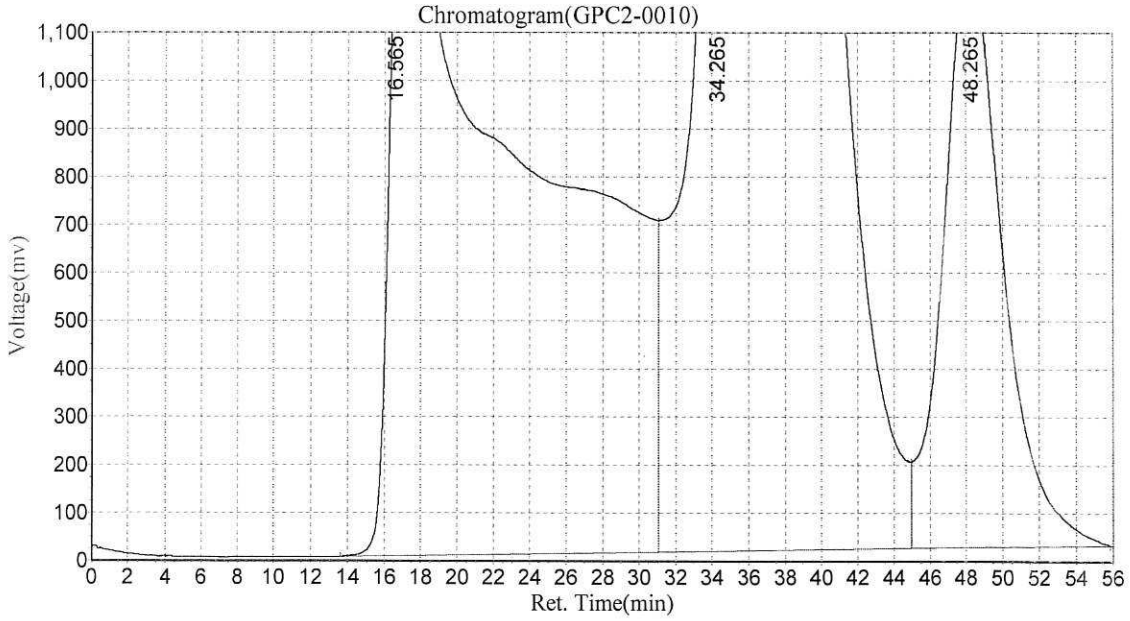
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-25,4:05:47 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.565	1368616.500	813045248.000	41.7932
2		34.265	1353241.000	854013440.000	43.8991
3		48.265	1249190.500	278344192.000	14.3078
Total			3971048.000	1945402880.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,5:03:30 AM
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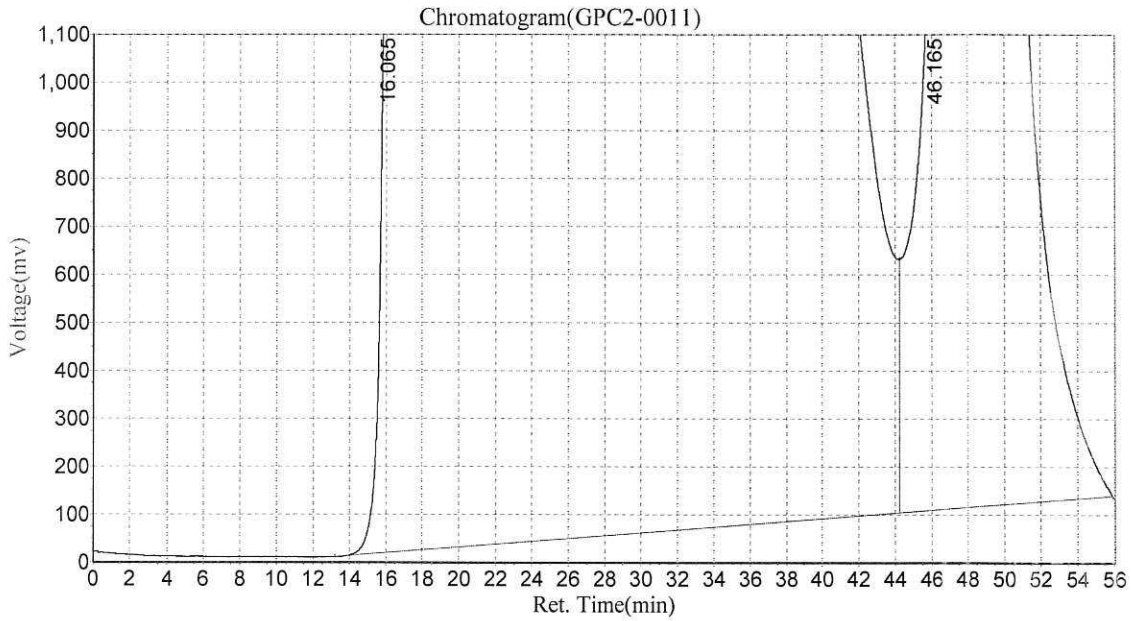
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,5:03:30 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.065	1359194.875	2175231744.000	79.4975
2		46.165	1264701.750	560994368.000	20.5025
Total			2623896.625	2736226112.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

-04

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,6:01:11 AM
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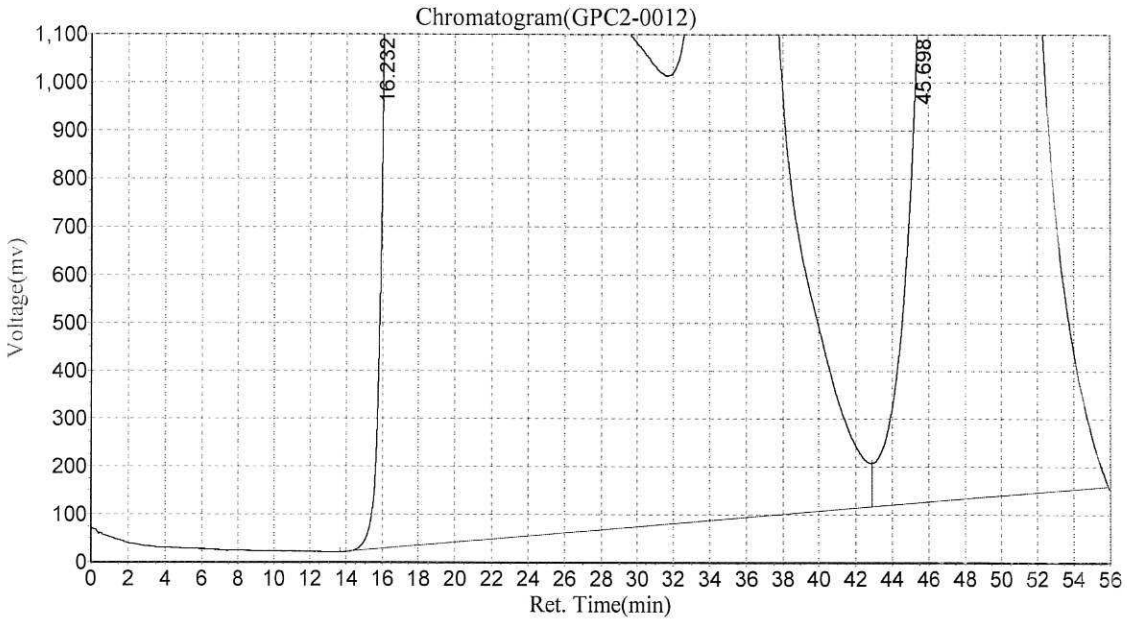
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-25,6:01:11 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.232	1349620.750	1715374592.000	73.1371
2		45.698	1250056.250	630048384.000	26.8629
Total			2599677.000	2345422976.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,6:58:55 AM
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Method File:E:\GPC2_InHouse.mtd

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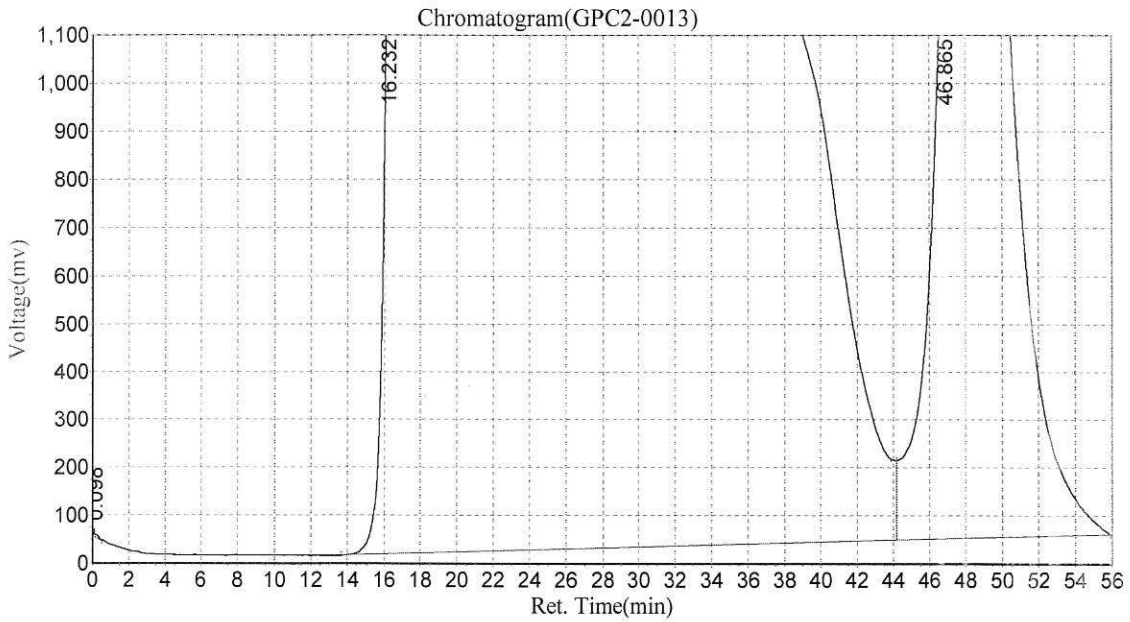

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		0.098	6719.571	134172.297	0.0055
2		16.232	1360139.125	2002314496.000	81.8702
3		46.865	1324983.250	443269440.000	18.1243
Total			2691841.946	2445718108.297	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

-06

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,7:56:36 AM
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Method File:E:\GPC2_InHouse.mtd

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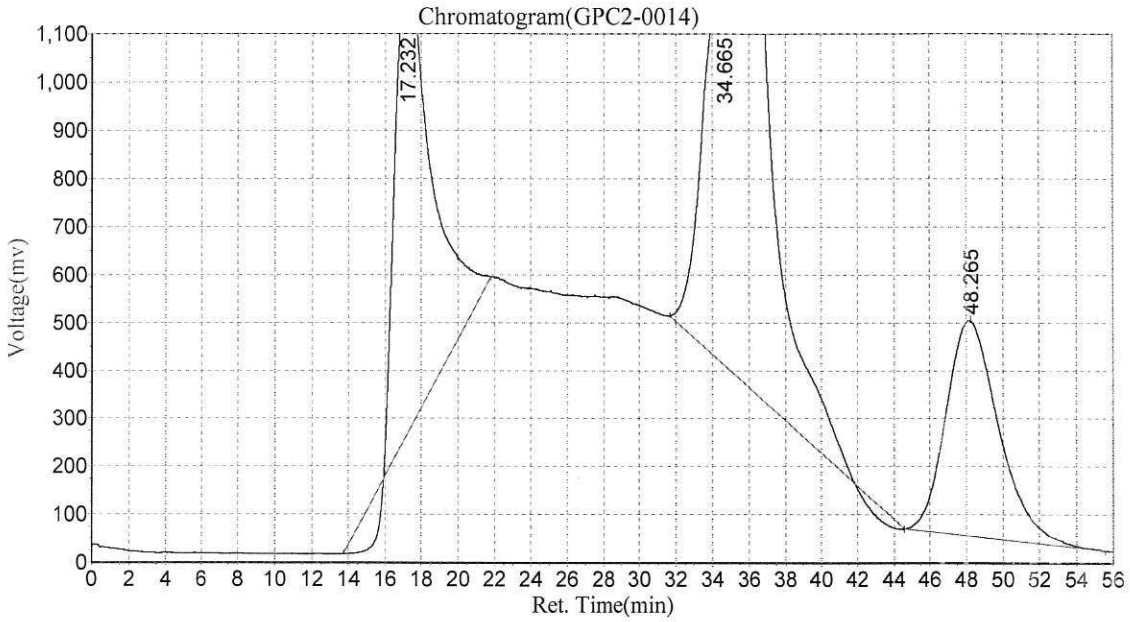

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.232	1008494.063	131179976.000	27.5192
2		34.665	962608.188	255311184.000	53.5598
3		48.265	448656.000	90193280.000	18.9210
Total			2419758.250	476684440.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,8:54:24 AM
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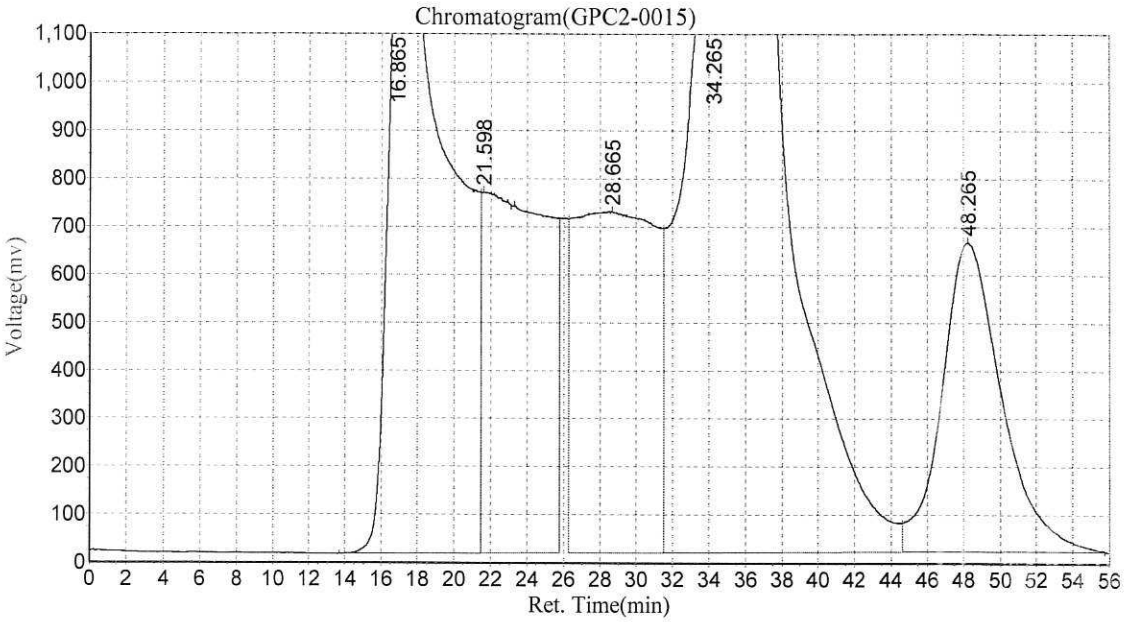
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,8:54:24 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.865	1359608.125	320657184.000	22.1946
2		21.598	752219.438	185884896.000	12.8662
3		28.665	710737.313	220850592.000	15.2864
4		34.265	1351754.125	571716672.000	39.5719
5		48.265	641938.875	145646448.000	10.0810
Total			4816257.875	1444755792.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,9:52:06 AM
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Method File:E:\GPC2_InHouse.mtd

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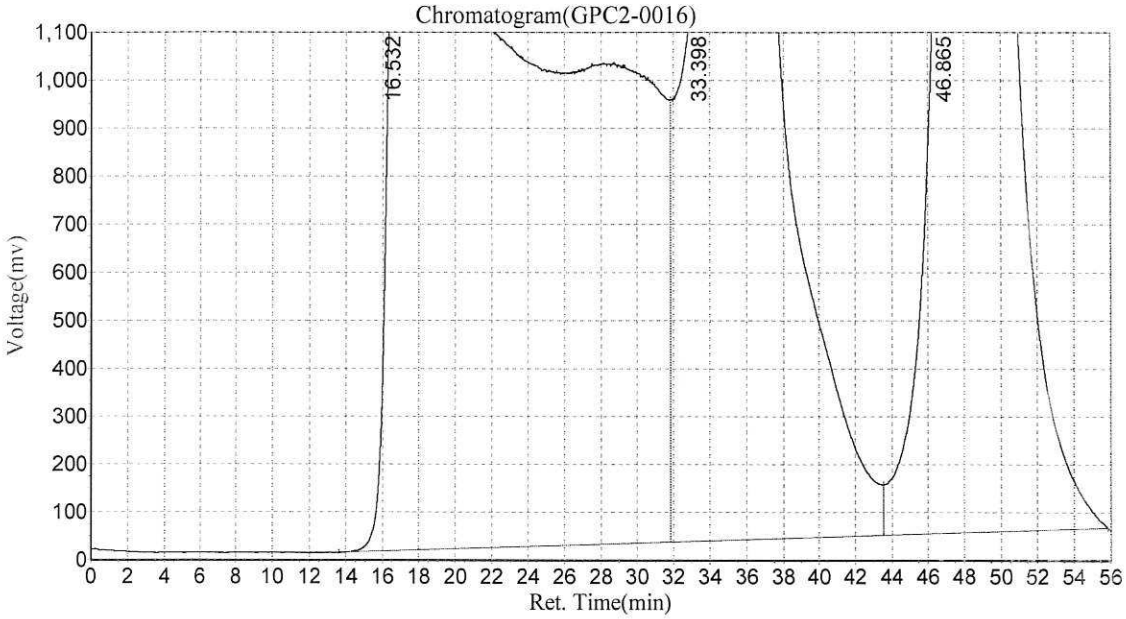
Date/Time2023-01-25,9:52:06 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.532	1360413.875	1034700416.000	48.9423
2		33.398	1333355.375	581002048.000	27.4820
3		46.865	1319582.750	498418720.000	23.5757
Total			4013352.000	2114121184.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,10:49:48 AM
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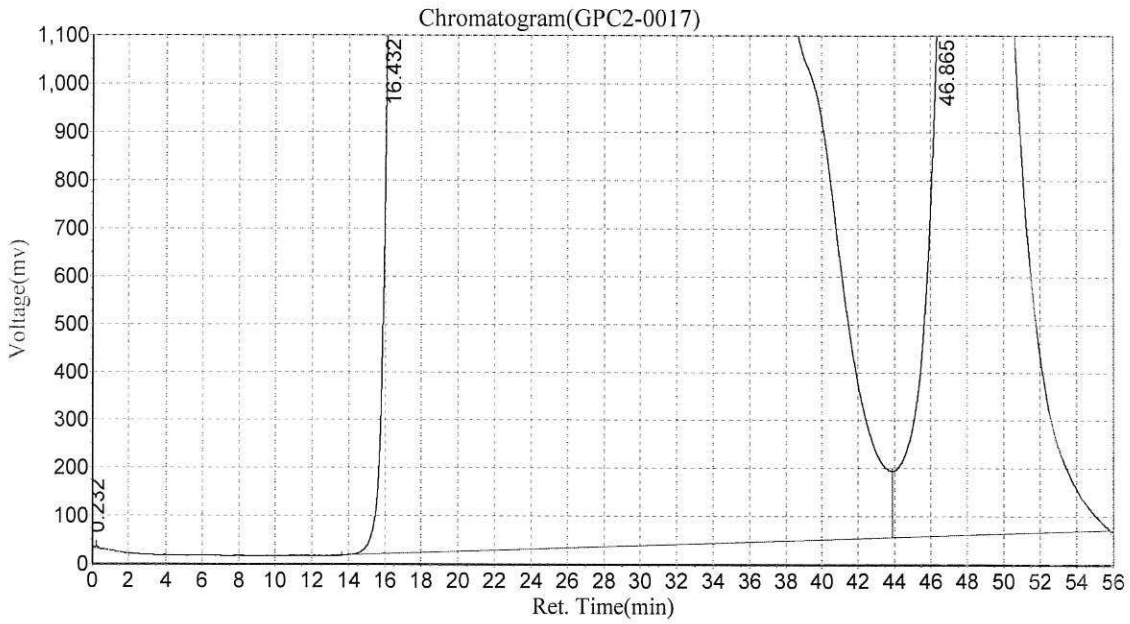

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		0.232	4673.300	110985.602	0.0046
2		16.432	1357745.375	1949109888.000	80.6883
3		46.865	1315891.875	466382464.000	19.3071
Total			2678310.550	2415603337.602	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

-1P

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,11:47:30 AM
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Method File:E:\GPC2_InHouse.mtd

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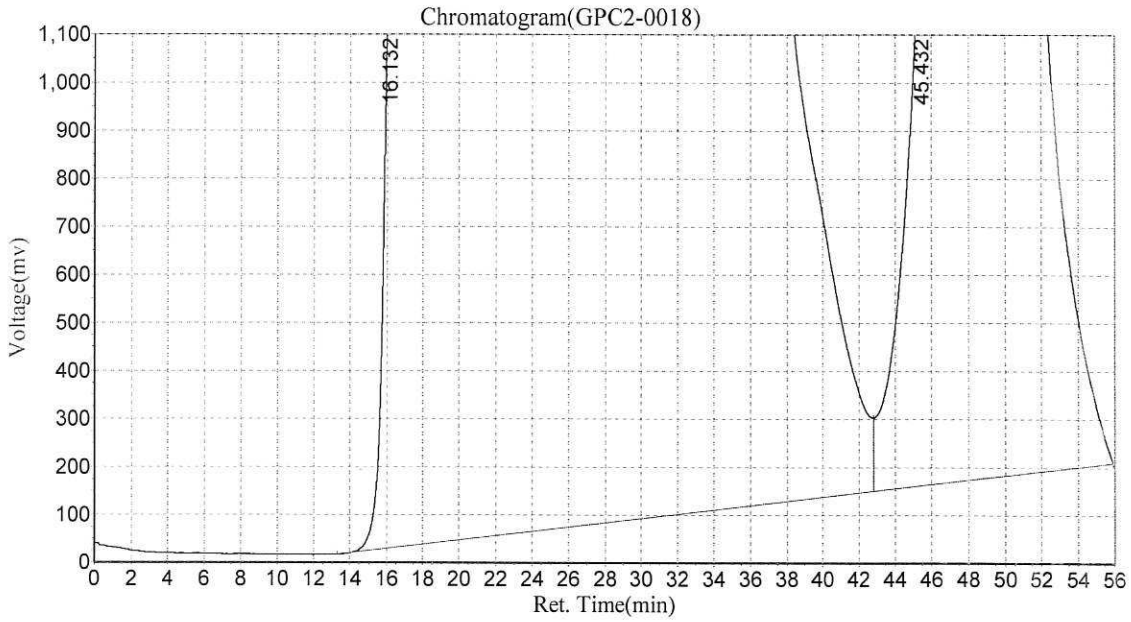


Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.132	1349622.750	1862042880.000	74.4158
2		45.432	1212322.625	640172032.000	25.5842
Total			2561945.375	2502214912.000	100.000

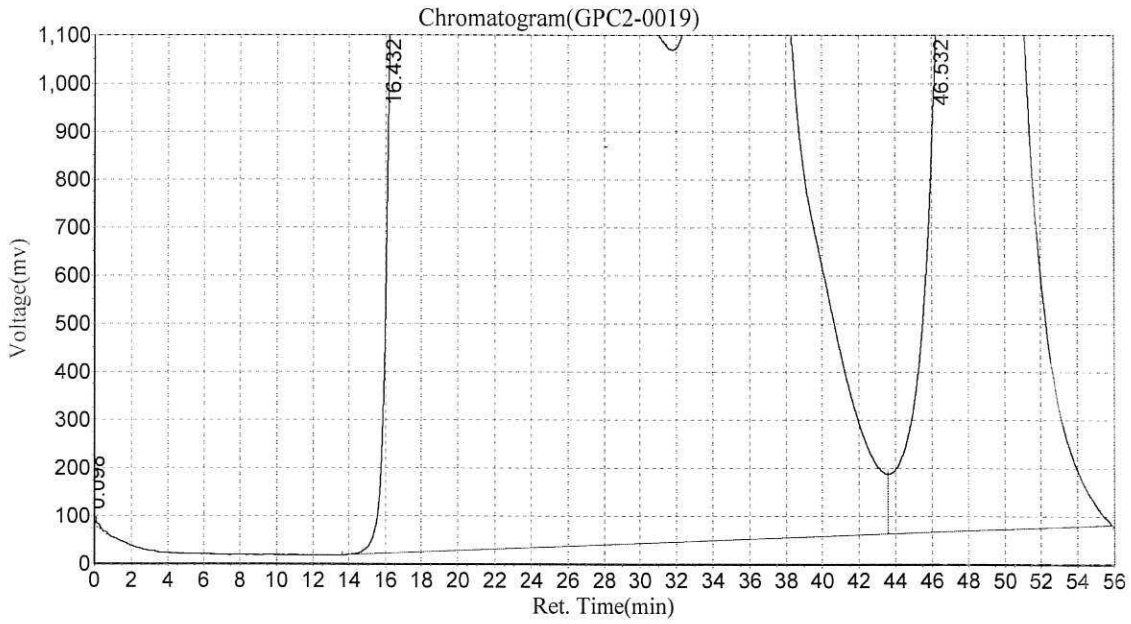
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,12:45:13 PM
Data File:c:\n2000\data\gpc2\012423\GPC2-0019
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,12:45:14 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		0.098	8875.842	122297.797	0.0052
2		16.432	1356638.375	1841350528.000	78.2571
3		46.532	1308904.875	511477504.000	21.7377
Total			2674419.092	2352950329.797	100.000

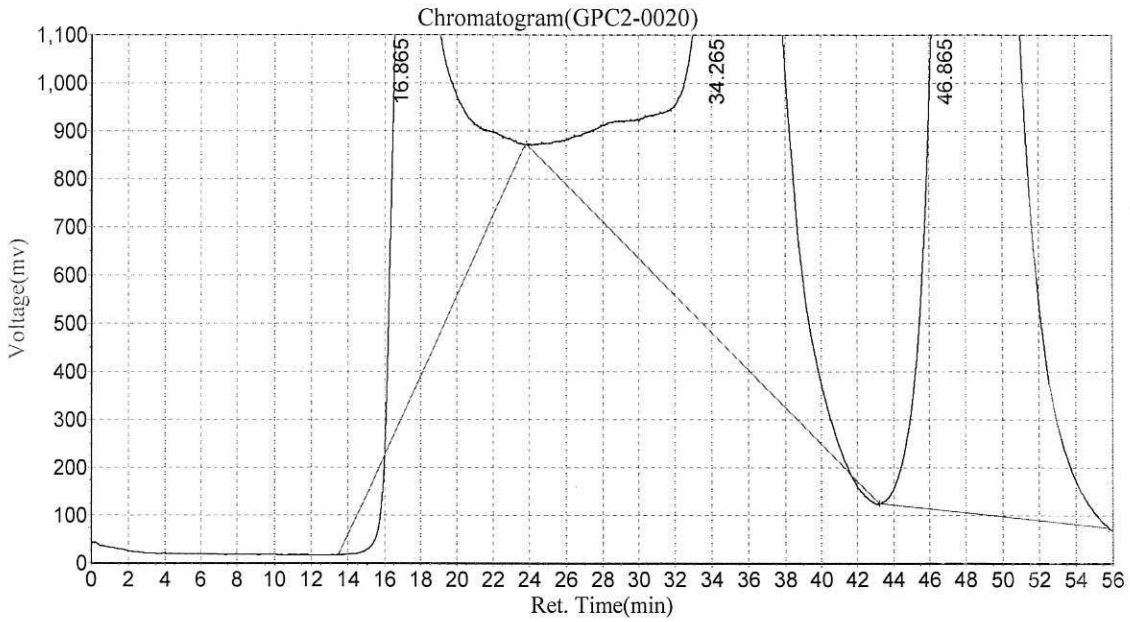
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,1:42:55 PM
Data File:c:\n2000\data\gpc2\012423\GPC2-0020
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,1:42:55 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.865	1081893.875	213574816.000	18.8280
2		34.265	904029.500	440646752.000	38.8459
3		46.865	1265849.625	480123488.000	42.3260
Total			3251773.000	1134345056.000	100.000

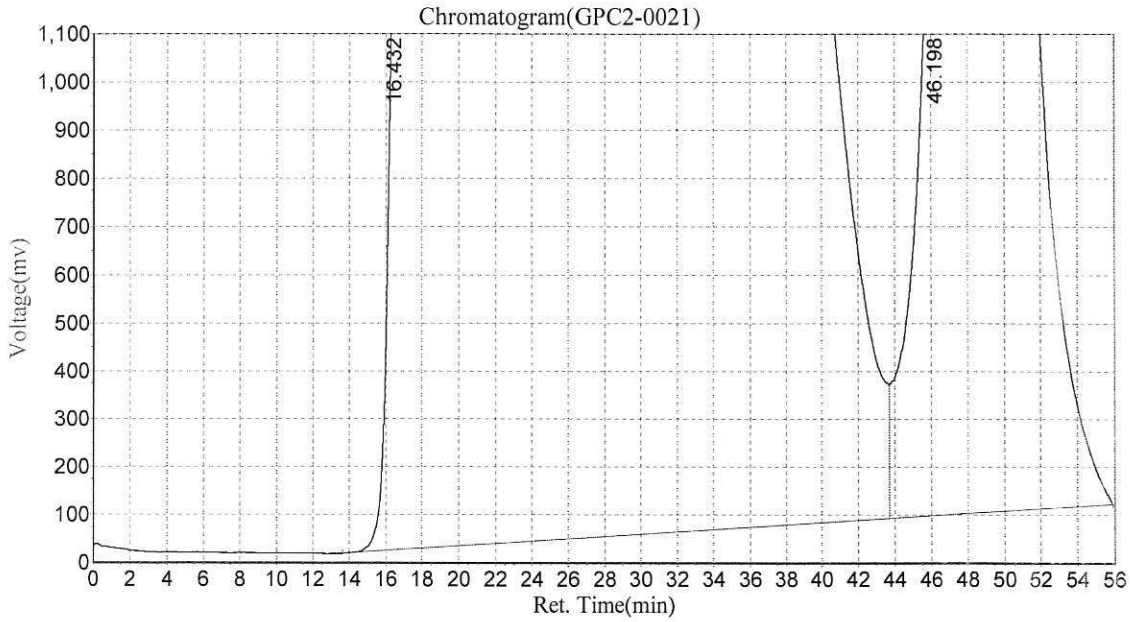
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,2:40:38 PM
Data File:c:\n2000\data\gpc2\012423\GPC2-0021
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-01-25,2:40:39 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.432	1353109.500	2046517632.000	77.0507
2		46.198	1277647.250	609547264.000	22.9493
Total			2630756.750	2656064896.000	100.000

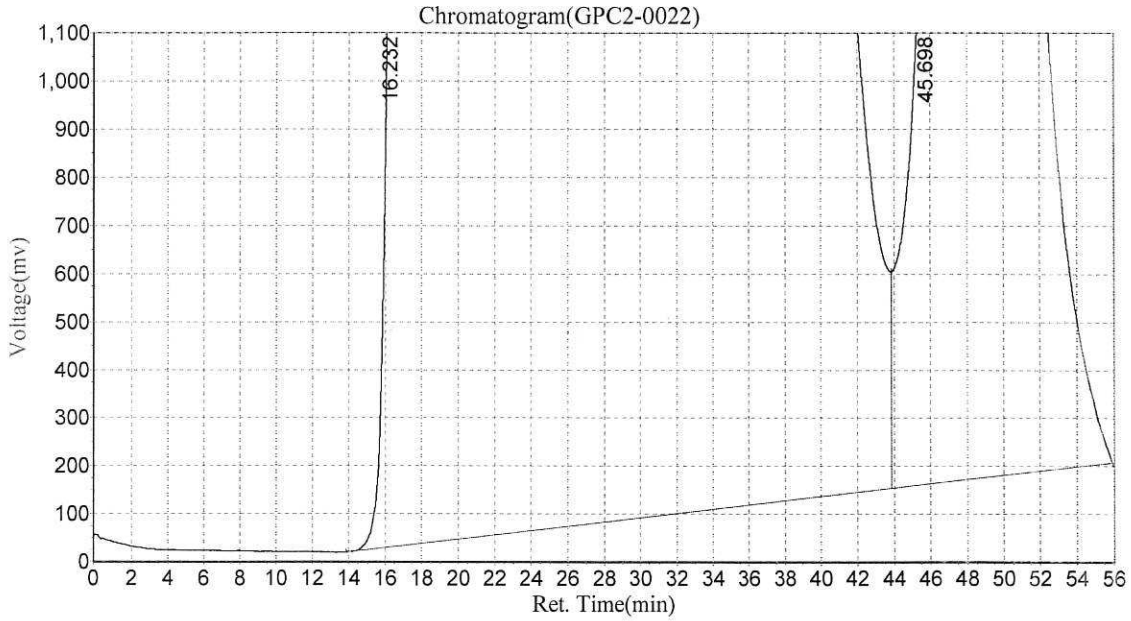
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,3:38:19 PM
Data File:c:\n2000\data\gpc2\012423\GPC2-0022
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,3:38:20 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.232	1348525.750	2085791872.000	76.7697
2		45.698	1214064.500	631155072.000	23.2303
Total			2562590.250	2716946944.000	100.000

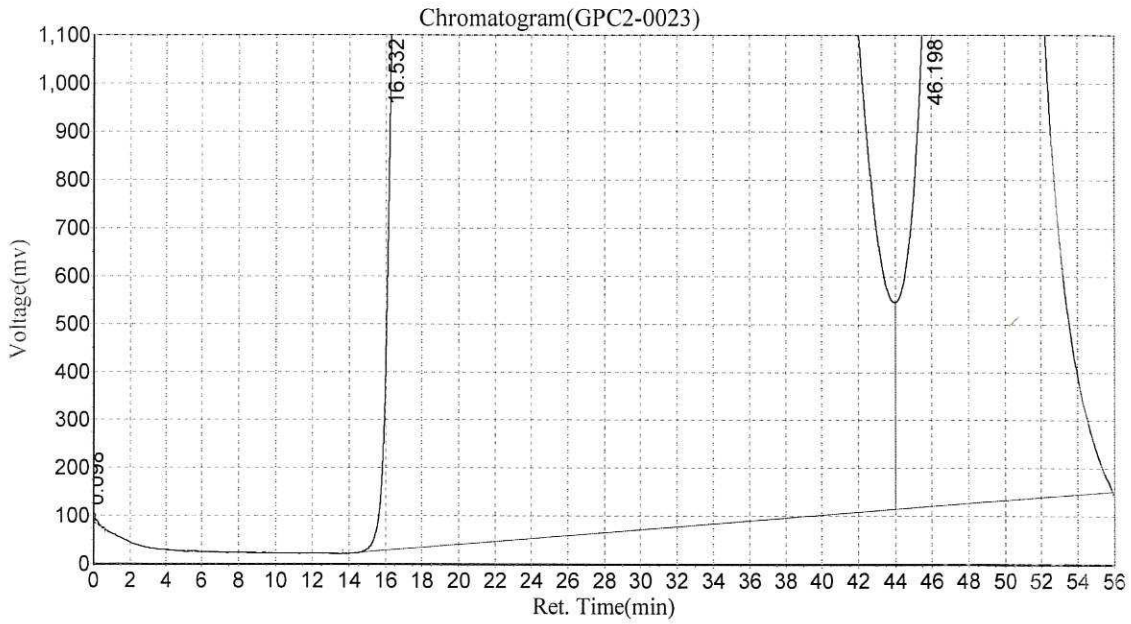
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,4:36:03 PM
Data File:c:\n2000\data\gpc2\012423\GPC2-0023
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,4:36:03 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		0.098	8319.111	110071.602	0.0040
2		16.532	1348669.500	2102572800.000	77.2178
3		46.198	1255150.375	620230592.000	22.7782
Total			2612138.986	2722913463.602	100.000

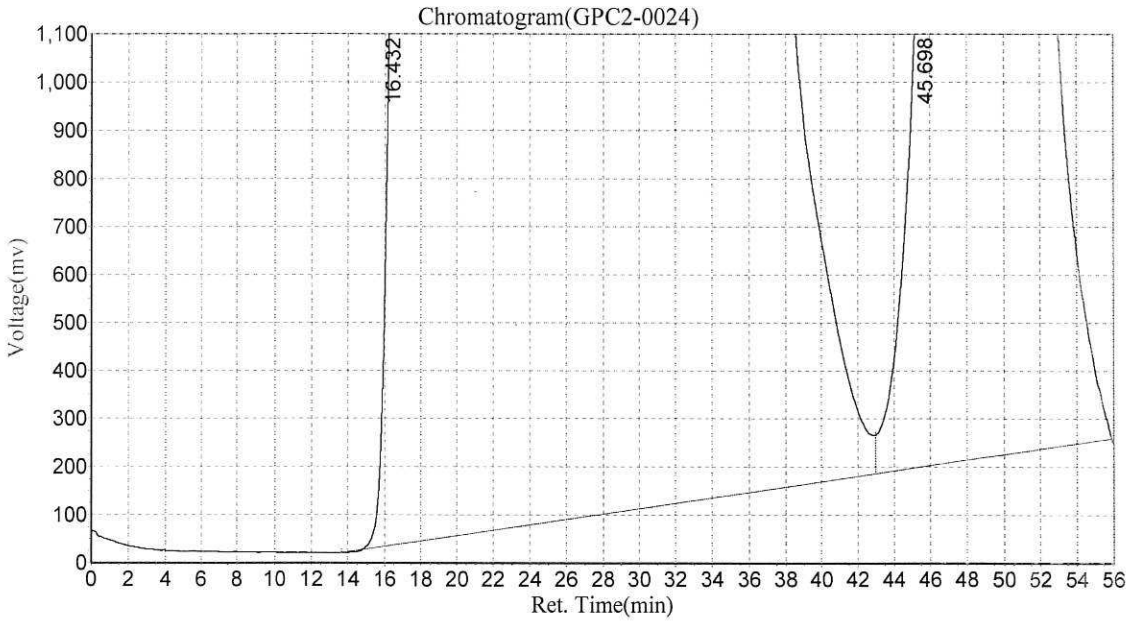
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0482/410 23A0272/288/134 PAH/SVOA

Date:2023-01-25,5:33:44 PM
Data File:c:\n2000\data\gpc2\012423\GPC2-0024
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-01-25,5:33:45 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.432	1342360.625	1806267648.000	73.9294
2		45.698	1173892.500	636965184.000	26.0706
Total			2516253.125	2443232832.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

PREPARATION BATCH SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Batch: BLA0411 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-IT1194	23A0134-14	N823012807.D	01/19/23 10:45	
Blank	BLA0411-BLK1	N823012803.D	01/19/23 10:45	
LCS	BLA0411-BS1	N823012804.D	01/19/23 10:45	
LCS Dup	BLA0411-BSD1	N823012805.D	01/19/23 10:45	
LDW23-IT1194	BLA0411-MS1	N823012808.D	01/19/23 10:45	
LDW23-IT1194	BLA0411-MSD1	N823012809.D	01/19/23 10:45	
Reference	BLA0411-SRM1	N823012806.D	01/19/23 10:45	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0411

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

Matrix: Solid **Date Prepared:** 01/19/23 **Balance ID:** B146462614 **Set Up By:** CPO 1/17/23

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
QLS 4	QLS 4

Analysis: 8270E-SIM PAH (0.1ug/L or 5ug/kg)

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ/Opt) GPC C/U (1:1) 1 2 3	(REQ/Opt) Sulfur C/U (1:1) Y/N (Transfer Rinse)	(REQ/Opt) Silica Gel C/U (1:1) Y/N	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0134-14 C	73.1	(13.69) 13.69	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ/Opt) GPC C/U (1:1) 1 2 3	(REQ/Opt) Sulfur C/U (1:1) Y/N (Transfer Rinse)	(REQ/Opt) Silica Gel C/U (1:1) Y/N	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0411-BLK1	100.0	(10.00) 10.00	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
BLA0411-BS1	100.0	(10.00) 10.00	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
BLA0411-BSD1	100.0	(10.00) 10.00	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
BLA0411-MS1	73.1	(13.69) 13.69	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	Use 23A0134-14
BLA0411-MSD1	73.1	(13.69) 13.69	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	Use 23A0134-14
BLA0411-SRM1	100.0	~~(10.00)~~ (5.00) 5.00 +1g DI WATER	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	Use L000097

VB 01/19/23 — Client ID Verified By — Date

CPO 1/25/23 — Preparation Reviewed By — Date

01/19/23 10:45 — Extraction Date and Time

Printed: 1/17/2023 10:22:47AM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0411

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps

Microwave
1 (2) 3
CT 01/19/23
Analyst/Date

Pre-GPC KD 100°C (No Exchange)
1 2 3 (4) 5 6 (09)
AIA 1-23-23
Analyst/Date

Pre GPC TurboVap
1 2 3 (4)
AIA 1-23-23
Analyst/Date

GPC
1 2 (3)
AIA 1-24-23
Analyst/Date

Post-GPC KD 80°C Hexane Exchange 2 x 20 mL 100°C
(0) 1 (2) 4 (5) 6
TWC 1/25/23
Analyst/Date

Pre-Cleanup TurboVap
1 2 3 (4)
CAD 1/25/23
Analyst/Date

Post-Cleanup TurboVap
1 2 (3) 4
CAD 1/25/23
Analyst/Date

Vialing
CAD 1/25/23
Analyst/Date

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: CT/N Date: 01/19/23	
Pre-Deactivated Glass Wool	K0H195
Anhydrous Sodium Sulfate	LB00453
1:1 Methylene Chloride/Acetone	LB00281
Methylene Chloride	K005942
Pre GPC KD Analyst: AA Date: 1-23-23	
Methylene Chloride	K010561
Hexane	K008310
GPC Filter Prep Analyst: AIA Date: 1-23-23	
Methylene Chloride	K005942
GPC Analyst: AIA Date: 1-24-23	
Methylene Chloride	L000808
GPC Calibration File	CLA0806-GPC1
Post GPC KD Analyst: TWC Date: 1/25/23	
Methylene Chloride	K005942
Hexane	K011373
Vialing Analyst: CAD Date: 1/25/23	
Hexane	K011373
Methylene Chloride	K005942
Silica Gel (SPE) darts	K011573
Sodium Sulfite	N/A
Tetrabutylammonium hydrogensulfate (TBAS)	N/A

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 15/75µg/mL	B ~~K008927~~ K009360 Exp Date: 9/28/2023	100µL	CT	N
Spike 15/75µg/mL	K009081 Exp Date: 3/4/2023	200µL	CT	N

MANUALLY ENTER EXPIRATION DATES!

(V) indicates a virtual standard combining two or more physical standards. In these cases the Standard ID refers to the virtual standard, not the parent standards.

If a Standard ID is missing, but should be present, check the standard definition in Element LIMS to be sure Standard Info 6 has the correct letter or number designator matching the vial designator inthe Standard ID column. If it is correct, check the batch and bench sheet in Element LIMS to be sure the correct standards are selected for surrogate(s) and spike(s).

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0411

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0411

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessel. 3. Add DCM ONLY to the vessels (until solvent is 3 inches above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 10-15 min in Refridgerator 05. Re-homogenize while cool. 7. Decant DCM into Erlenmeyer flask with a funnel containing pre-deactivated glasswool. 8. Rinse with DCM 9. Microwave a 2nd time using 1:1 DCM/ACE. 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with DCM. 11. If GPC is Req add 10mL Hexane and KD to 5mL at 100°C (NO EXCHANGE) 12. If GPC is NOT Req = KD to 5mL at 100°C. Exchange to Hexane (2X with 10mL) to 5mL at 100°C. 13. TurboVap. 14. If no GPC then Sulfur clean is REQUIRED. 15. Sulfur clean = Hexane transfer rinse. 16. Silica Clean-up Any Color=REQ (All or none). 17. TurboVap 18. Vial in DCM. A. Need Total Solids Y [N] B. Archive/Freeze [Y] N	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SIM PAH Extraction Batch BLA0411

Total Solids Batch: BLA0362 Work Order(s): 23A0134 01-16

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-16	CR 1/16/23
☒ Standing Water Decanted (Not shared)= 01-16	CR 1/16/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen =01-16	CR 1/16/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	CR 1/16/23
☒ Multiple Jars Y / (N)	CR 1/16/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0216	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Reference	BLA0411-SRM1	N823012806.D	01/25/2023	
Matrix Spike Dup	BLA0411-MSD1	N823012809.D	01/25/2023	
Matrix Spike	BLA0411-MS1	N823012808.D	01/25/2023	
LCS Dup	BLA0411-BSD1	N823012805.D	01/25/2023	
LCS	BLA0411-BS1	N823012804.D	01/25/2023	
Blank	BLA0411-BLK1	N823012803.D	01/25/2023	
LDW23-IT1194	23A0134-14	N823012807.D	01/25/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0216

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0166-GPC1** **Printed: 1/25/2023 2:14:58PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0134-14	C	LDW23-IT1194	C 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	1/25/2023	CTO	
BLA0411-BLK1	-	Blank	-	0.5	0.5	-	1/25/2023	CTO	
BLA0411-BS1	-	LCS	-	0.5	0.5	-	1/25/2023	CTO	
BLA0411-BSD1	-	LCS Dup	-	0.5	0.5	-	1/25/2023	CTO	
BLA0411-MS1	-	Matrix Spike	-	0.5	0.5	-	1/25/2023	CTO	
BLA0411-MSD1	-	Matrix Spike Dup	-	0.5	0.5	-	1/25/2023	CTO	
BLA0411-SRM1	-	Reference	-	0.5	0.5	-	1/25/2023	CTO	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0217	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Reference	BLA0411-SRM1	N823012806.D	01/25/2023	
Matrix Spike Dup	BLA0411-MSD1	N823012809.D	01/25/2023	
Matrix Spike	BLA0411-MS1	N823012808.D	01/25/2023	
LCS Dup	BLA0411-BSD1	N823012805.D	01/25/2023	
LCS	BLA0411-BS1	N823012804.D	01/25/2023	
Blank	BLA0411-BLK1	N823012803.D	01/25/2023	
LDW23-IT1194	23A0134-14	N823012807.D	01/25/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0217

Matrix: Solid **Cleanup using: Organics - EPA 3660C Silica Gel Cleanup - uL** **Printed: 1/25/2023 2:15:15PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0134-14	C	LDW23-IT1194	C 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	1/25/2023	CTO	
BLA0411-BLK1	-	Blank	-	0.5	0.5	-	1/25/2023	CTO	
BLA0411-BS1	-	LCS	-	0.5	0.5	-	1/25/2023	CTO	
BLA0411-BSD1	-	LCS Dup	-	0.5	0.5	-	1/25/2023	CTO	
BLA0411-MS1	-	Matrix Spike	-	0.5	0.5	-	1/25/2023	CTO	
BLA0411-MSD1	-	Matrix Spike Dup	-	0.5	0.5	-	1/25/2023	CTO	
BLA0411-SRM1	-	Reference	-	0.5	0.5	-	1/25/2023	CTO	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0008	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1179	23A0134-03	NT1802262312S.D	01/24/2023	
LDW23-SC1249	23A0134-15	NT1802272311S.D	01/24/2023	
LDW23-SS1116	23A0134-12	NT1802272307S.D	01/24/2023	
LDW23-SS1123	23A0134-11	NT1802262320S.D	01/24/2023	
LDW23-SS1124	23A0134-10	NT1802262319S.D	01/24/2023	
LDW23-SS1129	23A0134-09	NT1802262318S.D	01/24/2023	
LDW23-SS1131	23A0134-08	NT1802262317S.D	01/24/2023	
LDW23-SS1152	23A0134-07	NT1802262316S.D	01/24/2023	
LDW23-IT1210	23A0134-13	NT1802272308S.D	01/24/2023	
LDW23-SS1173	23A0134-05	NT1802262314S.D	01/24/2023	
Reference	BLA0410-SRM2	NT1802262309S.D	01/24/2023	
LDW23-SS1188	23A0134-02	NT1802262311S.D	01/24/2023	
LDW23-SS1205	23A0134-01	NT1802262310S.D	01/24/2023	
LDW23-SS1242	23A0134-04	NT1802262313S.D	01/24/2023	
Blank	BLA0410-BLK2	NT1802262306S.D	01/24/2023	
LCS	BLA0410-BS2	NT1802262307S.D	01/24/2023	
LCS Dup	BLA0410-BSD2	NT1802262308S.D	01/24/2023	
Matrix Spike	BLA0410-MS2	NT1802272309S.D	01/24/2023	
Matrix Spike Dup	BLA0410-MSD2	NT1802272310S.D	01/24/2023	
LDW23-SS1160	23A0134-06	NT1802262315S.D	01/24/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0008

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0166-GPC1** **Printed: 2/2/2023 10:54:12AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0134-01	C	LDW23-SS1205	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-01	C	LDW23-SS1205	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-02	C	LDW23-SS1188	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-02	C	LDW23-SS1188	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-03	C	LDW23-SS1179	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-03	C	LDW23-SS1179	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-04	C	LDW23-SS1242	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-04	C	LDW23-SS1242	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-05	C	LDW23-SS1173	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-05	C	LDW23-SS1173	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-06	C	LDW23-SS1160	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-06	C	LDW23-SS1160	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-07	C	LDW23-SS1152	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-07	C	LDW23-SS1152	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-08	C	LDW23-SS1131	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-08	C	LDW23-SS1131	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-09	C	LDW23-SS1129	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-09	C	LDW23-SS1129	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-10	C	LDW23-SS1124	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-10	C	LDW23-SS1124	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-11	C	LDW23-SS1123	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-11	C	LDW23-SS1123	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0008

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0166-GPC1** **Printed: 2/2/2023 10:54:12AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0134-12	C	LDW23-SS1116	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-12	C	LDW23-SS1116	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-13	C	LDW23-IT1210	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-13	C	LDW23-IT1210	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
23A0134-15	C	LDW23-SC1249	C 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	1/24/2023	TWC	
23A0134-15	C	LDW23-SC1249	C 04	1	1	8270E-SIM Dual Scan SVOC	1/24/2023	TWC	
BLA0410-BLK1	-	Blank	-	1	1	-	1/24/2023	TWC	
BLA0410-BLK2	-	Blank	-	1	1	-	1/24/2023	TWC	
BLA0410-BS1	-	LCS	-	1	1	-	1/24/2023	TWC	
BLA0410-BS2	-	LCS	-	1	1	-	1/24/2023	TWC	
BLA0410-BSD1	-	LCS Dup	-	1	1	-	1/24/2023	TWC	
BLA0410-BSD2	-	LCS Dup	-	1	1	-	1/24/2023	TWC	
BLA0410-MS1	-	Matrix Spike	-	1	1	-	1/24/2023	TWC	
BLA0410-MS2	-	Matrix Spike	-	1	1	-	1/24/2023	TWC	
BLA0410-MSD1	-	Matrix Spike Dup	-	1	1	-	1/24/2023	TWC	
BLA0410-MSD2	-	Matrix Spike Dup	-	1	1	-	1/24/2023	TWC	
BLA0410-SRM1	-	Reference	-	1	1	-	1/24/2023	TWC	
BLA0410-SRM2	-	Reference	-	1	1	-	1/24/2023	TWC	

Form I

METHOD BLANK DATA SHEET

EPA 8270E-SIM

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0410-BLK2	File ID:	NT1802262306S.D
Sampled:	N/A	Prepared:	01/19/23 13:35	Analyzed:	02/26/23 15:11
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BLA0410	Sequence:	SLC0389	Calibration:	GC00036
Instrument:	NT18	Column:	ZB-5MS	Cleanups:	GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.1	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	1.0	J	0.7	5.0
100-51-6	Benzyl Alcohol	1	20.0	U	2.5	20.0
65-85-0	Benzoic acid	1	100	U	13.4	100
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	20.0	U	2.1	20.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	422	56.2	27 - 120	
p-Terphenyl-d14	500.00	410	82.1	37 - 120	

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623065.D

Date : 26-FEB-2023 15:11

Client ID:

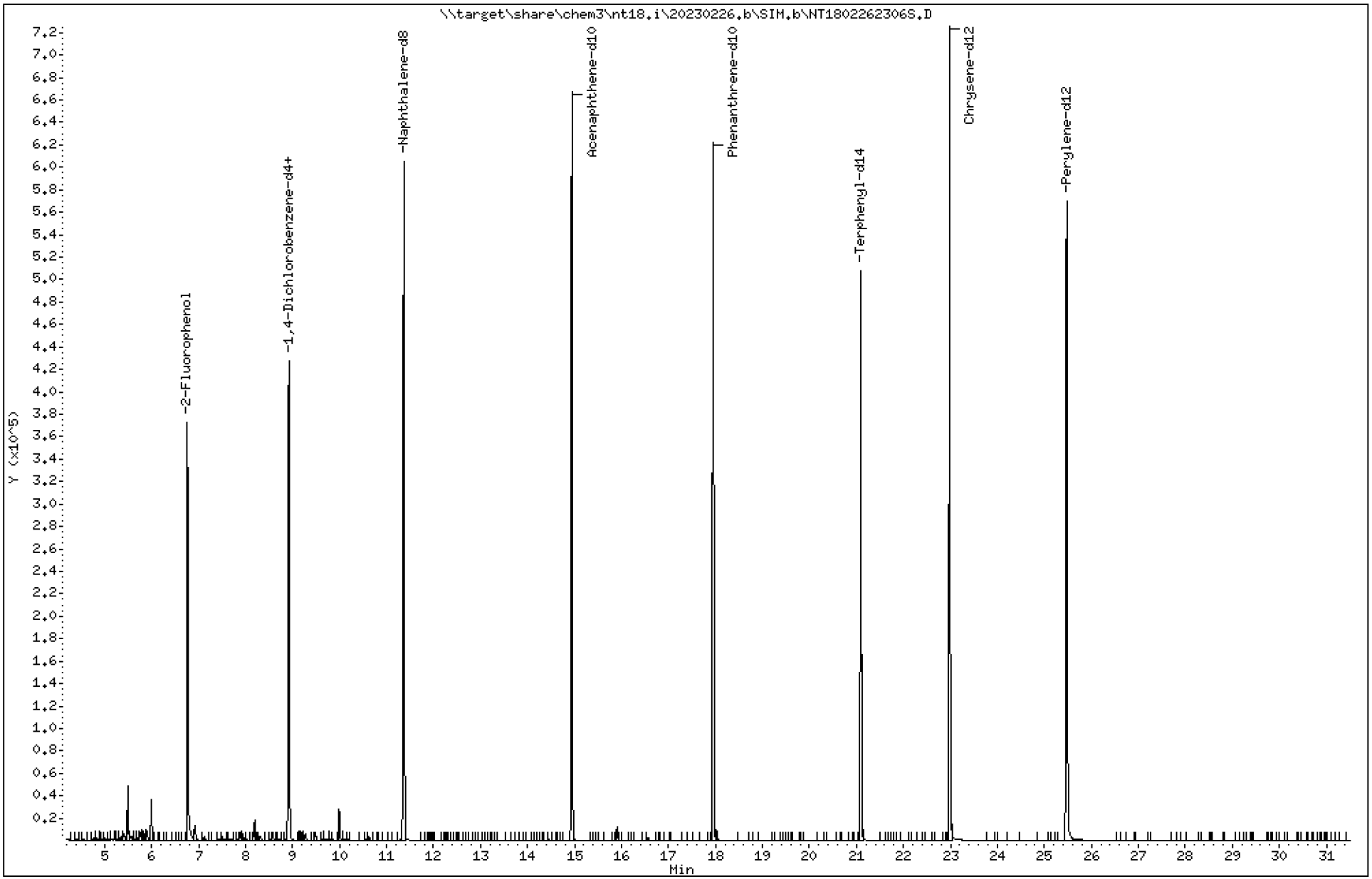
Instrument: nt18.i

Sample Info: BLA0410-BLK2

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 15:11

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BLK2

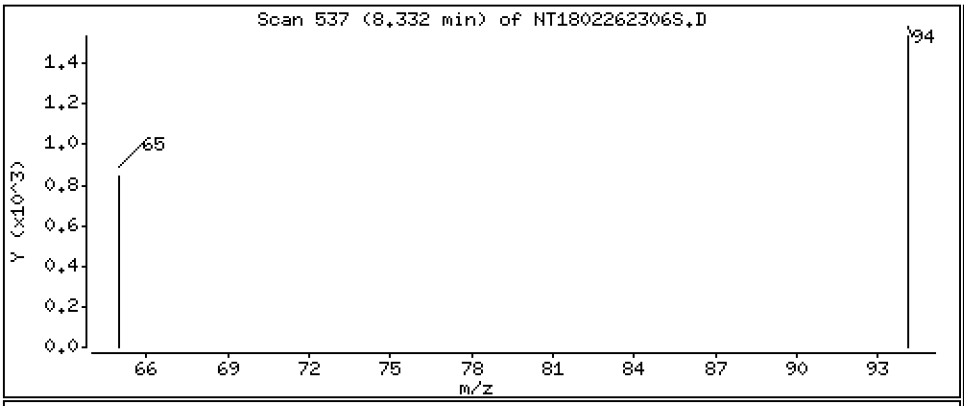
Operator: YZ

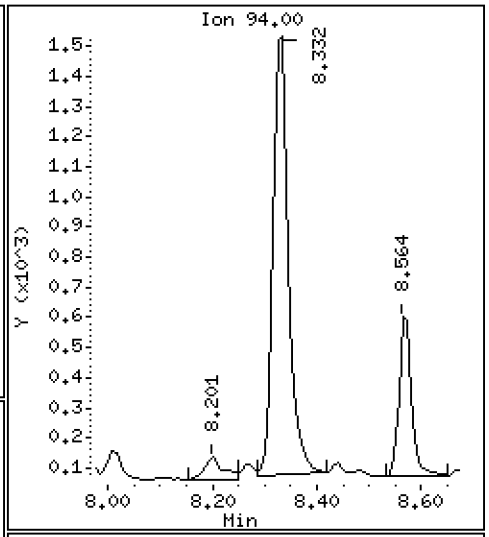
Column phase: ZB-5msi

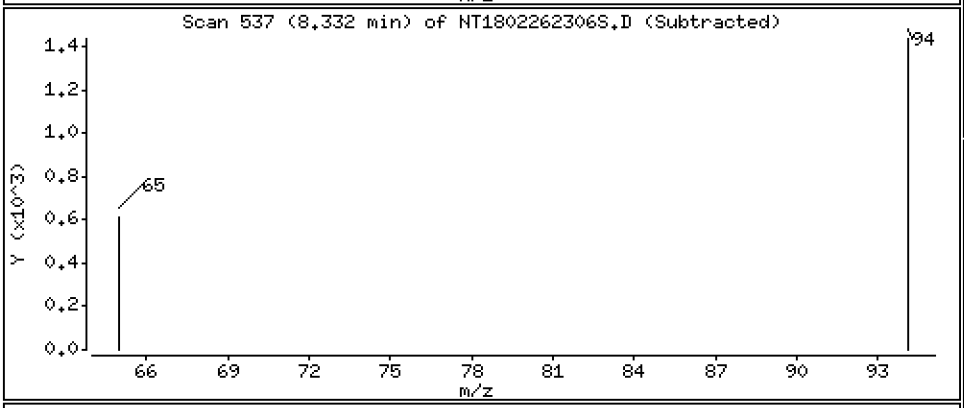
Column diameter: 0.25

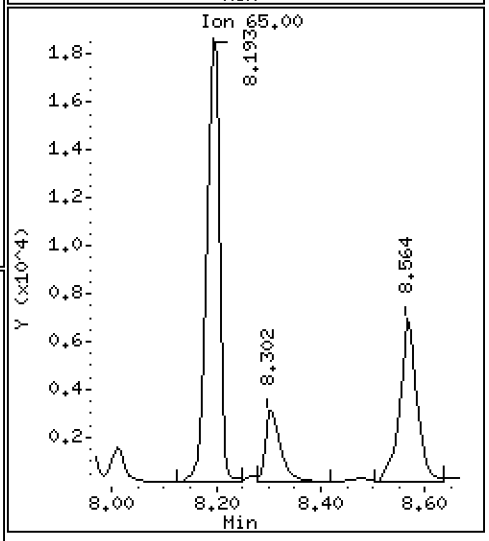
3 Phenol

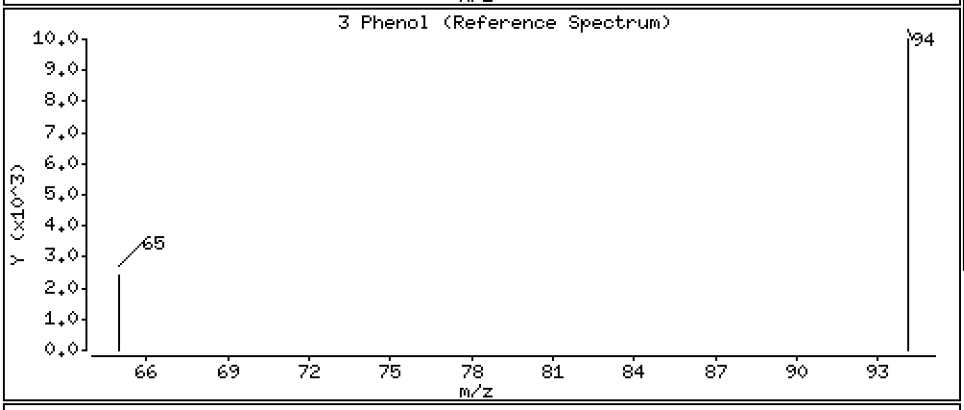
Concentration: 0.02585 ug/mL

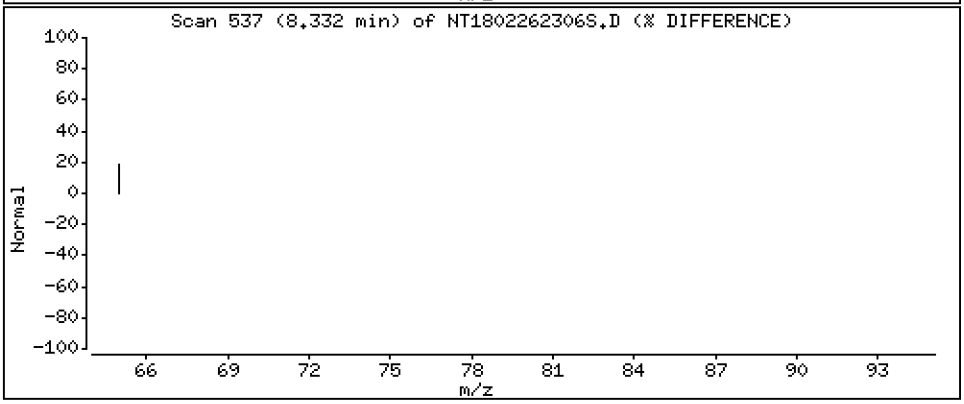












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Date : 26-FEB-2023 15:11

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BLK2

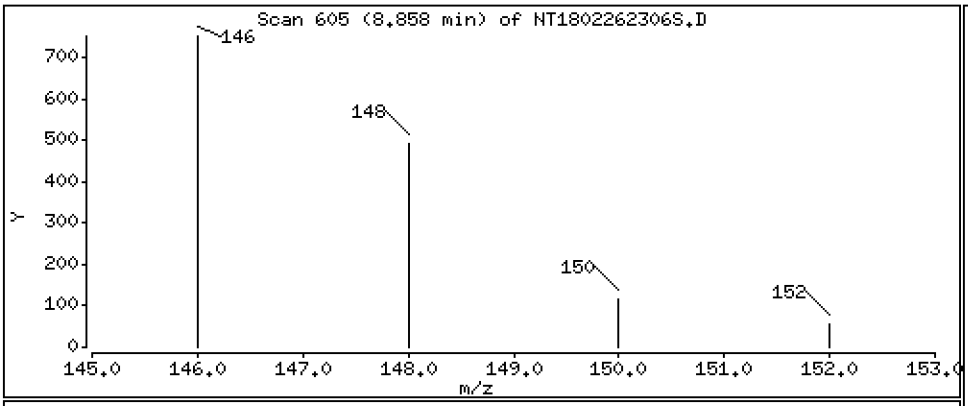
Operator: YZ

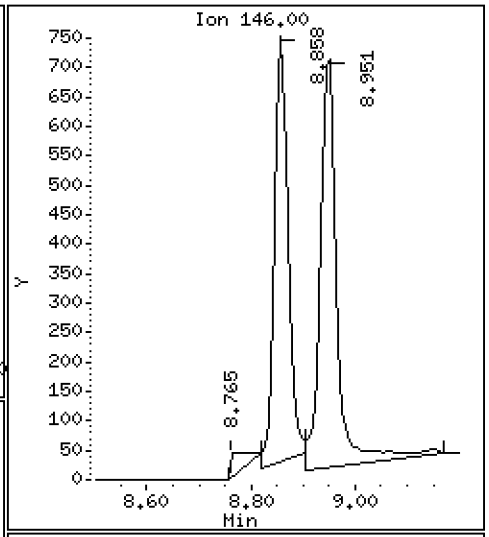
Column phase: ZB-5msi

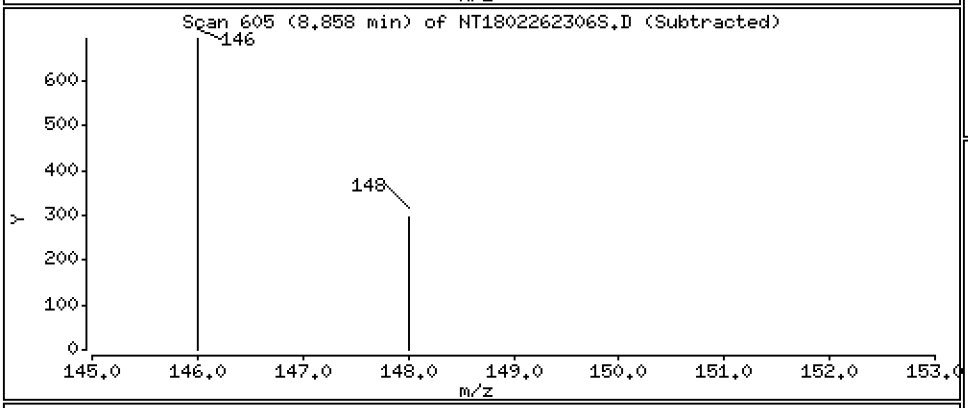
Column diameter: 0.25

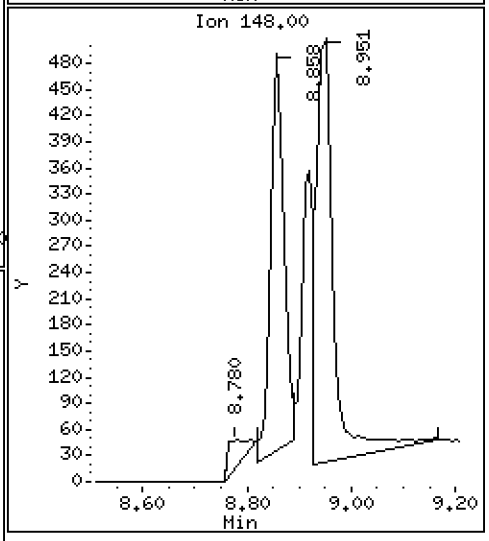
7 1,3-Dichlorobenzene

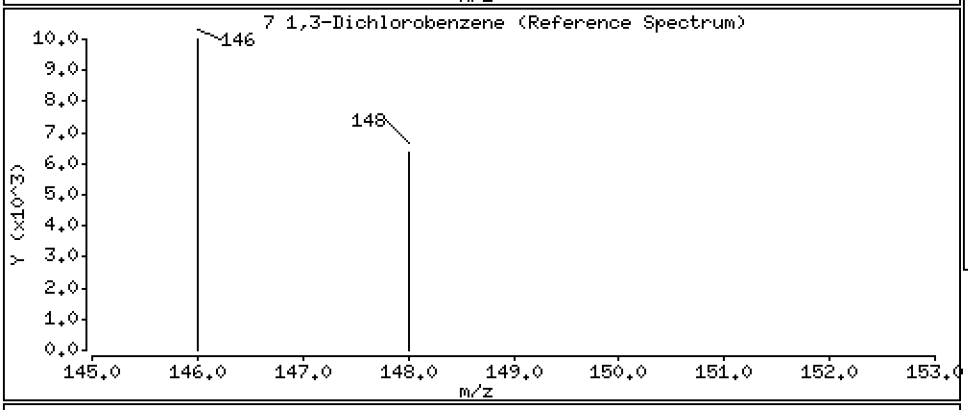
Concentration: 0.01116 ug/mL

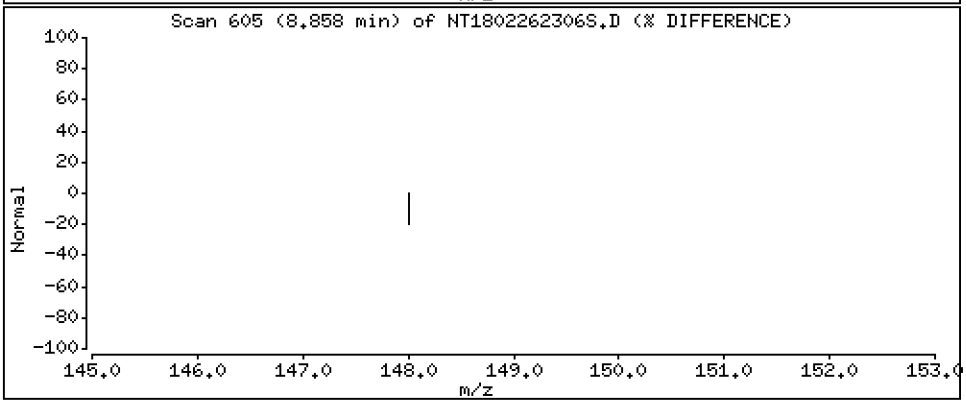












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Date : 26-FEB-2023 15:11

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BLK2

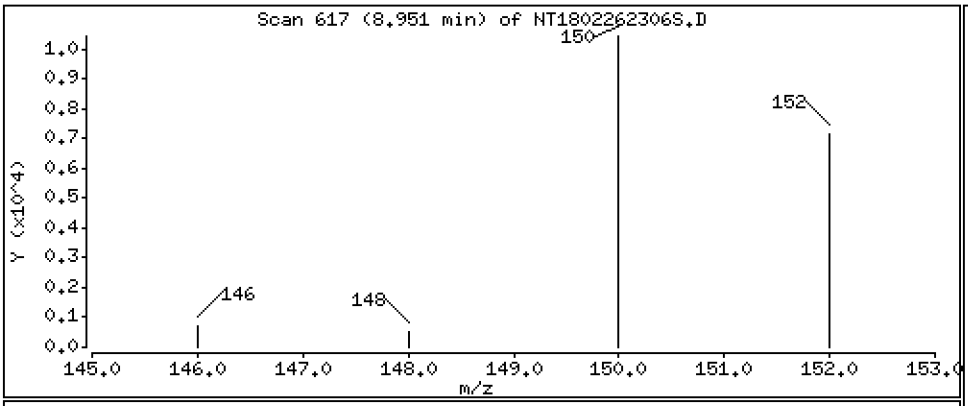
Operator: YZ

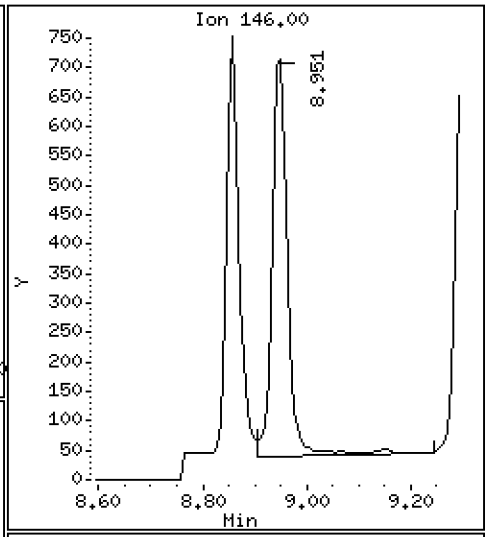
Column phase: ZB-5msi

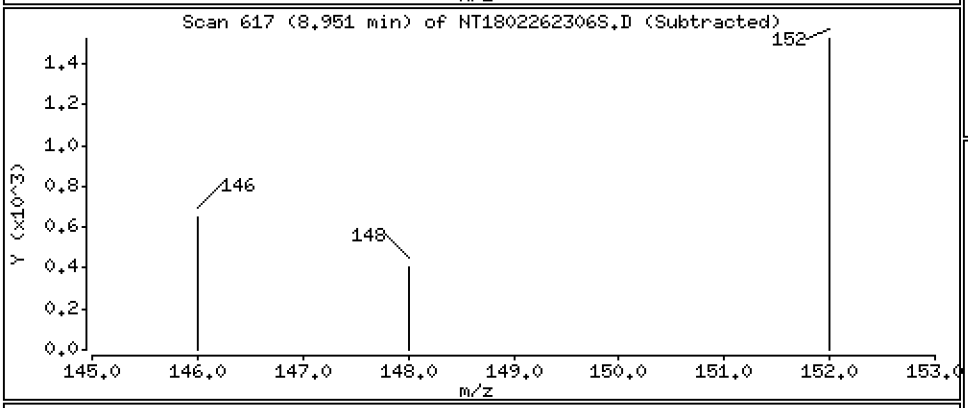
Column diameter: 0.25

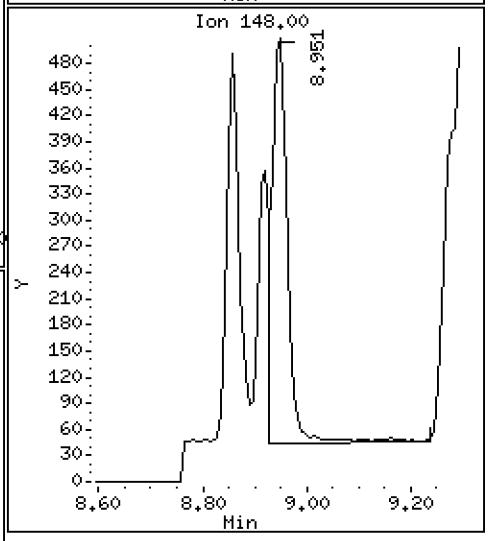
9 1,4-Dichlorobenzene

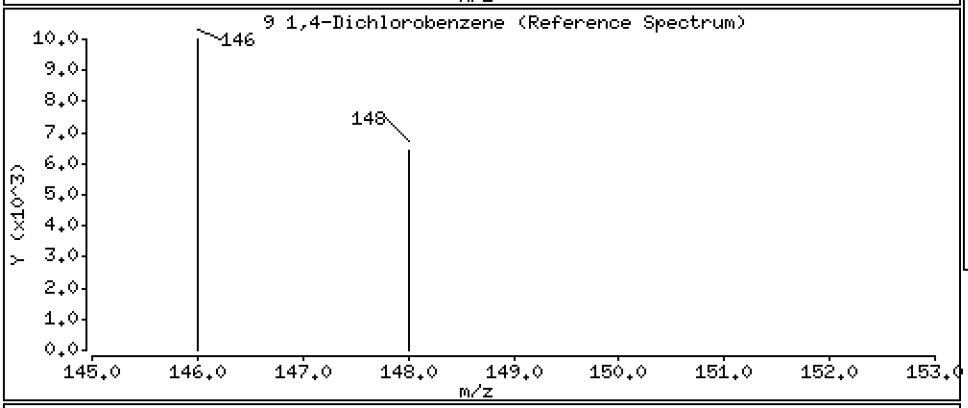
Concentration: 0.01145 ug/mL

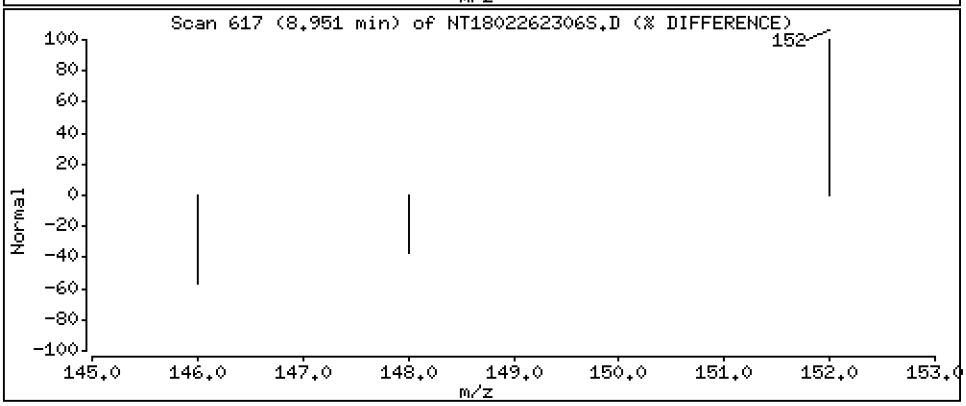












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Date : 26-FEB-2023 15:11

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BLK2

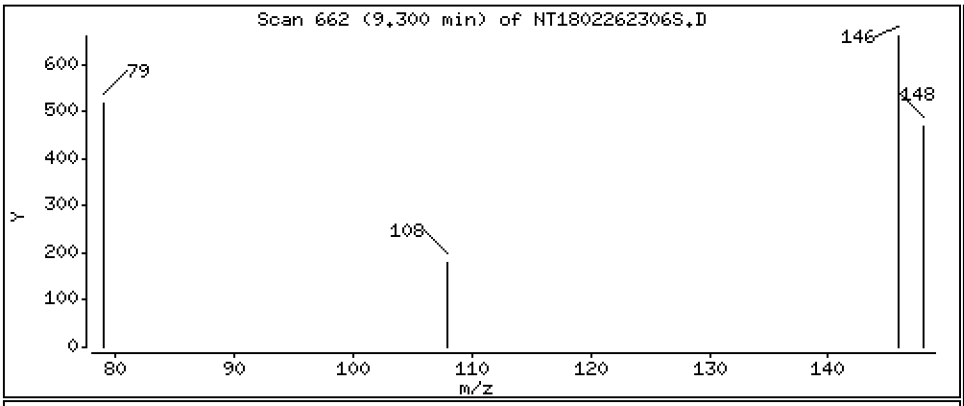
Operator: YZ

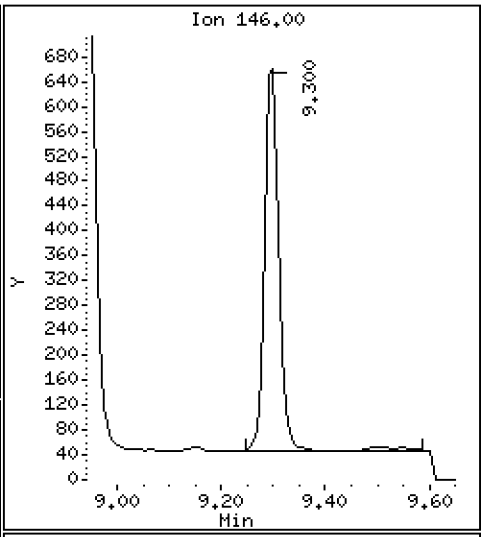
Column phase: ZB-5msi

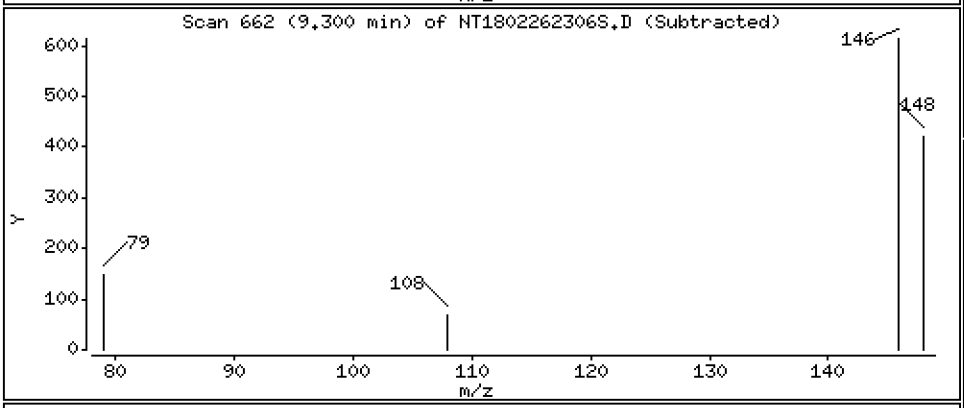
Column diameter: 0.25

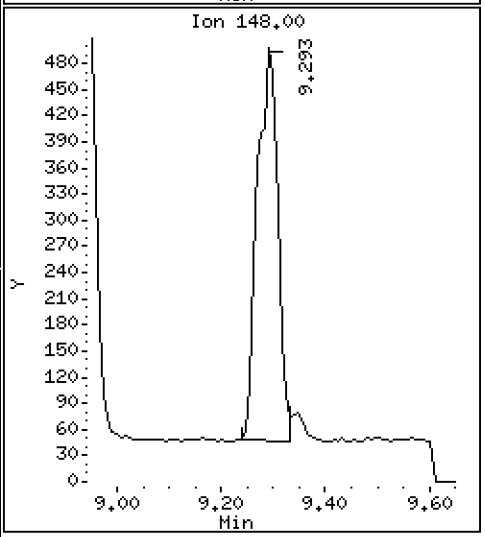
12 1,2-Dichlorobenzene

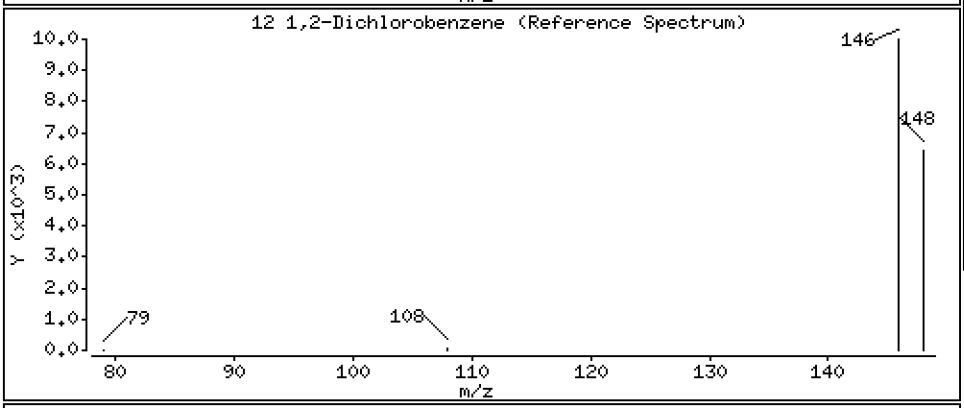
Concentration: 0.01009 ug/mL

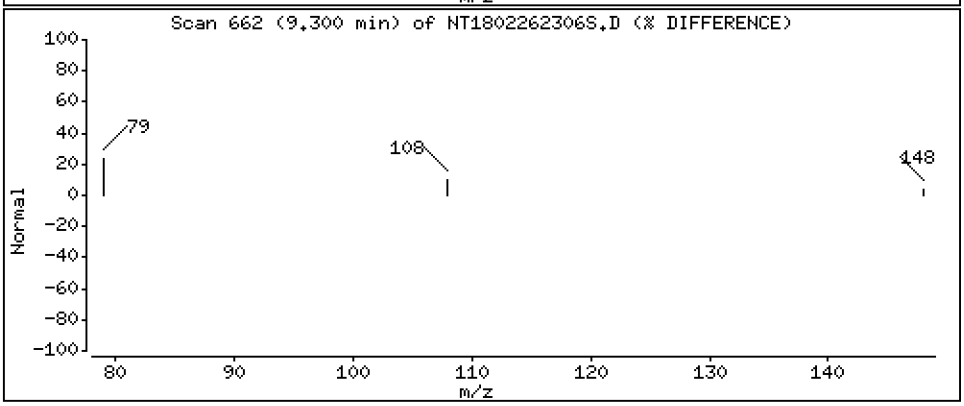












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Date : 26-FEB-2023 15:11

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BLK2

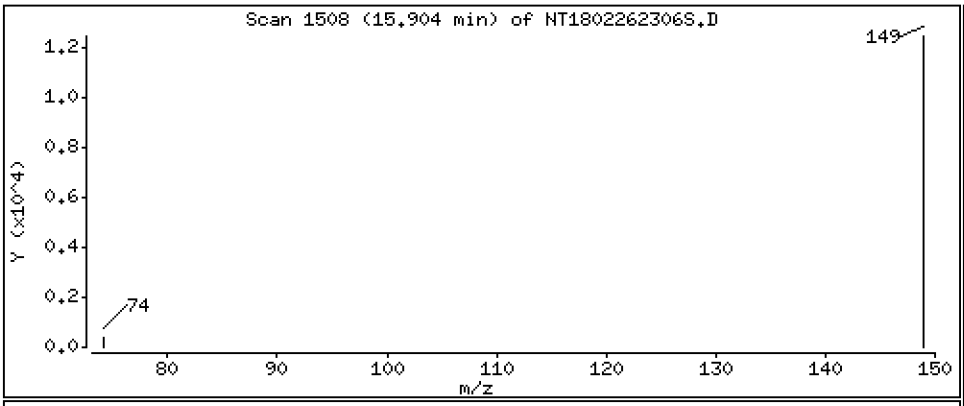
Operator: YZ

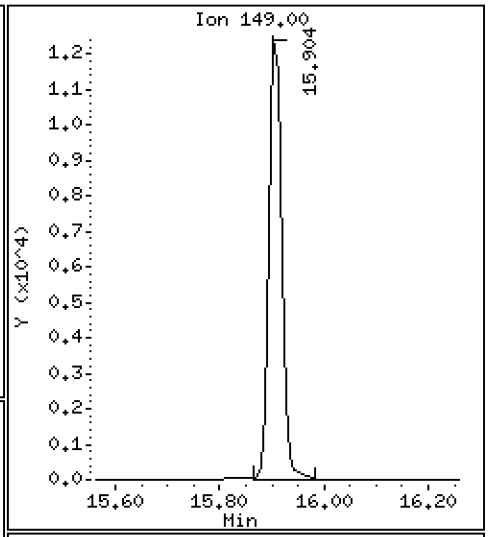
Column phase: ZB-5msi

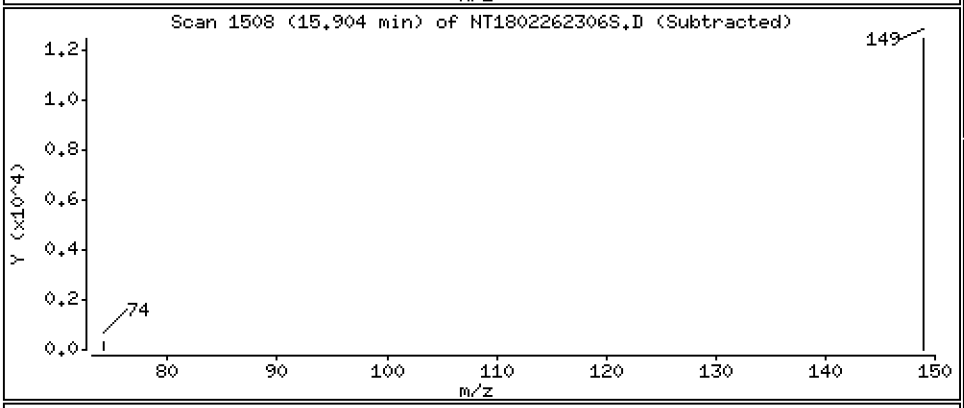
Column diameter: 0.25

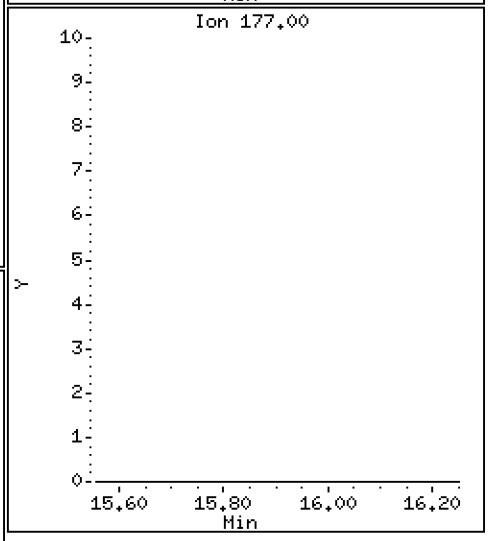
50 Diethylphthalate

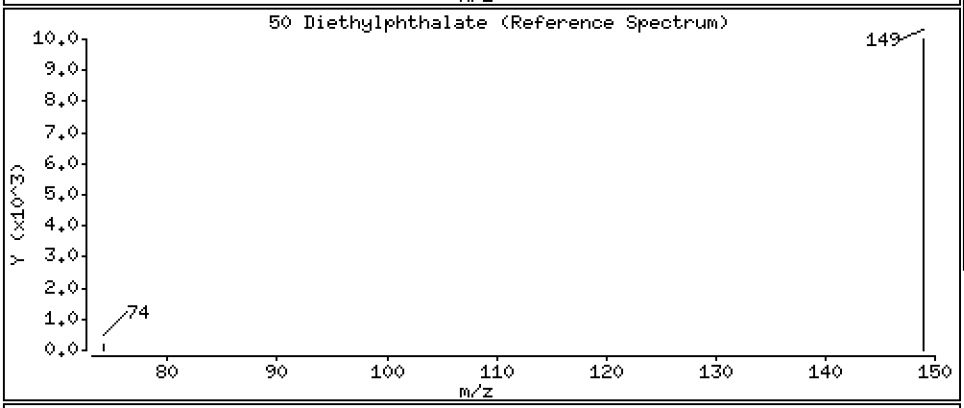
Concentration: 0.1135 ug/mL

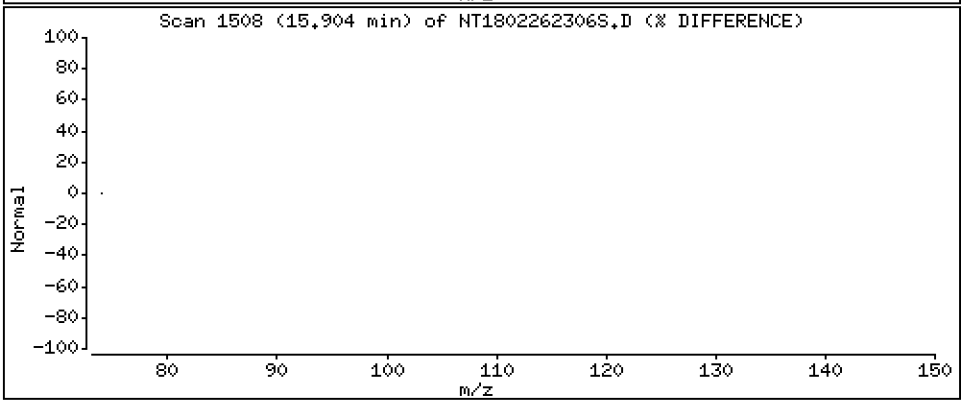












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623065.D

Date : 26-FEB-2023 15:11

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BLK2

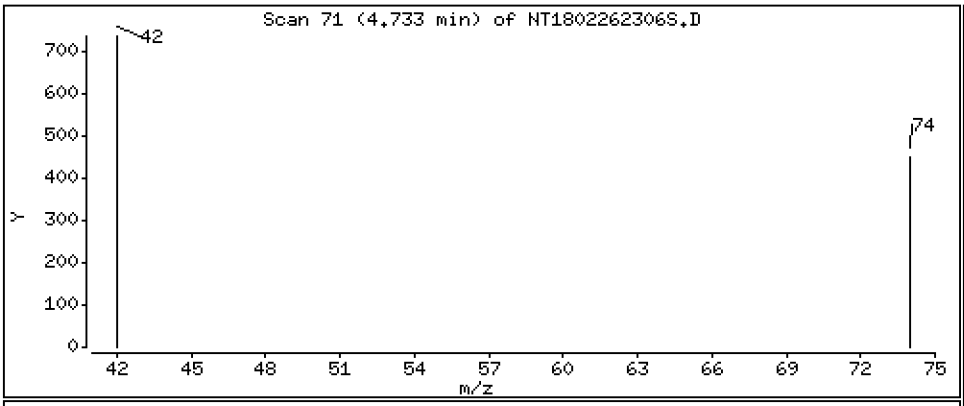
Operator: YZ

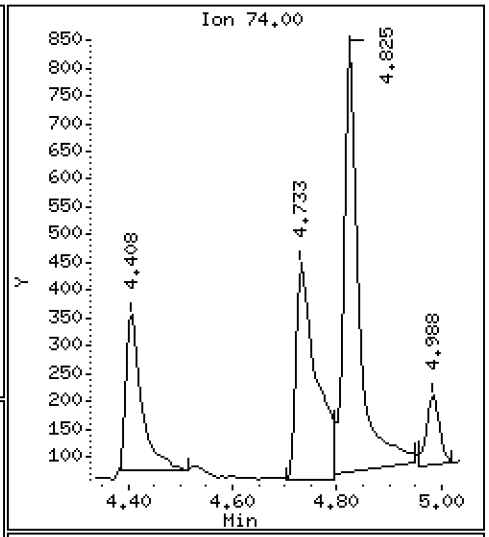
Column phase: ZB-5msi

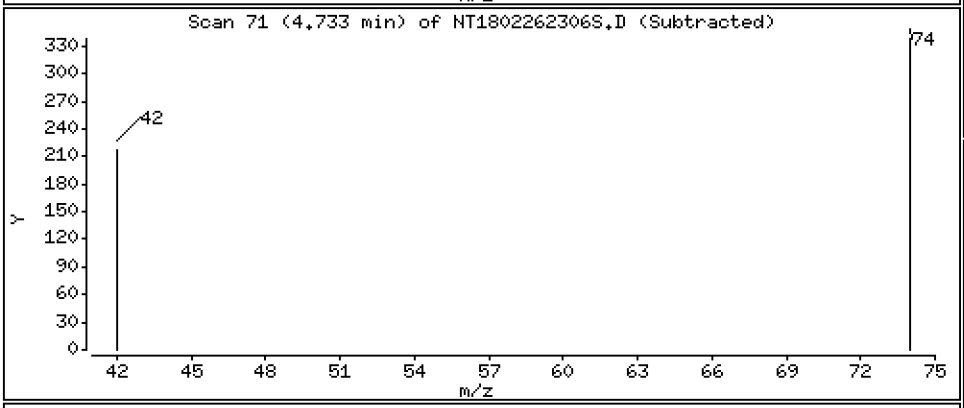
Column diameter: 0.25

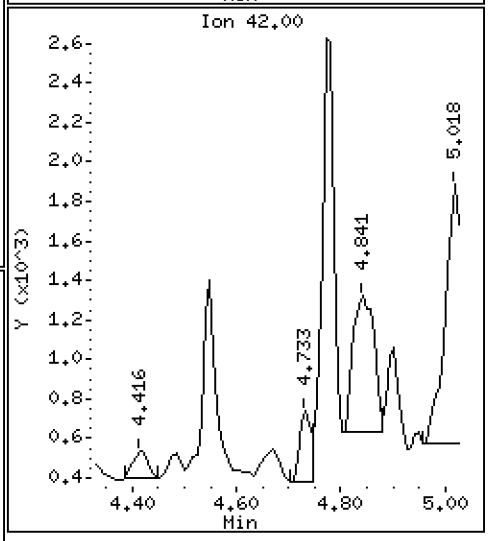
90 N-Nitrosodimethylamine

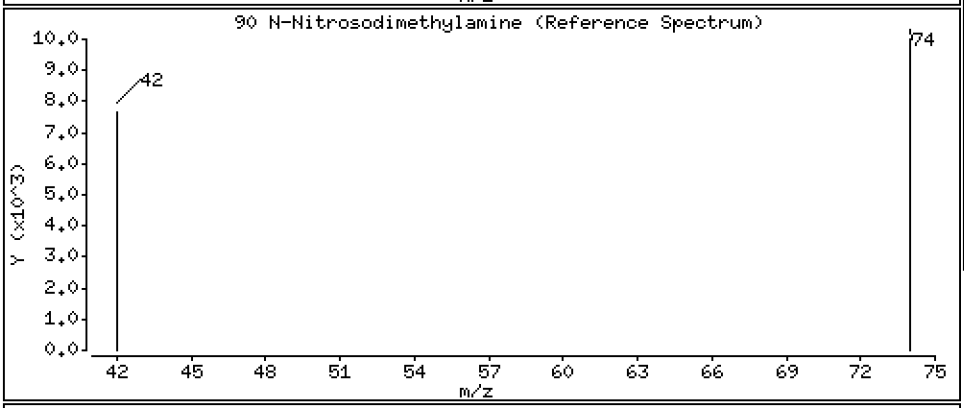
Concentration: 0.02121 ug/mL

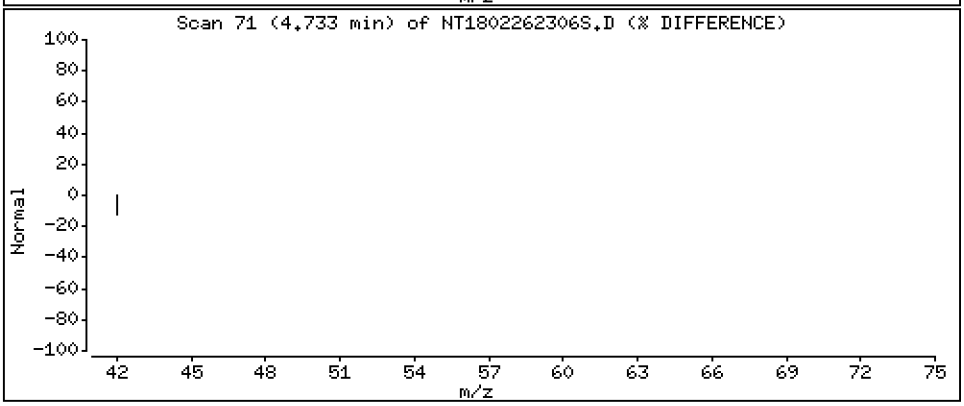












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262306S.D
Lab Smp Id: BLA0410-BLK2
Inj Date : 26-FEB-2023 15:11
Operator : YZ Inst ID: nt18.i
Smp Info : BLA0410-BLK2
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.764	6.748	(0.758)	362075	4.21565	4.216(R)
	3	Phenol	94	8.332	8.324	(0.934)	2896	0.02585	0.02585
	7	1,3-Dichlorobenzene	146	8.858	8.850	(0.993)	1252	0.01116	0.01116
*	8	1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	266113	4.00000	
	9	1,4-Dichlorobenzene	146	8.951	8.943	(1.003)	1341	0.01145	0.01145(M)
	11	Benzyl alcohol	79	Compound Not Detected.					
	12	1,2-Dichlorobenzene	146	9.300	9.300	(1.043)	1125	0.01009	0.01009
	13	2-Methylphenol	108	Compound Not Detected.					
	15	4-Methylphenol	108	Compound Not Detected.					
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	Compound Not Detected.					
	24	Benzoic acid	105	Compound Not Detected.					
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.362	11.370	(1.000)	997822	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
*	42	Acenaphthene-d10	162	14.945	14.945	(1.000)	503567	4.00000	
	50	Diethylphthalate	149	15.903	15.911	(1.064)	20060	0.11347	0.1135
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	17.950	17.950	(1.000)	943982	4.00000	
$	66	Terphenyl-d14	244	21.099	21.091	(0.918)	646891	4.10311	4.103(R)
	67	Butylbenzylphthalate	149	Compound Not Detected.					
*	69	Chrysene-d12	240	22.980	22.980	(1.000)	870699	4.00000	
*	77	Perylene-d12	264	25.473	25.473	(1.000)	941927	4.00000	
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	90	N-Nitrosodimethylamine	74	4.732	4.686	(0.531)	1084	0.02121	0.02121(H)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262306S.D
Lab Smp Id: BLA0410-BLK2
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	266113	-4.78
27 Naphthalene-d8	1065527	532764	2131054	997822	-6.35
42 Acenaphthene-d10	544290	272145	1088580	503567	-7.48
59 Phenanthrene-d10	1003412	501706	2006824	943982	-5.92
69 Chrysene-d12	936975	468488	1873950	870699	-7.07
77 Perylene-d12	1057771	528886	2115542	941927	-10.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.36	-0.07
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	-0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	-0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262306S.D

Lab ID: BLA0410-BLK2
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 15:11

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.531	0.525	0.0052	N-Nitrosodimethylamine

RRT check based on Ccal File: SIM.b/NT1802262303S.D

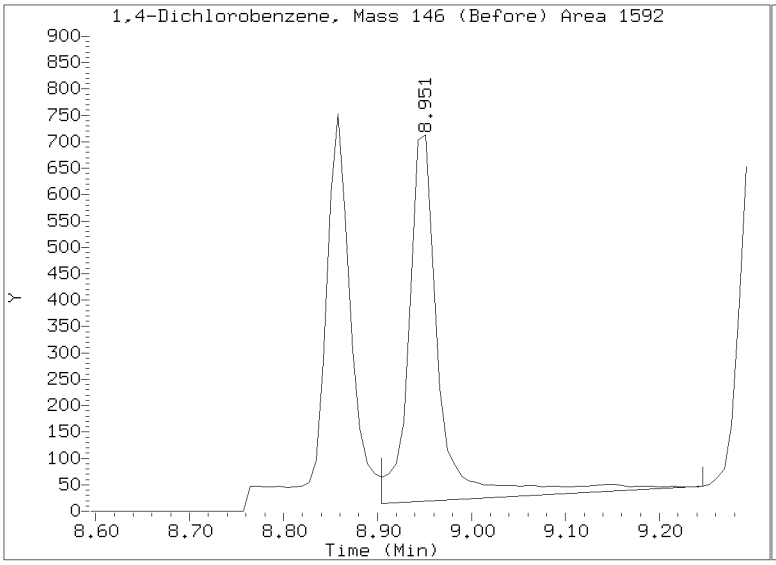
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

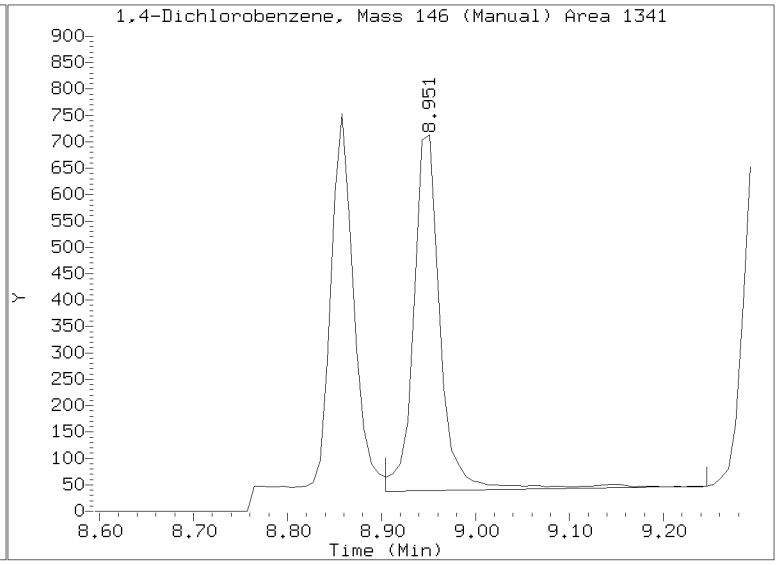
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/SIM.b/NT1802262306S.D
Injection Date: 26-FEB-2023 15:11
Lab ID:BLA0410-BLK2 Client ID:
Report Date: 03/24/2023 11:52





APPROVED

By Deenay Dunmore at 12:05 pm, Mar 24, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8270E-SIM

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0411-BLK1	File ID:	N823012803.D
Sampled:	N/A	Prepared:	01/19/23 10:45	Analyzed:	01/25/23 15:27
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 0.5 mL
Batch:	BLA0411	Sequence:	SLA0285	Calibration:	GA00050
Instrument:	NT8	Column:	RXI-17Sil ms	Cleanups:	GPC, Silica Gel

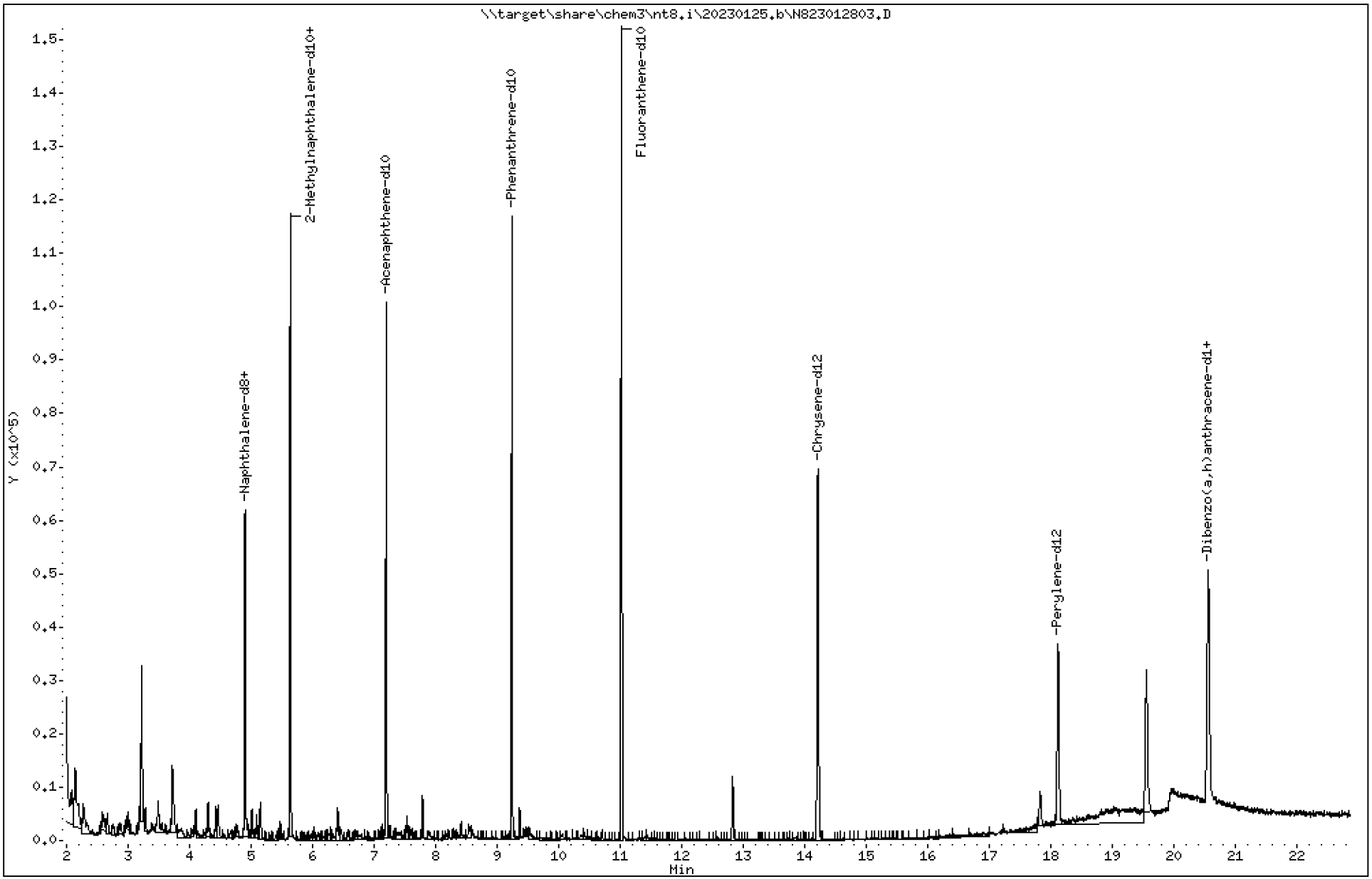
CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
56-55-3	Benzo(a)anthracene	1	5.00	U	0.82	5.00
218-01-9	Chrysene	1	5.00	U	1.05	5.00
205-99-2	Benzo(b)fluoranthene	1	5.00	U	1.37	5.00
207-08-9	Benzo(k)fluoranthene	1	5.00	U	0.76	5.00
50-32-8	Benzo(a)pyrene	1	5.00	U	0.61	5.00
193-39-5	Indeno(1,2,3-cd)pyrene	1	1.14	J	1.05	5.00
53-70-3	Dibenzo(a,h)anthracene	1	1.00	J	0.89	5.00

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Methylnaphthalene-d10	150.00	153	102	32 - 120	
Dibenzo[a,h]anthracene-d14	150.00	225	150	21 - 133	*
Fluoranthene-d10	150.00	188	125	36 - 134	

Data File: \\target\share\chem3\nt8.i\20230125.b\N823012803.D
Date : 25-JAN-2023 15:27
Client ID:
Sample Info: BLA0411-BLK1,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



Data File: \\target\share\chem3\nt8.i\20230125.b\N823012803.D

Date : 25-JAN-2023 15:27

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BLK1,

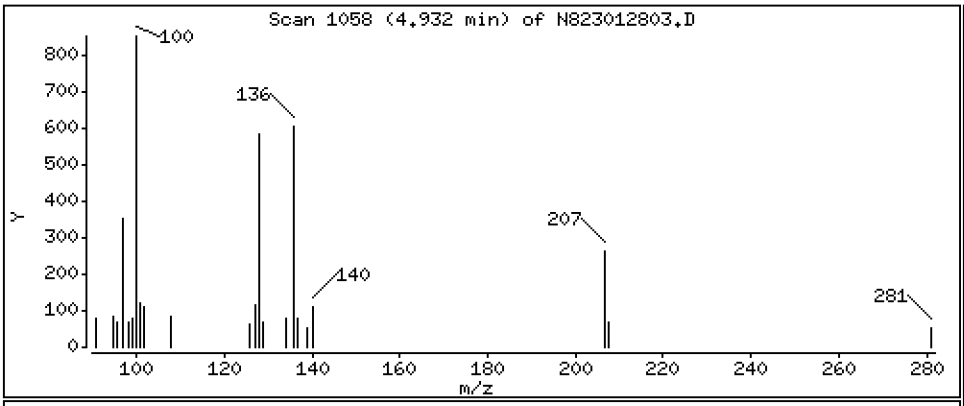
Operator: JZ

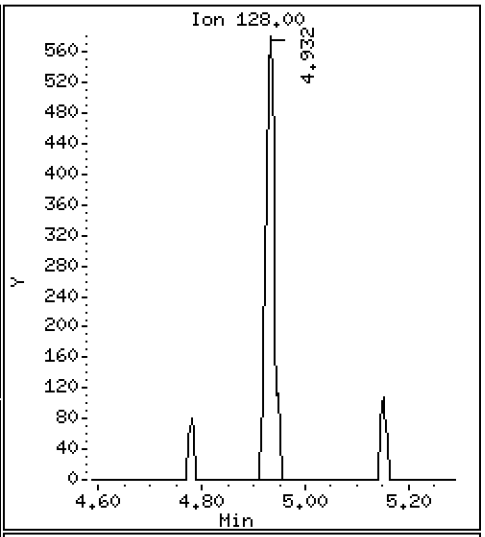
Column phase: Rxi-17sil

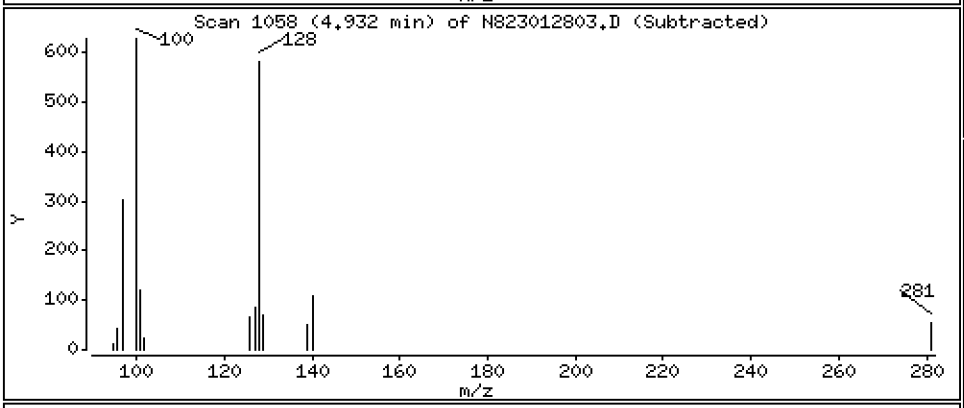
Column diameter: 0.25

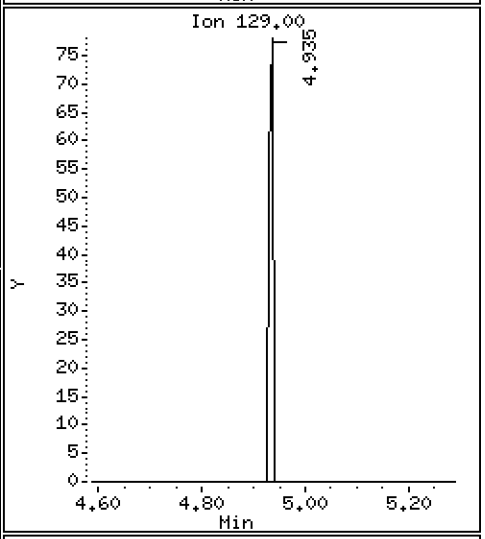
2 Naphthalene

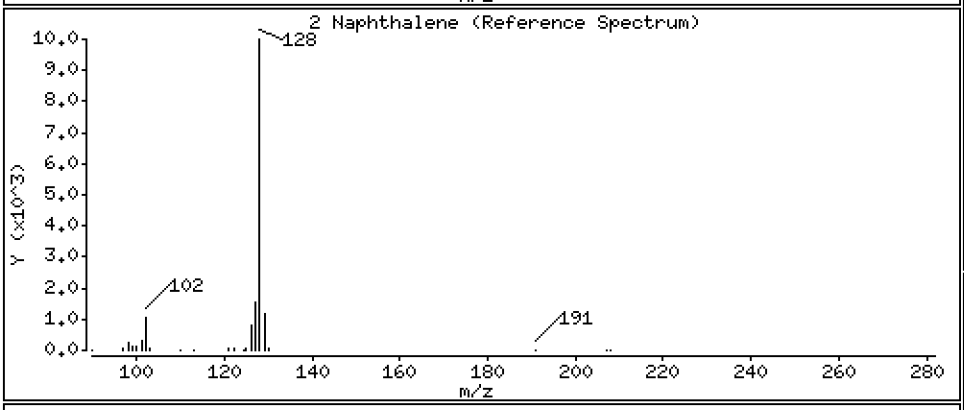
Concentration: 0.03051 ug/mL

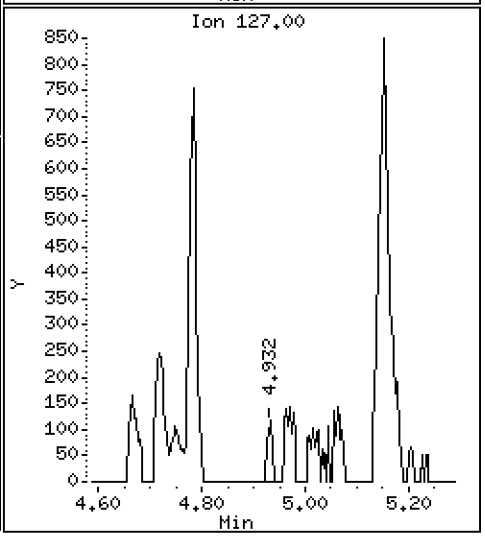


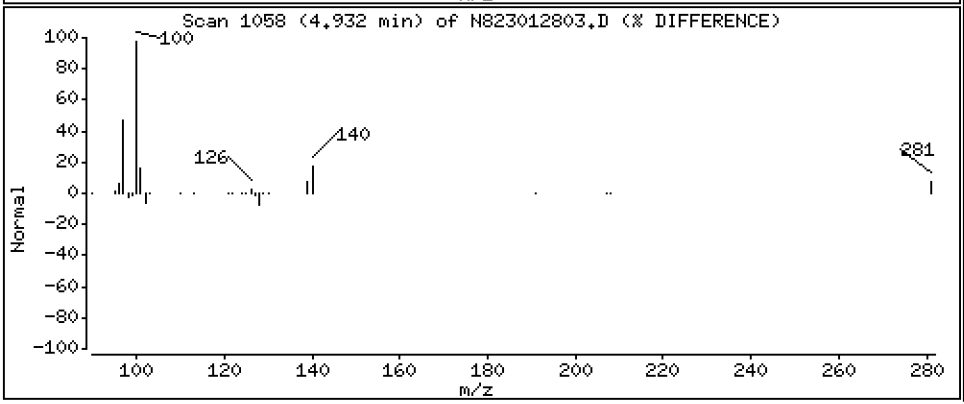












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012803.D

Date : 25-JAN-2023 15:27

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BLK1,

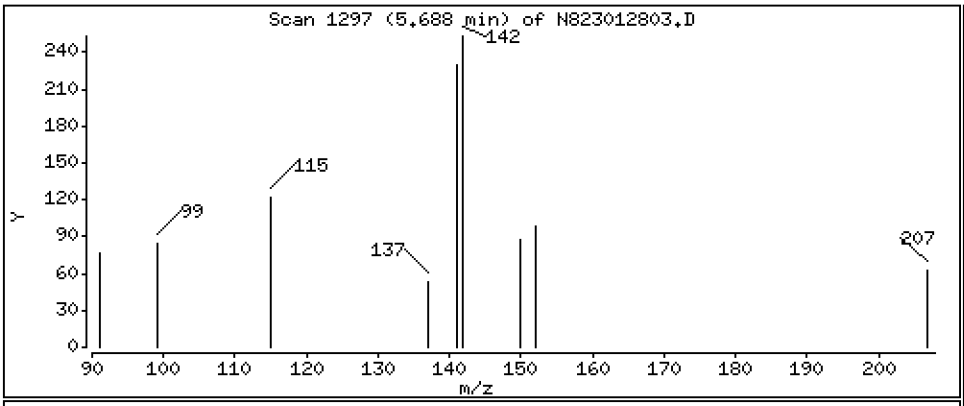
Operator: JZ

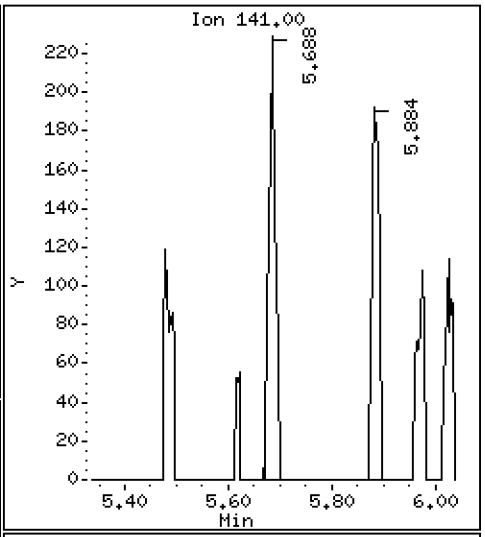
Column phase: Rxi-17sil

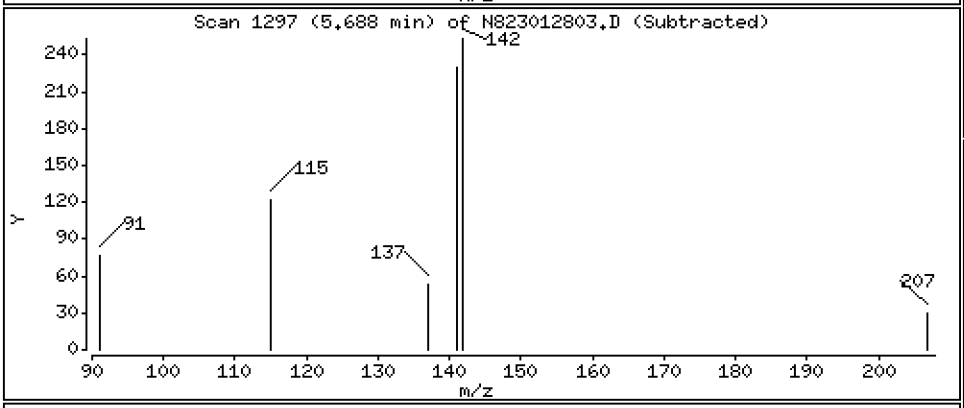
Column diameter: 0.25

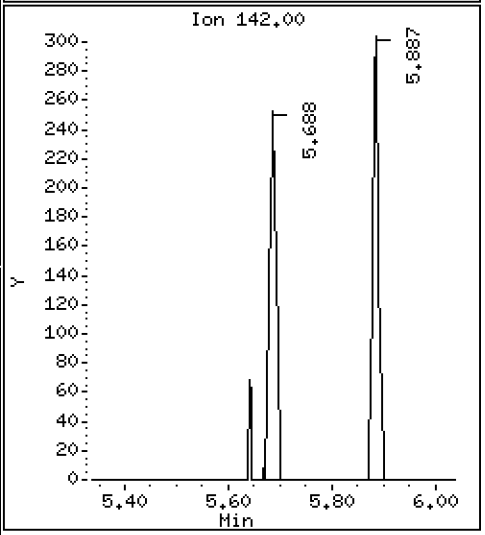
4 2-Methylnaphthalene

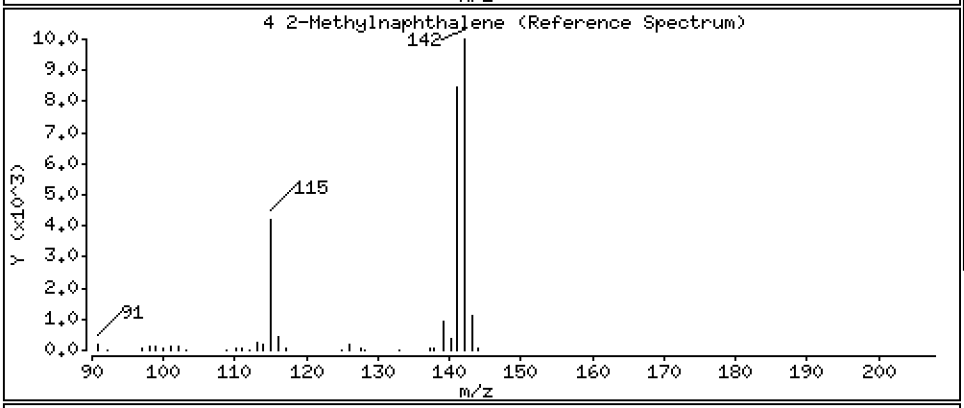
Concentration: 0.01791 ug/mL

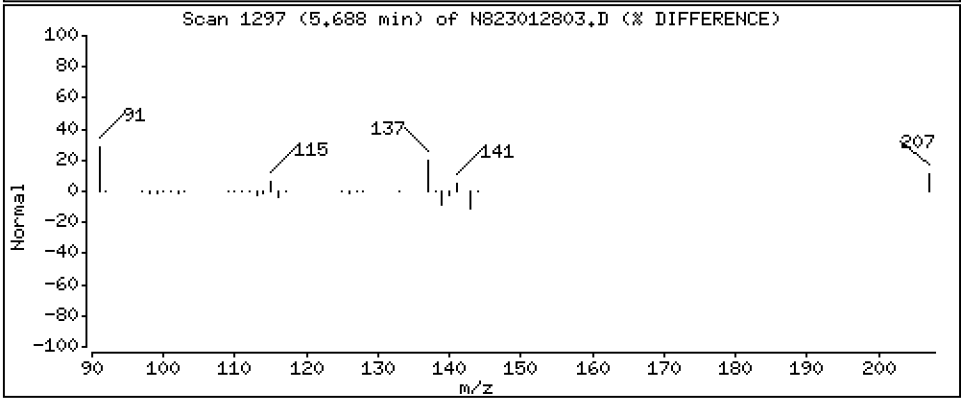












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012803.D

Date : 25-JAN-2023 15:27

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BLK1,

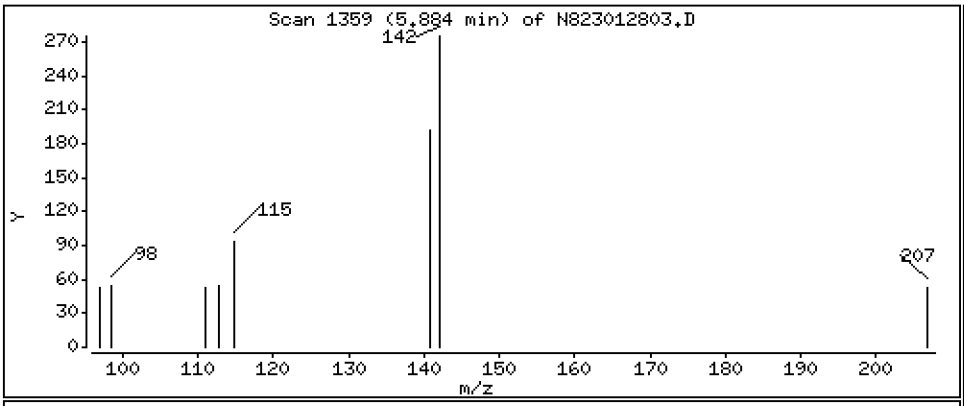
Operator: JZ

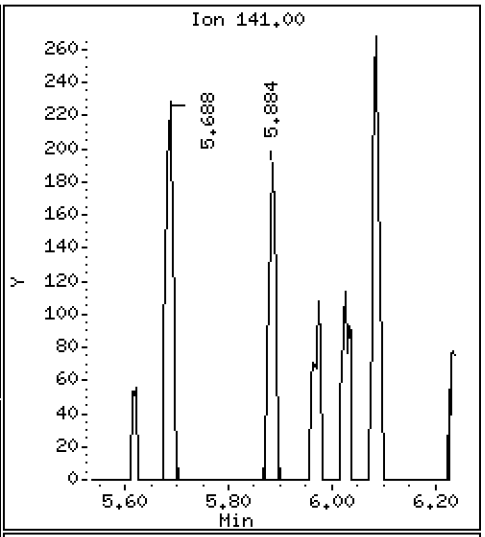
Column phase: Rxi-17sil

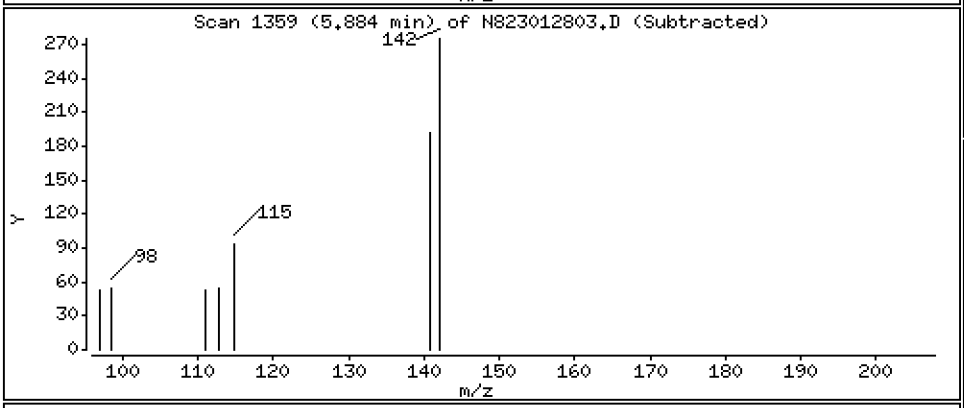
Column diameter: 0.25

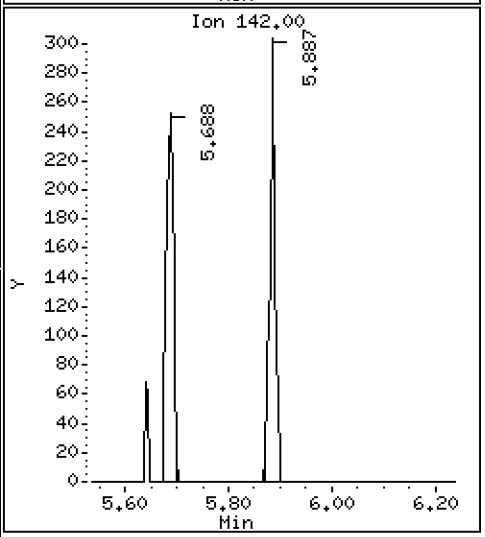
5 1-methylnaphthalene

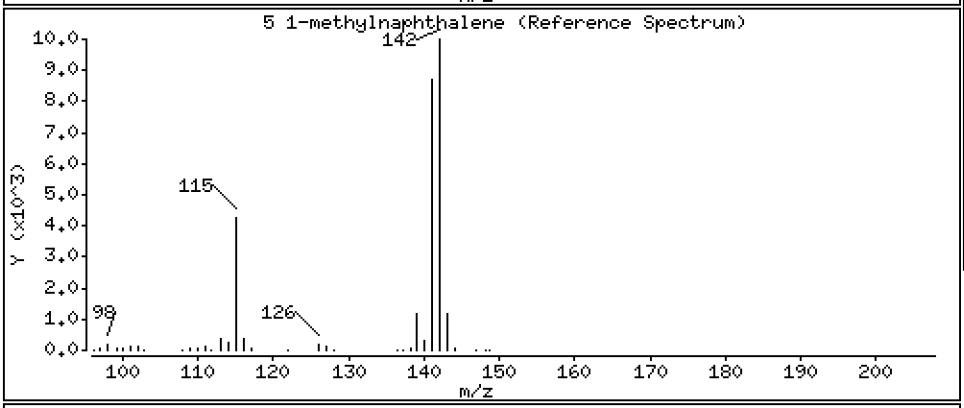
Concentration: 0.01513 ug/mL

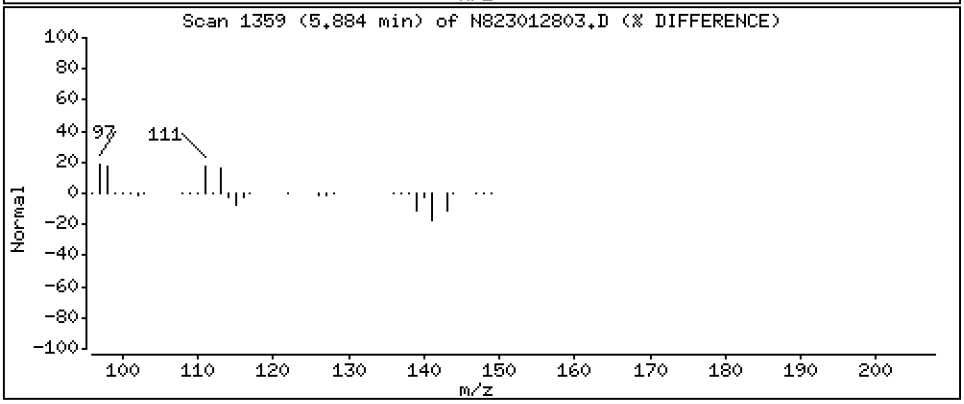












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012803.D

Date : 25-JAN-2023 15:27

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BLK1,

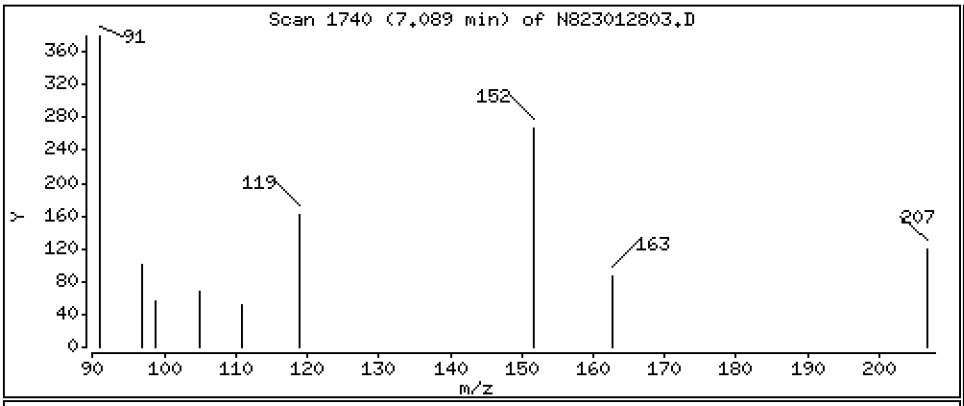
Operator: JZ

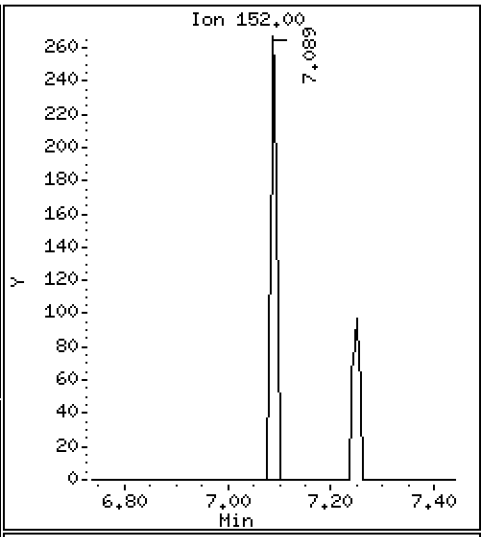
Column phase: Rxi-17sil

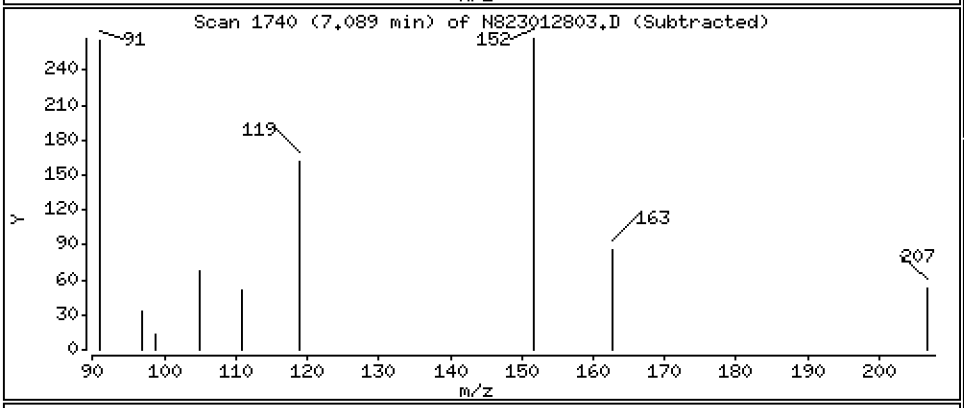
Column diameter: 0.25

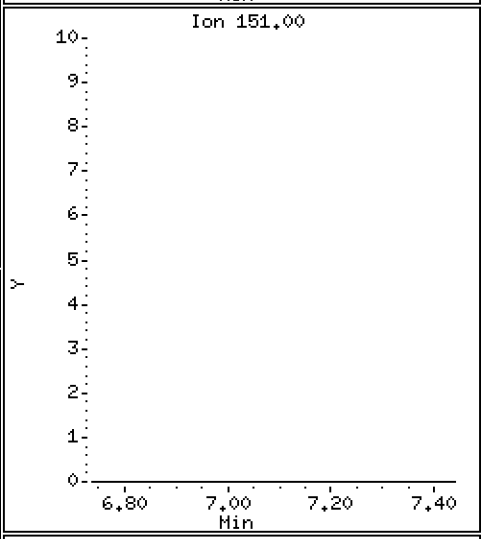
9 Acenaphthylene

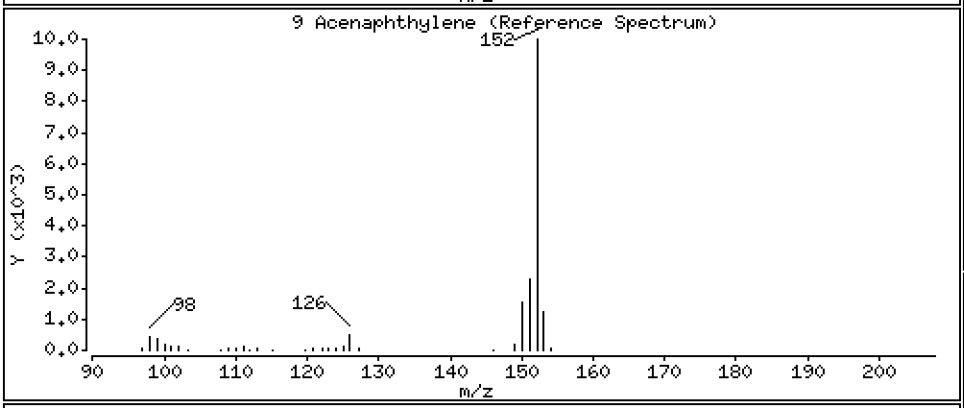
Concentration: 0.01050 ug/mL

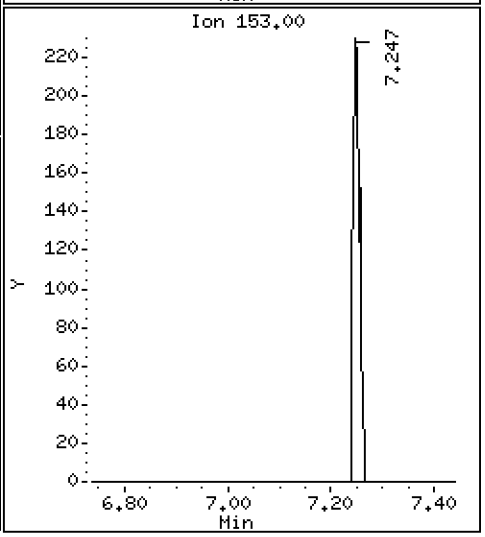


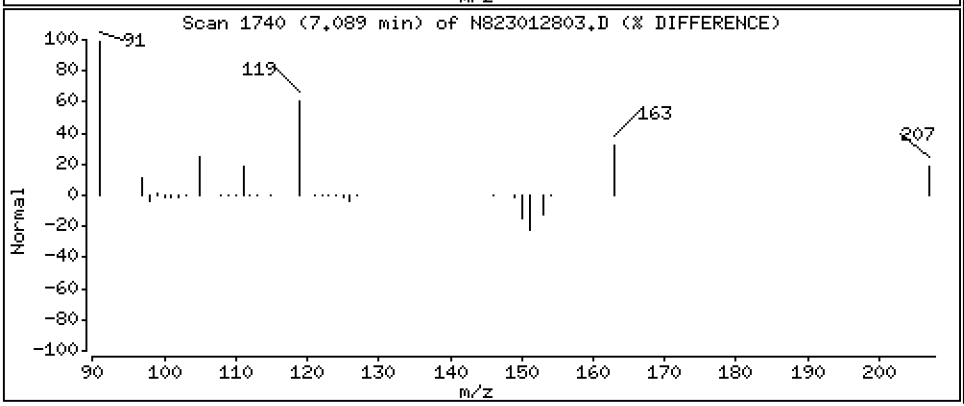












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Date : 25-JAN-2023 15:27

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BLK1,

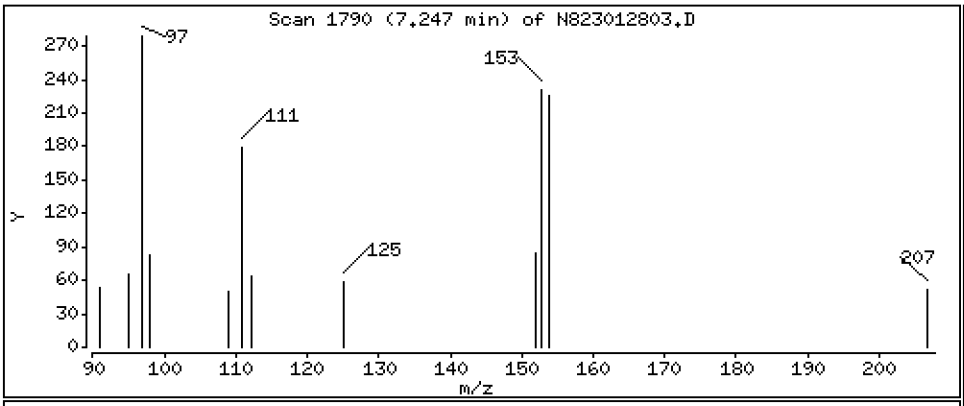
Operator: JZ

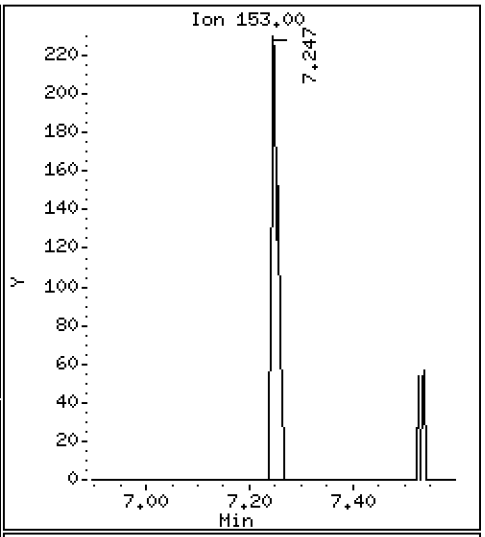
Column phase: Rxi-17sil

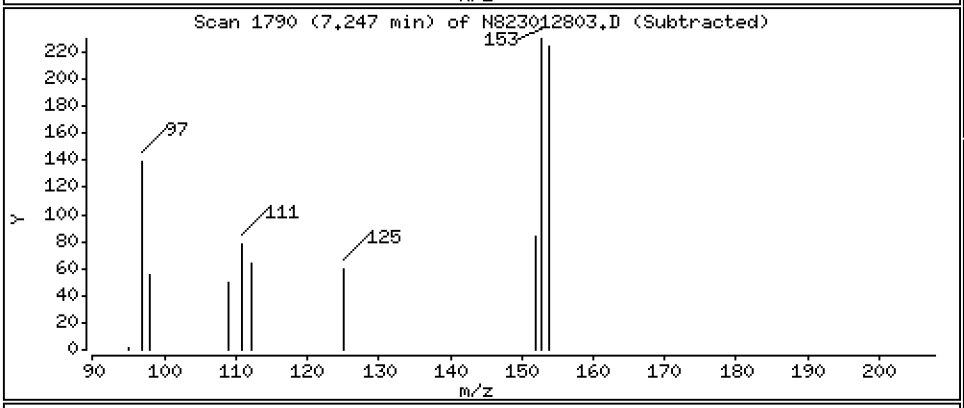
Column diameter: 0.25

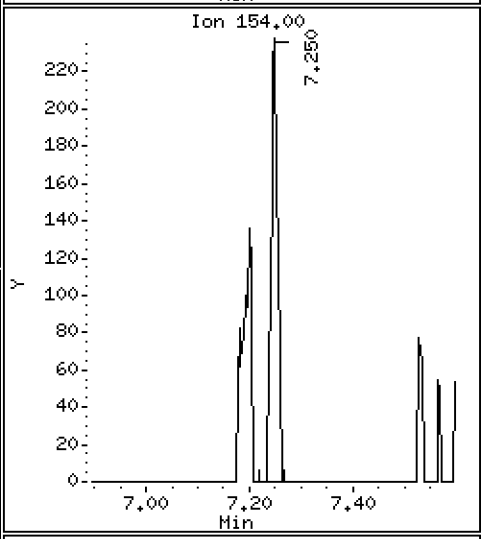
11 Acenaphthene

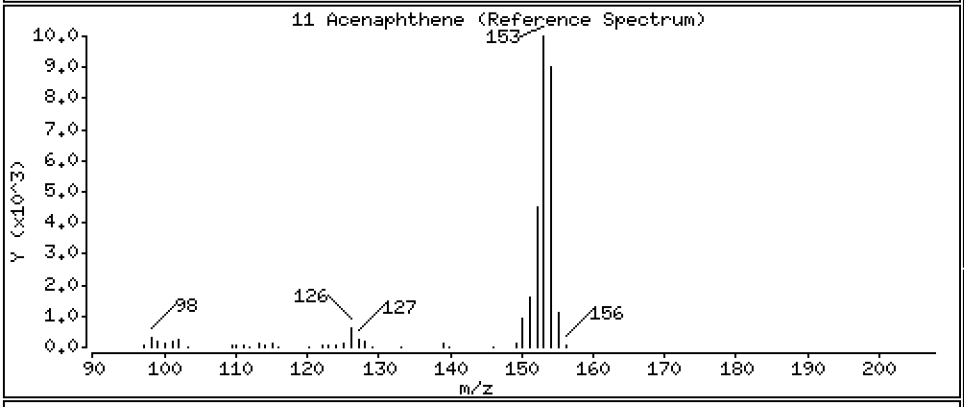
Concentration: 0.01449 ug/mL

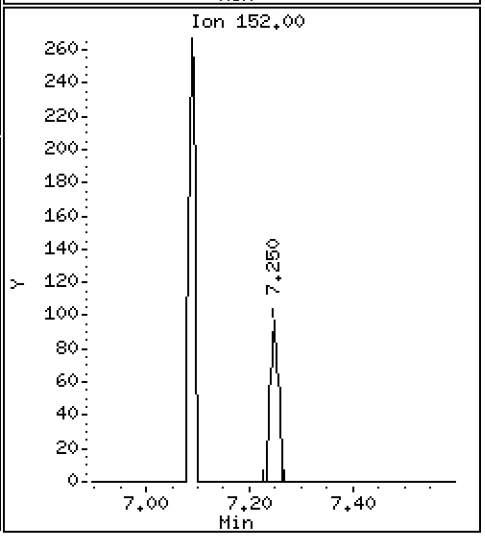


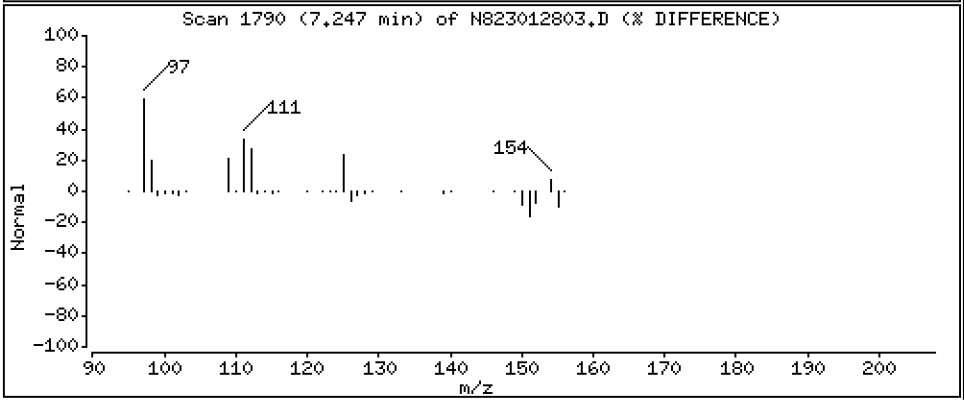












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Date : 25-JAN-2023 15:27

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BLK1,

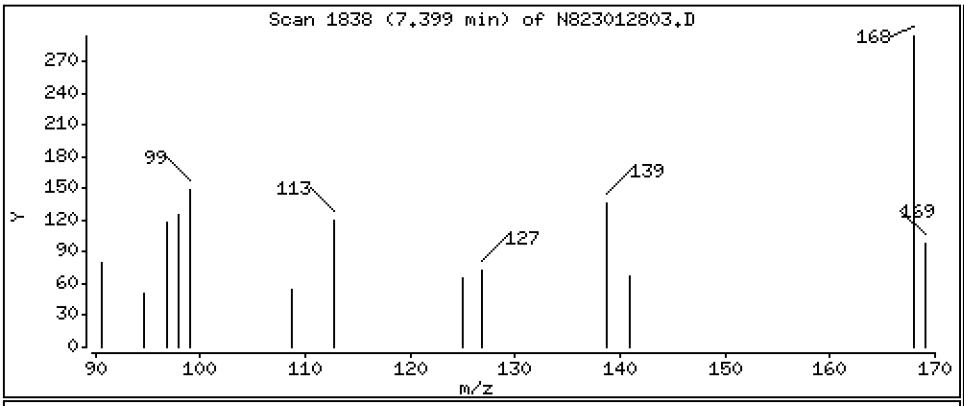
Operator: JZ

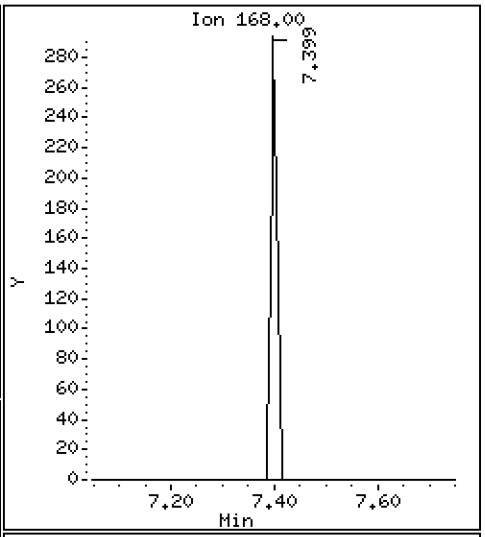
Column phase: Rxi-17sil

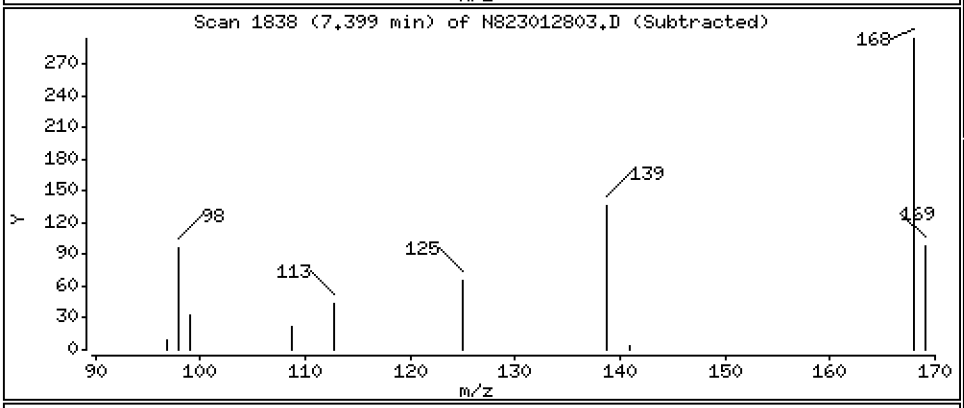
Column diameter: 0.25

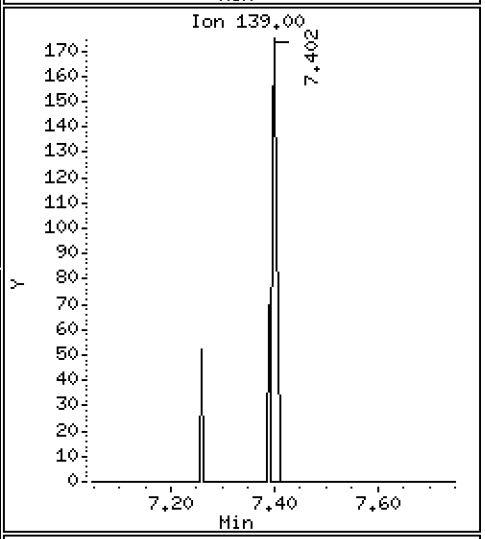
12 Dibenzofuran

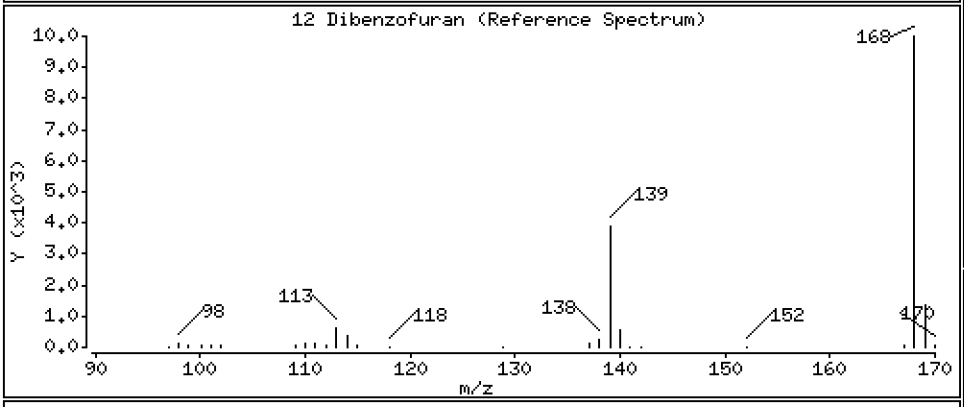
Concentration: 0.01183 ug/mL

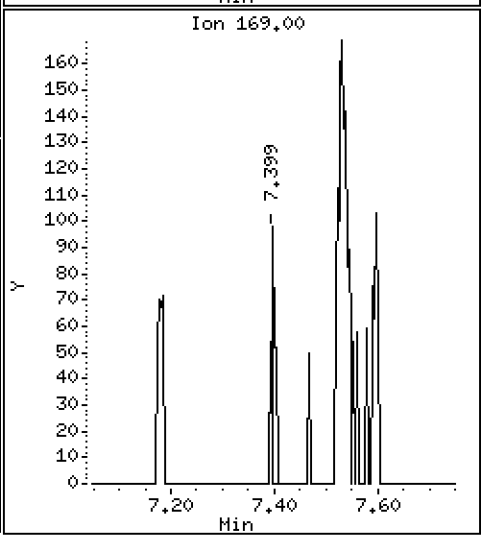


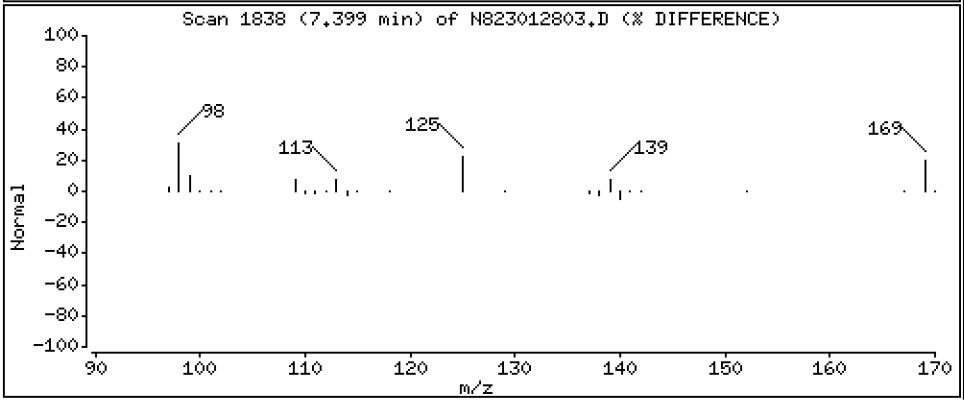












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Date : 25-JAN-2023 15:27

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BLK1,

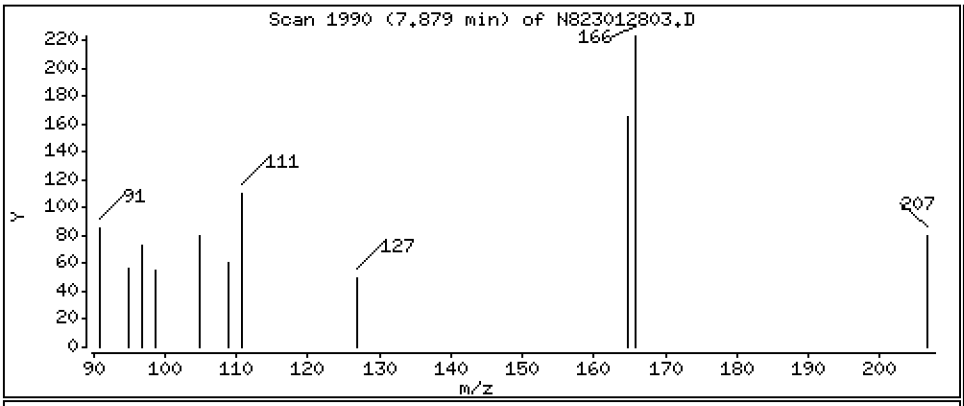
Operator: JZ

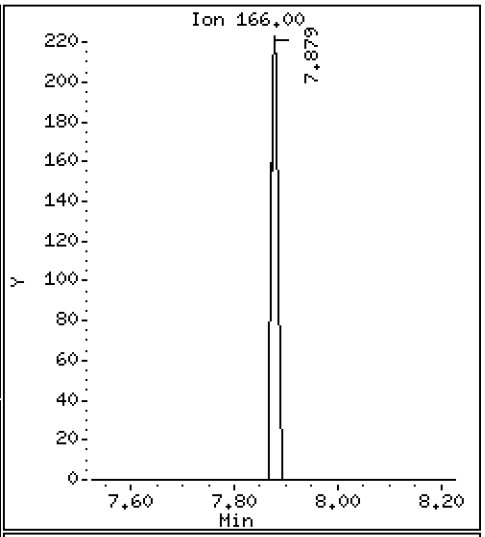
Column phase: Rxi-17sil

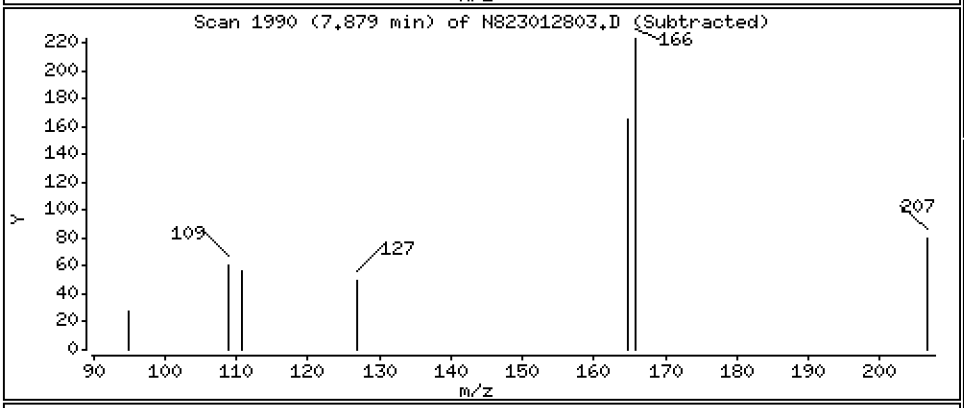
Column diameter: 0.25

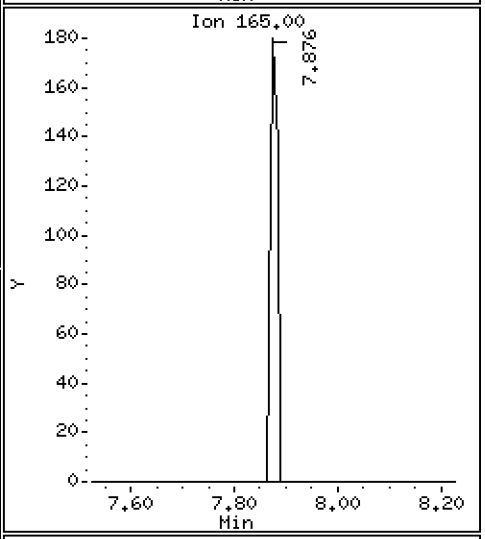
14 Fluorene

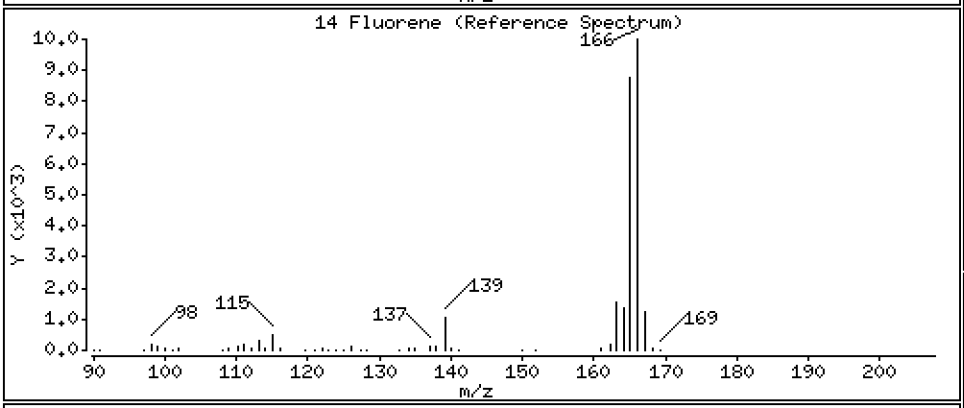
Concentration: 0.01229 ug/mL

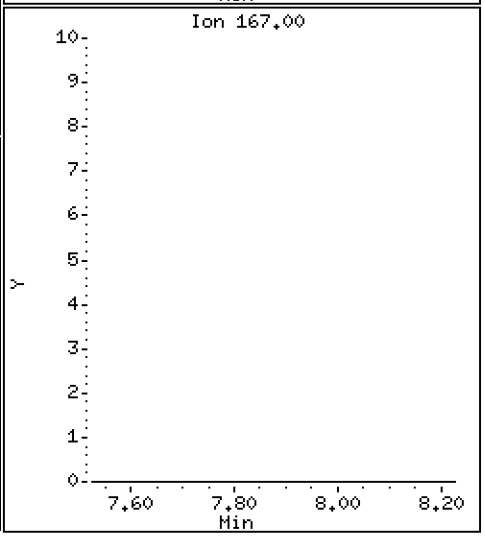


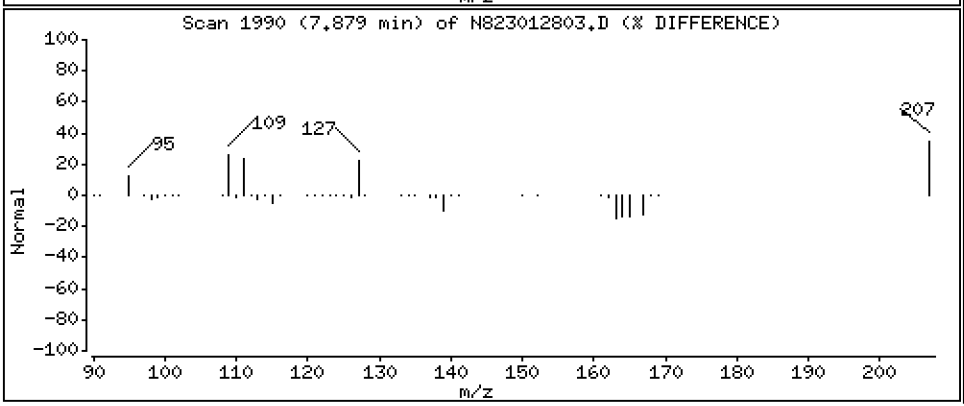












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Date : 25-JAN-2023 15:27

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BLK1,

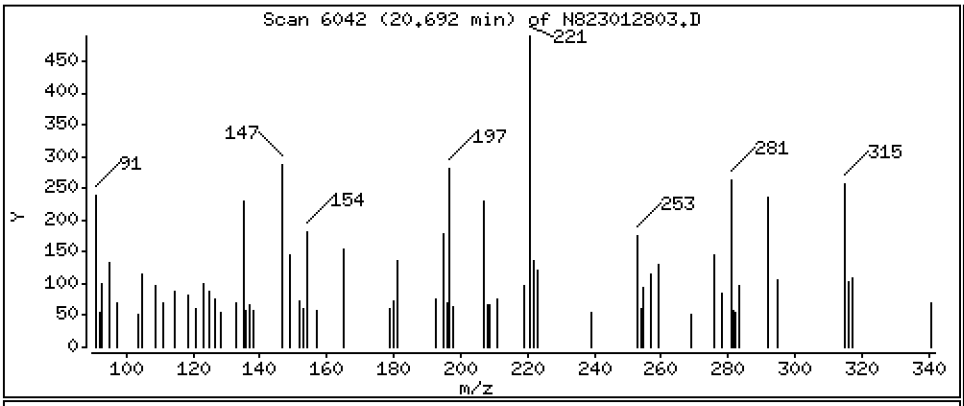
Operator: JZ

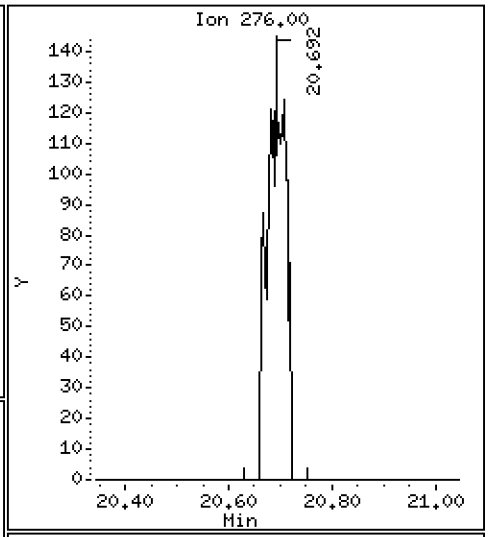
Column phase: Rxi-17sil

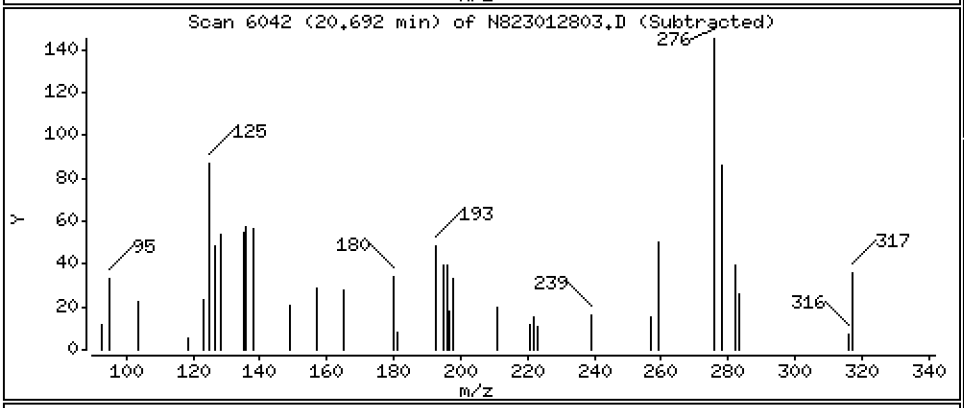
Column diameter: 0.25

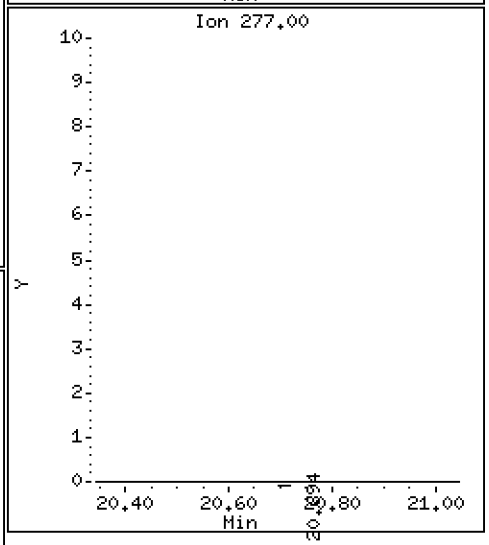
37 Indeno(1,2,3-cd)pyrene

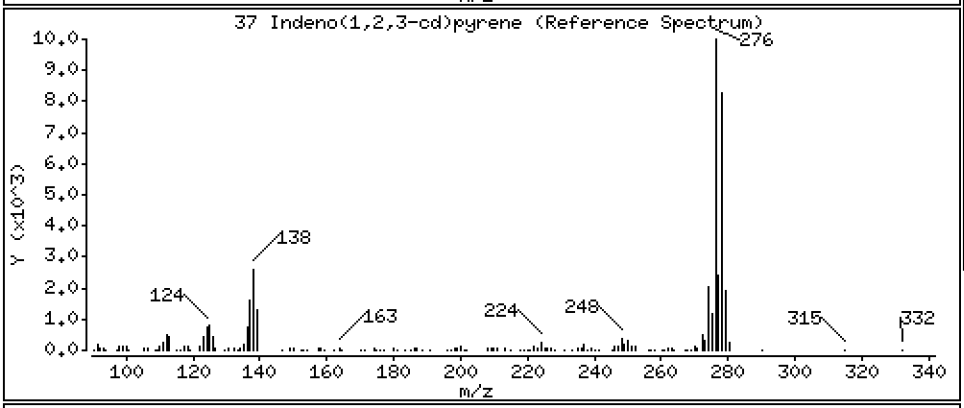
Concentration: 0.02279 ug/mL

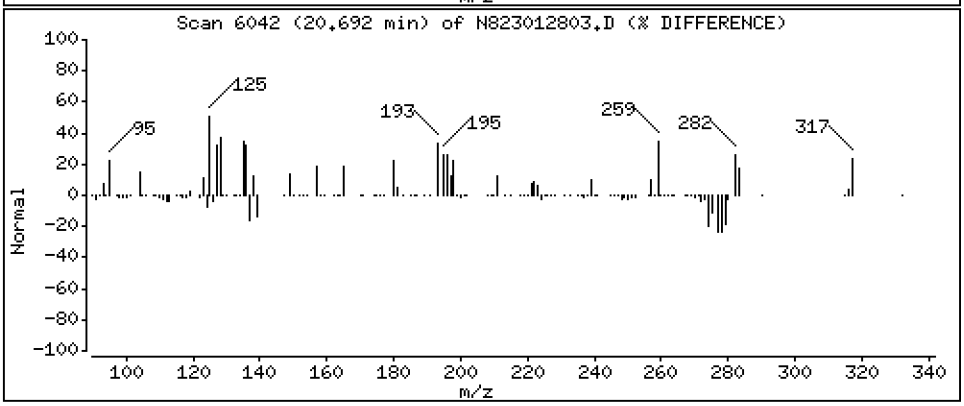












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Date : 25-JAN-2023 15:27

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BLK1,

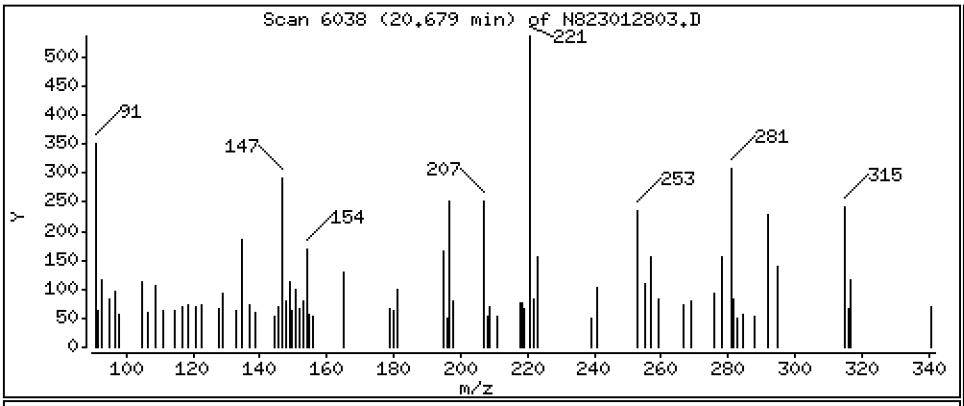
Operator: JZ

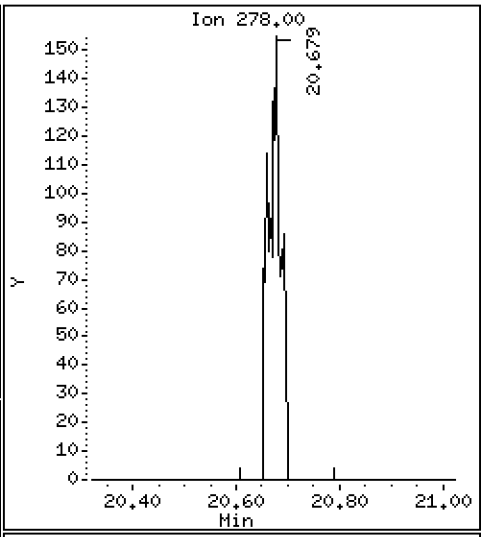
Column phase: Rxi-17sil

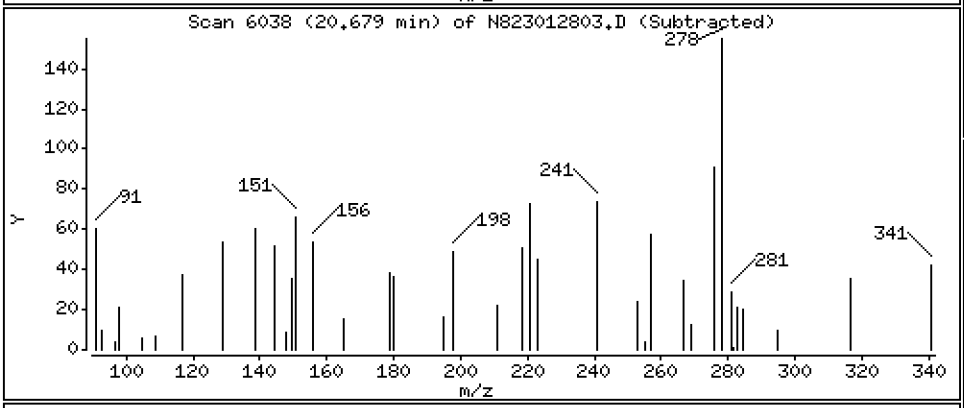
Column diameter: 0.25

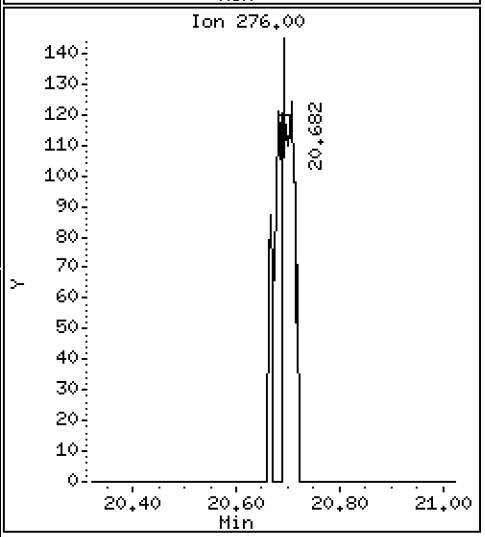
38 Dibenzo(a,h)anthracene

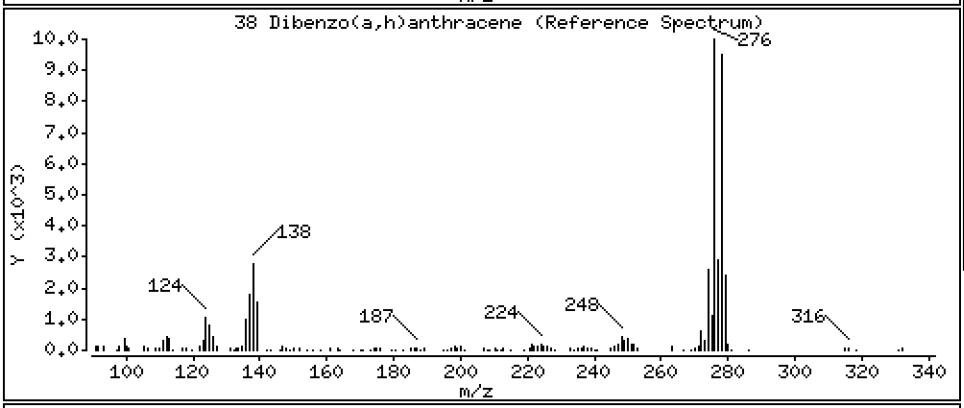
Concentration: 0.01992 ug/mL

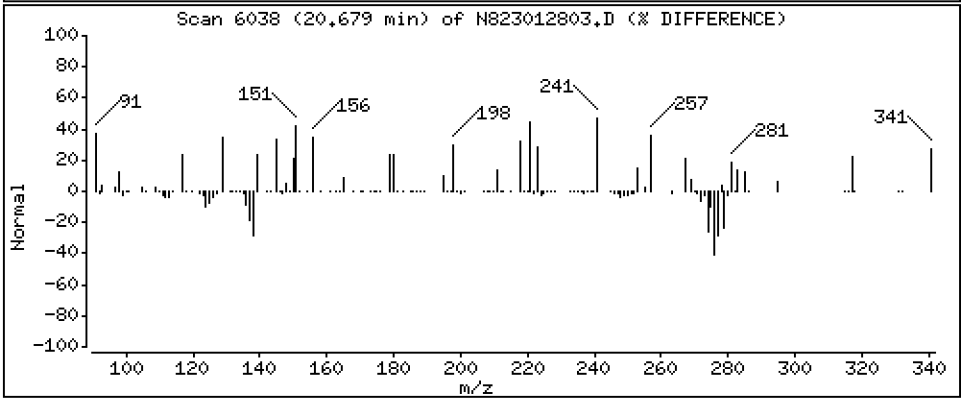












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Date : 25-JAN-2023 15:27

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BLK1,

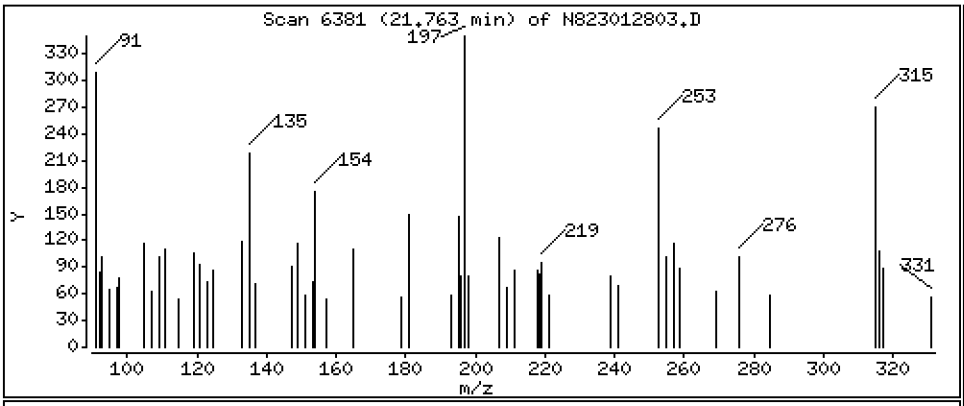
Operator: JZ

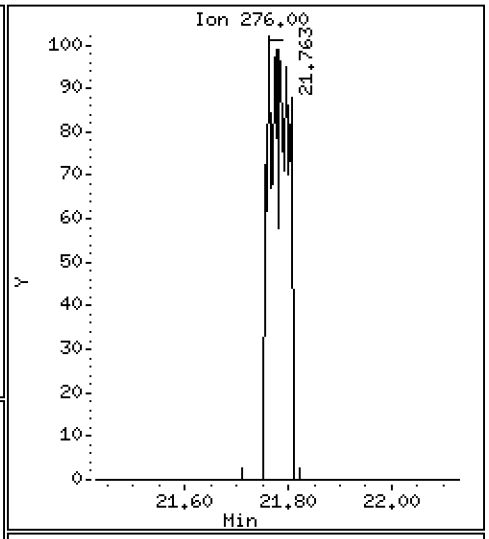
Column phase: Rxi-17sil

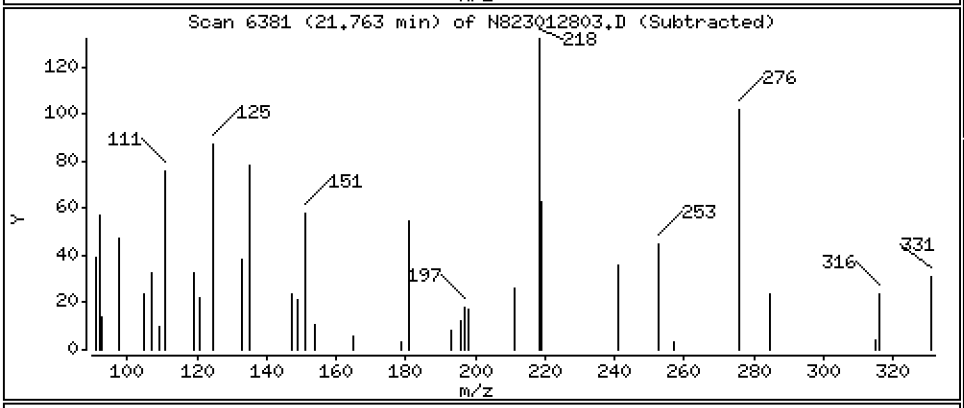
Column diameter: 0.25

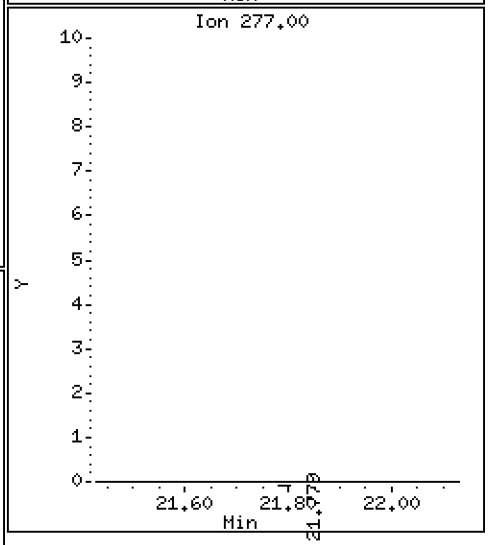
39 Benzo(g,h,i)perylene

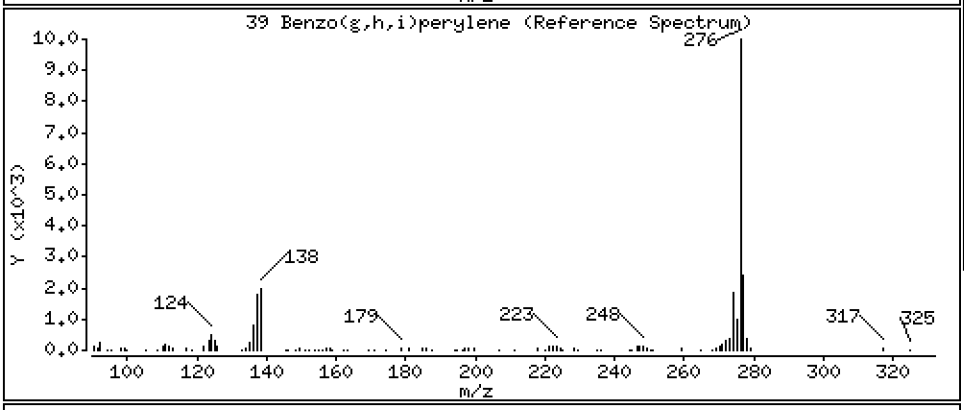
Concentration: 0.02009 ug/mL

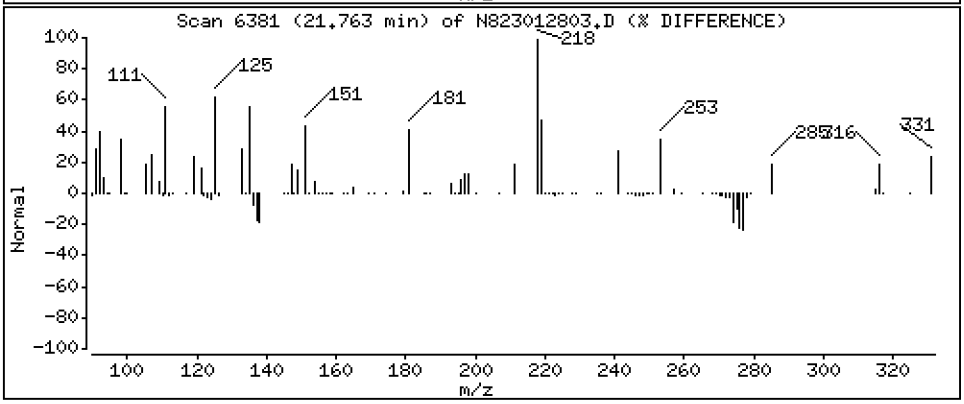












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230125.b\N823012803.D
Lab Smp Id: BLA0411-BLK1
Inj Date : 25-JAN-2023 15:27
Operator : JZ Inst ID: nt8.i
Smp Info : BLA0411-BLK1,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 22:56 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PNAXMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.903	4.906	(1.000)	47372	2.00000	
	2 Naphthalene	128	4.932	4.938	(1.006)	672	0.03051	0.03051
$	3 2-Methylnaphthalene-d10	152	5.640	5.640	(1.150)	39406	3.05011	3.050
	4 2-Methylnaphthalene	141	5.687	5.687	(1.160)	217	0.01791	0.01791
	5 1-methylnaphthalene	141	5.884	5.886	(1.200)	186	0.01513	0.01513
	9 Acenaphthylene	152	7.088	7.088	(0.985)	226	0.01050	0.01050
*	10 Acenaphthene-d10	164	7.199	7.199	(1.000)	28499	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	209	0.01449	0.01449
	12 Dibenzofuran	168	7.398	7.398	(1.028)	259	0.01183	0.01183
	14 Fluorene	166	7.879	7.875	(1.094)	209	0.01229	0.01229
*	15 Phenanthrene-d10	188	9.238	9.238	(1.000)	53245	2.00000	
	16 Phenanthrene	178	Compound Not Detected.					
	17 Anthracene	178	Compound Not Detected.					
	22 Fluoranthene	202	Compound Not Detected.					
$	21 Fluoranthene-d10	212	11.022	11.018	(1.193)	88230	3.75583	3.756
	23 Pyrene	202	Compound Not Detected.					
	24 Benzo(a)anthracene	228	Compound Not Detected.					
*	25 Chrysene-d12	240	14.215	14.212	(1.000)	44908	2.00000	
	27 Chrysene	228	Compound Not Detected.					
	28 Benzo(b)fluoranthene	252	Compound Not Detected.					
	29 Benzo(k)fluoranthene	252	Compound Not Detected.					
	30 Benzo(j)fluoranthene	252	Compound Not Detected.					
	31 Total Benzofluoranthenes	252	Compound Not Detected.					
	32 Benzo(a)pyrene	252	Compound Not Detected.					
*	33 Perylene-d12	264	18.124	18.120	(1.000)	25782	2.00000	
	35 Perylene	252	Compound Not Detected.					
$	36 Dibenzo(a,h)anthracene-d14	292	20.565	20.564	(1.135)	45549	4.50894	4.509
	37 Indeno(1,2,3-cd)pyrene	276	20.691	20.694	(1.142)	343	0.02279	0.02279(M)
	38 Dibenzo(a,h)anthracene	278	20.678	20.672	(1.141)	258	0.01992	0.01992(M)
	39 Benzo(g,h,i)perylene	276	21.763	21.779	(1.201)	274	0.02009	0.02009(M)

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823012803.D
Lab Smp Id: BLA0411-BLK1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 25-JAN-2023
Calibration Time: 14:49
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	46976	23488	93952	47372	0.84
10 Acenaphthene-d10	27652	13826	55304	28499	3.06
15 Phenanthrene-d10	51738	25869	103476	53245	2.91
25 Chrysene-d12	45383	22692	90766	44908	-1.05
33 Perylene-d12	41344	20672	82688	25782	-37.64

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.90	-0.06
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.21	13.71	14.71	14.22	0.02
33 Perylene-d12	18.12	17.62	18.62	18.12	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823012803.D

Lab ID: BLA0411-BLK1
nt8.i, 20230125.b\FSIMPNA230119.m,   25-JAN-2023 15:27

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

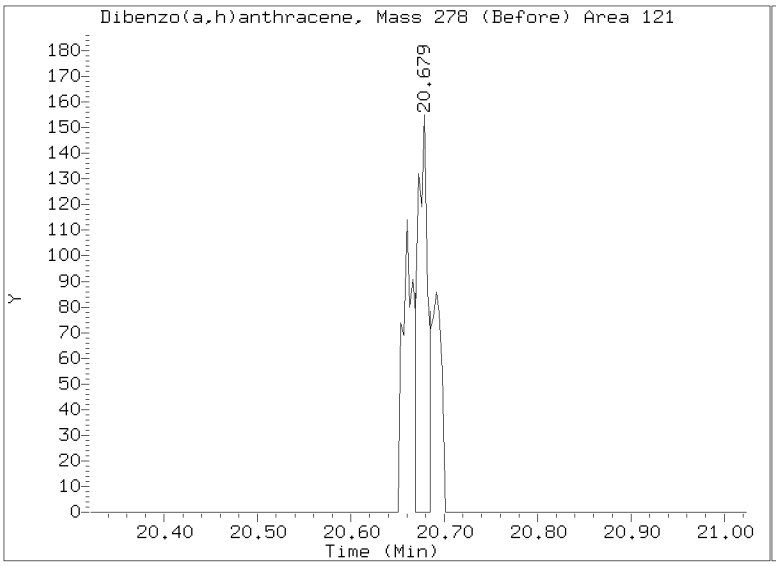
No RRT check performed

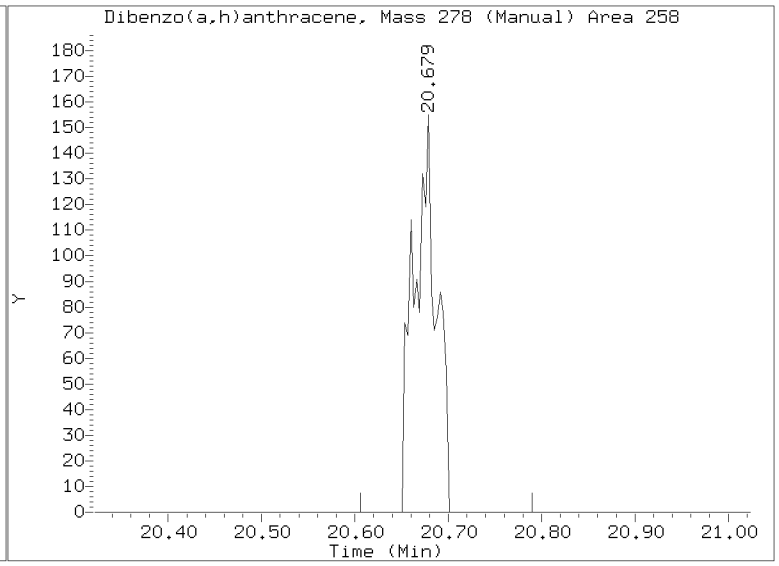
On Column LOD for nt8.i, 20230125.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

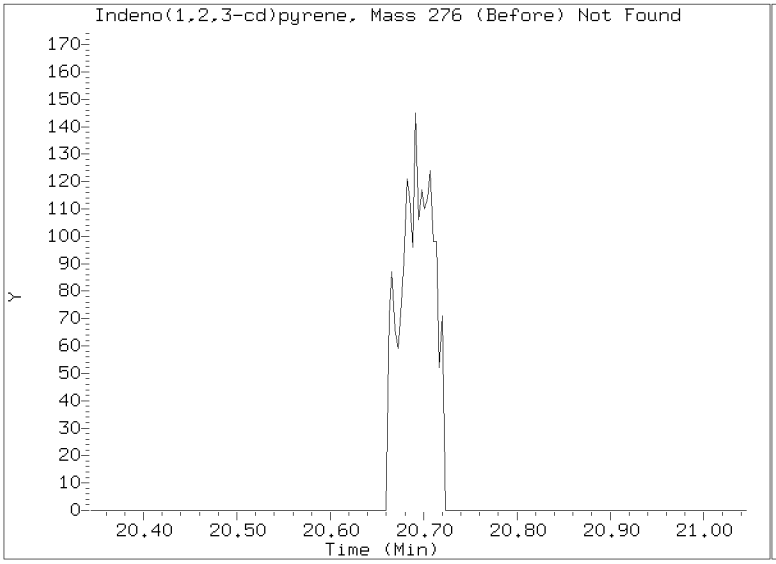
* Only compounds listed in the work order have been verified by the analyst *

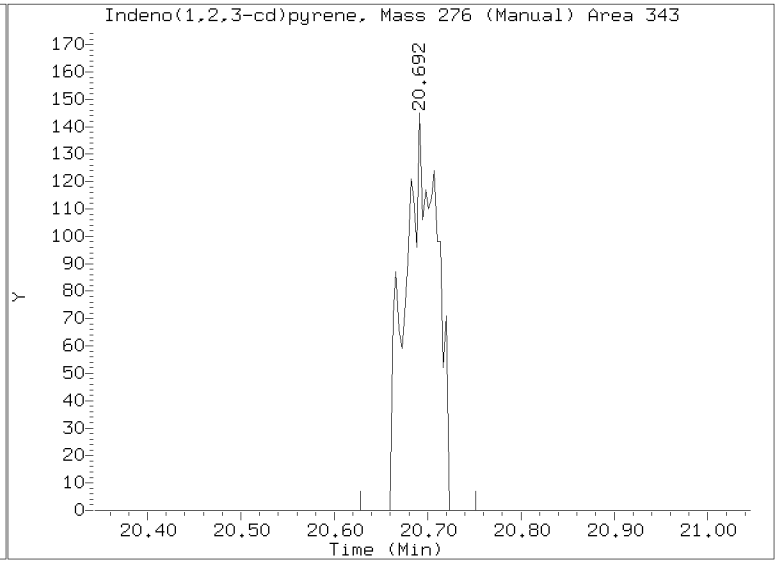
Quant Ion Manual Peak Adjustment Report

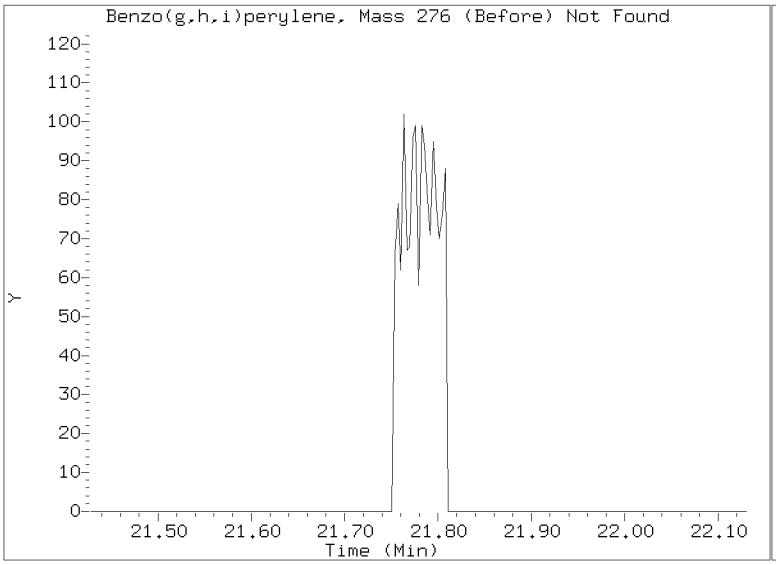
Datafile: //target/share/chem3/nt8.i/20230125.b/N823012803.D
Injection Date: 25-JAN-2023 15:27
Lab ID:BLA0411-BLK1 Client ID:
Report Date: 01/25/2023 22:57

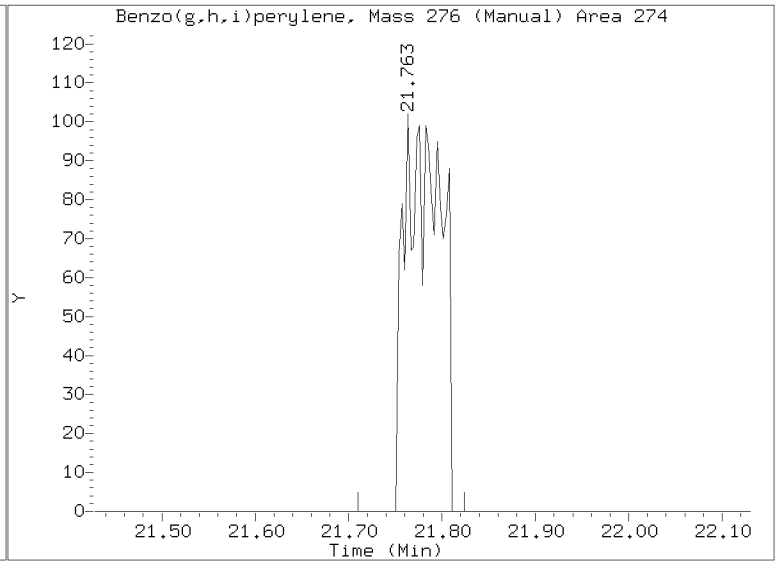












LCS / LCS DUPLICATE RECOVERY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/26/23 15:52
Batch:	BLA0410	Laboratory ID:	BLA0410-BS2
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	500	303		60.7	36 - 120
1,2-Dichlorobenzene	500	309		61.9	36 - 120
Benzyl Alcohol	500	354		70.9	25 - 123
Benzoic acid	2300	1670	Q	72.6	10 - 160
2,4-Dimethylphenol	1300	586		45.1	10 - 120
1,2,4-Trichlorobenzene	500	318		63.5	35 - 120
N-Nitrosodiphenylamine	500	316		63.2	27 - 120
Pentachlorophenol	1300	1470	Q	113	26 - 120

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	500	319		63.8	4.96	30	36 - 120
1,2-Dichlorobenzene	500	324		64.8	4.56	30	36 - 120
Benzyl Alcohol	500	369		73.7	3.95	30	25 - 123
Benzoic acid	2300	2000	Q	87.1	18.2	30	10 - 160
2,4-Dimethylphenol	1300	762		58.6	26.1	30	10 - 120
1,2,4-Trichlorobenzene	500	339		67.8	6.57	30	35 - 120
N-Nitrosodiphenylamine	500	360		72.0	13.0	30	27 - 120
Pentachlorophenol	1300	1660	*, Q	128 *	12.0	30	26 - 120

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623075.D

Date : 26-FEB-2023 15:52

Client ID:

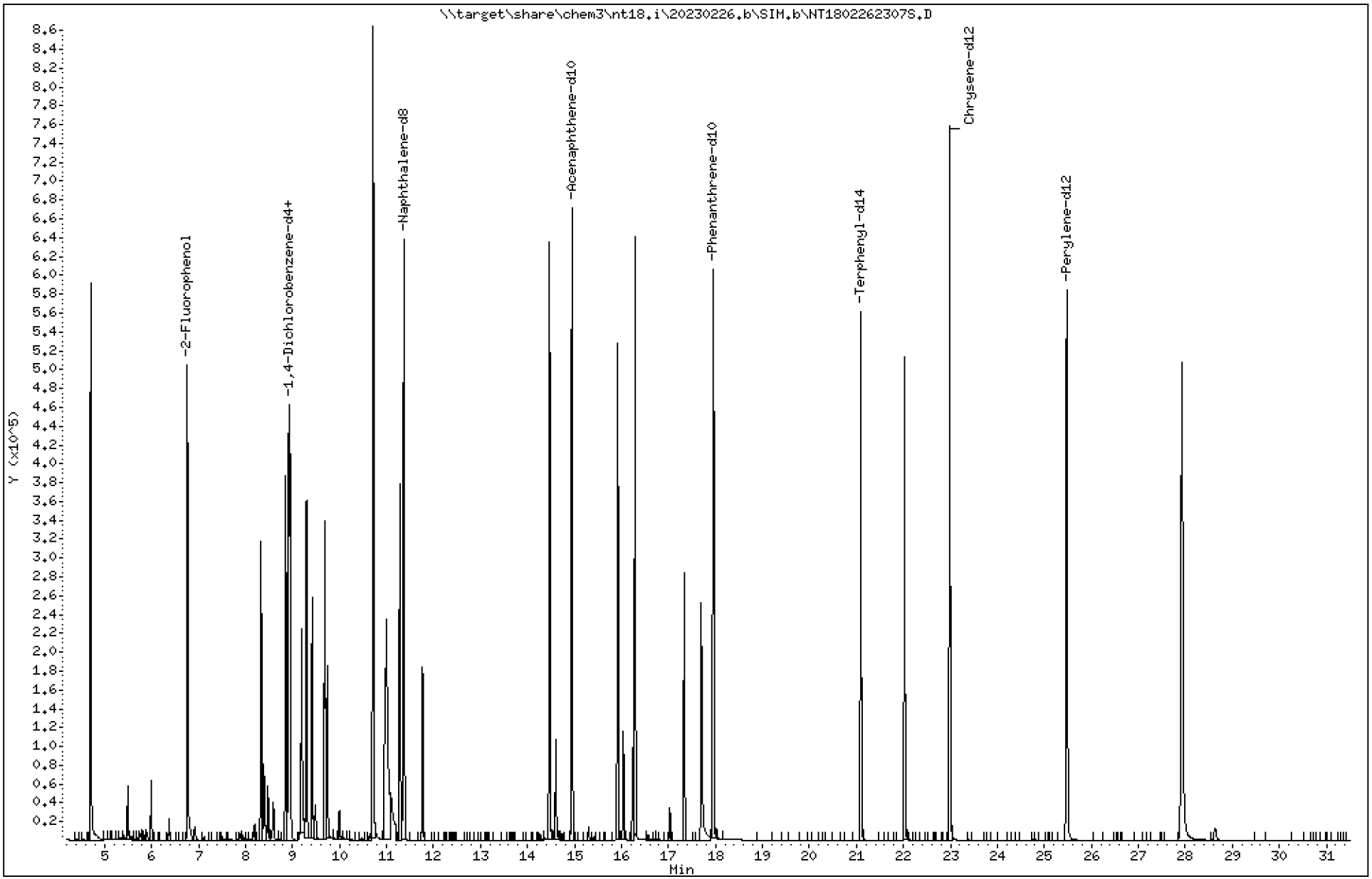
Sample Info: BLA0410-BS2

Column phase: ZB-5msi

Instrument: nt18.i

Operator: YZ

Column diameter: 0.25



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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

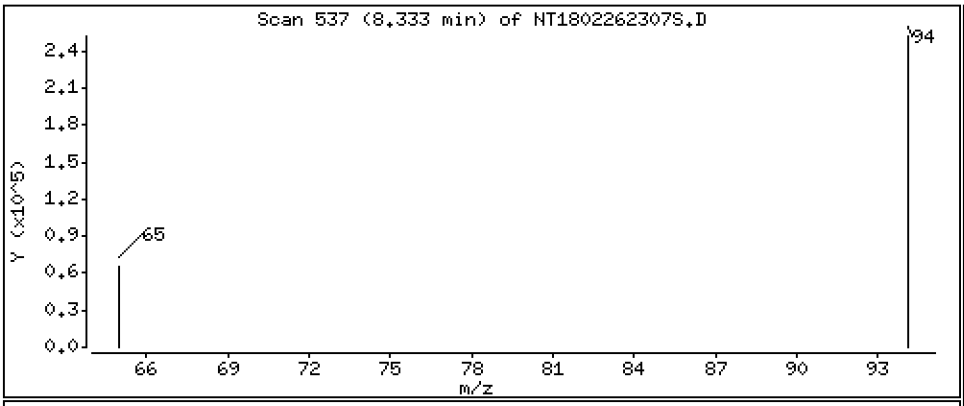
Operator: YZ

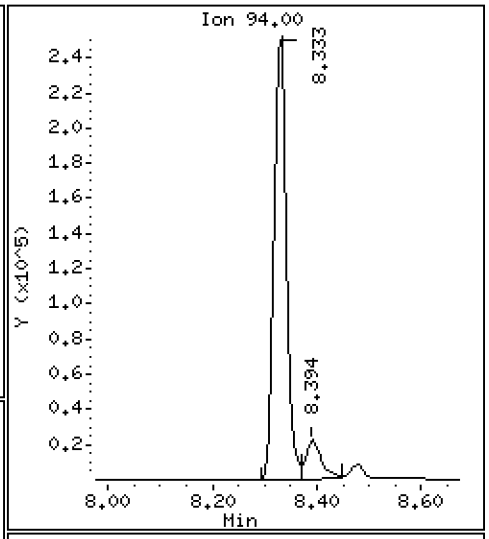
Column phase: ZB-5msi

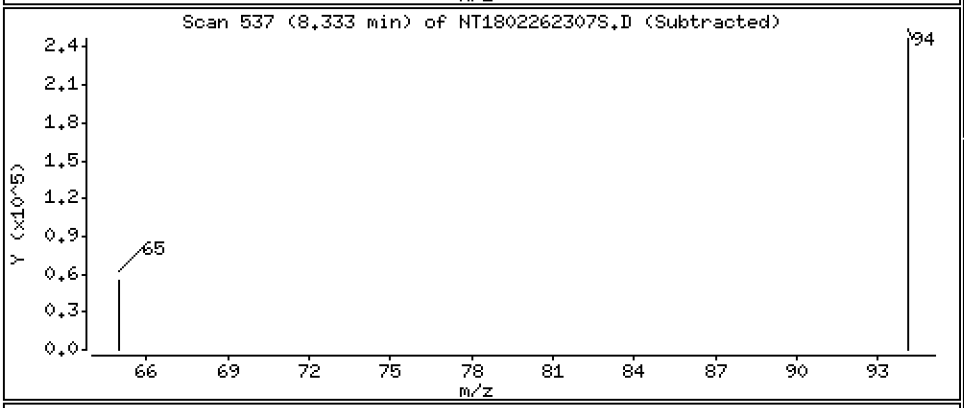
Column diameter: 0.25

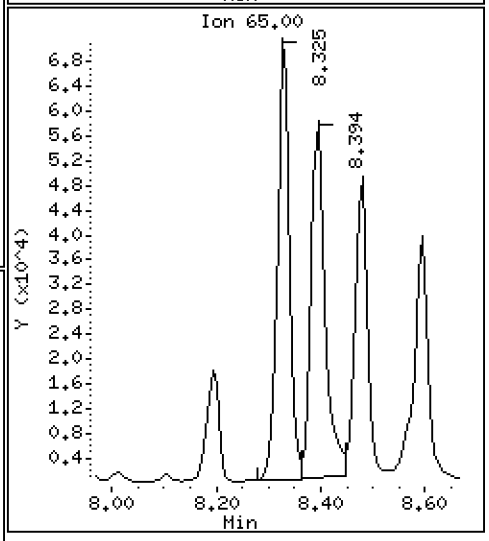
3 Phenol

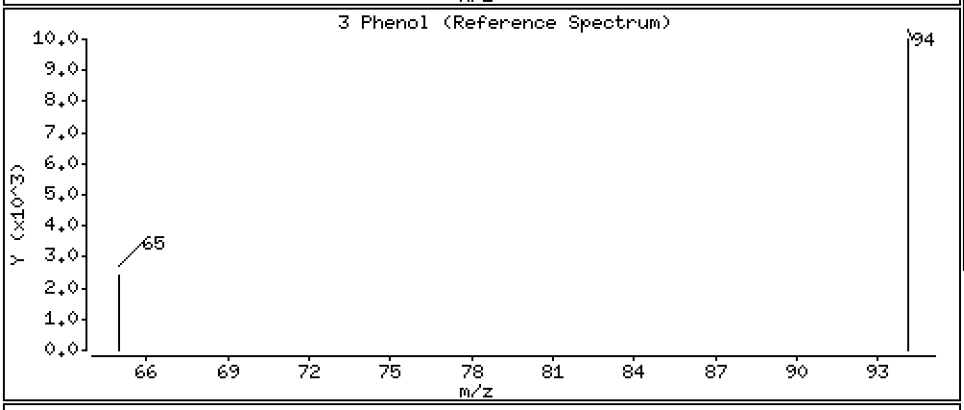
Concentration: 3.398 ug/mL

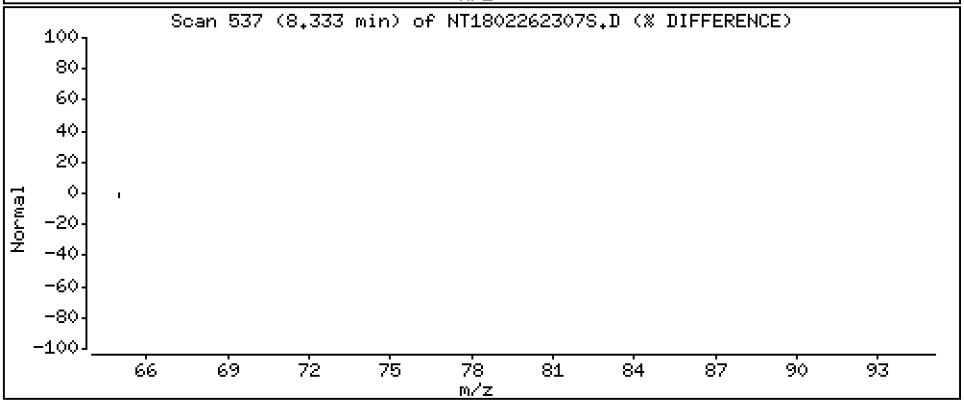












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

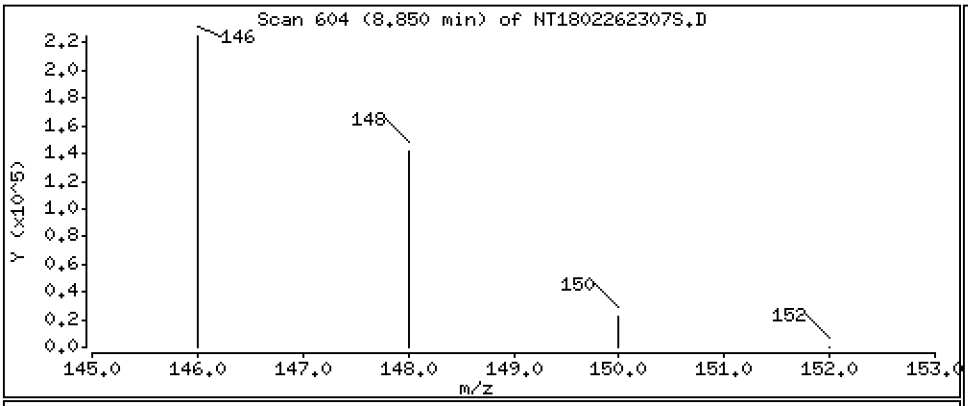
Operator: YZ

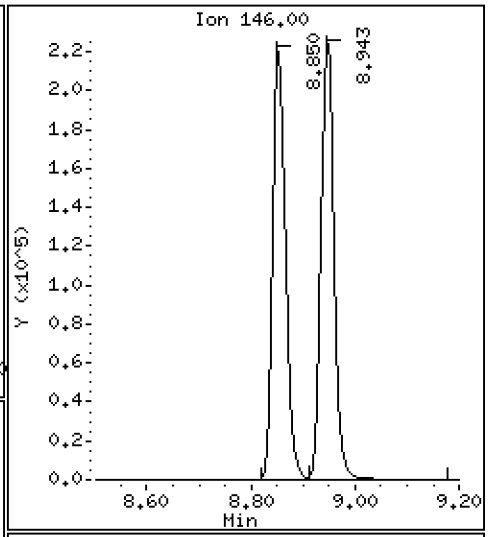
Column phase: ZB-5msi

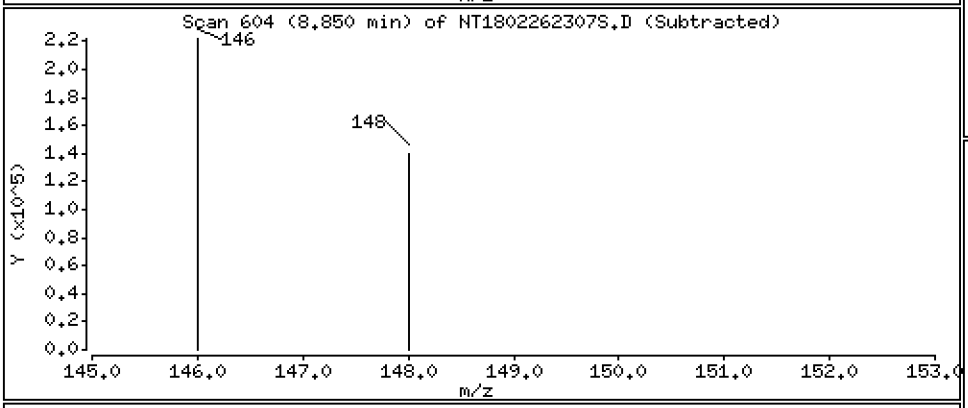
Column diameter: 0.25

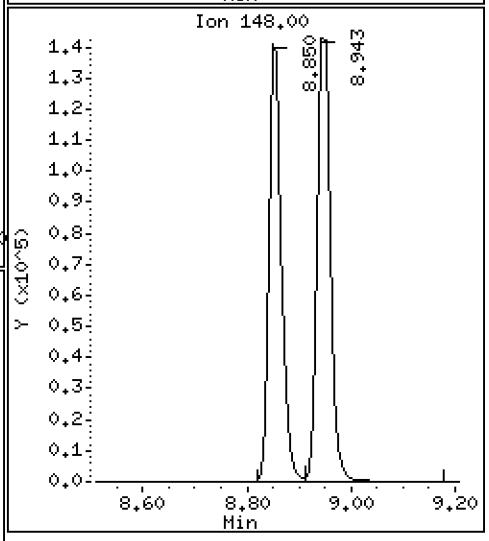
7 1,3-Dichlorobenzene

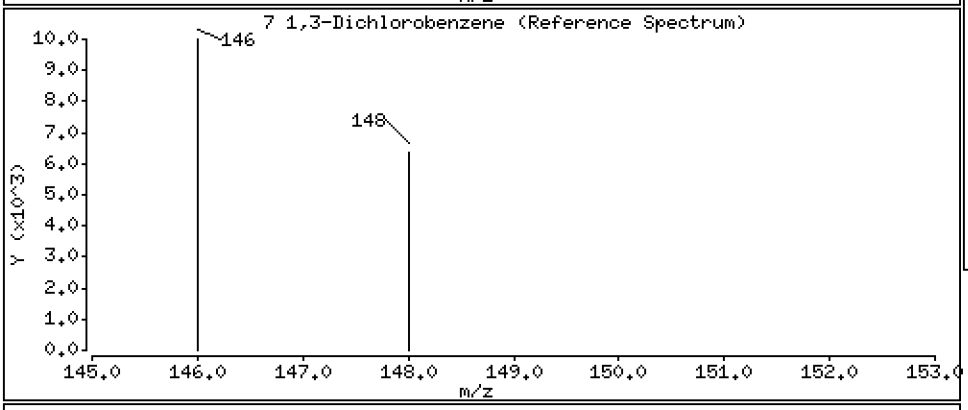
Concentration: 3.080 ug/mL

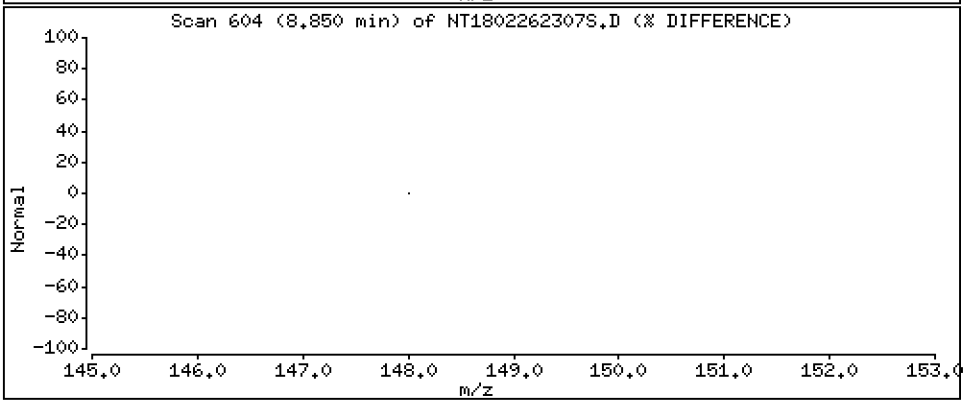












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

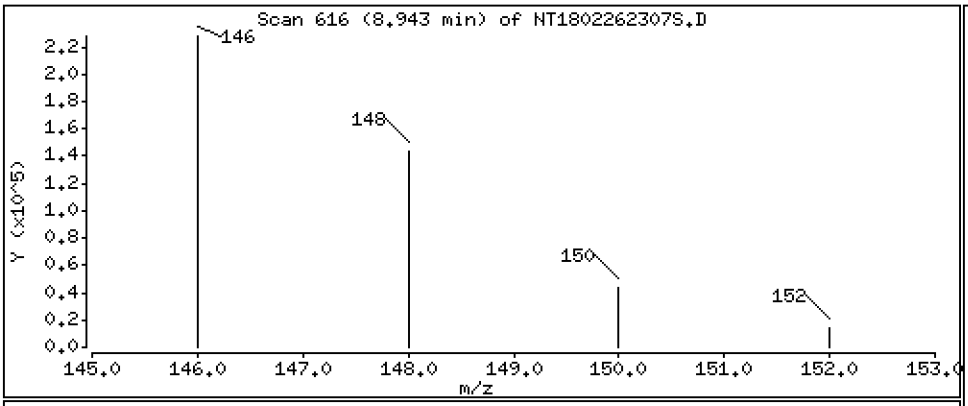
Operator: YZ

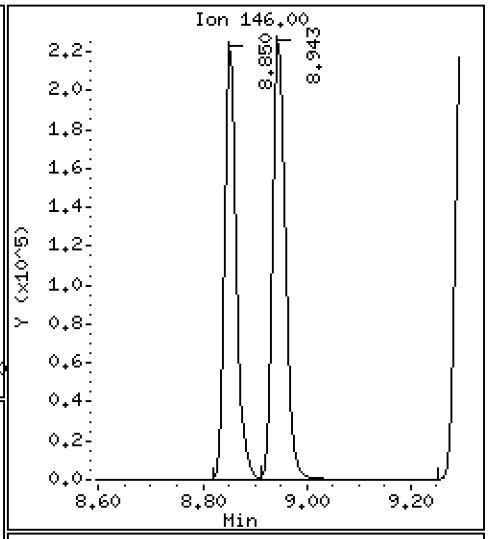
Column phase: ZB-5msi

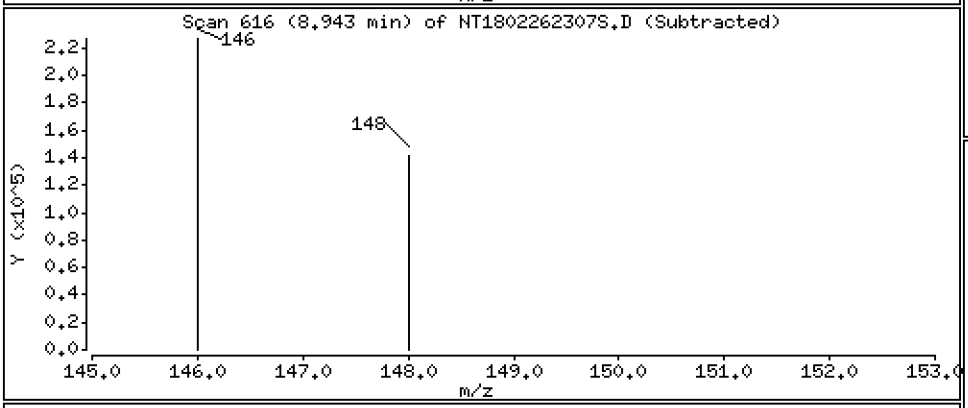
Column diameter: 0.25

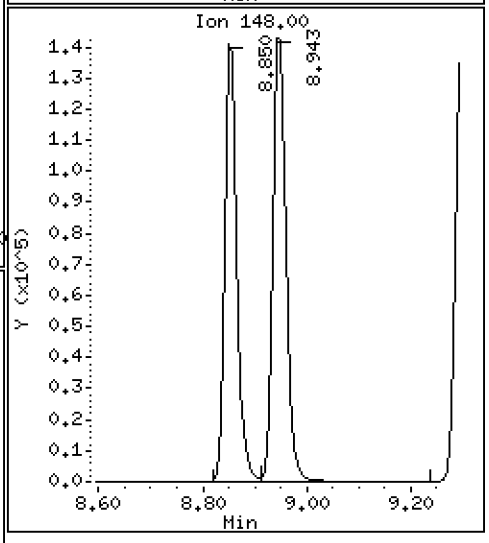
9 1,4-Dichlorobenzene

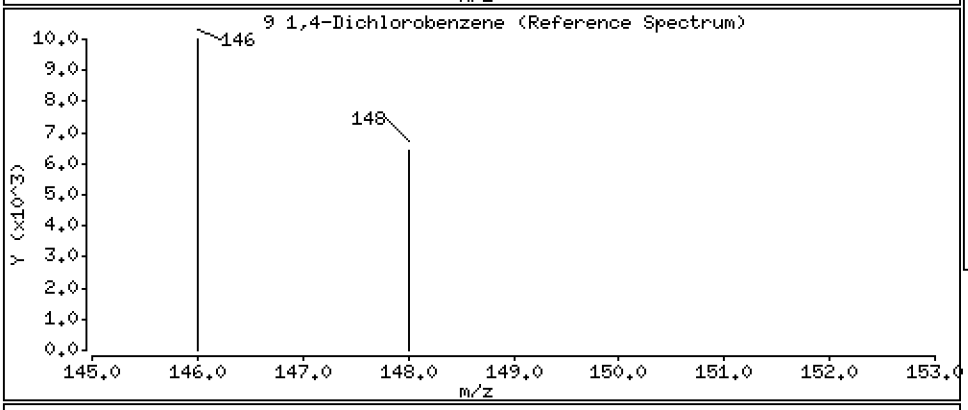
Concentration: 3.033 ug/mL

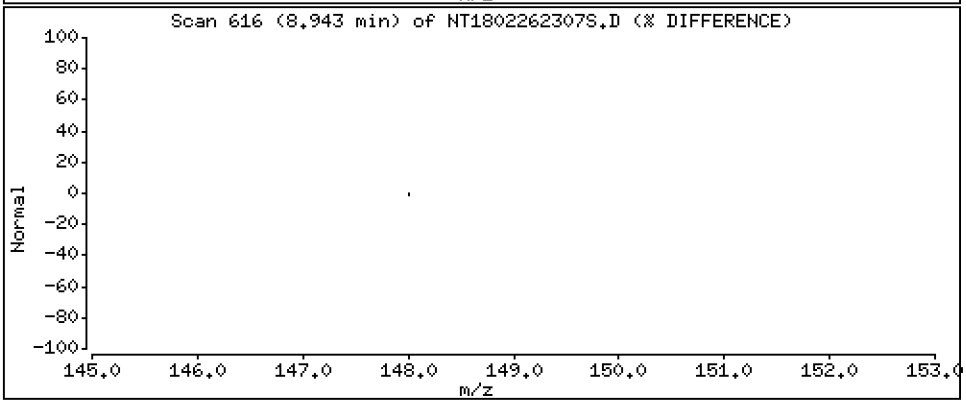












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

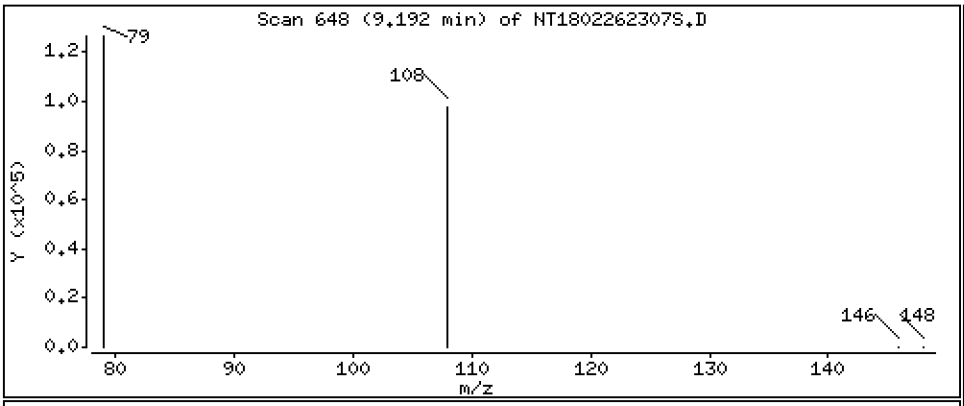
Operator: YZ

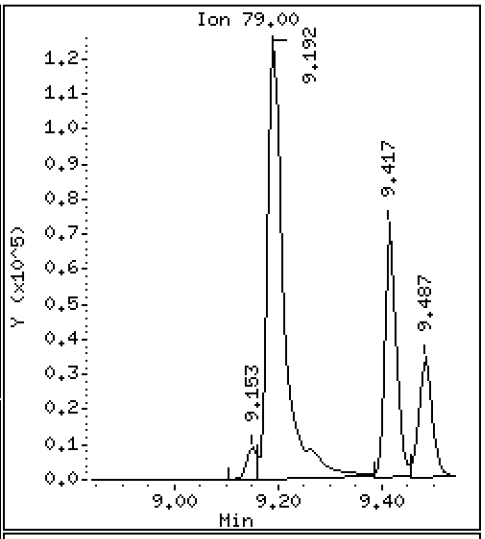
Column phase: ZB-5msi

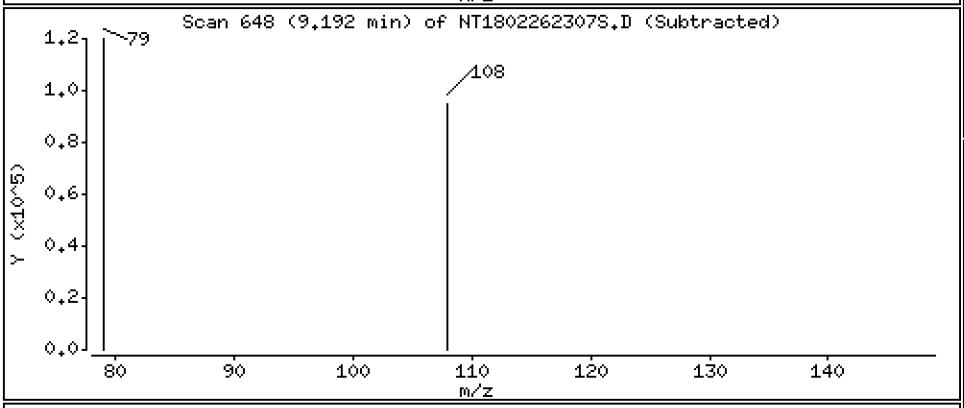
Column diameter: 0.25

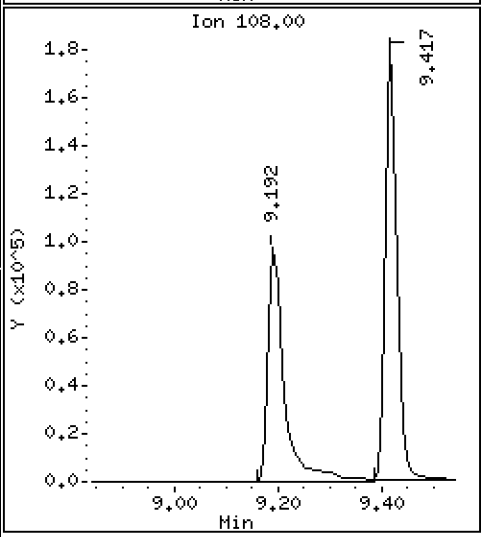
11 Benzyl alcohol

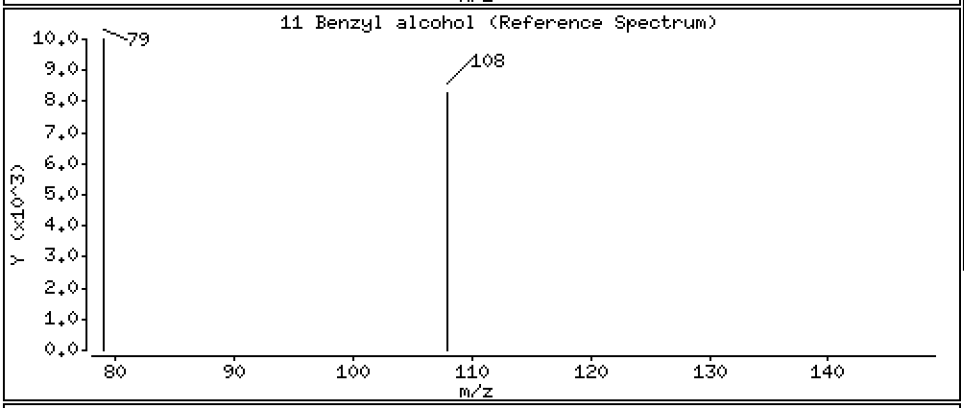
Concentration: 3.544 ug/mL

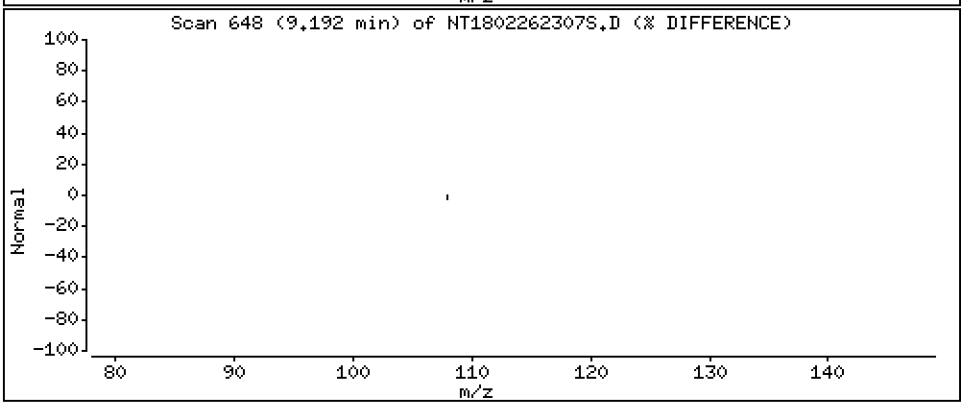












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262307S.D

Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

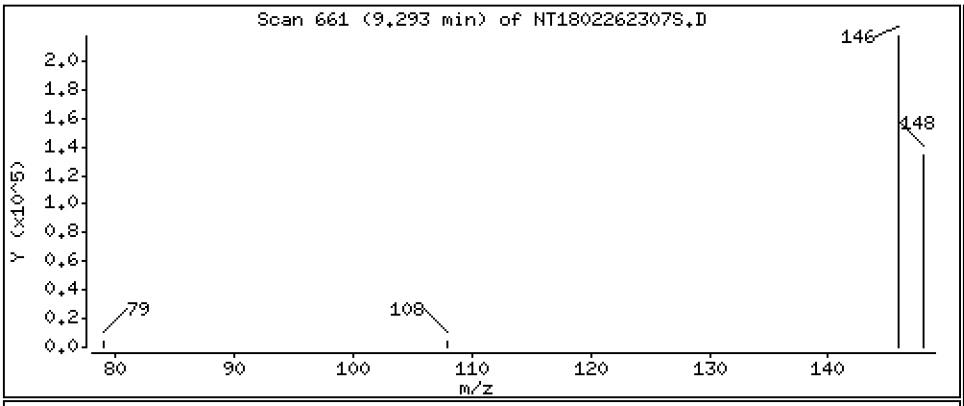
Operator: YZ

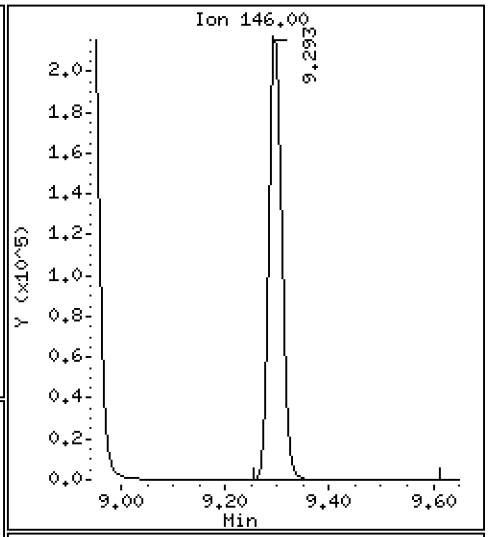
Column phase: ZB-5msi

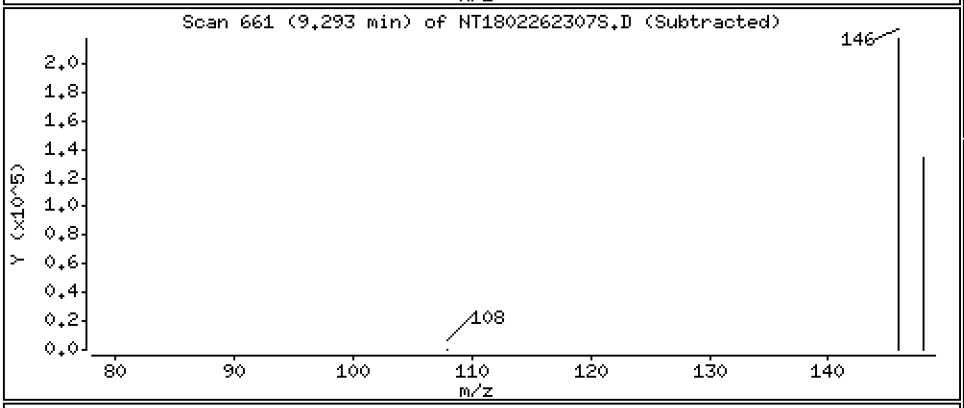
Column diameter: 0.25

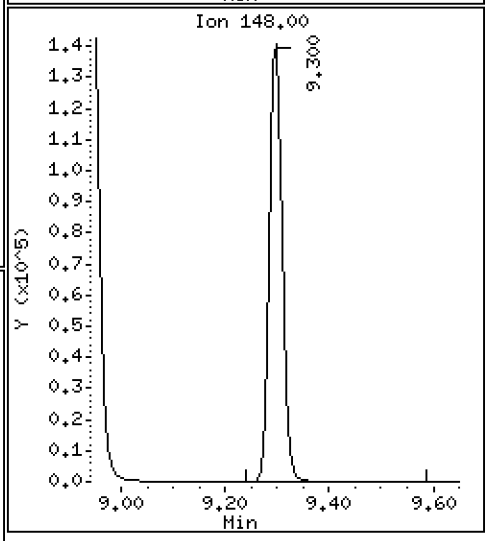
12 1,2-Dichlorobenzene

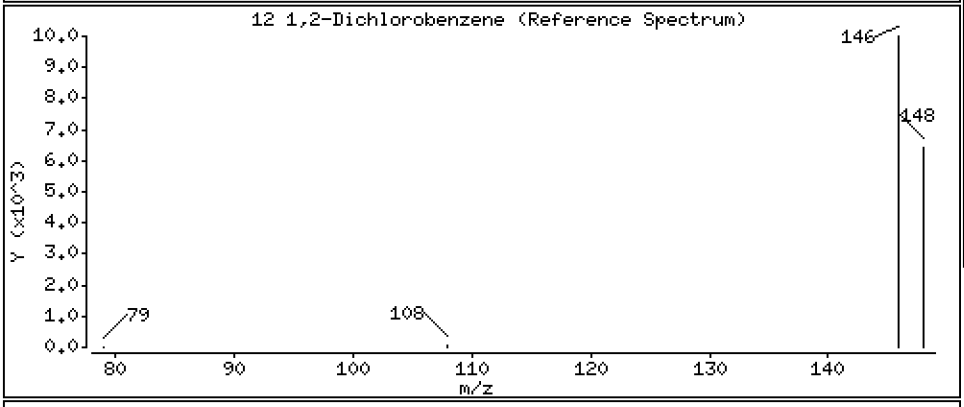
Concentration: 3.093 ug/mL

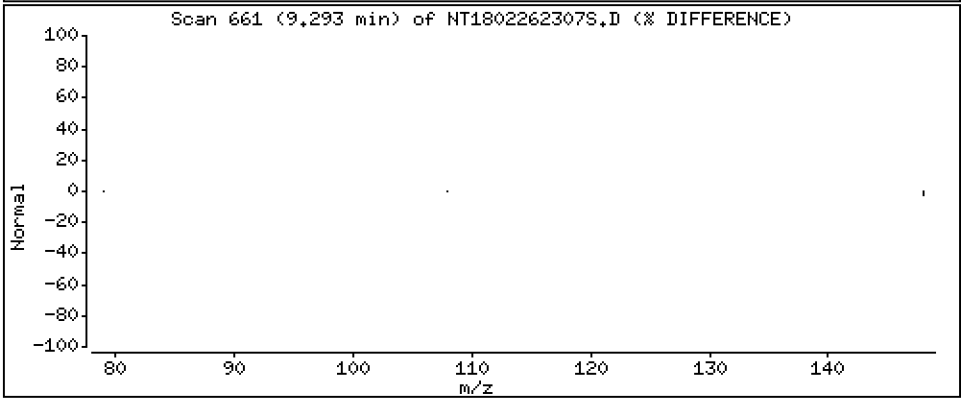












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262307S.D

Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

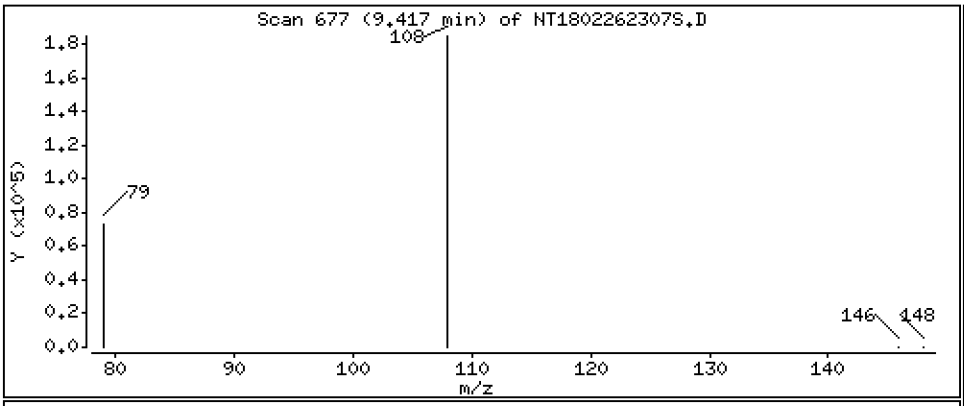
Operator: YZ

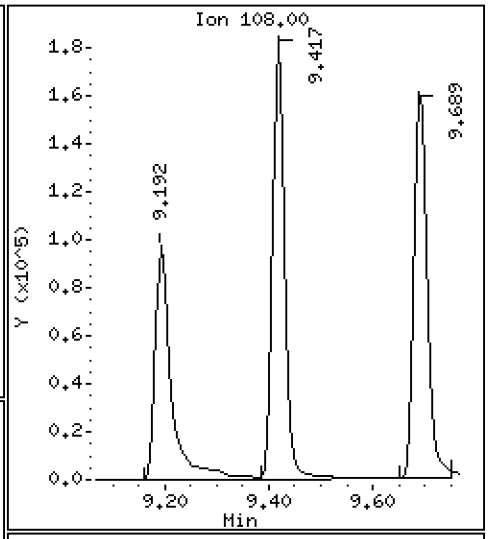
Column phase: ZB-5msi

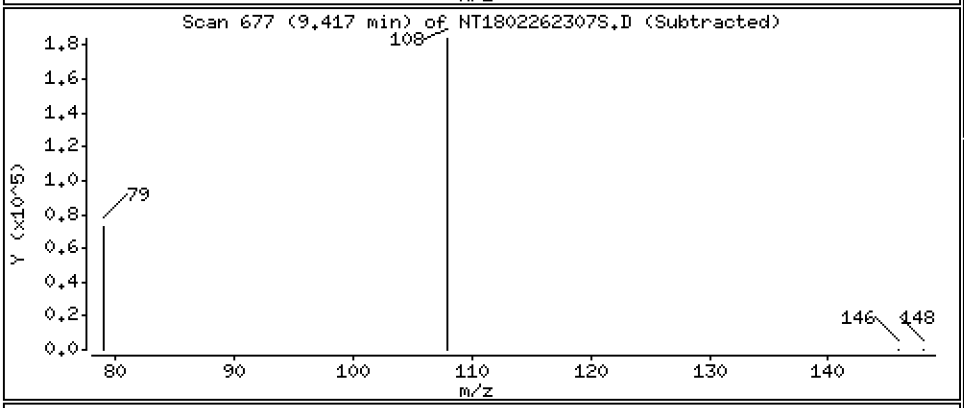
Column diameter: 0.25

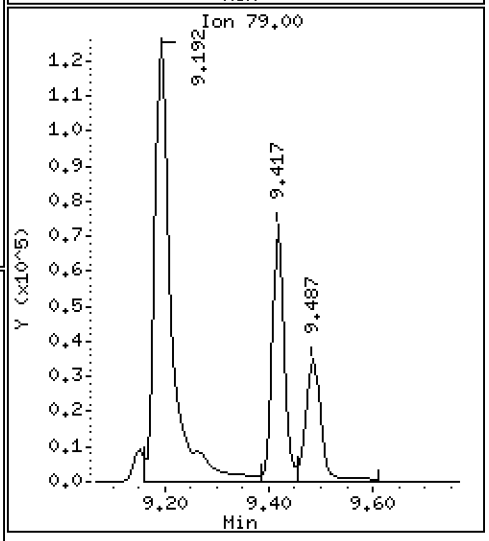
13 2-Methylphenol

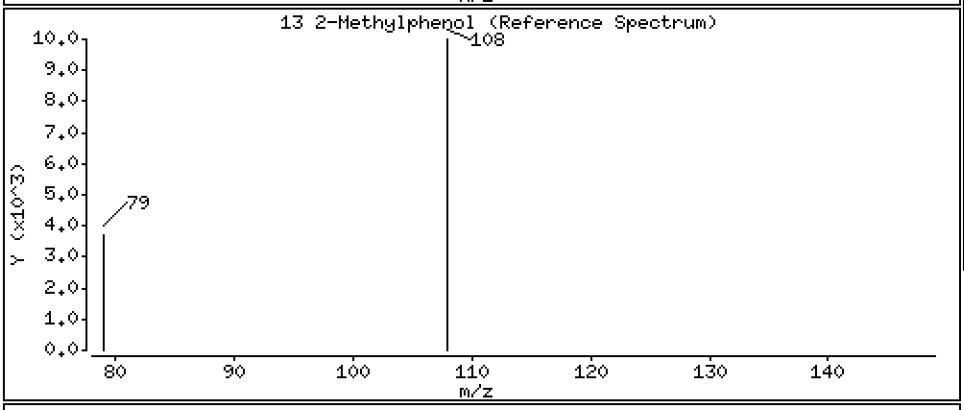
Concentration: 2.858 ug/mL

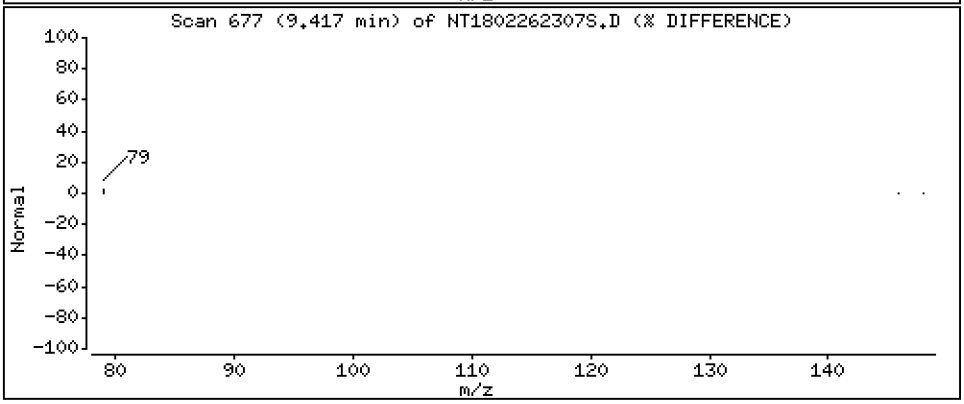












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262307S.D

Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

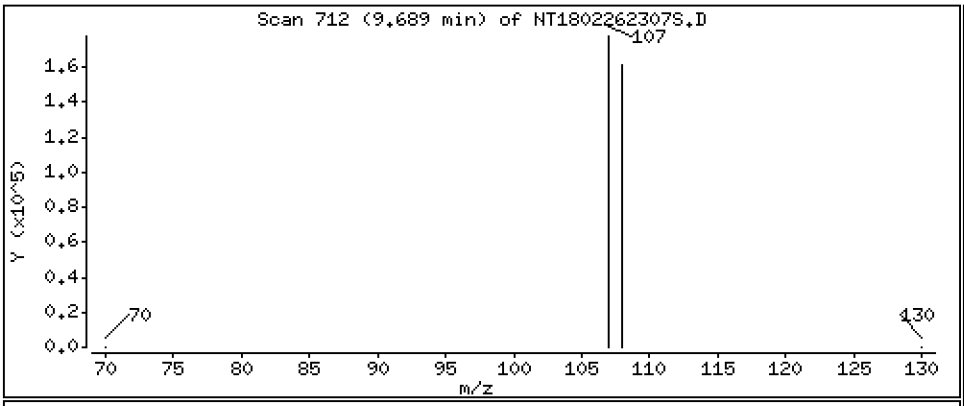
Operator: YZ

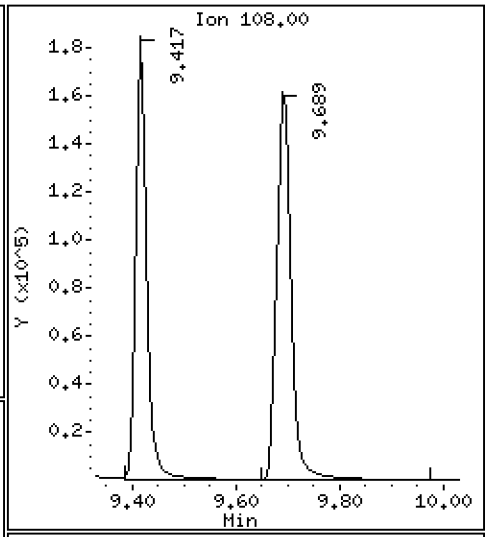
Column phase: ZB-5msi

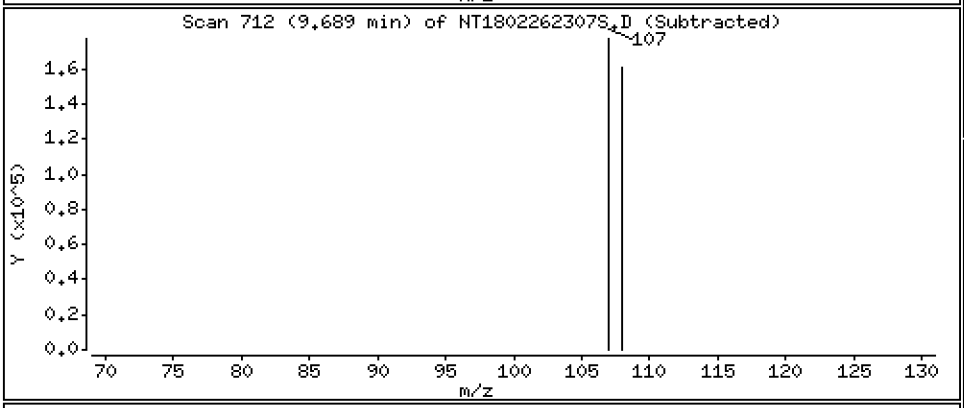
Column diameter: 0.25

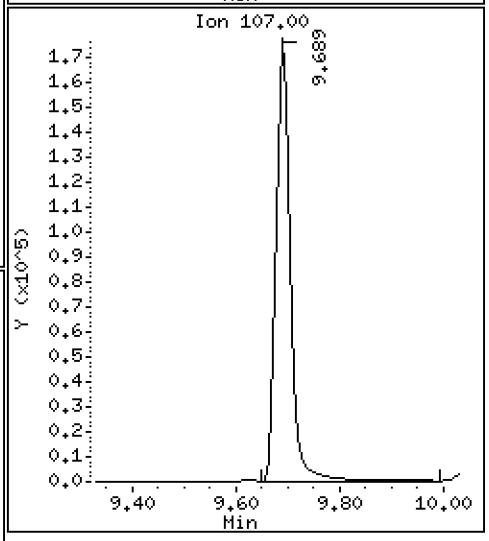
15 4-Methylphenol

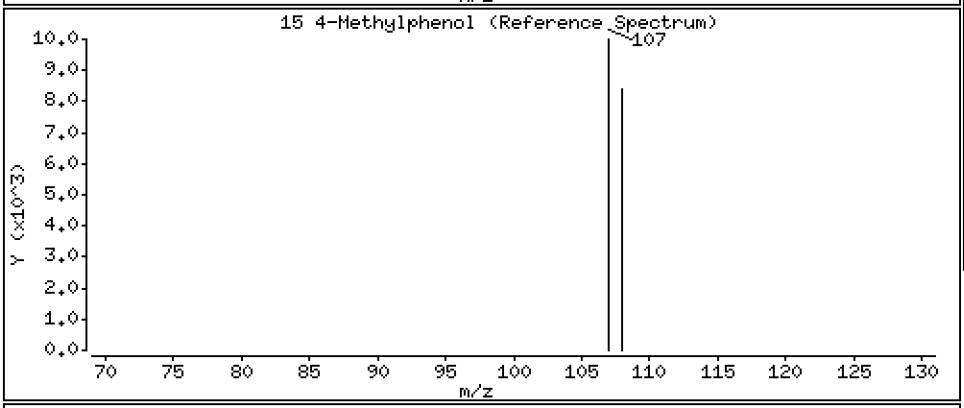
Concentration: 3.205 ug/mL

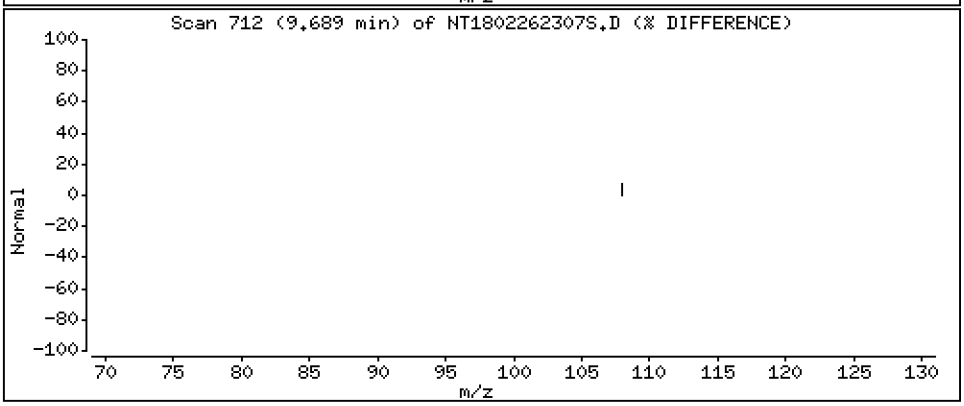












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

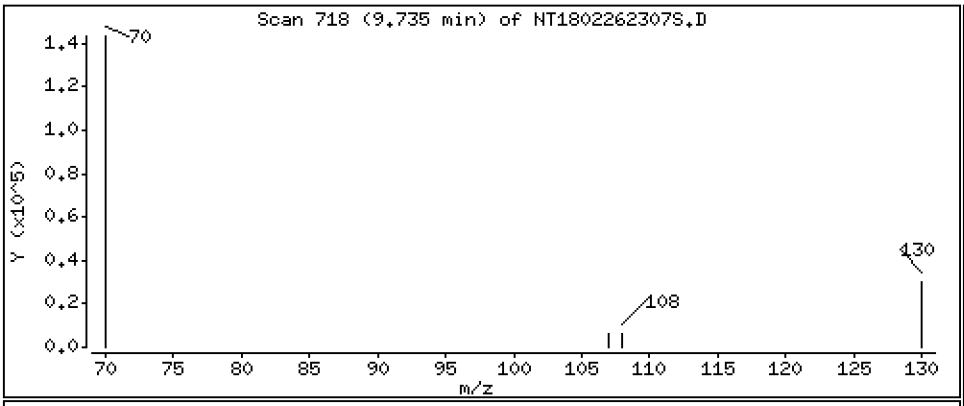
Operator: YZ

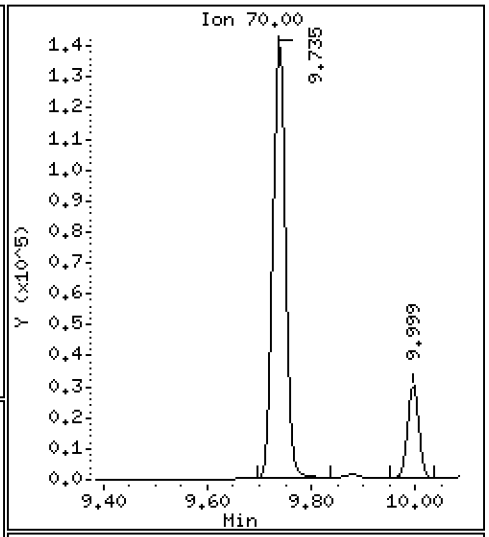
Column phase: ZB-5msi

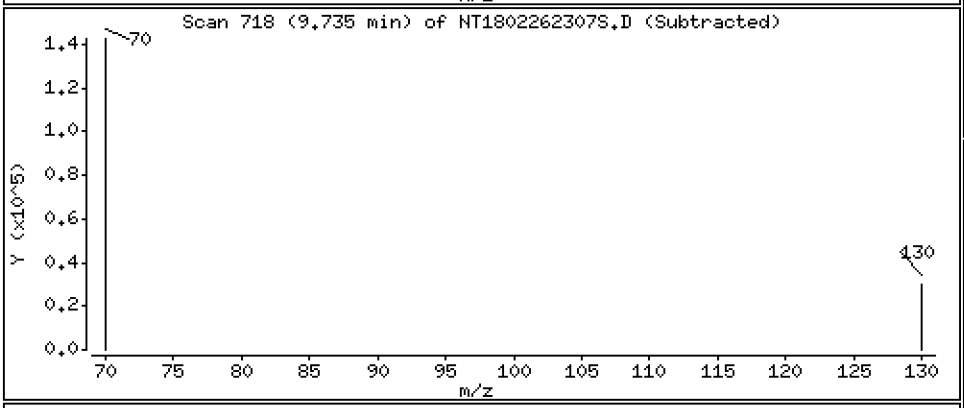
Column diameter: 0.25

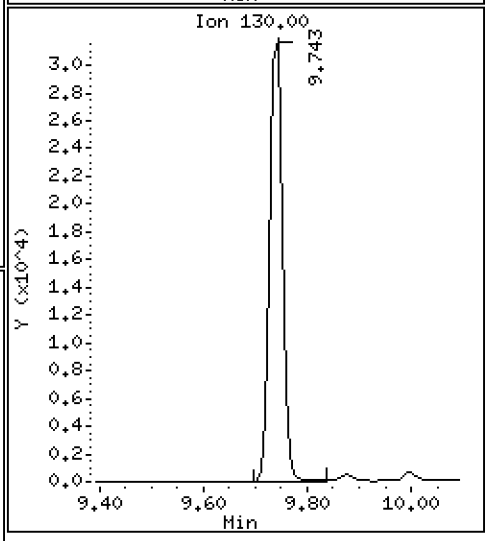
16 N-Nitroso-di-n-propylamine

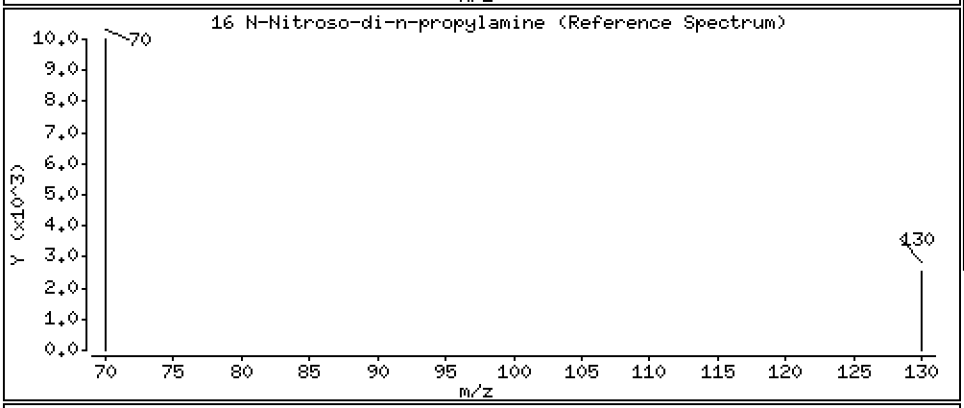
Concentration: 3.450 ug/mL

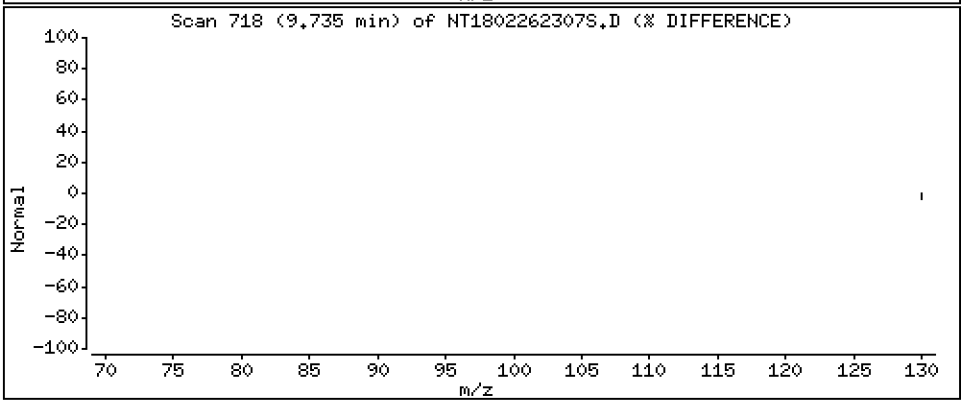












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

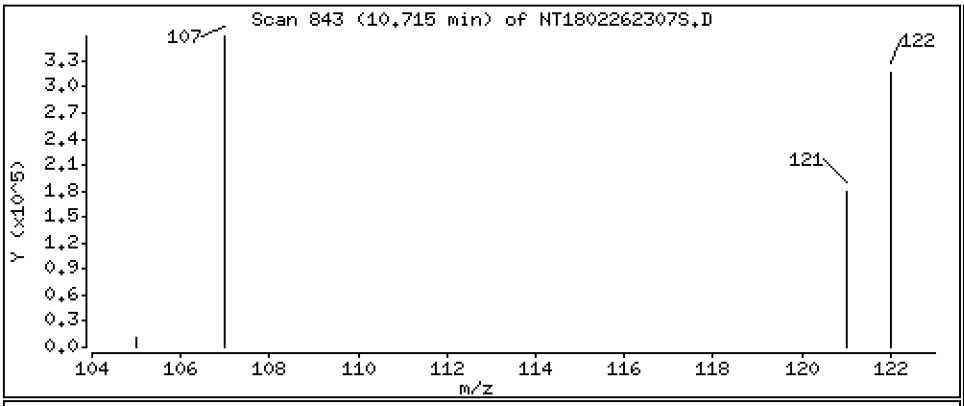
Operator: YZ

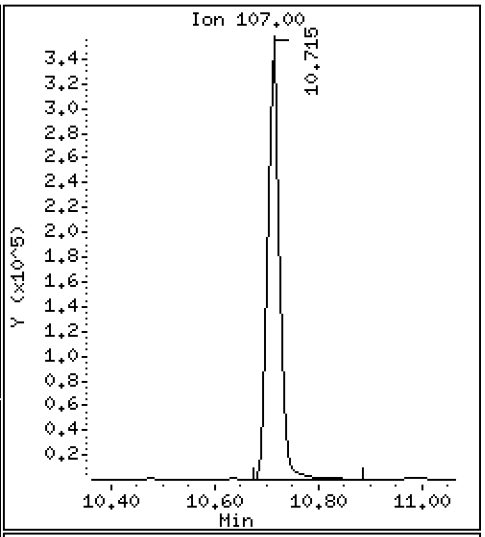
Column phase: ZB-5msi

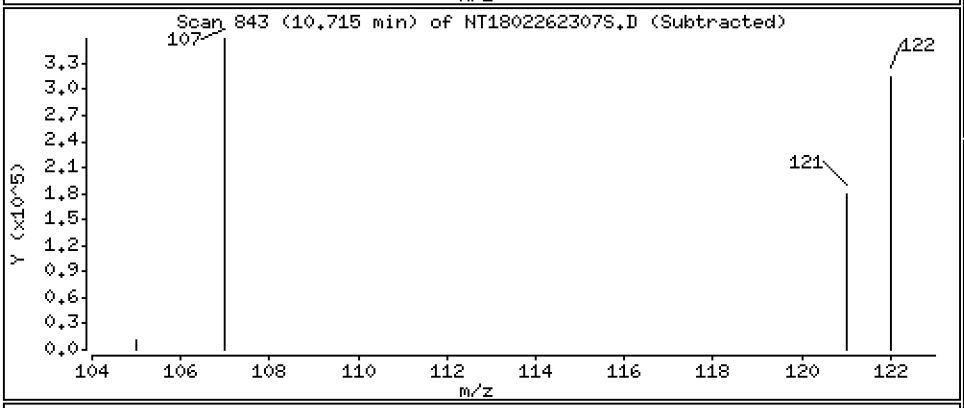
Column diameter: 0.25

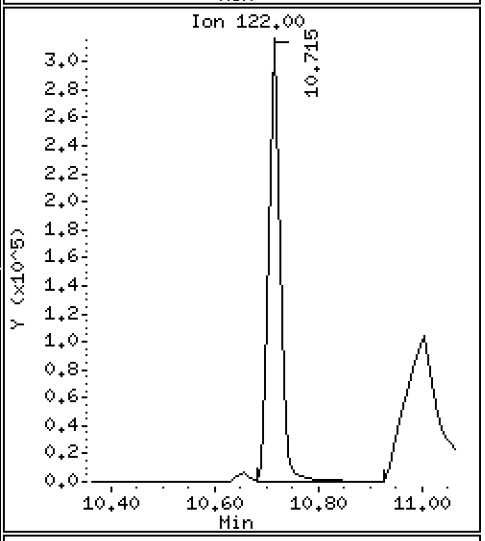
22 2,4-Dimethylphenol

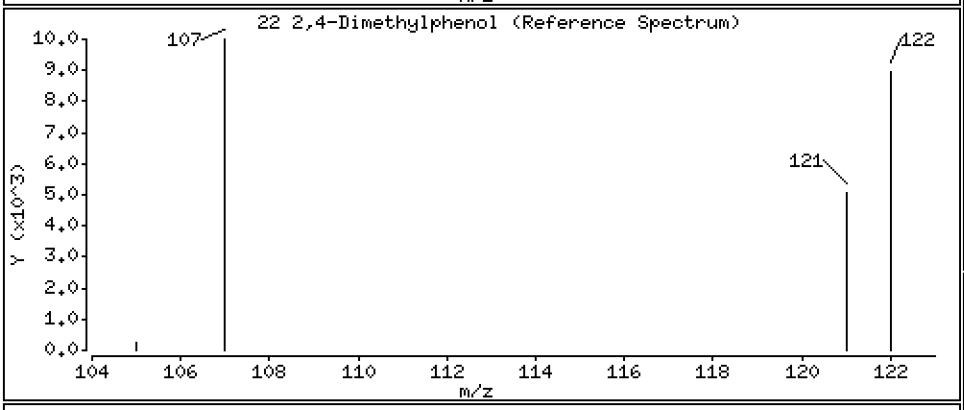
Concentration: 5.858 ug/mL

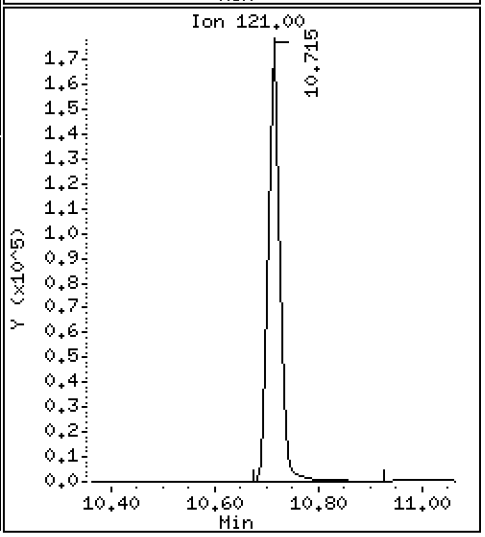


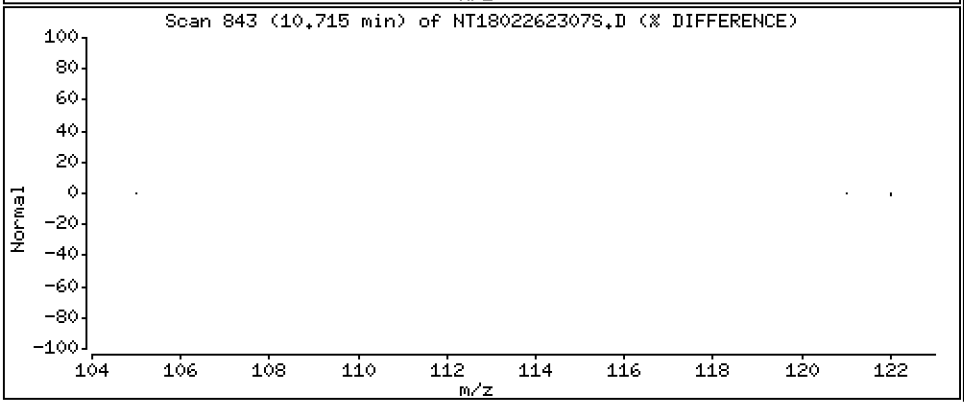












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

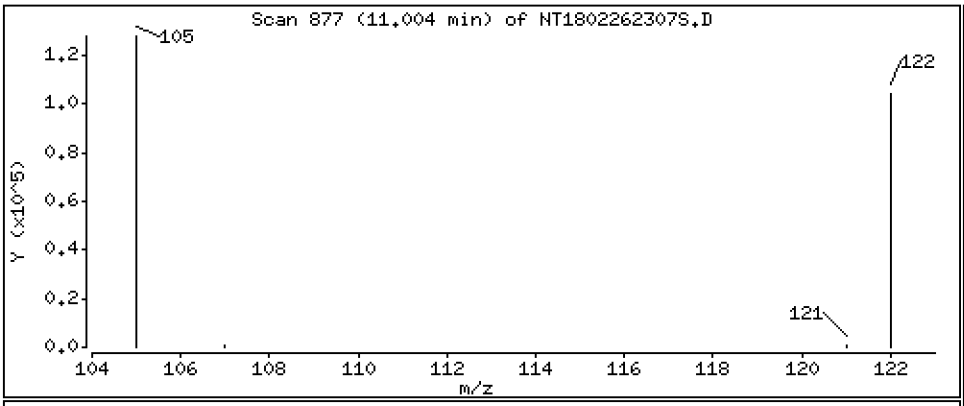
Operator: YZ

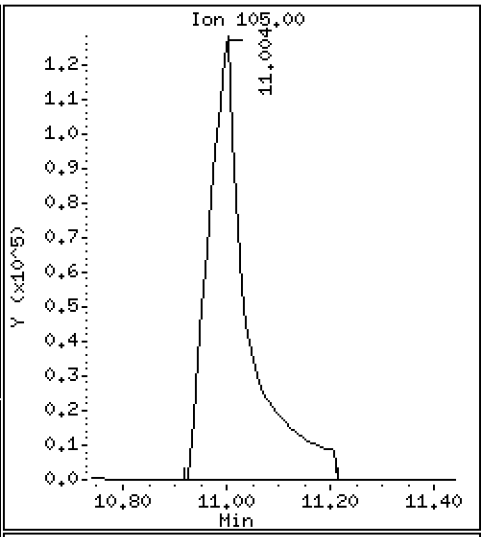
Column phase: ZB-5msi

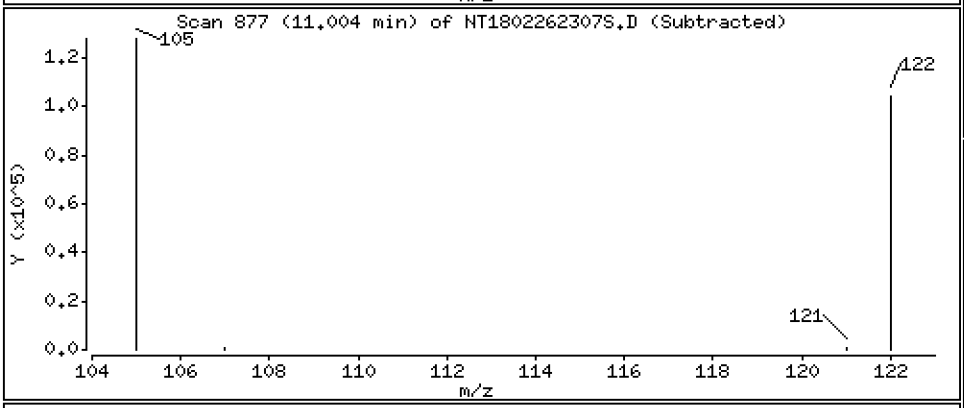
Column diameter: 0.25

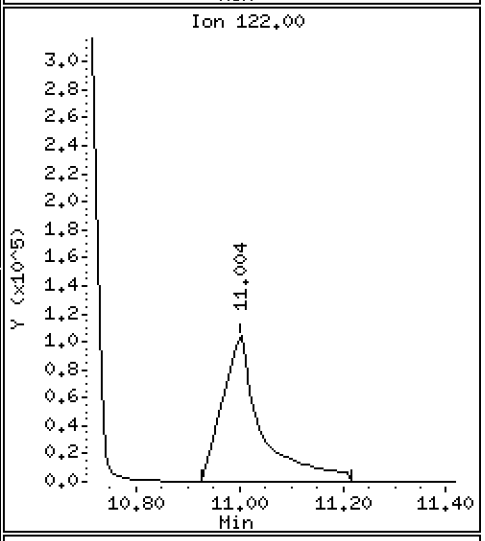
24 Benzoic acid

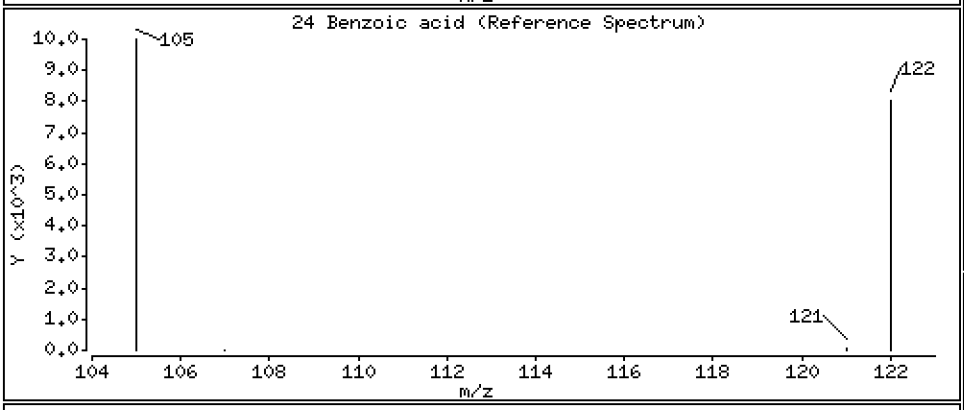
Concentration: 16.71 ug/mL

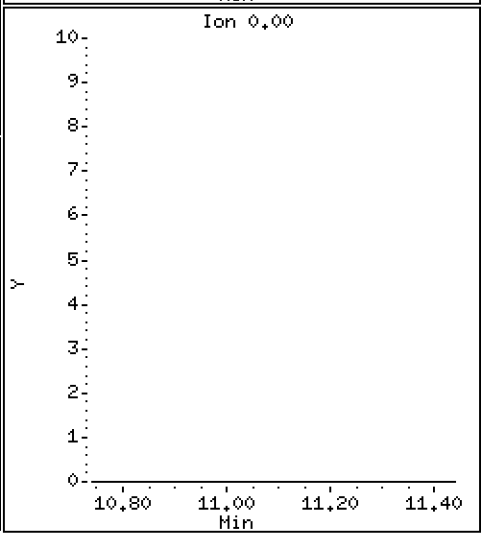


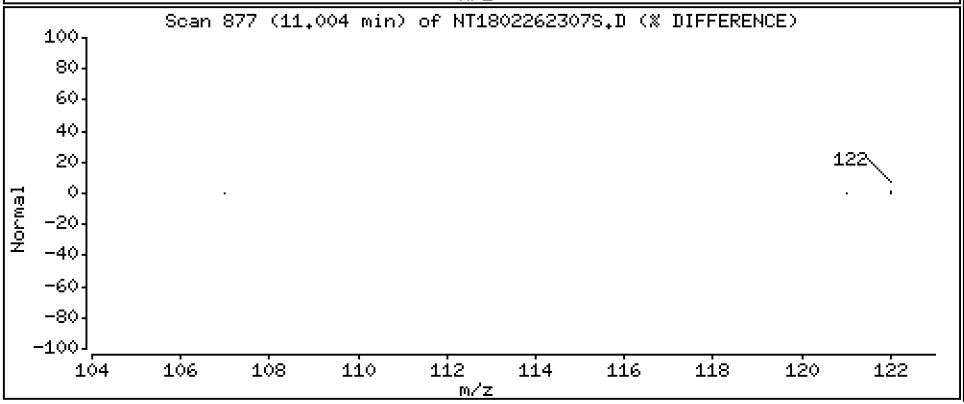












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

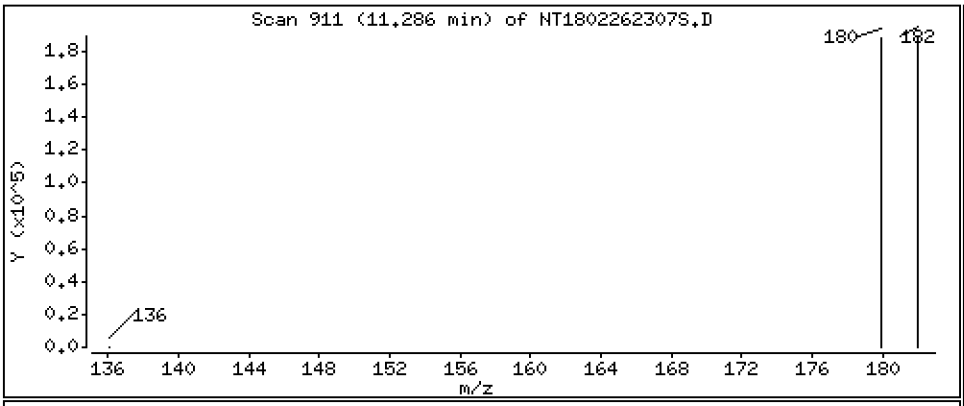
Operator: YZ

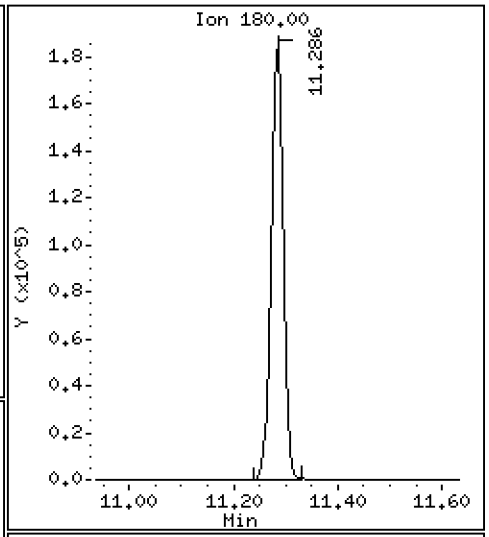
Column phase: ZB-5msi

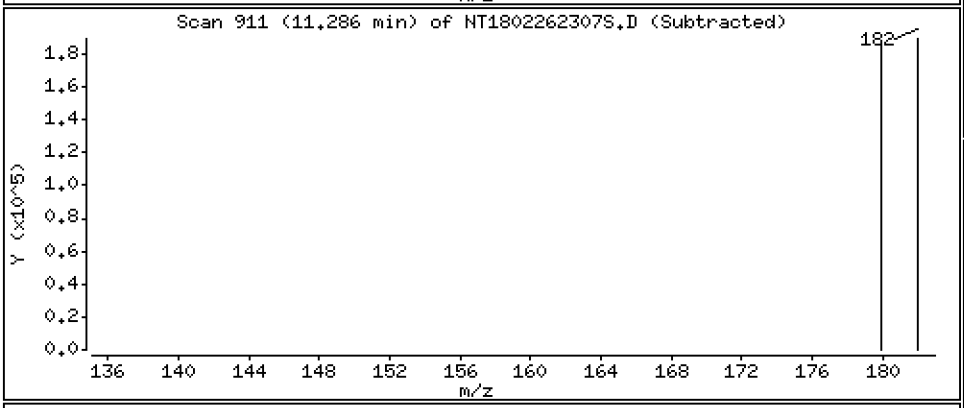
Column diameter: 0.25

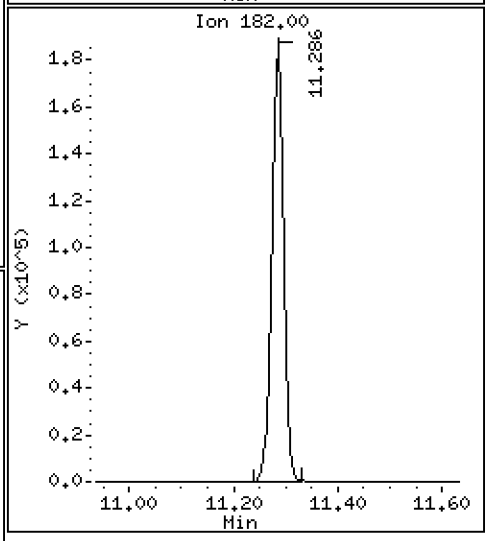
26 1,2,4-Trichlorobenzene

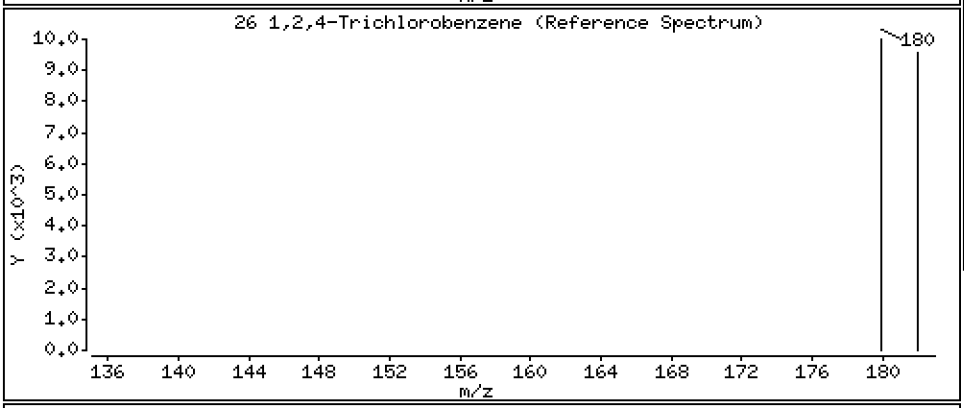
Concentration: 3.175 ug/mL

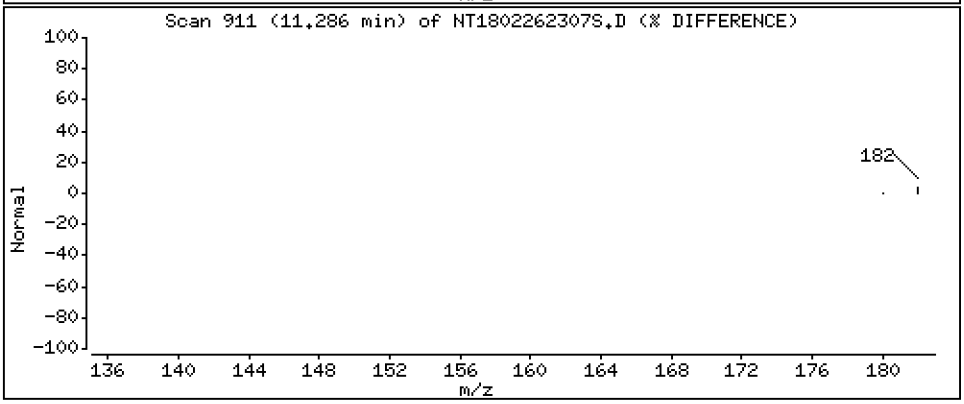












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262307S.D

Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

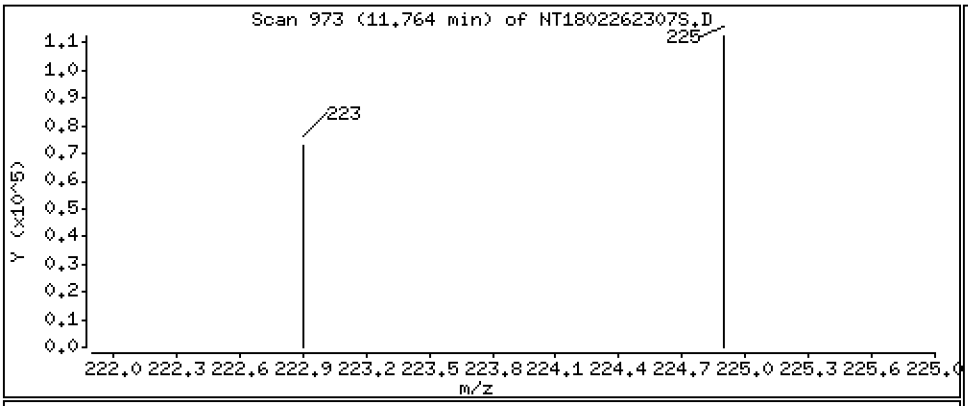
Operator: YZ

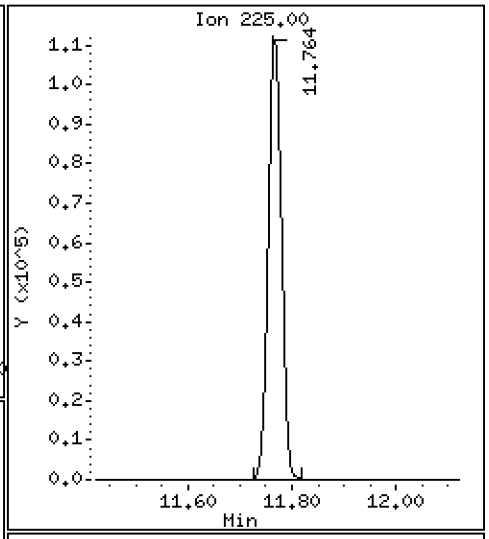
Column phase: ZB-5msi

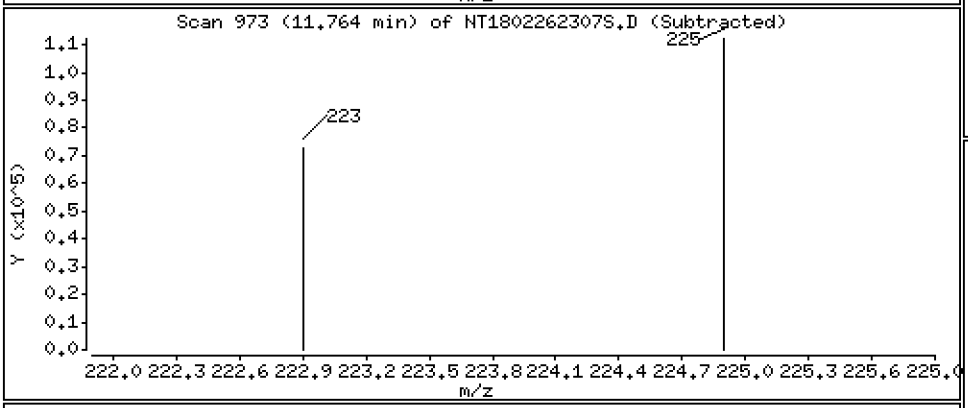
Column diameter: 0.25

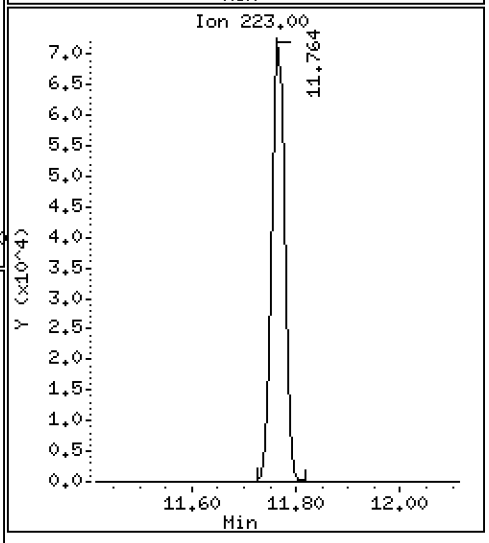
30 Hexachlorobutadiene

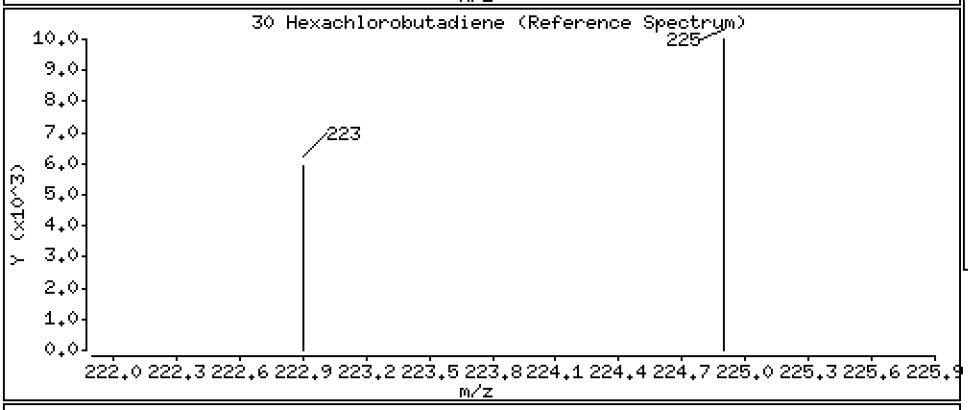
Concentration: 3.220 ug/mL

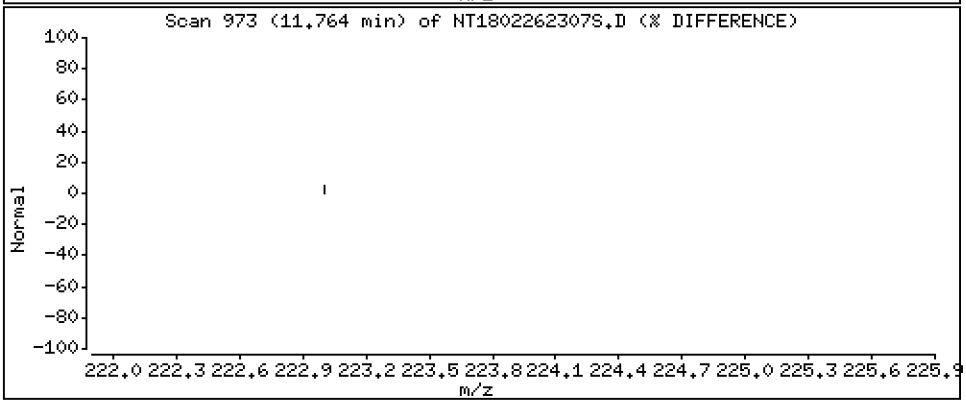












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262307S.D

Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

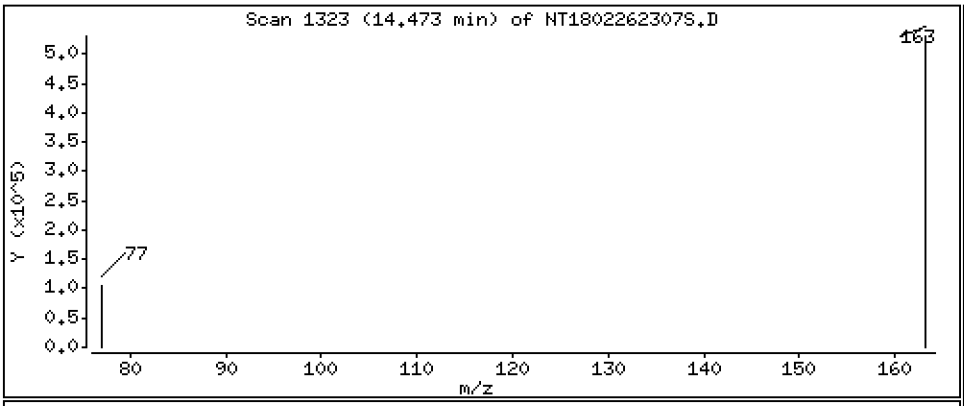
Operator: YZ

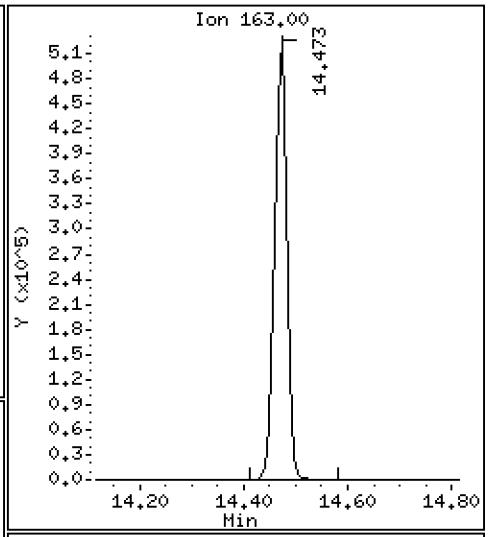
Column phase: ZB-5msi

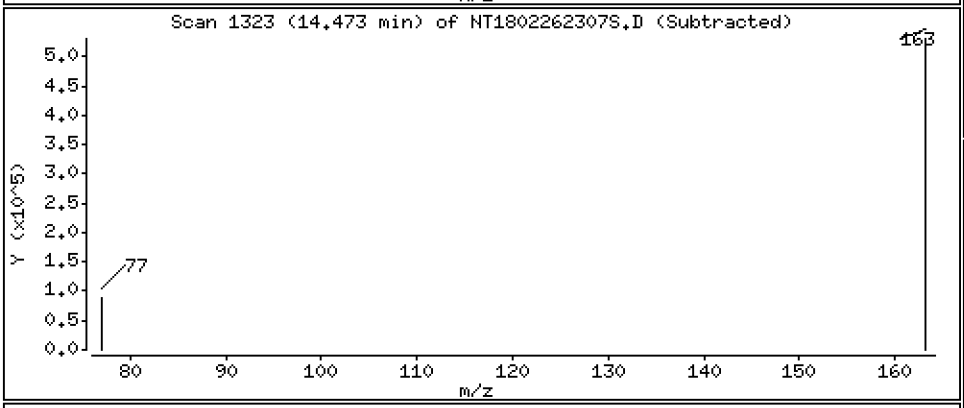
Column diameter: 0.25

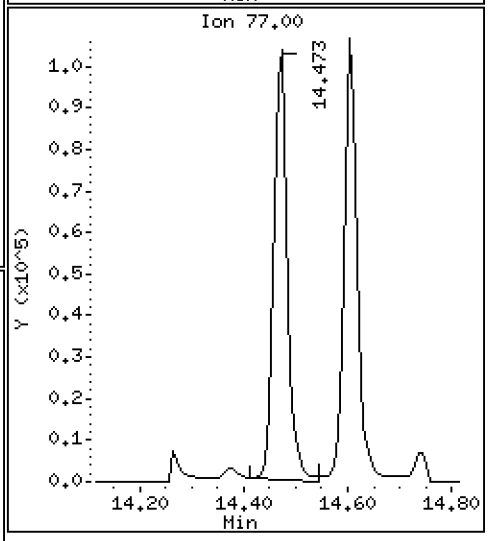
39 Dimethylphthalate

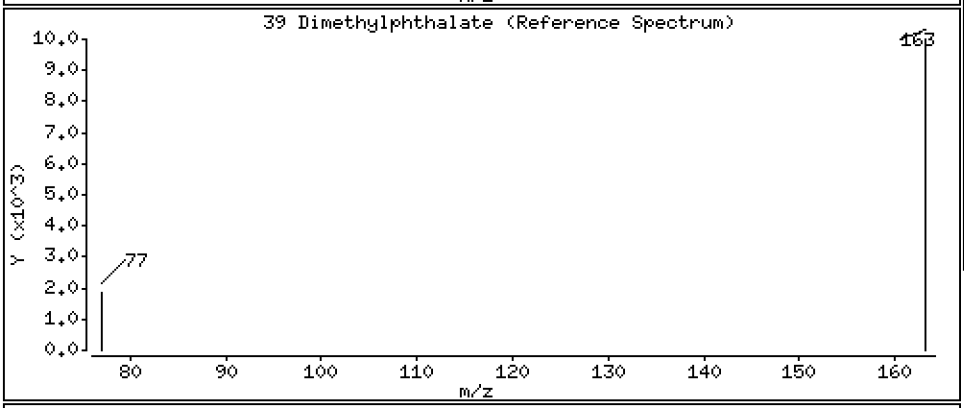
Concentration: 3.998 ug/mL

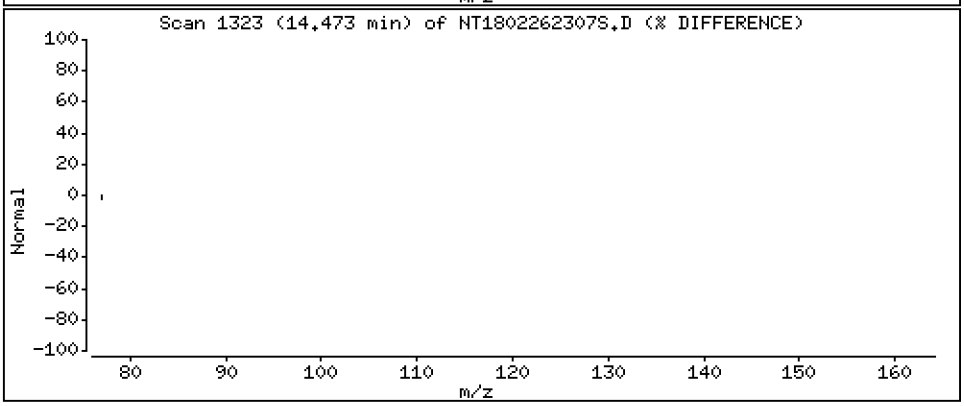












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

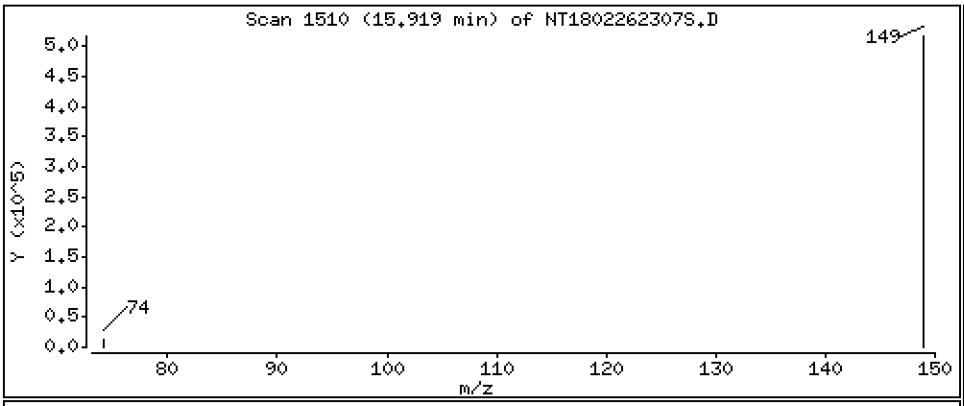
Operator: YZ

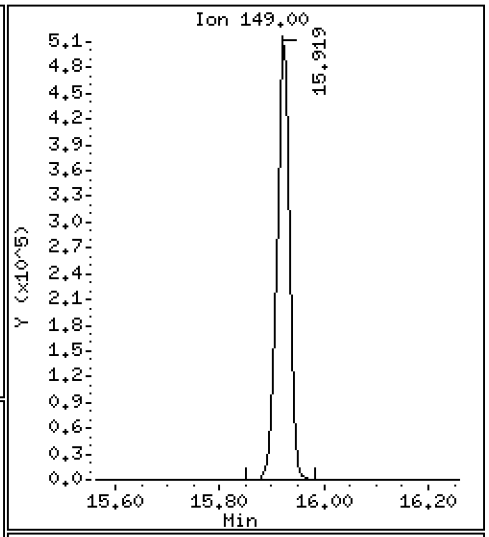
Column phase: ZB-5msi

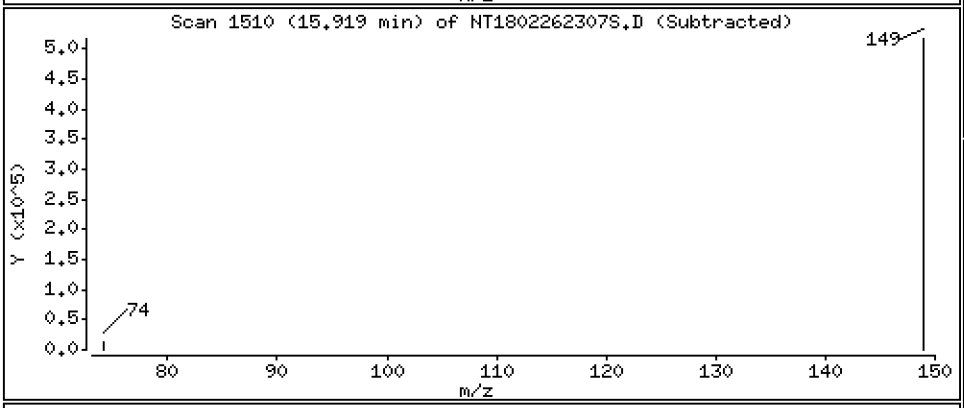
Column diameter: 0.25

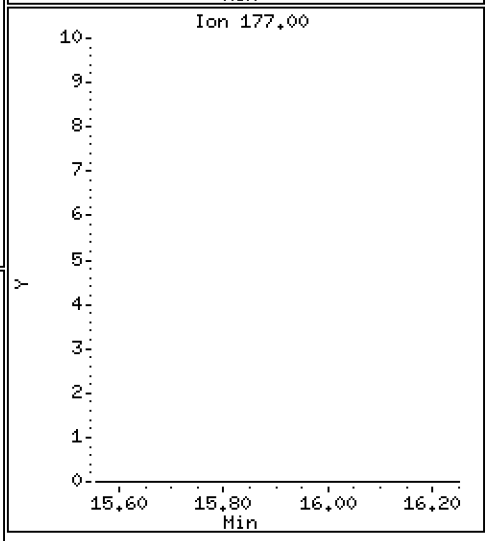
50 Diethylphthalate

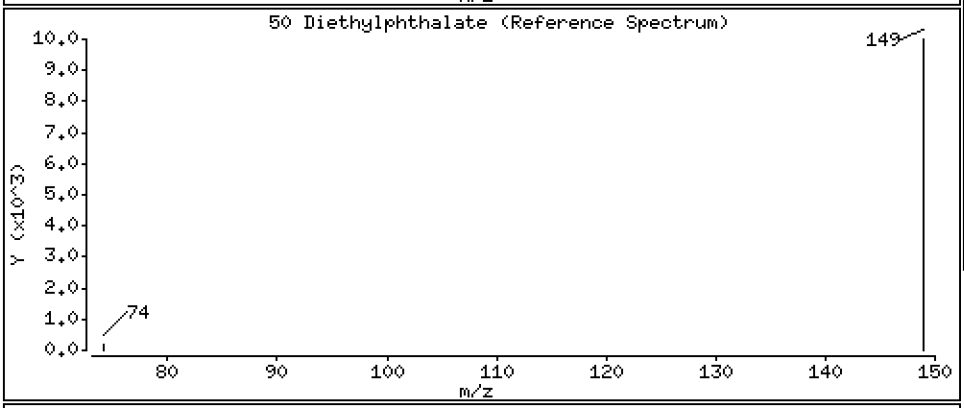
Concentration: 4.524 ug/mL

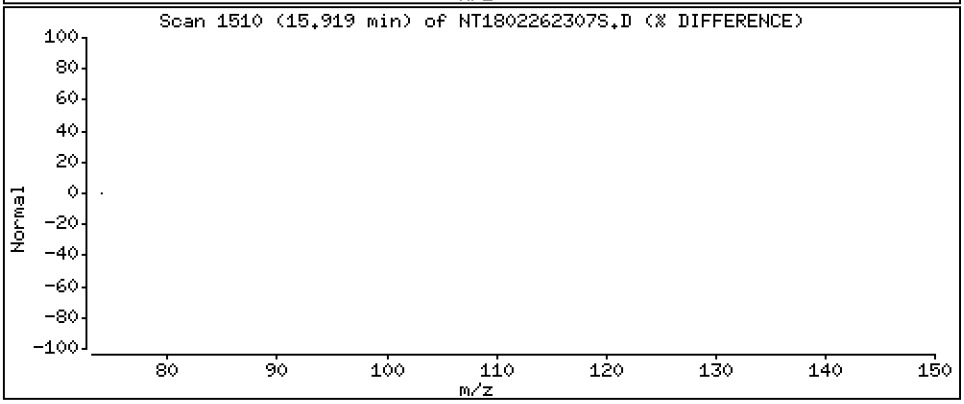












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

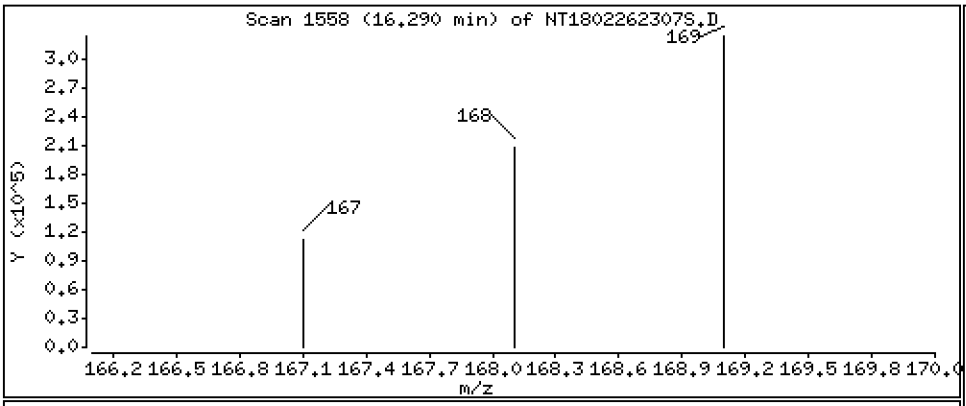
Operator: YZ

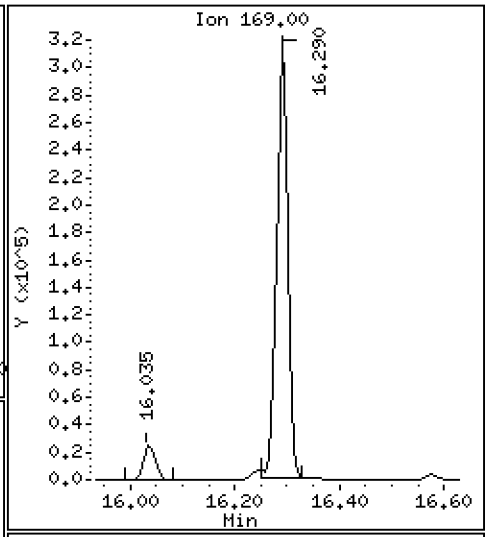
Column phase: ZB-5msi

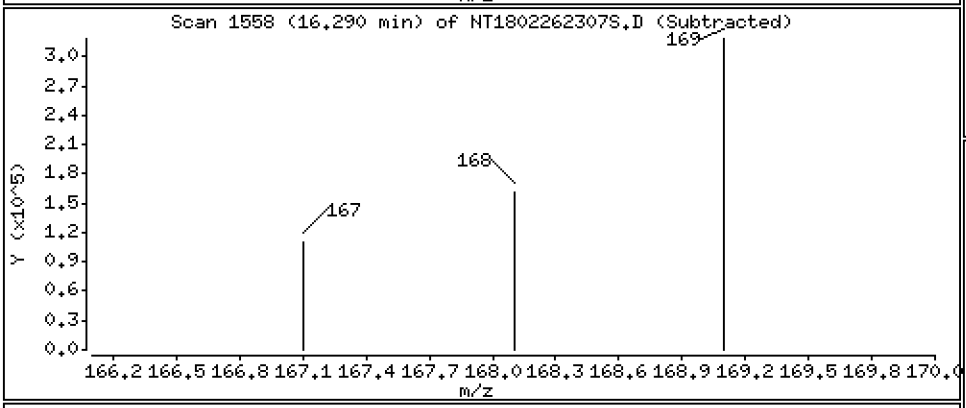
Column diameter: 0.25

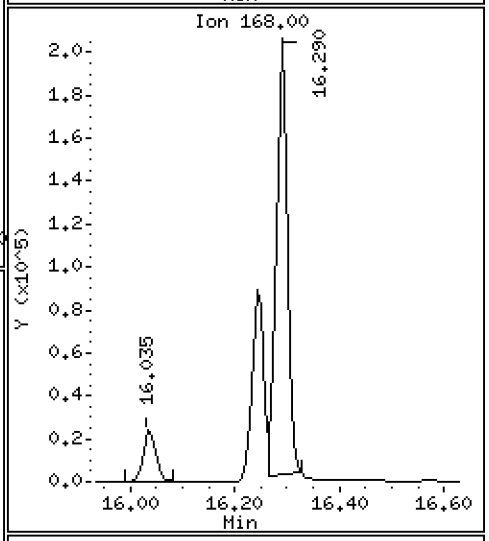
54 N-Nitrosodiphenylamine

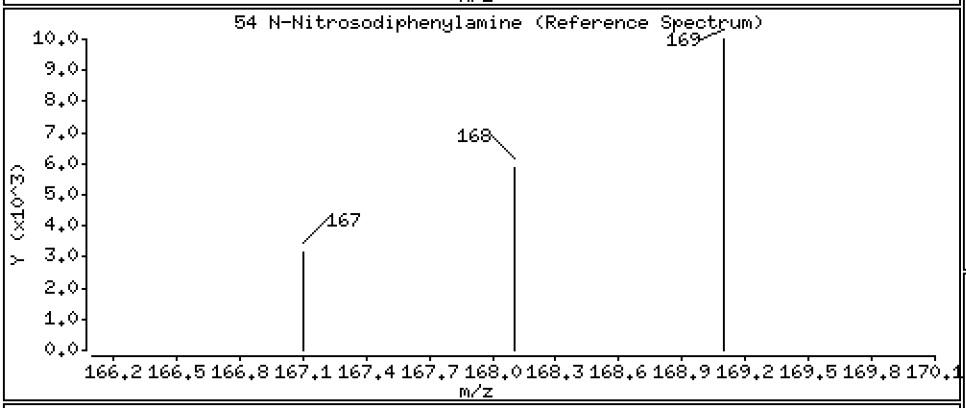
Concentration: 3.161 ug/mL

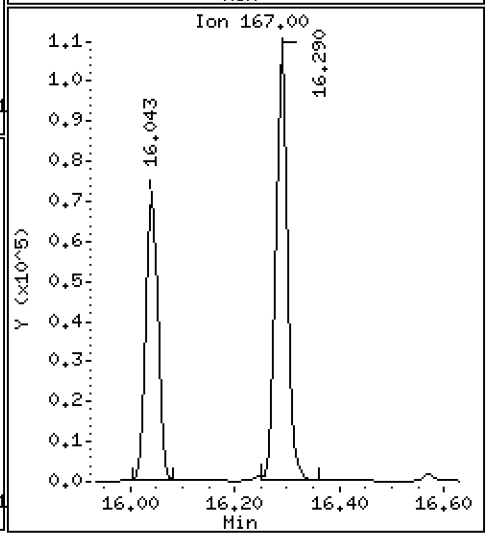


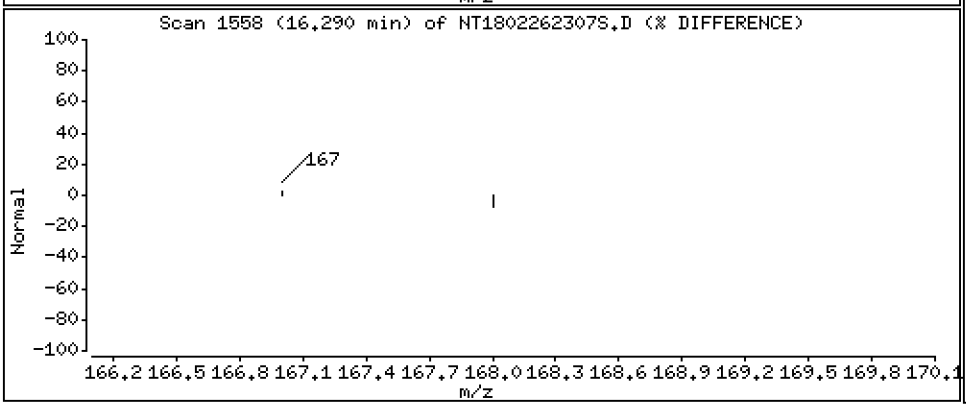












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

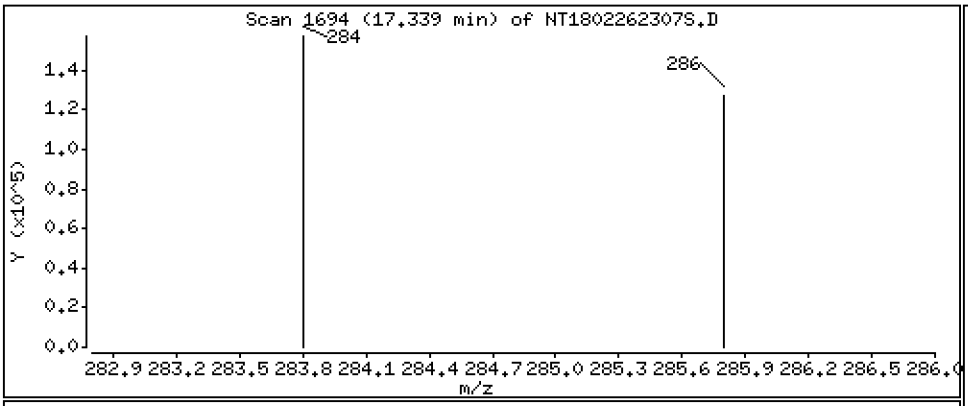
Operator: YZ

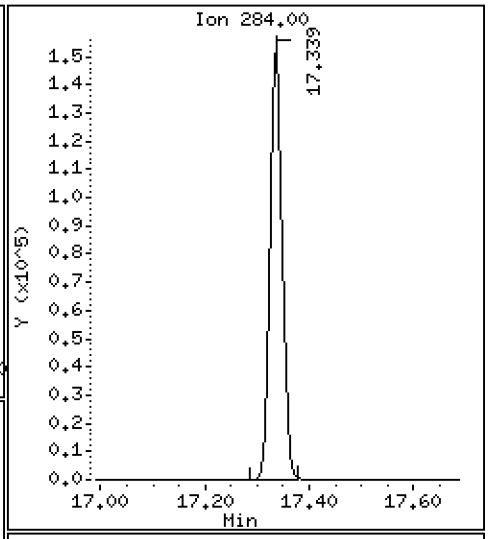
Column phase: ZB-5msi

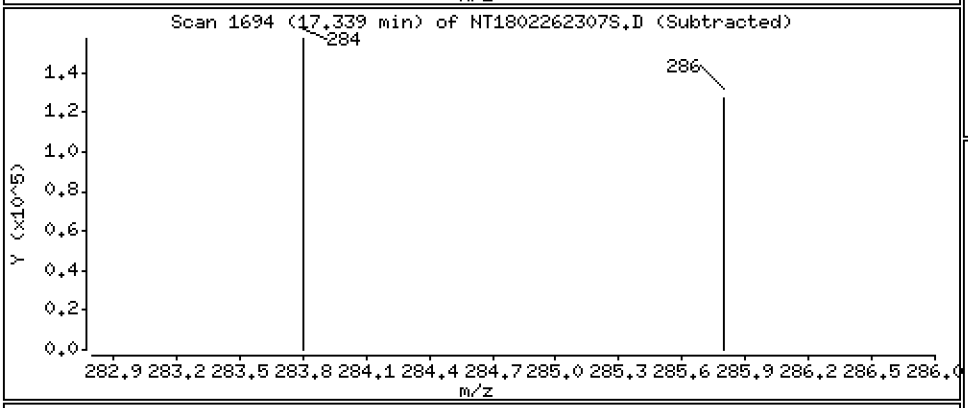
Column diameter: 0.25

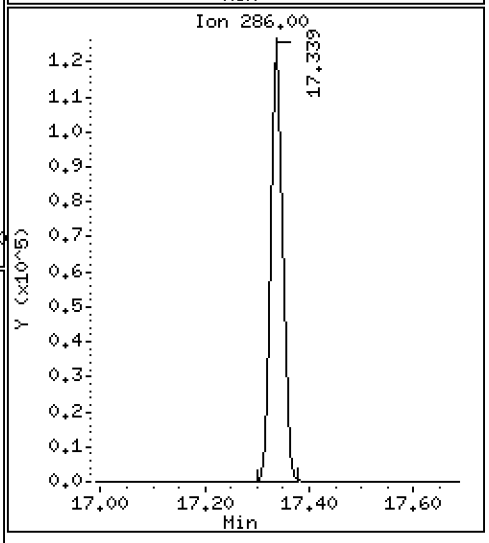
57 Hexachlorobenzene

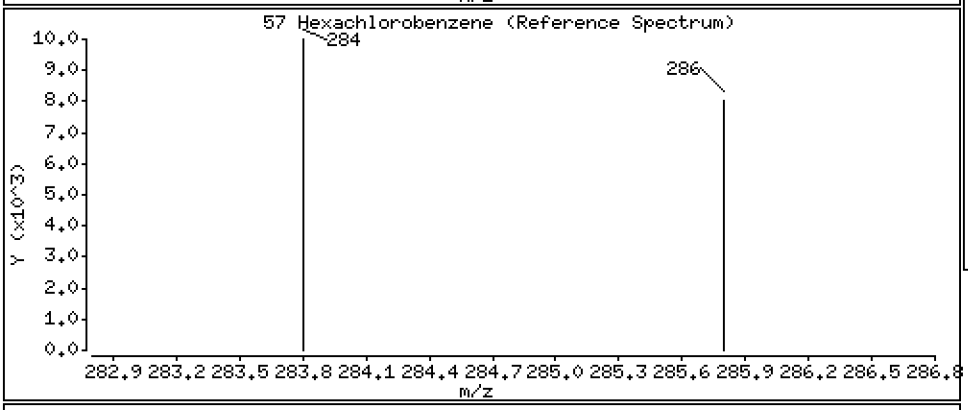
Concentration: 3.540 ug/mL

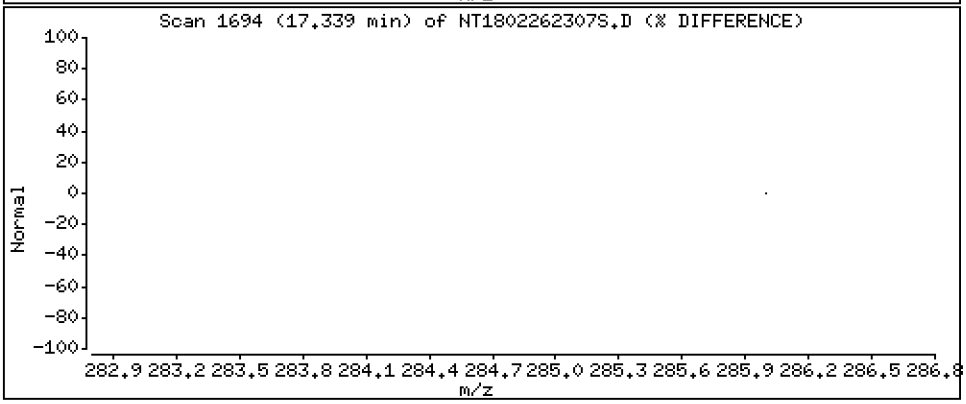












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

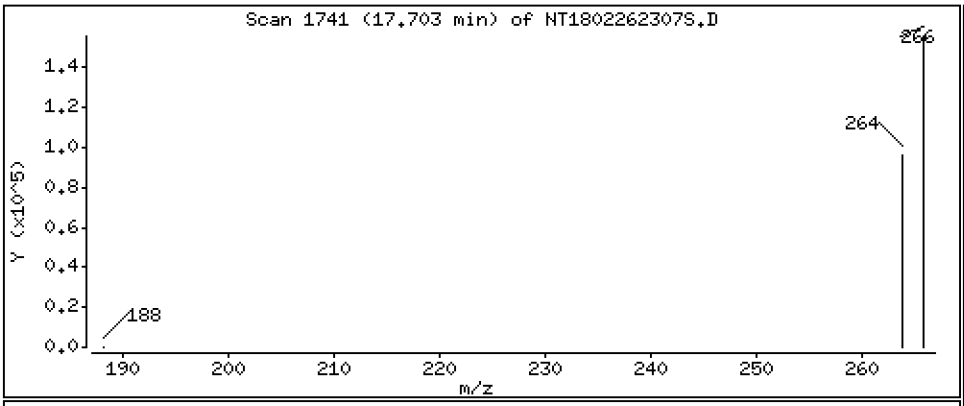
Operator: YZ

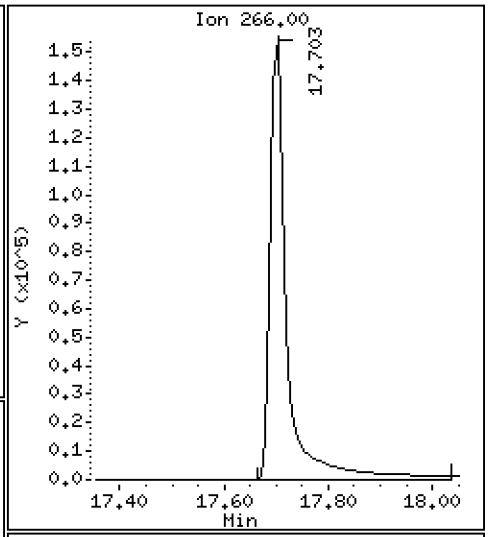
Column phase: ZB-5msi

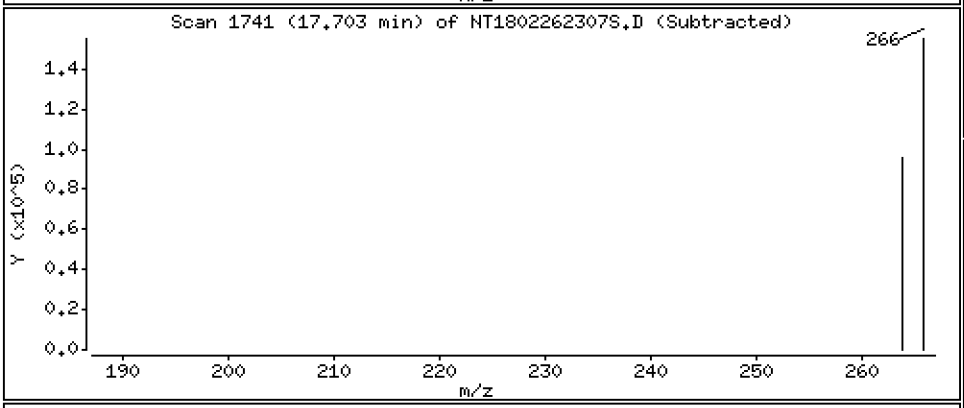
Column diameter: 0.25

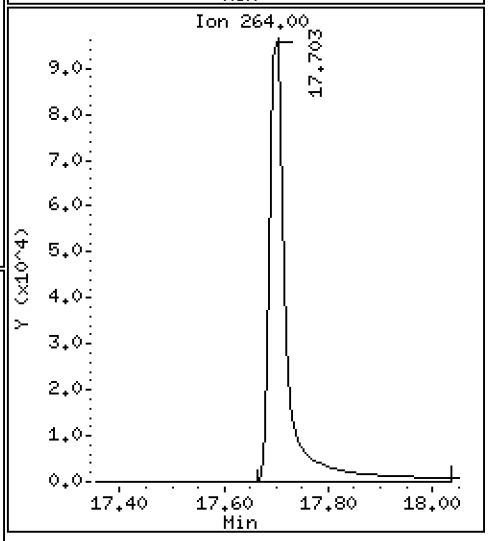
58 Pentachlorophenol

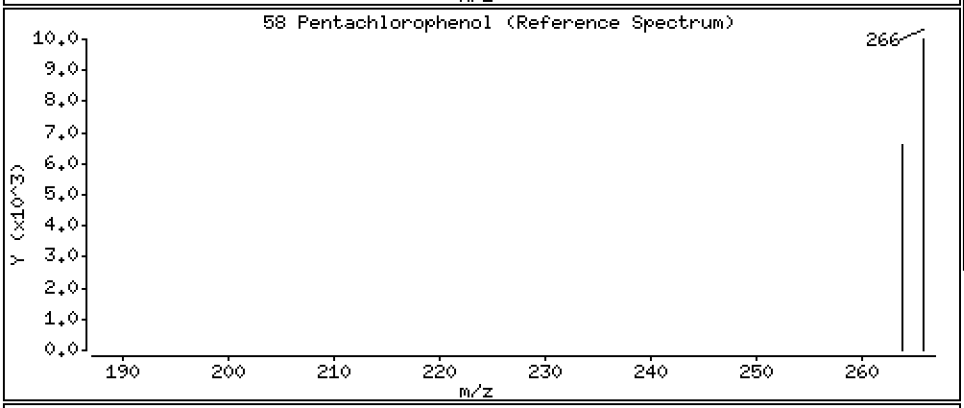
Concentration: 14.72 ug/mL

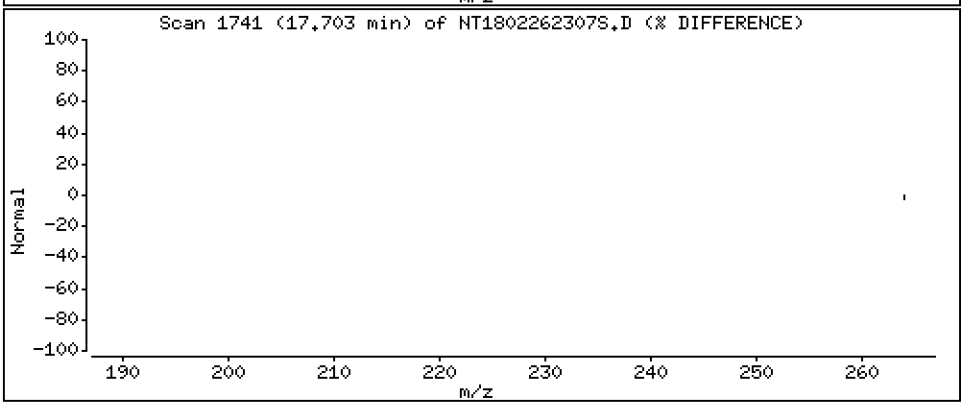












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

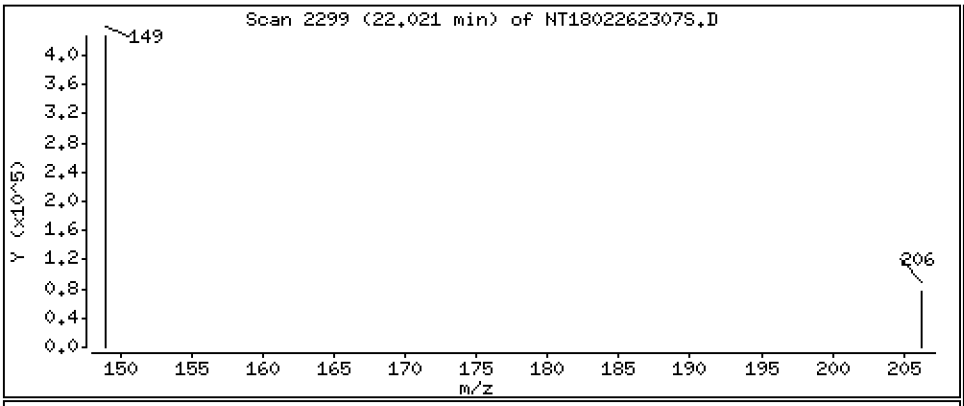
Operator: YZ

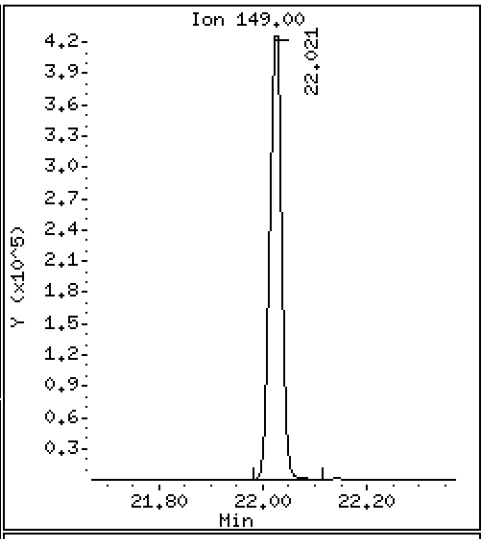
Column phase: ZB-5msi

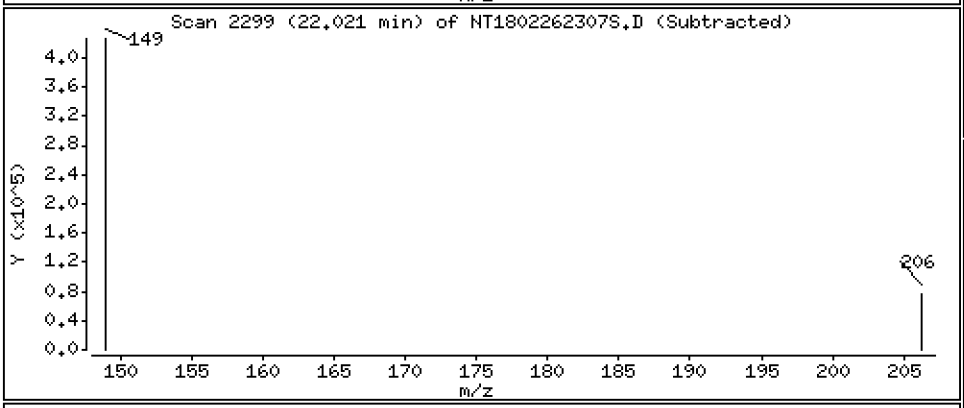
Column diameter: 0.25

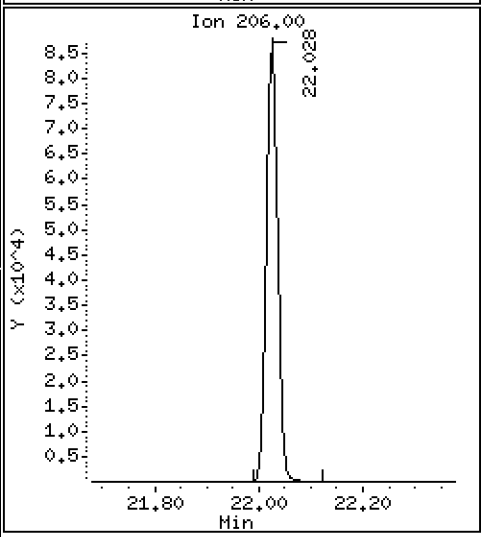
67 Butylbenzylphthalate

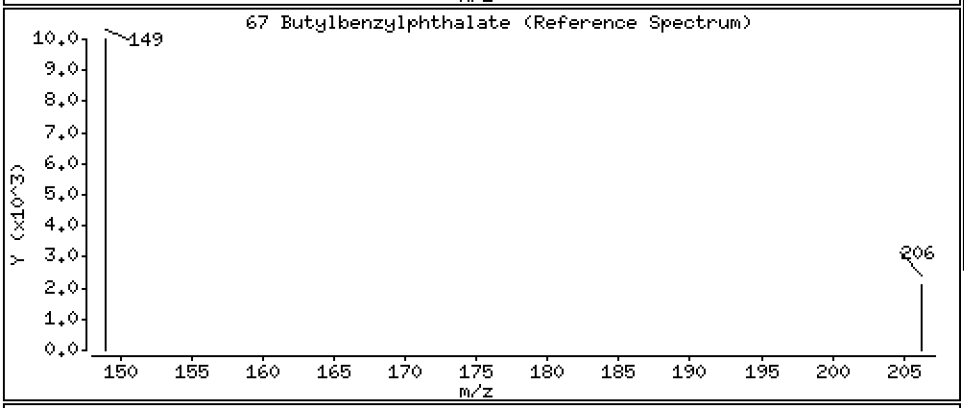
Concentration: 4.409 ug/mL

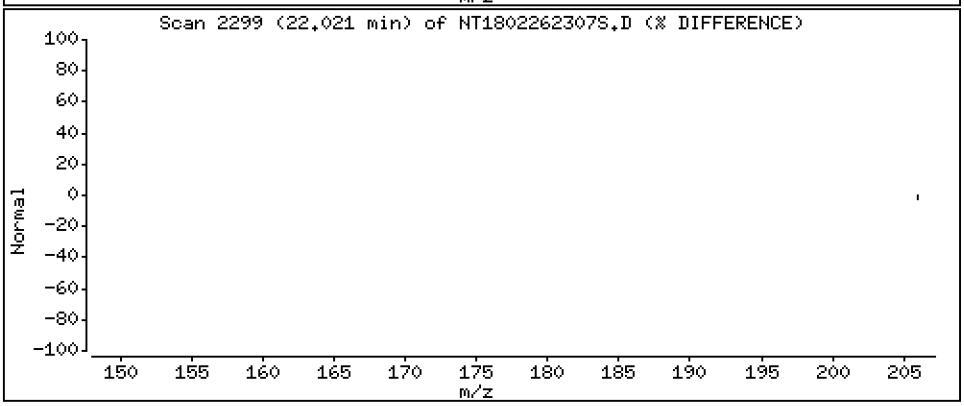












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

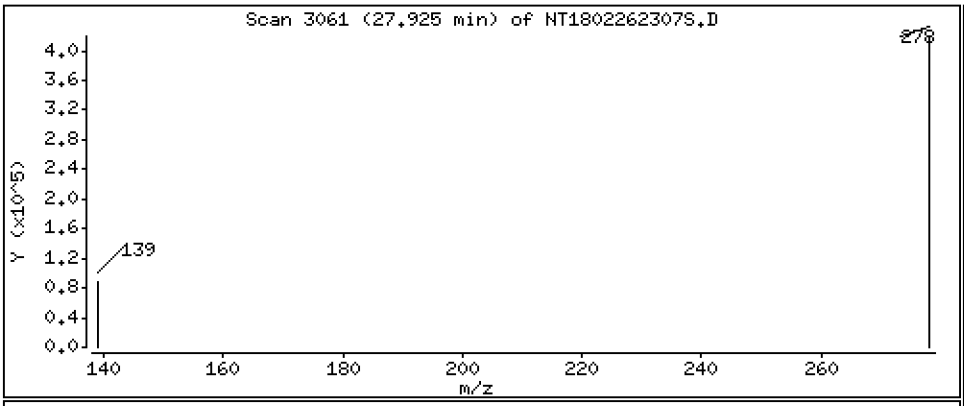
Operator: YZ

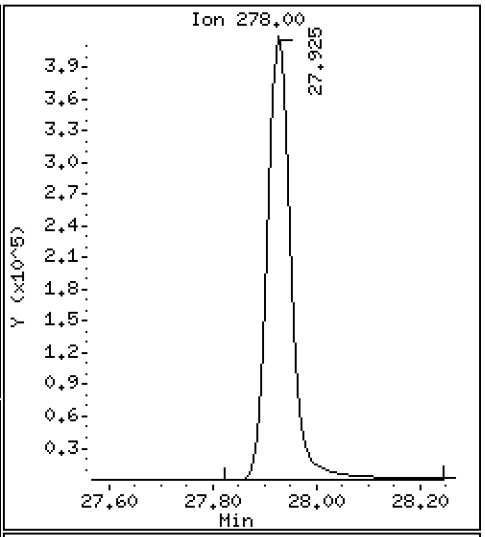
Column phase: ZB-5msi

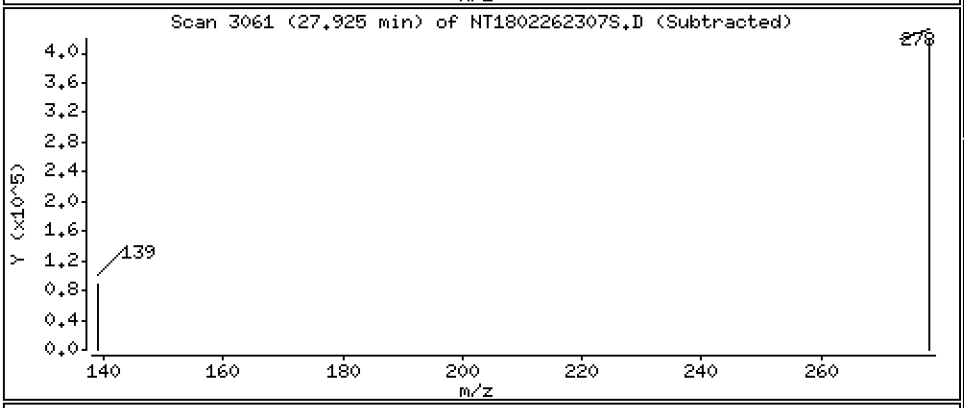
Column diameter: 0.25

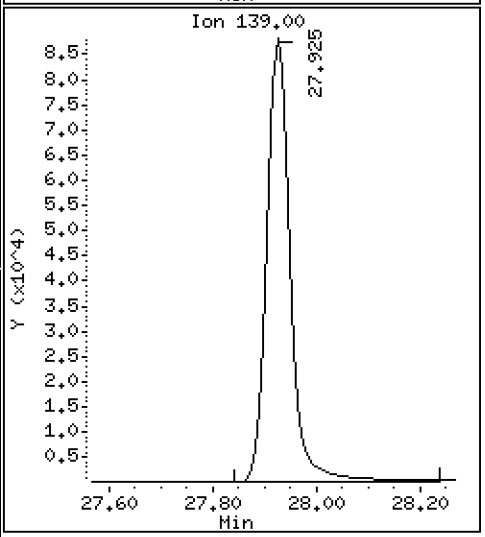
79 Dibenzo(a,h)anthracene

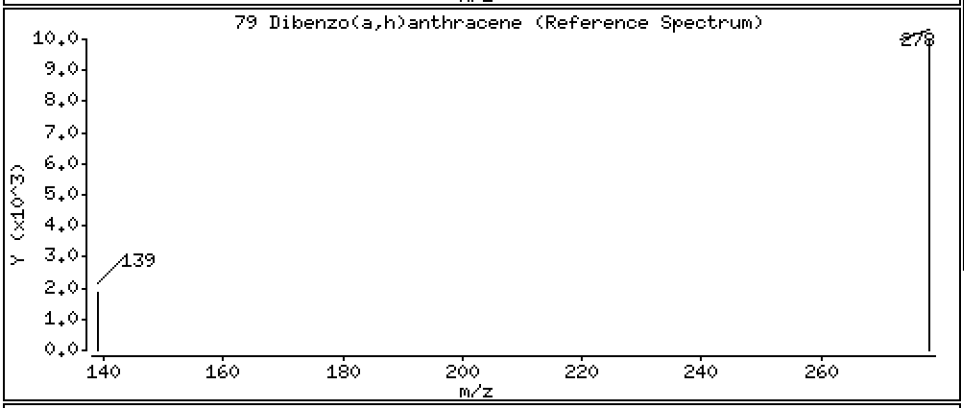
Concentration: 4.481 ug/mL

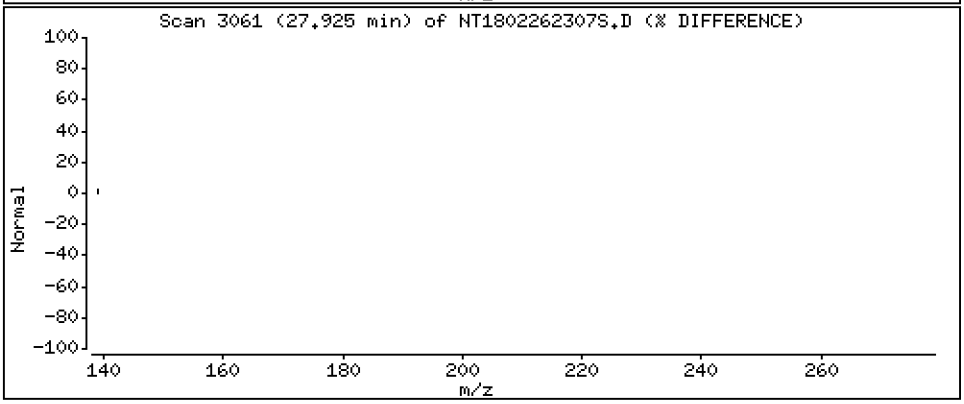












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Date : 26-FEB-2023 15:52

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BS2

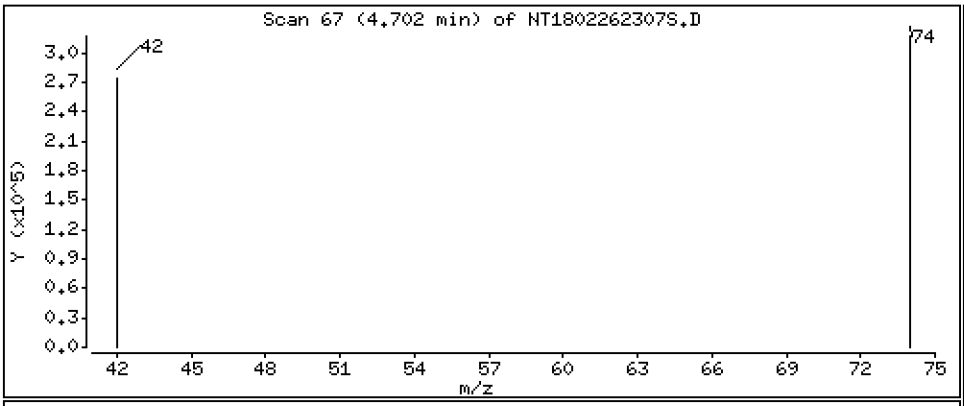
Operator: YZ

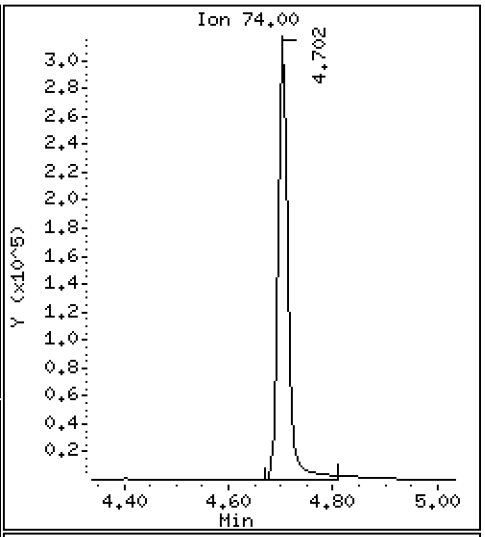
Column phase: ZB-5msi

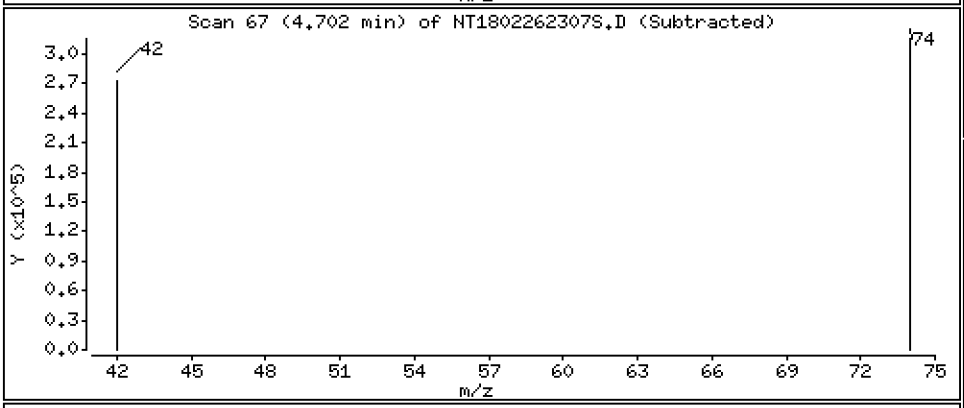
Column diameter: 0.25

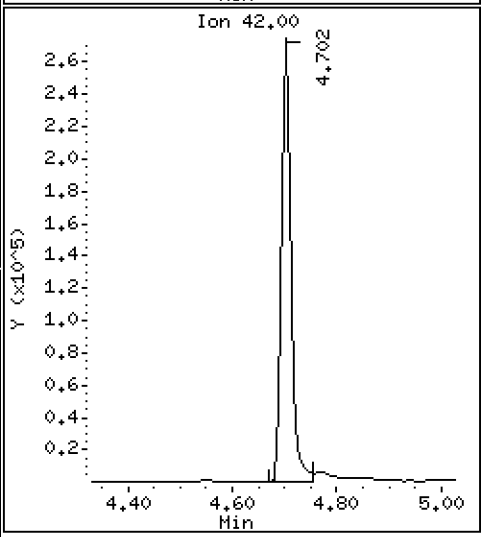
90 N-Nitrosodimethylamine

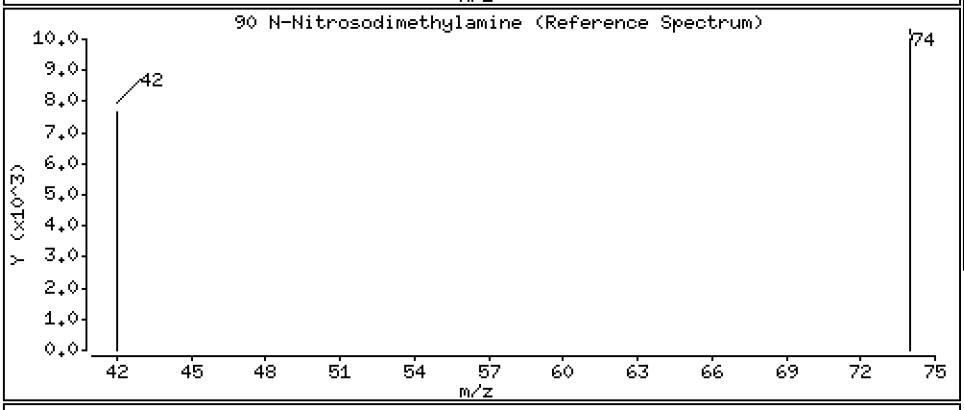
Concentration: 8.113 ug/mL

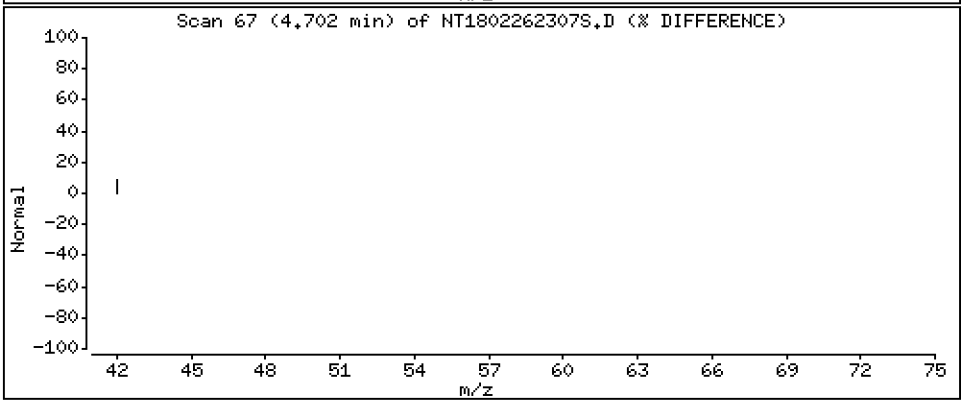












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262307S.D
Lab Smp Id: BLA0410-BS2
Inj Date : 26-FEB-2023 15:52
Operator : YZ Inst ID: nt18.i
Smp Info : BLA0410-BS2
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.764	6.748	(0.758)	479631	5.31711	5.317(R)
	3	Phenol	94	8.332	8.324	(0.934)	399890	3.39821	3.398
	7	1,3-Dichlorobenzene	146	8.850	8.850	(0.992)	362922	3.08018	3.080
*	8	1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	279488	4.00000	
	9	1,4-Dichlorobenzene	146	8.943	8.943	(1.003)	373223	3.03318	3.033
	11	Benzyl alcohol	79	9.191	9.191	(1.030)	267379	3.54410	3.544
	12	1,2-Dichlorobenzene	146	9.292	9.300	(1.042)	362405	3.09345	3.093
	13	2-Methylphenol	108	9.416	9.416	(1.056)	276581	2.85804	2.858
	15	4-Methylphenol	108	9.688	9.680	(1.086)	311150	3.20452	3.205
	16	N-Nitroso-di-n-propylamine	70	9.735	9.735	(1.091)	225636	3.44979	3.450
	22	2,4-Dimethylphenol	107	10.715	10.715	(0.942)	557885	5.85813	5.858
	24	Benzoic acid	105	11.003	11.088	(0.968)	670981	16.7057	16.71
	26	1,2,4-Trichlorobenzene	180	11.285	11.285	(0.993)	309652	3.17520	3.175
*	27	Naphthalene-d8	136	11.370	11.370	(1.000)	1067378	4.00000	
	30	Hexachlorobutadiene	225	11.764	11.772	(1.035)	188408	3.22005	3.220
	39	Dimethylphthalate	163	14.473	14.465	(0.968)	828411	3.99769	3.998
*	42	Acenaphthene-d10	162	14.945	14.945	(1.000)	539372	4.00000	
	50	Diethylphthalate	149	15.919	15.911	(1.065)	856633	4.52390	4.524
	54	N-Nitrosodiphenylamine	169	16.289	16.281	(0.907)	456133	3.16136	3.161
	57	Hexachlorobenzene	284	17.338	17.338	(0.966)	245223	3.54008	3.540
	58	Pentachlorophenol	266	17.702	17.702	(0.986)	329455	14.7249	14.72
*	59	Phenanthrene-d10	188	17.950	17.950	(1.000)	997293	4.00000	
$	66	Terphenyl-d14	244	21.099	21.091	(0.918)	693377	4.15489	4.155(R)
	67	Butylbenzylphthalate	149	22.020	22.020	(0.958)	646291	4.40898	4.409
*	69	Chrysene-d12	240	22.988	22.980	(1.000)	921638	4.00000	
*	77	Perylene-d12	264	25.473	25.473	(1.000)	987317	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.925	27.917	(1.096)	1314680	4.48143	4.481
	90	N-Nitrosodimethylamine	74	4.701	4.686	(0.527)	435568	8.11277	8.113

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262307S.D
Lab Smp Id: BLA0410-BS2
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	279488	0.01
27 Naphthalene-d8	1065527	532764	2131054	1067378	0.17
42 Acenaphthene-d10	544290	272145	1088580	539372	-0.90
59 Phenanthrene-d10	1003412	501706	2006824	997293	-0.61
69 Chrysene-d12	936975	468488	1873950	921638	-1.64
77 Perylene-d12	1057771	528886	2115542	987317	-6.66

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262307S.D

Lab ID: BLA0410-BS2
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 15:52

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.968	0.975	-0.0075	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623085.D

Date : 26-FEB-2023 16:32

Client ID:

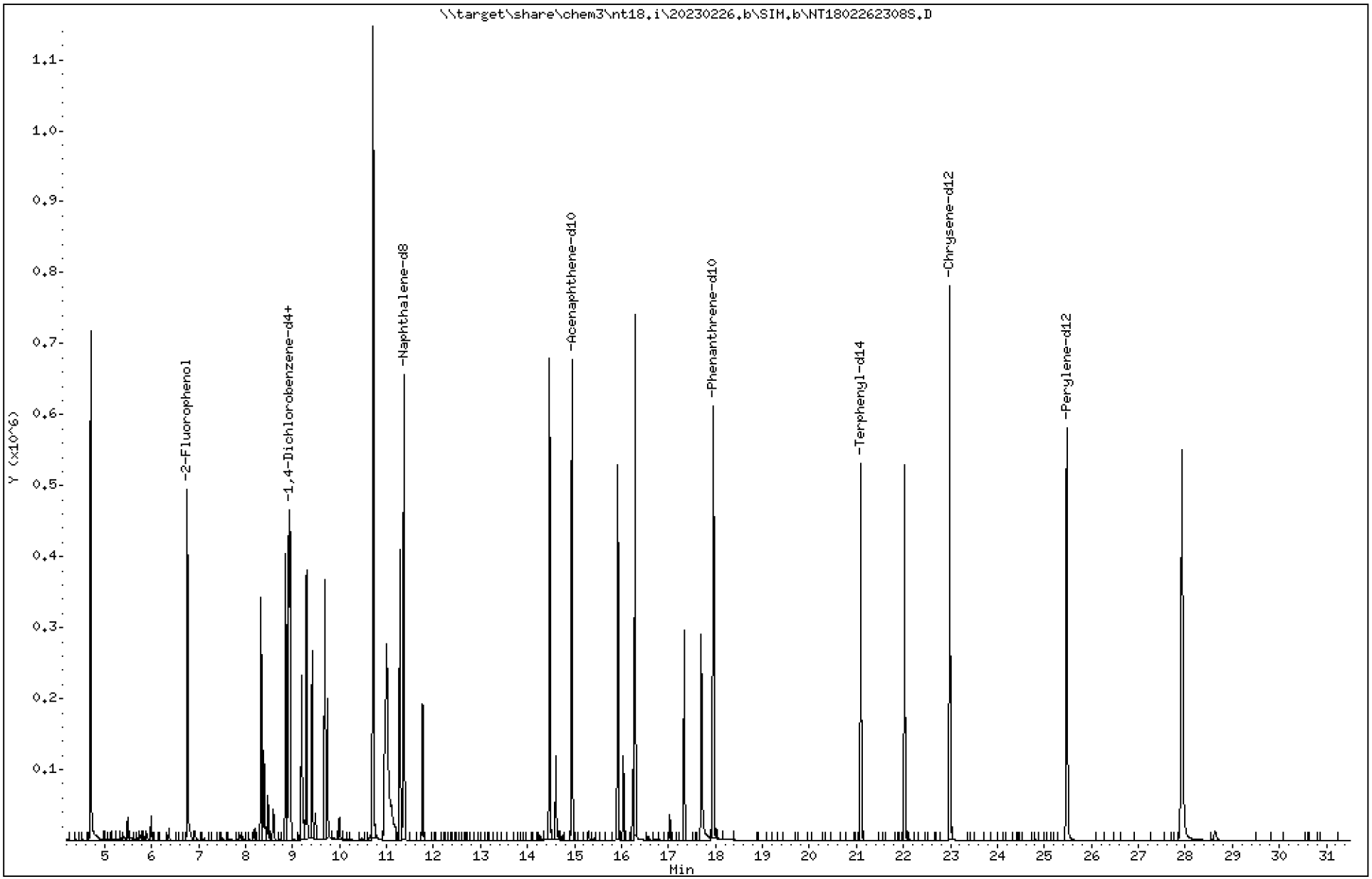
Sample Info: BLA0410-BSD2

Column phase: ZB-5msi

Instrument: nt18.i

Operator: YZ

Column diameter: 0.25



Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623085.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

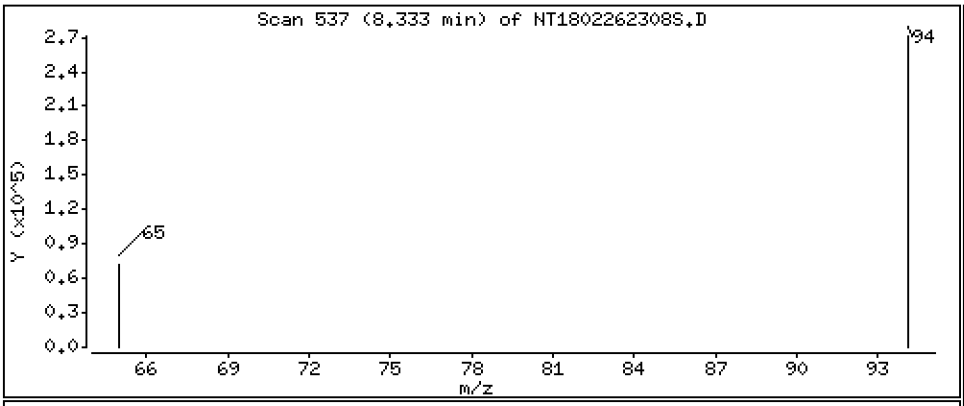
Operator: YZ

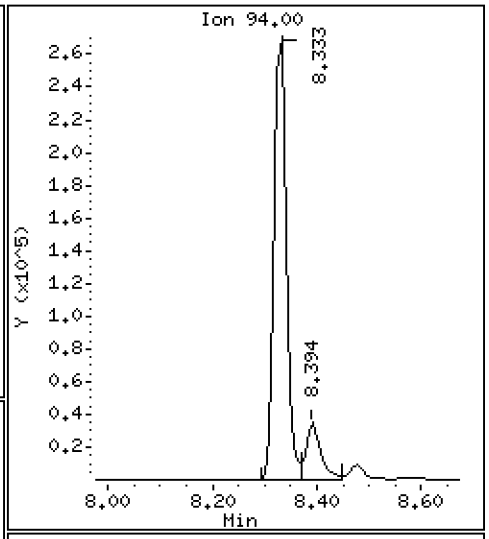
Column phase: ZB-5msi

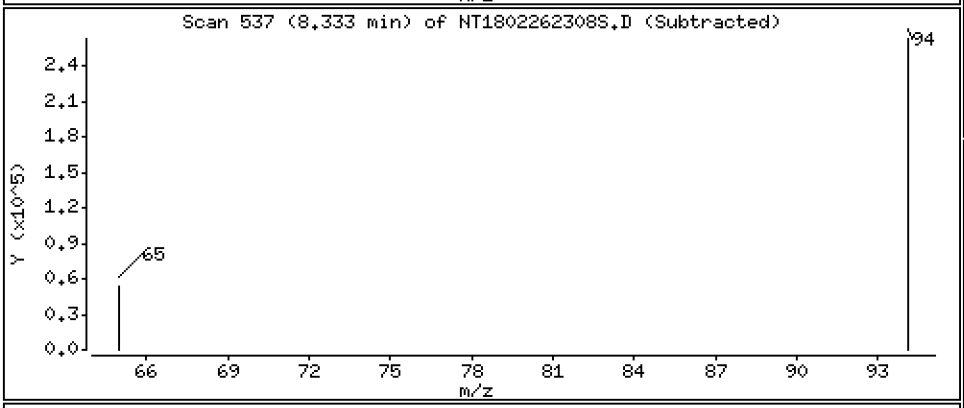
Column diameter: 0.25

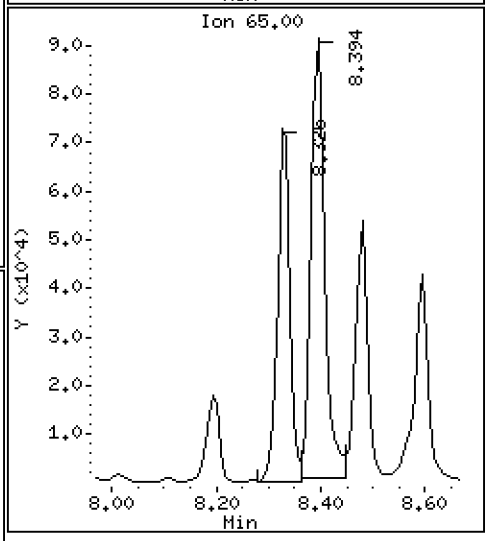
3 Phenol

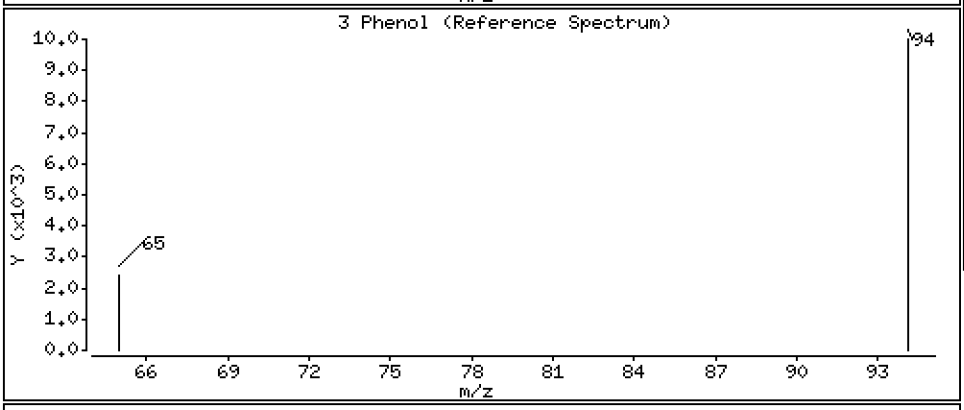
Concentration: 3.548 ug/mL

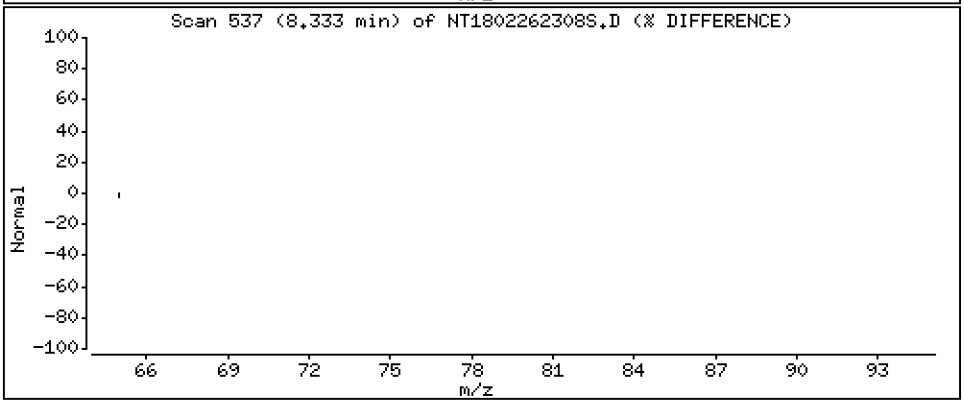












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623085.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

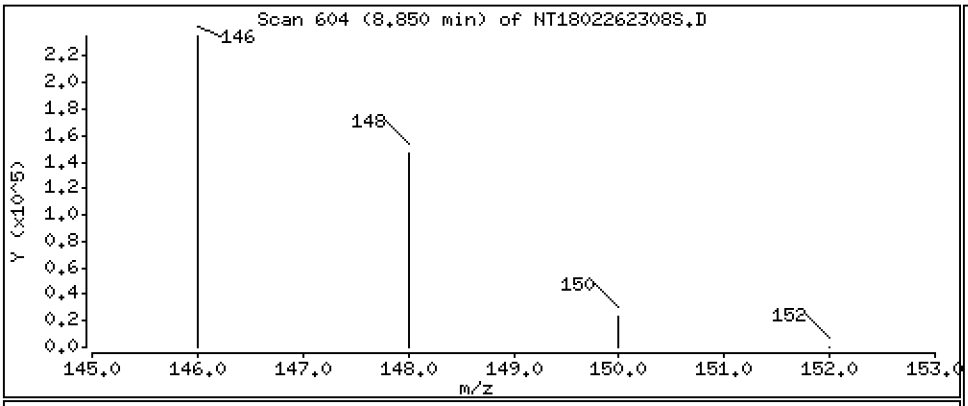
Operator: YZ

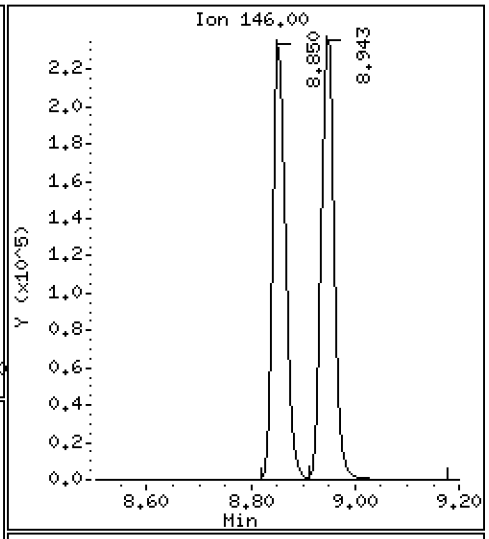
Column phase: ZB-5msi

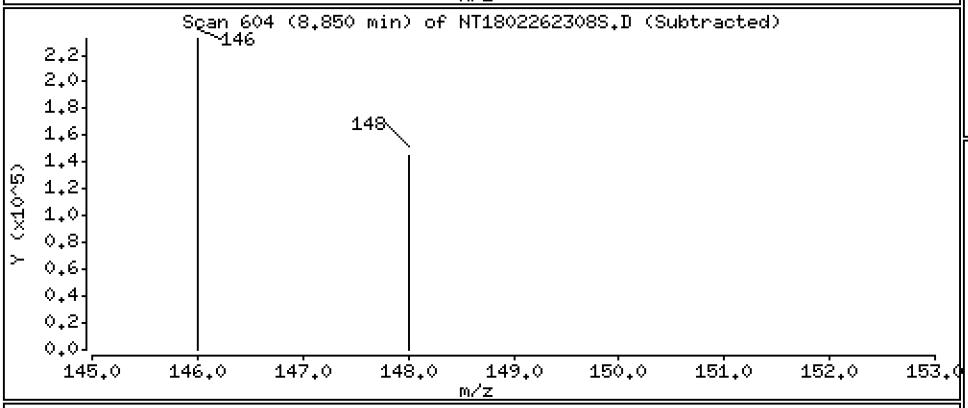
Column diameter: 0.25

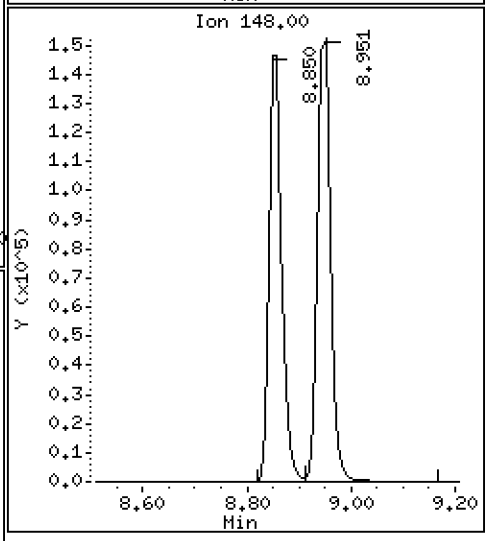
7 1,3-Dichlorobenzene

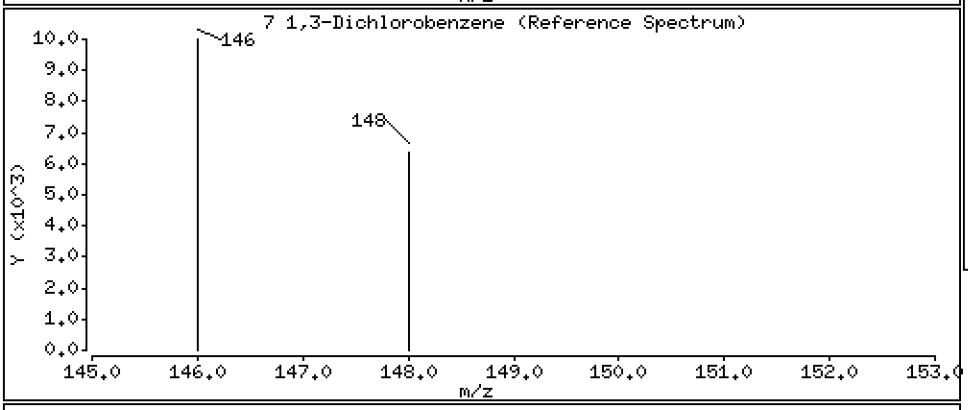
Concentration: 3.233 ug/mL

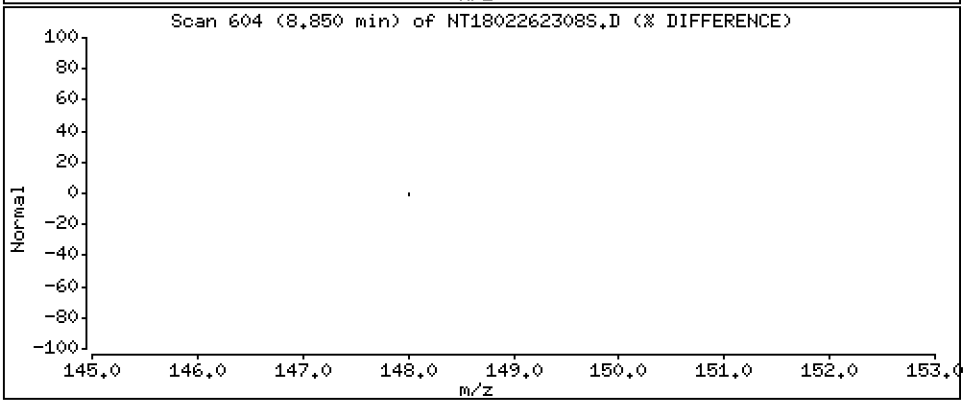












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623085.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

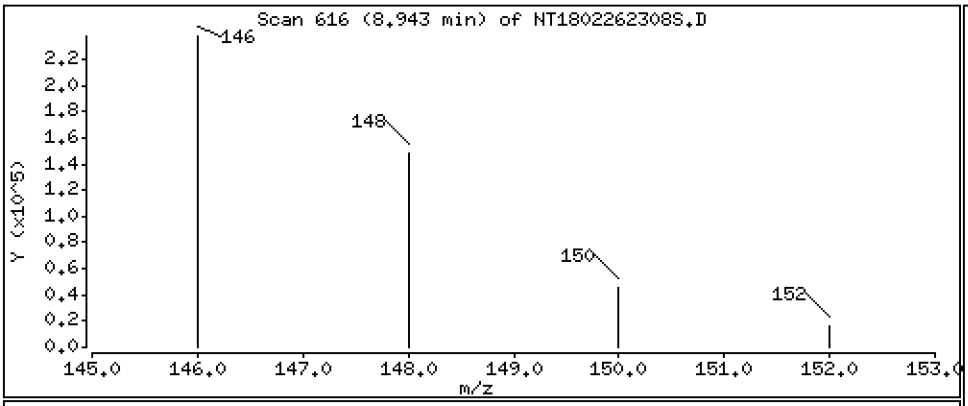
Operator: YZ

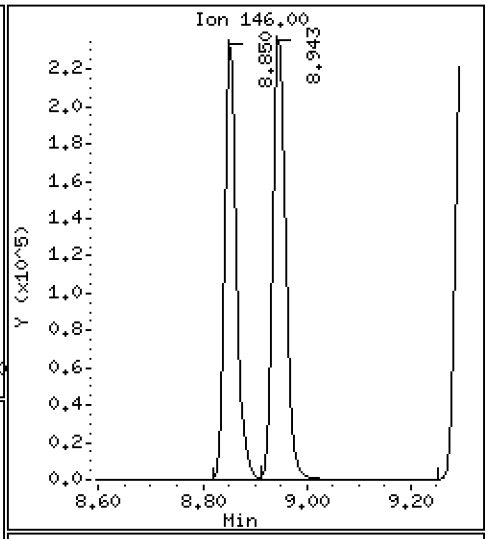
Column phase: ZB-5msi

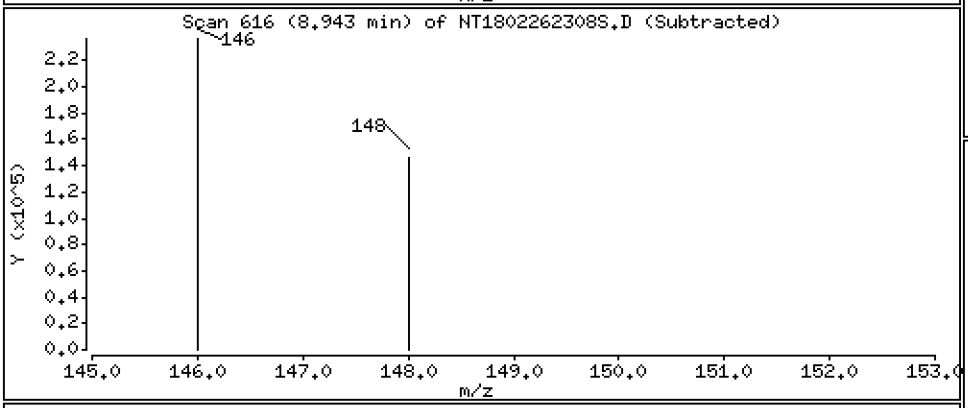
Column diameter: 0.25

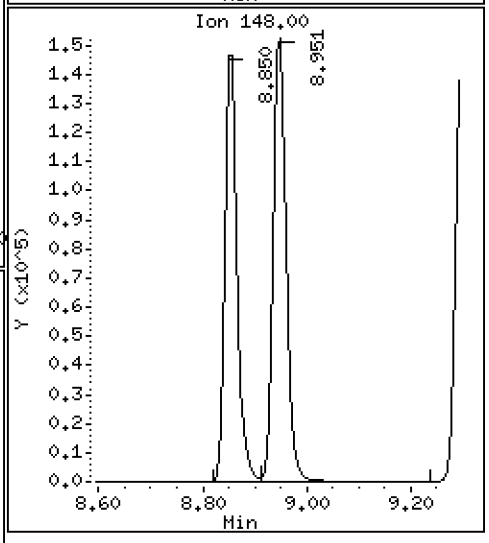
9 1,4-Dichlorobenzene

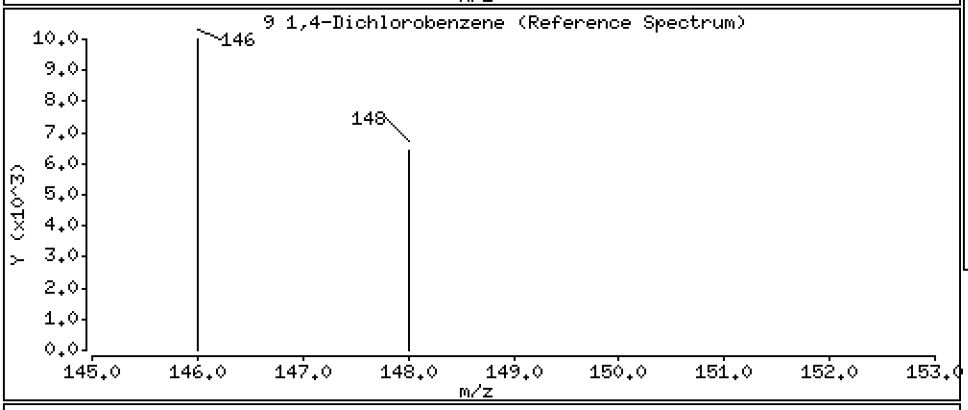
Concentration: 3.188 ug/mL

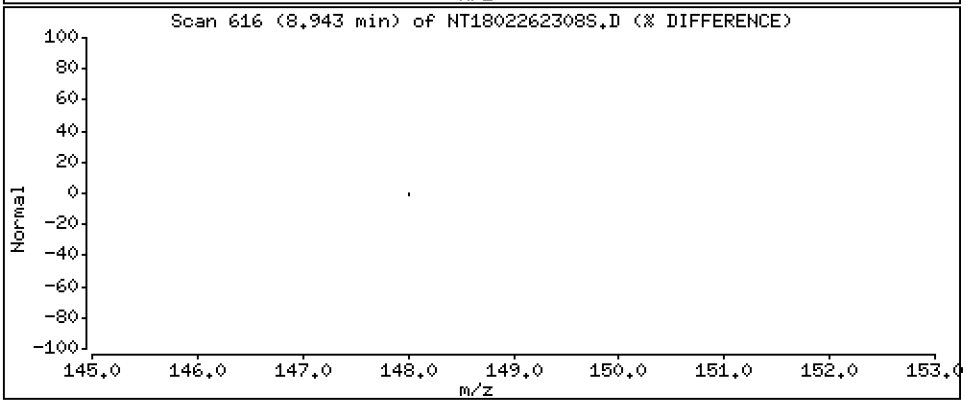












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623085.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

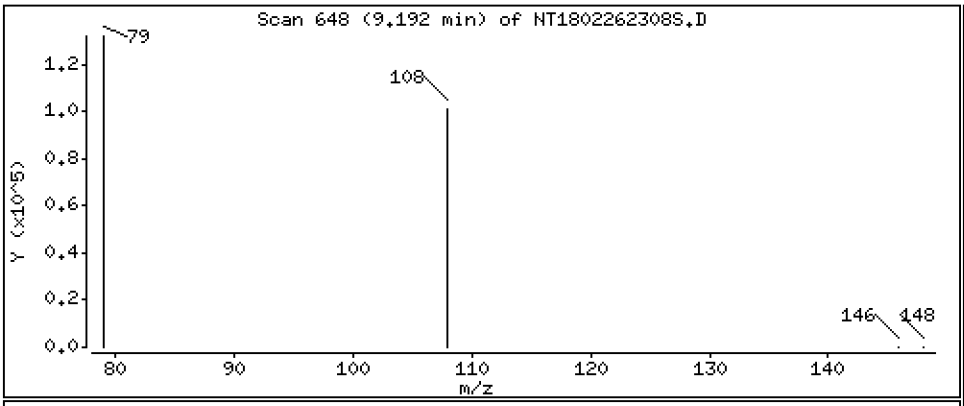
Operator: YZ

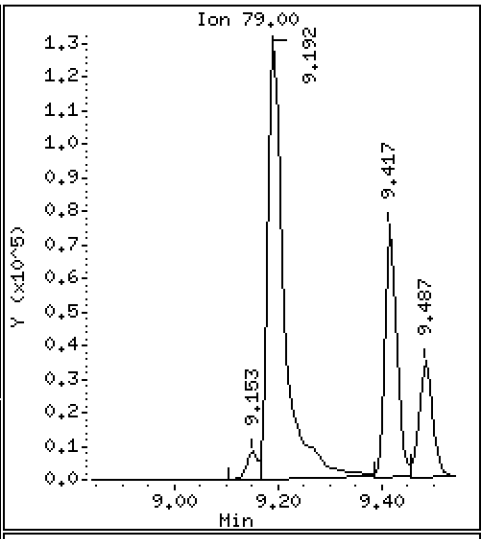
Column phase: ZB-5msi

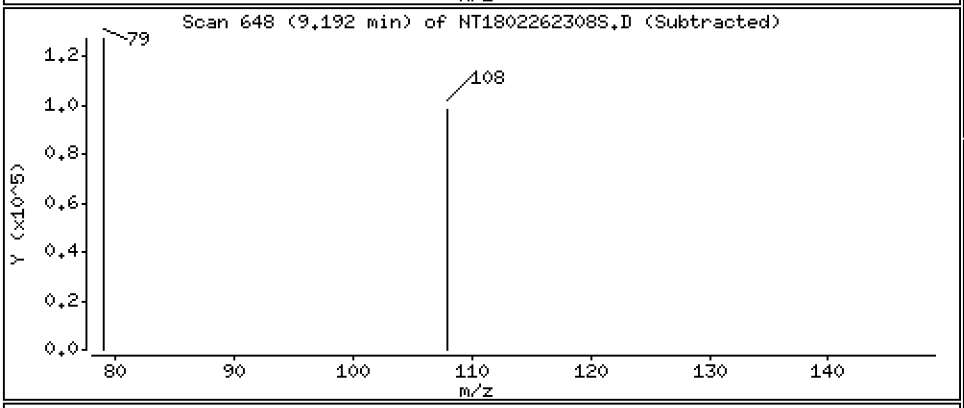
Column diameter: 0.25

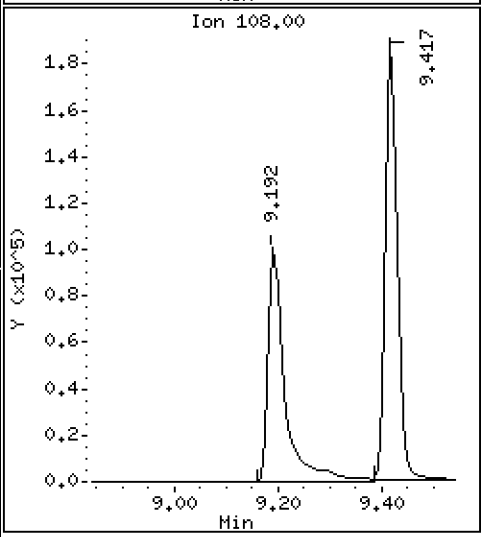
11 Benzyl alcohol

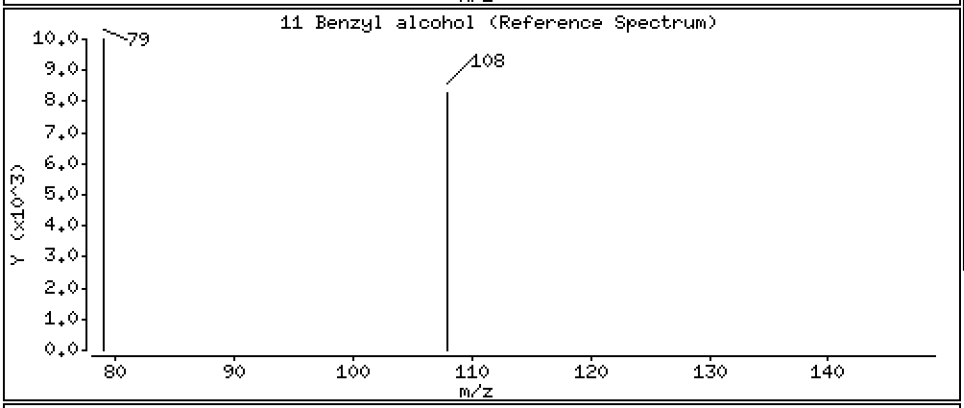
Concentration: 3.687 ug/mL

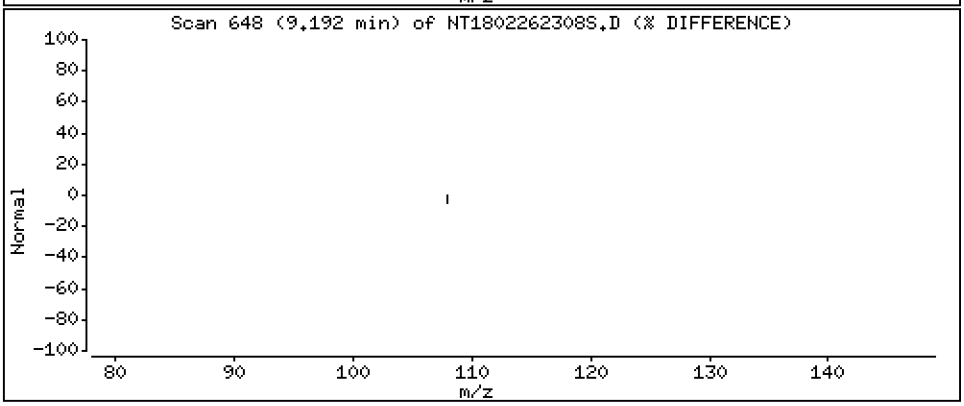












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623085.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

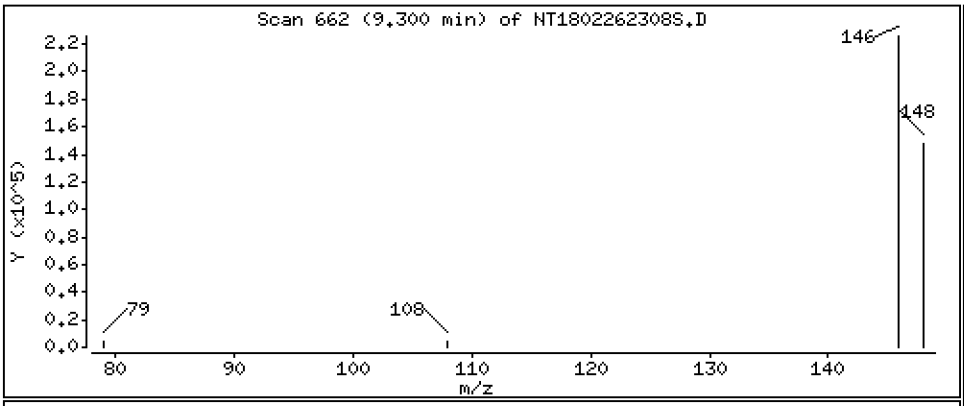
Operator: YZ

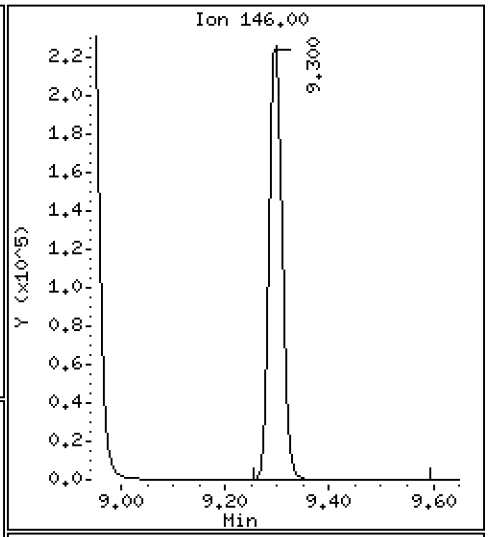
Column phase: ZB-5msi

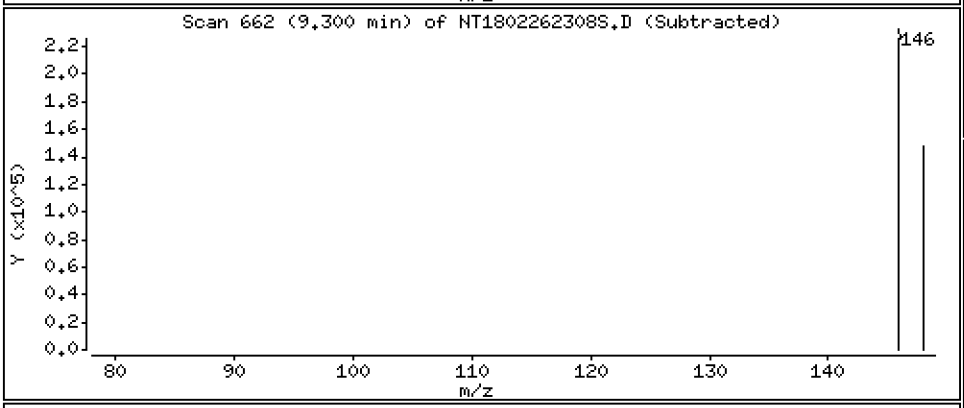
Column diameter: 0.25

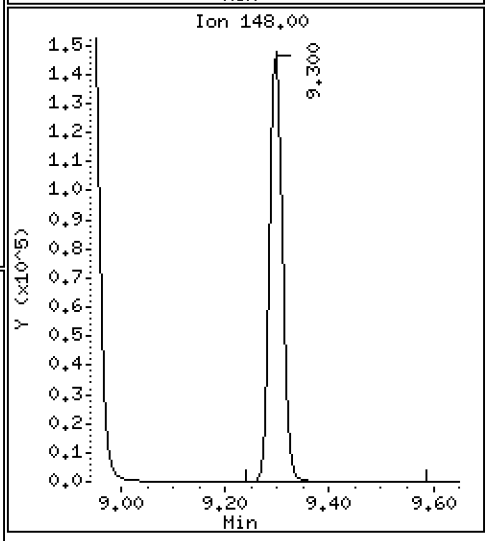
12 1,2-Dichlorobenzene

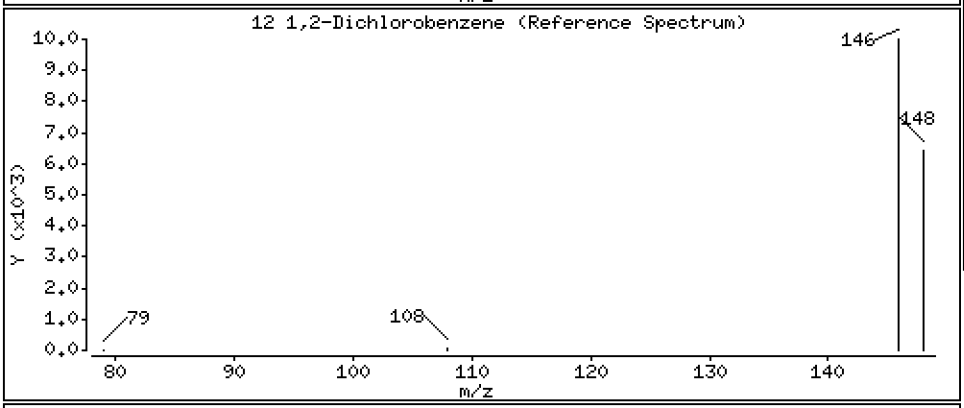
Concentration: 3.238 ug/mL

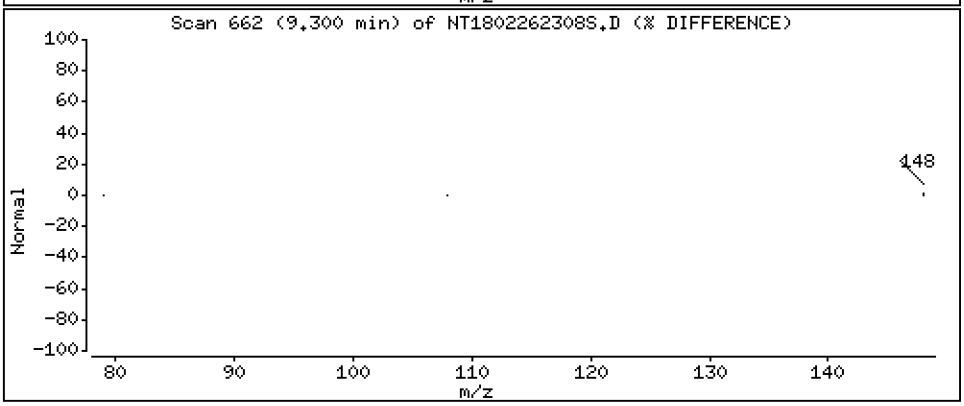












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623085.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

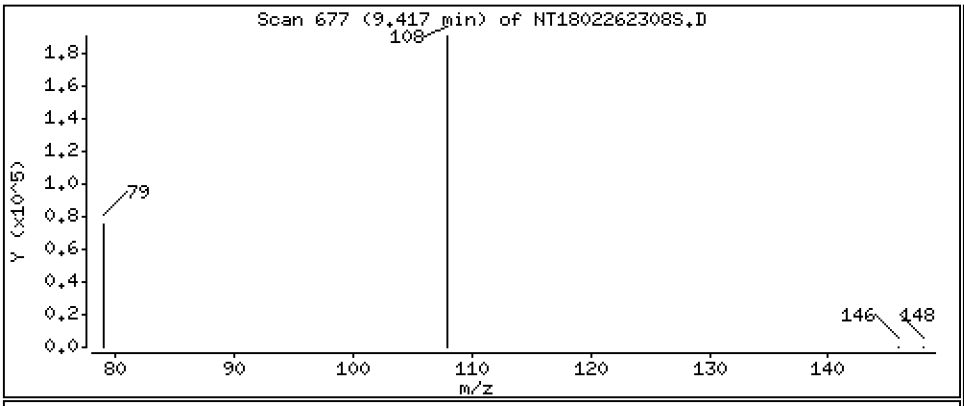
Operator: YZ

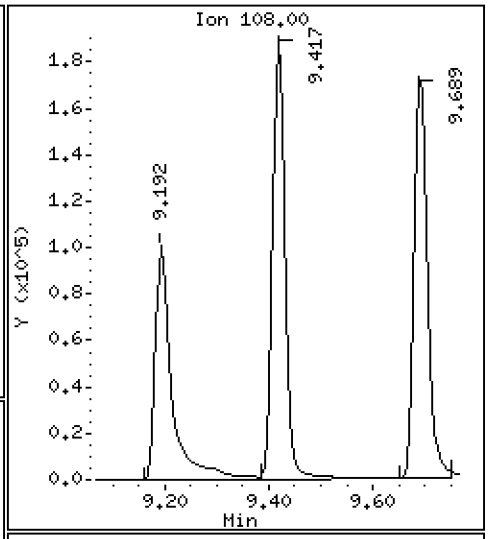
Column phase: ZB-5msi

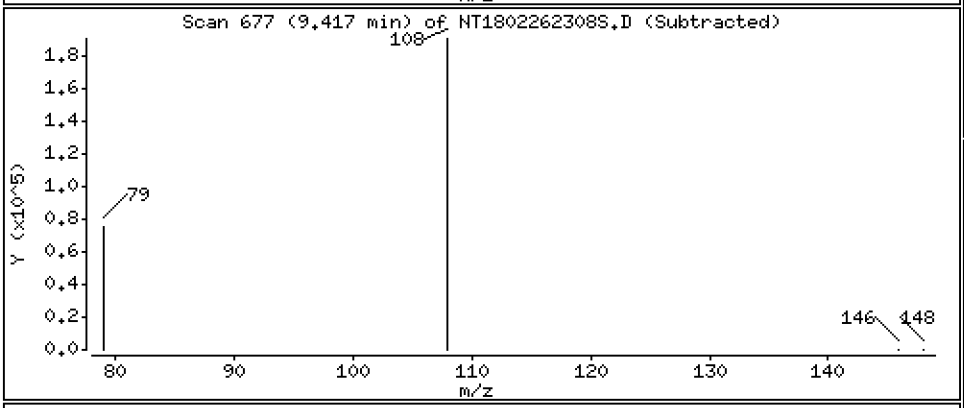
Column diameter: 0.25

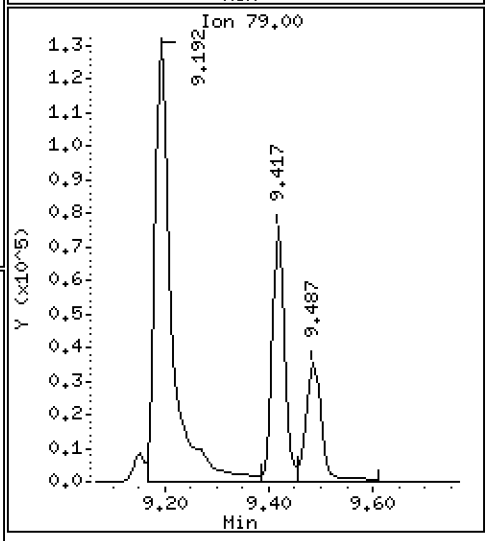
13 2-Methylphenol

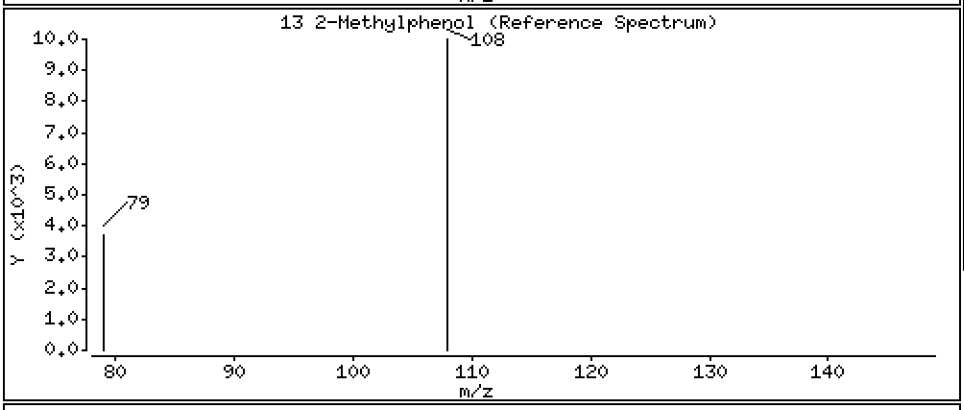
Concentration: 3.082 ug/mL

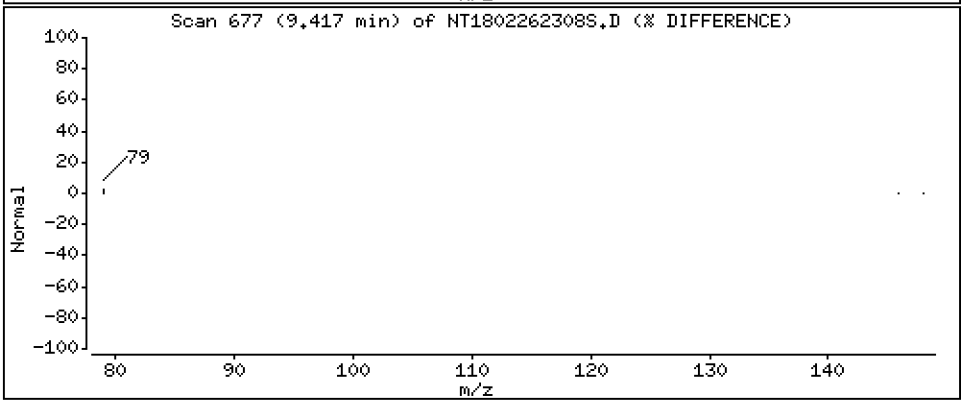












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262308S.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

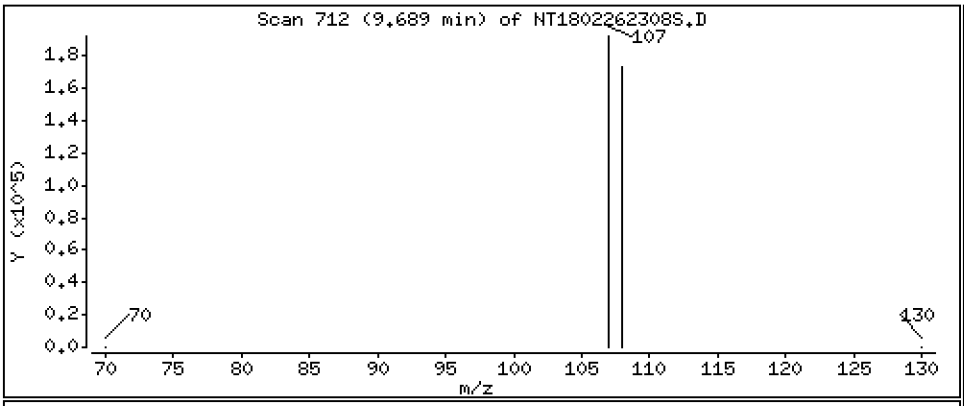
Operator: YZ

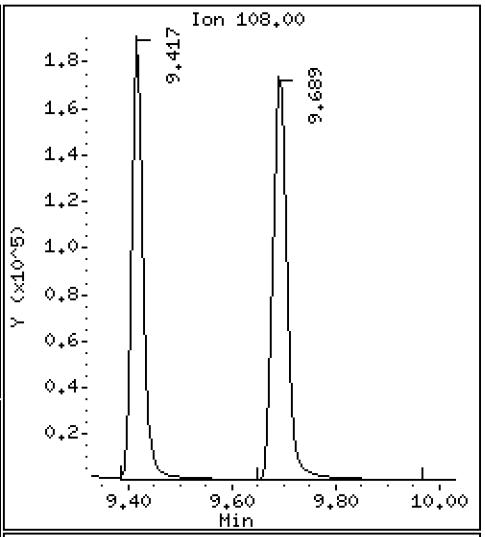
Column phase: ZB-5msi

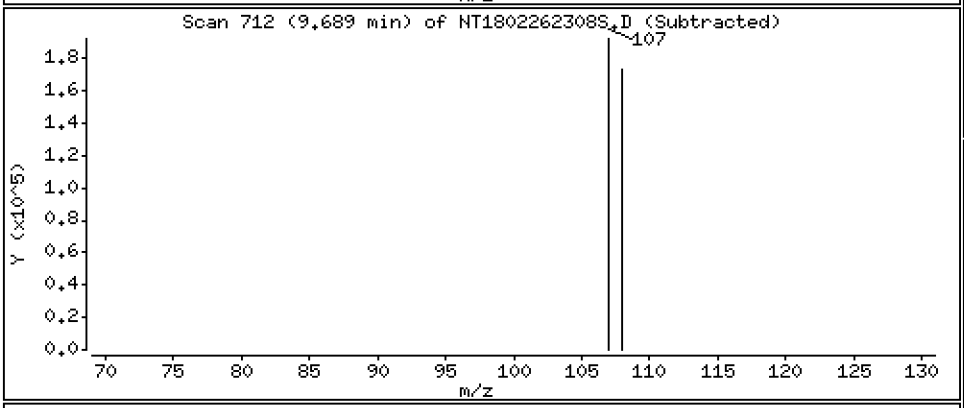
Column diameter: 0.25

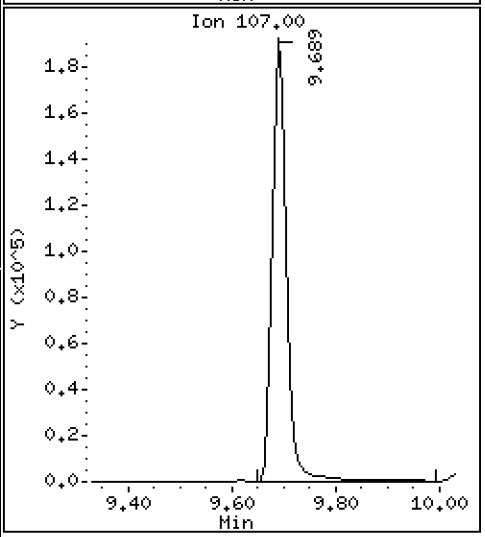
15 4-Methylphenol

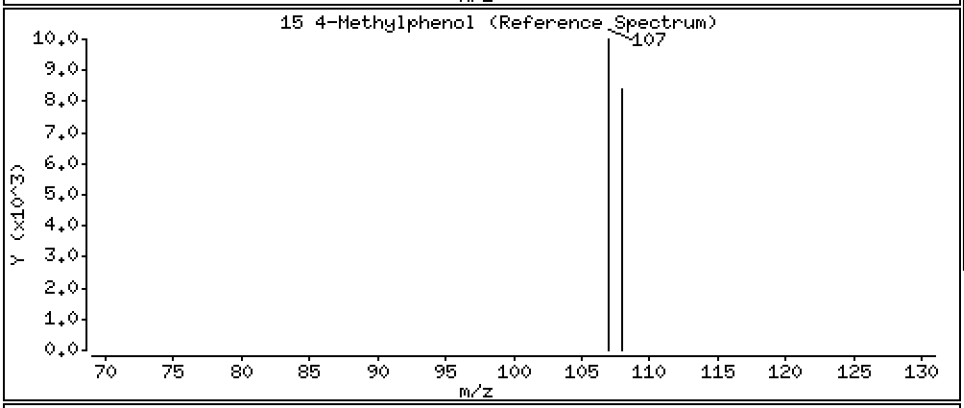
Concentration: 3.443 ug/mL

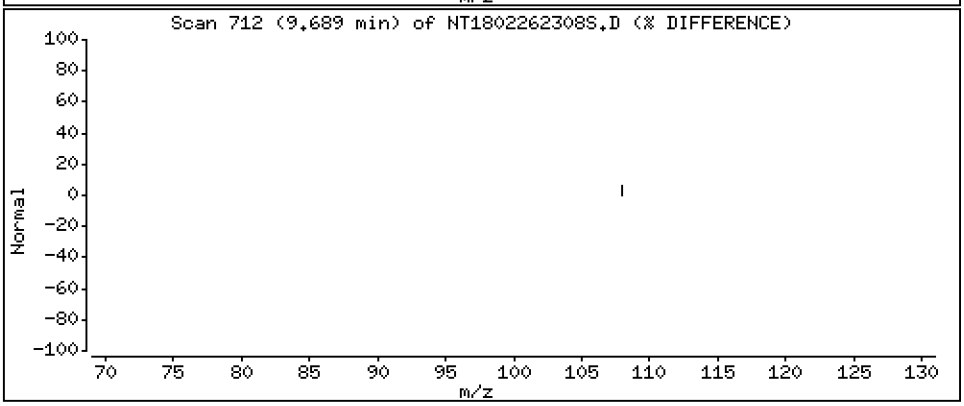












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623085.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

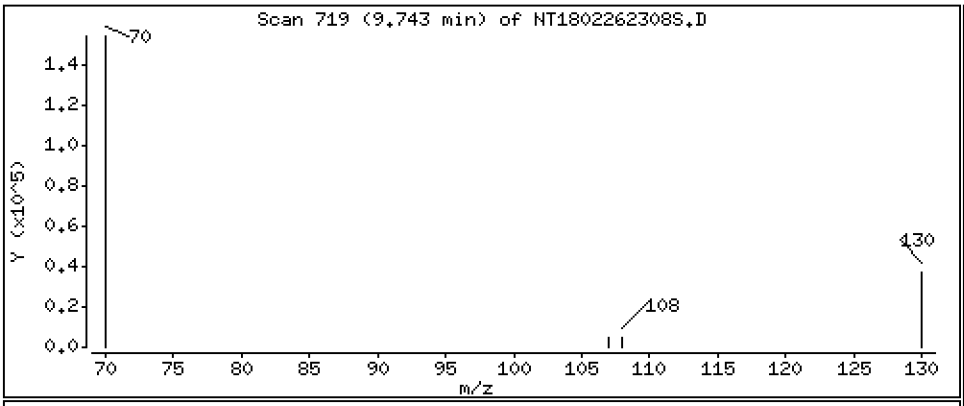
Operator: YZ

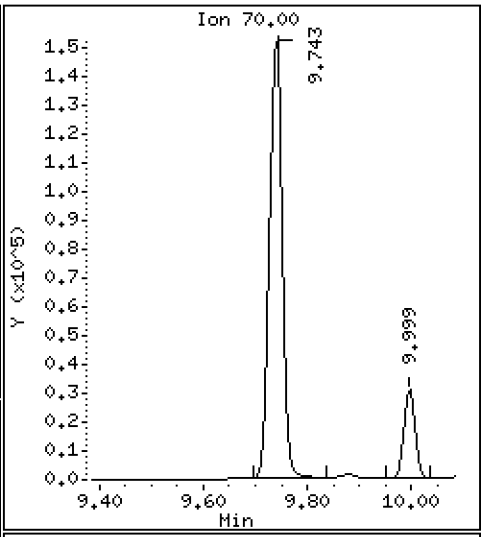
Column phase: ZB-5msi

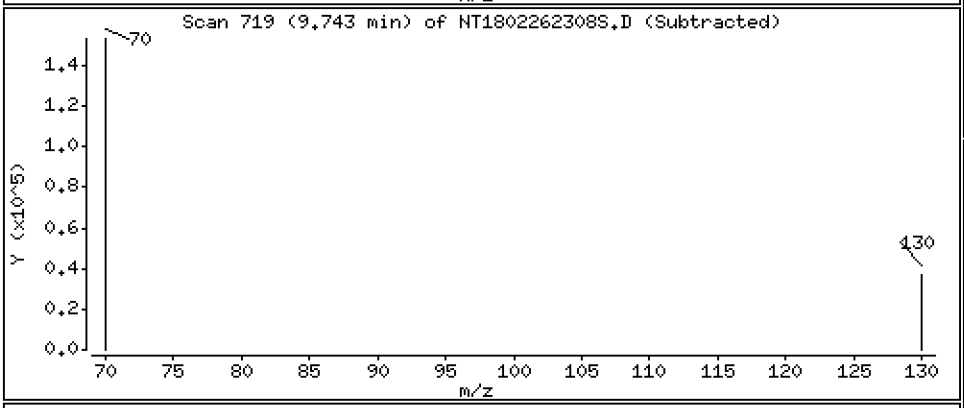
Column diameter: 0.25

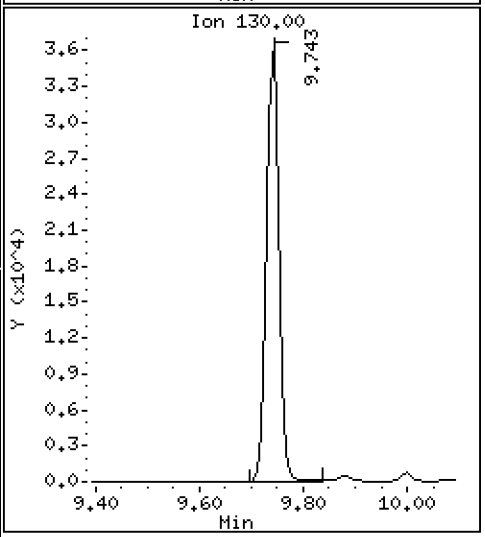
16 N-Nitroso-di-n-propylamine

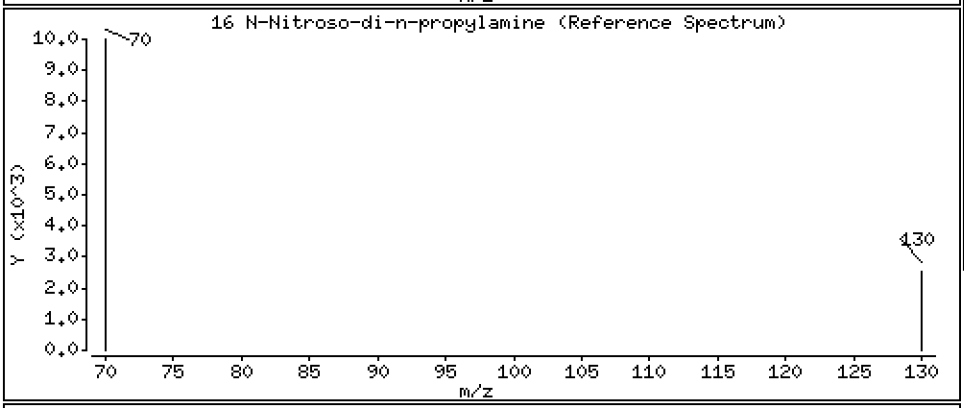
Concentration: 3.807 ug/mL

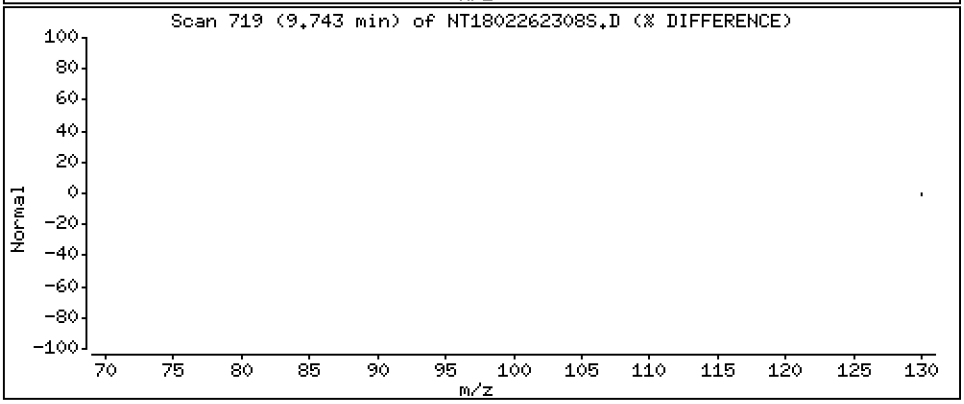












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262308S.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

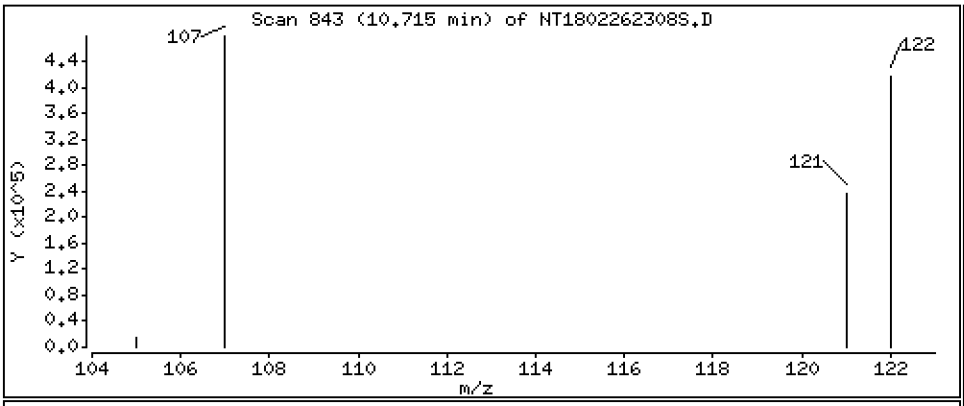
Operator: YZ

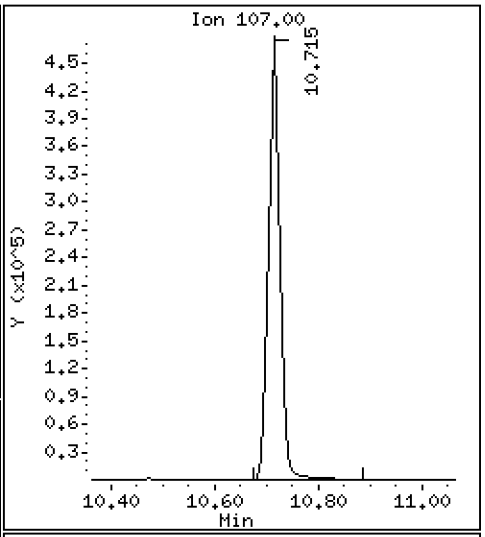
Column phase: ZB-5msi

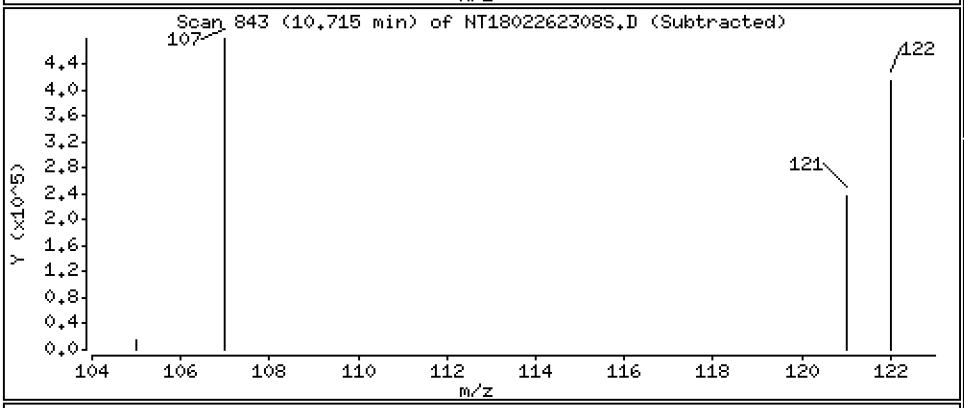
Column diameter: 0.25

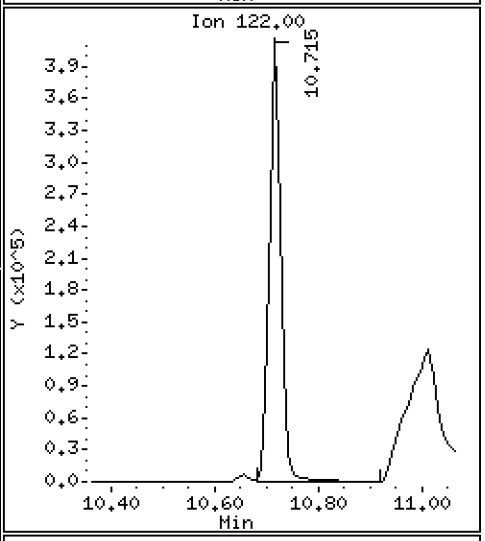
22 2,4-Dimethylphenol

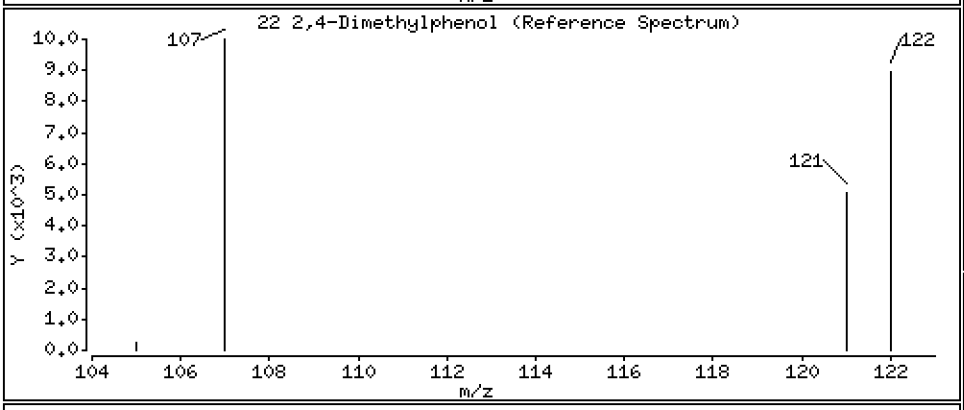
Concentration: 7.620 ug/mL

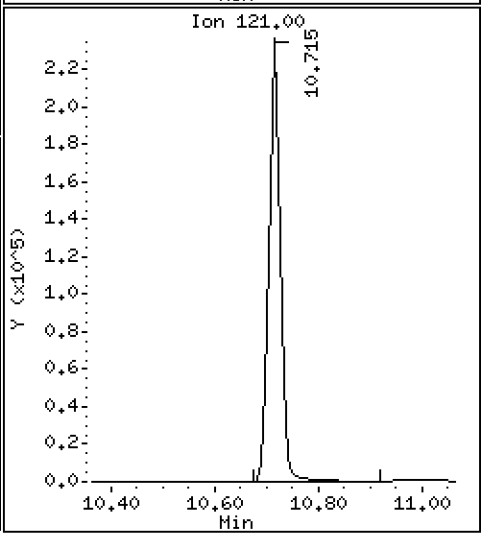


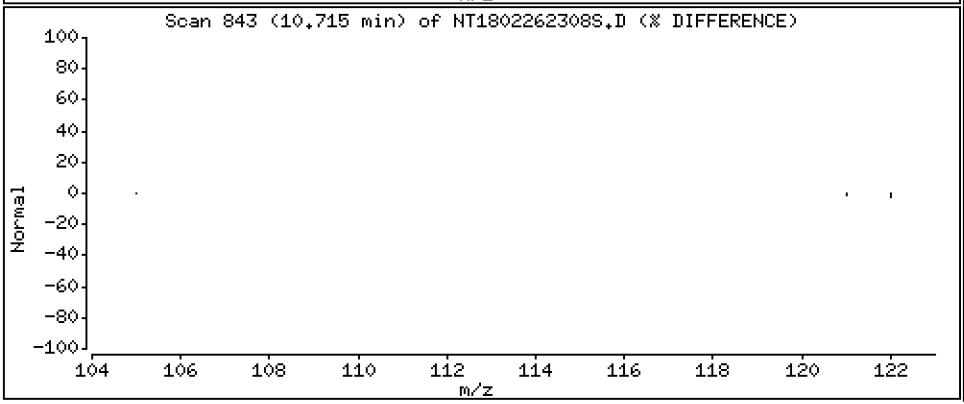












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262308S.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

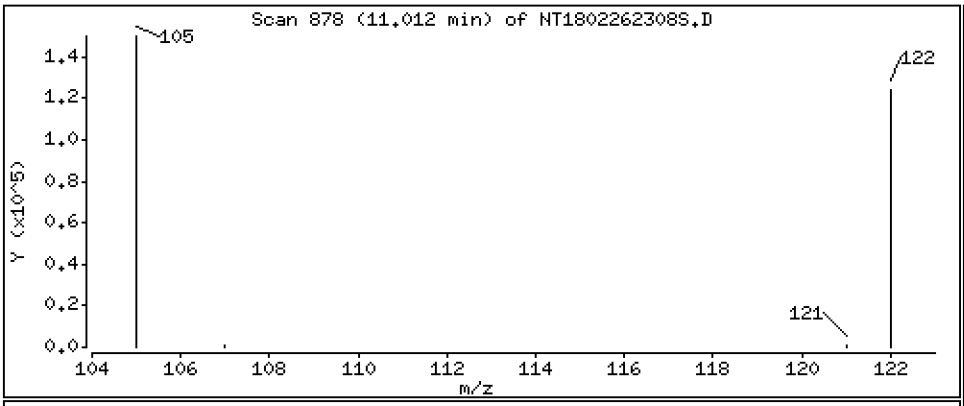
Operator: YZ

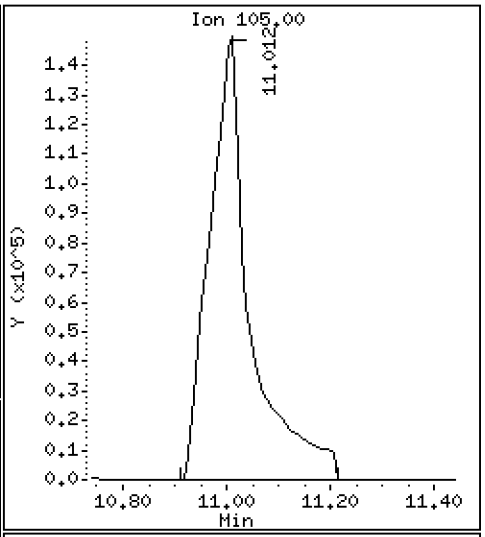
Column phase: ZB-5msi

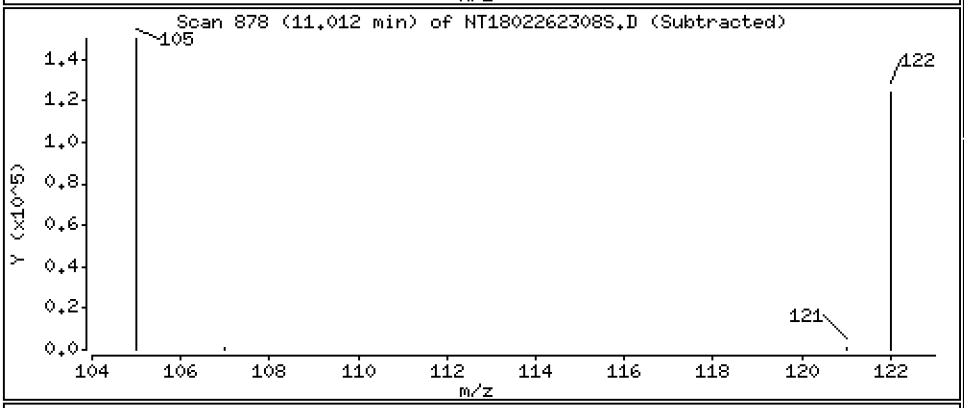
Column diameter: 0.25

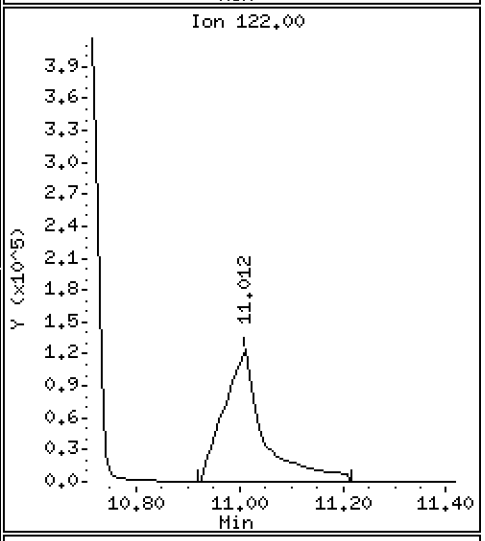
24 Benzoic acid

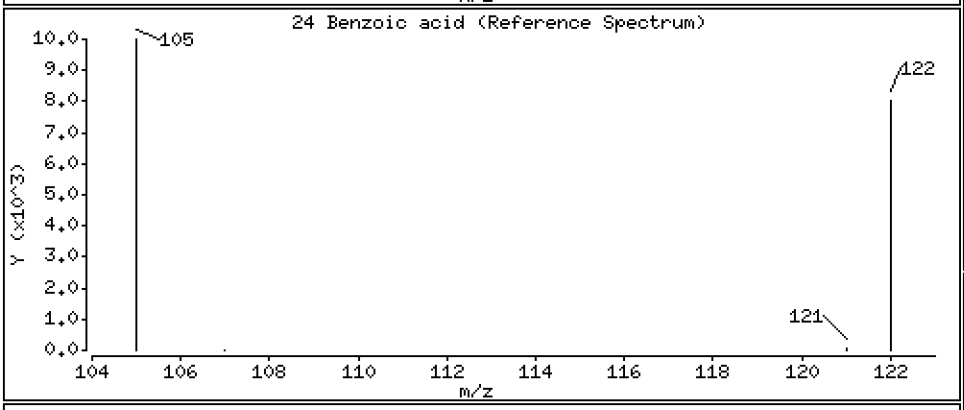
Concentration: 20.04 ug/mL

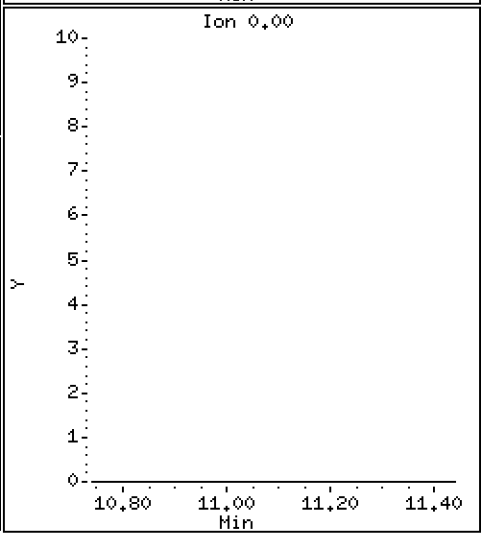


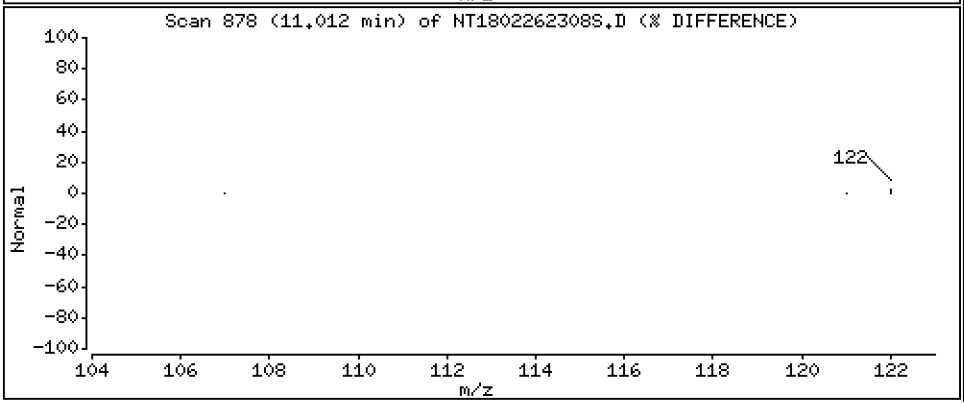












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262308S.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

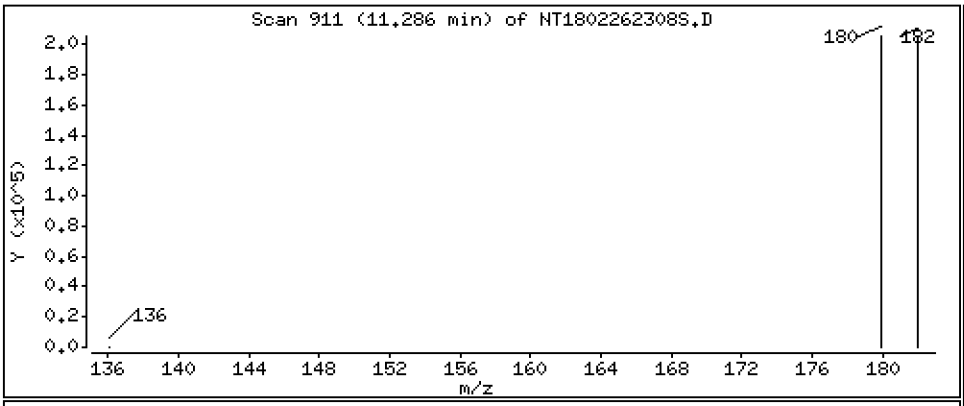
Operator: YZ

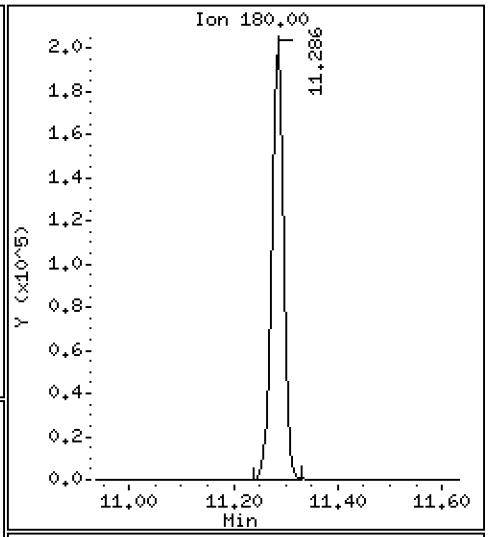
Column phase: ZB-5msi

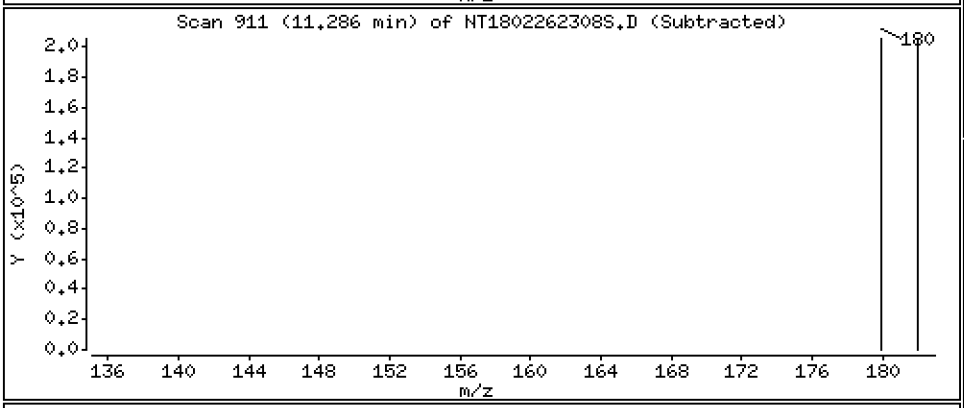
Column diameter: 0.25

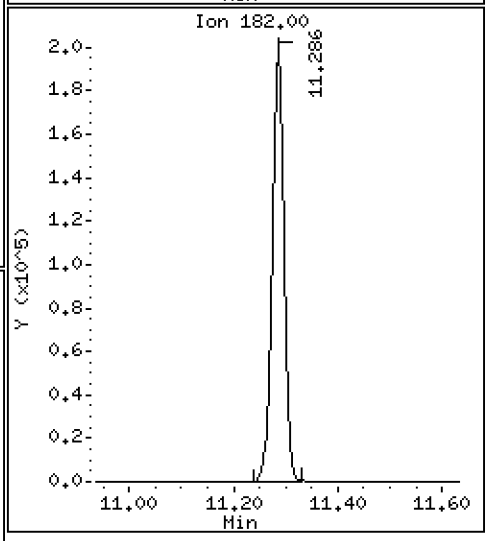
26 1,2,4-Trichlorobenzene

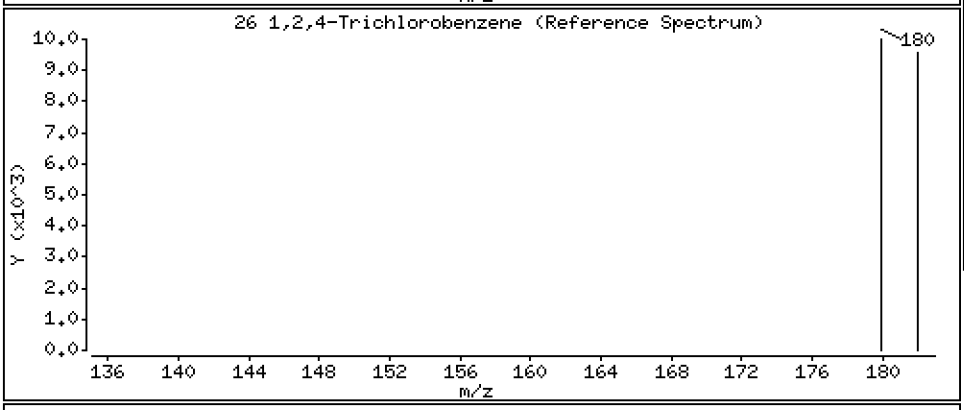
Concentration: 3.391 ug/mL

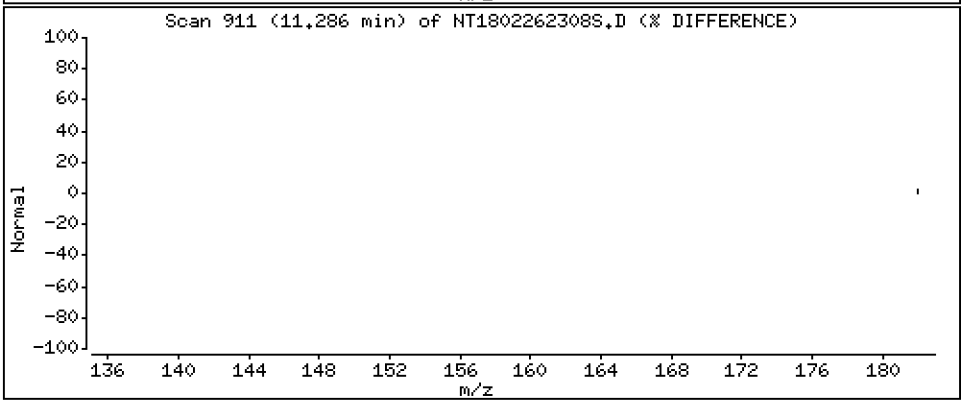












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262308S.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

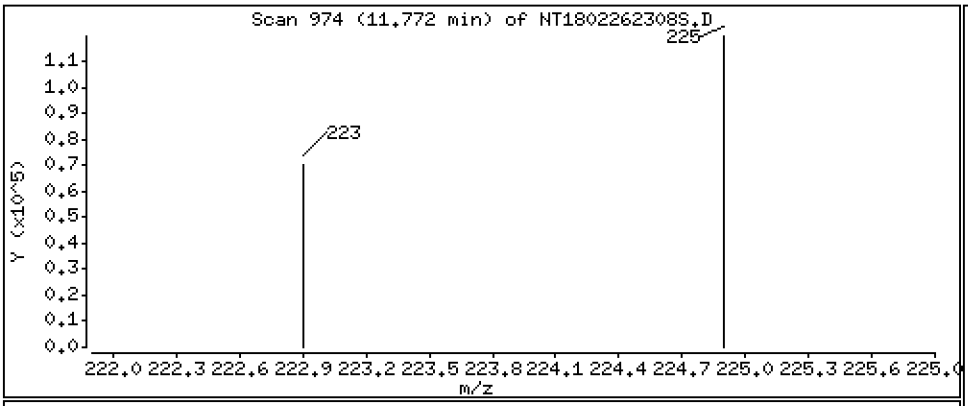
Operator: YZ

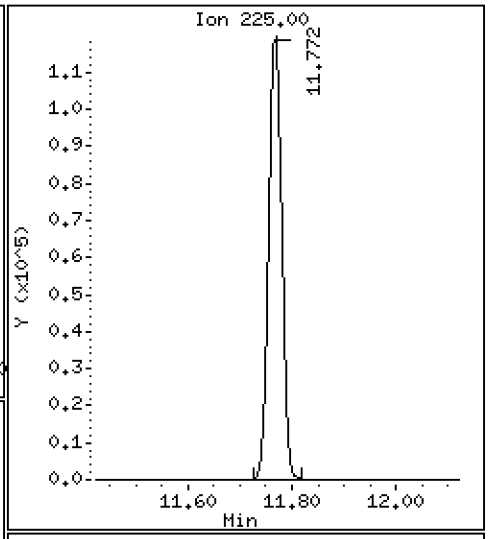
Column phase: ZB-5msi

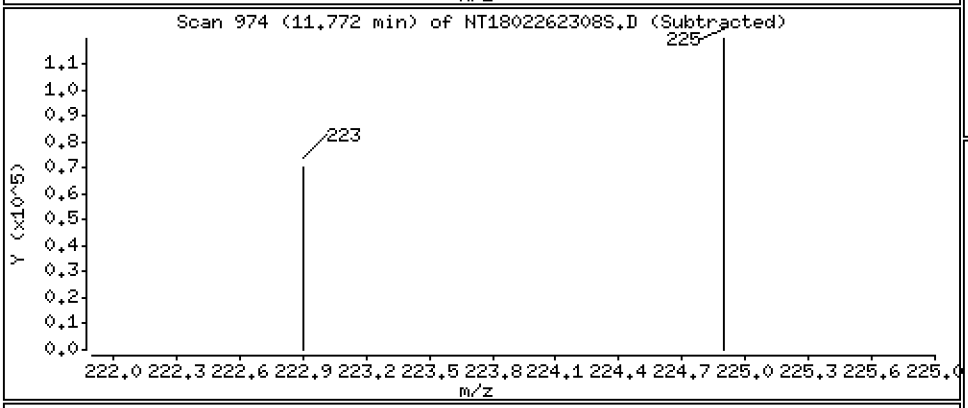
Column diameter: 0.25

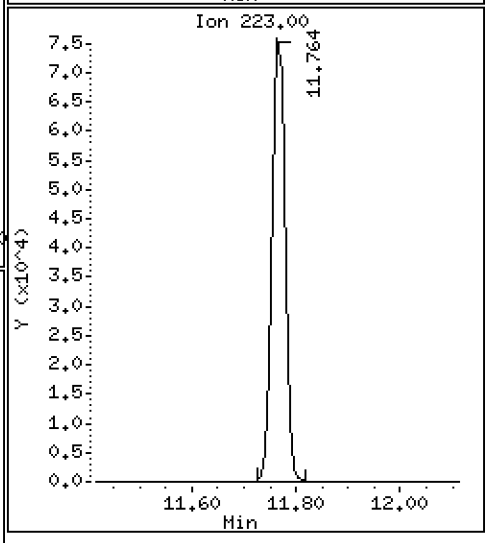
30 Hexachlorobutadiene

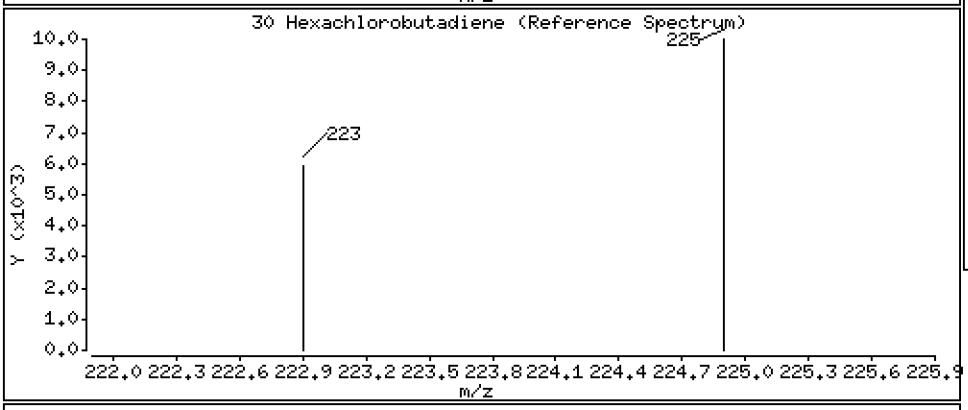
Concentration: 3.422 ug/mL

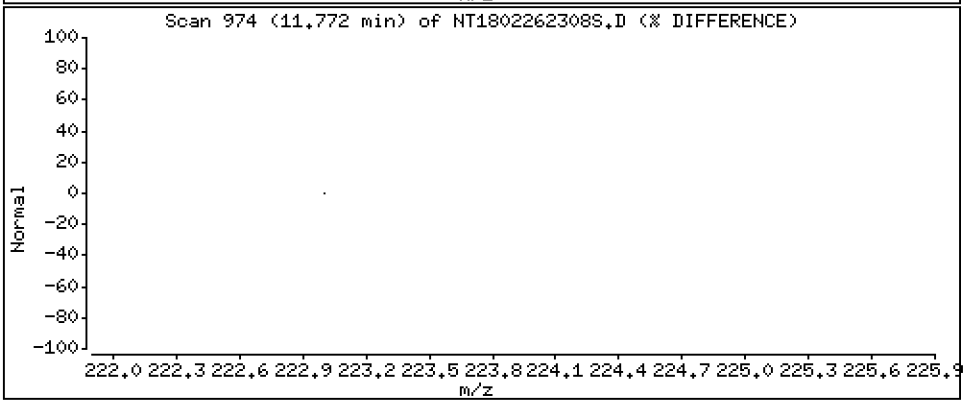












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262308S.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

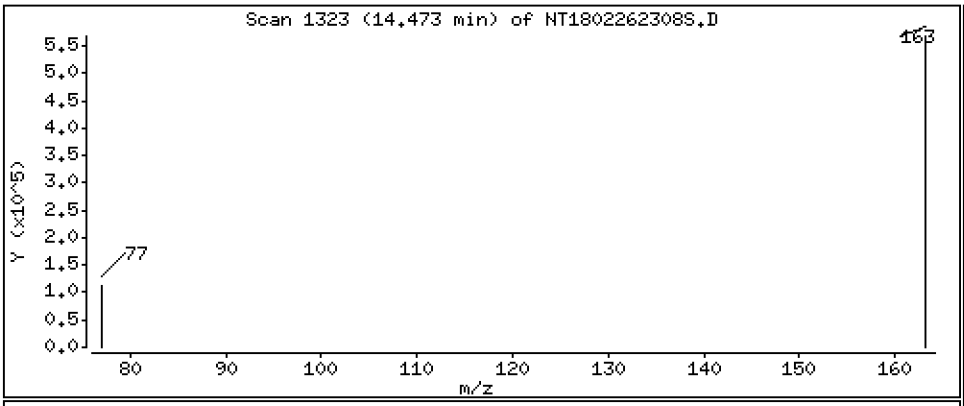
Operator: YZ

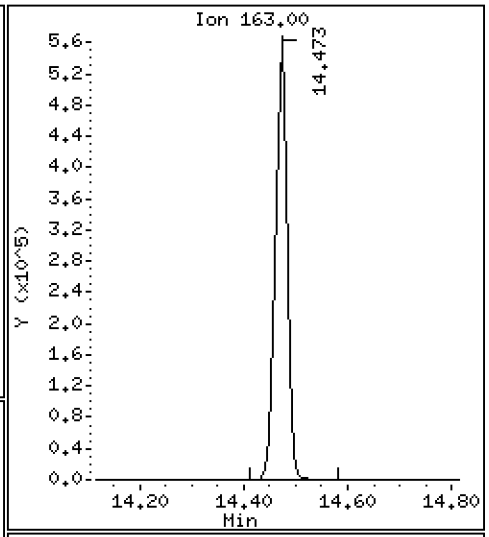
Column phase: ZB-5msi

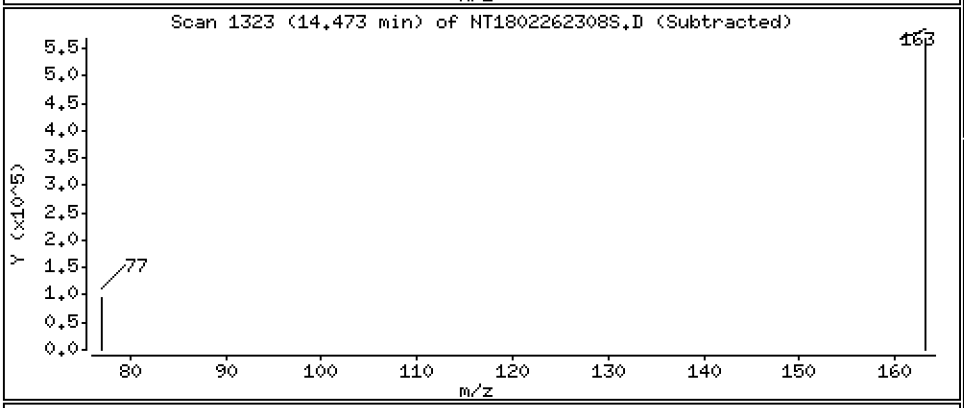
Column diameter: 0.25

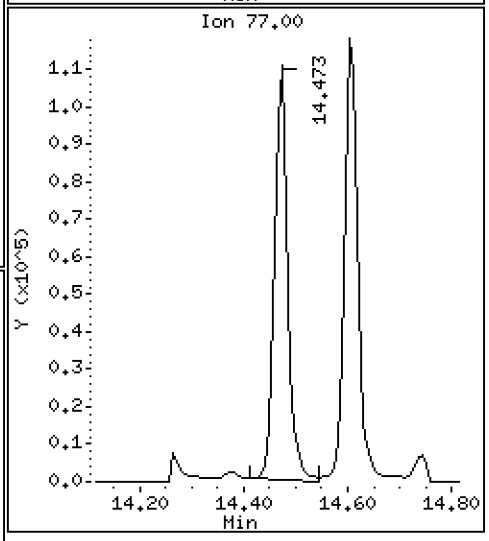
39 Dimethylphthalate

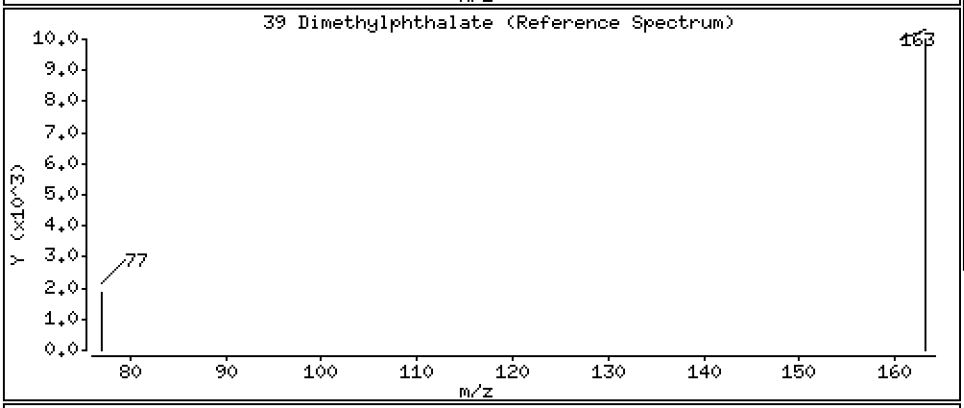
Concentration: 4.112 ug/mL

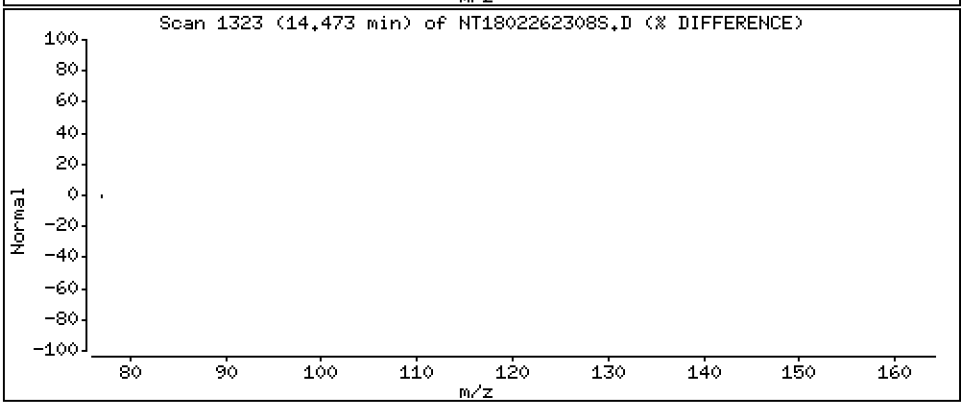












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262308S.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

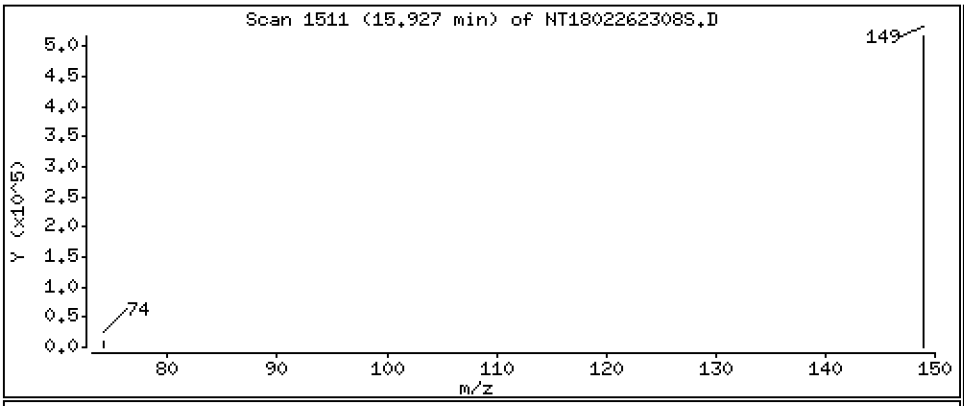
Operator: YZ

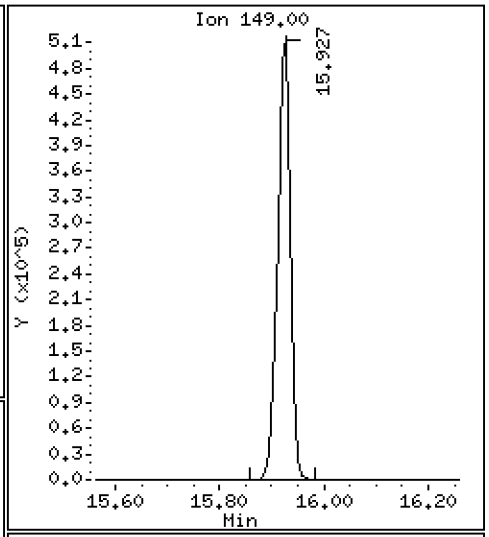
Column phase: ZB-5msi

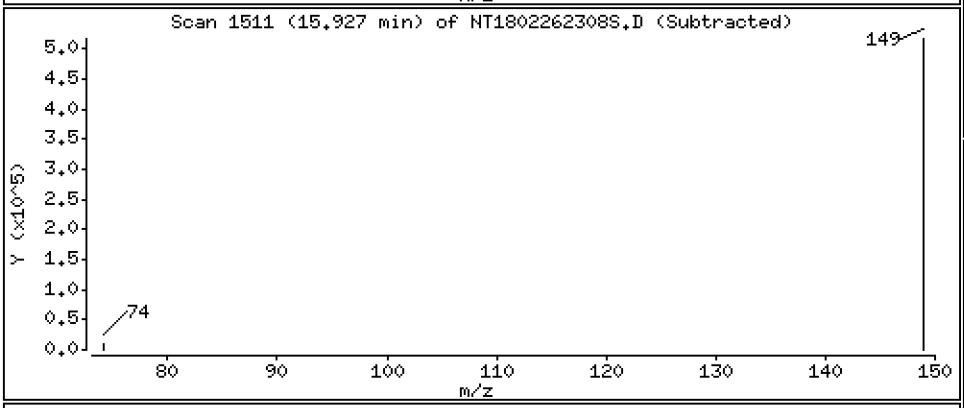
Column diameter: 0.25

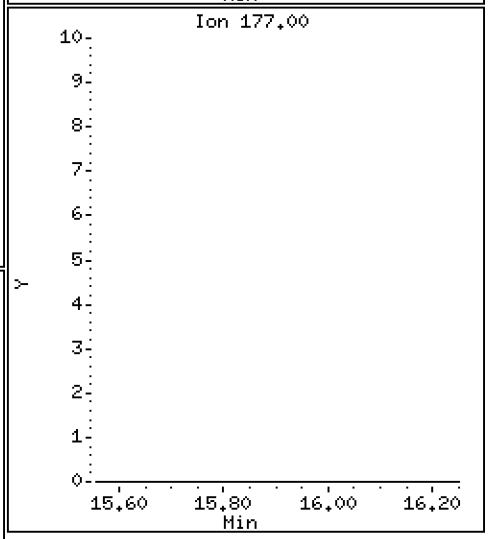
50 Diethylphthalate

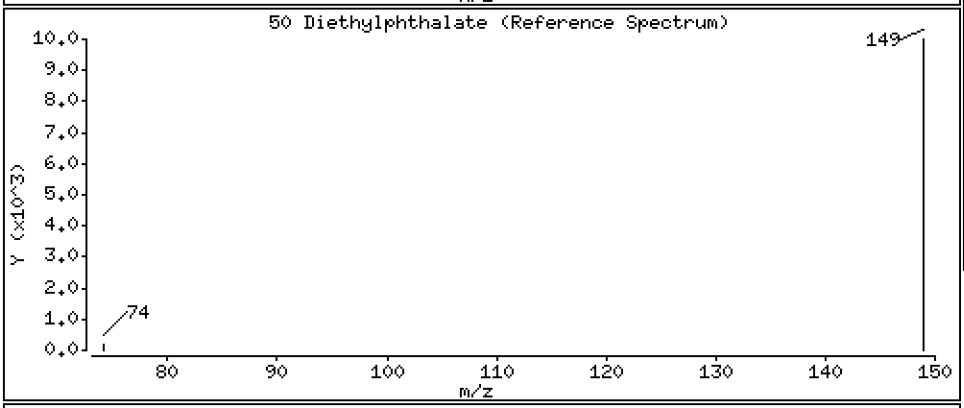
Concentration: 4.614 ug/mL

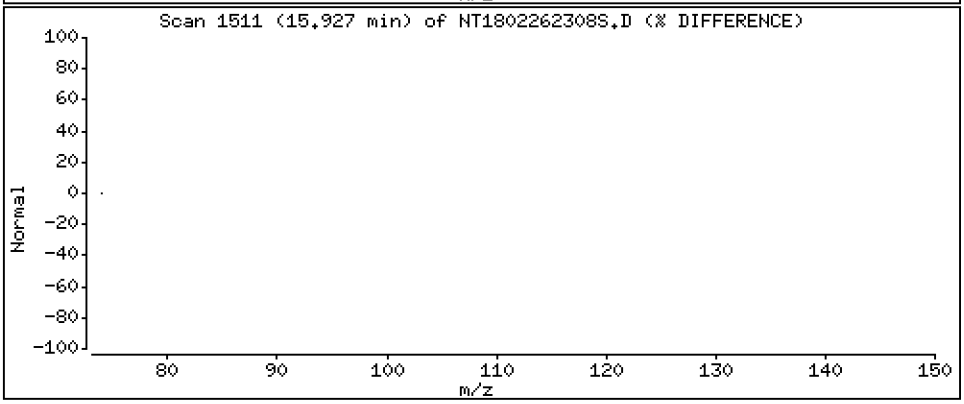












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262308S.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

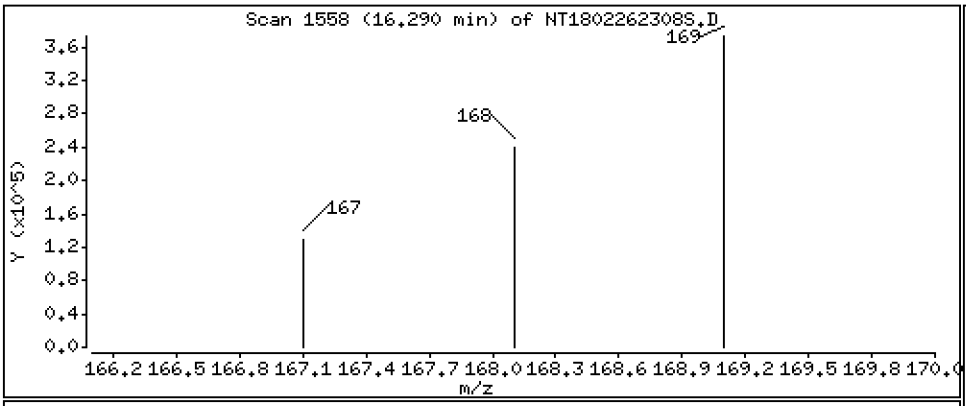
Operator: YZ

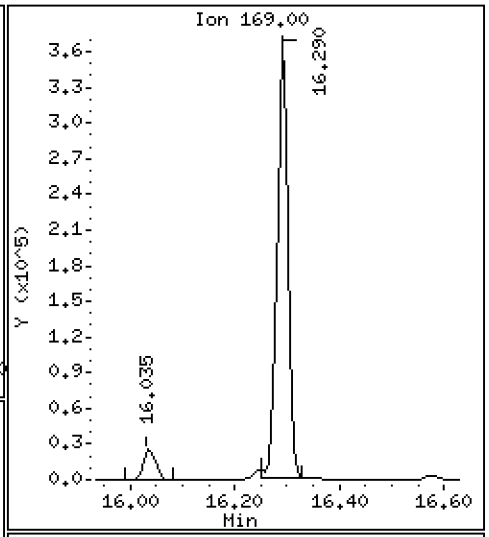
Column phase: ZB-5msi

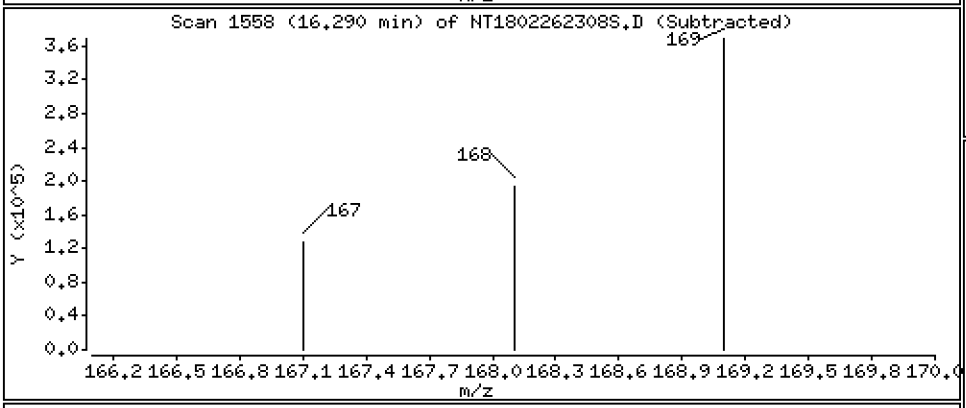
Column diameter: 0.25

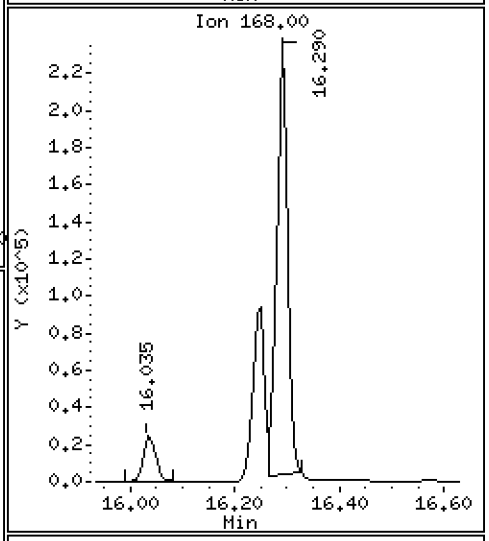
54 N-Nitrosodiphenylamine

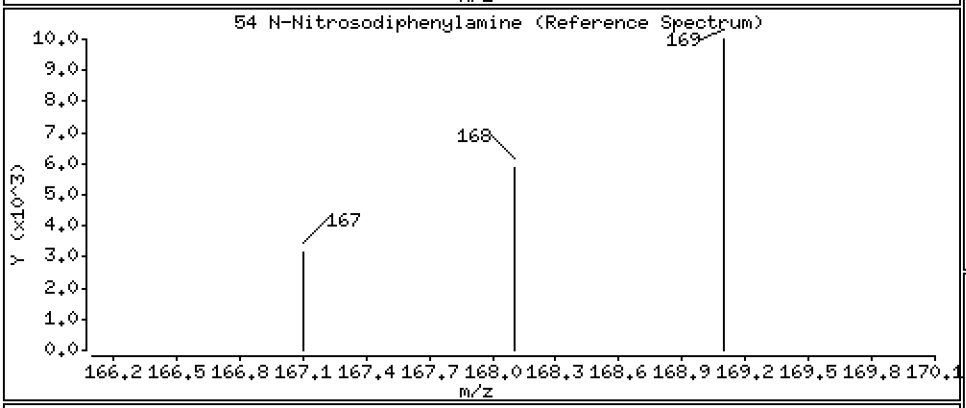
Concentration: 3.602 ug/mL

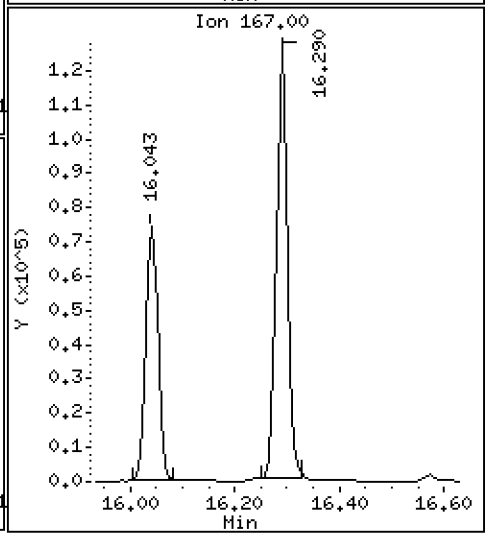


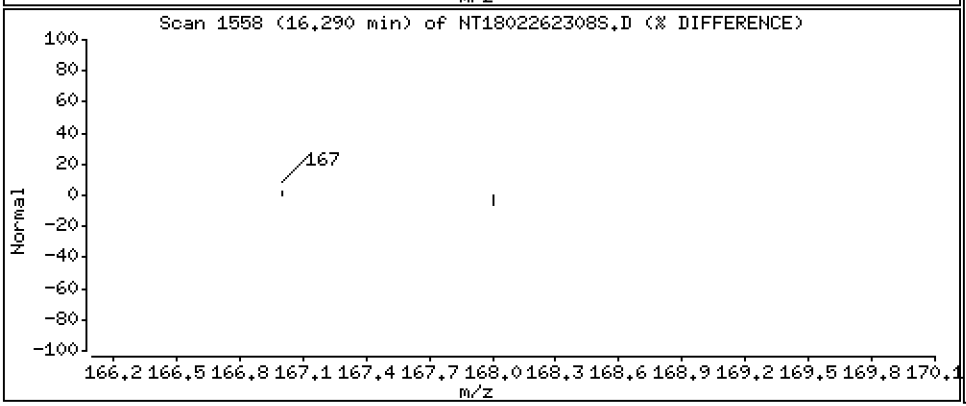












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262308S.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

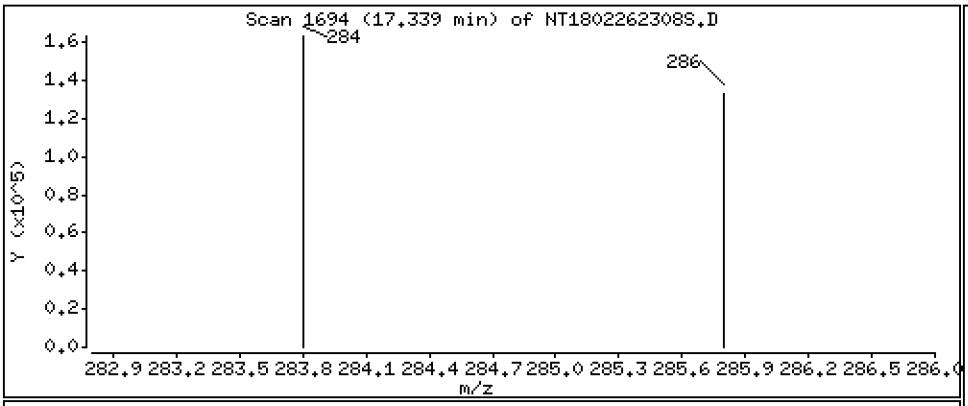
Operator: YZ

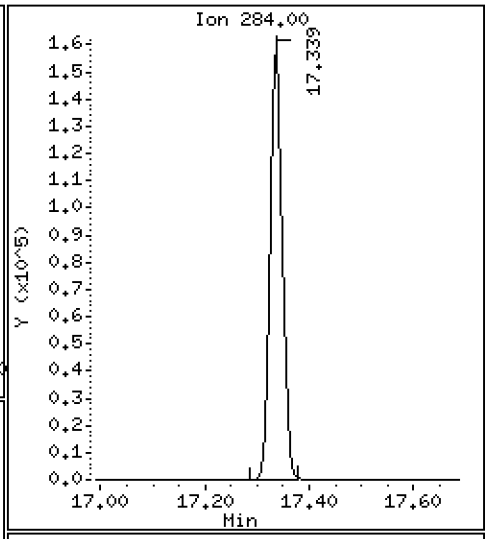
Column phase: ZB-5msi

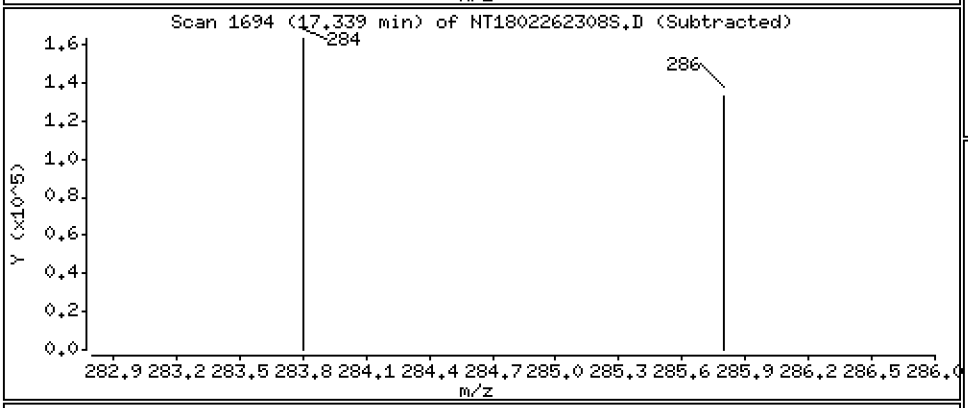
Column diameter: 0.25

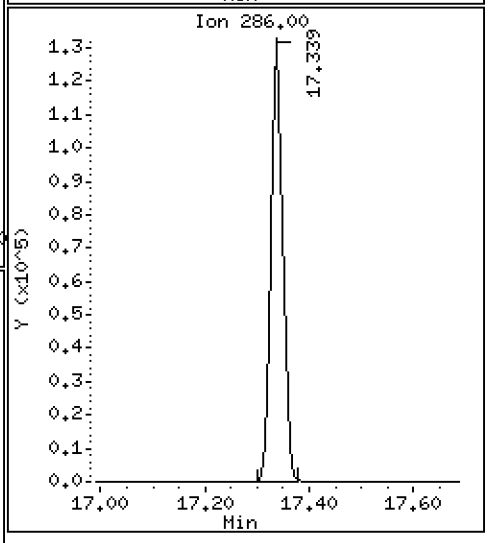
57 Hexachlorobenzene

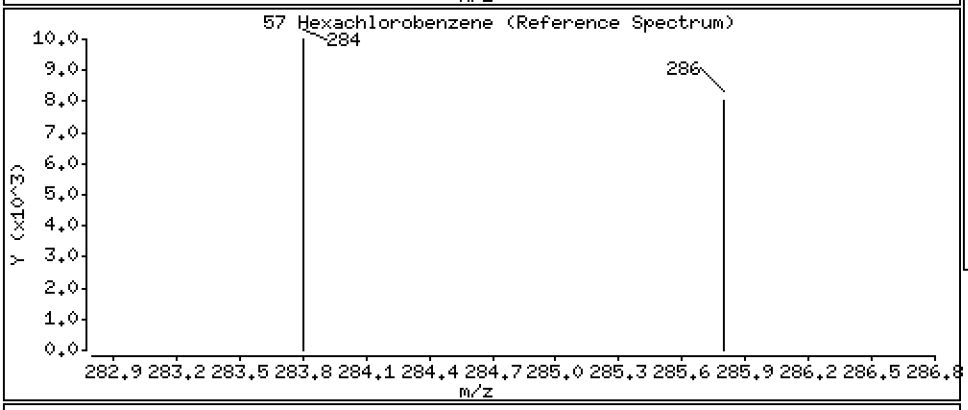
Concentration: 3.697 ug/mL

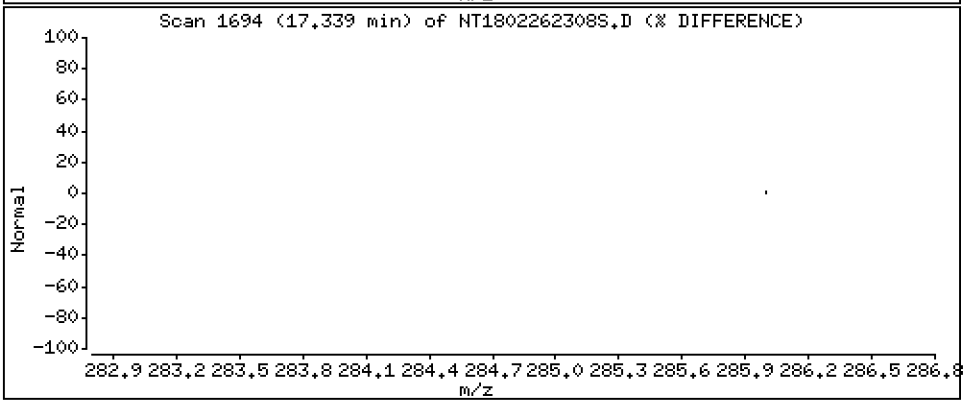












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262308S.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

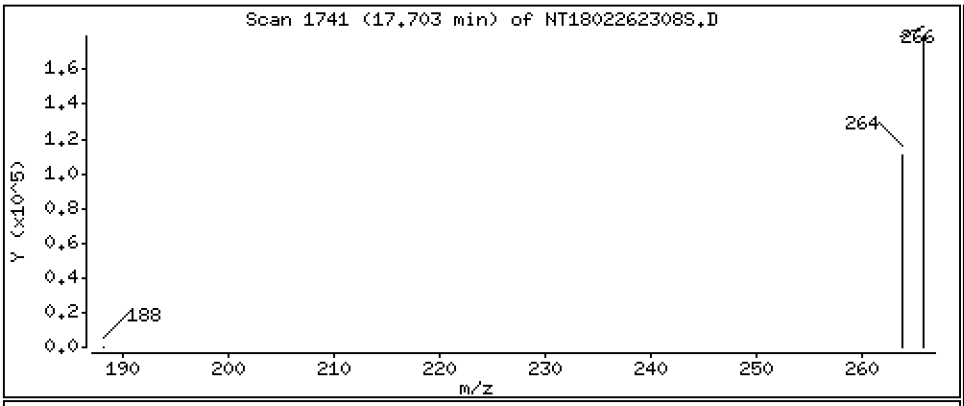
Operator: YZ

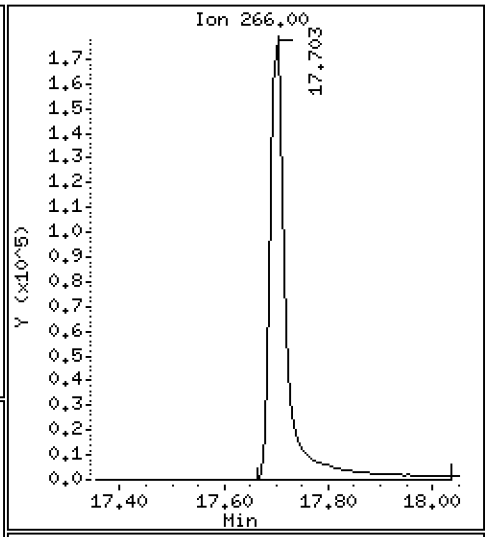
Column phase: ZB-5msi

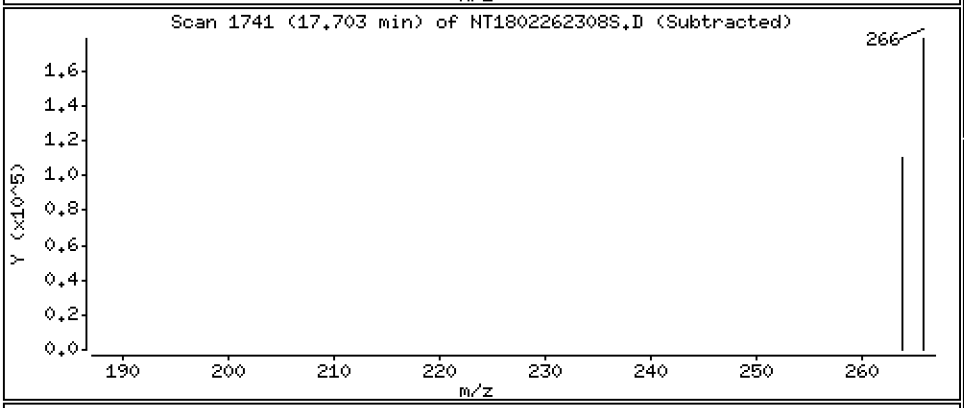
Column diameter: 0.25

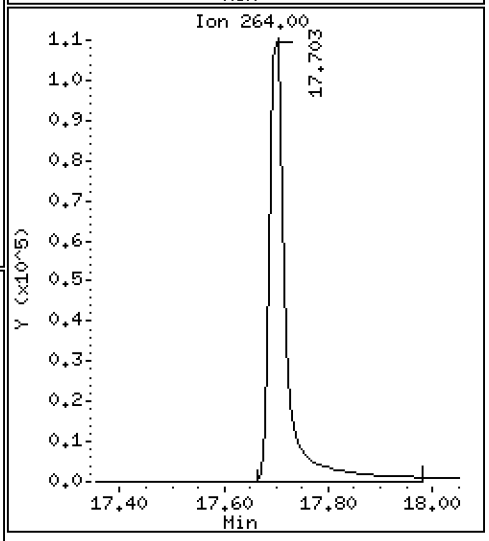
58 Pentachlorophenol

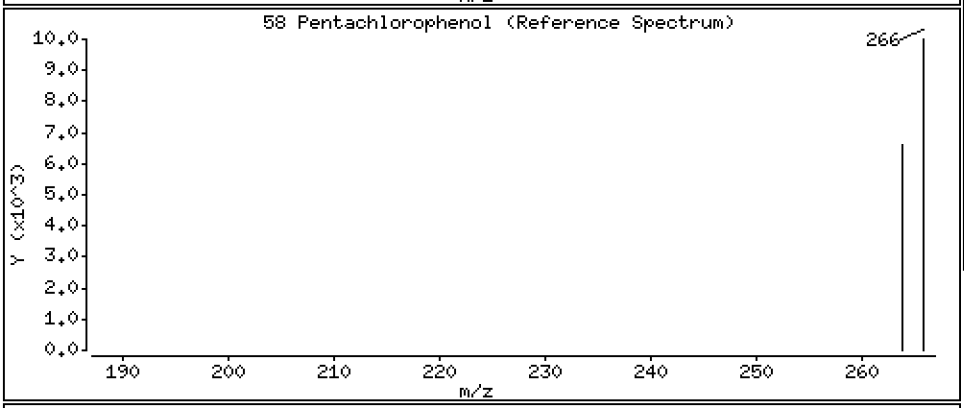
Concentration: 16.60 ug/mL

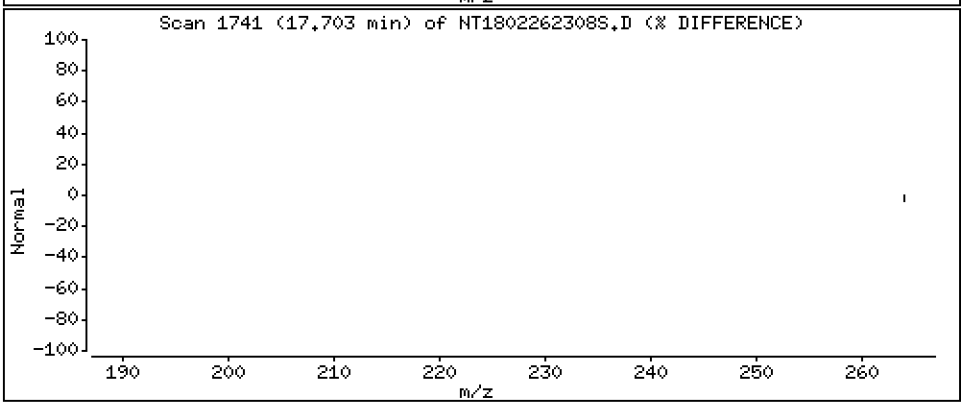












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262308S.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

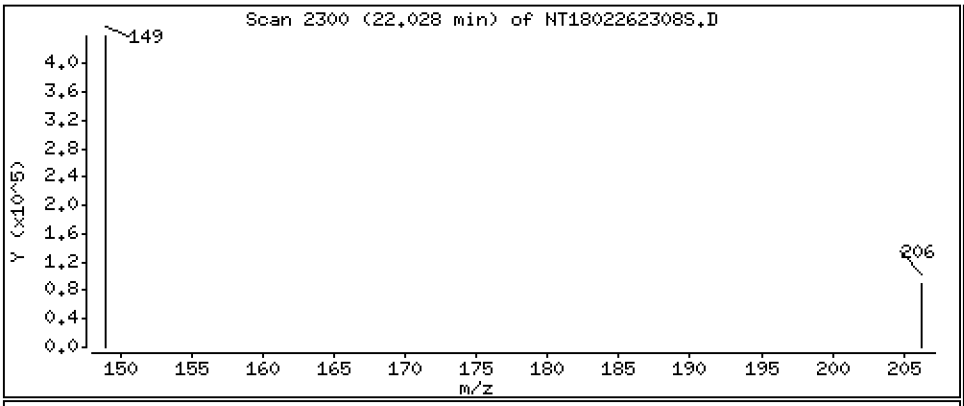
Operator: YZ

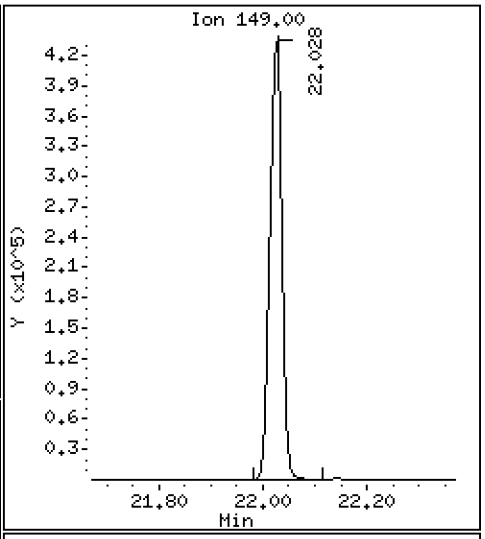
Column phase: ZB-5msi

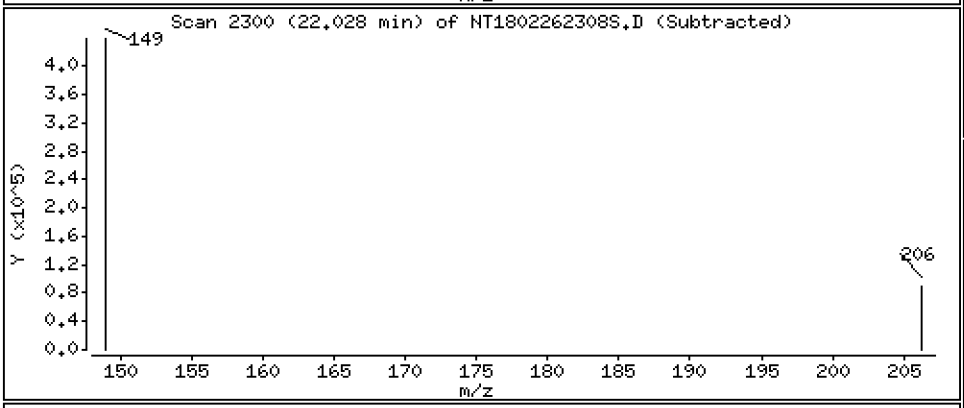
Column diameter: 0.25

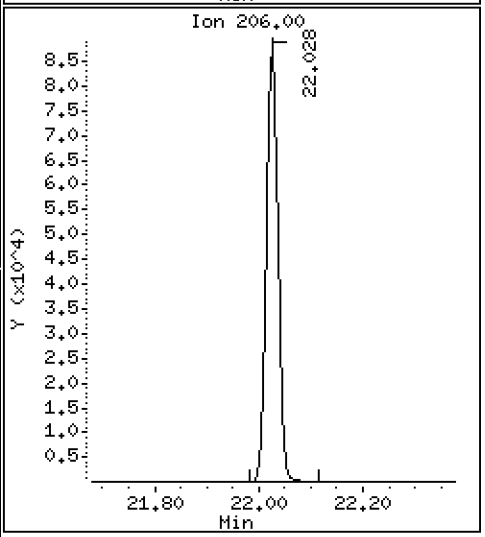
67 Butylbenzylphthalate

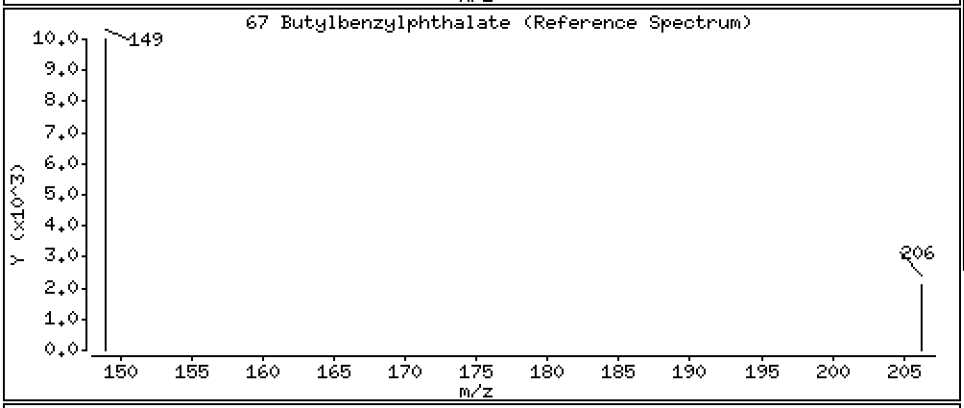
Concentration: 4.597 ug/mL

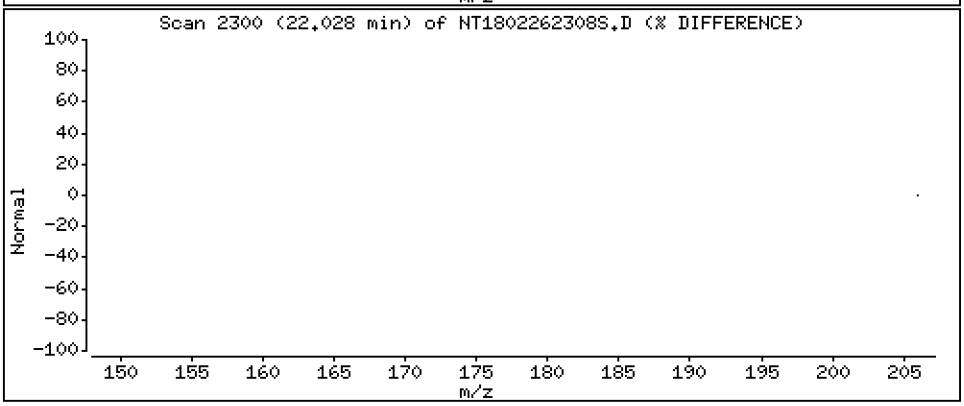












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Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

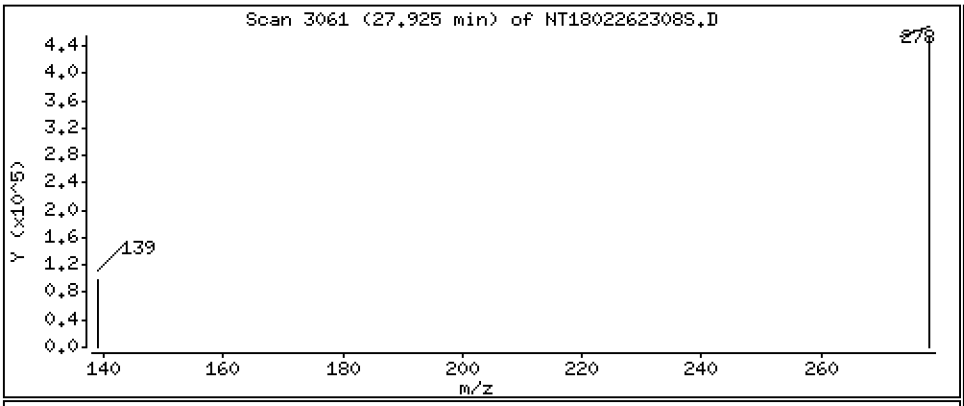
Operator: YZ

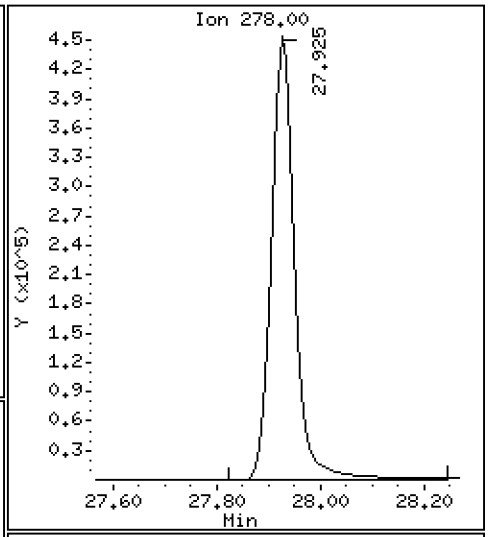
Column phase: ZB-5msi

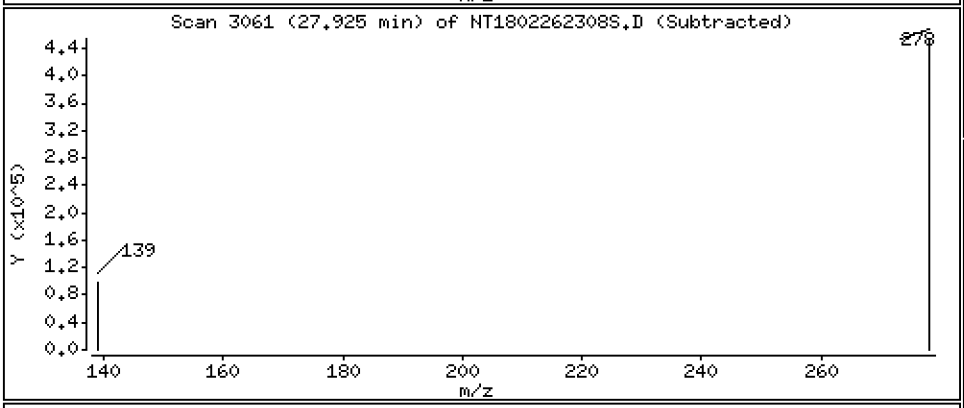
Column diameter: 0.25

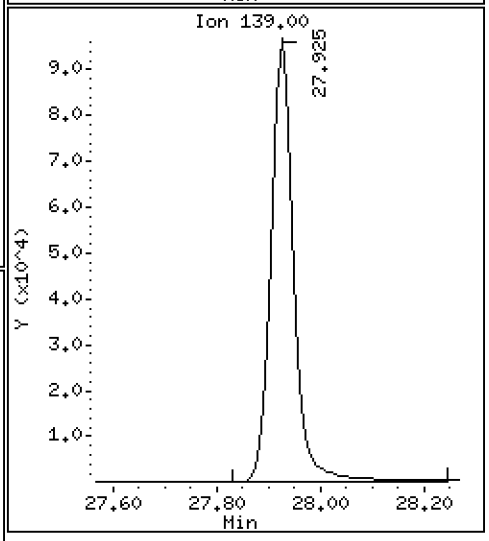
79 Dibenzo(a,h)anthracene

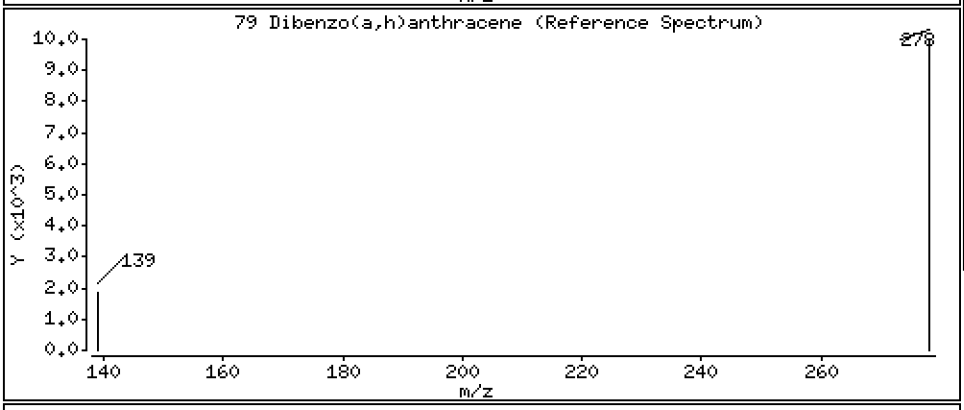
Concentration: 4.661 ug/mL

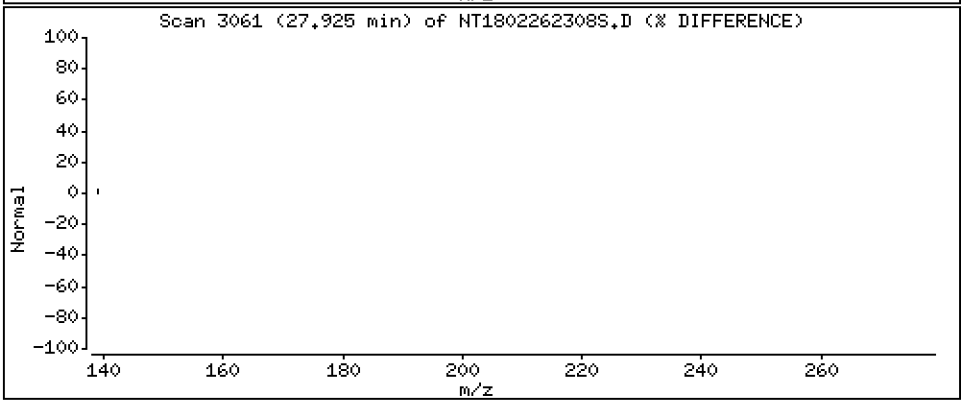












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262308S.D

Date : 26-FEB-2023 16:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-BSD2

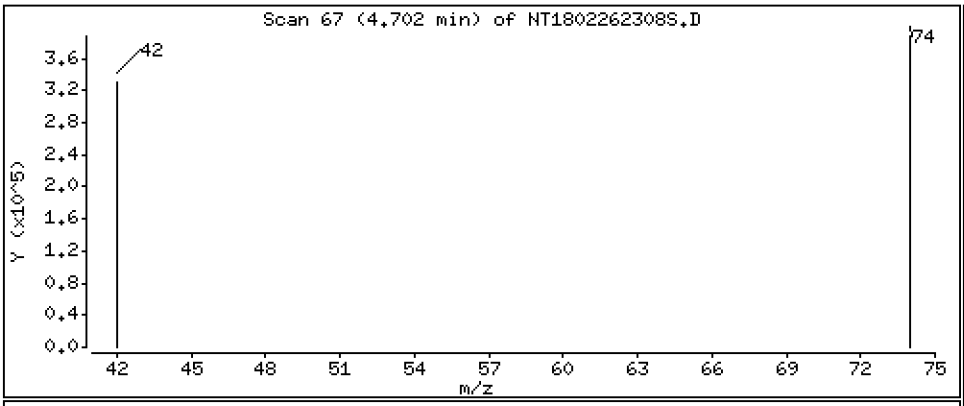
Operator: YZ

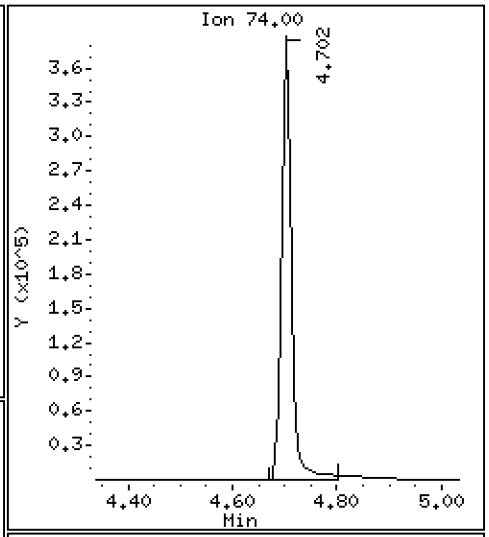
Column phase: ZB-5msi

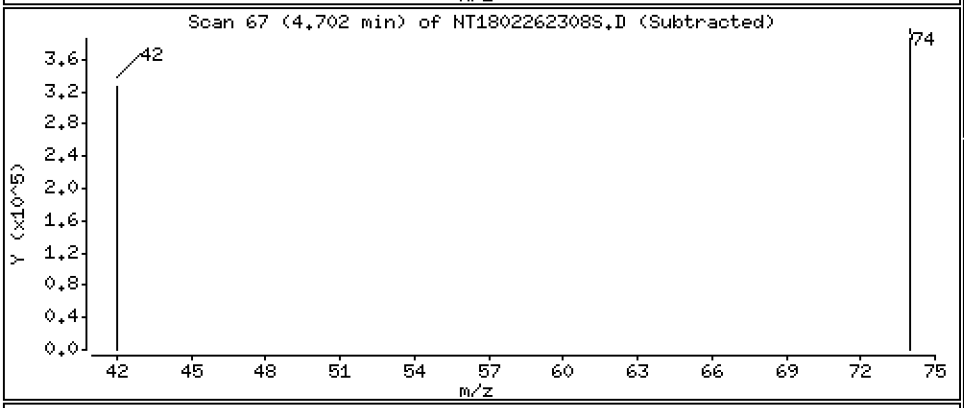
Column diameter: 0.25

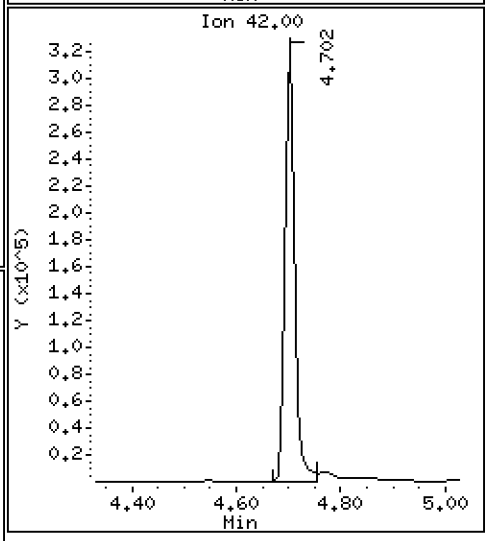
90 N-Nitrosodimethylamine

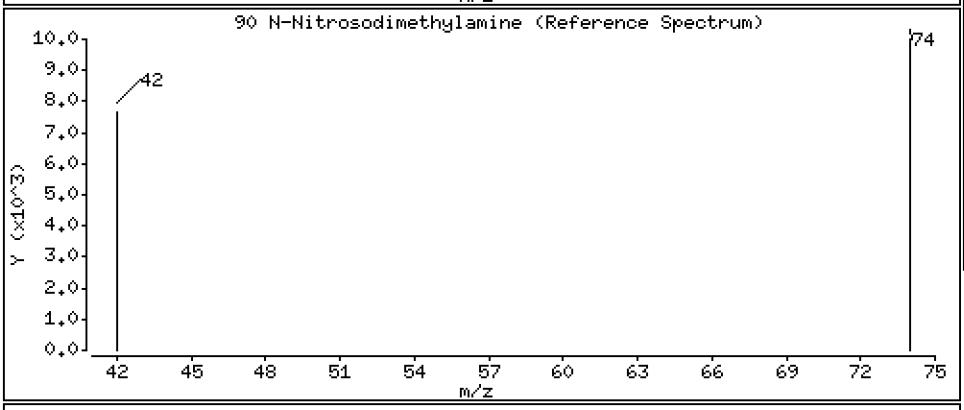
Concentration: 9.762 ug/mL

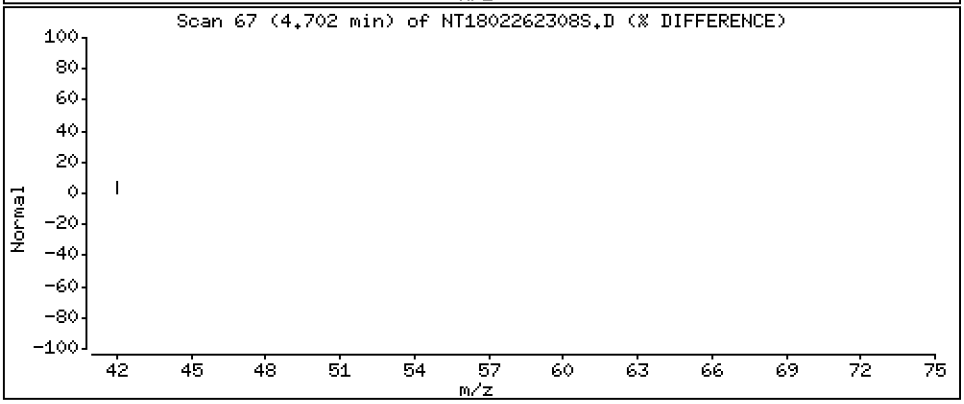












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262308S.D
Lab Smp Id: BLA0410-BSD2
Inj Date : 26-FEB-2023 16:32
Operator : YZ Inst ID: nt18.i
Smp Info : BLA0410-BSD2
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.764	6.748	(0.758)	483739	5.34966	5.350(R)
	3	Phenol	94	8.332	8.324	(0.934)	418549	3.54815	3.548
	7	1,3-Dichlorobenzene	146	8.850	8.850	(0.992)	381846	3.23294	3.233
*	8	1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	280167	4.00000	
	9	1,4-Dichlorobenzene	146	8.943	8.943	(1.003)	393176	3.18759	3.188
	11	Benzyl alcohol	79	9.191	9.191	(1.030)	278826	3.68688	3.687
	12	1,2-Dichlorobenzene	146	9.300	9.300	(1.043)	380247	3.23788	3.238
	13	2-Methylphenol	108	9.416	9.416	(1.056)	299015	3.08237	3.082
	15	4-Methylphenol	108	9.688	9.680	(1.086)	335152	3.44335	3.443
	16	N-Nitroso-di-n-propylamine	70	9.742	9.735	(1.092)	249596	3.80687	3.807
	22	2,4-Dimethylphenol	107	10.715	10.715	(0.942)	724517	7.62013	7.620
	24	Benzoic acid	105	11.012	11.088	(0.969)	811648	20.0414	20.04
	26	1,2,4-Trichlorobenzene	180	11.285	11.285	(0.993)	330154	3.39089	3.391
*	27	Naphthalene-d8	136	11.370	11.370	(1.000)	1065660	4.00000	
	30	Hexachlorobutadiene	225	11.772	11.772	(1.035)	199889	3.42178	3.422
	39	Dimethylphthalate	163	14.473	14.465	(0.968)	854556	4.11160	4.112
*	42	Acenaphthene-d10	162	14.945	14.945	(1.000)	540980	4.00000	
	50	Diethylphthalate	149	15.926	15.911	(1.066)	876296	4.61399	4.614
	54	N-Nitrosodiphenylamine	169	16.289	16.281	(0.907)	516385	3.60150	3.602
	57	Hexachlorobenzene	284	17.338	17.338	(0.966)	254480	3.69686	3.697
	58	Pentachlorophenol	266	17.702	17.702	(0.986)	374590	16.5967	16.60
*	59	Phenanthrene-d10	188	17.950	17.950	(1.000)	991049	4.00000	
$	66	Terphenyl-d14	244	21.099	21.091	(0.918)	678633	4.11021	4.110(R)
	67	Butylbenzylphthalate	149	22.028	22.020	(0.958)	665648	4.59739	4.597
*	69	Chrysene-d12	240	22.988	22.980	(1.000)	911845	4.00000	
*	77	Perylene-d12	264	25.473	25.473	(1.000)	994325	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.925	27.917	(1.096)	1377072	4.66102	4.661
	90	N-Nitrosodimethylamine	74	4.701	4.686	(0.527)	525392	9.76209	9.762

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262308S.D
Lab Smp Id: BLA0410-BSD2
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	280167	0.25
27 Naphthalene-d8	1065527	532764	2131054	1065660	0.01
42 Acenaphthene-d10	544290	272145	1088580	540980	-0.61
59 Phenanthrene-d10	1003412	501706	2006824	991049	-1.23
69 Chrysene-d12	936975	468488	1873950	911845	-2.68
77 Perylene-d12	1057771	528886	2115542	994325	-6.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262308S.D

Lab ID: BLA0410-BSD2
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 16:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.969	0.975	-0.0067	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

LCS / LCS DUPLICATE RECOVERY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	01/25/23 15:54
Batch:	BLA0411	Laboratory ID:	BLA0411-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 0.5 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Benzo(a)anthracene	300	242		80.7	42 - 120
Chrysene	300	236		78.6	48 - 120
Benzo(b)fluoranthene	300	352		117	52 - 137
Benzo(k)fluoranthene	300	331		110	37 - 129
Benzo(a)pyrene	300	223		74.3	36 - 120
Indeno(1,2,3-cd)pyrene	300	246		82.0	67 - 132
Dibenzo(a,h)anthracene	300	275		91.6	66 - 139

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Benzo(a)anthracene	300	268		89.4	10.2	30	42 - 120
Chrysene	300	261		86.9	10.0	30	48 - 120
Benzo(b)fluoranthene	300	381		127	7.97	30	52 - 137
Benzo(k)fluoranthene	300	348		116	5.28	30	37 - 129
Benzo(a)pyrene	300	240		79.9	7.24	30	36 - 120
Indeno(1,2,3-cd)pyrene	300	270		90.0	9.31	30	67 - 132
Dibenzo(a,h)anthracene	300	300		99.9	8.65	30	66 - 139

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

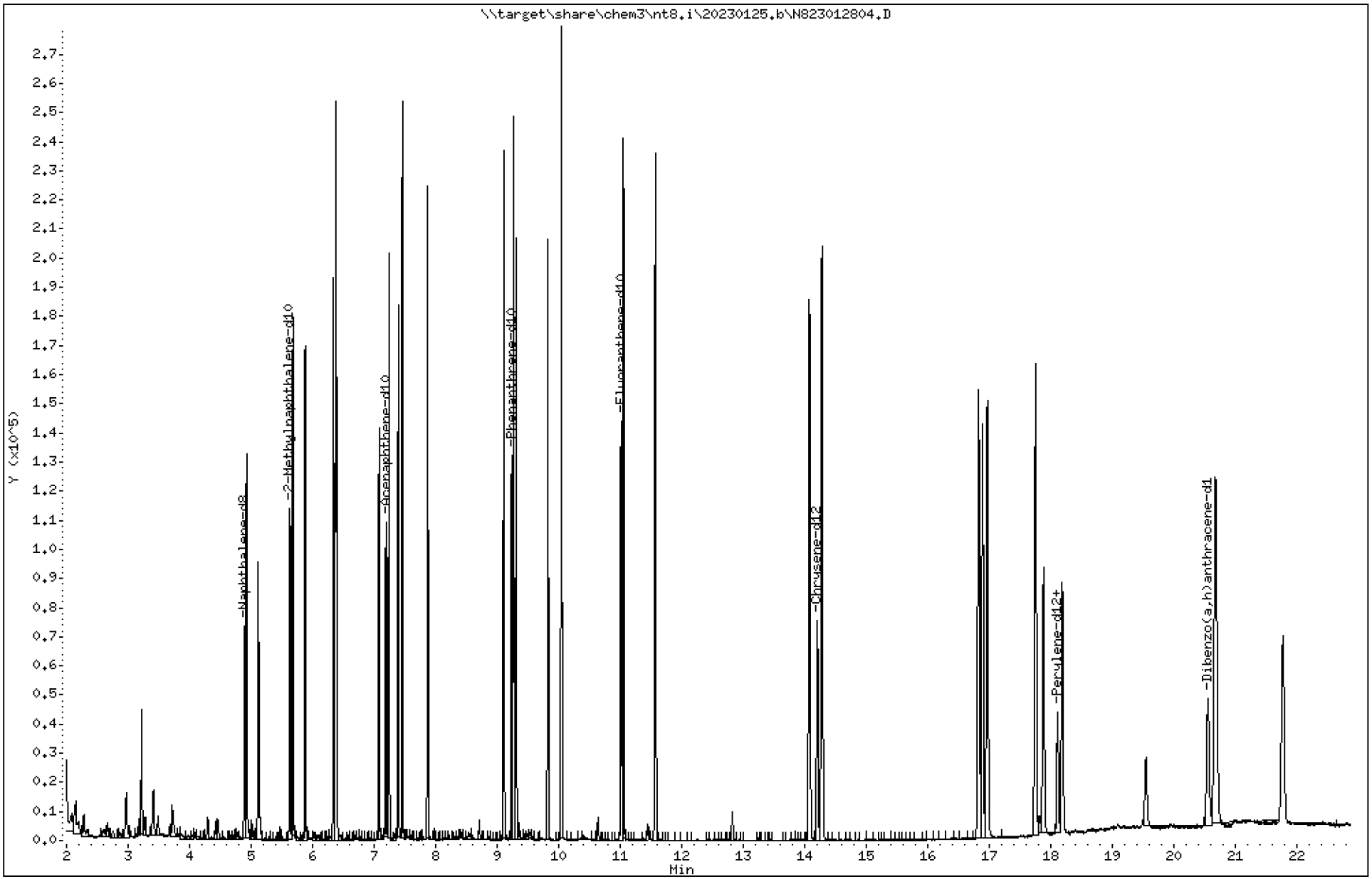
Instrument: nt8.i

Sample Info: BLA0411-BS1,

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

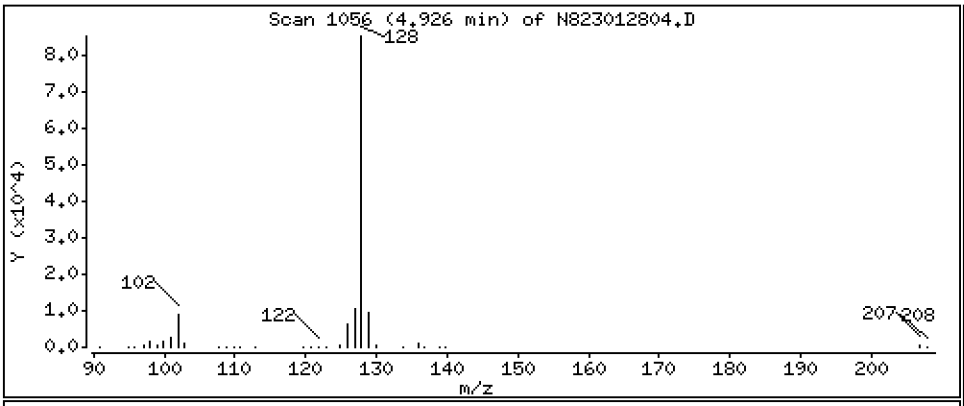
Operator: JZ

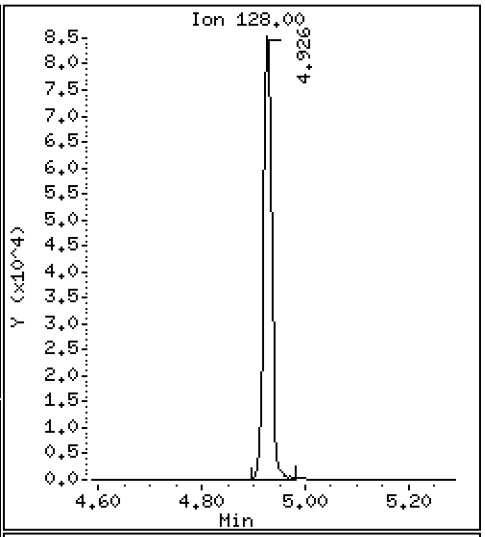
Column phase: Rxi-17sil

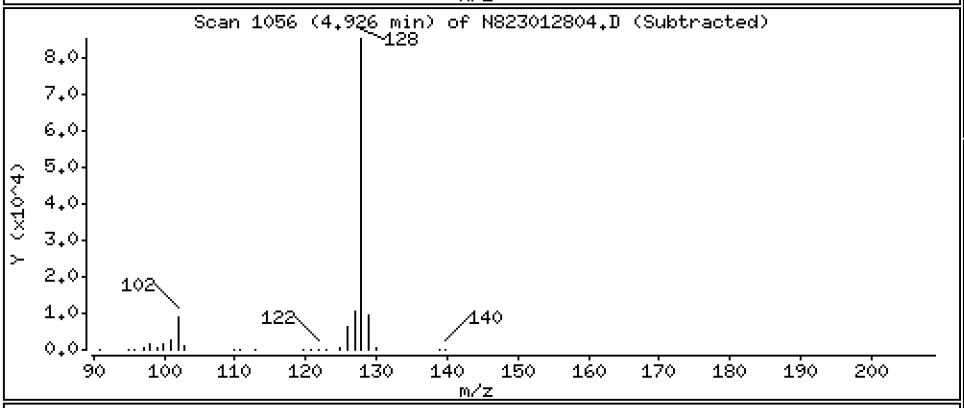
Column diameter: 0.25

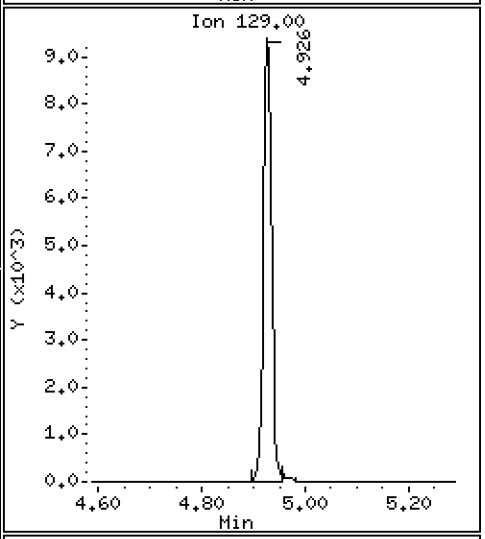
2 Naphthalene

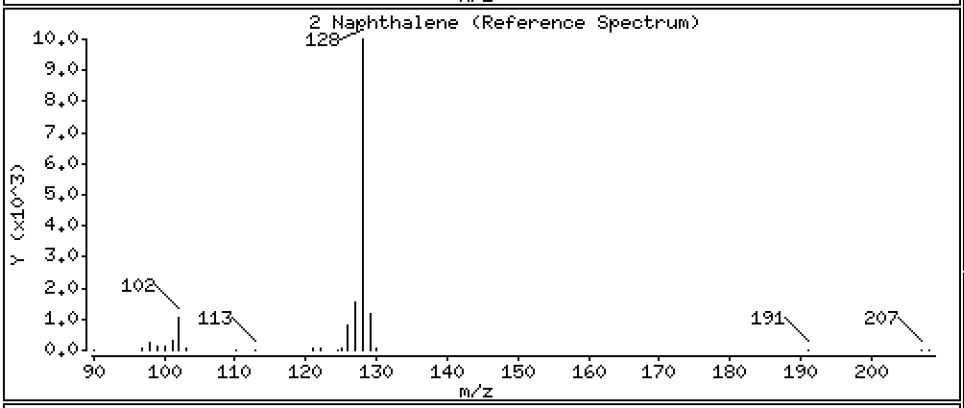
Concentration: 3.796 ug/mL

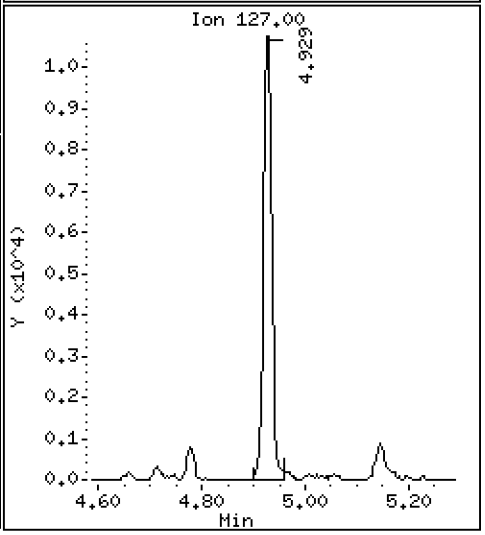


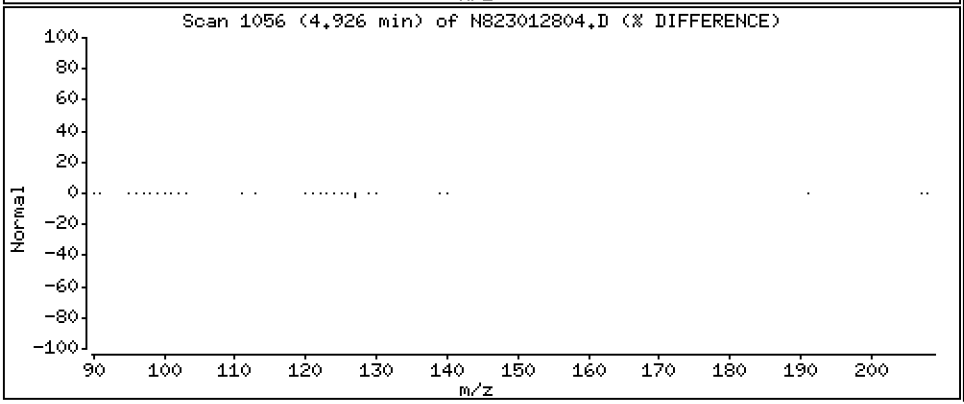












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

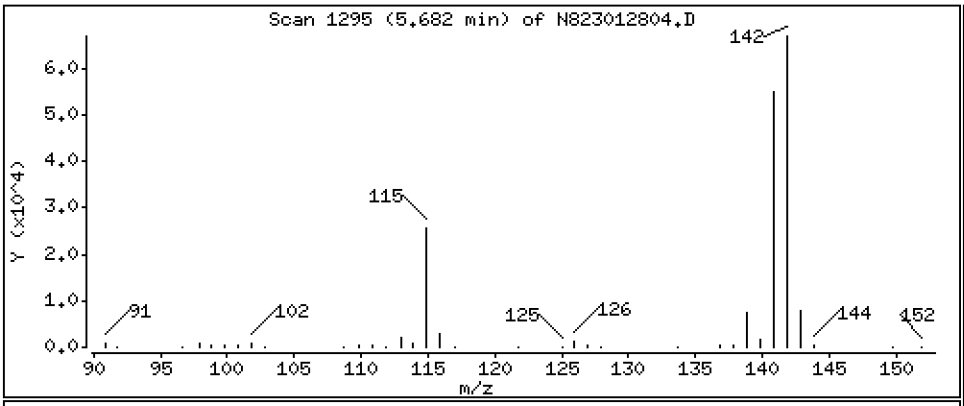
Operator: JZ

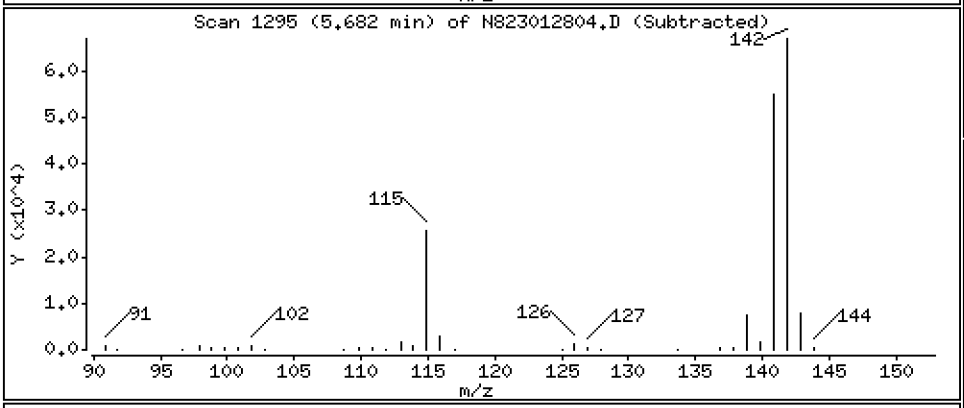
Column phase: Rxi-17sil

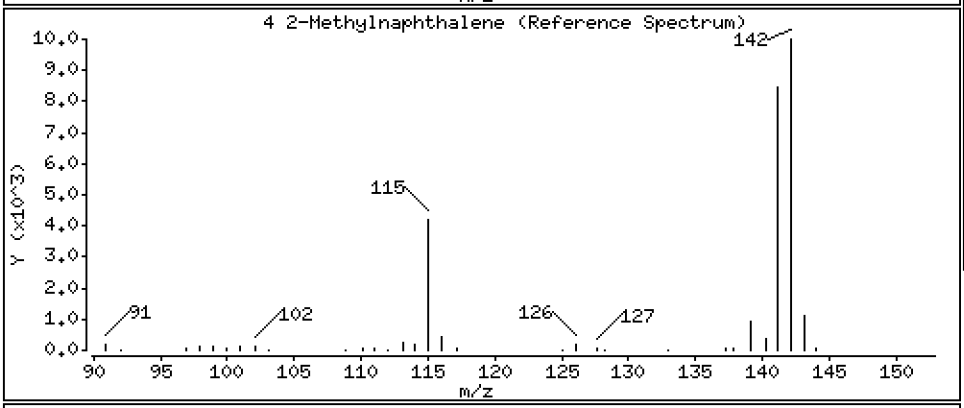
Column diameter: 0.25

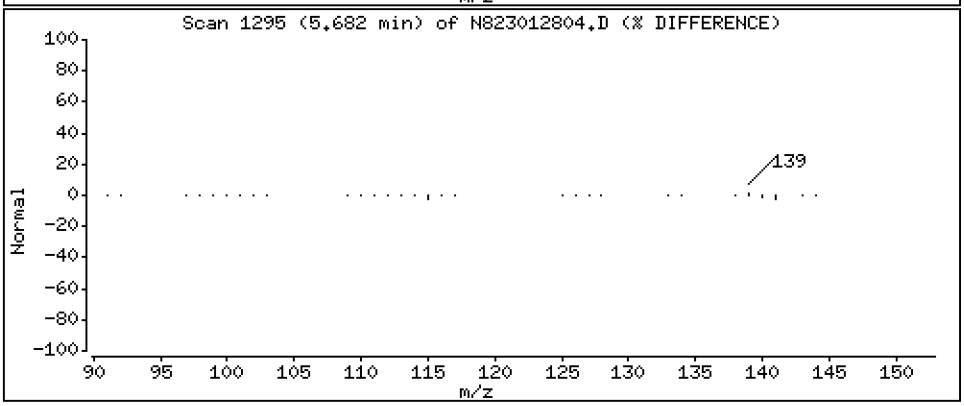
4 2-Methylnaphthalene

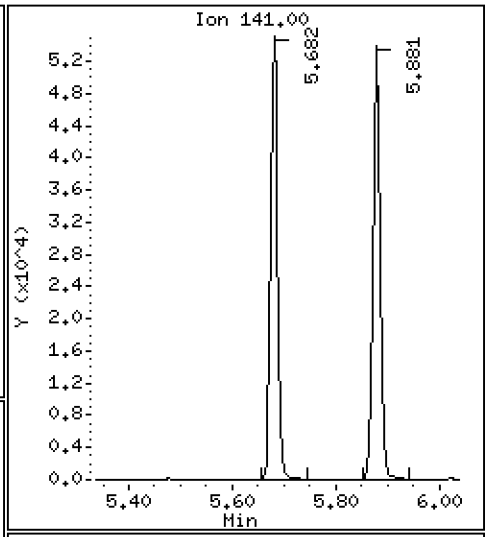
Concentration: 3.911 ug/mL

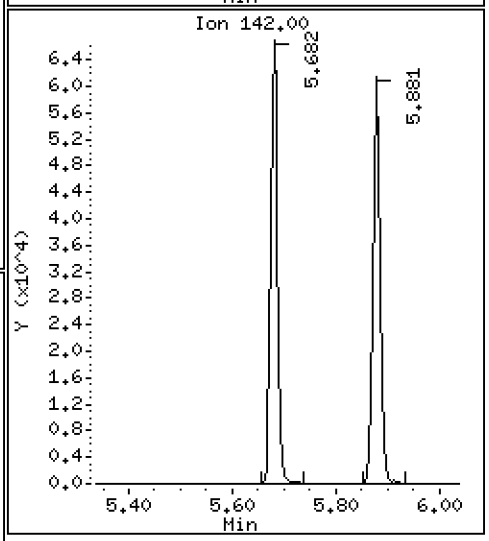












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

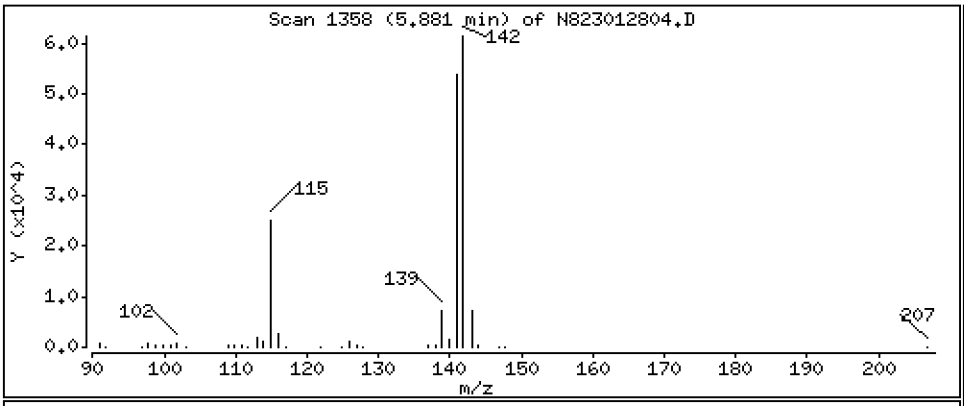
Operator: JZ

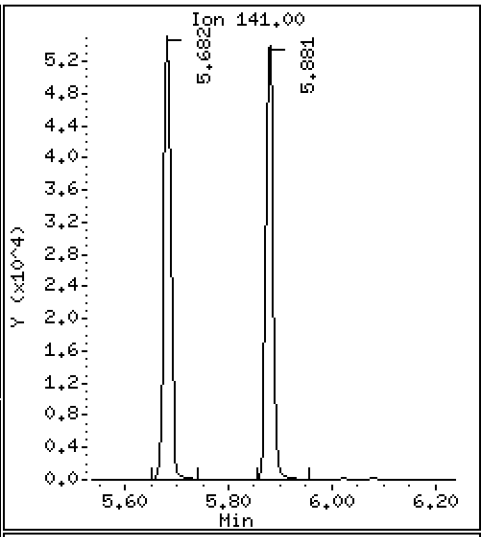
Column phase: Rxi-17sil

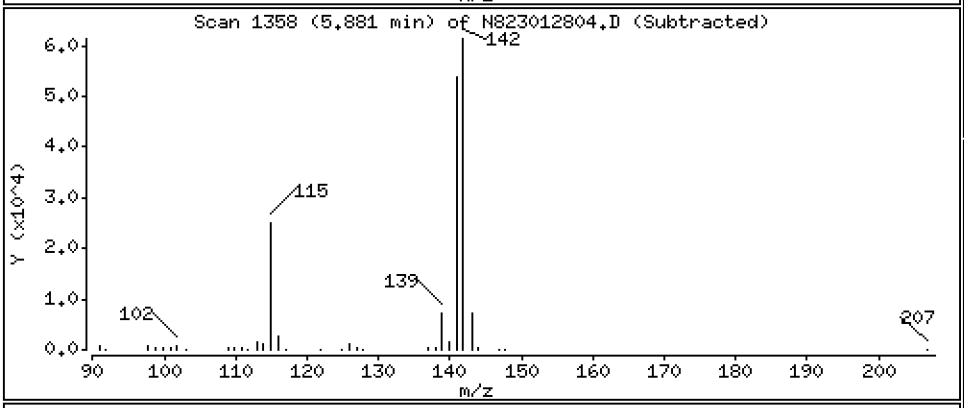
Column diameter: 0.25

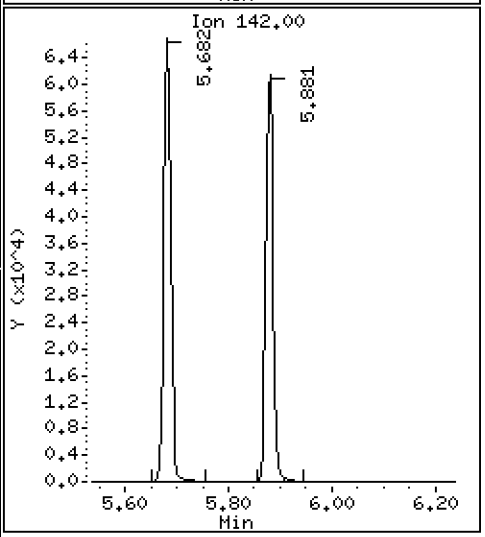
5 1-methylnaphthalene

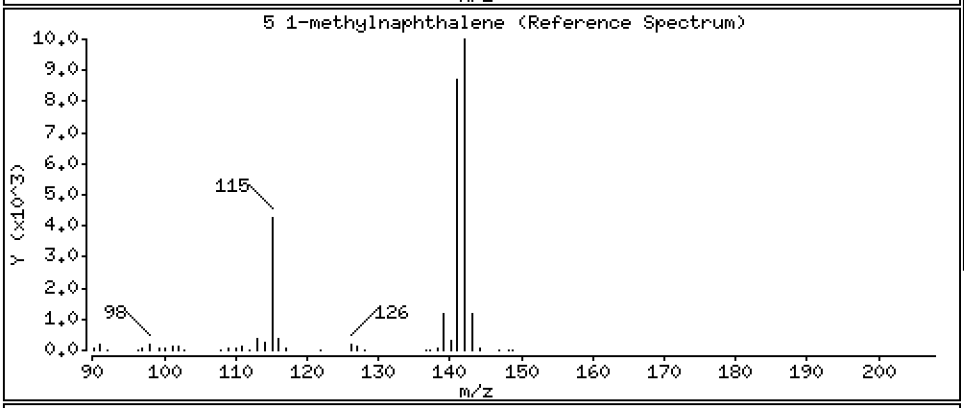
Concentration: 3.948 ug/mL

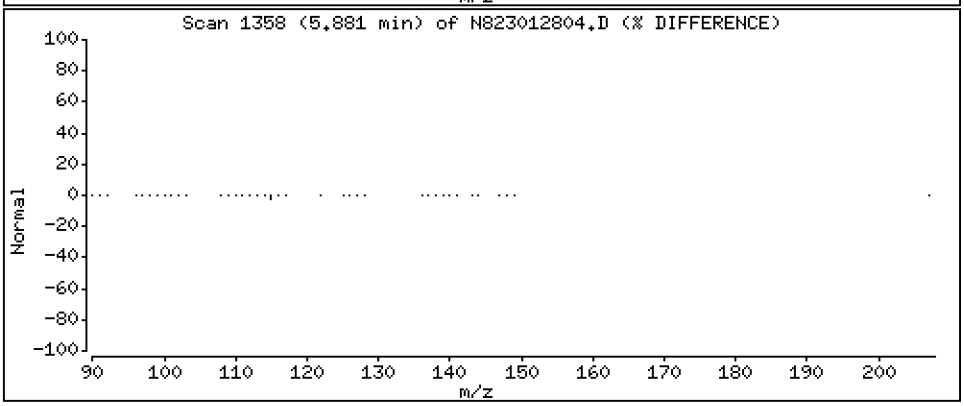












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

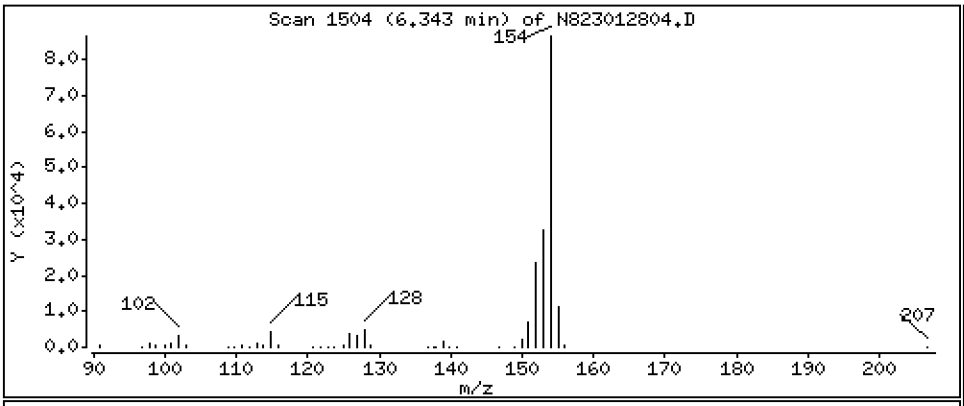
Operator: JZ

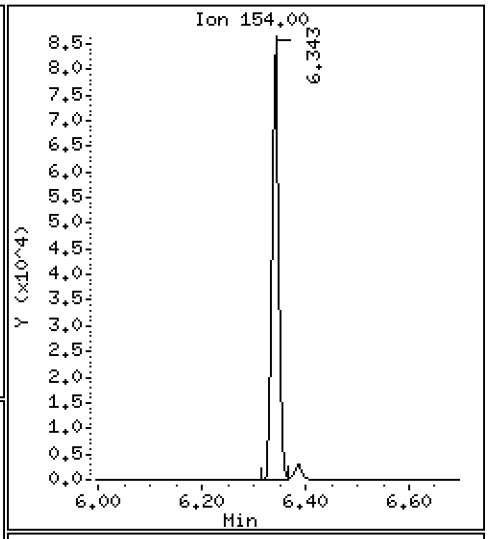
Column phase: Rxi-17sil

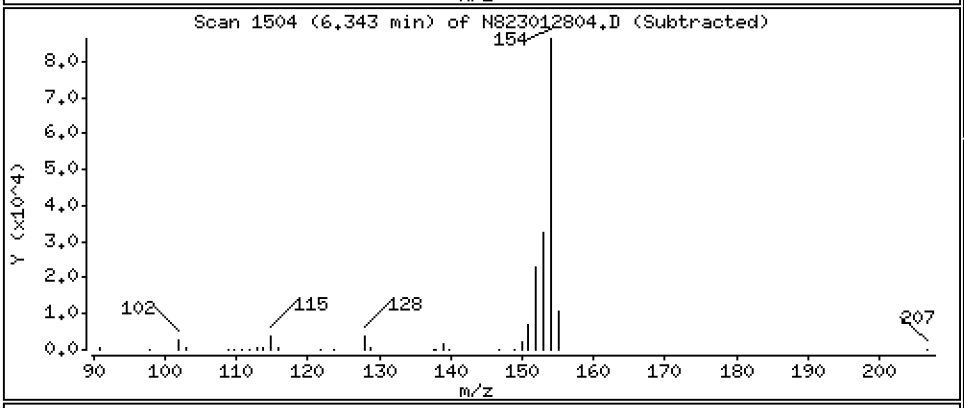
Column diameter: 0.25

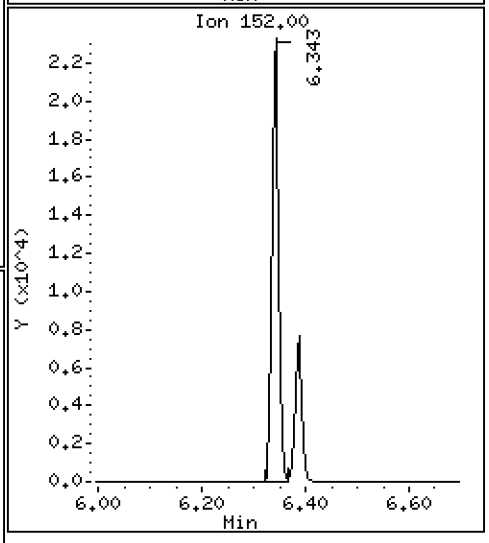
7 Biphenyl

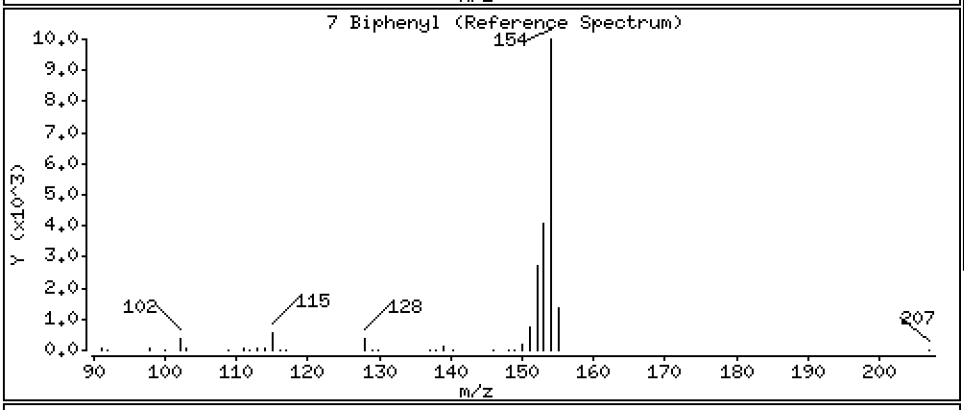
Concentration: 3.904 ug/mL

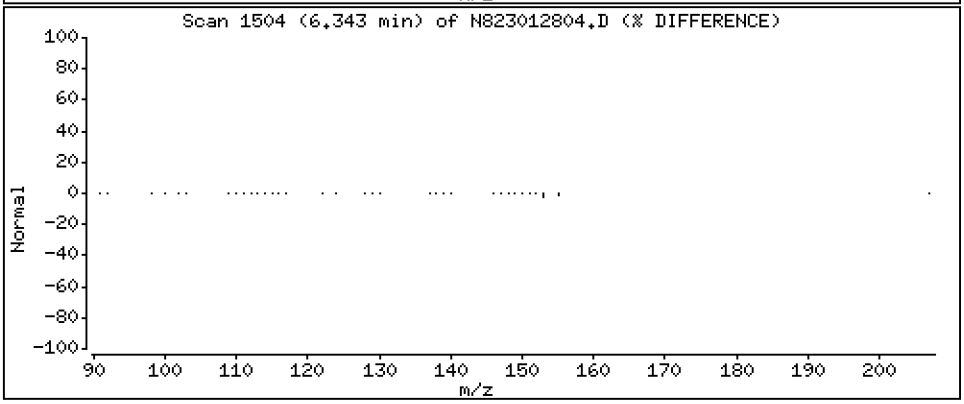












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

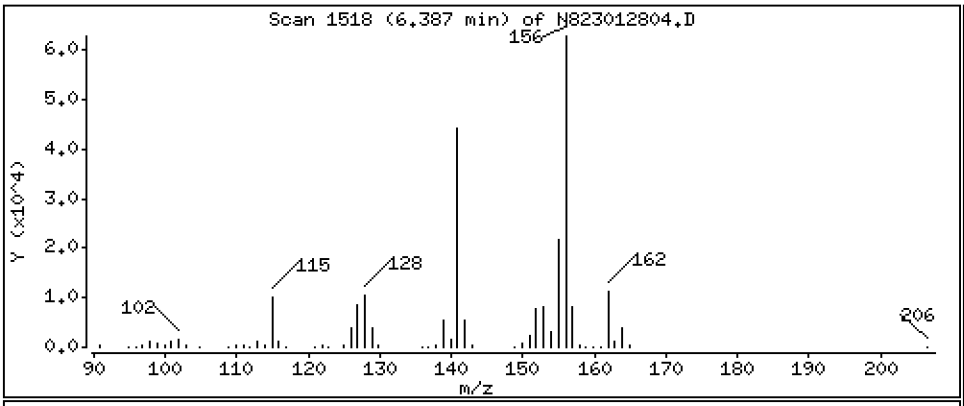
Operator: JZ

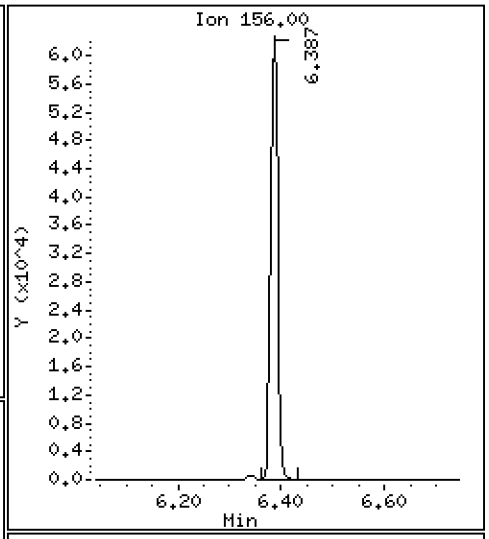
Column phase: Rxi-17sil

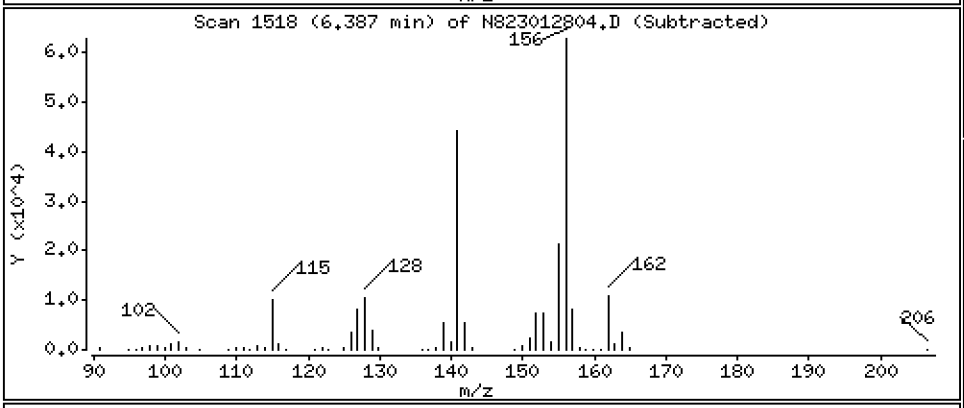
Column diameter: 0.25

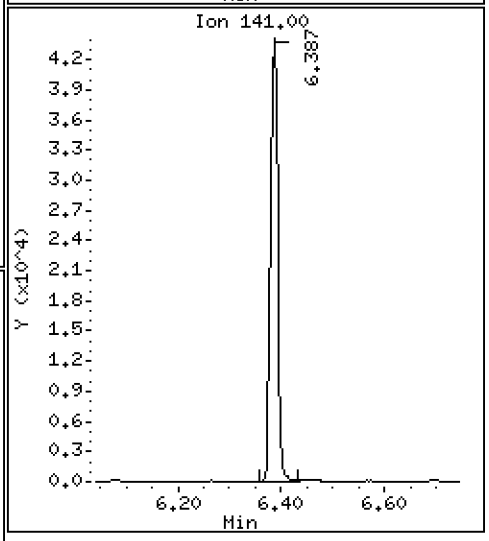
8 2,6-Dimethylnaphthalene

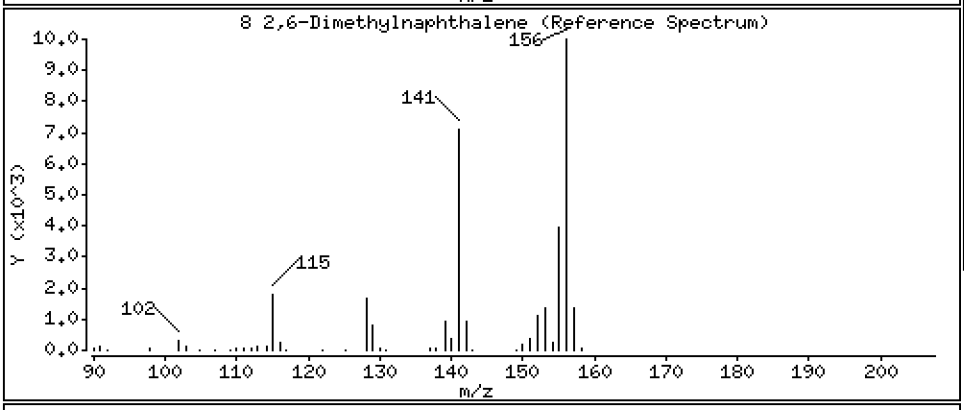
Concentration: 4.069 ug/mL

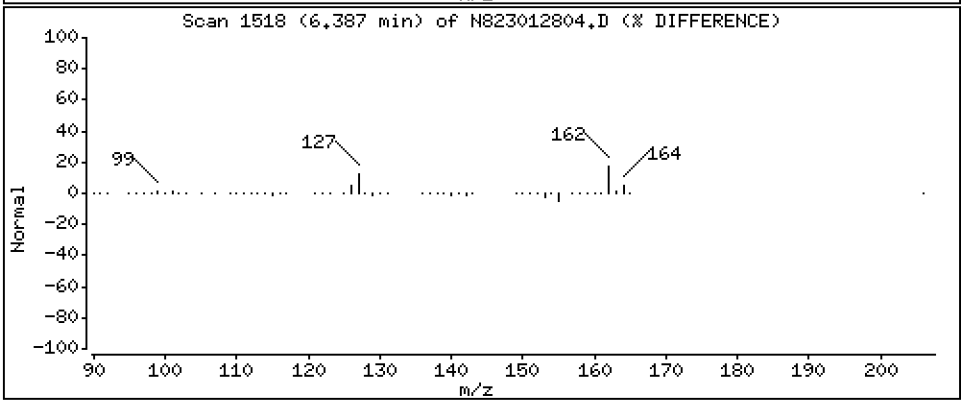












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

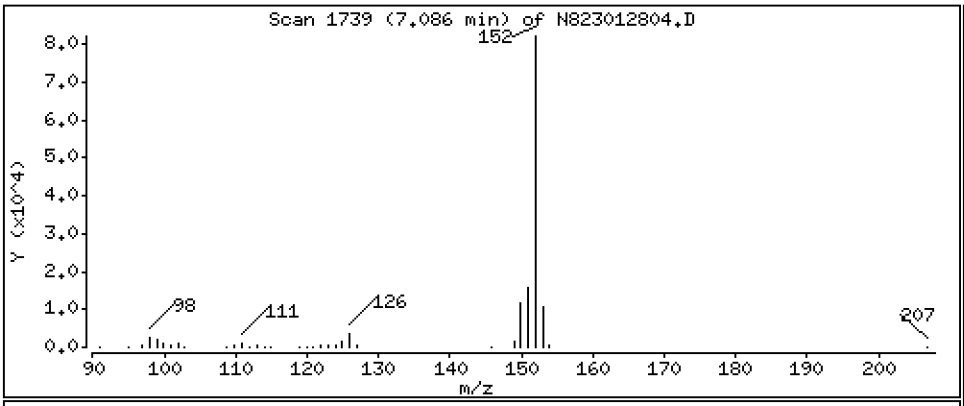
Operator: JZ

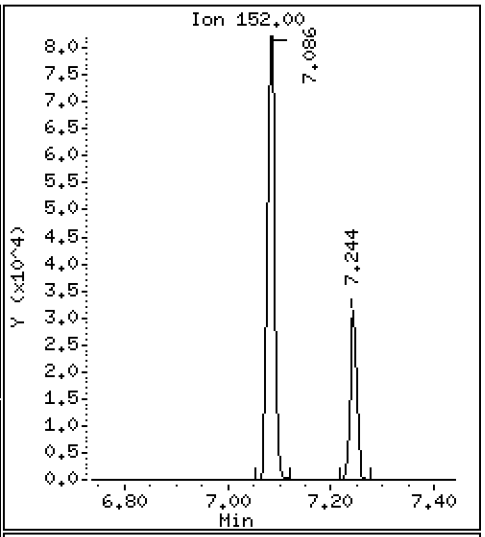
Column phase: Rxi-17sil

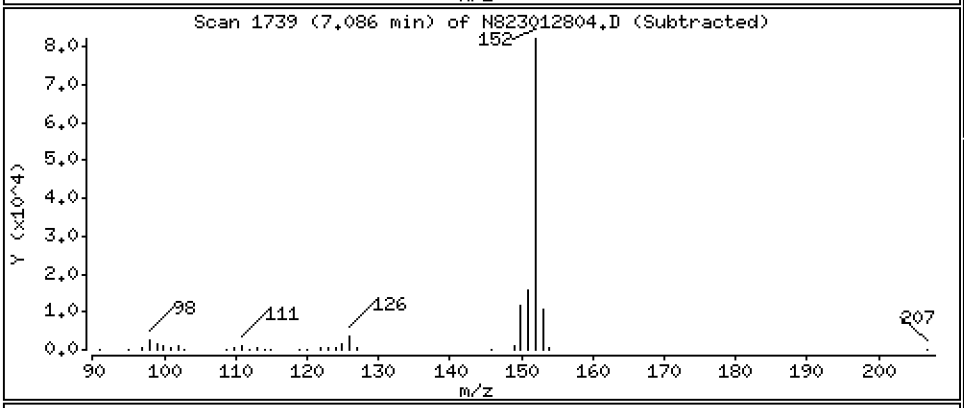
Column diameter: 0.25

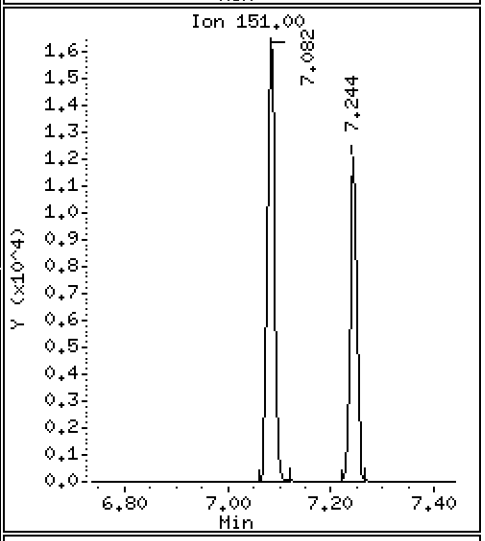
9 Acenaphthylene

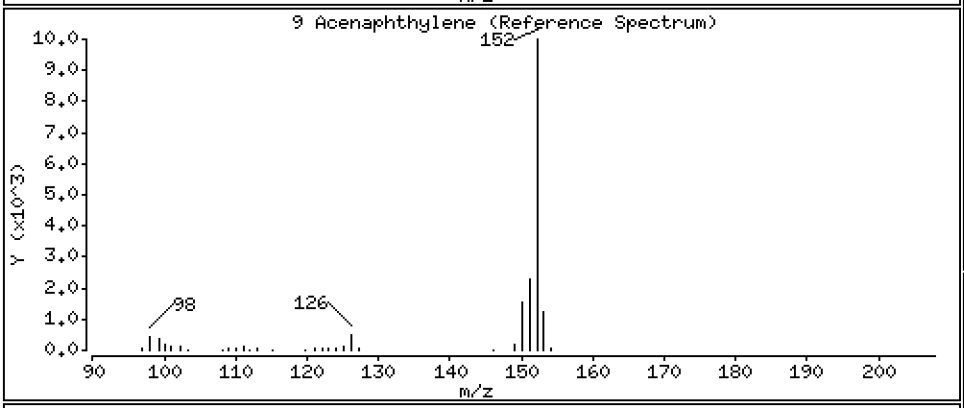
Concentration: 3.438 ug/mL

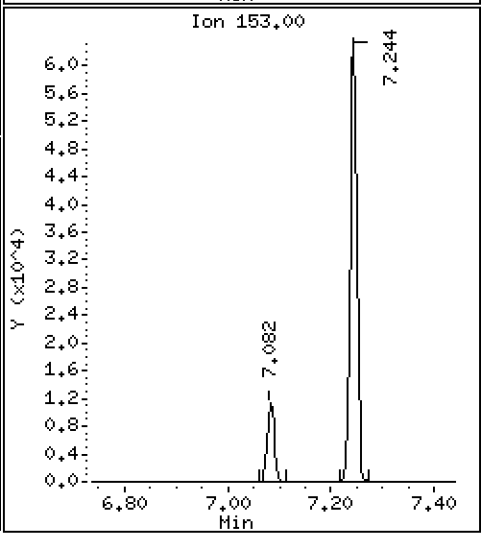


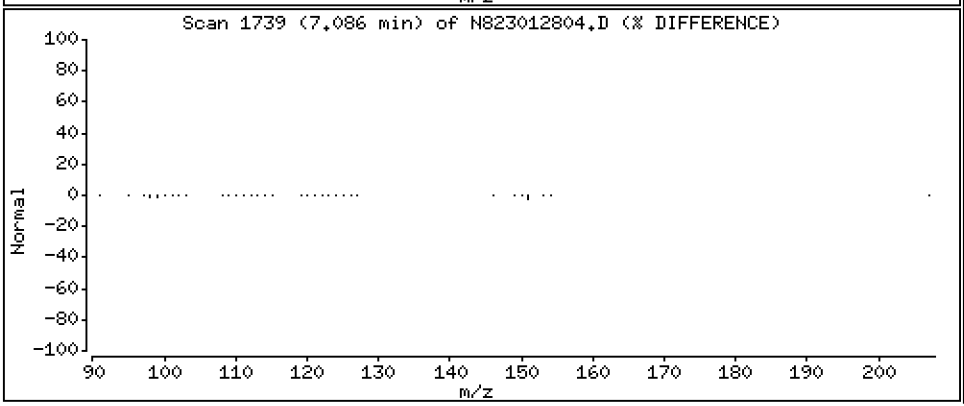












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Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

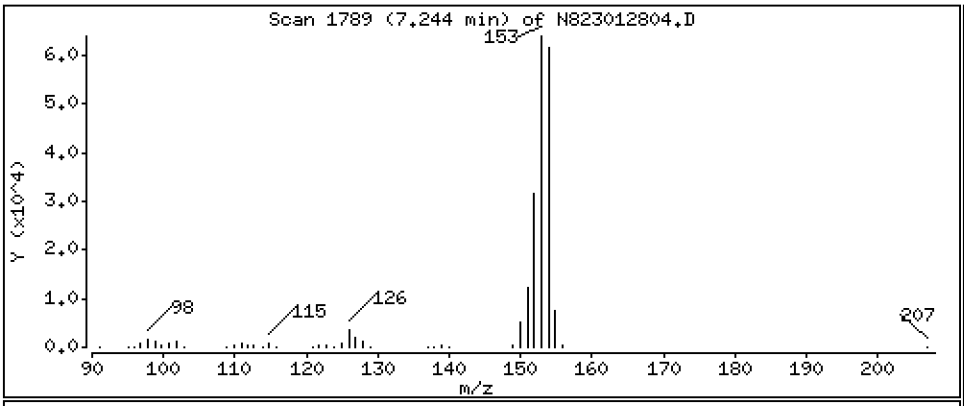
Operator: JZ

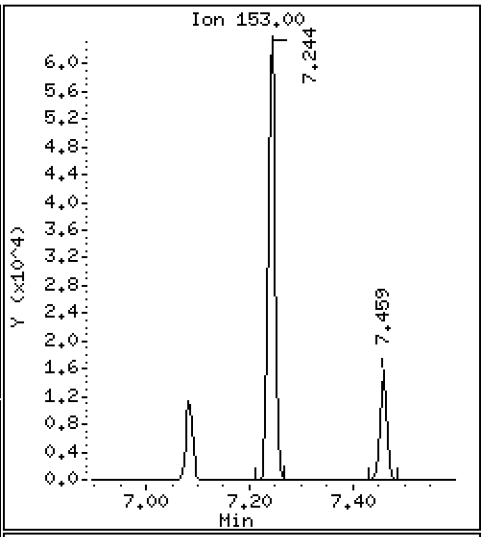
Column phase: Rxi-17sil

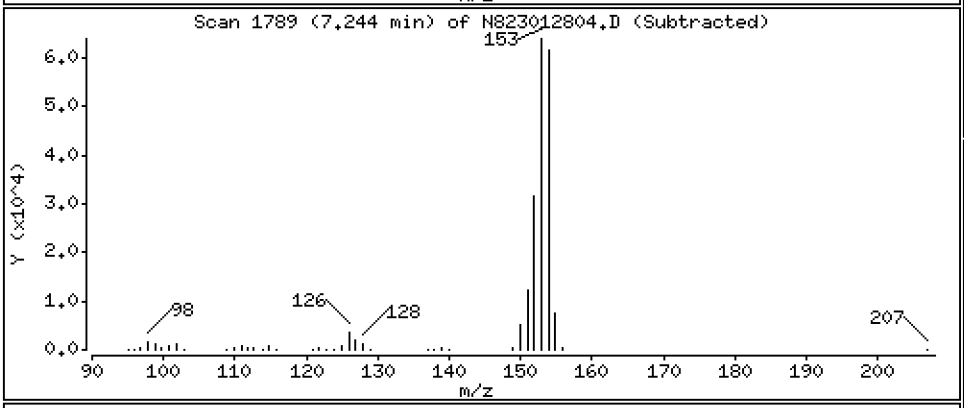
Column diameter: 0.25

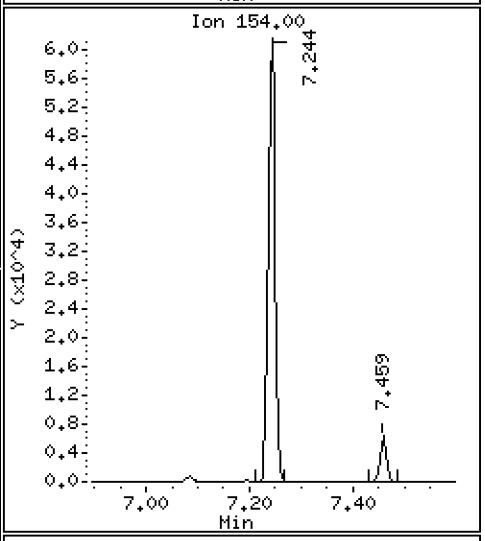
11 Acenaphthene

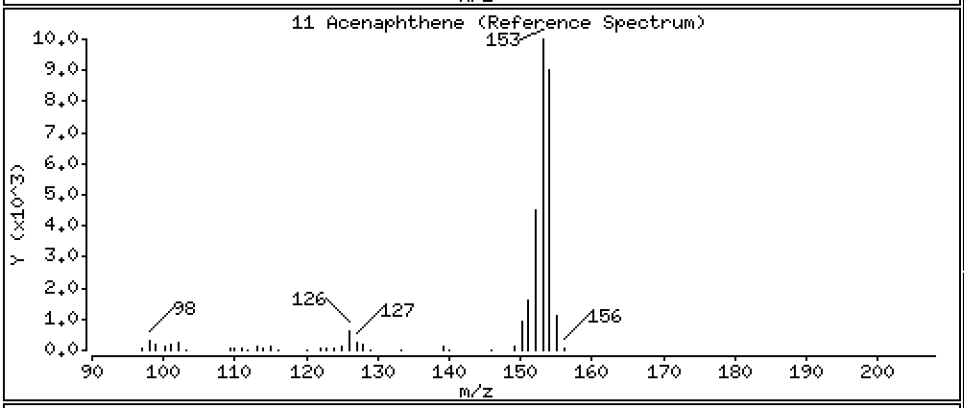
Concentration: 3.811 ug/mL

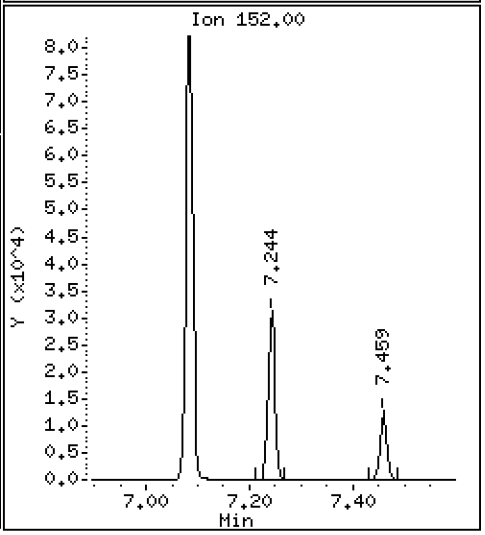


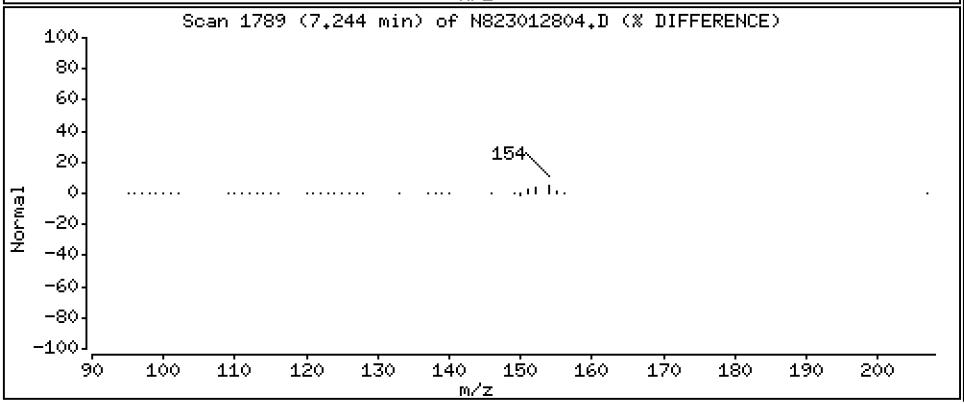












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Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

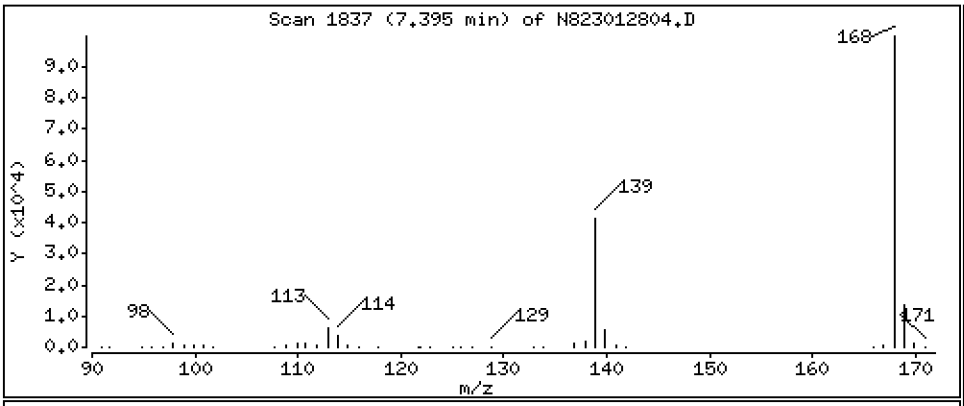
Operator: JZ

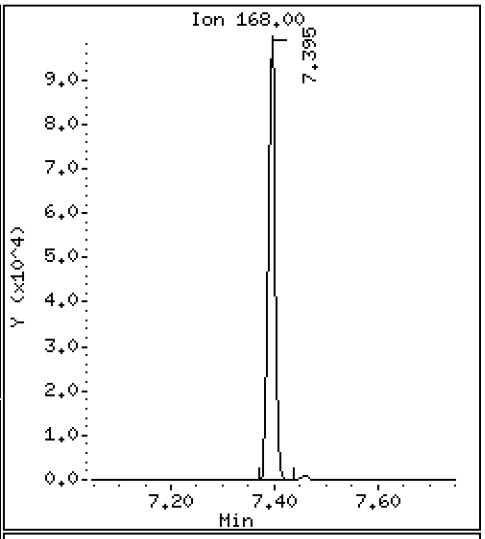
Column phase: Rxi-17sil

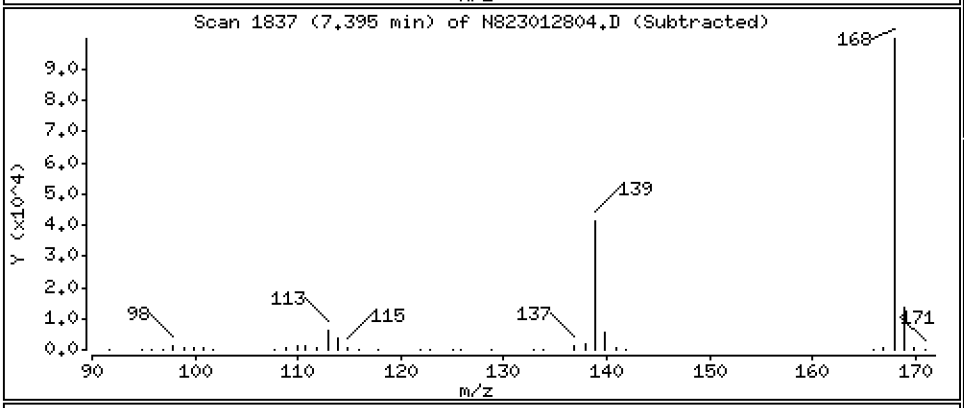
Column diameter: 0.25

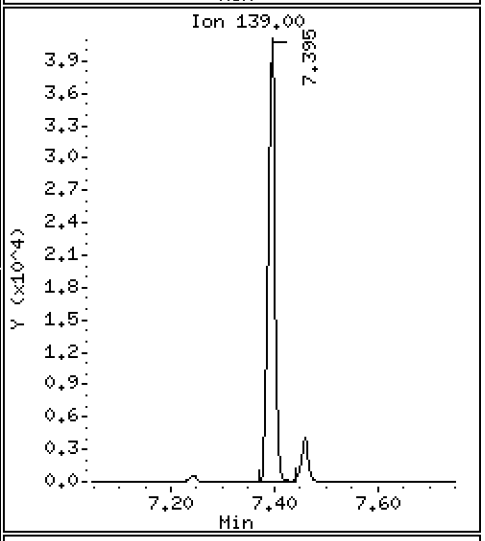
12 Dibenzofuran

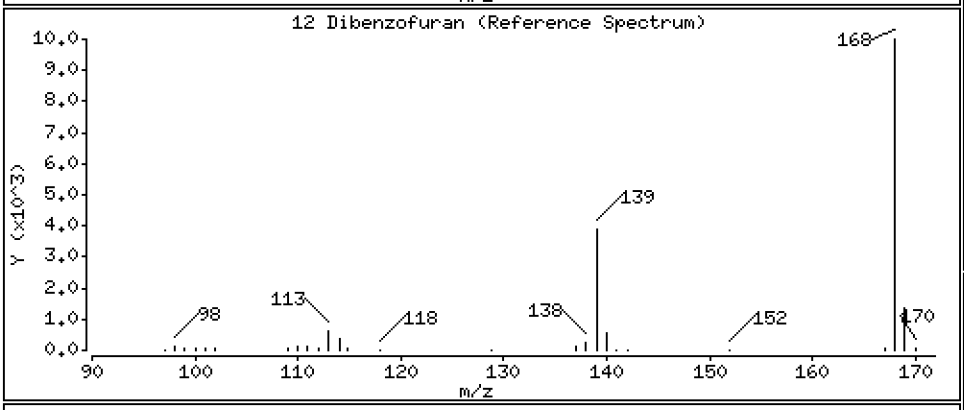
Concentration: 3.904 ug/mL

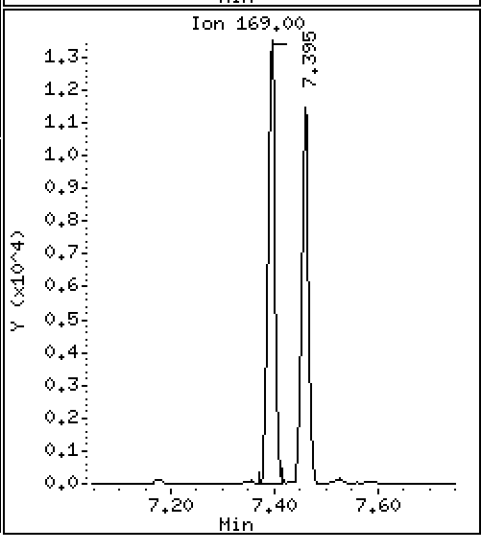


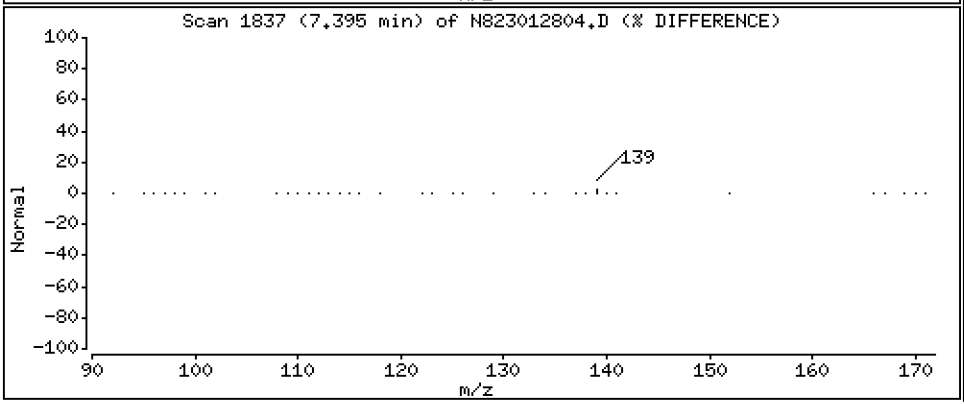












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Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

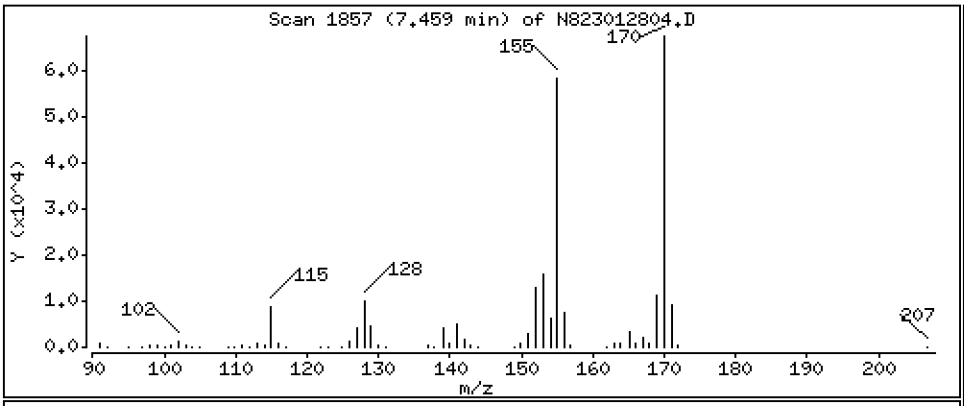
Operator: JZ

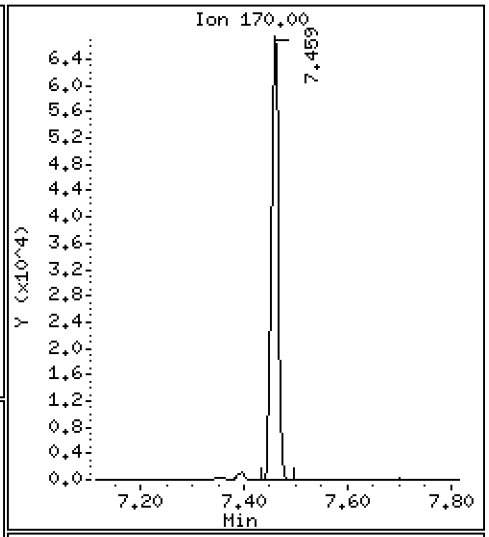
Column phase: Rxi-17sil

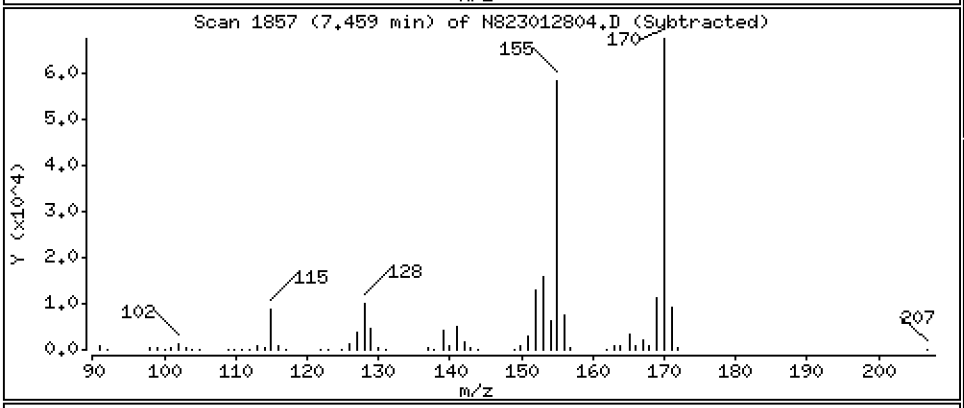
Column diameter: 0.25

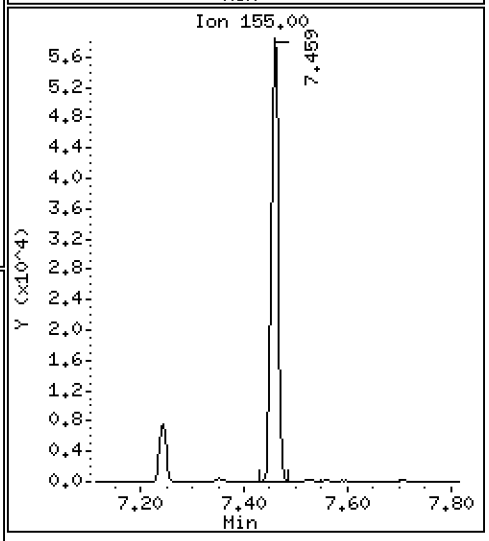
13 1,6,7-Trimethylnaphthalene

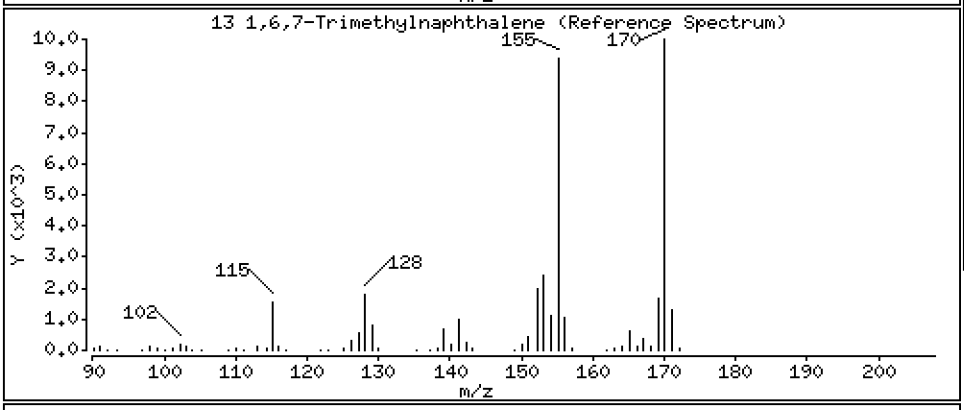
Concentration: 4.152 ug/mL

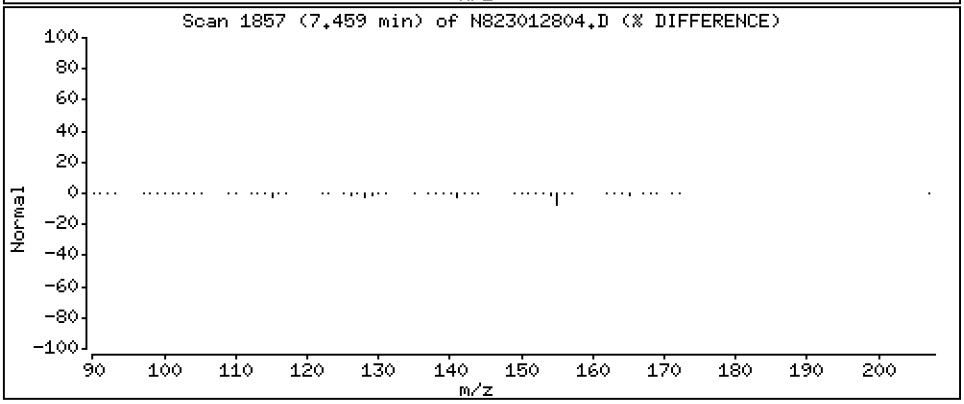












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Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

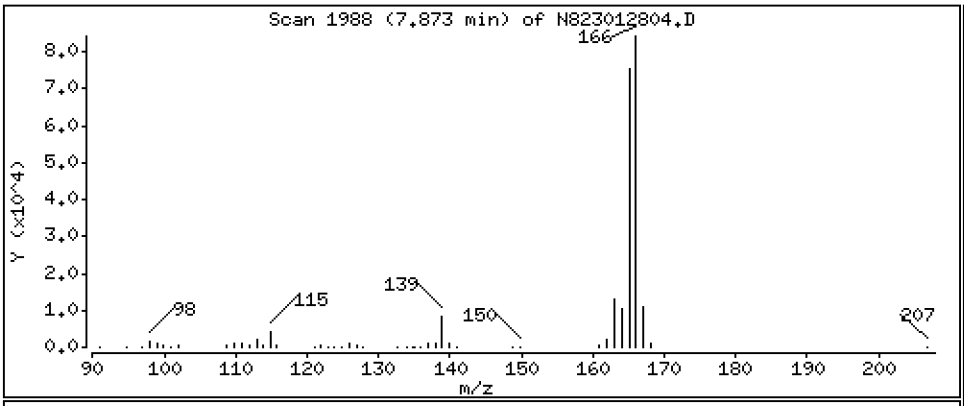
Operator: JZ

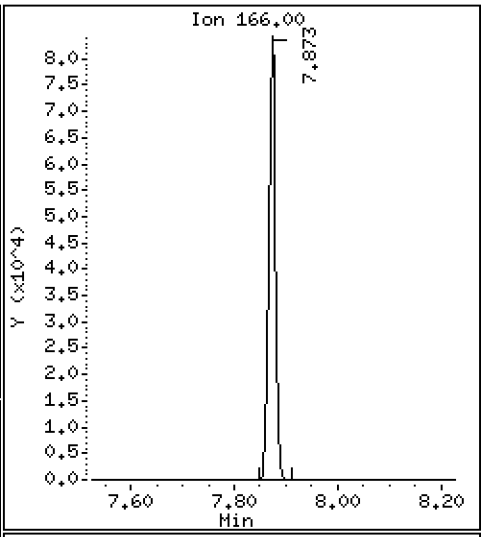
Column phase: Rxi-17sil

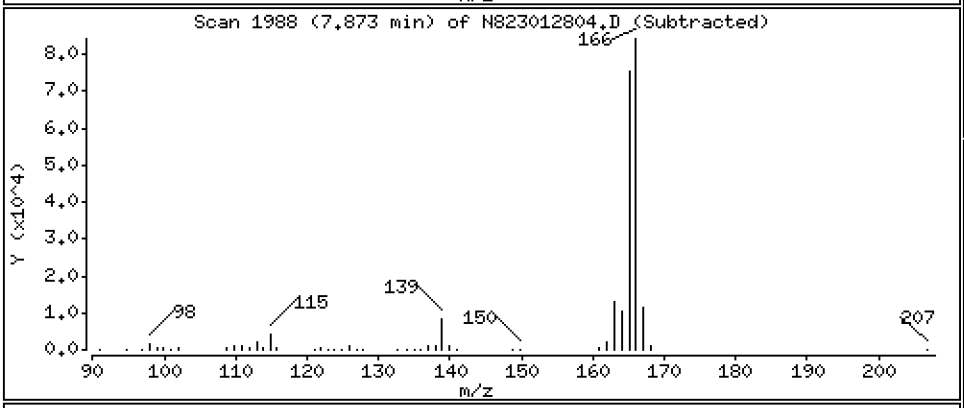
Column diameter: 0.25

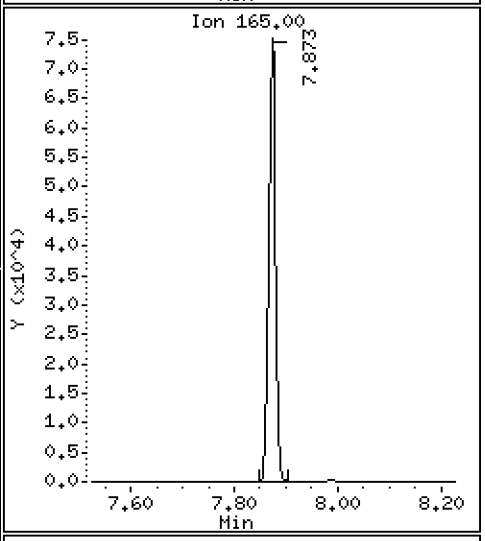
14 Fluorene

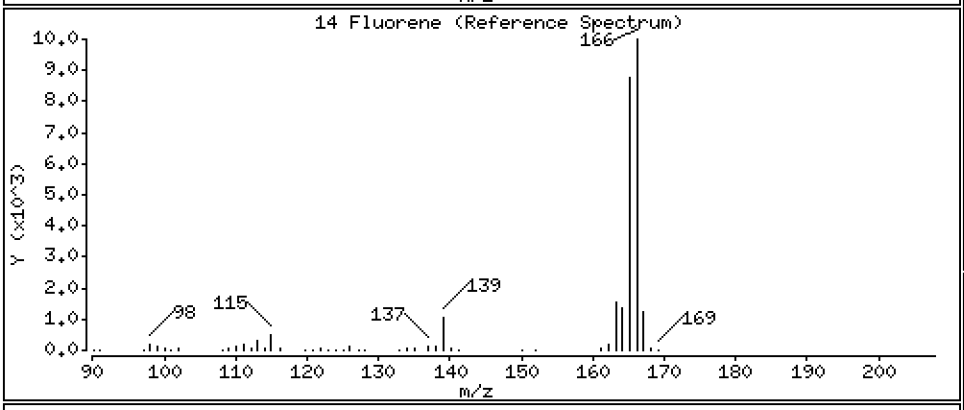
Concentration: 4.142 ug/mL

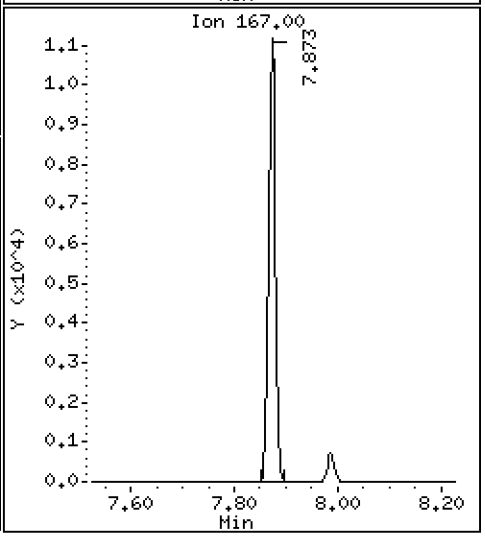


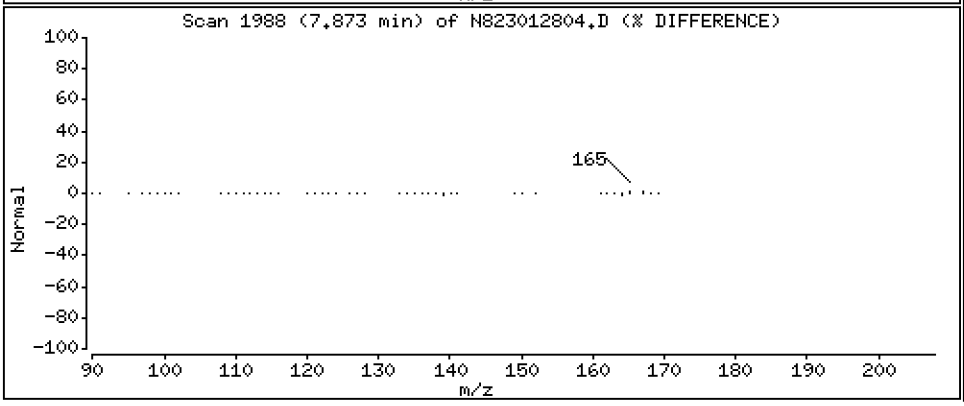












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Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

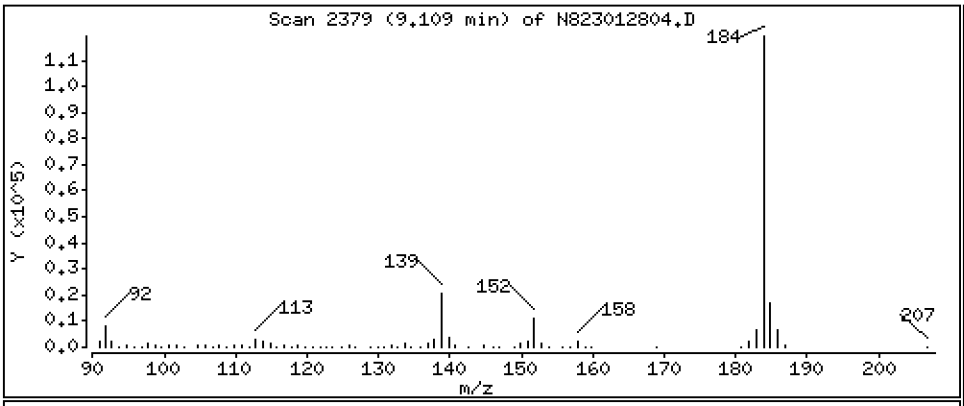
Operator: JZ

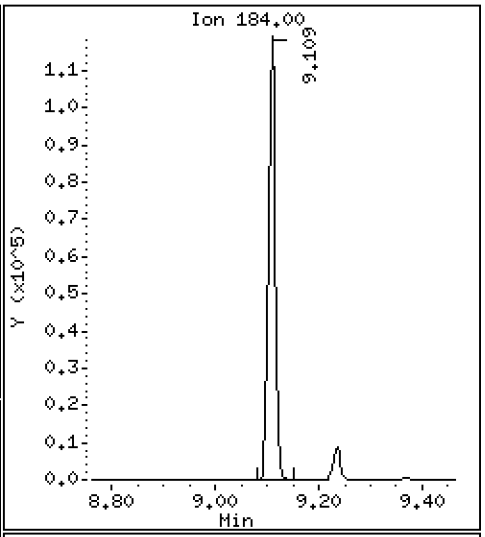
Column phase: Rxi-17sil

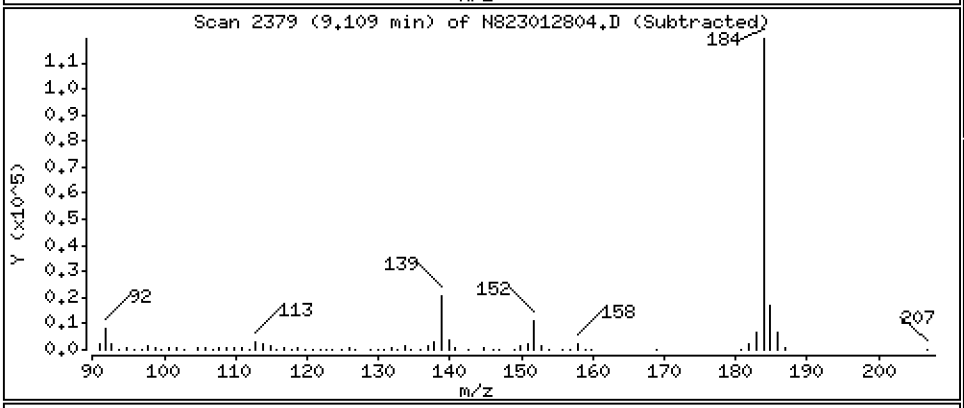
Column diameter: 0.25

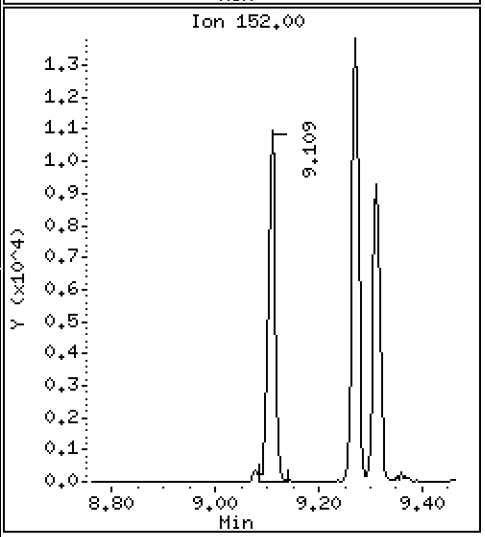
18 Dibenzothiophene

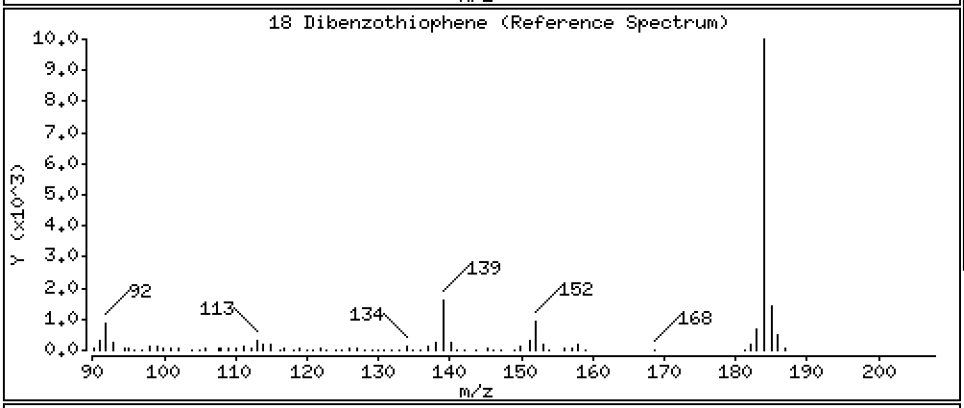
Concentration: 4.250 ug/mL

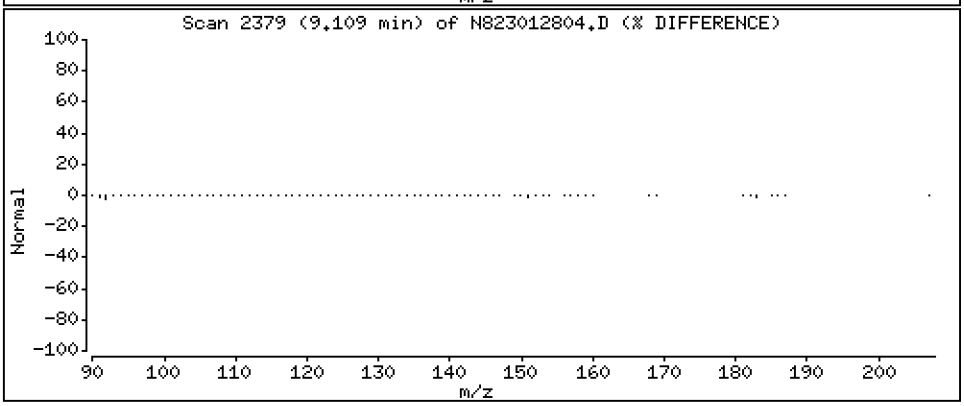












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Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

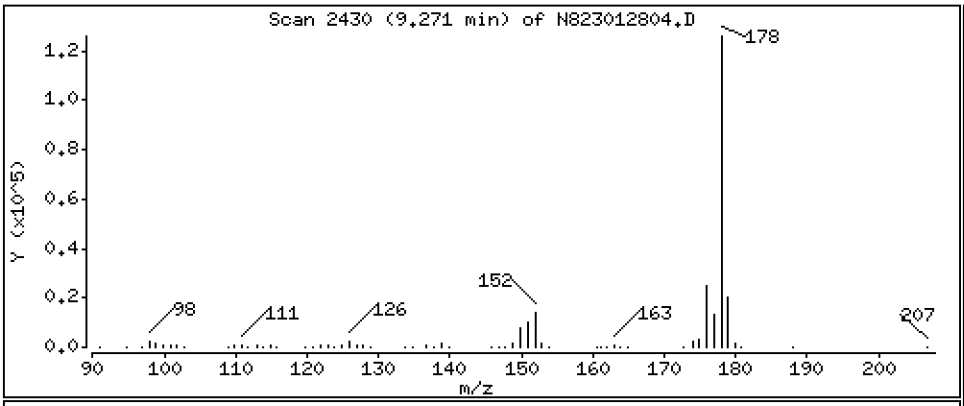
Operator: JZ

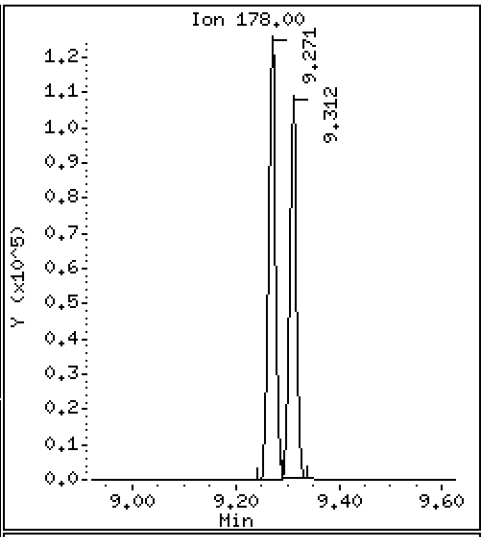
Column phase: Rxi-17sil

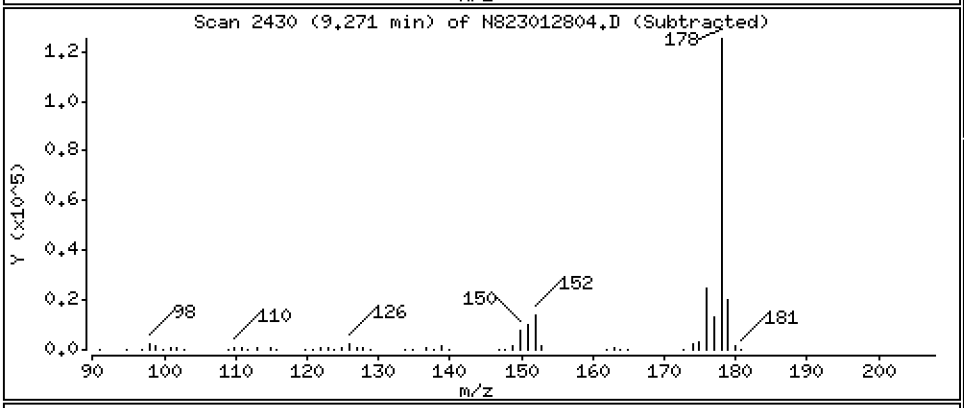
Column diameter: 0.25

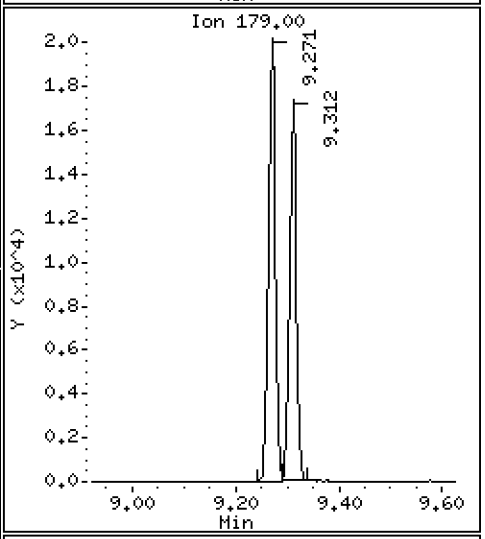
16 Phenanthrene

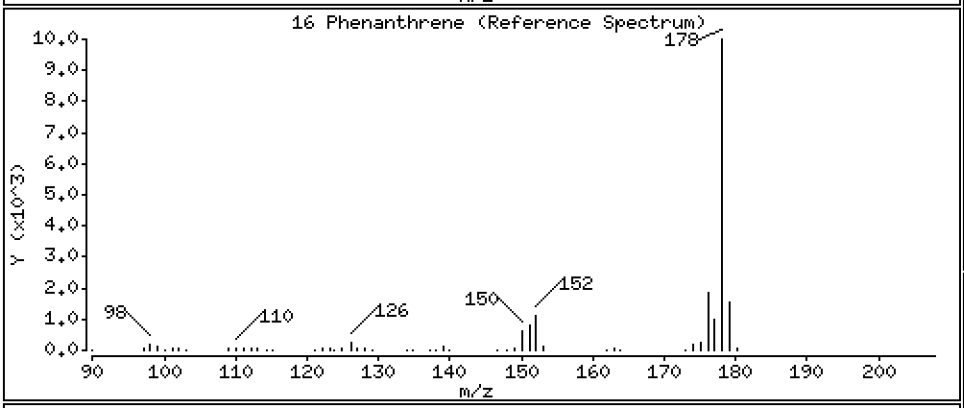
Concentration: 4.159 ug/mL

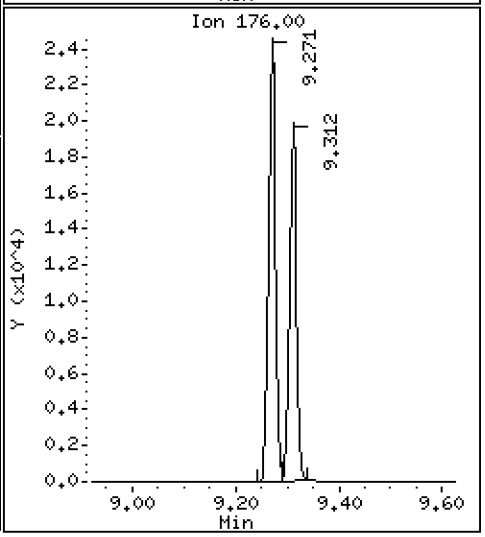


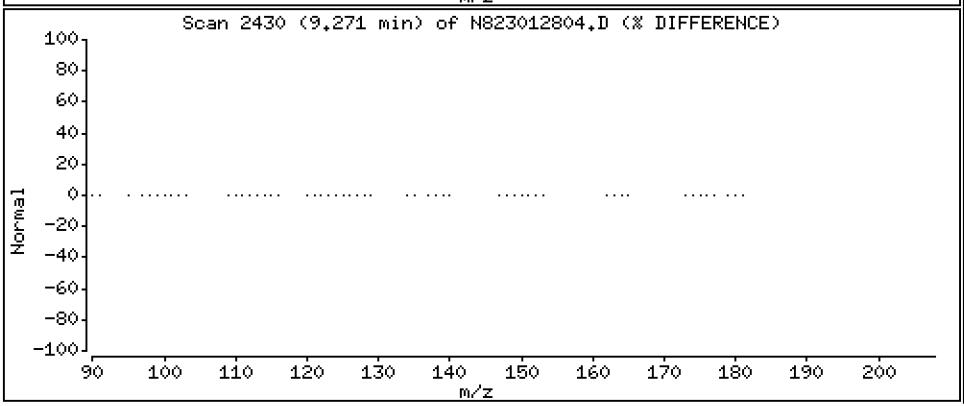












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Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

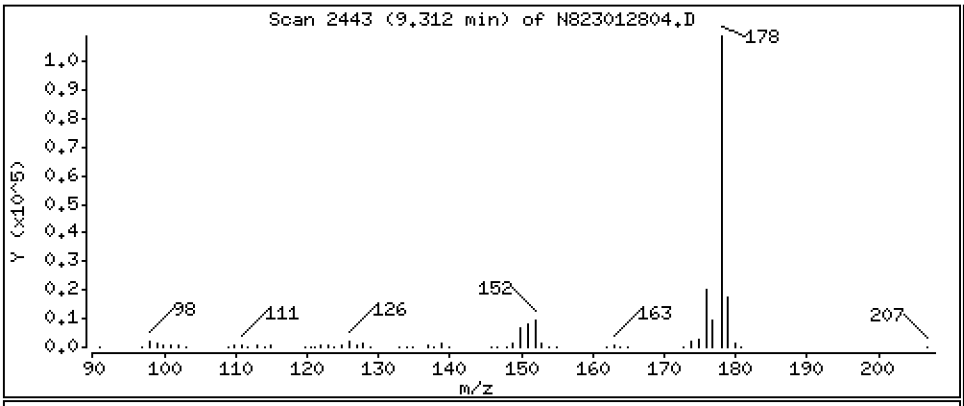
Operator: JZ

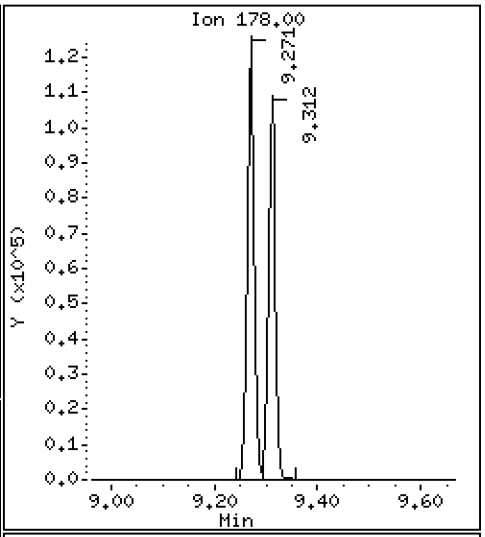
Column phase: Rxi-17sil

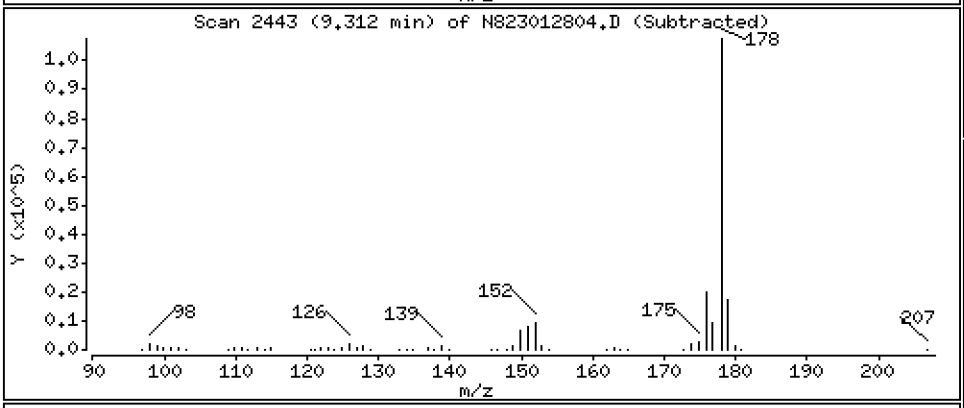
Column diameter: 0.25

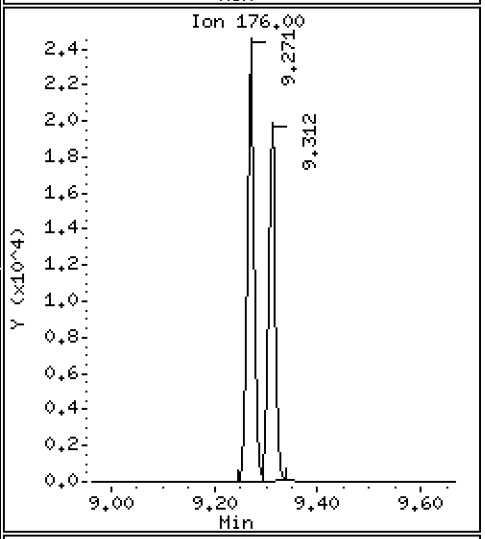
17 Anthracene

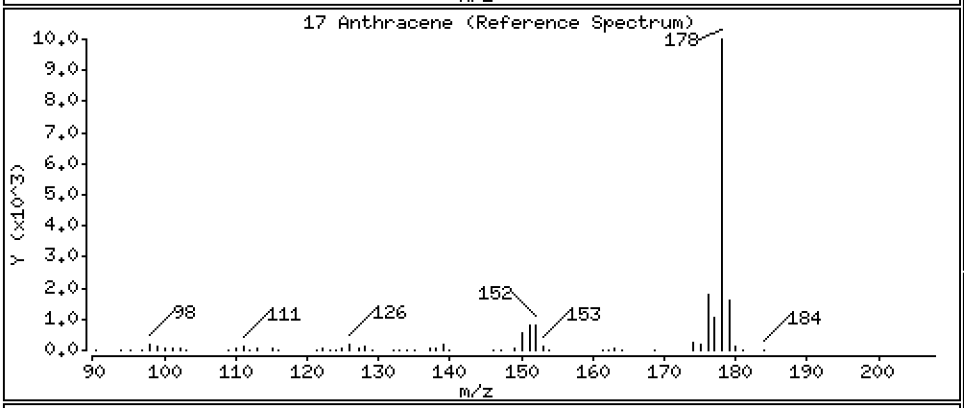
Concentration: 3.830 ug/mL

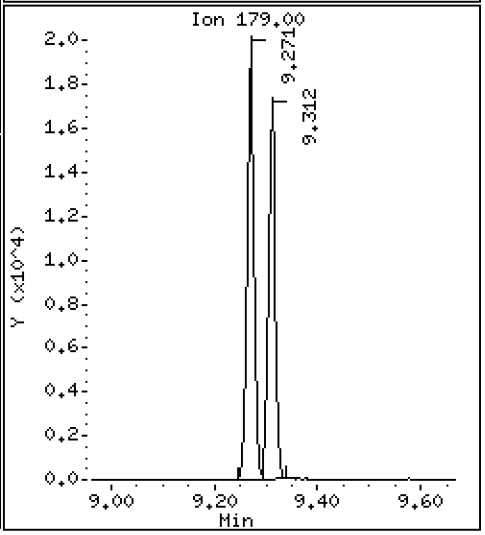


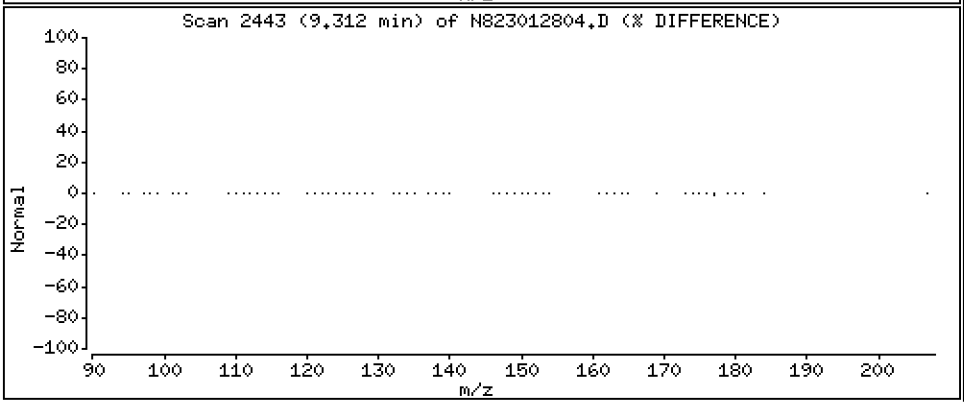












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

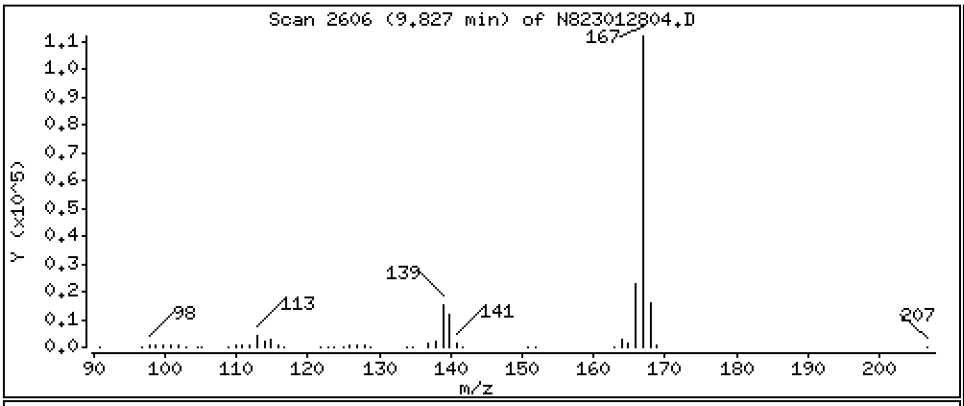
Operator: JZ

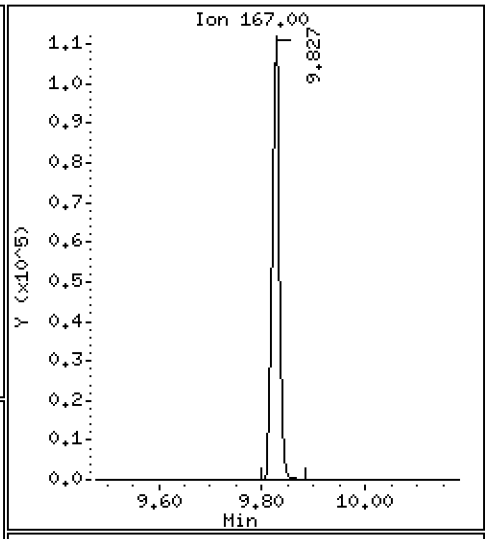
Column phase: Rxi-17sil

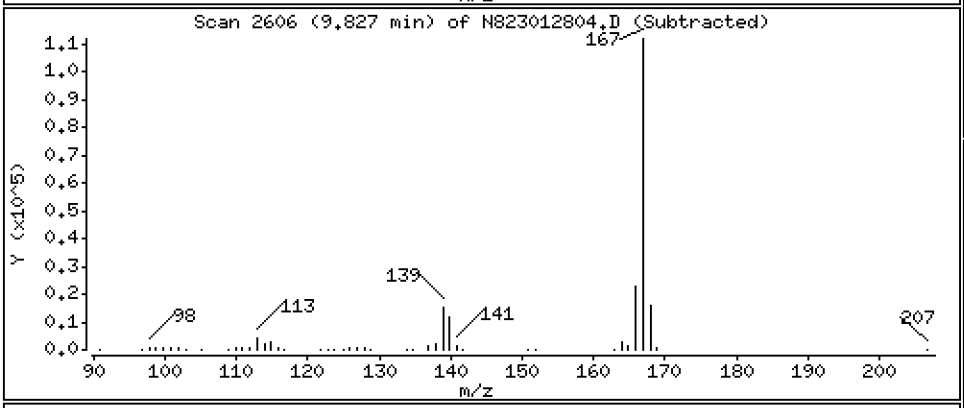
Column diameter: 0.25

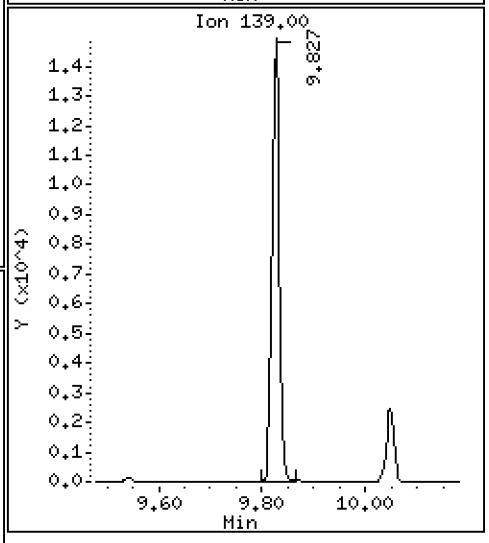
19 Carbazole

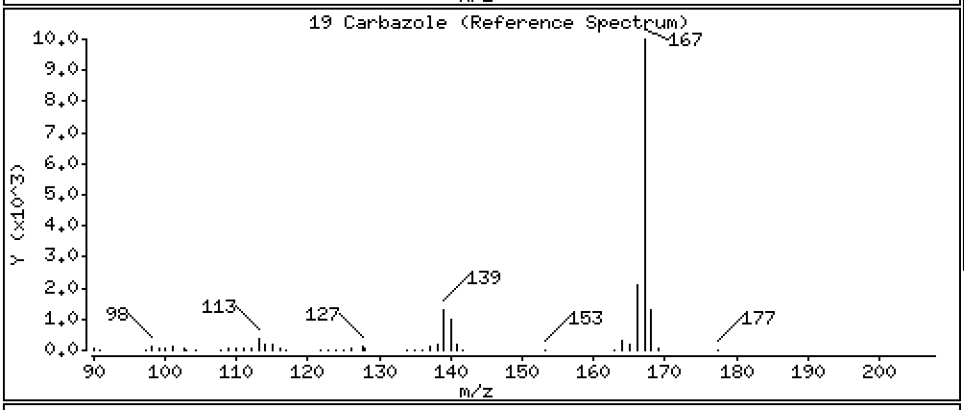
Concentration: 4.561 ug/mL

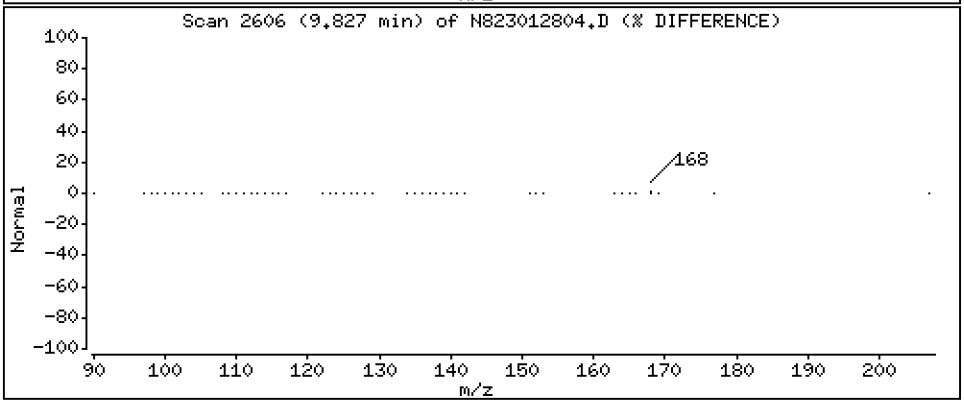












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

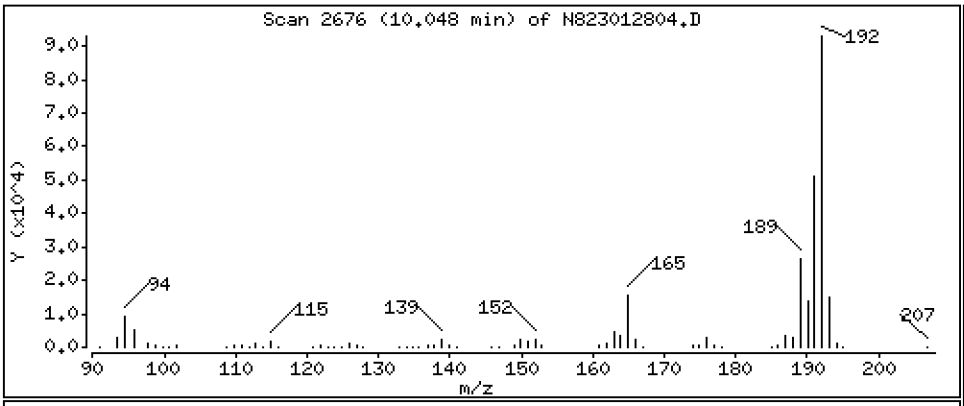
Operator: JZ

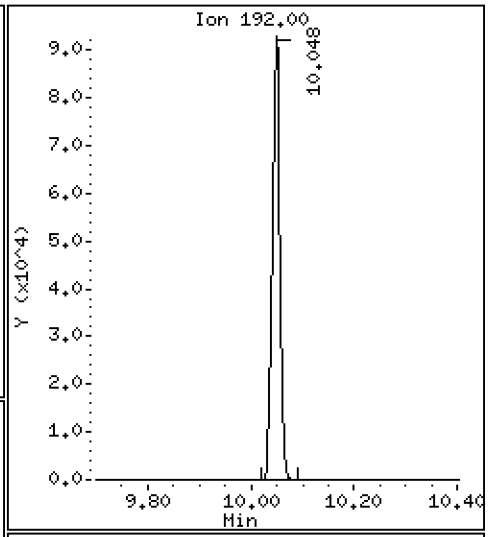
Column phase: Rxi-17sil

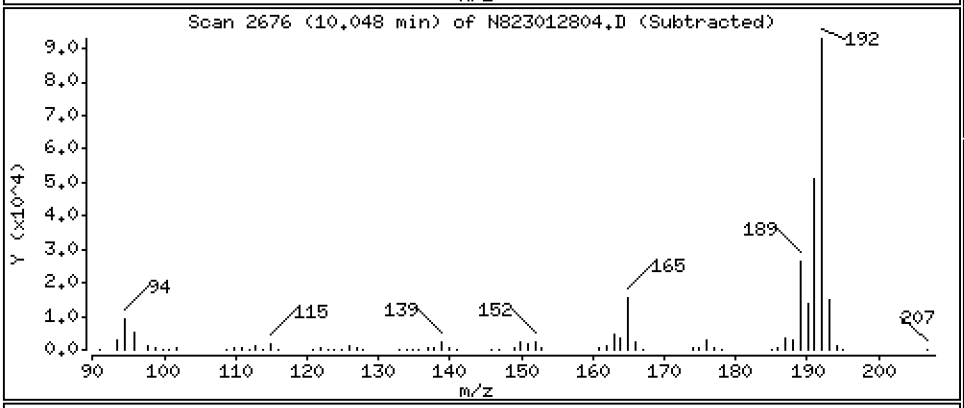
Column diameter: 0.25

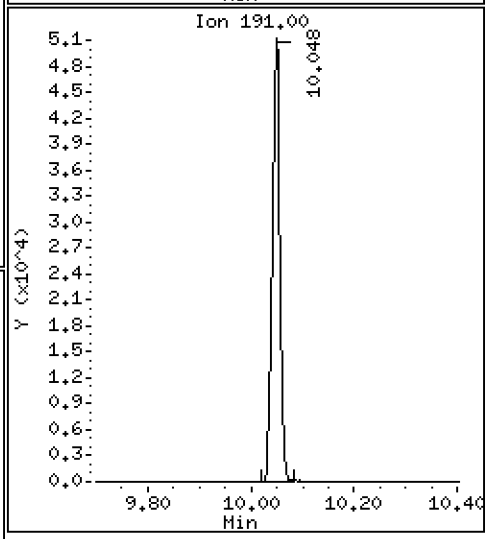
20 1-Methylphenanthrene

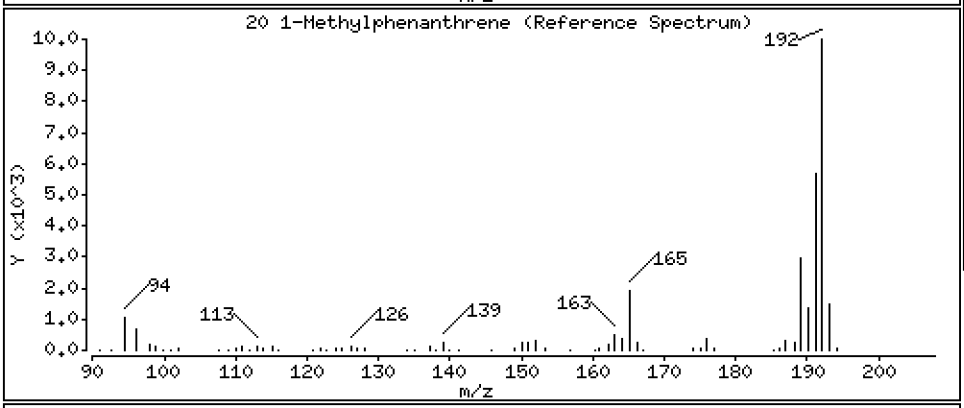
Concentration: 4.638 ug/mL

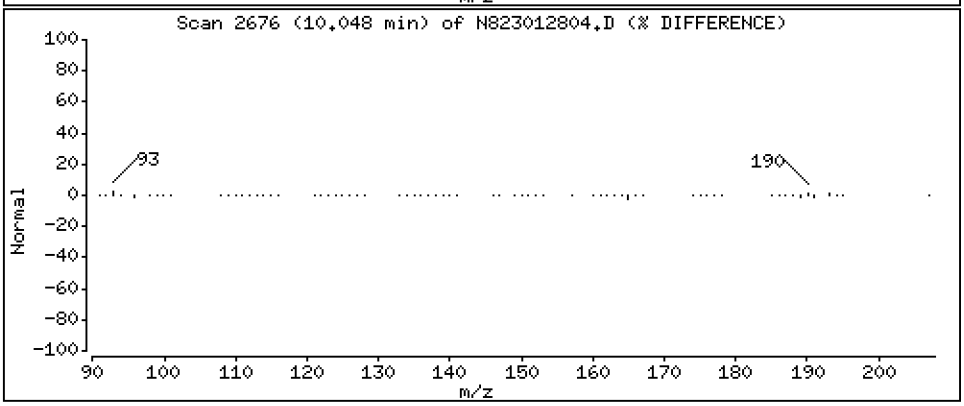












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

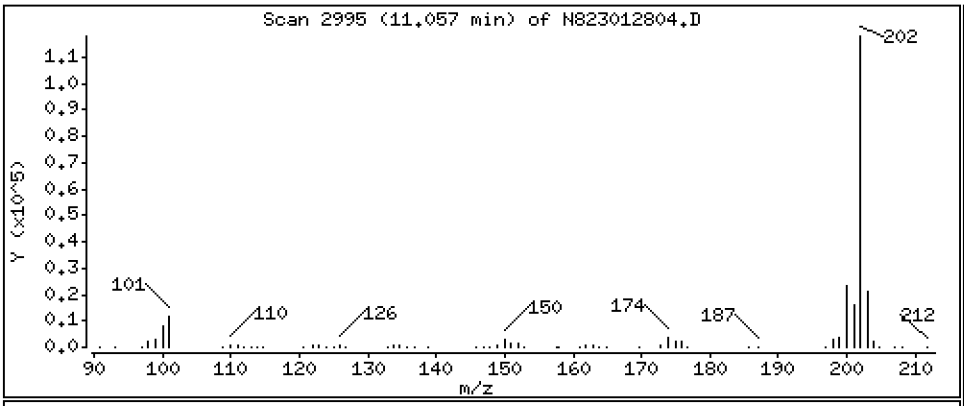
Operator: JZ

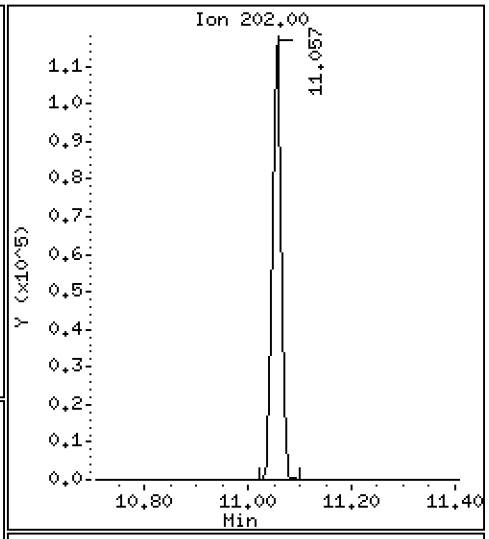
Column phase: Rxi-17sil

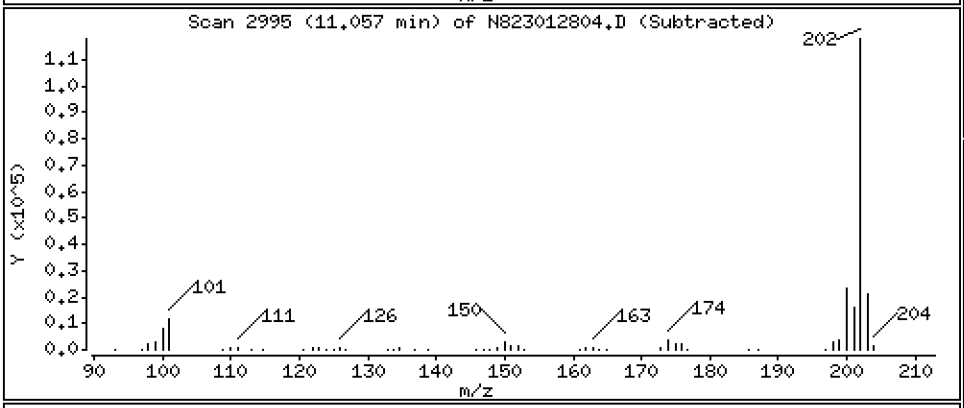
Column diameter: 0.25

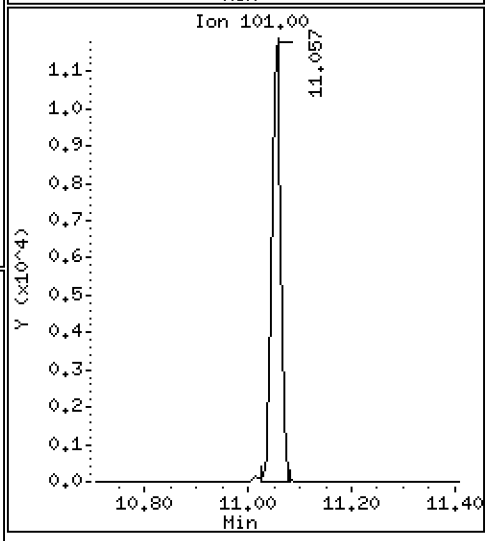
22 Fluoranthene

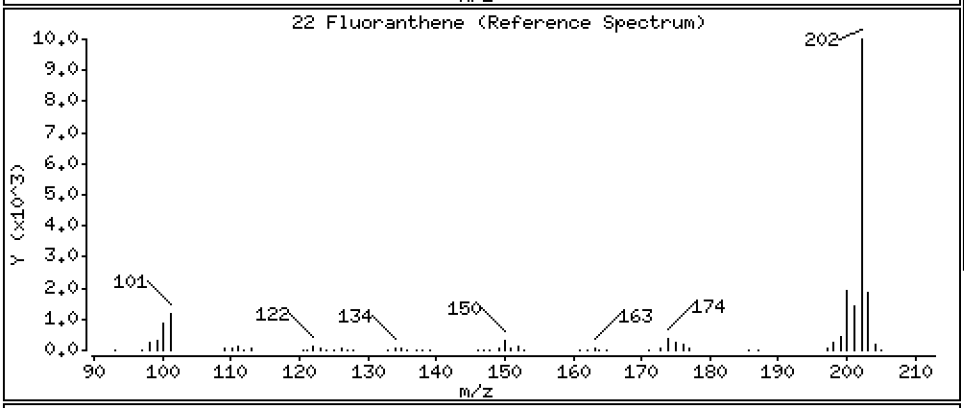
Concentration: 4.544 ug/mL

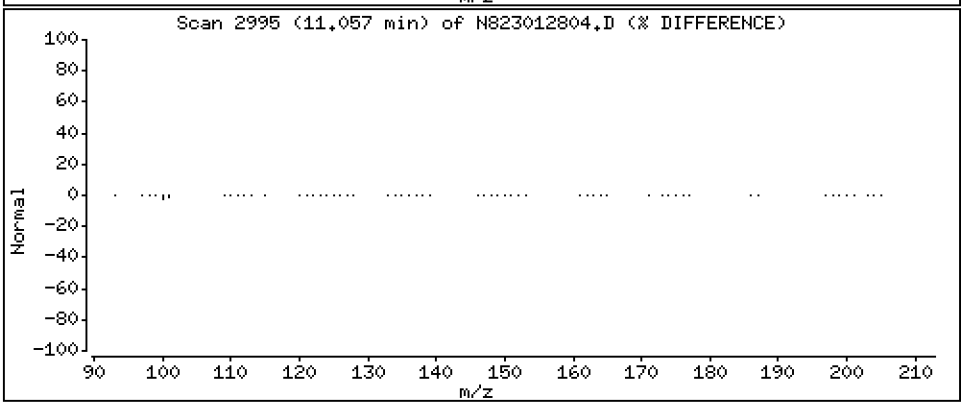












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

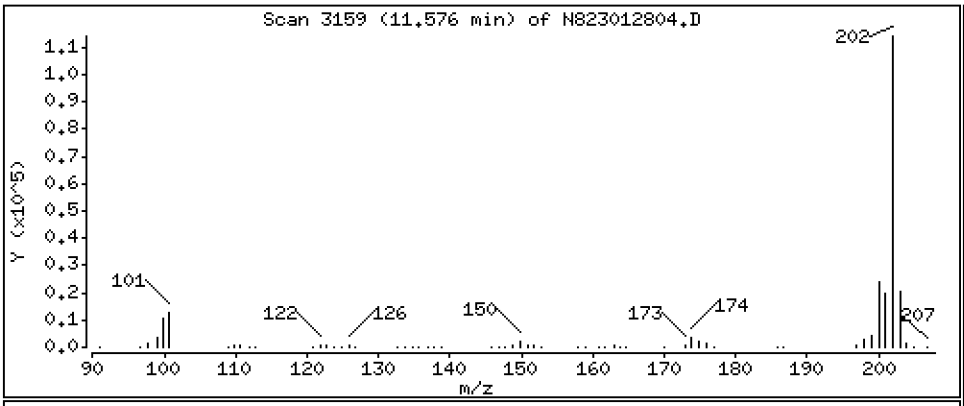
Operator: JZ

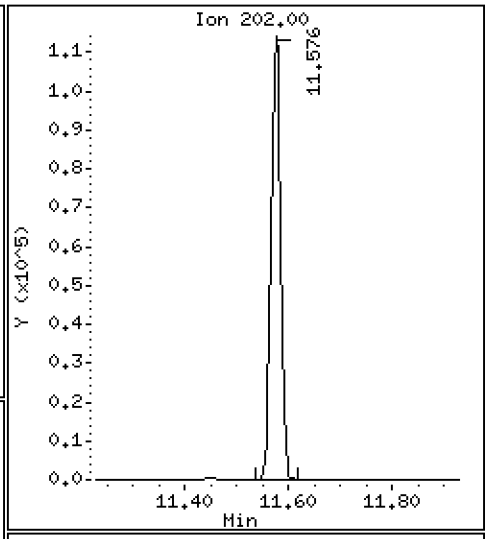
Column phase: Rxi-17sil

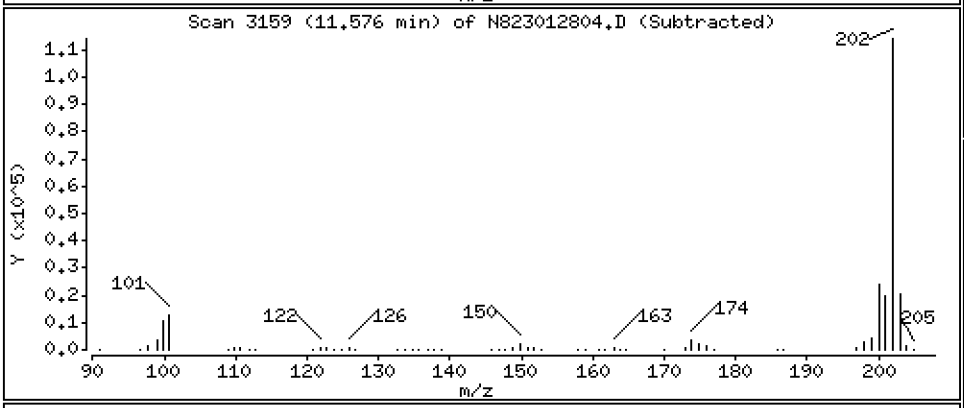
Column diameter: 0.25

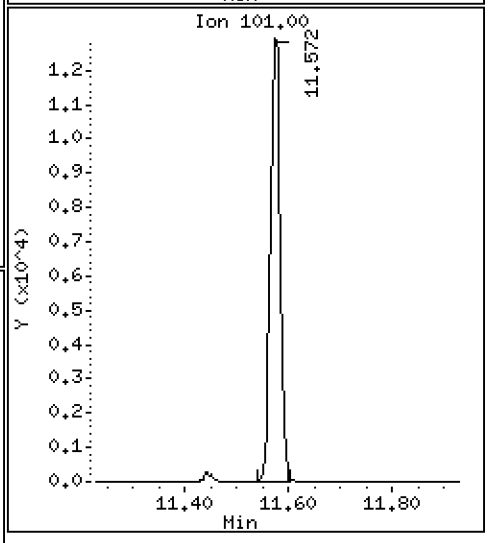
23 Pyrene

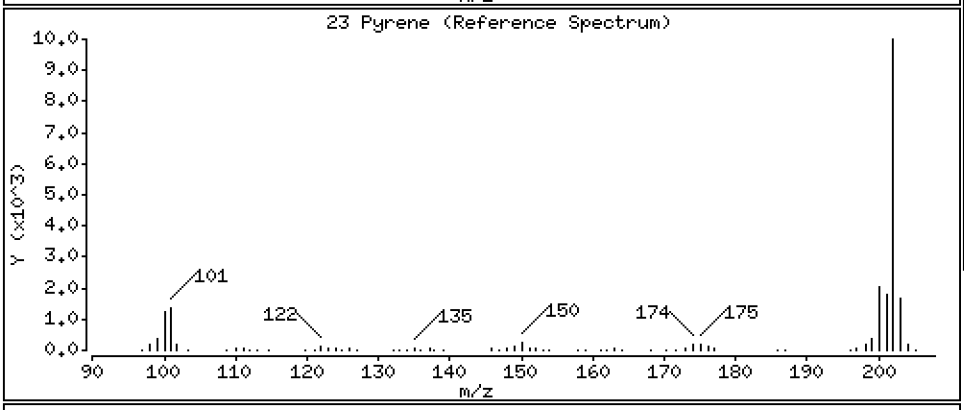
Concentration: 4.831 ug/mL

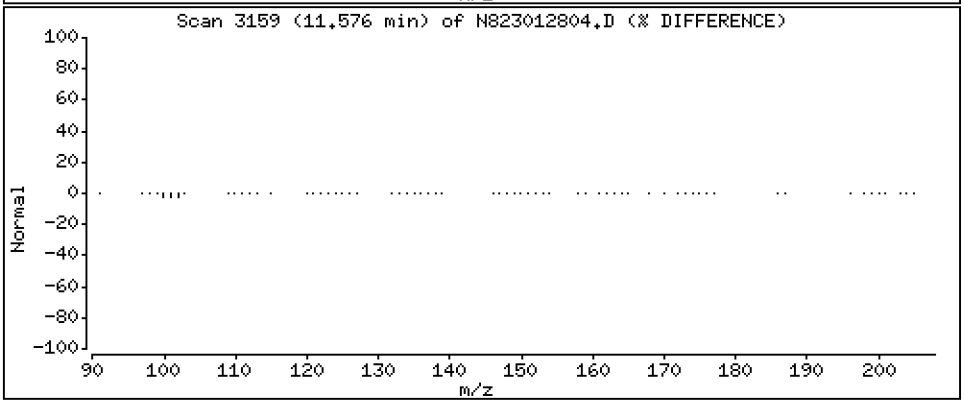












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

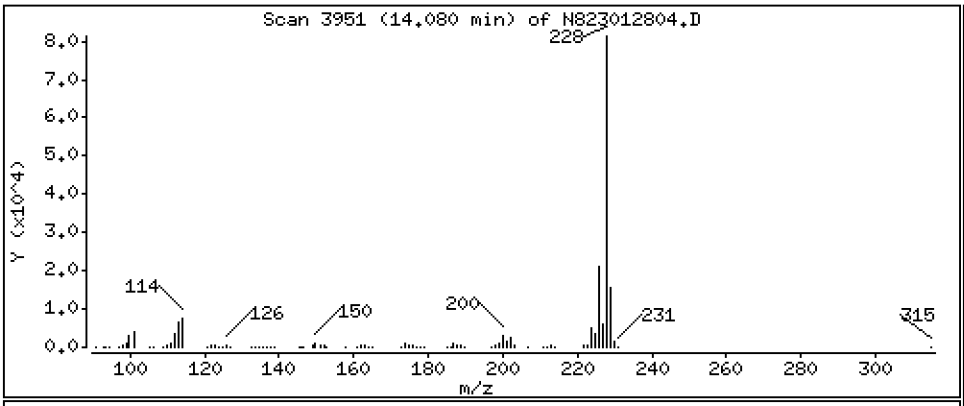
Operator: JZ

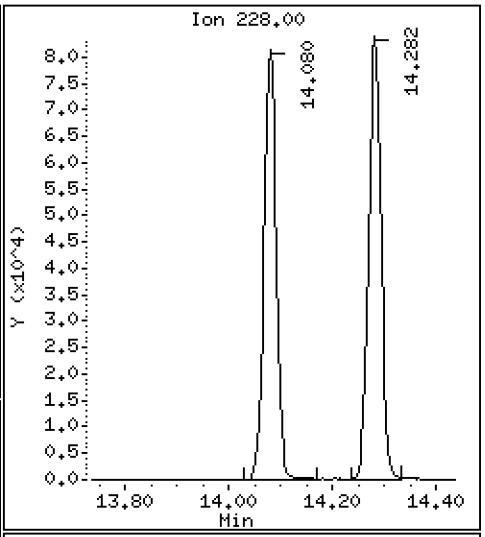
Column phase: Rxi-17sil

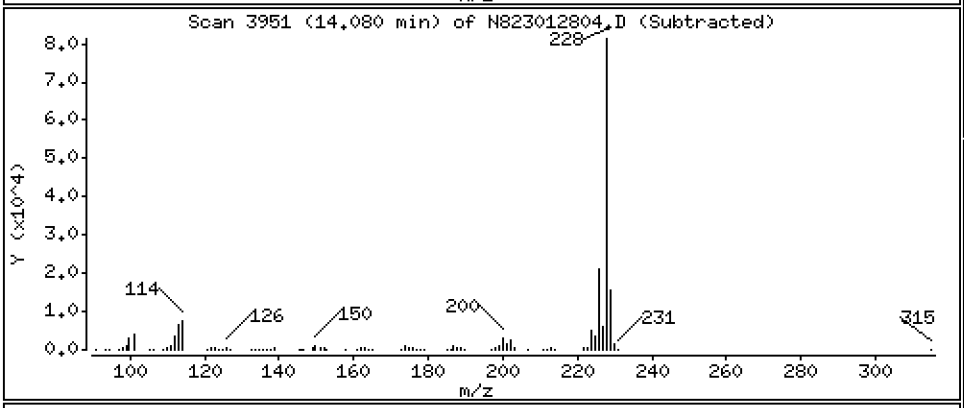
Column diameter: 0.25

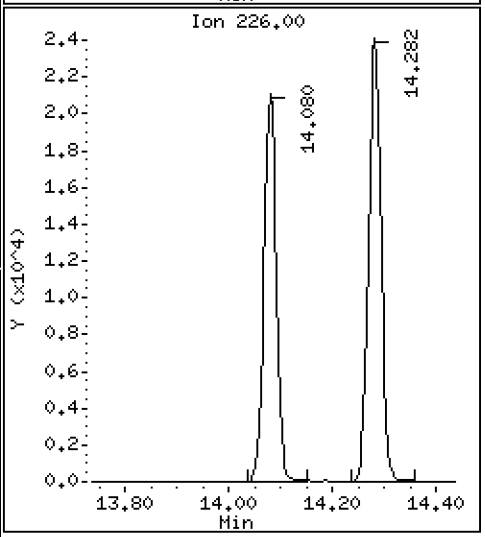
24 Benzo(a)anthracene

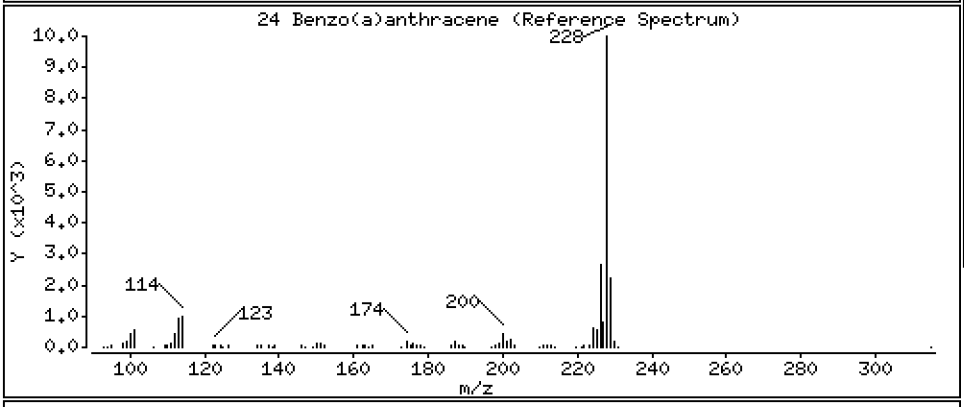
Concentration: 4.844 ug/mL

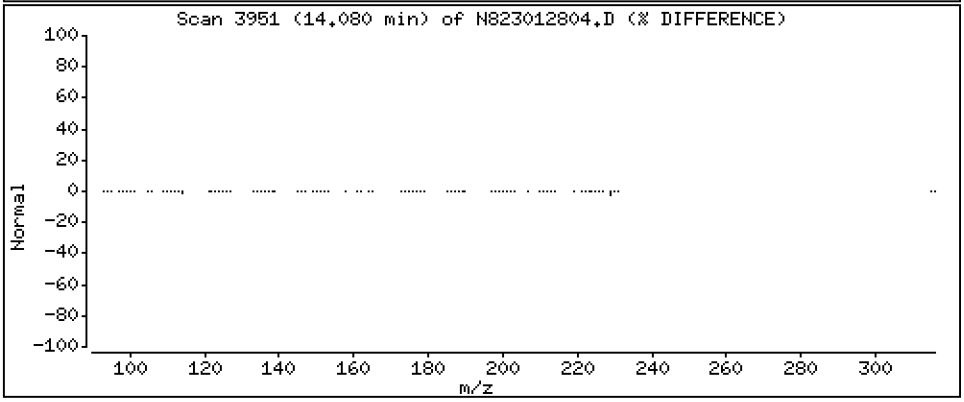












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

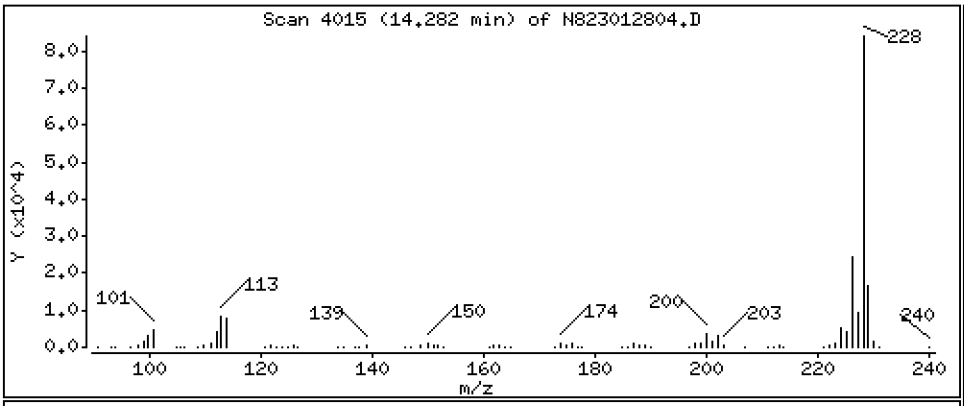
Operator: JZ

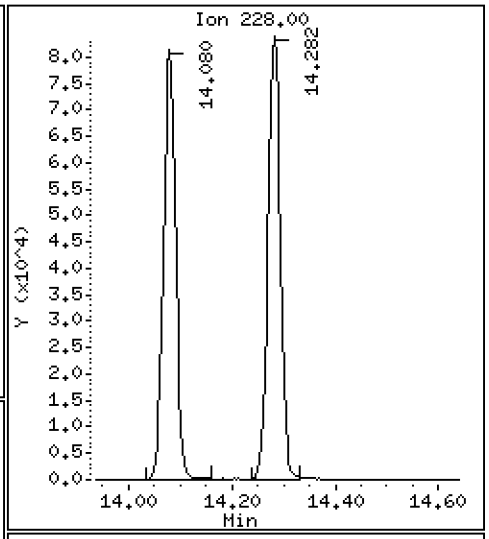
Column phase: Rxi-17sil

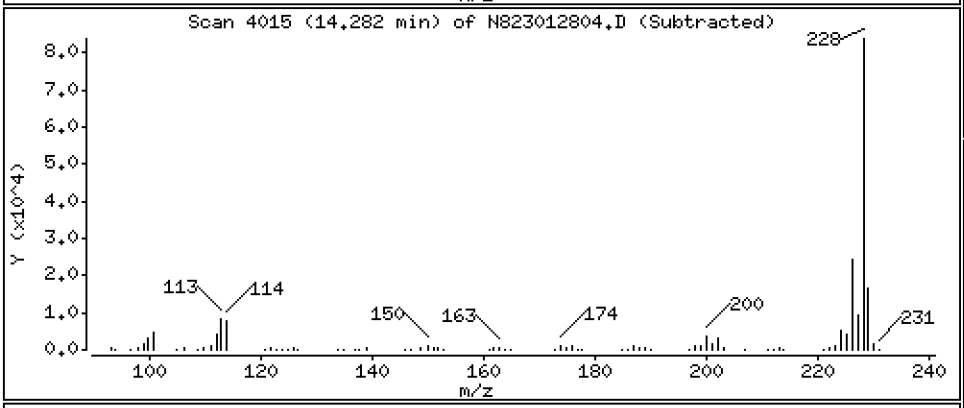
Column diameter: 0.25

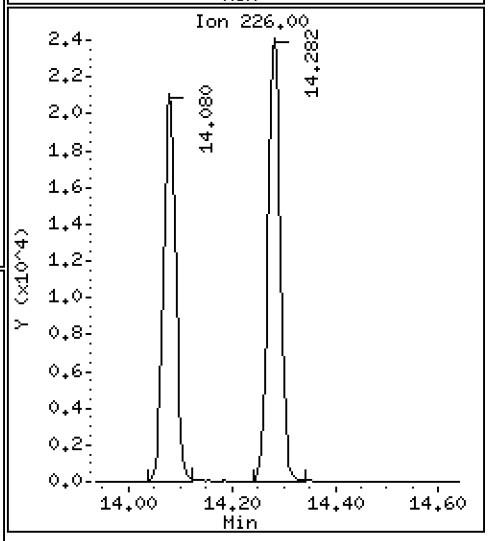
27 Chrysene

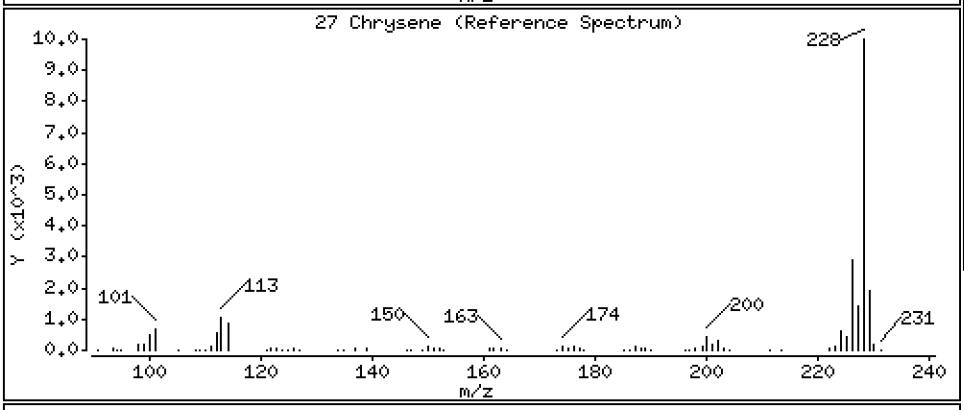
Concentration: 4.716 ug/mL

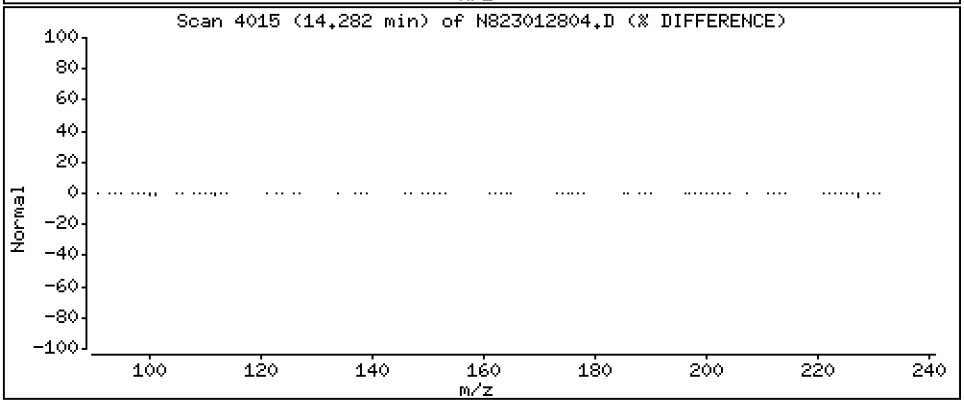












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

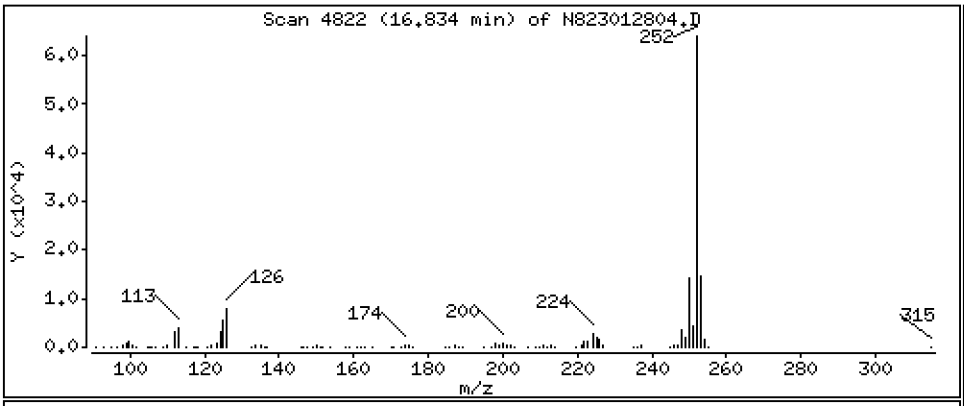
Operator: JZ

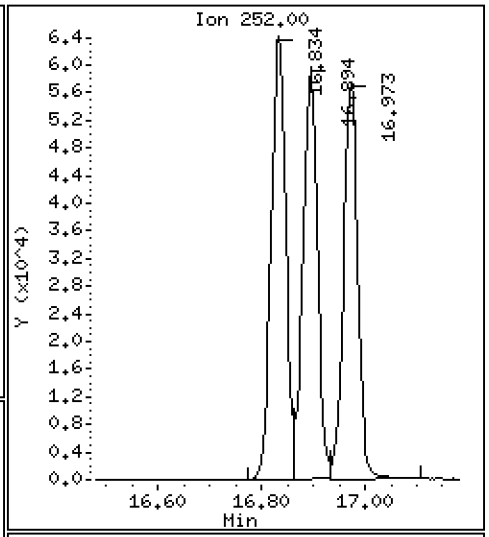
Column phase: Rxi-17sil

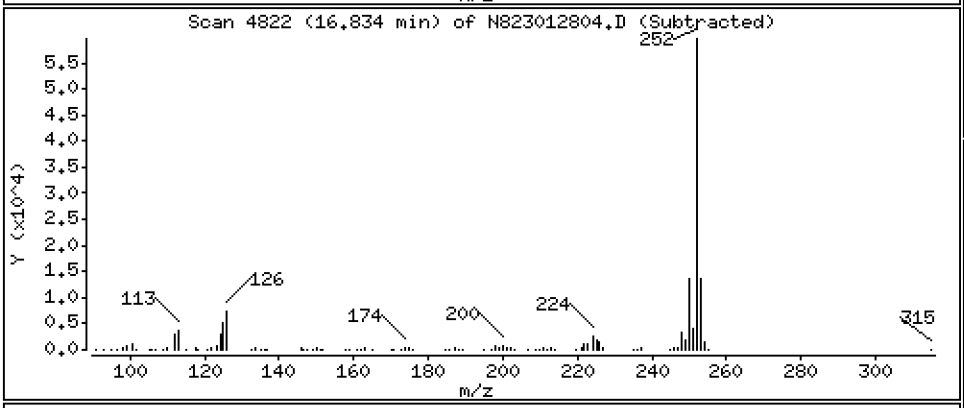
Column diameter: 0.25

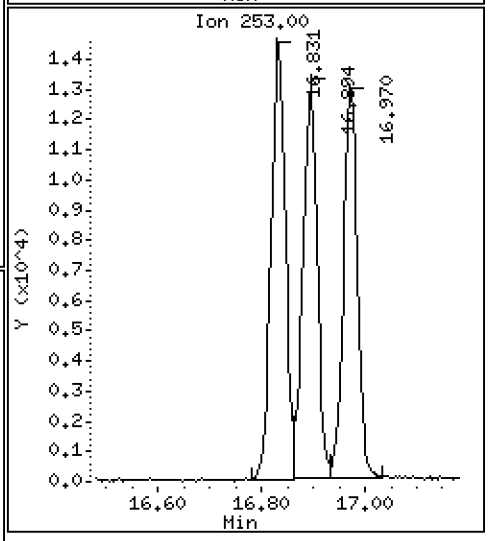
28 Benzo(b)fluoranthene

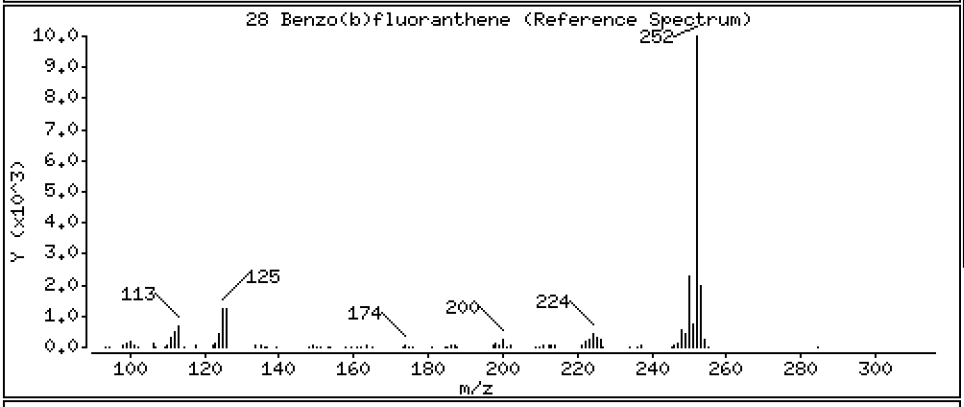
Concentration: 7.040 ug/mL

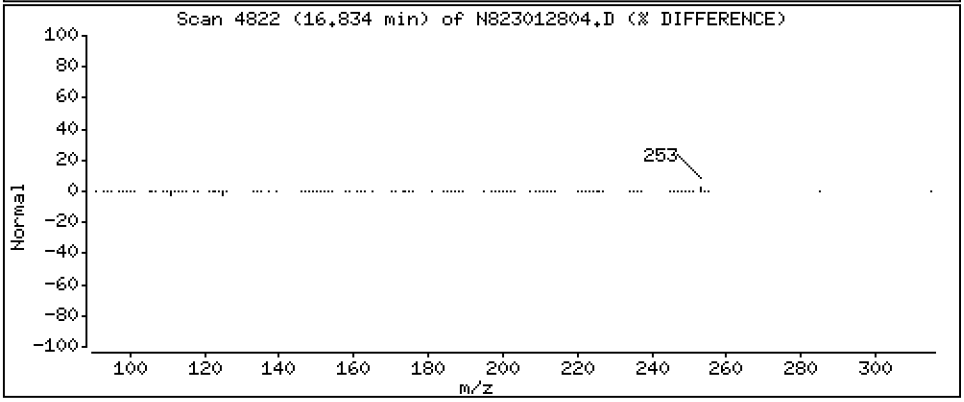












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

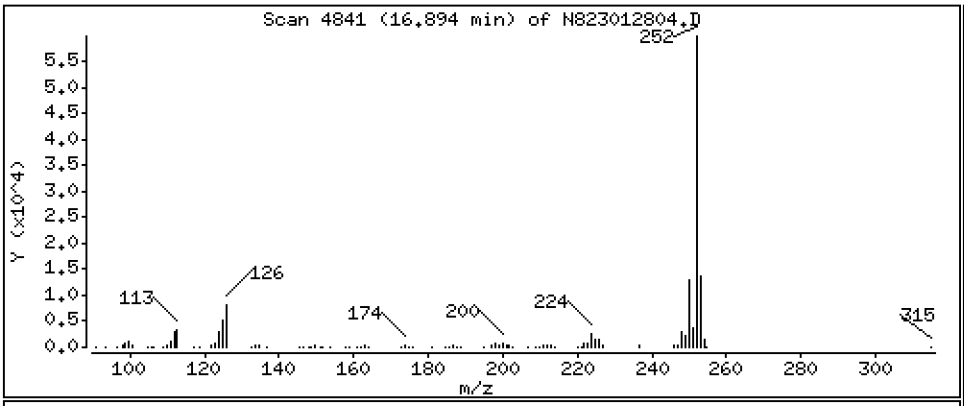
Operator: JZ

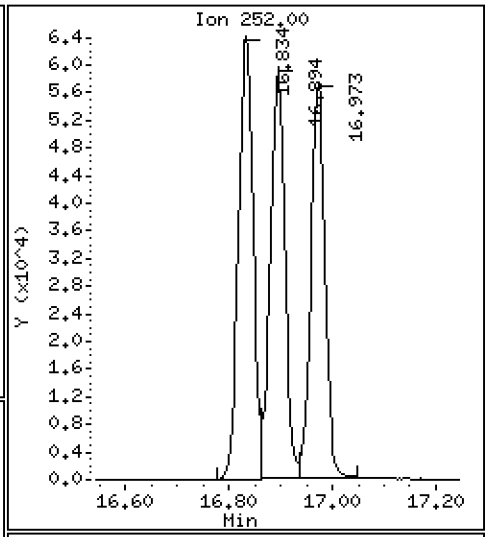
Column phase: Rxi-17sil

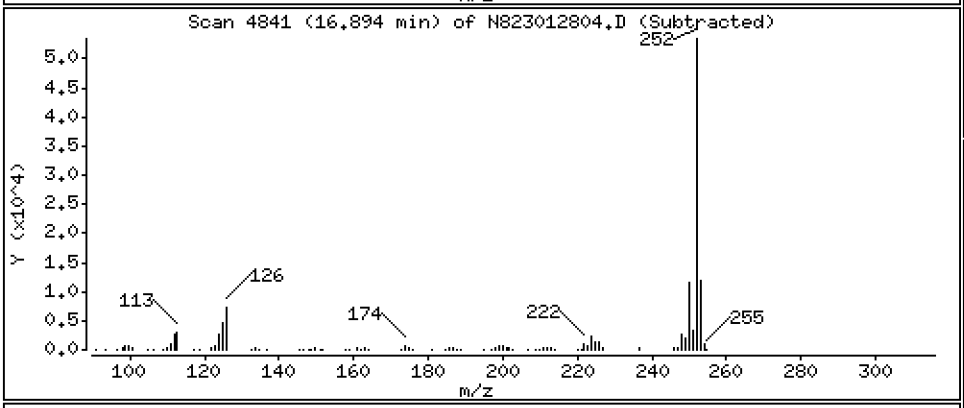
Column diameter: 0.25

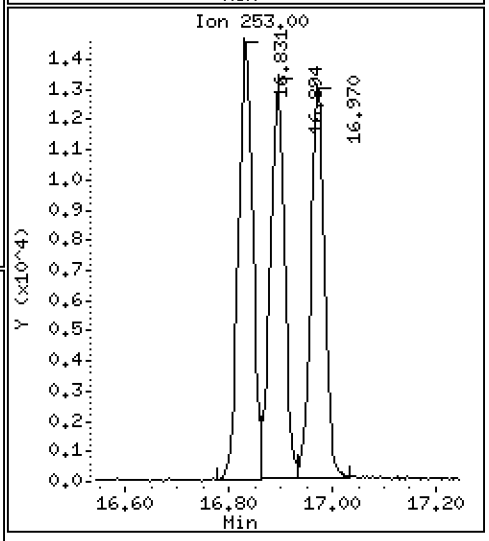
29 Benzo(k)fluoranthene

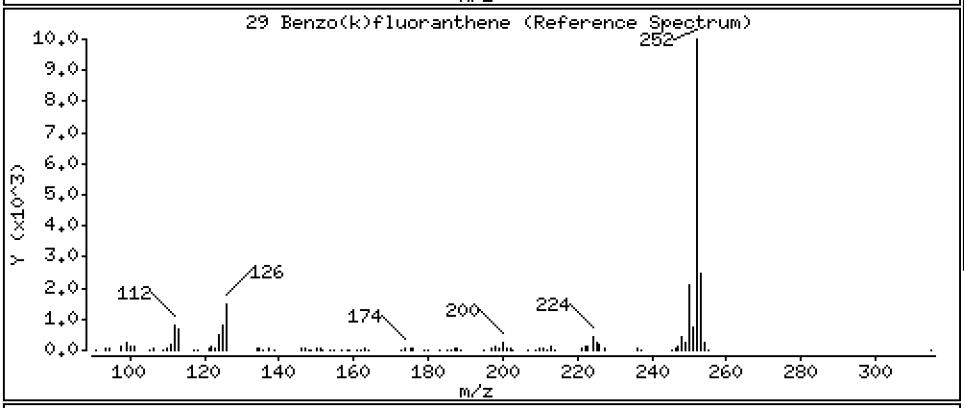
Concentration: 6.610 ug/mL

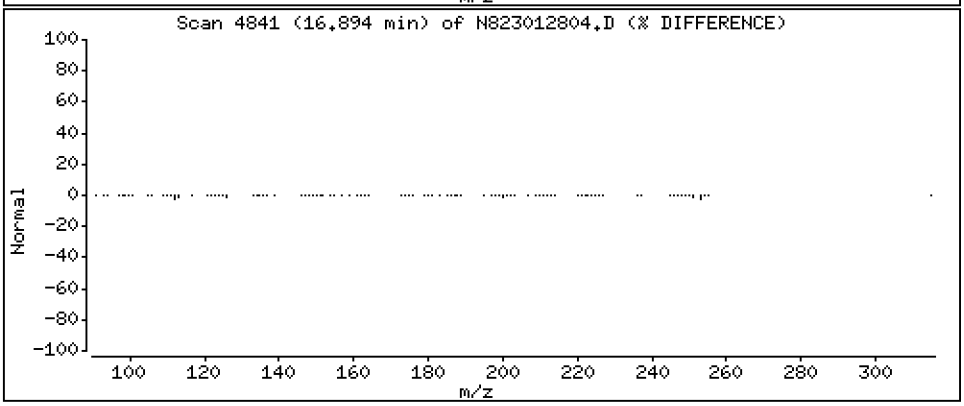












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

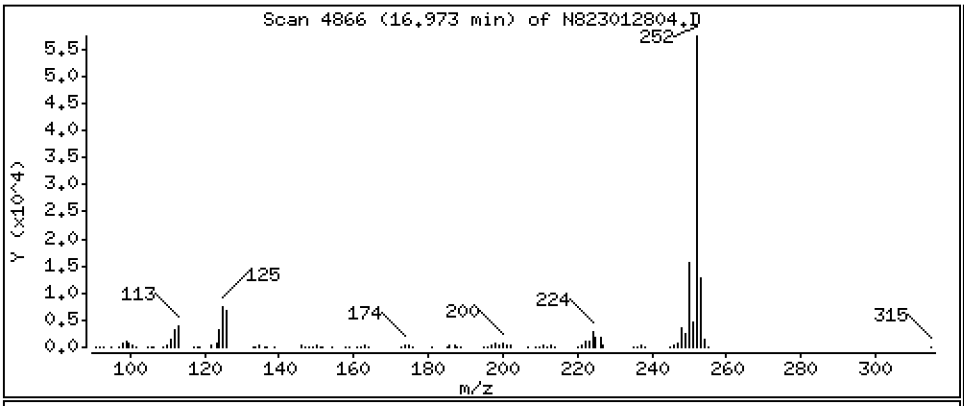
Operator: JZ

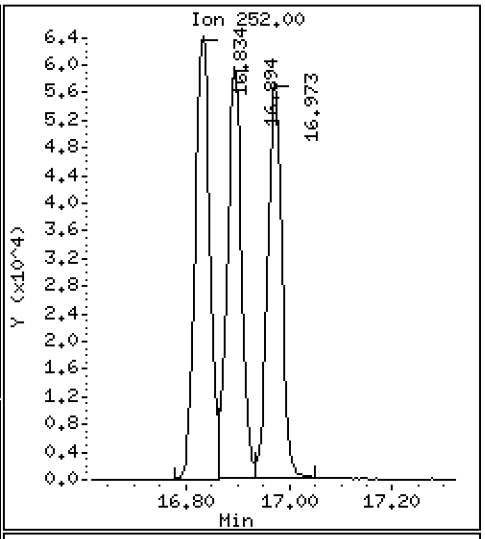
Column phase: Rxi-17sil

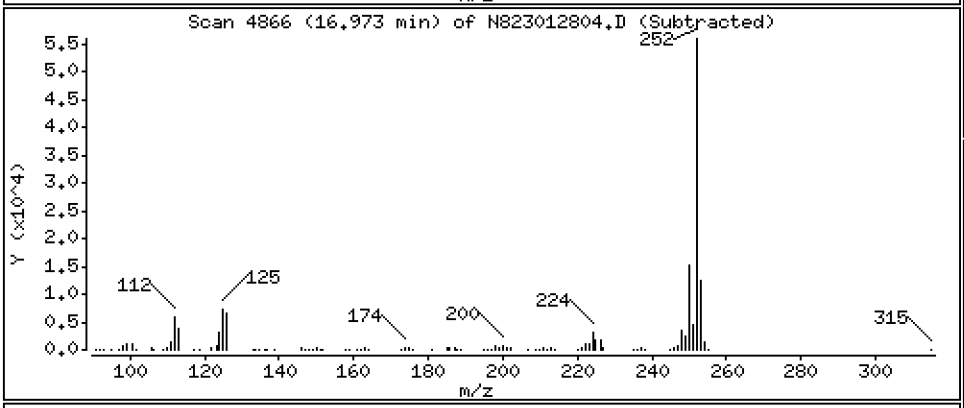
Column diameter: 0.25

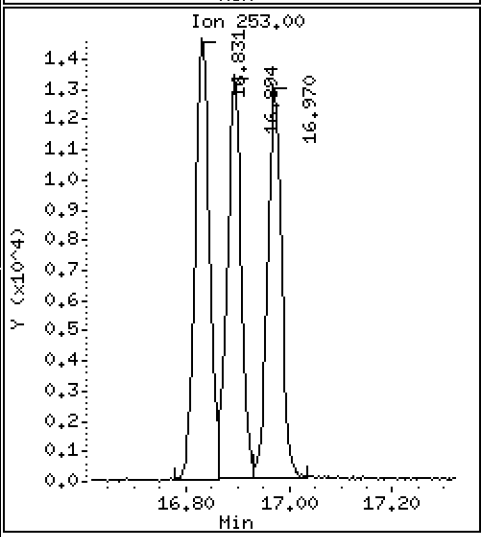
30 Benzo(j)fluoranthene

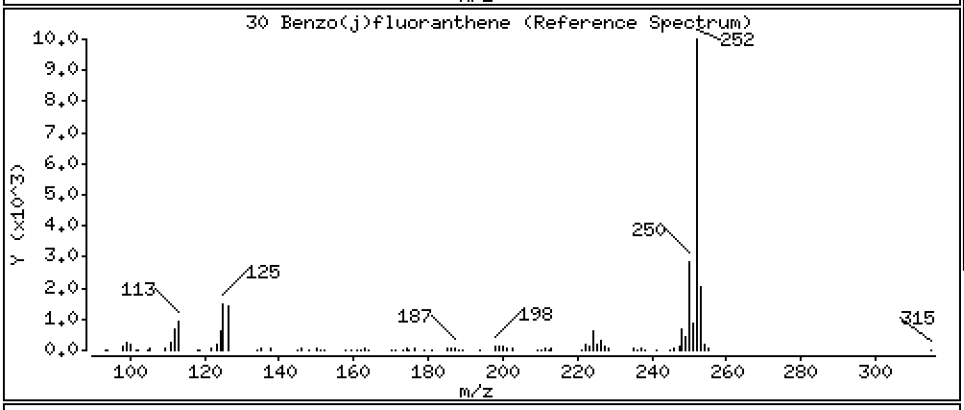
Concentration: 6.863 ug/mL

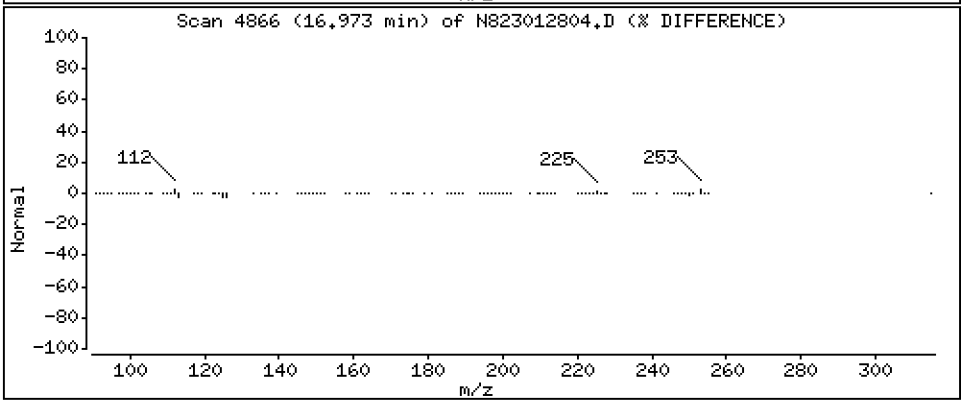












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

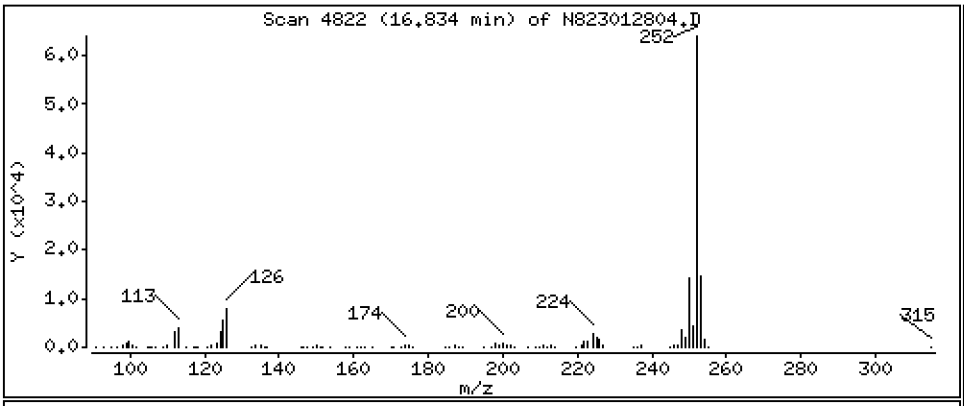
Operator: JZ

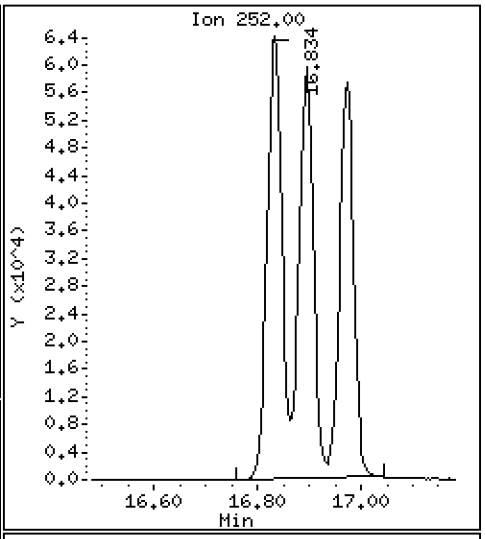
Column phase: Rxi-17sil

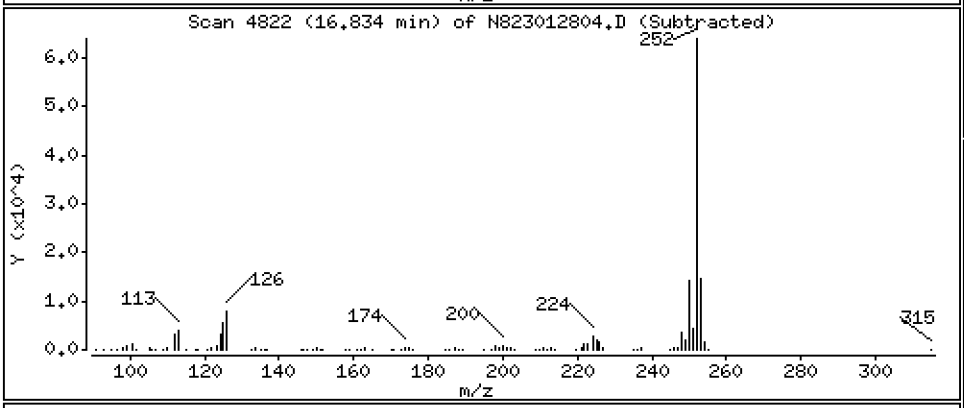
Column diameter: 0.25

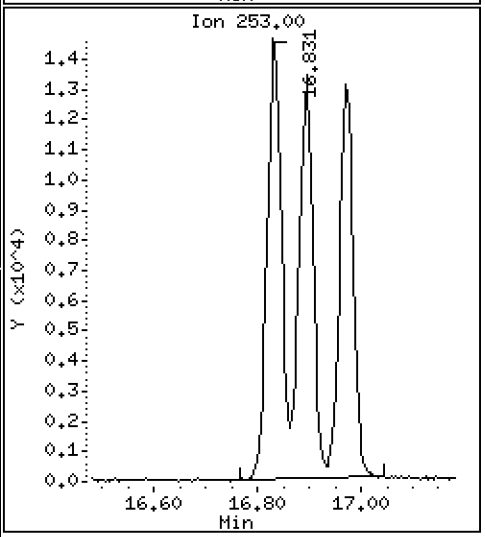
31 Total Benzofluoranthenes

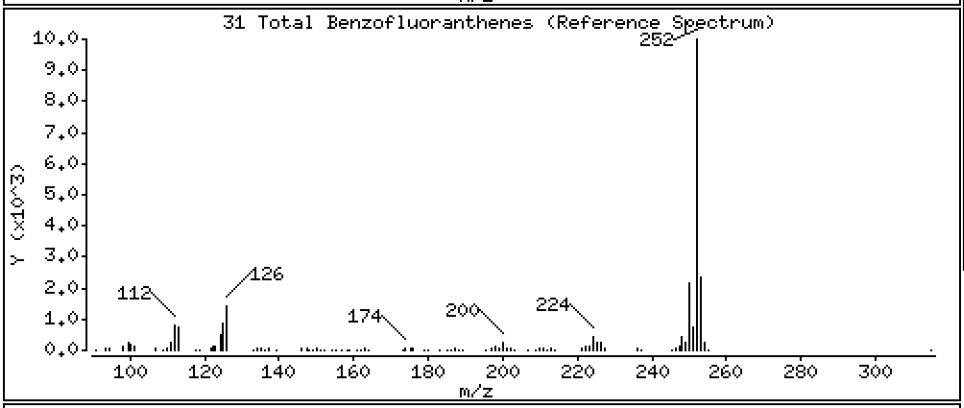
Concentration: 20.47 ug/mL

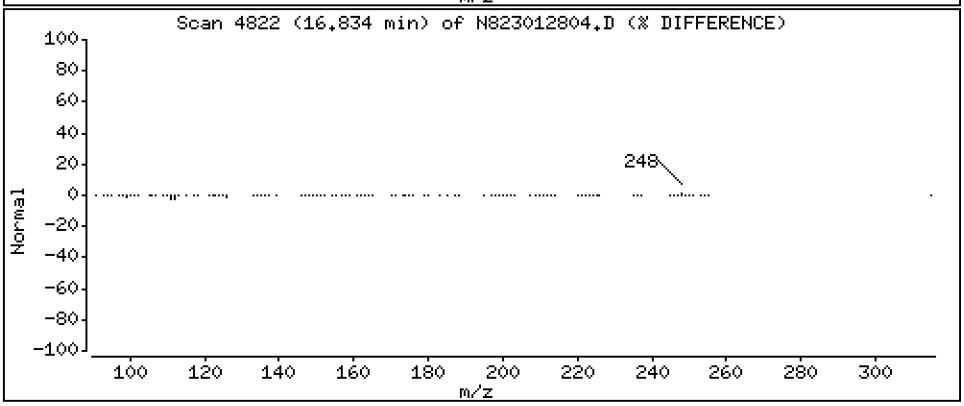












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

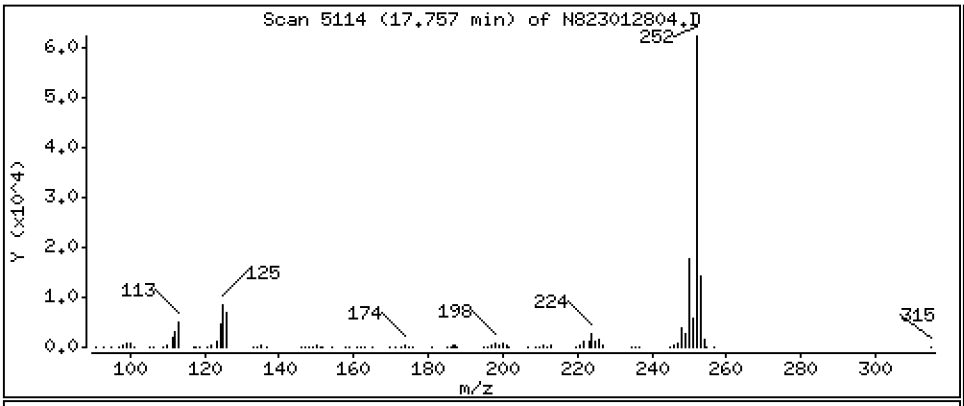
Operator: JZ

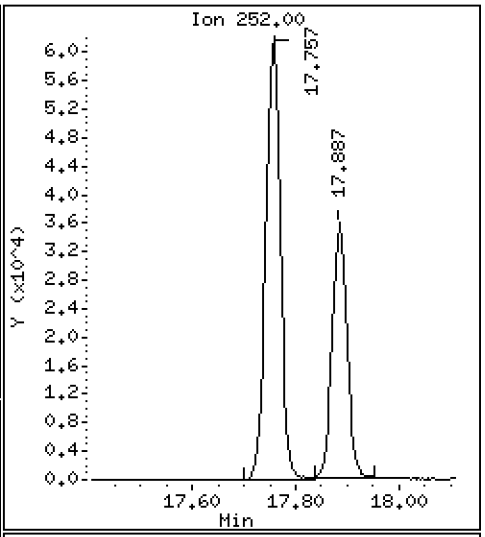
Column phase: Rxi-17sil

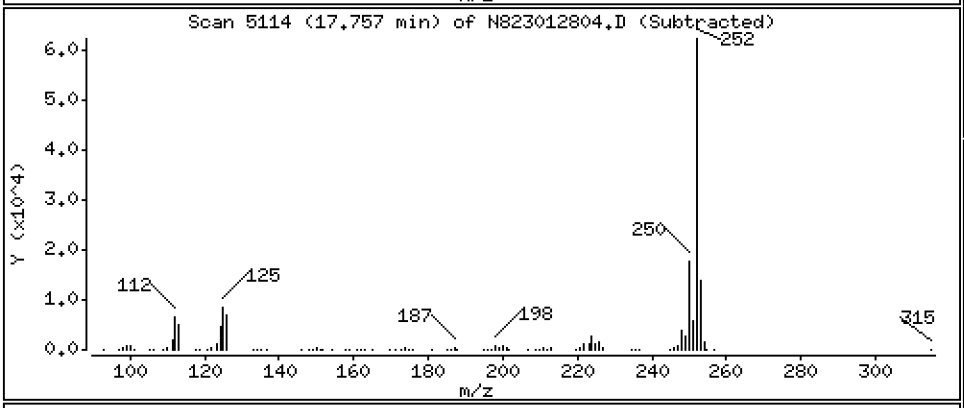
Column diameter: 0.25

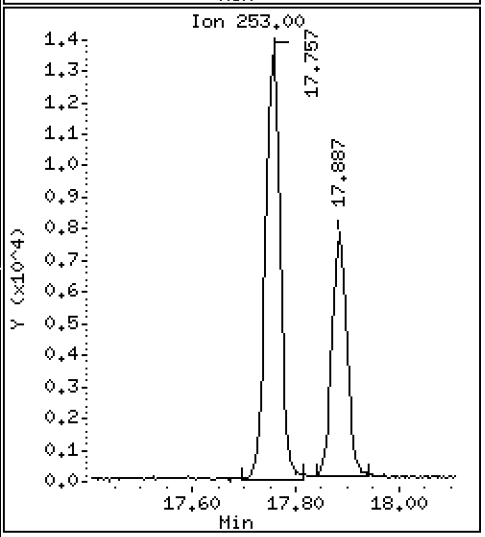
34 Benzo(e)pyrene

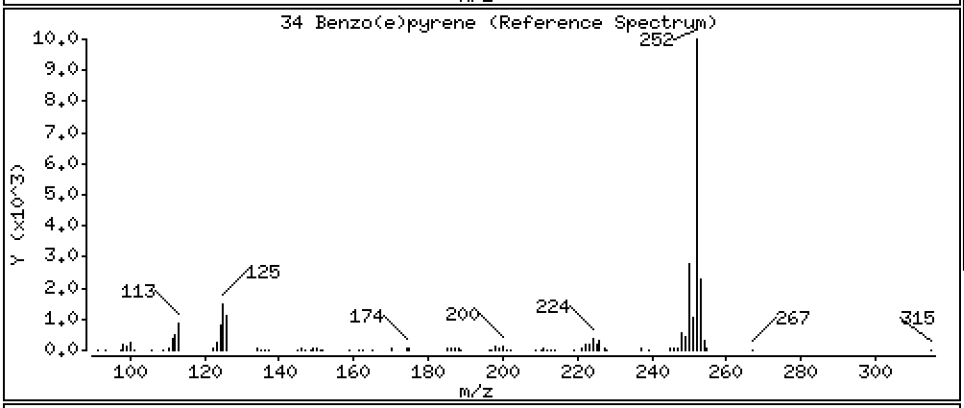
Concentration: 6.837 ug/mL

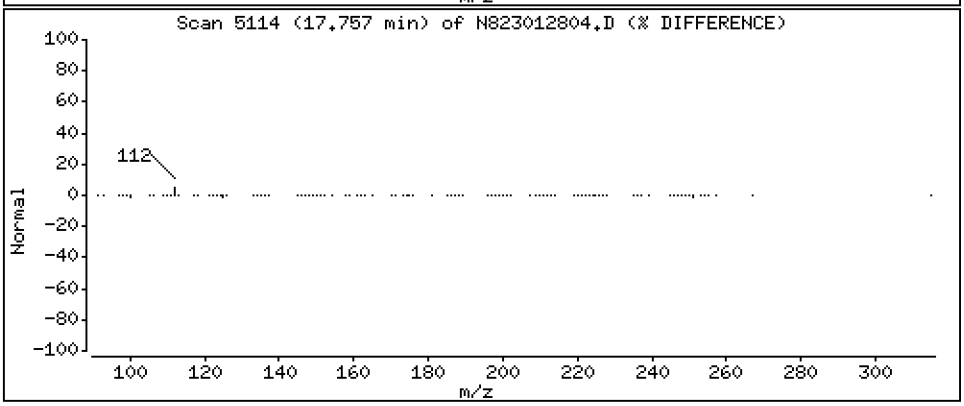












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

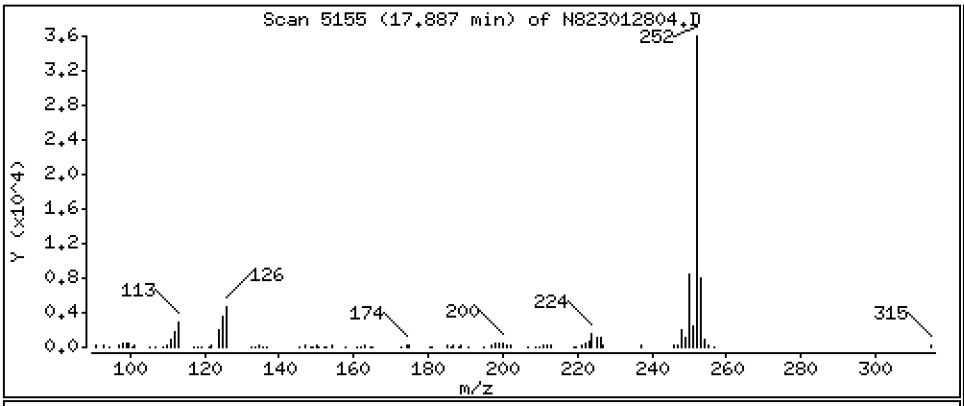
Operator: JZ

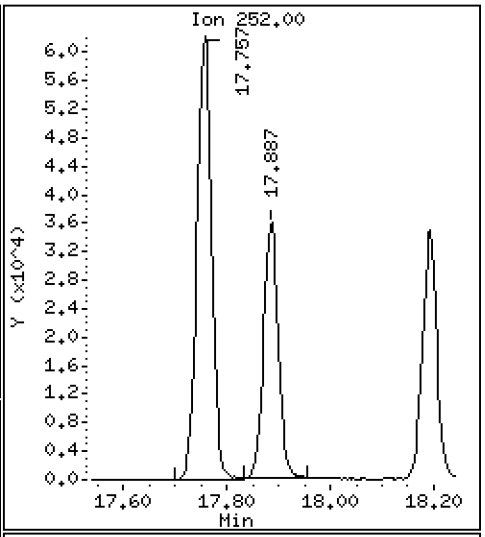
Column phase: Rxi-17sil

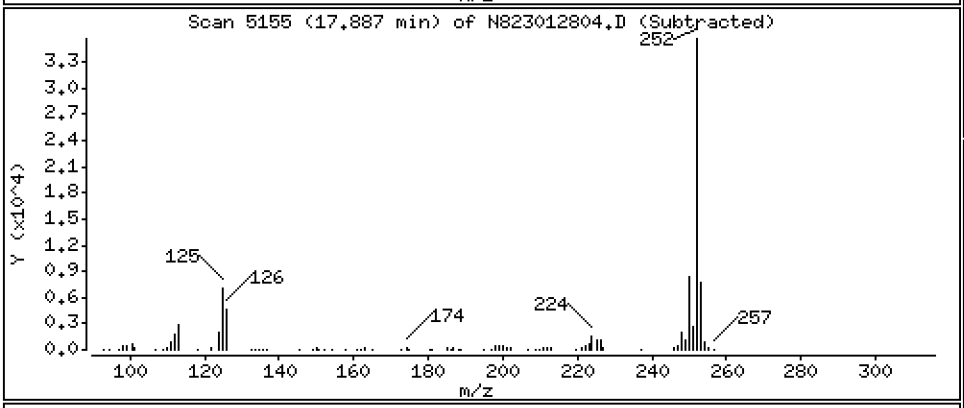
Column diameter: 0.25

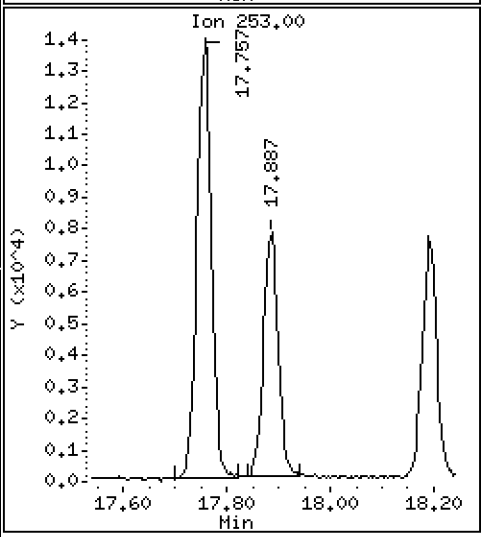
32 Benzo(a)pyrene

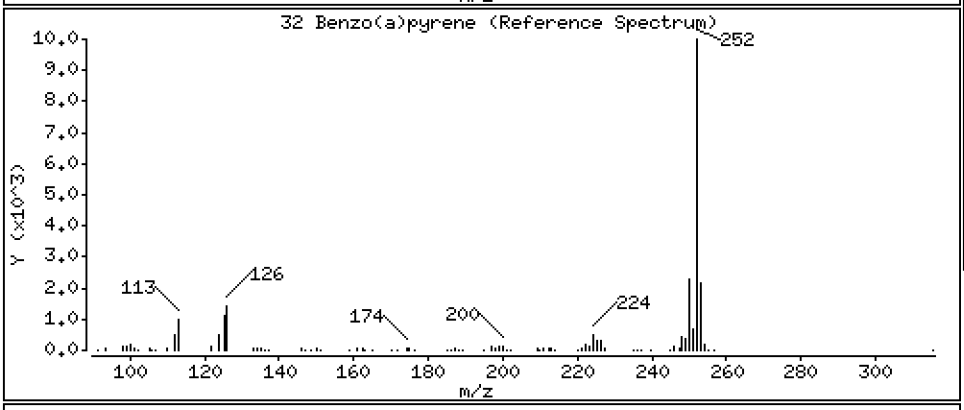
Concentration: 4.458 ug/mL

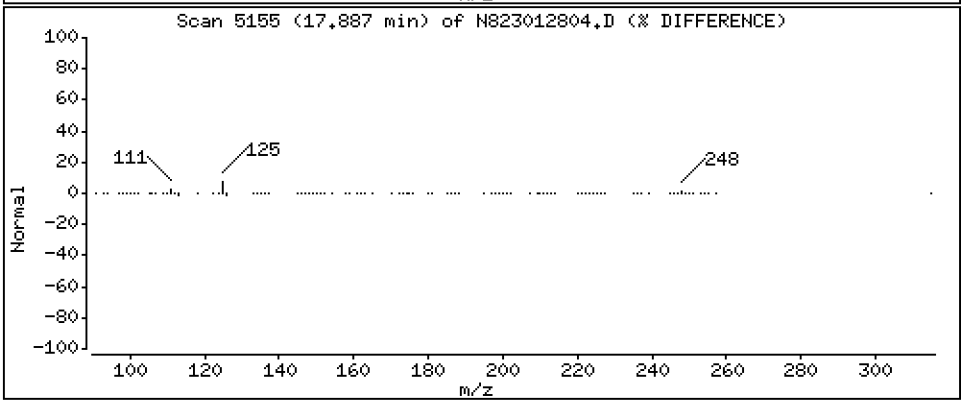












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

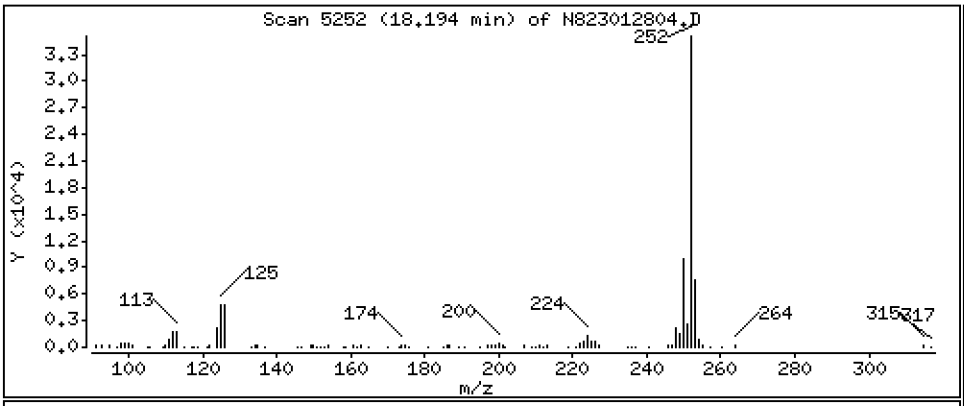
Operator: JZ

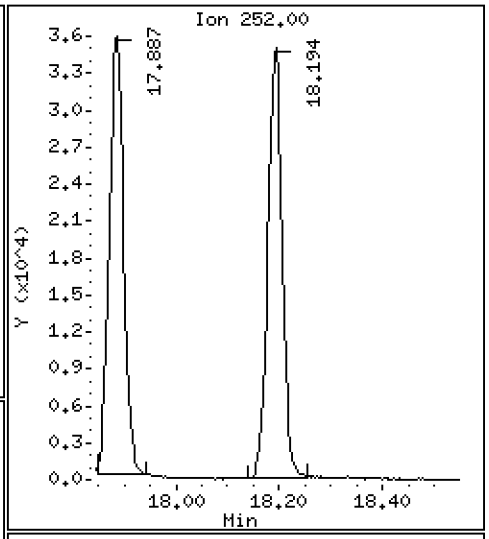
Column phase: Rxi-17sil

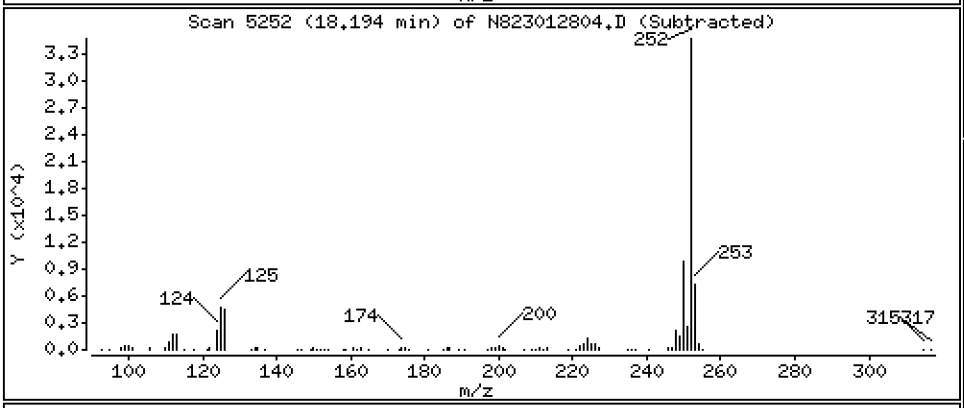
Column diameter: 0.25

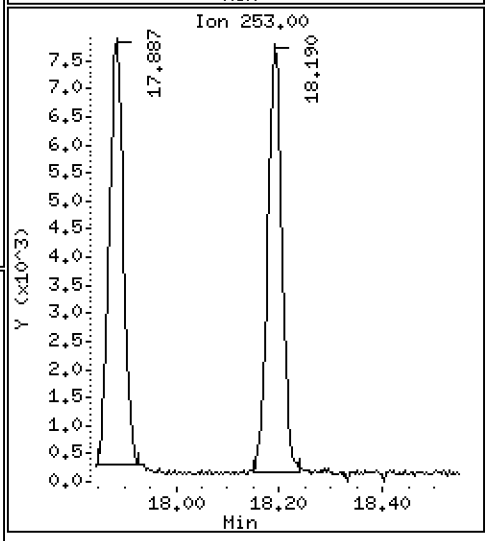
35 Perylene

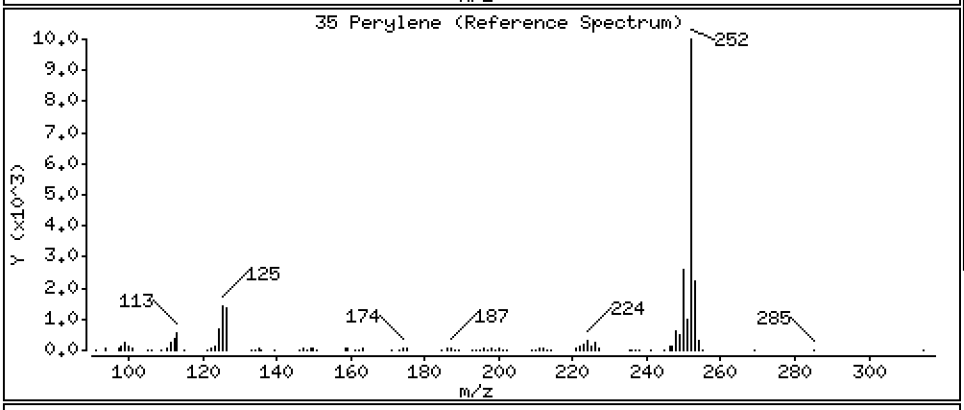
Concentration: 3.949 ug/mL

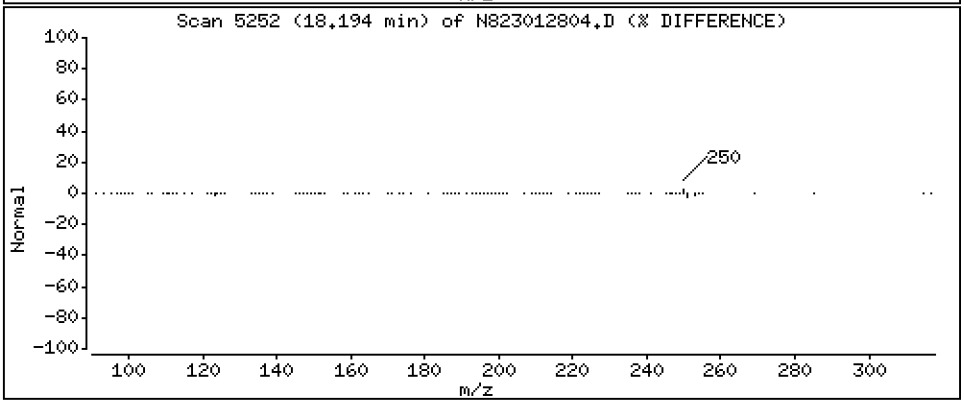












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

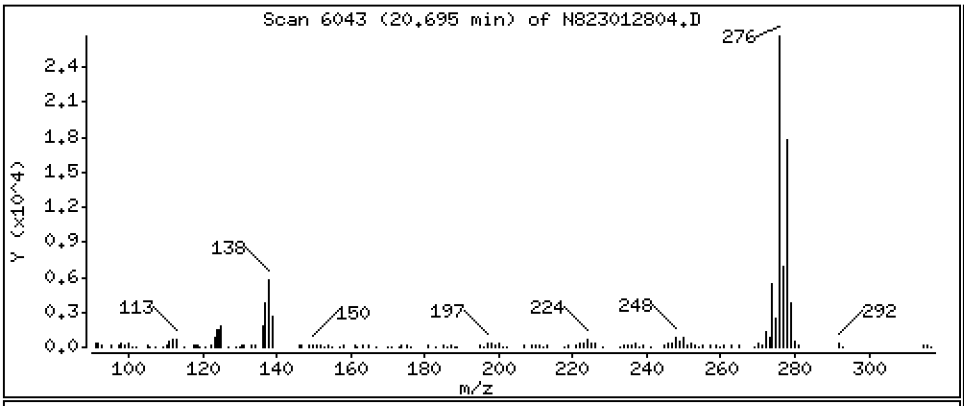
Operator: JZ

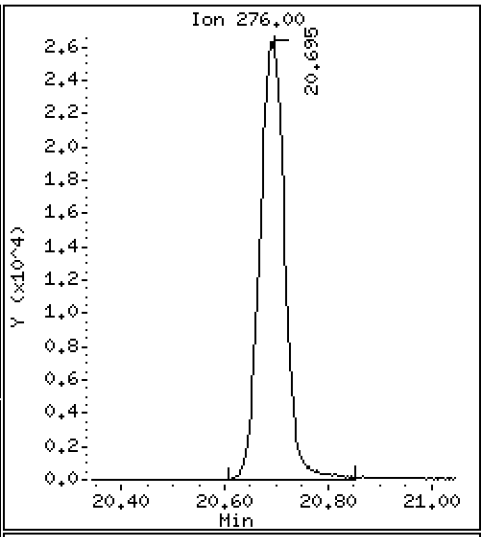
Column phase: Rxi-17sil

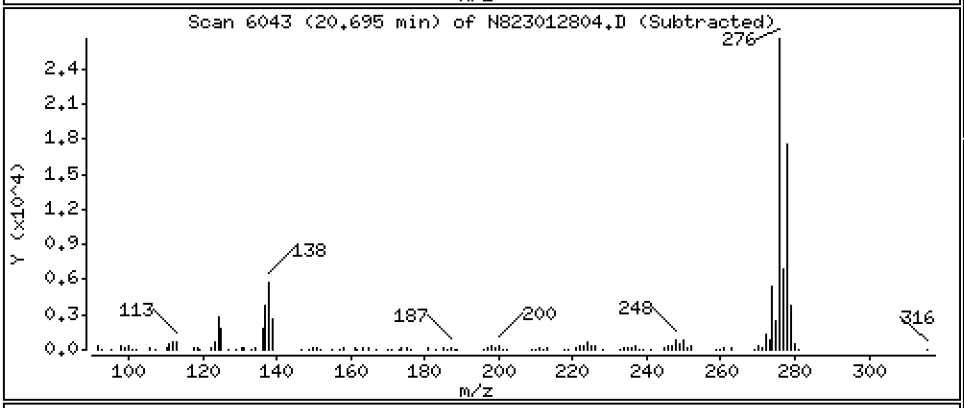
Column diameter: 0.25

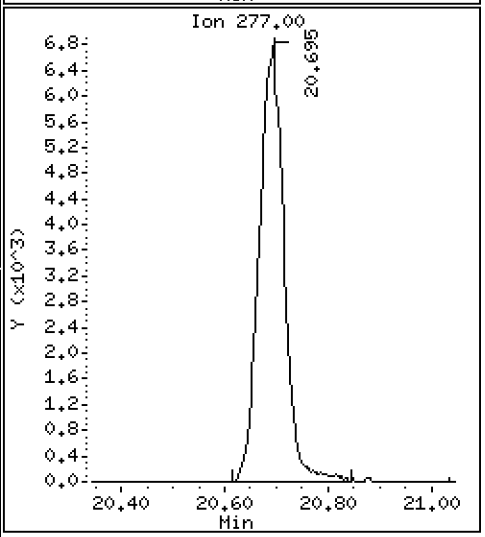
37 Indeno(1,2,3-cd)pyrene

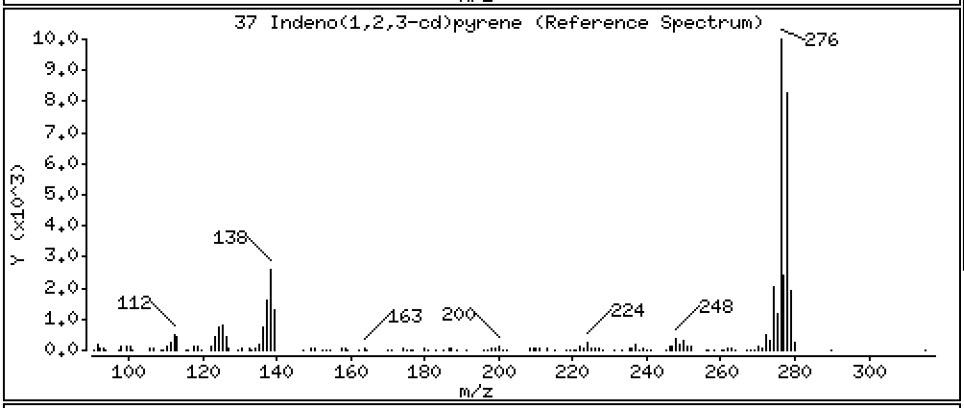
Concentration: 4.920 ug/mL

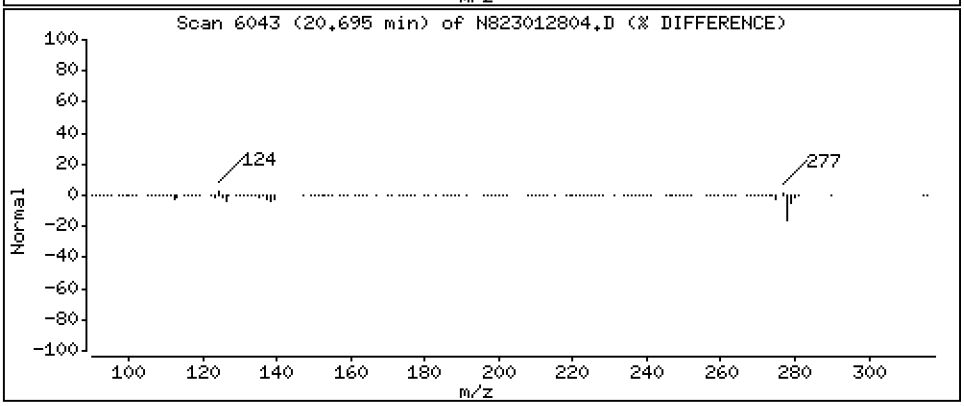












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

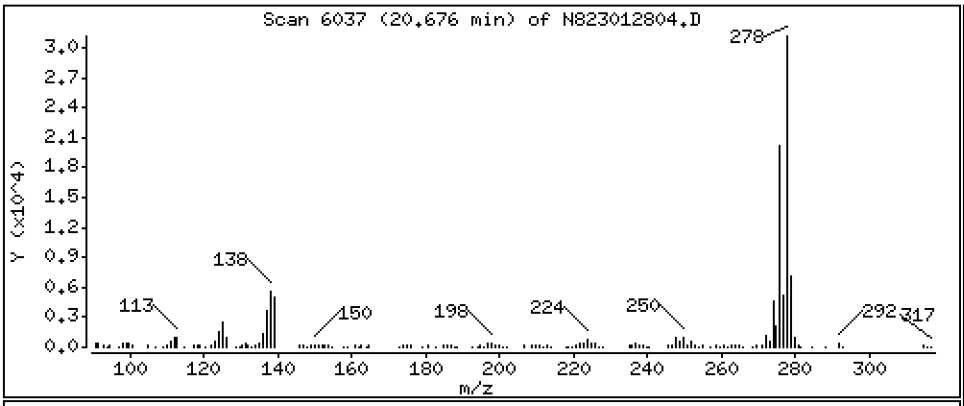
Operator: JZ

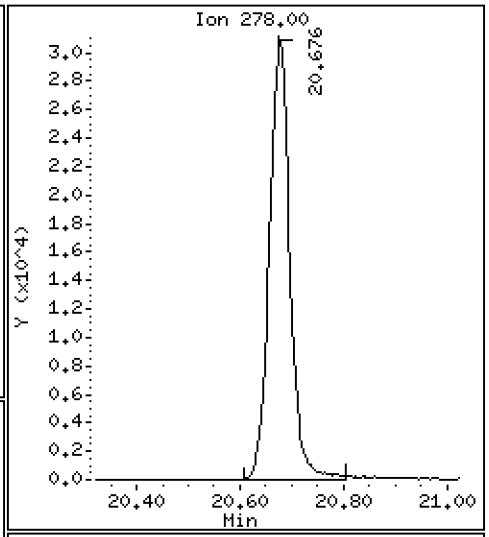
Column phase: Rxi-17sil

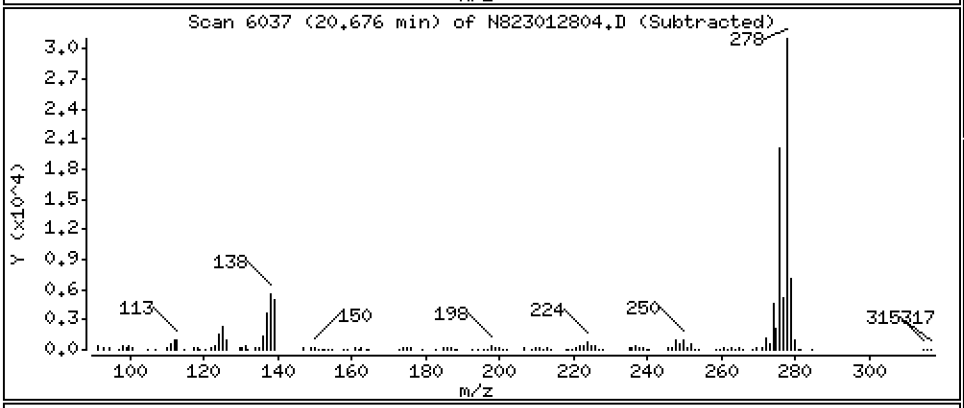
Column diameter: 0.25

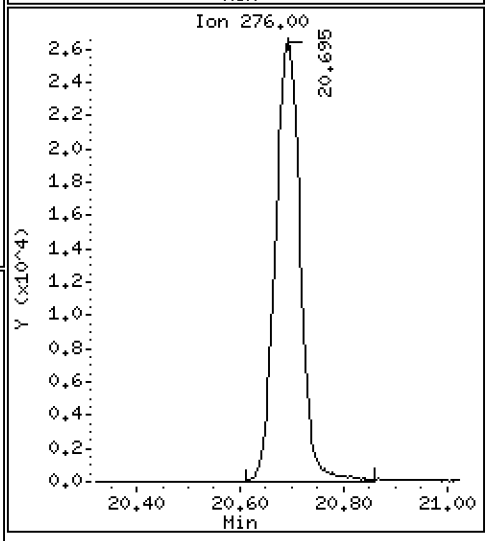
38 Dibenzo(a,h)anthracene

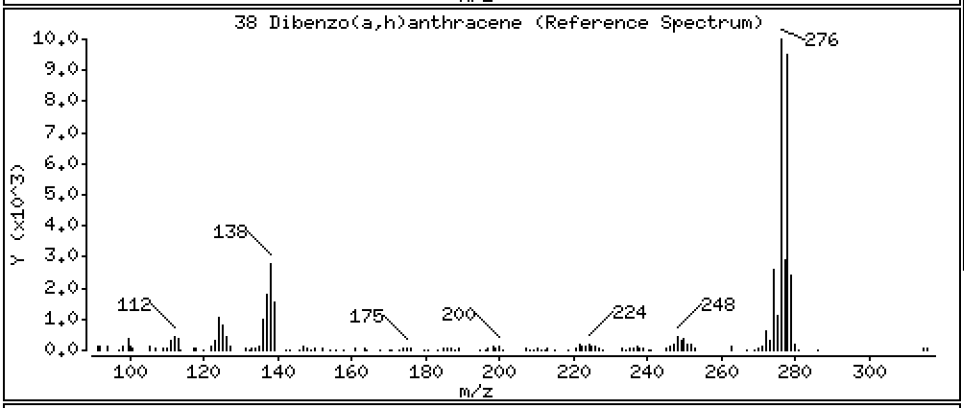
Concentration: 5.496 ug/mL

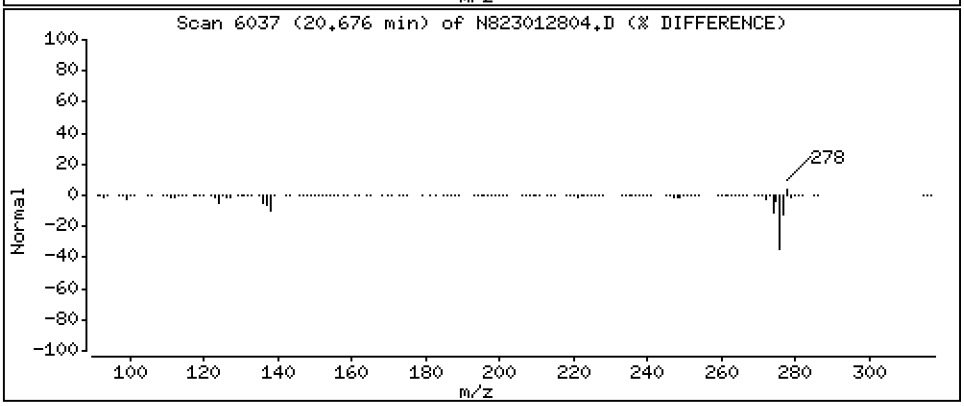












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012804.D

Date : 25-JAN-2023 15:54

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BS1,

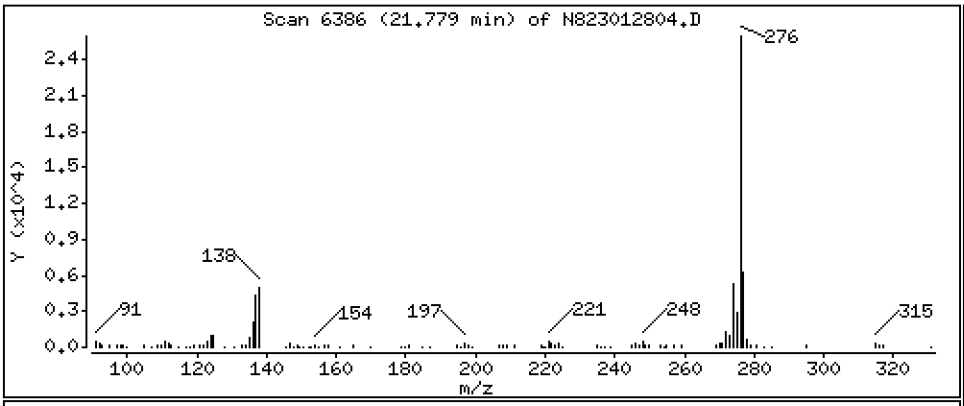
Operator: JZ

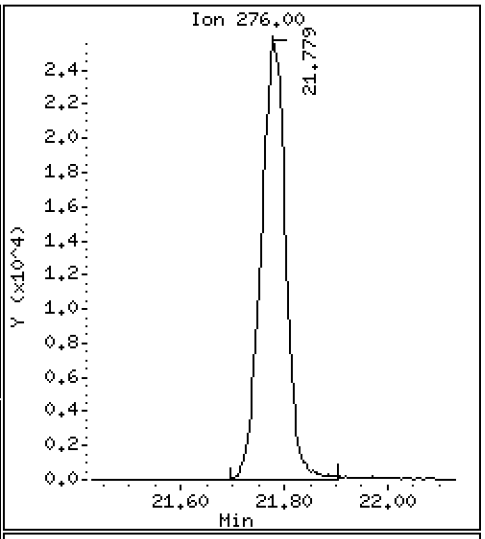
Column phase: Rxi-17sil

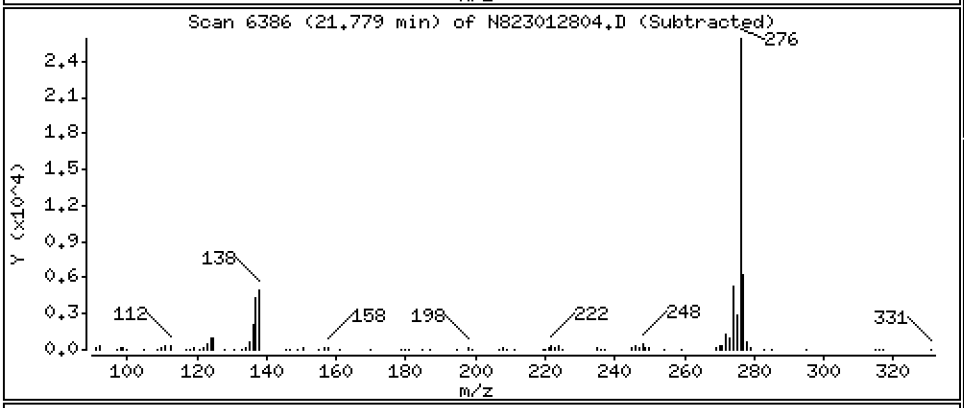
Column diameter: 0.25

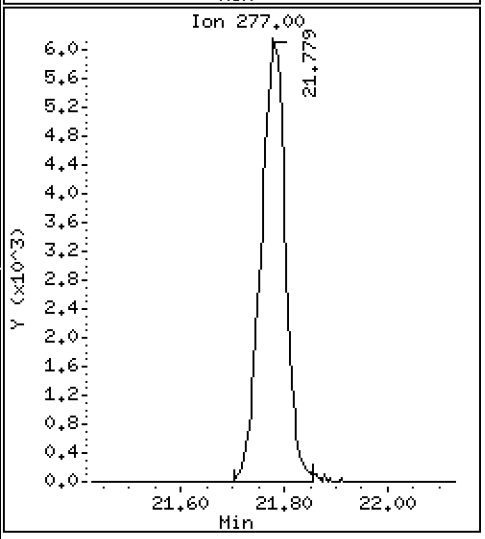
39 Benzo(g,h,i)perylene

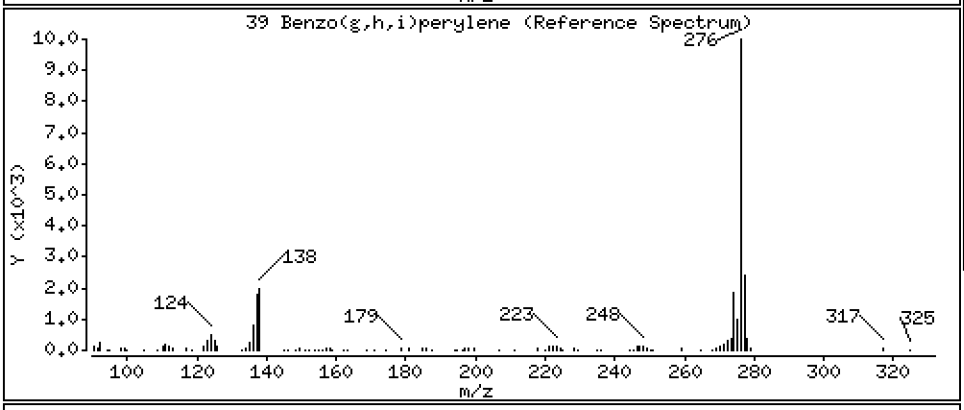
Concentration: 5.258 ug/mL

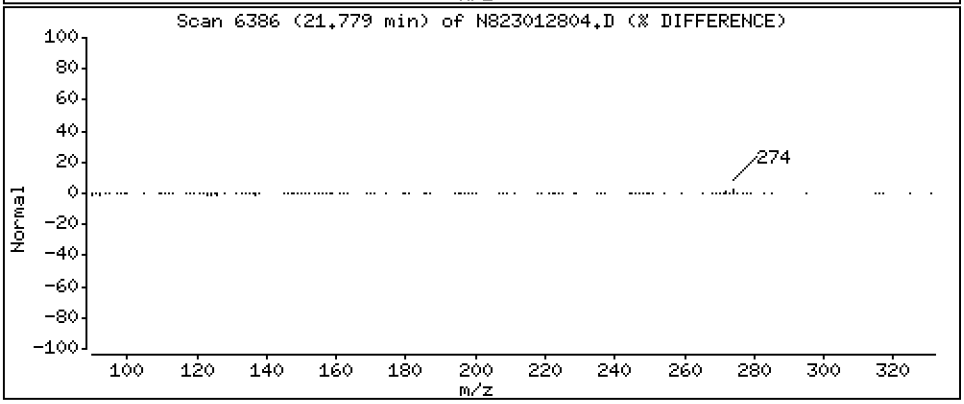












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230125.b\N823012804.D
Lab Smp Id: BLA0411-BS1
Inj Date : 25-JAN-2023 15:54
Operator : JZ Inst ID: nt8.i
Smp Info : BLA0411-BS1,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 22:56 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.897	4.906	(1.000)	52723	2.00000	
	2 Naphthalene	128	4.925	4.938	(1.006)	93056	3.79603	3.796
$	3 2-Methylnaphthalene-d10	152	5.634	5.640	(1.150)	37786	2.62788	2.628
	4 2-Methylnaphthalene	141	5.681	5.687	(1.160)	52740	3.91130	3.911
	5 1-methylnaphthalene	141	5.880	5.886	(1.201)	54027	3.94787	3.948
	7 Biphenyl	154	6.342	6.345	(0.882)	79255	3.90431	3.904
	8 2,6-Dimethylnaphthalene	156	6.386	6.392	(0.888)	58459	4.06902	4.069
	9 Acenaphthylene	152	7.085	7.088	(0.985)	79894	3.43847	3.438
*	10 Acenaphthene-d10	164	7.193	7.199	(1.000)	30770	2.00000	
	11 Acenaphthene	153	7.243	7.246	(1.007)	59337	3.81140	3.811
	12 Dibenzofuran	168	7.395	7.398	(1.028)	92314	3.90396	3.904
	13 1,6,7-Trimethylnaphthalene	170	7.458	7.464	(1.037)	61914	4.15220	4.152
	14 Fluorene	166	7.872	7.875	(1.095)	76078	4.14245	4.142
	18 Dibenzothiophene	184	9.109	9.112	(0.986)	109338	4.24966	4.250
*	15 Phenanthrene-d10	188	9.235	9.238	(1.000)	58224	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	118282	4.15883	4.159
	17 Anthracene	178	9.311	9.314	(1.008)	98952	3.82989	3.830
	19 Carbazole	167	9.827	9.829	(1.064)	108040	4.56138	4.561
	20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	95052	4.63773	4.638
	22 Fluoranthene	202	11.057	11.056	(1.197)	140666	4.54370	4.544
$	21 Fluoranthene-d10	212	11.015	11.018	(1.193)	83787	3.26169	3.262
	23 Pyrene	202	11.575	11.578	(0.815)	148214	4.83127	4.831
	24 Benzo(a)anthracene	228	14.079	14.085	(0.991)	134682	4.84362	4.844
*	25 Chrysene-d12	240	14.209	14.212	(1.000)	49482	2.00000	
	27 Chrysene	228	14.282	14.288	(1.005)	139608	4.71633	4.716
	28 Benzo(b)fluoranthene	252	16.833	16.830	(0.929)	127956	7.03972	7.040
	29 Benzo(k)fluoranthene	252	16.894	16.893	(0.932)	117685	6.61013	6.610
	30 Benzo(j)fluoranthene	252	16.973	16.969	(0.937)	110005	6.86349	6.863
	31 Total Benzofluoranthenes	252	16.833	16.830	(0.929)	352366	20.4699	20.47(M)
	34 Benzo(e)pyrene	252	17.757	17.756	(0.980)	123926	6.83719	6.837
	32 Benzo(a)pyrene	252	17.886	17.889	(0.987)	71309	4.45820	4.458
*	33 Perylene-d12	264	18.117	18.120	(1.000)	31209	2.00000	
	35 Perylene	252	18.193	18.196	(1.004)	67775	3.94860	3.949

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.561	20.564	(1.135)	48294	3.94935	3.949
37 Indeno(1,2,3-cd)pyrene	276	20.694	20.694	(1.142)	89648	4.91972	4.920
38 Dibenzo(a,h)anthracene	278	20.675	20.672	(1.141)	86190	5.49624	5.496
39 Benzo(g,h,i)perylene	276	21.779	21.779	(1.202)	86814	5.25835	5.258

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823012804.D
Lab Smp Id: BLA0411-BS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 25-JAN-2023
Calibration Time: 14:49
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	46976	23488	93952	52723	12.23
10 Acenaphthene-d10	27652	13826	55304	30770	11.28
15 Phenanthrene-d10	51738	25869	103476	58224	12.54
25 Chrysene-d12	45383	22692	90766	49482	9.03
33 Perylene-d12	41344	20672	82688	31209	-24.51

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.90	-0.19
10 Acenaphthene-d10	7.20	6.70	7.70	7.19	-0.08
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	-0.03
25 Chrysene-d12	14.21	13.71	14.71	14.21	-0.02
33 Perylene-d12	18.12	17.62	18.62	18.12	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823012804.D

Lab ID: BLA0411-BS1
nt8.i, 20230125.b\FSIMPNA230119.m,   25-JAN-2023 15:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

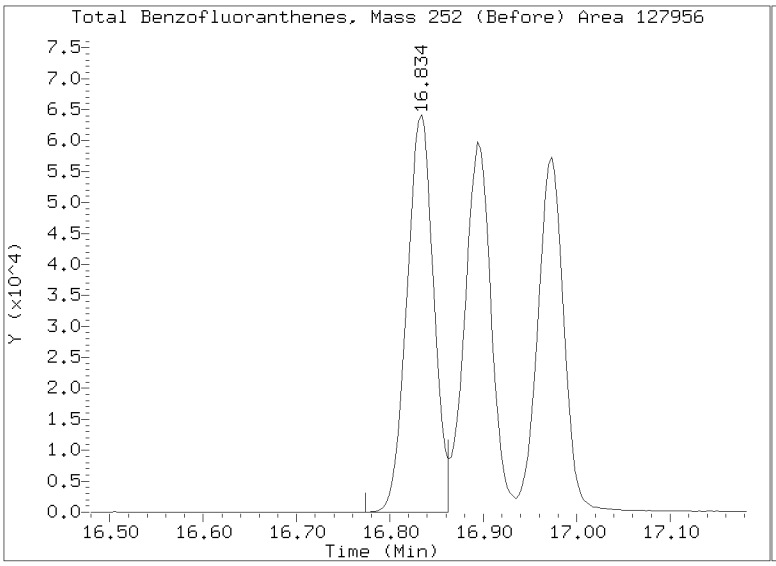
No RRT check performed

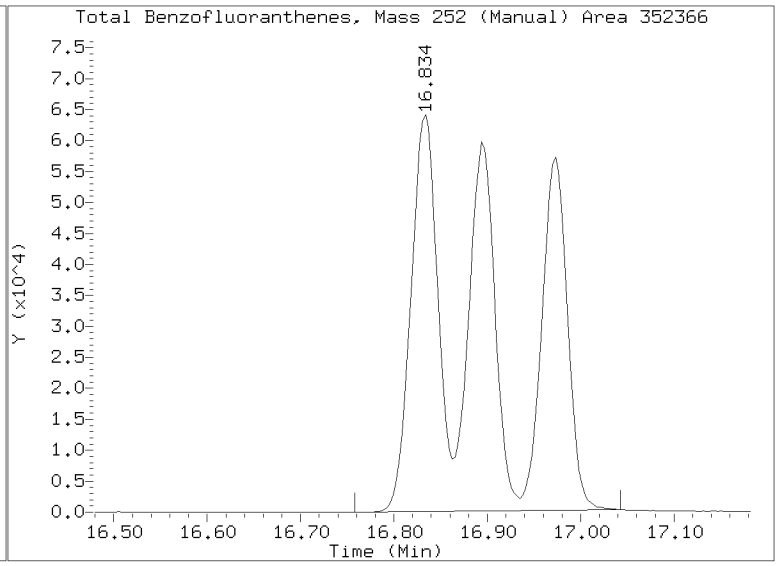
On Column LOD for nt8.i, 20230125.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230125.b/N823012804.D
Injection Date: 25-JAN-2023 15:54
Lab ID:BLA0411-BS1 Client ID:
Report Date: 01/25/2023 22:57





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Date : 25-JAN-2023 16:21

Client ID:

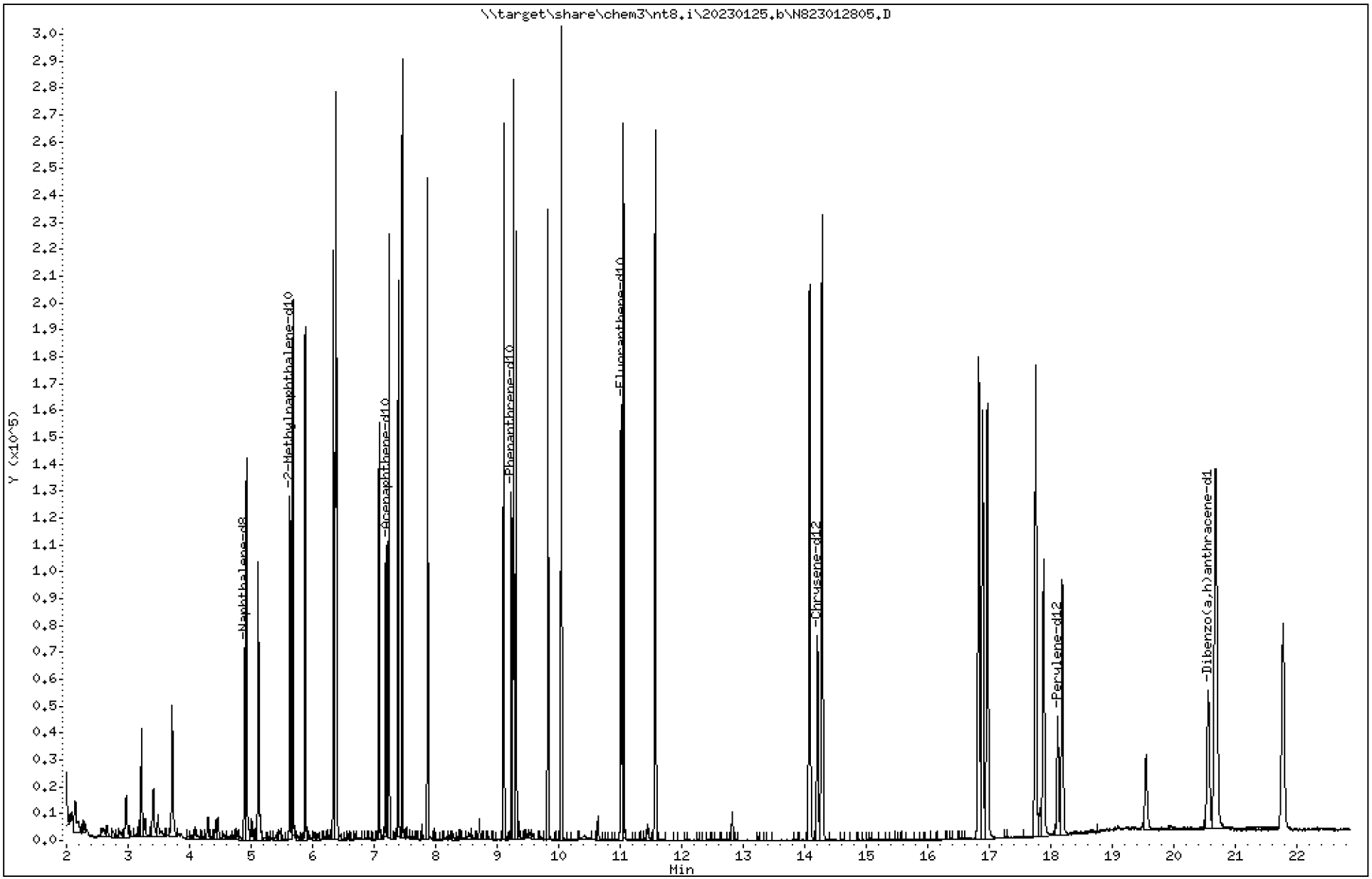
Instrument: nt8.i

Sample Info: BLA0411-BSD1,

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



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Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

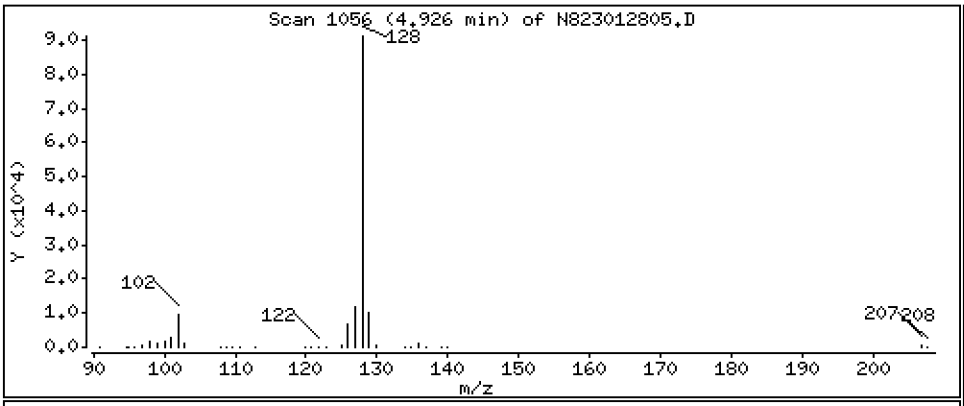
Operator: JZ

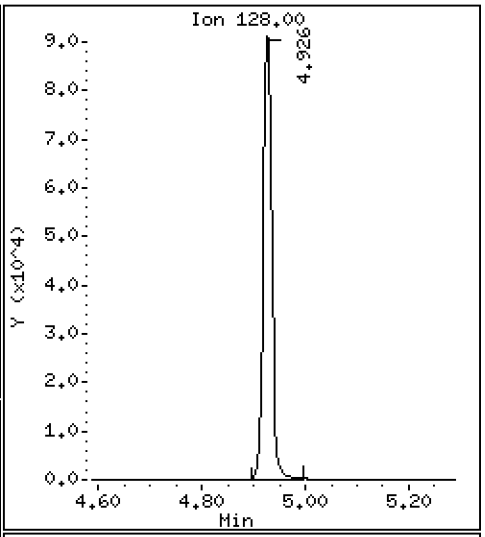
Column phase: Rxi-17sil

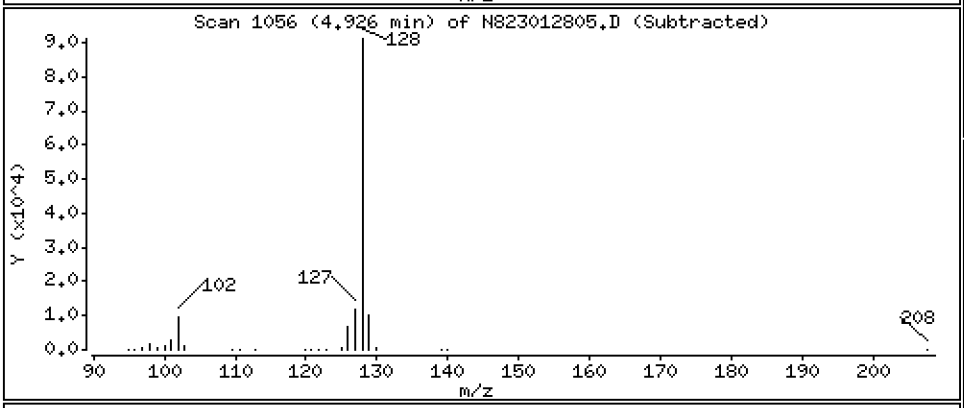
Column diameter: 0.25

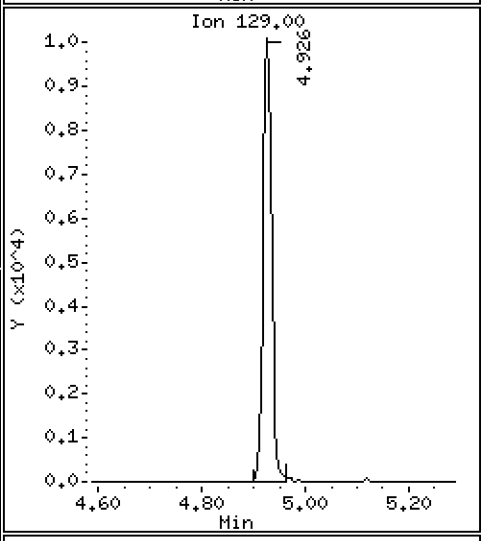
2 Naphthalene

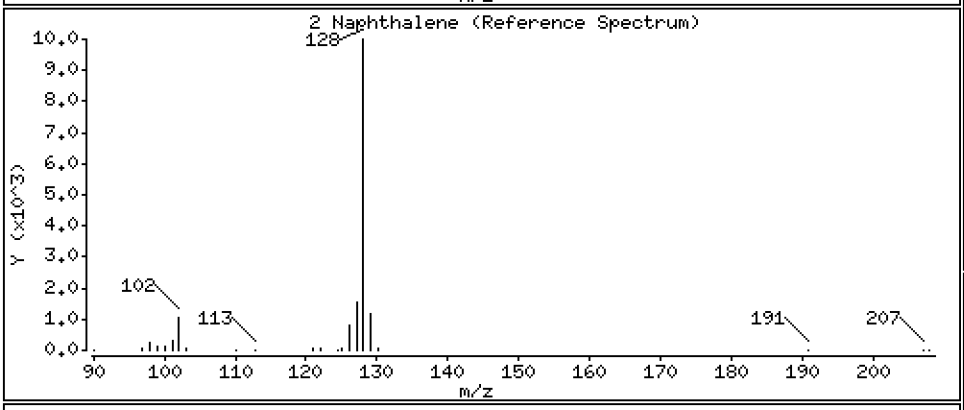
Concentration: 4.316 ug/mL

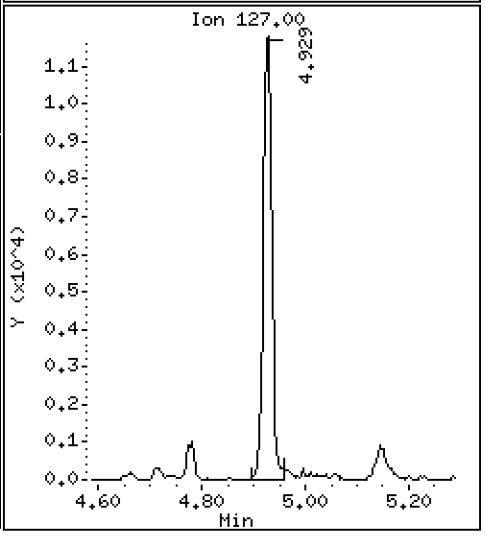


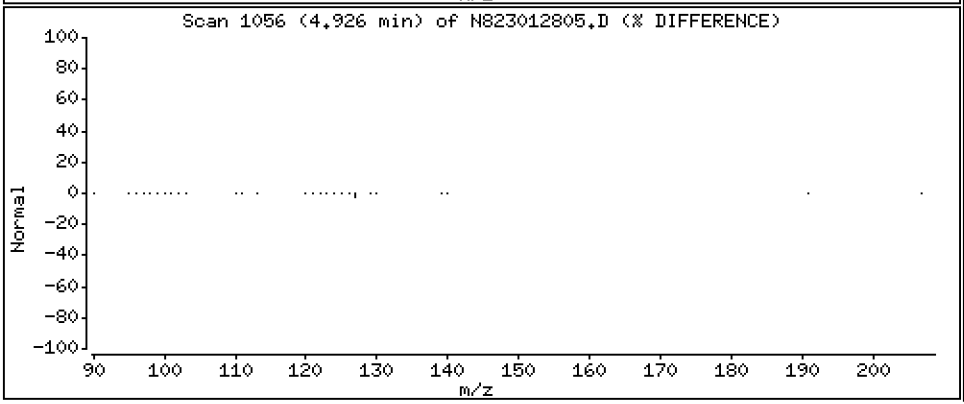












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Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

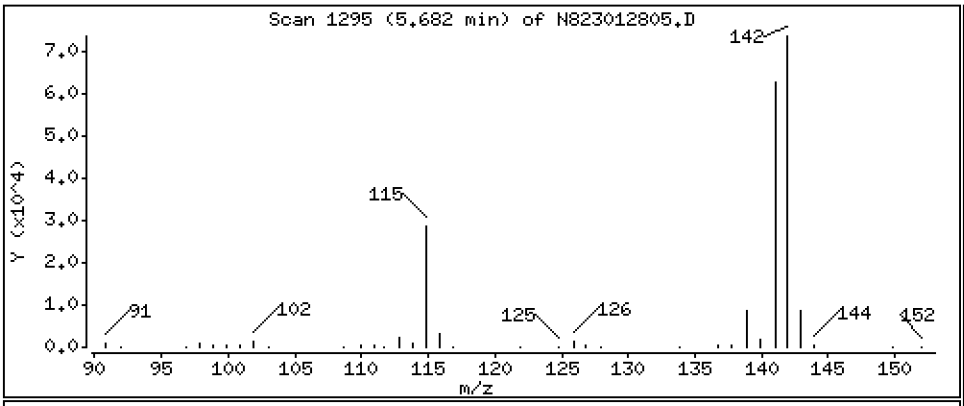
Operator: JZ

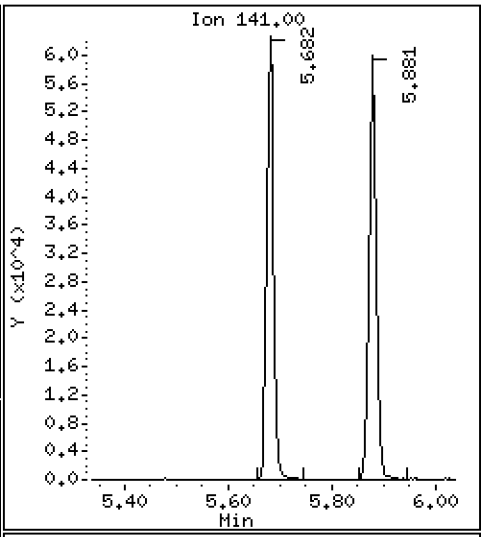
Column phase: Rxi-17sil

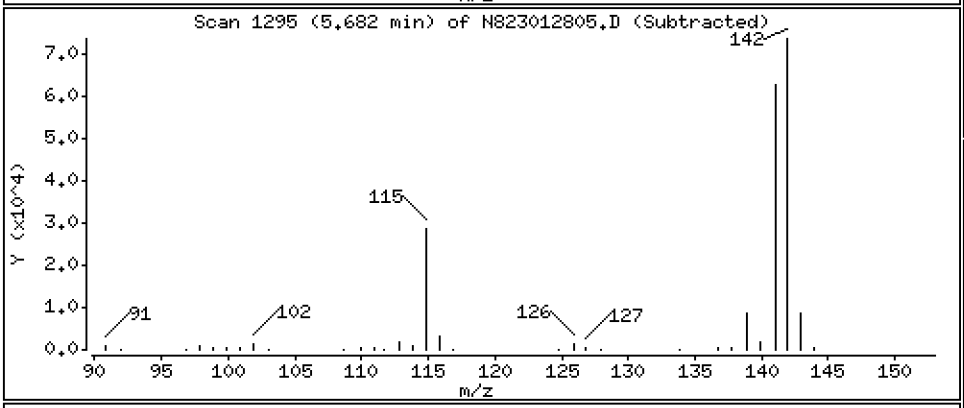
Column diameter: 0.25

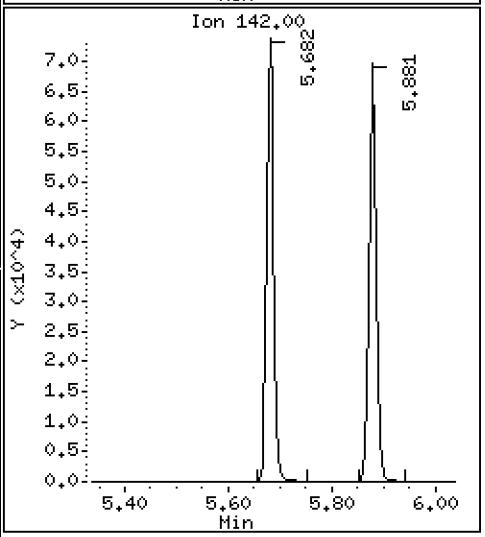
4 2-Methylnaphthalene

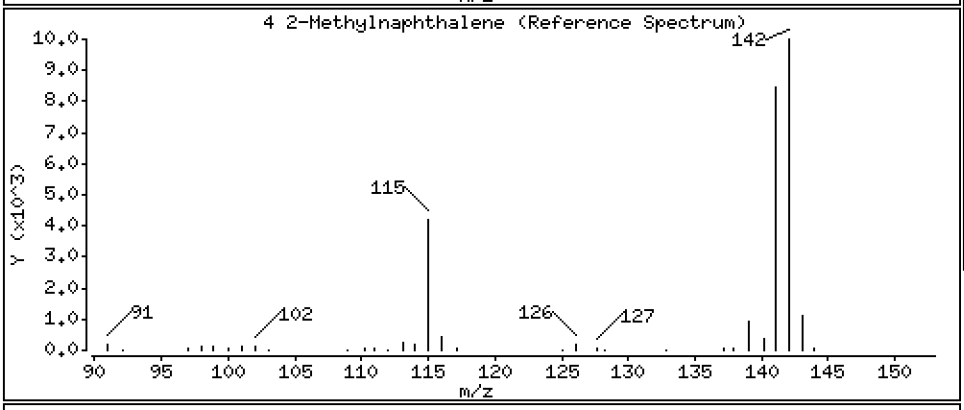
Concentration: 4.421 ug/mL

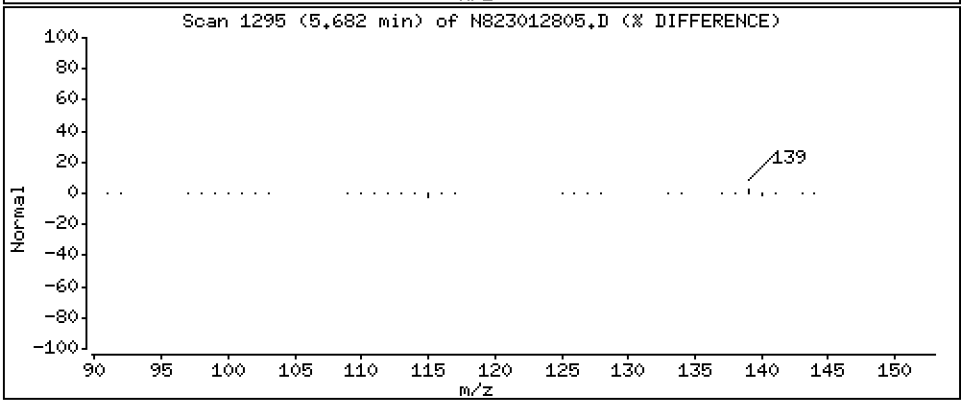












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Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

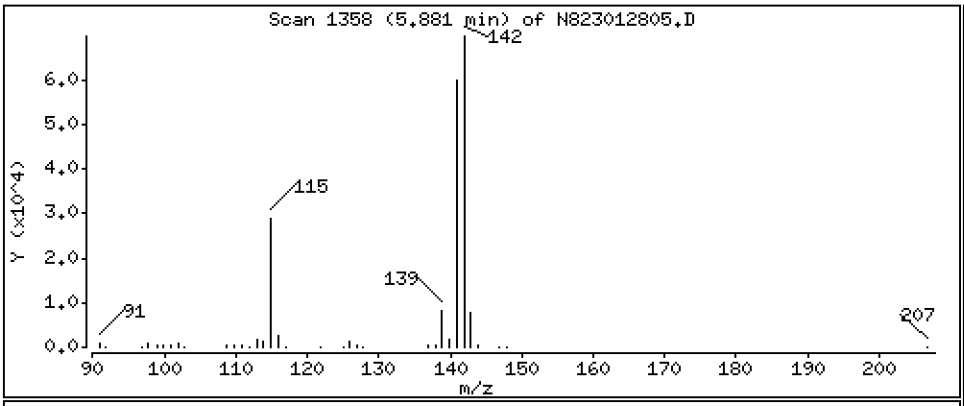
Operator: JZ

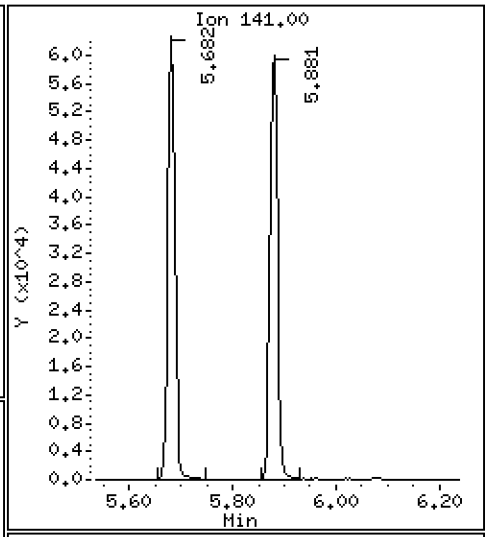
Column phase: Rxi-17sil

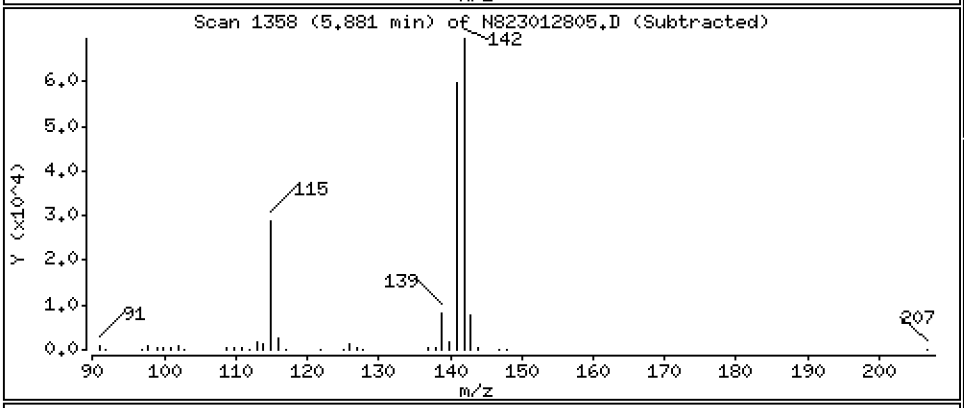
Column diameter: 0.25

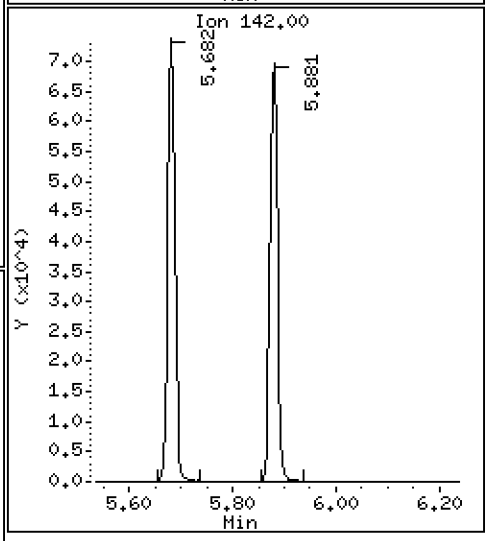
5 1-methylnaphthalene

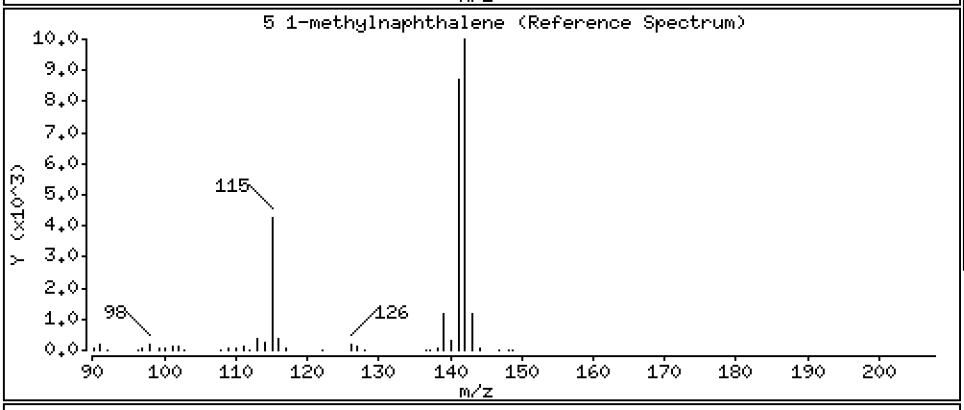
Concentration: 4.398 ug/mL

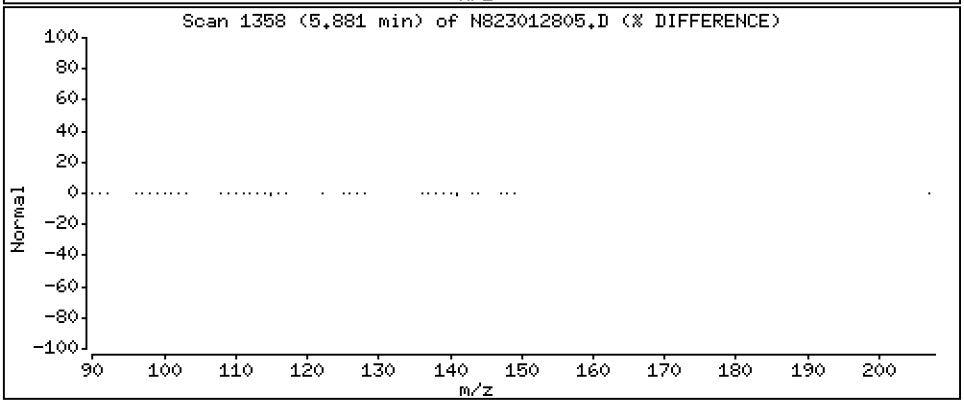












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

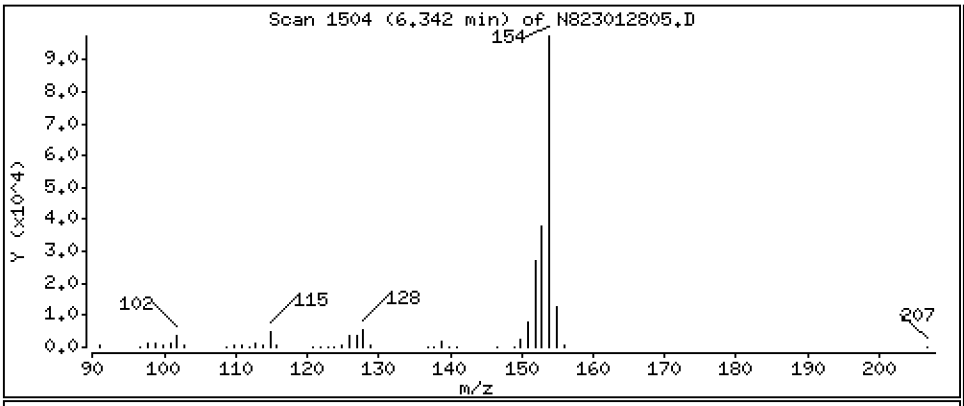
Operator: JZ

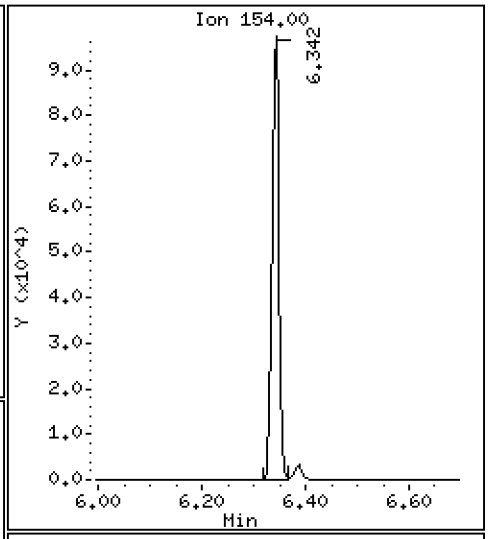
Column phase: Rxi-17sil

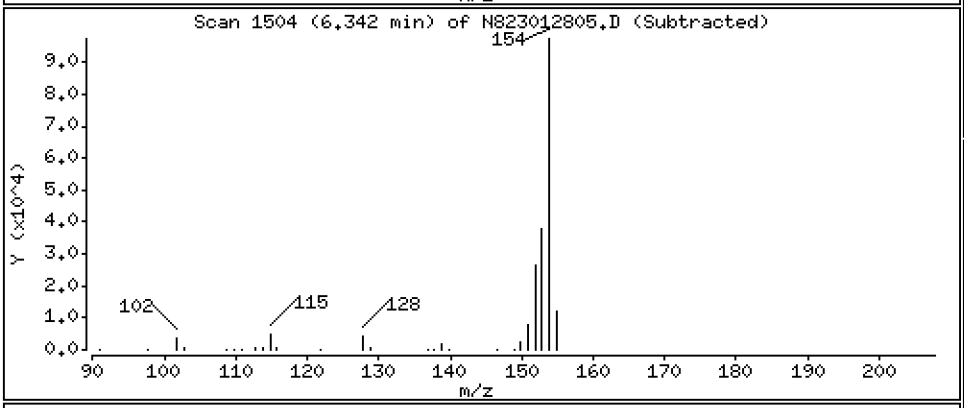
Column diameter: 0.25

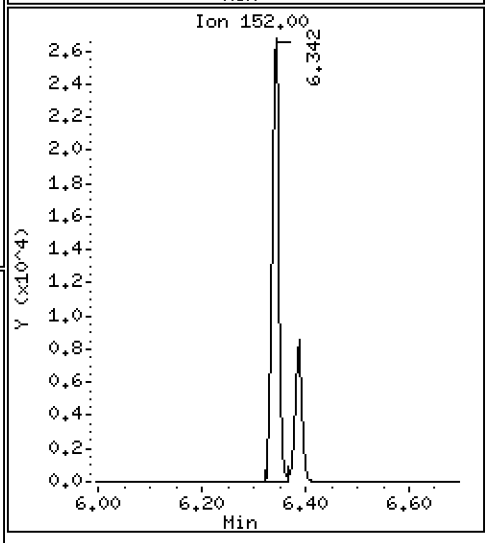
7 Biphenyl

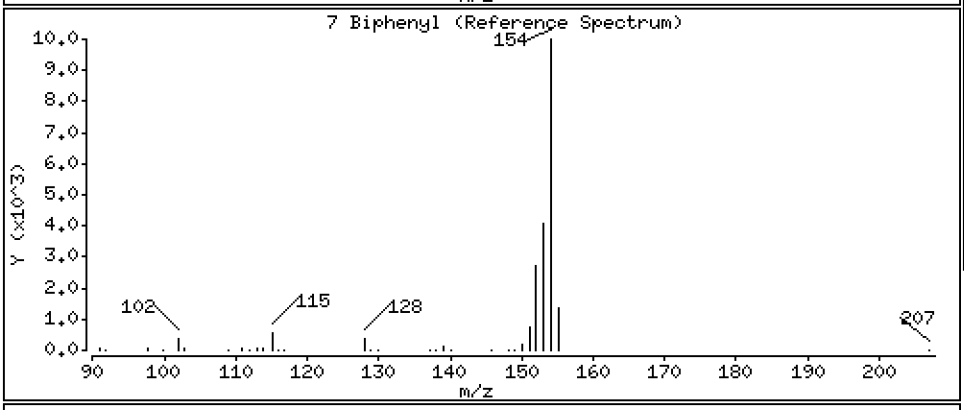
Concentration: 4.419 ug/mL

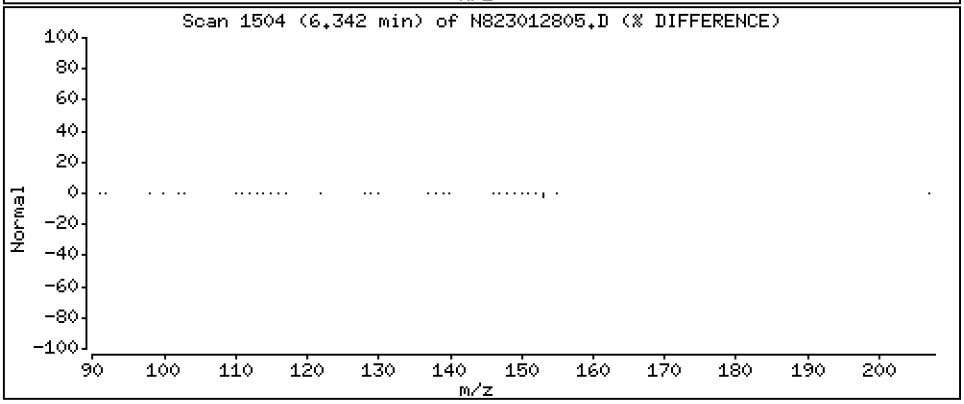












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

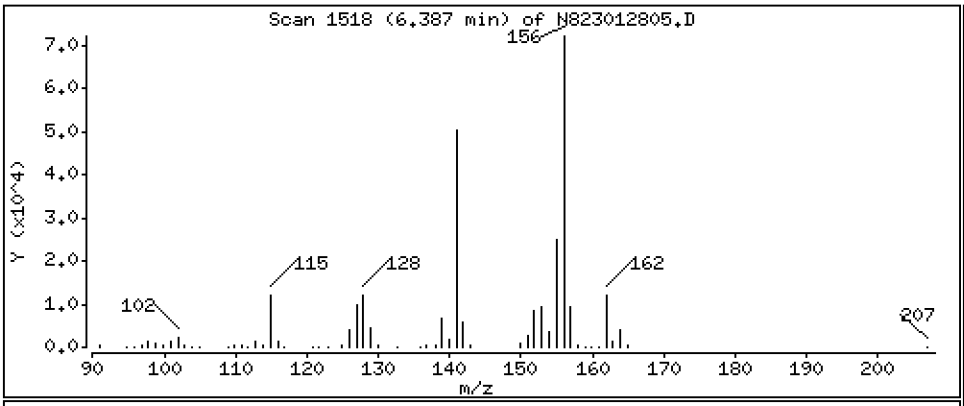
Operator: JZ

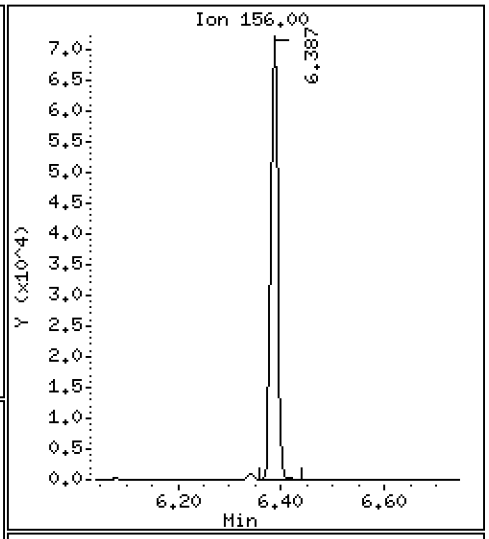
Column phase: Rxi-17sil

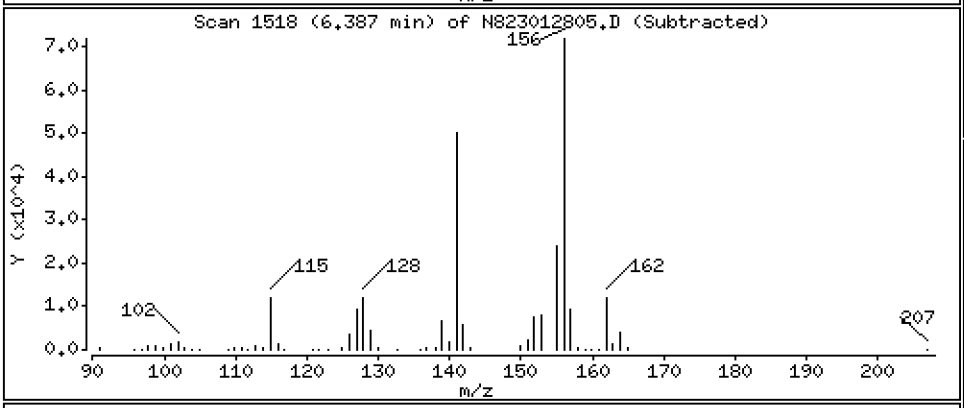
Column diameter: 0.25

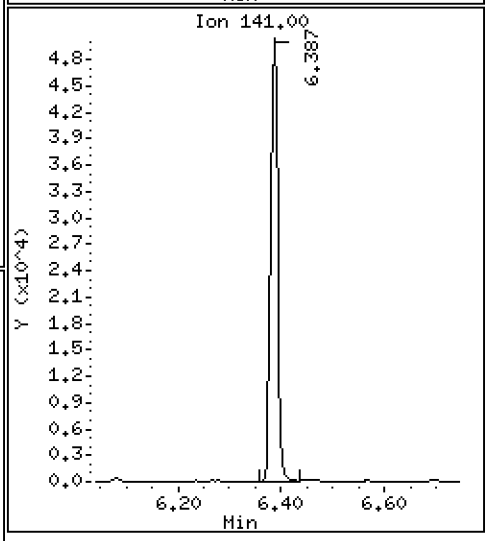
8 2,6-Dimethylnaphthalene

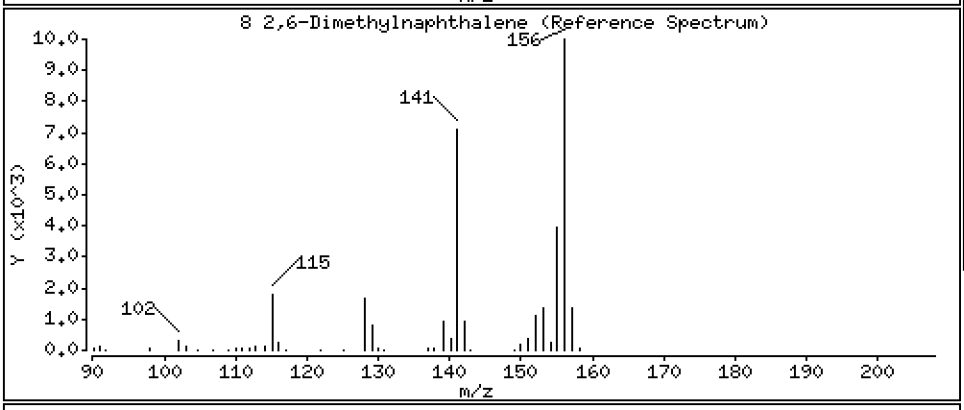
Concentration: 4.571 ug/mL

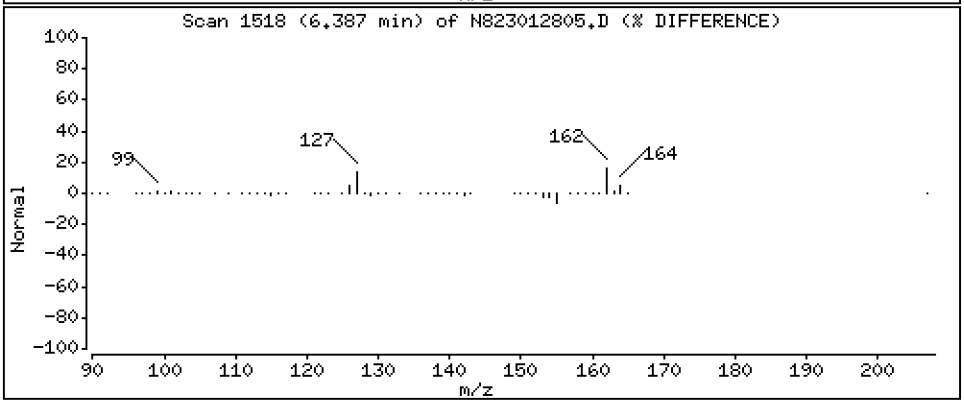












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

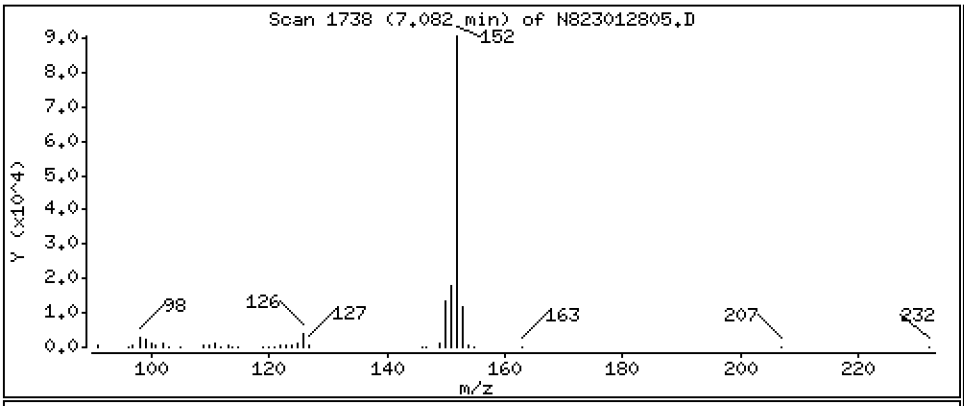
Operator: JZ

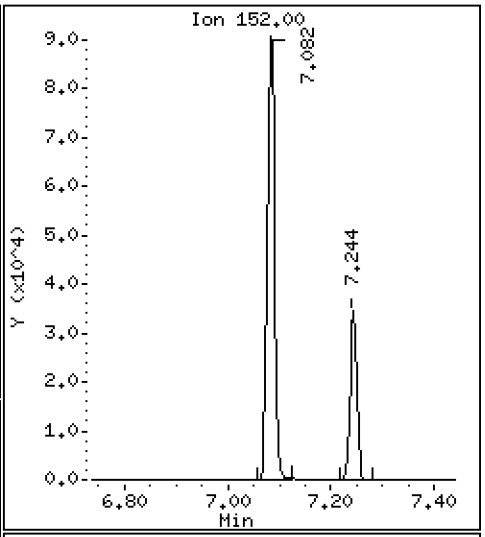
Column phase: Rxi-17sil

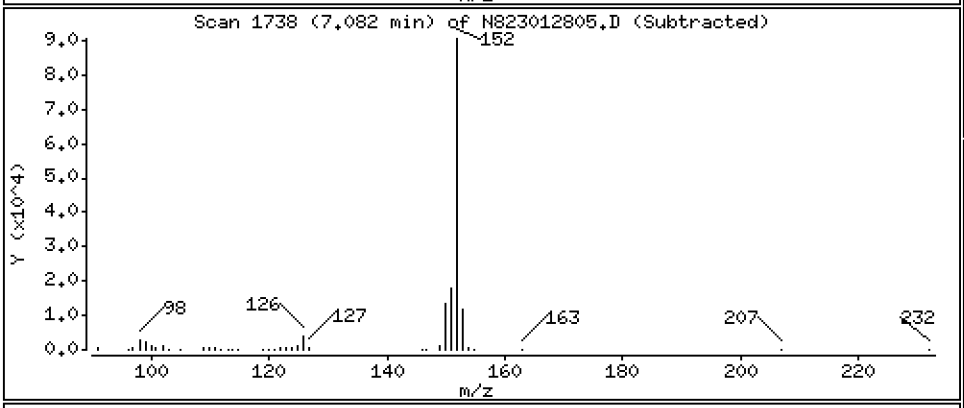
Column diameter: 0.25

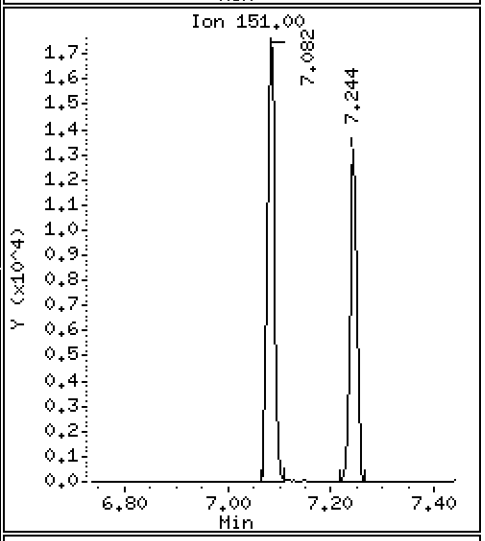
9 Acenaphthylene

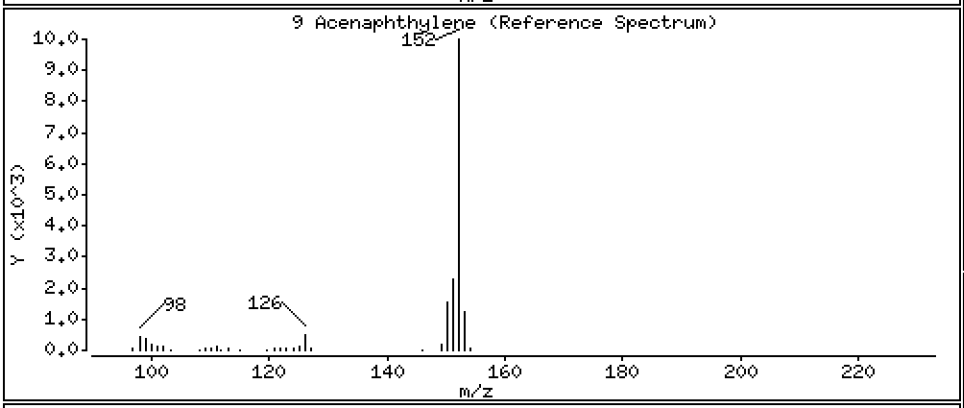
Concentration: 3.791 ug/mL

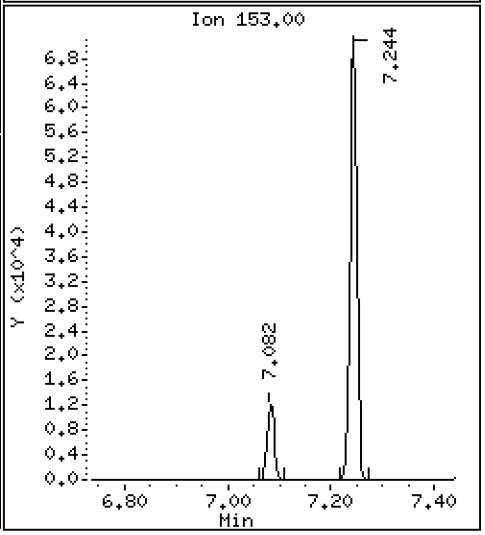


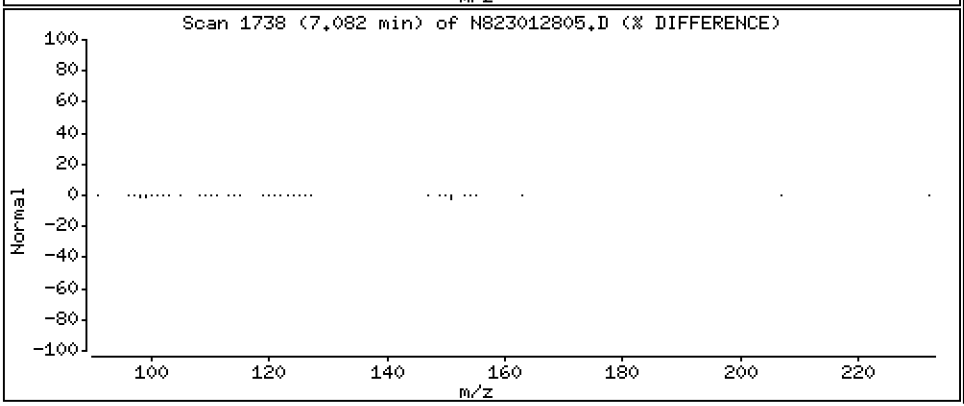












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Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

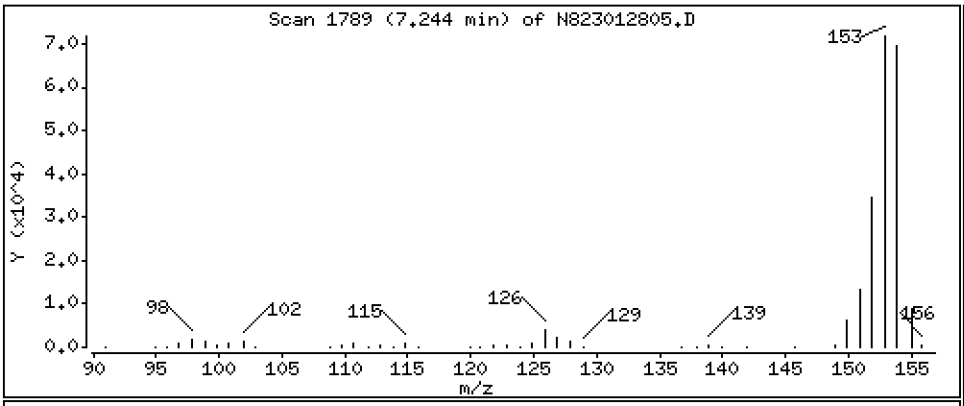
Operator: JZ

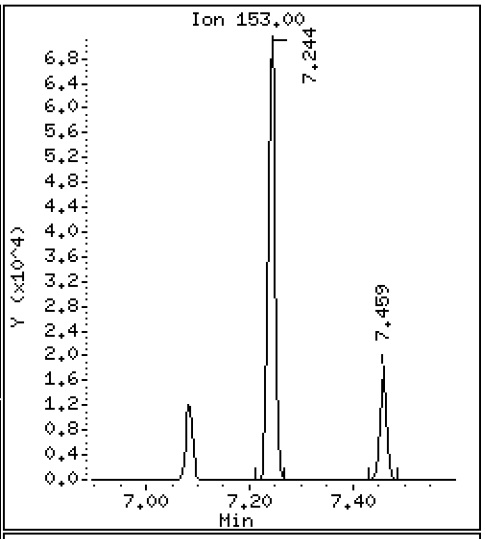
Column phase: Rxi-17sil

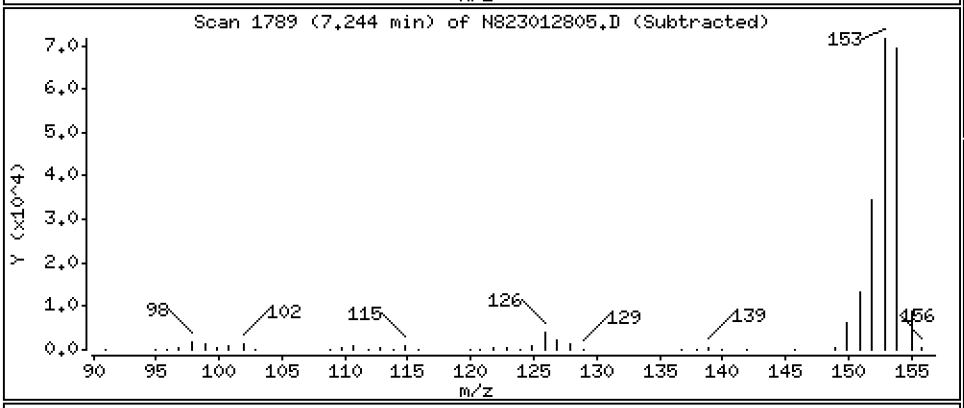
Column diameter: 0.25

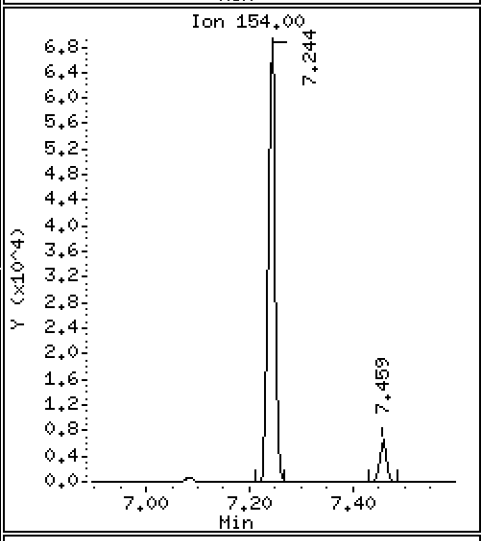
11 Acenaphthene

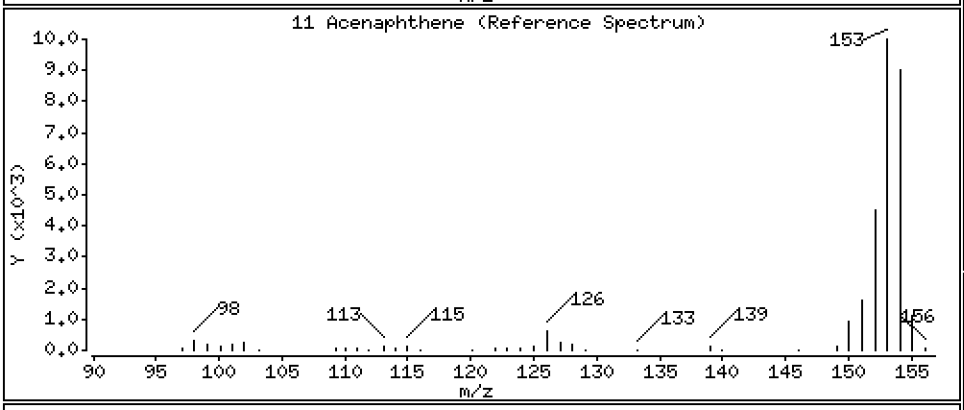
Concentration: 4.344 ug/mL

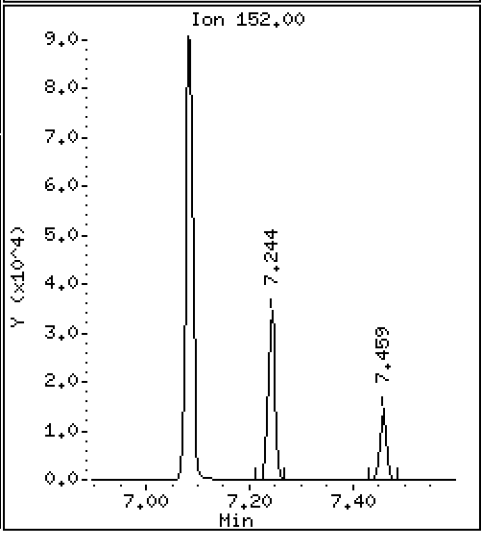


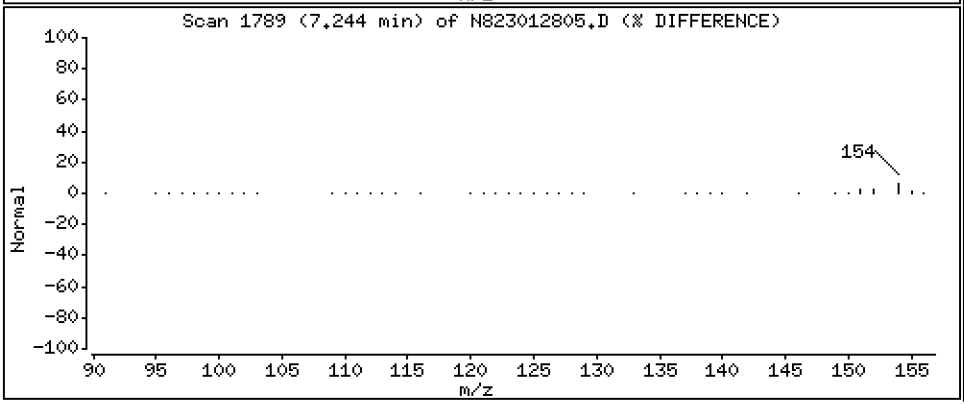












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Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

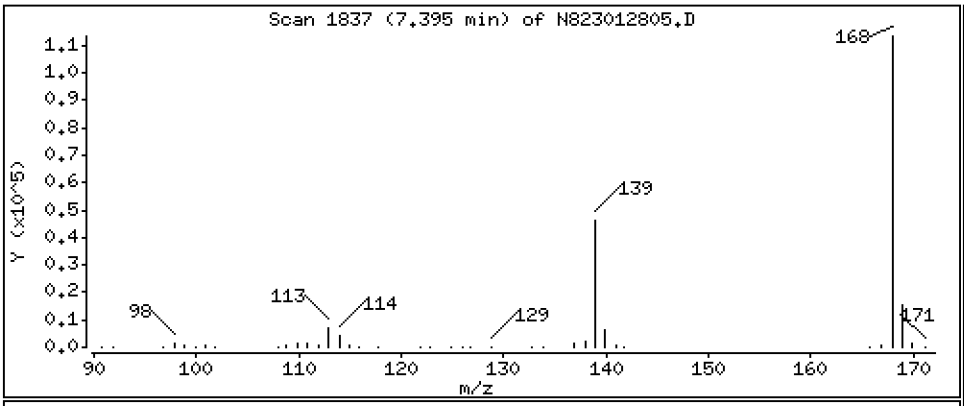
Operator: JZ

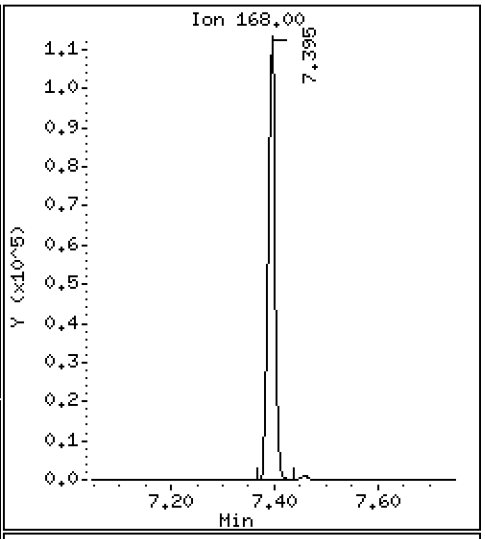
Column phase: Rxi-17sil

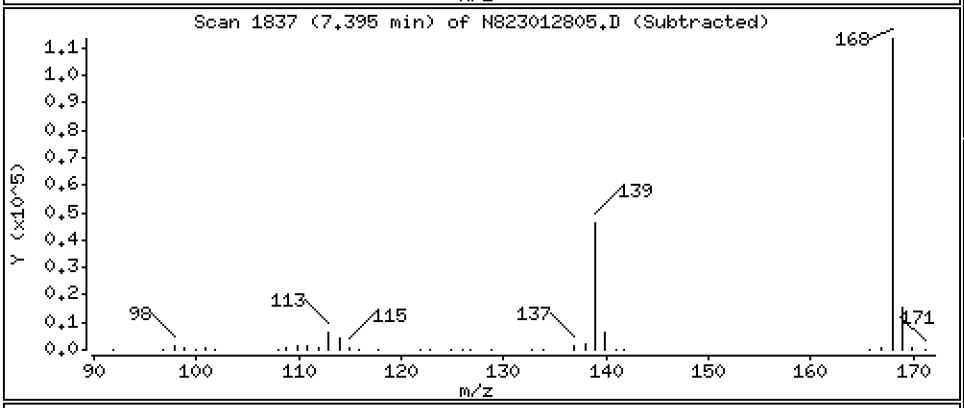
Column diameter: 0.25

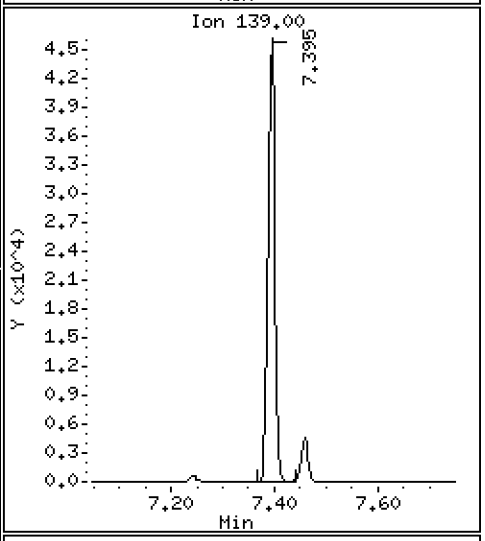
12 Dibenzofuran

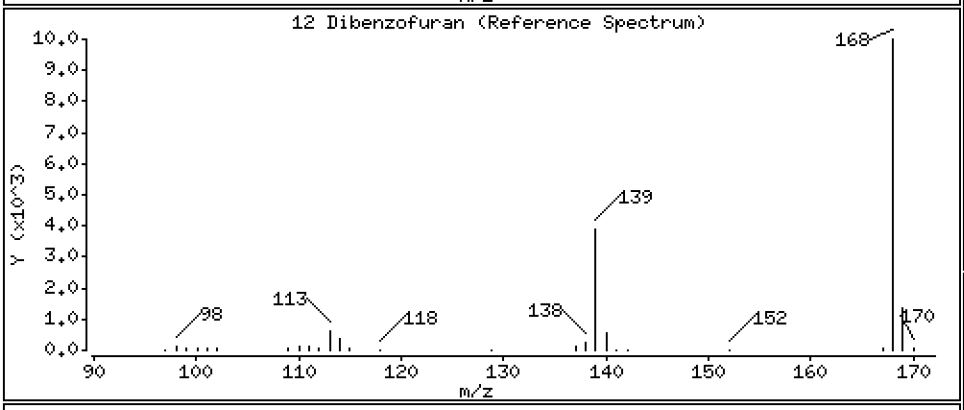
Concentration: 4.448 ug/mL

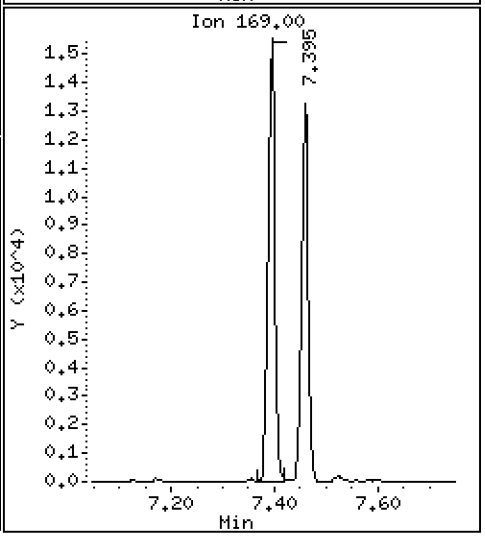


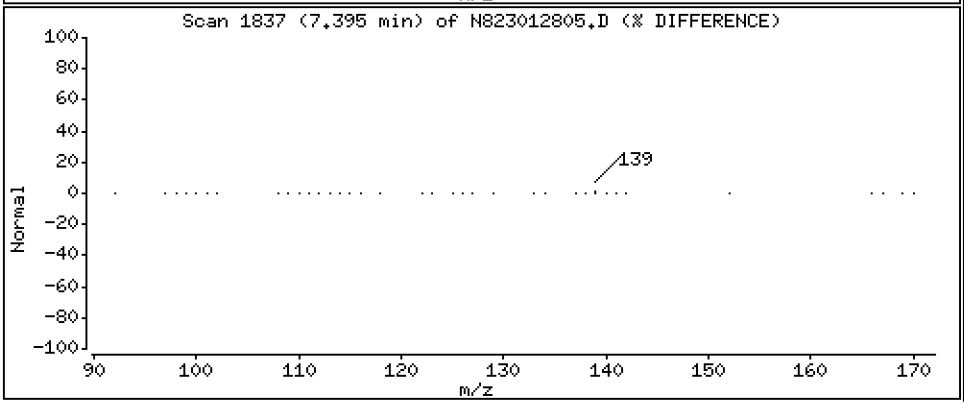












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

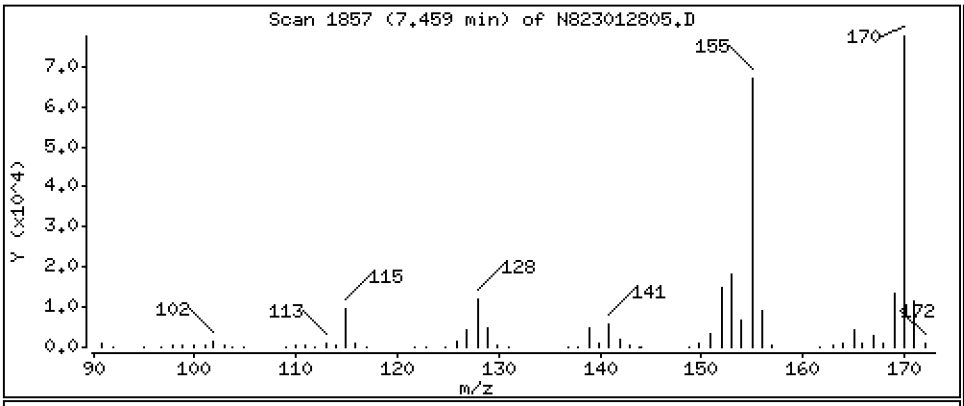
Operator: JZ

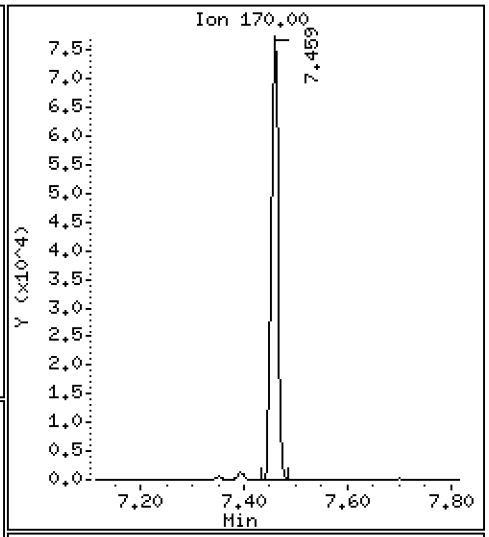
Column phase: Rxi-17sil

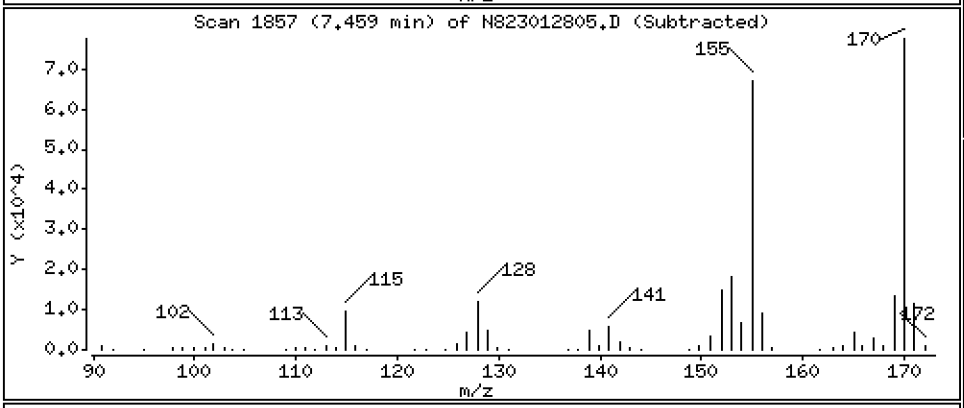
Column diameter: 0.25

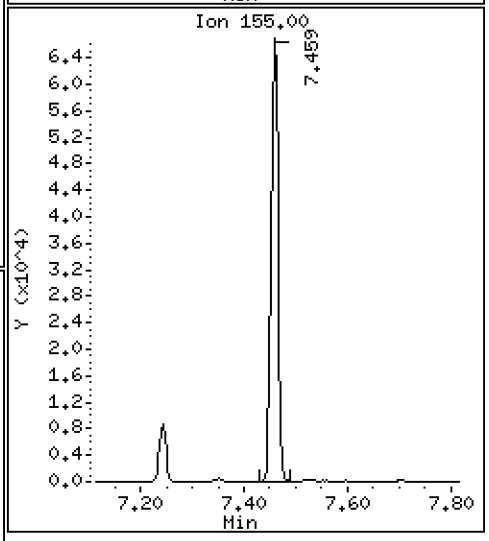
13 1,6,7-Trimethylnaphthalene

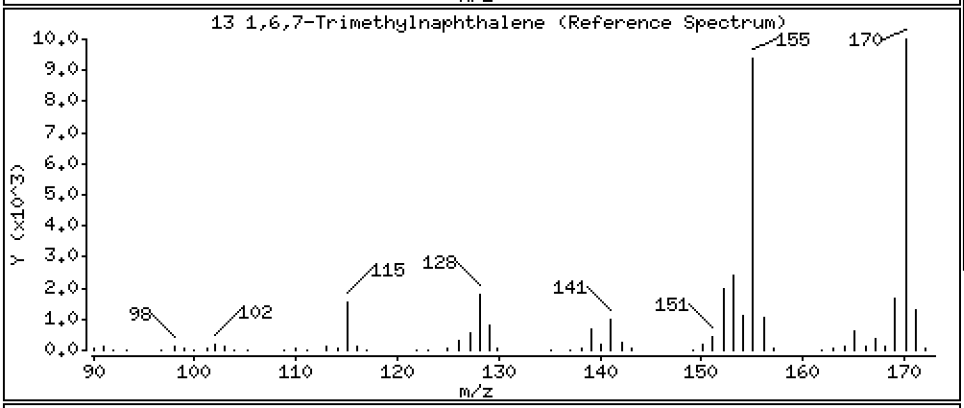
Concentration: 4.706 ug/mL

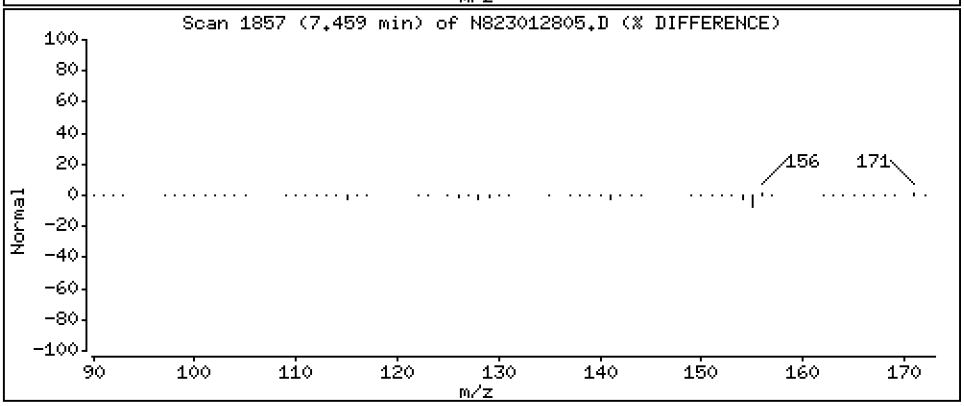












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Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

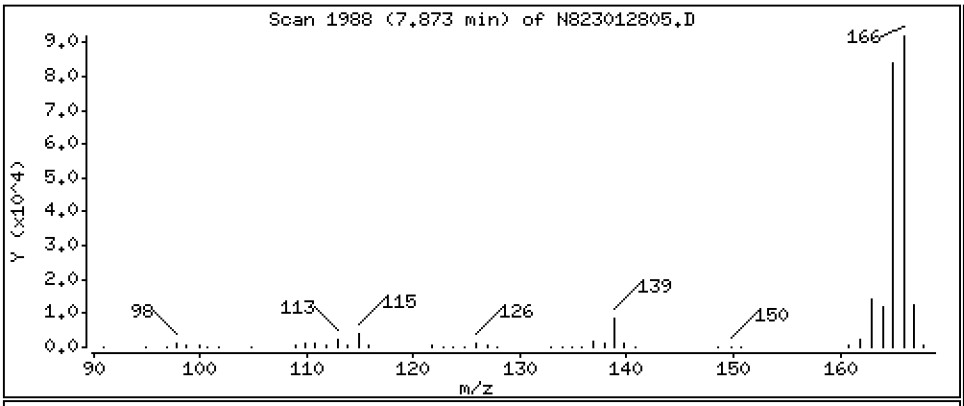
Operator: JZ

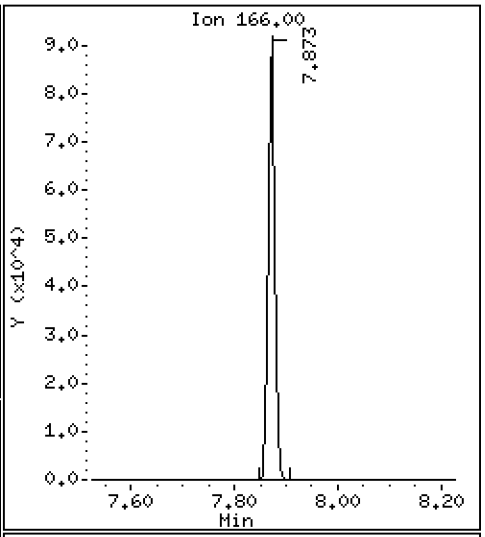
Column phase: Rxi-17sil

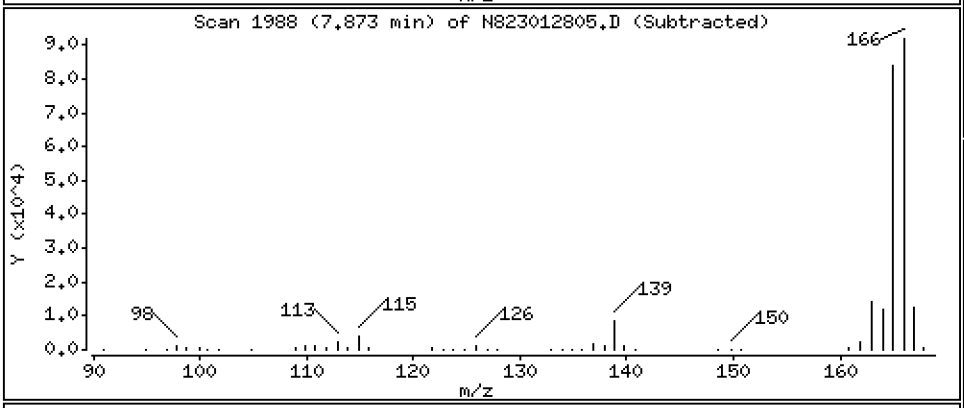
Column diameter: 0.25

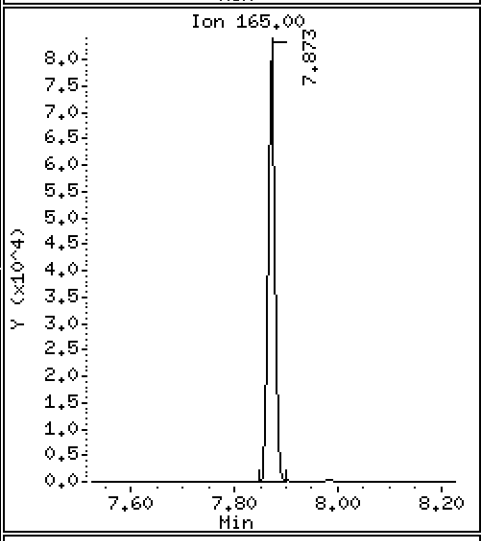
14 Fluorene

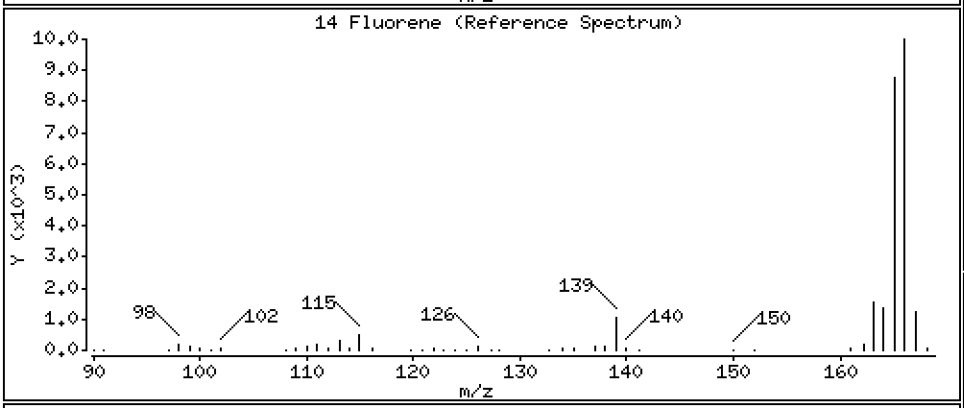
Concentration: 4.664 ug/mL

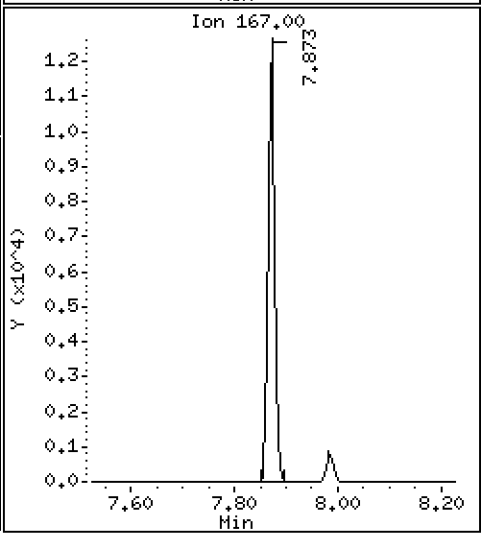


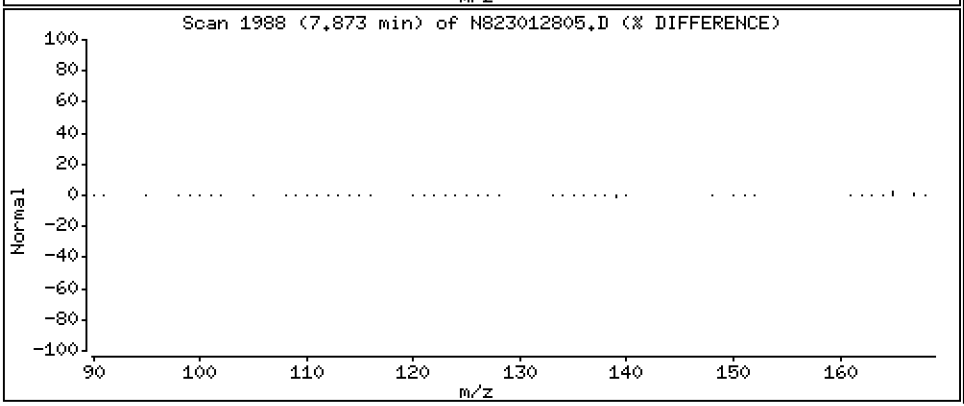












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

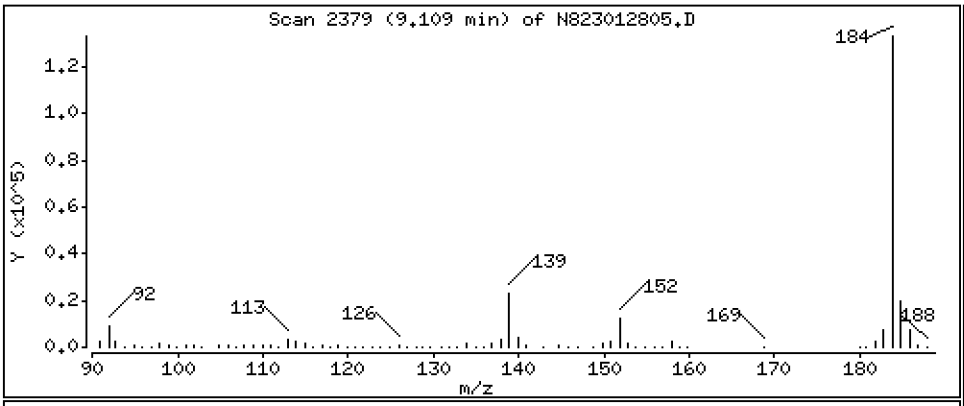
Operator: JZ

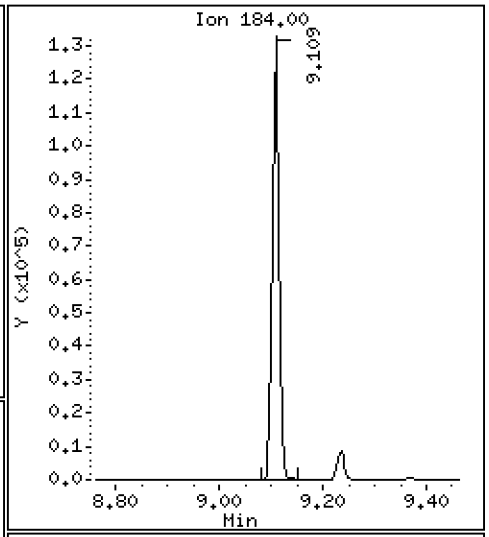
Column phase: Rxi-17sil

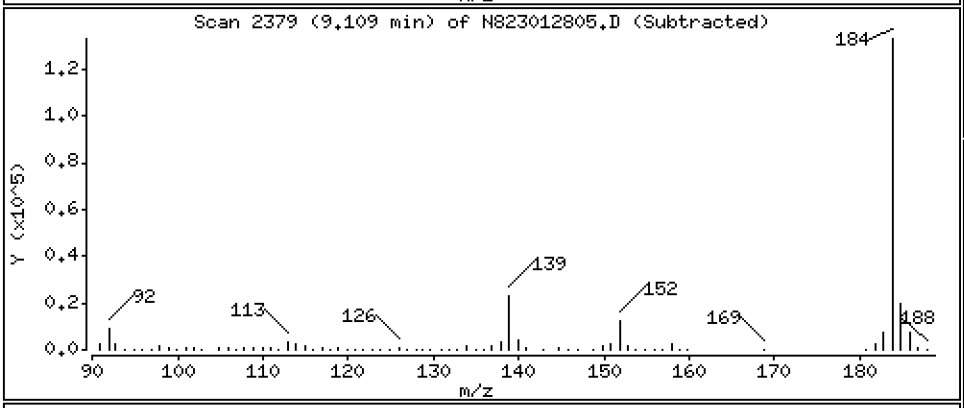
Column diameter: 0.25

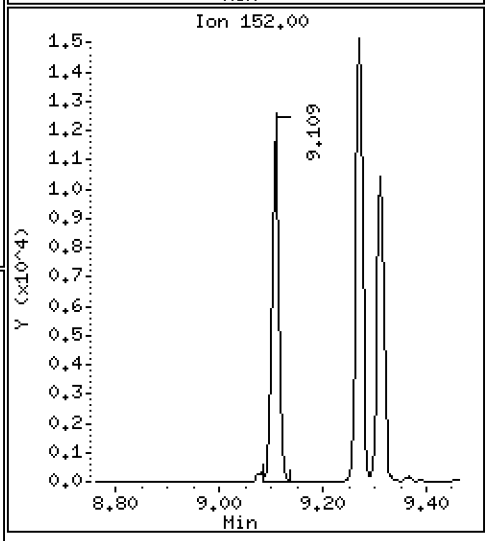
18 Dibenzothiophene

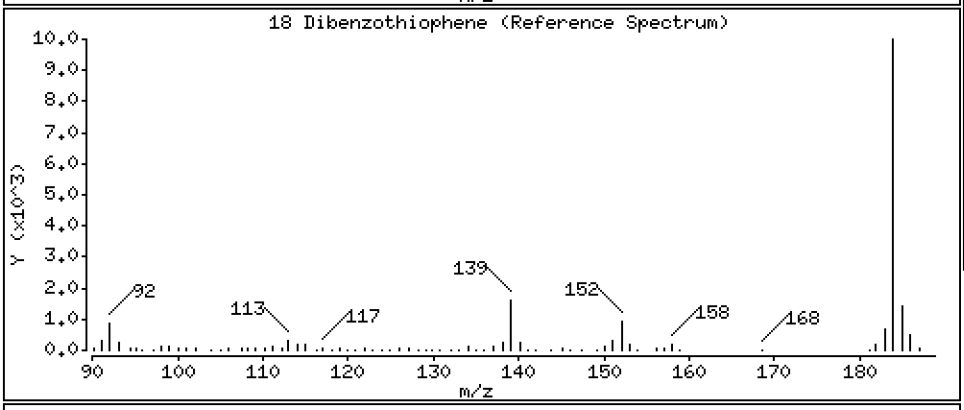
Concentration: 4.771 ug/mL

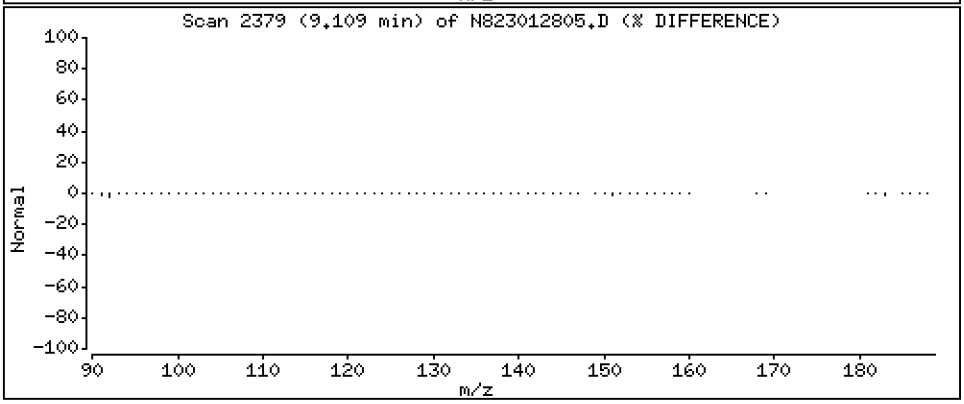












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

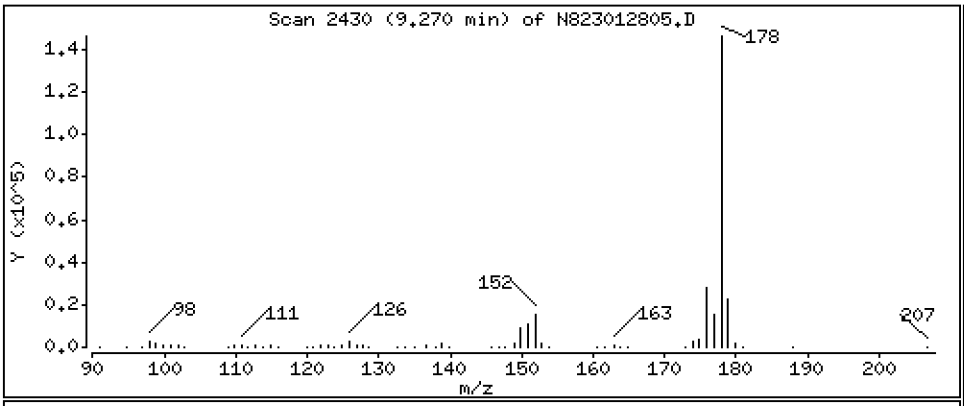
Operator: JZ

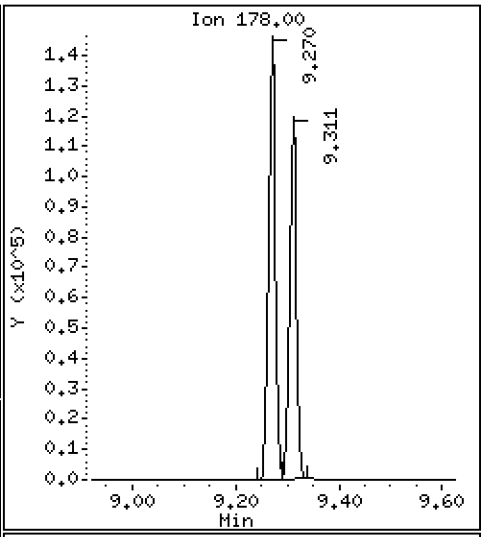
Column phase: Rxi-17sil

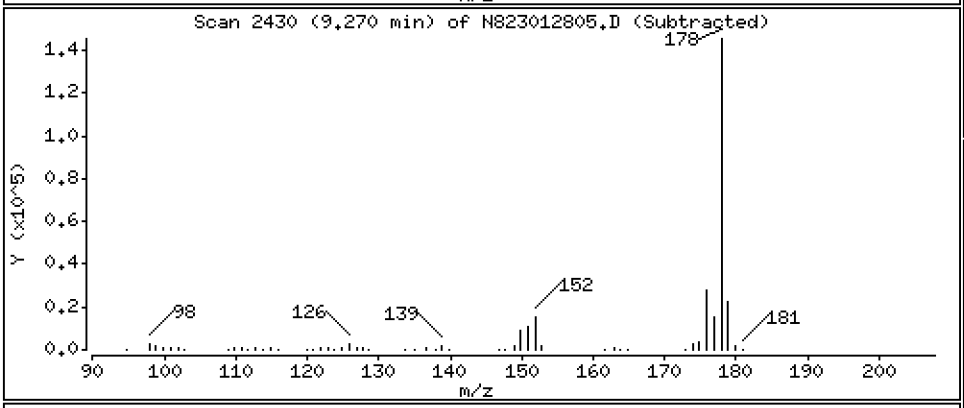
Column diameter: 0.25

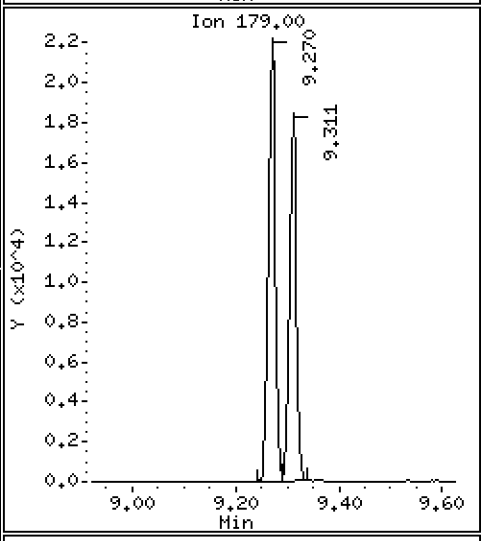
16 Phenanthrene

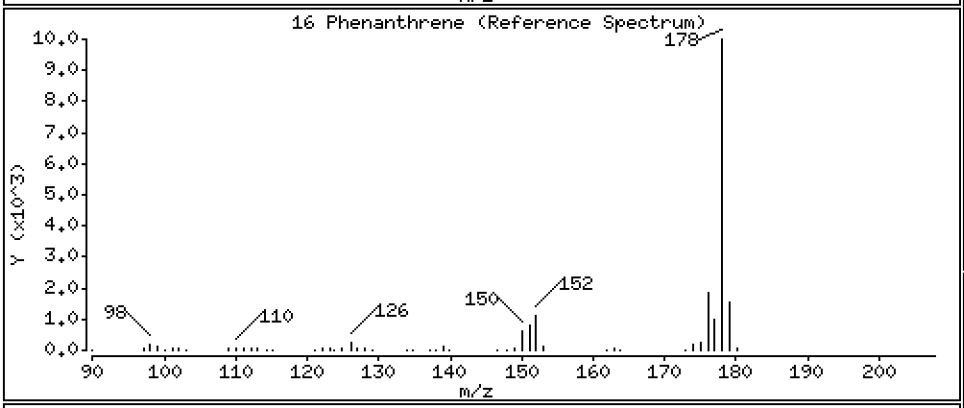
Concentration: 4.660 ug/mL

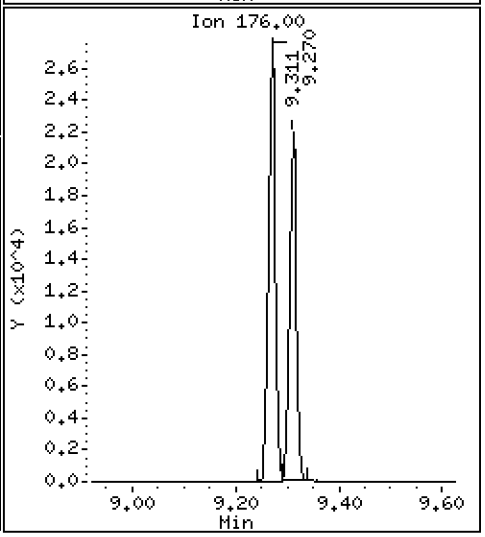


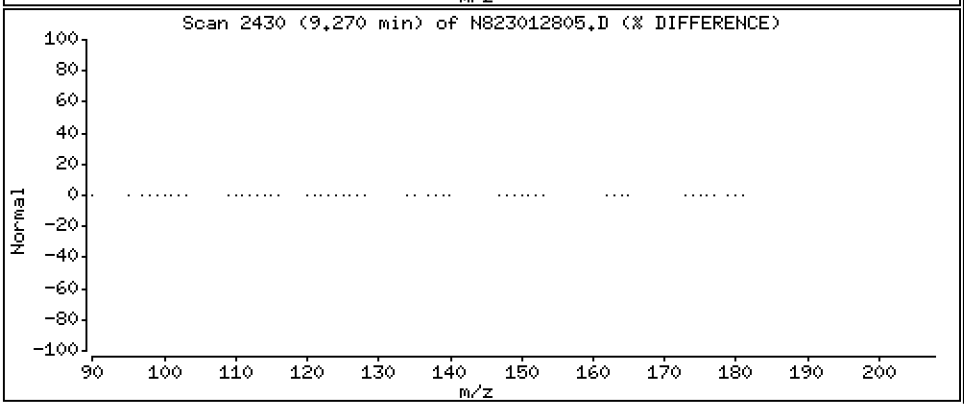












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

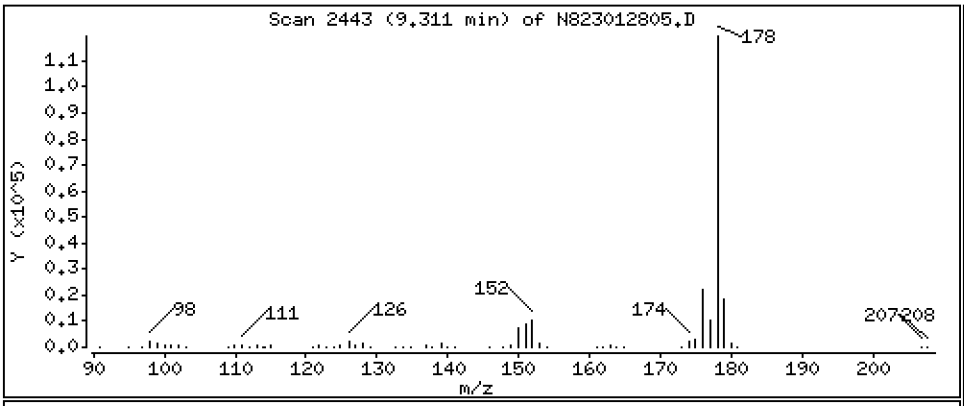
Operator: JZ

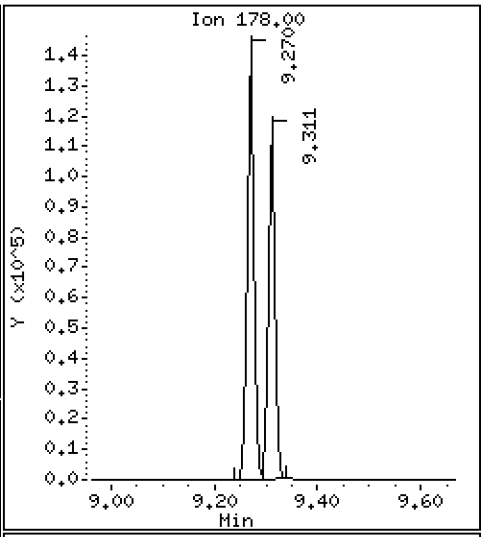
Column phase: Rxi-17sil

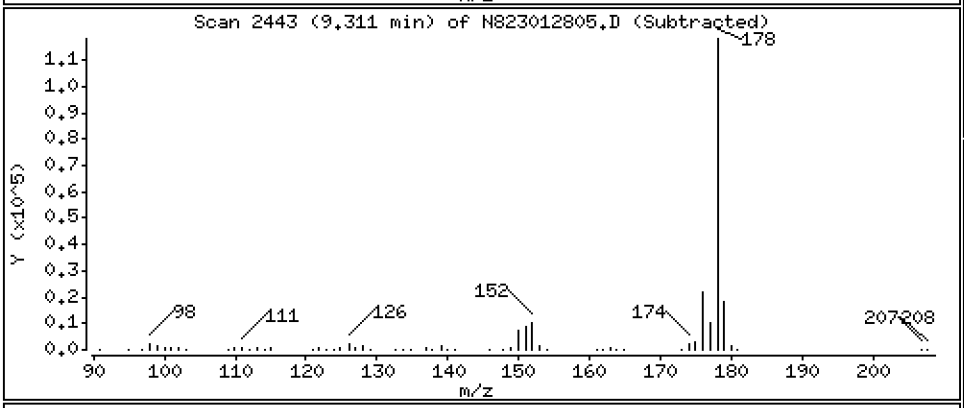
Column diameter: 0.25

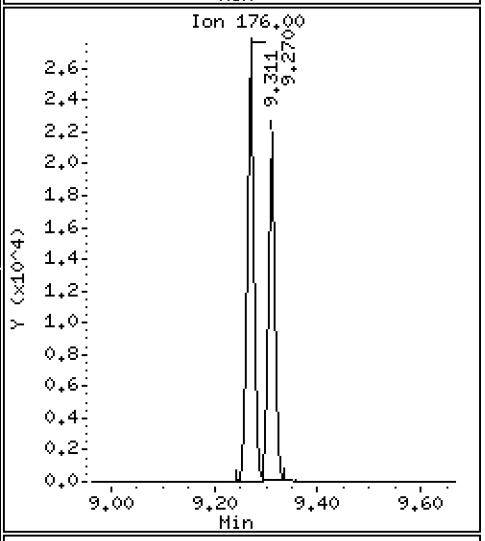
17 Anthracene

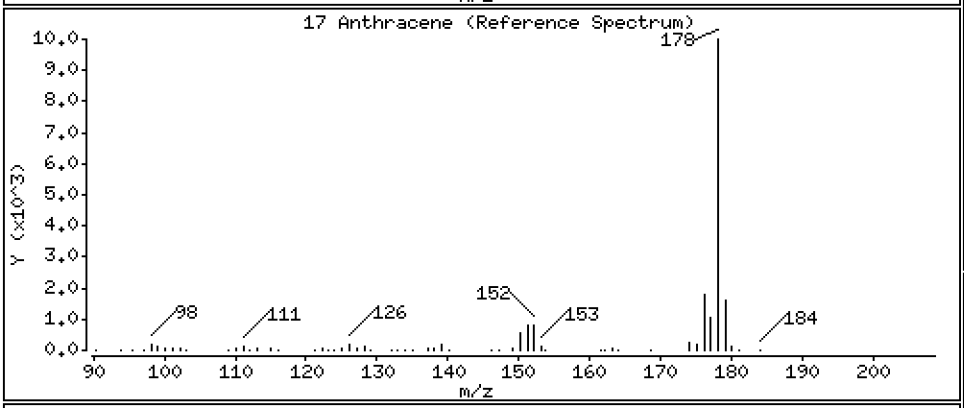
Concentration: 4.174 ug/mL

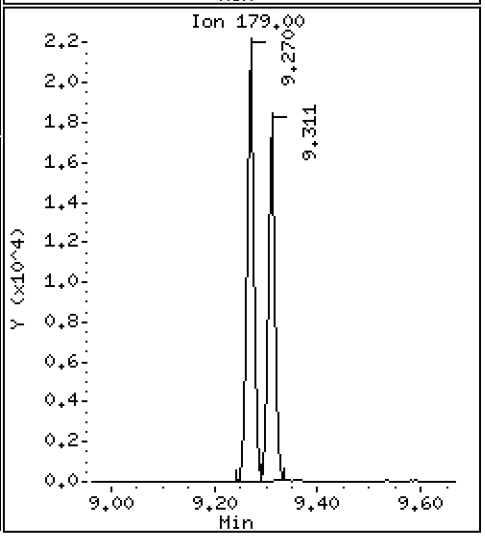


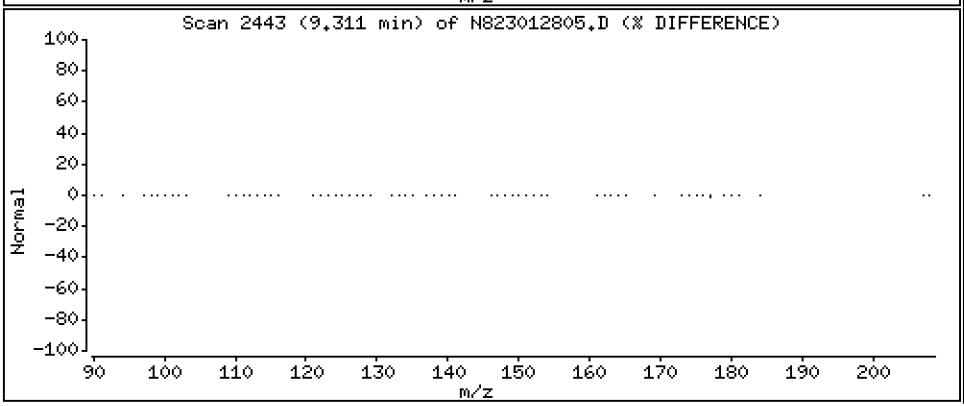












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

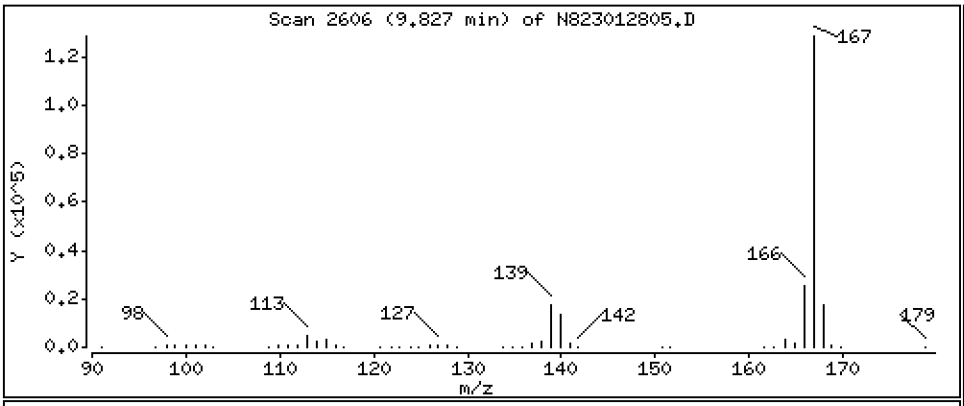
Operator: JZ

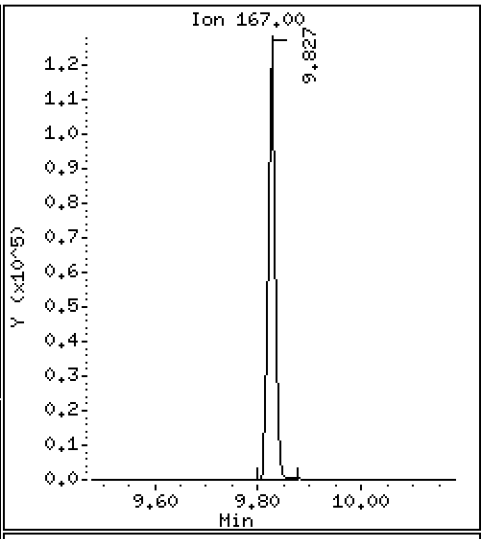
Column phase: Rxi-17sil

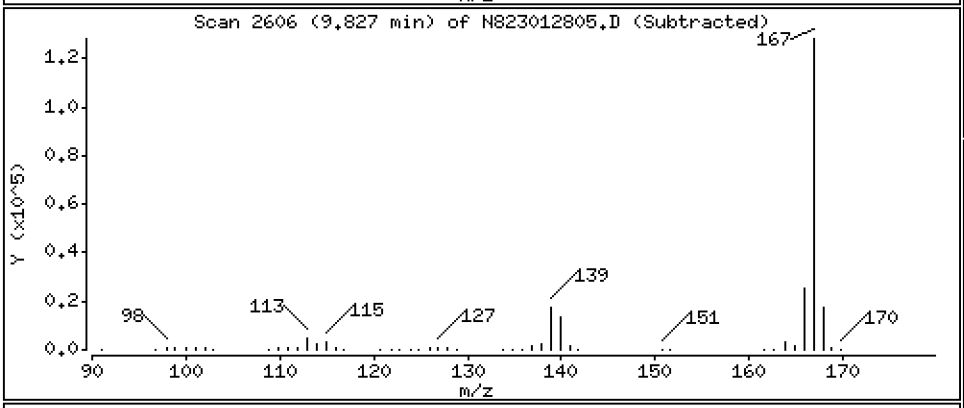
Column diameter: 0.25

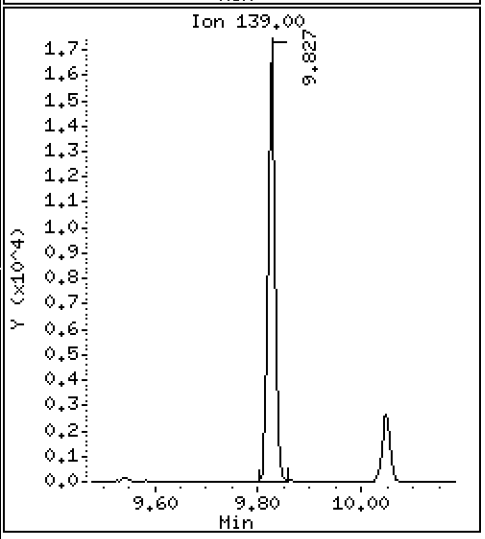
19 Carbazole

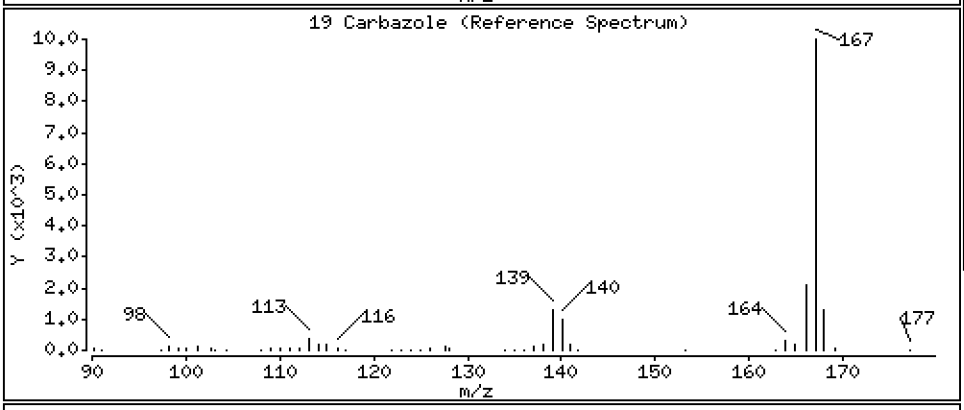
Concentration: 5.143 ug/mL

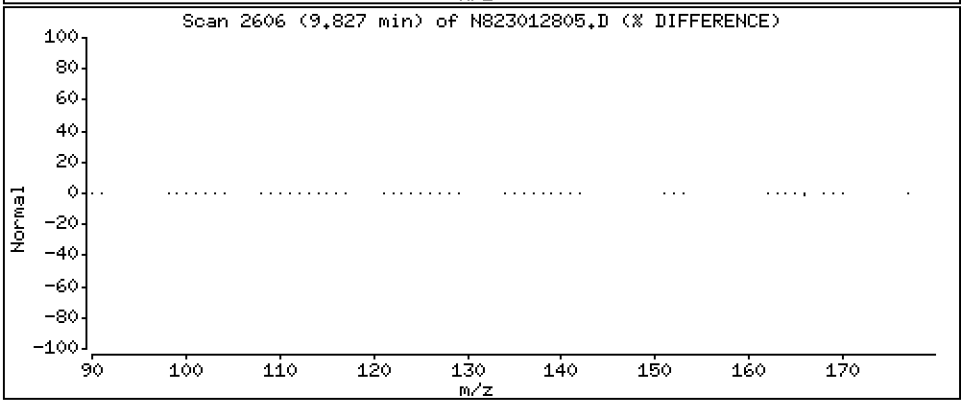












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

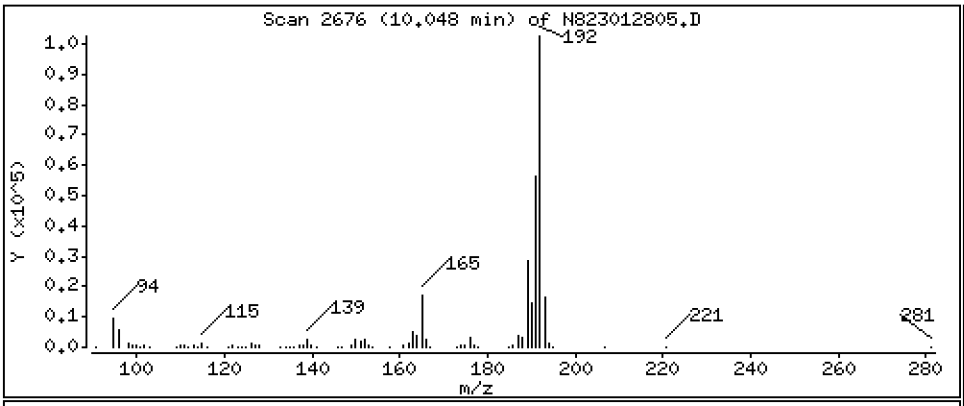
Operator: JZ

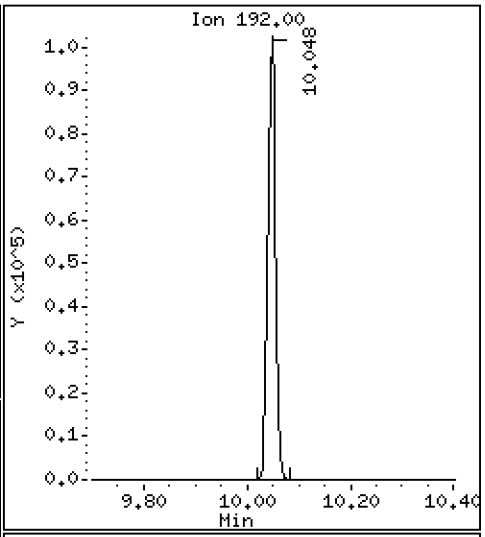
Column phase: Rxi-17sil

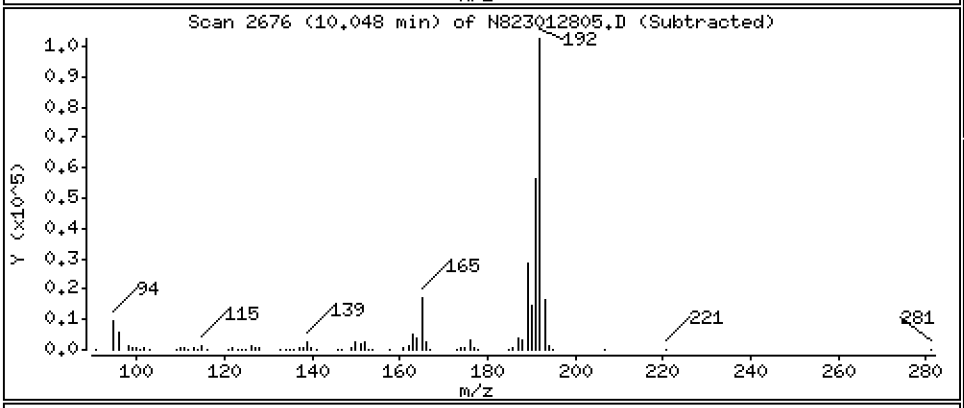
Column diameter: 0.25

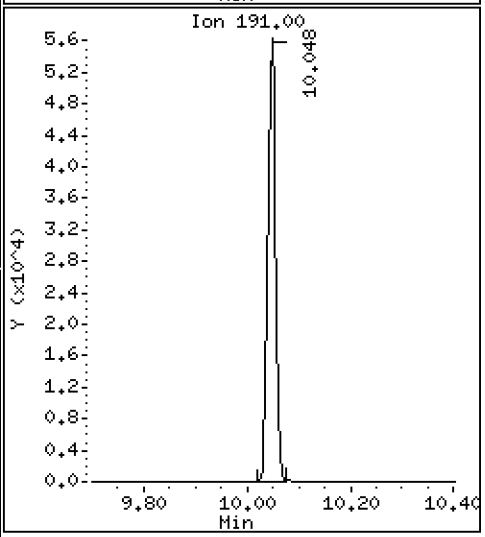
20 1-Methylphenanthrene

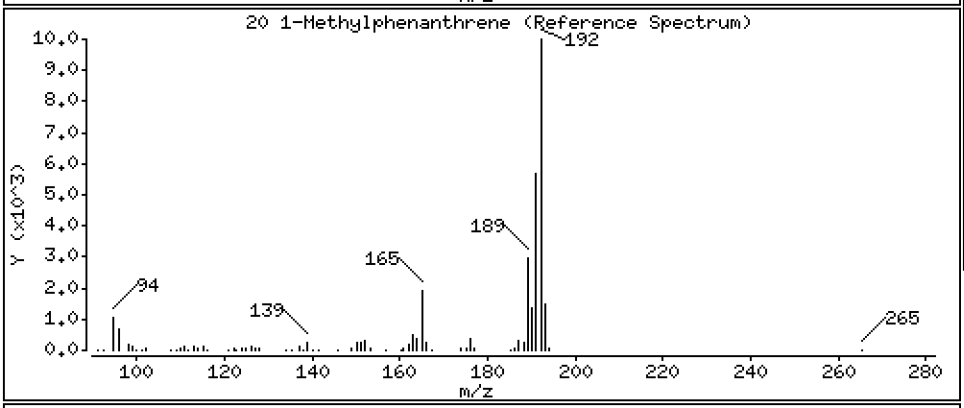
Concentration: 5.194 ug/mL

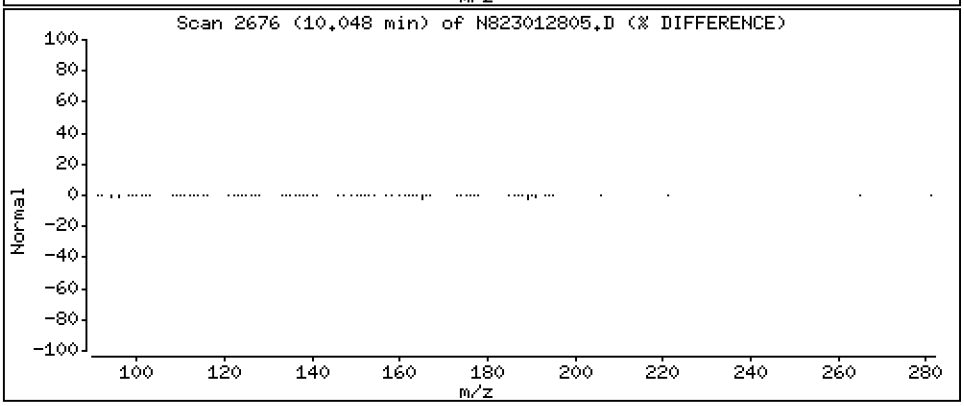












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

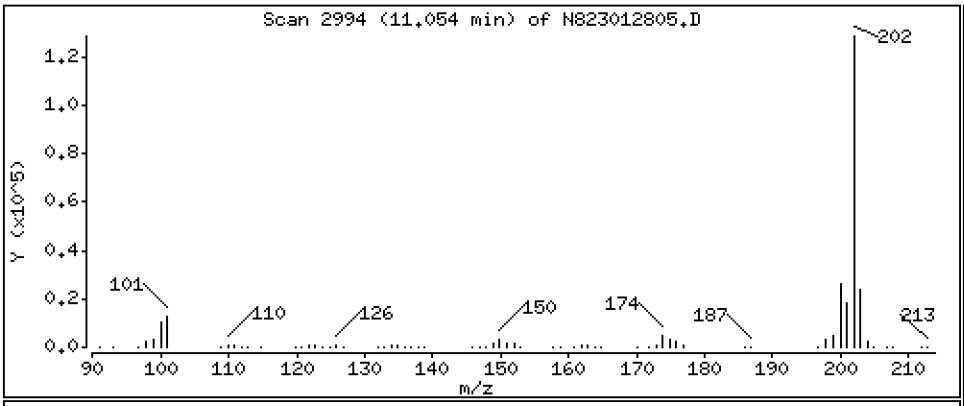
Operator: JZ

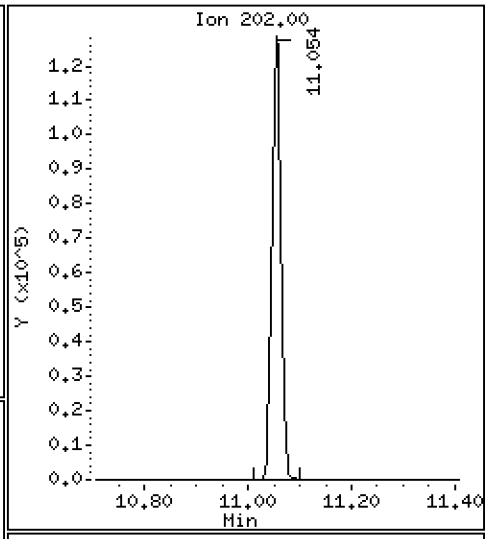
Column phase: Rxi-17sil

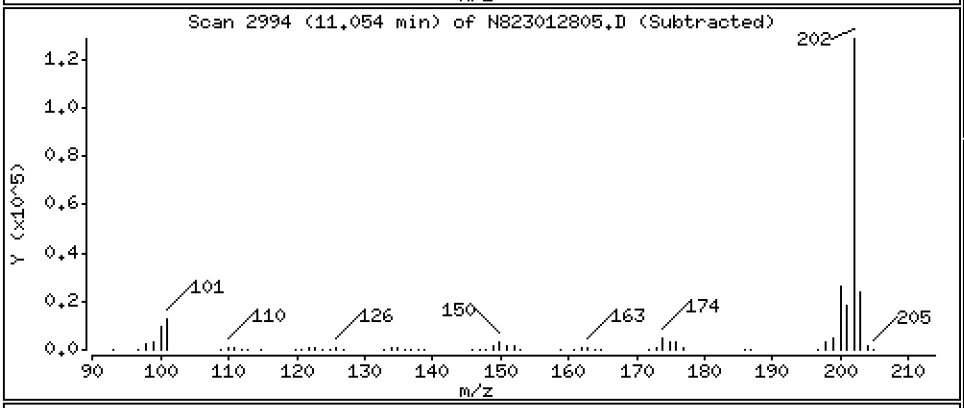
Column diameter: 0.25

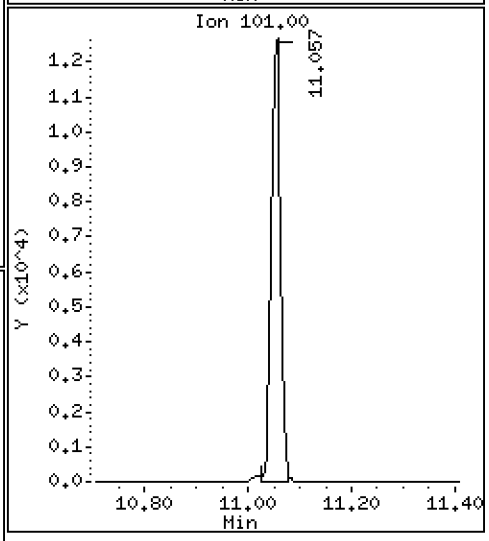
22 Fluoranthene

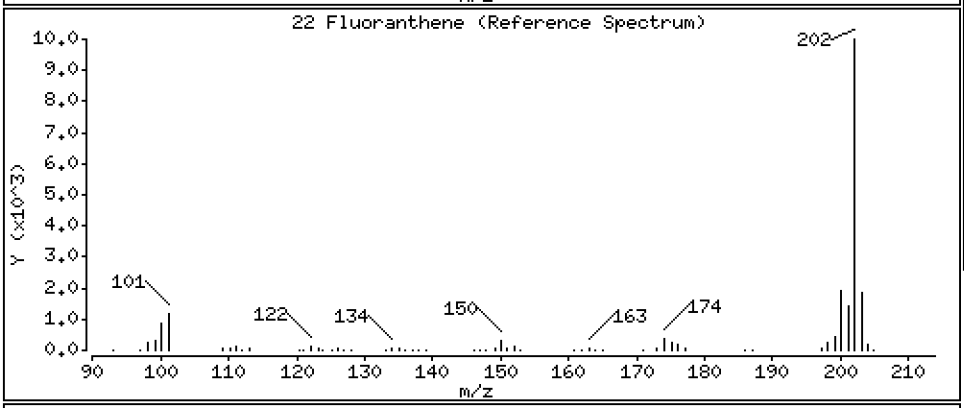
Concentration: 5.064 ug/mL

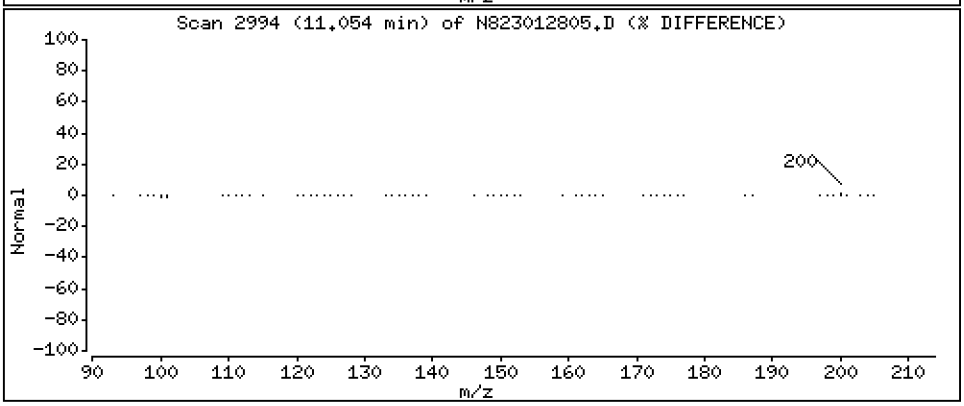












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

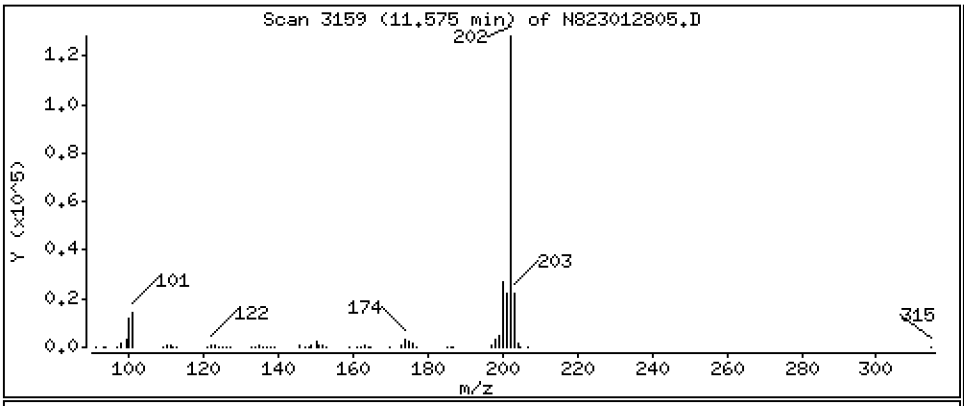
Operator: JZ

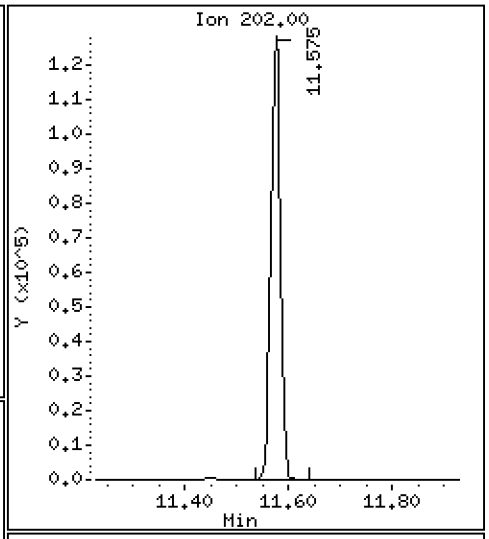
Column phase: Rxi-17sil

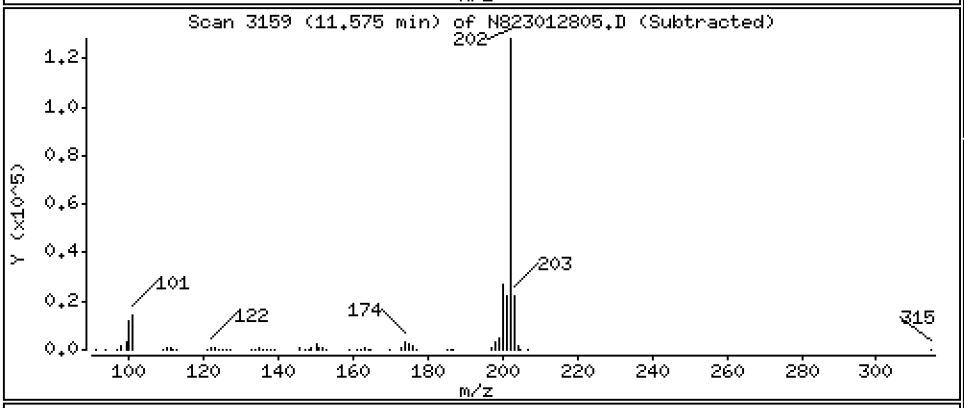
Column diameter: 0.25

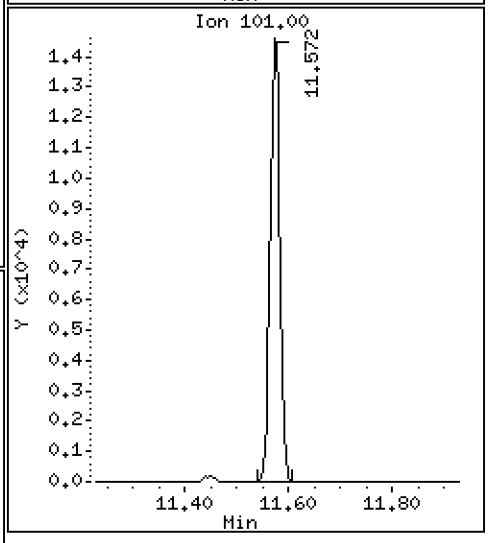
23 Pyrene

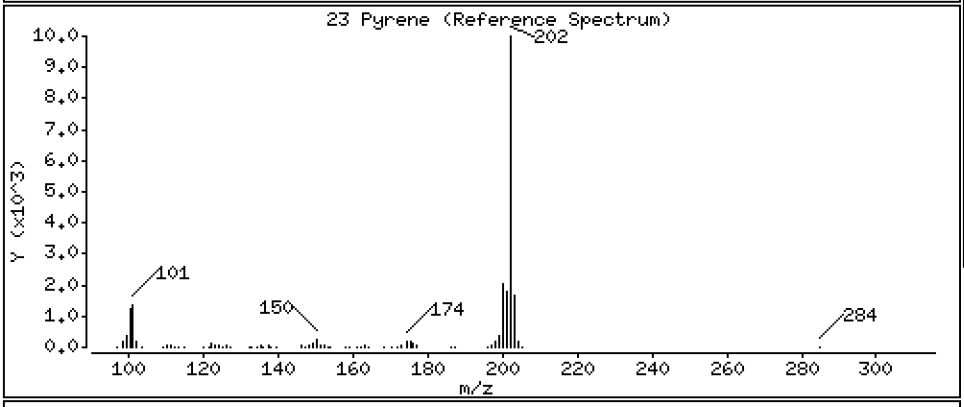
Concentration: 5.344 ug/mL

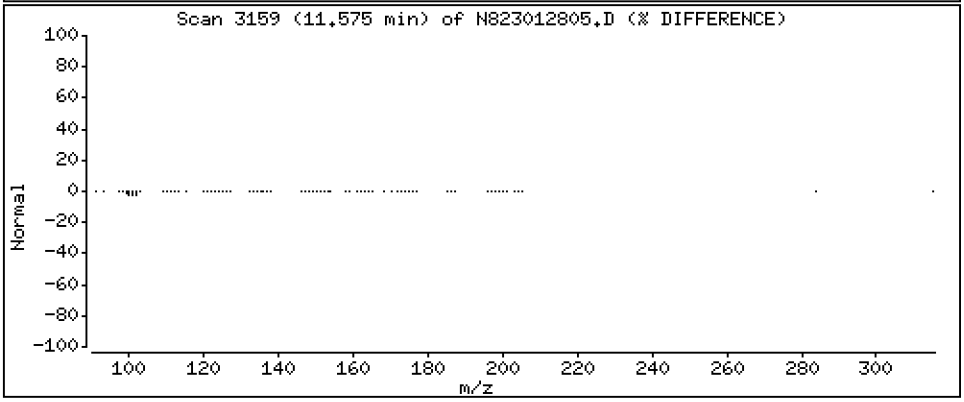












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

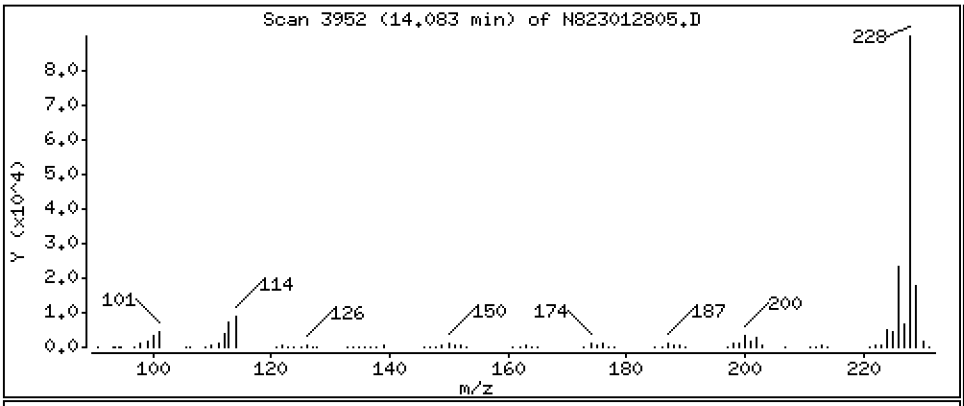
Operator: JZ

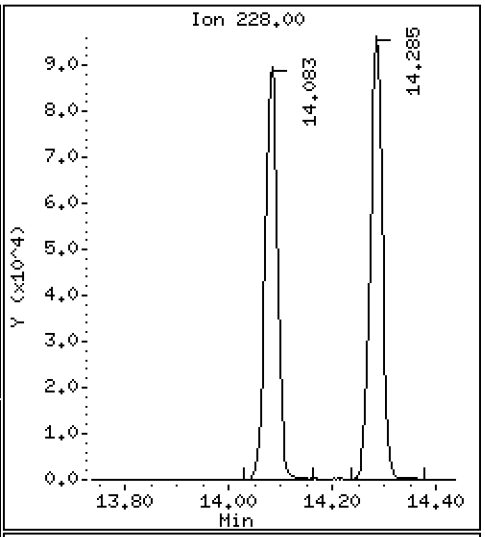
Column phase: Rxi-17sil

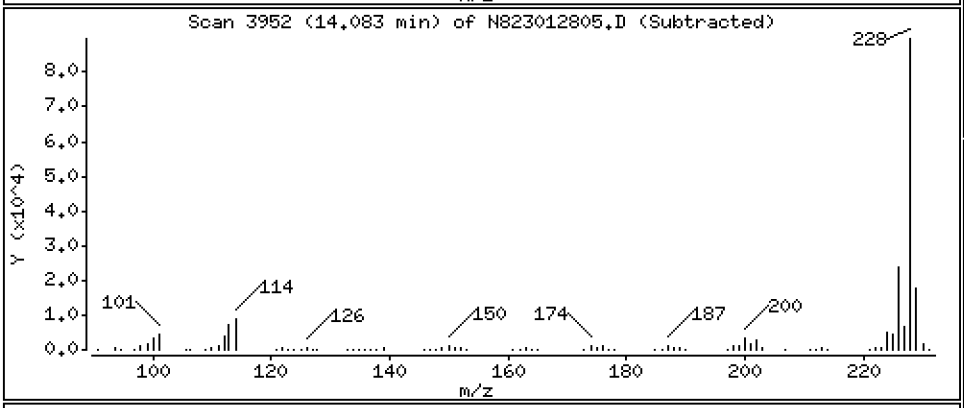
Column diameter: 0.25

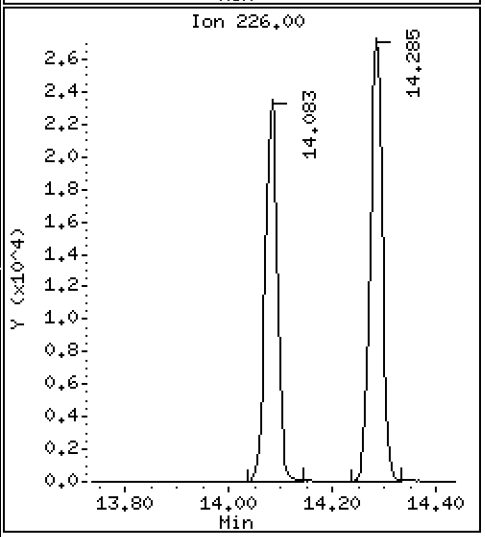
24 Benzo(a)anthracene

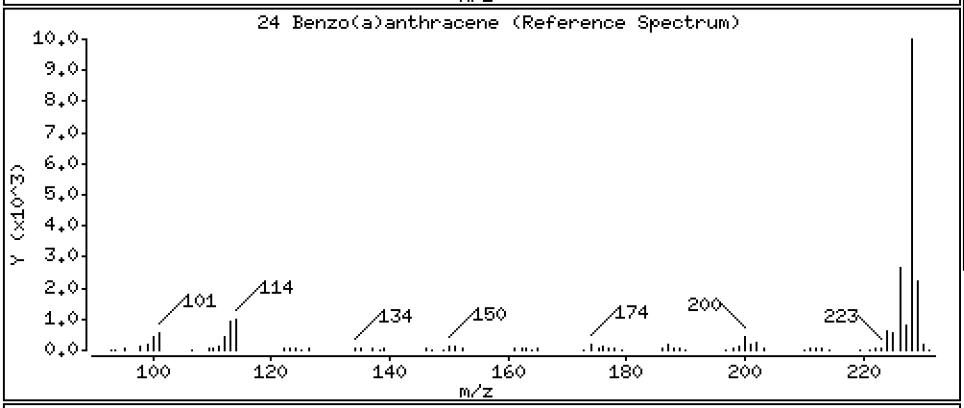
Concentration: 5.364 ug/mL

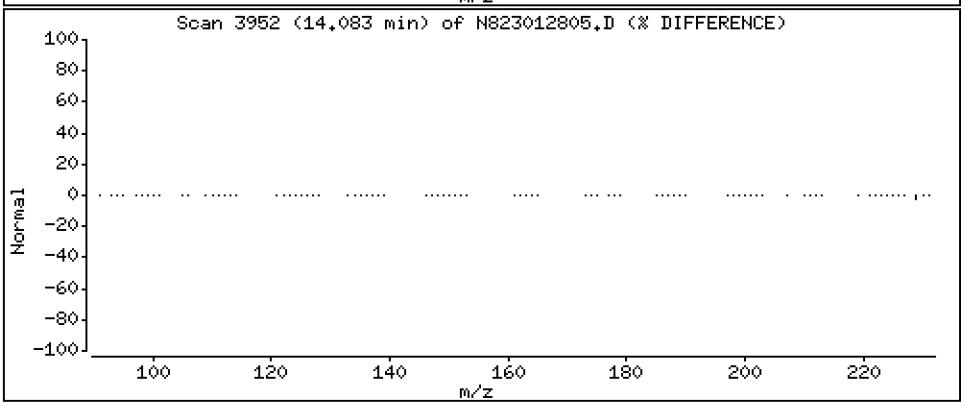












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

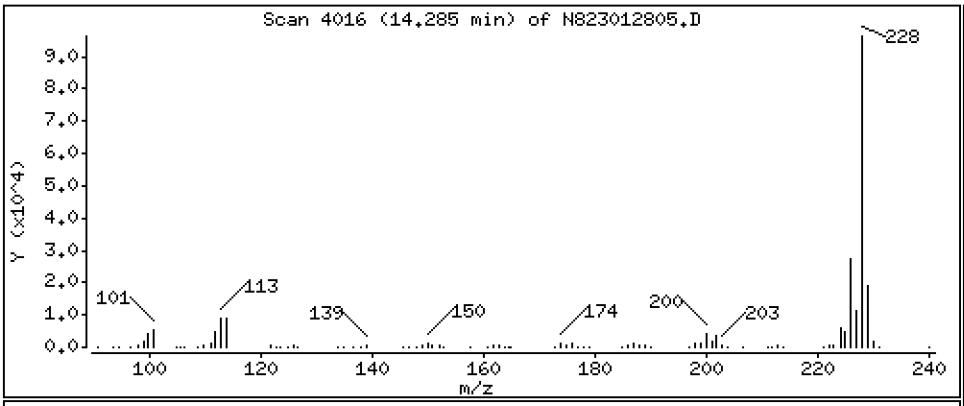
Operator: JZ

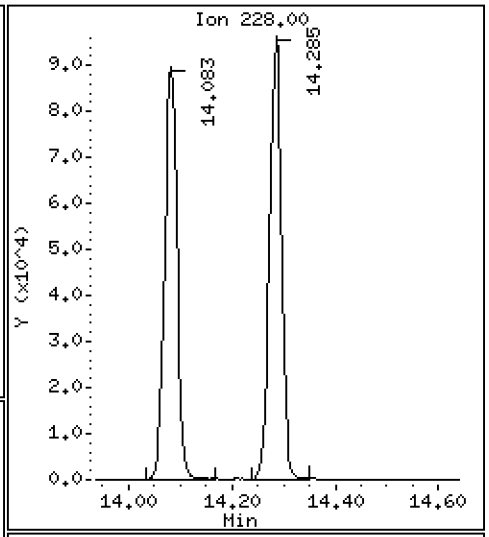
Column phase: Rxi-17sil

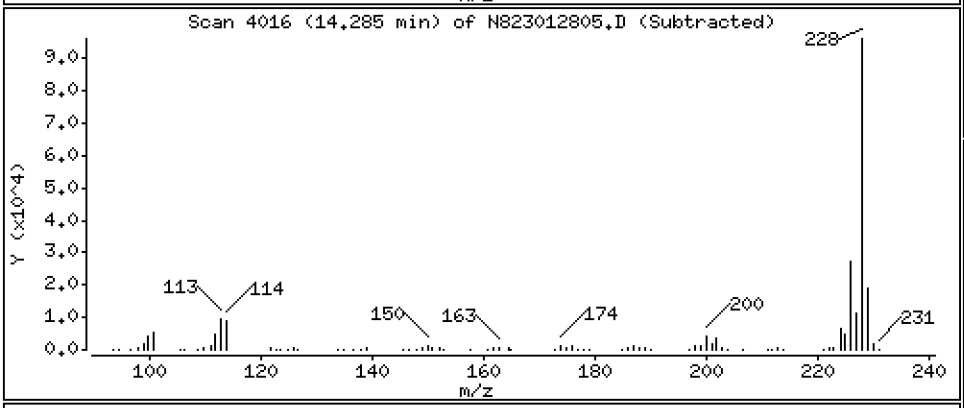
Column diameter: 0.25

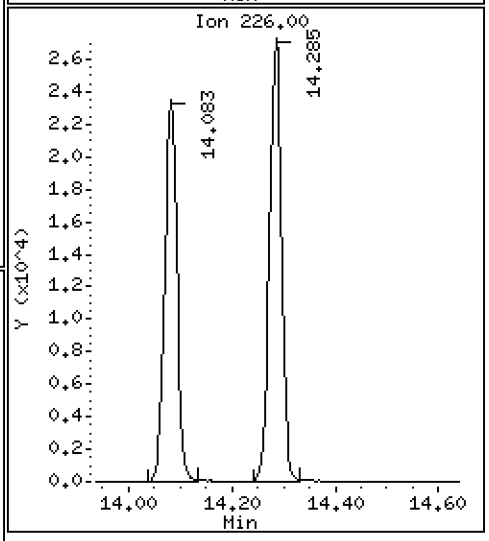
27 Chrysene

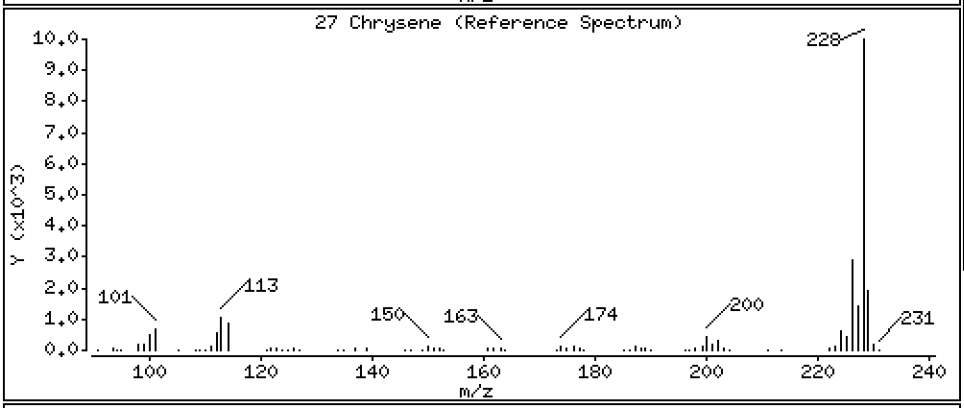
Concentration: 5.214 ug/mL

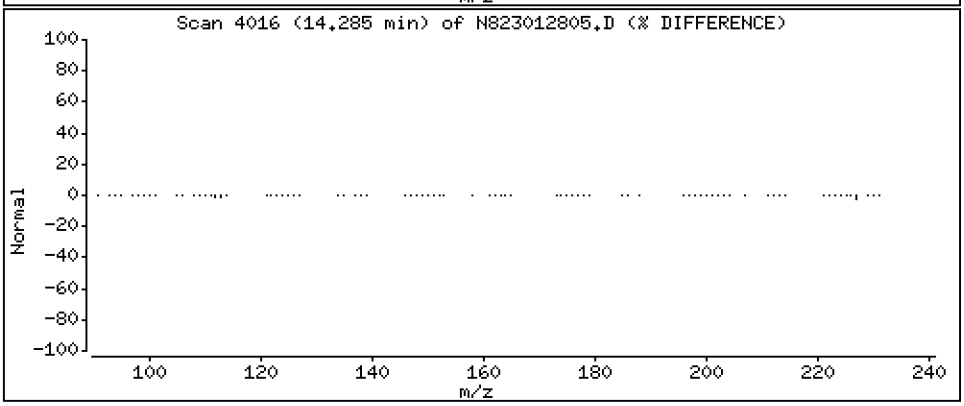












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

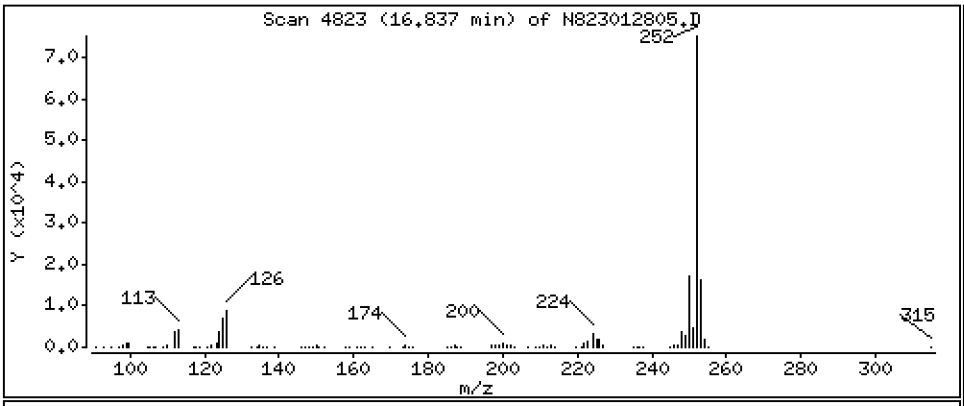
Operator: JZ

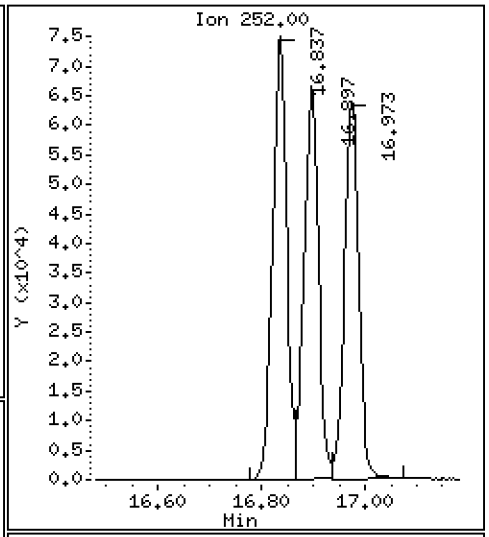
Column phase: Rxi-17sil

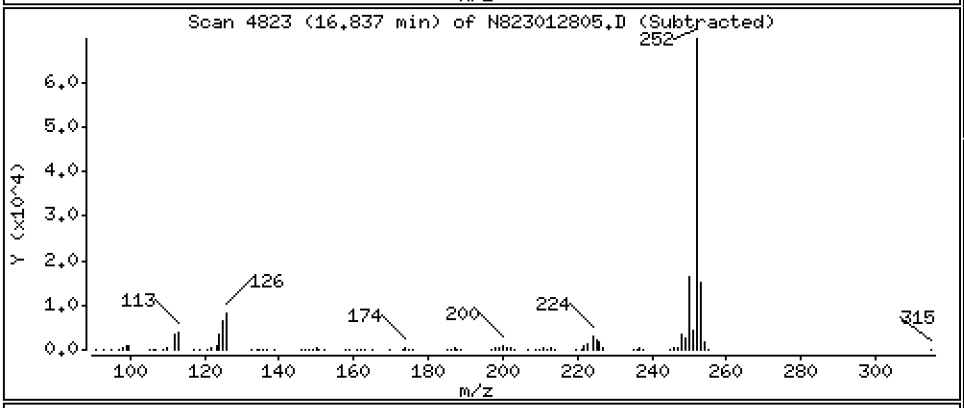
Column diameter: 0.25

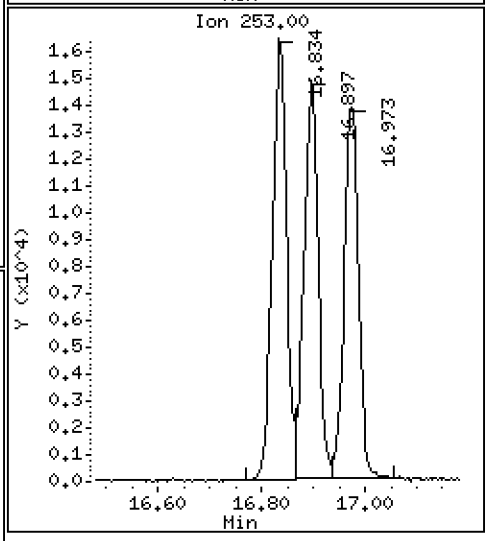
28 Benzo(b)fluoranthene

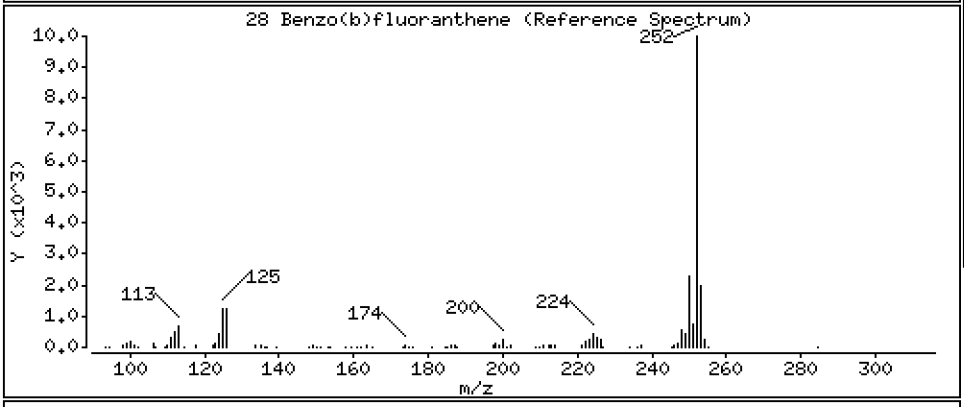
Concentration: 7.624 ug/mL

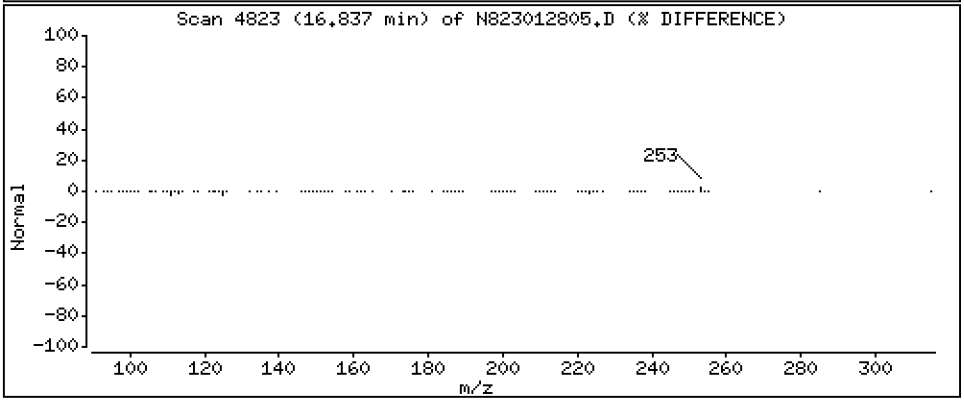












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

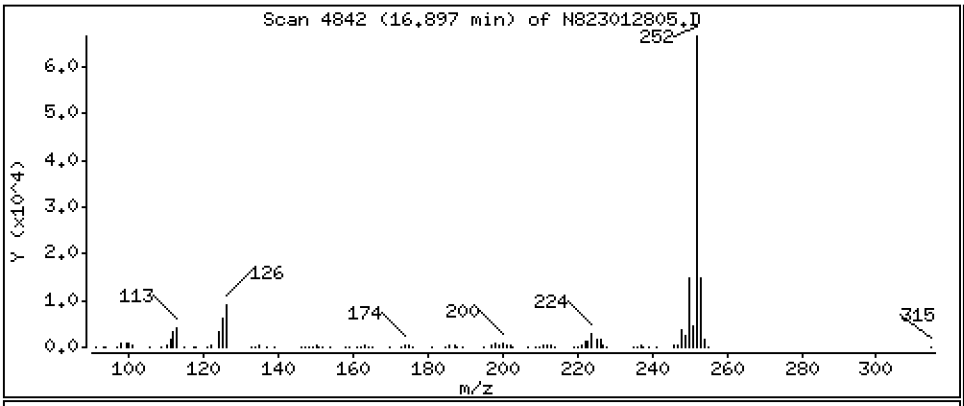
Operator: JZ

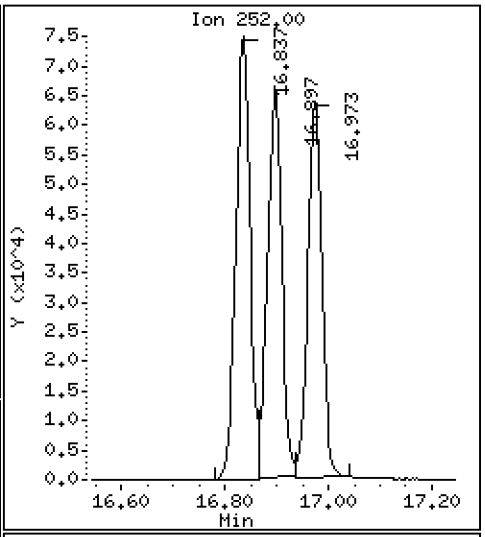
Column phase: Rxi-17sil

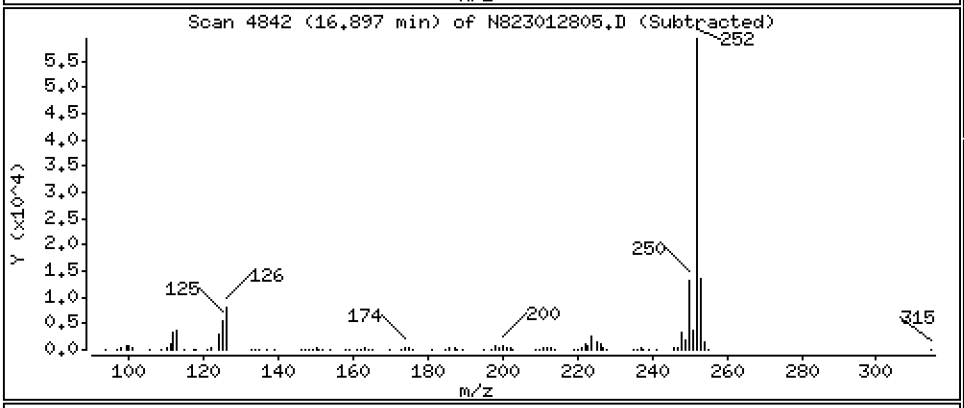
Column diameter: 0.25

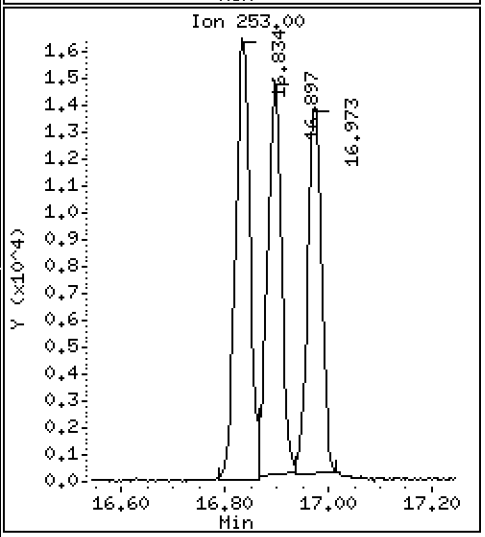
29 Benzo(k)fluoranthene

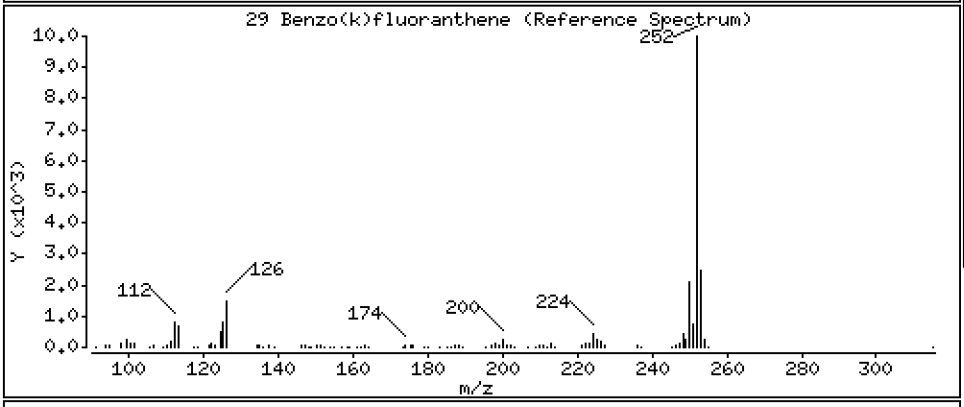
Concentration: 6.969 ug/mL

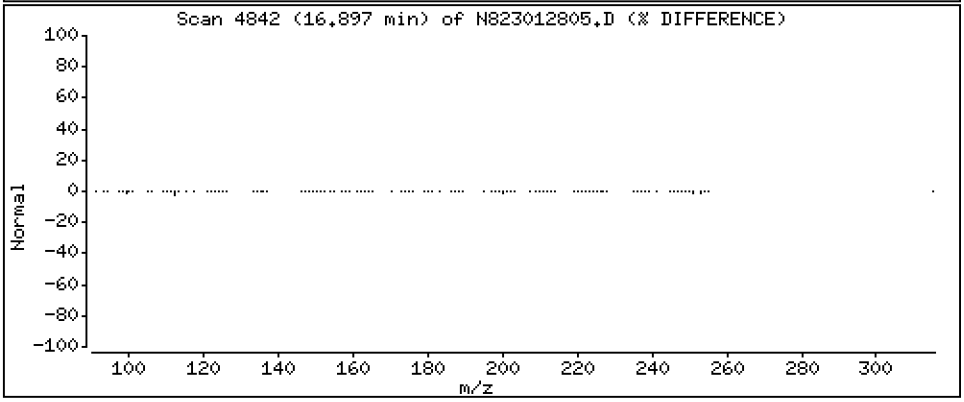












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

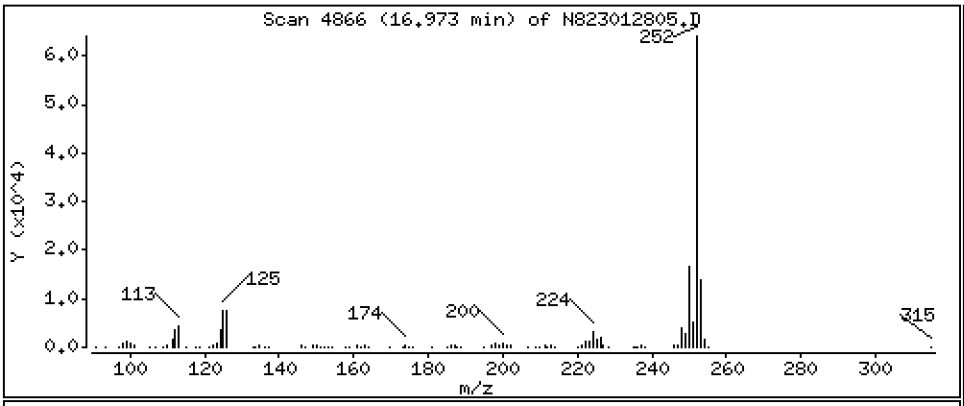
Operator: JZ

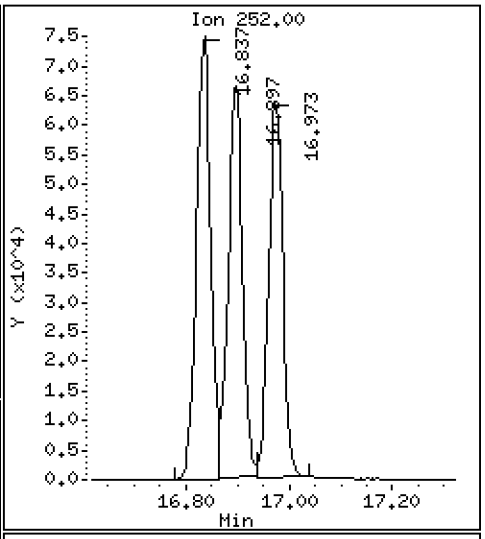
Column phase: Rxi-17sil

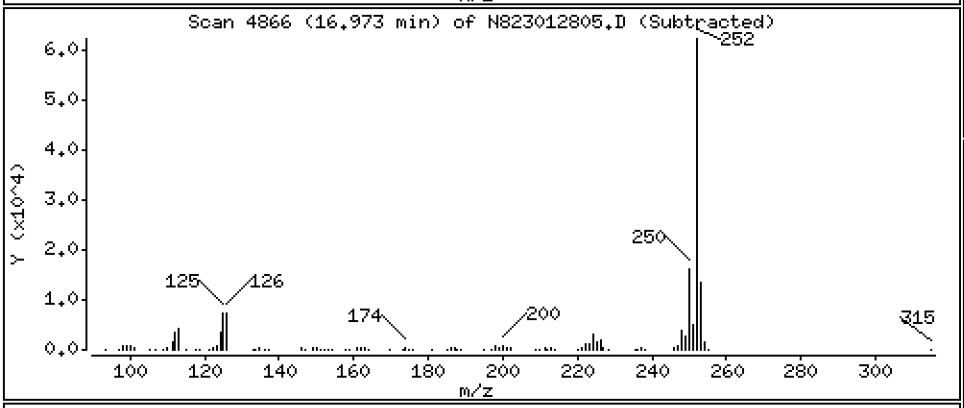
Column diameter: 0.25

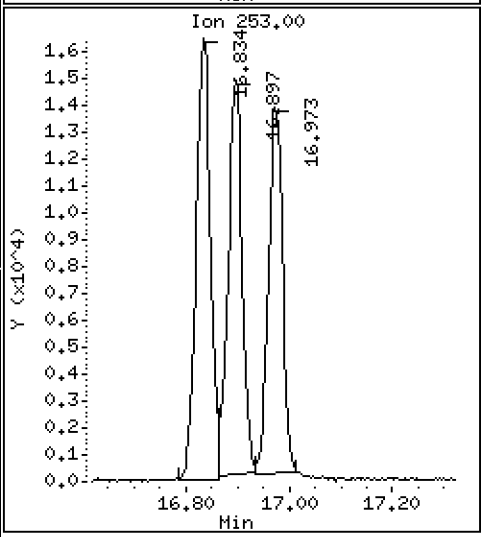
30 Benzo(j)fluoranthene

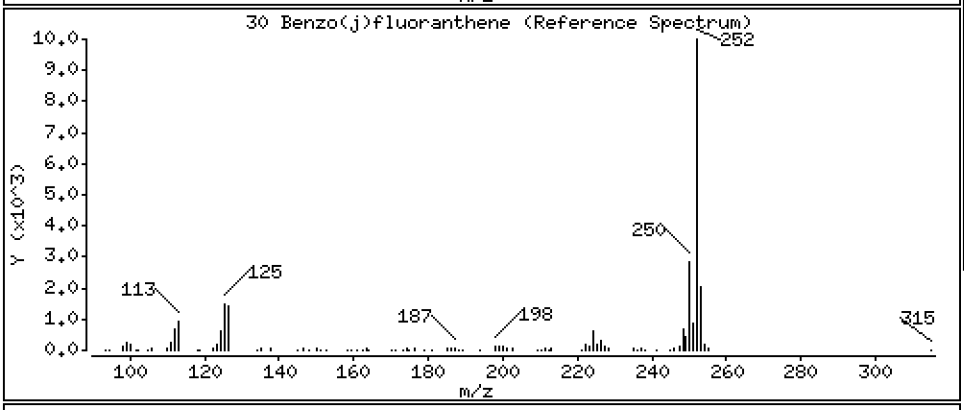
Concentration: 7.316 ug/mL

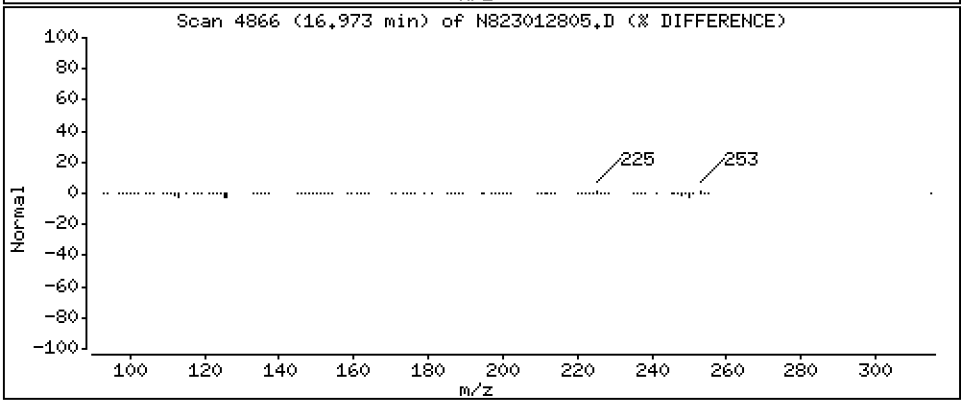












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

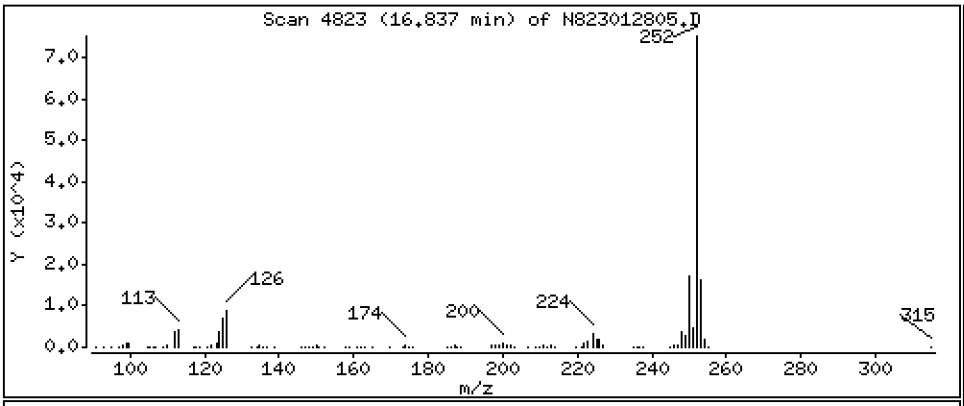
Operator: JZ

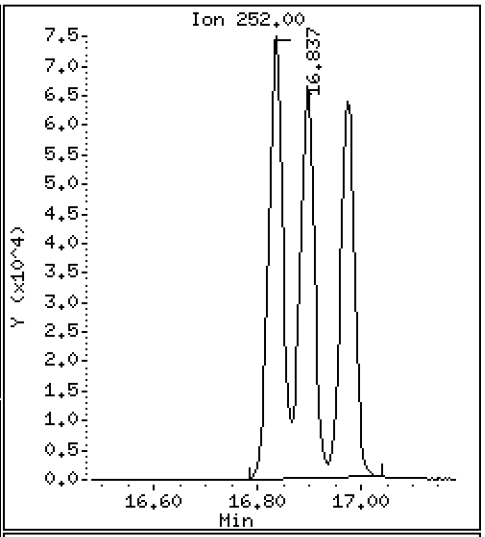
Column phase: Rxi-17sil

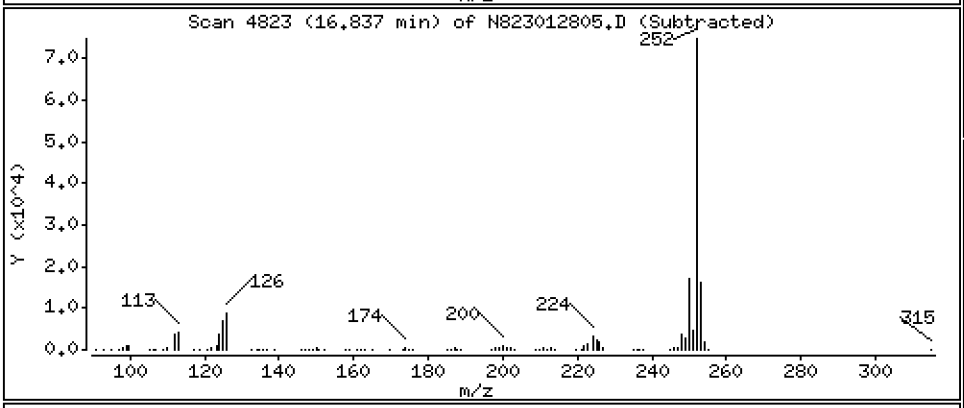
Column diameter: 0.25

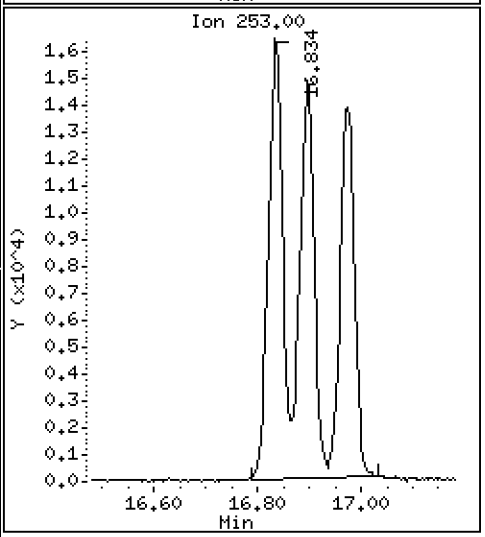
31 Total Benzofluoranthenes

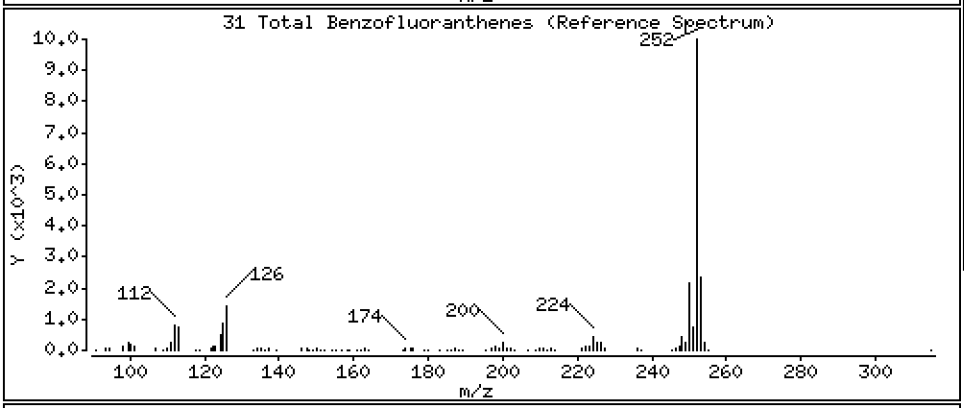
Concentration: 21.93 ug/mL

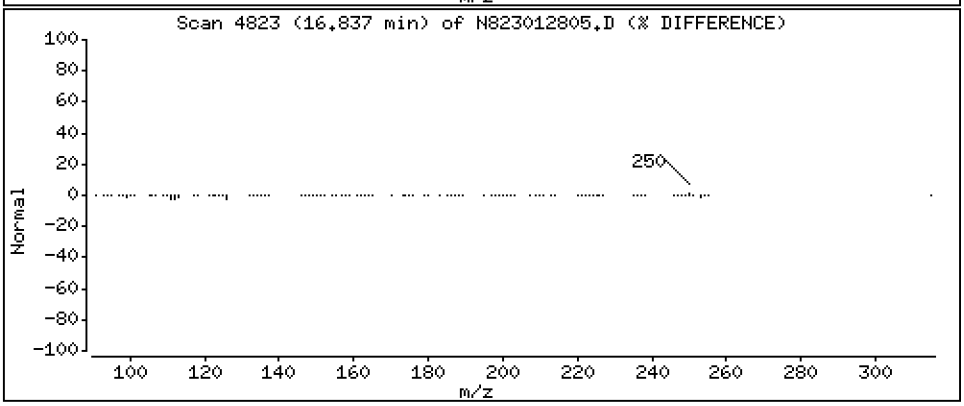












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

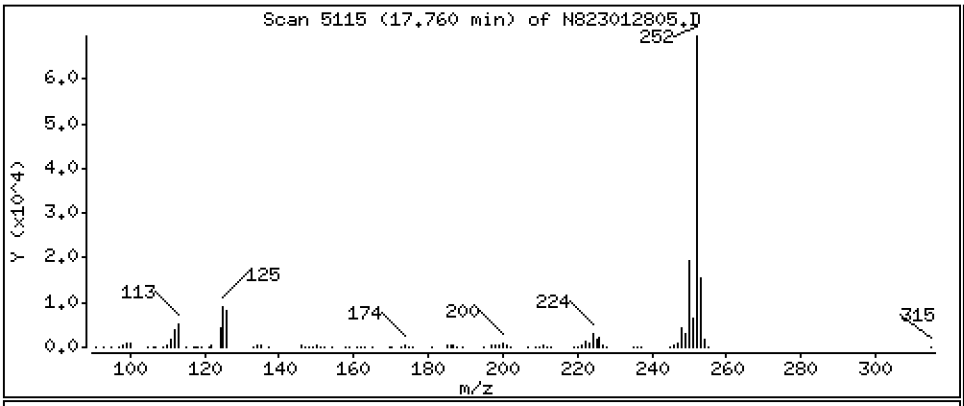
Operator: JZ

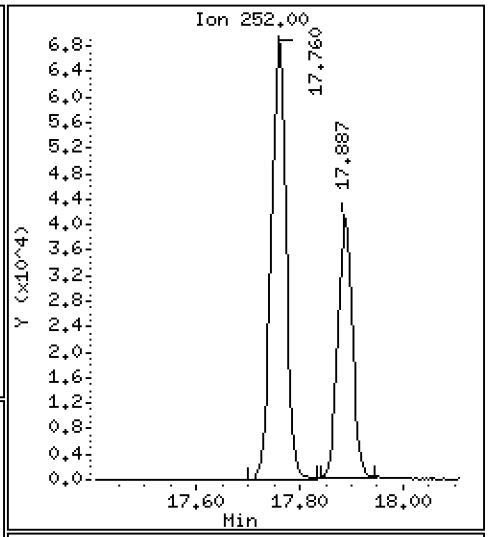
Column phase: Rxi-17sil

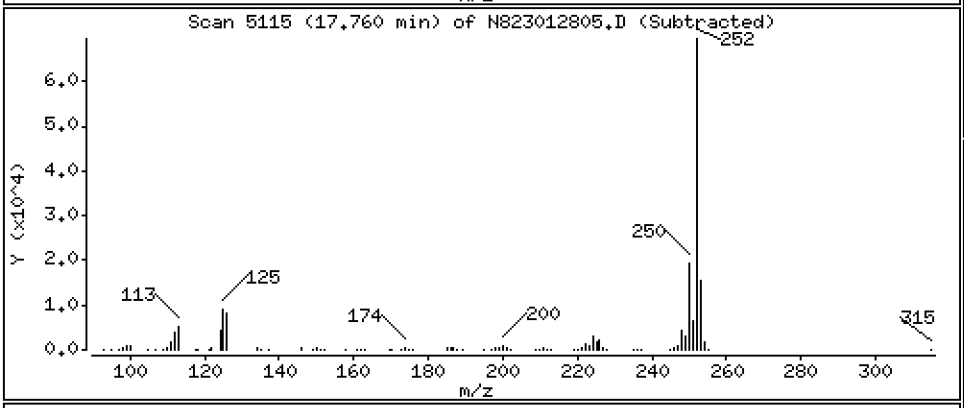
Column diameter: 0.25

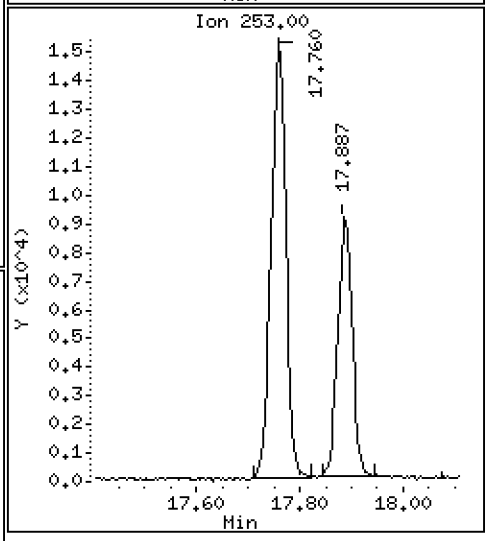
34 Benzo(e)pyrene

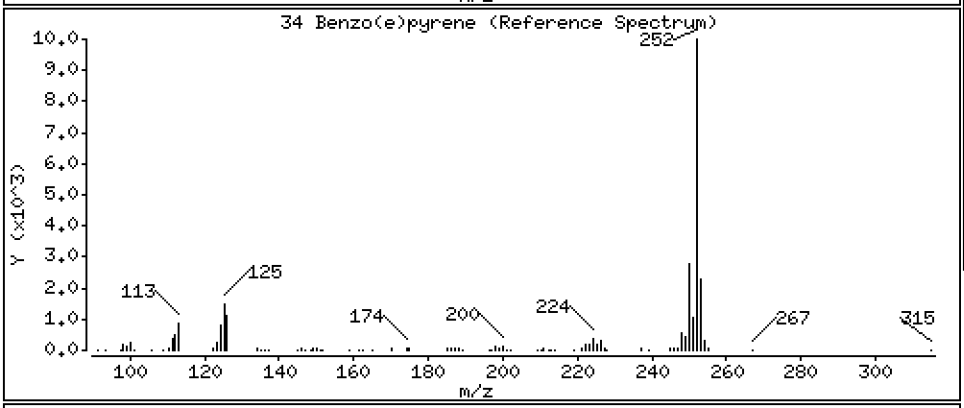
Concentration: 7.351 ug/mL

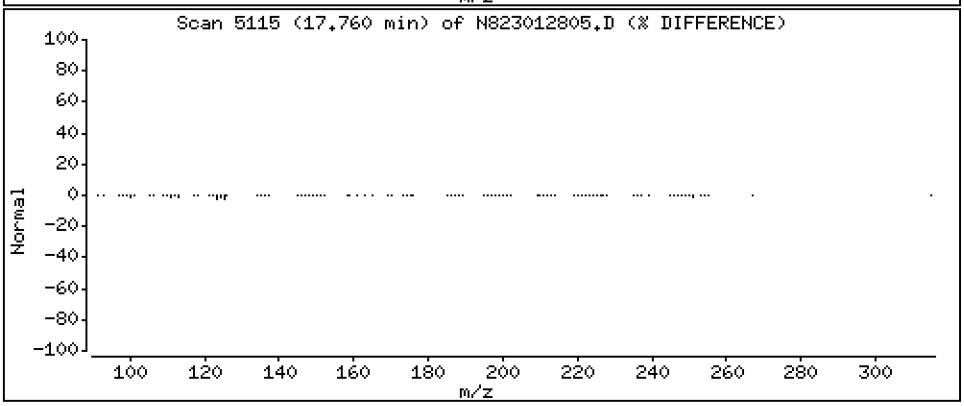












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

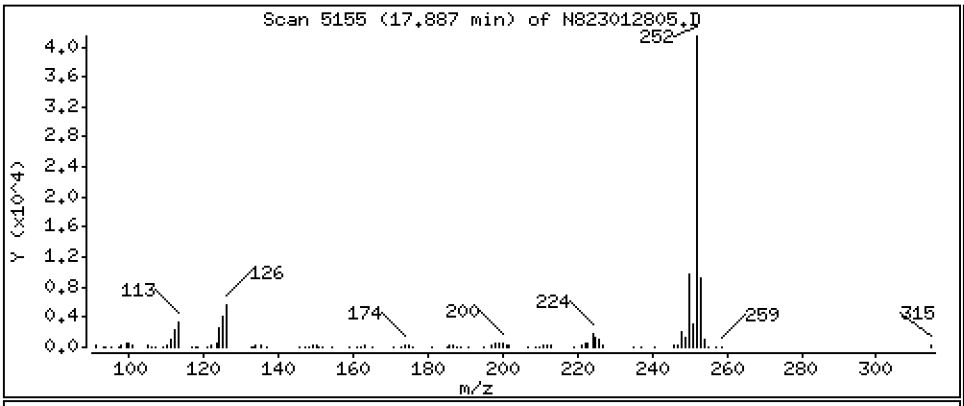
Operator: JZ

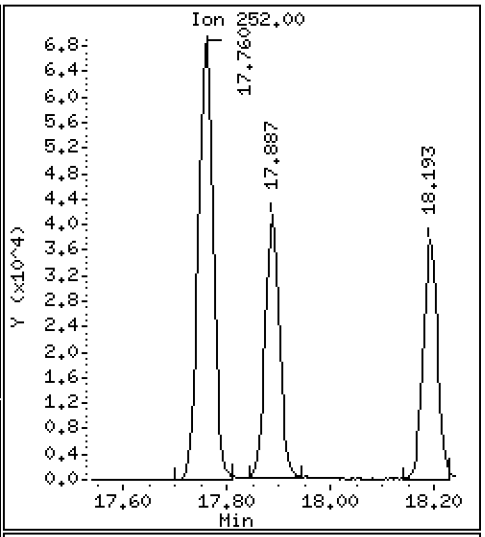
Column phase: Rxi-17sil

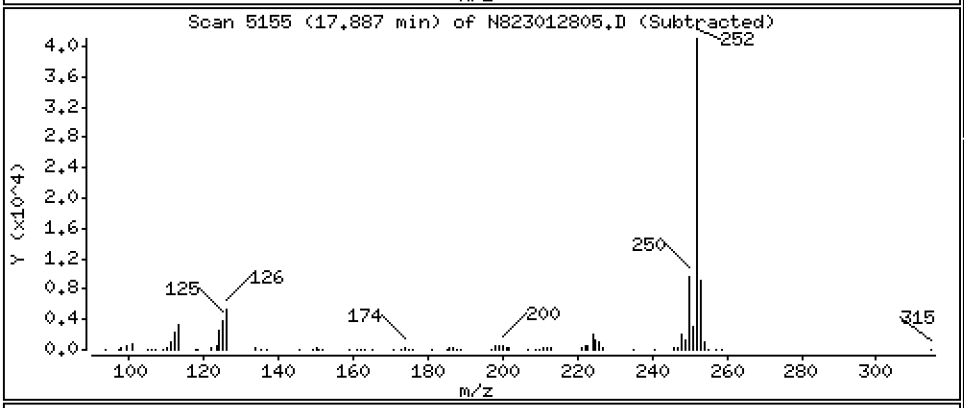
Column diameter: 0.25

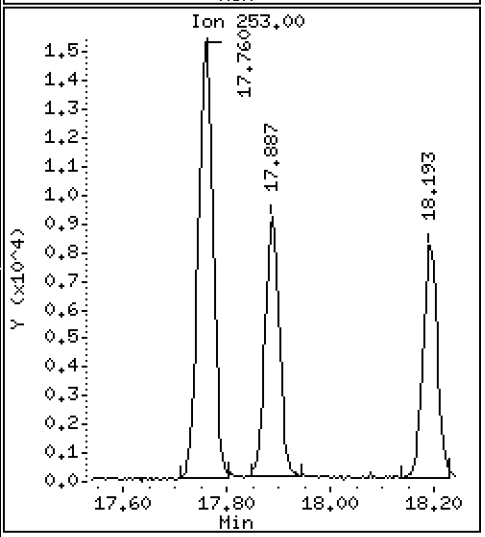
32 Benzo(a)pyrene

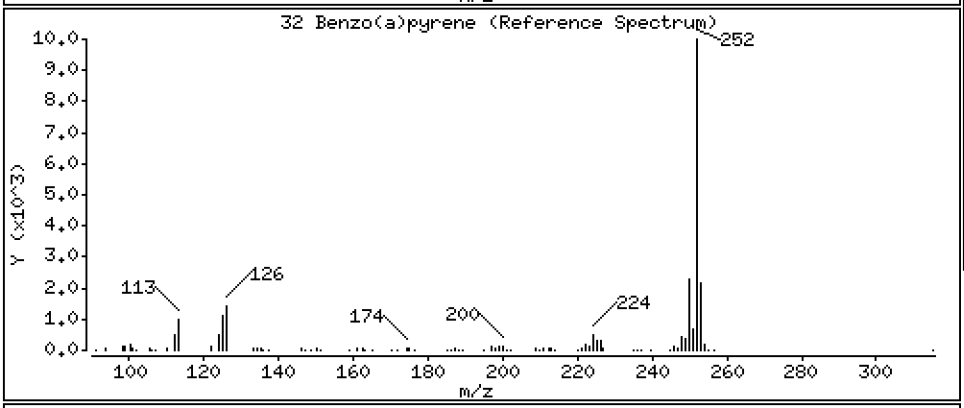
Concentration: 4.793 ug/mL

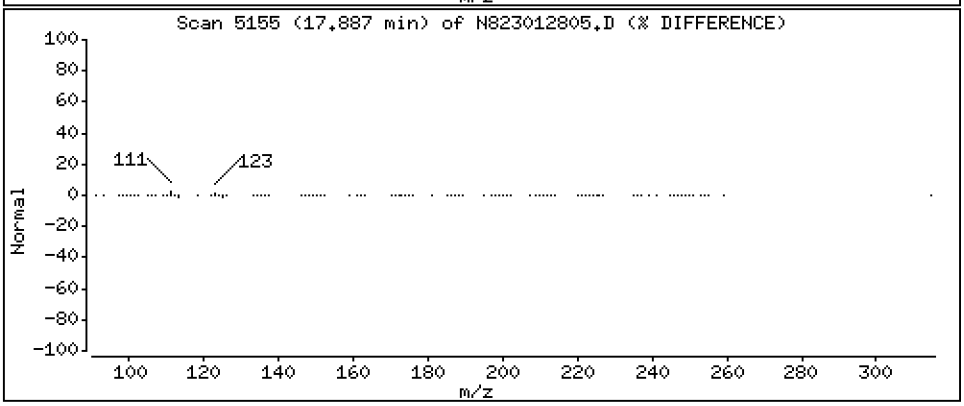












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

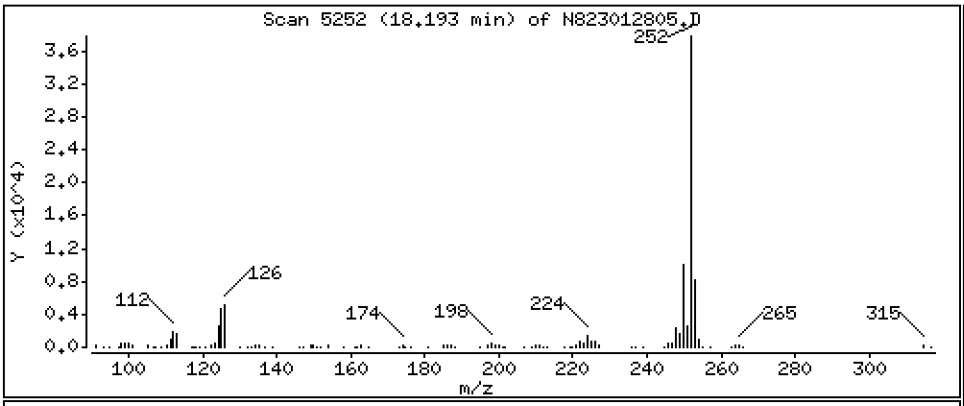
Operator: JZ

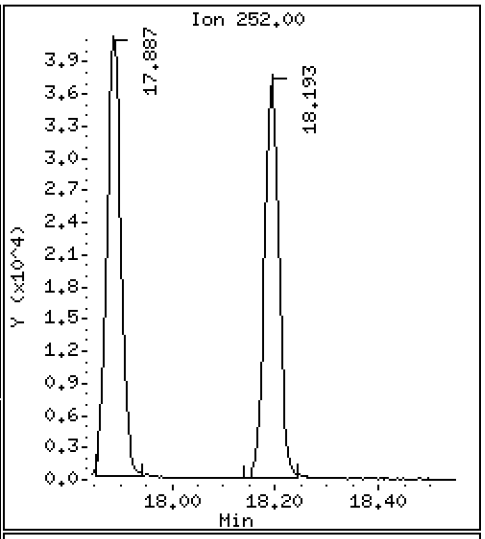
Column phase: Rxi-17sil

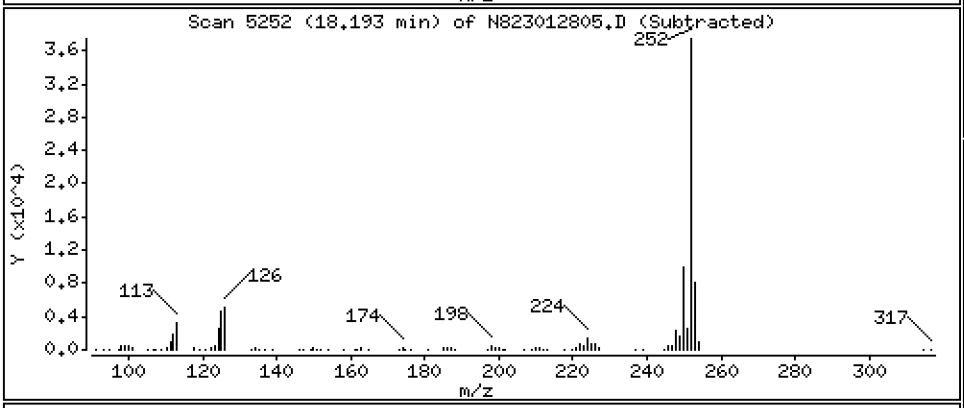
Column diameter: 0.25

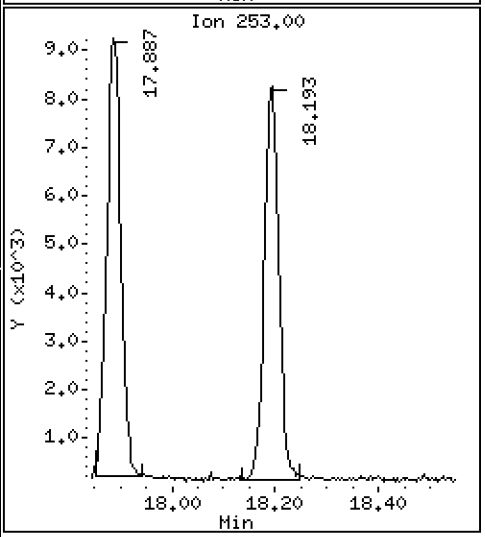
35 Perylene

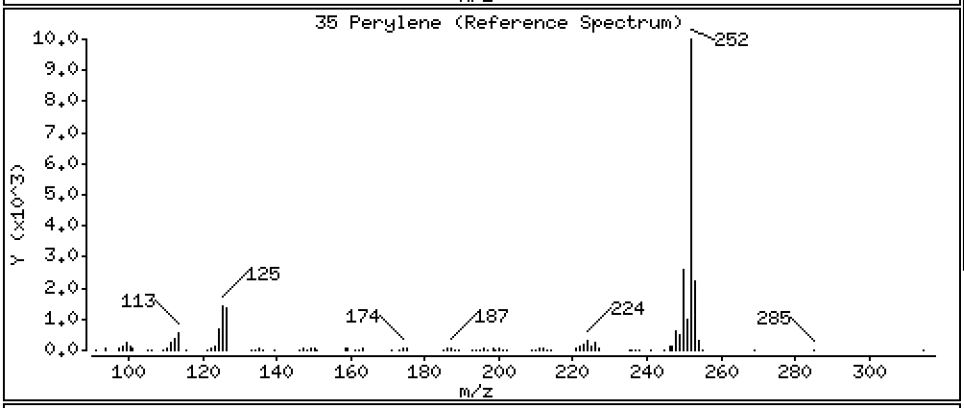
Concentration: 4.090 ug/mL

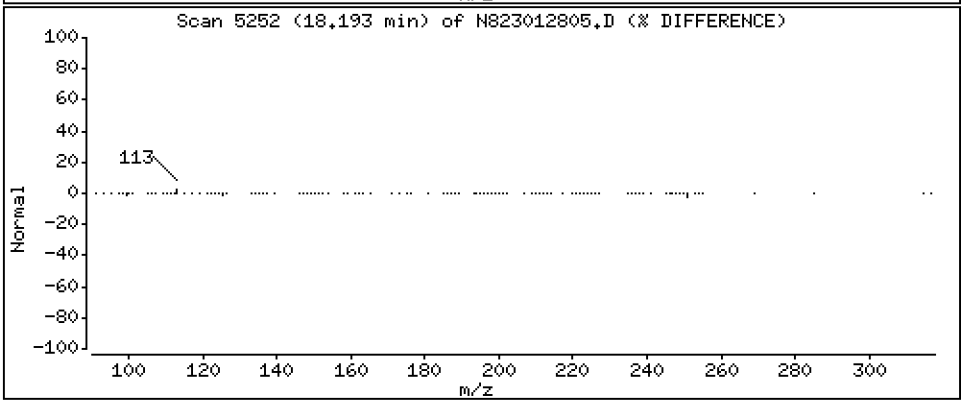












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

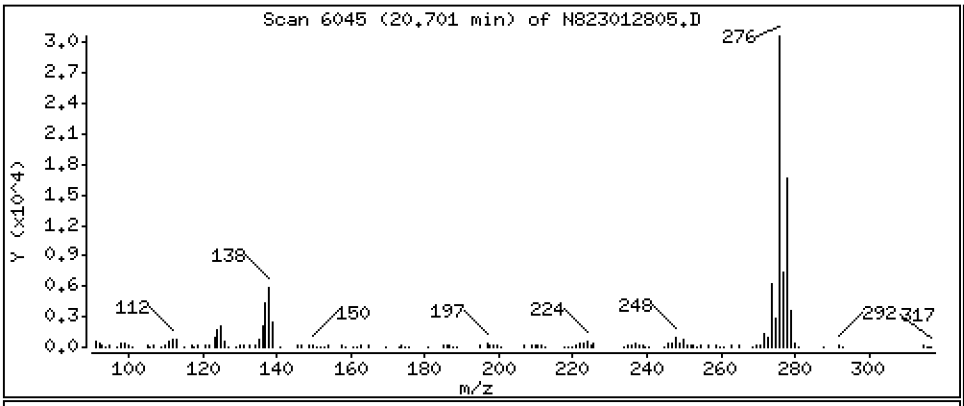
Operator: JZ

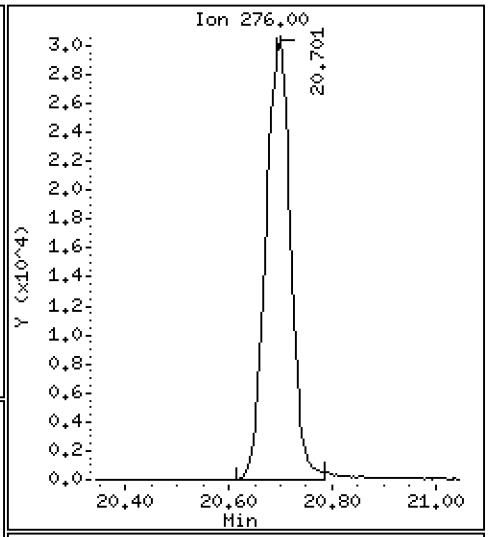
Column phase: Rxi-17sil

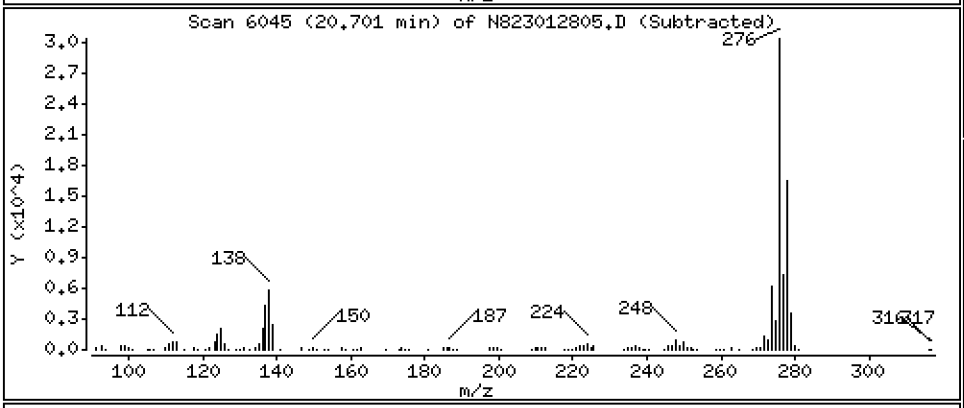
Column diameter: 0.25

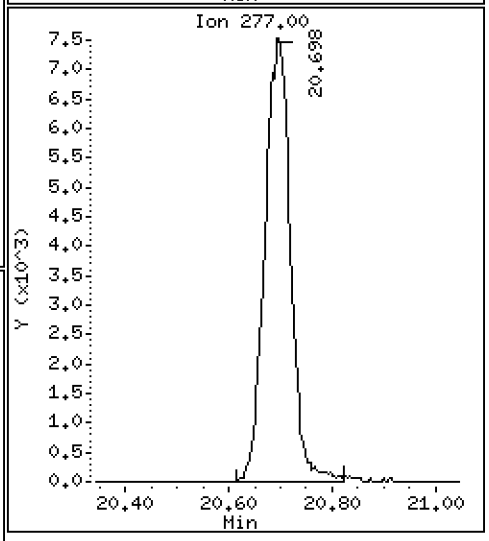
37 Indeno(1,2,3-cd)pyrene

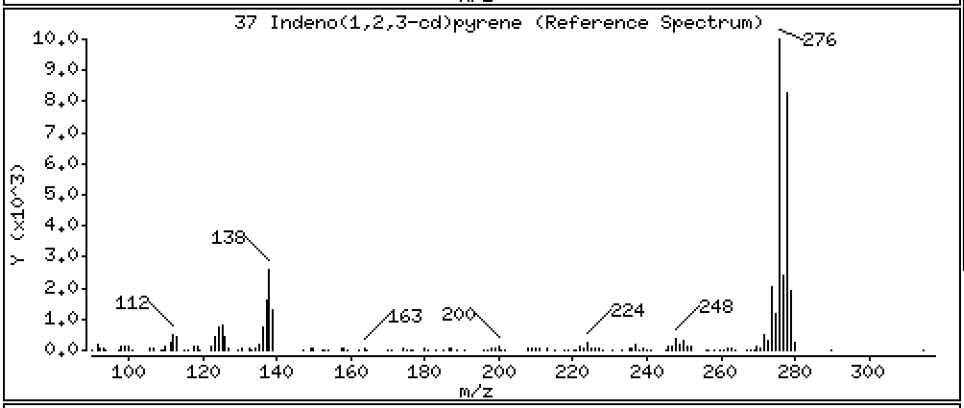
Concentration: 5.400 ug/mL

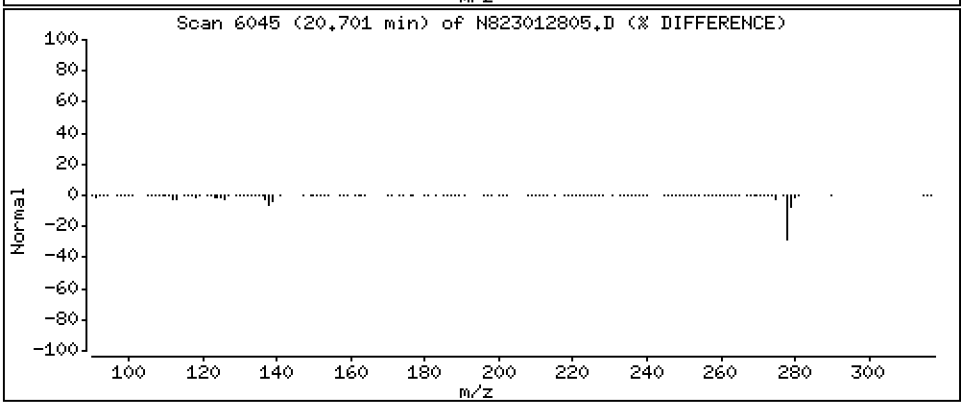












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

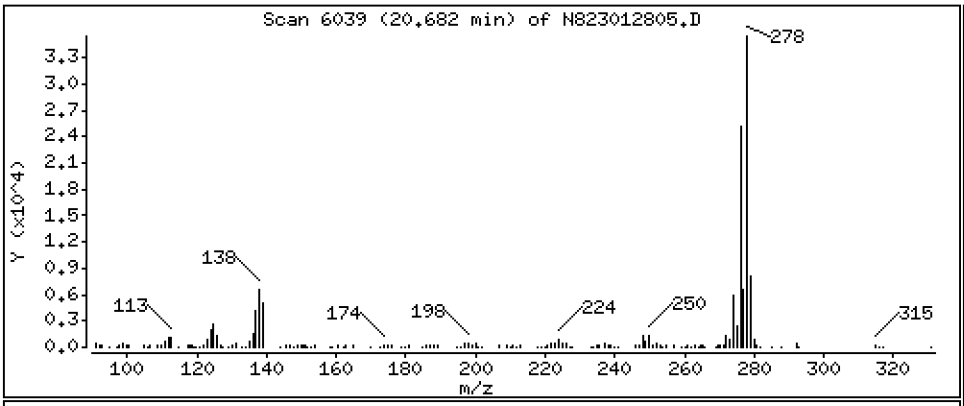
Operator: JZ

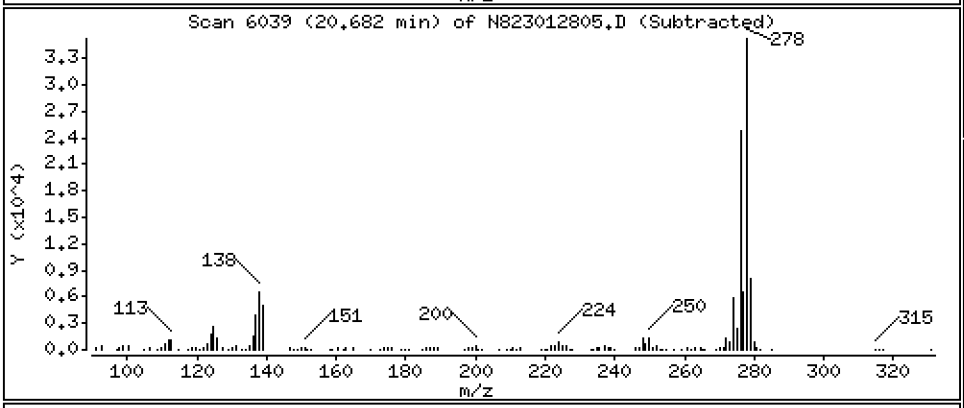
Column phase: Rxi-17sil

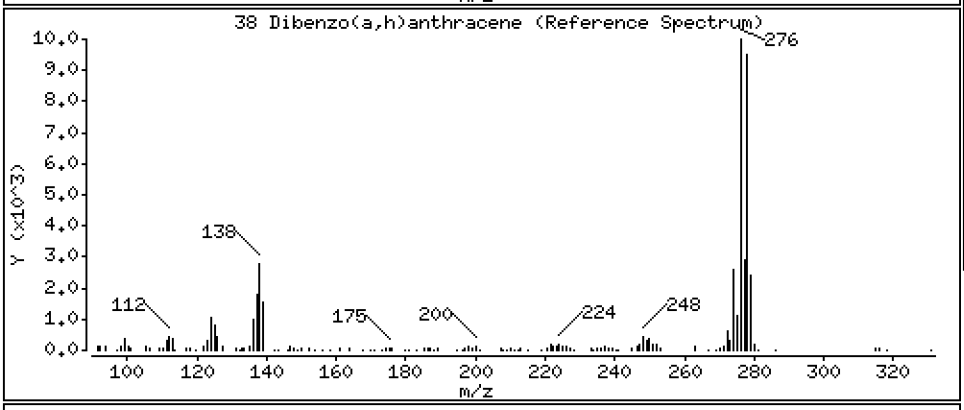
Column diameter: 0.25

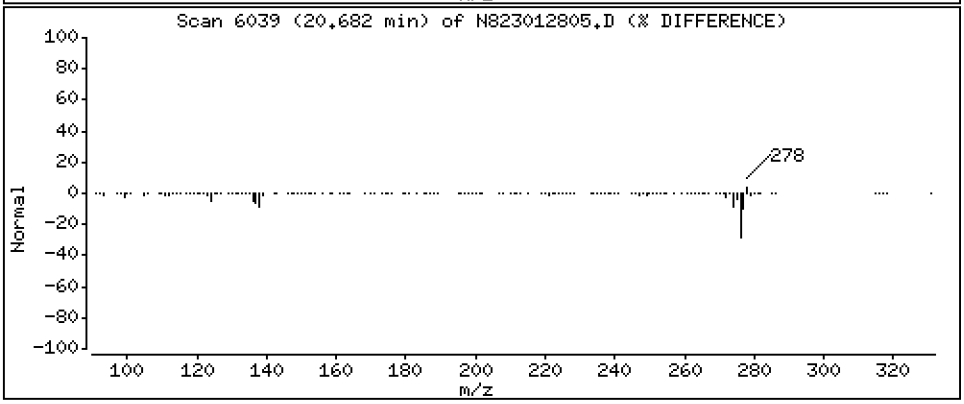
38 Dibenzo(a,h)anthracene

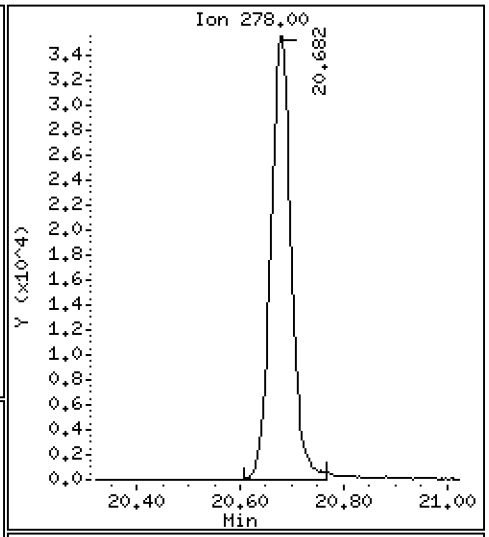
Concentration: 5.993 ug/mL

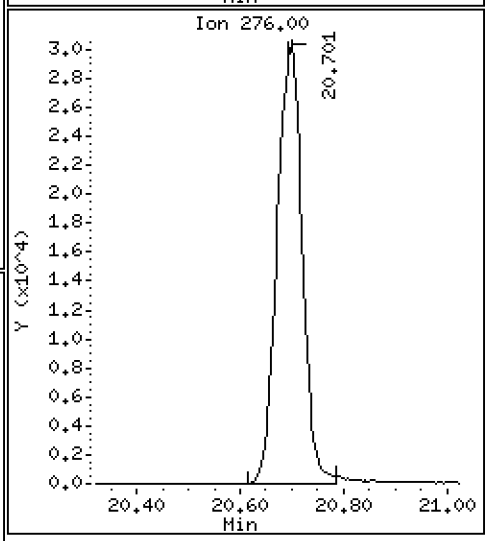












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012805.D

Date : 25-JAN-2023 16:21

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-BSD1,

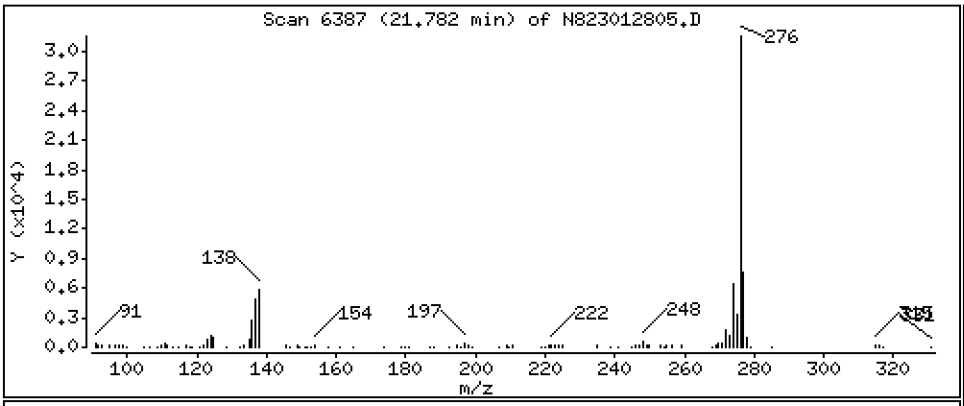
Operator: JZ

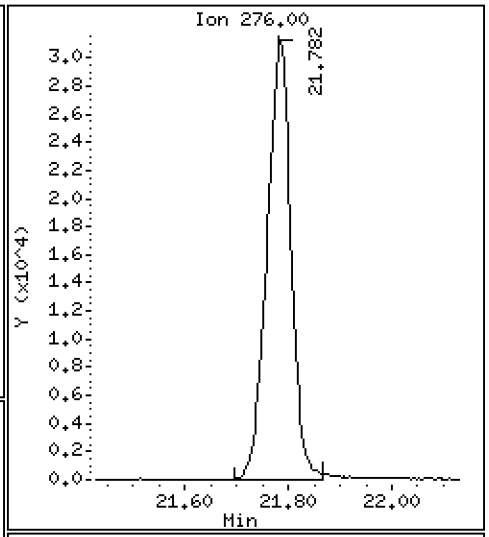
Column phase: Rxi-17sil

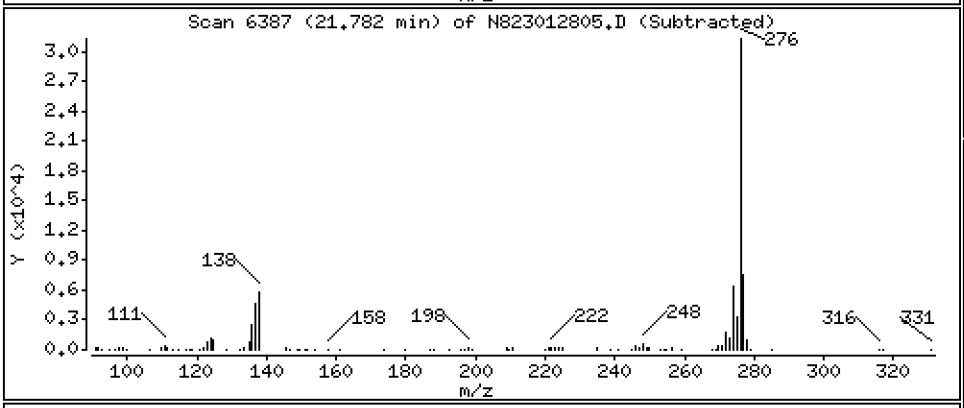
Column diameter: 0.25

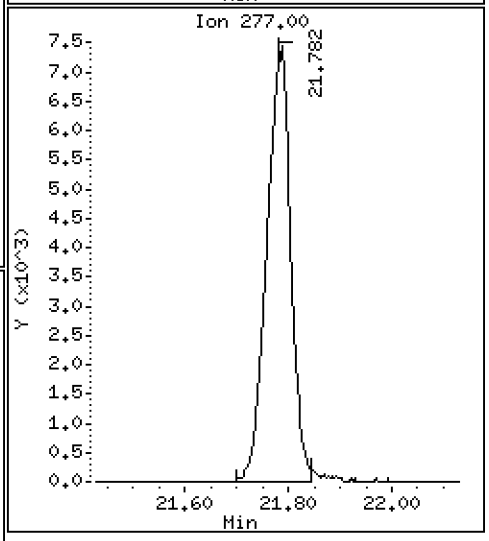
39 Benzo(g,h,i)perylene

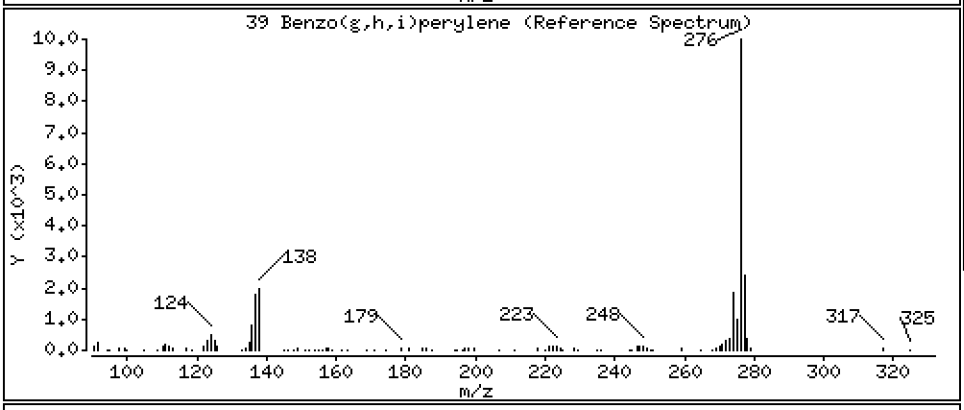
Concentration: 5.909 ug/mL

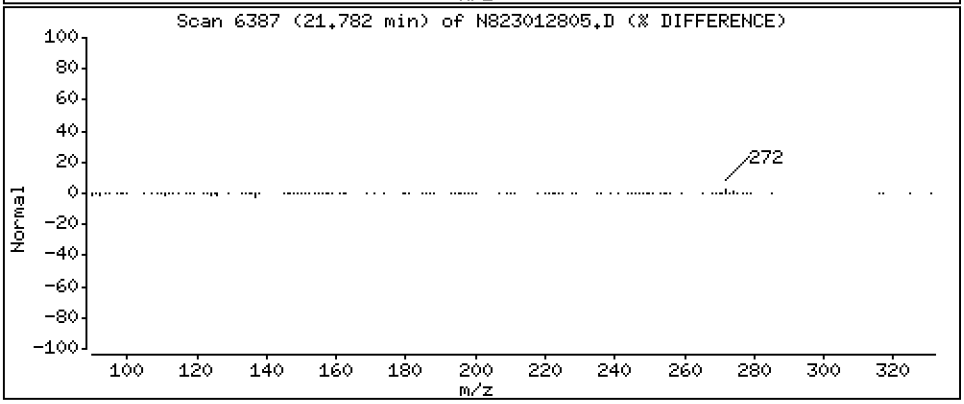












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230125.b\N823012805.D
Lab Smp Id: BLA0411-BSD1
Inj Date : 25-JAN-2023 16:21
Operator : JZ Inst ID: nt8.i
Smp Info : BLA0411-BSD1,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 22:56 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.897	4.906	(1.000)	52212	2.00000	
	2 Naphthalene	128	4.925	4.938	(1.006)	104782	4.31620	4.316
$	3 2-Methylnaphthalene-d10	152	5.634	5.640	(1.150)	43426	3.04968	3.050
	4 2-Methylnaphthalene	141	5.681	5.687	(1.160)	59036	4.42108	4.421
	5 1-methylnaphthalene	141	5.880	5.886	(1.201)	59598	4.39758	4.398
	7 Biphenyl	154	6.342	6.345	(0.882)	88861	4.41917	4.419
	8 2,6-Dimethylnaphthalene	156	6.386	6.392	(0.888)	65051	4.57093	4.571
	9 Acenaphthylene	152	7.082	7.088	(0.985)	87258	3.79113	3.791
*	10 Acenaphthene-d10	164	7.192	7.199	(1.000)	30480	2.00000	
	11 Acenaphthene	153	7.243	7.246	(1.007)	66999	4.34449	4.344
	12 Dibenzofuran	168	7.395	7.398	(1.028)	104187	4.44799	4.448
	13 1,6,7-Trimethylnaphthalene	170	7.458	7.464	(1.037)	69517	4.70645	4.706
	14 Fluorene	166	7.872	7.875	(1.095)	84841	4.66355	4.664
	18 Dibenzothiophene	184	9.109	9.112	(0.986)	123044	4.77139	4.771
*	15 Phenanthrene-d10	188	9.235	9.238	(1.000)	58358	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	132827	4.65951	4.660
	17 Anthracene	178	9.311	9.314	(1.008)	108096	4.17420	4.174
	19 Carbazole	167	9.826	9.829	(1.064)	122090	5.14273	5.143
	20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	106693	5.19376	5.194
	22 Fluoranthene	202	11.053	11.056	(1.197)	157145	5.06434	5.064
$	21 Fluoranthene-d10	212	11.015	11.018	(1.193)	94687	3.67755	3.678
	23 Pyrene	202	11.575	11.578	(0.815)	165572	5.34394	5.344
	24 Benzo(a)anthracene	228	14.082	14.085	(0.991)	150644	5.36433	5.364
*	25 Chrysene-d12	240	14.209	14.212	(1.000)	49974	2.00000	
	27 Chrysene	228	14.285	14.288	(1.005)	155860	5.21352	5.214
	28 Benzo(b)fluoranthene	252	16.836	16.830	(0.929)	144774	7.62396	7.624
	29 Benzo(k)fluoranthene	252	16.897	16.893	(0.932)	129618	6.96866	6.969
	30 Benzo(j)fluoranthene	252	16.972	16.969	(0.937)	122504	7.31608	7.316
	31 Total Benzofluoranthenes	252	16.836	16.830	(0.929)	394453	21.9337	21.93(M)
	34 Benzo(e)pyrene	252	17.760	17.756	(0.980)	139202	7.35117	7.351
	32 Benzo(a)pyrene	252	17.886	17.889	(0.987)	80092	4.79291	4.793
*	33 Perylene-d12	264	18.120	18.120	(1.000)	32605	2.00000	
	35 Perylene	252	18.193	18.196	(1.004)	73337	4.08971	4.090

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.568	20.564	(1.135)	56603	4.43065	4.431
37 Indeno(1,2,3-cd)pyrene	276	20.700	20.694	(1.142)	102804	5.40014	5.400
38 Dibenzo(a,h)anthracene	278	20.681	20.672	(1.141)	98188	5.99325	5.993
39 Benzo(g,h,i)perylene	276	21.782	21.779	(1.202)	101912	5.90855	5.909

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823012805.D
Lab Smp Id: BLA0411-BSD1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 25-JAN-2023
Calibration Time: 14:49
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	46976	23488	93952	52212	11.15
10 Acenaphthene-d10	27652	13826	55304	30480	10.23
15 Phenanthrene-d10	51738	25869	103476	58358	12.80
25 Chrysene-d12	45383	22692	90766	49974	10.12
33 Perylene-d12	41344	20672	82688	32605	-21.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.90	-0.19
10 Acenaphthene-d10	7.20	6.70	7.70	7.19	-0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	-0.03
25 Chrysene-d12	14.21	13.71	14.71	14.21	-0.02
33 Perylene-d12	18.12	17.62	18.62	18.12	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823012805.D

Lab ID: BLA0411-BSD1
nt8.i, 20230125.b\FSIMPNA230119.m,   25-JAN-2023 16:21

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

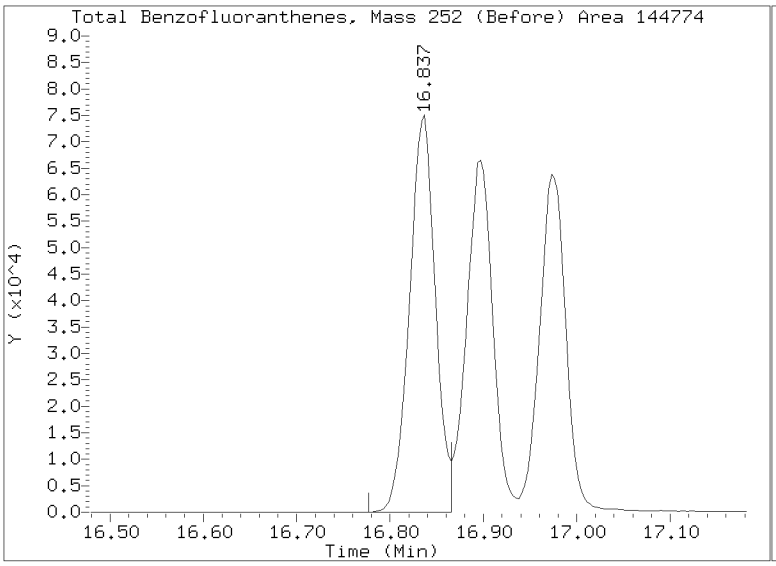
No RRT check performed

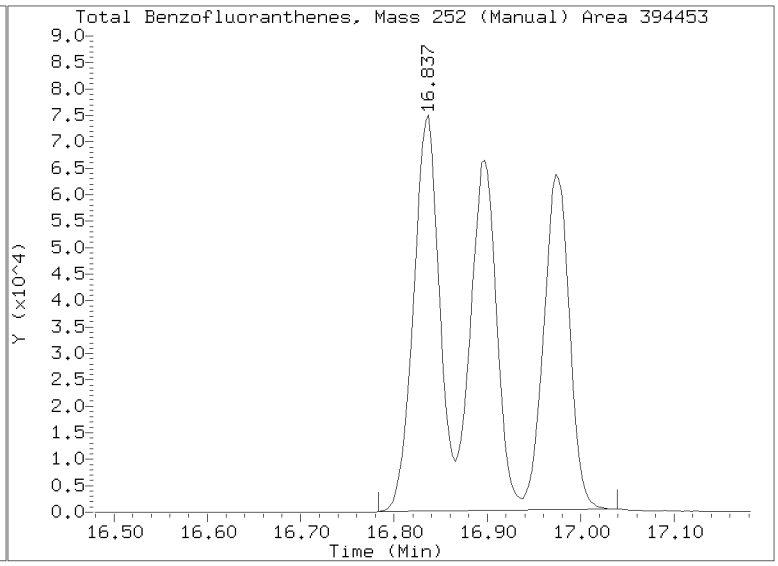
On Column LOD for nt8.i, 20230125.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230125.b/N823012805.D
Injection Date: 25-JAN-2023 16:21
Lab ID:BLA0411-BSD1 Client ID:
Report Date: 01/25/2023 22:57





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-IT1210

MS / MS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/27/23 22:32
Batch:	BLA0410	Laboratory ID:	BLA0410-MS2
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike
Initial/Final:	18.02 g / 1 mL	Source Sample:	LDW23-IT1210

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	500	5.6		310		60.9	36 - 120
1,2-Dichlorobenzene	500	2.8	J	312		61.9	36 - 120
Benzyl Alcohol	500	39.5		382		68.6	25 - 123
Benzoic acid	2300	64.6	J	1810	Q	76.1	10 - 160
2,4-Dimethylphenol	1300	3.5	J	1250		96.0	10 - 120
1,2,4-Trichlorobenzene	500	ND	U	329		65.7	35 - 120
N-Nitrosodiphenylamine	500	ND	U	349		69.8	27 - 120
Pentachlorophenol	1300	5.4	J	2080		160 *	26 - 120

* Values outside of QC limits

MS / MS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/27/23 23:12
Batch:	BLA0410	Laboratory ID:	BLA0410-MSD2
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike Dup
Initial/Final:	18.02 g / 1 mL	Source Sample:	LDW23-IT1210

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	500	319		62.6	2.63	30	36 - 120
1,2-Dichlorobenzene	500	323		64.1	3.48	30	36 - 120
Benzyl Alcohol	500	392		70.6	2.55	30	25 - 123
Benzoic acid	2300	1870	Q	78.6	3.08	30	10 - 160
2,4-Dimethylphenol	1300	1320		101	5.49	30	10 - 120
1,2,4-Trichlorobenzene	500	340		68.1	3.55	30	35 - 120
N-Nitrosodiphenylamine	500	363		72.6	3.85	30	27 - 120
Pentachlorophenol	1300	2080		159 *	0.134	30	26 - 120

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723095.D

Date : 27-FEB-2023 22:32

Client ID:

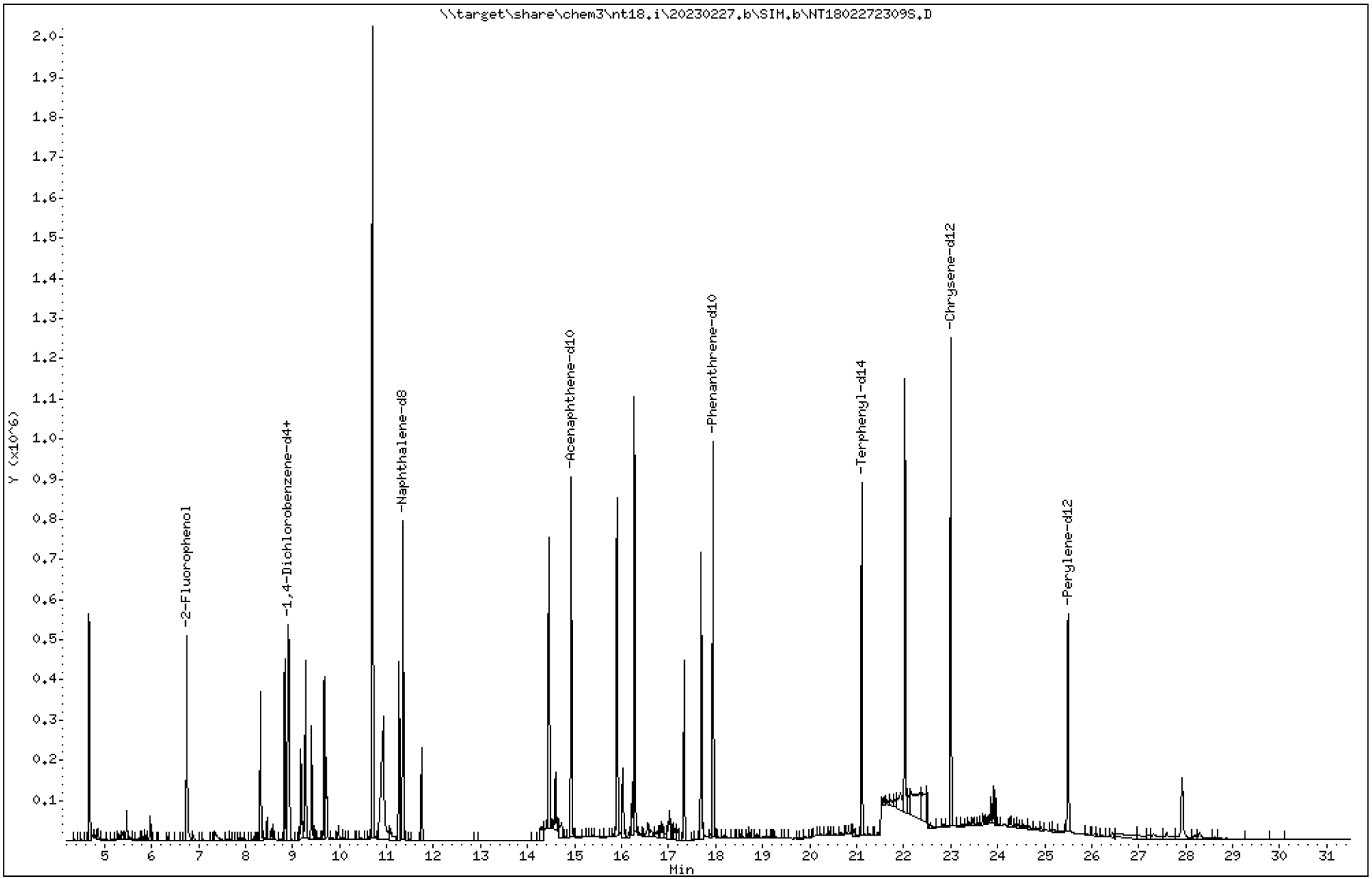
Sample Info: BLA0410-MS2

Instrument: nt18.i

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

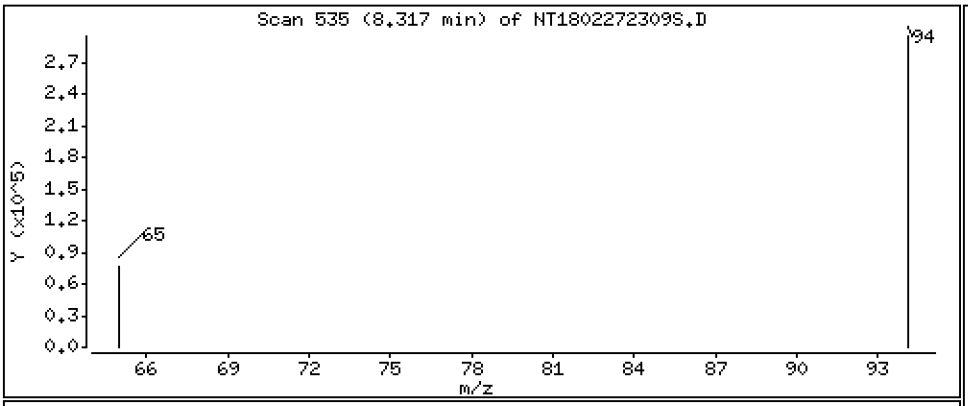
Operator: YZ

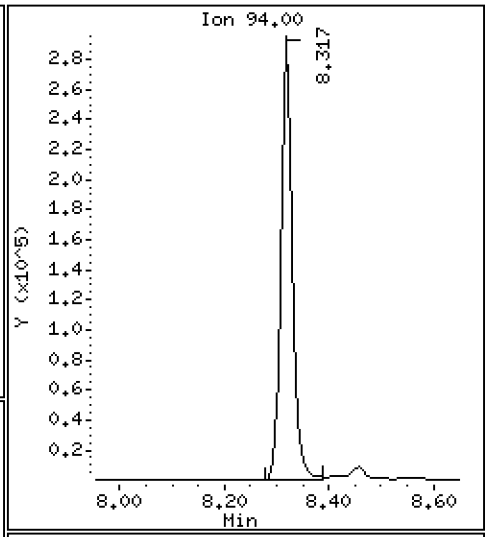
Column phase: ZB-5msi

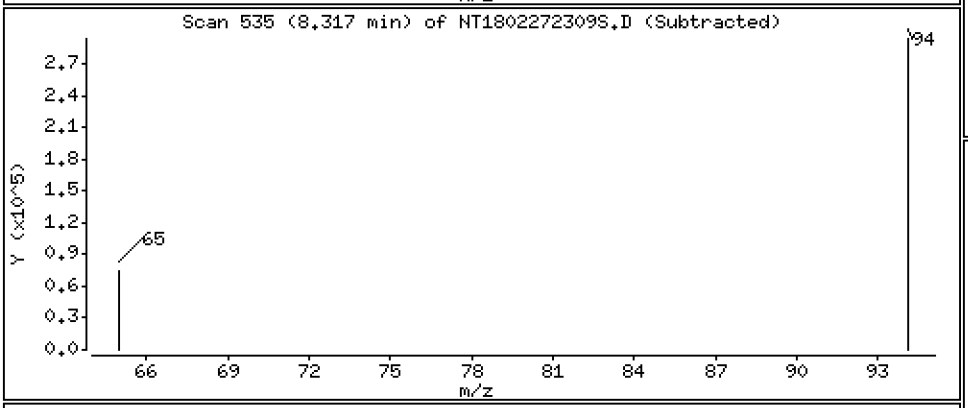
Column diameter: 0.25

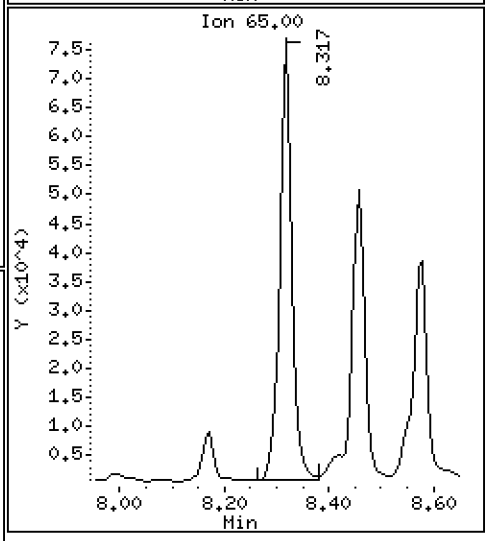
3 Phenol

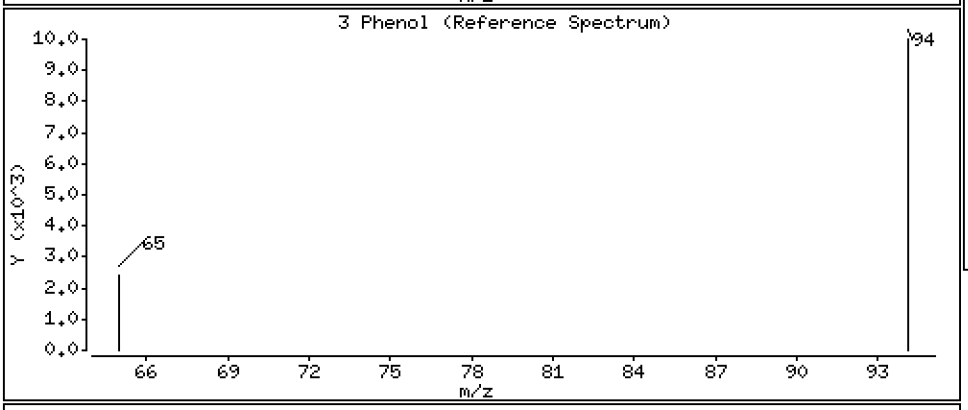
Concentration: 3.427 ug/mL

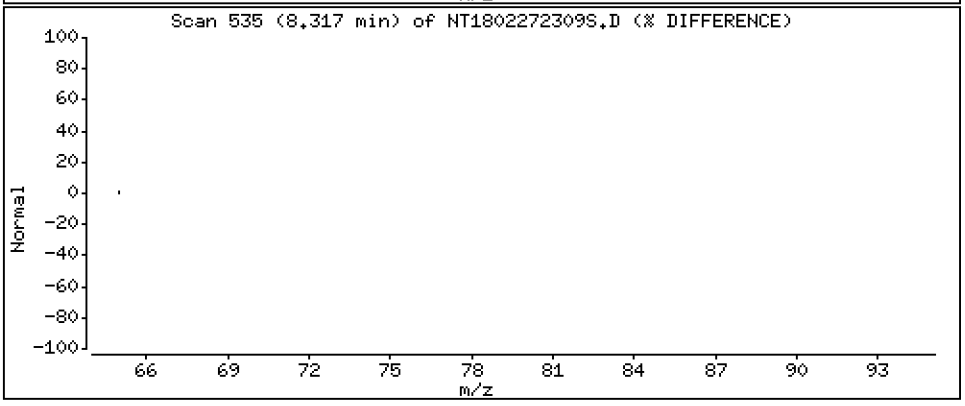












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

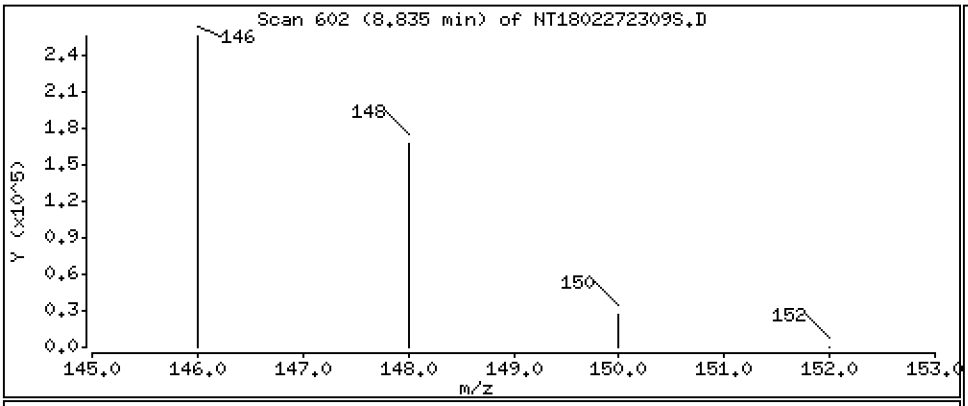
Operator: YZ

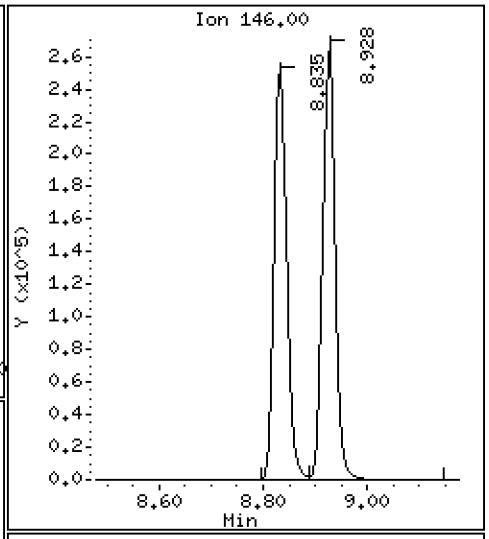
Column phase: ZB-5msi

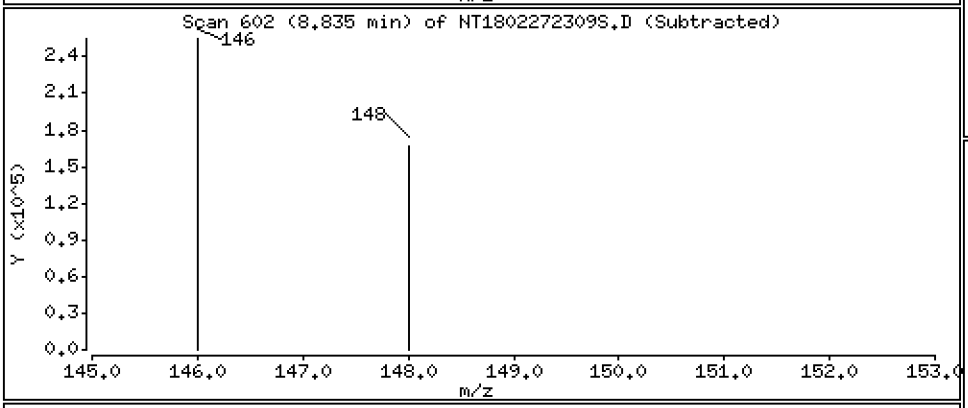
Column diameter: 0.25

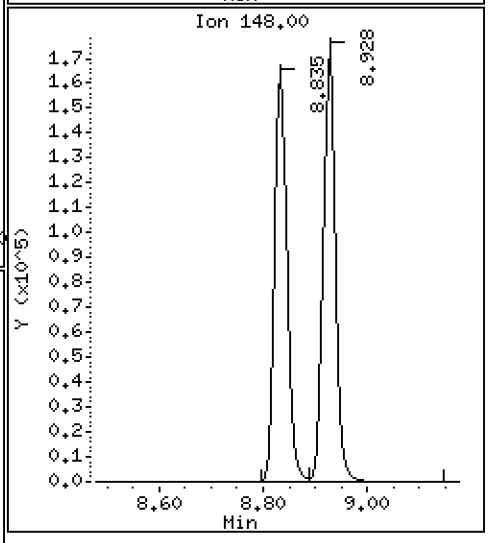
7 1,3-Dichlorobenzene

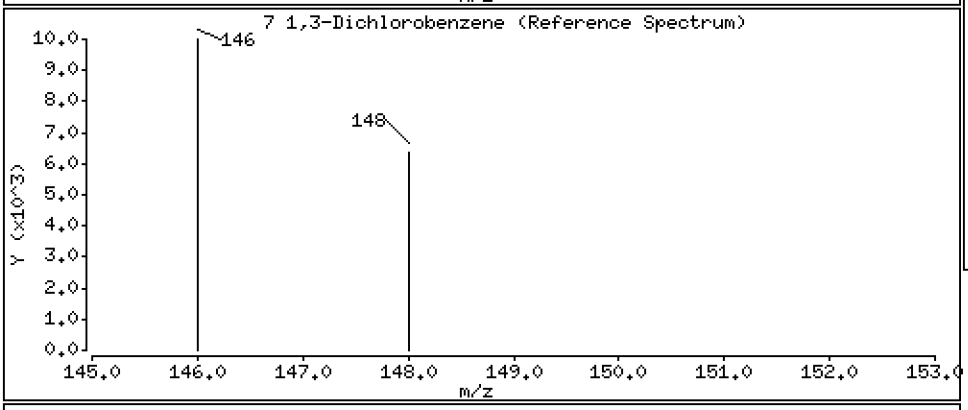
Concentration: 3.065 ug/mL

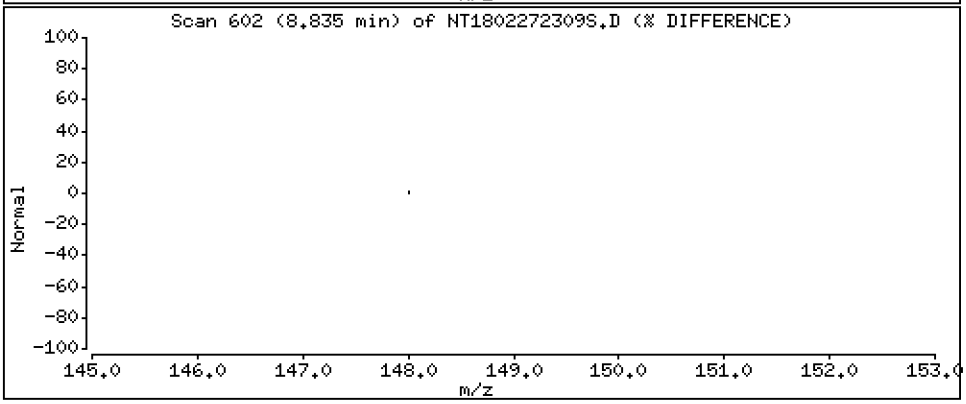












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

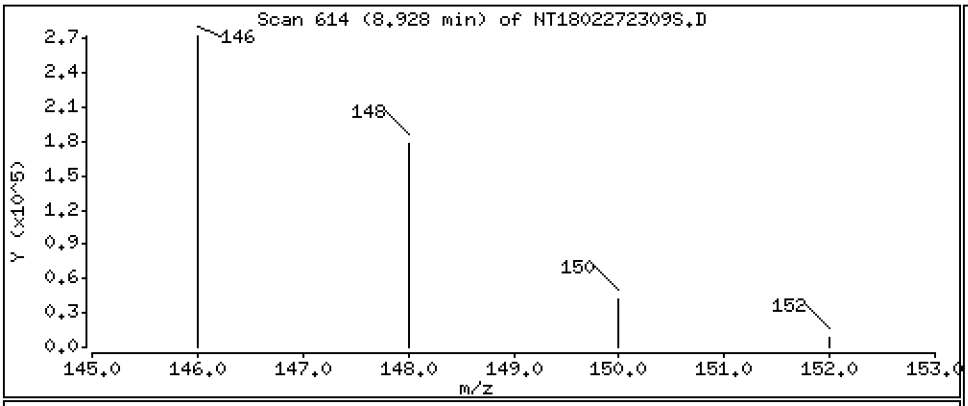
Operator: YZ

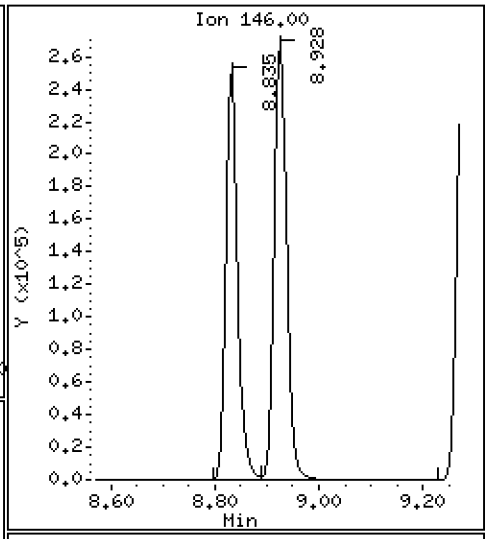
Column phase: ZB-5msi

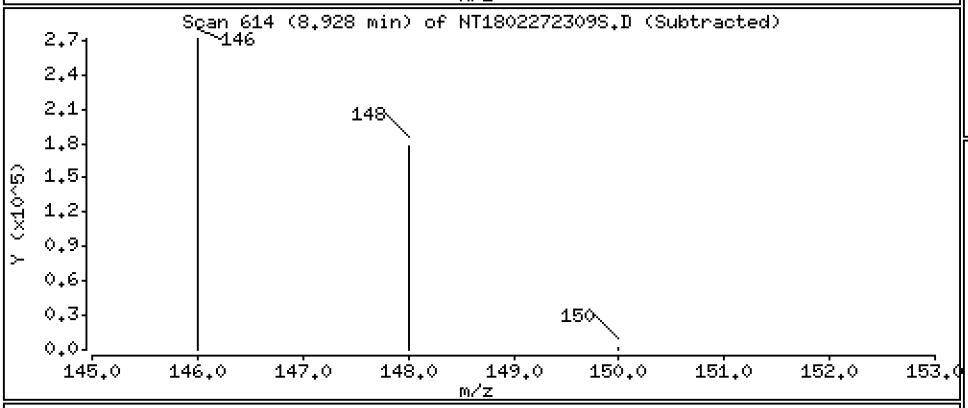
Column diameter: 0.25

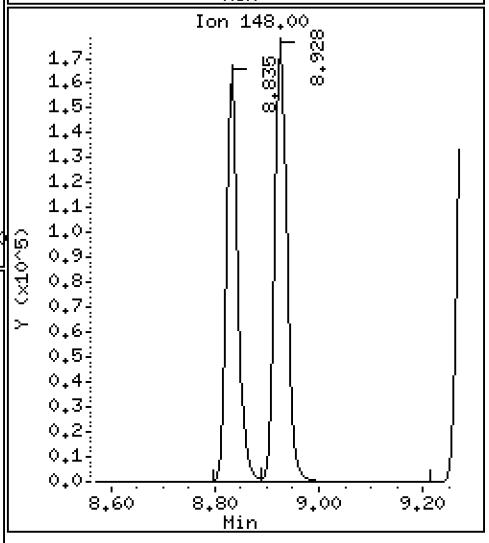
9 1,4-Dichlorobenzene

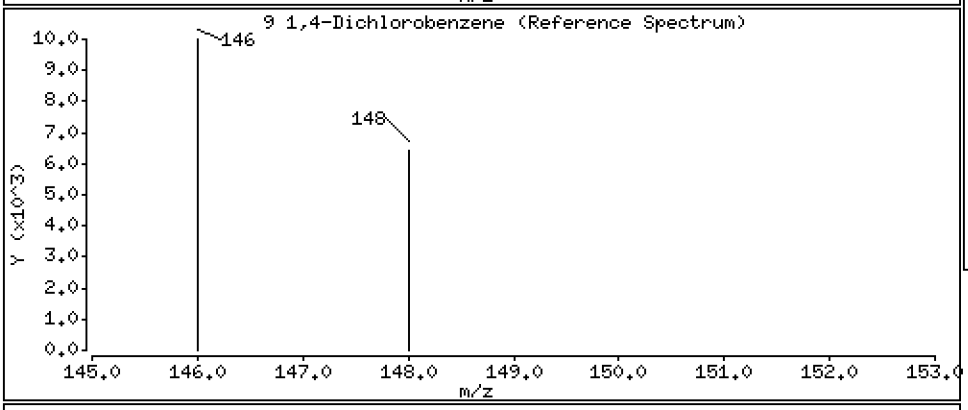
Concentration: 3.103 ug/mL

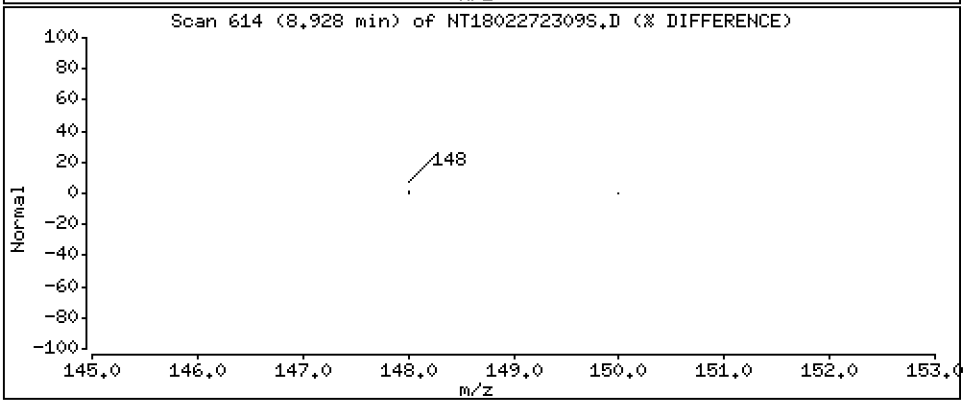












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

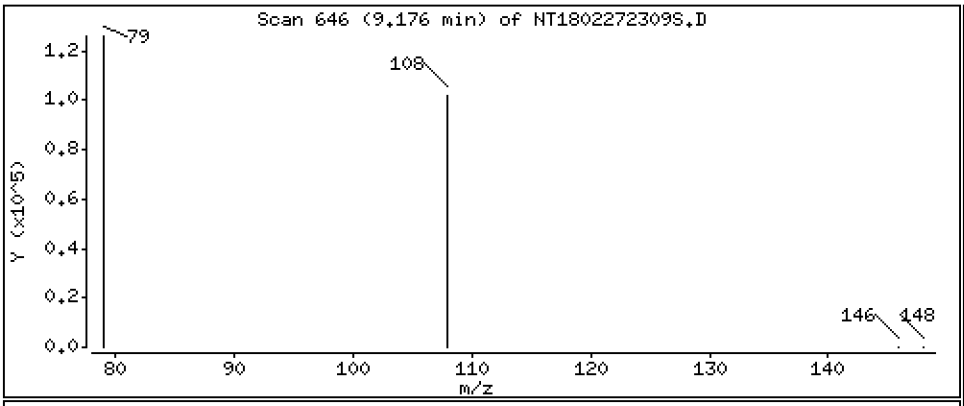
Operator: YZ

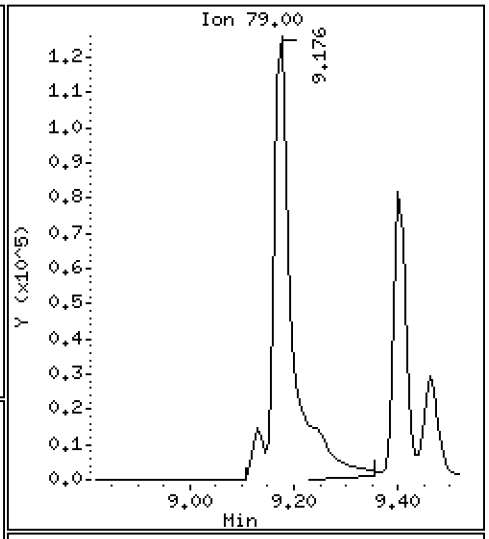
Column phase: ZB-5msi

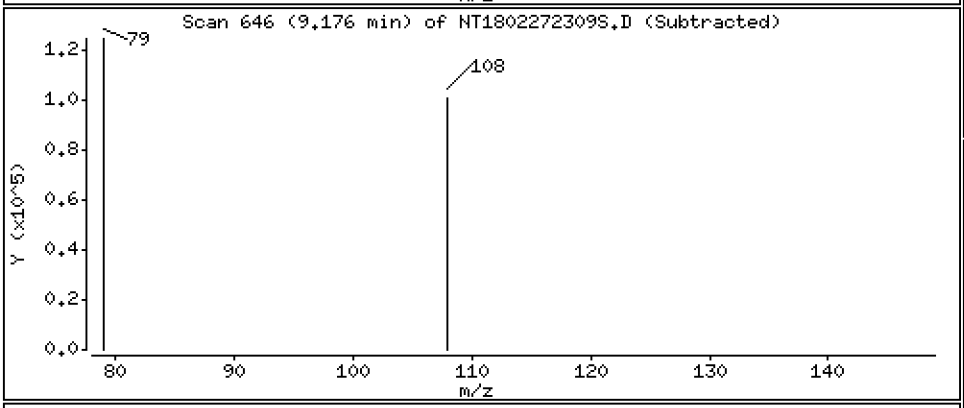
Column diameter: 0.25

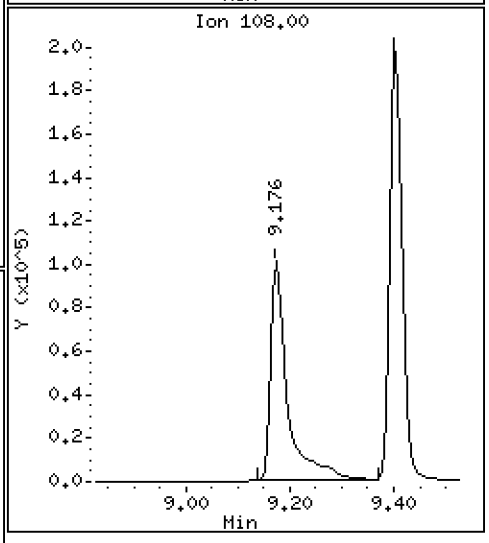
11 Benzyl alcohol

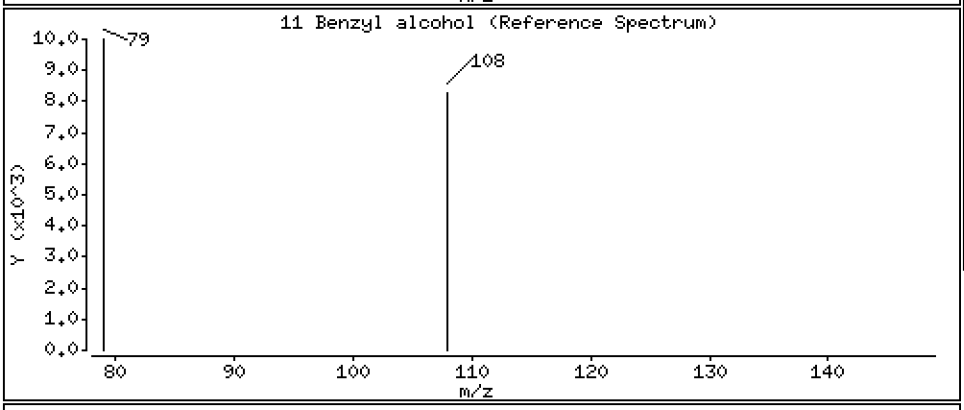
Concentration: 3.825 ug/mL

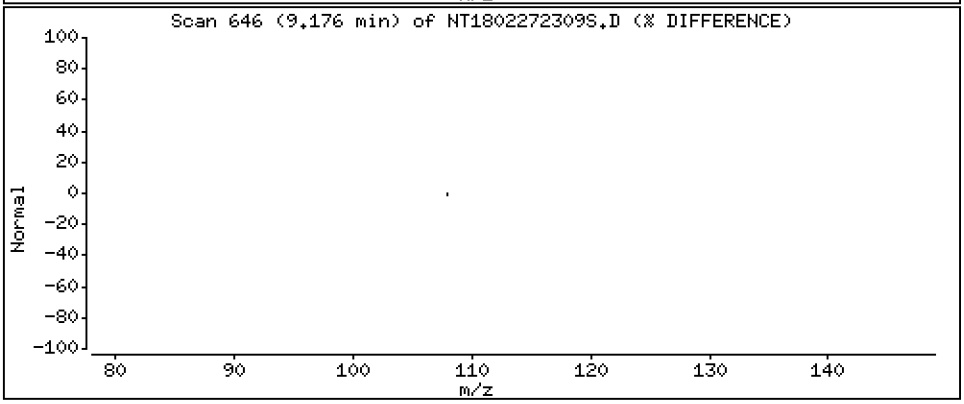












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723095.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

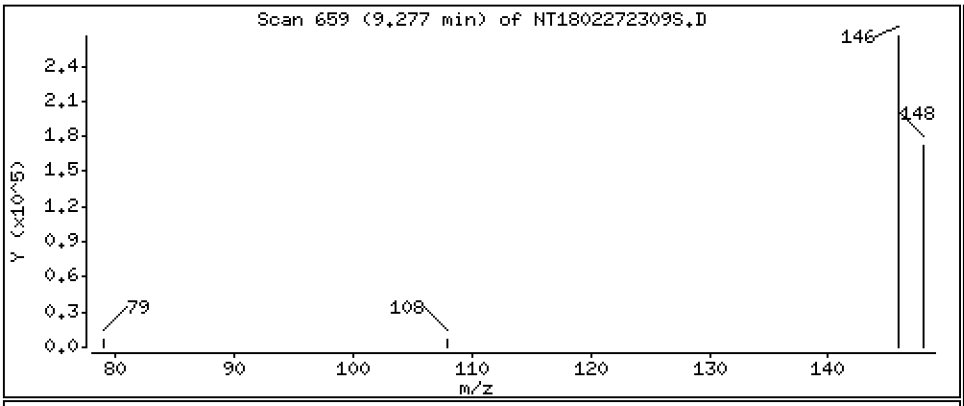
Operator: YZ

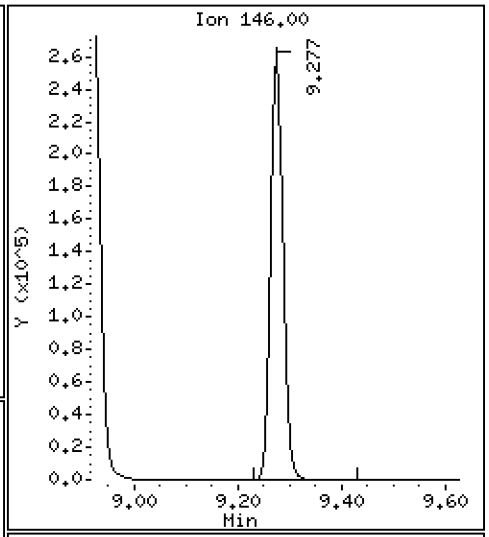
Column phase: ZB-5msi

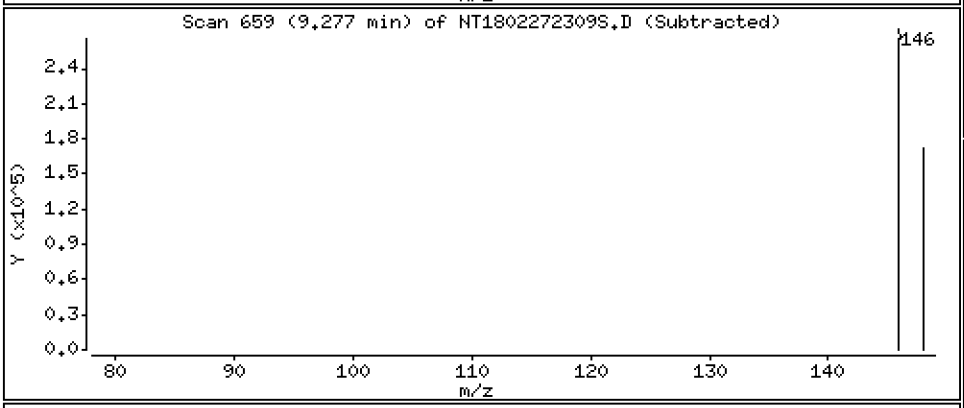
Column diameter: 0.25

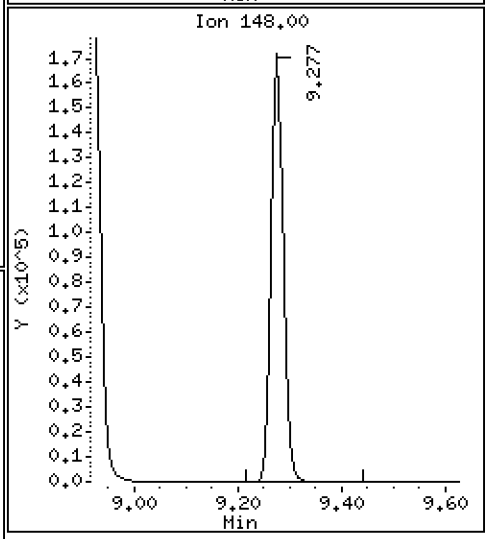
12 1,2-Dichlorobenzene

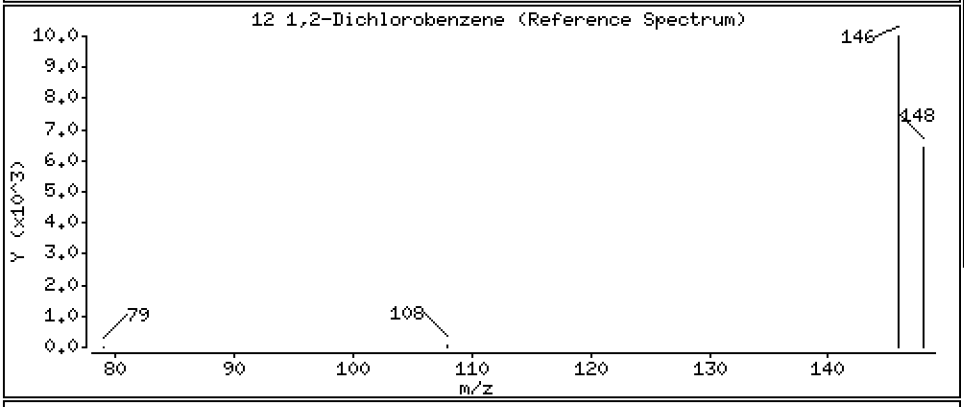
Concentration: 3.121 ug/mL

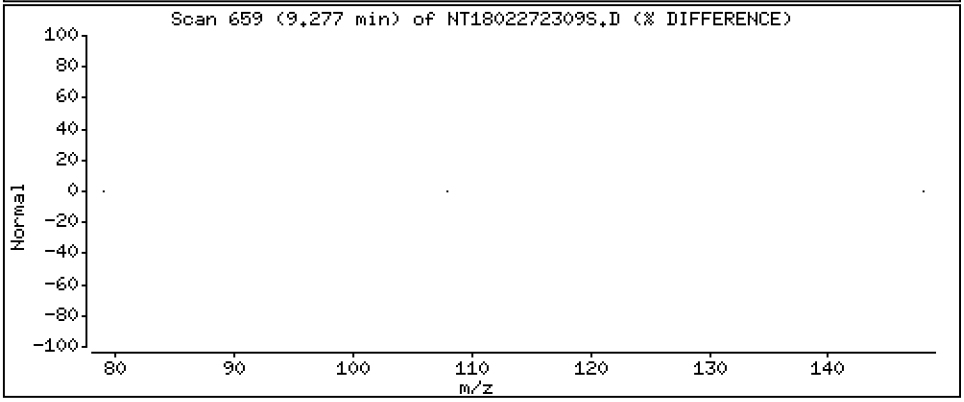












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

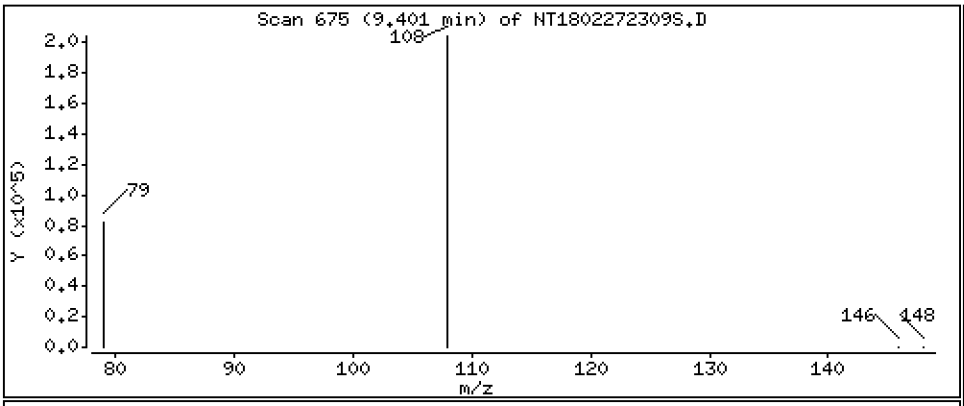
Operator: YZ

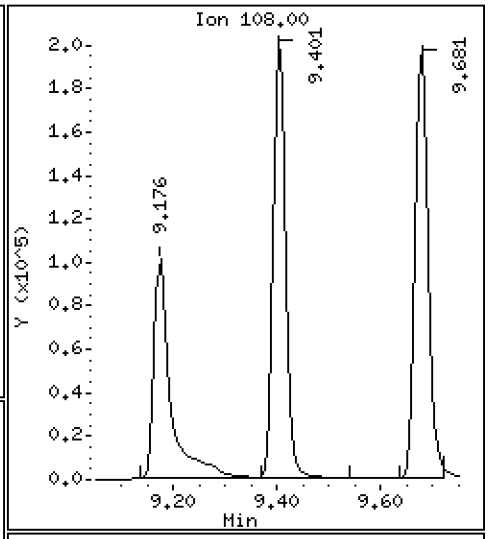
Column phase: ZB-5msi

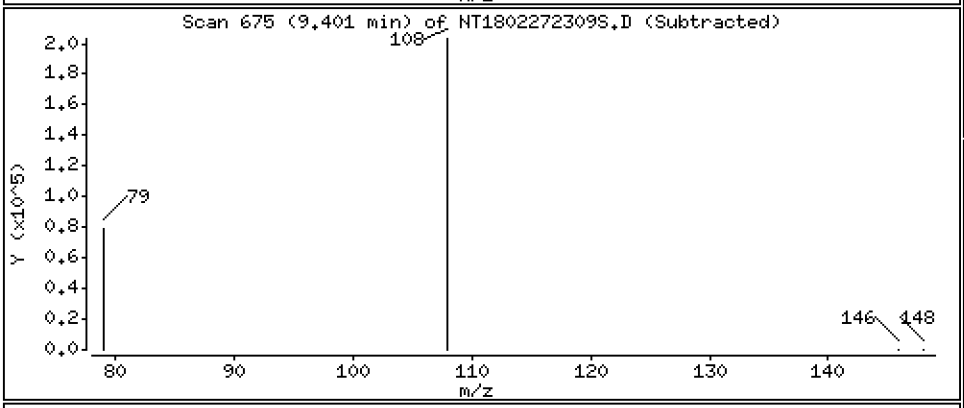
Column diameter: 0.25

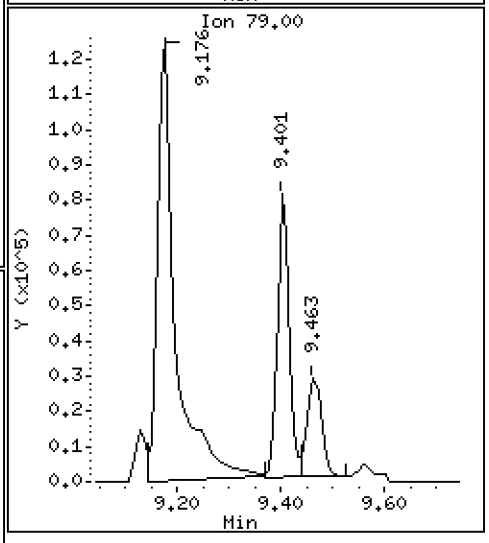
13 2-Methylphenol

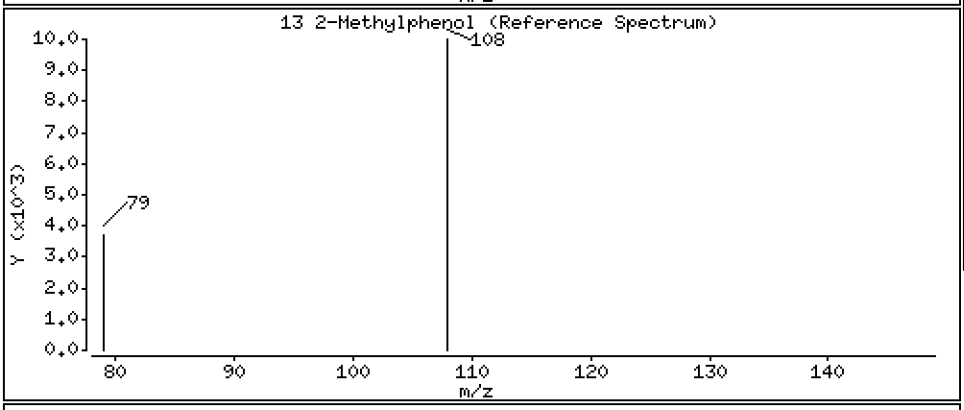
Concentration: 2.922 ug/mL

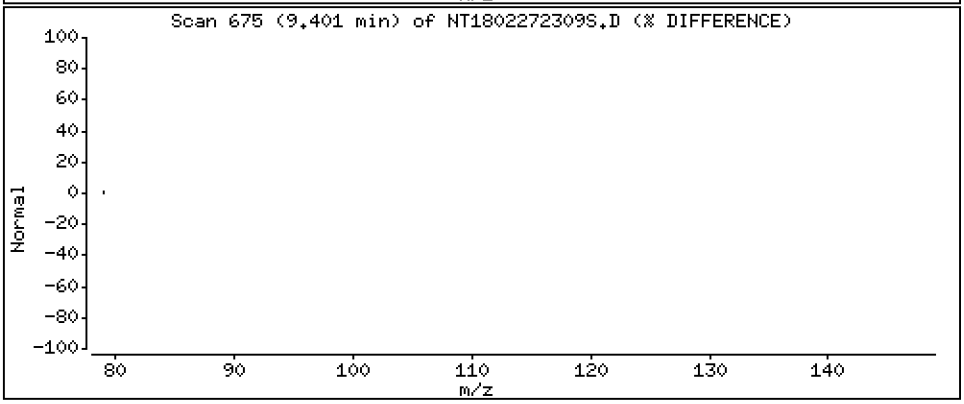












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

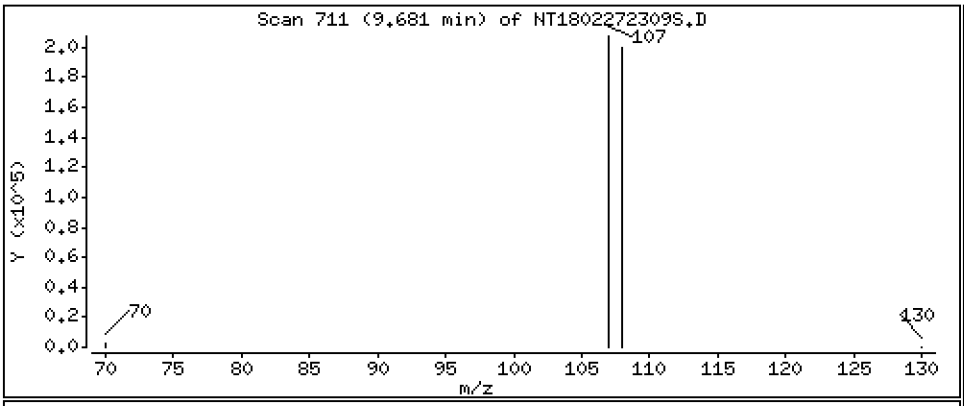
Operator: YZ

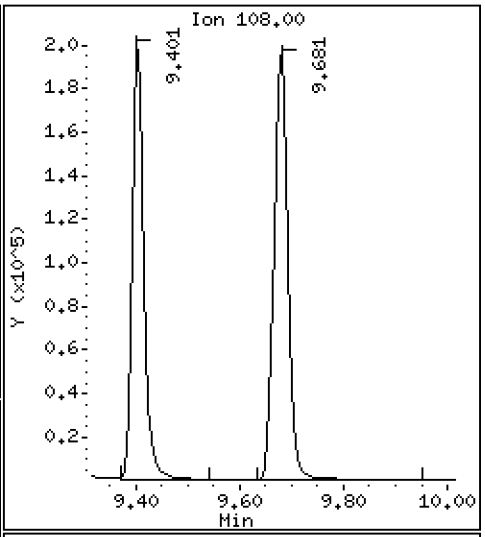
Column phase: ZB-5msi

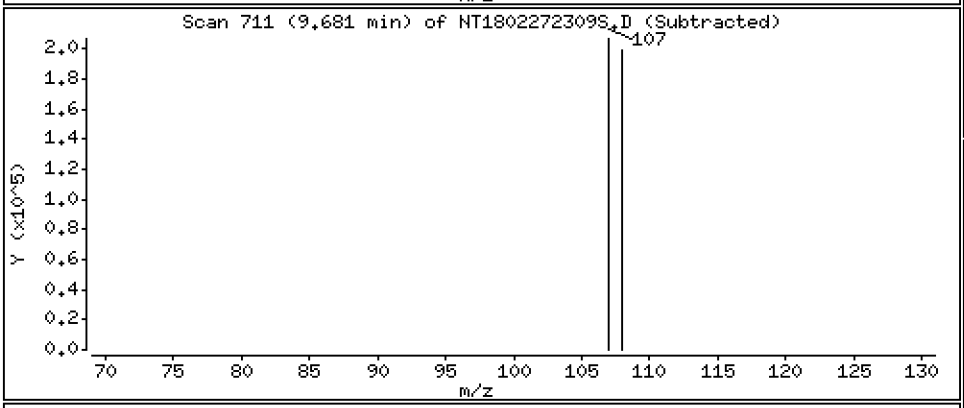
Column diameter: 0.25

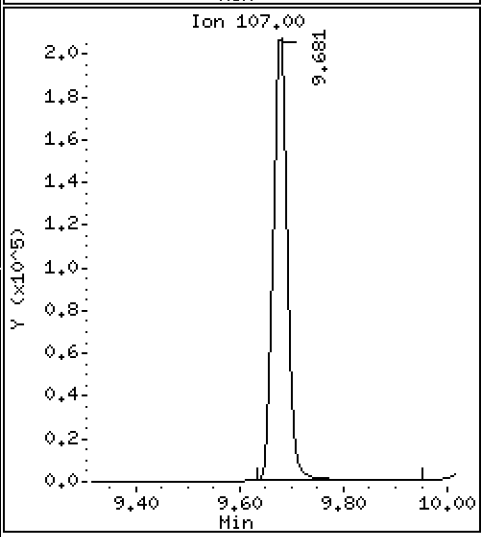
15 4-Methylphenol

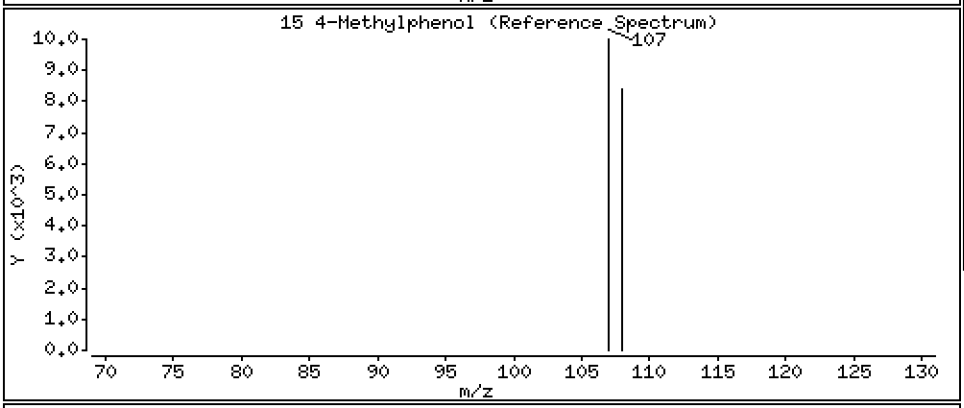
Concentration: 3.398 ug/mL

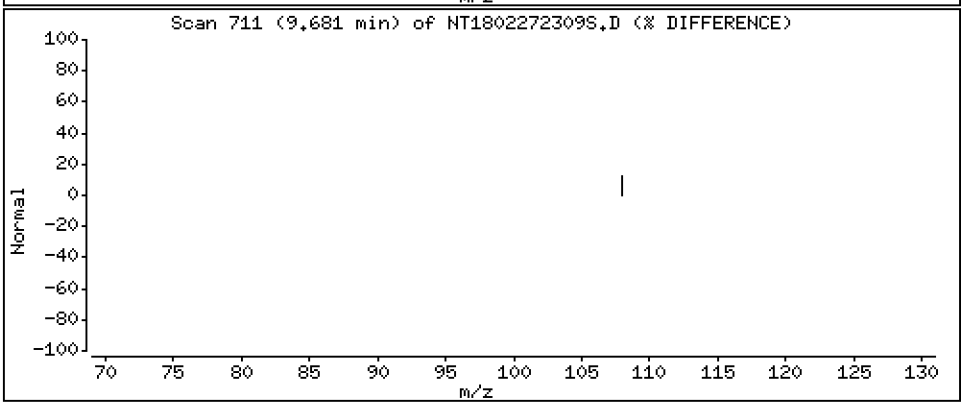












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

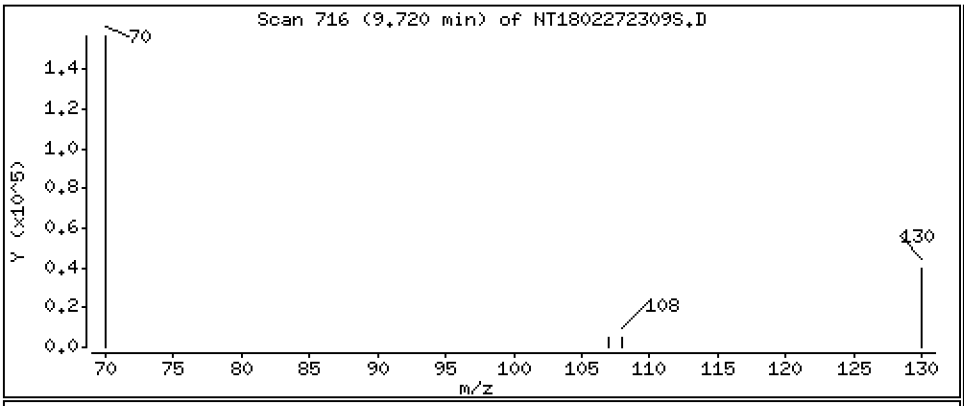
Operator: YZ

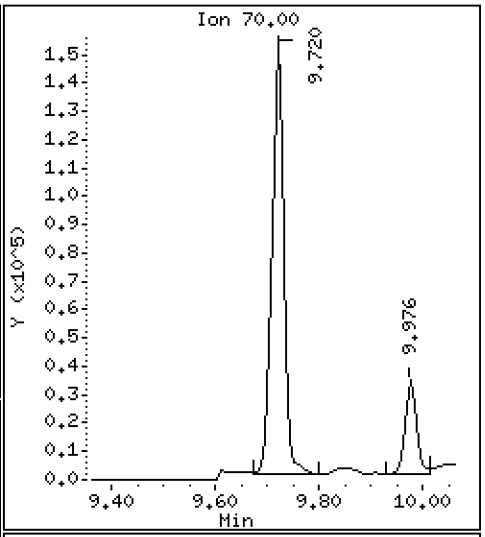
Column phase: ZB-5msi

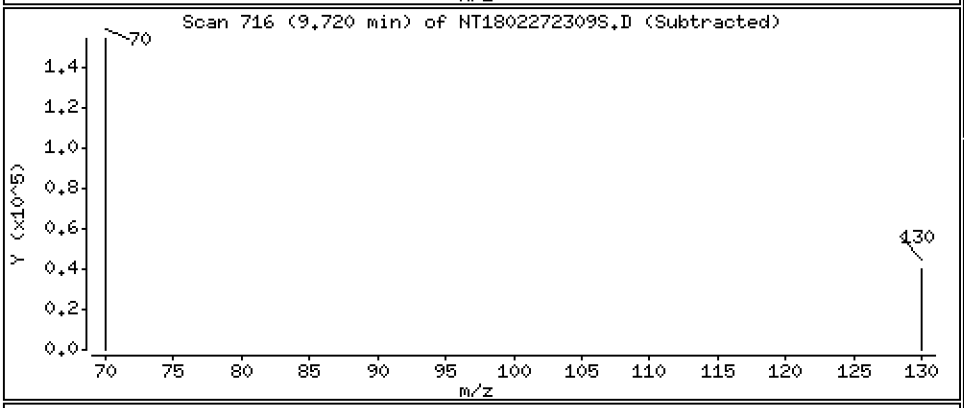
Column diameter: 0.25

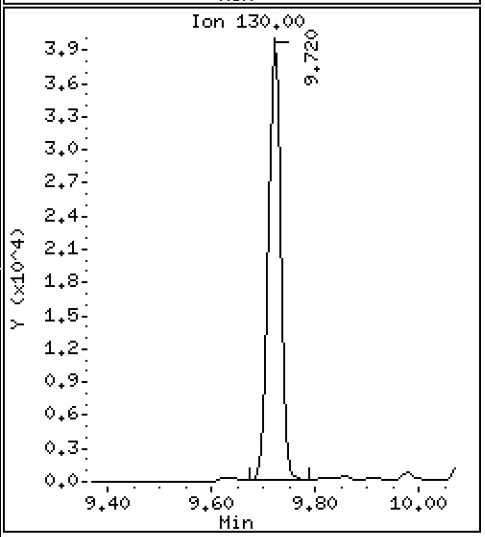
16 N-Nitroso-di-n-propylamine

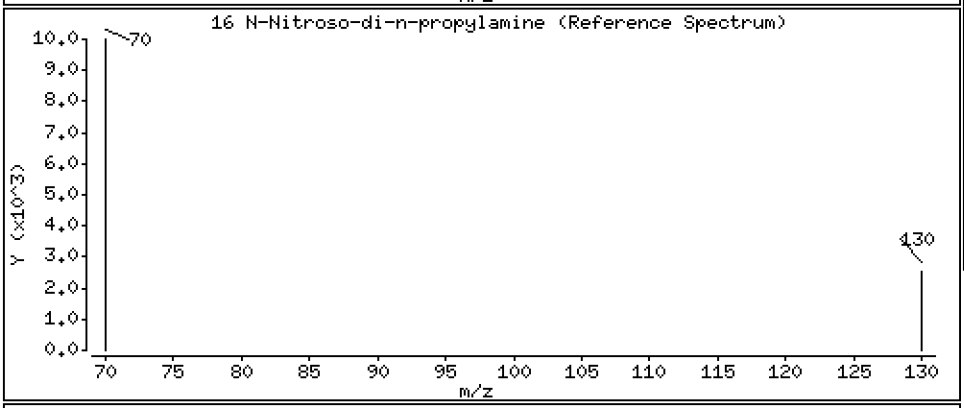
Concentration: 3.242 ug/mL

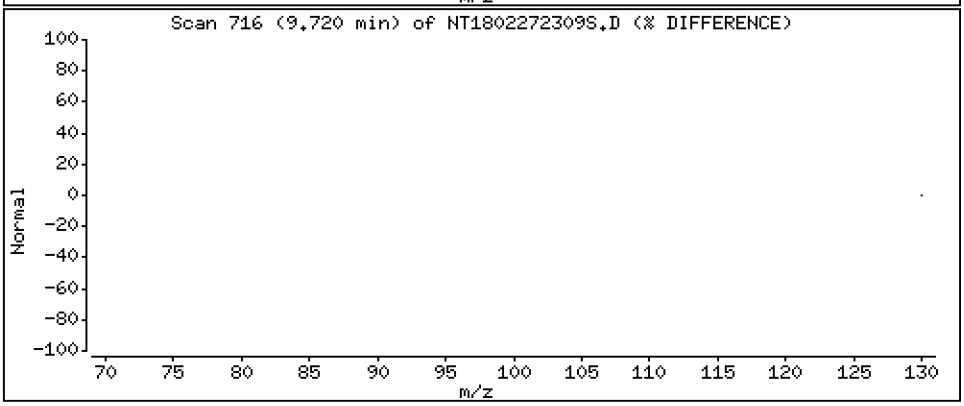












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

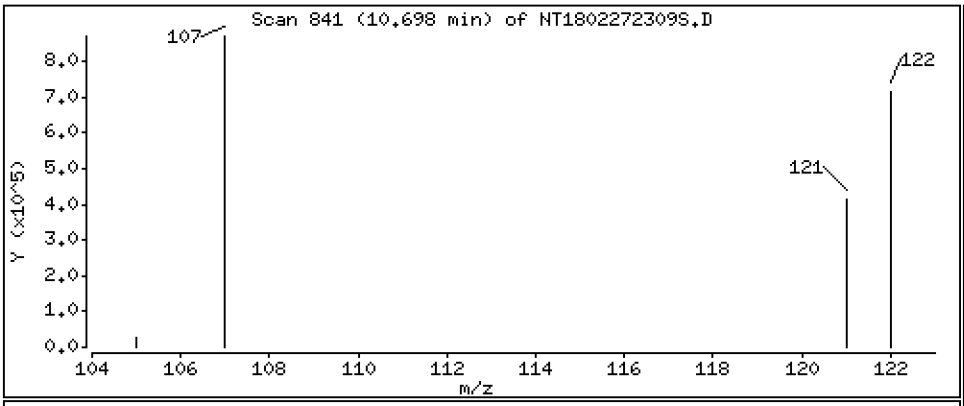
Operator: YZ

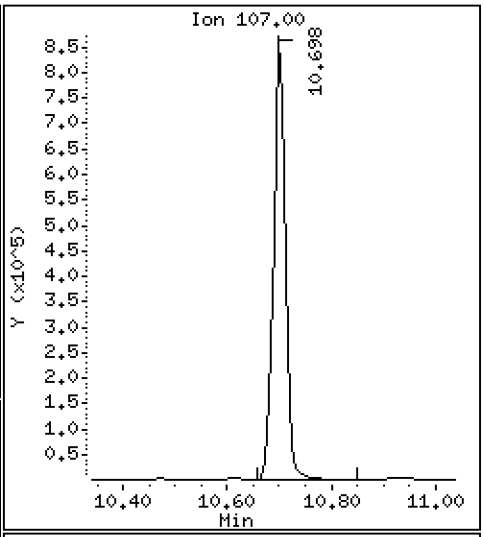
Column phase: ZB-5msi

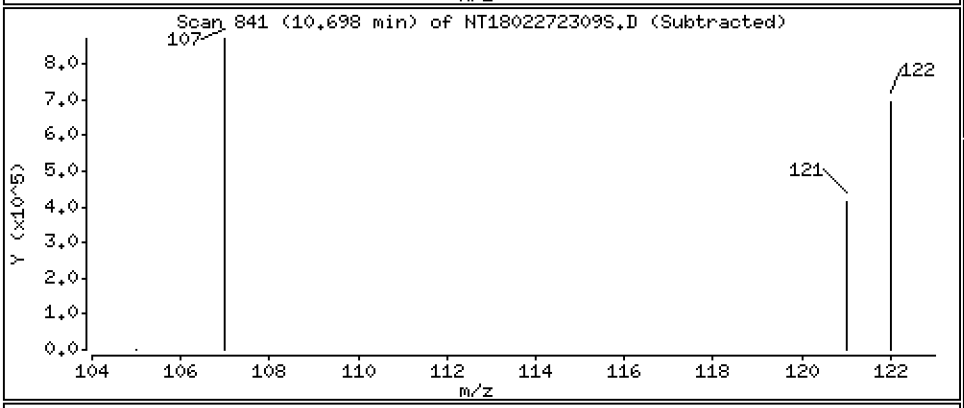
Column diameter: 0.25

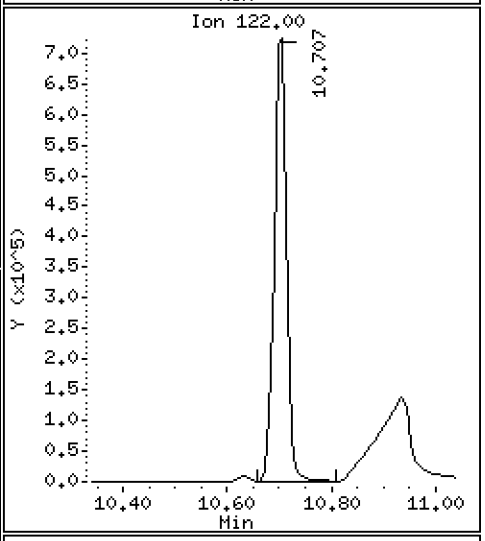
22 2,4-Dimethylphenol

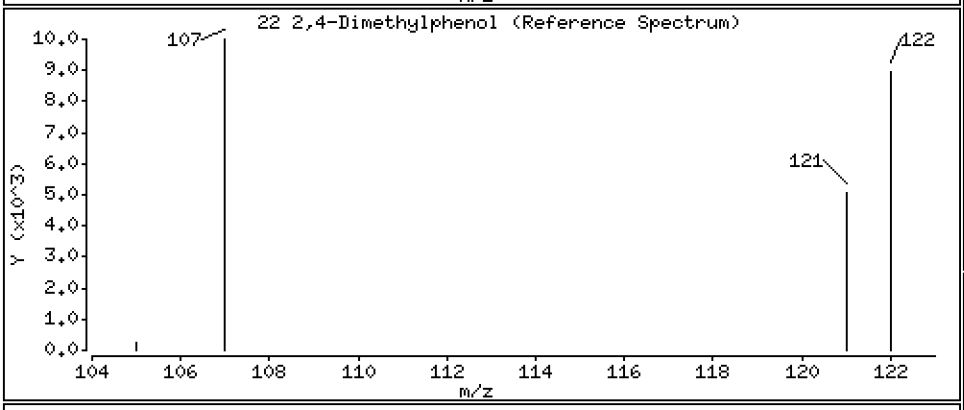
Concentration: 12.52 ug/mL

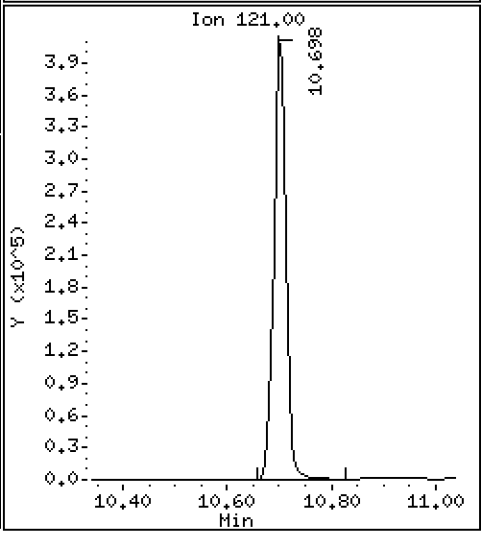


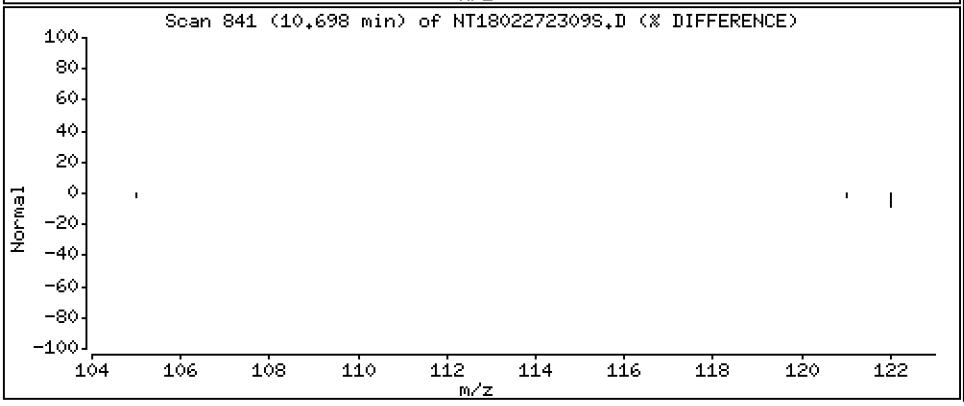












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

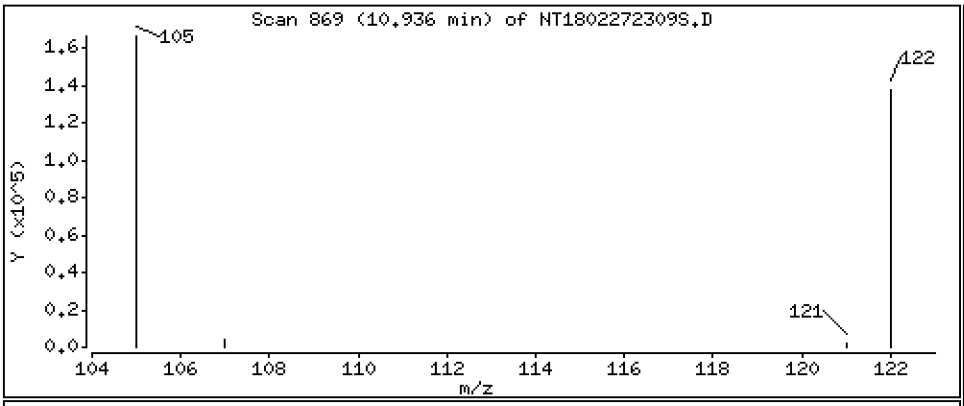
Operator: YZ

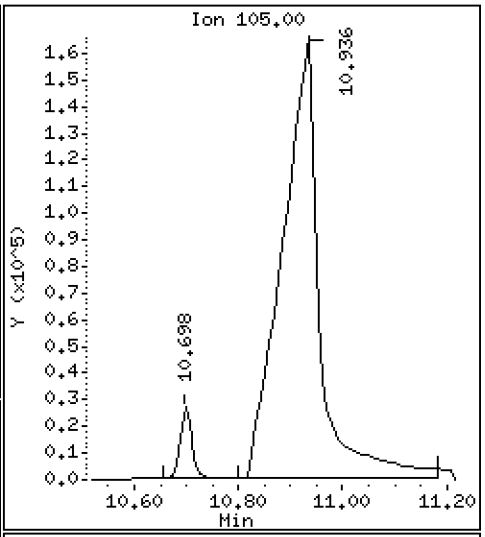
Column phase: ZB-5msi

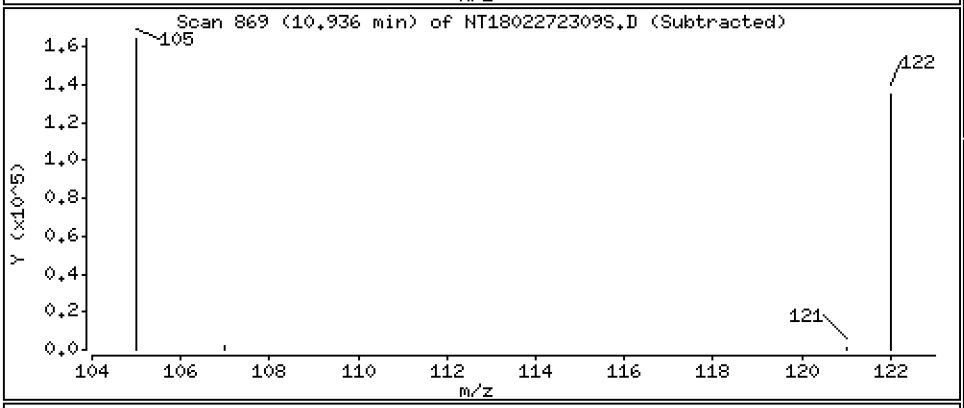
Column diameter: 0.25

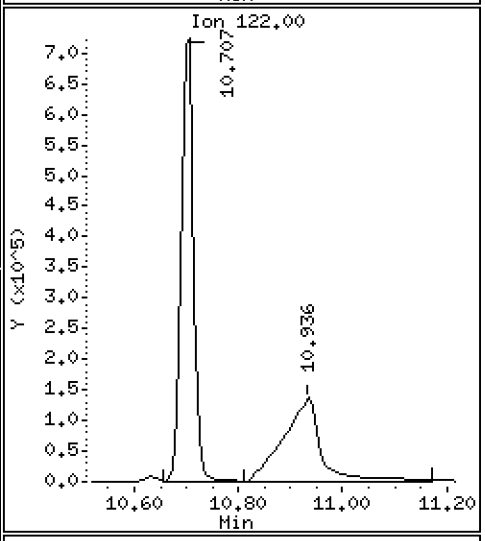
24 Benzoic acid

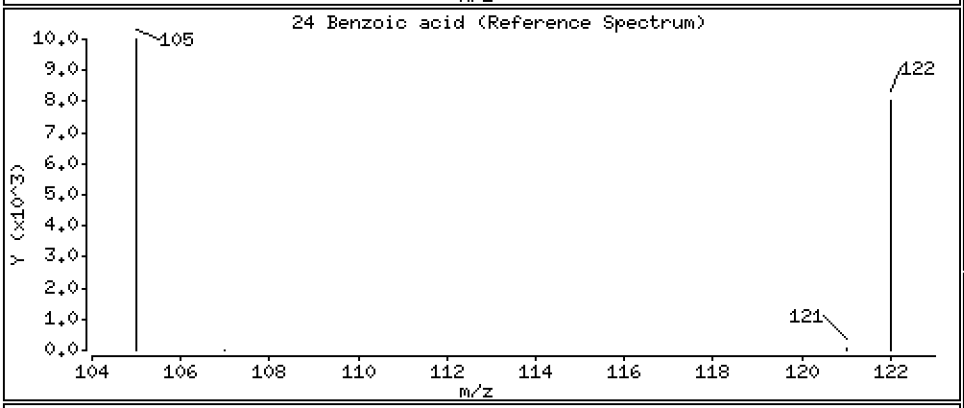
Concentration: 18.14 ug/mL

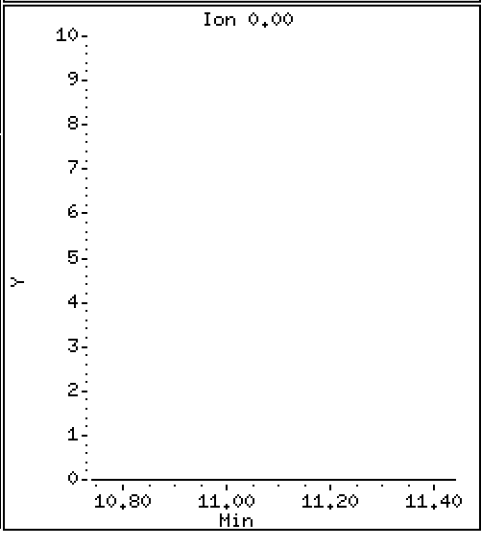


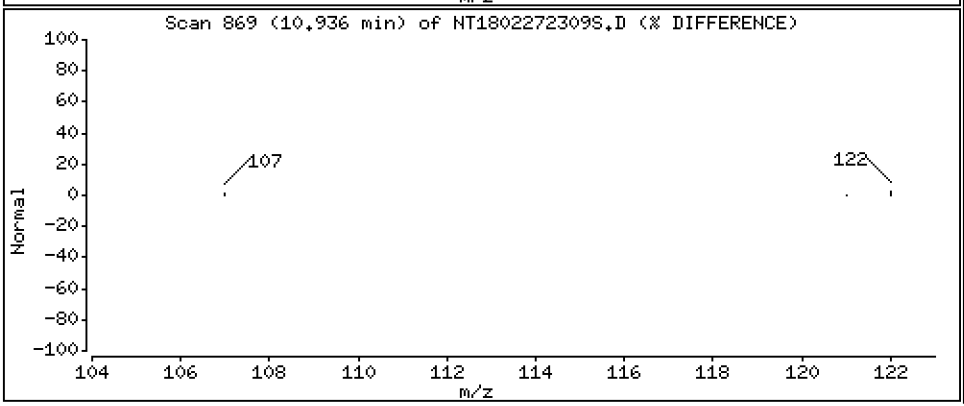












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

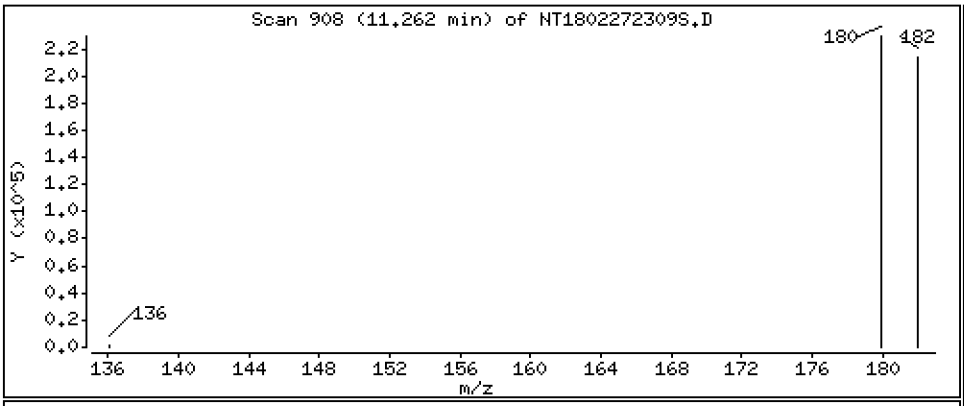
Operator: YZ

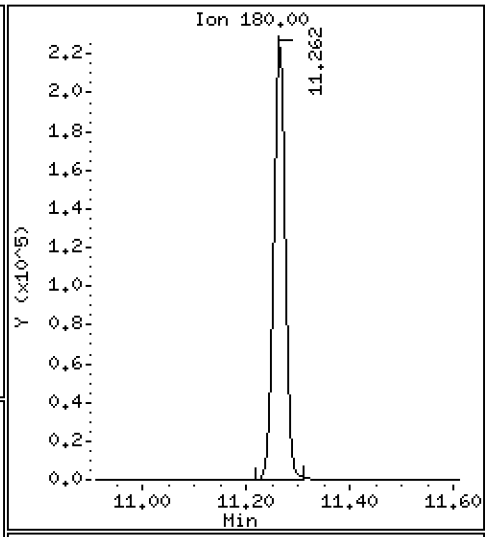
Column phase: ZB-5msi

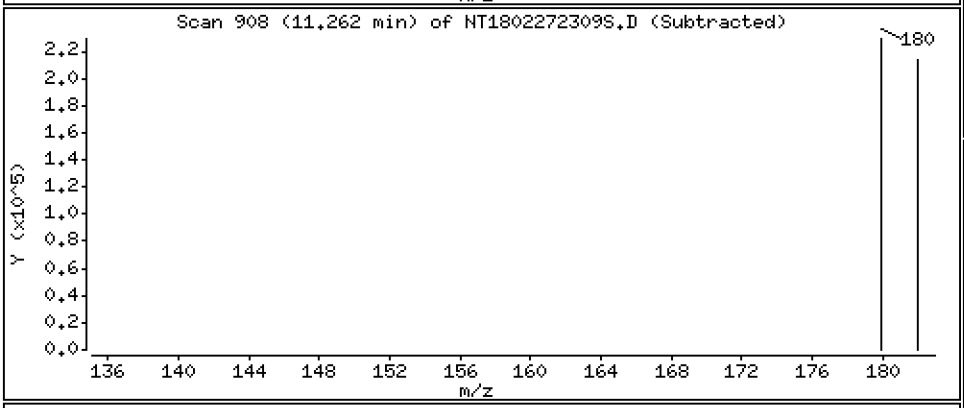
Column diameter: 0.25

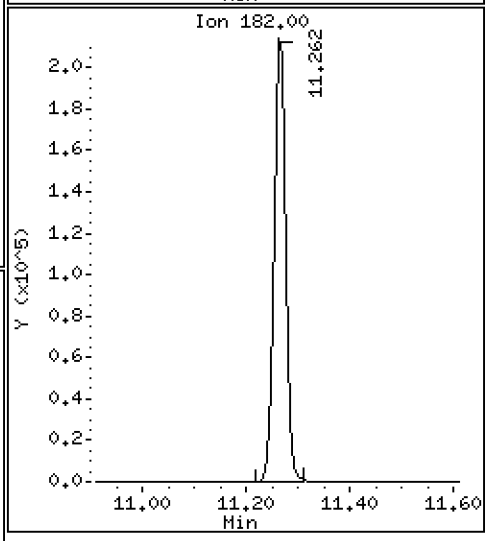
26 1,2,4-Trichlorobenzene

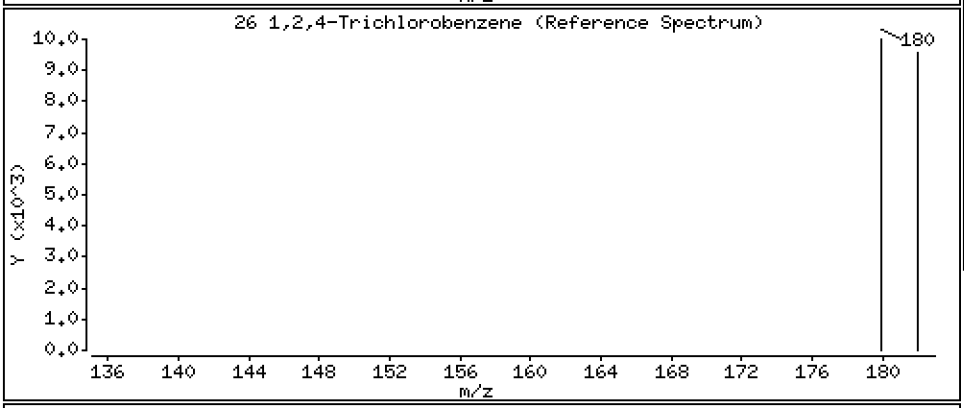
Concentration: 3.285 ug/mL

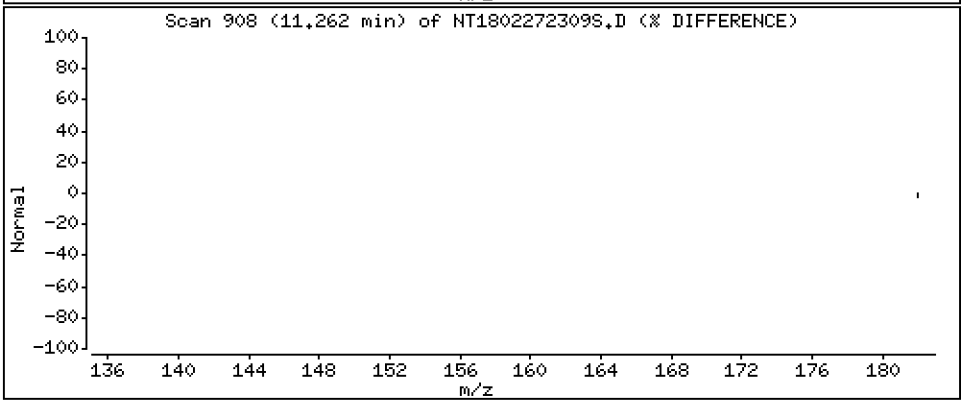












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

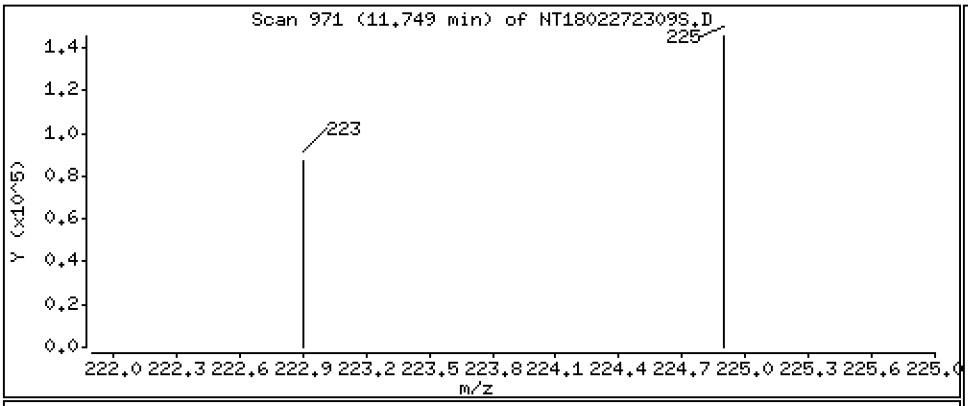
Operator: YZ

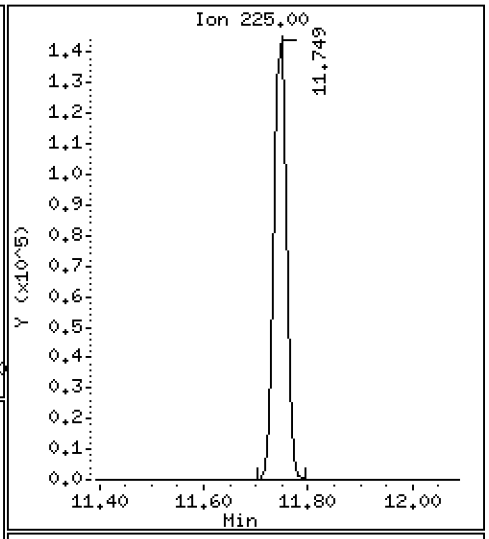
Column phase: ZB-5msi

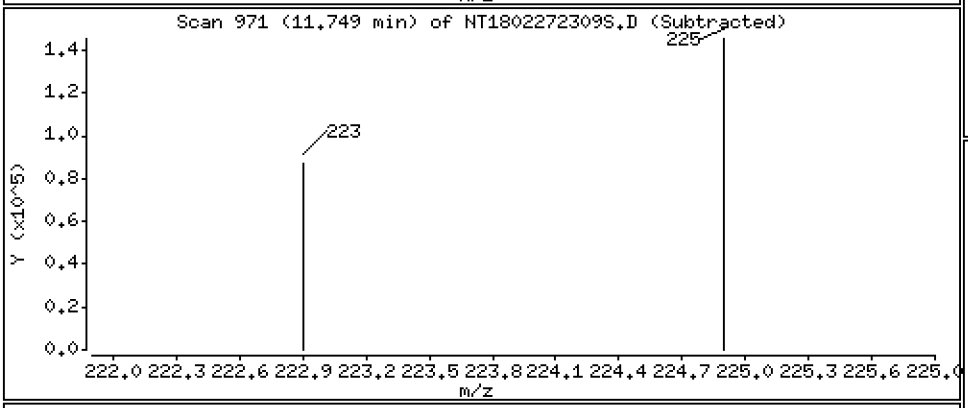
Column diameter: 0.25

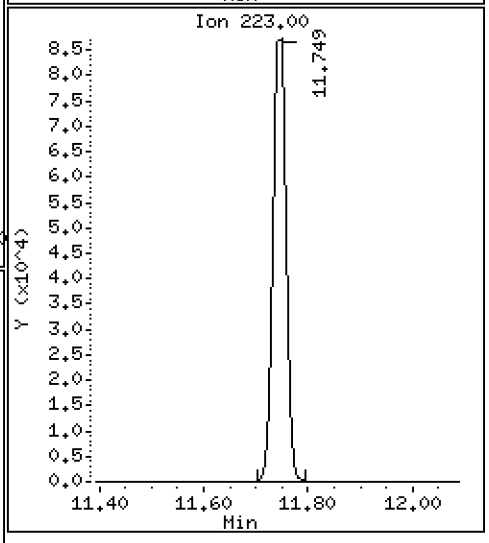
30 Hexachlorobutadiene

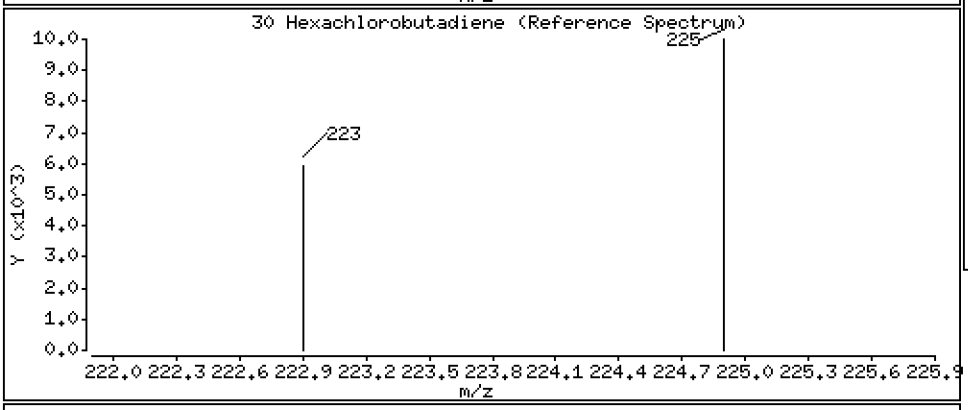
Concentration: 3.451 ug/mL

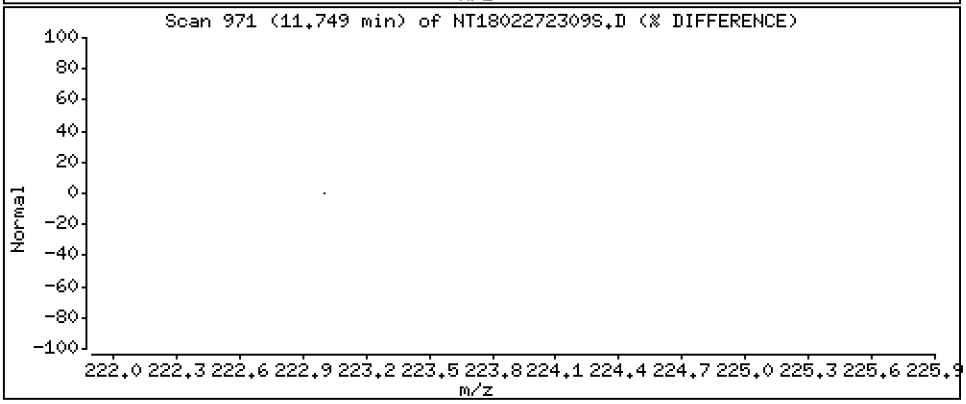












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

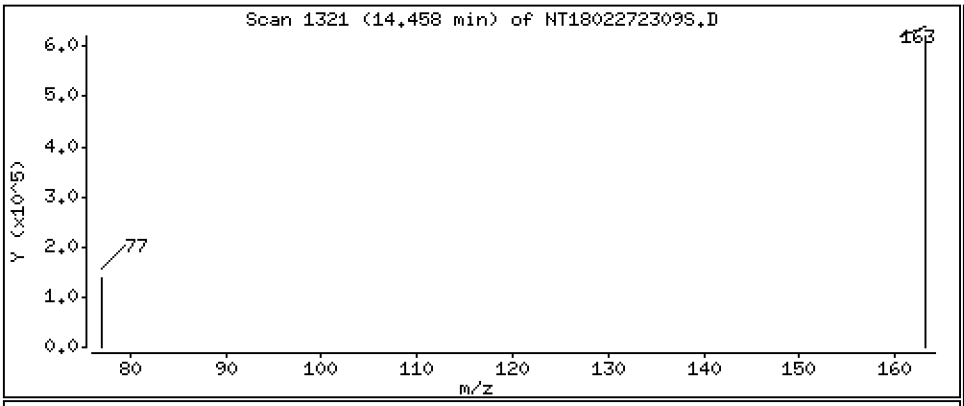
Operator: YZ

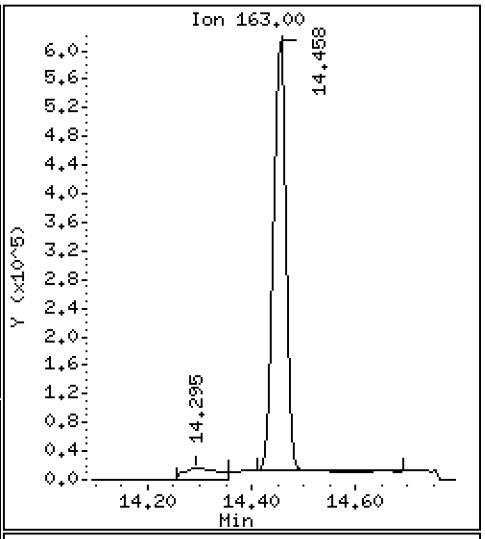
Column phase: ZB-5msi

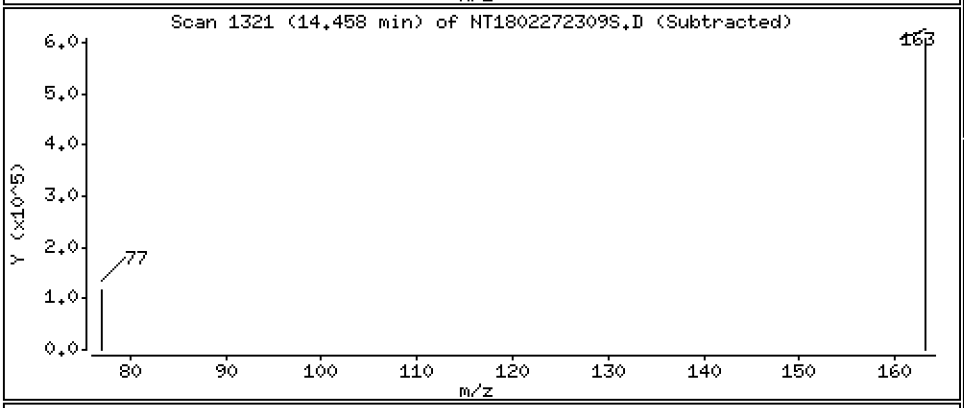
Column diameter: 0.25

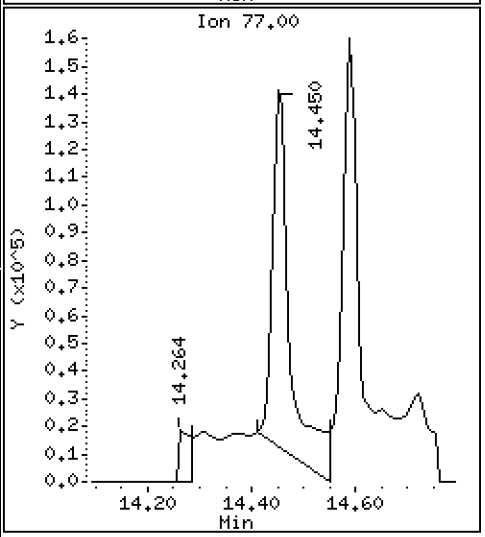
39 Dimethylphthalate

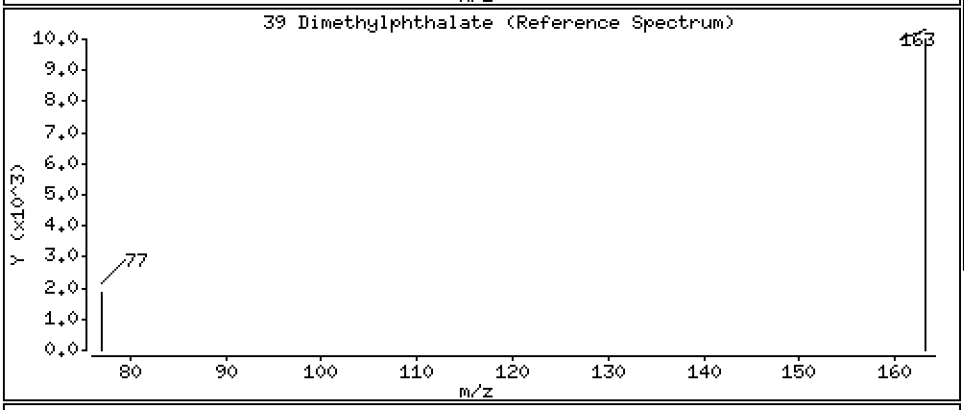
Concentration: 3.752 ug/mL

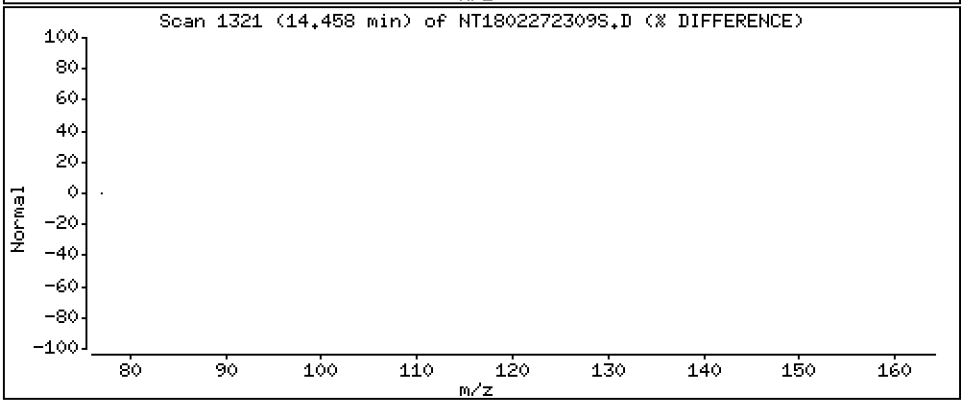












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

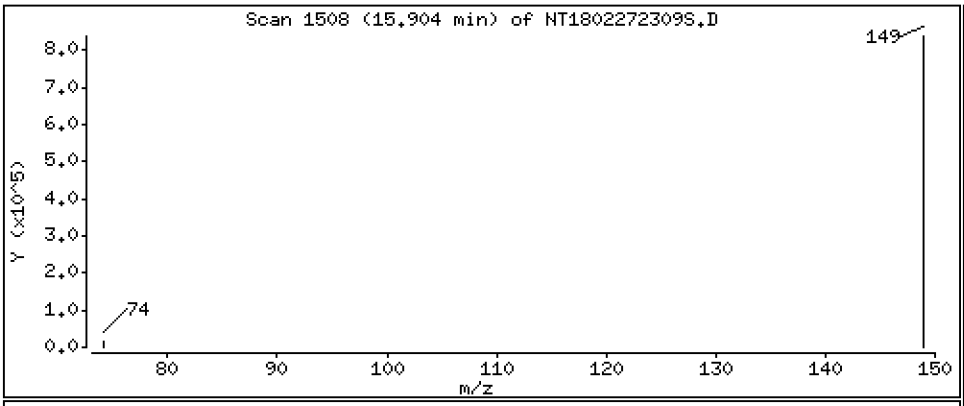
Operator: YZ

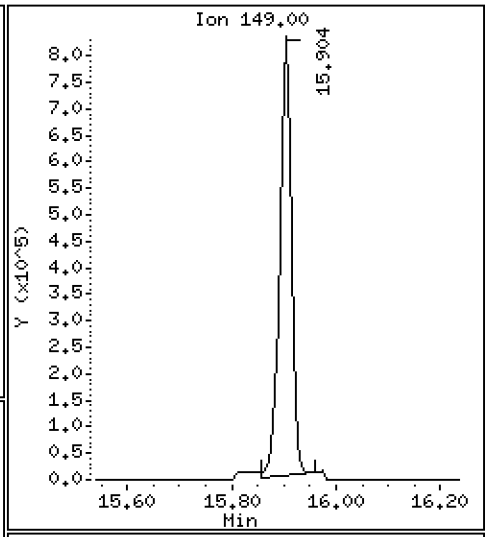
Column phase: ZB-5msi

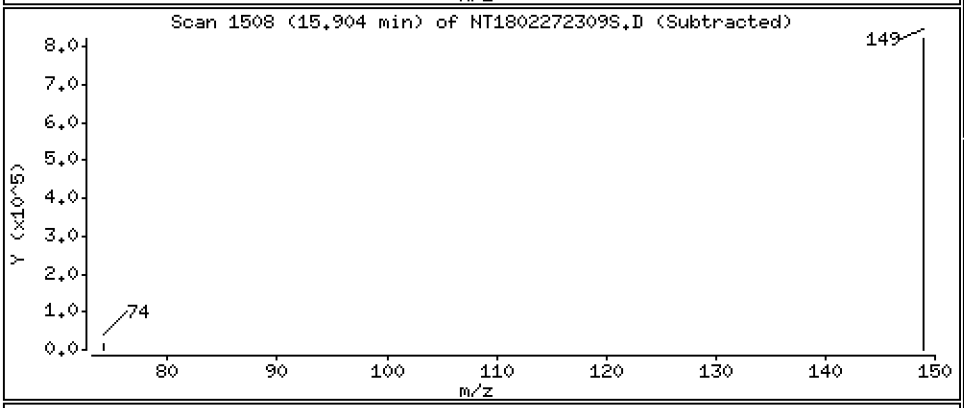
Column diameter: 0.25

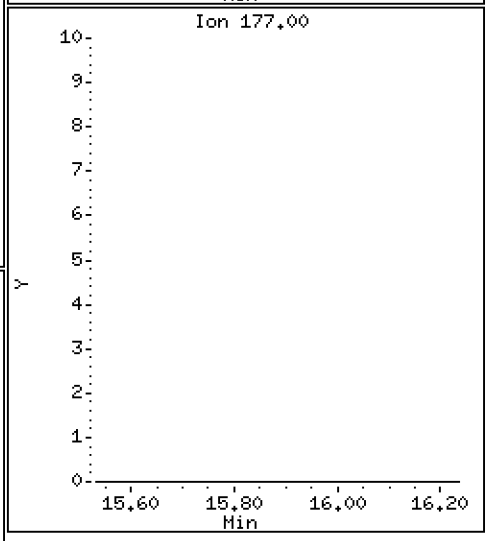
50 Diethylphthalate

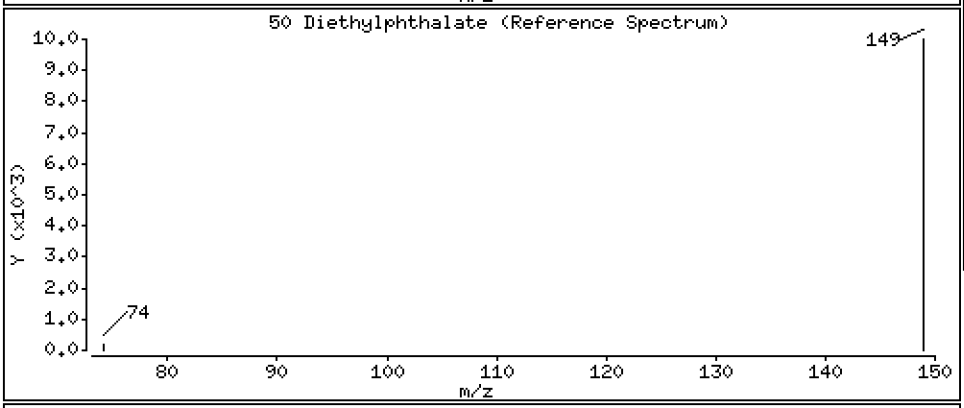
Concentration: 5.595 ug/mL

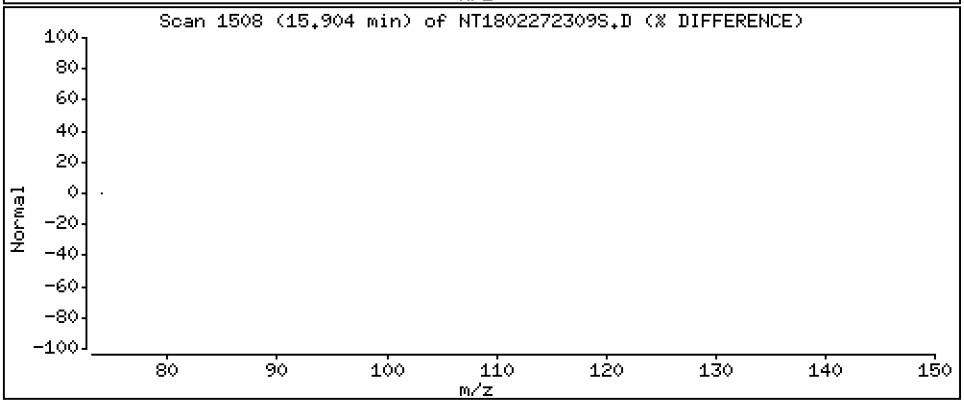












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

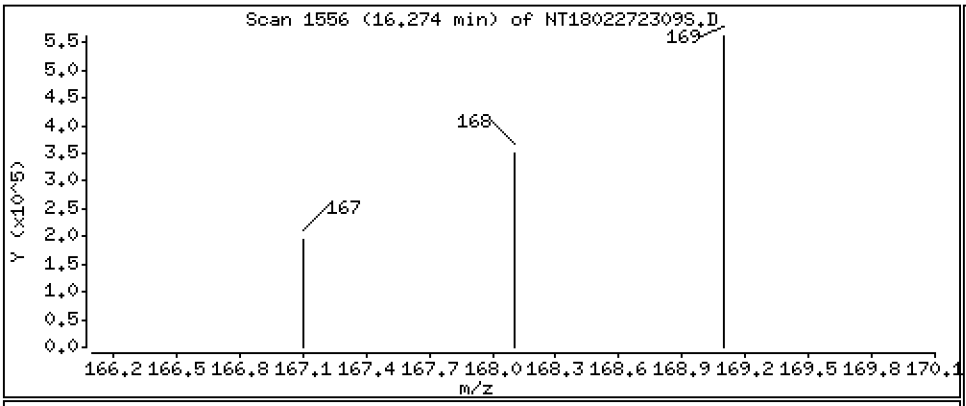
Operator: YZ

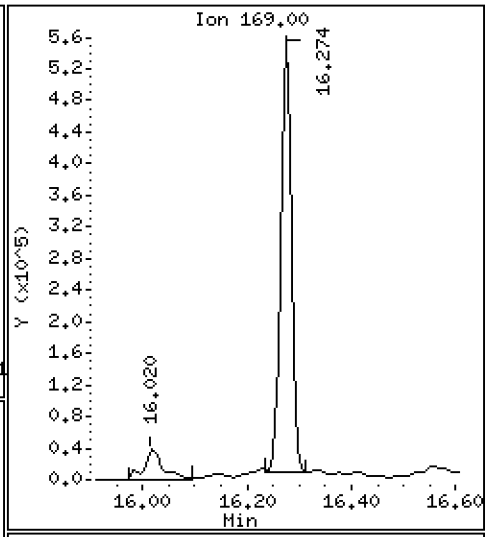
Column phase: ZB-5msi

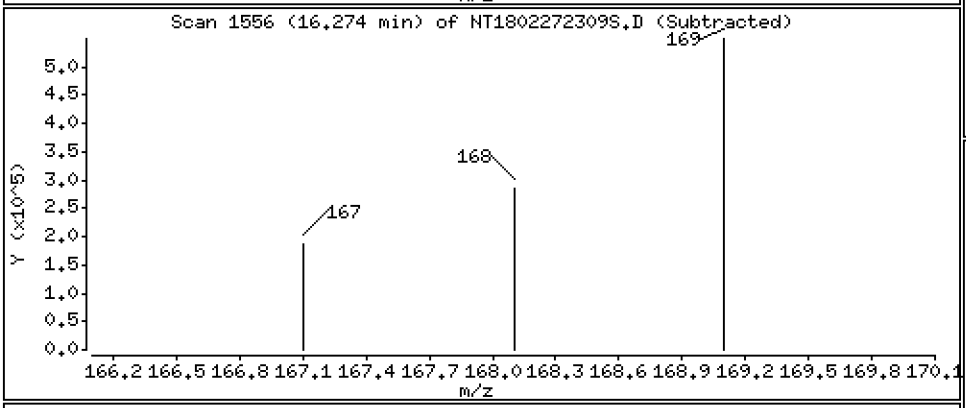
Column diameter: 0.25

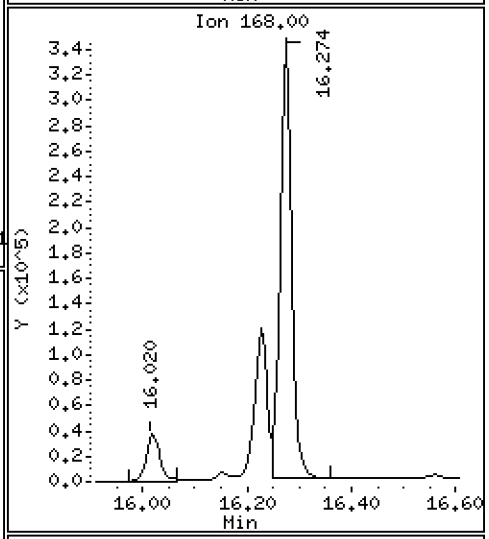
54 N-Nitrosodiphenylamine

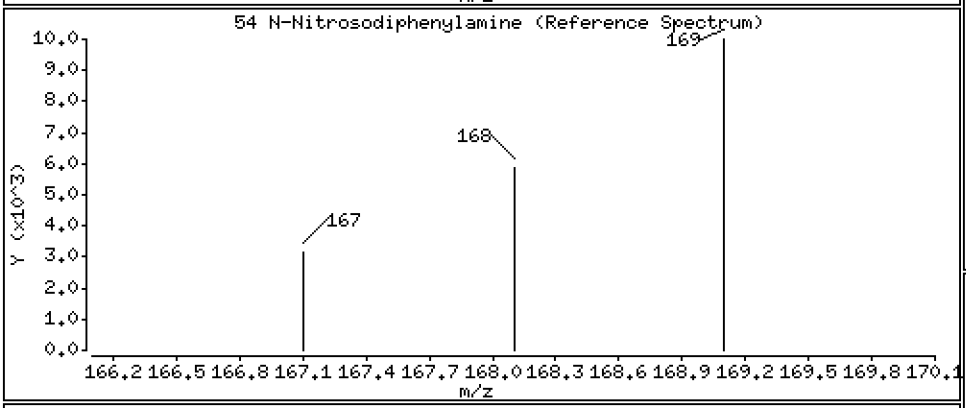
Concentration: 3.491 ug/mL

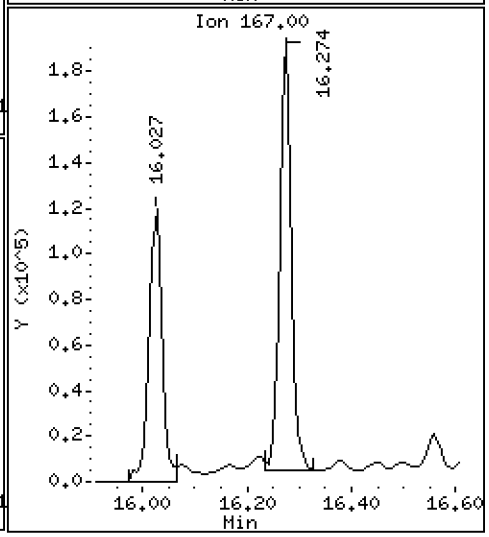


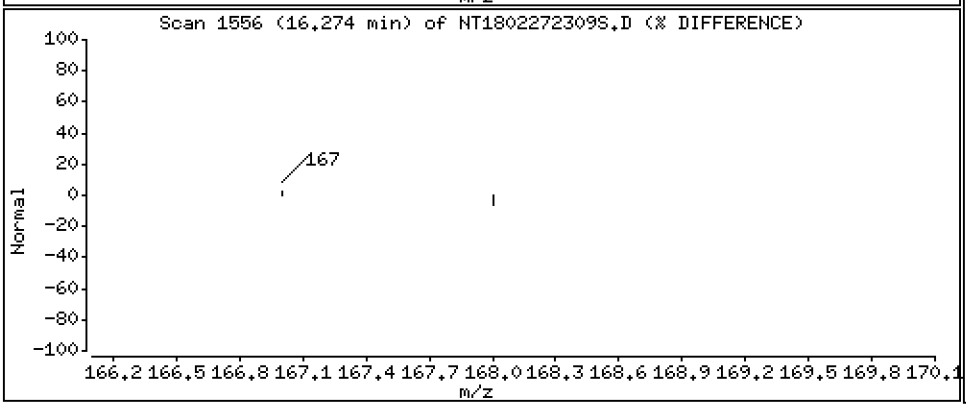












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

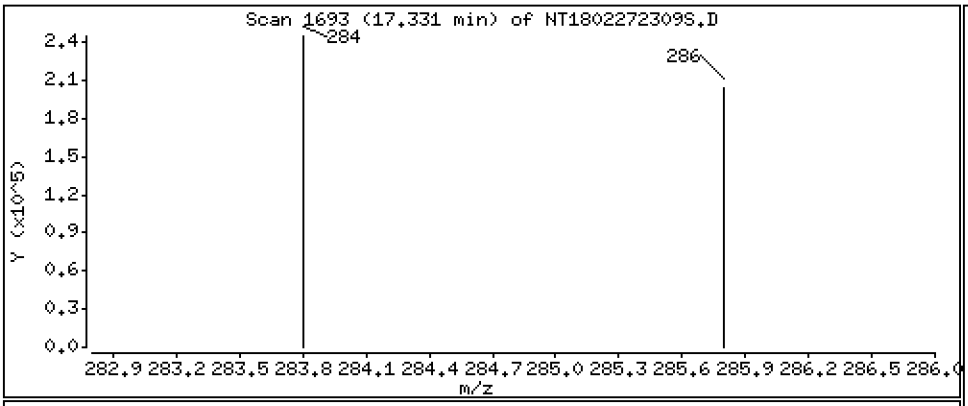
Operator: YZ

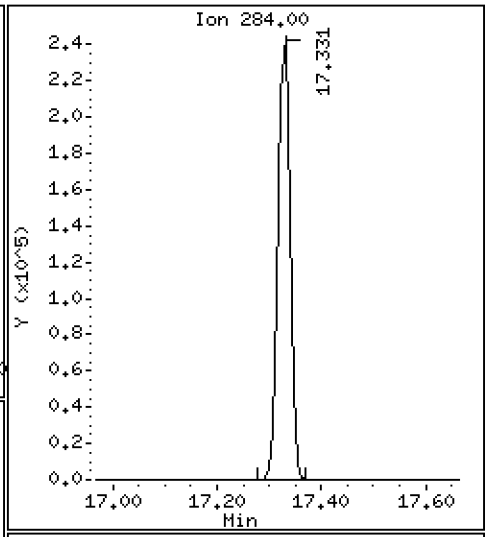
Column phase: ZB-5msi

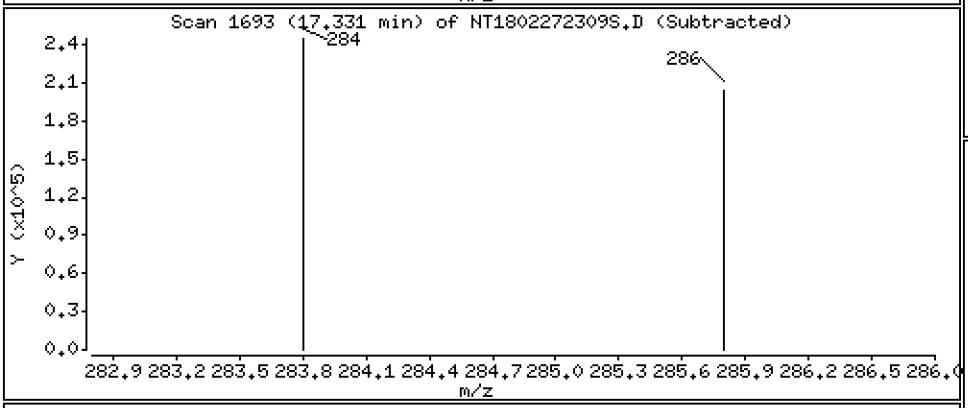
Column diameter: 0.25

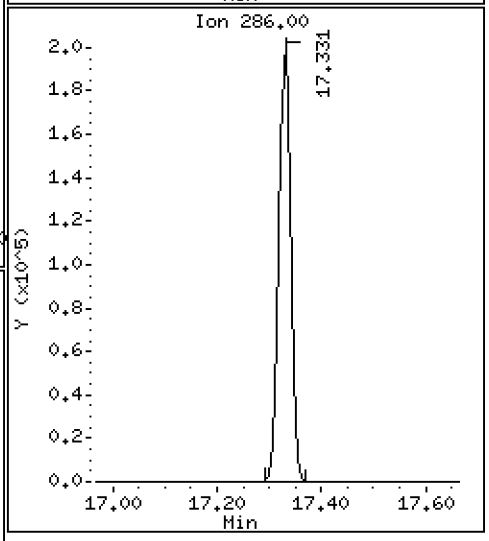
57 Hexachlorobenzene

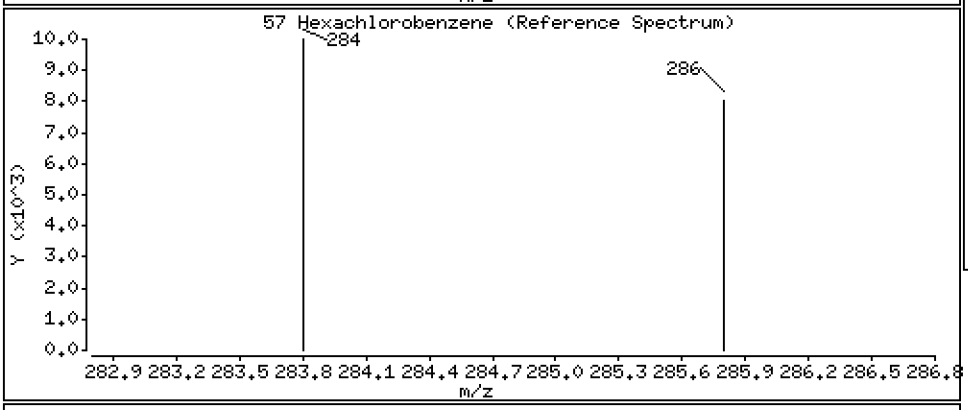
Concentration: 3.420 ug/mL

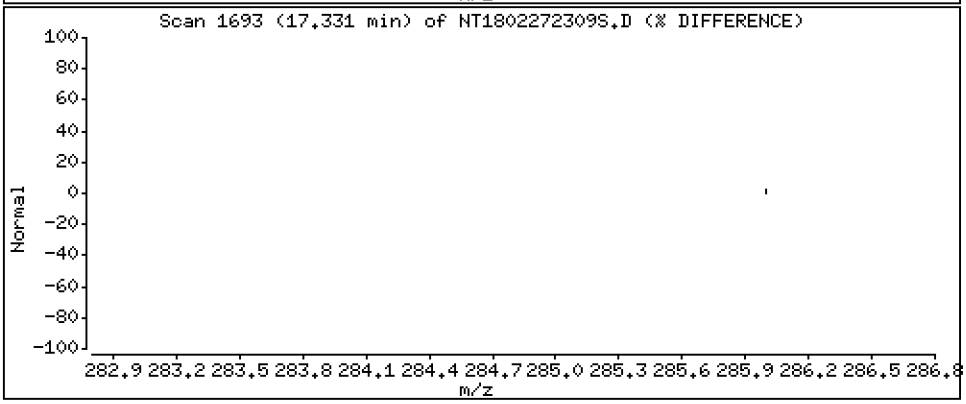












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

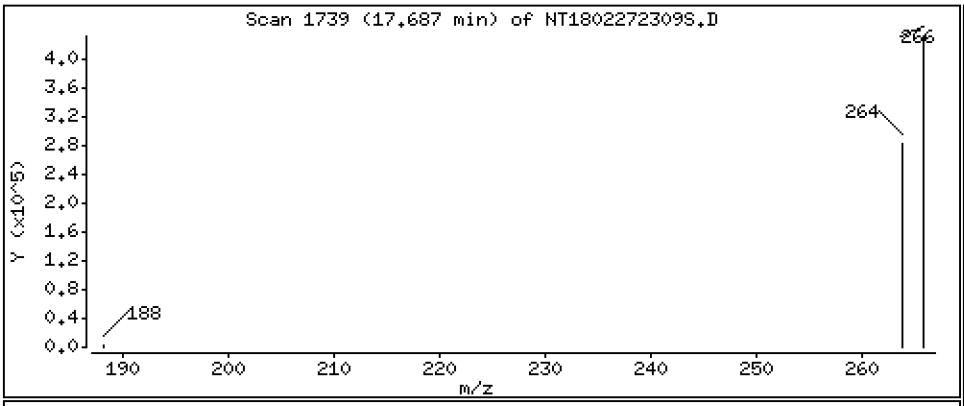
Operator: YZ

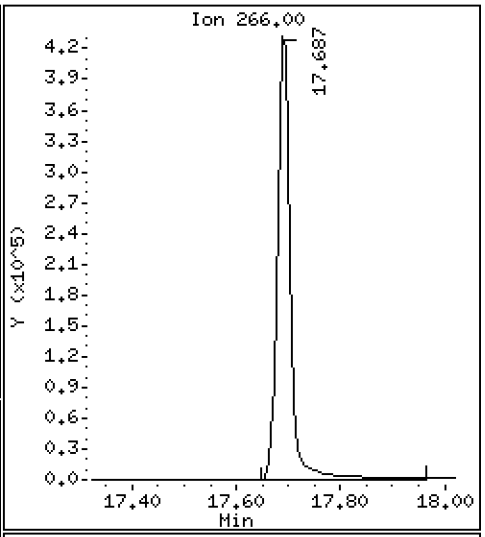
Column phase: ZB-5msi

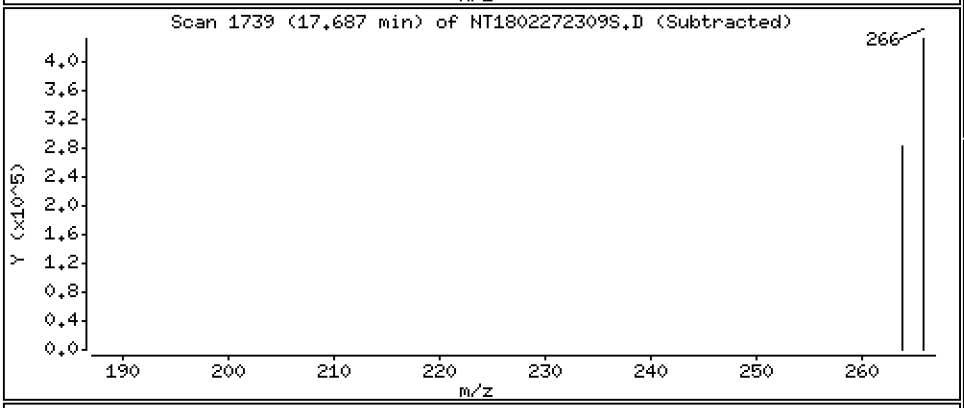
Column diameter: 0.25

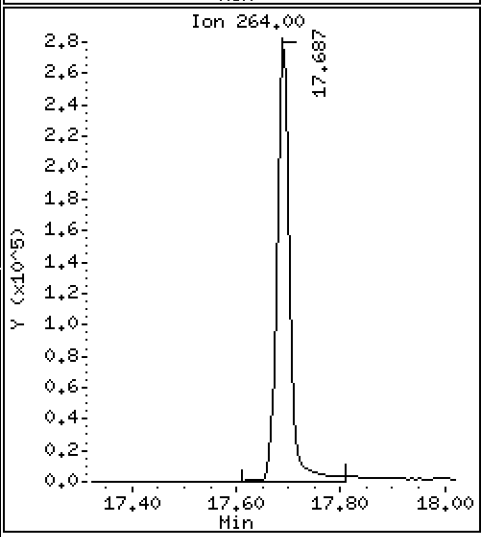
58 Pentachlorophenol

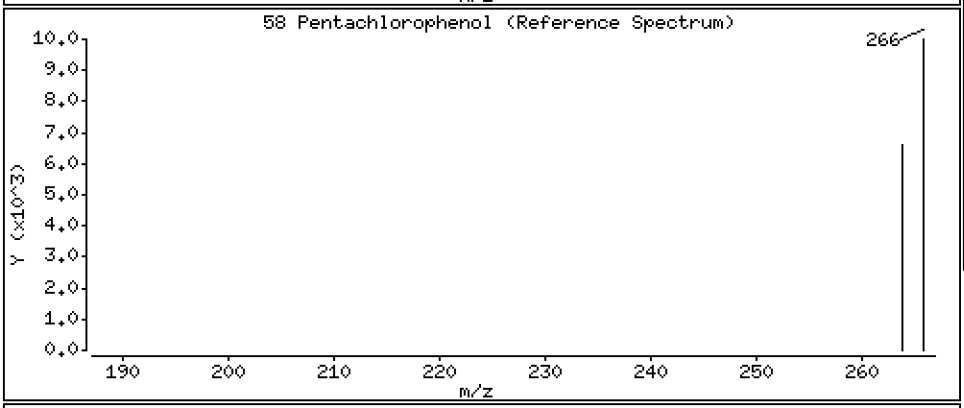
Concentration: 20.82 ug/mL

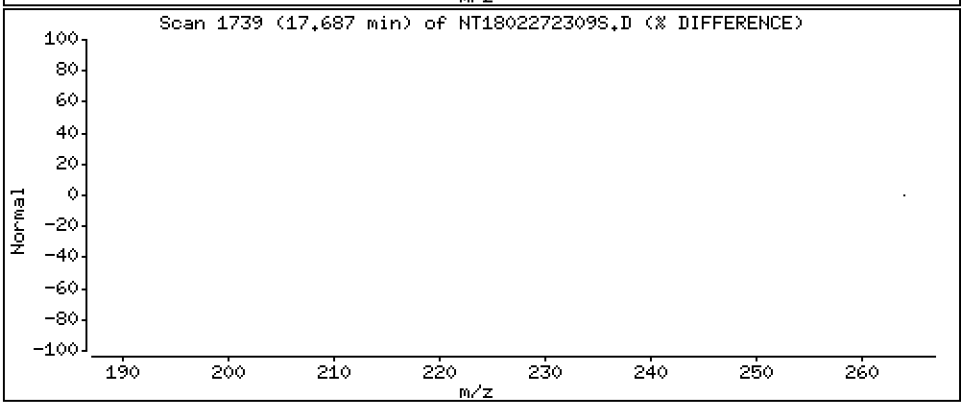












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

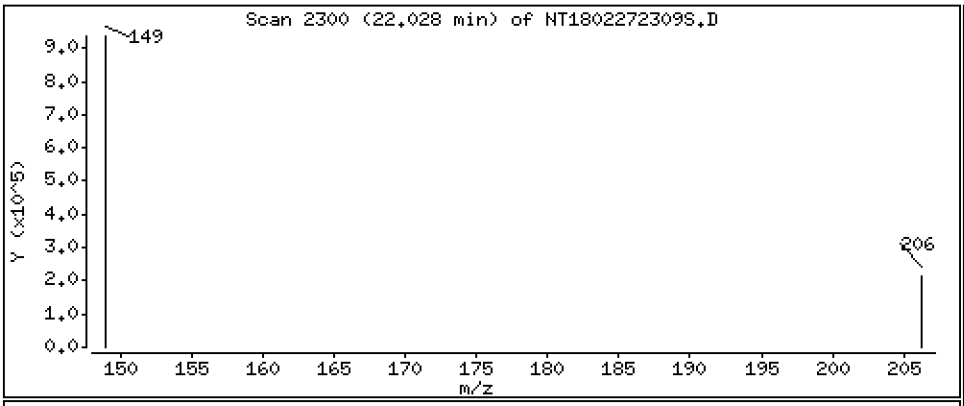
Operator: YZ

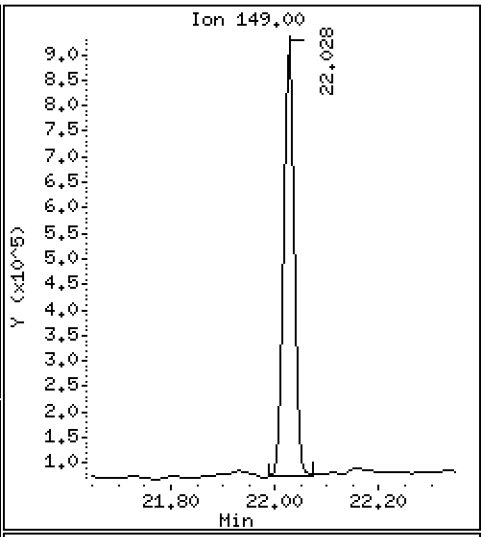
Column phase: ZB-5msi

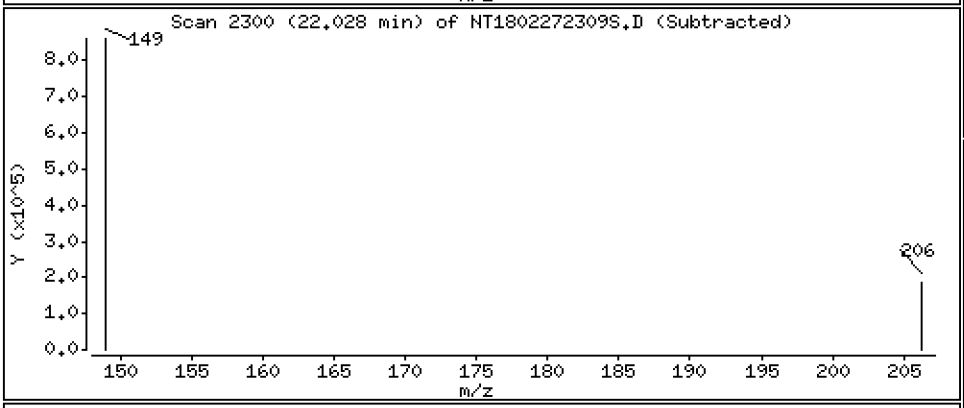
Column diameter: 0.25

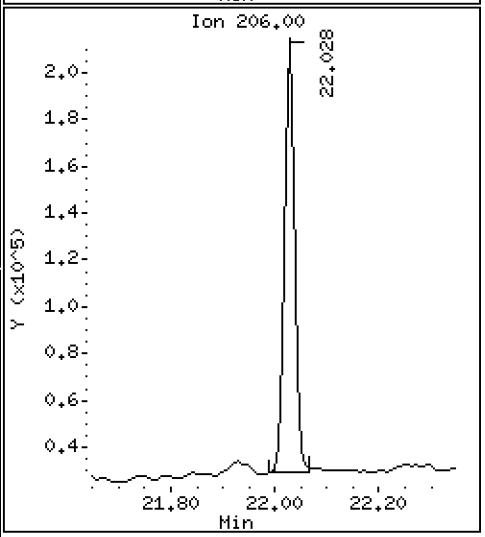
67 Butylbenzylphthalate

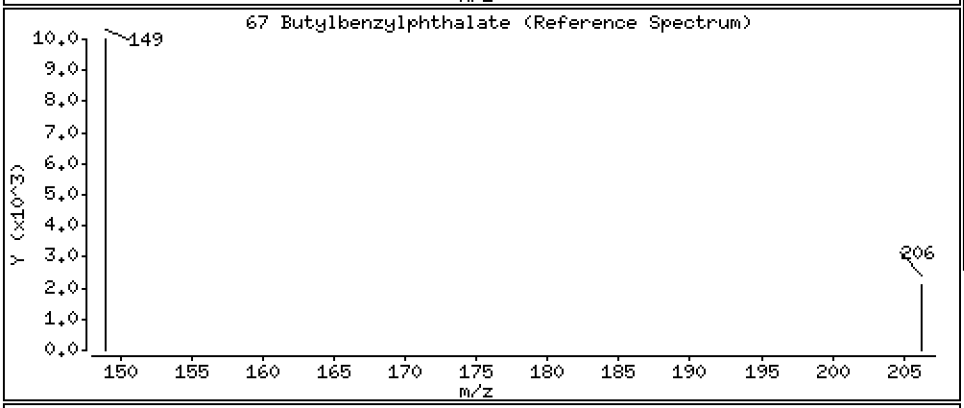
Concentration: 5.223 ug/mL

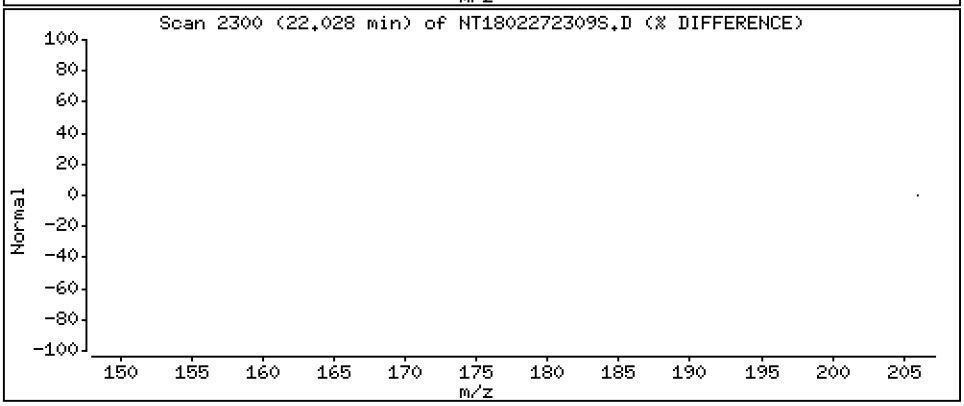












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Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

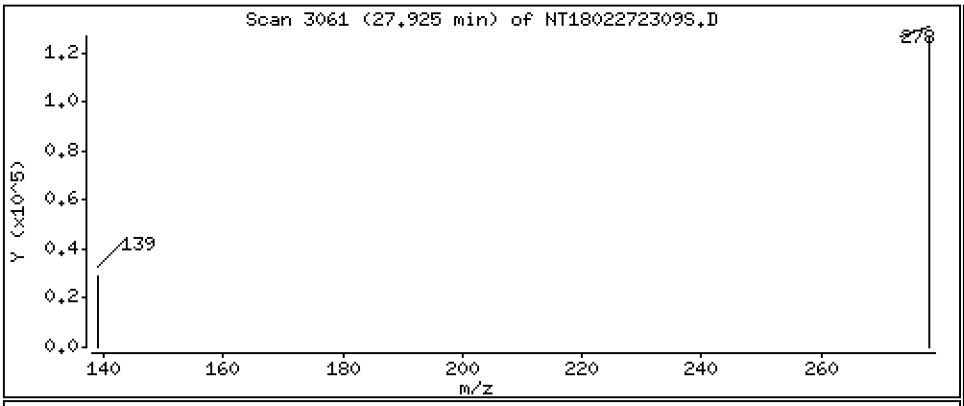
Operator: YZ

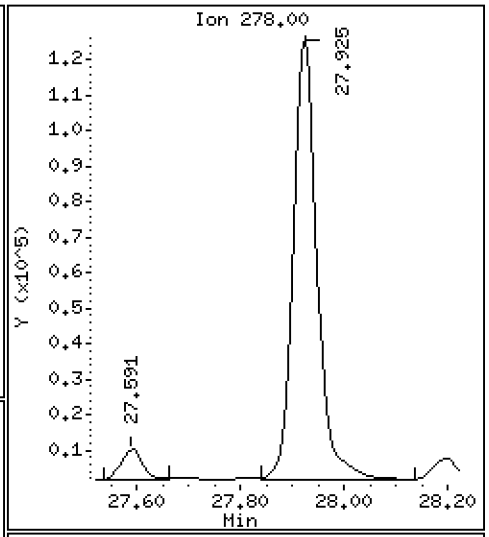
Column phase: ZB-5msi

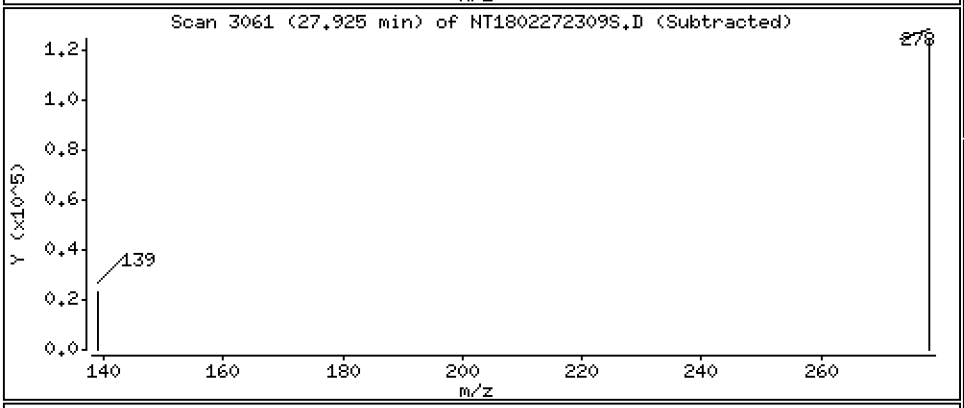
Column diameter: 0.25

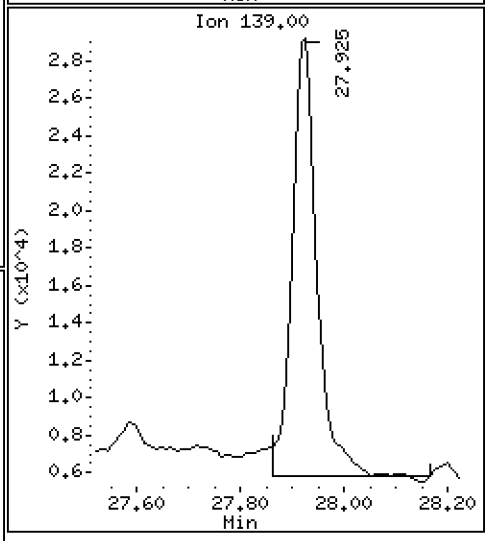
79 Dibenzo(a,h)anthracene

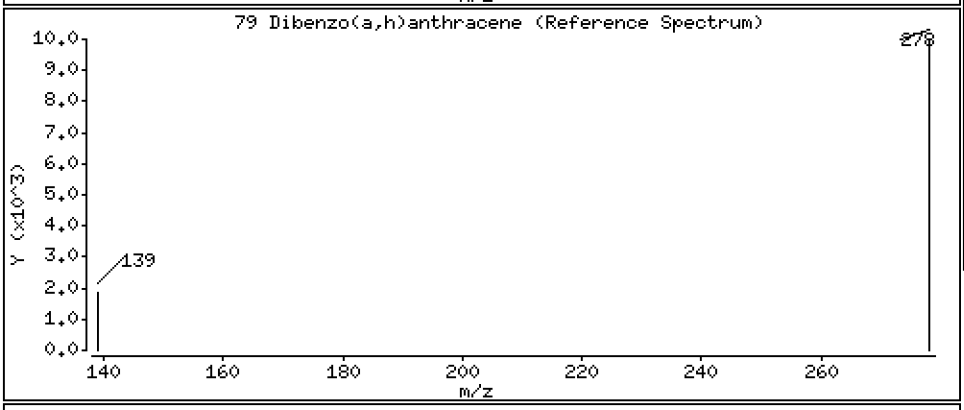
Concentration: 1.414 ug/mL

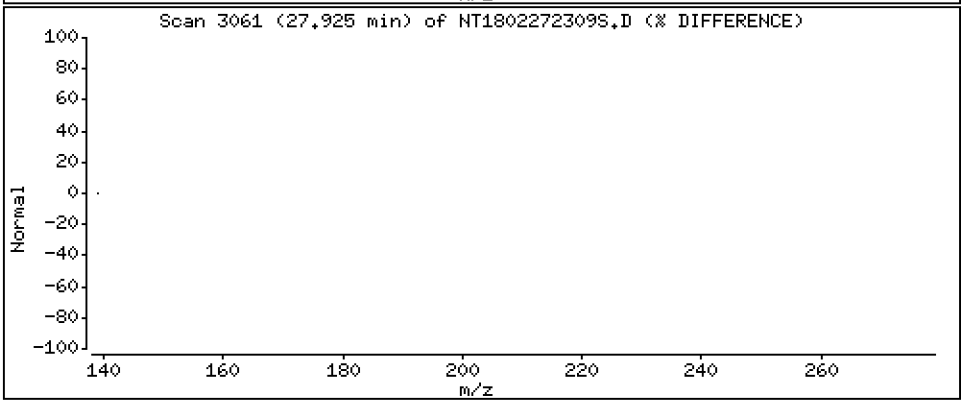












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D

Date : 27-FEB-2023 22:32

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MS2

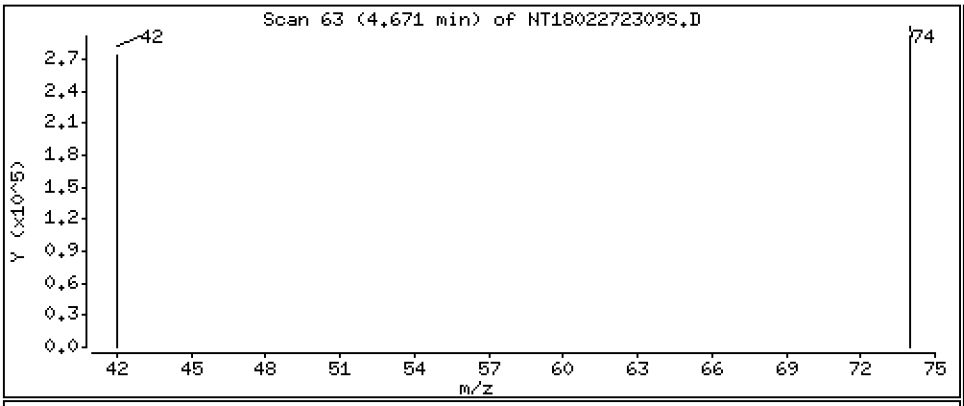
Operator: YZ

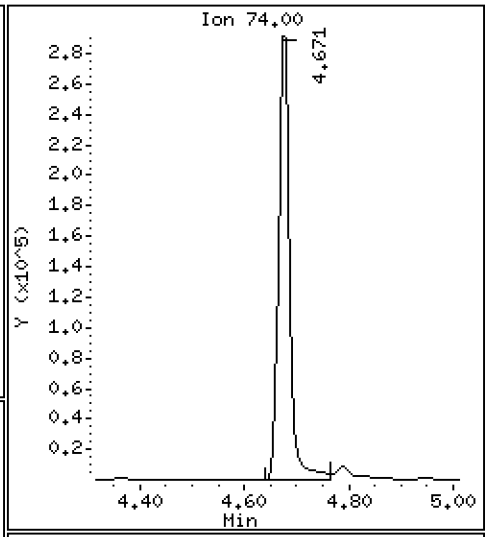
Column phase: ZB-5msi

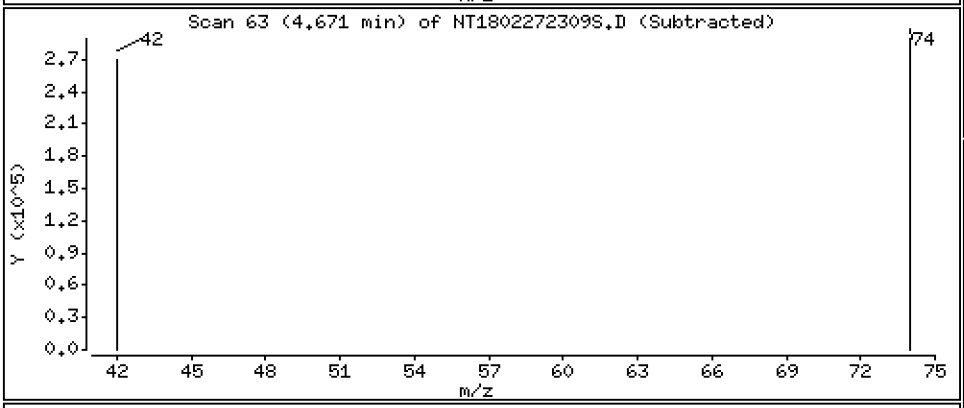
Column diameter: 0.25

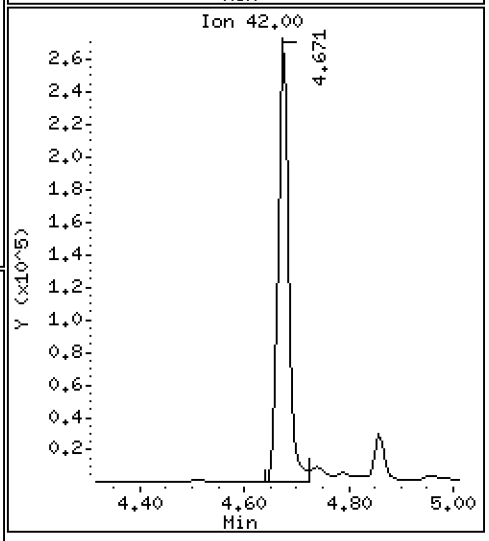
90 N-Nitrosodimethylamine

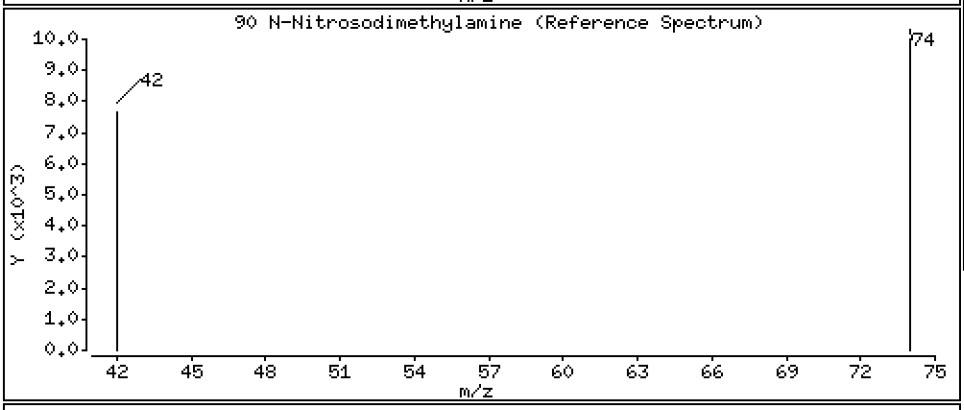
Concentration: 7.298 ug/mL

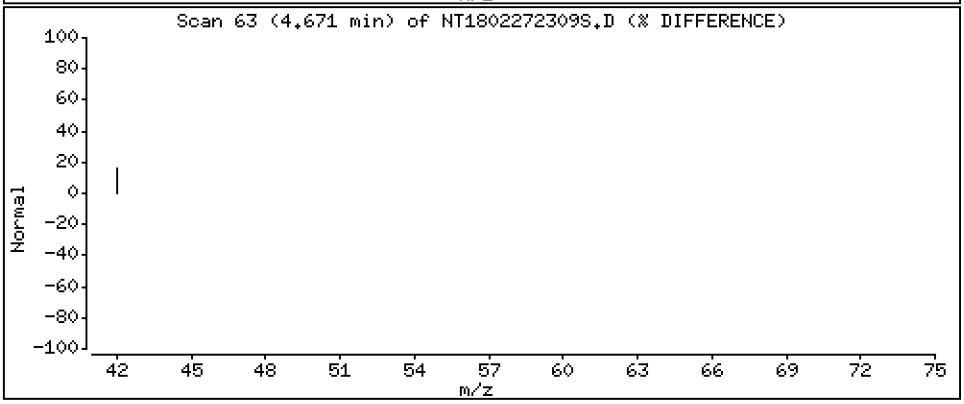












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272309S.D
Lab Smp Id: BLA0410-MS2
Inj Date : 27-FEB-2023 22:32
Operator : YZ Inst ID: nt18.i
Smp Info : BLA0410-MS2
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 13:42 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.748	6.725	(0.759)	514030	5.08723	5.087(R)
	3	Phenol	94	8.317	8.301	(0.935)	451673	3.42656	3.427
	7	1,3-Dichlorobenzene	146	8.834	8.827	(0.993)	404458	3.06451	3.065
*	8	1,4-Dichlorobenzene-d4	152	8.896	8.896	(1.000)	313068	4.00000	
	9	1,4-Dichlorobenzene	146	8.927	8.920	(1.003)	427713	3.10318	3.103
	11	Benzyl alcohol	79	9.176	9.168	(1.031)	323206	3.82457	3.825(M)
	12	1,2-Dichlorobenzene	146	9.277	9.277	(1.043)	409559	3.12097	3.121
	13	2-Methylphenol	108	9.401	9.401	(1.057)	316789	2.92240	2.922
	15	4-Methylphenol	108	9.680	9.665	(1.088)	369548	3.39773	3.398
	16	N-Nitroso-di-n-propylamine	70	9.719	9.711	(1.092)	237499	3.24168	3.242
	22	2,4-Dimethylphenol	107	10.698	10.689	(0.943)	1349088	12.5180	12.52
	24	Benzoic acid	105	10.935	10.868	(0.964)	828244	18.1449	18.14
	26	1,2,4-Trichlorobenzene	180	11.262	11.262	(0.993)	362540	3.28498	3.285
*	27	Naphthalene-d8	136	11.347	11.347	(1.000)	1207922	4.00000	
	30	Hexachlorobutadiene	225	11.748	11.741	(1.035)	228530	3.45132	3.451(H)
	39	Dimethylphthalate	163	14.457	14.442	(0.968)	960020	3.75150	3.752
*	42	Acenaphthene-d10	162	14.929	14.921	(1.000)	666080	4.00000	
	50	Diethylphthalate	149	15.903	15.888	(1.065)	1308300	5.59484	5.595
	54	N-Nitrosodiphenylamine	169	16.274	16.258	(0.907)	791415	3.49149	3.491
	57	Hexachlorobenzene	284	17.331	17.315	(0.966)	372159	3.41983	3.420
	58	Pentachlorophenol	266	17.687	17.671	(0.986)	770603	20.8161	20.82
*	59	Phenanthrene-d10	188	17.942	17.927	(1.000)	1566748	4.00000	
$	66	Terphenyl-d14	244	21.114	21.068	(0.918)	1174909	4.24136	4.241(R)
	67	Butylbenzylphthalate	149	22.028	21.997	(0.958)	1261904	5.22306	5.223
*	69	Chrysene-d12	240	23.004	22.957	(1.000)	1529851	4.00000	
*	77	Perylene-d12	264	25.497	25.442	(1.000)	960465	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.925	27.871	(1.095)	403540	1.41403	1.414
	90	N-Nitrosodimethylamine	74	4.671	4.663	(0.525)	438914	7.29822	7.298

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272309S.D
Lab Smp Id: BLA0410-MS2
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	334128	167064	668256	313068	-6.30
27 Naphthalene-d8	1260796	630398	2521592	1207922	-4.19
42 Acenaphthene-d10	648152	324076	1296304	666080	2.77
59 Phenanthrene-d10	1231995	615998	2463990	1566748	27.17
69 Chrysene-d12	1126974	563487	2253948	1529851	35.75
77 Perylene-d12	1243668	621834	2487336	960465	-22.77

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.35	10.85	11.85	11.35	-0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.93	0.05
59 Phenanthrene-d10	17.93	17.43	18.43	17.94	0.09
69 Chrysene-d12	22.96	22.46	23.46	23.00	0.20
77 Perylene-d12	25.44	24.94	25.94	25.50	0.21

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272309S.D

Lab ID: BLA0410-MS2
nt18.i, 20230227.b\SIM.b\SIMABN2.m,   27-FEB-2023 22:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.964	0.958	0.0060	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802272303S.D

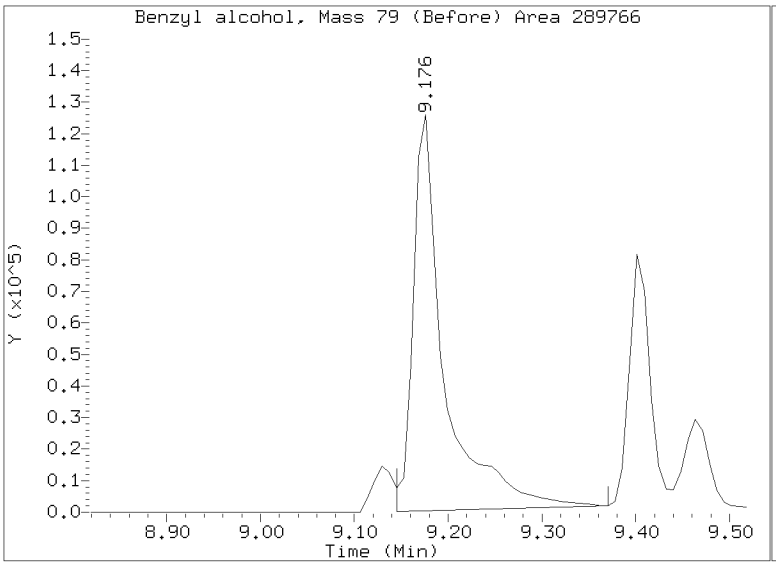
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

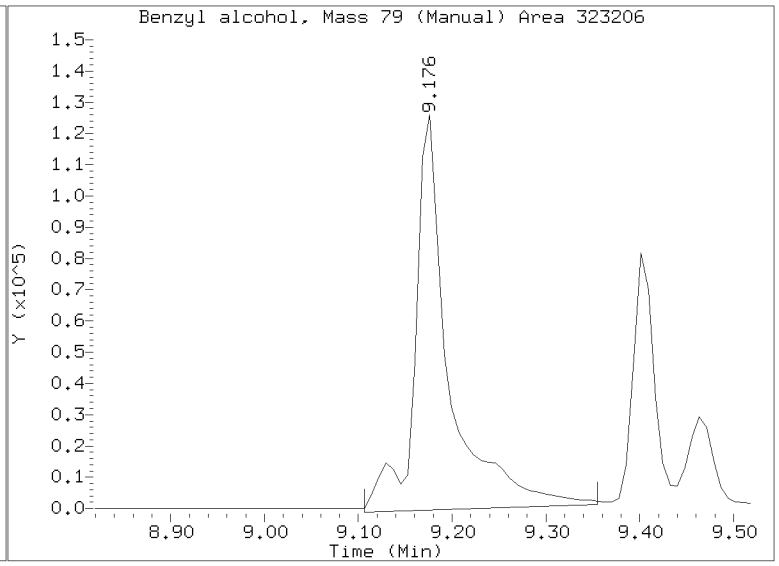
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230227.b/SIM.b/NT1802272309S.D
Injection Date: 27-FEB-2023 22:32
Lab ID:BLA0410-MS2 Client ID:
Report Date: 03/24/2023 13:46





APPROVED

By Deenay Dunmore at 2:29 pm, Mar 24, 2023

Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723105.D

Date : 27-FEB-2023 23:12

Client ID:

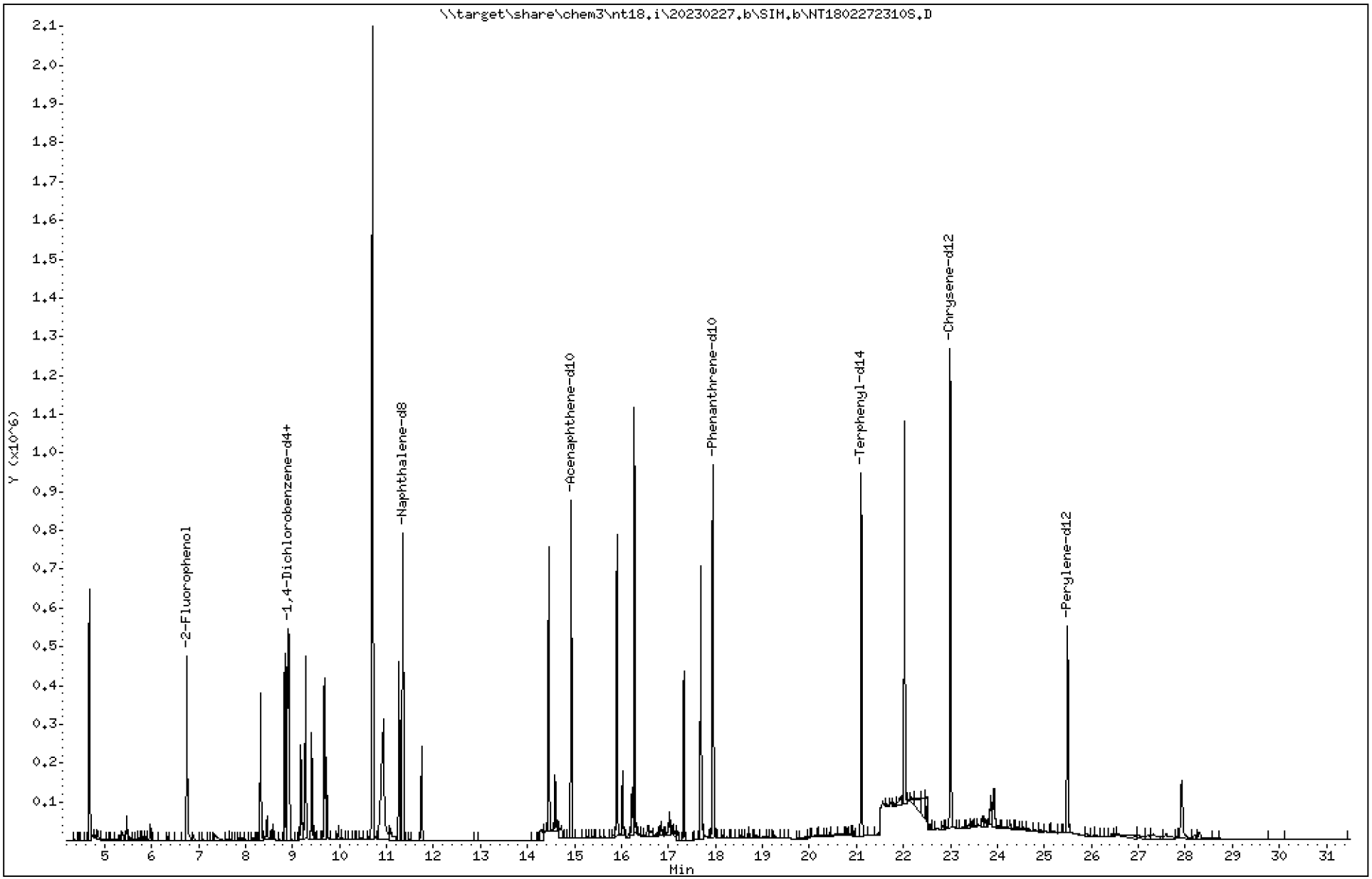
Sample Info: BLA0410-MSD2

Column phase: ZB-5msi

Instrument: nt18.i

Operator: YZ

Column diameter: 0.25



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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

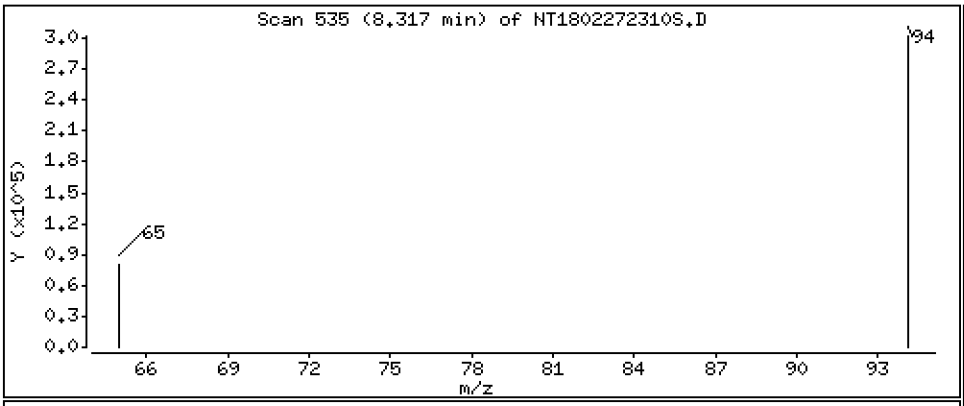
Operator: YZ

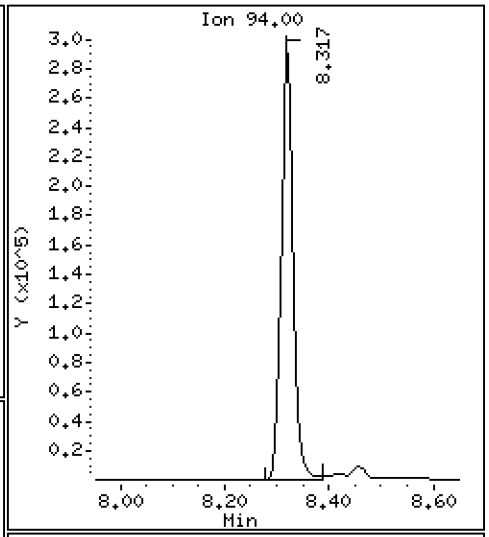
Column phase: ZB-5msi

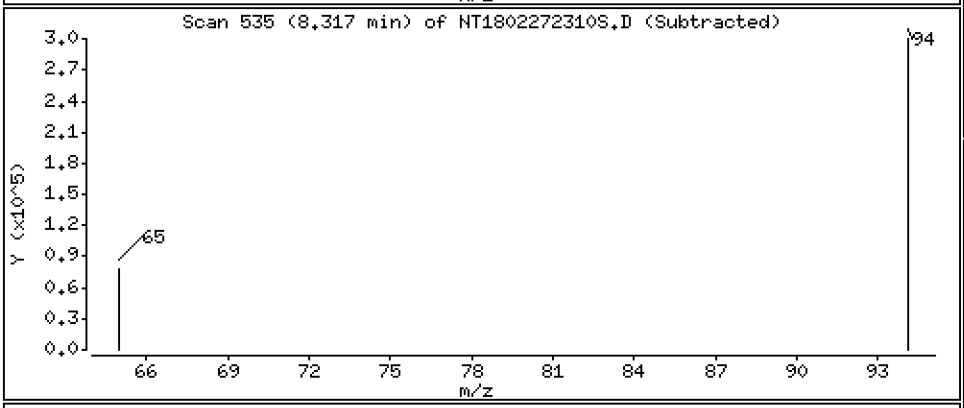
Column diameter: 0.25

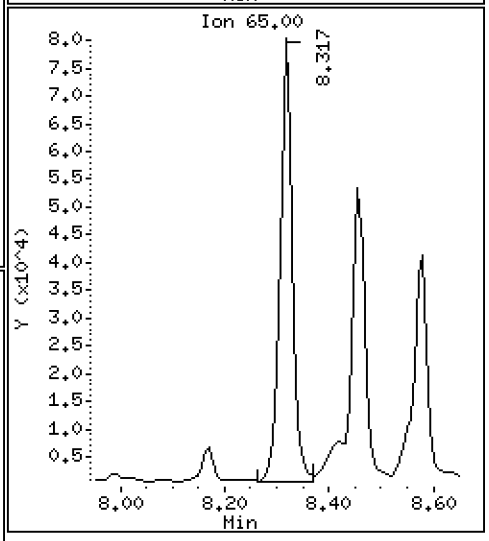
3 Phenol

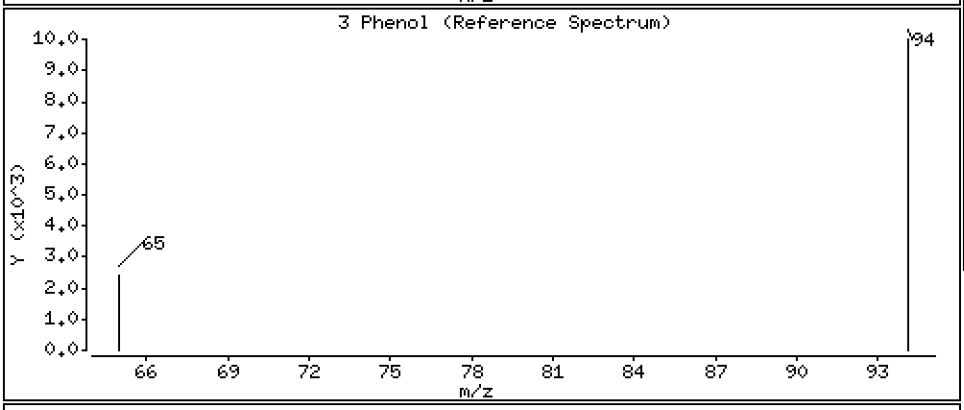
Concentration: 3.492 ug/mL

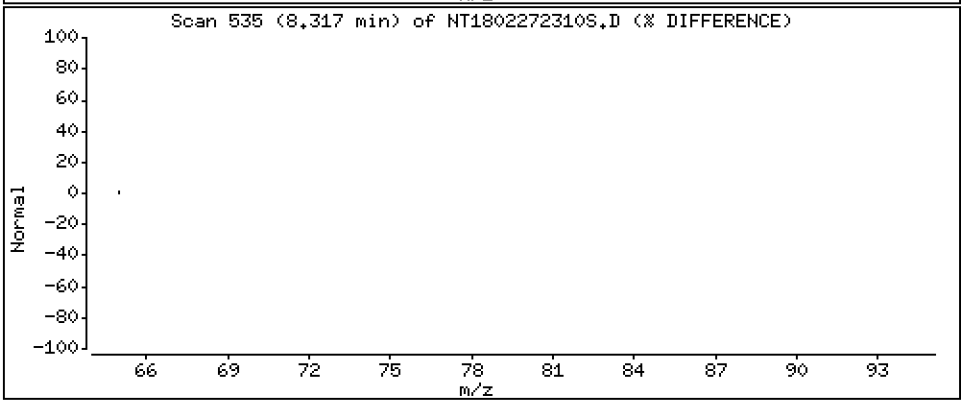












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

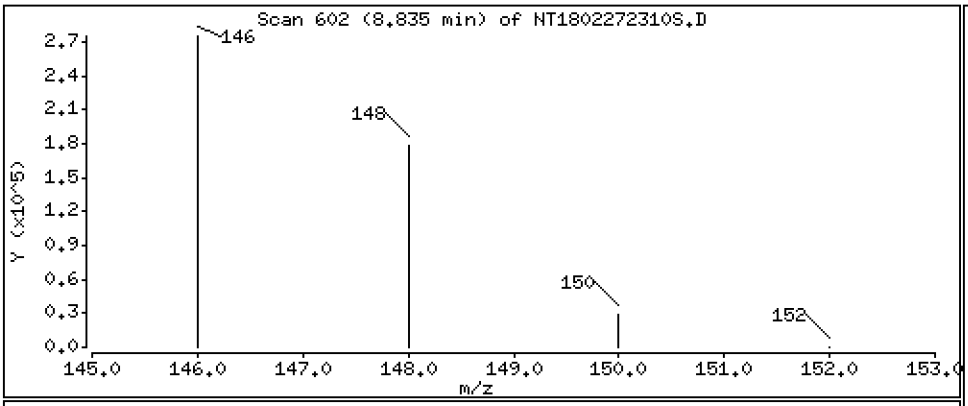
Operator: YZ

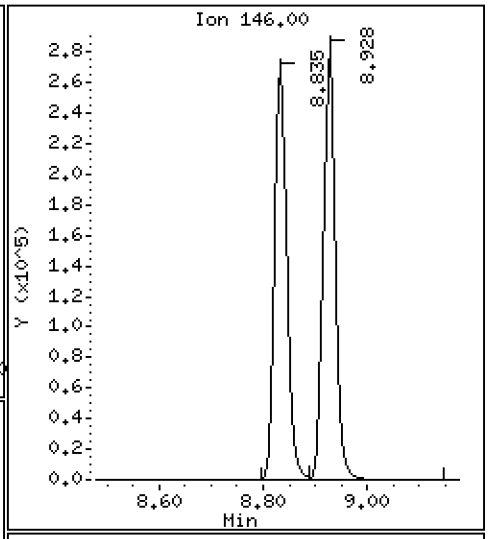
Column phase: ZB-5msi

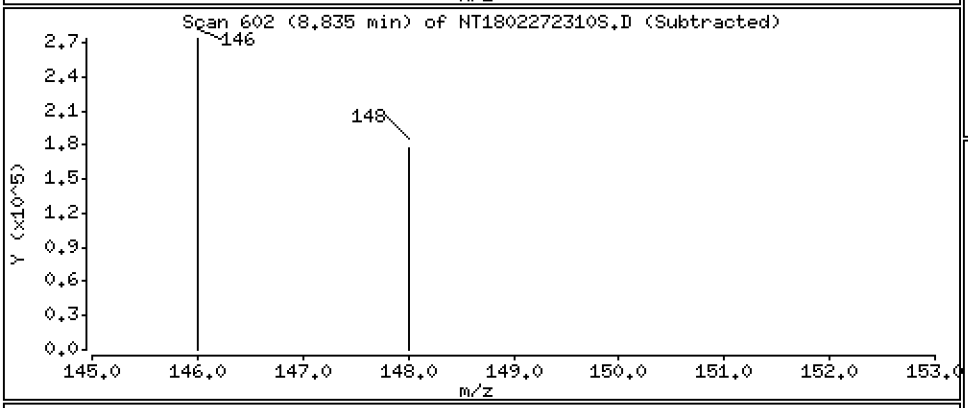
Column diameter: 0.25

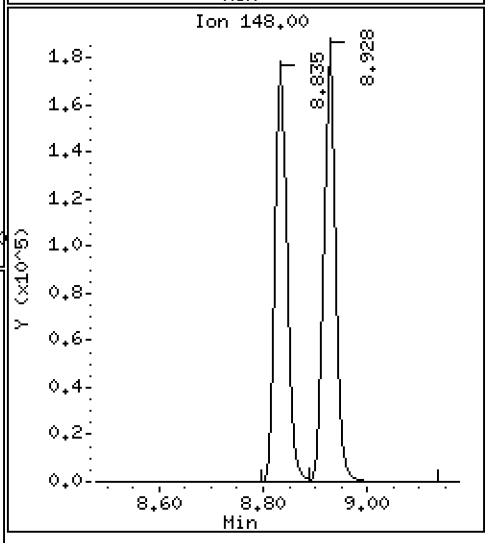
7 1,3-Dichlorobenzene

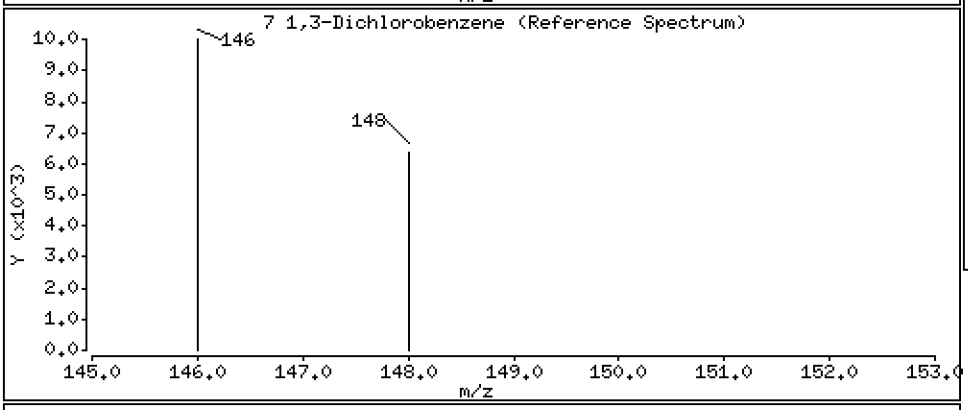
Concentration: 3.170 ug/mL

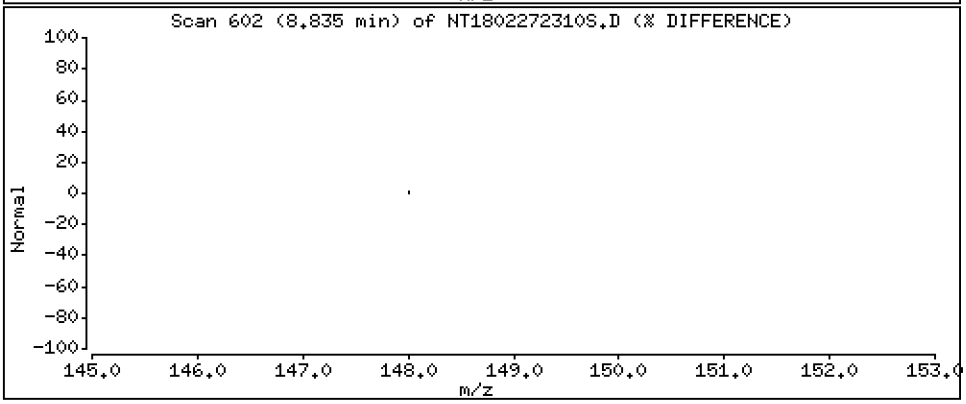












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

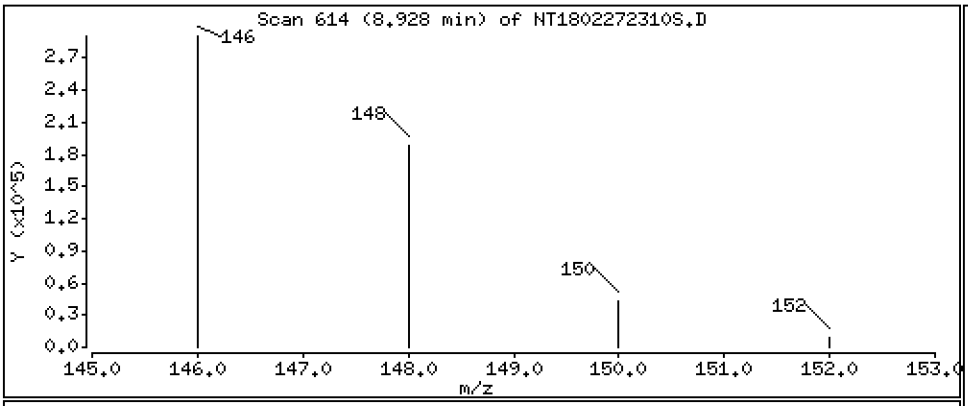
Operator: YZ

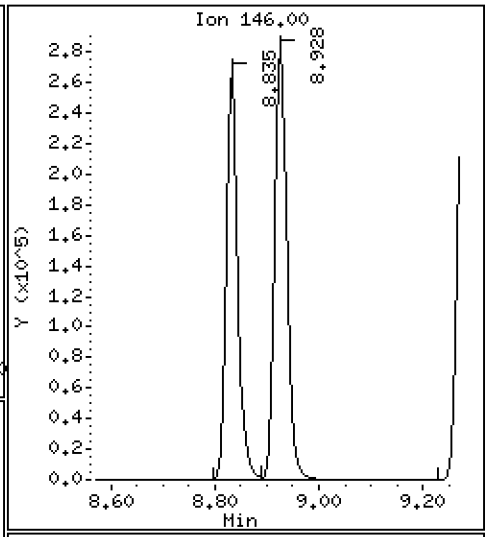
Column phase: ZB-5msi

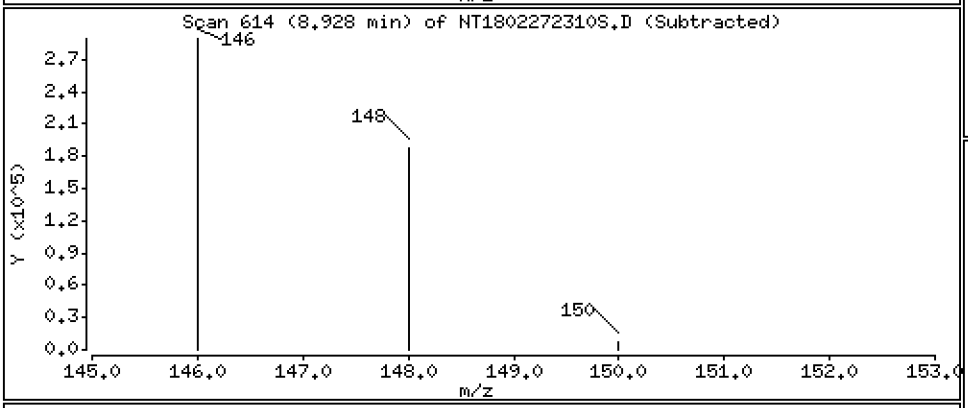
Column diameter: 0.25

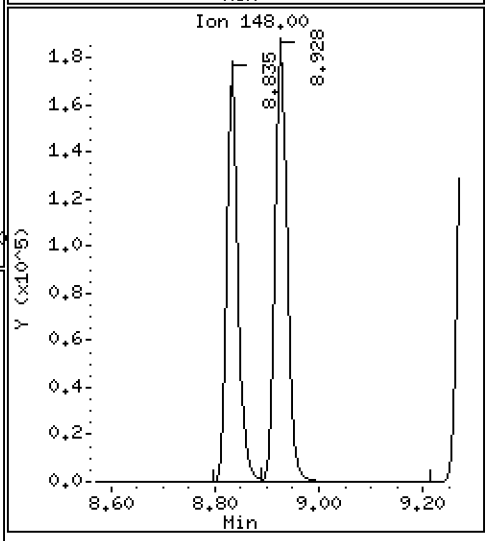
9 1,4-Dichlorobenzene

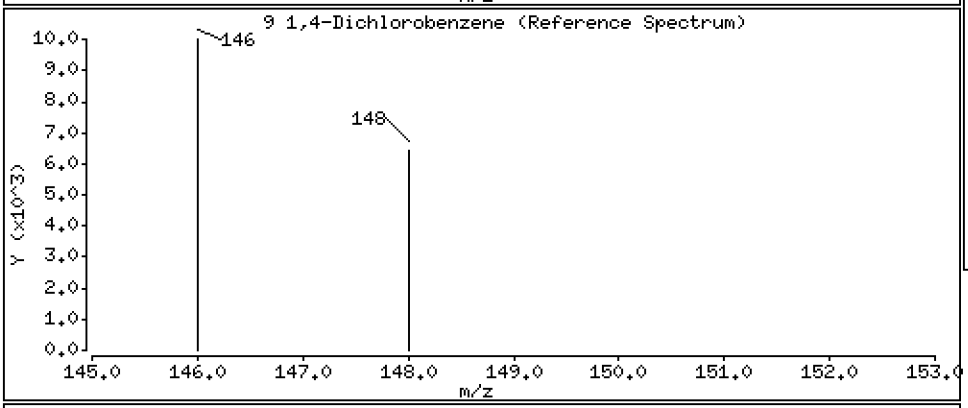
Concentration: 3.186 ug/mL

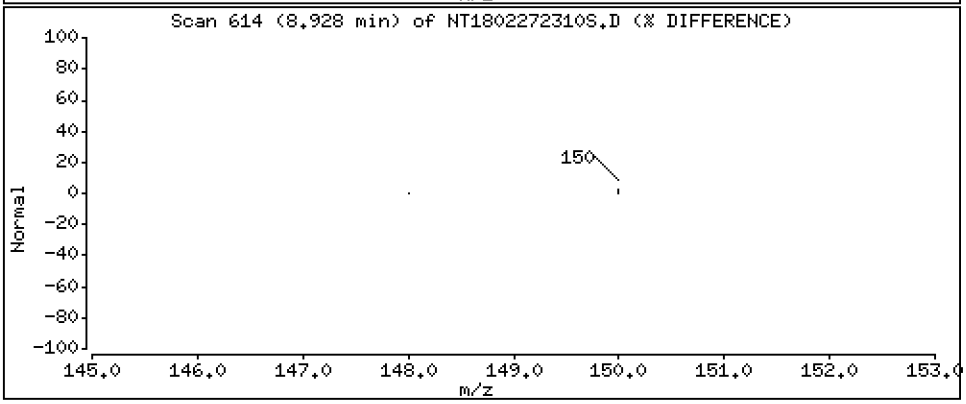












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

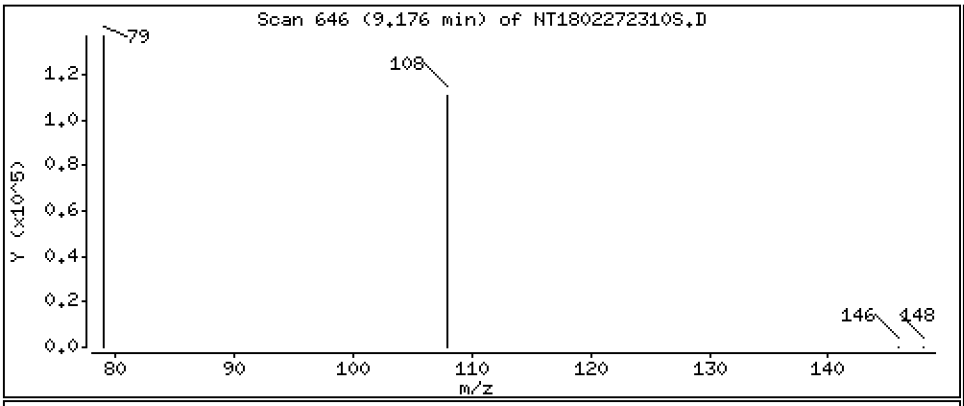
Operator: YZ

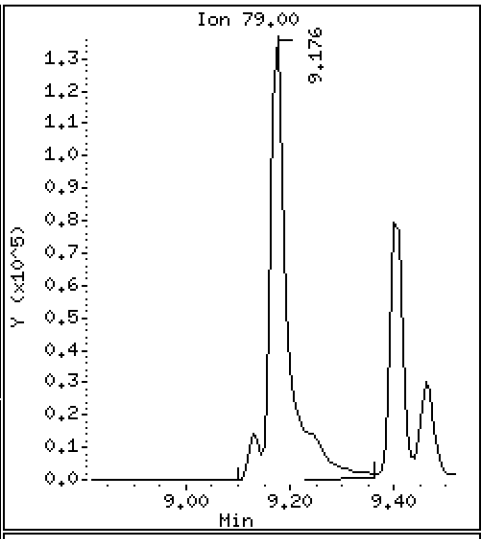
Column phase: ZB-5msi

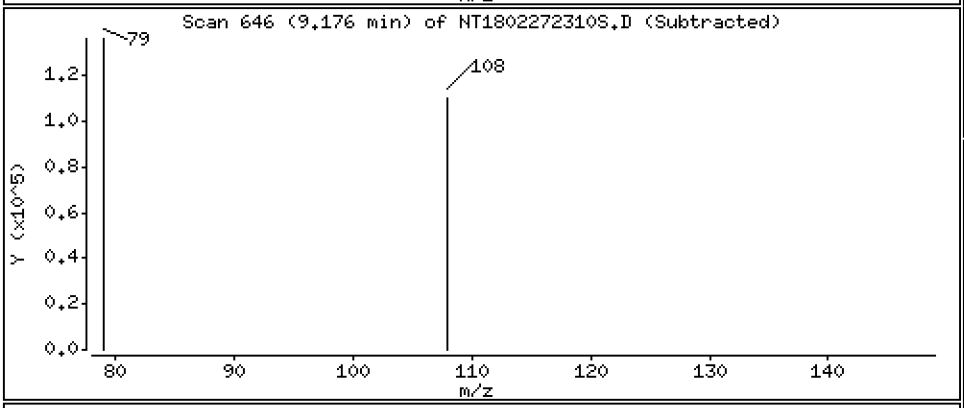
Column diameter: 0.25

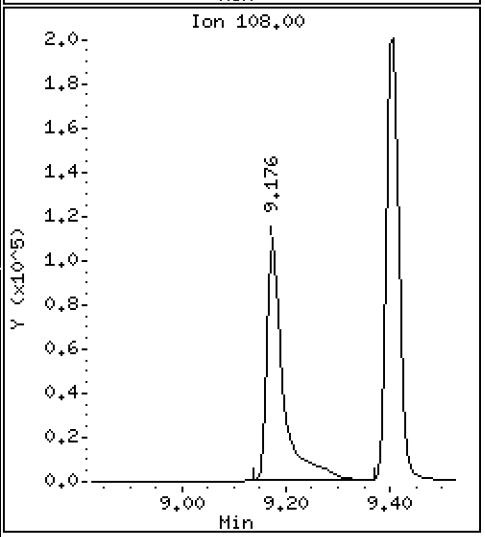
11 Benzyl alcohol

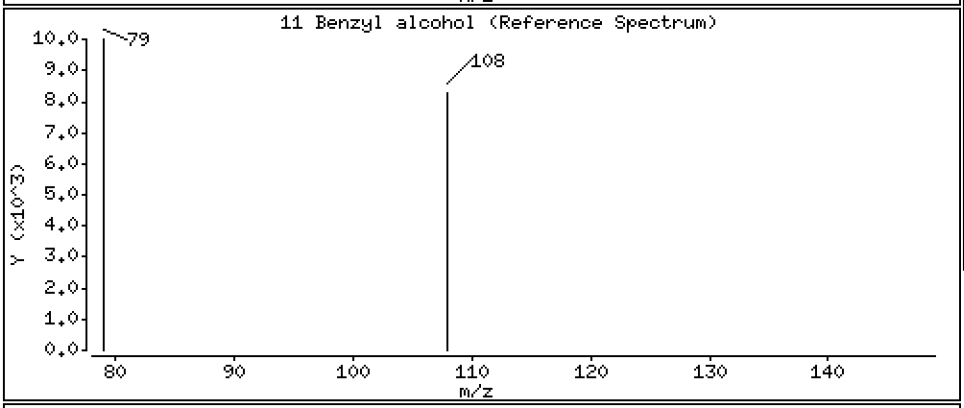
Concentration: 3.924 ug/mL

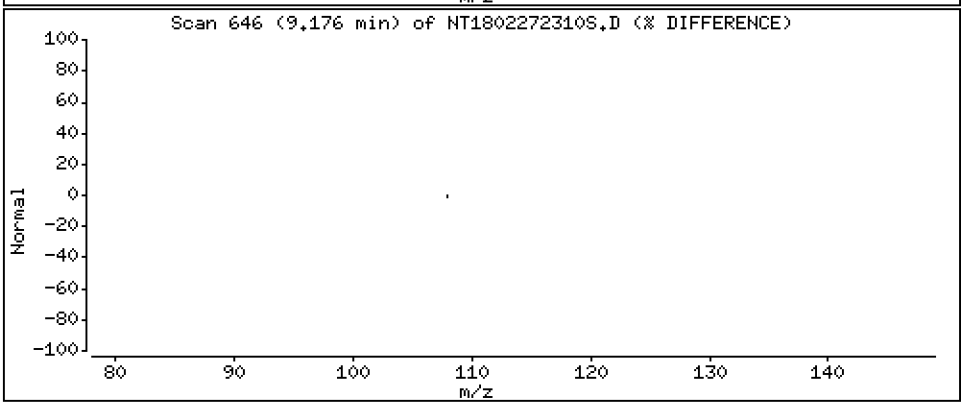












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

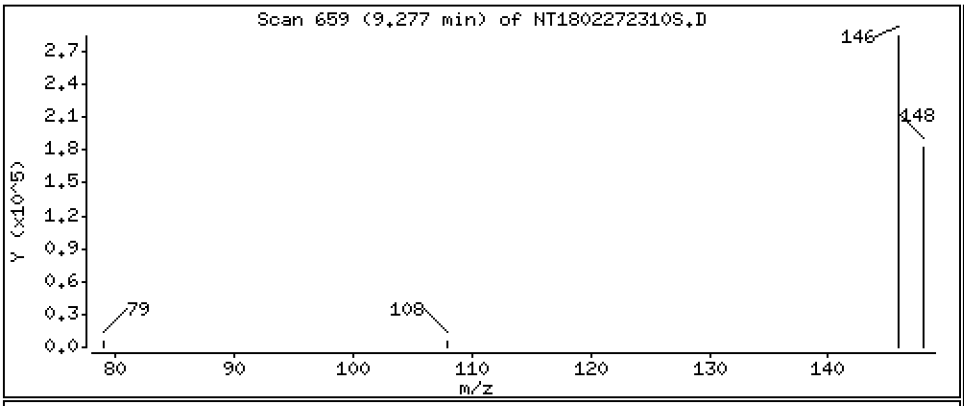
Operator: YZ

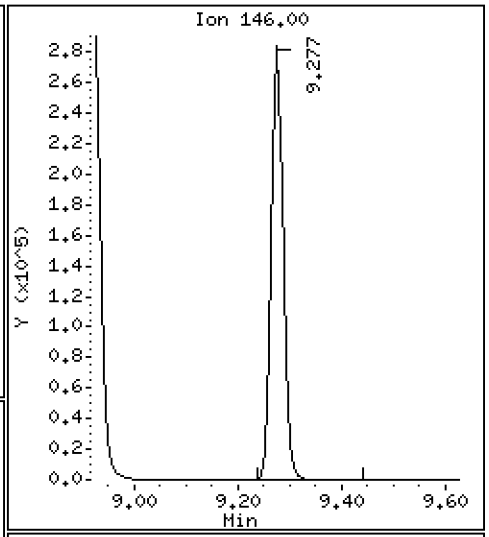
Column phase: ZB-5msi

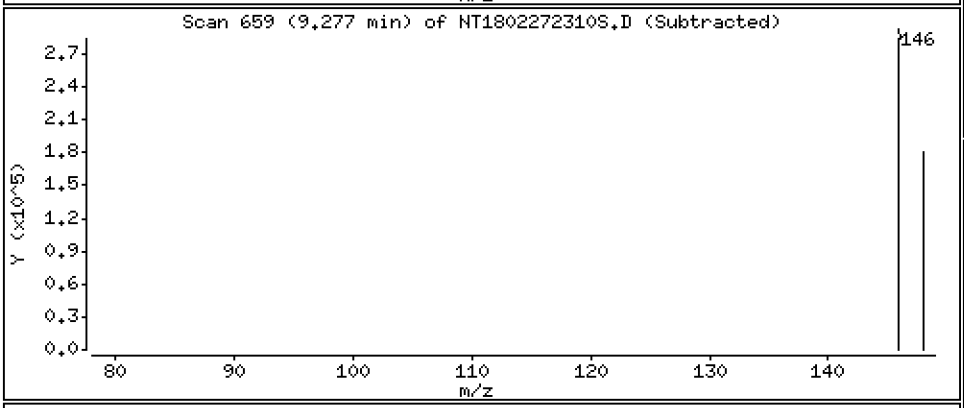
Column diameter: 0.25

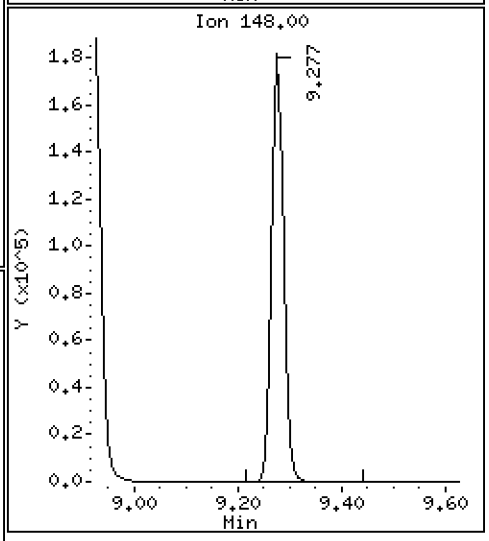
12 1,2-Dichlorobenzene

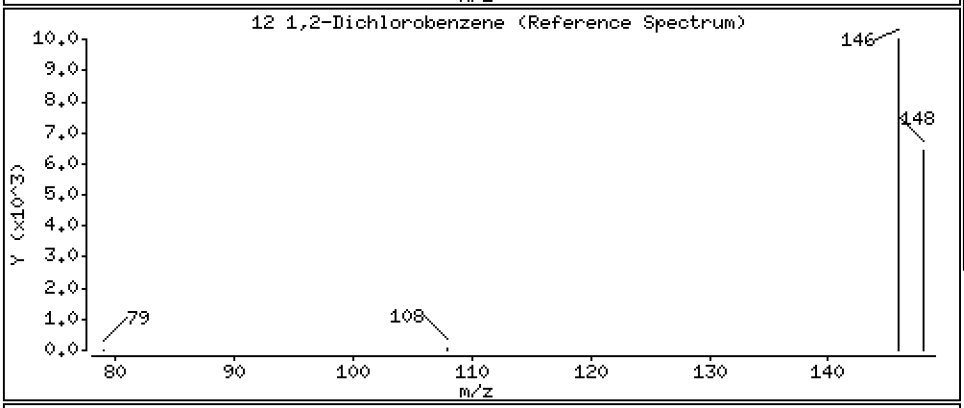
Concentration: 3.232 ug/mL

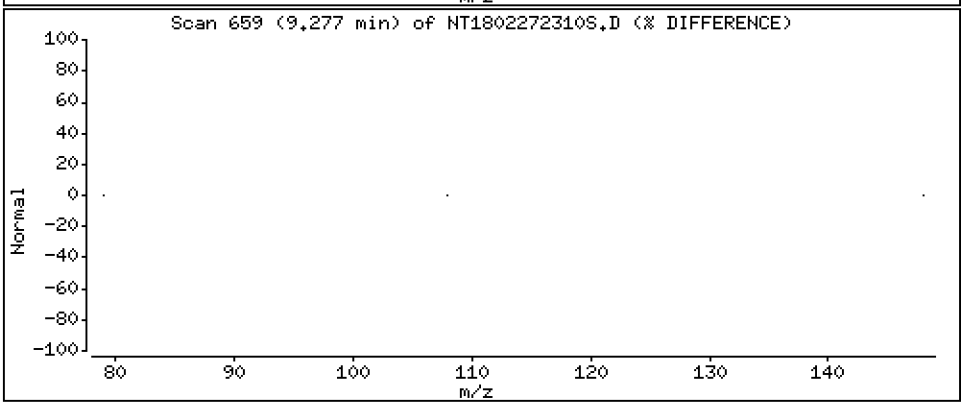












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

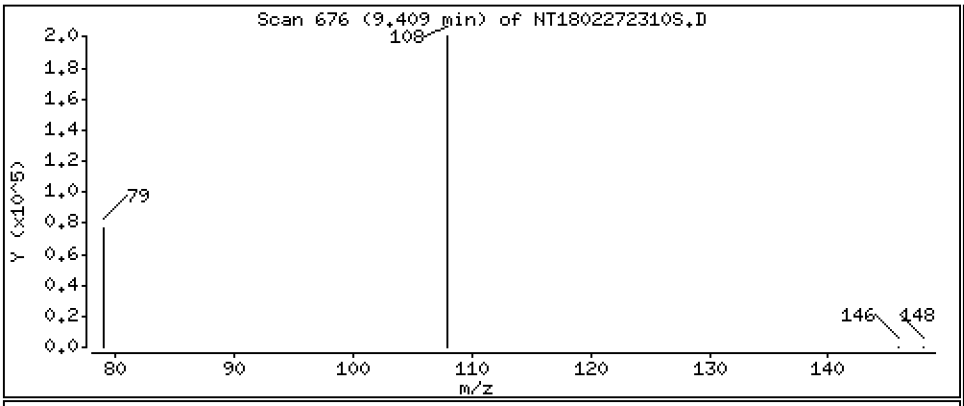
Operator: YZ

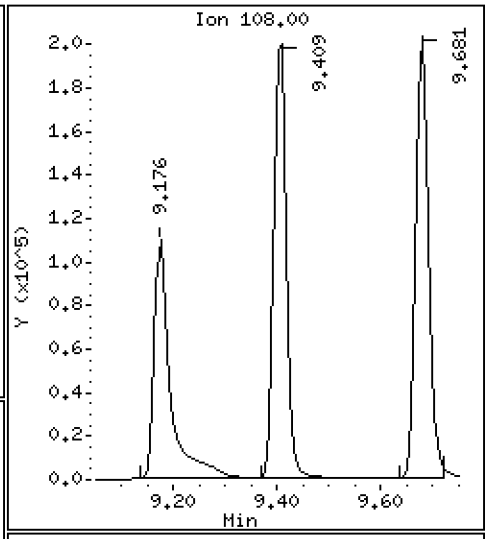
Column phase: ZB-5msi

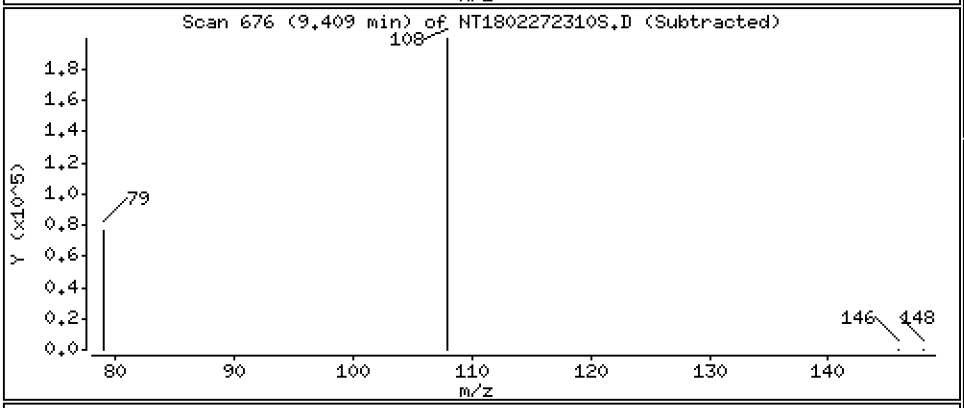
Column diameter: 0.25

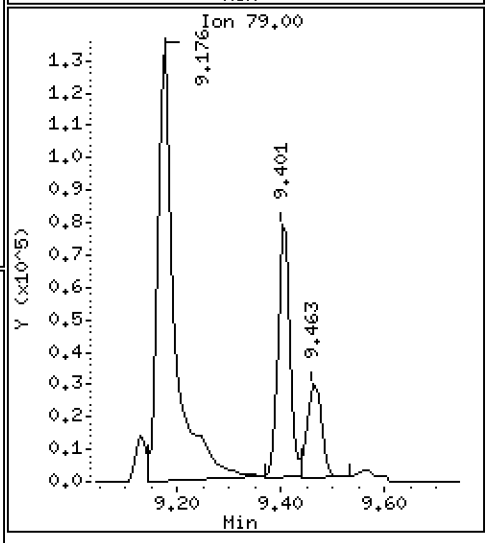
13 2-Methylphenol

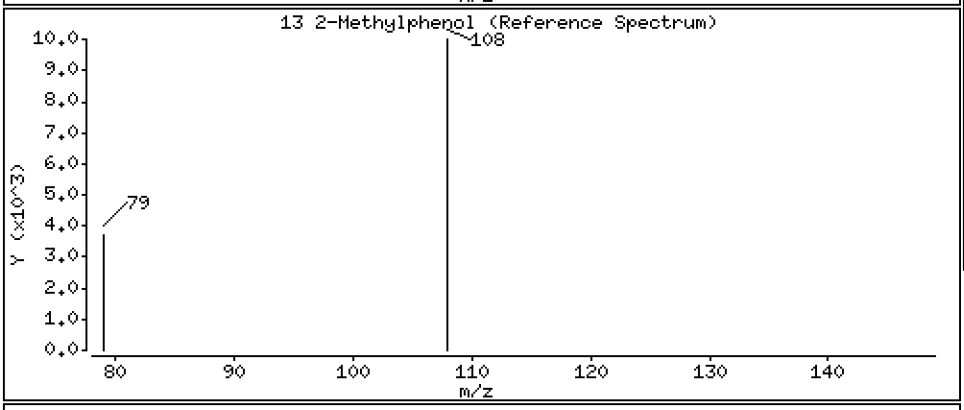
Concentration: 3.008 ug/mL

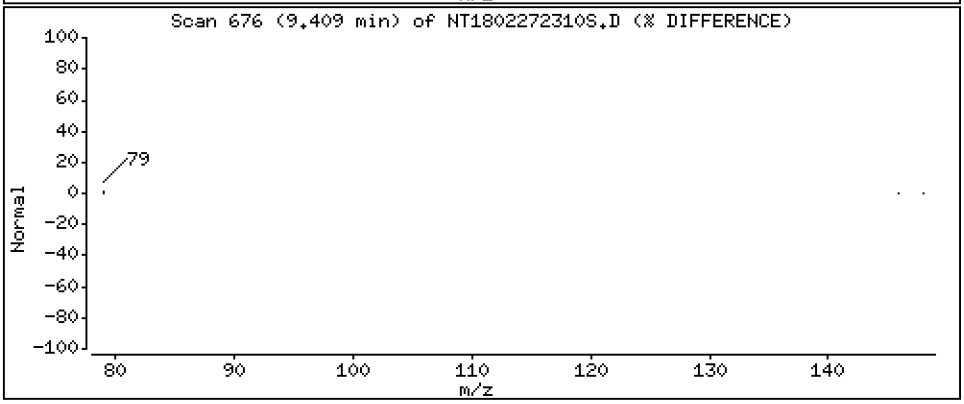












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

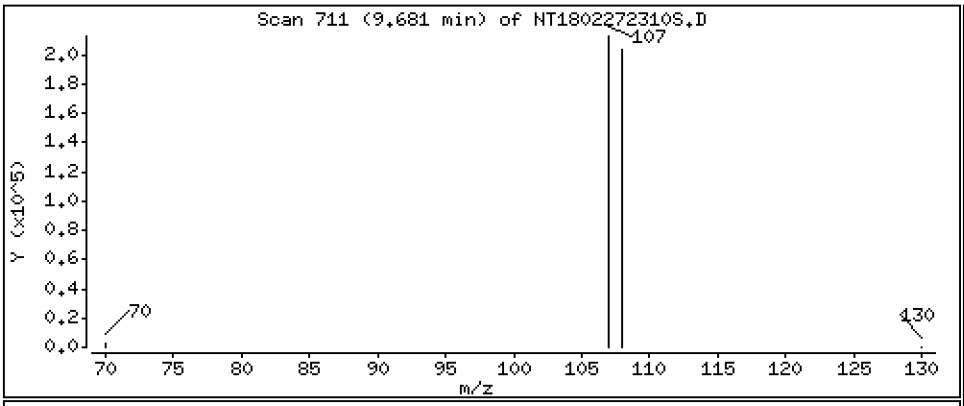
Operator: YZ

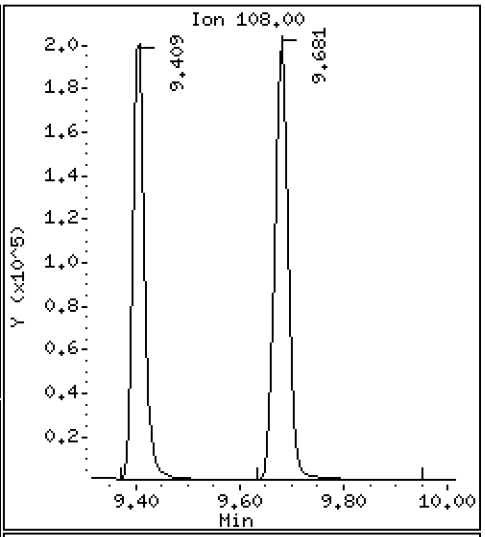
Column phase: ZB-5msi

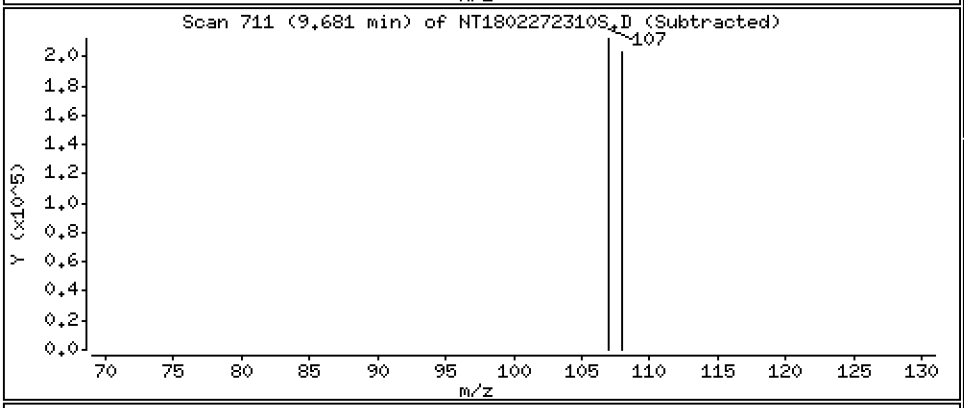
Column diameter: 0.25

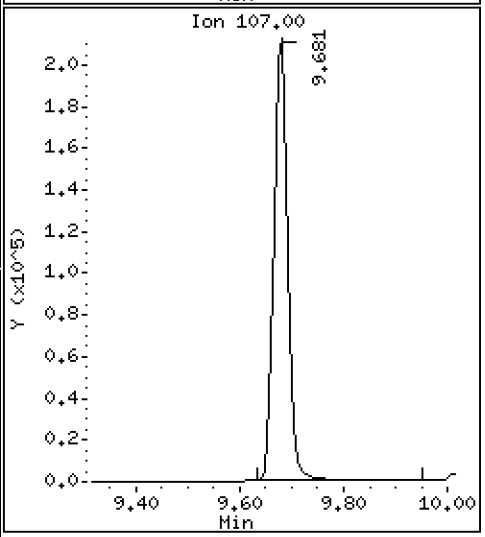
15 4-Methylphenol

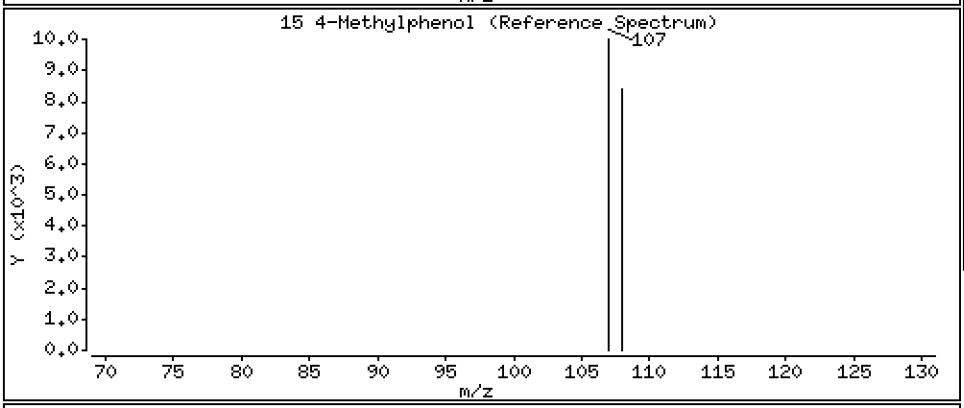
Concentration: 3.410 ug/mL

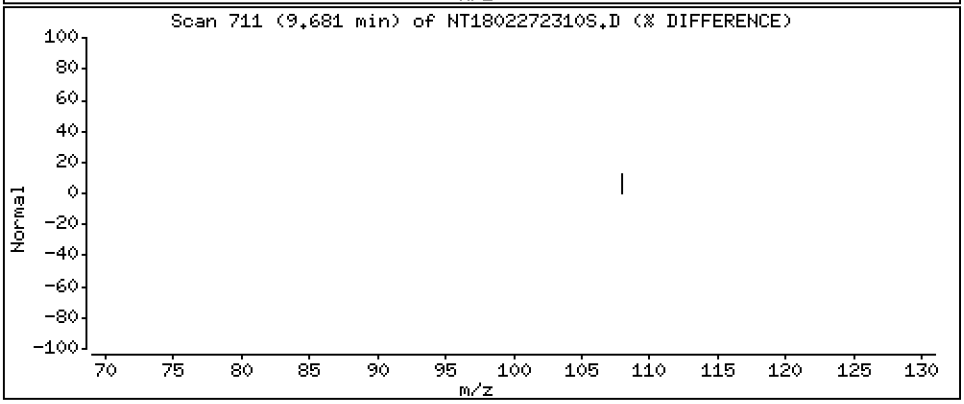












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

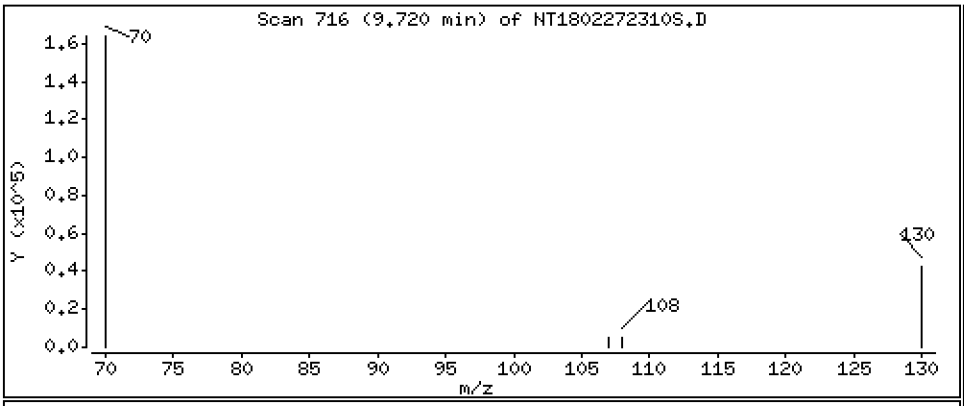
Operator: YZ

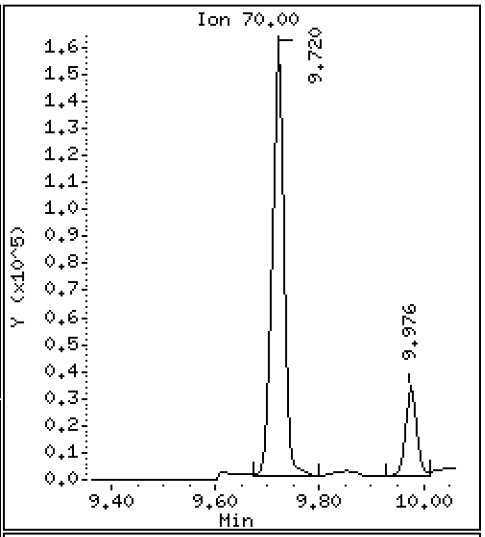
Column phase: ZB-5msi

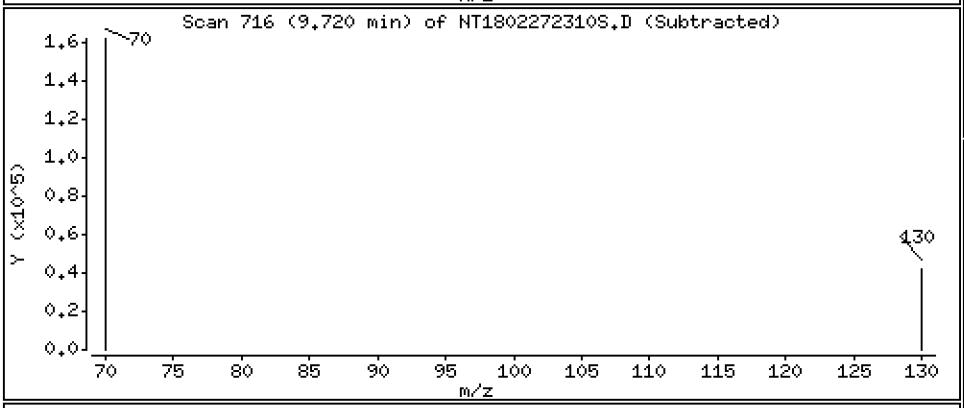
Column diameter: 0.25

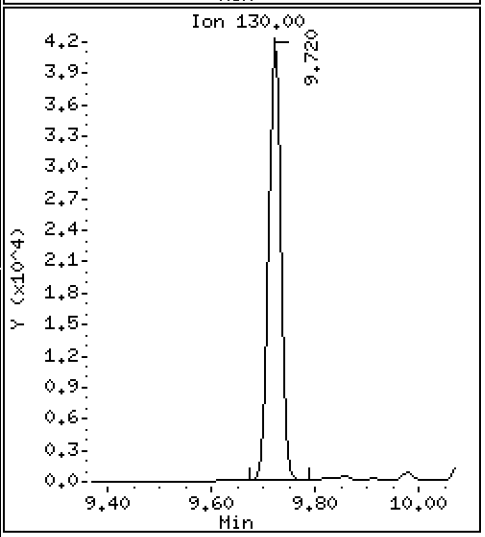
16 N-Nitroso-di-n-propylamine

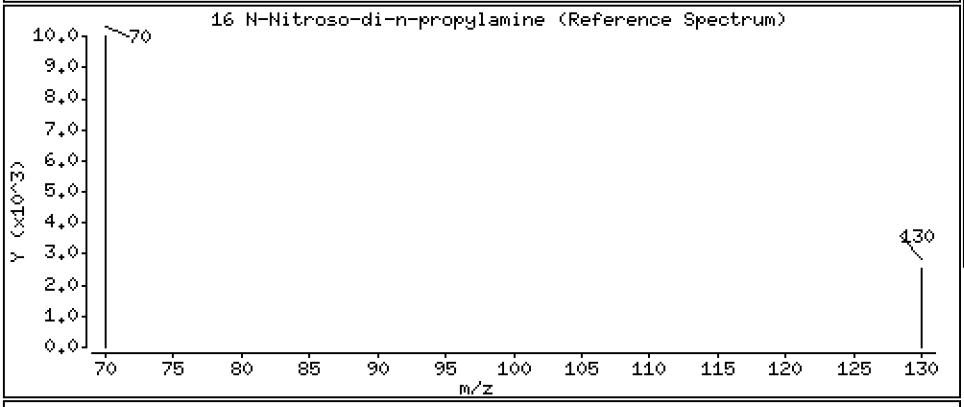
Concentration: 3.340 ug/mL

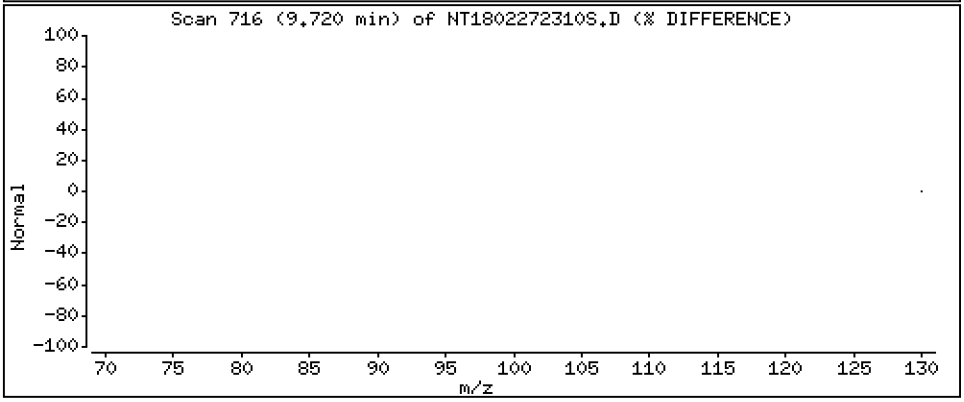












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

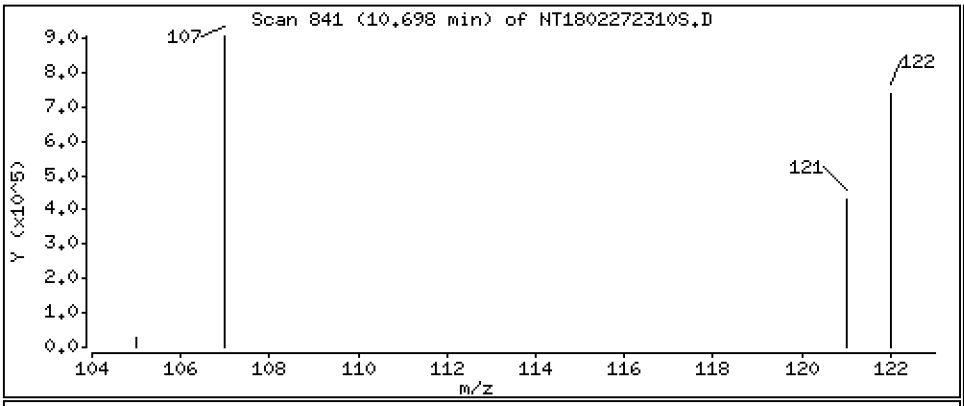
Operator: YZ

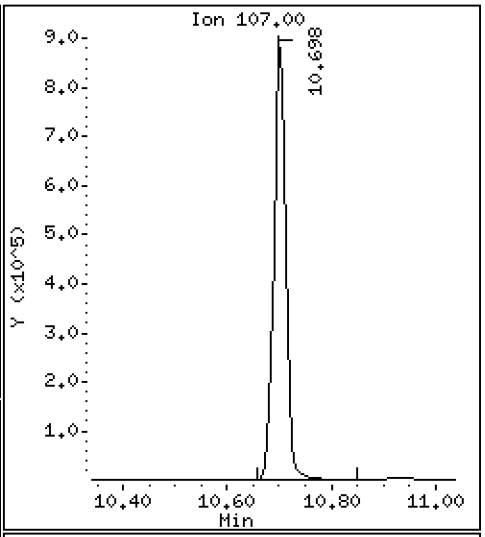
Column phase: ZB-5msi

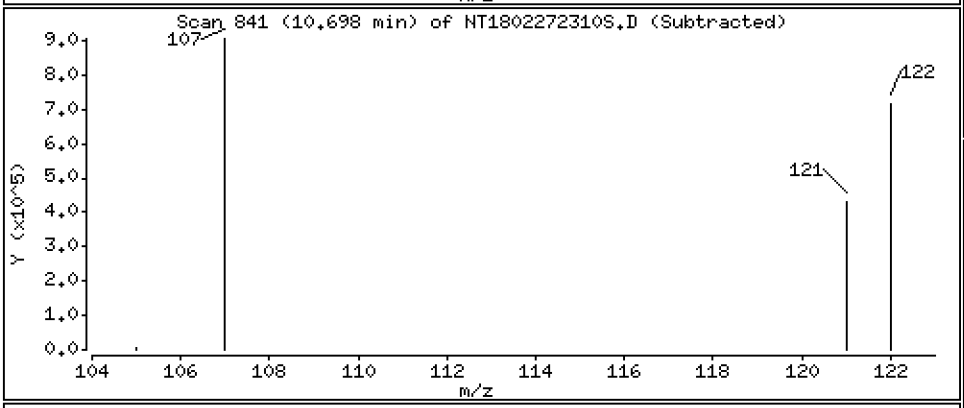
Column diameter: 0.25

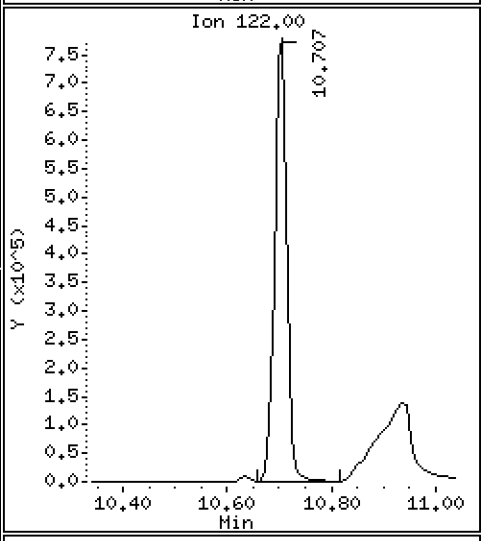
22 2,4-Dimethylphenol

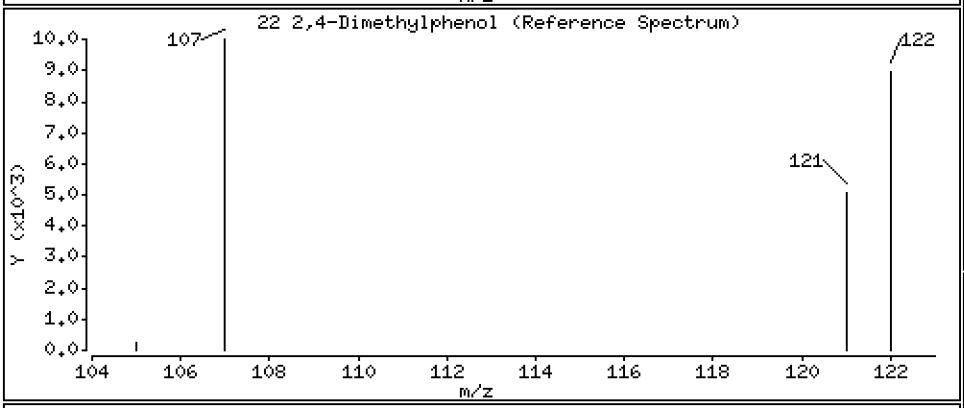
Concentration: 13.22 ug/mL

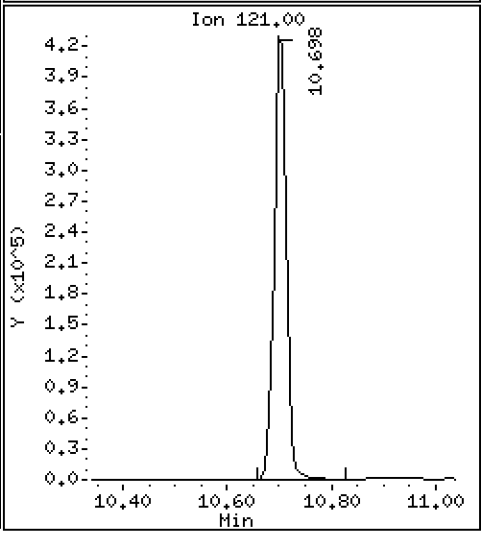


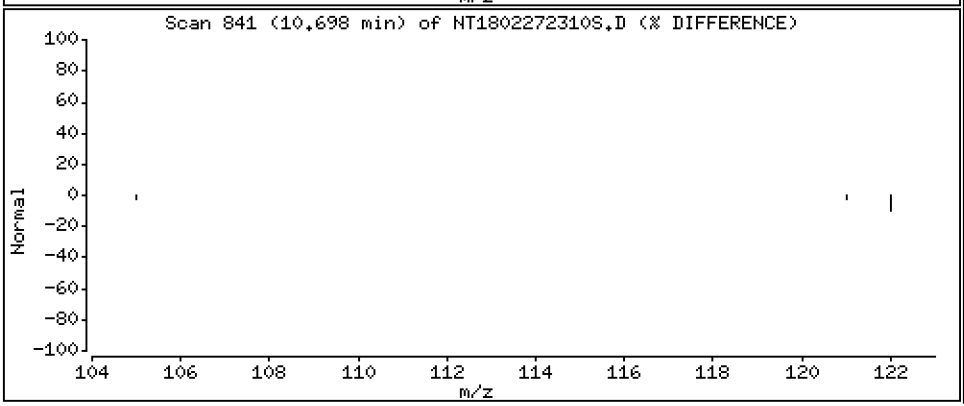












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

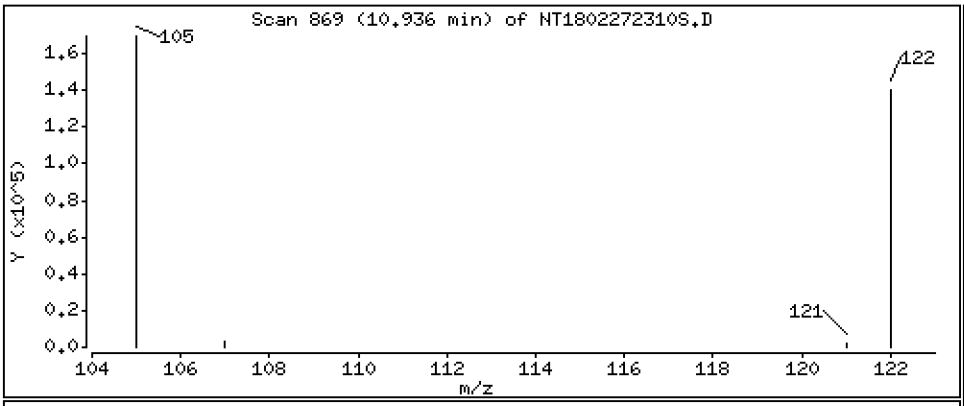
Operator: YZ

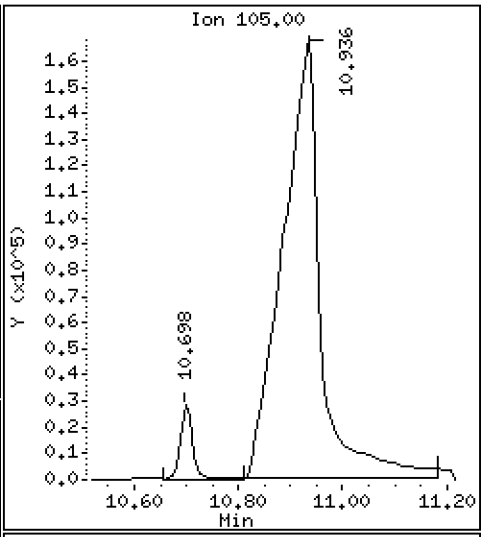
Column phase: ZB-5msi

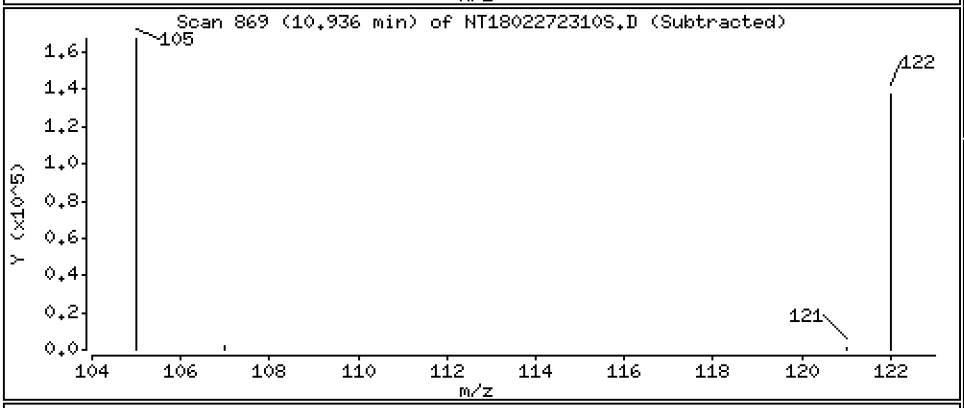
Column diameter: 0.25

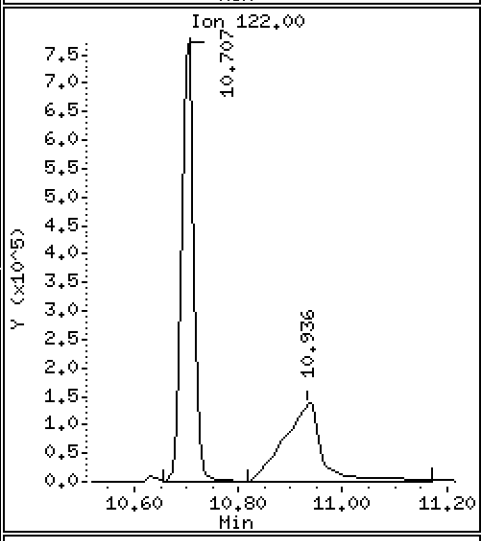
24 Benzoic acid

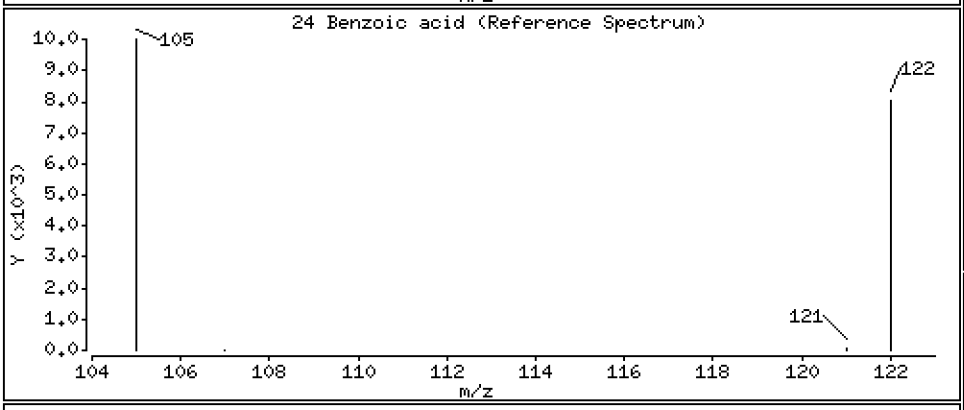
Concentration: 18.71 ug/mL

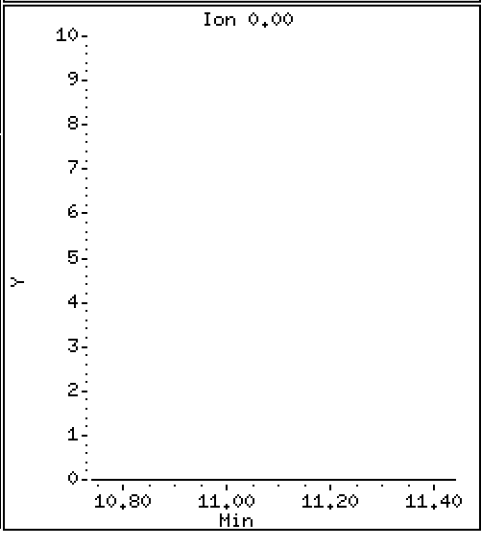


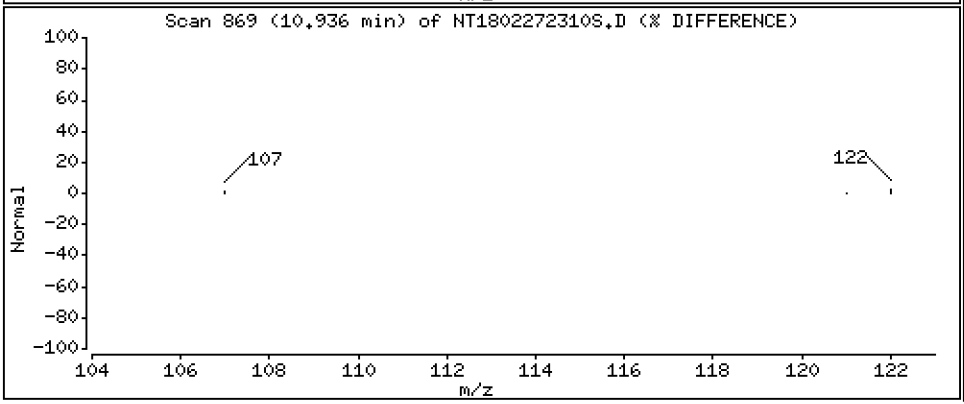












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

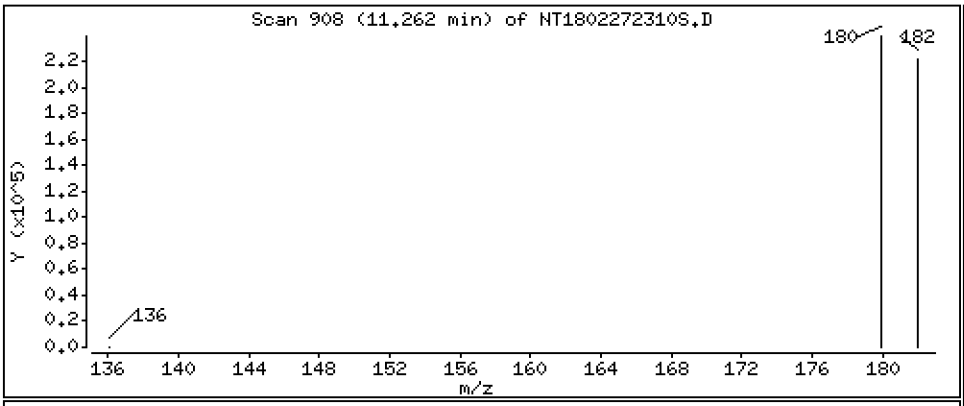
Operator: YZ

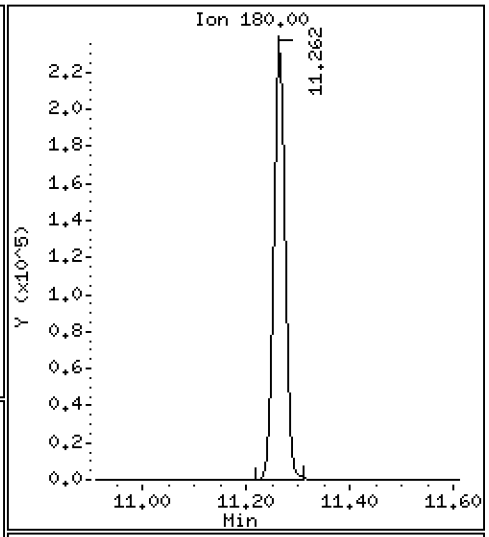
Column phase: ZB-5msi

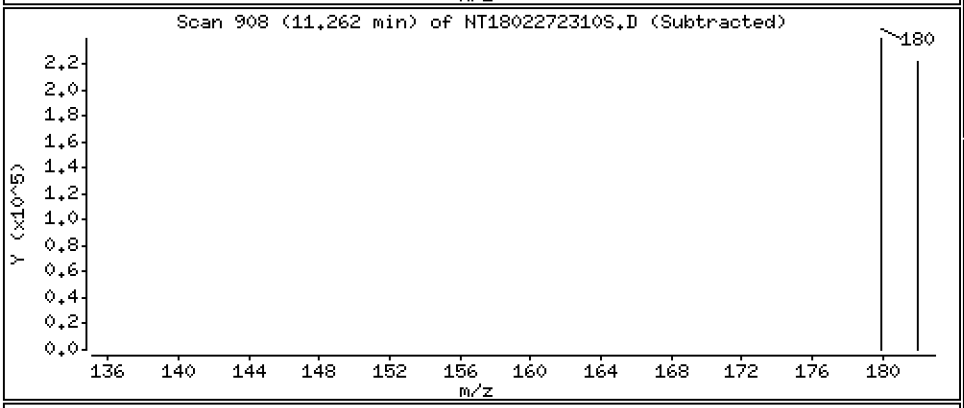
Column diameter: 0.25

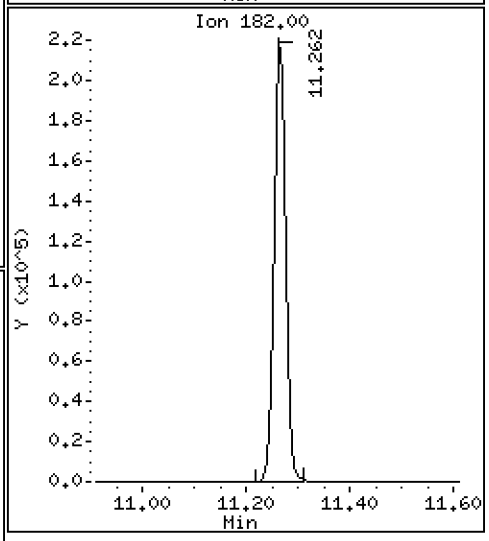
26 1,2,4-Trichlorobenzene

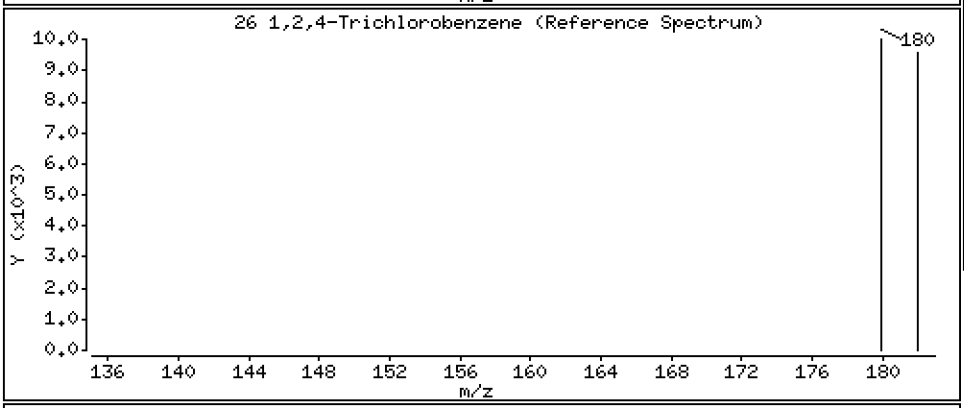
Concentration: 3.404 ug/mL

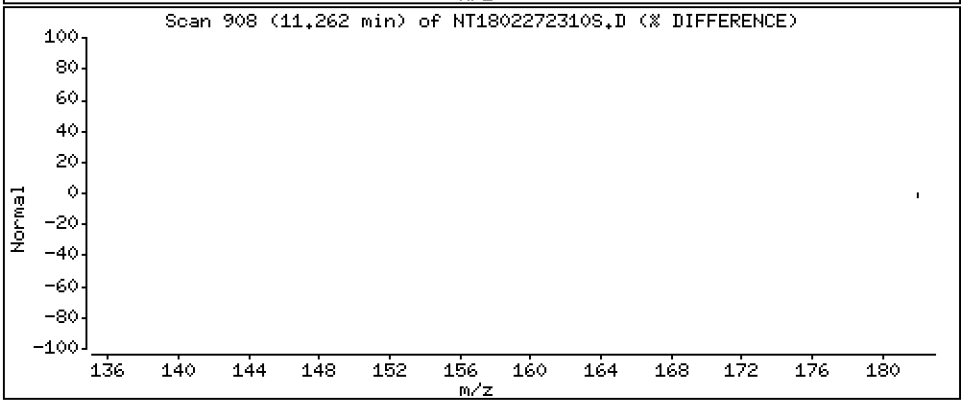












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

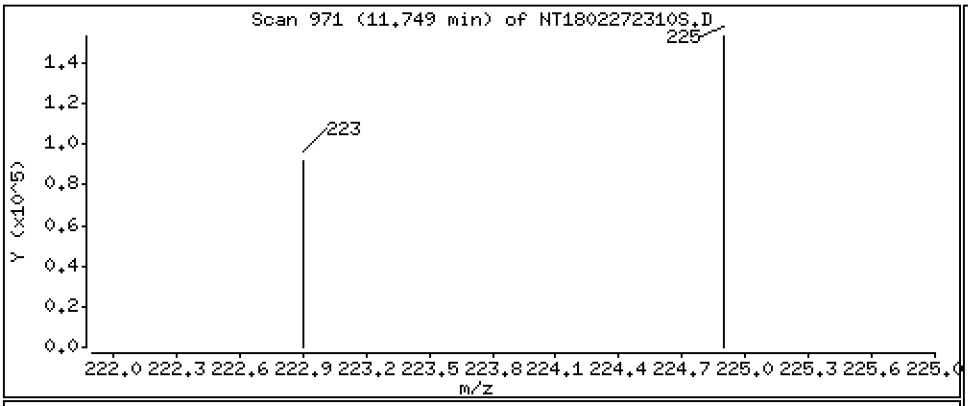
Operator: YZ

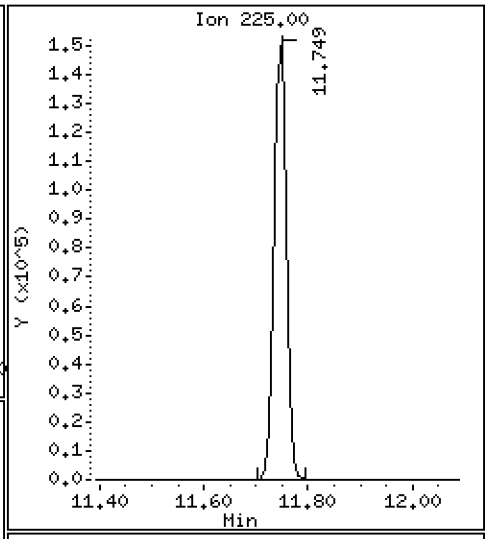
Column phase: ZB-5msi

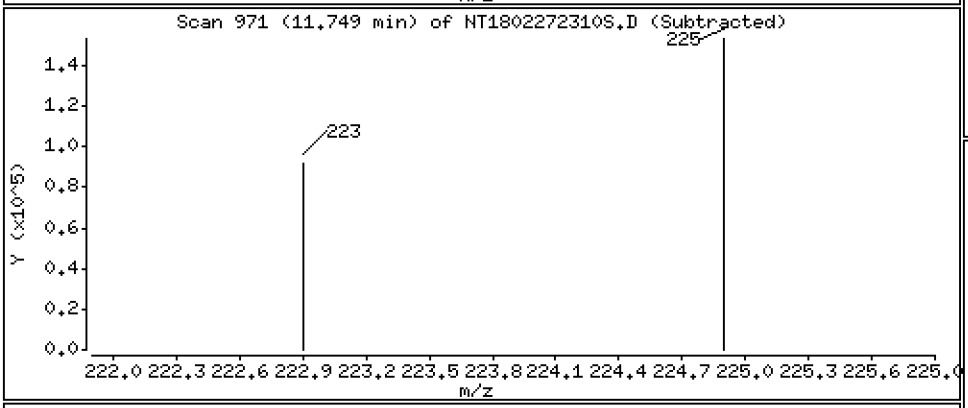
Column diameter: 0.25

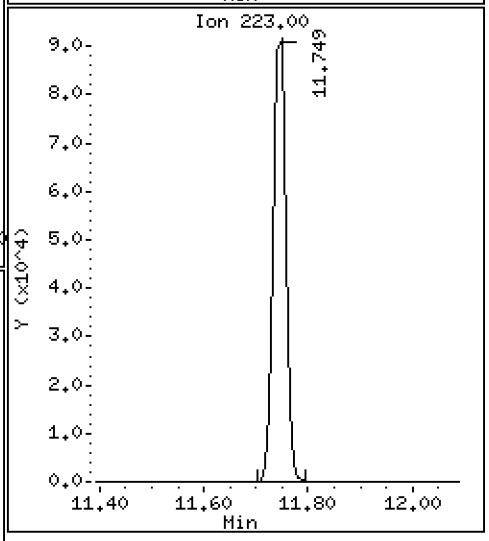
30 Hexachlorobutadiene

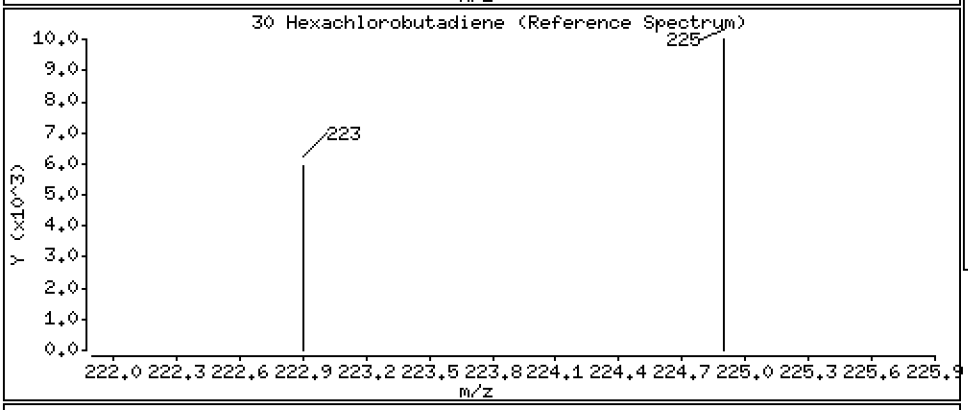
Concentration: 3.554 ug/mL

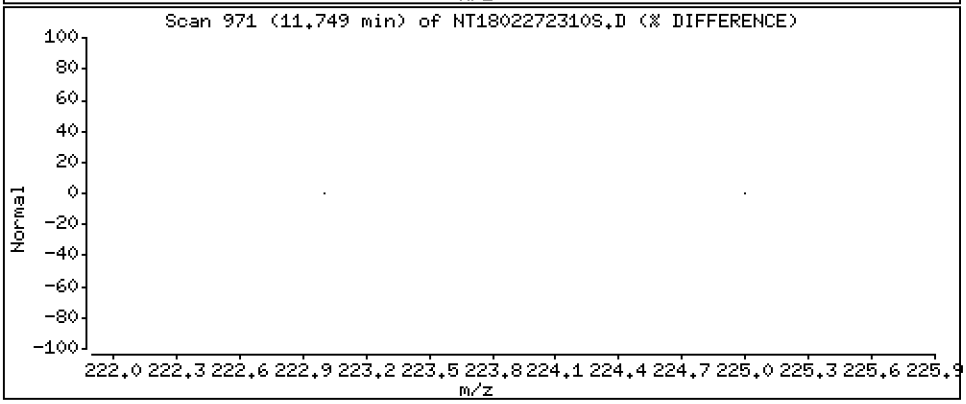












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

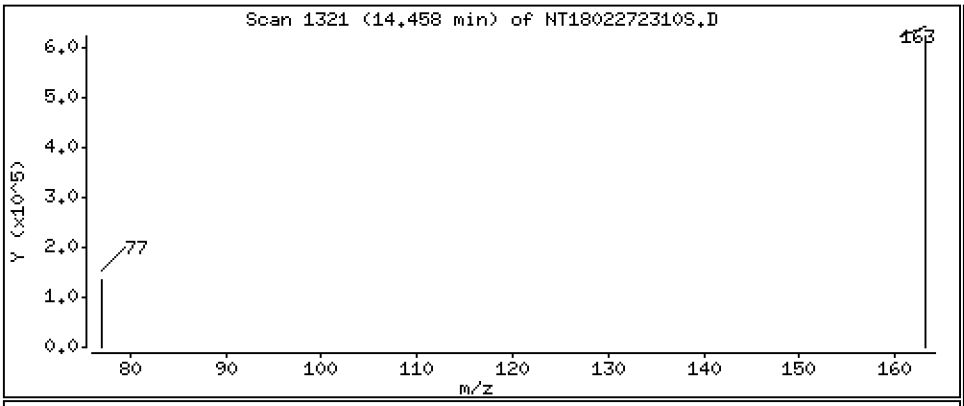
Operator: YZ

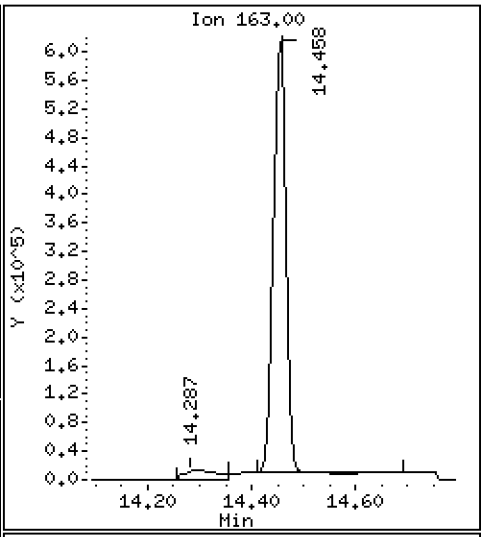
Column phase: ZB-5msi

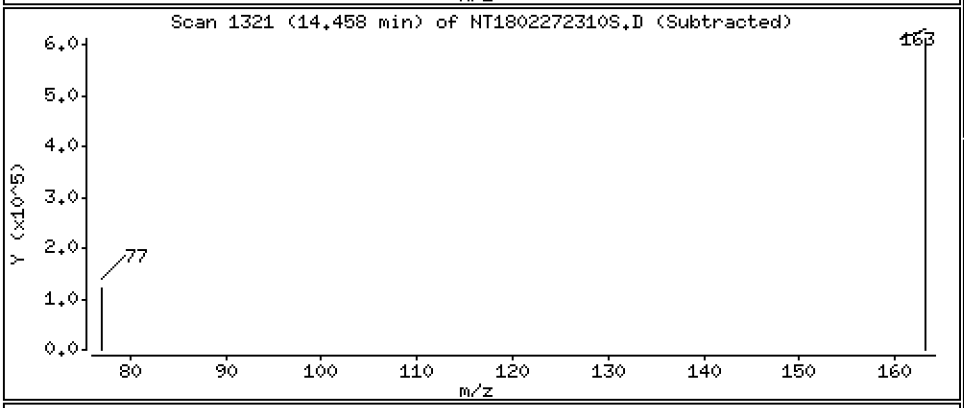
Column diameter: 0.25

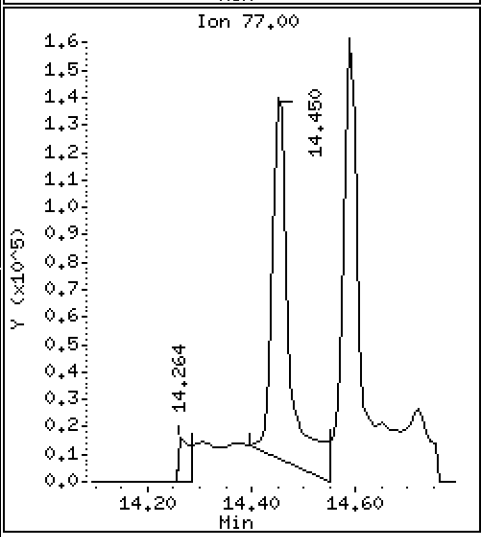
39 Dimethylphthalate

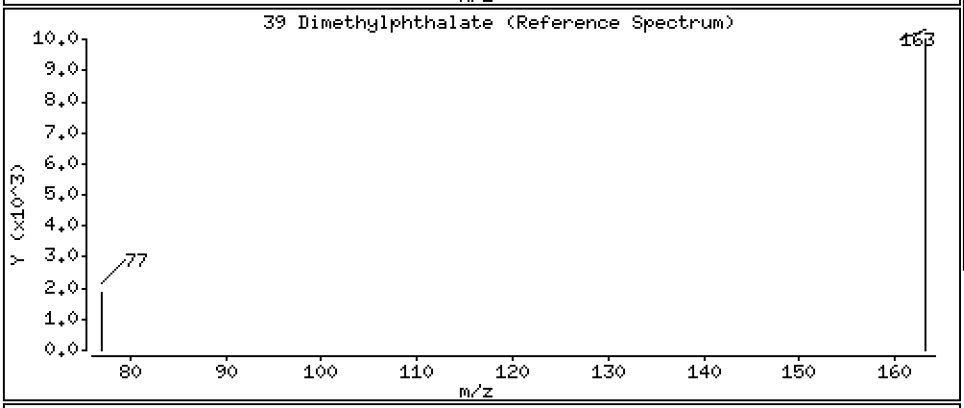
Concentration: 3.911 ug/mL

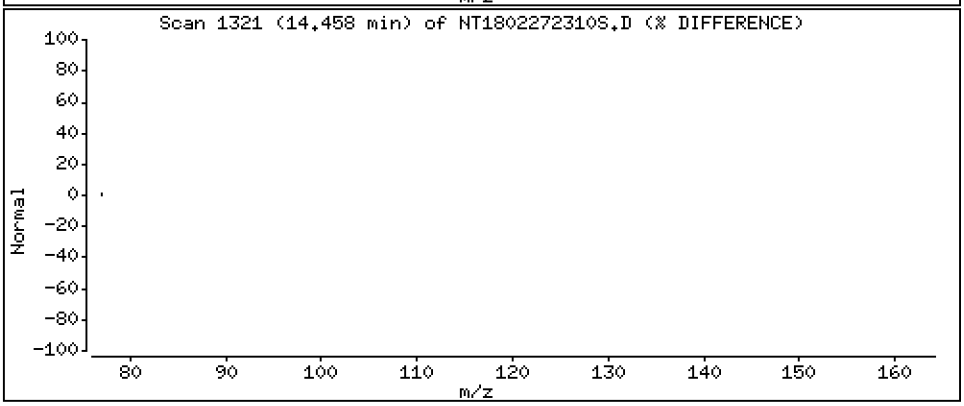












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

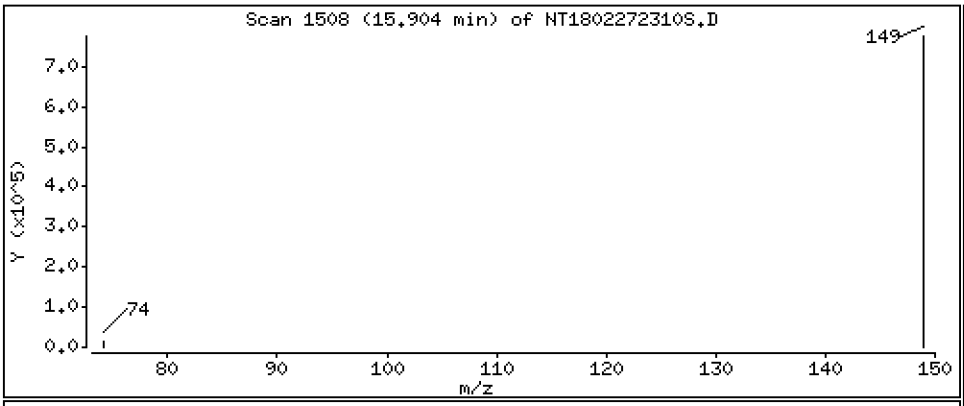
Operator: YZ

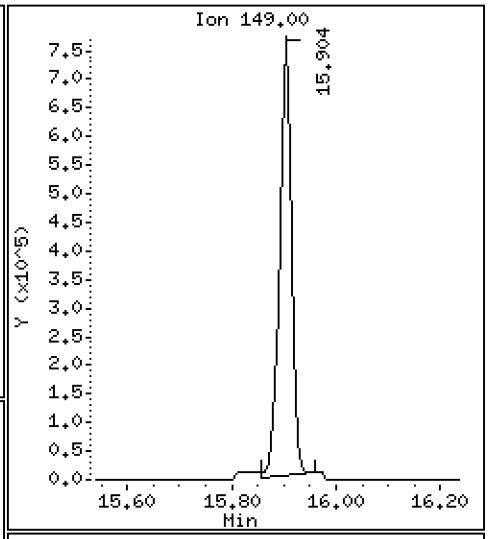
Column phase: ZB-5msi

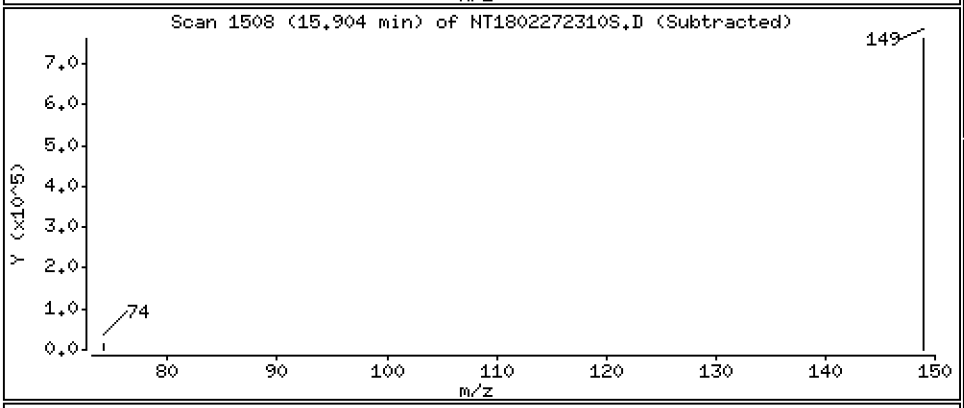
Column diameter: 0.25

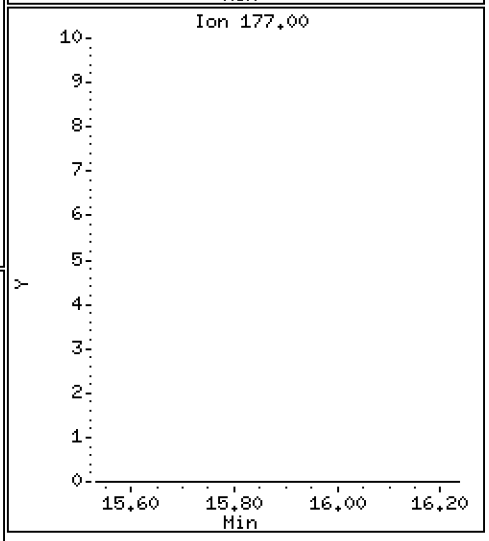
50 Diethylphthalate

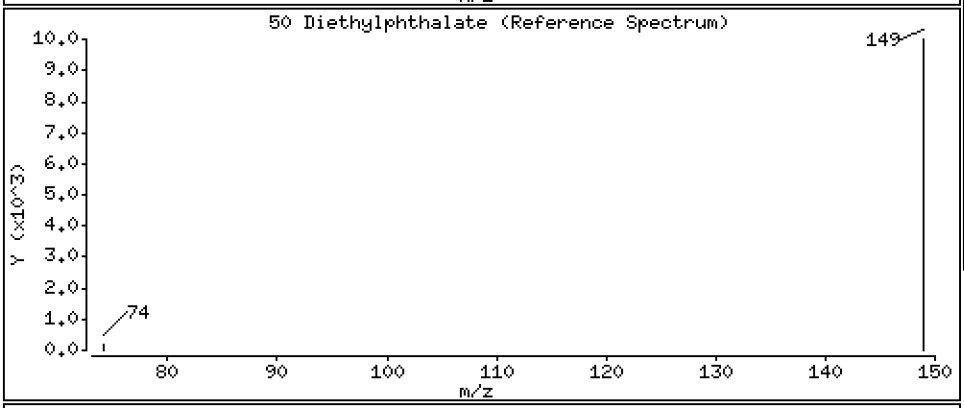
Concentration: 5.415 ug/mL

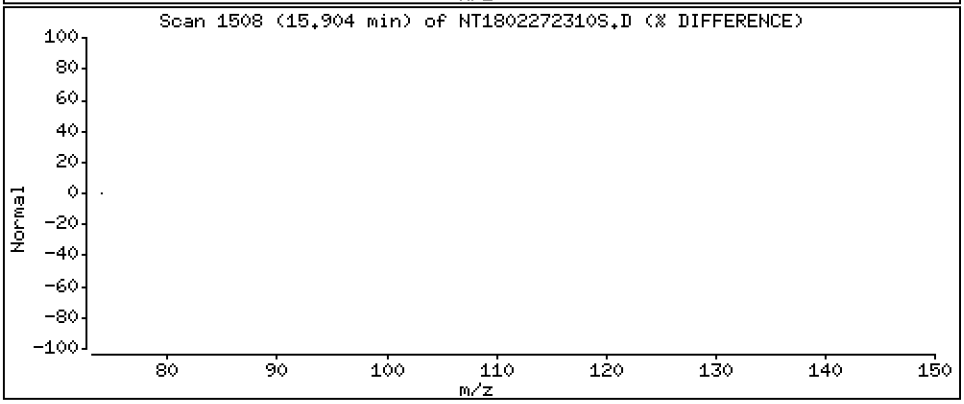












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

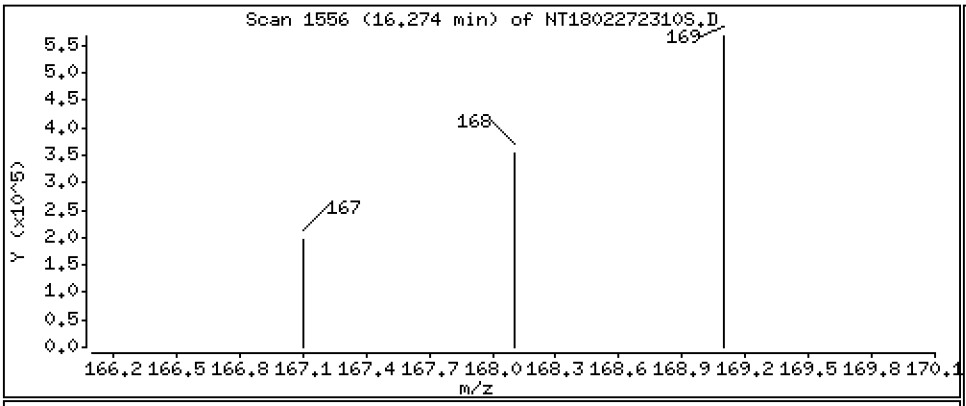
Operator: YZ

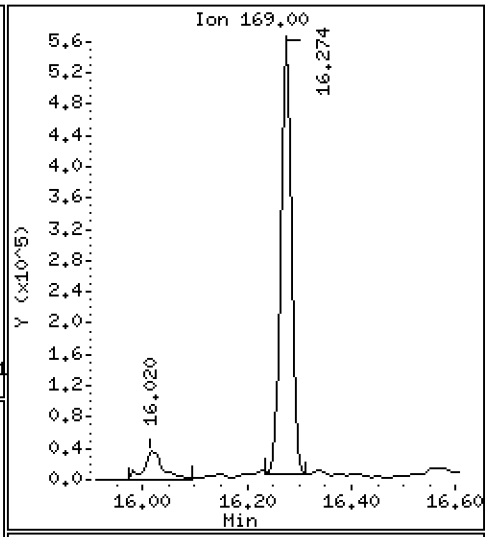
Column phase: ZB-5msi

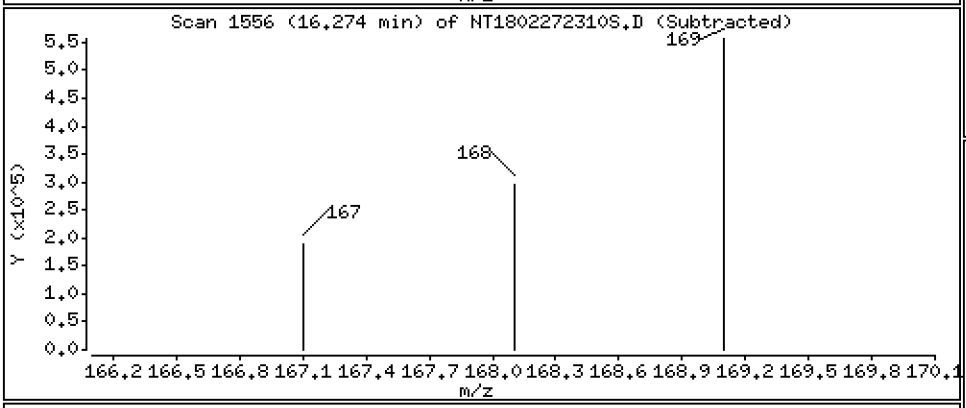
Column diameter: 0.25

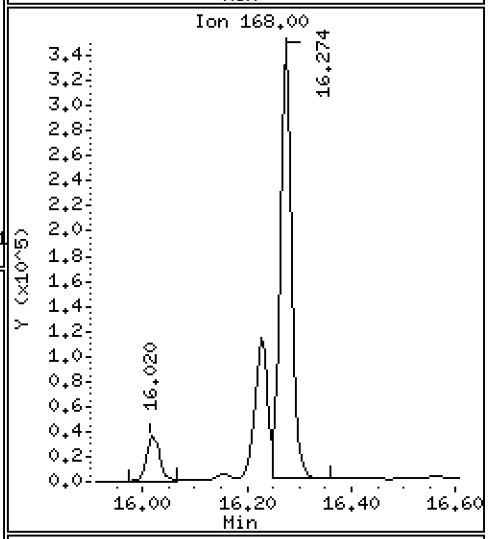
54 N-Nitrosodiphenylamine

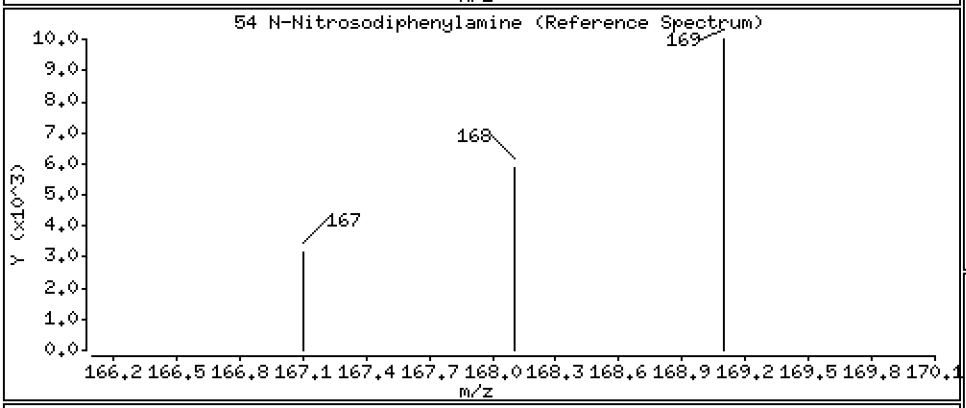
Concentration: 3.629 ug/mL

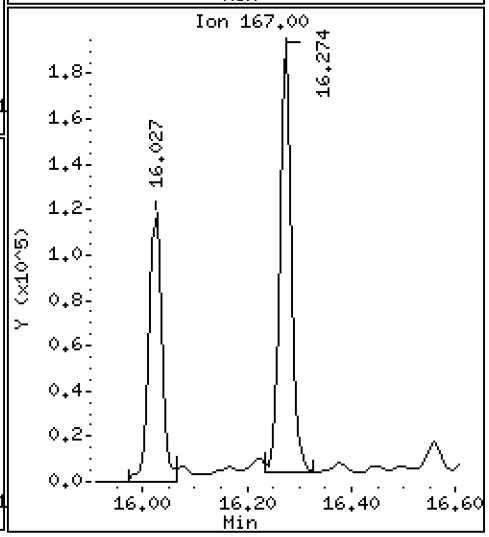


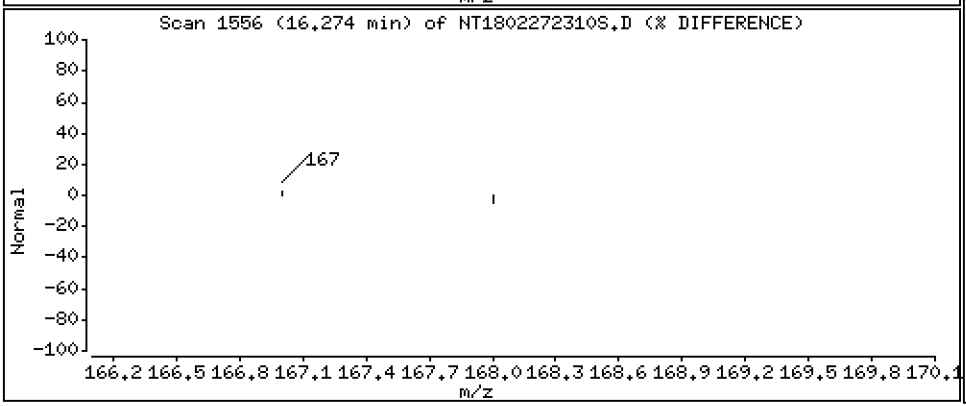












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Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

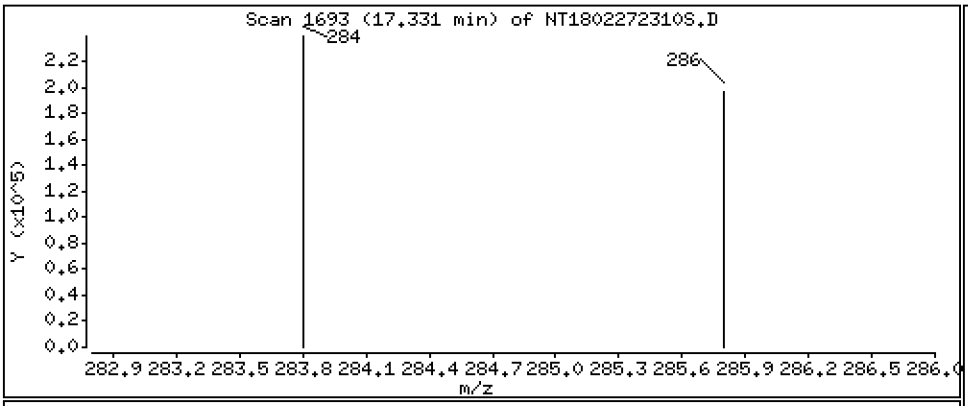
Operator: YZ

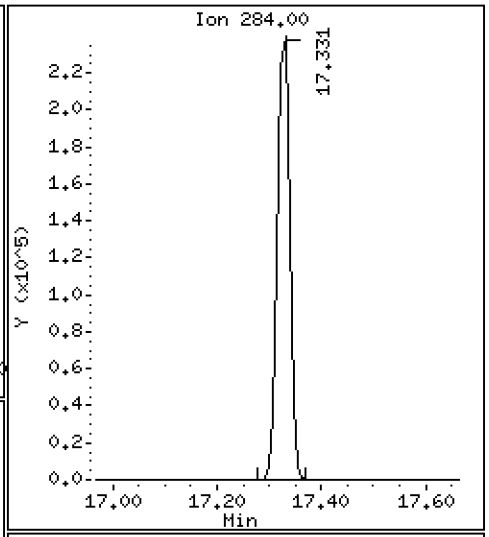
Column phase: ZB-5msi

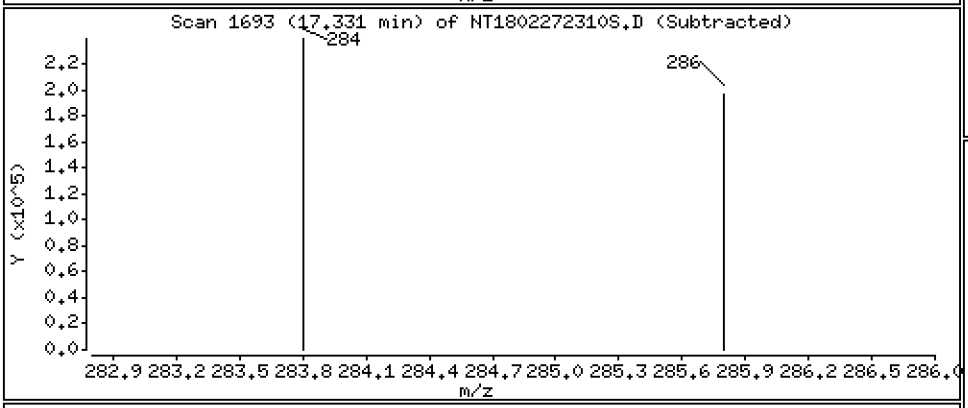
Column diameter: 0.25

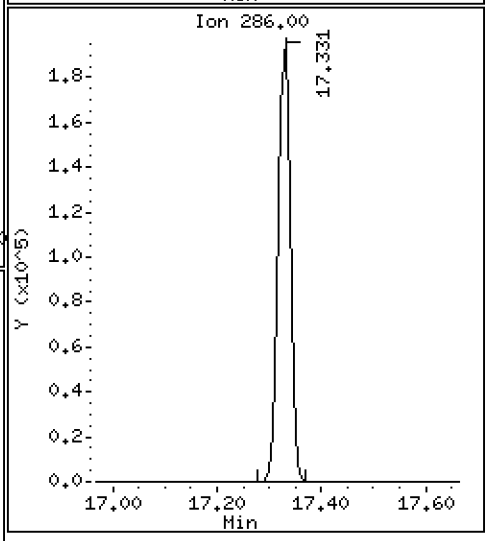
57 Hexachlorobenzene

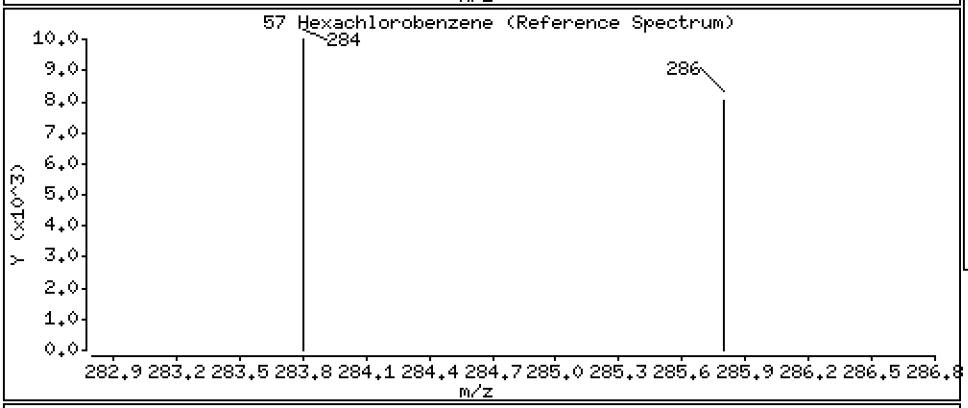
Concentration: 3.548 ug/mL

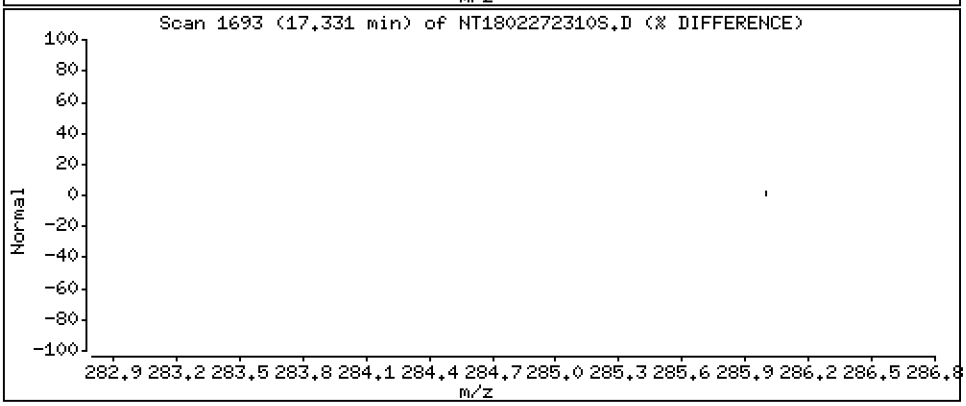












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

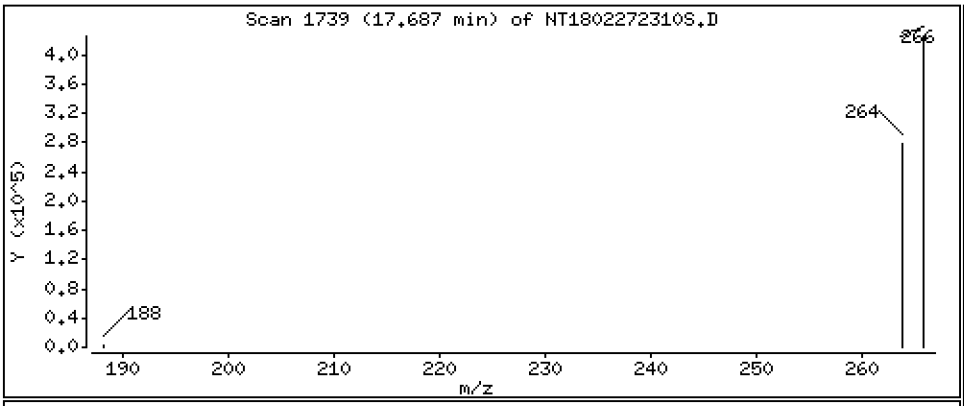
Operator: YZ

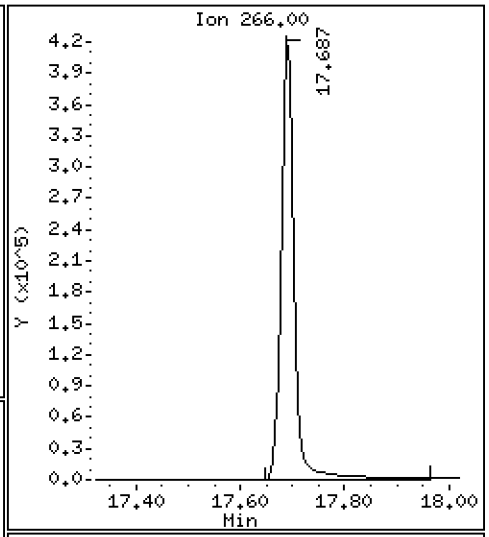
Column phase: ZB-5msi

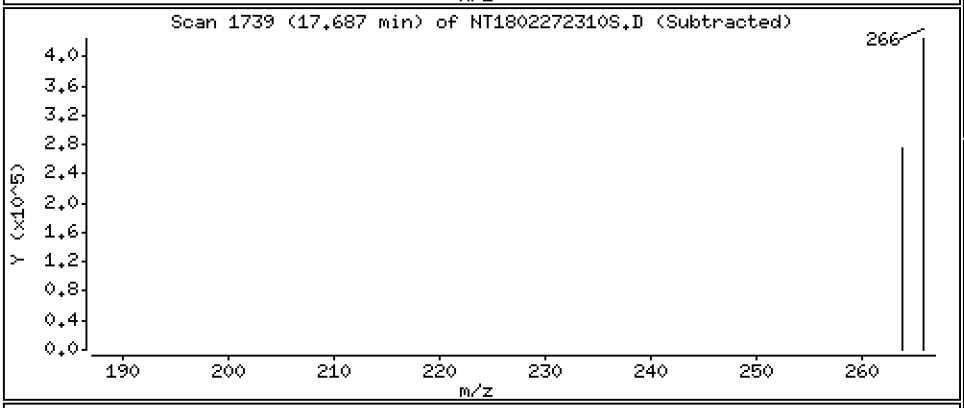
Column diameter: 0.25

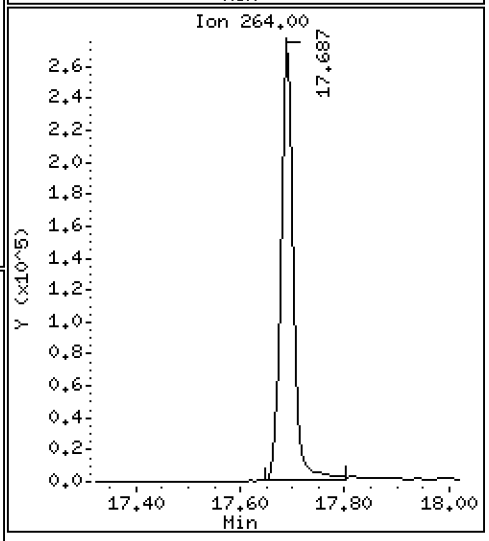
58 Pentachlorophenol

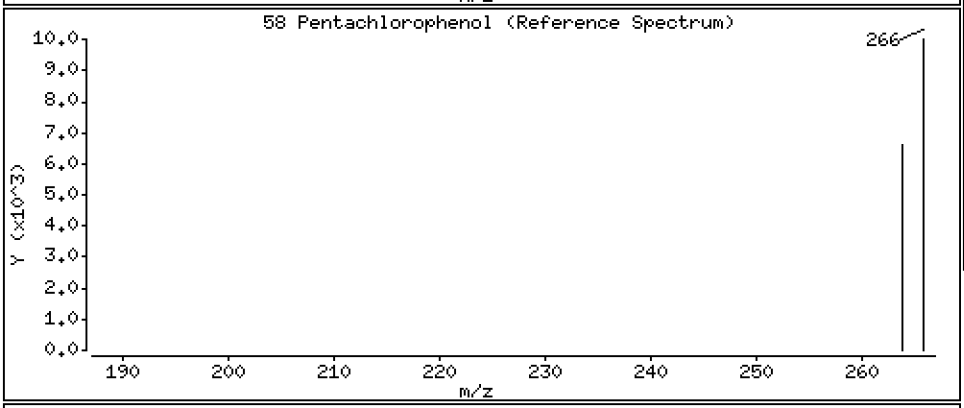
Concentration: 20.79 ug/mL

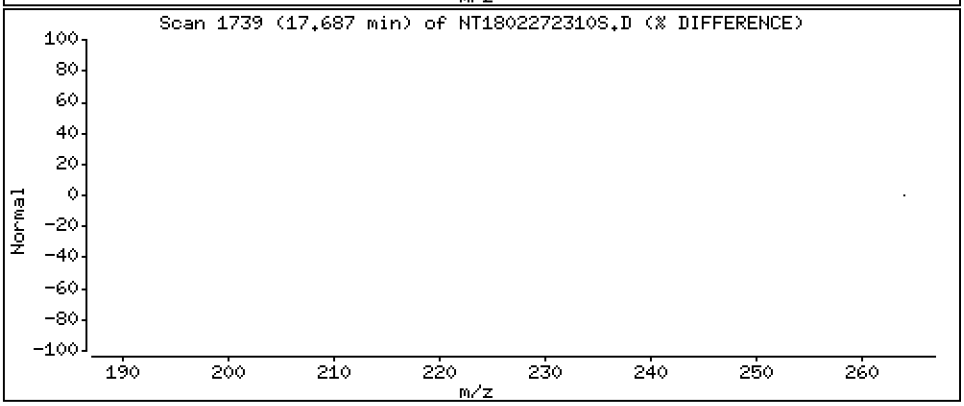












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

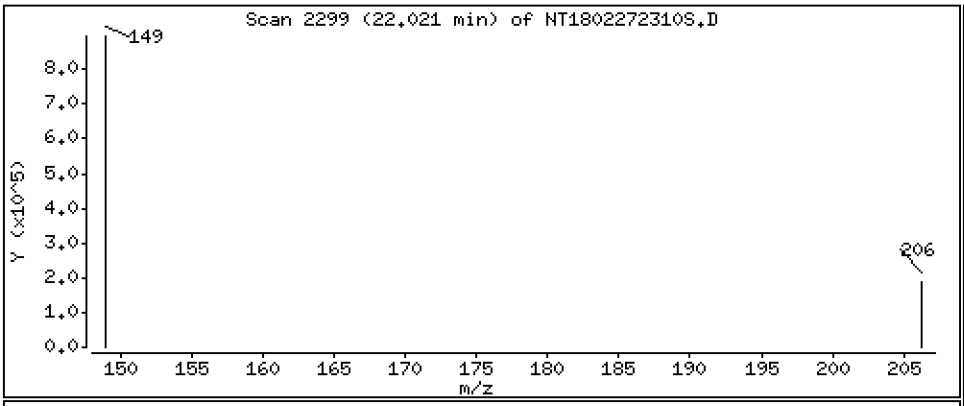
Operator: YZ

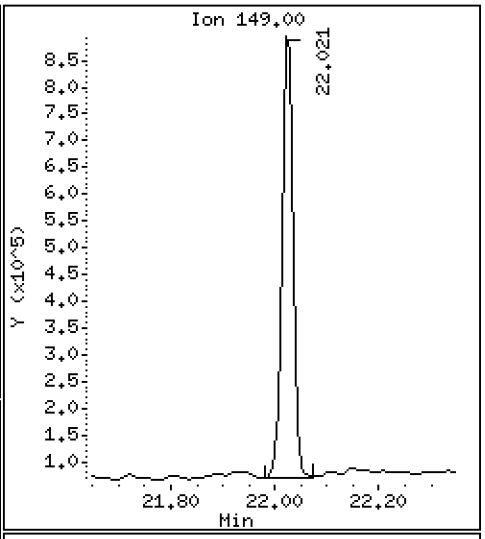
Column phase: ZB-5msi

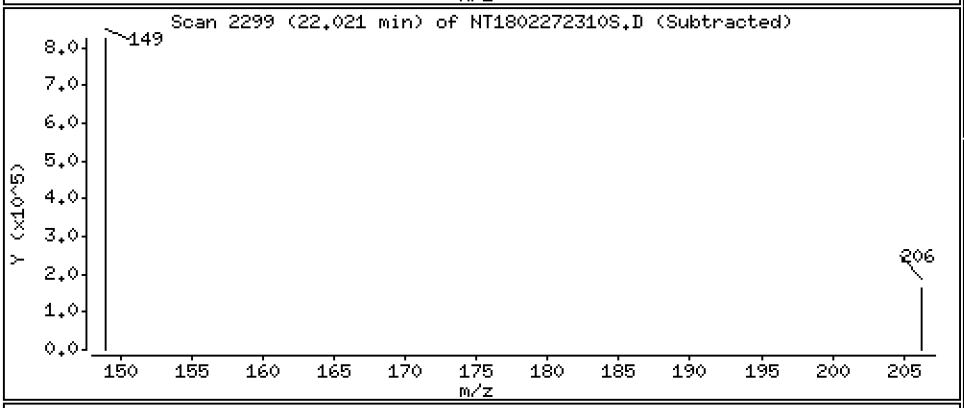
Column diameter: 0.25

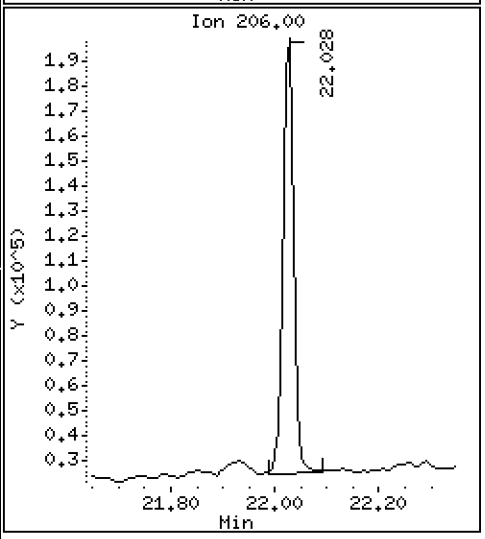
67 Butylbenzylphthalate

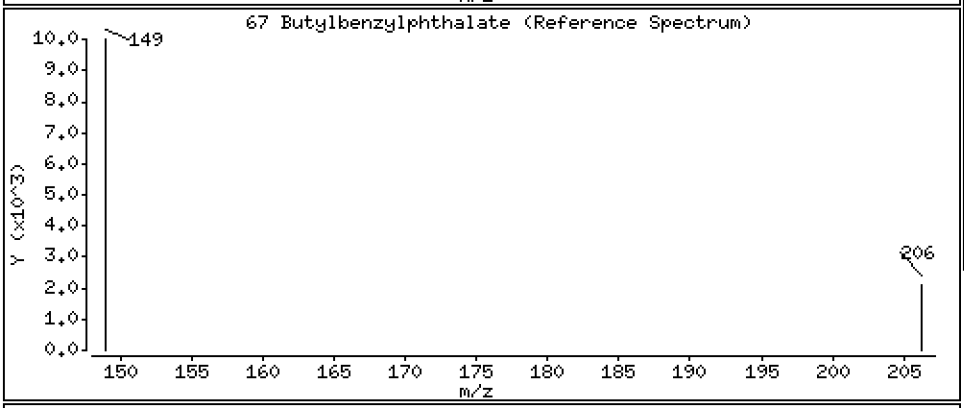
Concentration: 5.197 ug/mL

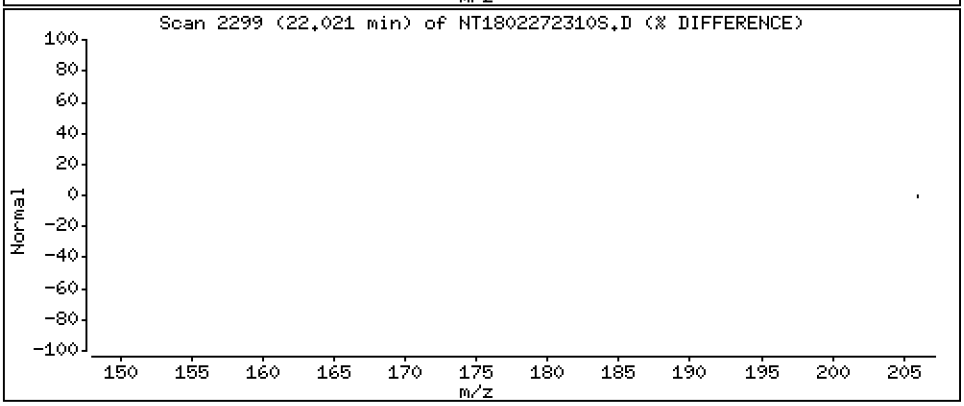












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

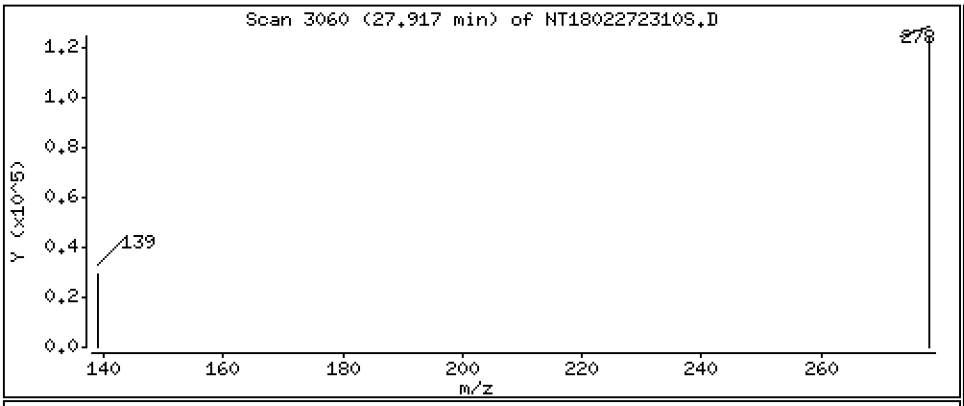
Operator: YZ

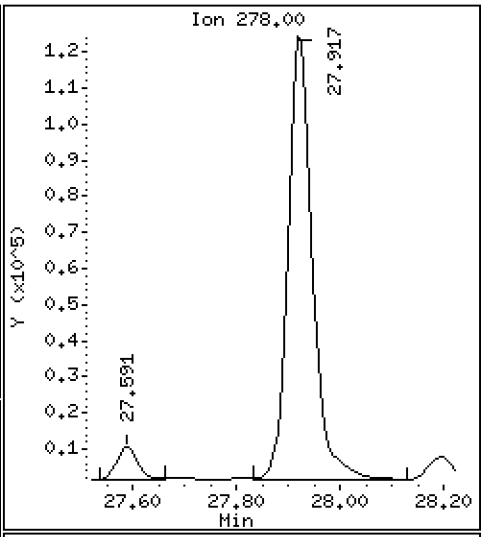
Column phase: ZB-5msi

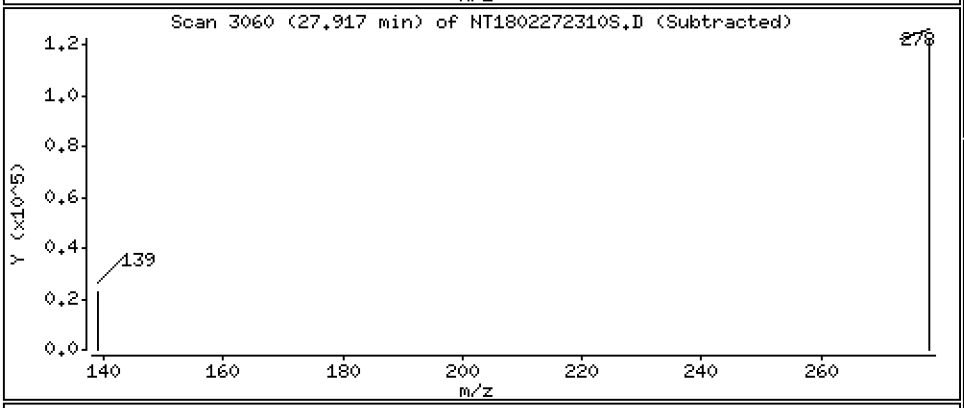
Column diameter: 0.25

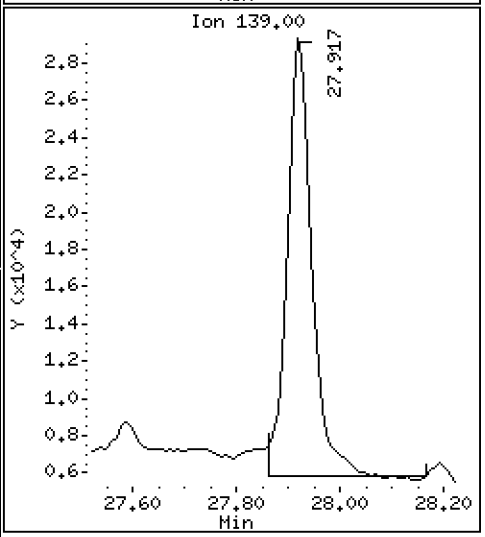
79 Dibenzo(a,h)anthracene

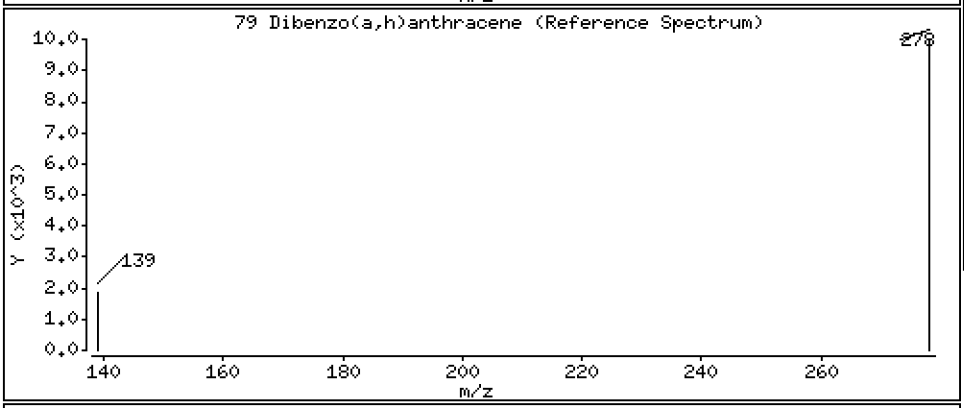
Concentration: 1.444 ug/mL

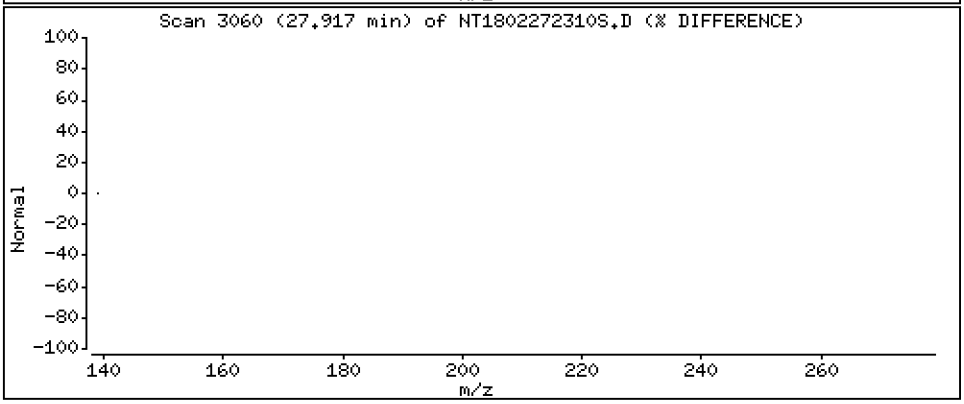












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D

Date : 27-FEB-2023 23:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-MSD2

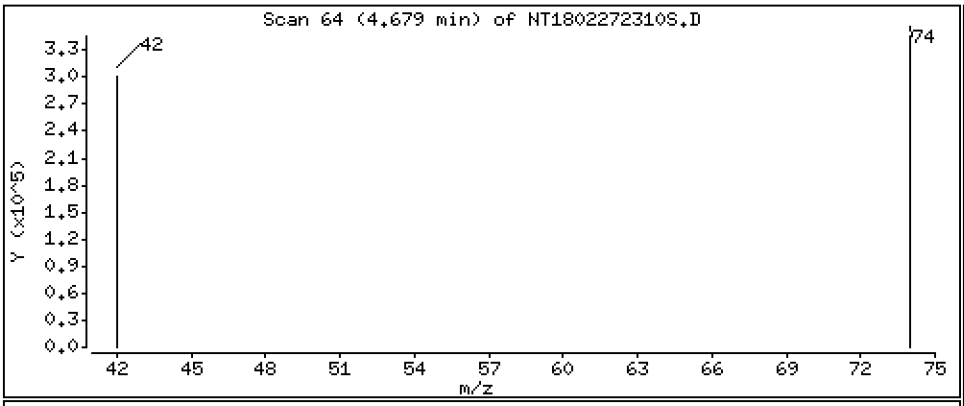
Operator: YZ

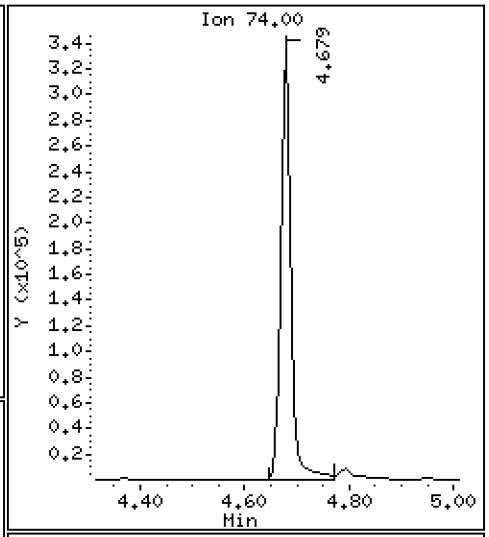
Column phase: ZB-5msi

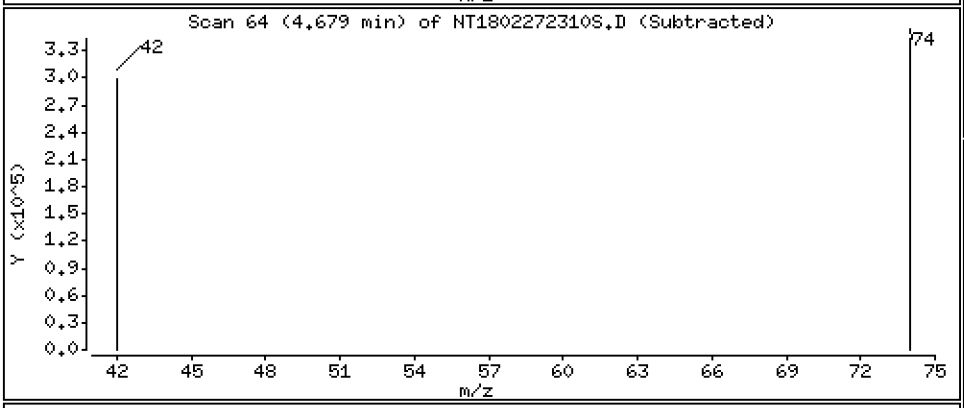
Column diameter: 0.25

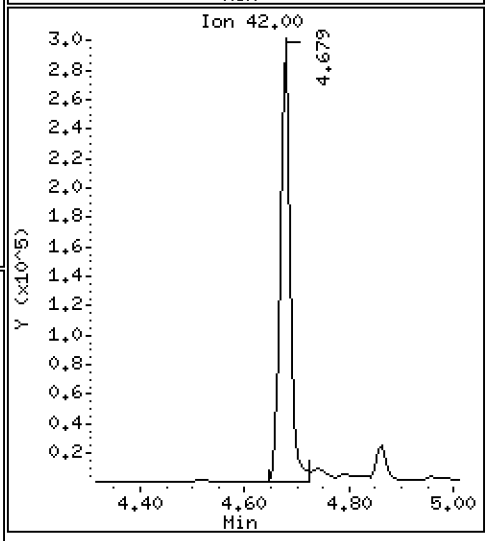
90 N-Nitrosodimethylamine

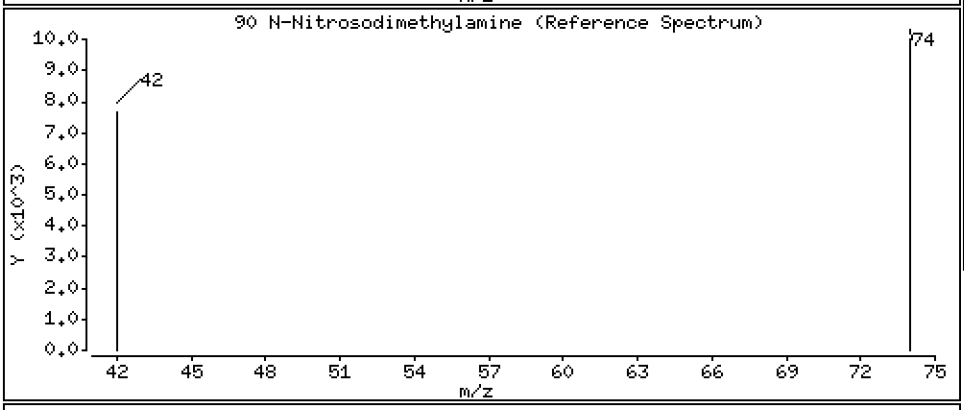
Concentration: 7.683 ug/mL

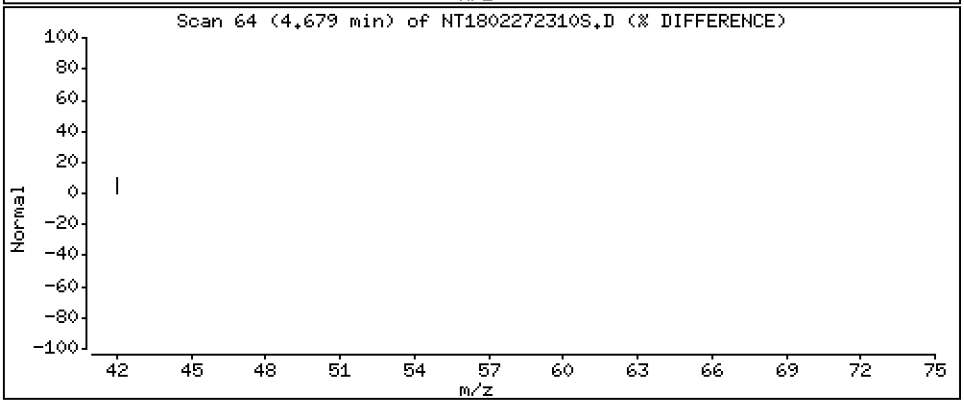












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272310S.D
Lab Smp Id: BLA0410-MSD2
Inj Date : 27-FEB-2023 23:12
Operator : YZ Inst ID: nt18.i
Smp Info : BLA0410-MSD2
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 13:42 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

								CONCENTRATIONS	
		QUANT SIG						ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	6.756	6.725	(0.759)	517626		5.11400	5.114(R)
	3 Phenol	94	8.316	8.301	(0.935)	461154		3.49246	3.492
	7 1,3-Dichlorobenzene	146	8.834	8.827	(0.993)	419075		3.16979	3.170
*	8 1,4-Dichlorobenzene-d4	152	8.896	8.896	(1.000)	313608		4.00000	
	9 1,4-Dichlorobenzene	146	8.927	8.920	(1.003)	439876		3.18593	3.186
	11 Benzyl alcohol	79	9.176	9.168	(1.031)	332141		3.92354	3.924(M)
	12 1,2-Dichlorobenzene	146	9.277	9.277	(1.043)	424801		3.23155	3.232
	13 2-Methylphenol	108	9.409	9.401	(1.058)	326621		3.00792	3.008
	15 4-Methylphenol	108	9.680	9.665	(1.088)	371479		3.40960	3.410
	16 N-Nitroso-di-n-propylamine	70	9.719	9.711	(1.092)	245092		3.33956	3.340
	22 2,4-Dimethylphenol	107	10.698	10.689	(0.943)	1413992		13.2250	13.22
	24 Benzoic acid	105	10.935	10.868	(0.964)	848831		18.7129	18.71
	26 1,2,4-Trichlorobenzene	180	11.262	11.262	(0.993)	372680		3.40382	3.404
*	27 Naphthalene-d8	136	11.347	11.347	(1.000)	1198353		4.00000	
	30 Hexachlorobutadiene	225	11.748	11.741	(1.035)	233476		3.55418	3.554
	39 Dimethylphthalate	163	14.457	14.442	(0.968)	968775		3.91067	3.911
*	42 Acenaphthene-d10	162	14.929	14.921	(1.000)	644797		4.00000	
	50 Diethylphthalate	149	15.903	15.888	(1.065)	1225712		5.41467	5.415
	54 N-Nitrosodiphenylamine	169	16.273	16.258	(0.907)	800880		3.62853	3.629
	57 Hexachlorobenzene	284	17.330	17.315	(0.966)	375996		3.54827	3.548
	58 Pentachlorophenol	266	17.687	17.671	(0.986)	749167		20.7883	20.79
*	59 Phenanthrene-d10	188	17.942	17.927	(1.000)	1525603		4.00000	
$	66 Terphenyl-d14	244	21.106	21.068	(0.918)	1183718		4.22485	4.225(R)
	67 Butylbenzylphthalate	149	22.020	21.997	(0.958)	1270209		5.19682	5.197
*	69 Chrysene-d12	240	22.996	22.957	(1.000)	1547346		4.00000	
*	77 Perylene-d12	264	25.496	25.442	(1.000)	944991		4.00000	
	79 Dibenzo(a,h)anthracene	278	27.917	27.871	(1.095)	405560		1.44438	1.444
	90 N-Nitrosodimethylamine	74	4.678	4.663	(0.526)	462863		7.68319	7.683

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272310S.D
Lab Smp Id: BLA0410-MSD2
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	334128	167064	668256	313608	-6.14
27 Naphthalene-d8	1260796	630398	2521592	1198353	-4.95
42 Acenaphthene-d10	648152	324076	1296304	644797	-0.52
59 Phenanthrene-d10	1231995	615998	2463990	1525603	23.83
69 Chrysene-d12	1126974	563487	2253948	1547346	37.30
77 Perylene-d12	1243668	621834	2487336	944991	-24.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.35	10.85	11.85	11.35	-0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.93	0.05
59 Phenanthrene-d10	17.93	17.43	18.43	17.94	0.09
69 Chrysene-d12	22.96	22.46	23.46	23.00	0.17
77 Perylene-d12	25.44	24.94	25.94	25.50	0.21

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272310S.D

Lab ID: BLA0410-MSD2
nt18.i, 20230227.b\SIM.b\SIMABN2.m,   27-FEB-2023 23:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.964	0.958	0.0060	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802272303S.D

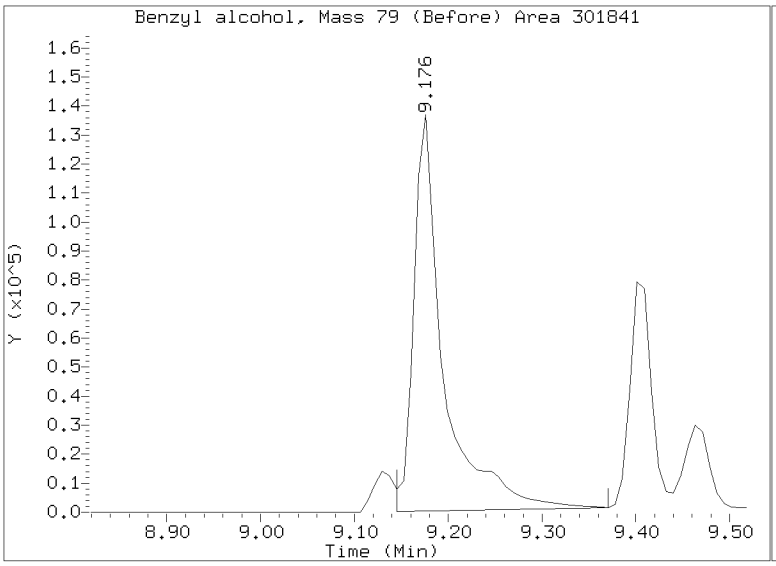
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

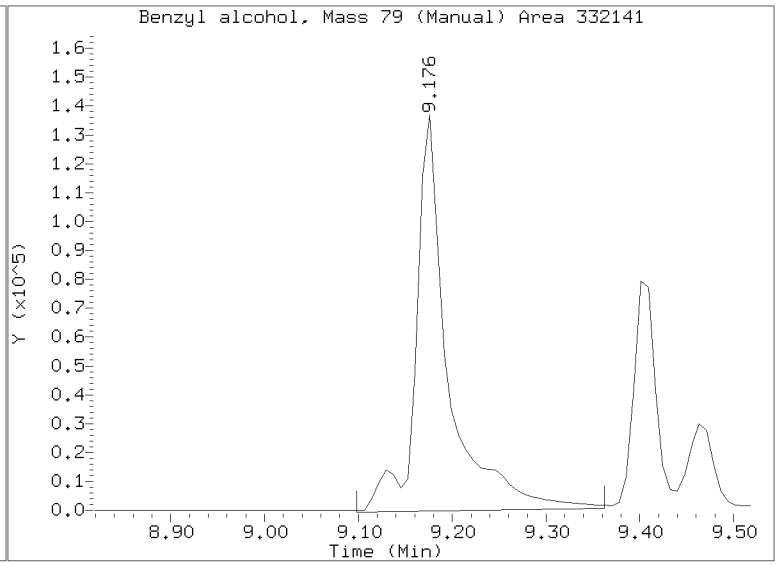
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230227.b/SIM.b/NT1802272310S.D
Injection Date: 27-FEB-2023 23:12
Lab ID:BLA0410-MSD2 Client ID:
Report Date: 03/24/2023 13:46





APPROVED

By Deenay Dunmore at 2:29 pm, Mar 24, 2023

MS / MS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	01/25/23 17:41
Batch:	BLA0411	Laboratory ID:	BLA0411-MS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike
Initial/Final:	13.69 g / 0.5 mL	Source Sample:	LDW23-IT1194

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Benzo(a)anthracene	300	68.7		332		87.8	42 - 120
Chrysene	300	114		315		67.0	48 - 120
Benzo(b)fluoranthene	300	68.3		313		81.7	52 - 137
Benzo(k)fluoranthene	300	37.1		274		79.1	37 - 129
Benzo(a)pyrene	300	52.9		307		84.6	36 - 120
Indeno(1,2,3-cd)pyrene	300	32.1		324		97.3	67 - 132
Dibenzo(a,h)anthracene	300	9.56		316		102	66 - 139

* Values outside of QC limits

MS / MS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	01/25/23 18:08
Batch:	BLA0411	Laboratory ID:	BLA0411-MSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike Dup
Initial/Final:	13.69 g / 0.5 mL	Source Sample:	LDW23-IT1194

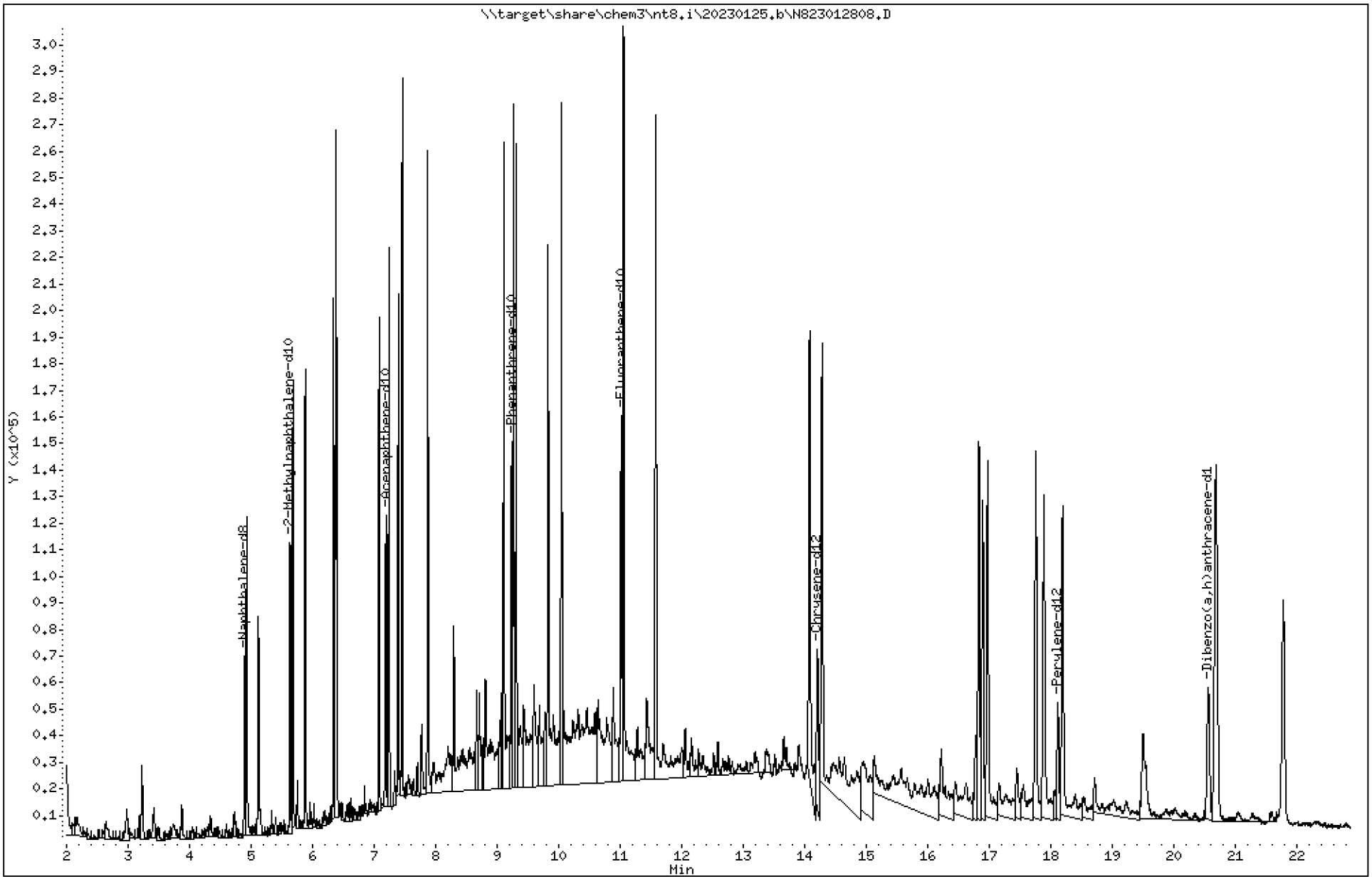
COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #		% RPD #		QC LIMITS RPD	QC LIMITS REC.
Benzo(a)anthracene	300	441	*	124	*	28.3		30	42 - 120
Chrysene	300	470	*	118		39.3	*	30	48 - 120
Benzo(b)fluoranthene	300	444	*	125		34.6	*	30	52 - 137
Benzo(k)fluoranthene	300	326		96.3		17.2		30	37 - 129
Benzo(a)pyrene	300	414		120		29.7		30	36 - 120
Indeno(1,2,3-cd)pyrene	300	379		116		15.7		30	67 - 132
Dibenzo(a,h)anthracene	300	340		110		7.33		30	66 - 139

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D
Date : 25-JAN-2023 17:41
Client ID:
Sample Info: BLA0411-MS1,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

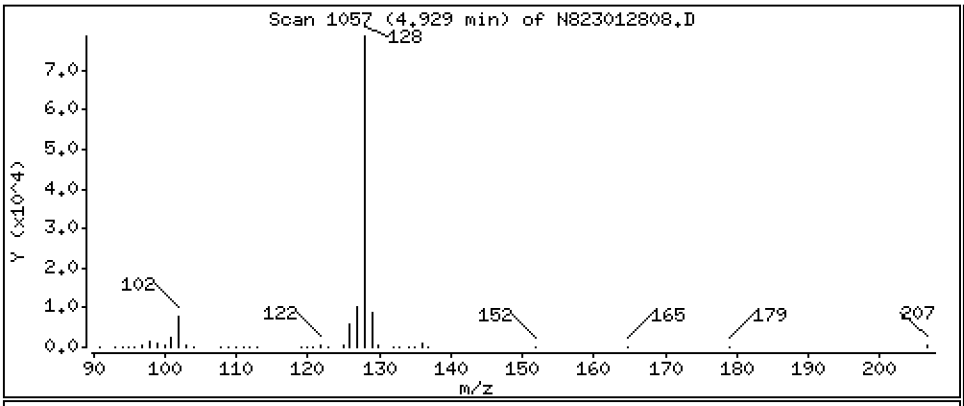
Operator: JZ

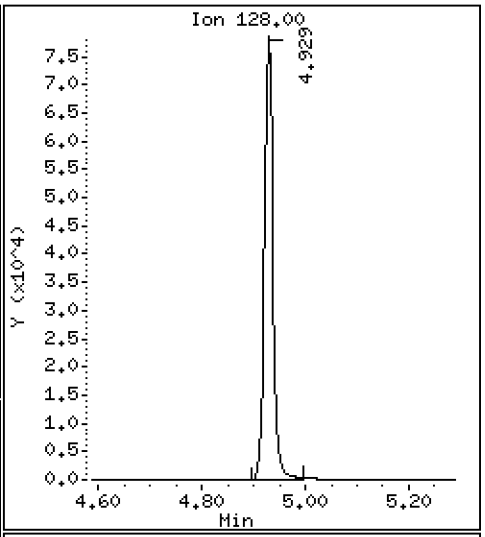
Column phase: Rxi-17sil

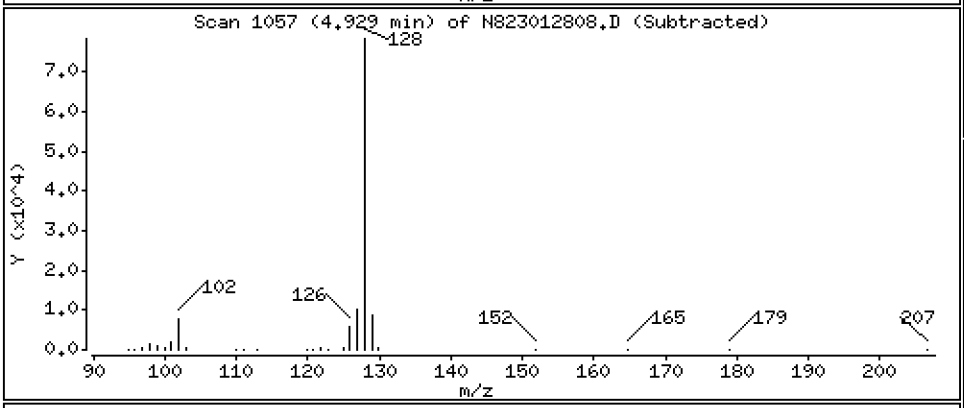
Column diameter: 0.25

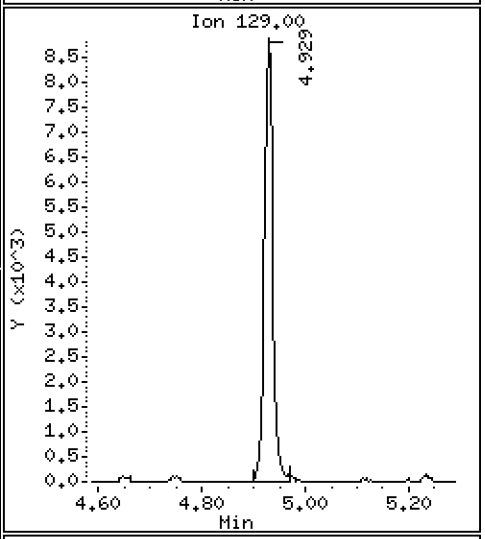
2 Naphthalene

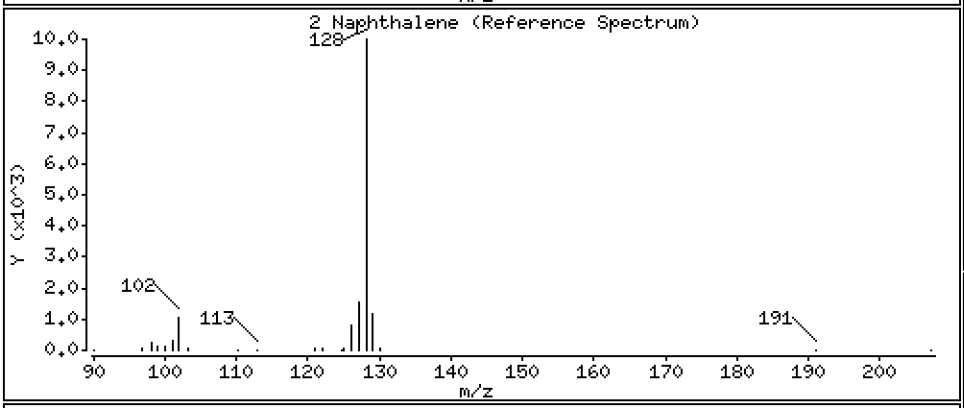
Concentration: 3.722 ug/mL

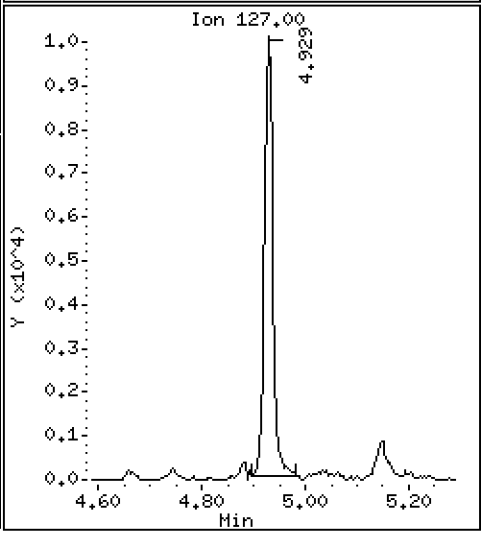


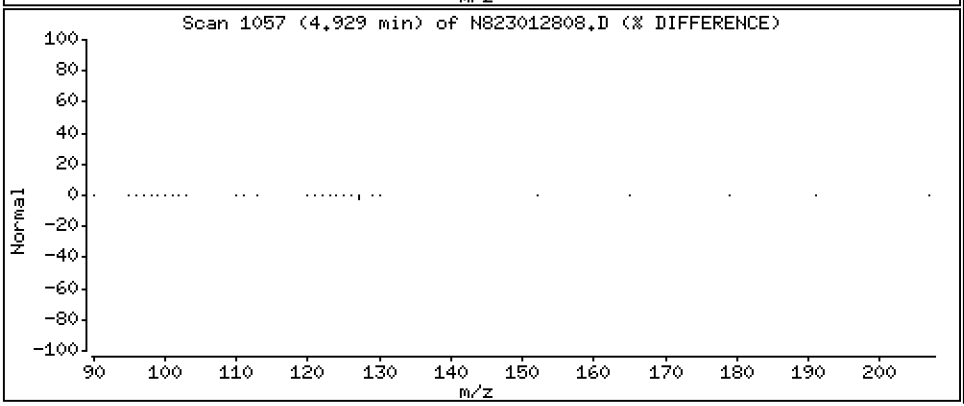












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

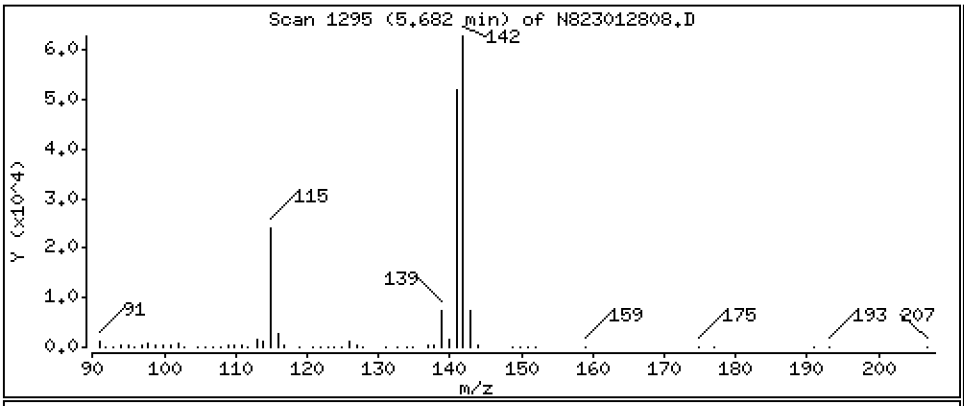
Operator: JZ

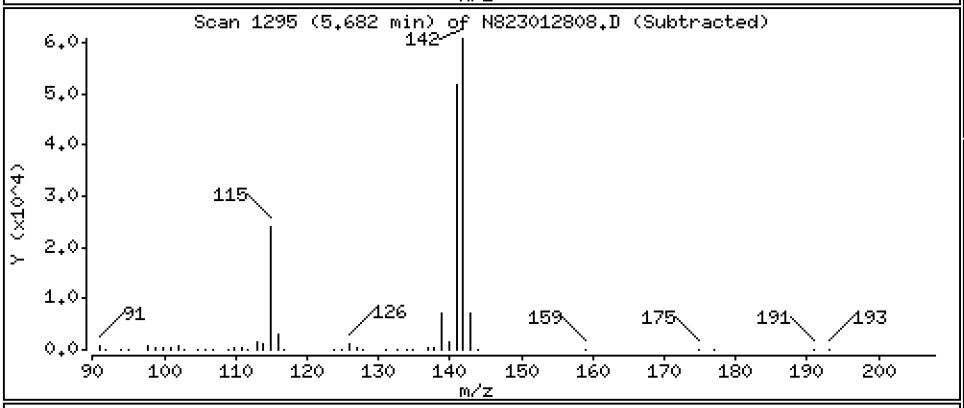
Column phase: Rxi-17sil

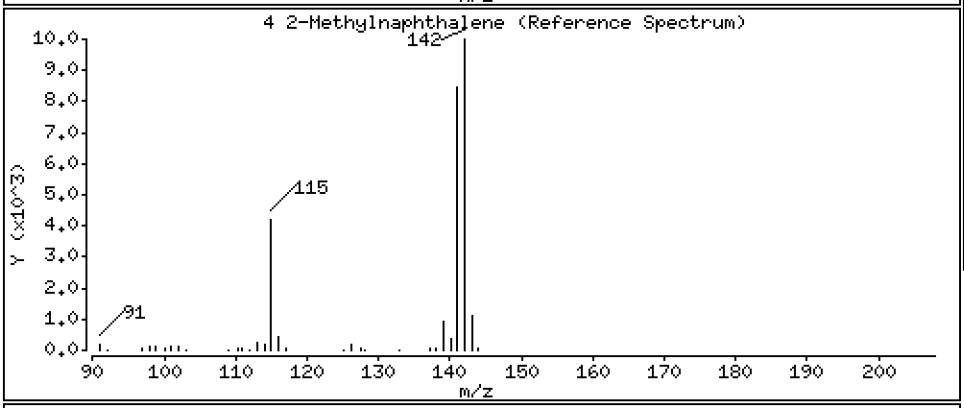
Column diameter: 0.25

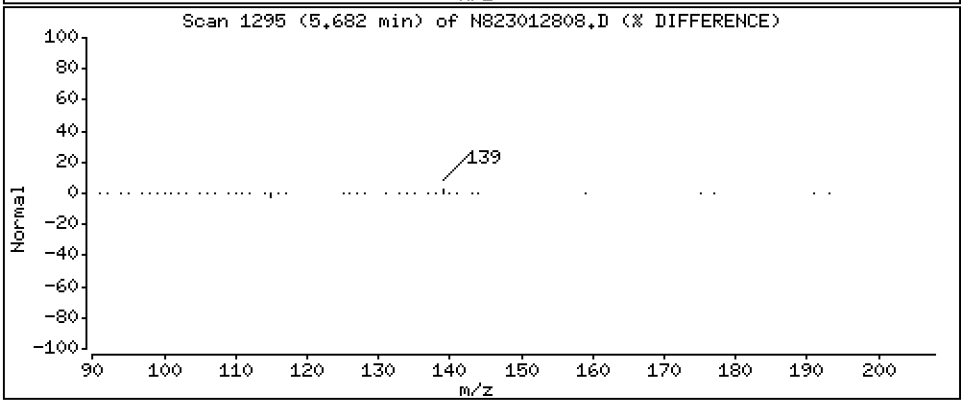
4 2-Methylnaphthalene

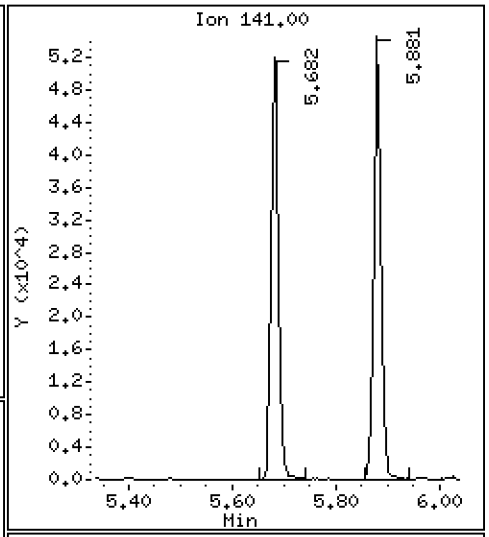
Concentration: 3.975 ug/mL

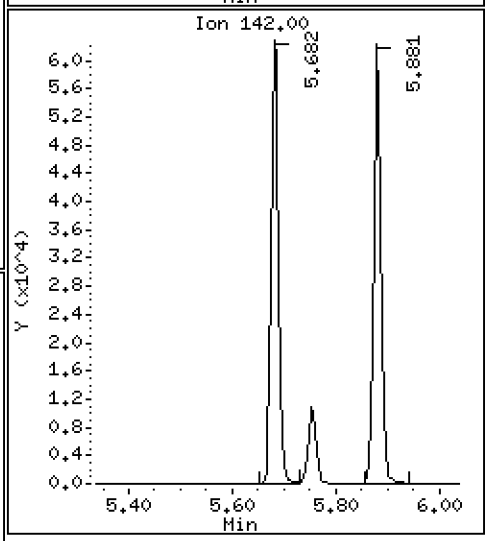












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

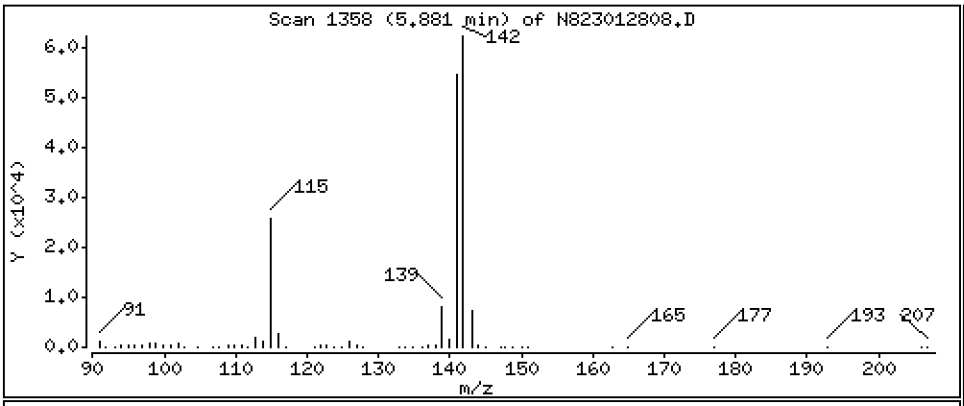
Operator: JZ

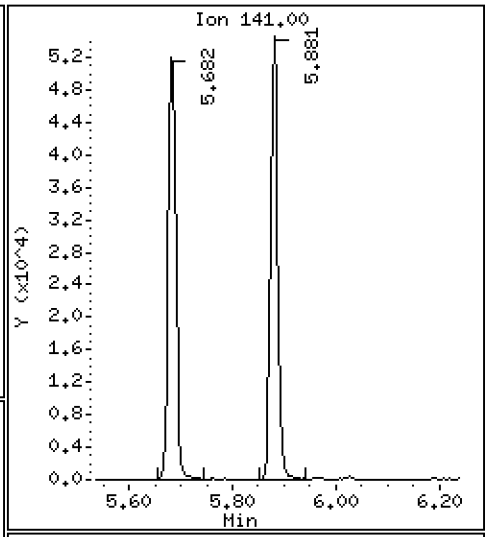
Column phase: Rxi-17sil

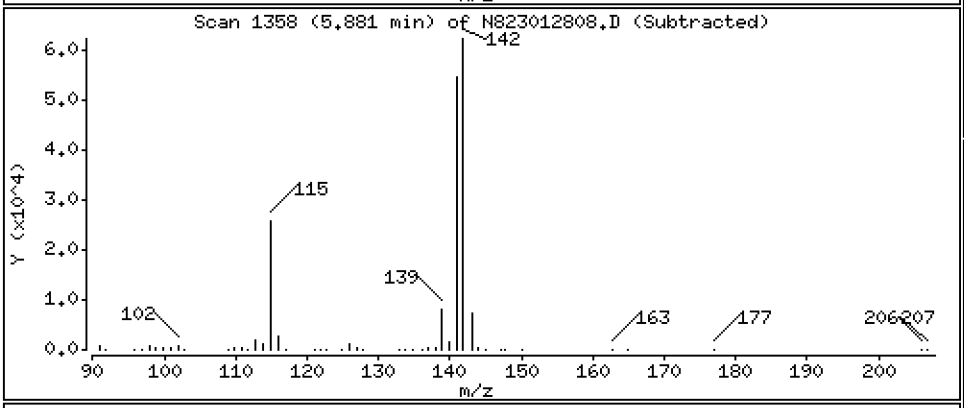
Column diameter: 0.25

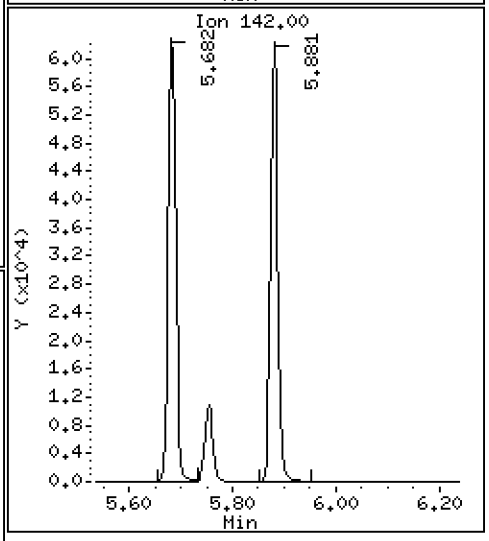
5 1-methylnaphthalene

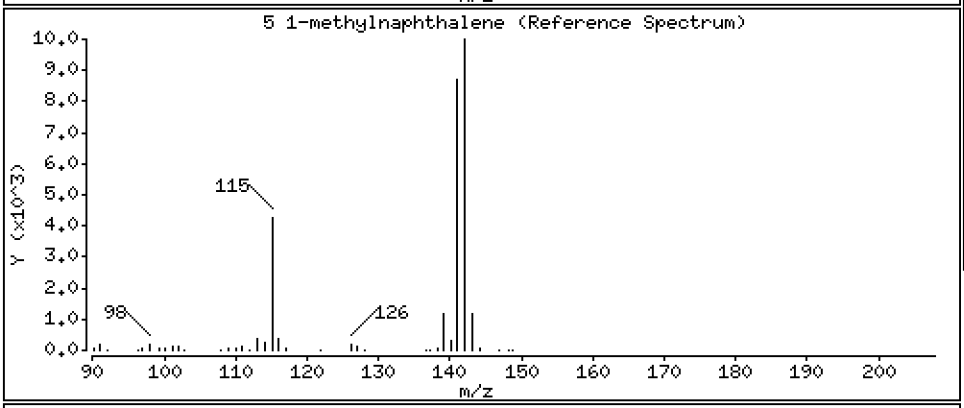
Concentration: 3.932 ug/mL

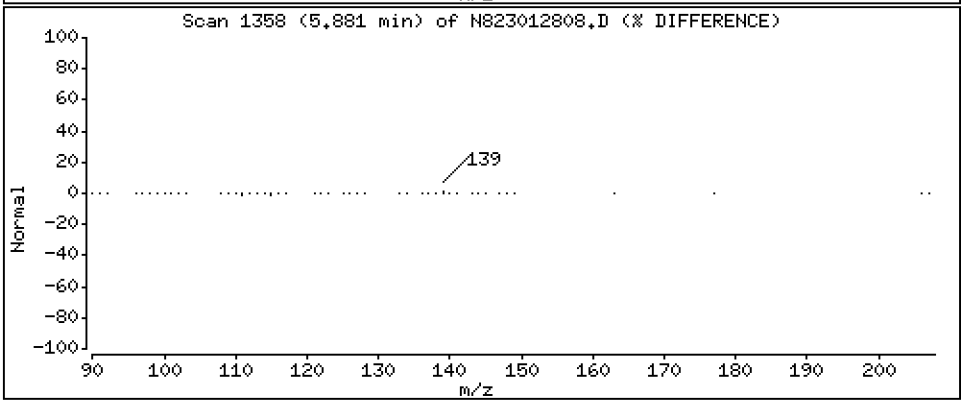












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Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

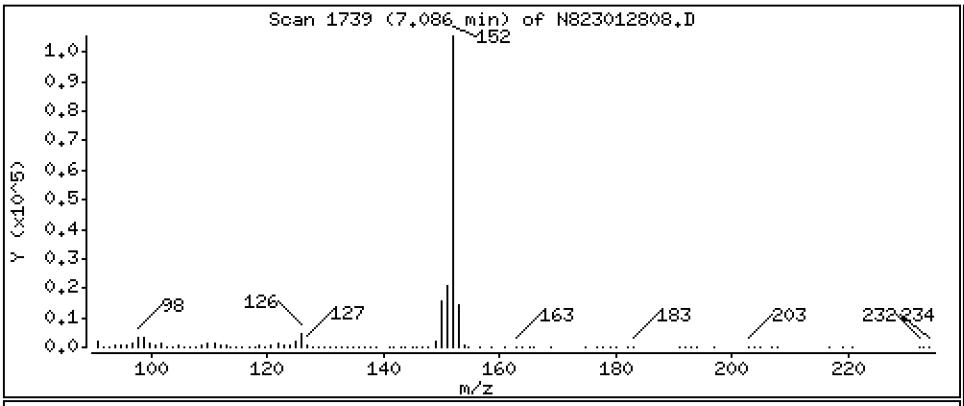
Operator: JZ

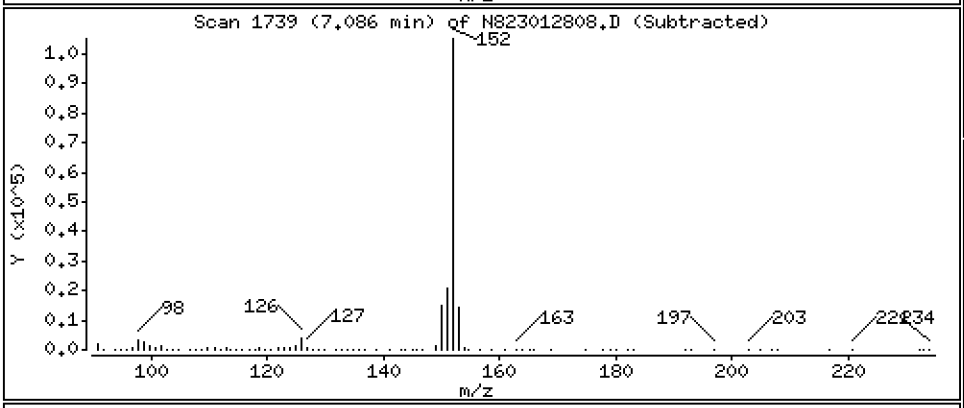
Column phase: Rxi-17sil

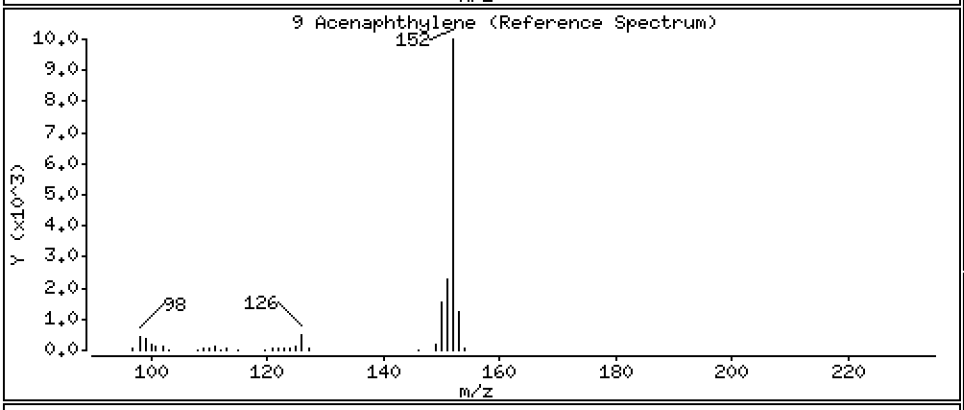
Column diameter: 0.25

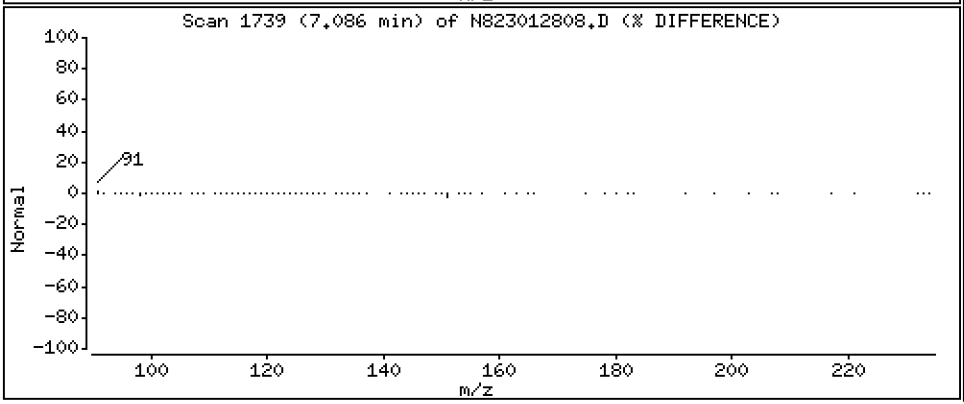
9 Acenaphthylene

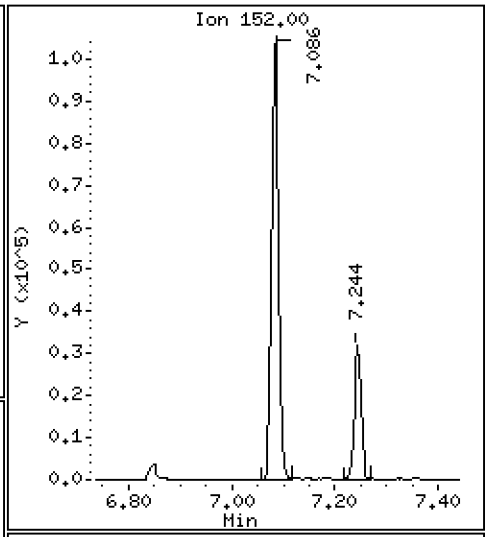
Concentration: 4.439 ug/mL

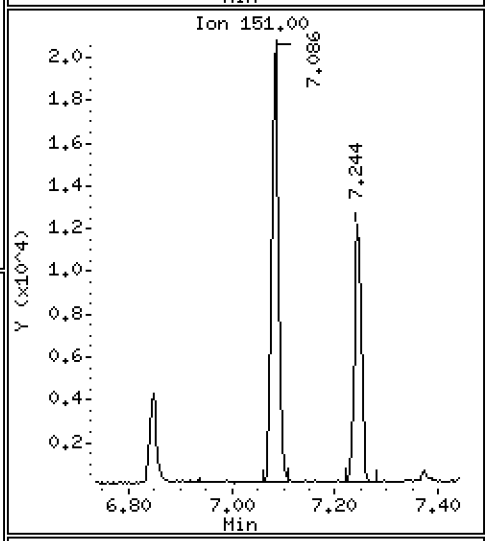


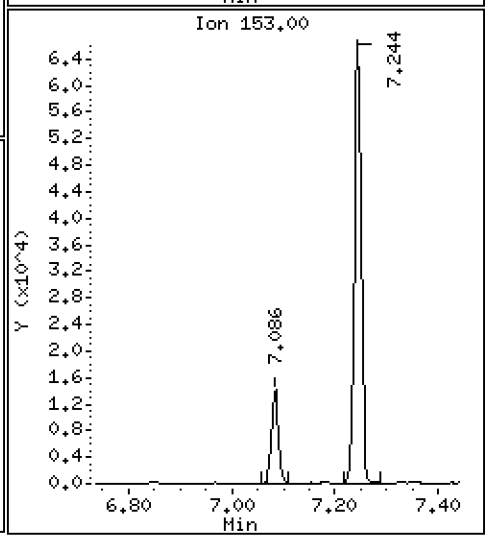












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Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

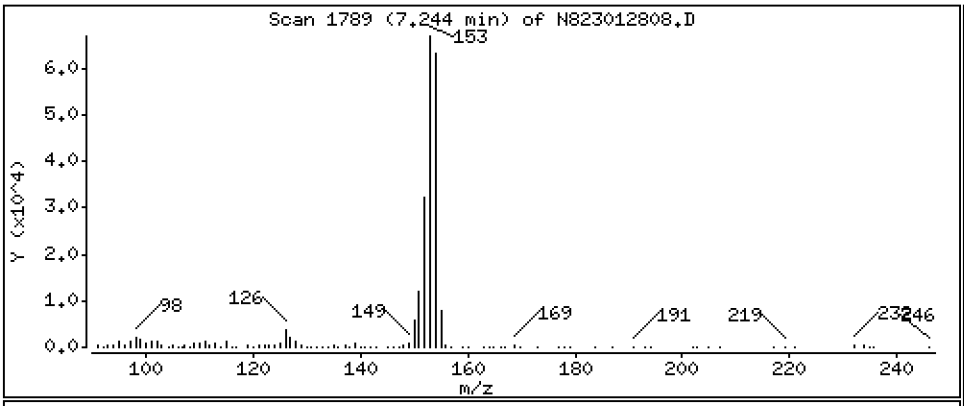
Operator: JZ

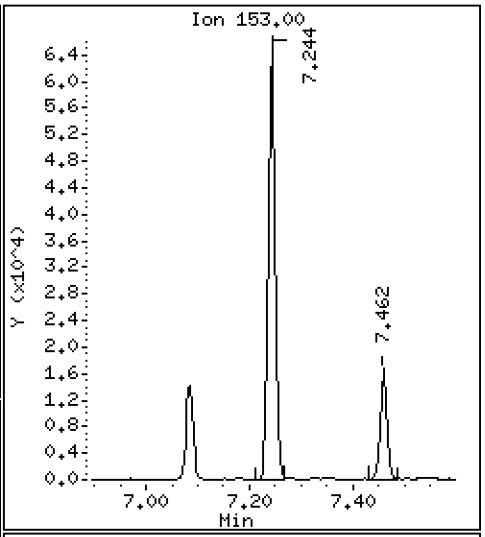
Column phase: Rxi-17sil

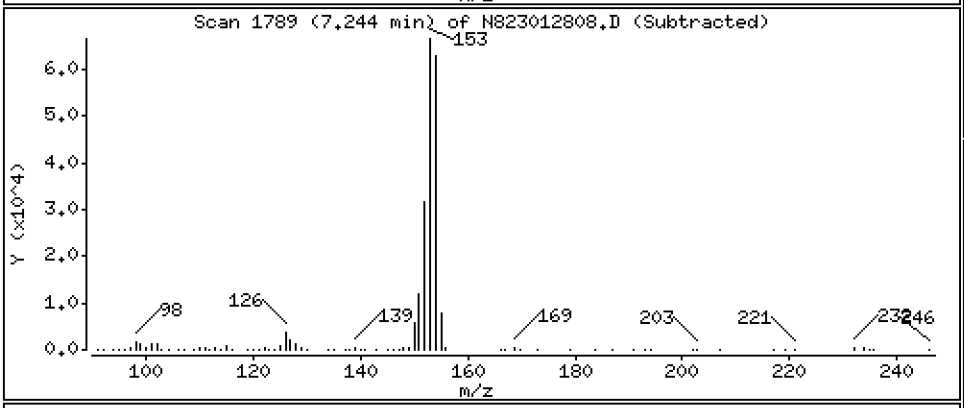
Column diameter: 0.25

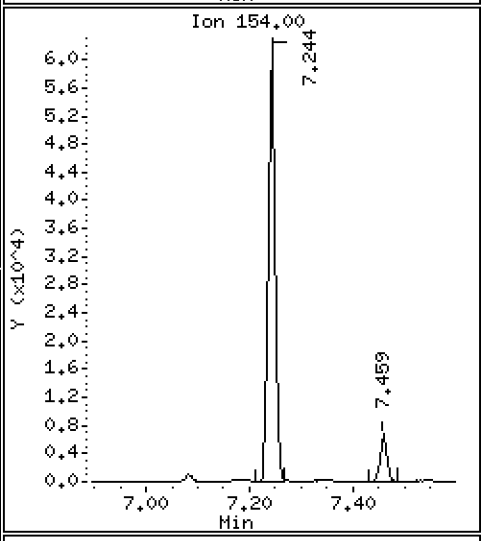
11 Acenaphthene

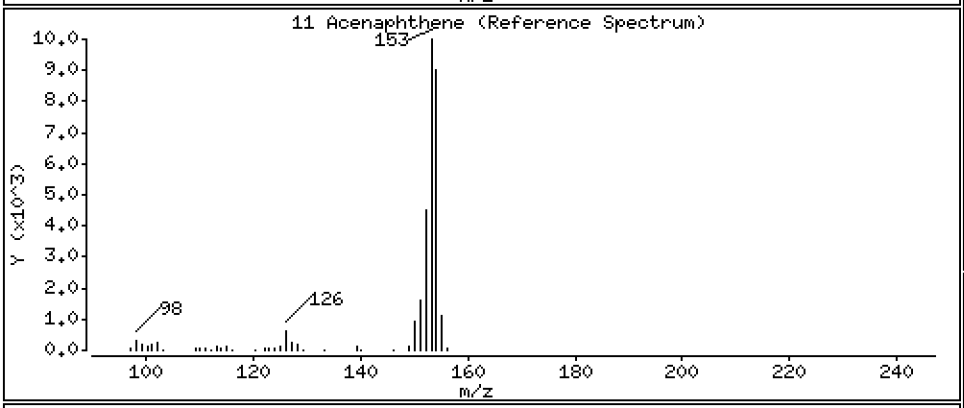
Concentration: 4.094 ug/mL

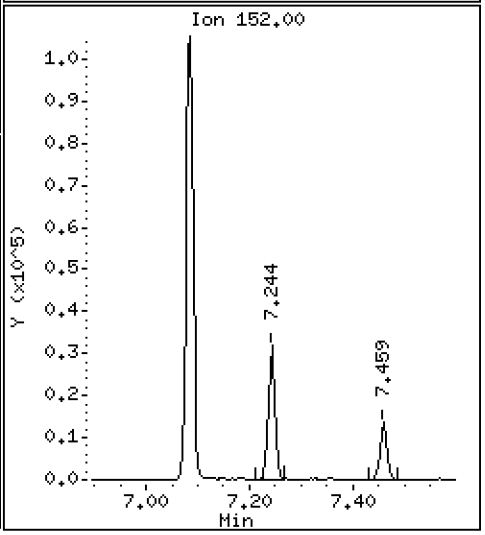


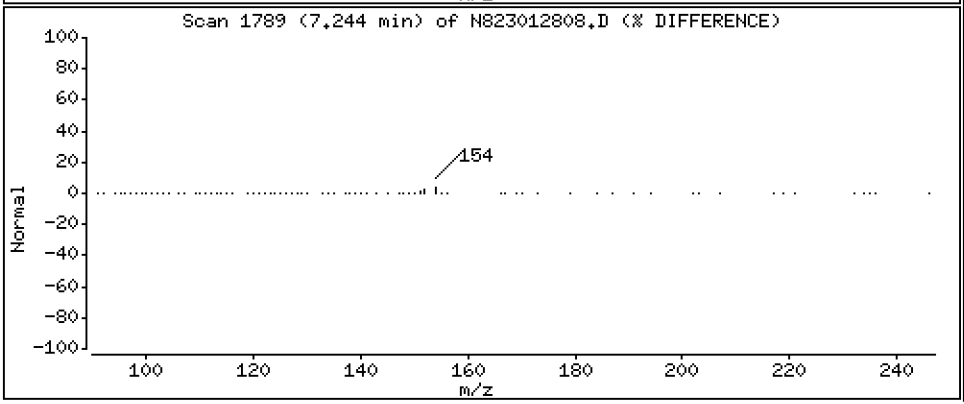












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Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

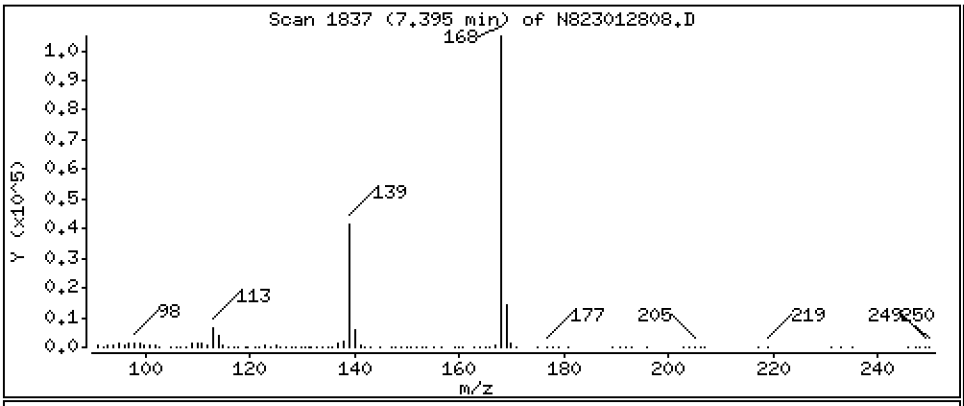
Operator: JZ

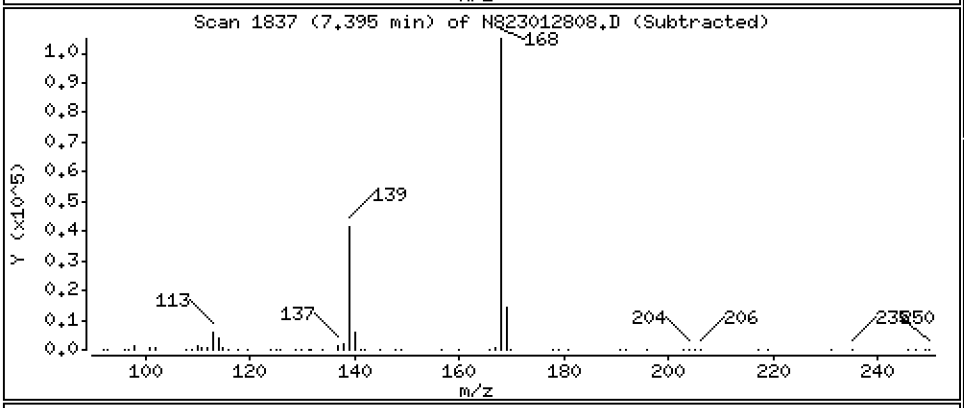
Column phase: Rxi-17sil

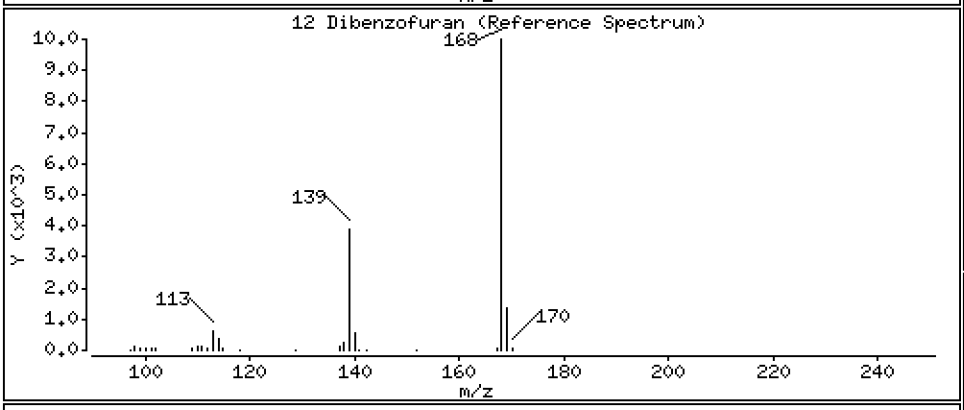
Column diameter: 0.25

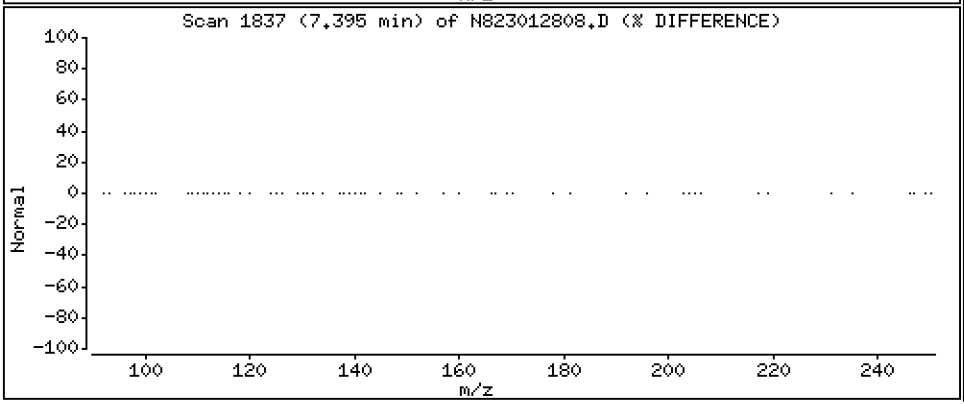
12 Dibenzofuran

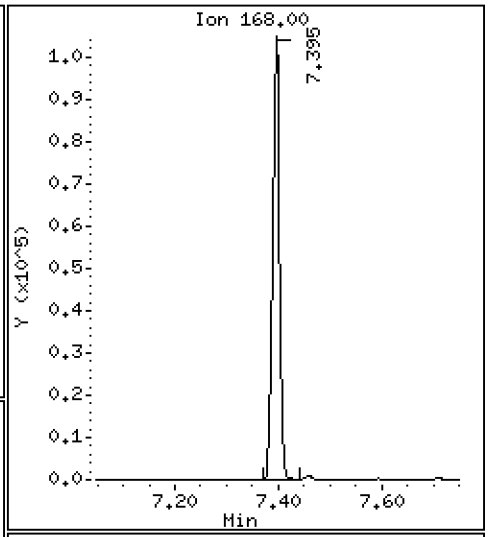
Concentration: 4.158 ug/mL

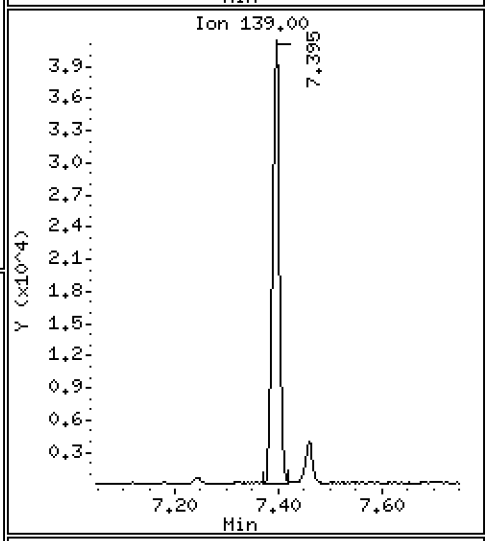


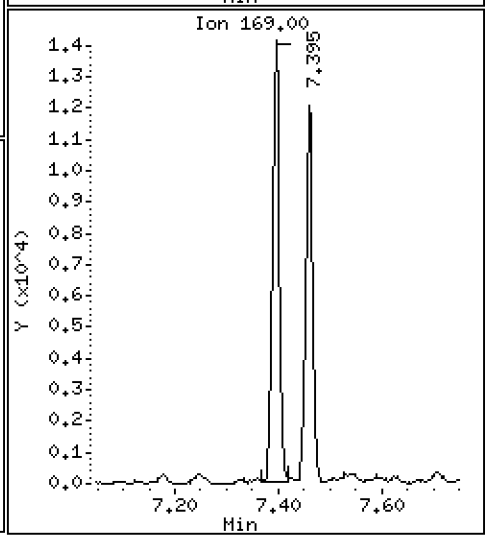












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Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

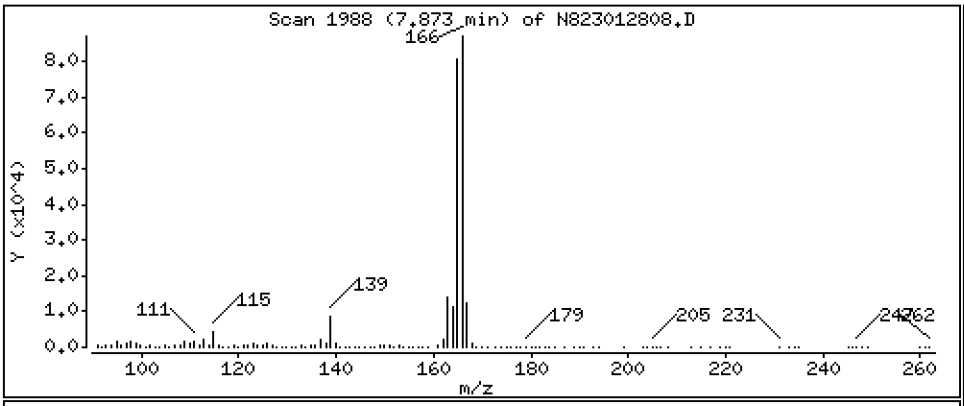
Operator: JZ

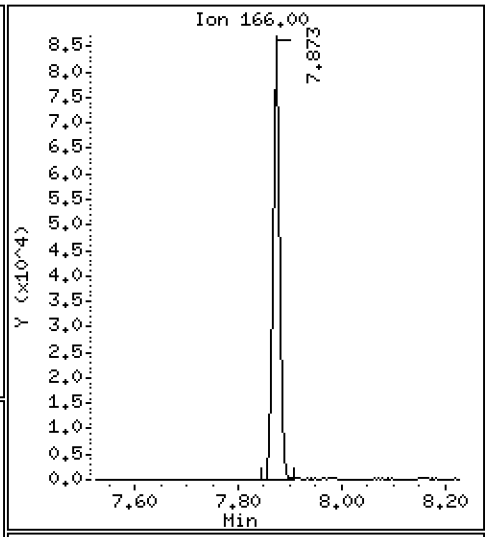
Column phase: Rxi-17sil

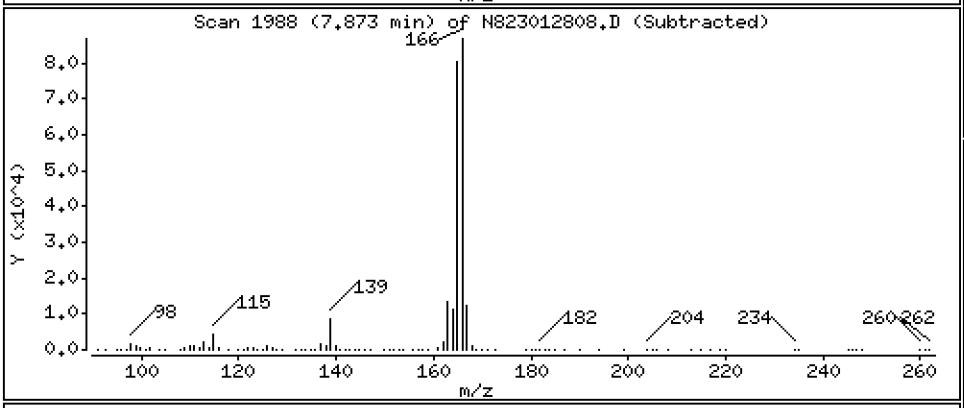
Column diameter: 0.25

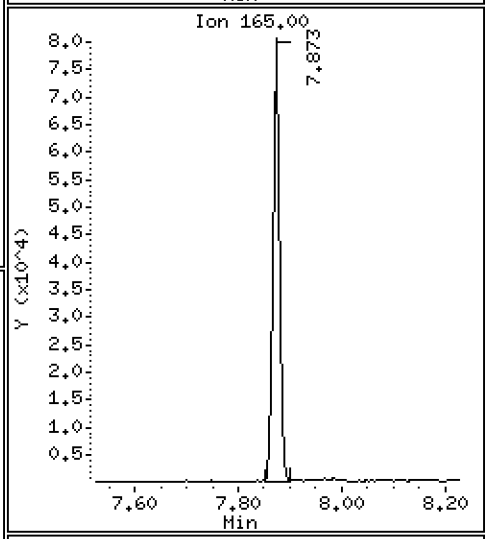
14 Fluorene

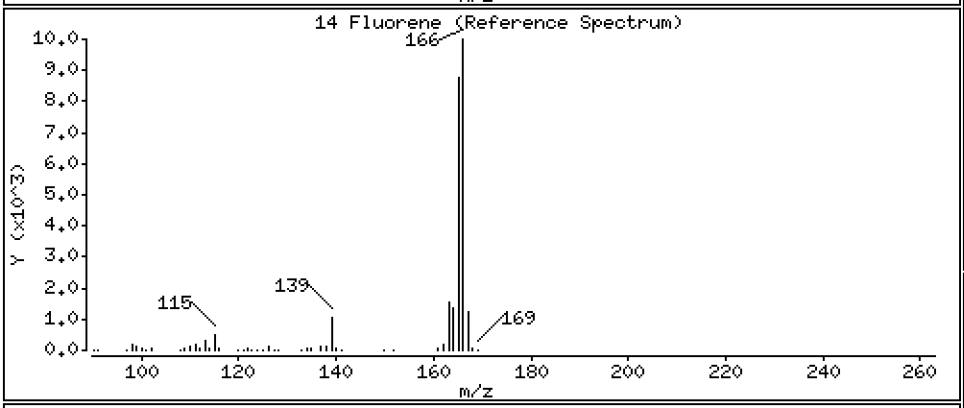
Concentration: 4.443 ug/mL

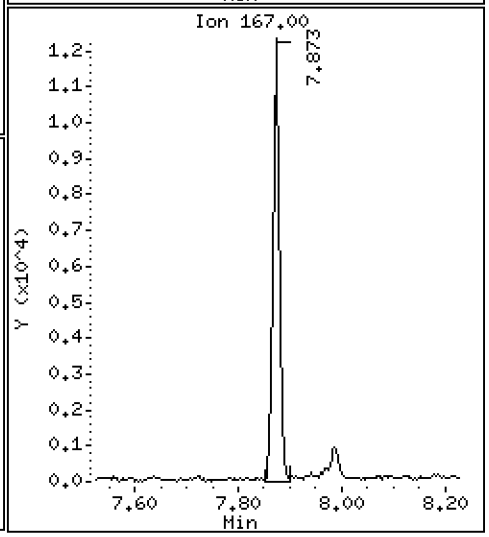


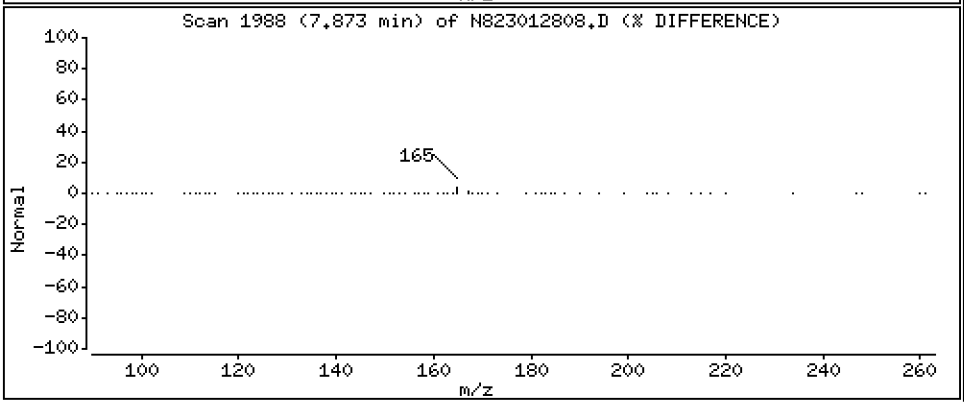












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Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

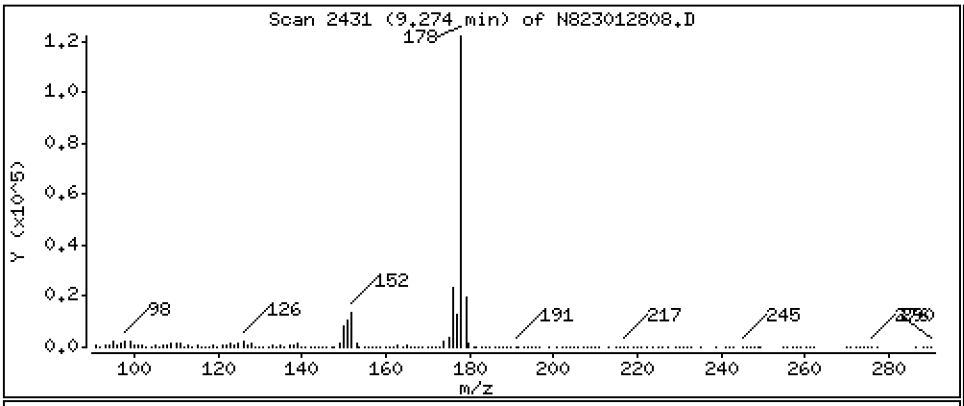
Operator: JZ

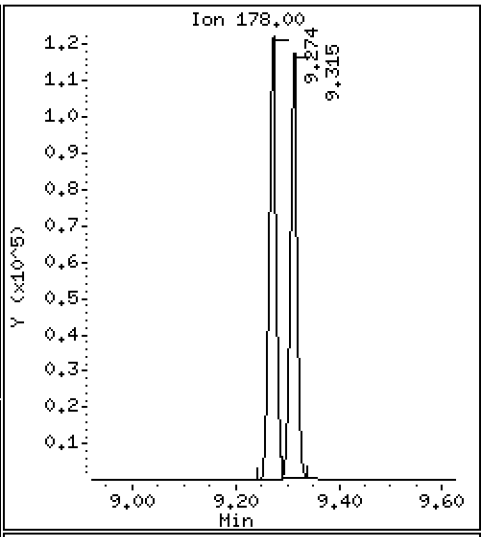
Column phase: Rxi-17sil

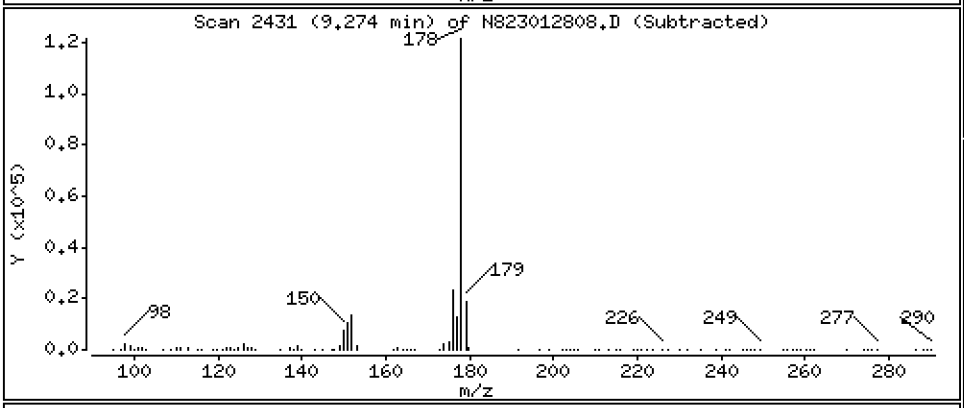
Column diameter: 0.25

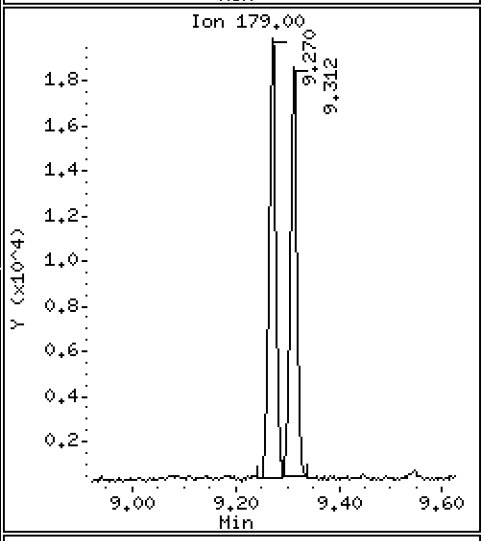
16 Phenanthrene

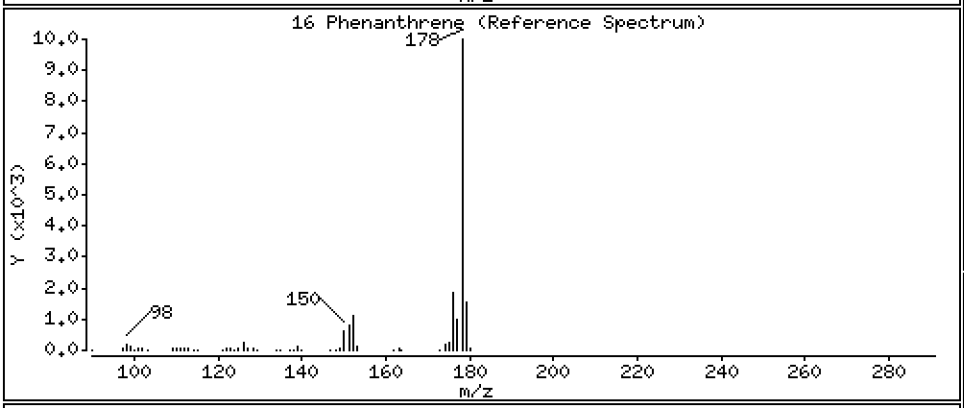
Concentration: 4.748 ug/mL

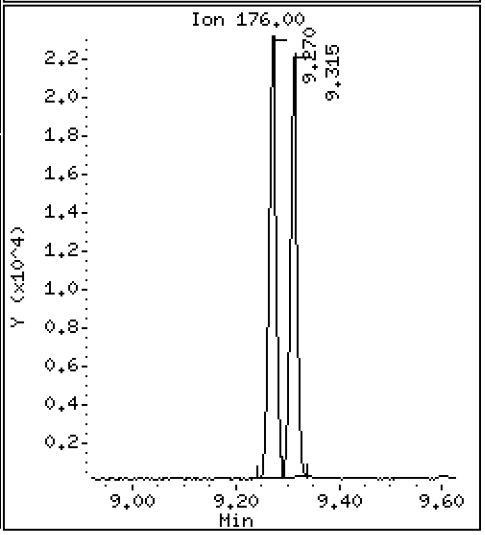


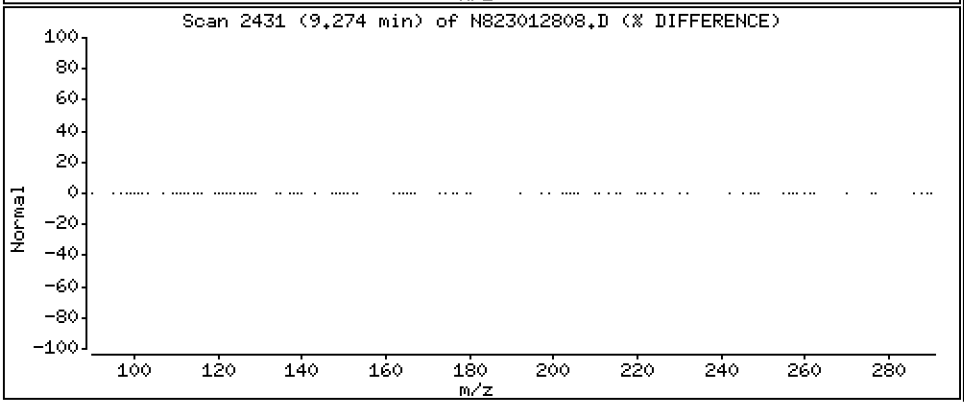












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Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

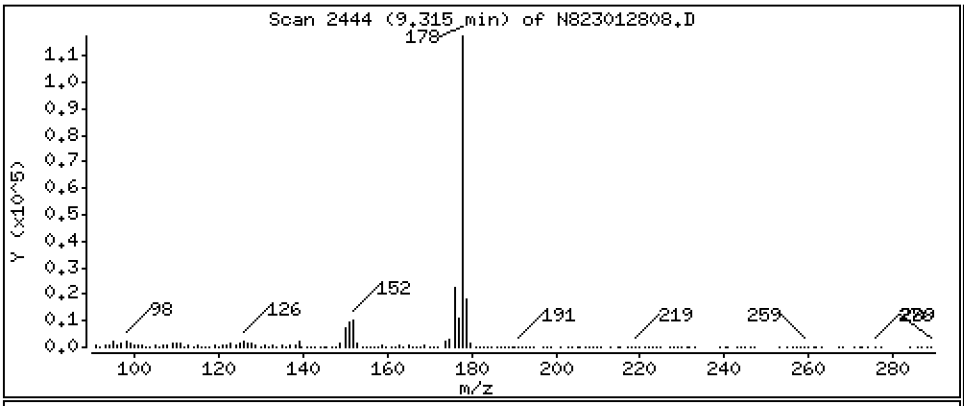
Operator: JZ

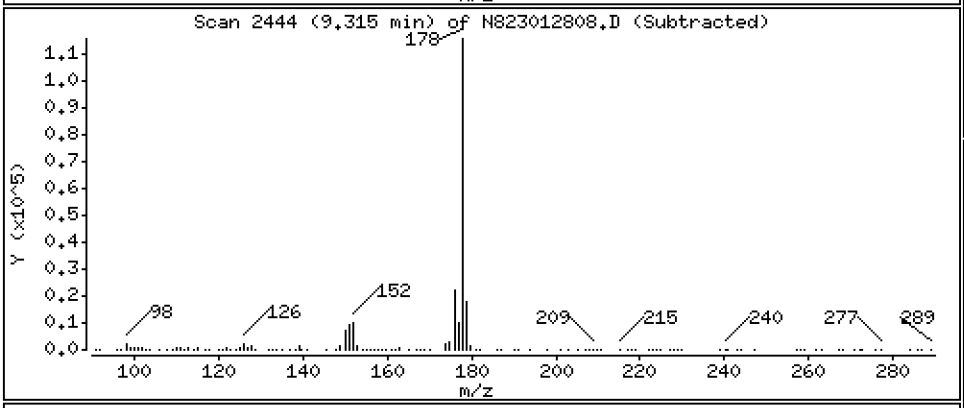
Column phase: Rxi-17sil

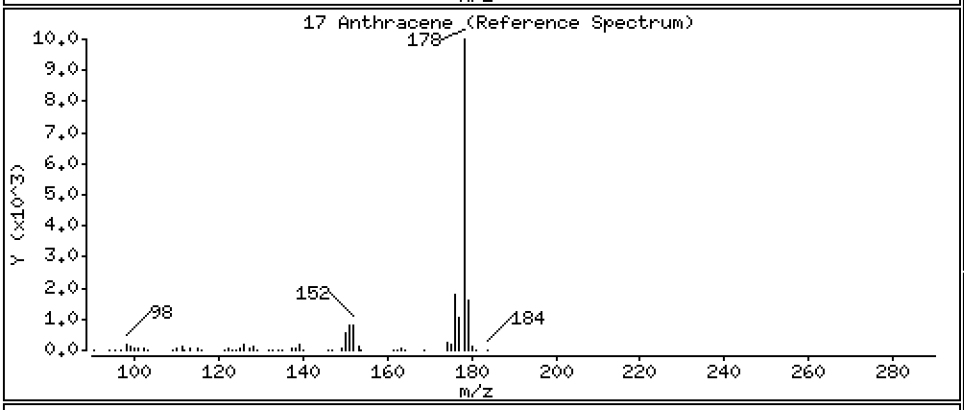
Column diameter: 0.25

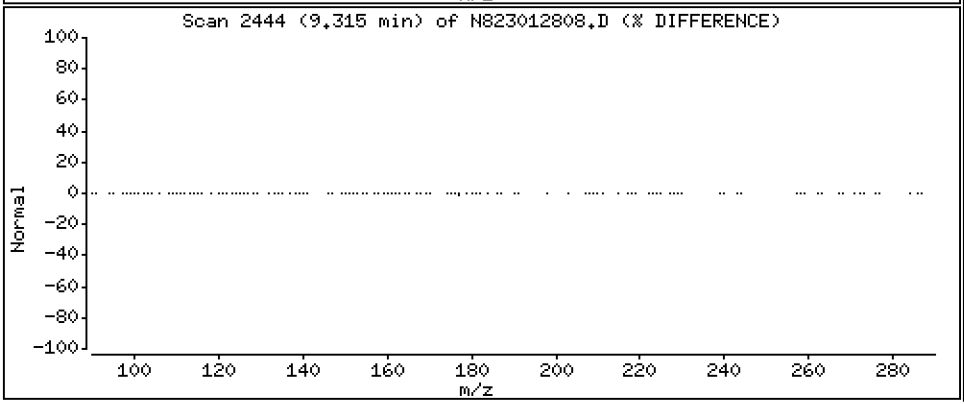
17 Anthracene

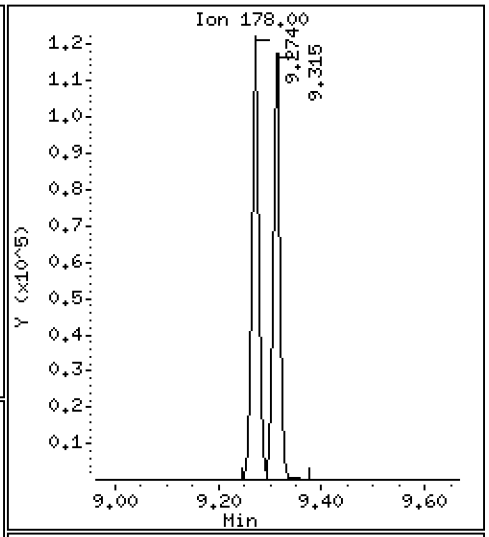
Concentration: 4.883 ug/mL

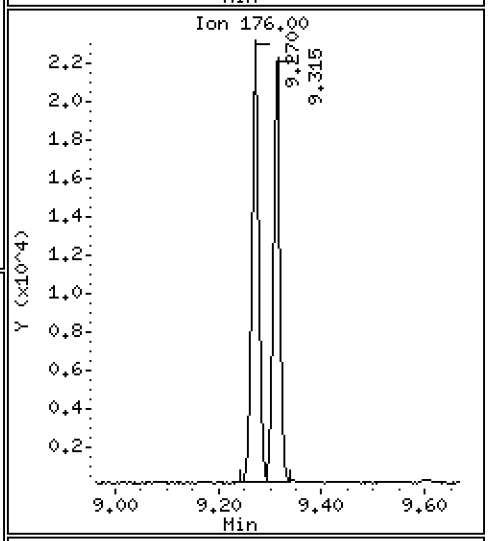


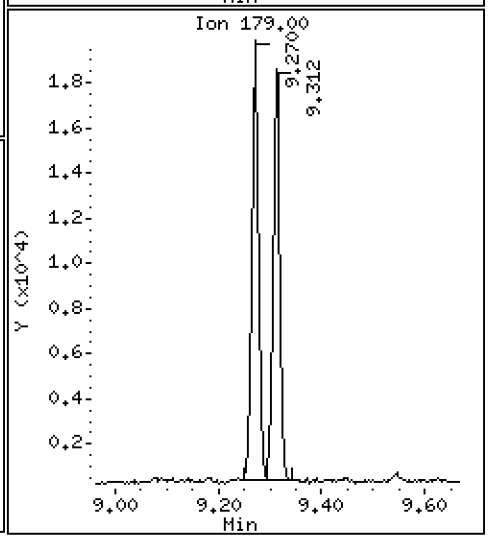












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

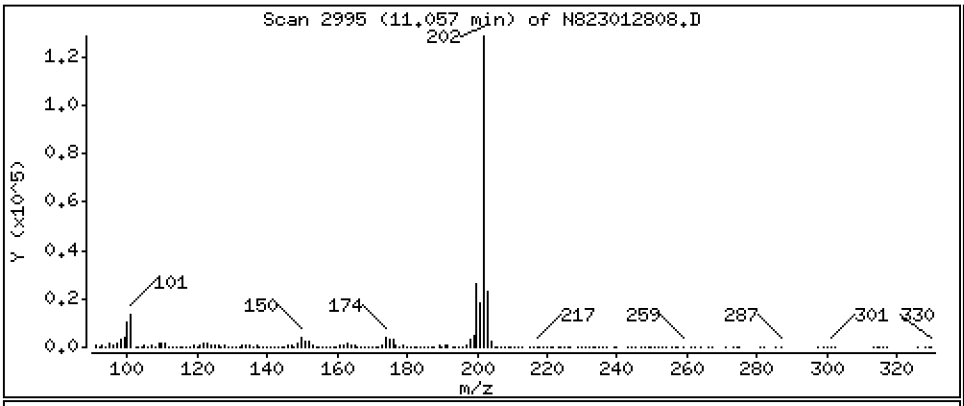
Operator: JZ

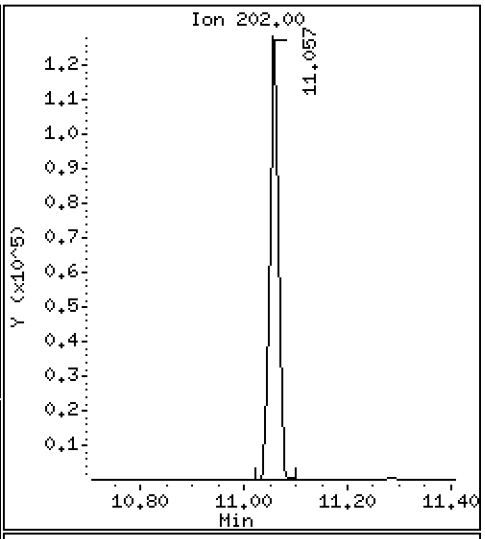
Column phase: Rxi-17sil

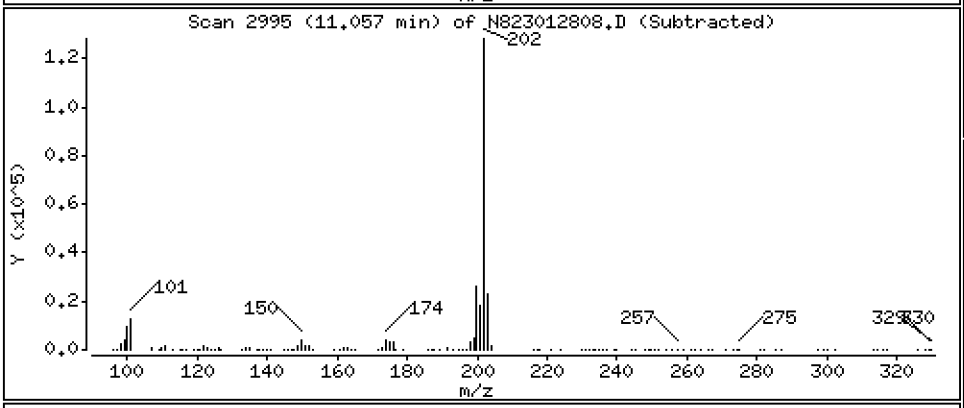
Column diameter: 0.25

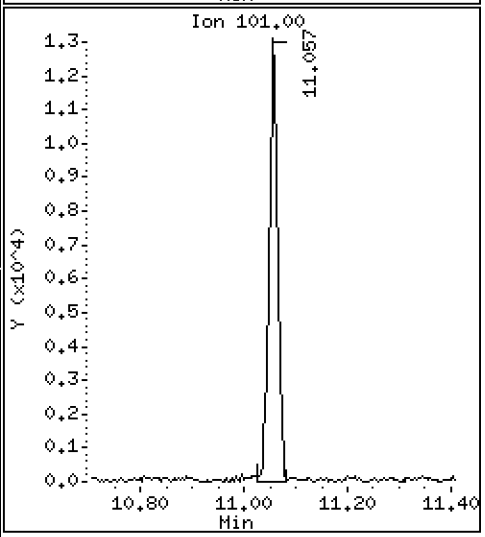
22 Fluoranthene

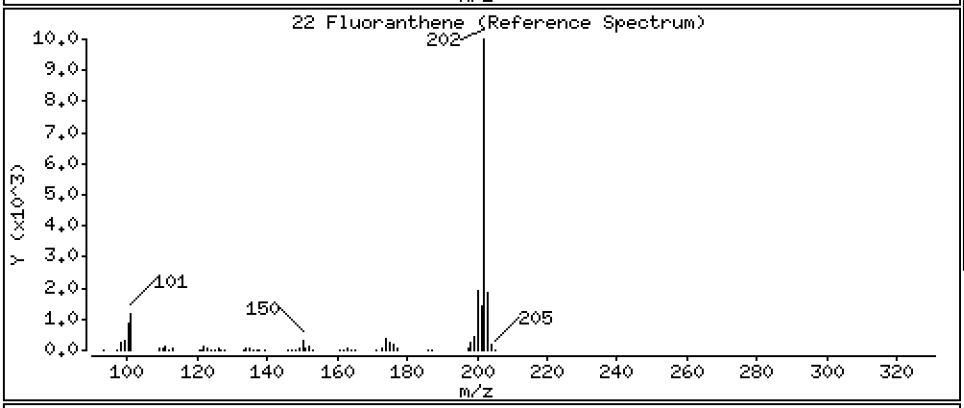
Concentration: 5.668 ug/mL

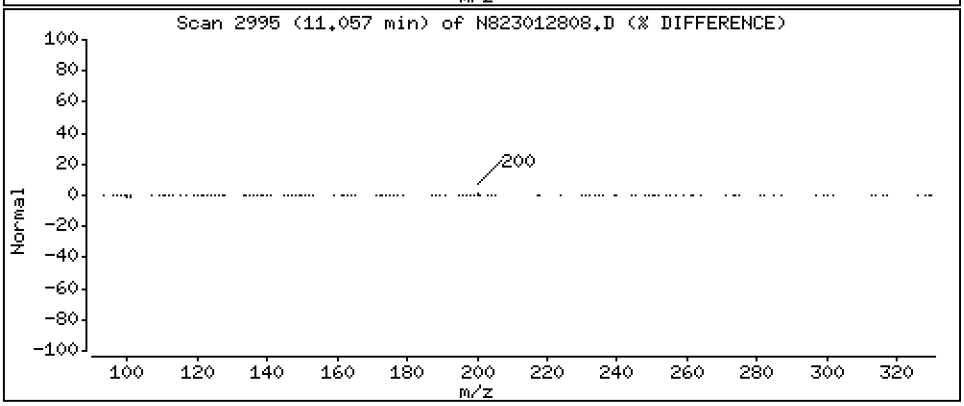












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

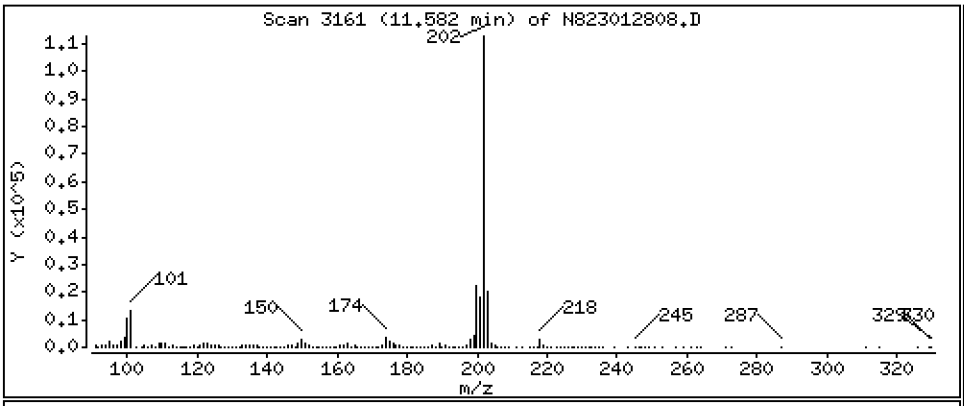
Operator: JZ

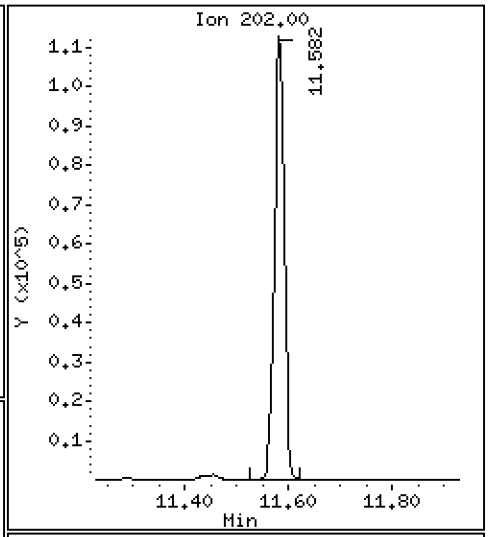
Column phase: Rxi-17sil

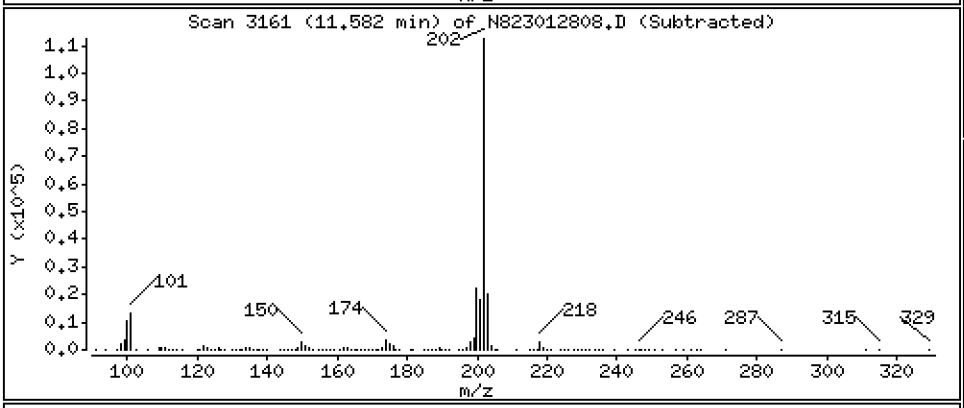
Column diameter: 0.25

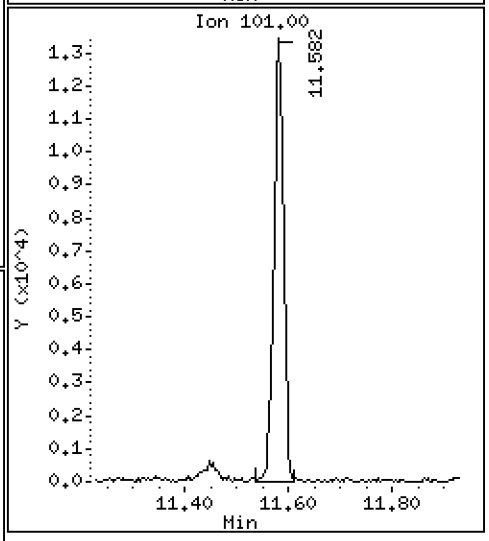
23 Pyrene

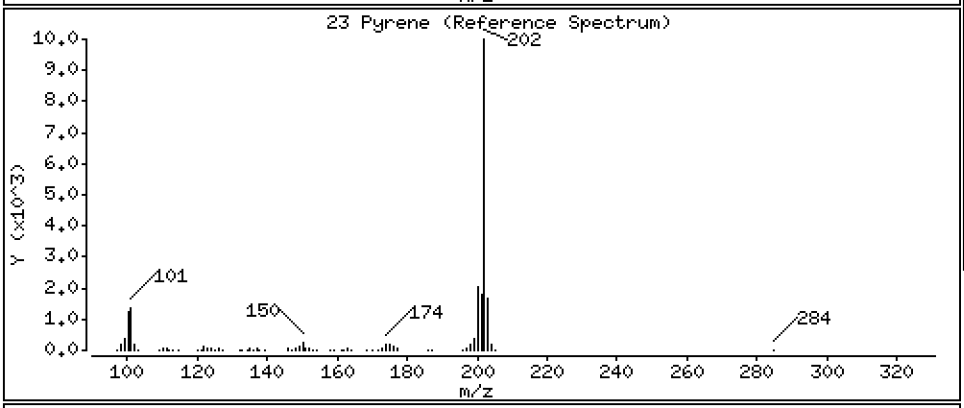
Concentration: 8.155 ug/mL

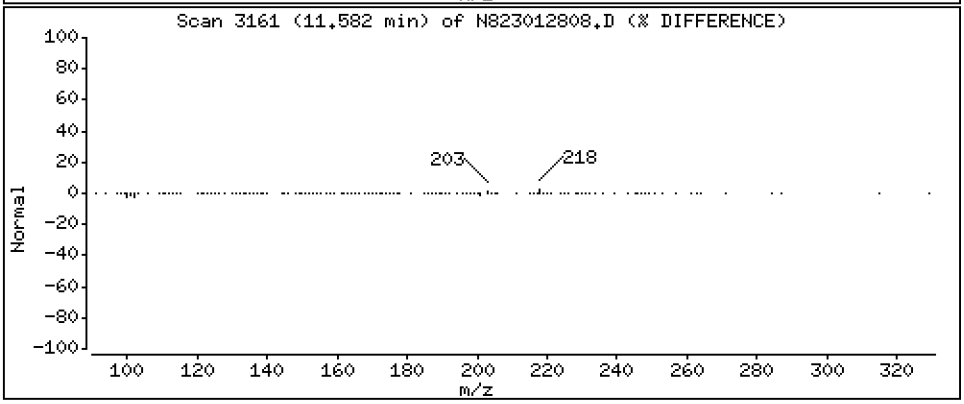












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

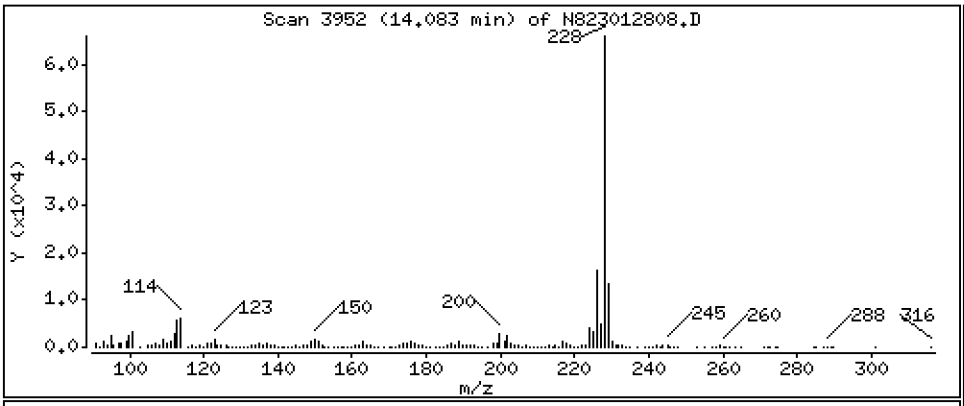
Operator: JZ

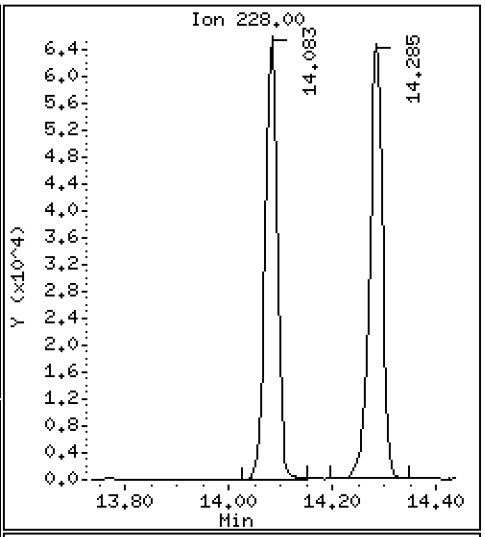
Column phase: Rxi-17sil

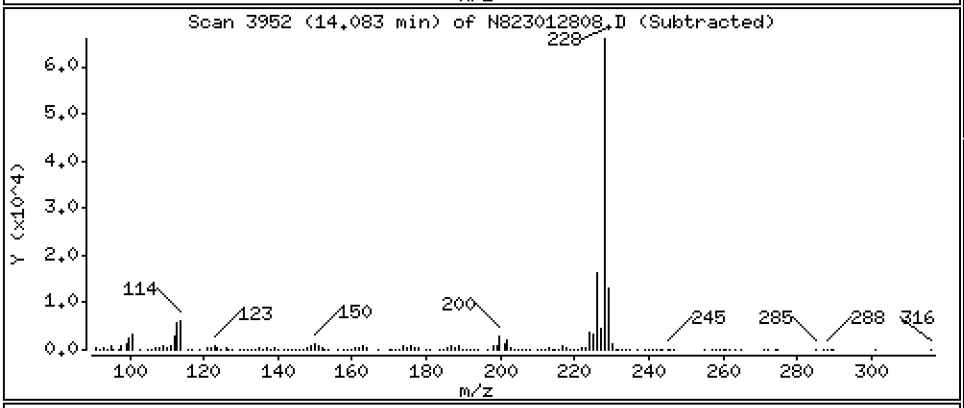
Column diameter: 0.25

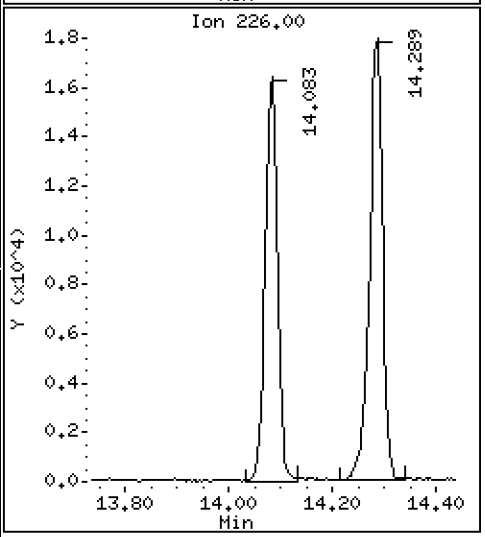
24 Benzo(a)anthracene

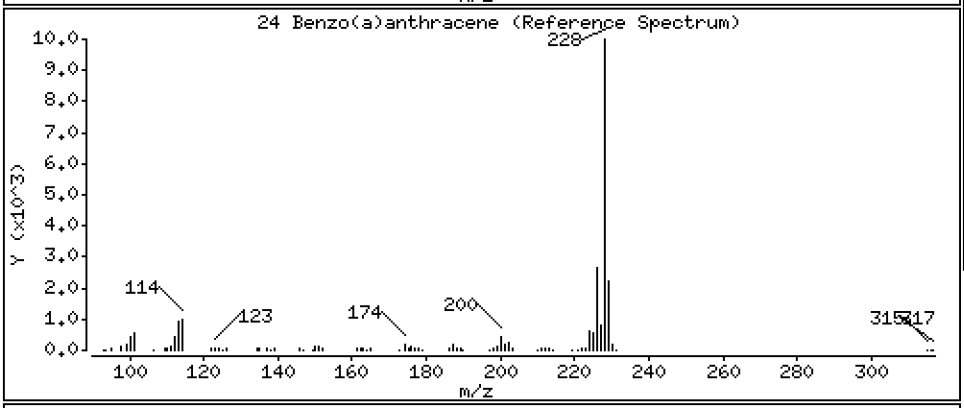
Concentration: 6.640 ug/mL

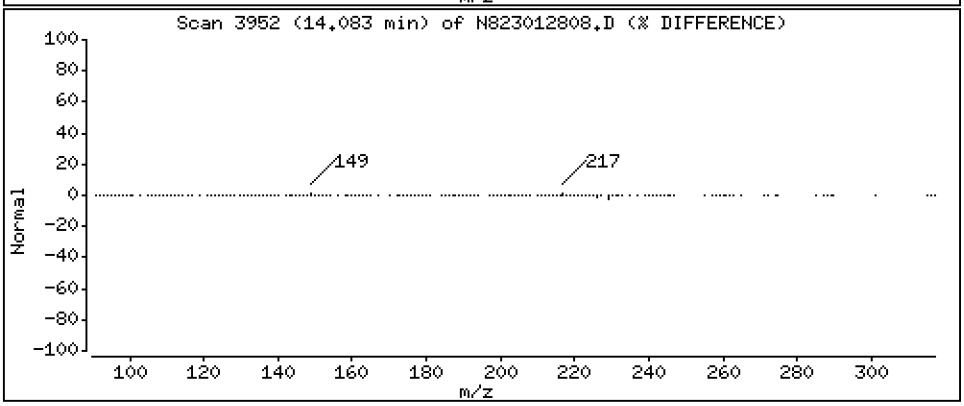












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

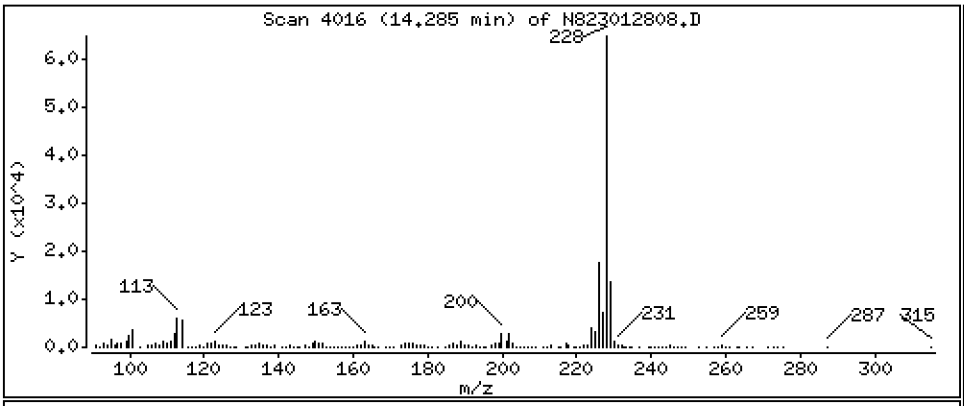
Operator: JZ

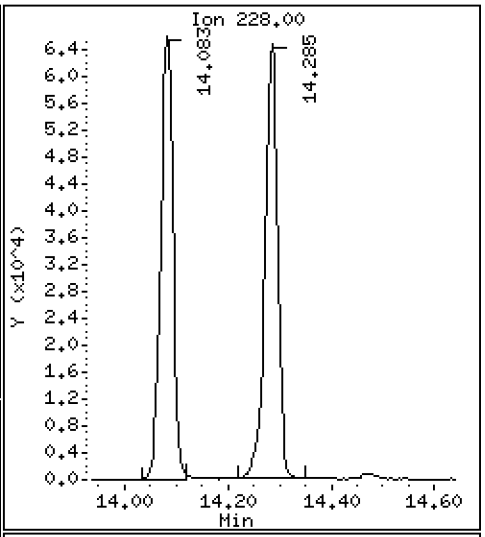
Column phase: Rxi-17sil

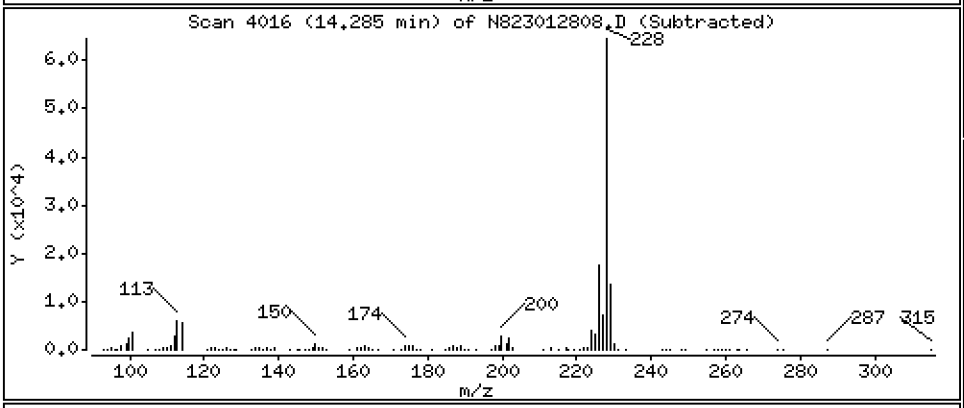
Column diameter: 0.25

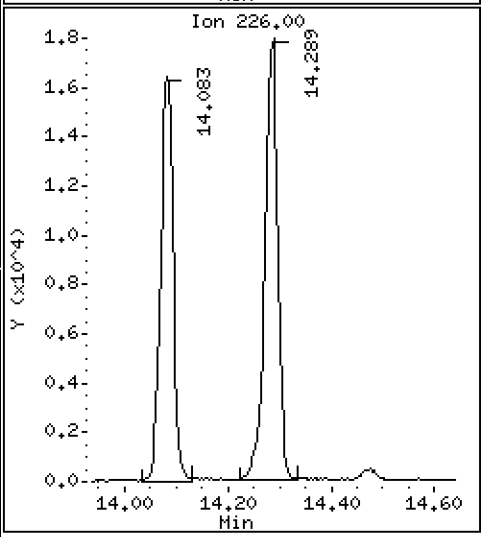
27 Chrysene

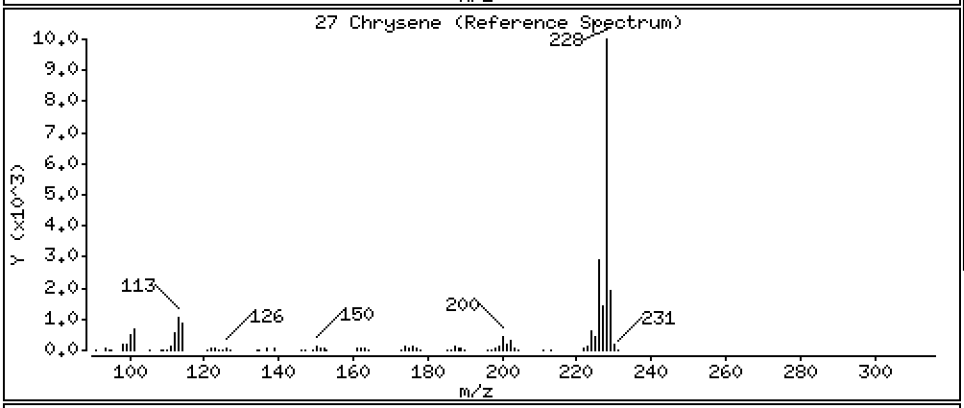
Concentration: 6.308 ug/mL

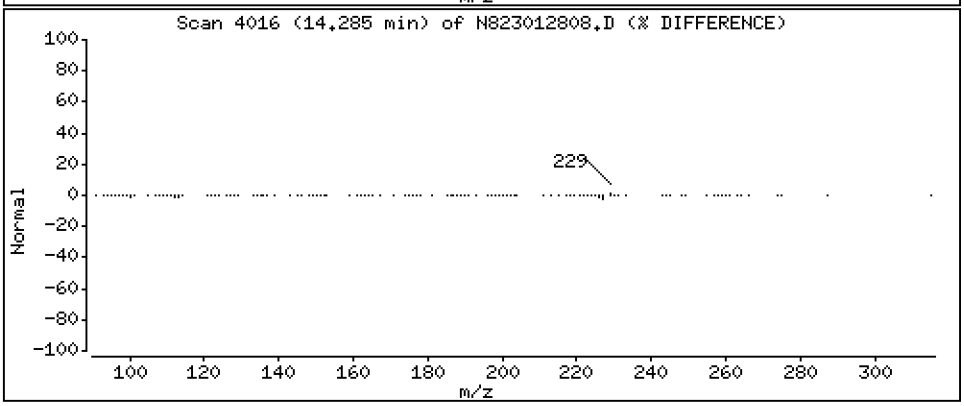












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

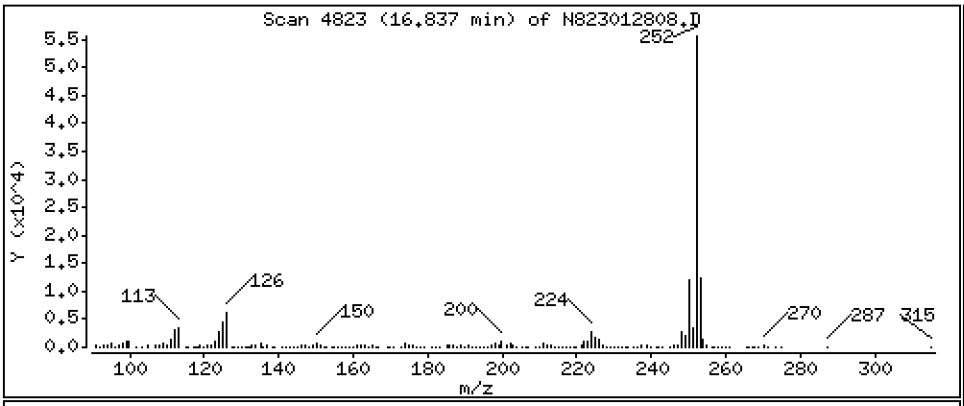
Operator: JZ

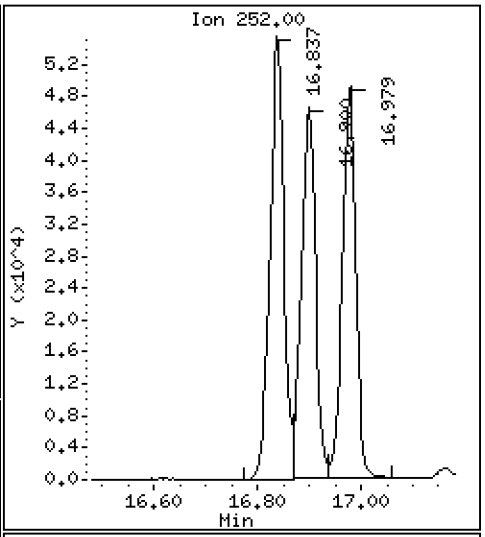
Column phase: Rxi-17sil

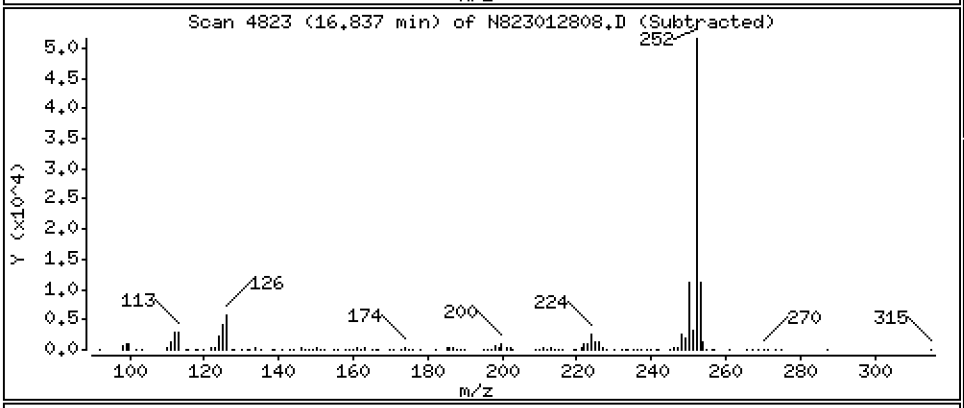
Column diameter: 0.25

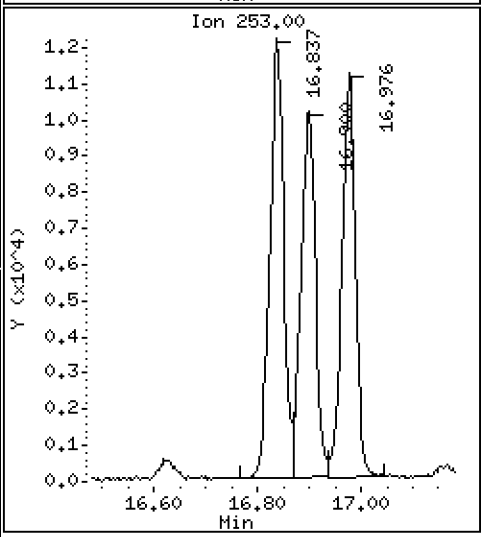
28 Benzo(b)fluoranthene

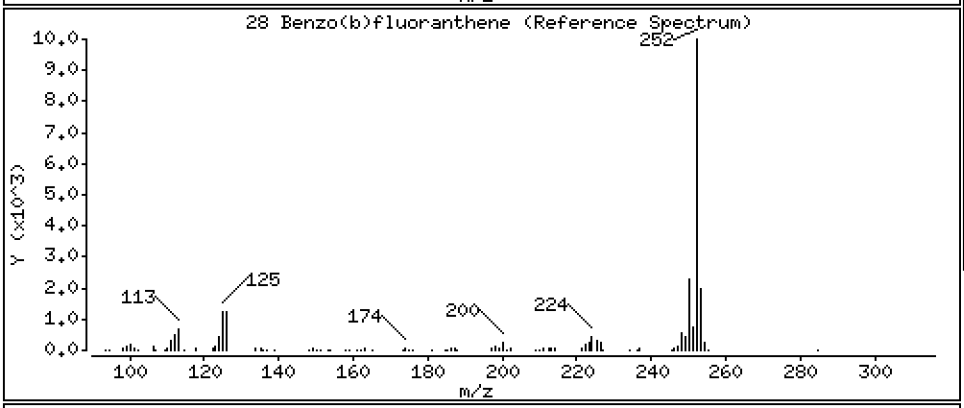
Concentration: 6.266 ug/mL

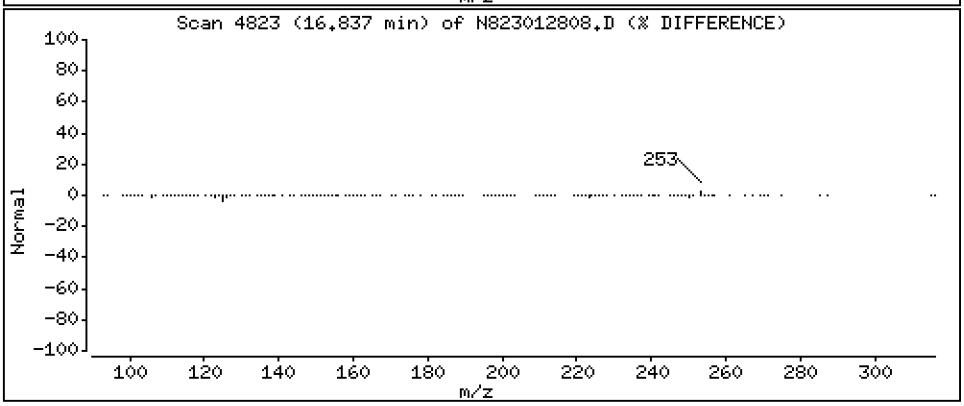












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

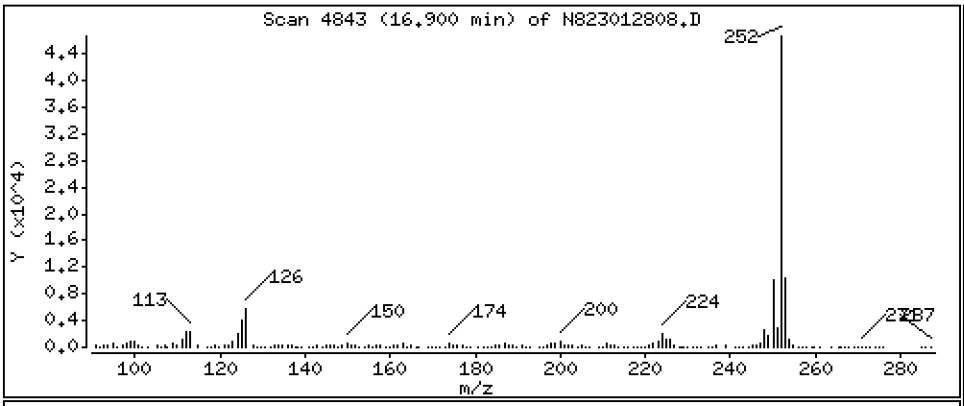
Operator: JZ

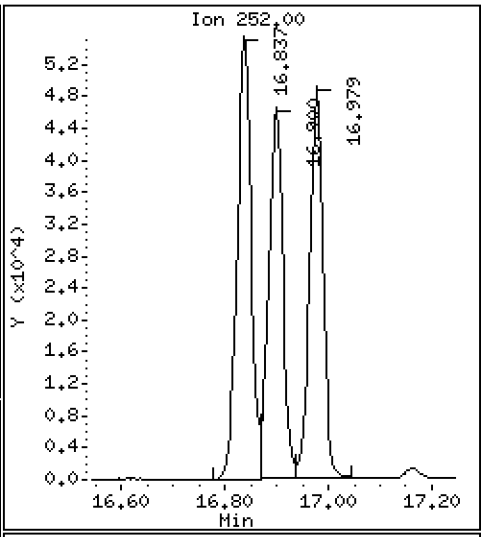
Column phase: Rxi-17sil

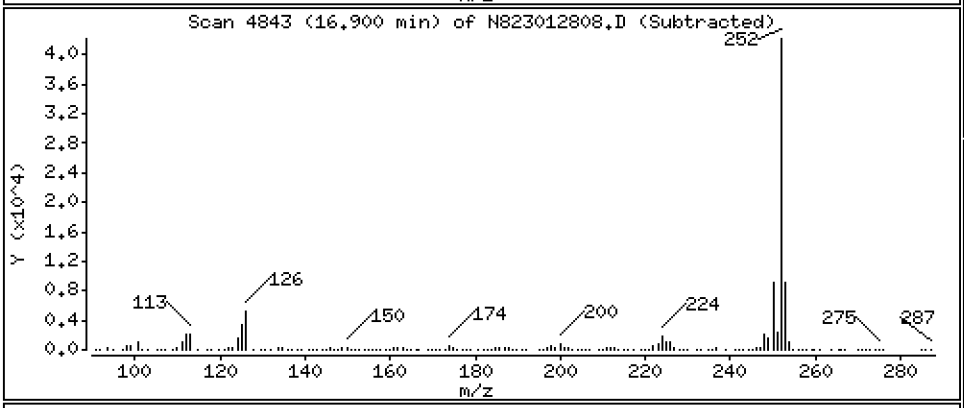
Column diameter: 0.25

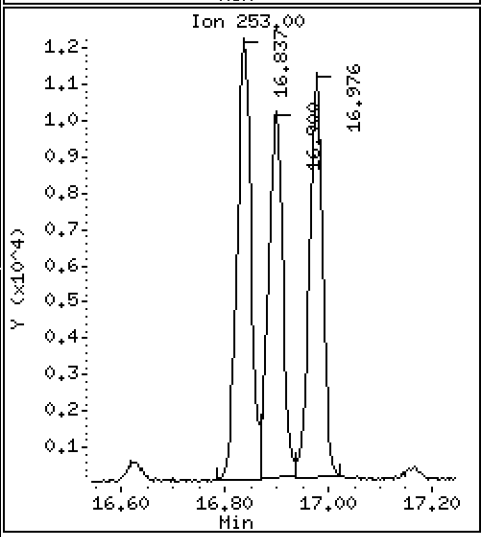
29 Benzo(k)fluoranthene

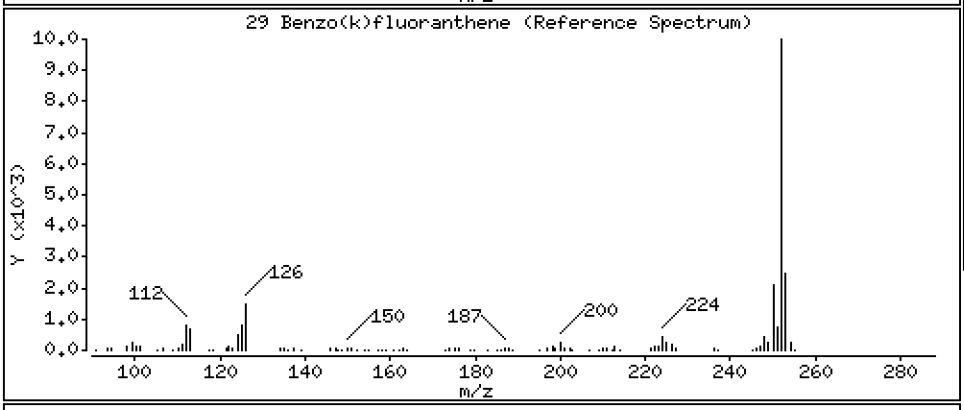
Concentration: 5.490 ug/mL

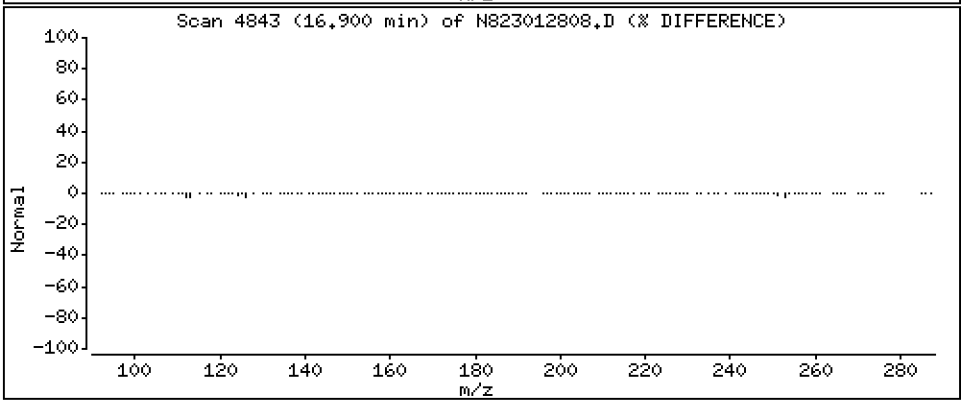












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

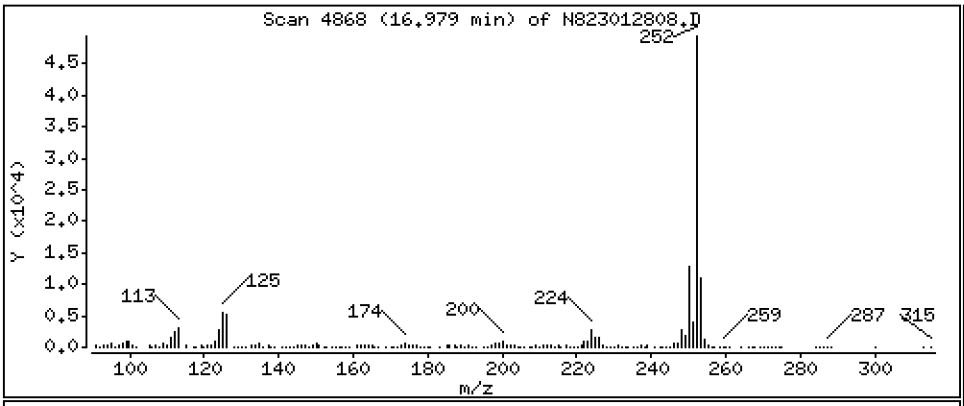
Operator: JZ

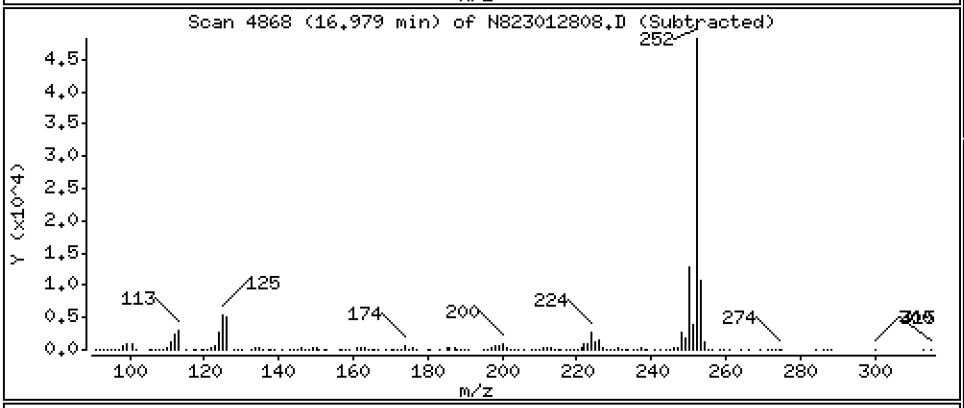
Column phase: Rxi-17sil

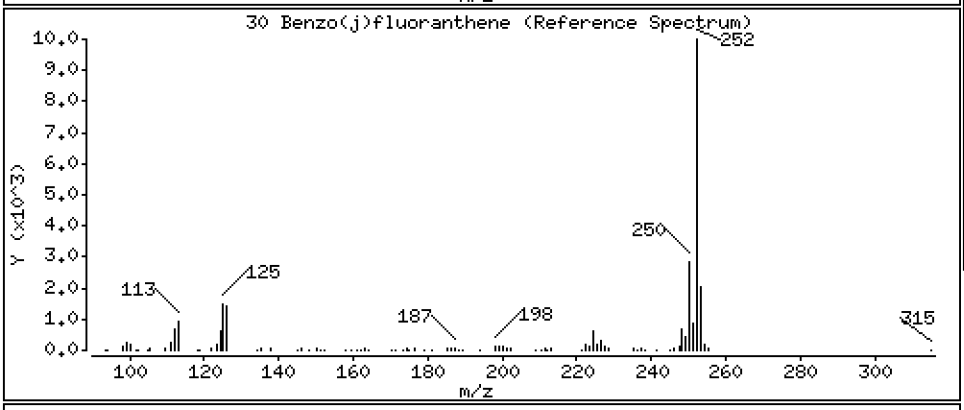
Column diameter: 0.25

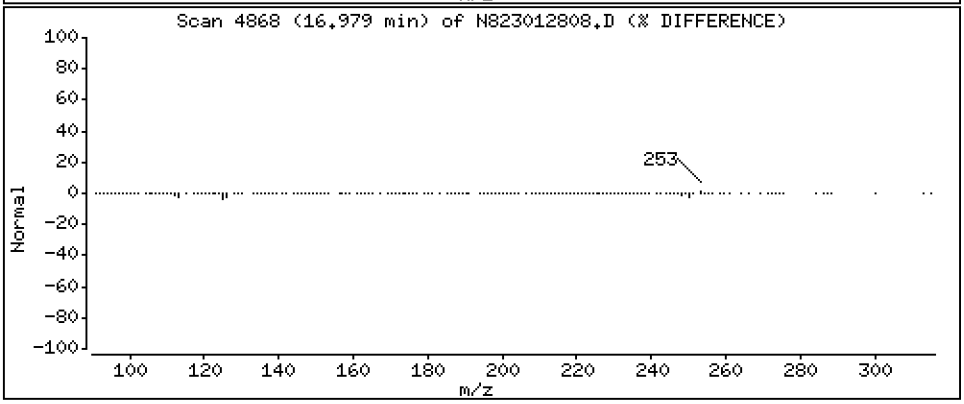
30 Benzo(j)fluoranthene

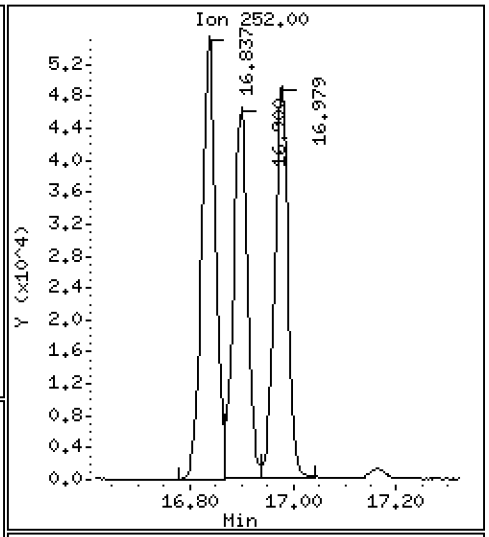
Concentration: 6.060 ug/mL

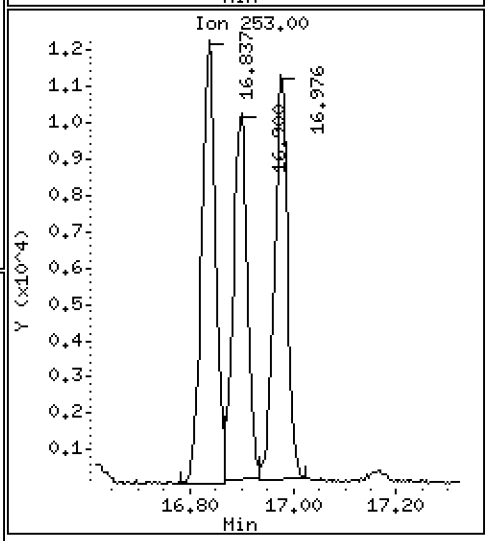












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

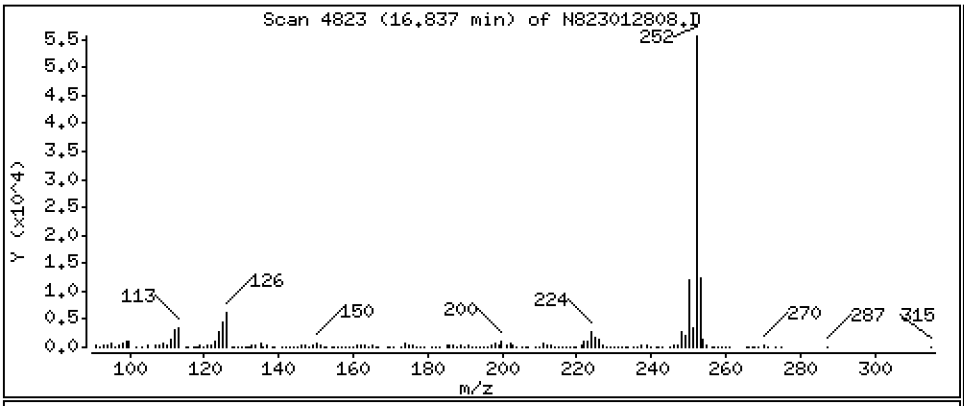
Operator: JZ

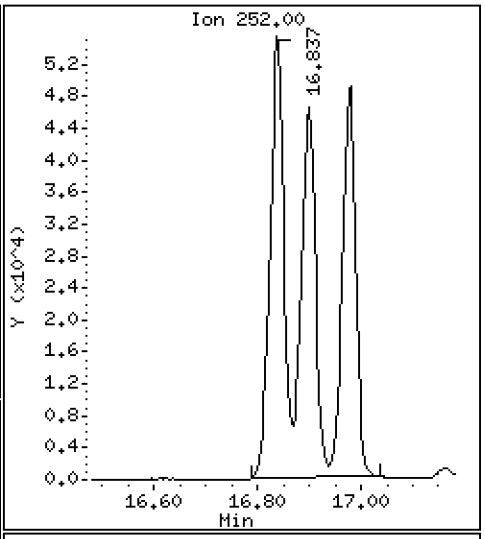
Column phase: Rxi-17sil

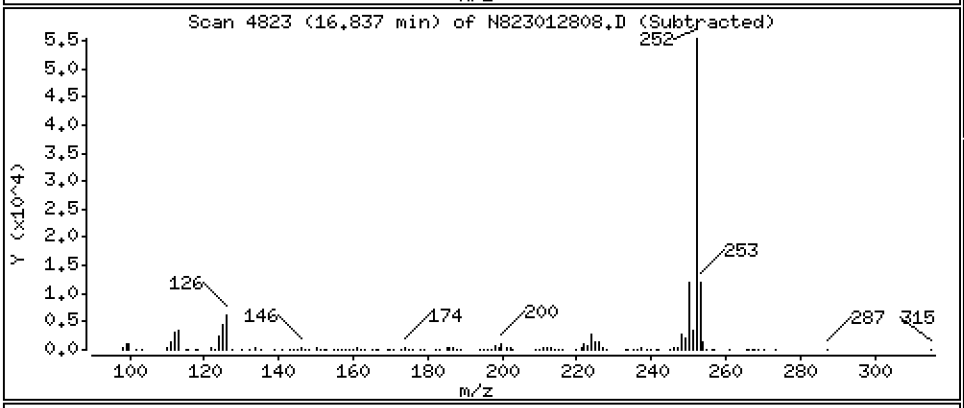
Column diameter: 0.25

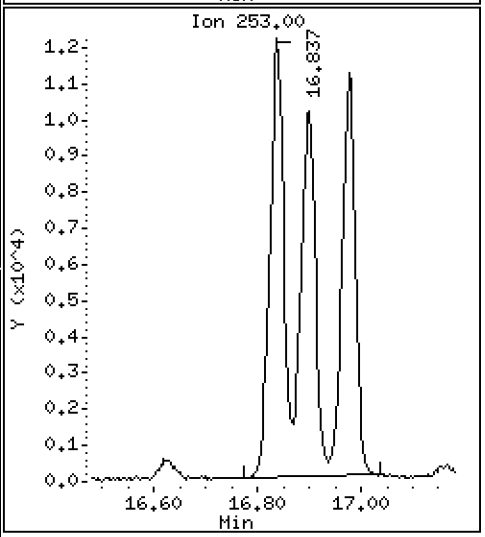
31 Total Benzofluoranthenes

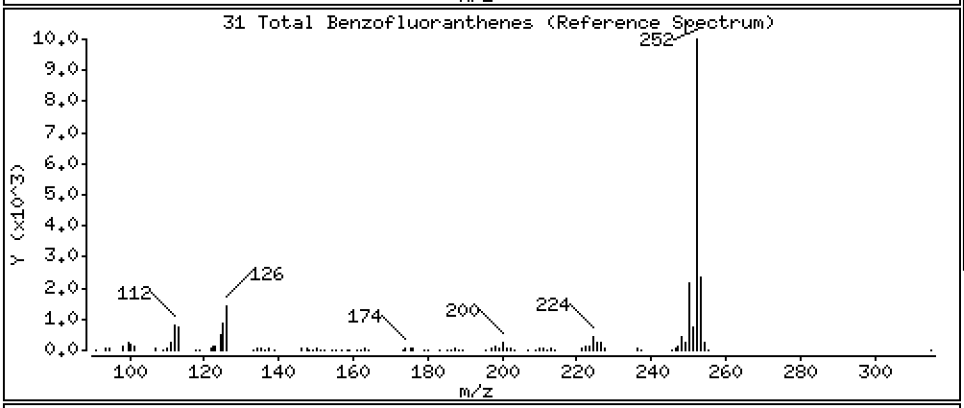
Concentration: 17.70 ug/mL

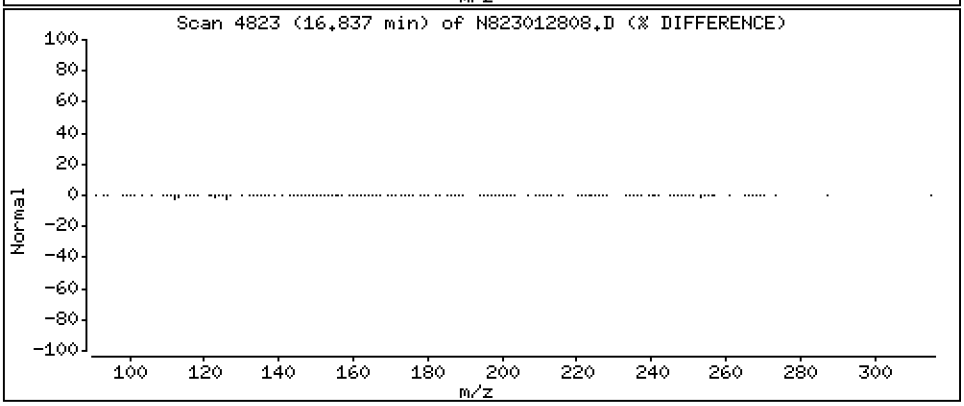












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

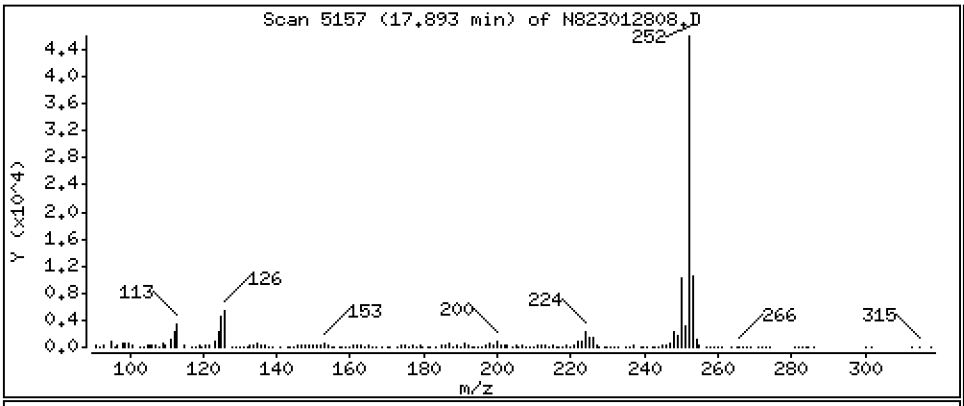
Operator: JZ

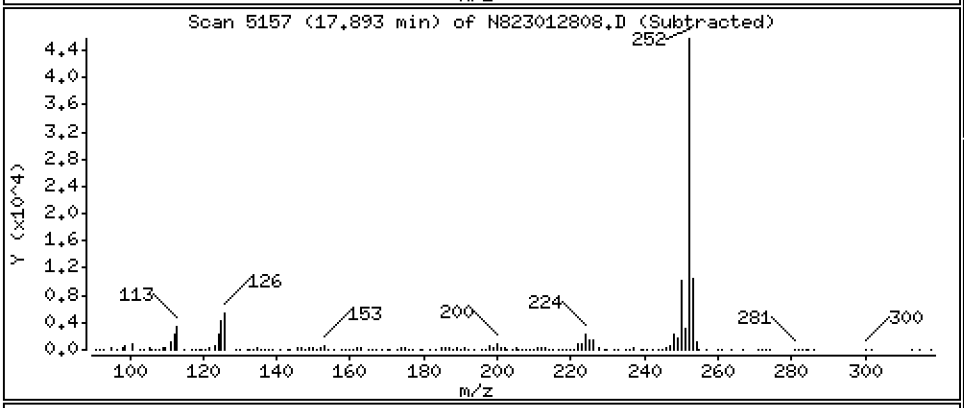
Column phase: Rxi-17sil

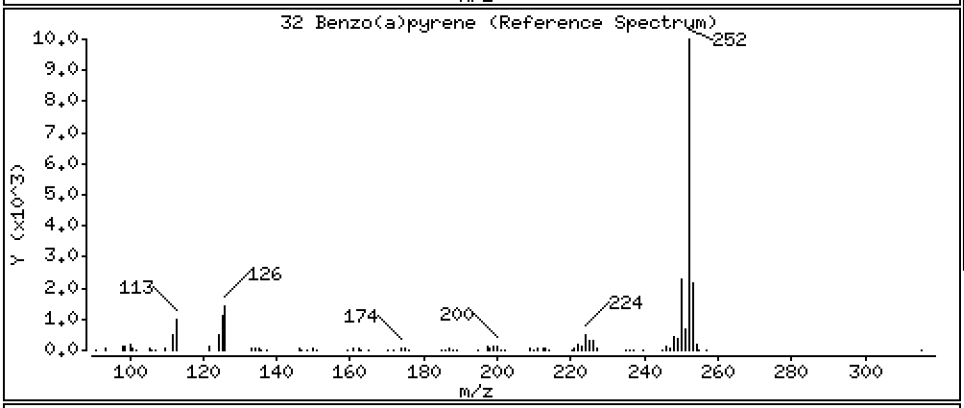
Column diameter: 0.25

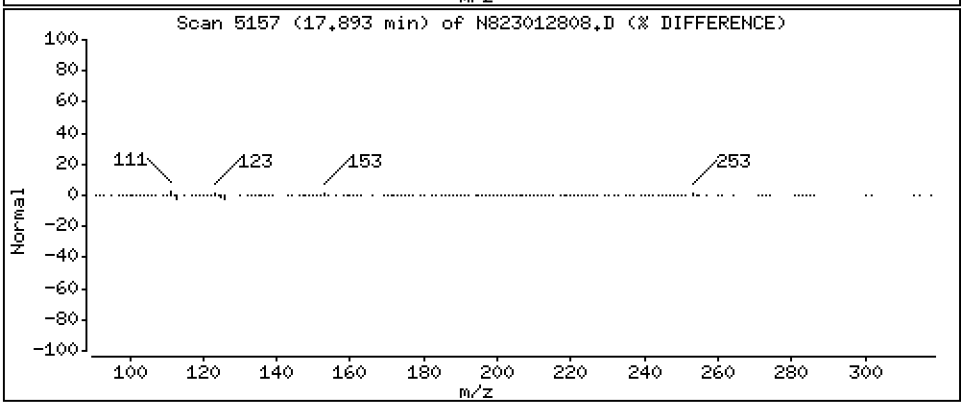
32 Benzo(a)pyrene

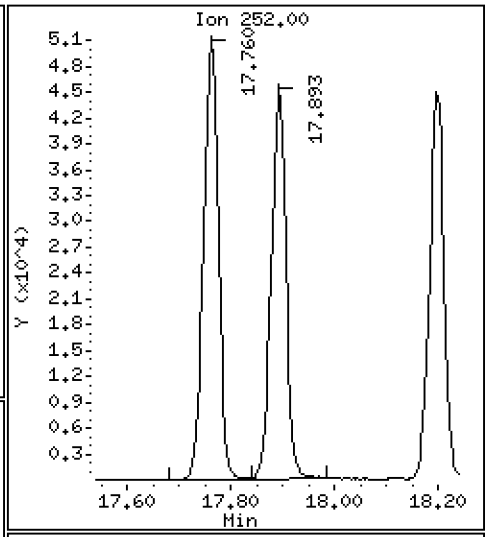
Concentration: 6.133 ug/mL

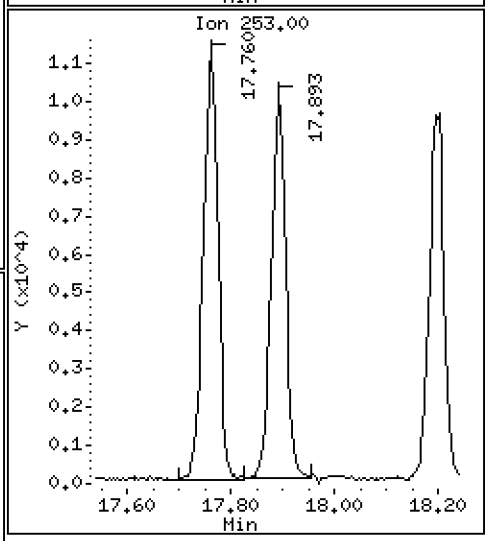












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

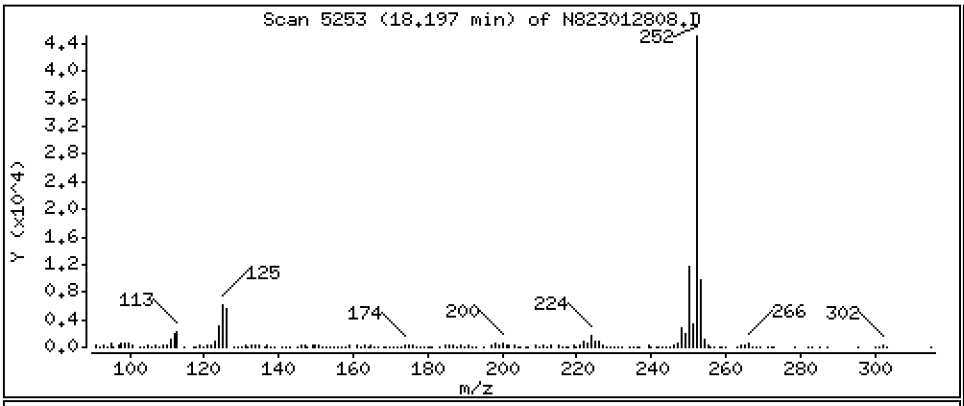
Operator: JZ

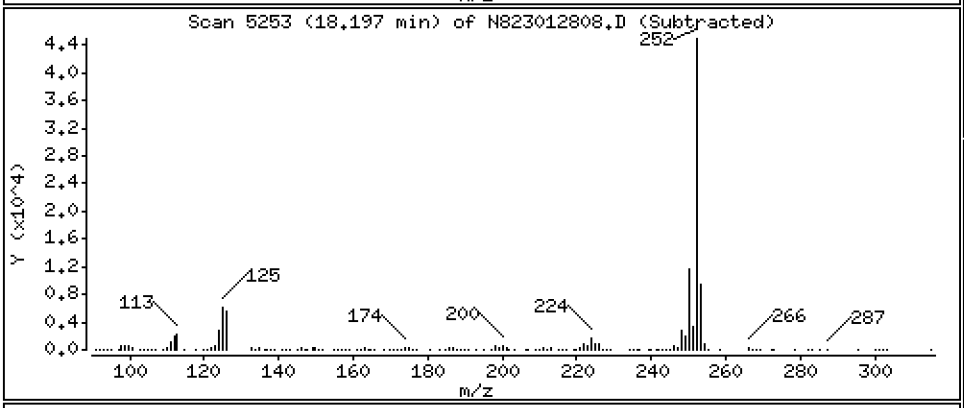
Column phase: Rxi-17sil

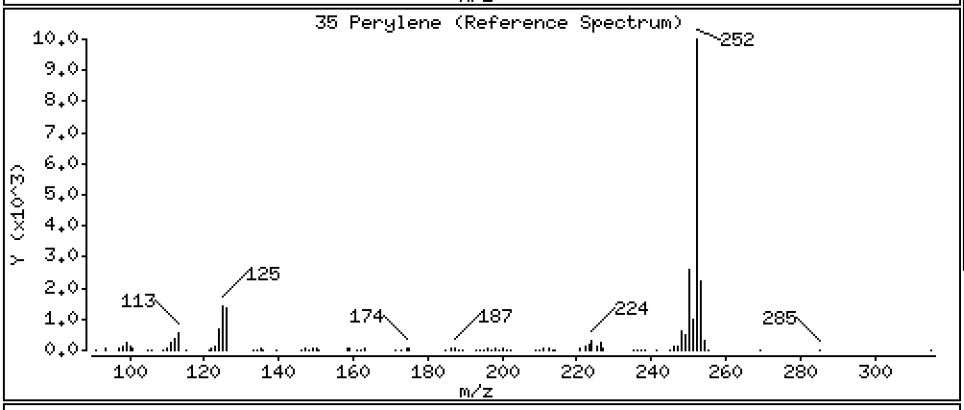
Column diameter: 0.25

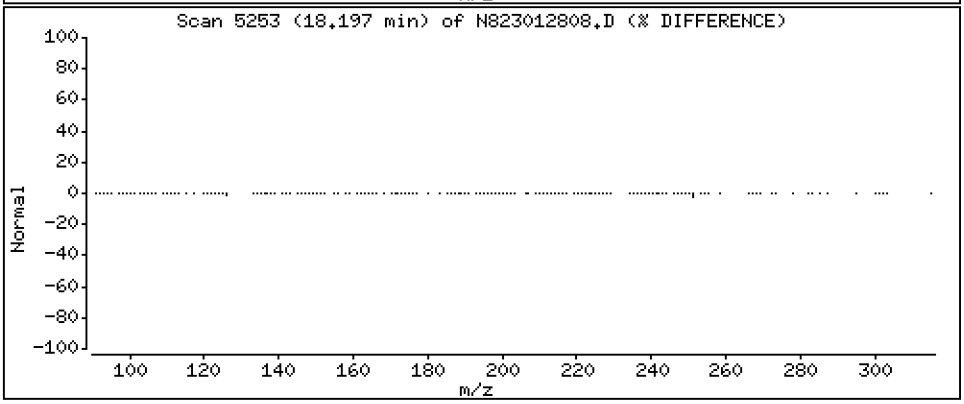
35 Perylene

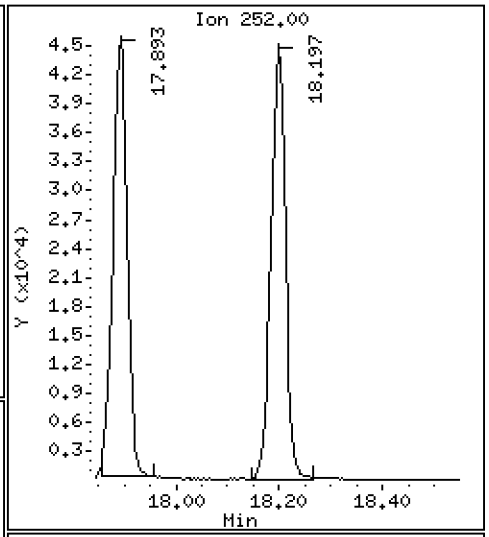
Concentration: 5.588 ug/mL

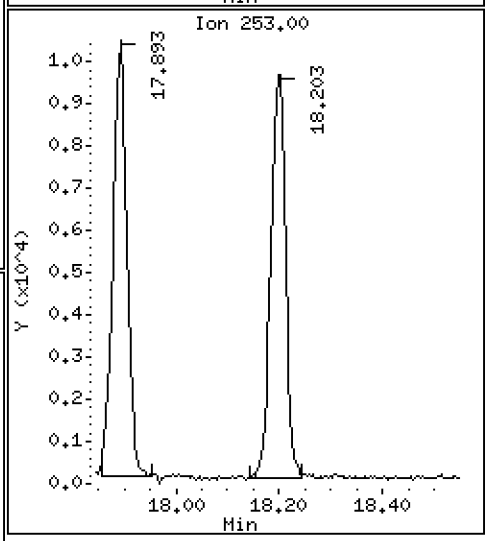












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

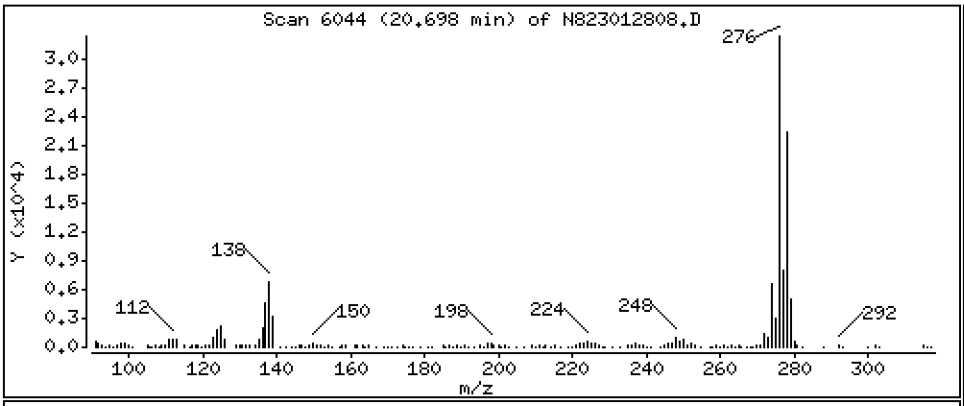
Operator: JZ

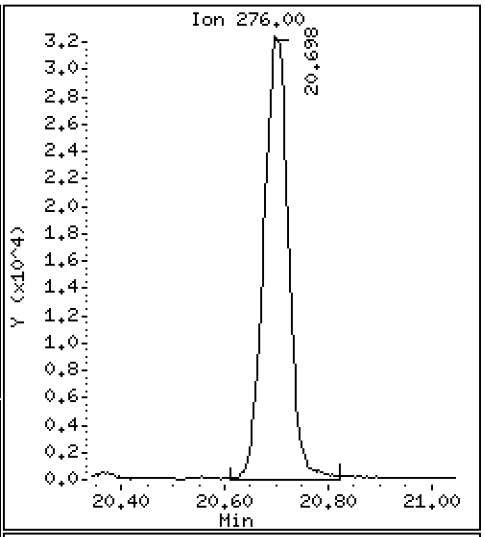
Column phase: Rxi-17sil

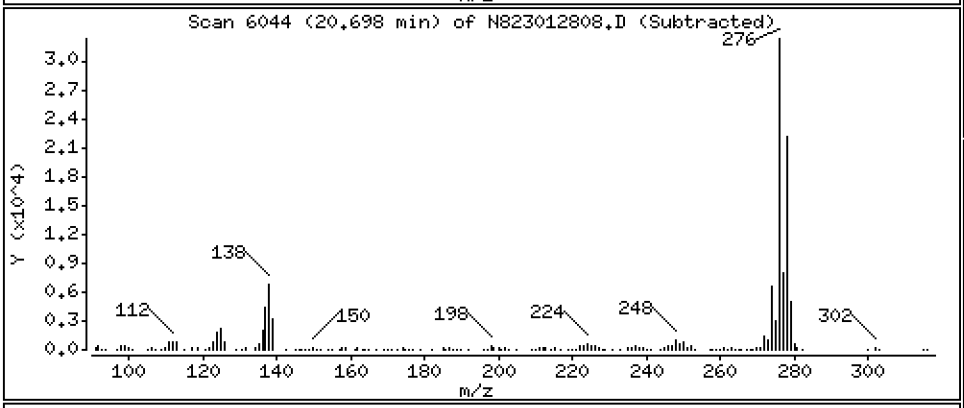
Column diameter: 0.25

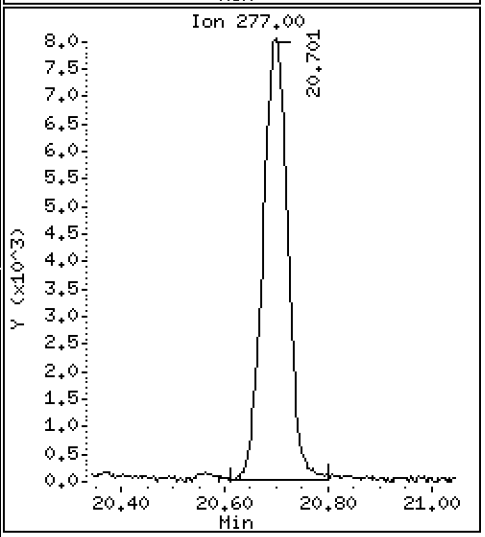
37 Indeno(1,2,3-cd)pyrene

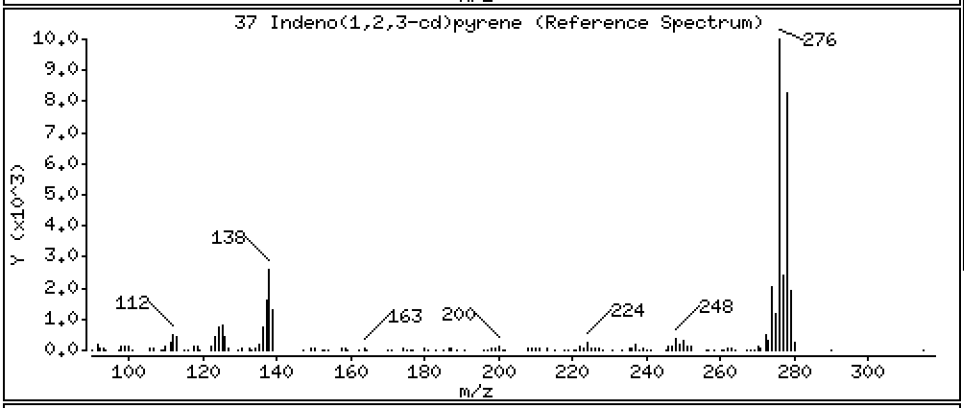
Concentration: 6.481 ug/mL

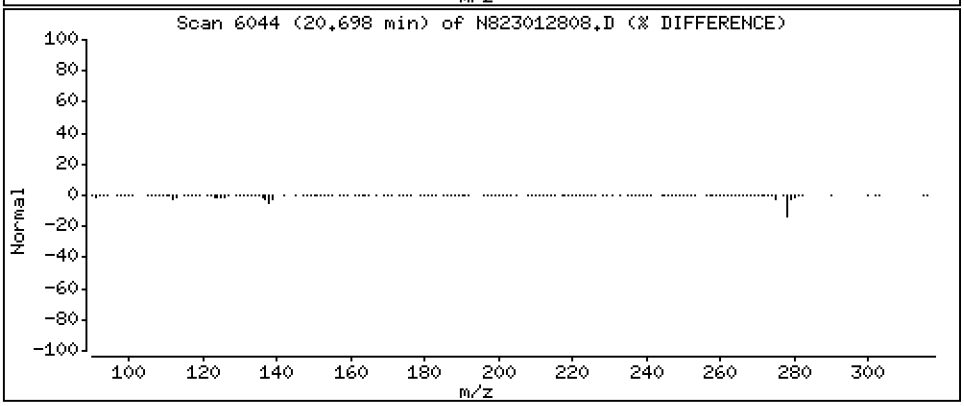












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

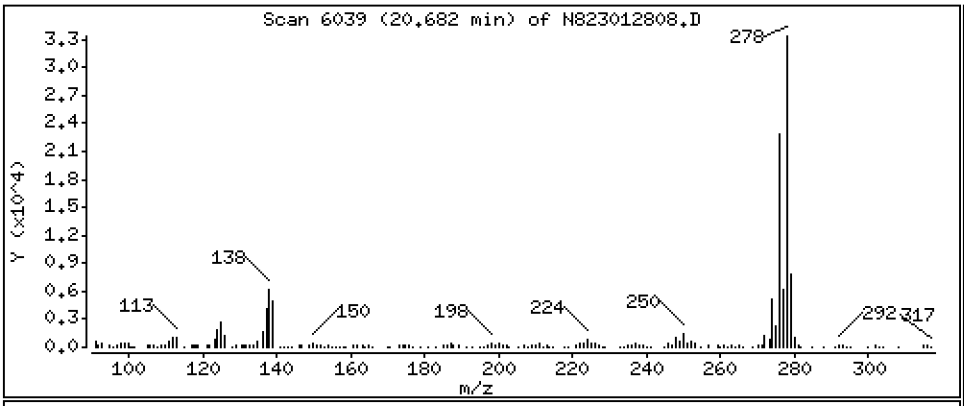
Operator: JZ

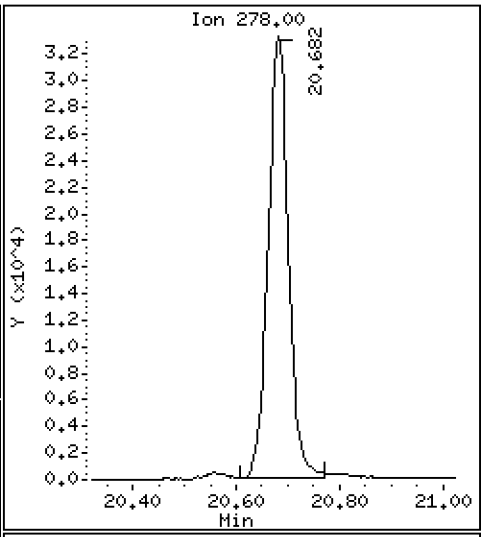
Column phase: Rxi-17sil

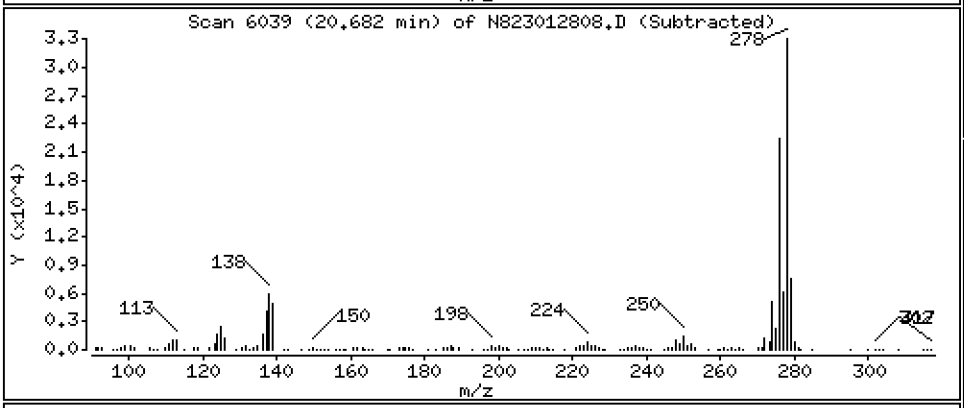
Column diameter: 0.25

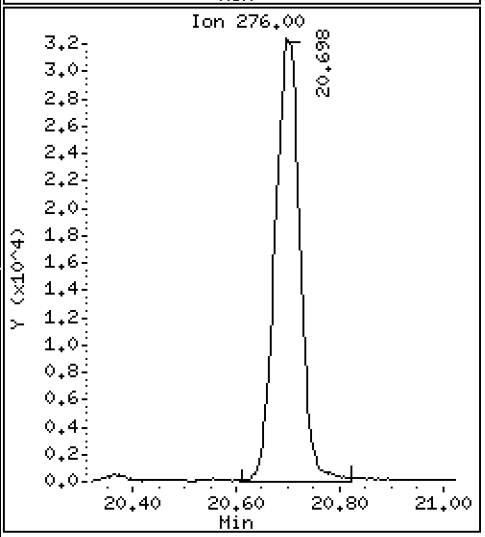
38 Dibenzo(a,h)anthracene

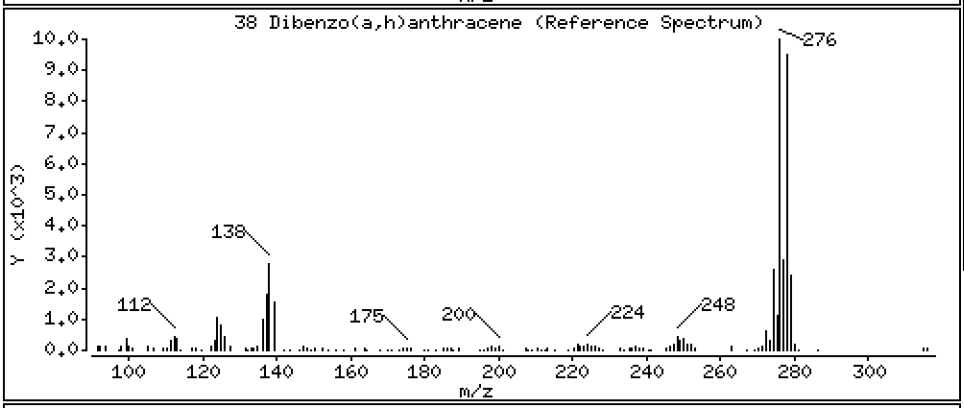
Concentration: 6.324 ug/mL

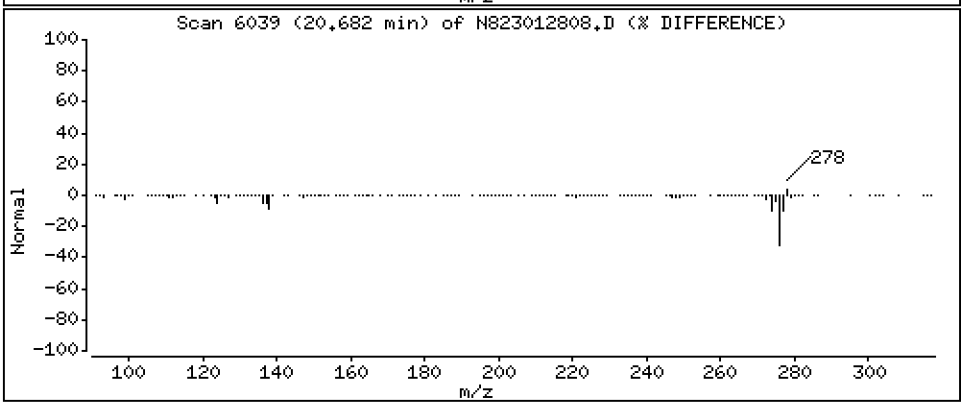












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012808.D

Date : 25-JAN-2023 17:41

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MS1,

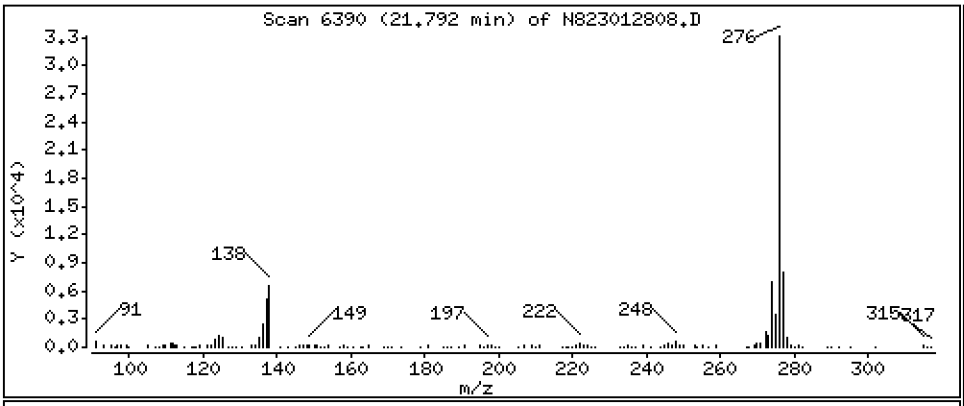
Operator: JZ

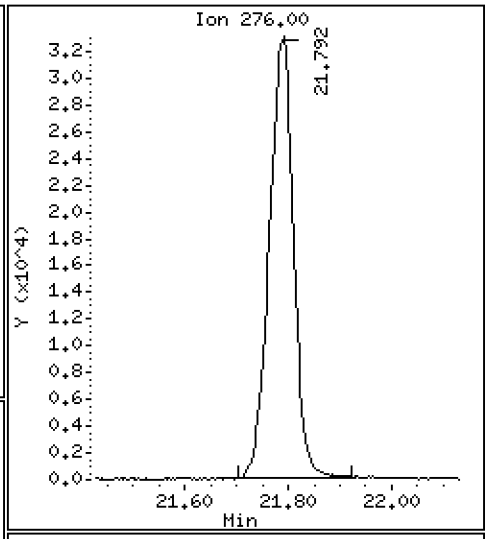
Column phase: Rxi-17sil

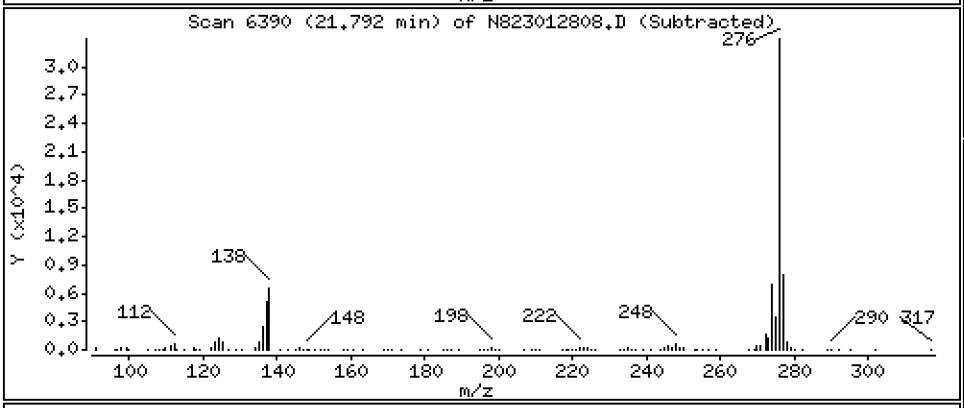
Column diameter: 0.25

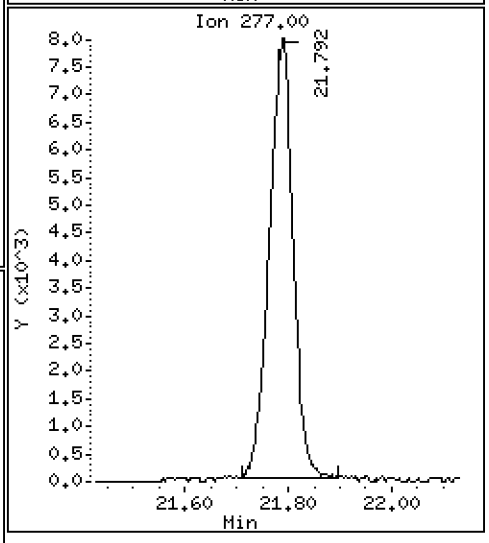
39 Benzo(g,h,i)perylene

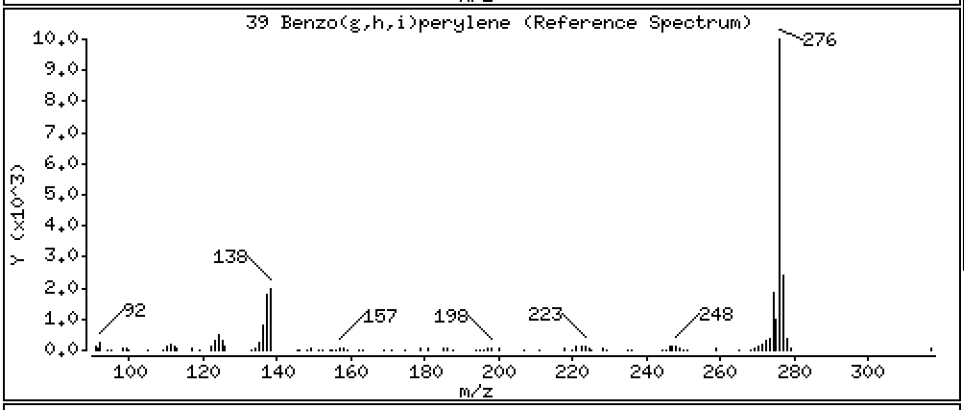
Concentration: 7.123 ug/mL

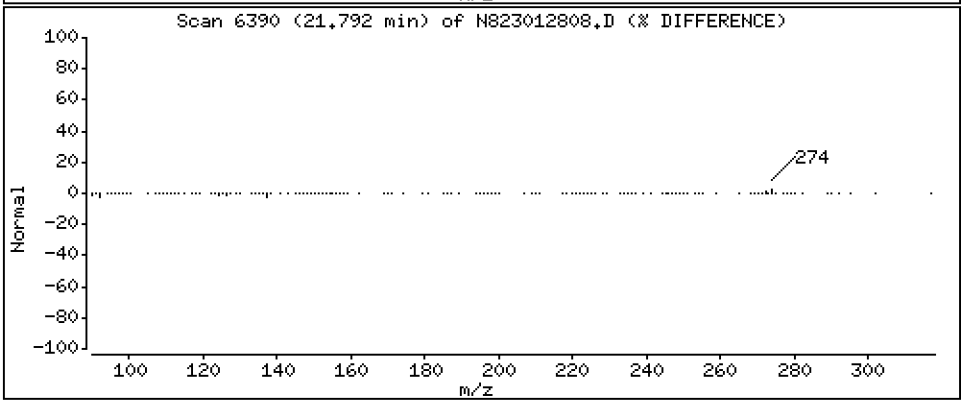












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230125.b\N823012808.D
Lab Smp Id: BLA0411-MS1
Inj Date : 25-JAN-2023 17:41
Operator : JZ Inst ID: nt8.i
Smp Info : BLA0411-MS1,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Meth Date : 26-Jan-2023 09:27 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PNAXMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.900	4.907	(1.000)	52577	2.00000	
	2 Naphthalene	128	4.929	4.938	(1.006)	90988	3.72198	3.722
$	3 2-Methylnaphthalene-d10	152	5.634	5.640	(1.150)	38233	2.66635	2.666
	4 2-Methylnaphthalene	141	5.681	5.687	(1.159)	53452	3.97511	3.975
	5 1-methylnaphthalene	141	5.880	5.886	(1.200)	53662	3.93209	3.932
	9 Acenaphthylene	152	7.085	7.088	(0.985)	101449	4.43900	4.439
*	10 Acenaphthene-d10	164	7.193	7.199	(1.000)	30265	2.00000	
	11 Acenaphthene	153	7.243	7.246	(1.007)	62692	4.09409	4.094
	12 Dibenzofuran	168	7.395	7.398	(1.028)	96712	4.15819	4.158
	14 Fluorene	166	7.872	7.875	(1.095)	80265	4.44336	4.443
*	15 Phenanthrene-d10	188	9.235	9.238	(1.000)	49999	2.00000	
	16 Phenanthrene	178	9.273	9.273	(1.004)	115951	4.74753	4.748
	17 Anthracene	178	9.314	9.314	(1.009)	108334	4.88278	4.883
	22 Fluoranthene	202	11.056	11.056	(1.197)	150691	5.66825	5.668
$	21 Fluoranthene-d10	212	11.019	11.018	(1.193)	70998	3.21850	3.218
	23 Pyrene	202	11.581	11.578	(0.815)	149202	8.15528	8.155
	24 Benzo(a)anthracene	228	14.082	14.085	(0.991)	110106	6.63994	6.640
*	25 Chrysene-d12	240	14.212	14.212	(1.000)	29509	2.00000	
	27 Chrysene	228	14.285	14.288	(1.005)	111362	6.30846	6.308
	28 Benzo(b)fluoranthene	252	16.837	16.830	(0.929)	104887	6.26606	6.266
	29 Benzo(k)fluoranthene	252	16.900	16.893	(0.932)	90012	5.48993	5.490
	30 Benzo(j)fluoranthene	252	16.979	16.969	(0.937)	89450	6.06025	6.060
	31 Total Benzofluoranthenes	252	16.837	16.830	(0.929)	280551	17.6974	17.70(M)
	32 Benzo(a)pyrene	252	17.893	17.889	(0.987)	90339	6.13293	6.133
*	33 Perylene-d12	264	18.123	18.120	(1.000)	28741	2.00000	
	35 Perylene	252	18.196	18.196	(1.004)	88324	5.58767	5.588
$	36 Dibenzo(a,h)anthracene-d14	292	20.565	20.565	(1.135)	50892	4.51918	4.519
	37 Indeno(1,2,3-cd)pyrene	276	20.697	20.694	(1.142)	108755	6.48077	6.481
	38 Dibenzo(a,h)anthracene	278	20.682	20.672	(1.141)	91324	6.32370	6.324
	39 Benzo(g,h,i)perylene	276	21.791	21.779	(1.202)	108293	7.12259	7.123

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823012808.D
Lab Smp Id: BLA0411-MS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 25-JAN-2023
Calibration Time: 14:49
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	46976	23488	93952	52577	11.92
10 Acenaphthene-d10	27652	13826	55304	30265	9.45
15 Phenanthrene-d10	51738	25869	103476	49999	-3.36
25 Chrysene-d12	45383	22692	90766	29509	-34.98
33 Perylene-d12	41344	20672	82688	28741	-30.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.90	-0.12
10 Acenaphthene-d10	7.20	6.70	7.70	7.19	-0.08
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	-0.03
25 Chrysene-d12	14.21	13.71	14.71	14.21	0.00
33 Perylene-d12	18.12	17.62	18.62	18.12	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823012808.D

Lab ID: BLA0411-MS1
nt8.i, 20230125.b\FSIMPNA230119.m,   25-JAN-2023 17:41

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

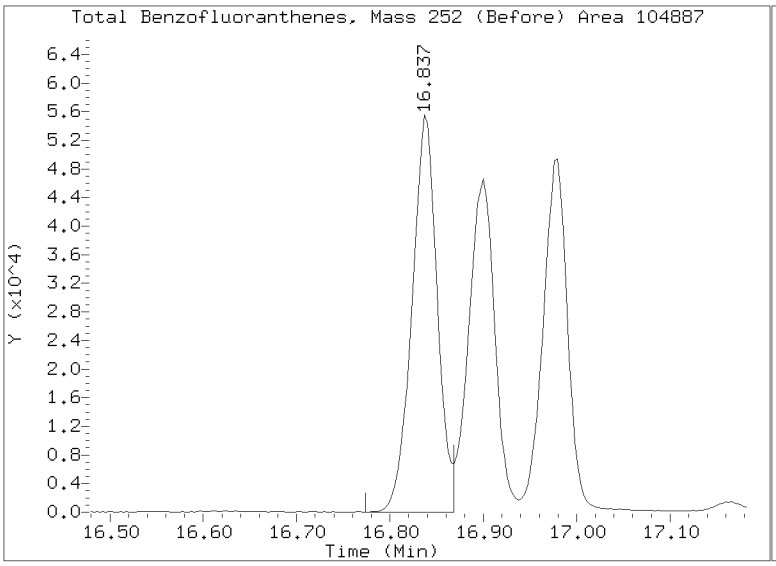
No RRT check performed

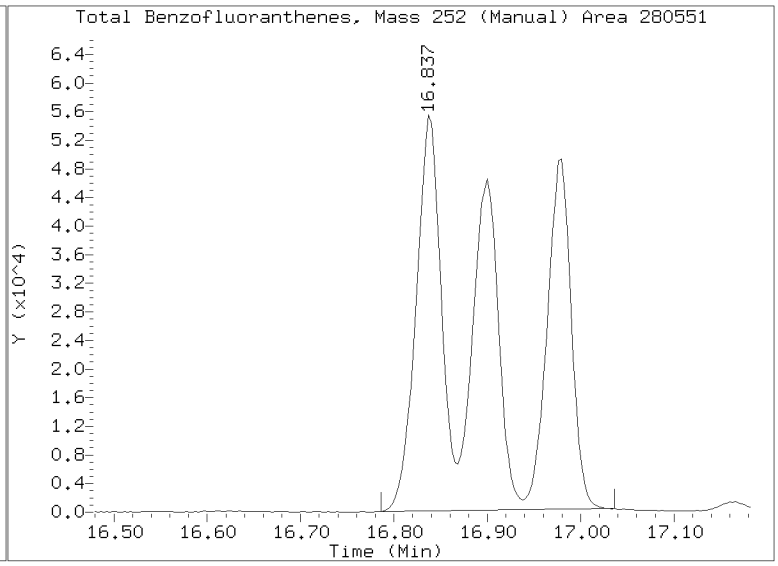
On Column LOD for nt8.i, 20230125.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230125.b/N823012808.D
Injection Date: 25-JAN-2023 17:41
Lab ID:BLA0411-MS1 Client ID:
Report Date: 01/26/2023 09:45

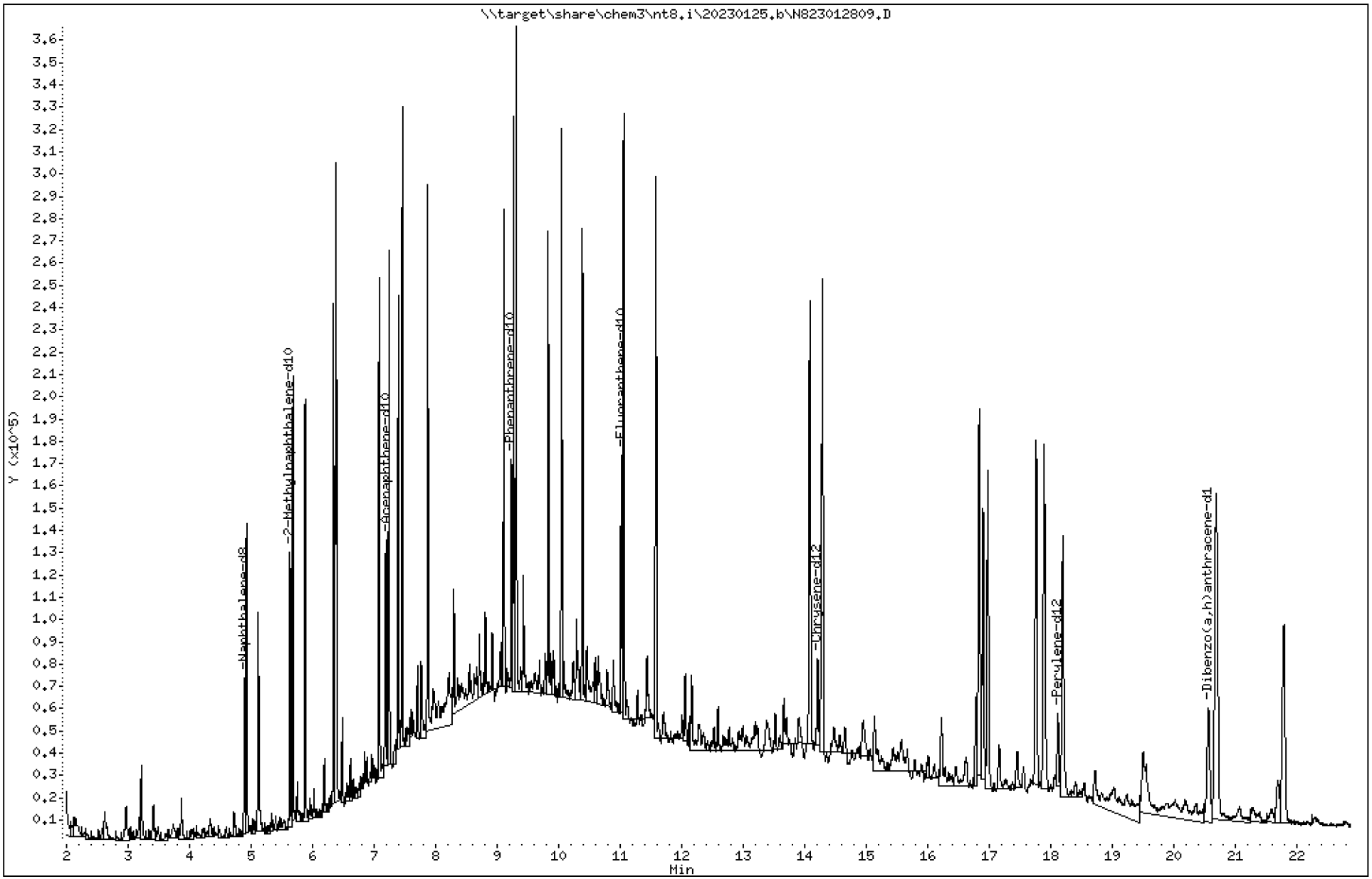




Data File: \\target\share\chem3\nt8.i\20230125.b\N823012809.D
Date : 25-JAN-2023 18:08
Client ID:
Sample Info: BLA0411-MSD1,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

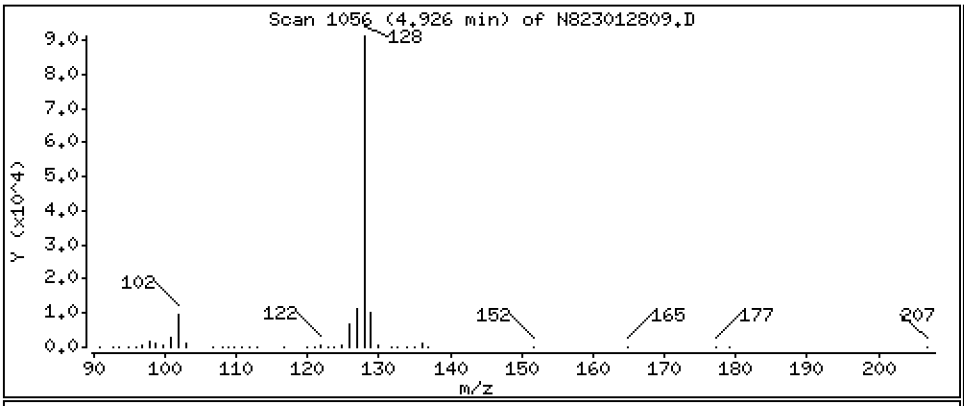
Operator: JZ

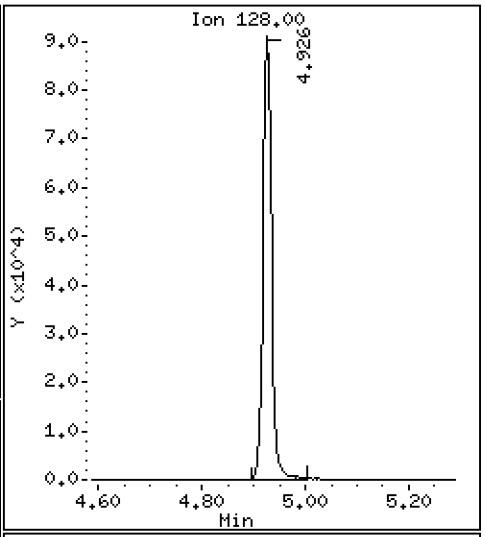
Column phase: Rxi-17sil

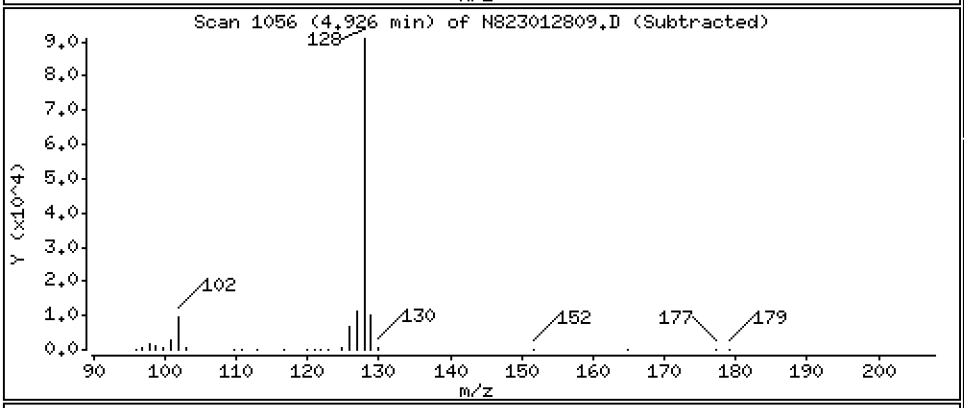
Column diameter: 0.25

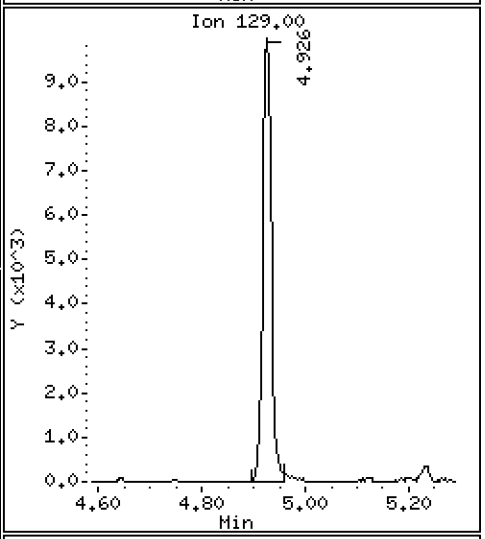
2 Naphthalene

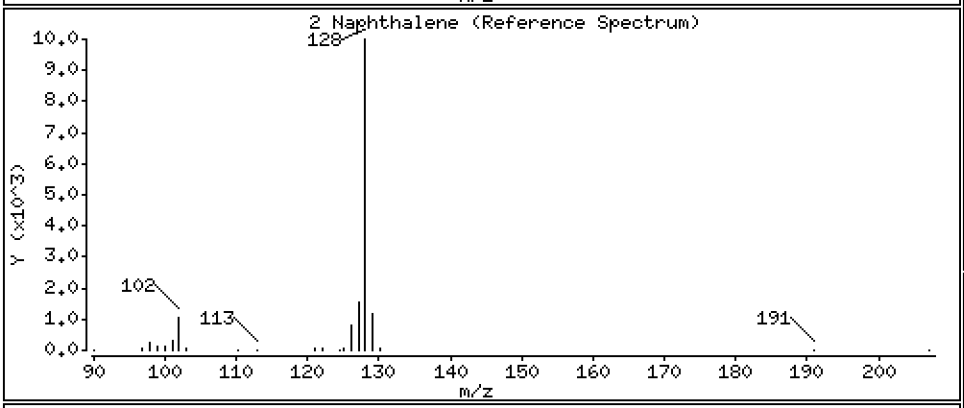
Concentration: 4.192 ug/mL

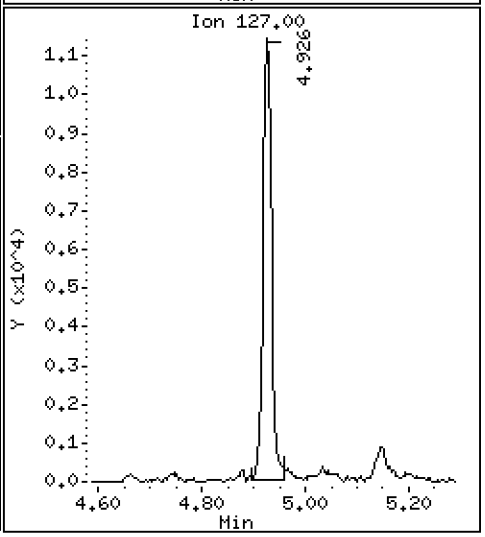


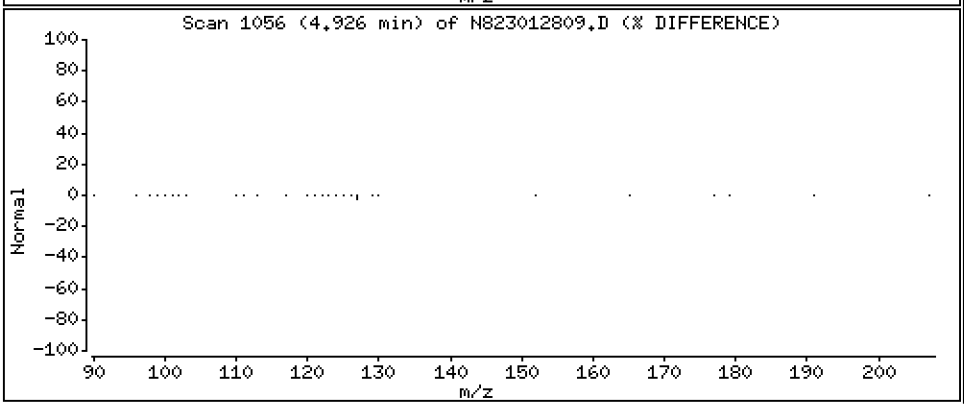












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

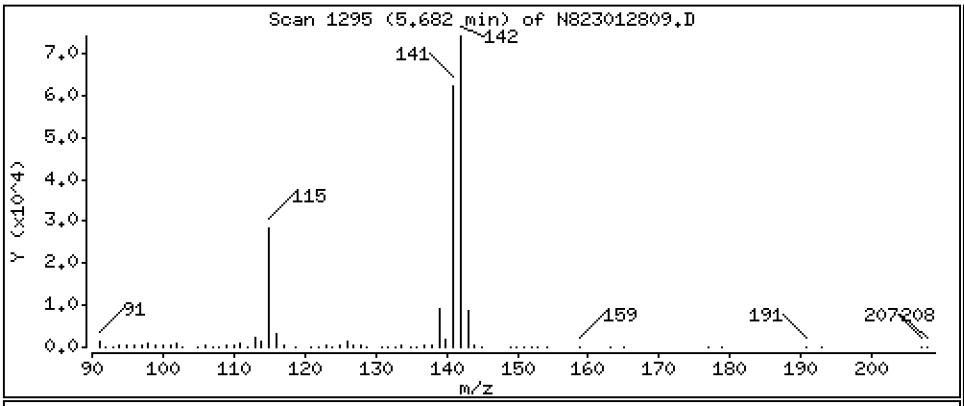
Operator: JZ

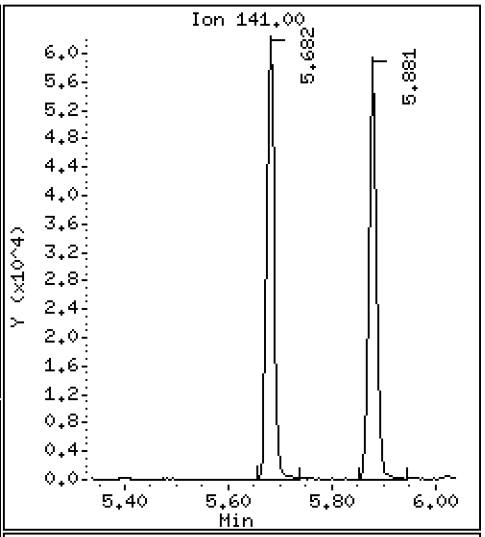
Column phase: Rxi-17sil

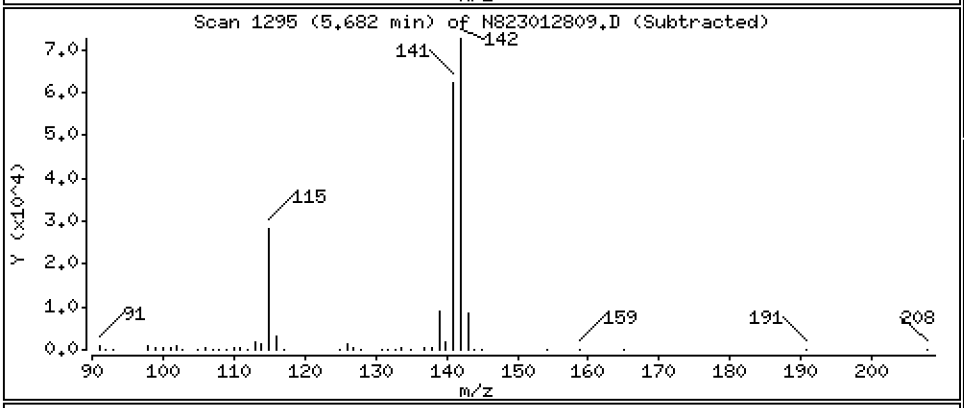
Column diameter: 0.25

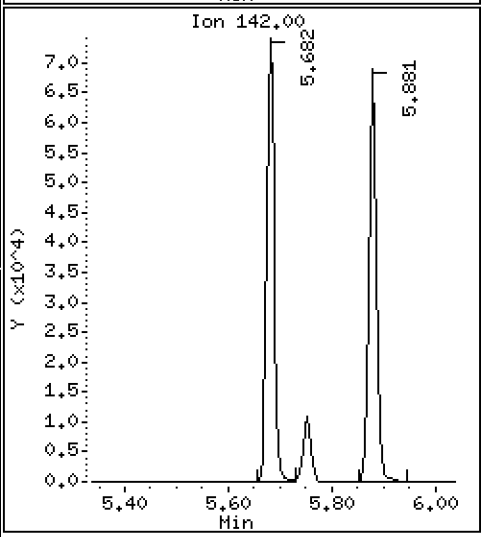
4 2-Methylnaphthalene

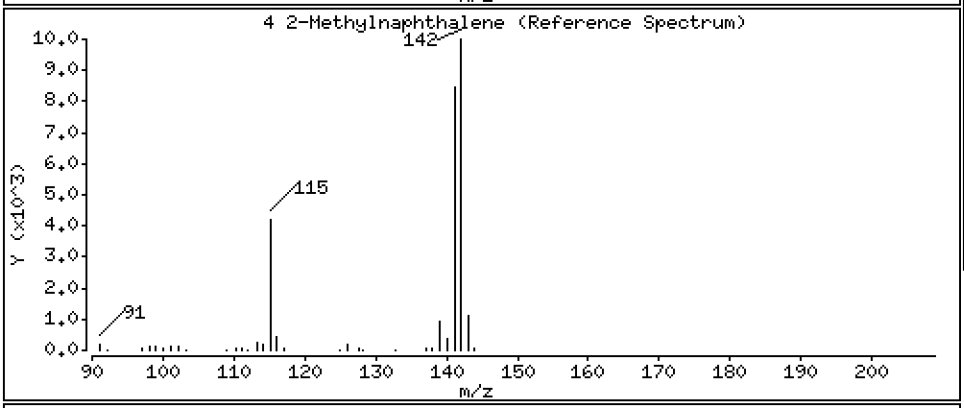
Concentration: 4.419 ug/mL

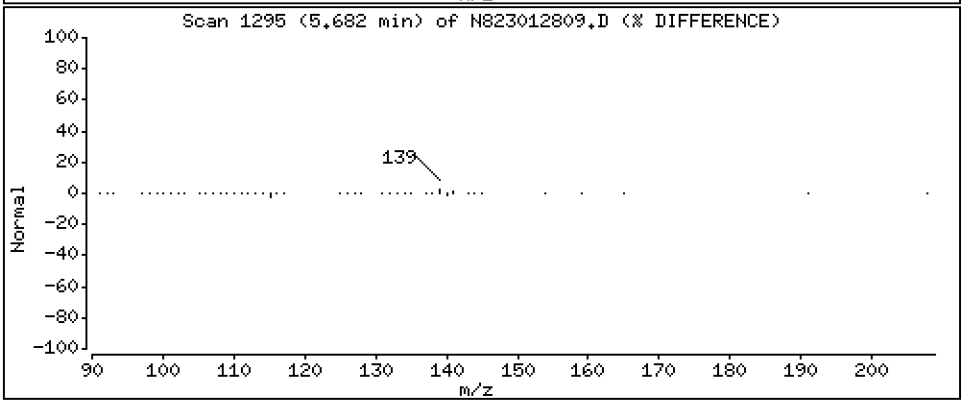












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

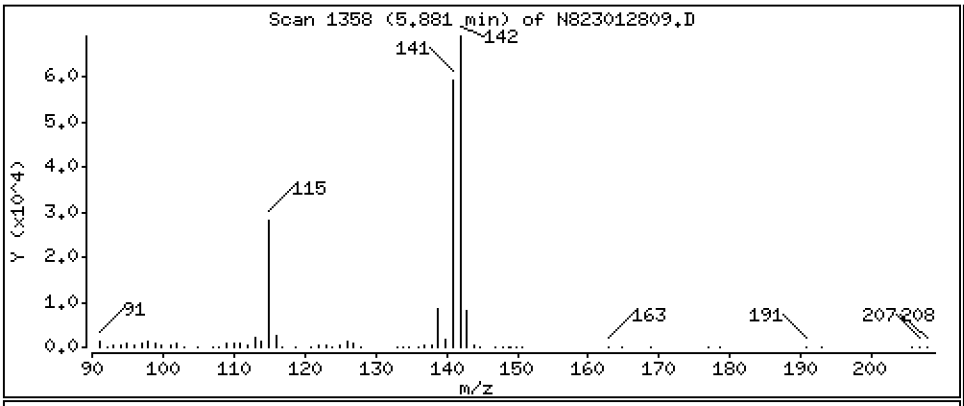
Operator: JZ

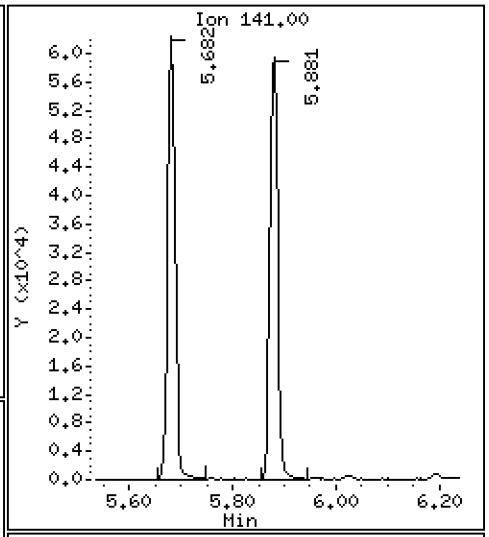
Column phase: Rxi-17sil

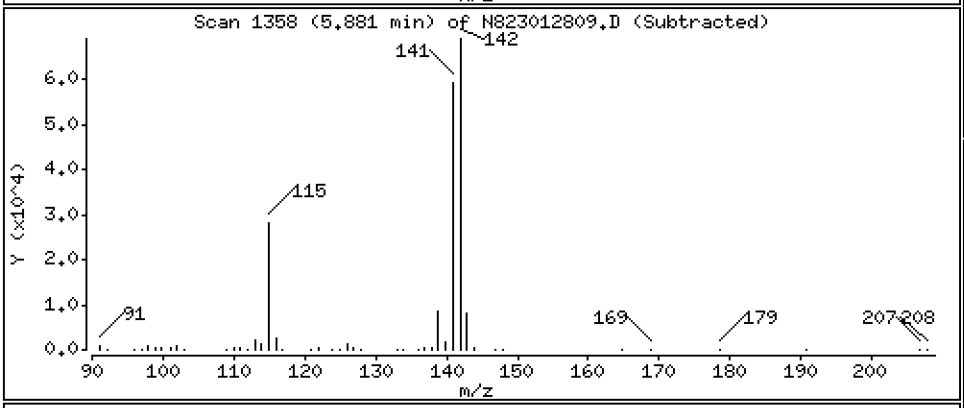
Column diameter: 0.25

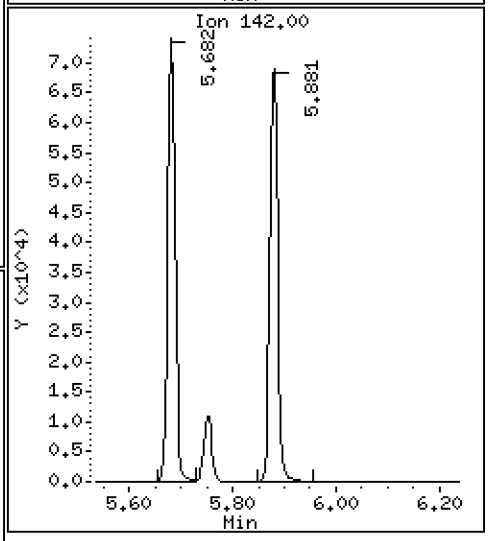
5 1-methylnaphthalene

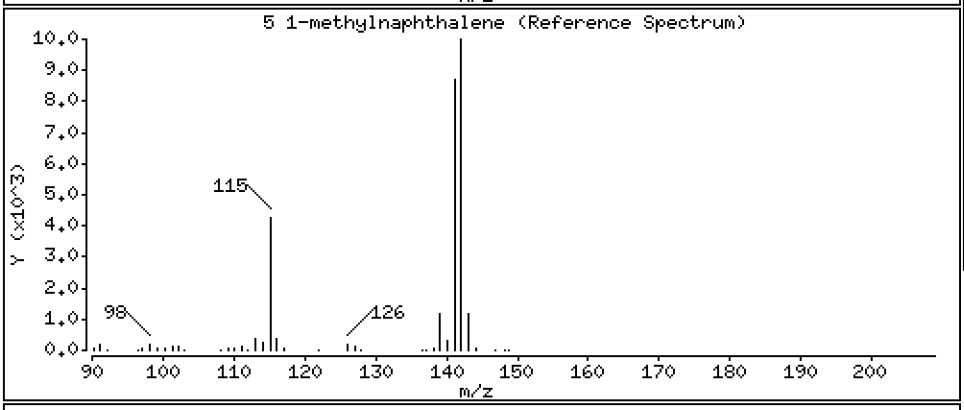
Concentration: 4.318 ug/mL

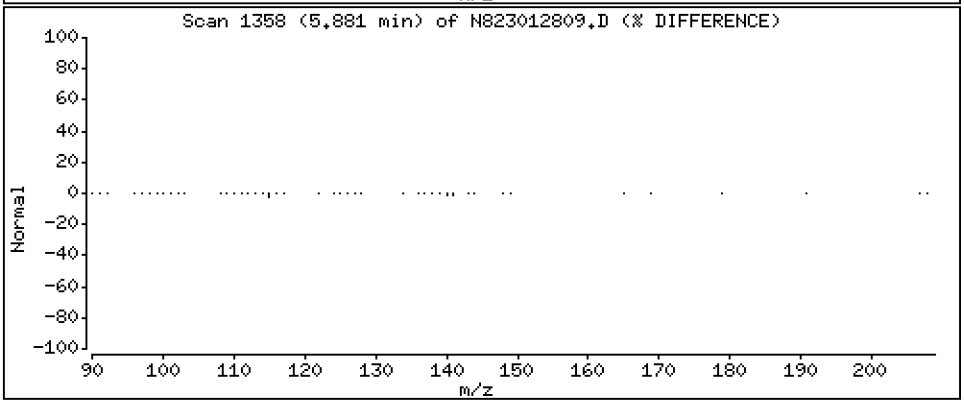












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

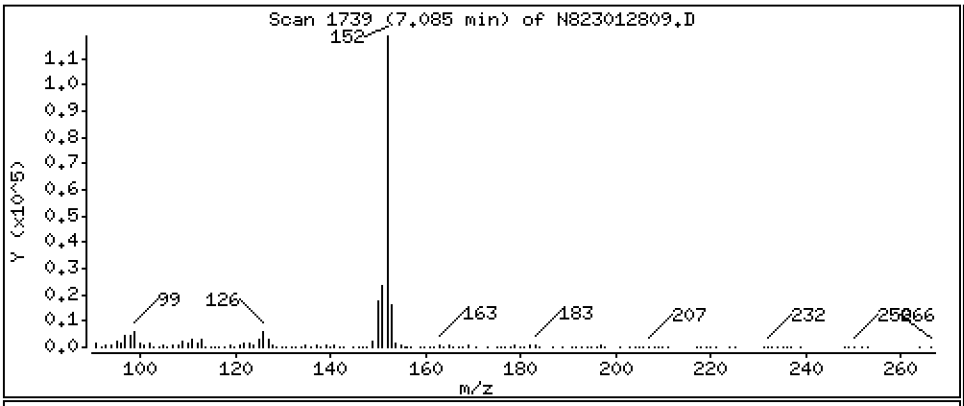
Operator: JZ

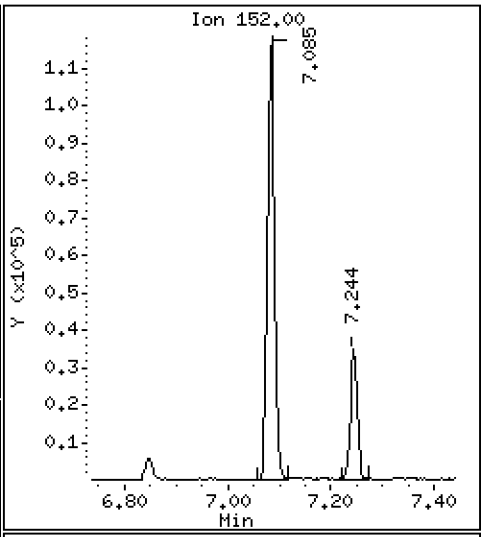
Column phase: Rxi-17sil

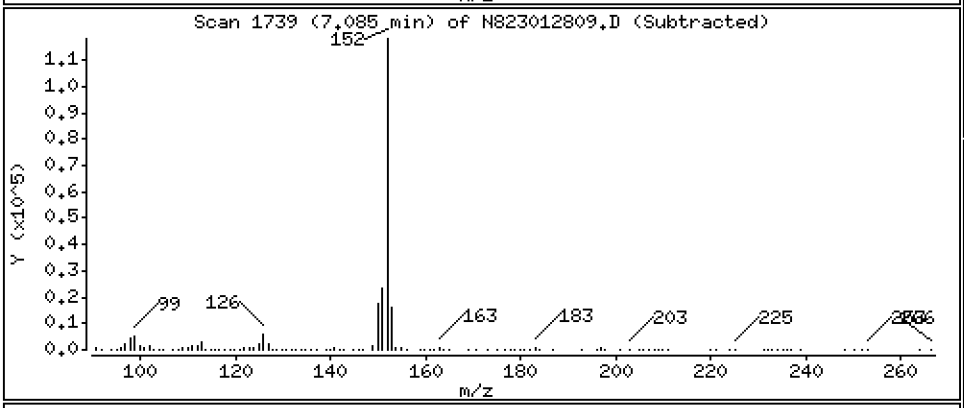
Column diameter: 0.25

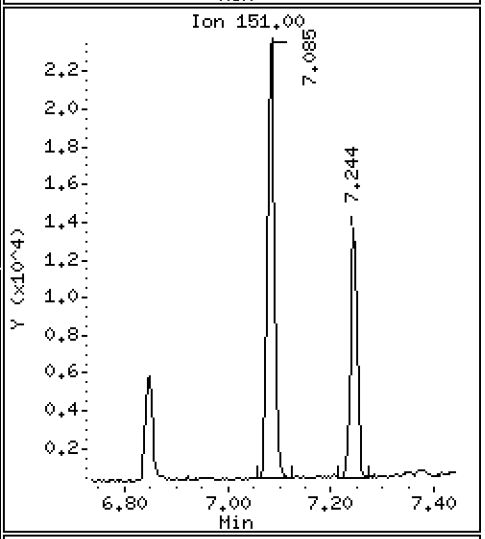
9 Acenaphthylene

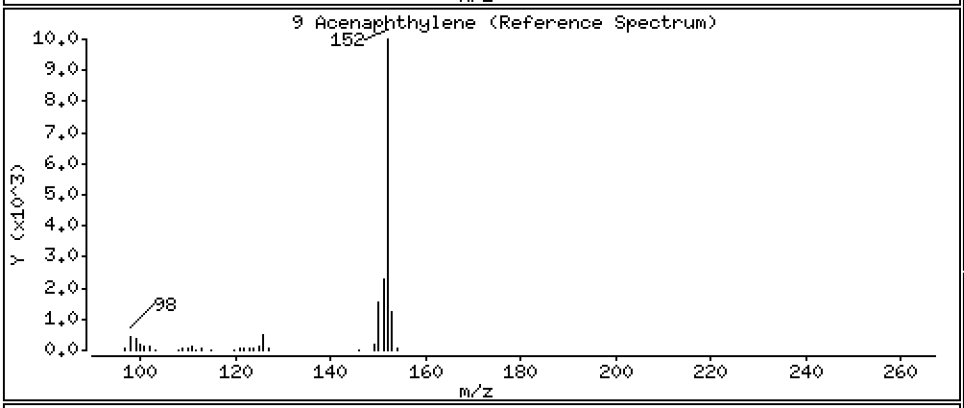
Concentration: 5.255 ug/mL

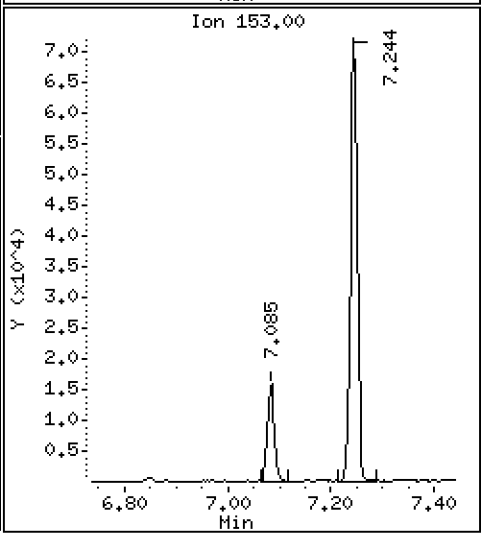


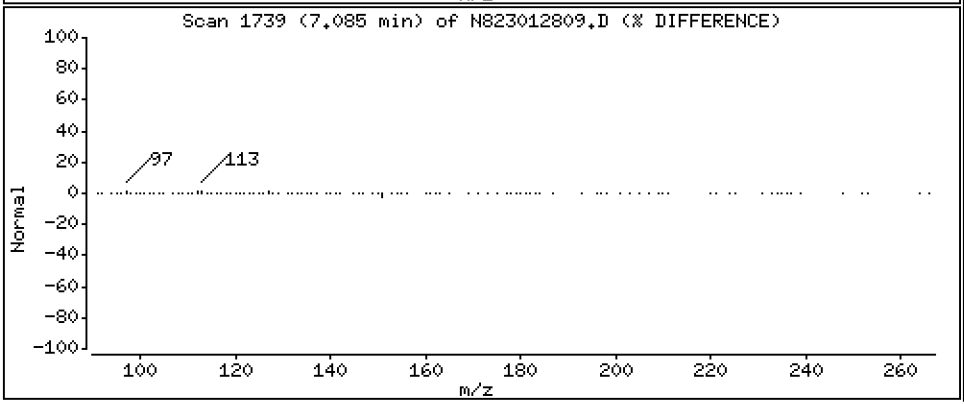












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

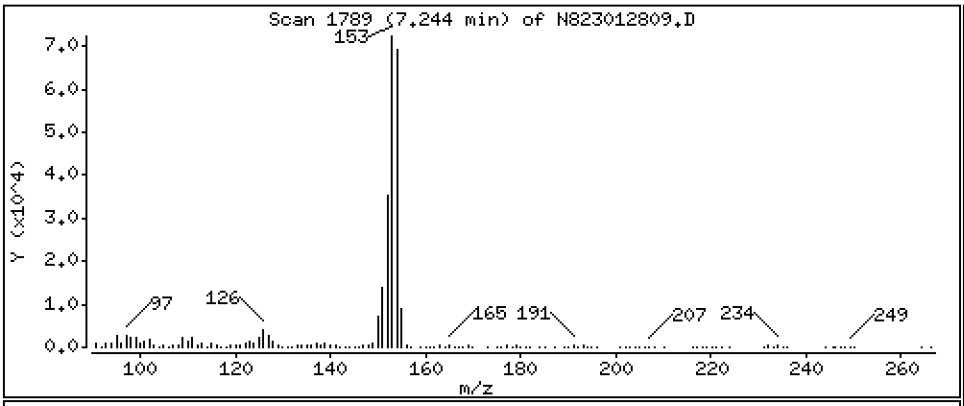
Operator: JZ

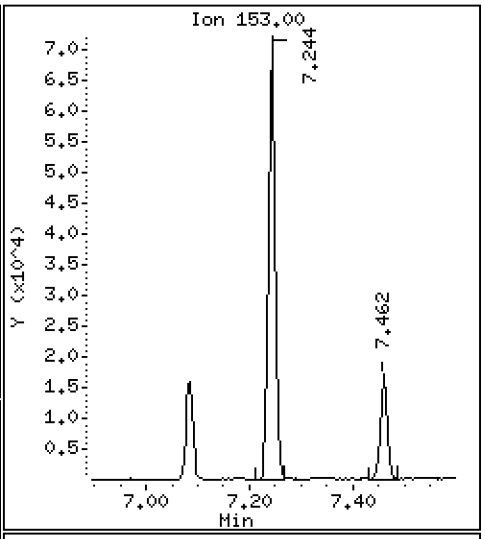
Column phase: Rxi-17sil

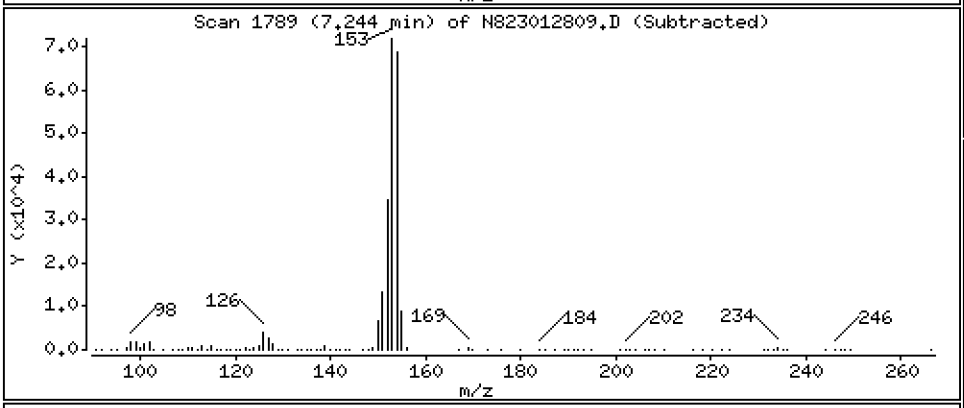
Column diameter: 0.25

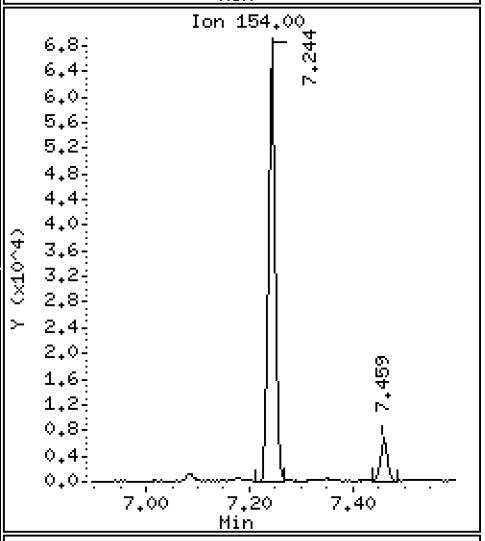
11 Acenaphthene

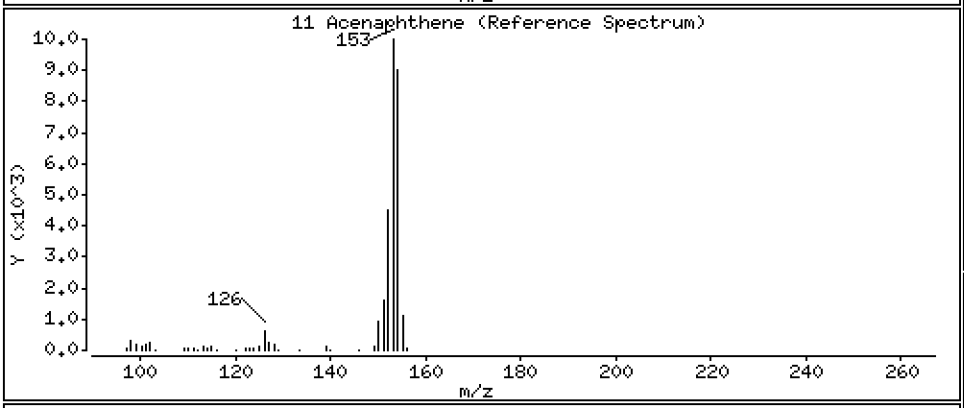
Concentration: 4.598 ug/mL

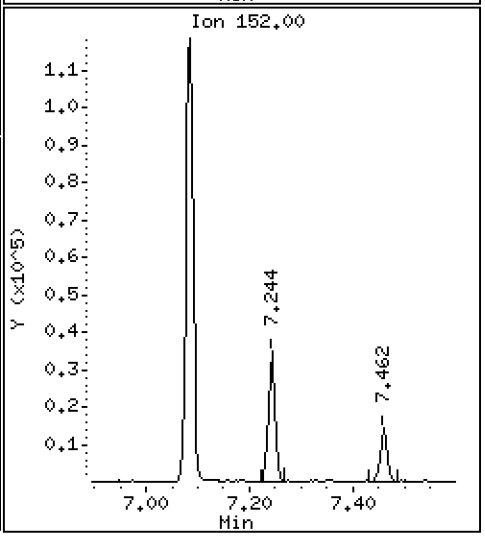


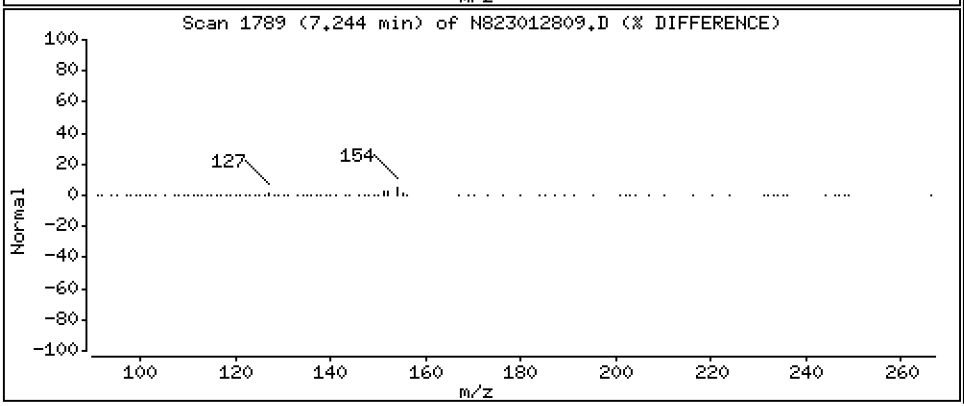












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

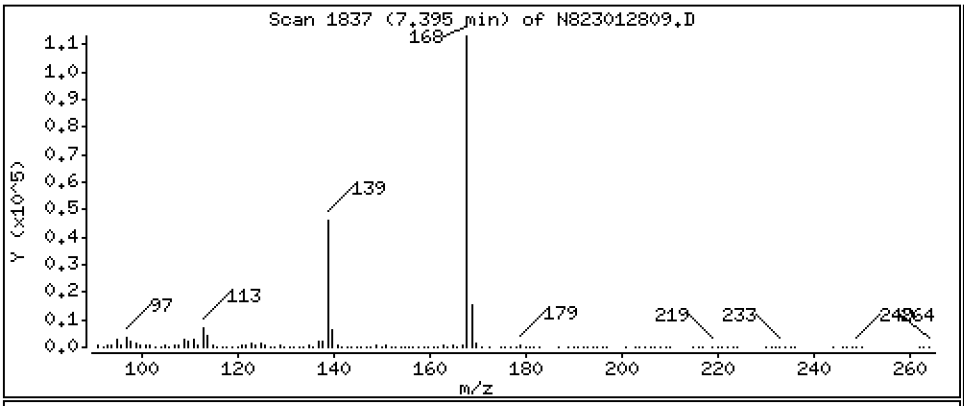
Operator: JZ

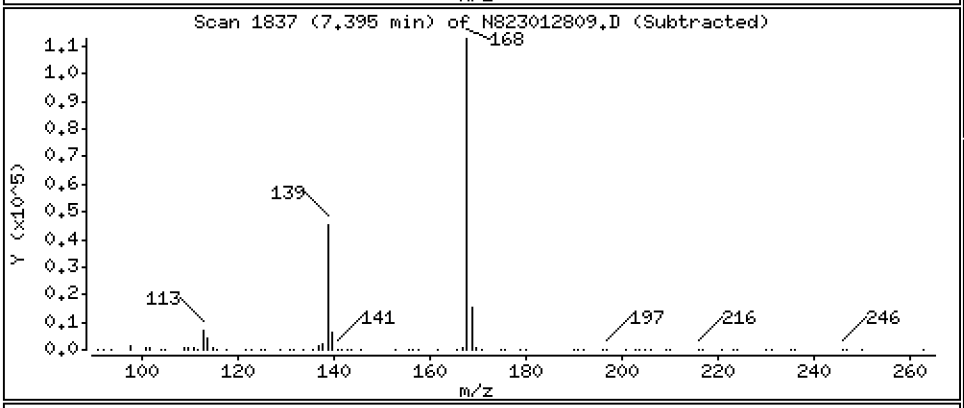
Column phase: Rxi-17sil

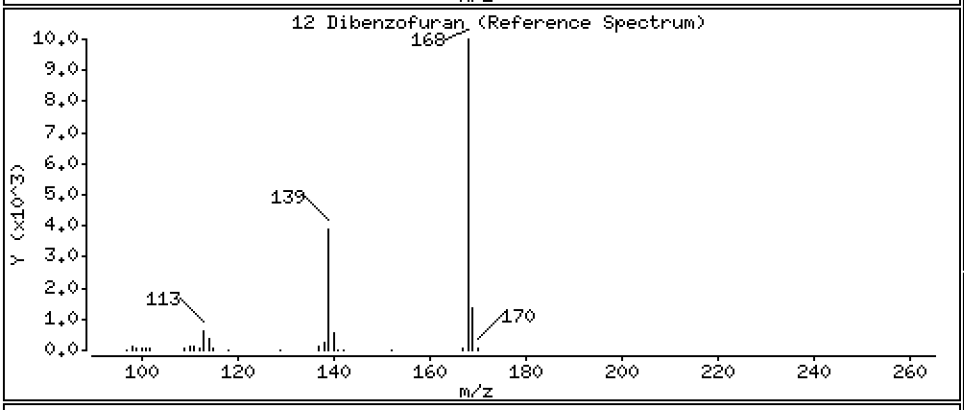
Column diameter: 0.25

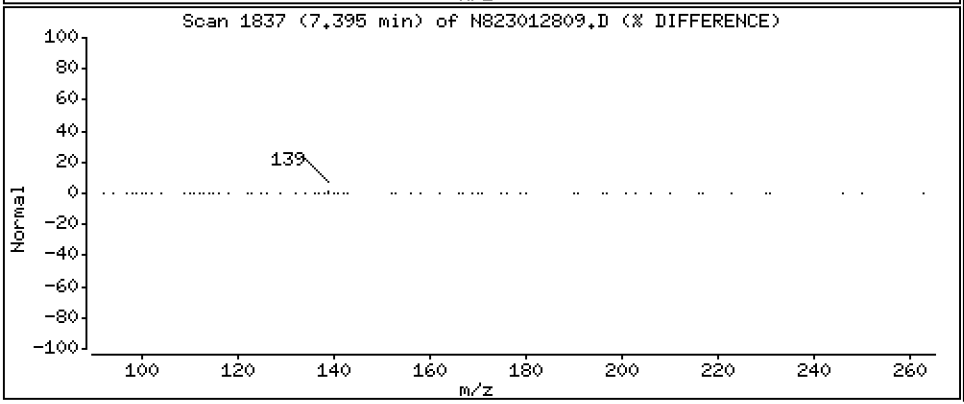
12 Dibenzofuran

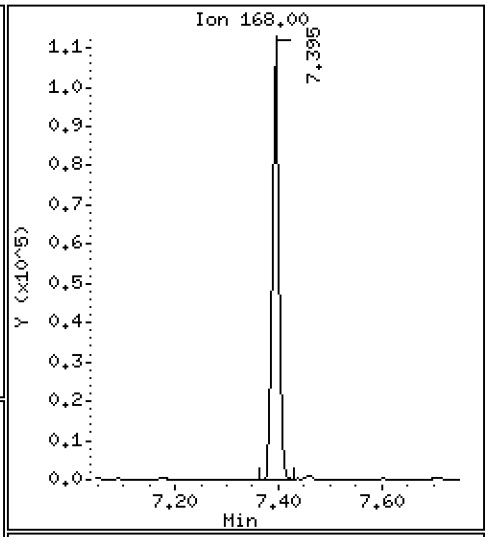
Concentration: 4.564 ug/mL

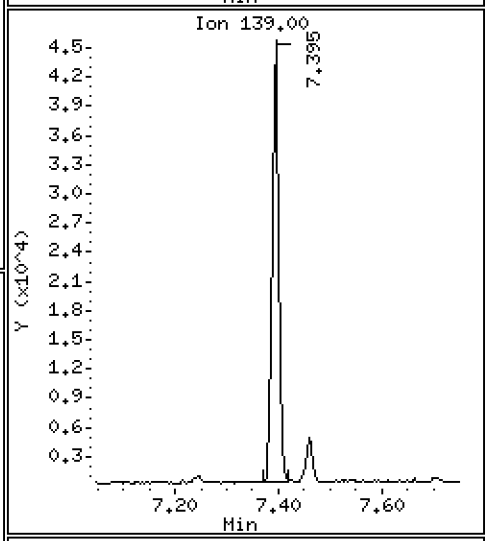


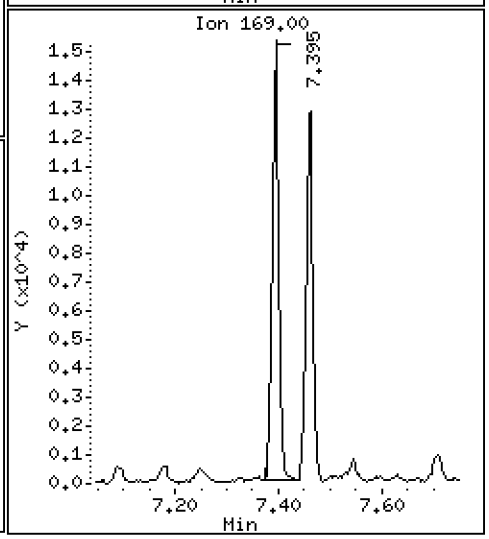












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

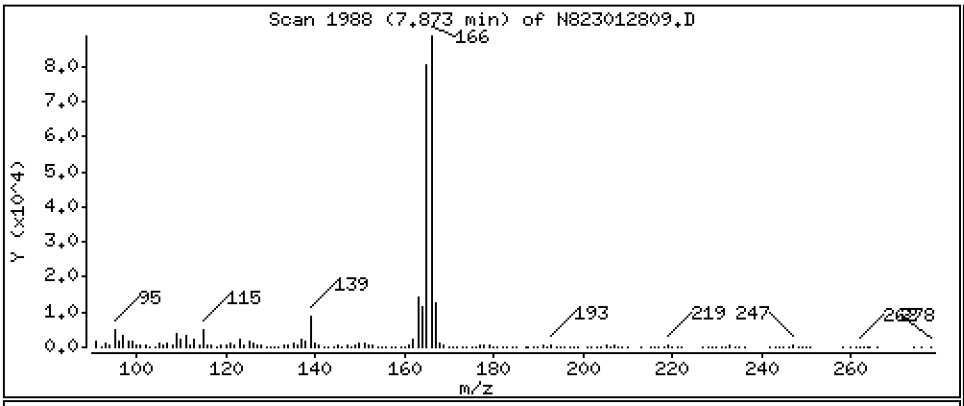
Operator: JZ

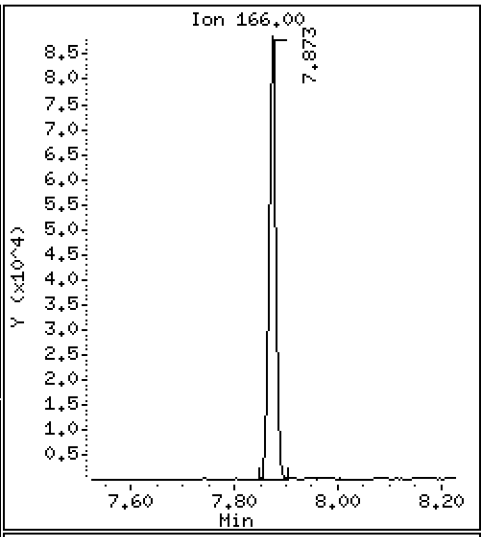
Column phase: Rxi-17sil

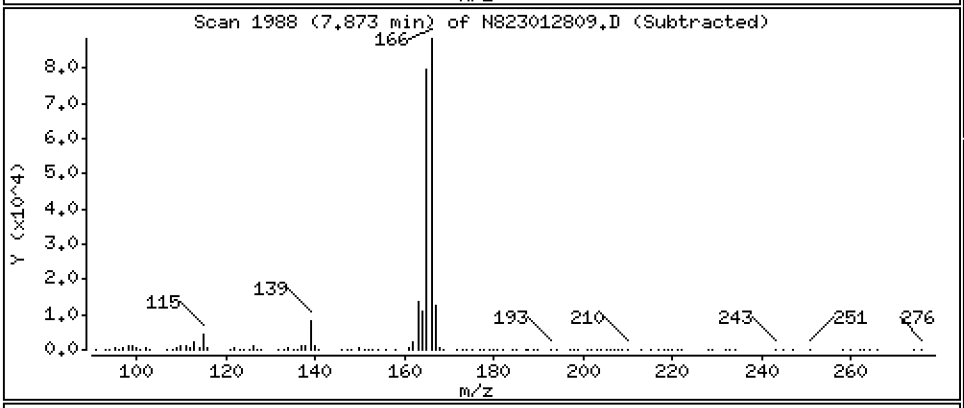
Column diameter: 0.25

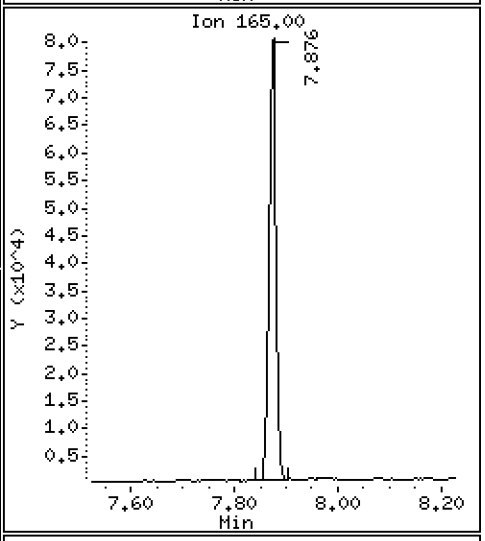
14 Fluorene

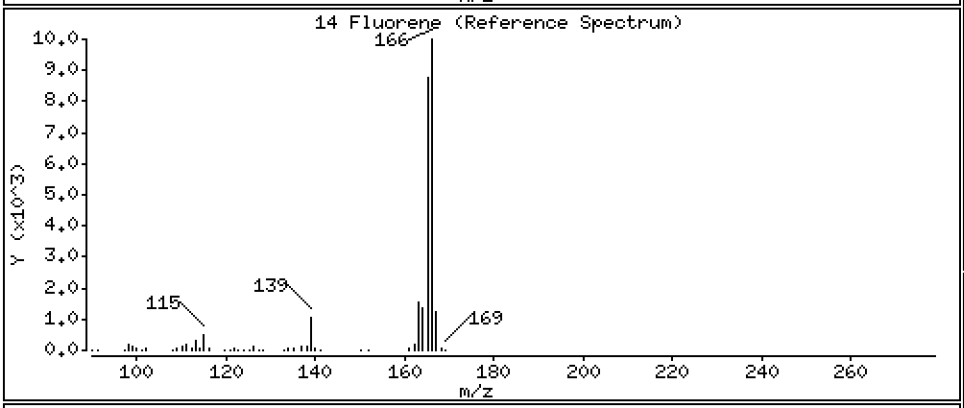
Concentration: 4.793 ug/mL

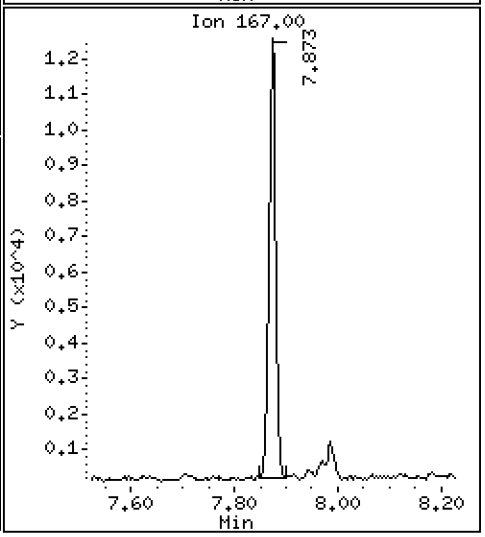


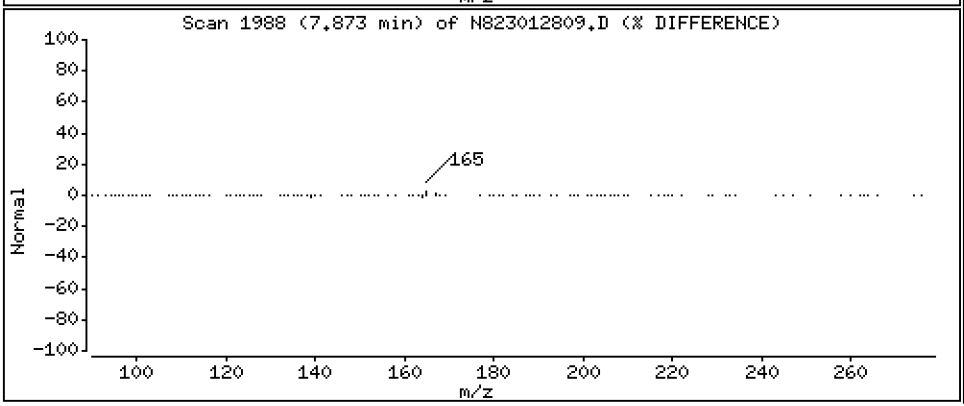












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

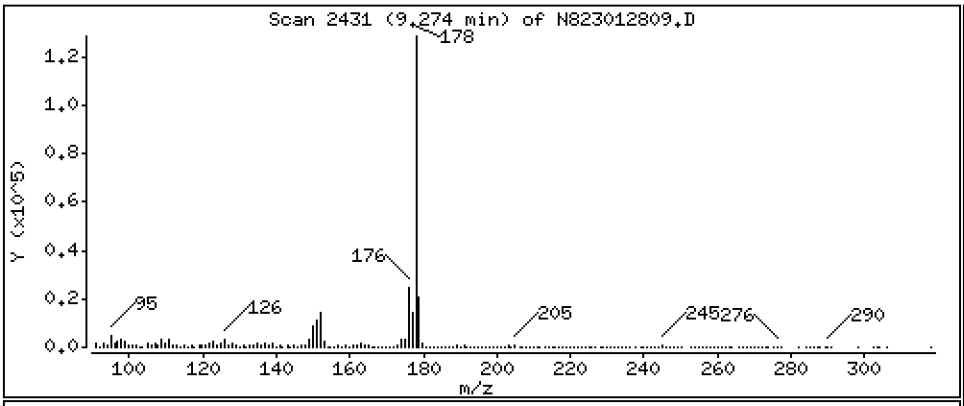
Operator: JZ

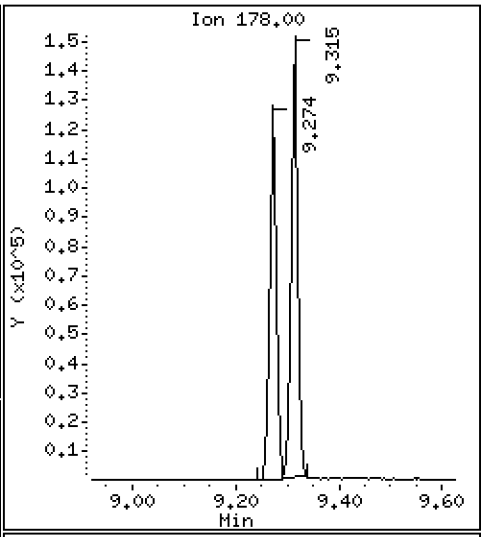
Column phase: Rxi-17sil

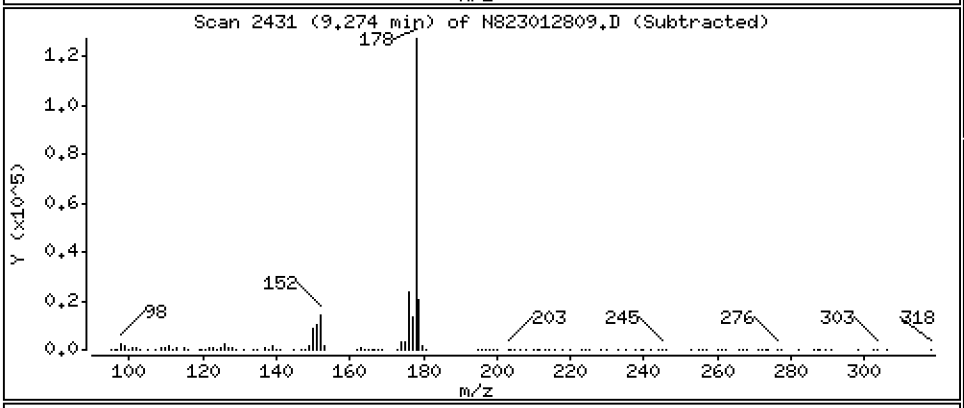
Column diameter: 0.25

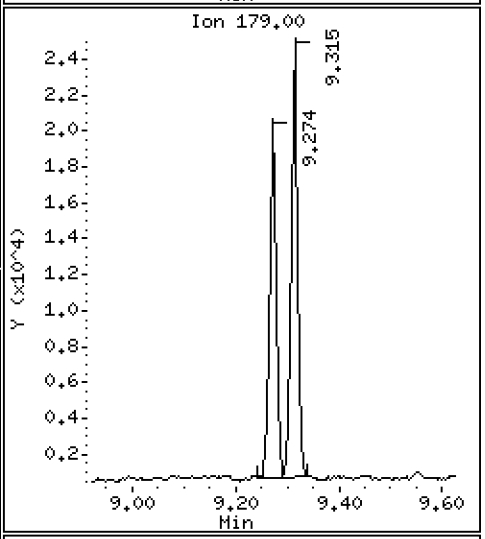
16 Phenanthrene

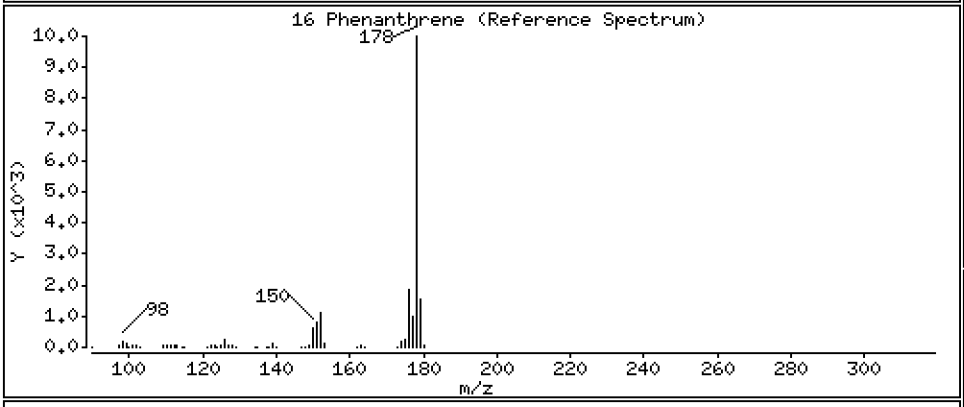
Concentration: 5.416 ug/mL

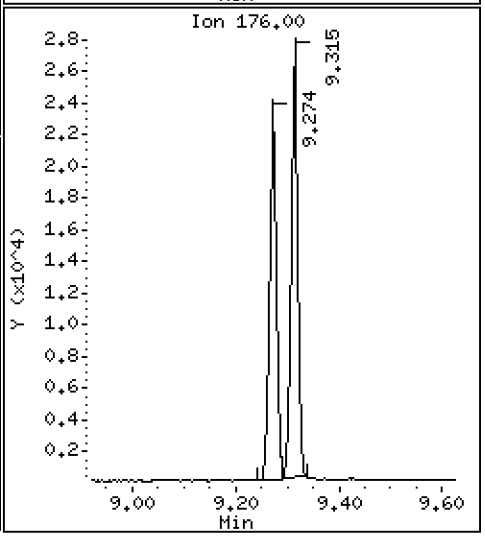


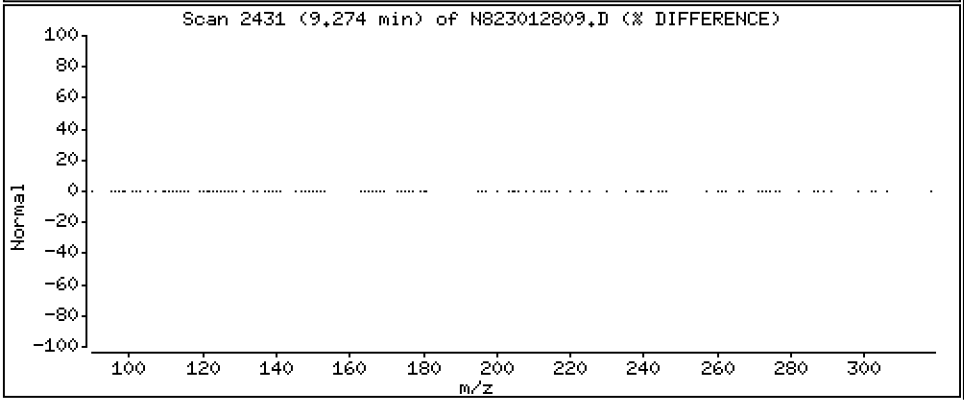












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

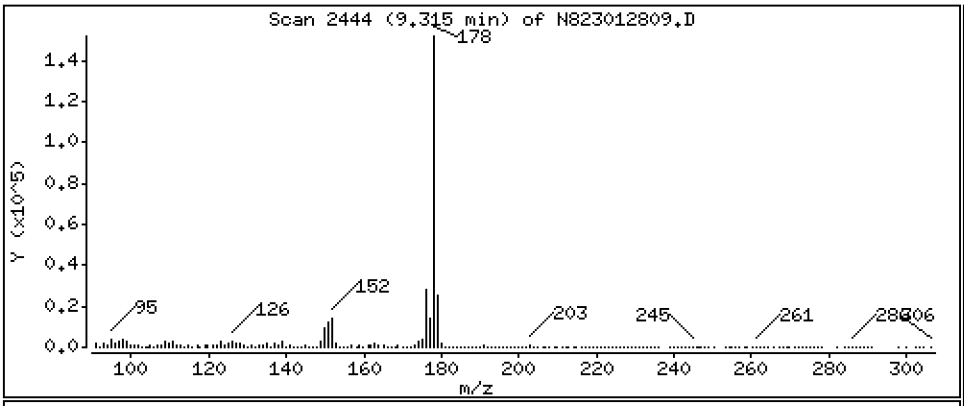
Operator: JZ

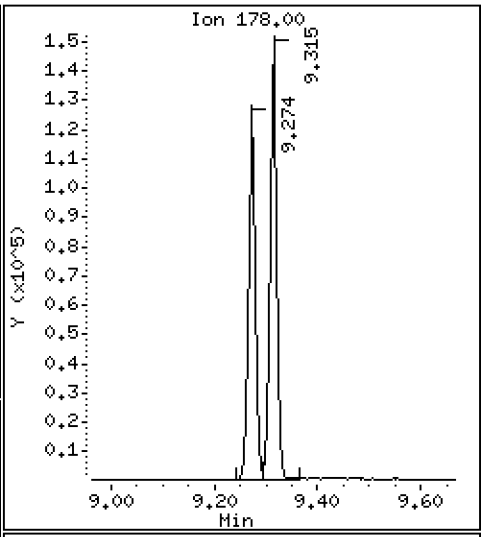
Column phase: Rxi-17sil

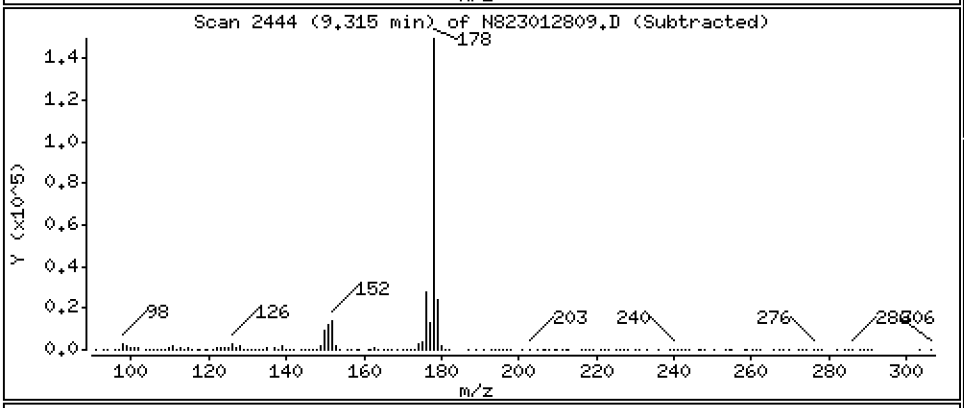
Column diameter: 0.25

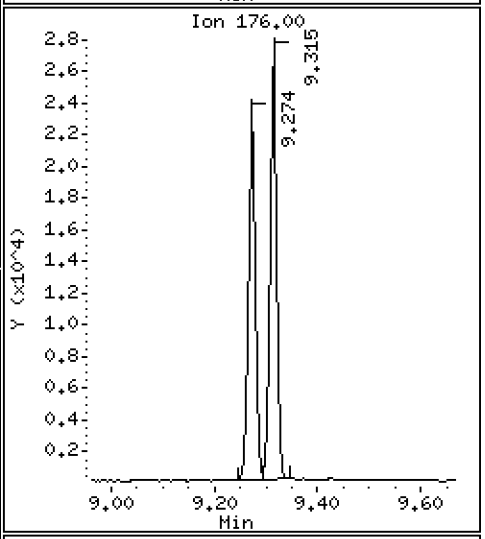
17 Anthracene

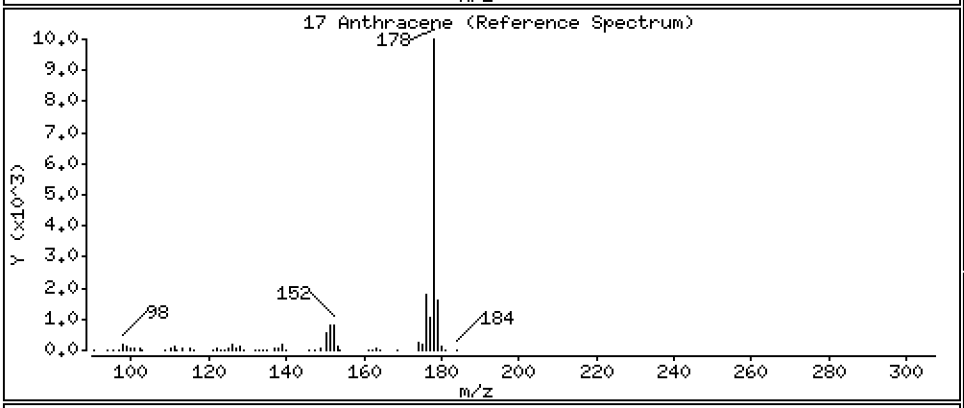
Concentration: 6.913 ug/mL

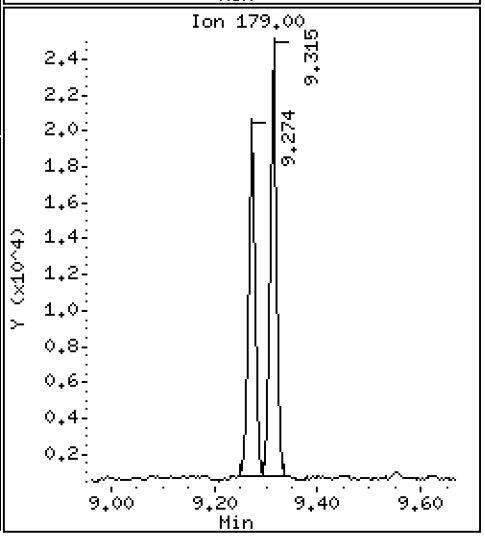


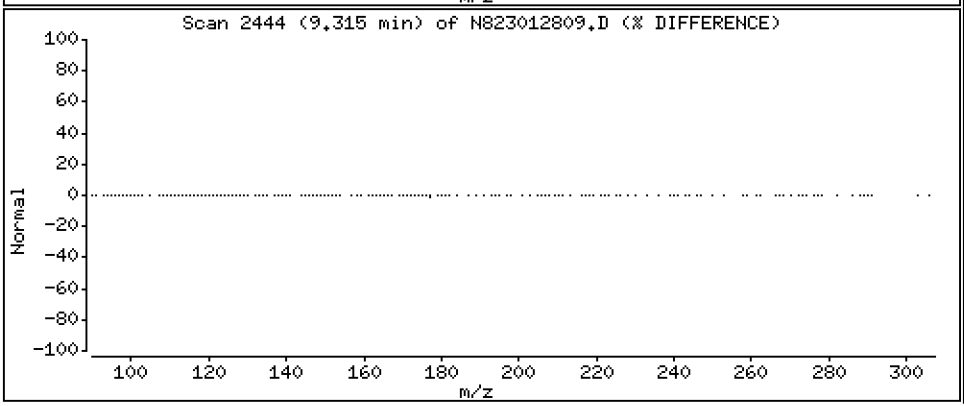












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

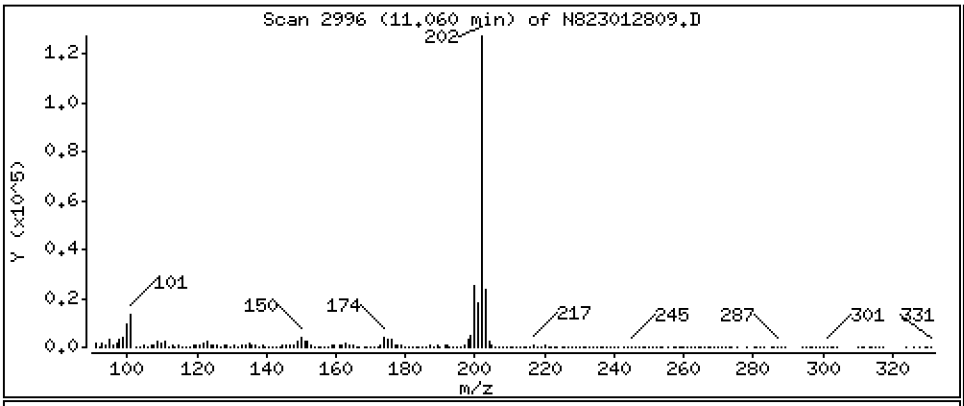
Operator: JZ

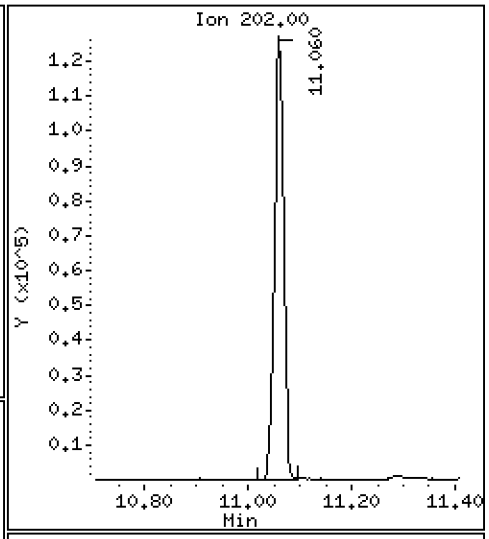
Column phase: Rxi-17sil

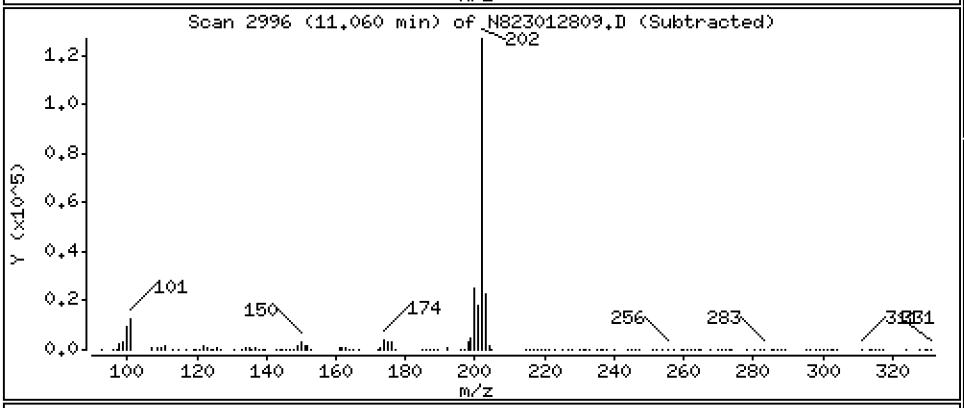
Column diameter: 0.25

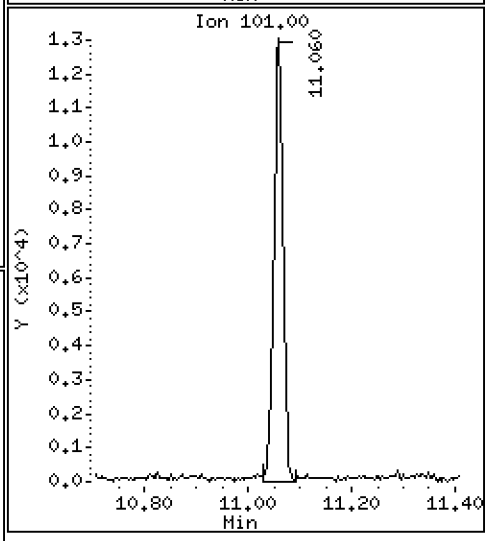
22 Fluoranthene

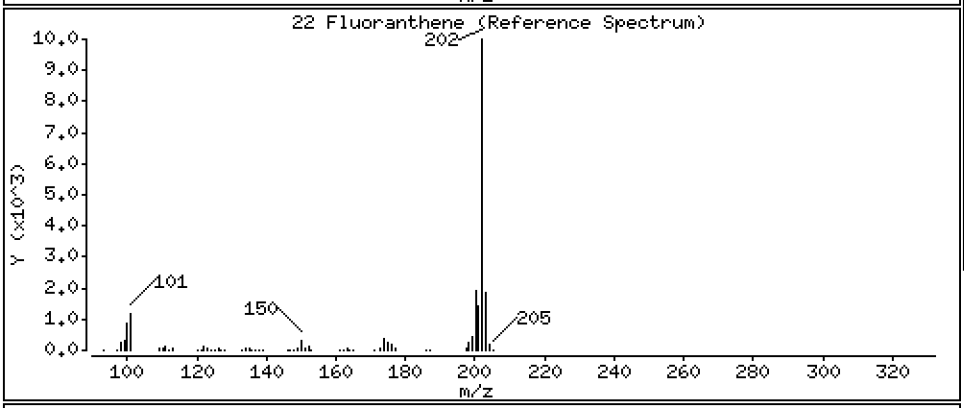
Concentration: 6.544 ug/mL

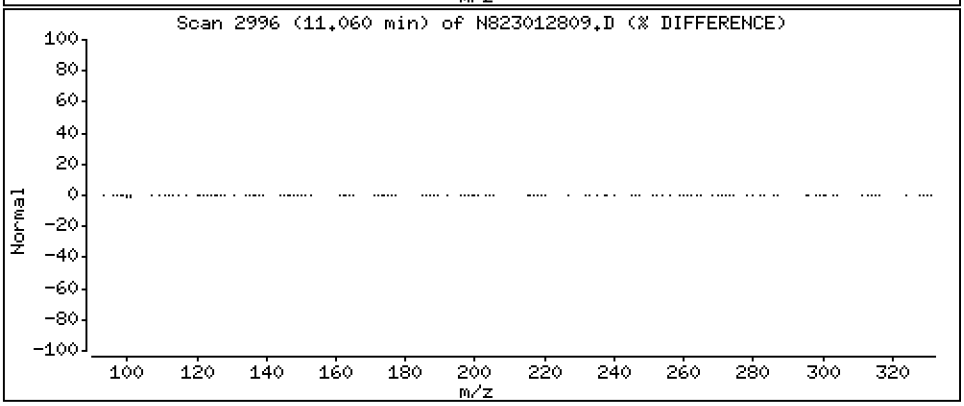












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

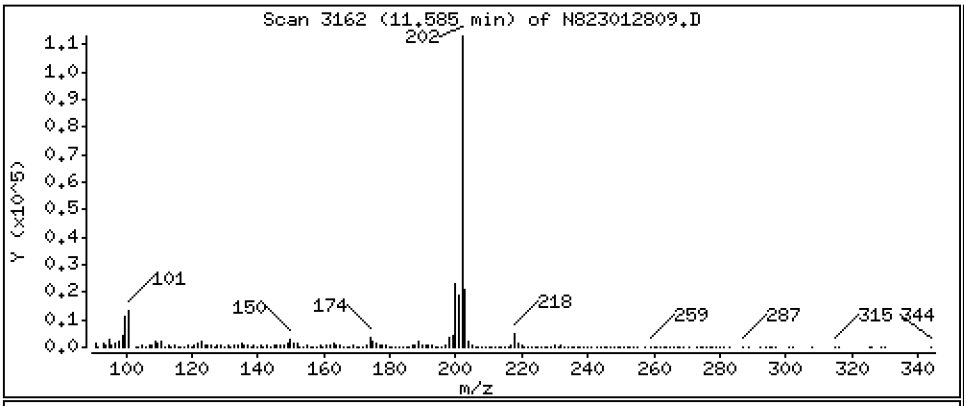
Operator: JZ

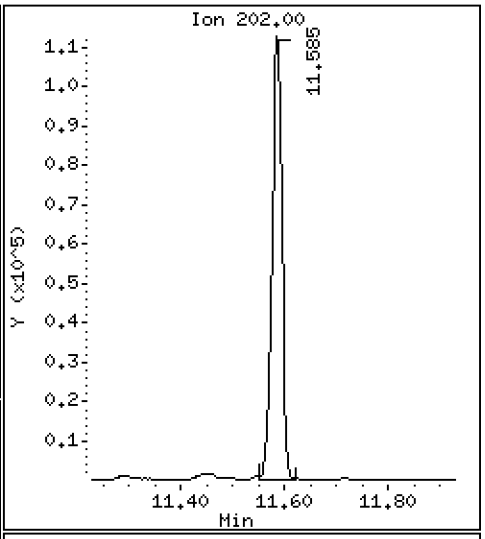
Column phase: Rxi-17sil

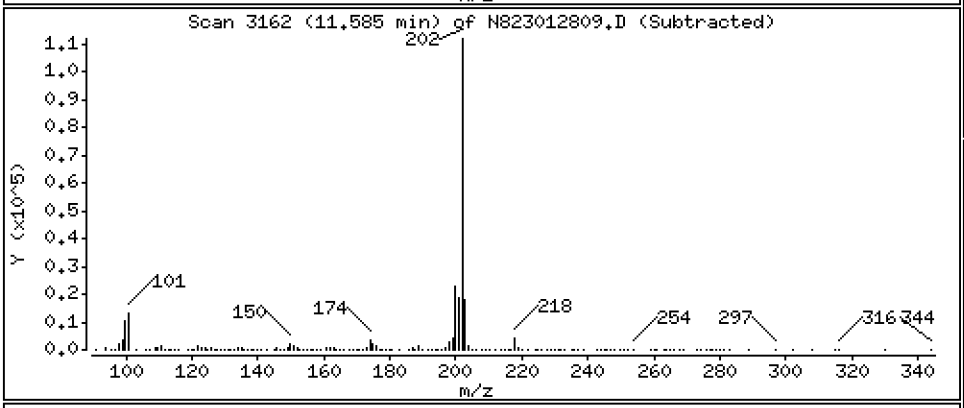
Column diameter: 0.25

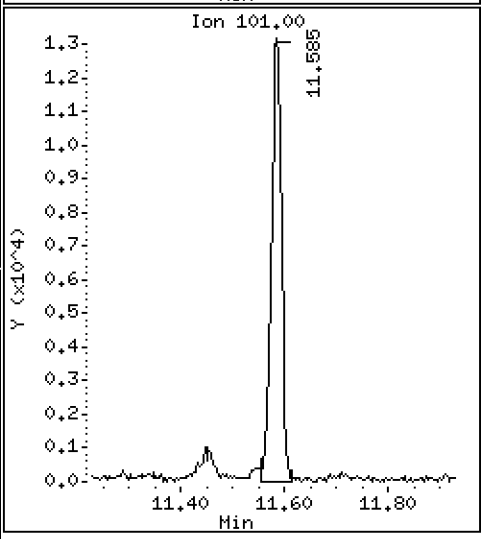
23 Pyrene

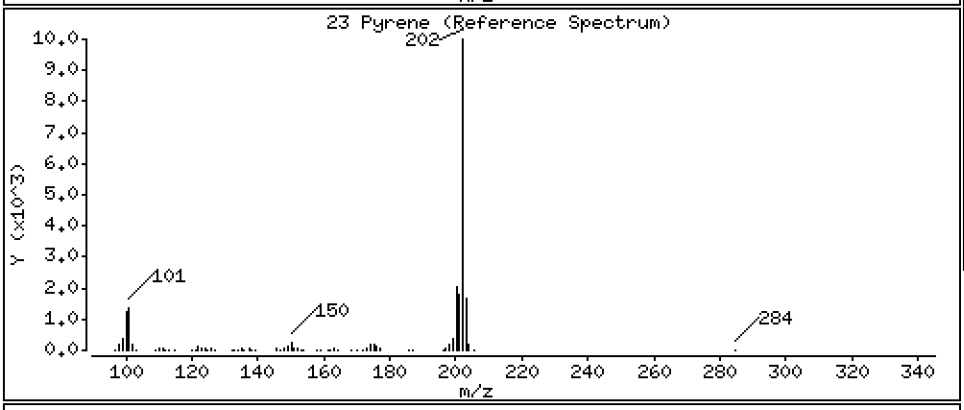
Concentration: 9.158 ug/mL

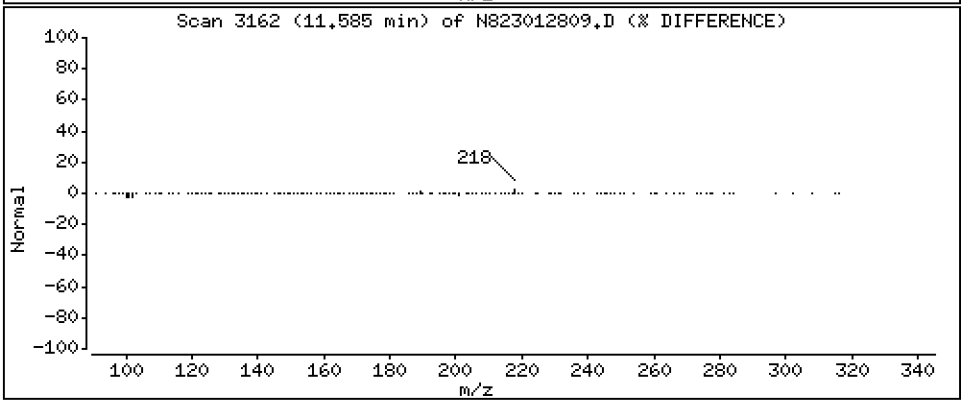












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

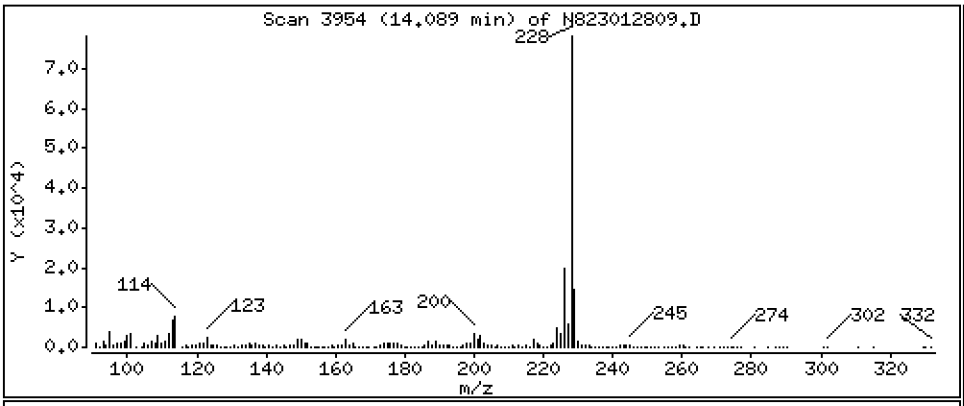
Operator: JZ

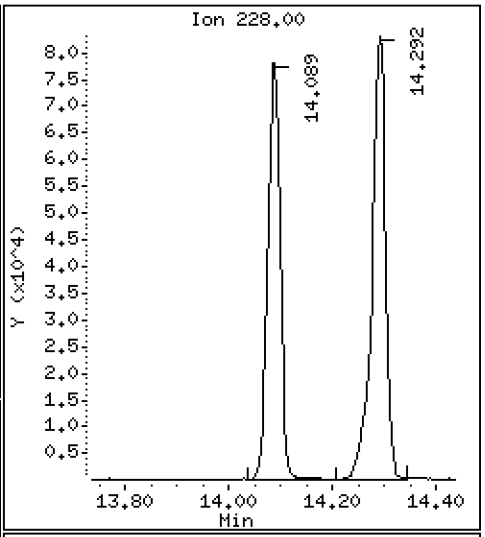
Column phase: Rxi-17sil

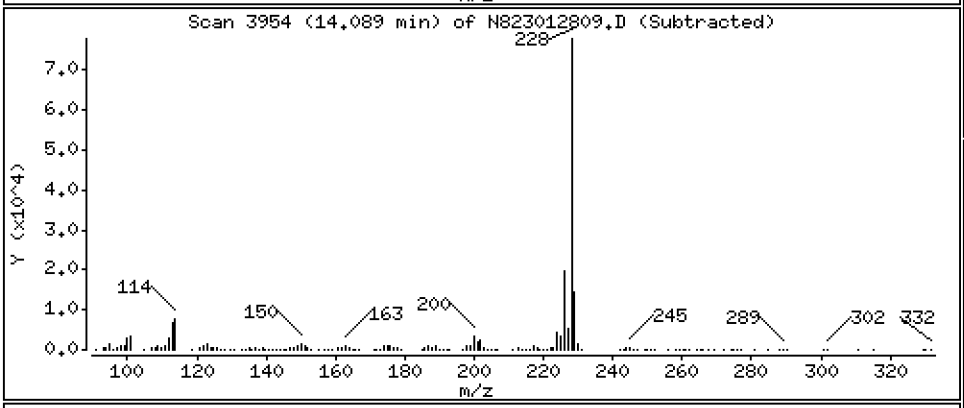
Column diameter: 0.25

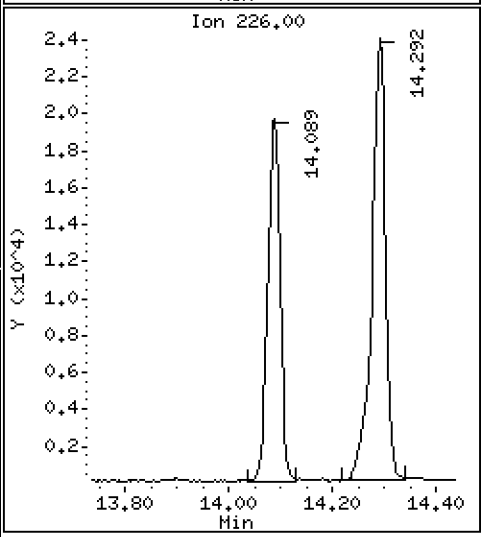
24 Benzo(a)anthracene

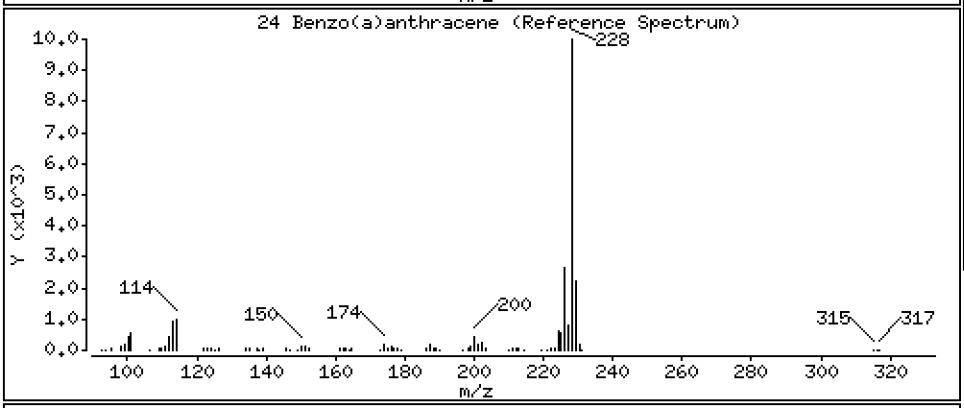
Concentration: 8.828 ug/mL

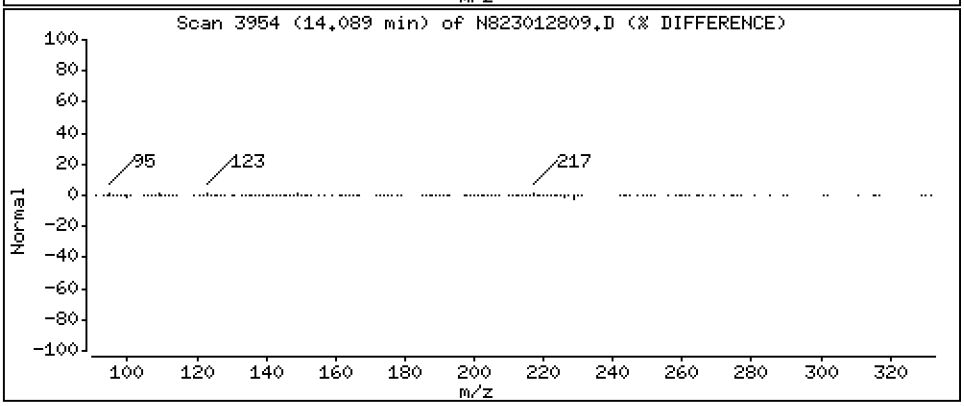












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

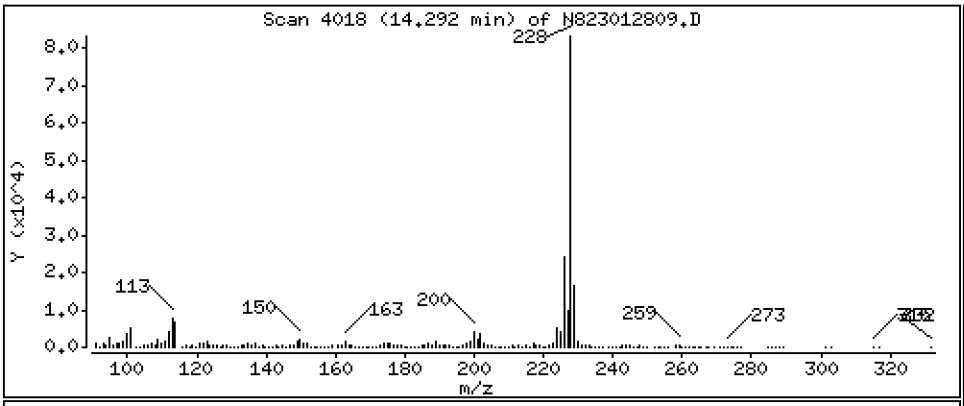
Operator: JZ

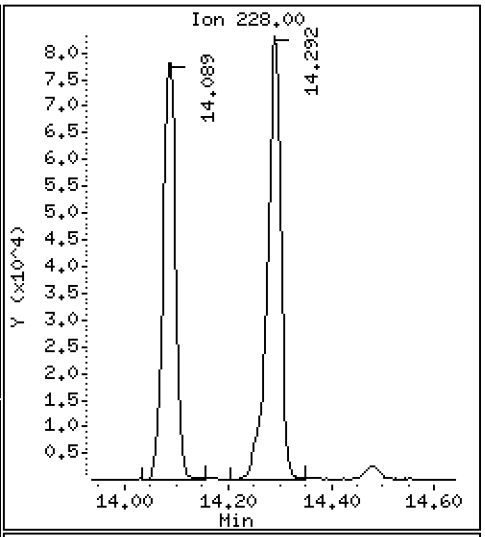
Column phase: Rxi-17sil

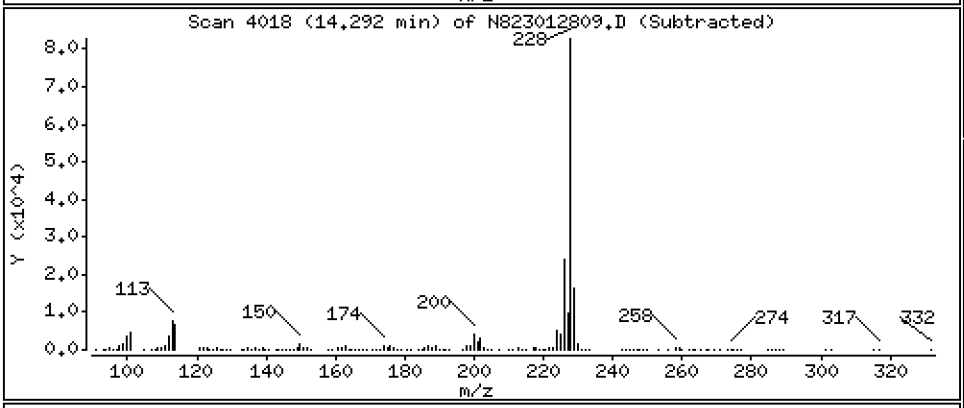
Column diameter: 0.25

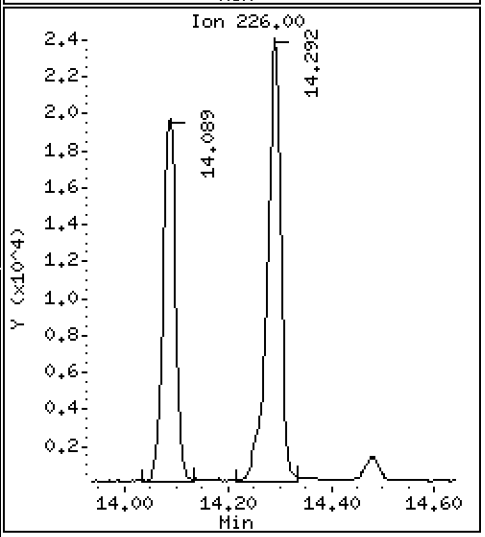
27 Chrysene

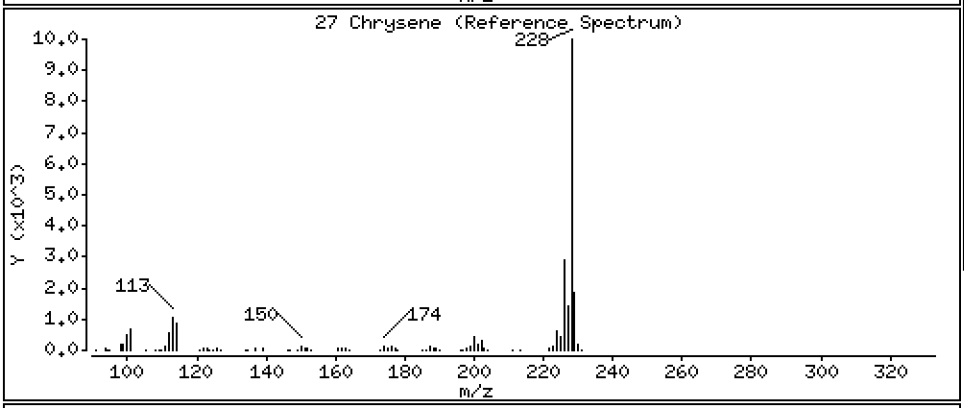
Concentration: 9.395 ug/mL

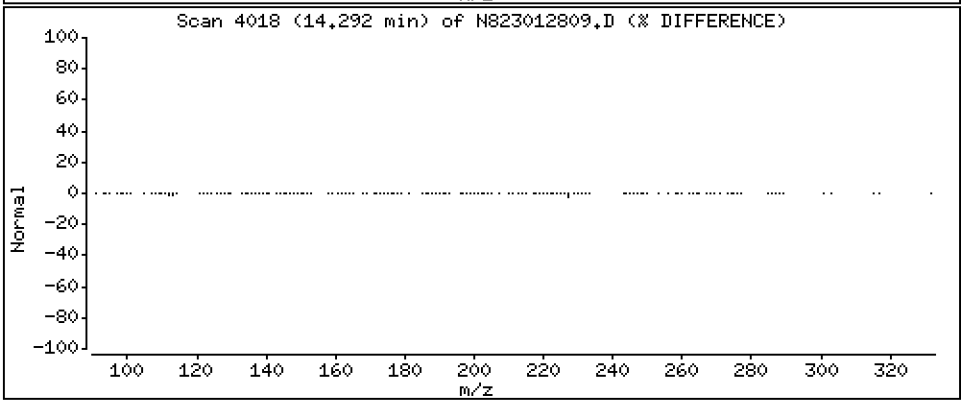












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

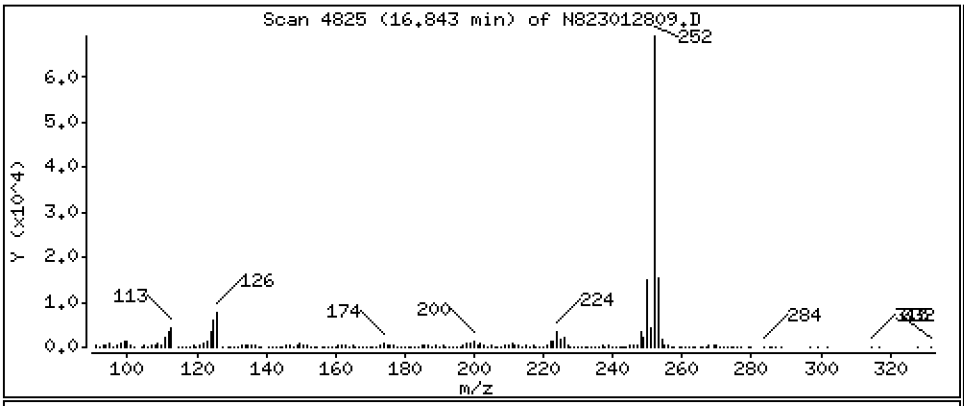
Operator: JZ

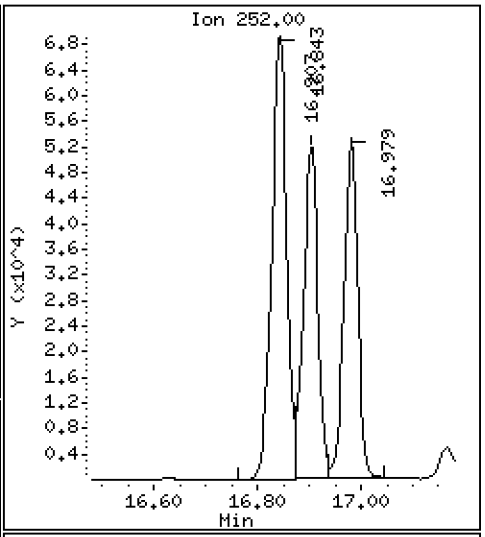
Column phase: Rxi-17sil

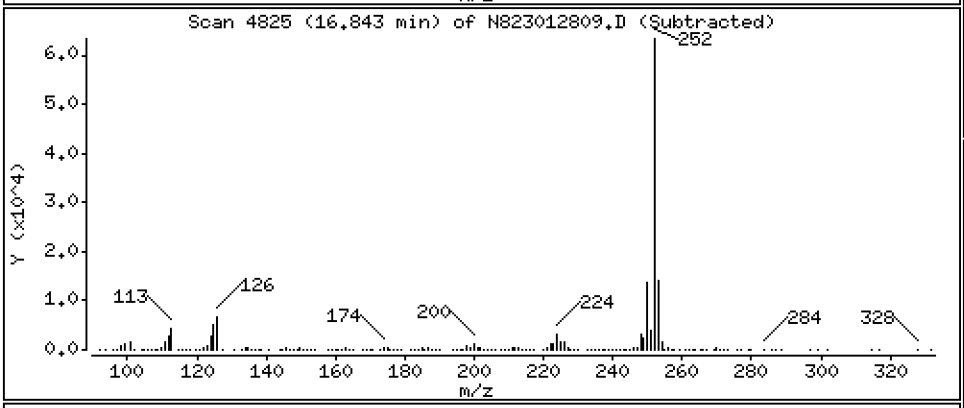
Column diameter: 0.25

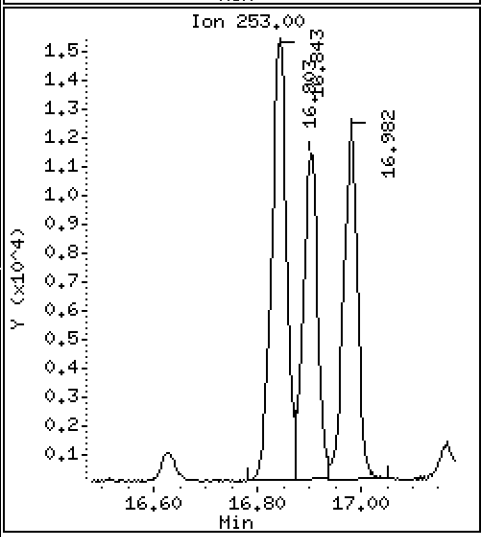
28 Benzo(b)fluoranthene

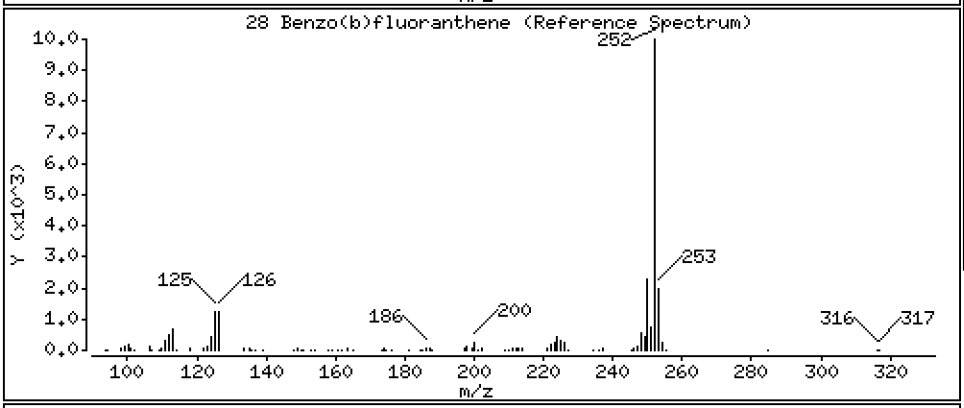
Concentration: 8.885 ug/mL

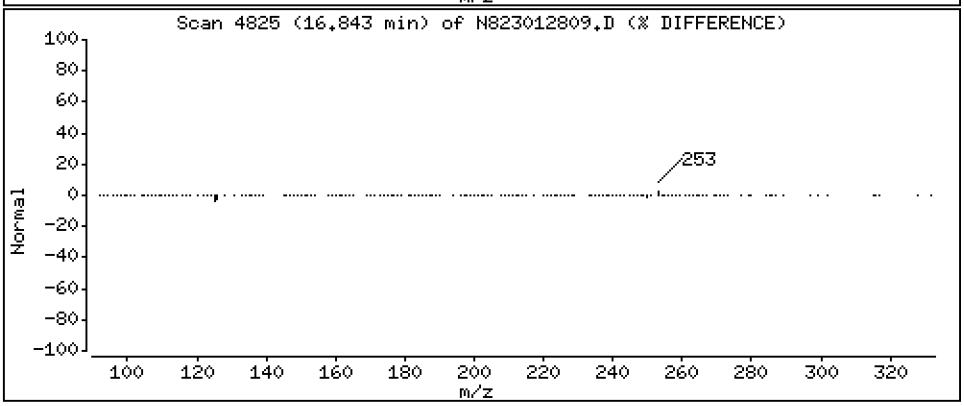












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012809.D

Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

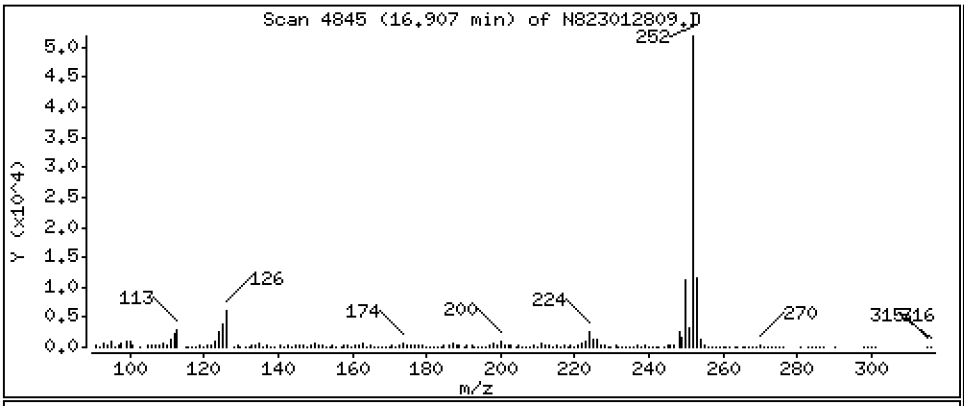
Operator: JZ

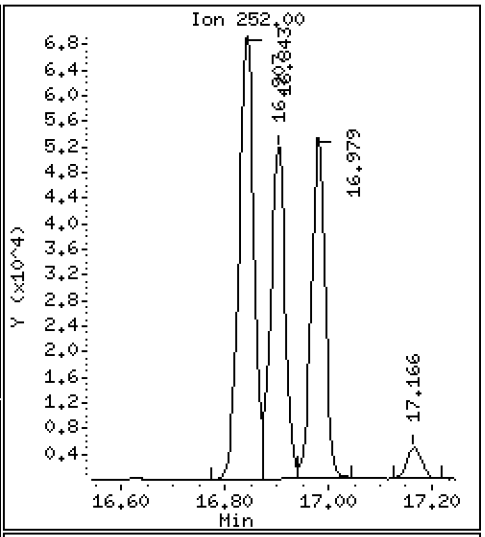
Column phase: Rxi-17sil

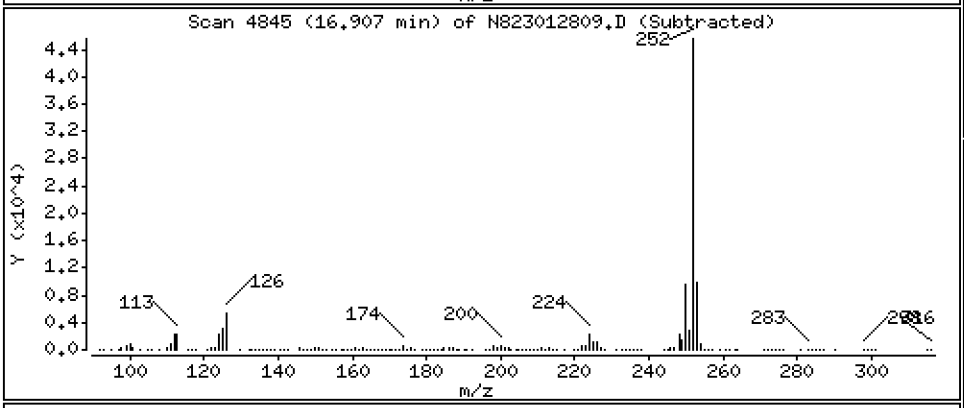
Column diameter: 0.25

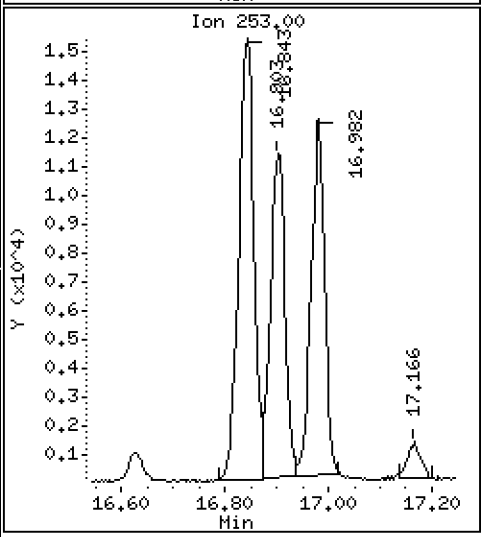
29 Benzo(k)fluoranthene

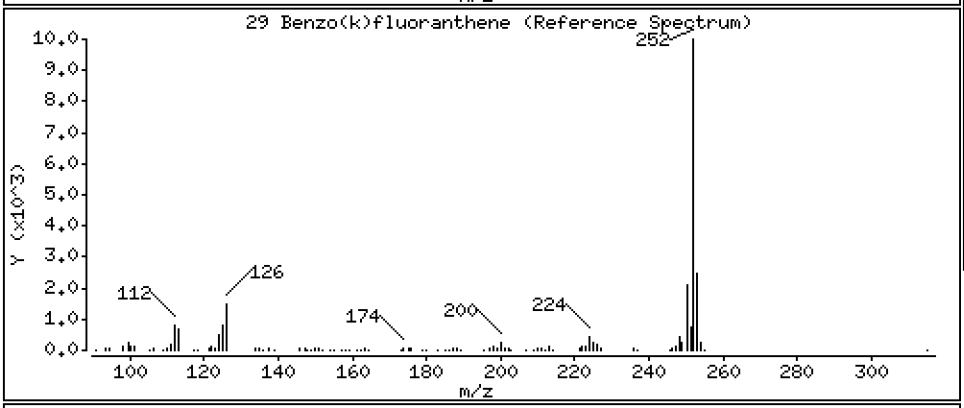
Concentration: 6.522 ug/mL

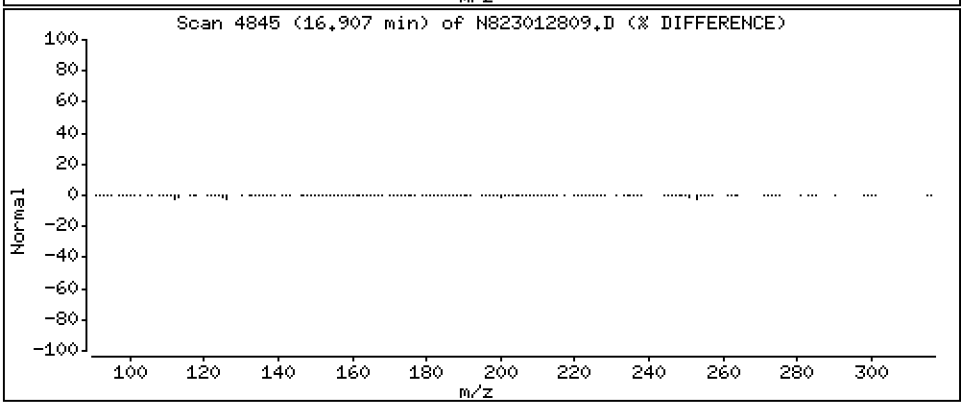












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012809.D

Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

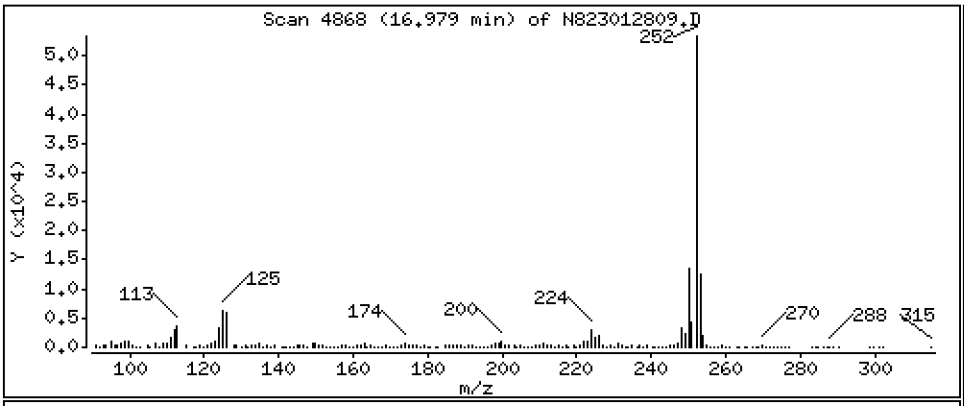
Operator: JZ

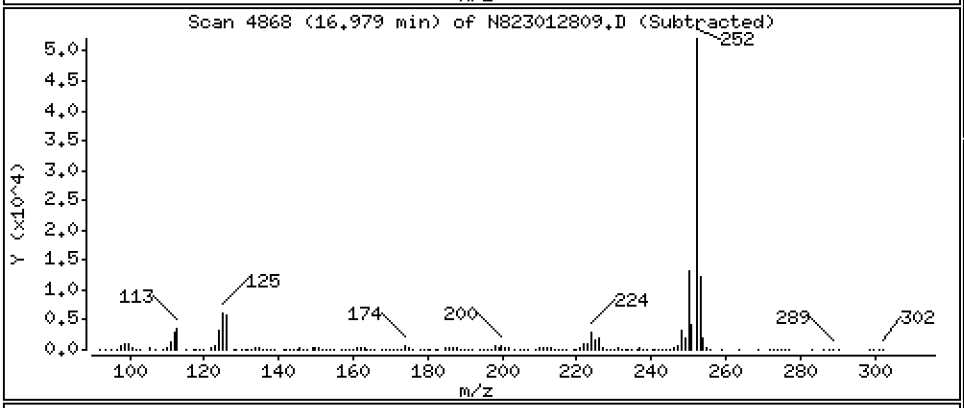
Column phase: Rxi-17sil

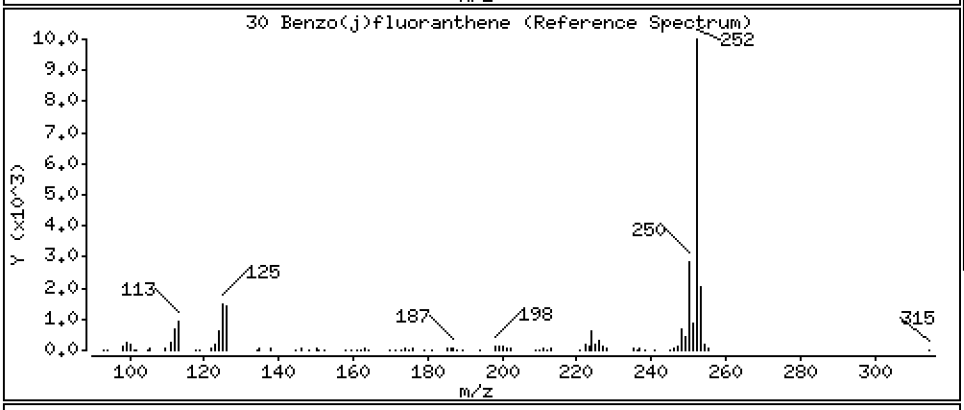
Column diameter: 0.25

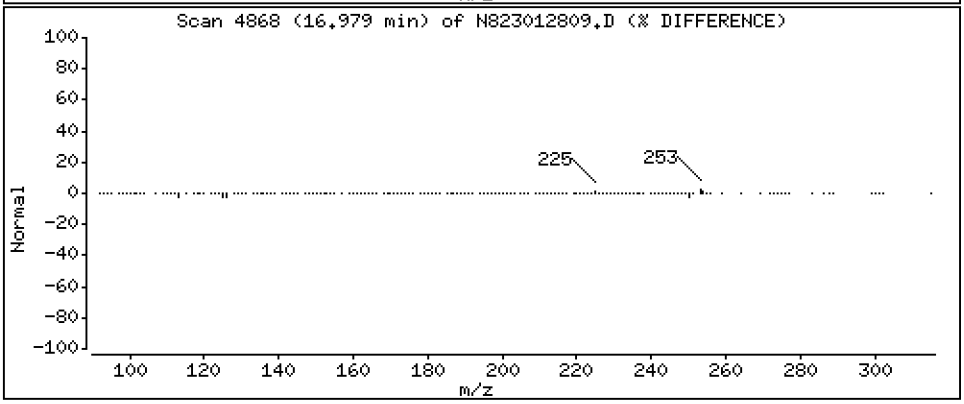
30 Benzo(j)fluoranthene

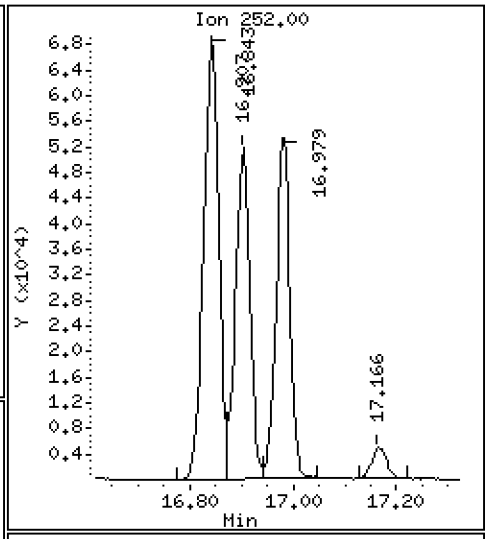
Concentration: 6.999 ug/mL

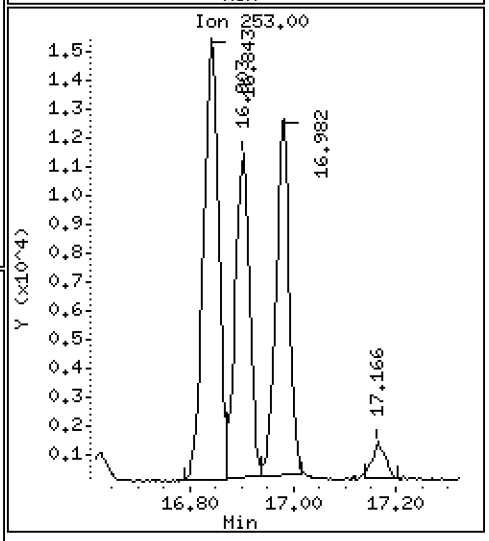












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012809.D

Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

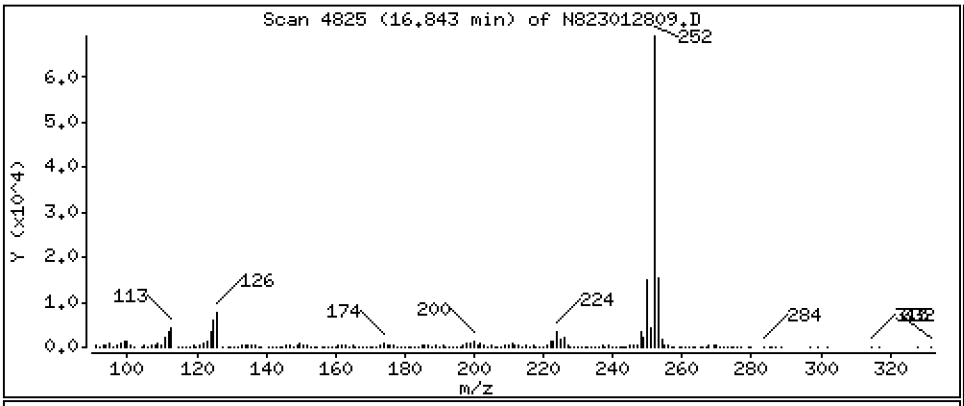
Operator: JZ

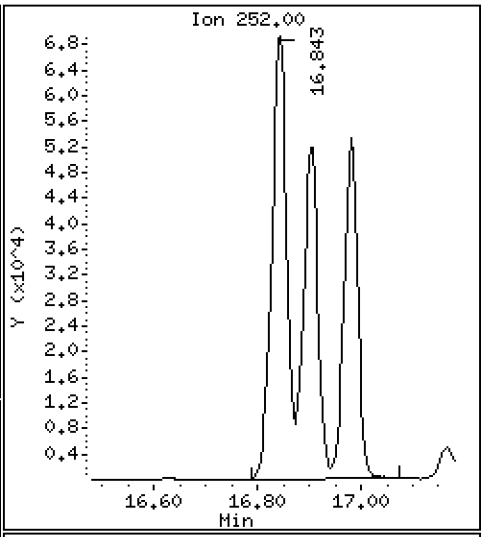
Column phase: Rxi-17sil

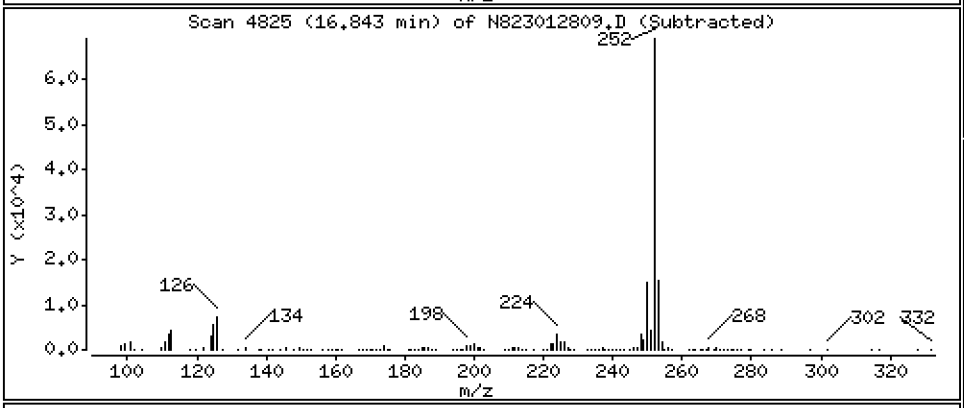
Column diameter: 0.25

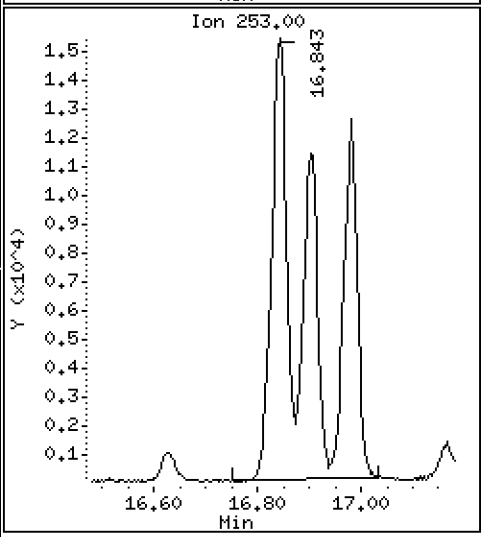
31 Total Benzofluoranthenes

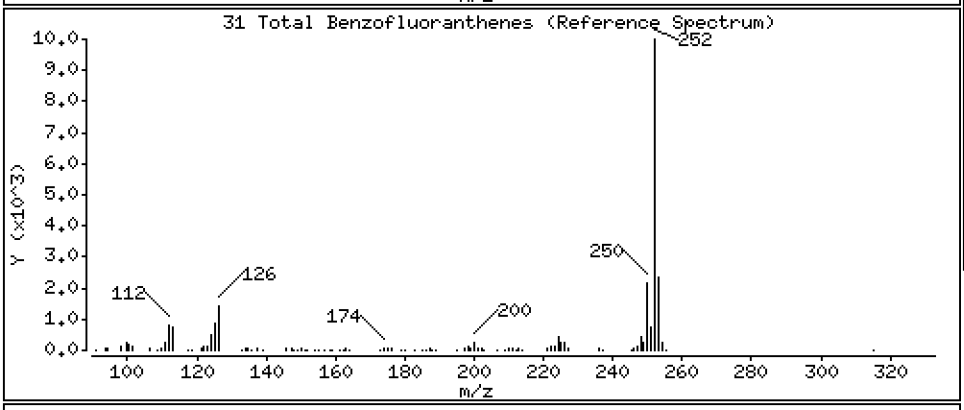
Concentration: 22.40 ug/mL

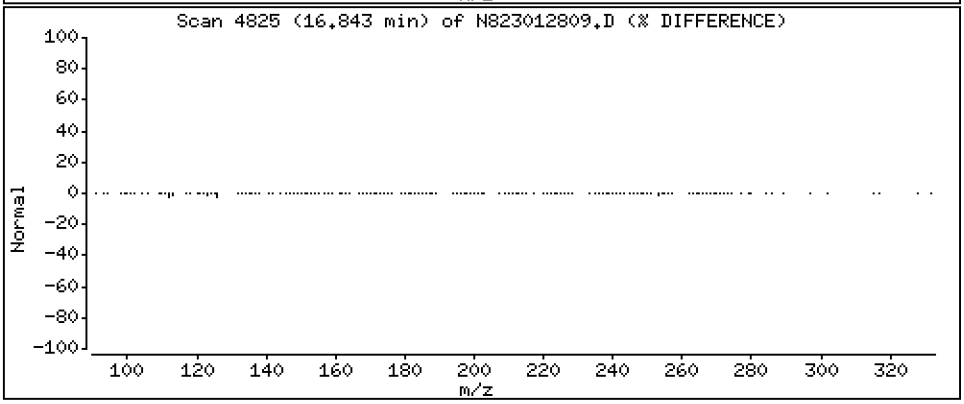












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012809.D

Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

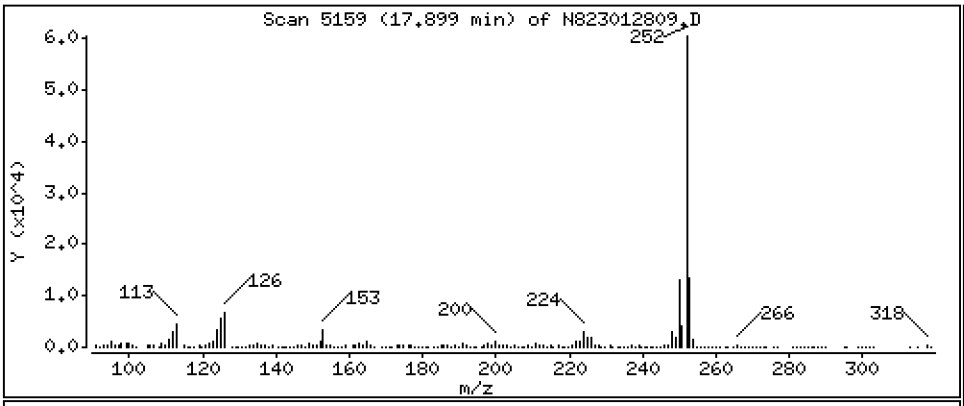
Operator: JZ

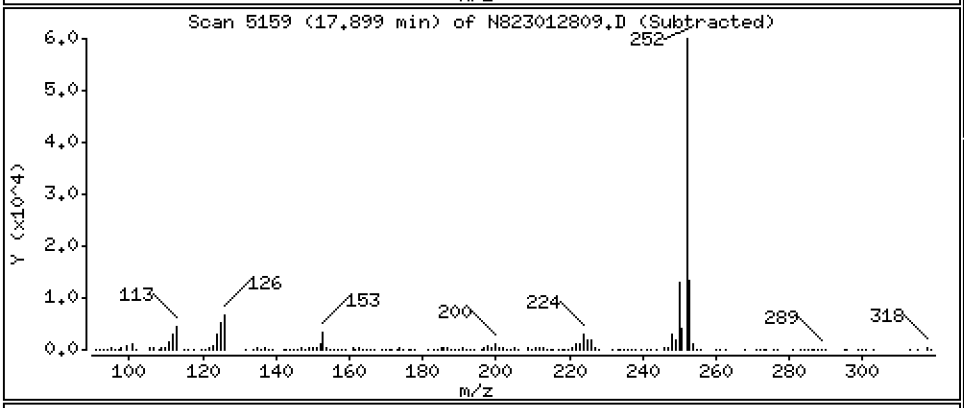
Column phase: Rxi-17sil

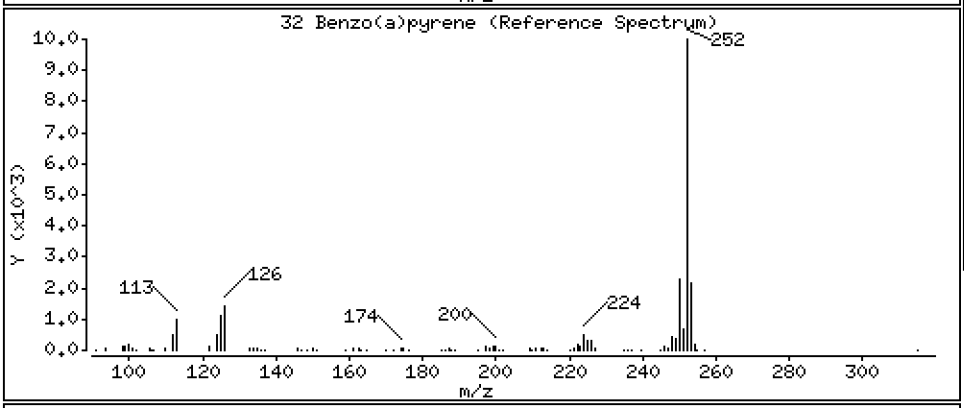
Column diameter: 0.25

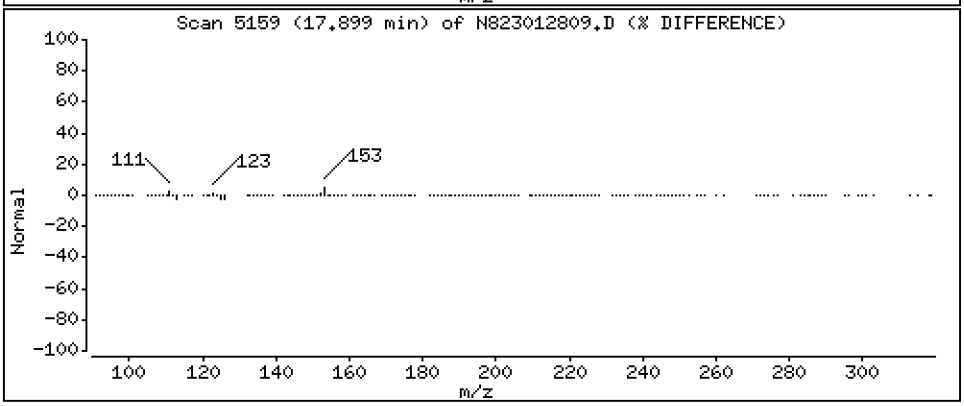
32 Benzo(a)pyrene

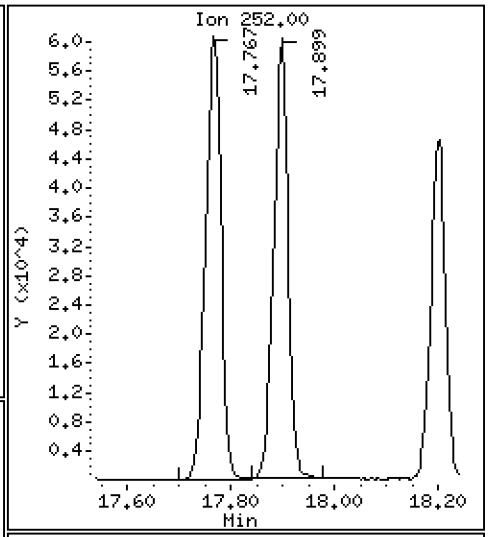
Concentration: 8.276 ug/mL

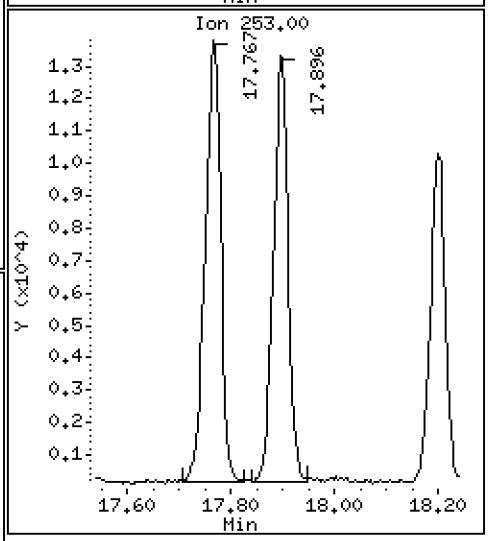












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

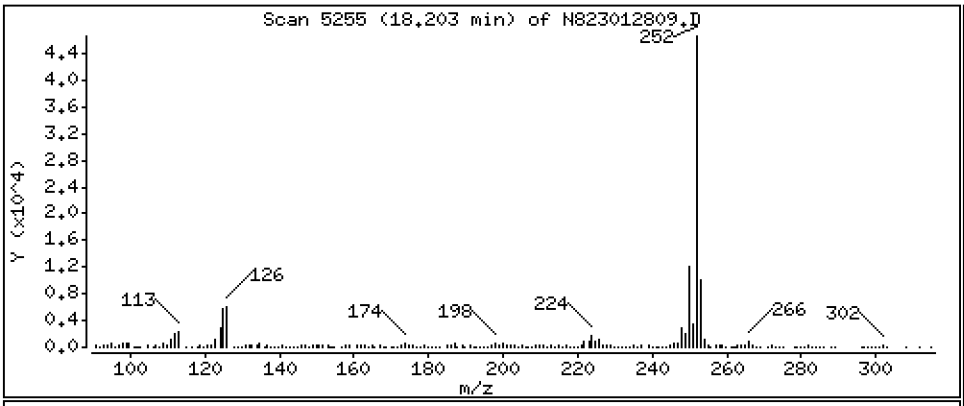
Operator: JZ

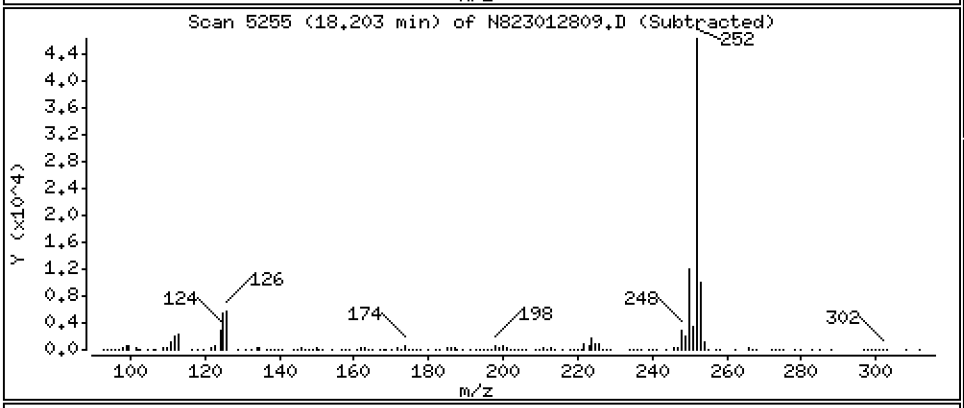
Column phase: Rxi-17sil

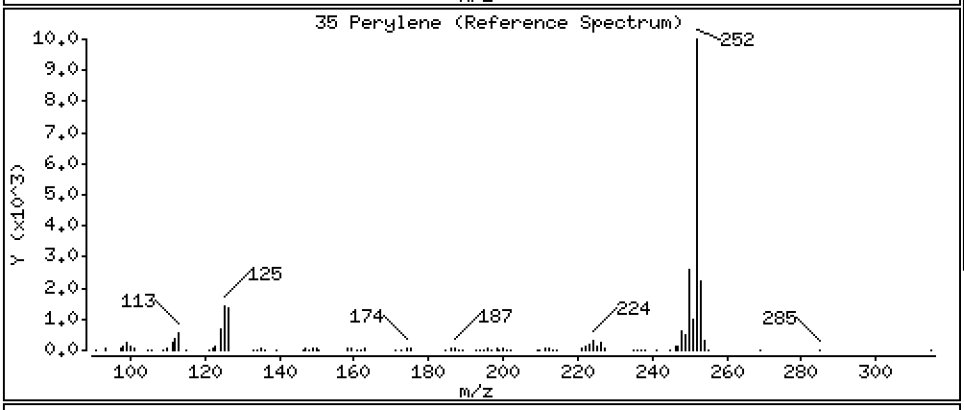
Column diameter: 0.25

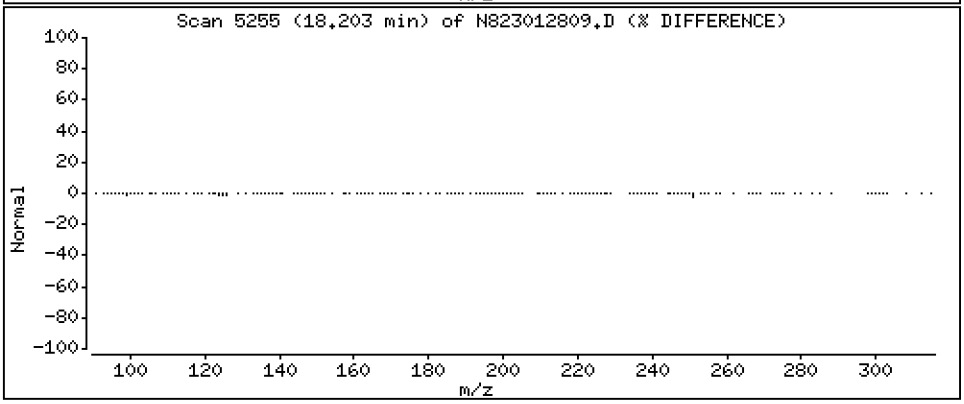
35 Perylene

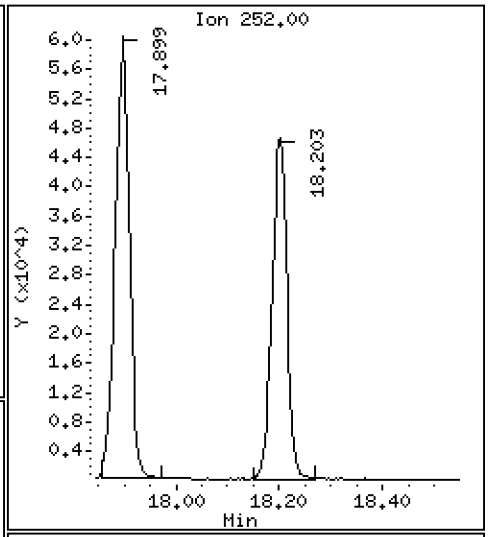
Concentration: 6.124 ug/mL

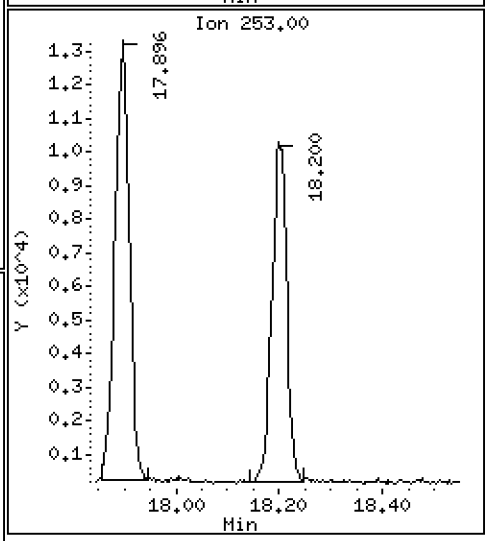












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

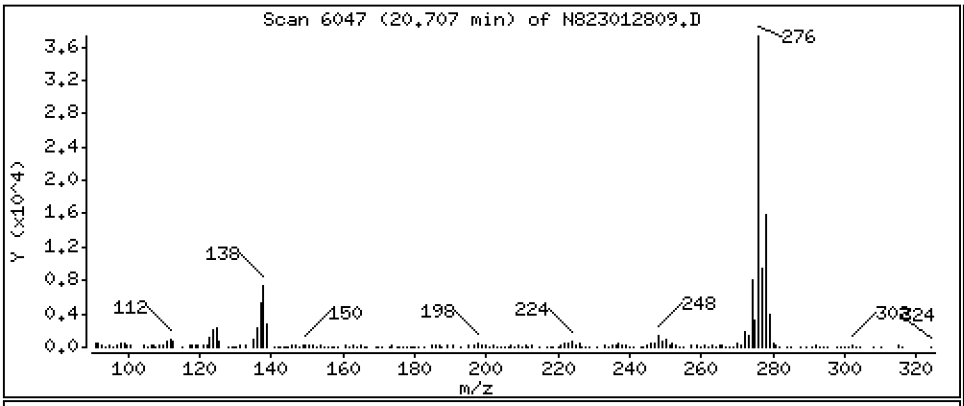
Operator: JZ

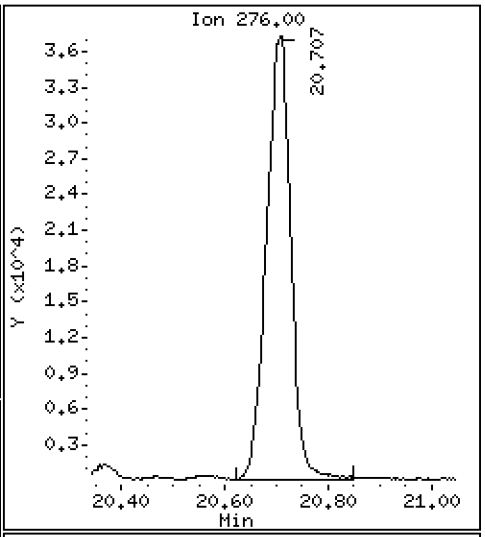
Column phase: Rxi-17sil

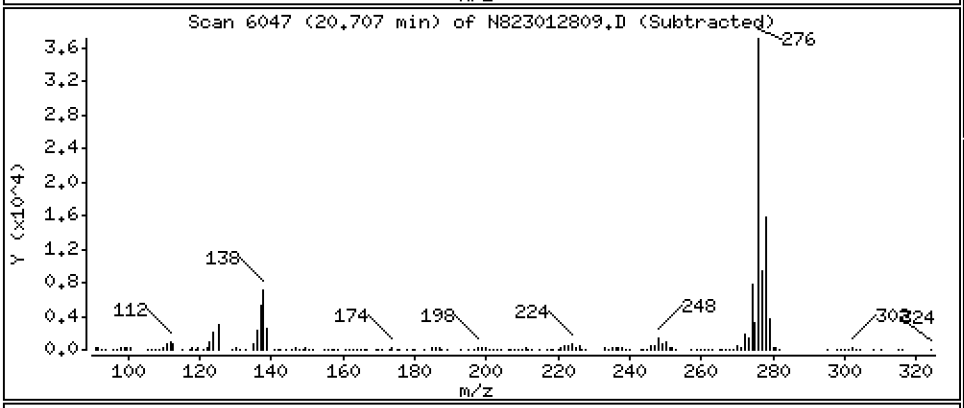
Column diameter: 0.25

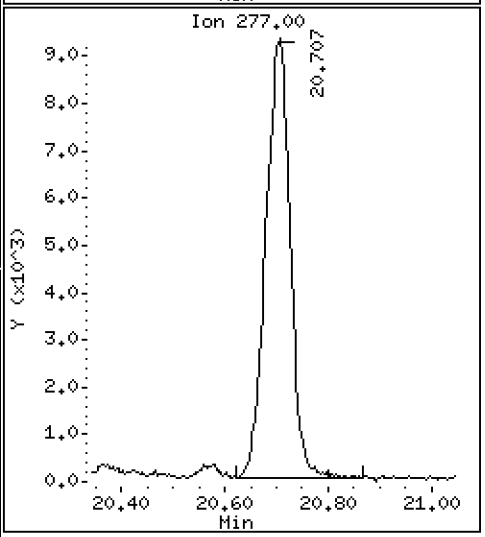
37 Indeno(1,2,3-cd)pyrene

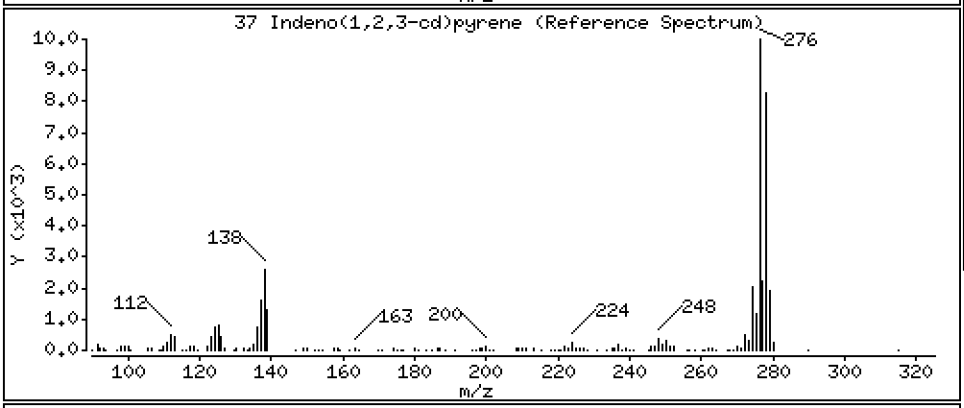
Concentration: 7.584 ug/mL

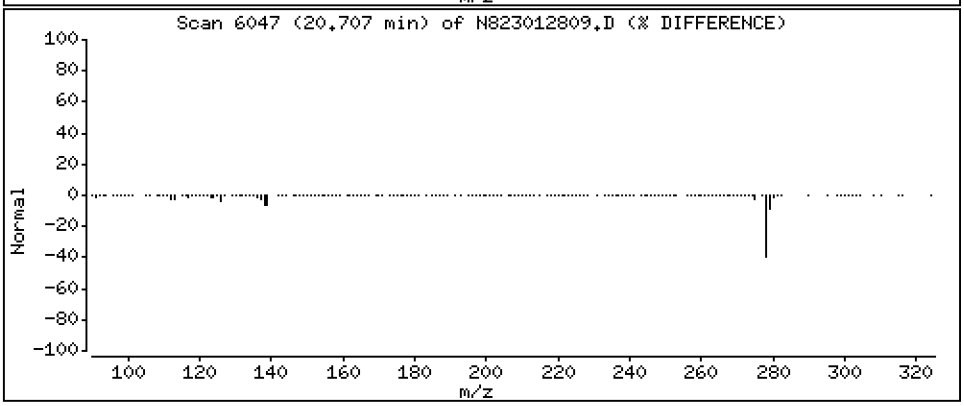












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Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

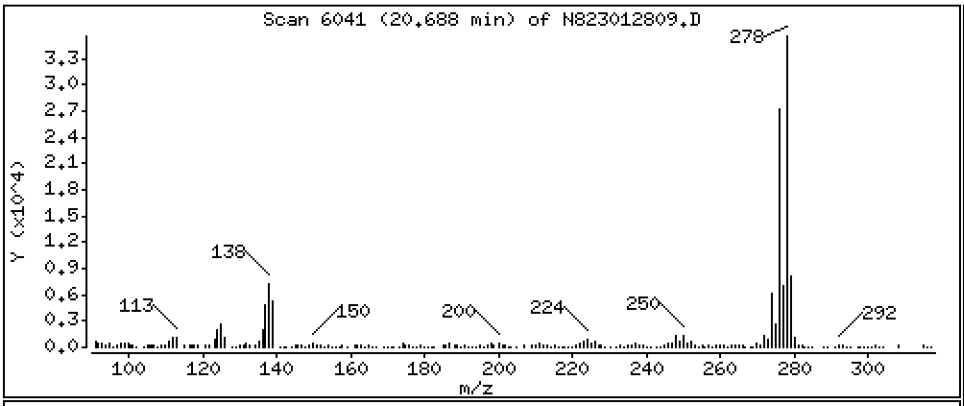
Operator: JZ

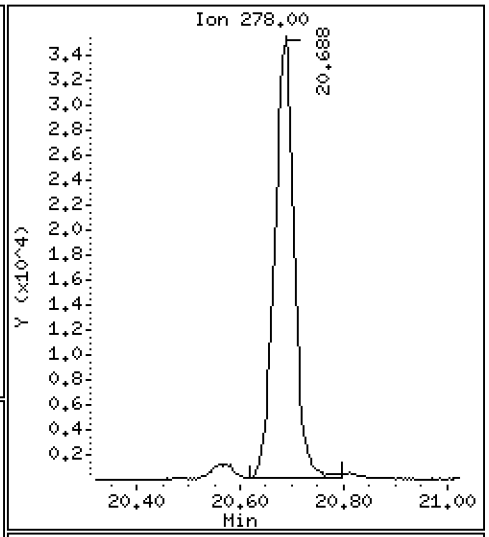
Column phase: Rxi-17sil

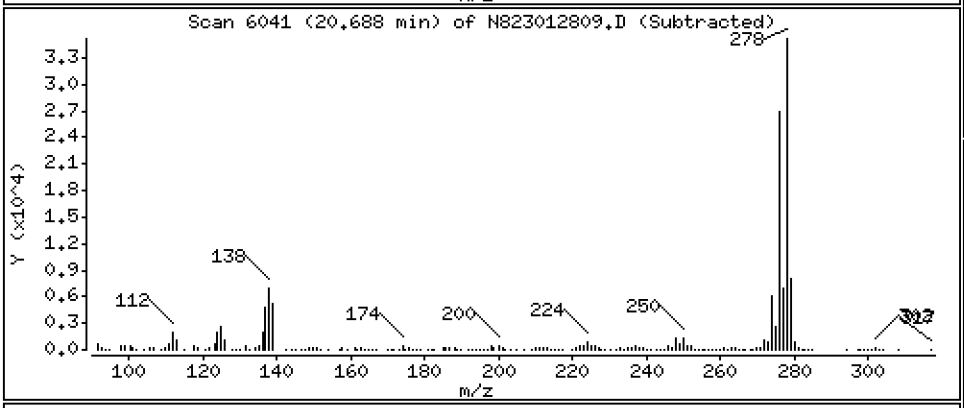
Column diameter: 0.25

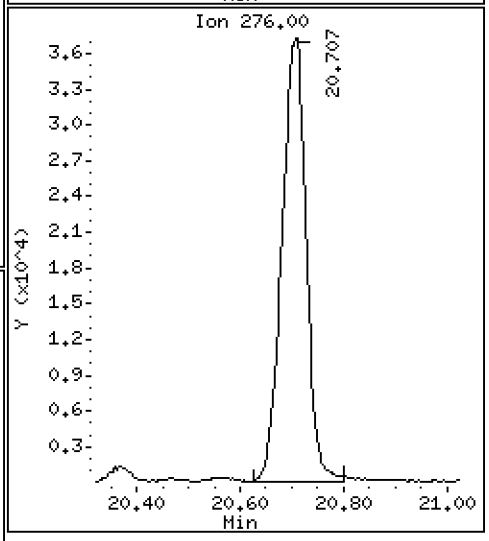
38 Dibenzo(a,h)anthracene

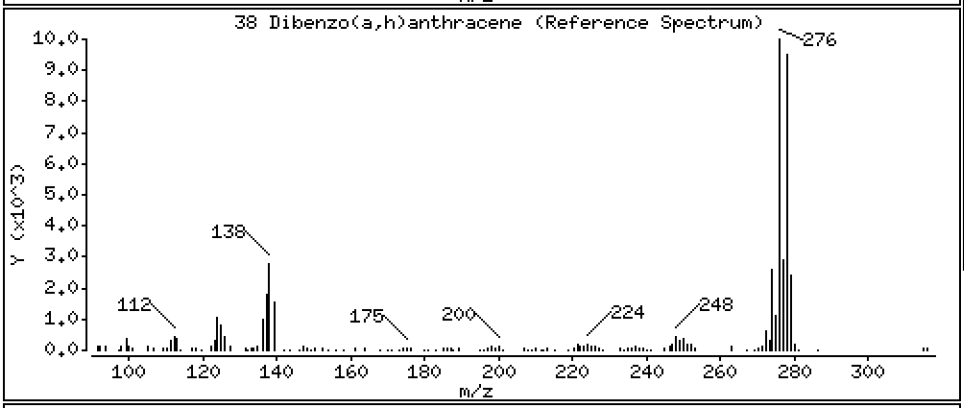
Concentration: 6.805 ug/mL

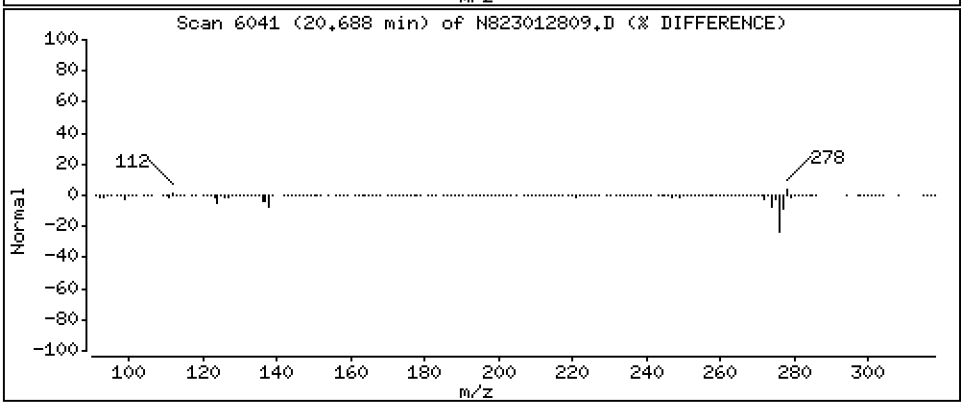












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012809.D

Date : 25-JAN-2023 18:08

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-MSD1,

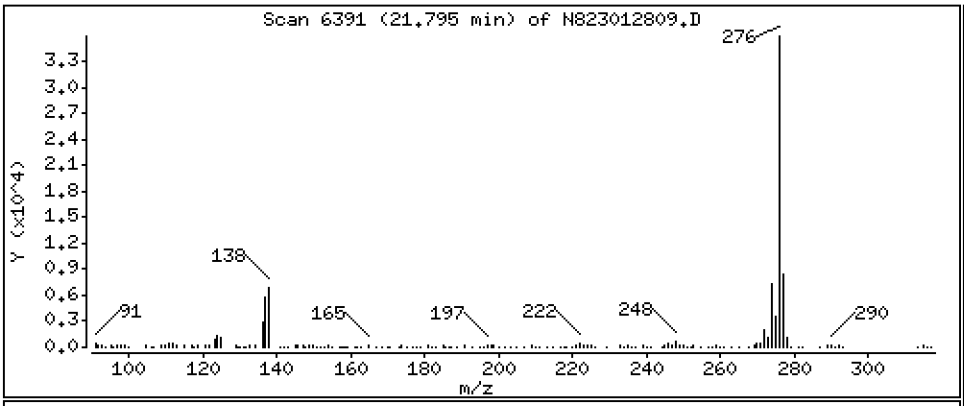
Operator: JZ

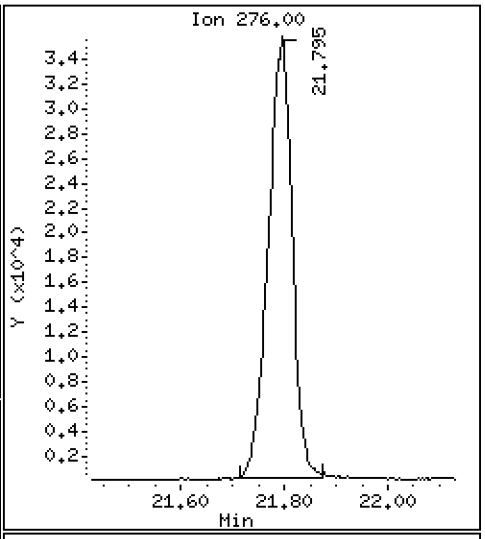
Column phase: Rxi-17sil

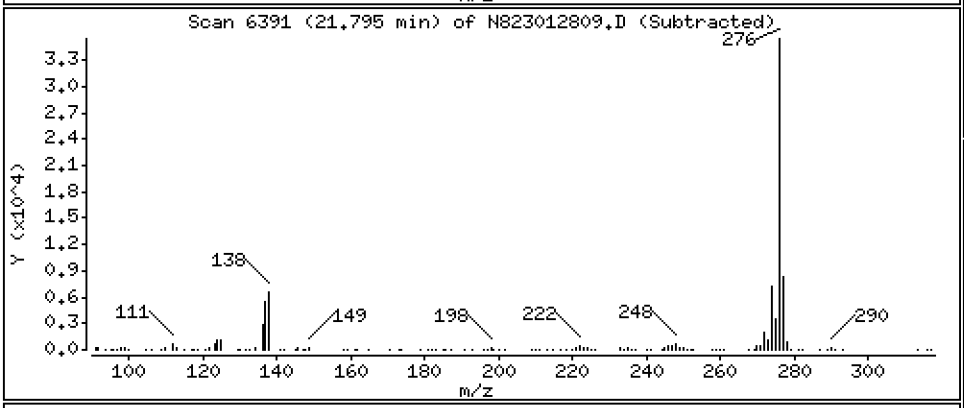
Column diameter: 0.25

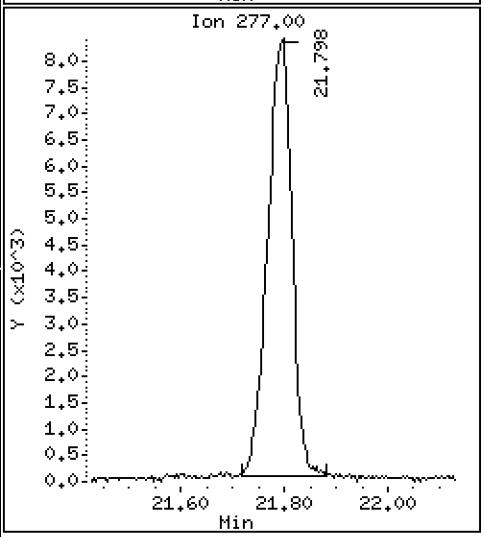
39 Benzo(g,h,i)perylene

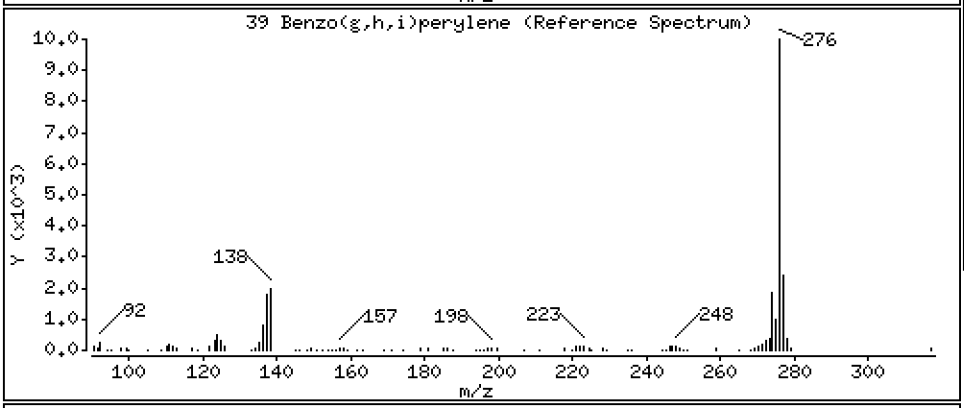
Concentration: 7.895 ug/mL

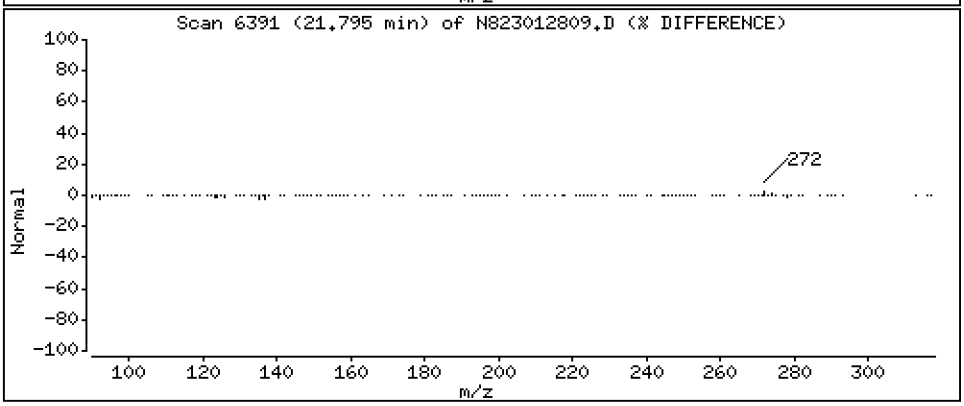












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230125.b\N823012809.D
Lab Smp Id: BLA0411-MSD1
Inj Date : 25-JAN-2023 18:08
Operator : JZ Inst ID: nt8.i
Smp Info : BLA0411-MSD1,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Meth Date : 26-Jan-2023 09:27 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PNAXMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

								CONCENTRATIONS	
		QUANT SIG						ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
*	1 Naphthalene-d8	136	4.897	4.907	(1.000)	54711		2.00000	
	2 Naphthalene	128	4.925	4.938	(1.006)	106637		4.19197	4.192
$	3 2-Methylnaphthalene-d10	152	5.634	5.640	(1.150)	42531		2.85040	2.850
	4 2-Methylnaphthalene	141	5.681	5.687	(1.160)	61826		4.41853	4.419
	5 1-methylnaphthalene	141	5.880	5.886	(1.201)	61324		4.31825	4.318
	9 Acenaphthylene	152	7.085	7.088	(0.985)	114726		5.25524	5.255
*	10 Acenaphthene-d10	164	7.192	7.199	(1.000)	28910		2.00000	
	11 Acenaphthene	153	7.243	7.246	(1.007)	67260		4.59827	4.598
	12 Dibenzofuran	168	7.395	7.398	(1.028)	101398		4.56401	4.564
	14 Fluorene	166	7.872	7.875	(1.095)	82712		4.79343	4.793
*	15 Phenanthrene-d10	188	9.235	9.238	(1.000)	44792		2.00000	
	16 Phenanthrene	178	9.273	9.273	(1.004)	118504		5.41611	5.416
	17 Anthracene	178	9.314	9.314	(1.009)	137399		6.91268	6.913
	22 Fluoranthene	202	11.060	11.056	(1.198)	155846		6.54362	6.544
$	21 Fluoranthene-d10	212	11.022	11.018	(1.193)	66355		3.35770	3.358
	23 Pyrene	202	11.584	11.578	(0.815)	151766		9.15787	9.158
	24 Benzo(a)anthracene	228	14.089	14.085	(0.991)	132607		8.82826	8.828
*	25 Chrysene-d12	240	14.215	14.212	(1.000)	26730		2.00000	
	27 Chrysene	228	14.291	14.288	(1.005)	150234		9.39529	9.395
	28 Benzo(b)fluoranthene	252	16.843	16.830	(0.929)	142465		8.88474	8.885
	29 Benzo(k)fluoranthene	252	16.906	16.893	(0.933)	102439		6.52223	6.522
	30 Benzo(j)fluoranthene	252	16.979	16.969	(0.937)	98955		6.99862	6.999
	31 Total Benzofluoranthenes	252	16.843	16.830	(0.929)	340093		22.3955	22.40(M)
	32 Benzo(a)pyrene	252	17.899	17.889	(0.988)	116783		8.27630	8.276
*	33 Perylene-d12	264	18.123	18.120	(1.000)	27532		2.00000	
	35 Perylene	252	18.202	18.196	(1.004)	92732		6.12415	6.124
$	36 Dibenzo(a,h)anthracene-d14	292	20.571	20.565	(1.135)	48279		4.47540	4.475
	37 Indeno(1,2,3-cd)pyrene	276	20.707	20.694	(1.143)	121915		7.58401	7.584
	38 Dibenzo(a,h)anthracene	278	20.688	20.672	(1.141)	94135		6.80459	6.805
	39 Benzo(g,h,i)perylene	276	21.794	21.779	(1.203)	114984		7.89477	7.895

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823012809.D
Lab Smp Id: BLA0411-MSD1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 25-JAN-2023
Calibration Time: 14:49
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	46976	23488	93952	54711	16.47
10 Acenaphthene-d10	27652	13826	55304	28910	4.55
15 Phenanthrene-d10	51738	25869	103476	44792	-13.43
25 Chrysene-d12	45383	22692	90766	26730	-41.10
33 Perylene-d12	41344	20672	82688	27532	-33.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.90	-0.19
10 Acenaphthene-d10	7.20	6.70	7.70	7.19	-0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	-0.03
25 Chrysene-d12	14.21	13.71	14.71	14.22	0.02
33 Perylene-d12	18.12	17.62	18.62	18.12	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823012809.D

Lab ID: BLA0411-MSD1
nt8.i, 20230125.b\FSIMPNA230119.m,   25-JAN-2023 18:08

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

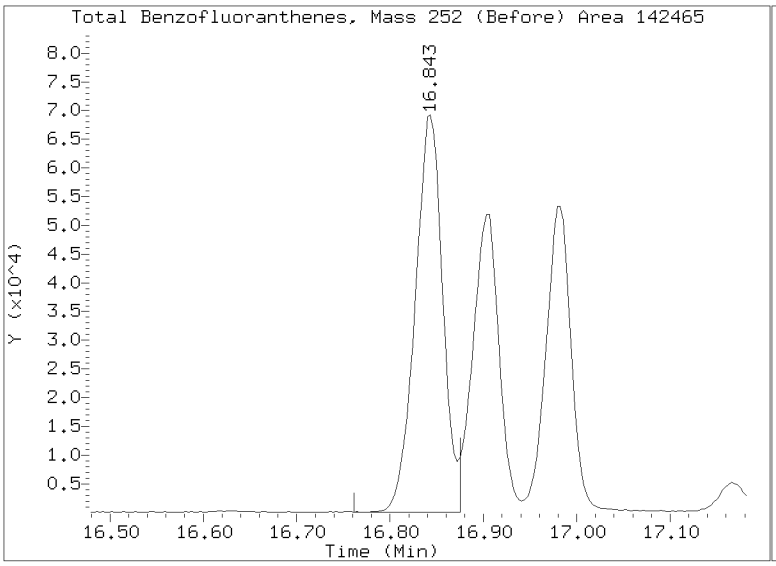
No RRT check performed

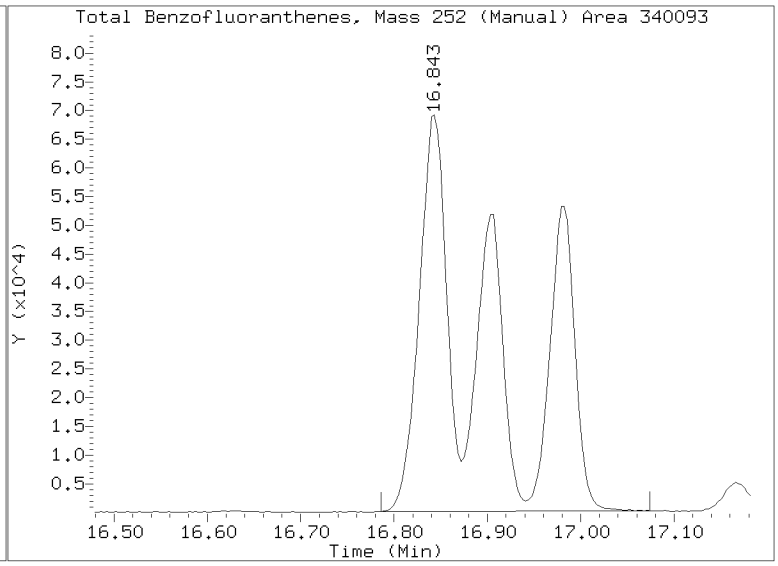
On Column LOD for nt8.i, 20230125.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230125.b/N823012809.D
Injection Date: 25-JAN-2023 18:08
Lab ID:BLA0411-MSD1 Client ID:
Report Date: 01/26/2023 09:45





Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0410-SRM2
Batch: BLA0410
Initial/Final: 1 g / 1 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 02/26/2023 17:12
Standard ID: K003477
Expires: 01/31/2024
Standard Lot#: CRM 143 (LRAC8918)
Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
2,4-Dimethylphenol	6357.0	3570	21.7	200		56.2	0 - 220
1,2,4-Trichlorobenzene	1477.0	776	26.8	50.0		52.5	10 - 193
N-Nitrosodiphenylamine	2854.0	2260	13.1	50.0		79.2	40 - 160
Pentachlorophenol	3411.0	3370	21.3	200	Q	98.9	10 - 206

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623095.D

Date : 26-FEB-2023 17:12

Client ID:

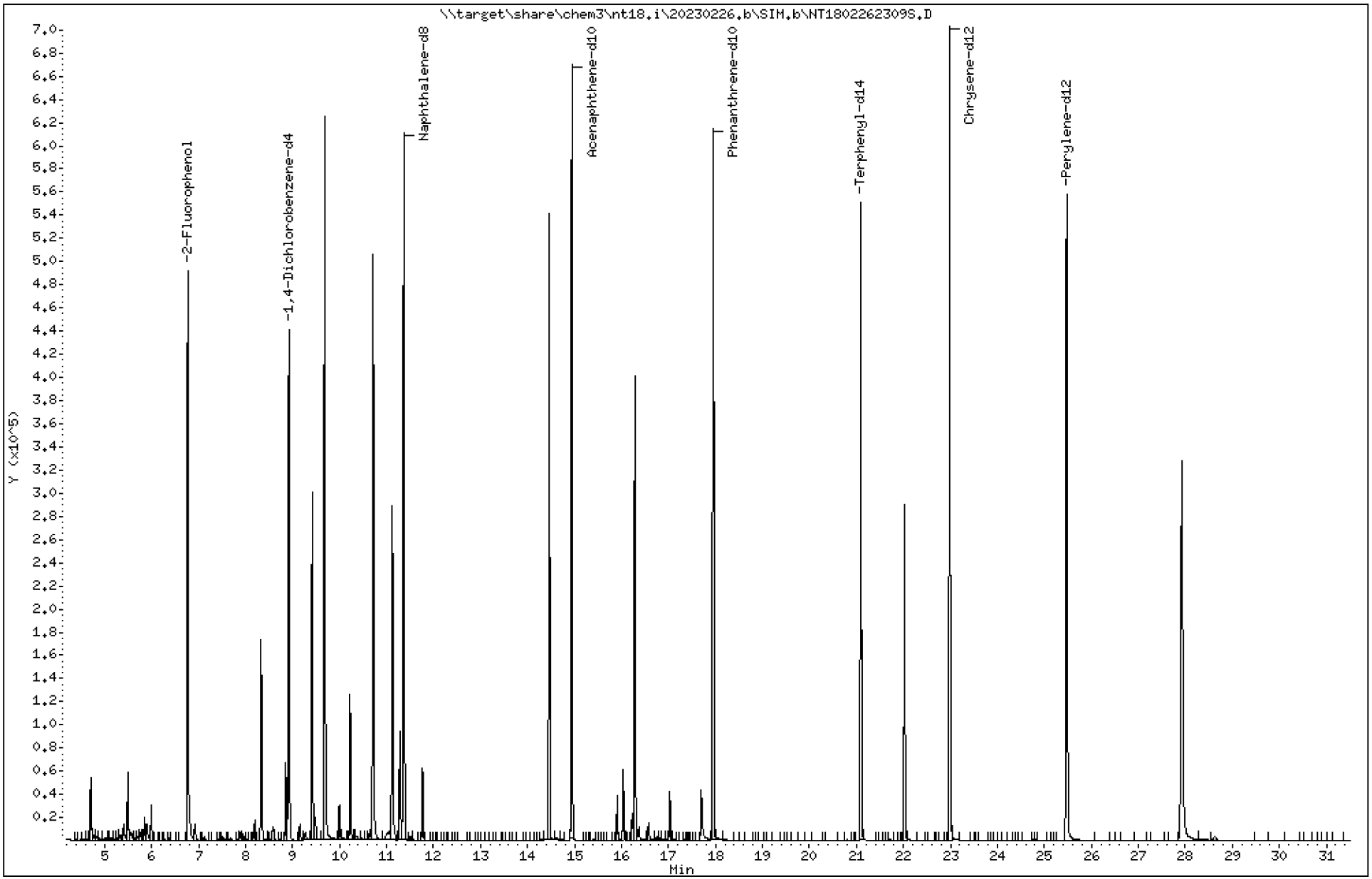
Instrument: nt18.i

Sample Info: BLA0410-SRM2

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262309S.D

Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

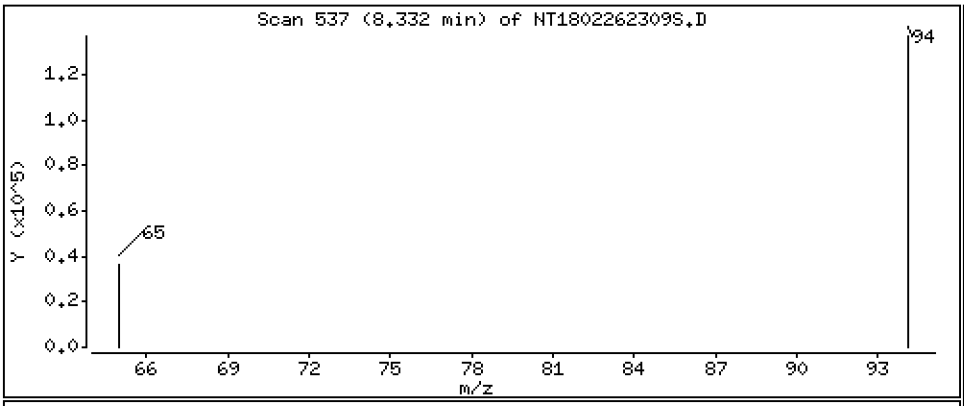
Operator: YZ

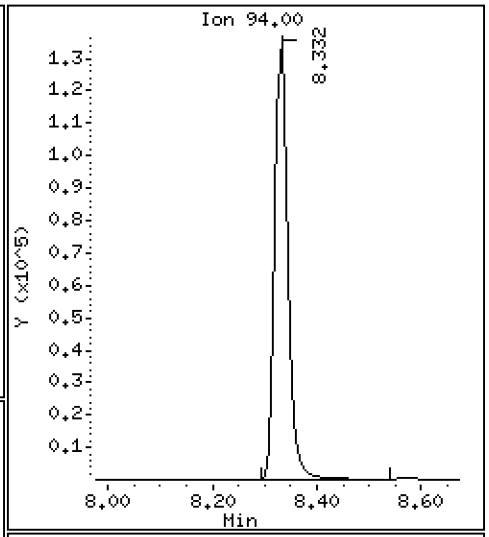
Column phase: ZB-5msi

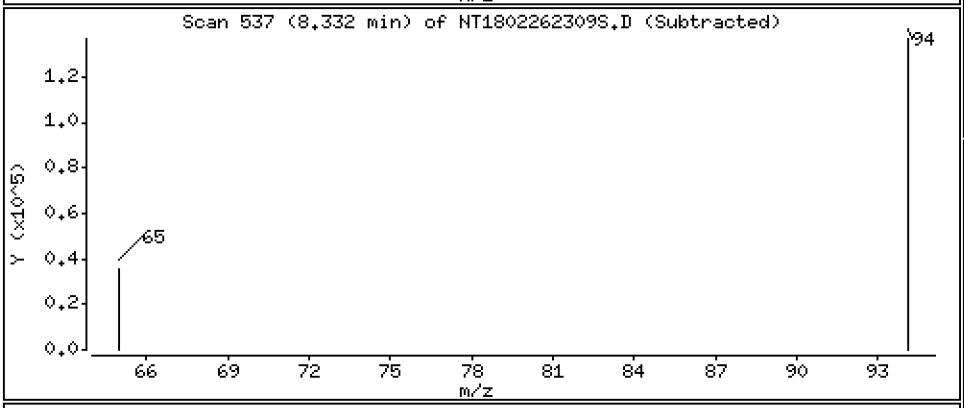
Column diameter: 0.25

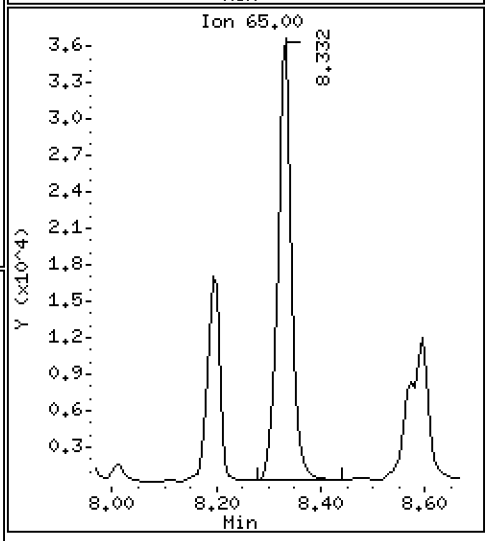
3 Phenol

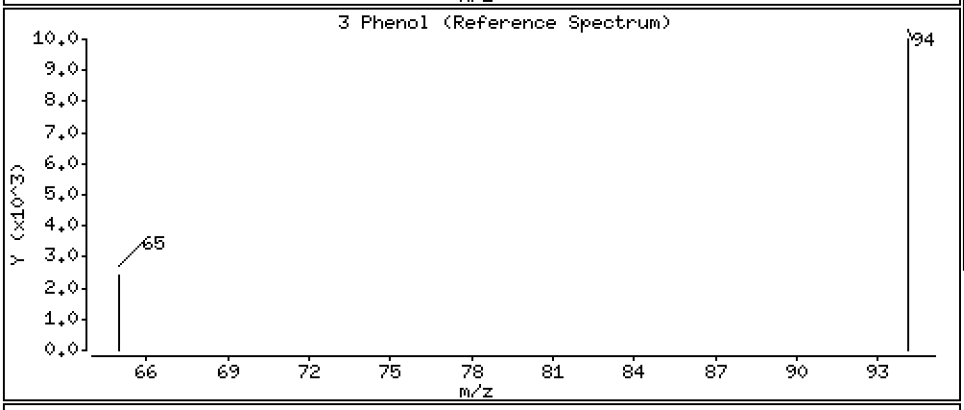
Concentration: 1.989 ug/mL

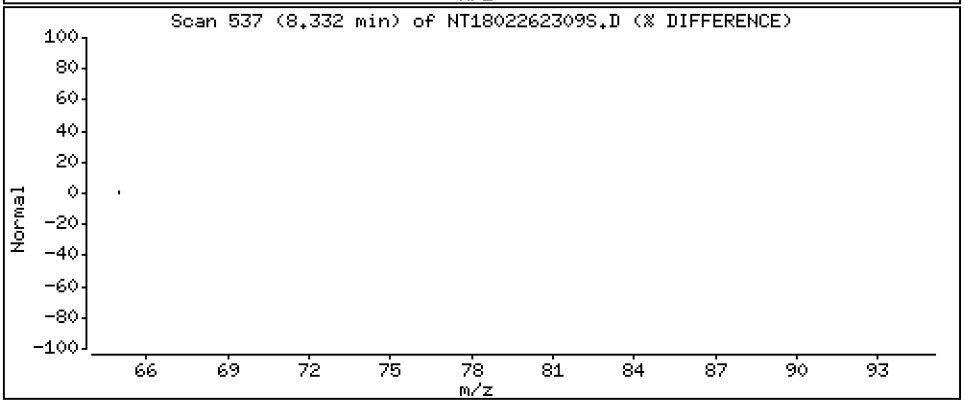












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

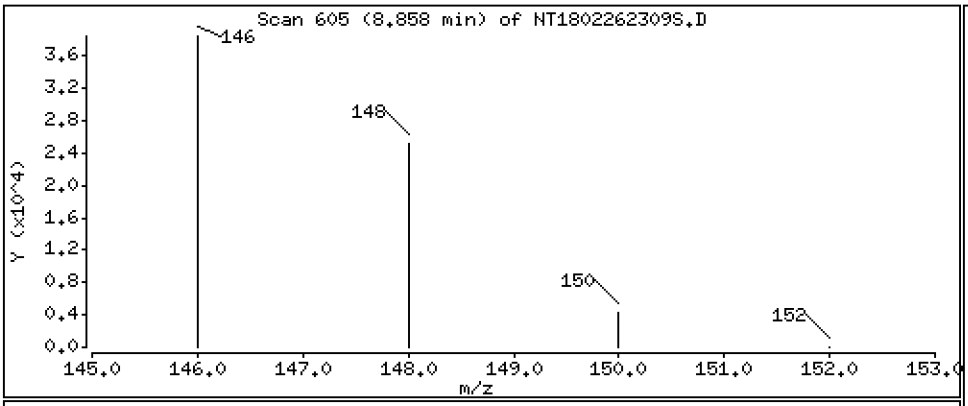
Operator: YZ

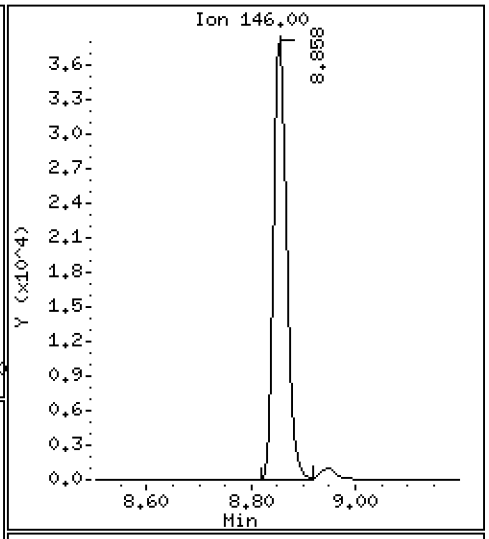
Column phase: ZB-5msi

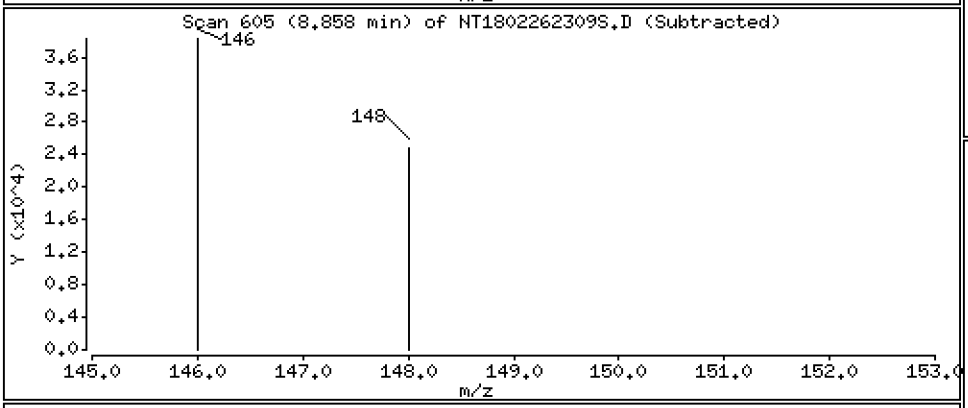
Column diameter: 0.25

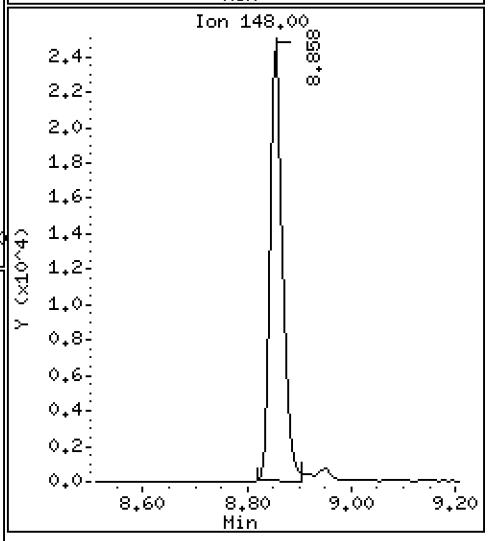
7 1,3-Dichlorobenzene

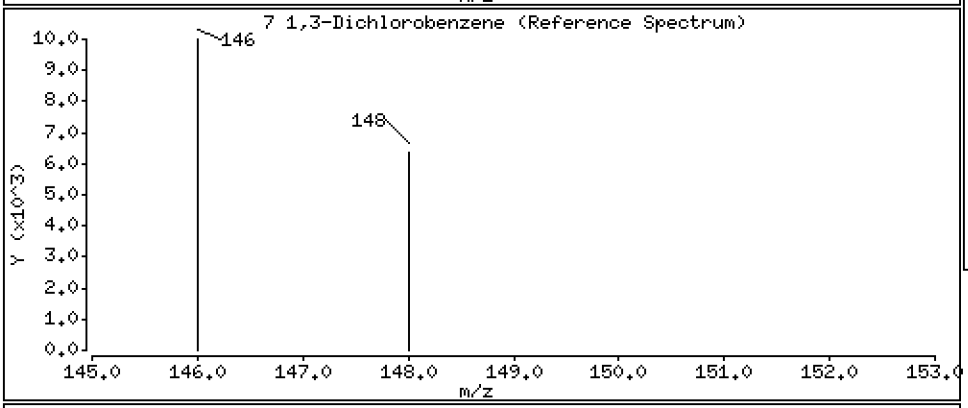
Concentration: 0.5582 ug/mL

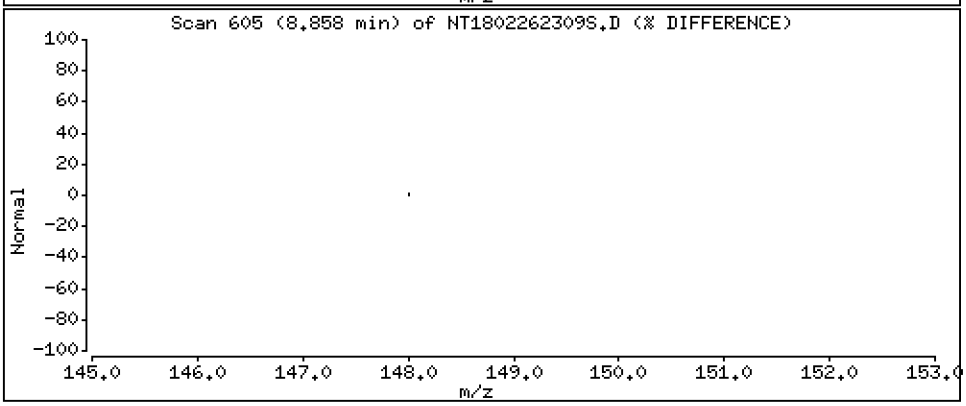












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

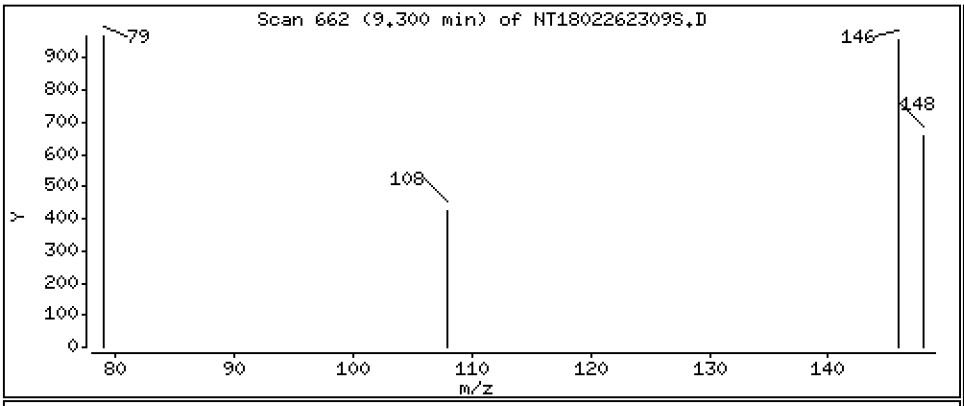
Operator: YZ

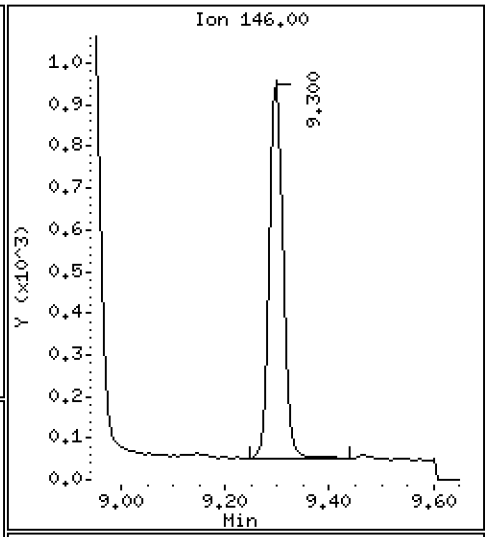
Column phase: ZB-5msi

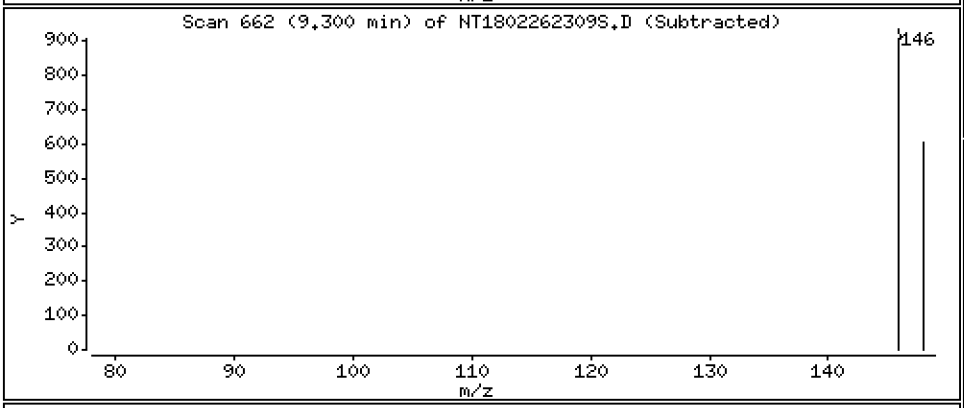
Column diameter: 0.25

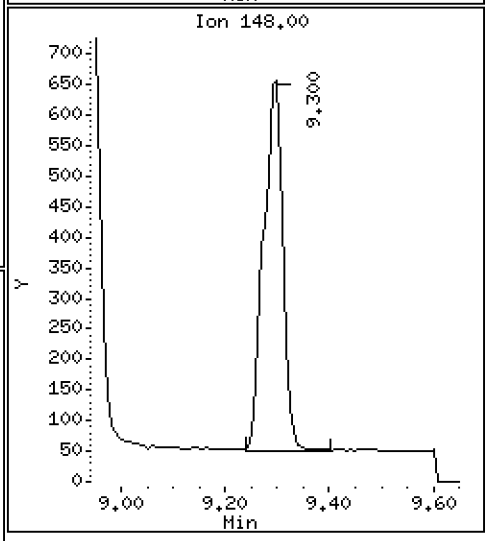
12 1,2-Dichlorobenzene

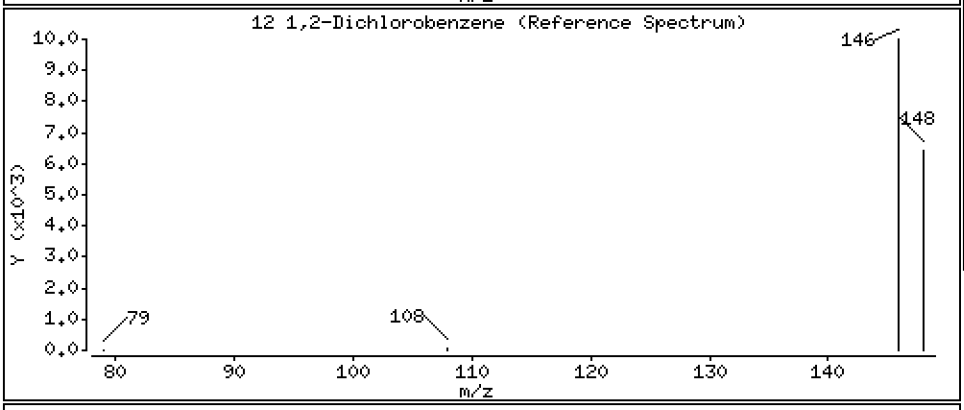
Concentration: 0.01418 ug/mL

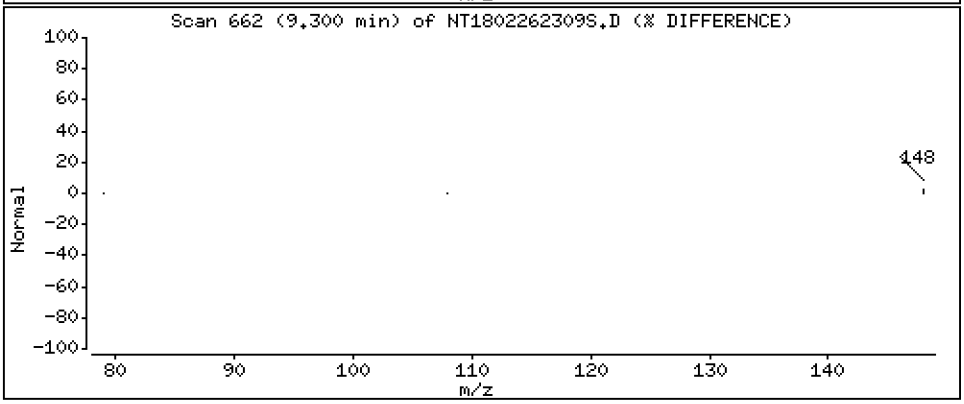












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

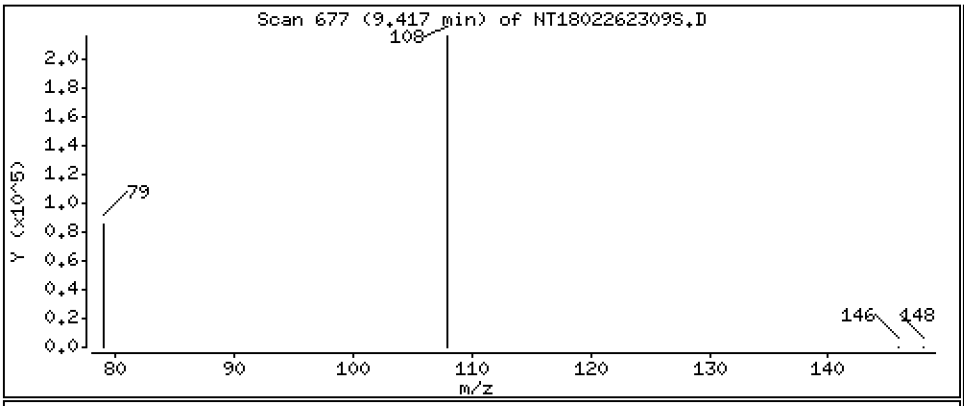
Operator: YZ

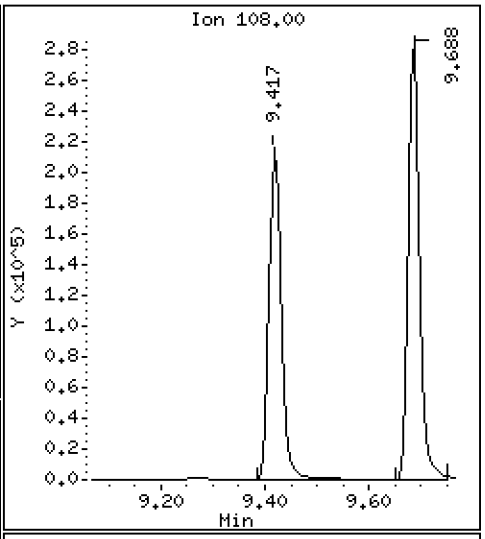
Column phase: ZB-5msi

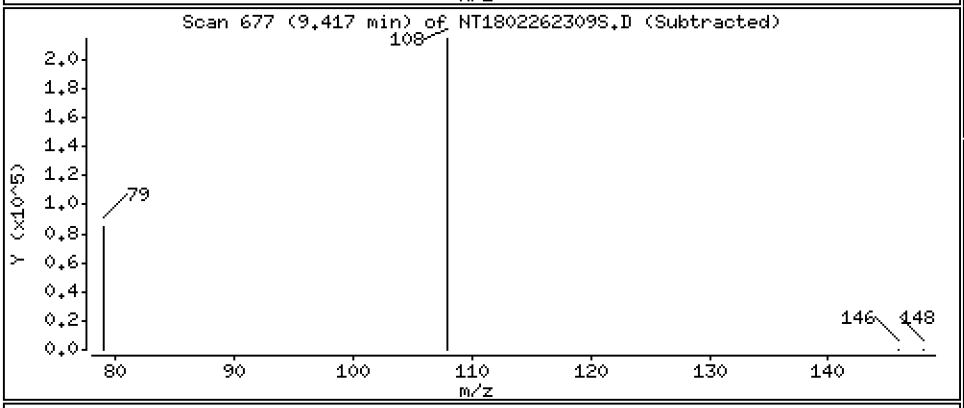
Column diameter: 0.25

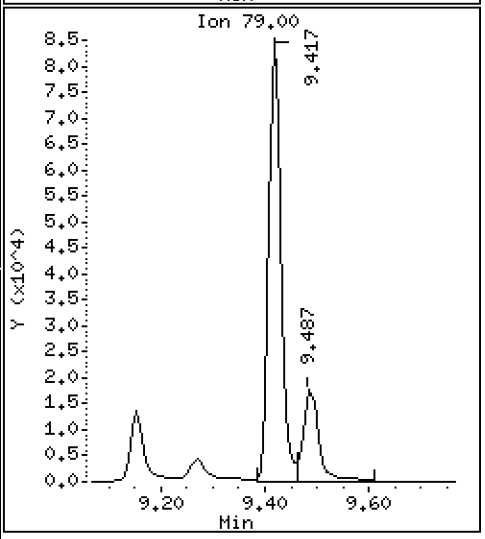
13 2-Methylphenol

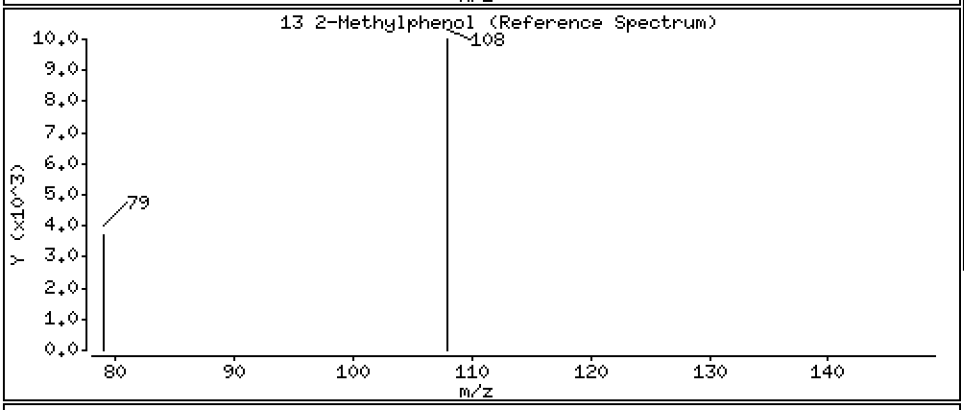
Concentration: 3.595 ug/mL

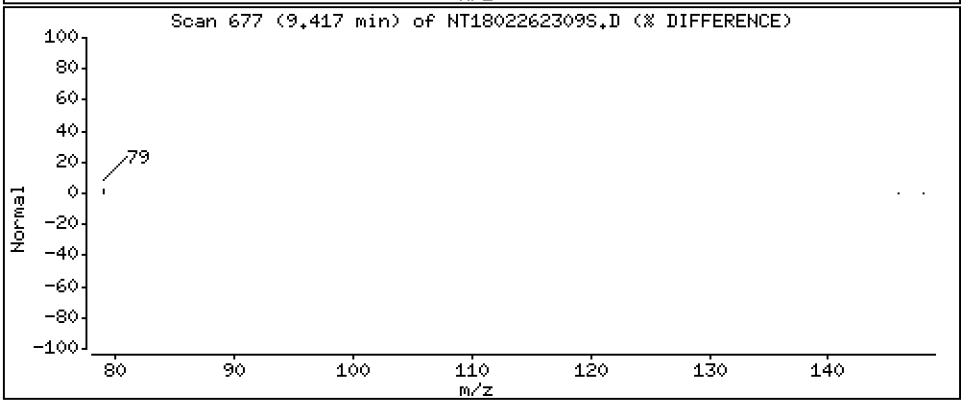












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

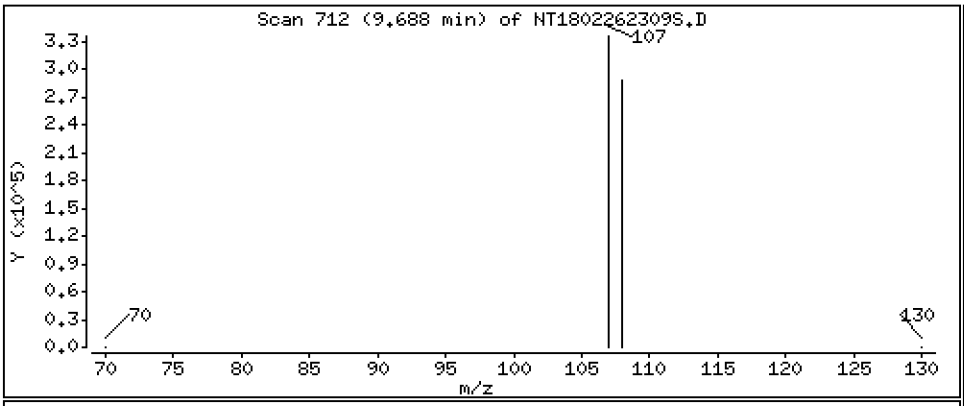
Operator: YZ

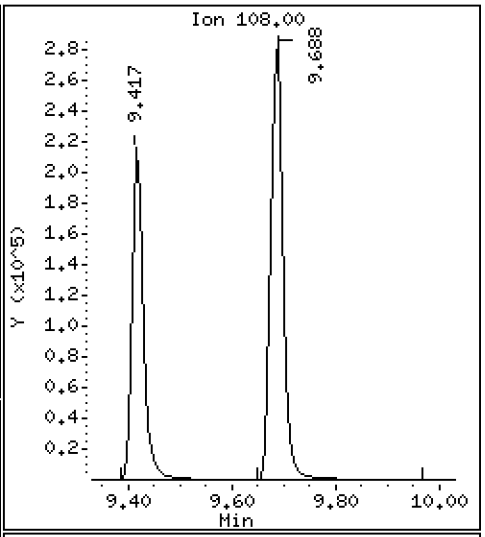
Column phase: ZB-5msi

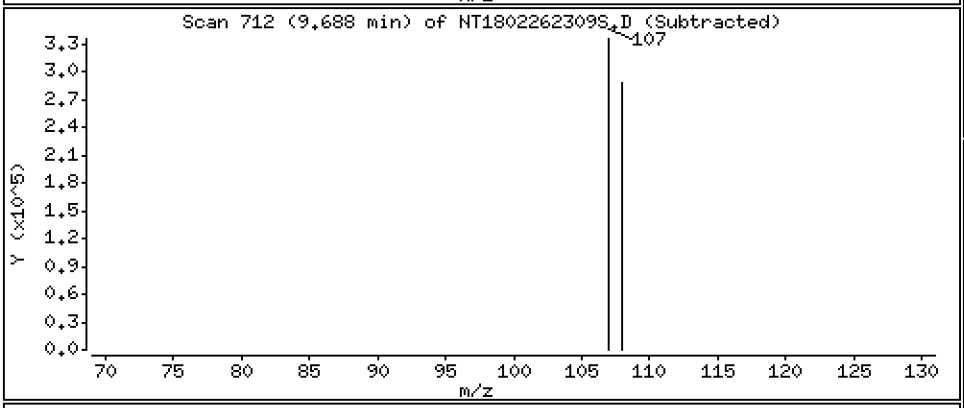
Column diameter: 0.25

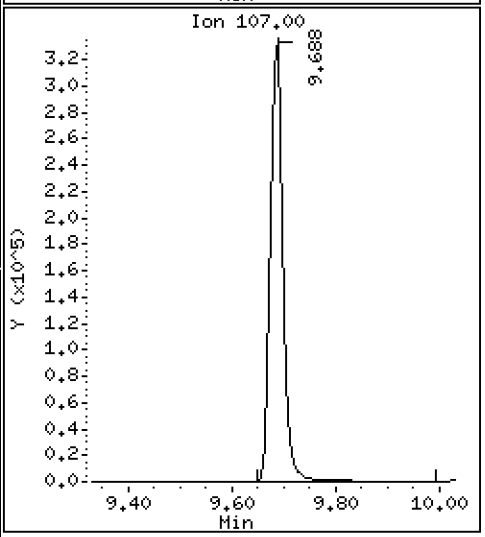
15 4-Methylphenol

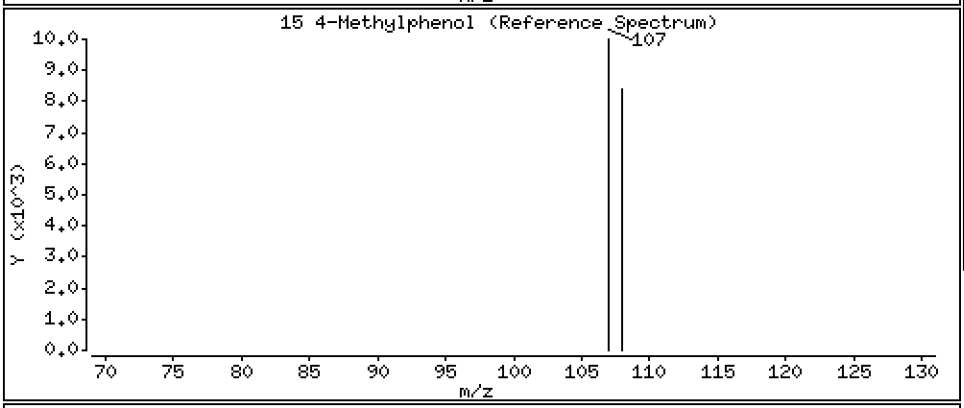
Concentration: 4.848 ug/mL

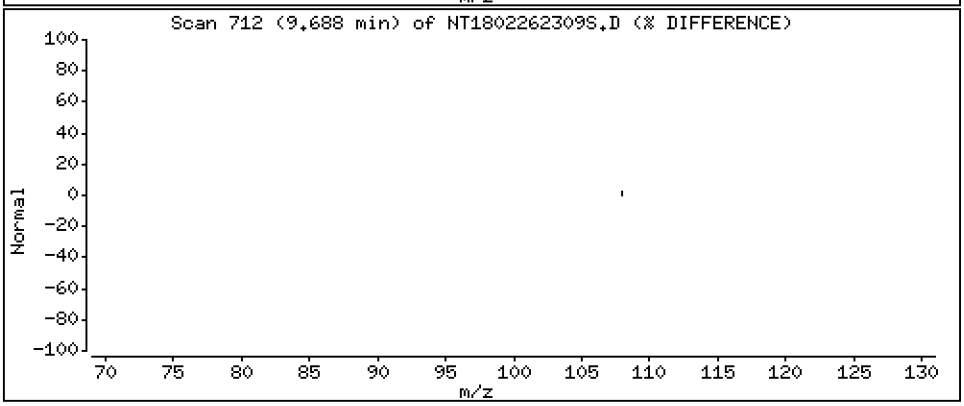












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262309S.D

Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

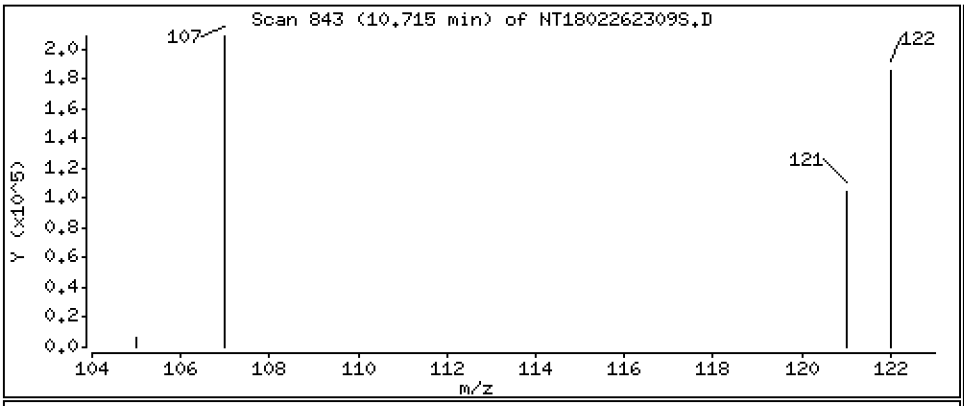
Operator: YZ

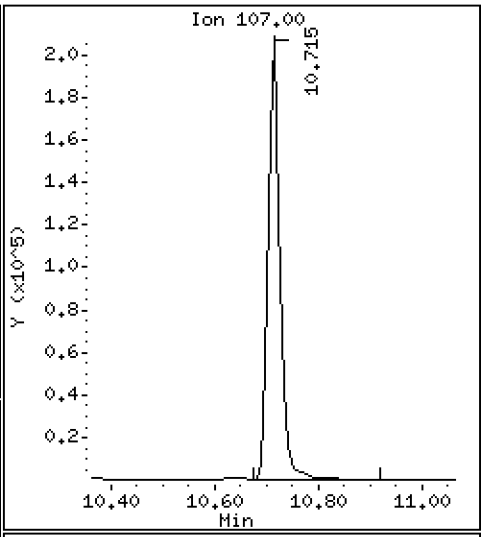
Column phase: ZB-5msi

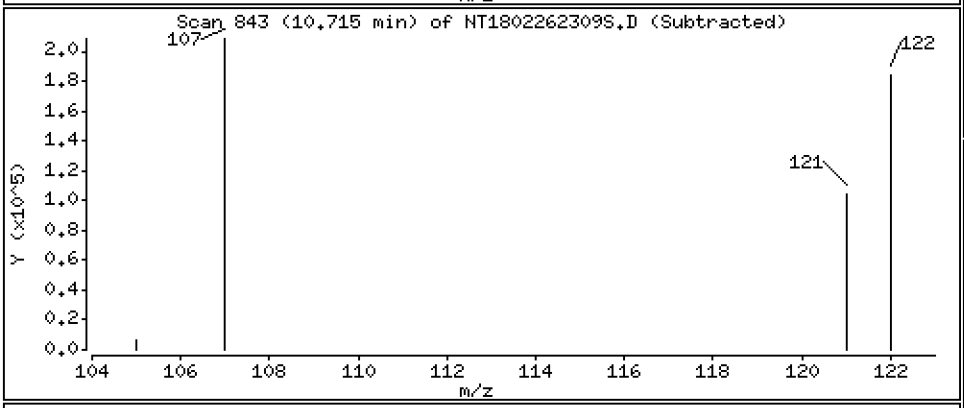
Column diameter: 0.25

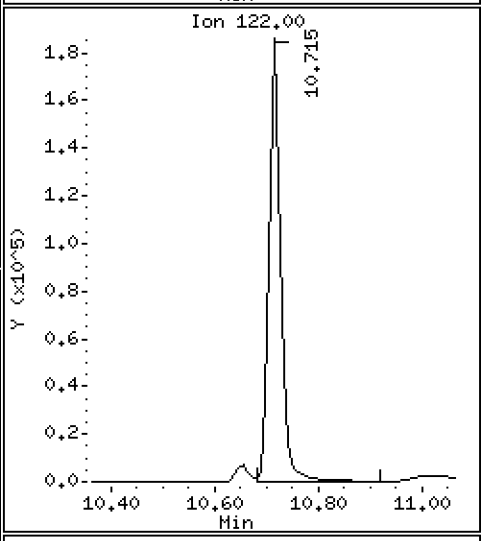
22 2,4-Dimethylphenol

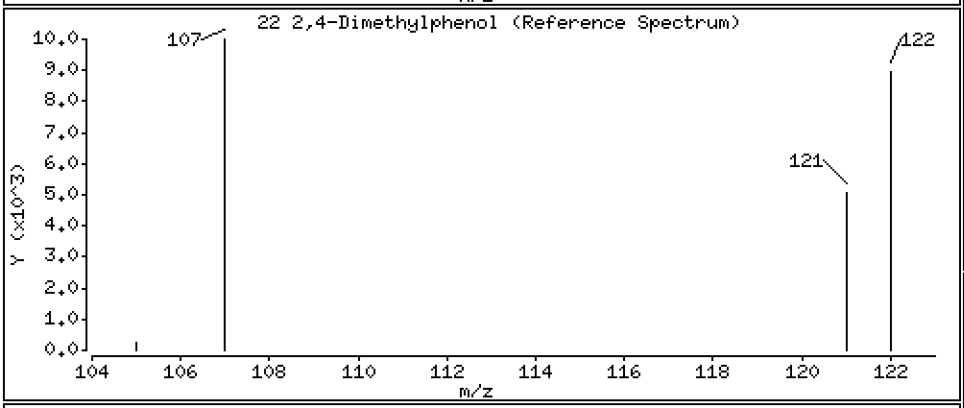
Concentration: 3.572 ug/mL

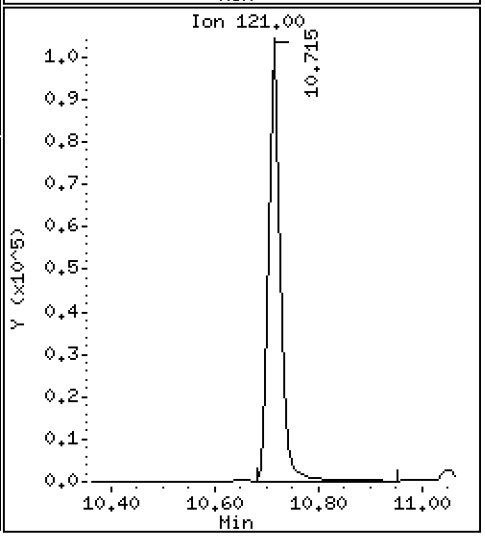


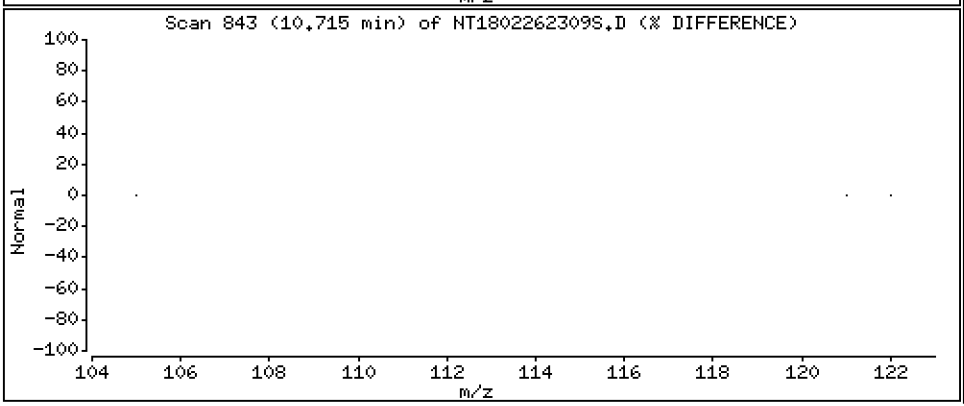












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

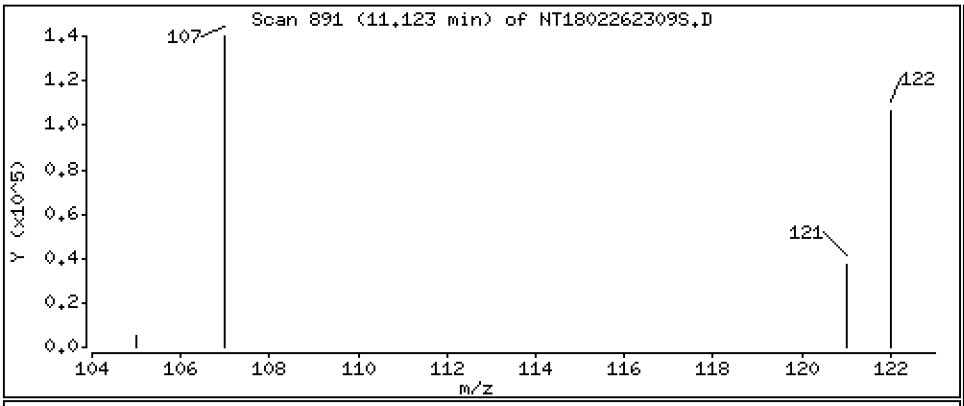
Operator: YZ

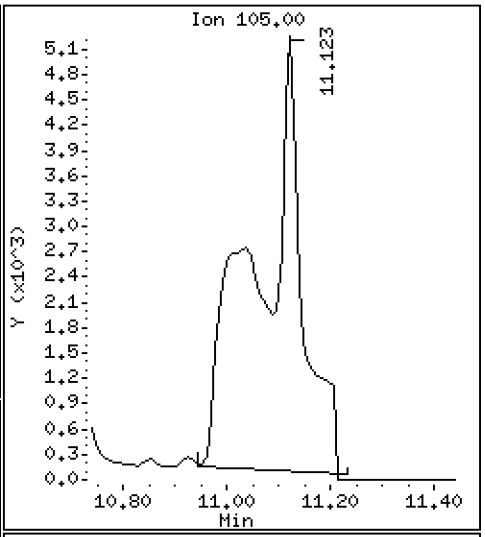
Column phase: ZB-5msi

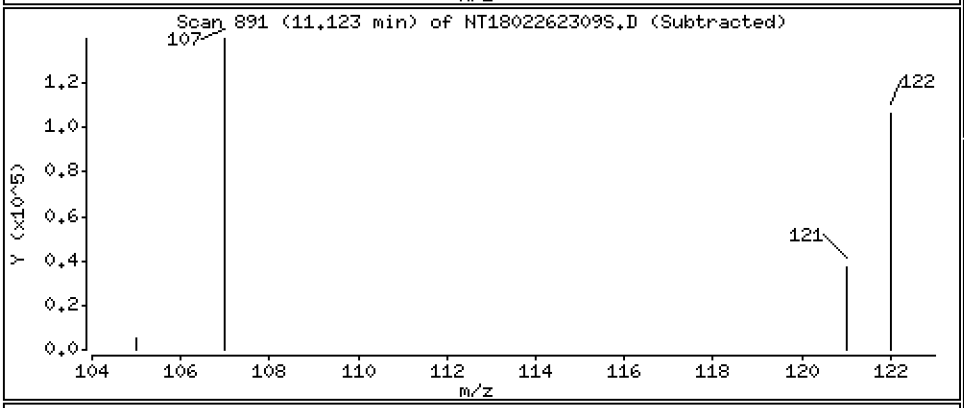
Column diameter: 0.25

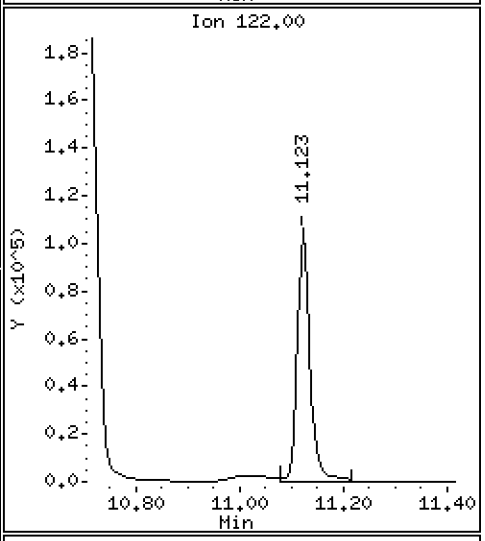
24 Benzoic acid

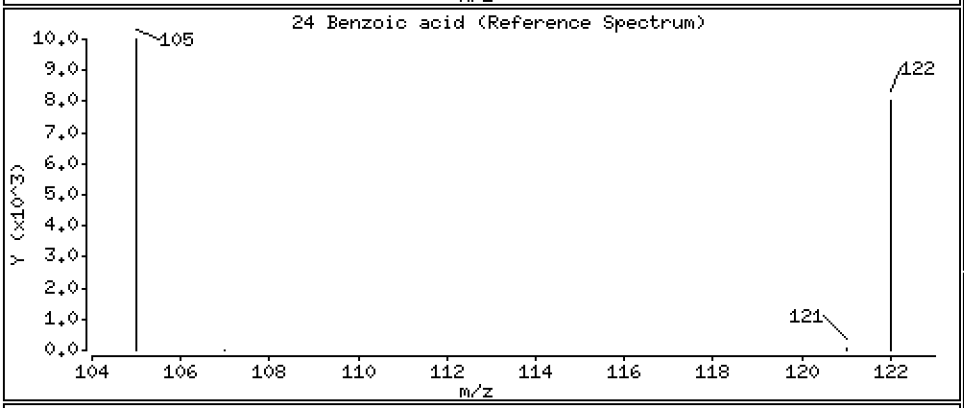
Concentration: 0.8444 ug/mL

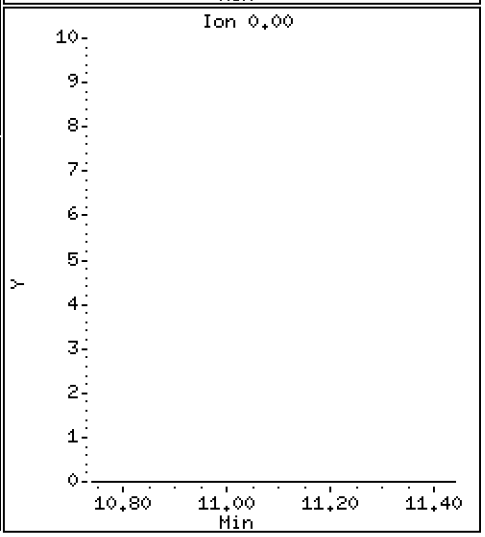


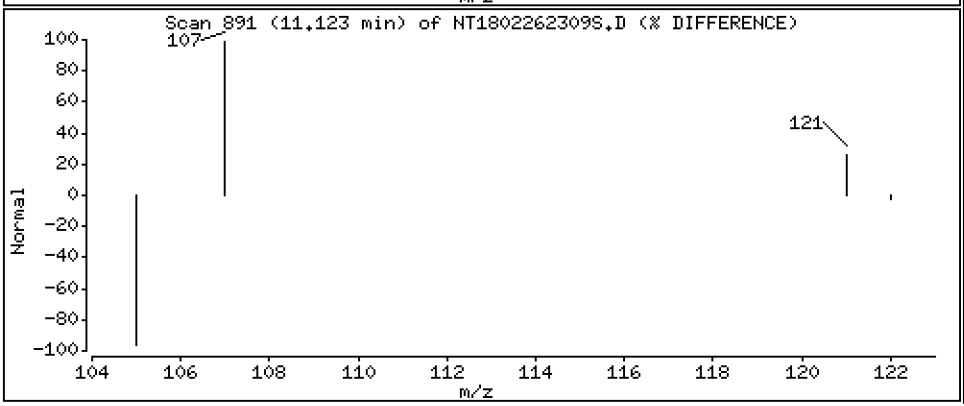












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

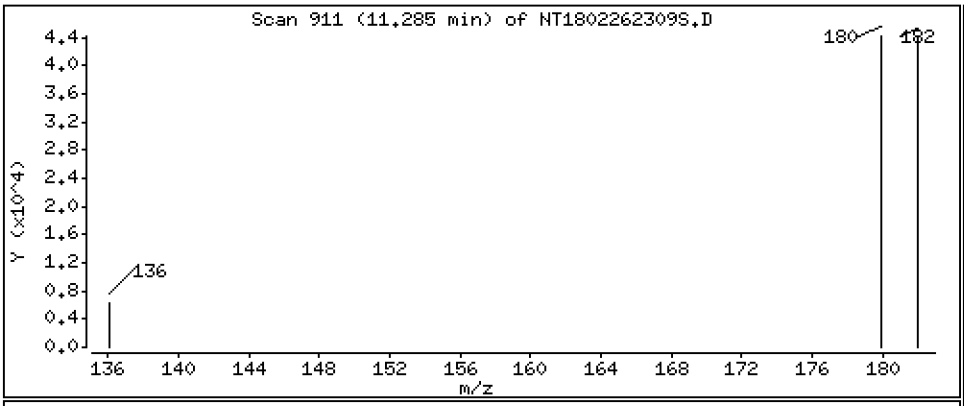
Operator: YZ

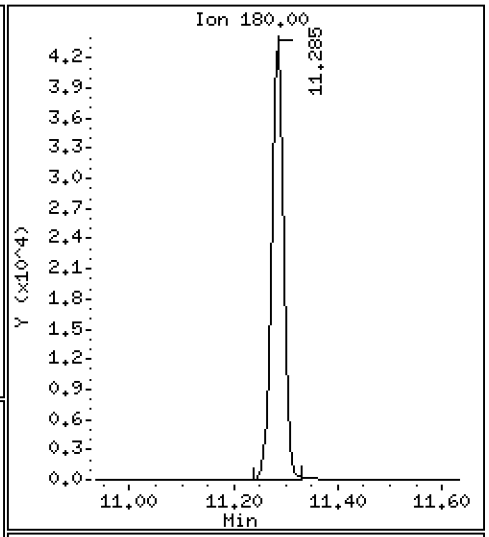
Column phase: ZB-5msi

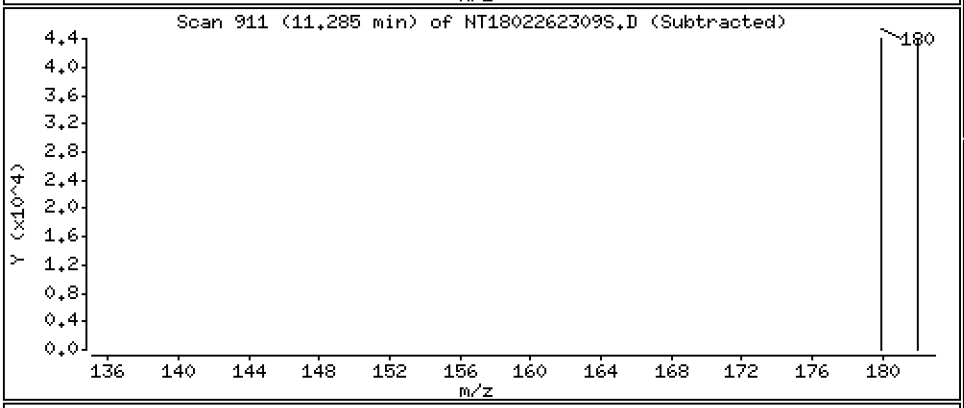
Column diameter: 0.25

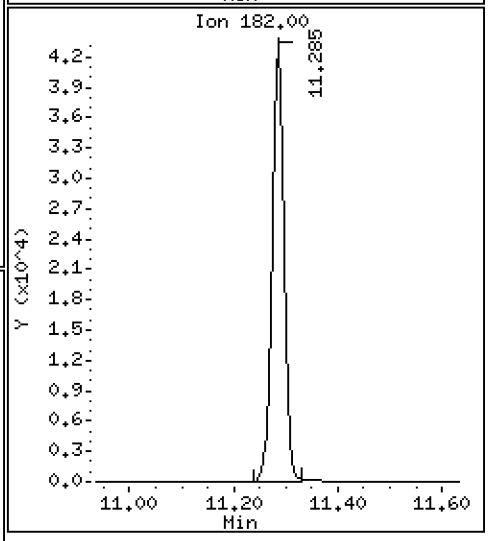
26 1,2,4-Trichlorobenzene

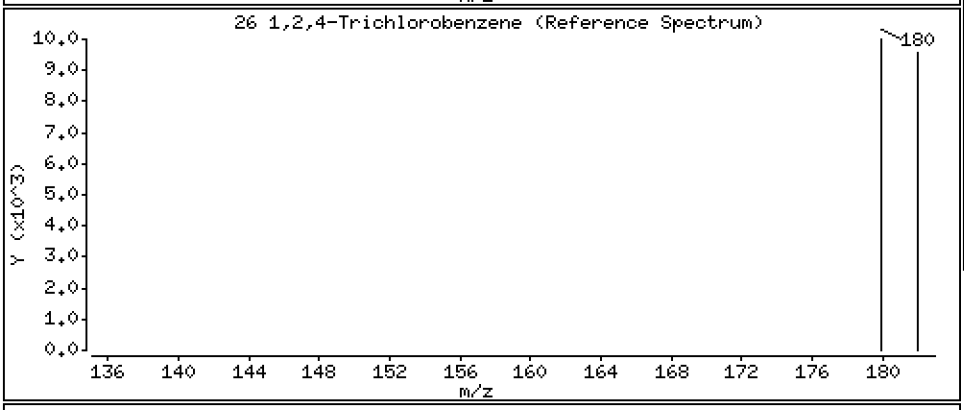
Concentration: 0.7757 ug/mL

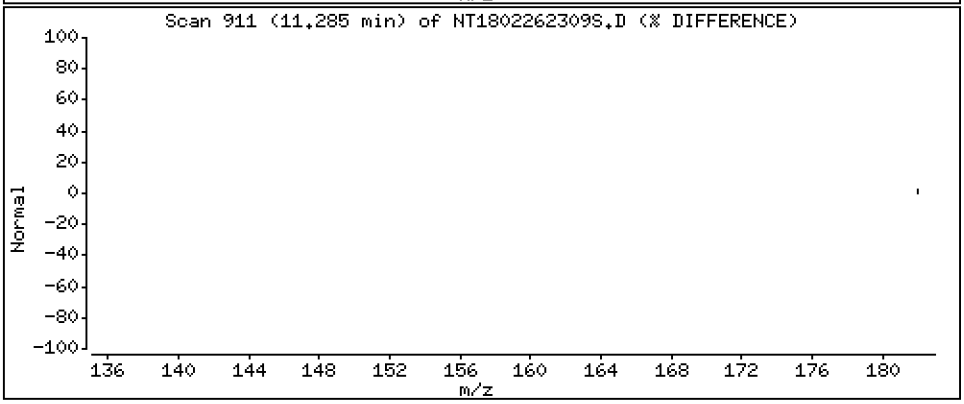












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262309S.D

Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

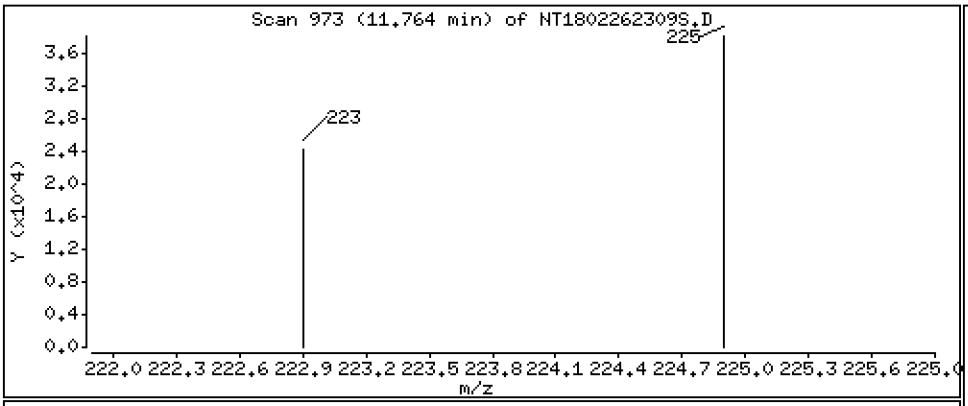
Operator: YZ

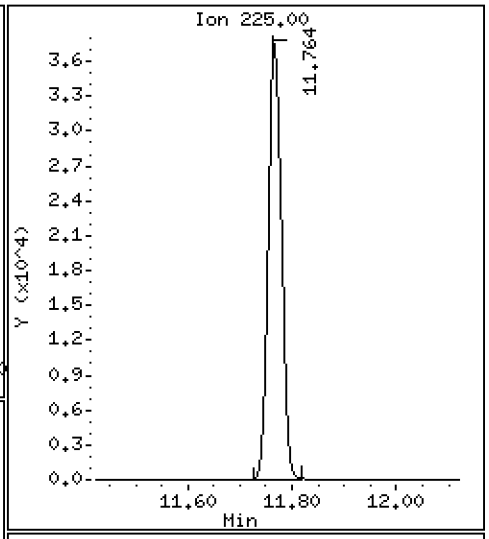
Column phase: ZB-5msi

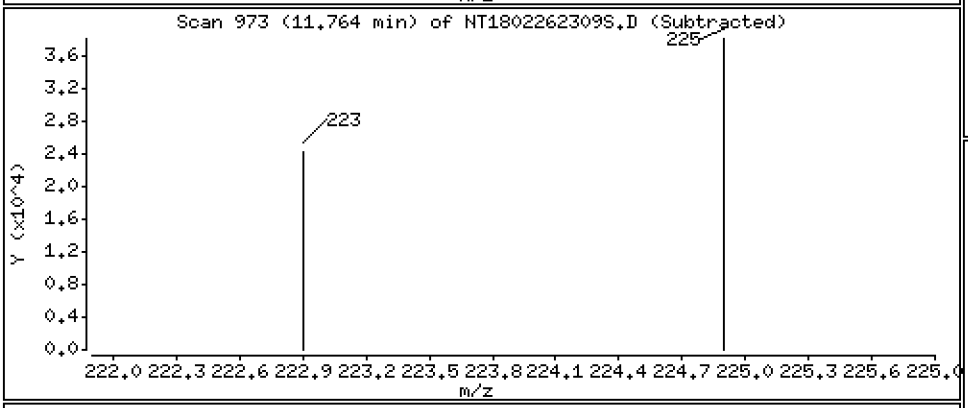
Column diameter: 0.25

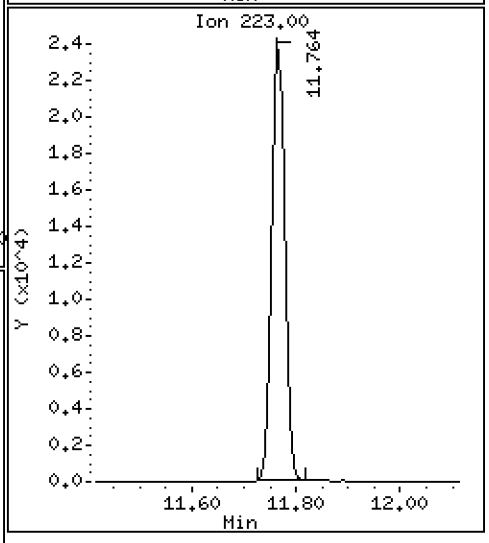
30 Hexachlorobutadiene

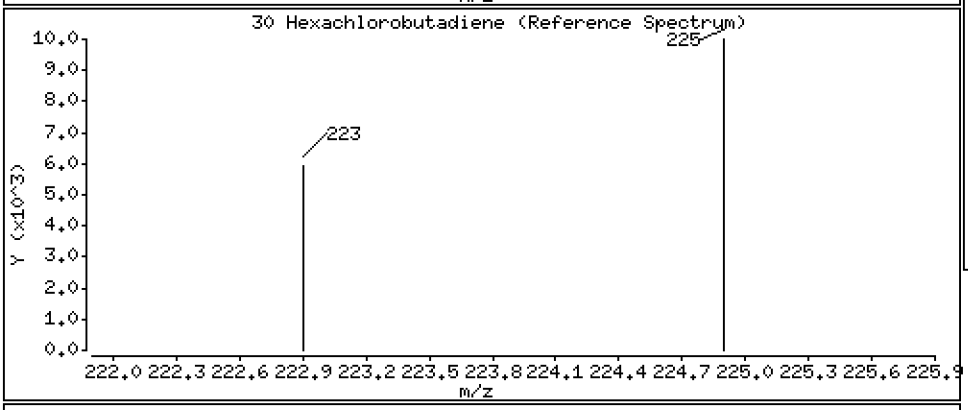
Concentration: 1.135 ug/mL

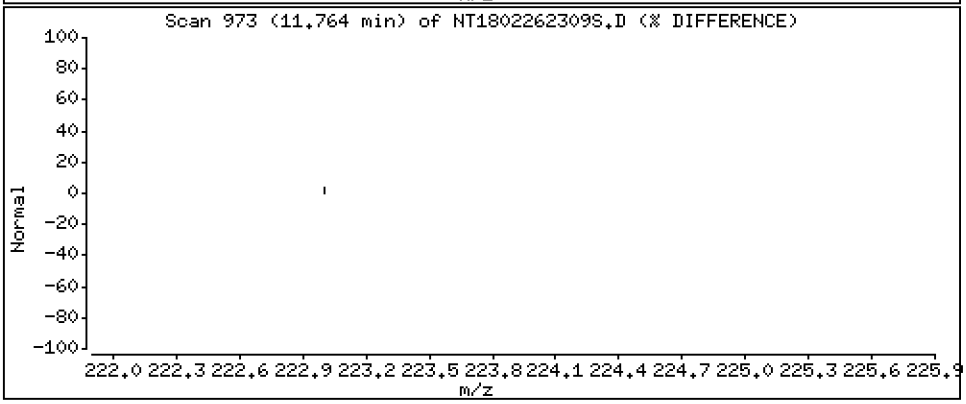












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262309S.D

Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

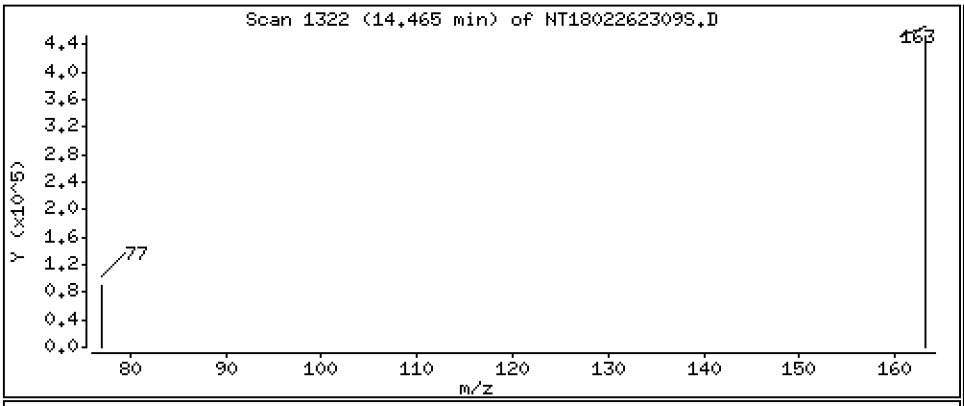
Operator: YZ

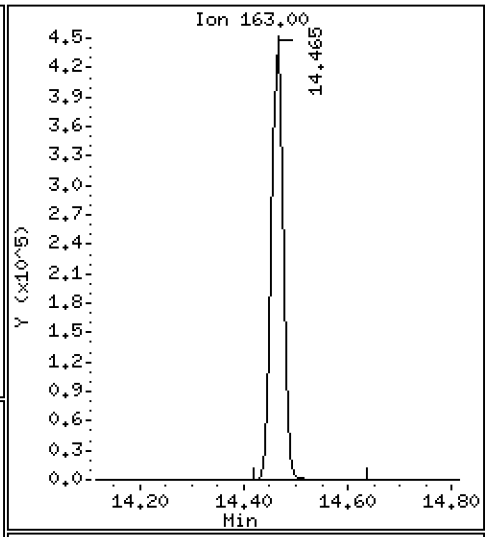
Column phase: ZB-5msi

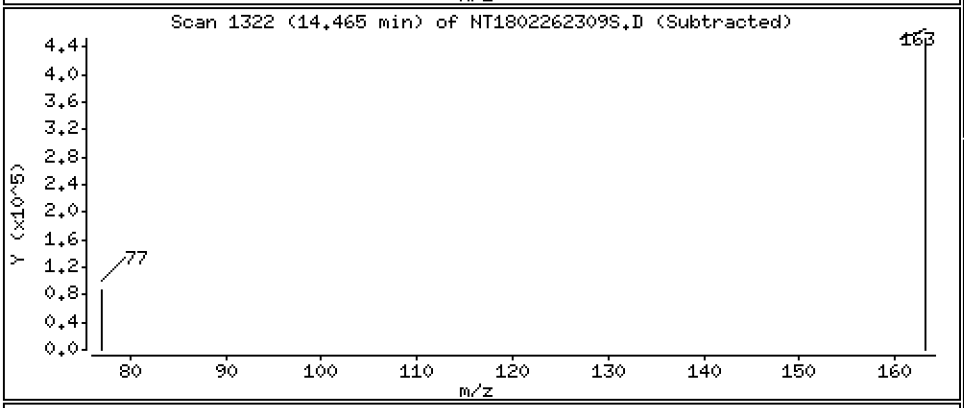
Column diameter: 0.25

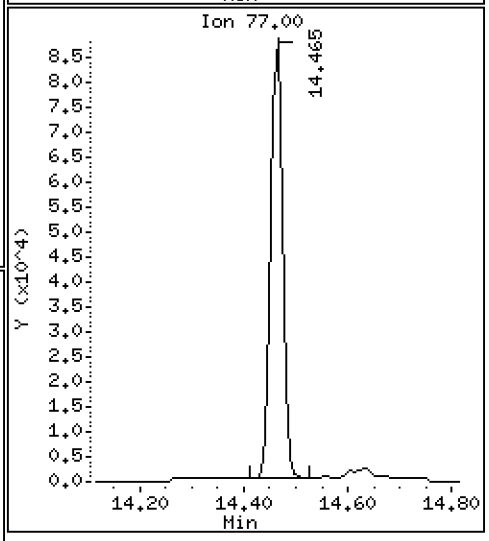
39 Dimethylphthalate

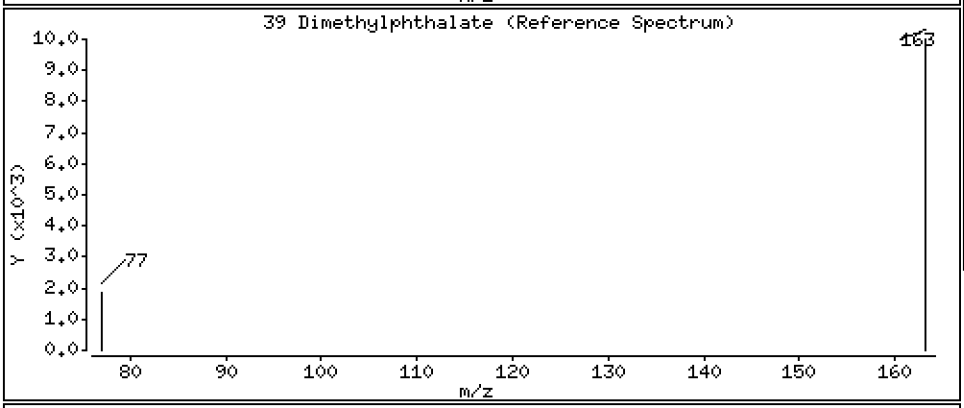
Concentration: 3.317 ug/mL

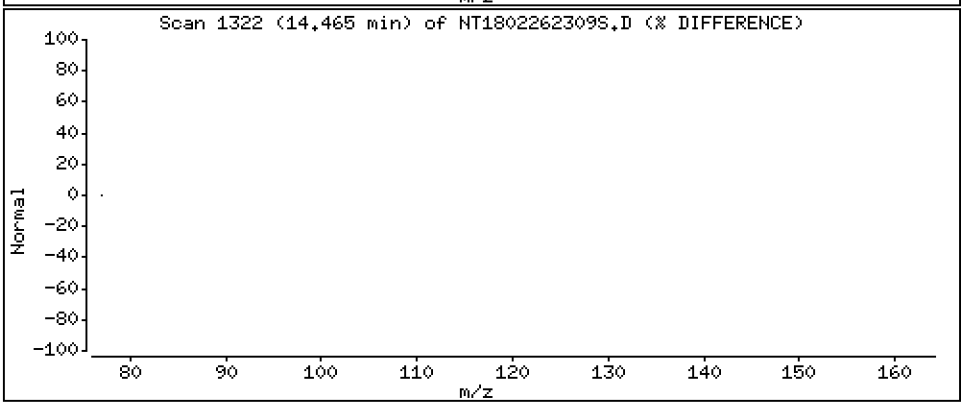












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262309S.D

Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

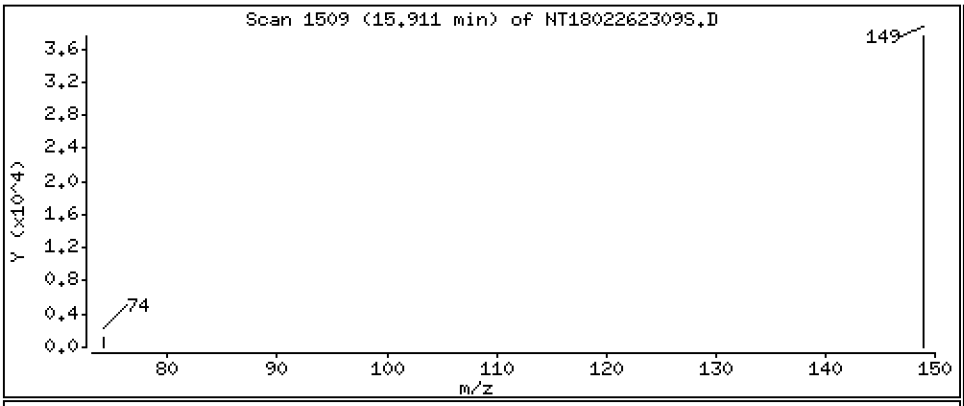
Operator: YZ

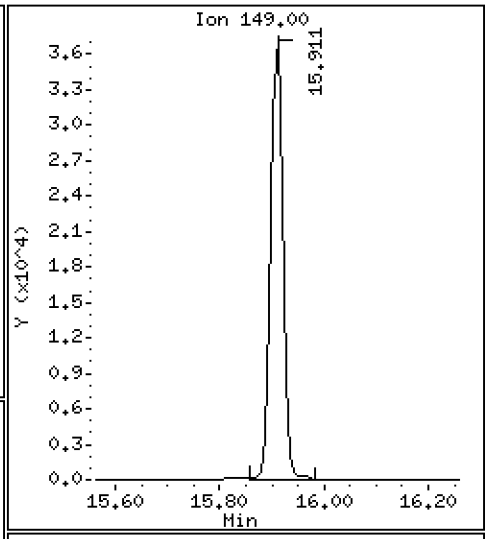
Column phase: ZB-5msi

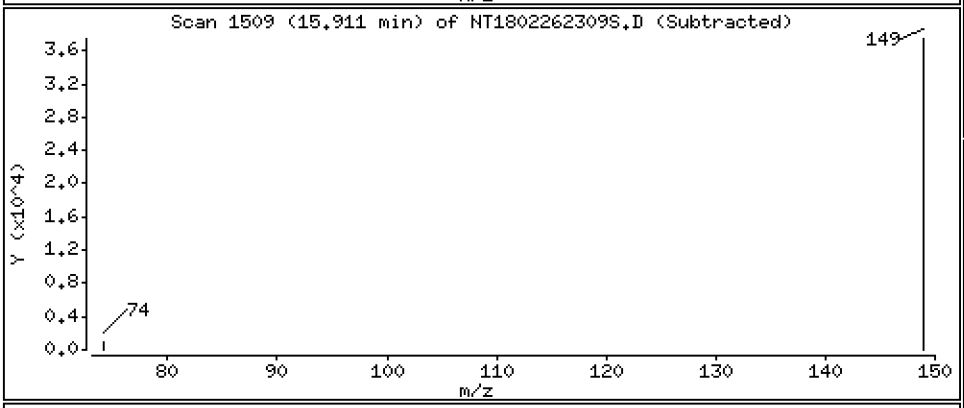
Column diameter: 0.25

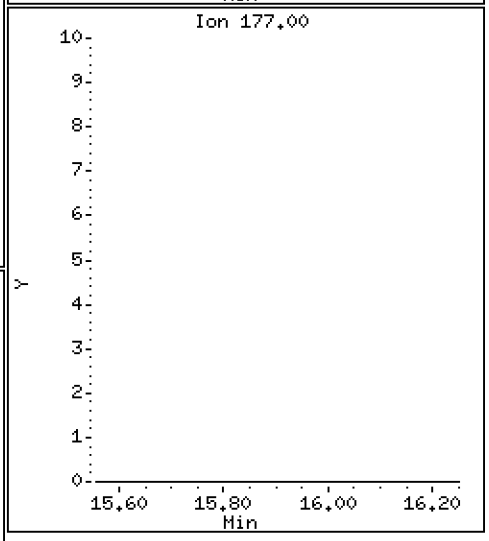
50 Diethylphthalate

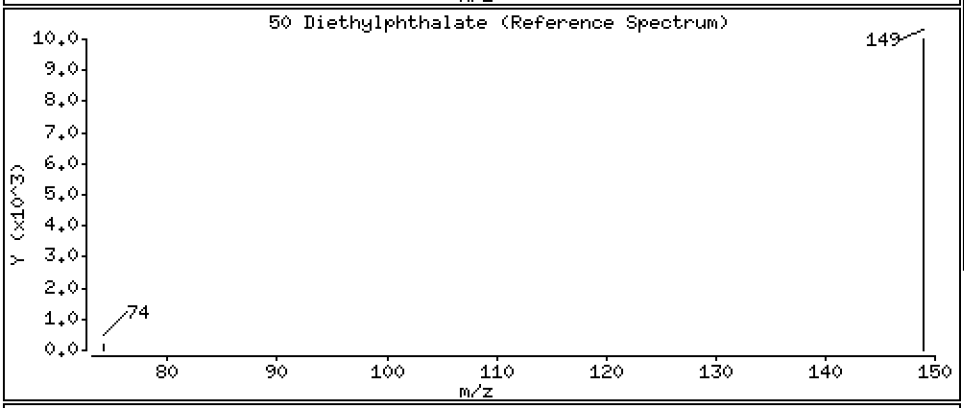
Concentration: 0.3169 ug/mL

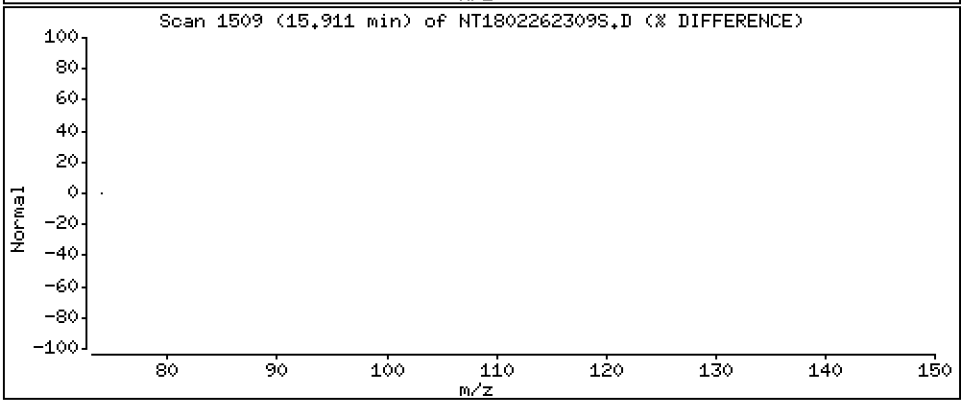












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

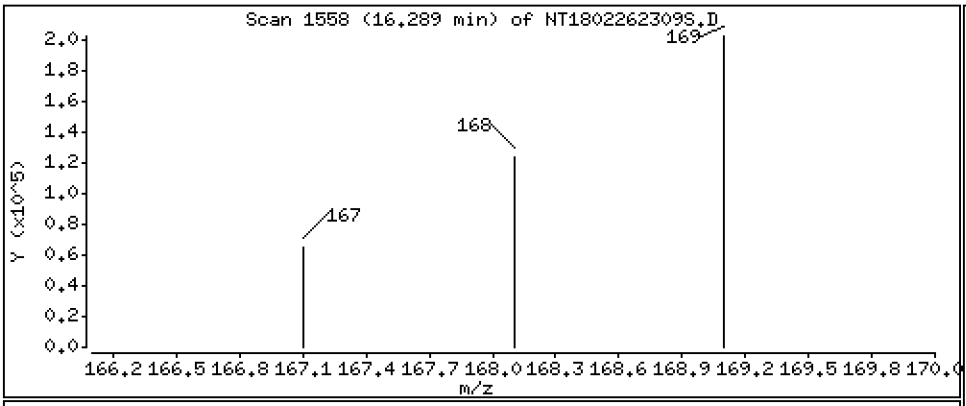
Operator: YZ

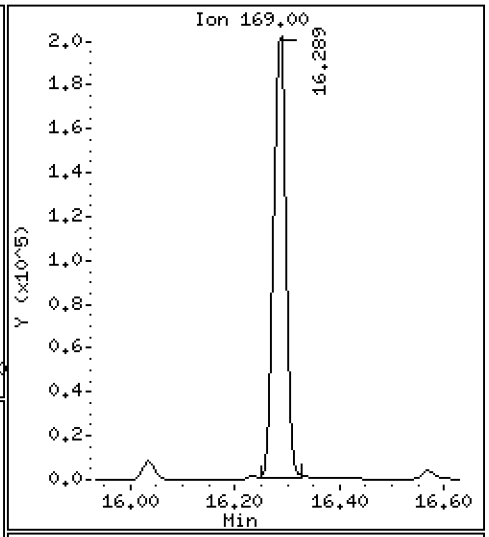
Column phase: ZB-5msi

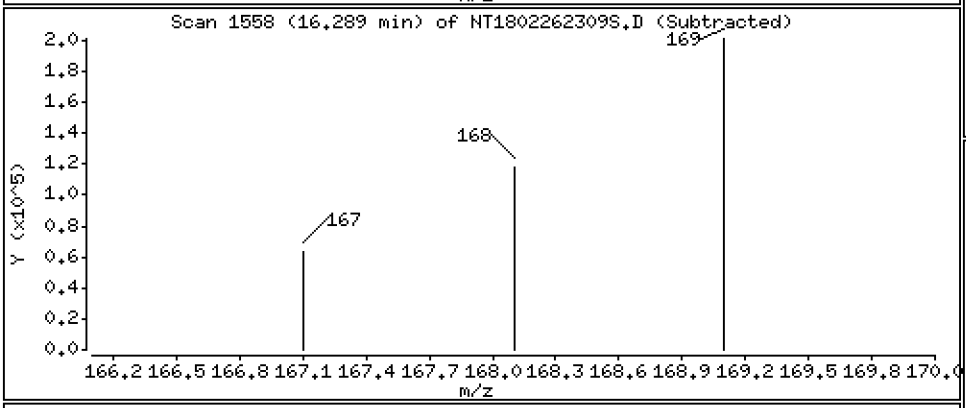
Column diameter: 0.25

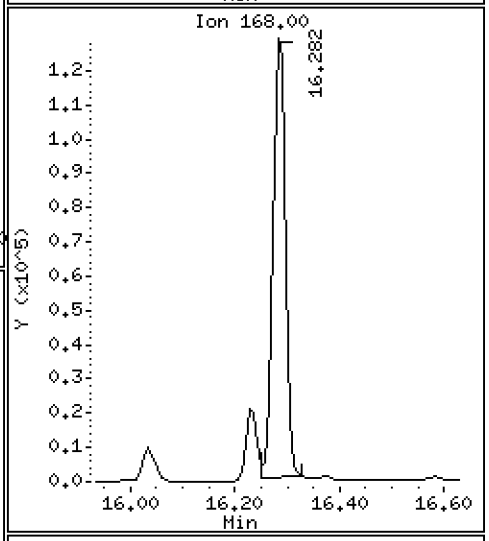
54 N-Nitrosodiphenylamine

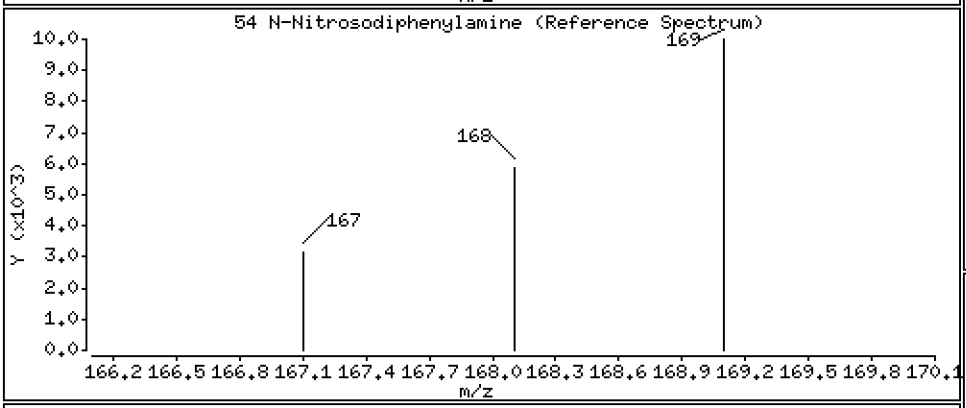
Concentration: 2.260 ug/mL

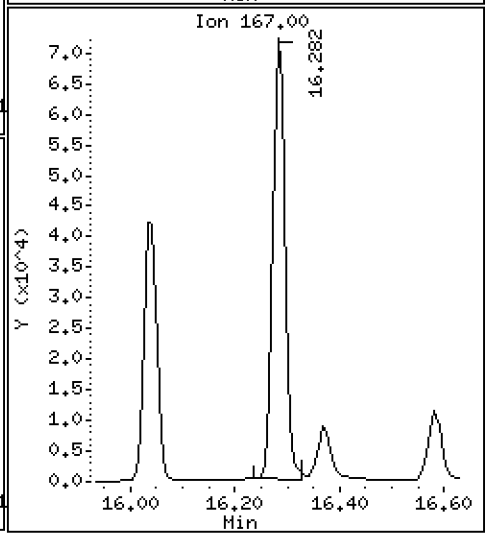


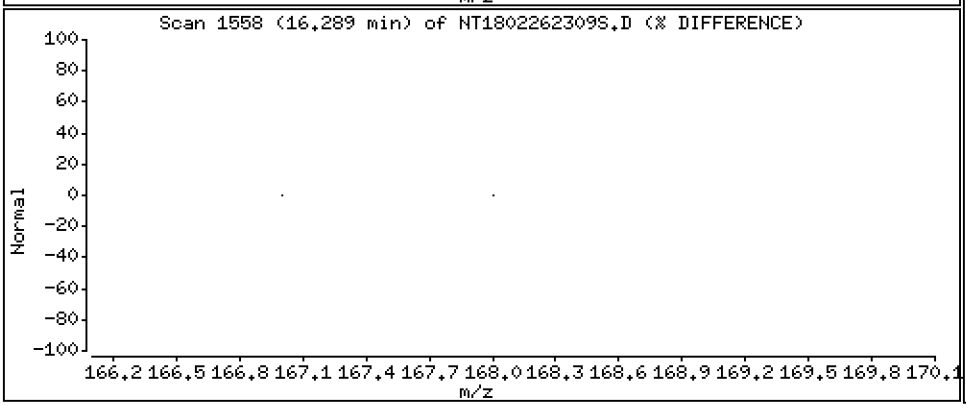












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Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

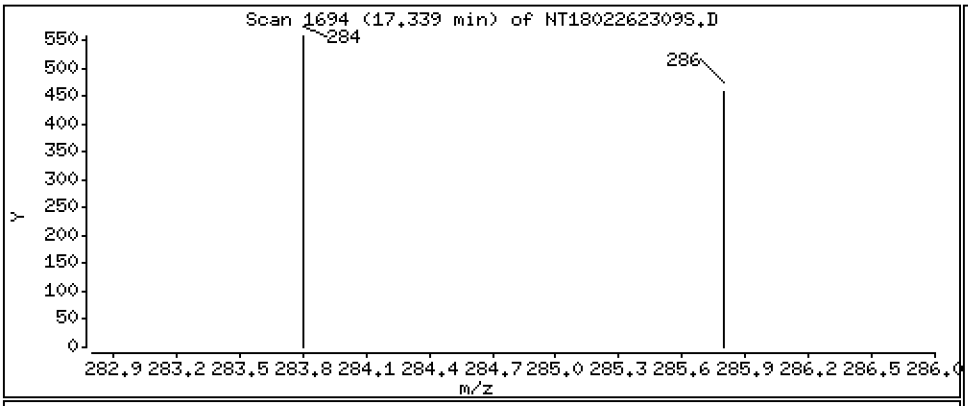
Operator: YZ

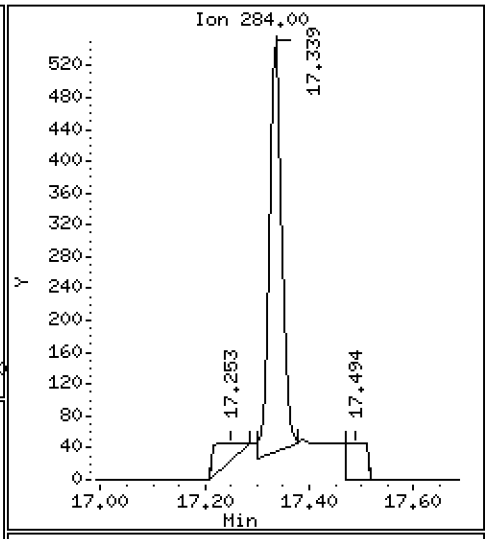
Column phase: ZB-5msi

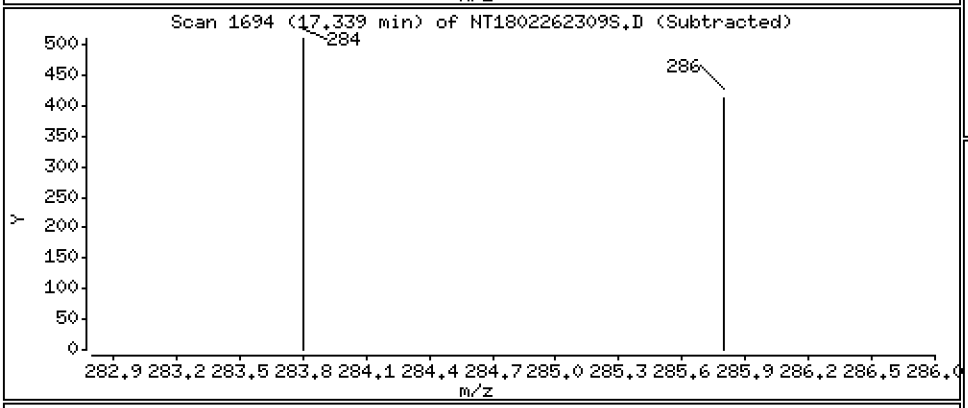
Column diameter: 0.25

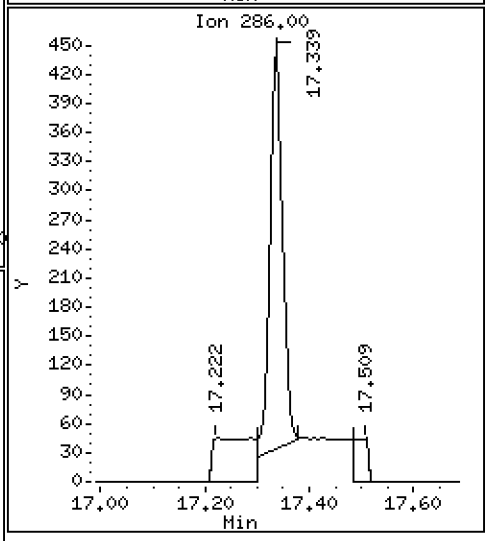
57 Hexachlorobenzene

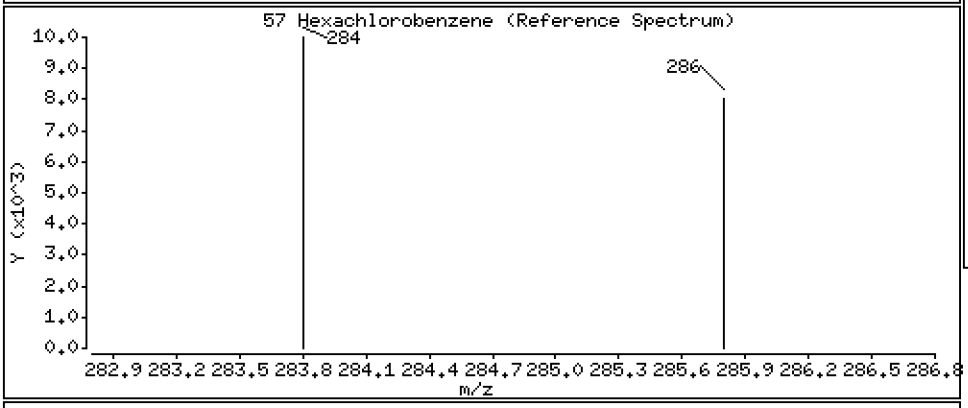
Concentration: 0.01275 ug/mL

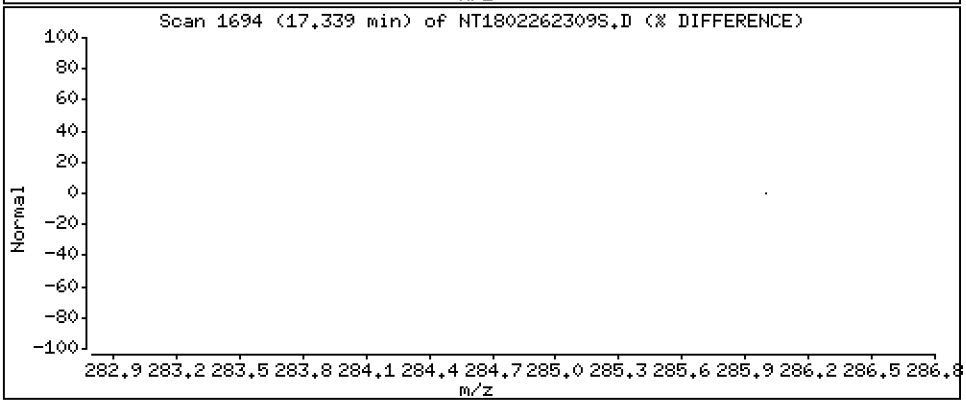












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262309S.D

Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

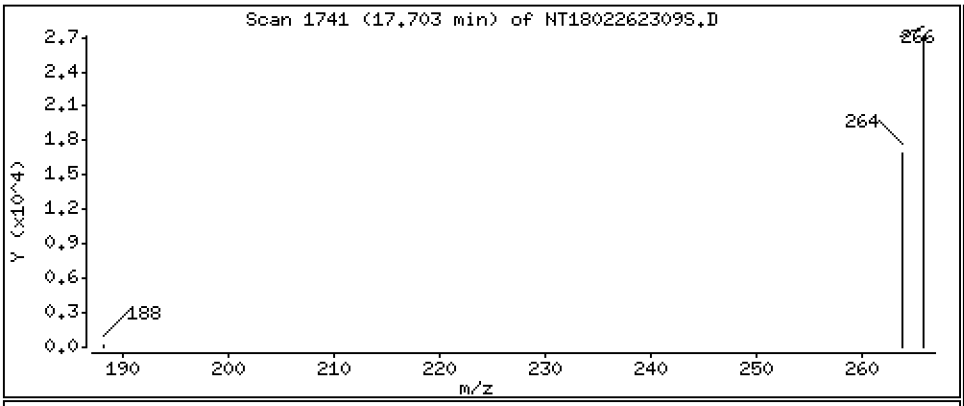
Operator: YZ

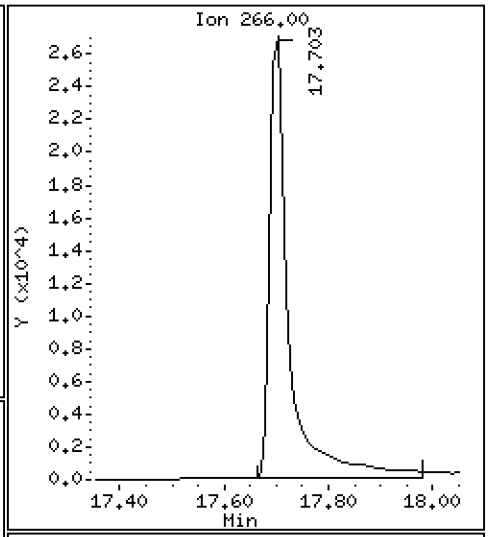
Column phase: ZB-5msi

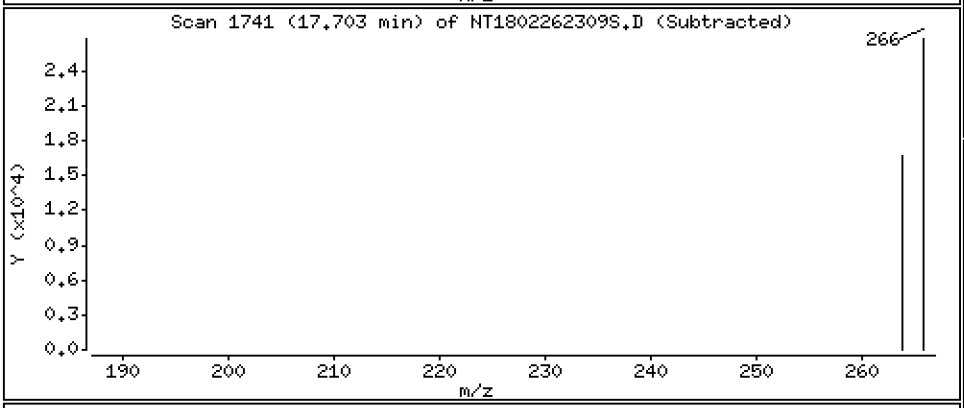
Column diameter: 0.25

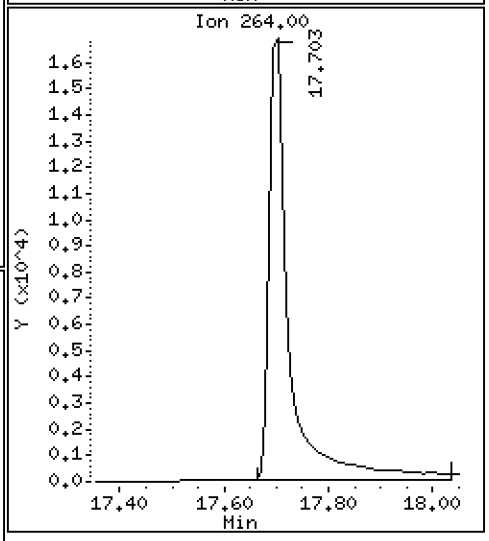
58 Pentachlorophenol

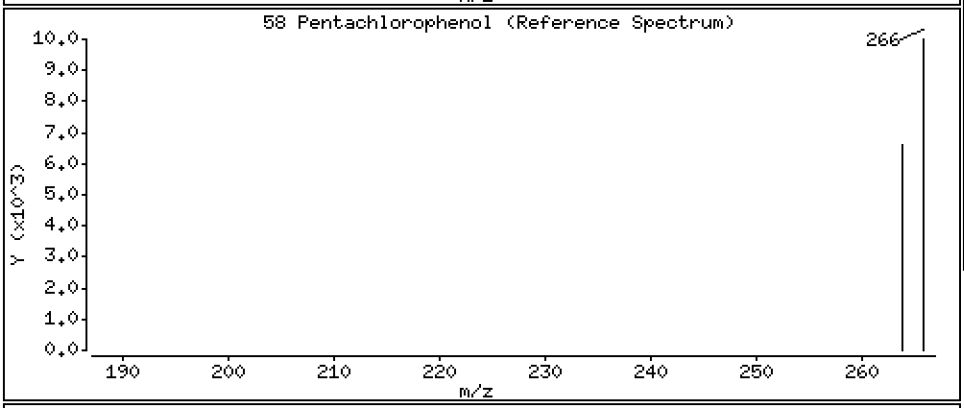
Concentration: 3.374 ug/mL

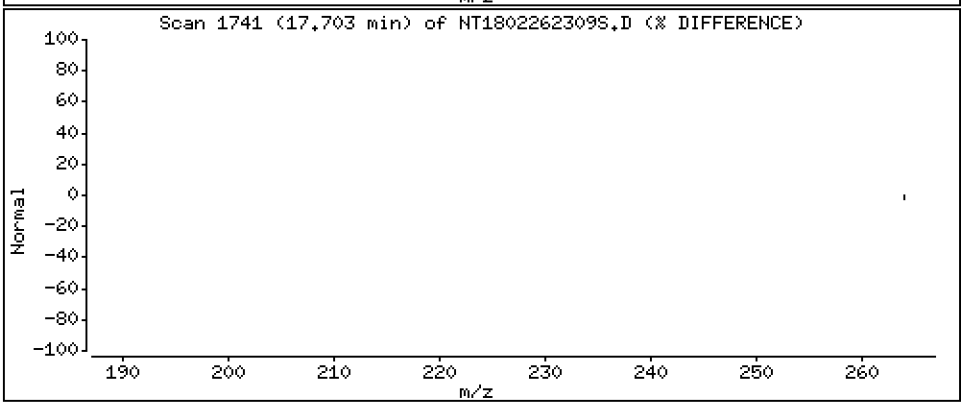












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262309S.D

Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

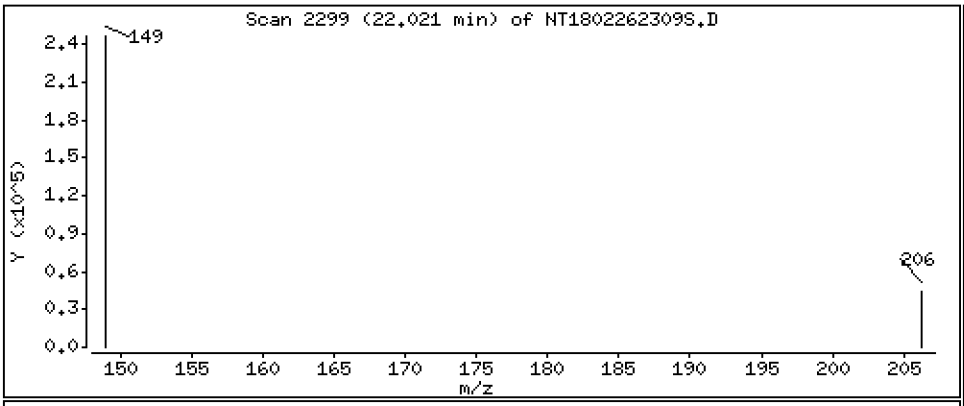
Operator: YZ

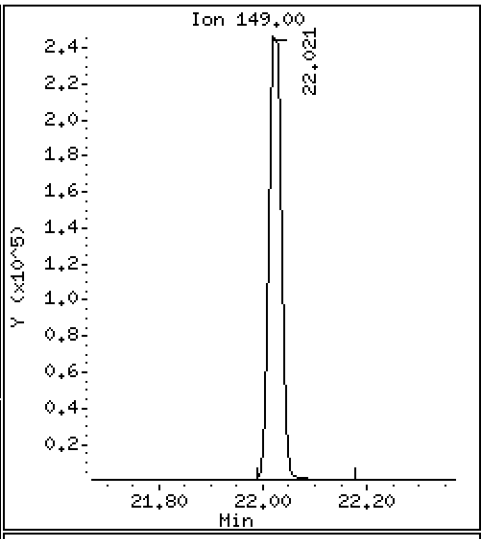
Column phase: ZB-5msi

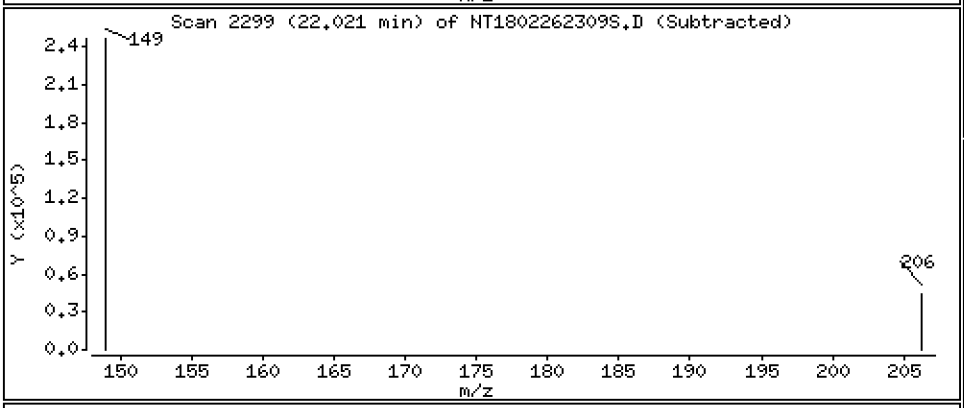
Column diameter: 0.25

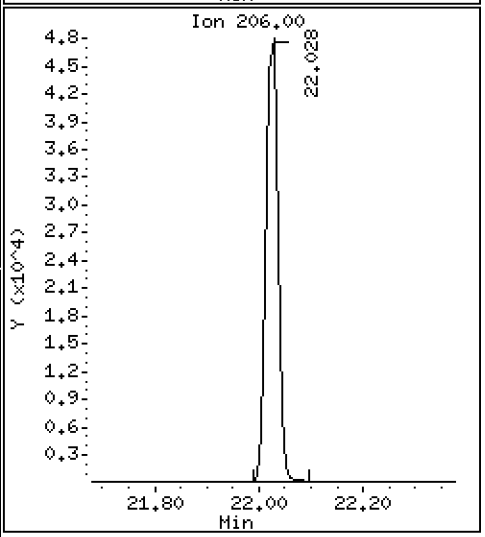
67 Butylbenzylphthalate

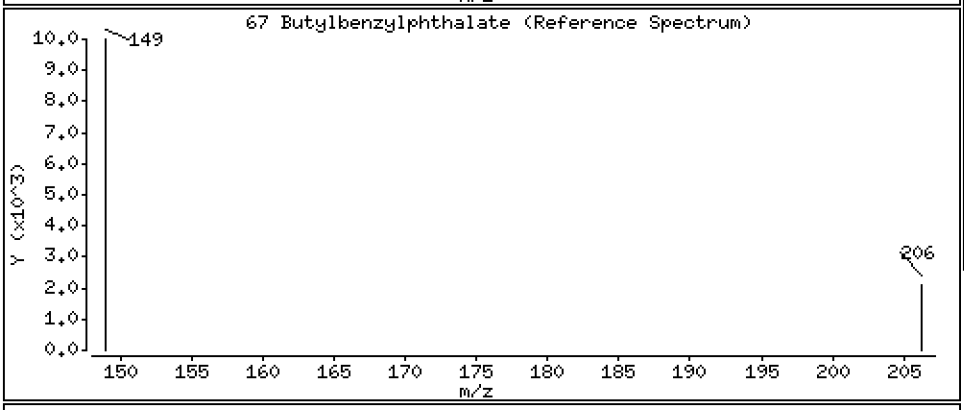
Concentration: 2.672 ug/mL

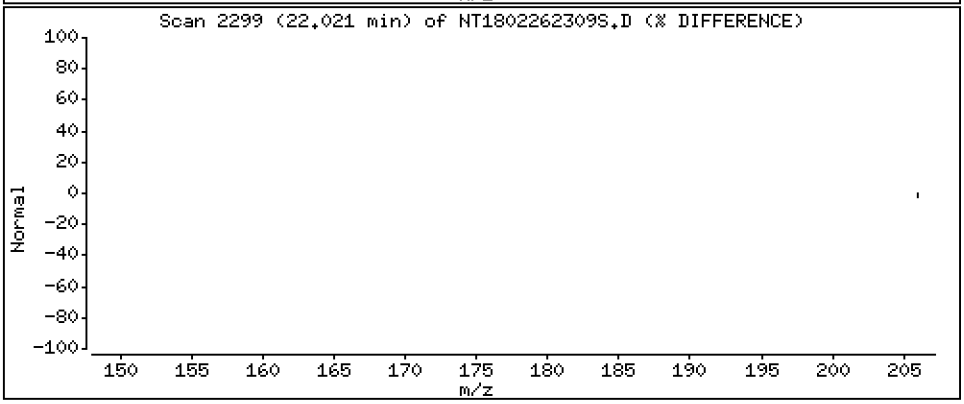












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262309S.D

Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

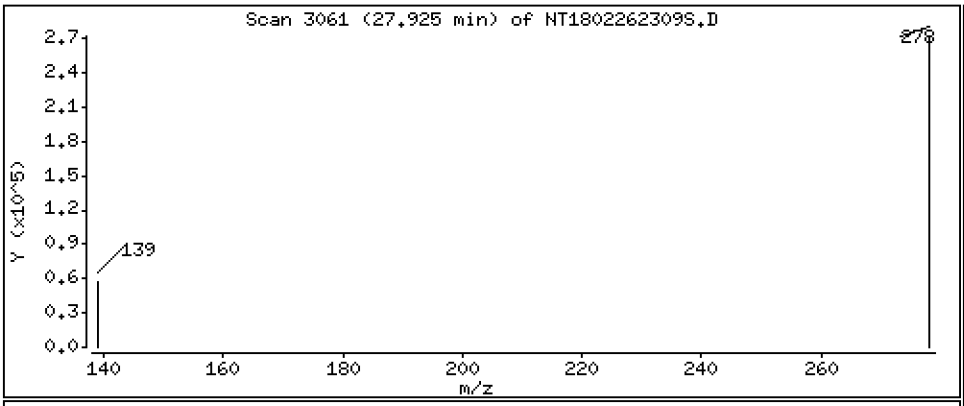
Operator: YZ

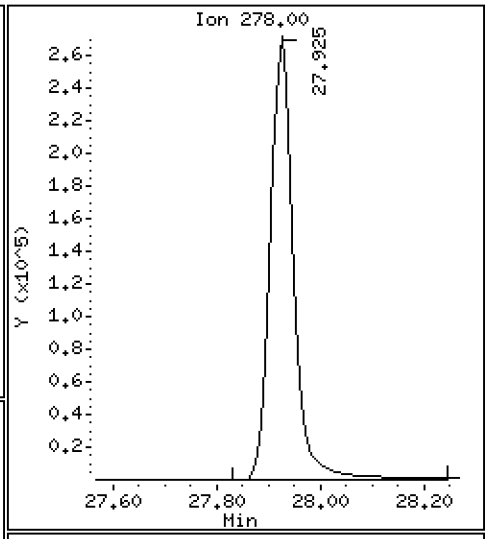
Column phase: ZB-5msi

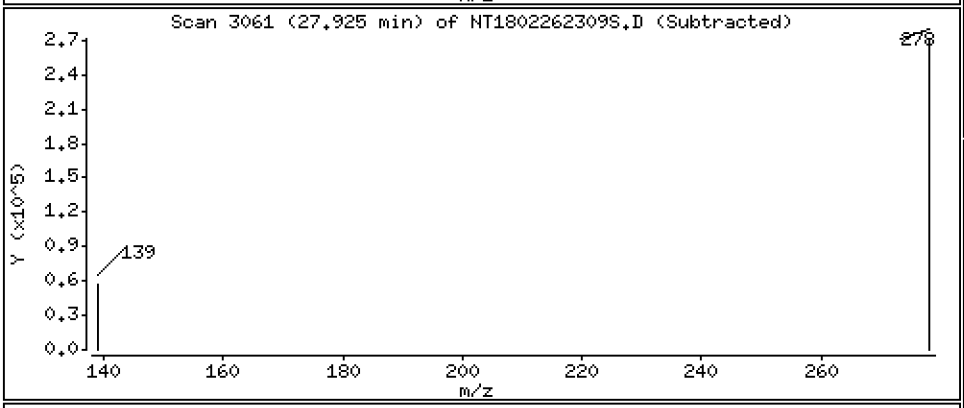
Column diameter: 0.25

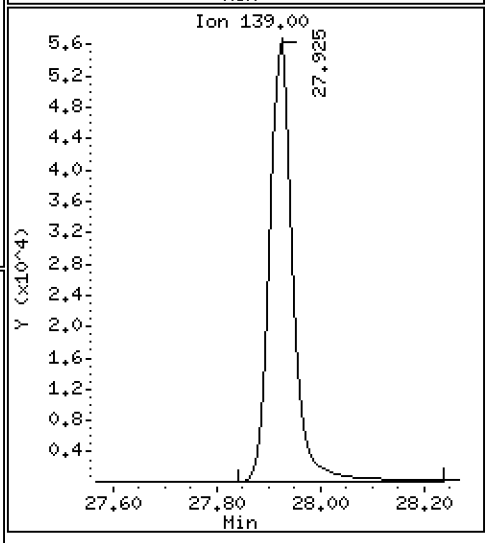
79 Dibenzo(a,h)anthracene

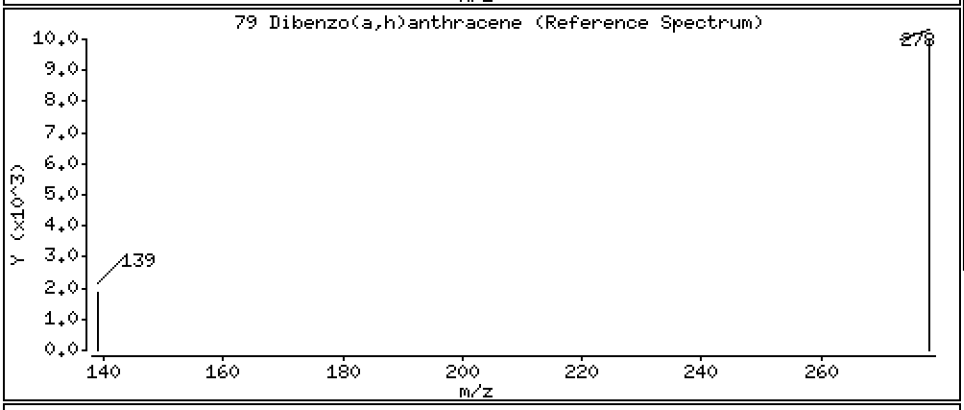
Concentration: 3.092 ug/mL

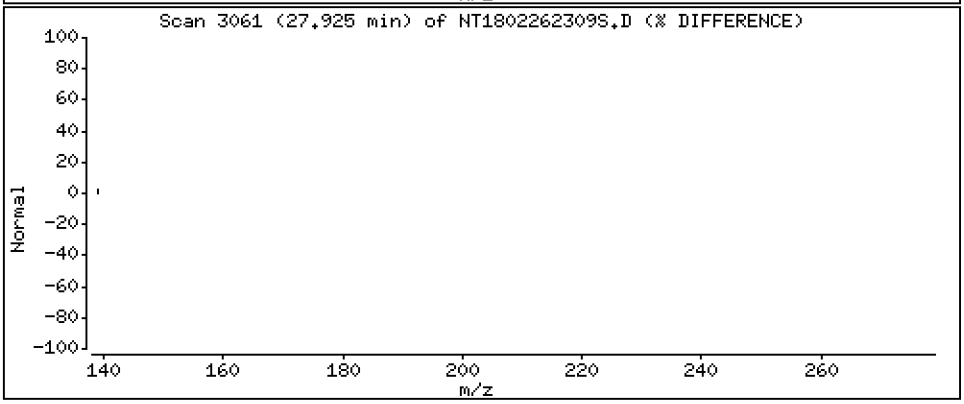












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262309S.D

Date : 26-FEB-2023 17:12

Client ID:

Instrument: nt18.i

Sample Info: BLA0410-SRM2

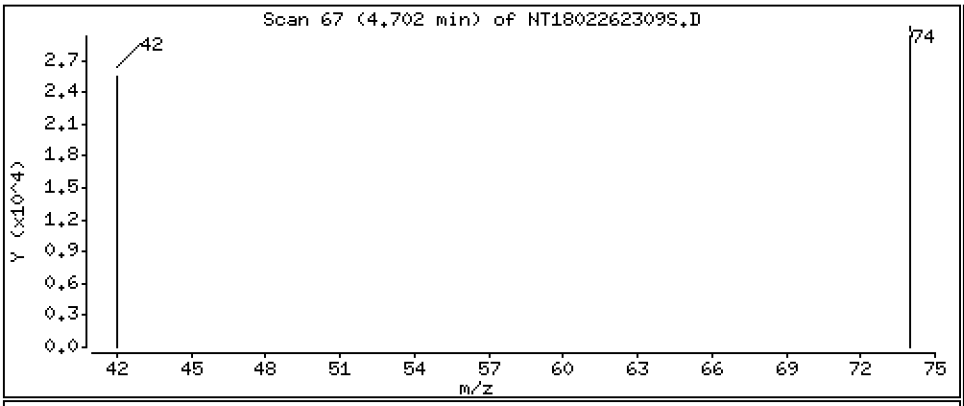
Operator: YZ

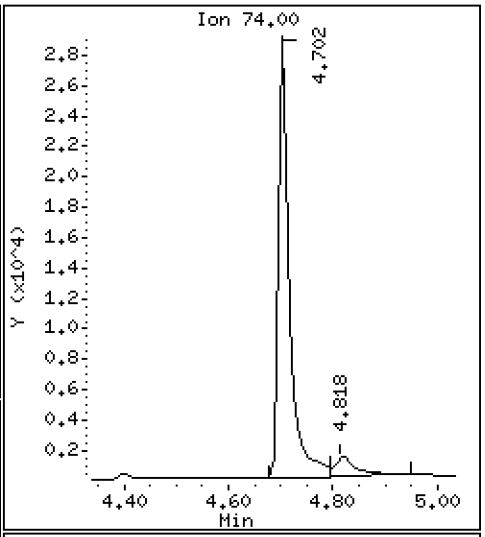
Column phase: ZB-5msi

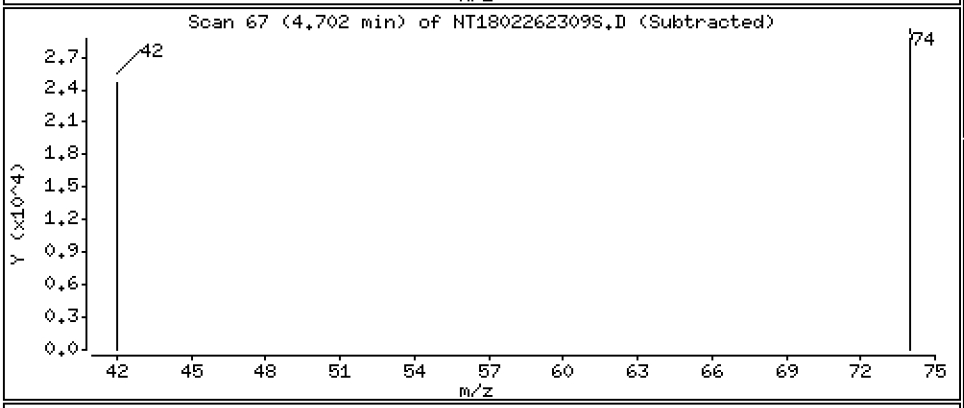
Column diameter: 0.25

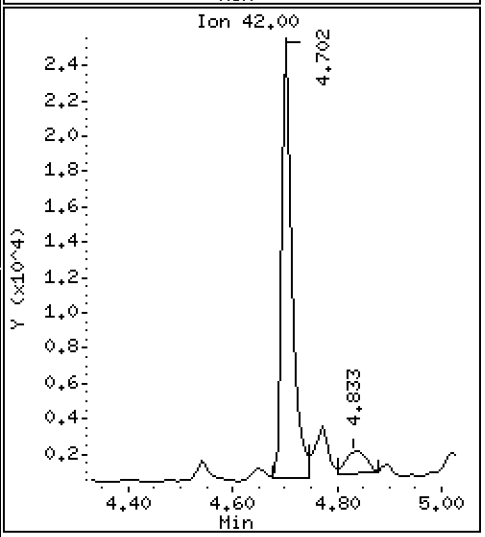
90 N-Nitrosodimethylamine

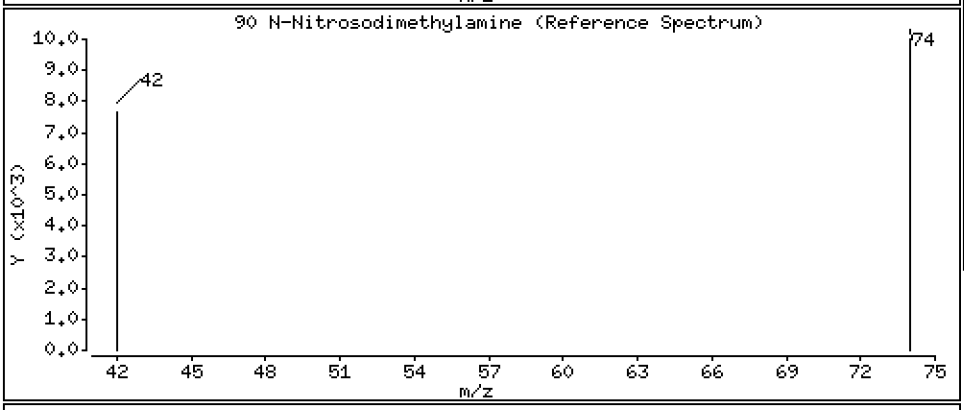
Concentration: 0.8530 ug/mL

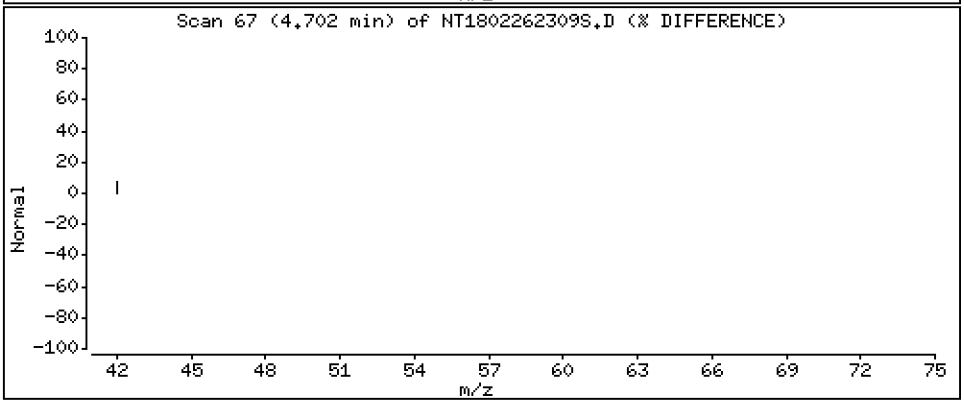












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262309S.D
Lab Smp Id: BLA0410-SRM2
Inj Date : 26-FEB-2023 17:12
Operator : YZ Inst ID: nt18.i
Smp Info : BLA0410-SRM2
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)	
$	1	2-Fluorophenol	112	6.771	6.748	(0.759)	473037	5.44574	5.446	(R)
	3	Phenol	94	8.332	8.324	(0.934)	225389	1.98900	1.989	
	7	1,3-Dichlorobenzene	146	8.857	8.850	(0.993)	63332	0.55819	0.5582	
*	8	1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	269135	4.00000		
	9	1,4-Dichlorobenzene	146	Compound Not Detected.						
	11	Benzyl alcohol	79	Compound Not Detected.						
	12	1,2-Dichlorobenzene	146	9.300	9.300	(1.043)	1600	0.01418	0.01418	
	13	2-Methylphenol	108	9.416	9.416	(1.056)	335040	3.59530	3.595	
	15	4-Methylphenol	108	9.688	9.680	(1.086)	453324	4.84837	4.848	
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.						
	22	2,4-Dimethylphenol	107	10.715	10.715	(0.943)	324587	3.57169	3.572	
	24	Benzoic acid	105	11.122	11.088	(0.979)	30993	0.84440	0.8444	(M)
	26	1,2,4-Trichlorobenzene	180	11.285	11.285	(0.993)	72186	0.77567	0.7757	
*	27	Naphthalene-d8	136	11.362	11.370	(1.000)	1018568	4.00000		
	30	Hexachlorobutadiene	225	11.764	11.772	(1.035)	63380	1.13512	1.135	
	39	Dimethylphthalate	163	14.465	14.465	(0.968)	659402	3.31673	3.317	
*	42	Acenaphthene-d10	162	14.944	14.945	(1.000)	517478	4.00000		
	50	Diethylphthalate	149	15.911	15.911	(1.065)	57572	0.31690	0.3169	
	54	N-Nitrosodiphenylamine	169	16.289	16.281	(0.907)	314610	2.26039	2.260	
	57	Hexachlorobenzene	284	17.338	17.338	(0.966)	852	0.01275	0.01275	
	58	Pentachlorophenol	266	17.702	17.702	(0.986)	67332	3.37369	3.374	
*	59	Phenanthrene-d10	188	17.950	17.950	(1.000)	962042	4.00000		
$	66	Terphenyl-d14	244	21.099	21.091	(0.918)	698804	4.34858	4.349	(R)
	67	Butylbenzylphthalate	149	22.020	22.020	(0.958)	383062	2.67172	2.672	
*	69	Chrysene-d12	240	22.988	22.980	(1.000)	887480	4.00000		
*	77	Perylene-d12	264	25.473	25.473	(1.000)	913912	4.00000		
	79	Dibenzo(a,h)anthracene	278	27.925	27.917	(1.096)	839695	3.09222	3.092	
	90	N-Nitrosodimethylamine	74	4.701	4.686	(0.527)	44100	0.85299	0.8530	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262309S.D
Lab Smp Id: BLA0410-SRM2
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	269135	-3.70
27 Naphthalene-d8	1065527	532764	2131054	1018568	-4.41
42 Acenaphthene-d10	544290	272145	1088580	517478	-4.93
59 Phenanthrene-d10	1003412	501706	2006824	962042	-4.12
69 Chrysene-d12	936975	468488	1873950	887480	-5.28
77 Perylene-d12	1057771	528886	2115542	913912	-13.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.36	-0.07
42 Acenaphthene-d10	14.95	14.45	15.45	14.94	-0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.00
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
77 Perylene-d12	25.47	24.97	25.97	25.47	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262309S.D

Lab ID: BLA0410-SRM2
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 17:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1802262303S.D

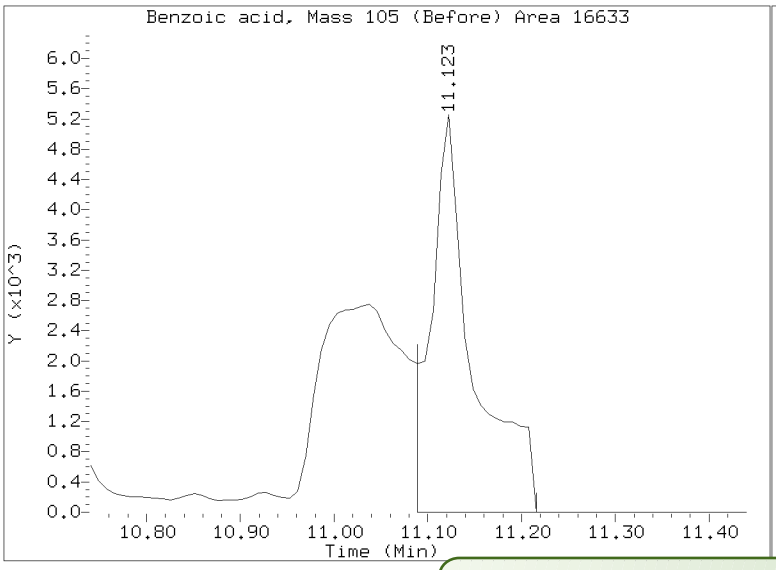
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

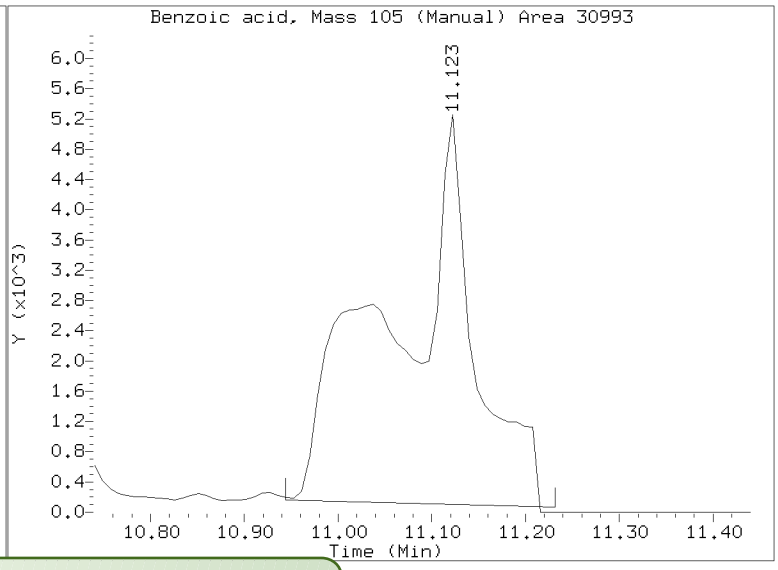
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/SIM.b/NT1802262309S.D
Injection Date: 26-FEB-2023 17:12
Lab ID:BLA0410-SRM2 Client ID:
Report Date: 03/24/2023 11:53





APPROVED

By Deenay Dunmore at 12:05 pm, Mar 24, 2023

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0411-SRM1
Batch: BLA0411
Initial/Final: 5 g / 0.5 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 01/25/2023 16:48
Standard ID: L000097
Expires: 10/31/2025
Standard Lot#: SQC017 (LRAD3953)
Description: SQC017-40G PAHs by HPLC40g

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Benzo(a)anthracene	110.00	119	1.65	10.0		108	26 - 174
Chrysene	231.00	234	2.11	10.0		101	43 - 156
Benzo(b)fluoranthene	318.00	483	2.74	10.0		152	0 - 211
Benzo(k)fluoranthene	95.100	135	1.52	10.0		142	0 - 226
Benzo(a)pyrene	159.00	156	1.23	10.0		98.3	0 - 206
Indeno(1,2,3-cd)pyrene	119.00	132	2.10	10.0		111	44 - 155
Dibenzo(a,h)anthracene	220.00	255	1.78	10.0		116	45 - 155

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Page 1

Date : 25-JAN-2023 16:48

Client ID:

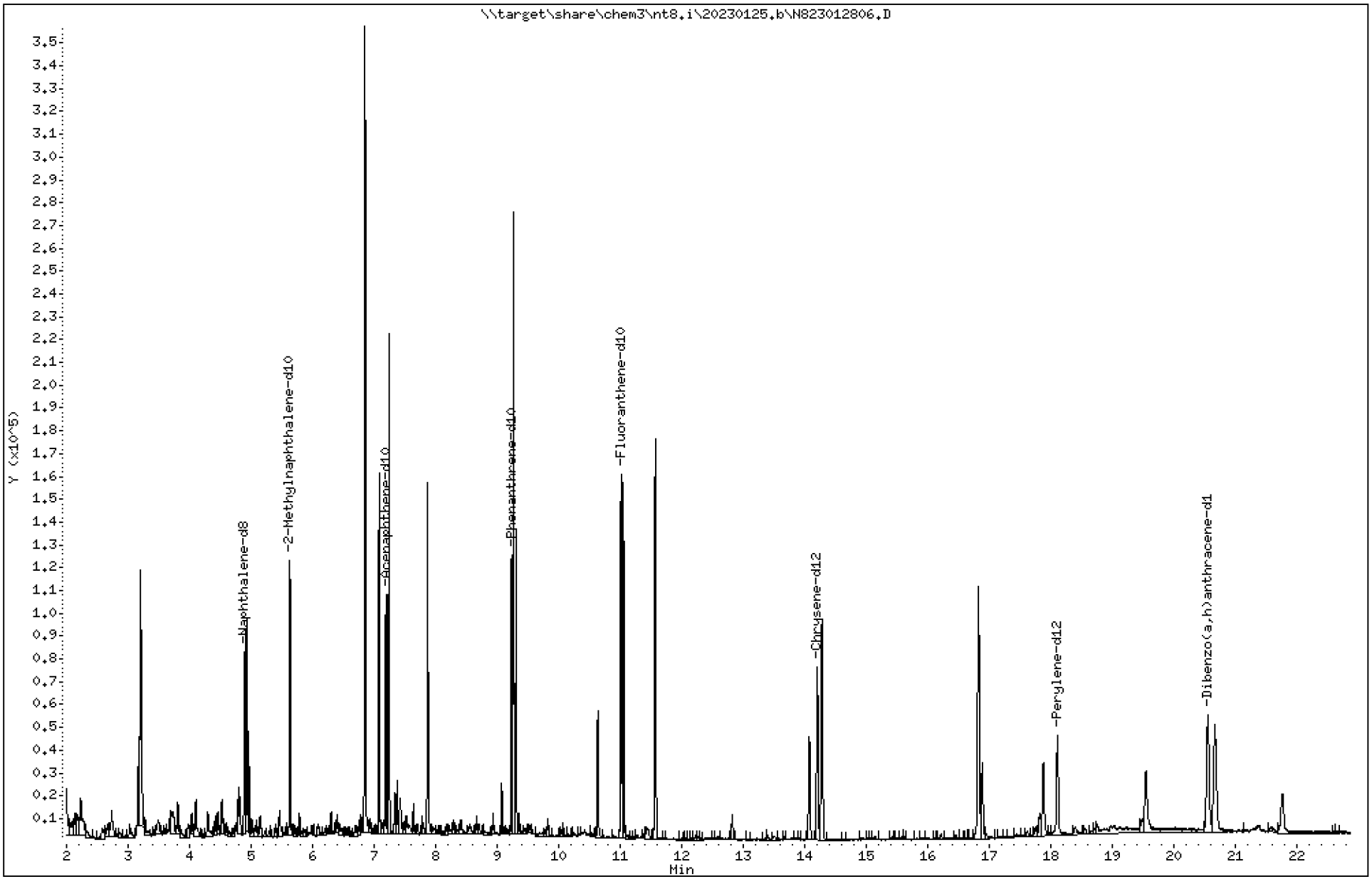
Instrument: nt8.i

Sample Info: BLA0411-SRM1,

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

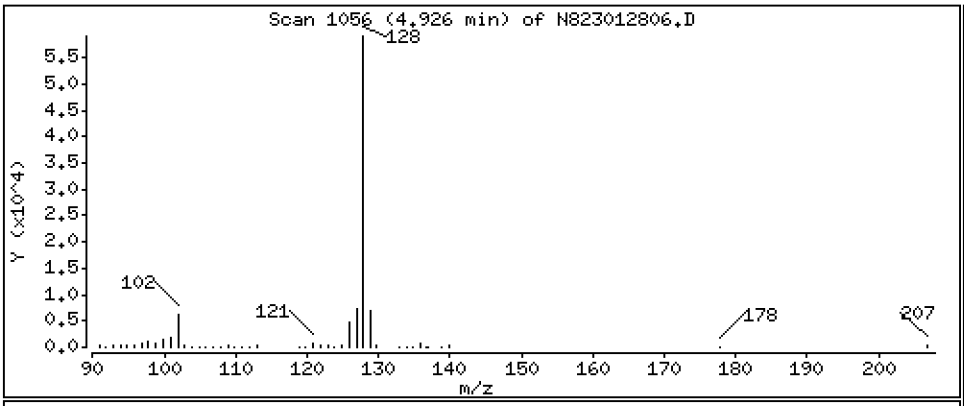
Operator: JZ

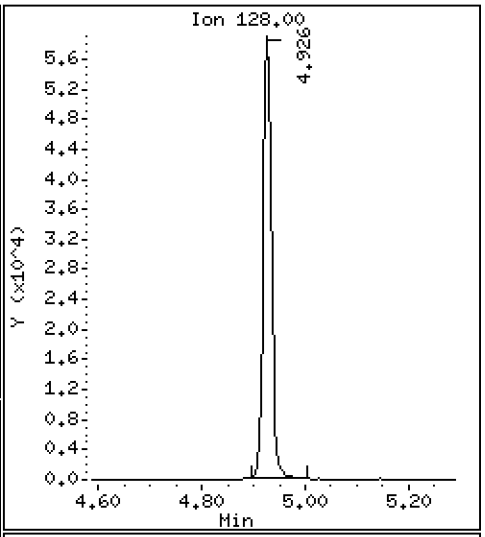
Column phase: Rxi-17sil

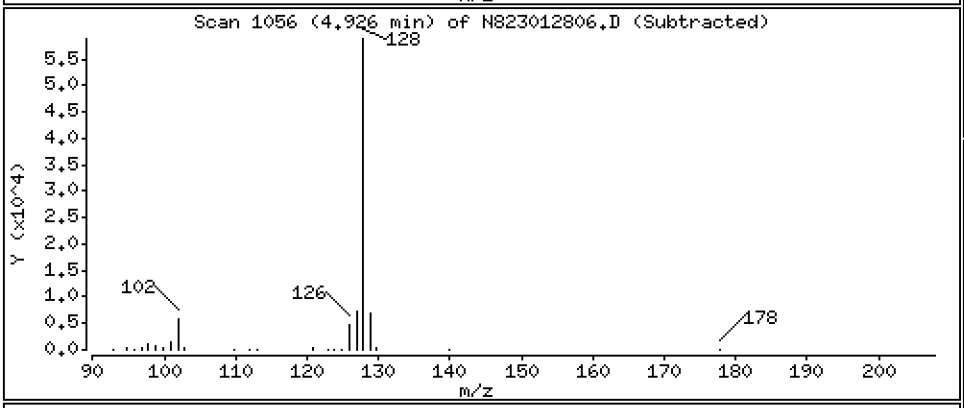
Column diameter: 0.25

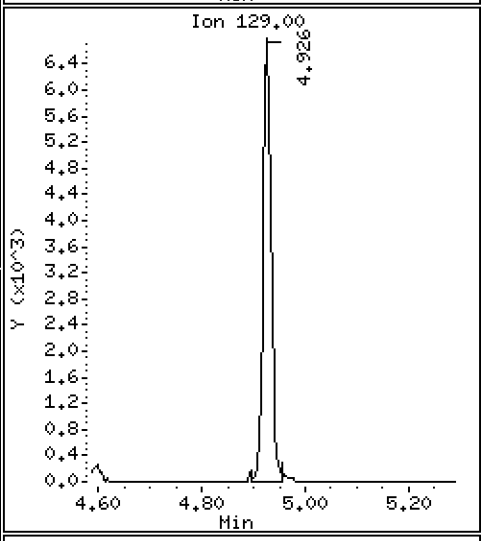
2 Naphthalene

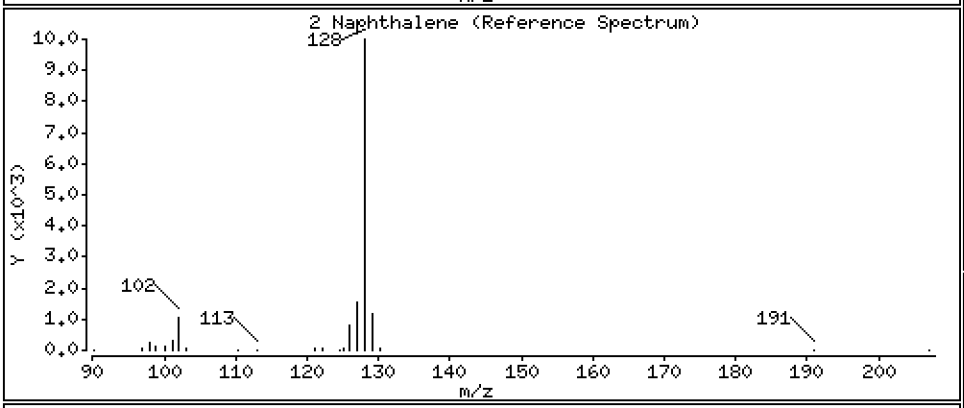
Concentration: 2.784 ug/mL

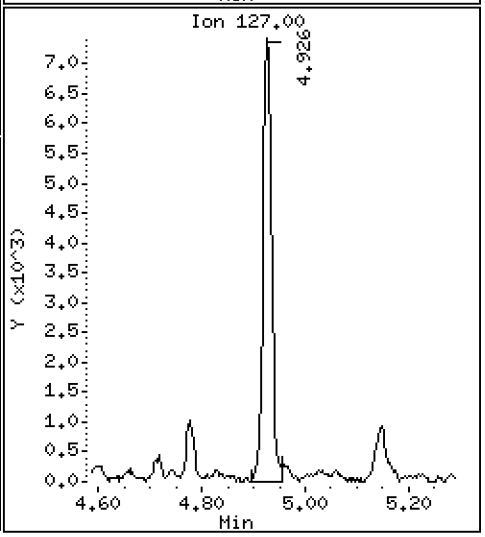


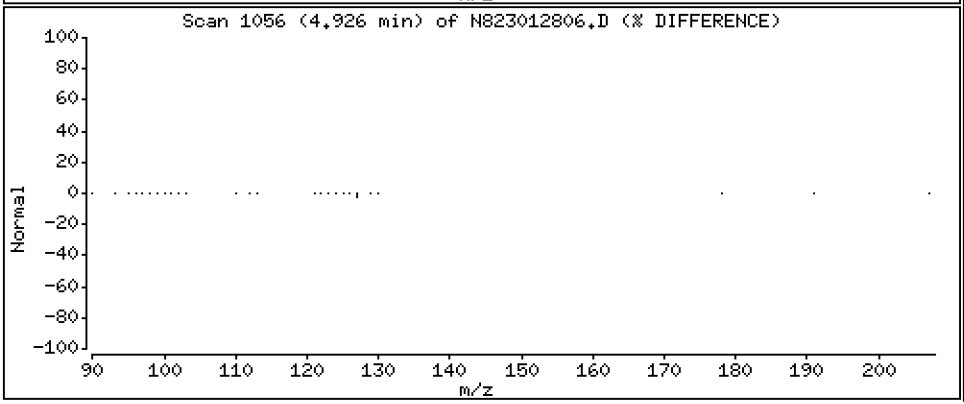












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

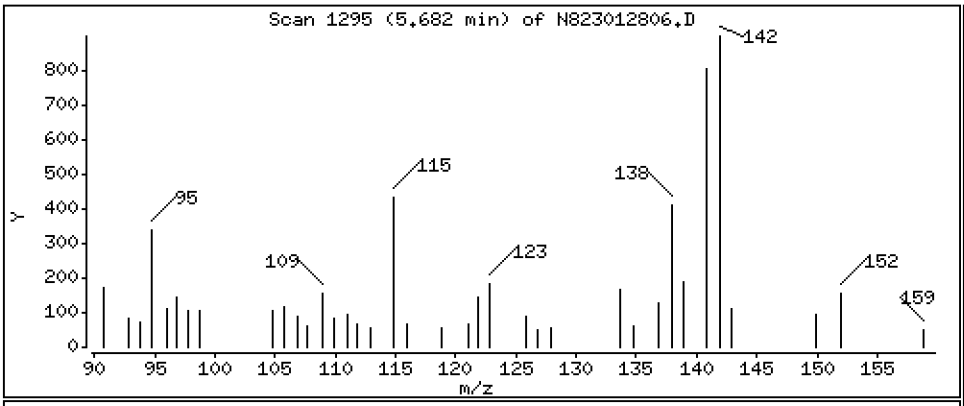
Operator: JZ

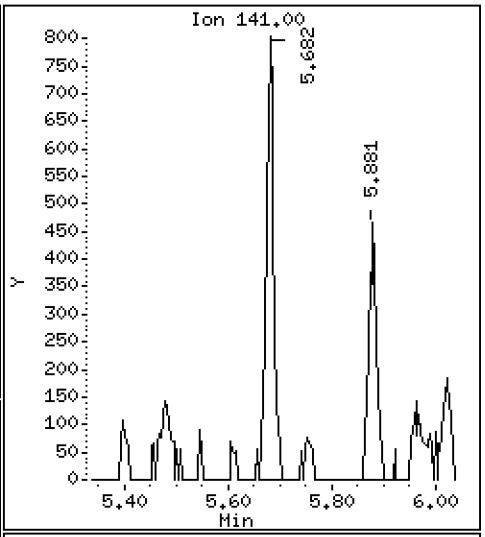
Column phase: Rxi-17sil

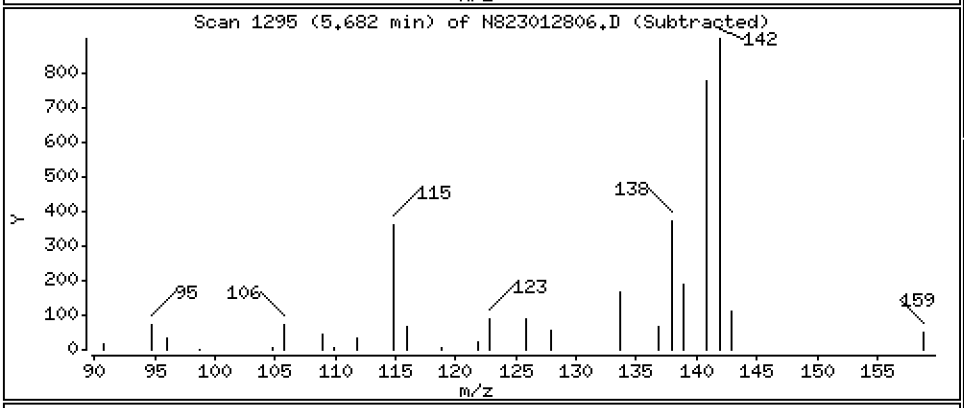
Column diameter: 0.25

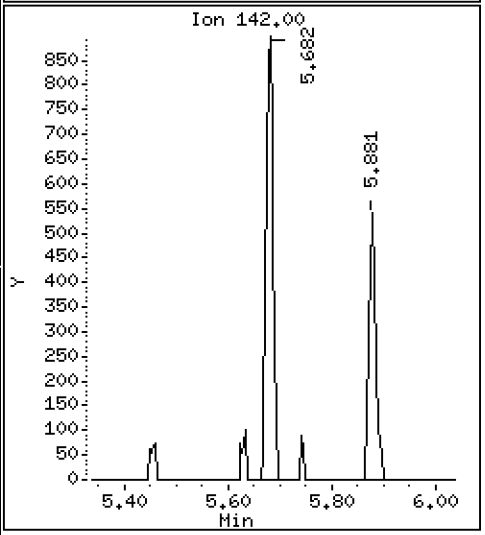
4 2-Methylnaphthalene

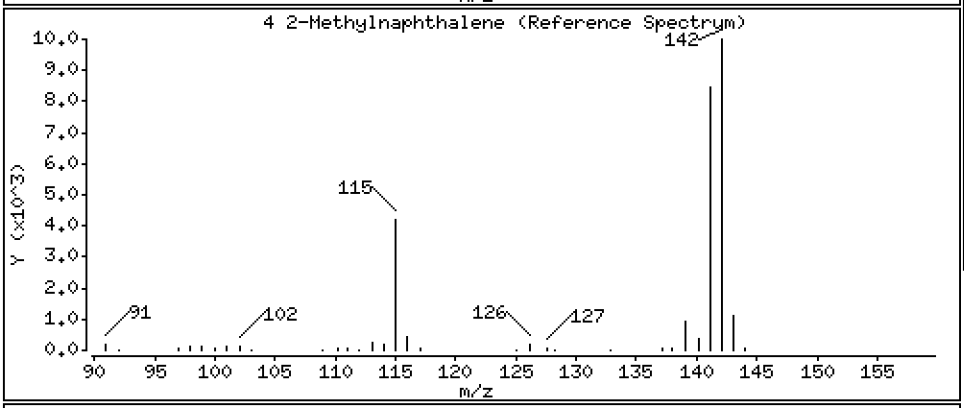
Concentration: 0.06358 ug/mL

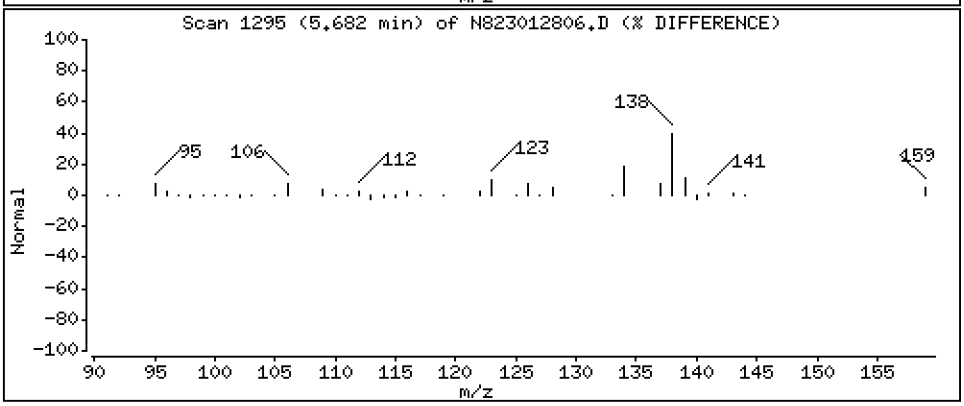












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Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

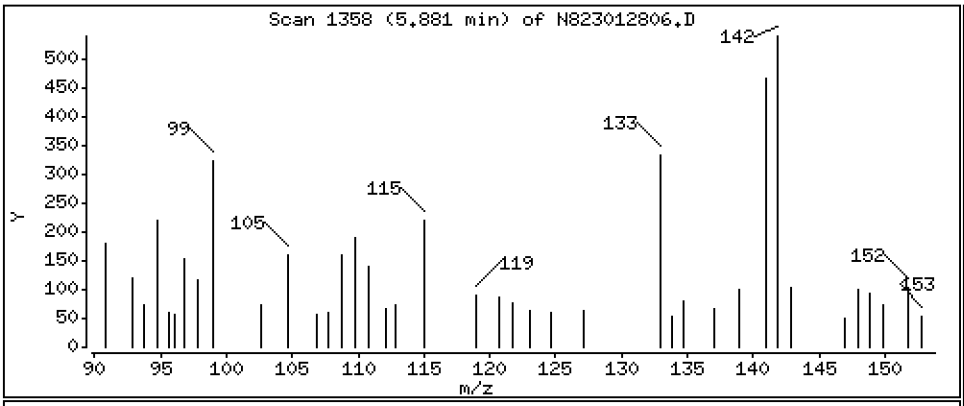
Operator: JZ

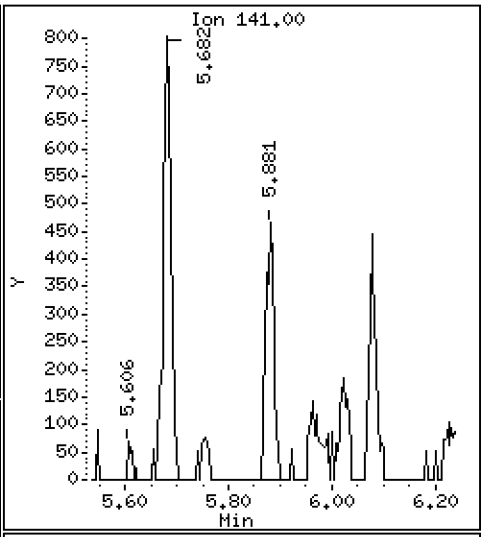
Column phase: Rxi-17sil

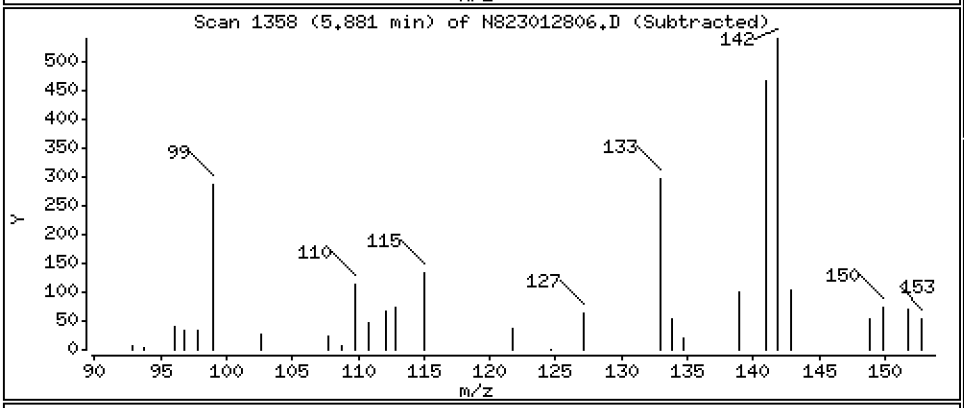
Column diameter: 0.25

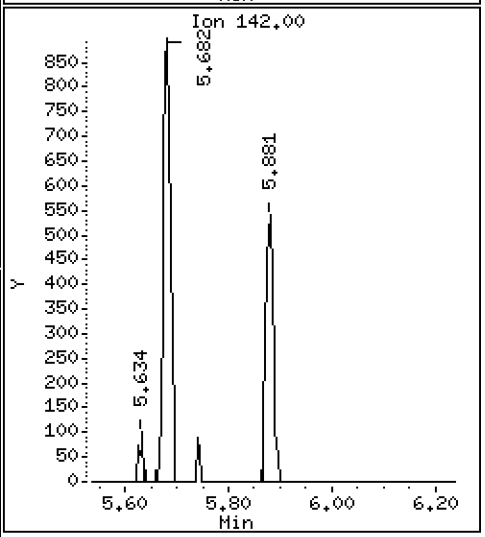
5 1-methylnaphthalene

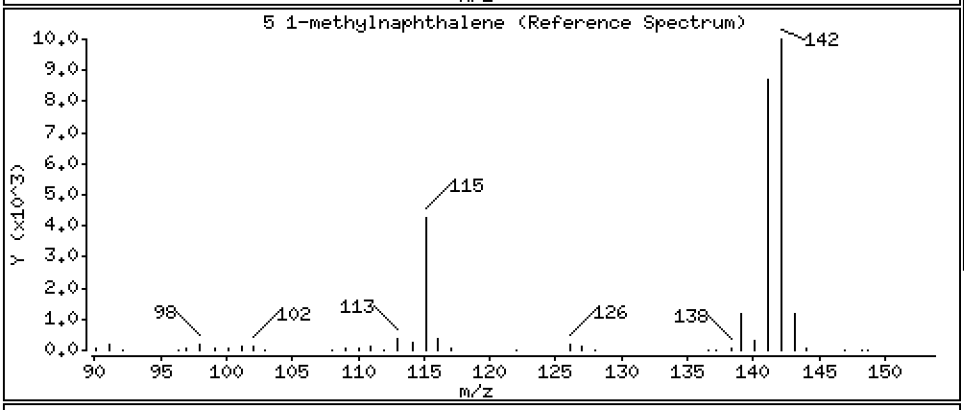
Concentration: 0.03792 ug/mL

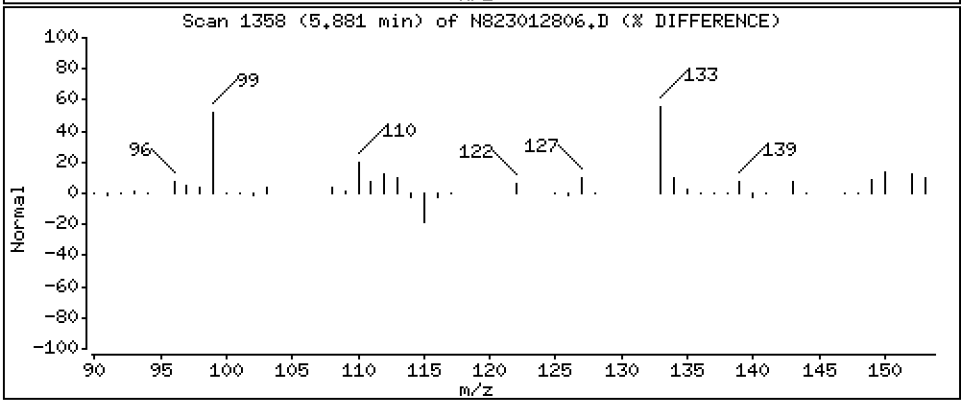












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Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

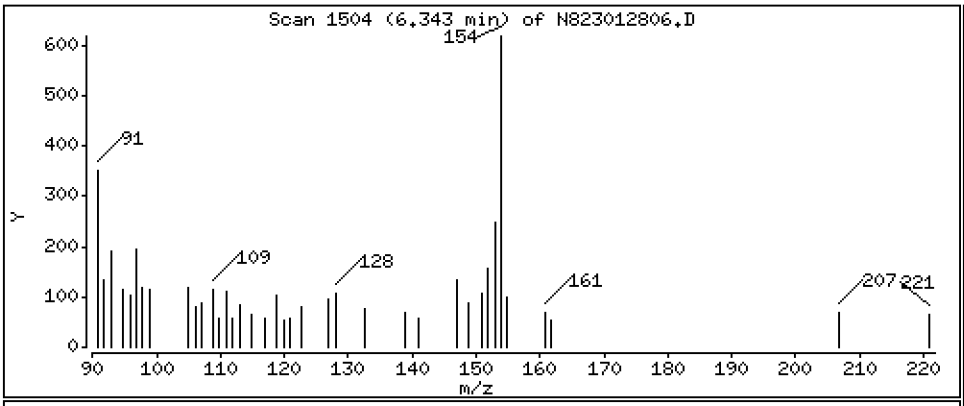
Operator: JZ

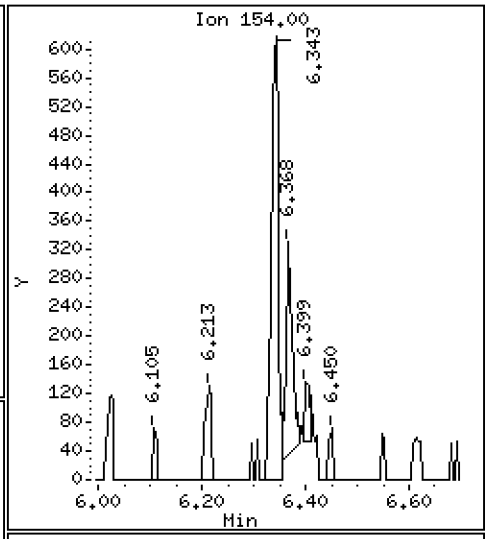
Column phase: Rxi-17sil

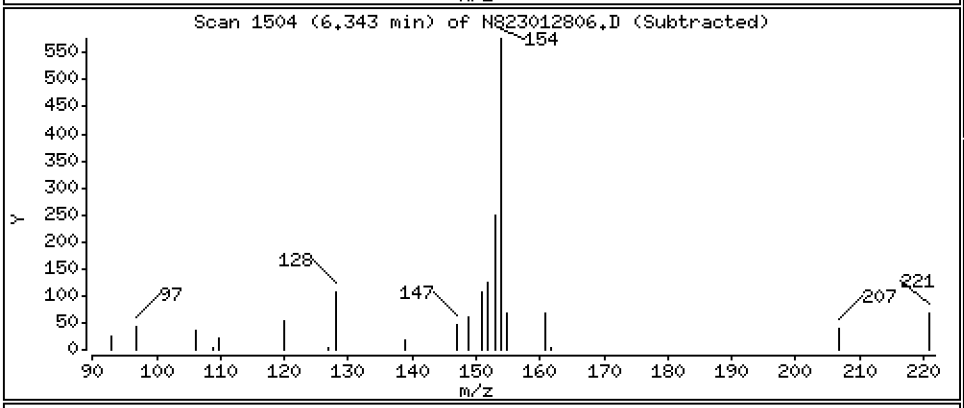
Column diameter: 0.25

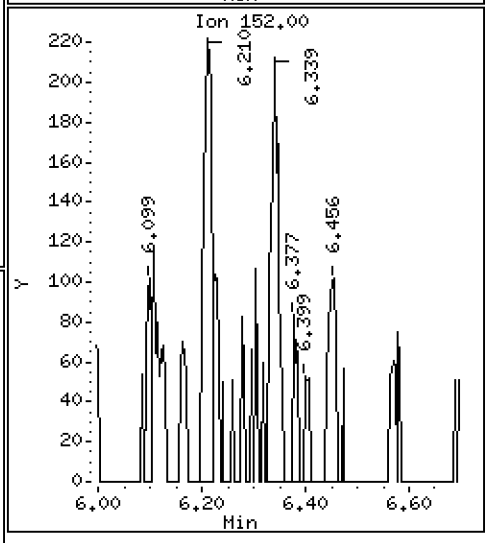
7 Biphenyl

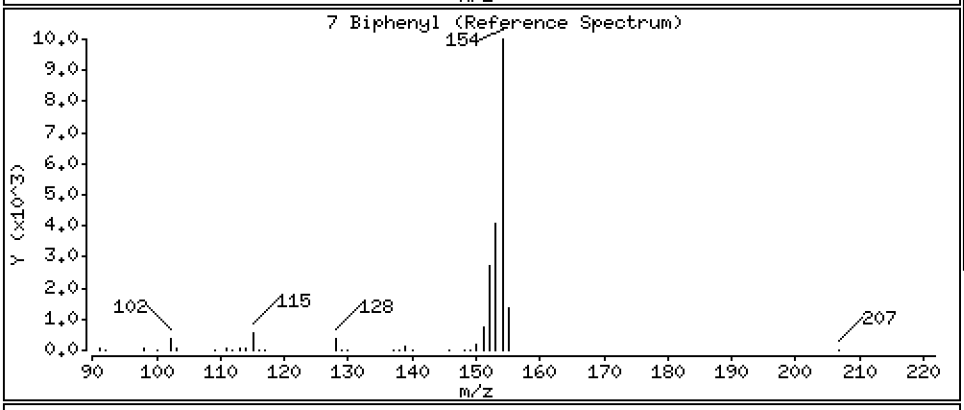
Concentration: 0.03055 ug/mL

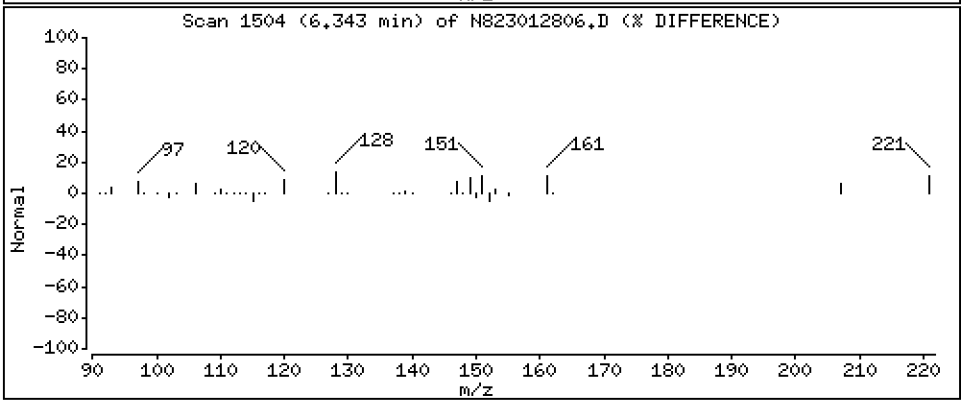












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Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

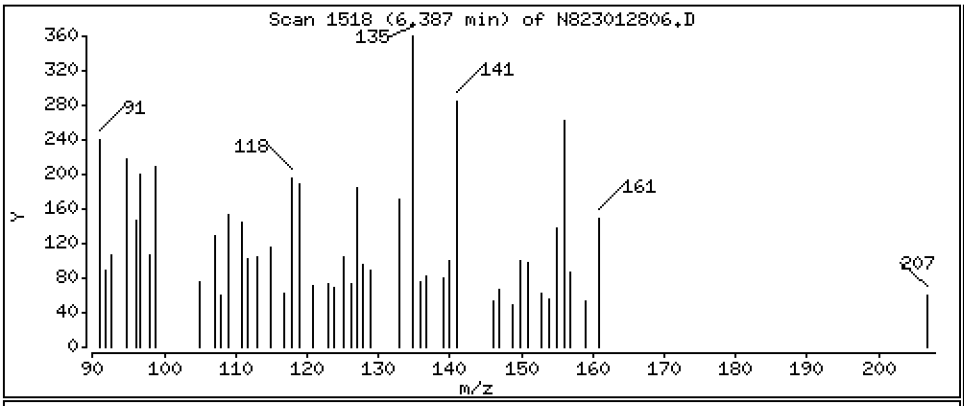
Operator: JZ

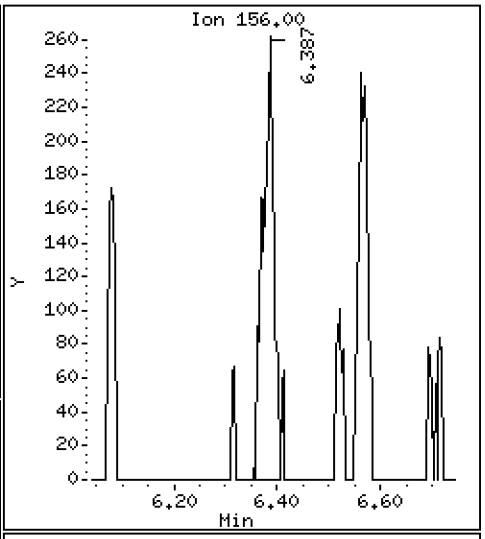
Column phase: Rxi-17sil

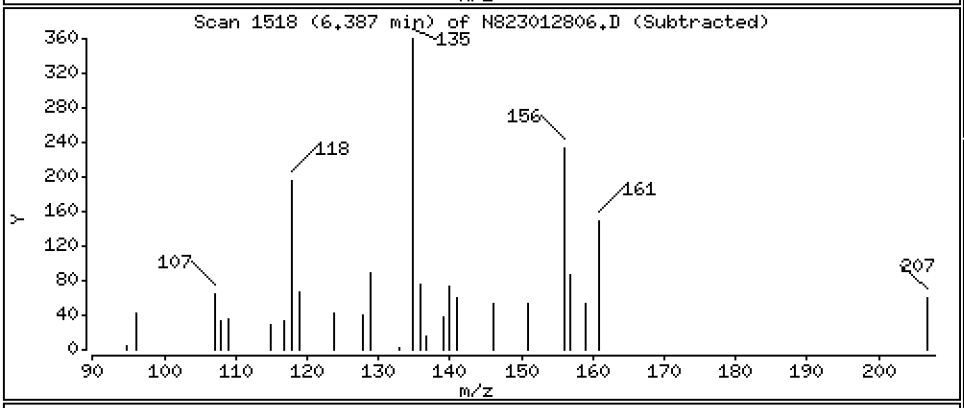
Column diameter: 0.25

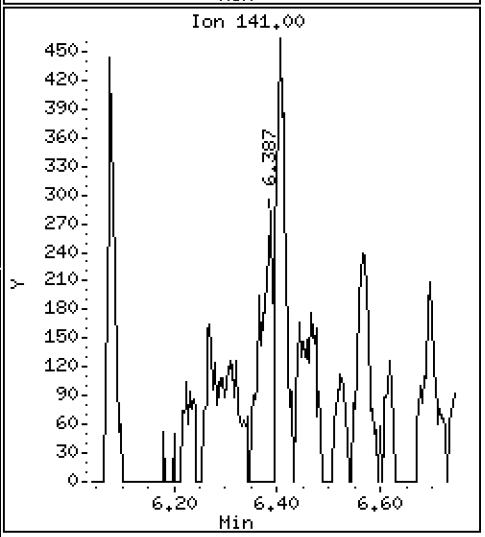
8 2,6-Dimethylnaphthalene

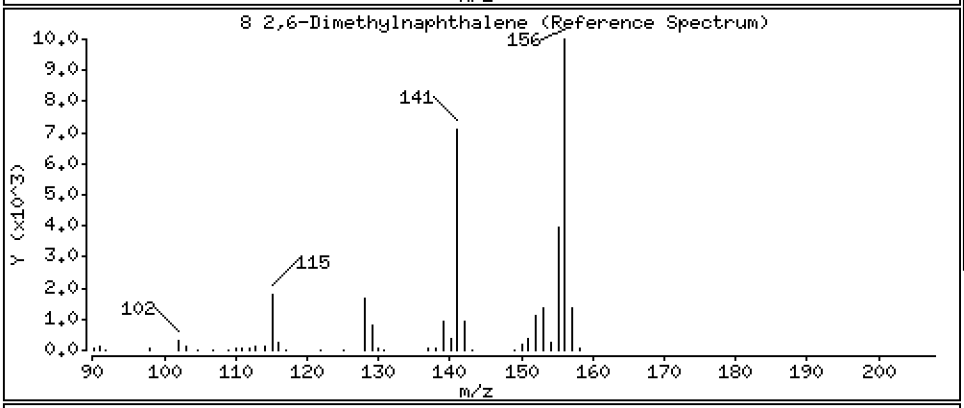
Concentration: 0.02826 ug/mL

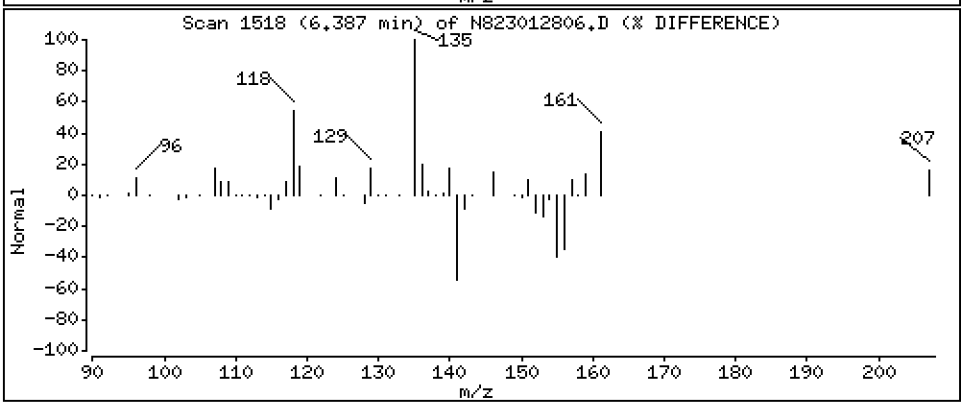












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Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

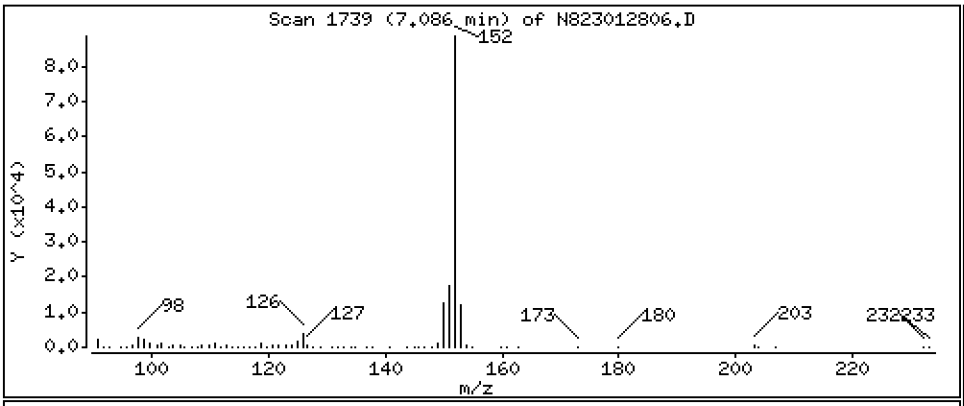
Operator: JZ

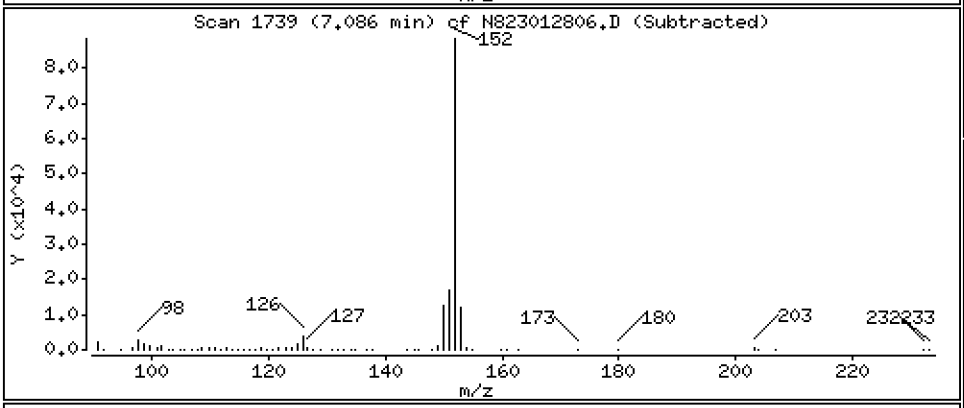
Column phase: Rxi-17sil

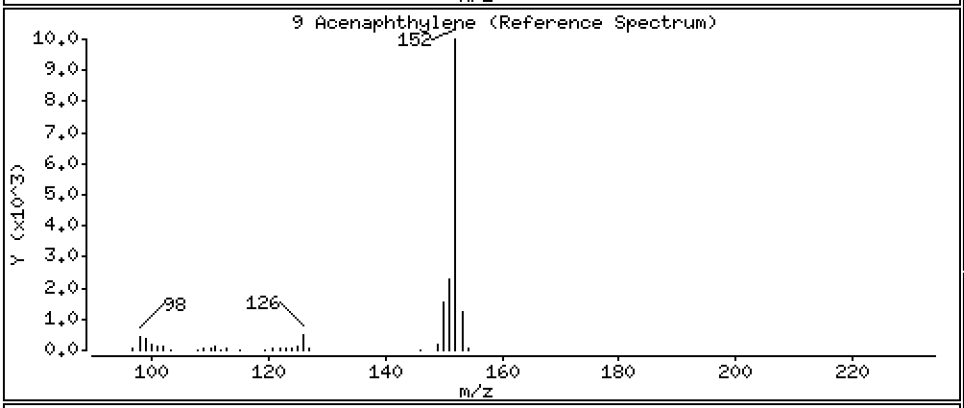
Column diameter: 0.25

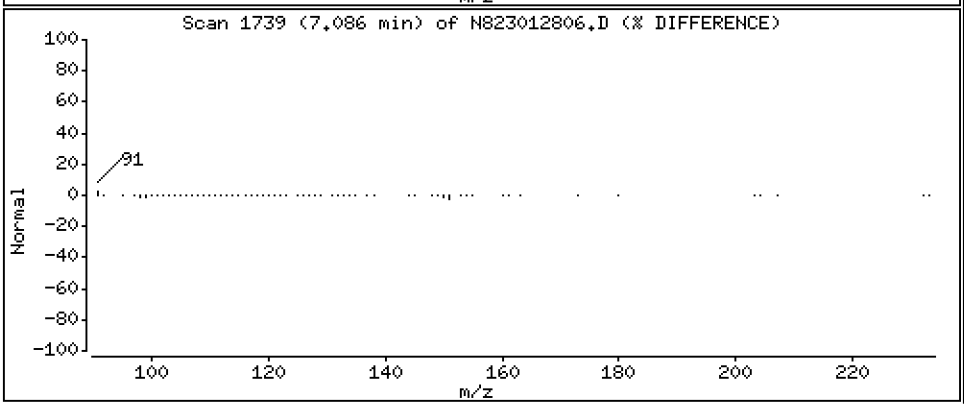
9 Acenaphthylene

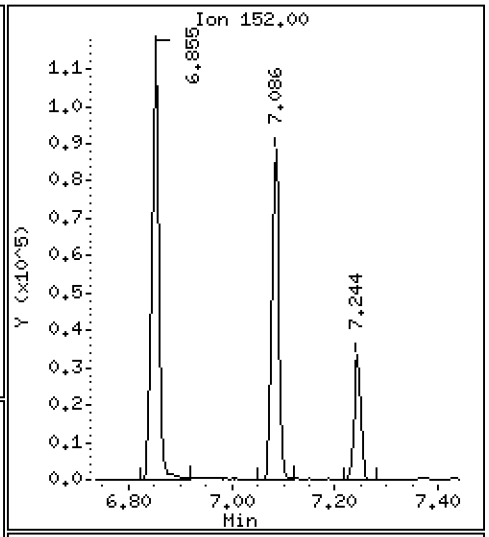
Concentration: 3.769 ug/mL

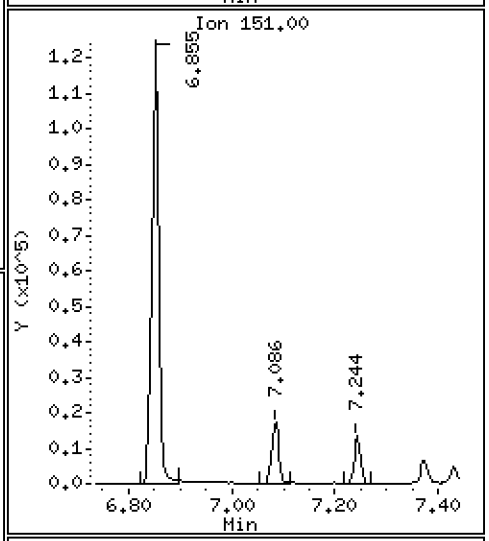


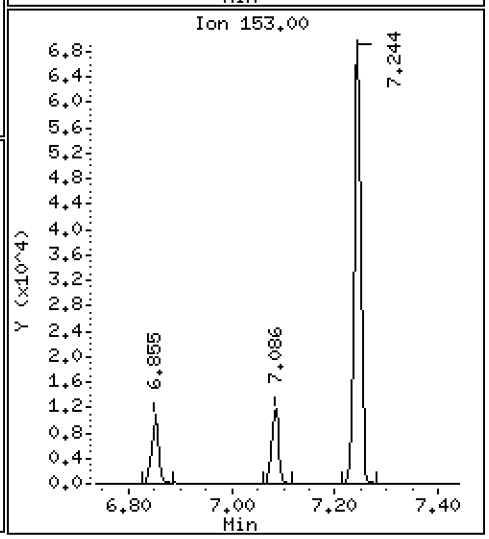












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Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

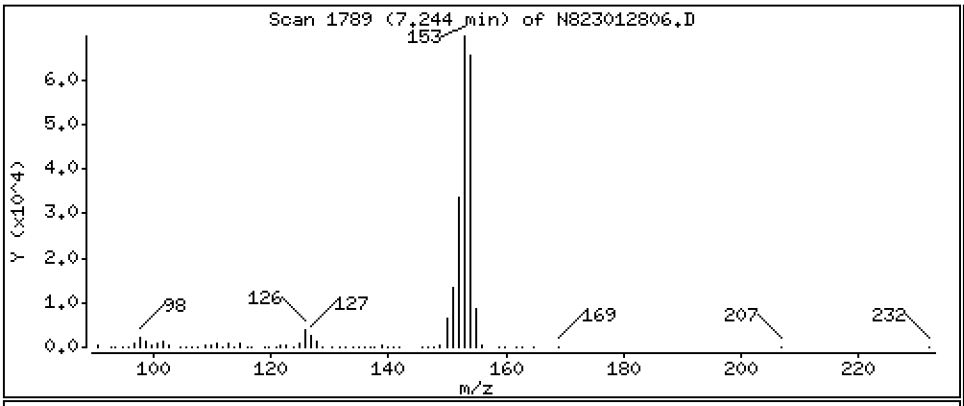
Operator: JZ

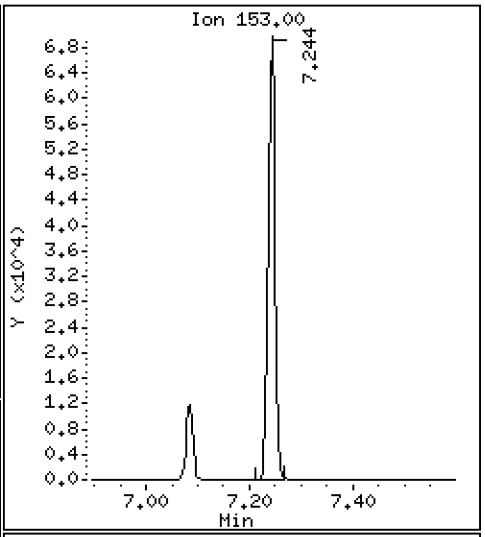
Column phase: Rxi-17sil

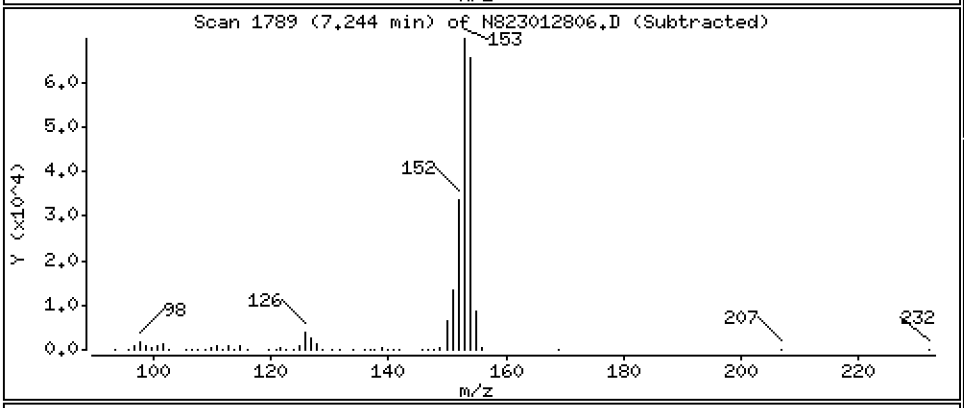
Column diameter: 0.25

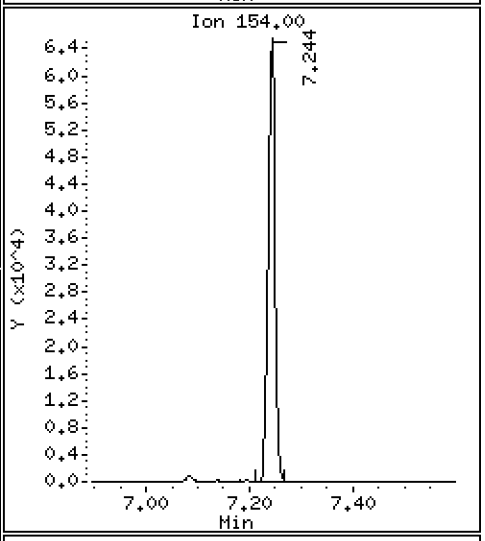
11 Acenaphthene

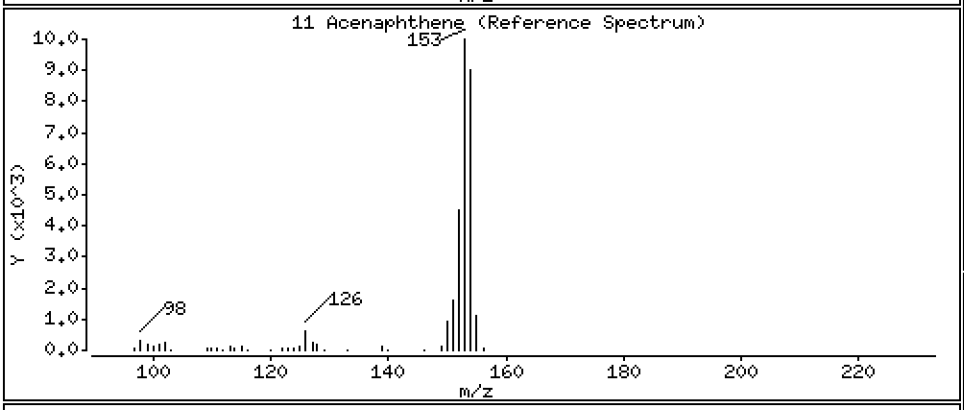
Concentration: 4.332 ug/mL

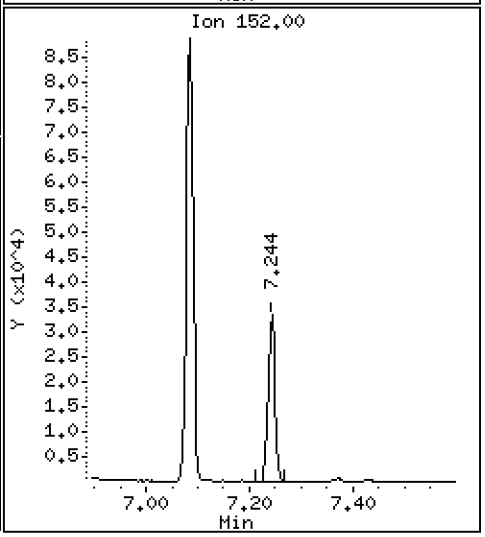


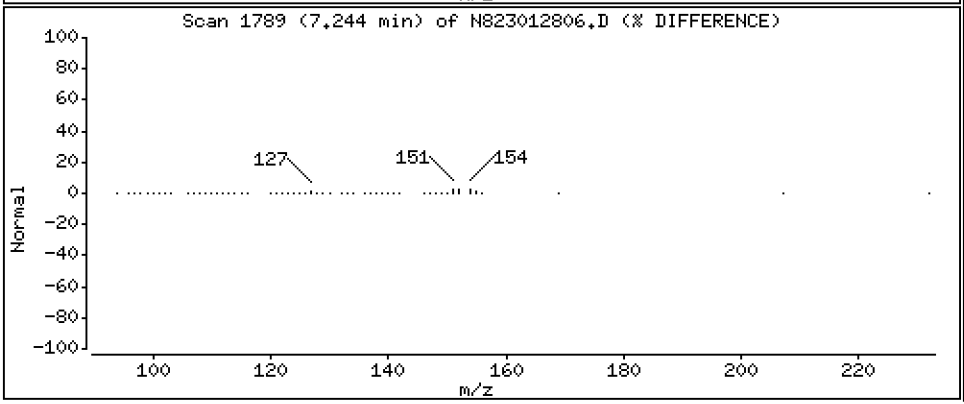












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Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

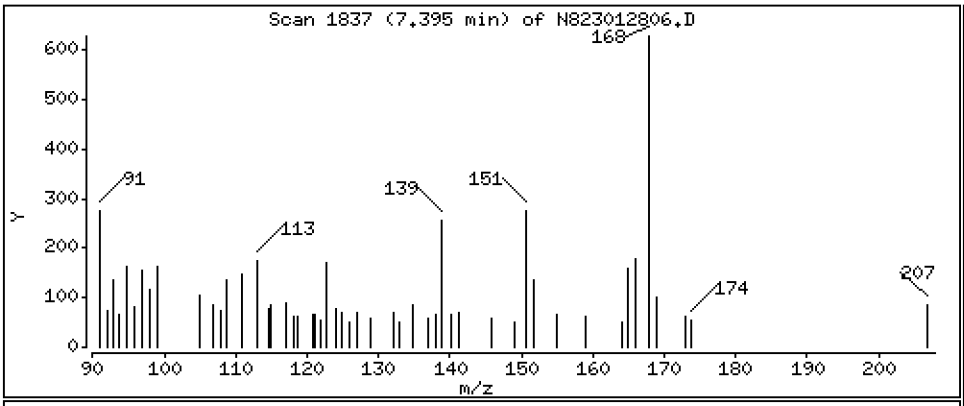
Operator: JZ

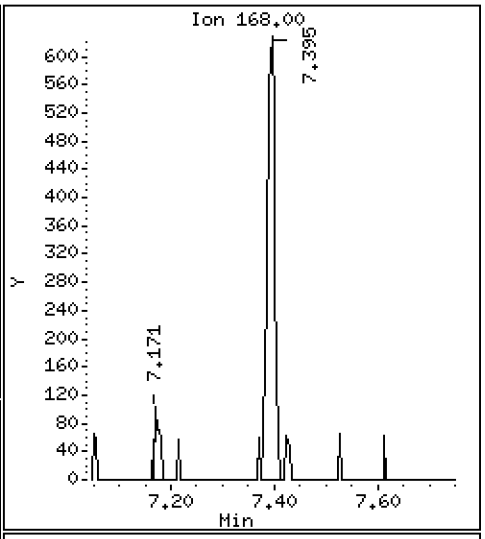
Column phase: Rxi-17sil

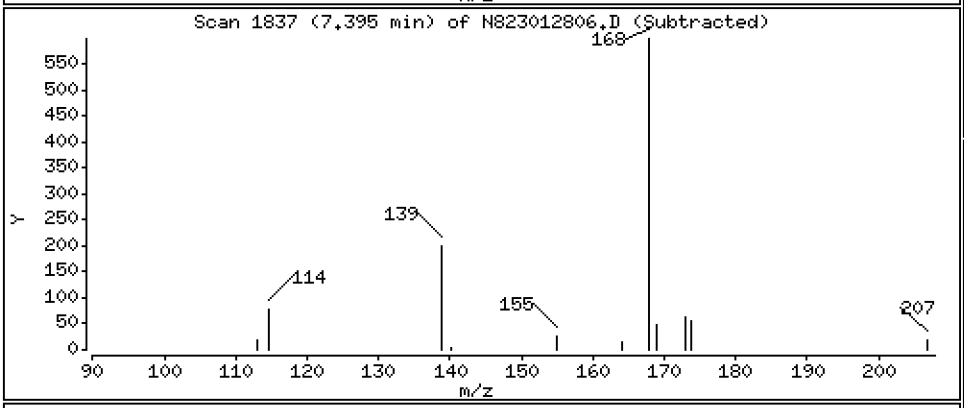
Column diameter: 0.25

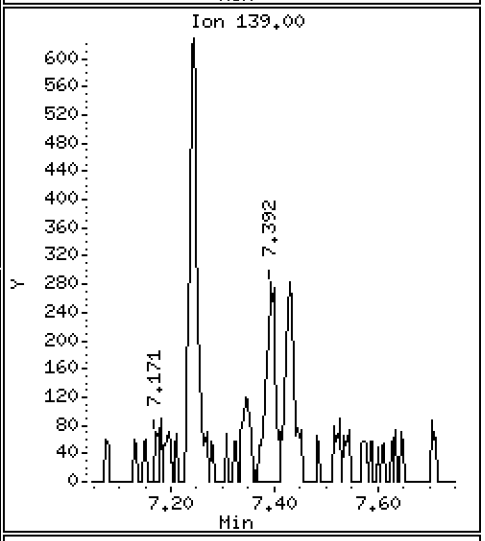
12 Dibenzofuran

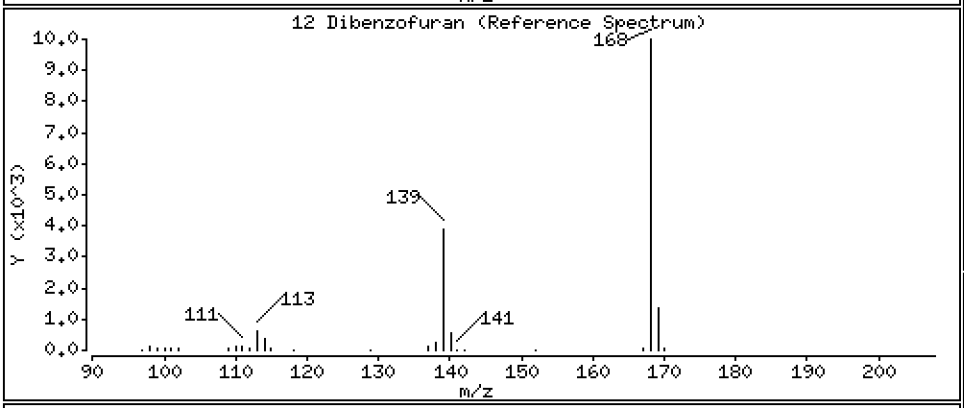
Concentration: 0.02887 ug/mL

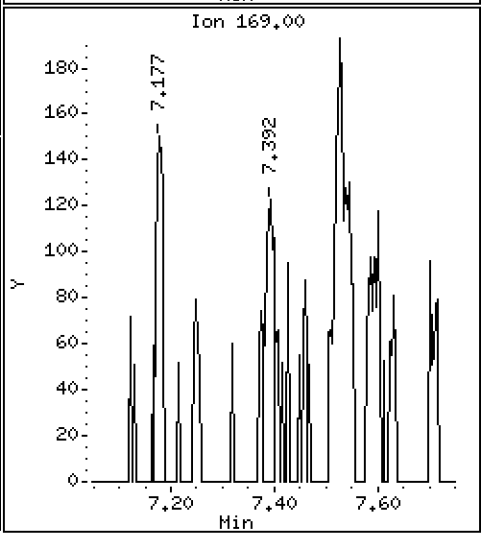


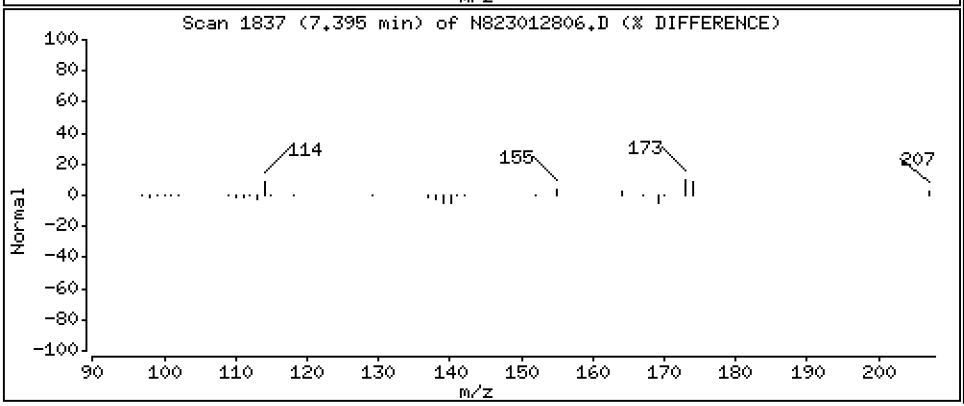












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

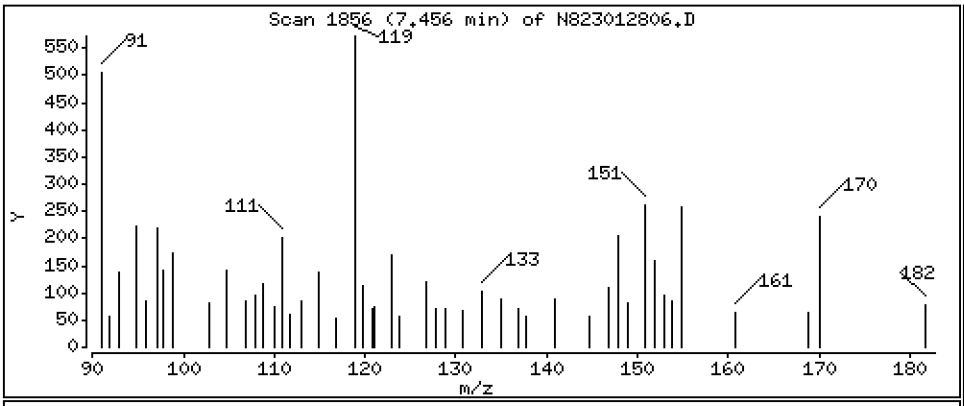
Operator: JZ

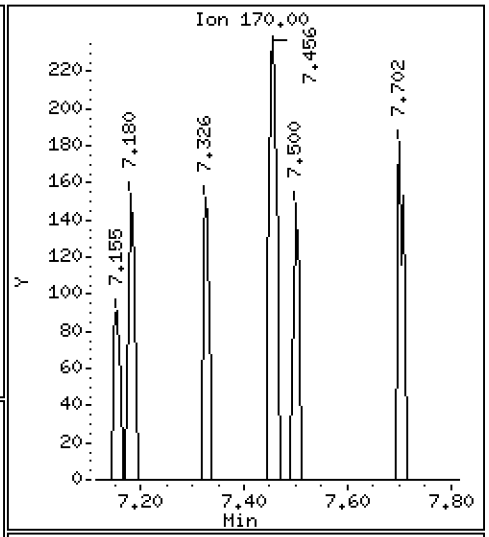
Column phase: Rxi-17sil

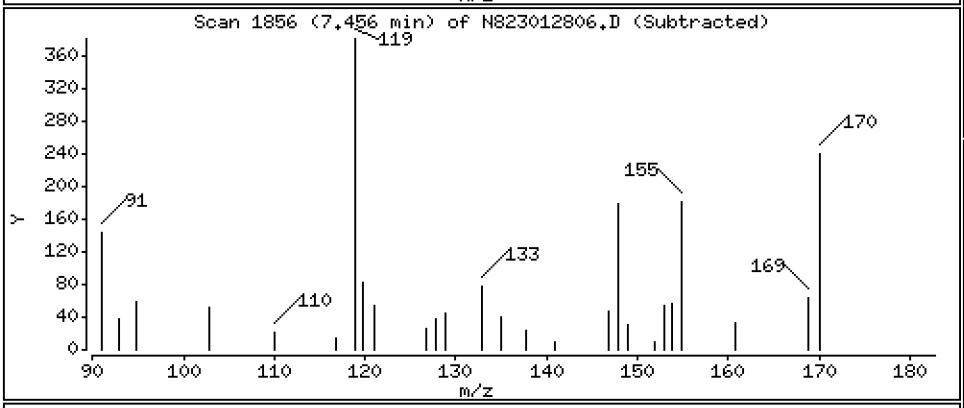
Column diameter: 0.25

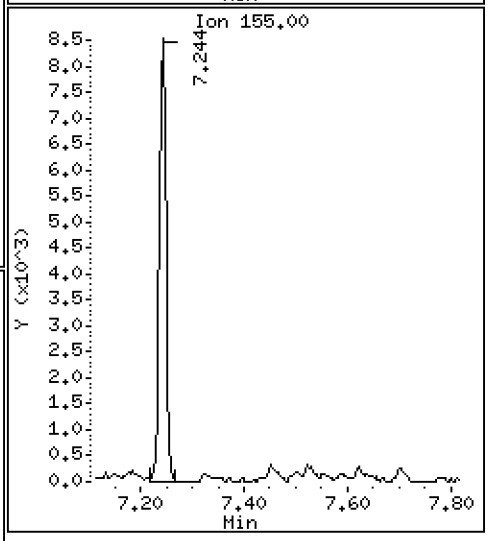
13 1,6,7-Trimethylnaphthalene

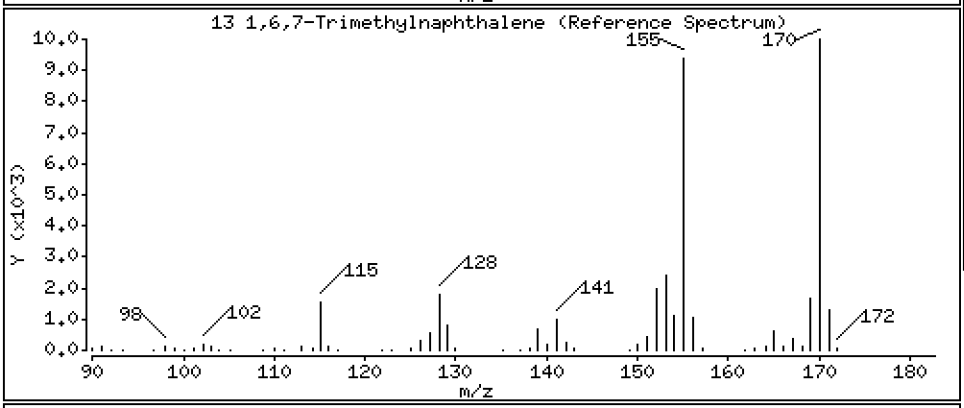
Concentration: 0.01735 ug/mL

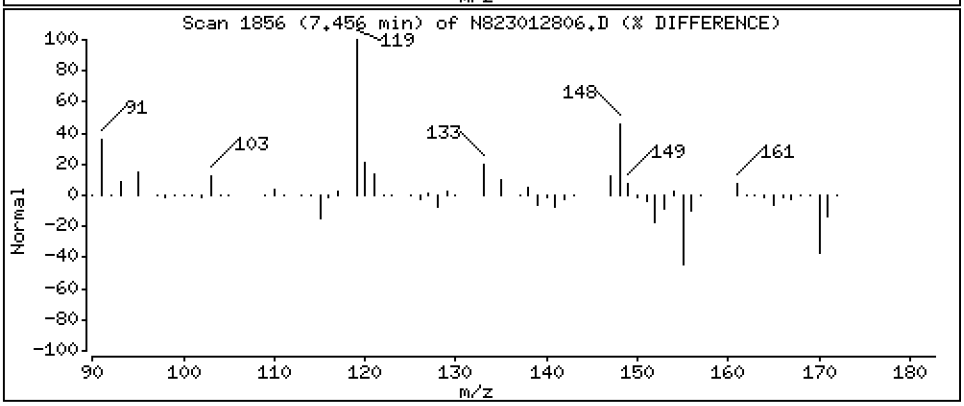












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Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

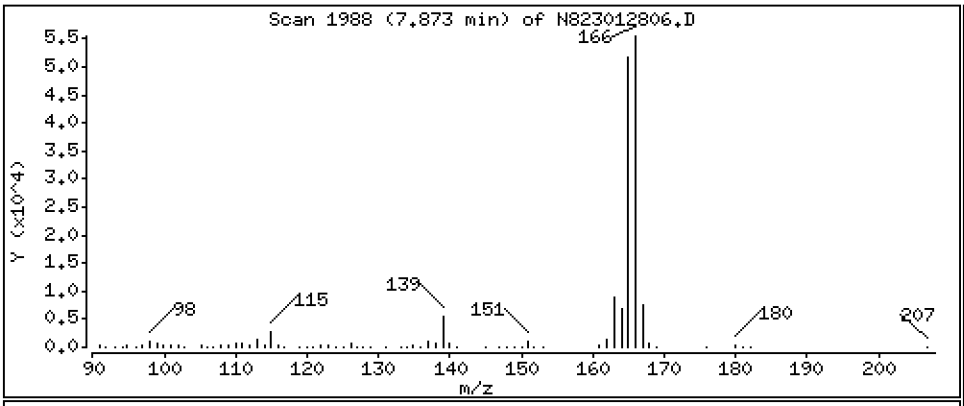
Operator: JZ

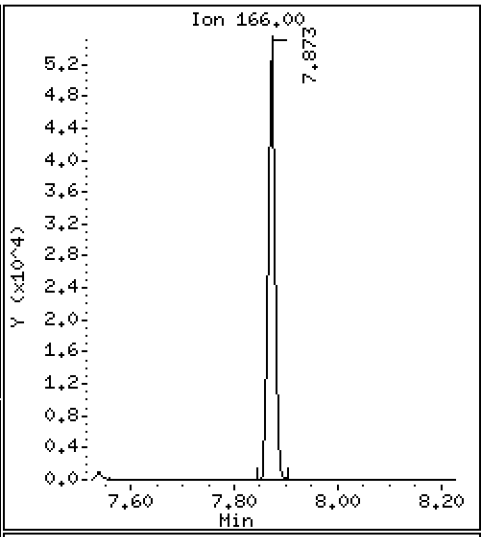
Column phase: Rxi-17sil

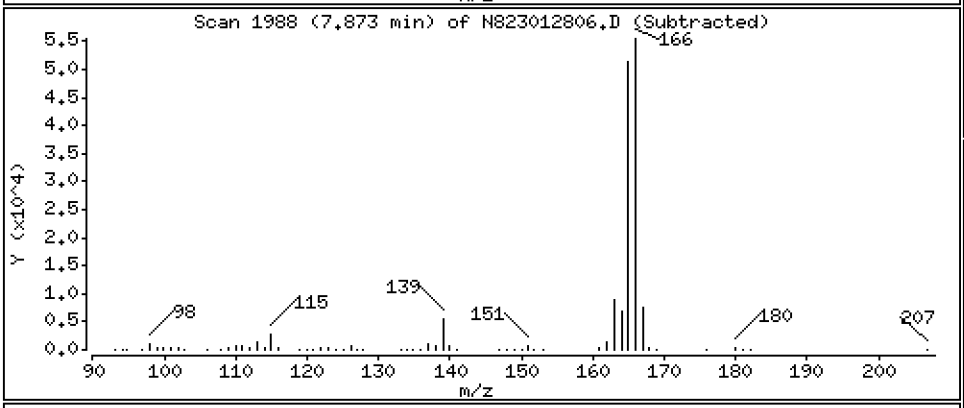
Column diameter: 0.25

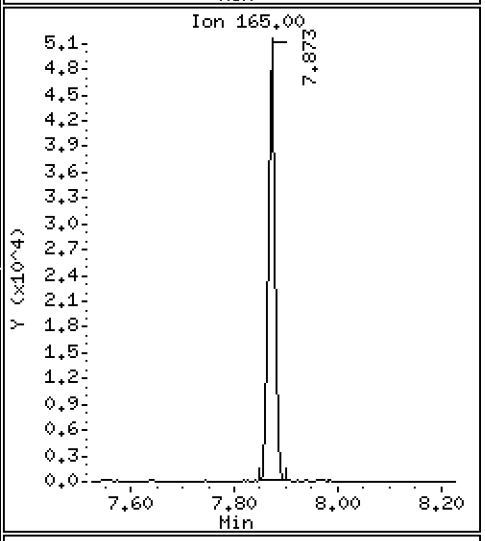
14 Fluorene

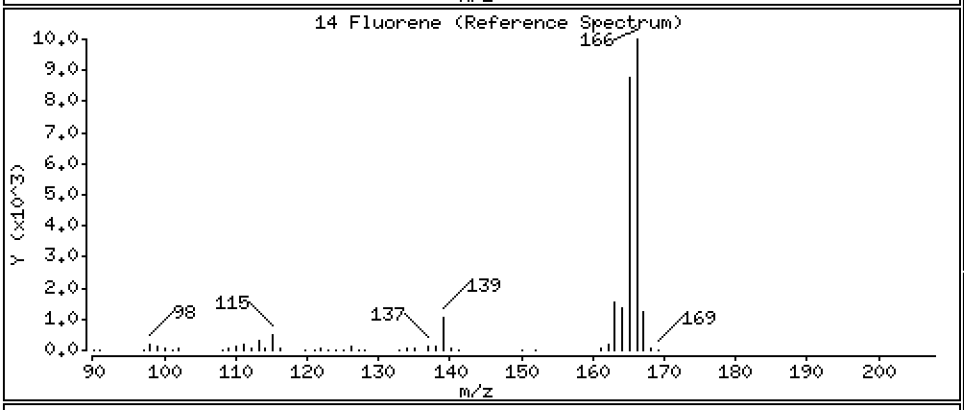
Concentration: 3.005 ug/mL

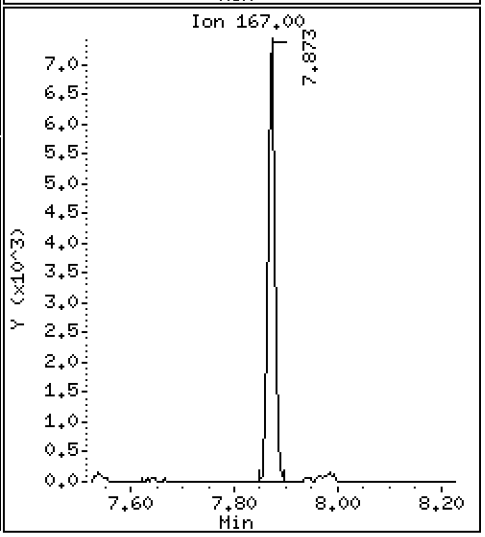


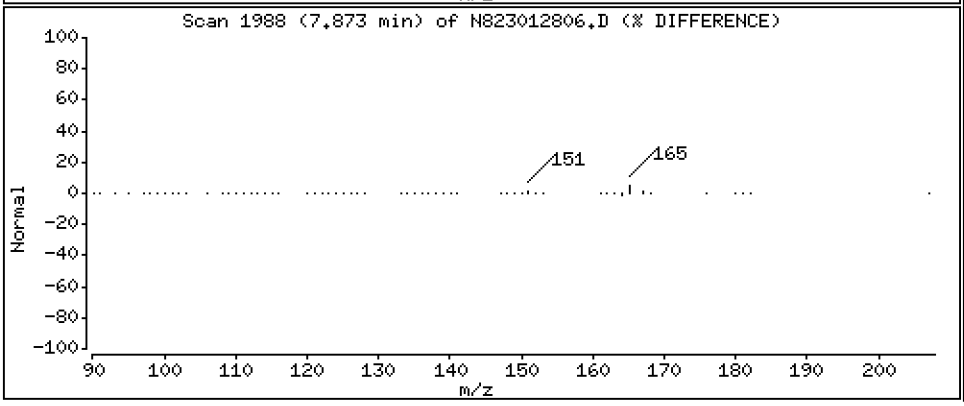












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Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

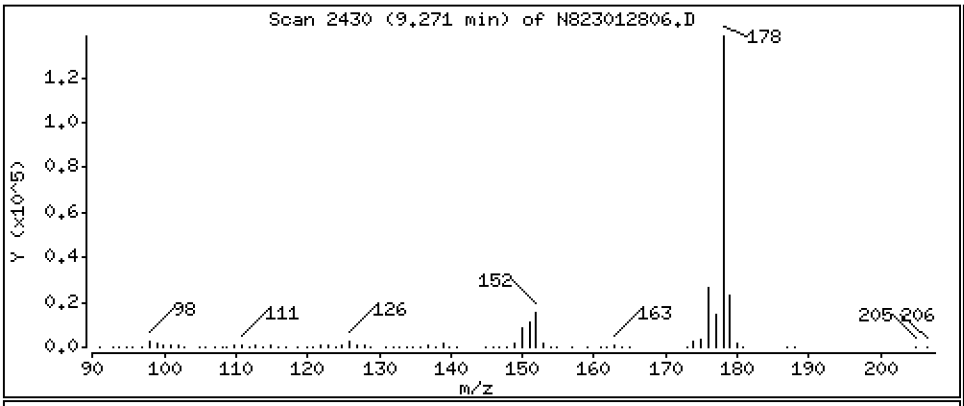
Operator: JZ

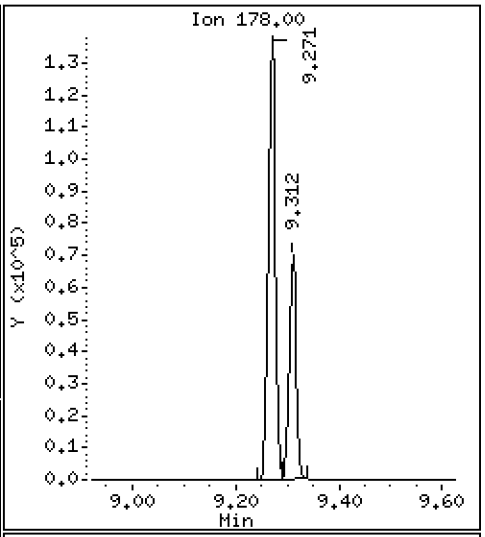
Column phase: Rxi-17sil

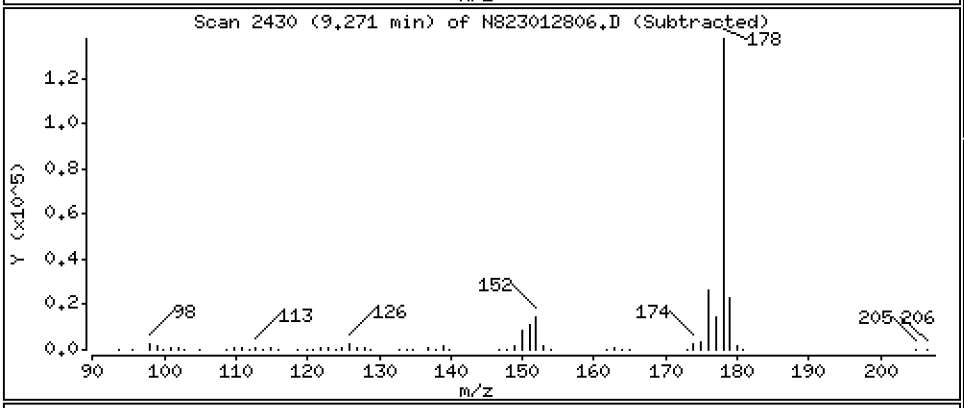
Column diameter: 0.25

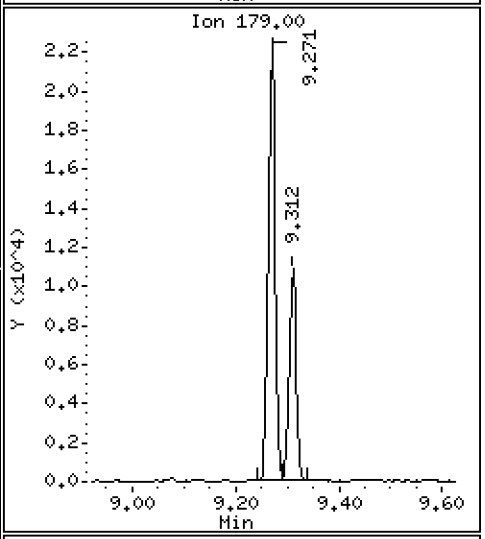
16 Phenanthrene

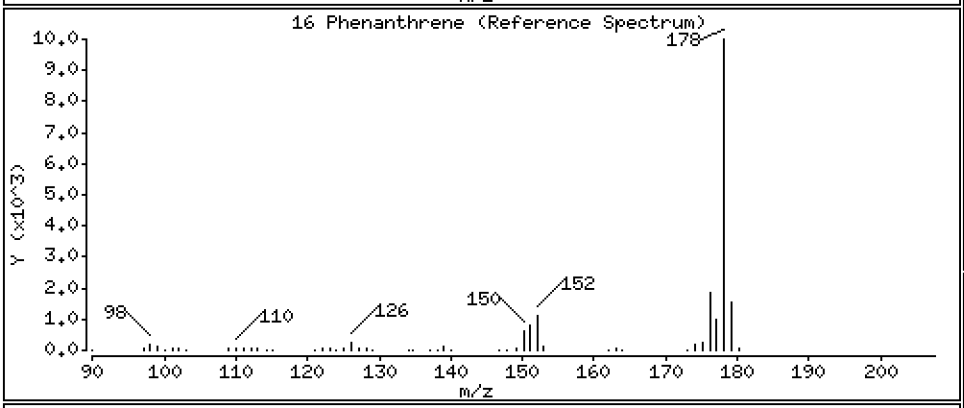
Concentration: 4.966 ug/mL

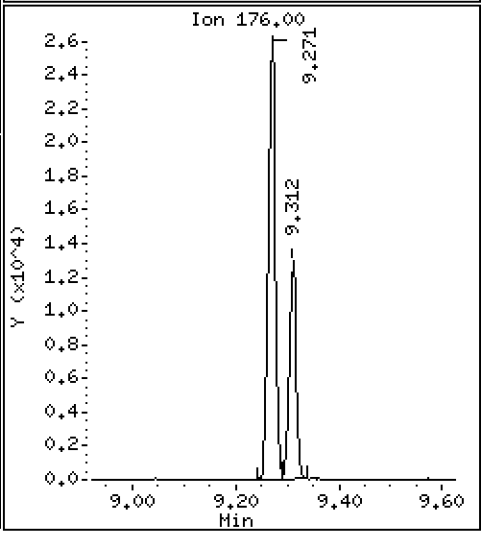


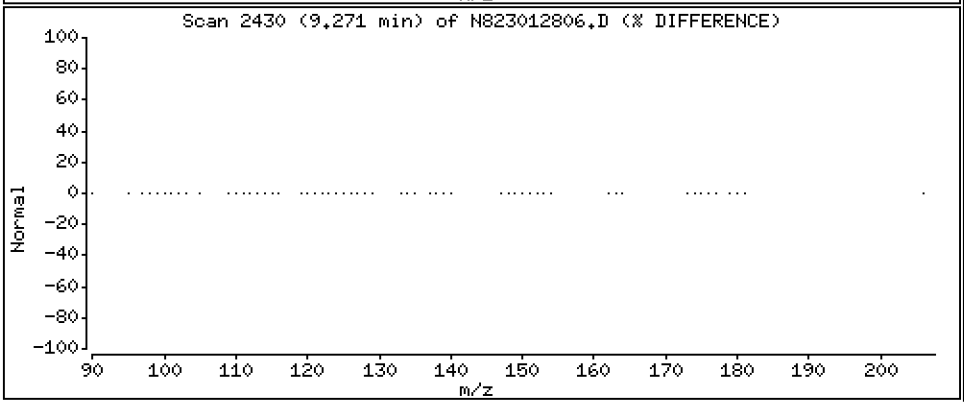












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Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

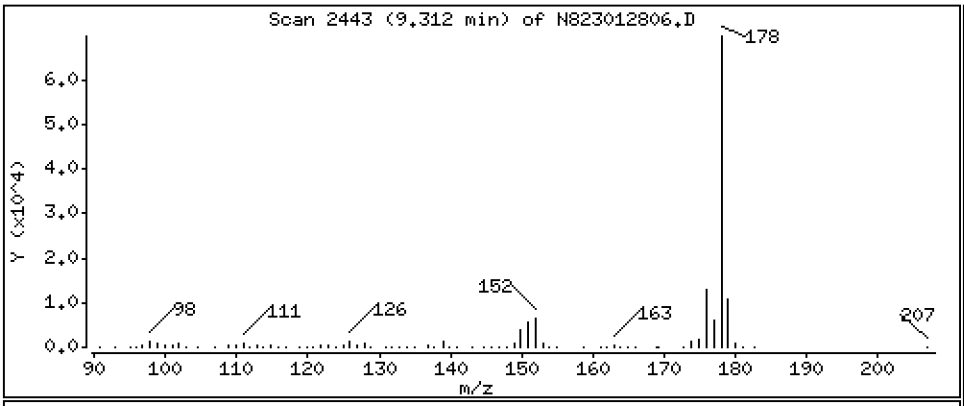
Operator: JZ

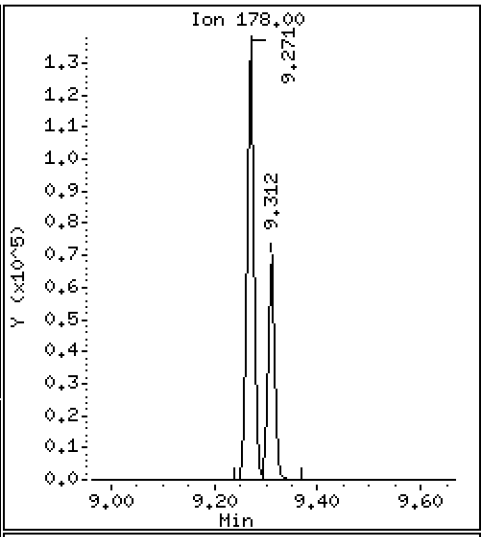
Column phase: Rxi-17sil

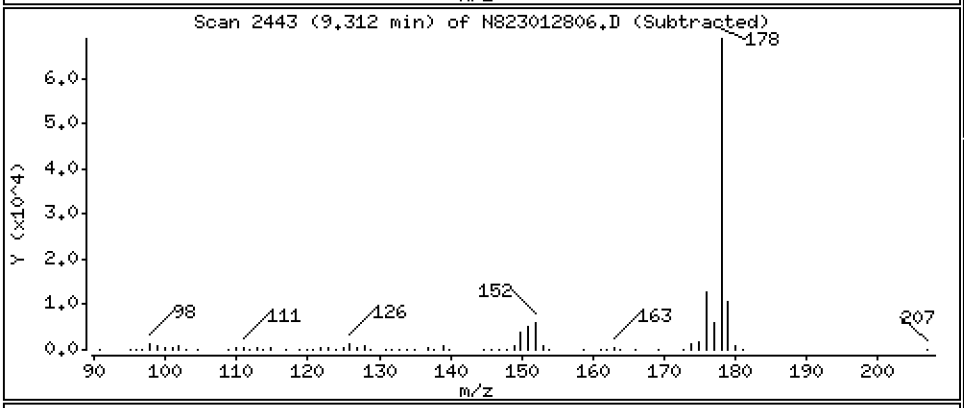
Column diameter: 0.25

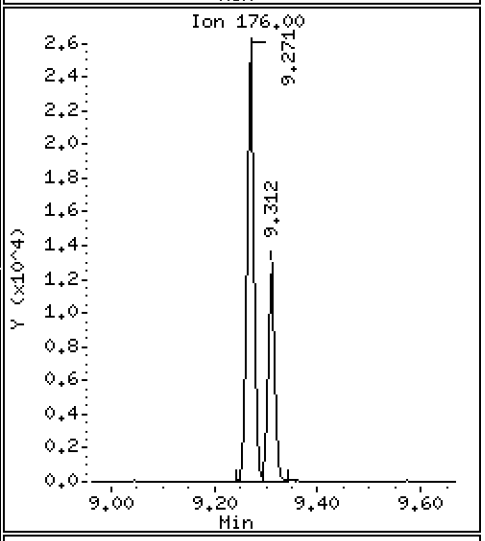
17 Anthracene

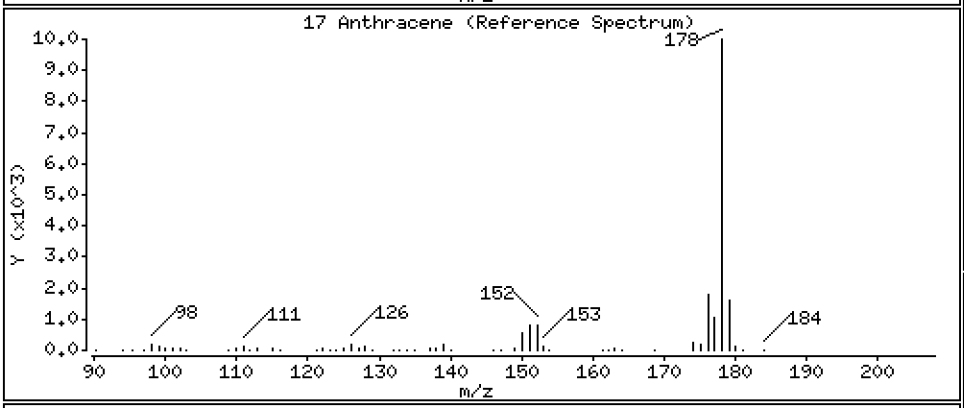
Concentration: 2.716 ug/mL

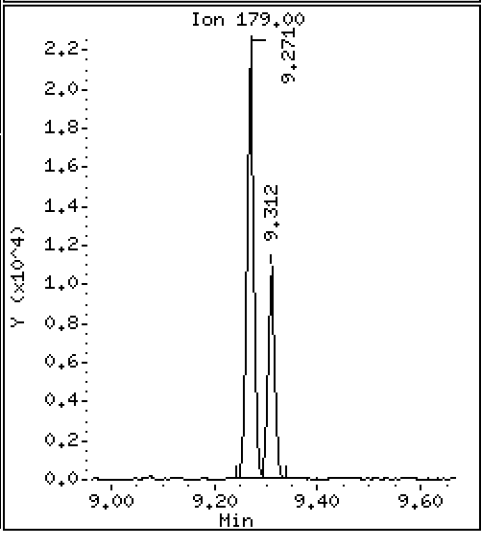


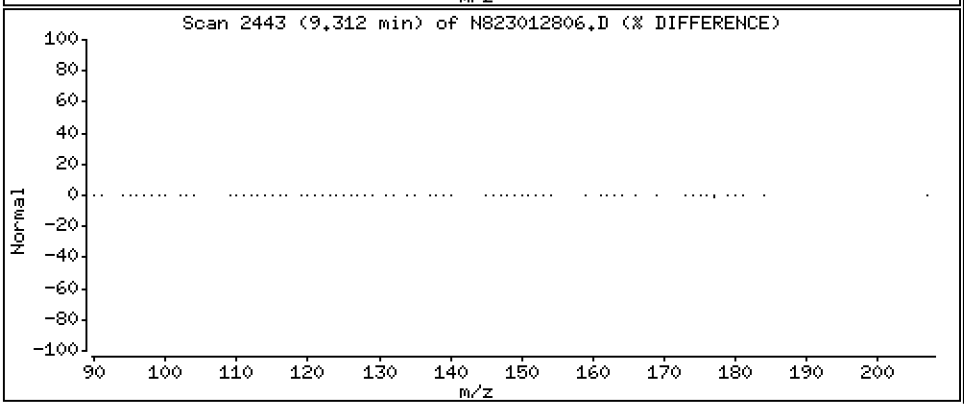












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Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

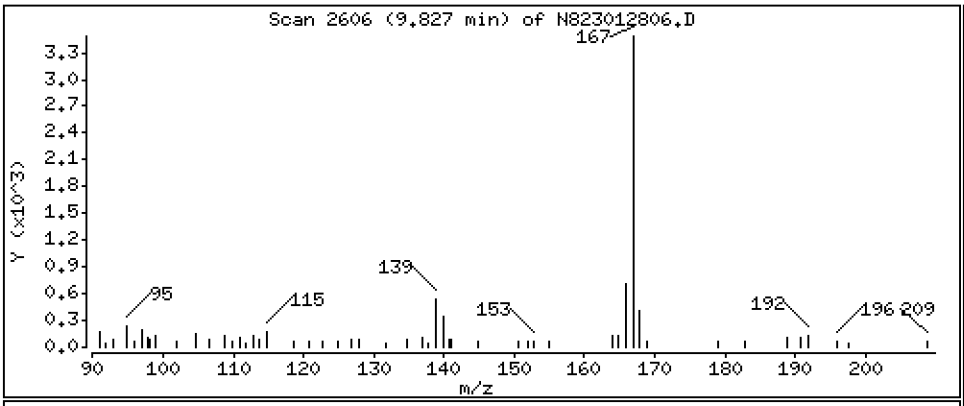
Operator: JZ

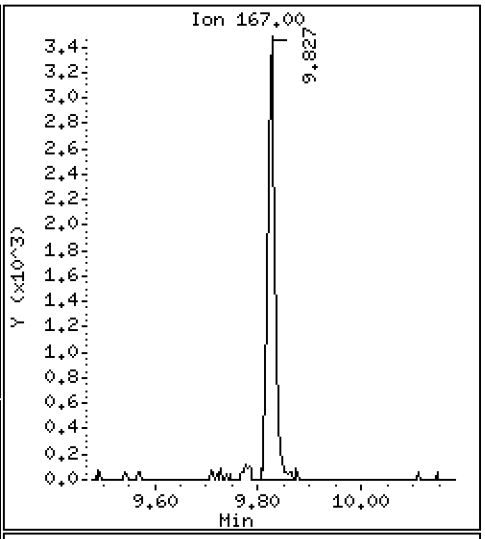
Column phase: Rxi-17sil

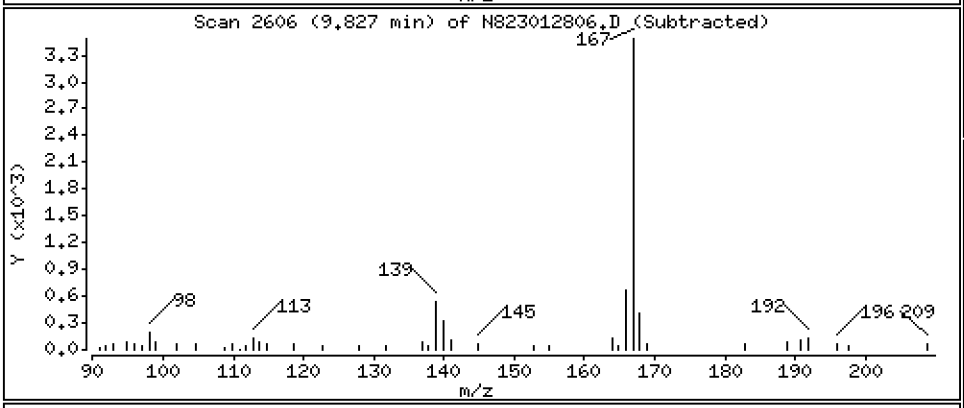
Column diameter: 0.25

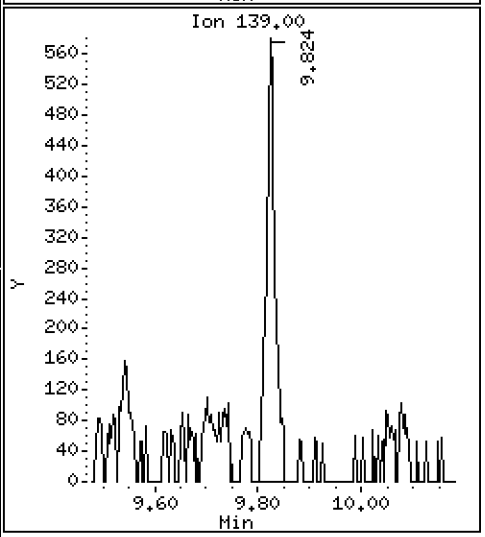
19 Carbazole

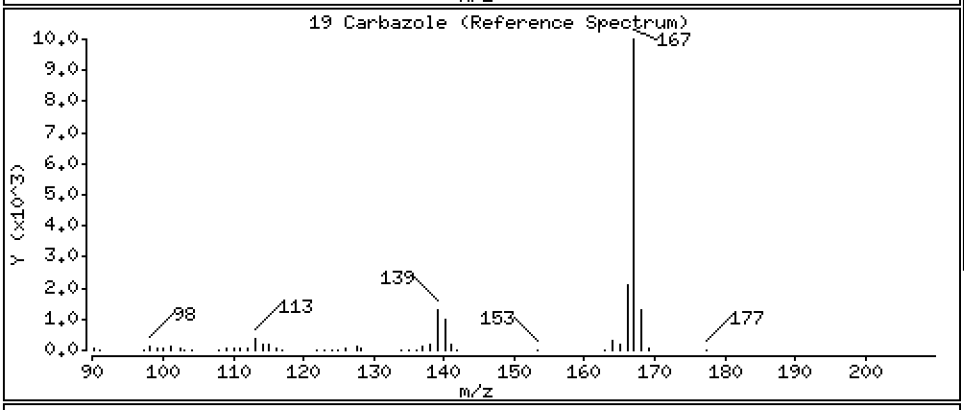
Concentration: 0.1597 ug/mL

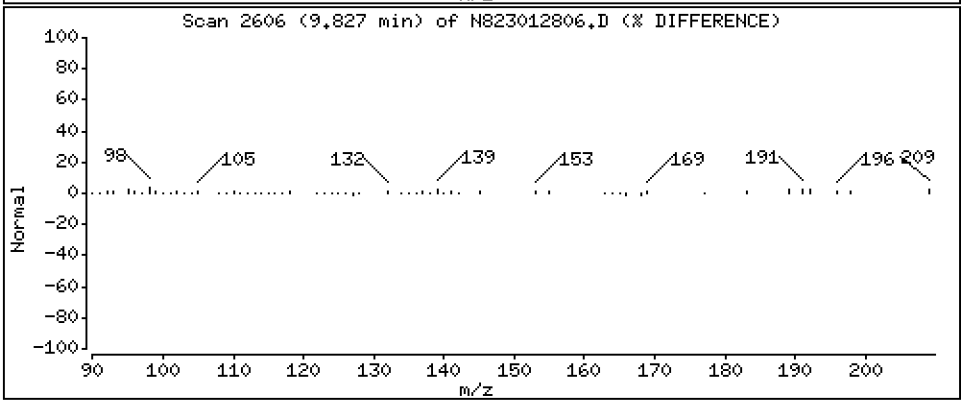












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Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

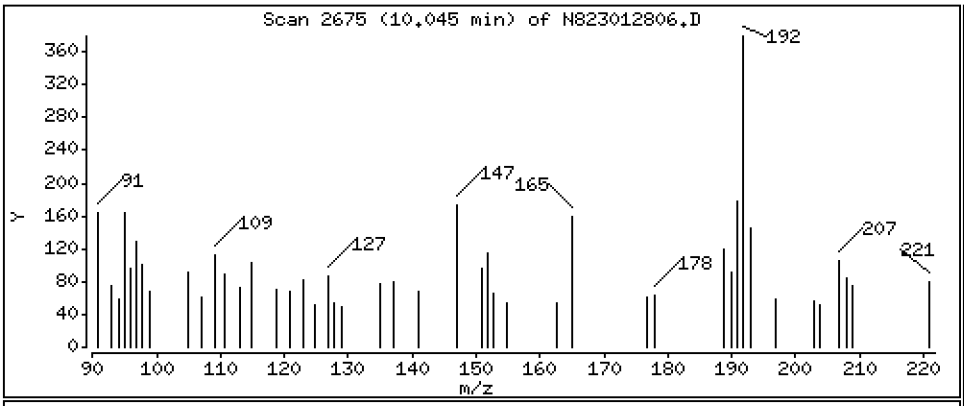
Operator: JZ

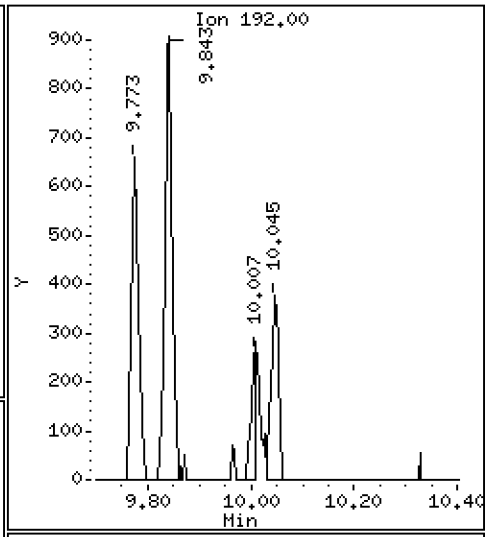
Column phase: Rxi-17sil

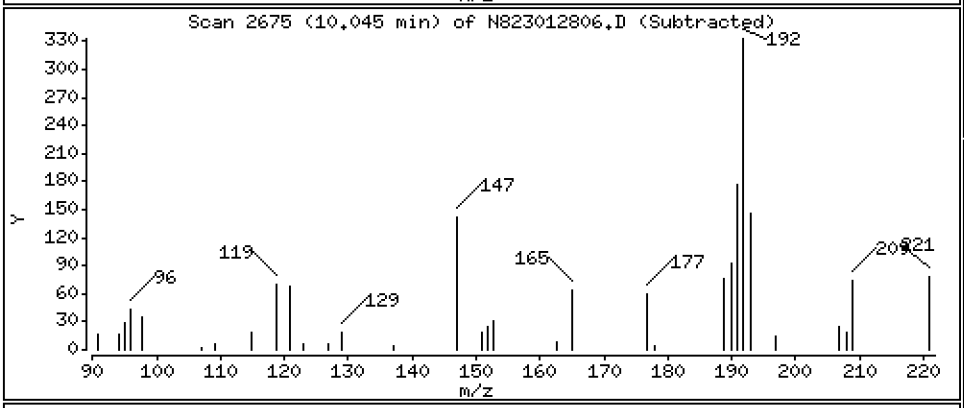
Column diameter: 0.25

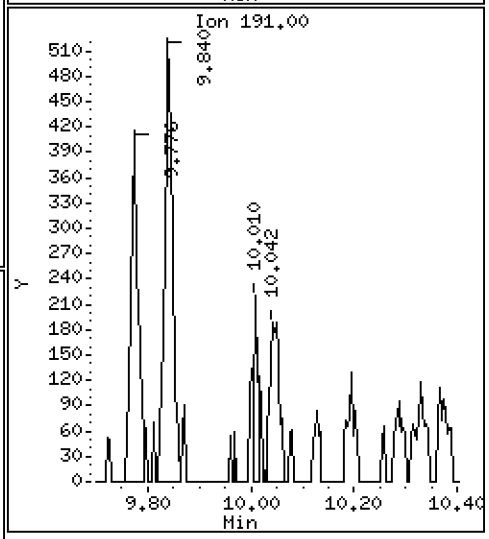
20 1-Methylphenanthrene

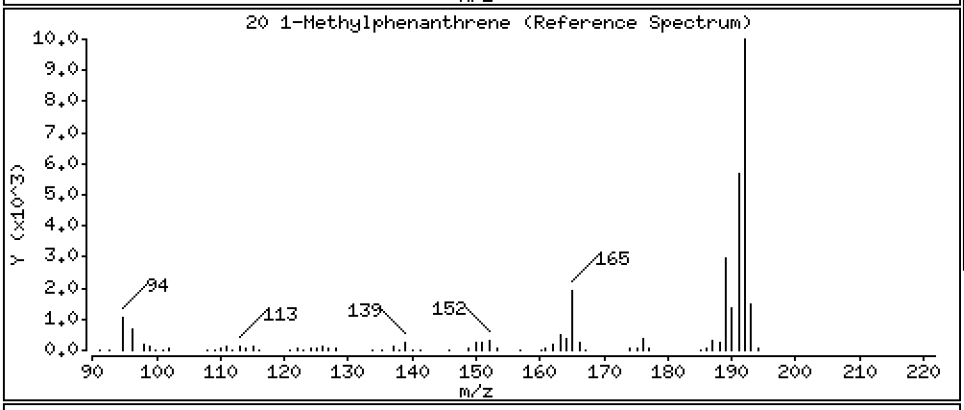
Concentration: 0.01970 ug/mL

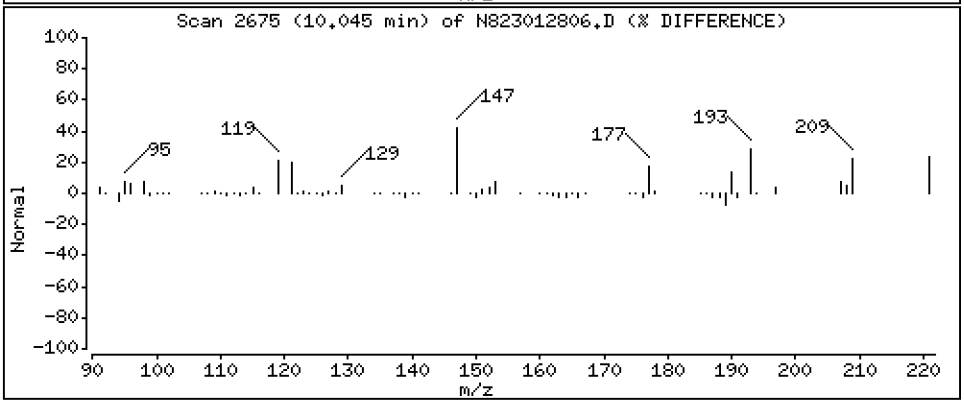












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Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

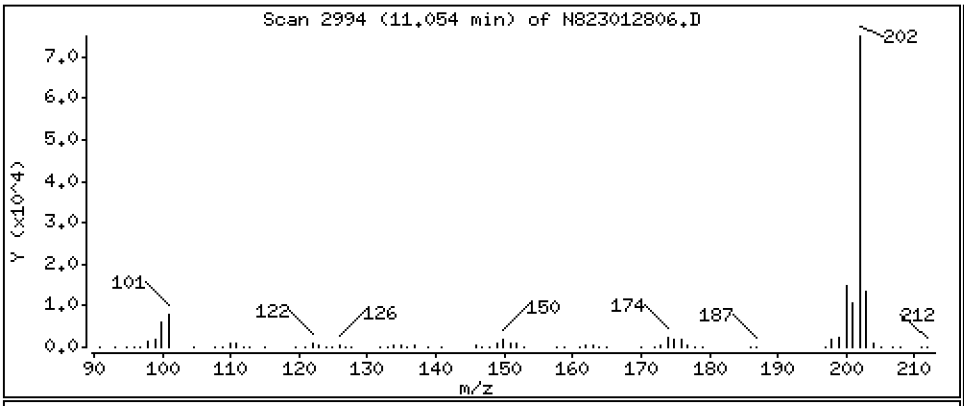
Operator: JZ

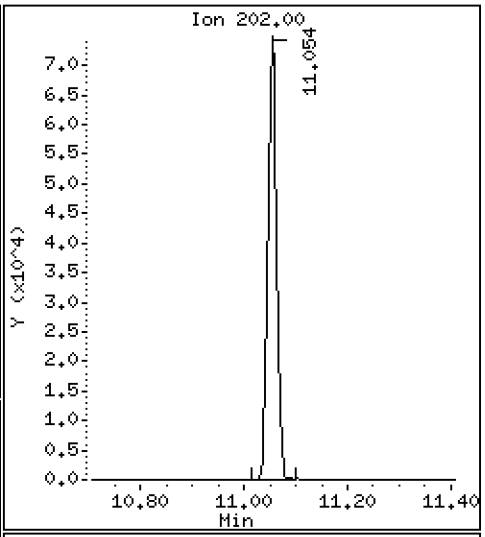
Column phase: Rxi-17sil

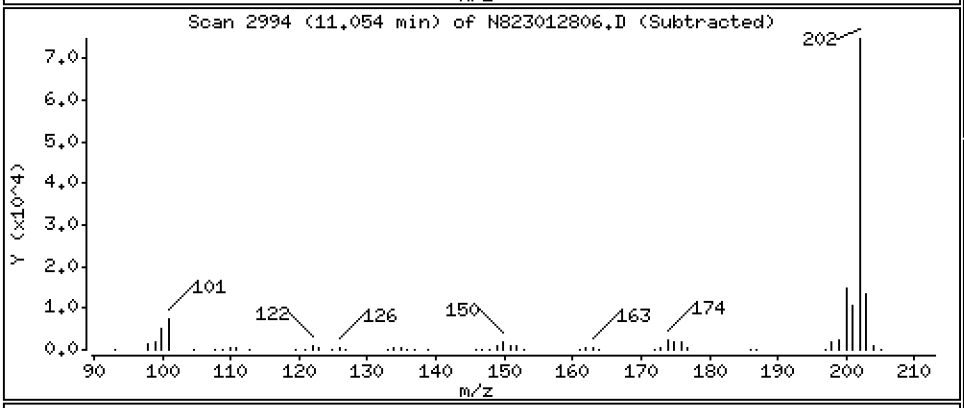
Column diameter: 0.25

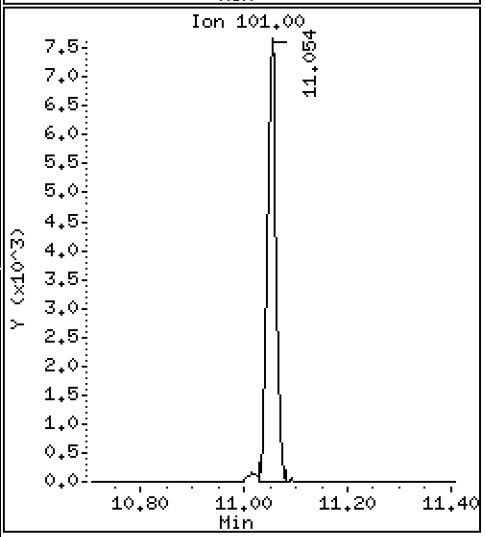
22 Fluoranthene

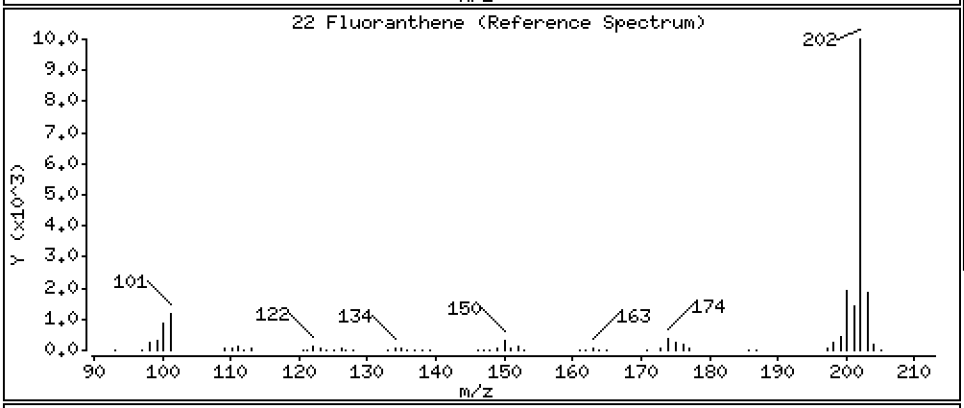
Concentration: 3.046 ug/mL

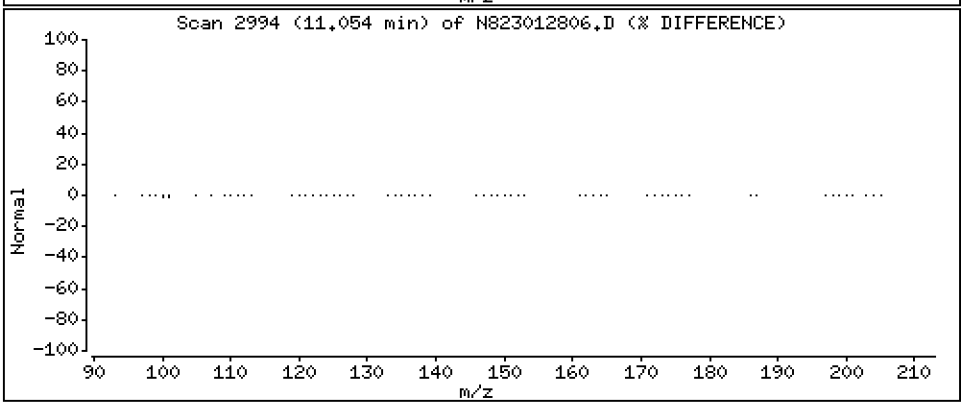












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

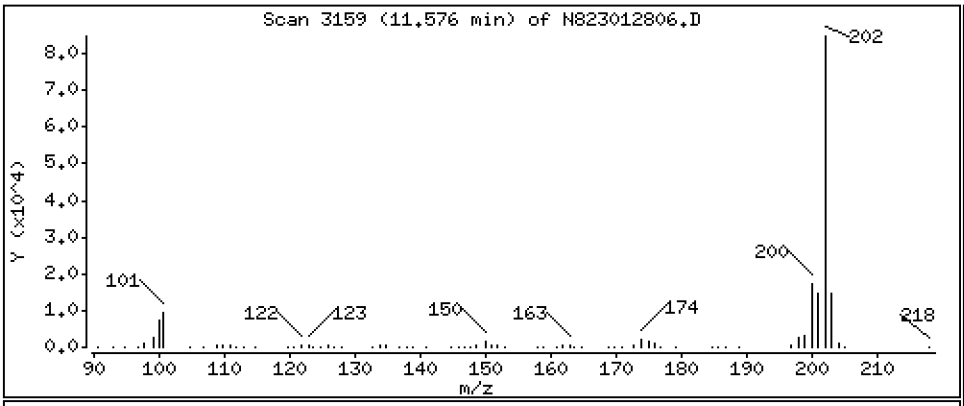
Operator: JZ

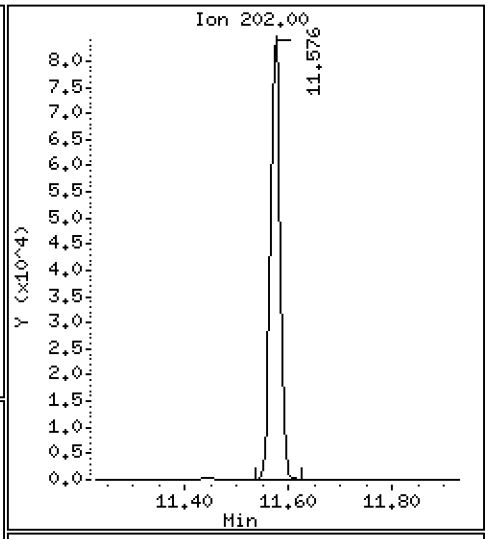
Column phase: Rxi-17sil

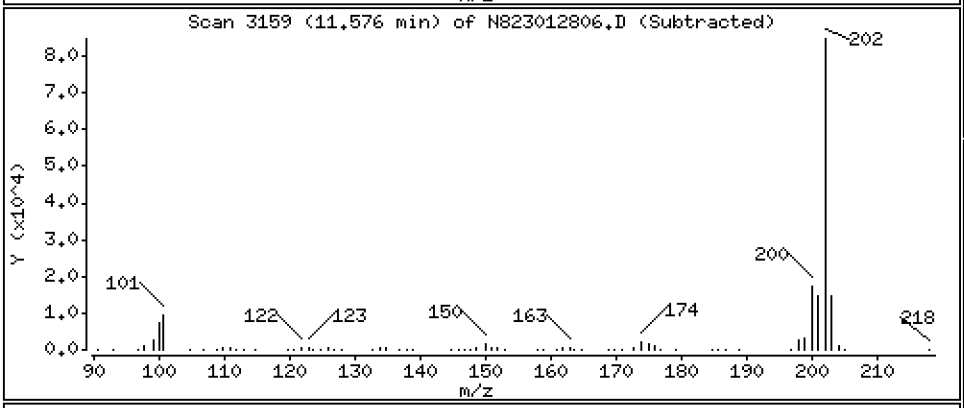
Column diameter: 0.25

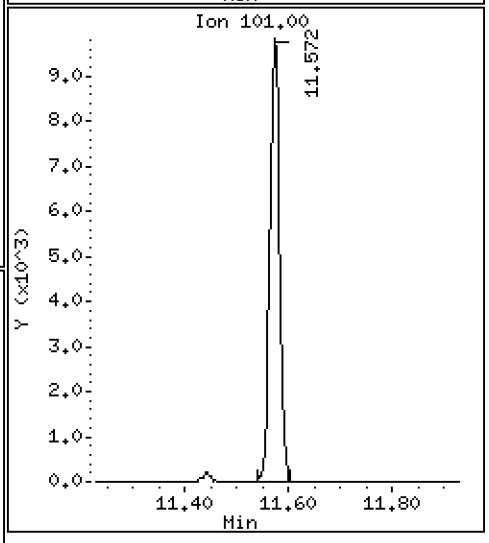
23 Pyrene

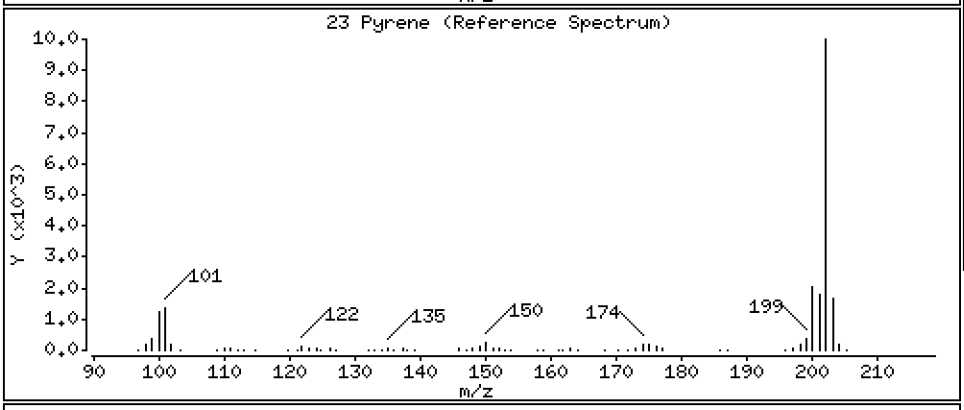
Concentration: 3.617 ug/mL

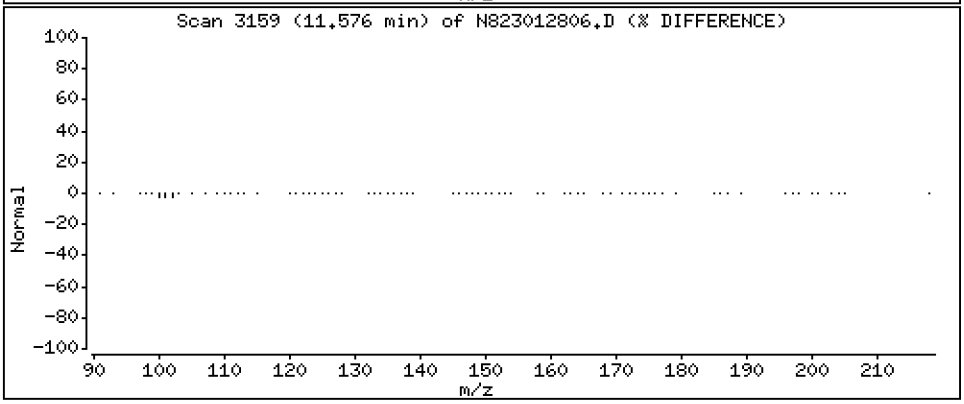












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

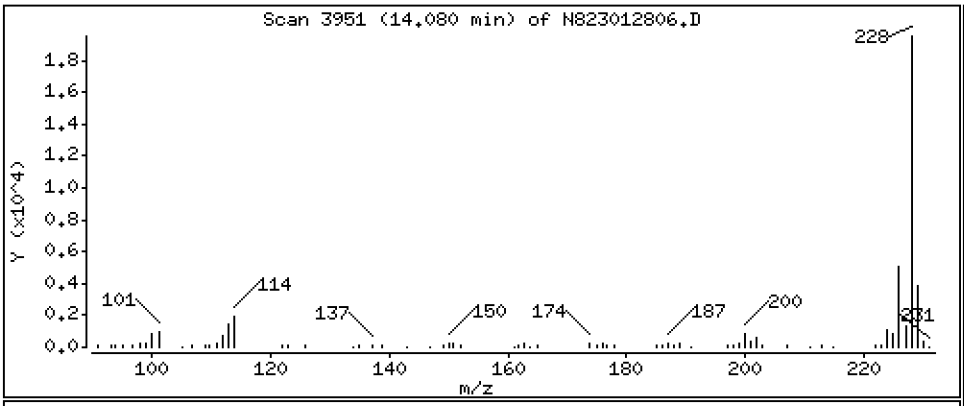
Operator: JZ

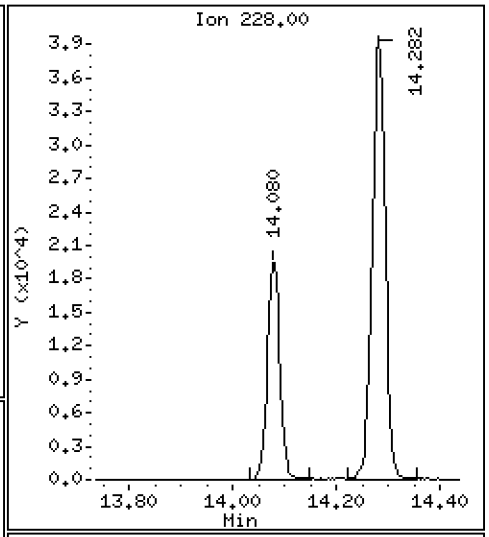
Column phase: Rxi-17sil

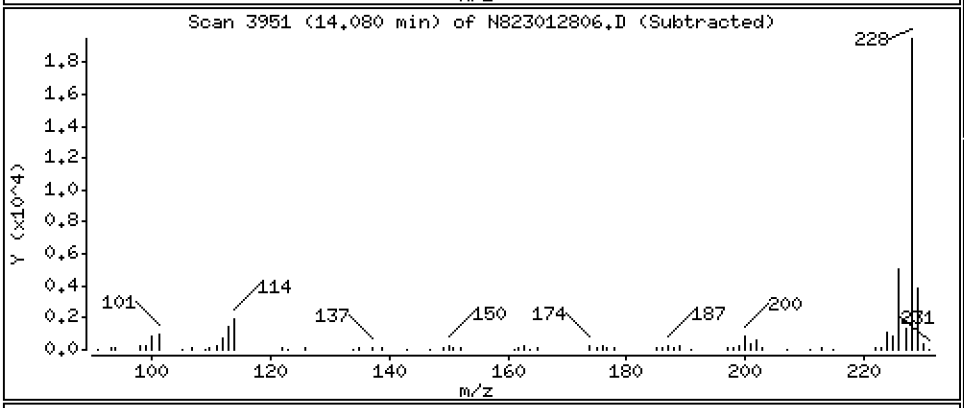
Column diameter: 0.25

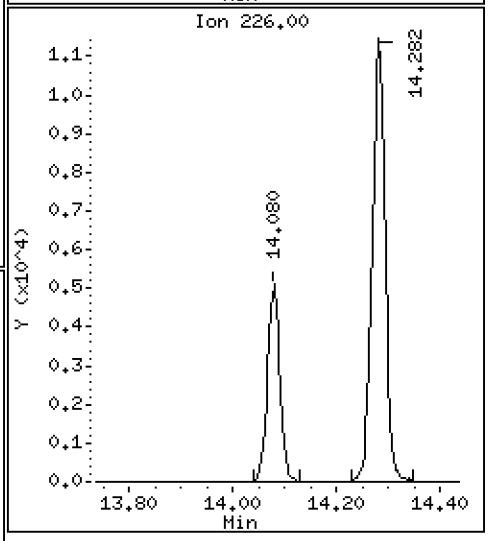
24 Benzo(a)anthracene

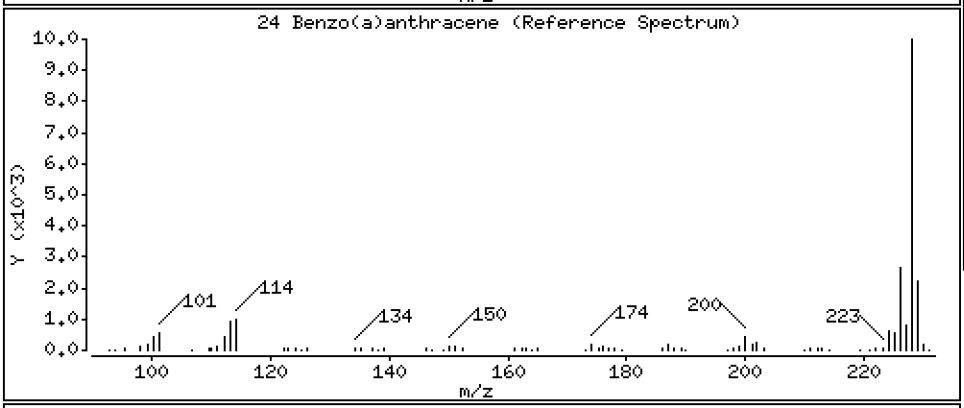
Concentration: 1.192 ug/mL

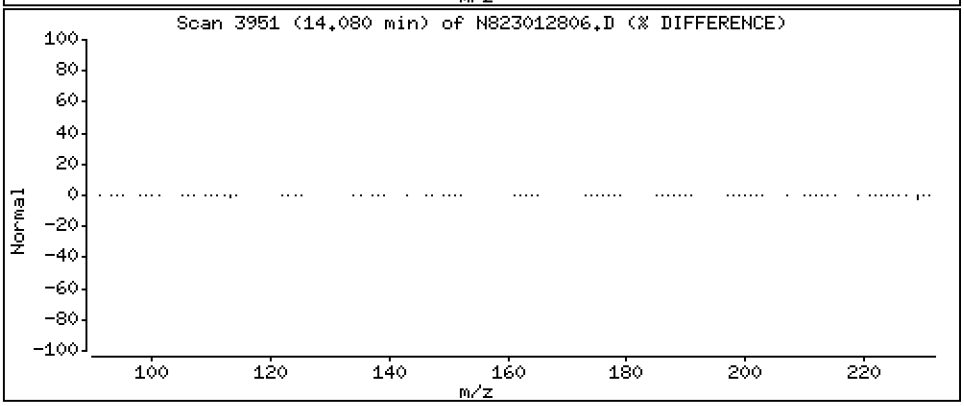












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

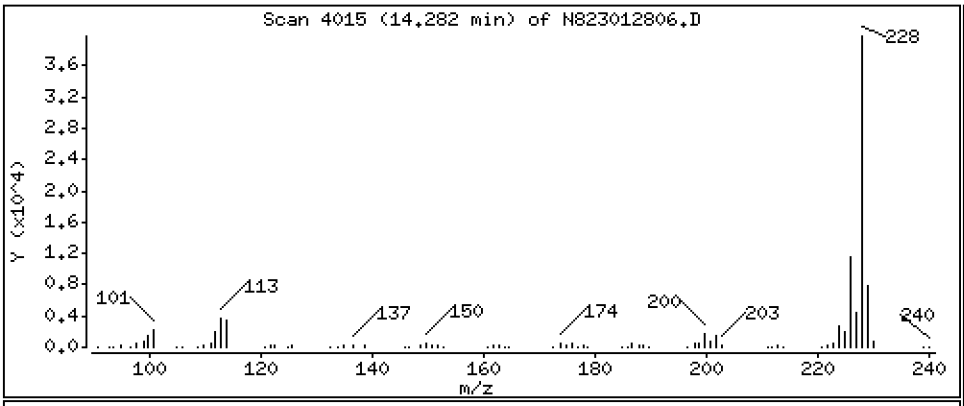
Operator: JZ

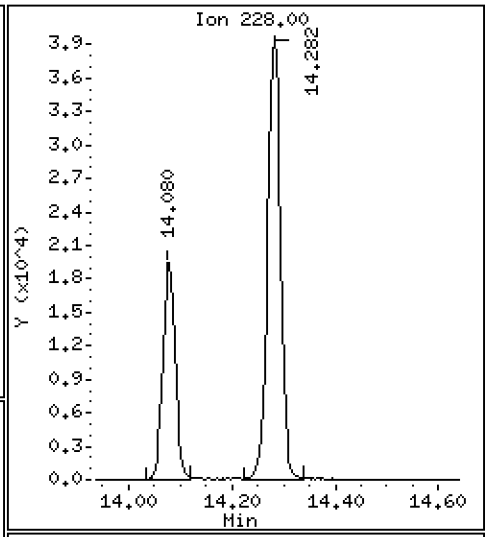
Column phase: Rxi-17sil

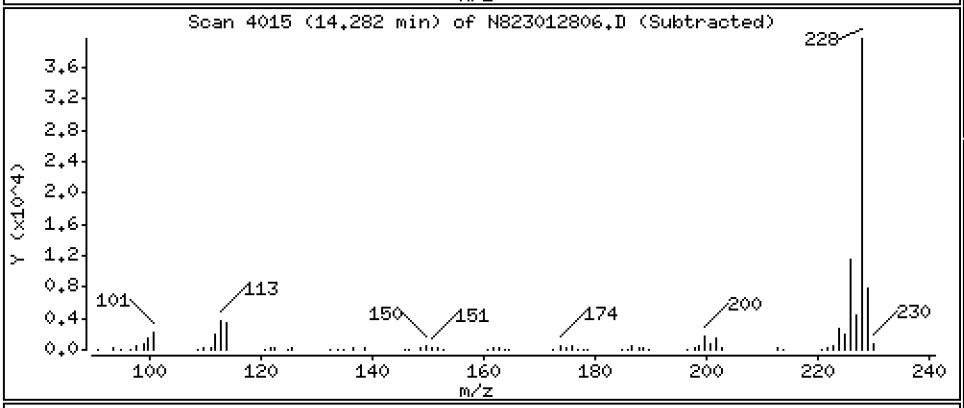
Column diameter: 0.25

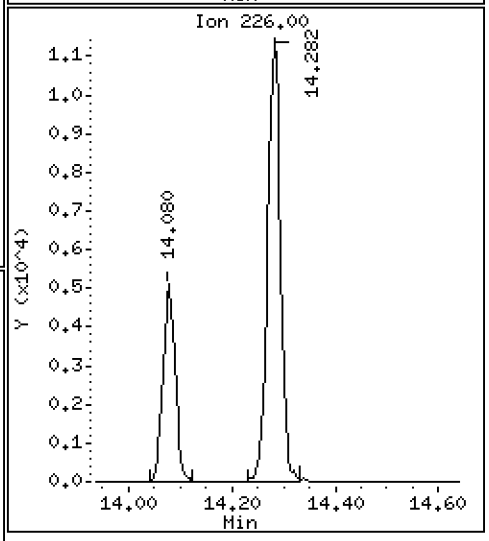
27 Chrysene

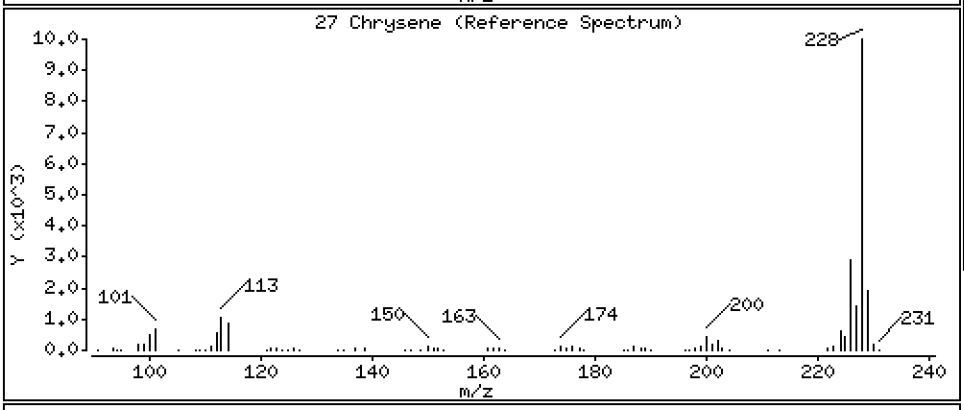
Concentration: 2.343 ug/mL

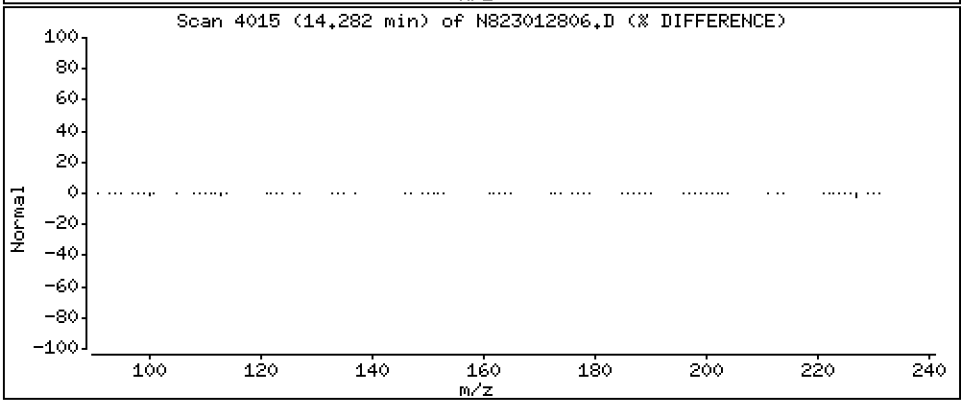












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

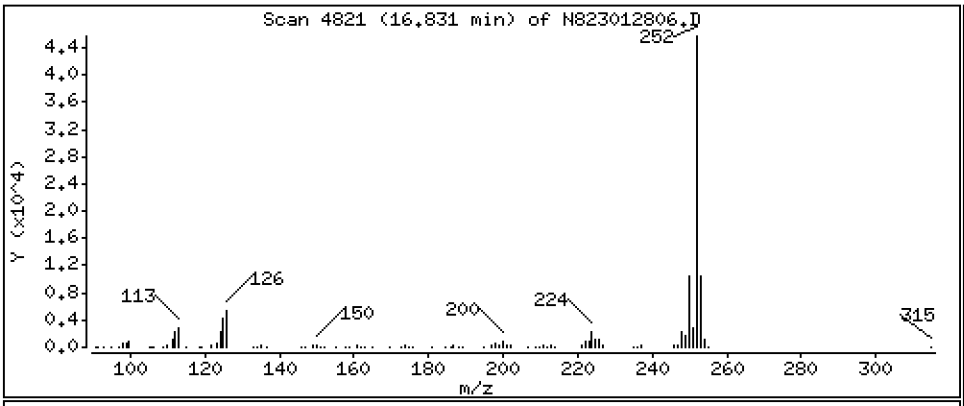
Operator: JZ

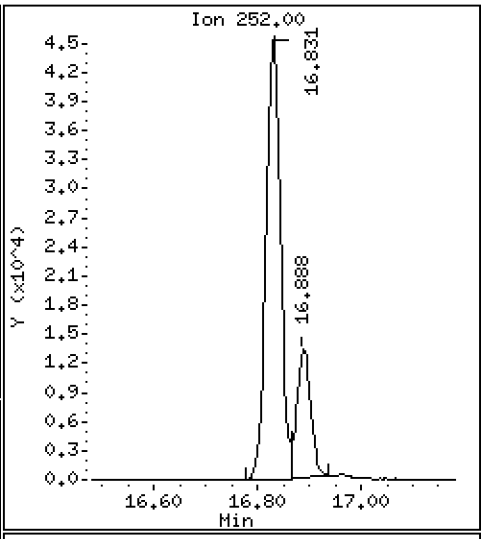
Column phase: Rxi-17sil

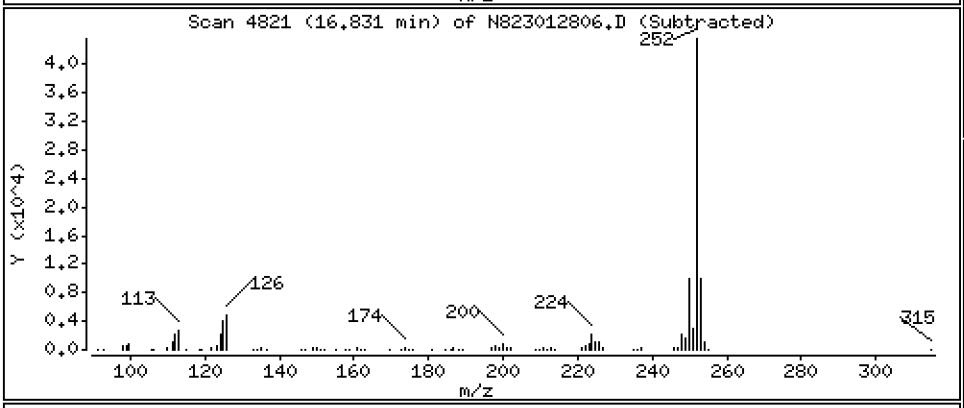
Column diameter: 0.25

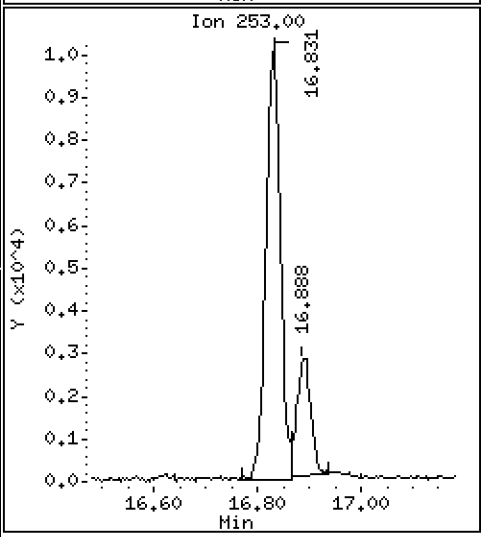
28 Benzo(b)fluoranthene

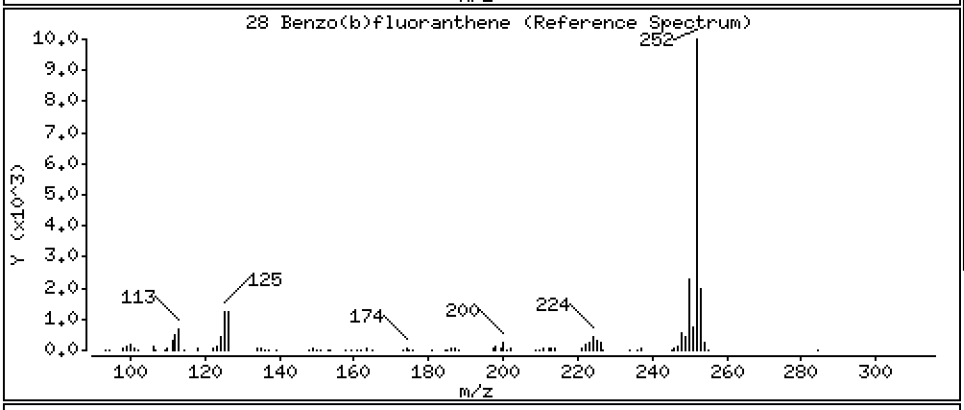
Concentration: 4.827 ug/mL

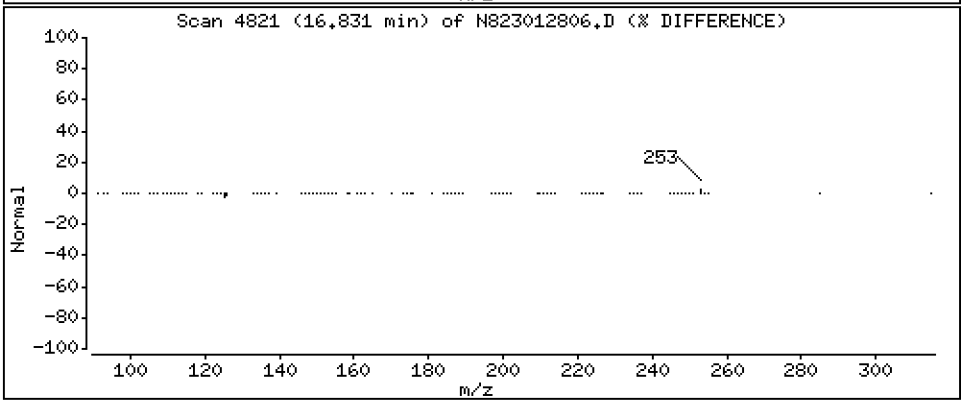












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

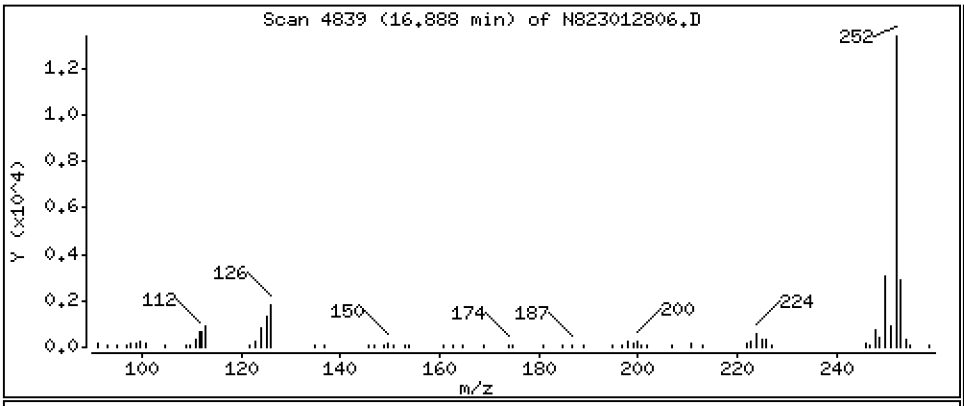
Operator: JZ

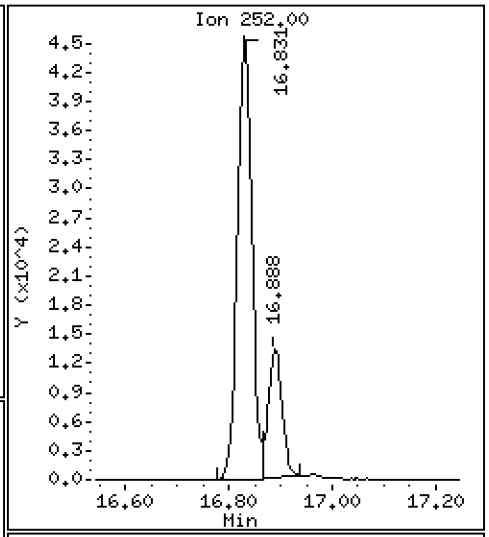
Column phase: Rxi-17sil

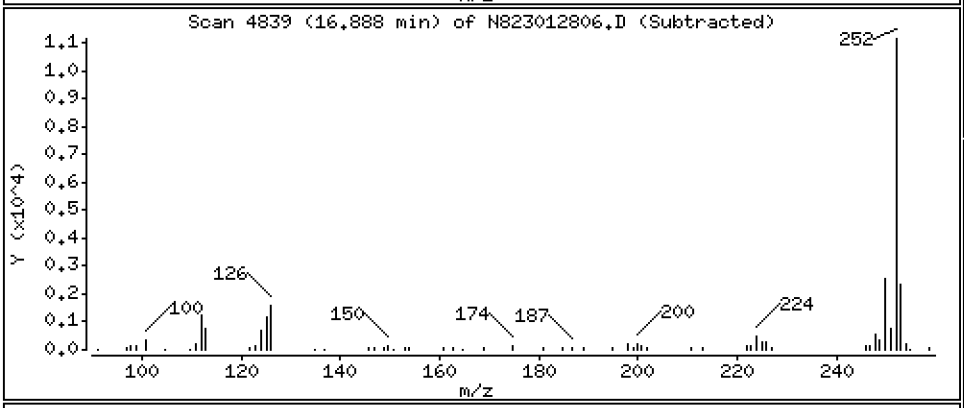
Column diameter: 0.25

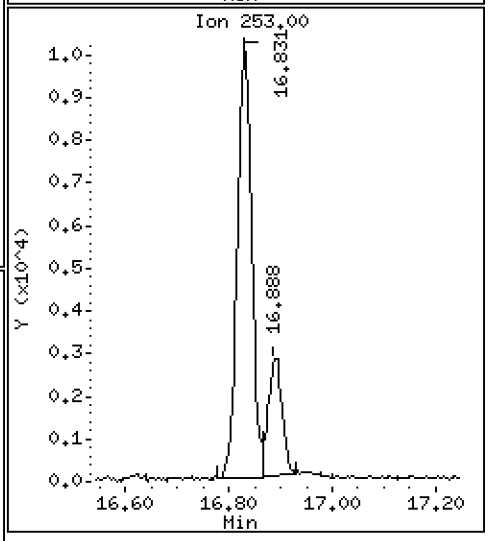
29 Benzo(k)fluoranthene

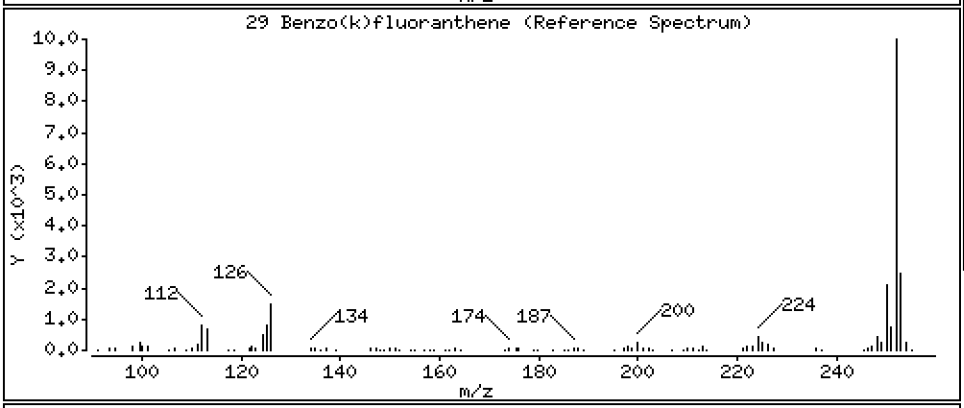
Concentration: 1.348 ug/mL

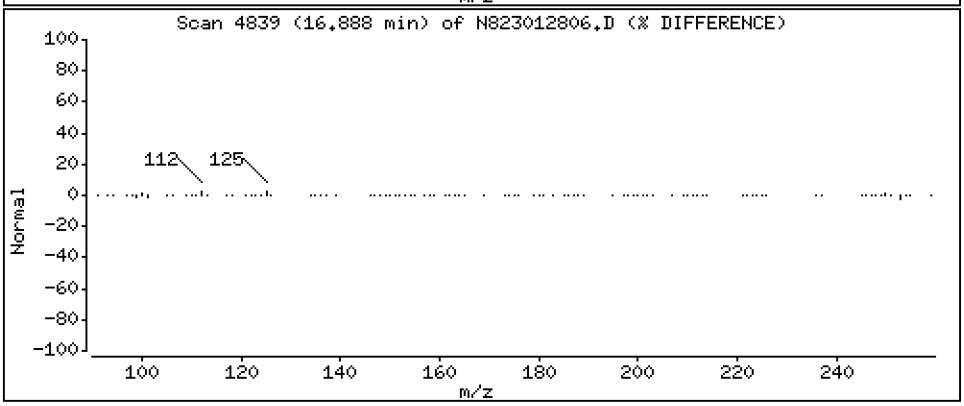












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

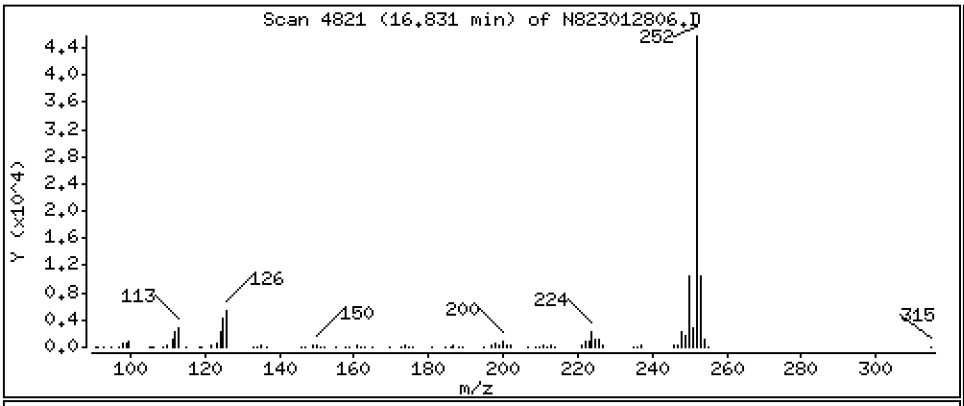
Operator: JZ

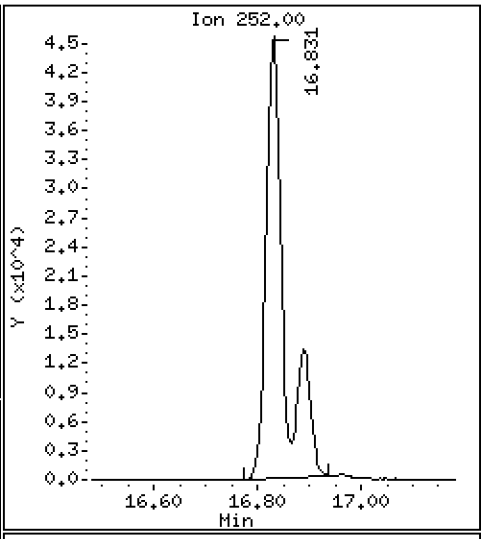
Column phase: Rxi-17sil

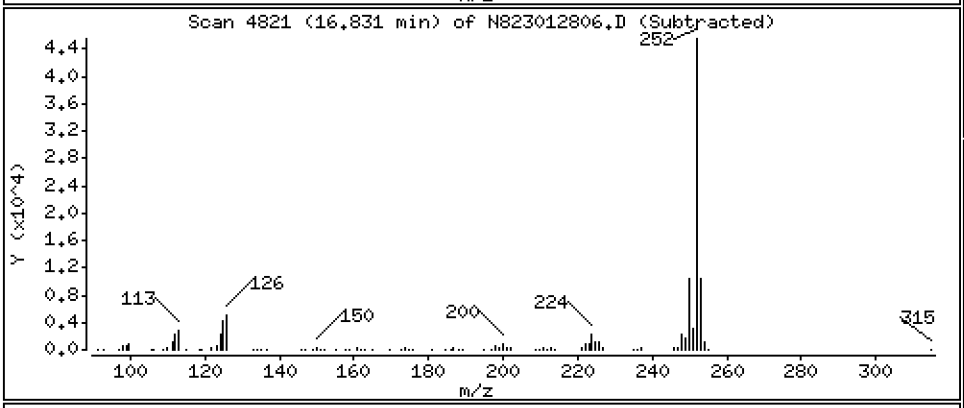
Column diameter: 0.25

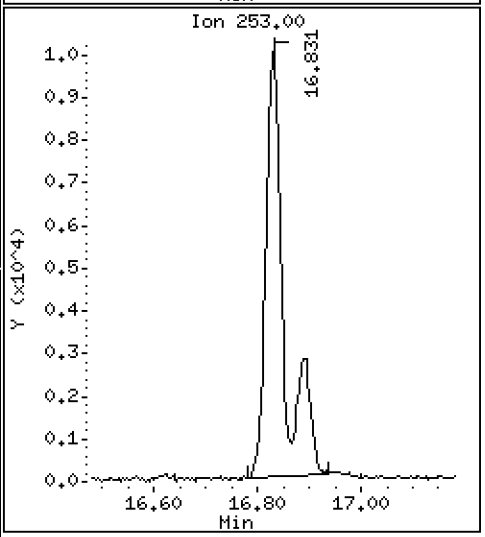
31 Total Benzofluoranthenes

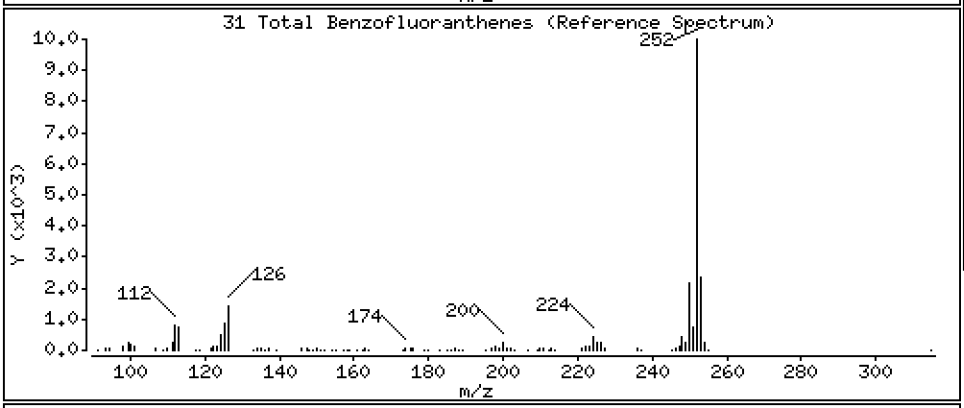
Concentration: 6.414 ug/mL

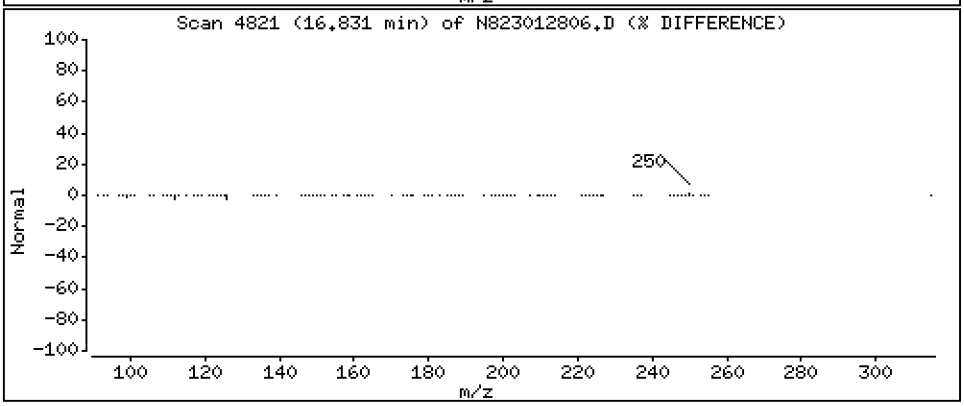












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Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

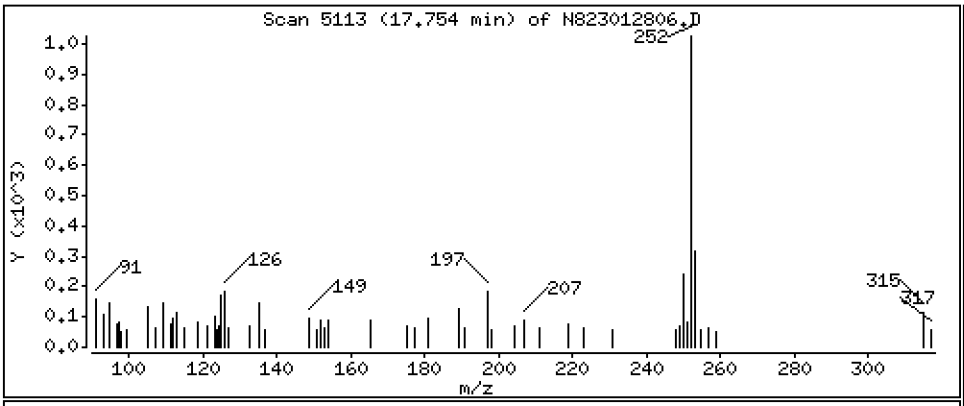
Operator: JZ

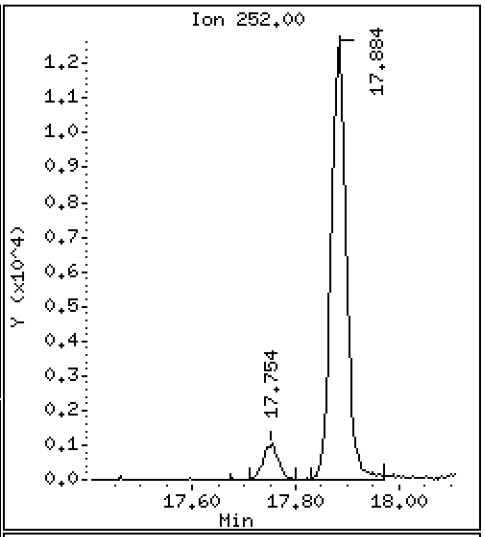
Column phase: Rxi-17sil

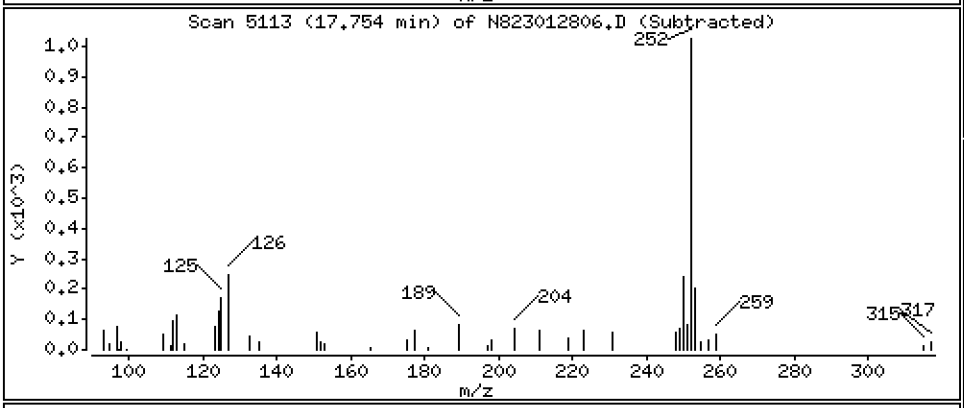
Column diameter: 0.25

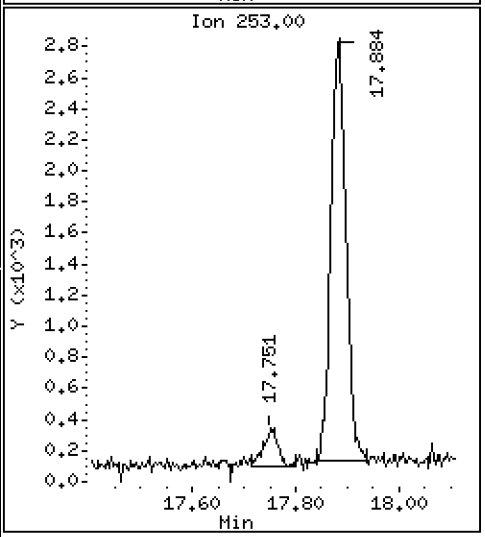
34 Benzo(e)pyrene

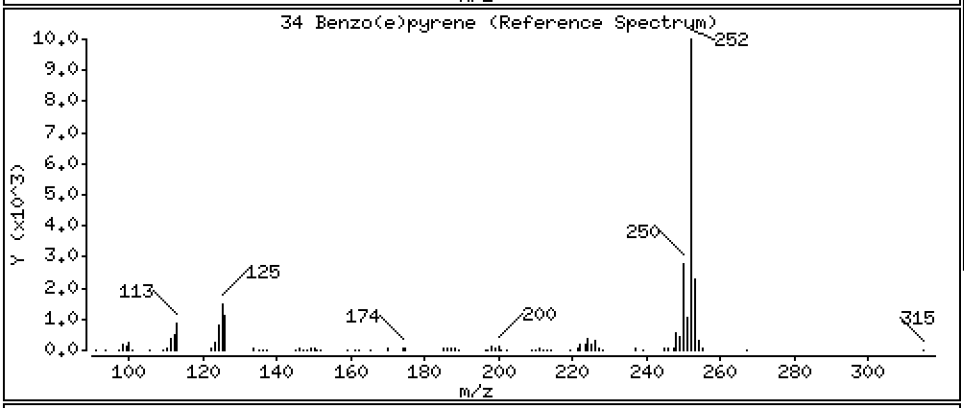
Concentration: 0.1145 ug/mL

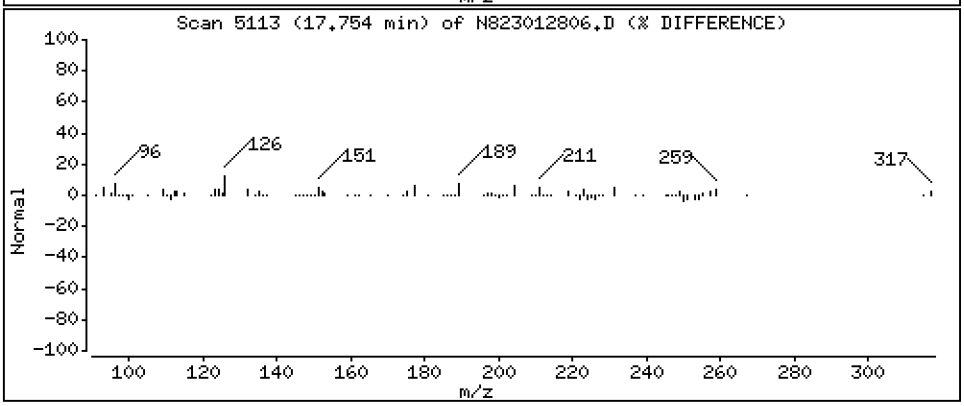












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

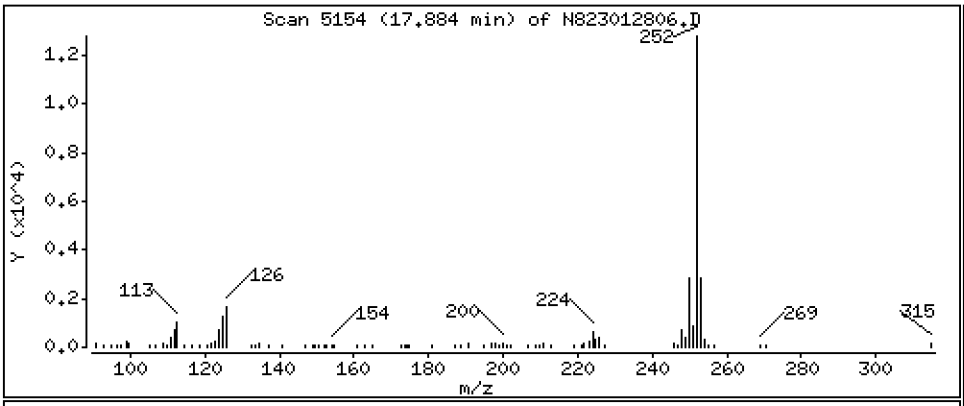
Operator: JZ

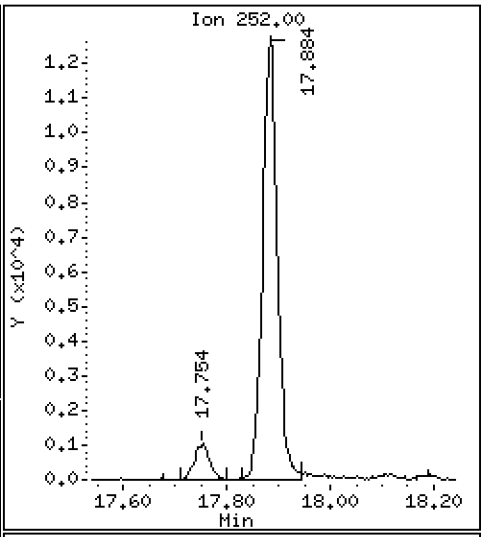
Column phase: Rxi-17sil

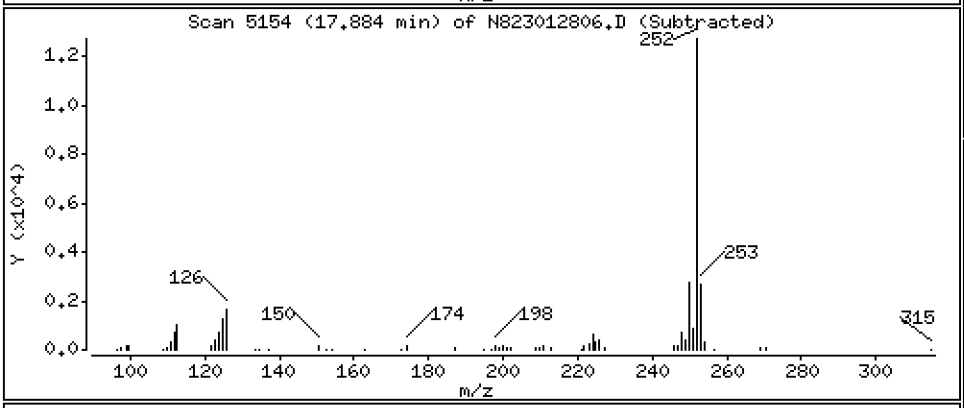
Column diameter: 0.25

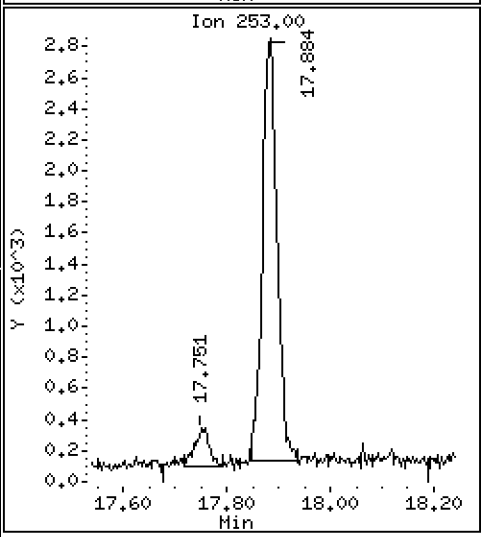
32 Benzo(a)pyrene

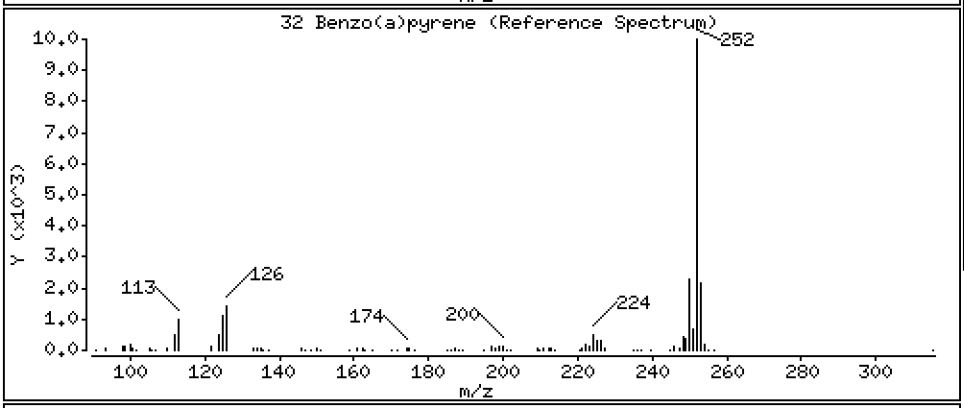
Concentration: 1.562 ug/mL

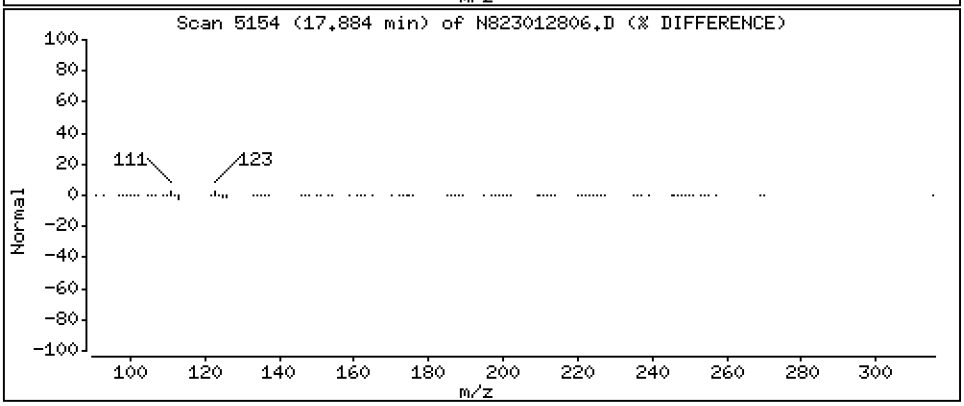












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

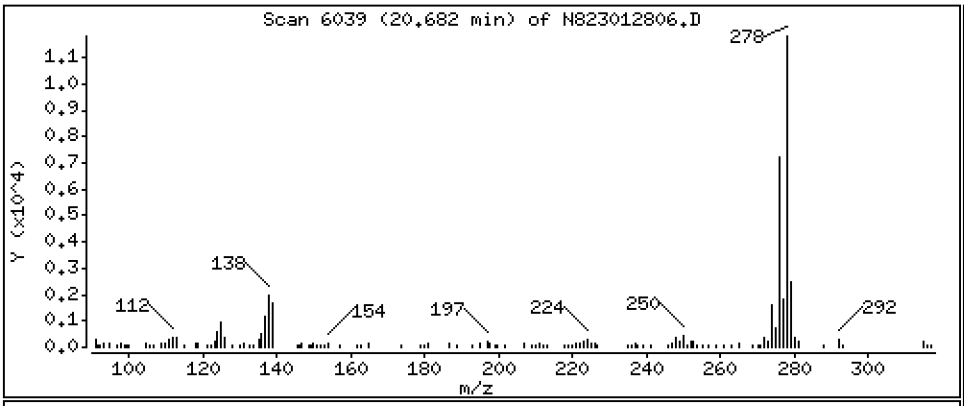
Operator: JZ

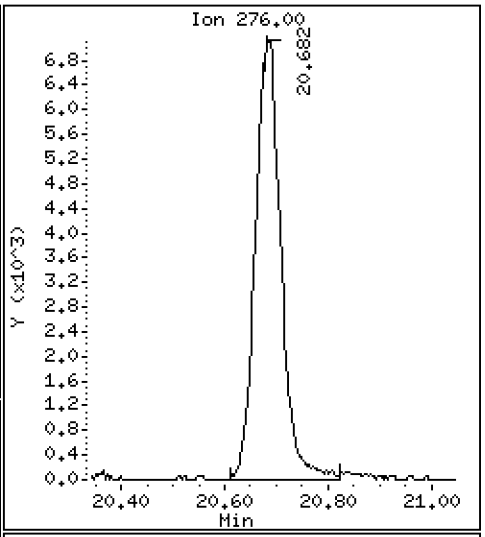
Column phase: Rxi-17sil

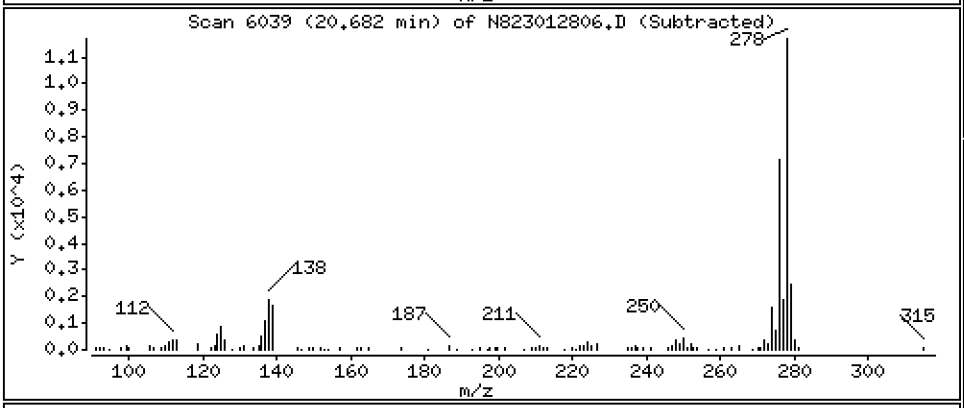
Column diameter: 0.25

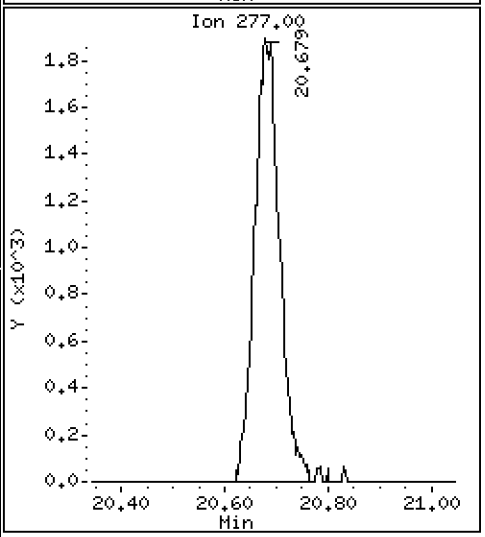
37 Indeno(1,2,3-cd)pyrene

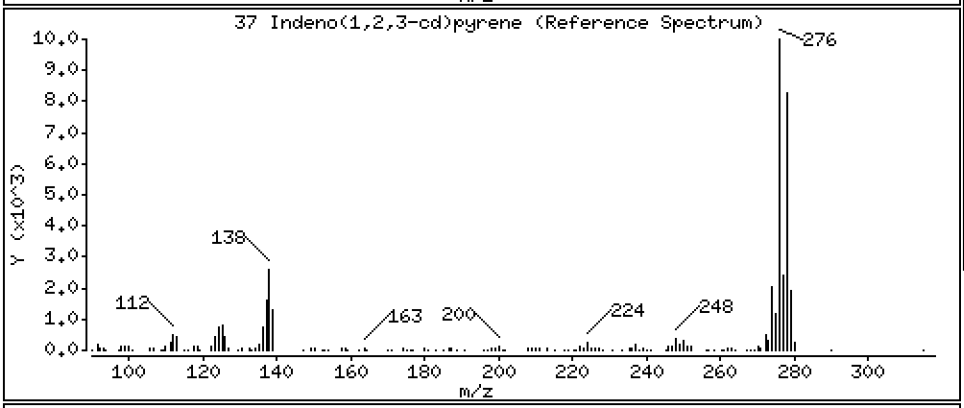
Concentration: 1.325 ug/mL

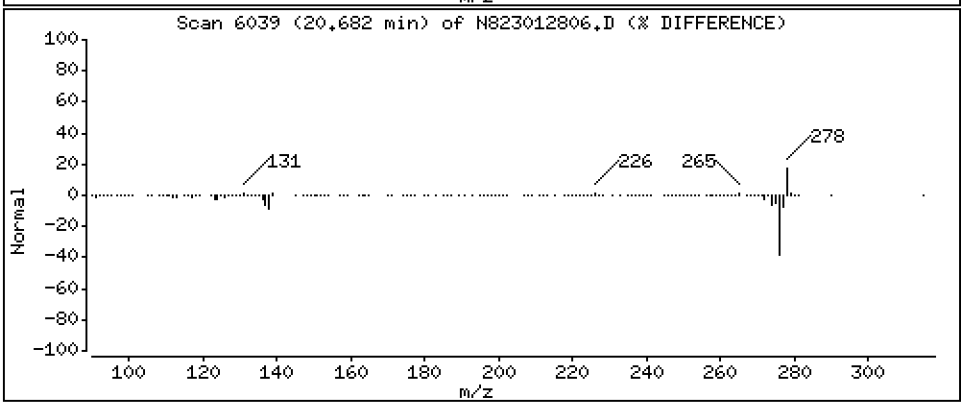












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

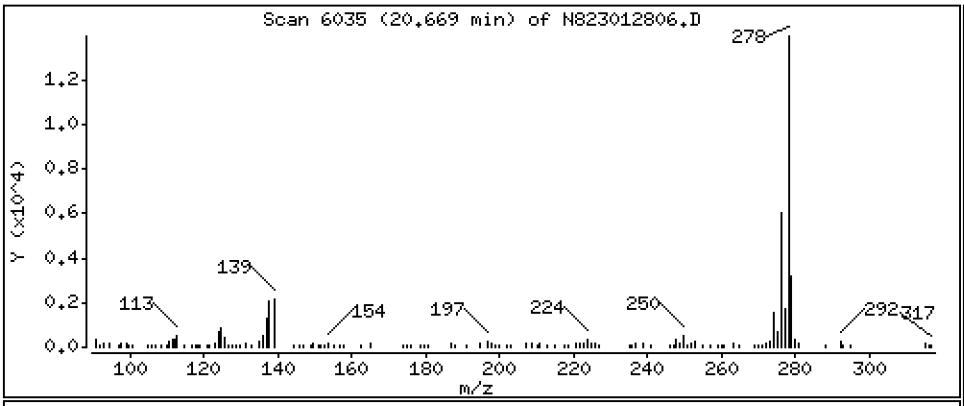
Operator: JZ

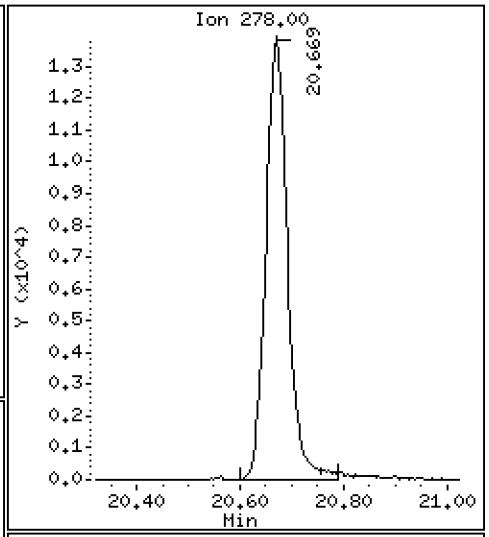
Column phase: Rxi-17sil

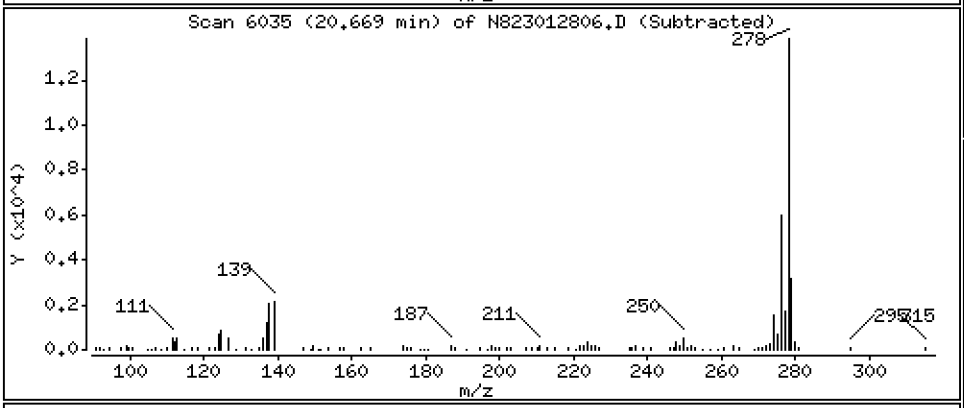
Column diameter: 0.25

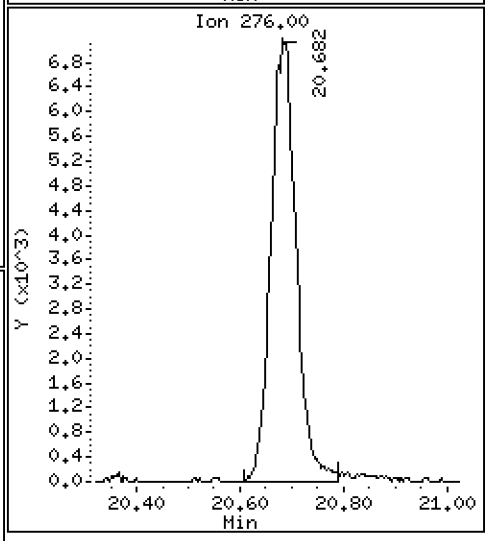
38 Dibenzo(a,h)anthracene

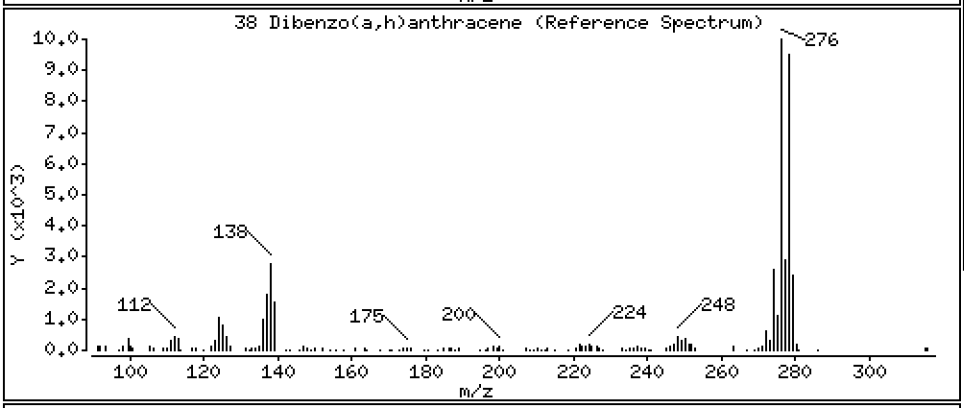
Concentration: 2.547 ug/mL

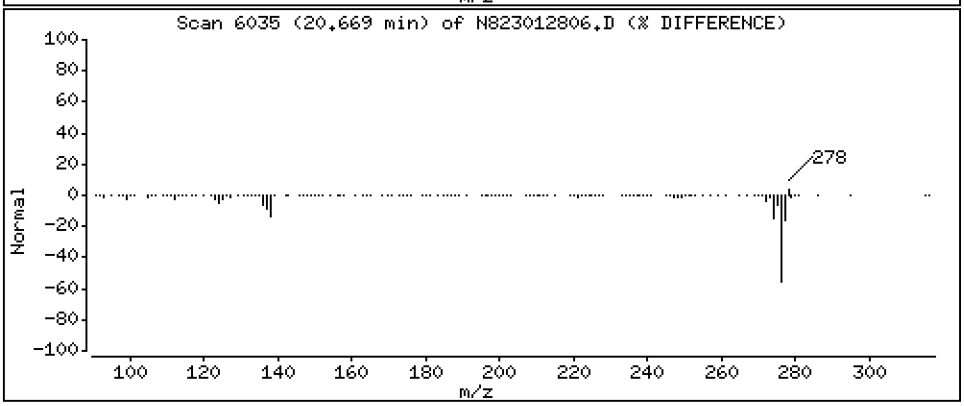












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012806.D

Date : 25-JAN-2023 16:48

Client ID:

Instrument: nt8.i

Sample Info: BLA0411-SRM1,

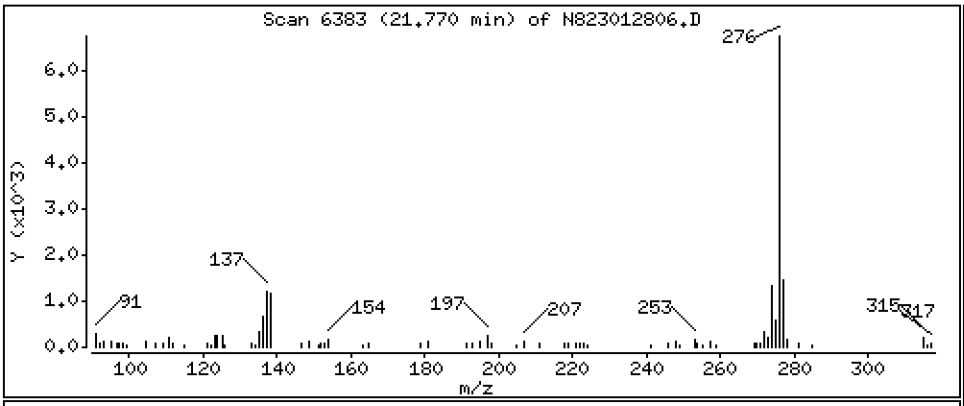
Operator: JZ

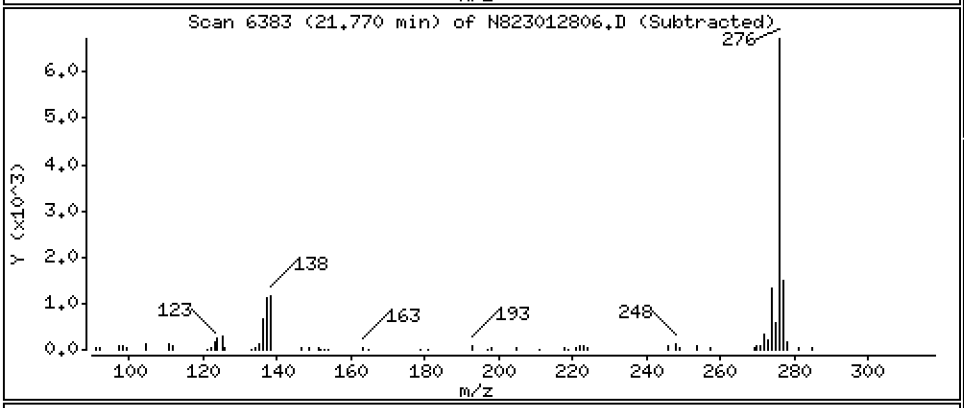
Column phase: Rxi-17sil

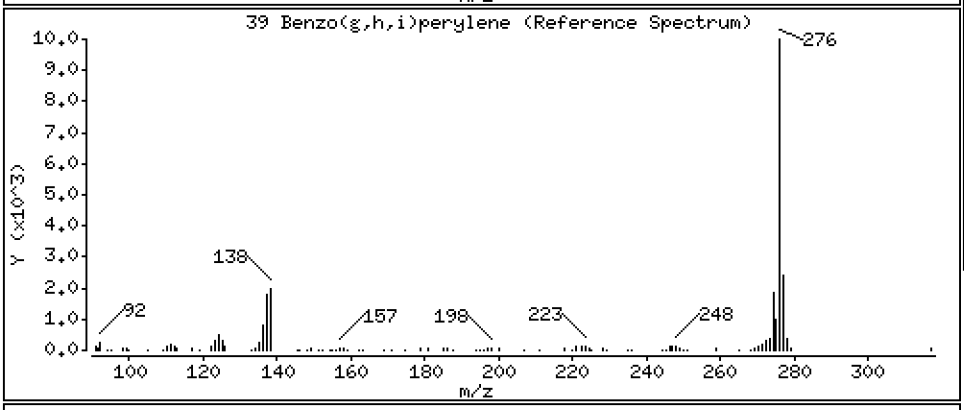
Column diameter: 0.25

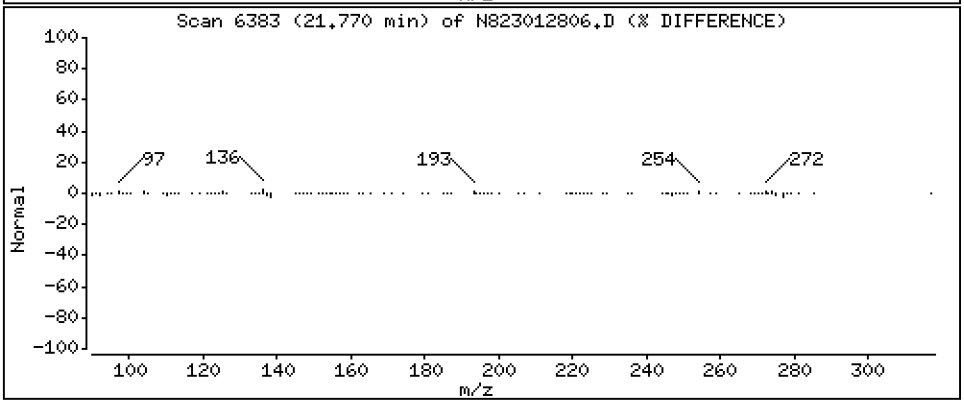
39 Benzo(g,h,i)perylene

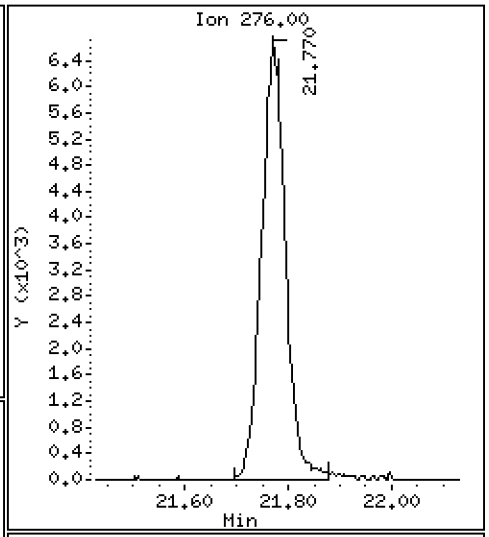
Concentration: 1.280 ug/mL

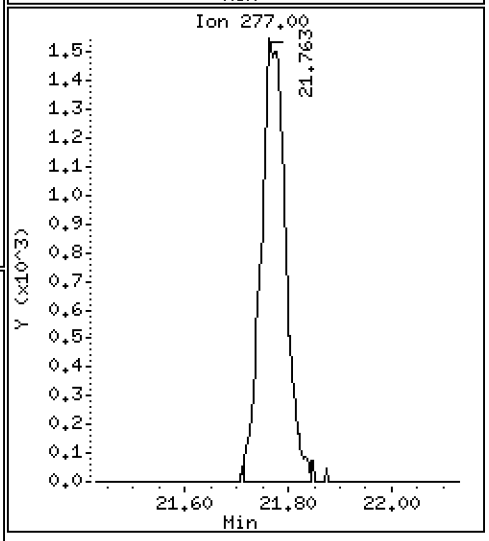












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230125.b\N823012806.D
Lab Smp Id: BLA0411-SRM1
Inj Date : 25-JAN-2023 16:48
Operator : JZ Inst ID: nt8.i
Smp Info : BLA0411-SRM1,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 22:56 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.897	4.906	(1.000)	50185	2.00000	
	2 Naphthalene	128	4.925	4.938	(1.006)	64959	2.78388	2.784
$	3 2-Methylnaphthalene-d10	152	5.634	5.640	(1.150)	40452	2.95557	2.956
	4 2-Methylnaphthalene	141	5.681	5.687	(1.160)	816	0.06358	0.06358
	5 1-methylnaphthalene	141	5.880	5.886	(1.201)	494	0.03792	0.03792
	7 Biphenyl	154	6.342	6.345	(0.882)	585	0.03055	0.03055
	8 2,6-Dimethylnaphthalene	156	6.386	6.392	(0.888)	383	0.02826	0.02826(M)
	9 Acenaphthylene	152	7.085	7.088	(0.985)	82602	3.76875	3.769
*	10 Acenaphthene-d10	164	7.193	7.199	(1.000)	29025	2.00000	
	11 Acenaphthene	153	7.243	7.246	(1.007)	63617	4.33198	4.332
	12 Dibenzofuran	168	7.395	7.398	(1.028)	644	0.02887	0.02887
	13 1,6,7-Trimethylnaphthalene	170	7.455	7.464	(1.036)	244	0.01735	0.01735
	14 Fluorene	166	7.872	7.875	(1.095)	52055	3.00480	3.005
	18 Dibenzothiophene	184	Compound Not Detected.					
*	15 Phenanthrene-d10	188	9.235	9.238	(1.000)	54075	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	131177	4.96610	4.966
	17 Anthracene	178	9.311	9.314	(1.008)	65161	2.71553	2.716
	19 Carbazole	167	9.827	9.829	(1.064)	3514	0.15974	0.1597
	20 1-Methylphenanthrene	192	10.045	10.051	(1.088)	375	0.01970	0.01970
	22 Fluoranthene	202	11.053	11.056	(1.197)	87580	3.04601	3.046
$	21 Fluoranthene-d10	212	11.019	11.018	(1.193)	90492	3.79299	3.793
	23 Pyrene	202	11.575	11.578	(0.815)	110432	3.61695	3.617
	24 Benzo(a)anthracene	228	14.079	14.085	(0.991)	32995	1.19230	1.192
*	25 Chrysene-d12	240	14.206	14.212	(1.000)	49246	2.00000	
	27 Chrysene	228	14.282	14.288	(1.005)	69024	2.34299	2.343
	28 Benzo(b)fluoranthene	252	16.830	16.830	(0.929)	89997	4.82714	4.827
	29 Benzo(k)fluoranthene	252	16.887	16.893	(0.932)	24615	1.34789	1.348
	30 Benzo(j)fluoranthene	252	Compound Not Detected.					
	31 Total Benzofluoranthenes	252	16.830	16.830	(0.929)	113259	6.41447	6.414(M)
	34 Benzo(e)pyrene	252	17.754	17.756	(0.980)	2128	0.11446	0.1145
	32 Benzo(a)pyrene	252	17.883	17.889	(0.987)	25631	1.56224	1.562
*	33 Perylene-d12	264	18.114	18.120	(1.000)	32012	2.00000	
	35 Perylene	252	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.558	20.564	(1.135)	54661	4.35789	4.358
37 Indeno(1,2,3-cd)pyrene	276	20.682	20.694	(1.142)	24762	1.32481	1.325
38 Dibenzo(a,h)anthracene	278	20.669	20.672	(1.141)	40966	2.54683	2.547
39 Benzo(g,h,i)perylene	276	21.769	21.779	(1.202)	21669	1.27957	1.280

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823012806.D
Lab Smp Id: BLA0411-SRM1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 25-JAN-2023
Calibration Time: 14:49
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	46976	23488	93952	50185	6.83
10 Acenaphthene-d10	27652	13826	55304	29025	4.97
15 Phenanthrene-d10	51738	25869	103476	54075	4.52
25 Chrysene-d12	45383	22692	90766	49246	8.51
33 Perylene-d12	41344	20672	82688	32012	-22.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.90	-0.19
10 Acenaphthene-d10	7.20	6.70	7.70	7.19	-0.08
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	-0.03
25 Chrysene-d12	14.21	13.71	14.71	14.21	-0.04
33 Perylene-d12	18.12	17.62	18.62	18.11	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823012806.D

Lab ID: BLA0411-SRM1
nt8.i, 20230125.b\FSIMPNA230119.m,   25-JAN-2023 16:48

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

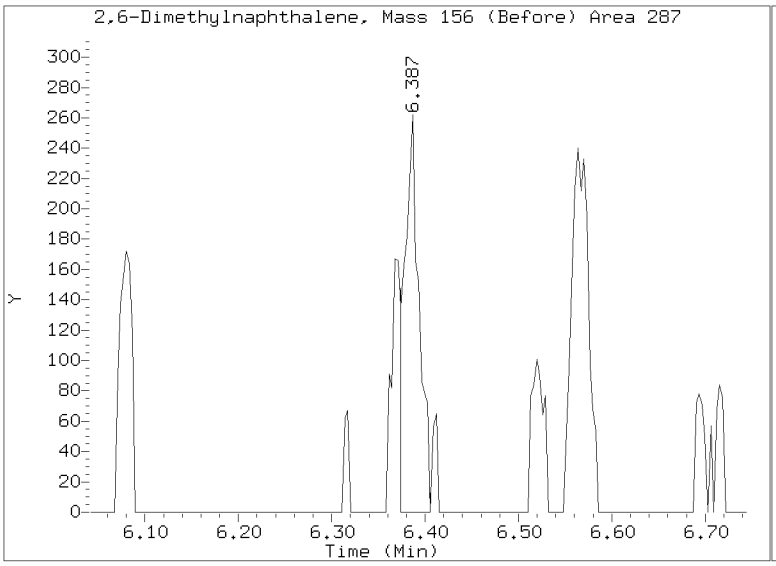
No RRT check performed

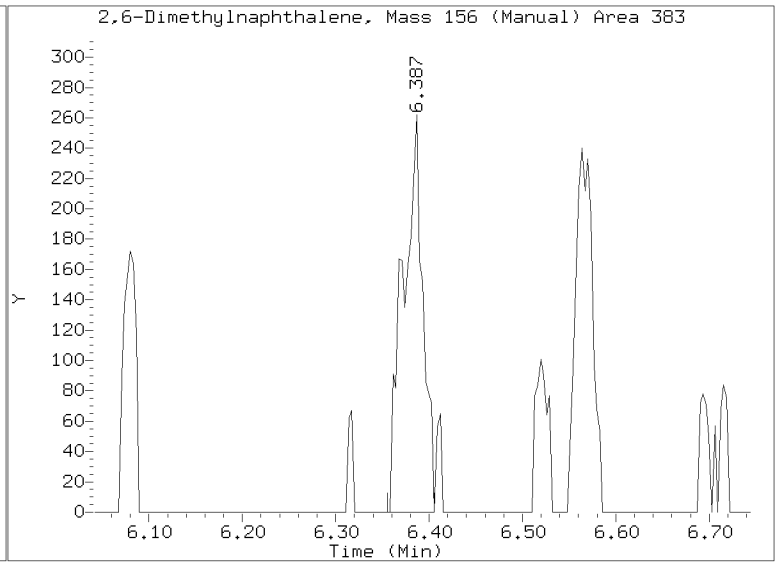
On Column LOD for nt8.i, 20230125.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

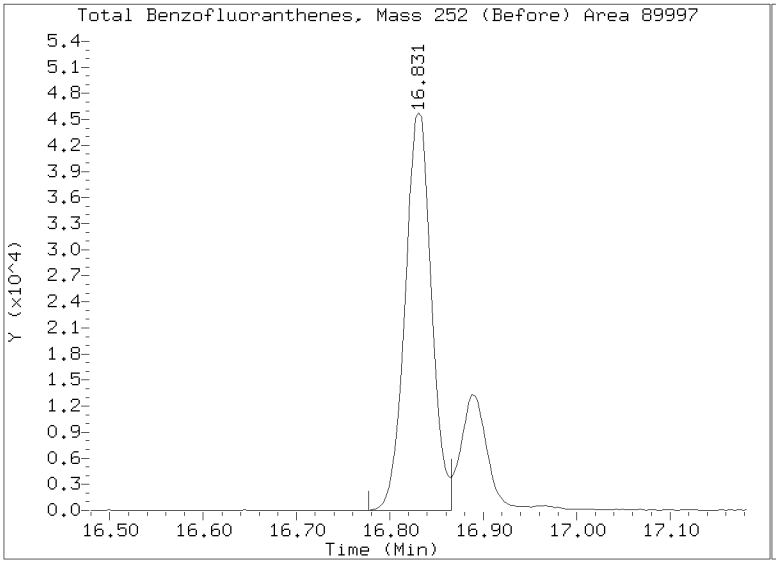
* Only compounds listed in the work order have been verified by the analyst *

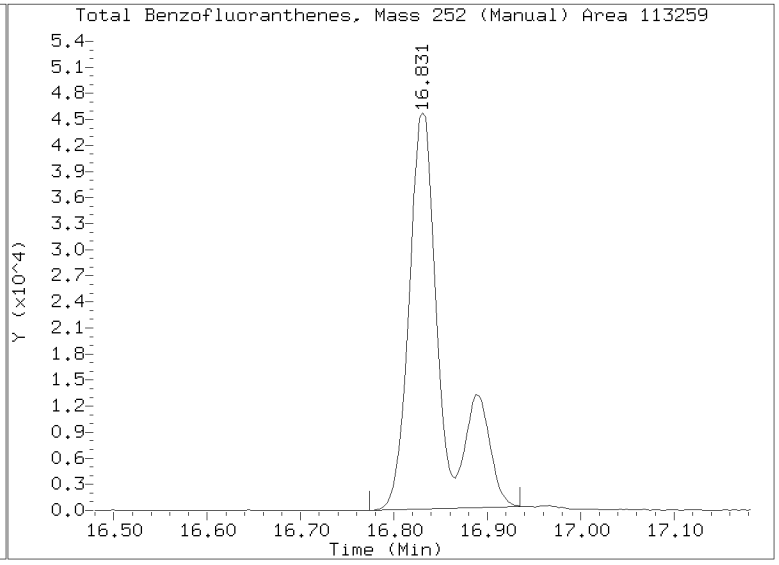
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230125.b/N823012806.D
Injection Date: 25-JAN-2023 16:48
Lab ID:BLA0411-SRM1 Client ID:
Report Date: 01/25/2023 23:02









Analytical Resources, LLC
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E-SIM

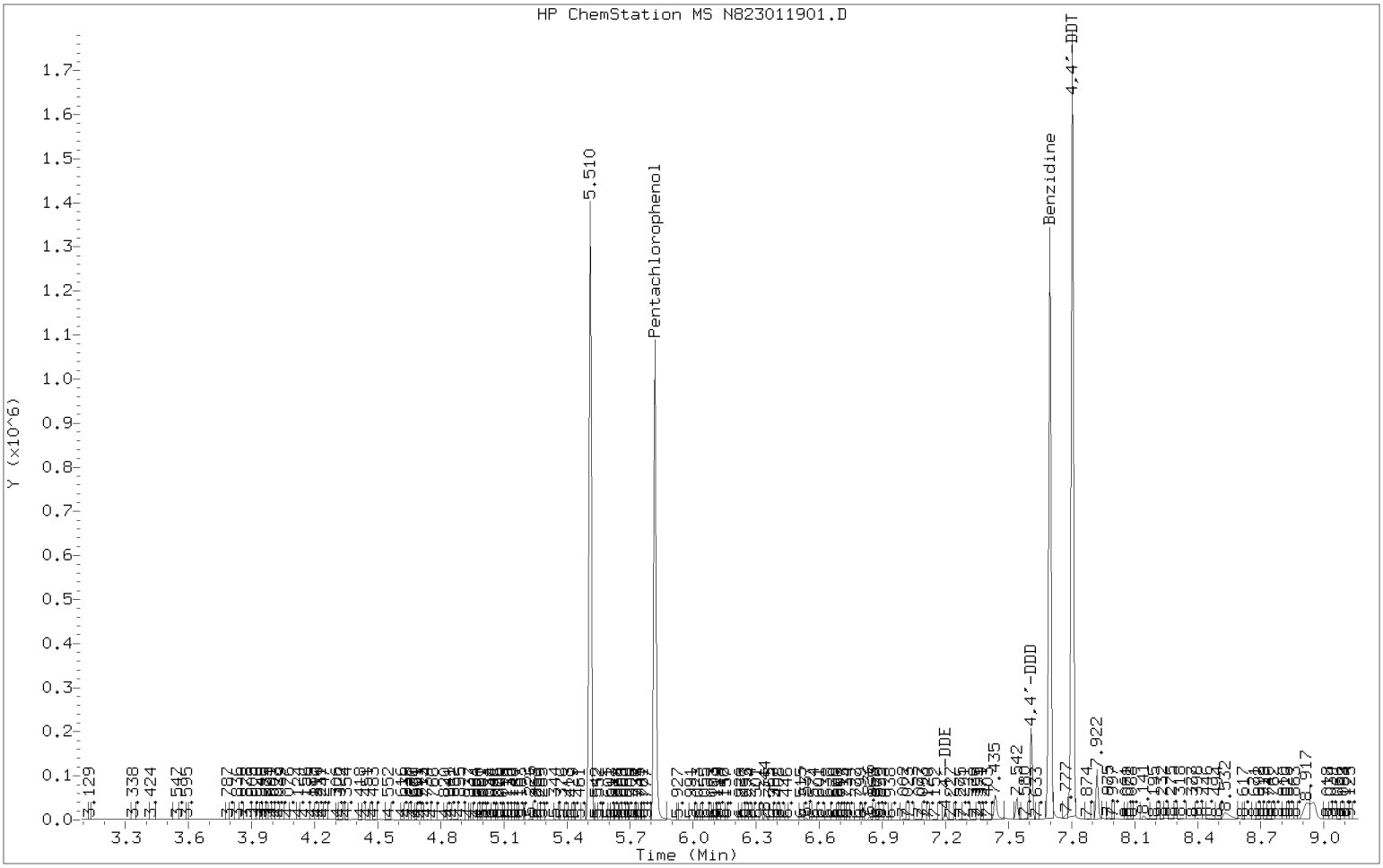
Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	N823011901.D	Injection Date:	01/19/23
Instrument ID:	NT8	Injection Time:	10:28
Sequence:	SLA0213	Lab Sample ID:	SLA0213-TUN1

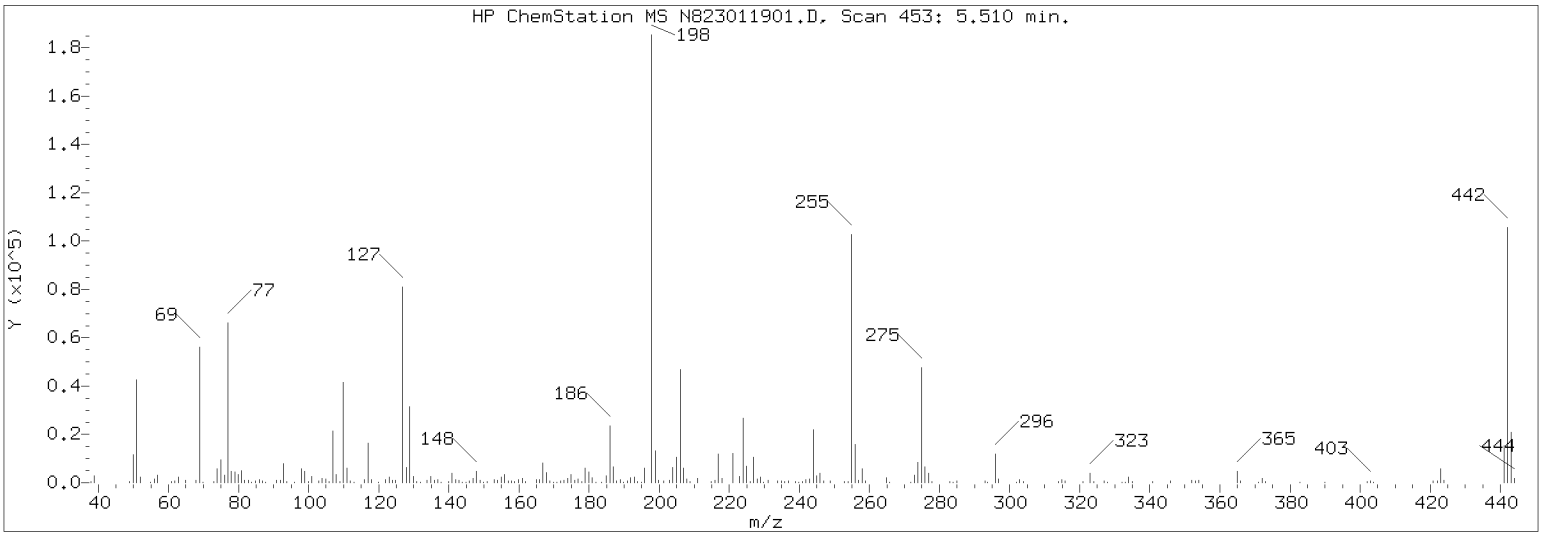
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	1.25	PASS
69	Less than 100% of 198	30.9	PASS
70	Less than 2% of 69	0.208	PASS
197	Less than 2% of 198	0.168	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.89	PASS
365	1 - 100% of 198	2.85	PASS
441	Less than 150% of 443	72.9	PASS
442	1 - 200% of 198	67.9	PASS
443	15 - 24% of 442	19.6	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Less than 200% of		

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLA0213-TUN1	N823011901.D	01/19/2023	10:28
Initial Cal Blank	SLA0213-ICB1	N823011902.D	01/19/2023	10:59
Cal Standard	SLA0213-CAL1	N823011903.D	01/19/2023	11:26
Cal Standard	SLA0213-CAL2	N823011904.D	01/19/2023	11:58
Cal Standard	SLA0213-CAL3	N823011905.D	01/19/2023	12:25
Cal Standard	SLA0213-CAL4	N823011906.D	01/19/2023	12:52
Cal Standard	SLA0213-CAL5	N823011907.D	01/19/2023	13:19
Cal Standard	SLA0213-CAL6	N823011908.D	01/19/2023	13:46
Secondary Cal Check	SLA0213-SCV1	N823011909.D	01/19/2023	14:58

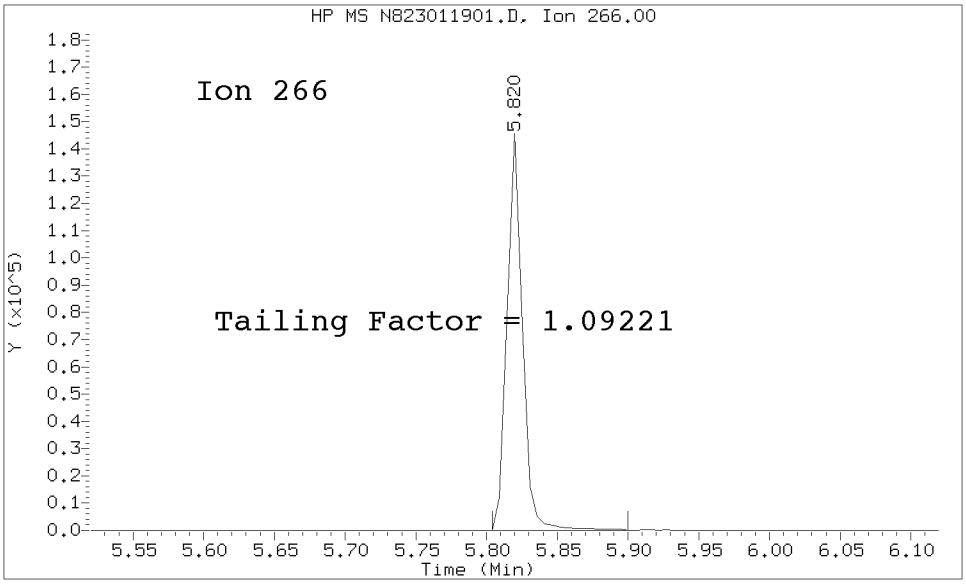
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: SLA0213-TUN1 DFTPP230119
Report Date: 01/19/2023 20:14



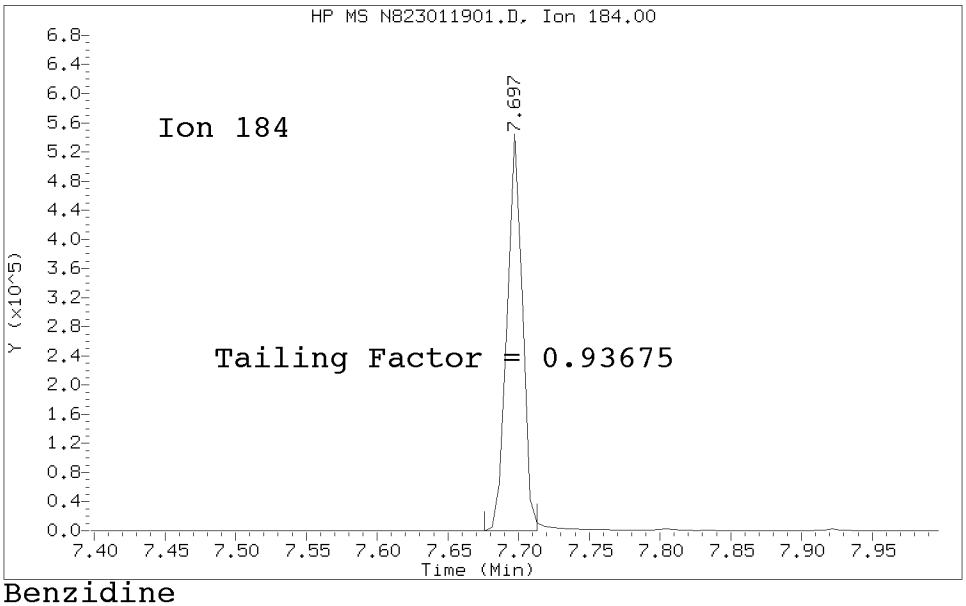


Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m\sw846ddt.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: DFTPP230119
Report Date: 01/19/2023 20:14



Pentachlorophenol
==========
Exp. RT = 5.825
Found RT = 5.820

Tail Factor = 1.092 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.703
Found RT = 7.697

Tail Factor = 0.937 Maximum Allowed = 2.0

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	23.71
68	Less than 2.00% of mass 69	0.39 (1.25)
69	Mass 69 relative abundance	30.92
70	Less than 2.00% of mass 69	0.06 (0.21)
127	10.00 - 80.00% of mass 198	44.20
197	Less than 2.00% of mass 198	0.17
199	5.00 - 9.00% of mass 198	6.89
275	10.00 - 60.00% of mass 198	26.96
365	Greater than 1.00% of mass 198	2.85
441	0.01 - 24.00% of mass 442	9.72 (14.32)
442	50.00 - 200.00% of mass 198	67.89
443	15.00 - 24.00% of mass 442	13.33 (19.64)

Data File: N823011901.D
Spectrum: Avg. Scans 452-454 (5.51), Background Scan 448
Location of Maximum: 198.00
Number of points: 228

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	424	124.00	727	188.00	466	265.00	1738
39.00	2285	125.00	694	189.00	1088	266.00	231
49.00	389	127.00	59064	190.00	92	272.00	97
50.00	8567	128.00	4618	191.00	538	273.00	2435
51.00	31688	129.00	23208	192.00	1501	274.00	6434
52.00	1694	130.00	1967	193.00	1652	275.00	36032
55.00	89	131.00	387	194.00	339	276.00	4936
56.00	1081	132.00	92	195.00	108	277.00	3133
57.00	2353	134.00	695	196.00	4417	278.00	496
61.00	487	135.00	1887	197.00	224	283.00	243
62.00	511	136.00	770	198.00	133632	284.00	200
63.00	1627	137.00	979	199.00	9210	285.00	536
65.00	865	138.00	101	200.00	711	293.00	678
68.00	518	140.00	220	201.00	653	294.00	83
69.00	41320	141.00	2913	203.00	891	296.00	9364
70.00	86	142.00	931	204.00	4715	297.00	1310
73.00	274	143.00	728	205.00	8070	302.00	96
74.00	4327	144.00	83	206.00	34104	303.00	1146
75.00	6885	145.00	91	207.00	4557	304.00	262
76.00	2362	146.00	508	208.00	1177	314.00	364
77.00	48072	147.00	1540	209.00	387	315.00	1068
78.00	3441	148.00	3391	210.00	236	316.00	588
79.00	3296	149.00	690	211.00	1430	321.00	250
80.00	2464	150.00	90	215.00	376	323.00	3145
81.00	3741	151.00	458	216.00	746	324.00	501
82.00	872	152.00	181	217.00	9085	327.00	540
83.00	845	153.00	893	218.00	1189	328.00	201
84.00	287	154.00	764	221.00	8442	332.00	178
85.00	621	155.00	1756	223.00	2039	333.00	129
86.00	1039	156.00	2503	224.00	19544	334.00	1893
87.00	481	157.00	527	225.00	5122	335.00	518
88.00	91	158.00	516	226.00	502	341.00	275
91.00	866	159.00	410	227.00	8274	346.00	674
92.00	878	160.00	955	228.00	1174	352.00	945
93.00	5816	161.00	1421	229.00	1712	353.00	630
94.00	409	162.00	445	230.00	111	354.00	910
96.00	203	165.00	1085	231.00	685	365.00	3802
98.00	4243	166.00	1023	234.00	538	366.00	580
99.00	3501	167.00	5993	235.00	568	371.00	91
100.00	344	168.00	3082	236.00	394	372.00	1475
101.00	1983	169.00	490	237.00	657	373.00	292
103.00	704	170.00	94	239.00	327	383.00	290
104.00	1275	171.00	194	240.00	187	390.00	177
105.00	1230	172.00	595	241.00	468	402.00	468
106.00	379	173.00	732	242.00	1090	403.00	736
107.00	15826	174.00	1319	243.00	1102	404.00	243
108.00	2447	175.00	2491	244.00	16206	421.00	649
109.00	331	176.00	751	245.00	2245	422.00	226
110.00	30008	177.00	1175	246.00	3000	423.00	4860

111.00	4456	178.00	288	247.00	624	424.00	978
112.00	513	179.00	4561	249.00	587	441.00	12991
113.00	89	180.00	3271	253.00	239	442.00	90720
116.00	935	181.00	1513	254.00	438	443.00	17816
117.00	12513	182.00	106	255.00	76904	444.00	1584
118.00	931	184.00	333	256.00	11699		
120.00	104	185.00	2153	257.00	880		
122.00	1003	186.00	17336	258.00	4539		
123.00	1682	187.00	4916	259.00	746		

Analytical Resources, LLC
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	NT1802252301S.D	Injection Date:	02/25/23
Instrument ID:	NT18	Injection Time:	20:42
Sequence:	SLC0155	Lab Sample ID:	SLC0155-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	0	PASS
69	Less than 100% of 198	41.2	PASS
70	Less than 2% of 69	0.5	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.63	PASS
365	1 - 100% of 198	3.7	PASS
441	Less than 150% of 443	80.5	PASS
442	1 - 200% of 198	80.5	PASS
443	15 - 24% of 442	18.9	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Less than 200% of		

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLC0155-TUN1	NT1802252301S.D	02/25/2023	20:42
Cal Standard	SLC0155-CAL9	NT1802252302S.D	02/25/2023	21:23
Cal Standard	SLC0155-CAL8	NT1802252303S.D	02/25/2023	22:03
Cal Standard	SLC0155-CAL7	NT1802252304S.D	02/25/2023	22:43
Cal Standard	SLC0155-CAL6	NT1802252305S.D	02/25/2023	23:24
Cal Standard	SLC0155-CAL5	NT1802252306S.D	02/26/2023	0:04
Cal Standard	SLC0155-CAL4	NT1802252307S.D	02/26/2023	0:44
Cal Standard	SLC0155-CAL3	NT1802252308S.D	02/26/2023	1:24
Cal Standard	SLC0155-CAL2	NT1802252309S.D	02/26/2023	2:05
Cal Standard	SLC0155-CAL1	NT1802252310S.D	02/26/2023	2:45
Instrument Blank	SLC0155-IBL1	NT1802252311S.D	02/26/2023	3:26
Secondary Cal Check	SLC0155-SCV1	NT1802252312S.D	02/26/2023	4:06

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	41.17
70	Less than 2.00% of mass 69	0.21 (0.50)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.63
365	1.00 - 100.00% of mass 198	3.70
441	Less than 150.00% of mass 443	12.29 (80.53)
442	Less than 200.00% of mass 198	80.53
443	15.00 - 24.00% of mass 442	15.26 (18.95)

Data File: NT1802252301S.D
Spectrum: Avg. Scans 1843-1845 (18.72), Background Scan 1838
Location of Maximum: 198.00
Number of points: 323

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	220	127.00	242176	210.00	608	299.00	72
37.00	967	128.00	18392	211.00	5556	301.00	577
38.00	2785	129.00	96032	213.00	351	302.00	747
39.00	15166	130.00	8031	214.00	66	303.00	4907
40.00	725	131.00	1607	215.00	1396	304.00	1293
41.00	438	132.00	1034	216.00	2830	305.00	132
43.00	117	133.00	332	217.00	33656	308.00	545
45.00	414	134.00	2677	218.00	4658	309.00	434
48.00	70	135.00	7544	219.00	379	310.00	1105
49.00	1824	136.00	2933	221.00	34584	311.00	223
50.00	51088	137.00	3930	223.00	7904	312.00	111
51.00	187520	138.00	1034	224.00	76560	313.00	506
52.00	9471	139.00	573	225.00	19064	314.00	2103
53.00	517	140.00	1188	226.00	2136	315.00	4587
55.00	1003	141.00	11908	227.00	30976	316.00	2629
56.00	5693	142.00	3963	228.00	4600	317.00	476
57.00	12450	143.00	2682	229.00	6368	319.00	51
58.00	594	144.00	879	230.00	1131	320.00	142
59.00	116	145.00	620	231.00	2856	321.00	1493
60.00	306	146.00	2281	232.00	514	322.00	473
61.00	2536	147.00	5711	233.00	607	323.00	13155
62.00	2844	148.00	13401	234.00	1942	324.00	2624
63.00	7649	149.00	2648	235.00	2285	325.00	217
64.00	1188	150.00	799	236.00	1377	326.00	330
65.00	3947	151.00	2003	237.00	2608	327.00	2589
66.00	374	152.00	431	238.00	396	328.00	1447
67.00	156	153.00	3992	239.00	1277	329.00	179
69.00	215360	154.00	2809	240.00	977	332.00	1079
70.00	1077	155.00	6572	241.00	1835	333.00	1407
71.00	119	156.00	10087	242.00	4428	334.00	8469
73.00	1722	157.00	2167	243.00	4996	335.00	2223
74.00	21360	158.00	2291	244.00	65768	336.00	252
75.00	32760	159.00	1645	245.00	8615	339.00	174
76.00	11667	160.00	3868	246.00	11846	340.00	236
77.00	227136	161.00	5423	247.00	2483	341.00	1666
78.00	15427	162.00	1602	248.00	563	342.00	409
79.00	15397	163.00	449	249.00	2360	346.00	3398
80.00	10911	164.00	742	250.00	444	347.00	545
81.00	15377	165.00	4059	251.00	531	351.00	284
82.00	3815	166.00	3568	252.00	527	352.00	4094
83.00	3427	167.00	24600	253.00	1289	353.00	2881
84.00	399	168.00	12104	255.00	323392	354.00	4506
85.00	2535	169.00	2188	256.00	46232	355.00	899
86.00	4534	170.00	789	257.00	3793	358.00	50
87.00	2011	171.00	1123	258.00	18128	359.00	217
88.00	945	172.00	2241	259.00	2864	360.00	57
89.00	447	173.00	2799	260.00	541	365.00	19352
90.00	108	174.00	5195	261.00	486	366.00	2645
91.00	3668	175.00	9152	263.00	168	367.00	222

92.00	4027	176.00	3473	264.00	450	370.00	396
93.00	24888	177.00	4425	265.00	7366	371.00	1012
94.00	1863	178.00	1648	266.00	1155	372.00	6575
95.00	521	179.00	17864	267.00	55	373.00	1696
96.00	1194	180.00	11878	268.00	133	374.00	80
98.00	19456	181.00	6026	269.00	52	383.00	1730
99.00	15353	182.00	945	270.00	429	384.00	494
100.00	1355	183.00	556	271.00	651	385.00	136
101.00	8334	184.00	1650	272.00	1019	390.00	844
102.00	590	185.00	8888	273.00	10416	391.00	488
103.00	3238	186.00	70416	274.00	26248	392.00	390
104.00	5358	187.00	19576	275.00	154752	397.00	52
105.00	4920	188.00	2032	276.00	19848	401.00	364
106.00	2328	189.00	4603	277.00	11801	402.00	2598
107.00	65456	190.00	638	278.00	2016	403.00	3311
108.00	10450	191.00	2013	279.00	504	404.00	1346
110.00	127944	192.00	5979	281.00	67	405.00	136
111.00	17976	193.00	6294	282.00	292	415.00	133
112.00	2498	194.00	1387	283.00	1383	421.00	2859
113.00	766	195.00	1119	284.00	925	422.00	3020
114.00	175	196.00	18912	285.00	2369	423.00	20976
115.00	408	198.00	523072	286.00	372	424.00	4215
116.00	3902	199.00	34704	288.00	120	425.00	431
117.00	54672	200.00	2675	289.00	626	437.00	115
118.00	3817	201.00	3359	290.00	396	438.00	243
119.00	488	203.00	3637	291.00	280	439.00	450
120.00	868	204.00	18208	292.00	638	441.00	64280
121.00	541	205.00	31632	293.00	2603	442.00	421248
122.00	4779	206.00	131200	294.00	693	443.00	79824
123.00	6547	207.00	17288	296.00	43712	444.00	7170
124.00	3236	208.00	4403	297.00	6035	445.00	374
125.00	2841	209.00	1300	298.00	407		

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00050	Instrument:	NT8
Calibration Date:	01/19/2023	Column (1):	RXI-17Sil ms

Calibration Comments: SS, Dibenzo(a,h)anthracene-d14, highest point included. Changed curve fit from "AVG" to "LRO" on 1/25/23 by JZ.

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
Naphthalene	0.1	1.051331	0.5	0.8804155	1	0.9140738	2.5	0.9442377	5	0.9059688	10	0.8834817
2-Methylnaphthalene	0.1	0.5583976	0.5	0.483576	1	0.4966087	2.5	0.5321582	5	0.5081776	10	0.490102
1-Methylnaphthalene	0.1	0.567502	0.5	0.4881925	1	0.5073336	2.5	0.5386185	5	0.5123544	10	0.5007901
Acenaphthylene	0.1	1.569275	0.5	1.288567	1	1.419627	2.5	1.612722	5	1.573862	10	1.597505
Acenaphthene	0.1	1.159165	0.5	0.9399536	1	0.9690137	2.5	1.040021	5	0.9826181	10	0.9807186
Dibenzofuran	0.1	1.856131	0.5	1.449189	1	1.468766	2.5	1.539056	5	1.458398	10	1.450275
Fluorene	0.1	1.333774	0.5	1.066627	1	1.134936	2.5	1.226731	5	1.19285	10	1.207426
Phenanthrene	0.1	1.200199	0.5	0.9068737	1	0.925967	2.5	0.9922048	5	0.9288855	10	0.90761
Anthracene	0.1	0.9900686	0.5	0.7891408	1	0.8362482	2.5	0.9415647	5	0.895227	10	0.8727266
Fluoranthene	0.1	1.200966	0.5	0.9720444	1	1.022937	2.5	1.114343	5	1.05358	10	1.016684
Pyrene	0.1	1.416146	0.5	1.066416	1	1.156217	2.5	1.294823	5	1.256828	10	1.249389
Benzo(a)anthracene	0.1	1.200365	0.5	0.9419141	1	1.006861	2.5	1.18718	5	1.184592	10	1.222407
Chrysene	0.1	1.382333	0.5	1.081643	1	1.128342	2.5	1.227241	5	1.185771	10	1.173282
Benzo(b)fluoranthene	0.1	1.335895	0.5	0.9774708	1	1.022944	2.5	1.220494	5	1.192377	10	1.239686
Benzo(k)fluoranthene	0.1	1.327249	0.5	0.9937275	1	1.005899	2.5	1.178993	5	1.164539	10	1.175213
Benzo(j)fluoranthene	0.1	1.092831	0.5	0.9205253	1	0.9228699	2.5	1.084778	5	1.075203	10	1.066465
Benzofluoranthenes, Total	0.3	1.255354	1.5	0.9344954	3	0.9716584	7.5	1.159079	15	1.142352	30	1.155882
Benzo(a)pyrene	0.1	1.139906	0.5	0.8777692	1	0.8951488	2.5	1.077374	5	1.063086	10	1.096879
Indeno(1,2,3-cd)pyrene	0.1	1.208599	0.5	0.995325	1	1.072555	2.5	1.257473	5	1.228578	10	1.24398
Dibenzo(a,h)anthracene	0.1	1.049117	0.5	0.8348251	1	0.8950591	2.5	1.081382	5	1.068557	10	1.100721
Benzo(g,h,i)perylene	0.1	1.162964	0.5	0.9102826	1	0.9409469	2.5	1.106673	5	1.088733	10	1.138469
2-Methylnaphthalene-d10	0.1	0.5857106	0.5	0.4932528	1	0.5345061	2.5	0.5674481	5	0.5504276	10	0.5413545
Dibenzo[a,h]anthracene-d14	0.1	0.580281	0.5	0.5471844	1	0.6076211	2.5	0.7324975	5	0.7420675	10	0.7980029
Fluoranthene-d10	0.1	0.9007247	0.5	0.754546	1	0.8247891	2.5	0.9550254	5	0.9291815	10	0.930087

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00050	Instrument:	NT8
Calibration Date:	01/19/2023	Column (1):	RXI-17Sil ms

Calibration Comments: SS, Dibenzo(a,h)anthracene-d14, highest point included. Changed curve fit from "AVG" to "LRO" on 1/25/23 by JZ.

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Naphthalene	0.9299181	6.9			RSD (15)	
2-Methylnaphthalene	0.5115033	5.6			RSD (15)	
1-Methylnaphthalene	0.5191318	5.6			RSD (15)	
Acenaphthylene	1.51026	8.5			RSD (15)	
Acenaphthene	1.011915	7.8			RSD (15)	
Dibenzofuran	1.536969	10.4			RSD (15)	
Fluorene	1.193724	7.5			RSD (15)	
Phenanthrene	0.9769567	11.6			RSD (15)	
Anthracene	0.887496	8.1			RSD (15)	
Fluoranthene	1.063426	7.7			RSD (15)	
Pyrene	1.23997	9.6			RSD (15)	
Benzo(a)anthracene	1.123887	10.5			RSD (15)	
Chrysene	1.196435	8.7			RSD (15)	
Benzo(b)fluoranthene	1.164811	11.8			RSD (15)	
Benzo(k)fluoranthene	1.140937	10.9			RSD (15)	
Benzo(j)fluoranthene	1.027112	8.0			RSD (15)	
Benzofluoranthenes, Total	1.103137	11.2			RSD (15)	
Benzo(a)pyrene	1.025027	10.8			RSD (15)	
Indeno(1,2,3-cd)pyrene	1.167752	9.2			RSD (15)	
Dibenzo(a,h)anthracene	1.004944	11.1			RSD (15)	
Benzo(g,h,i)perylene	1.058011	10.0			RSD (15)	
2-Methylnaphthalene-d10	0.5454499	5.8			RSD (15)	
Dibenzo[a,h]anthracene-d14	0.6679424	15.3	0.9971		LCOD (0.99)	
Fluoranthene-d10	0.8823923	8.7			RSD (15)	

Printed: 1/19/2023 8:45:16PM

ANALYSIS SEQUENCE

SLA0213

Instrument: NT8 Element Column ID: J006458
Calibration ID: GA00050

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SLA0213-TUN1	MS Tune	QC		1	K004775			
SLA0213-ICB1	Initial Cal Blank	QC		2		K008540		
SLA0213-CAL1	8270 SIM PNA 0.1	QC		3	L000603	K008540		
SLA0213-CAL2	8270 SIM PNA 0.5	QC		4	L000604	K008540		
SLA0213-CAL3	8270 SIM PNA 1.0	QC		5	L000605	K008540		
SLA0213-CAL4	8270 SIM PNA 2.5	QC		6	L000606	K008540		
SLA0213-CAL5	8270 SIM PNA 5	QC		7	L000607	K008540		
SLA0213-CAL6	8270 SIM PNA 10	QC		8	L000608	K008540		
SLA0213-SCV1	8270 SIM PNA SCV	QC		9	L000686	K008540		

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

	Time	Filename	LabID	ClientId	DF									
1	1028	N823011901.D	SLA0213-TUN1		1	|NO ISTDS FOUND||								
2	1059	N823011902.D	SLA0213-ICB1		1	| 4.92	52082||	7.20	30936||	9.24	59030||	14.22	50944||	18.12	47418|
3	1126	N823011903.D	SLA0213-CAL1		1	| 4.91	46132||	7.20	27261||	9.24	52158||	14.20	44953||	18.11	41635|
4	1158	N823011904.D	SLA0213-CAL2		1	| 4.91	45056||	7.20	26746||	9.24	50759||	14.21	44658||	18.11	42567|
5	1225	N823011905.D	SLA0213-CAL3		1	| 4.91	47180||	7.20	28206||	9.24	53233||	14.20	46493||	18.11	44587|
6	1252	N823011906.D	SLA0213-CAL4		1	| 4.91	44704||	7.20	26411||	9.24	49210||	14.20	42994||	18.11	40520|
7	1319	N823011907.D	SLA0213-CAL5		1	| 4.91	46542||	7.20	27638||	9.23	51351||	14.20	44781||	18.11	42187|
8	1346	N823011908.D	SLA0213-CAL6		1	| 4.91	46070||	7.20	26689||	9.24	50683||	14.21	43880||	18.11	40659|
9	1458	N823011909.D	SLA0213-SCV1		1	| 4.91	46346||	7.20	27709||	9.24	51685||	14.21	46582||	18.12	41743|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

ARI Job No.: SLA0 Method: FSIMPNA230119.m Instrument: nt8.i Date: 19-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1059	N823011902.D	SLA0213-ICB1		1	NO MANUAL INTEGRATION
1126	N823011903.D	SLA0213-CAL1		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene-d14,
1158	N823011904.D	SLA0213-CAL2		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene, Dibenzo(a,h)anthracene-d14,
1225	N823011905.D	SLA0213-CAL3		1	Total Benzofluoranthenes,
1252	N823011906.D	SLA0213-CAL4		1	Total Benzofluoranthenes,
1319	N823011907.D	SLA0213-CAL5		1	Total Benzofluoranthenes,
1346	N823011908.D	SLA0213-CAL6		1	Total Benzofluoranthenes,
1458	N823011909.D	SLA0213-SCV1		1	Total Benzofluoranthenes,

Security Status Report

Date: 19-Jan-2023 20:43

N823011901.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011902.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011903.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011904.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011905.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011906.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011907.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011908.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011909.D	Data Locked	jianqing, 19-Jan-2023 20:43

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JAN-2023 11:26
End Cal Date : 19-JAN-2023 13:46
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Last Edit : 19-Jan-2023 20:20 jianqing
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem3\nt8.i\20230119.b\N823011903.D
Level 2: \\target\share\chem3\nt8.i\20230119.b\N823011904.D
Level 3: \\target\share\chem3\nt8.i\20230119.b\N823011905.D
Level 4: \\target\share\chem3\nt8.i\20230119.b\N823011906.D
Level 5: \\target\share\chem3\nt8.i\20230119.b\N823011907.D
Level 6: \\target\share\chem3\nt8.i\20230119.b\N823011908.D

	0.10000	0.50000	1.000	2.500	5.000	10.000	___	
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	% RSD
2 Naphthalene	1.05133	0.88042	0.91407	0.94424	0.90597	0.88348	0.92992	6.865
4 2-Methylnaphthalene	0.55840	0.48358	0.49661	0.53216	0.50818	0.49010	0.51150	5.596
5 1-methylnaphthalene	0.56750	0.48819	0.50733	0.53862	0.51235	0.50079	0.51913	5.582
6 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Biphenyl	1.53553	1.22381	1.26186	1.35447	1.27381	1.26708	1.31943	8.655
8 2,6-Dimethylnaphthalene	1.00657	0.84902	0.90342	0.98129	0.93327	0.92936	0.93382	5.997
9 Acenaphthylene	1.56927	1.28857	1.41963	1.61272	1.57386	1.59750	1.51026	8.531
11 Acenaphthene	1.15917	0.93995	0.96901	1.04002	0.98262	0.98072	1.01192	7.822
12 Dibenzofuran	1.85613	1.44919	1.46877	1.53906	1.45840	1.45028	1.53697	10.407
13 1,6,7-Trimethylnaphthalene	1.10194	0.88028	0.91555	1.00758	0.95392	0.95592	0.96920	8.030
14 Fluorene	1.33377	1.06663	1.13494	1.22673	1.19285	1.20743	1.19372	7.540
16 Phenanthrene	1.20020	0.90687	0.92597	0.99220	0.92889	0.90761	0.97696	11.644
17 Anthracene	0.99007	0.78914	0.83625	0.94156	0.89523	0.87273	0.88750	8.129
18 Dibenzothiophene	1.00464	0.81097	0.83858	0.91687	0.87432	0.85731	0.88378	7.813
19 Carbazole	0.89689	0.71317	0.75168	0.85950	0.83159	0.82882	0.81361	8.430
20 1-Methylphenanthrene	0.79489	0.62625	0.65095	0.73891	0.70849	0.70462	0.70402	8.607

22 Fluoranthene	1.20097	0.97204	1.02294	1.11434	1.05358	1.01668	1.06343	7.729
23 Pyrene	1.41615	1.06642	1.15622	1.29482	1.25683	1.24939	1.23997	9.648
24 Benzo(a)anthracene	1.20036	0.94191	1.00686	1.18718	1.18459	1.22241	1.12389	10.532
27 Chrysene	1.38233	1.08164	1.12834	1.22724	1.18577	1.17328	1.19644	8.684
28 Benzo(b)fluoranthene	1.33590	0.97747	1.02294	1.22049	1.19238	1.23969	1.16481	11.769
29 Benzo(k)fluoranthene	1.32725	0.99373	1.00590	1.17899	1.16454	1.17521	1.14094	10.933
30 Benzo(j)fluoranthene	1.09283	0.92053	0.92287	1.08478	1.07520	1.06646	1.02711	7.997
31 Total Benzofluoranthenes	1.25535	0.93450	0.97166	1.15908	1.14235	1.15588	1.10314	11.202
32 Benzo(a)pyrene	1.13991	0.87777	0.89515	1.07737	1.06309	1.09688	1.02503	10.785
34 Benzo(e)pyrene	1.38633	1.02276	1.03286	1.18813	1.15641	1.18275	1.16154	11.391
35 Perylene	1.28978	0.96103	0.98751	1.14448	1.10241	1.11455	1.09996	10.771
37 Indeno(1,2,3-cd)pyrene	1.20860	0.99533	1.07255	1.25747	1.22858	1.24398	1.16775	9.225

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JAN-2023 11:26
End Cal Date : 19-JAN-2023 13:46
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Last Edit : 19-Jan-2023 20:20 jianqing
Curve Type : Average

Compound	0.10000 Level 1	0.50000 Level 2	1.000 Level 3	2.500 Level 4	5.000 Level 5	10.000 Level 6	___ RRF	% RSD
38 Dibenzo(a,h)anthracene	1.04912	0.83483	0.89506	1.08138	1.06856	1.10072	1.00494	11.083
39 Benzo(g,h,i)perylene	1.16296	0.91028	0.94095	1.10667	1.08873	1.13847	1.05801	10.032
$ 3 2-Methylnaphthalene-d10	0.58571	0.49325	0.53451	0.56745	0.55043	0.54135	0.54545	5.792
$ 21 Fluoranthene-d10	0.90072	0.75455	0.82479	0.95503	0.92918	0.93009	0.88239	8.740
$ 36 Dibenzo(a,h)anthracene-d14	0.58028	0.54718	0.60762	0.73250	0.74207	+++++	0.64193	13.973

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Batch File: \\target\share\chem3\nt8.i\20230119.b
Inst ID: nt8.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	N823011903	N823011904	N823011905	N823011906	N823011907	N823011908
INJ.DATE:	19-JAN-2023	19-JAN-2023	19-JAN-2023	19-JAN-2023	19-JAN-2023	19-JAN-2023
INJ.TIME:	11:26	11:58	12:25	12:52	13:19	13:46

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 1 Naphthalene-d8	4.907	4.913	4.907	4.907	4.910	4.907	4.907	1.907-7.907	4.908	0.003
2 Naphthalene	4.939	4.942	4.939	4.938	4.938	4.938	4.938	1.938-7.938	4.939	0.001
$ 3 2-Methylnaphthalene-d1	5.644	5.647	5.640	5.640	5.640	5.640	5.640	2.640-8.640	5.642	0.003
4 2-Methylnaphthalene	5.691	5.694	5.688	5.688	5.688	5.688	5.688	2.688-8.688	5.689	0.003
5 1-methylnaphthalene	5.884	5.890	5.887	5.884	5.887	5.887	5.887	2.887-8.887	5.887	0.002
6 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	6.377	3.377-9.377	+++++	+++++
7 Biphenyl	6.346	6.352	6.346	6.345	6.346	6.349	6.349	3.349-9.349	6.347	0.003
8 2,6-Dimethylnaphthalen	6.390	6.396	6.390	6.390	6.390	6.393	6.393	3.393-9.393	6.391	0.003
9 Acenaphthylene	7.086	7.092	7.085	7.085	7.085	7.089	7.089	4.089-10.089	7.087	0.003
* 10 Acenaphthene-d10	7.196	7.199	7.196	7.196	7.196	7.196	7.196	4.196-10.196	7.197	0.001
11 Acenaphthene	7.247	7.250	7.247	7.247	7.247	7.247	7.247	4.247-10.247	7.247	0.001
12 Dibenzofuran	7.395	7.402	7.395	7.395	7.395	7.398	7.398	4.398-10.398	7.397	0.003
13 1,6,7-Trimethylnaphtha	7.462	7.465	7.462	7.462	7.462	7.465	7.465	4.465-10.465	7.463	0.002
14 Fluorene	7.876	7.879	7.876	7.873	7.876	7.876	7.876	4.876-10.876	7.876	0.002
* 15 Phenanthrene-d10	9.236	9.239	9.236	9.236	9.232	9.236	9.236	6.236-12.236	9.236	0.002
16 Phenanthrene	9.270	9.273	9.270	9.270	9.270	9.274	9.274	6.274-12.274	9.271	0.002
17 Anthracene	9.312	9.315	9.312	9.311	9.311	9.315	9.315	6.315-12.315	9.313	0.002

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

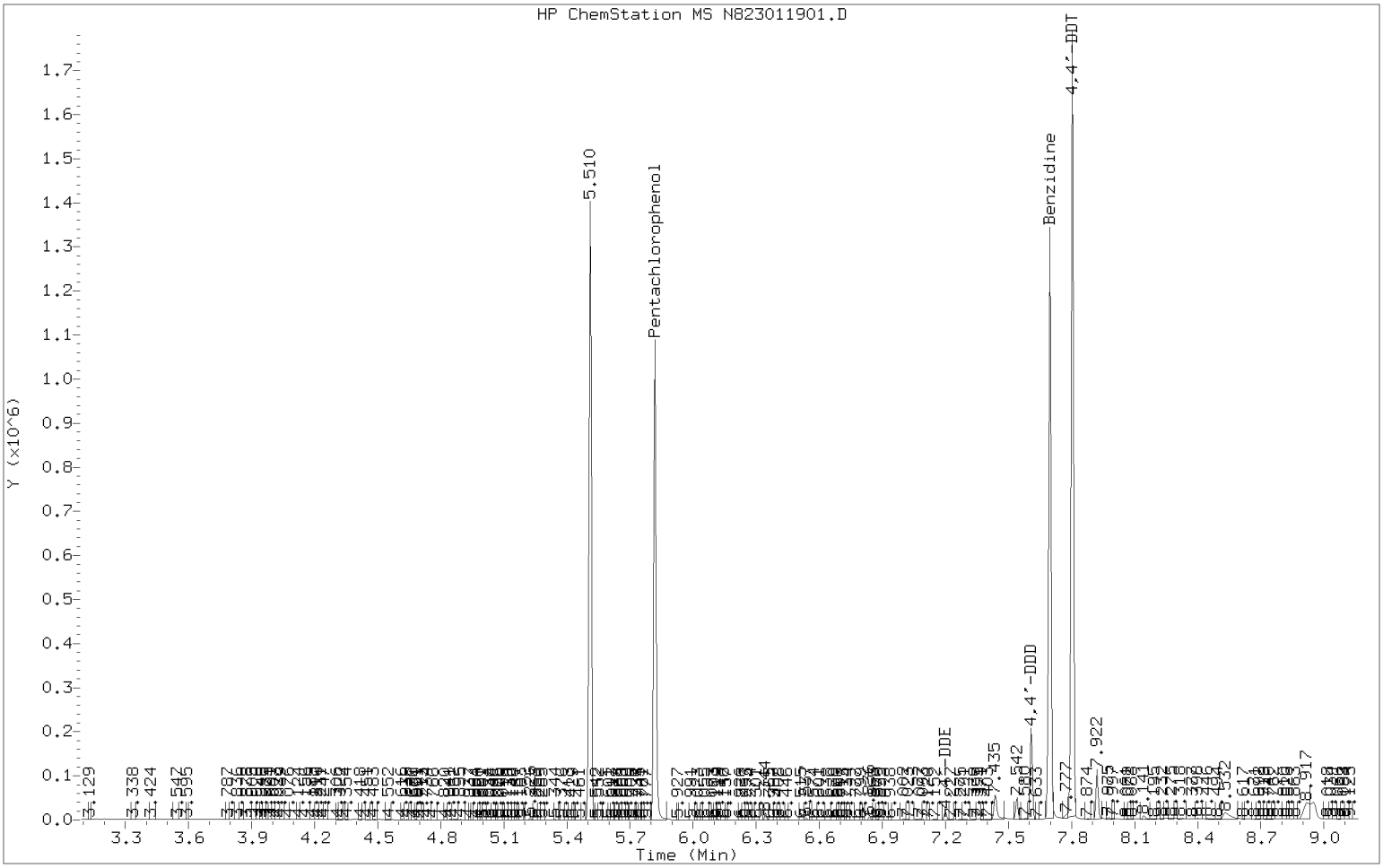
ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

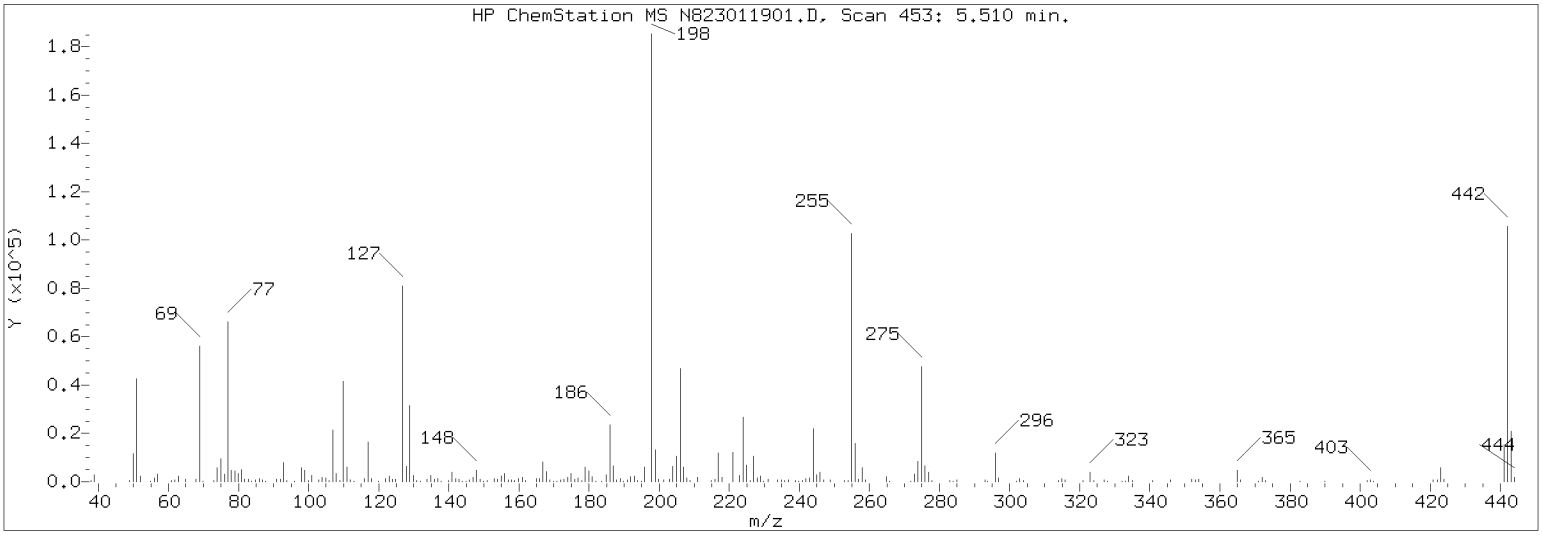
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Batch File: \\target\share\chem3\nt8.i\20230119.b
Inst ID: nt8.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 Dibenzothiophene	9.109	9.112	9.109	9.109	9.109	9.112	9.112	6.112-12.112	9.110	0.002
19 Carbazole	9.824	9.830	9.824	9.824	9.824	9.827	9.827	6.827-12.827	9.825	0.003
20 1-Methylphenanthrene	10.048	10.051	10.048	10.048	10.048	10.051	10.051	7.051-13.051	10.049	0.002
$ 21 Fluoranthene-d10	11.016	11.019	11.016	11.016	11.016	11.019	11.019	8.019-14.019	11.017	0.002
22 Fluoranthene	11.054	11.057	11.051	11.054	11.054	11.057	11.057	8.057-14.057	11.054	0.002
23 Pyrene	11.572	11.575	11.572	11.572	11.572	11.575	11.575	8.575-14.575	11.573	0.002
24 Benzo(a)anthracene	14.073	14.080	14.077	14.077	14.077	14.080	14.080	11.080-17.080	14.077	0.002
* 25 Chrysene-d12	14.203	14.209	14.203	14.203	14.203	14.206	14.206	11.206-17.206	14.205	0.003
27 Chrysene	14.276	14.279	14.276	14.279	14.279	14.282	14.282	11.282-17.282	14.278	0.002
28 Benzo(b)fluoranthene	16.821	16.827	16.824	16.821	16.827	16.834	16.834	13.834-19.834	16.826	0.005
29 Benzo(k)fluoranthene	16.881	16.887	16.881	16.884	16.888	16.897	16.897	13.897-19.897	16.886	0.006
30 Benzo(j)fluoranthene	16.960	16.963	16.960	16.963	16.967	16.973	16.973	13.973-19.973	16.964	0.005
31 Total Benzofluoranthen	16.821	16.827	16.824	16.821	16.827	16.834	16.834	13.834-19.834	16.826	0.005
32 Benzo(a)pyrene	17.874	17.883	17.877	17.877	17.884	17.890	17.890	14.890-20.890	17.881	0.006
* 33 Perylene-d12	18.111	18.114	18.111	18.111	18.111	18.114	18.114	15.114-21.114	18.112	0.002
34 Benzo(e)pyrene	17.748	17.754	17.751	17.748	17.751	17.760	17.760	14.760-20.760	17.752	0.005
35 Perylene	18.184	18.187	18.184	18.184	18.187	18.193	18.193	15.193-21.193	18.187	0.004
$ 36 Dibenzo(a,h)anthracene	20.546	20.549	20.549	20.552	20.555	20.565	20.565	17.565-23.565	20.553	0.007
37 Indeno(1,2,3-cd)pyrene	20.666	20.676	20.672	20.676	20.682	20.691	20.691	17.691-23.691	20.677	0.009
38 Dibenzo(a,h)anthracene	20.666	20.666	20.657	20.663	20.669	20.685	20.685	17.685-23.685	20.668	0.010
39 Benzo(g,h,i)perylene	21.757	21.760	21.748	21.757	21.763	21.782	21.782	18.782-24.782	21.761	0.012

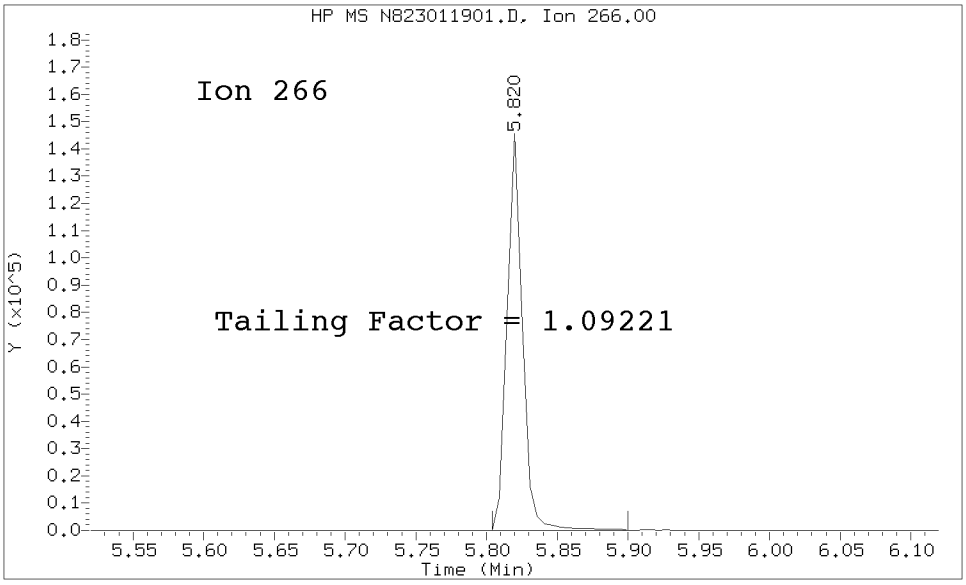
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: SLA0213-TUN1 DFTPP230119
Report Date: 01/19/2023 20:14



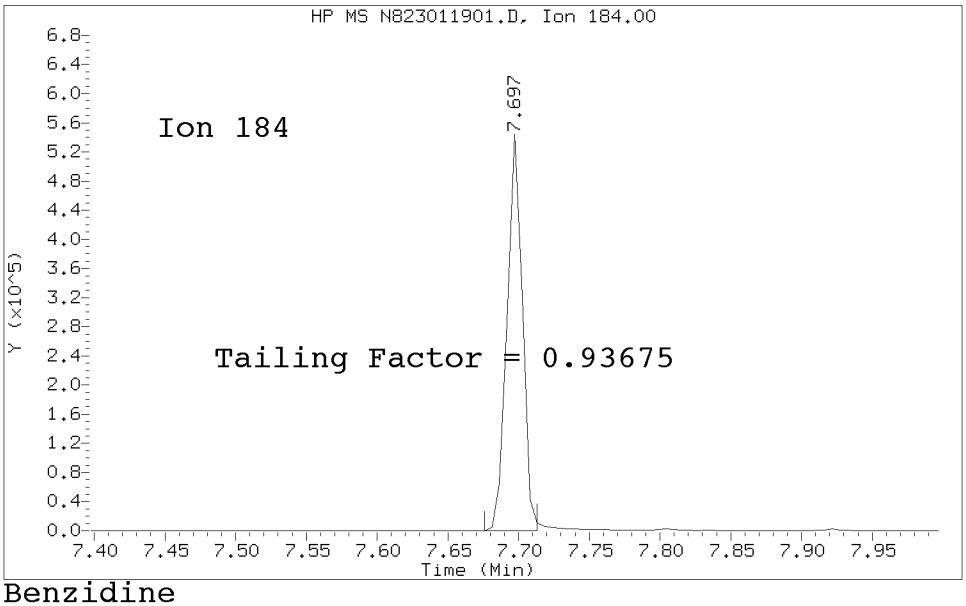


Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m\sw846ddt.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: DFTPP230119
Report Date: 01/19/2023 20:14



Pentachlorophenol
==========
Exp. RT = 5.825
Found RT = 5.820

Tail Factor = 1.092 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.703
Found RT = 7.697

Tail Factor = 0.937 Maximum Allowed = 2.0

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	23.71
68	Less than 2.00% of mass 69	0.39 (1.25)
69	Mass 69 relative abundance	30.92
70	Less than 2.00% of mass 69	0.06 (0.21)
127	10.00 - 80.00% of mass 198	44.20
197	Less than 2.00% of mass 198	0.17
199	5.00 - 9.00% of mass 198	6.89
275	10.00 - 60.00% of mass 198	26.96
365	Greater than 1.00% of mass 198	2.85
441	0.01 - 24.00% of mass 442	9.72 (14.32)
442	50.00 - 200.00% of mass 198	67.89
443	15.00 - 24.00% of mass 442	13.33 (19.64)

Data File: N823011901.D
Spectrum: Avg. Scans 452-454 (5.51), Background Scan 448
Location of Maximum: 198.00
Number of points: 228

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	424	124.00	727	188.00	466	265.00	1738
39.00	2285	125.00	694	189.00	1088	266.00	231
49.00	389	127.00	59064	190.00	92	272.00	97
50.00	8567	128.00	4618	191.00	538	273.00	2435
51.00	31688	129.00	23208	192.00	1501	274.00	6434
52.00	1694	130.00	1967	193.00	1652	275.00	36032
55.00	89	131.00	387	194.00	339	276.00	4936
56.00	1081	132.00	92	195.00	108	277.00	3133
57.00	2353	134.00	695	196.00	4417	278.00	496
61.00	487	135.00	1887	197.00	224	283.00	243
62.00	511	136.00	770	198.00	133632	284.00	200
63.00	1627	137.00	979	199.00	9210	285.00	536
65.00	865	138.00	101	200.00	711	293.00	678
68.00	518	140.00	220	201.00	653	294.00	83
69.00	41320	141.00	2913	203.00	891	296.00	9364
70.00	86	142.00	931	204.00	4715	297.00	1310
73.00	274	143.00	728	205.00	8070	302.00	96
74.00	4327	144.00	83	206.00	34104	303.00	1146
75.00	6885	145.00	91	207.00	4557	304.00	262
76.00	2362	146.00	508	208.00	1177	314.00	364
77.00	48072	147.00	1540	209.00	387	315.00	1068
78.00	3441	148.00	3391	210.00	236	316.00	588
79.00	3296	149.00	690	211.00	1430	321.00	250
80.00	2464	150.00	90	215.00	376	323.00	3145
81.00	3741	151.00	458	216.00	746	324.00	501
82.00	872	152.00	181	217.00	9085	327.00	540
83.00	845	153.00	893	218.00	1189	328.00	201
84.00	287	154.00	764	221.00	8442	332.00	178
85.00	621	155.00	1756	223.00	2039	333.00	129
86.00	1039	156.00	2503	224.00	19544	334.00	1893
87.00	481	157.00	527	225.00	5122	335.00	518
88.00	91	158.00	516	226.00	502	341.00	275
91.00	866	159.00	410	227.00	8274	346.00	674
92.00	878	160.00	955	228.00	1174	352.00	945
93.00	5816	161.00	1421	229.00	1712	353.00	630
94.00	409	162.00	445	230.00	111	354.00	910
96.00	203	165.00	1085	231.00	685	365.00	3802
98.00	4243	166.00	1023	234.00	538	366.00	580
99.00	3501	167.00	5993	235.00	568	371.00	91
100.00	344	168.00	3082	236.00	394	372.00	1475
101.00	1983	169.00	490	237.00	657	373.00	292
103.00	704	170.00	94	239.00	327	383.00	290
104.00	1275	171.00	194	240.00	187	390.00	177
105.00	1230	172.00	595	241.00	468	402.00	468
106.00	379	173.00	732	242.00	1090	403.00	736
107.00	15826	174.00	1319	243.00	1102	404.00	243
108.00	2447	175.00	2491	244.00	16206	421.00	649
109.00	331	176.00	751	245.00	2245	422.00	226
110.00	30008	177.00	1175	246.00	3000	423.00	4860

111.00	4456	178.00	288	247.00	624	424.00	978
112.00	513	179.00	4561	249.00	587	441.00	12991
113.00	89	180.00	3271	253.00	239	442.00	90720
116.00	935	181.00	1513	254.00	438	443.00	17816
117.00	12513	182.00	106	255.00	76904	444.00	1584
118.00	931	184.00	333	256.00	11699		
120.00	104	185.00	2153	257.00	880		
122.00	1003	186.00	17336	258.00	4539		
123.00	1682	187.00	4916	259.00	746		

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011902.D

Date : 19-JAN-2023 10:59

Client ID:

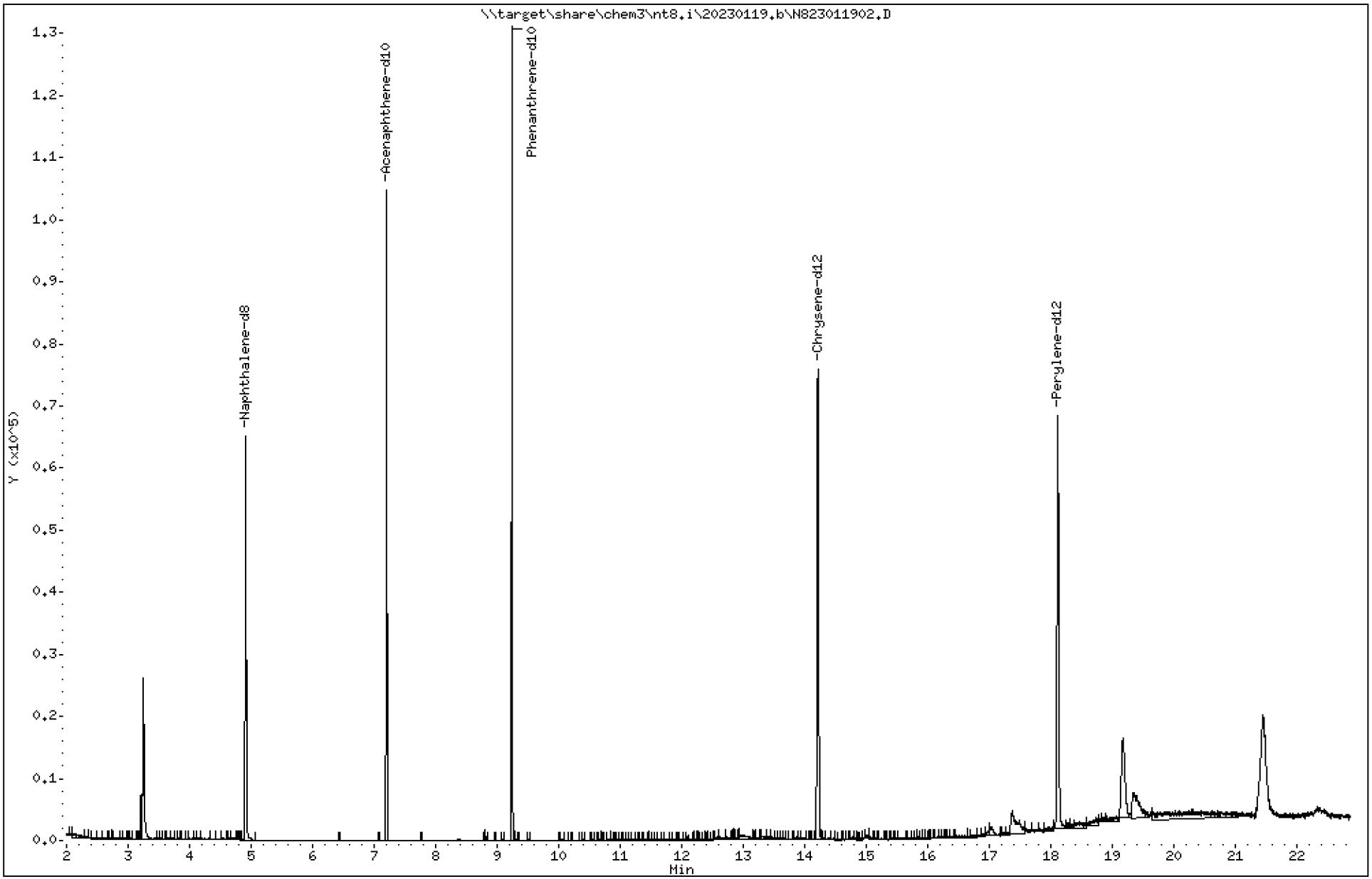
Instrument: nt8.i

Sample Info: ICB230119

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011902.D
Lab Smp Id: SLA0213-ICB1
Inj Date : 19-JAN-2023 10:59
Operator : JZ Inst ID: nt8.i
Smp Info : ICB230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:20 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.916	4.906	(1.000)	52082	2.00000	
	2 Naphthalene	128	Compound Not Detected.					
$	3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
	4 2-Methylnaphthalene	141	Compound Not Detected.					
	5 1-methylnaphthalene	141	Compound Not Detected.					
	7 Biphenyl	154	Compound Not Detected.					
	8 2,6-Dimethylnaphthalene	156	Compound Not Detected.					
	9 Acenaphthylene	152	Compound Not Detected.					
*	10 Acenaphthene-d10	164	7.202	7.196	(1.000)	30936	2.00000	
	11 Acenaphthene	153	Compound Not Detected.					
	12 Dibenzofuran	168	Compound Not Detected.					
	13 1,6,7-Trimethylnaphthalene	170	Compound Not Detected.					
	14 Fluorene	166	Compound Not Detected.					
	18 Dibenzothiophene	184	Compound Not Detected.					
*	15 Phenanthrene-d10	188	9.241	9.235	(1.000)	59030	2.00000	
	16 Phenanthrene	178	Compound Not Detected.					
	17 Anthracene	178	Compound Not Detected.					
	19 Carbazole	167	Compound Not Detected.					
	20 1-Methylphenanthrene	192	Compound Not Detected.					
	22 Fluoranthene	202	Compound Not Detected.					
$	21 Fluoranthene-d10	212	Compound Not Detected.					
	23 Pyrene	202	Compound Not Detected.					
	24 Benzo(a)anthracene	228	Compound Not Detected.					
*	25 Chrysene-d12	240	14.215	14.202	(1.000)	50944	2.00000	
	27 Chrysene	228	Compound Not Detected.					
	28 Benzo(b)fluoranthene	252	Compound Not Detected.					
	29 Benzo(k)fluoranthene	252	Compound Not Detected.					
	30 Benzo(j)fluoranthene	252	Compound Not Detected.					
	31 Total Benzofluoranthenes	252	Compound Not Detected.					
	34 Benzo(e)pyrene	252	Compound Not Detected.					
	32 Benzo(a)pyrene	252	Compound Not Detected.					
*	33 Perylene-d12	264	18.120	18.111	(1.000)	47418	2.00000	
	35 Perylene	252	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011902.D
Lab Smp Id: SLA0213-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	52082	16.50
10 Acenaphthene-d10	26411	13206	52822	30936	17.13
15 Phenanthrene-d10	49210	24605	98420	59030	19.96
25 Chrysene-d12	42994	21497	85988	50944	18.49
33 Perylene-d12	40520	20260	81040	47418	17.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.92	0.19
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.07
25 Chrysene-d12	14.20	13.70	14.70	14.22	0.09
33 Perylene-d12	18.11	17.61	18.61	18.12	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823011902.D

Lab ID: SLA0213-ICB1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 10:59

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

No RRT check performed

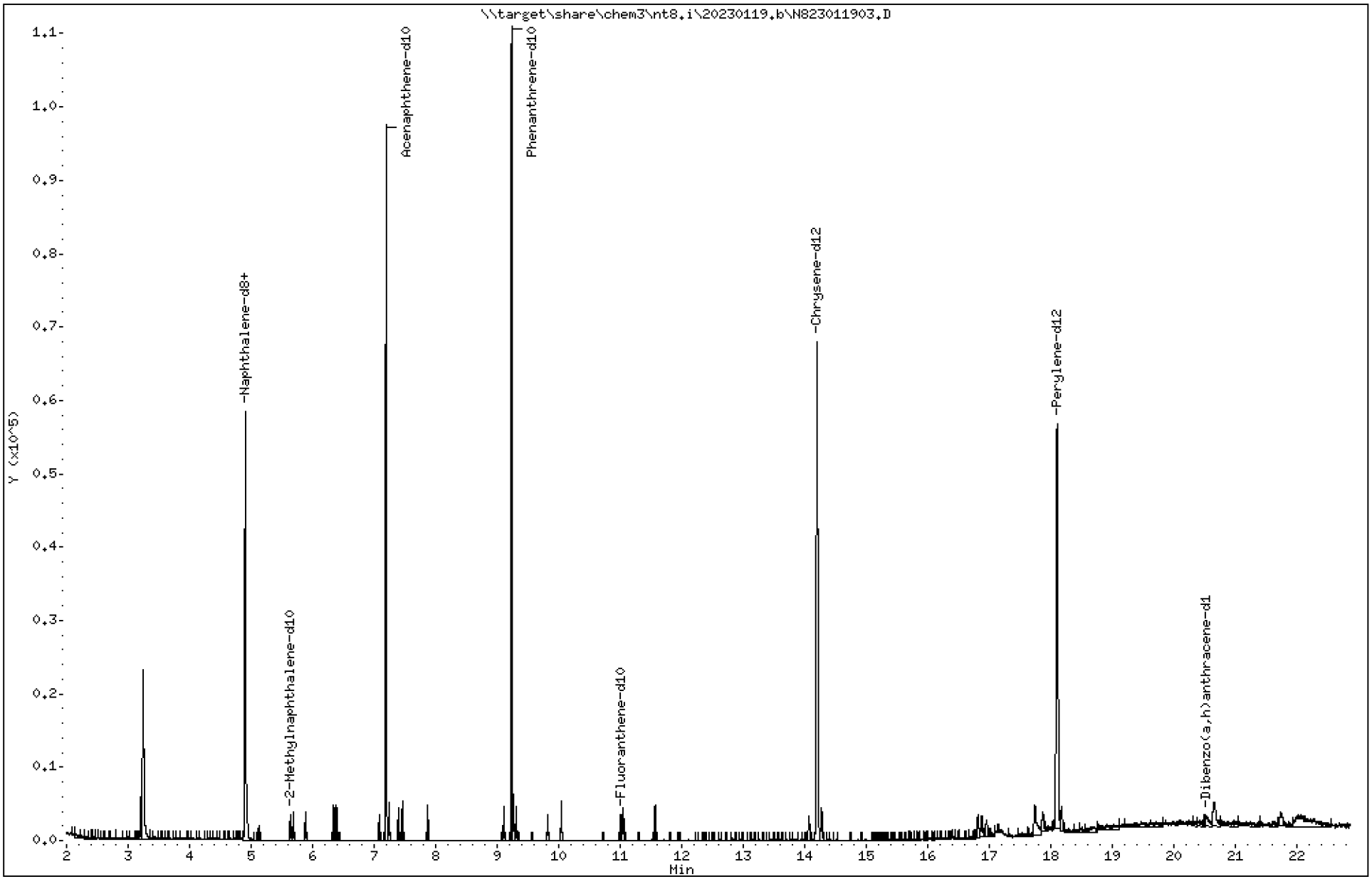
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011903.D
Date : 19-JAN-2023 11:26
Client ID:
Sample Info: IC01230119,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011903.D
Lab Smp Id: SLA0213-CAL1
Inj Date : 19-JAN-2023 11:26
Operator : JZ Inst ID: nt8.i
Smp Info : IC01230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	46132	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	2425	0.10000	0.1131
$	3 2-Methylnaphthalene-d10	152	5.643	5.640	(1.150)	1351	0.10000	0.1074
	4 2-Methylnaphthalene	141	5.691	5.687	(1.160)	1288	0.10000	0.1092
	5 1-methylnaphthalene	141	5.883	5.887	(1.199)	1309	0.10000	0.1093
	7 Biphenyl	154	6.345	6.348	(0.882)	2093	0.10000	0.1164
	8 2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	1372	0.10000	0.1078
	9 Acenaphthylene	152	7.085	7.088	(0.985)	2139	0.10000	0.1039
*	10 Acenaphthene-d10	164	7.196	7.196	(1.000)	27261	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	1580	0.10000	0.1146
	12 Dibenzofuran	168	7.395	7.398	(1.028)	2530	0.10000	0.1208
	13 1,6,7-Trimethylnaphthalene	170	7.461	7.464	(1.037)	1502	0.10000	0.1137
	14 Fluorene	166	7.876	7.875	(1.094)	1818	0.10000	0.1117
	18 Dibenzothiophene	184	9.109	9.112	(0.986)	2620	0.10000	0.1137
*	15 Phenanthrene-d10	188	9.235	9.235	(1.000)	52158	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	3130	0.10000	0.1229
	17 Anthracene	178	9.311	9.314	(1.008)	2582	0.10000	0.1116
	19 Carbazole	167	9.823	9.826	(1.064)	2339	0.10000	0.1102
	20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	2073	0.10000	0.1129
	22 Fluoranthene	202	11.053	11.056	(1.197)	3132	0.10000	0.1129
$	21 Fluoranthene-d10	212	11.015	11.018	(1.193)	2349	0.10000	0.1021
	23 Pyrene	202	11.572	11.575	(0.815)	3183	0.10000	0.1142
	24 Benzo(a)anthracene	228	14.073	14.079	(0.991)	2698	0.10000	0.1068
*	25 Chrysene-d12	240	14.203	14.206	(1.000)	44953	2.00000	
	27 Chrysene	228	14.275	14.282	(1.005)	3107	0.10000	0.1155
	28 Benzo(b)fluoranthene	252	16.821	16.833	(0.929)	2781	0.10000	0.1147
	29 Benzo(k)fluoranthene	252	16.881	16.897	(0.932)	2763	0.10000	0.1163
	30 Benzo(j)fluoranthene	252	16.960	16.972	(0.936)	2275	0.10000	0.1064
	31 Total Benzofluoranthenes	252	16.821	16.833	(0.929)	7840	0.30000	0.3414(M)
	34 Benzo(e)pyrene	252	17.747	17.760	(0.980)	2886	0.10000	0.1194
	32 Benzo(a)pyrene	252	17.874	17.889	(0.987)	2373	0.10000	0.1112
*	33 Perylene-d12	264	18.111	18.114	(1.000)	41635	2.00000	
	35 Perylene	252	18.184	18.193	(1.004)	2685	0.10000	0.1173

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.546	20.565	(1.134)	1208	0.10000	0.09040(M)
37 Indeno(1,2,3-cd)pyrene	276	20.666	20.691	(1.141)	2516	0.10000	0.1035
38 Dibenzo(a,h)anthracene	278	20.666	20.685	(1.141)	2184	0.10000	0.1044
39 Benzo(g,h,i)perylene	276	21.757	21.782	(1.201)	2421	0.10000	0.1099

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011903.D
Lab Smp Id: SLA0213-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46132	3.19
10 Acenaphthene-d10	26411	13206	52822	27261	3.22
15 Phenanthrene-d10	49210	24605	98420	52158	5.99
25 Chrysene-d12	42994	21497	85988	44953	4.56
33 Perylene-d12	40520	20260	81040	41635	2.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823011903.D

Lab ID: SLA0213-CAL1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 11:26

RT	CO-ELUTION COMPOUNDS
20.666	Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene
20.666	Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene

Quant Method: ICAL

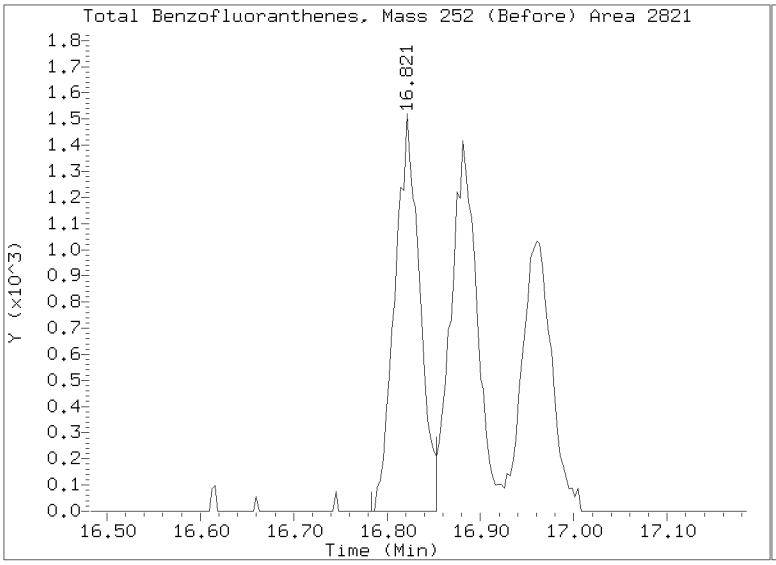
No RRT check performed

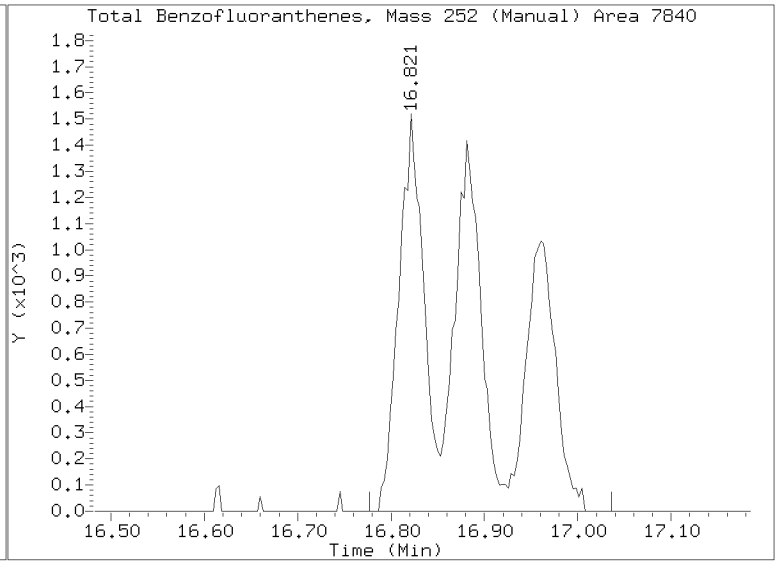
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

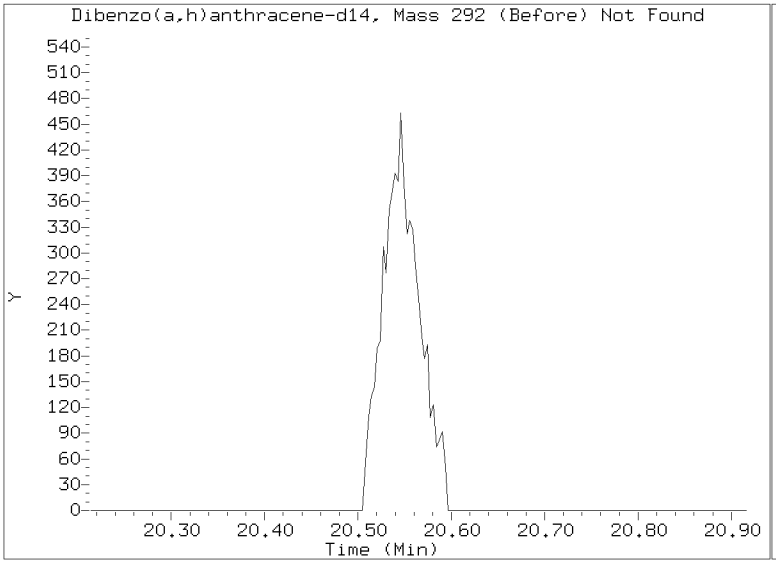
* Only compounds listed in the work order have been verified by the analyst *

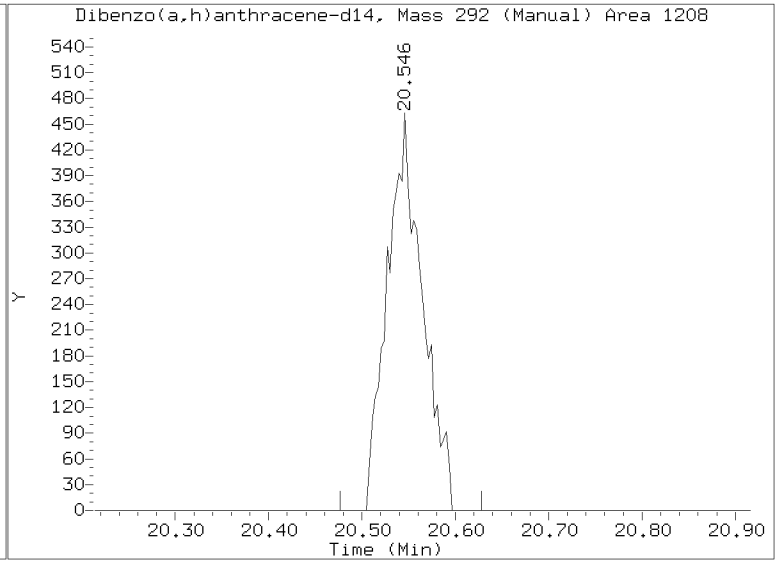
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011903.D
Injection Date: 19-JAN-2023 11:26
Lab ID:SLA0213-CAL1 Client ID:
Report Date: 01/19/2023 20:12





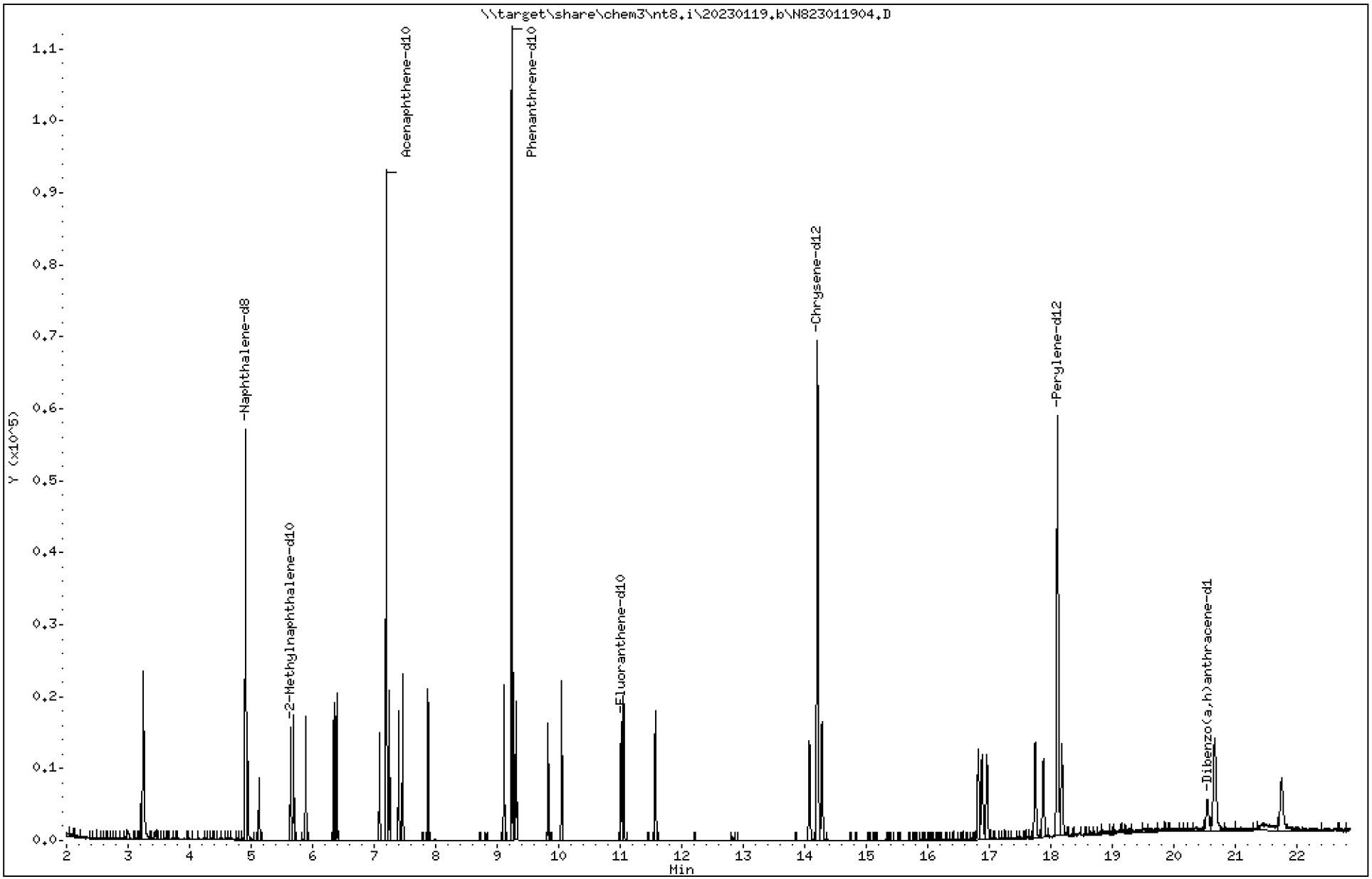




Data File: \\target\share\chem3\nt8.i\20230119.b\N823011904.D
Date : 19-JAN-2023 11:58
Client ID:
Sample Info: IC05230119,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011904.D
Lab Smp Id: SLA0213-CAL2
Inj Date : 19-JAN-2023 11:58
Operator : JZ Inst ID: nt8.i
Smp Info : IC05230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.913	4.906	(1.000)	45056	2.00000	
	2 Naphthalene	128	4.941	4.938	(1.006)	9917	0.50000	0.4734
$	3 2-Methylnaphthalene-d10	152	5.646	5.640	(1.149)	5556	0.50000	0.4522
	4 2-Methylnaphthalene	141	5.694	5.687	(1.159)	5447	0.50000	0.4727
	5 1-methylnaphthalene	141	5.890	5.887	(1.199)	5499	0.50000	0.4702
	7 Biphenyl	154	6.351	6.348	(0.882)	8183	0.50000	0.4638
	8 2,6-Dimethylnaphthalene	156	6.396	6.392	(0.888)	5677	0.50000	0.4546
	9 Acenaphthylene	152	7.091	7.088	(0.985)	8616	0.50000	0.4266
*	10 Acenaphthene-d10	164	7.199	7.196	(1.000)	26746	2.00000	
	11 Acenaphthene	153	7.249	7.246	(1.007)	6285	0.50000	0.4644
	12 Dibenzofuran	168	7.401	7.398	(1.028)	9690	0.50000	0.4714
	13 1,6,7-Trimethylnaphthalene	170	7.464	7.464	(1.037)	5886	0.50000	0.4541
	14 Fluorene	166	7.879	7.875	(1.094)	7132	0.50000	0.4468
	18 Dibenzothiophene	184	9.112	9.112	(0.986)	10291	0.50000	0.4588
*	15 Phenanthrene-d10	188	9.238	9.235	(1.000)	50759	2.00000	
	16 Phenanthrene	178	9.273	9.273	(1.004)	11508	0.50000	0.4641
	17 Anthracene	178	9.314	9.314	(1.008)	10014	0.50000	0.4446
	19 Carbazole	167	9.829	9.826	(1.064)	9050	0.50000	0.4383
	20 1-Methylphenanthrene	192	10.051	10.051	(1.088)	7947	0.50000	0.4448
	22 Fluoranthene	202	11.056	11.056	(1.197)	12335	0.50000	0.4570
$	21 Fluoranthene-d10	212	11.018	11.018	(1.193)	9575	0.50000	0.4276
	23 Pyrene	202	11.575	11.575	(0.815)	11906	0.50000	0.4300
	24 Benzo(a)anthracene	228	14.079	14.079	(0.991)	10516	0.50000	0.4190
*	25 Chrysene-d12	240	14.209	14.206	(1.000)	44658	2.00000	
	27 Chrysene	228	14.278	14.282	(1.005)	12076	0.50000	0.4520
	28 Benzo(b)fluoranthene	252	16.827	16.833	(0.929)	10402	0.50000	0.4196
	29 Benzo(k)fluoranthene	252	16.887	16.897	(0.932)	10575	0.50000	0.4355
	30 Benzo(j)fluoranthene	252	16.963	16.972	(0.936)	9796	0.50000	0.4481
	31 Total Benzofluoranthenes	252	16.827	16.833	(0.929)	29834	1.50000	1.271(M)
	34 Benzo(e)pyrene	252	17.753	17.760	(0.980)	10884	0.50000	0.4403
	32 Benzo(a)pyrene	252	17.883	17.889	(0.987)	9341	0.50000	0.4282
*	33 Perylene-d12	264	18.114	18.114	(1.000)	42567	2.00000	
	35 Perylene	252	18.187	18.193	(1.004)	10227	0.50000	0.4368

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.549	20.565	(1.134)	5823	0.50000	0.4262(M)
37 Indeno(1,2,3-cd)pyrene	276	20.675	20.691	(1.141)	10592	0.50000	0.4262
38 Dibenzo(a,h)anthracene	278	20.666	20.685	(1.141)	8884	0.50000	0.4154(M)
39 Benzo(g,h,i)perylene	276	21.760	21.782	(1.201)	9687	0.50000	0.4302

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011904.D
Lab Smp Id: SLA0213-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	45056	0.79
10 Acenaphthene-d10	26411	13206	52822	26746	1.27
15 Phenanthrene-d10	49210	24605	98420	50759	3.15
25 Chrysene-d12	42994	21497	85988	44658	3.87
33 Perylene-d12	40520	20260	81040	42567	5.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.04
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.04
33 Perylene-d12	18.11	17.61	18.61	18.11	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823011904.D

Lab ID: SLA0213-CAL2
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 11:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

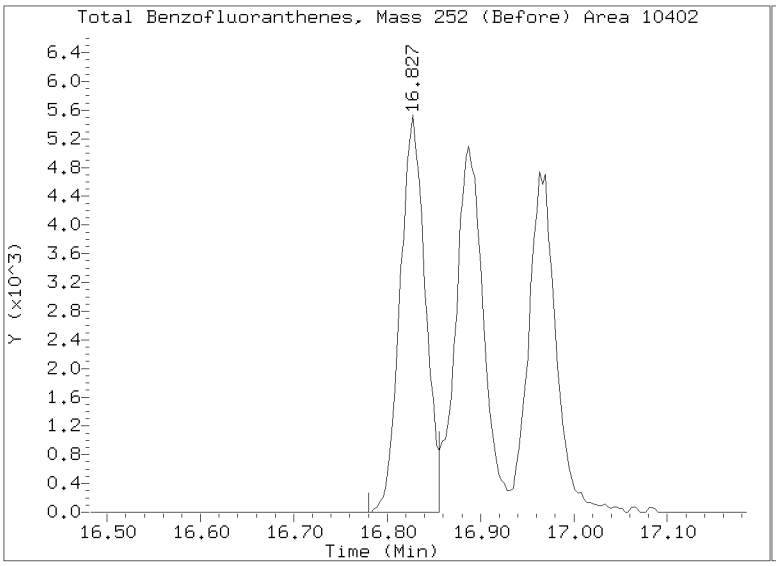
No RRT check performed

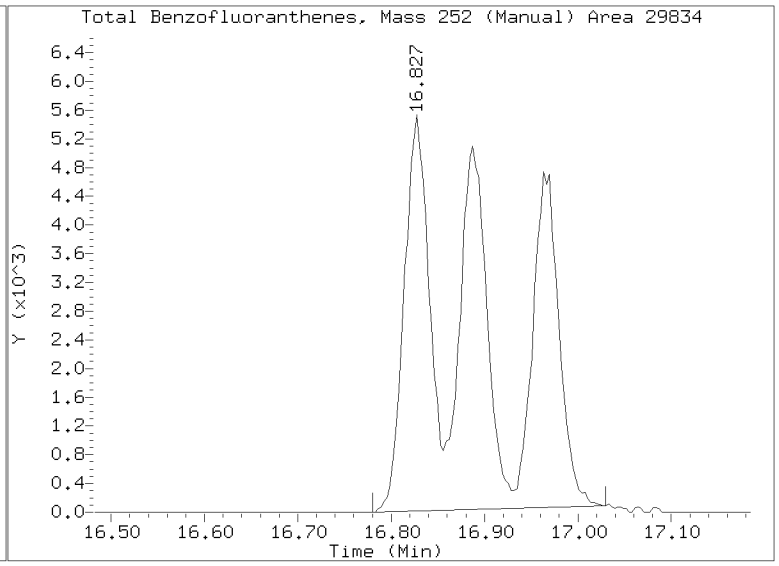
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

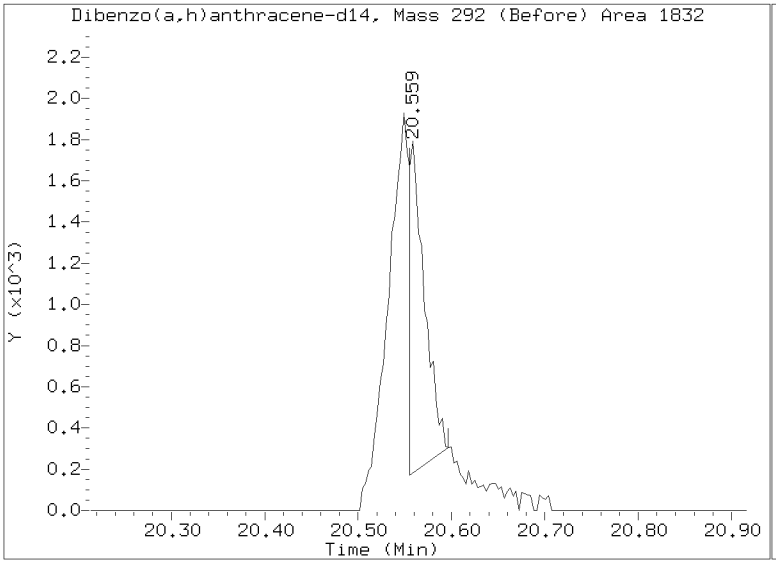
* Only compounds listed in the work order have been verified by the analyst *

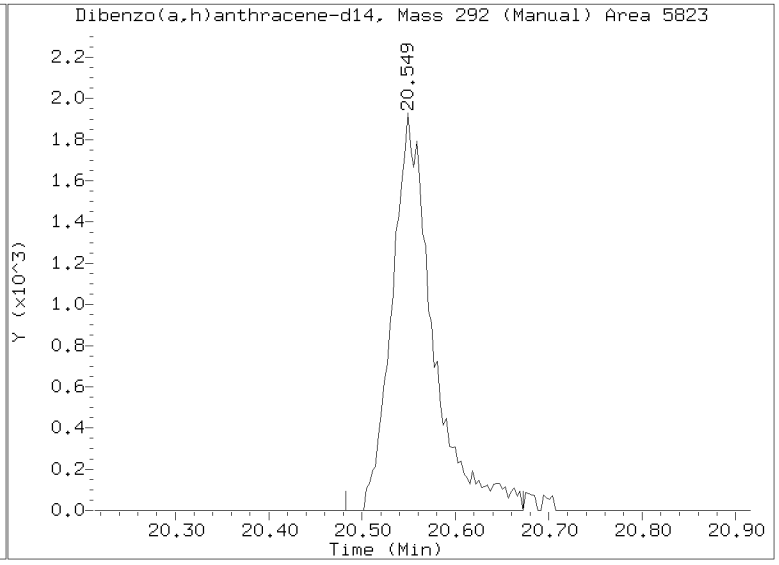
Quant Ion Manual Peak Adjustment Report

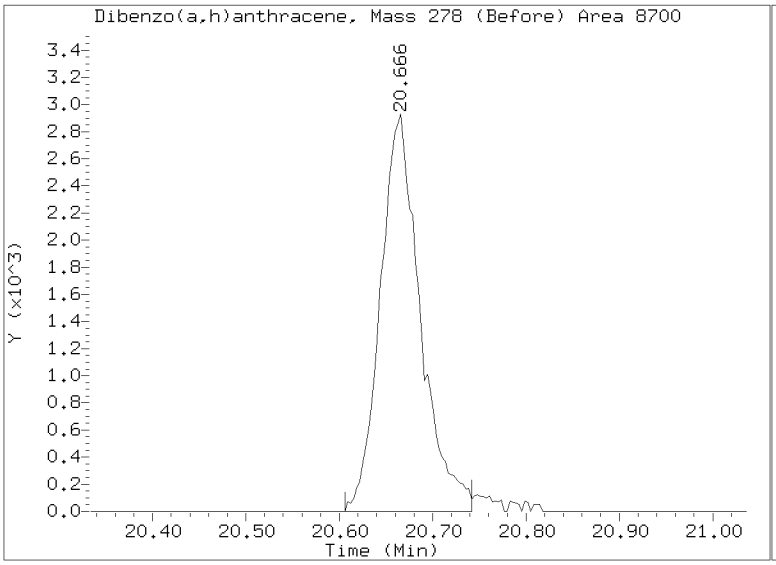
Datafile: //target/share/chem3/nt8.i/20230119.b/N823011904.D
Injection Date: 19-JAN-2023 11:58
Lab ID:SLA0213-CAL2 Client ID:
Report Date: 01/19/2023 20:12

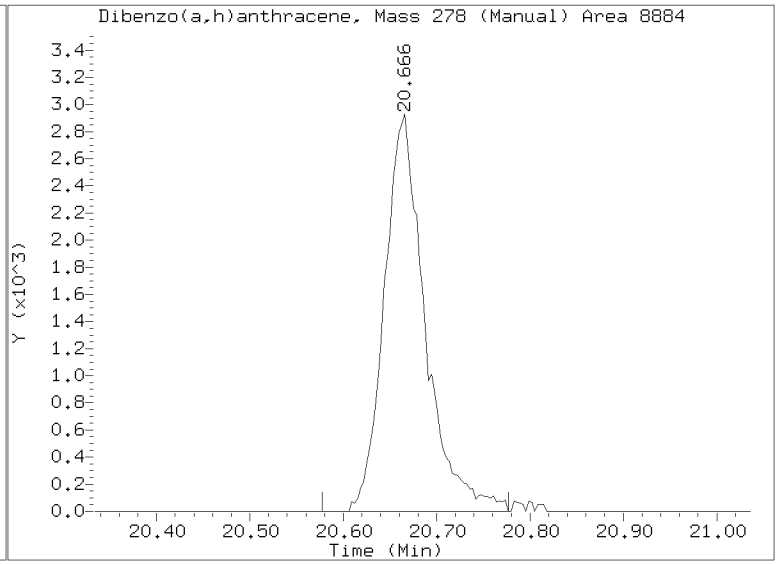








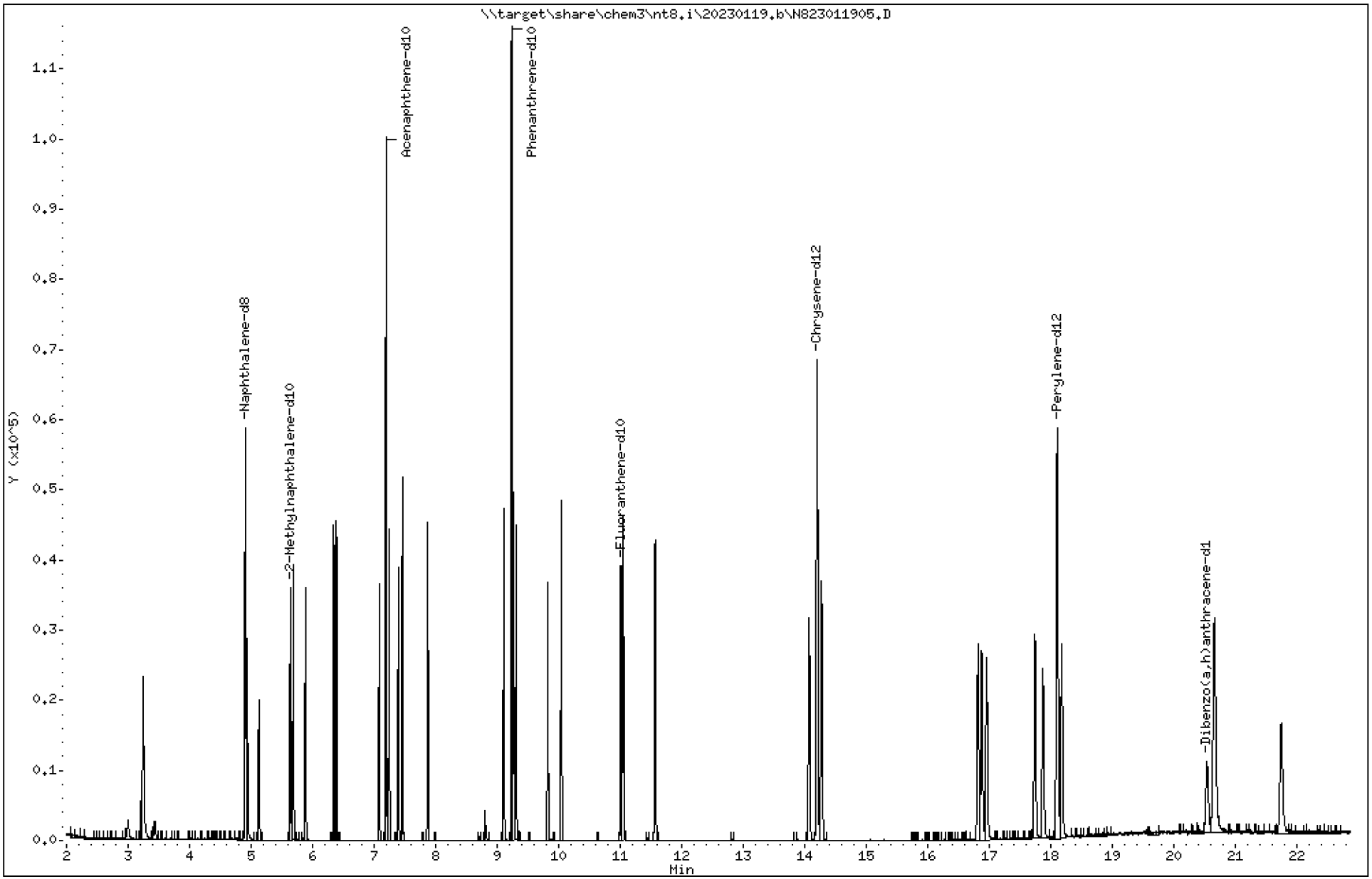




Data File: \\target\share\chem3\nt8.i\20230119.b\N823011905.D
Date : 19-JAN-2023 12:25
Client ID:
Sample Info: IC1230119,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011905.D
Lab Smp Id: SLA0213-CAL3
Inj Date : 19-JAN-2023 12:25
Operator : JZ Inst ID: nt8.i
Smp Info : IC1230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	47180	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	21563	1.00000	0.9830
$	3 2-Methylnaphthalene-d10	152	5.640	5.640	(1.150)	12609	1.00000	0.9799
	4 2-Methylnaphthalene	141	5.687	5.687	(1.159)	11715	1.00000	0.9709
	5 1-methylnaphthalene	141	5.887	5.887	(1.200)	11968	1.00000	0.9773
	7 Biphenyl	154	6.345	6.348	(0.882)	17796	1.00000	0.9564
	8 2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	12741	1.00000	0.9674
	9 Acenaphthylene	152	7.085	7.088	(0.985)	20021	1.00000	0.9400
*	10 Acenaphthene-d10	164	7.196	7.196	(1.000)	28206	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	13666	1.00000	0.9576
	12 Dibenzofuran	168	7.395	7.398	(1.028)	20714	1.00000	0.9556
	13 1,6,7-Trimethylnaphthalene	170	7.461	7.464	(1.037)	12912	1.00000	0.9446
	14 Fluorene	166	7.875	7.875	(1.094)	16006	1.00000	0.9508
	18 Dibenzothiophene	184	9.109	9.112	(0.986)	22320	1.00000	0.9489
*	15 Phenanthrene-d10	188	9.235	9.235	(1.000)	53233	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	24646	1.00000	0.9478
	17 Anthracene	178	9.311	9.314	(1.008)	22258	1.00000	0.9423
	19 Carbazole	167	9.823	9.826	(1.064)	20007	1.00000	0.9239
	20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	17326	1.00000	0.9246
	22 Fluoranthene	202	11.050	11.056	(1.197)	27227	1.00000	0.9619
$	21 Fluoranthene-d10	212	11.015	11.018	(1.193)	21953	1.00000	0.9347
	23 Pyrene	202	11.572	11.575	(0.815)	26878	1.00000	0.9325
	24 Benzo(a)anthracene	228	14.076	14.079	(0.991)	23406	1.00000	0.8959
*	25 Chrysene-d12	240	14.203	14.206	(1.000)	46493	2.00000	
	27 Chrysene	228	14.275	14.282	(1.005)	26230	1.00000	0.9431
	28 Benzo(b)fluoranthene	252	16.824	16.833	(0.929)	22805	1.00000	0.8782
	29 Benzo(k)fluoranthene	252	16.881	16.897	(0.932)	22425	1.00000	0.8816
	30 Benzo(j)fluoranthene	252	16.960	16.972	(0.936)	20574	1.00000	0.8985
	31 Total Benzofluoranthenes	252	16.824	16.833	(0.929)	64985	3.00000	2.642(M)
	34 Benzo(e)pyrene	252	17.750	17.760	(0.980)	23026	1.00000	0.8892
	32 Benzo(a)pyrene	252	17.877	17.889	(0.987)	19956	1.00000	0.8733
*	33 Perylene-d12	264	18.111	18.114	(1.000)	44587	2.00000	
	35 Perylene	252	18.184	18.193	(1.004)	22015	1.00000	0.8978

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.549	20.565	(1.135)	13546	1.00000	0.9466
37 Indeno(1,2,3-cd)pyrene	276	20.672	20.691	(1.141)	23911	1.00000	0.9185
38 Dibenzo(a,h)anthracene	278	20.656	20.685	(1.141)	19954	1.00000	0.8907
39 Benzo(g,h,i)perylene	276	21.747	21.782	(1.201)	20977	1.00000	0.8894

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011905.D
Lab Smp Id: SLA0213-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	47180	5.54
10 Acenaphthene-d10	26411	13206	52822	28206	6.80
15 Phenanthrene-d10	49210	24605	98420	53233	8.18
25 Chrysene-d12	42994	21497	85988	46493	8.14
33 Perylene-d12	40520	20260	81040	44587	10.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823011905.D

Lab ID: SLA0213-CAL3
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 12:25

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

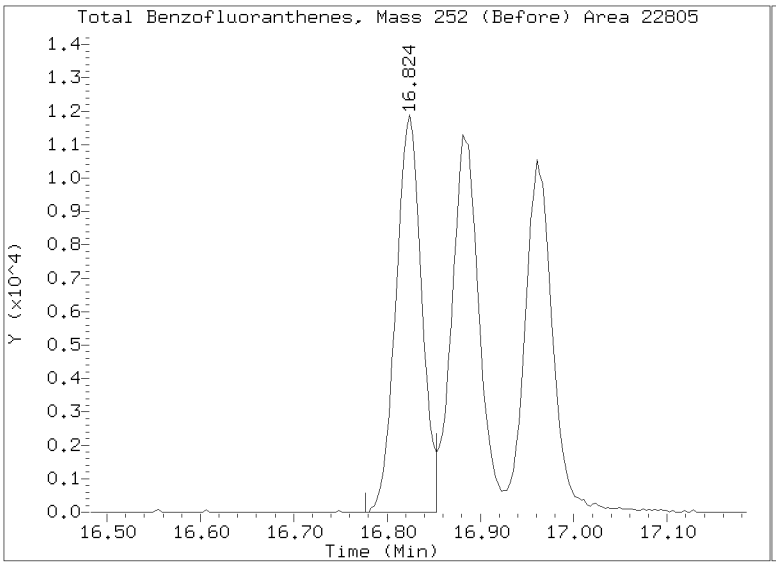
No RRT check performed

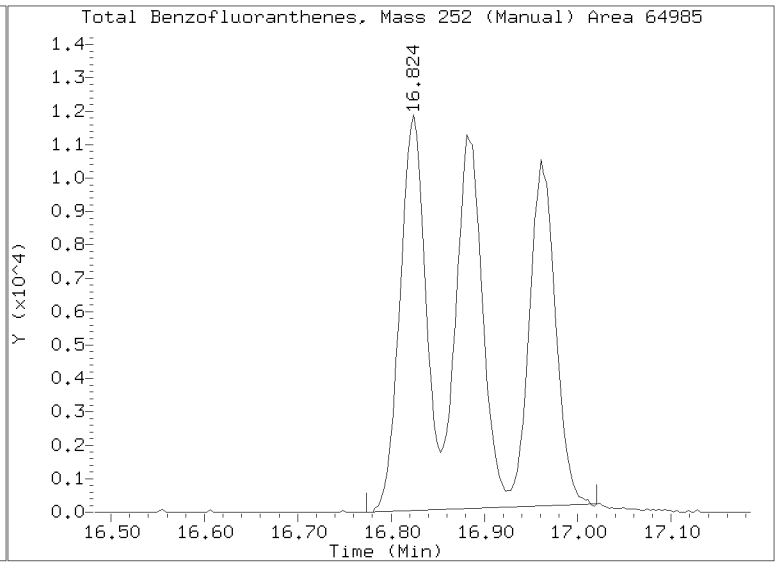
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011905.D
Injection Date: 19-JAN-2023 12:25
Lab ID:SLA0213-CAL3 Client ID:
Report Date: 01/19/2023 20:12

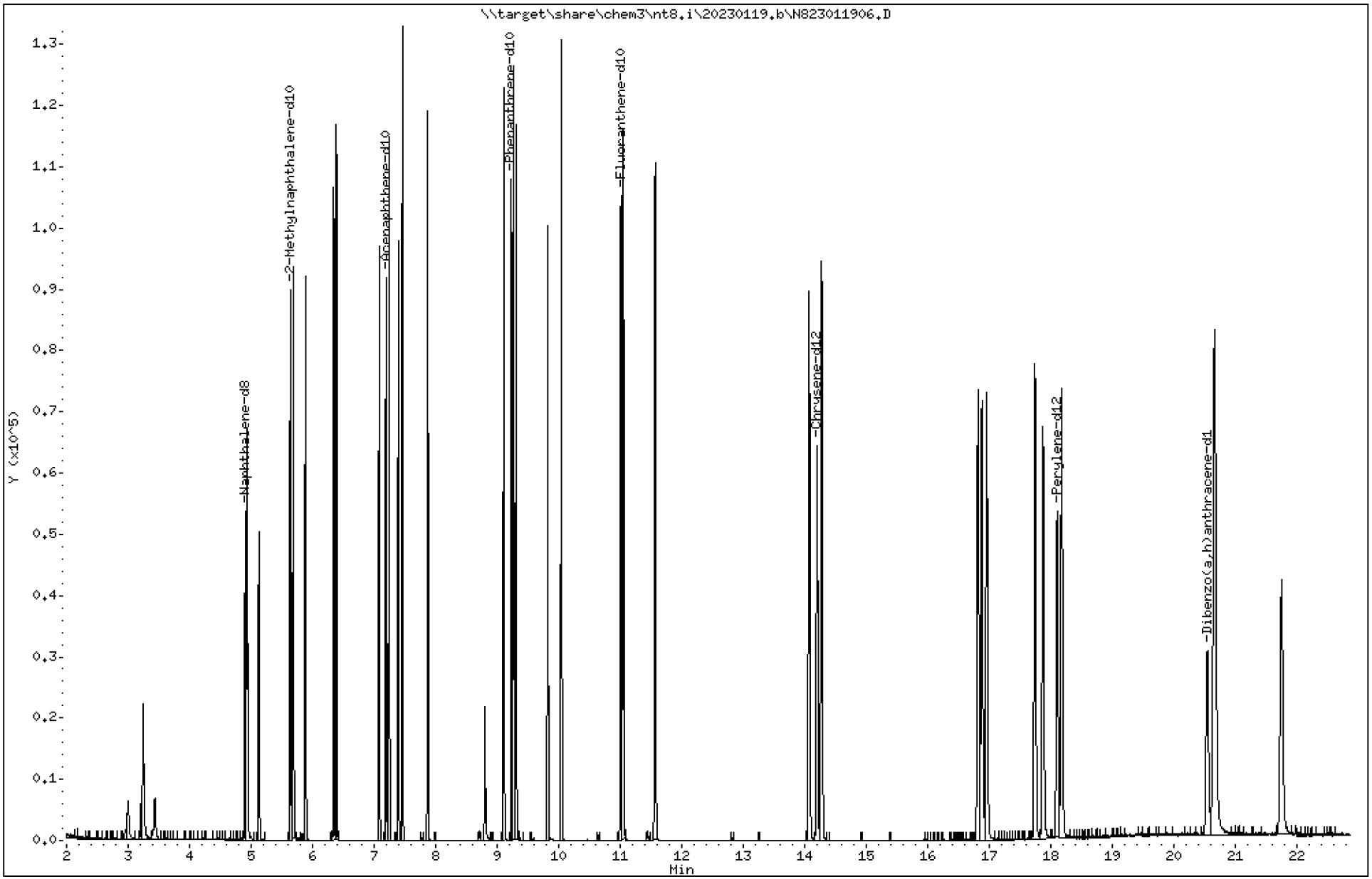




Data File: \\target\share\chem3\nt8.i\20230119.b\N823011906.D
Date : 19-JAN-2023 12:52
Client ID:
Sample Info: IC25230119,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011906.D
Lab Smp Id: SLA0213-CAL4
Inj Date : 19-JAN-2023 12:52
Operator : JZ Inst ID: nt8.i
Smp Info : IC25230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	44704	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	52764	2.50000	2.538
$	3 2-Methylnaphthalene-d10	152	5.640	5.640	(1.150)	31709	2.50000	2.601
	4 2-Methylnaphthalene	141	5.687	5.687	(1.159)	29737	2.50000	2.601
	5 1-methylnaphthalene	141	5.883	5.887	(1.199)	30098	2.50000	2.594
	7 Biphenyl	154	6.345	6.348	(0.882)	44716	2.50000	2.566
	8 2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	32396	2.50000	2.627
	9 Acenaphthylene	152	7.085	7.088	(0.985)	53242	2.50000	2.670
*	10 Acenaphthene-d10	164	7.196	7.196	(1.000)	26411	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	34335	2.50000	2.569
	12 Dibenzofuran	168	7.395	7.398	(1.028)	50810	2.50000	2.503
	13 1,6,7-Trimethylnaphthalene	170	7.461	7.464	(1.037)	33264	2.50000	2.599
	14 Fluorene	166	7.872	7.875	(1.094)	40499	2.50000	2.569
	18 Dibenzothiophene	184	9.109	9.112	(0.986)	56399	2.50000	2.594
*	15 Phenanthrene-d10	188	9.235	9.235	(1.000)	49210	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	61033	2.50000	2.539
	17 Anthracene	178	9.311	9.314	(1.008)	57918	2.50000	2.652
	19 Carbazole	167	9.823	9.826	(1.064)	52870	2.50000	2.641
	20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	45452	2.50000	2.624
	22 Fluoranthene	202	11.053	11.056	(1.197)	68546	2.50000	2.620
$	21 Fluoranthene-d10	212	11.015	11.018	(1.193)	58746	2.50000	2.706
	23 Pyrene	202	11.572	11.575	(0.815)	69587	2.50000	2.611
	24 Benzo(a)anthracene	228	14.076	14.079	(0.991)	63802	2.50000	2.641
*	25 Chrysene-d12	240	14.202	14.206	(1.000)	42994	2.00000	
	27 Chrysene	228	14.278	14.282	(1.005)	65955	2.50000	2.564
	28 Benzo(b)fluoranthene	252	16.821	16.833	(0.929)	61818	2.50000	2.620
	29 Benzo(k)fluoranthene	252	16.884	16.897	(0.932)	59716	2.50000	2.583
	30 Benzo(j)fluoranthene	252	16.963	16.972	(0.937)	54944	2.50000	2.640
	31 Total Benzofluoranthenes	252	16.821	16.833	(0.929)	176122	7.50000	7.880(M)
	34 Benzo(e)pyrene	252	17.747	17.760	(0.980)	60179	2.50000	2.557
	32 Benzo(a)pyrene	252	17.877	17.889	(0.987)	54569	2.50000	2.628
*	33 Perylene-d12	264	18.111	18.114	(1.000)	40520	2.00000	
	35 Perylene	252	18.183	18.193	(1.004)	57968	2.50000	2.601

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.552	20.565	(1.135)	37101	2.50000	2.853
37 Indeno(1,2,3-cd)pyrene	276	20.675	20.691	(1.142)	63691	2.50000	2.692
38 Dibenzo(a,h)anthracene	278	20.662	20.685	(1.141)	54772	2.50000	2.690
39 Benzo(g,h,i)perylene	276	21.756	21.782	(1.201)	56053	2.50000	2.615

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011906.D
Lab Smp Id: SLA0213-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	44704	0.00
10 Acenaphthene-d10	26411	13206	52822	26411	0.00
15 Phenanthrene-d10	49210	24605	98420	49210	0.00
25 Chrysene-d12	42994	21497	85988	42994	0.00
33 Perylene-d12	40520	20260	81040	40520	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823011906.D

Lab ID: SLA0213-CAL4
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 12:52

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

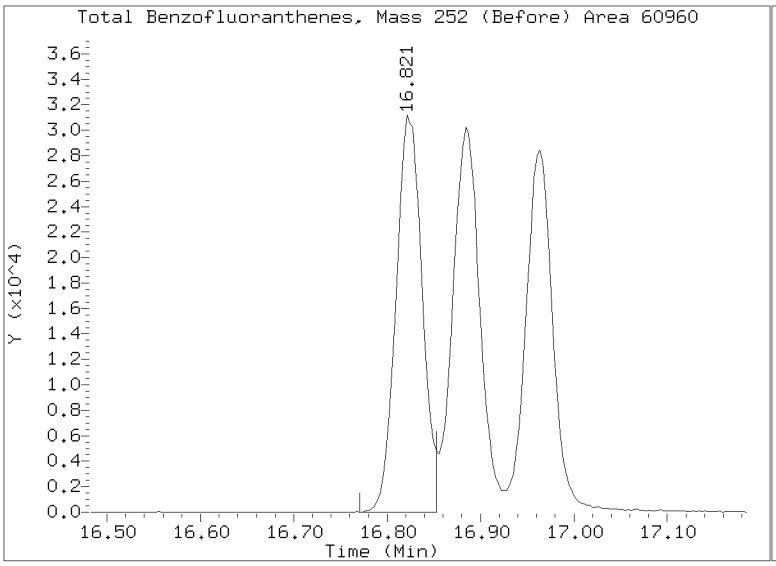
No RRT check performed

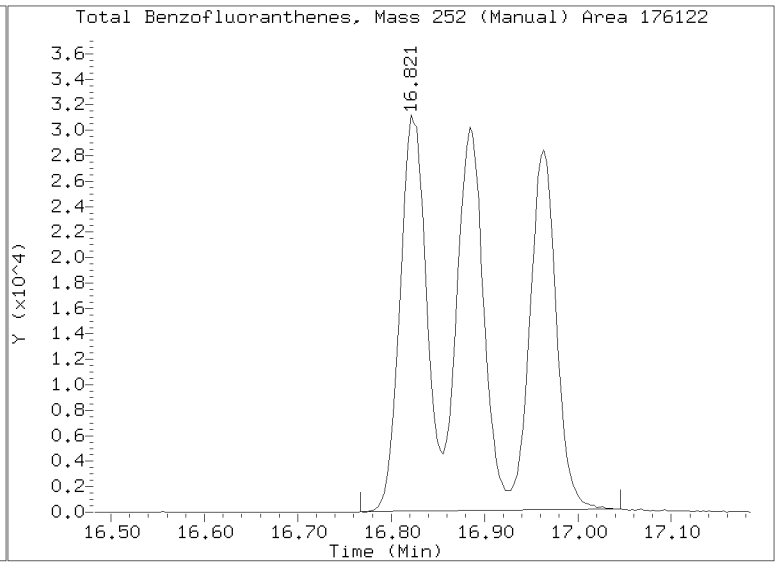
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011906.D
Injection Date: 19-JAN-2023 12:52
Lab ID:SLA0213-CAL4 Client ID:
Report Date: 01/19/2023 20:12





Data File: \\target\share\chem3\nt8.i\20230119.b\N823011907.D

Page 1

Date : 19-JAN-2023 13:19

Client ID:

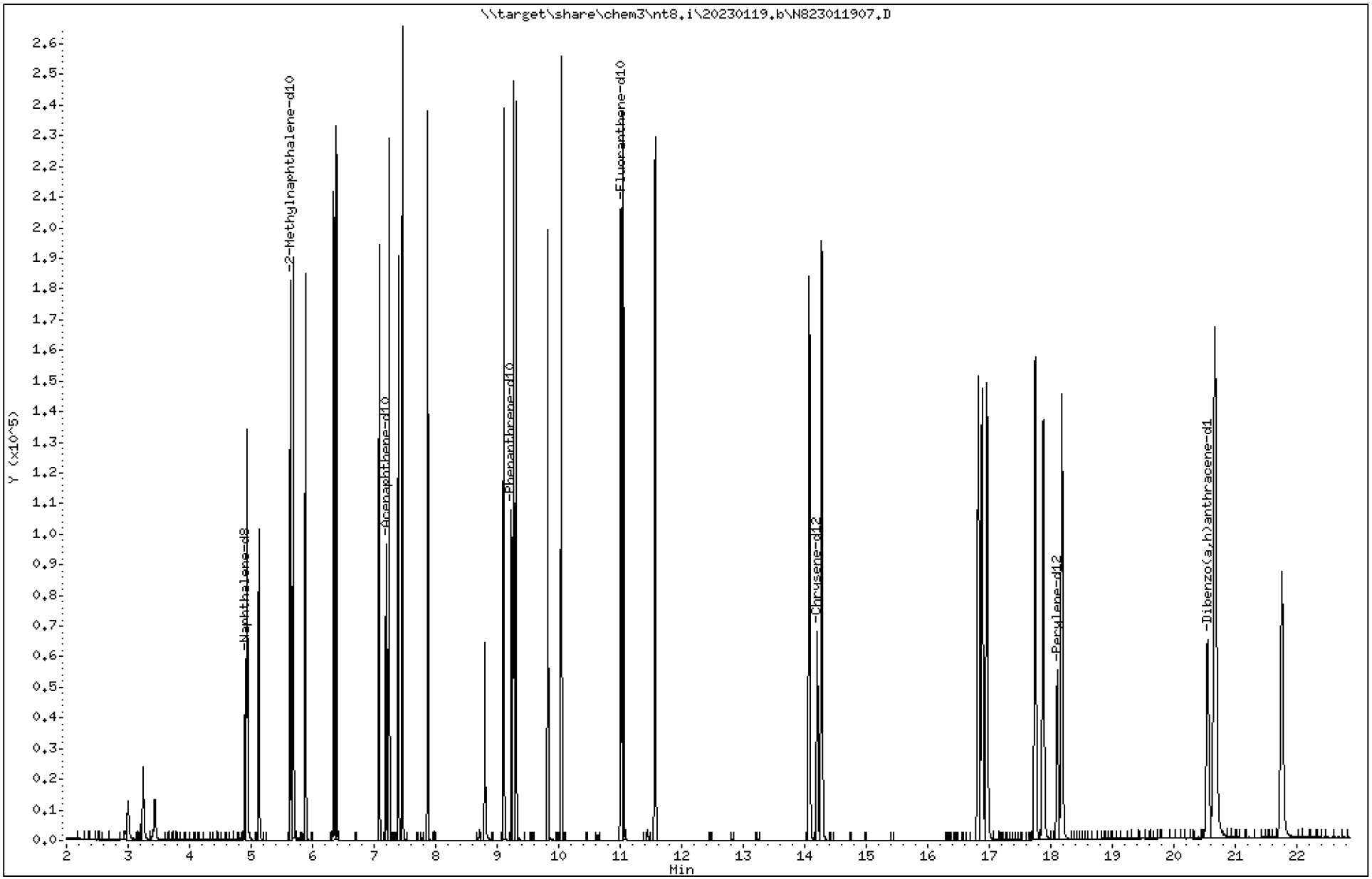
Instrument: nt8.i

Sample Info: IC5230119,

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011907.D
Lab Smp Id: SLA0213-CAL5
Inj Date : 19-JAN-2023 13:19
Operator : JZ Inst ID: nt8.i
Smp Info : IC5230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1	Naphthalene-d8	136	4.909	4.906	(1.000)	46542	2.00000	
	2	Naphthalene	128	4.938	4.938	(1.006)	105414	5.00000	4.871
$	3	2-Methylnaphthalene-d10	152	5.640	5.640	(1.149)	64045	5.00000	5.046
	4	2-Methylnaphthalene	141	5.687	5.687	(1.158)	59129	5.00000	4.967
	5	1-methylnaphthalene	141	5.887	5.887	(1.199)	59615	5.00000	4.935
	7	Biphenyl	154	6.345	6.348	(0.882)	88014	5.00000	4.827
	8	2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	64484	5.00000	4.997
	9	Acenaphthylene	152	7.085	7.088	(0.985)	108746	5.00000	5.211
*	10	Acenaphthene-d10	164	7.196	7.196	(1.000)	27638	2.00000	
	11	Acenaphthene	153	7.246	7.246	(1.007)	67894	5.00000	4.855
	12	Dibenzofuran	168	7.395	7.398	(1.028)	100768	5.00000	4.744
	13	1,6,7-Trimethylnaphthalene	170	7.461	7.464	(1.037)	65911	5.00000	4.921
	14	Fluorene	166	7.875	7.875	(1.094)	82420	5.00000	4.996
	18	Dibenzothiophene	184	9.109	9.112	(0.987)	112243	5.00000	4.946
*	15	Phenanthrene-d10	188	9.232	9.235	(1.000)	51351	2.00000	
	16	Phenanthrene	178	9.270	9.273	(1.004)	119248	5.00000	4.754
	17	Anthracene	178	9.311	9.314	(1.009)	114927	5.00000	5.044
	19	Carbazole	167	9.823	9.826	(1.064)	106758	5.00000	5.111
	20	1-Methylphenanthrene	192	10.048	10.051	(1.088)	90954	5.00000	5.032
	22	Fluoranthene	202	11.053	11.056	(1.197)	135256	5.00000	4.954
$	21	Fluoranthene-d10	212	11.015	11.018	(1.193)	119286	5.00000	5.265
	23	Pyrene	202	11.572	11.575	(0.815)	140705	5.00000	5.068
	24	Benzo(a)anthracene	228	14.076	14.079	(0.991)	132618	5.00000	5.270
*	25	Chrysene-d12	240	14.203	14.206	(1.000)	44781	2.00000	
	27	Chrysene	228	14.278	14.282	(1.005)	132750	5.00000	4.955
	28	Benzo(b)fluoranthene	252	16.827	16.833	(0.929)	125757	5.00000	5.118
	29	Benzo(k)fluoranthene	252	16.887	16.897	(0.932)	122821	5.00000	5.103
	30	Benzo(j)fluoranthene	252	16.966	16.972	(0.937)	113399	5.00000	5.234
	31	Total Benzofluoranthenes	252	16.827	16.833	(0.929)	361443	15.0000	15.53(M)
	34	Benzo(e)pyrene	252	17.750	17.760	(0.980)	121964	5.00000	4.978
	32	Benzo(a)pyrene	252	17.883	17.889	(0.987)	112121	5.00000	5.186
*	33	Perylene-d12	264	18.111	18.114	(1.000)	42187	2.00000	
	35	Perylene	252	18.187	18.193	(1.004)	116268	5.00000	5.011

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.555	20.565	(1.135)	78264	5.00000	5.780
37 Indeno(1,2,3-cd)pyrene	276	20.681	20.691	(1.142)	129575	5.00000	5.260
38 Dibenzo(a,h)anthracene	278	20.669	20.685	(1.141)	112698	5.00000	5.317
39 Benzo(g,h,i)perylene	276	21.763	21.782	(1.202)	114826	5.00000	5.145

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011907.D
Lab Smp Id: SLA0213-CAL5
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46542	4.11
10 Acenaphthene-d10	26411	13206	52822	27638	4.65
15 Phenanthrene-d10	49210	24605	98420	51351	4.35
25 Chrysene-d12	42994	21497	85988	44781	4.16
33 Perylene-d12	40520	20260	81040	42187	4.11

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.06
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.23	-0.03
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823011907.D

Lab ID: SLA0213-CAL5
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 13:19

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

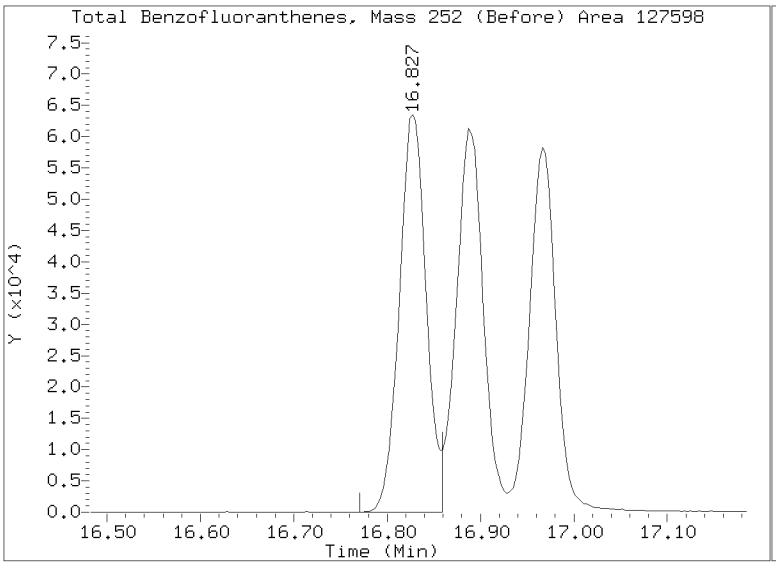
No RRT check performed

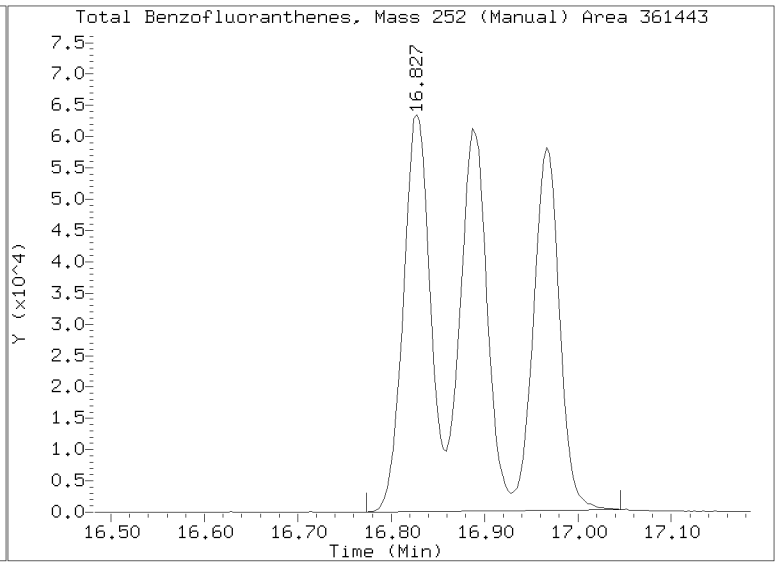
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011907.D
Injection Date: 19-JAN-2023 13:19
Lab ID:SLA0213-CAL5 Client ID:
Report Date: 01/19/2023 20:12

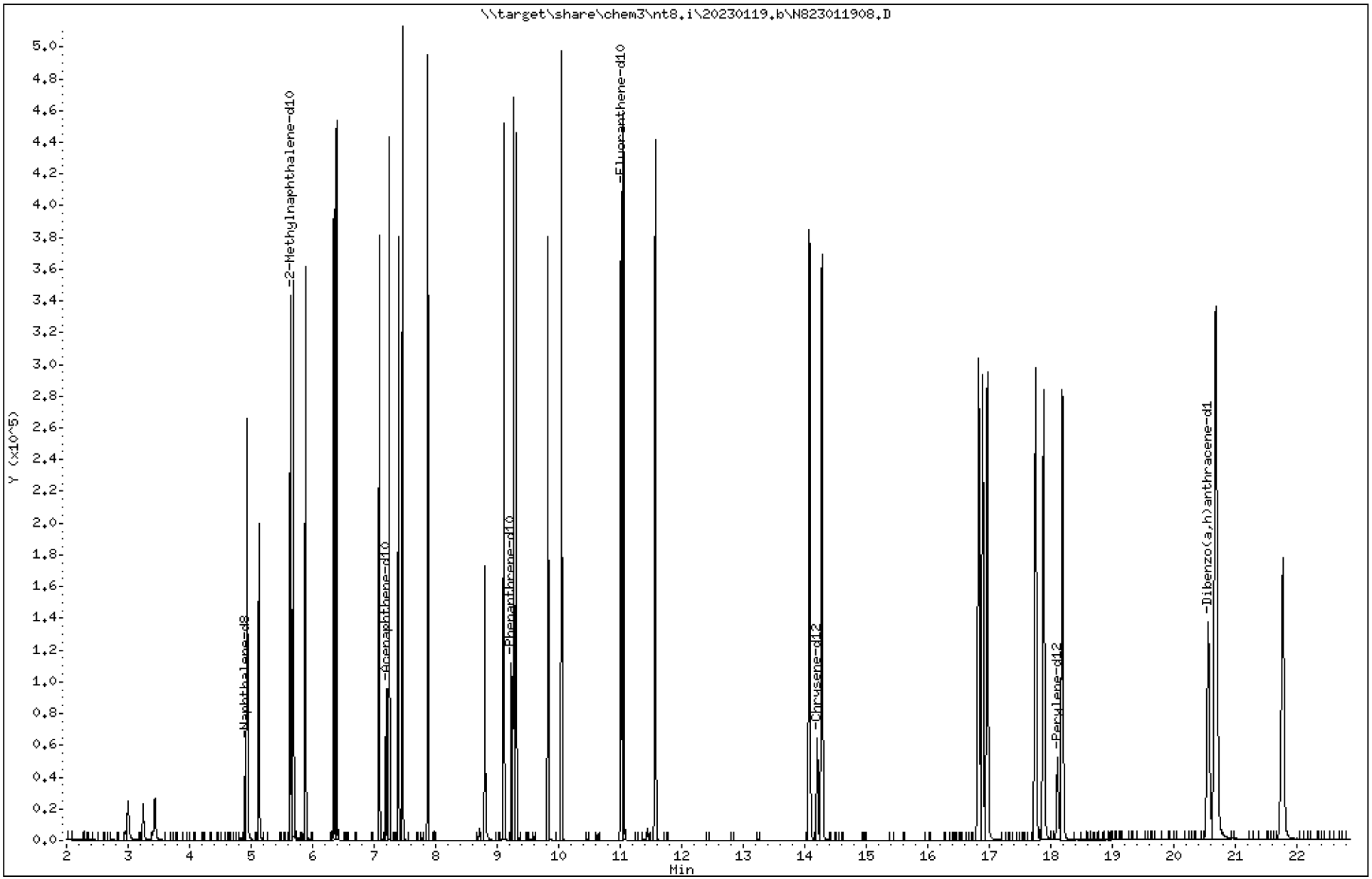




Data File: \\target\share\chem3\nt8.i\20230119.b\N823011908.D
Date : 19-JAN-2023 13:46
Client ID:
Sample Info: IC10230119,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011908.D
Lab Smp Id: SLA0213-CAL6
Inj Date : 19-JAN-2023 13:46
Operator : JZ Inst ID: nt8.i
Smp Info : IC10230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	46070	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	203510	10.0000	9.501
$	3 2-Methylnaphthalene-d10	152	5.640	5.640	(1.149)	124701	10.0000	9.925
	4 2-Methylnaphthalene	141	5.687	5.687	(1.159)	112895	10.0000	9.582
	5 1-methylnaphthalene	141	5.887	5.887	(1.200)	115357	10.0000	9.647
	7 Biphenyl	154	6.348	6.348	(0.882)	169086	10.0000	9.603
	8 2,6-Dimethylnaphthalene	156	6.392	6.392	(0.888)	124019	10.0000	9.952
	9 Acenaphthylene	152	7.088	7.088	(0.985)	213179	10.0000	10.58
*	10 Acenaphthene-d10	164	7.196	7.196	(1.000)	26689	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	130872	10.0000	9.692
	12 Dibenzofuran	168	7.398	7.398	(1.028)	193532	10.0000	9.436
	13 1,6,7-Trimethylnaphthalene	170	7.464	7.464	(1.037)	127563	10.0000	9.863
	14 Fluorene	166	7.875	7.875	(1.094)	161125	10.0000	10.11
	18 Dibenzothiophene	184	9.112	9.112	(0.987)	217256	10.0000	9.701
*	15 Phenanthrene-d10	188	9.235	9.235	(1.000)	50683	2.00000	
	16 Phenanthrene	178	9.273	9.273	(1.004)	230002	10.0000	9.290
	17 Anthracene	178	9.314	9.314	(1.009)	221162	10.0000	9.834
	19 Carbazole	167	9.826	9.826	(1.064)	210036	10.0000	10.19
	20 1-Methylphenanthrene	192	10.051	10.051	(1.088)	178561	10.0000	10.01
	22 Fluoranthene	202	11.056	11.056	(1.197)	257643	10.0000	9.560
$	21 Fluoranthene-d10	212	11.018	11.018	(1.193)	235698	10.0000	10.54
	23 Pyrene	202	11.575	11.575	(0.815)	274116	10.0000	10.08
	24 Benzo(a)anthracene	228	14.079	14.079	(0.991)	268196	10.0000	10.88
*	25 Chrysene-d12	240	14.206	14.206	(1.000)	43880	2.00000	
	27 Chrysene	228	14.282	14.282	(1.005)	257418	10.0000	9.806
	28 Benzo(b)fluoranthene	252	16.833	16.833	(0.929)	252022	10.0000	10.64
	29 Benzo(k)fluoranthene	252	16.897	16.897	(0.933)	238915	10.0000	10.30
	30 Benzo(j)fluoranthene	252	16.972	16.972	(0.937)	216807	10.0000	10.38
	31 Total Benzofluoranthenes	252	16.833	16.833	(0.929)	704955	30.0000	31.43(M)
	34 Benzo(e)pyrene	252	17.760	17.760	(0.980)	240447	10.0000	10.18
	32 Benzo(a)pyrene	252	17.889	17.889	(0.988)	222990	10.0000	10.70
*	33 Perylene-d12	264	18.114	18.114	(1.000)	40659	2.00000	
	35 Perylene	252	18.193	18.193	(1.004)	226582	10.0000	10.13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.564	20.565	(1.135)	162230	10.0000	12.43
37 Indeno(1,2,3-cd)pyrene	276	20.691	20.691	(1.142)	252895	10.0000	10.65
38 Dibenzo(a,h)anthracene	278	20.685	20.685	(1.142)	223771	10.0000	10.95
39 Benzo(g,h,i)perylene	276	21.782	21.782	(1.202)	231445	10.0000	10.76

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011908.D
Lab Smp Id: SLA0213-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46070	3.06
10 Acenaphthene-d10	26411	13206	52822	26689	1.05
15 Phenanthrene-d10	49210	24605	98420	50683	2.99
25 Chrysene-d12	42994	21497	85988	43880	2.06
33 Perylene-d12	40520	20260	81040	40659	0.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.02
33 Perylene-d12	18.11	17.61	18.61	18.11	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823011908.D

Lab ID: SLA0213-CAL6
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 13:46

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

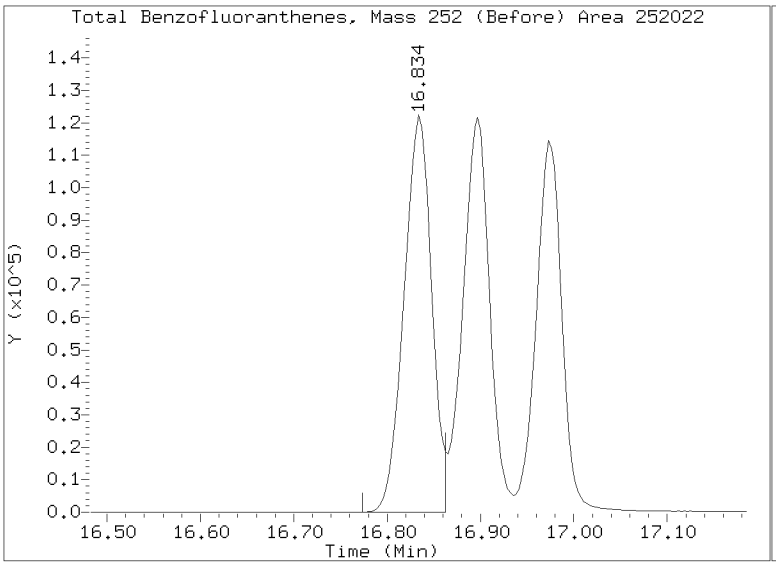
No RRT check performed

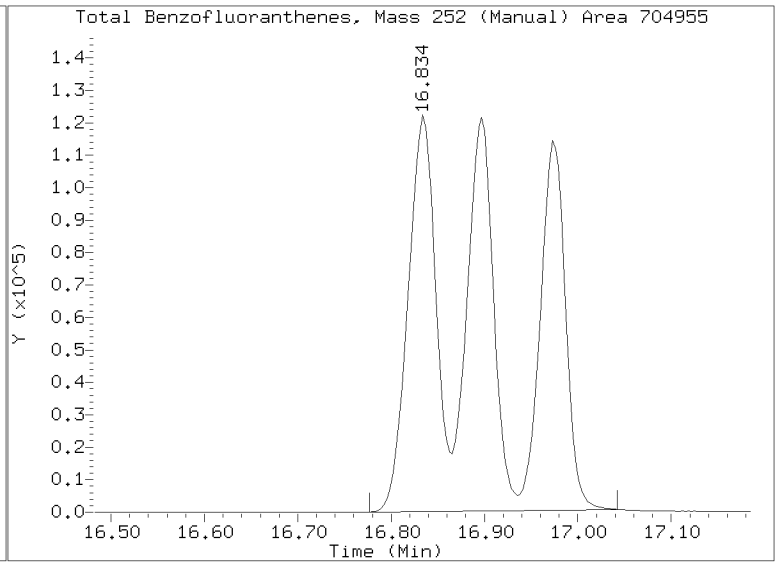
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

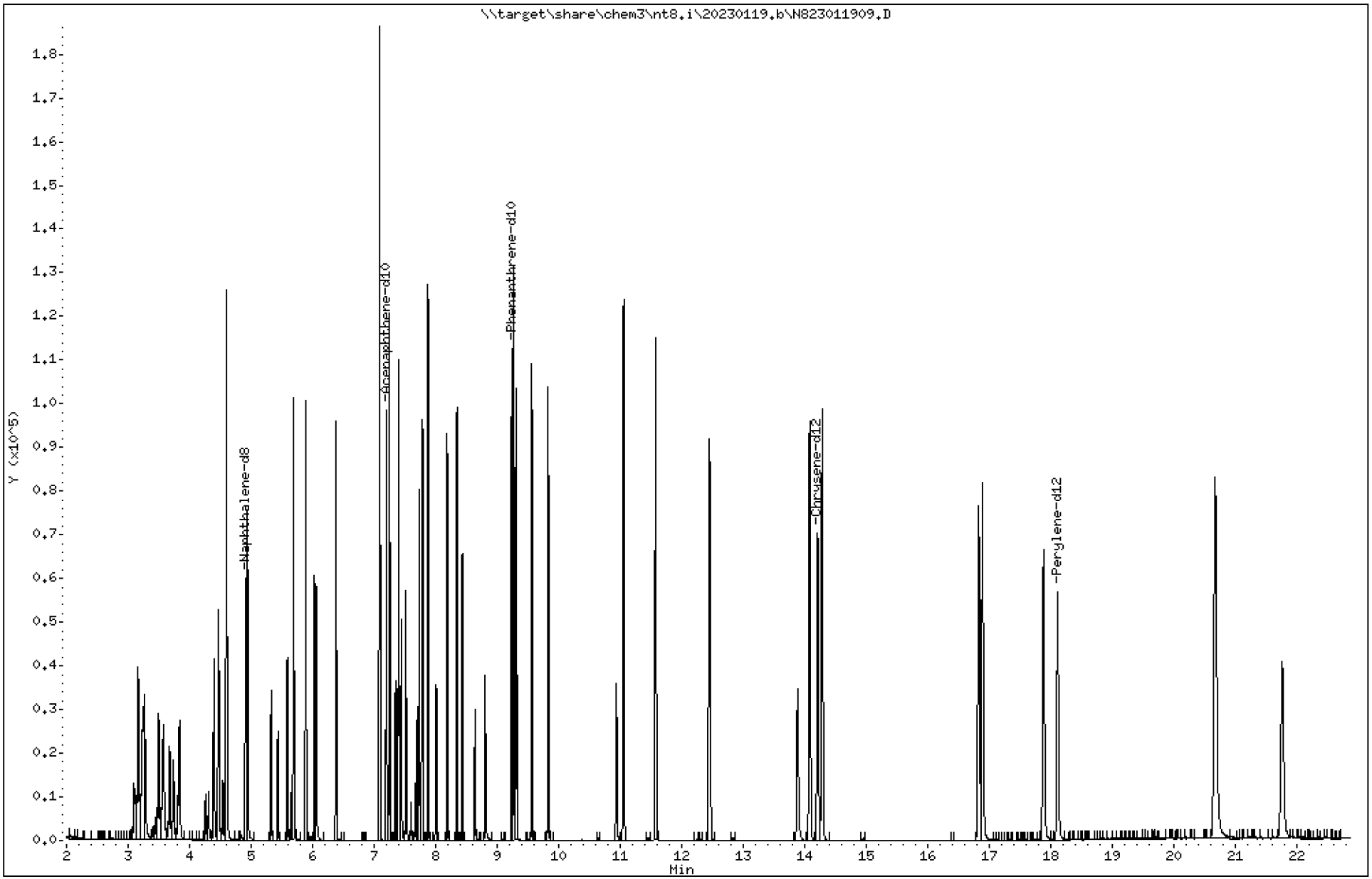
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011908.D
Injection Date: 19-JAN-2023 13:46
Lab ID:SLA0213-CAL6 Client ID:
Report Date: 01/19/2023 20:12





Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Date : 19-JAN-2023 14:58
Client ID:
Instrument: nt8.i
Sample Info: SCV230119
Volume Injected (uL): 1.0
Operator: JZ
Column phase: Rxi-17sil
Column diameter: 0.25



Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

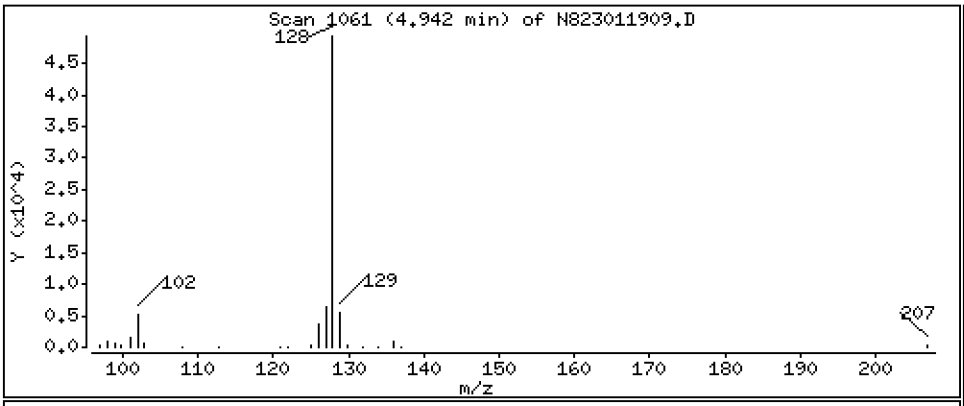
Operator: JZ

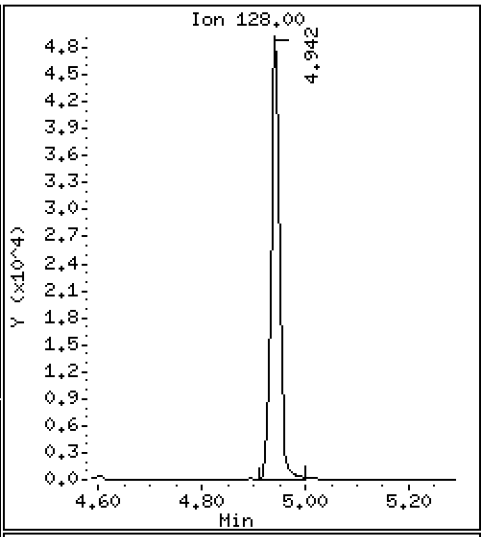
Column phase: Rxi-17sil

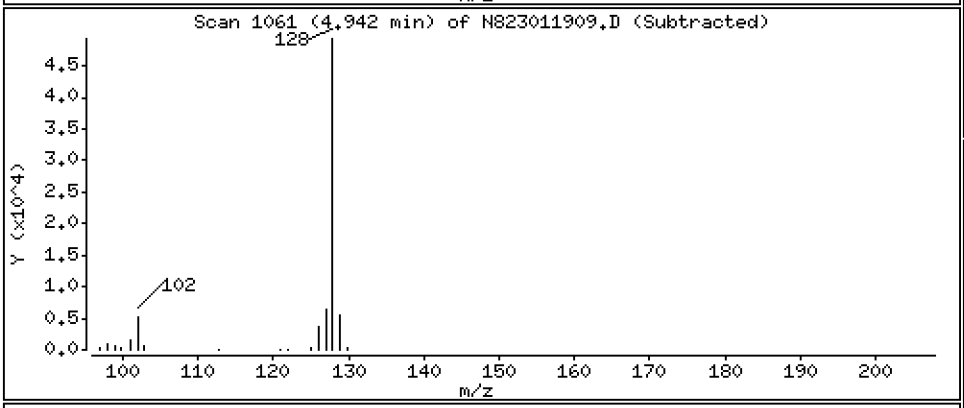
Column diameter: 0.25

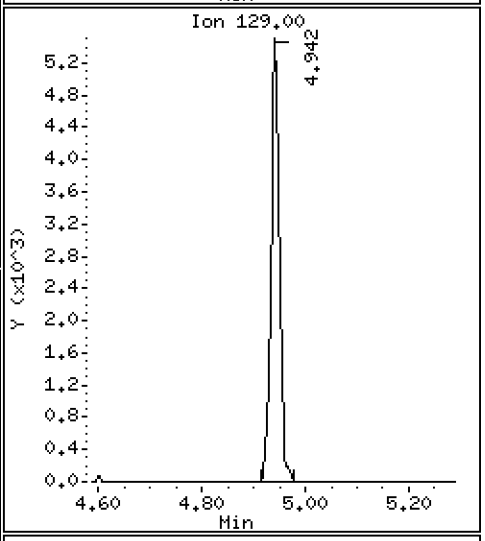
2 Naphthalene

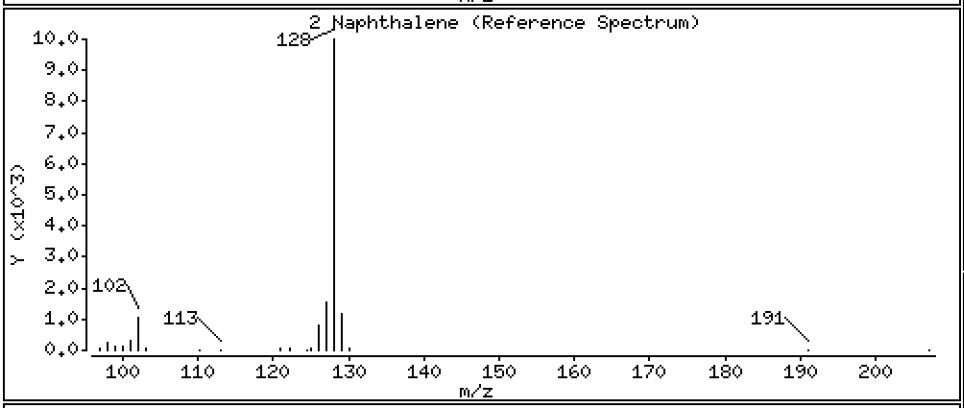
Concentration: 2.626 ug/L

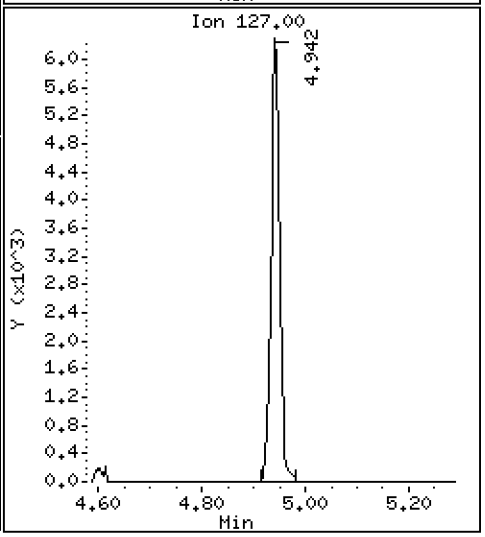


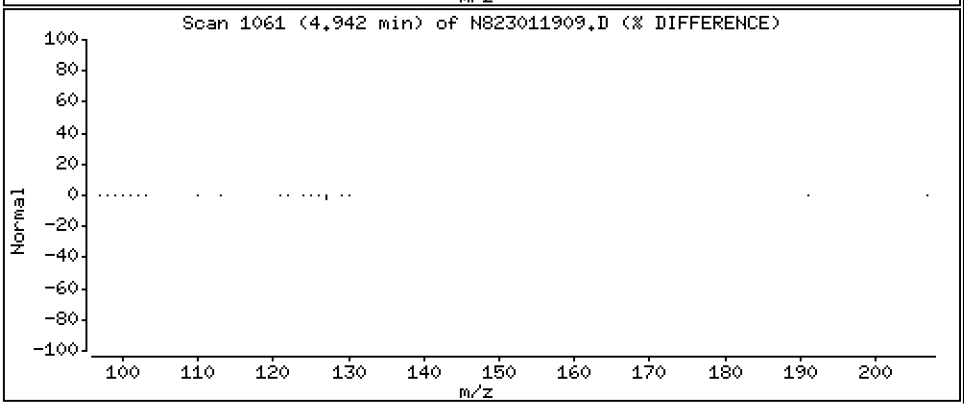












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

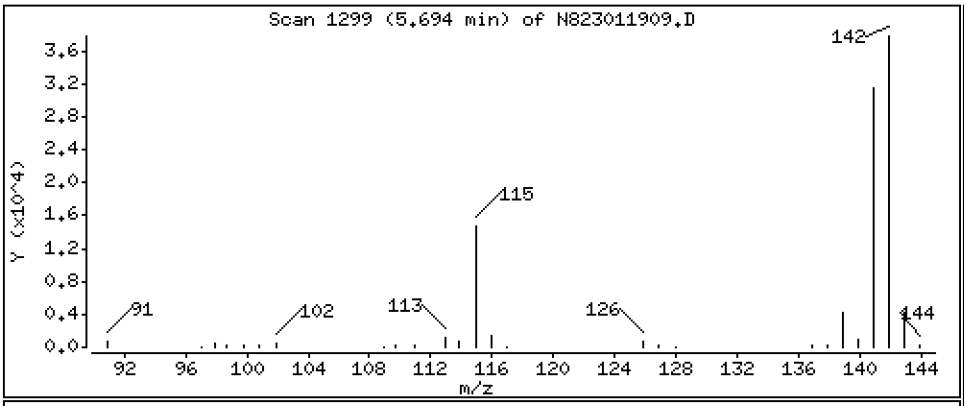
Operator: JZ

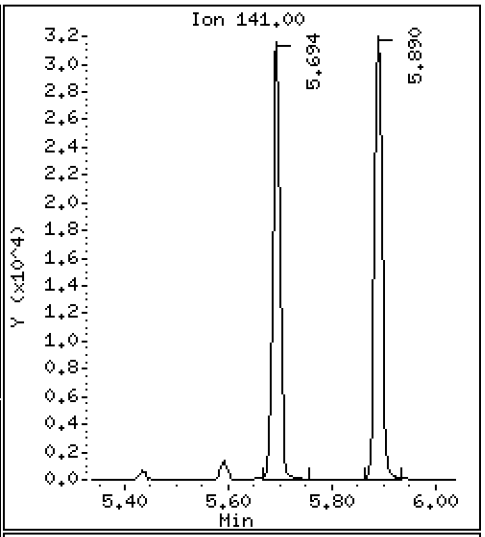
Column phase: Rxi-17sil

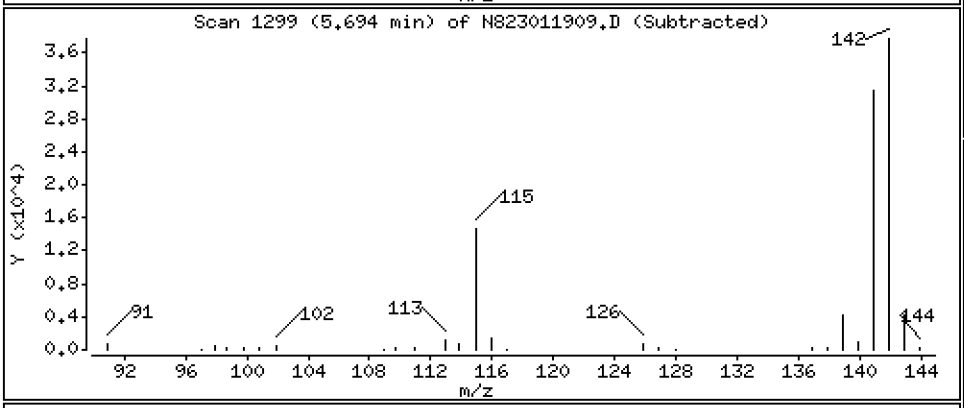
Column diameter: 0.25

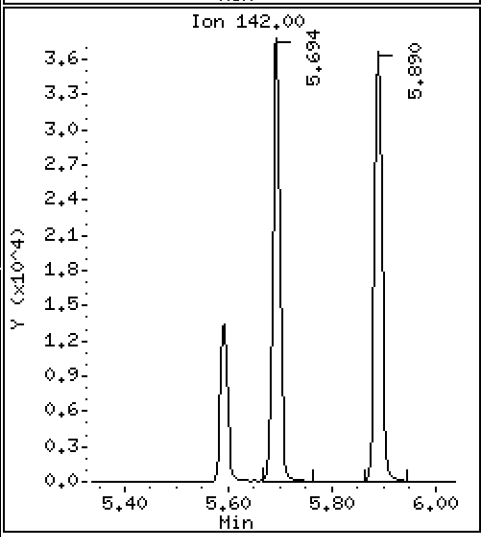
4 2-Methylnaphthalene

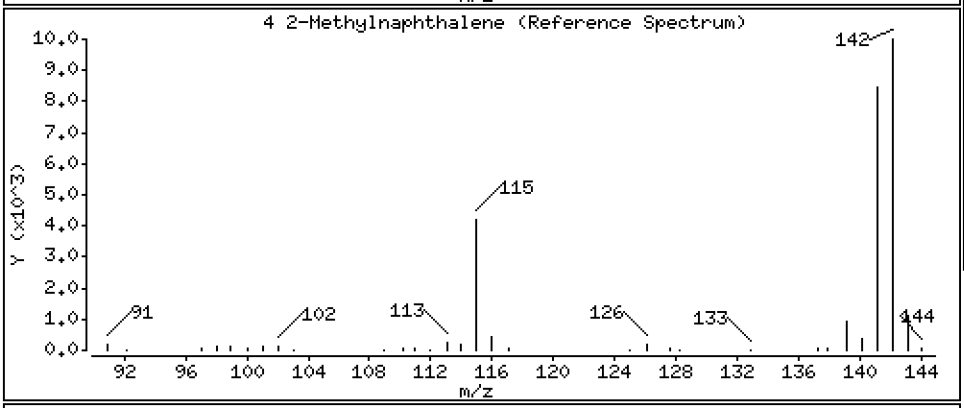
Concentration: 2.670 ug/L

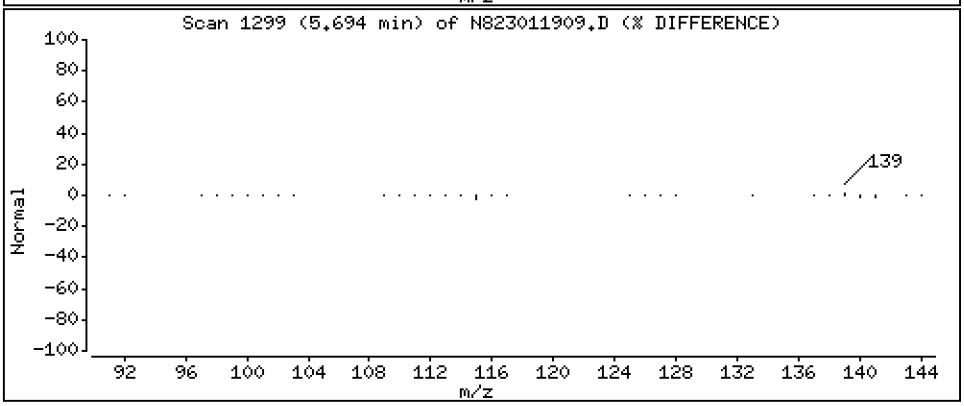












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

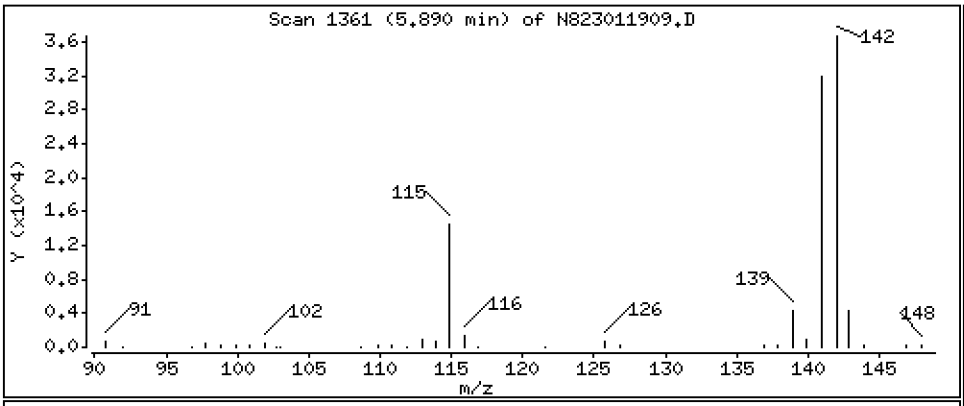
Operator: JZ

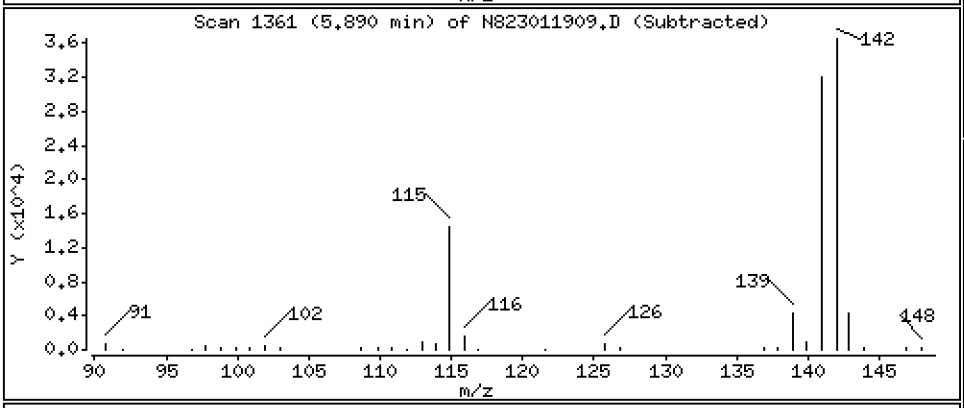
Column phase: Rxi-17sil

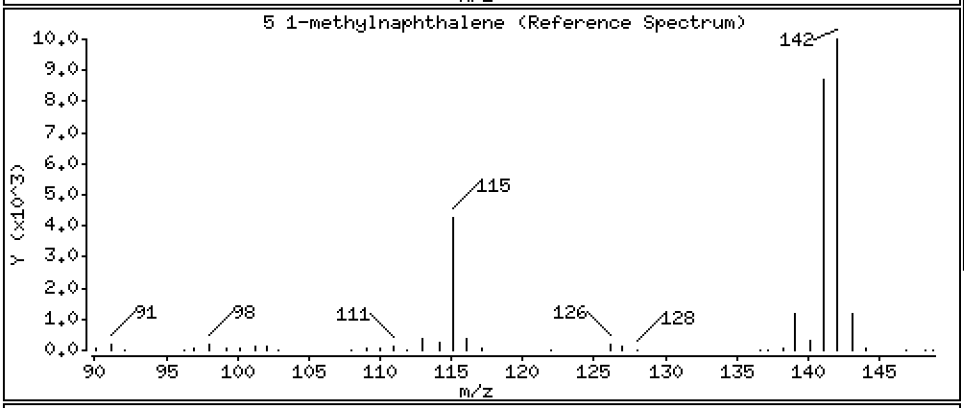
Column diameter: 0.25

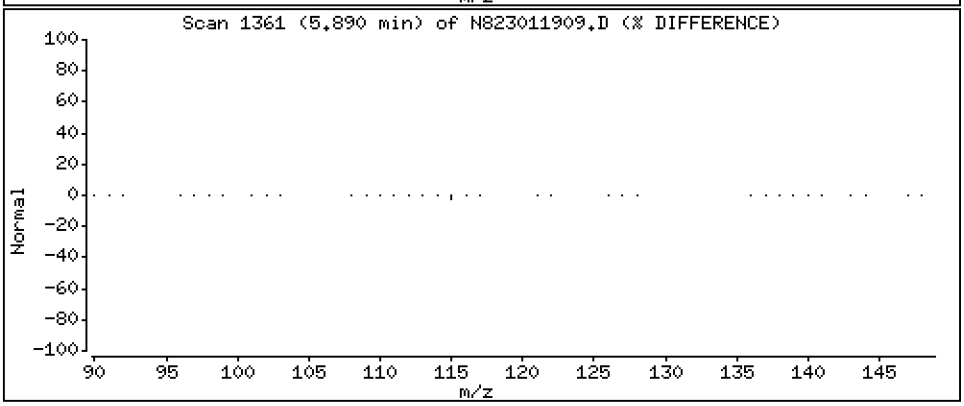
5 1-methylnaphthalene

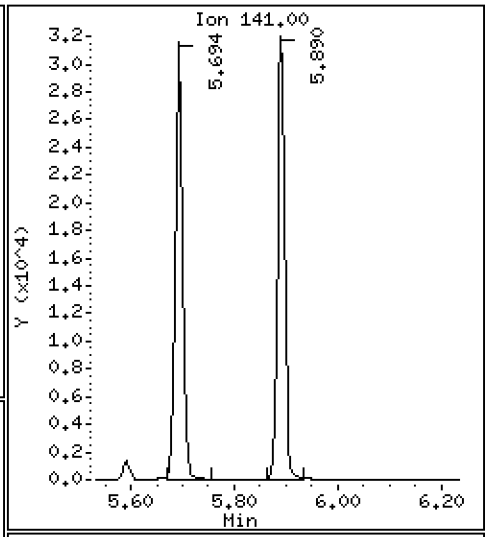
Concentration: 2.649 ug/L

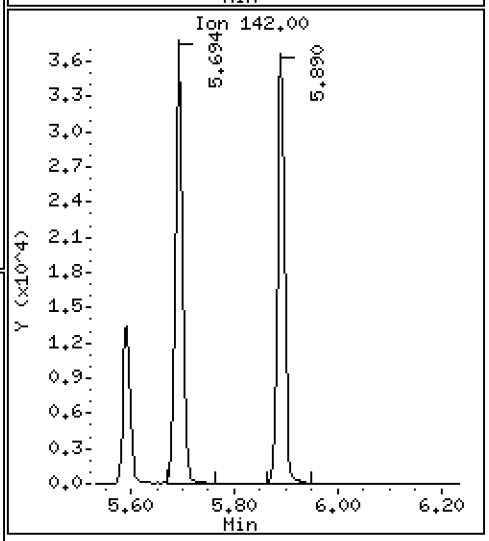












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

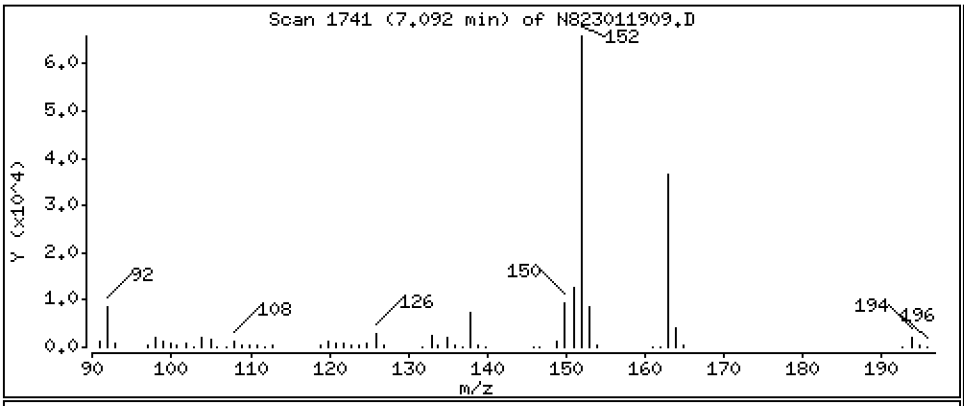
Operator: JZ

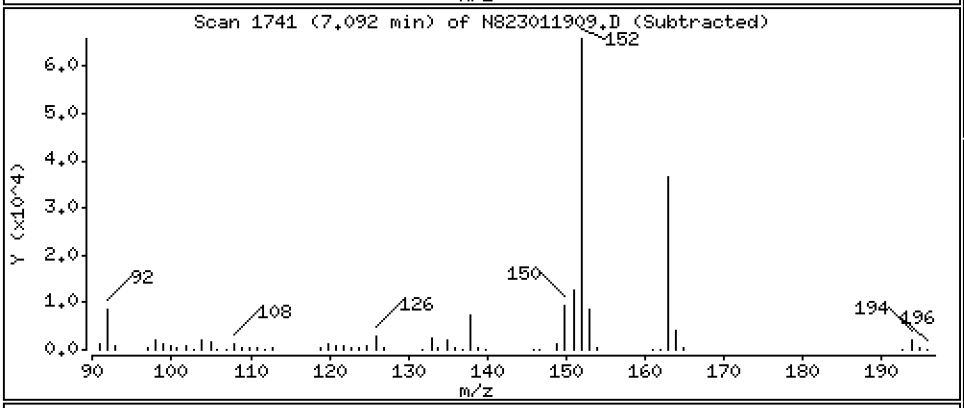
Column phase: Rxi-17sil

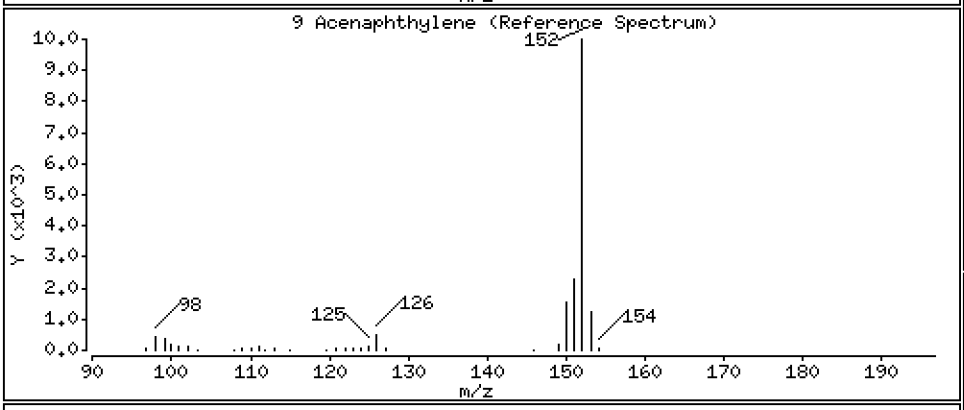
Column diameter: 0.25

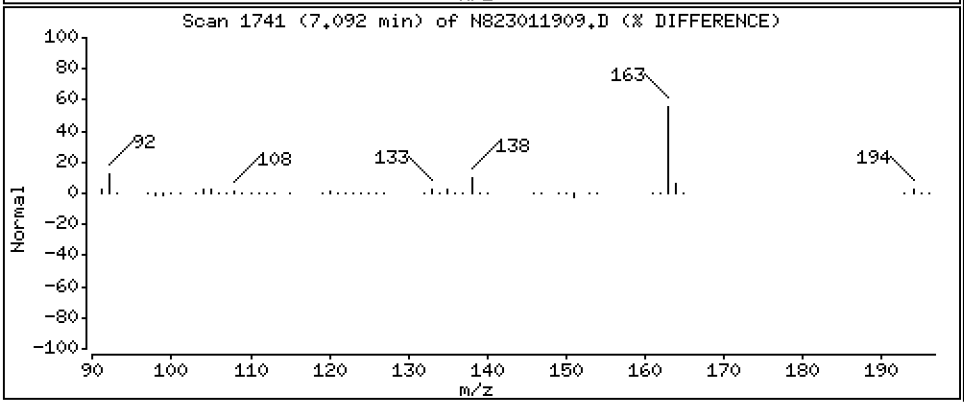
9 Acenaphthylene

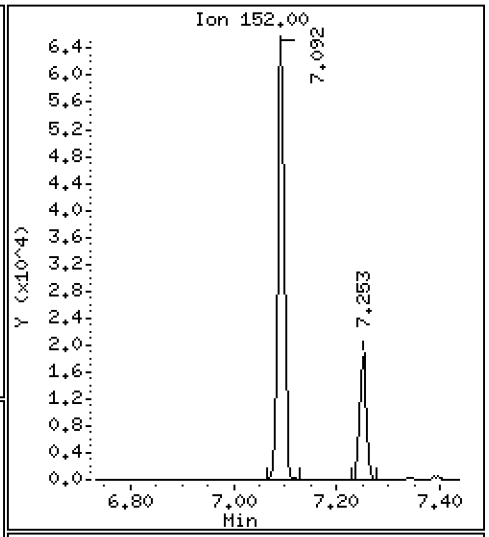
Concentration: 2.821 ug/L

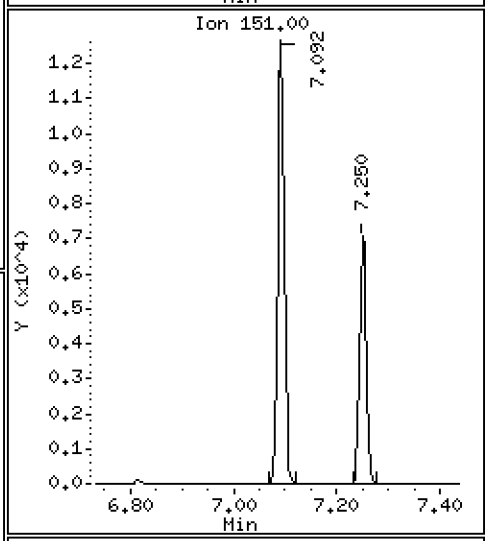


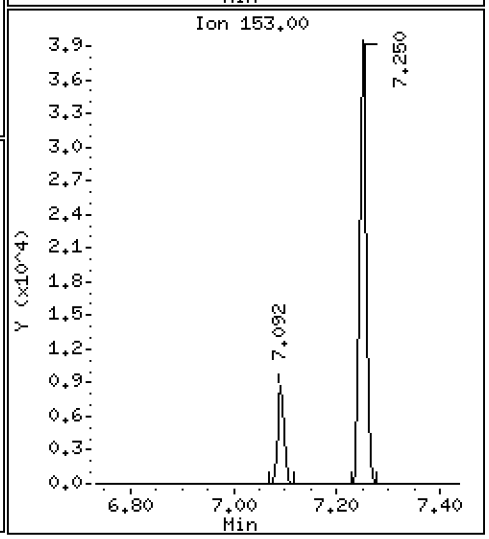












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

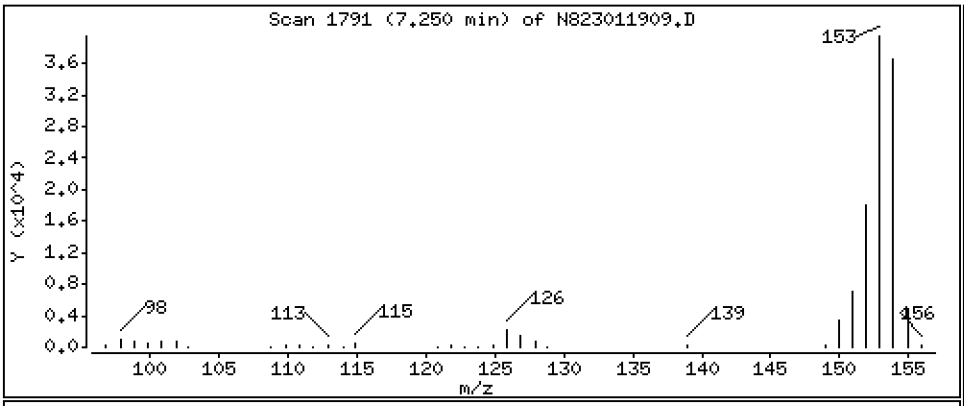
Operator: JZ

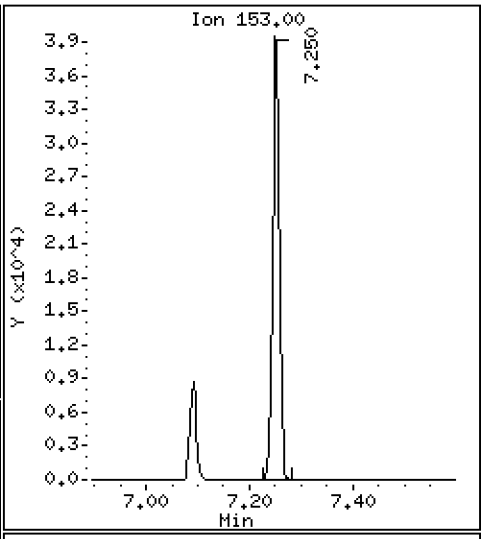
Column phase: Rxi-17sil

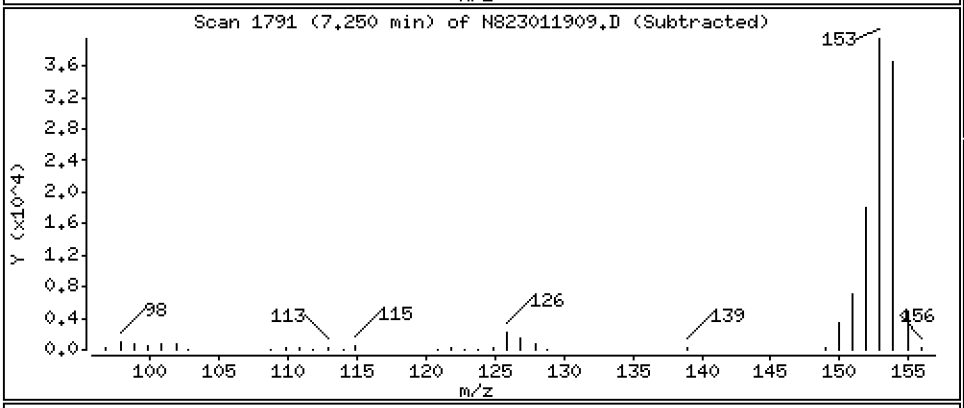
Column diameter: 0.25

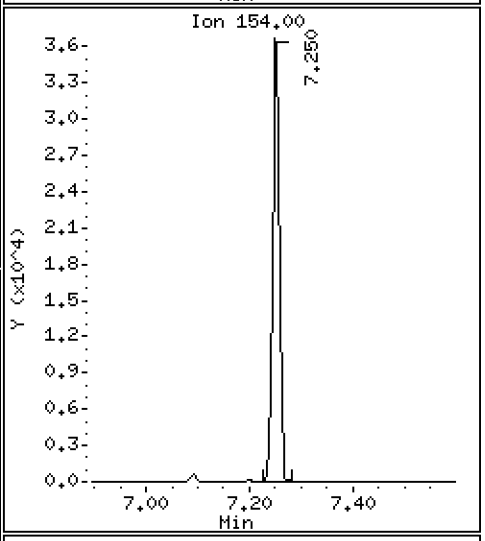
11 Acenaphthene

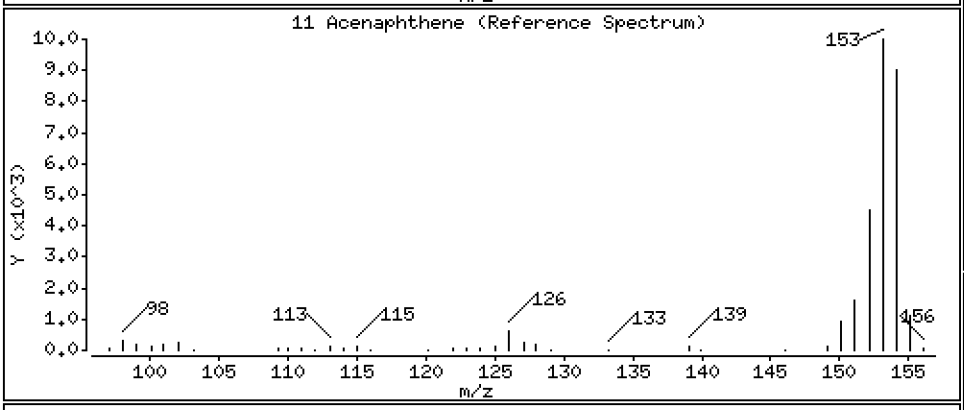
Concentration: 2.600 ug/L

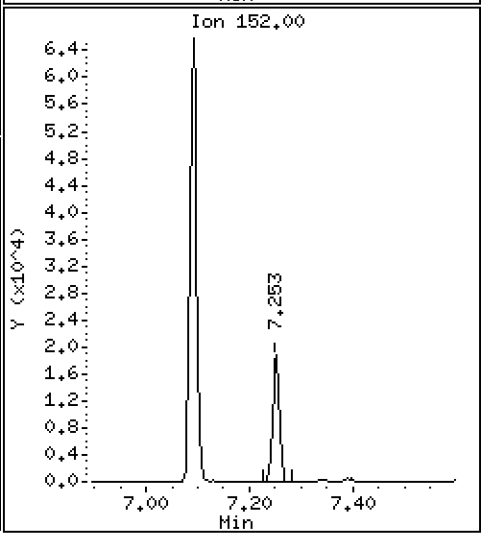


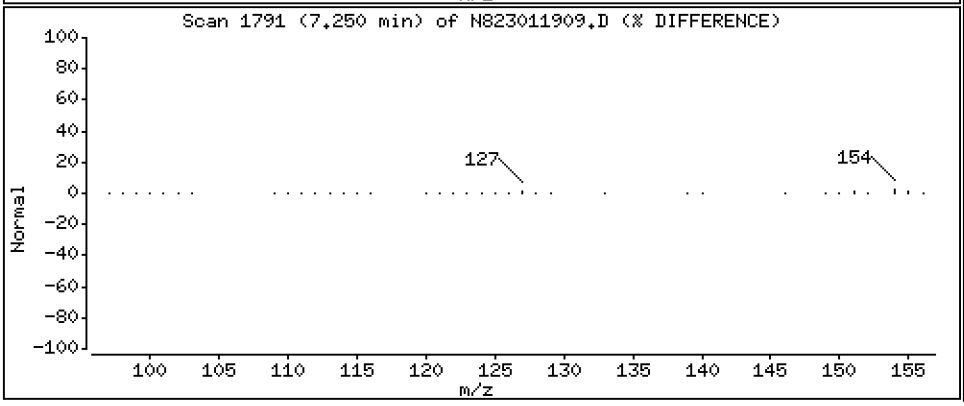












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

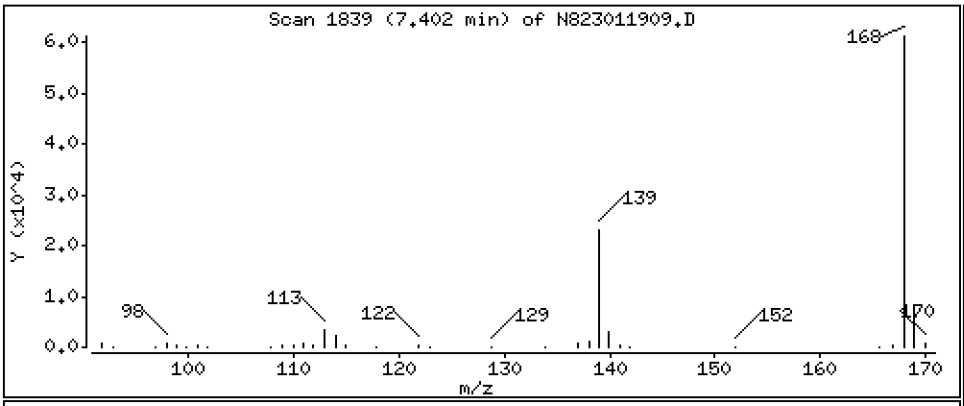
Operator: JZ

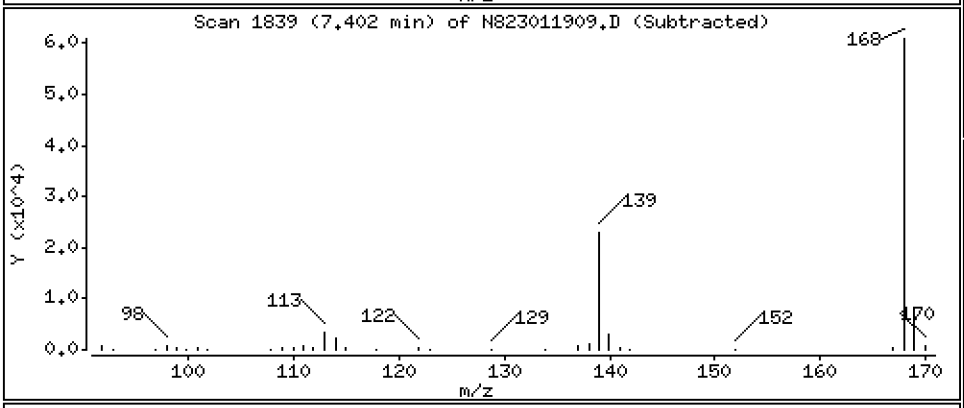
Column phase: Rxi-17sil

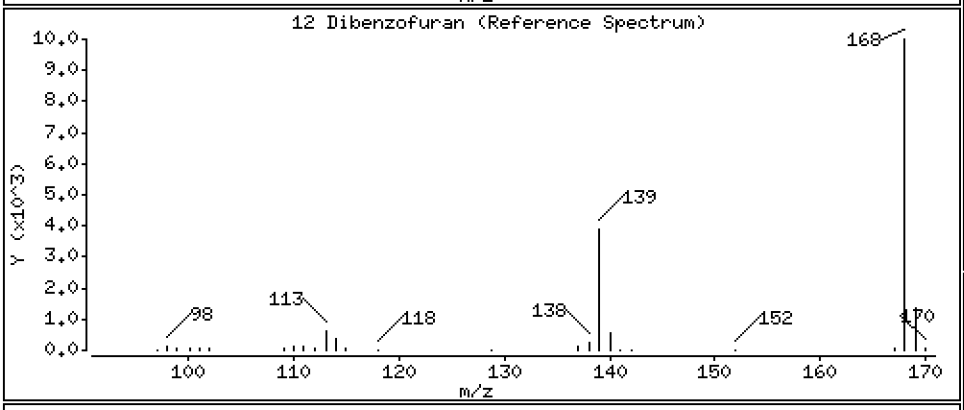
Column diameter: 0.25

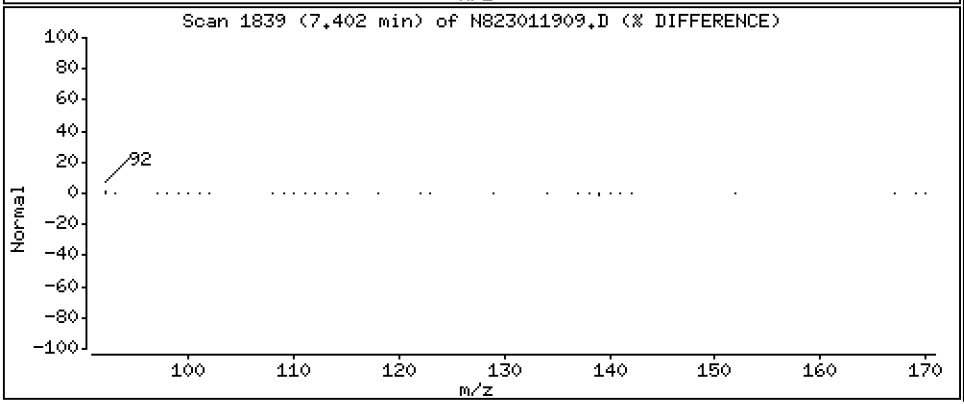
12 Dibenzofuran

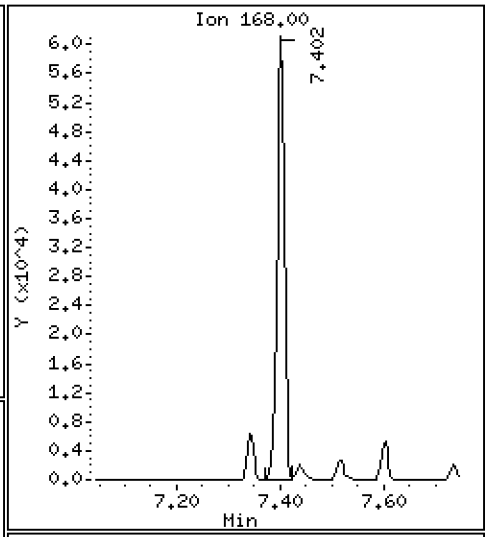
Concentration: 2.860 ug/L

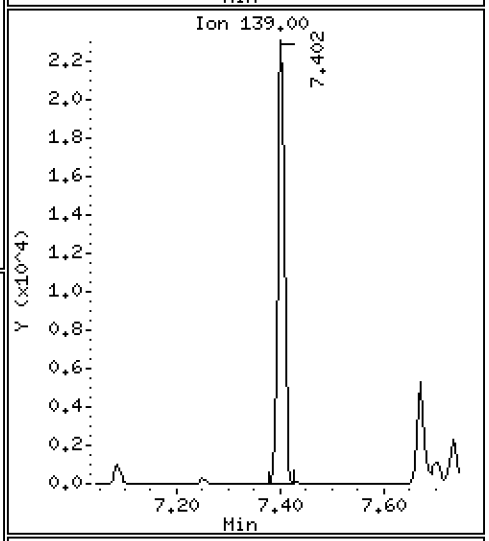


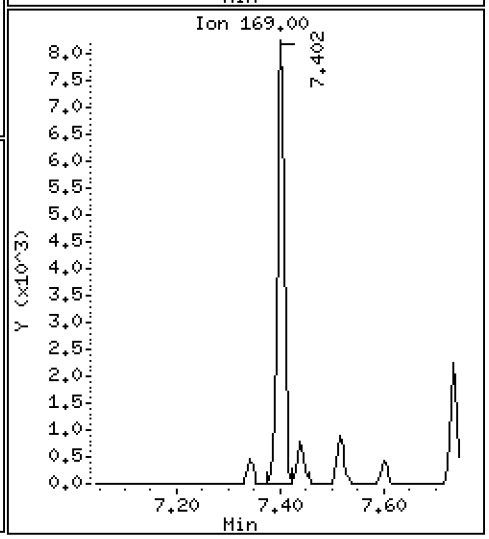












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

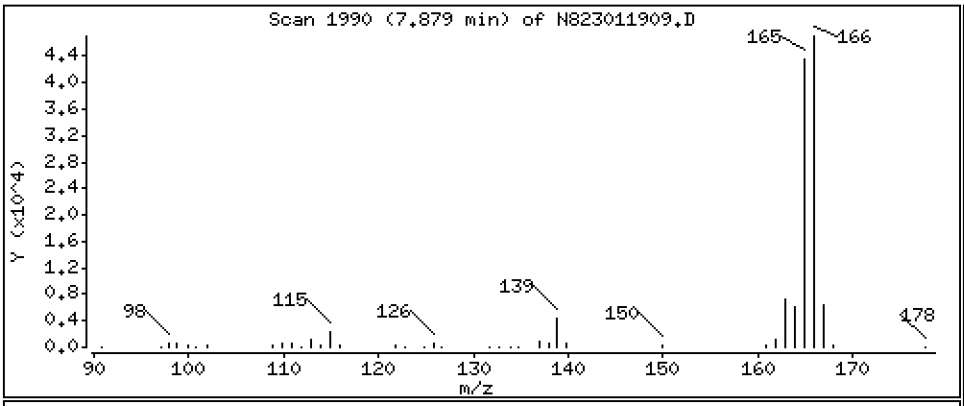
Operator: JZ

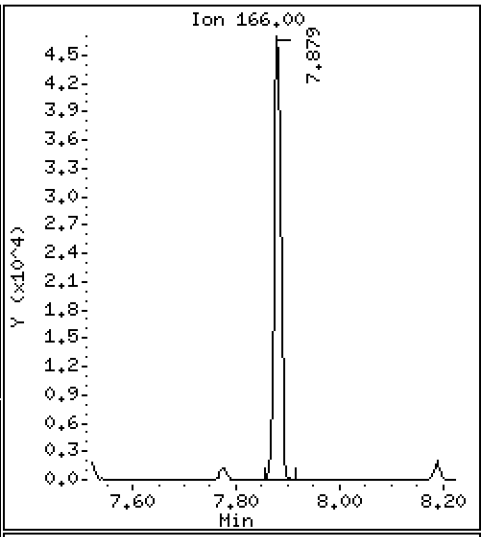
Column phase: Rxi-17sil

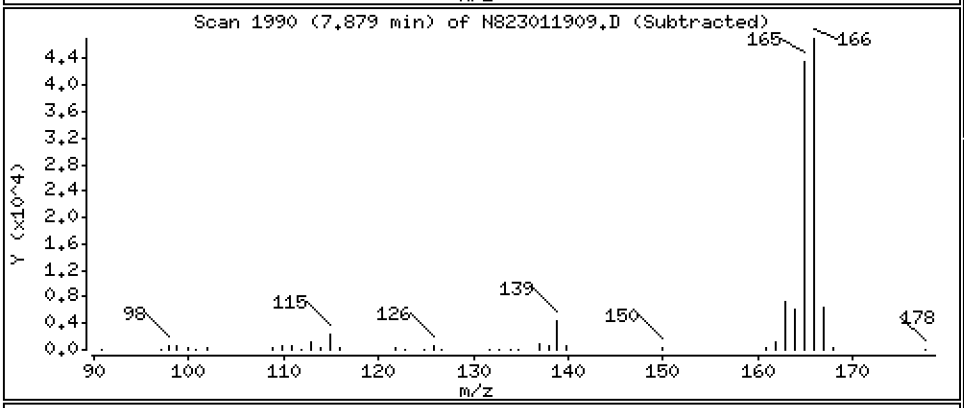
Column diameter: 0.25

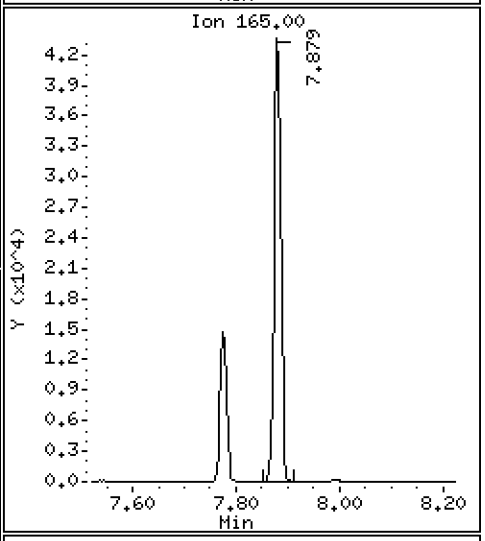
14 Fluorene

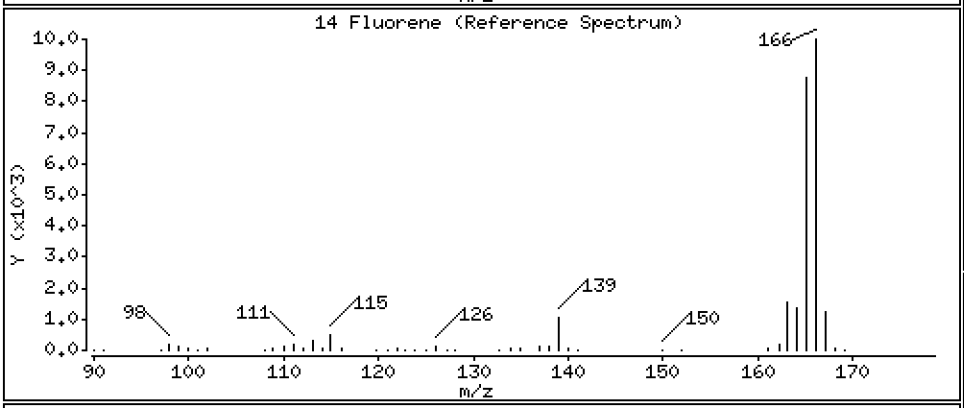
Concentration: 2.631 ug/L

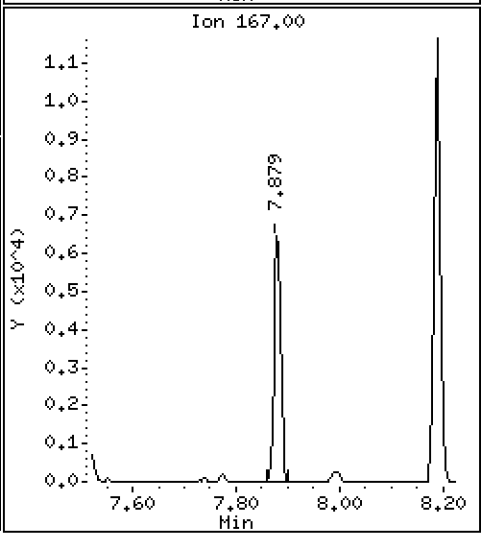


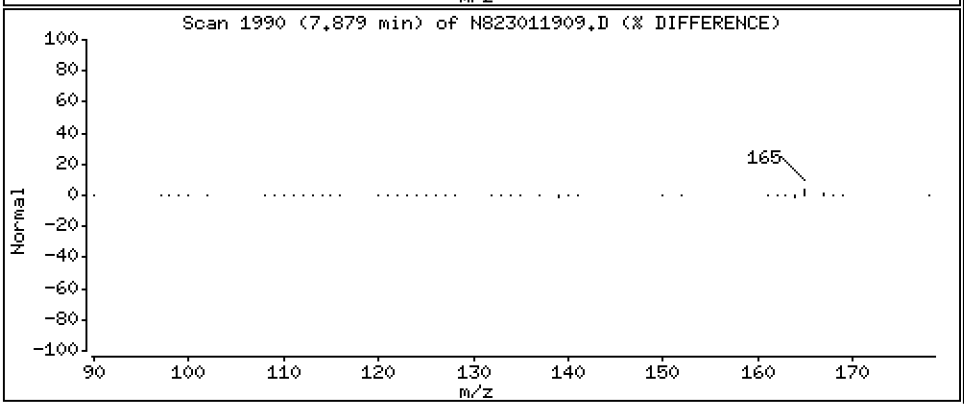












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

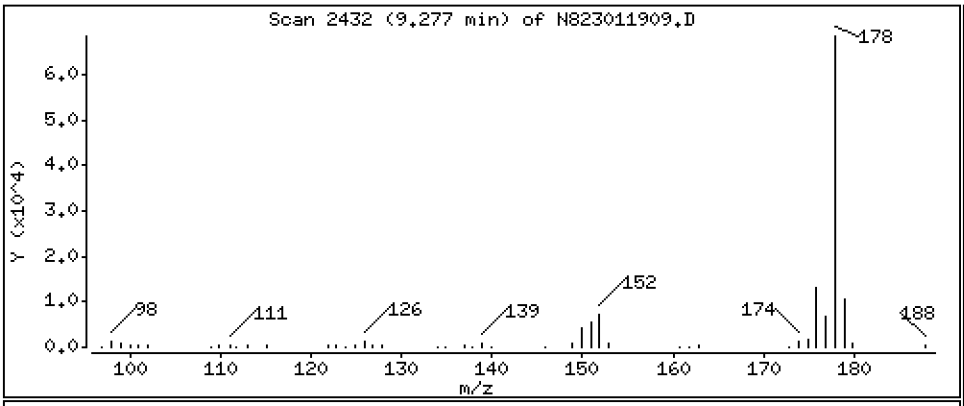
Operator: JZ

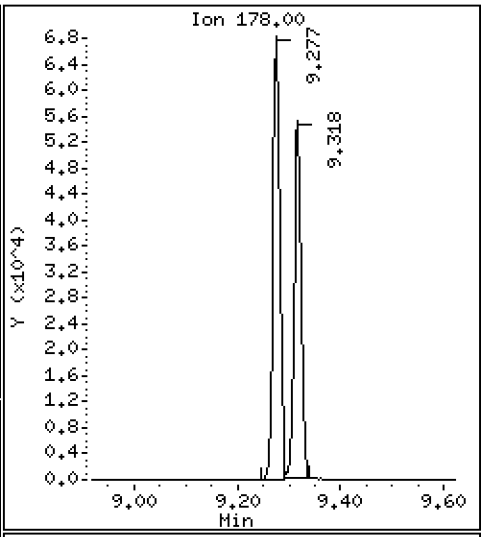
Column phase: Rxi-17sil

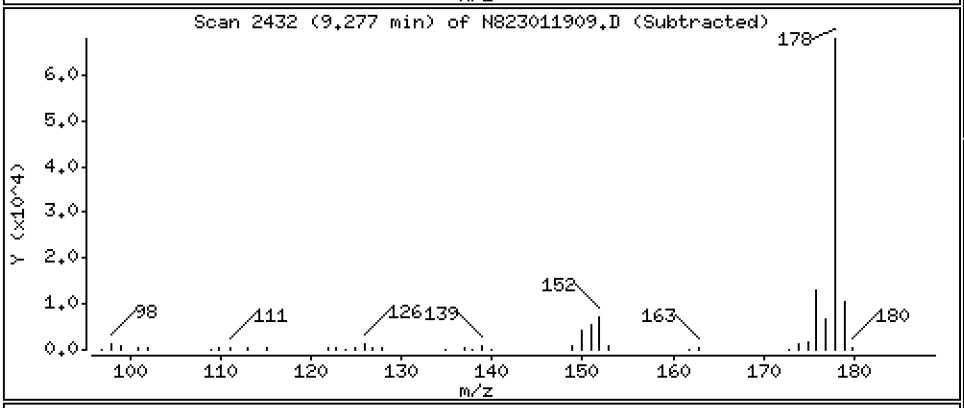
Column diameter: 0.25

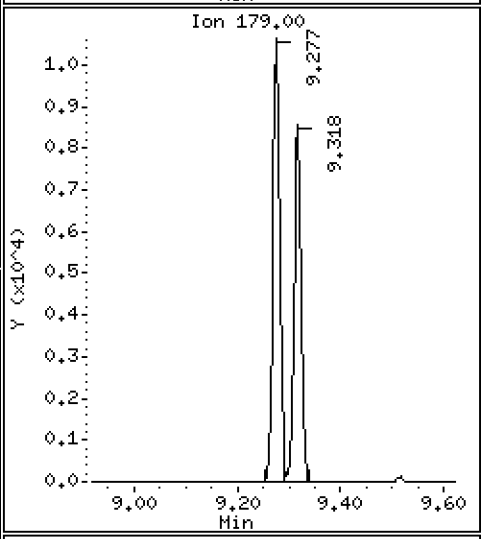
16 Phenanthrene

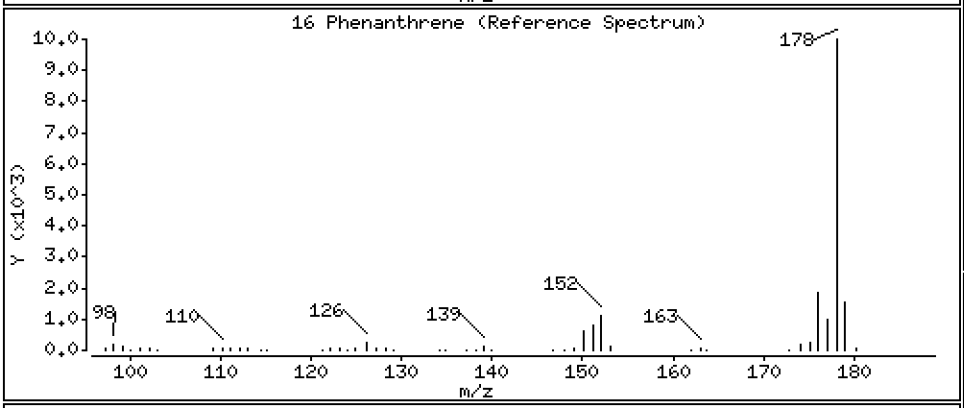
Concentration: 2.448 ug/L

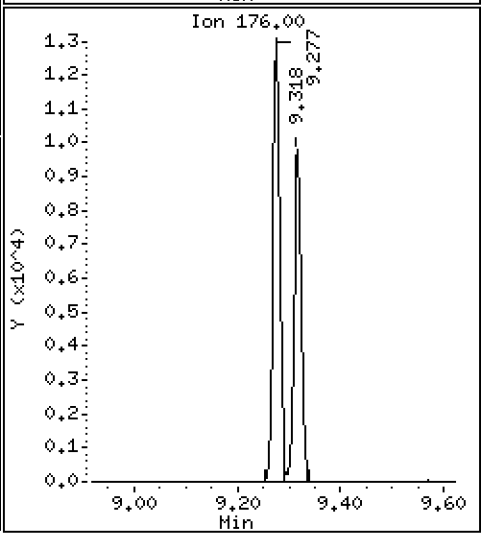


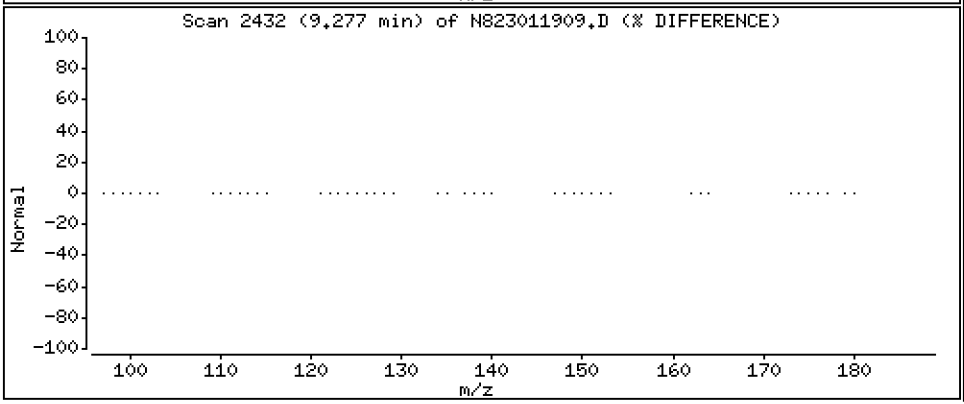












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

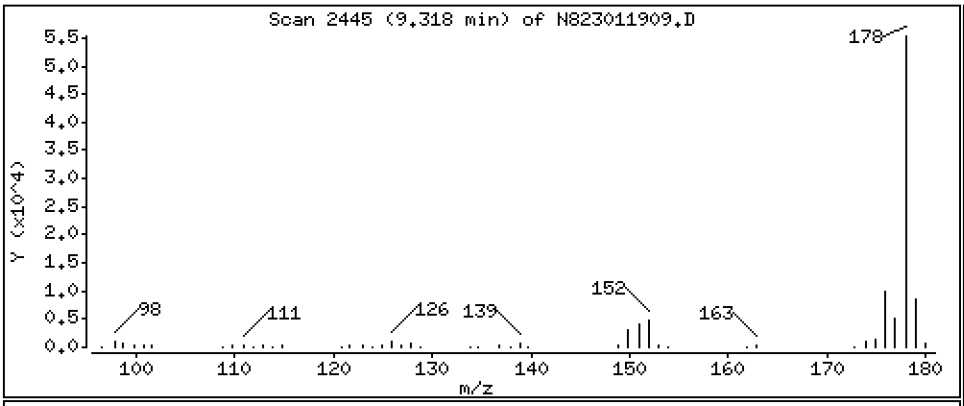
Operator: JZ

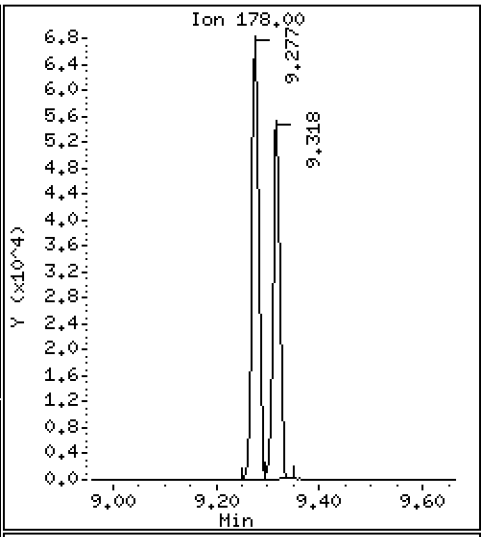
Column phase: Rxi-17sil

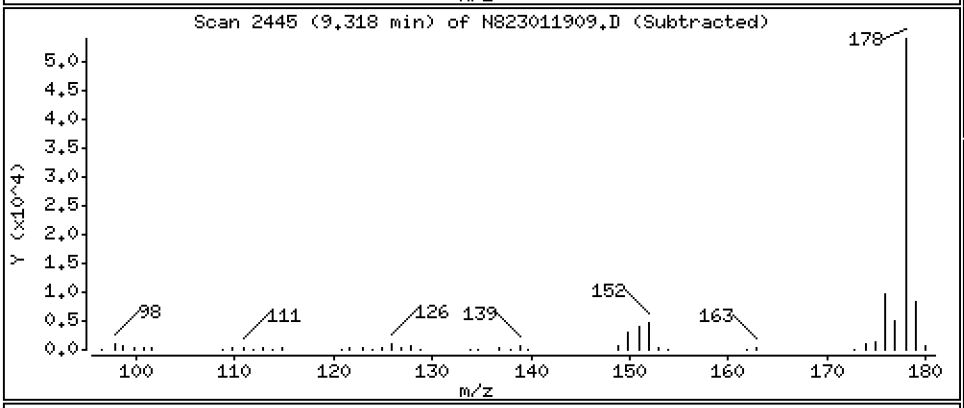
Column diameter: 0.25

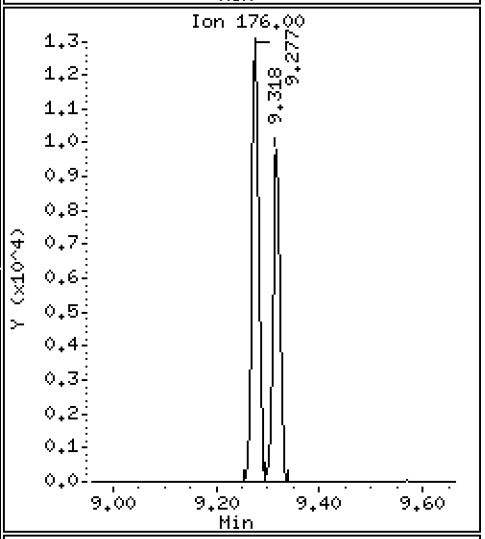
17 Anthracene

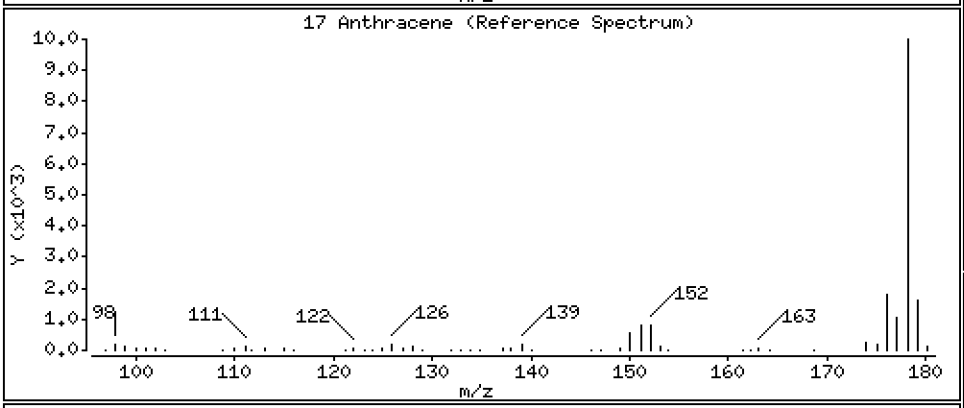
Concentration: 2.270 ug/L

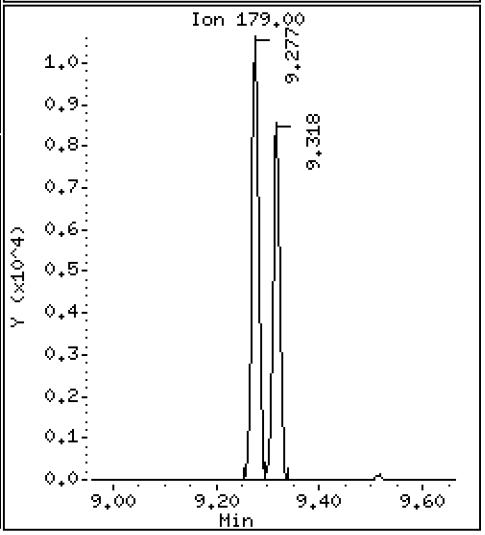


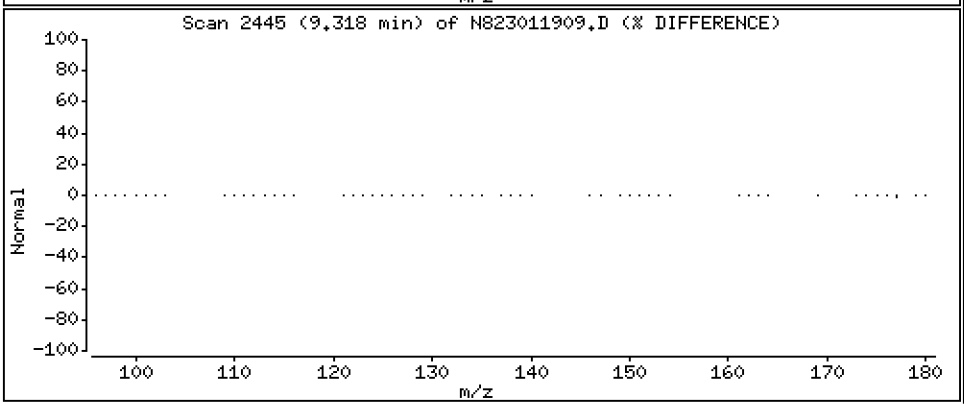












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

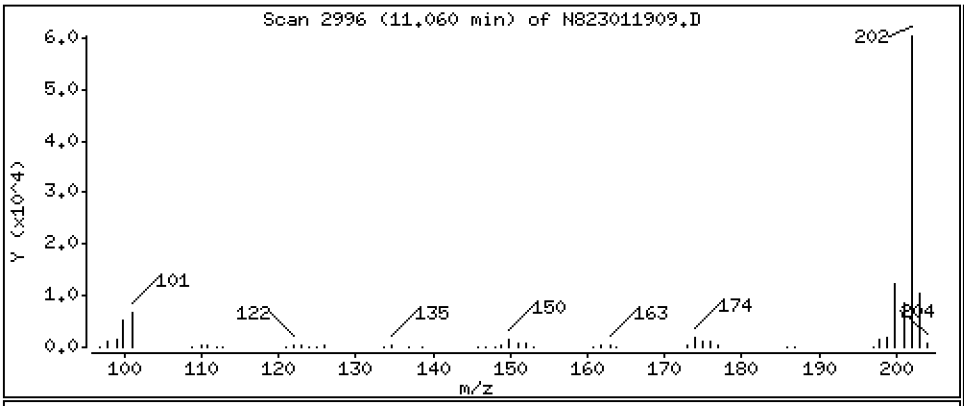
Operator: JZ

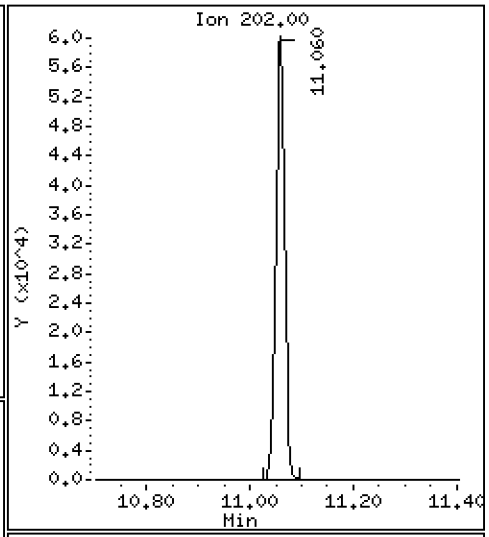
Column phase: Rxi-17sil

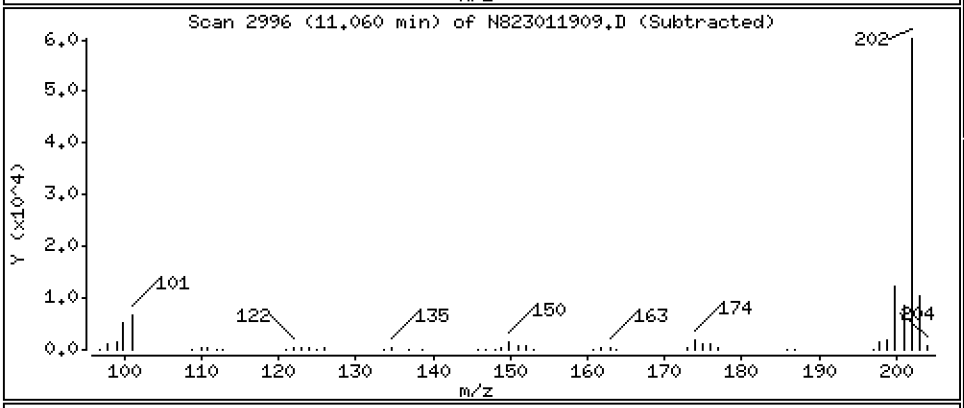
Column diameter: 0.25

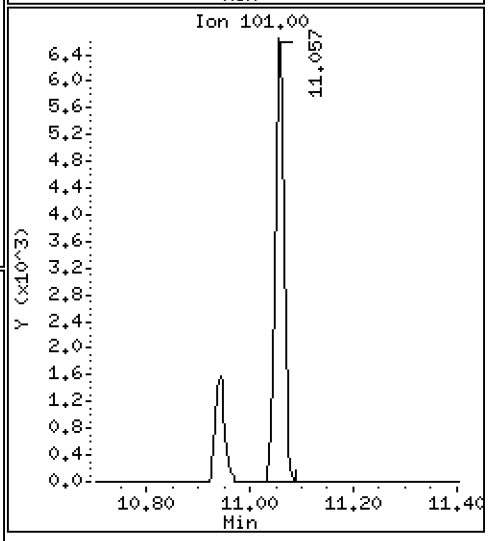
22 Fluoranthene

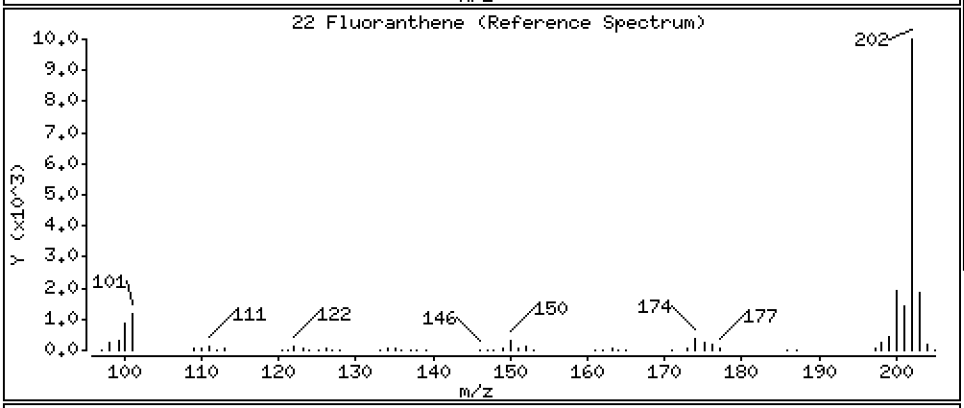
Concentration: 2.653 ug/L

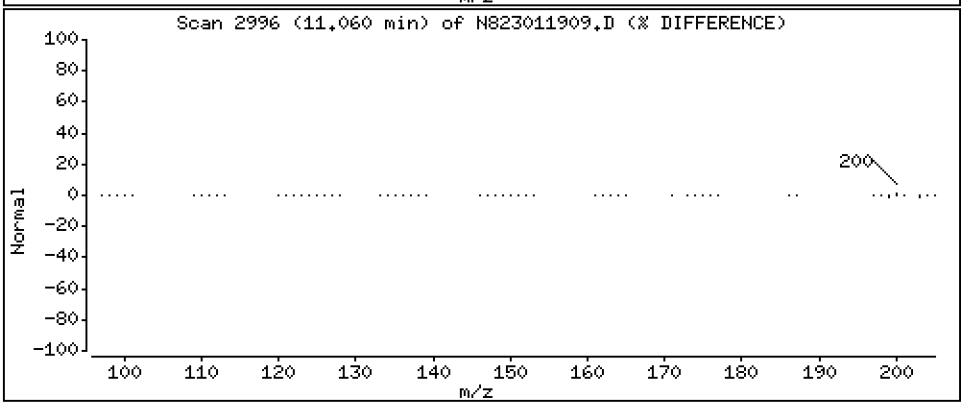












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

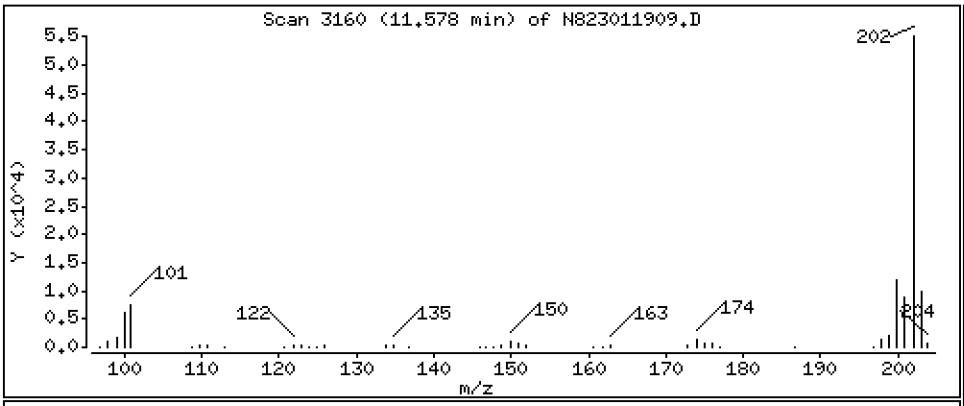
Operator: JZ

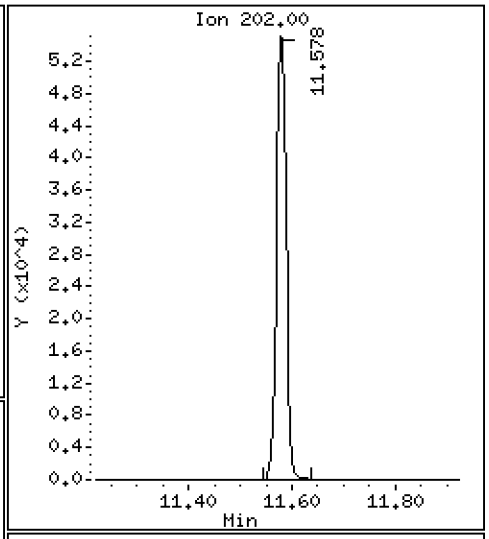
Column phase: Rxi-17sil

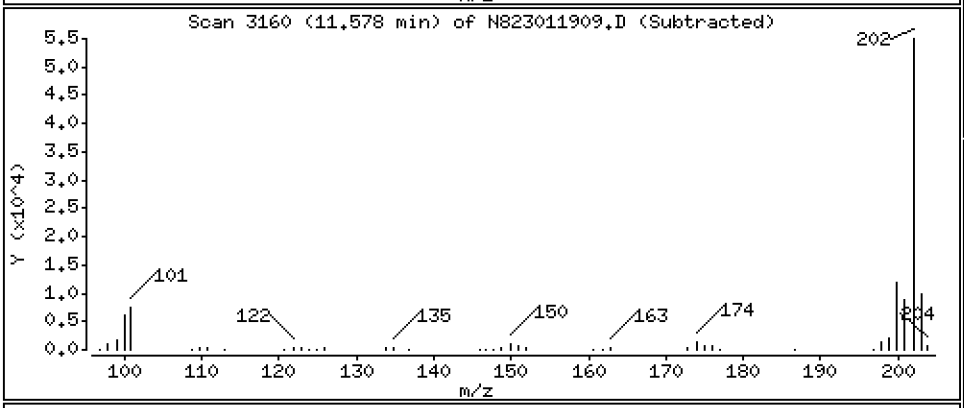
Column diameter: 0.25

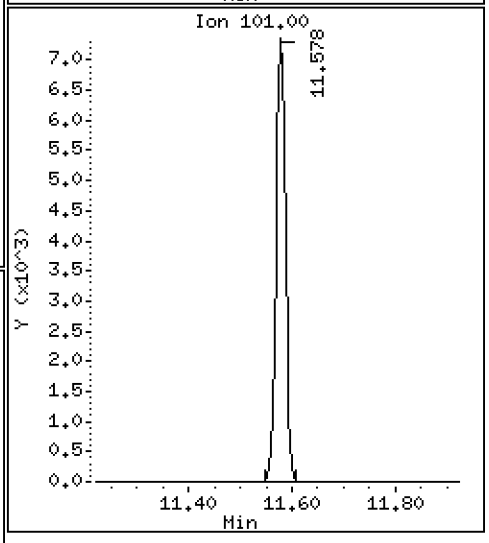
23 Pyrene

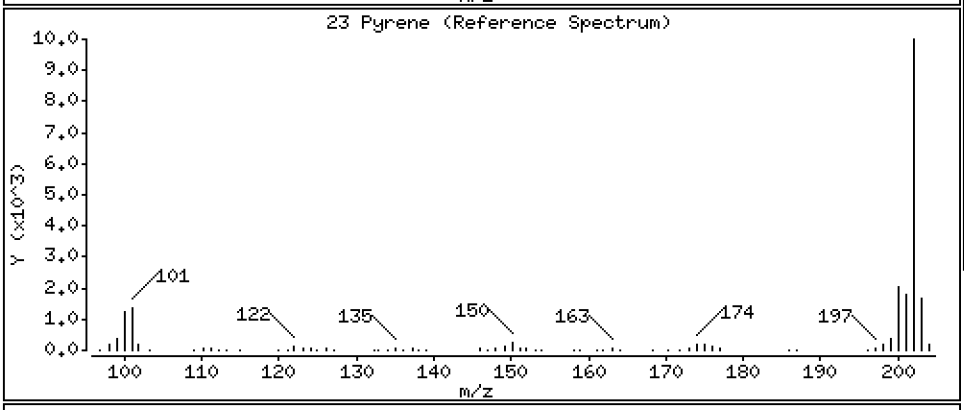
Concentration: 2.462 ug/L

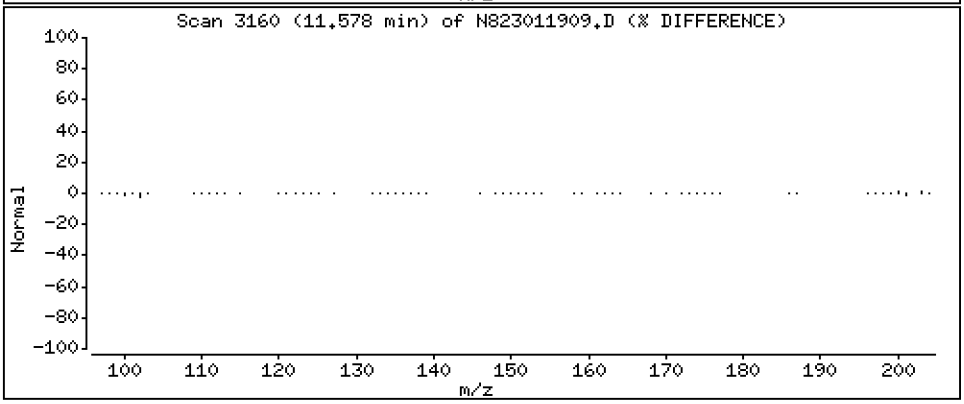












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

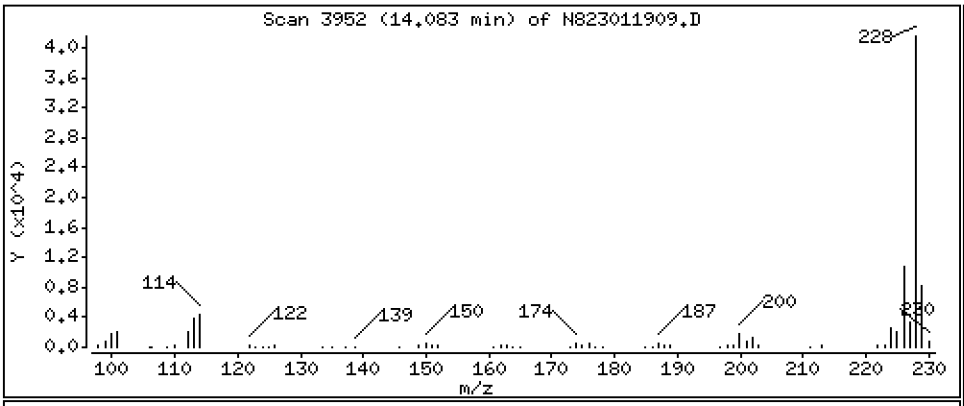
Operator: JZ

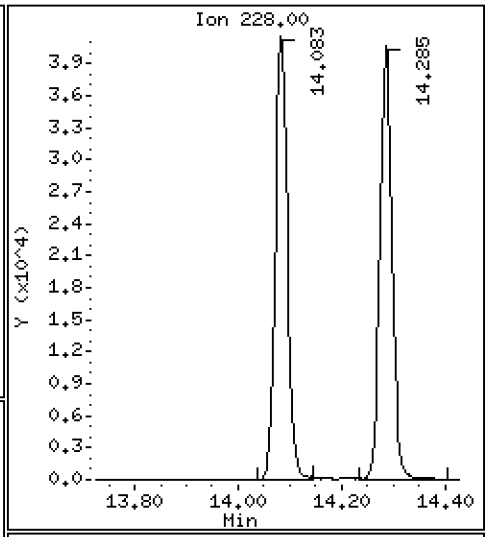
Column phase: Rxi-17sil

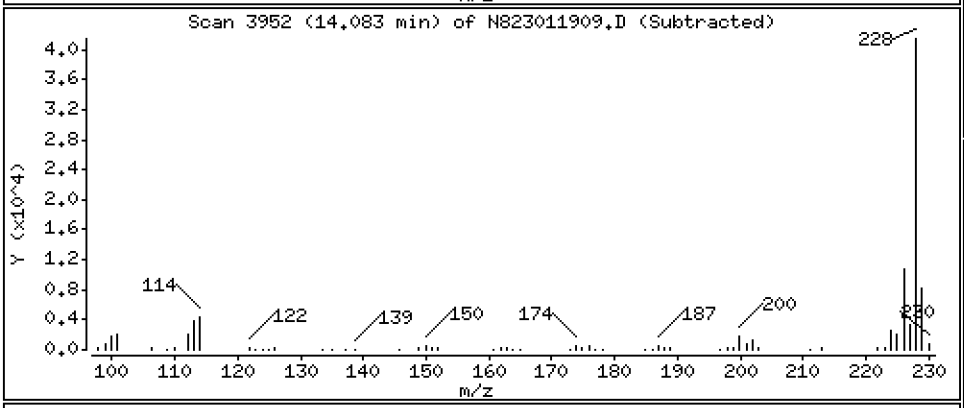
Column diameter: 0.25

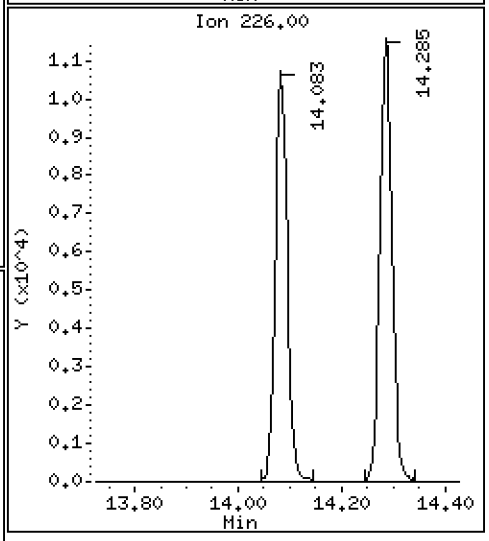
24 Benzo(a)anthracene

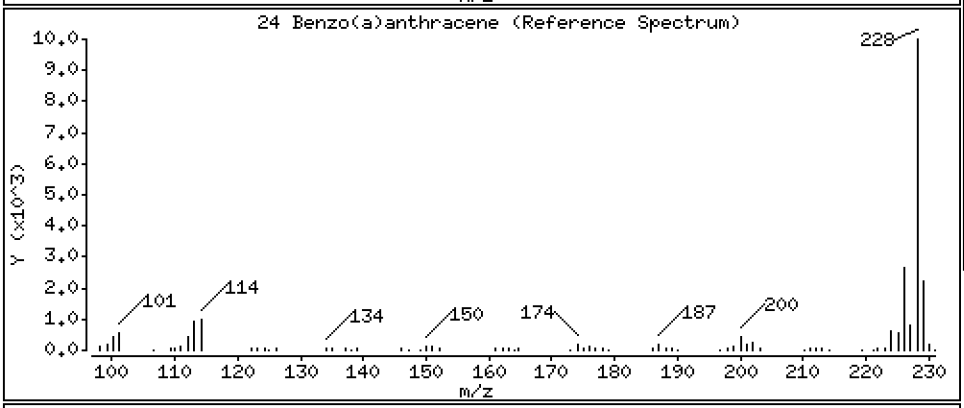
Concentration: 2.587 ug/L

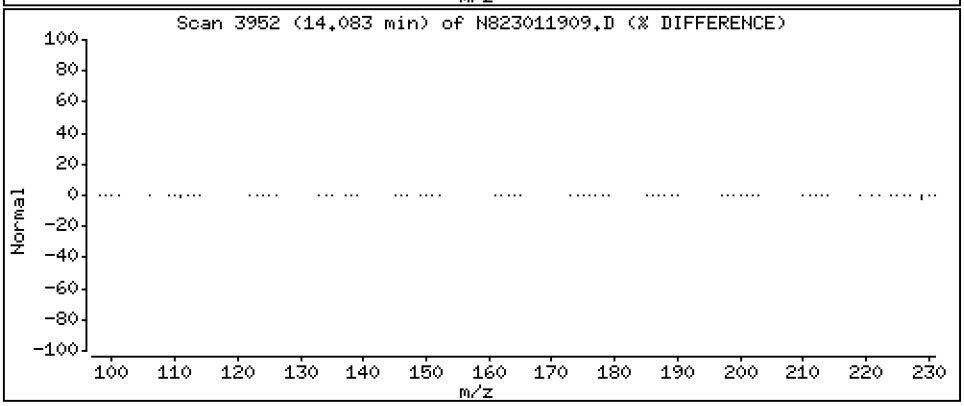












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

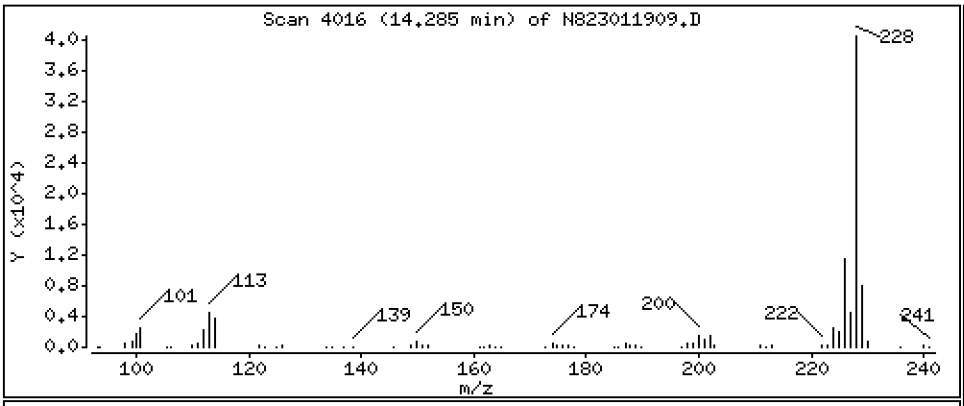
Operator: JZ

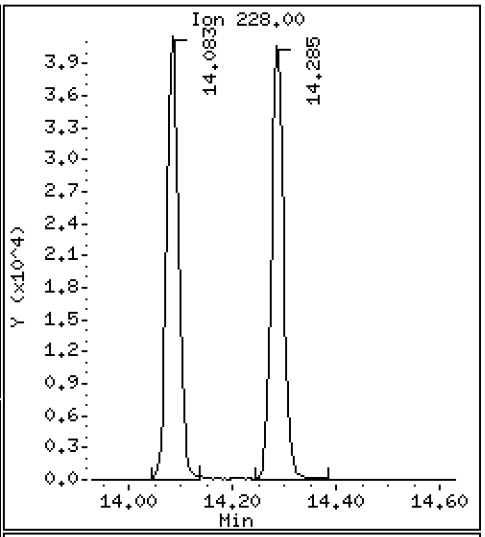
Column phase: Rxi-17sil

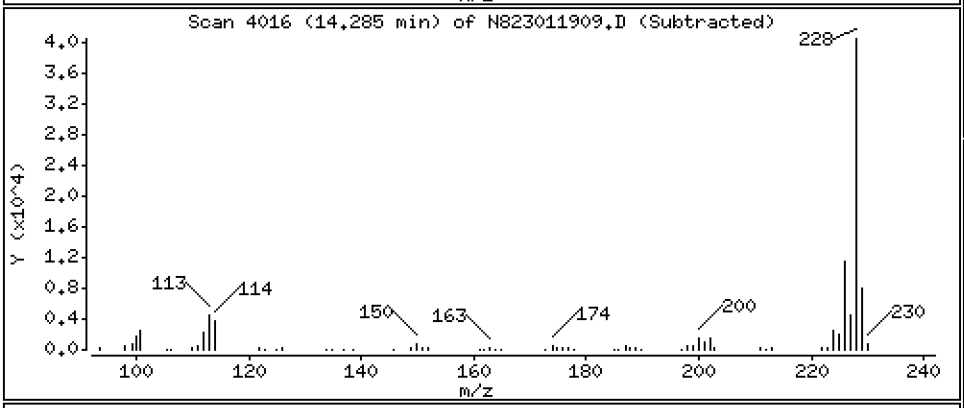
Column diameter: 0.25

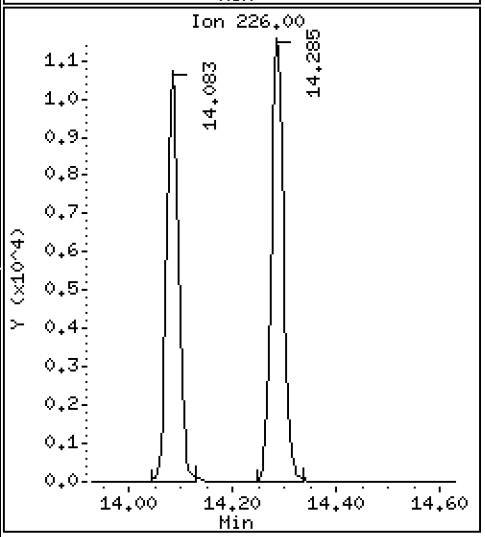
27 Chrysene

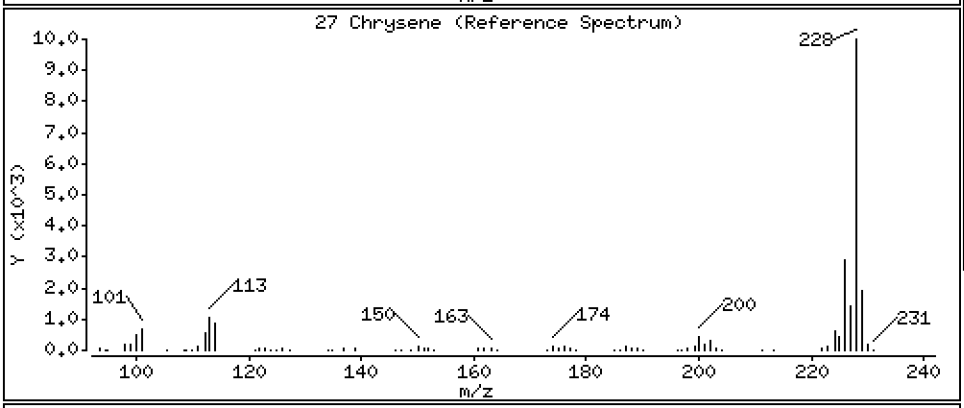
Concentration: 2.400 ug/L

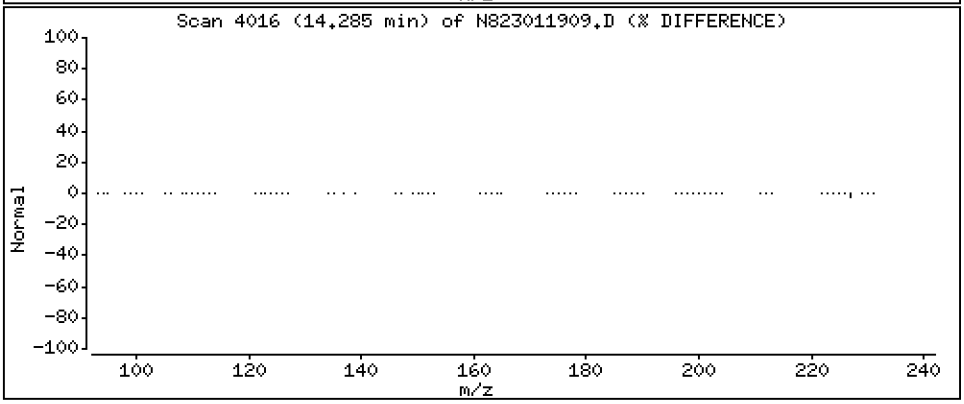












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

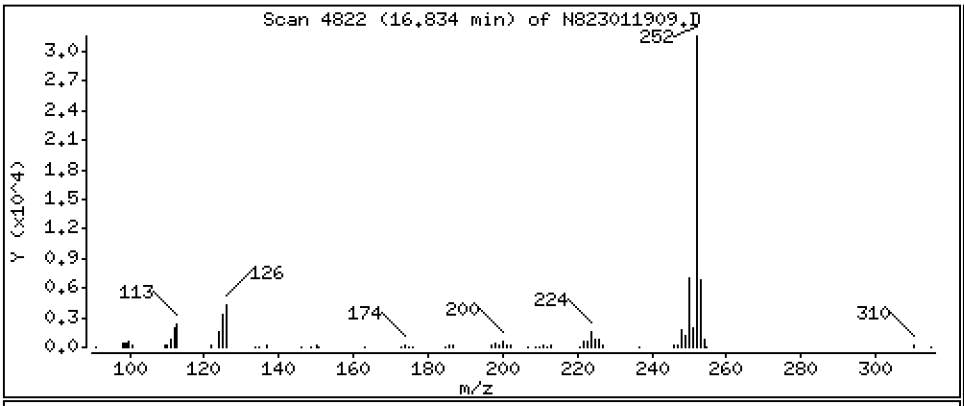
Operator: JZ

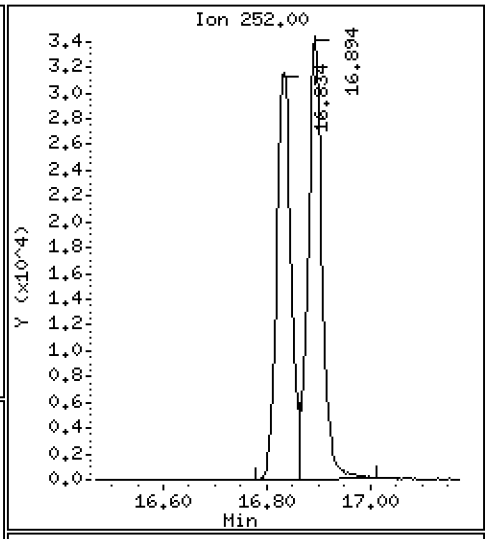
Column phase: Rxi-17sil

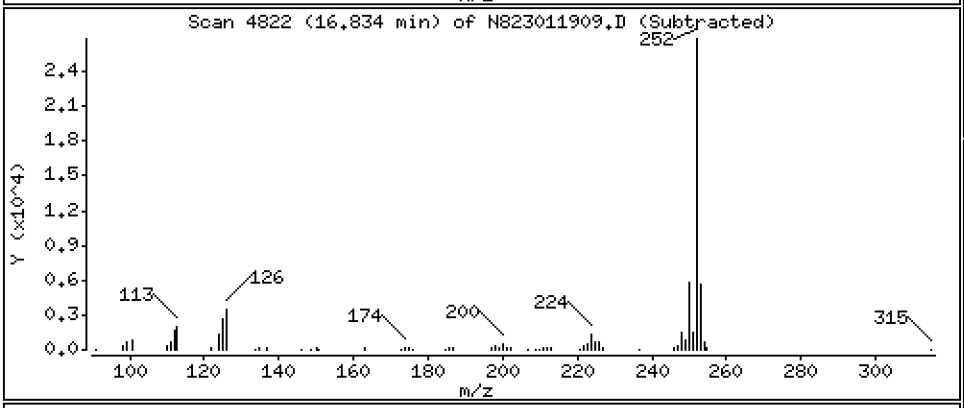
Column diameter: 0.25

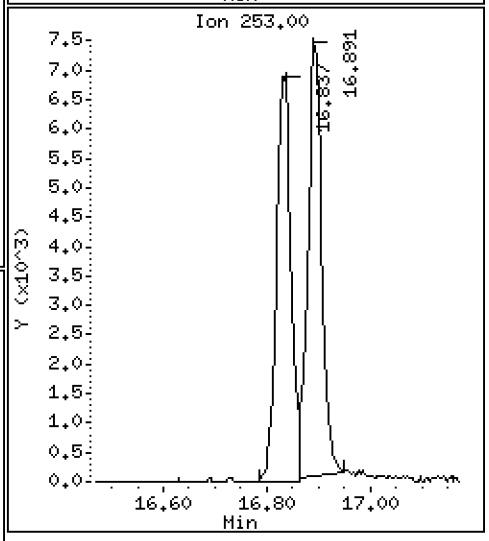
28 Benzo(b)fluoranthene

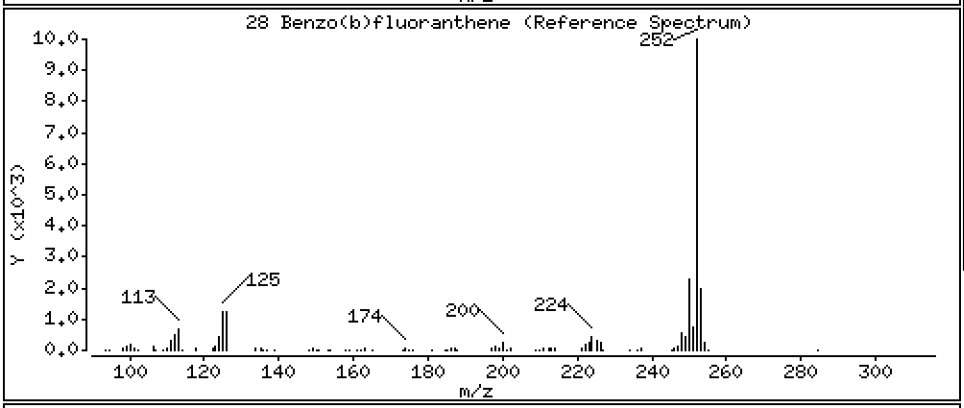
Concentration: 2.507 ug/L

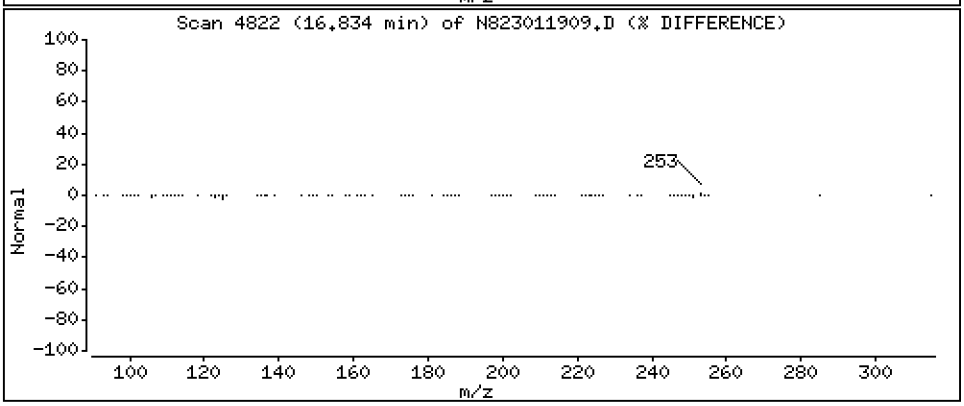












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

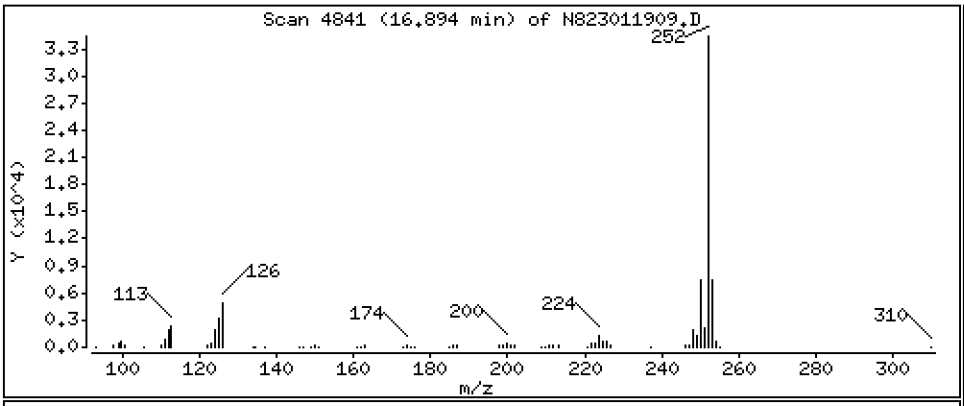
Operator: JZ

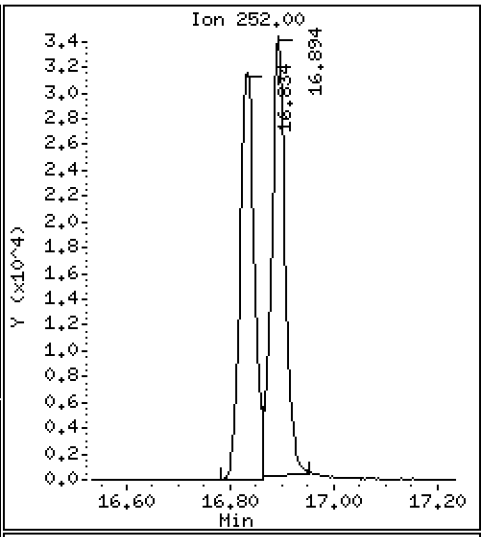
Column phase: Rxi-17sil

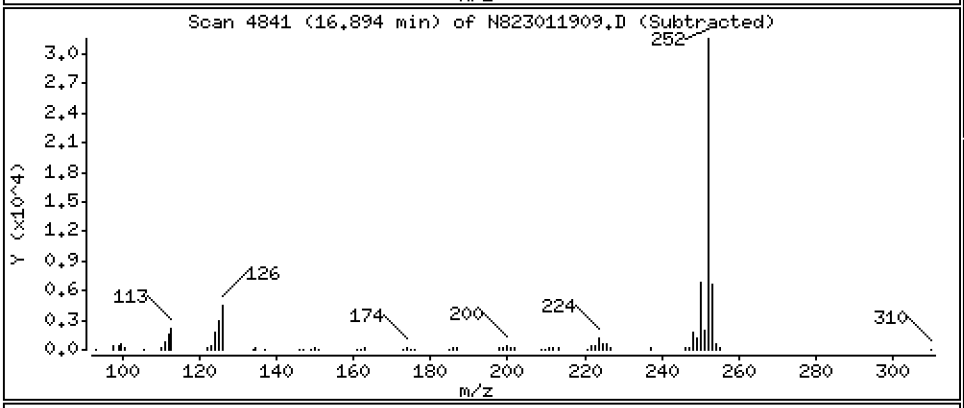
Column diameter: 0.25

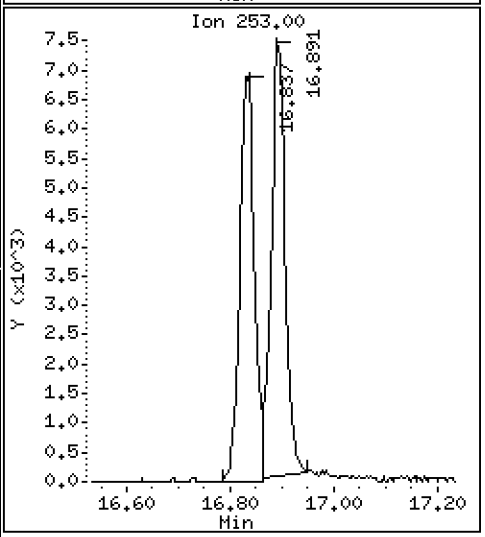
29 Benzo(k)fluoranthene

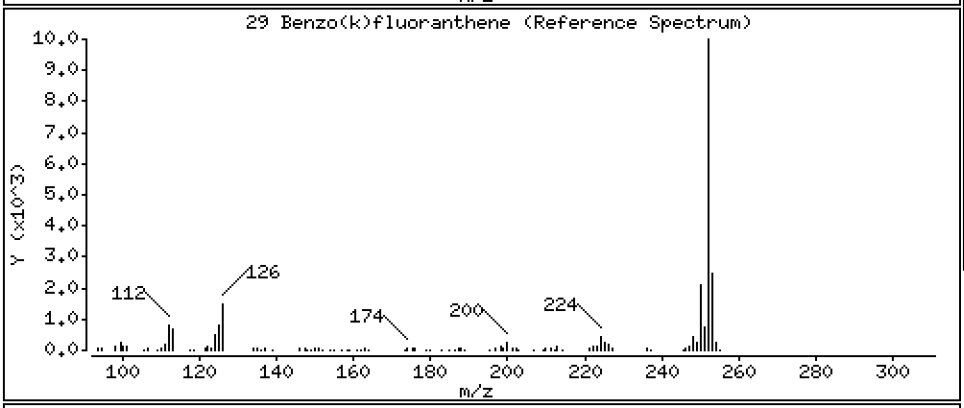
Concentration: 2.656 ug/L

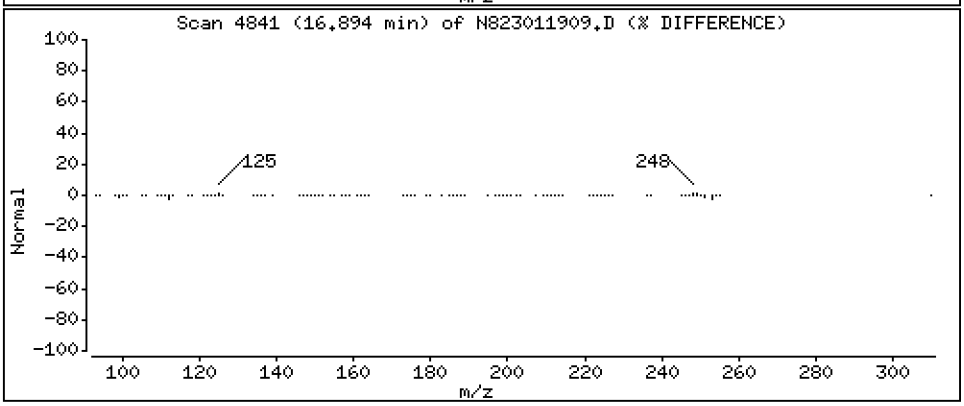












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

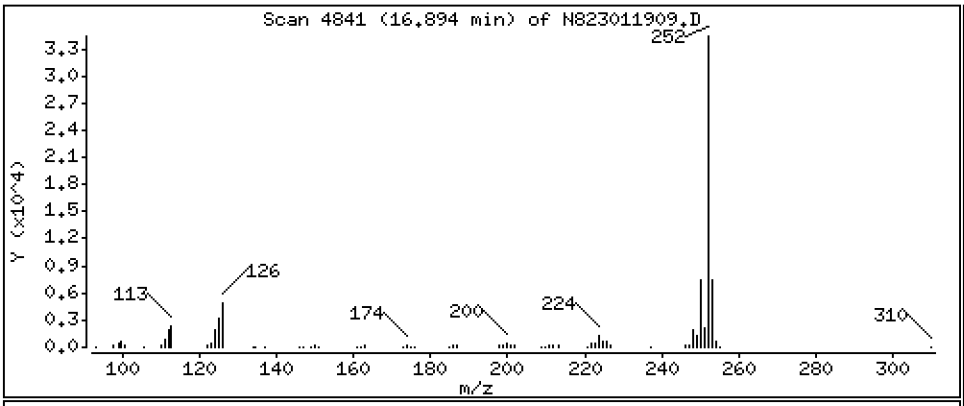
Operator: JZ

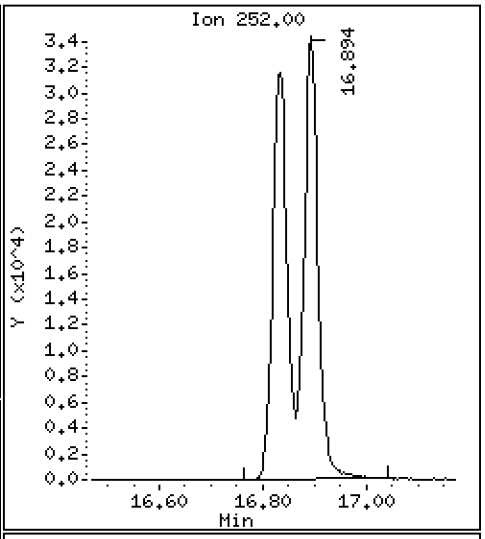
Column phase: Rxi-17sil

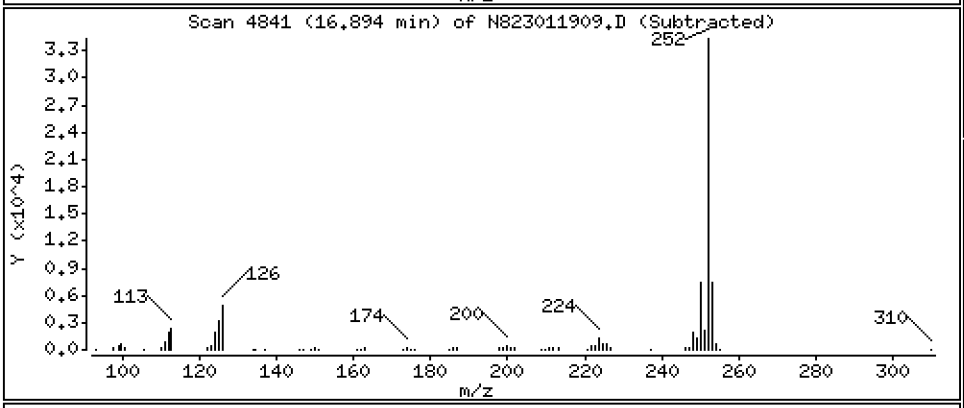
Column diameter: 0.25

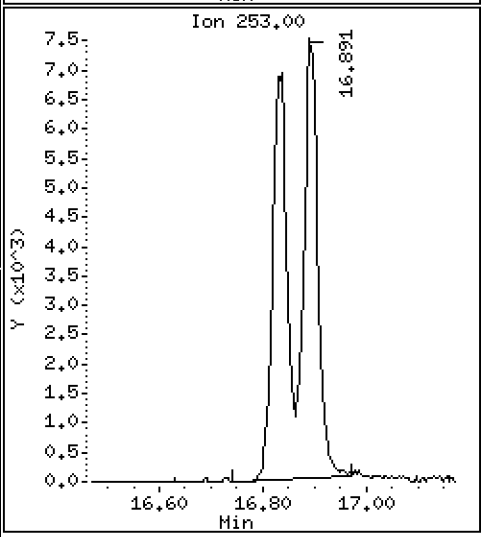
31 Total Benzofluoranthenes

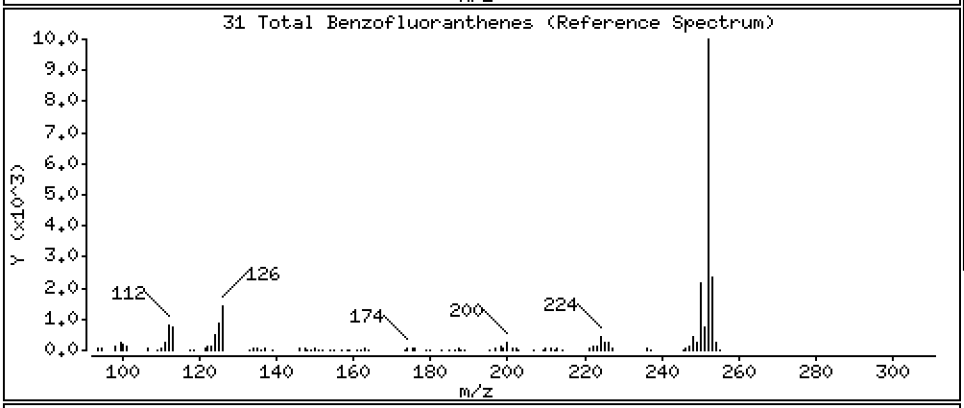
Concentration: 5.480 ug/L

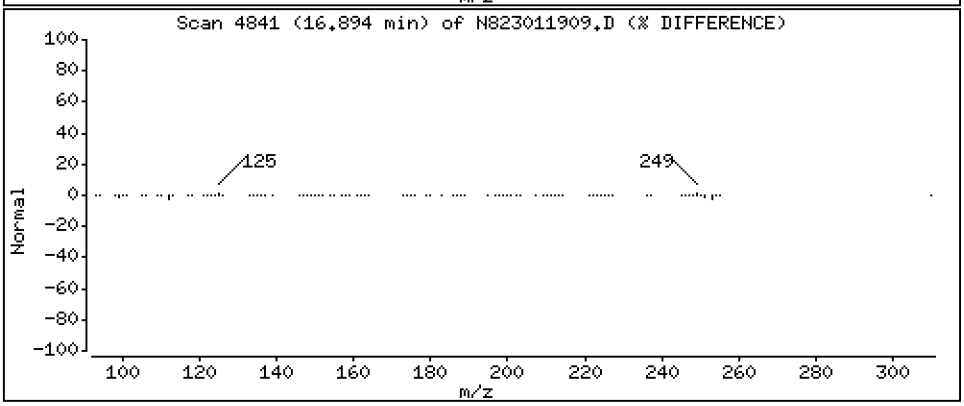












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

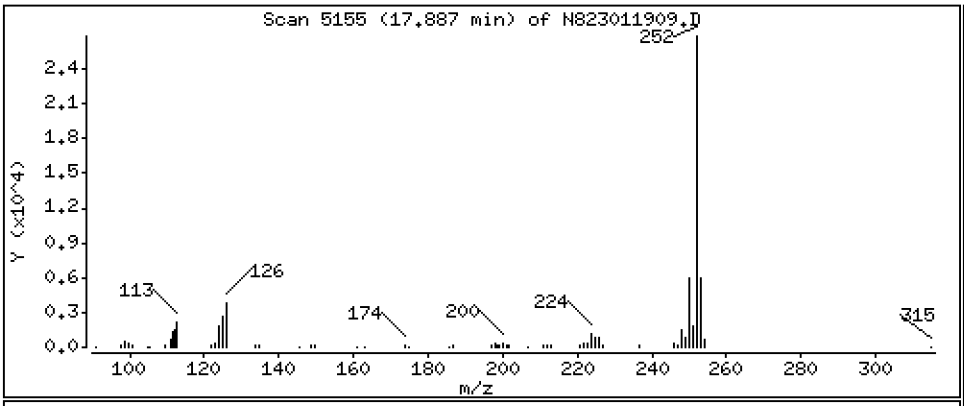
Operator: JZ

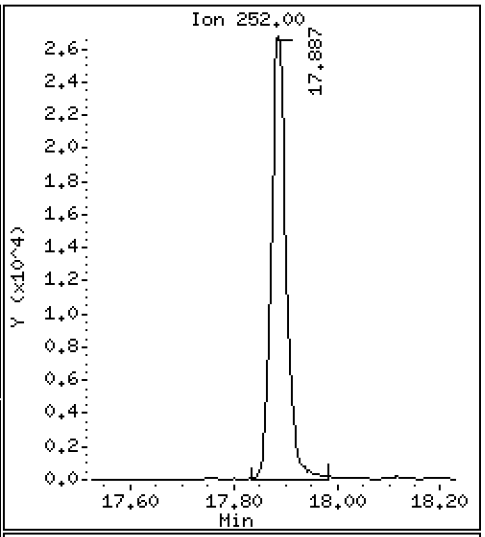
Column phase: Rxi-17sil

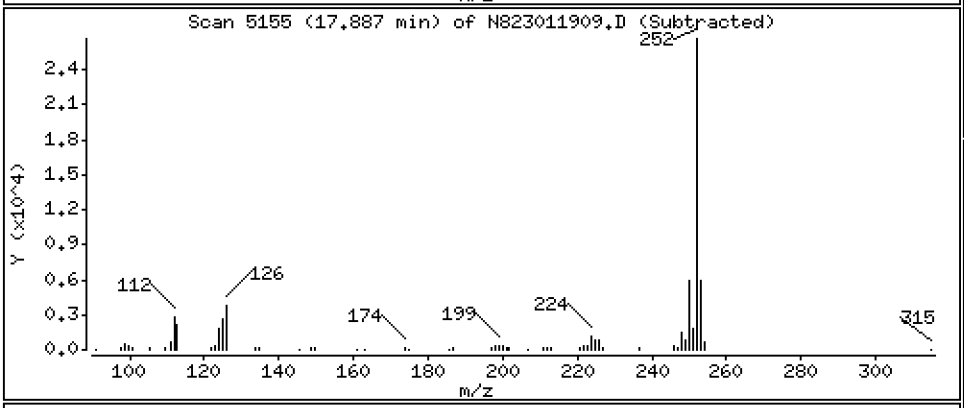
Column diameter: 0.25

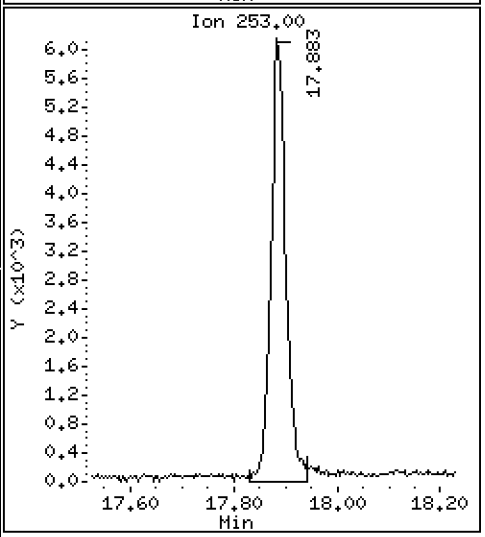
32 Benzo(a)pyrene

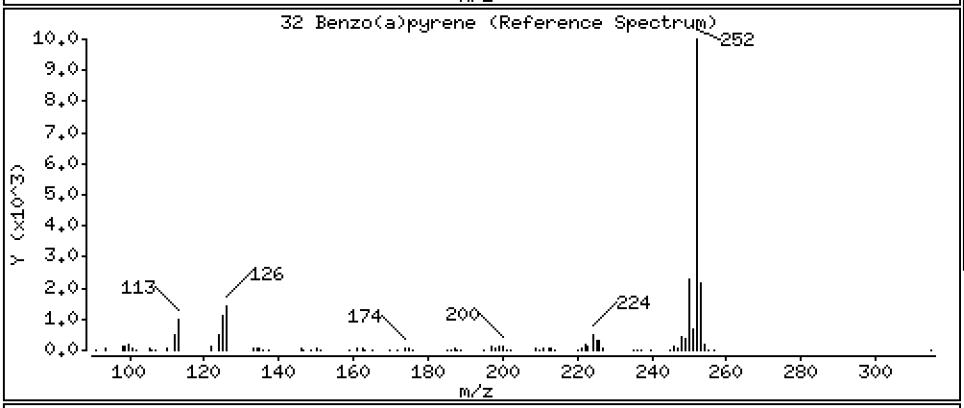
Concentration: 2.572 ug/L

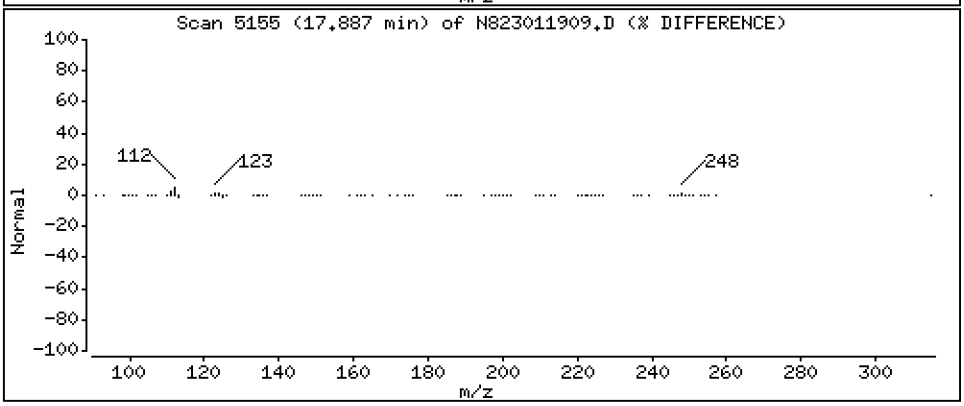












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

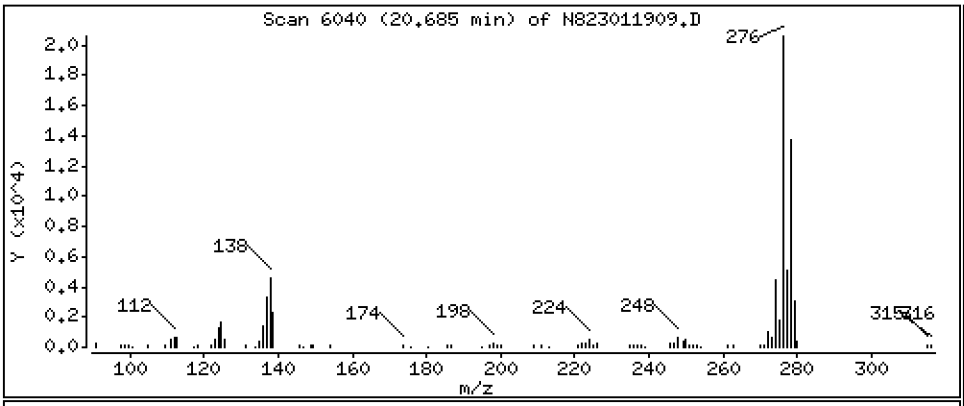
Operator: JZ

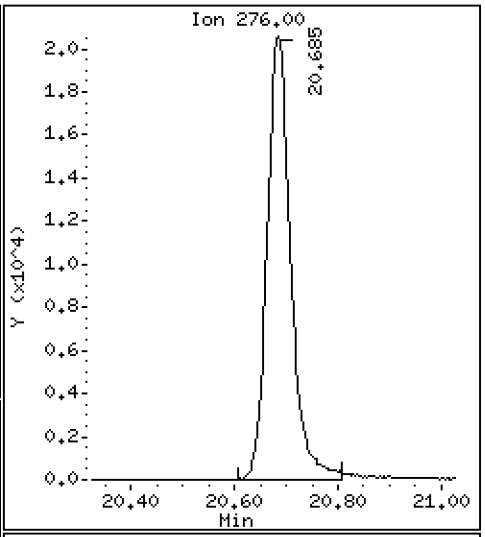
Column phase: Rxi-17sil

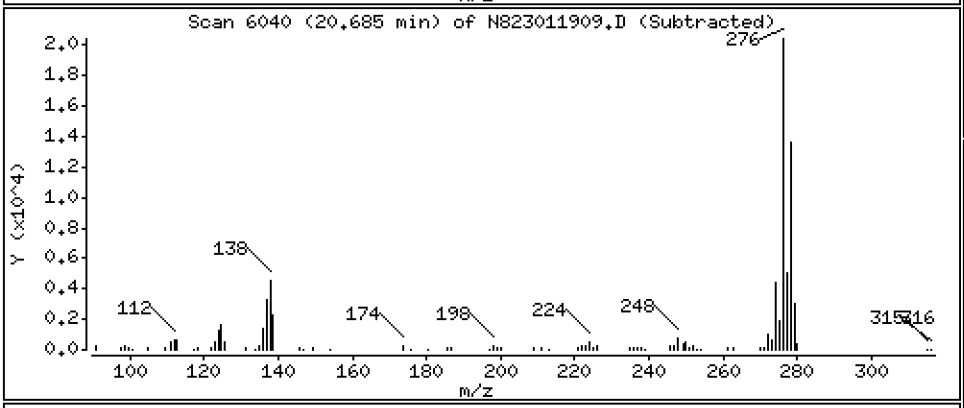
Column diameter: 0.25

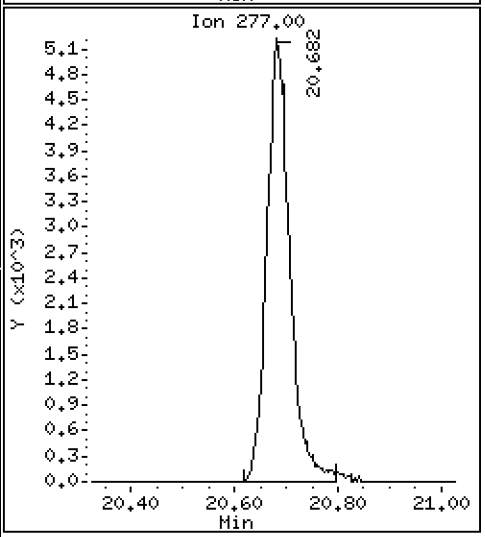
37 Indeno(1,2,3-cd)pyrene

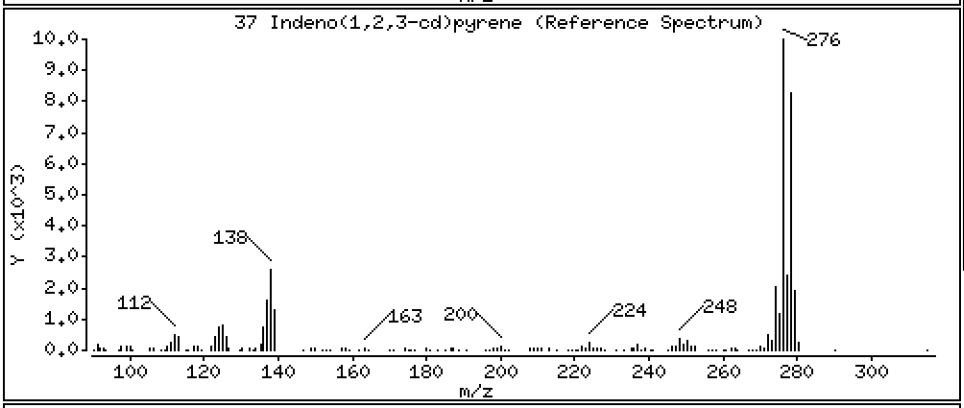
Concentration: 2.689 ug/L

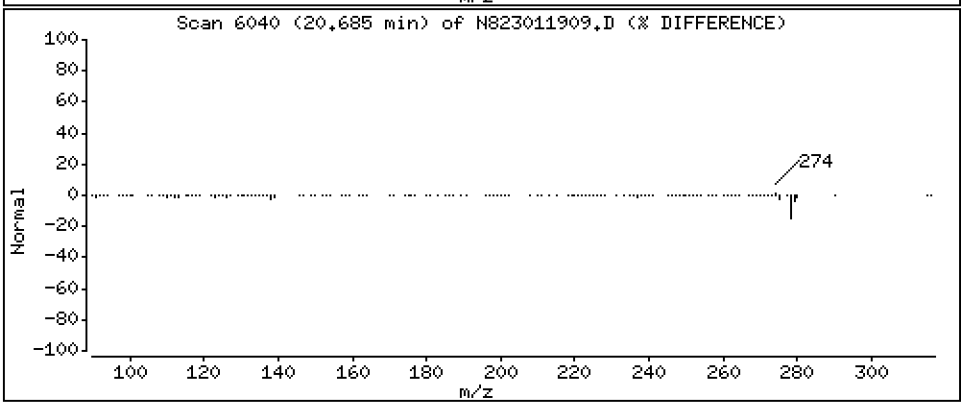












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

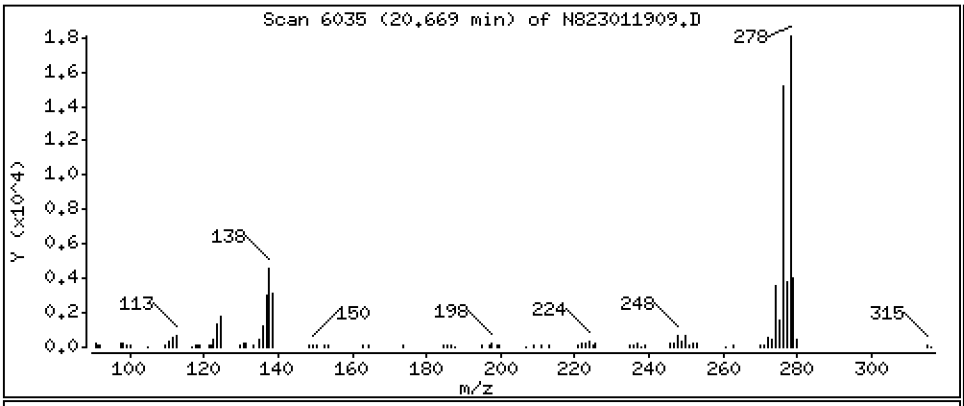
Operator: JZ

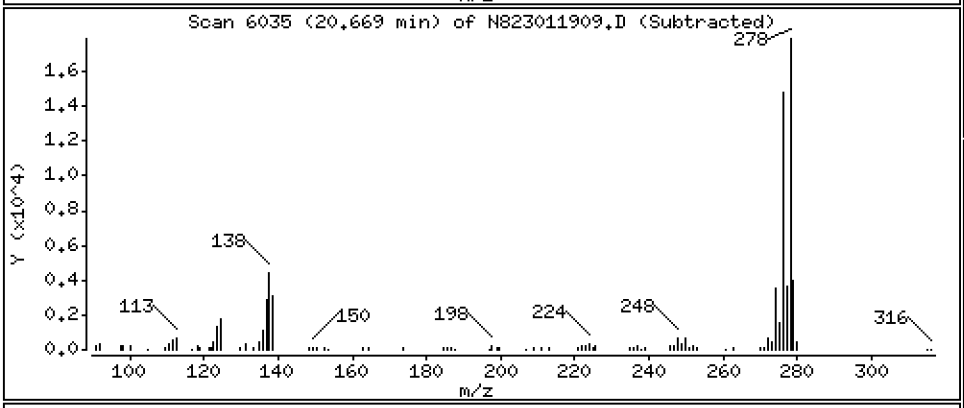
Column phase: Rxi-17sil

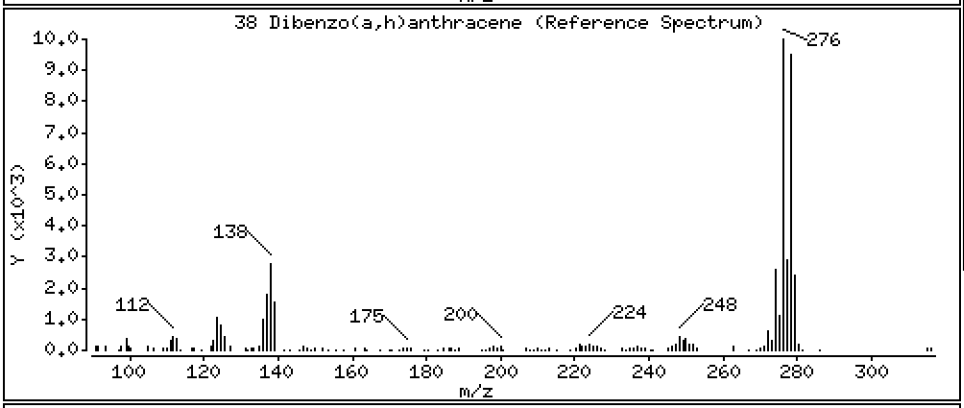
Column diameter: 0.25

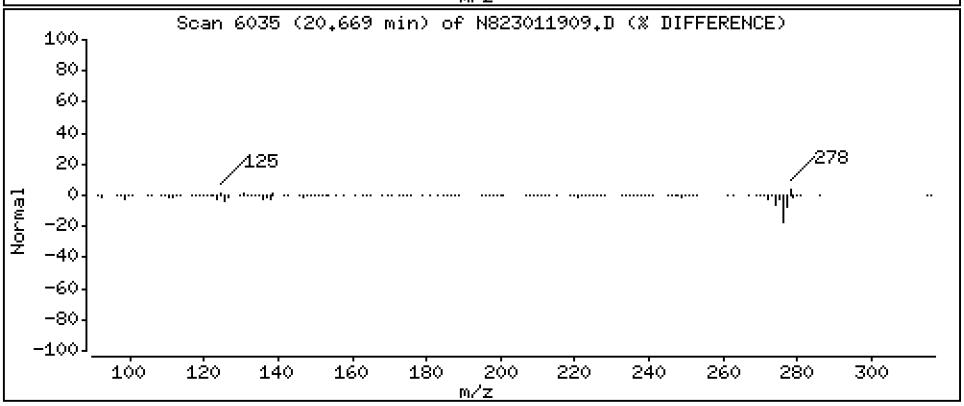
38 Dibenzo(a,h)anthracene

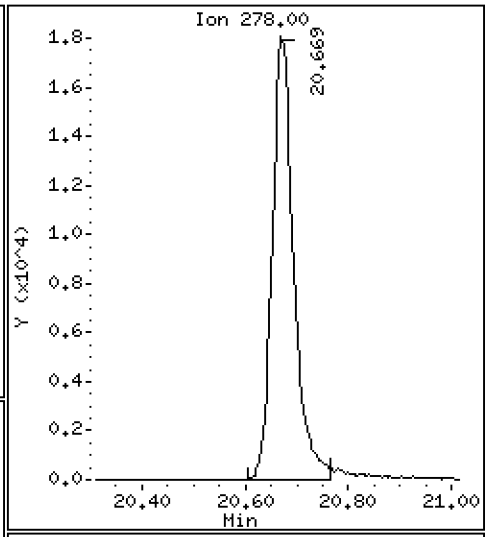
Concentration: 2.493 ug/L

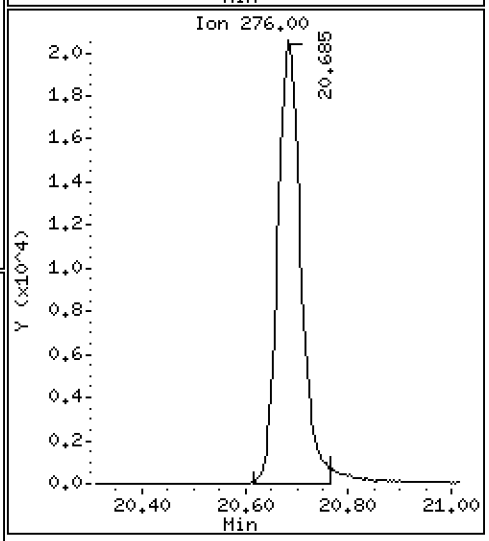












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

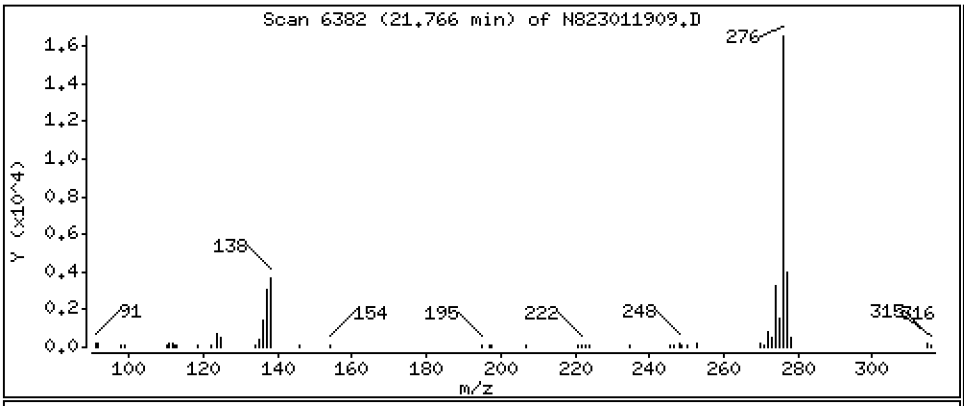
Operator: JZ

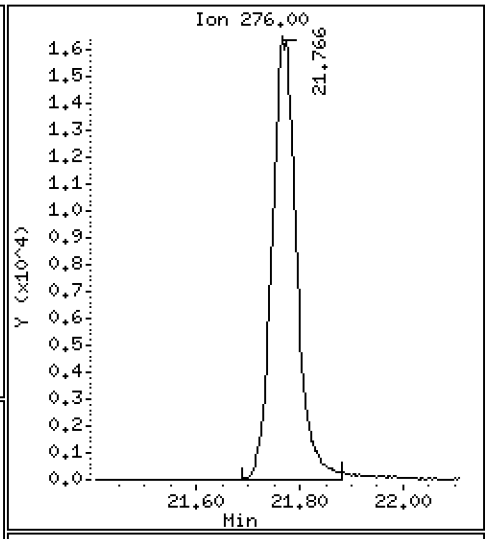
Column phase: Rxi-17sil

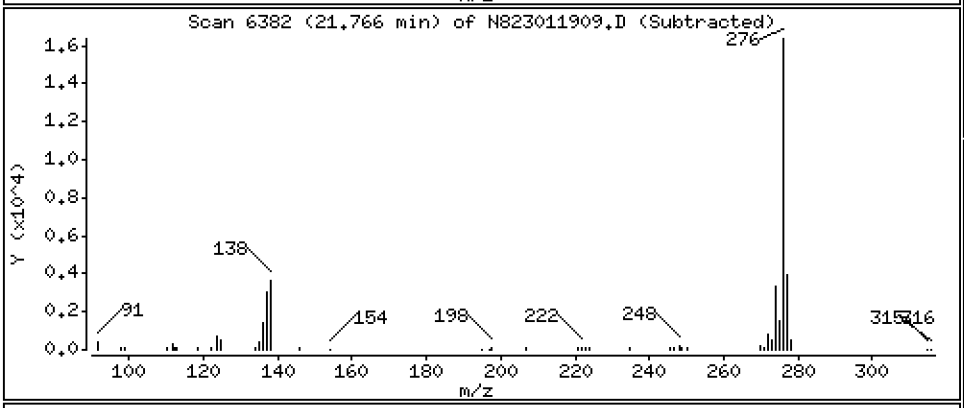
Column diameter: 0.25

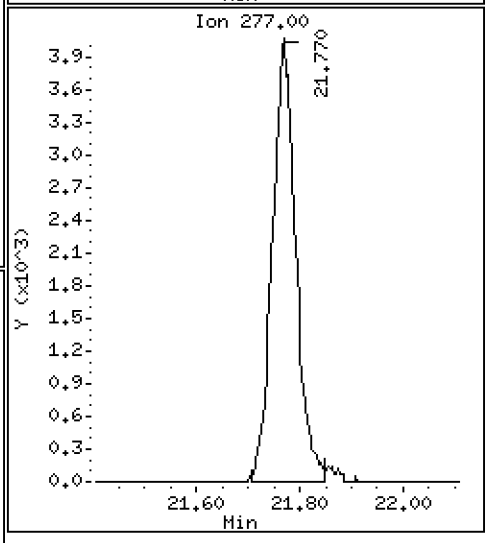
39 Benzo(g,h,i)perylene

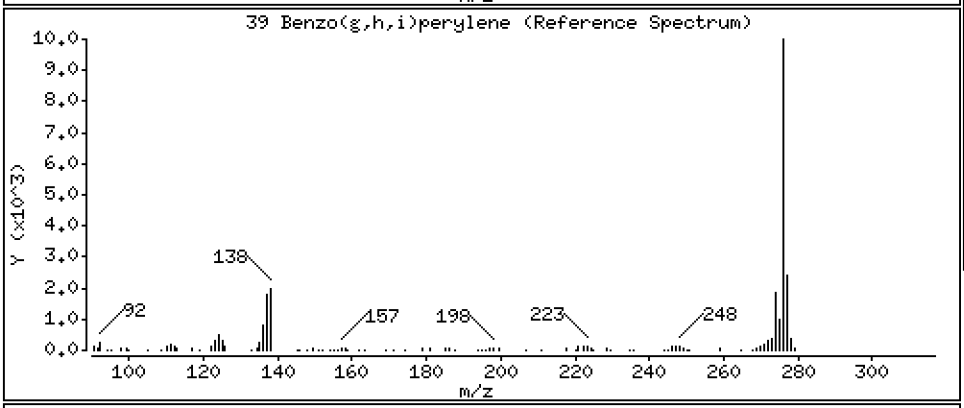
Concentration: 2.483 ug/L

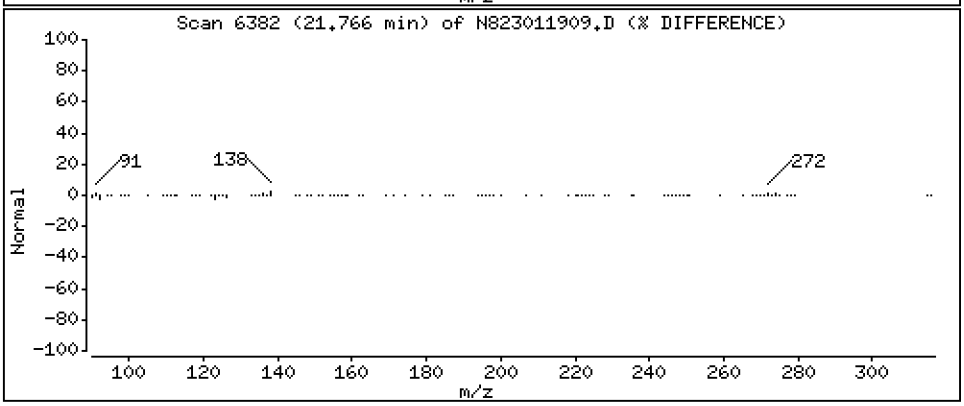












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Lab Smp Id: SLA0213-SCV1
Inj Date : 19-JAN-2023 14:58
Operator : JZ Inst ID: nt8.i
Smp Info : SCV230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:20 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnascv.sub
Target Version: 4.14
Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 1 Naphthalene-d8	136	4.913	4.906	(1.000)	46346	2.00000	
2 Naphthalene	128	4.941	4.938	(1.006)	56587	2.62597	2.626
$ 3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
4 2-Methylnaphthalene	141	5.694	5.687	(1.159)	31650	2.67019	2.670
5 1-methylnaphthalene	141	5.890	5.883	(1.199)	31873	2.64949	2.649
9 Acenaphthylene	152	7.091	7.085	(0.985)	59018	2.82060	2.821
* 10 Acenaphthene-d10	164	7.202	7.196	(1.000)	27709	2.00000	
11 Acenaphthene	153	7.249	7.246	(1.007)	36454	2.60022	2.600
12 Dibenzofuran	168	7.401	7.395	(1.028)	60898	2.85987	2.860
14 Fluorene	166	7.878	7.872	(1.094)	43507	2.63066	2.631
* 15 Phenanthrene-d10	188	9.238	9.235	(1.000)	51685	2.00000	
16 Phenanthrene	178	9.276	9.270	(1.004)	61815	2.44841	2.448
17 Anthracene	178	9.317	9.311	(1.009)	52064	2.27006	2.270
22 Fluoranthene	202	11.059	11.053	(1.197)	72902	2.65276	2.653
$ 21 Fluoranthene-d10	212	Compound Not Detected.					
23 Pyrene	202	11.578	11.572	(0.815)	71115	2.46242	2.462
24 Benzo(a)anthracene	228	14.082	14.076	(0.991)	67725	2.58725	2.587
* 25 Chrysene-d12	240	14.212	14.202	(1.000)	46582	2.00000	
27 Chrysene	228	14.285	14.278	(1.005)	66872	2.39976	2.400
28 Benzo(b)fluoranthene	252	16.833	16.821	(0.929)	60946	2.50689	2.507
29 Benzo(k)fluoranthene	252	16.893	16.884	(0.932)	63249	2.65606	2.656
31 Total Benzofluoranthenes	252	16.893	16.821	(0.932)	126178	5.48025	5.480(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572
*	33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000	
	37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493
	39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483
	35 Perylene	252	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011909.D
Lab Smp Id: SLA0213-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 14:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

No RRT check performed

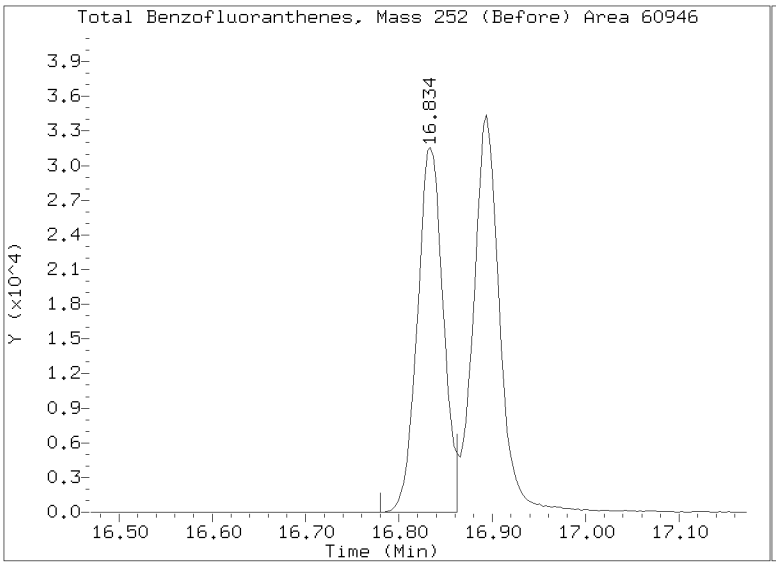
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

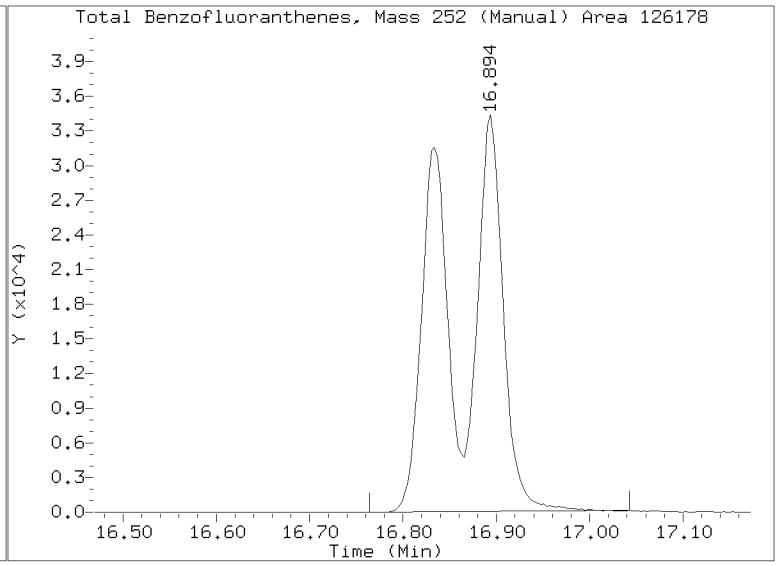
Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D
Injection Date: 19-JAN-2023 14:58
Lab ID:SLA0213-SCV1 Client ID:
Report Date: 01/19/2023 20:27





INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00036	Instrument:	NT18
Calibration Date:	02/25/2023	Column (1):	ZB-5MS

Calibration Comments: 8270E-SIM DUAL SCAN ICAL

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
1,4-Dichlorobenzene	0.05	2.093226	0.1	2.01147	0.2	1.983528	0.5	1.926108	1	1.604188	2.5	1.665811
1,2-Dichlorobenzene	0.05	1.836201	0.1	1.903574	0.2	1.887016	0.5	1.848453	1	1.574426	2.5	1.609226
Benzyl Alcohol	0.05	0.7968489	0.1	0.9672817	0.2	1.106467	0.5	1.264703	1	1.025786	2.5	1.138216
Benzoic acid	0.2		0.4		0.8		2	8.373279E-03	4	2.306746E-02	10	5.533202E-02
2,4-Dimethylphenol	0.1	0.3174363	0.2	0.3676955	0.4	0.3869563	1	0.4088374	2	0.3485705	5	0.3764774
1,2,4-Trichlorobenzene	0.05	0.3891551	0.1	0.4067222	0.2	0.407372	0.5	0.401164	1	0.3380883	2.5	0.3562918
N-Nitrosodiphenylamine	0.05	0.4859367	0.1	0.5893115	0.2	0.6285803	0.5	0.6416908	1	0.5457423	2.5	0.5878628
Pentachlorophenol	0.1		0.2	1.975787E-03	0.4	6.682519E-03	1	2.228492E-02	2	3.359244E-02	5	0.0509718
2-Fluorophenol	0.075	0.898134	0.15	1.138038	0.3	1.314816	0.75	1.461878	1.5	1.34776	3.75	1.434076
p-Terphenyl-d14	0.05	0.6535624	0.1	0.7449981	0.2	0.7584195	0.5	0.8114411	1	0.6842129	2.5	0.7651327

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00036	Instrument:	NT18
Calibration Date:	02/25/2023	Column (1):	ZB-5MS

Calibration Comments: 8270E-SIM DUAL SCAN ICAL

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
1,4-Dichlorobenzene	5	1.559111	10	1.539829	20	1.466005						
1,2-Dichlorobenzene	5	1.49923	10	1.49941	20	1.432511						
Benzyl Alcohol	5	1.14618	10	1.157655	20	1.114487						
Benzoic acid	20	0.1288496	40	0.1744141	80	0.1992						
2,4-Dimethylphenol	10	0.352414	20	0.3456743	40	0.3078992						
1,2,4-Trichlorobenzene	5	0.3346439	10	0.331799	20	0.3239388						
N-Nitrosodiphenylamine	5	0.5665069	10	0.5882676	20	0.5744151						
Pentachlorophenol	10	7.953091E-02	20	9.882118E-02	40	0.1263888						
2-Fluorophenol	7.5	1.381722	15	1.374037	30	1.268588						
p-Terphenyl-d14	5	0.7051321	10	0.7240721	20	0.6715936						

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00036	Instrument:	NT18
Calibration Date:	02/25/2023	Column (1):	ZB-5MS

Calibration Comments: 8270E-SIM DUAL SCAN ICAL

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
1,4-Dichlorobenzene	1.761031	13.6			RSD (15)	
1,2-Dichlorobenzene	1.676672	11.3			RSD (15)	
Benzyl Alcohol	1.079736	12.5			RSD (15)	
Benzoic acid	9.820608E-02	82.1		0.9847	QCOD (0.99)	*
2,4-Dimethylphenol	0.3568845	9.0			RSD (15)	
1,2,4-Trichlorobenzene	0.3654639	9.6			RSD (15)	
N-Nitrosodiphenylamine	0.5787015	7.9			RSD (15)	
Pentachlorophenol	5.253104E-02	85.9		0.9947	QCOD (0.99)	
2-Fluorophenol	1.291005	13.6			RSD (15)	
p-Terphenyl-d14	0.724285	7.0			RSD (15)	

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00050
Laboratory ID: SLA0213-SCV1
Sequence: SLA0213
Sequence Name: 8270 SIM PNA SCV
Standard ID: L000686

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Naphthalene	2.5000	2.63	5.0	
2-Methylnaphthalene	2.5000	2.67	6.8	
1-Methylnaphthalene	2.5000	2.65	6.0	
Acenaphthylene	2.5000	2.82	12.8	
Acenaphthene	2.5000	2.60	4.0	
Dibenzofuran	2.5000	2.86	14.4	
Fluorene	2.5000	2.63	5.2	
Phenanthrene	2.5000	2.45	-2.1	
Anthracene	2.5000	2.27	-9.2	
Fluoranthene	2.5000	2.65	6.1	
Pyrene	2.5000	2.46	-1.5	
Benzo(a)anthracene	2.5000	2.59	3.5	
Chrysene	2.5000	2.40	-4.0	
Benzo(b)fluoranthene	2.5000	2.51	0.3	
Benzo(k)fluoranthene	2.5000	2.66	6.2	
Benzofluoranthenes, Total	5.0000	5.48	9.6	
Benzo(a)pyrene	2.5000	2.57	2.9	
Indeno(1,2,3-cd)pyrene	2.5000	2.69	7.6	
Dibenzo(a,h)anthracene	2.5000	2.49	-0.3	
Benzo(g,h,i)perylene	2.5000	2.48	-0.7	

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

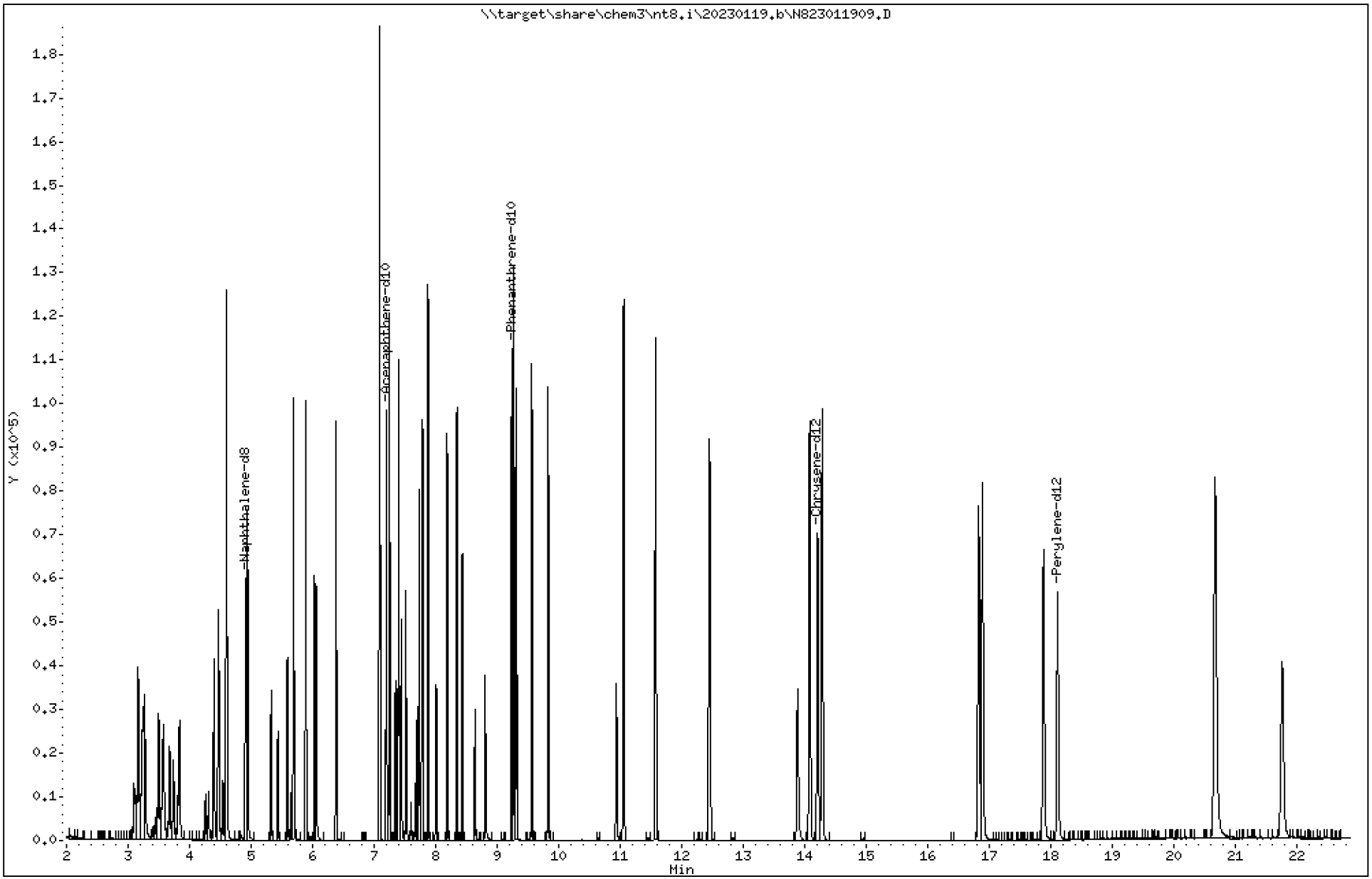
Sample Info: SCV230119

Volume Injected (uL): 1.0

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

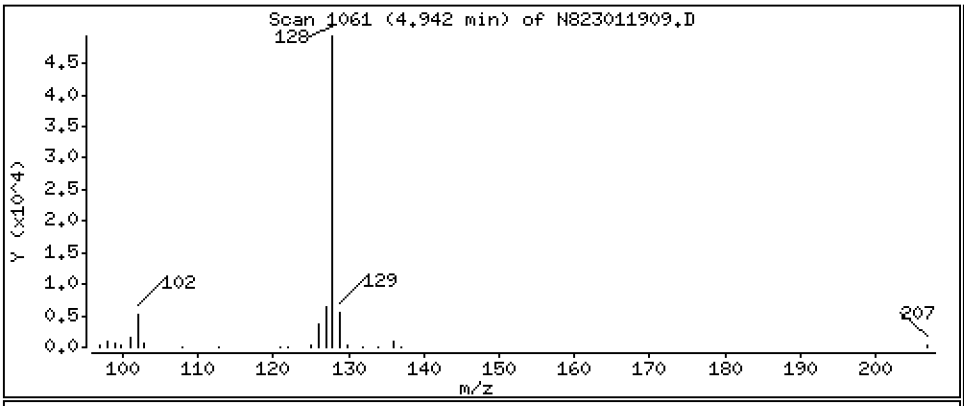
Operator: JZ

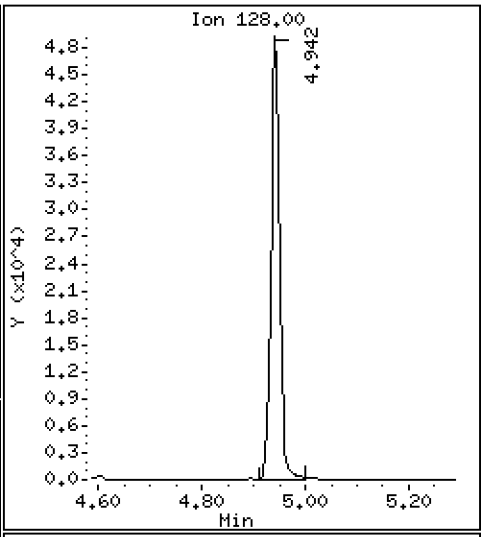
Column phase: Rxi-17sil

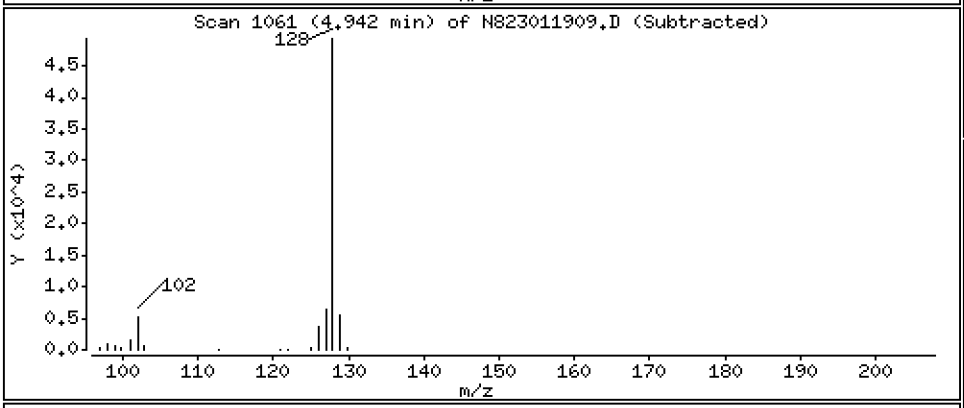
Column diameter: 0.25

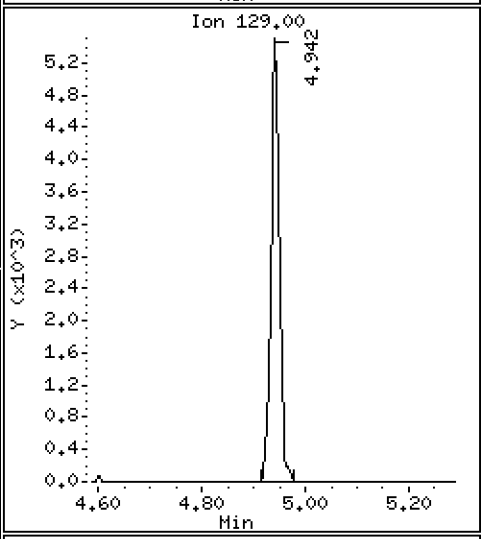
2 Naphthalene

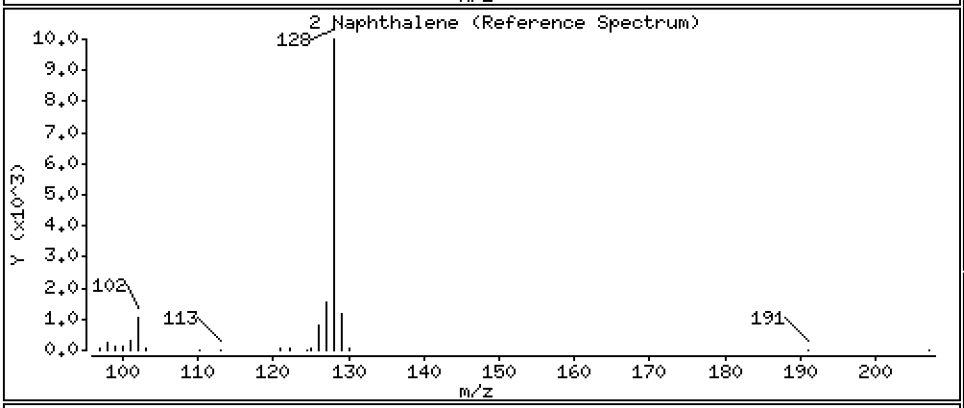
Concentration: 2.626 ug/L

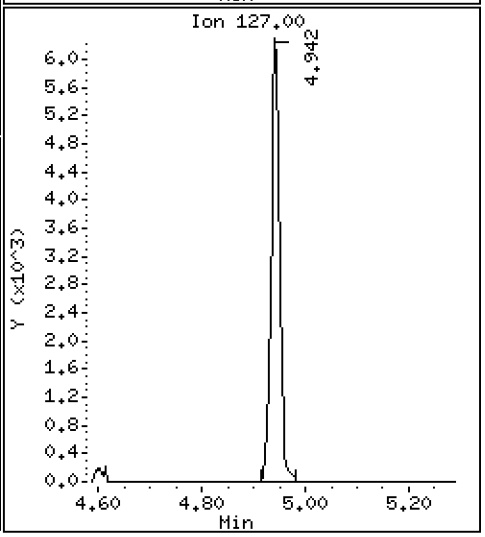


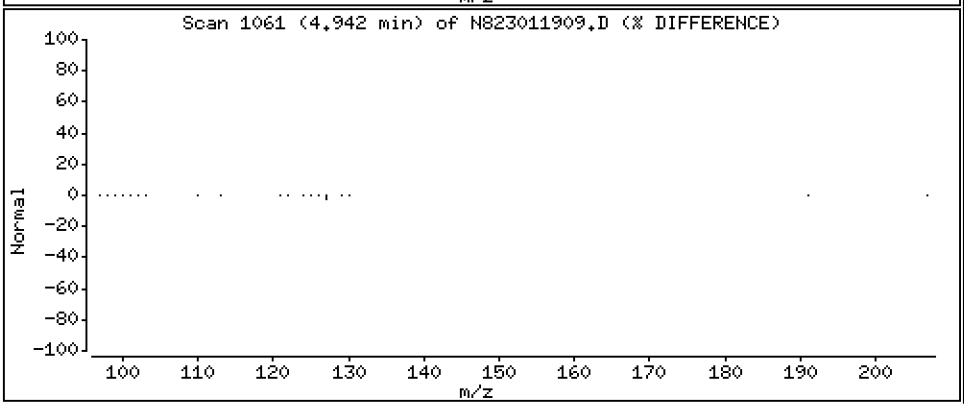












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

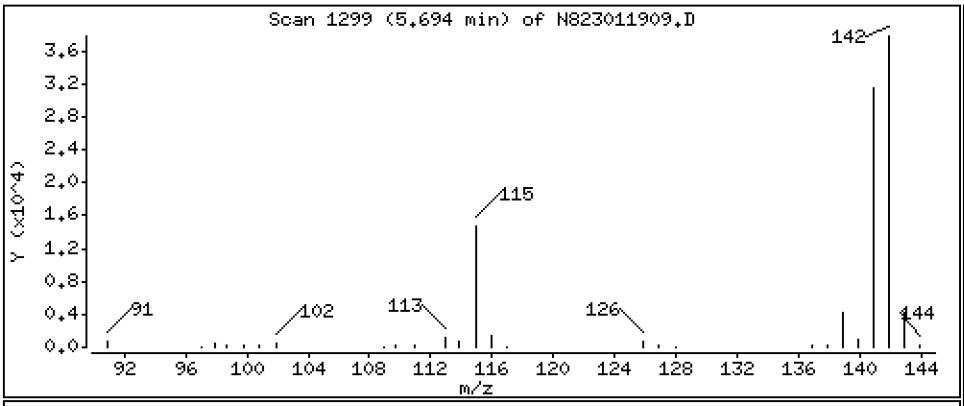
Operator: JZ

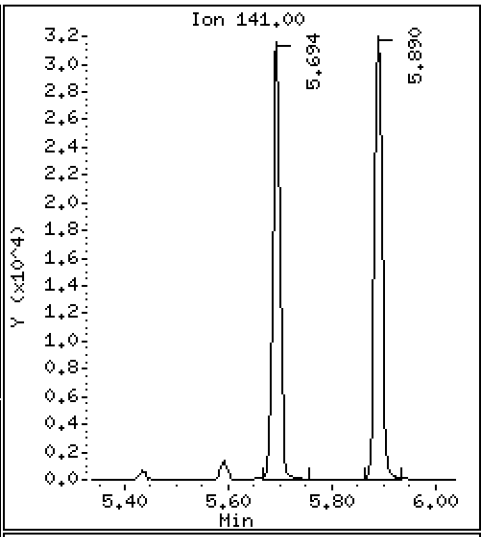
Column phase: Rxi-17sil

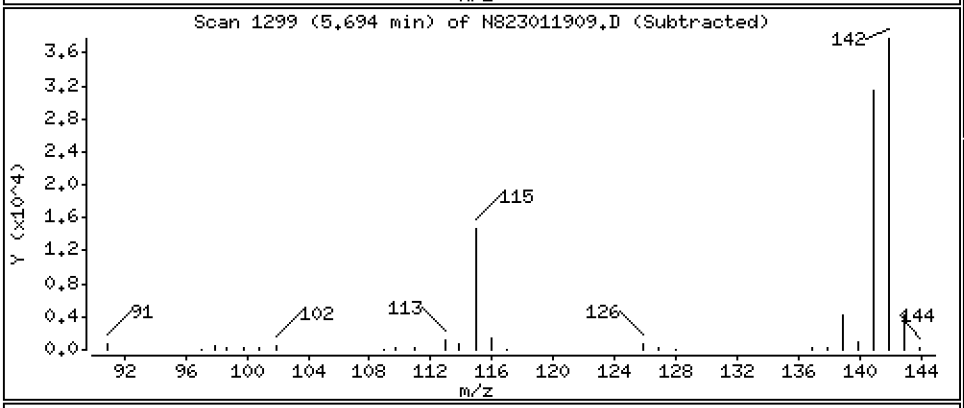
Column diameter: 0.25

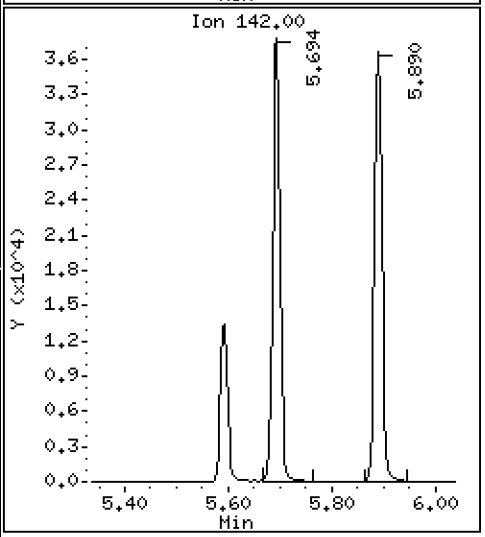
4 2-Methylnaphthalene

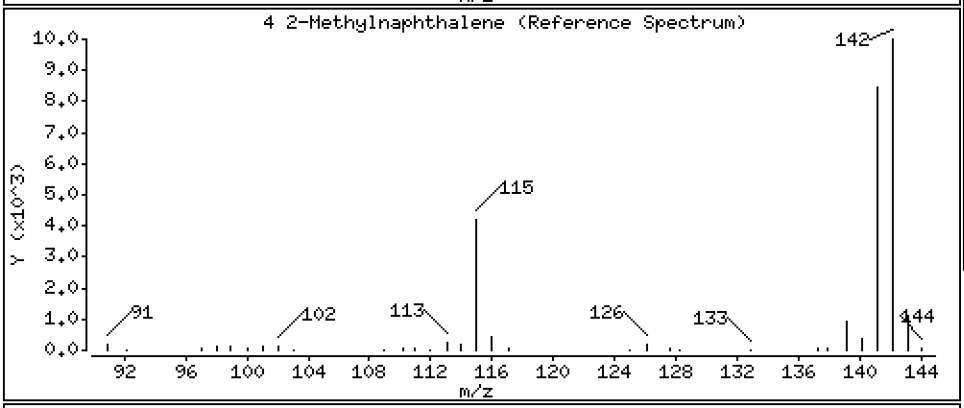
Concentration: 2.670 ug/L

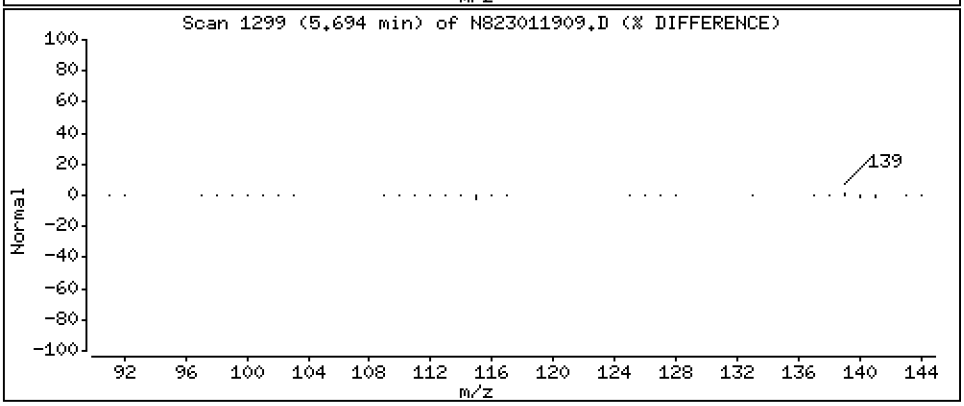












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

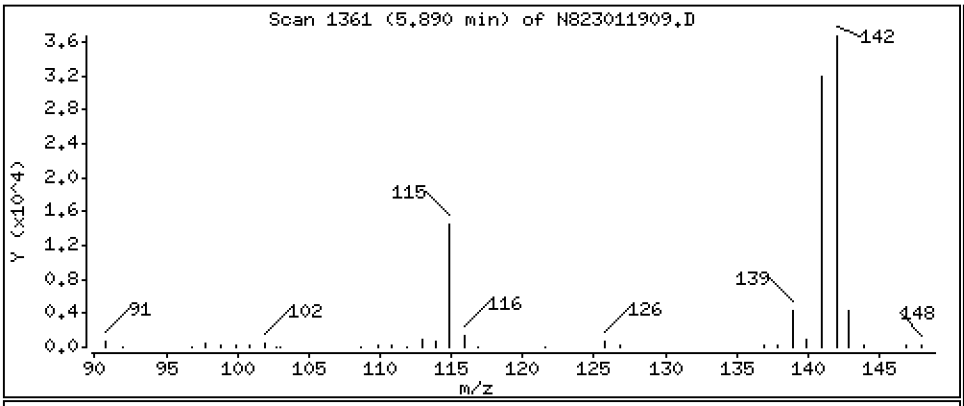
Operator: JZ

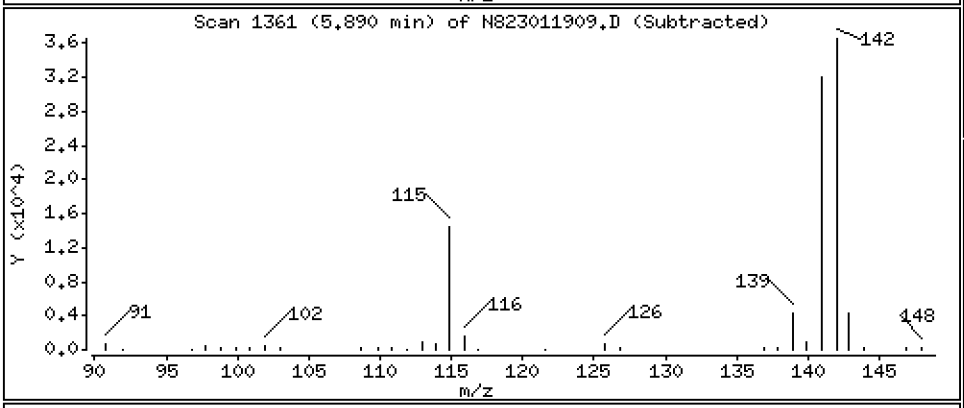
Column phase: Rxi-17sil

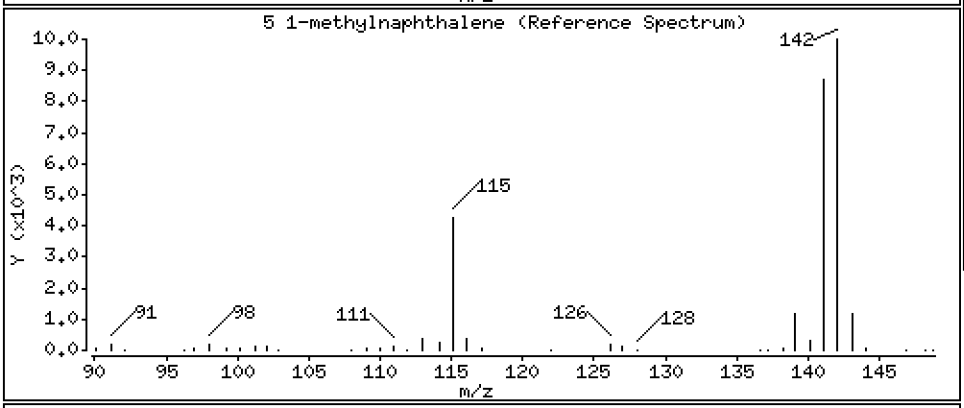
Column diameter: 0.25

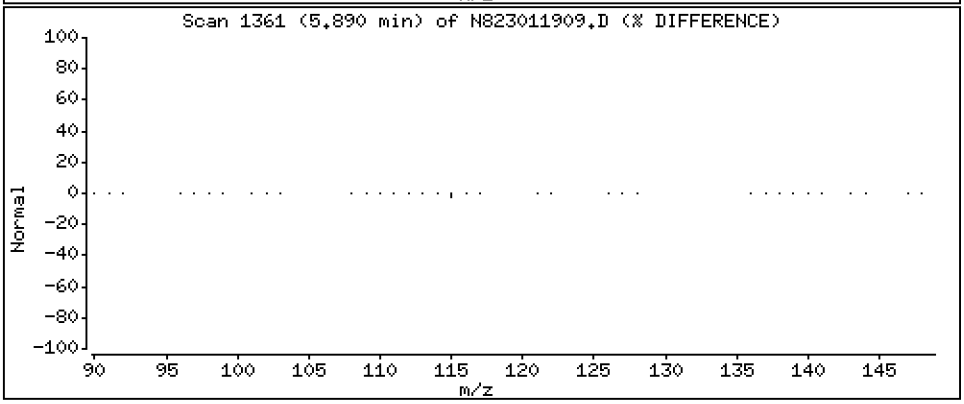
5 1-methylnaphthalene

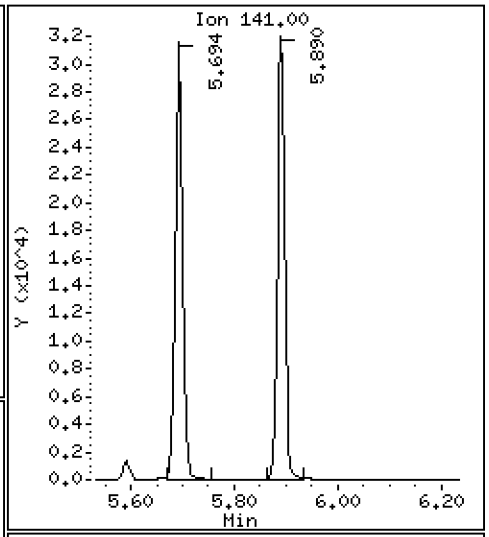
Concentration: 2.649 ug/L

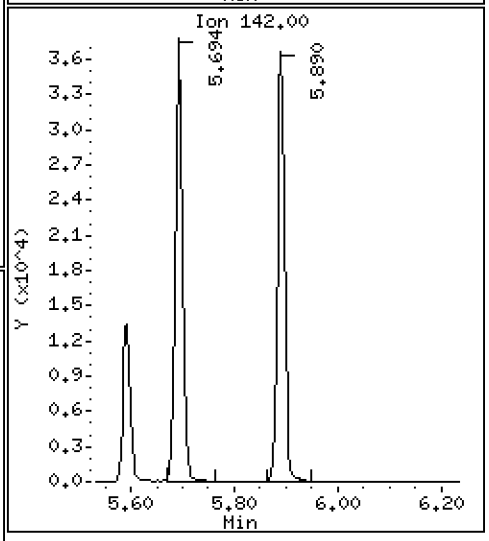












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

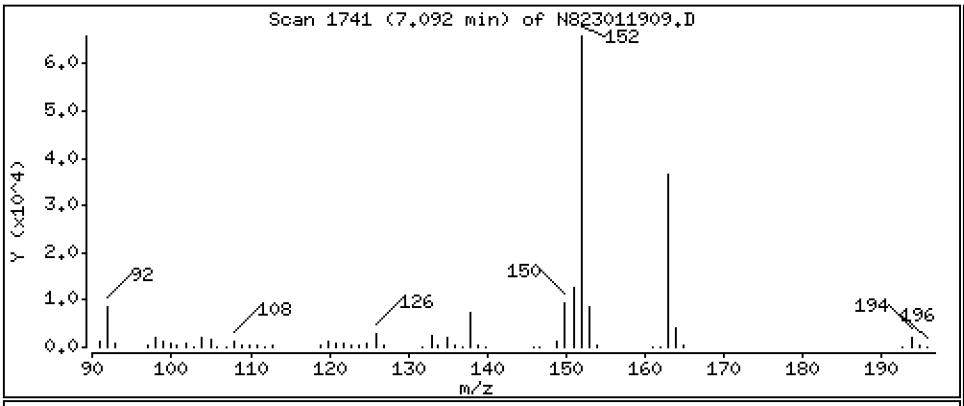
Operator: JZ

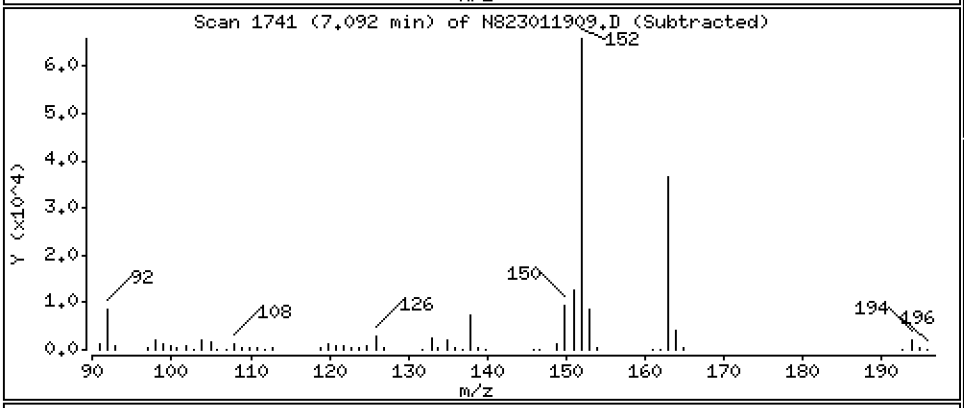
Column phase: Rxi-17sil

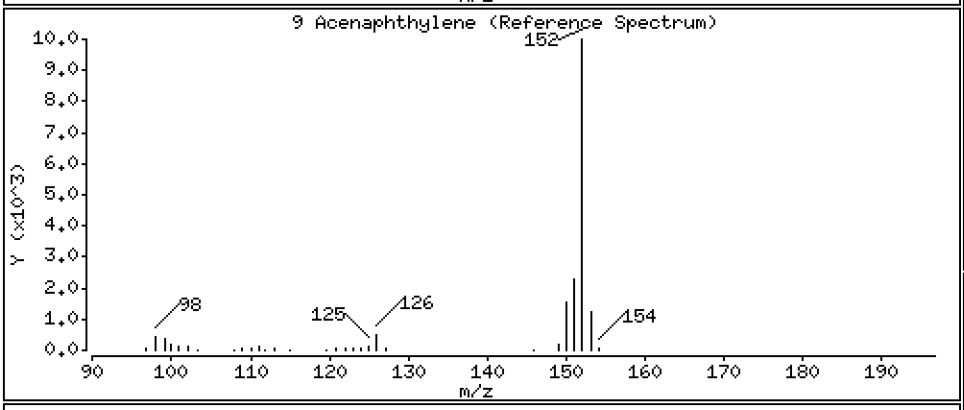
Column diameter: 0.25

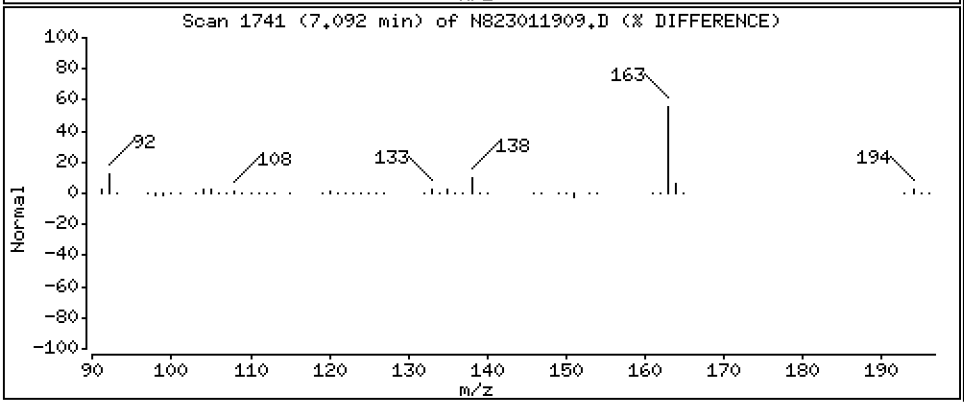
9 Acenaphthylene

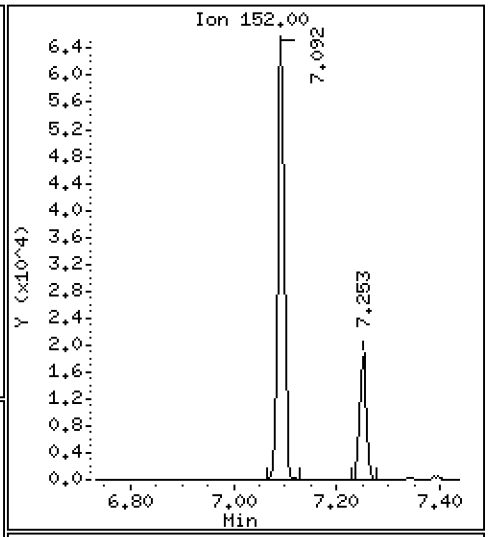
Concentration: 2.821 ug/L

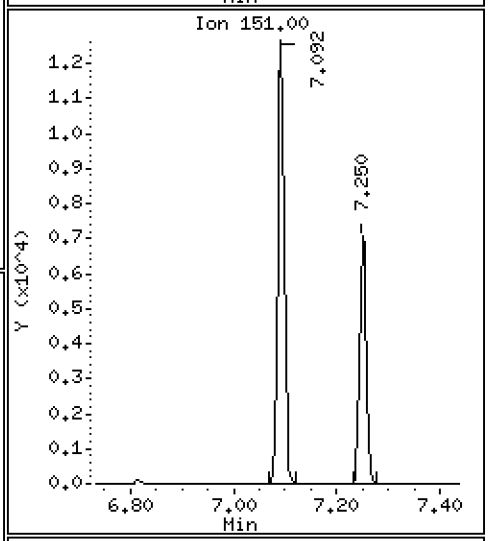


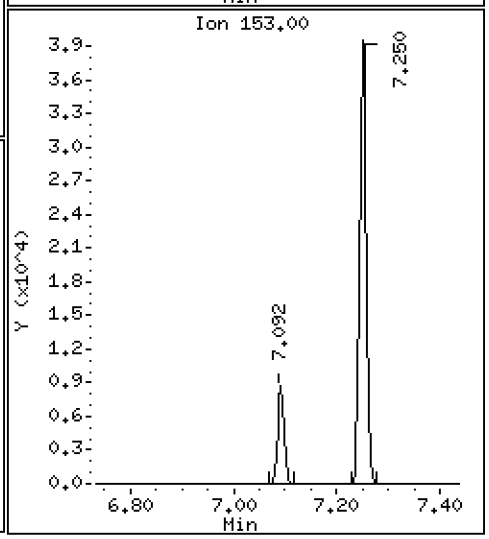












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

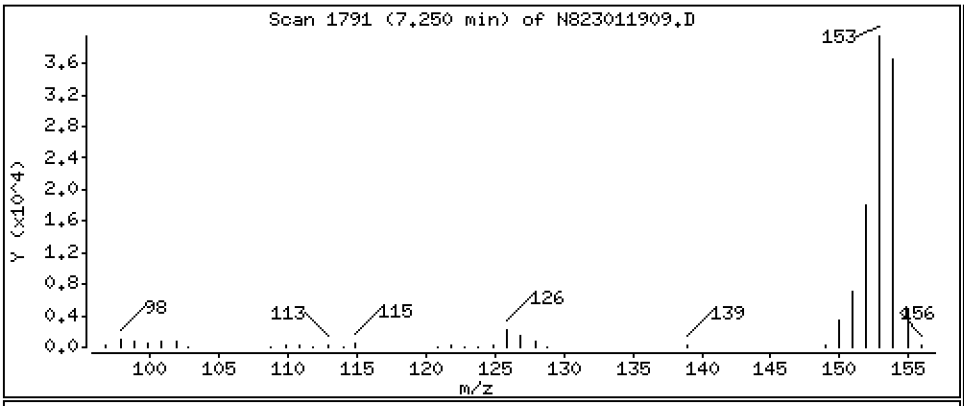
Operator: JZ

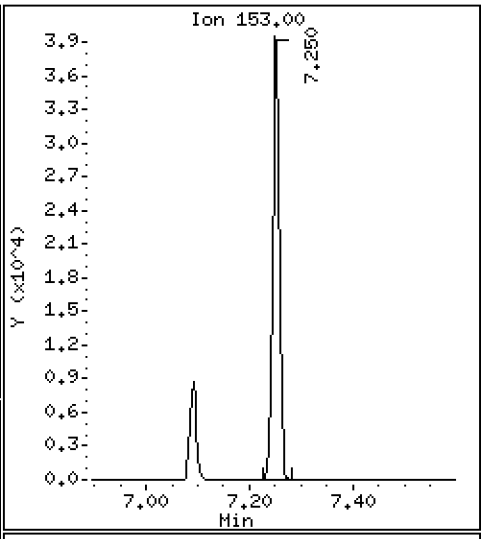
Column phase: Rxi-17sil

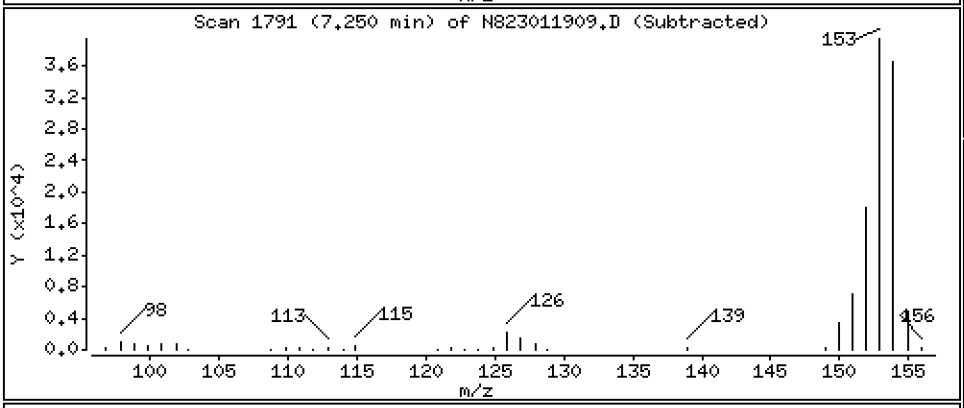
Column diameter: 0.25

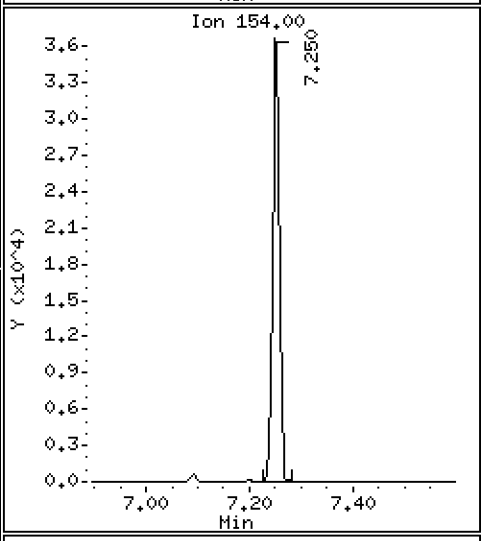
11 Acenaphthene

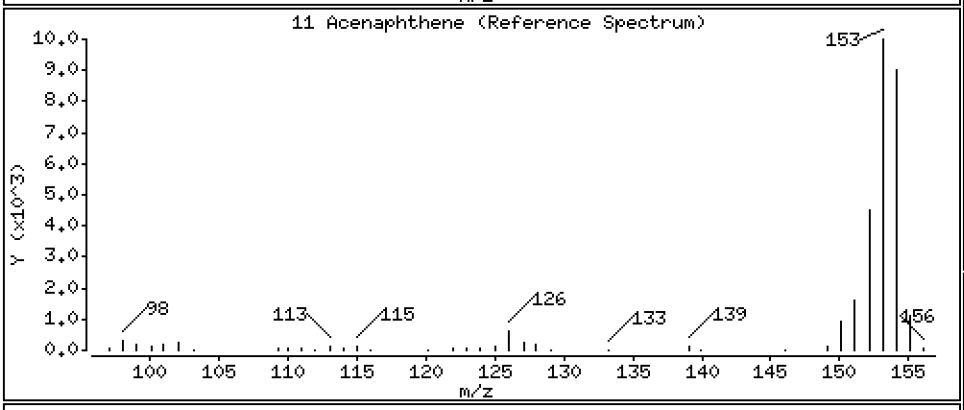
Concentration: 2.600 ug/L

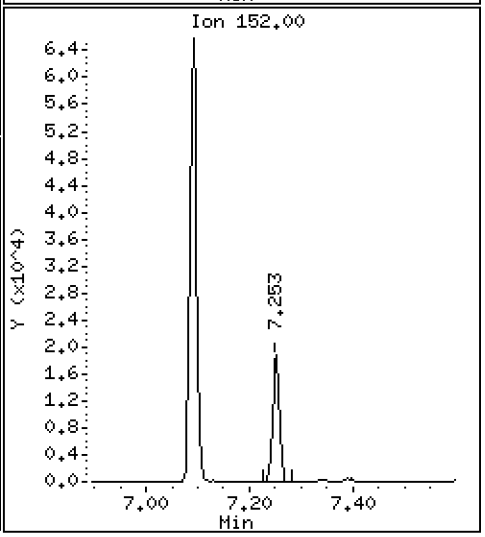


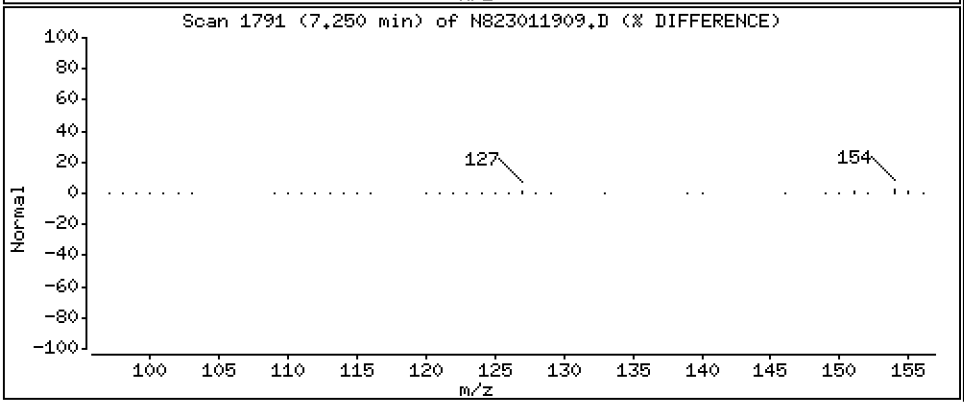












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

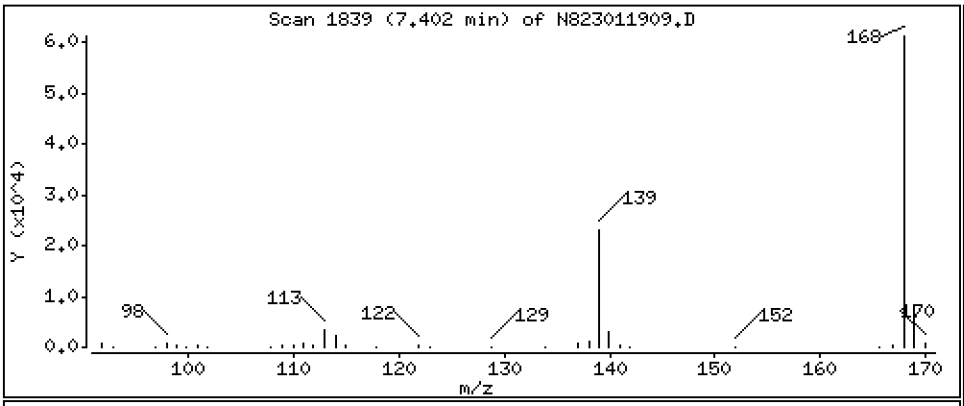
Operator: JZ

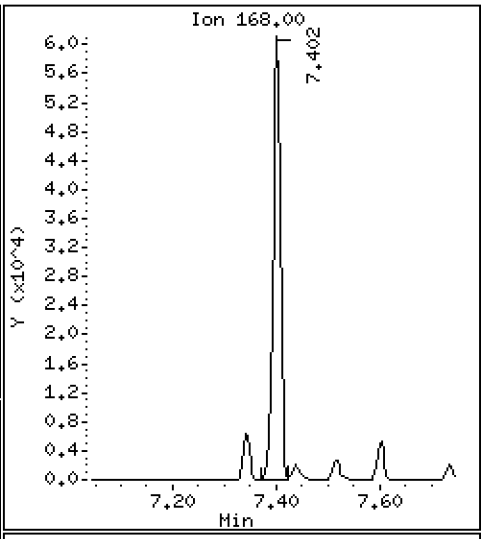
Column phase: Rxi-17sil

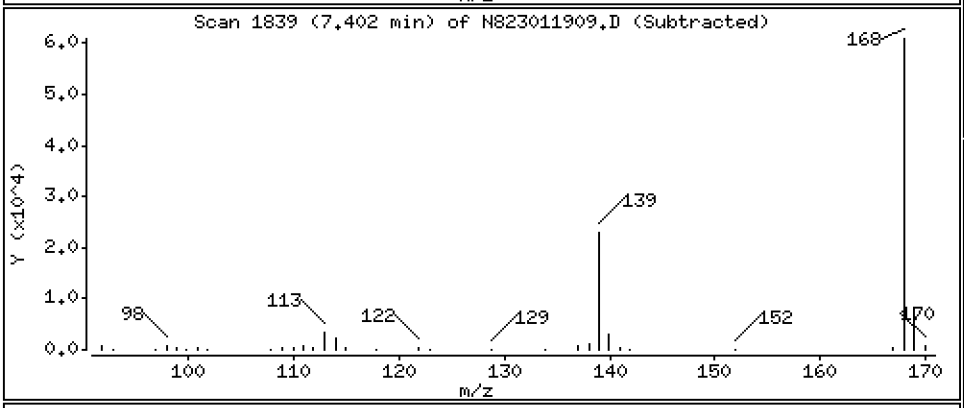
Column diameter: 0.25

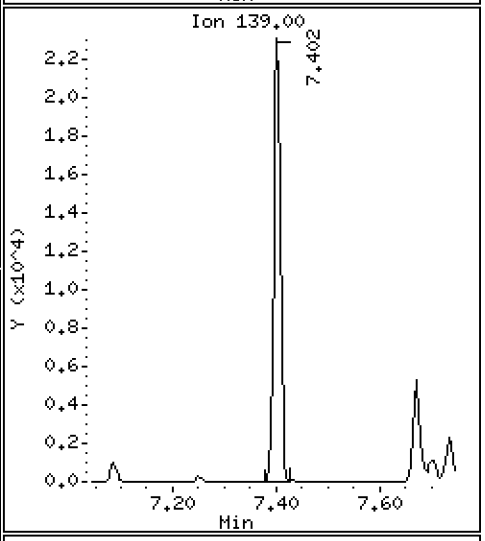
12 Dibenzofuran

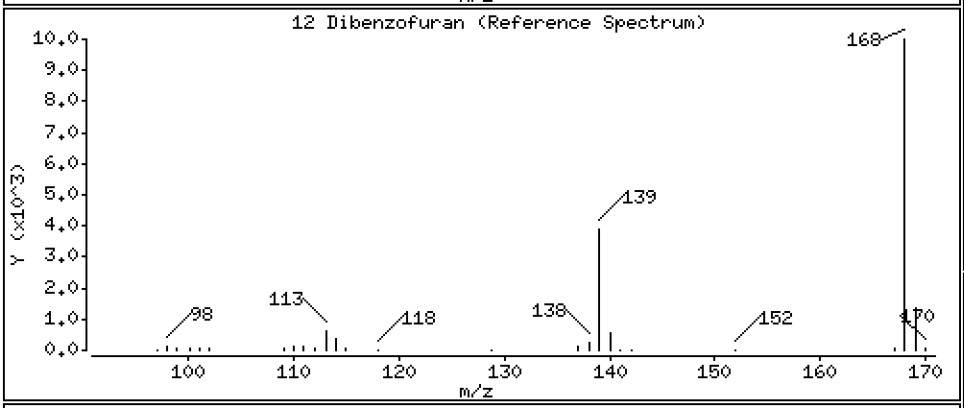
Concentration: 2.860 ug/L

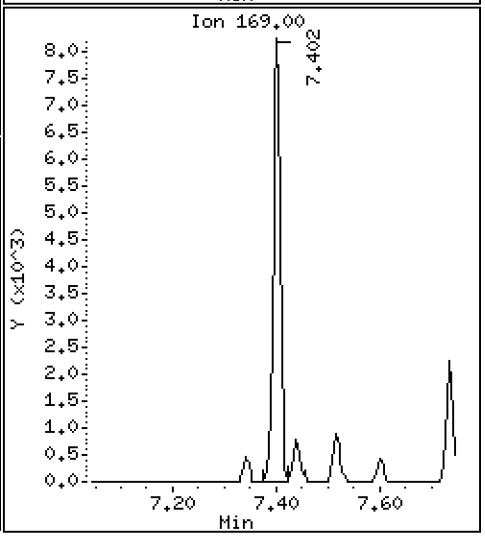


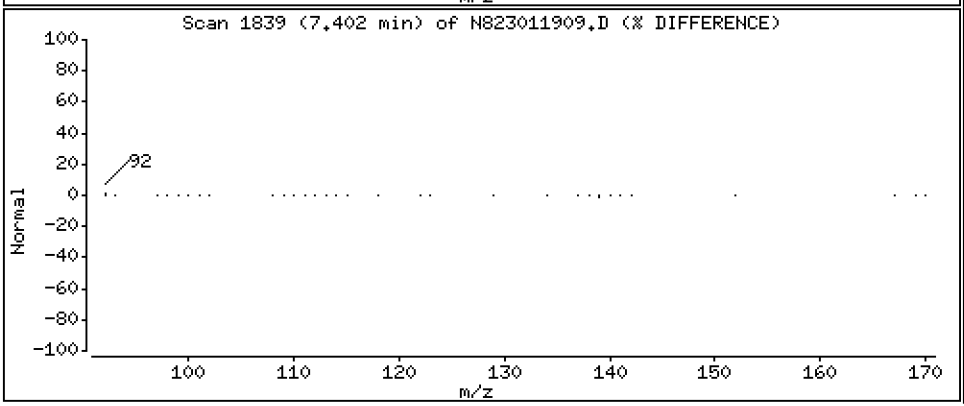












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

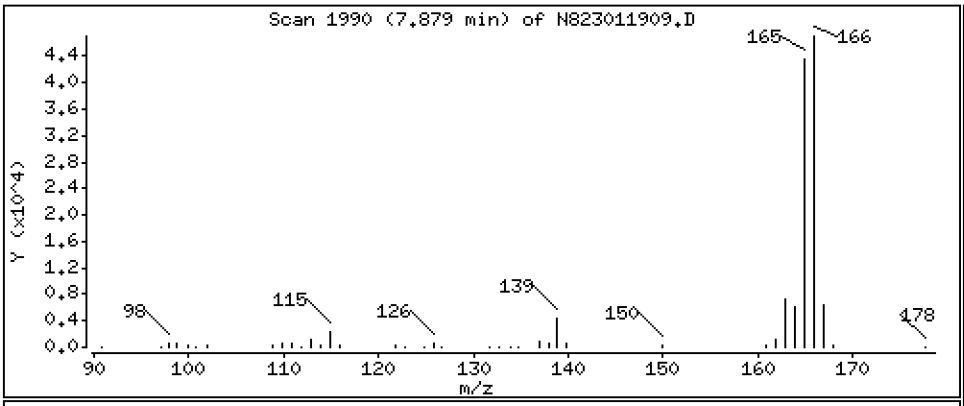
Operator: JZ

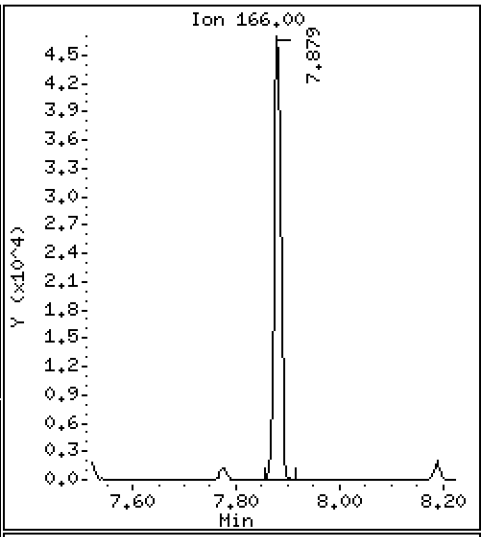
Column phase: Rxi-17sil

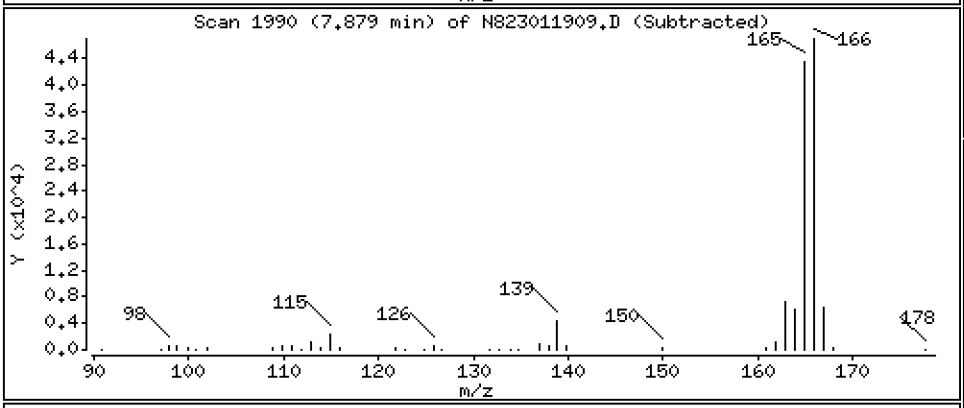
Column diameter: 0.25

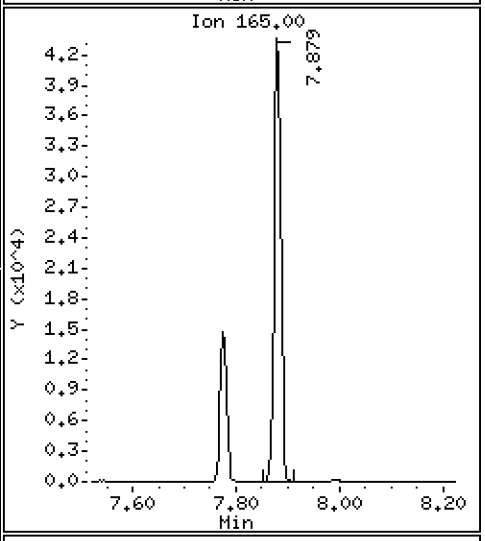
14 Fluorene

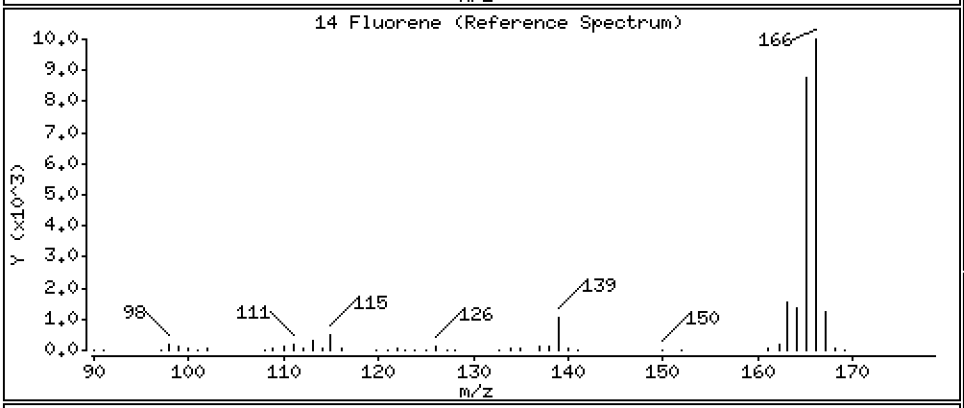
Concentration: 2.631 ug/L

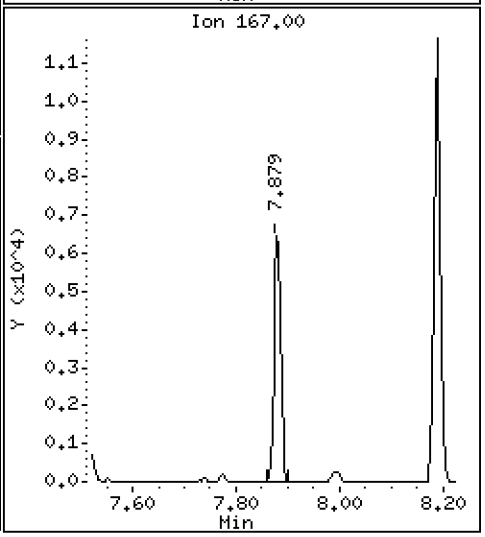


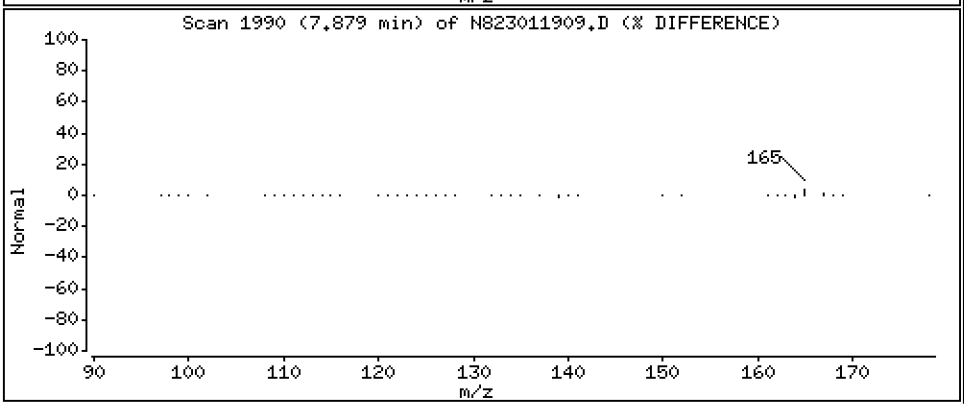












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

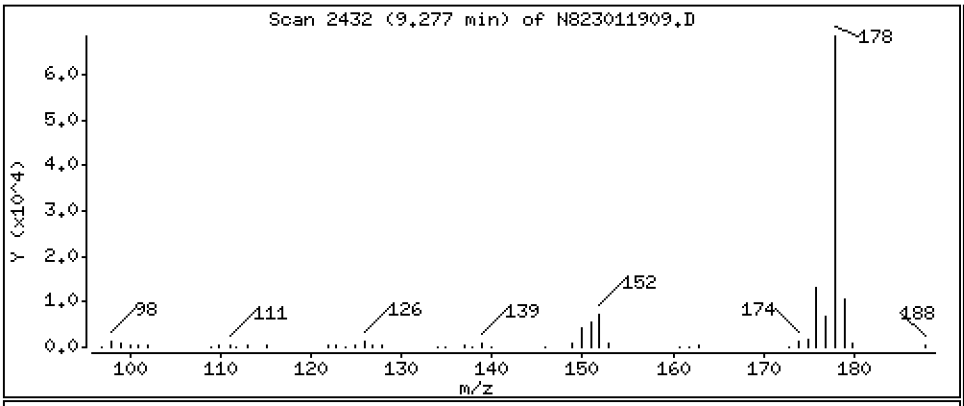
Operator: JZ

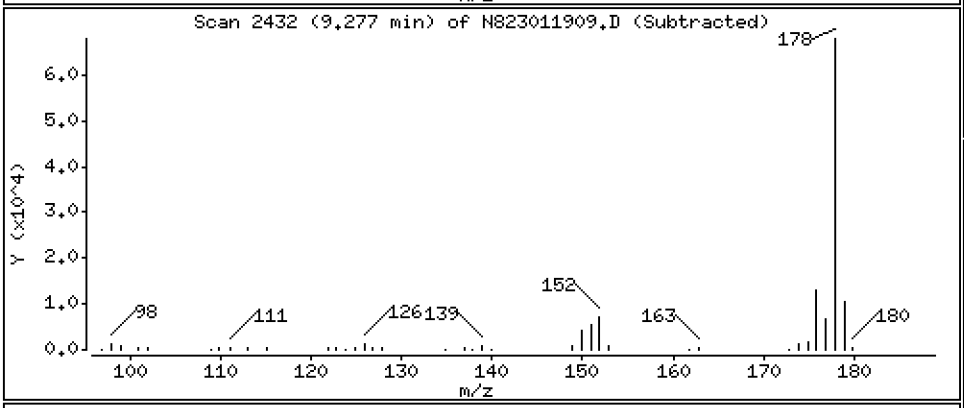
Column phase: Rxi-17sil

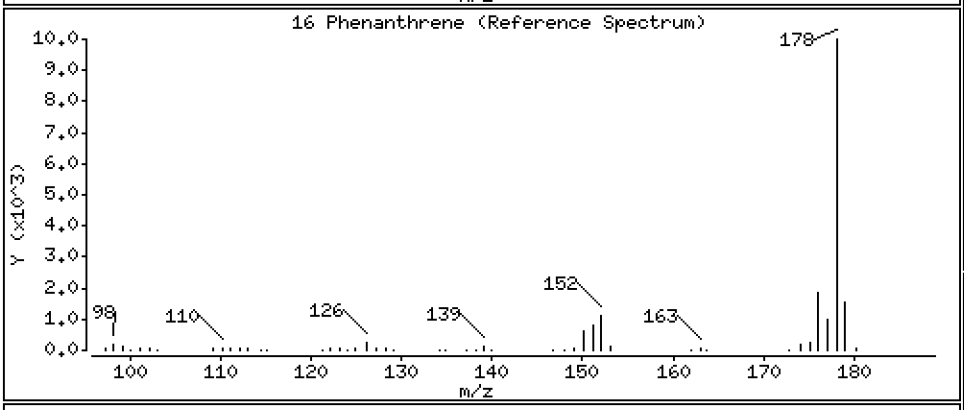
Column diameter: 0.25

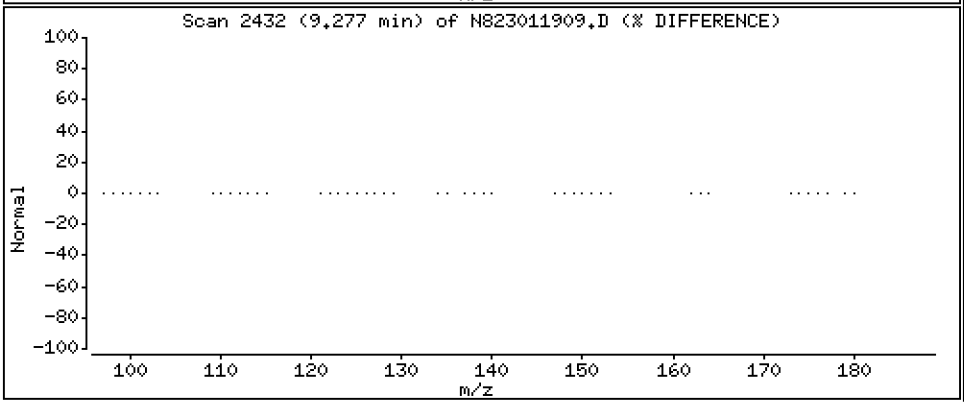
16 Phenanthrene

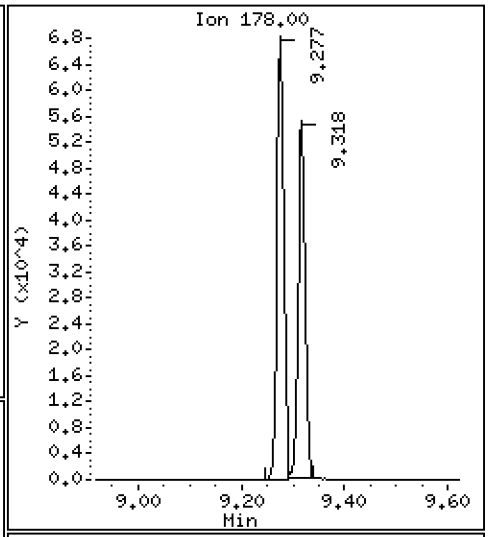
Concentration: 2.448 ug/L

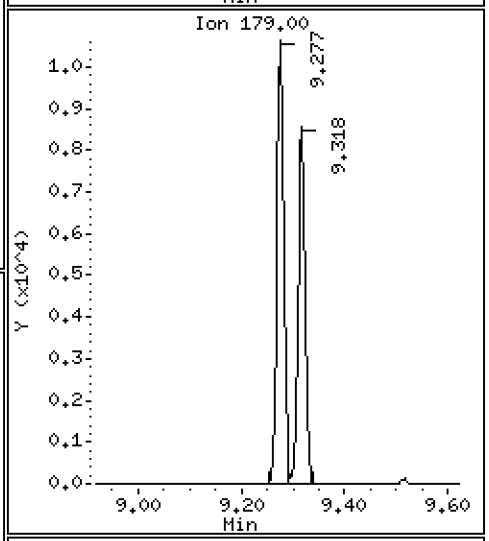


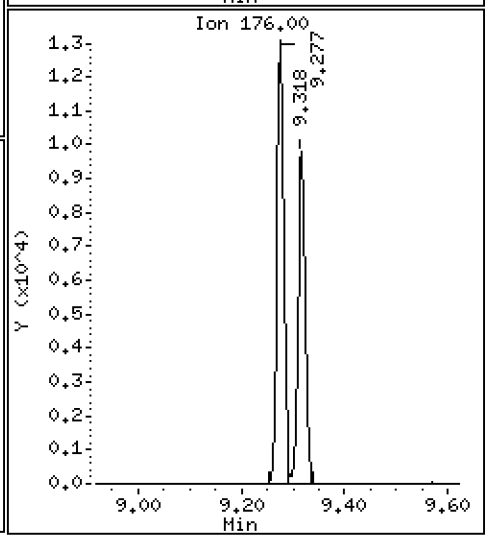












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

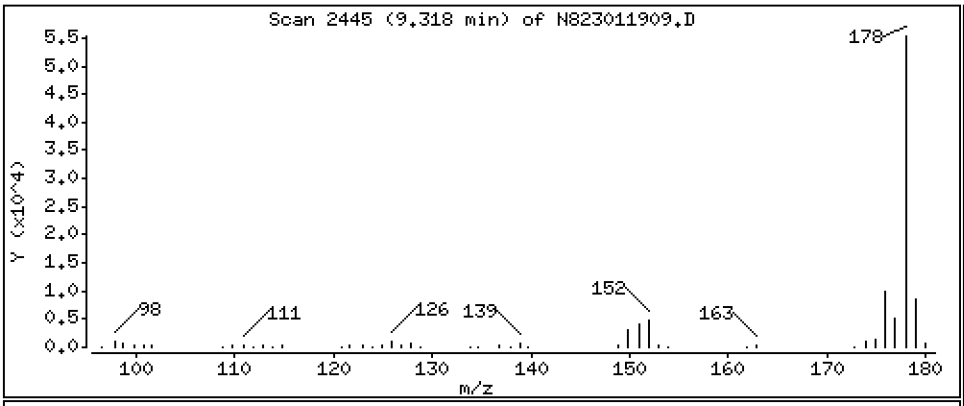
Operator: JZ

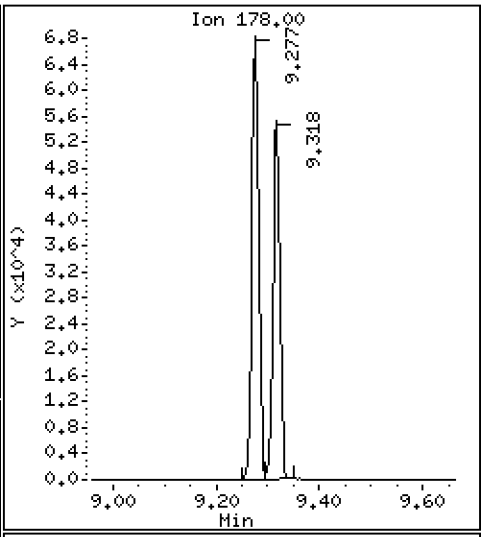
Column phase: Rxi-17sil

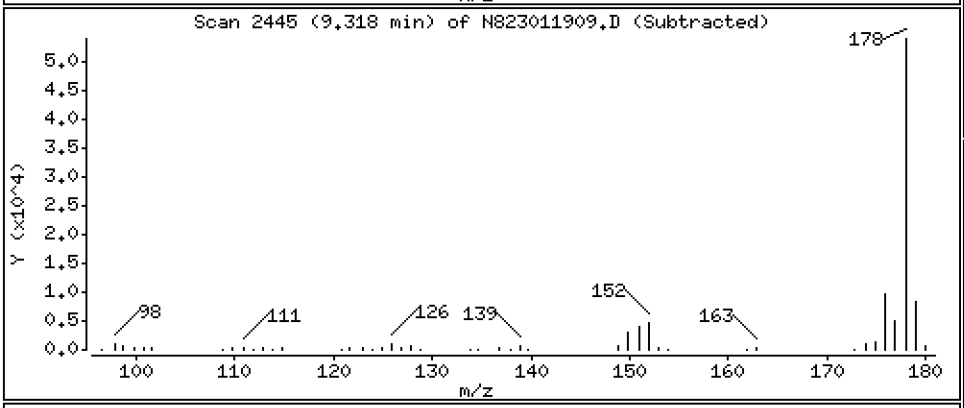
Column diameter: 0.25

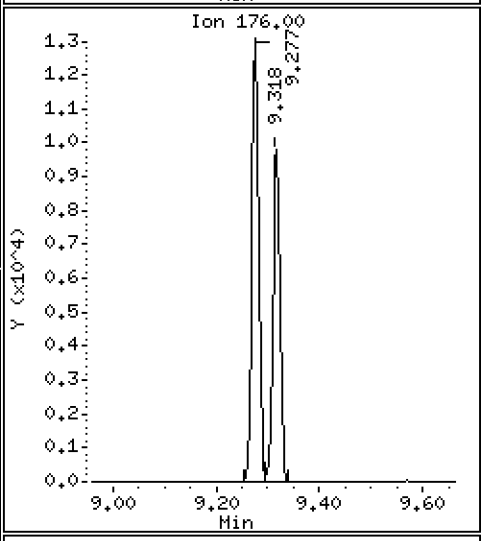
17 Anthracene

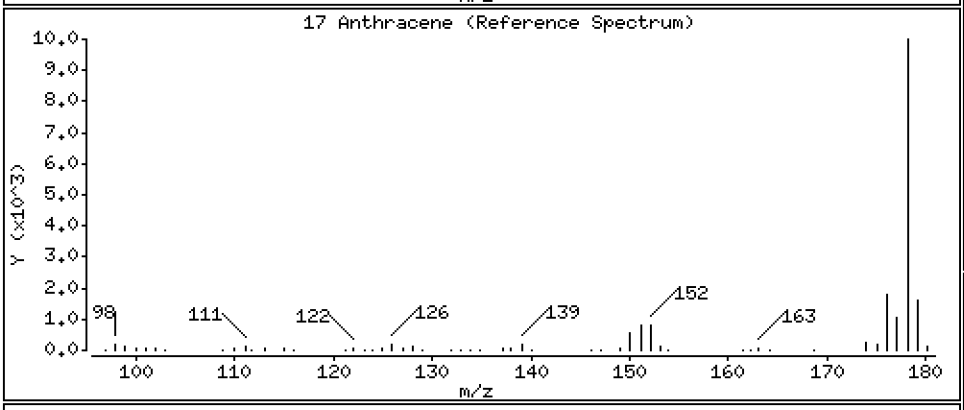
Concentration: 2.270 ug/L

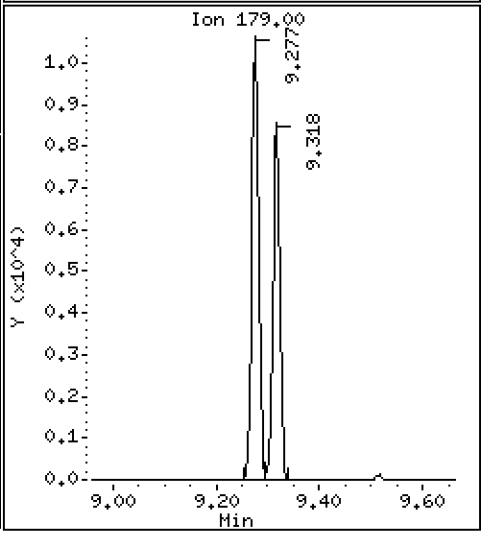


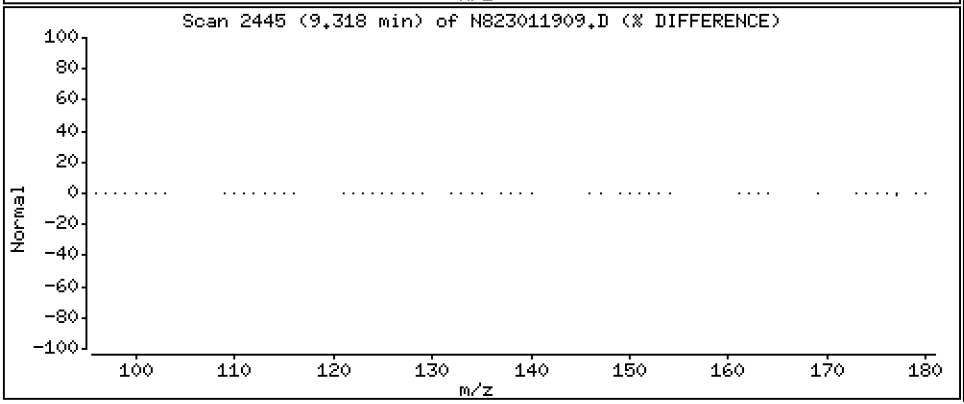












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

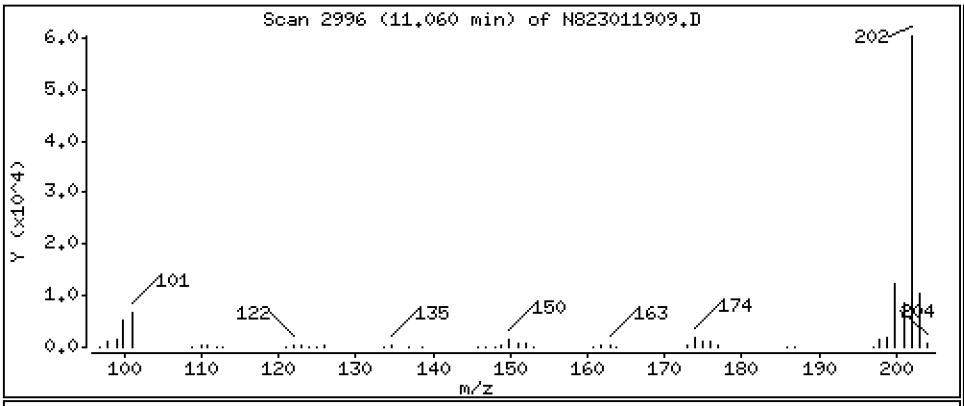
Operator: JZ

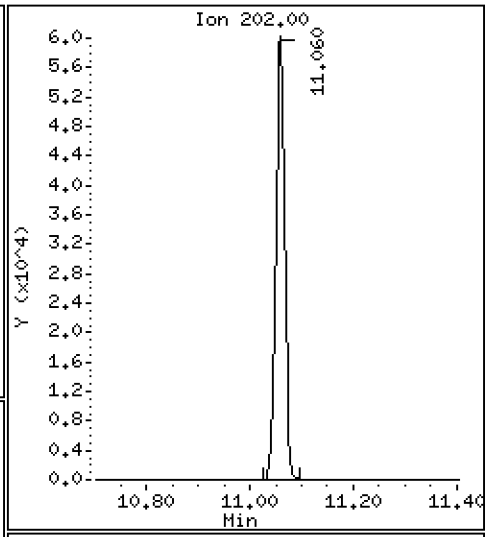
Column phase: Rxi-17sil

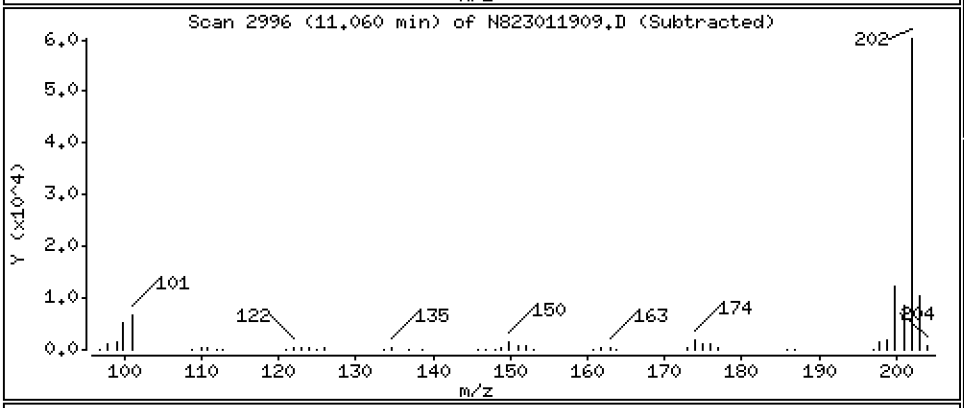
Column diameter: 0.25

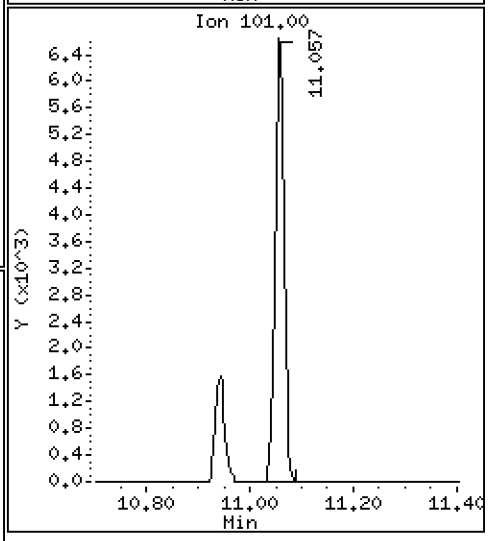
22 Fluoranthene

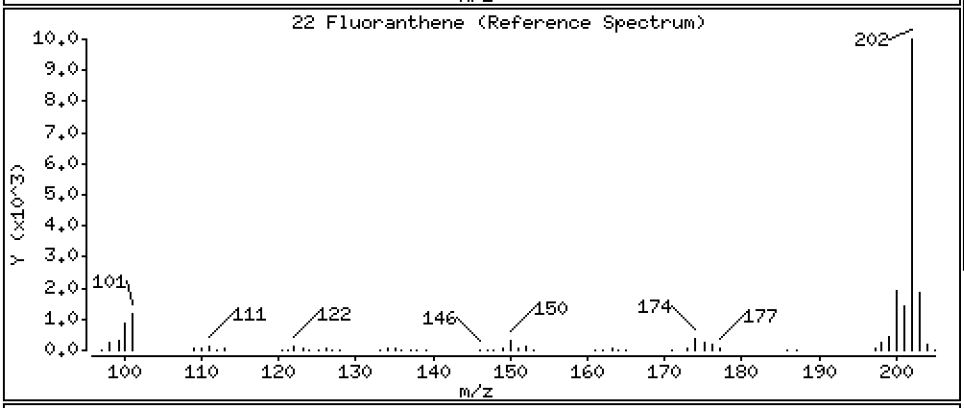
Concentration: 2.653 ug/L

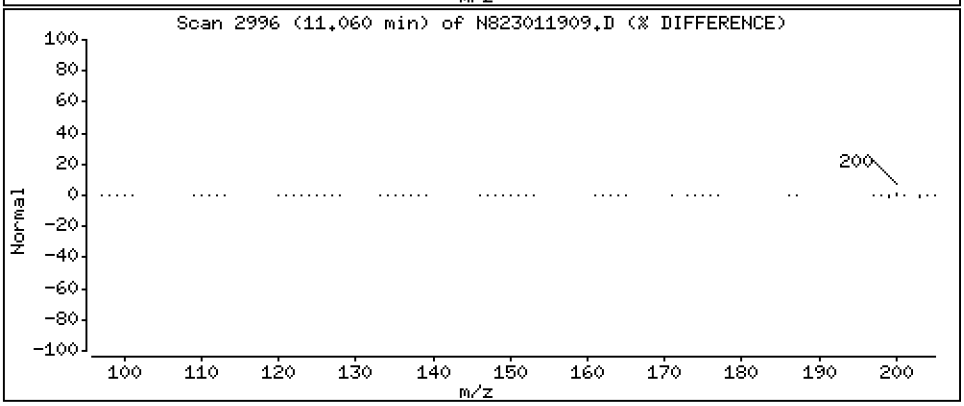












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

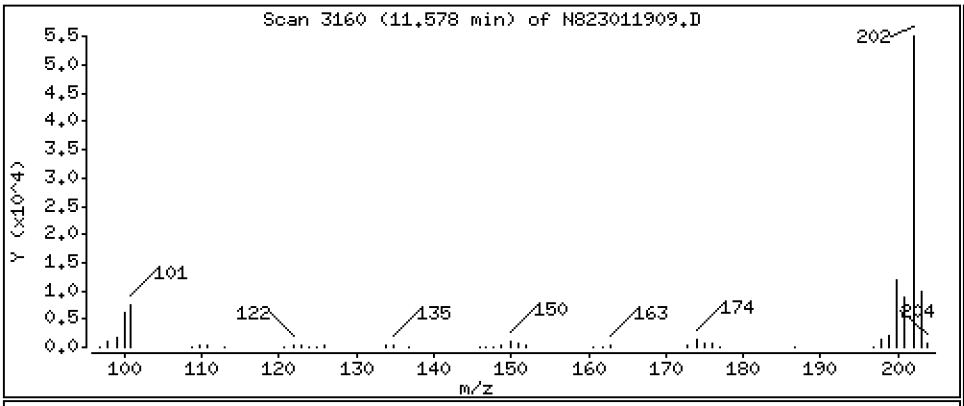
Operator: JZ

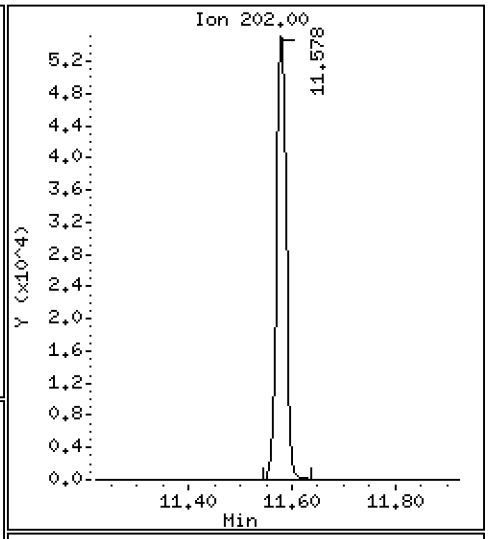
Column phase: Rxi-17sil

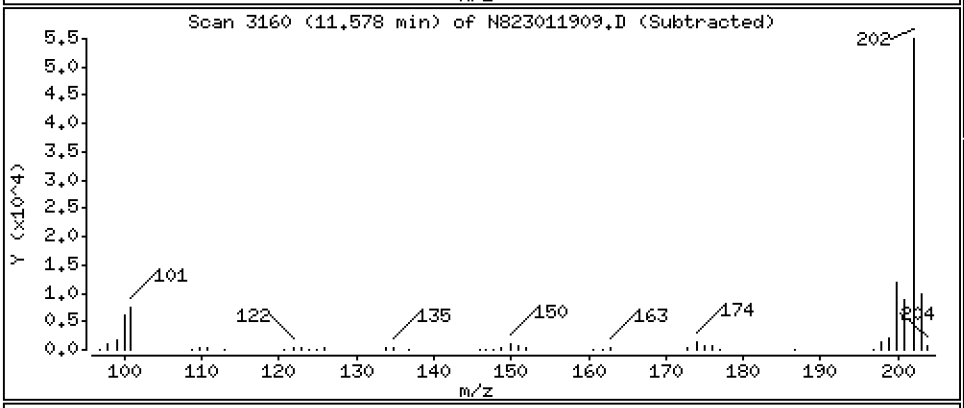
Column diameter: 0.25

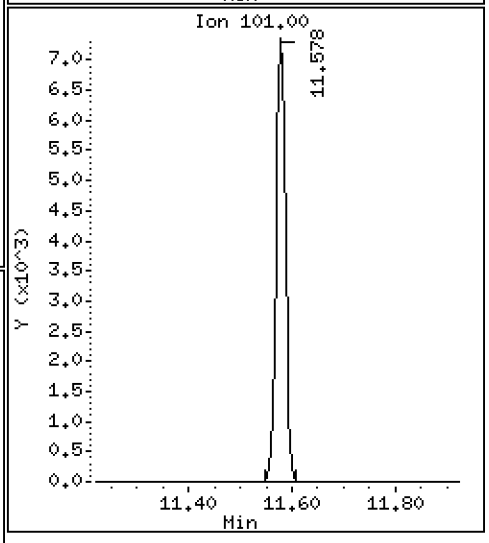
23 Pyrene

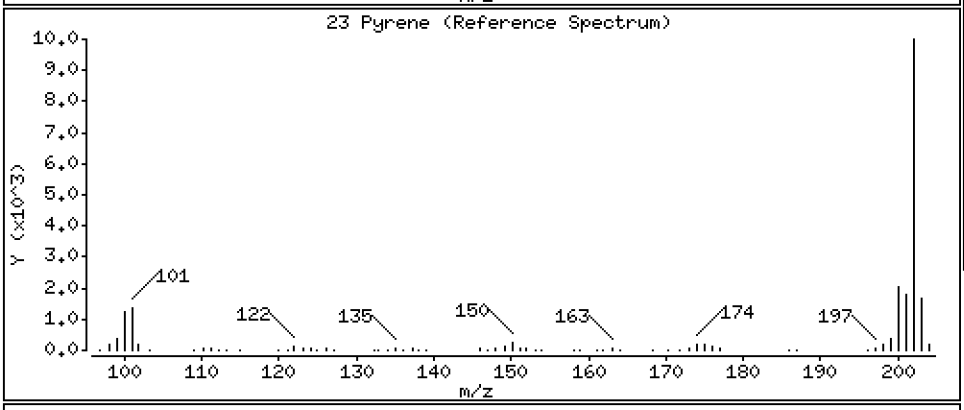
Concentration: 2.462 ug/L

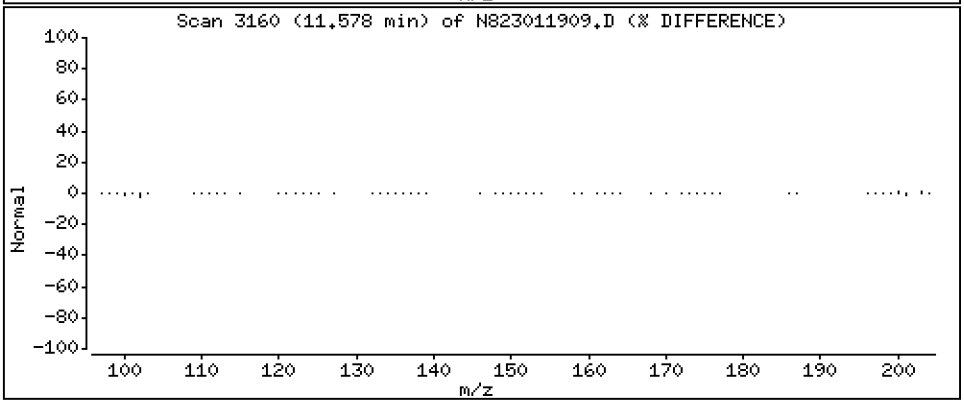












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

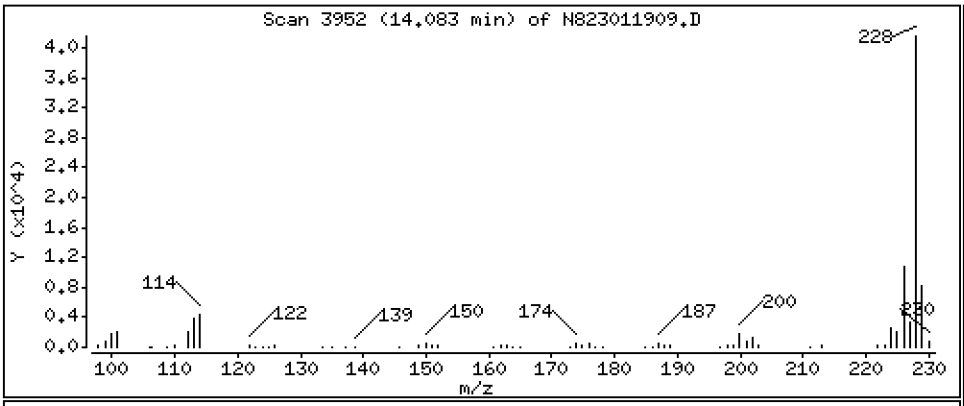
Operator: JZ

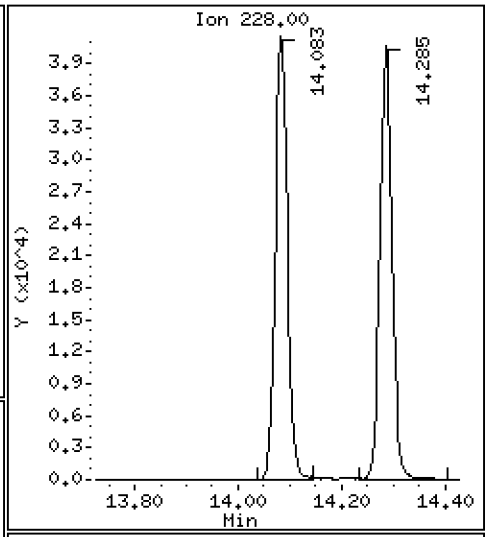
Column phase: Rxi-17sil

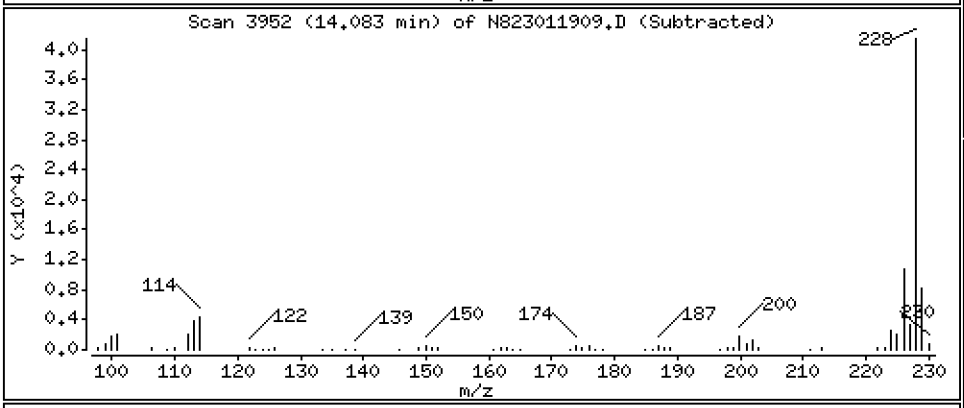
Column diameter: 0.25

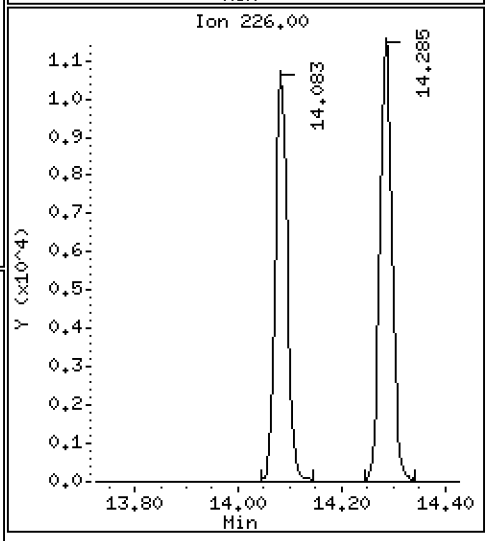
24 Benzo(a)anthracene

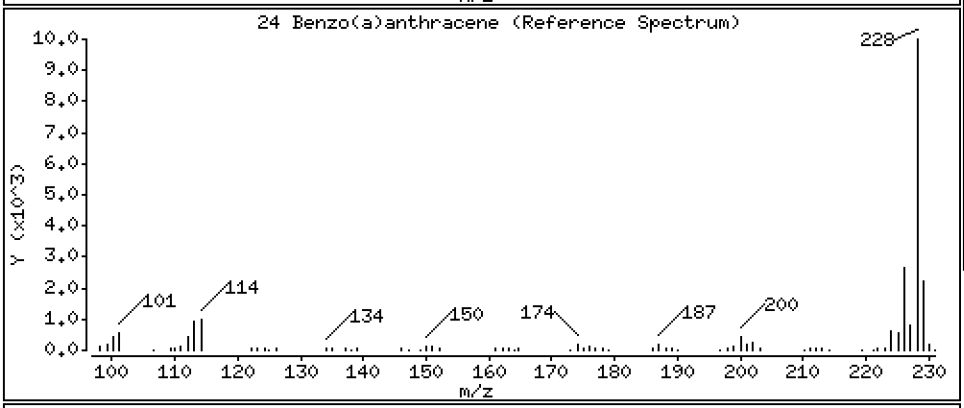
Concentration: 2.587 ug/L

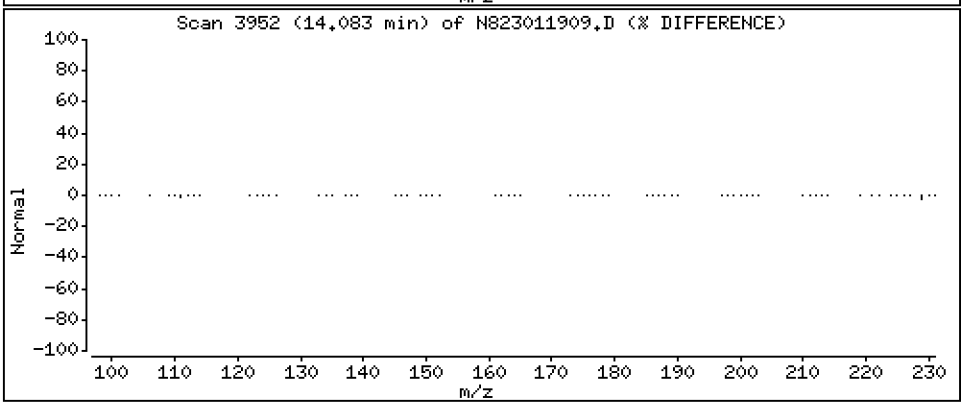












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

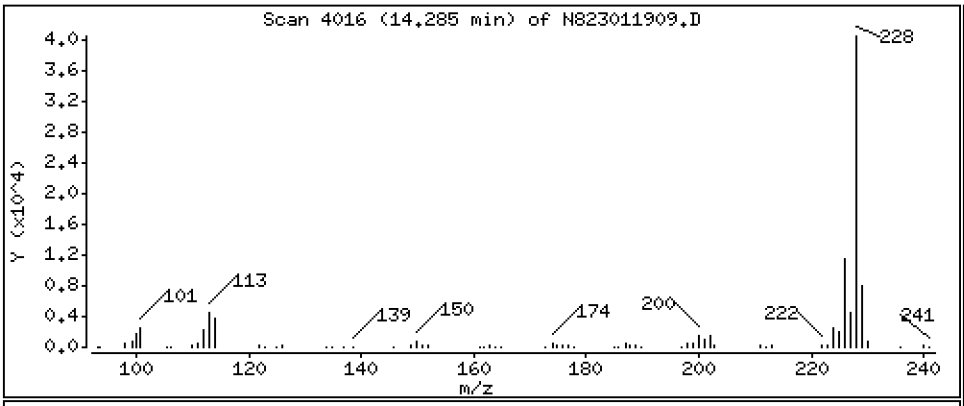
Operator: JZ

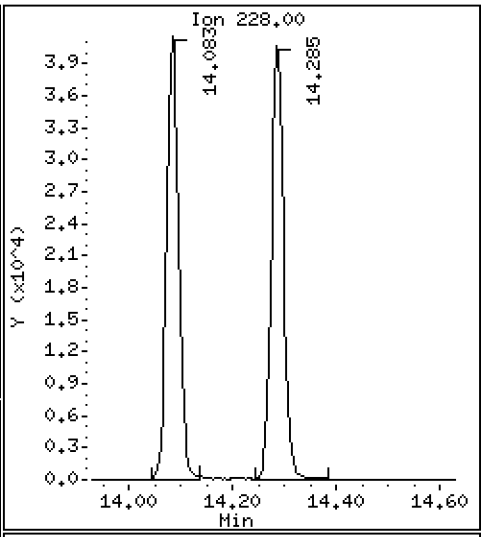
Column phase: Rxi-17sil

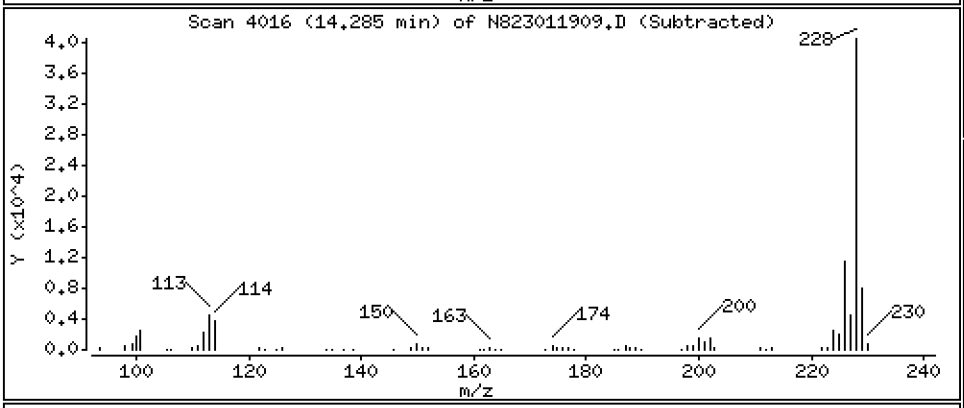
Column diameter: 0.25

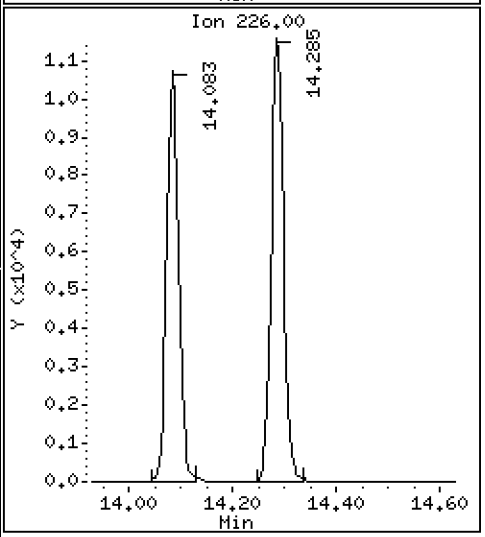
27 Chrysene

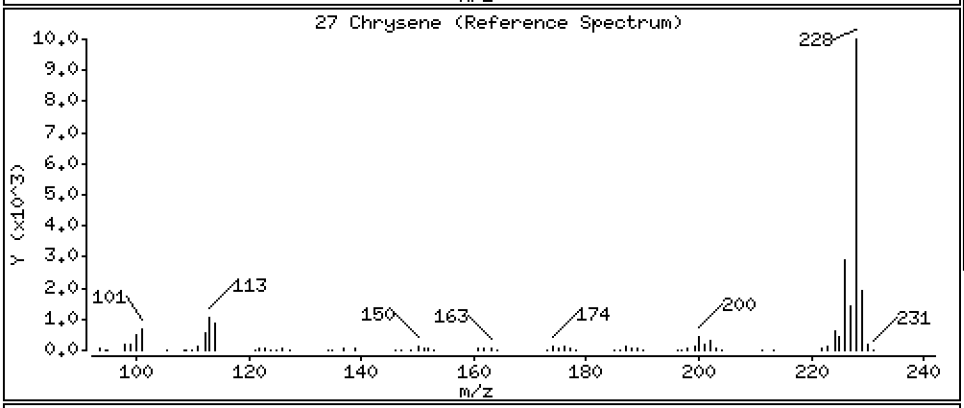
Concentration: 2.400 ug/L

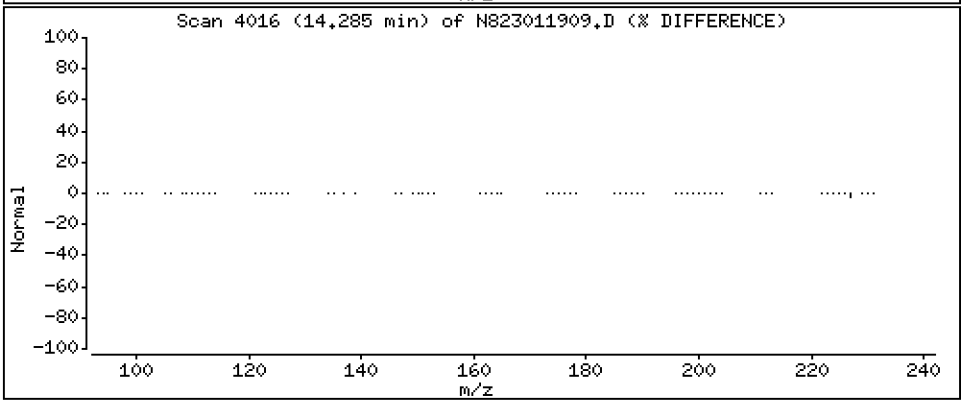












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

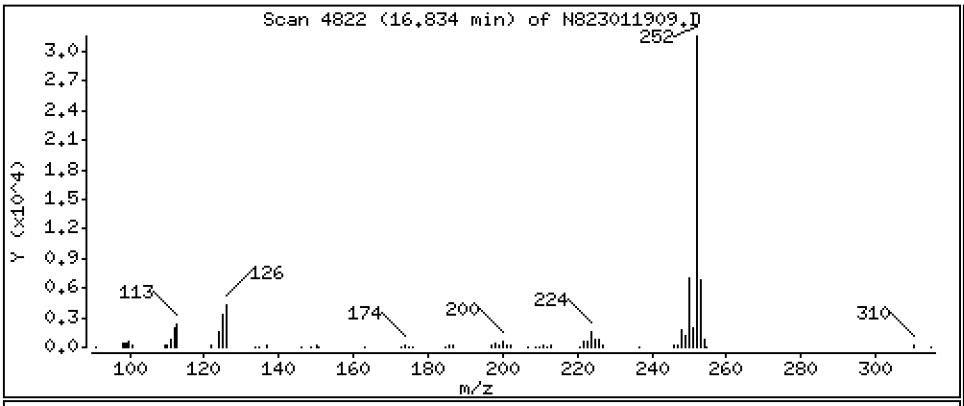
Operator: JZ

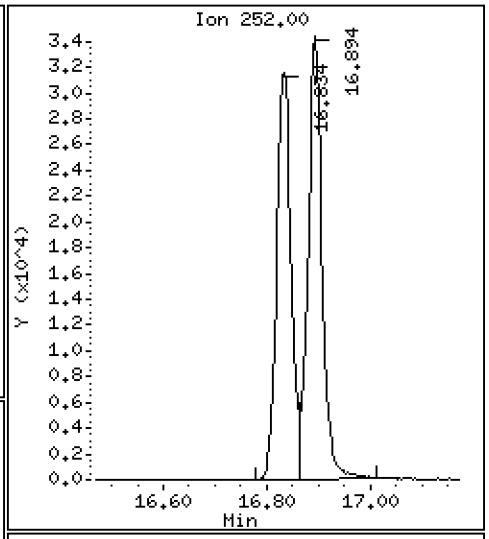
Column phase: Rxi-17sil

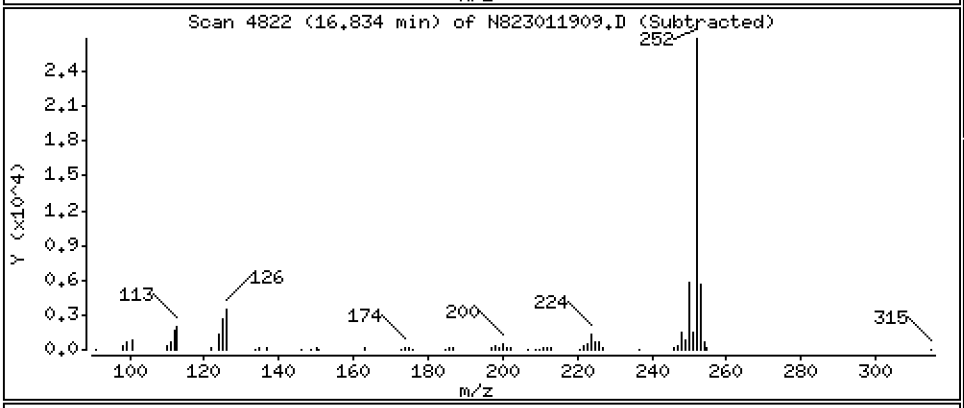
Column diameter: 0.25

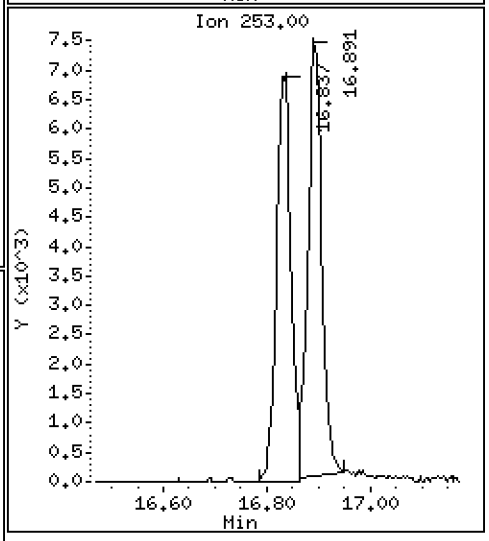
28 Benzo(b)fluoranthene

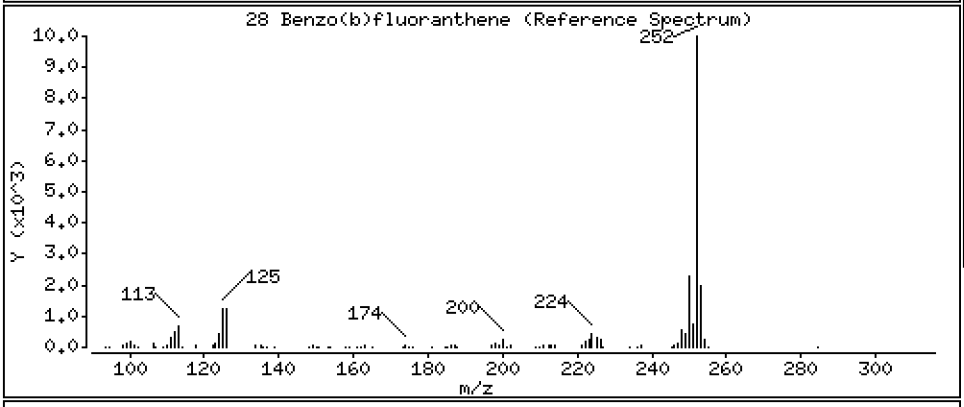
Concentration: 2.507 ug/L

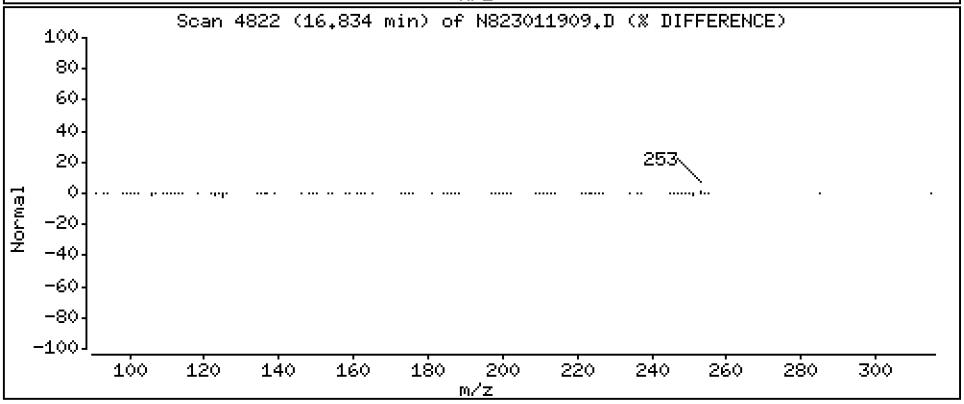












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

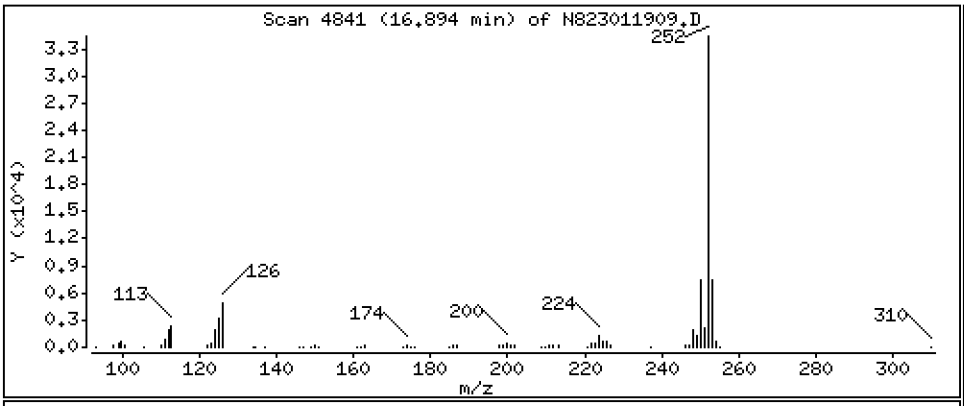
Operator: JZ

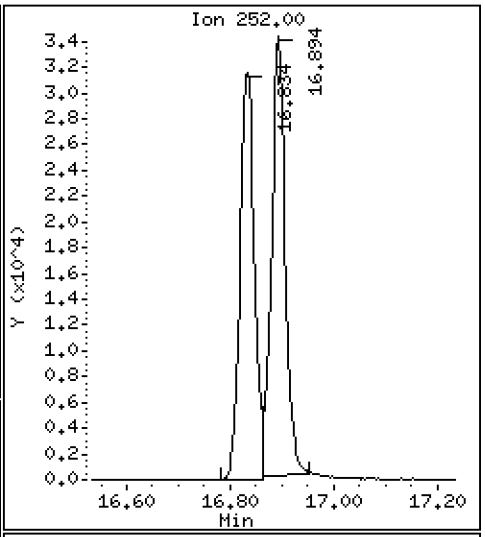
Column phase: Rxi-17sil

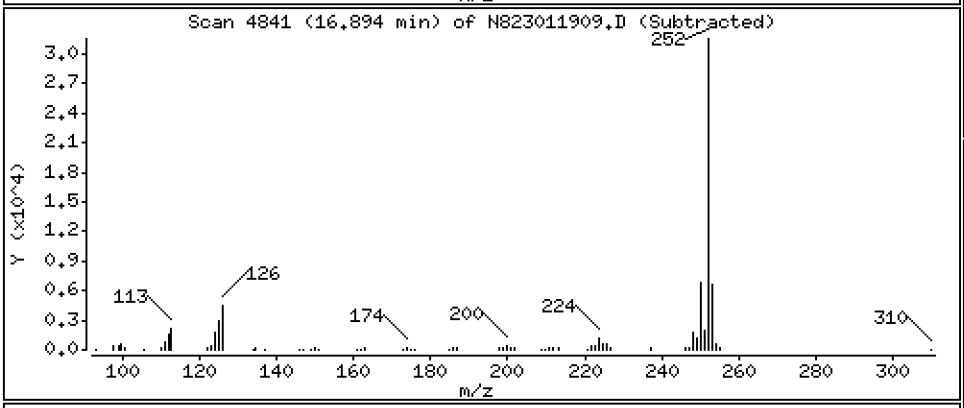
Column diameter: 0.25

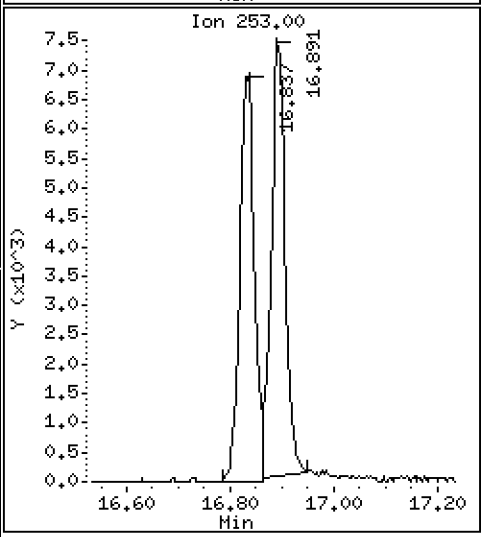
29 Benzo(k)fluoranthene

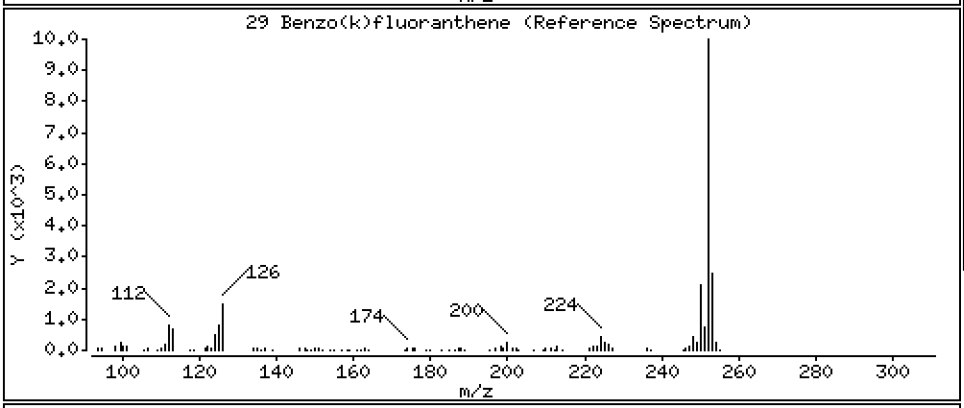
Concentration: 2.656 ug/L

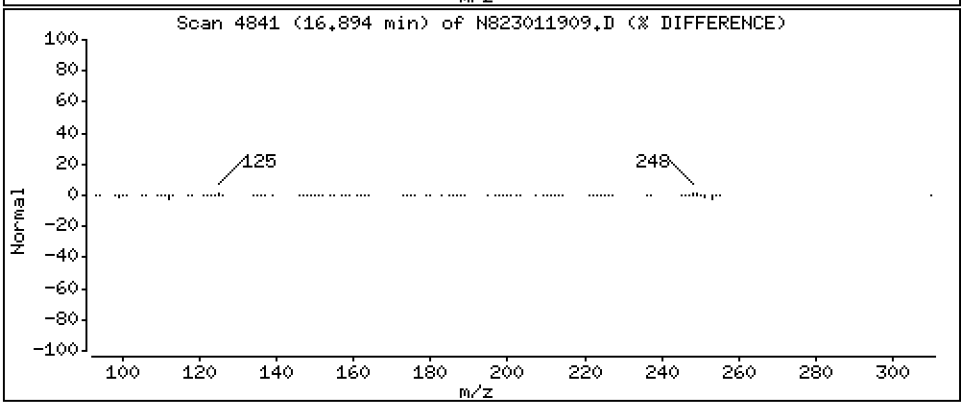












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

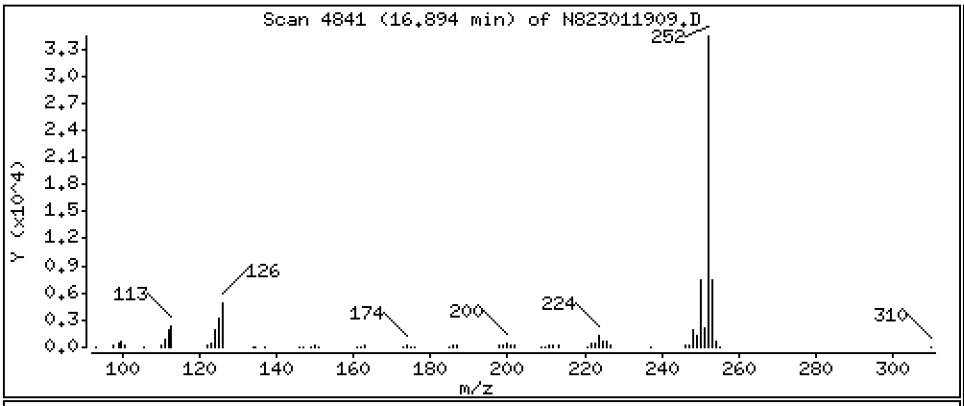
Operator: JZ

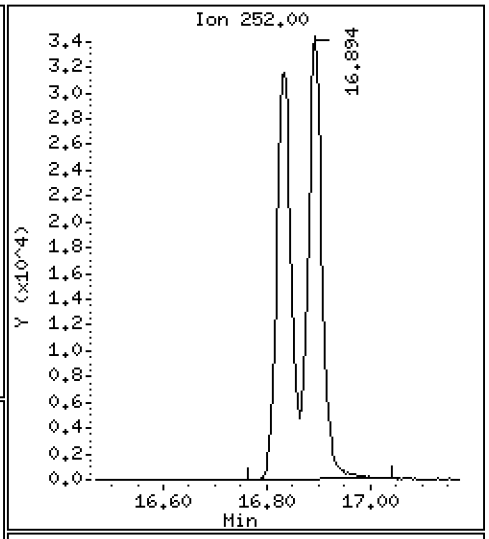
Column phase: Rxi-17sil

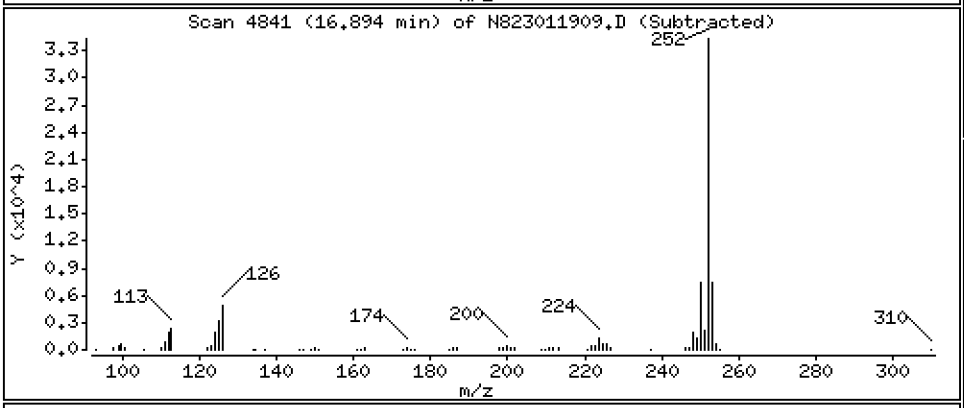
Column diameter: 0.25

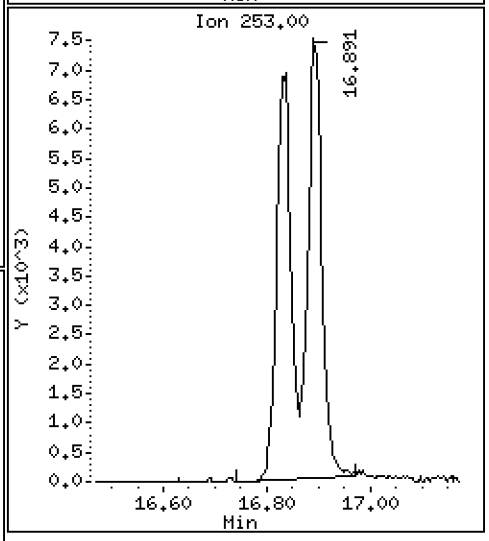
31 Total Benzofluoranthenes

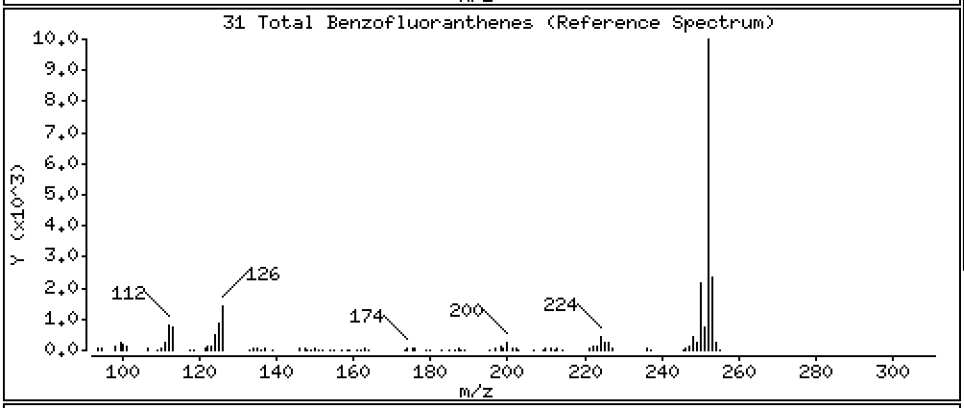
Concentration: 5.480 ug/L

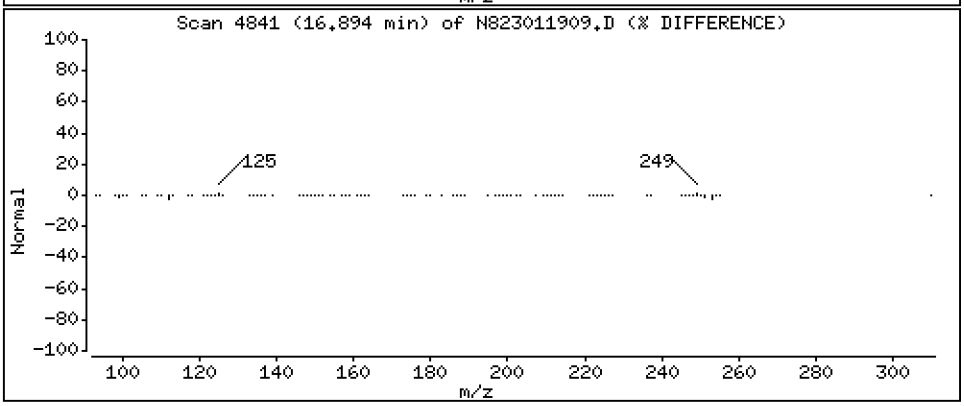












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

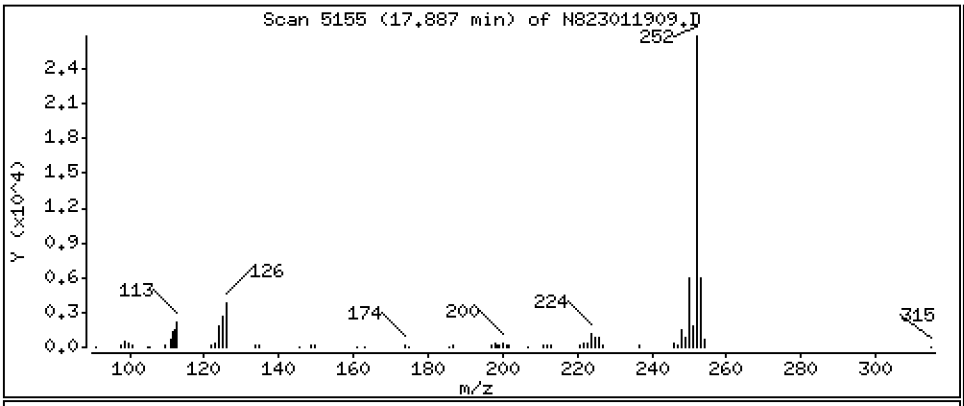
Operator: JZ

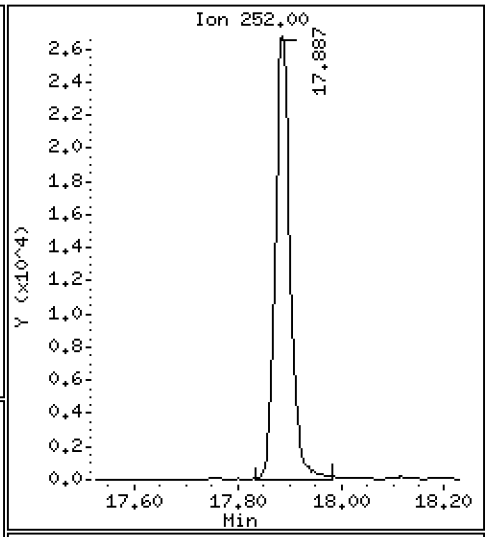
Column phase: Rxi-17sil

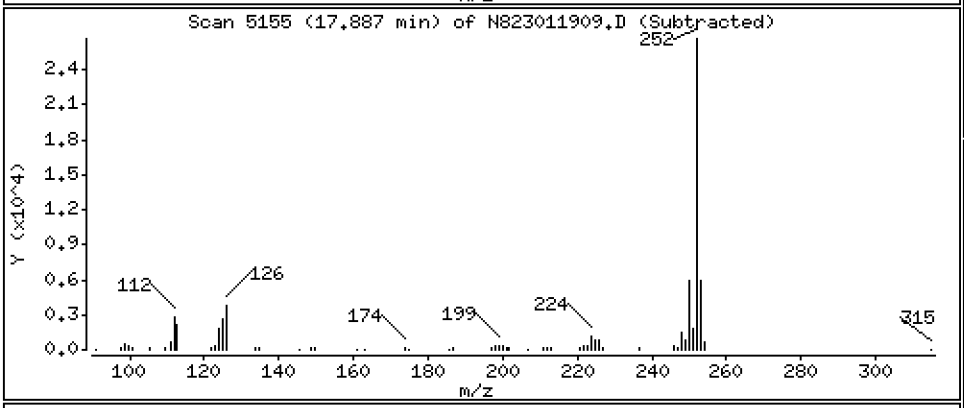
Column diameter: 0.25

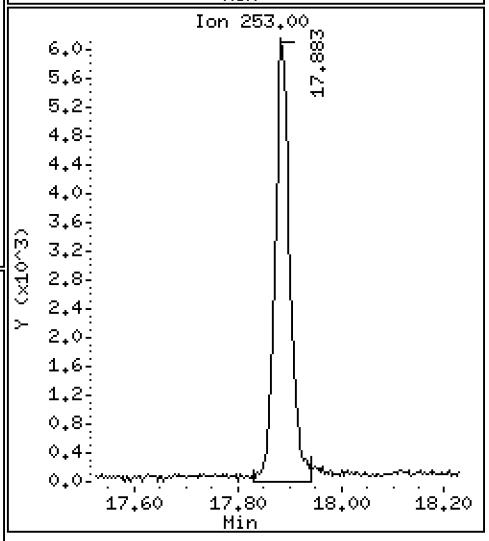
32 Benzo(a)pyrene

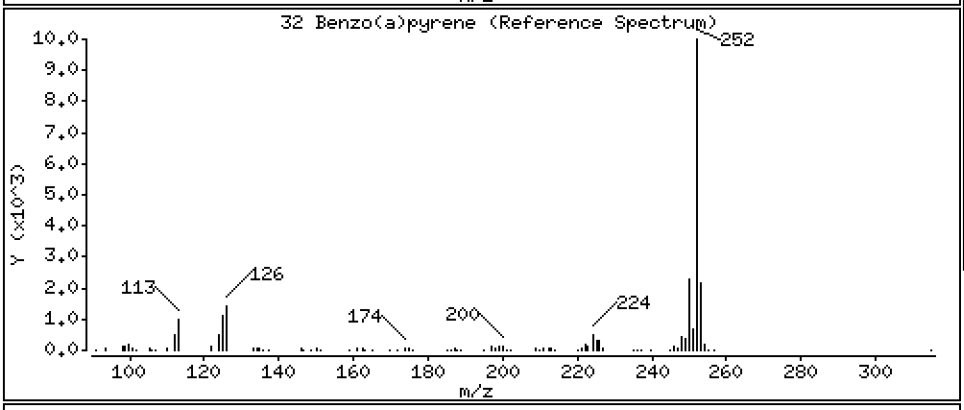
Concentration: 2.572 ug/L

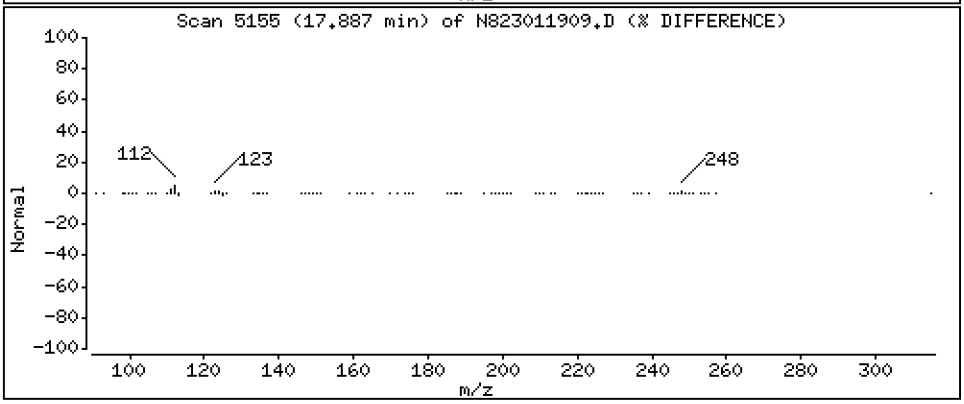












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

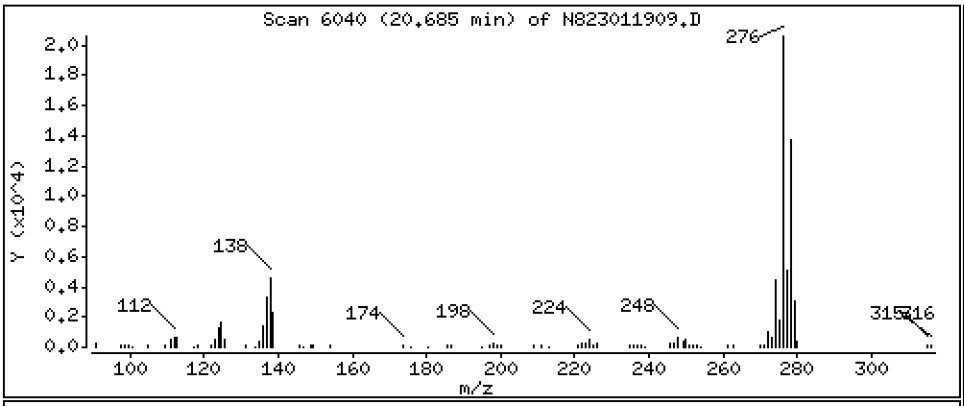
Operator: JZ

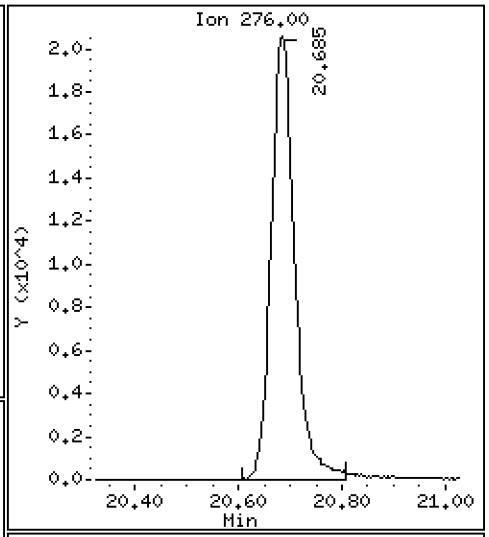
Column phase: Rxi-17sil

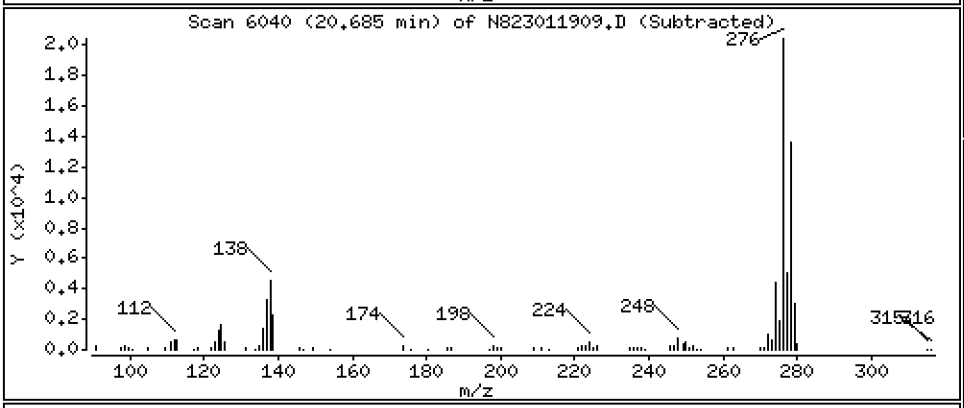
Column diameter: 0.25

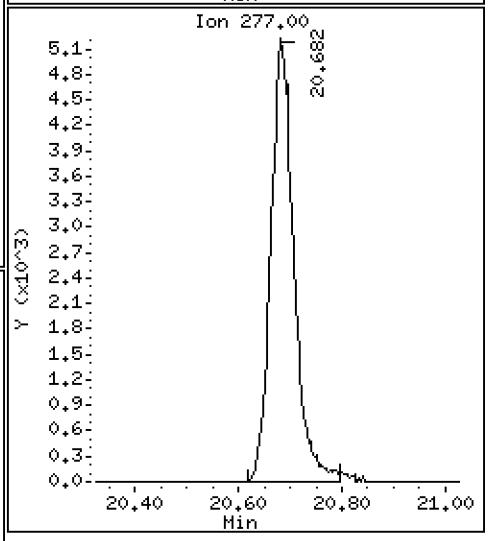
37 Indeno(1,2,3-cd)pyrene

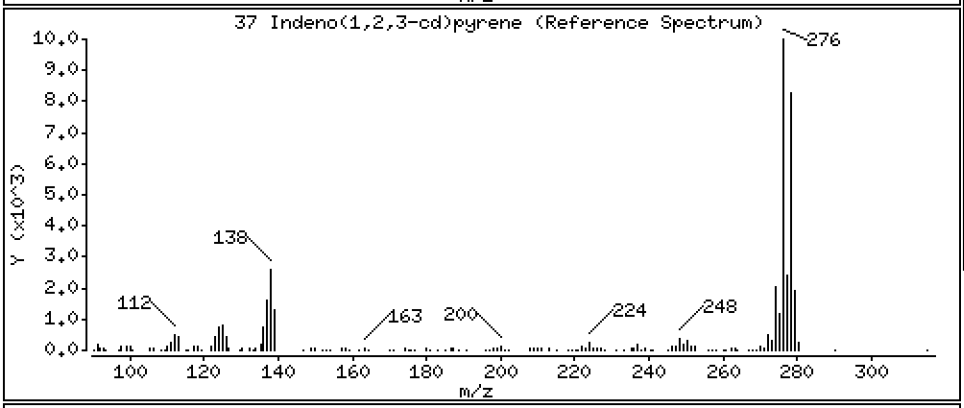
Concentration: 2.689 ug/L

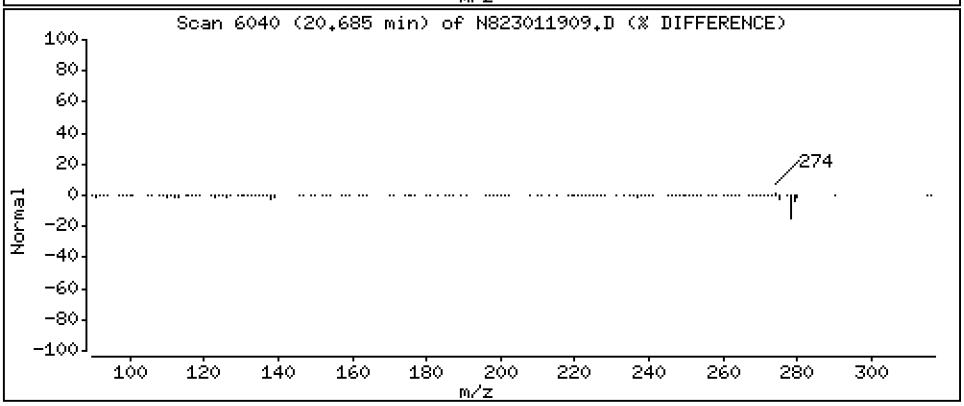












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

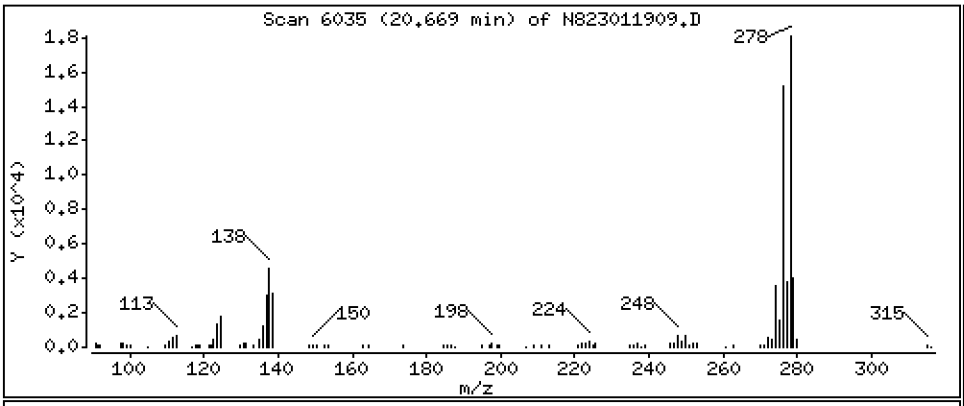
Operator: JZ

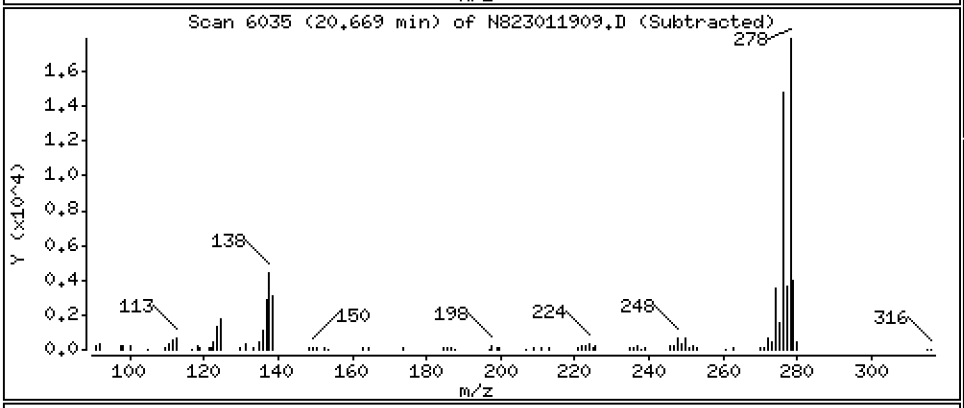
Column phase: Rxi-17sil

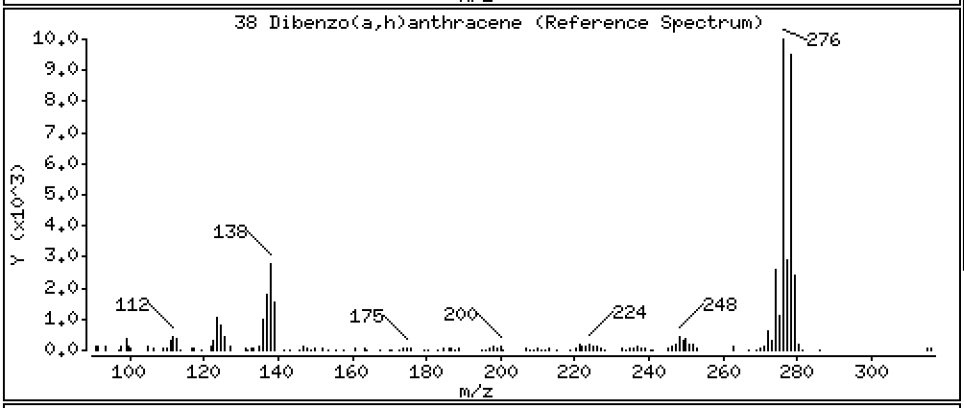
Column diameter: 0.25

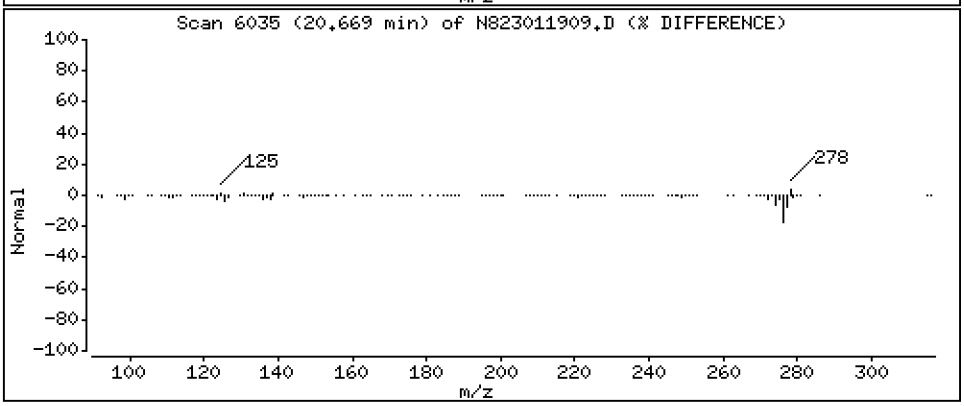
38 Dibenzo(a,h)anthracene

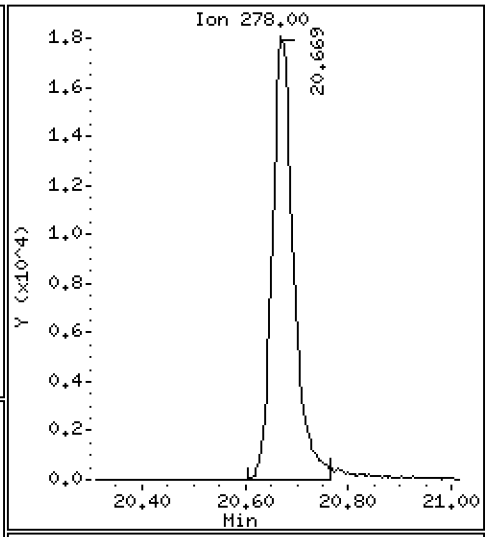
Concentration: 2.493 ug/L

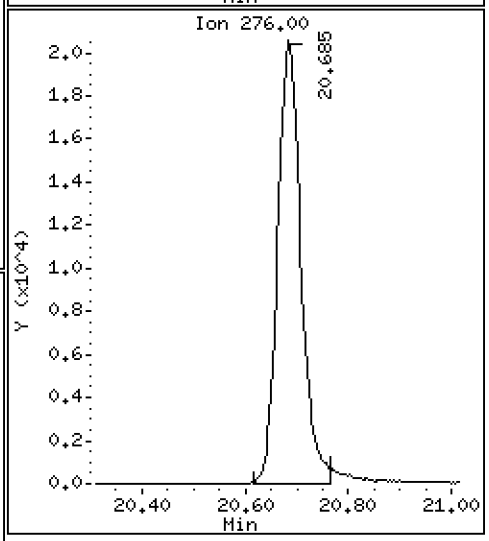












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

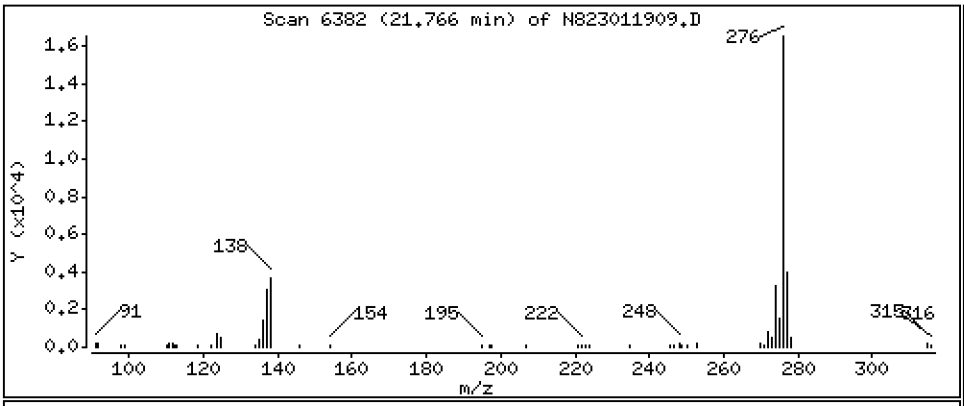
Operator: JZ

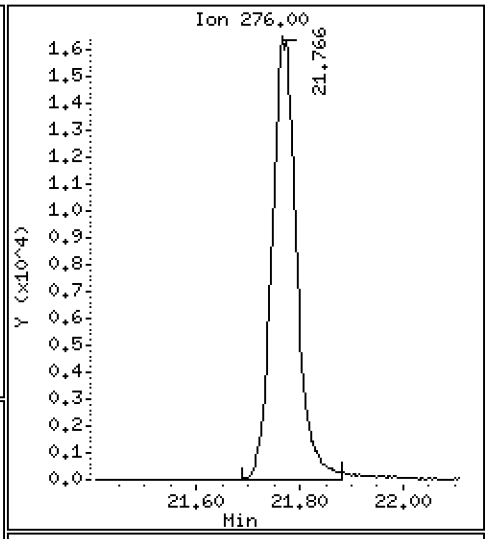
Column phase: Rxi-17sil

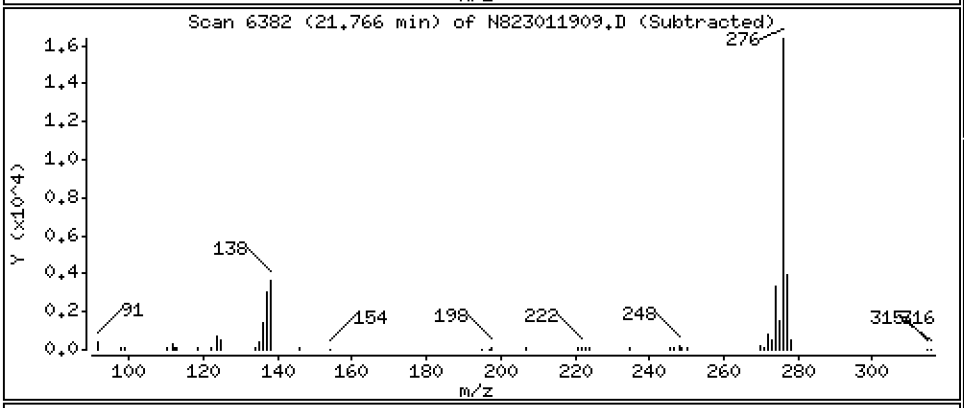
Column diameter: 0.25

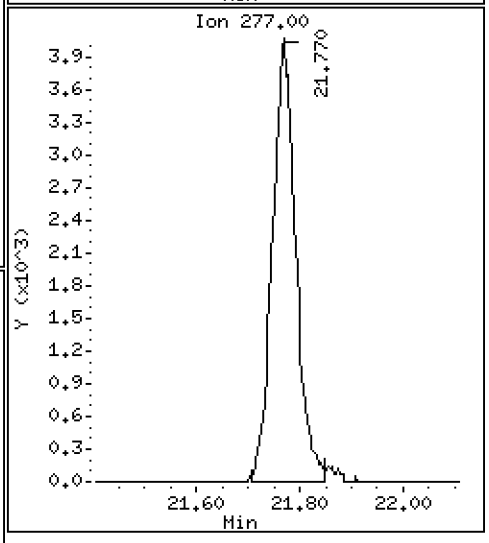
39 Benzo(g,h,i)perylene

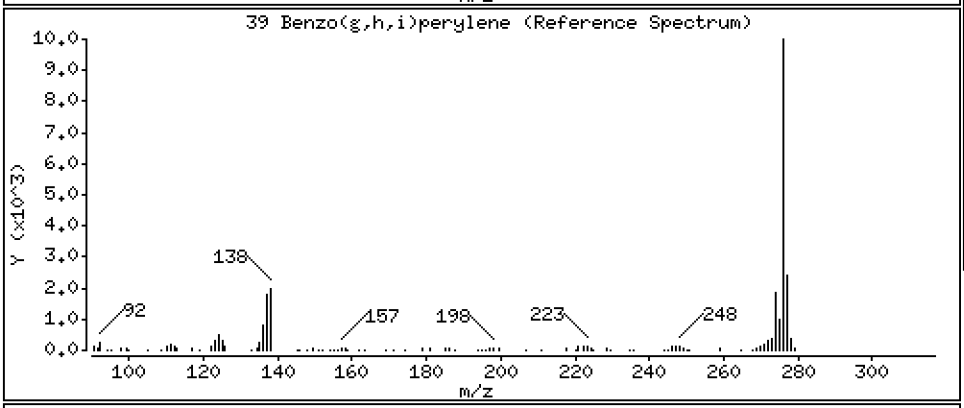
Concentration: 2.483 ug/L

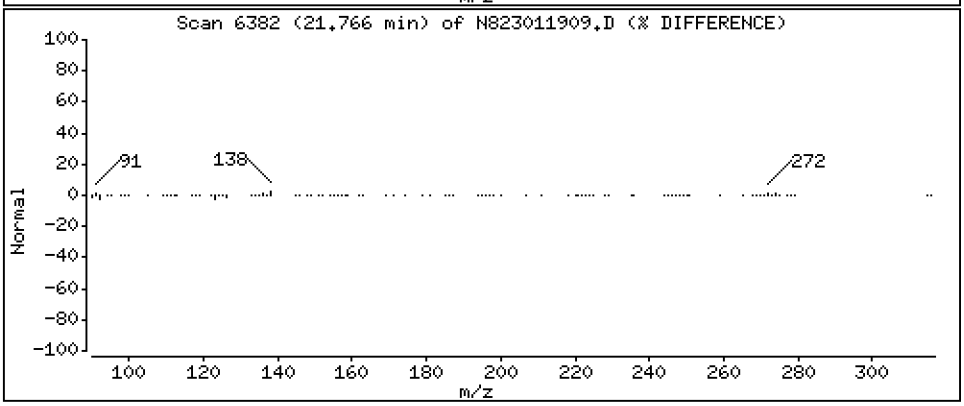












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Lab Smp Id: SLA0213-SCV1
Inj Date : 19-JAN-2023 14:58
Operator : JZ Inst ID: nt8.i
Smp Info : SCV230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 21:57 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnascv.sub
Target Version: 4.14
Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
*	1 Naphthalene-d8	136	4.913	4.906	(1.000)	46346	2.00000	
	2 Naphthalene	128	4.941	4.938	(1.006)	56587	2.62597	2.626
$	3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
	4 2-Methylnaphthalene	141	5.694	5.687	(1.159)	31650	2.67019	2.670
	5 1-methylnaphthalene	141	5.890	5.883	(1.199)	31873	2.64949	2.649
	9 Acenaphthylene	152	7.091	7.085	(0.985)	59018	2.82060	2.821
*	10 Acenaphthene-d10	164	7.202	7.196	(1.000)	27709	2.00000	
	11 Acenaphthene	153	7.249	7.246	(1.007)	36454	2.60022	2.600
	12 Dibenzofuran	168	7.401	7.395	(1.028)	60898	2.85987	2.860
	14 Fluorene	166	7.878	7.872	(1.094)	43507	2.63066	2.631
*	15 Phenanthrene-d10	188	9.238	9.235	(1.000)	51685	2.00000	
	16 Phenanthrene	178	9.276	9.270	(1.004)	61815	2.44841	2.448
	17 Anthracene	178	9.317	9.311	(1.009)	52064	2.27006	2.270
	22 Fluoranthene	202	11.059	11.053	(1.197)	72902	2.65276	2.653
$	21 Fluoranthene-d10	212	Compound Not Detected.					
	23 Pyrene	202	11.578	11.572	(0.815)	71115	2.46242	2.462
	24 Benzo(a)anthracene	228	14.082	14.076	(0.991)	67725	2.58725	2.587
*	25 Chrysene-d12	240	14.212	14.202	(1.000)	46582	2.00000	
	27 Chrysene	228	14.285	14.278	(1.005)	66872	2.39976	2.400
	28 Benzo(b)fluoranthene	252	16.833	16.821	(0.929)	60946	2.50689	2.507
	29 Benzo(k)fluoranthene	252	16.893	16.884	(0.932)	63249	2.65606	2.656
	31 Total Benzofluoranthenes	252	16.893	16.821	(0.932)	126178	5.48025	5.480(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572
*	33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000	
	37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493
	39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483
	35 Perylene	252	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011909.D
Lab Smp Id: SLA0213-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 14:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

No RRT check performed

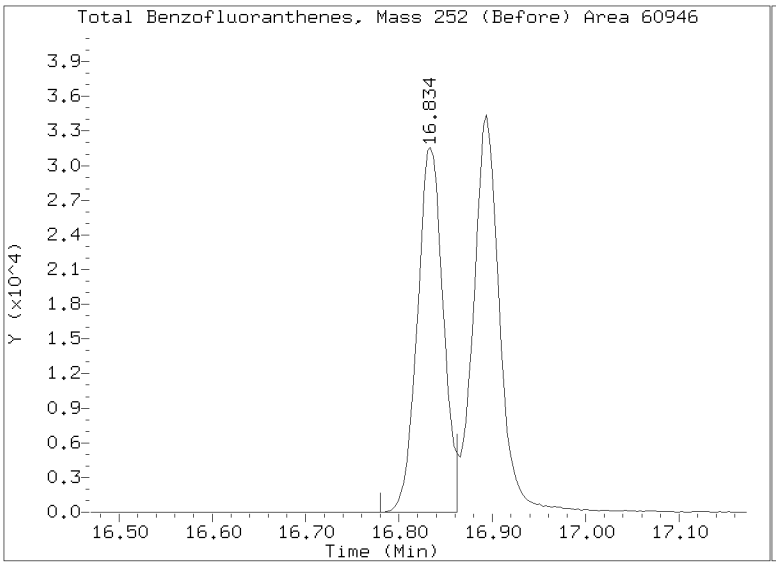
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

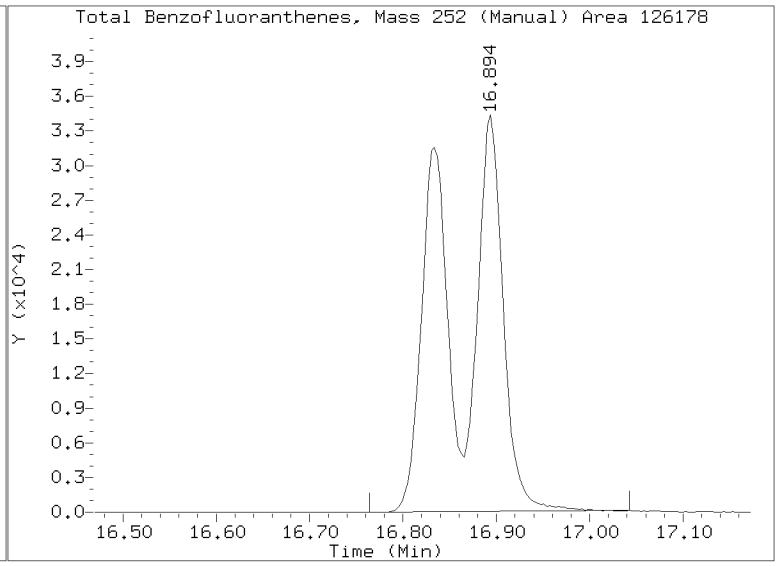
Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D
Injection Date: 19-JAN-2023 14:58
Lab ID:SLA0213-SCV1 Client ID:
Report Date: 01/25/2023 22:00





SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00036
Laboratory ID: SLC0155-SCV1
Sequence: SLC0155
Sequence Name: SCV 5.0
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	4.4	-12.0	20.00
1,2-Dichlorobenzene	5.0000	4.4	-12.0	20.00
Benzyl Alcohol	5.0000	4.8	-3.1	20.00
Benzoic acid	10.000	1.7	-82.8 *	20.00
2,4-Dimethylphenol	5.0000	3.5	-29.2 *	20.00
1,2,4-Trichlorobenzene	5.0000	4.4	-12.3	20.00
N-Nitrosodiphenylamine	5.0000	4.8	-3.7	20.00
Pentachlorophenol	5.0000	2.6	-47.4 *	20.00
2-Fluorophenol	7.5000	0.00		
p-Terphenyl-d14	5.0000	0.00465	-99.9	

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523128.D

Date : 26-FEB-2023 04:06

Client ID:

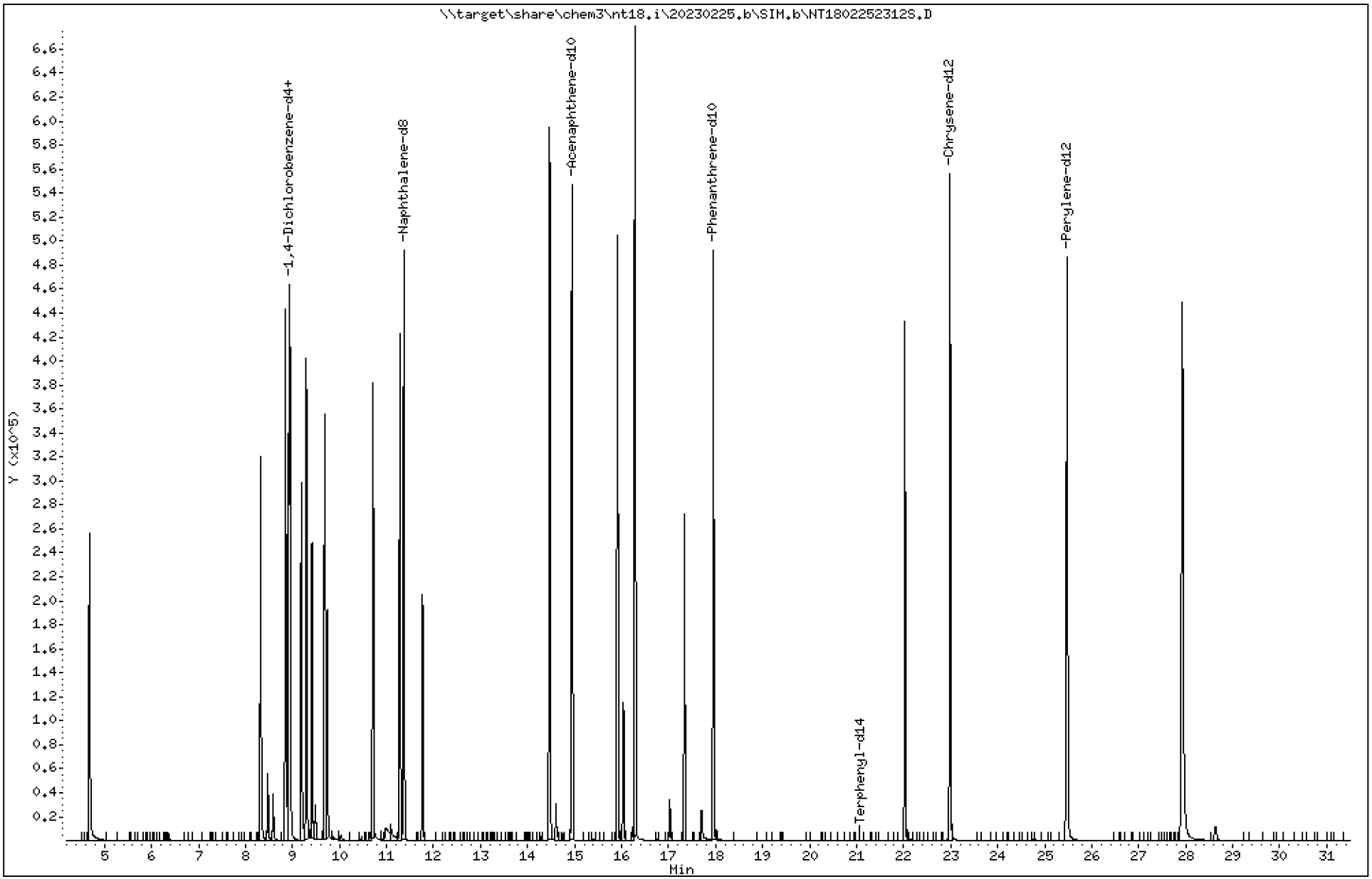
Sample Info: SLC0155-SCV1

Column phase: ZB-5msi

Instrument: nt18.i

Operator: YZ

Column diameter: 0.25



Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

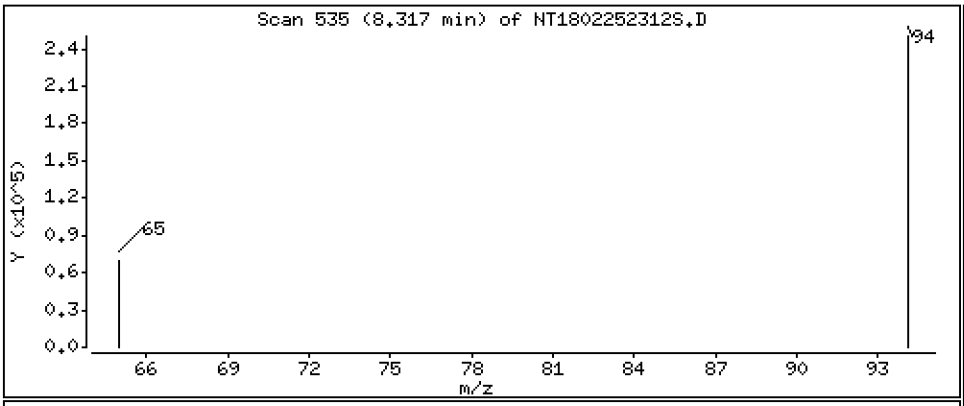
Operator: YZ

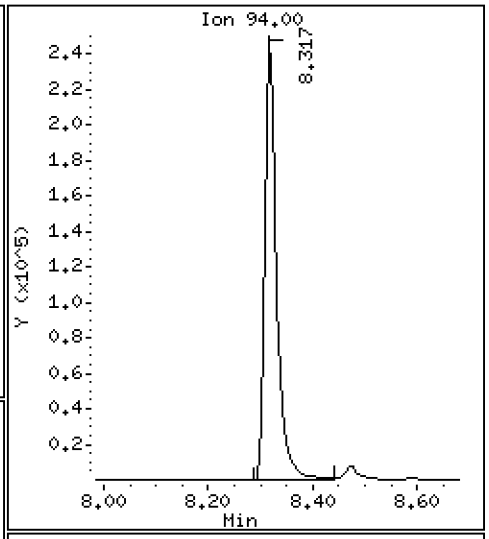
Column phase: ZB-5msi

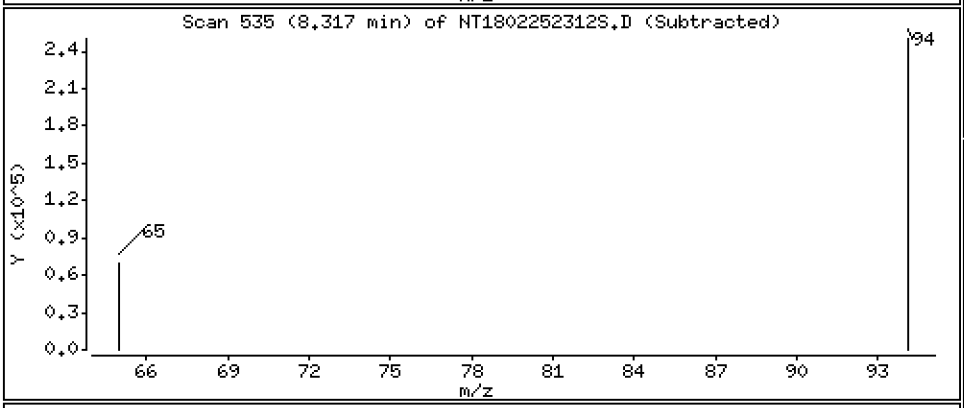
Column diameter: 0.25

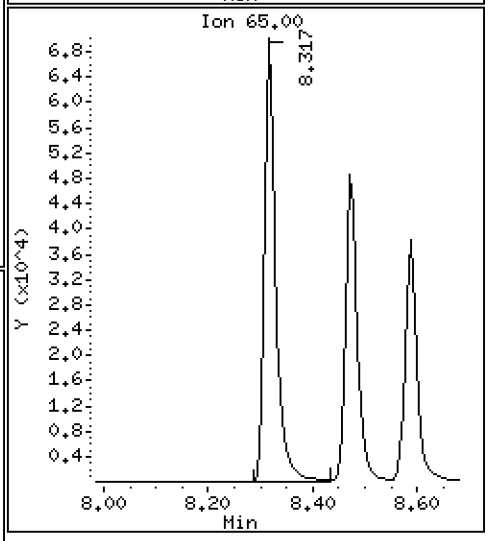
3 Phenol

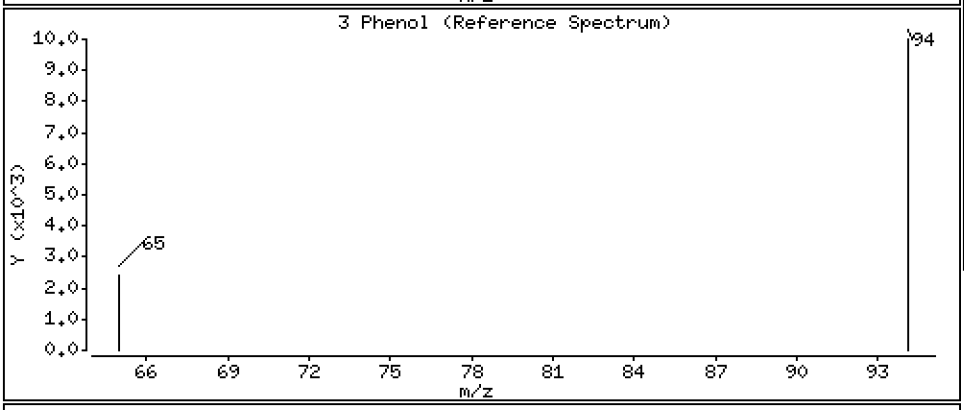
Concentration: 4.325 ug/mL

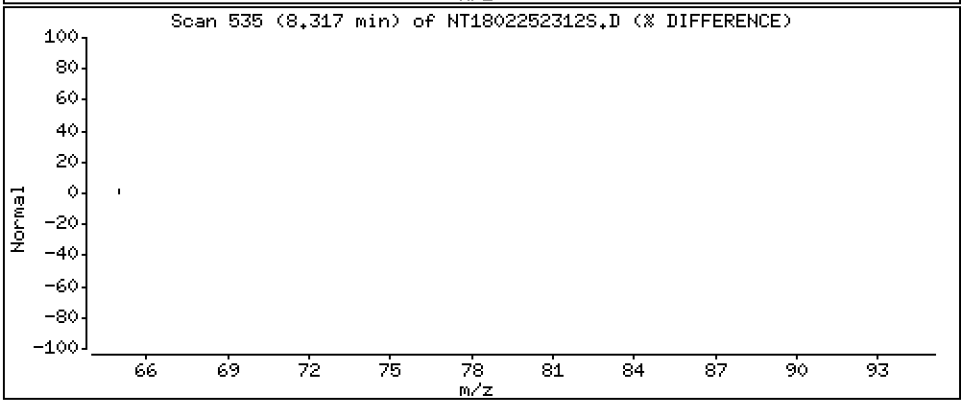












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

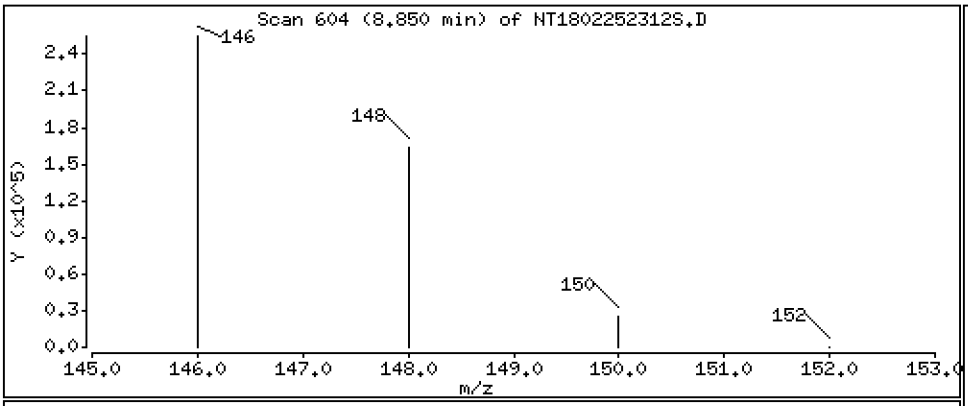
Operator: YZ

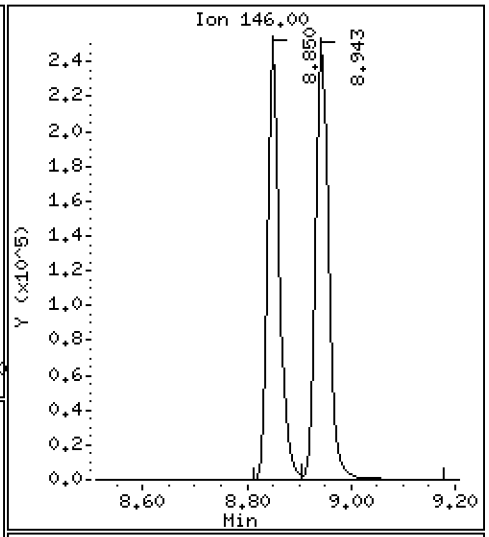
Column phase: ZB-5msi

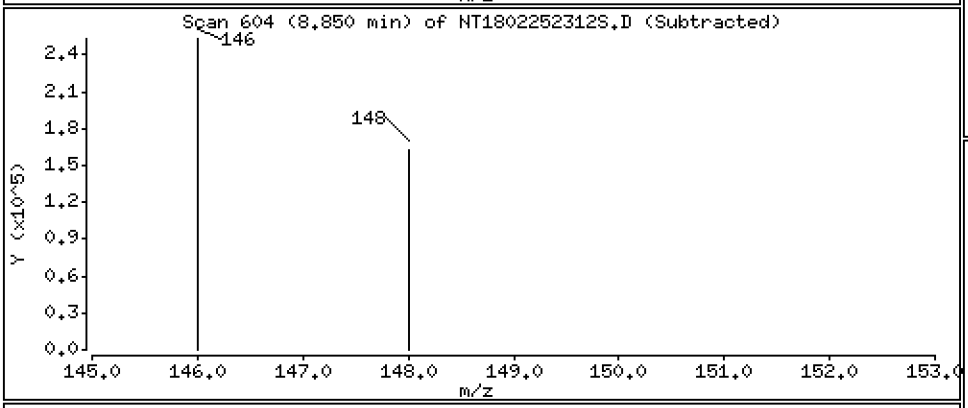
Column diameter: 0.25

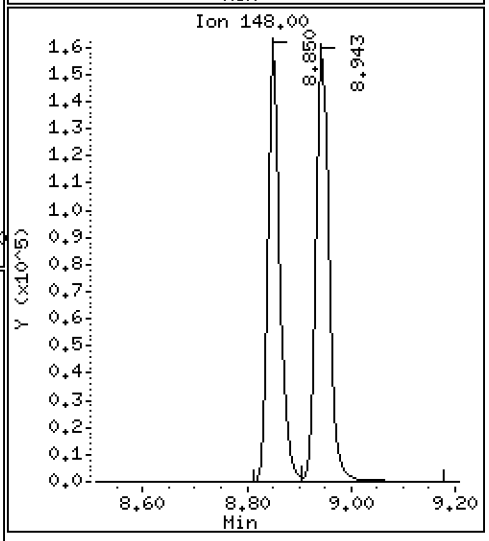
7 1,3-Dichlorobenzene

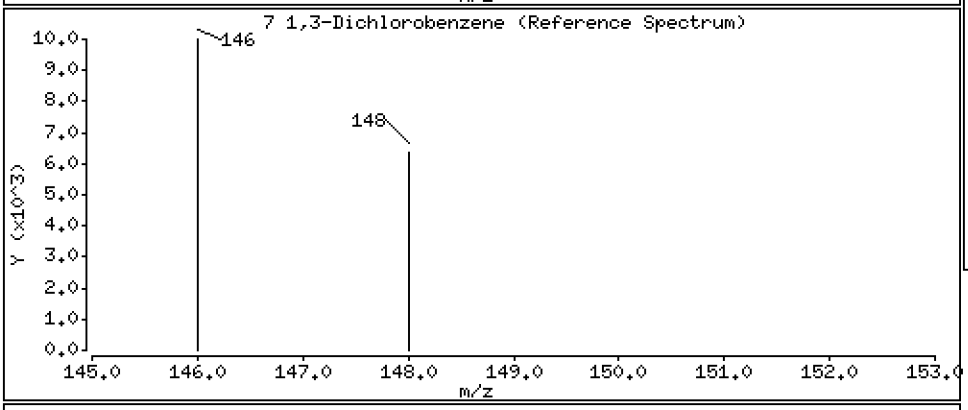
Concentration: 4.462 ug/mL

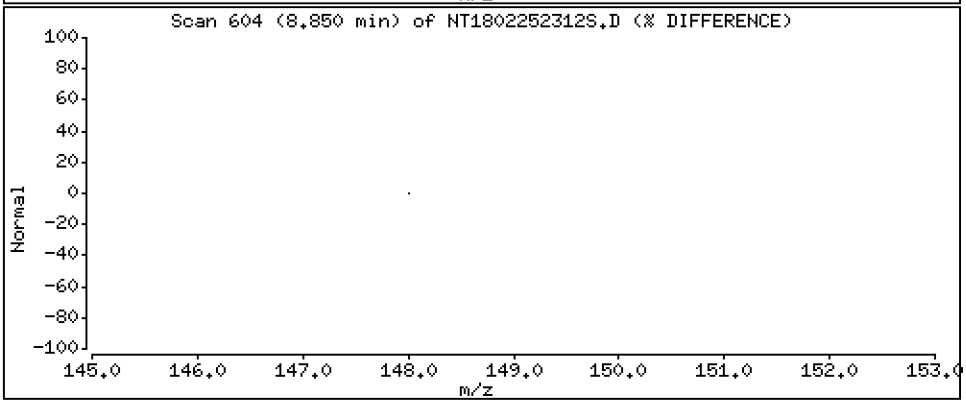












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

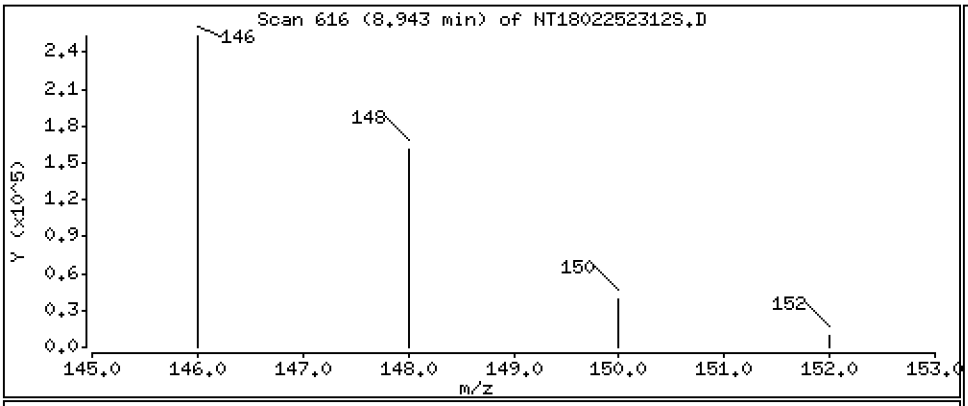
Operator: YZ

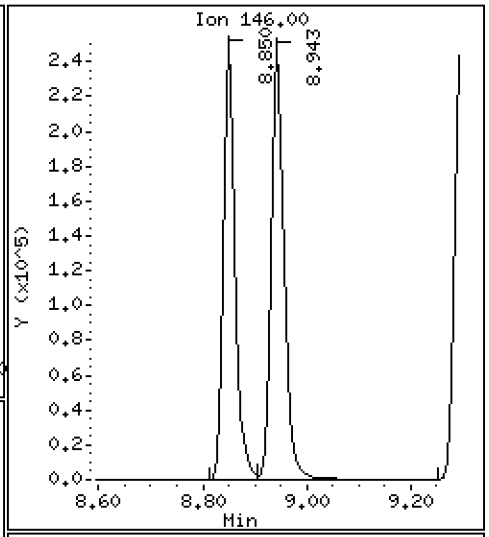
Column phase: ZB-5msi

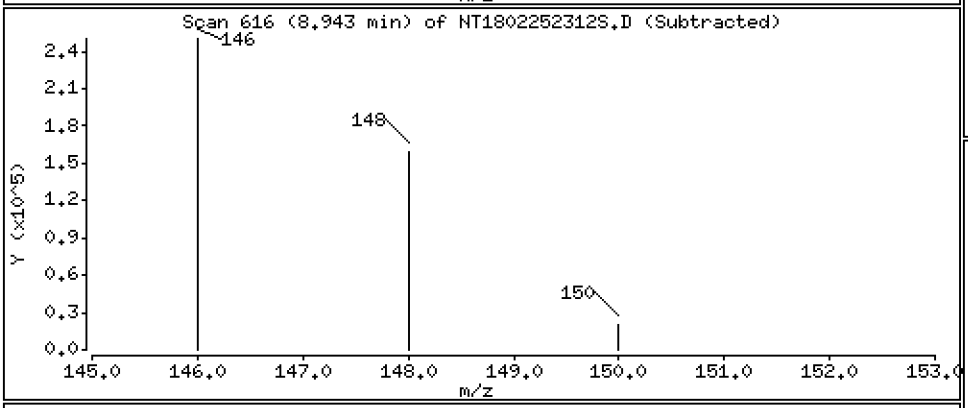
Column diameter: 0.25

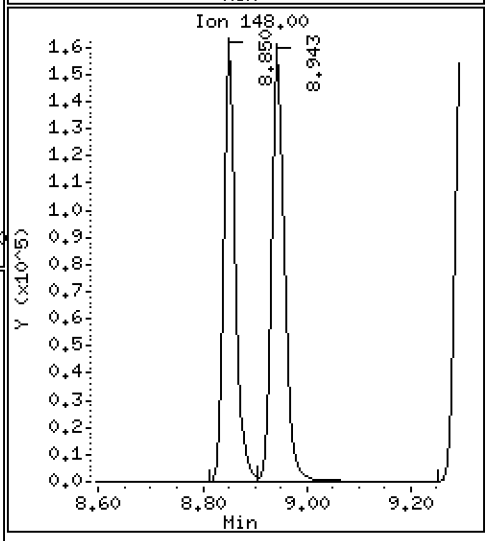
9 1,4-Dichlorobenzene

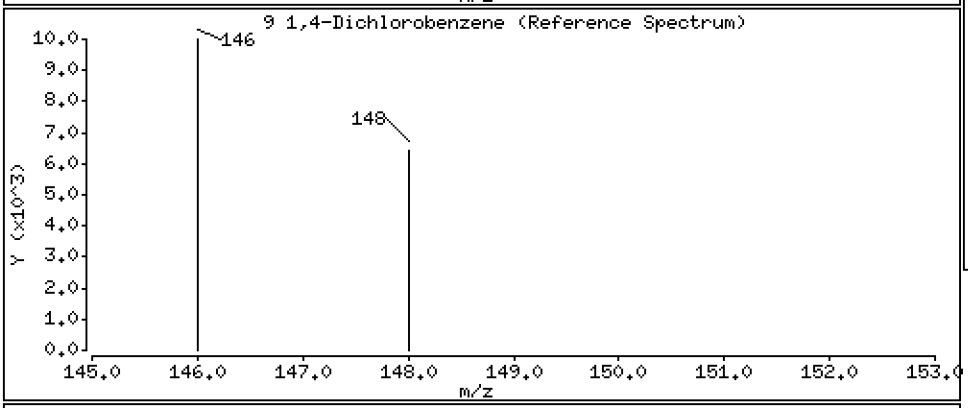
Concentration: 4.402 ug/mL

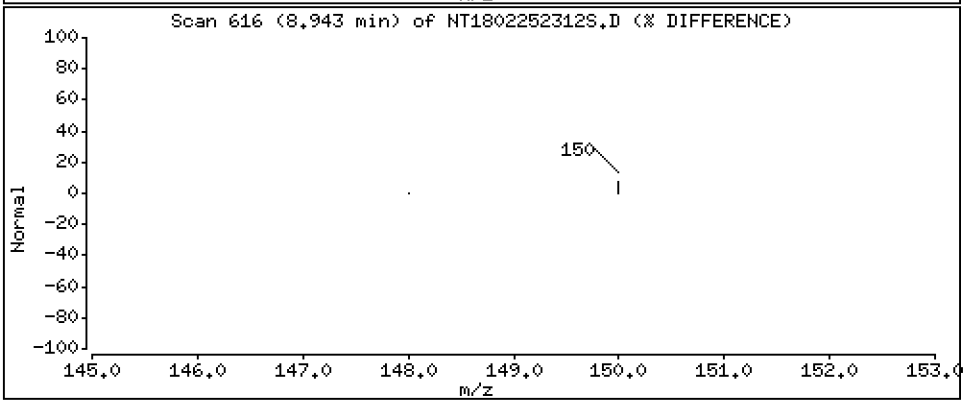












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

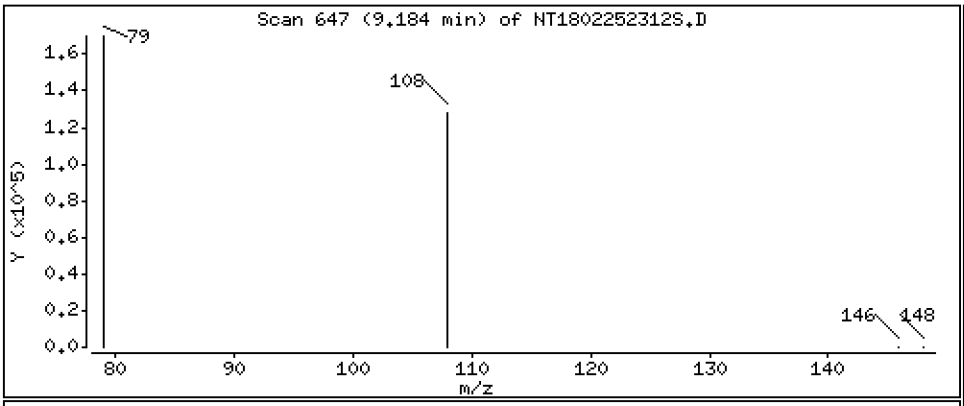
Operator: YZ

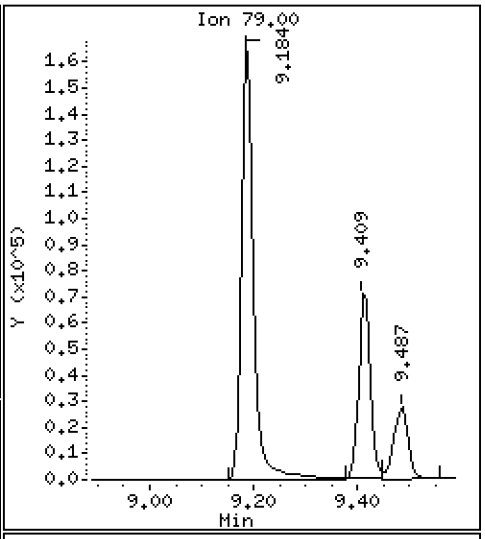
Column phase: ZB-5msi

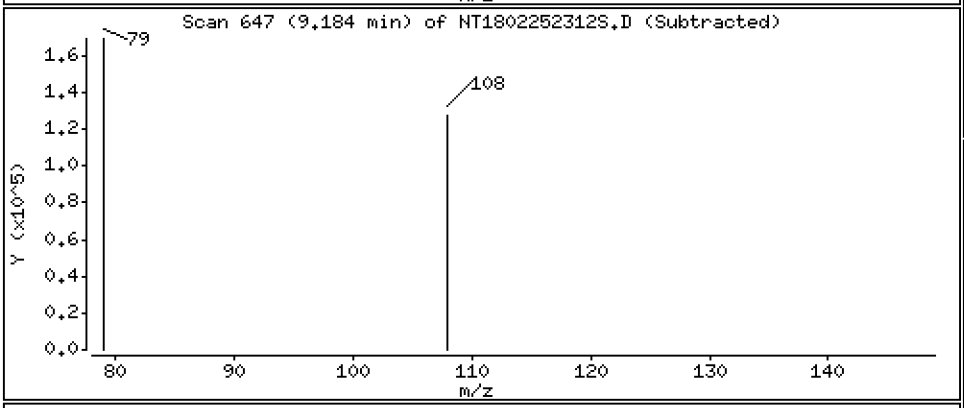
Column diameter: 0.25

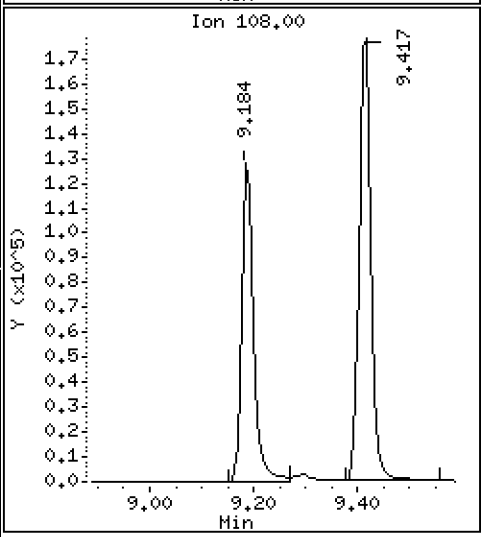
11 Benzyl alcohol

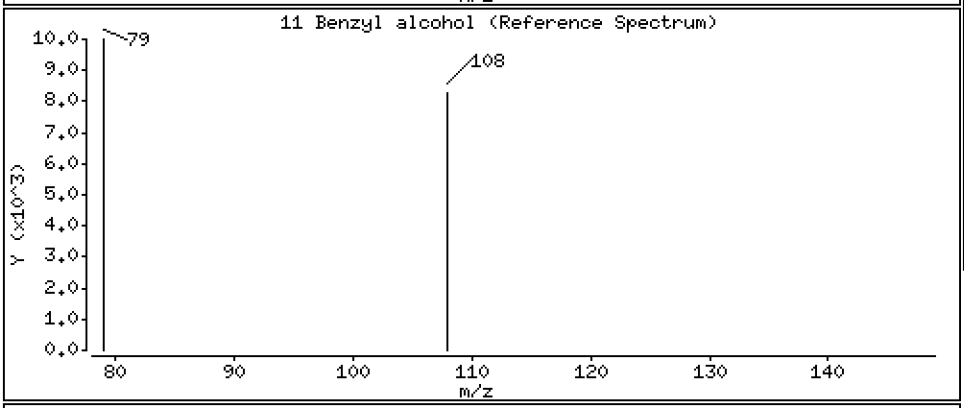
Concentration: 4.846 ug/mL

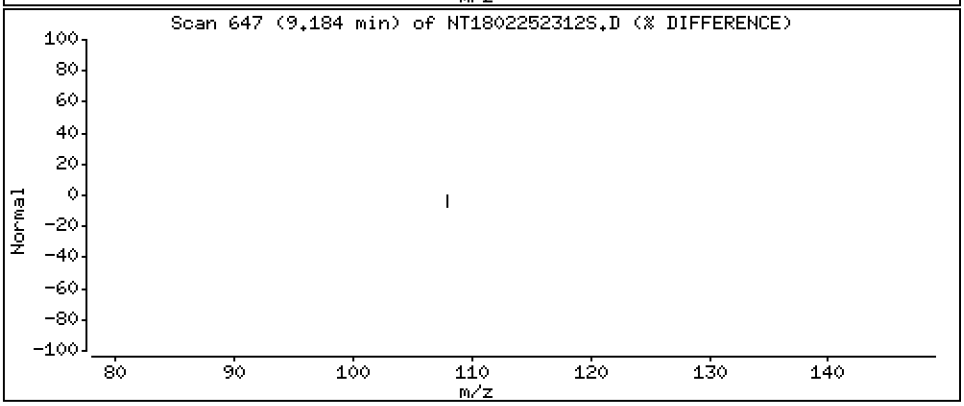












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

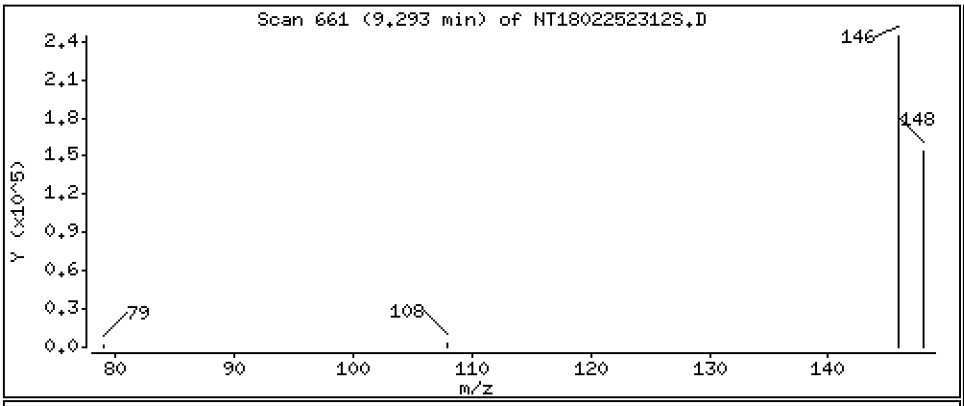
Operator: YZ

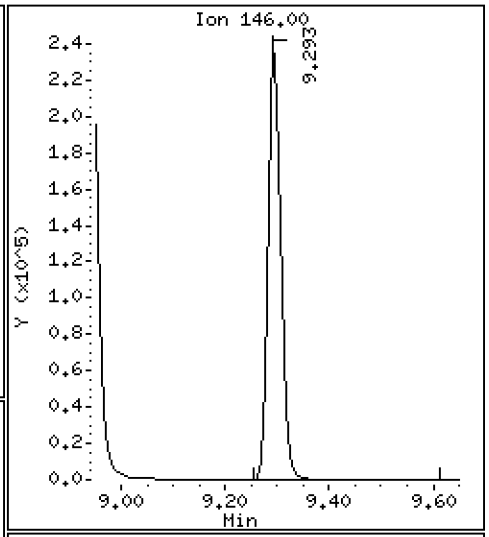
Column phase: ZB-5msi

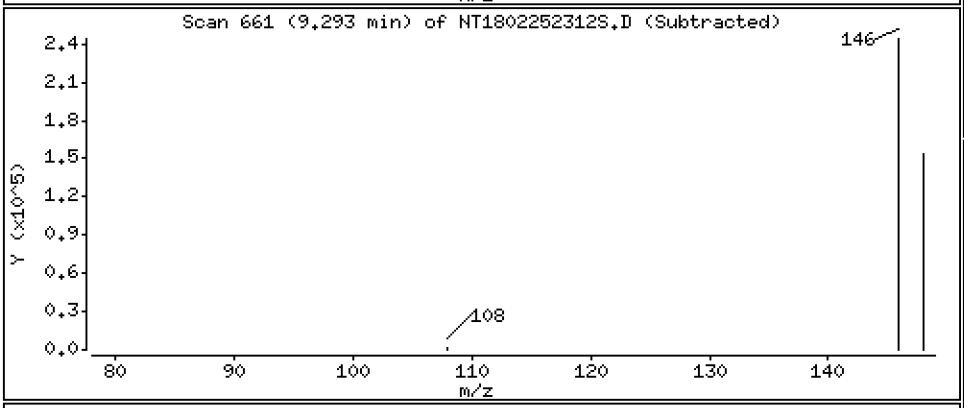
Column diameter: 0.25

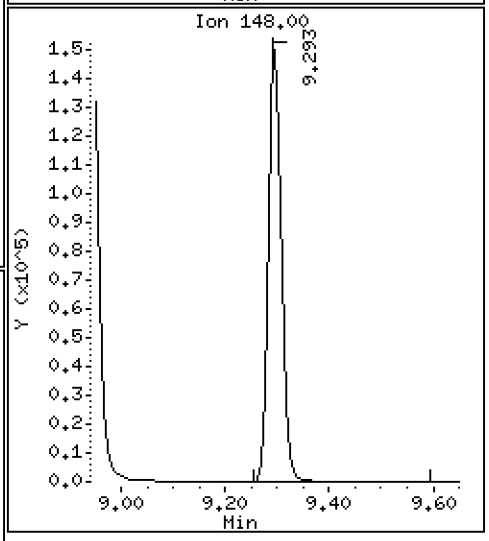
12 1,2-Dichlorobenzene

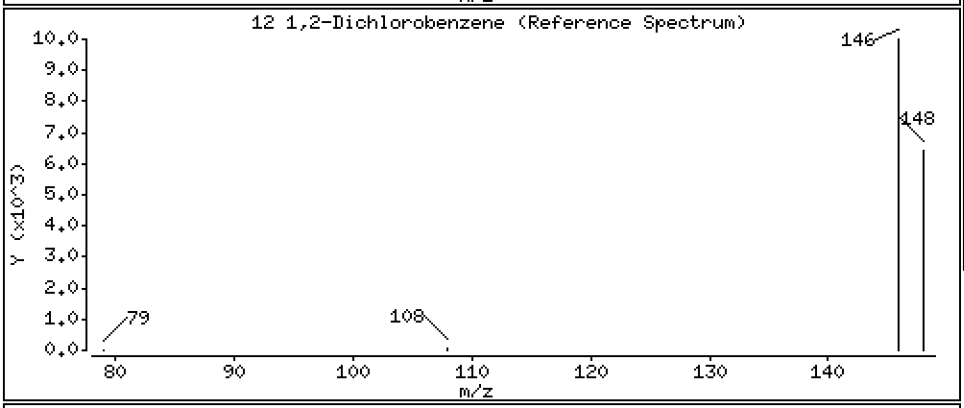
Concentration: 4.401 ug/mL

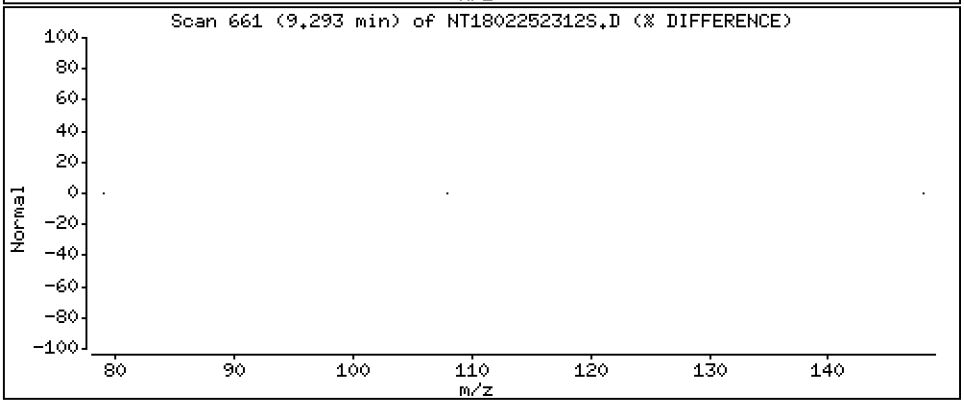












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

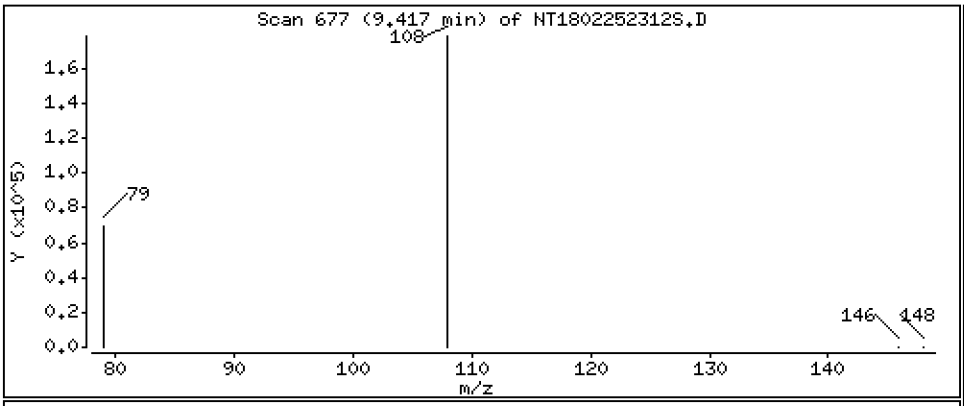
Operator: YZ

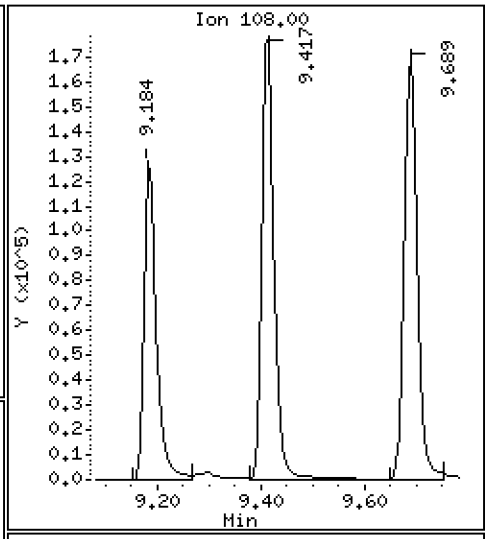
Column phase: ZB-5msi

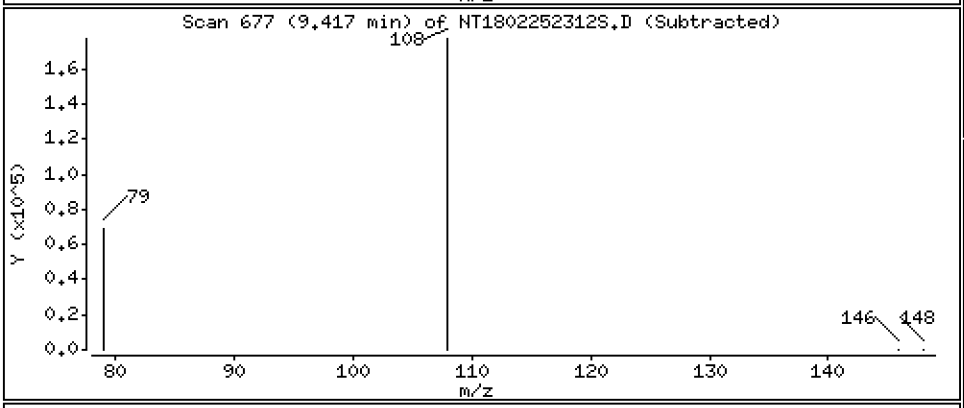
Column diameter: 0.25

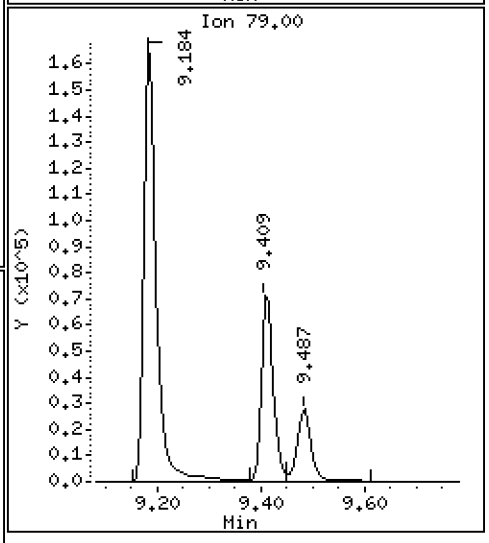
13 2-Methylphenol

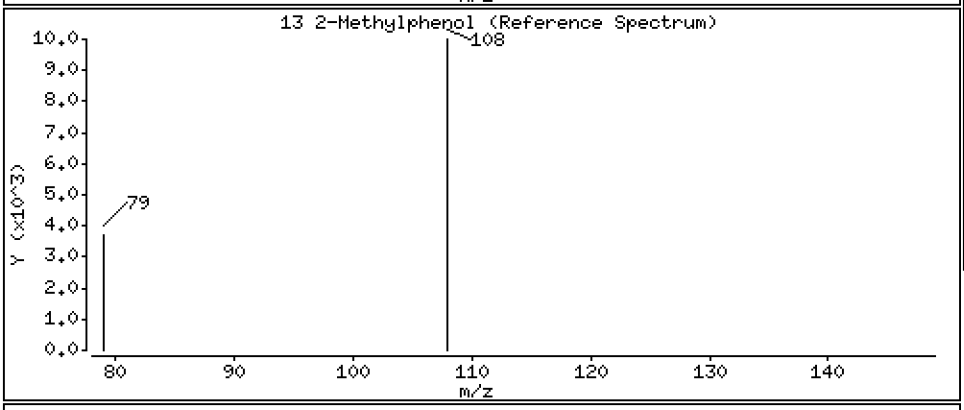
Concentration: 3.880 ug/mL

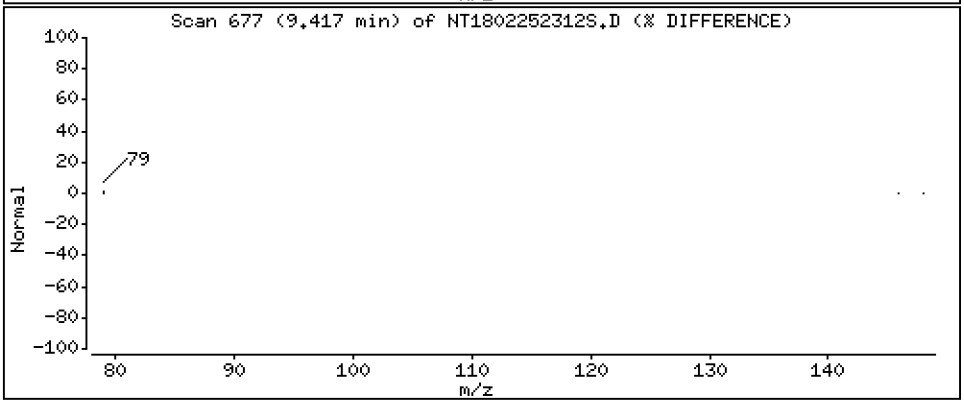












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

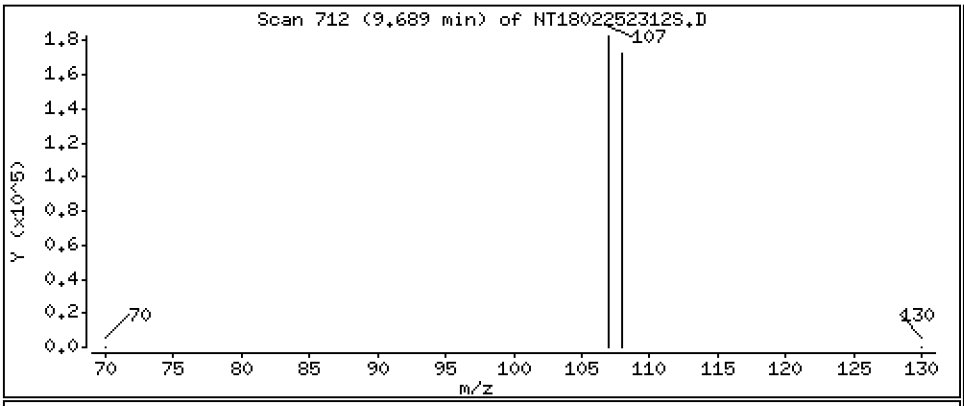
Operator: YZ

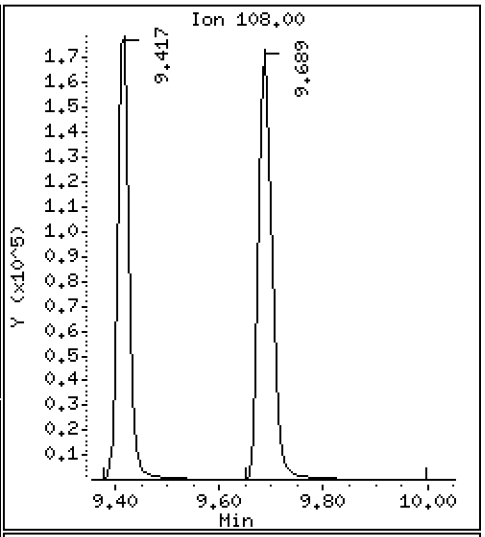
Column phase: ZB-5msi

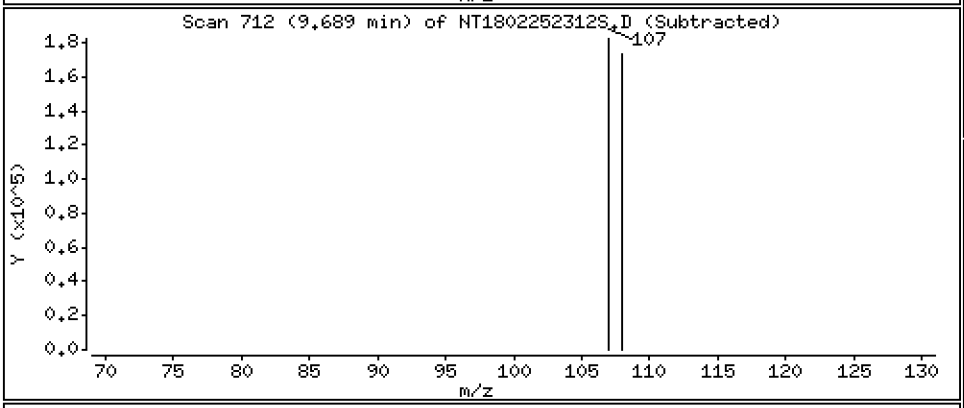
Column diameter: 0.25

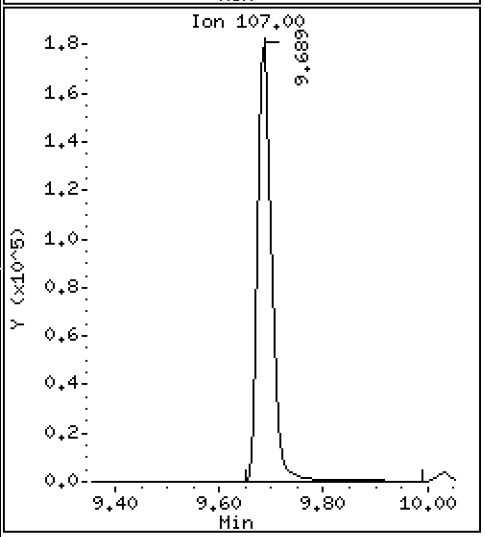
15 4-Methylphenol

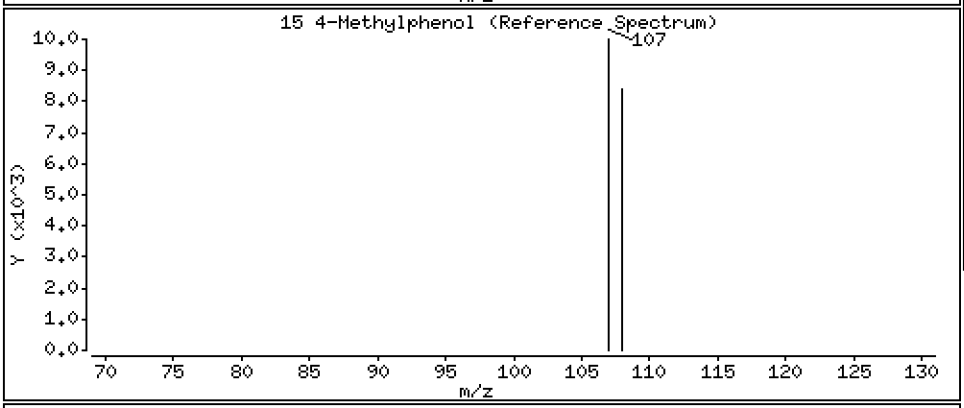
Concentration: 4.215 ug/mL

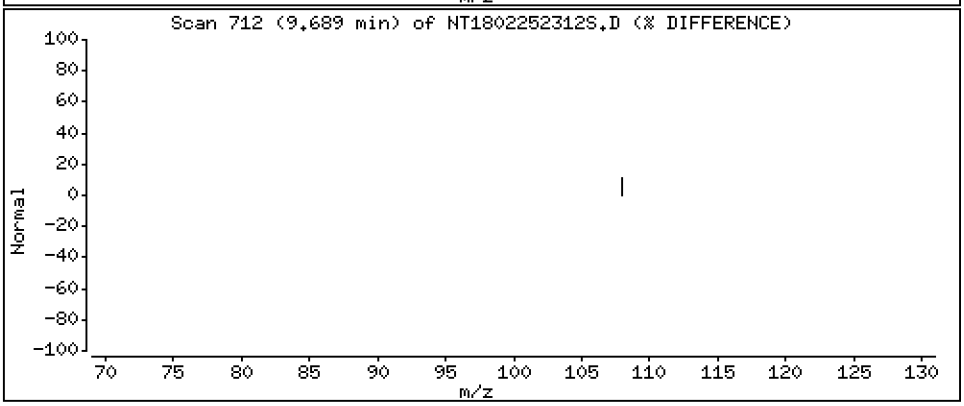












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

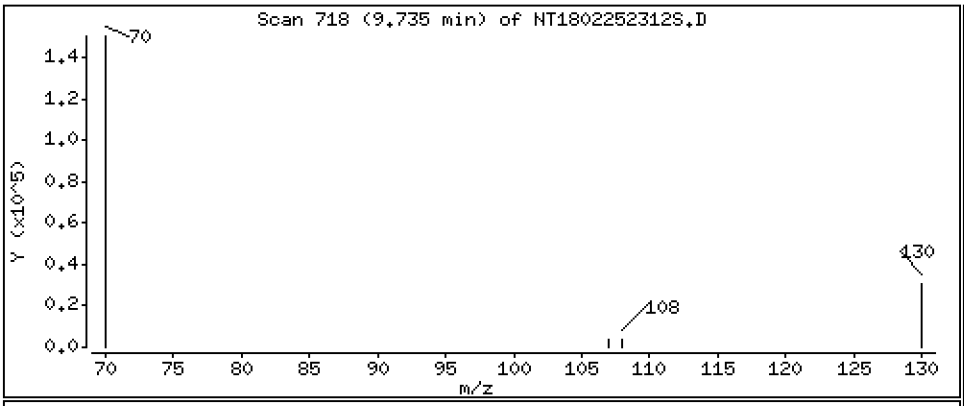
Operator: YZ

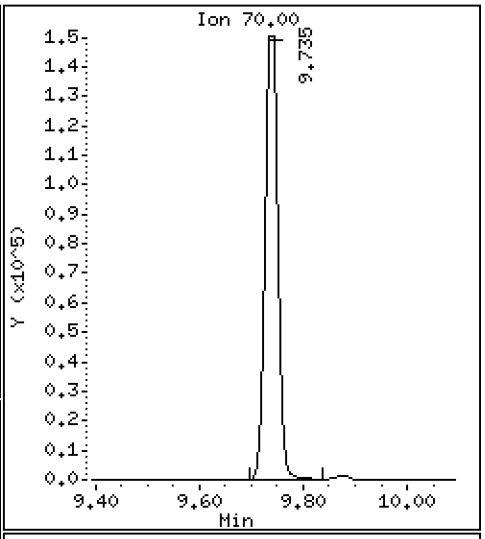
Column phase: ZB-5msi

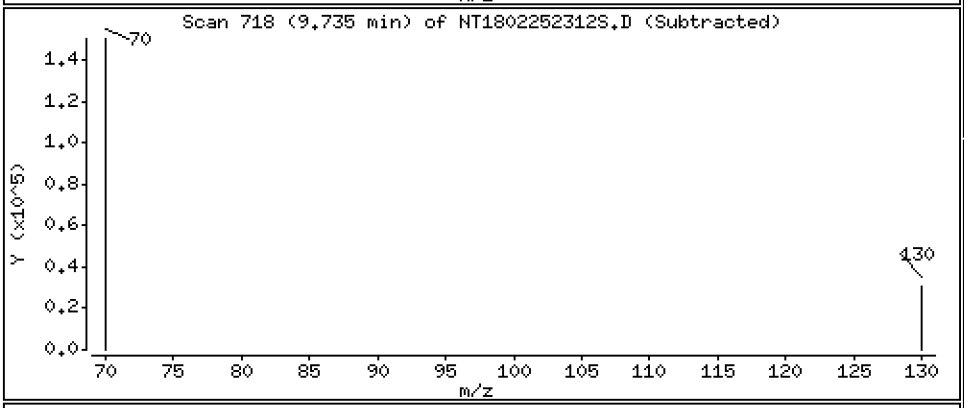
Column diameter: 0.25

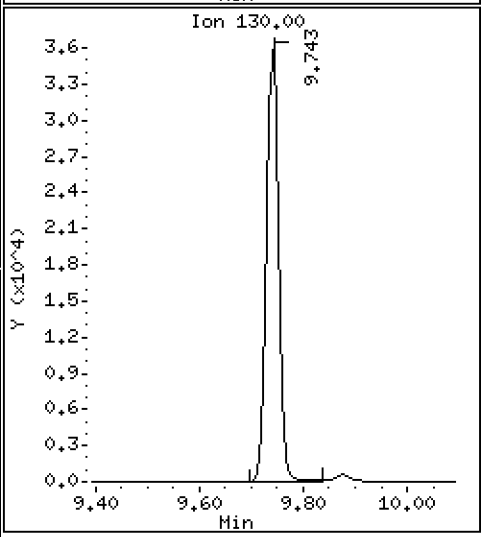
16 N-Nitroso-di-n-propylamine

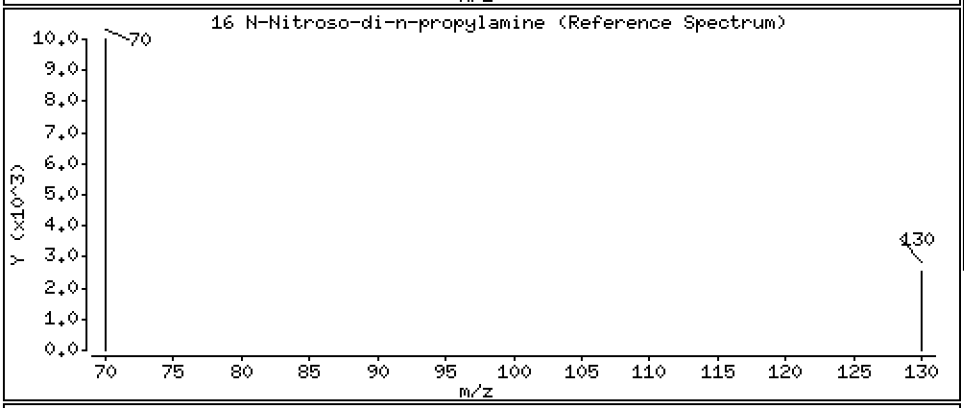
Concentration: 4.789 ug/mL

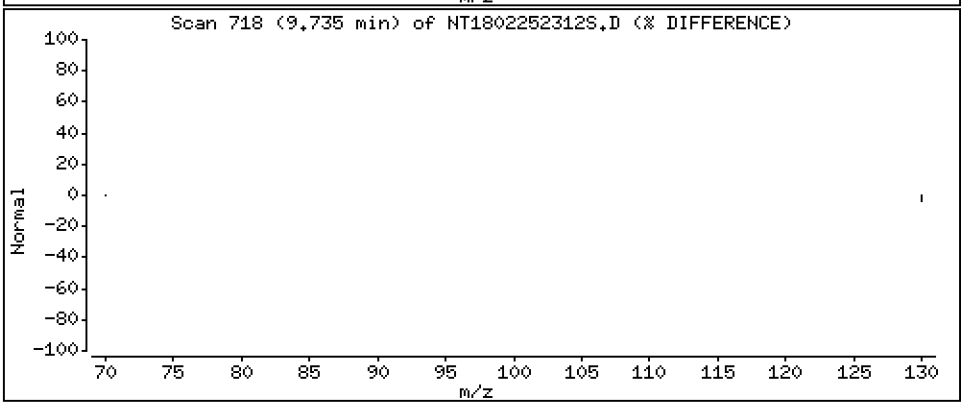












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

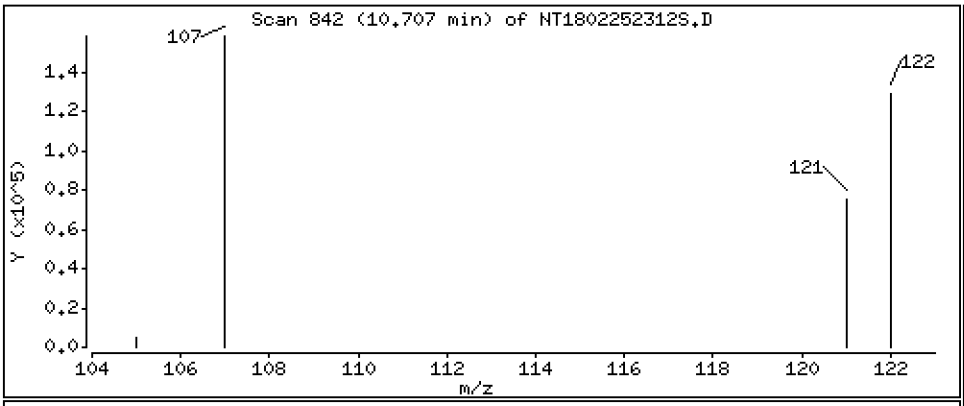
Operator: YZ

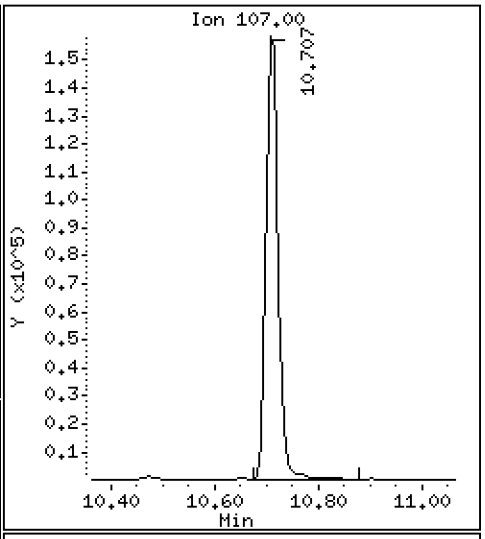
Column phase: ZB-5msi

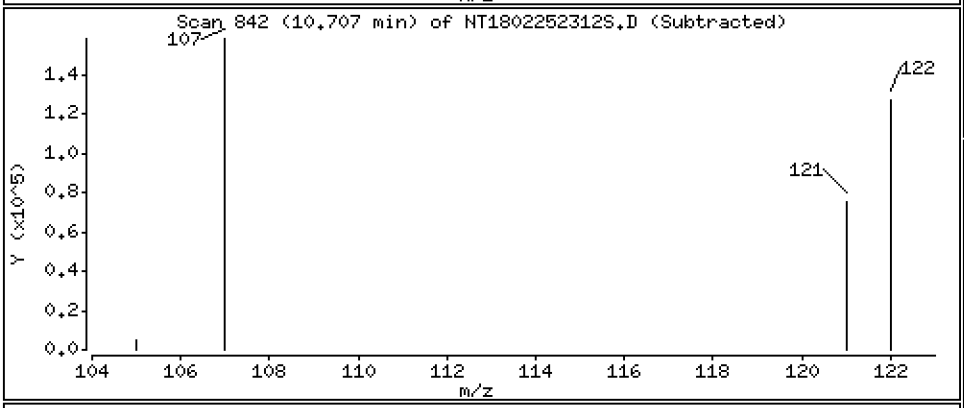
Column diameter: 0.25

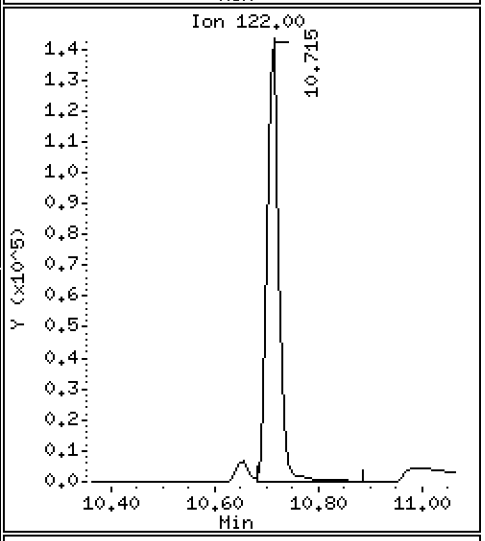
22 2,4-Dimethylphenol

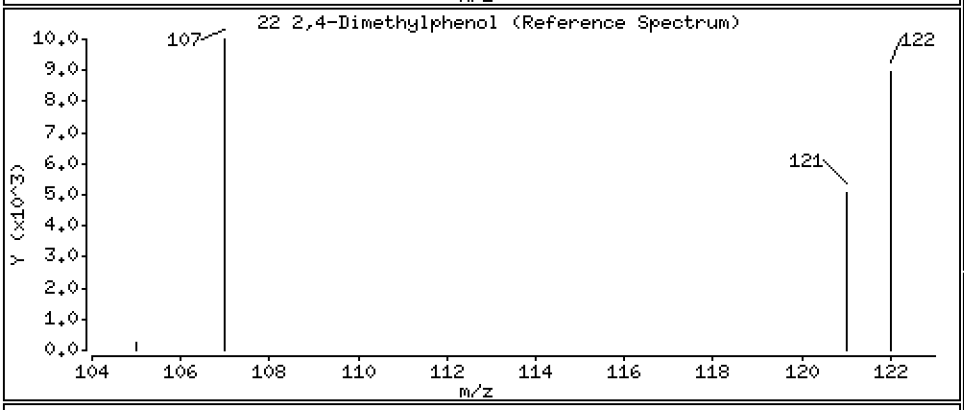
Concentration: 3.540 ug/mL

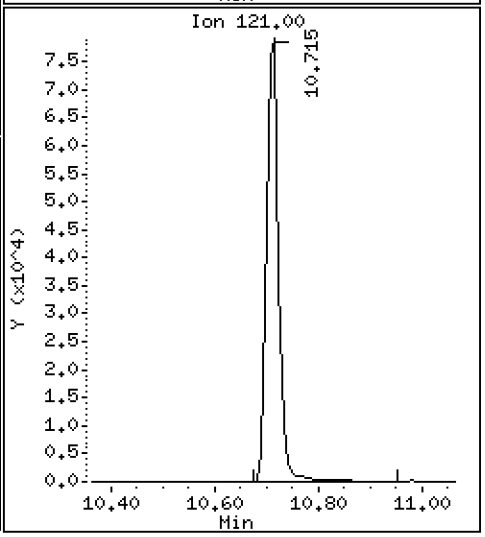


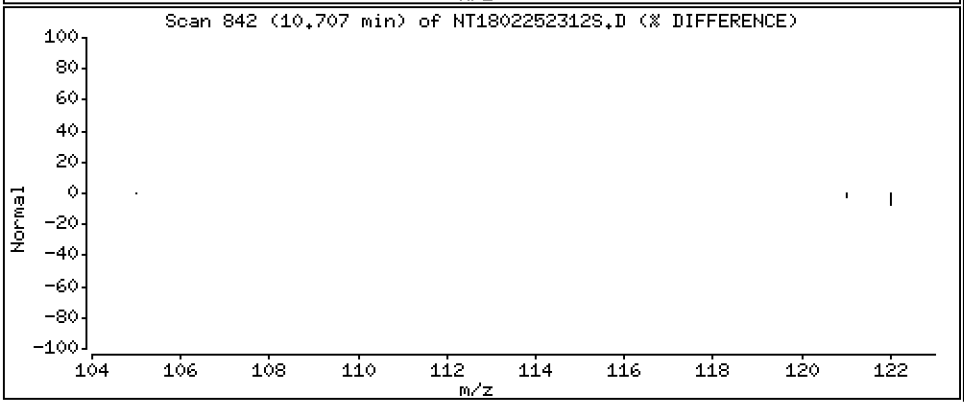












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

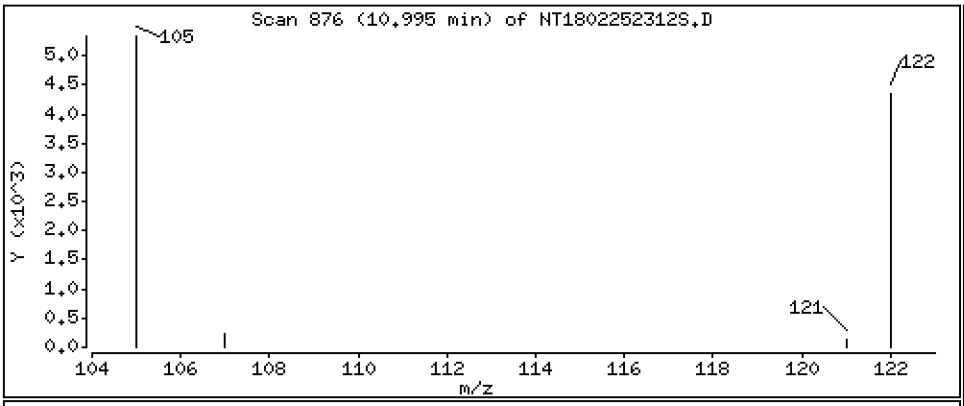
Operator: YZ

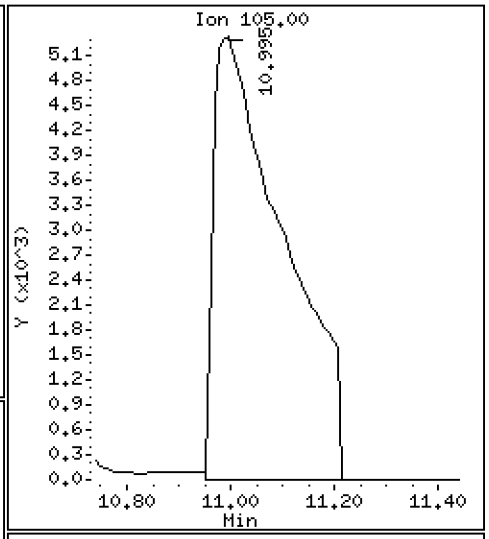
Column phase: ZB-5msi

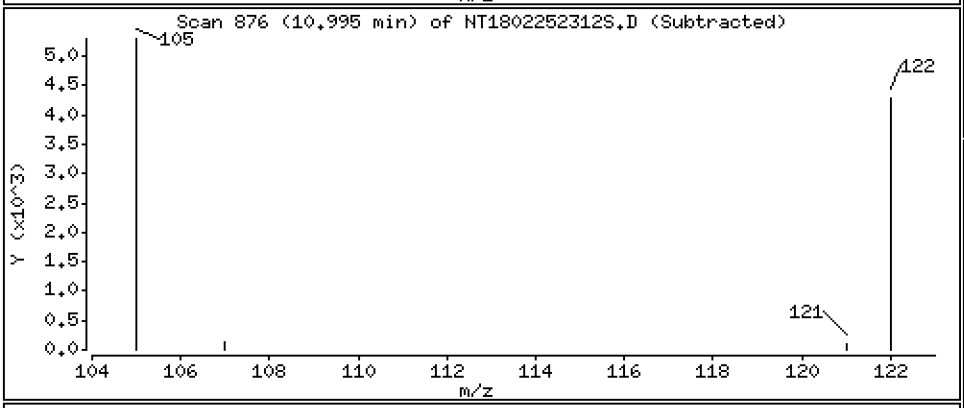
Column diameter: 0.25

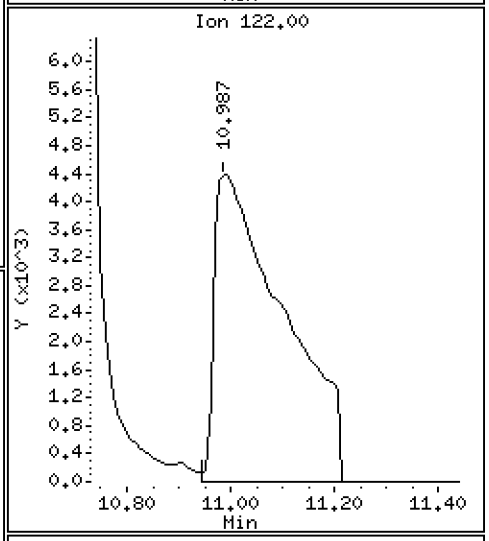
24 Benzoic acid

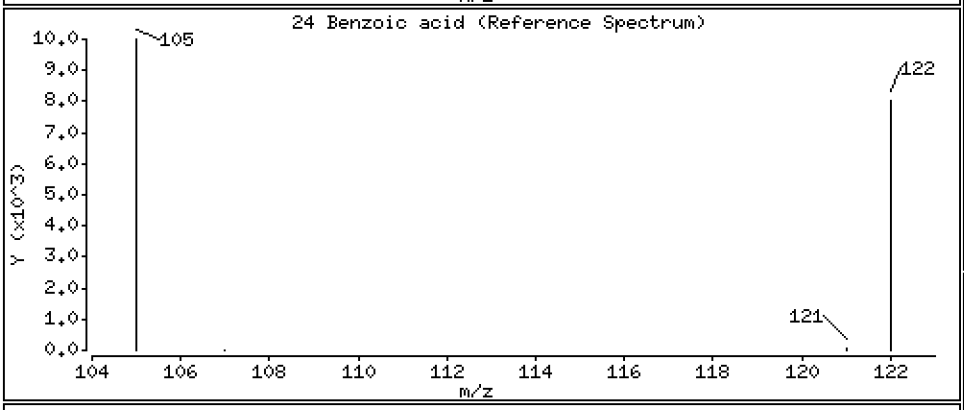
Concentration: 1.716 ug/mL

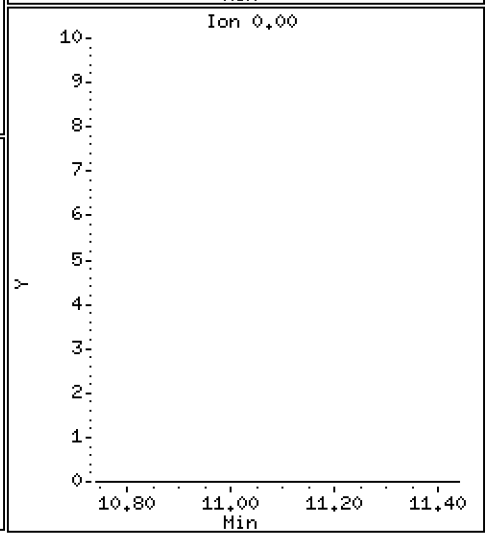


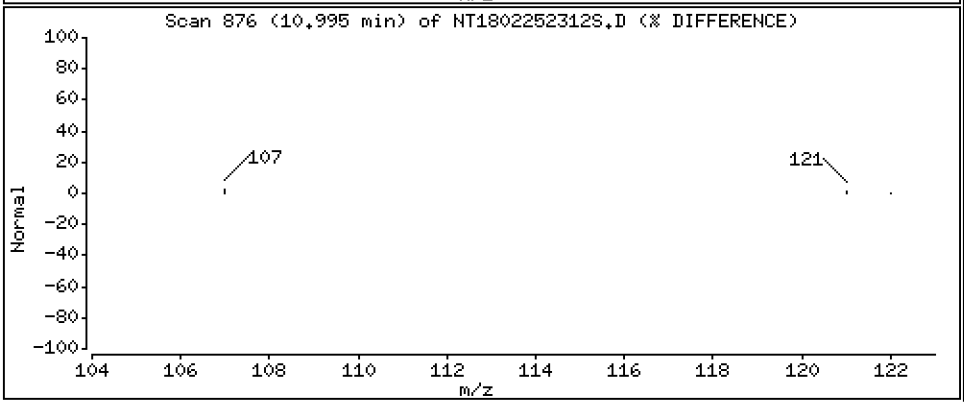












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

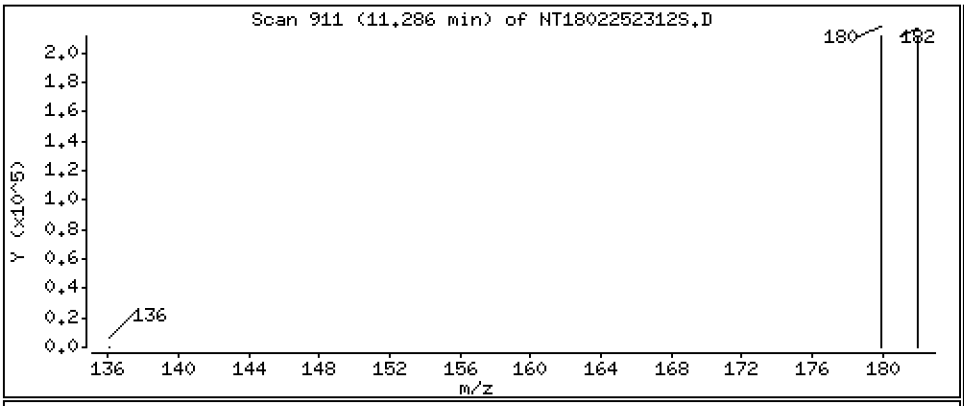
Operator: YZ

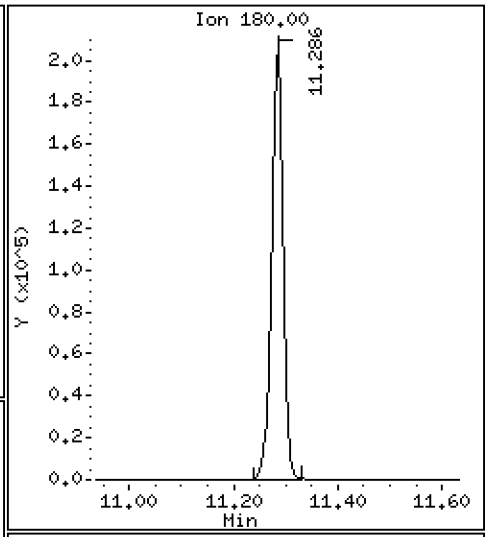
Column phase: ZB-5msi

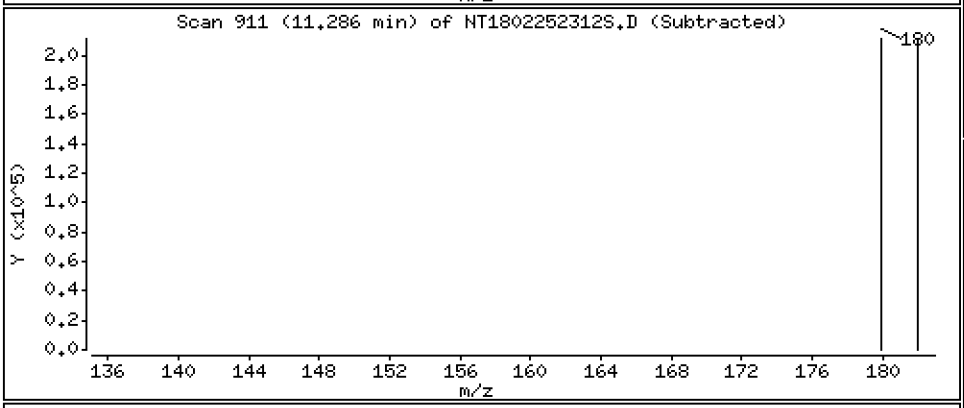
Column diameter: 0.25

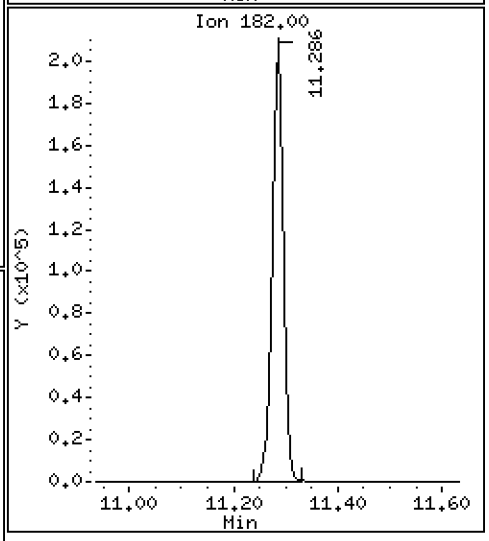
26 1,2,4-Trichlorobenzene

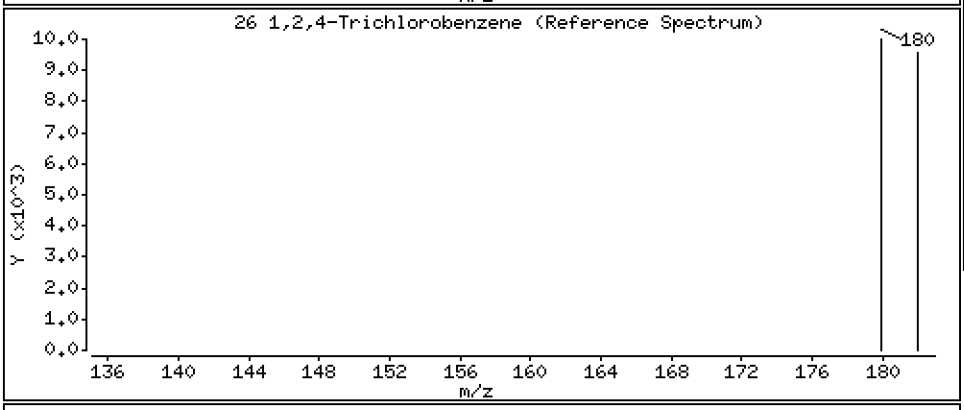
Concentration: 4.384 ug/mL

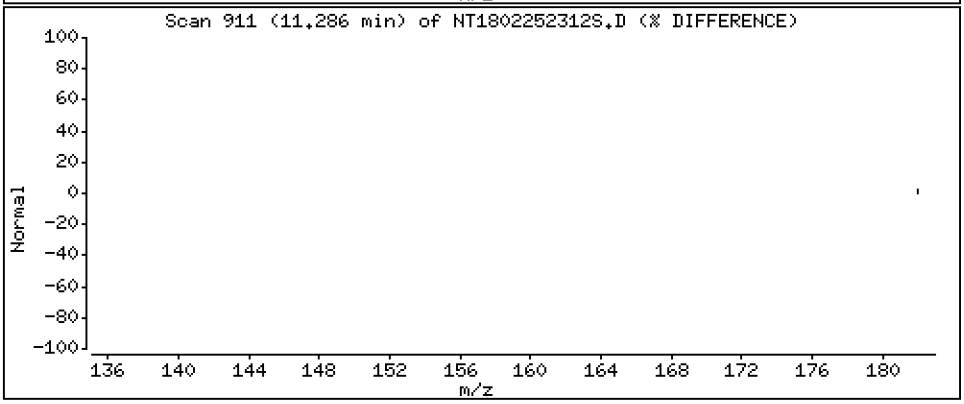












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

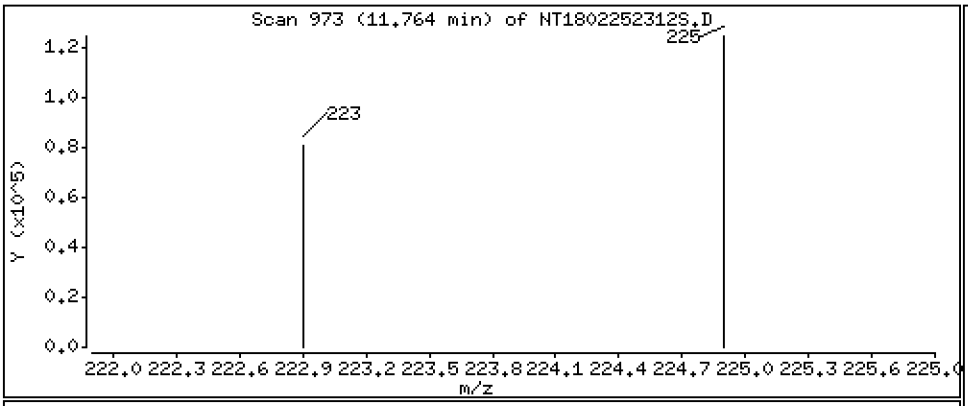
Operator: YZ

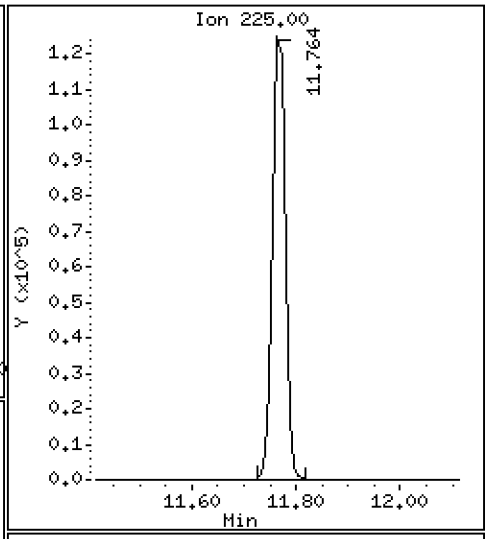
Column phase: ZB-5msi

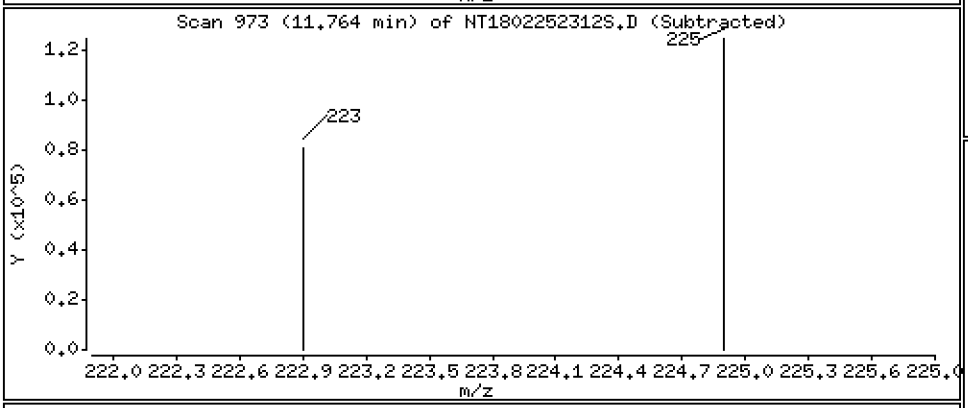
Column diameter: 0.25

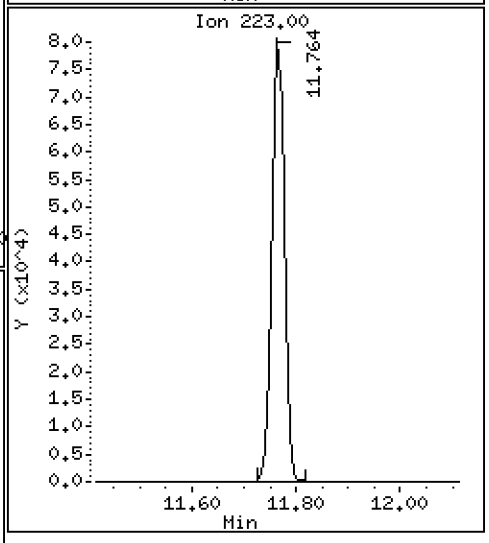
30 Hexachlorobutadiene

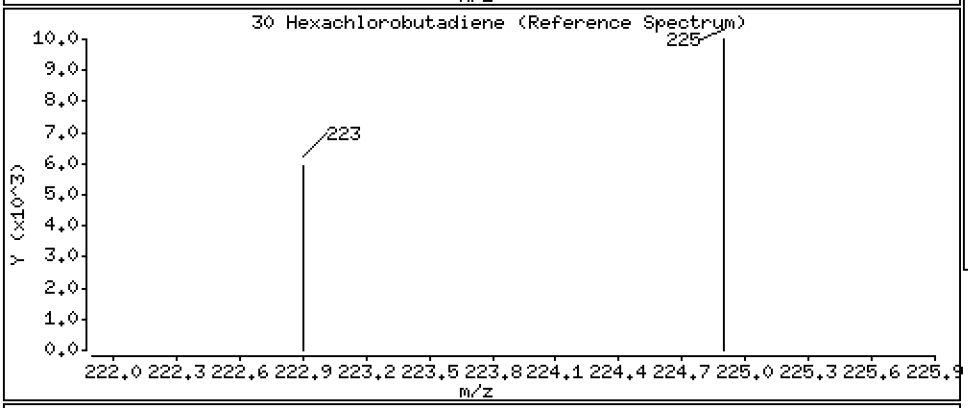
Concentration: 4.536 ug/mL

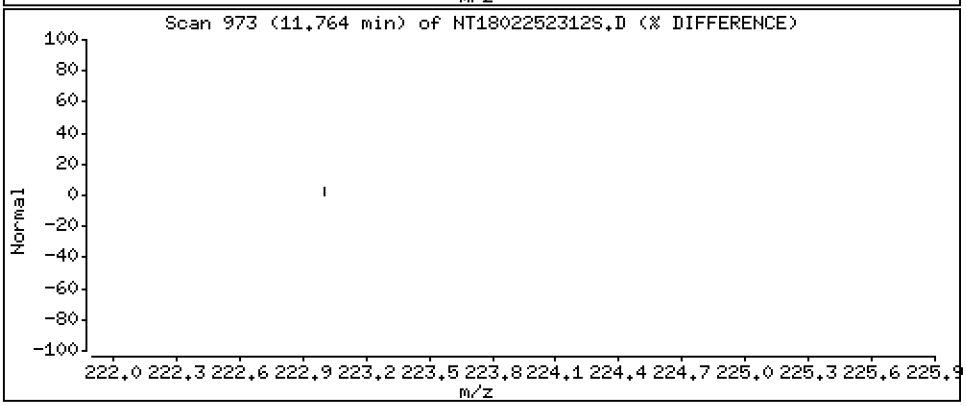












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT1802252312S.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

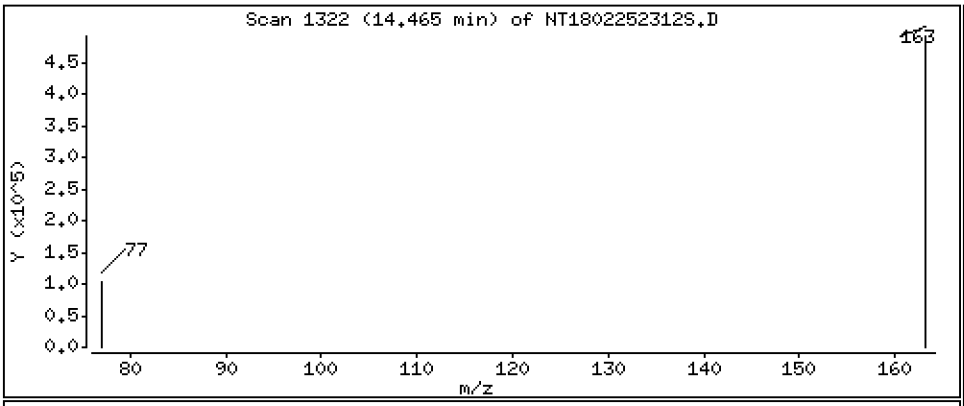
Operator: YZ

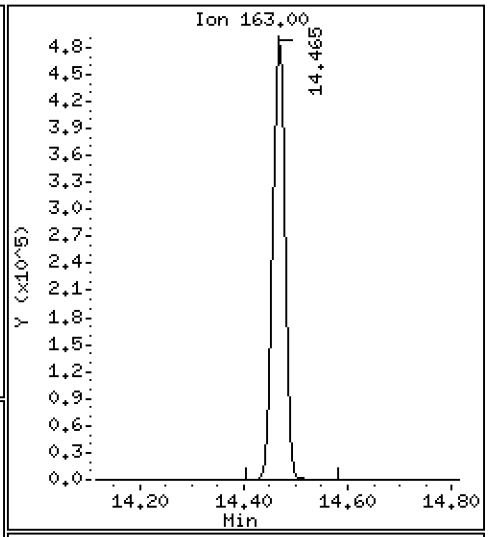
Column phase: ZB-5msi

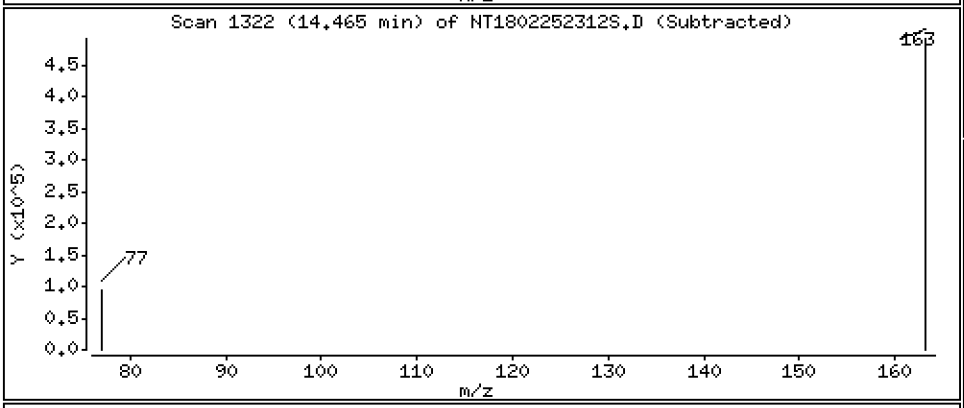
Column diameter: 0.25

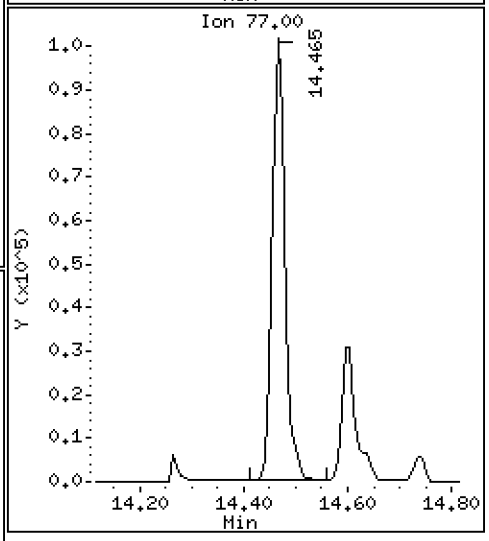
39 Dimethylphthalate

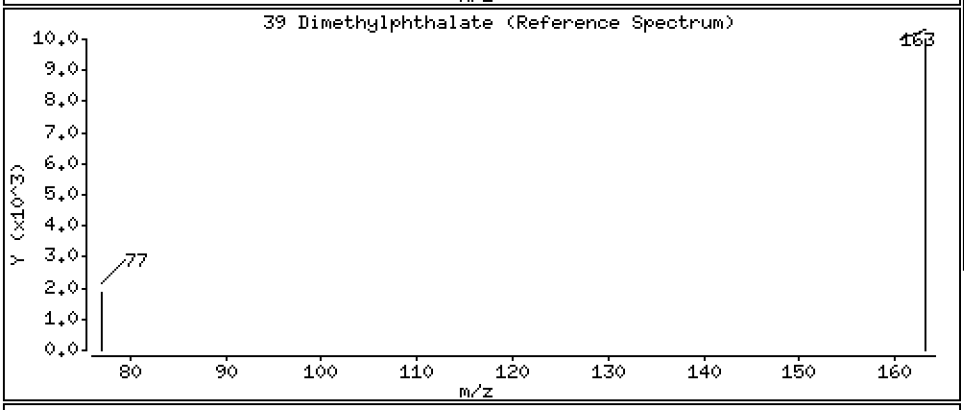
Concentration: 4.793 ug/mL

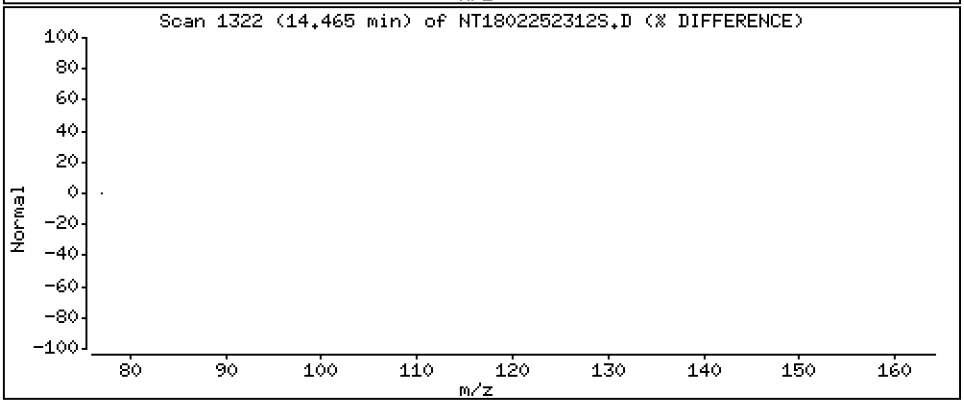












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT1802252312S.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

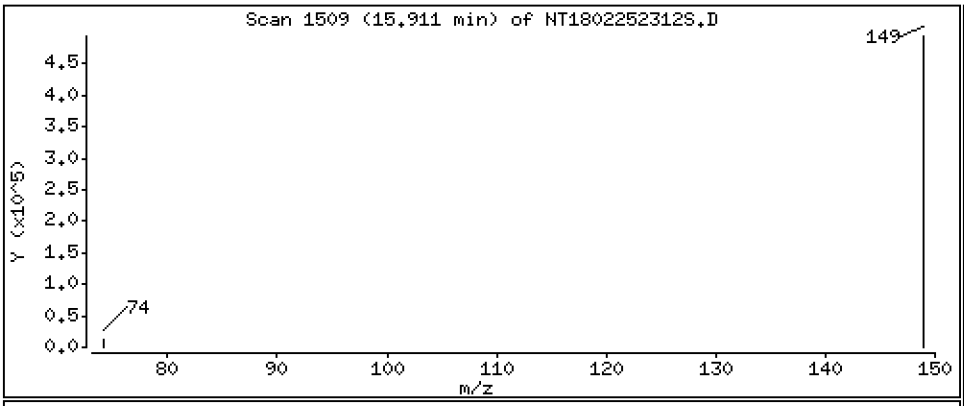
Operator: YZ

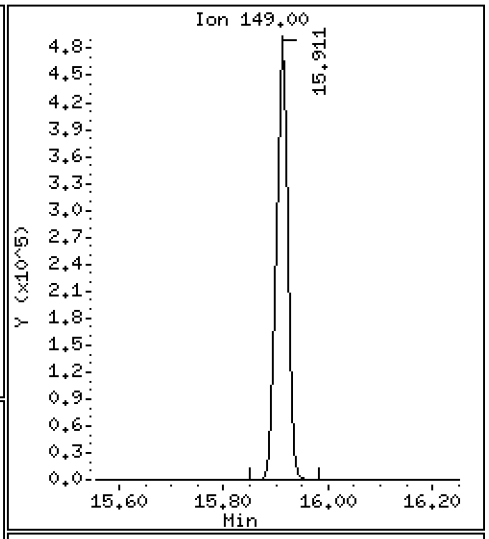
Column phase: ZB-5msi

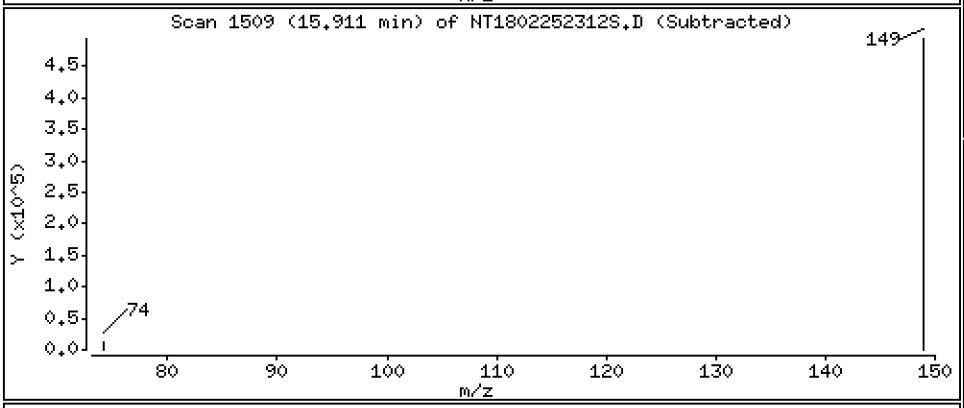
Column diameter: 0.25

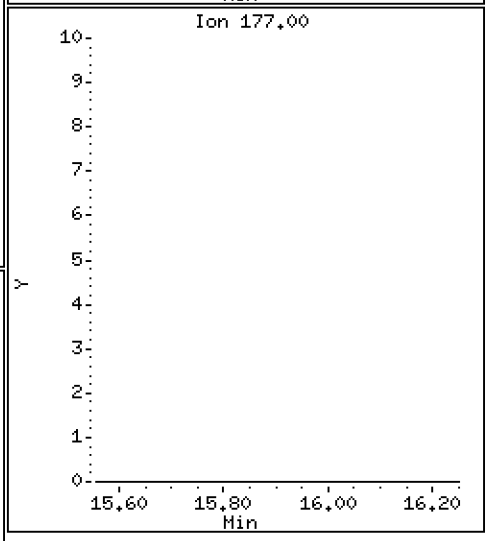
50 Diethylphthalate

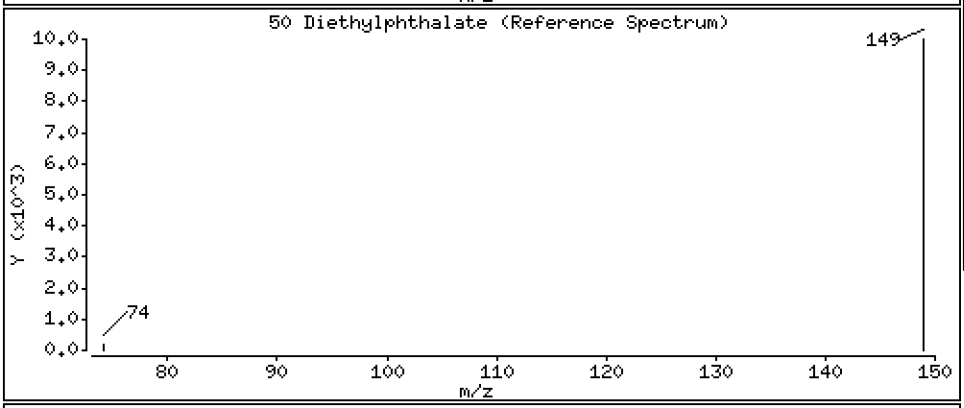
Concentration: 5.068 ug/mL

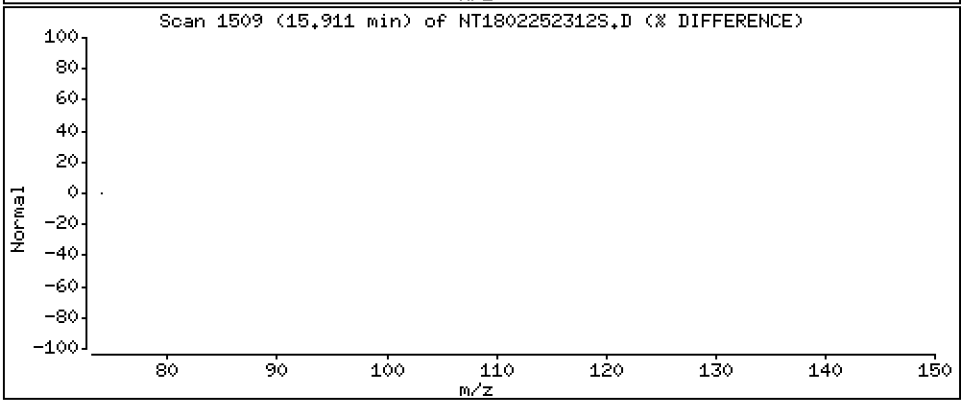












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

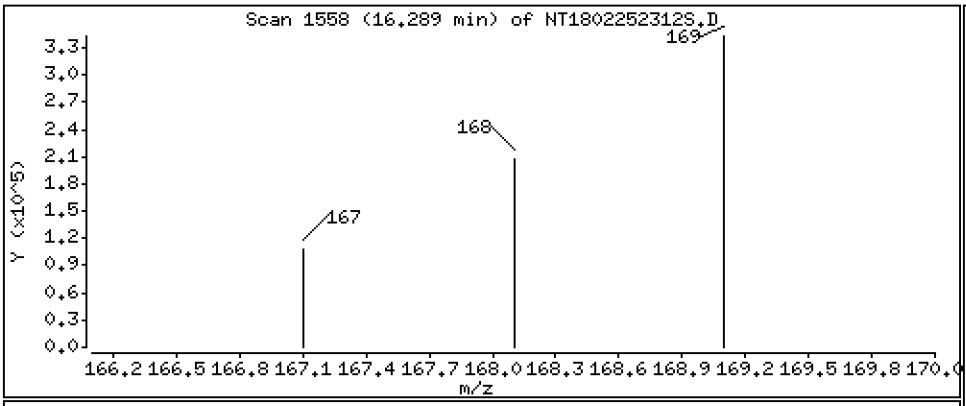
Operator: YZ

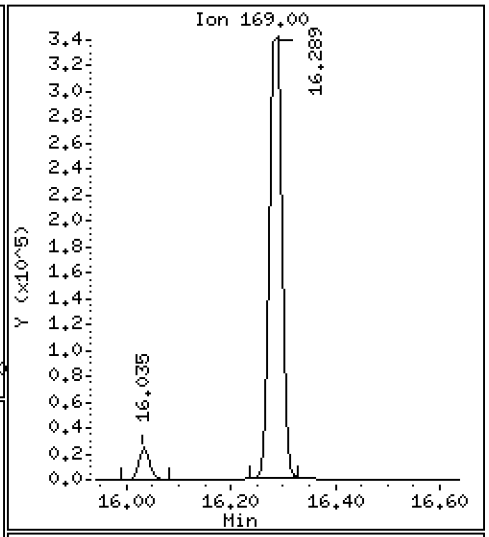
Column phase: ZB-5msi

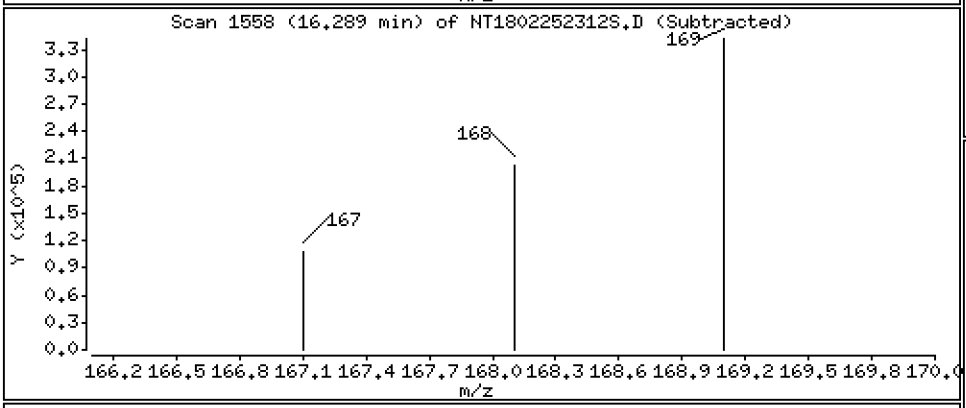
Column diameter: 0.25

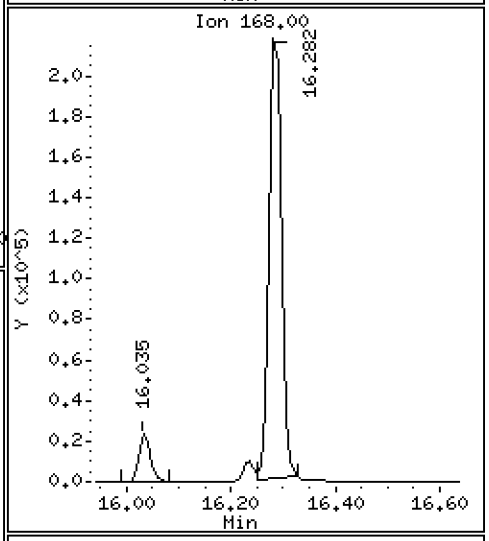
54 N-Nitrosodiphenylamine

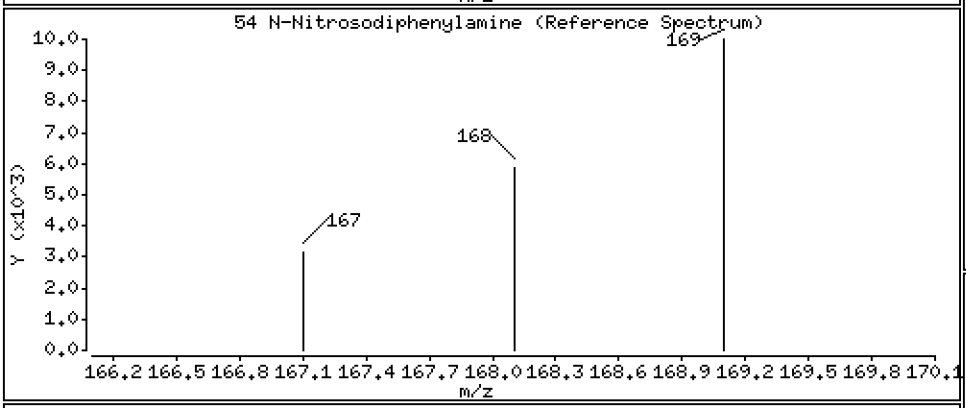
Concentration: 4.815 ug/mL

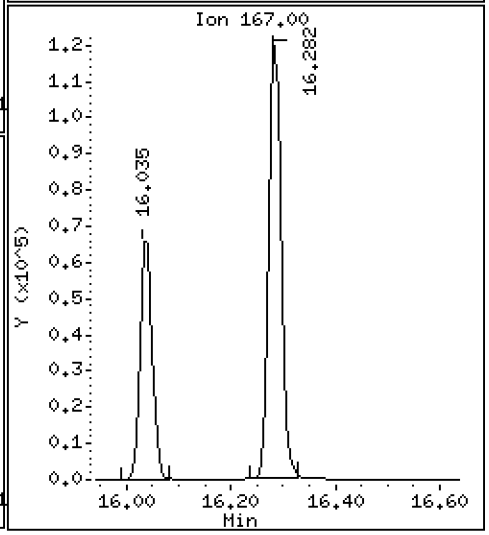


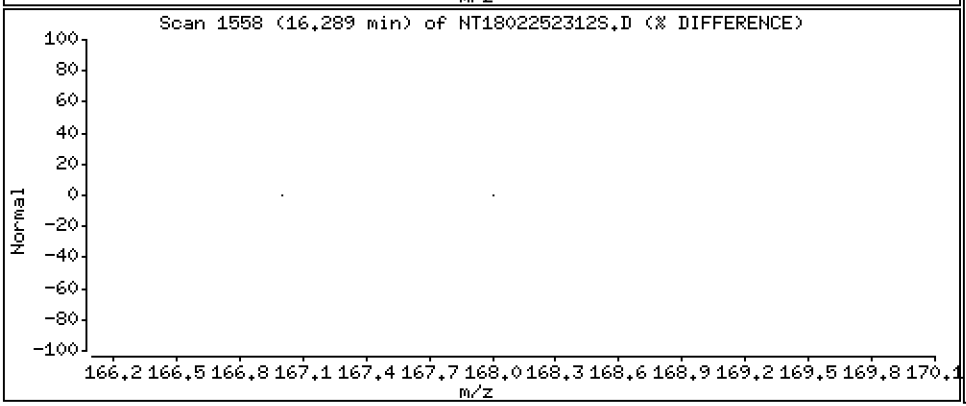












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT1802252312S.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

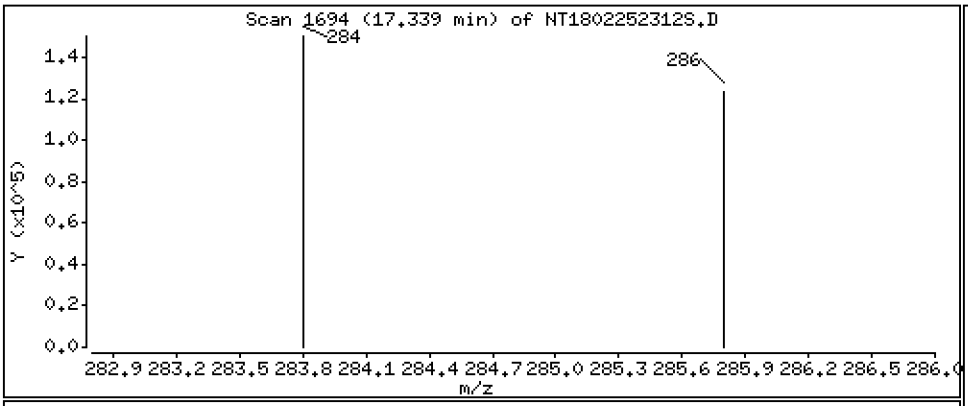
Operator: YZ

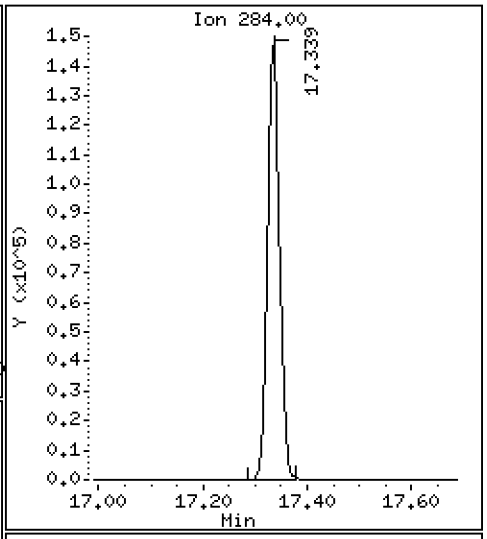
Column phase: ZB-5msi

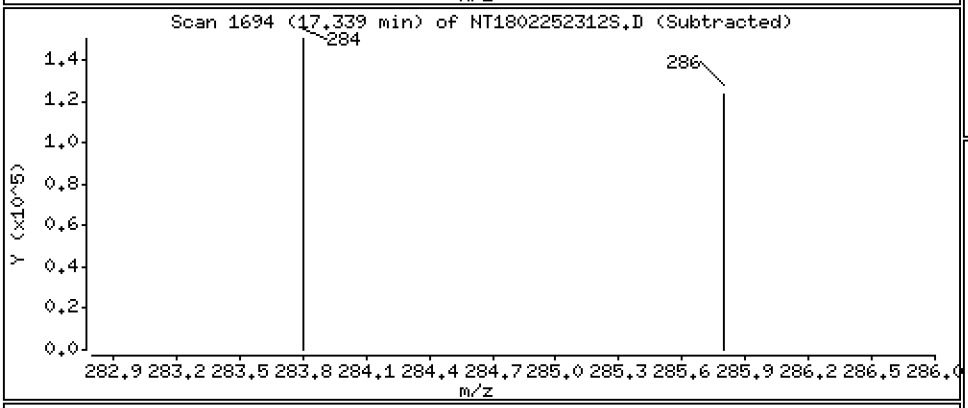
Column diameter: 0.25

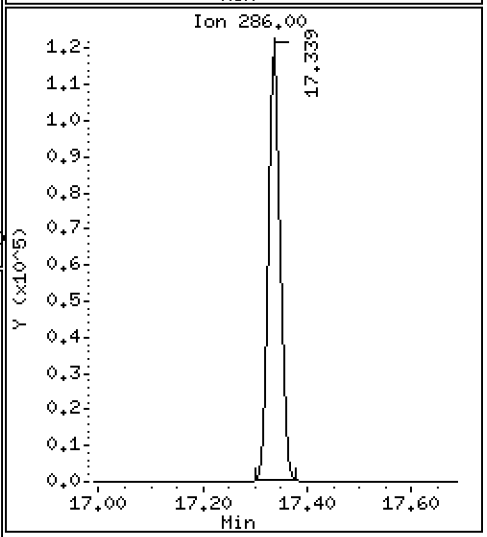
57 Hexachlorobenzene

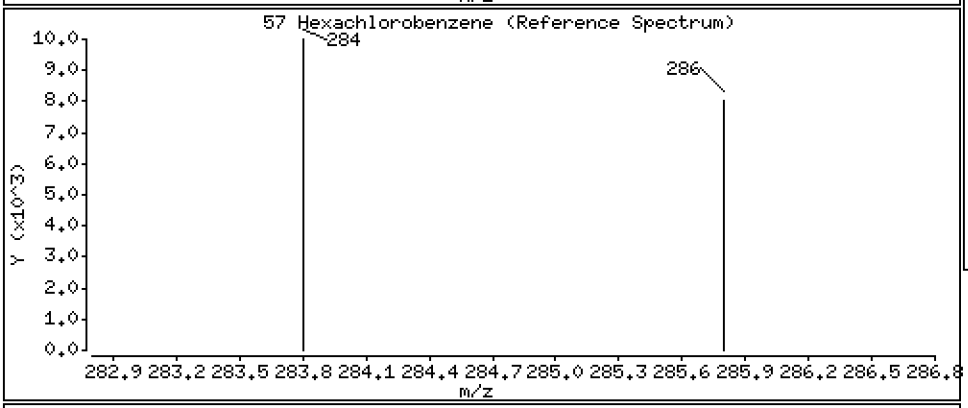
Concentration: 4.458 ug/mL

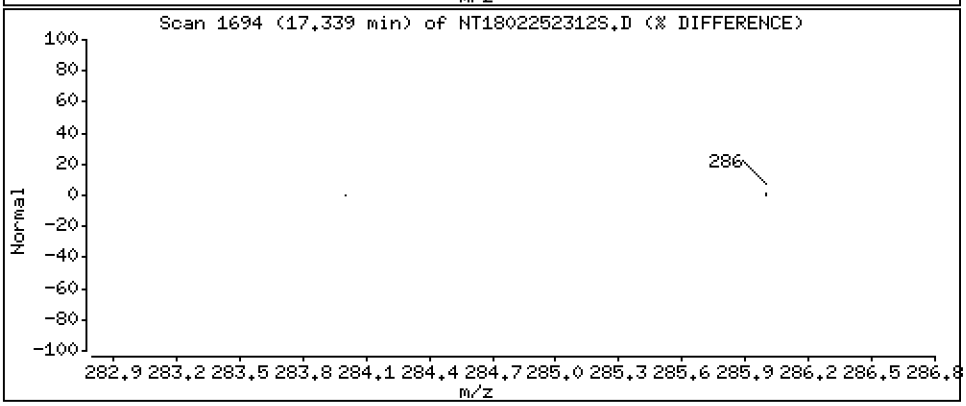












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT1802252312S.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

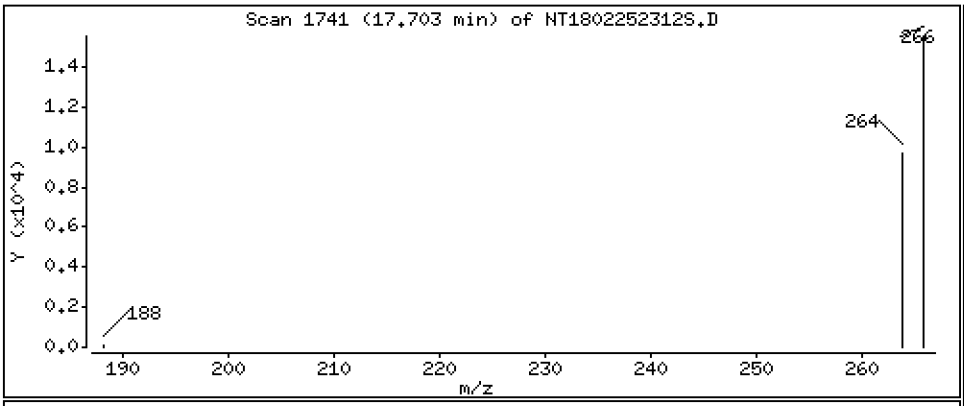
Operator: YZ

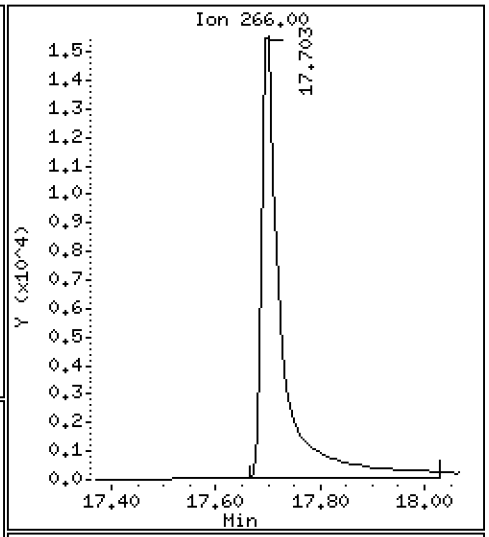
Column phase: ZB-5msi

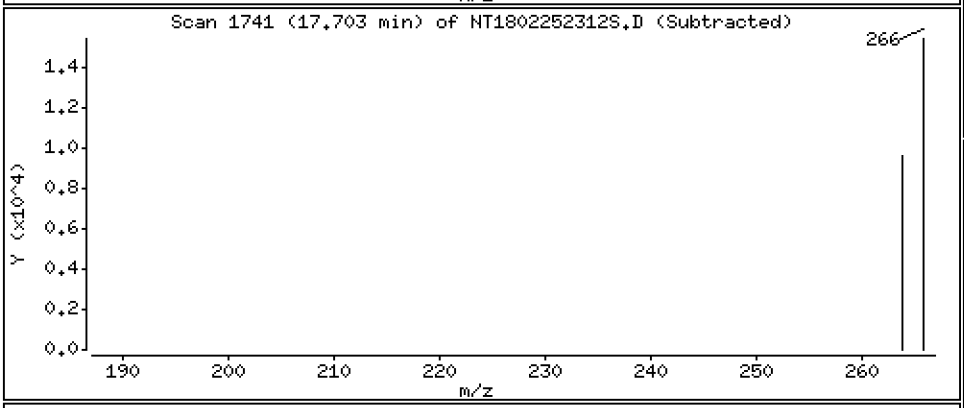
Column diameter: 0.25

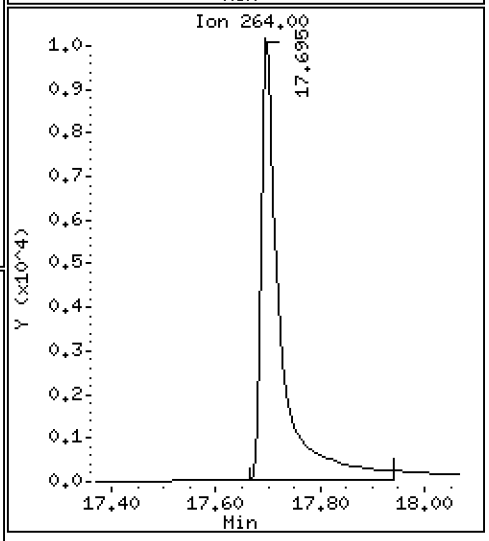
58 Pentachlorophenol

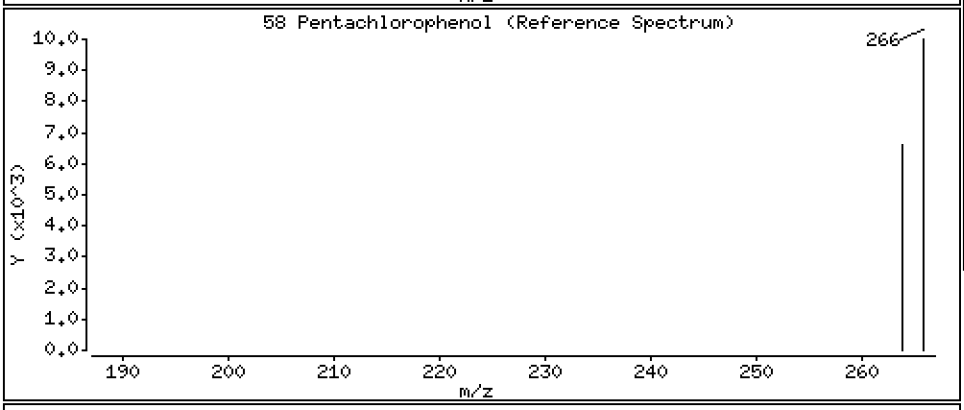
Concentration: 2.631 ug/mL

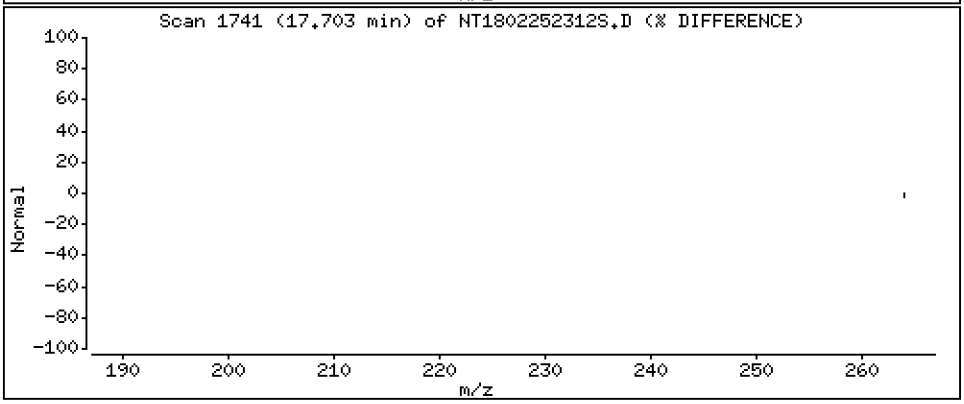












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

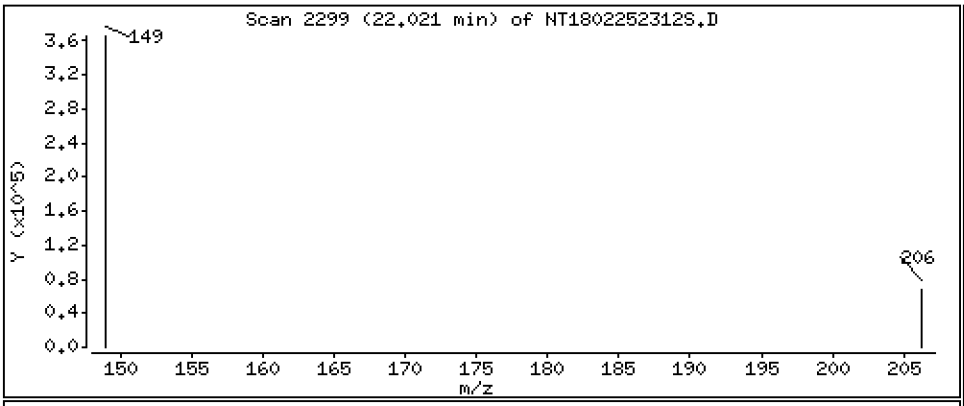
Operator: YZ

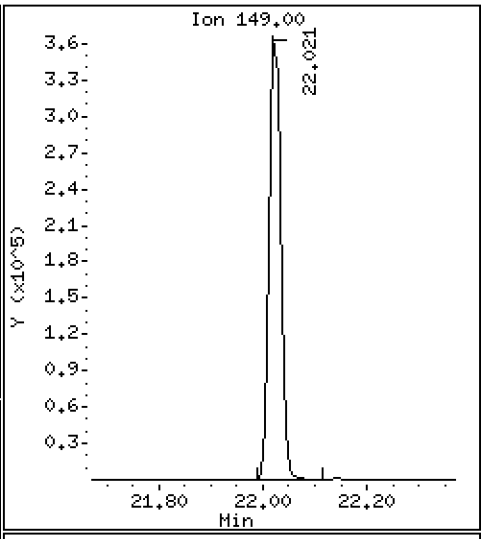
Column phase: ZB-5msi

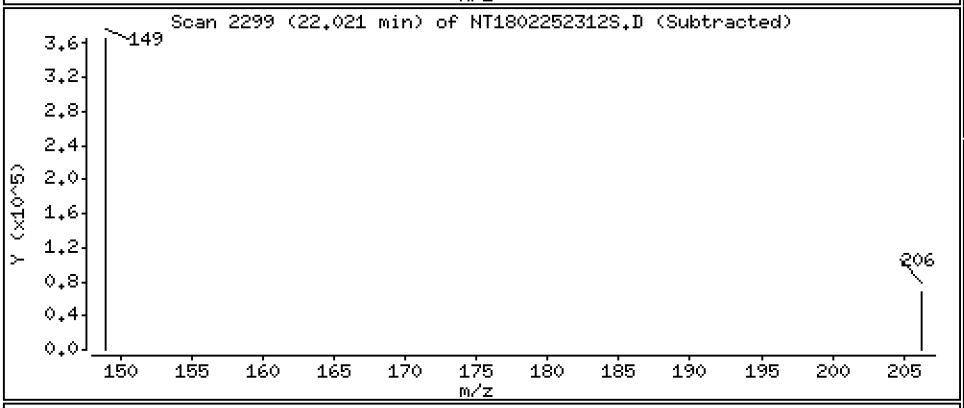
Column diameter: 0.25

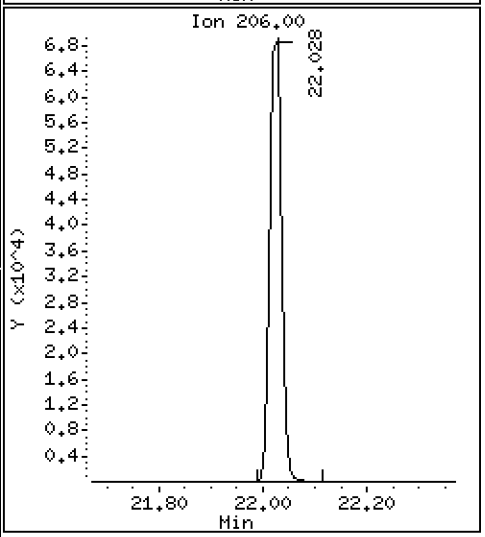
67 Butylbenzylphthalate

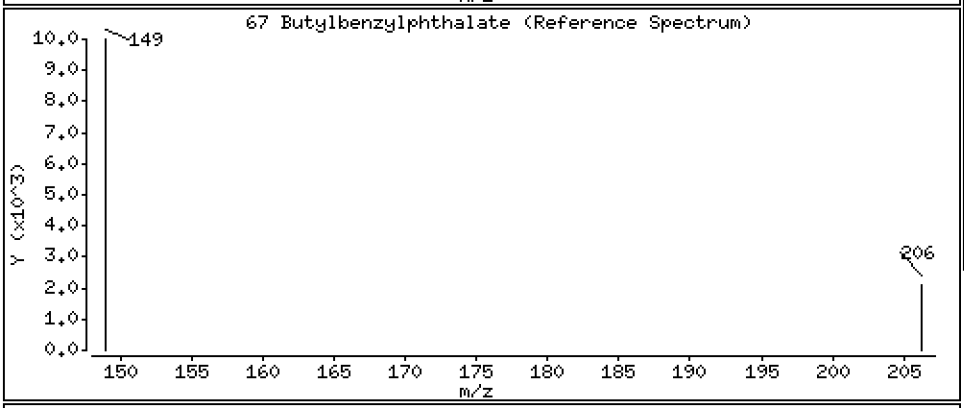
Concentration: 4.683 ug/mL

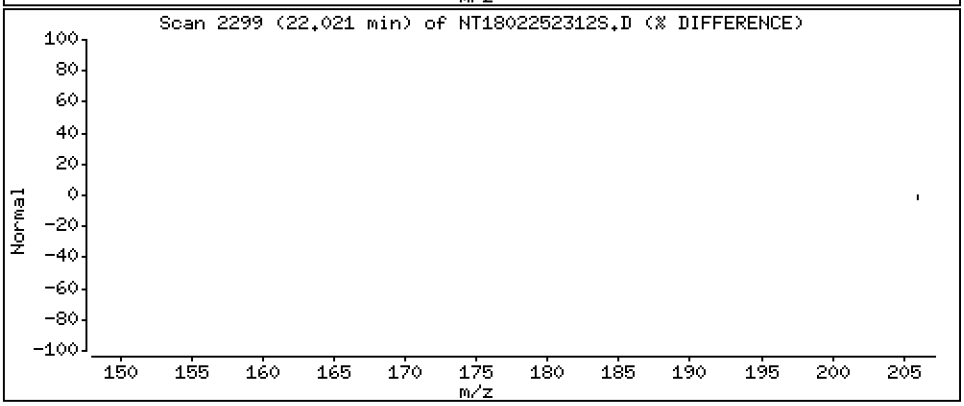












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

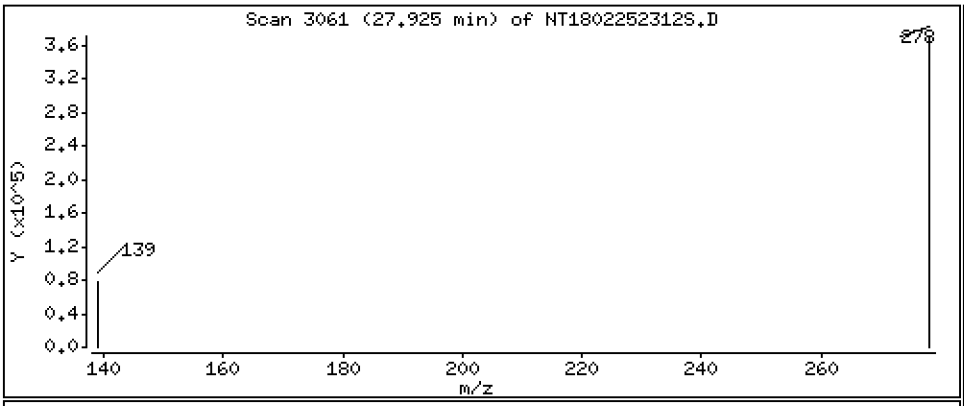
Operator: YZ

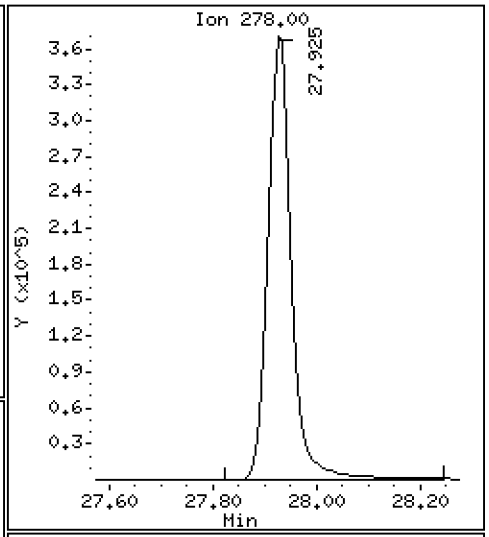
Column phase: ZB-5msi

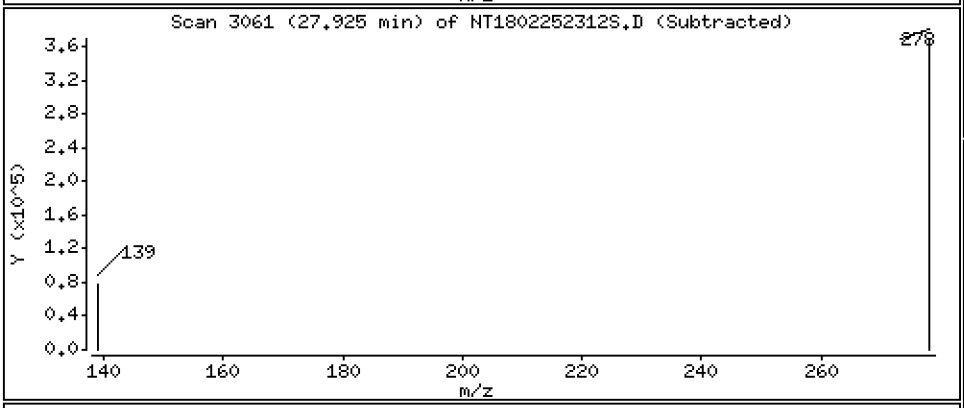
Column diameter: 0.25

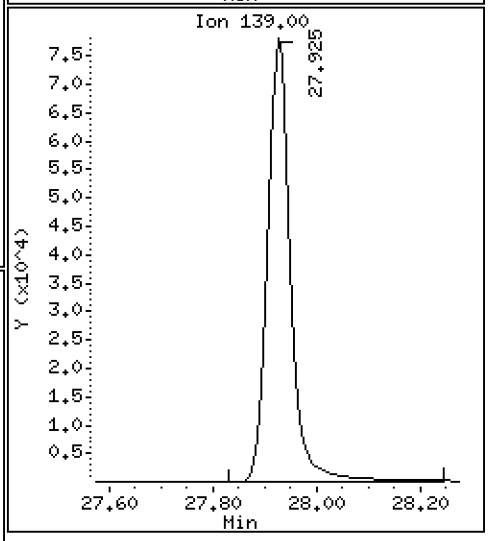
79 Dibenzo(a,h)anthracene

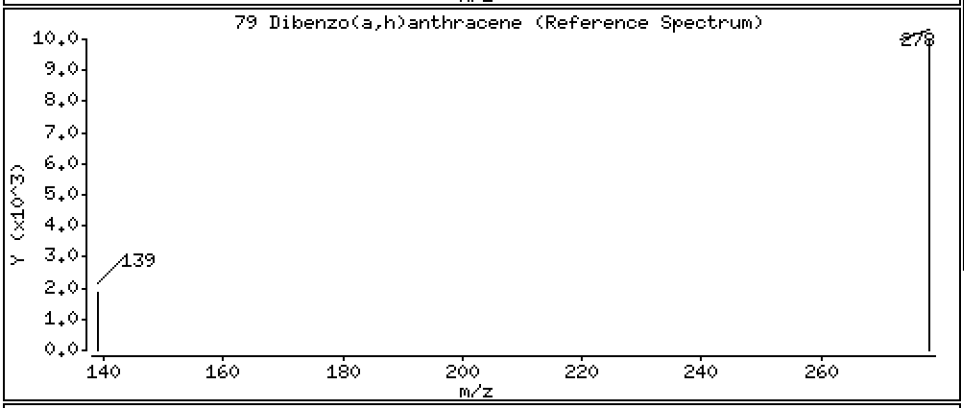
Concentration: 4.890 ug/mL

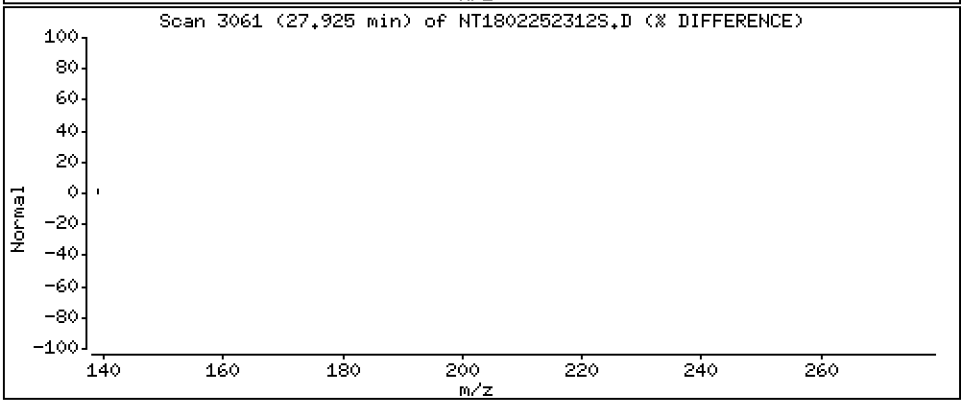












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

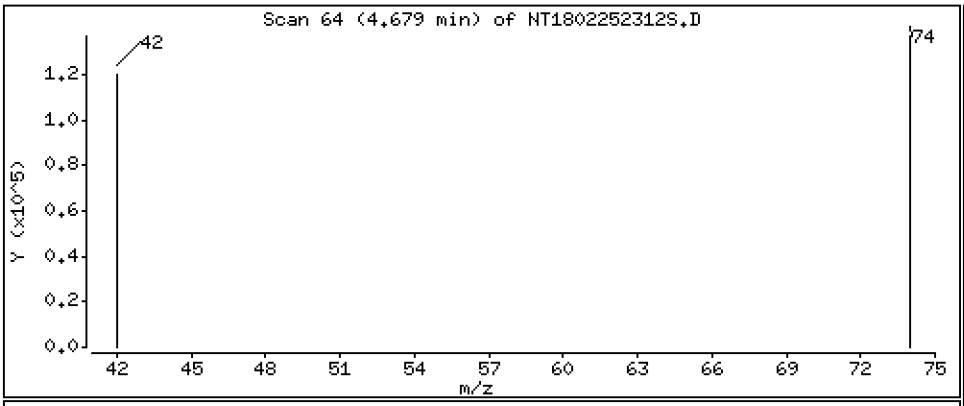
Operator: YZ

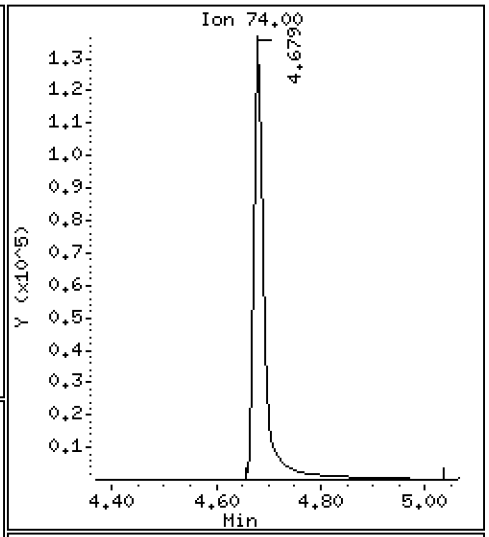
Column phase: ZB-5msi

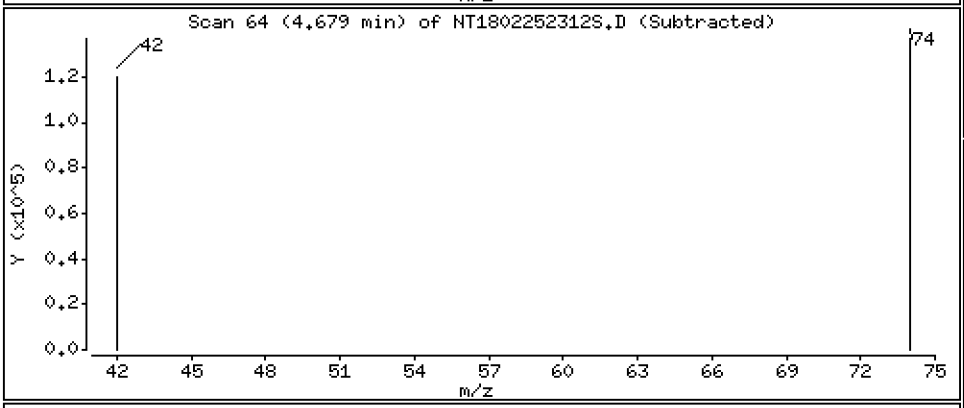
Column diameter: 0.25

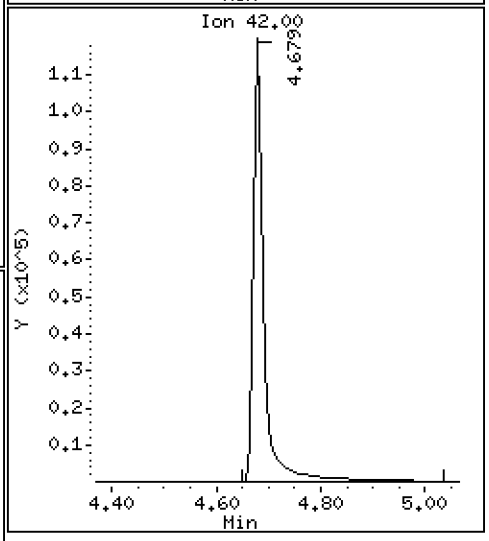
90 N-Nitrosodimethylamine

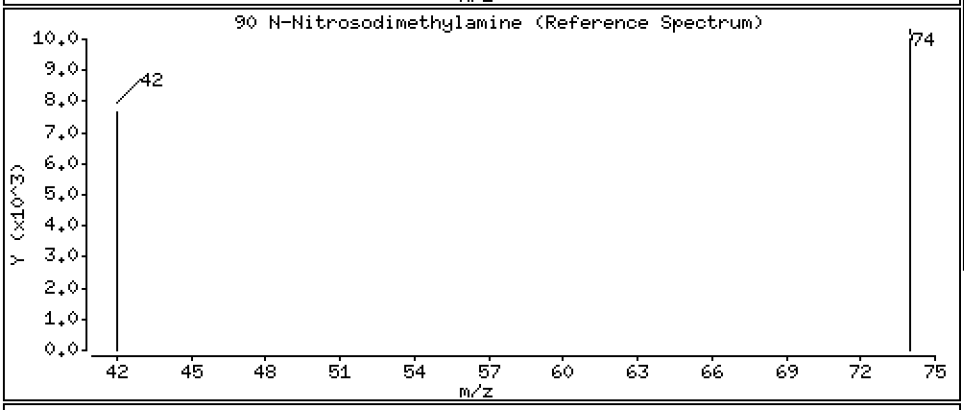
Concentration: 4.897 ug/mL

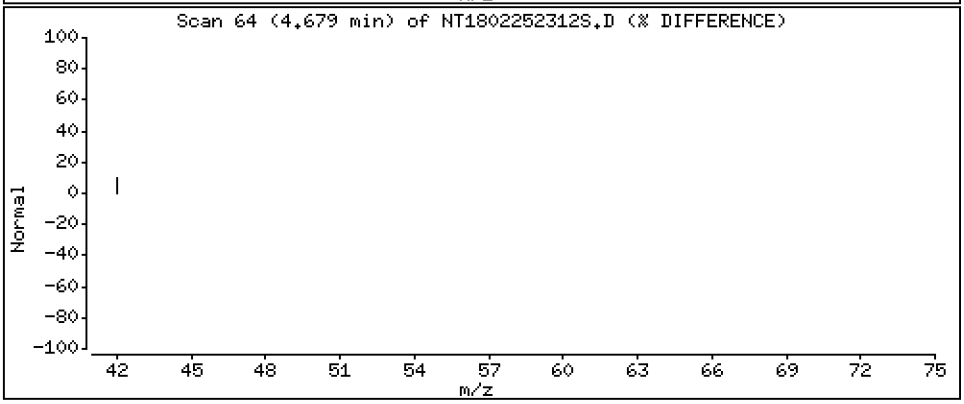












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT1802252312S.D
Lab Smp Id: SLC0155-SCV1
Inj Date : 26-FEB-2023 04:06
Operator : YZ Inst ID: nt18.i
Smp Info : SLC0155-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230225.b\SIM.b\SIMABN2.m
Meth Date : 10-Mar-2023 16:13 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	Compound Not Detected.					
3	Phenol	94	8.317	8.332	(0.933)	389165	4.32477	4.325
7	1,3-Dichlorobenzene	146	8.850	8.857	(0.993)	402056	4.46241	4.462
* 8	1,4-Dichlorobenzene-d4	152	8.912	8.912	(1.000)	213719	4.00000	
9	1,4-Dichlorobenzene	146	8.943	8.943	(1.003)	414169	4.40177	4.402
11	Benzyl alcohol	79	9.183	9.238	(1.030)	279573	4.84612	4.846
12	1,2-Dichlorobenzene	146	9.292	9.300	(1.043)	394289	4.40132	4.401
13	2-Methylphenol	108	9.416	9.432	(1.057)	287135	3.88018	3.880
15	4-Methylphenol	108	9.688	9.703	(1.087)	312938	4.21475	4.215
16	N-Nitroso-di-n-propylamine	70	9.735	9.742	(1.092)	239532	4.78925	4.789
22	2,4-Dimethylphenol	107	10.706	10.715	(0.942)	256225	3.54019	3.540
24	Benzoic acid	105	10.995	11.089	(0.967)	50284	1.71635	1.716
26	1,2,4-Trichlorobenzene	180	11.285	11.285	(0.993)	324895	4.38361	4.384
* 27	Naphthalene-d8	136	11.370	11.362	(1.000)	811198	4.00000	
30	Hexachlorobutadiene	225	11.764	11.764	(1.035)	201685	4.53553	4.536
39	Dimethylphthalate	163	14.465	14.465	(0.968)	760894	4.79274	4.793
* 42	Acenaphthene-d10	162	14.945	14.944	(1.000)	413230	4.00000	
50	Diethylphthalate	149	15.911	15.903	(1.065)	735201	5.06782	5.068
54	N-Nitrosodiphenylamine	169	16.289	16.289	(0.907)	527579	4.81477	4.815
57	Hexachlorobenzene	284	17.338	17.338	(0.966)	234531	4.45818	4.458
58	Pentachlorophenol	266	17.702	17.718	(0.986)	41149	2.63077	2.631
* 59	Phenanthrene-d10	188	17.950	17.950	(1.000)	757386	4.00000	
$ 66	Terphenyl-d14	244	21.099	21.099	(0.918)	599	0.00465	0.004650(RM)
67	Butylbenzylphthalate	149	22.020	22.021	(0.958)	528586	4.68314	4.683
* 69	Chrysene-d12	240	22.988	22.980	(1.000)	711364	4.00000	
* 77	Perylene-d12	264	25.473	25.473	(1.000)	786043	4.00000	
79	Dibenzo(a,h)anthracene	278	27.925	27.925	(1.096)	1142201	4.89045	4.890
90	N-Nitrosodimethylamine	74	4.678	4.717	(0.525)	201044	4.89694	4.897

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252312S.D
Lab Smp Id: SLC0155-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 00:04
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	234930	117465	469860	213719	-9.03
27 Naphthalene-d8	904391	452196	1808782	811198	-10.30
42 Acenaphthene-d10	465099	232550	930198	413230	-11.15
59 Phenanthrene-d10	856800	428400	1713600	757386	-11.60
69 Chrysene-d12	764037	382019	1528074	711364	-6.89
77 Perylene-d12	862908	431454	1725816	786043	-8.91

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.00
27 Naphthalene-d8	11.36	10.86	11.86	11.37	0.07
42 Acenaphthene-d10	14.94	14.44	15.44	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252312S.D

Lab ID: SLC0155-SCV1
nt18.i, 20230225.b\SIM.b\SIMABN2.m,   26-FEB-2023 04:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.030	1.037	-0.0061	Benzyl alcohol
0.967	0.000	0.9670	Benzoic acid
0.986	0.000	0.9862	Pentachlorophenol

RRT check based on Ccal File: SIM.b/NT1802252310S.D

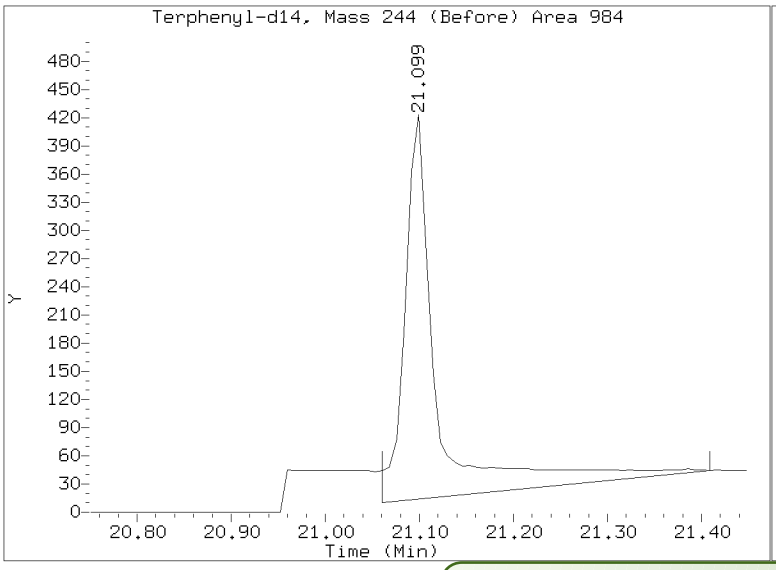
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

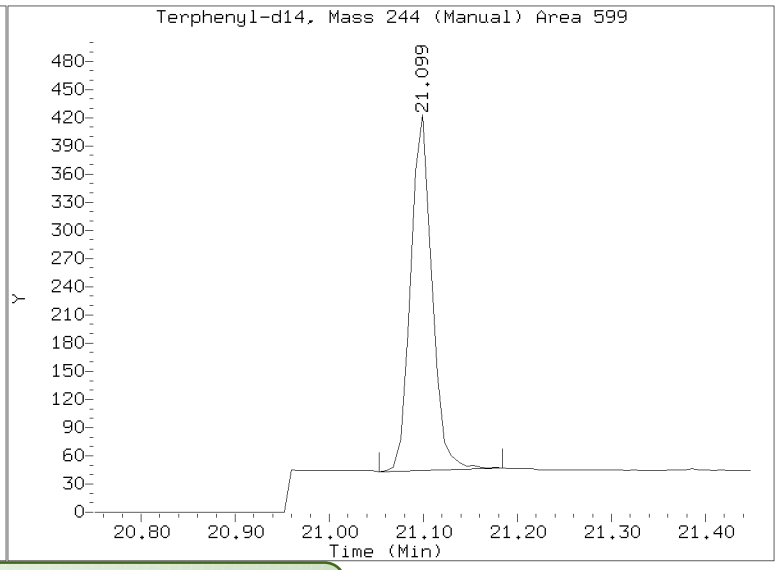
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230225.b/SIM.b/NT1802252312S.D
Injection Date: 26-FEB-2023 04:06
Lab ID:SLC0155-SCV1 Client ID:
Report Date: 03/10/2023 16:18





APPROVED

By Deenay Dunmore at 4:33 pm, Mar 10, 2023

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00050
Laboratory ID: SLA0213-SCV1
Sequence: SLA0213
Standard ID: L000686

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Naphthalene	2.5000	2.63	5.0	
2-Methylnaphthalene	2.5000	2.67	6.8	
1-Methylnaphthalene	2.5000	2.65	6.0	
Acenaphthylene	2.5000	2.82	12.8	
Acenaphthene	2.5000	2.60	4.0	
Dibenzofuran	2.5000	2.86	14.4	
Fluorene	2.5000	2.63	5.2	
Phenanthrene	2.5000	2.45	-2.1	
Anthracene	2.5000	2.27	-9.2	
Fluoranthene	2.5000	2.65	6.1	
Pyrene	2.5000	2.46	-1.5	
Benzo(a)anthracene	2.5000	2.59	3.5	
Chrysene	2.5000	2.40	-4.0	
Benzo(b)fluoranthene	2.5000	2.51	0.3	
Benzo(k)fluoranthene	2.5000	2.66	6.2	
Benzofluoranthenes, Total	5.0000	5.48	9.6	
Benzo(a)pyrene	2.5000	2.57	2.9	
Indeno(1,2,3-cd)pyrene	2.5000	2.69	7.6	
Dibenzo(a,h)anthracene	2.5000	2.49	-0.3	
Benzo(g,h,i)perylene	2.5000	2.48	-0.7	

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

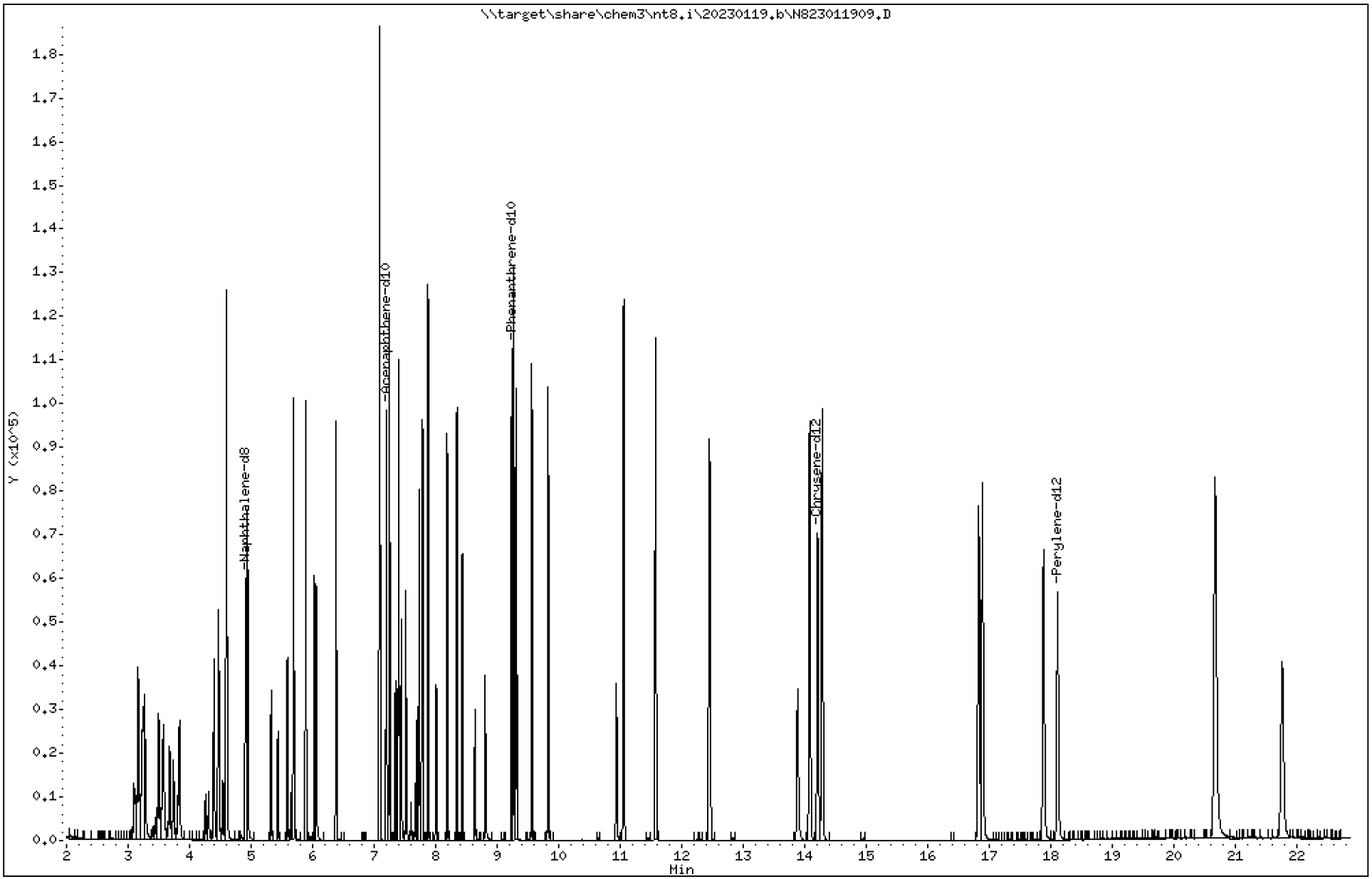
Sample Info: SCV230119

Volume Injected (uL): 1.0

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

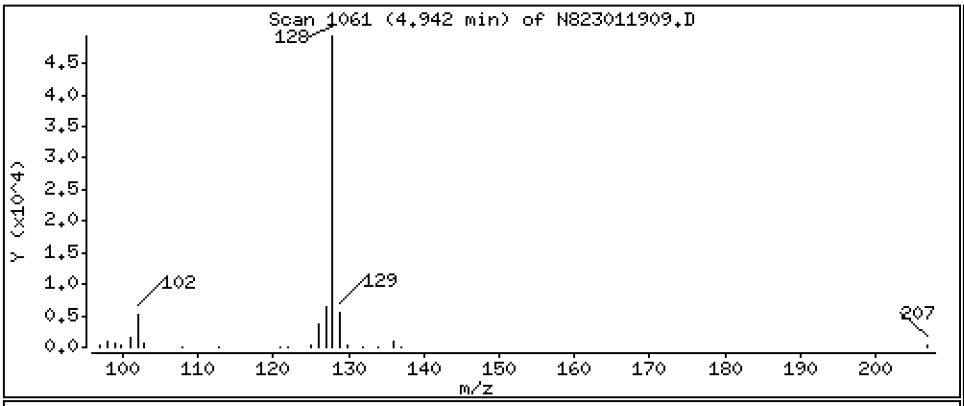
Operator: JZ

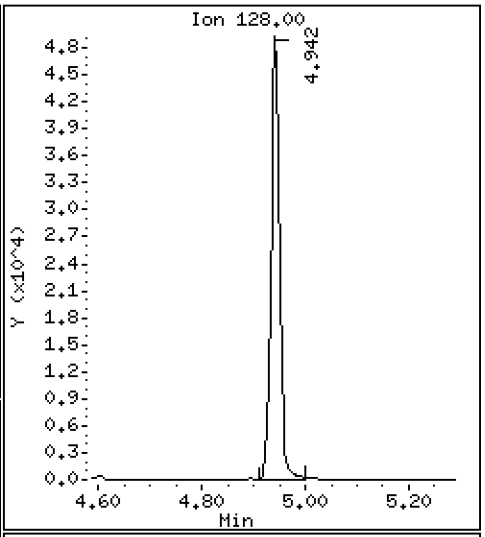
Column phase: Rxi-17sil

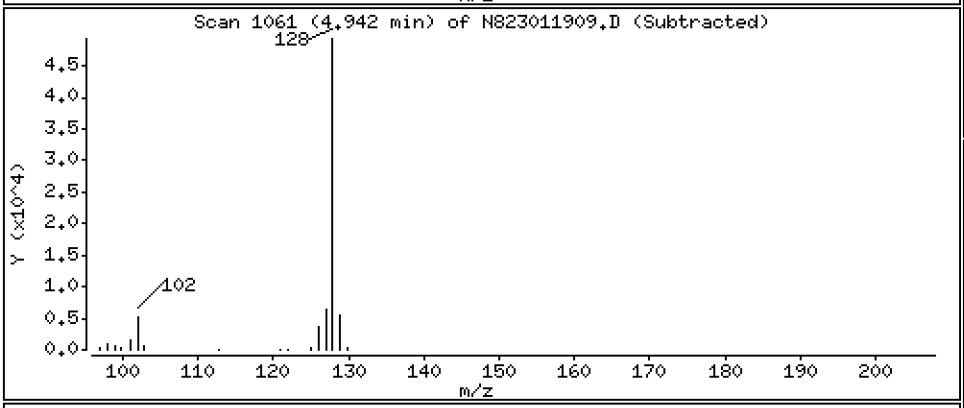
Column diameter: 0.25

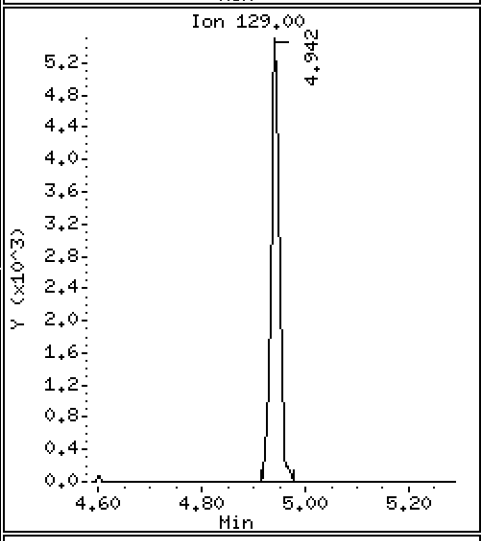
2 Naphthalene

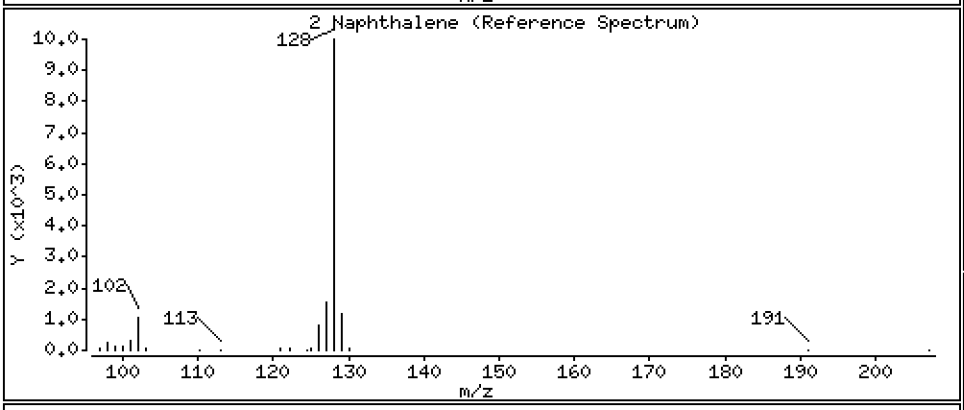
Concentration: 2.626 ug/L

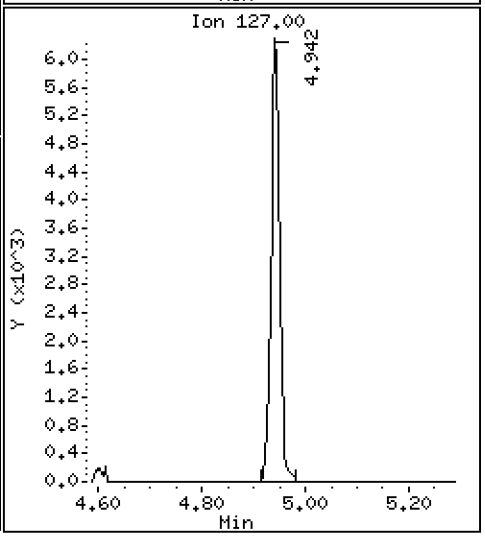


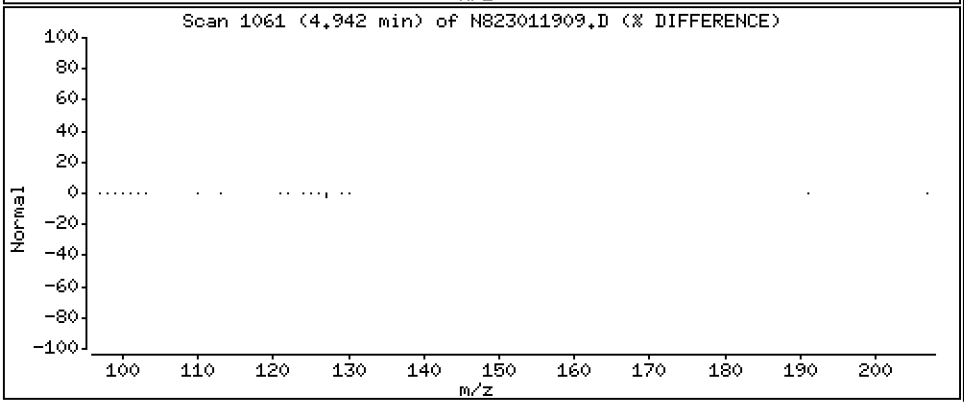












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

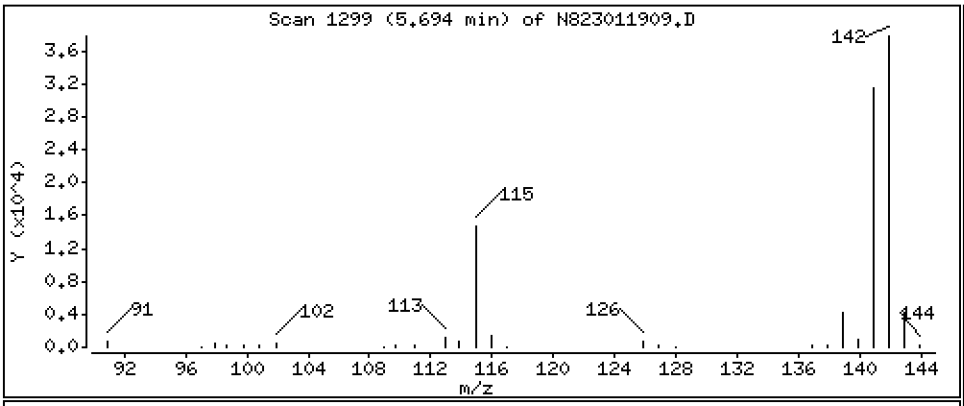
Operator: JZ

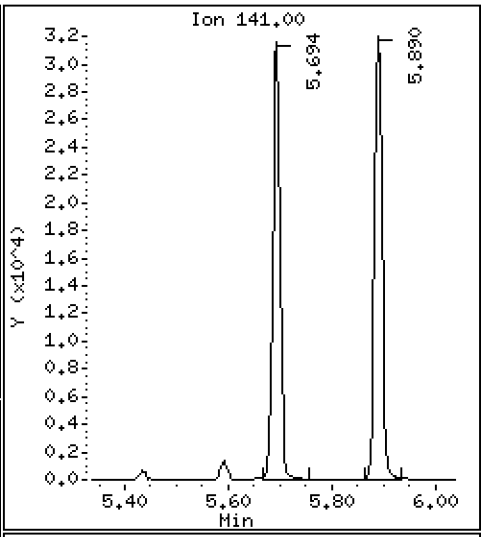
Column phase: Rxi-17sil

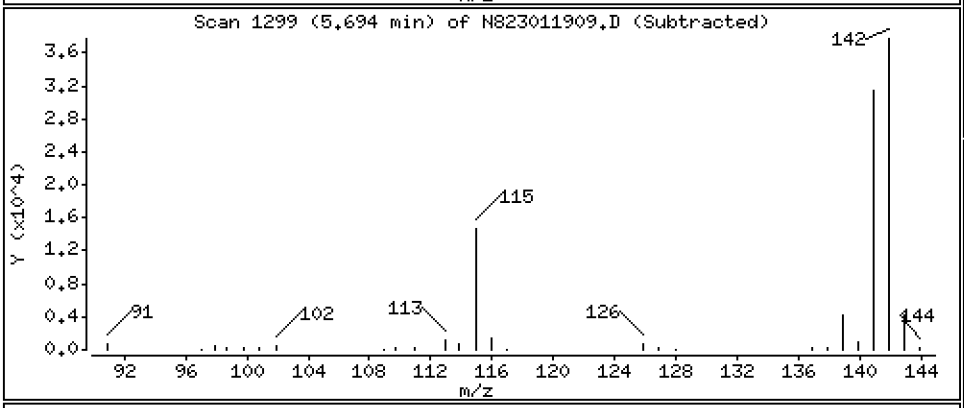
Column diameter: 0.25

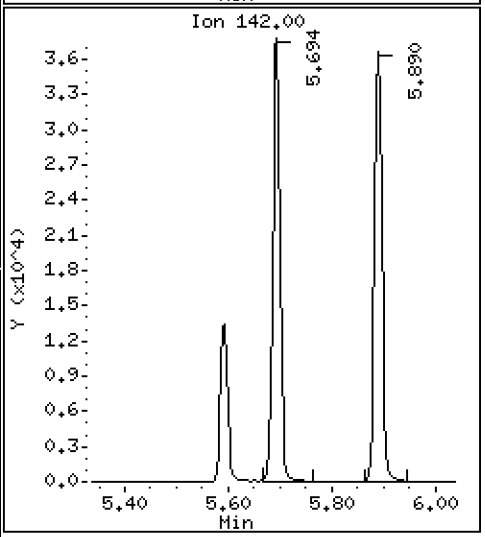
4 2-Methylnaphthalene

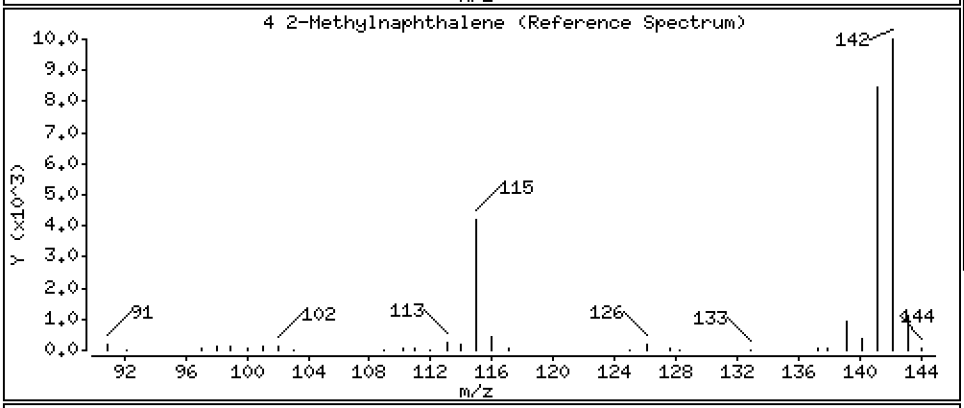
Concentration: 2.670 ug/L

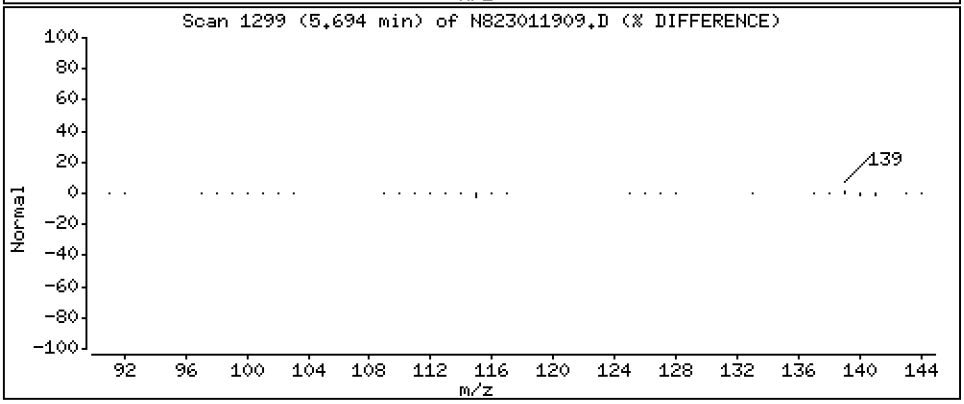












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

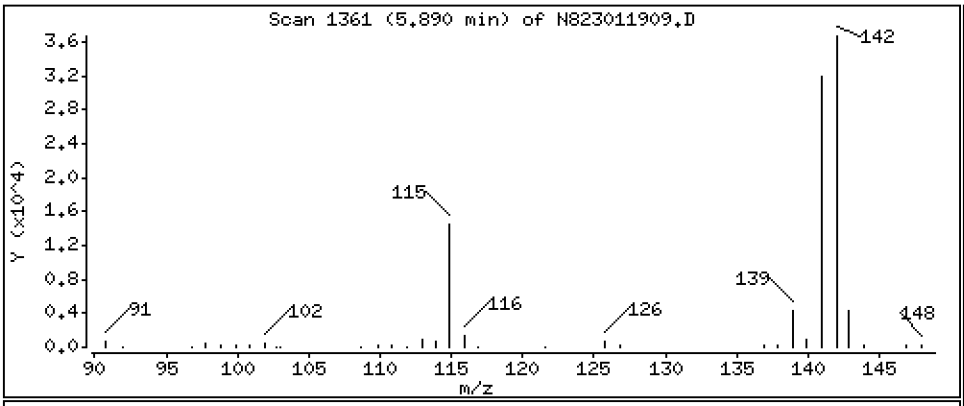
Operator: JZ

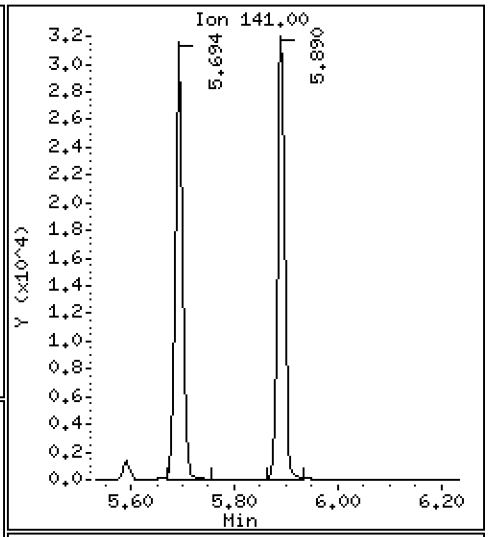
Column phase: Rxi-17sil

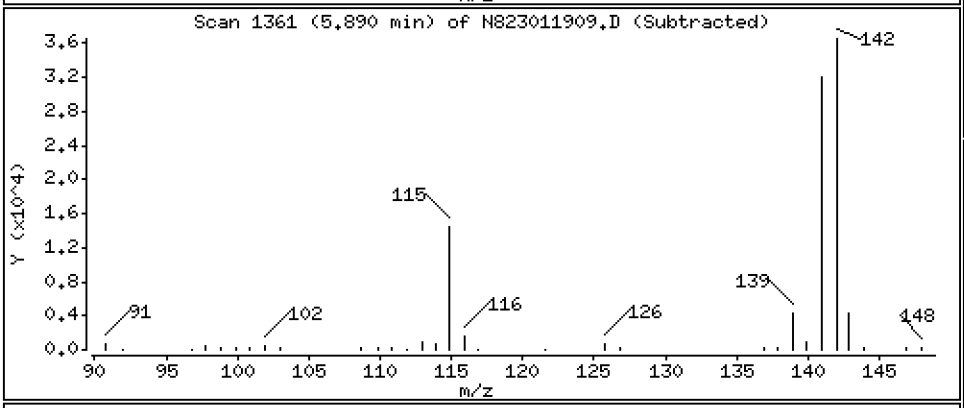
Column diameter: 0.25

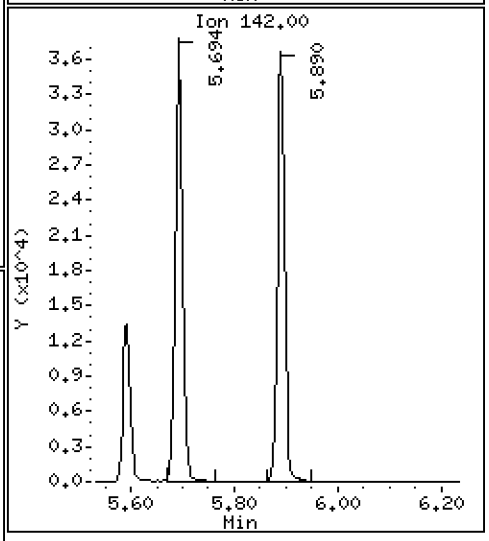
5 1-methylnaphthalene

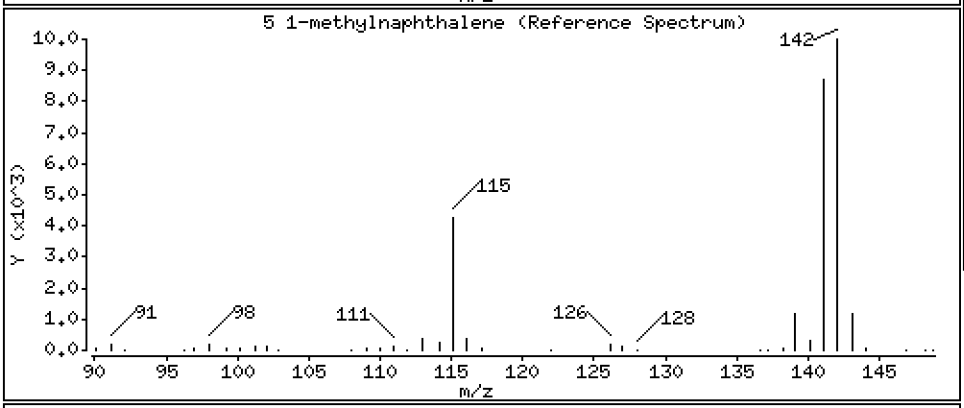
Concentration: 2.649 ug/L

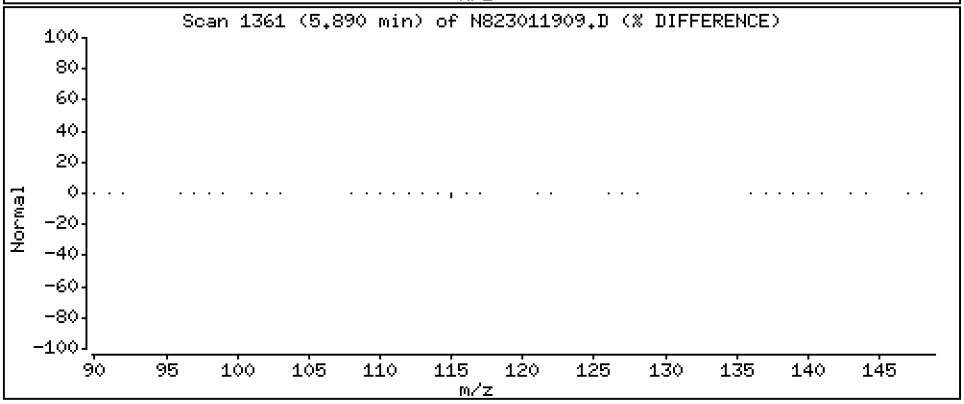












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

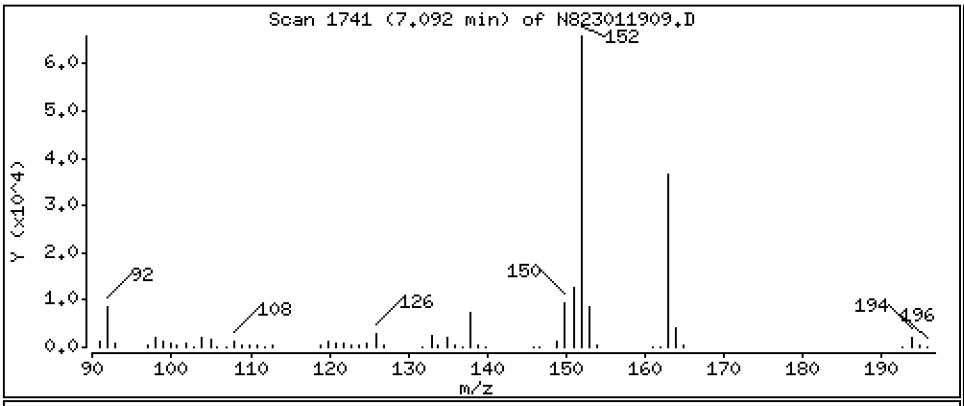
Operator: JZ

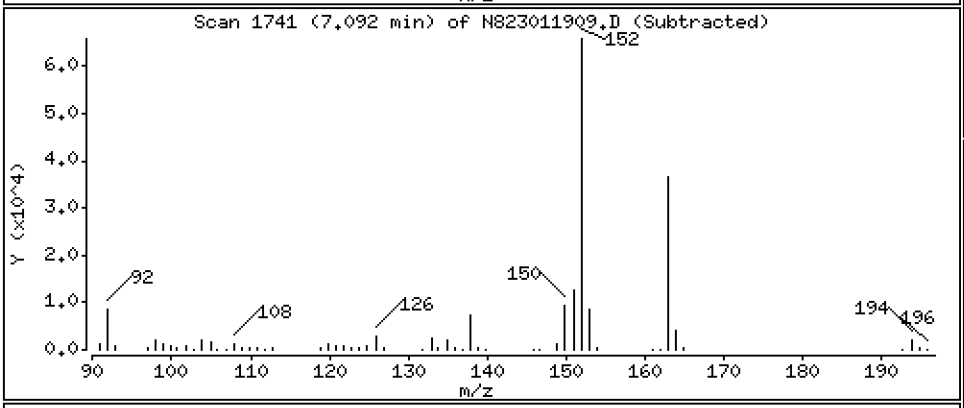
Column phase: Rxi-17sil

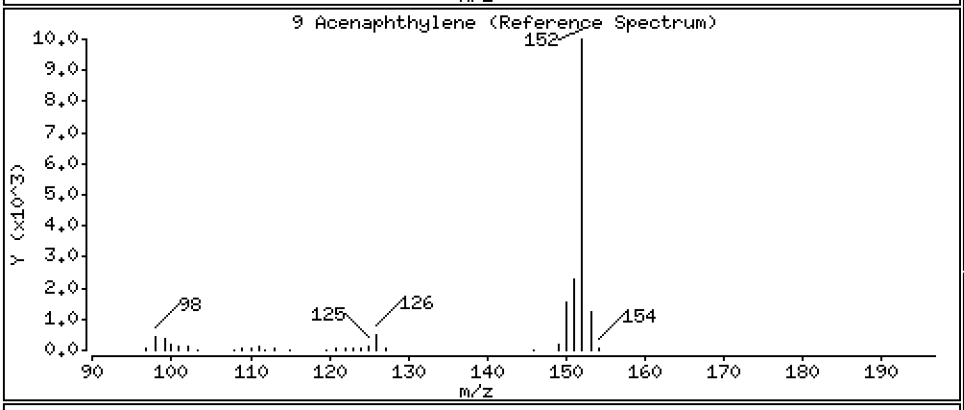
Column diameter: 0.25

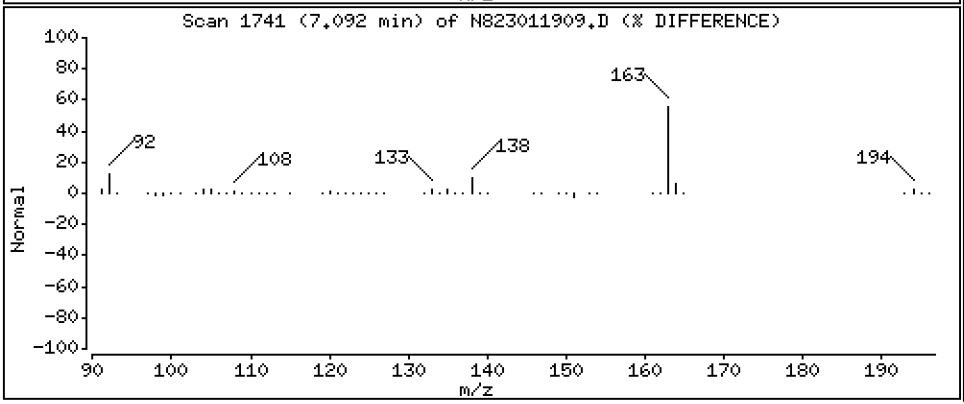
9 Acenaphthylene

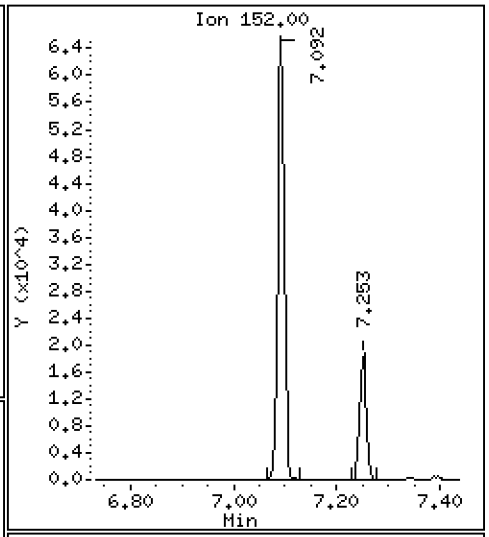
Concentration: 2.821 ug/L

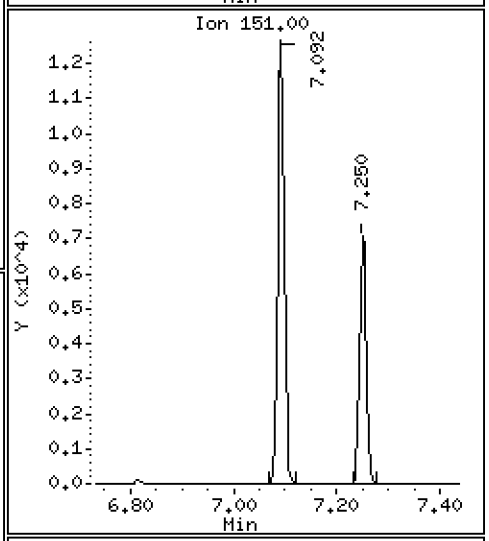


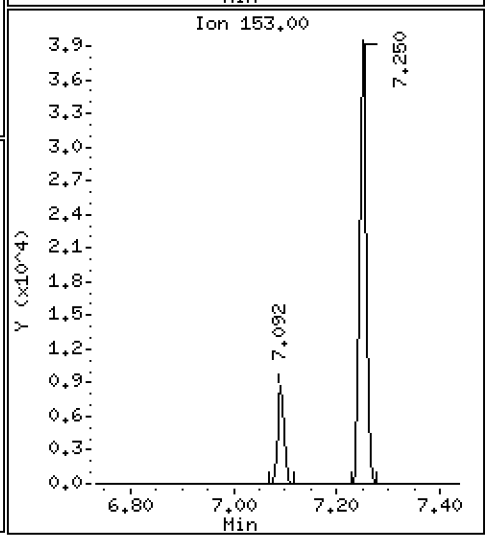












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

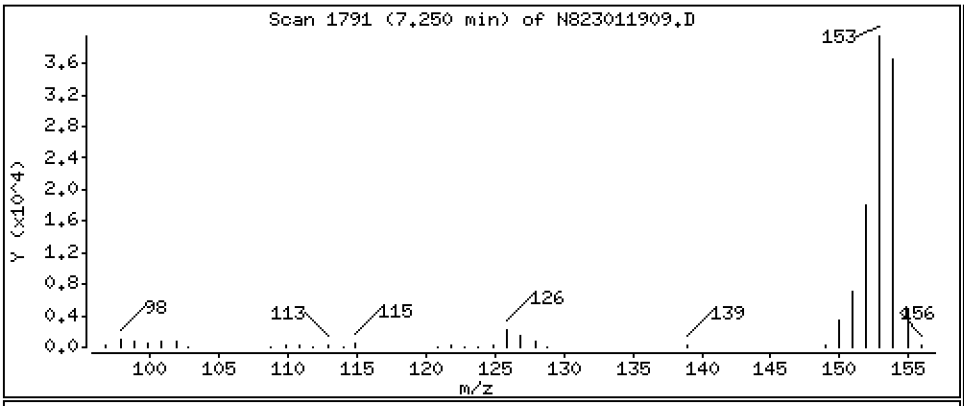
Operator: JZ

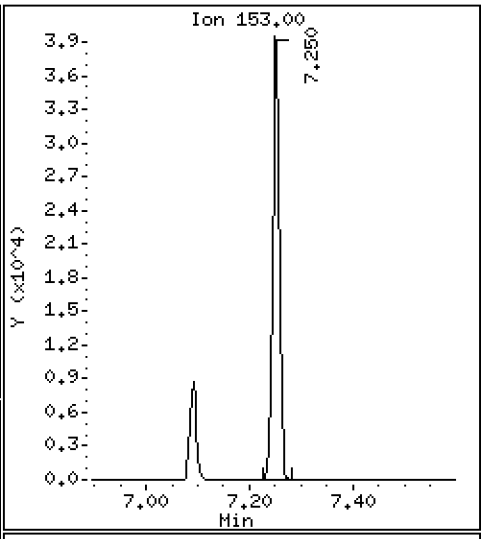
Column phase: Rxi-17sil

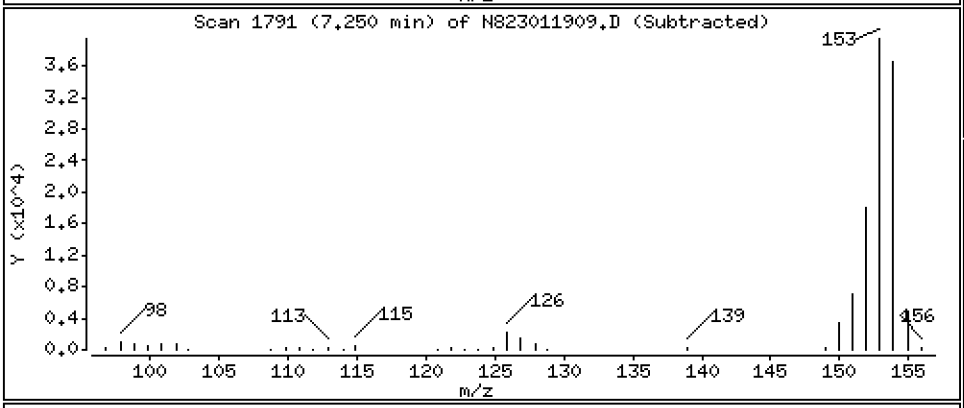
Column diameter: 0.25

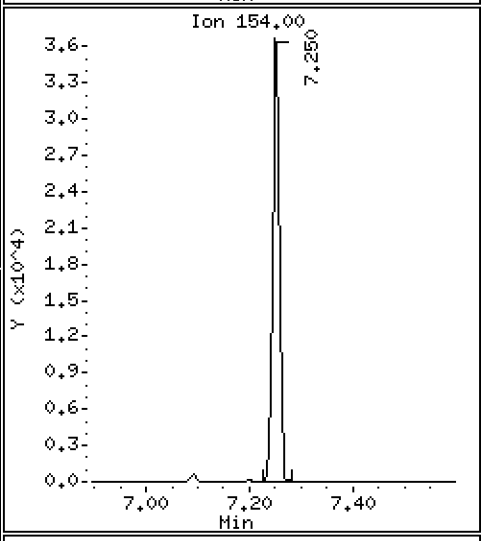
11 Acenaphthene

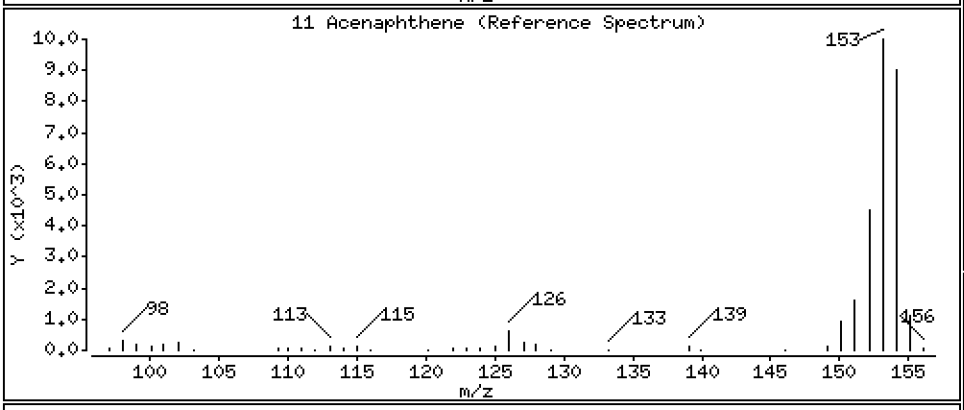
Concentration: 2.600 ug/L

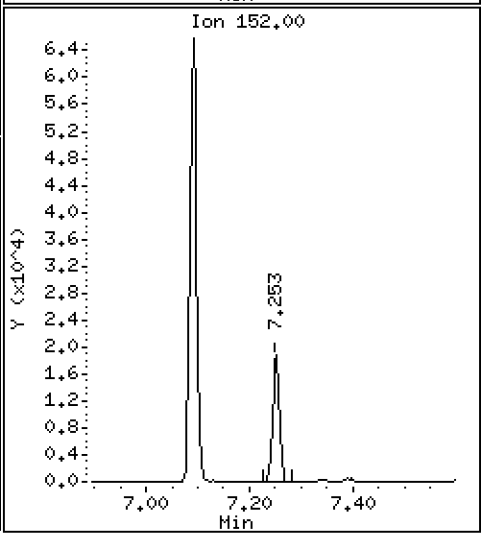


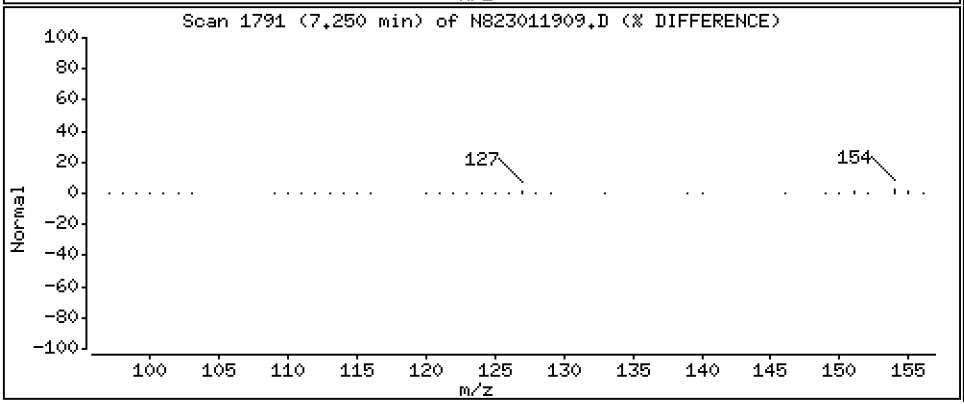












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

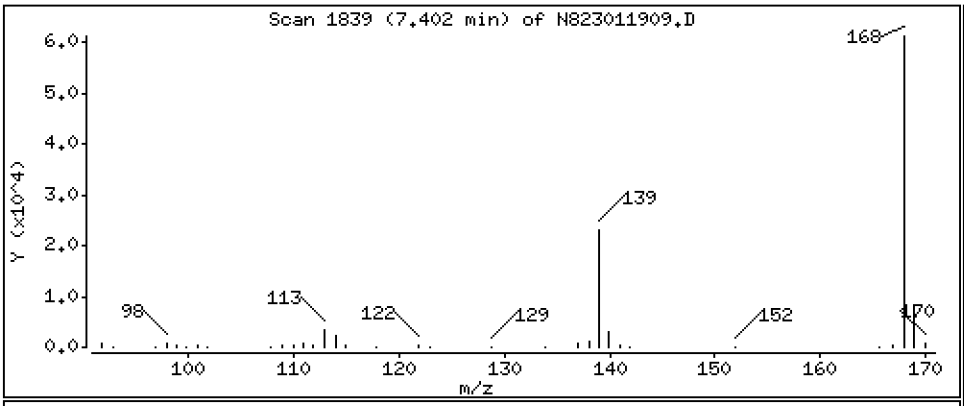
Operator: JZ

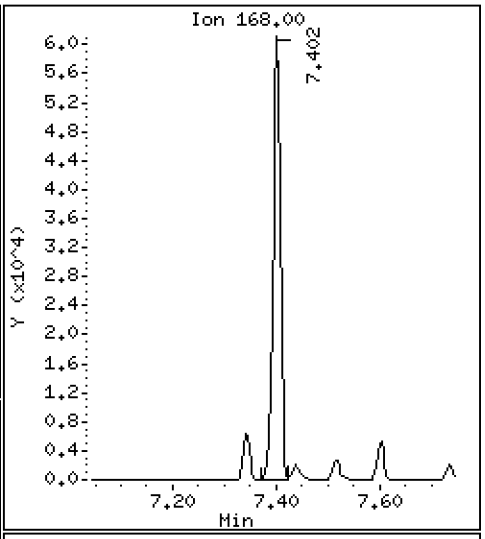
Column phase: Rxi-17sil

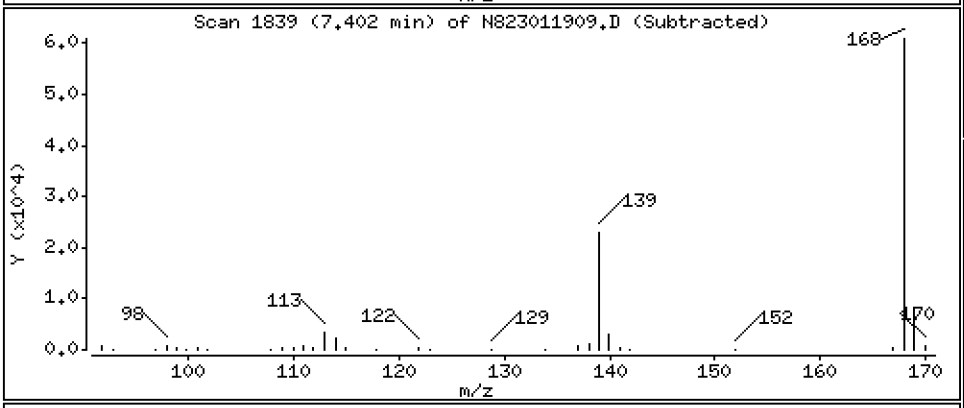
Column diameter: 0.25

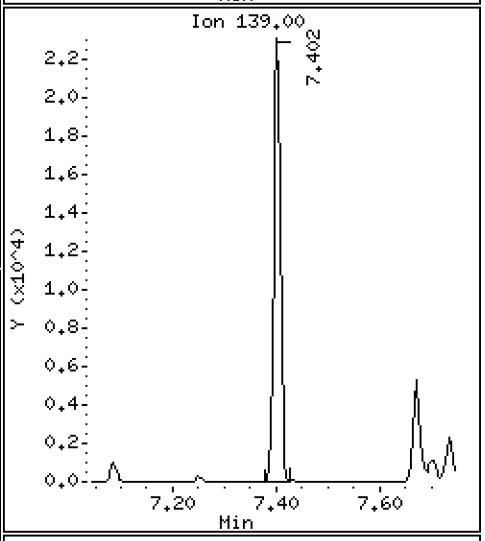
12 Dibenzofuran

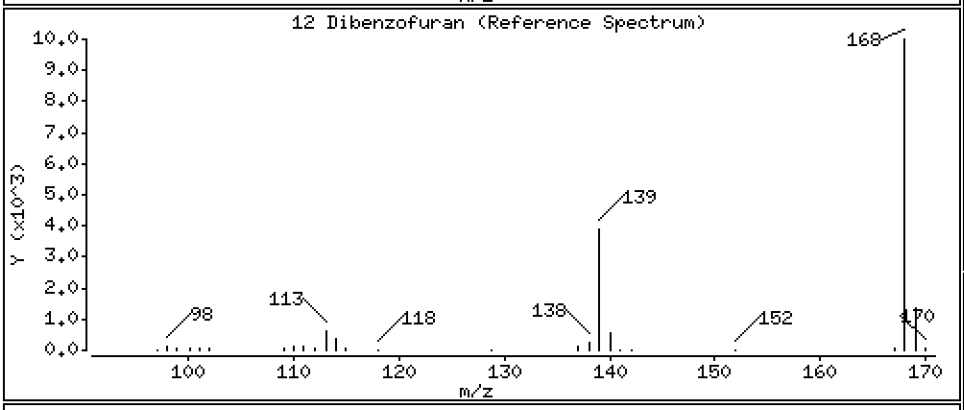
Concentration: 2.860 ug/L

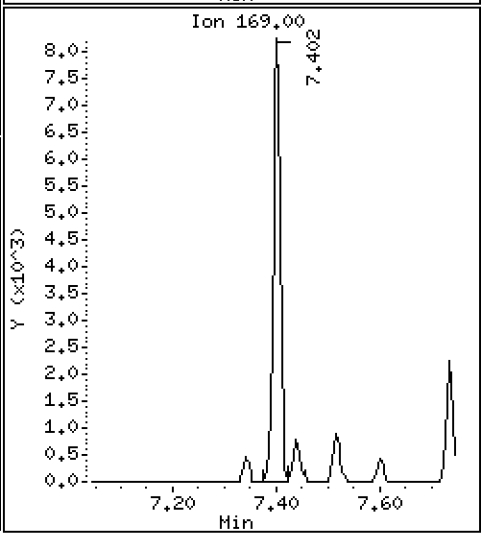


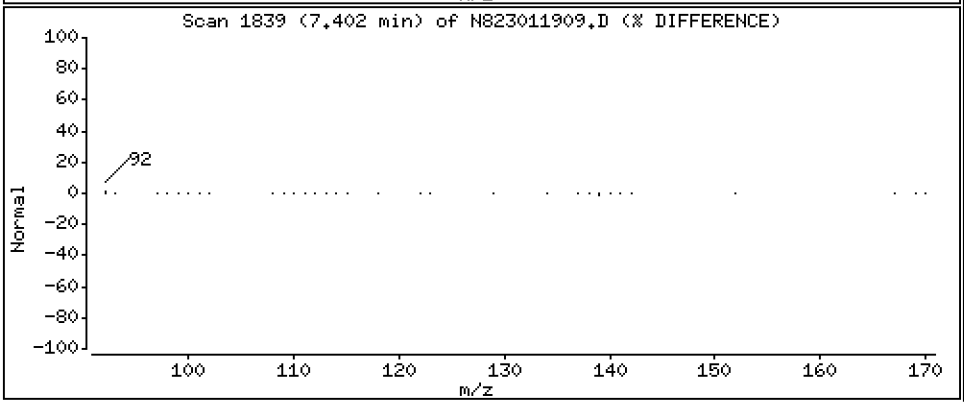












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

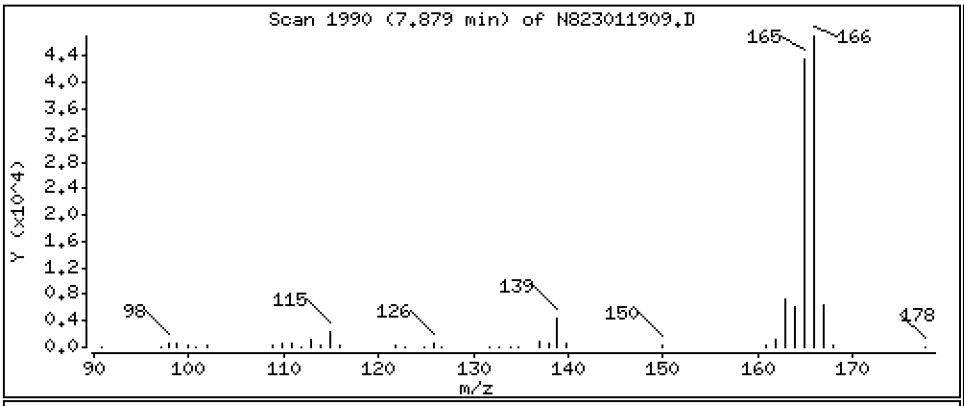
Operator: JZ

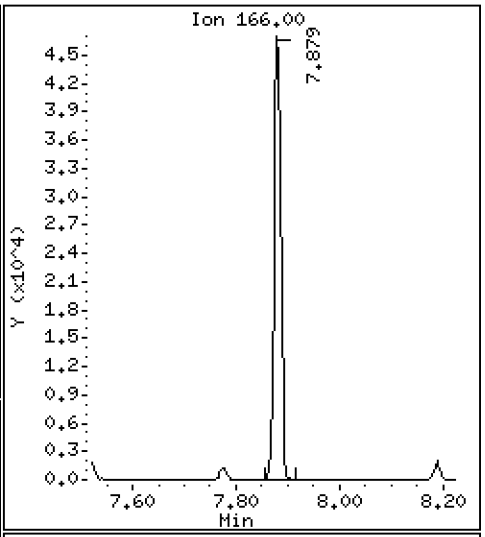
Column phase: Rxi-17sil

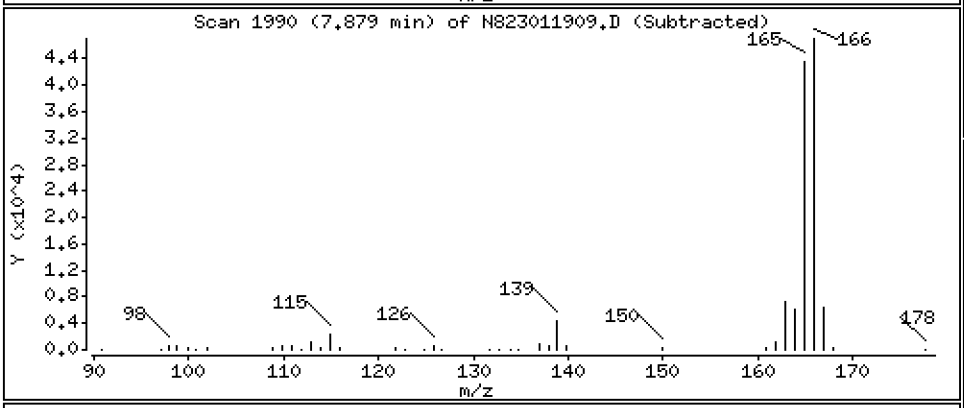
Column diameter: 0.25

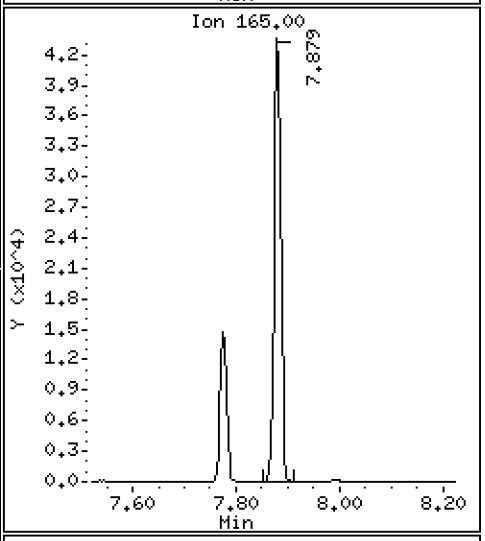
14 Fluorene

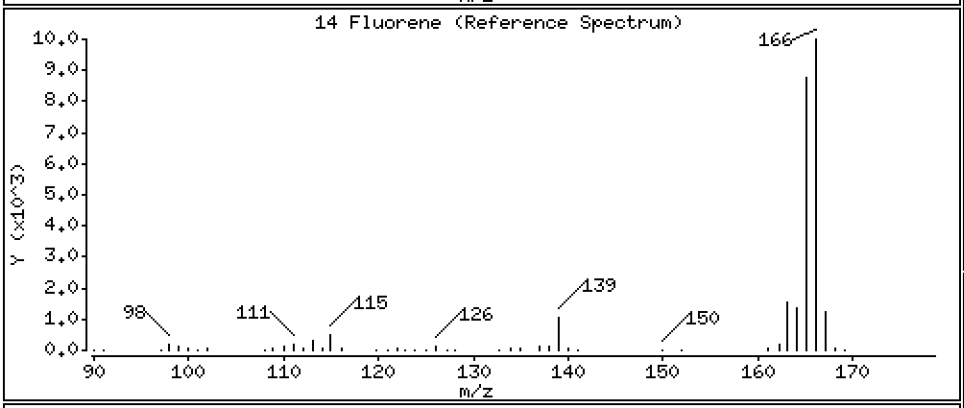
Concentration: 2.631 ug/L

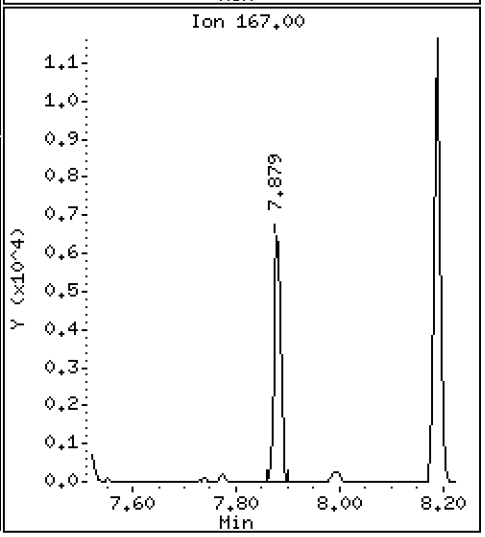


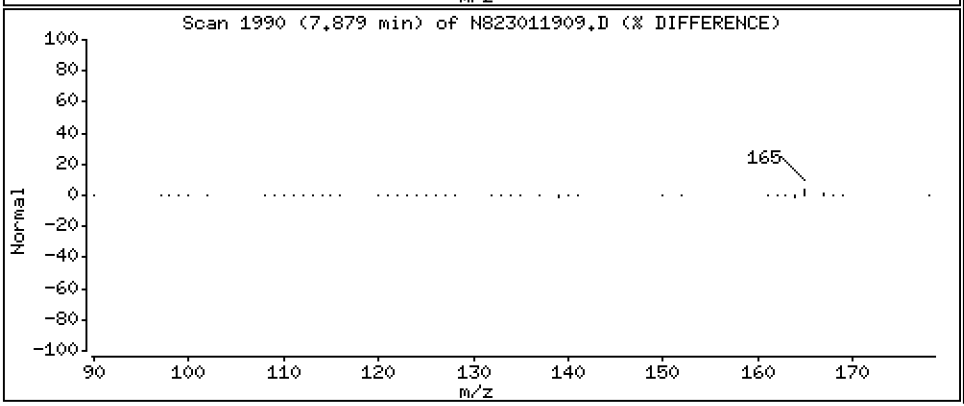












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

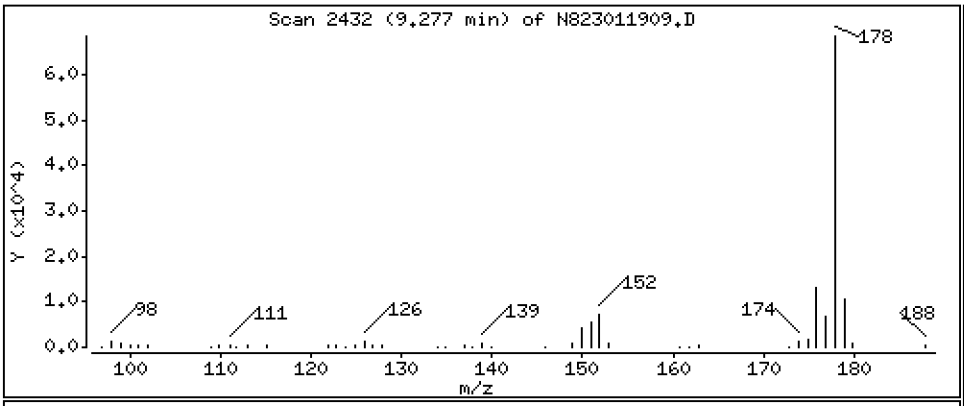
Operator: JZ

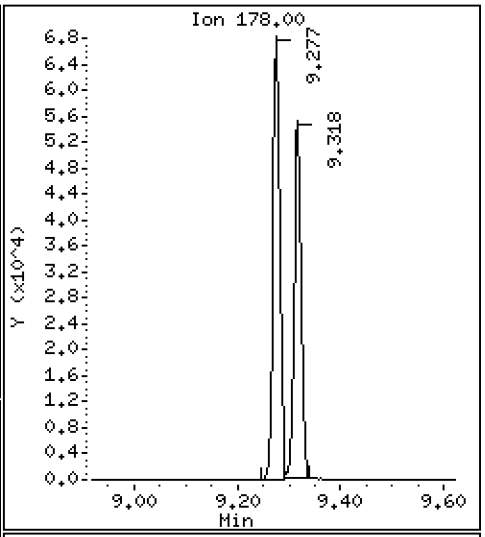
Column phase: Rxi-17sil

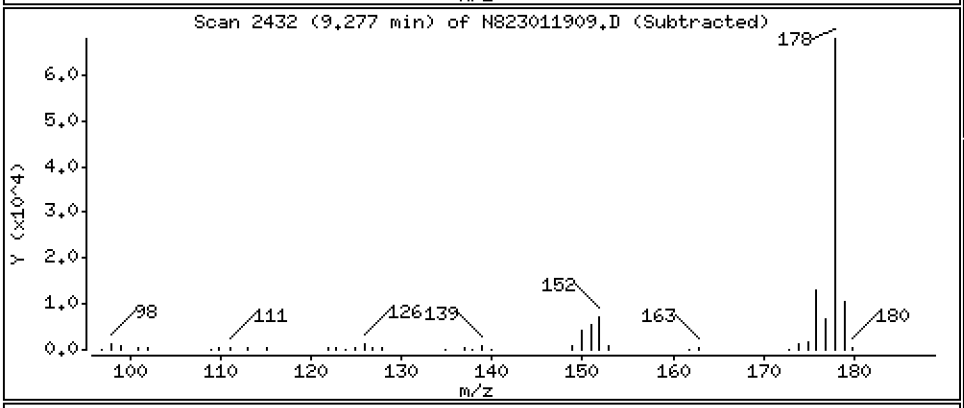
Column diameter: 0.25

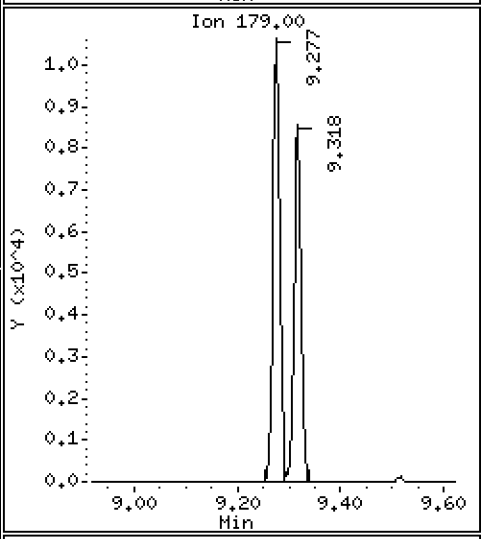
16 Phenanthrene

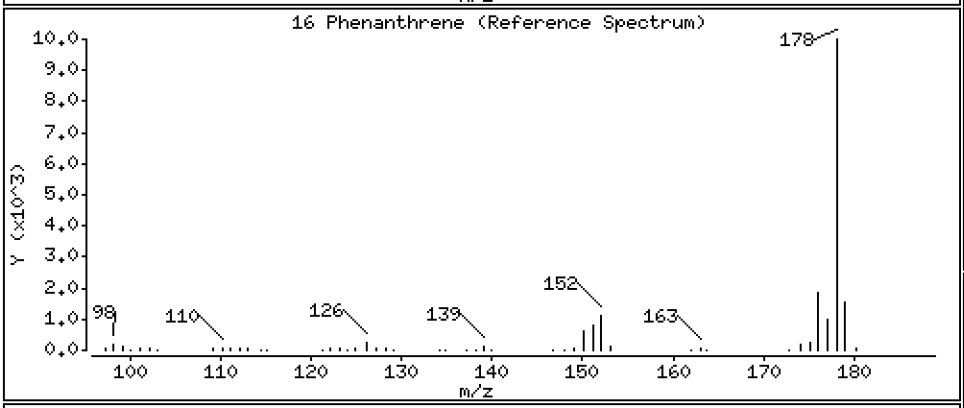
Concentration: 2.448 ug/L

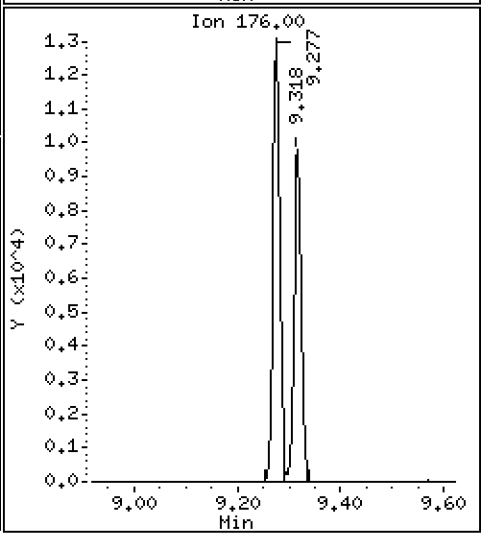


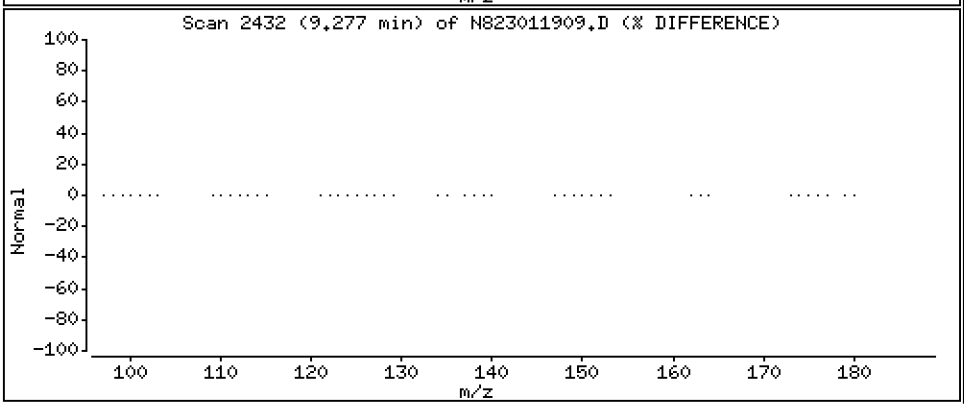












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

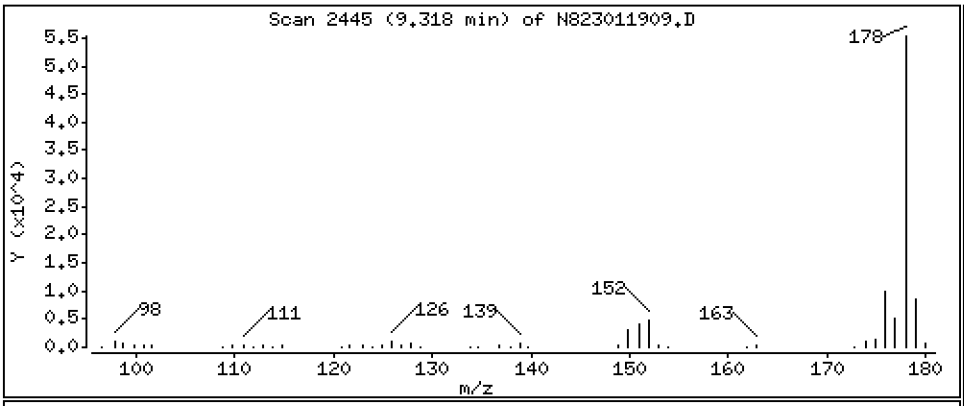
Operator: JZ

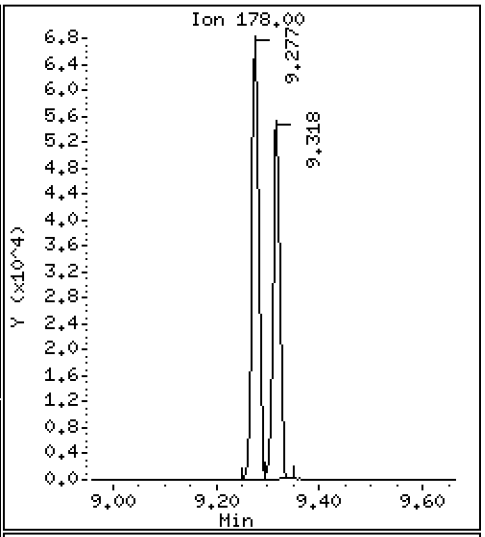
Column phase: Rxi-17sil

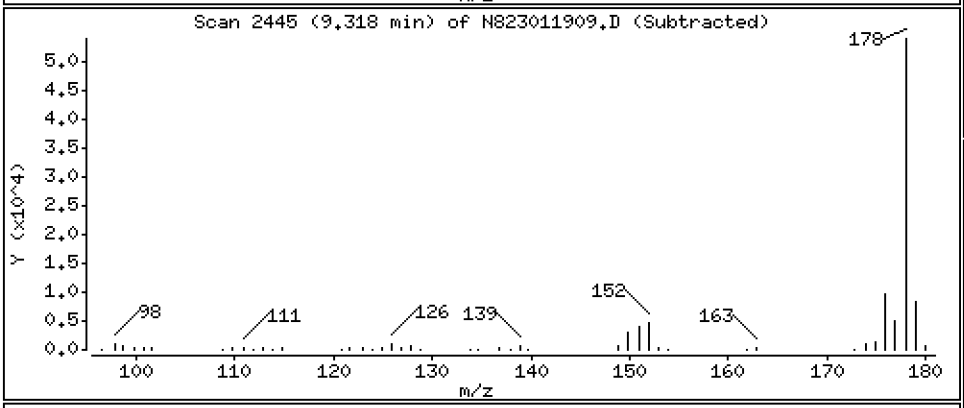
Column diameter: 0.25

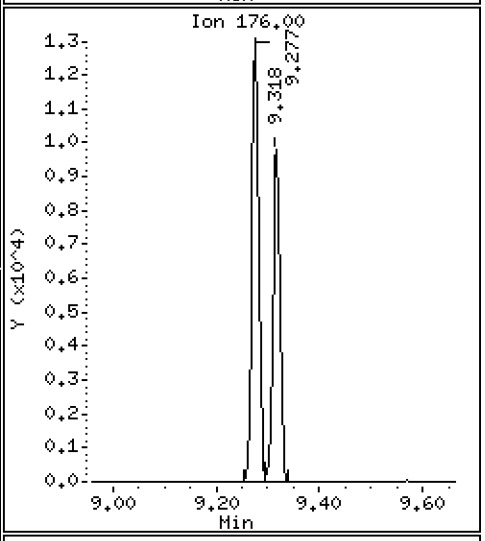
17 Anthracene

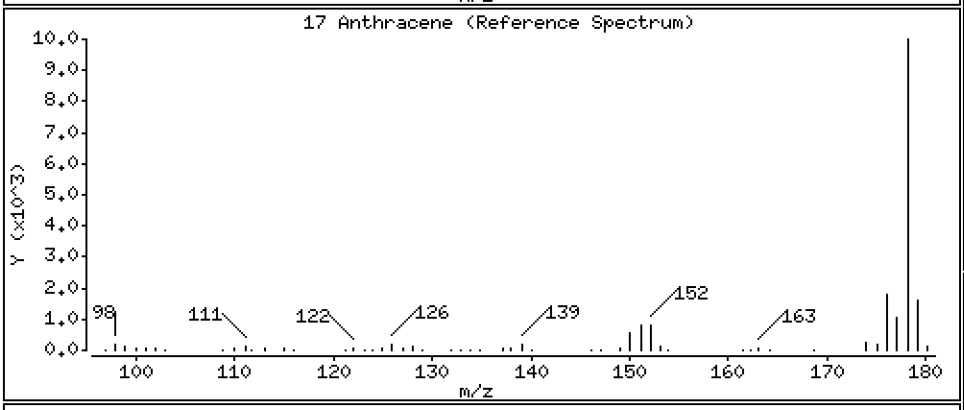
Concentration: 2.270 ug/L

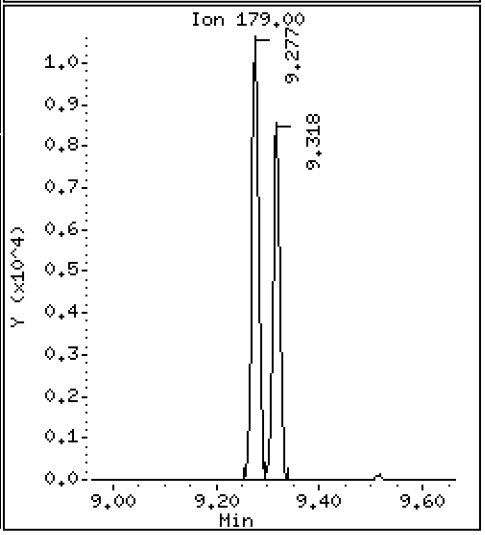


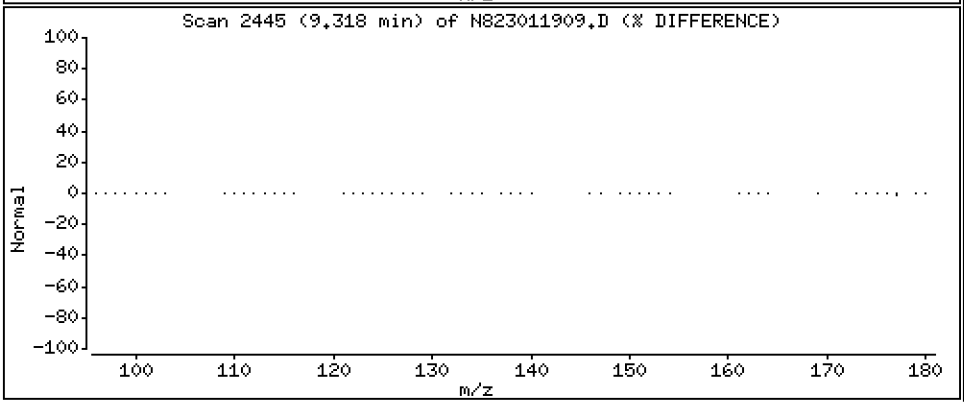












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

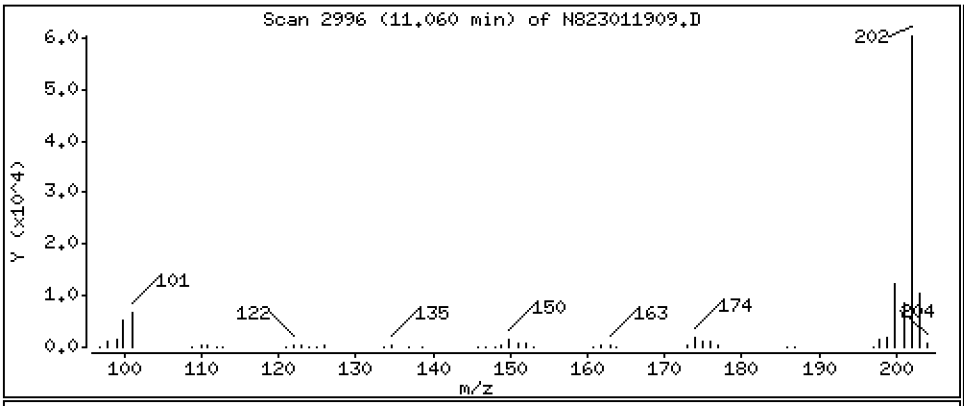
Operator: JZ

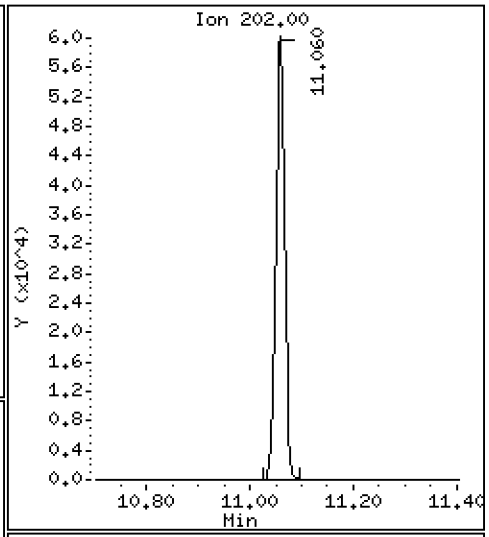
Column phase: Rxi-17sil

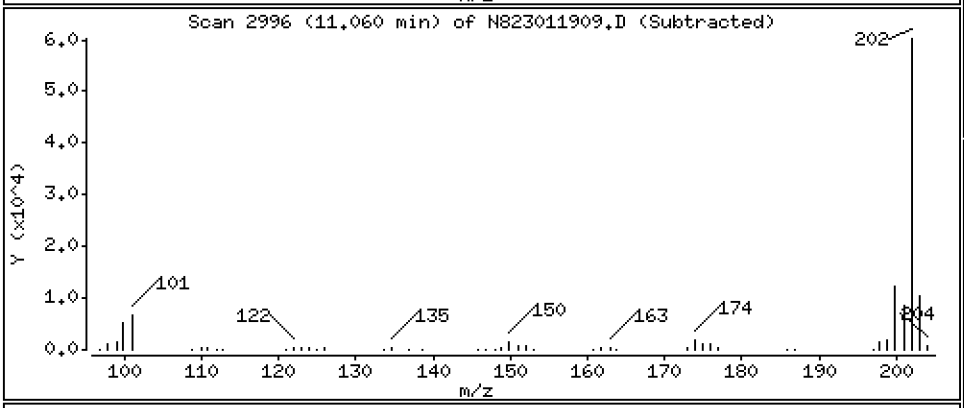
Column diameter: 0.25

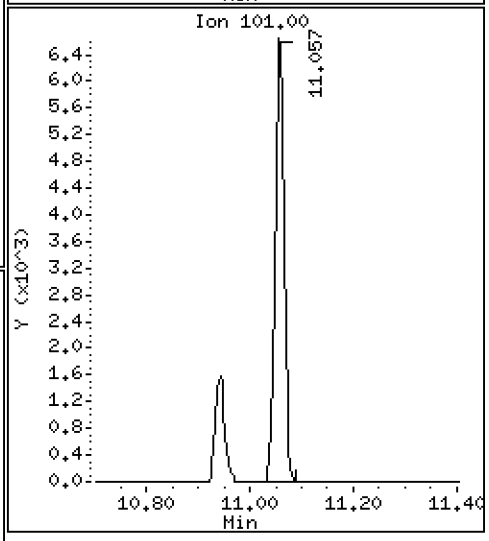
22 Fluoranthene

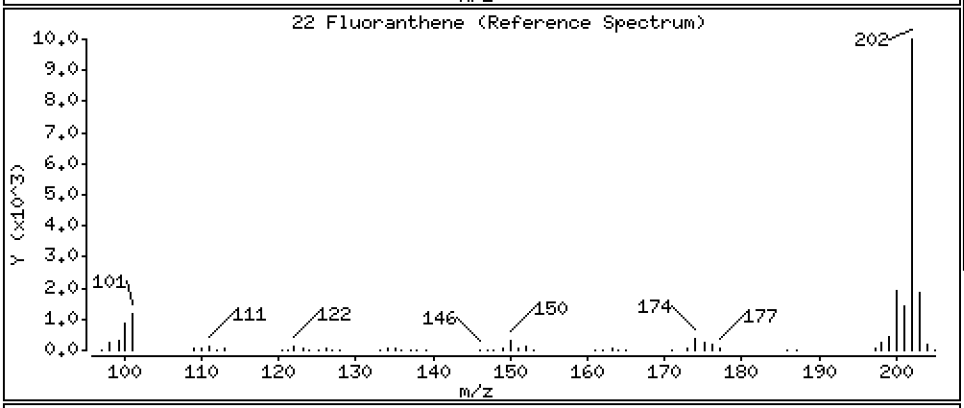
Concentration: 2.653 ug/L

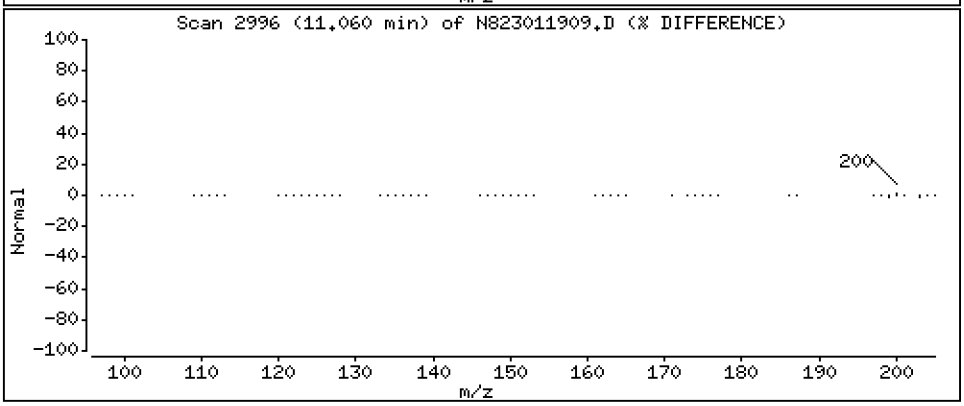












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

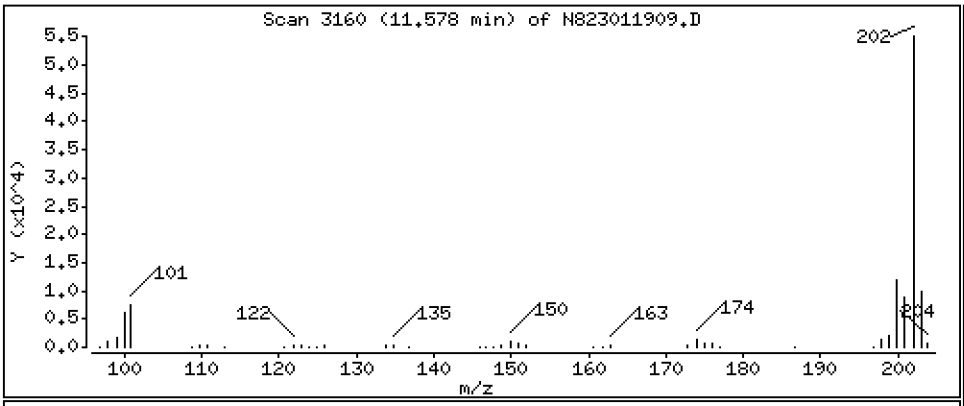
Operator: JZ

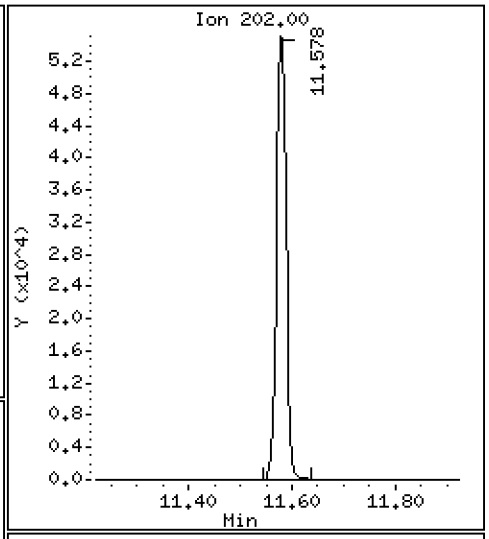
Column phase: Rxi-17sil

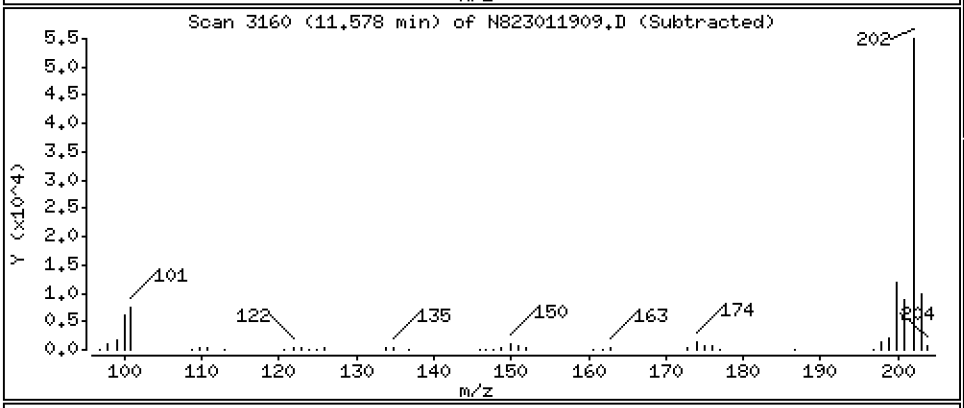
Column diameter: 0.25

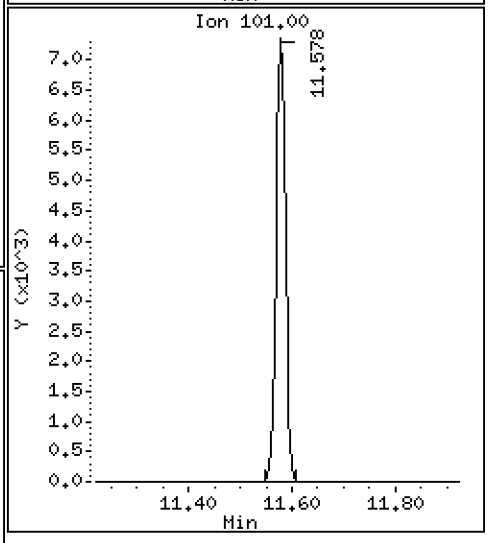
23 Pyrene

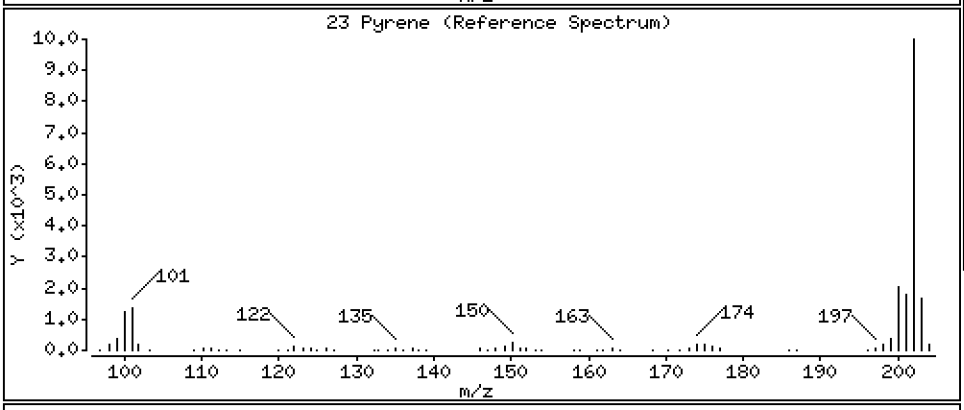
Concentration: 2.462 ug/L

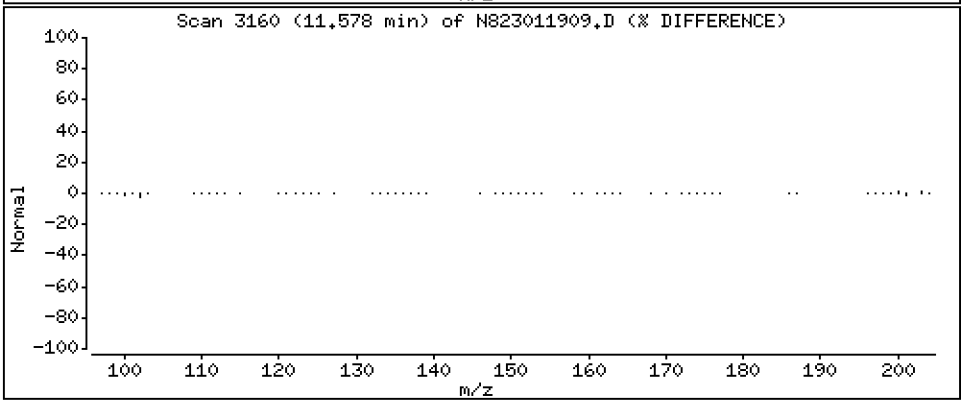












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

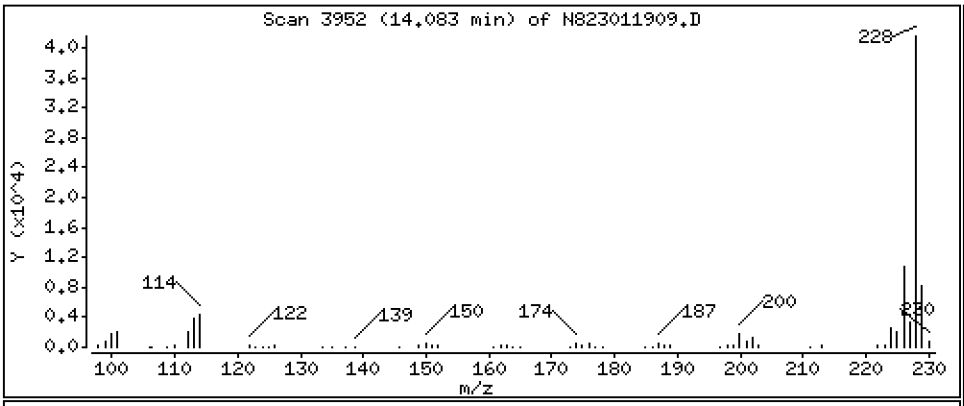
Operator: JZ

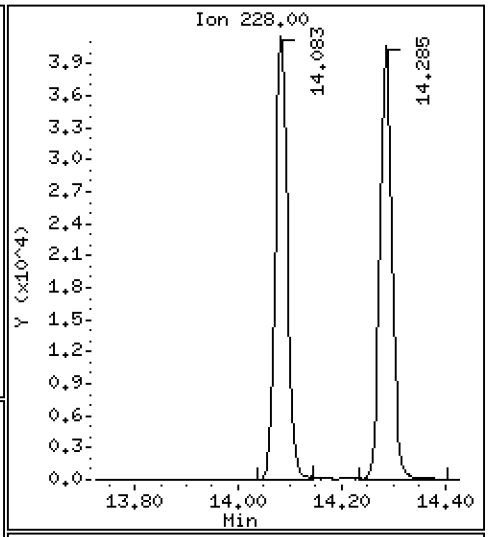
Column phase: Rxi-17sil

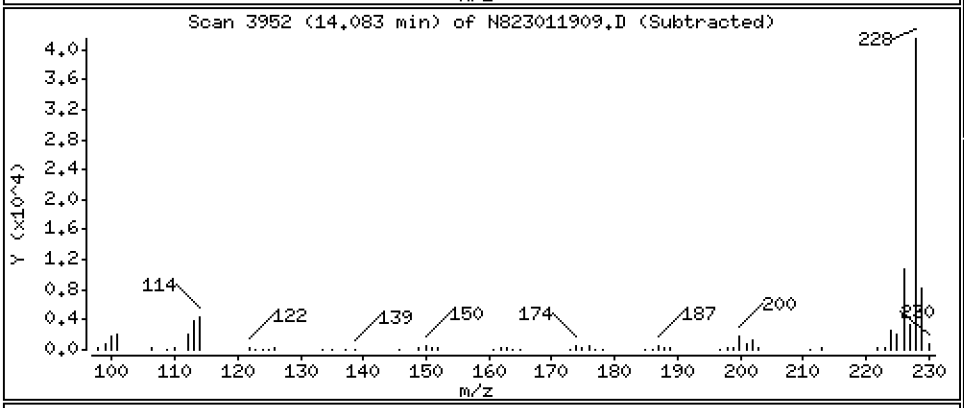
Column diameter: 0.25

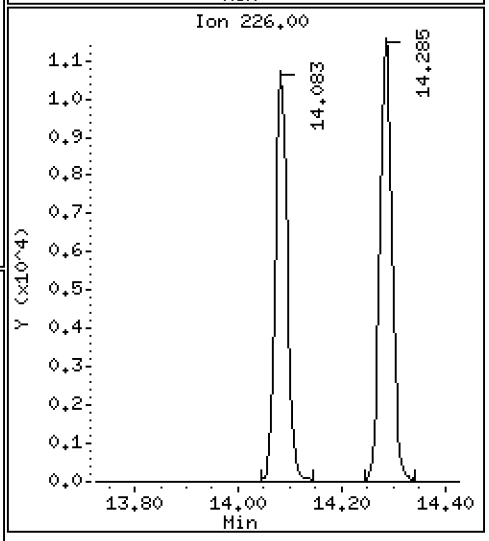
24 Benzo(a)anthracene

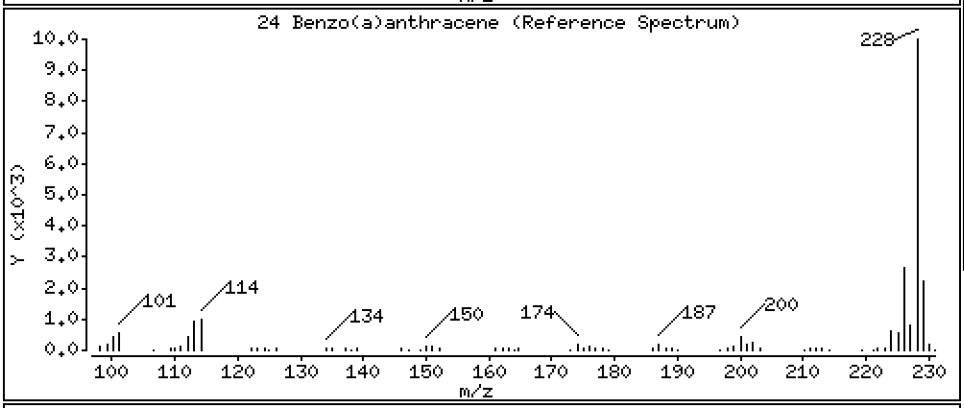
Concentration: 2.587 ug/L

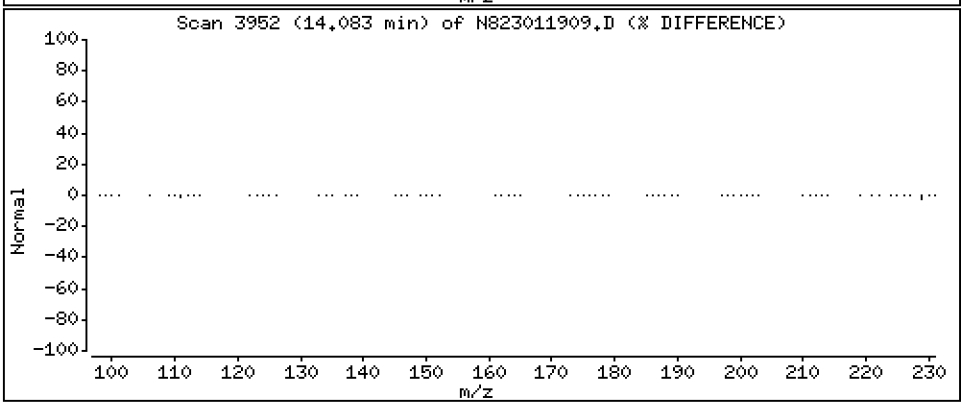












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

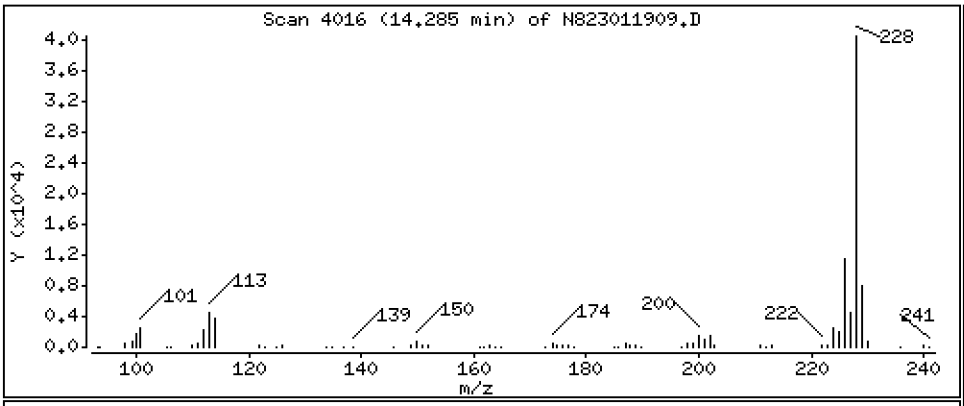
Operator: JZ

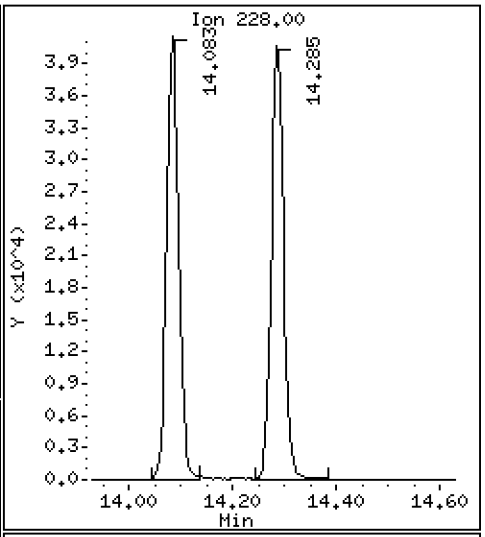
Column phase: Rxi-17sil

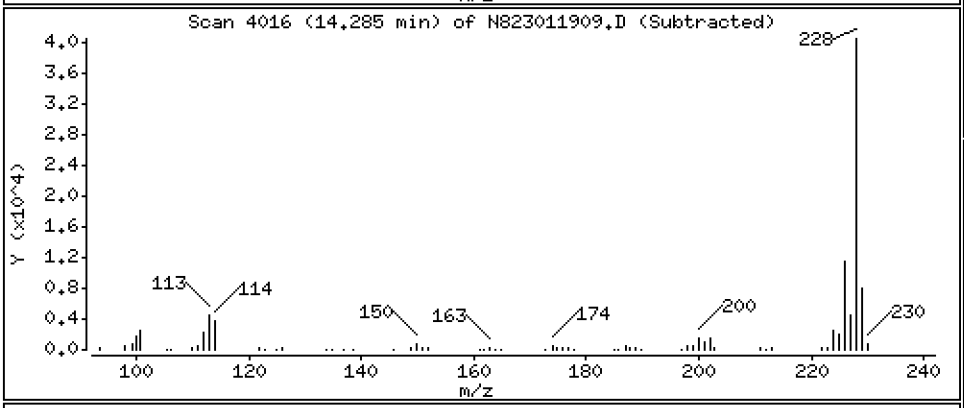
Column diameter: 0.25

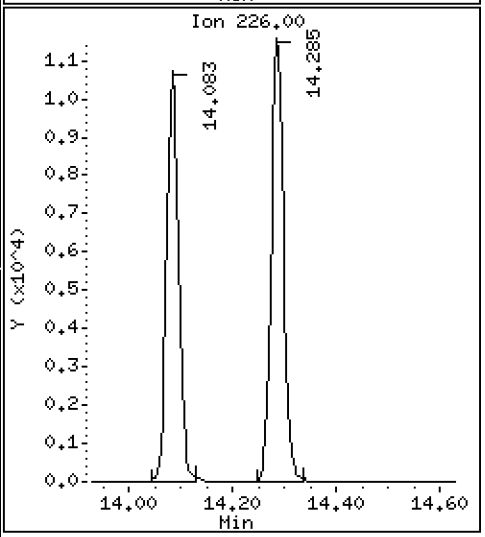
27 Chrysene

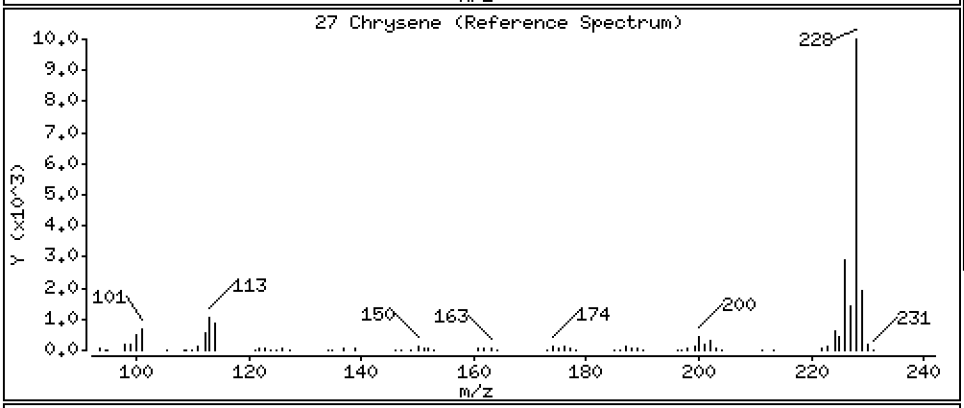
Concentration: 2.400 ug/L

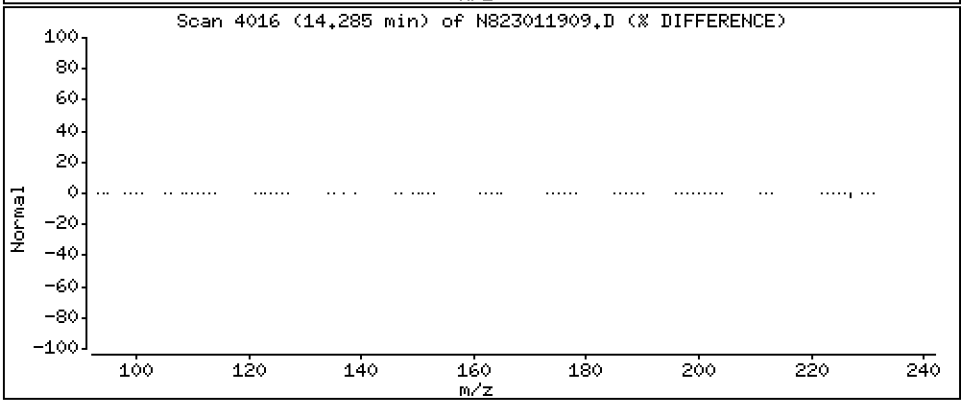












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

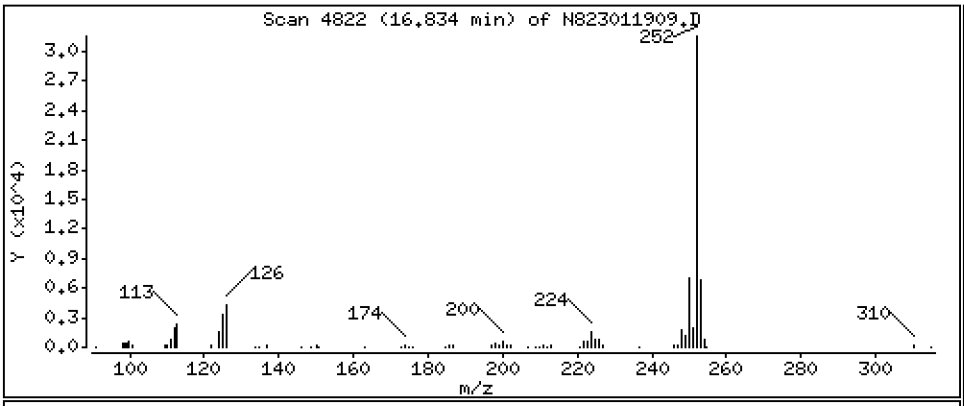
Operator: JZ

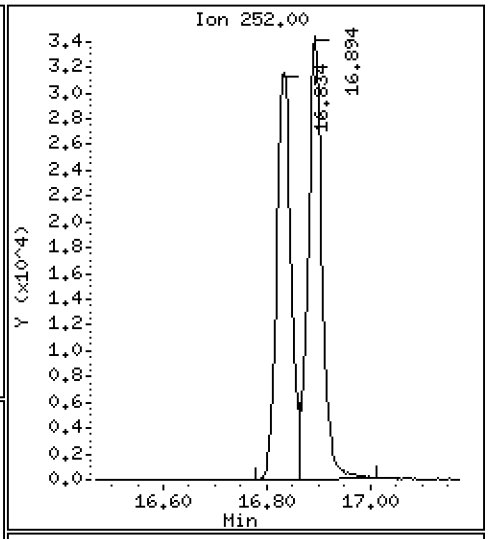
Column phase: Rxi-17sil

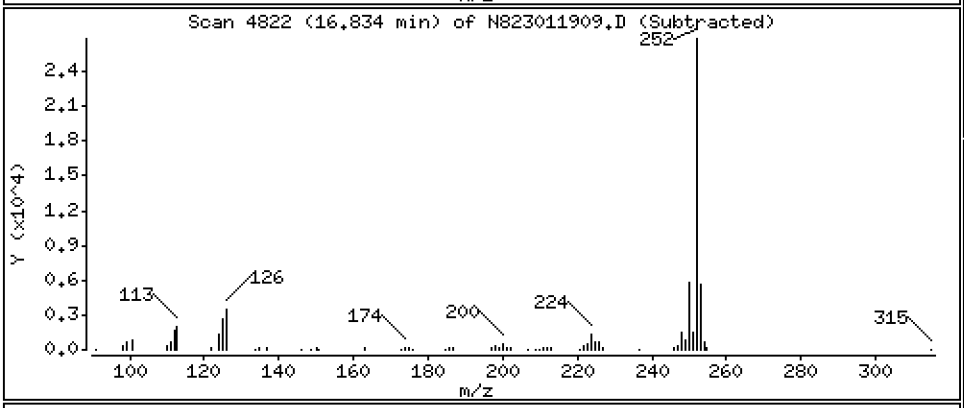
Column diameter: 0.25

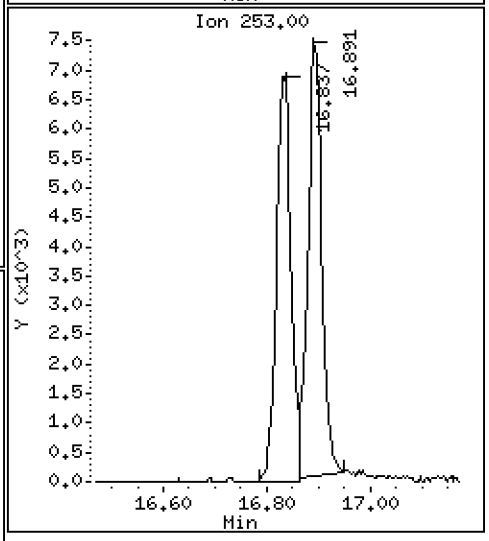
28 Benzo(b)fluoranthene

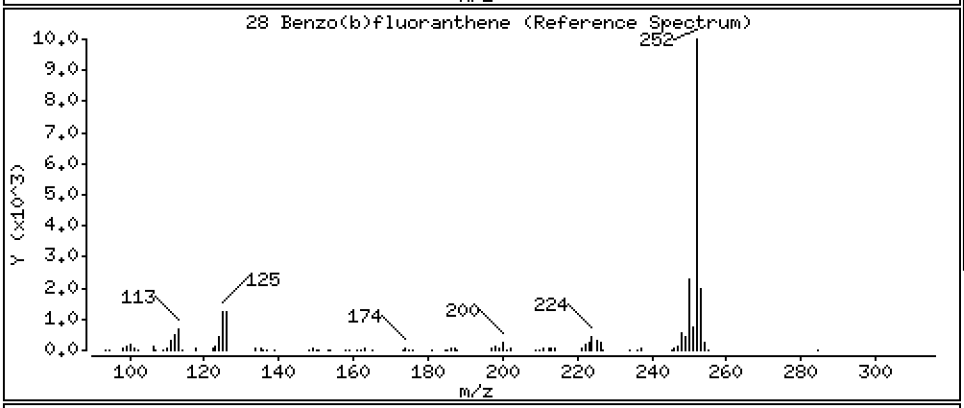
Concentration: 2.507 ug/L

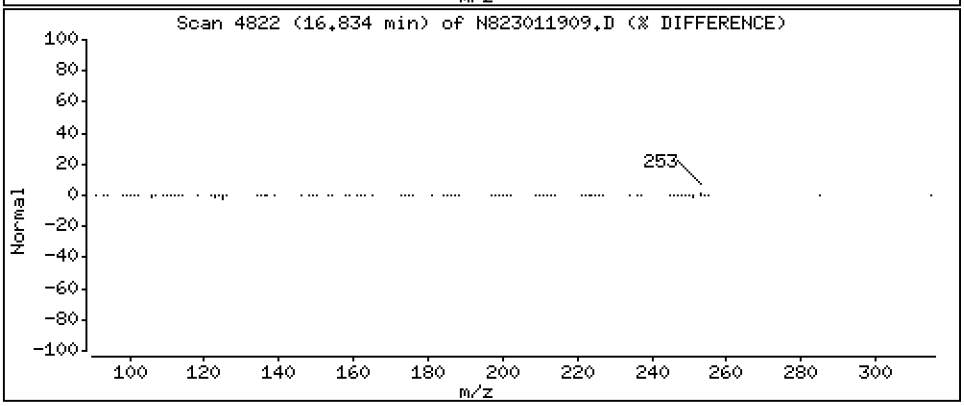












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

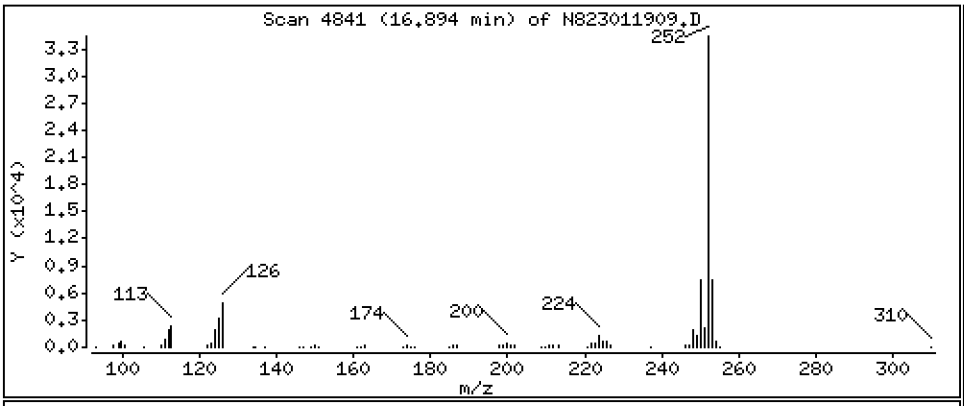
Operator: JZ

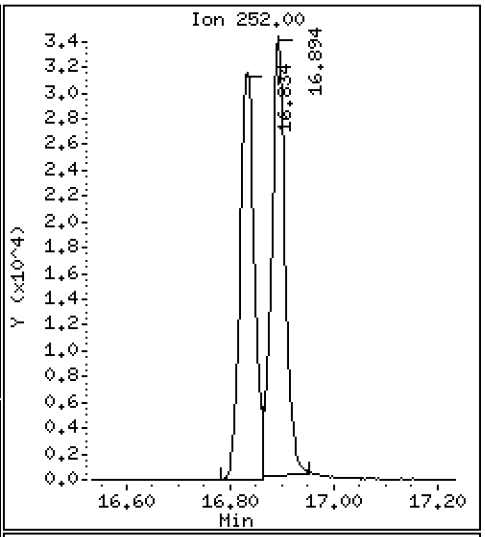
Column phase: Rxi-17sil

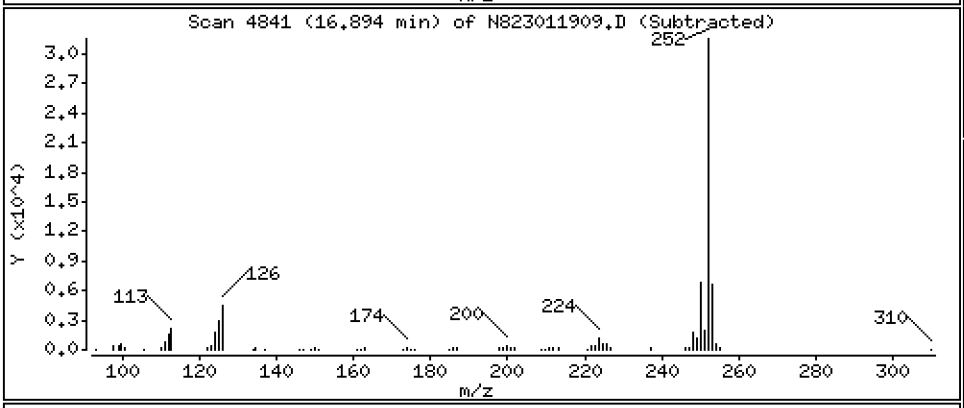
Column diameter: 0.25

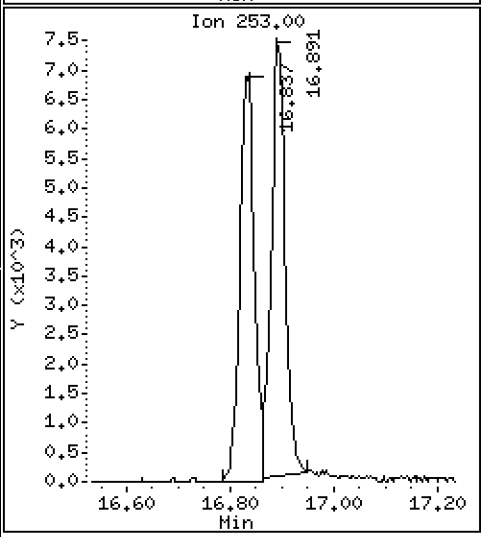
29 Benzo(k)fluoranthene

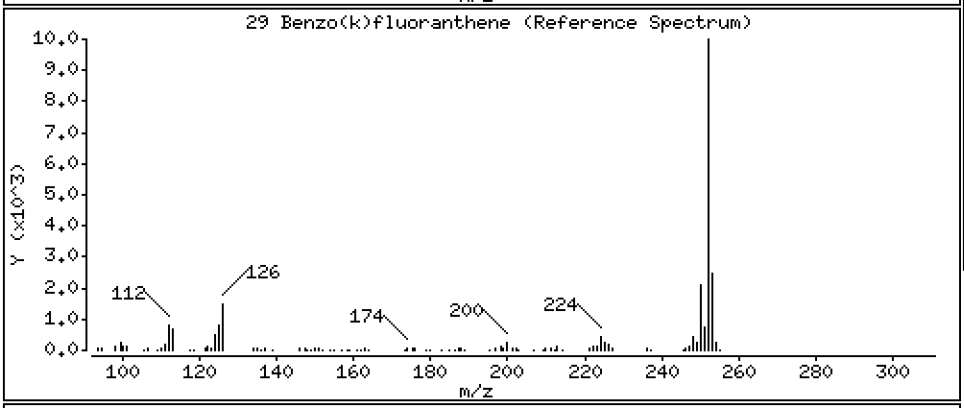
Concentration: 2.656 ug/L

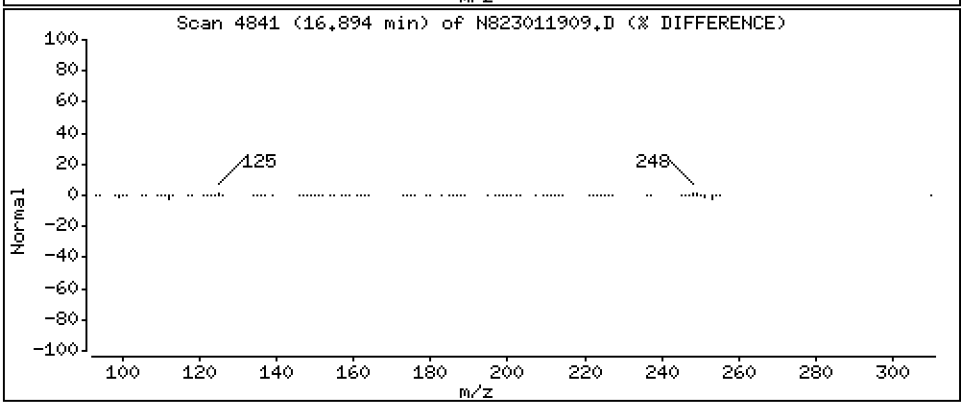












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

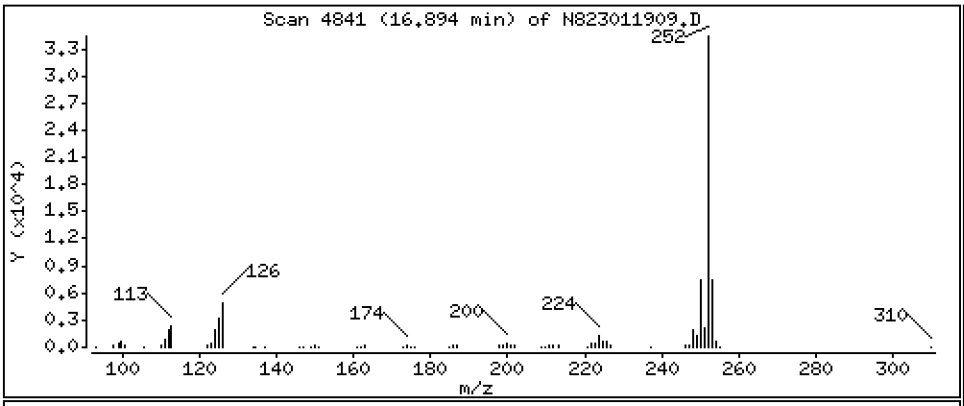
Operator: JZ

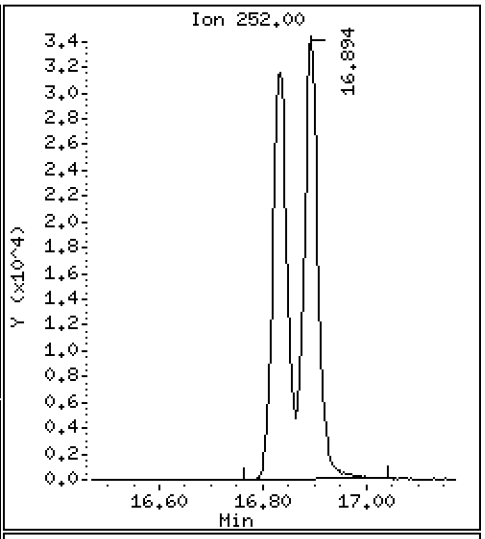
Column phase: Rxi-17sil

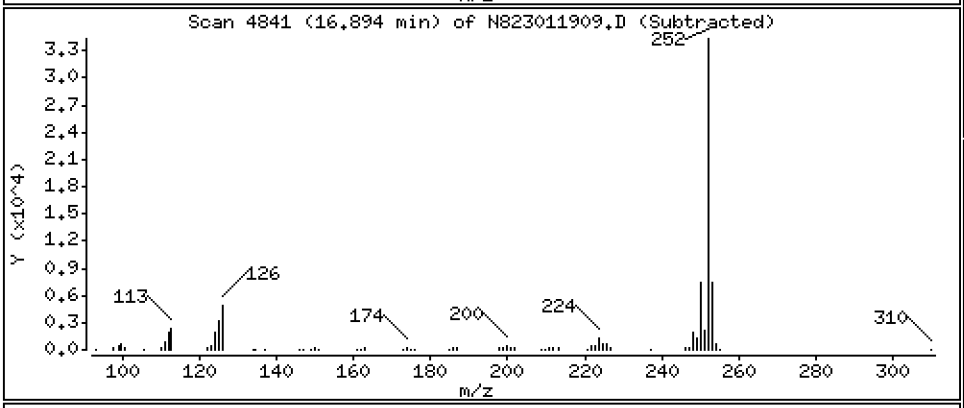
Column diameter: 0.25

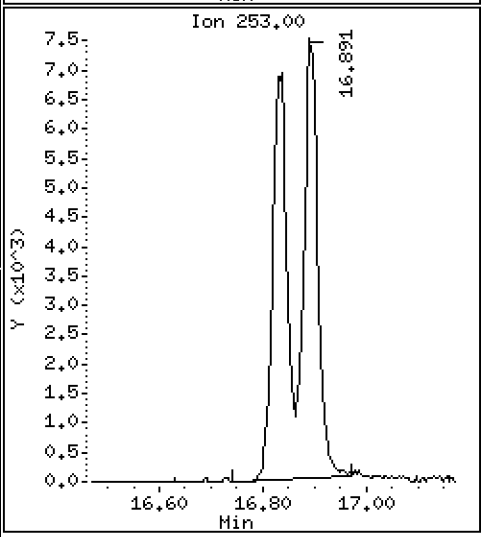
31 Total Benzofluoranthenes

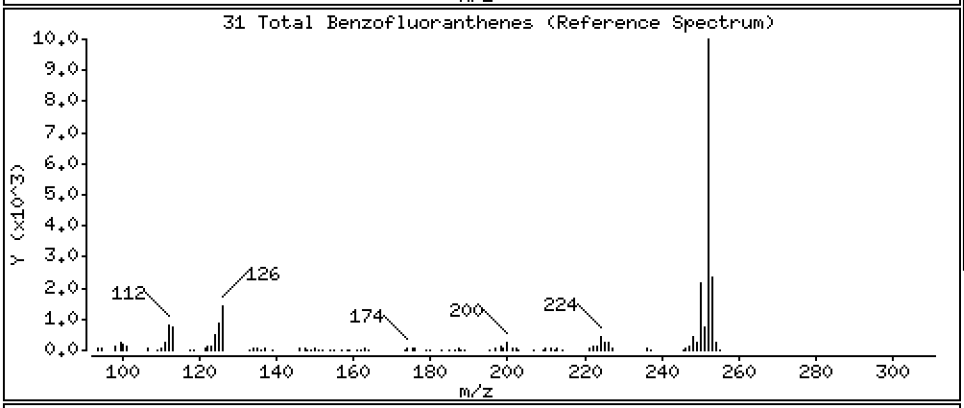
Concentration: 5.480 ug/L

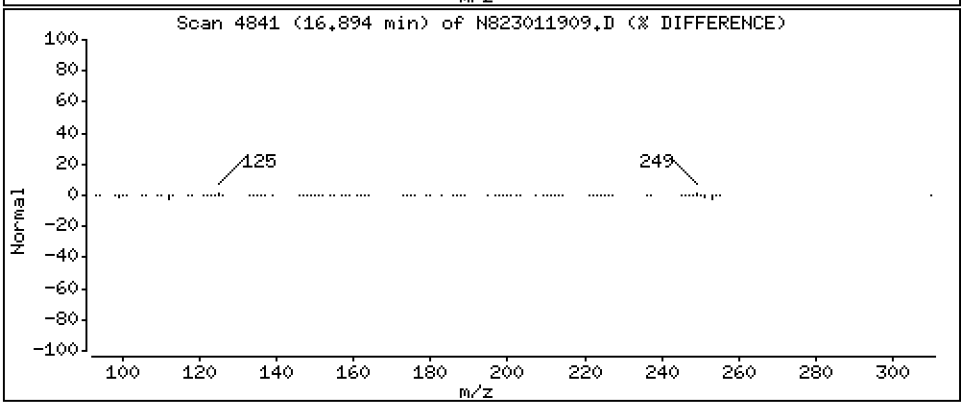












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

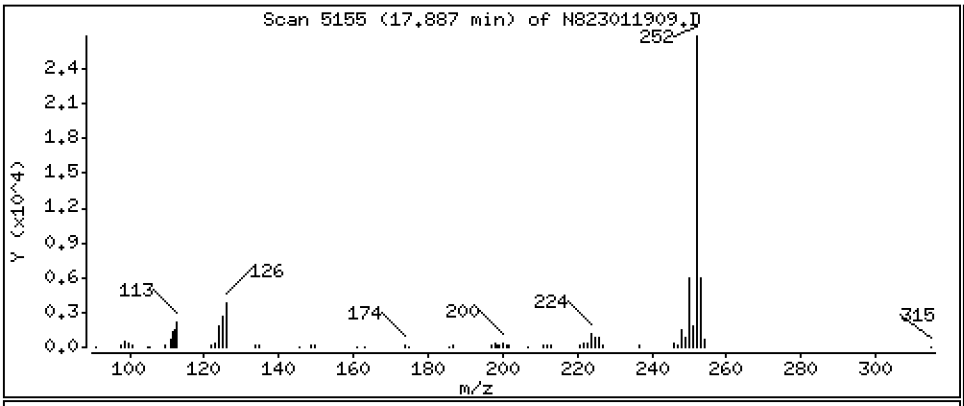
Operator: JZ

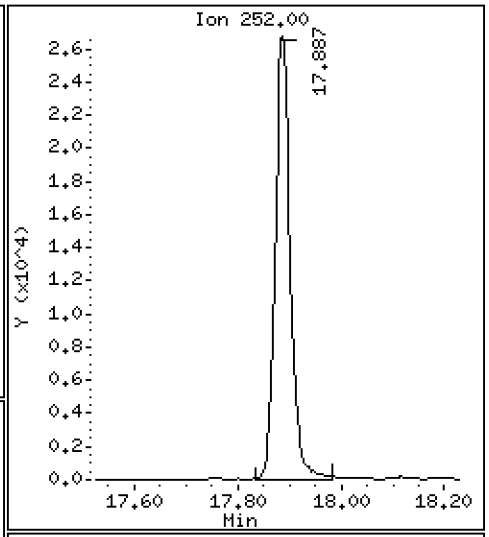
Column phase: Rxi-17sil

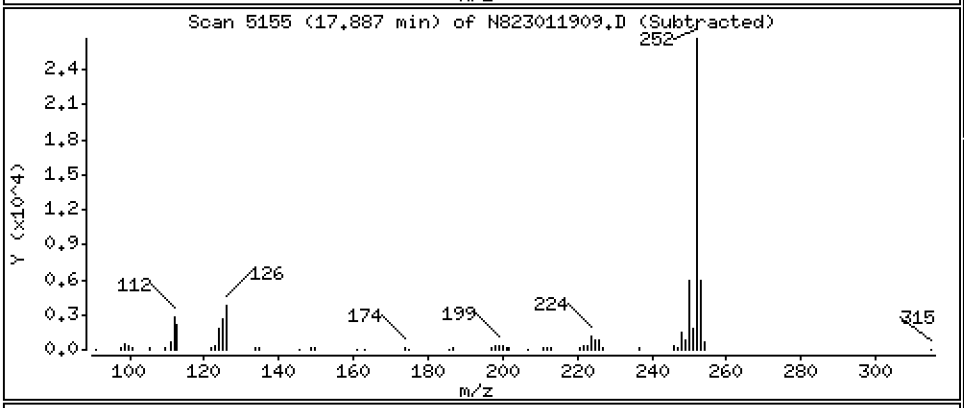
Column diameter: 0.25

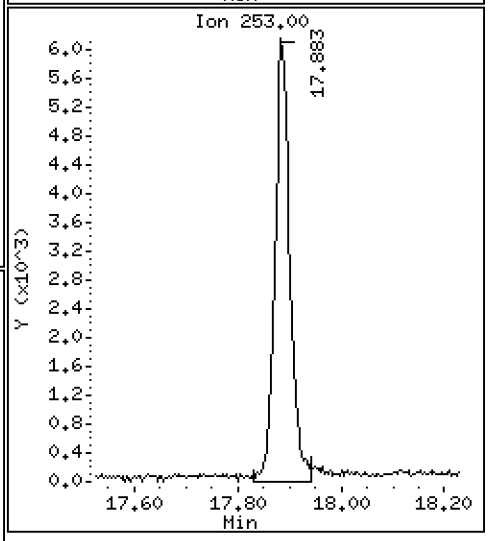
32 Benzo(a)pyrene

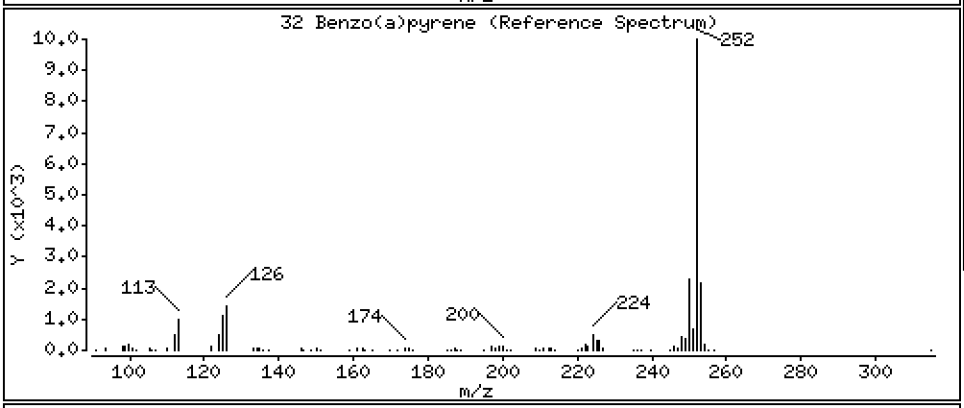
Concentration: 2.572 ug/L

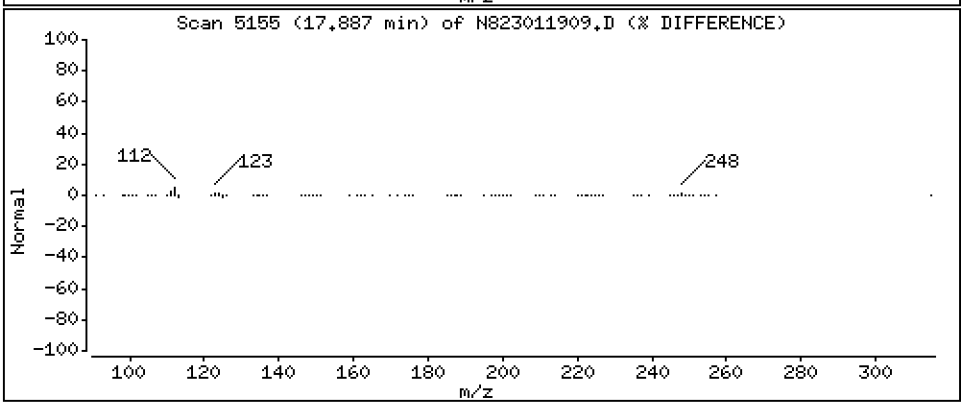












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

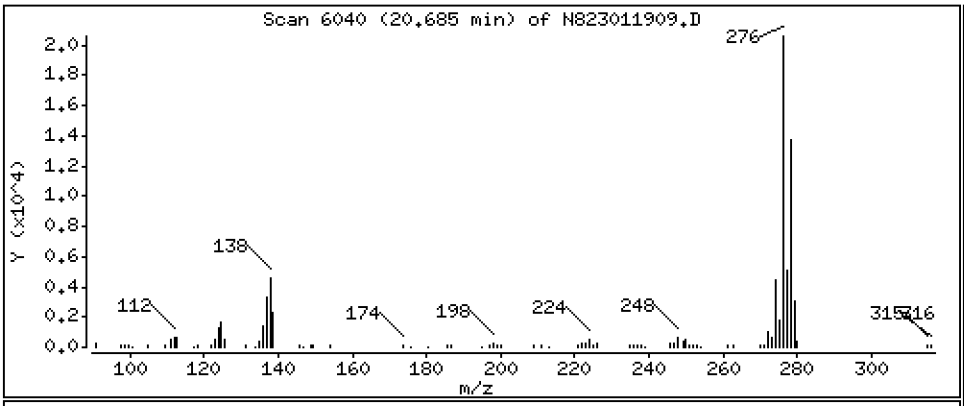
Operator: JZ

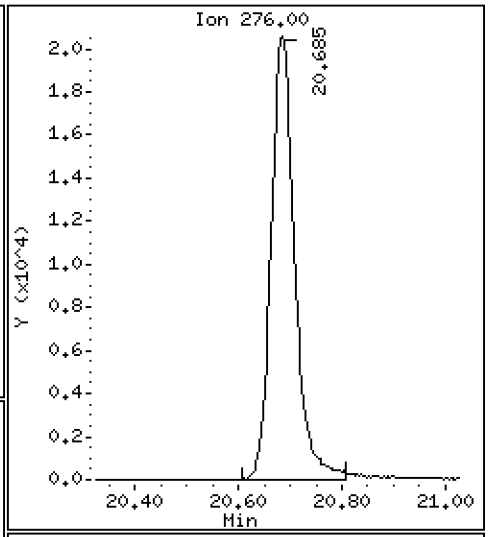
Column phase: Rxi-17sil

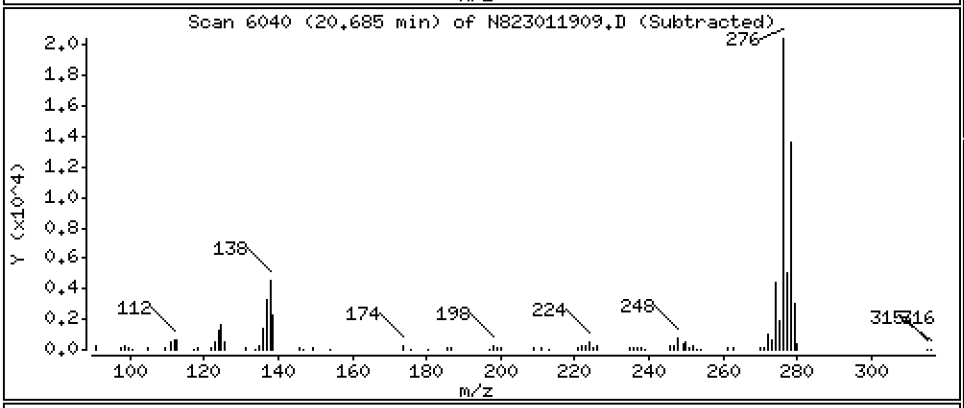
Column diameter: 0.25

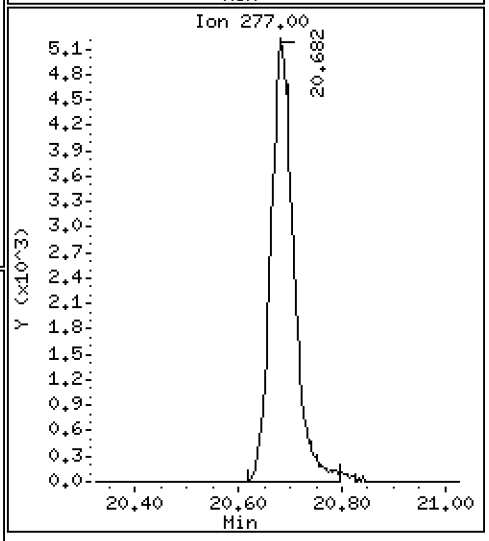
37 Indeno(1,2,3-cd)pyrene

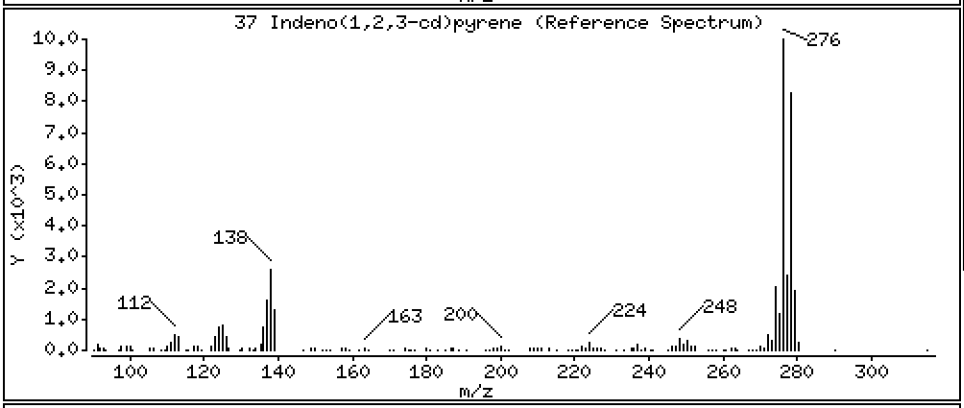
Concentration: 2.689 ug/L

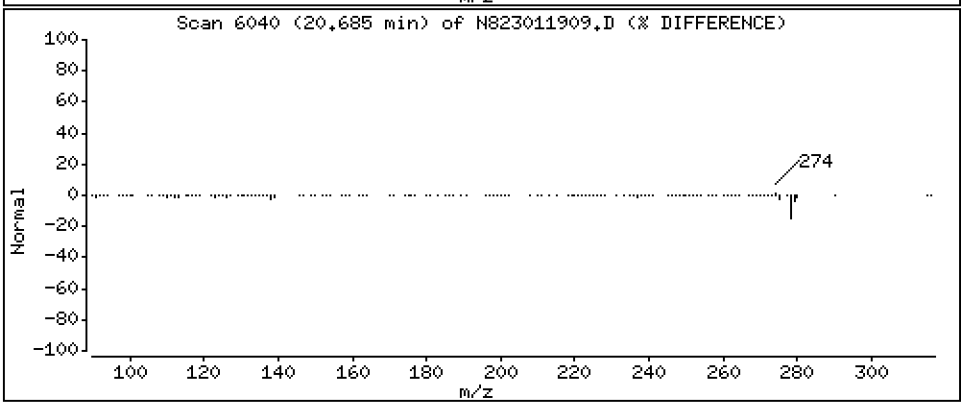












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

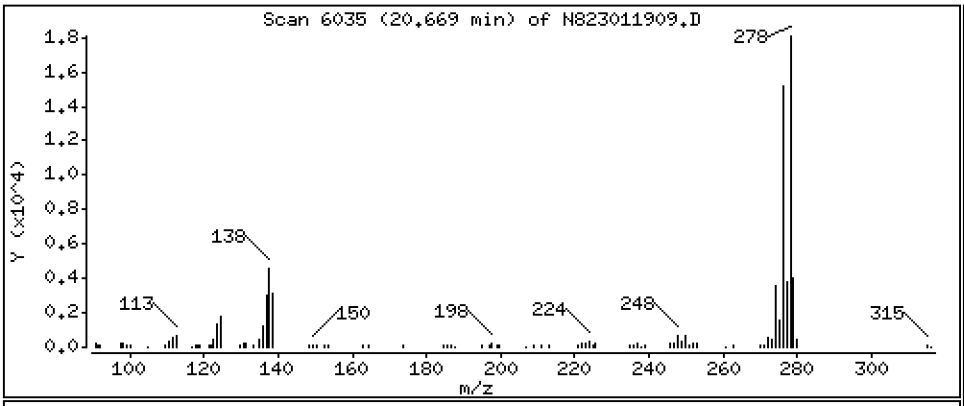
Operator: JZ

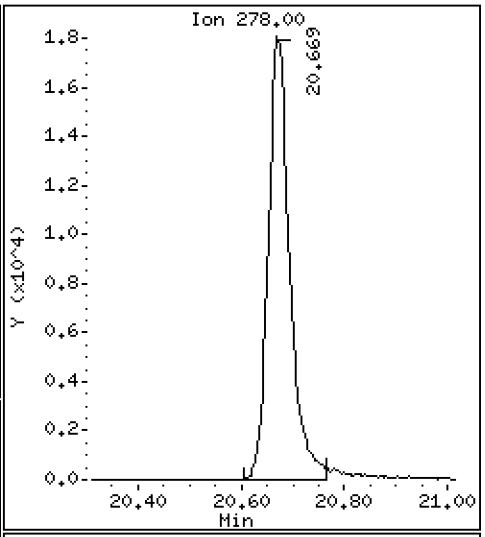
Column phase: Rxi-17sil

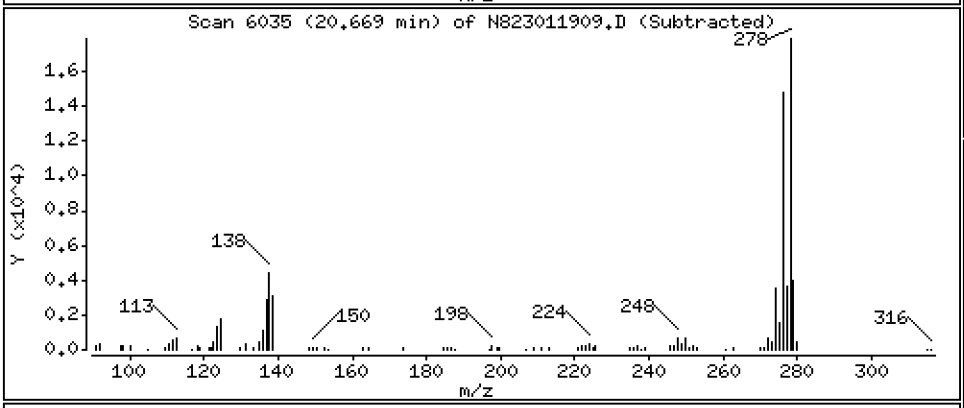
Column diameter: 0.25

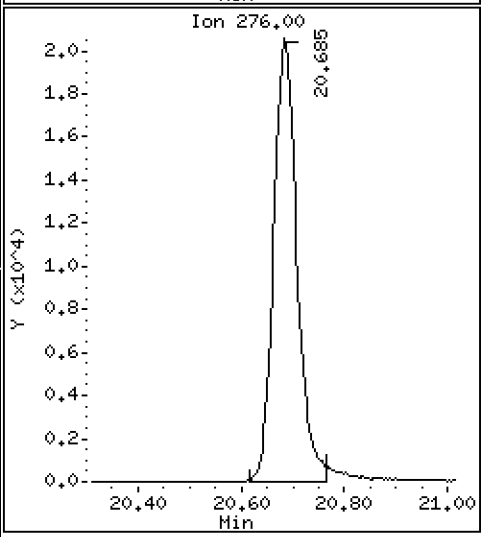
38 Dibenzo(a,h)anthracene

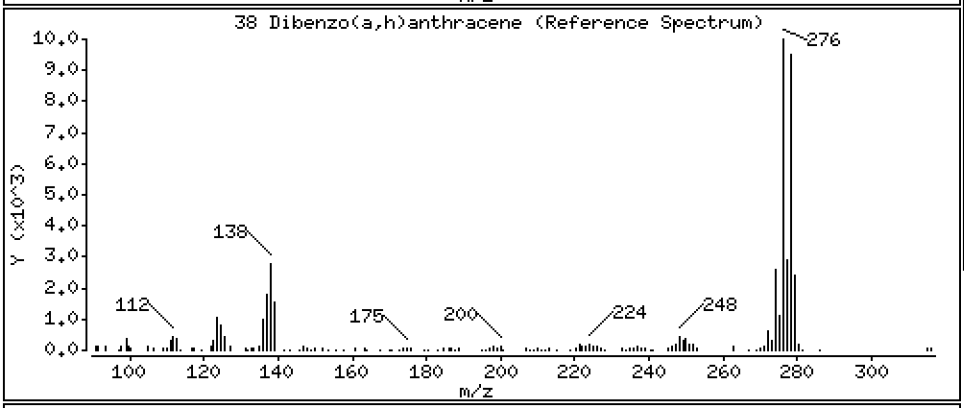
Concentration: 2.493 ug/L

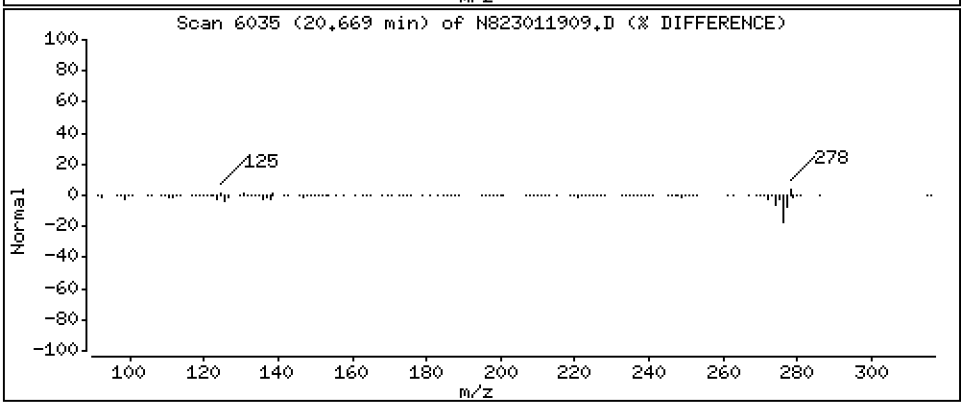












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

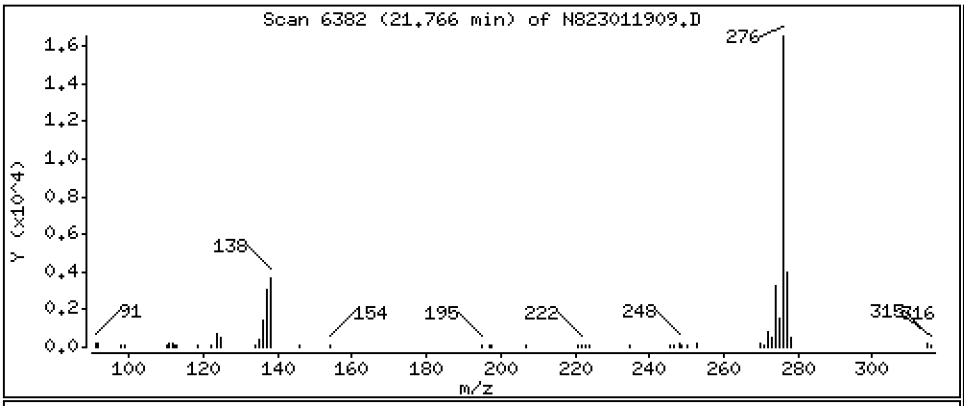
Operator: JZ

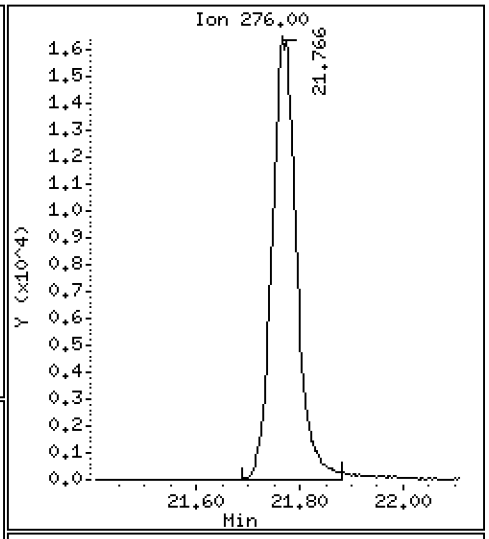
Column phase: Rxi-17sil

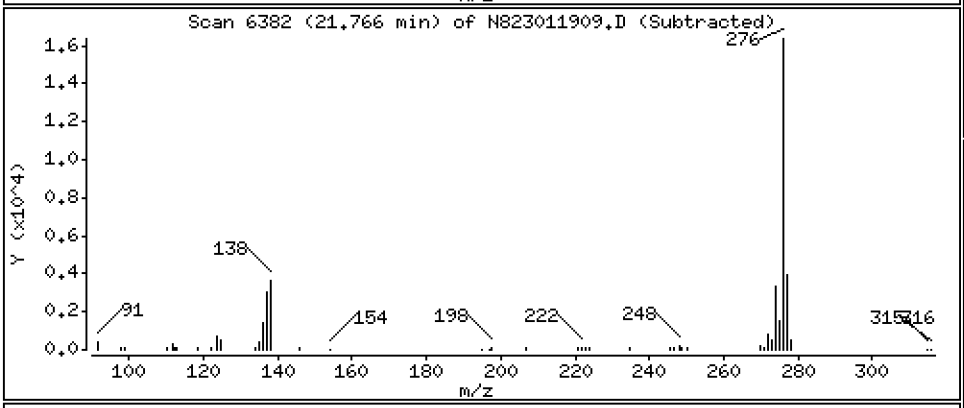
Column diameter: 0.25

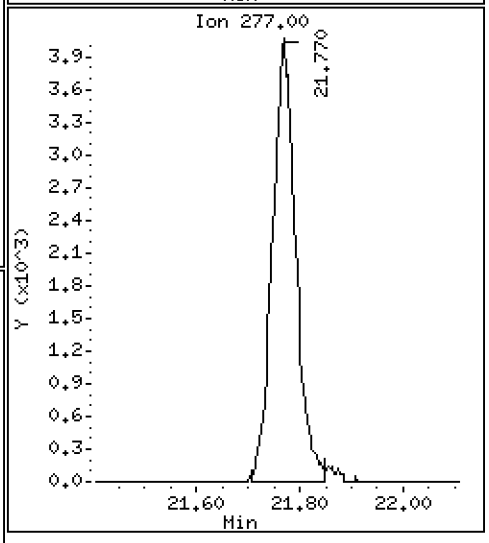
39 Benzo(g,h,i)perylene

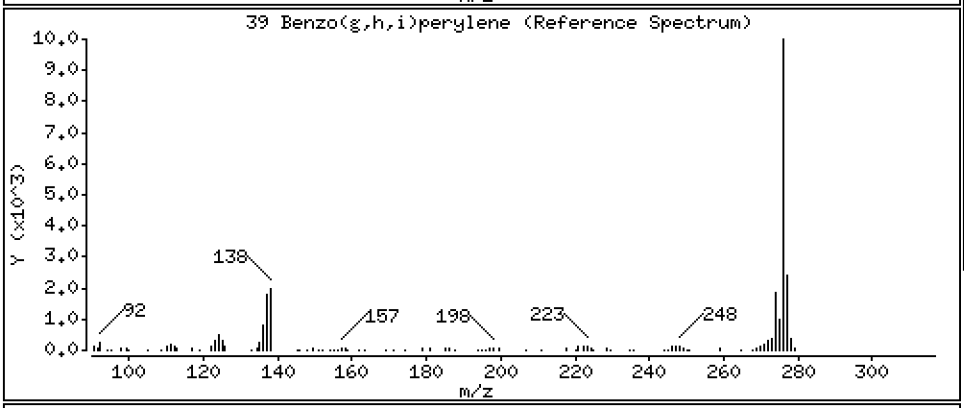
Concentration: 2.483 ug/L

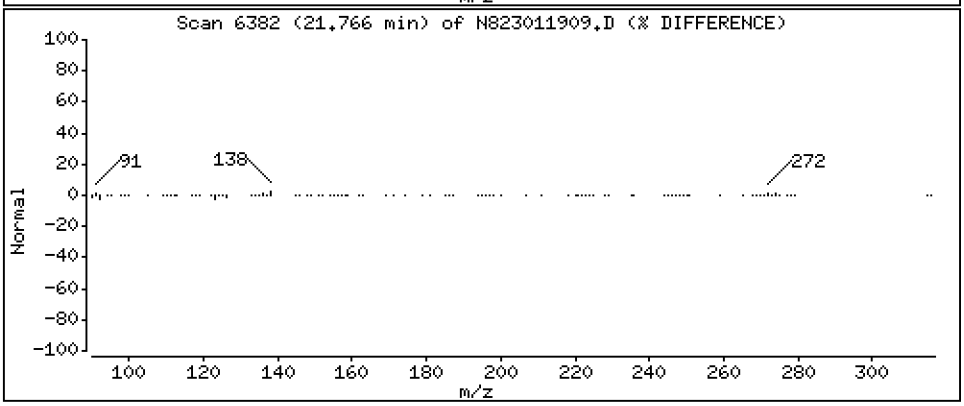












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Lab Smp Id: SLA0213-SCV1
Inj Date : 19-JAN-2023 14:58
Operator : JZ Inst ID: nt8.i
Smp Info : SCV230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 21:57 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnascv.sub
Target Version: 4.14
Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
*	1 Naphthalene-d8	136	4.913	4.906	(1.000)	46346	2.00000	
	2 Naphthalene	128	4.941	4.938	(1.006)	56587	2.62597	2.626
$	3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
	4 2-Methylnaphthalene	141	5.694	5.687	(1.159)	31650	2.67019	2.670
	5 1-methylnaphthalene	141	5.890	5.883	(1.199)	31873	2.64949	2.649
	9 Acenaphthylene	152	7.091	7.085	(0.985)	59018	2.82060	2.821
*	10 Acenaphthene-d10	164	7.202	7.196	(1.000)	27709	2.00000	
	11 Acenaphthene	153	7.249	7.246	(1.007)	36454	2.60022	2.600
	12 Dibenzofuran	168	7.401	7.395	(1.028)	60898	2.85987	2.860
	14 Fluorene	166	7.878	7.872	(1.094)	43507	2.63066	2.631
*	15 Phenanthrene-d10	188	9.238	9.235	(1.000)	51685	2.00000	
	16 Phenanthrene	178	9.276	9.270	(1.004)	61815	2.44841	2.448
	17 Anthracene	178	9.317	9.311	(1.009)	52064	2.27006	2.270
	22 Fluoranthene	202	11.059	11.053	(1.197)	72902	2.65276	2.653
$	21 Fluoranthene-d10	212	Compound Not Detected.					
	23 Pyrene	202	11.578	11.572	(0.815)	71115	2.46242	2.462
	24 Benzo(a)anthracene	228	14.082	14.076	(0.991)	67725	2.58725	2.587
*	25 Chrysene-d12	240	14.212	14.202	(1.000)	46582	2.00000	
	27 Chrysene	228	14.285	14.278	(1.005)	66872	2.39976	2.400
	28 Benzo(b)fluoranthene	252	16.833	16.821	(0.929)	60946	2.50689	2.507
	29 Benzo(k)fluoranthene	252	16.893	16.884	(0.932)	63249	2.65606	2.656
	31 Total Benzofluoranthenes	252	16.893	16.821	(0.932)	126178	5.48025	5.480(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572
*	33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000	
	37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493
	39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483
	35 Perylene	252	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011909.D
Lab Smp Id: SLA0213-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 14:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

No RRT check performed

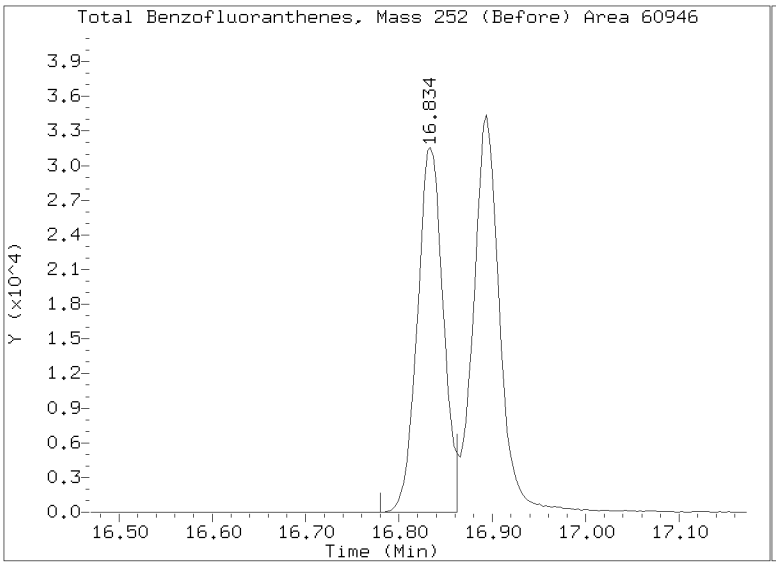
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

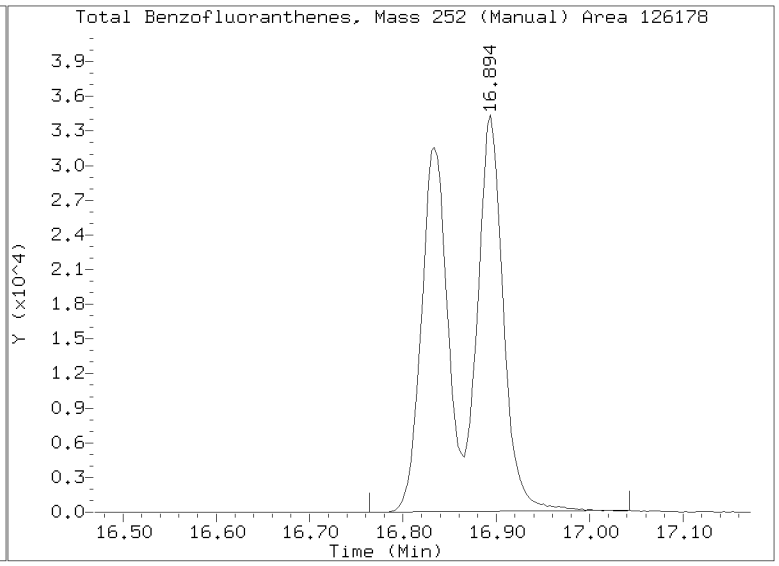
Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D
Injection Date: 19-JAN-2023 14:58
Lab ID:SLA0213-SCV1 Client ID:
Report Date: 01/25/2023 22:00





SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00036
Laboratory ID: SLC0155-SCV1
Sequence: SLC0155
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	4.4	-12.0	20.00
1,2-Dichlorobenzene	5.0000	4.4	-12.0	20.00
Benzyl Alcohol	5.0000	4.8	-3.1	20.00
Benzoic acid	10.000	1.7	-82.8 *	20.00
2,4-Dimethylphenol	5.0000	3.5	-29.2 *	20.00
1,2,4-Trichlorobenzene	5.0000	4.4	-12.3	20.00
N-Nitrosodiphenylamine	5.0000	4.8	-3.7	20.00
Pentachlorophenol	5.0000	2.6	-47.4 *	20.00
2-Fluorophenol	7.5000	0.00		
p-Terphenyl-d14	5.0000	0.00465	-99.9	

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Page 1

Date : 26-FEB-2023 04:06

Client ID:

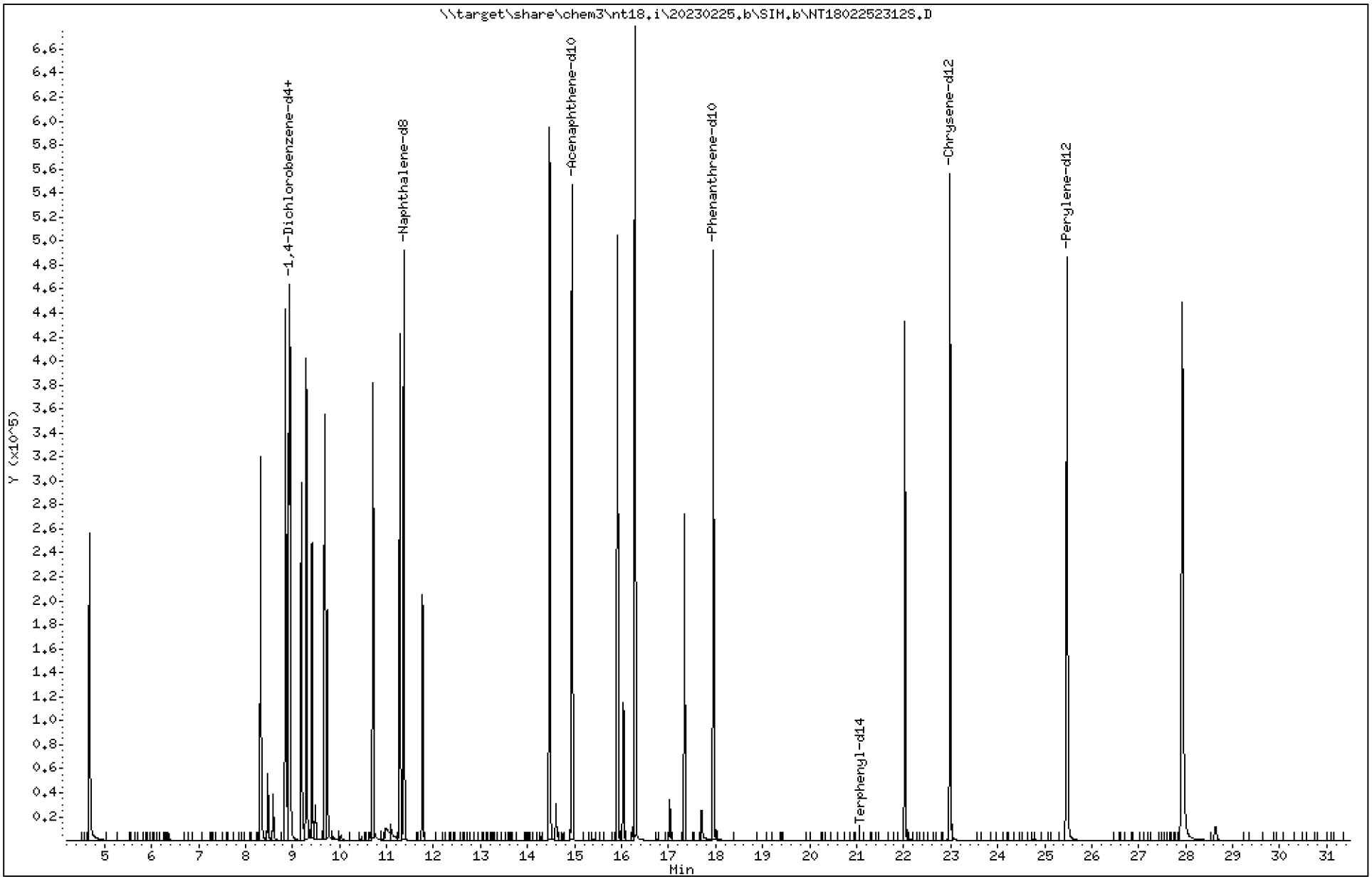
Instrument: nt18.i

Sample Info: SLC0155-SCV1

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

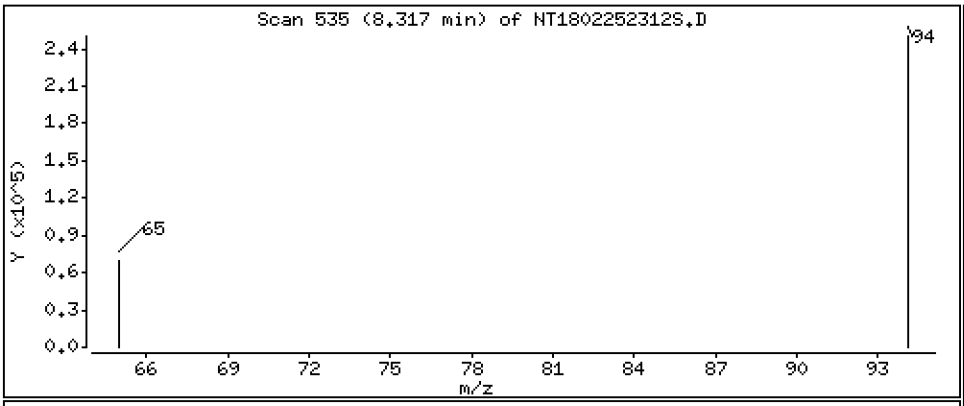
Operator: YZ

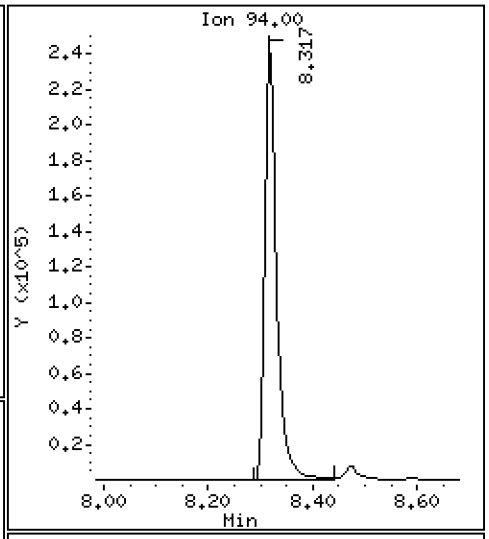
Column phase: ZB-5msi

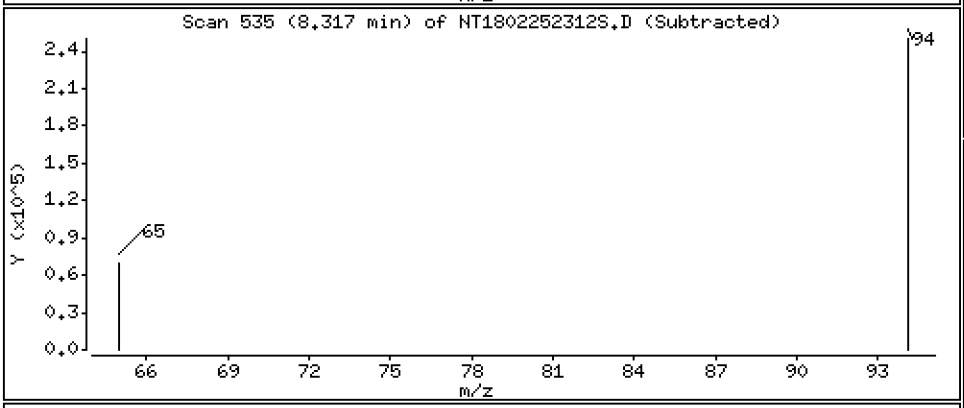
Column diameter: 0.25

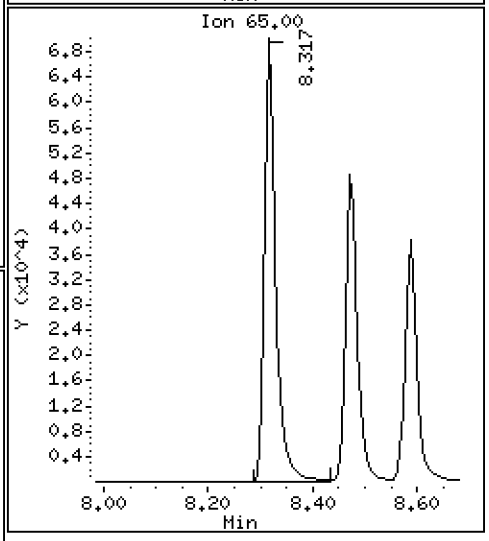
3 Phenol

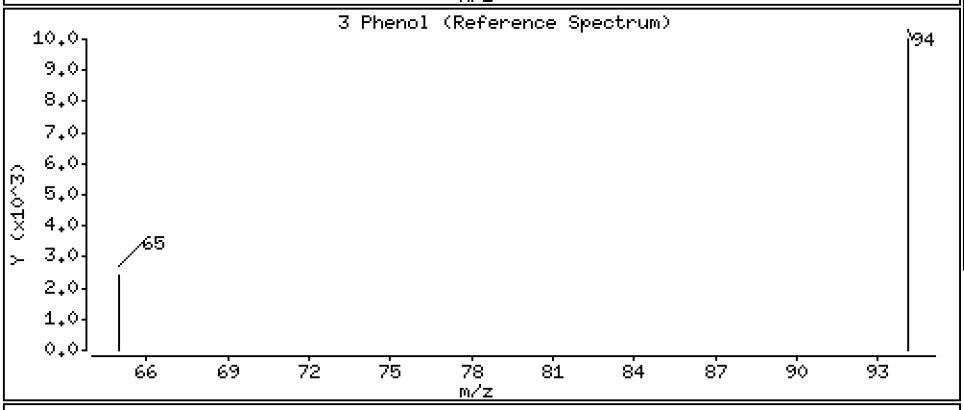
Concentration: 4.325 ug/mL

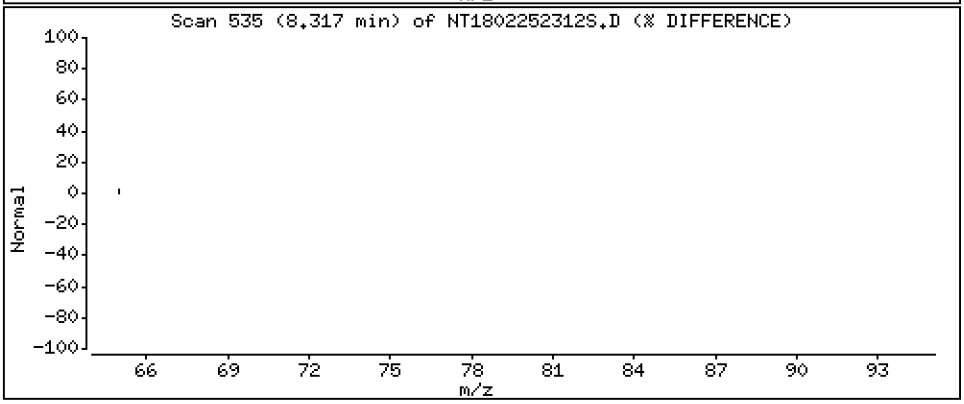












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

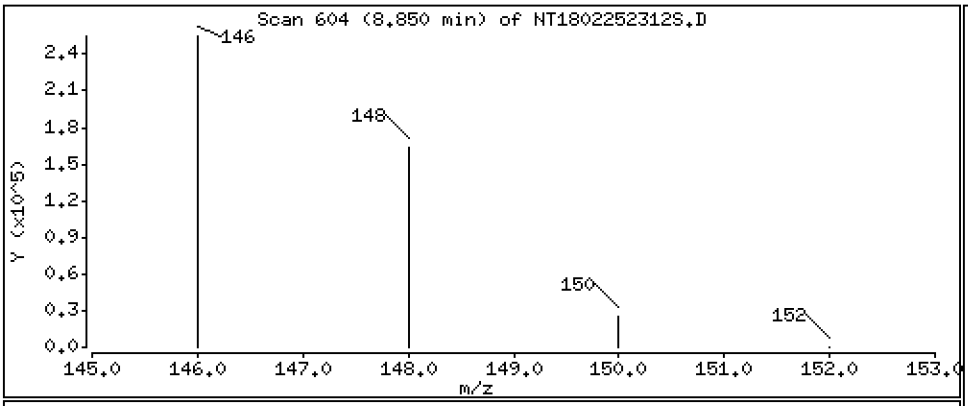
Operator: YZ

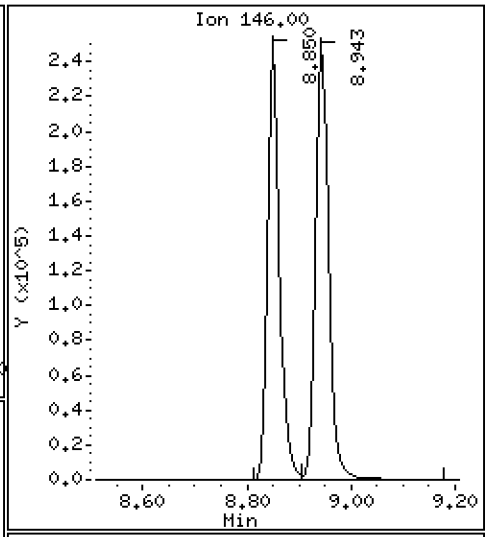
Column phase: ZB-5msi

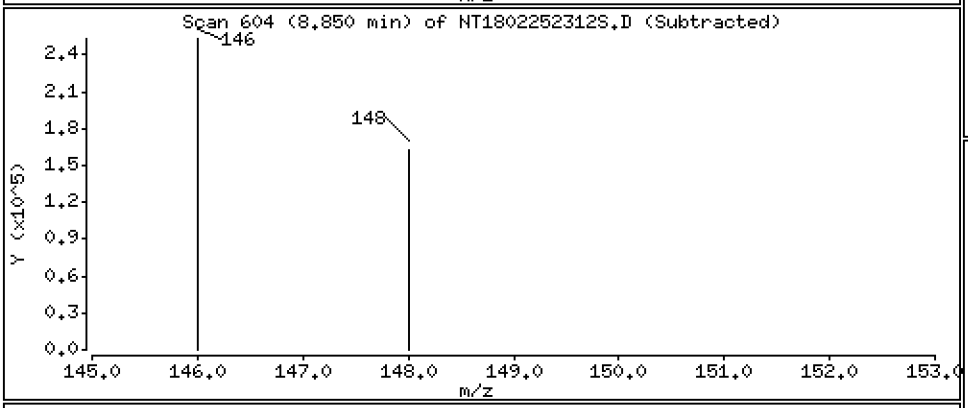
Column diameter: 0.25

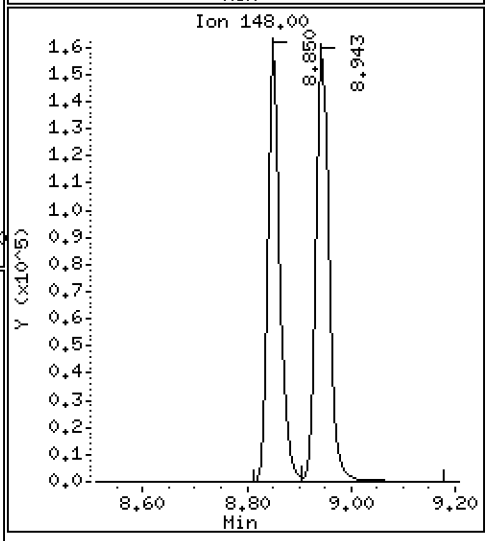
7 1,3-Dichlorobenzene

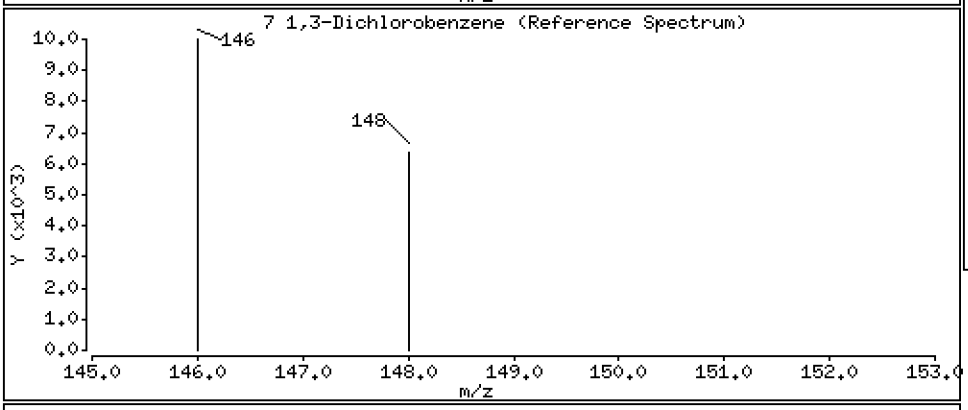
Concentration: 4.462 ug/mL

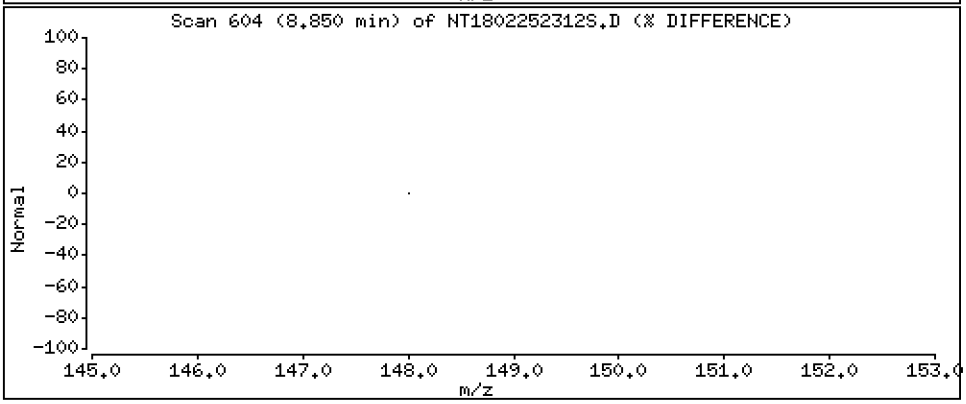












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

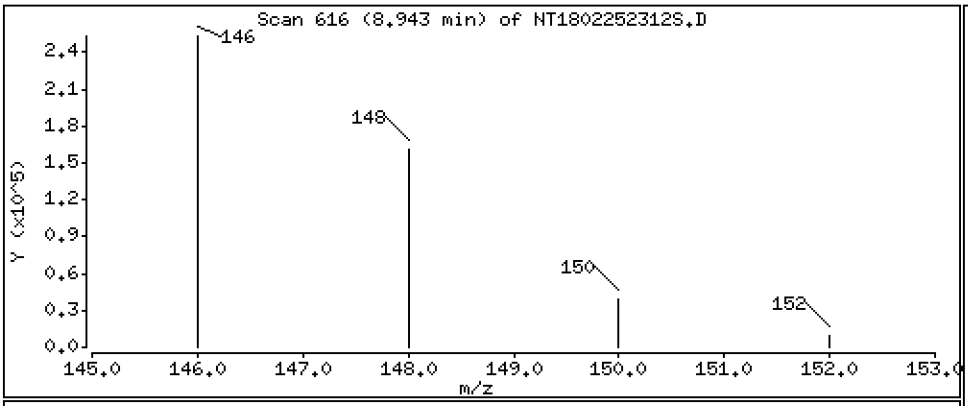
Operator: YZ

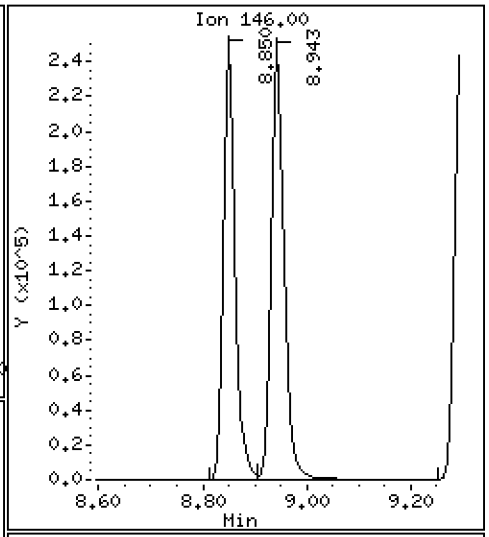
Column phase: ZB-5msi

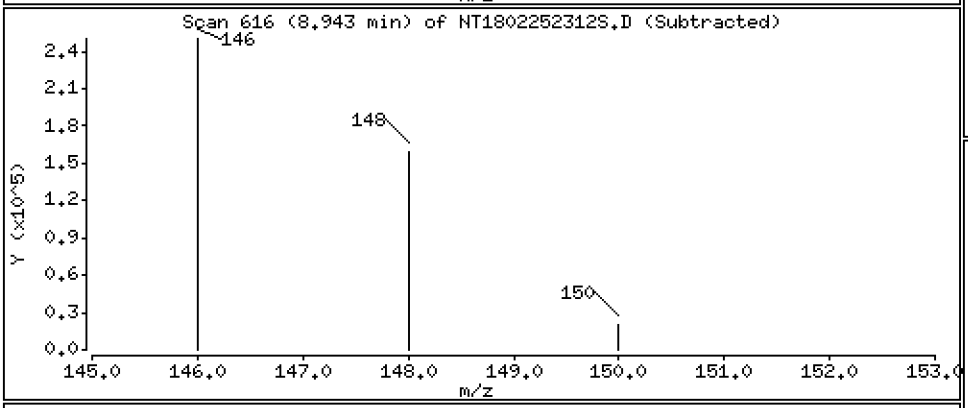
Column diameter: 0.25

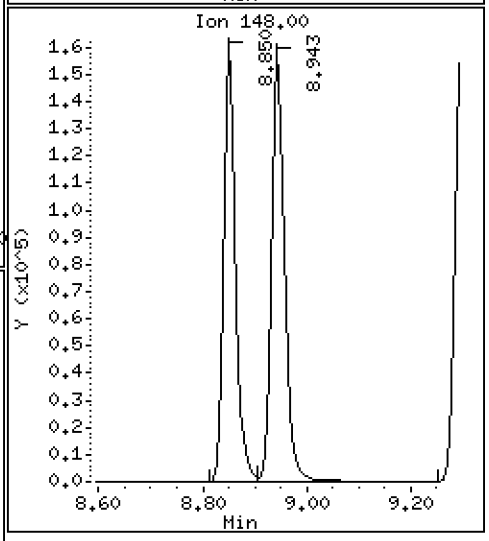
9 1,4-Dichlorobenzene

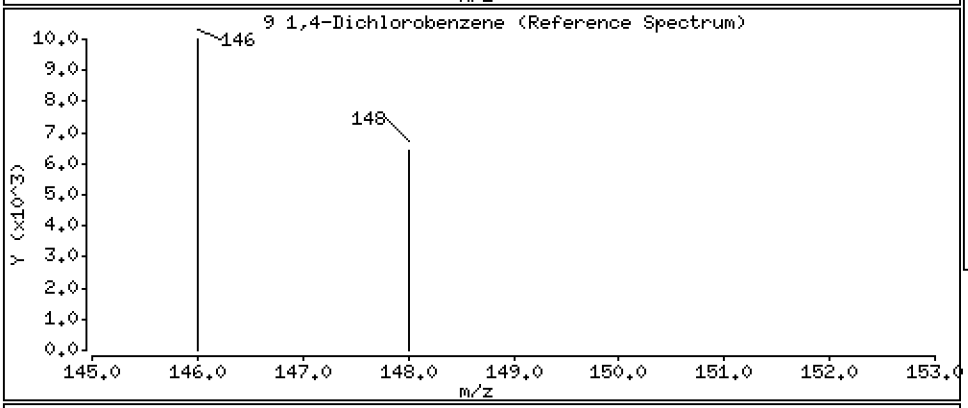
Concentration: 4.402 ug/mL

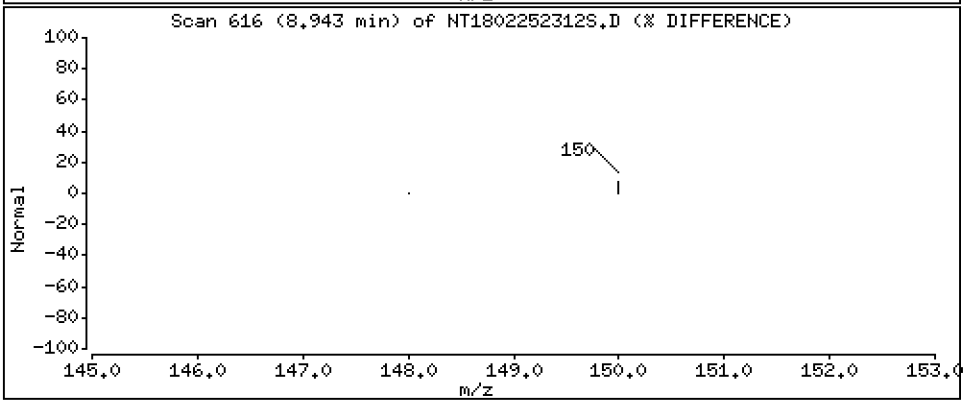












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

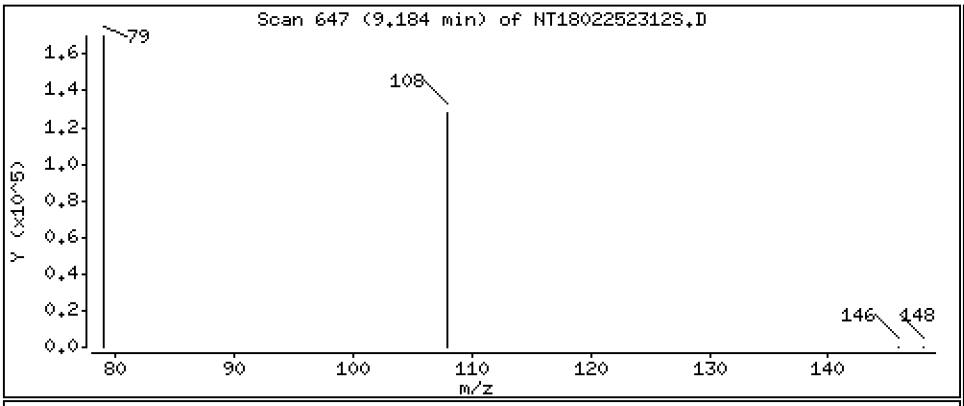
Operator: YZ

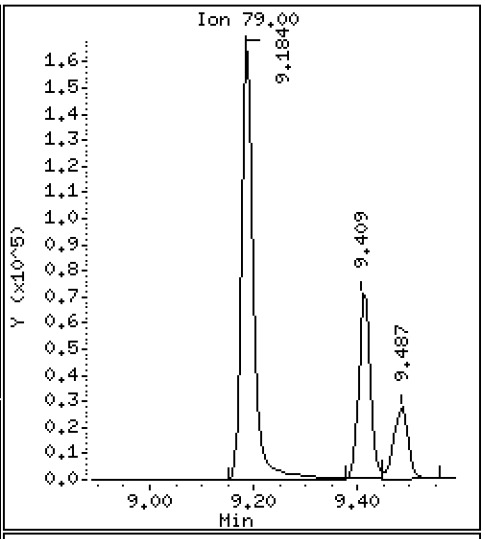
Column phase: ZB-5msi

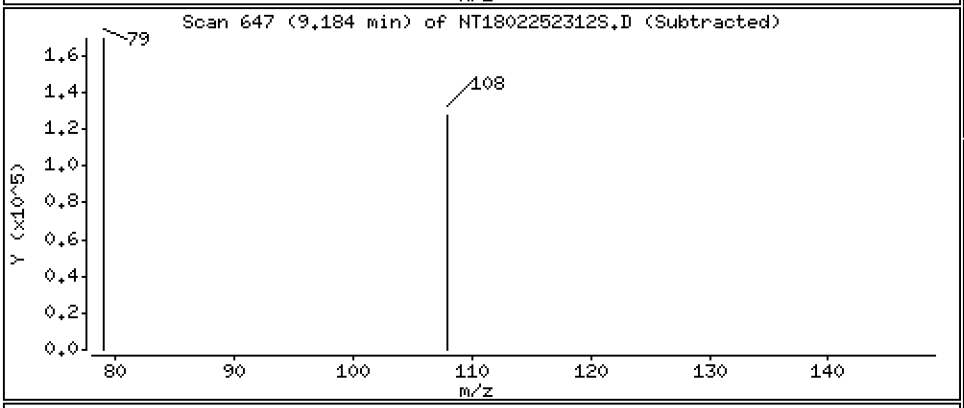
Column diameter: 0.25

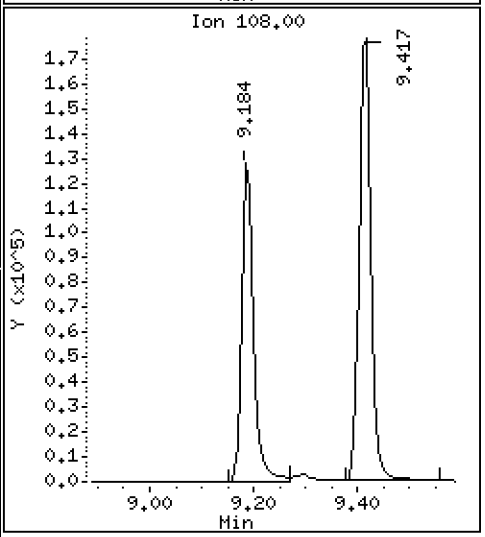
11 Benzyl alcohol

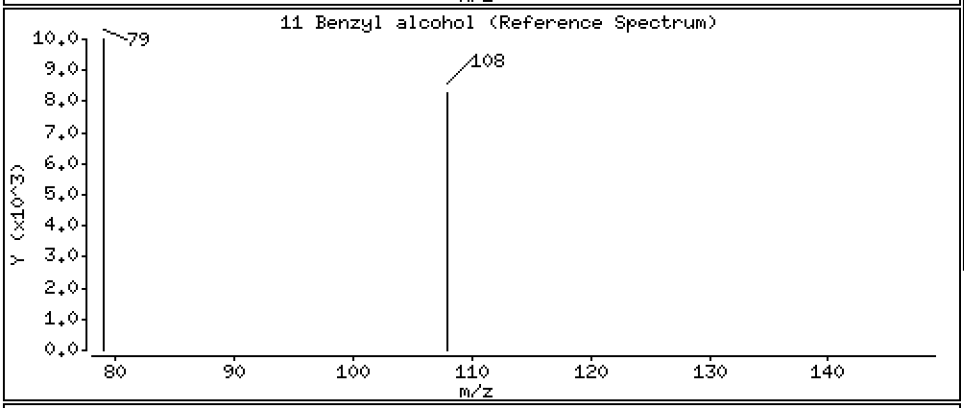
Concentration: 4.846 ug/mL

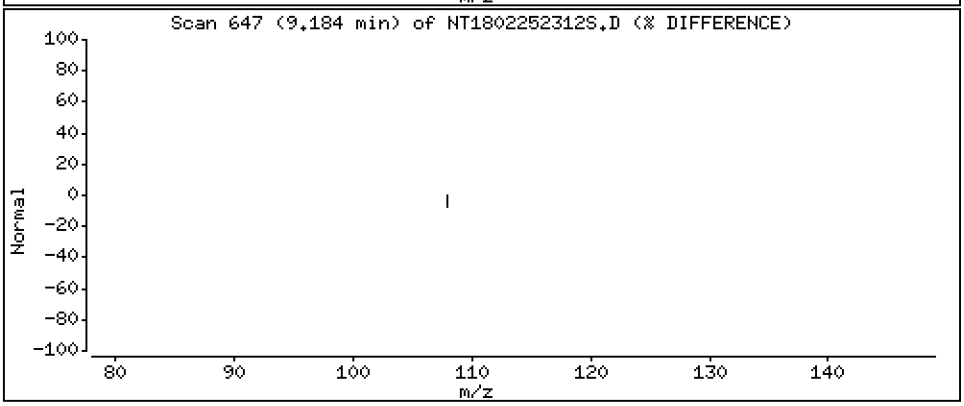












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

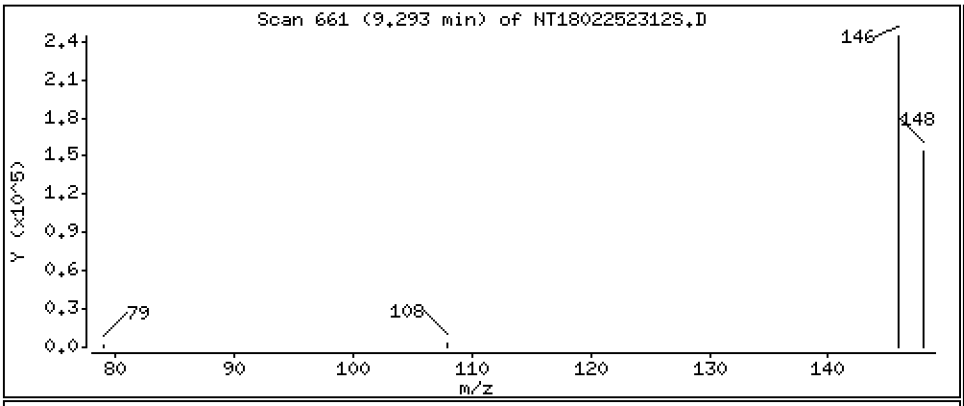
Operator: YZ

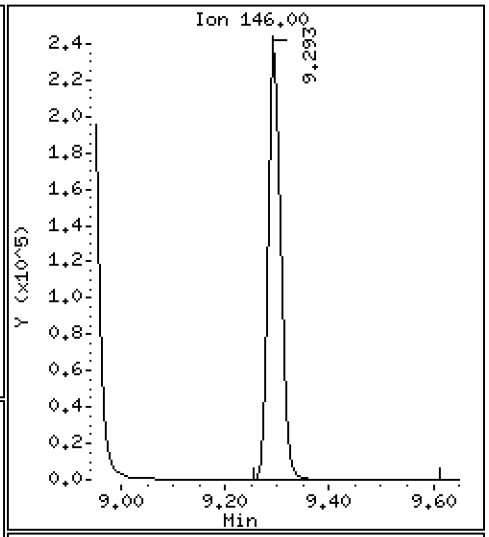
Column phase: ZB-5msi

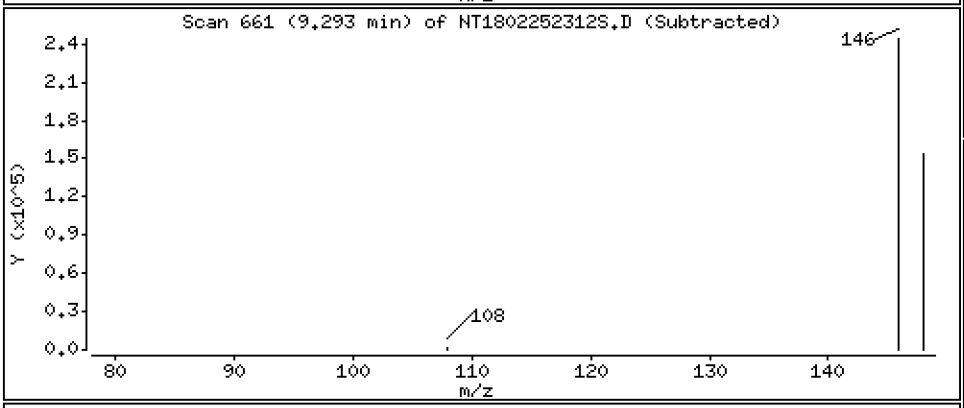
Column diameter: 0.25

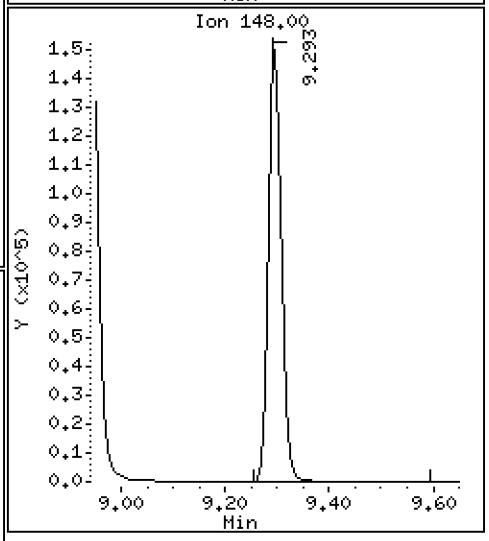
12 1,2-Dichlorobenzene

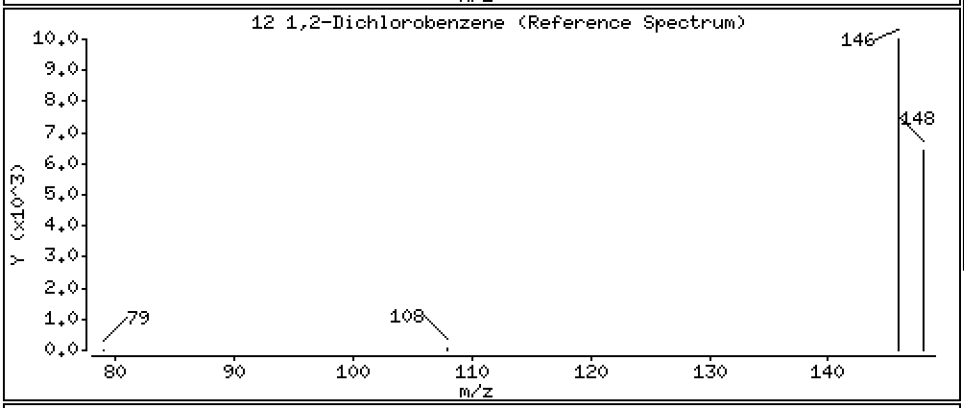
Concentration: 4.401 ug/mL

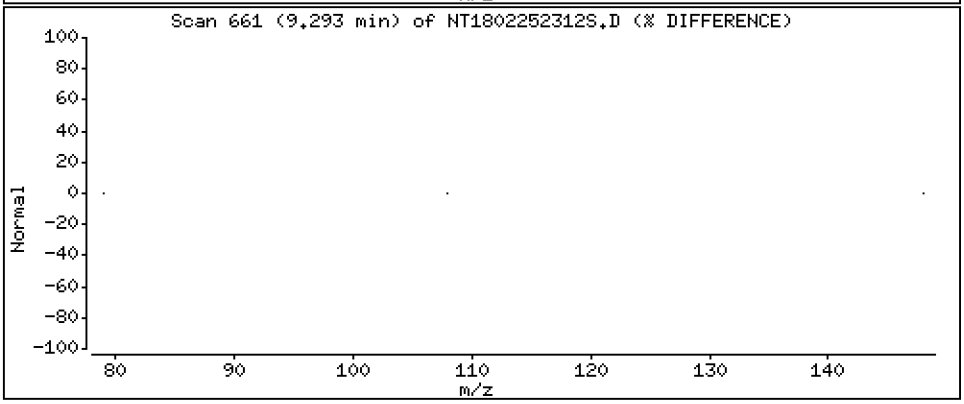












Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

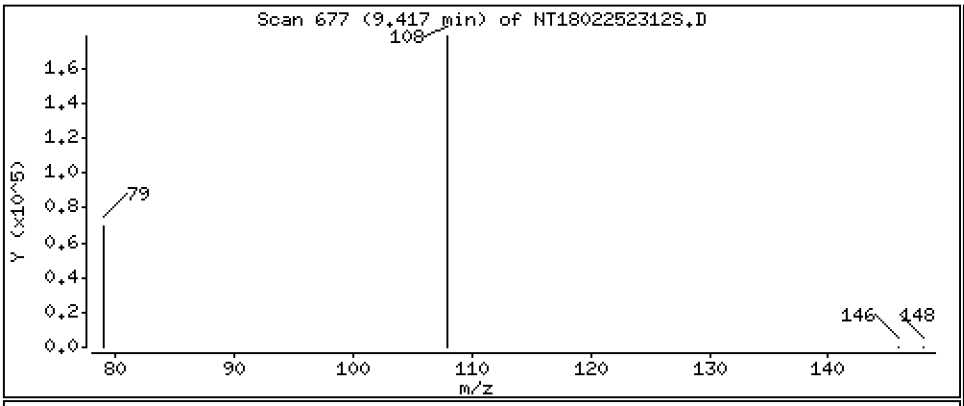
Operator: YZ

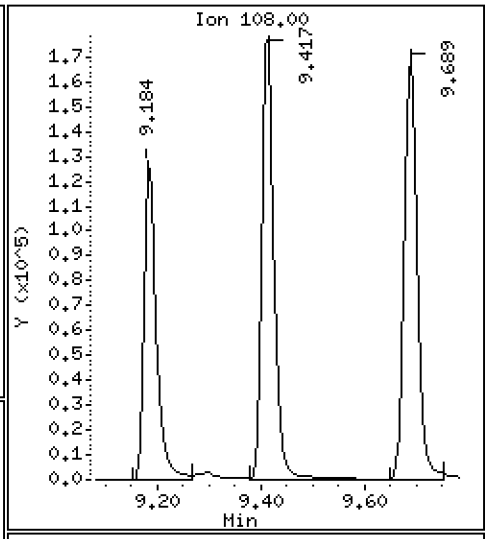
Column phase: ZB-5msi

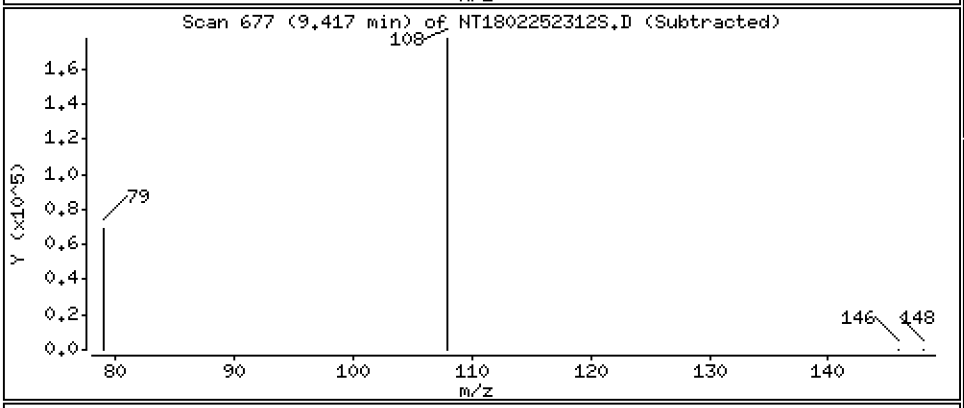
Column diameter: 0.25

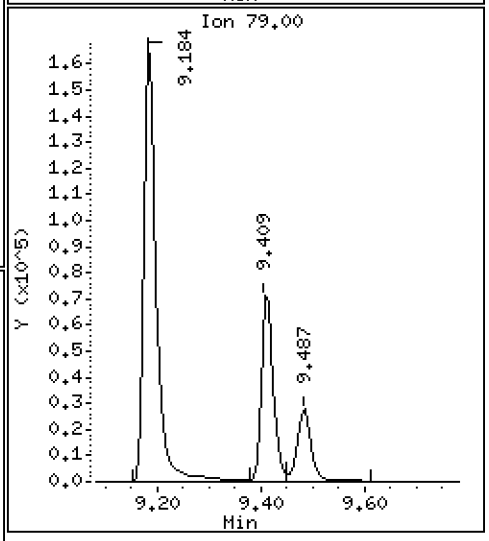
13 2-Methylphenol

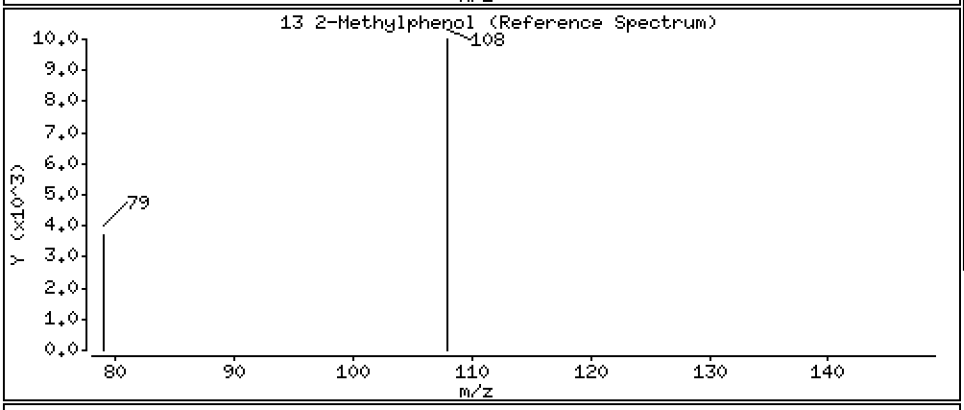
Concentration: 3.880 ug/mL

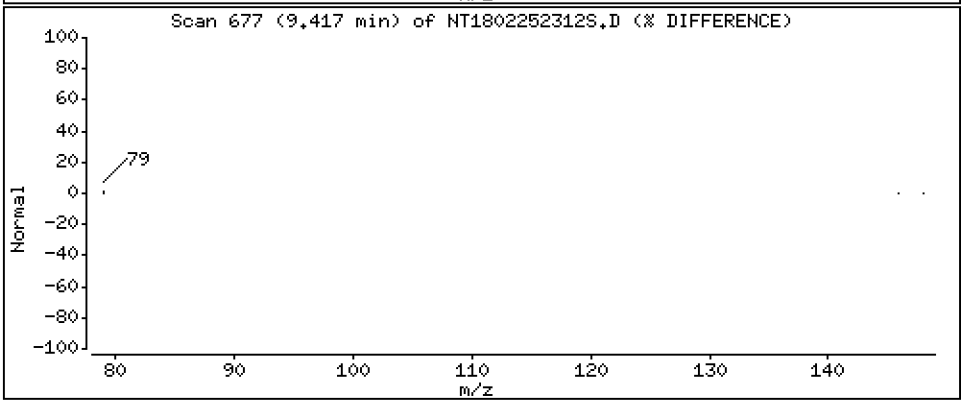












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

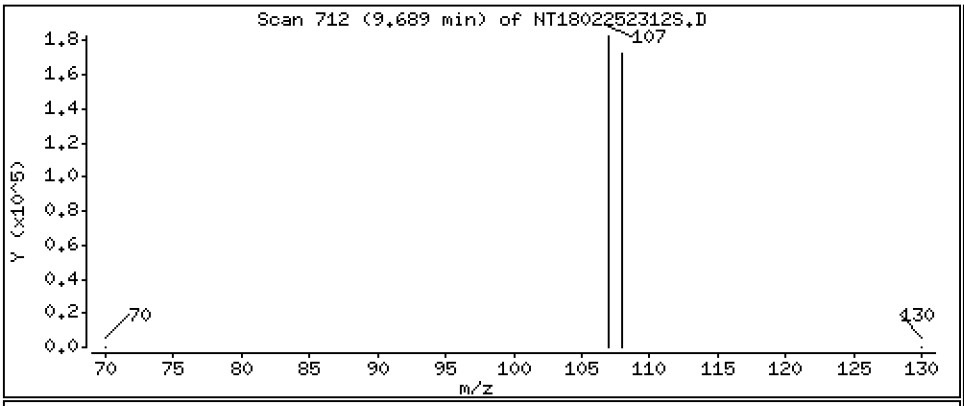
Operator: YZ

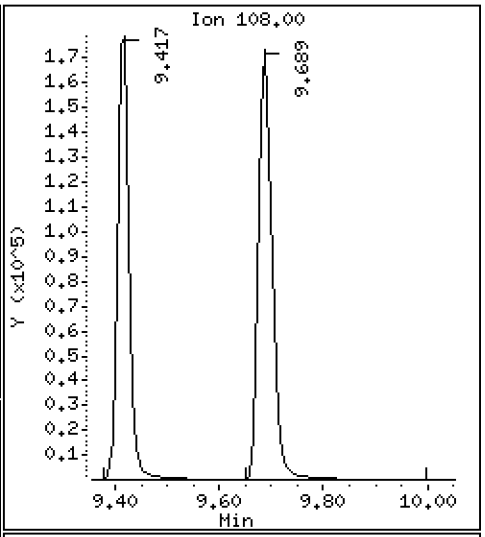
Column phase: ZB-5msi

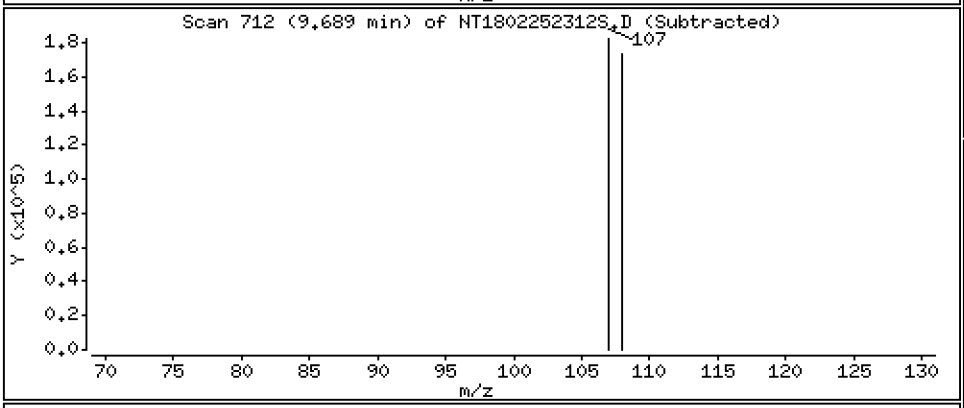
Column diameter: 0.25

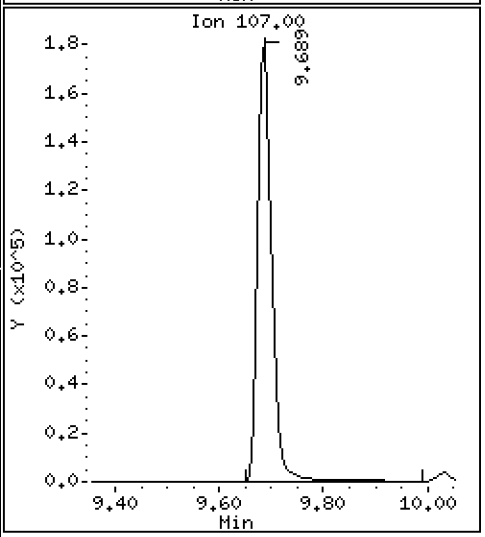
15 4-Methylphenol

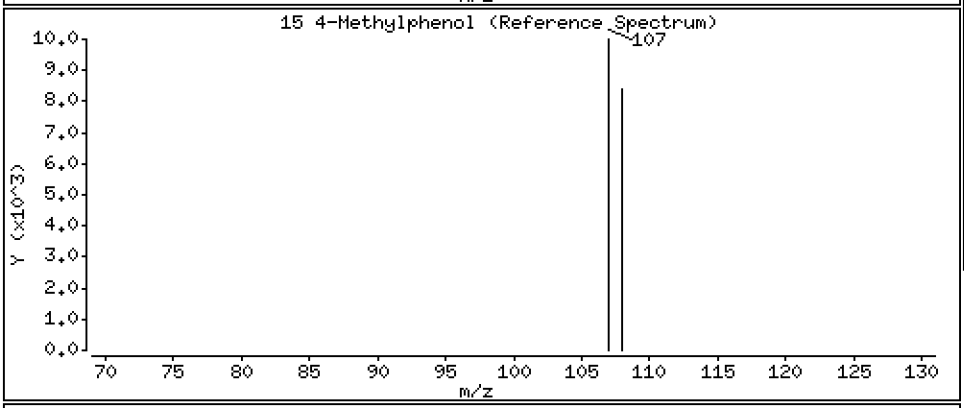
Concentration: 4.215 ug/mL

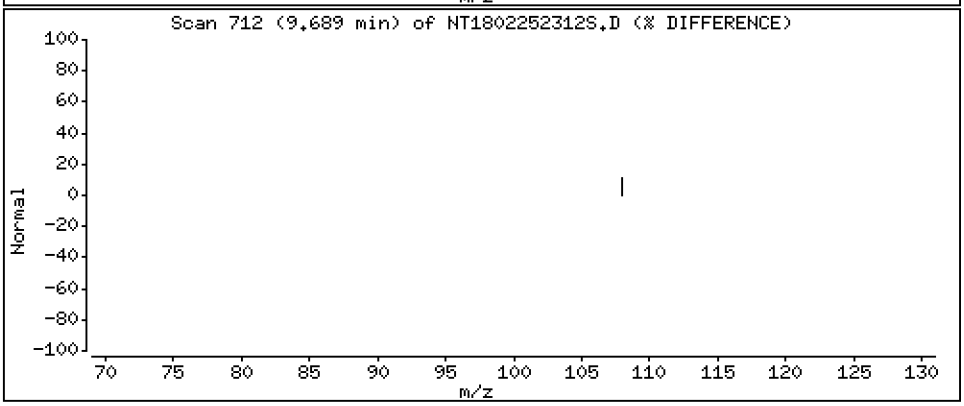












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

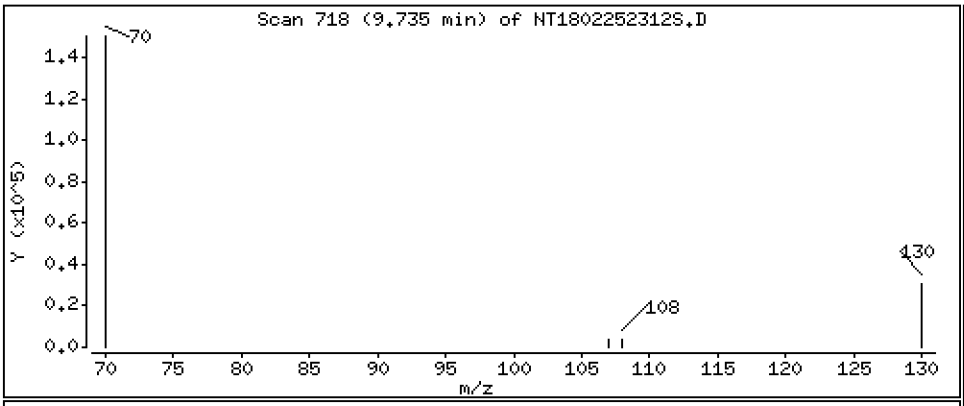
Operator: YZ

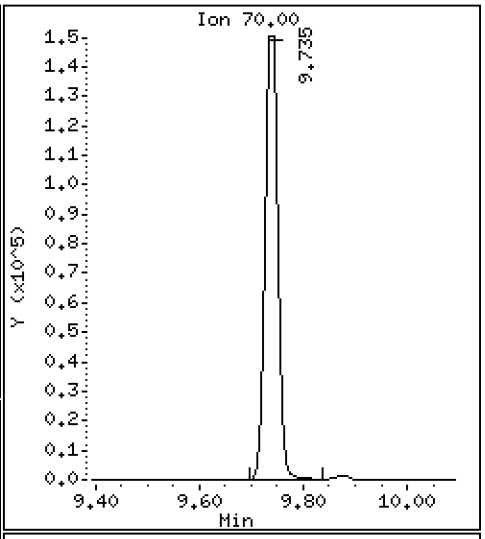
Column phase: ZB-5msi

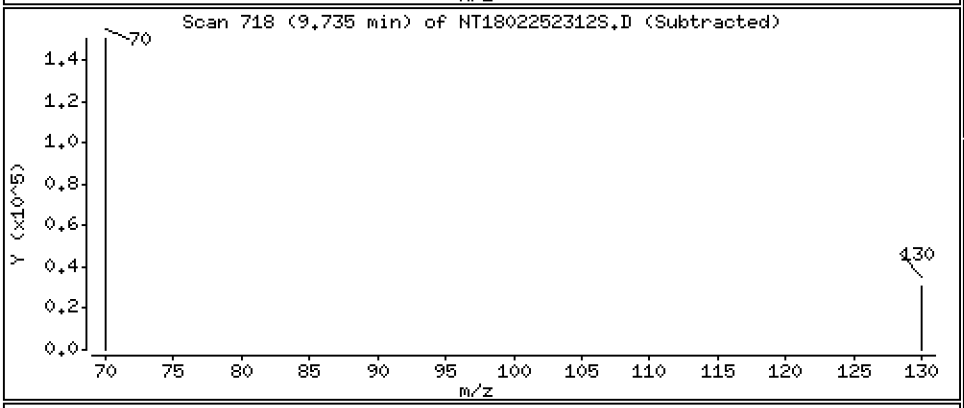
Column diameter: 0.25

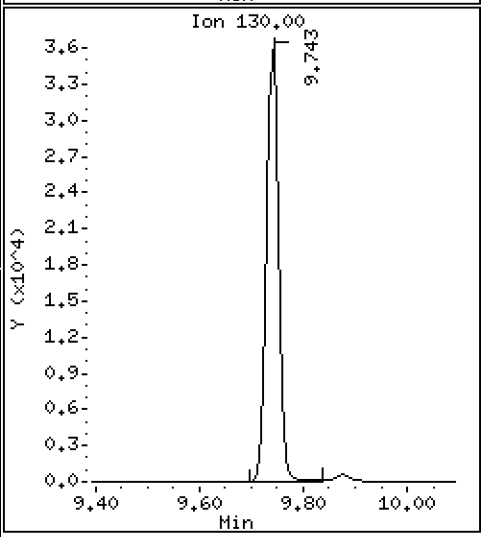
16 N-Nitroso-di-n-propylamine

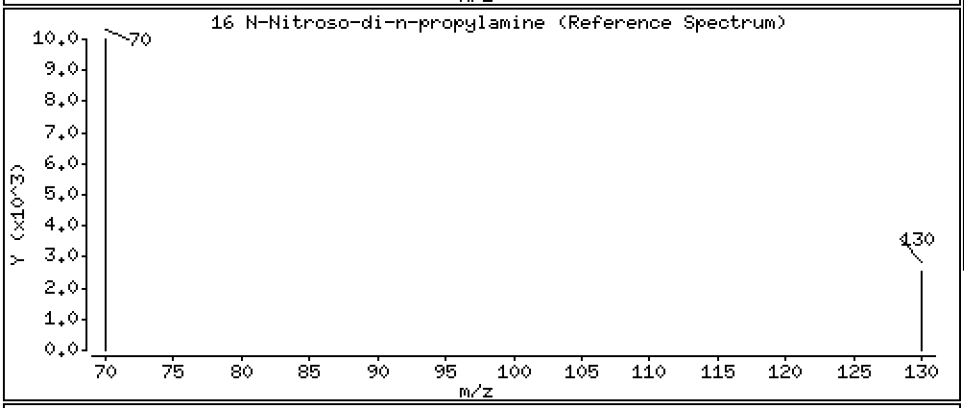
Concentration: 4.789 ug/mL

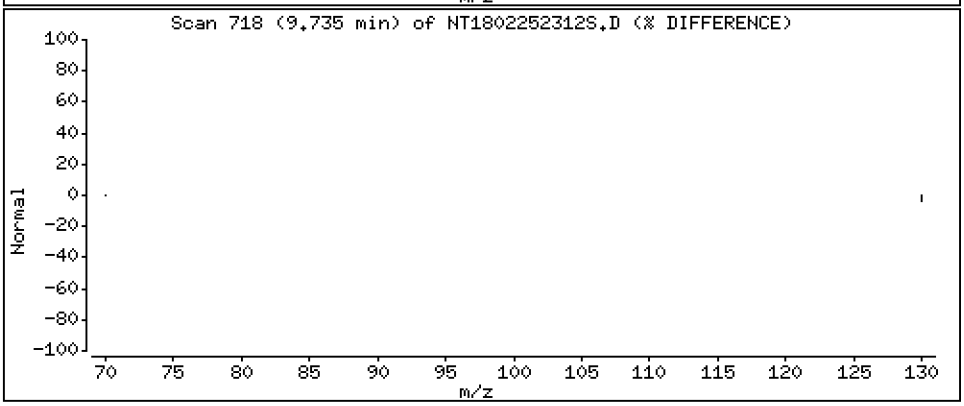












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

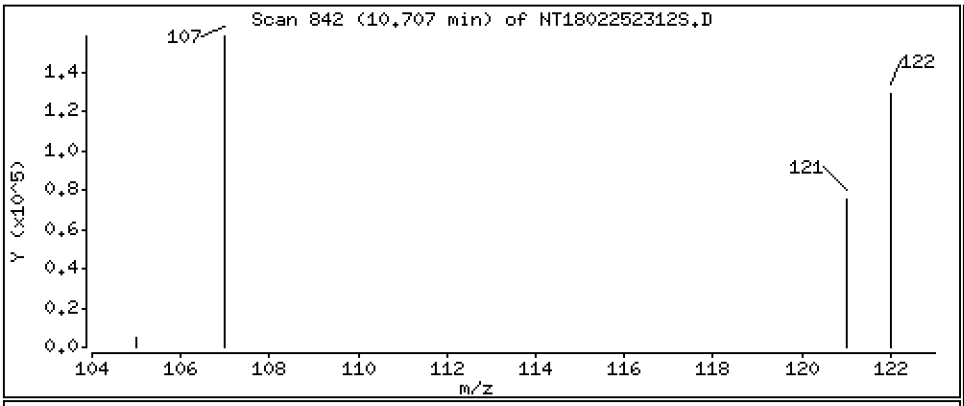
Operator: YZ

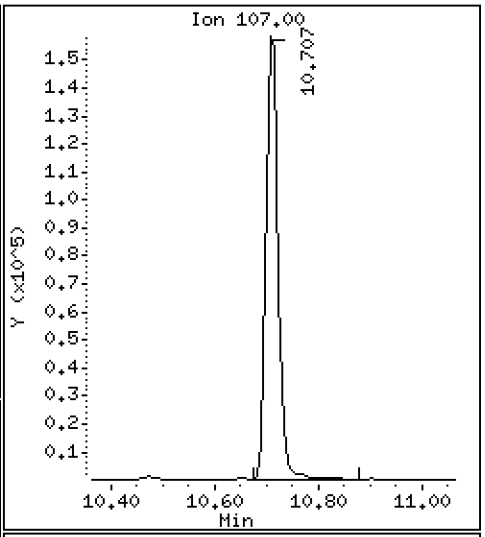
Column phase: ZB-5msi

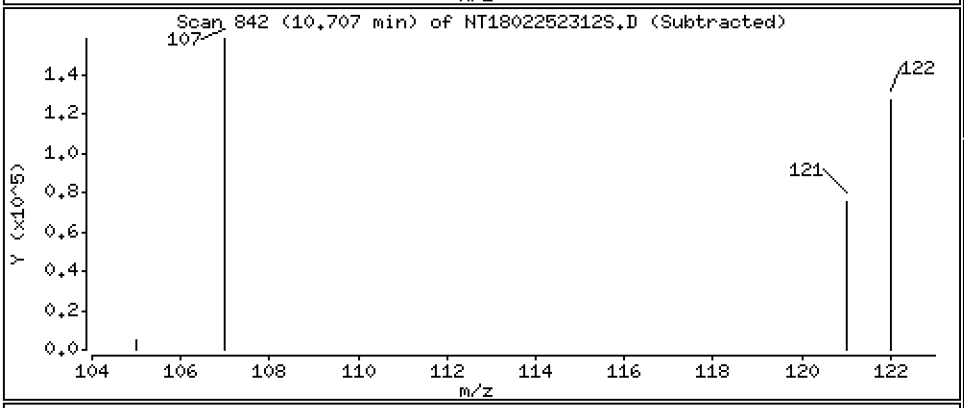
Column diameter: 0.25

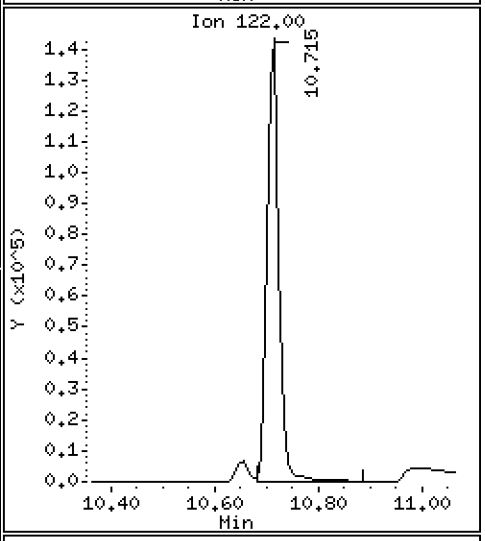
22 2,4-Dimethylphenol

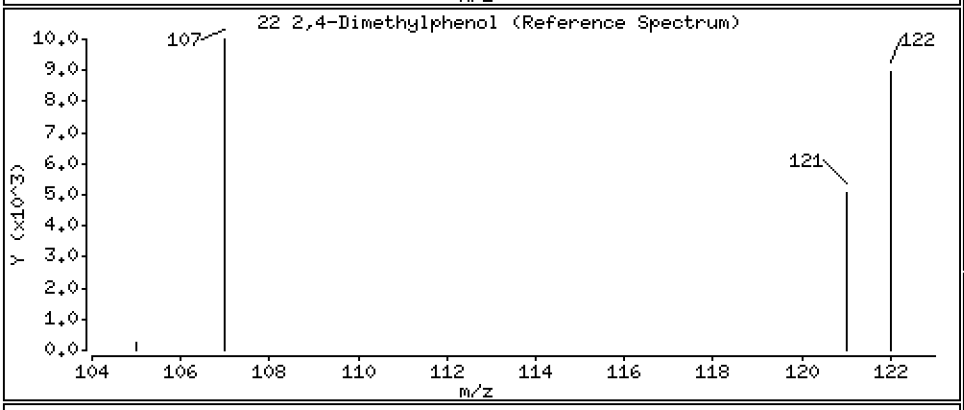
Concentration: 3.540 ug/mL

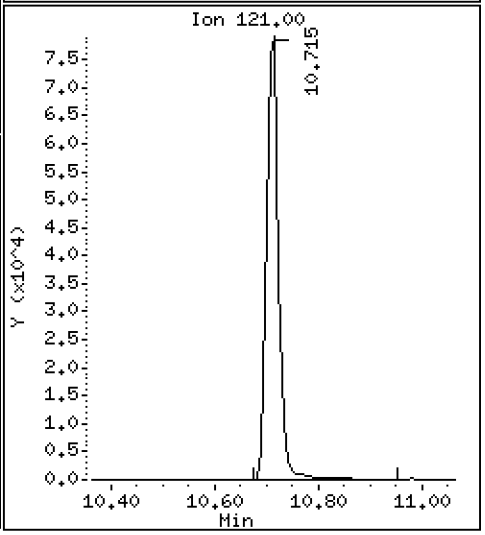


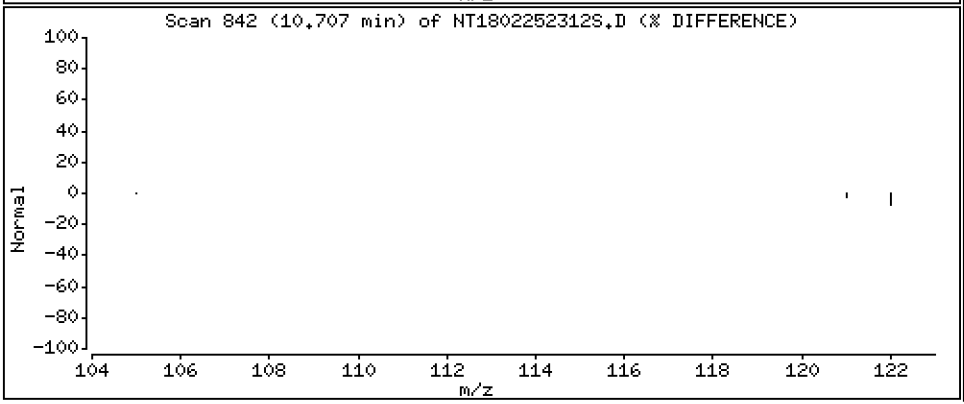












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

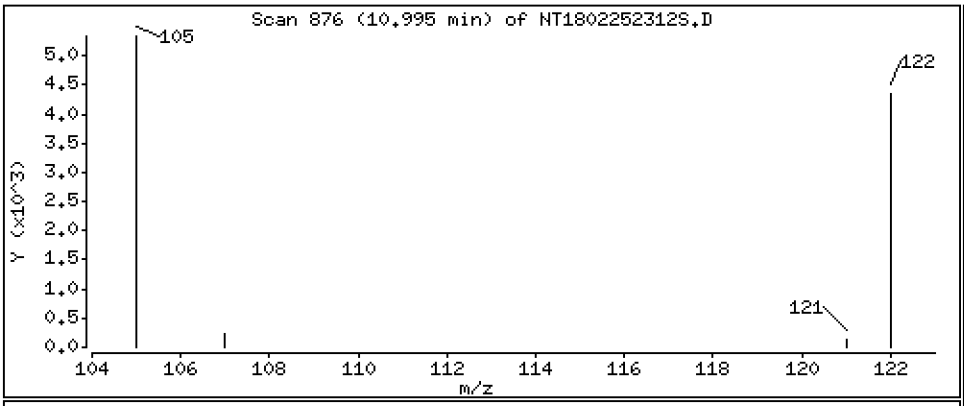
Operator: YZ

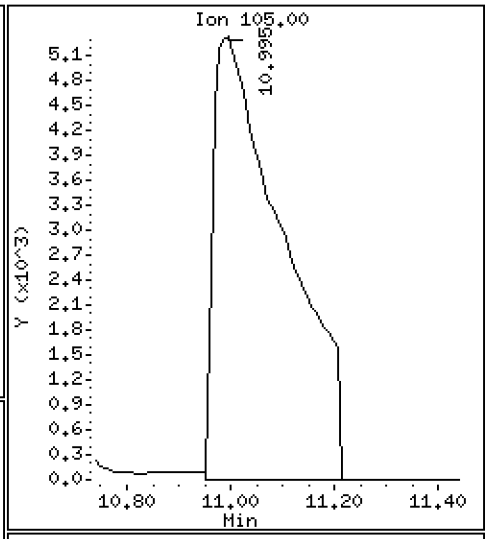
Column phase: ZB-5msi

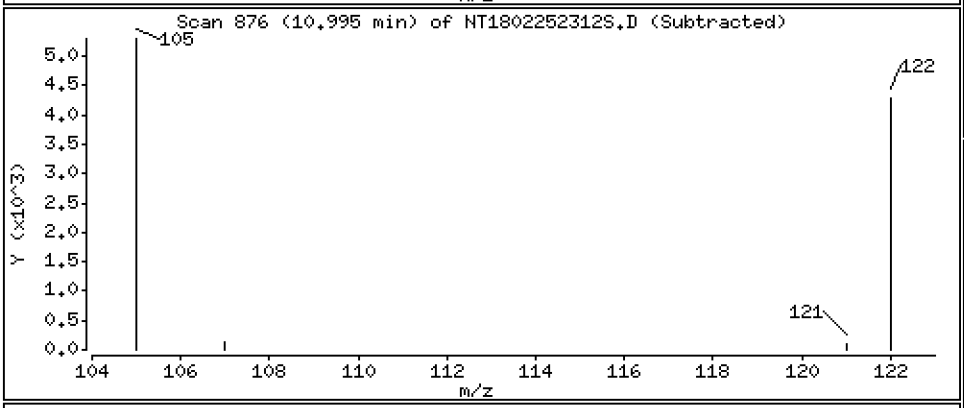
Column diameter: 0.25

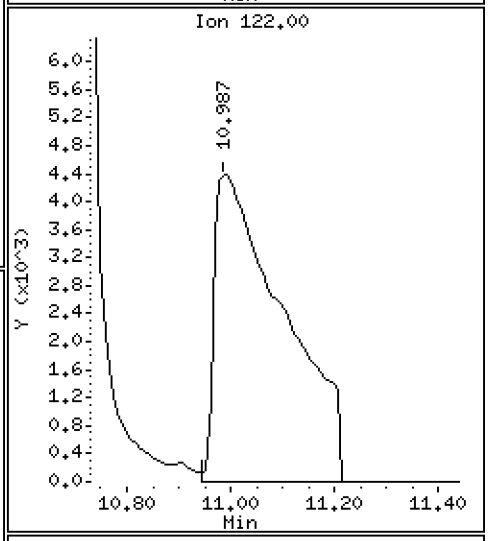
24 Benzoic acid

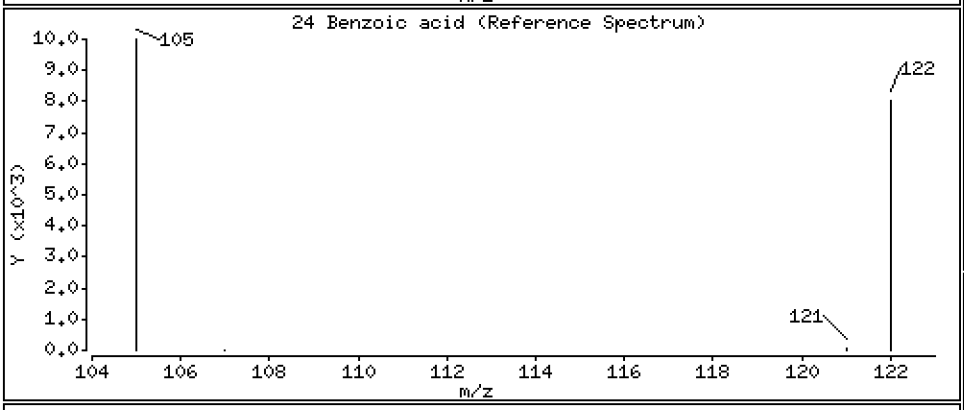
Concentration: 1.716 ug/mL

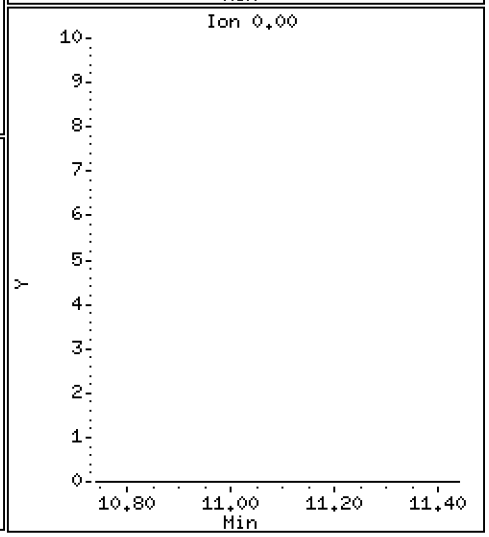


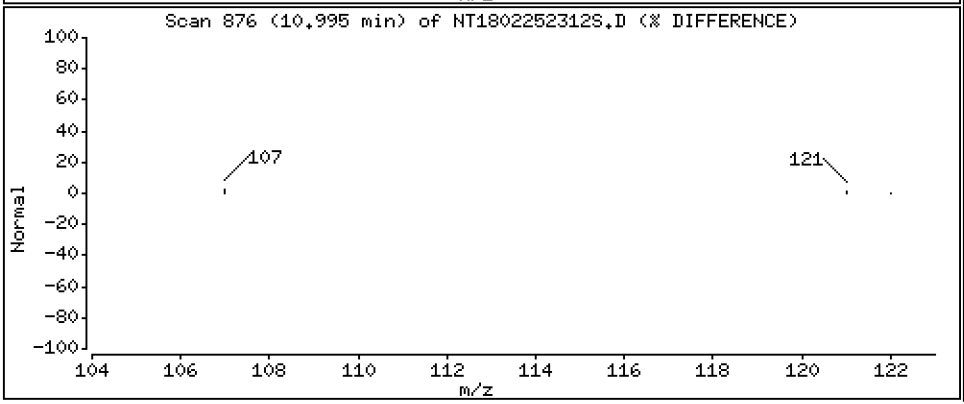












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

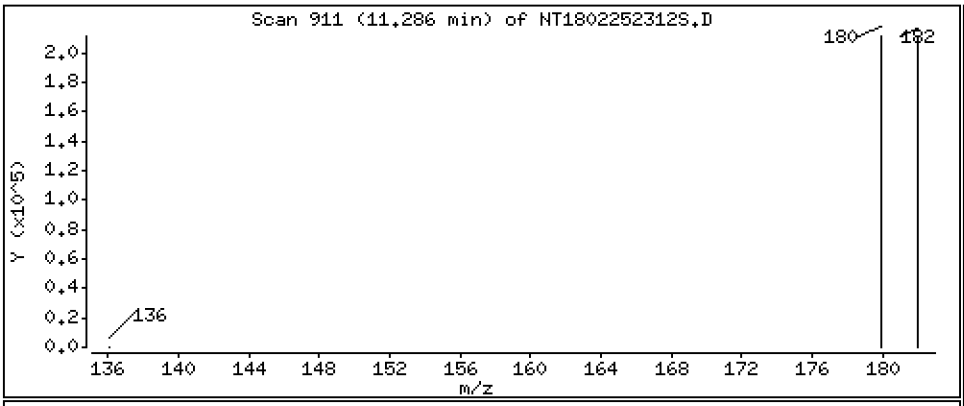
Operator: YZ

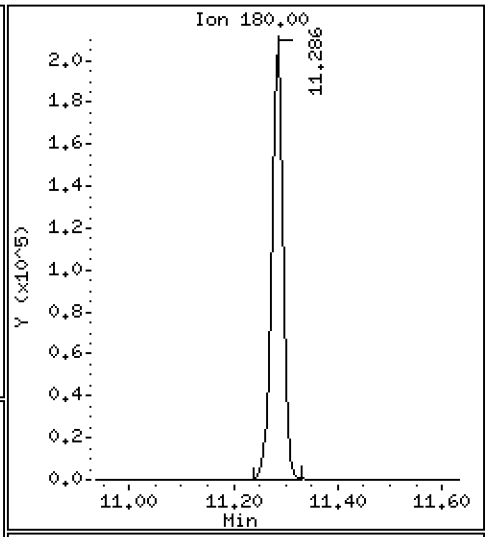
Column phase: ZB-5msi

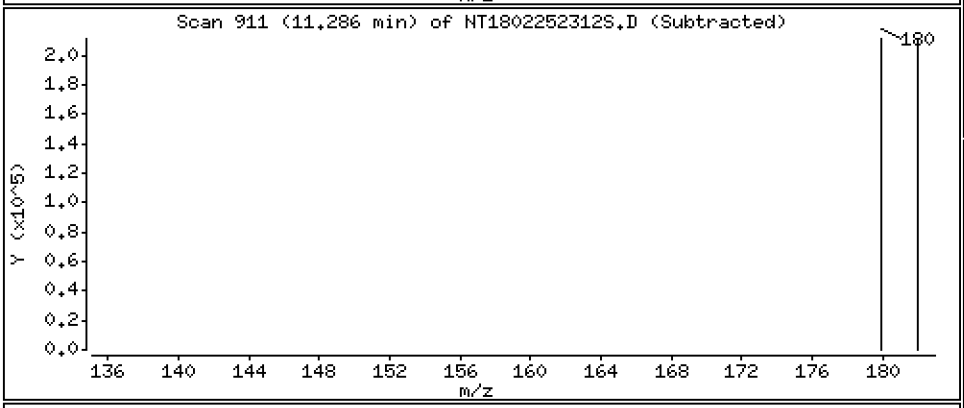
Column diameter: 0.25

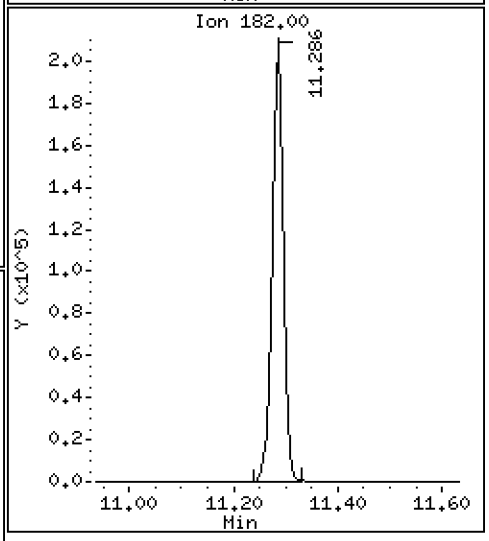
26 1,2,4-Trichlorobenzene

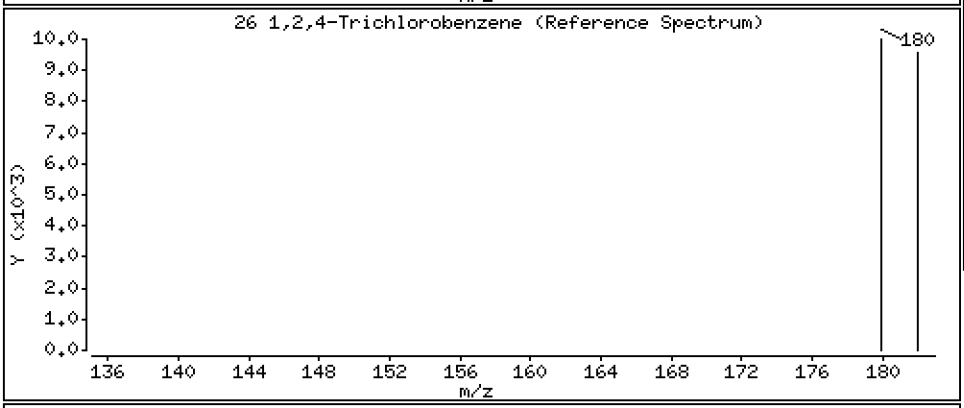
Concentration: 4.384 ug/mL

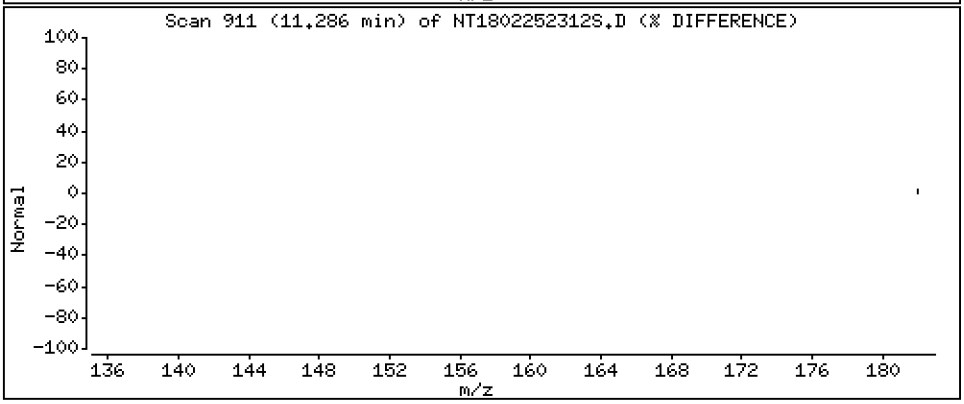












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

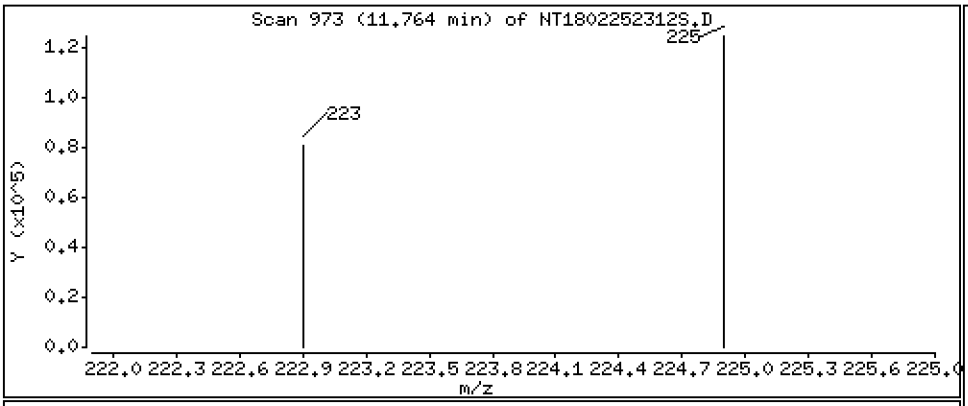
Operator: YZ

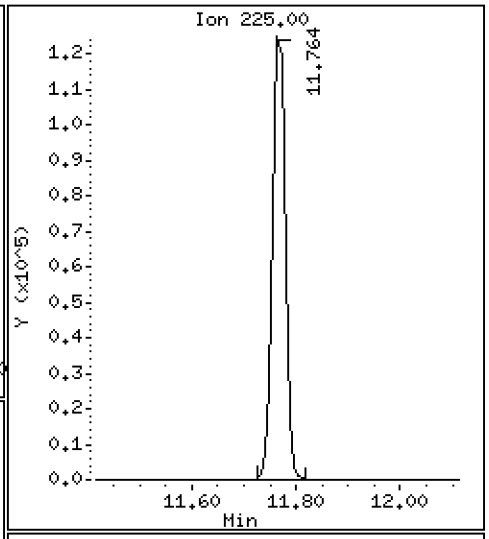
Column phase: ZB-5msi

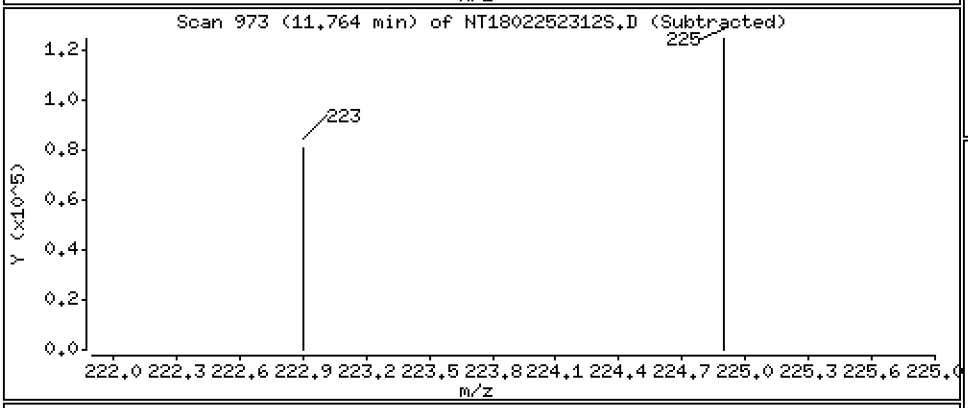
Column diameter: 0.25

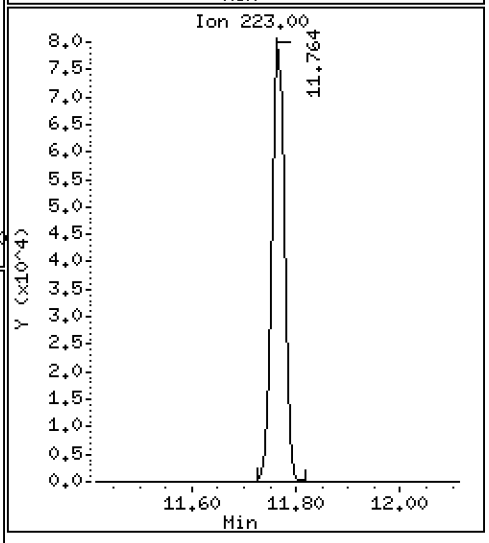
30 Hexachlorobutadiene

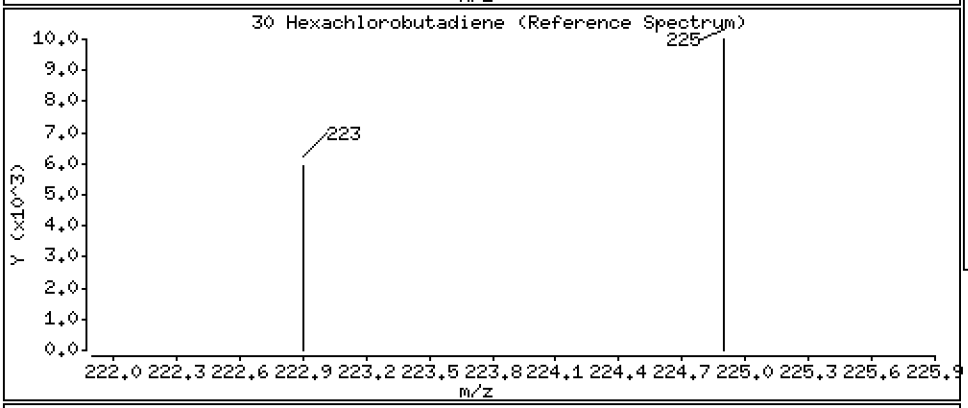
Concentration: 4.536 ug/mL

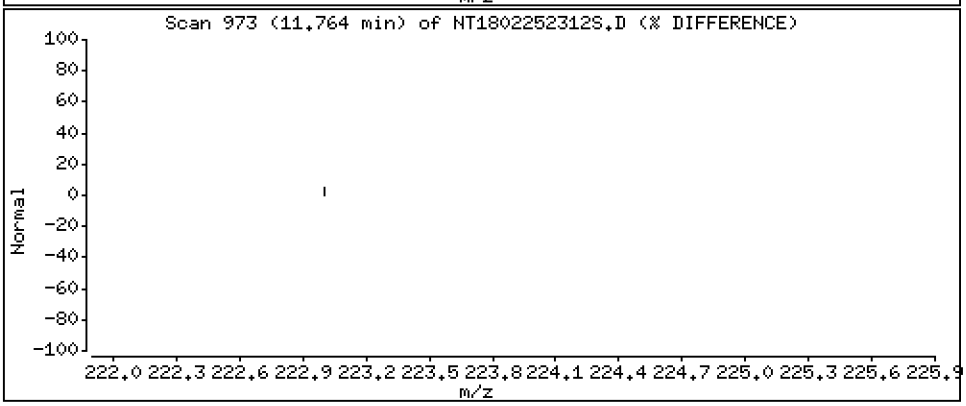












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT1802252312S.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

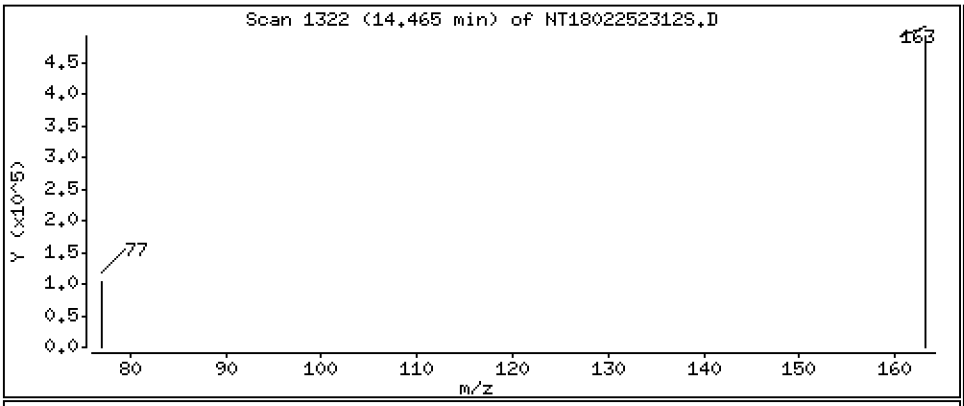
Operator: YZ

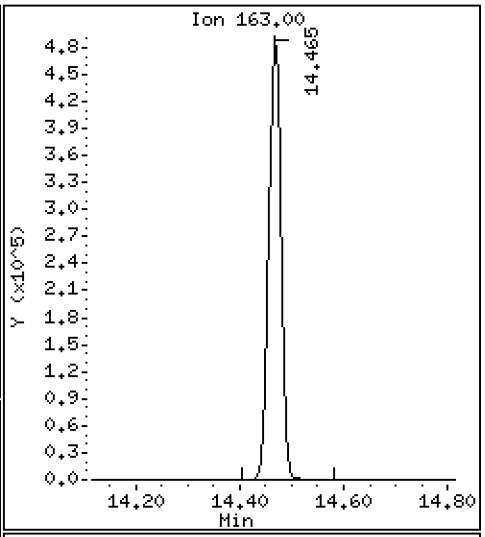
Column phase: ZB-5msi

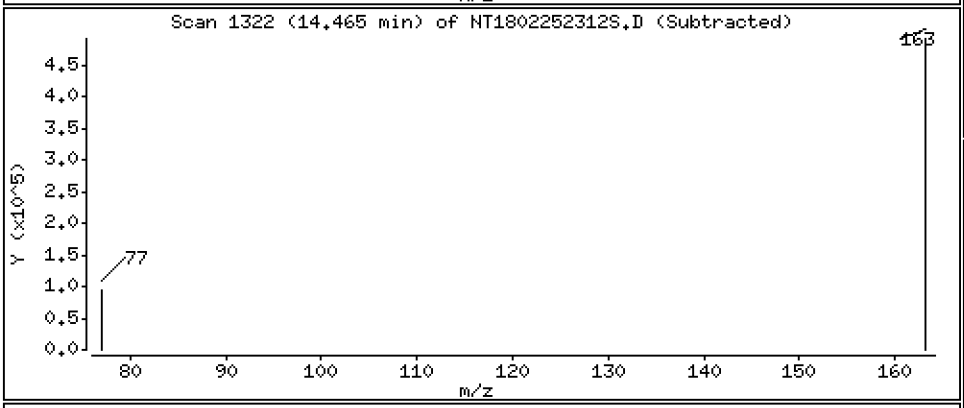
Column diameter: 0.25

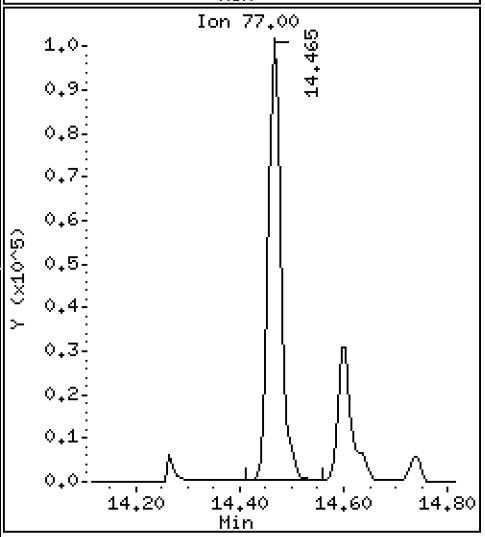
39 Dimethylphthalate

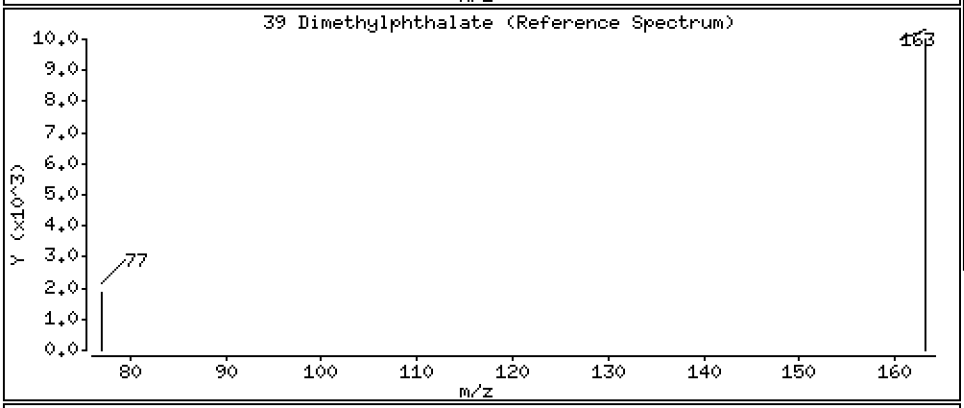
Concentration: 4.793 ug/mL

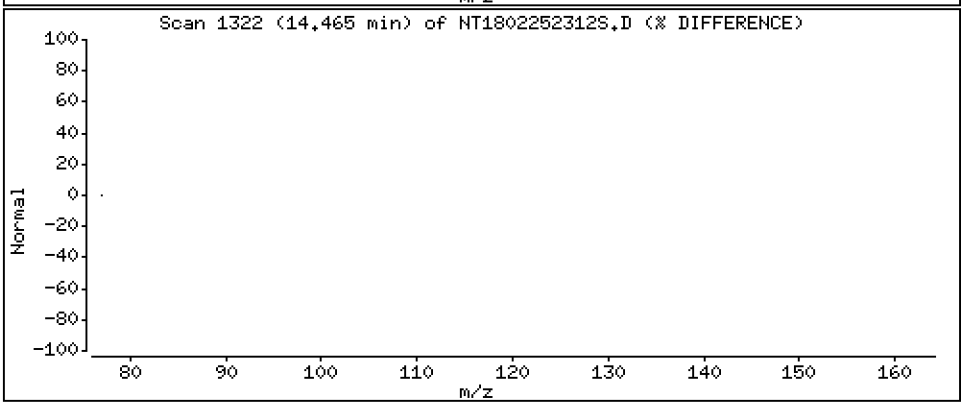












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT1802252312S.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

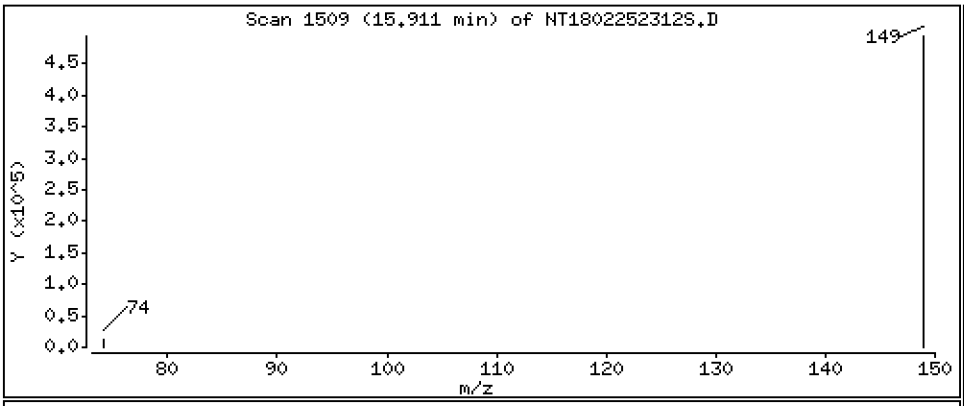
Operator: YZ

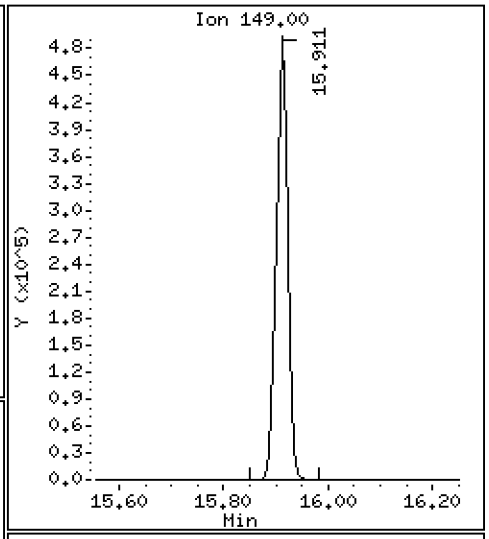
Column phase: ZB-5msi

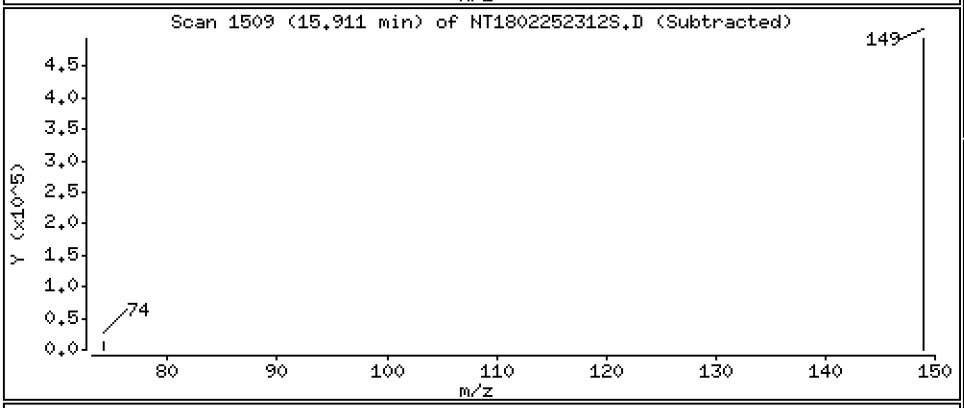
Column diameter: 0.25

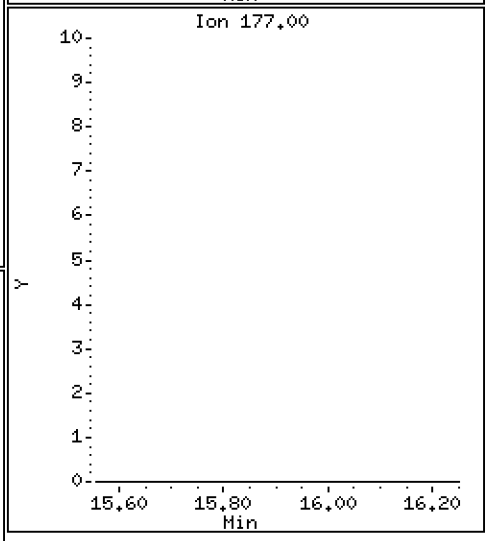
50 Diethylphthalate

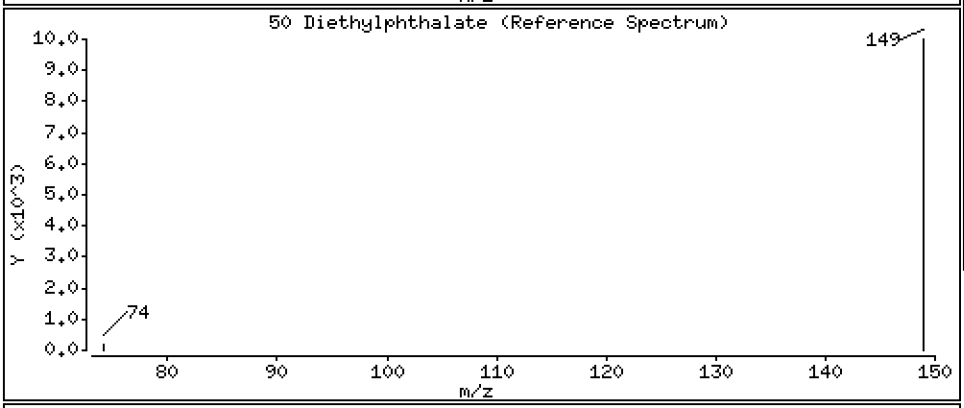
Concentration: 5.068 ug/mL

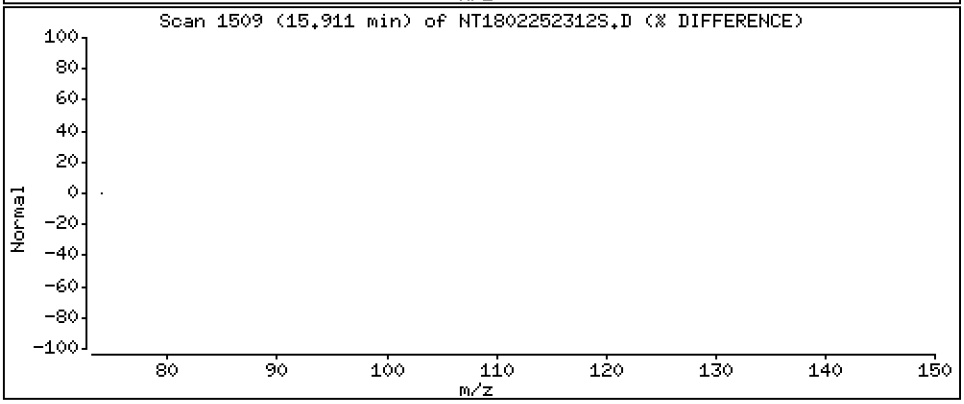












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

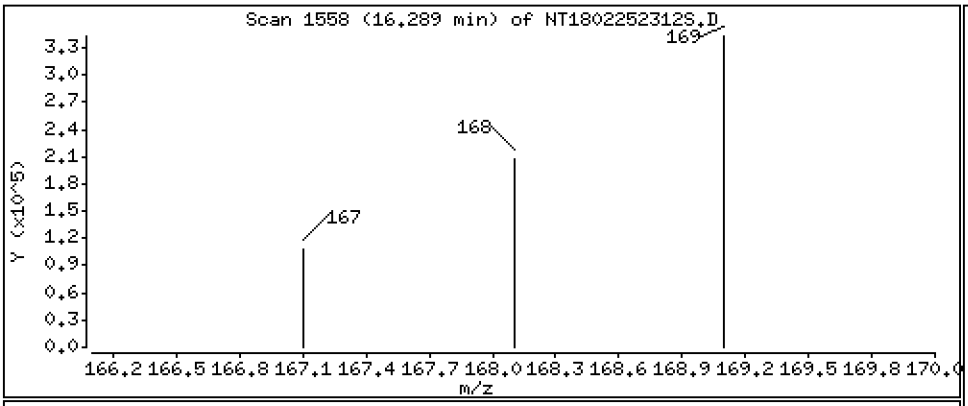
Operator: YZ

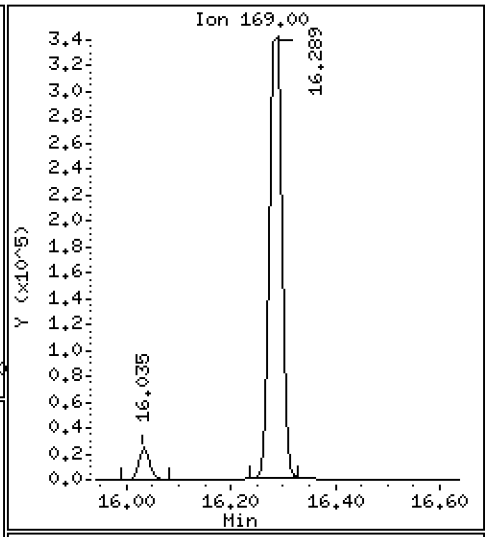
Column phase: ZB-5msi

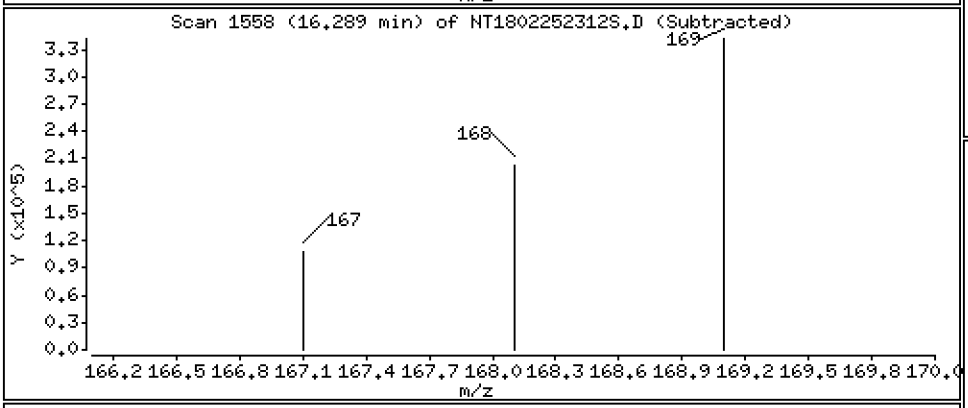
Column diameter: 0.25

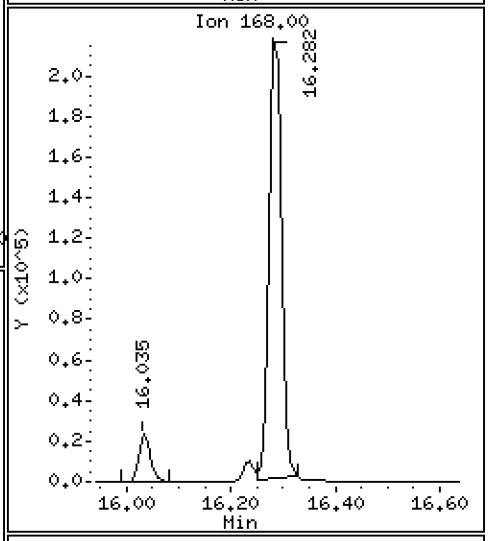
54 N-Nitrosodiphenylamine

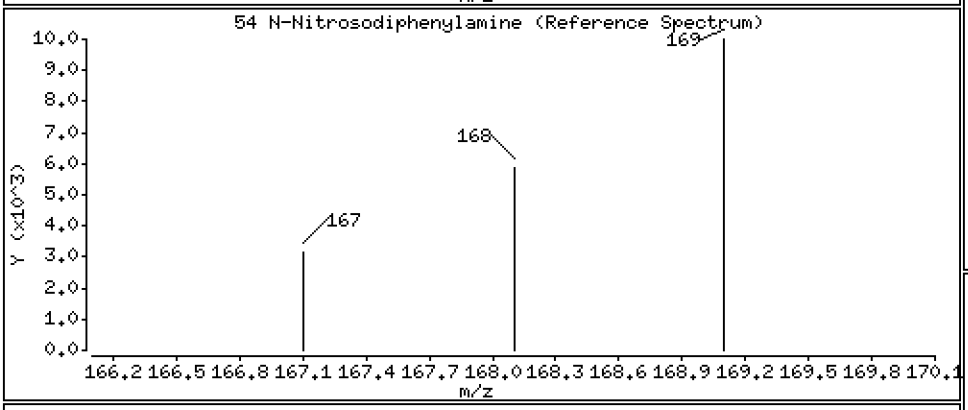
Concentration: 4.815 ug/mL

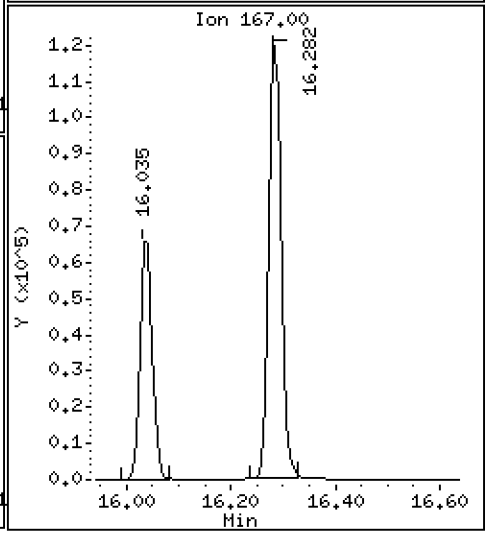


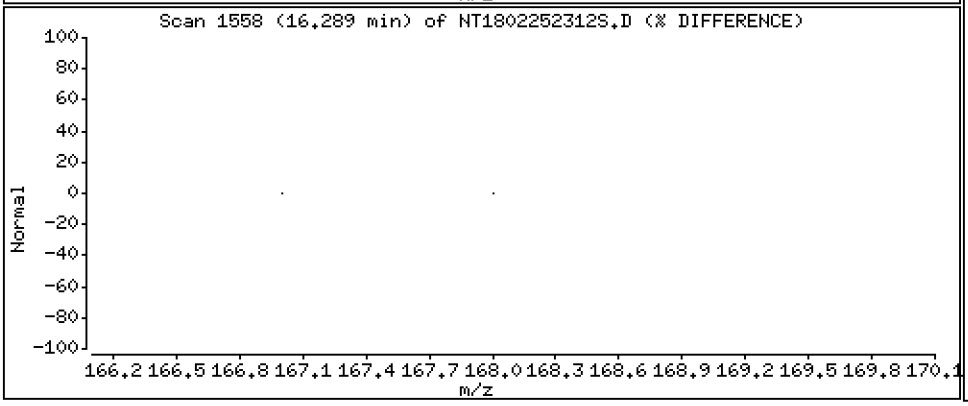












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT1802252312S.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

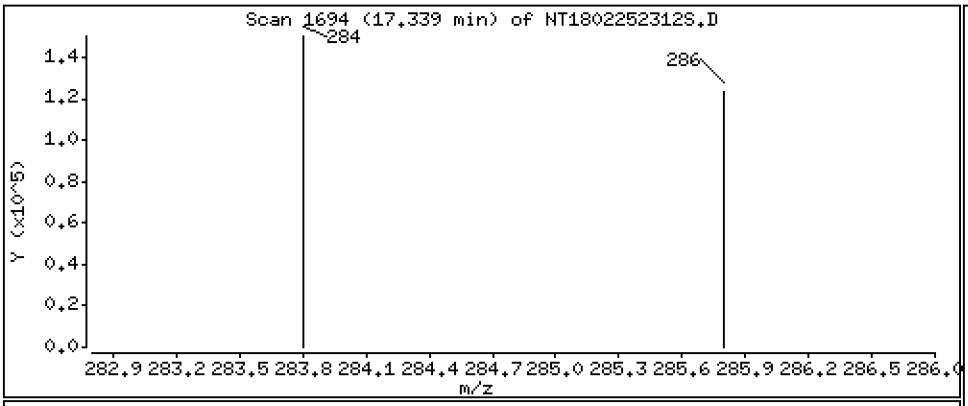
Operator: YZ

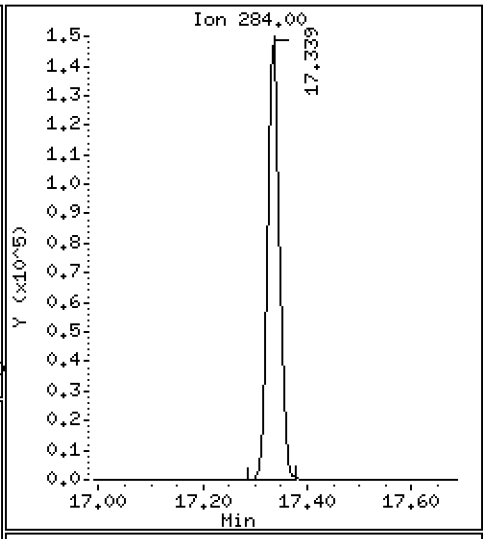
Column phase: ZB-5msi

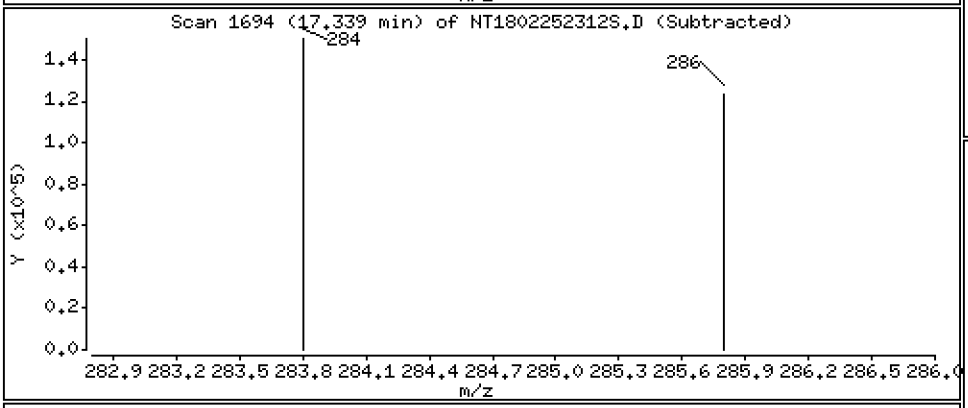
Column diameter: 0.25

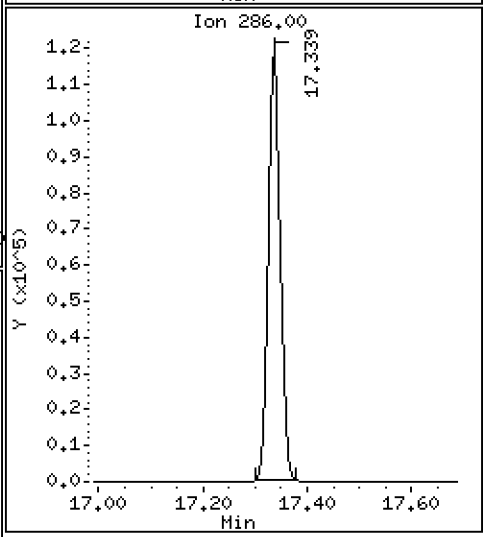
57 Hexachlorobenzene

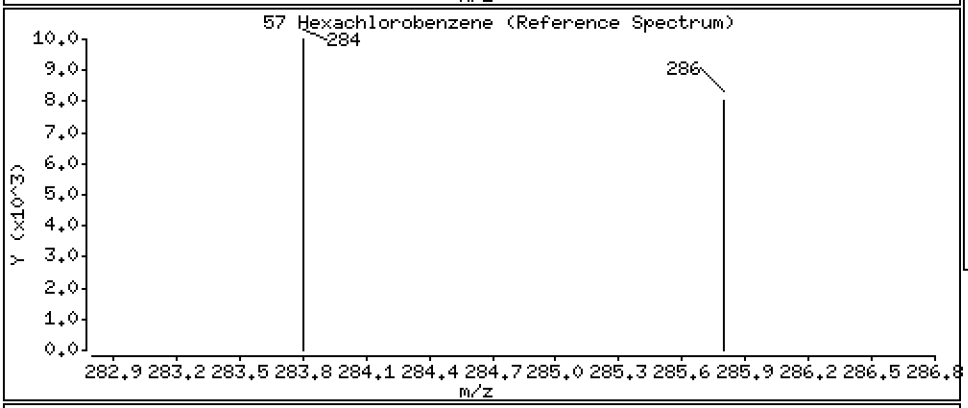
Concentration: 4.458 ug/mL

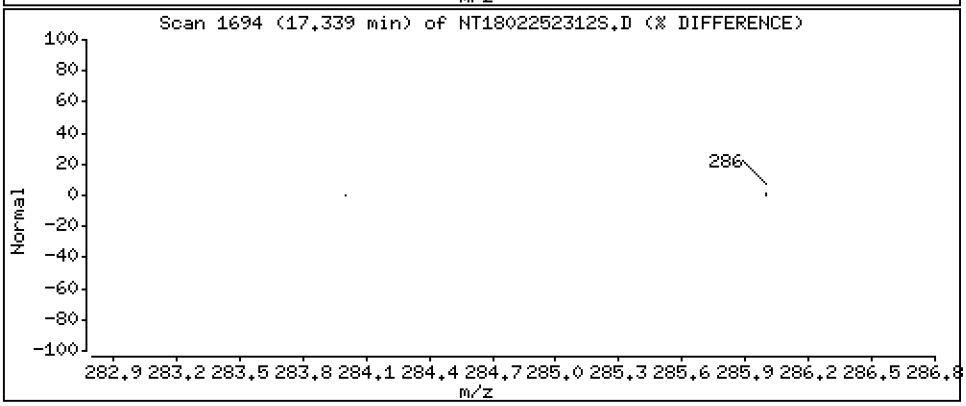












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT1802252312S.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

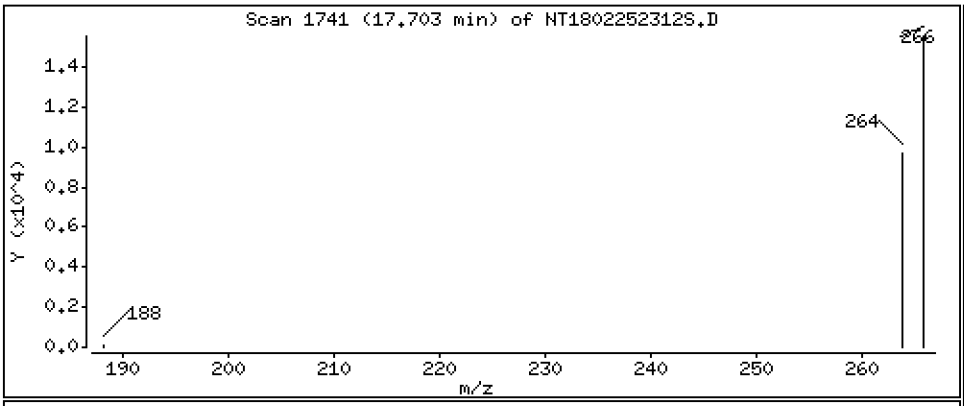
Operator: YZ

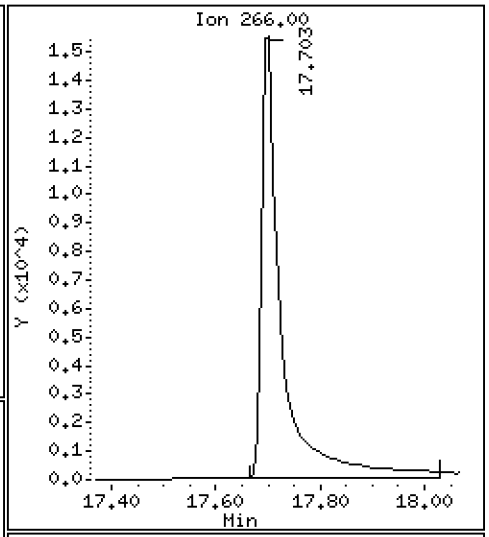
Column phase: ZB-5msi

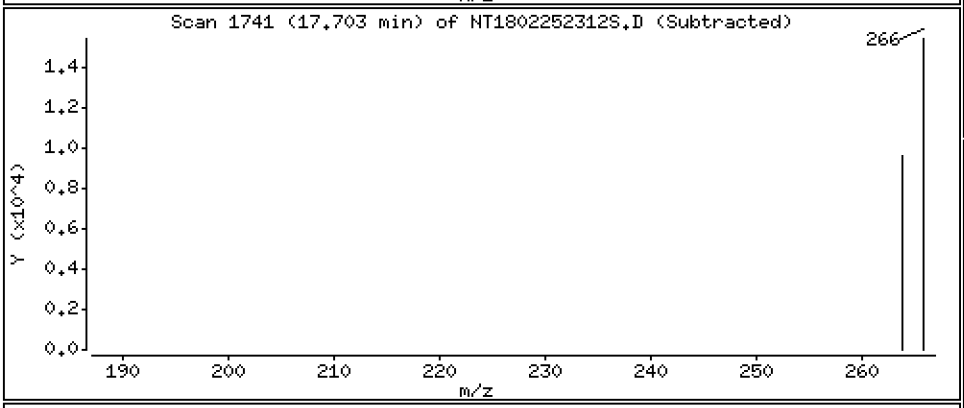
Column diameter: 0.25

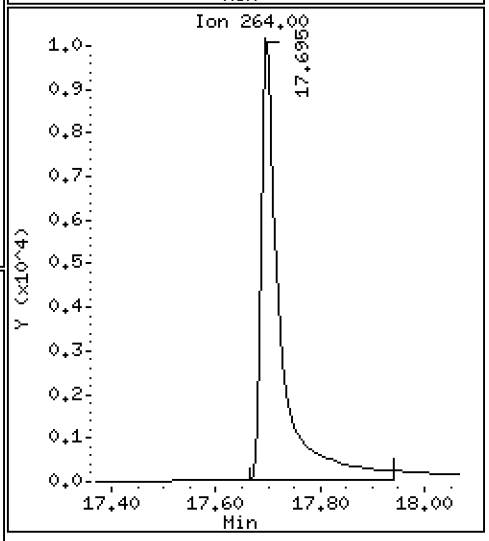
58 Pentachlorophenol

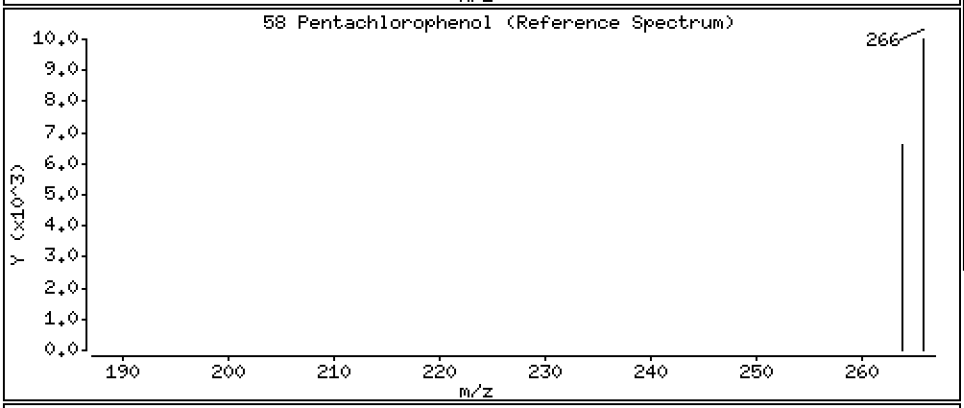
Concentration: 2.631 ug/mL

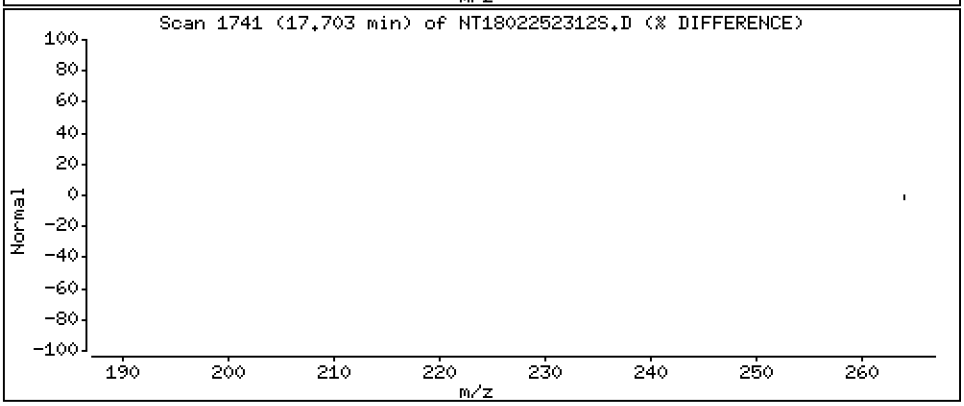












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

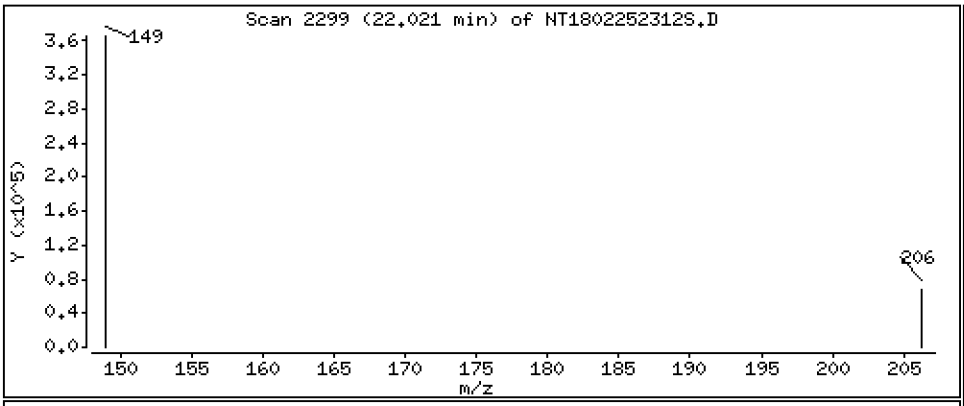
Operator: YZ

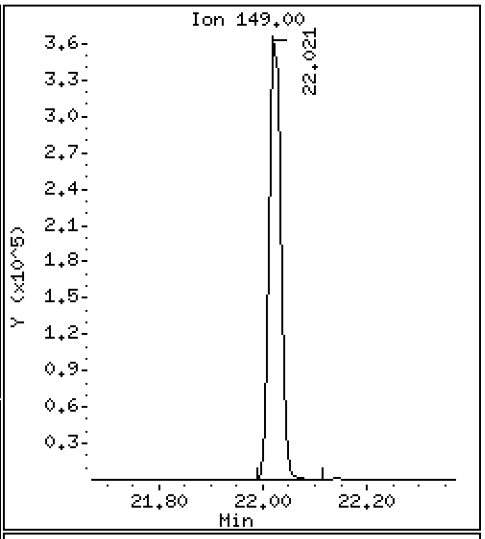
Column phase: ZB-5msi

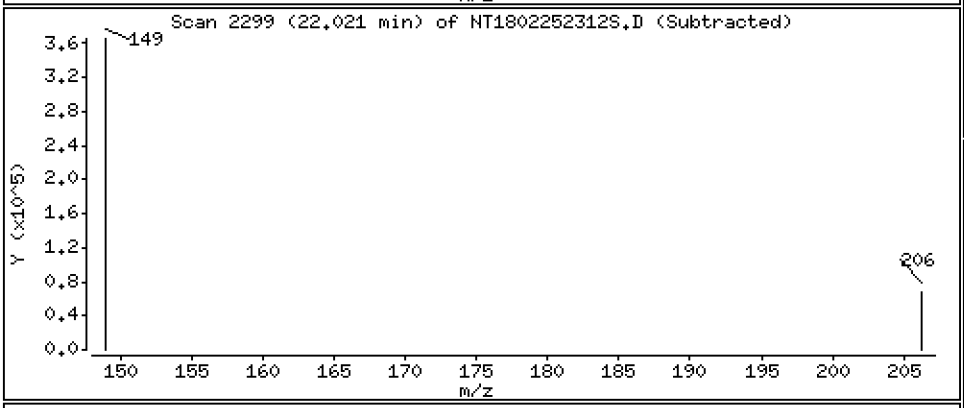
Column diameter: 0.25

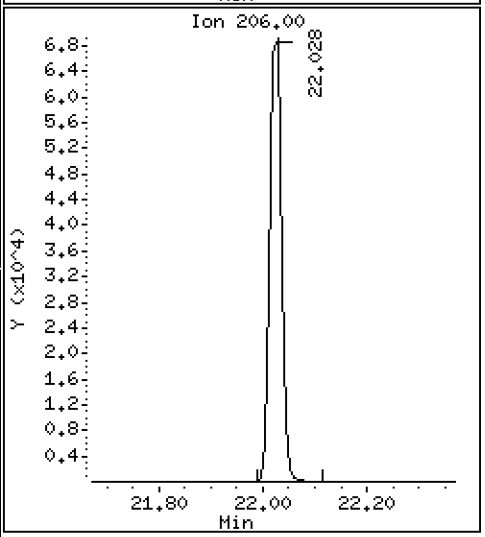
67 Butylbenzylphthalate

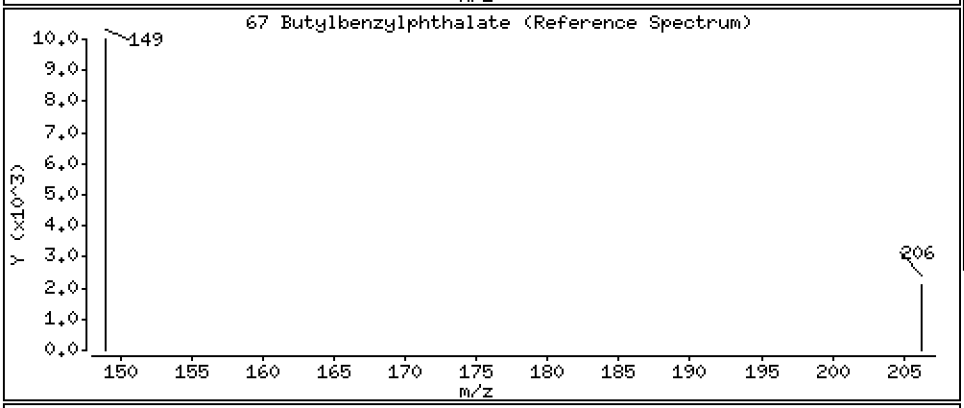
Concentration: 4.683 ug/mL

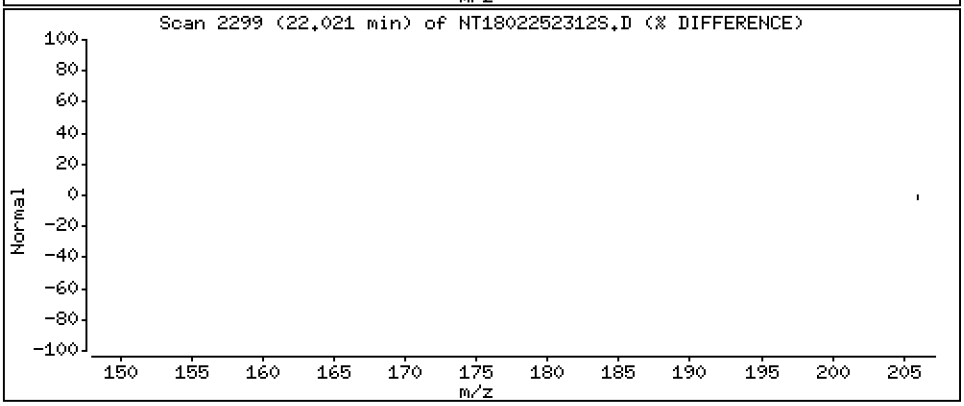












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

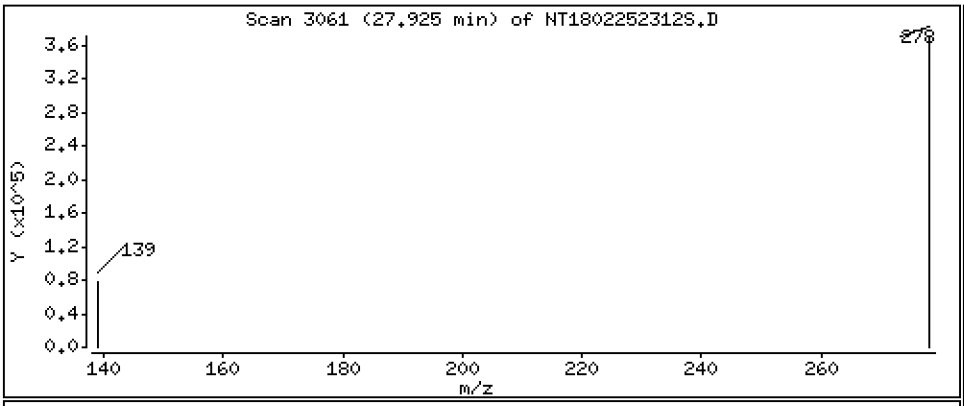
Operator: YZ

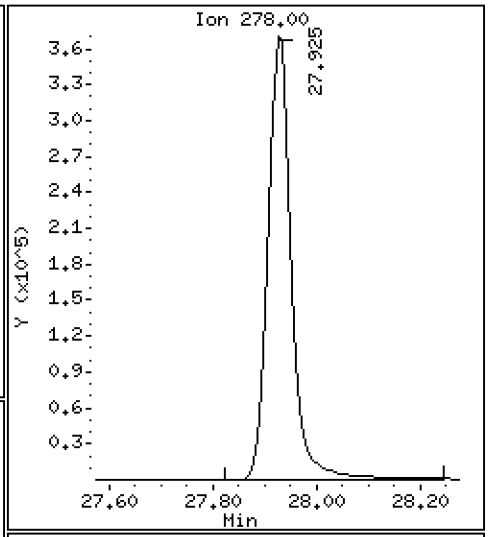
Column phase: ZB-5msi

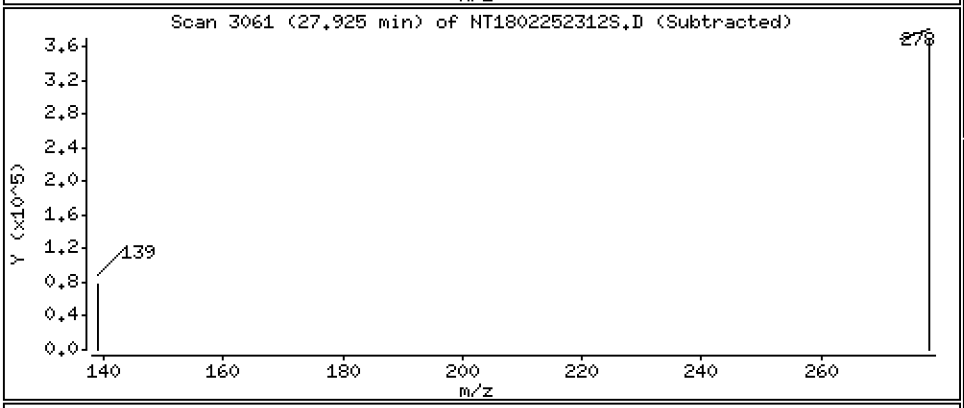
Column diameter: 0.25

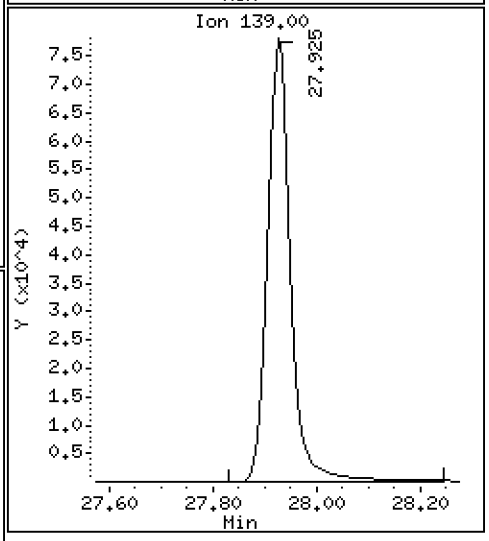
79 Dibenzo(a,h)anthracene

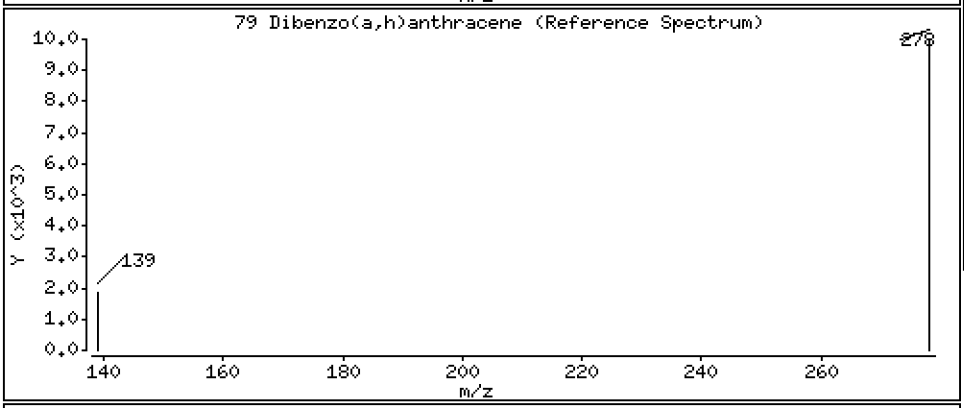
Concentration: 4.890 ug/mL

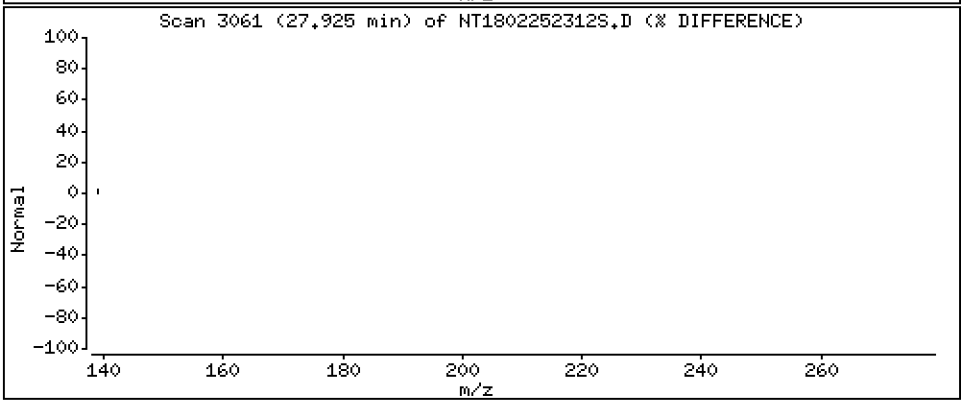












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

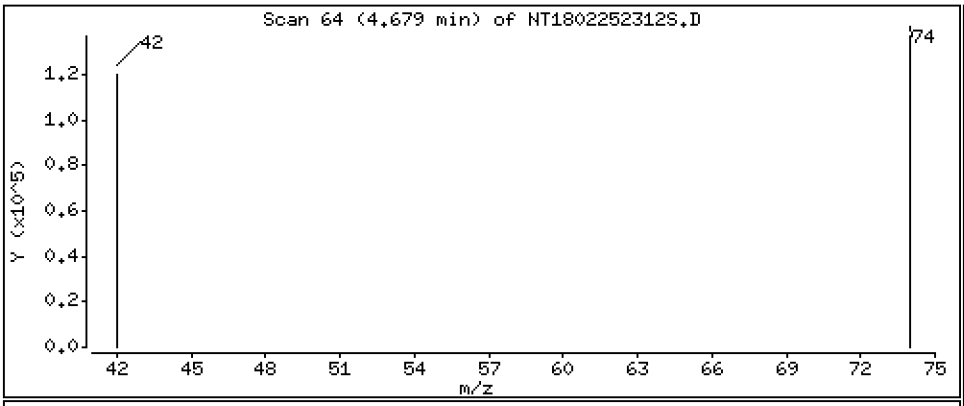
Operator: YZ

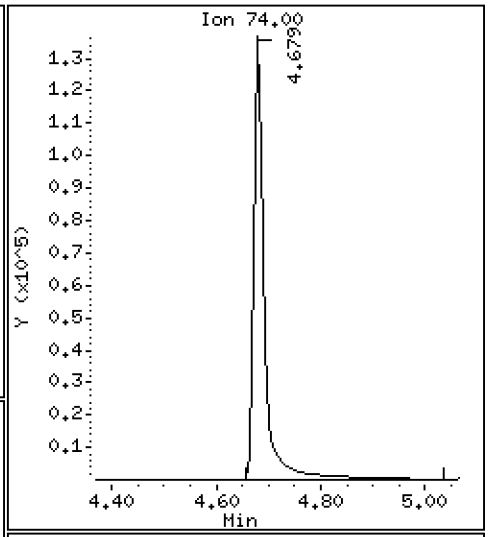
Column phase: ZB-5msi

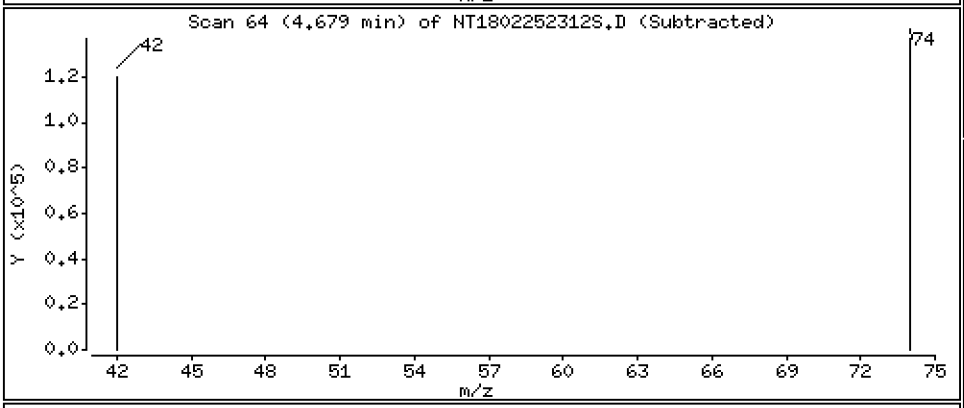
Column diameter: 0.25

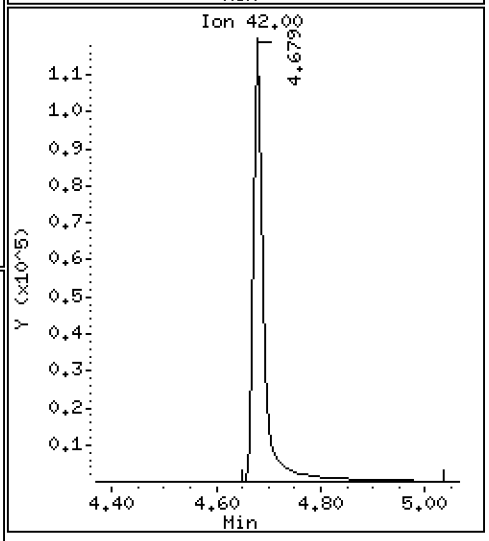
90 N-Nitrosodimethylamine

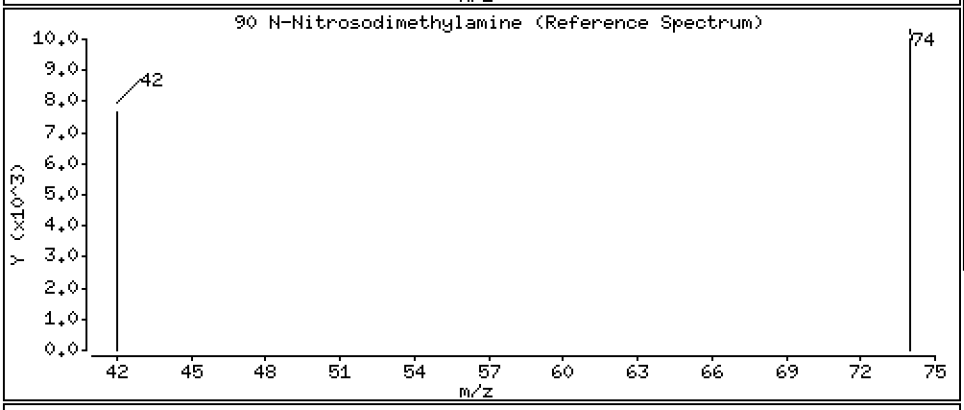
Concentration: 4.897 ug/mL

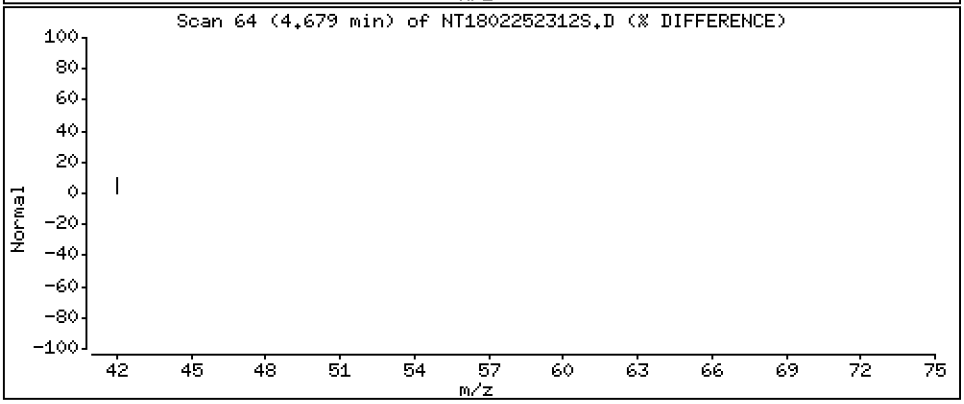












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT1802252312S.D
Lab Smp Id: SLC0155-SCV1
Inj Date : 26-FEB-2023 04:06
Operator : YZ Inst ID: nt18.i
Smp Info : SLC0155-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230225.b\SIM.b\SIMABN2.m
Meth Date : 10-Mar-2023 16:13 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	Compound Not Detected.					
	3	Phenol	94	8.317	8.332	(0.933)	389165	4.32477	4.325
	7	1,3-Dichlorobenzene	146	8.850	8.857	(0.993)	402056	4.46241	4.462
*	8	1,4-Dichlorobenzene-d4	152	8.912	8.912	(1.000)	213719	4.00000	
	9	1,4-Dichlorobenzene	146	8.943	8.943	(1.003)	414169	4.40177	4.402
	11	Benzyl alcohol	79	9.183	9.238	(1.030)	279573	4.84612	4.846
	12	1,2-Dichlorobenzene	146	9.292	9.300	(1.043)	394289	4.40132	4.401
	13	2-Methylphenol	108	9.416	9.432	(1.057)	287135	3.88018	3.880
	15	4-Methylphenol	108	9.688	9.703	(1.087)	312938	4.21475	4.215
	16	N-Nitroso-di-n-propylamine	70	9.735	9.742	(1.092)	239532	4.78925	4.789
	22	2,4-Dimethylphenol	107	10.706	10.715	(0.942)	256225	3.54019	3.540
	24	Benzoic acid	105	10.995	11.089	(0.967)	50284	1.71635	1.716
	26	1,2,4-Trichlorobenzene	180	11.285	11.285	(0.993)	324895	4.38361	4.384
*	27	Naphthalene-d8	136	11.370	11.362	(1.000)	811198	4.00000	
	30	Hexachlorobutadiene	225	11.764	11.764	(1.035)	201685	4.53553	4.536
	39	Dimethylphthalate	163	14.465	14.465	(0.968)	760894	4.79274	4.793
*	42	Acenaphthene-d10	162	14.945	14.944	(1.000)	413230	4.00000	
	50	Diethylphthalate	149	15.911	15.903	(1.065)	735201	5.06782	5.068
	54	N-Nitrosodiphenylamine	169	16.289	16.289	(0.907)	527579	4.81477	4.815
	57	Hexachlorobenzene	284	17.338	17.338	(0.966)	234531	4.45818	4.458
	58	Pentachlorophenol	266	17.702	17.718	(0.986)	41149	2.63077	2.631
*	59	Phenanthrene-d10	188	17.950	17.950	(1.000)	757386	4.00000	
$	66	Terphenyl-d14	244	21.099	21.099	(0.918)	599	0.00465	0.004650(RM)
	67	Butylbenzylphthalate	149	22.020	22.021	(0.958)	528586	4.68314	4.683
*	69	Chrysene-d12	240	22.988	22.980	(1.000)	711364	4.00000	
*	77	Perylene-d12	264	25.473	25.473	(1.000)	786043	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.925	27.925	(1.096)	1142201	4.89045	4.890
	90	N-Nitrosodimethylamine	74	4.678	4.717	(0.525)	201044	4.89694	4.897

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252312S.D
Lab Smp Id: SLC0155-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 00:04
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	234930	117465	469860	213719	-9.03
27 Naphthalene-d8	904391	452196	1808782	811198	-10.30
42 Acenaphthene-d10	465099	232550	930198	413230	-11.15
59 Phenanthrene-d10	856800	428400	1713600	757386	-11.60
69 Chrysene-d12	764037	382019	1528074	711364	-6.89
77 Perylene-d12	862908	431454	1725816	786043	-8.91

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.00
27 Naphthalene-d8	11.36	10.86	11.86	11.37	0.07
42 Acenaphthene-d10	14.94	14.44	15.44	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252312S.D

Lab ID: SLC0155-SCV1
nt18.i, 20230225.b\SIM.b\SIMABN2.m,   26-FEB-2023 04:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.030	1.037	-0.0061	Benzyl alcohol
0.967	0.000	0.9670	Benzoic acid
0.986	0.000	0.9862	Pentachlorophenol

RRT check based on Ccal File: SIM.b/NT1802252310S.D

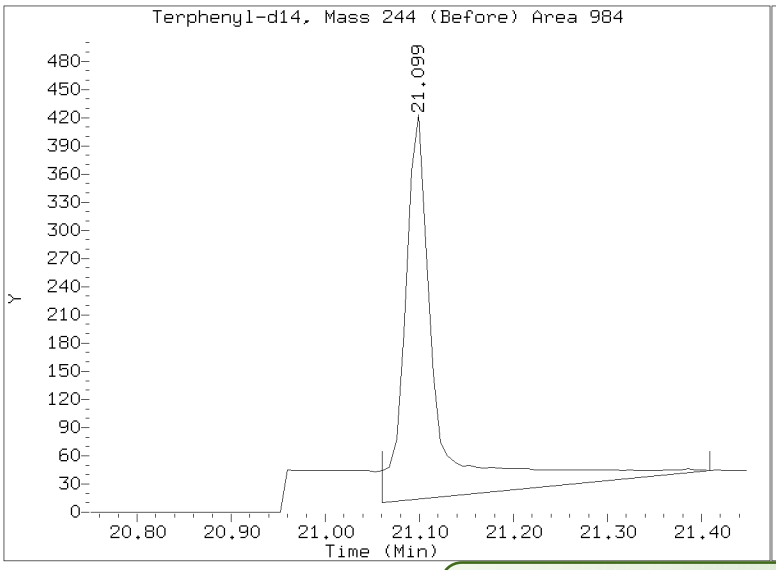
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

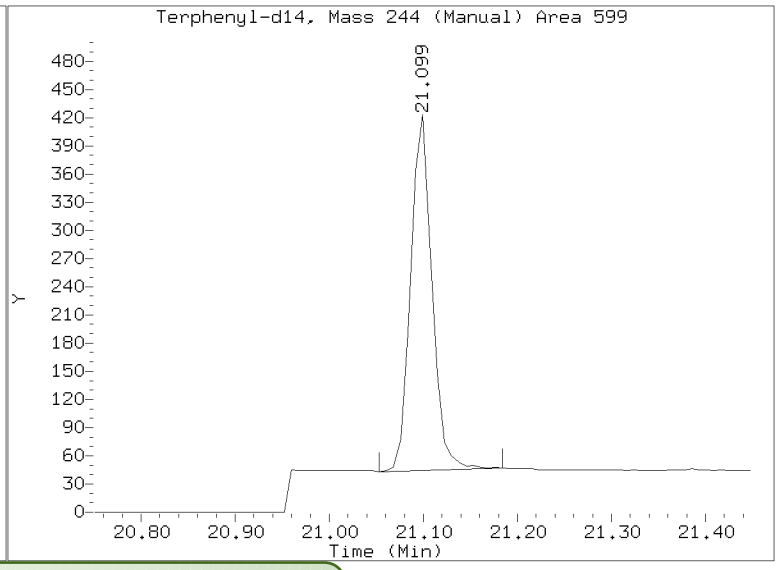
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230225.b/SIM.b/NT1802252312S.D
Injection Date: 26-FEB-2023 04:06
Lab ID:SLC0155-SCV1 Client ID:
Report Date: 03/10/2023 16:18





APPROVED

By Deenay Dunmore at 4:33 pm, Mar 10, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT8	Calibration:	GA00050
Lab File ID:	N823012802.D	Calibration Date:	01/19/2023
Sequence:	SLA0285	Injection Date:	01/25/23
Lab Sample ID:	SLA0285-ICV1	Injection Time:	14:49
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Benzo(a)anthracene	A	2.5000	2.70	1.1238870	1.2118720		7.8	+/-20
Chrysene	A	2.5000	2.55	1.1964350	1.2181130		1.8	+/-20
Benzo(b)fluoranthene	A	2.5000	2.72	1.1648110	1.2687120		8.9	+/-20
Benzo(k)fluoranthene	A	2.5000	2.63	1.1409370	1.2020830		5.4	+/-20
Benzo(a)pyrene	A	2.5000	2.60	1.0250270	1.0659210		4.0	+/-20
Indeno(1,2,3-cd)pyrene	A	2.5000	2.12	1.1677520	0.9885321		-15.4	+/-20
Dibenzo(a,h)anthracene	A	2.5000	2.13	1.0049440	0.8562309		-14.8	+/-20
2-Methylnaphthalene-d10	A	2.5000	2.62	0.5454499	0.5705041		4.6	+/-20
Dibenzo[a,h]anthracene-d14	A	2.5000	2.42	0.6679424	0.6204320		-3.4	+/-20
Fluoranthene-d10	A	2.5000	2.75	0.8823923	0.9700877		9.9	+/-20
Naphthalene-d8	A	2.0000	2.00	22973.6700	1.0000		0.0	
Acenaphthene-d10	A	2.0000	2.00	13579.2500	1.0000		0.0	
Phenanthrene-d10	A	2.0000	2.00	25616.1700	1.0000		0.0	
Chrysene-d12	A	2.0000	2.00	22313.2500	1.0000		0.0	
Perylene-d12	A	2.0000	2.00	21012.9200	1.0000		0.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230125.b\N823012802.D

Page 1

Date : 25-JAN-2023 14:49

Client ID:

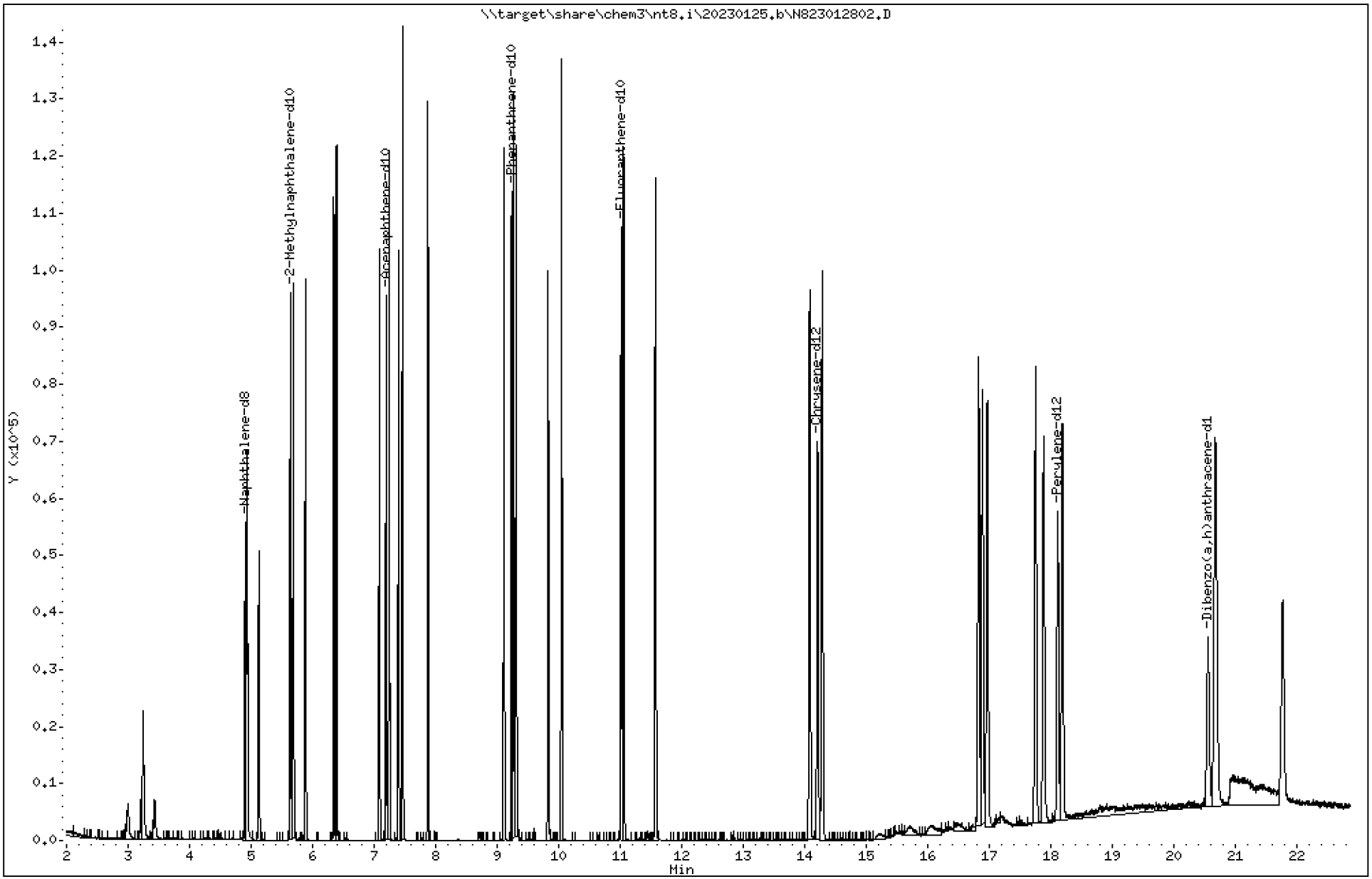
Instrument: nt8.i

Sample Info: ICV230125

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230125.b\N823012802.D
Lab Smp Id: SLA0285-ICV1
Inj Date : 25-JAN-2023 14:49
Operator : JZ Inst ID: nt8.i
Smp Info : ICV230125
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 22:55 Jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	46976	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	55672	2.50000	2.549
$	3 2-Methylnaphthalene-d10	152	5.640	5.640	(1.150)	33500	2.50000	2.615
	4 2-Methylnaphthalene	141	5.687	5.687	(1.159)	31076	2.50000	2.587
	5 1-methylnaphthalene	141	5.886	5.886	(1.200)	31623	2.50000	2.593
	7 Biphenyl	154	6.345	6.345	(0.881)	46365	2.50000	2.542
	8 2,6-Dimethylnaphthalene	156	6.392	6.392	(0.888)	34123	2.50000	2.643
	9 Acenaphthylene	152	7.088	7.088	(0.985)	54922	2.50000	2.630
*	10 Acenaphthene-d10	164	7.199	7.199	(1.000)	27652	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	35623	2.50000	2.546
	12 Dibenzofuran	168	7.398	7.398	(1.028)	53523	2.50000	2.519
	13 1,6,7-Trimethylnaphthalene	170	7.464	7.464	(1.037)	35310	2.50000	2.635
	14 Fluorene	166	7.875	7.875	(1.094)	43303	2.50000	2.624
	18 Dibenzothiophene	184	9.112	9.112	(0.986)	59018	2.50000	2.581
*	15 Phenanthrene-d10	188	9.238	9.238	(1.000)	51738	2.00000	
	16 Phenanthrene	178	9.273	9.273	(1.004)	62353	2.50000	2.467
	17 Anthracene	178	9.314	9.314	(1.008)	59041	2.50000	2.572
	19 Carbazole	167	9.829	9.829	(1.064)	55353	2.50000	2.630
	20 1-Methylphenanthrene	192	10.051	10.051	(1.088)	47913	2.50000	2.631
	22 Fluoranthene	202	11.056	11.056	(1.197)	72219	2.50000	2.625
$	21 Fluoranthene-d10	212	11.018	11.018	(1.193)	62738	2.50000	2.748
	23 Pyrene	202	11.578	11.578	(0.815)	73634	2.50000	2.617
	24 Benzo(a)anthracene	228	14.085	14.085	(0.991)	68748	2.50000	2.696
*	25 Chrysene-d12	240	14.212	14.212	(1.000)	45383	2.00000	
	27 Chrysene	228	14.288	14.288	(1.005)	69102	2.50000	2.545
	28 Benzo(b)fluoranthene	252	16.830	16.830	(0.929)	66379	2.50000	2.757
	29 Benzo(k)fluoranthene	252	16.893	16.893	(0.932)	62893	2.50000	2.667
	30 Benzo(j)fluoranthene	252	16.969	16.969	(0.936)	55946	2.50000	2.635
	31 Total Benzofluoranthenes	252	16.830	16.830	(0.929)	183399	7.50000	8.042(M)
	34 Benzo(e)pyrene	252	17.756	17.756	(0.980)	62717	2.50000	2.612
	32 Benzo(a)pyrene	252	17.889	17.889	(0.987)	55769	2.50000	2.632
*	33 Perylene-d12	264	18.120	18.120	(1.000)	41344	2.00000	
	35 Perylene	252	18.196	18.196	(1.004)	54708	2.50000	2.406

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.564	20.564	(1.135)	32462	2.50000	2.004
37 Indeno(1,2,3-cd)pyrene	276	20.694	20.694	(1.142)	51720	2.50000	2.143
38 Dibenzo(a,h)anthracene	278	20.672	20.672	(1.141)	45205	2.50000	2.176
39 Benzo(g,h,i)perylene	276	21.779	21.779	(1.202)	45373	2.50000	2.075

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823012802.D
Lab Smp Id: SLA0285-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 25-JAN-2023
Calibration Time: 14:20
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46976	5.08
10 Acenaphthene-d10	26411	13206	52822	27652	4.70
15 Phenanthrene-d10	49210	24605	98420	51738	5.14
25 Chrysene-d12	42994	21497	85988	45383	5.56
33 Perylene-d12	40520	20260	81040	41344	2.03

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.21	13.71	14.71	14.21	0.00
33 Perylene-d12	18.12	17.62	18.62	18.12	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823012802.D

Lab ID: SLA0285-ICV1
nt8.i, 20230125.b\FSIMPNA230119.m,   25-JAN-2023 14:49

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

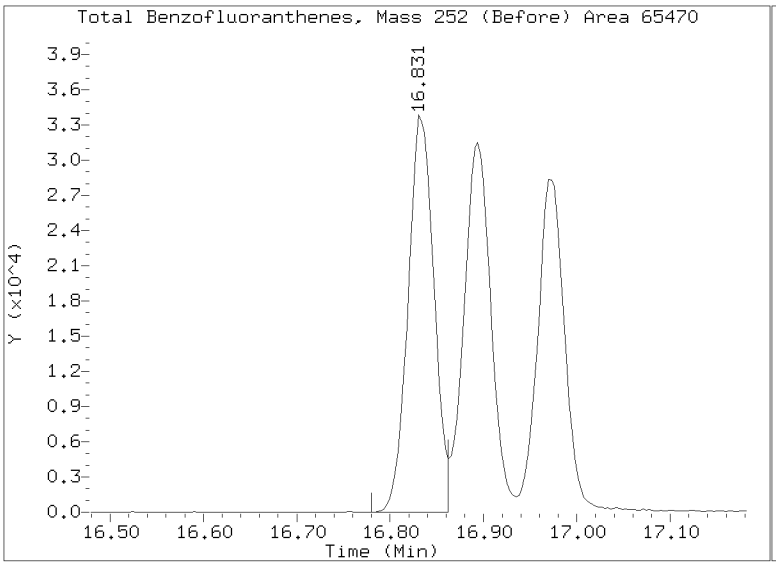
No RRT check performed

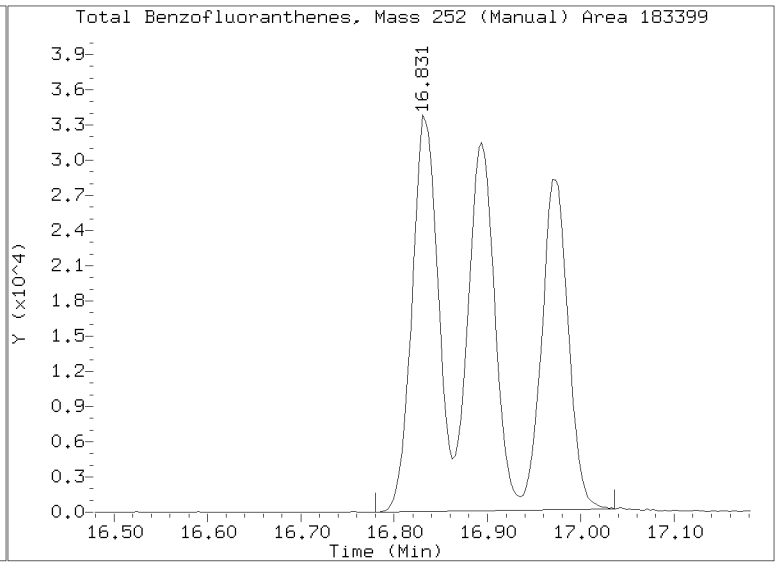
On Column LOD for nt8.i, 20230125.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230125.b/N823012802.D
Injection Date: 25-JAN-2023 14:49
Lab ID:SLA0285-ICV1 Client ID:
Report Date: 01/25/2023 22:56





Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230125.b

Instrument: nt8.i Date: 25-JAN-2023 Method: 20230125.b\FSIMPNA230119.m

INITIAL CAL: 19-JAN-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: N823012802.D 25-JAN-2023 14:49

Compound	%D
NO Q-FLAGS	

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00036
Lab File ID:	NT1802262303S.D	Calibration Date:	02/25/2023
Sequence:	SLC0389	Injection Date:	02/26/23
Lab Sample ID:	SLC0389-ICV1	Injection Time:	12:48
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
1,4-Dichlorobenzene	A	1.0000	0.9	1.7610310	1.5914320		-9.6	+/-20	
1,2-Dichlorobenzene	A	1.0000	0.9	1.6766720	1.5322640		-8.6	+/-20	
Benzyl Alcohol	A	1.0000	0.9	1.0797360	1.0005800		-7.3	+/-20	
Benzoic acid	A	4.0000	0.3	0.0982061	0.0121902		-91.5	+/-20	*
2,4-Dimethylphenol	A	2.0000	1.9	0.3568845	0.3445112		-3.5	+/-20	
1,2,4-Trichlorobenzene	A	1.0000	0.9	0.3654639	0.3370426		-7.8	+/-20	
N-Nitrosodiphenylamine	A	1.0000	1.0	0.5787015	0.5526663		-4.5	+/-20	
Pentachlorophenol	A	2.0000	0.8	0.0525310	0.0313750		-61.6	+/-20	*
2-Fluorophenol	A	1.5000	1.55	1.2910050	1.3302700		3.1	+/-20	
p-Terphenyl-d14	A	1.0000	0.925	0.7242850	0.6700883		-7.5	+/-20	
1,4-Dichlorobenzene-d4	A	4.0000	4.0	60638.2500	1.0000				
Naphthalene-d8	A	4.0000	4.0	237209.5000	1.0000				
Acenaphthene-d10	A	4.0000	4.0	120777.0000	1.0000				
Phenanthrene-d10	A	4.0000	4.0	218879.3000	1.0000				
Chrysene-d12	A	4.0000	4.0	219245.8000	1.0000				
Perylene-d12	A	4.0000	4.0	228351.3000	1.0000				

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623033.D

Date : 26-FEB-2023 12:48

Client ID:

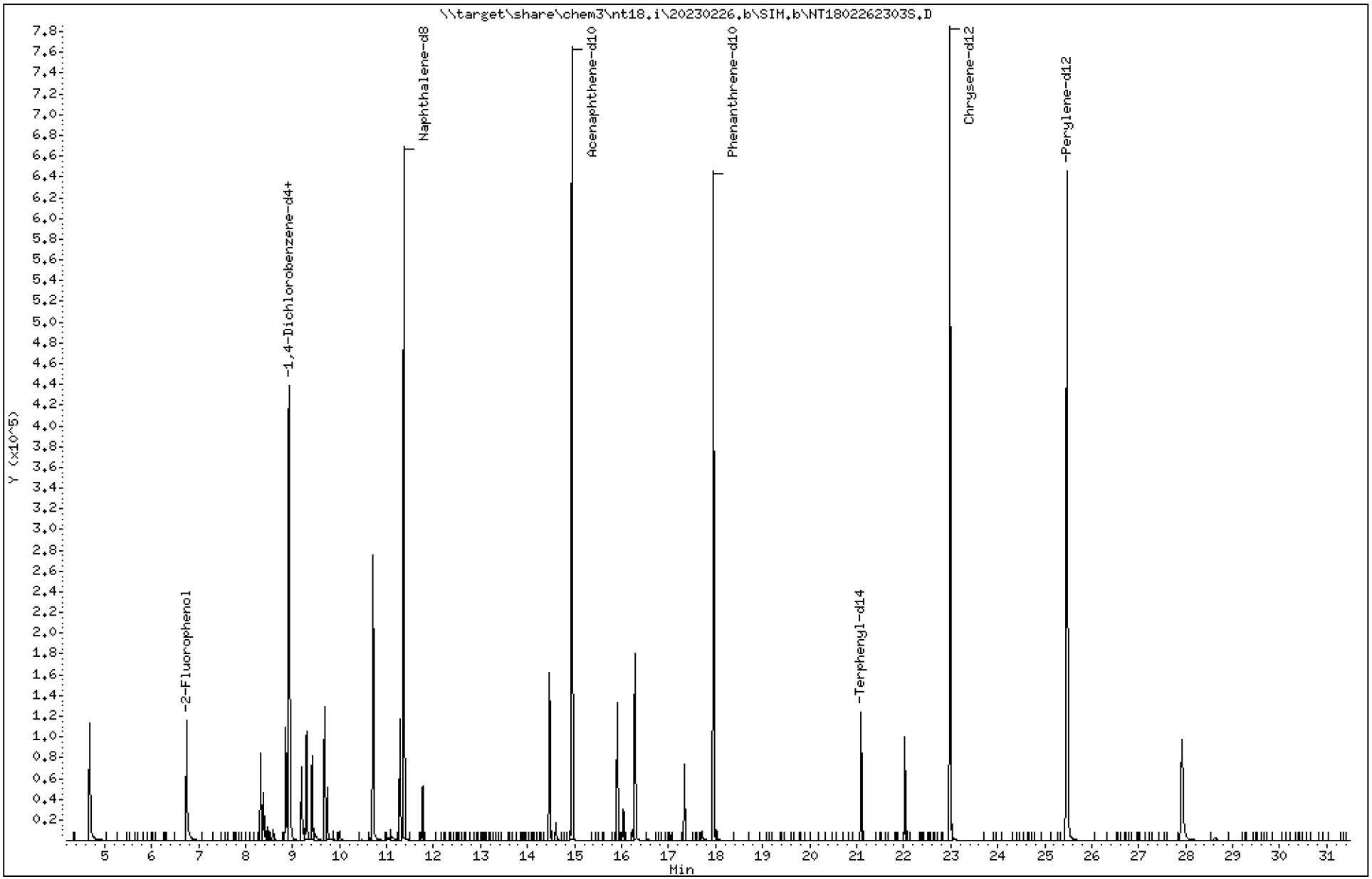
Instrument: nt18.i

Sample Info: SLC0389-ICV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262303S.D
Lab Smp Id: SLC0389-ICV1
Inj Date : 26-FEB-2023 12:48
Operator : VTS Inst ID: nt18.i
Smp Info : SLC0389-ICV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.748	6.748	(0.757)	139416	1.50000	1.546
	3 Phenol	94	8.324	8.324	(0.933)	115913	1.00000	0.9851
	7 1,3-Dichlorobenzene	146	8.850	8.850	(0.992)	108827	1.00000	0.9237
*	8 1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	279474	4.00000	
	9 1,4-Dichlorobenzene	146	8.943	8.943	(1.003)	111191	1.00000	0.9037
	11 Benzyl alcohol	79	9.191	9.191	(1.030)	69909	1.00000	0.9267(H)
	12 1,2-Dichlorobenzene	146	9.300	9.300	(1.043)	107057	1.00000	0.9139
	13 2-Methylphenol	108	9.416	9.416	(1.056)	91890	1.00000	0.9496
	15 4-Methylphenol	108	9.680	9.680	(1.085)	94806	1.00000	0.9765
	16 N-Nitroso-di-n-propylamine	70	9.735	9.735	(1.091)	62286	1.00000	0.9523
	22 2,4-Dimethylphenol	107	10.715	10.715	(0.942)	183543	2.00000	1.931
	24 Benzoic acid	105	11.088	11.088	(0.975)	12989	4.00000	0.3387
	26 1,2,4-Trichlorobenzene	180	11.285	11.285	(0.993)	89782	1.00000	0.9222
*	27 Naphthalene-d8	136	11.370	11.370	(1.000)	1065527	4.00000	
	30 Hexachlorobutadiene	225	11.772	11.772	(1.035)	53044	1.00000	0.9081
	39 Dimethylphthalate	163	14.465	14.465	(0.968)	195182	1.00000	0.9334
*	42 Acenaphthene-d10	162	14.945	14.945	(1.000)	544290	4.00000	
	50 Diethylphthalate	149	15.911	15.911	(1.065)	187018	1.00000	0.9787
	54 N-Nitrosodiphenylamine	169	16.281	16.281	(0.907)	138638	1.00000	0.9550
	57 Hexachlorobenzene	284	17.338	17.338	(0.966)	62602	1.00000	0.8982
	58 Pentachlorophenol	266	17.702	17.702	(0.986)	15741	2.00000	0.7681
*	59 Phenanthrene-d10	188	17.950	17.950	(1.000)	1003412	4.00000	
$	66 Terphenyl-d14	244	21.091	21.091	(0.918)	156964	1.00000	0.9252
	67 Butylbenzylphthalate	149	22.020	22.020	(0.958)	122760	1.00000	0.7967
*	69 Chrysene-d12	240	22.980	22.980	(1.000)	936975	4.00000	
*	77 Perylene-d12	264	25.473	25.473	(1.000)	1057771	4.00000	
	79 Dibenzo(a,h)anthracene	278	27.917	27.917	(1.096)	285142	1.00000	0.9072
	90 N-Nitrosodimethylamine	74	4.686	4.686	(0.525)	106798	2.00000	1.989

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262303S.D
Lab Smp Id: SLC0389-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 00:04
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	279474	0.00
27 Naphthalene-d8	1065527	532764	2131054	1065527	0.00
42 Acenaphthene-d10	544290	272145	1088580	544290	0.00
59 Phenanthrene-d10	1003412	501706	2006824	1003412	0.00
69 Chrysene-d12	936975	468488	1873950	936975	0.00
77 Perylene-d12	1057771	528886	2115542	1057771	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262303S.D

Lab ID: SLC0389-ICV1
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 12:48

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230226.b\SIM.b

Instrument: nt18.i Date: 26-FEB-2023 Method: SIM.b\SIMABN2.m

INITIAL CAL: 10-FEB-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1802262303S.D 26-FEB-2023 12:48

Compound	%D
Benzoic acid	-91.5
Pentachlorophenol	-61.6
Butylbenzylphthalate	-20.3

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00036
Lab File ID:	NT1802272303S.D	Calibration Date:	02/25/2023
Sequence:	SLC0396	Injection Date:	02/27/23
Lab Sample ID:	SLC0396-ICV1	Injection Time:	17:43
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
1,4-Dichlorobenzene	A	1.0000	0.9	1.7610310	1.6213670		-7.9	+/-20	
1,2-Dichlorobenzene	A	1.0000	0.9	1.6766720	1.5628860		-6.8	+/-20	
Benzyl Alcohol	A	1.0000	0.9	1.0797360	0.9238017		-14.4	+/-20	
Benzoic acid	A	4.0000	3.1	0.0982061	0.1140367		-21.4	+/-20	*
2,4-Dimethylphenol	A	2.0000	1.8	0.3568845	0.3237003		-9.3	+/-20	
1,2,4-Trichlorobenzene	A	1.0000	0.9	0.3654639	0.3360924		-8.0	+/-20	
N-Nitrosodiphenylamine	A	1.0000	1.0	0.5787015	0.5503691		-4.9	+/-20	
Pentachlorophenol	A	2.0000	1.7	0.0525310	0.0688509		-16.2	+/-20	
2-Fluorophenol	A	1.5000	1.45	1.2910050	1.2514250		-3.1	+/-20	
p-Terphenyl-d14	A	1.0000	0.865	0.7242850	0.6266125		-13.5	+/-20	
1,4-Dichlorobenzene-d4	A	4.0000	4.0	60638.2500	1.0000				
Naphthalene-d8	A	4.0000	4.0	237209.5000	1.0000				
Acenaphthene-d10	A	4.0000	4.0	120777.0000	1.0000				
Phenanthrene-d10	A	4.0000	4.0	218879.3000	1.0000				
Chrysene-d12	A	4.0000	4.0	219245.8000	1.0000				
Perylene-d12	A	4.0000	4.0	228351.3000	1.0000				

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723038.D

Page 1

Date : 27-FEB-2023 17:43

Client ID:

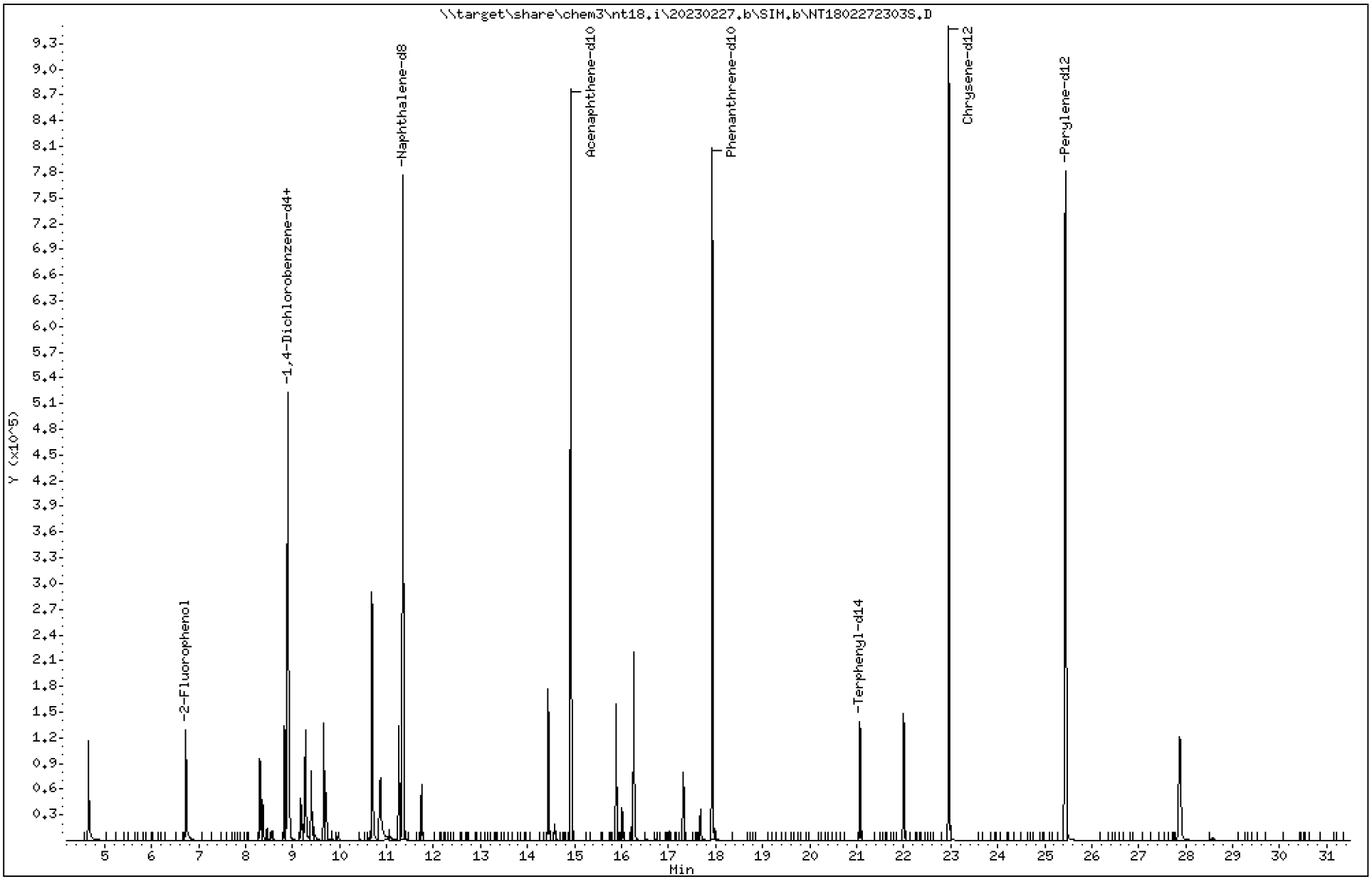
Instrument: nt18.i

Sample Info: SLC0396-ICV1

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272303S.D
Lab Smp Id: SLC0396-ICV1
Inj Date : 27-FEB-2023 17:43
Operator : YZ Inst ID: nt18.i
Smp Info : SLC0396-ICV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 13:42 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

								AMOUNTS	
		QUANT SIG						CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	6.725	6.725	(0.756)	156801		1.50000	1.454
	3 Phenol	94	8.301	8.301	(0.933)	135043		1.00000	0.9599
	7 1,3-Dichlorobenzene	146	8.827	8.827	(0.992)	132337		1.00000	0.9395
*	8 1,4-Dichlorobenzene-d4	152	8.896	8.896	(1.000)	334128		4.00000	
	9 1,4-Dichlorobenzene	146	8.920	8.920	(1.003)	135436		1.00000	0.9207
	11 Benzyl alcohol	79	9.168	9.168	(1.031)	77167		1.00000	0.8556(M)
	12 1,2-Dichlorobenzene	146	9.277	9.277	(1.043)	130551		1.00000	0.9321
	13 2-Methylphenol	108	9.401	9.401	(1.057)	106267		1.00000	0.9185
	15 4-Methylphenol	108	9.665	9.665	(1.086)	107510		1.00000	0.9262
	16 N-Nitroso-di-n-propylamine	70	9.711	9.711	(1.092)	64431		1.00000	0.8240
	22 2,4-Dimethylphenol	107	10.689	10.689	(0.942)	204060		2.00000	1.814
	24 Benzoic acid	105	10.868	10.868	(0.958)	143777		4.00000	3.146
	26 1,2,4-Trichlorobenzene	180	11.262	11.262	(0.993)	105936		1.00000	0.9196
*	27 Naphthalene-d8	136	11.347	11.347	(1.000)	1260796		4.00000	
	30 Hexachlorobutadiene	225	11.741	11.741	(1.035)	64828		1.00000	0.9380
	39 Dimethylphthalate	163	14.442	14.442	(0.968)	221342		1.00000	0.8889
*	42 Acenaphthene-d10	162	14.921	14.921	(1.000)	648152		4.00000	
	50 Diethylphthalate	149	15.888	15.888	(1.065)	238435		1.00000	1.048
	54 N-Nitrosodiphenylamine	169	16.258	16.258	(0.907)	169513		1.00000	0.9510
	57 Hexachlorobenzene	284	17.315	17.315	(0.966)	71133		1.00000	0.8313
	58 Pentachlorophenol	266	17.671	17.671	(0.986)	42412		2.00000	1.676
*	59 Phenanthrene-d10	188	17.927	17.927	(1.000)	1231995		4.00000	
$	66 Terphenyl-d14	244	21.068	21.068	(0.918)	176544		1.00000	0.8651
	67 Butylbenzylphthalate	149	21.997	21.997	(0.958)	181271		1.00000	0.9799
*	69 Chrysene-d12	240	22.957	22.957	(1.000)	1126974		4.00000	
*	77 Perylene-d12	264	25.442	25.442	(1.000)	1243668		4.00000	
	79 Dibenzo(a,h)anthracene	278	27.871	27.871	(1.095)	328779		1.00000	0.8897
	90 N-Nitrosodimethylamine	74	4.663	4.663	(0.524)	103050		2.00000	1.606

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272303S.D
Lab Smp Id: SLC0396-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	334128	167064	668256	334128	0.00
27 Naphthalene-d8	1260796	630398	2521592	1260796	0.00
42 Acenaphthene-d10	648152	324076	1296304	648152	0.00
59 Phenanthrene-d10	1231995	615998	2463990	1231995	0.00
69 Chrysene-d12	1126974	563487	2253948	1126974	0.00
77 Perylene-d12	1243668	621834	2487336	1243668	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.35	10.85	11.85	11.35	0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.92	0.00
59 Phenanthrene-d10	17.93	17.43	18.43	17.93	0.00
69 Chrysene-d12	22.96	22.46	23.46	22.96	0.00
77 Perylene-d12	25.44	24.94	25.94	25.44	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272303S.D

Lab ID: SLC0396-ICV1
nt18.i, 20230227.b\SIM.b\SIMABN2.m,   27-FEB-2023 17:43

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

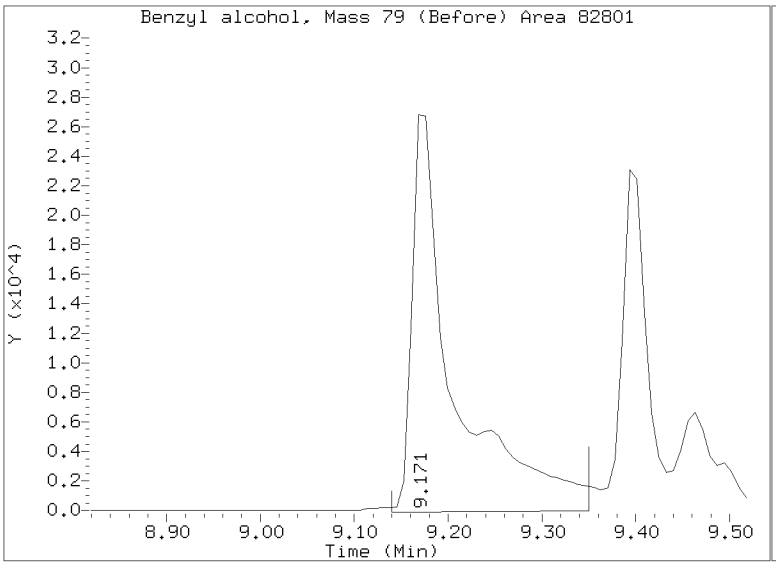
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

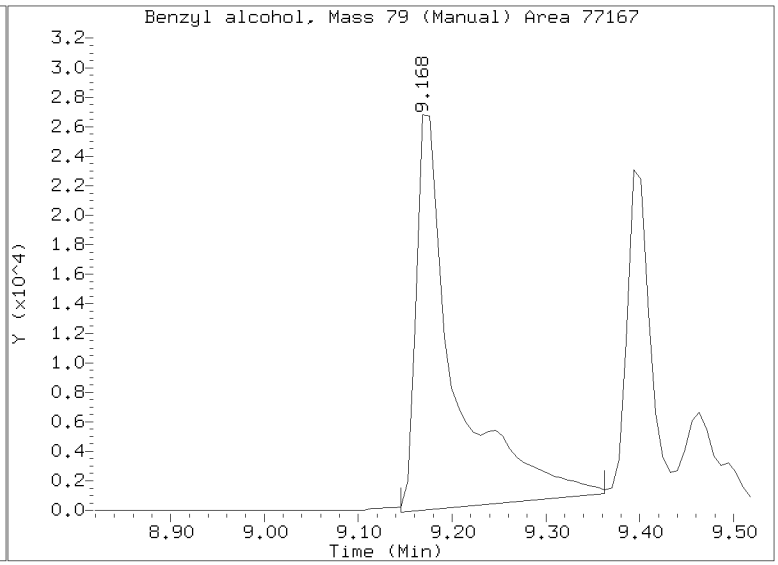
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230227.b/SIM.b/NT1802272303S.D
Injection Date: 27-FEB-2023 17:43
Lab ID:SLC0396-ICV1 Client ID:
Report Date: 03/24/2023 13:42





Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230227.b\SIM.b

Instrument: nt18.i Date: 27-FEB-2023 Method: SIM.b\SIMABN2.m

INITIAL CAL: 10-FEB-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1802272303S.D 27-FEB-2023 17:43

Compound	%D
Benzoic acid	-21.4

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT8	Calibration:	GA00050
Lab File ID:	N823011909.D	Calibration Date:	01/19/2023
Sequence:	SLA0213	Injection Date:	01/19/23
Lab Sample ID:	SLA0213-SCV1	Injection Time:	14:58
Sequence Name:	8270 SIM PNA SCV		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Naphthalene	A	2.5000	2.63	0.9299181	0.9767747		5.0	
2-Methylnaphthalene	A	2.5000	2.67	0.5115033	0.5463255		6.8	
1-Methylnaphthalene	A	2.5000	2.65	0.5191318	0.5501748		6.0	
Acenaphthylene	A	2.5000	2.82	1.5102600	1.7039370		12.8	
Acenaphthene	A	2.5000	2.60	1.0119150	1.0524810		4.0	
Dibenzofuran	A	2.5000	2.86	1.5369690	1.7582160		14.4	
Fluorene	A	2.5000	2.63	1.1937240	1.2561120		5.2	
Phenanthrene	A	2.5000	2.45	0.9769567	0.9567960		-2.1	
Anthracene	A	2.5000	2.27	0.8874960	0.8058663		-9.2	
Fluoranthene	A	2.5000	2.65	1.0634260	1.1284050		6.1	
Pyrene	A	2.5000	2.46	1.2399700	1.2213300		-1.5	
Benzo(a)anthracene	A	2.5000	2.59	1.1238870	1.1631100		3.5	
Chrysene	A	2.5000	2.40	1.1964350	1.1484610		-4.0	
Benzo(b)fluoranthene	A	2.5000	2.51	1.1648110	1.1680230		0.3	
Benzo(k)fluoranthene	A	2.5000	2.66	1.1409370	1.2121600		6.2	
Benzofluoranthenes, Total	A	5.0000	5.48	1.1031370	1.2090940		9.6	
Benzo(a)pyrene	A	2.5000	2.57	1.0250270	1.0545670		2.9	
Indeno(1,2,3-cd)pyrene	A	2.5000	2.69	1.1677520	1.2561630		7.6	
Dibenzo(a,h)anthracene	A	2.5000	2.49	1.0049440	1.0021900		-0.3	
Benzo(g,h,i)perylene	A	2.5000	2.48	1.0580110	1.0506380		-0.7	

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Page 1

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

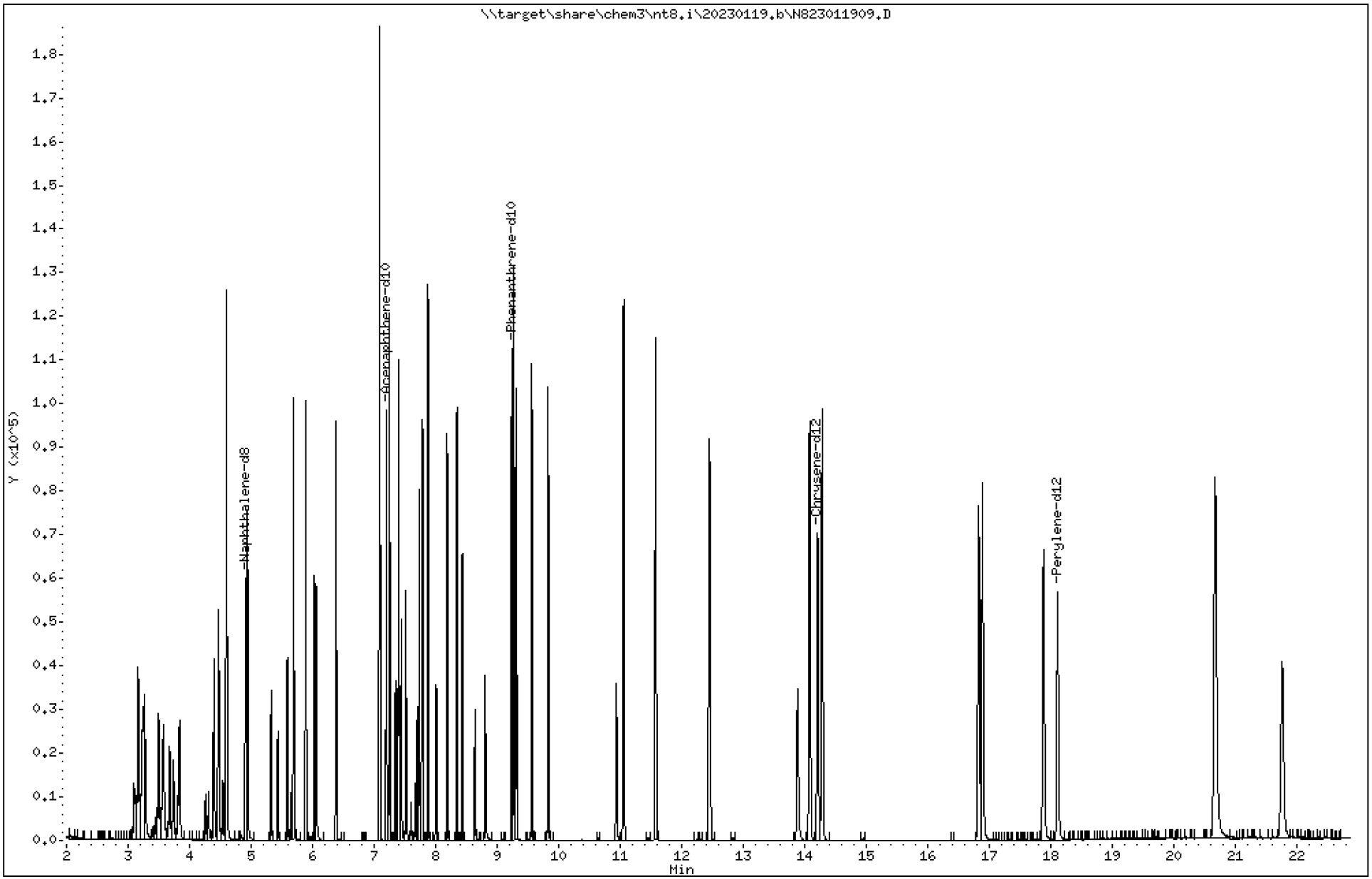
Sample Info: SCV230119

Volume Injected (uL): 1.0

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

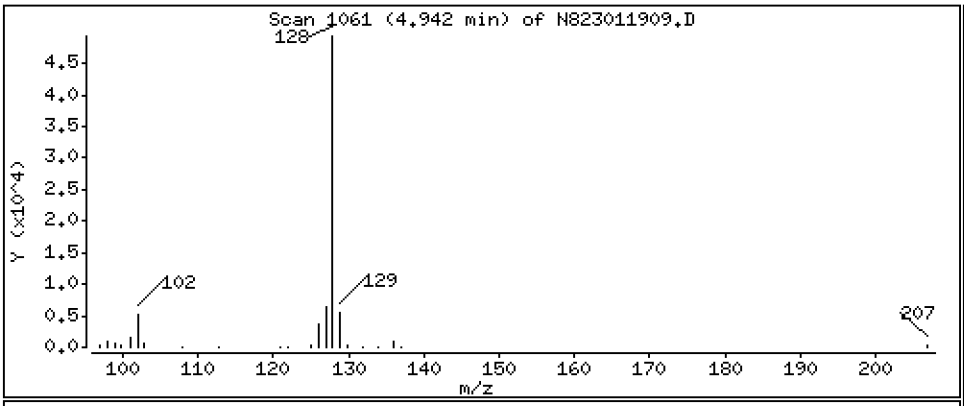
Operator: JZ

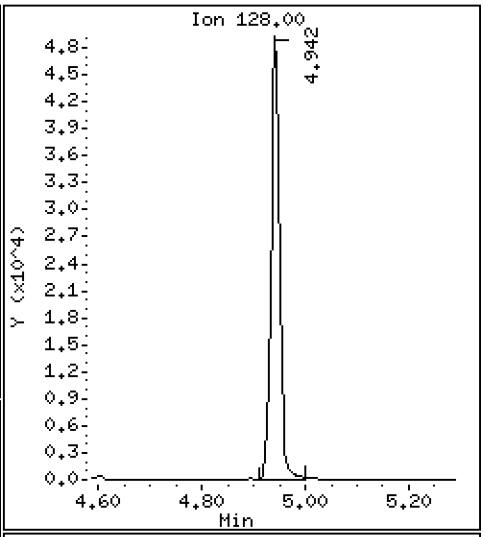
Column phase: Rxi-17sil

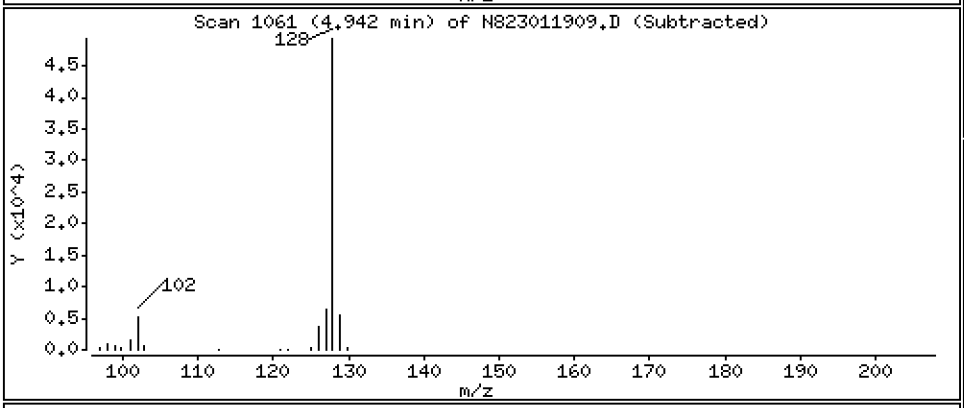
Column diameter: 0.25

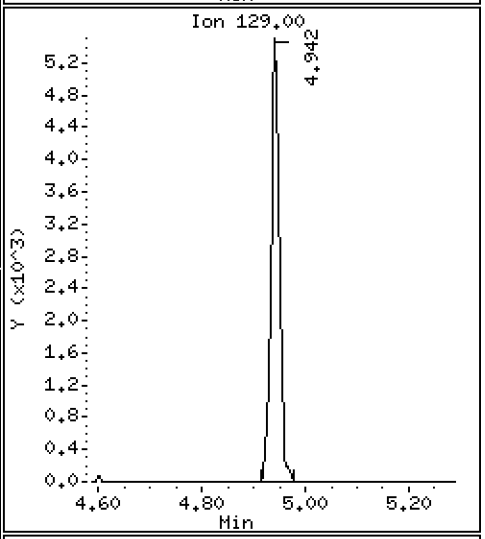
2 Naphthalene

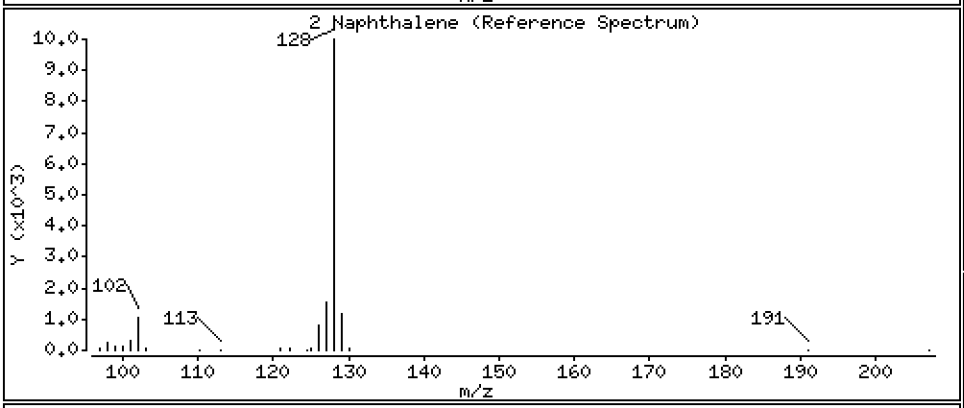
Concentration: 2.626 ug/L

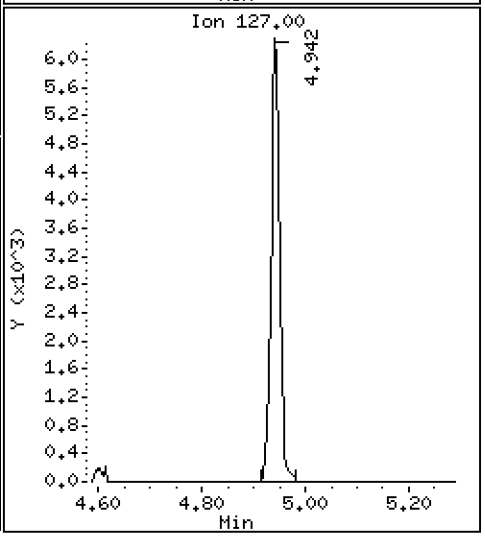


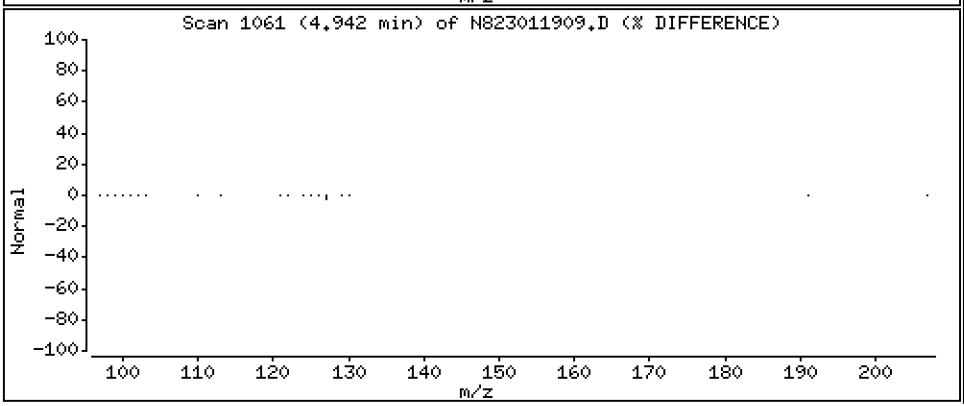












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

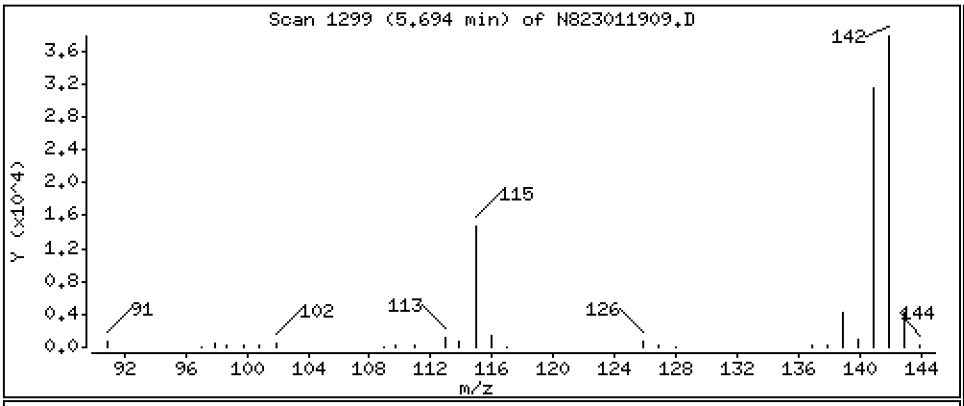
Operator: JZ

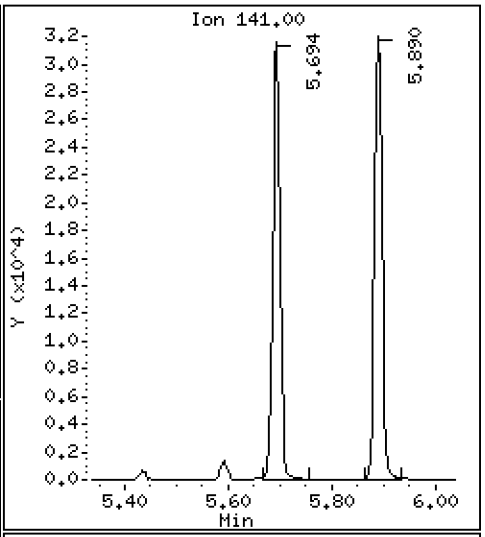
Column phase: Rxi-17sil

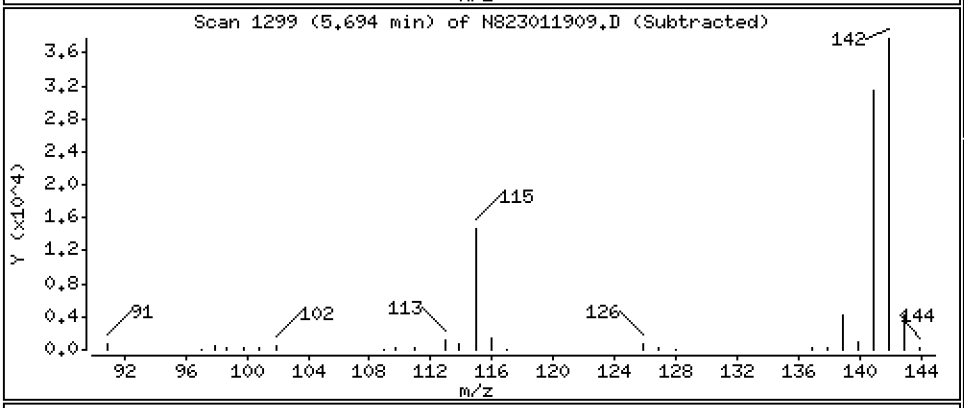
Column diameter: 0.25

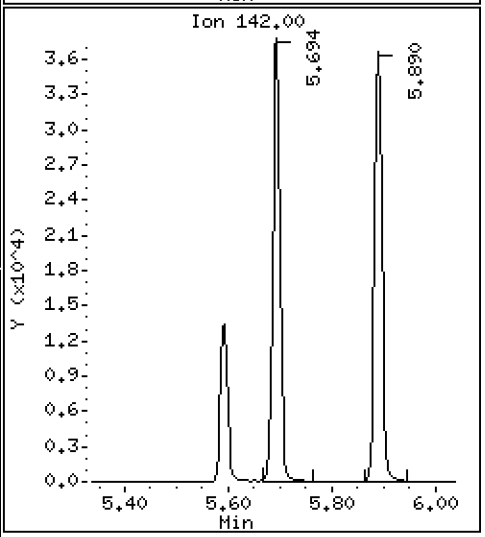
4 2-Methylnaphthalene

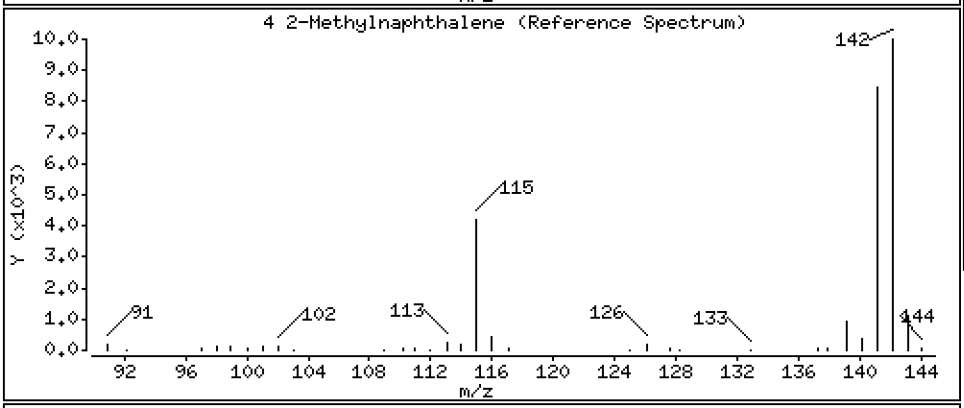
Concentration: 2.670 ug/L

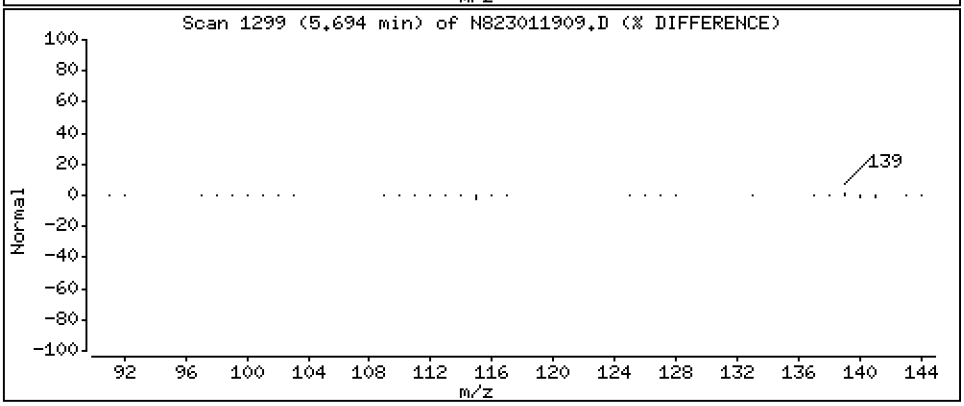












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

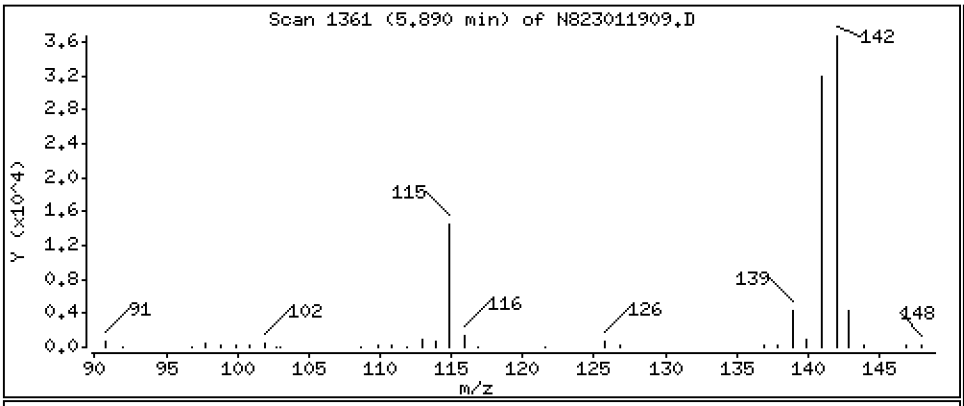
Operator: JZ

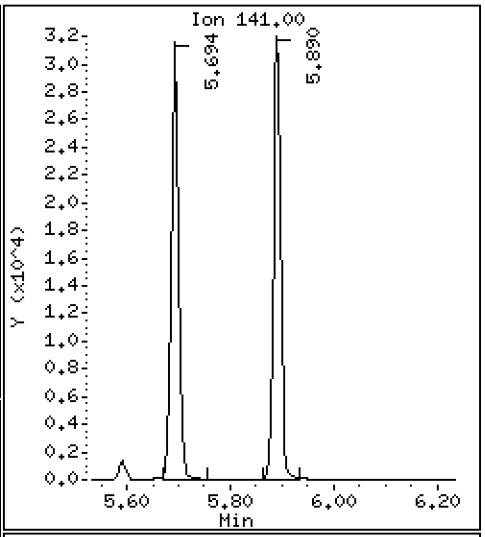
Column phase: Rxi-17sil

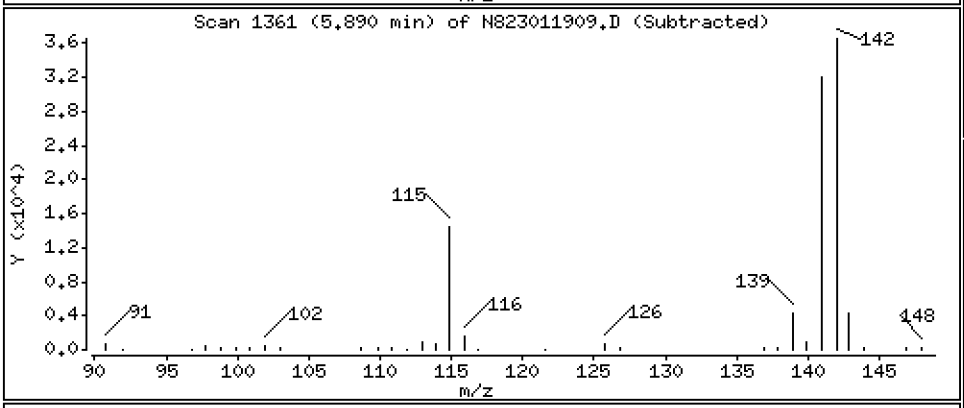
Column diameter: 0.25

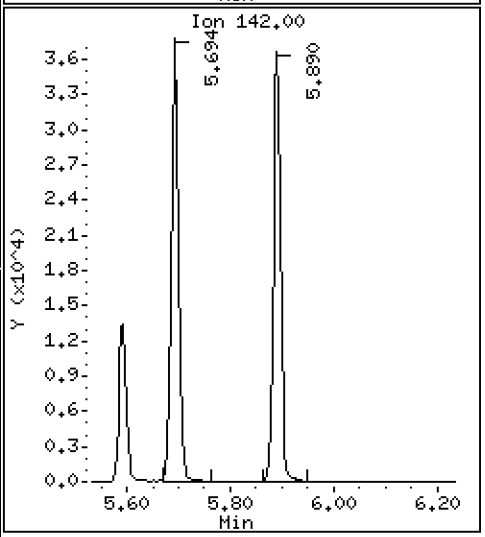
5 1-methylnaphthalene

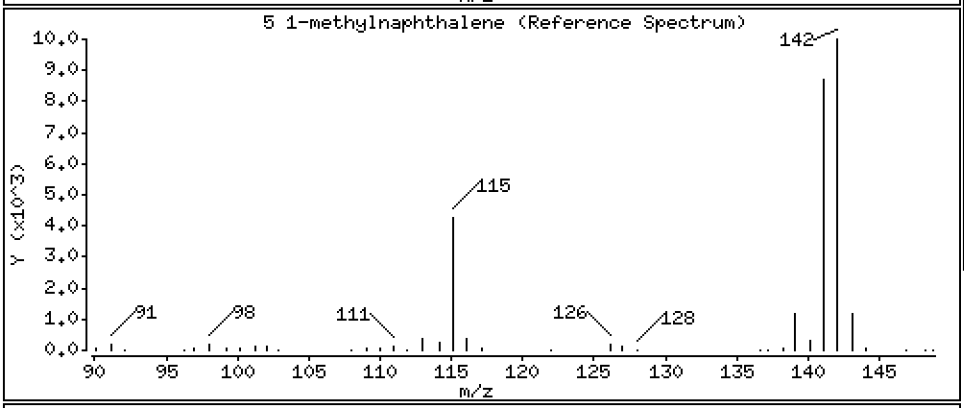
Concentration: 2.649 ug/L

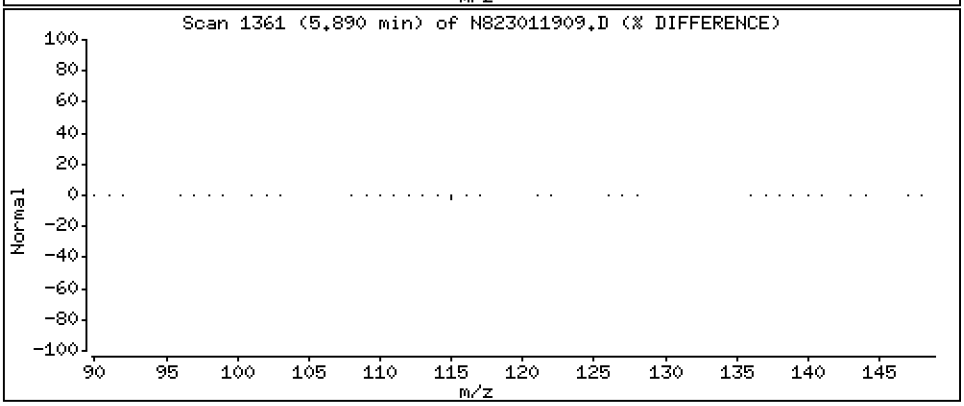












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

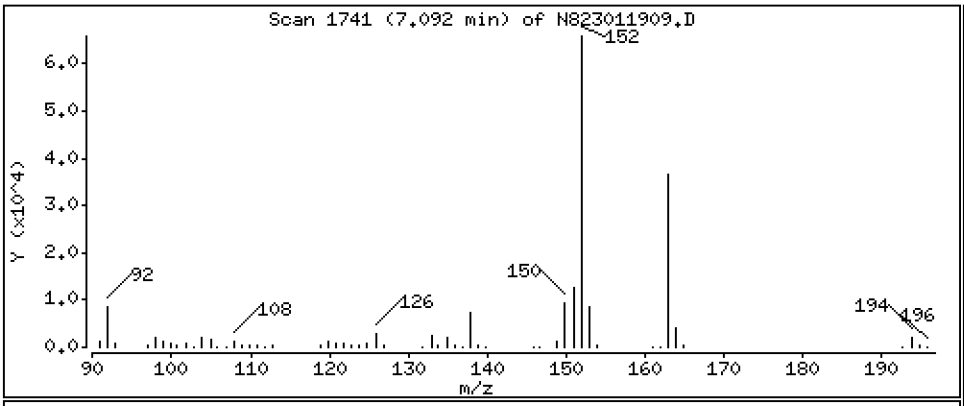
Operator: JZ

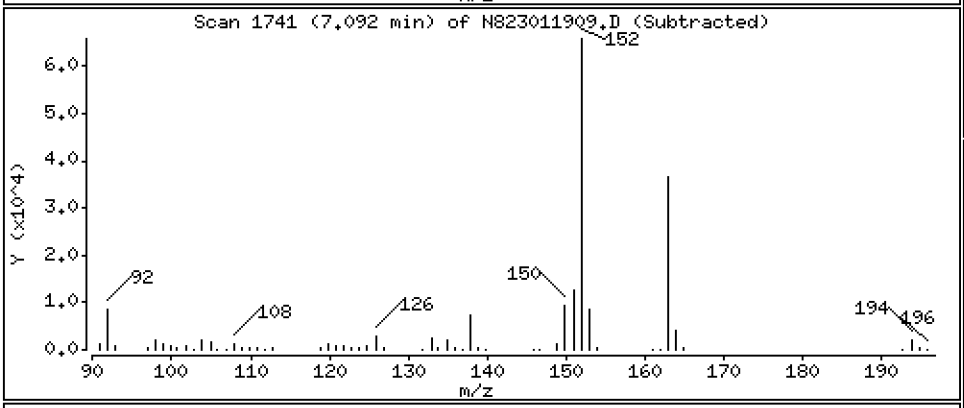
Column phase: Rxi-17sil

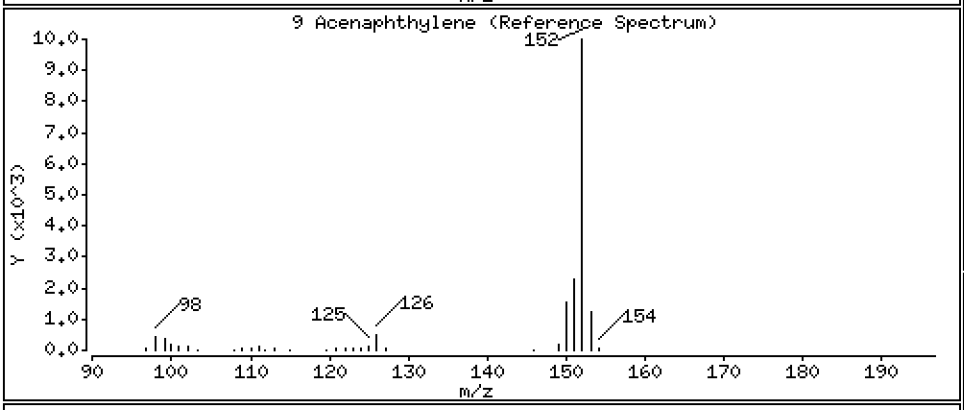
Column diameter: 0.25

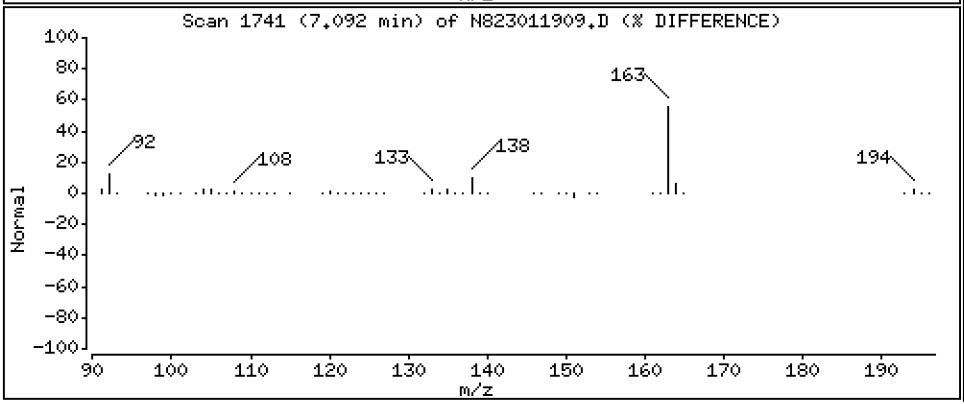
9 Acenaphthylene

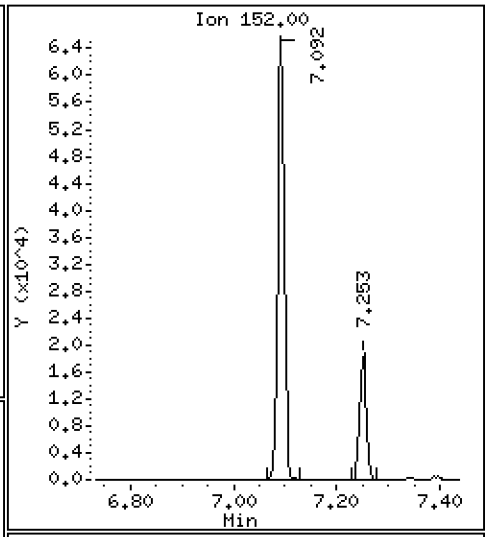
Concentration: 2.821 ug/L

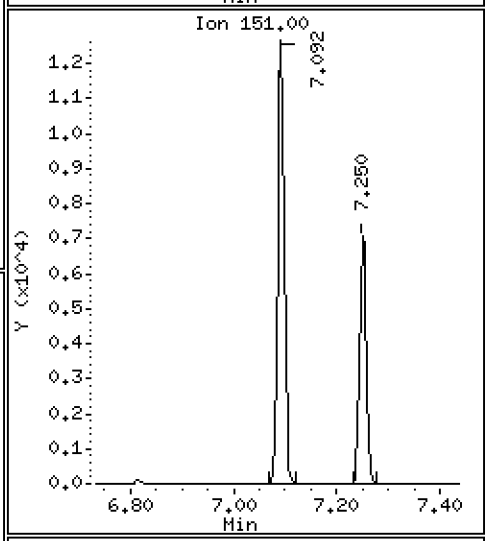


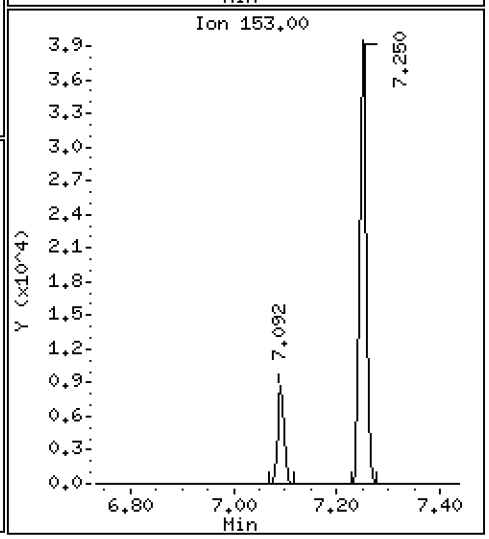












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

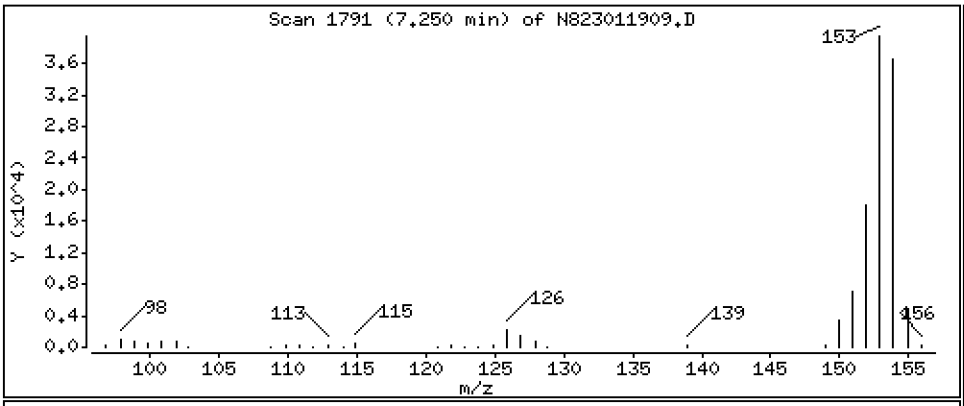
Operator: JZ

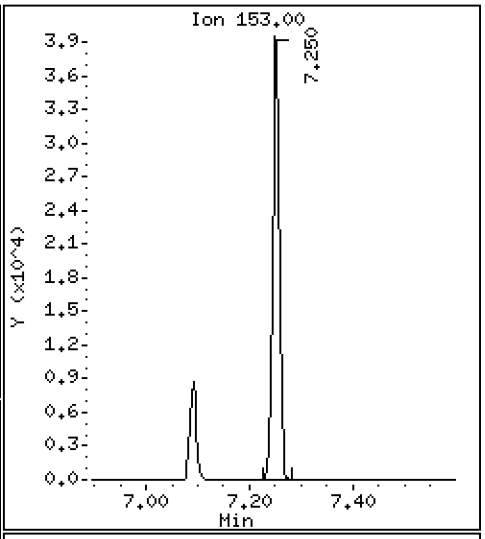
Column phase: Rxi-17sil

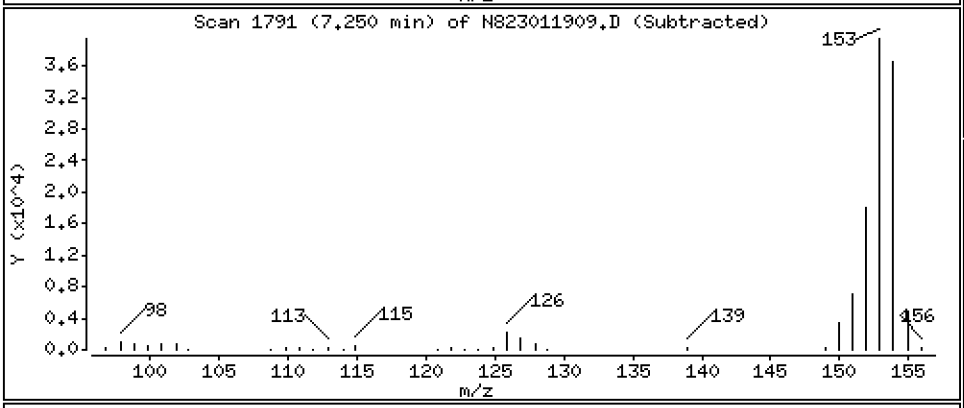
Column diameter: 0.25

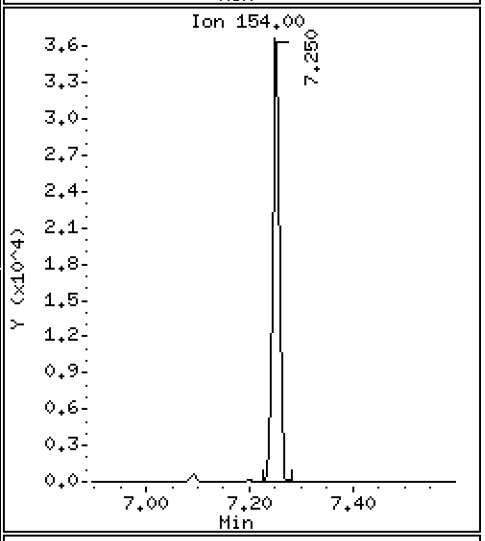
11 Acenaphthene

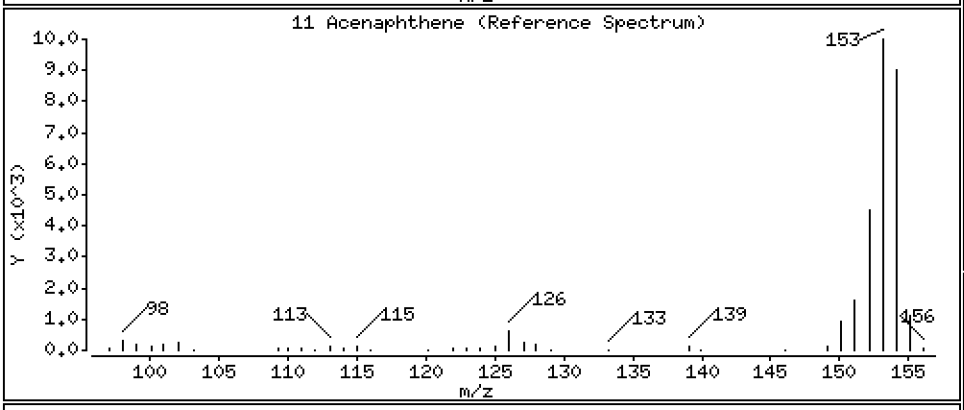
Concentration: 2.600 ug/L

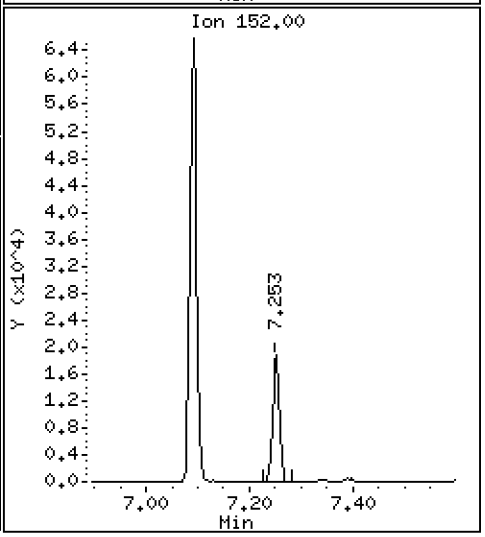


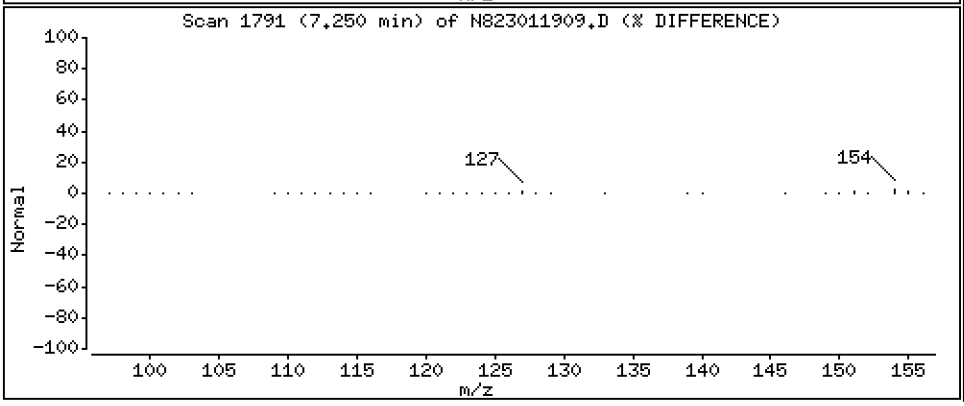












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

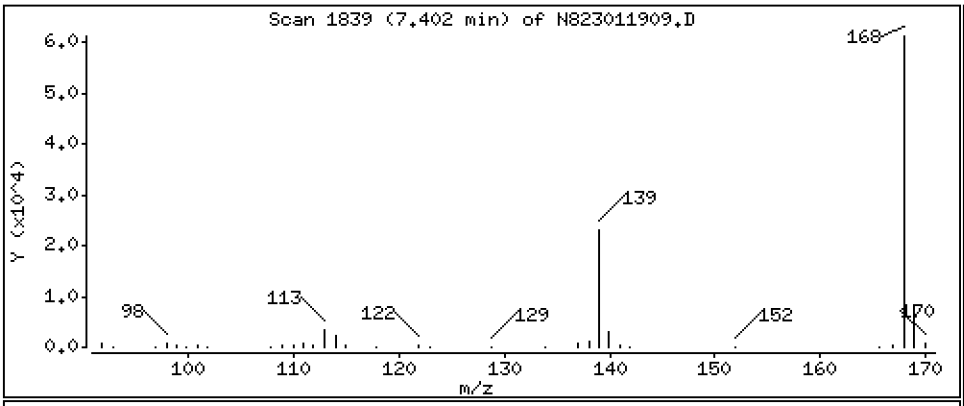
Operator: JZ

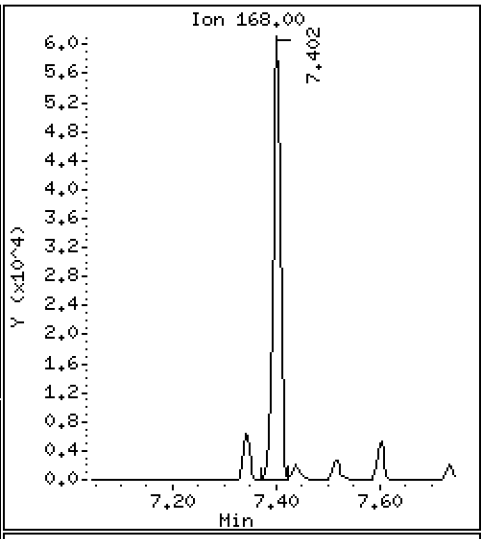
Column phase: Rxi-17sil

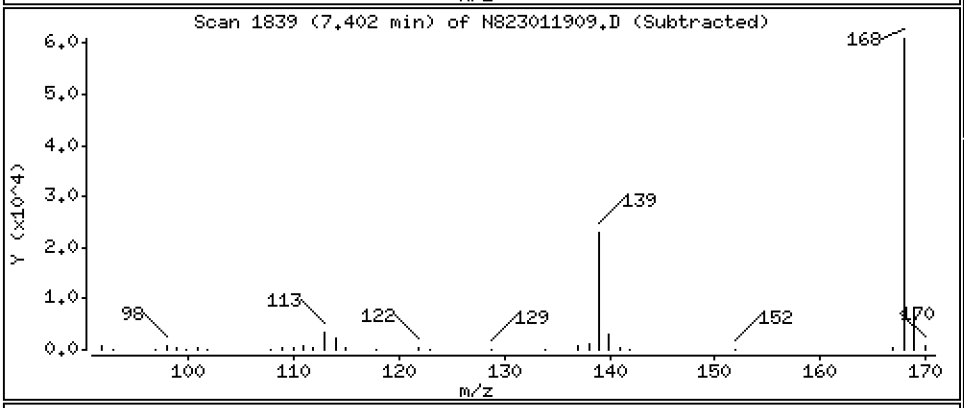
Column diameter: 0.25

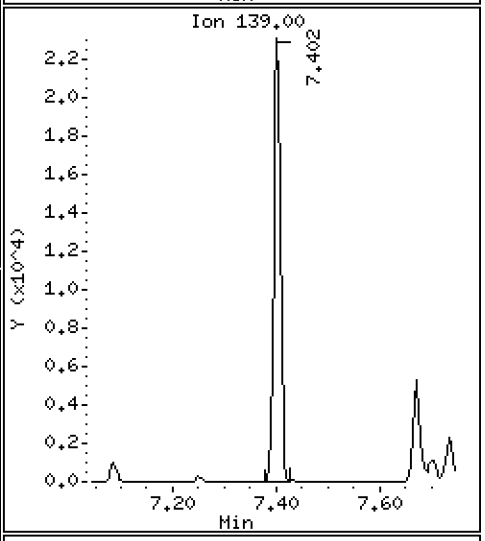
12 Dibenzofuran

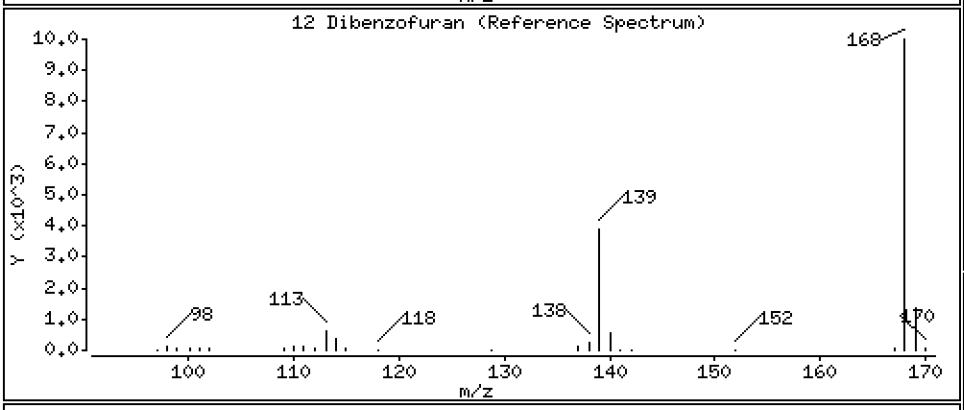
Concentration: 2.860 ug/L

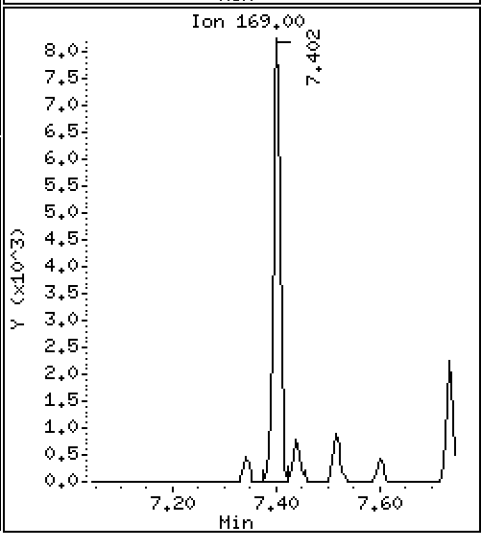


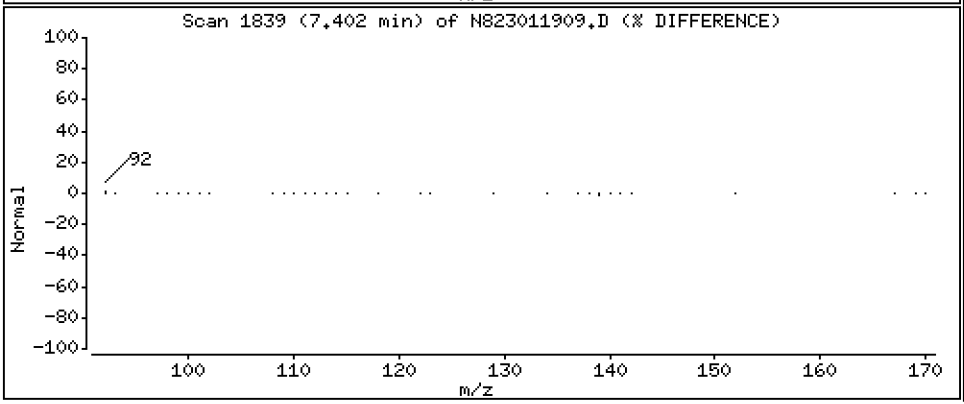












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

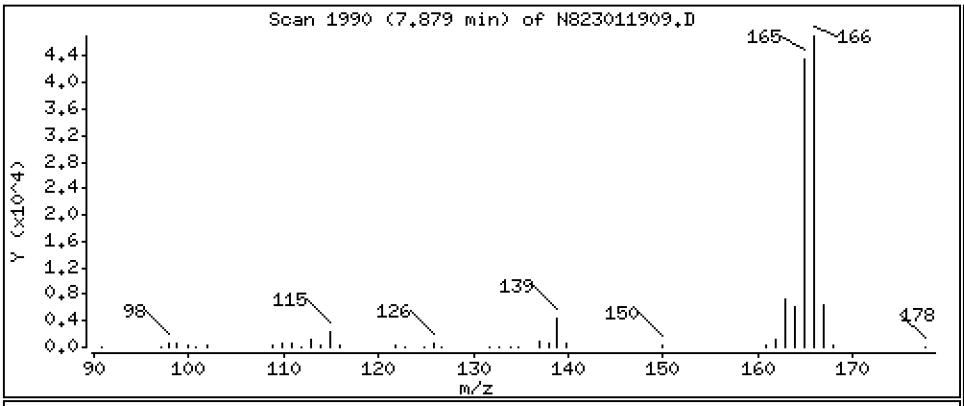
Operator: JZ

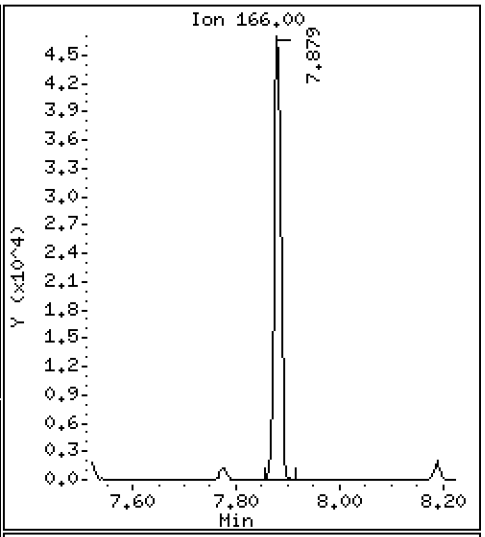
Column phase: Rxi-17sil

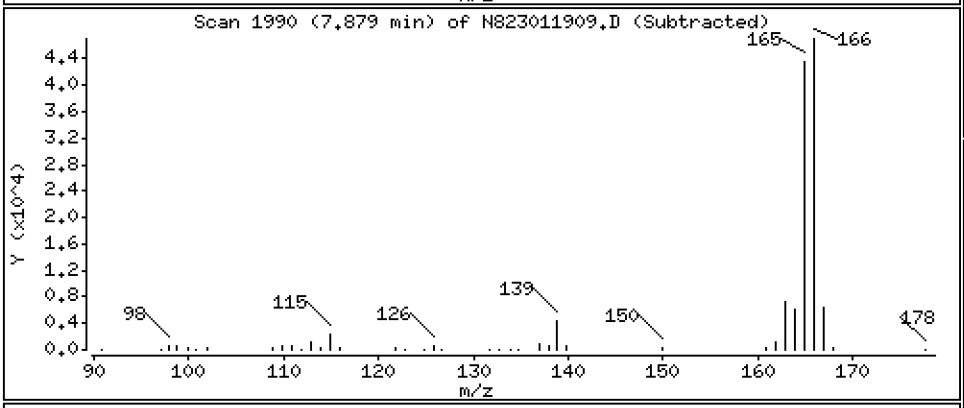
Column diameter: 0.25

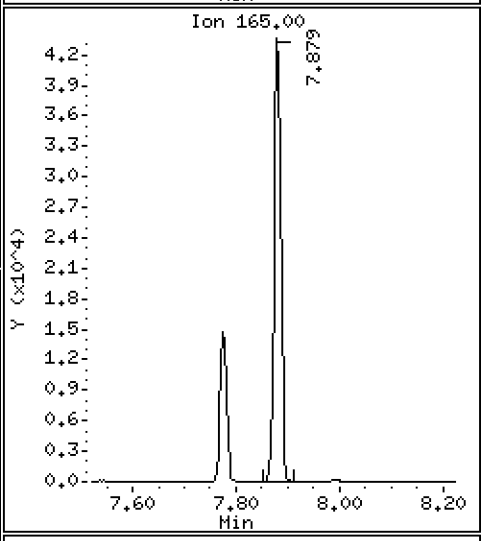
14 Fluorene

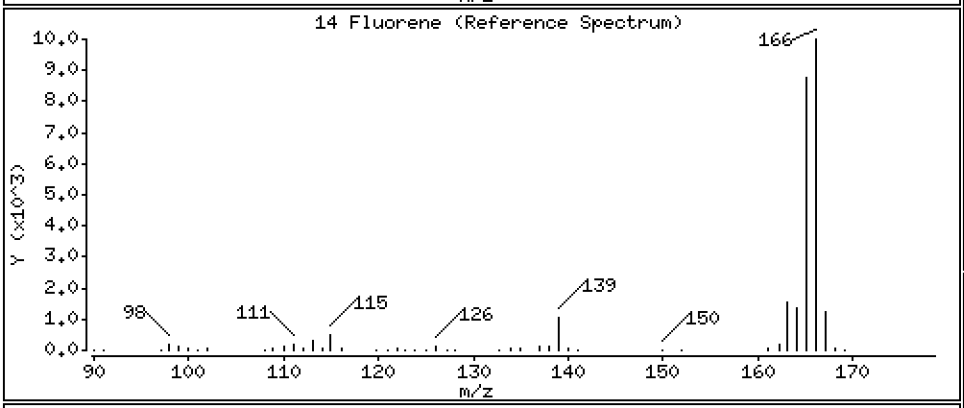
Concentration: 2.631 ug/L

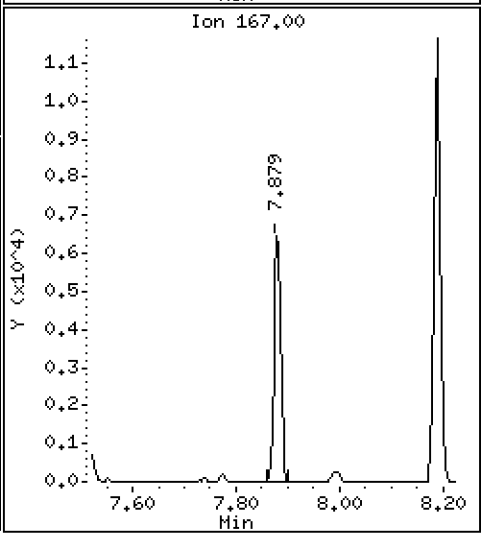


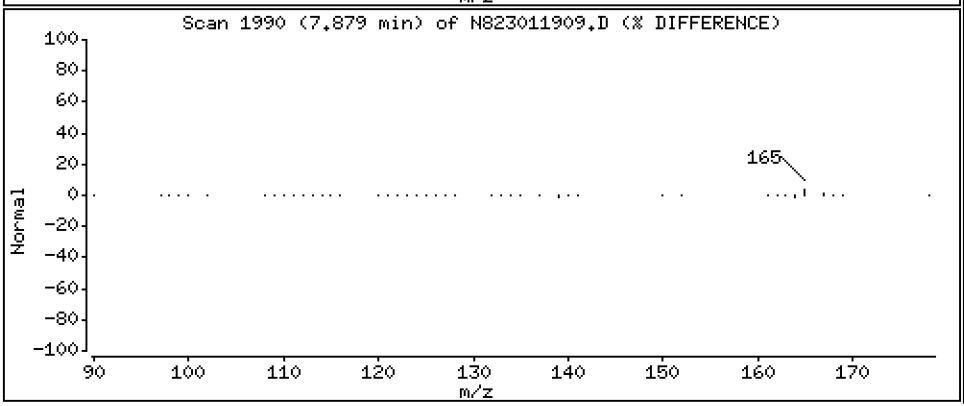












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

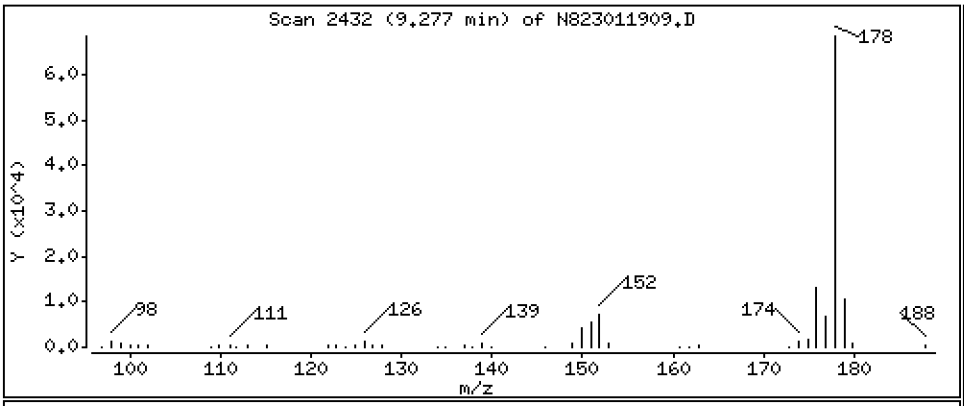
Operator: JZ

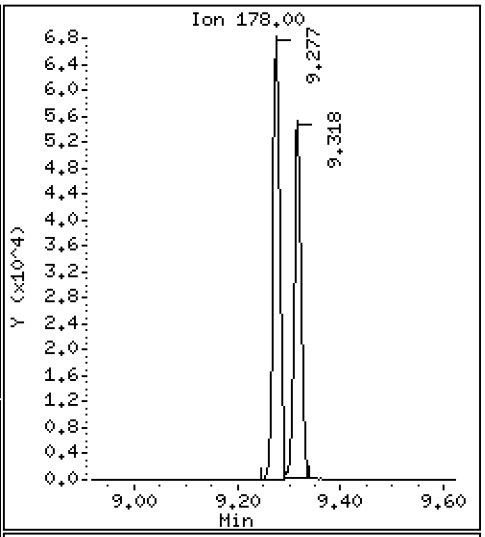
Column phase: Rxi-17sil

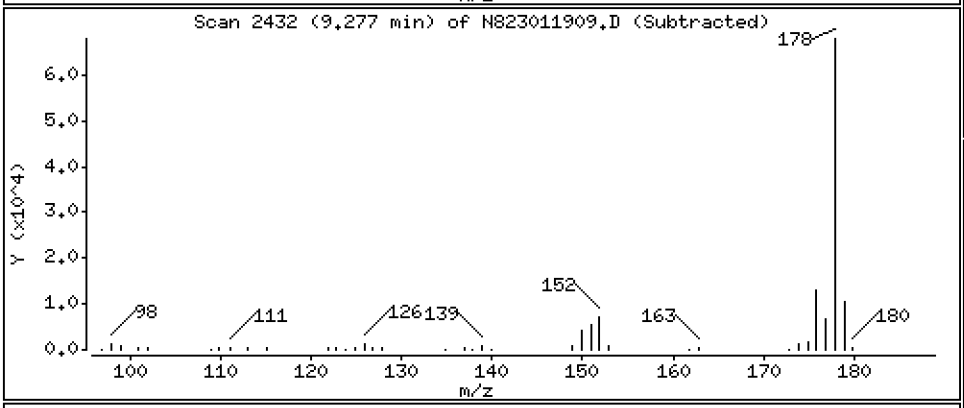
Column diameter: 0.25

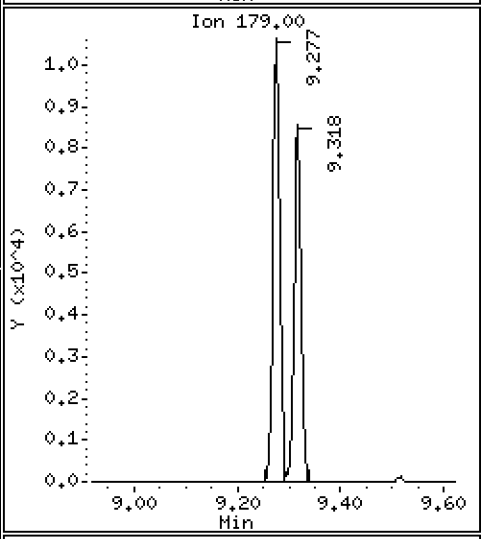
16 Phenanthrene

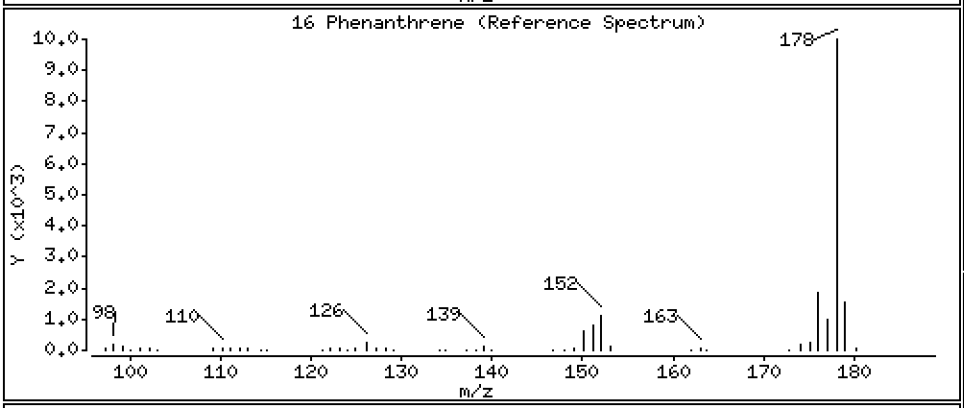
Concentration: 2.448 ug/L

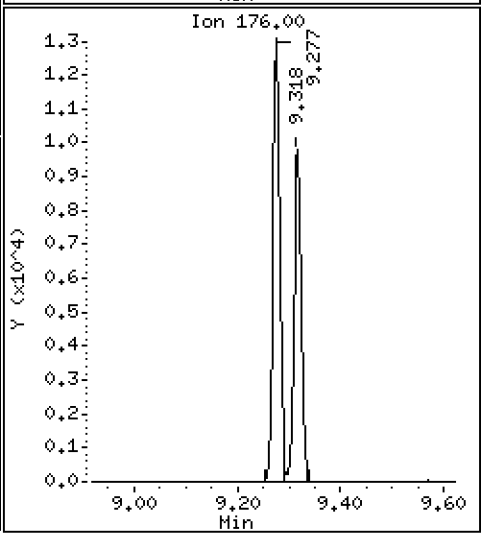


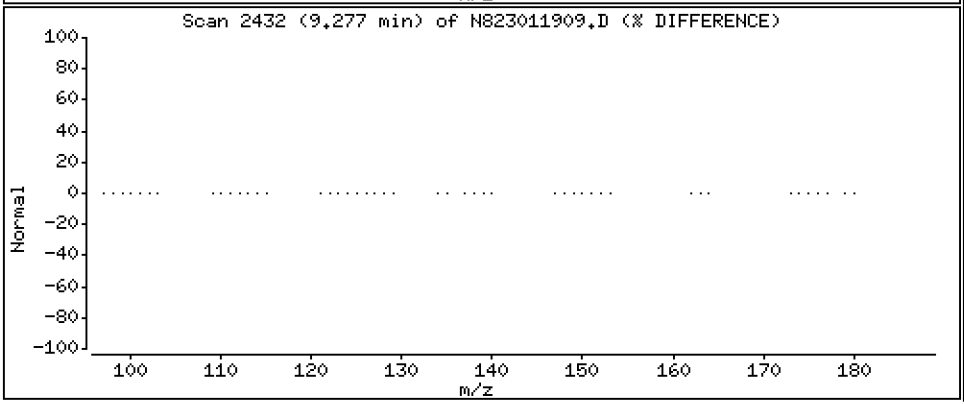












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

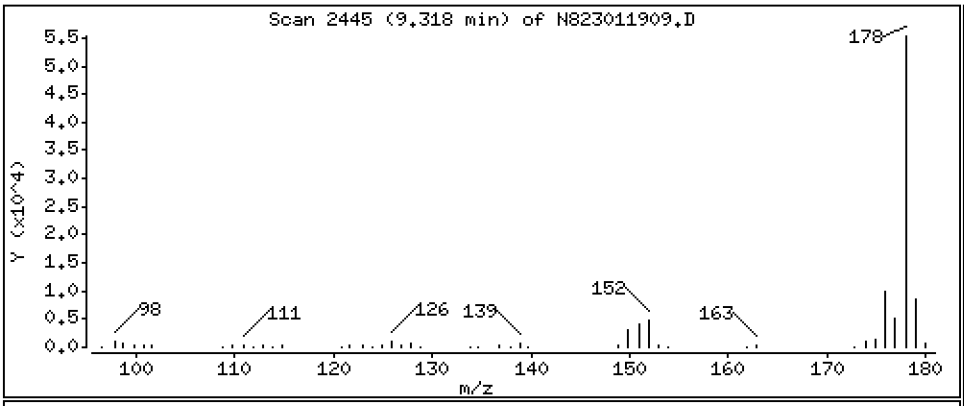
Operator: JZ

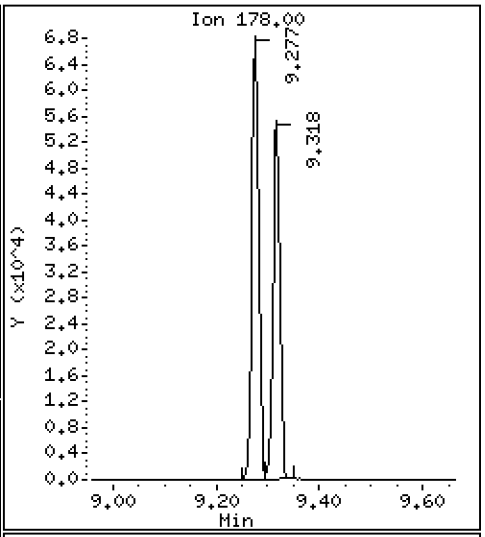
Column phase: Rxi-17sil

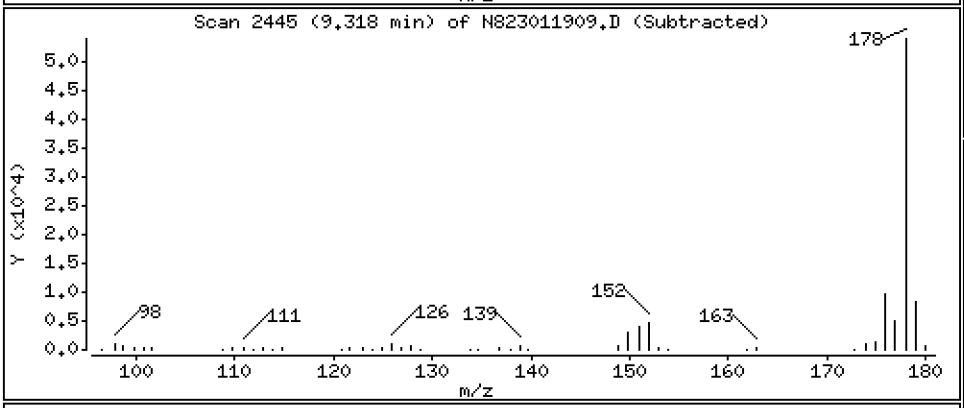
Column diameter: 0.25

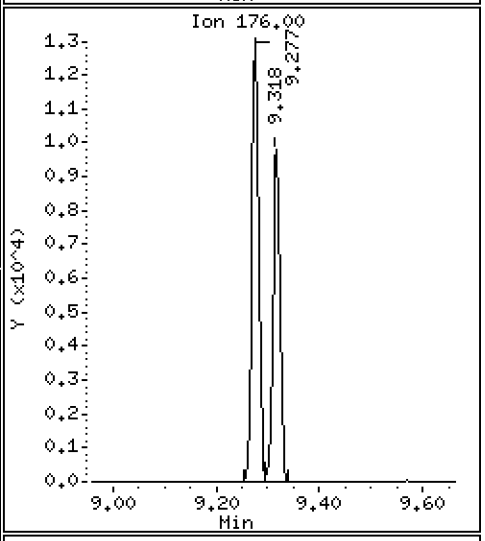
17 Anthracene

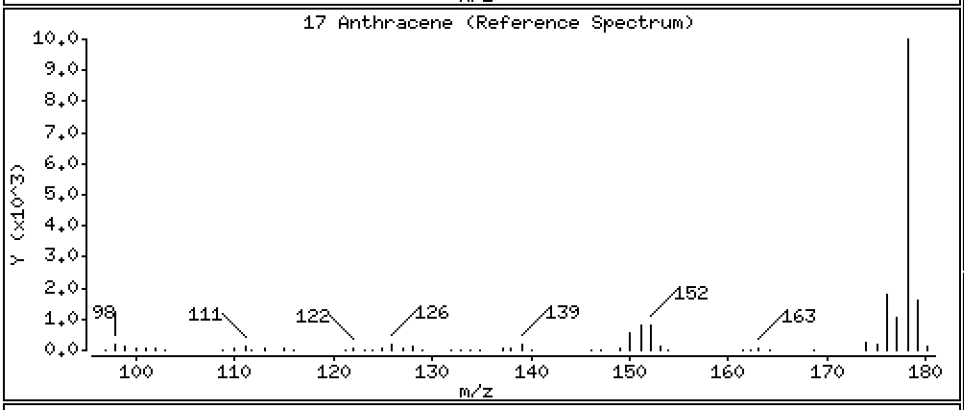
Concentration: 2.270 ug/L

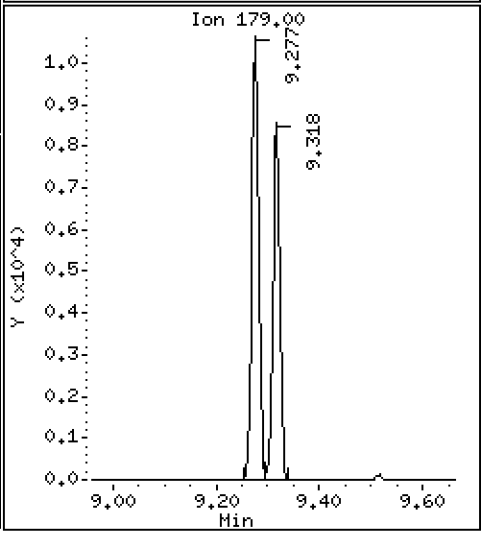


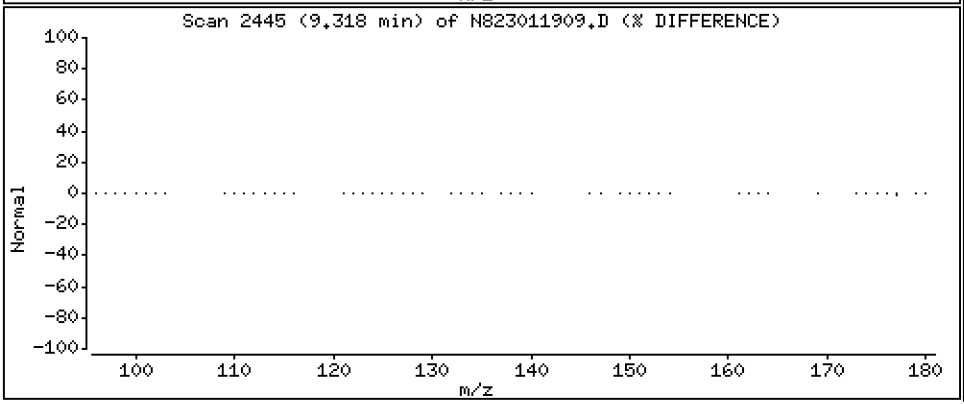












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

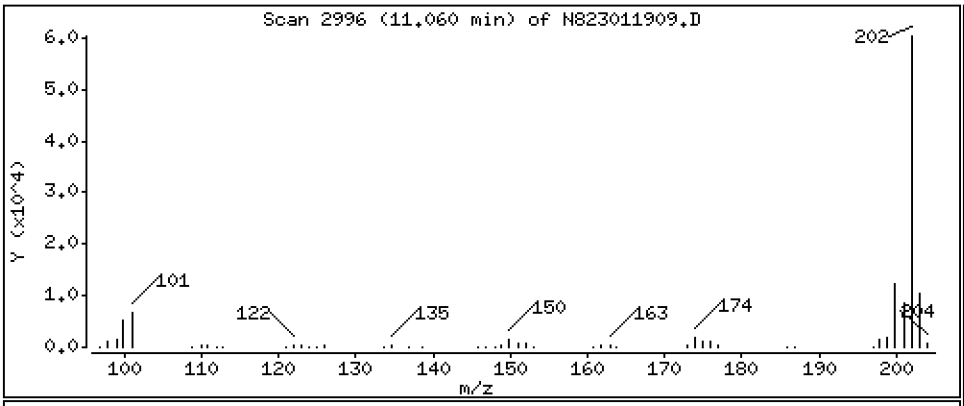
Operator: JZ

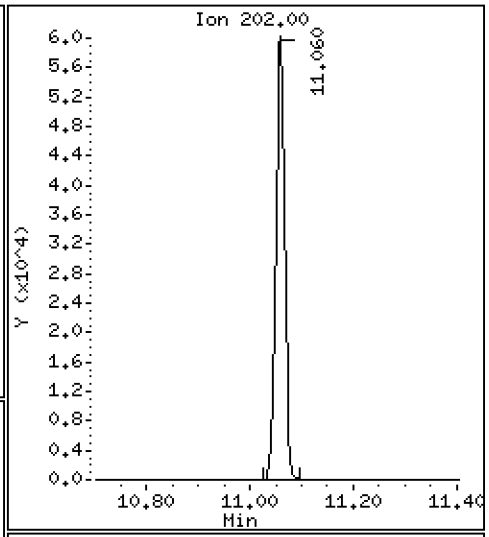
Column phase: Rxi-17sil

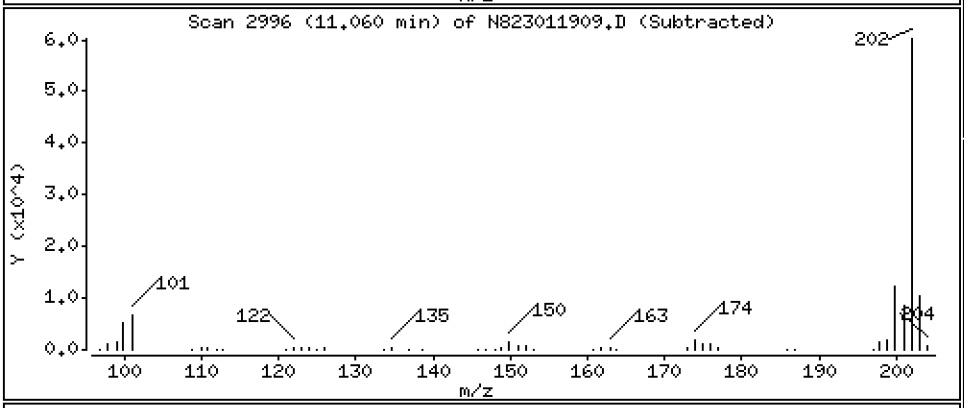
Column diameter: 0.25

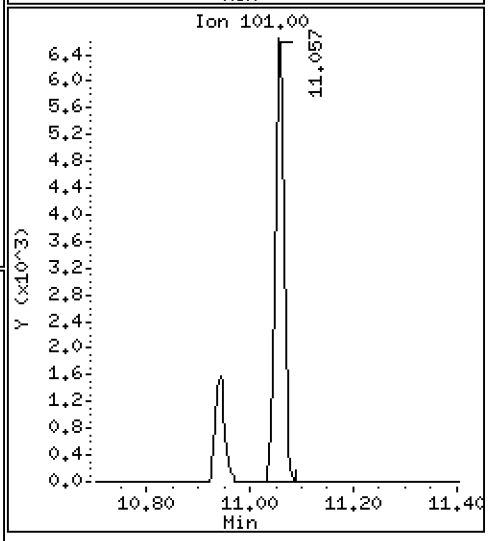
22 Fluoranthene

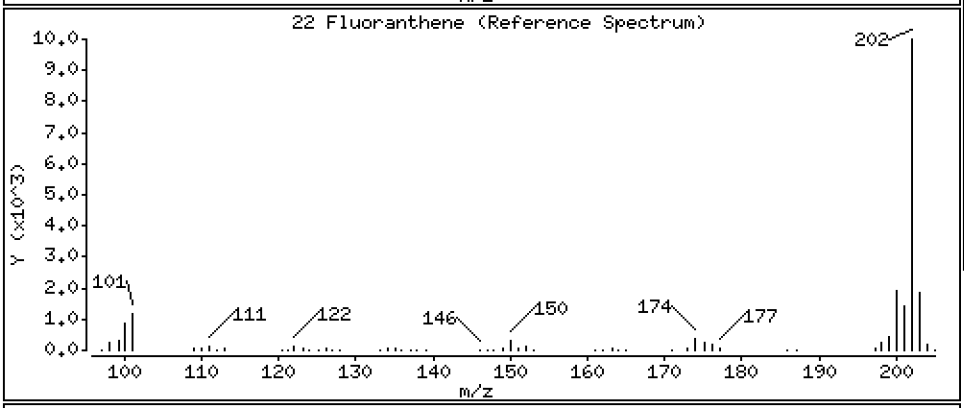
Concentration: 2.653 ug/L

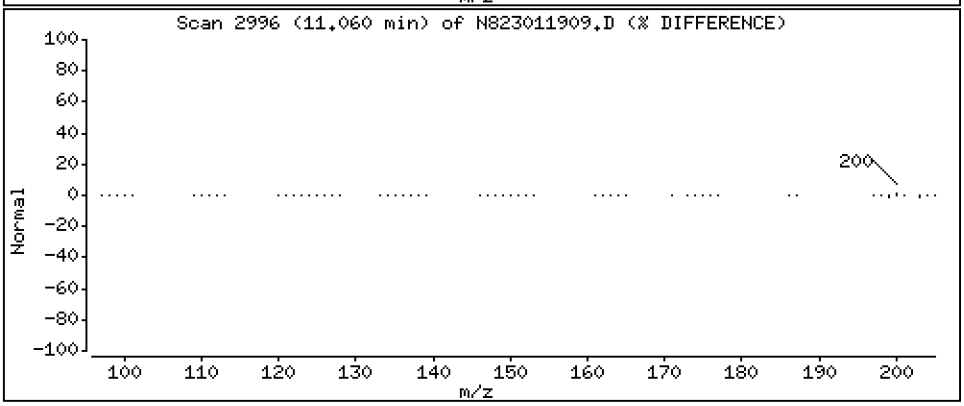












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

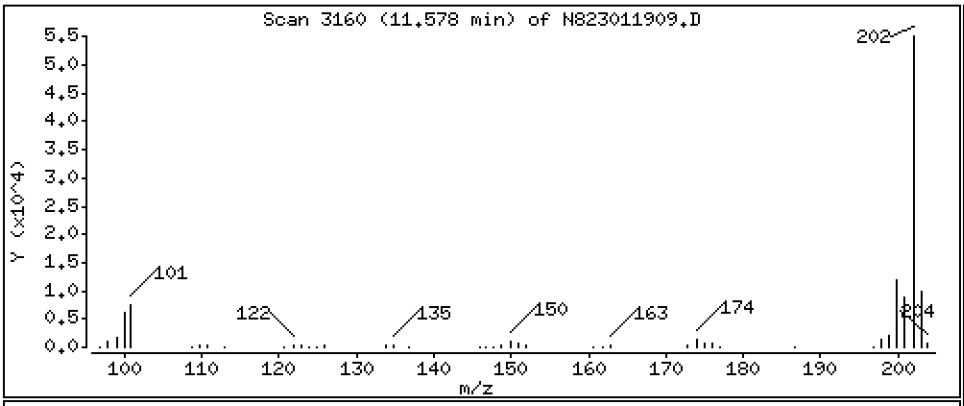
Operator: JZ

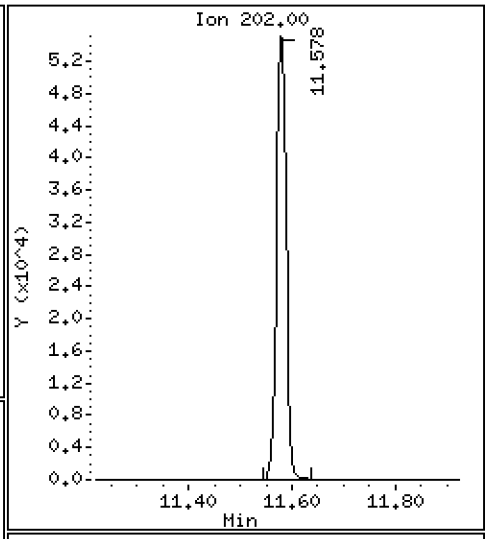
Column phase: Rxi-17sil

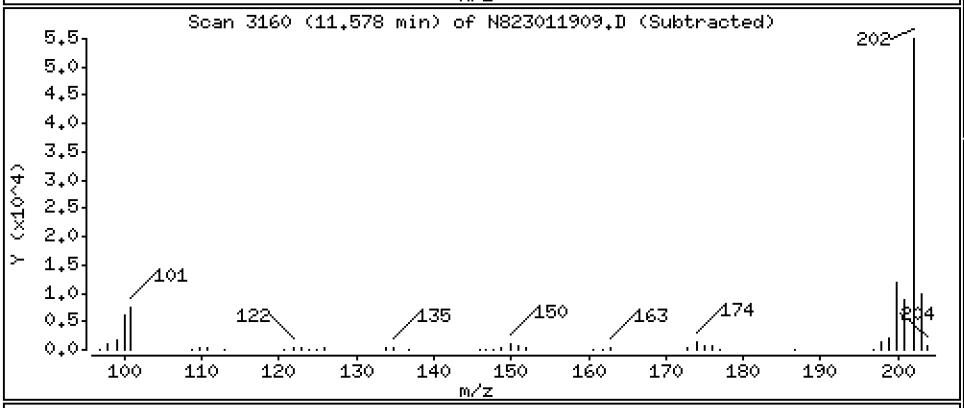
Column diameter: 0.25

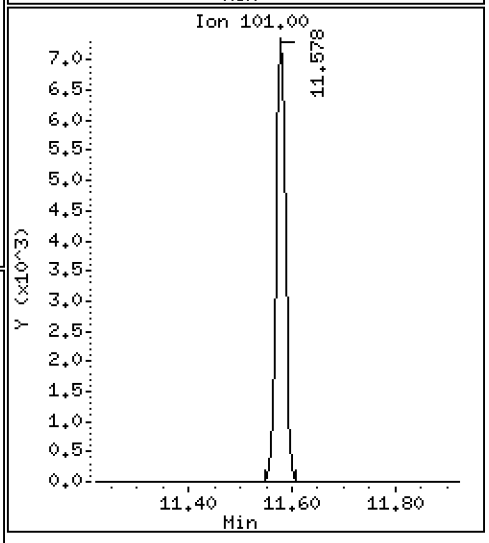
23 Pyrene

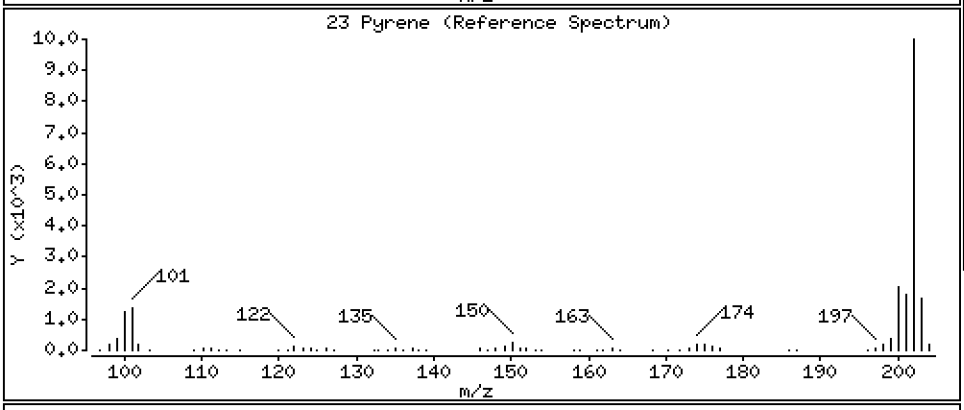
Concentration: 2.462 ug/L

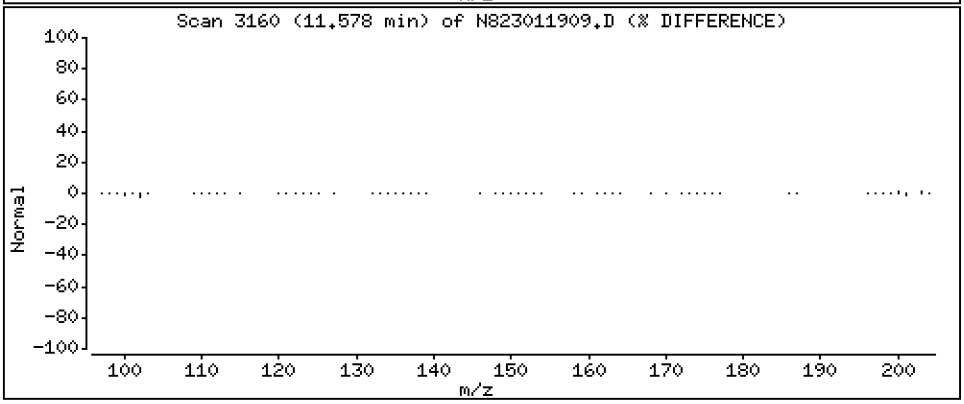












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

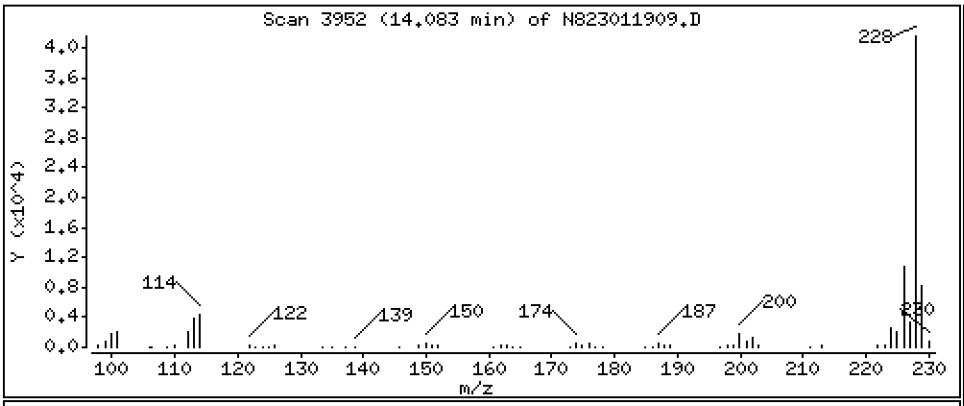
Operator: JZ

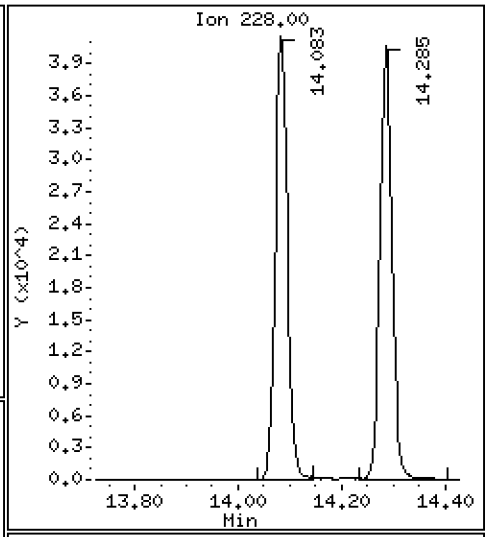
Column phase: Rxi-17sil

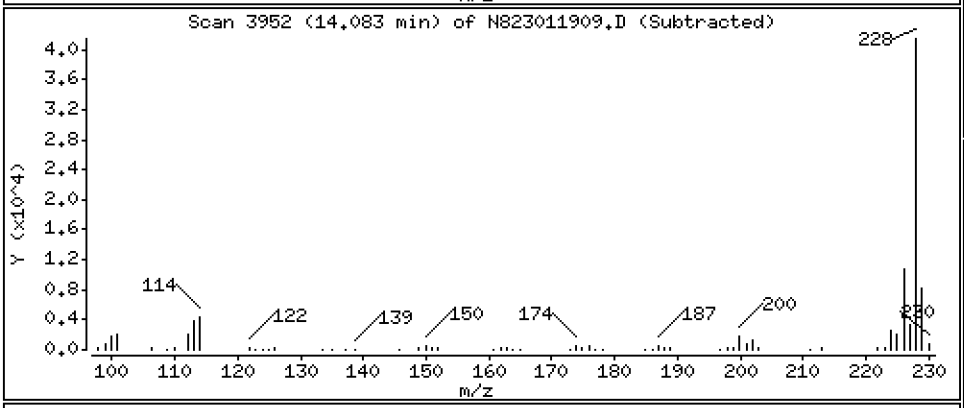
Column diameter: 0.25

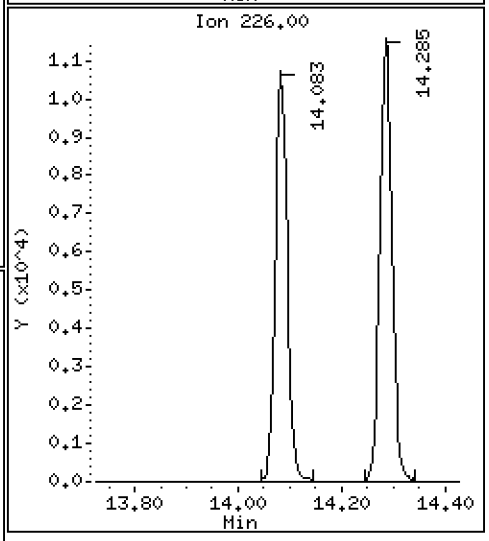
24 Benzo(a)anthracene

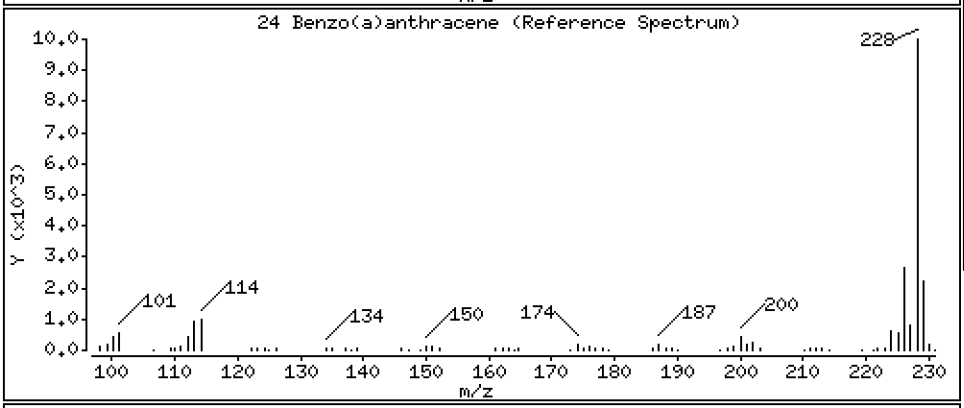
Concentration: 2.587 ug/L

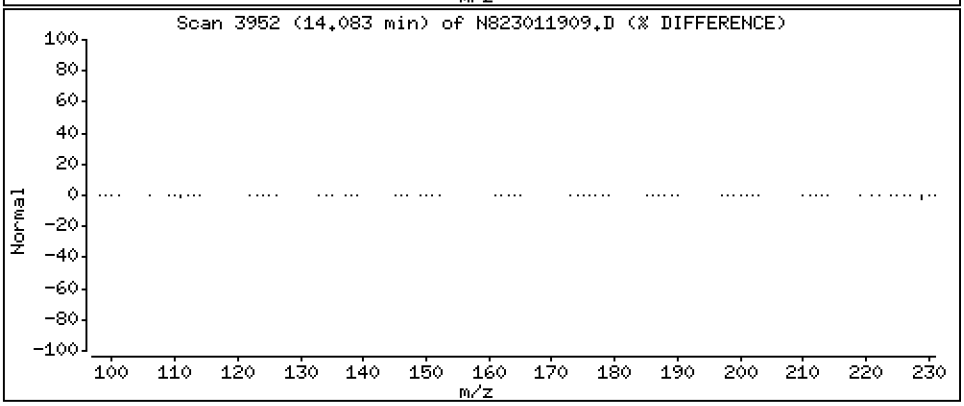












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

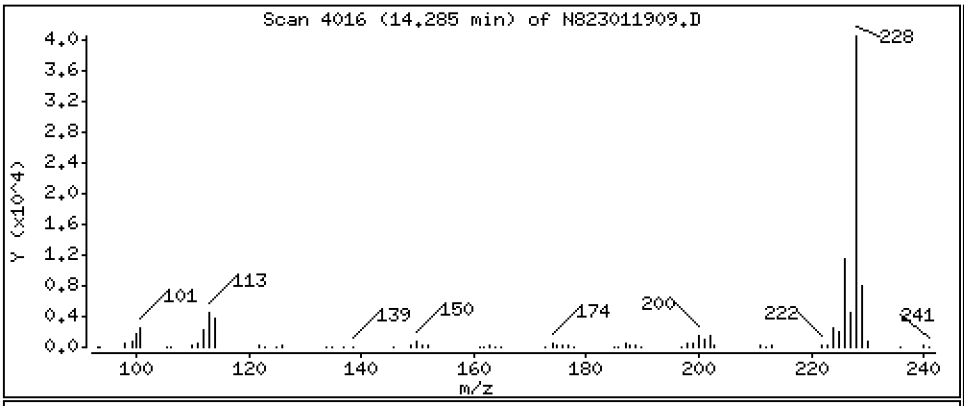
Operator: JZ

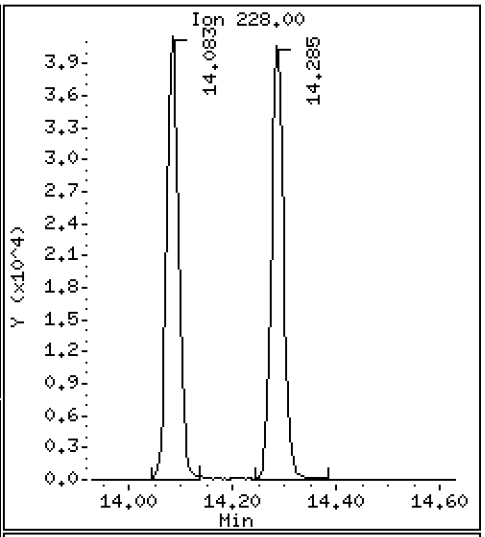
Column phase: Rxi-17sil

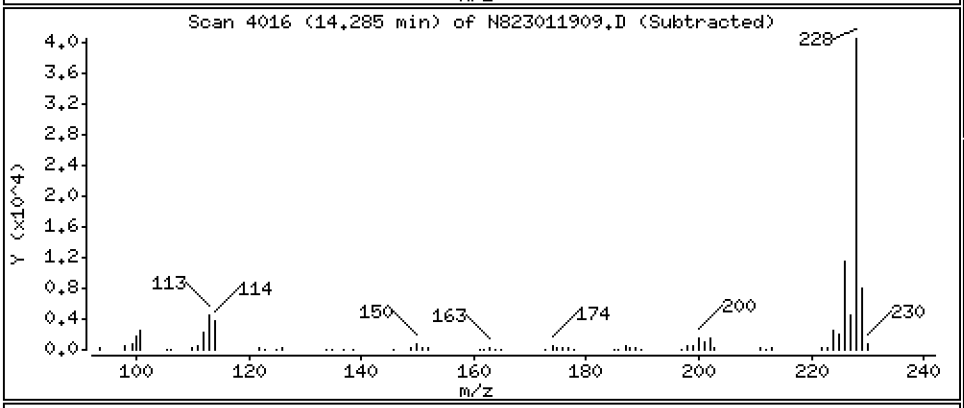
Column diameter: 0.25

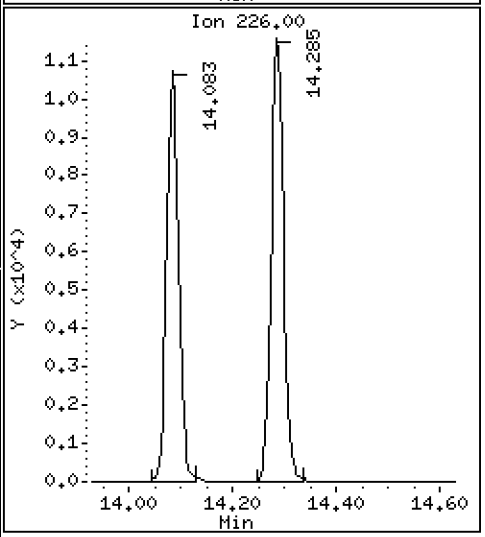
27 Chrysene

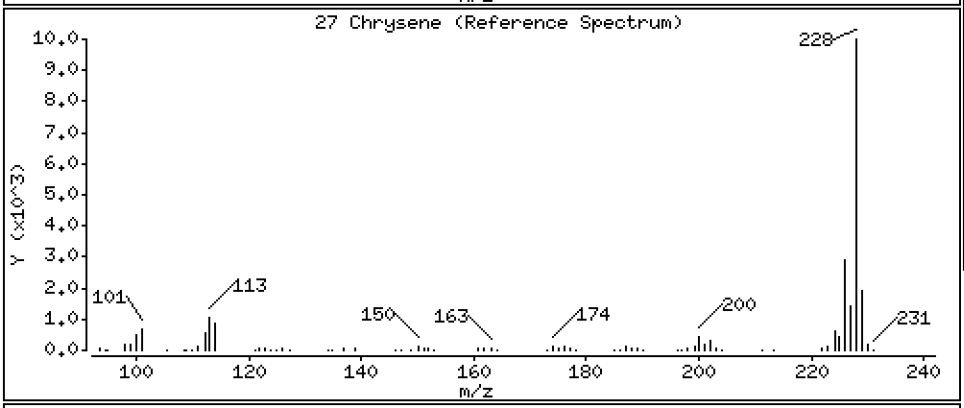
Concentration: 2.400 ug/L

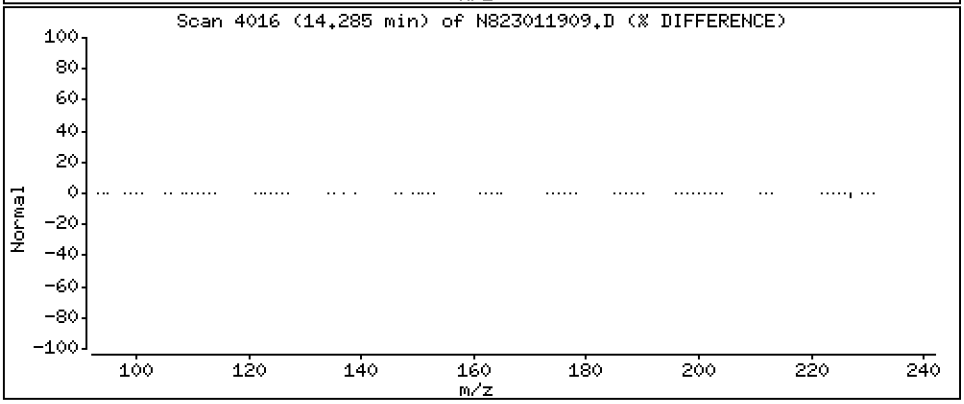












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

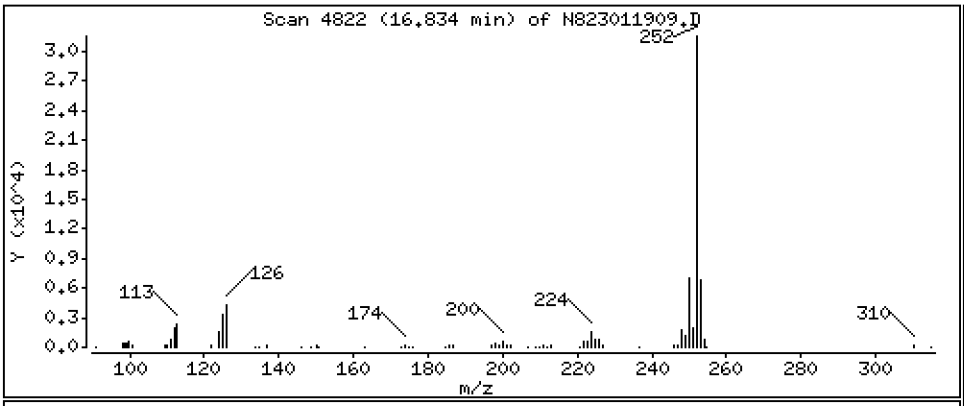
Operator: JZ

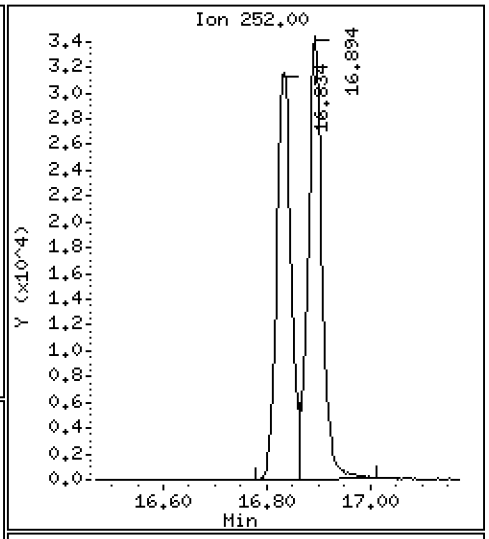
Column phase: Rxi-17sil

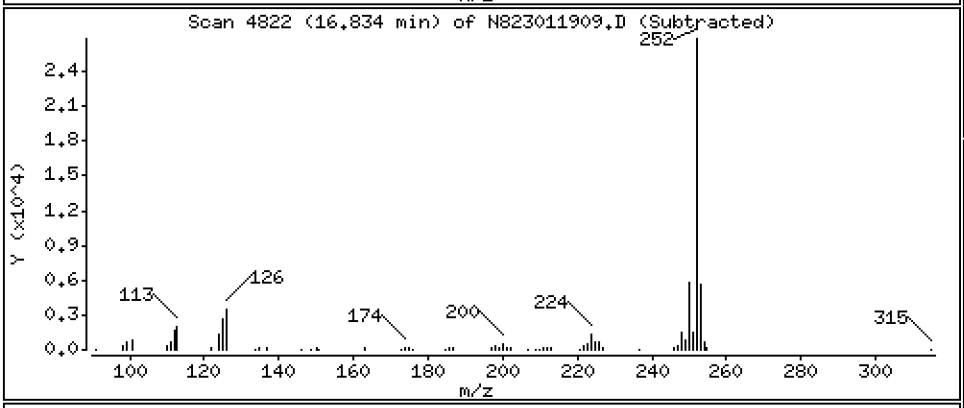
Column diameter: 0.25

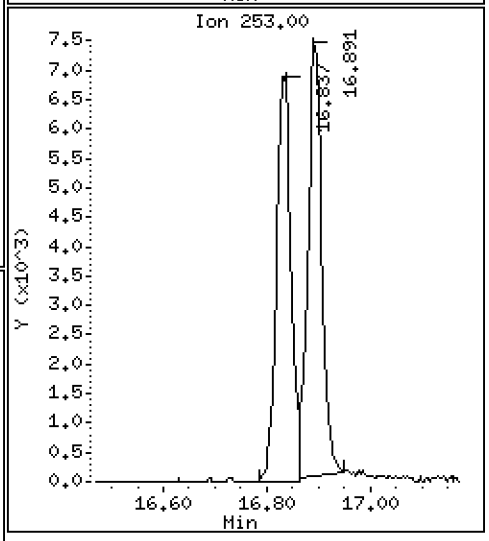
28 Benzo(b)fluoranthene

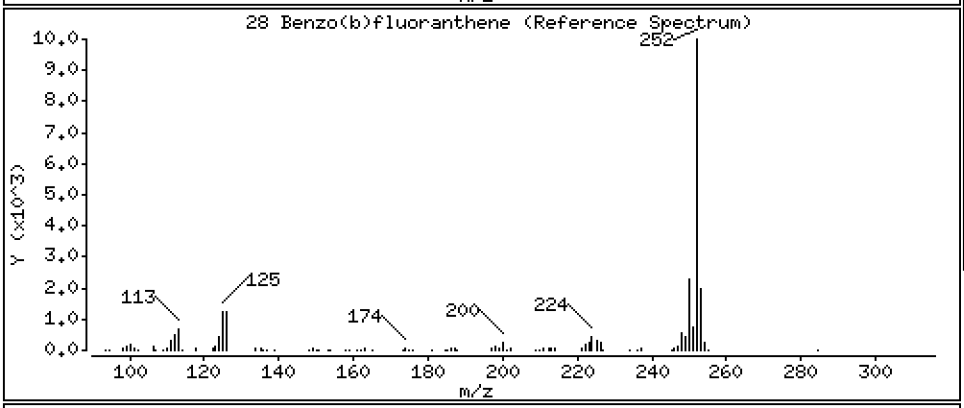
Concentration: 2.507 ug/L

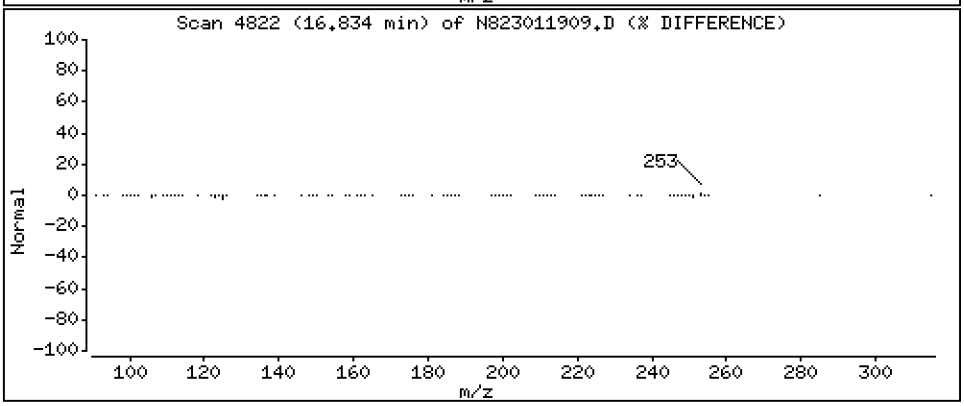












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

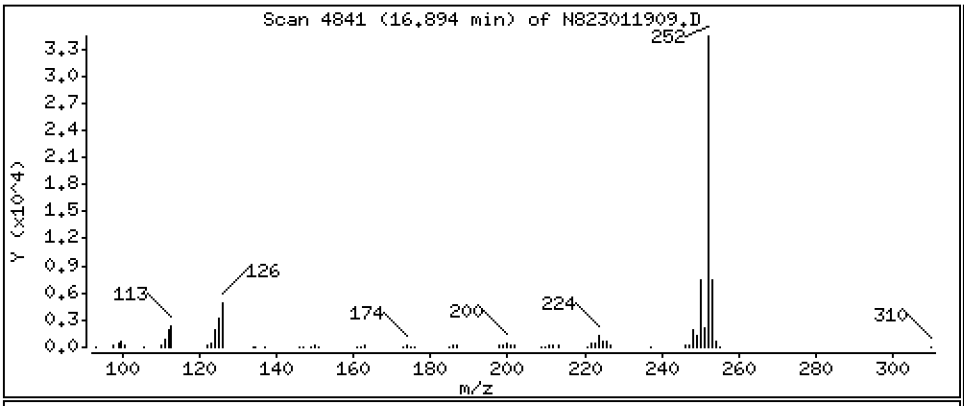
Operator: JZ

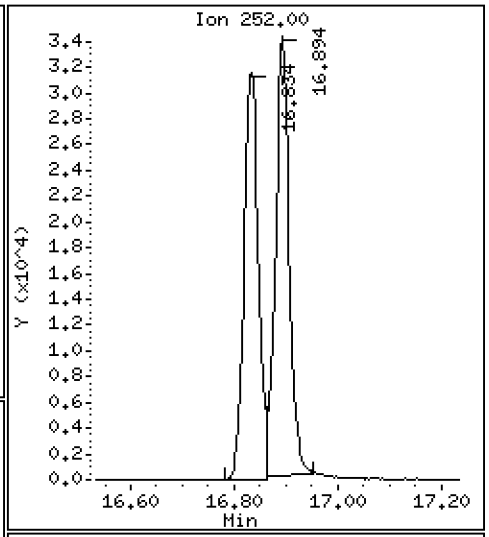
Column phase: Rxi-17sil

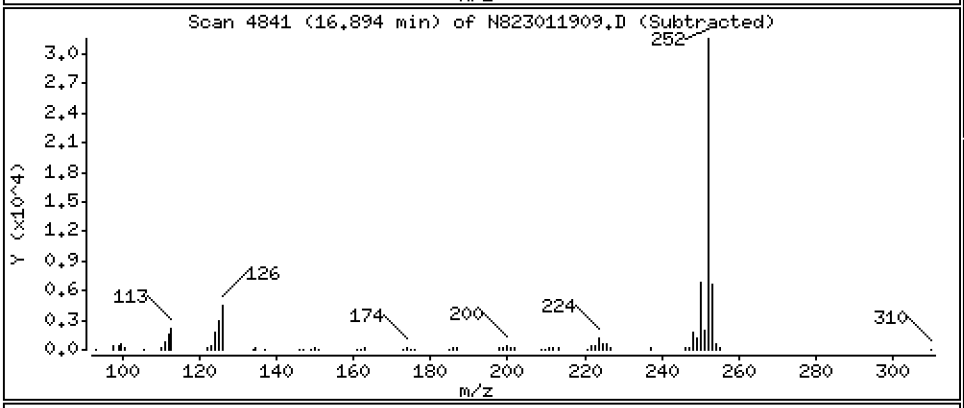
Column diameter: 0.25

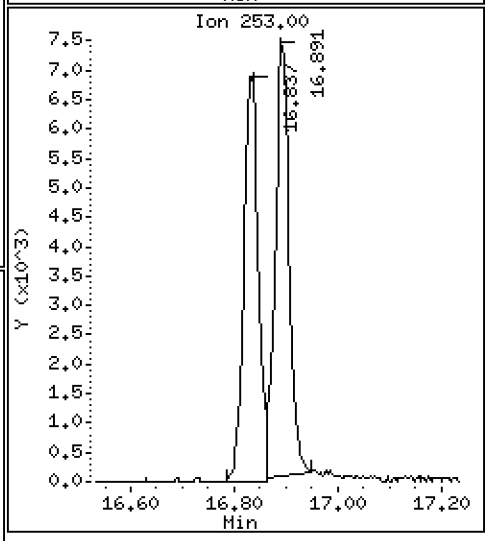
29 Benzo(k)fluoranthene

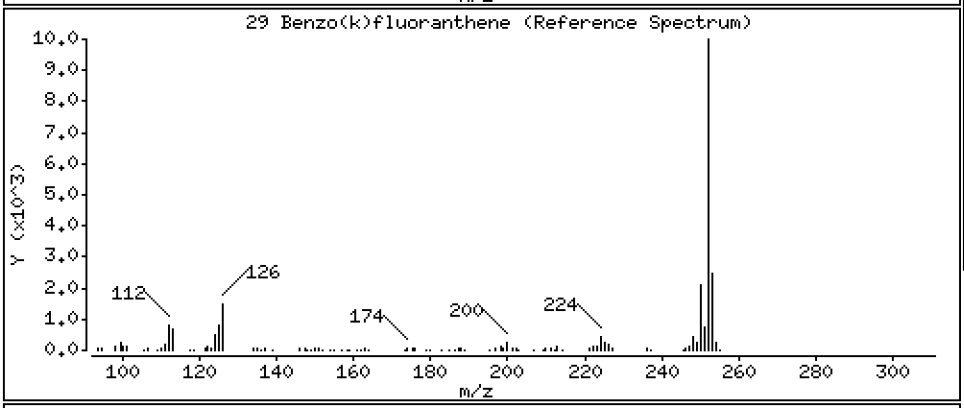
Concentration: 2.656 ug/L

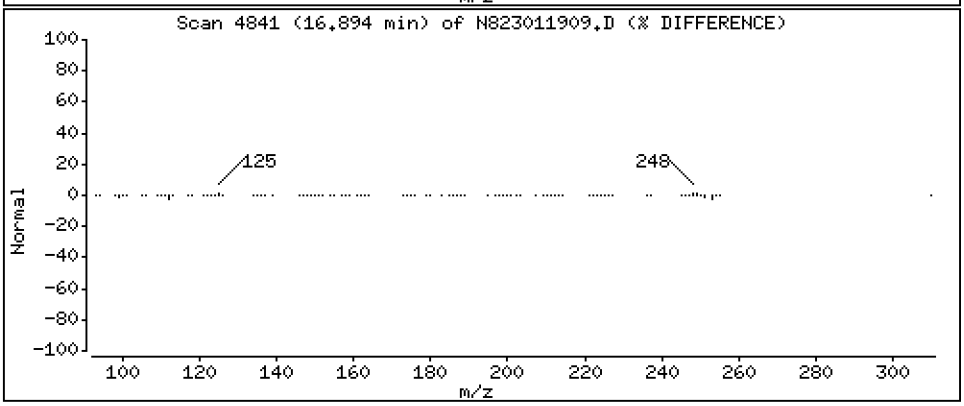












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

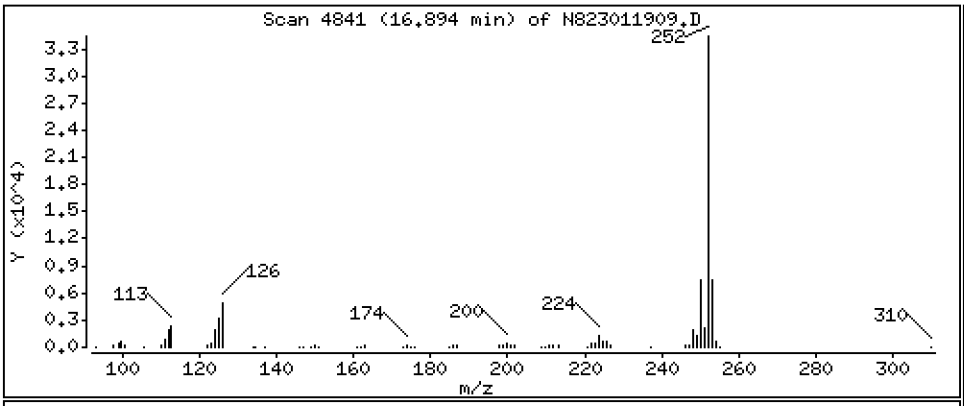
Operator: JZ

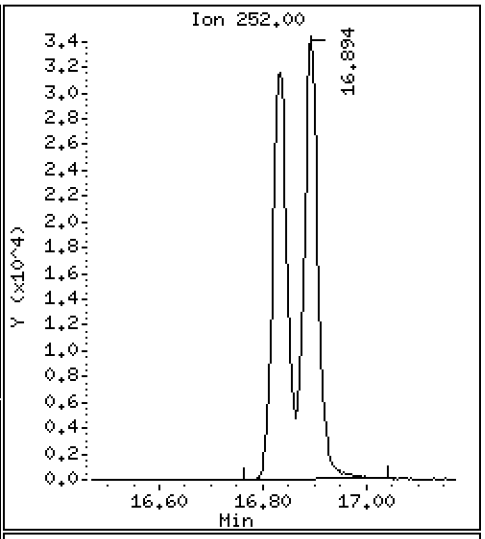
Column phase: Rxi-17sil

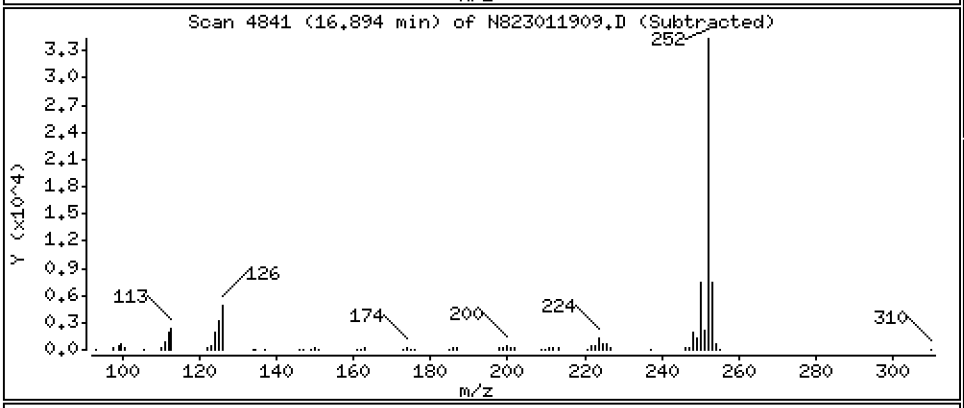
Column diameter: 0.25

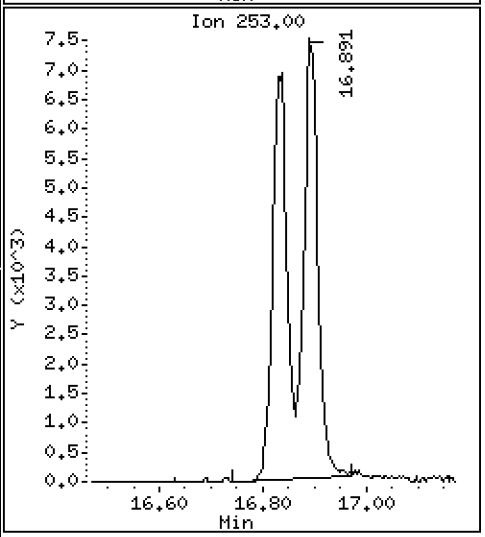
31 Total Benzofluoranthenes

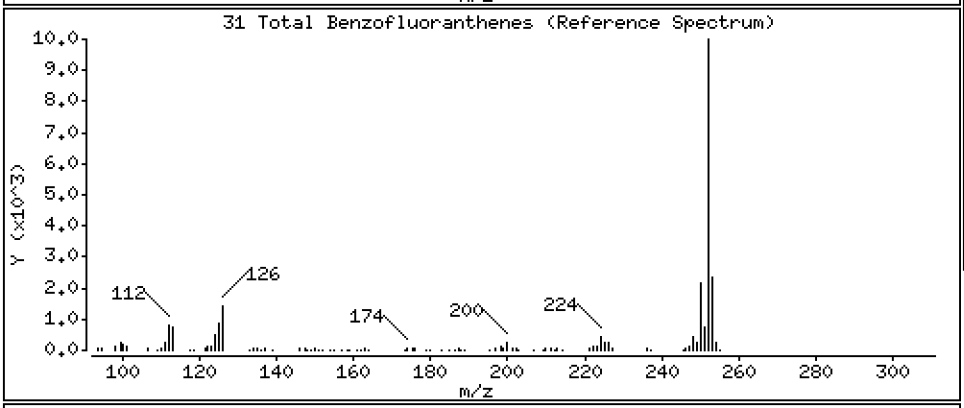
Concentration: 5.480 ug/L

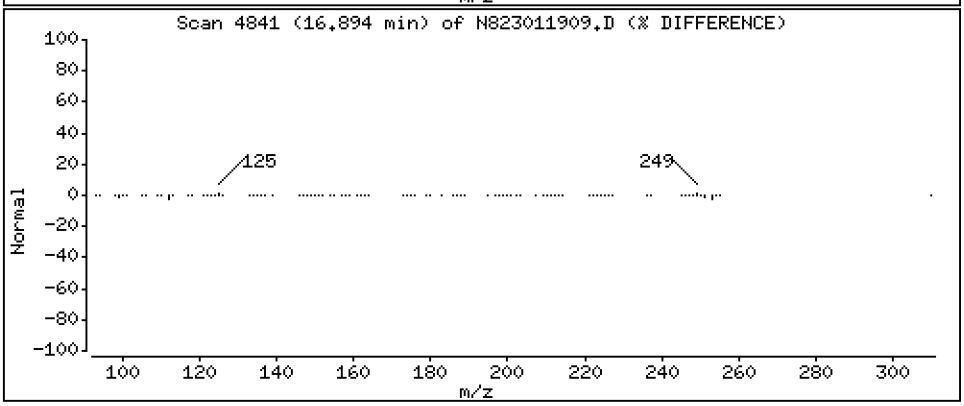












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

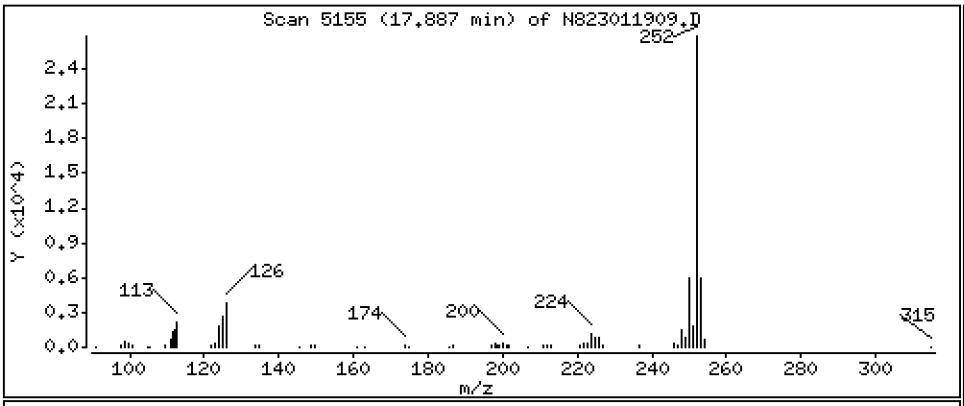
Operator: JZ

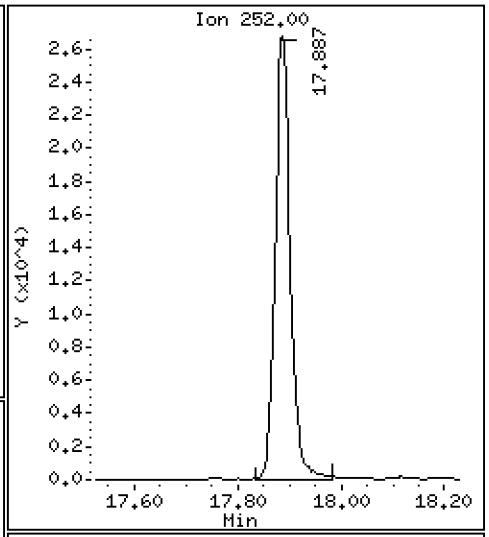
Column phase: Rxi-17sil

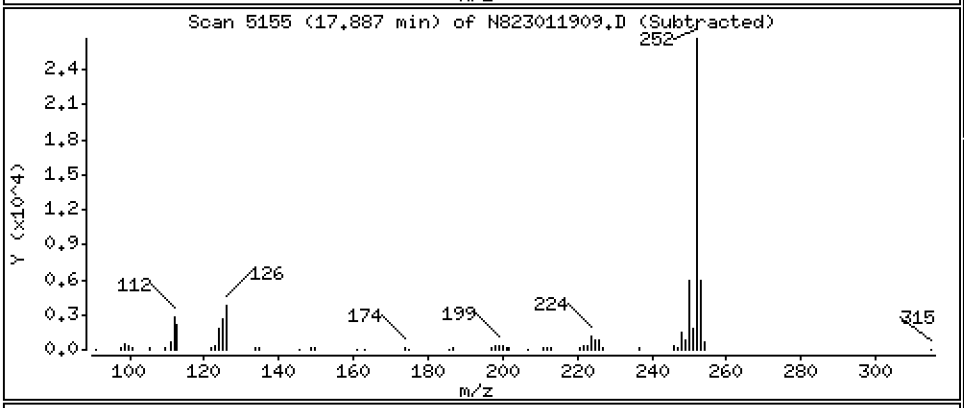
Column diameter: 0.25

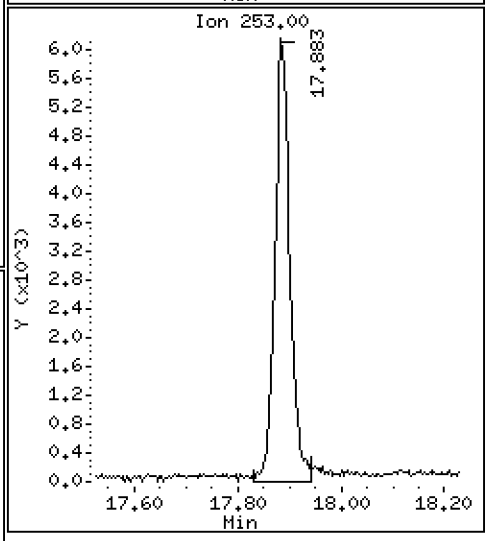
32 Benzo(a)pyrene

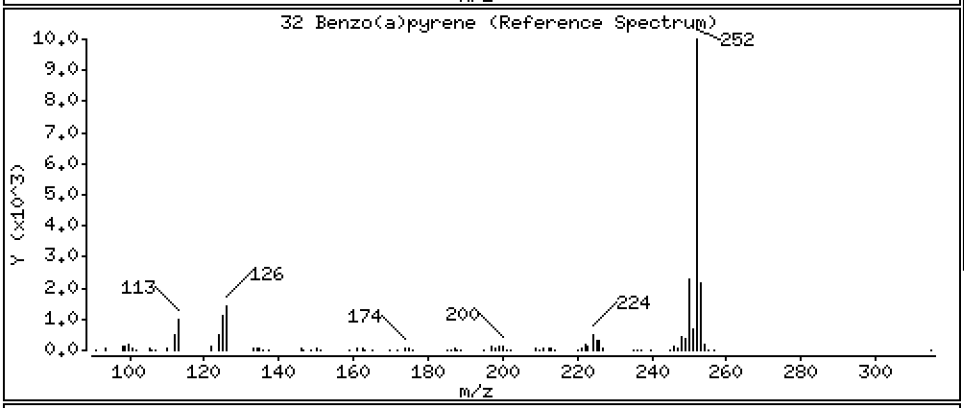
Concentration: 2.572 ug/L

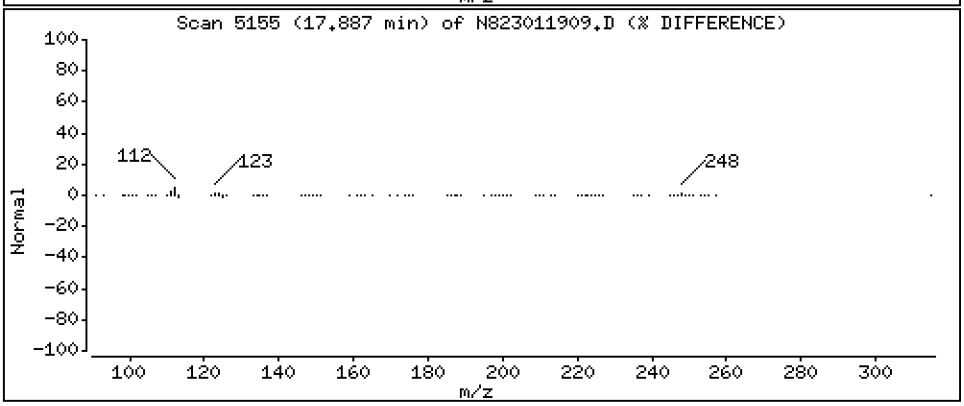












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

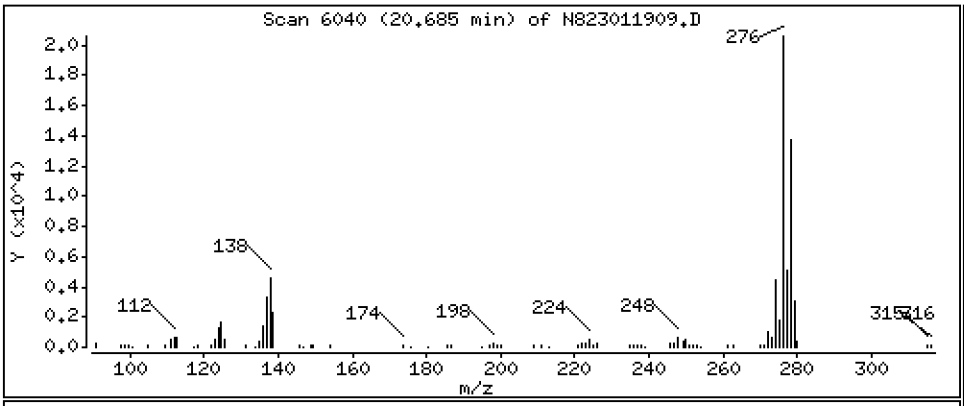
Operator: JZ

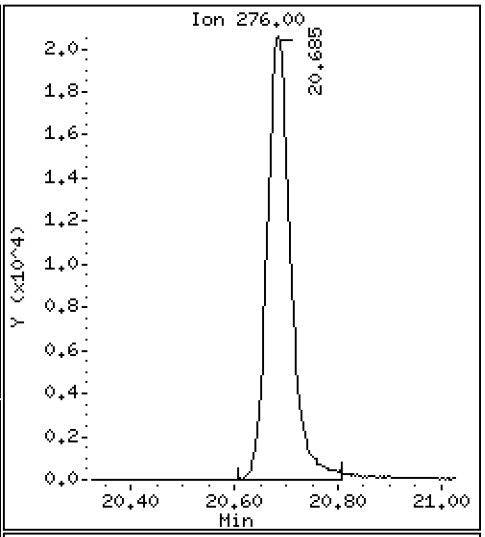
Column phase: Rxi-17sil

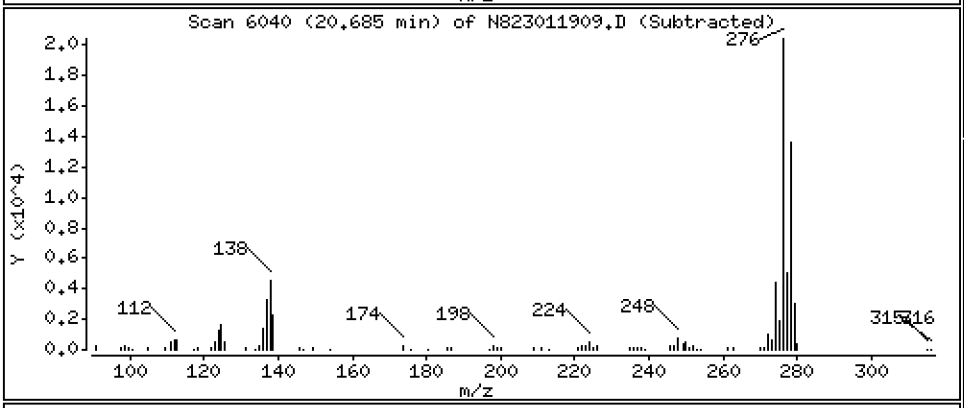
Column diameter: 0.25

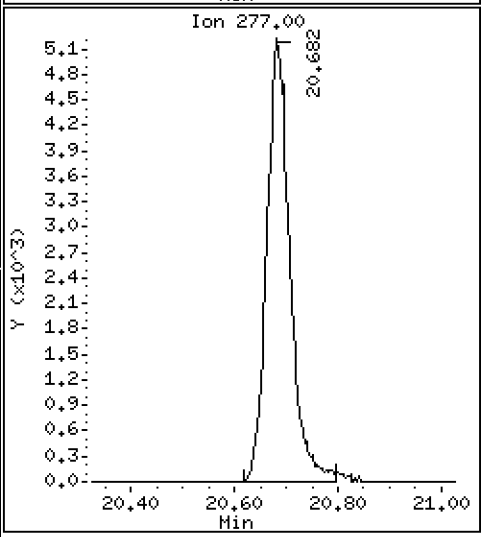
37 Indeno(1,2,3-cd)pyrene

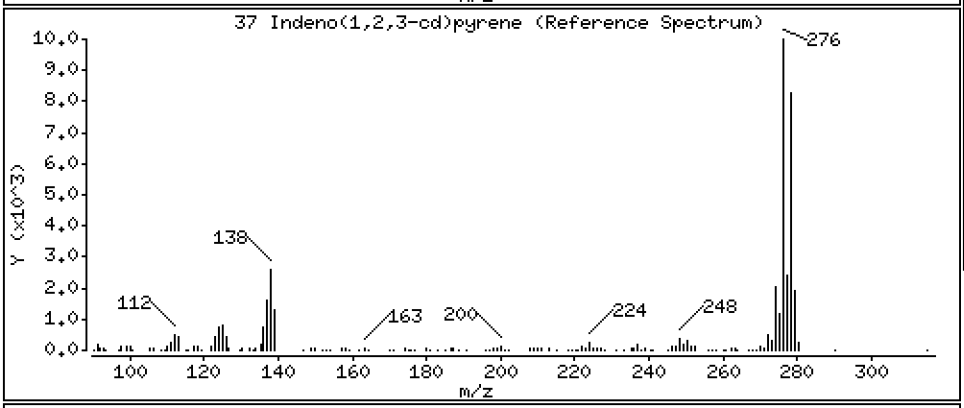
Concentration: 2.689 ug/L

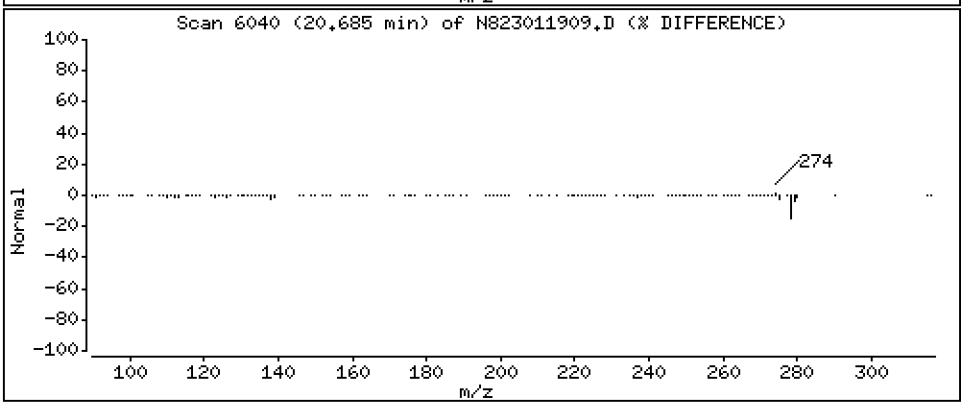












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

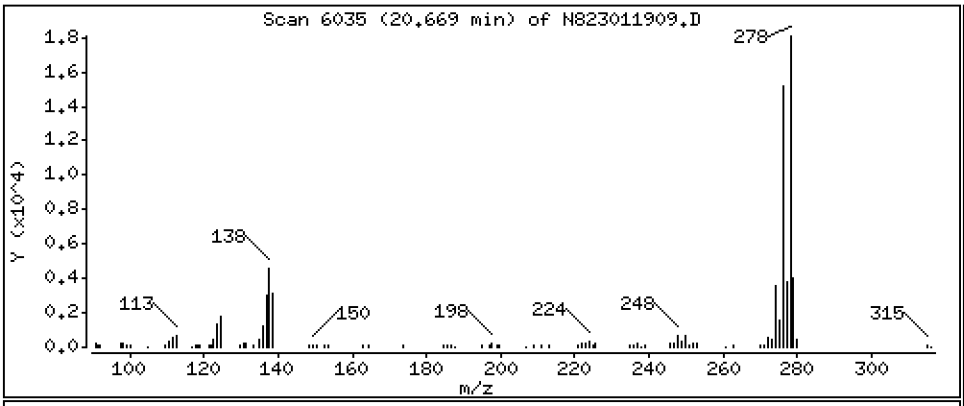
Operator: JZ

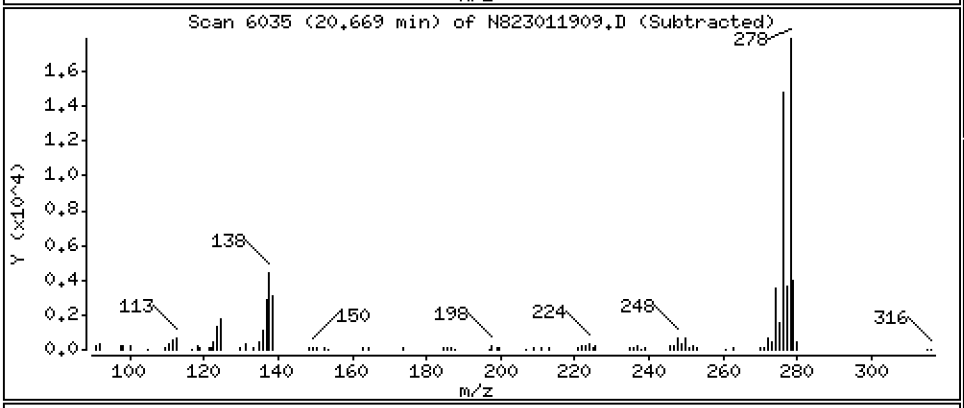
Column phase: Rxi-17sil

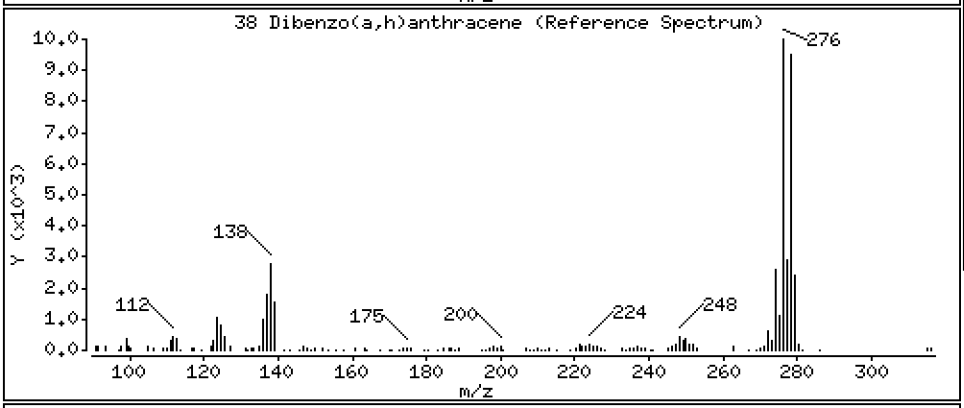
Column diameter: 0.25

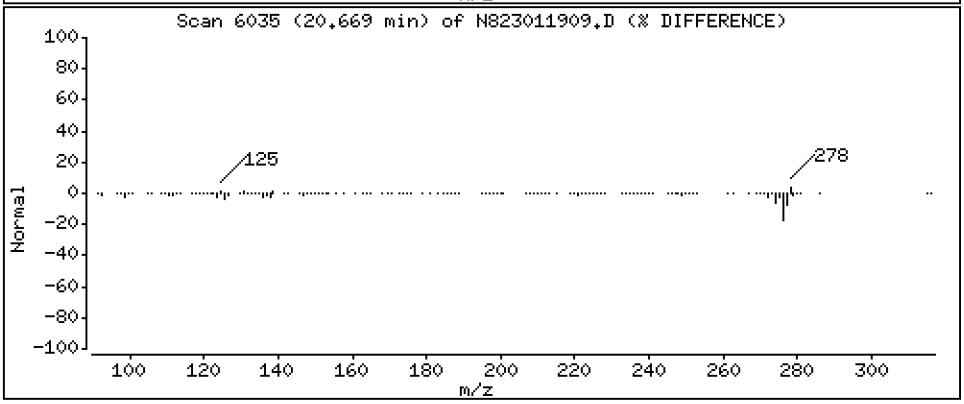
38 Dibenzo(a,h)anthracene

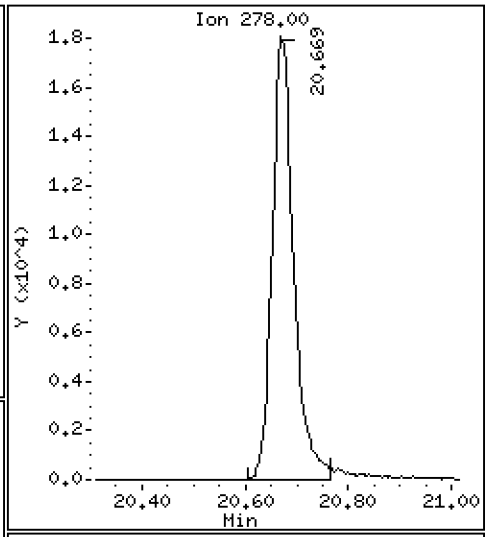
Concentration: 2.493 ug/L

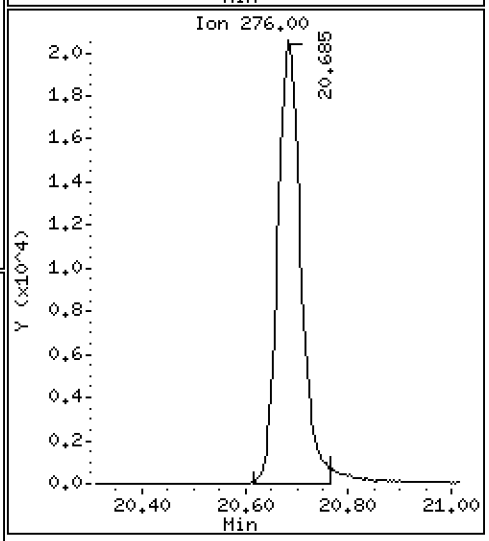












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

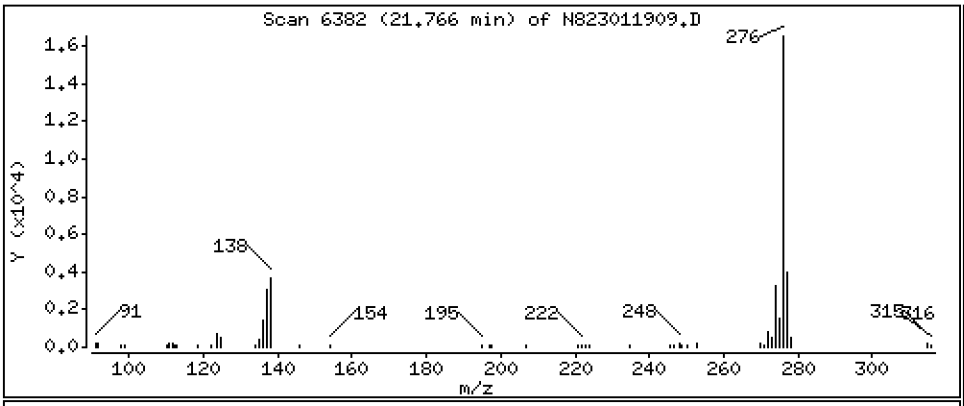
Operator: JZ

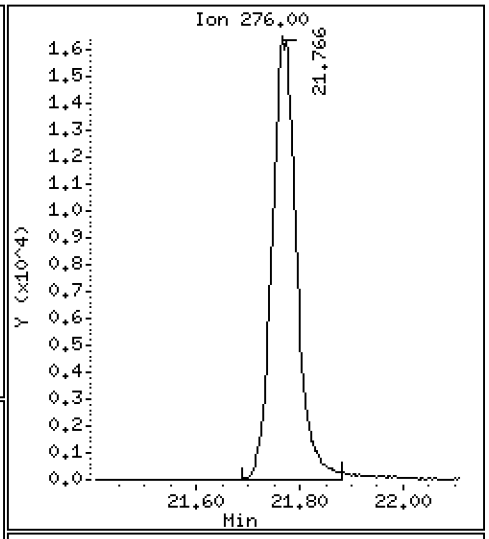
Column phase: Rxi-17sil

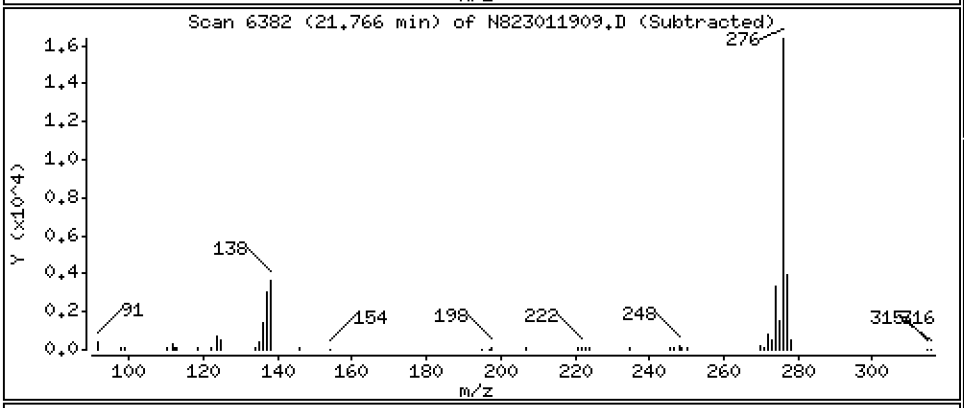
Column diameter: 0.25

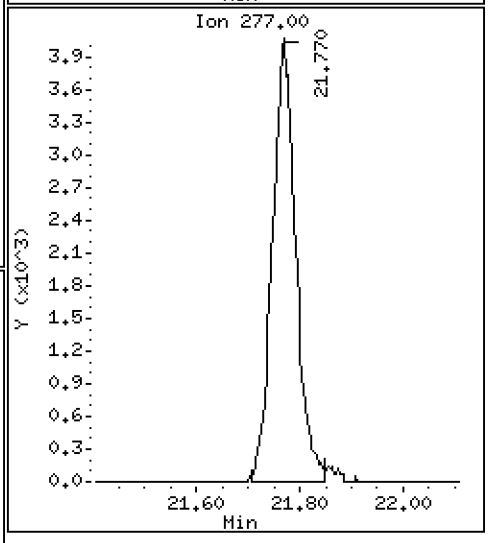
39 Benzo(g,h,i)perylene

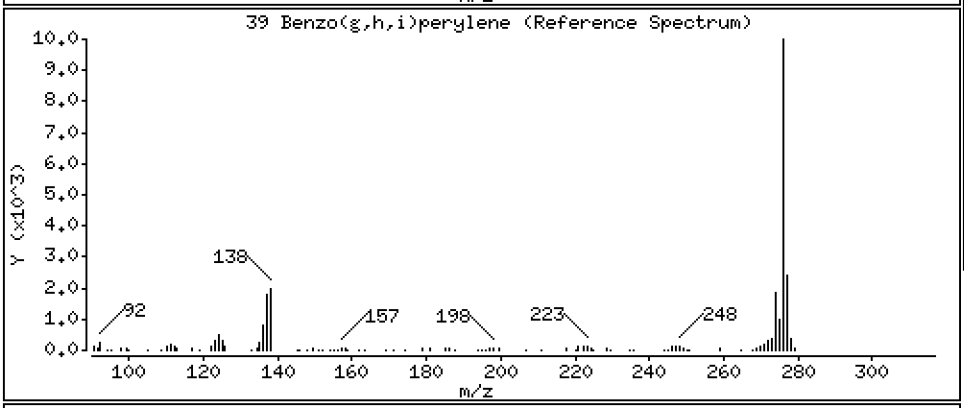
Concentration: 2.483 ug/L

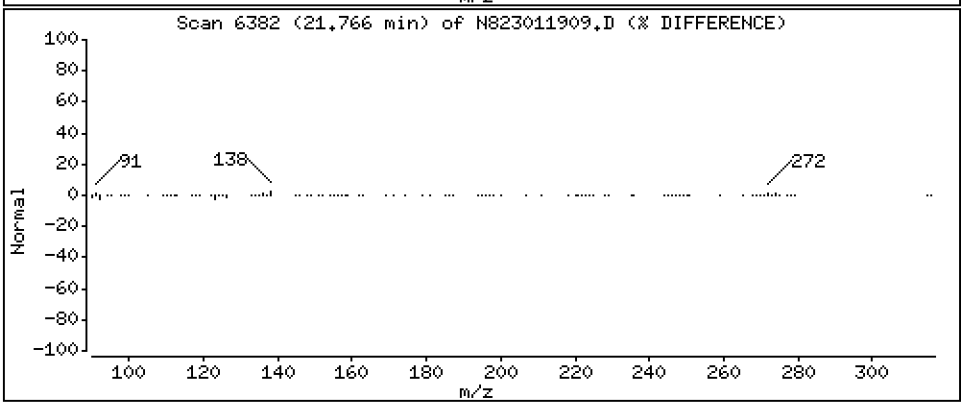












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Lab Smp Id: SLA0213-SCV1
Inj Date : 19-JAN-2023 14:58
Operator : JZ Inst ID: nt8.i
Smp Info : SCV230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 21:57 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnascv.sub
Target Version: 4.14
Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 1	Naphthalene-d8	136	4.913	4.906	(1.000)	46346	2.00000	
2	Naphthalene	128	4.941	4.938	(1.006)	56587	2.62597	2.626
$ 3	2-Methylnaphthalene-d10	152	Compound Not Detected.					
4	2-Methylnaphthalene	141	5.694	5.687	(1.159)	31650	2.67019	2.670
5	1-methylnaphthalene	141	5.890	5.883	(1.199)	31873	2.64949	2.649
9	Acenaphthylene	152	7.091	7.085	(0.985)	59018	2.82060	2.821
* 10	Acenaphthene-d10	164	7.202	7.196	(1.000)	27709	2.00000	
11	Acenaphthene	153	7.249	7.246	(1.007)	36454	2.60022	2.600
12	Dibenzofuran	168	7.401	7.395	(1.028)	60898	2.85987	2.860
14	Fluorene	166	7.878	7.872	(1.094)	43507	2.63066	2.631
* 15	Phenanthrene-d10	188	9.238	9.235	(1.000)	51685	2.00000	
16	Phenanthrene	178	9.276	9.270	(1.004)	61815	2.44841	2.448
17	Anthracene	178	9.317	9.311	(1.009)	52064	2.27006	2.270
22	Fluoranthene	202	11.059	11.053	(1.197)	72902	2.65276	2.653
$ 21	Fluoranthene-d10	212	Compound Not Detected.					
23	Pyrene	202	11.578	11.572	(0.815)	71115	2.46242	2.462
24	Benzo(a)anthracene	228	14.082	14.076	(0.991)	67725	2.58725	2.587
* 25	Chrysene-d12	240	14.212	14.202	(1.000)	46582	2.00000	
27	Chrysene	228	14.285	14.278	(1.005)	66872	2.39976	2.400
28	Benzo(b)fluoranthene	252	16.833	16.821	(0.929)	60946	2.50689	2.507
29	Benzo(k)fluoranthene	252	16.893	16.884	(0.932)	63249	2.65606	2.656
31	Total Benzofluoranthenes	252	16.893	16.821	(0.932)	126178	5.48025	5.480(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572
*	33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000	
	37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493
	39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483
	35 Perylene	252	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011909.D
Lab Smp Id: SLA0213-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 14:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

No RRT check performed

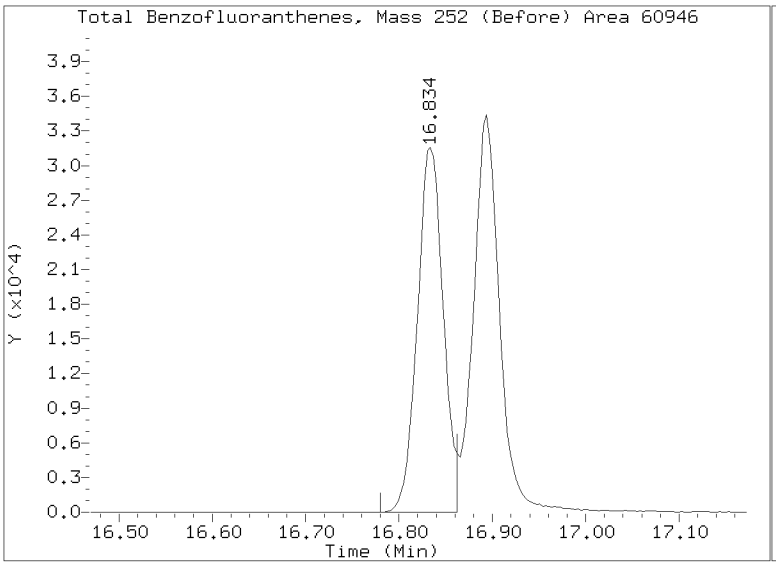
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

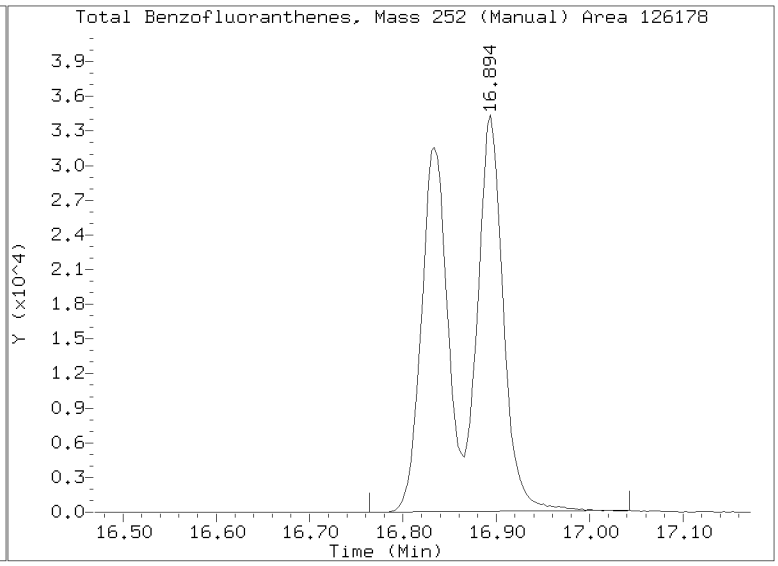
Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D
Injection Date: 19-JAN-2023 14:58
Lab ID:SLA0213-SCV1 Client ID:
Report Date: 01/25/2023 22:00





Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT8	Calibration:	GA00050
Lab File ID:	N823012815.D	Calibration Date:	01/19/2023
Sequence:	SLA0285	Injection Date:	01/25/23
Lab Sample ID:	SLA0285-CCV1	Injection Time:	20:49
Sequence Name:	Calibration Check		

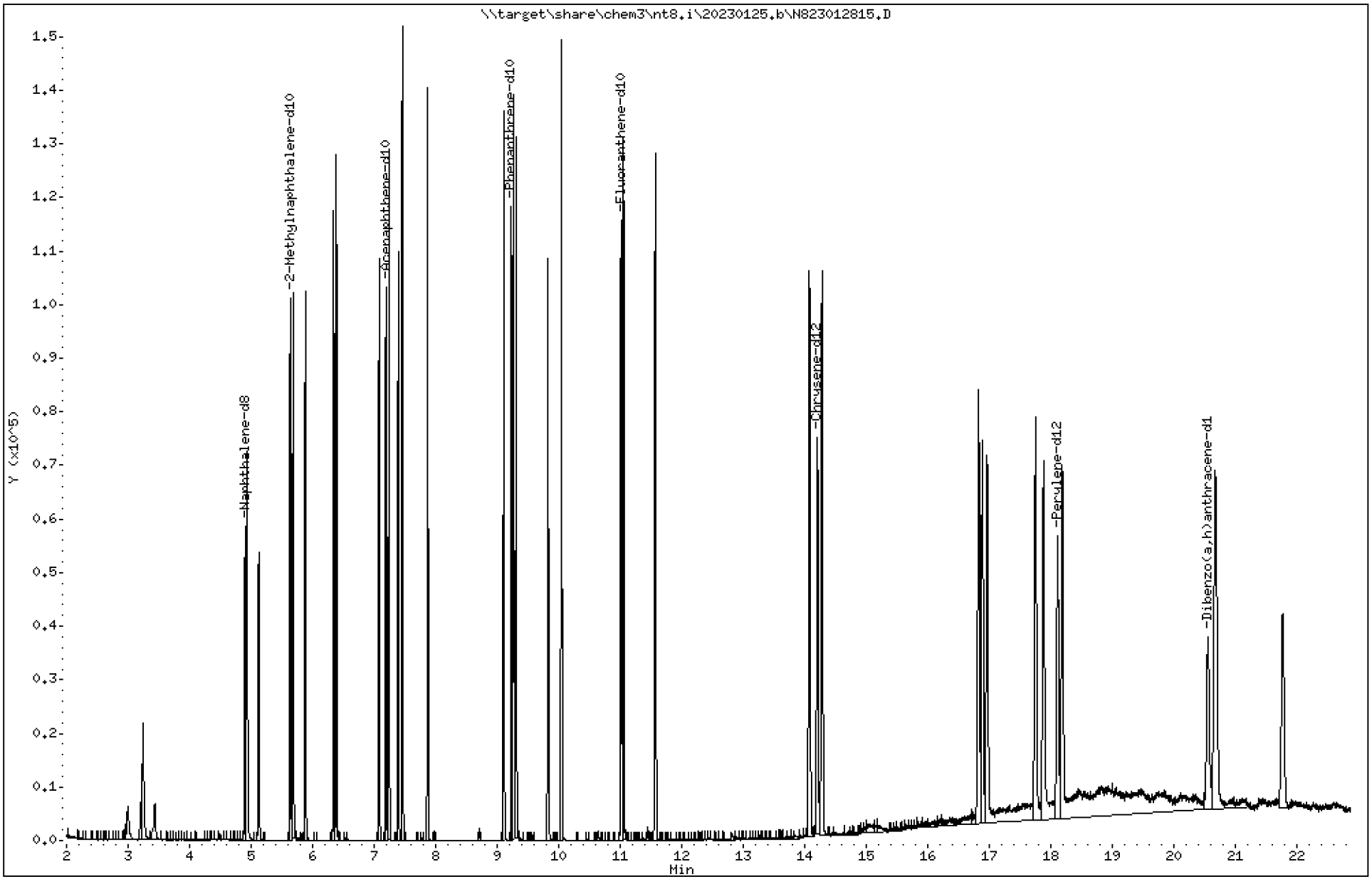
		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Benzo(a)anthracene	A	2.5000	2.86	1.1238870	1.2876260		14.6	+/-50
Chrysene	A	2.5000	2.48	1.1964350	1.1848810		-1.0	+/-50
Benzo(b)fluoranthene	A	2.5000	2.81	1.1648110	1.3085290		12.3	+/-50
Benzo(k)fluoranthene	A	2.5000	2.66	1.1409370	1.2159240		6.6	+/-50
Benzo(a)pyrene	A	2.5000	2.64	1.0250270	1.0830990		5.7	+/-50
Indeno(1,2,3-cd)pyrene	A	2.5000	2.28	1.1677520	1.0627540		-9.0	+/-50
Dibenzo(a,h)anthracene	A	2.5000	2.27	1.0049440	0.9138657		-9.1	+/-50
2-Methylnaphthalene-d10	A	2.5000	2.66	0.5454499	0.5795311		6.2	+/-50
Dibenzo[a,h]anthracene-d14	A	2.5000	2.14	0.6679424	0.6721593		-14.2	+/-50
Fluoranthene-d10	A	2.5000	2.77	0.8823923	0.9781740		10.9	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D
Date : 25-JAN-2023 20:49
Client ID:
Sample Info: CCV230125

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

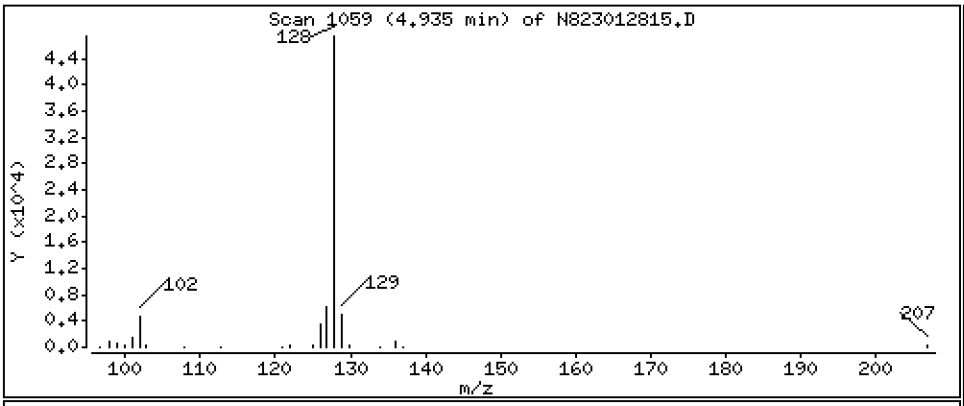
Operator: JZ

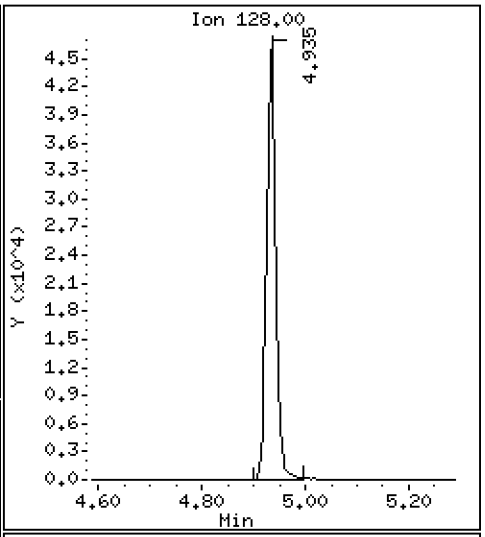
Column phase: Rxi-17sil

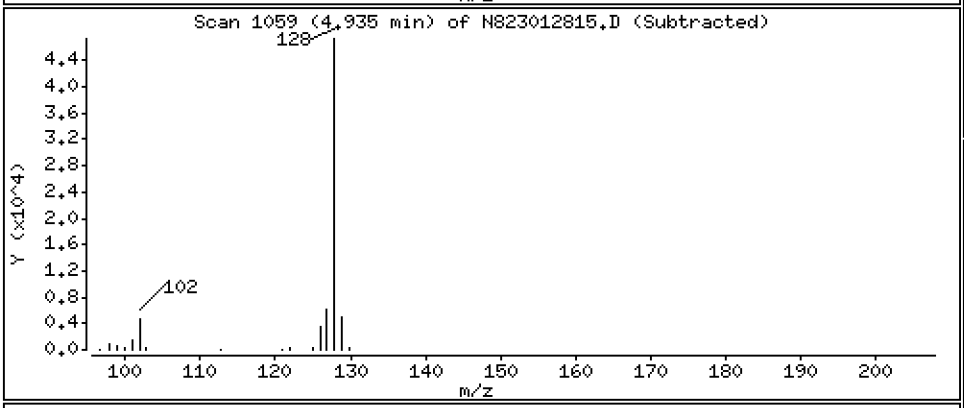
Column diameter: 0.25

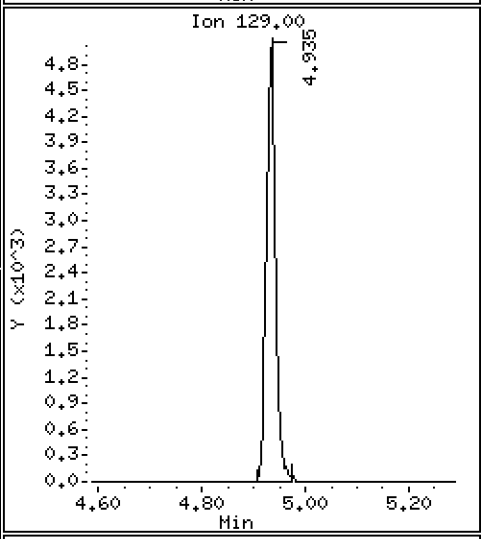
2 Naphthalene

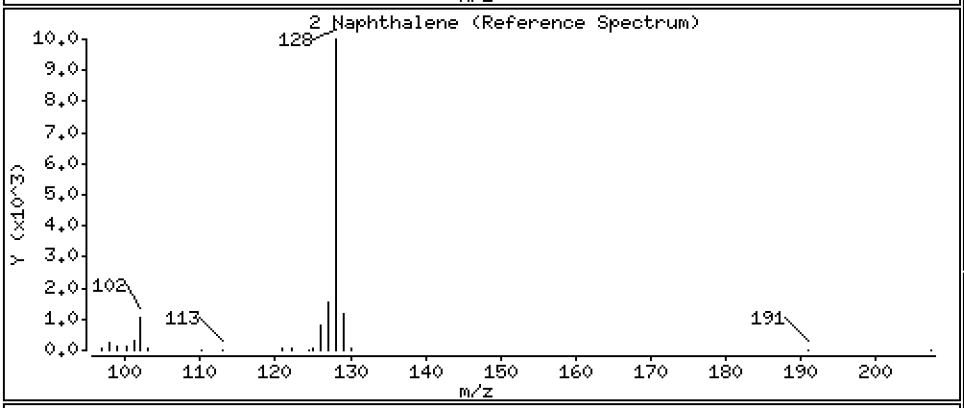
Concentration: 2.558 ug/mL

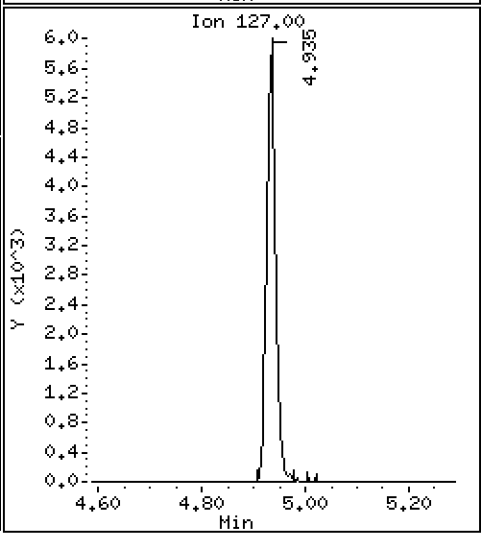


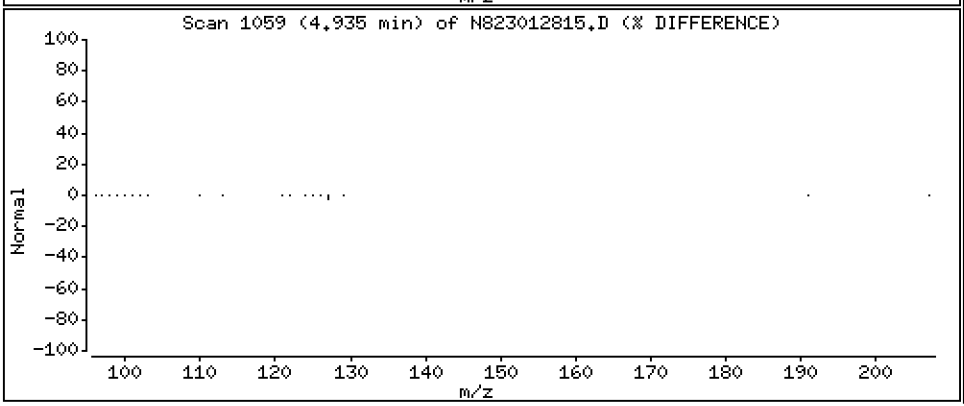












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

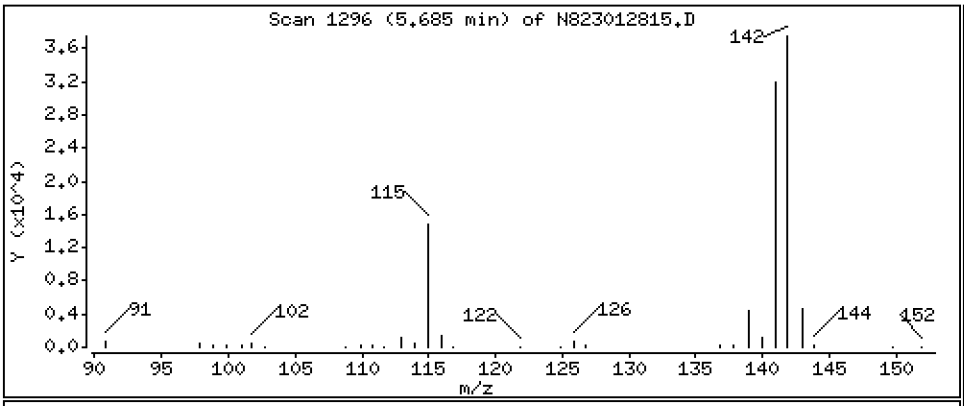
Operator: JZ

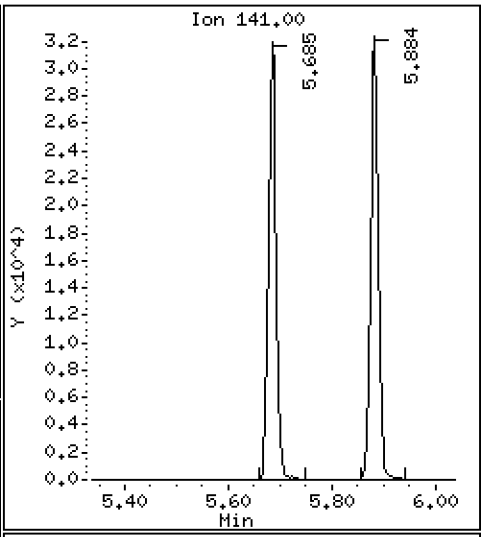
Column phase: Rxi-17sil

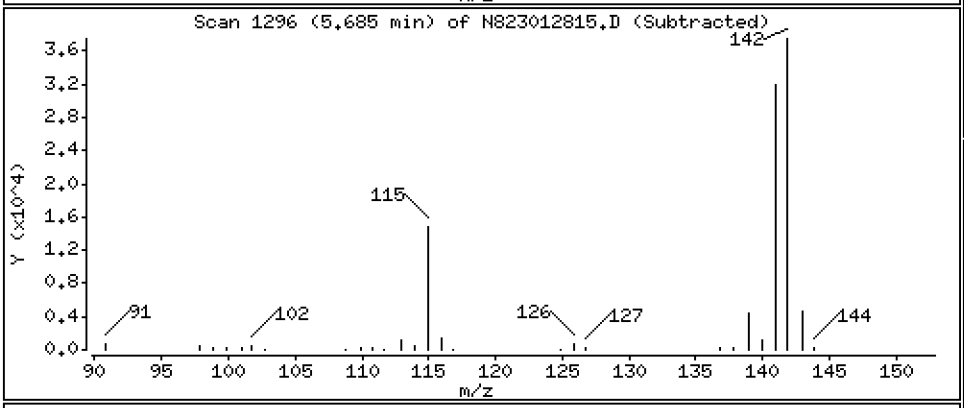
Column diameter: 0.25

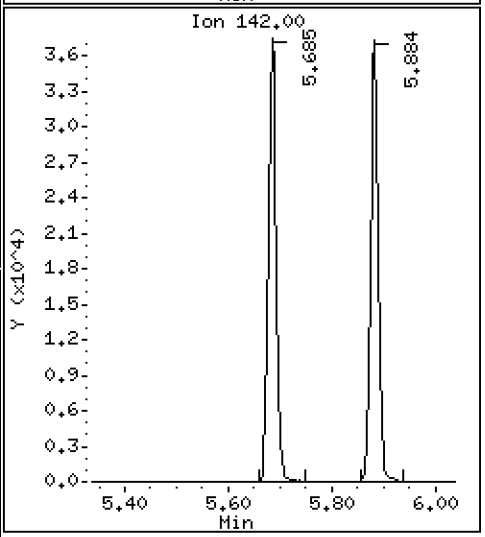
4 2-Methylnaphthalene

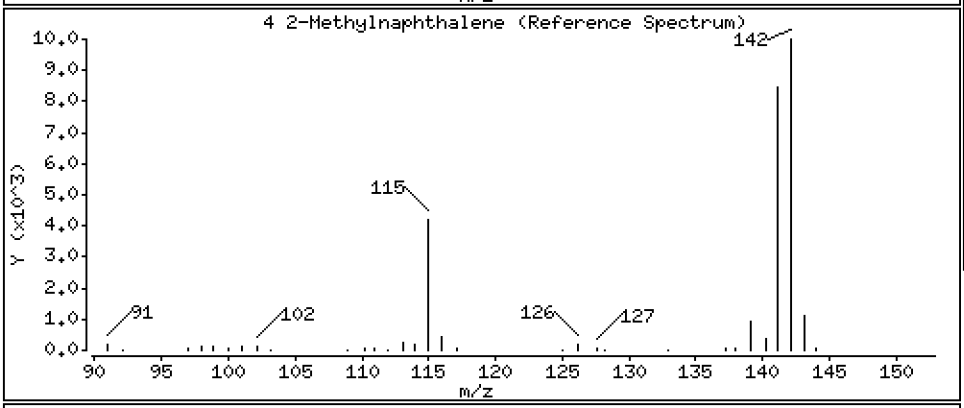
Concentration: 2.587 ug/mL

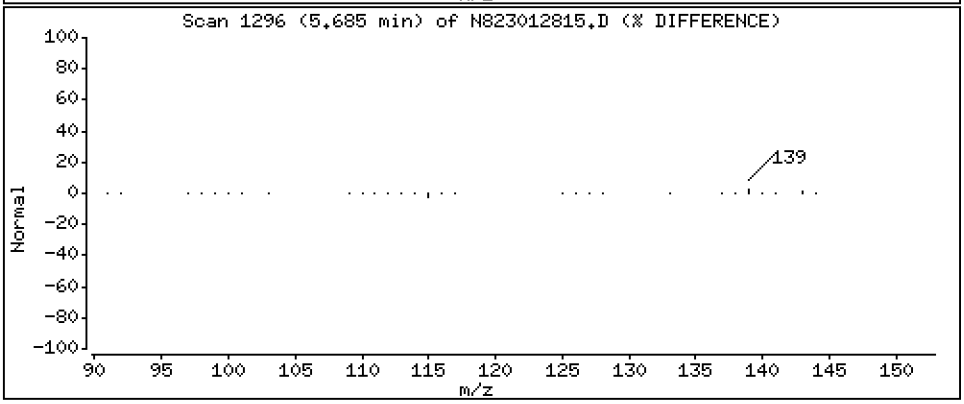












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Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

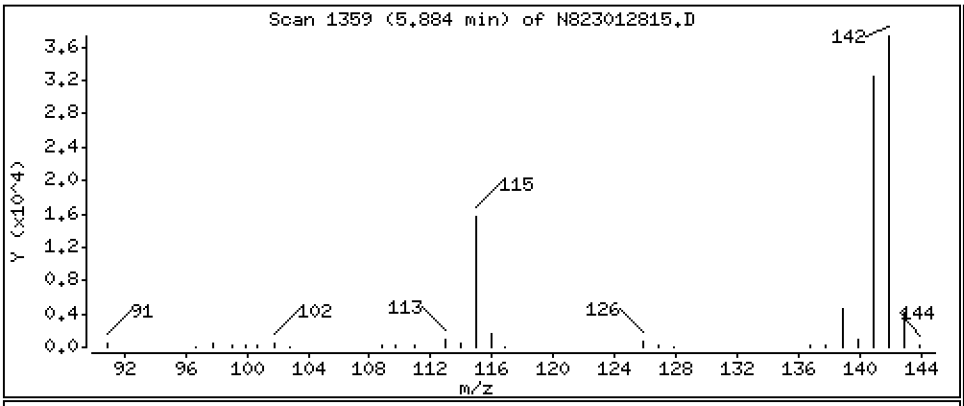
Operator: JZ

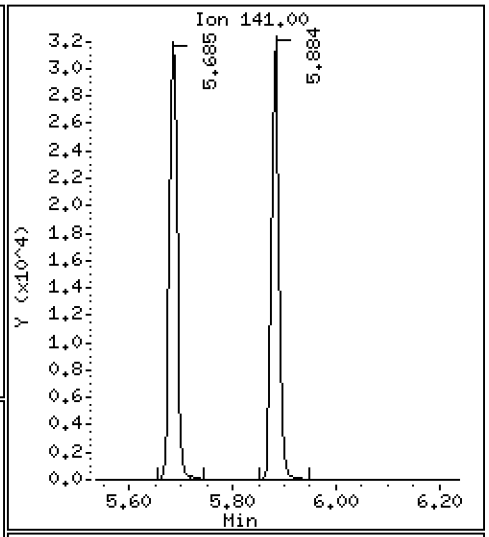
Column phase: Rxi-17sil

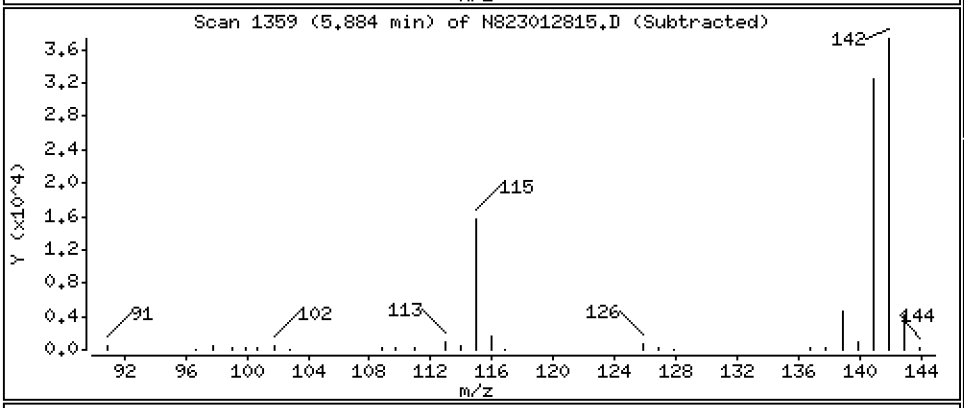
Column diameter: 0.25

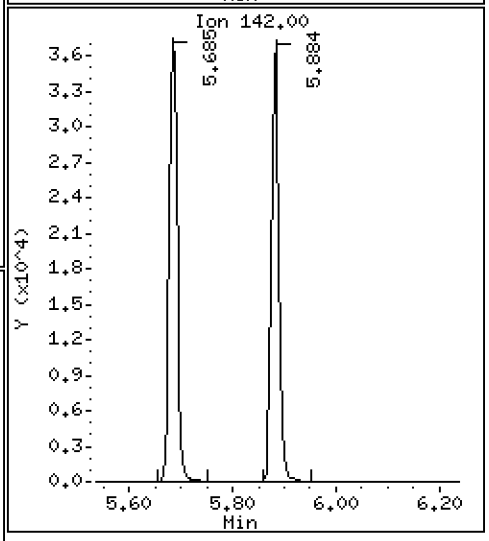
5 1-methylnaphthalene

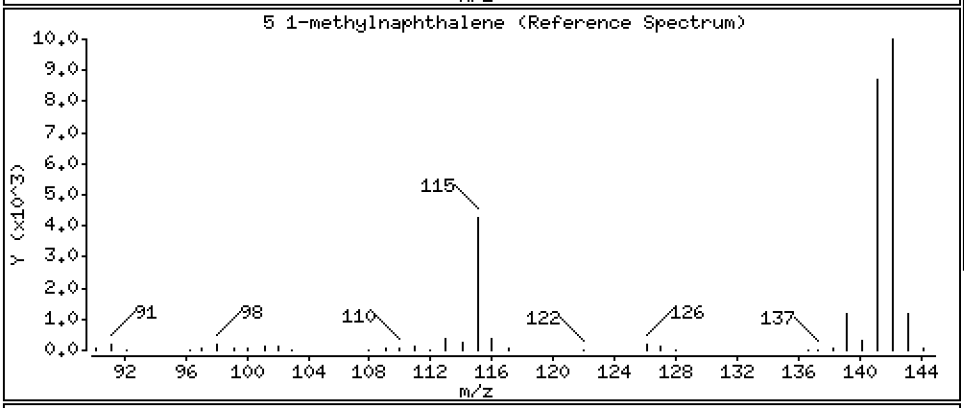
Concentration: 2.600 ug/mL

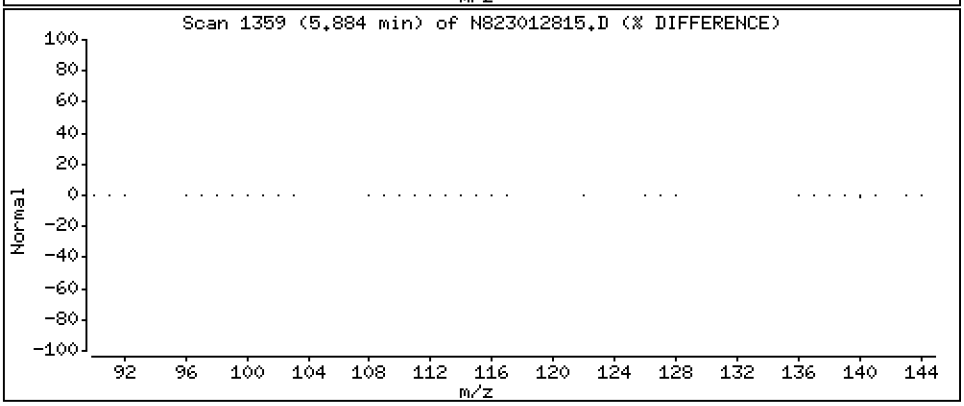












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

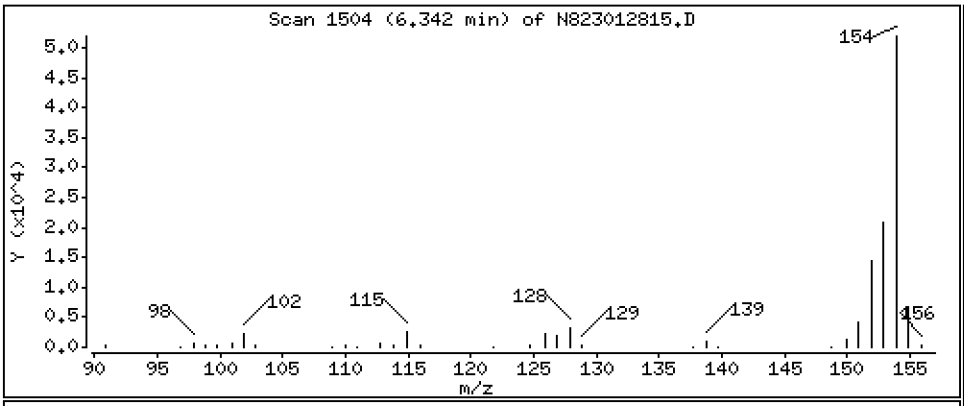
Operator: JZ

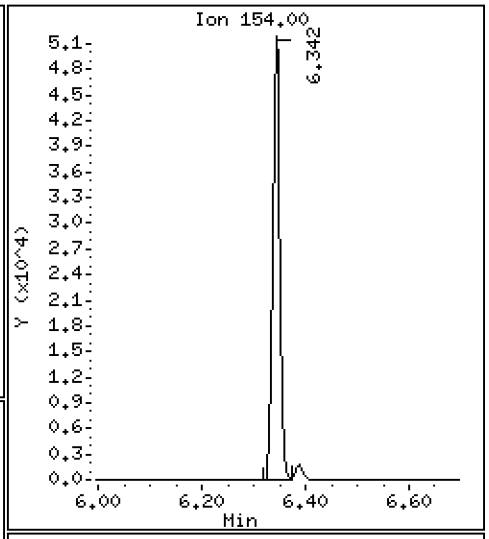
Column phase: Rxi-17sil

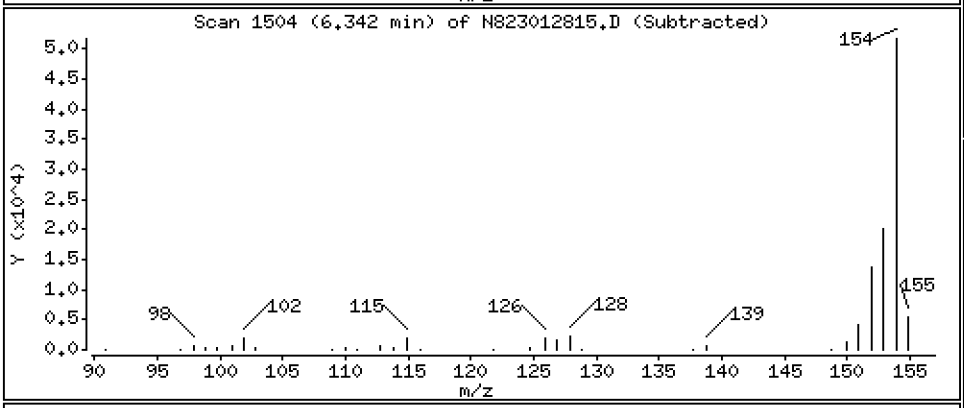
Column diameter: 0.25

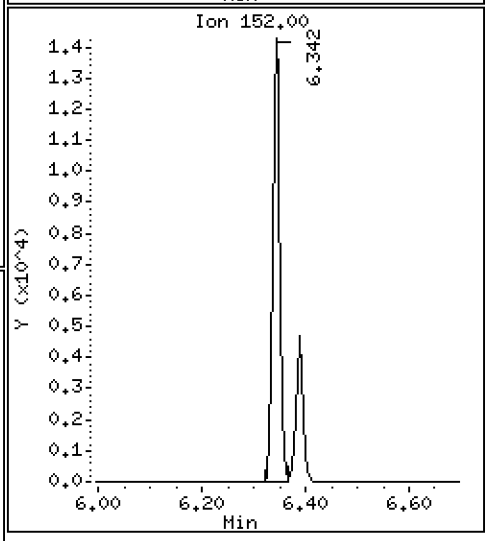
7 Biphenyl

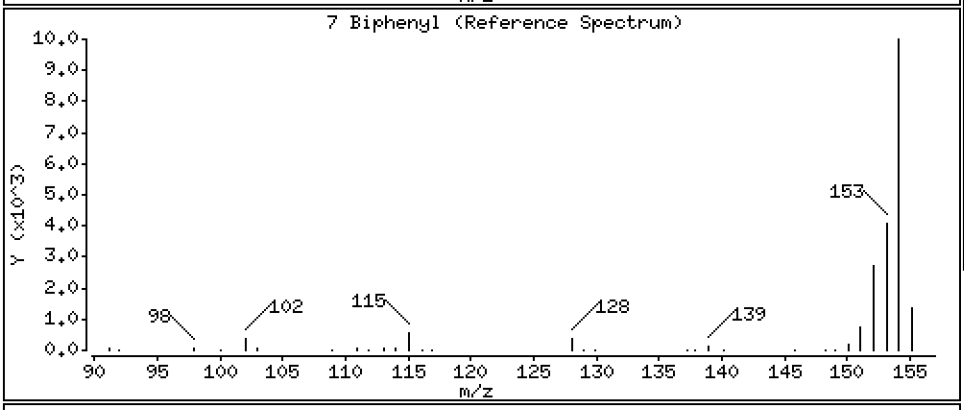
Concentration: 2.545 ug/mL

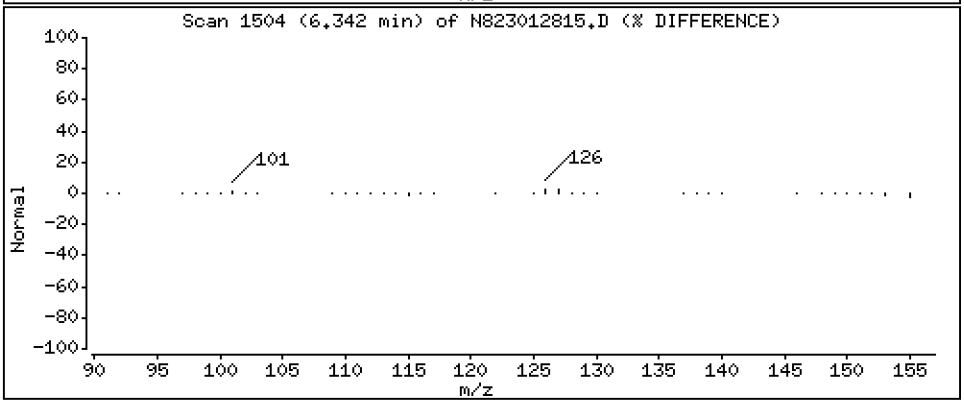












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

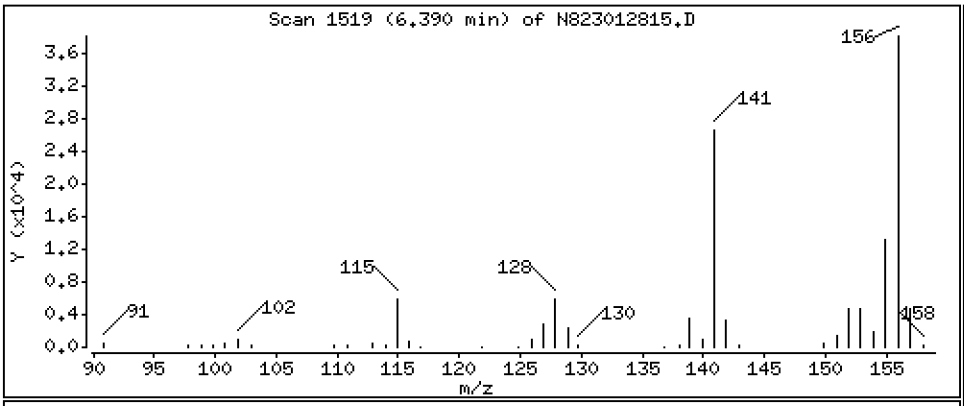
Operator: JZ

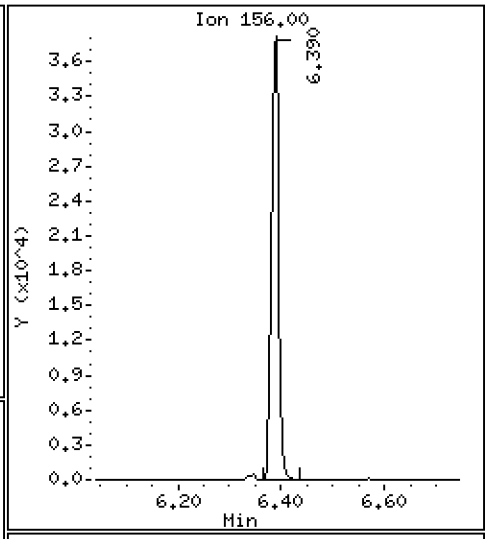
Column phase: Rxi-17sil

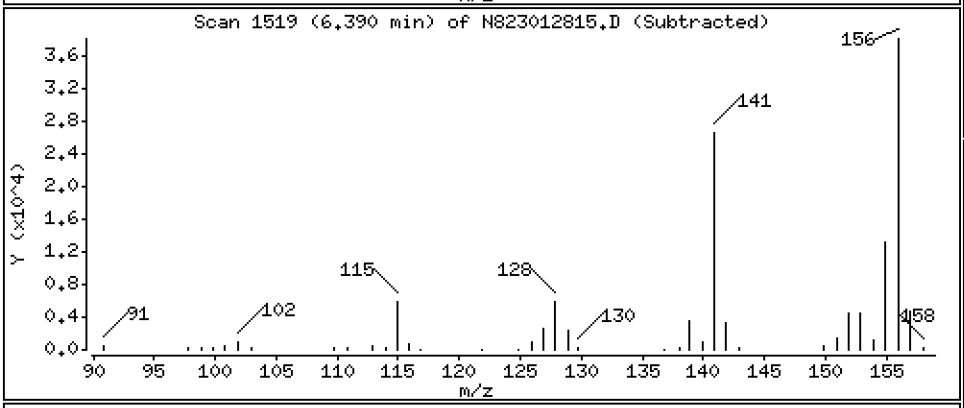
Column diameter: 0.25

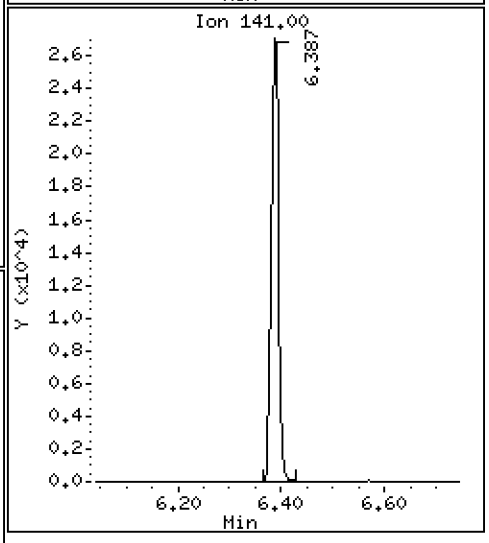
8 2,6-Dimethylnaphthalene

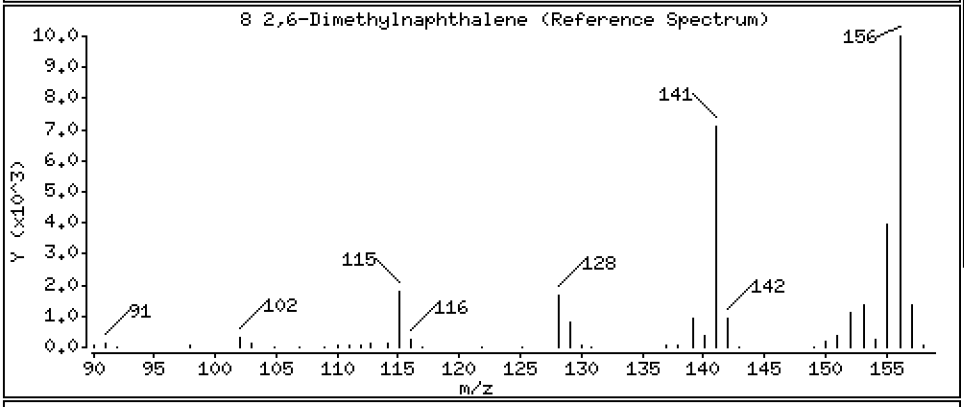
Concentration: 2.643 ug/mL

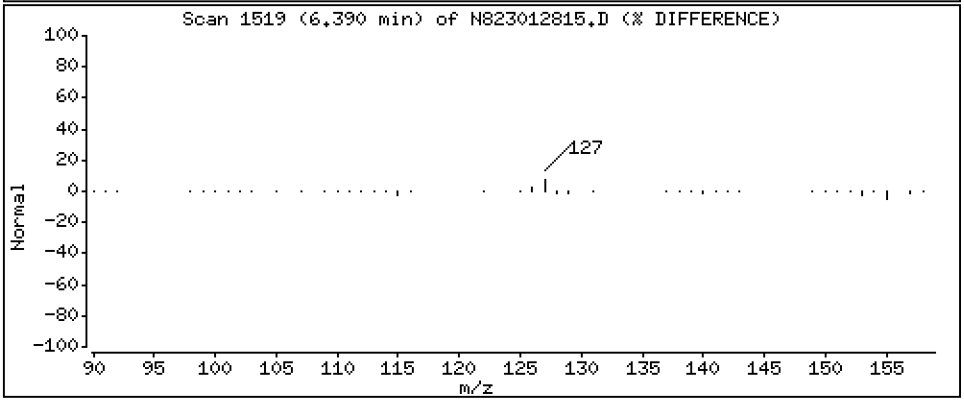












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Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

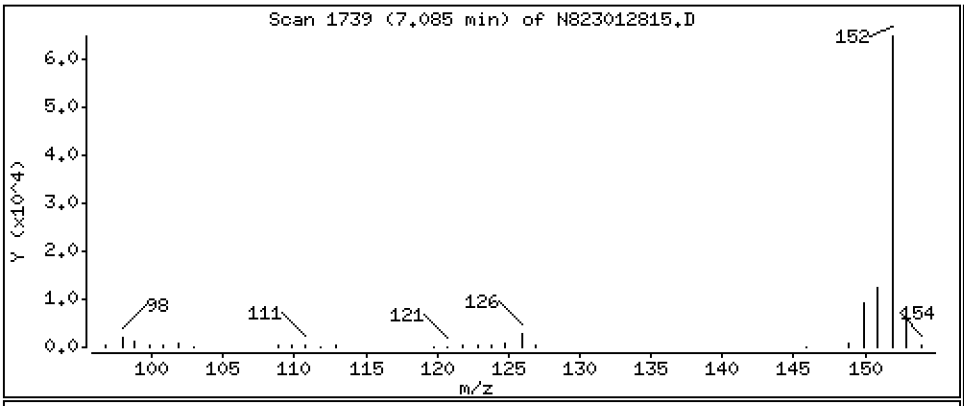
Operator: JZ

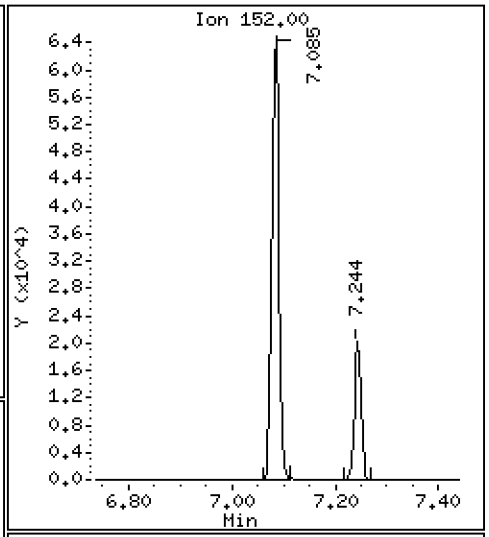
Column phase: Rxi-17sil

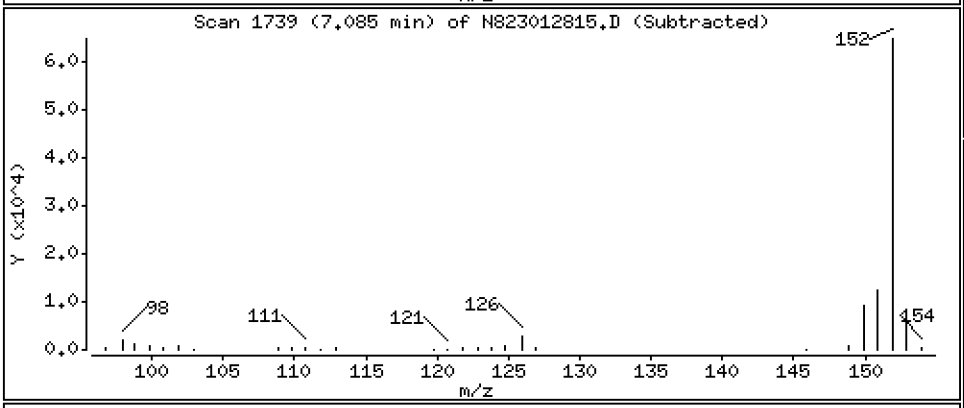
Column diameter: 0.25

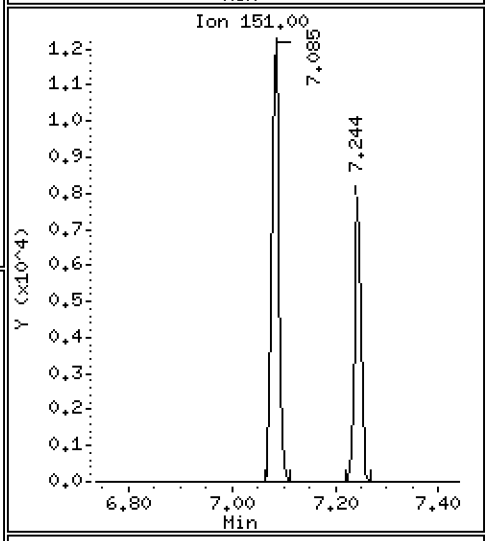
9 Acenaphthylene

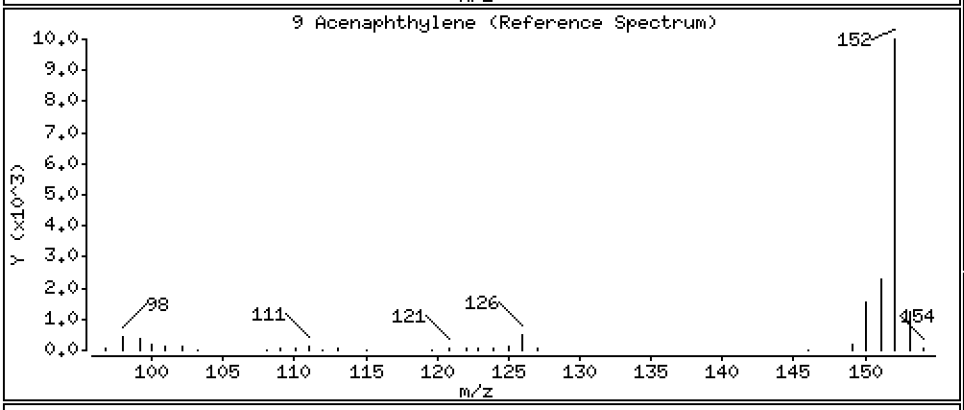
Concentration: 2.748 ug/mL

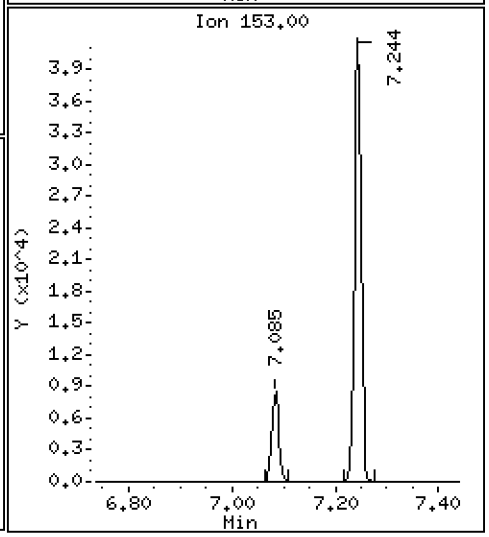


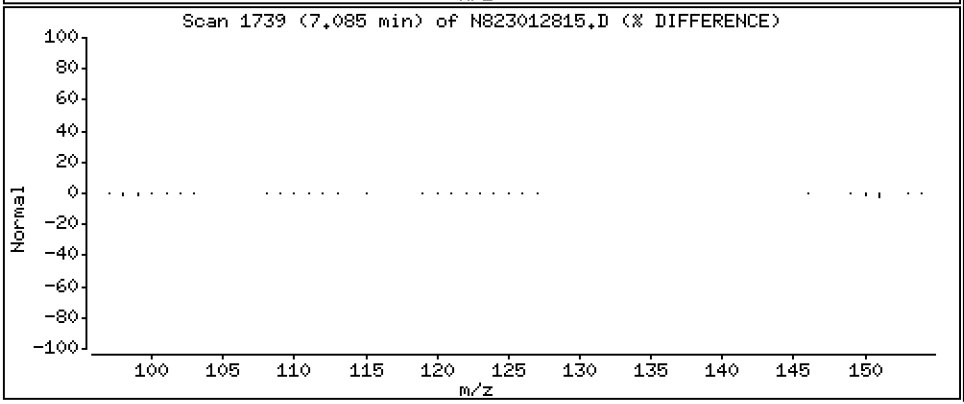












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Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

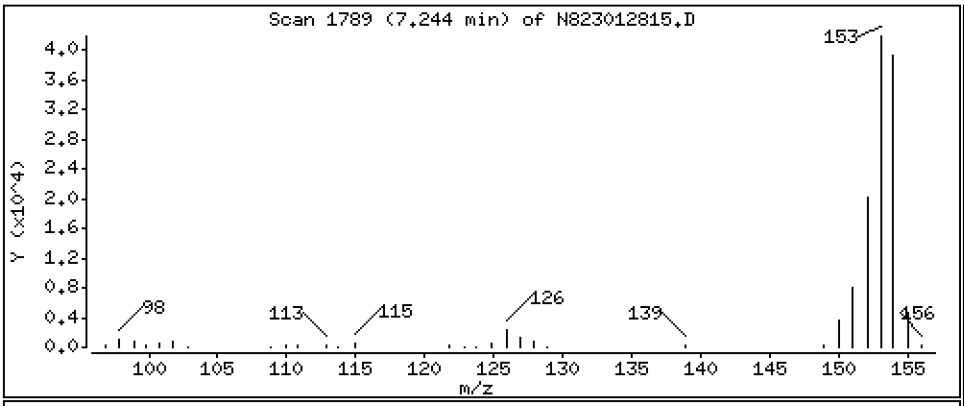
Operator: JZ

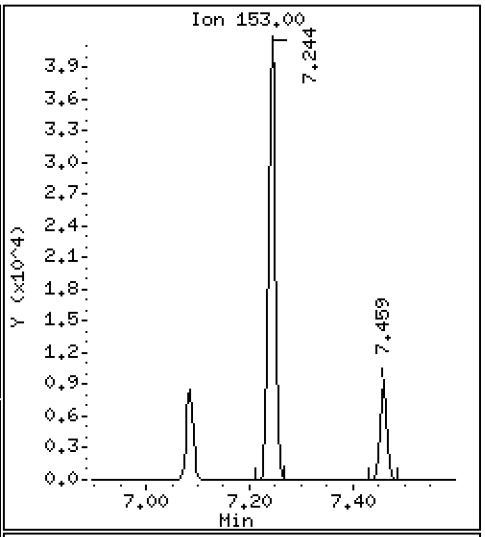
Column phase: Rxi-17sil

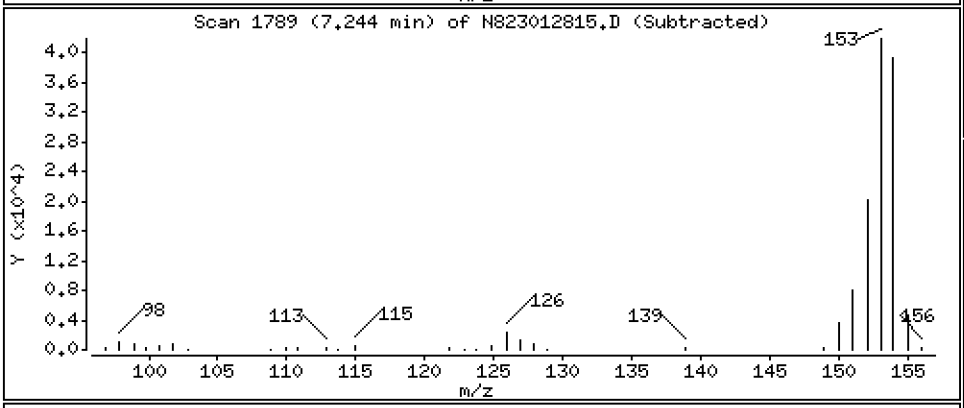
Column diameter: 0.25

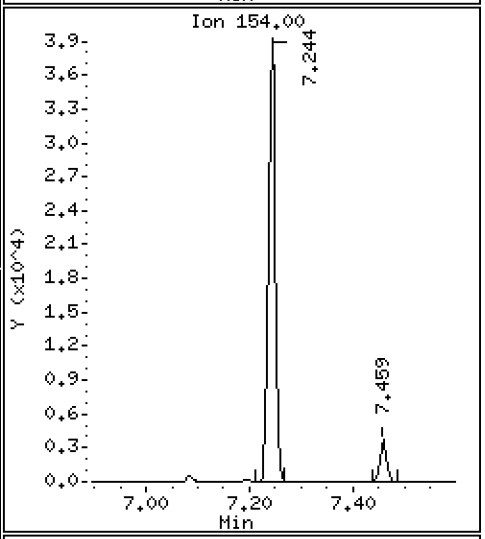
11 Acenaphthene

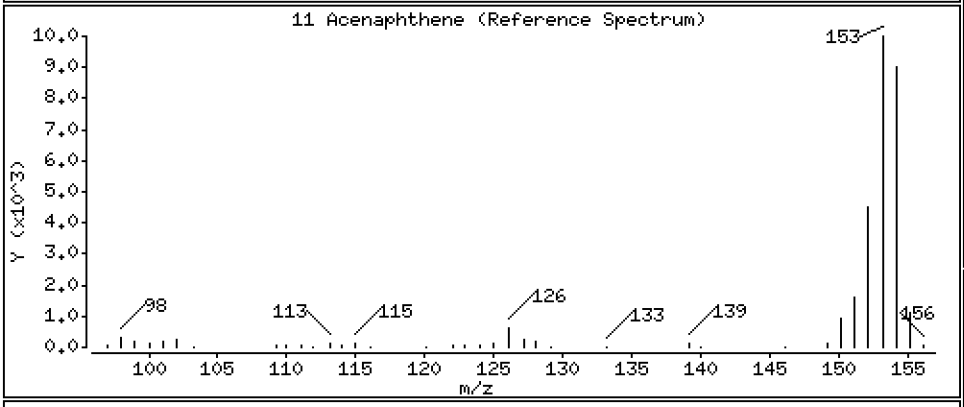
Concentration: 2.580 ug/mL

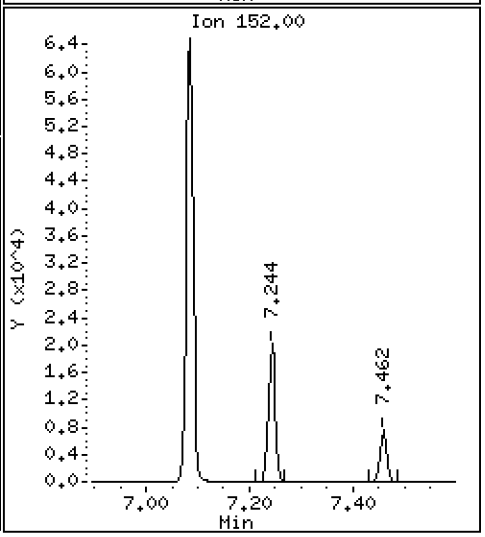


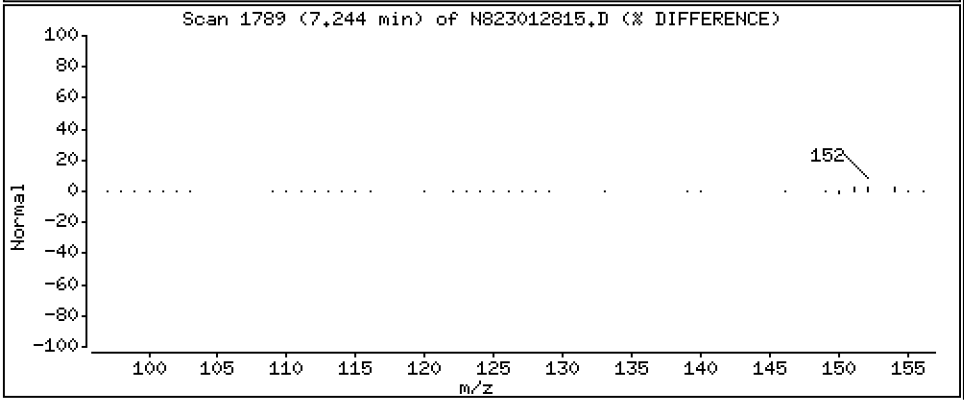












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Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

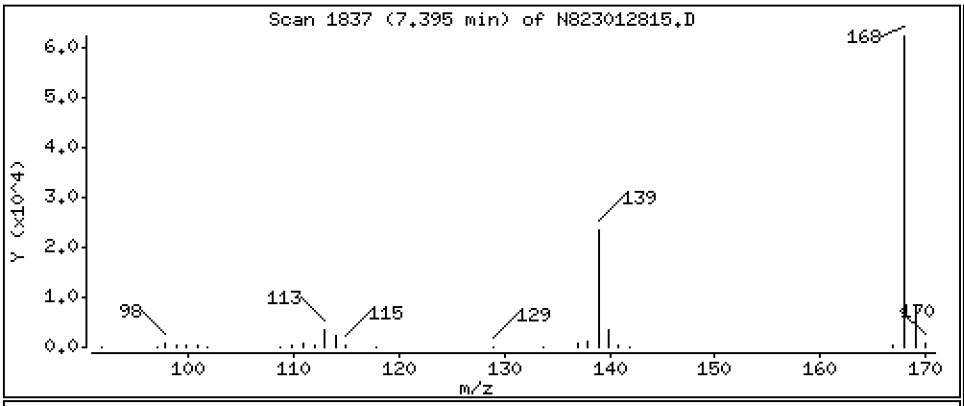
Operator: JZ

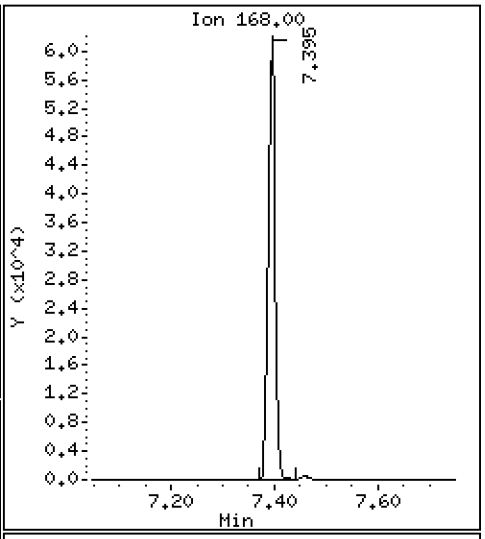
Column phase: Rxi-17sil

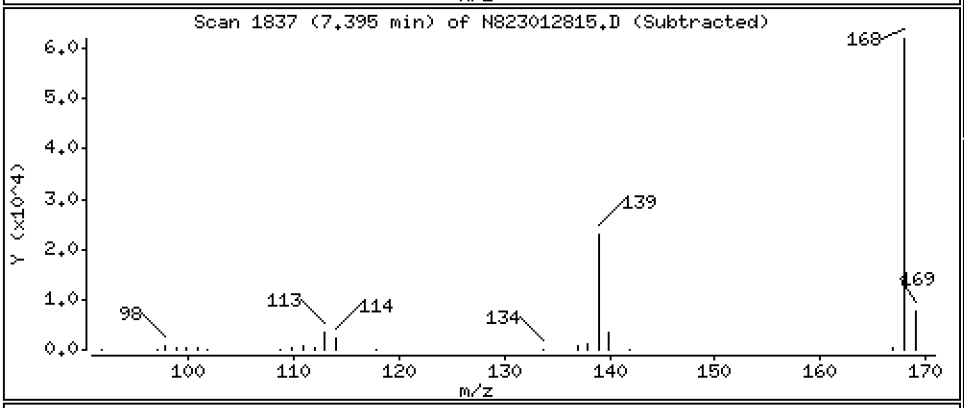
Column diameter: 0.25

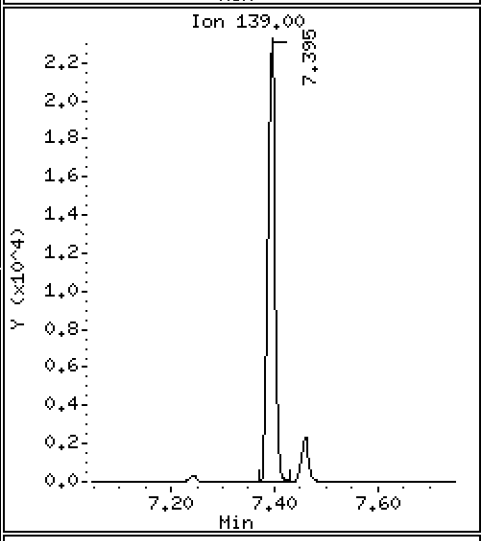
12 Dibenzofuran

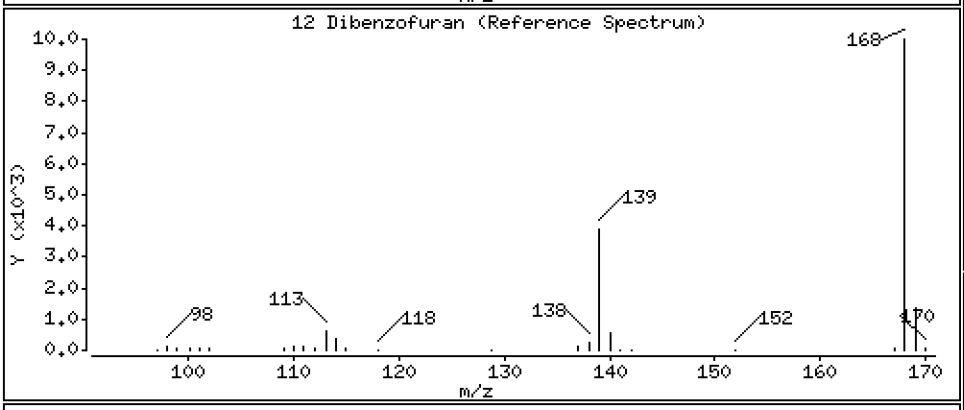
Concentration: 2.506 ug/mL

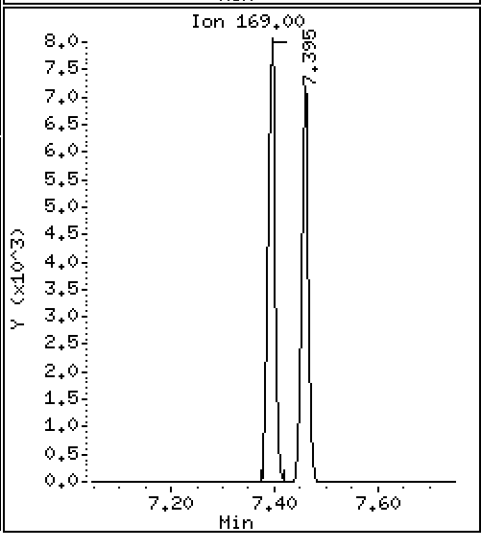


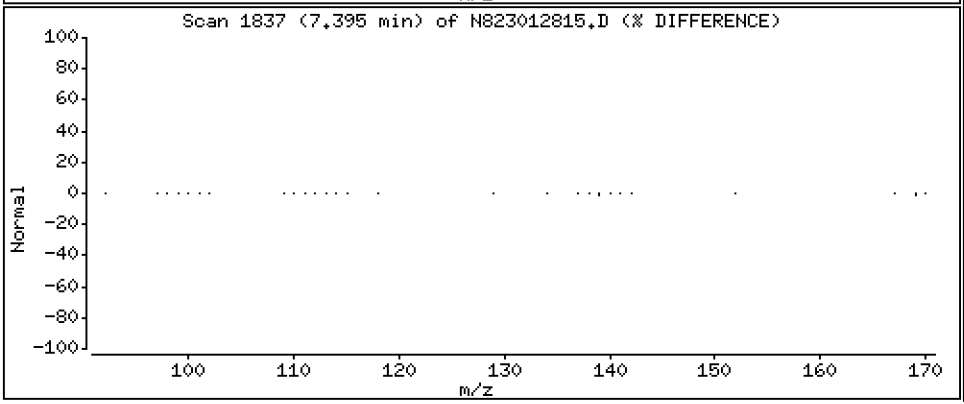












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

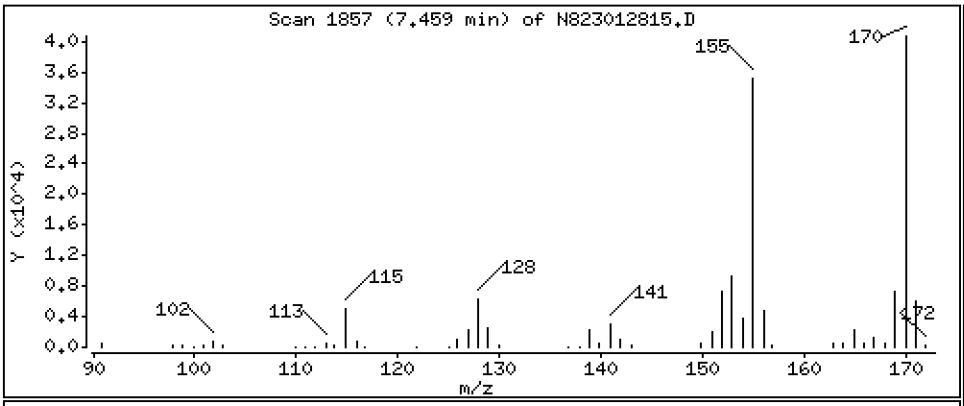
Operator: JZ

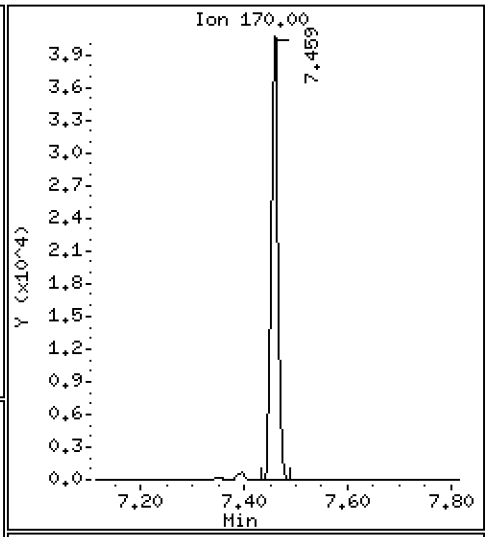
Column phase: Rxi-17sil

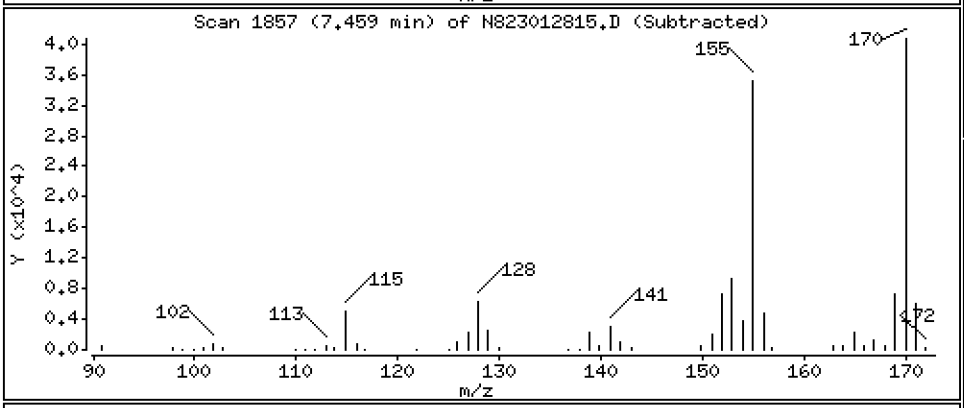
Column diameter: 0.25

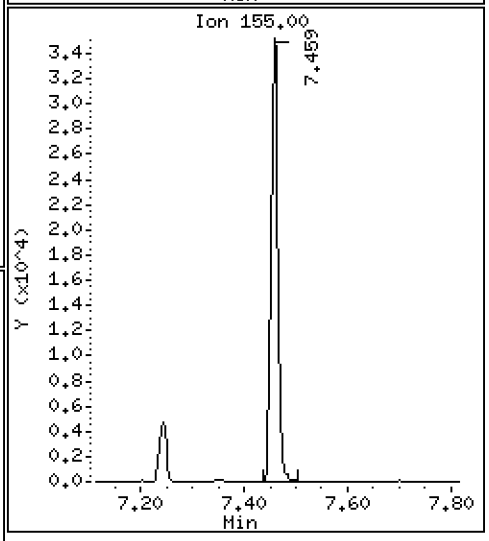
13 1,6,7-Trimethylnaphthalene

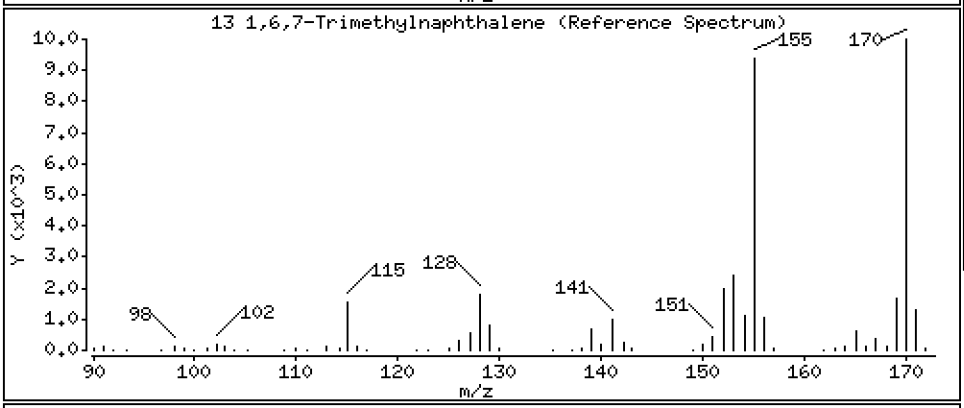
Concentration: 2.648 ug/mL

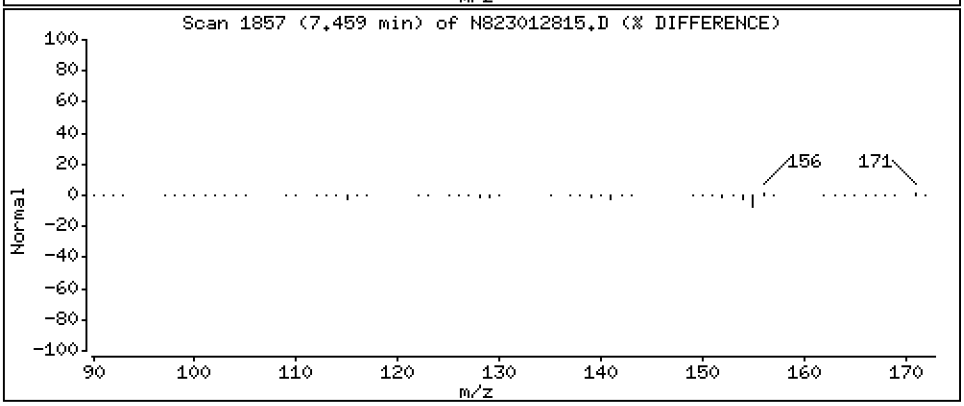












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Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

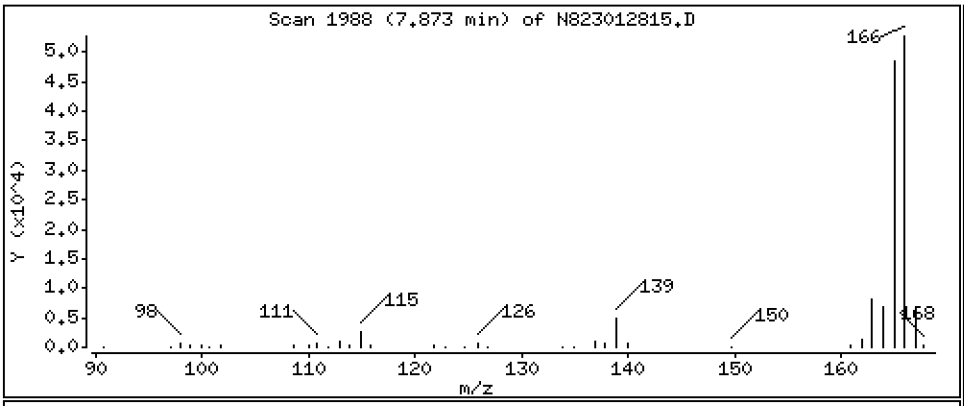
Operator: JZ

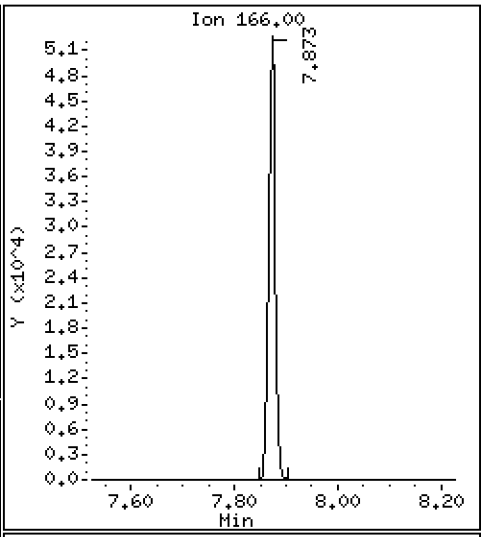
Column phase: Rxi-17sil

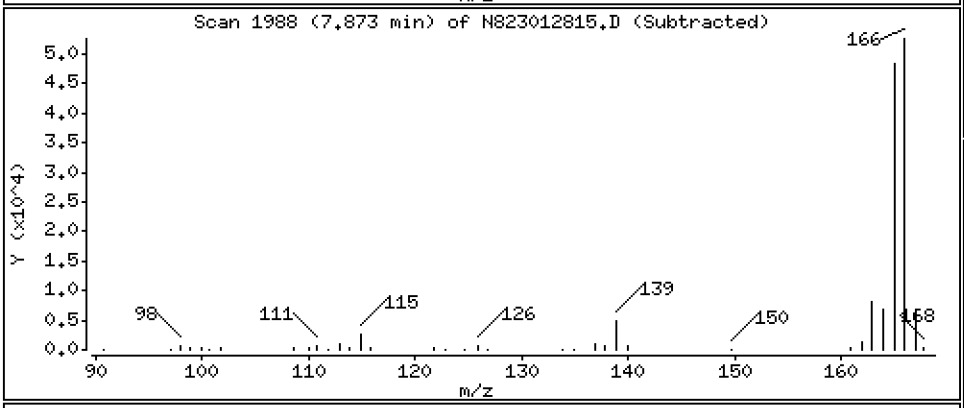
Column diameter: 0.25

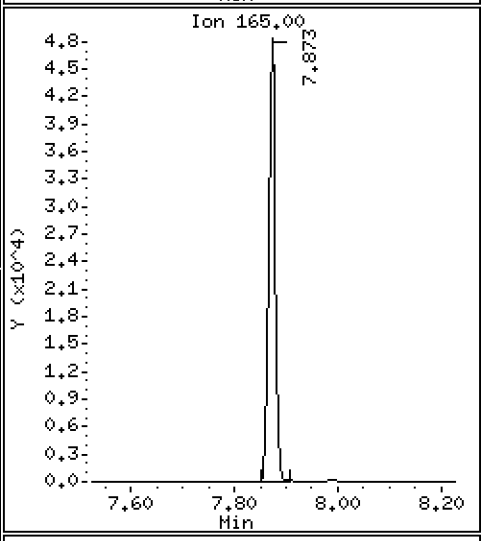
14 Fluorene

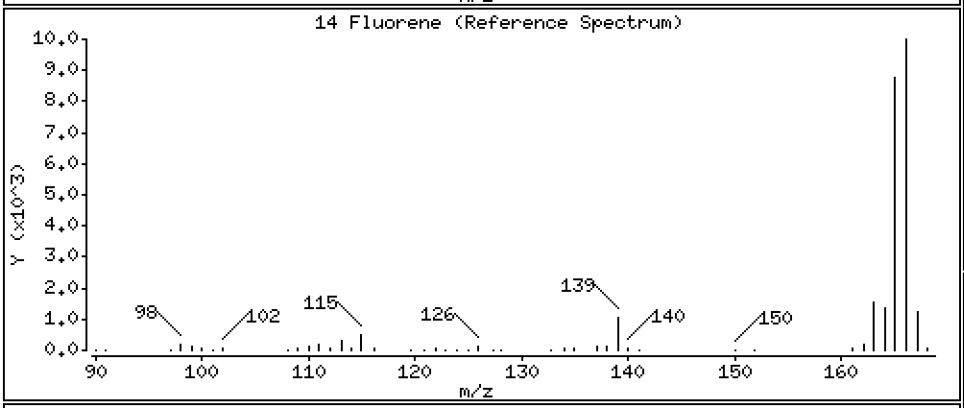
Concentration: 2.640 ug/mL

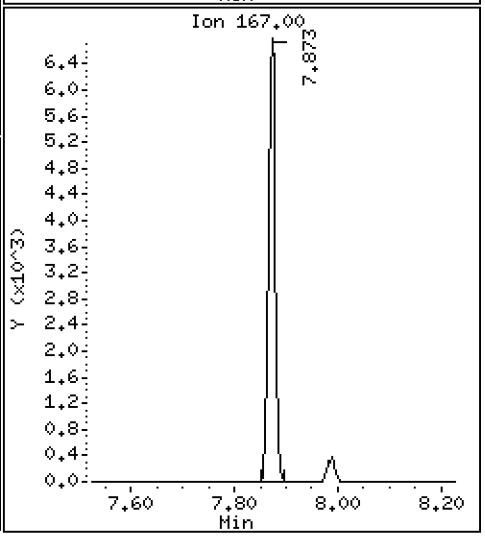


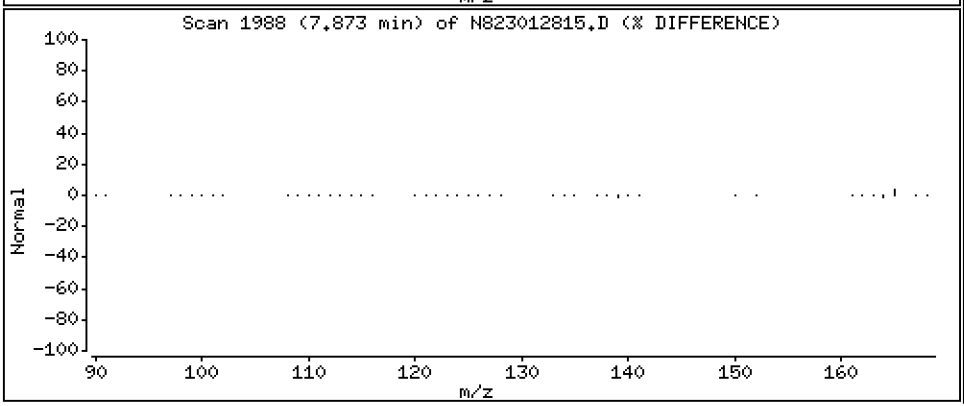












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

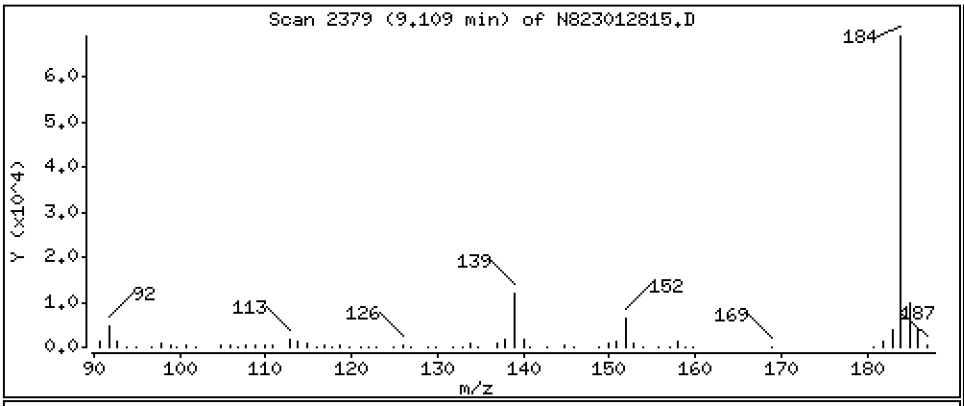
Operator: JZ

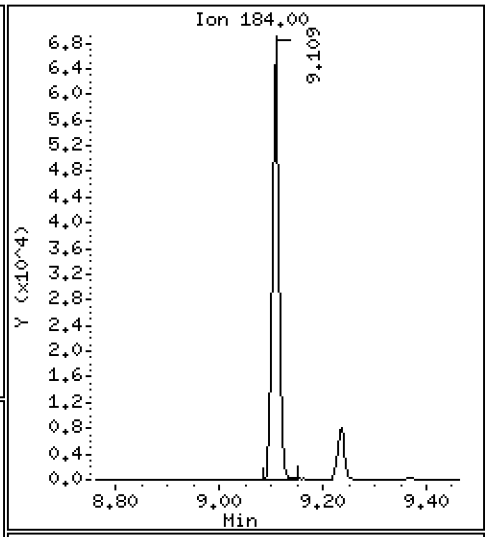
Column phase: Rxi-17sil

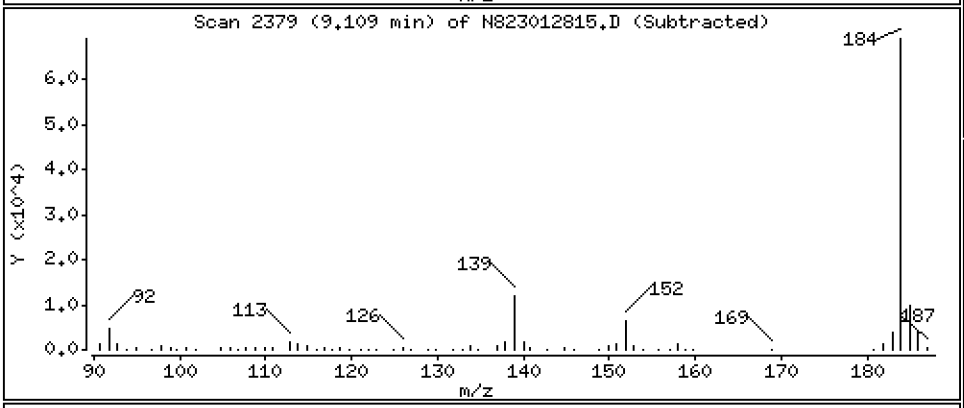
Column diameter: 0.25

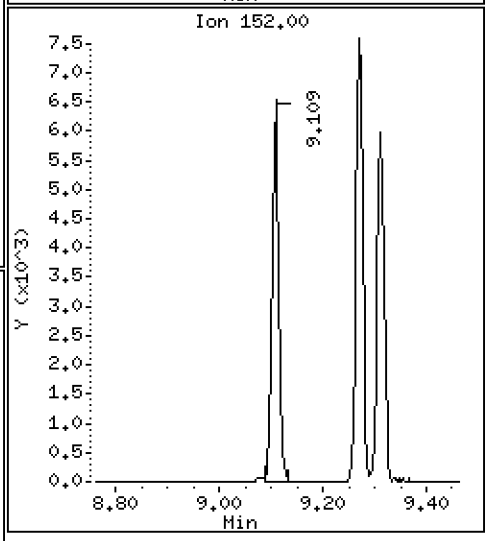
18 Dibenzothiophene

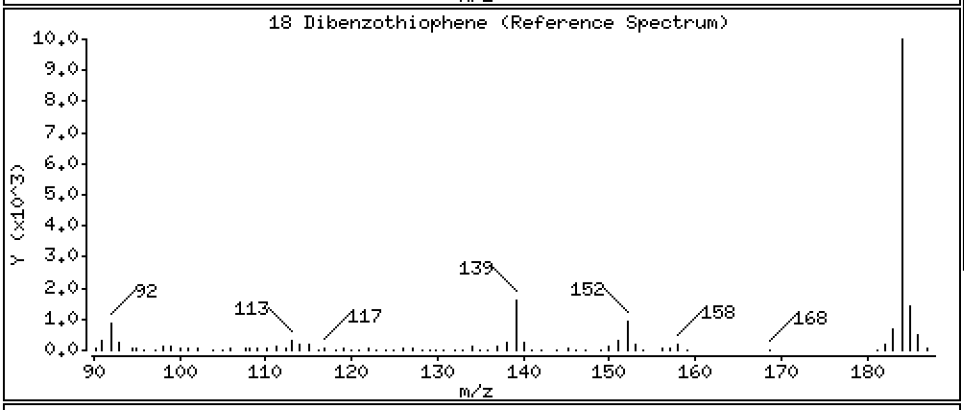
Concentration: 2.570 ug/mL

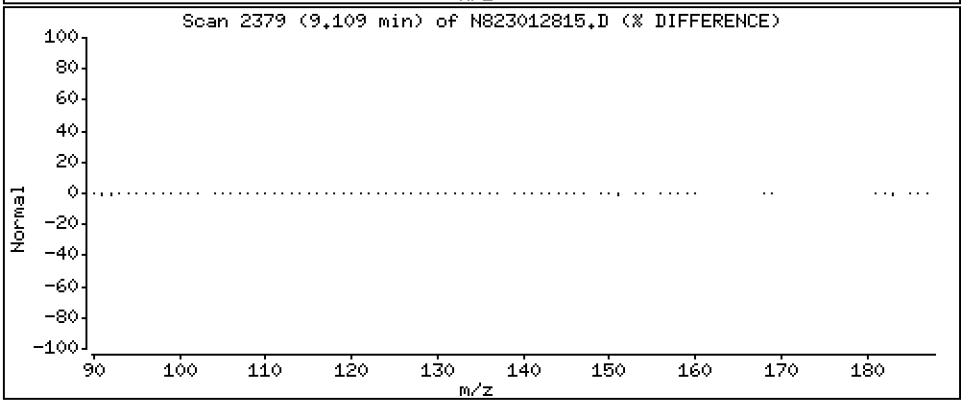












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

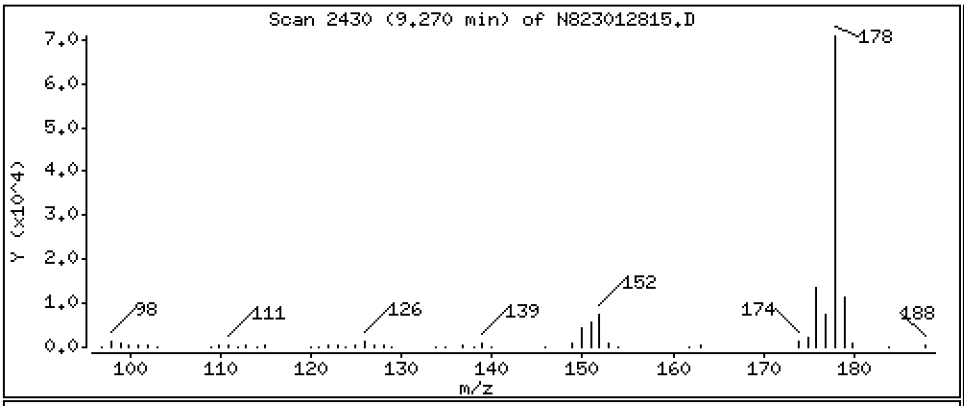
Operator: JZ

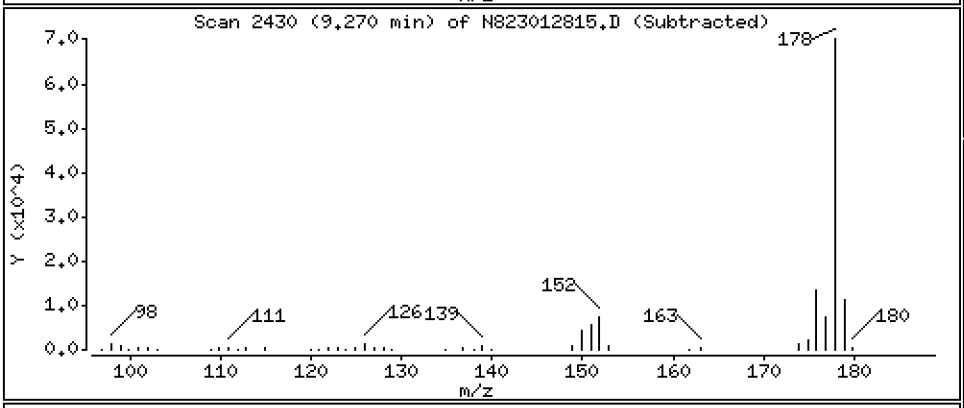
Column phase: Rxi-17sil

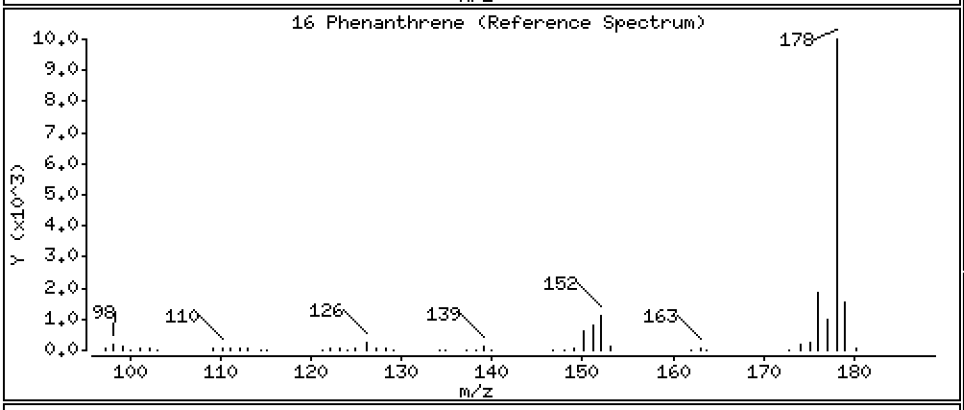
Column diameter: 0.25

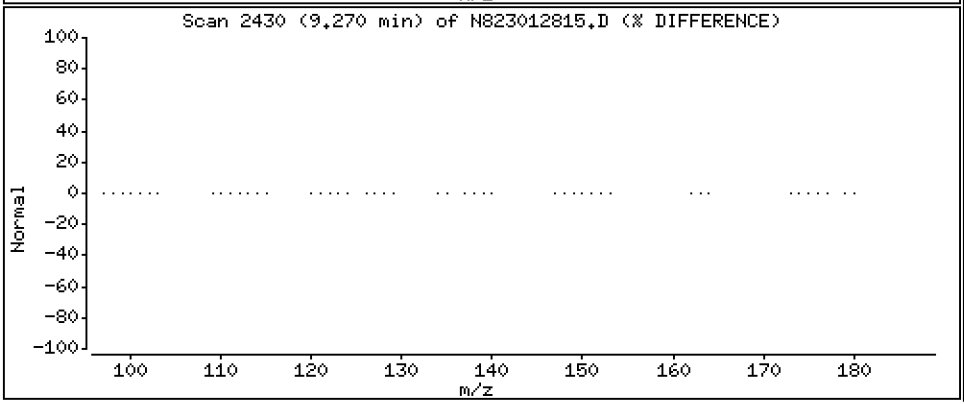
16 Phenanthrene

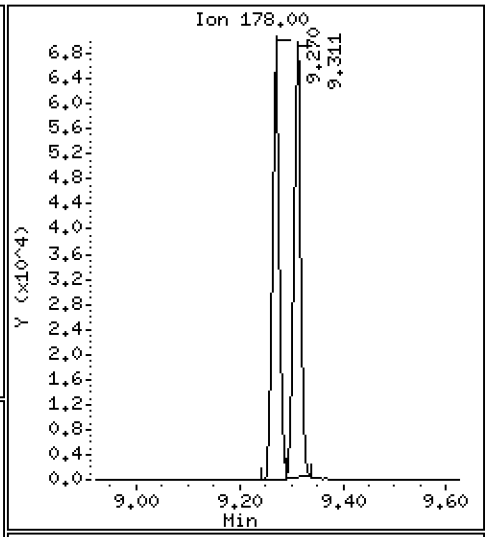
Concentration: 2.479 ug/mL

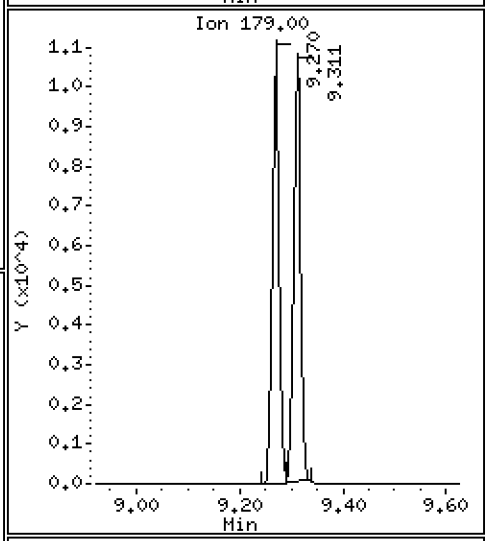


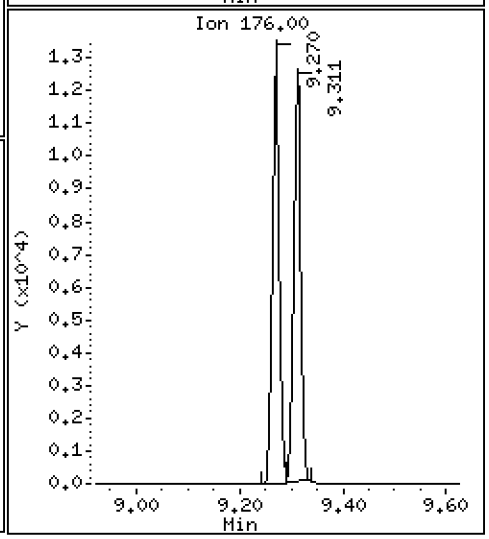












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Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

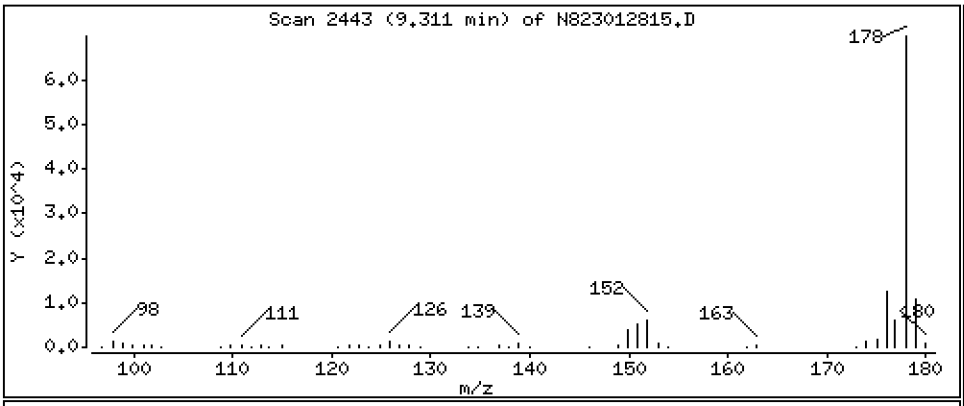
Operator: JZ

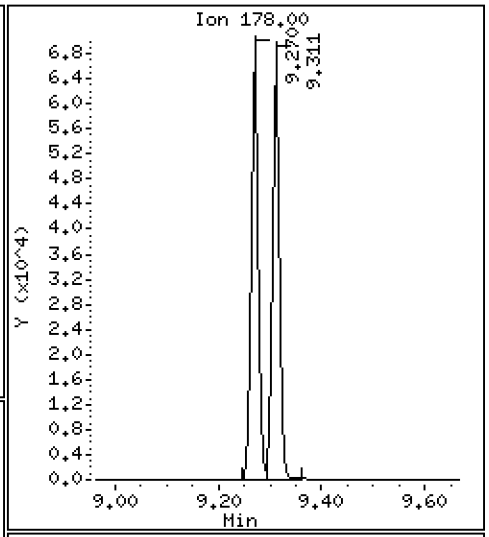
Column phase: Rxi-17sil

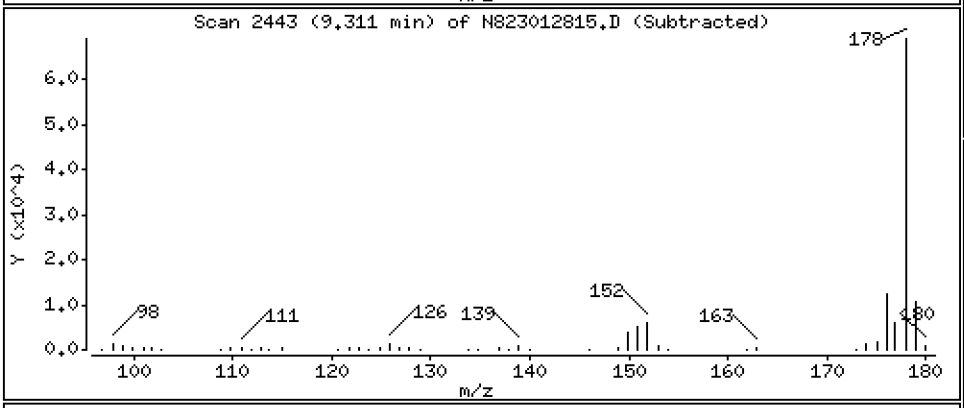
Column diameter: 0.25

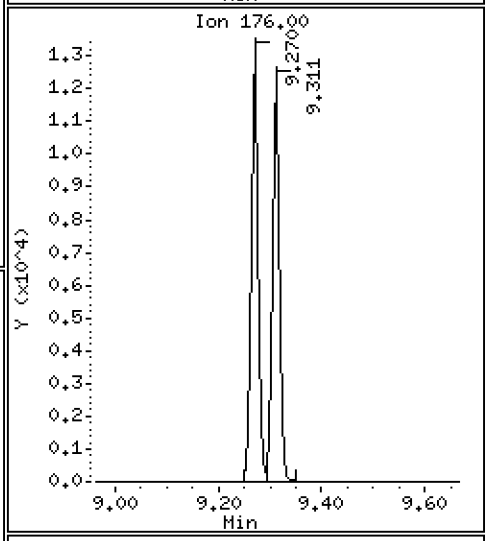
17 Anthracene

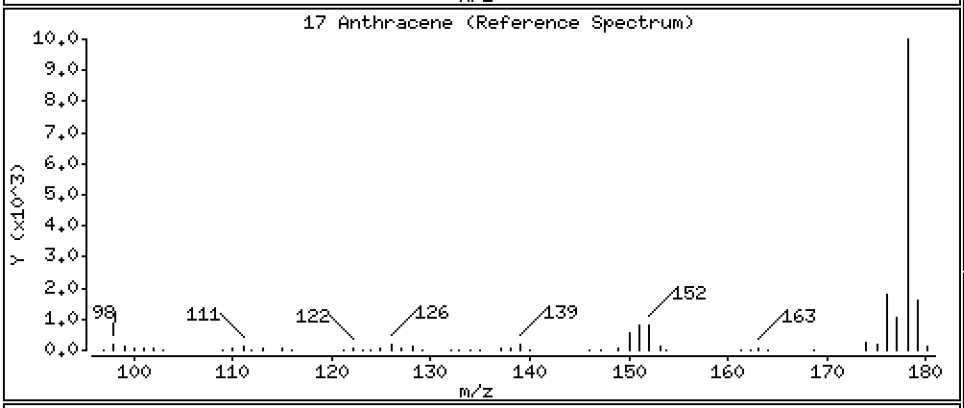
Concentration: 2.681 ug/mL

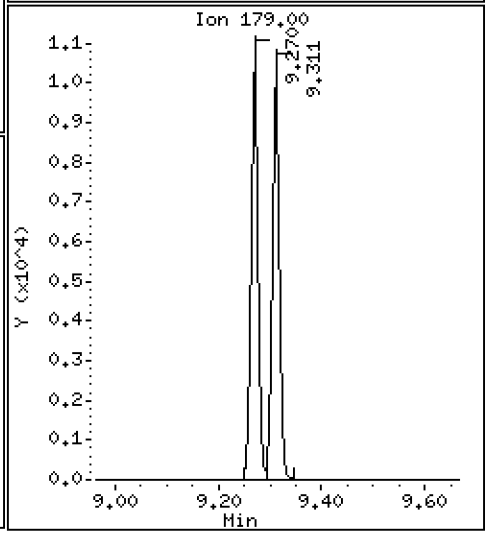


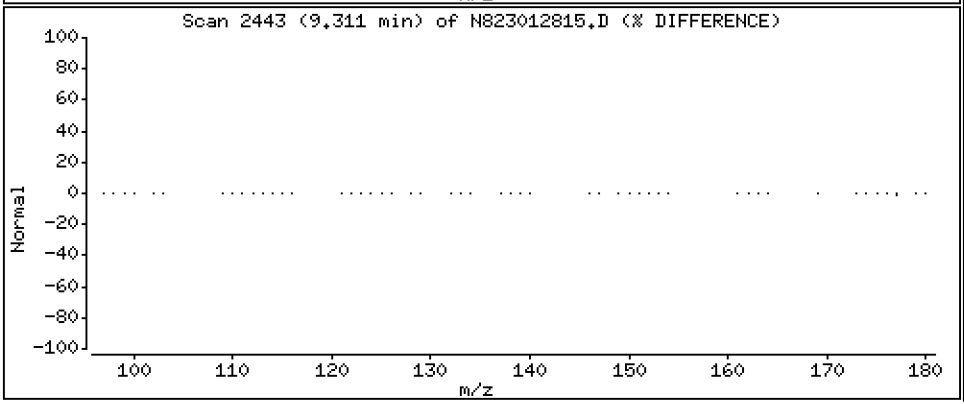












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Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

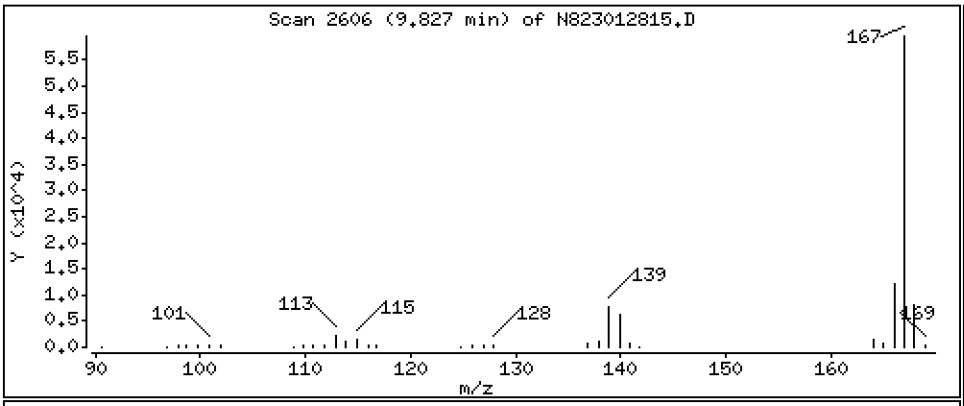
Operator: JZ

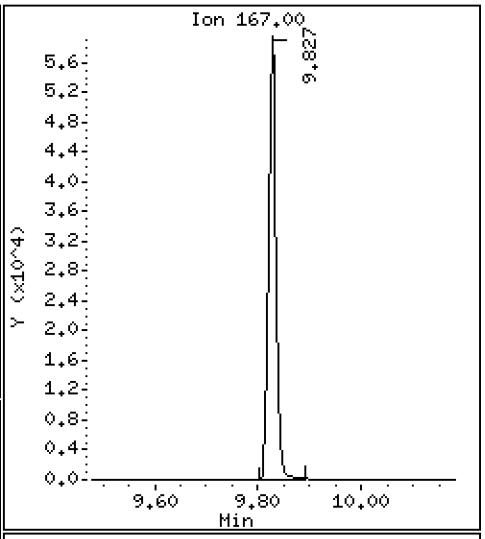
Column phase: Rxi-17sil

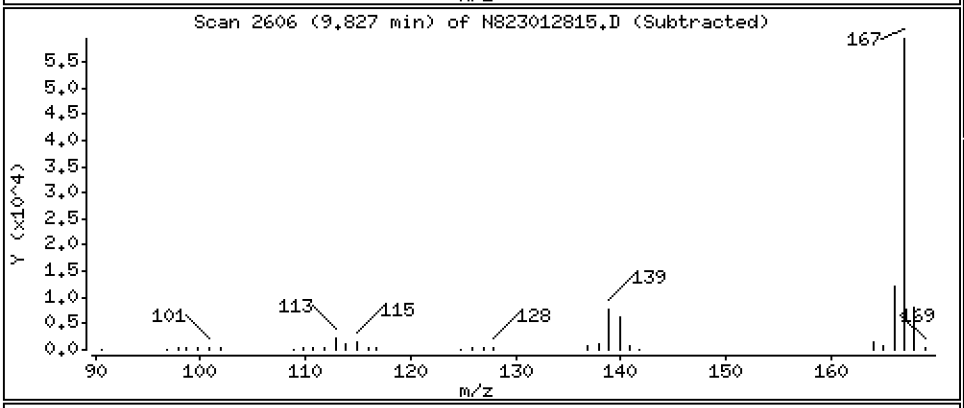
Column diameter: 0.25

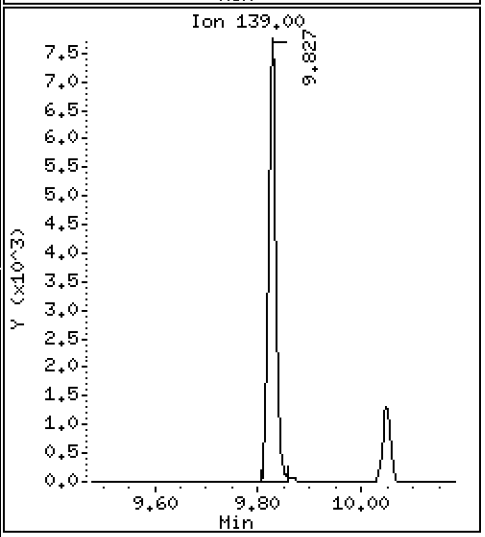
19 Carbazole

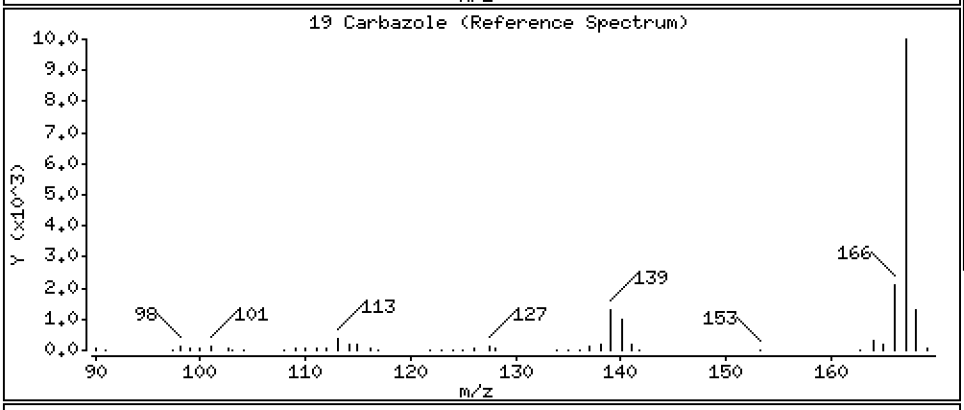
Concentration: 2.682 ug/mL

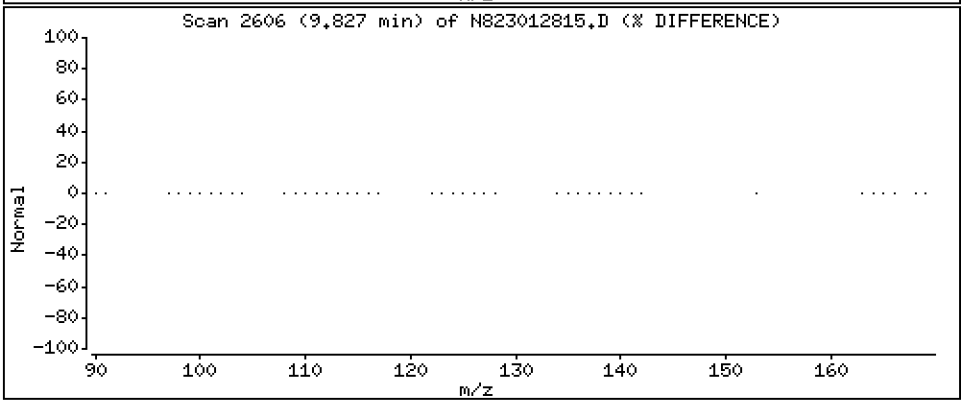












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Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

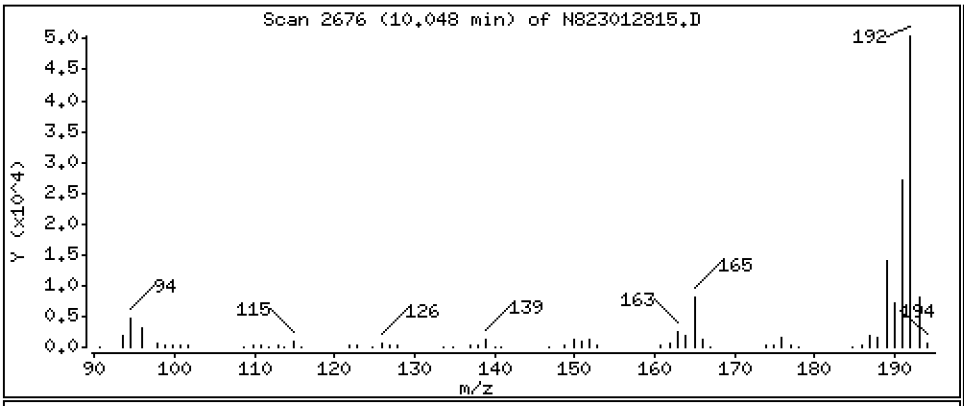
Operator: JZ

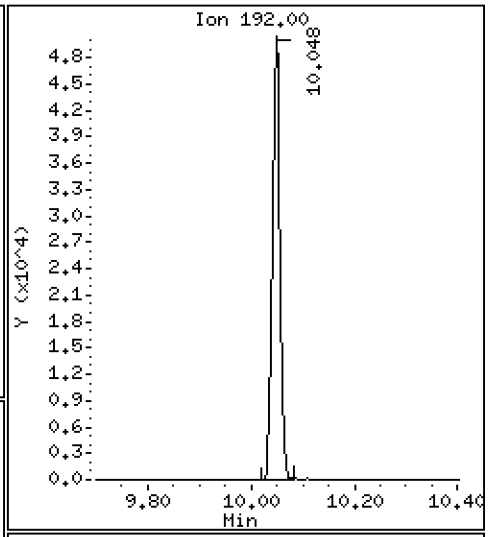
Column phase: Rxi-17sil

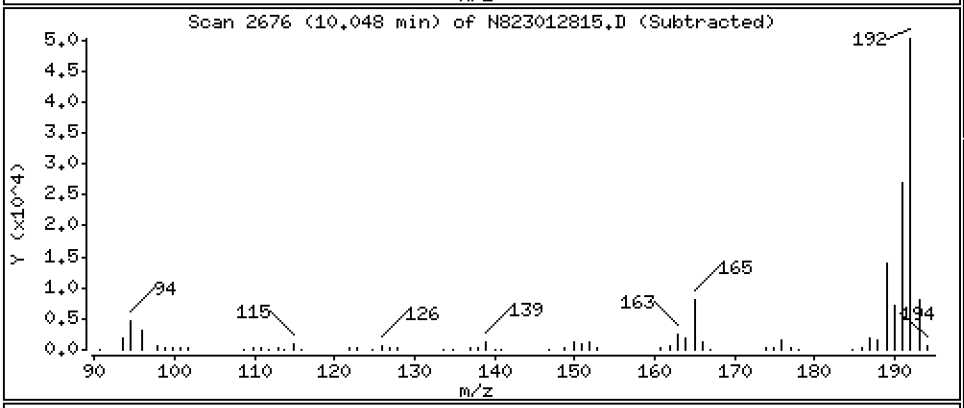
Column diameter: 0.25

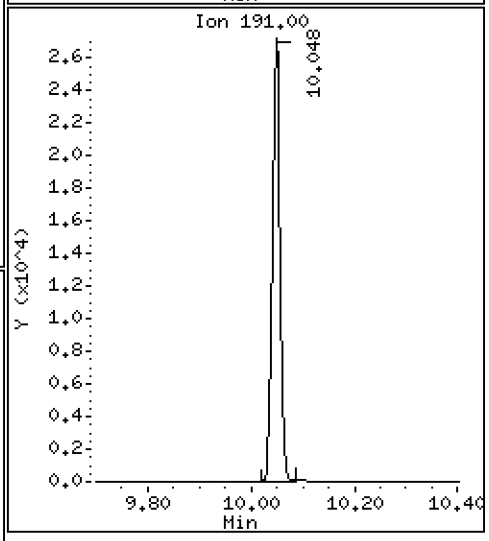
20 1-Methylphenanthrene

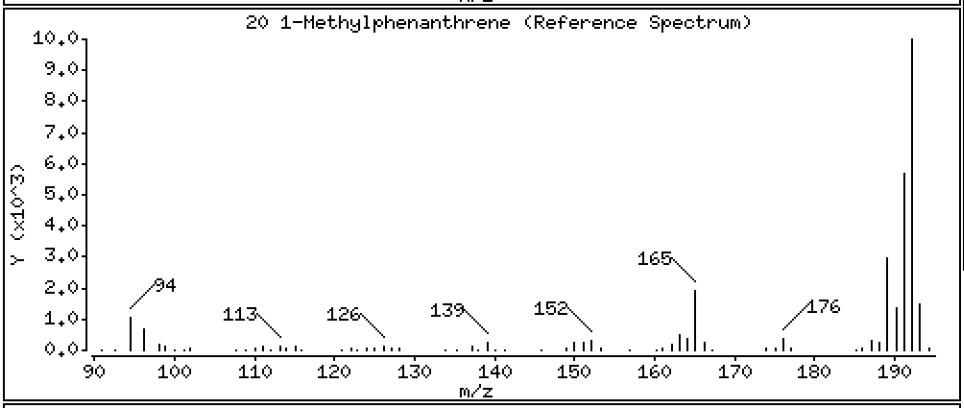
Concentration: 2.665 ug/mL

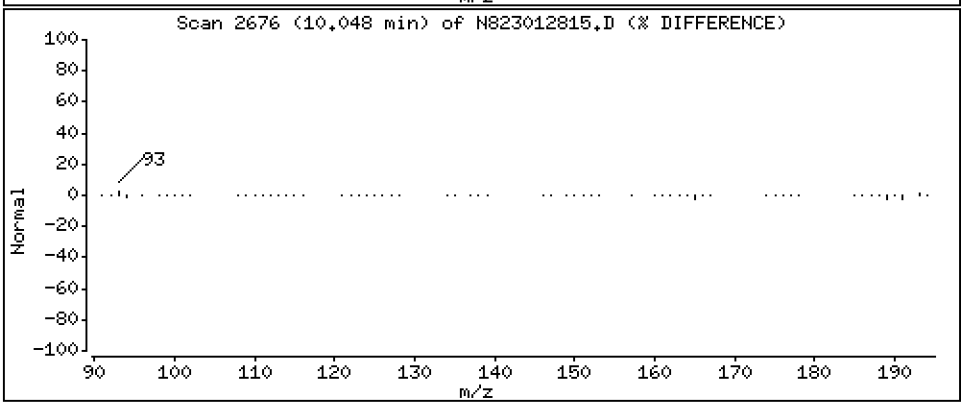












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Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

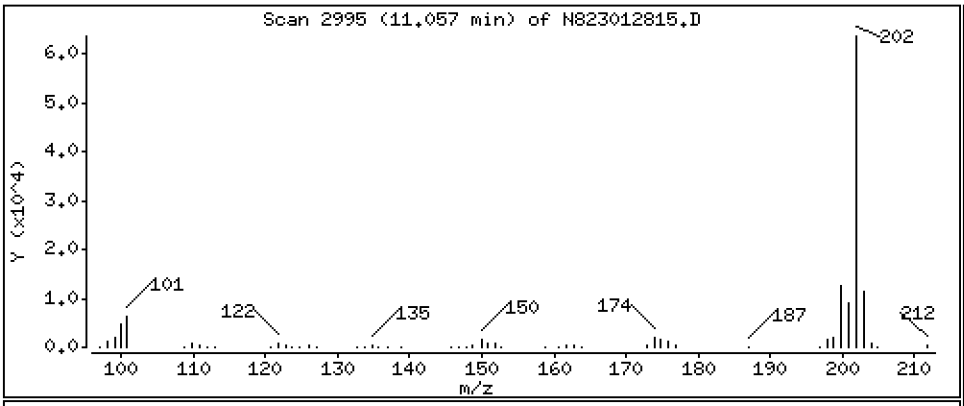
Operator: JZ

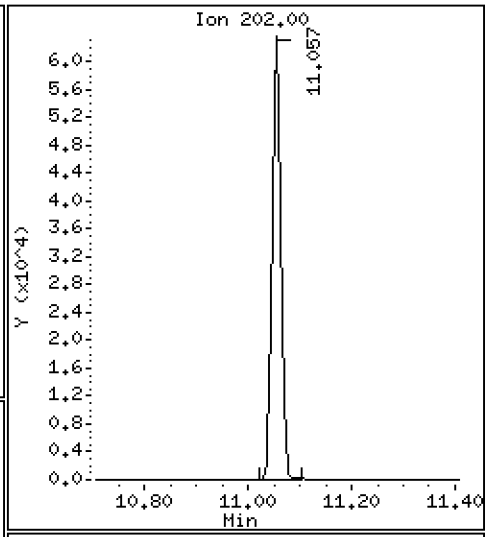
Column phase: Rxi-17sil

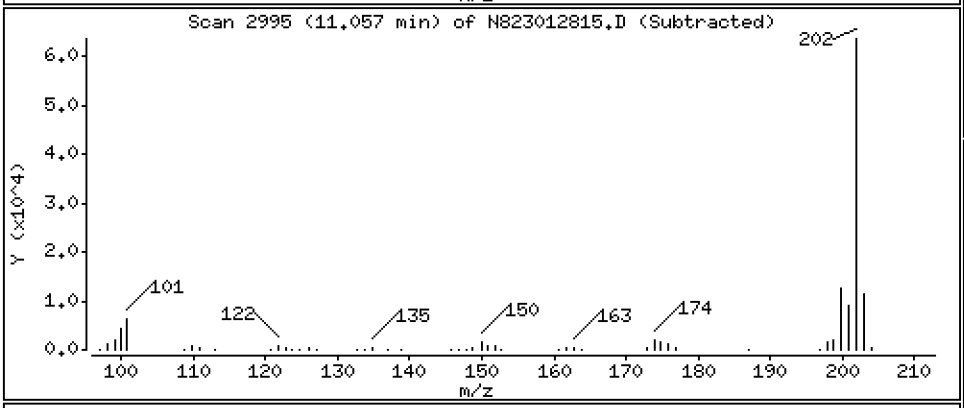
Column diameter: 0.25

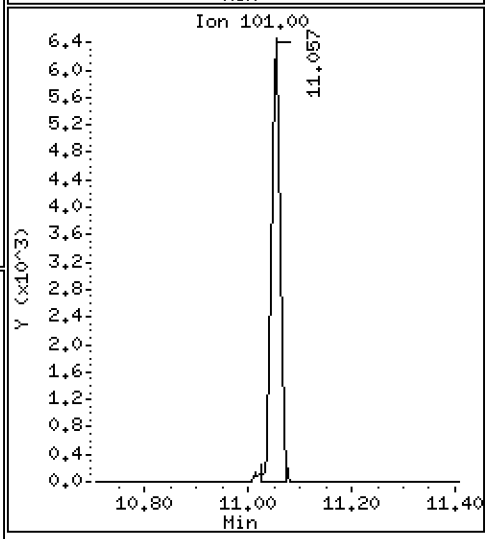
22 Fluoranthene

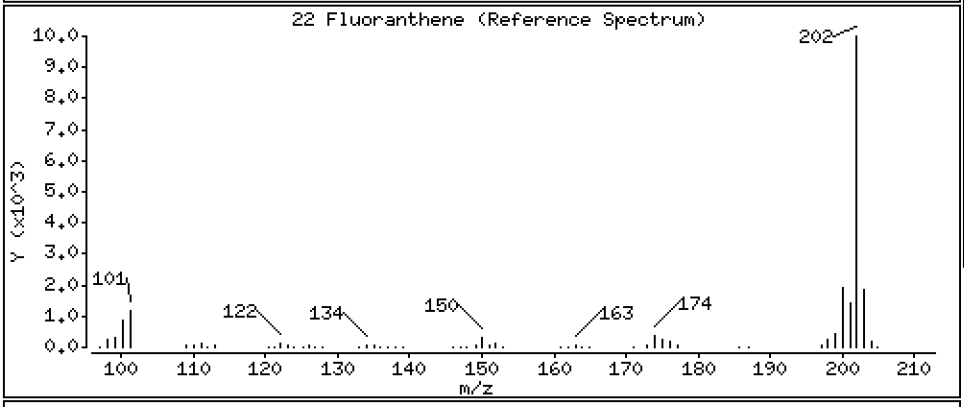
Concentration: 2.606 ug/mL

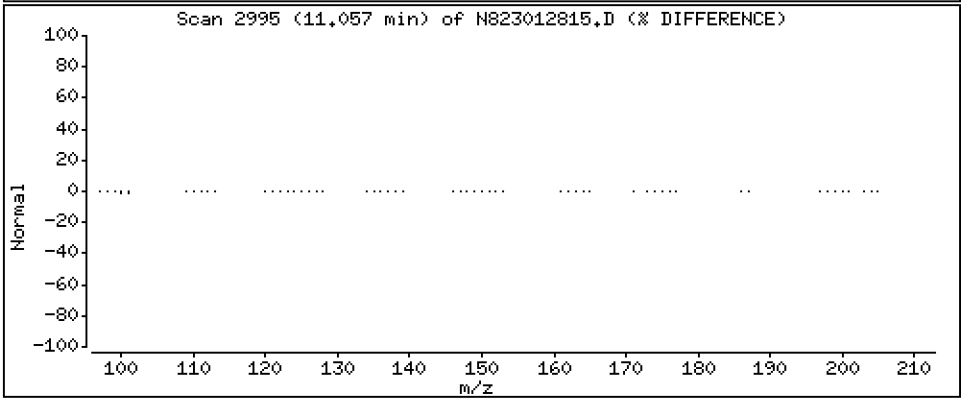












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

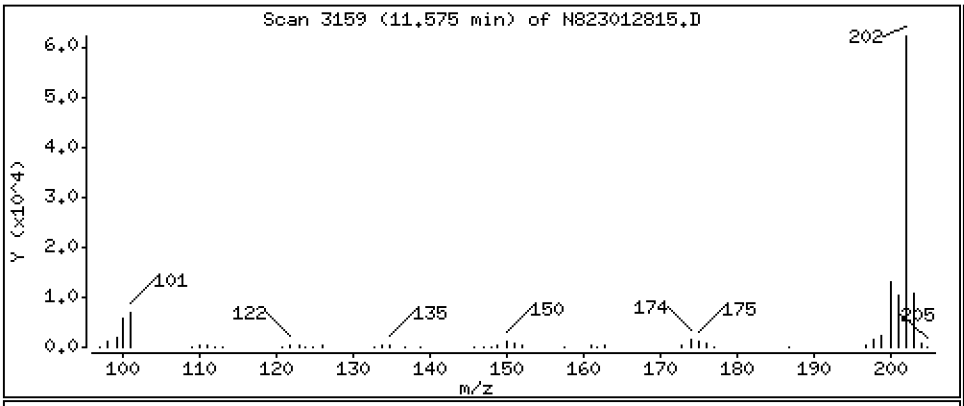
Operator: JZ

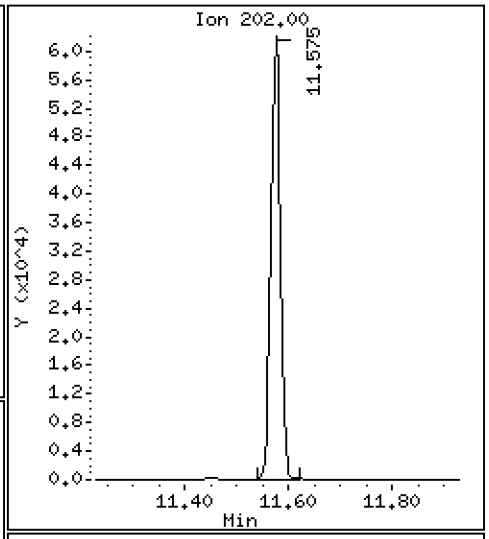
Column phase: Rxi-17sil

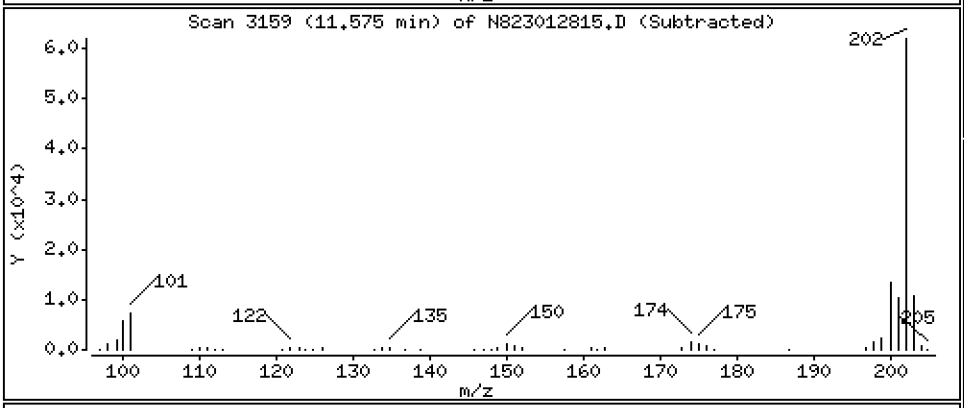
Column diameter: 0.25

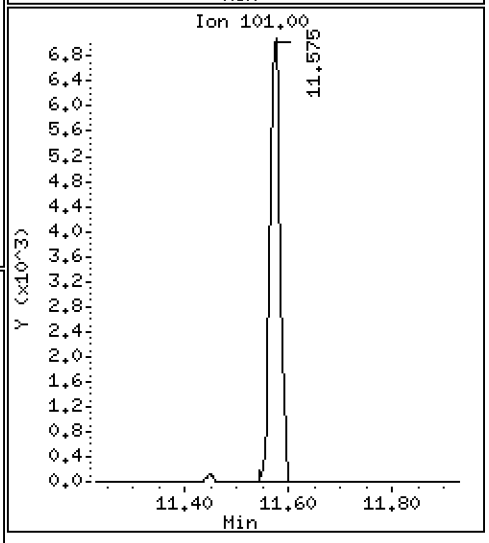
23 Pyrene

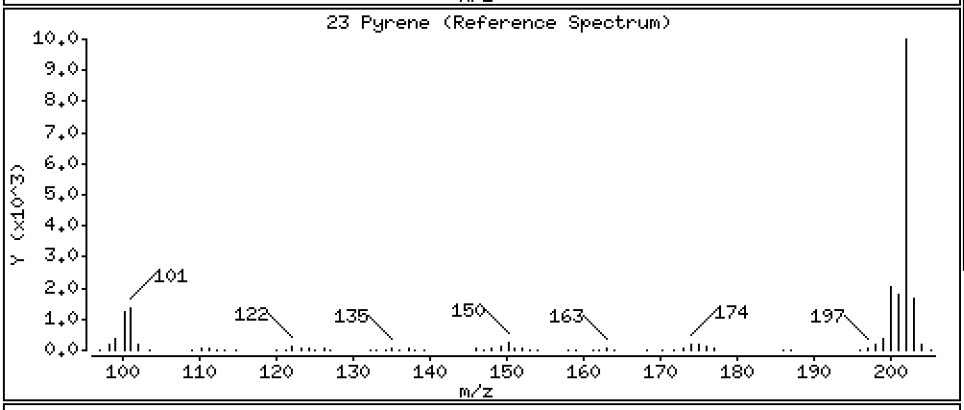
Concentration: 2.701 ug/mL

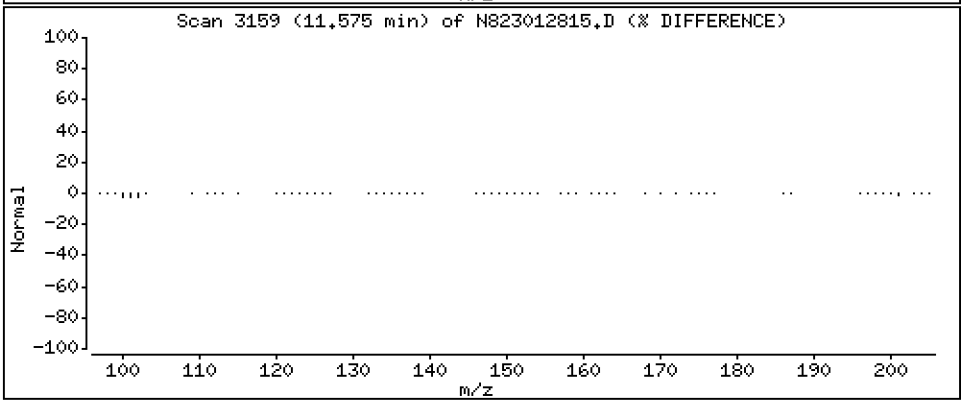












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

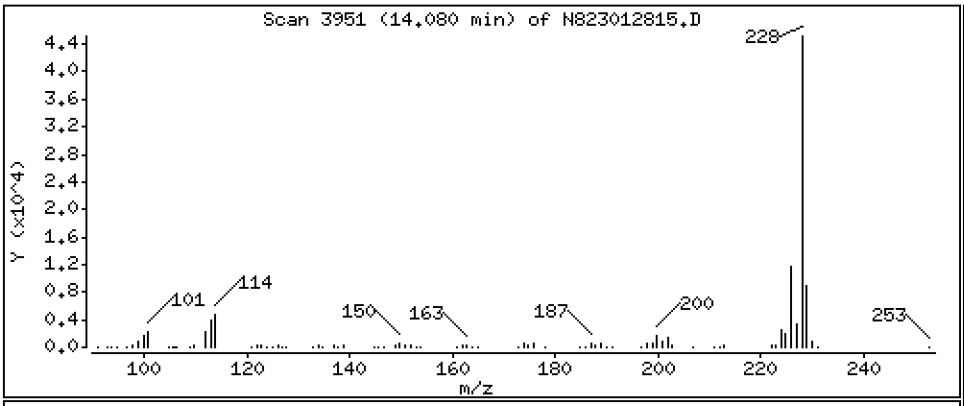
Operator: JZ

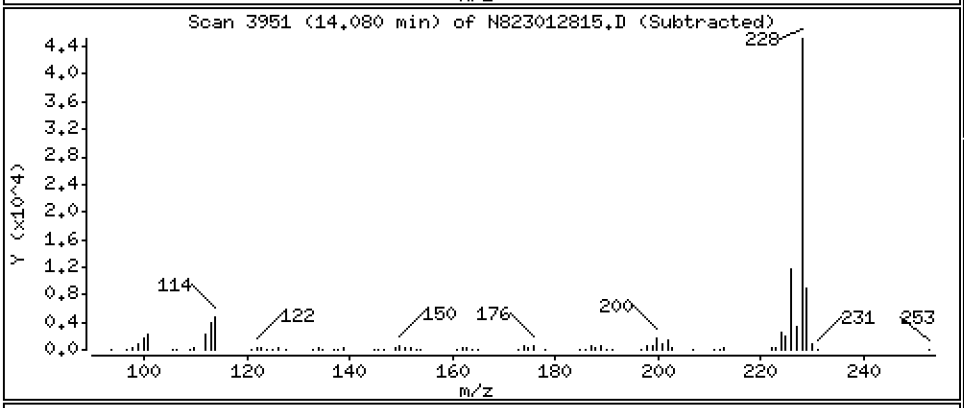
Column phase: Rxi-17sil

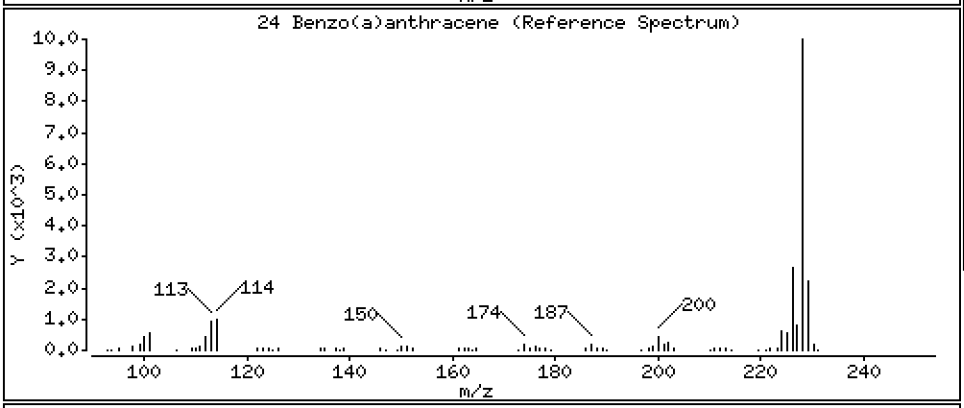
Column diameter: 0.25

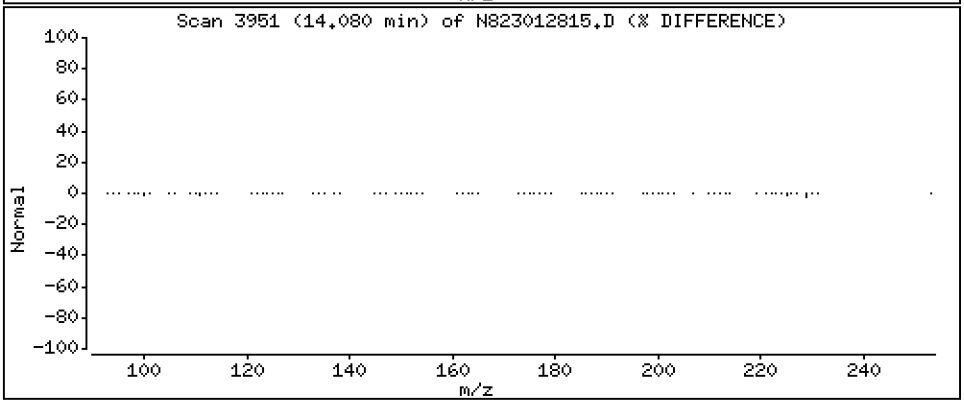
24 Benzo(a)anthracene

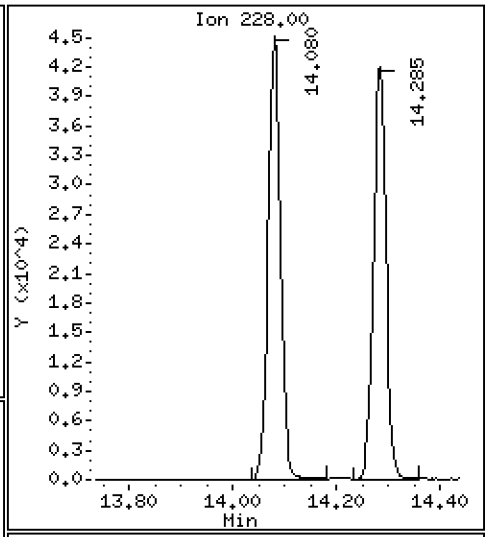
Concentration: 2.864 ug/mL

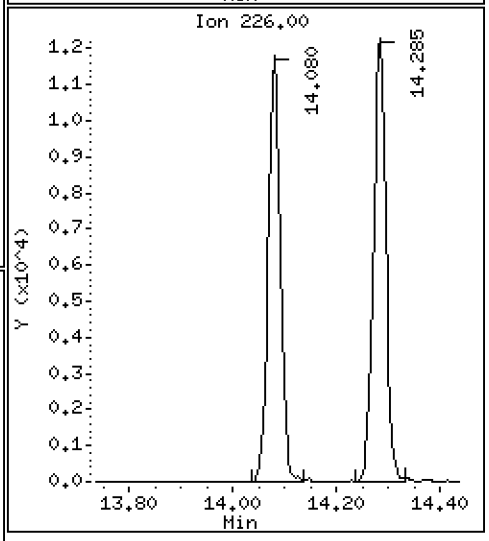












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

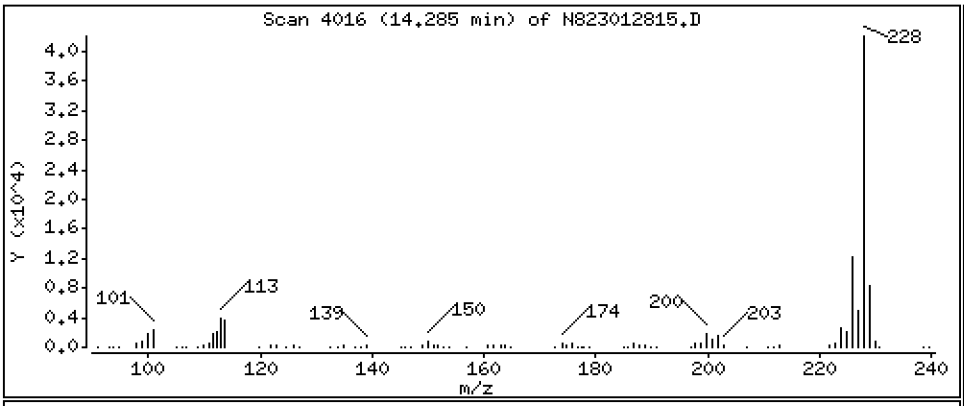
Operator: JZ

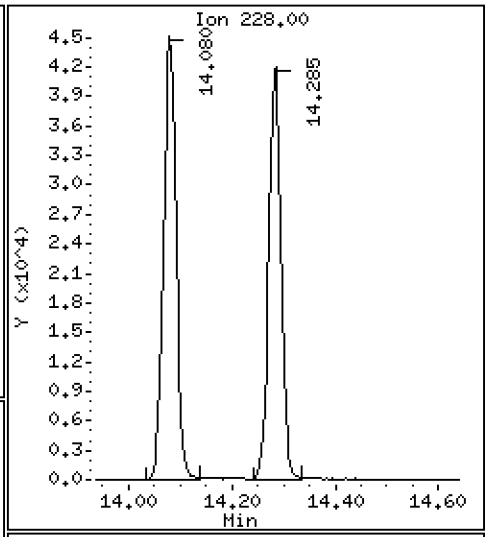
Column phase: Rxi-17sil

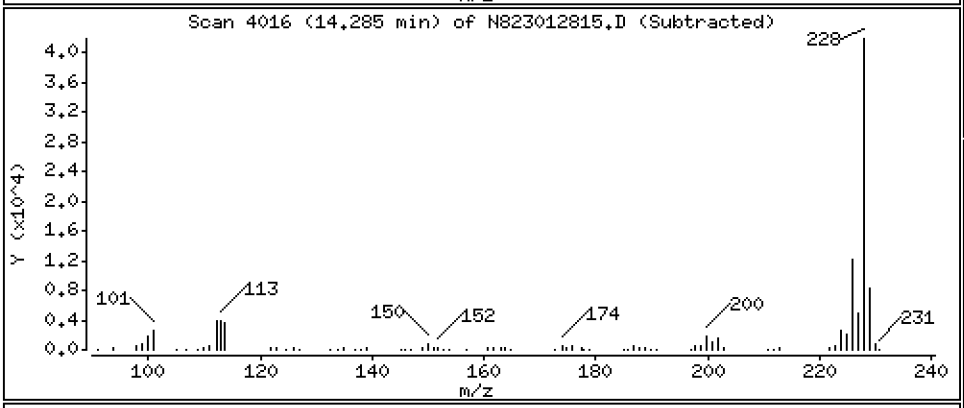
Column diameter: 0.25

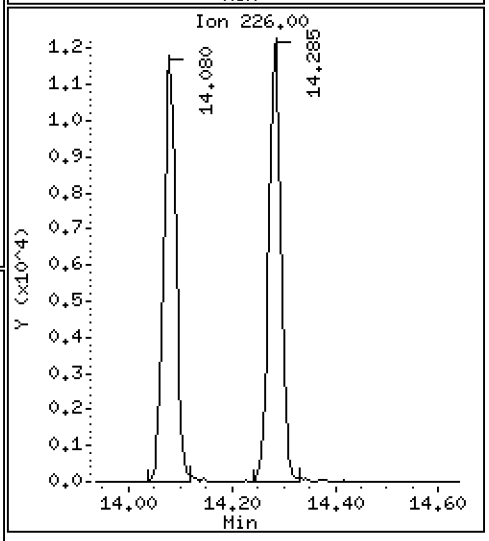
27 Chrysene

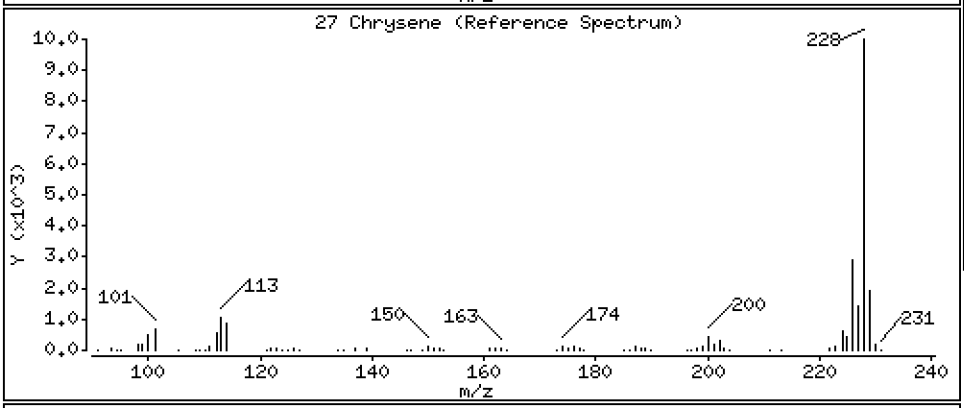
Concentration: 2.476 ug/mL

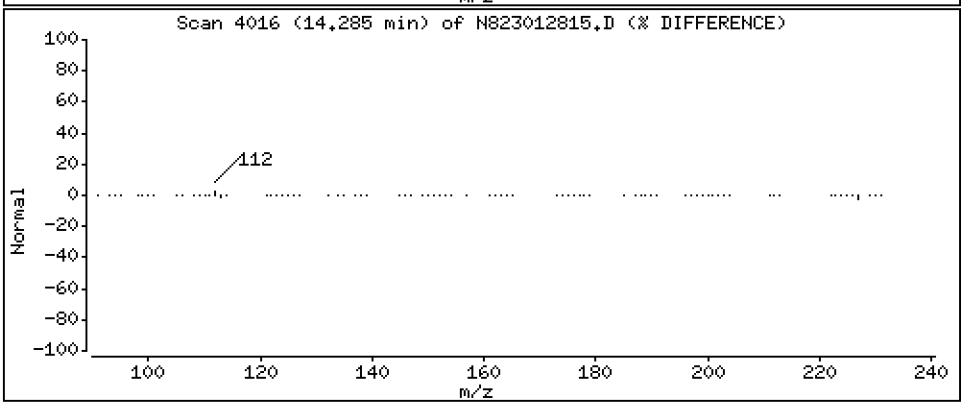












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

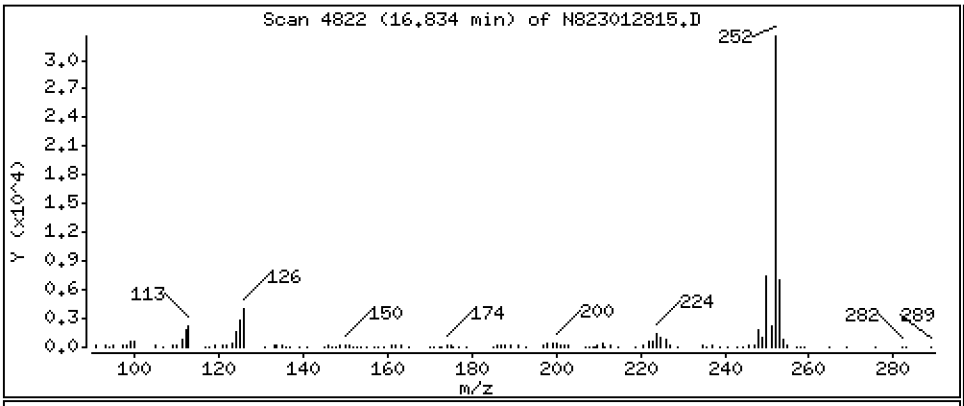
Operator: JZ

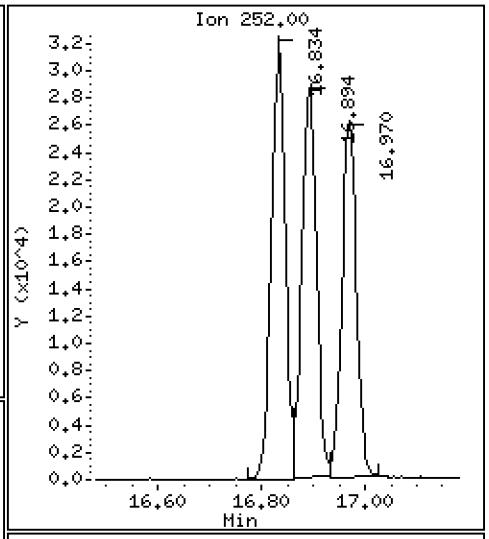
Column phase: Rxi-17sil

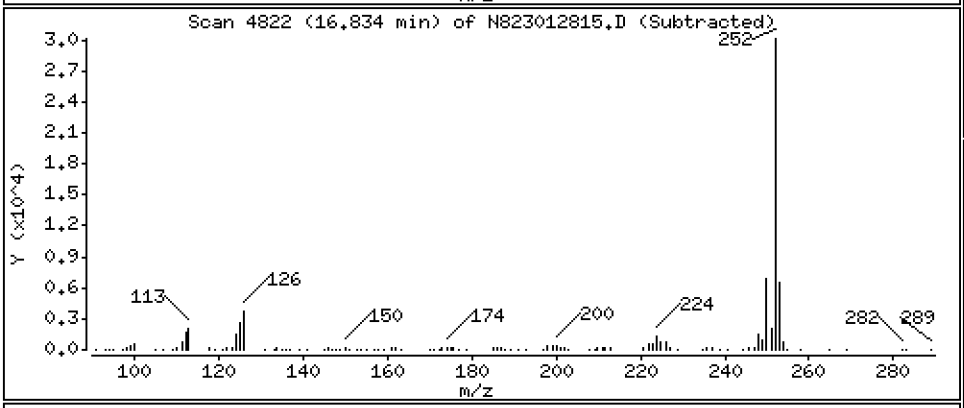
Column diameter: 0.25

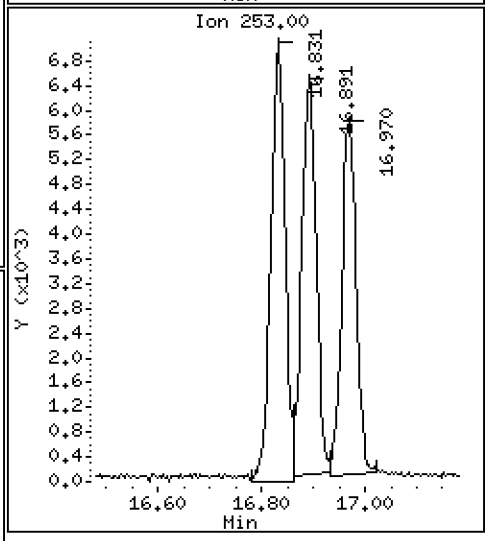
28 Benzo(b)fluoranthene

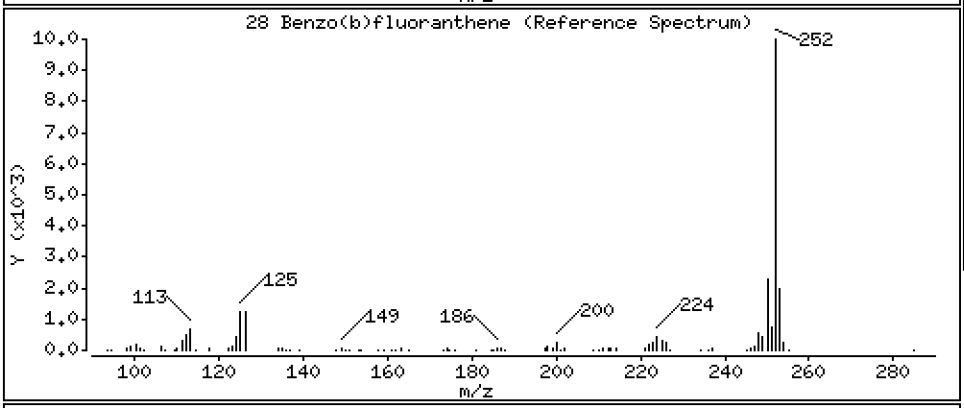
Concentration: 2.808 ug/mL

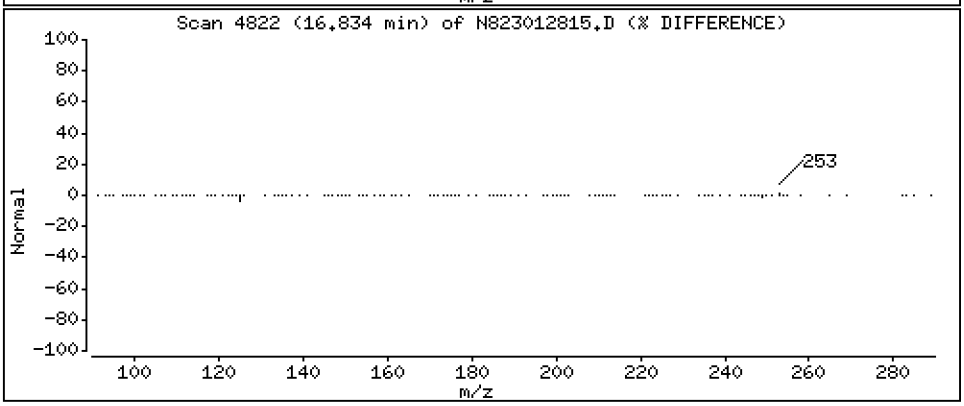












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

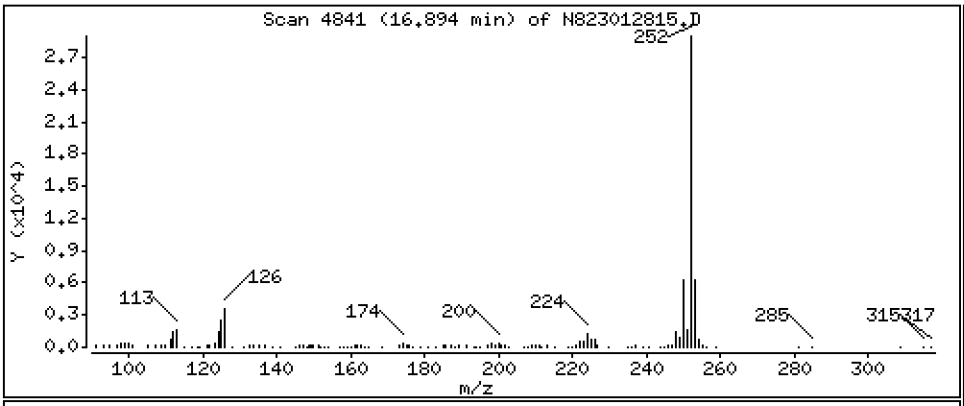
Operator: JZ

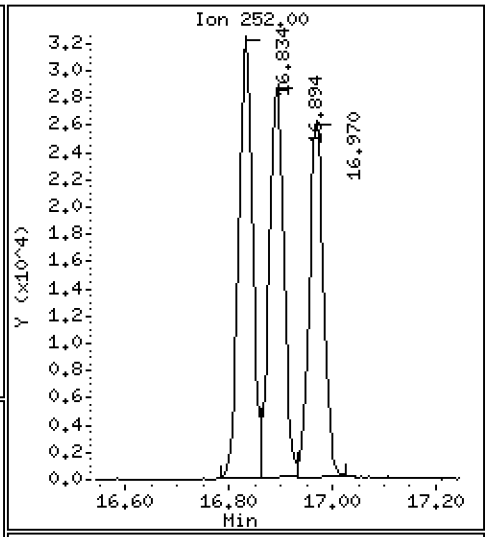
Column phase: Rxi-17sil

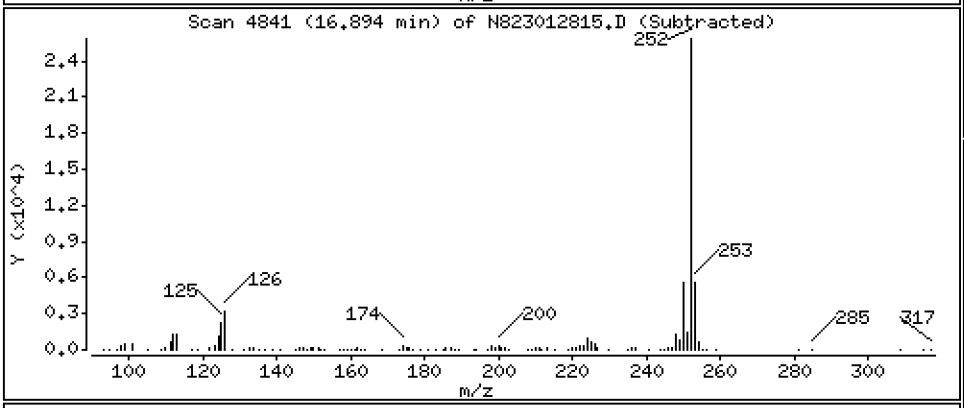
Column diameter: 0.25

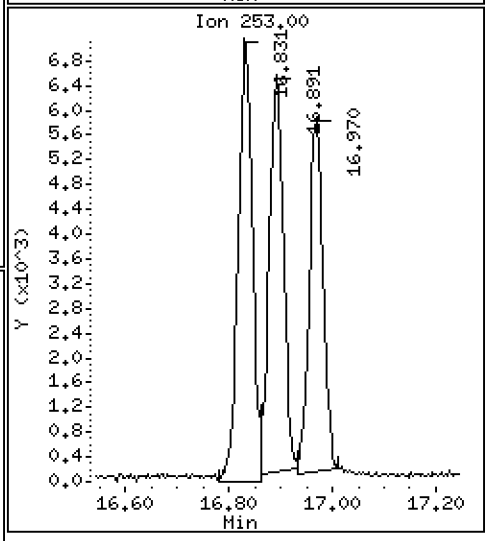
29 Benzo(k)fluoranthene

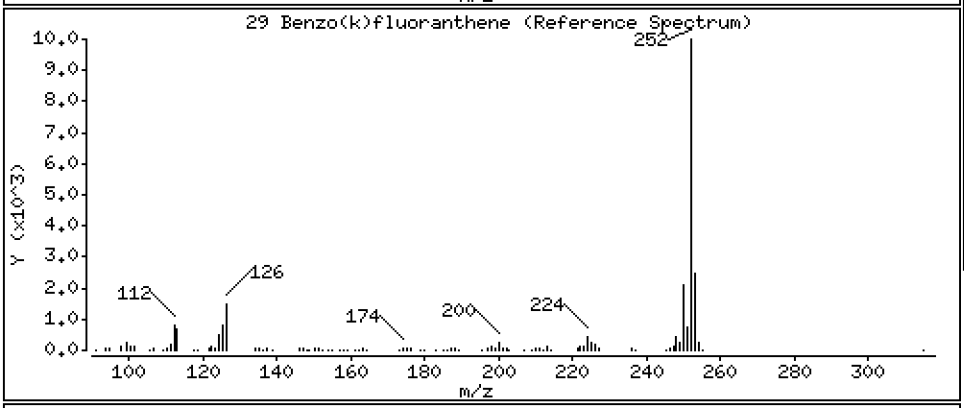
Concentration: 2.664 ug/mL

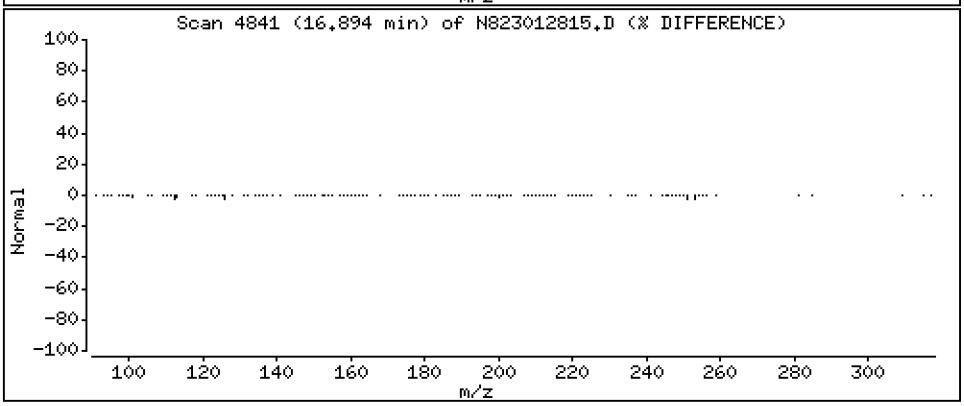












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

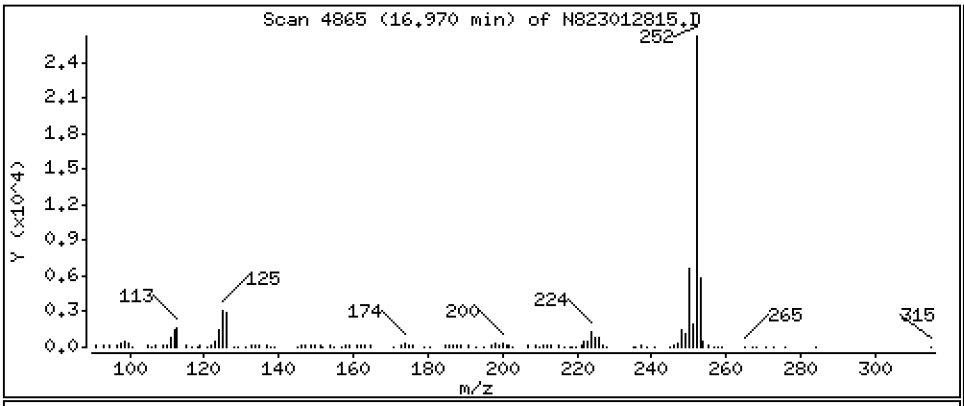
Operator: JZ

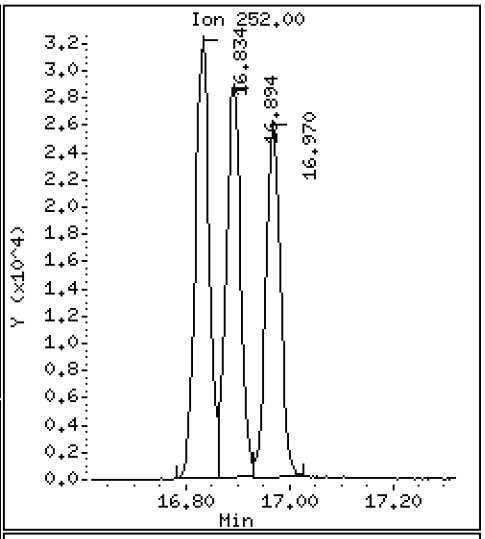
Column phase: Rxi-17sil

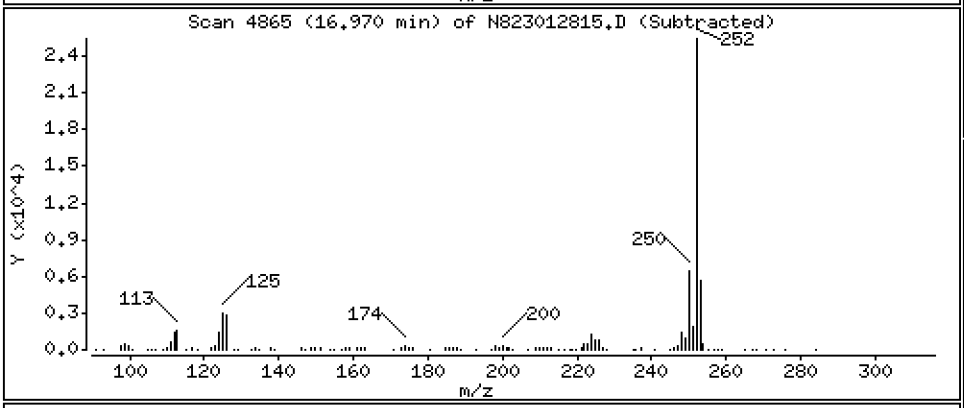
Column diameter: 0.25

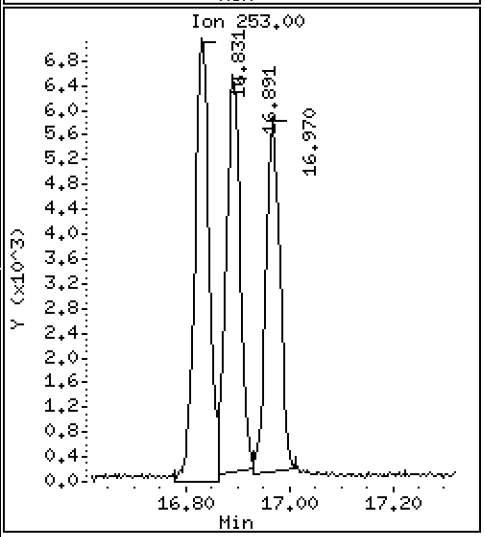
30 Benzo(j)fluoranthene

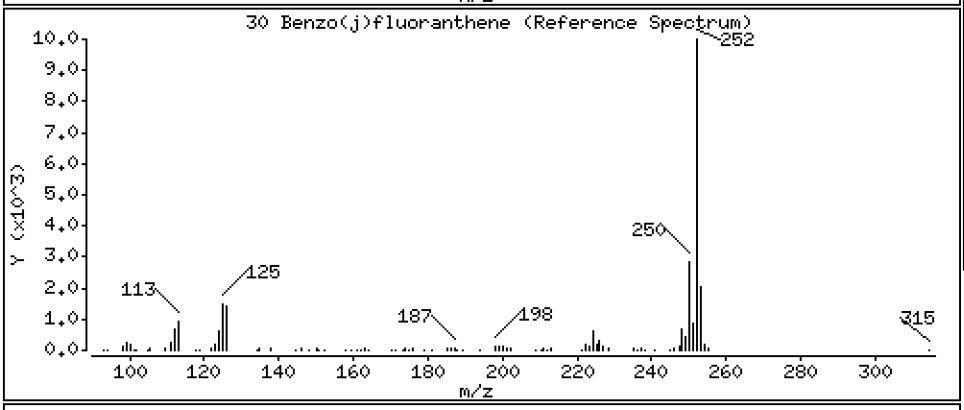
Concentration: 2.651 ug/mL

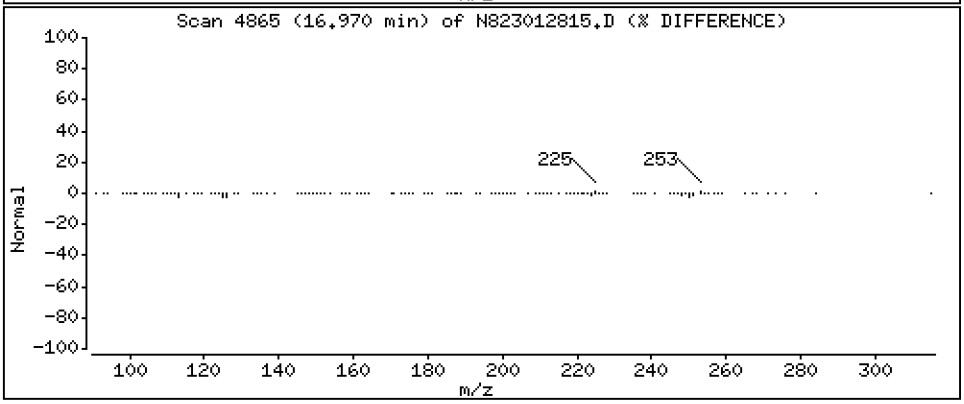












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

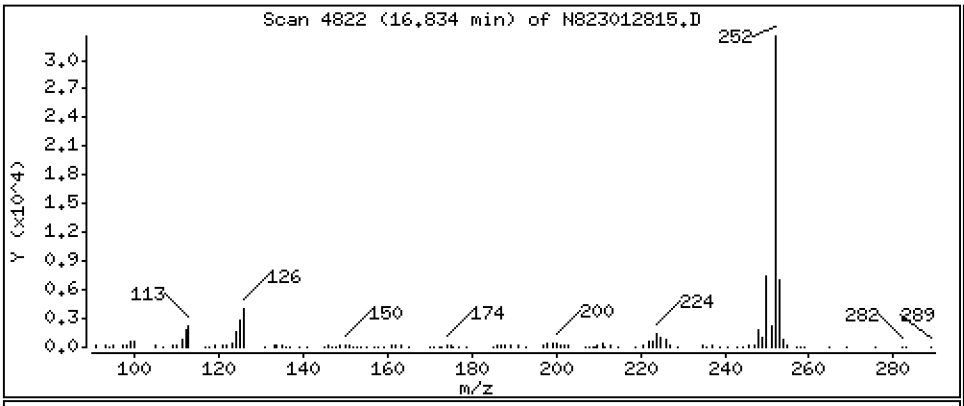
Operator: JZ

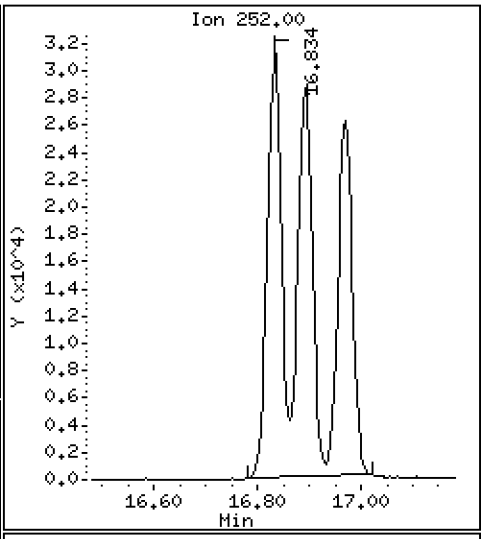
Column phase: Rxi-17sil

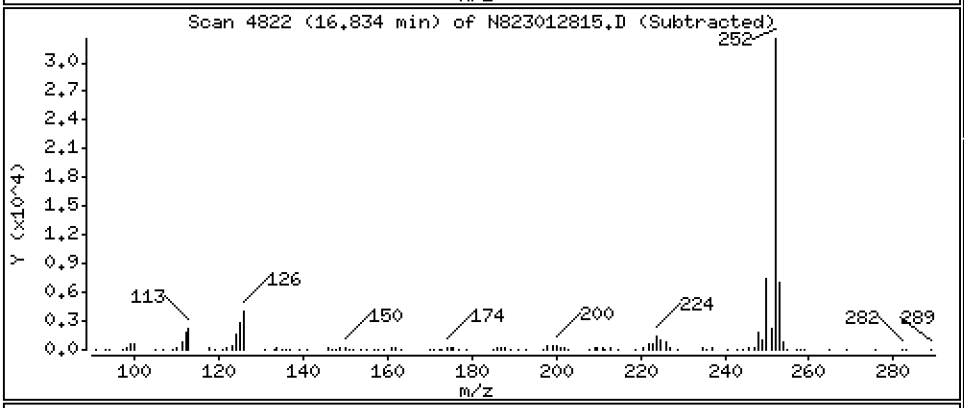
Column diameter: 0.25

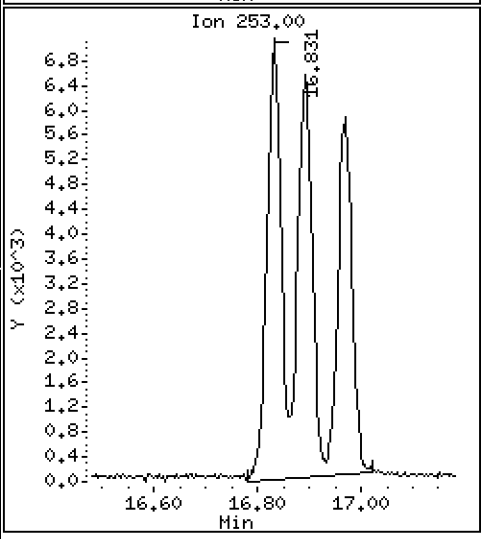
31 Total Benzofluoranthenes

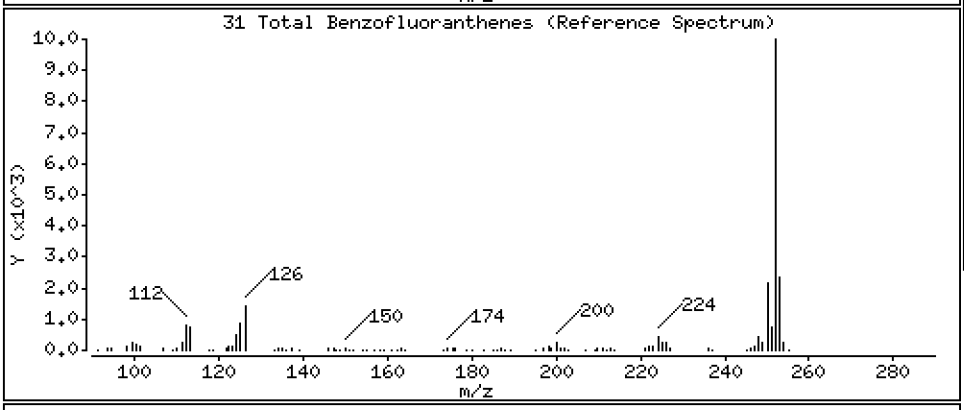
Concentration: 8.062 ug/mL

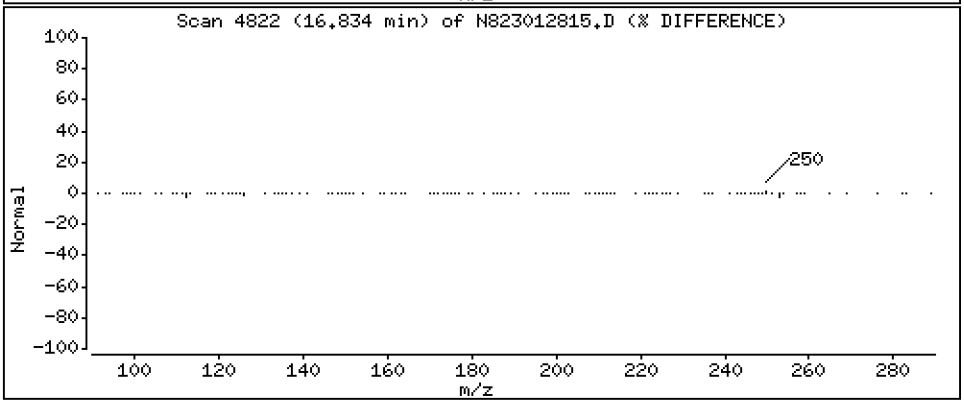












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

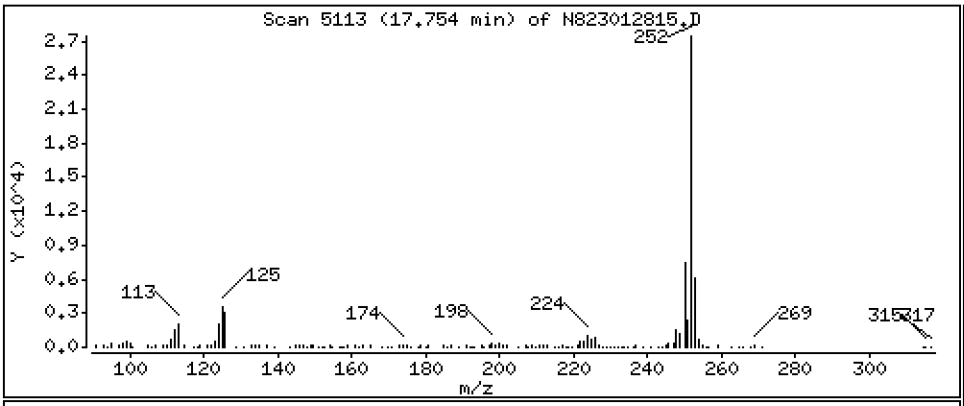
Operator: JZ

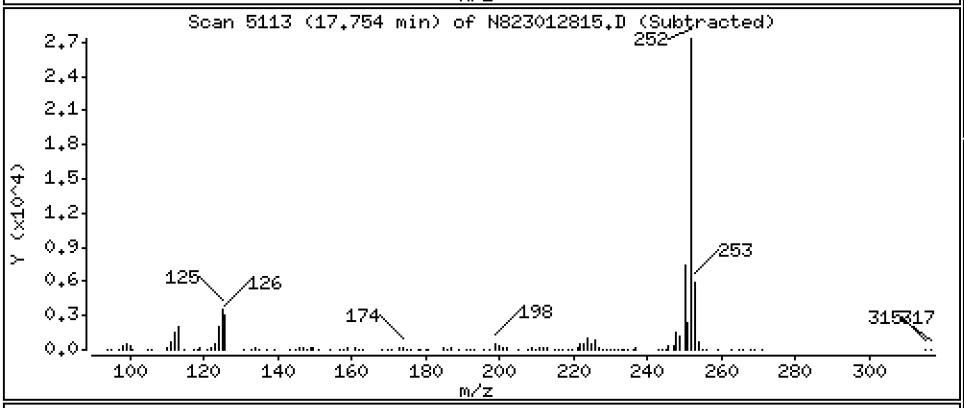
Column phase: Rxi-17sil

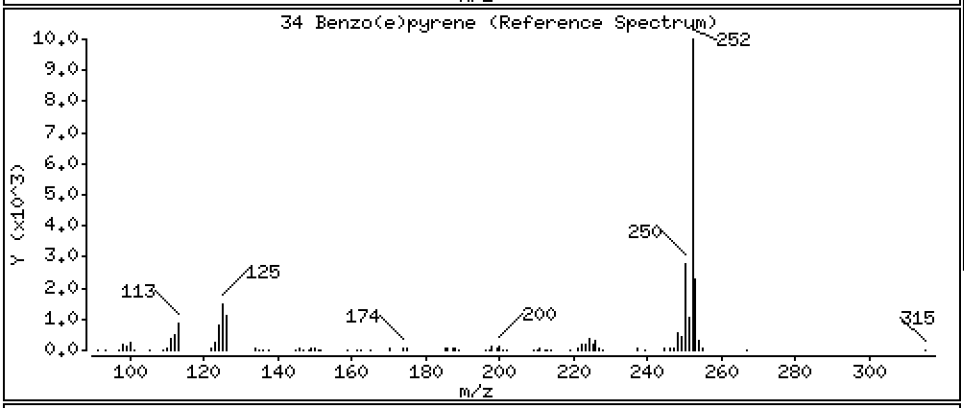
Column diameter: 0.25

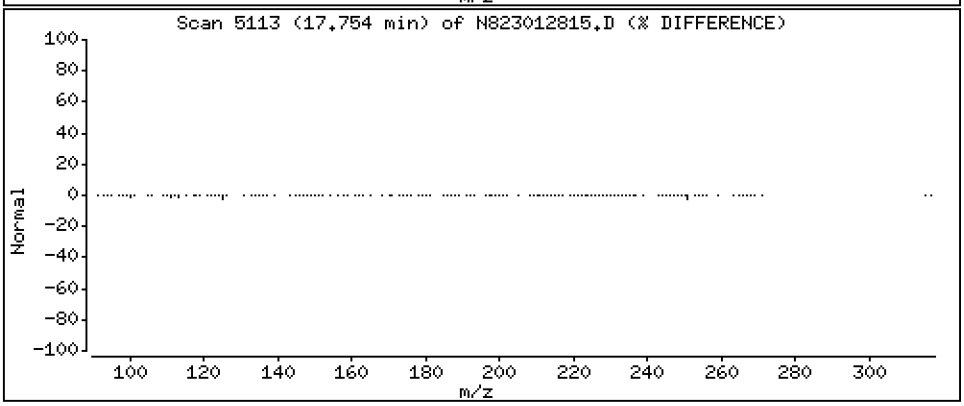
34 Benzo(e)pyrene

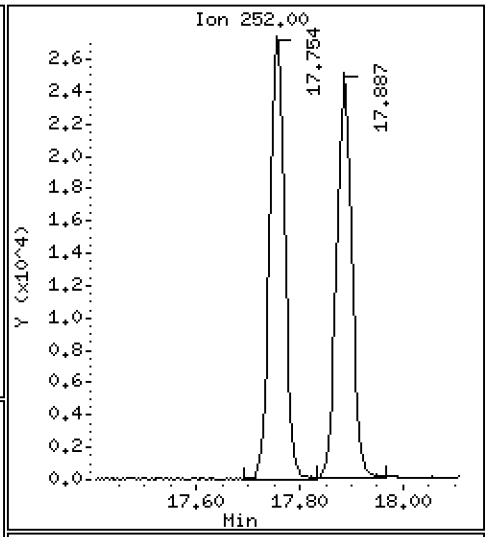
Concentration: 2.567 ug/mL

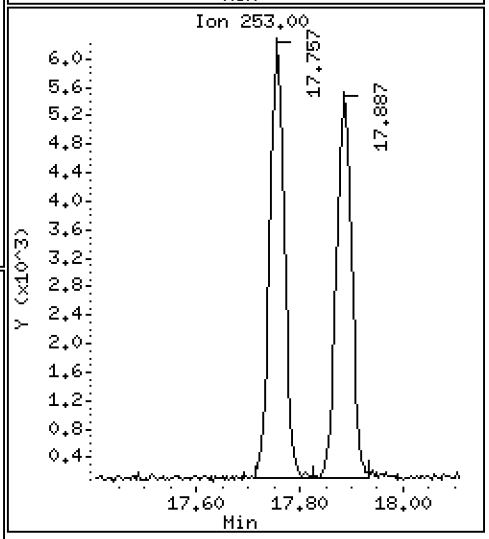












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

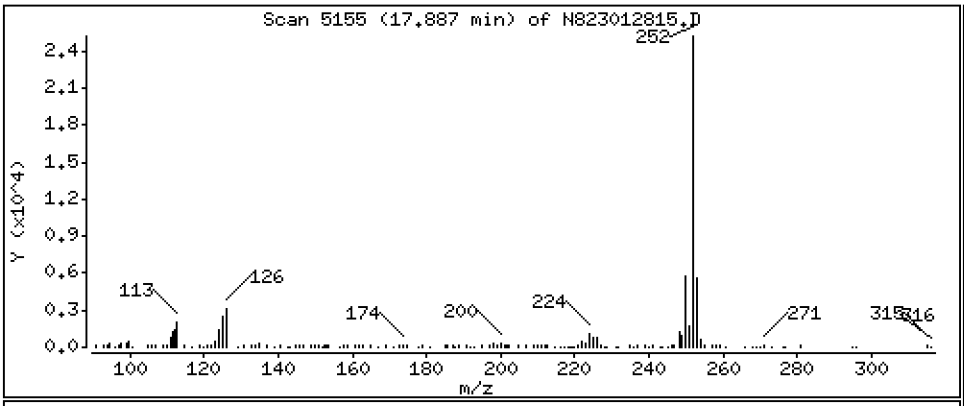
Operator: JZ

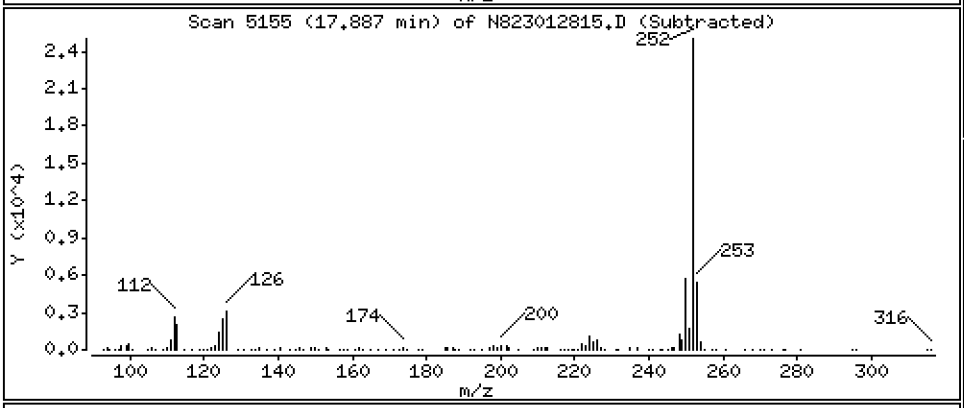
Column phase: Rxi-17sil

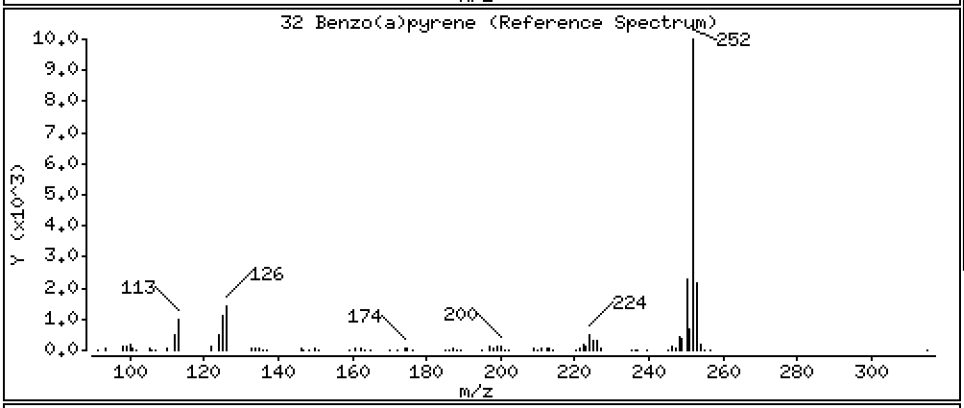
Column diameter: 0.25

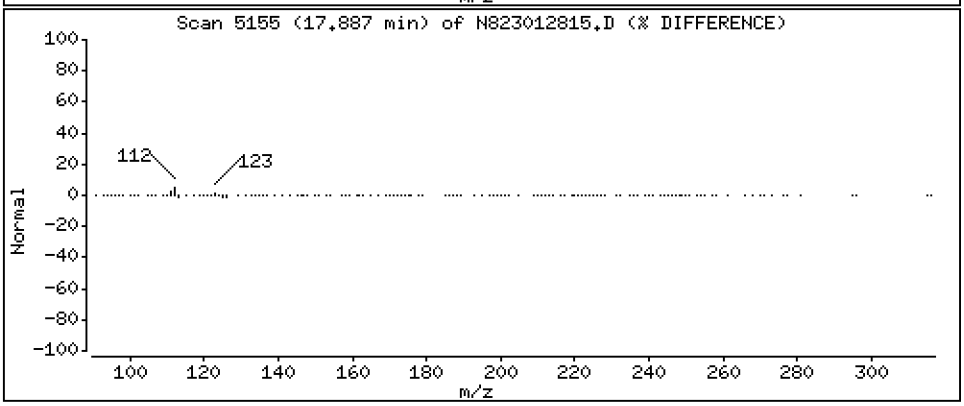
32 Benzo(a)pyrene

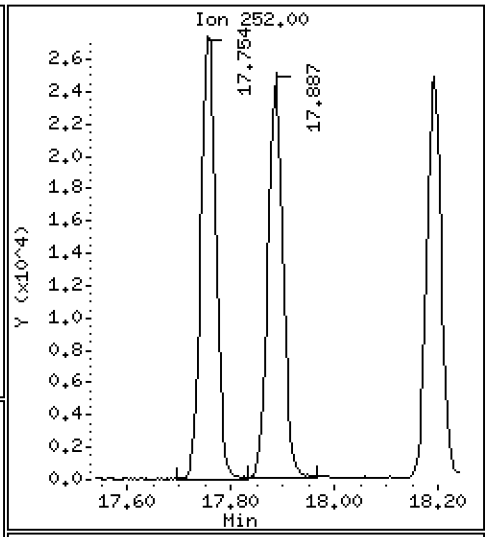
Concentration: 2.642 ug/mL

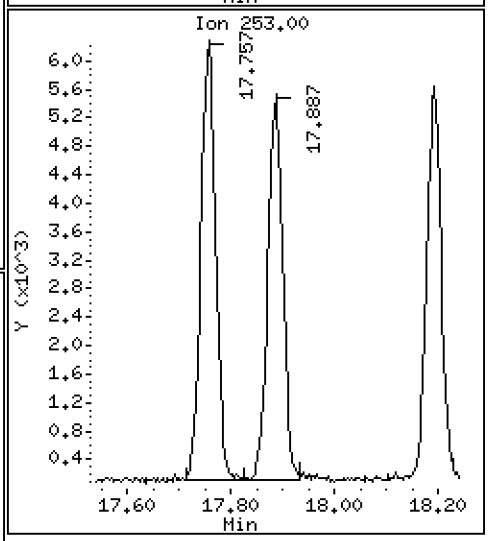












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

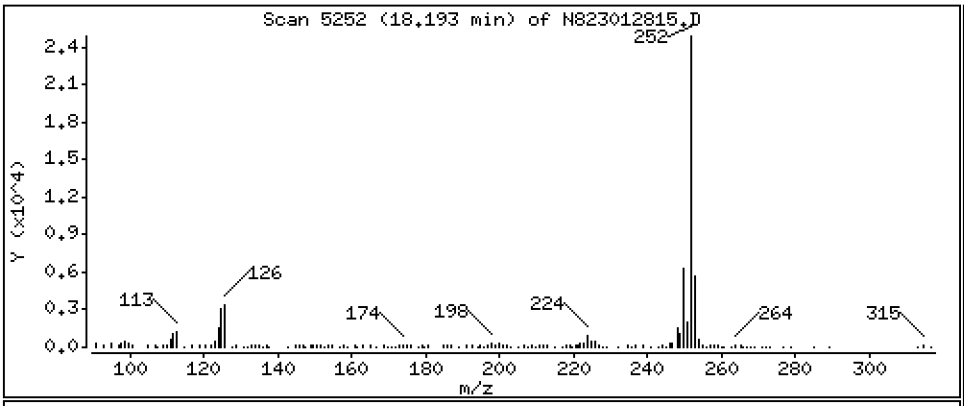
Operator: JZ

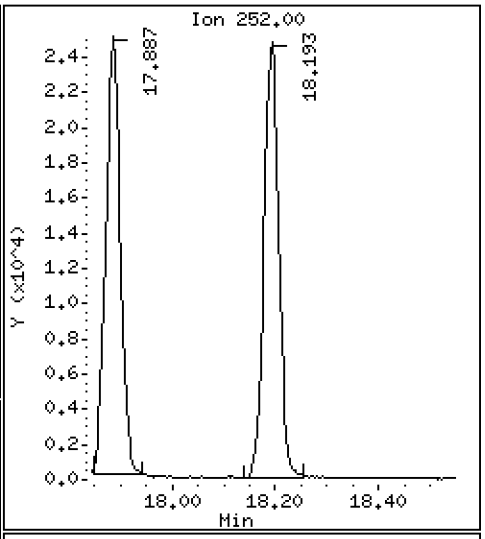
Column phase: Rxi-17sil

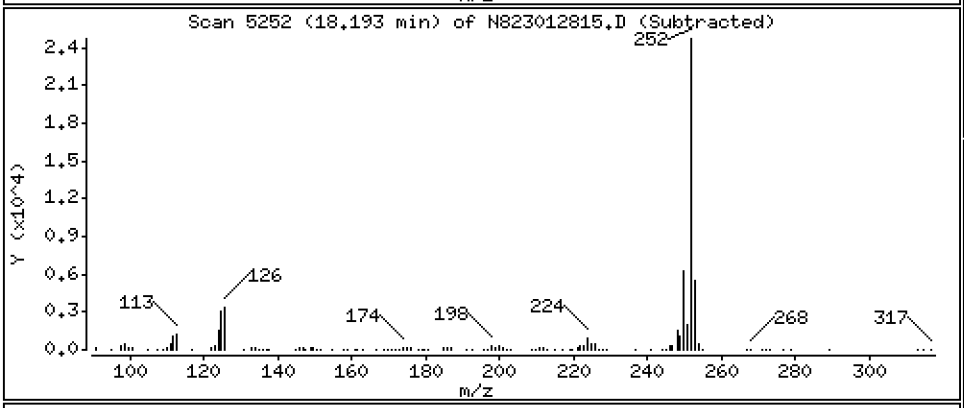
Column diameter: 0.25

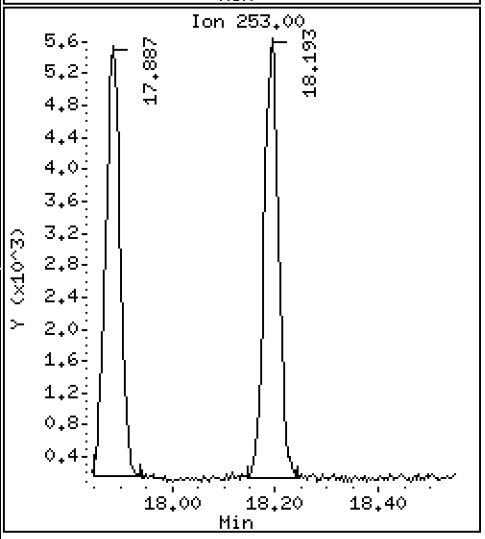
35 Perylene

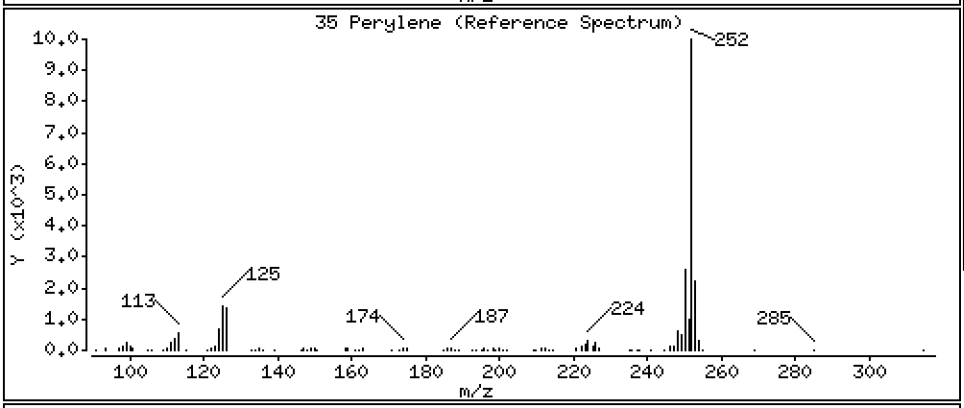
Concentration: 2.410 ug/mL

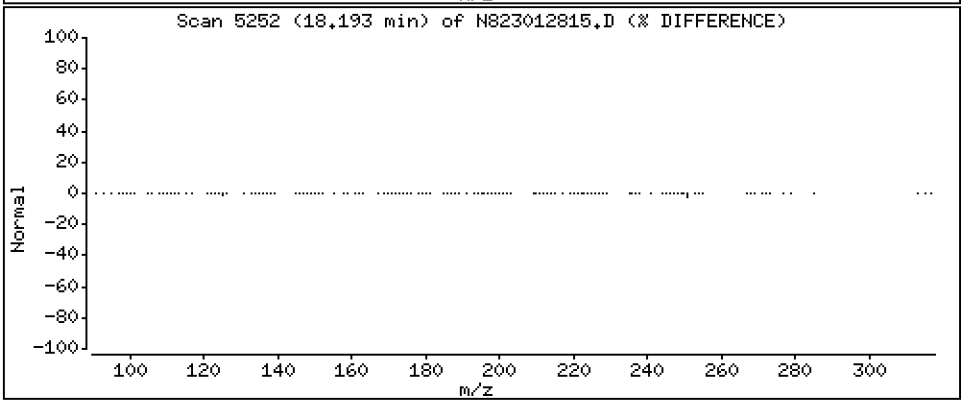












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

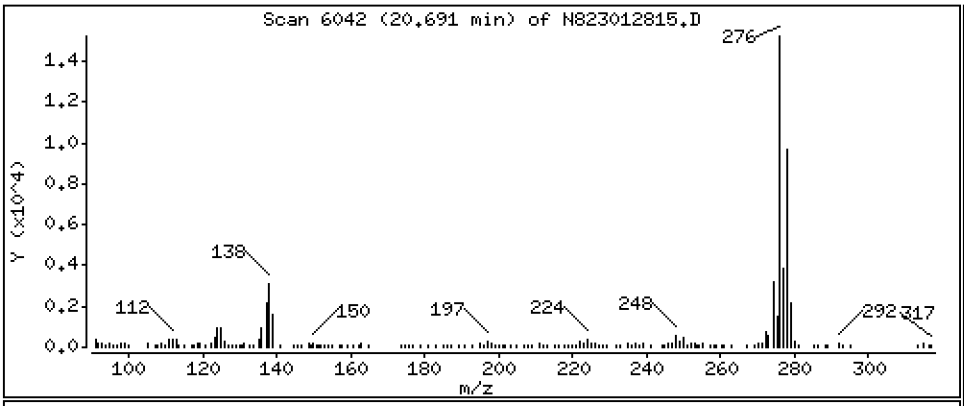
Operator: JZ

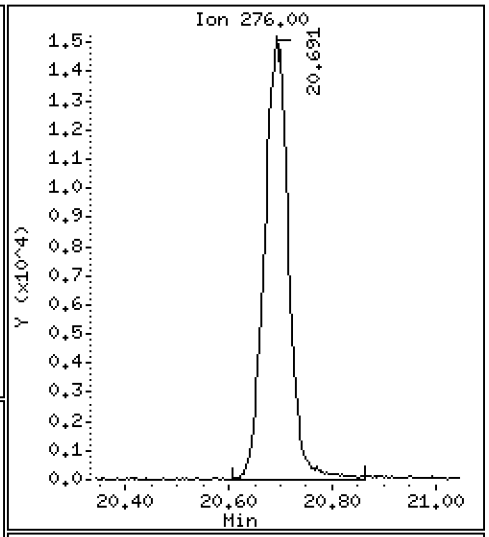
Column phase: Rxi-17sil

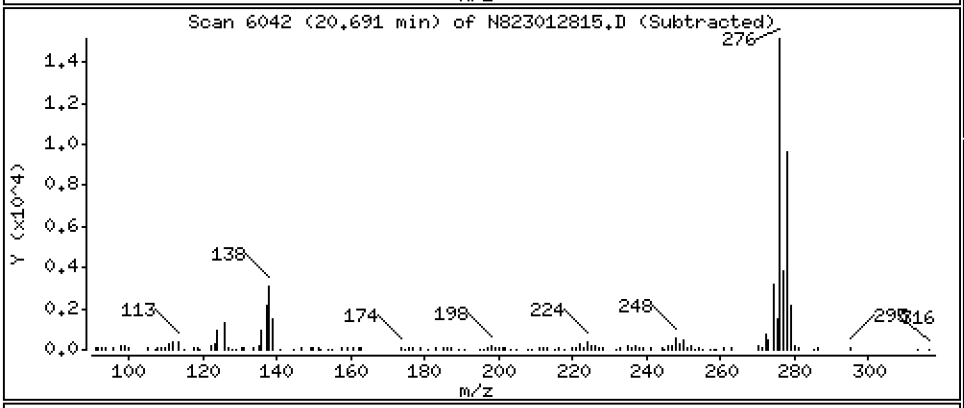
Column diameter: 0.25

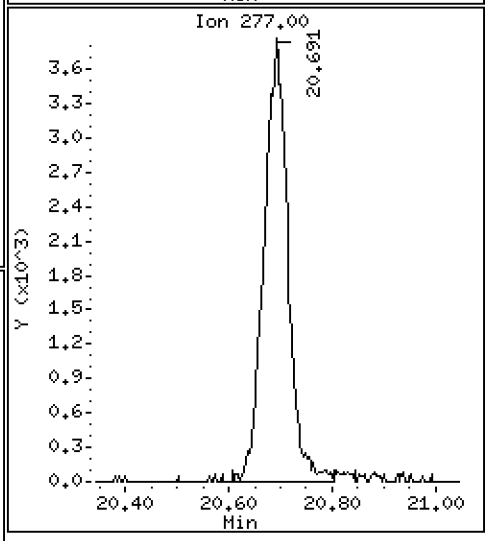
37 Indeno(1,2,3-cd)pyrene

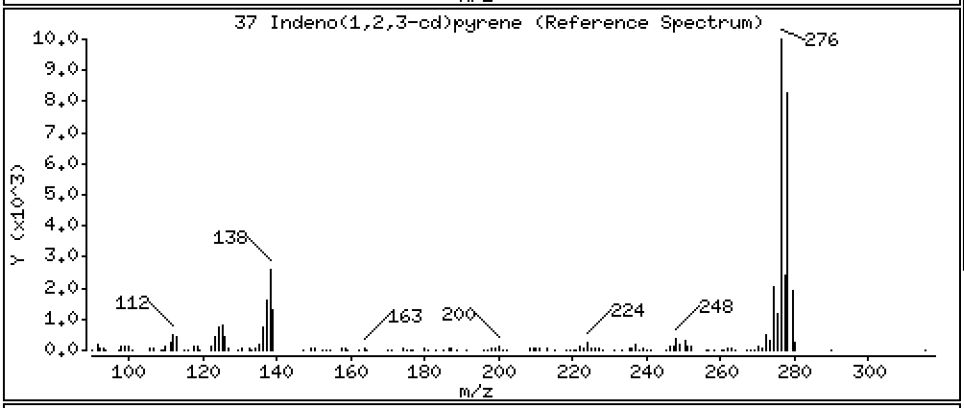
Concentration: 2.275 ug/mL

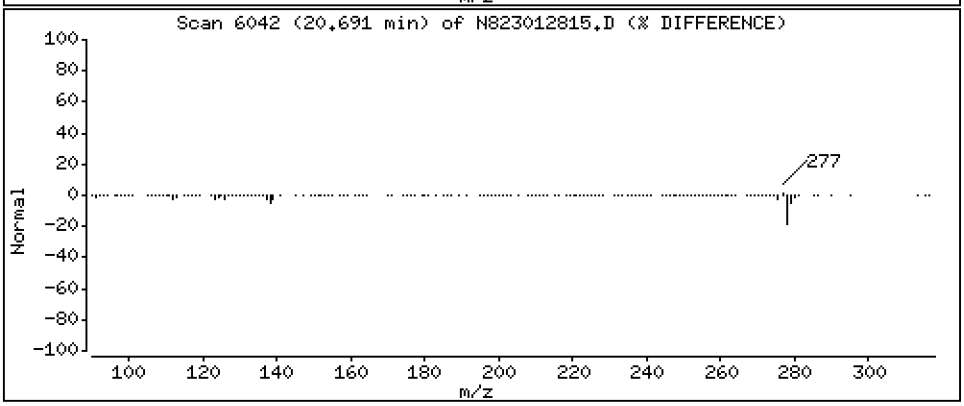












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

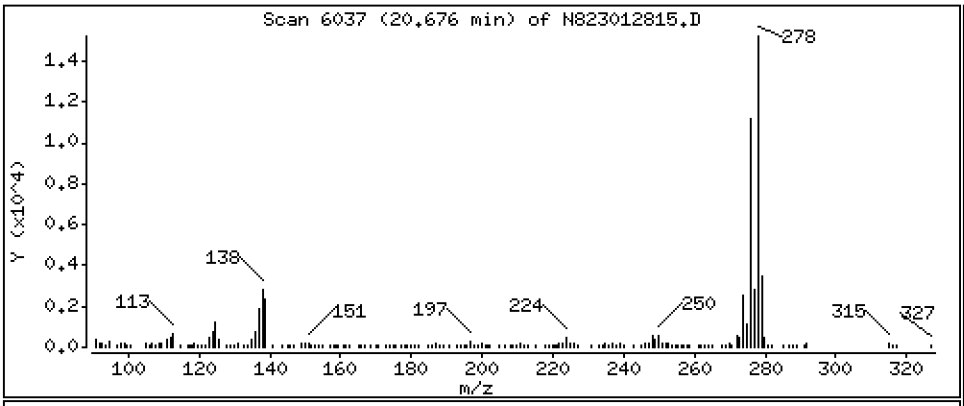
Operator: JZ

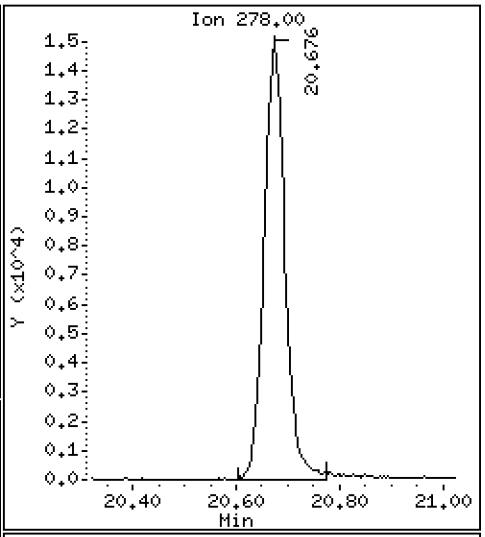
Column phase: Rxi-17sil

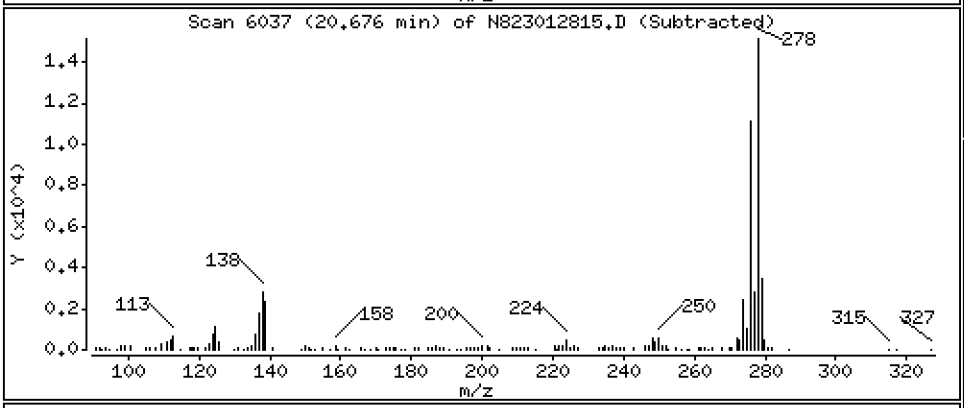
Column diameter: 0.25

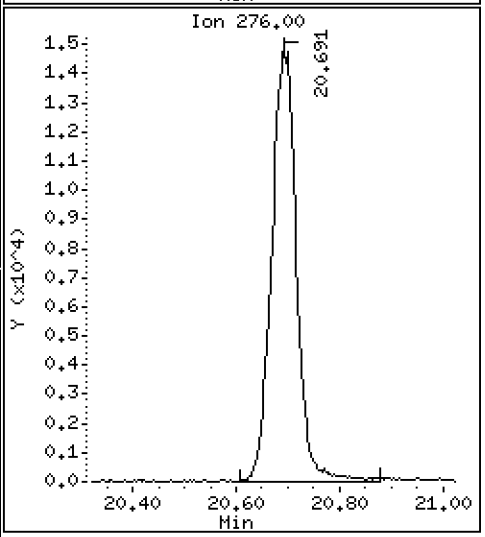
38 Dibenzo(a,h)anthracene

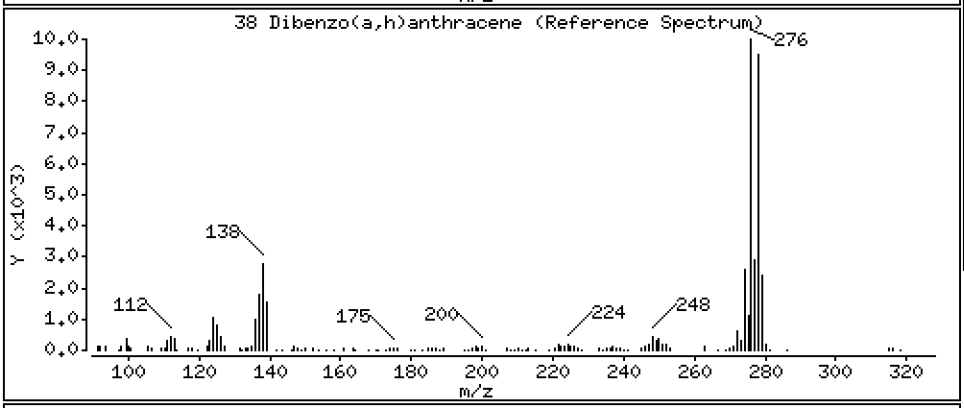
Concentration: 2.273 ug/mL

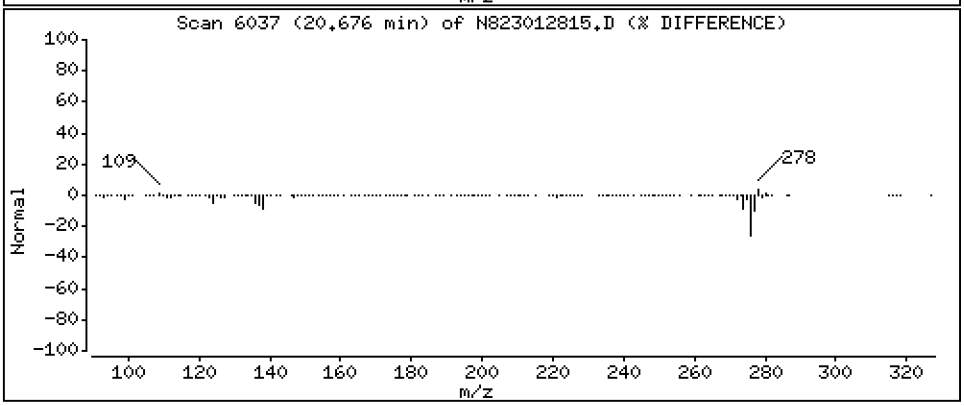












Data File: \\target\share\chem3\nt8.i\20230125.b\N823012815.D

Date : 25-JAN-2023 20:49

Client ID:

Instrument: nt8.i

Sample Info: CCV230125

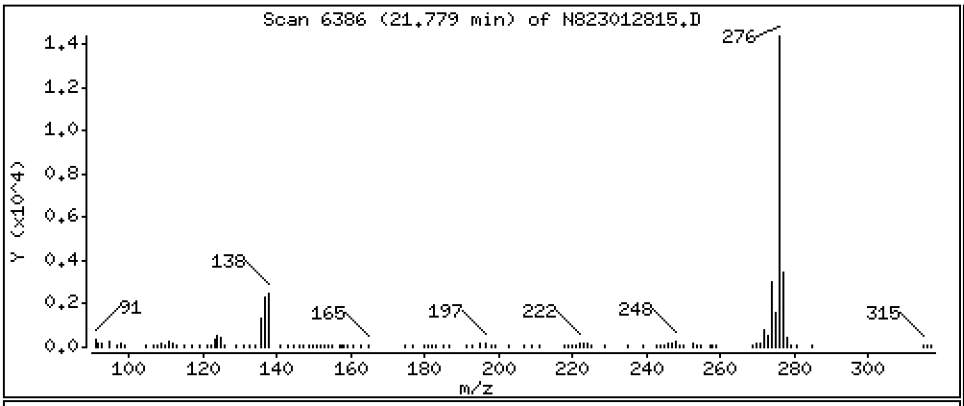
Operator: JZ

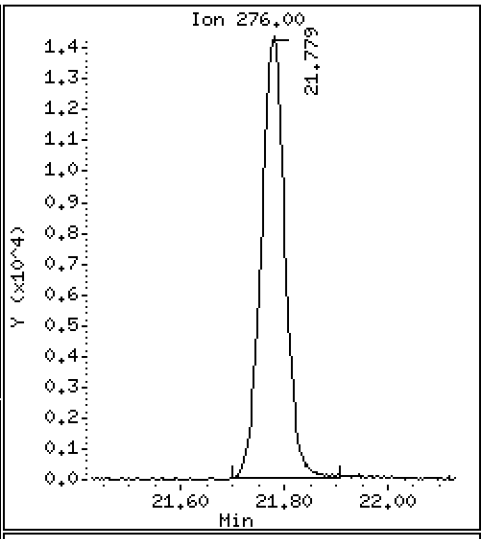
Column phase: Rxi-17sil

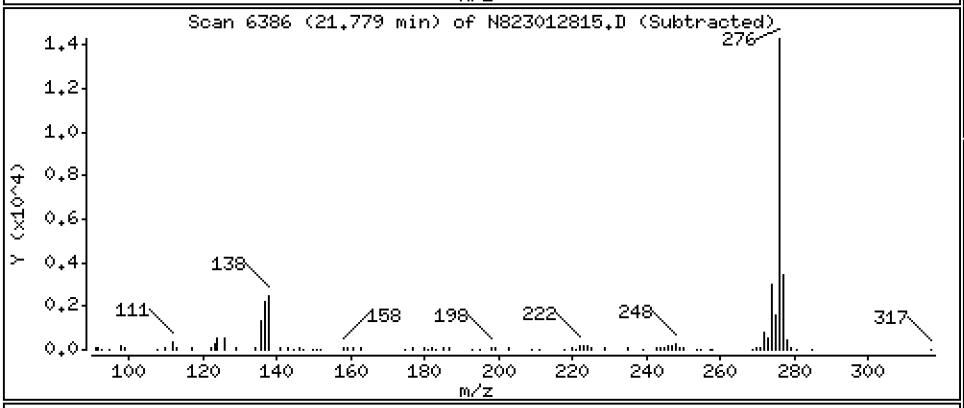
Column diameter: 0.25

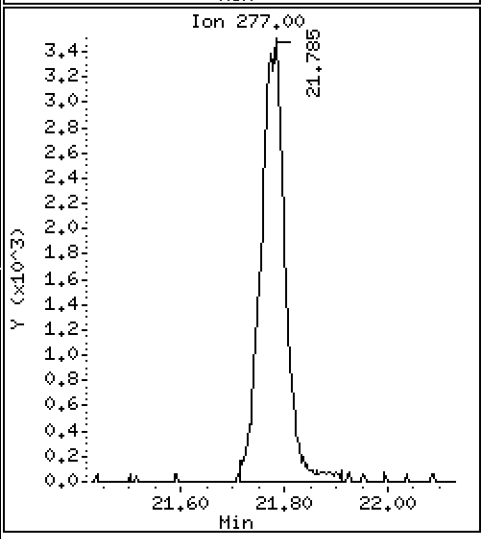
39 Benzo(g,h,i)perylene

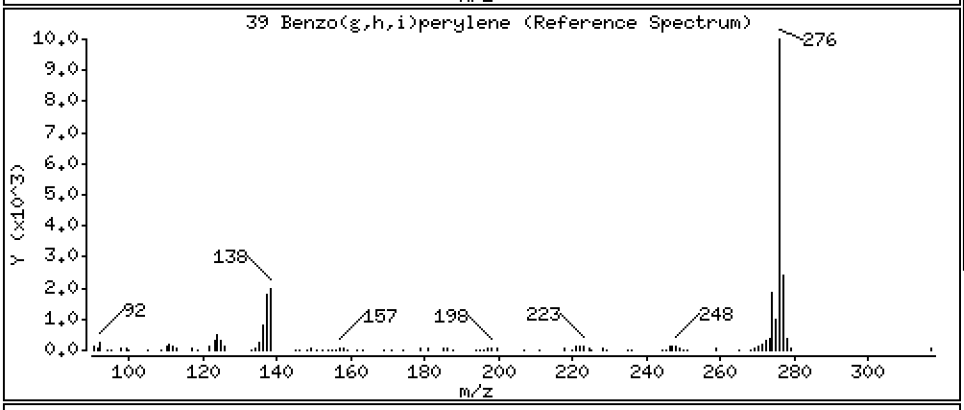
Concentration: 2.328 ug/mL

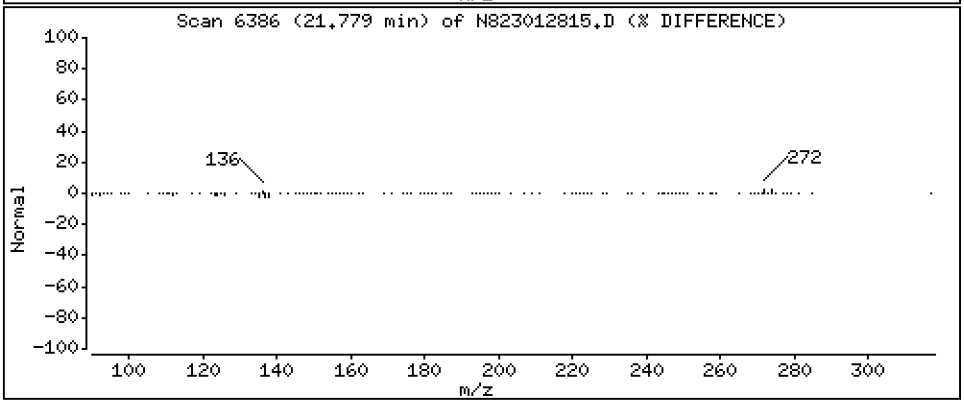












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230125.b\N823012815.D
Lab Smp Id: SLA0285-CCV1
Inj Date : 25-JAN-2023 20:49
Operator : JZ Inst ID: nt8.i
Smp Info : CCV230125
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Meth Date : 26-Jan-2023 09:27 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.906	4.907	(1.000)	49734	2.00000	
	2 Naphthalene	128	4.935	4.938	(1.006)	59143	2.55762	2.558
$	3 2-Methylnaphthalene-d10	152	5.637	5.640	(1.149)	36028	2.65621	2.656
	4 2-Methylnaphthalene	141	5.684	5.687	(1.159)	32909	2.58728	2.587
	5 1-methylnaphthalene	141	5.883	5.886	(1.199)	33564	2.60000	2.600
	7 Biphenyl	154	6.342	6.345	(0.882)	49554	2.54530	2.545
	8 2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	36416	2.64286	2.643
	9 Acenaphthylene	152	7.085	7.088	(0.985)	61245	2.74831	2.748
*	10 Acenaphthene-d10	164	7.192	7.199	(1.000)	29511	2.00000	
	11 Acenaphthene	153	7.243	7.246	(1.007)	38528	2.58035	2.580
	12 Dibenzofuran	168	7.395	7.398	(1.028)	56842	2.50640	2.506
	13 1,6,7-Trimethylnaphthalene	170	7.458	7.464	(1.037)	37862	2.64751	2.648
	14 Fluorene	166	7.872	7.875	(1.095)	46503	2.64012	2.640
	18 Dibenzothiophene	184	9.109	9.112	(0.986)	62424	2.57024	2.570
*	15 Phenanthrene-d10	188	9.235	9.238	(1.000)	54962	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	66556	2.47902	2.479
	17 Anthracene	178	9.311	9.314	(1.008)	65383	2.68081	2.681
	19 Carbazole	167	9.826	9.829	(1.064)	59973	2.68230	2.682
	20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	51554	2.66469	2.665
	22 Fluoranthene	202	11.056	11.056	(1.197)	76169	2.60638	2.606
$	21 Fluoranthene-d10	212	11.015	11.018	(1.193)	67203	2.77137	2.771
	23 Pyrene	202	11.575	11.578	(0.815)	79625	2.70136	2.701
	24 Benzo(a)anthracene	228	14.079	14.085	(0.991)	76522	2.86423	2.864
*	25 Chrysene-d12	240	14.209	14.212	(1.000)	47543	2.00000	
	27 Chrysene	228	14.285	14.288	(1.005)	70416	2.47586	2.476
	28 Benzo(b)fluoranthene	252	16.833	16.830	(0.929)	61424	2.80846	2.808
	29 Benzo(k)fluoranthene	252	16.893	16.893	(0.932)	57077	2.66431	2.664
	30 Benzo(j)fluoranthene	252	16.969	16.969	(0.937)	51120	2.65069	2.651
	31 Total Benzofluoranthenes	252	16.833	16.830	(0.929)	166979	8.06154	8.062(M)
	34 Benzo(e)pyrene	252	17.753	17.756	(0.980)	55984	2.56693	2.567
	32 Benzo(a)pyrene	252	17.886	17.889	(0.987)	50842	2.64163	2.642
*	33 Perylene-d12	264	18.117	18.120	(1.000)	37553	2.00000	
	35 Perylene	252	18.193	18.196	(1.004)	49772	2.40987	2.410

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.561	20.565	(1.135)	31552	2.14434	2.144
37 Indeno(1,2,3-cd)pyrene	276	20.691	20.694	(1.142)	49887	2.27521	2.275
38 Dibenzo(a,h)anthracene	278	20.675	20.672	(1.141)	42898	2.27343	2.273
39 Benzo(g,h,i)perylene	276	21.779	21.779	(1.202)	46253	2.32828	2.328

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823012815.D
Lab Smp Id: SLA0285-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230125.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 25-JAN-2023
Calibration Time: 14:49
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	46976	23488	93952	49734	5.87
10 Acenaphthene-d10	27652	13826	55304	29511	6.72
15 Phenanthrene-d10	51738	25869	103476	54962	6.23
25 Chrysene-d12	45383	22692	90766	47543	4.76
33 Perylene-d12	41344	20672	82688	37553	-9.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.19	-0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	-0.03
25 Chrysene-d12	14.21	13.71	14.71	14.21	-0.02
33 Perylene-d12	18.12	17.62	18.62	18.12	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - N823012815.D

Lab ID: SLA0285-CCV1
nt8.i, 20230125.b\FSIMPNA230119.m,   25-JAN-2023 20:49

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

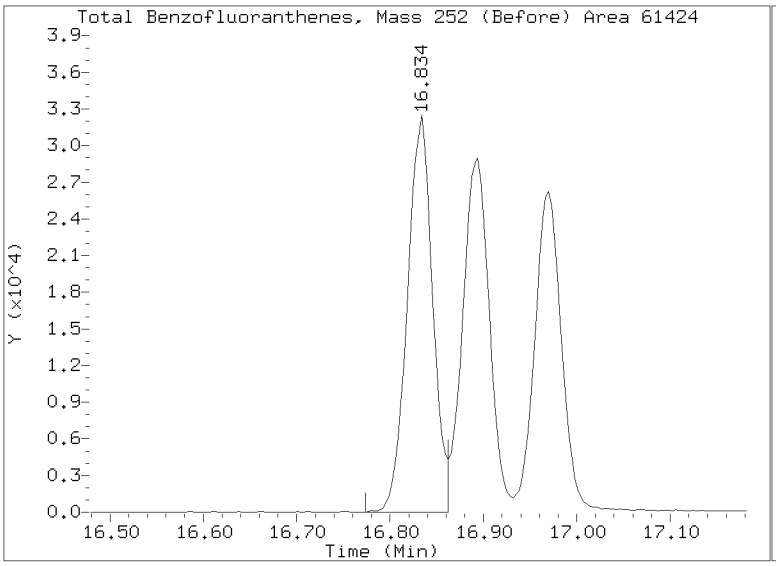
No RRT check performed

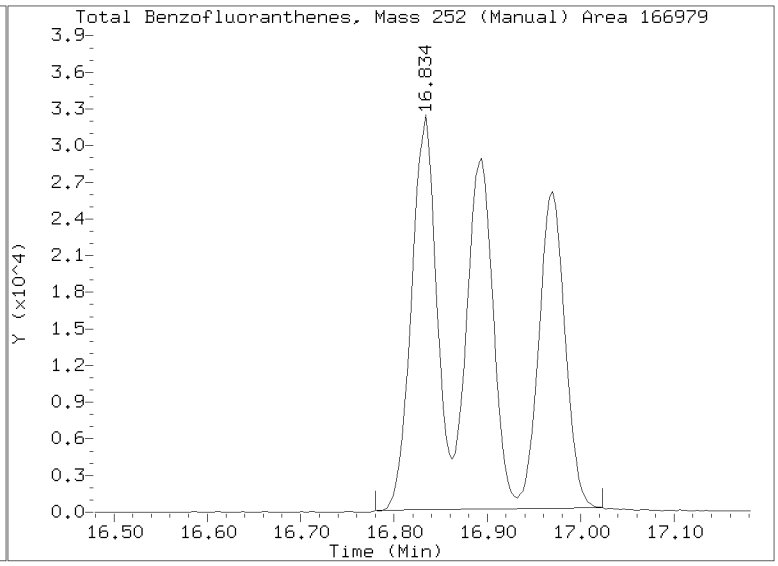
On Column LOD for nt8.i, 20230125.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230125.b/N823012815.D
Injection Date: 25-JAN-2023 20:49
Lab ID:SLA0285-CCV1 Client ID:
Report Date: 01/26/2023 09:57





Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00036
Lab File ID:	NT1802252312S.D	Calibration Date:	02/25/2023
Sequence:	SLC0155	Injection Date:	02/26/23
Lab Sample ID:	SLC0155-SCV1	Injection Time:	04:06
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
1,4-Dichlorobenzene	A	5.0000	4.4	1.7610310	1.5503310		-12.0	+/-20	
1,2-Dichlorobenzene	A	5.0000	4.4	1.6766720	1.4759160		-12.0	+/-20	
Benzyl Alcohol	A	5.0000	4.8	1.0797360	1.0465070		-3.1	+/-20	
Benzoic acid	A	10.000	1.7	0.0982061	0.0247949		-82.8	+/-20	*
2,4-Dimethylphenol	A	5.0000	3.5	0.3568845	0.2526880		-29.2	+/-20	*
1,2,4-Trichlorobenzene	A	5.0000	4.4	0.3654639	0.3204101		-12.3	+/-20	
N-Nitrosodiphenylamine	A	5.0000	4.8	0.5787015	0.5572630		-3.7	+/-20	
Pentachlorophenol	A	5.0000	2.6	0.0525310	0.0434642		-47.4	+/-20	*
2-Fluorophenol	A	7.5000	0.00	1.2910050					
p-Terphenyl-d14	A	5.0000	0.00465	0.7242850	0.0006736		-99.9		

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Page 1

Date : 26-FEB-2023 04:06

Client ID:

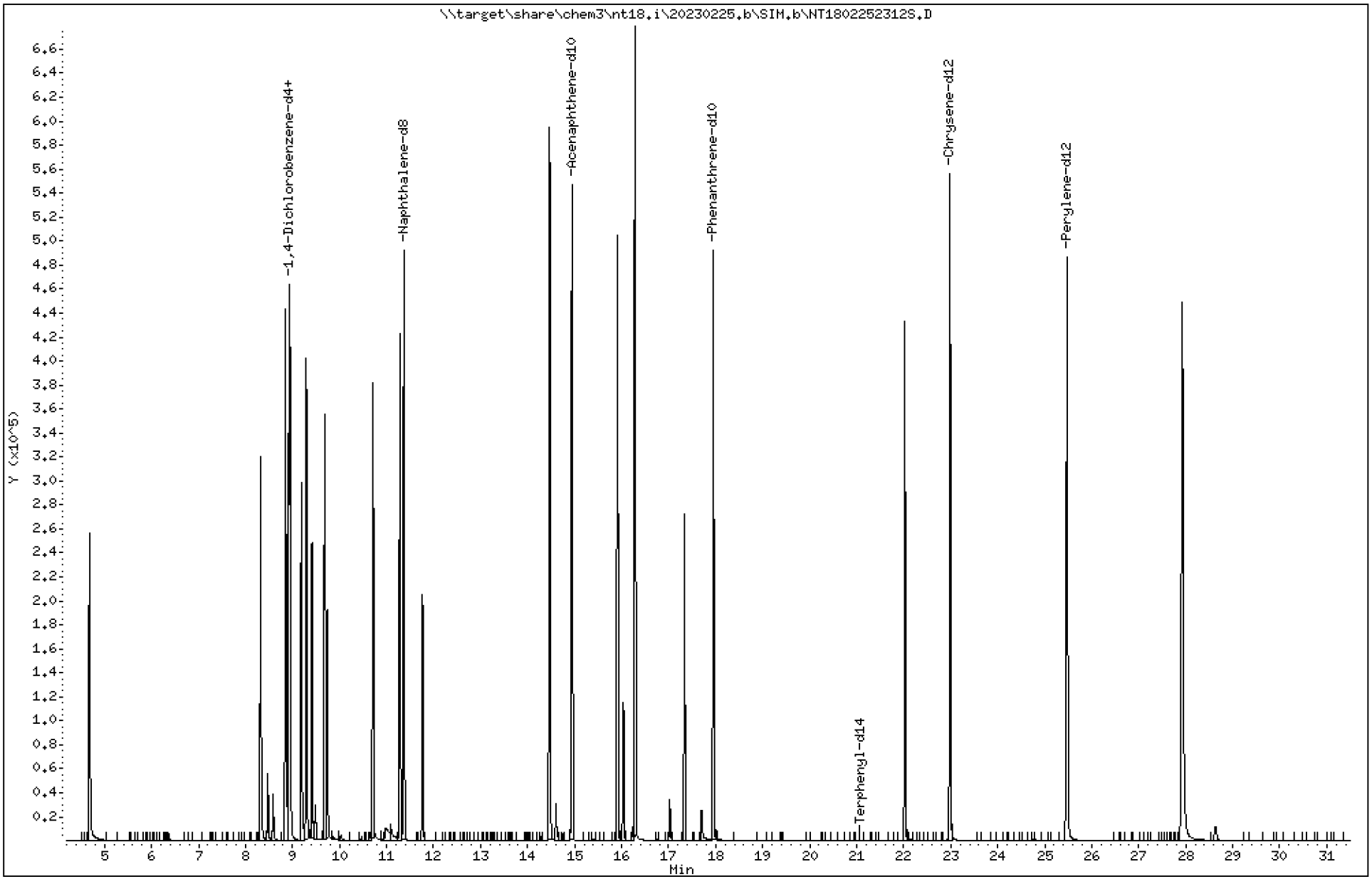
Instrument: nt18.i

Sample Info: SLC0155-SCV1

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

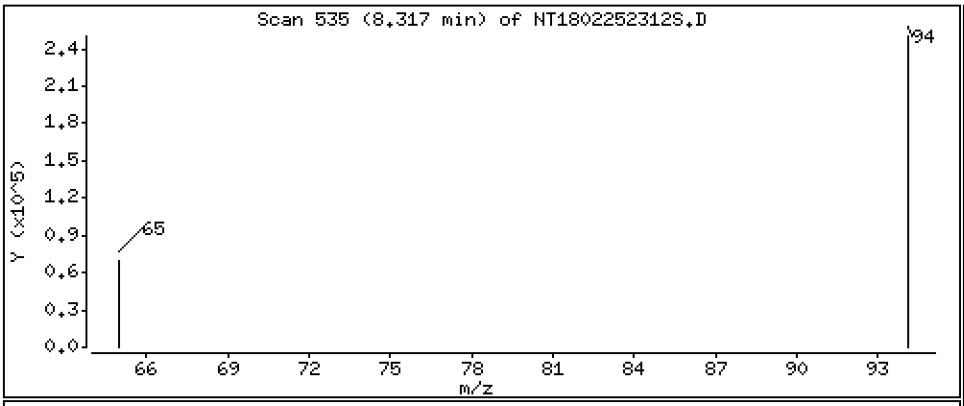
Operator: YZ

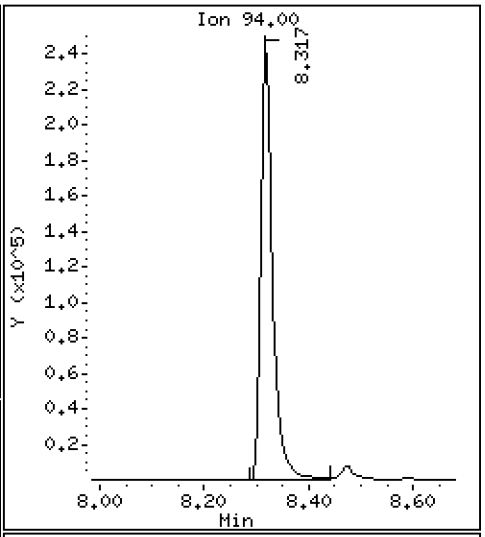
Column phase: ZB-5msi

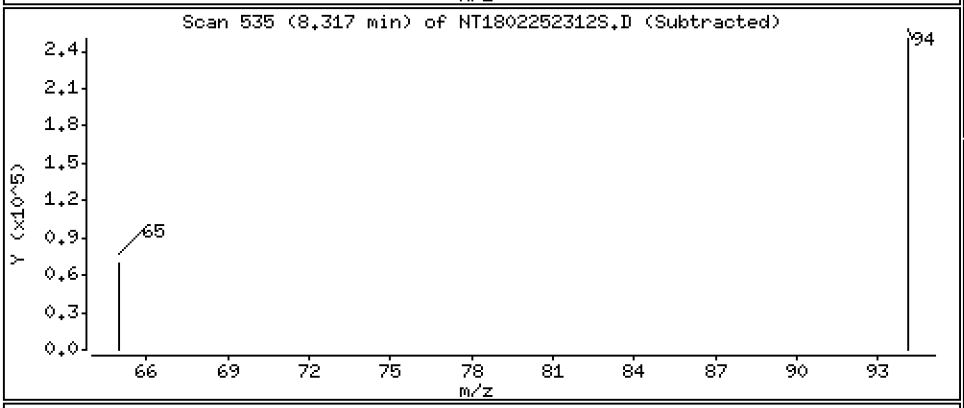
Column diameter: 0.25

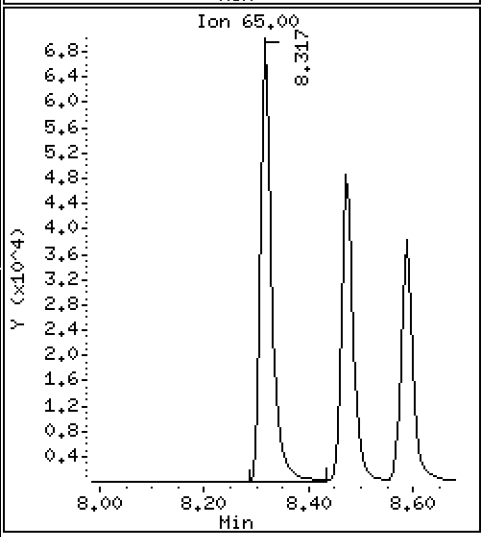
3 Phenol

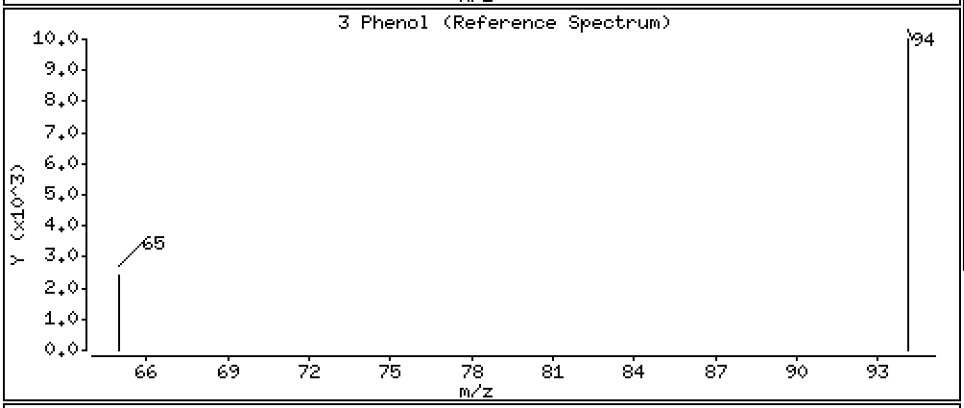
Concentration: 4.325 ug/mL

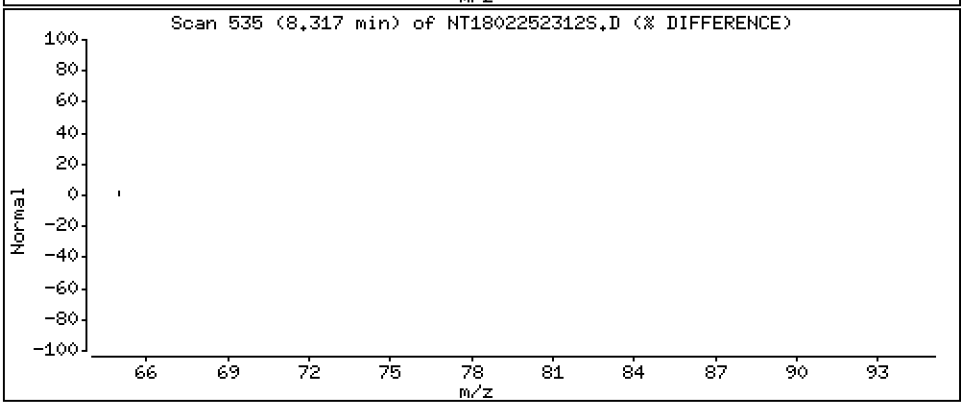












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

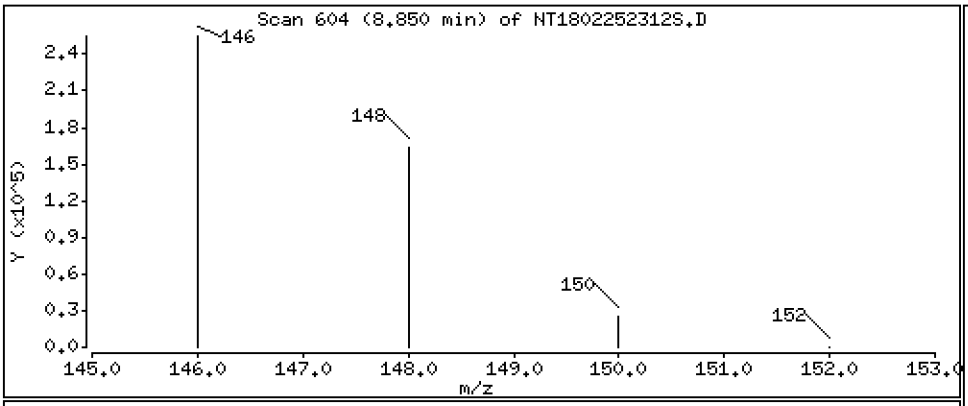
Operator: YZ

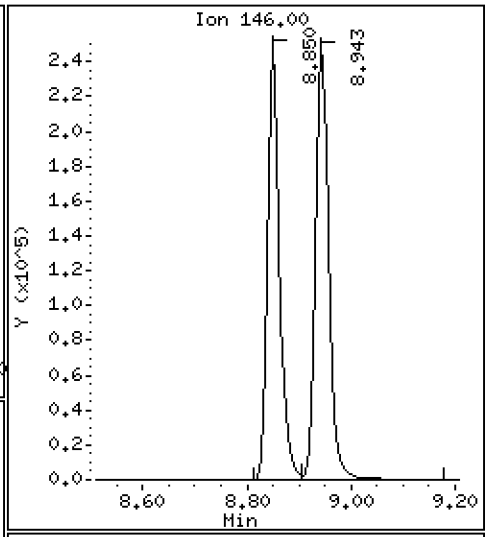
Column phase: ZB-5msi

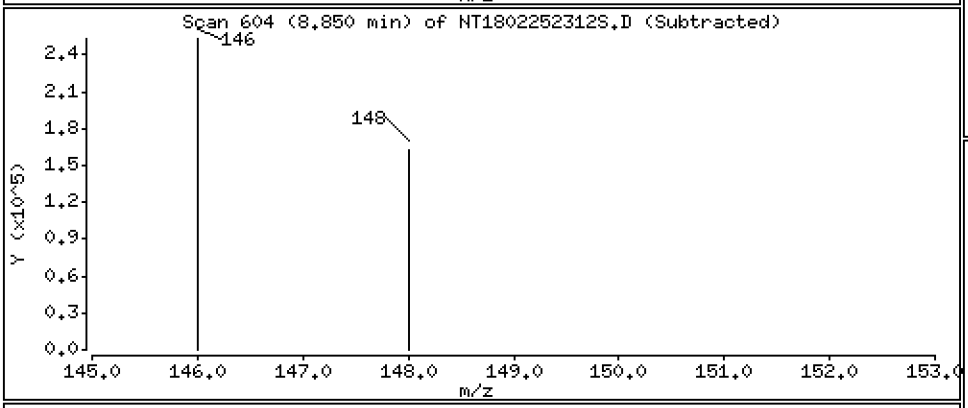
Column diameter: 0.25

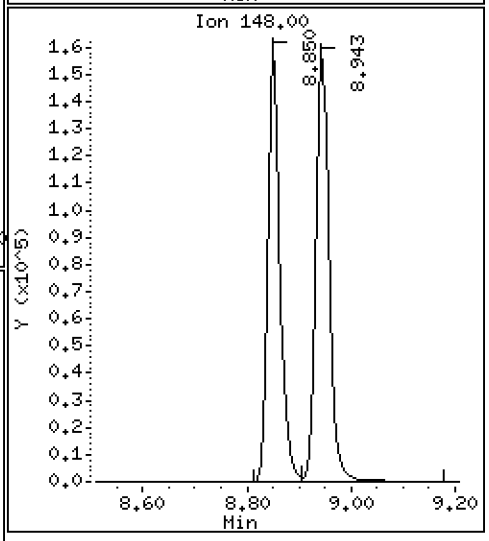
7 1,3-Dichlorobenzene

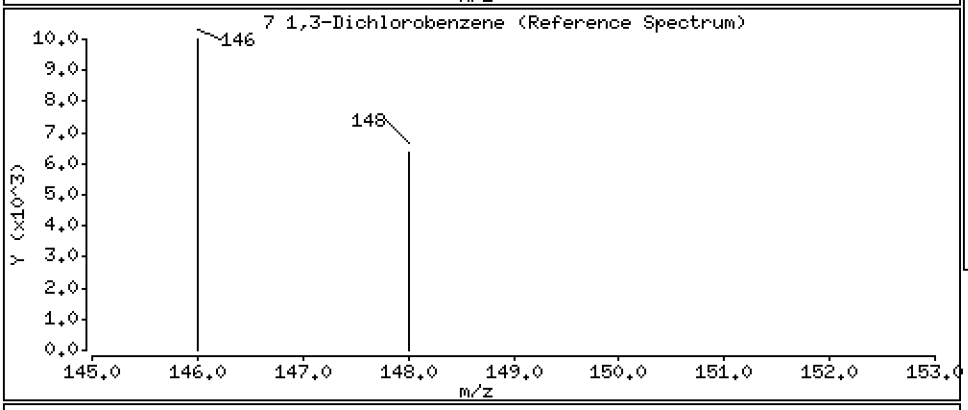
Concentration: 4.462 ug/mL

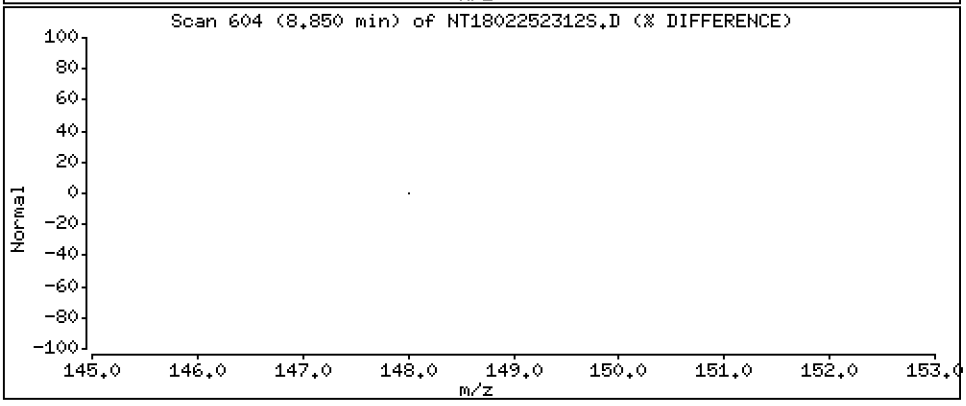












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

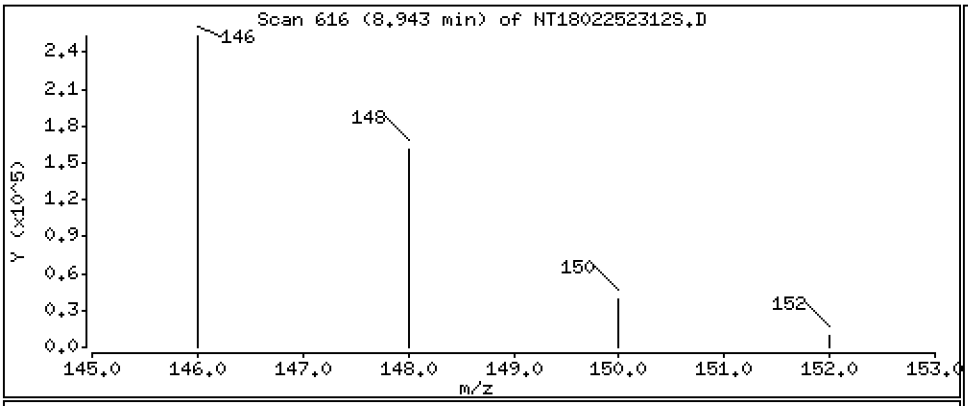
Operator: YZ

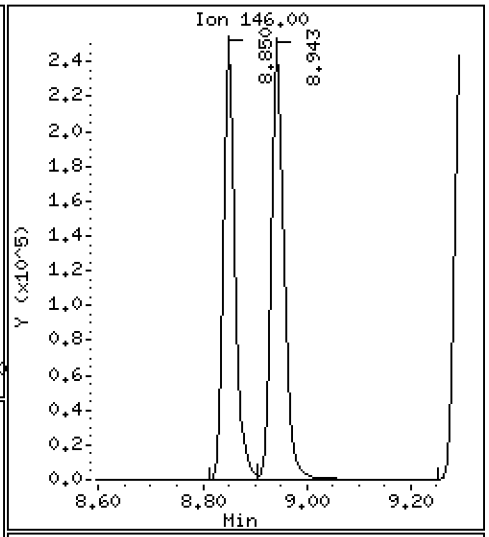
Column phase: ZB-5msi

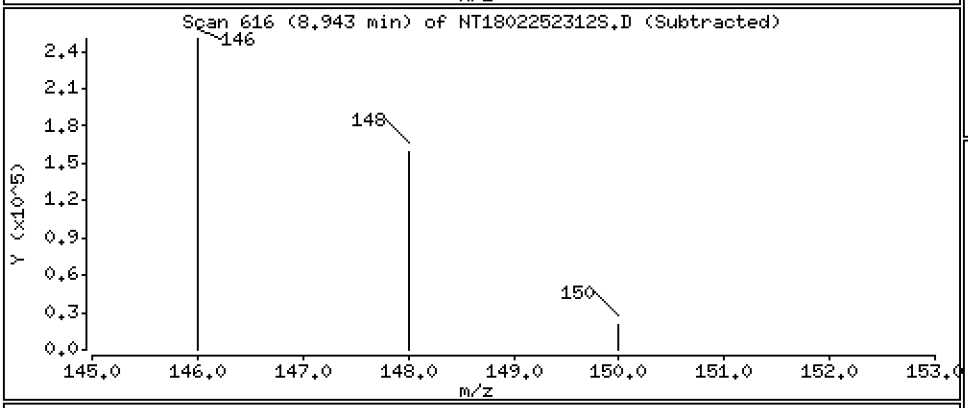
Column diameter: 0.25

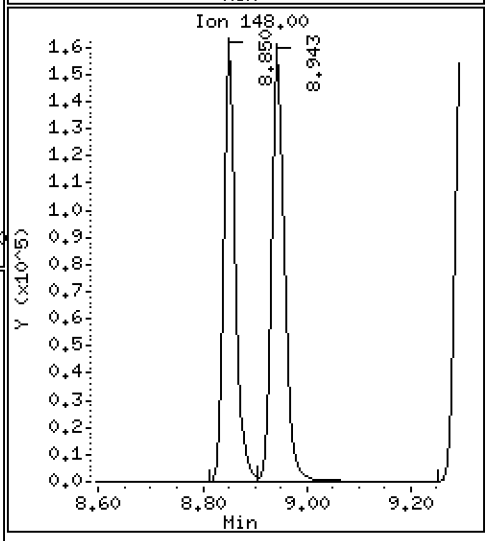
9 1,4-Dichlorobenzene

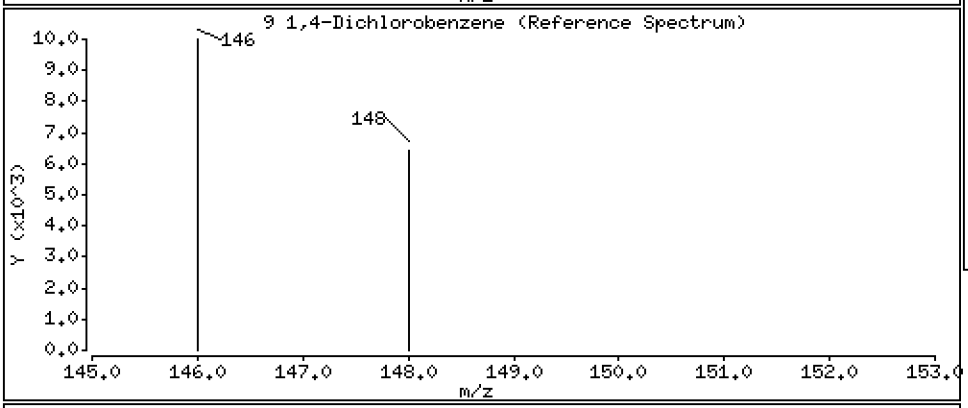
Concentration: 4.402 ug/mL

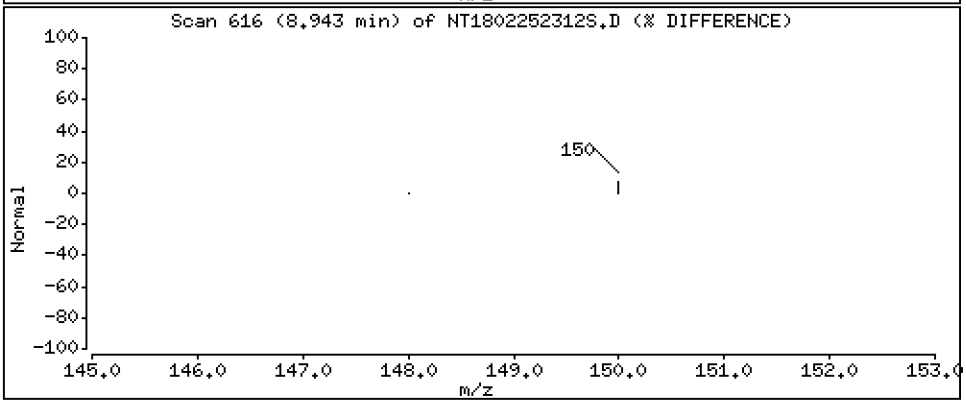












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

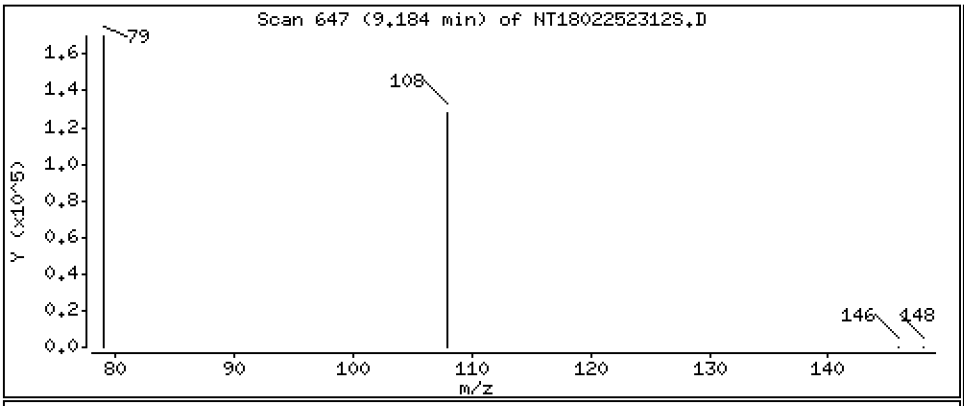
Operator: YZ

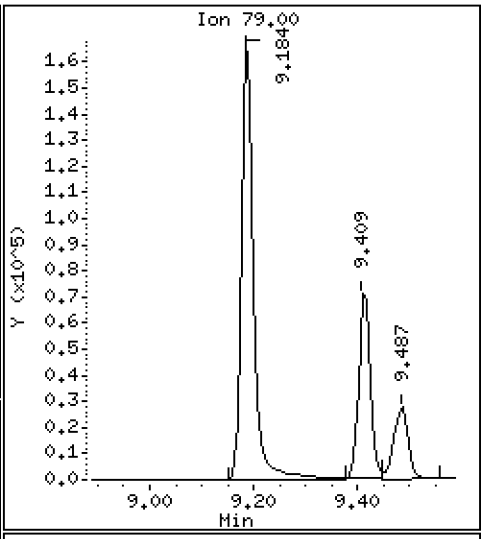
Column phase: ZB-5msi

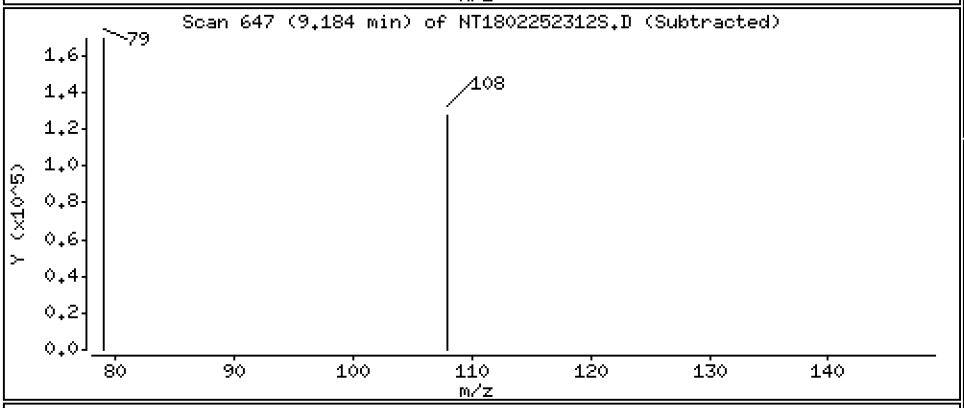
Column diameter: 0.25

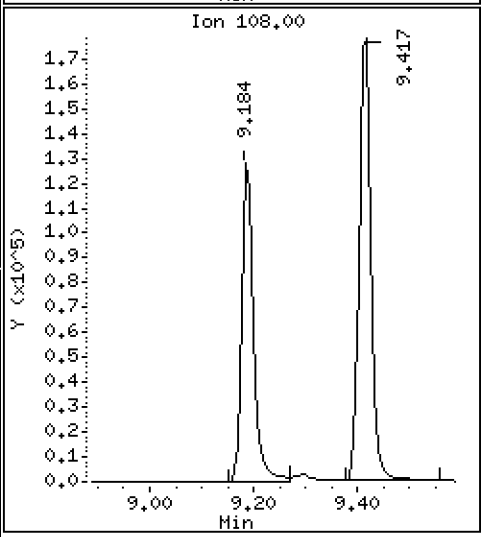
11 Benzyl alcohol

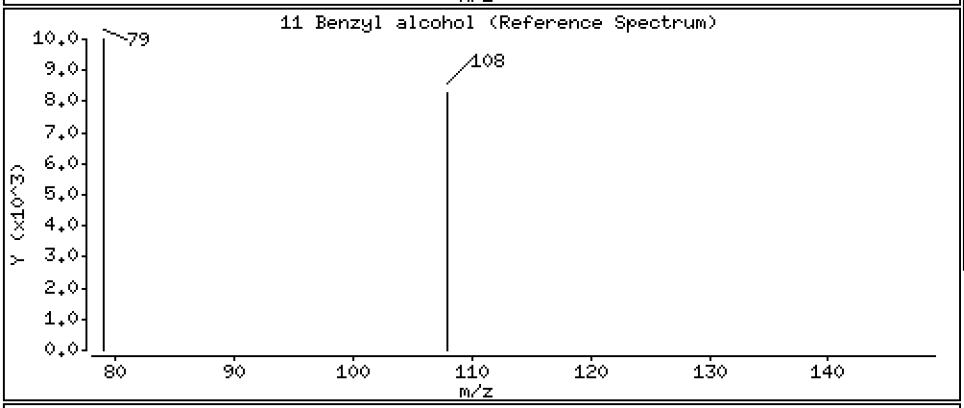
Concentration: 4.846 ug/mL

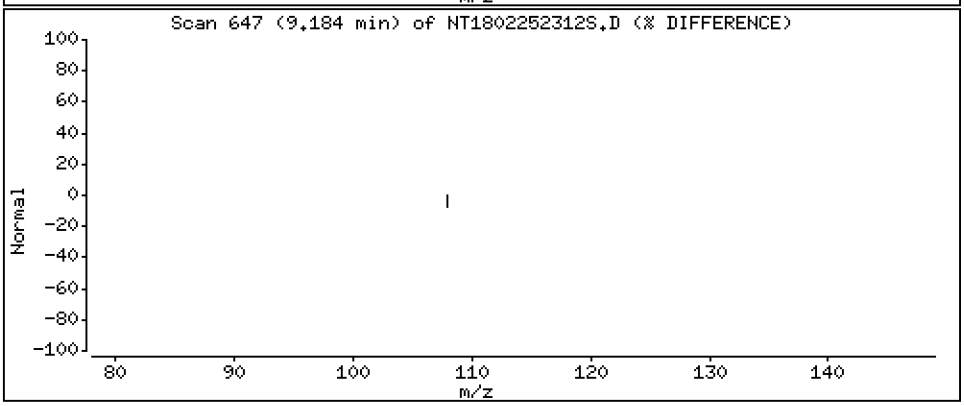












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

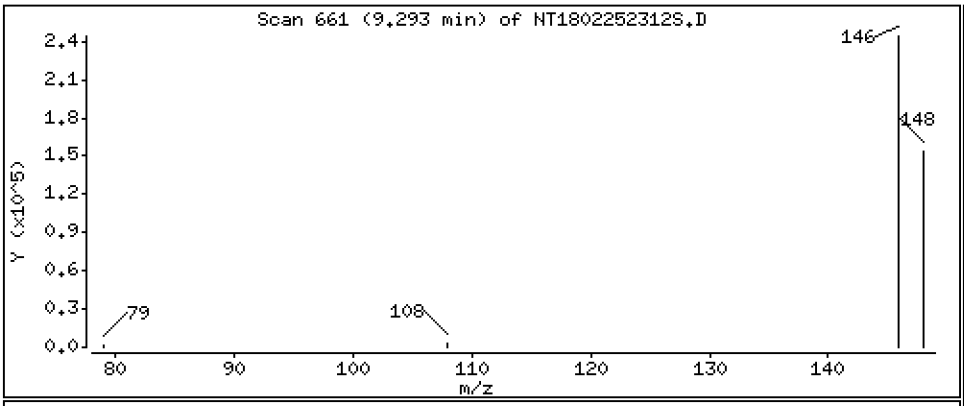
Operator: YZ

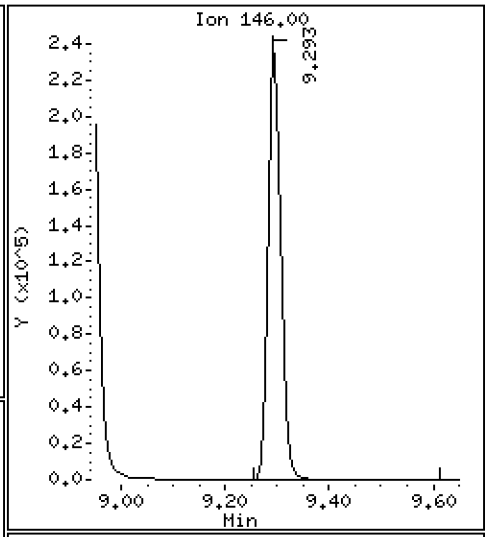
Column phase: ZB-5msi

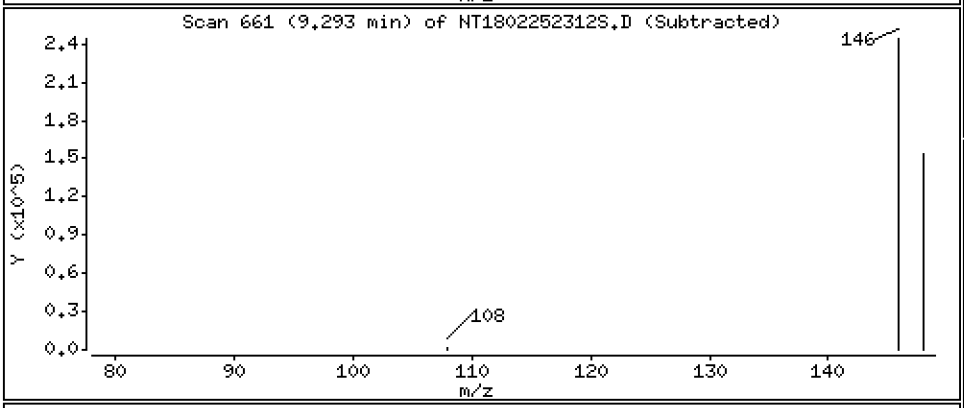
Column diameter: 0.25

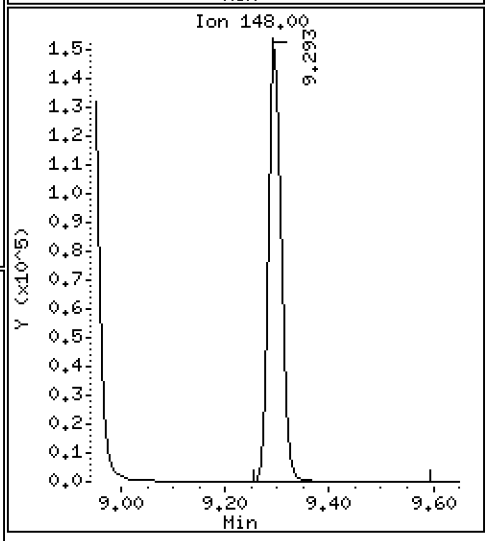
12 1,2-Dichlorobenzene

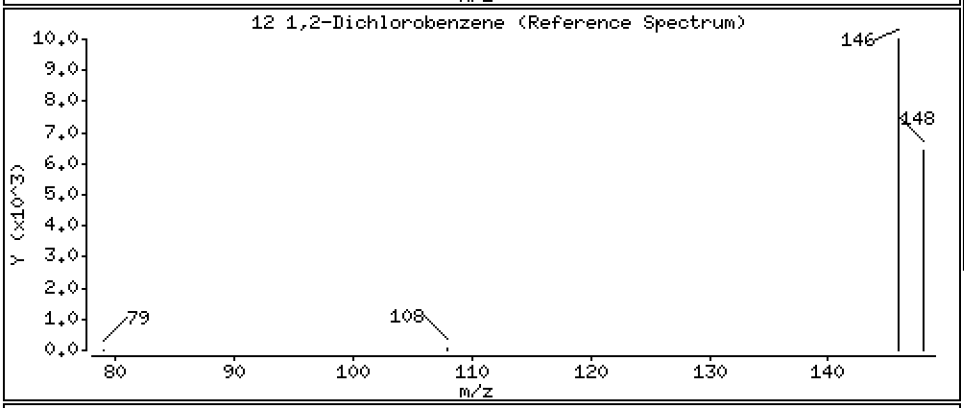
Concentration: 4.401 ug/mL

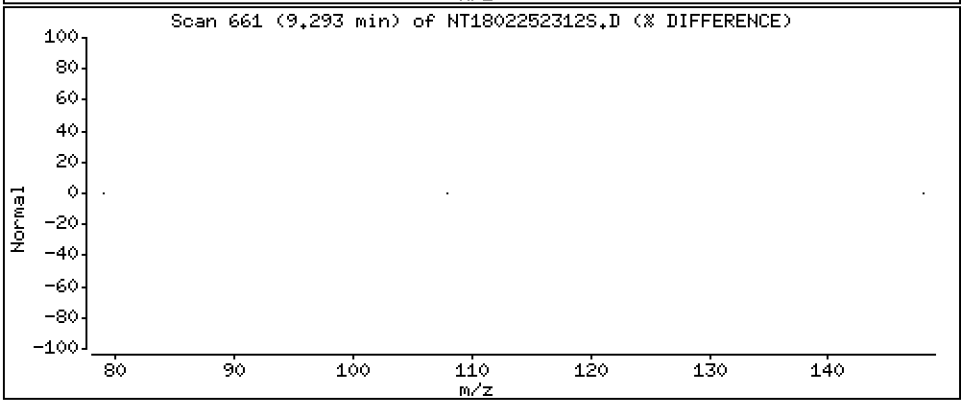












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

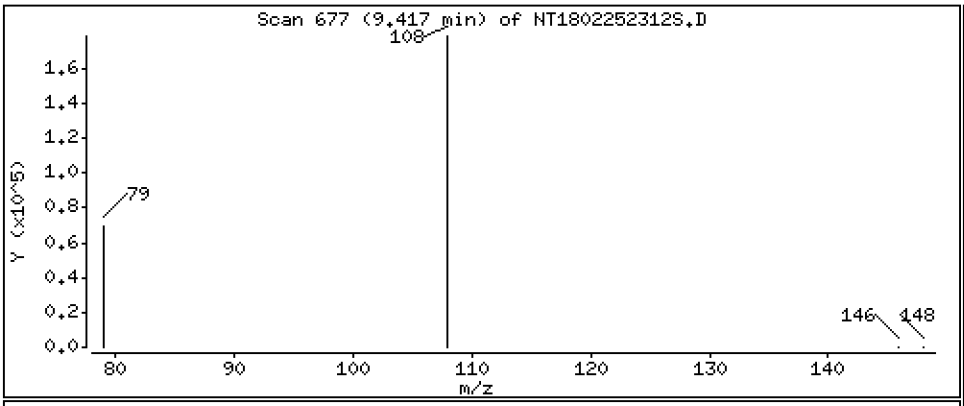
Operator: YZ

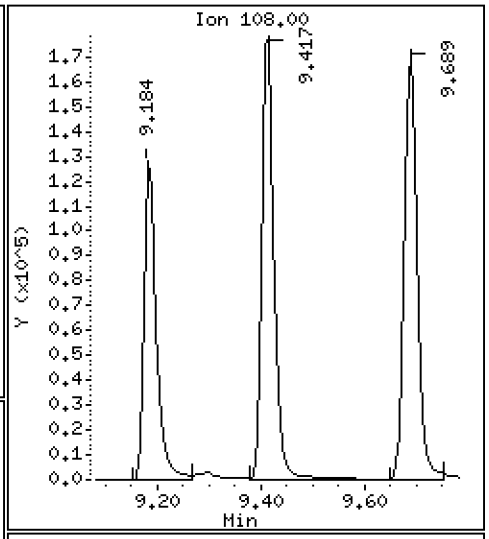
Column phase: ZB-5msi

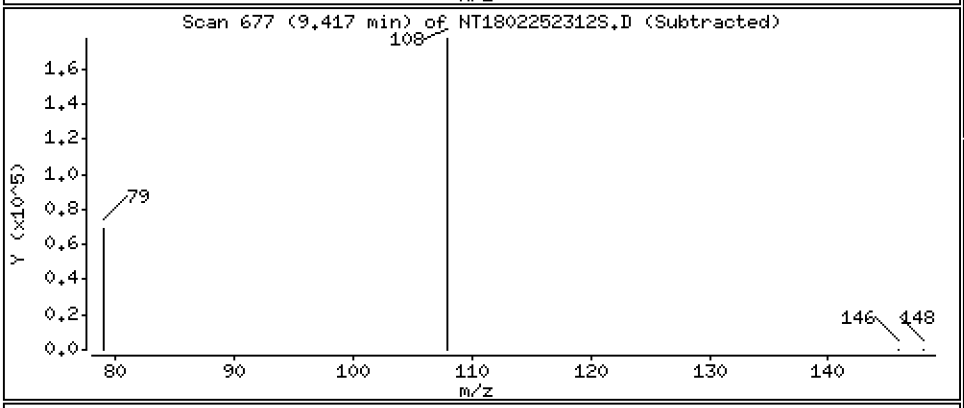
Column diameter: 0.25

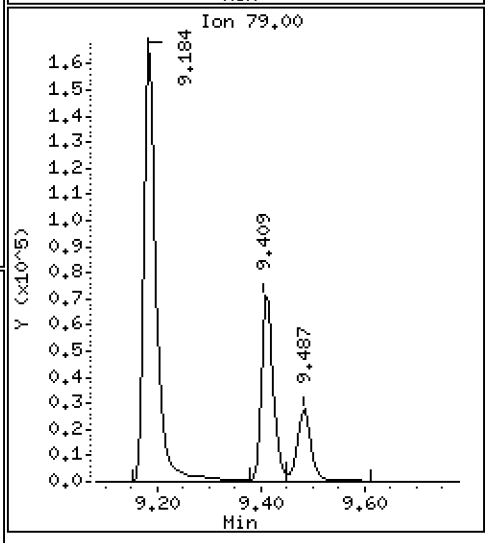
13 2-Methylphenol

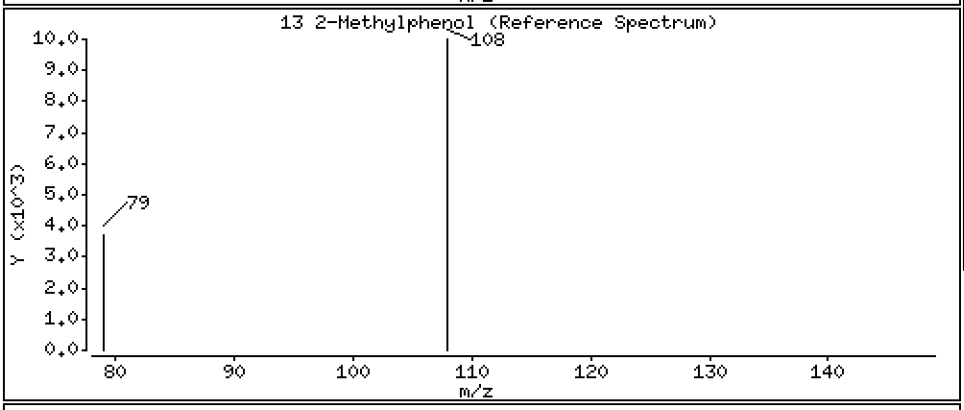
Concentration: 3.880 ug/mL

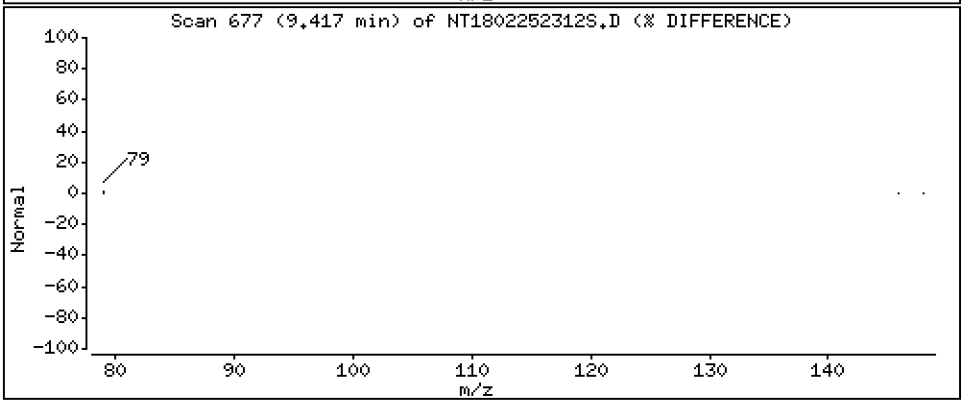












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

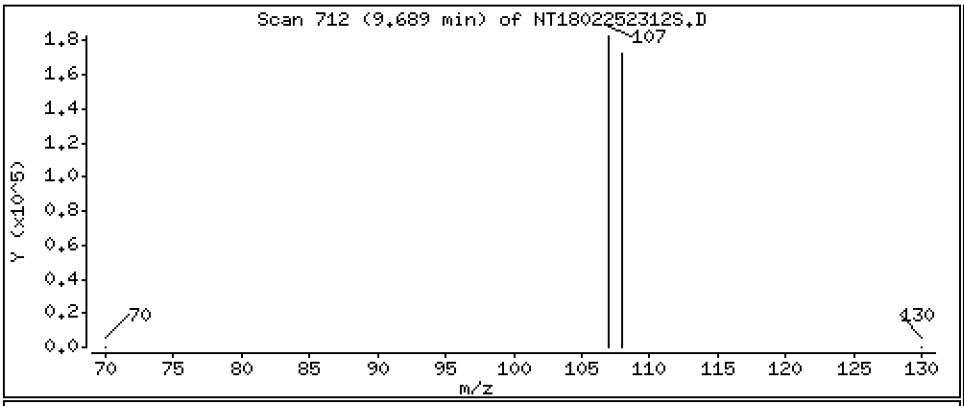
Operator: YZ

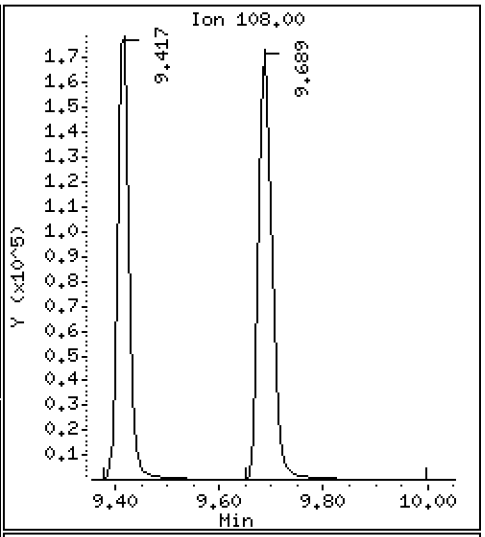
Column phase: ZB-5msi

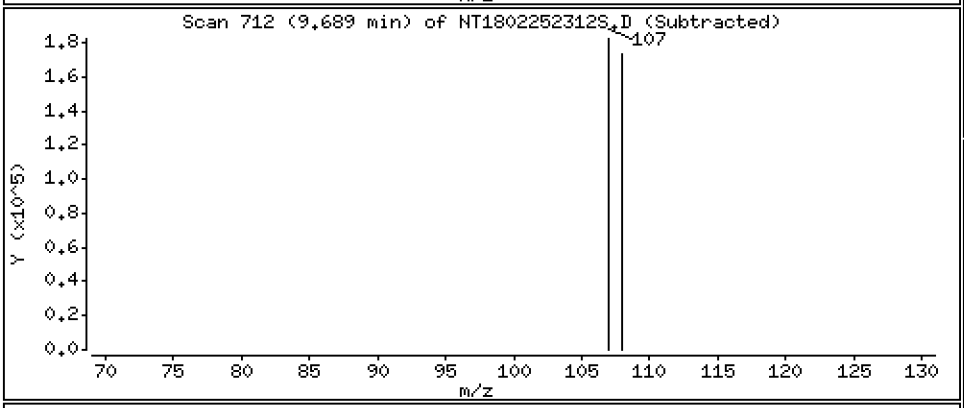
Column diameter: 0.25

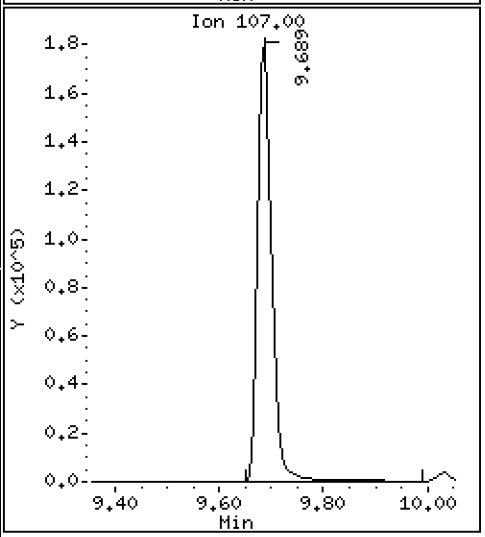
15 4-Methylphenol

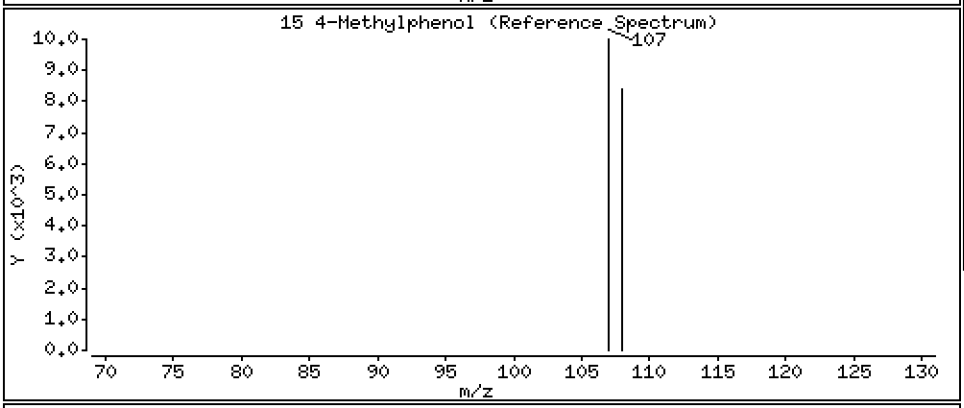
Concentration: 4.215 ug/mL

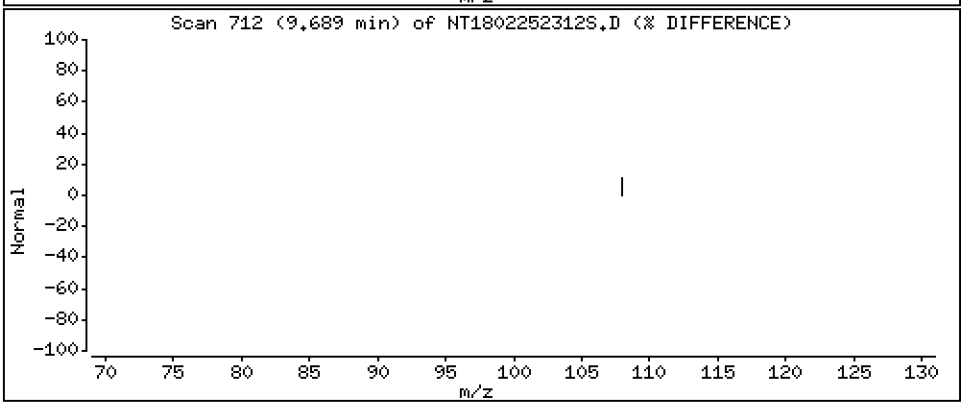












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

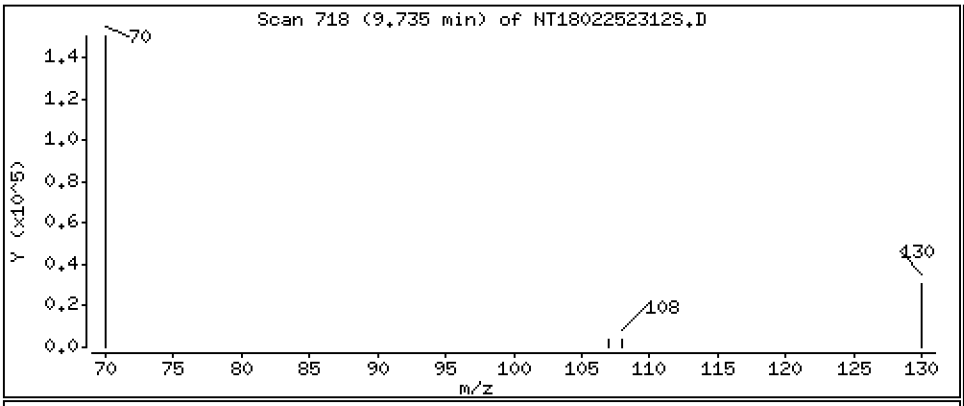
Operator: YZ

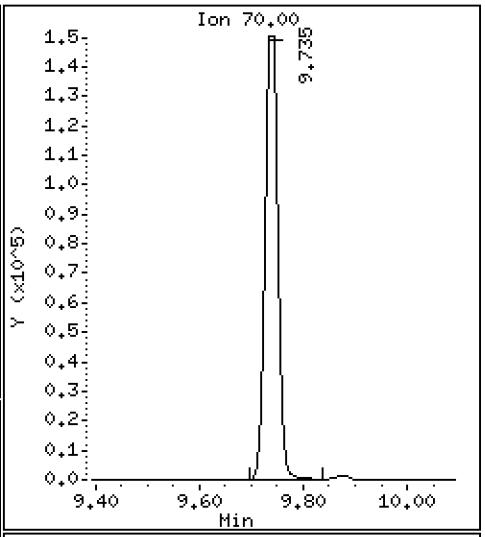
Column phase: ZB-5msi

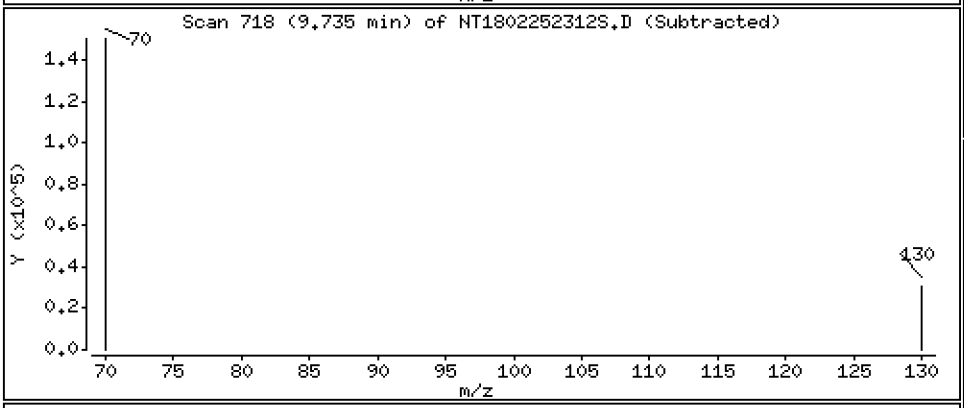
Column diameter: 0.25

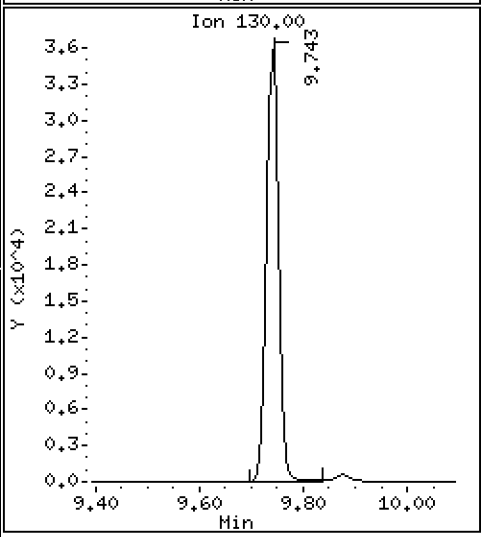
16 N-Nitroso-di-n-propylamine

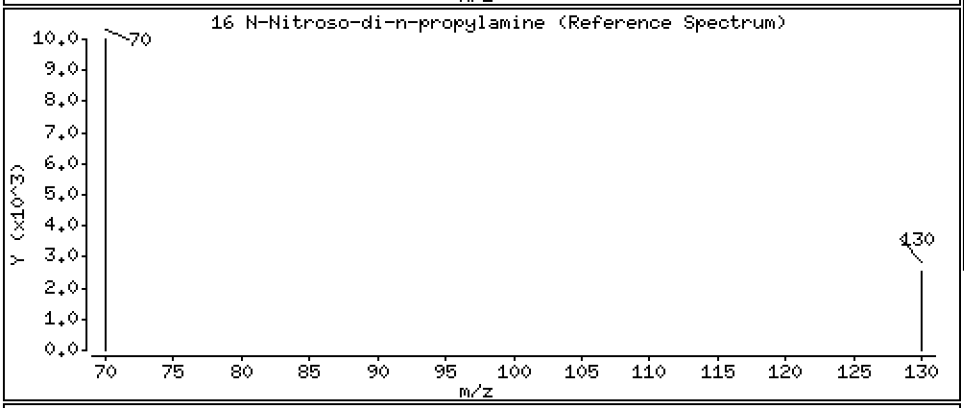
Concentration: 4.789 ug/mL

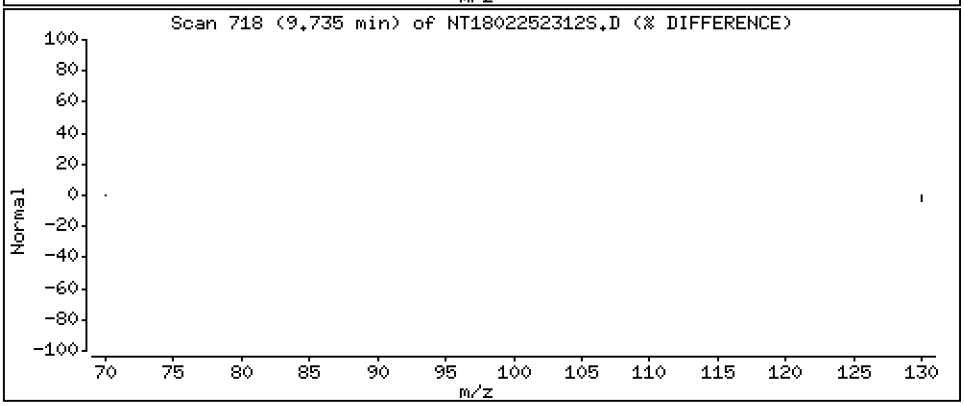












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

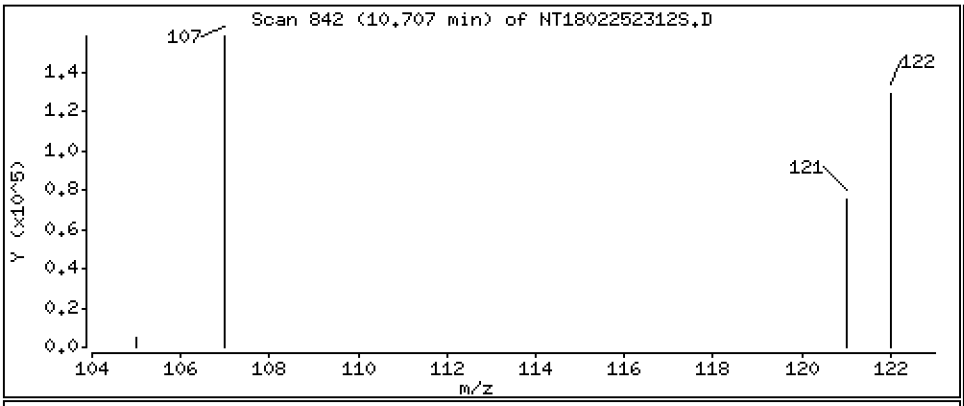
Operator: YZ

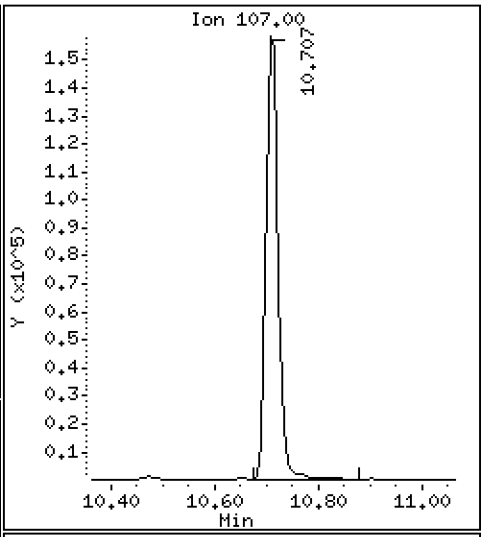
Column phase: ZB-5msi

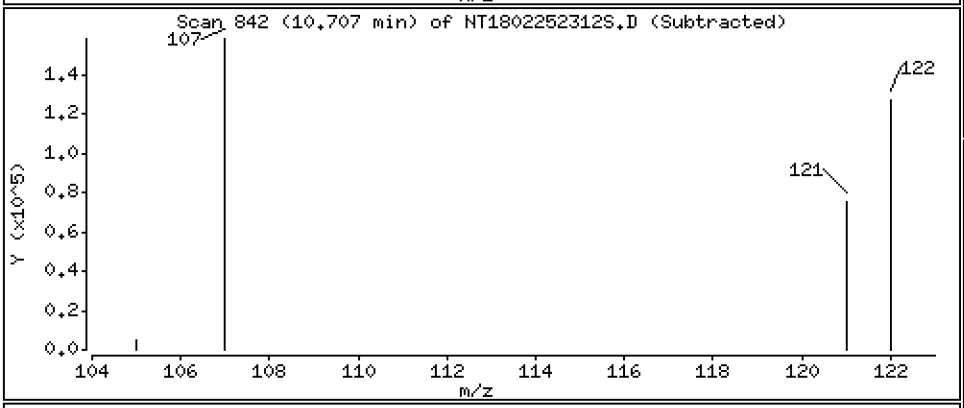
Column diameter: 0.25

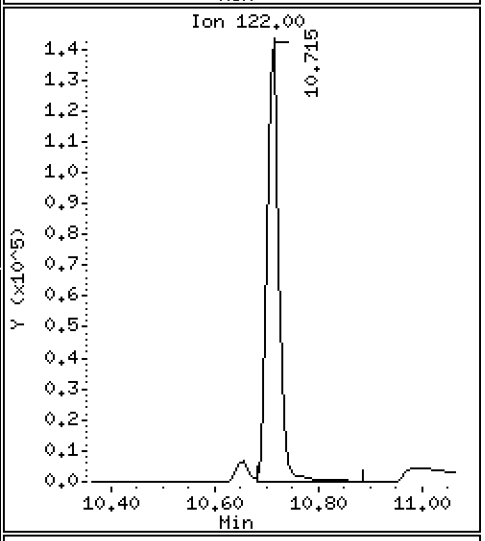
22 2,4-Dimethylphenol

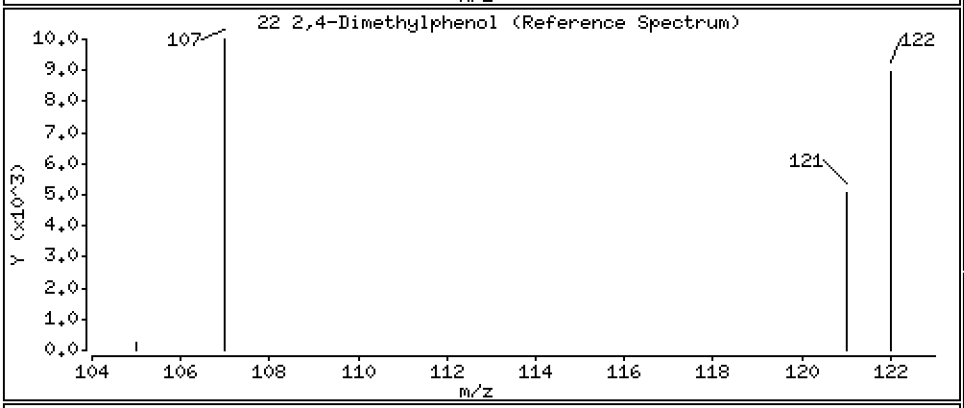
Concentration: 3.540 ug/mL

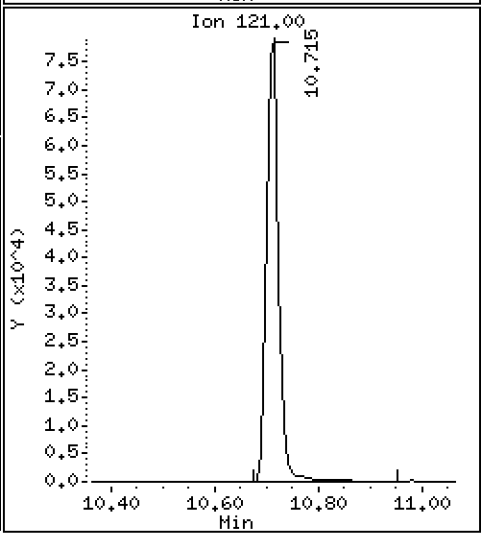


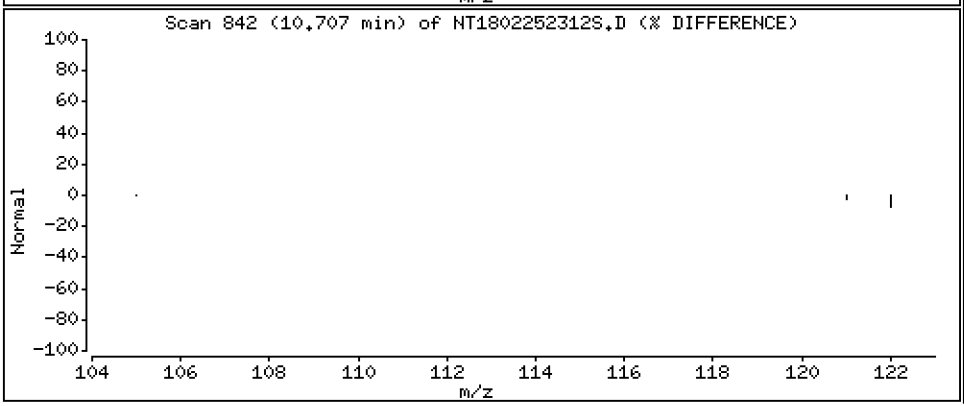












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

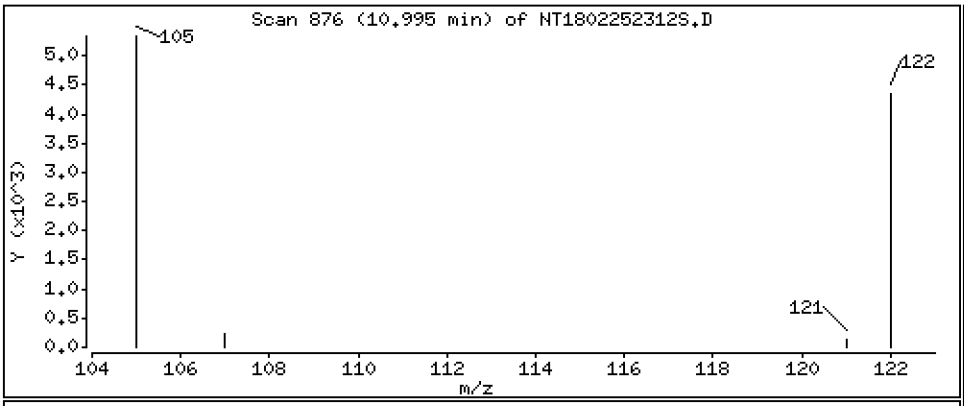
Operator: YZ

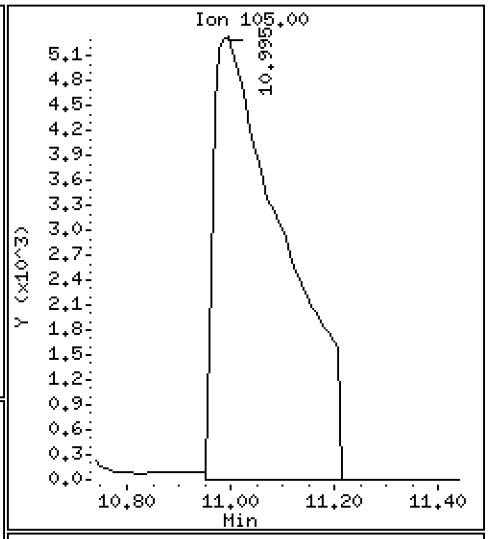
Column phase: ZB-5msi

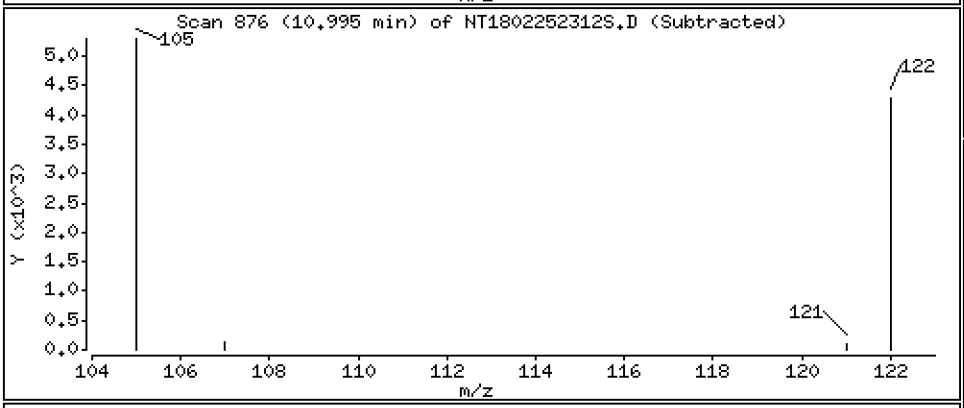
Column diameter: 0.25

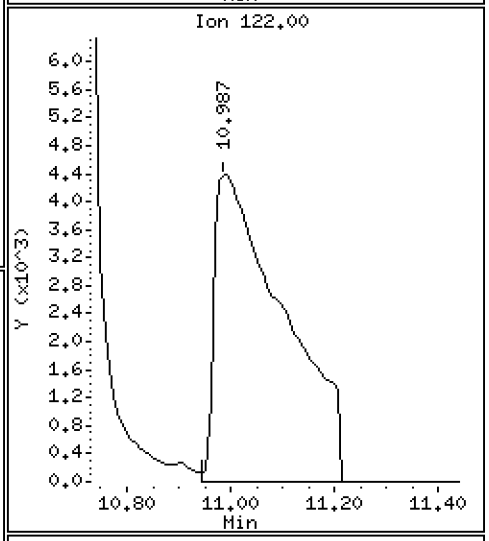
24 Benzoic acid

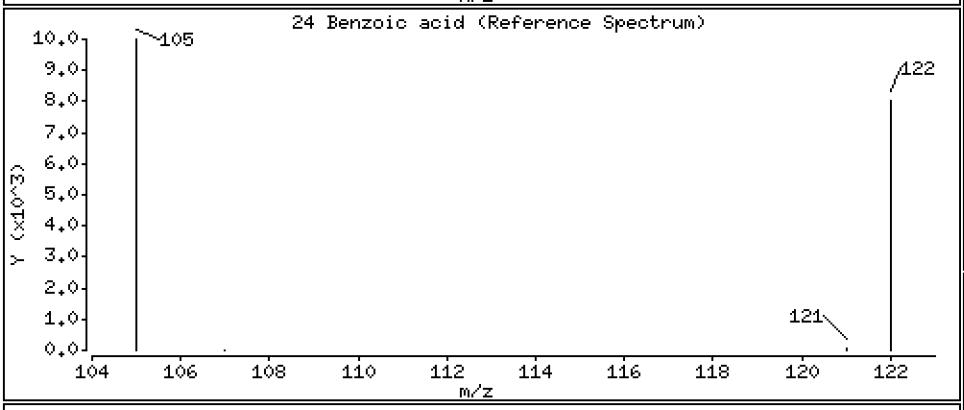
Concentration: 1.716 ug/mL

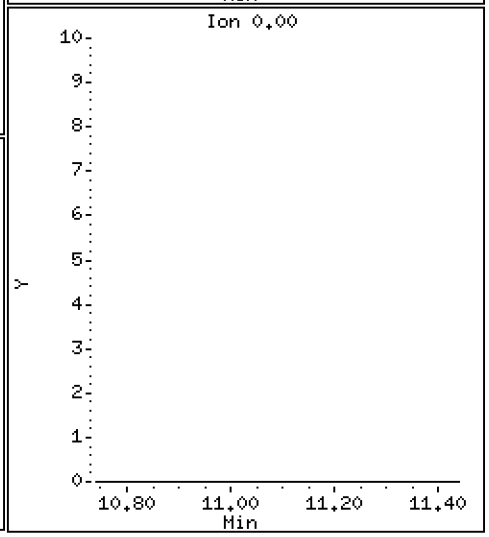


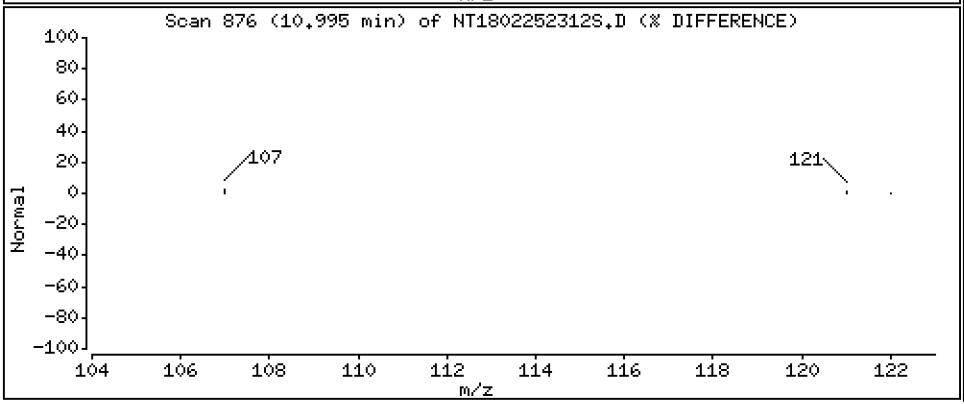












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

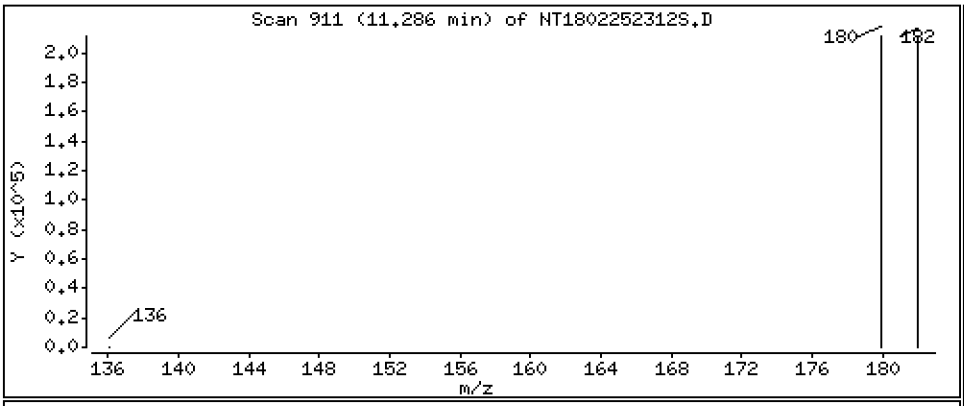
Operator: YZ

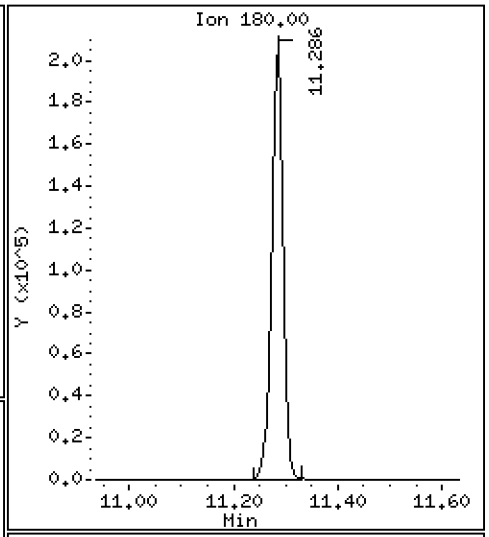
Column phase: ZB-5msi

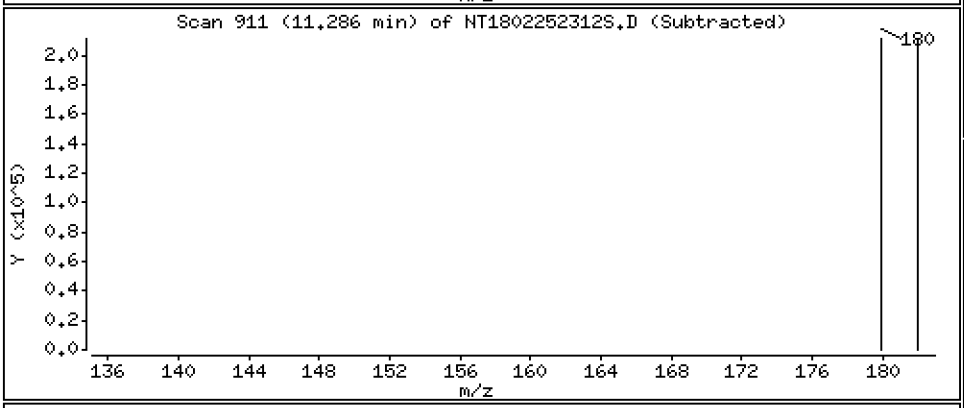
Column diameter: 0.25

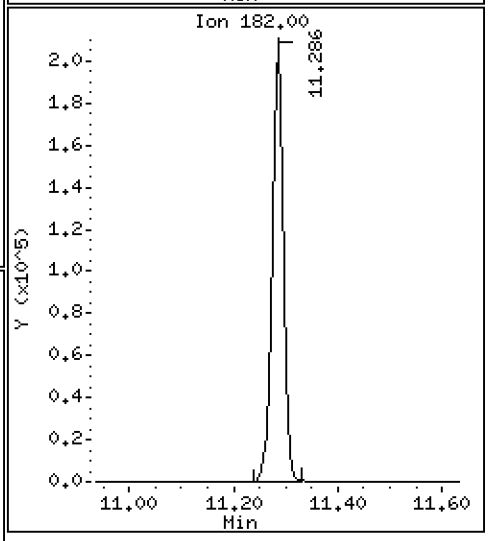
26 1,2,4-Trichlorobenzene

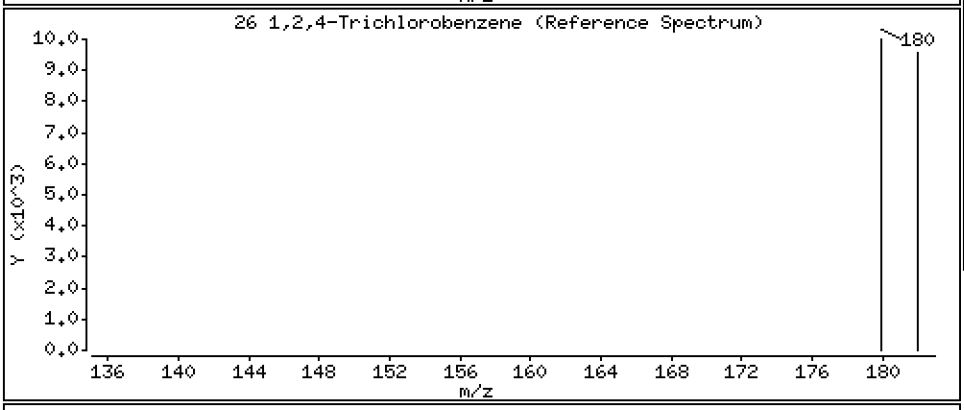
Concentration: 4.384 ug/mL

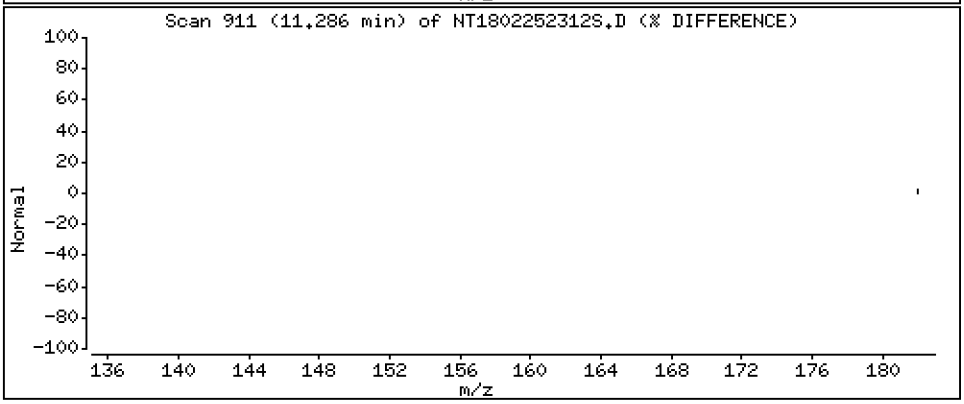












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

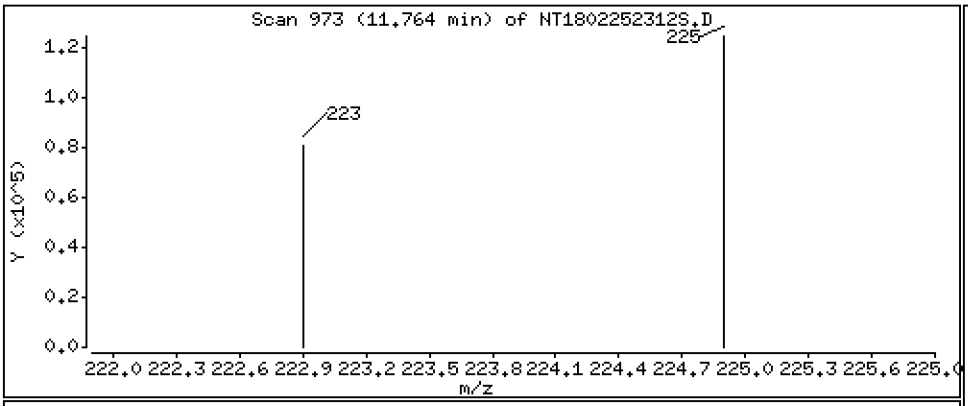
Operator: YZ

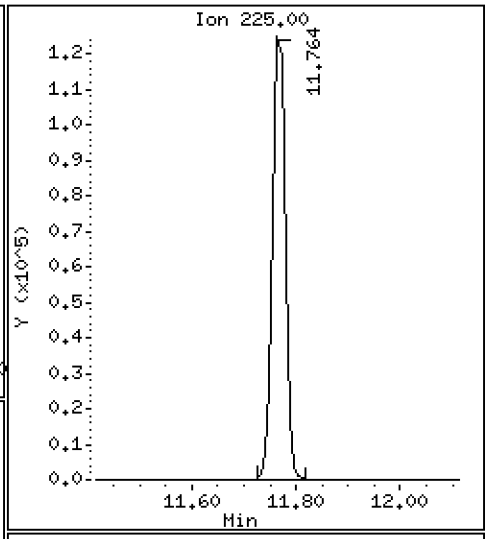
Column phase: ZB-5msi

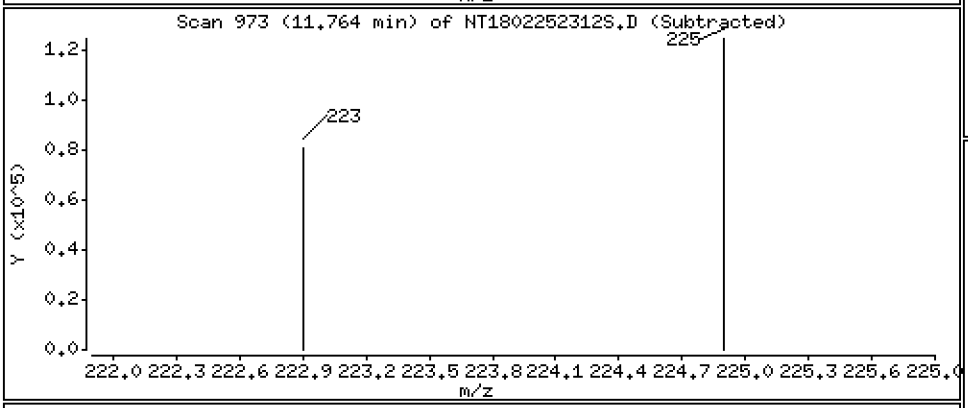
Column diameter: 0.25

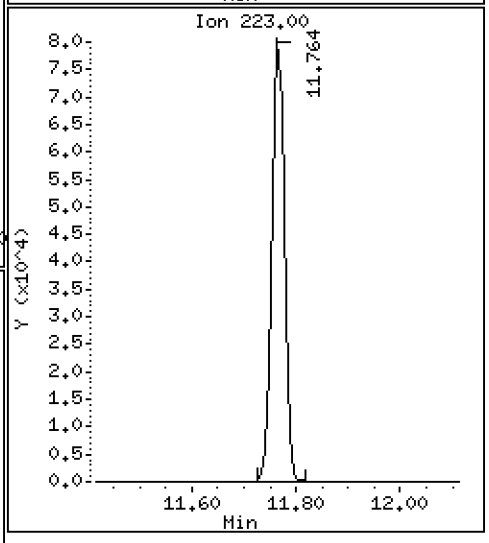
30 Hexachlorobutadiene

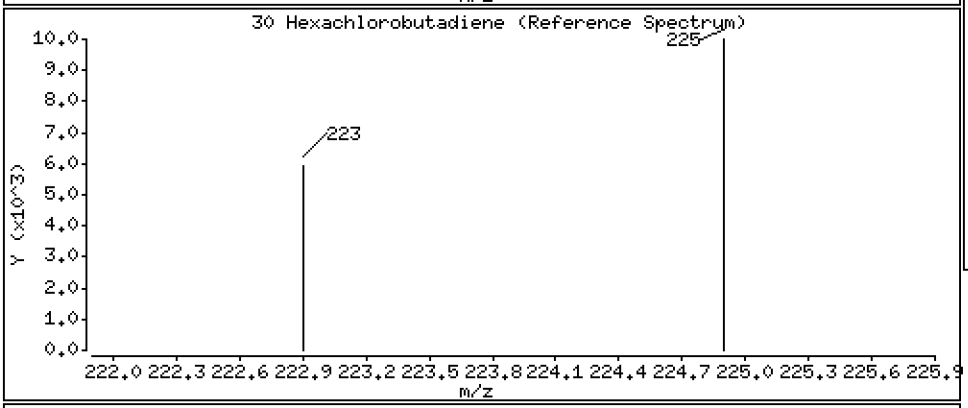
Concentration: 4.536 ug/mL

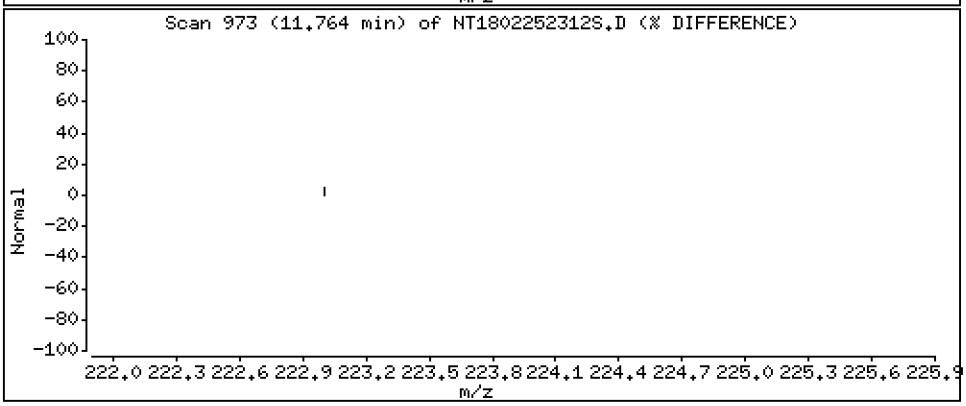












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

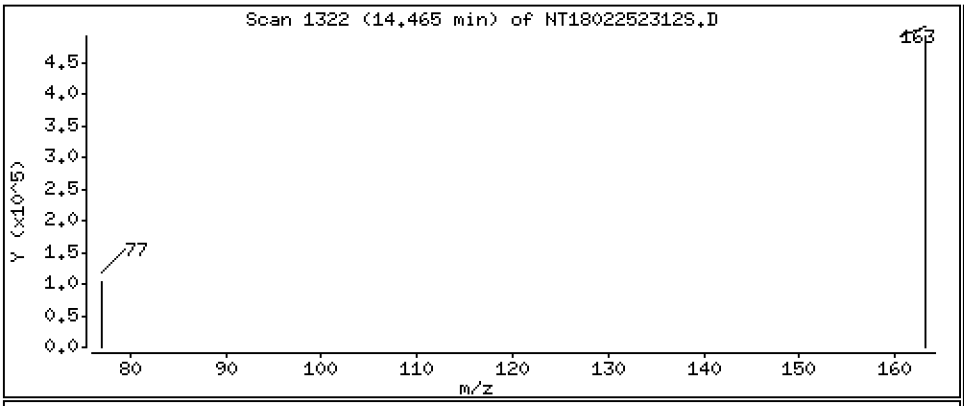
Operator: YZ

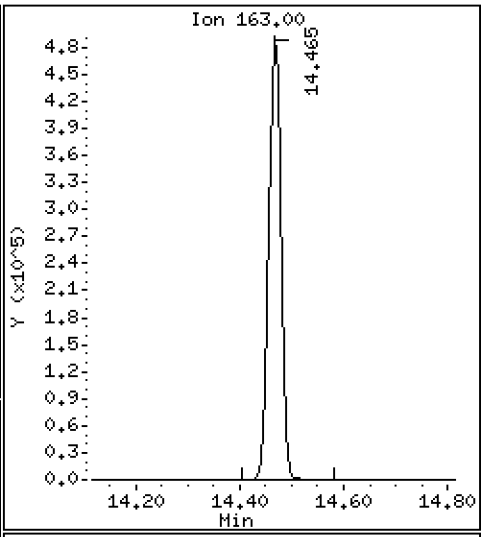
Column phase: ZB-5msi

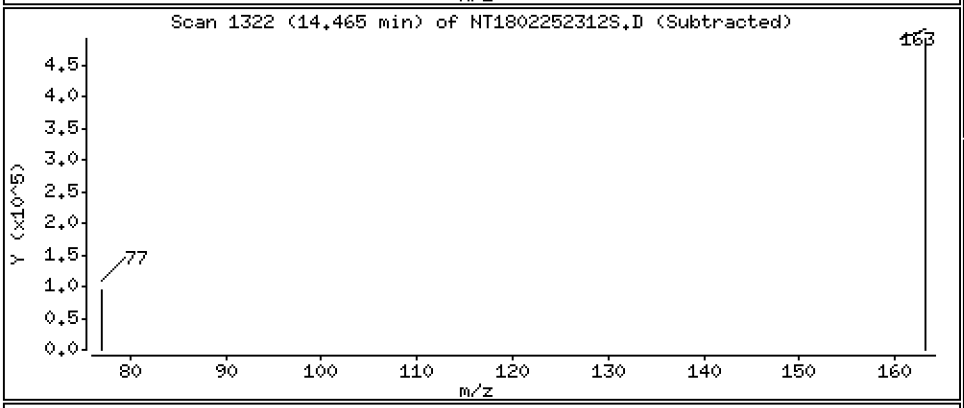
Column diameter: 0.25

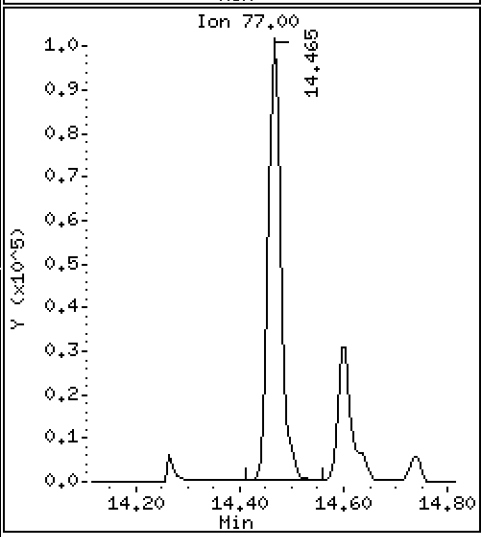
39 Dimethylphthalate

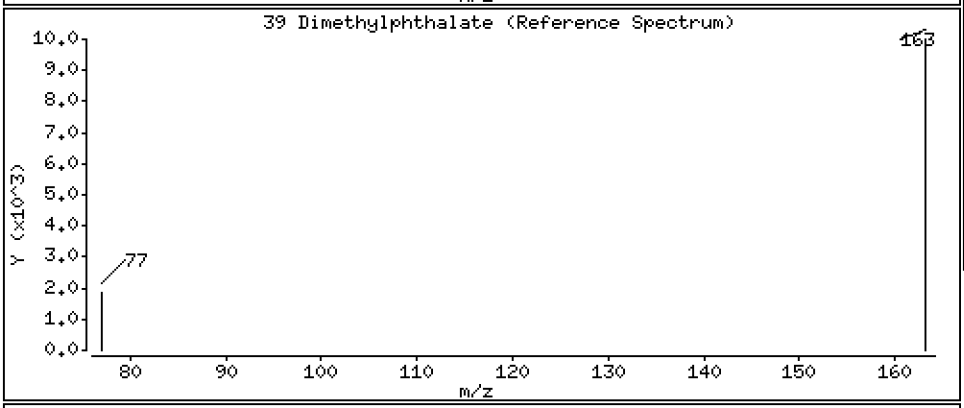
Concentration: 4.793 ug/mL

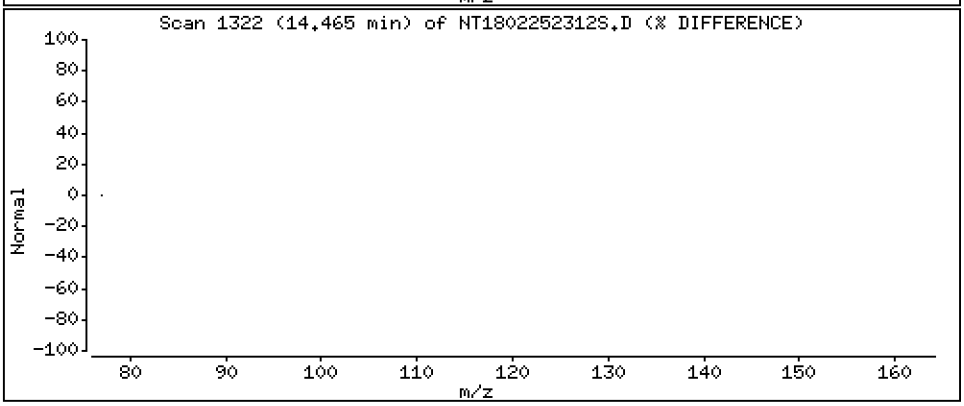












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

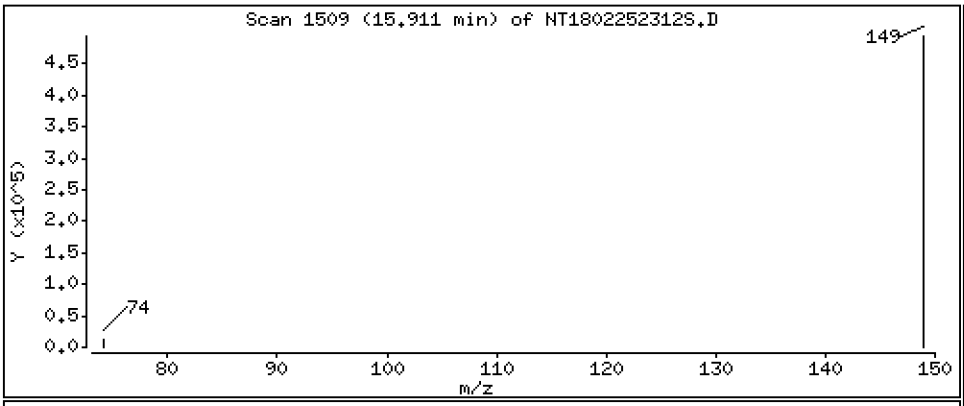
Operator: YZ

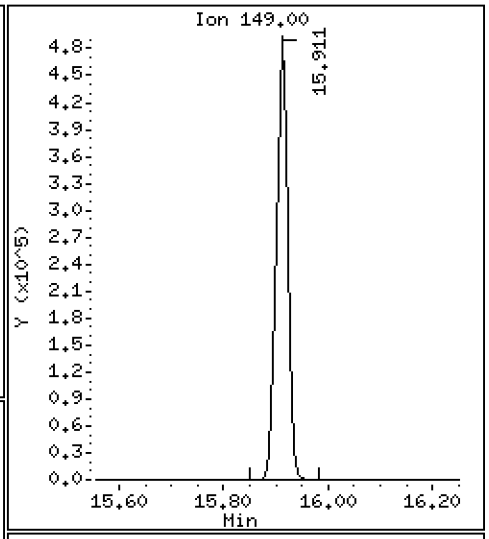
Column phase: ZB-5msi

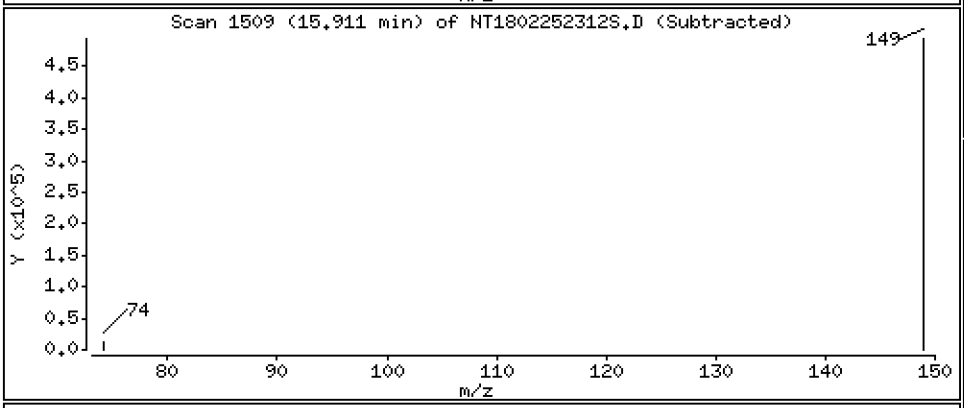
Column diameter: 0.25

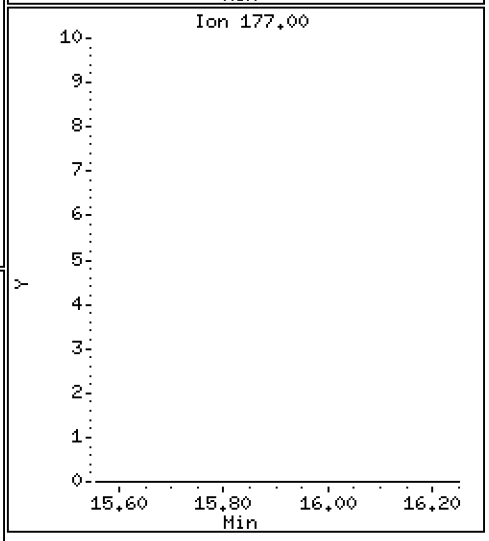
50 Diethylphthalate

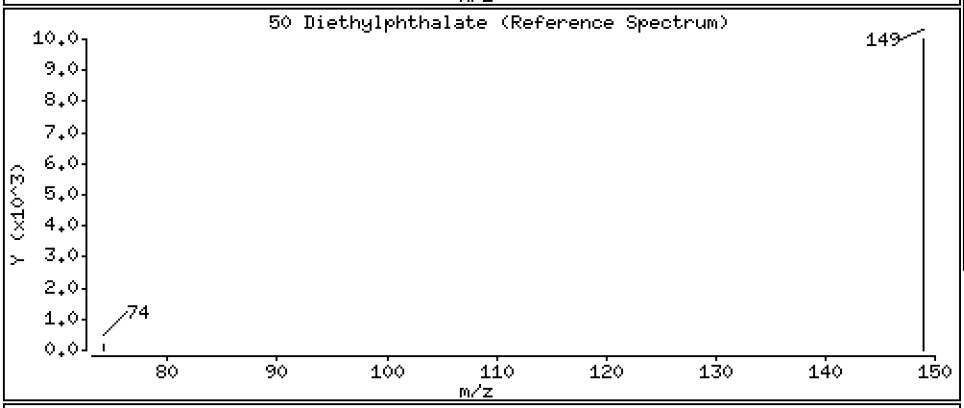
Concentration: 5.068 ug/mL

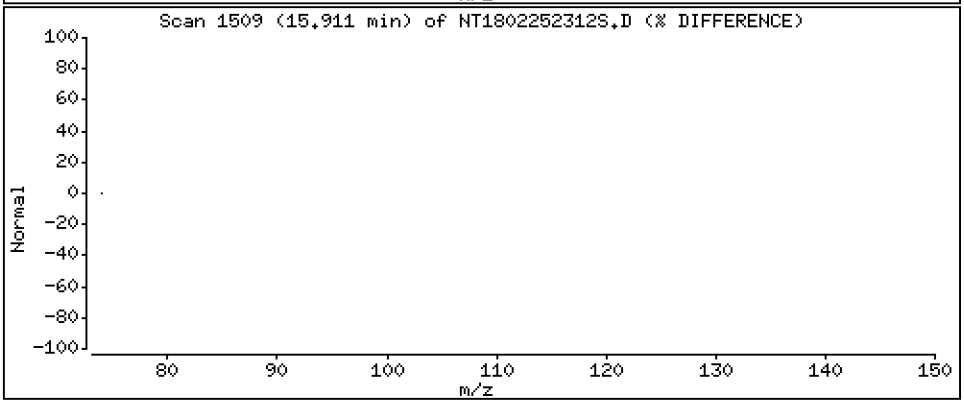












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

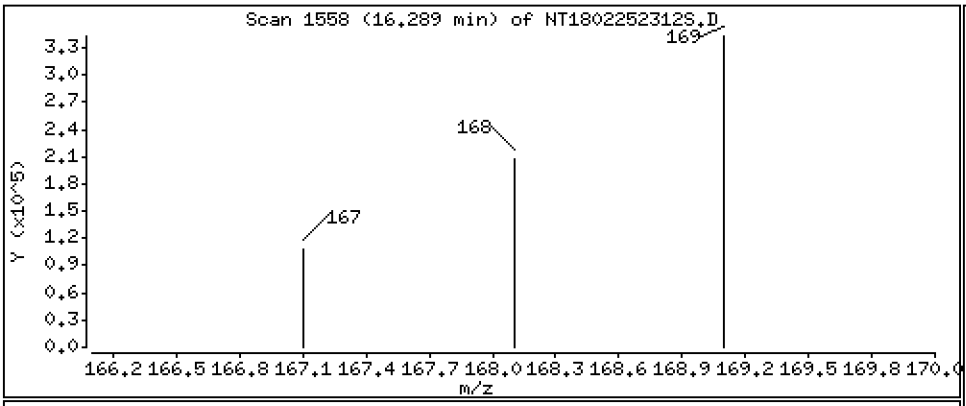
Operator: YZ

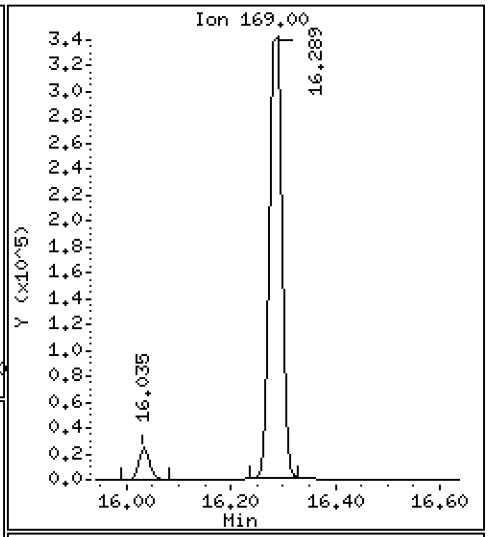
Column phase: ZB-5msi

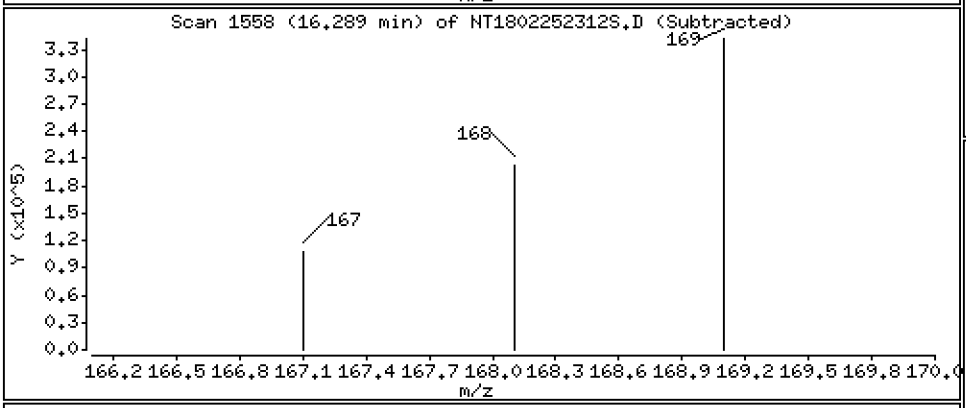
Column diameter: 0.25

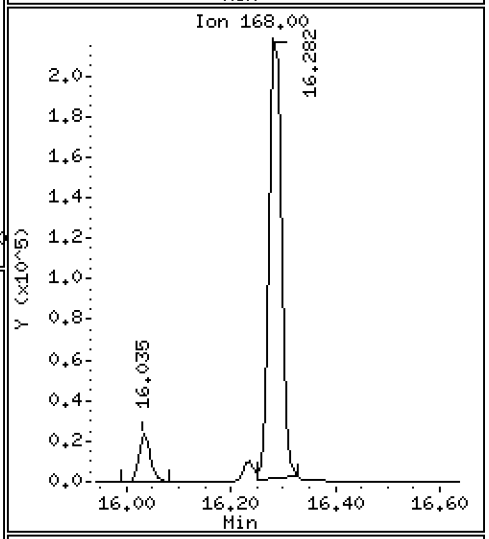
54 N-Nitrosodiphenylamine

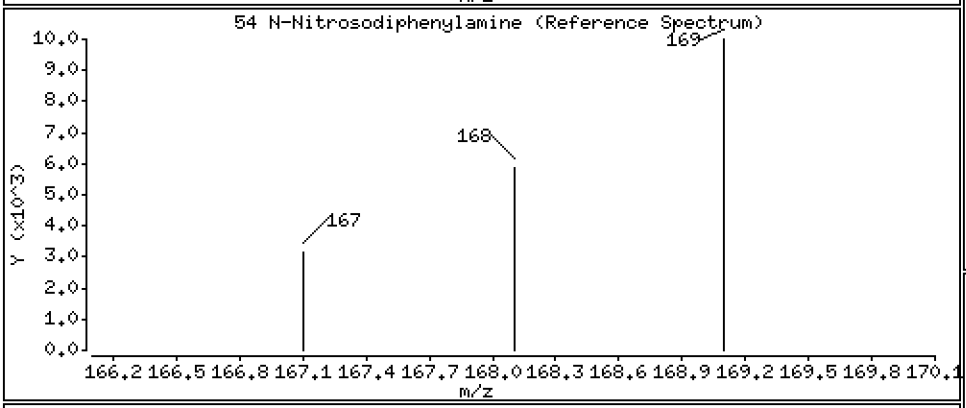
Concentration: 4.815 ug/mL

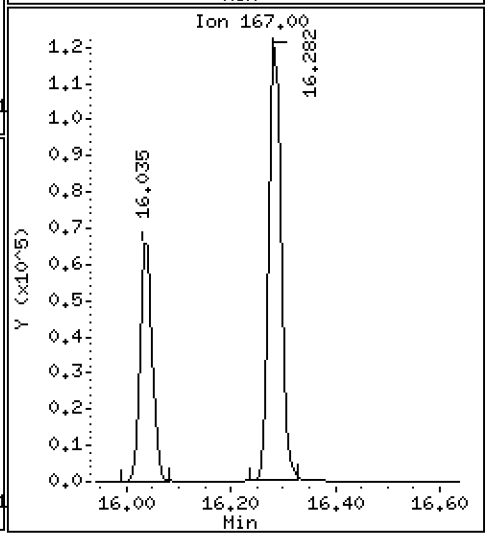


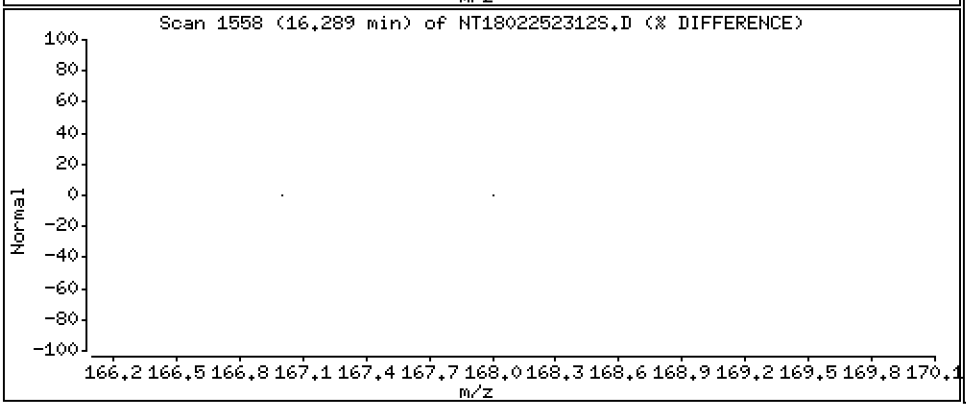












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

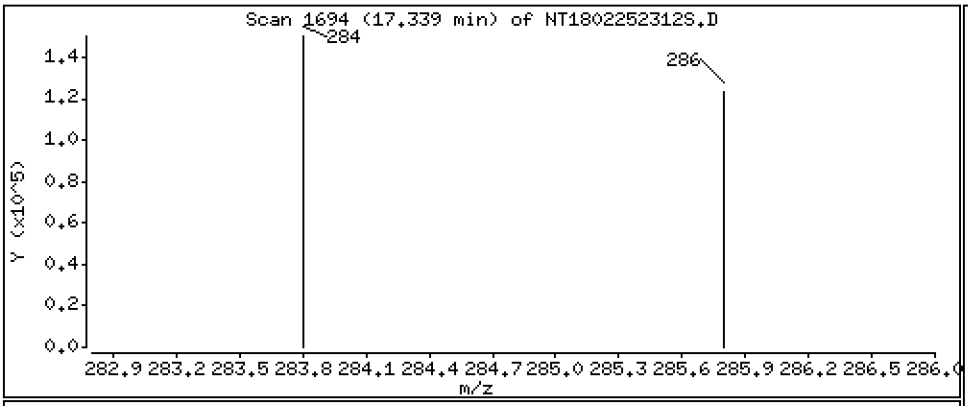
Operator: YZ

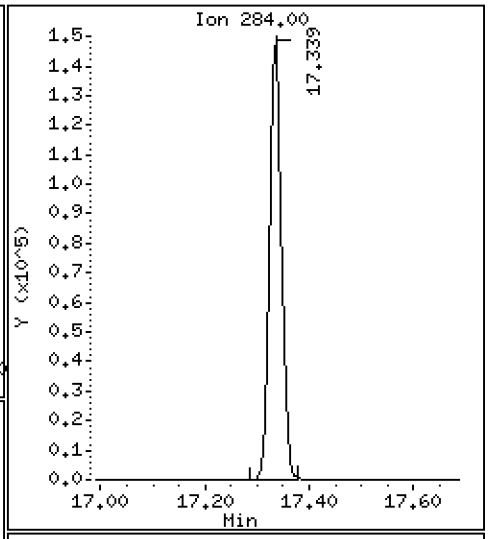
Column phase: ZB-5msi

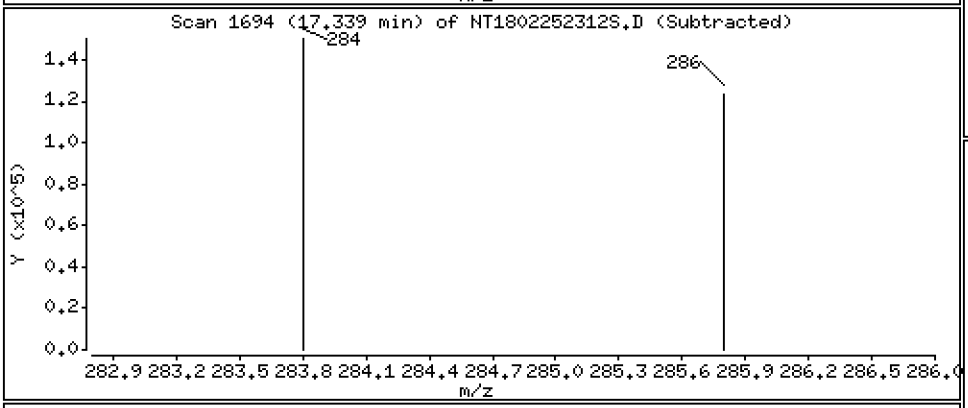
Column diameter: 0.25

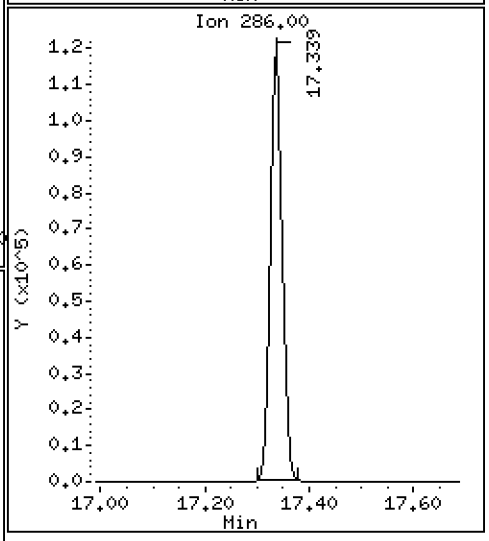
57 Hexachlorobenzene

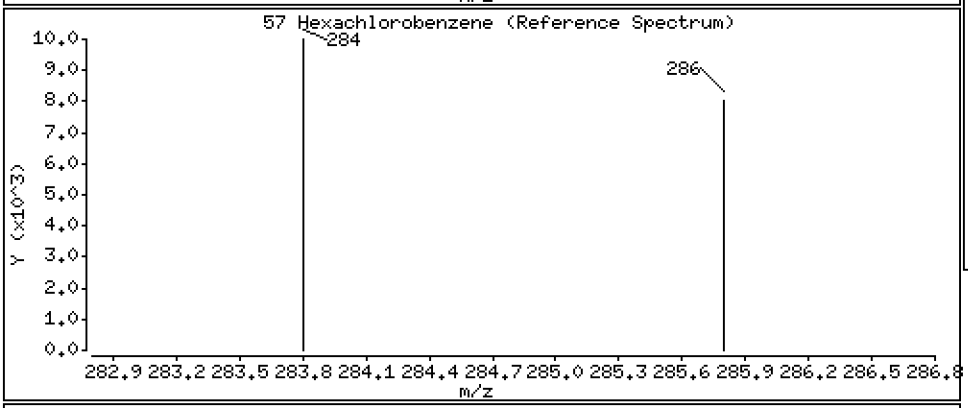
Concentration: 4.458 ug/mL

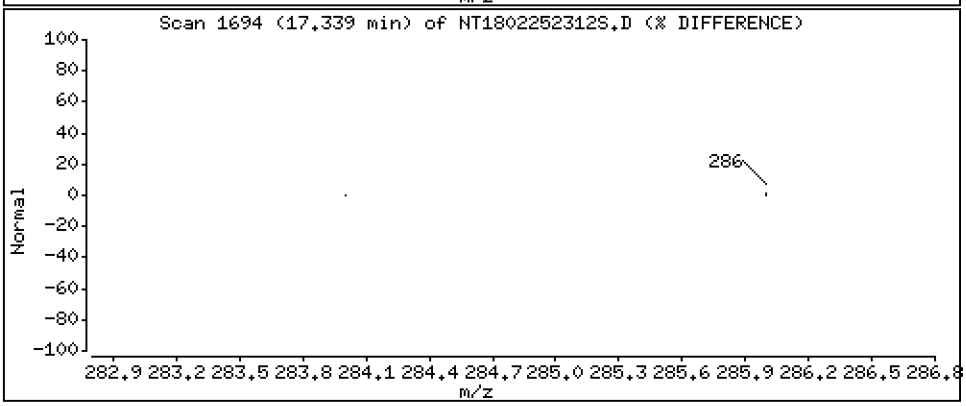












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT1802252312S.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

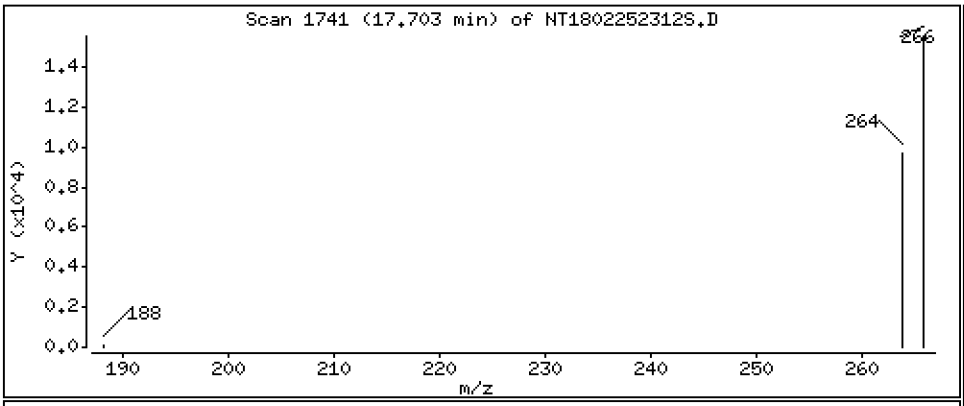
Operator: YZ

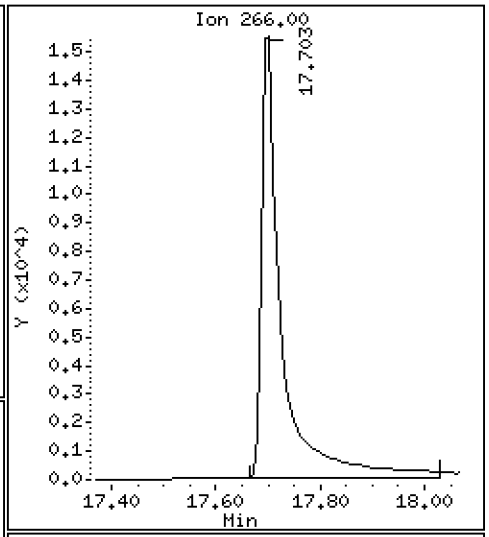
Column phase: ZB-5msi

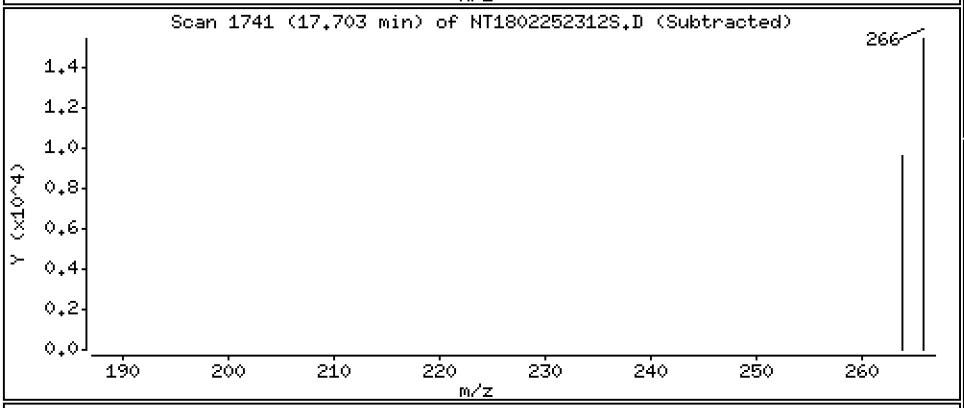
Column diameter: 0.25

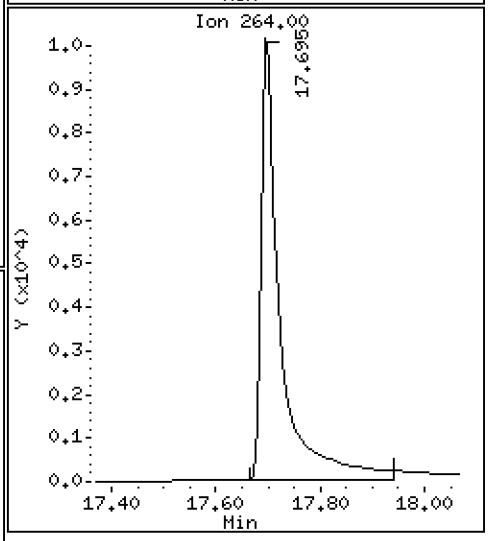
58 Pentachlorophenol

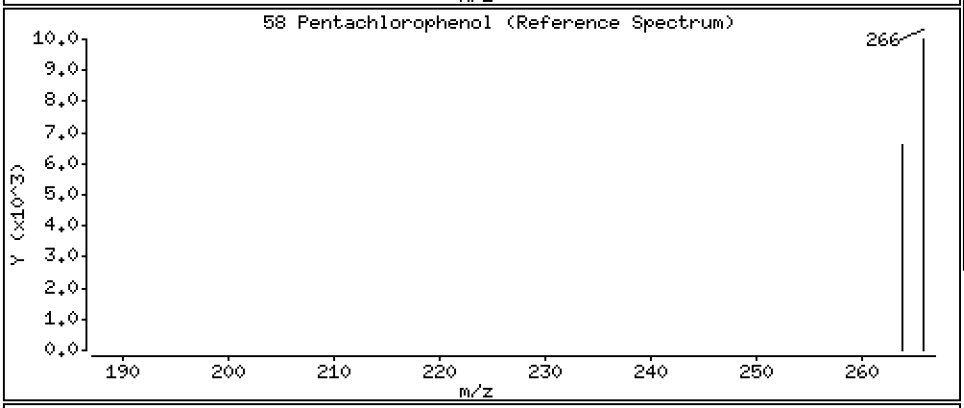
Concentration: 2.631 ug/mL

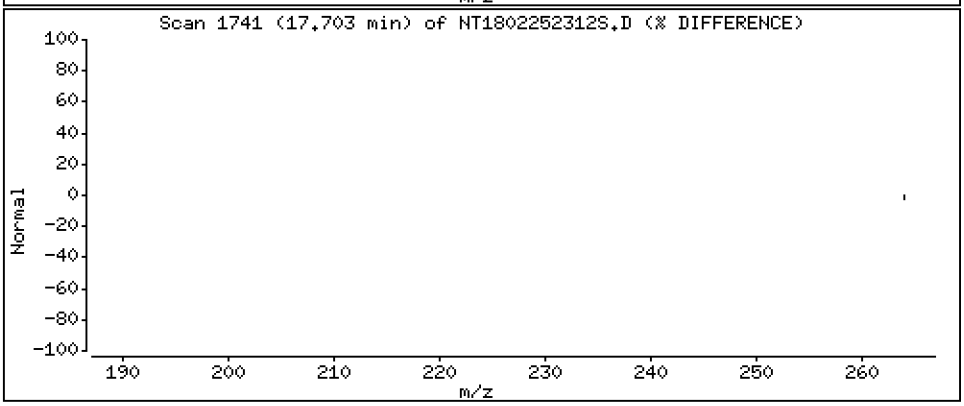












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

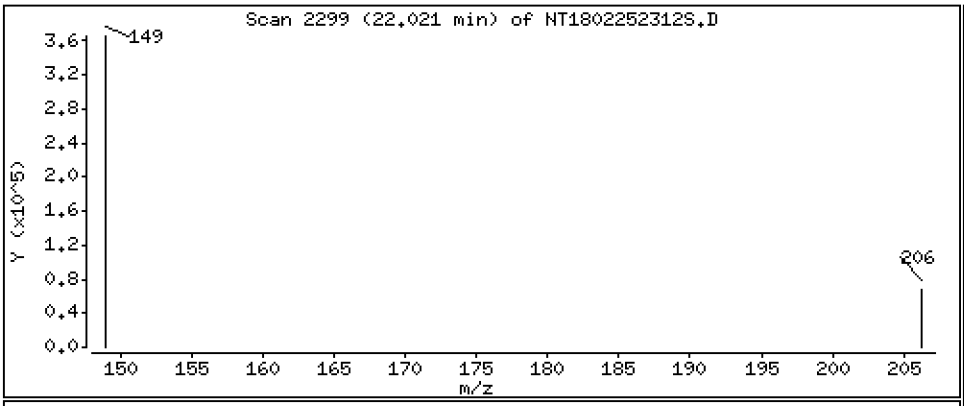
Operator: YZ

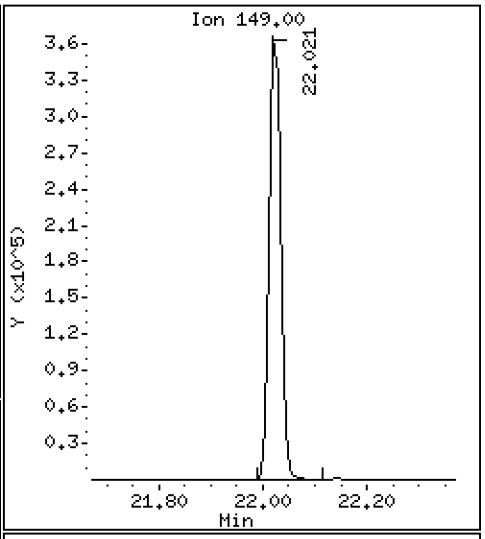
Column phase: ZB-5msi

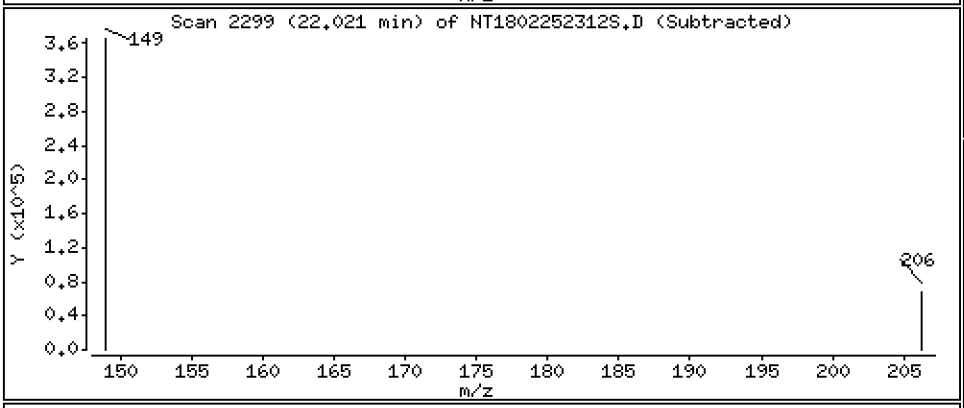
Column diameter: 0.25

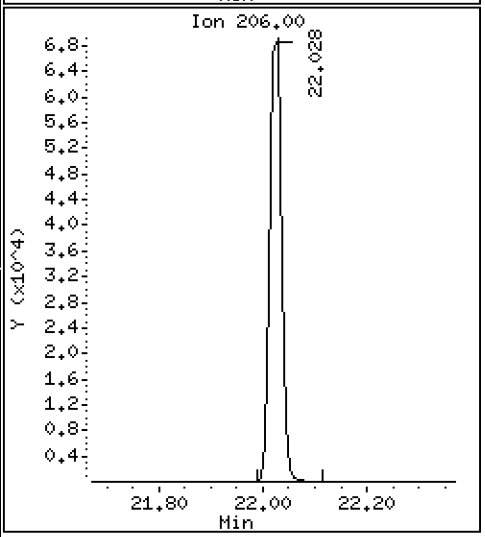
67 Butylbenzylphthalate

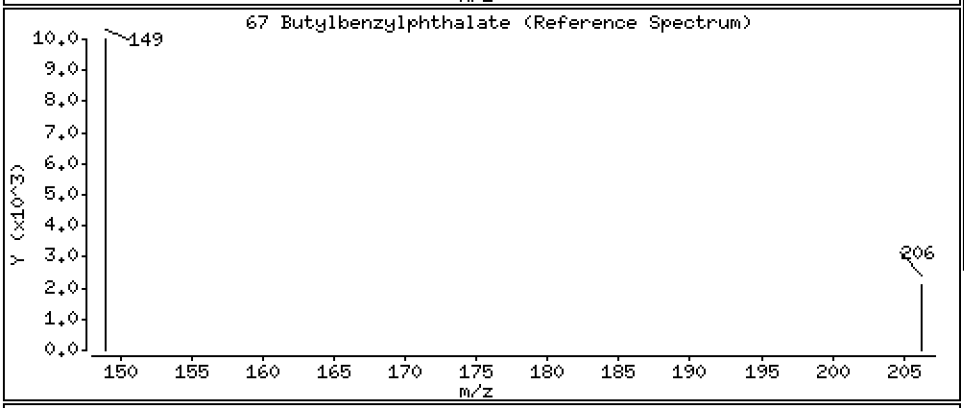
Concentration: 4.683 ug/mL

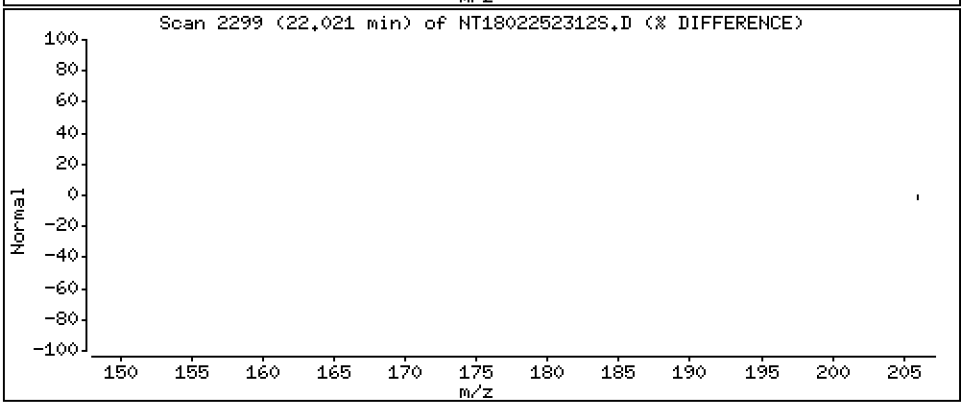












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Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

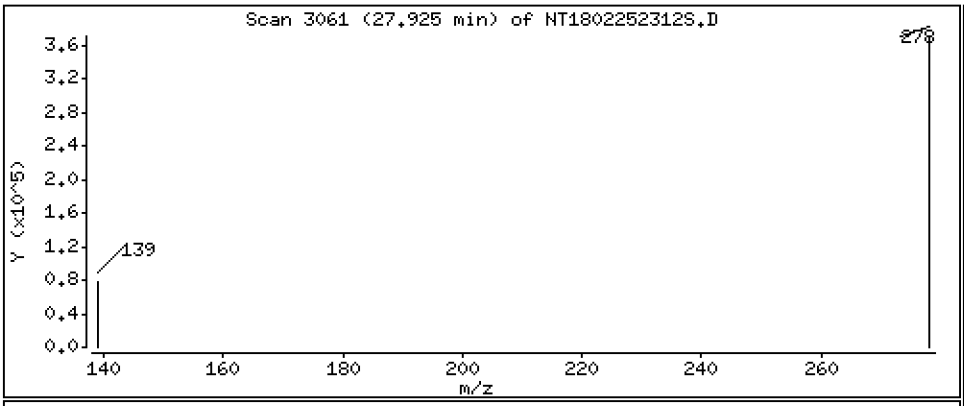
Operator: YZ

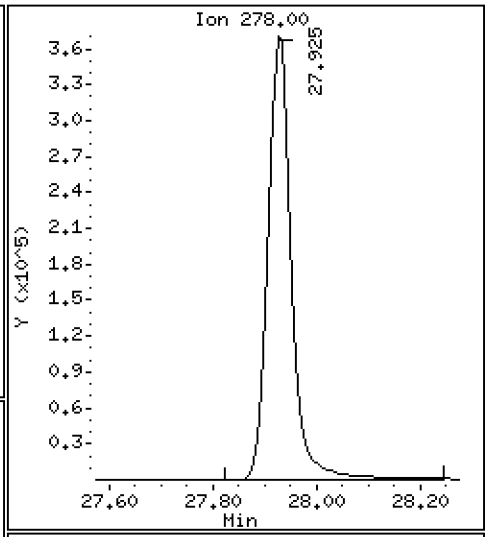
Column phase: ZB-5msi

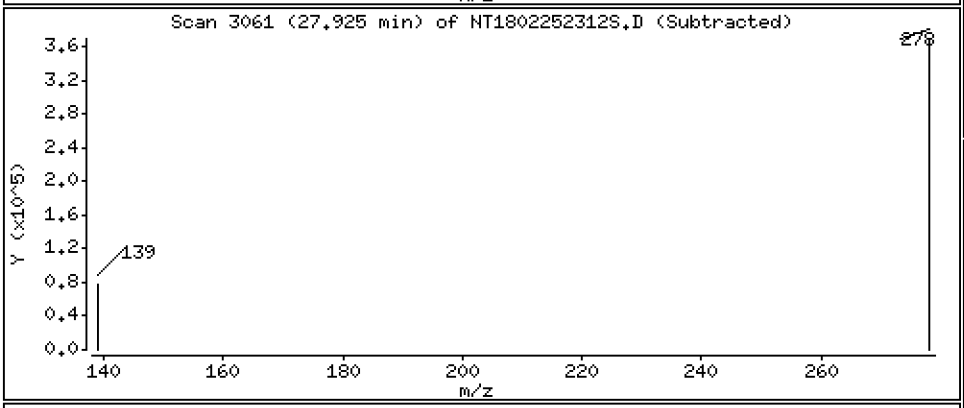
Column diameter: 0.25

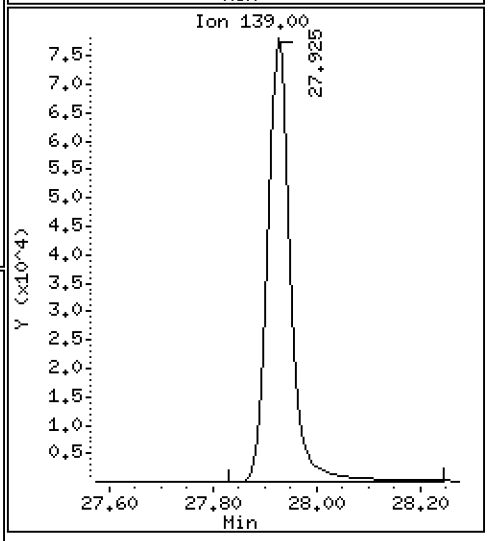
79 Dibenzo(a,h)anthracene

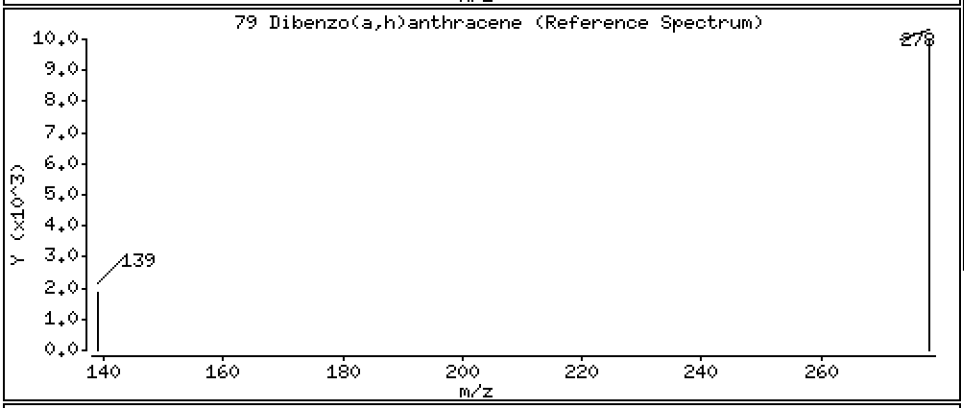
Concentration: 4.890 ug/mL

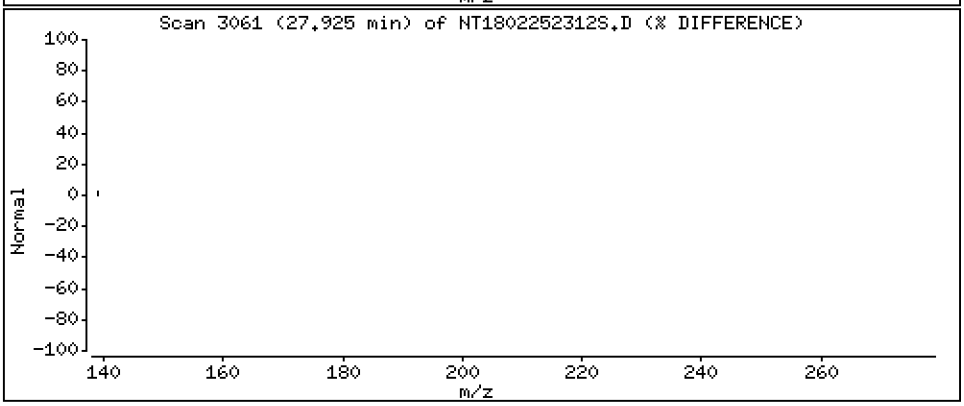












Data File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT18022523125.D

Date : 26-FEB-2023 04:06

Client ID:

Instrument: nt18.i

Sample Info: SLC0155-SCV1

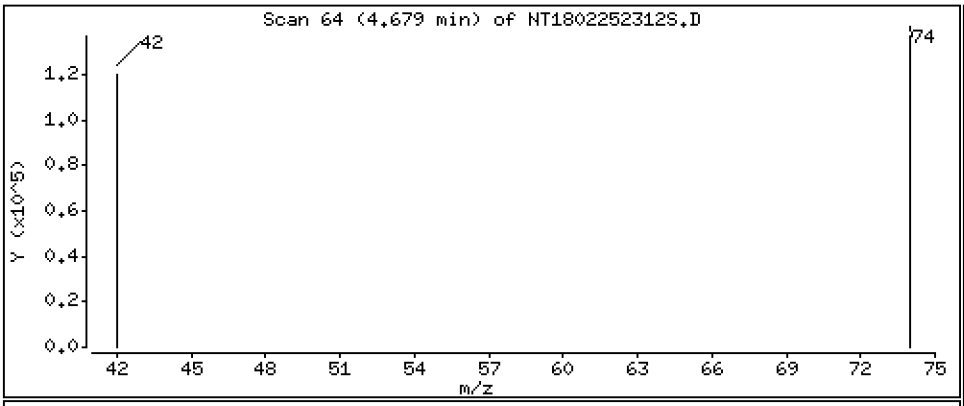
Operator: YZ

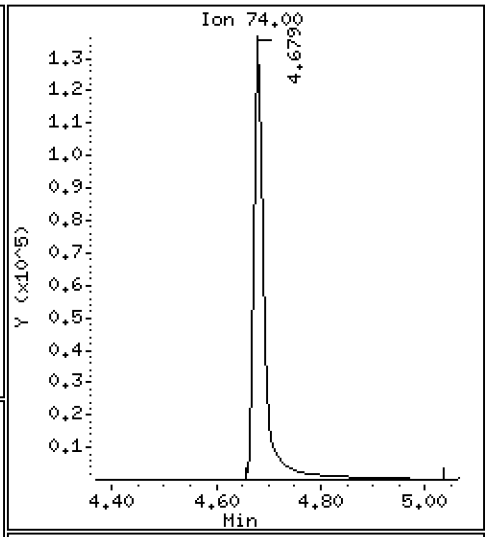
Column phase: ZB-5msi

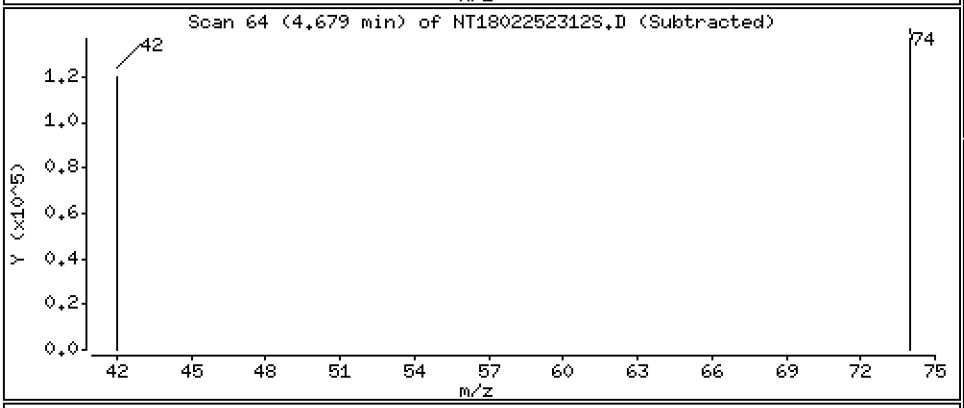
Column diameter: 0.25

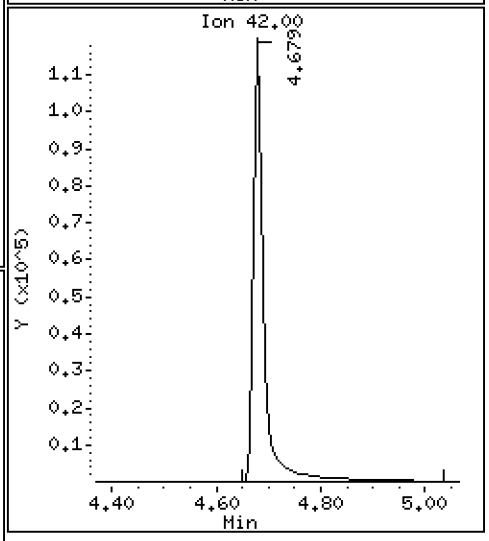
90 N-Nitrosodimethylamine

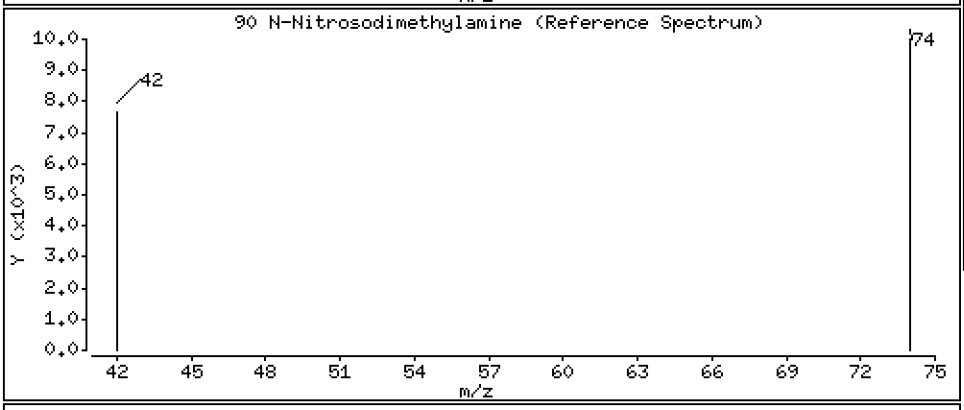
Concentration: 4.897 ug/mL

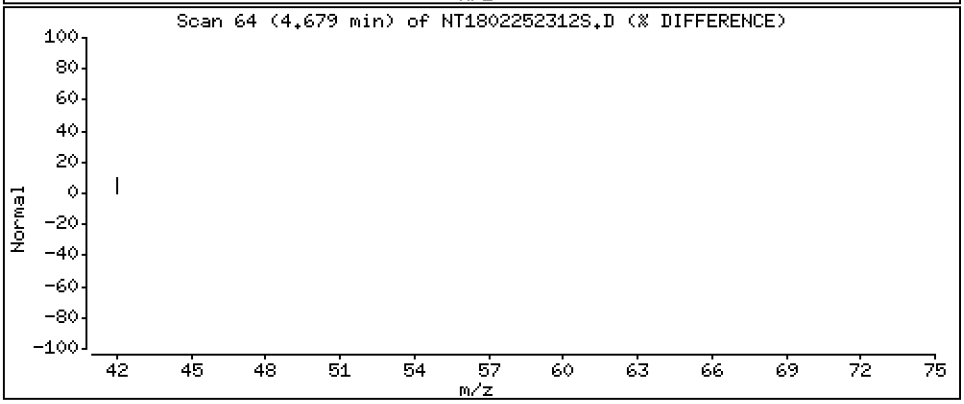












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230225.b\SIM.b\NT1802252312S.D
Lab Smp Id: SLC0155-SCV1
Inj Date : 26-FEB-2023 04:06
Operator : YZ Inst ID: nt18.i
Smp Info : SLC0155-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230225.b\SIM.b\SIMABN2.m
Meth Date : 10-Mar-2023 16:13 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	Compound Not Detected.					
	3	Phenol	94	8.317	8.332	(0.933)	389165	4.32477	4.325
	7	1,3-Dichlorobenzene	146	8.850	8.857	(0.993)	402056	4.46241	4.462
*	8	1,4-Dichlorobenzene-d4	152	8.912	8.912	(1.000)	213719	4.00000	
	9	1,4-Dichlorobenzene	146	8.943	8.943	(1.003)	414169	4.40177	4.402
	11	Benzyl alcohol	79	9.183	9.238	(1.030)	279573	4.84612	4.846
	12	1,2-Dichlorobenzene	146	9.292	9.300	(1.043)	394289	4.40132	4.401
	13	2-Methylphenol	108	9.416	9.432	(1.057)	287135	3.88018	3.880
	15	4-Methylphenol	108	9.688	9.703	(1.087)	312938	4.21475	4.215
	16	N-Nitroso-di-n-propylamine	70	9.735	9.742	(1.092)	239532	4.78925	4.789
	22	2,4-Dimethylphenol	107	10.706	10.715	(0.942)	256225	3.54019	3.540
	24	Benzoic acid	105	10.995	11.089	(0.967)	50284	1.71635	1.716
	26	1,2,4-Trichlorobenzene	180	11.285	11.285	(0.993)	324895	4.38361	4.384
*	27	Naphthalene-d8	136	11.370	11.362	(1.000)	811198	4.00000	
	30	Hexachlorobutadiene	225	11.764	11.764	(1.035)	201685	4.53553	4.536
	39	Dimethylphthalate	163	14.465	14.465	(0.968)	760894	4.79274	4.793
*	42	Acenaphthene-d10	162	14.945	14.944	(1.000)	413230	4.00000	
	50	Diethylphthalate	149	15.911	15.903	(1.065)	735201	5.06782	5.068
	54	N-Nitrosodiphenylamine	169	16.289	16.289	(0.907)	527579	4.81477	4.815
	57	Hexachlorobenzene	284	17.338	17.338	(0.966)	234531	4.45818	4.458
	58	Pentachlorophenol	266	17.702	17.718	(0.986)	41149	2.63077	2.631
*	59	Phenanthrene-d10	188	17.950	17.950	(1.000)	757386	4.00000	
$	66	Terphenyl-d14	244	21.099	21.099	(0.918)	599	0.00465	0.004650(RM)
	67	Butylbenzylphthalate	149	22.020	22.021	(0.958)	528586	4.68314	4.683
*	69	Chrysene-d12	240	22.988	22.980	(1.000)	711364	4.00000	
*	77	Perylene-d12	264	25.473	25.473	(1.000)	786043	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.925	27.925	(1.096)	1142201	4.89045	4.890
	90	N-Nitrosodimethylamine	74	4.678	4.717	(0.525)	201044	4.89694	4.897

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802252312S.D
Lab Smp Id: SLC0155-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230225.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 00:04
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	234930	117465	469860	213719	-9.03
27 Naphthalene-d8	904391	452196	1808782	811198	-10.30
42 Acenaphthene-d10	465099	232550	930198	413230	-11.15
59 Phenanthrene-d10	856800	428400	1713600	757386	-11.60
69 Chrysene-d12	764037	382019	1528074	711364	-6.89
77 Perylene-d12	862908	431454	1725816	786043	-8.91

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.91	8.41	9.41	8.91	0.00
27 Naphthalene-d8	11.36	10.86	11.86	11.37	0.07
42 Acenaphthene-d10	14.94	14.44	15.44	14.95	0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	0.00
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
77 Perylene-d12	25.47	24.97	25.97	25.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802252312S.D

Lab ID: SLC0155-SCV1
nt18.i, 20230225.b\SIM.b\SIMABN2.m,   26-FEB-2023 04:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.030	1.037	-0.0061	Benzyl alcohol
0.967	0.000	0.9670	Benzoic acid
0.986	0.000	0.9862	Pentachlorophenol

RRT check based on Ccal File: SIM.b/NT1802252310S.D

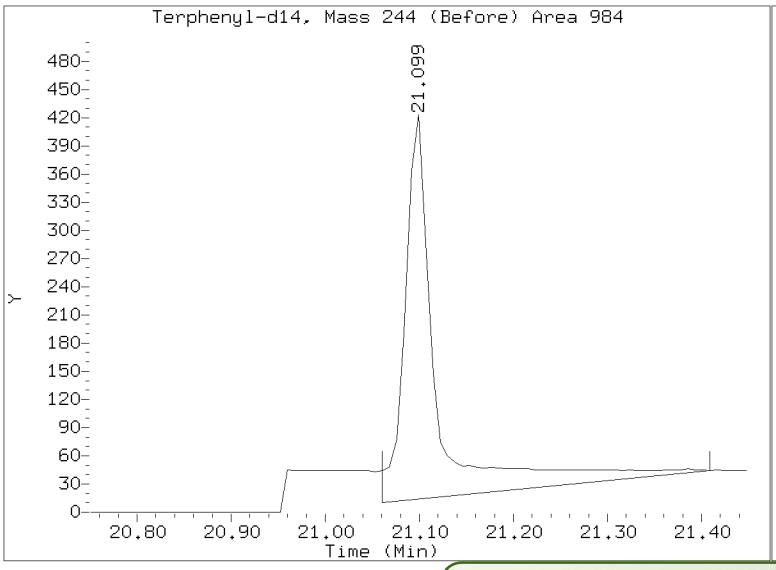
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

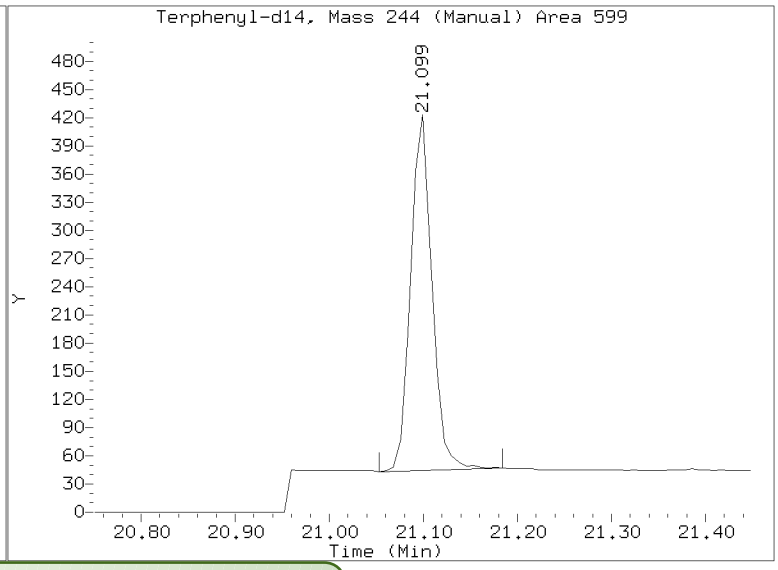
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230225.b/SIM.b/NT1802252312S.D
Injection Date: 26-FEB-2023 04:06
Lab ID:SLC0155-SCV1 Client ID:
Report Date: 03/10/2023 16:18





APPROVED

By Deenay Dunmore at 4:33 pm, Mar 10, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00036
Lab File ID:	NT1802262327S.D	Calibration Date:	02/25/2023
Sequence:	SLC0389	Injection Date:	02/27/23
Lab Sample ID:	SLC0389-CCV1	Injection Time:	05:16
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	1.0000	0.9	1.7610310	1.5945690		-9.5	+/-50
1,2-Dichlorobenzene	A	1.0000	0.9	1.6766720	1.5367400		-8.3	+/-50
Benzyl Alcohol	A	1.0000	1.1	1.0797360	1.1846870		9.7	+/-50
Benzoic acid	A	4.0000	4.8	0.0982061	0.1737461		19.3	+/-50
2,4-Dimethylphenol	A	2.0000	2.0	0.3568845	0.3505812		-1.8	+/-50
1,2,4-Trichlorobenzene	A	1.0000	0.9	0.3654639	0.3429729		-6.2	+/-50
N-Nitrosodiphenylamine	A	1.0000	0.9	0.5787015	0.5327616		-7.9	+/-50
Pentachlorophenol	A	2.0000	2.0	0.0525310	0.0842434		2.3	+/-50
2-Fluorophenol	A	1.5000	1.60	1.2910050	1.3812350		7.0	+/-50
p-Terphenyl-d14	A	1.0000	1.06	0.7242850	0.7651906		5.6	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623278.D

Page 1

Date : 27-FEB-2023 05:16

Client ID:

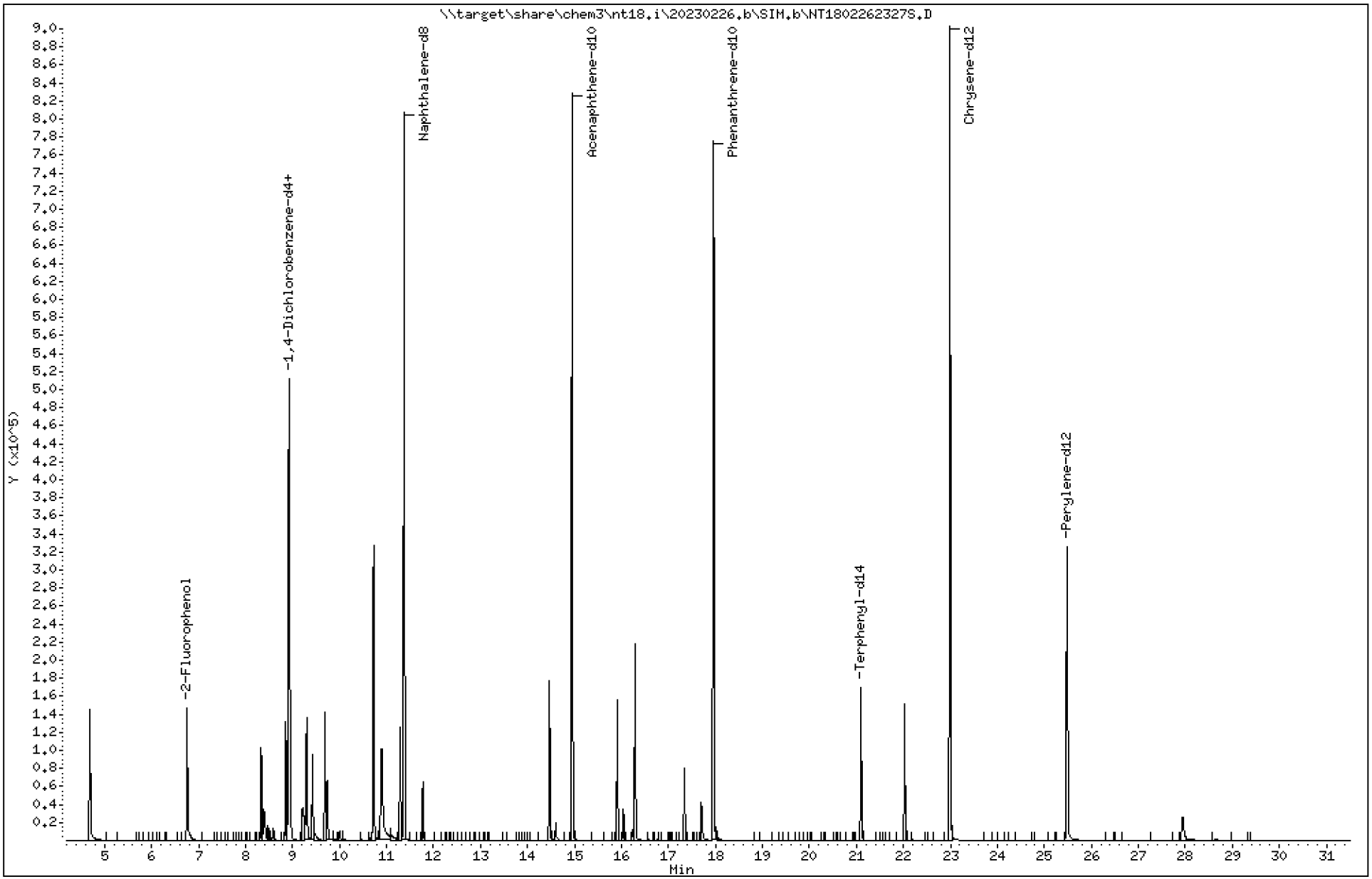
Instrument: nt18.i

Sample Info: SLC0389-CCV1

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

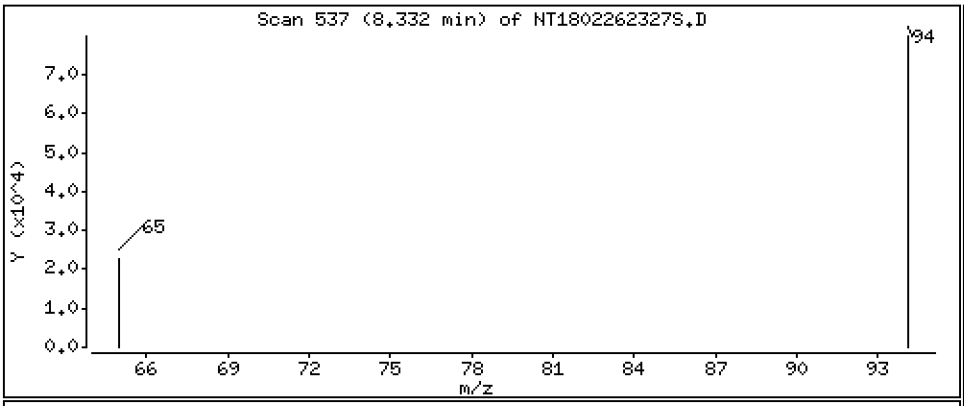
Operator: YZ

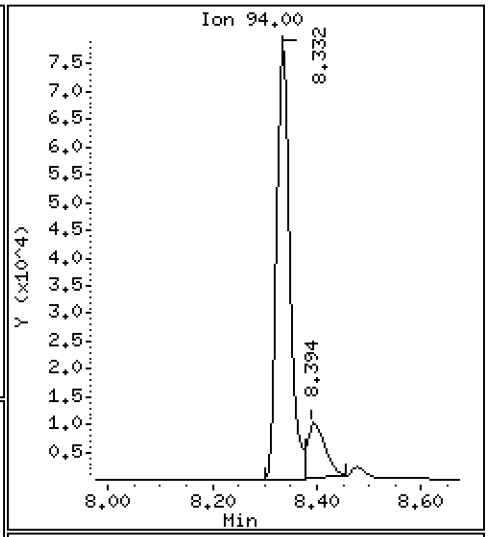
Column phase: ZB-5msi

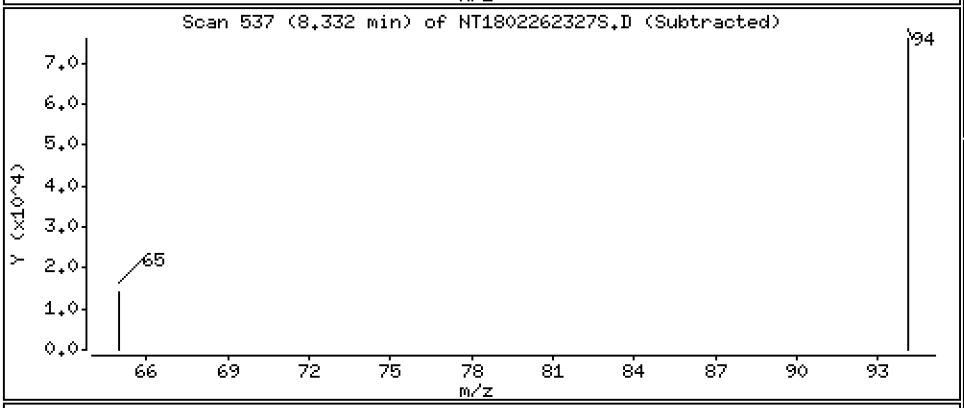
Column diameter: 0.25

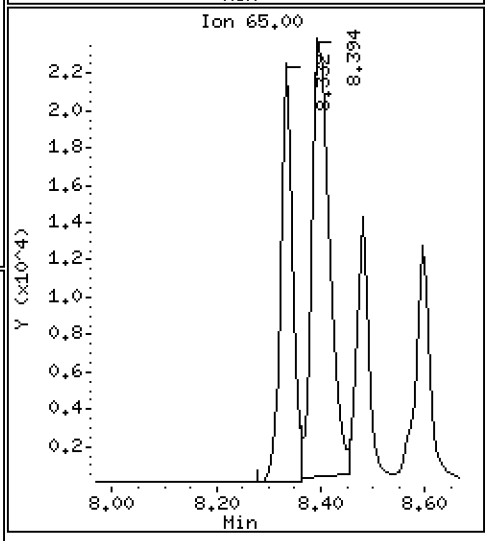
3 Phenol

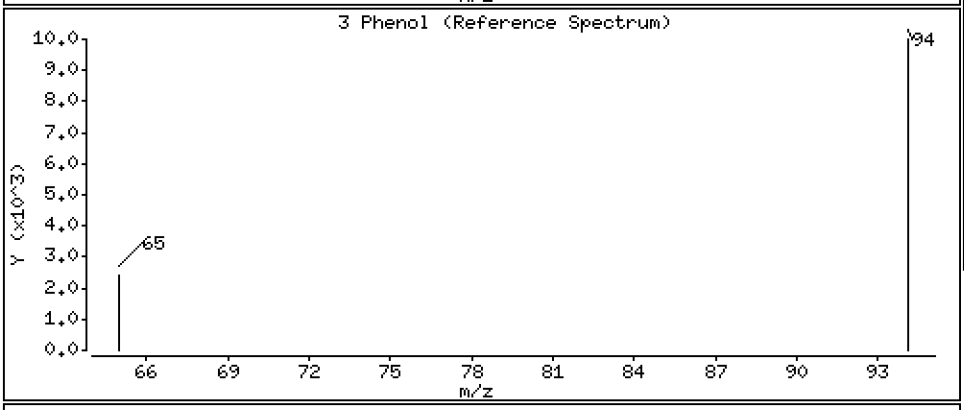
Concentration: 0.9944 ug/mL

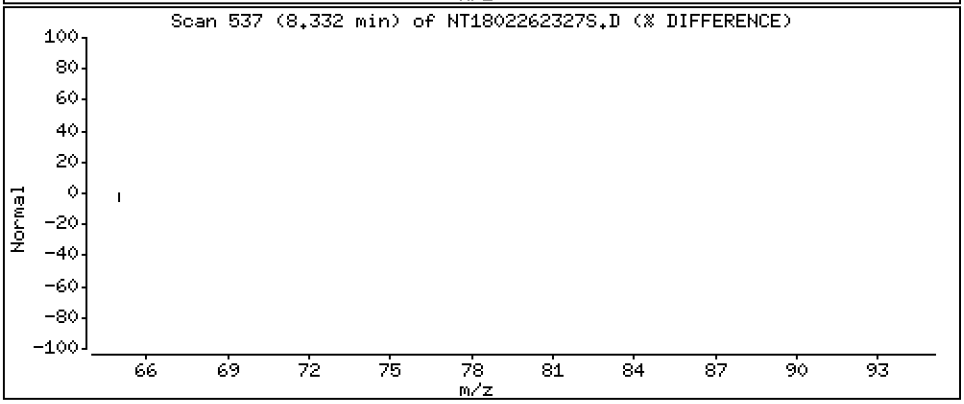












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Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

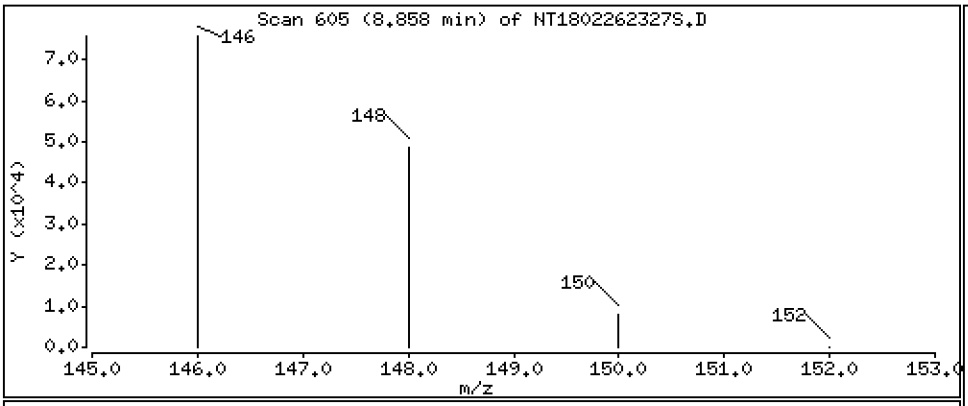
Operator: YZ

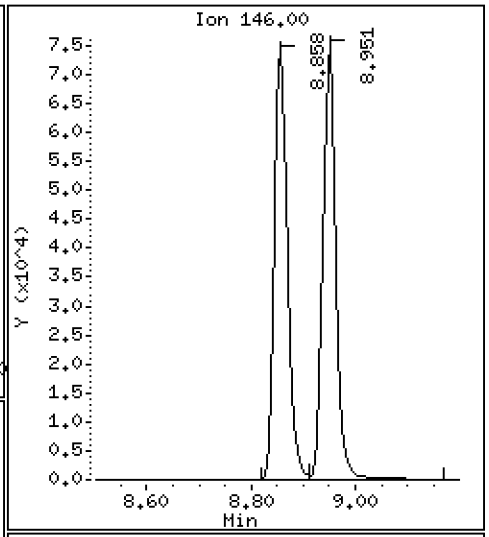
Column phase: ZB-5msi

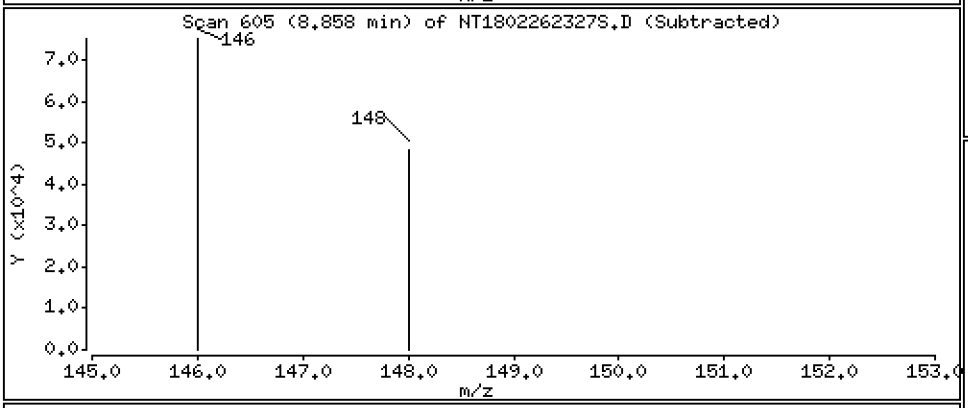
Column diameter: 0.25

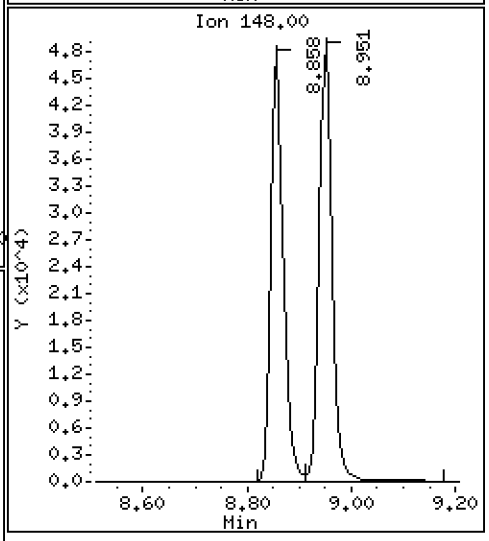
7 1,3-Dichlorobenzene

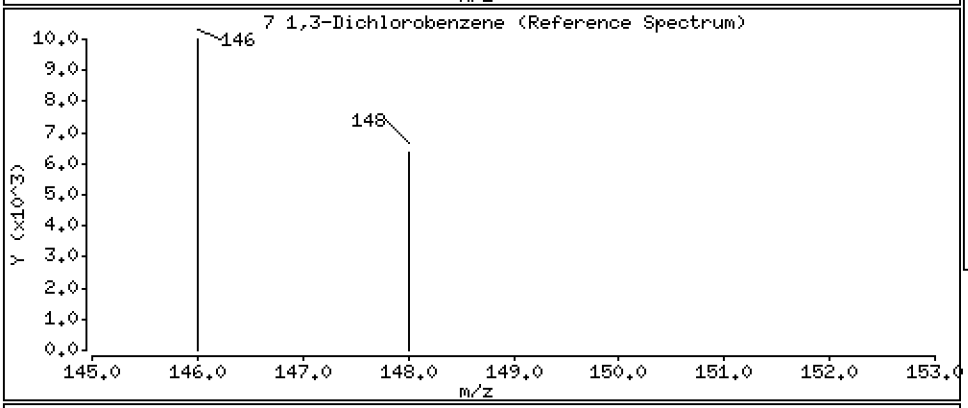
Concentration: 0.9313 ug/mL

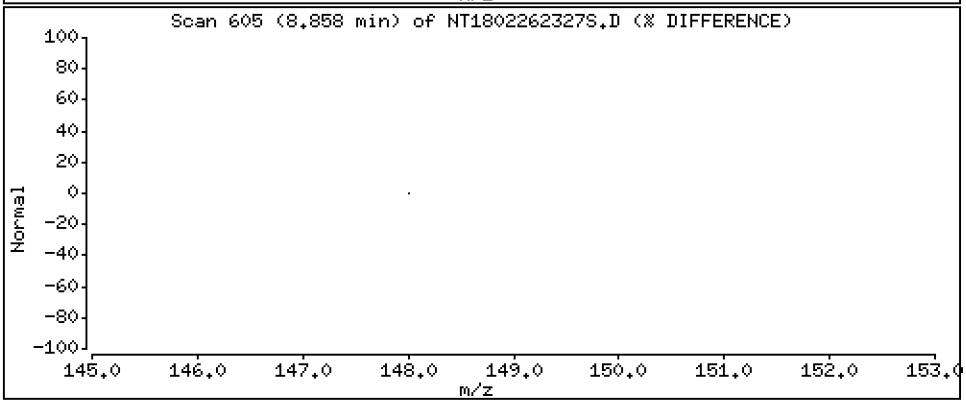












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Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

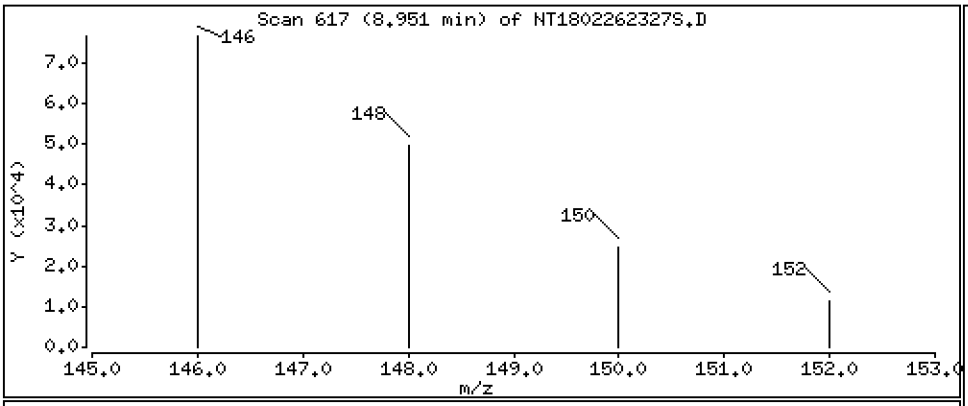
Operator: YZ

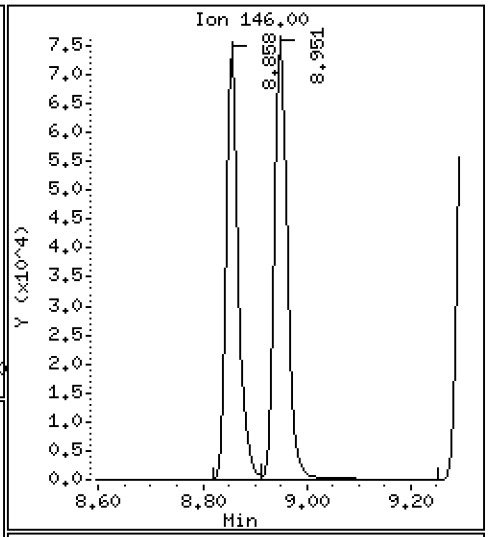
Column phase: ZB-5msi

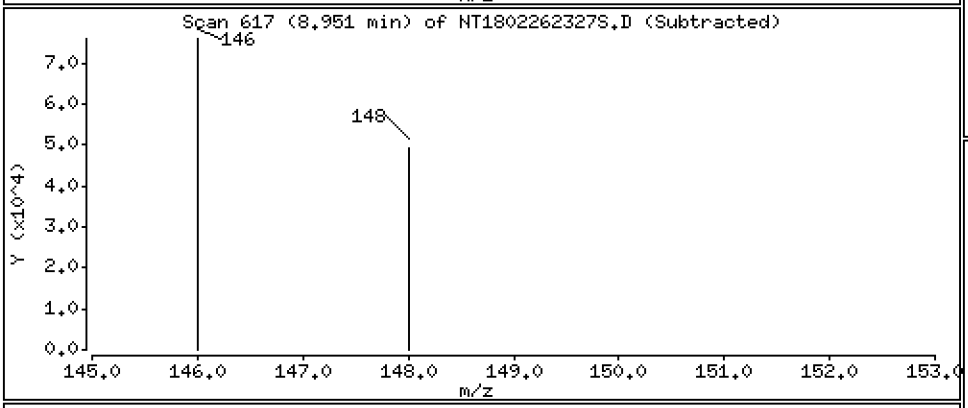
Column diameter: 0.25

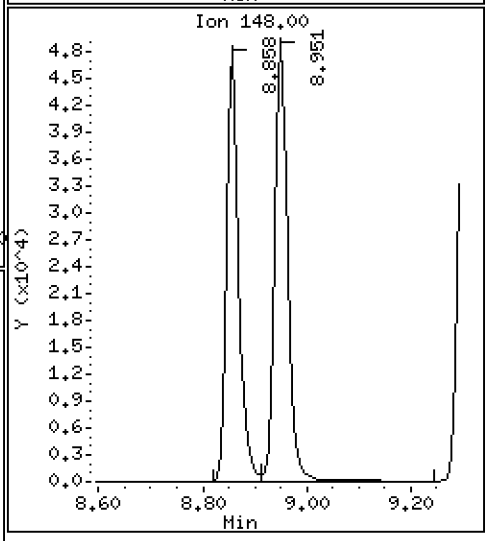
9 1,4-Dichlorobenzene

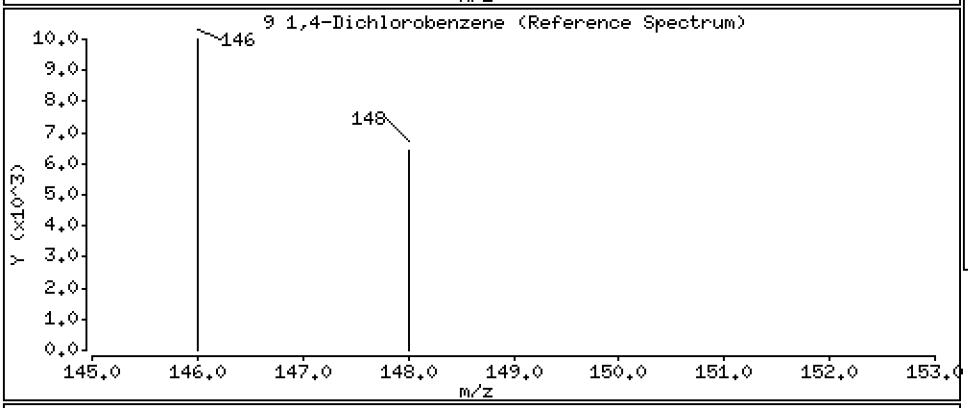
Concentration: 0.9055 ug/mL

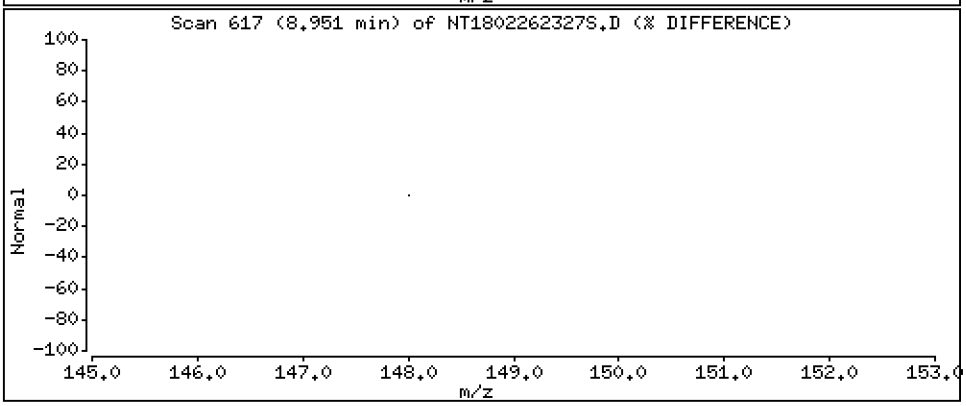












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Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

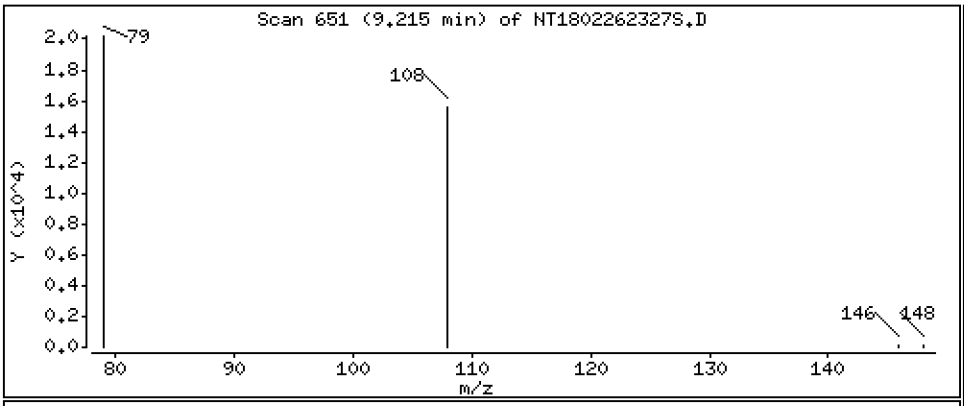
Operator: YZ

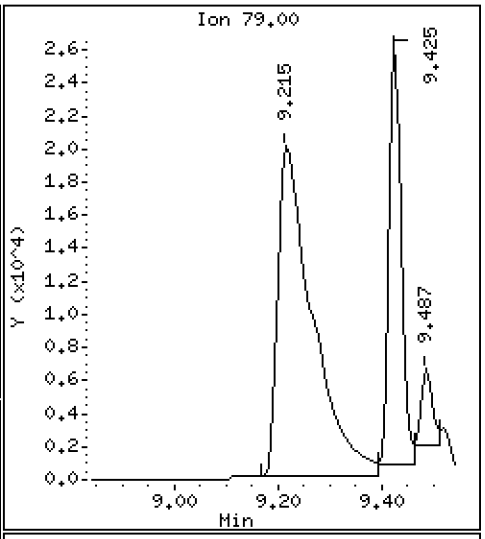
Column phase: ZB-5msi

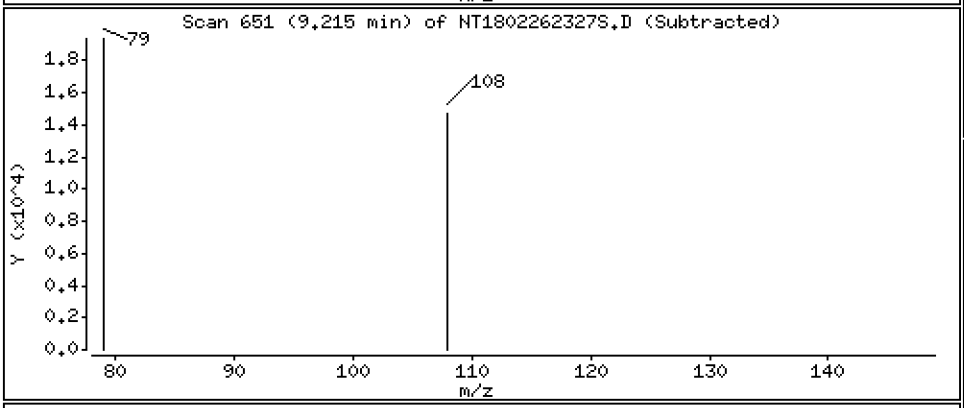
Column diameter: 0.25

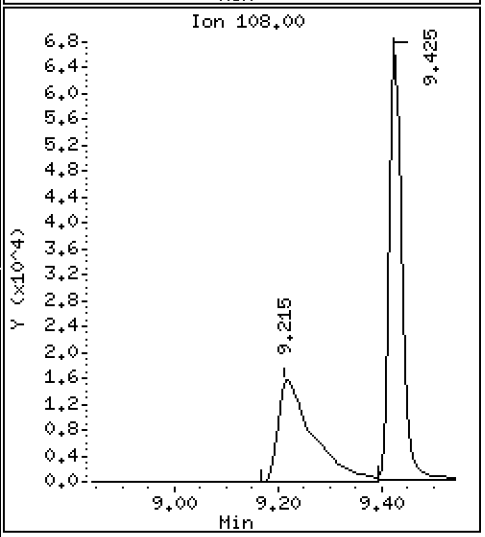
11 Benzyl alcohol

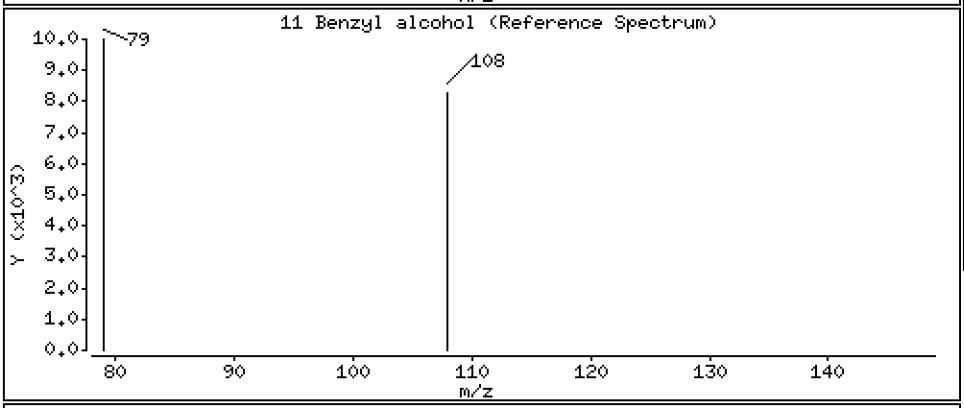
Concentration: 1.097 ug/mL

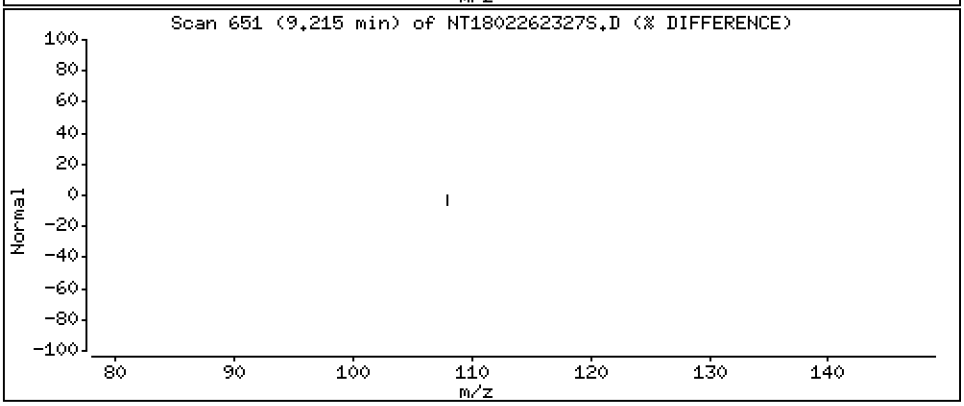












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Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

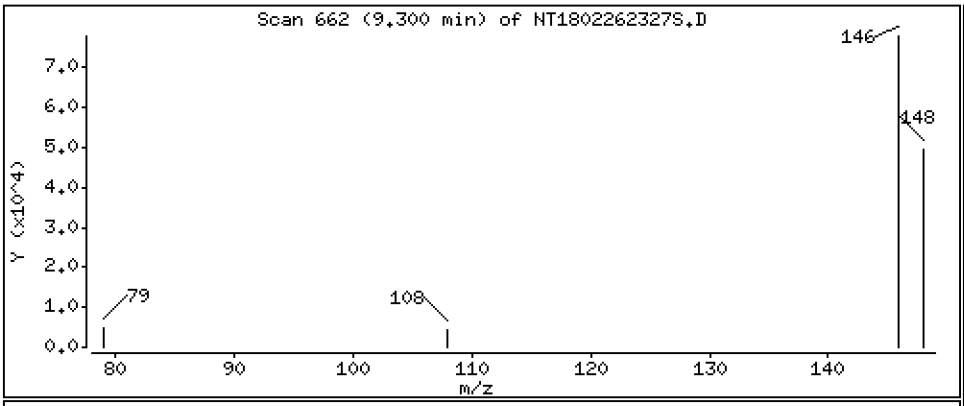
Operator: YZ

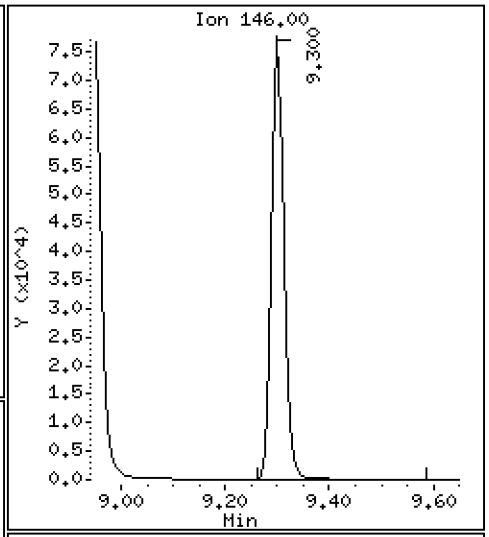
Column phase: ZB-5msi

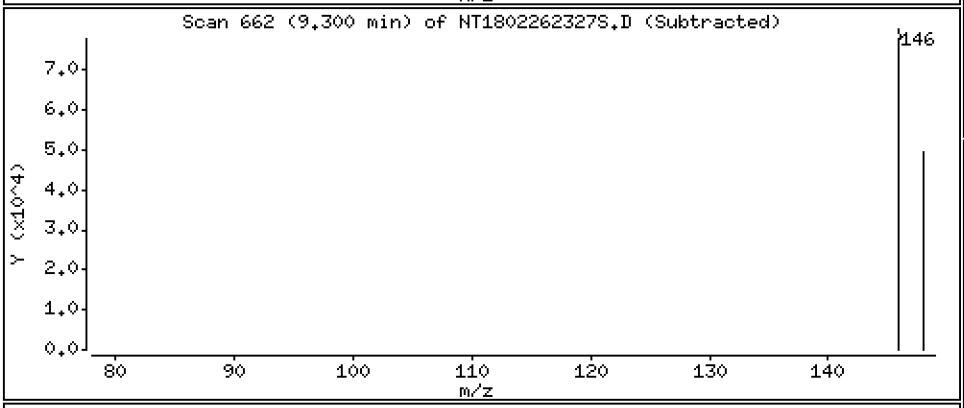
Column diameter: 0.25

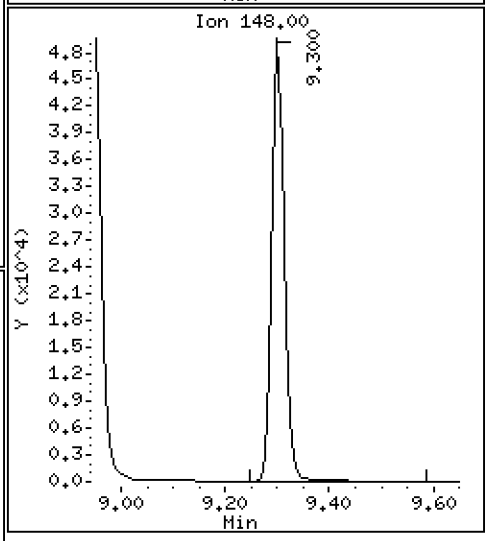
12 1,2-Dichlorobenzene

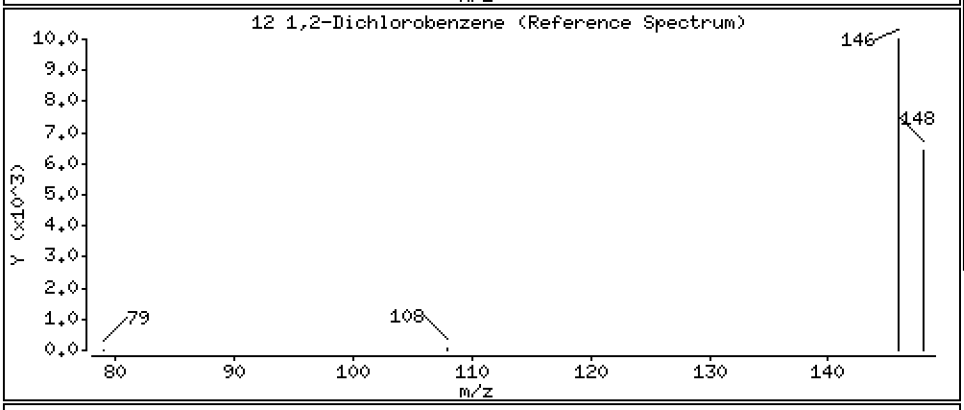
Concentration: 0.9165 ug/mL

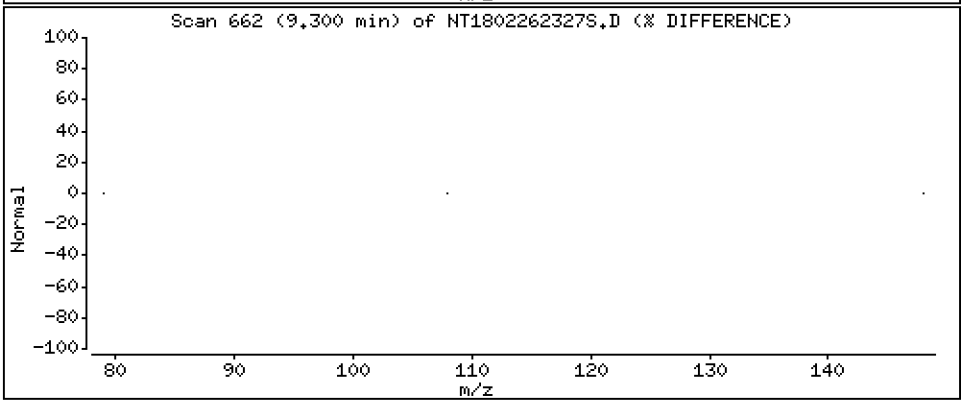












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Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

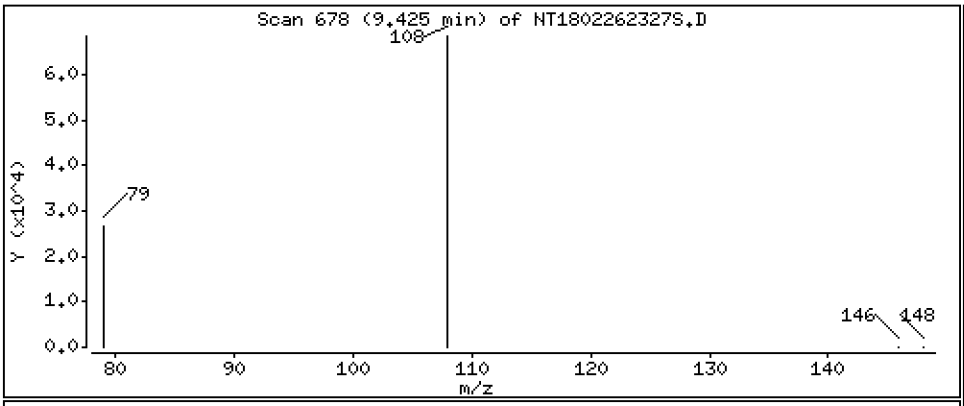
Operator: YZ

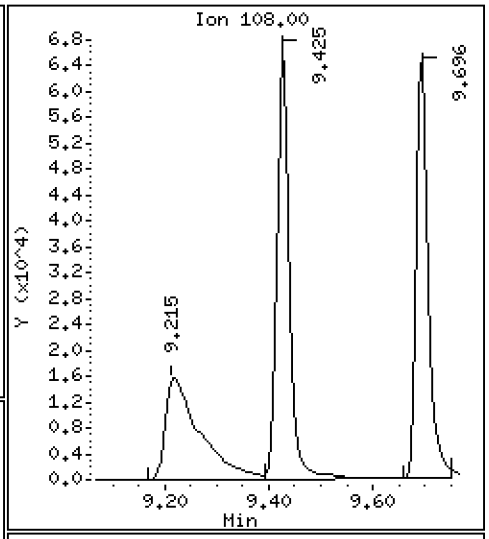
Column phase: ZB-5msi

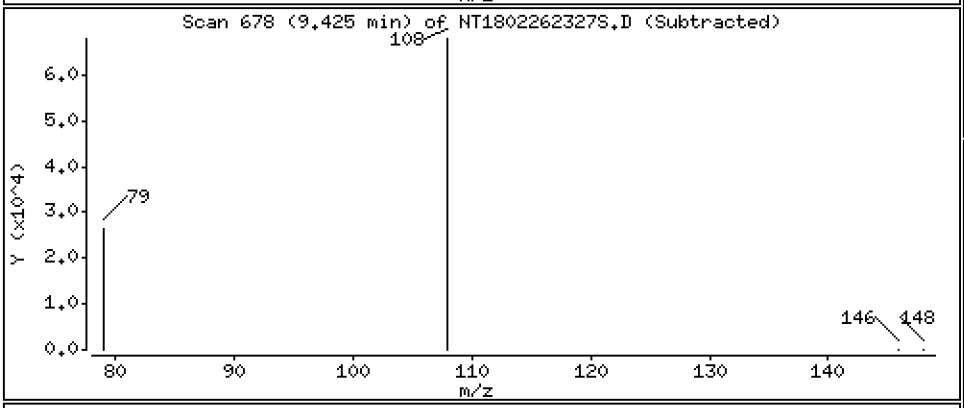
Column diameter: 0.25

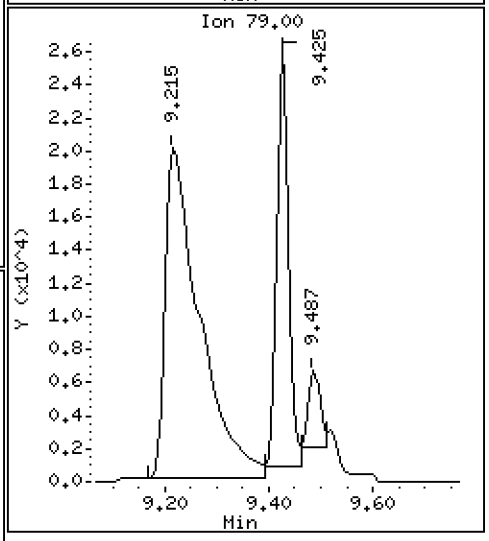
13 2-Methylphenol

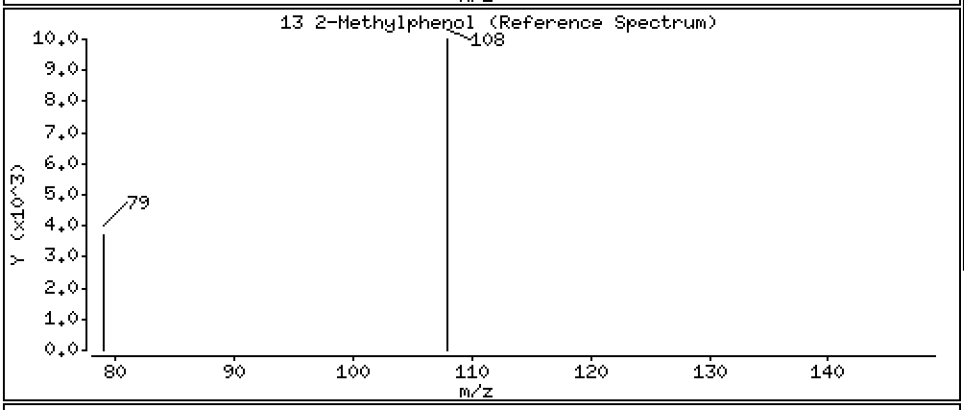
Concentration: 1.003 ug/mL

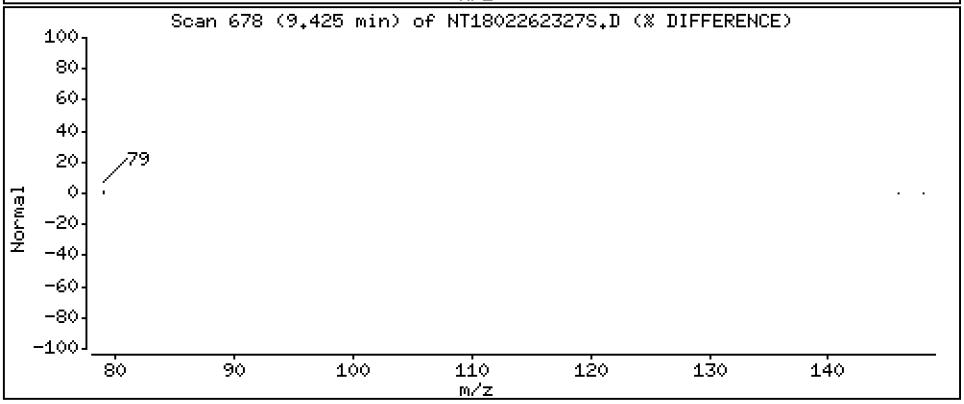












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623275.D

Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

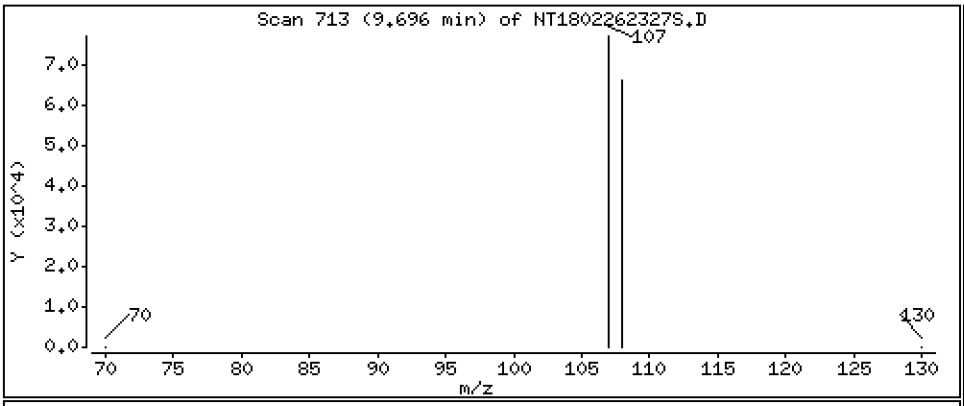
Operator: YZ

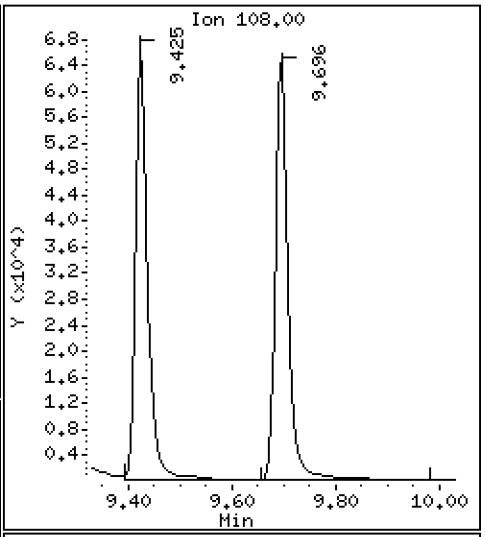
Column phase: ZB-5msi

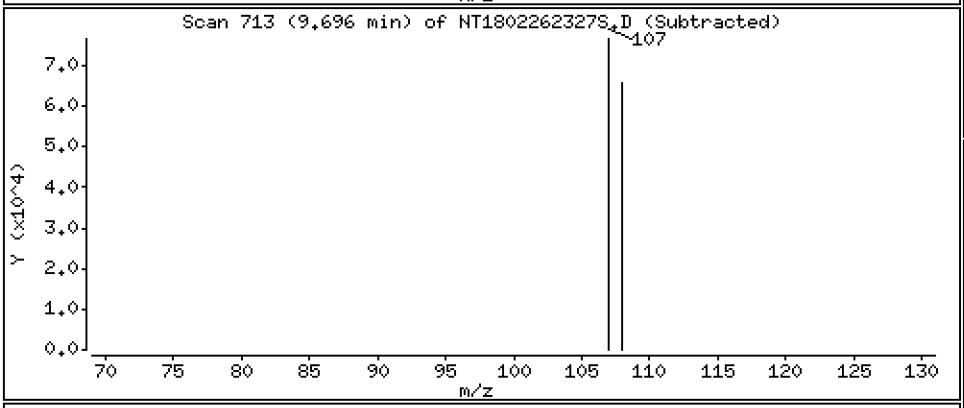
Column diameter: 0.25

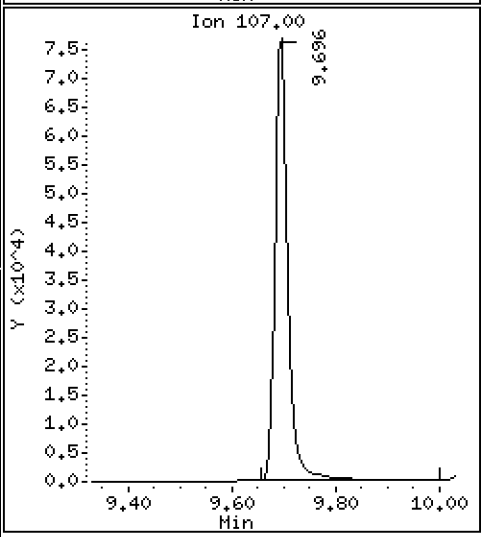
15 4-Methylphenol

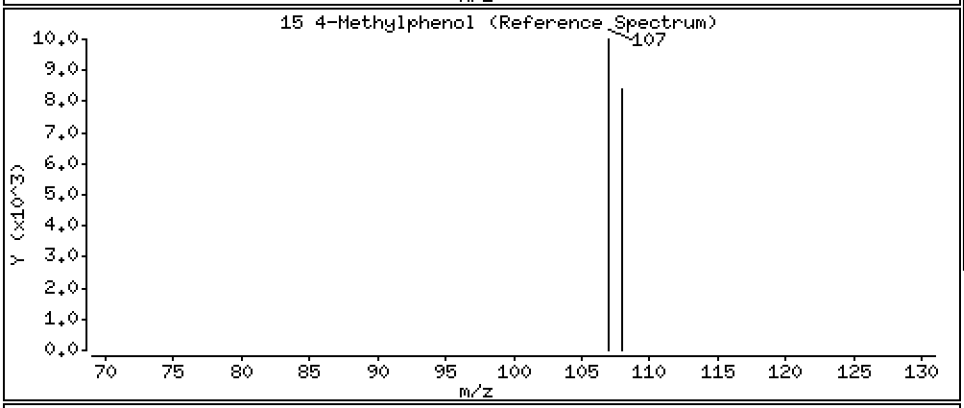
Concentration: 1.025 ug/mL

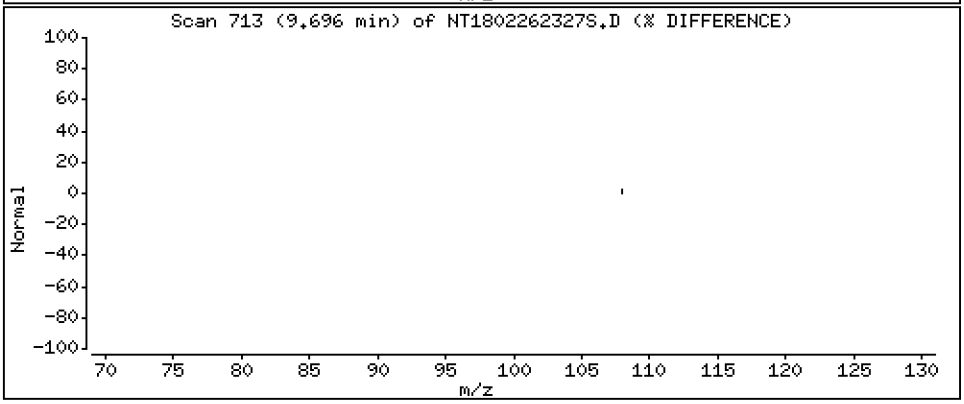












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623275.D

Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

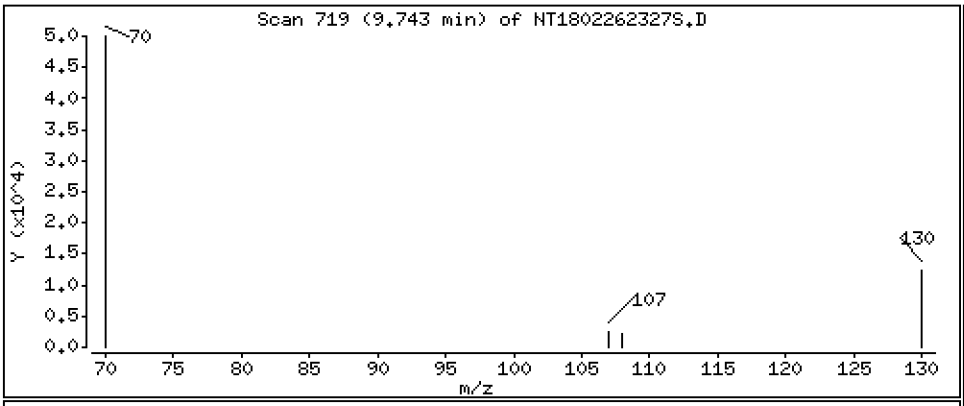
Operator: YZ

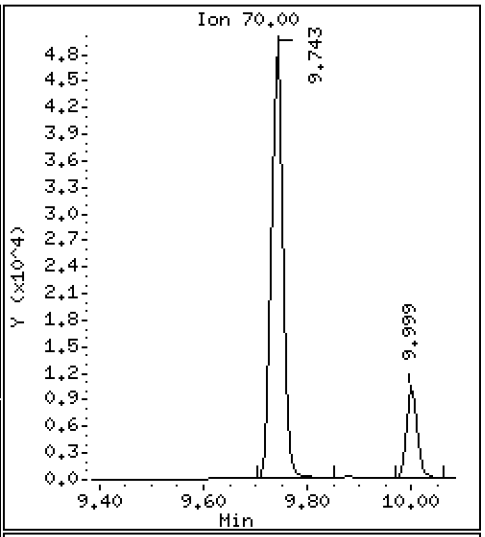
Column phase: ZB-5msi

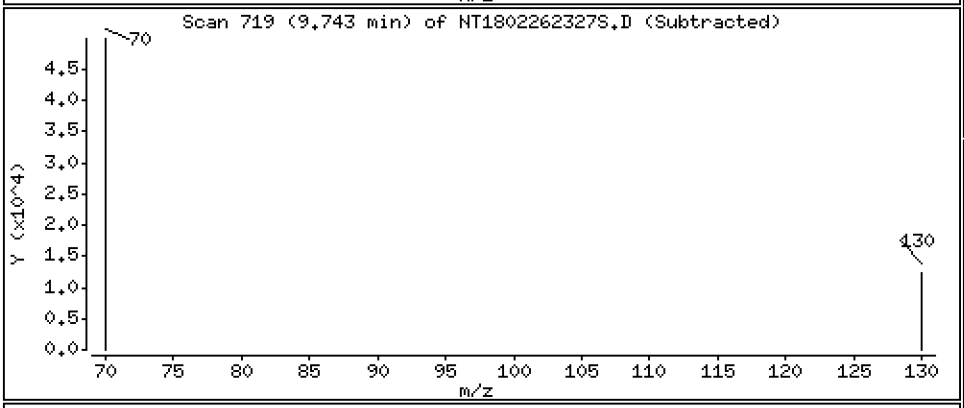
Column diameter: 0.25

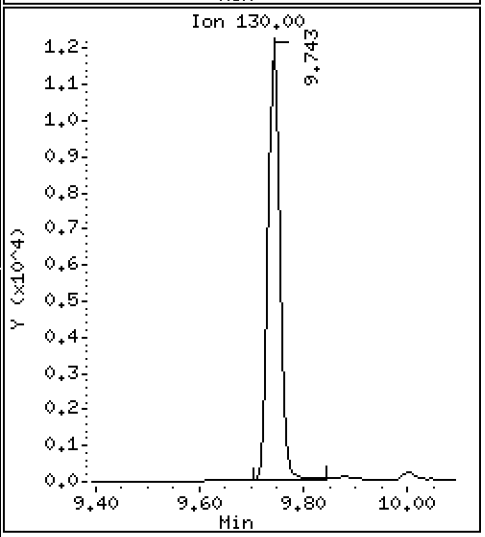
16 N-Nitroso-di-n-propylamine

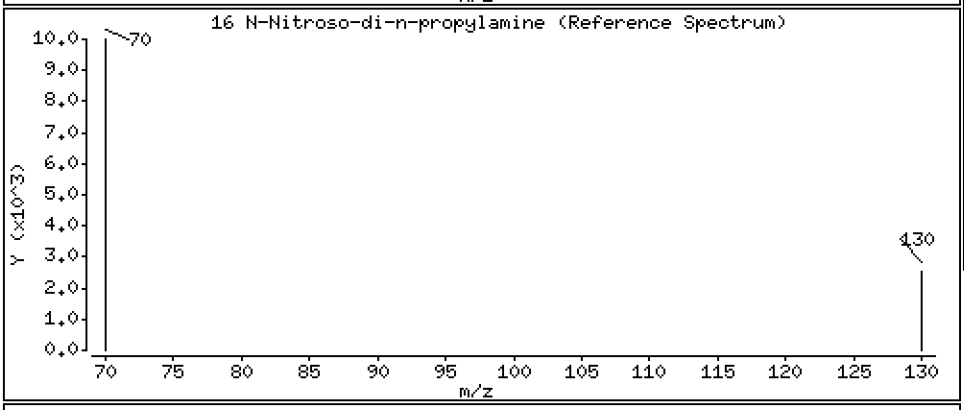
Concentration: 1.002 ug/mL

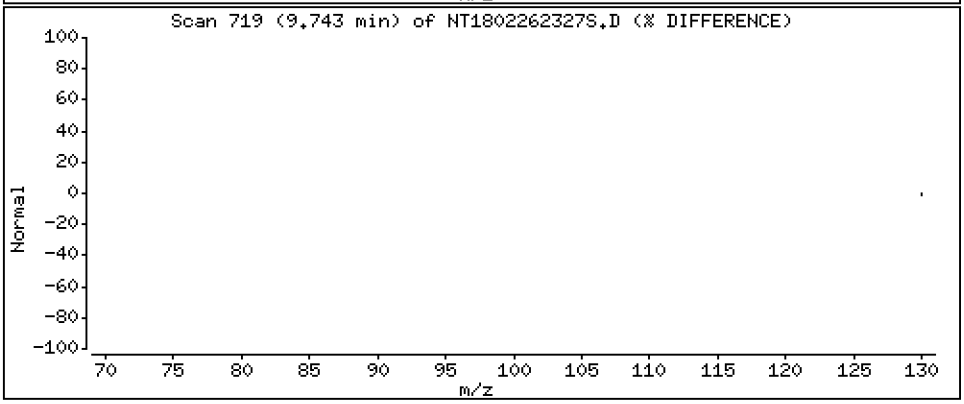












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Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

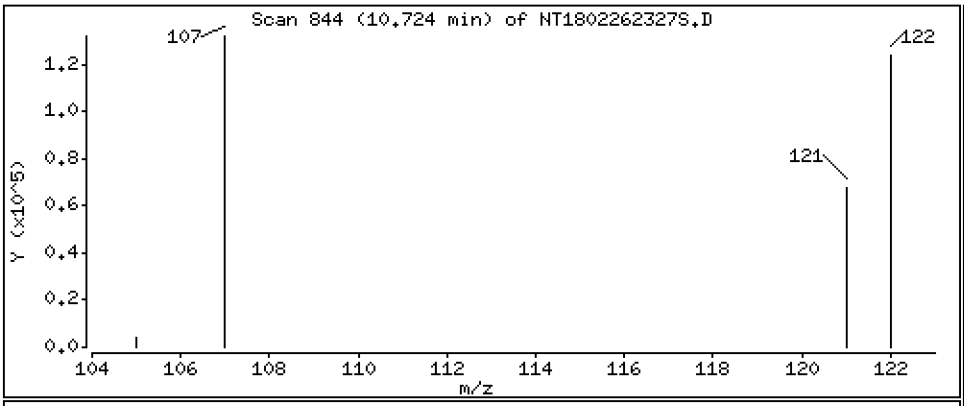
Operator: YZ

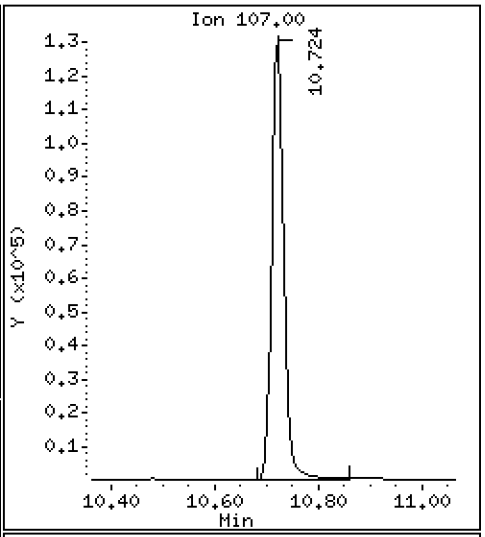
Column phase: ZB-5msi

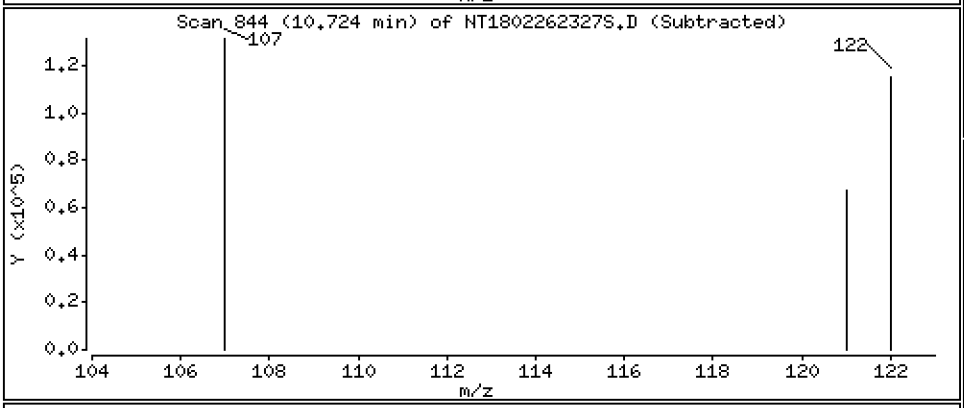
Column diameter: 0.25

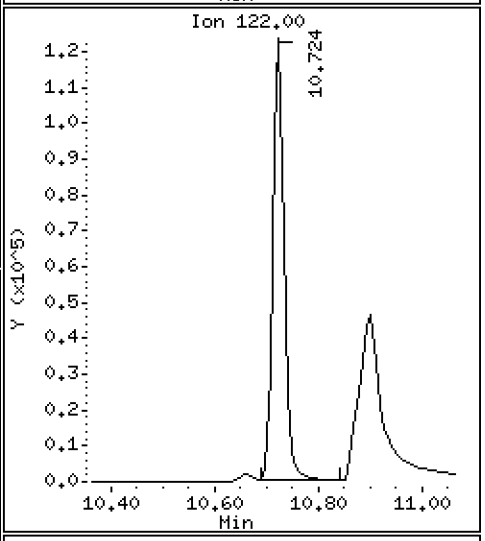
22 2,4-Dimethylphenol

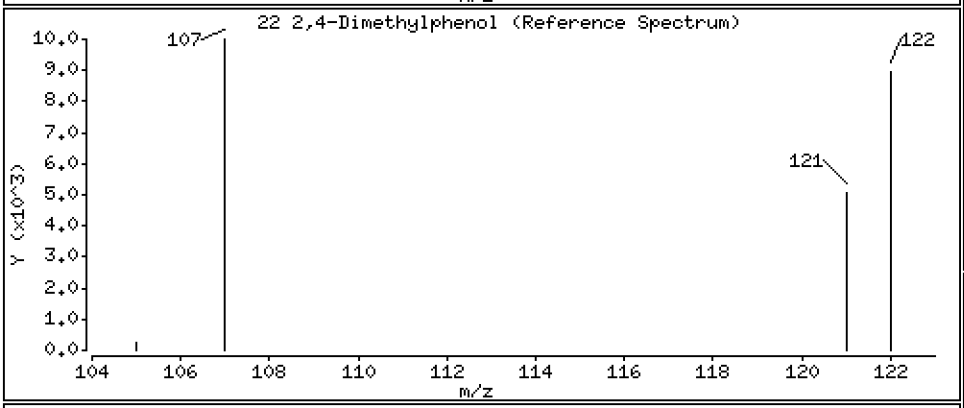
Concentration: 1.965 ug/mL

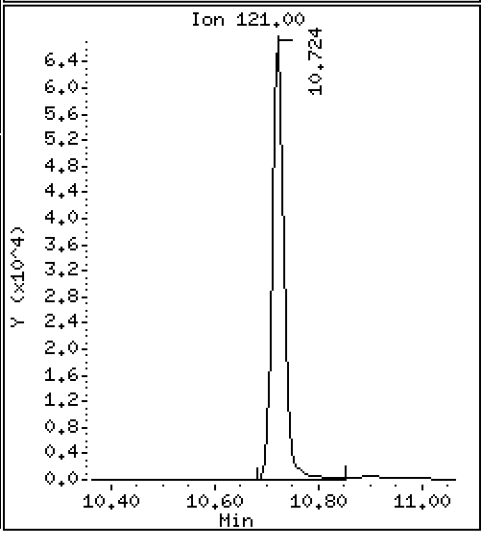


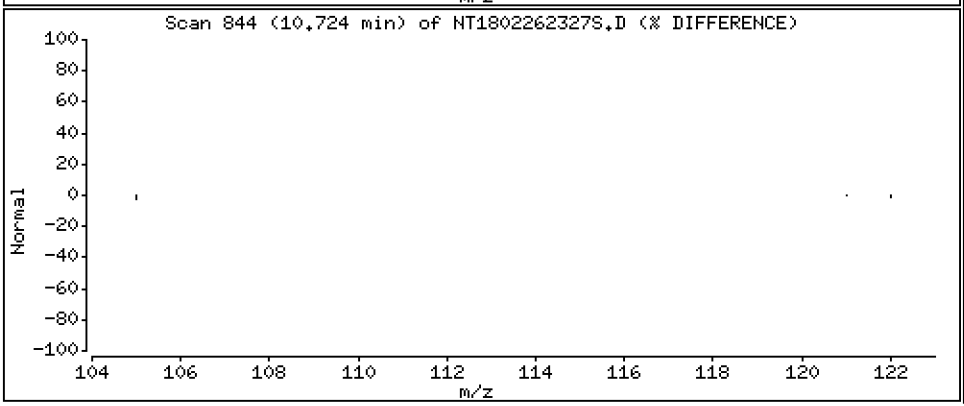












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Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

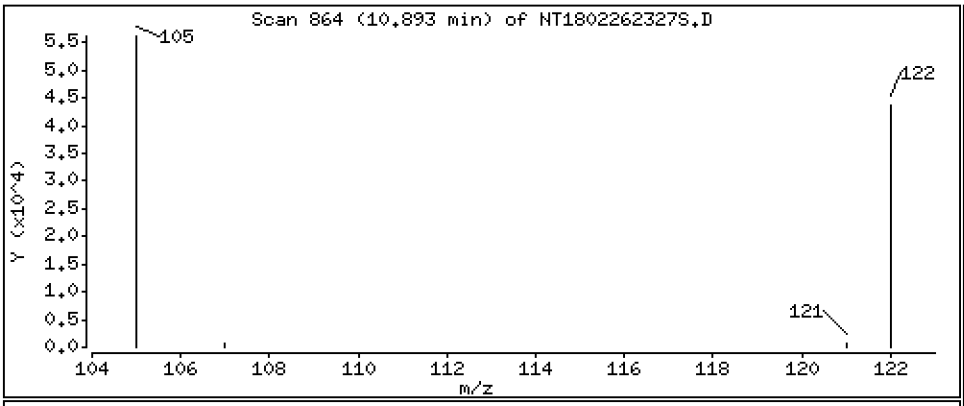
Operator: YZ

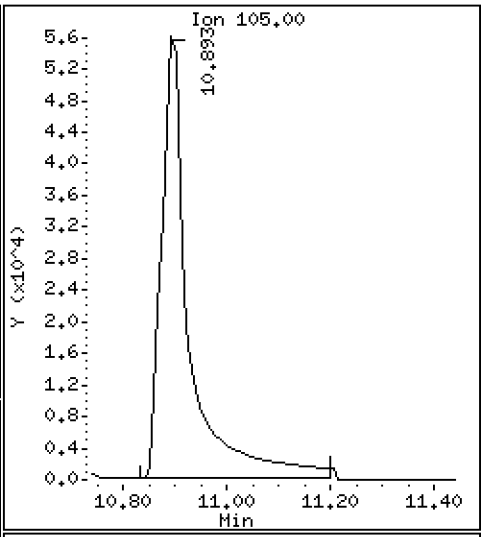
Column phase: ZB-5msi

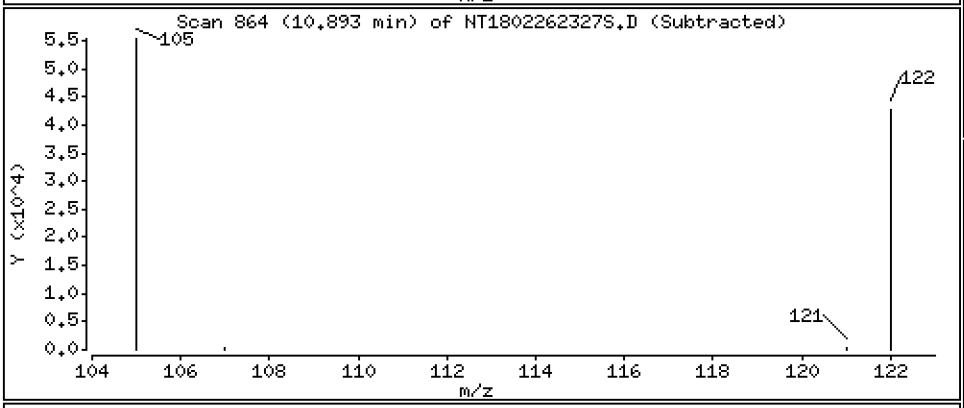
Column diameter: 0.25

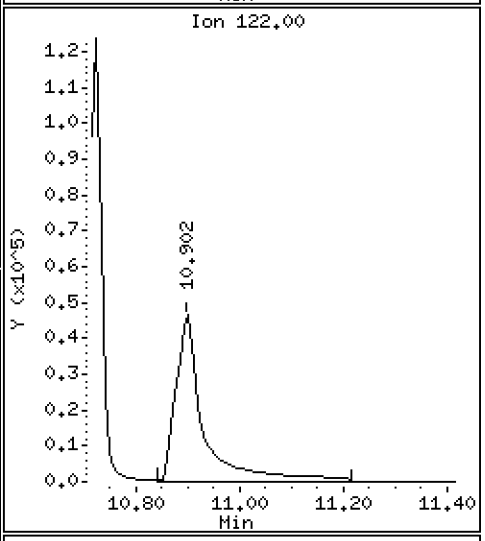
24 Benzoic acid

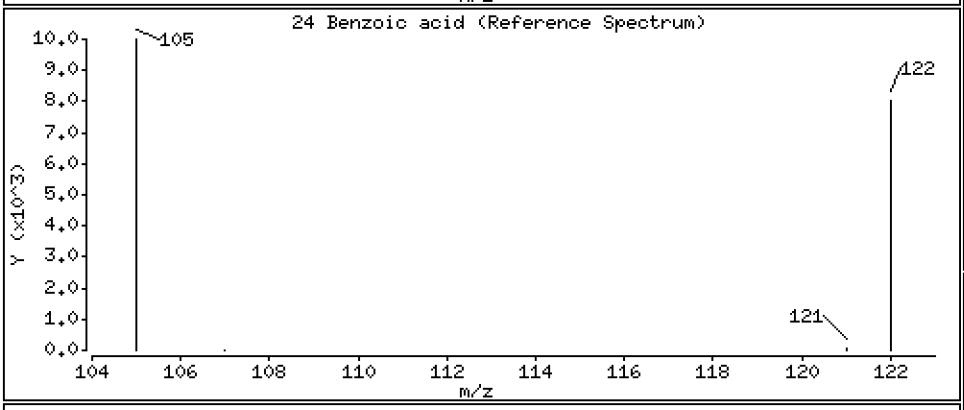
Concentration: 4.773 ug/mL

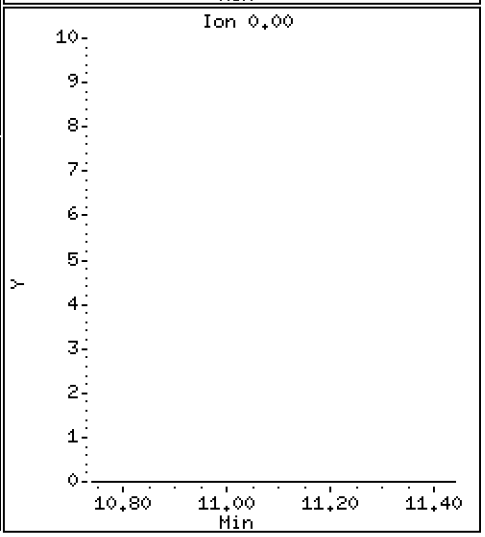


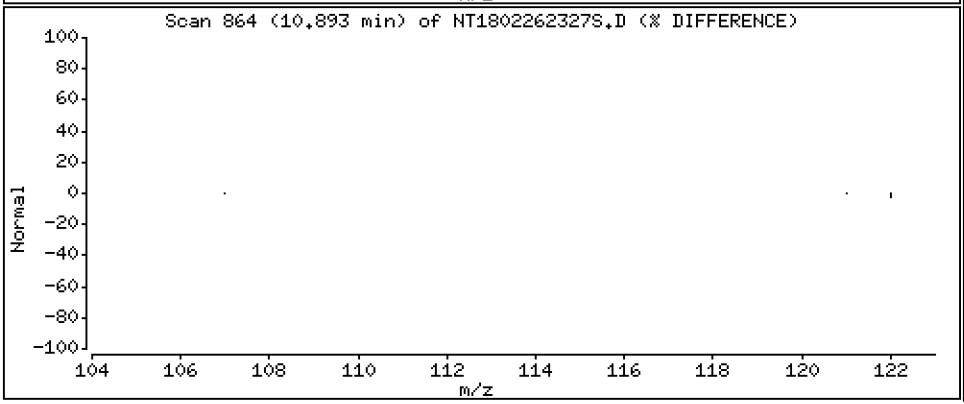












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Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

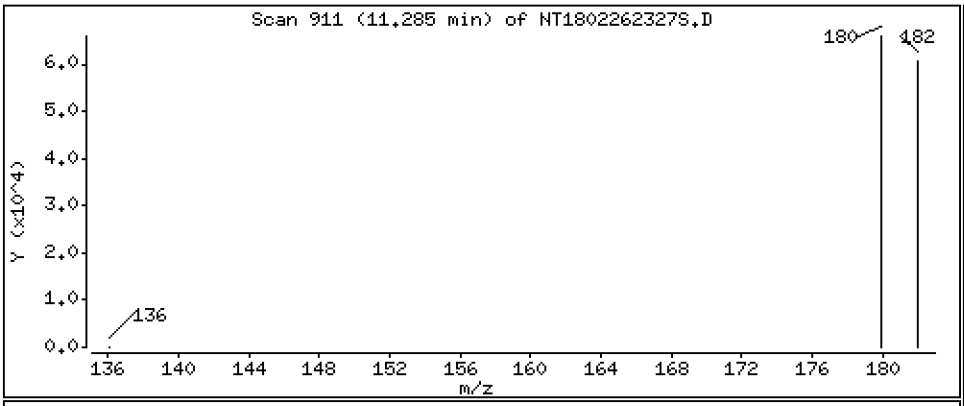
Operator: YZ

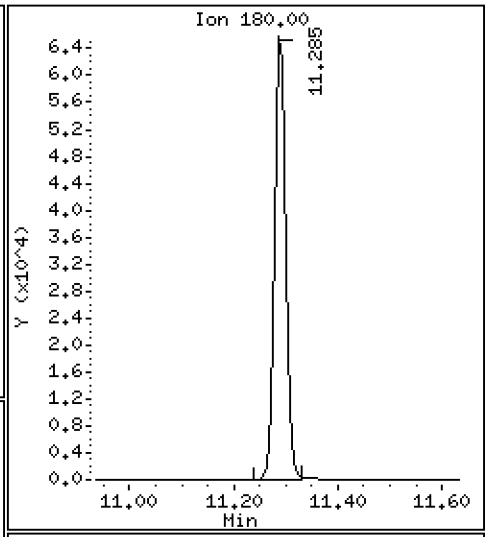
Column phase: ZB-5msi

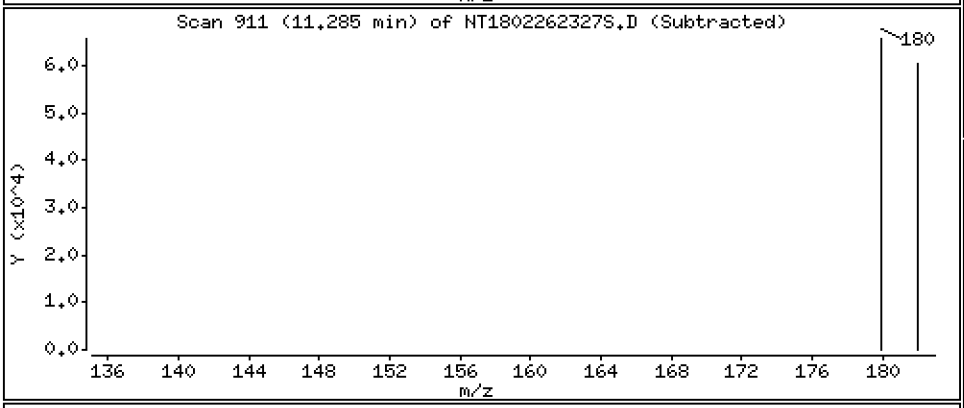
Column diameter: 0.25

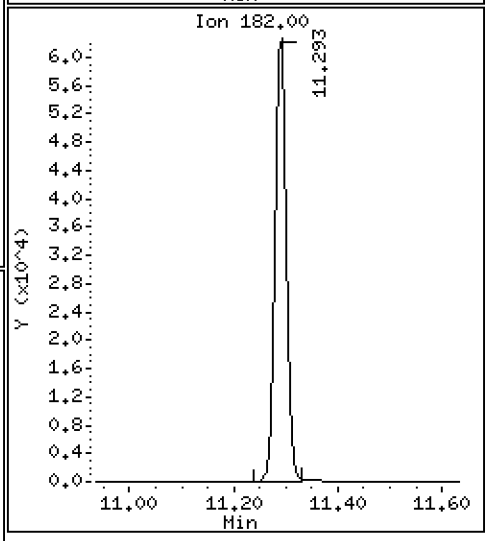
26 1,2,4-Trichlorobenzene

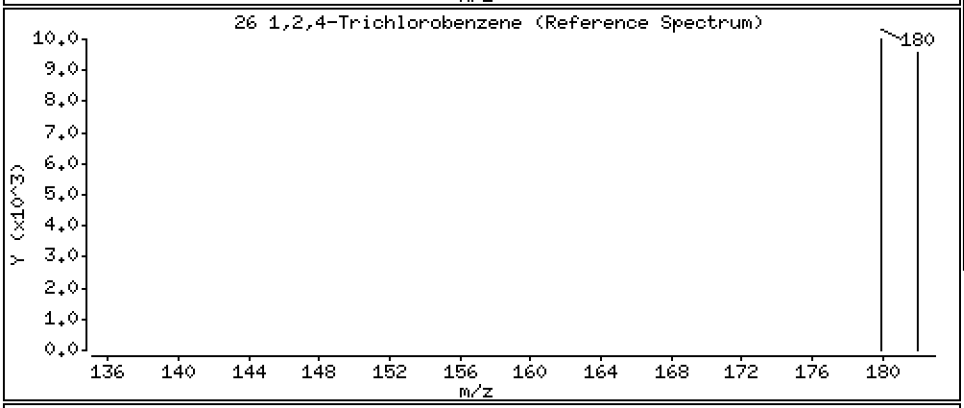
Concentration: 0.9385 ug/mL

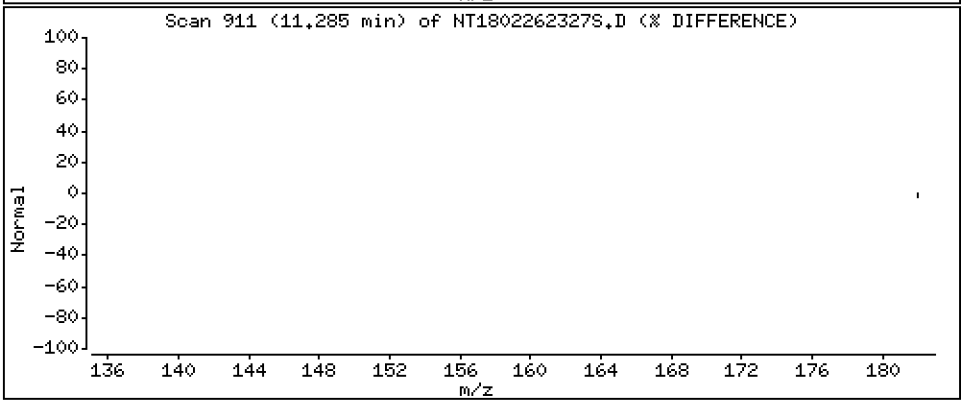












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623275.D

Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

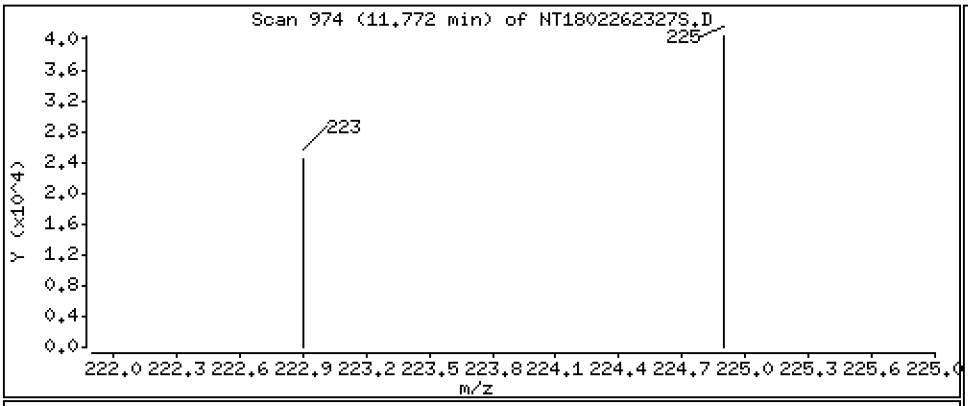
Operator: YZ

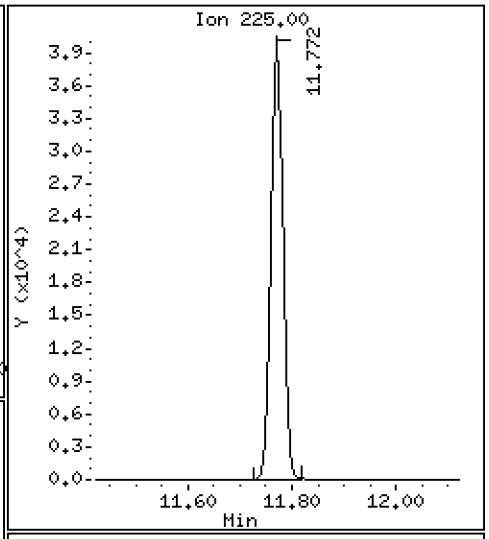
Column phase: ZB-5msi

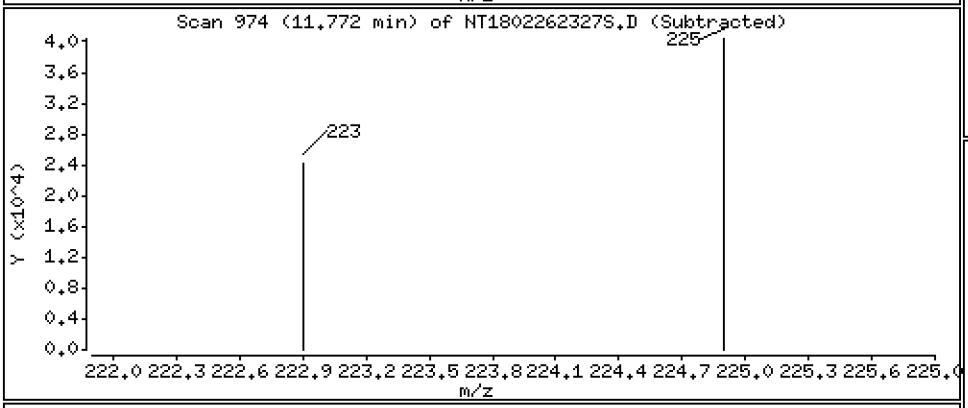
Column diameter: 0.25

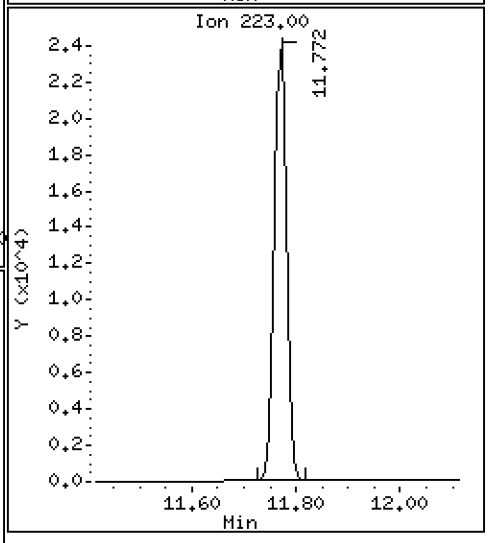
30 Hexachlorobutadiene

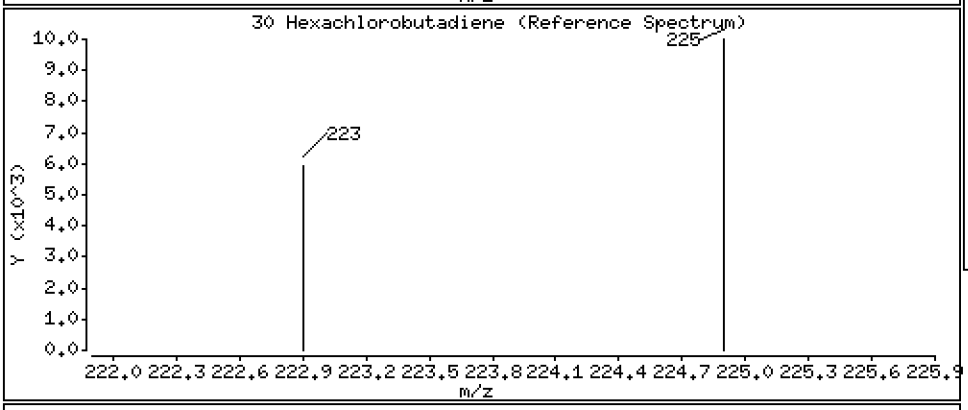
Concentration: 0.9131 ug/mL

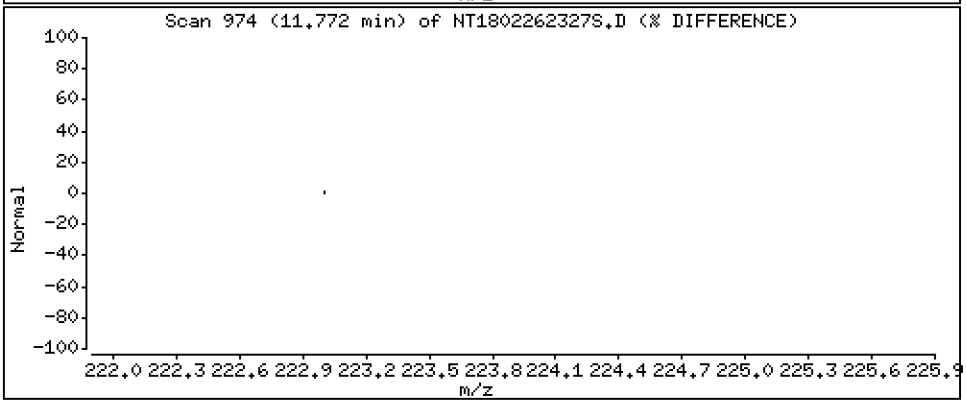












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Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

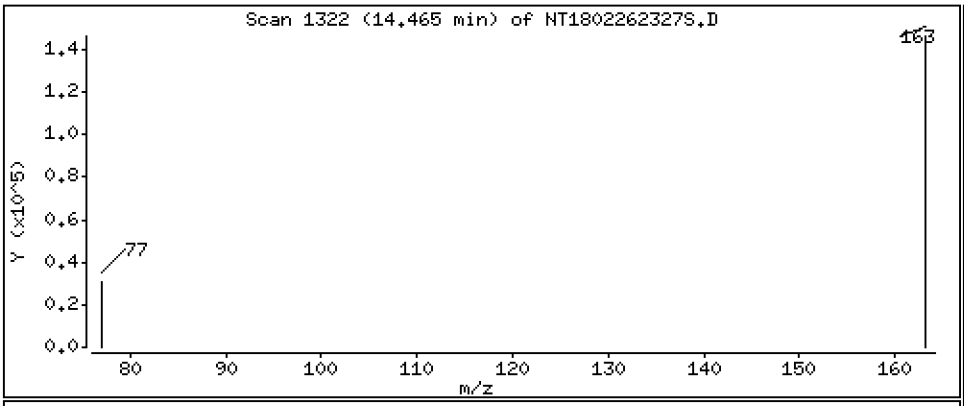
Operator: YZ

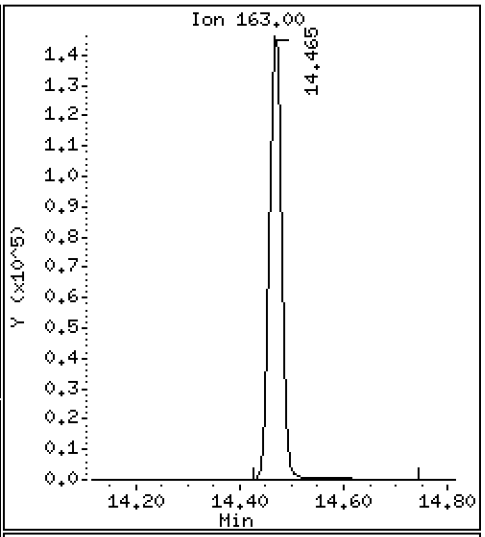
Column phase: ZB-5msi

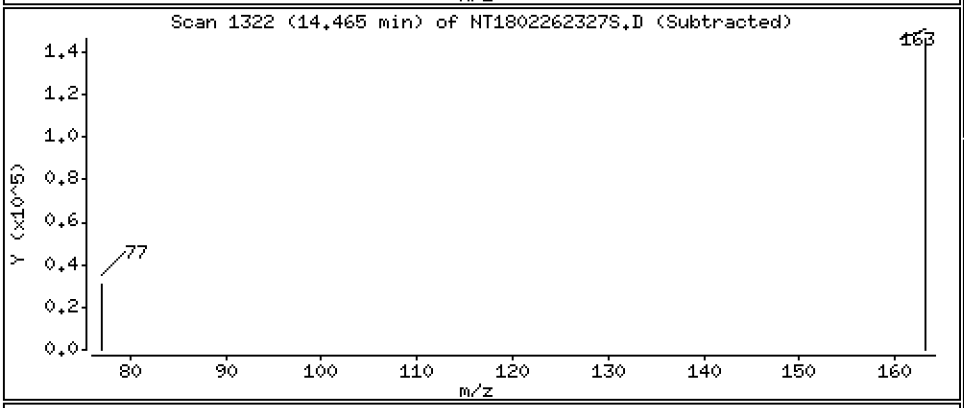
Column diameter: 0.25

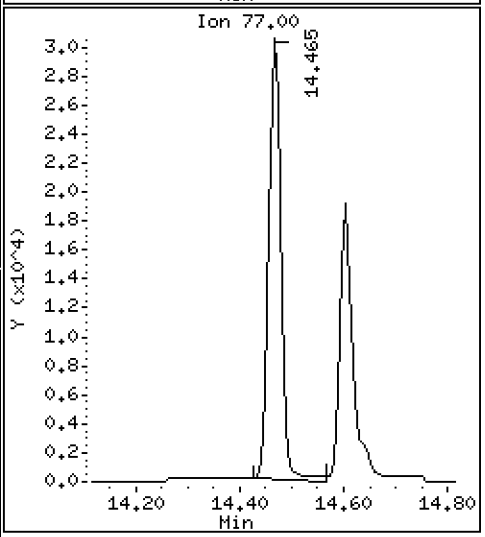
39 Dimethylphthalate

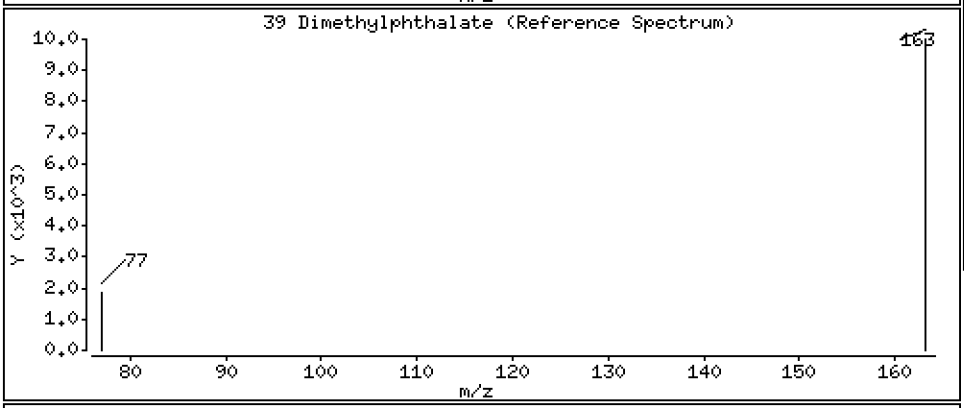
Concentration: 0.9776 ug/mL

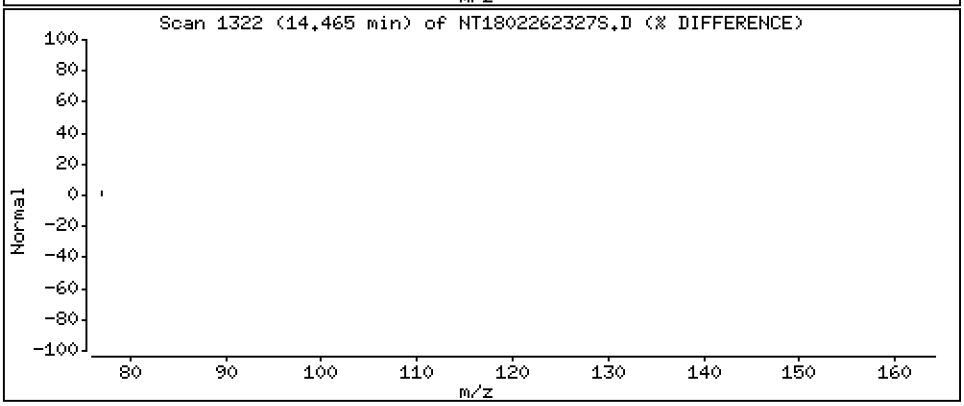












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262327S.D

Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

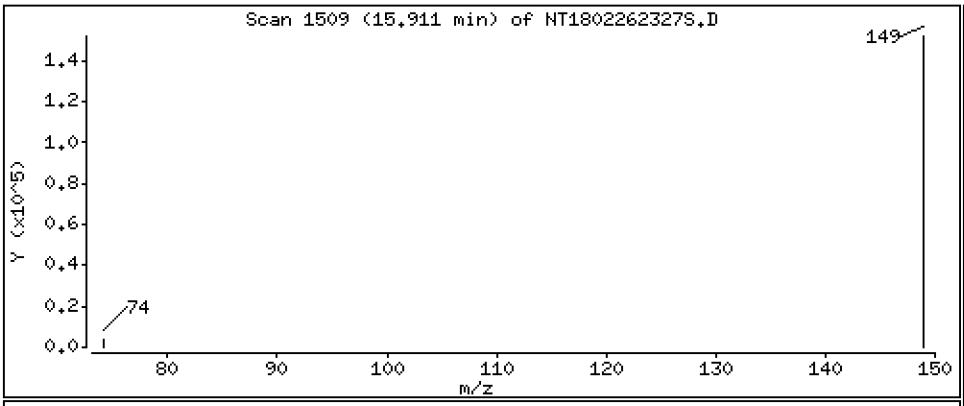
Operator: YZ

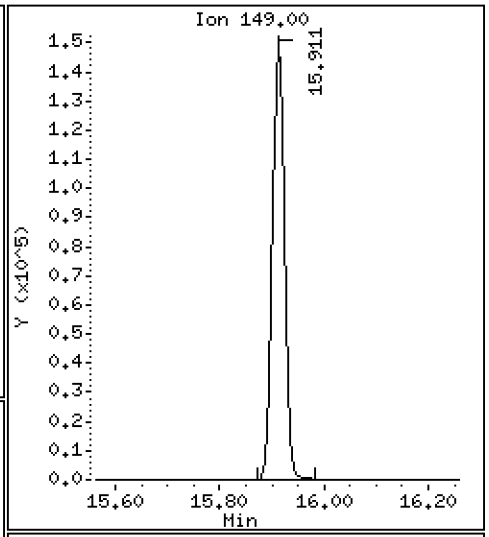
Column phase: ZB-5msi

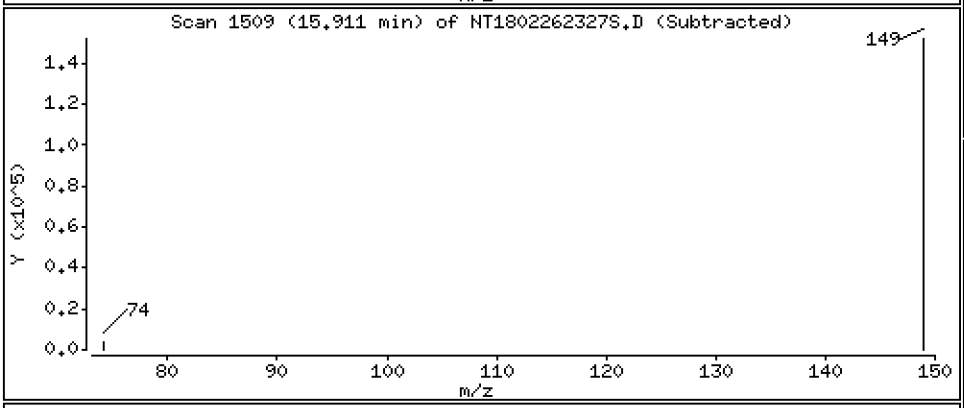
Column diameter: 0.25

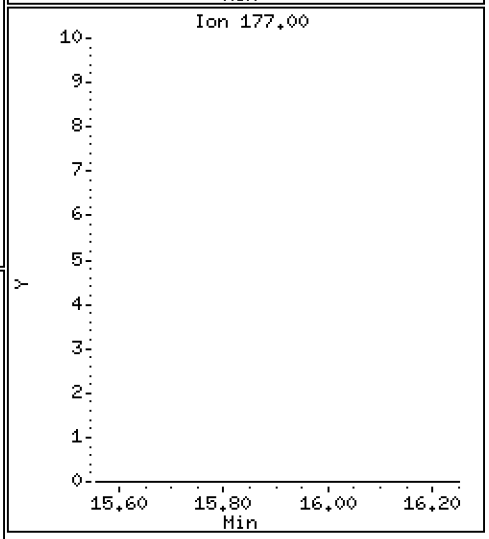
50 Diethylphthalate

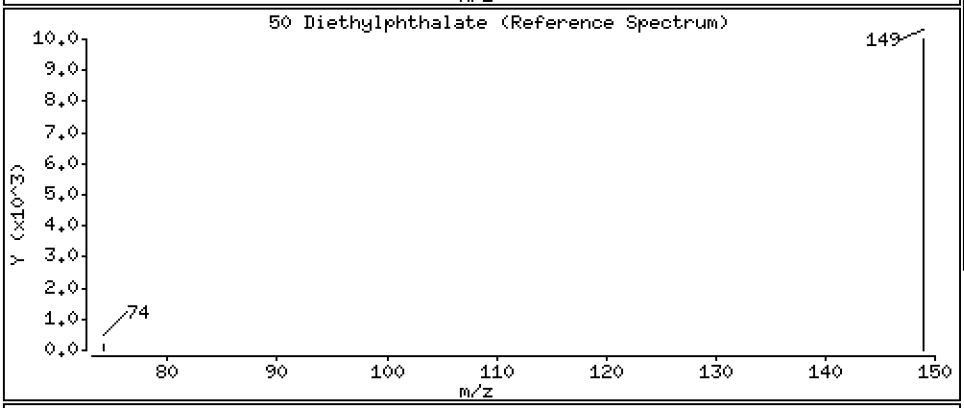
Concentration: 1.057 ug/mL

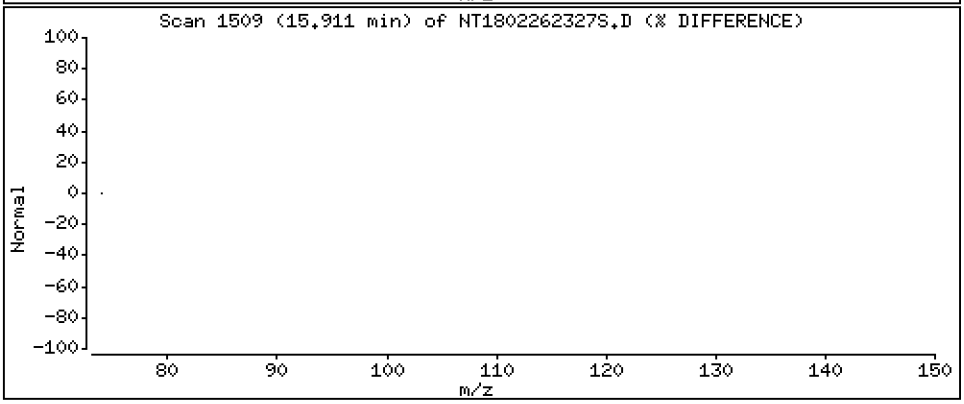












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262327S.D

Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

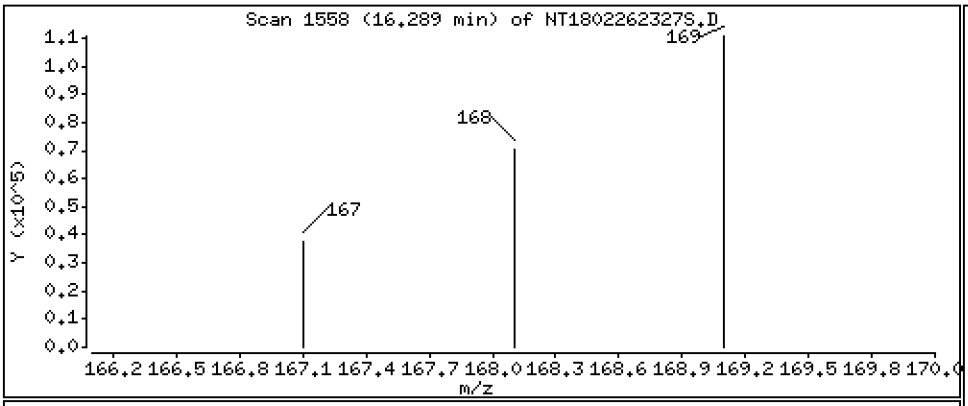
Operator: YZ

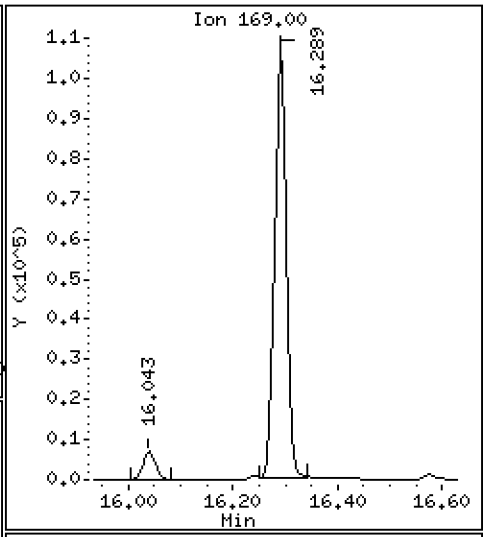
Column phase: ZB-5msi

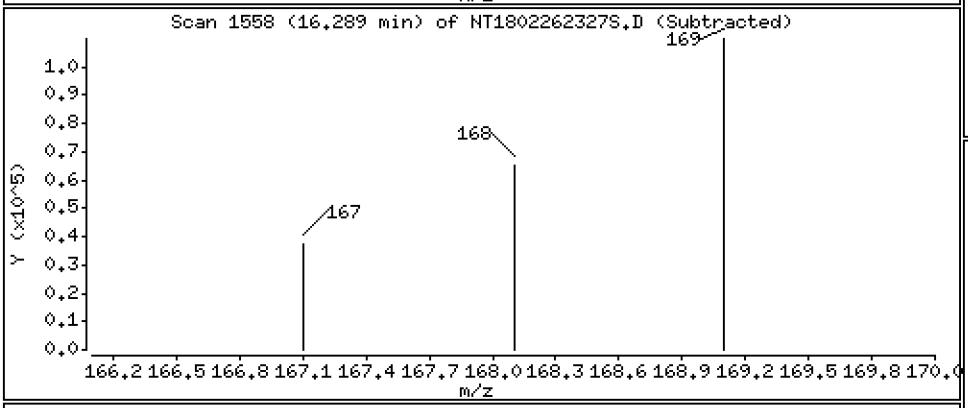
Column diameter: 0.25

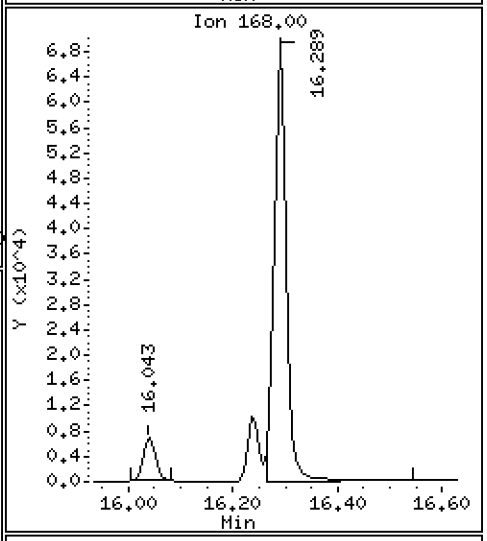
54 N-Nitrosodiphenylamine

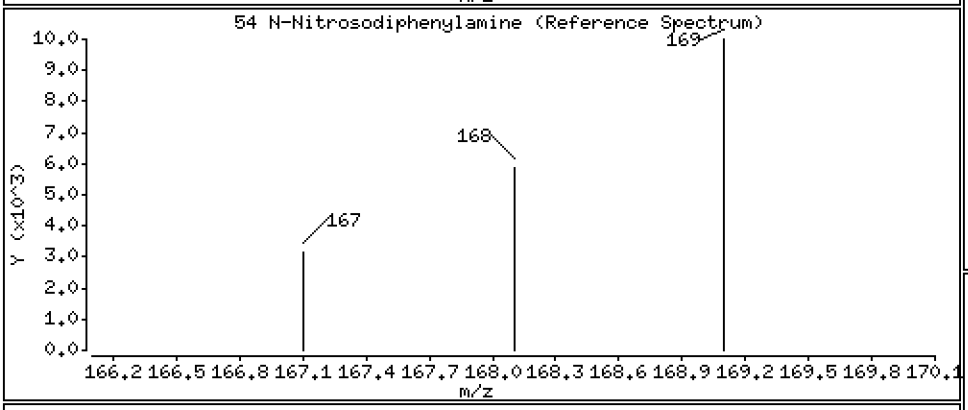
Concentration: 0.9206 ug/mL

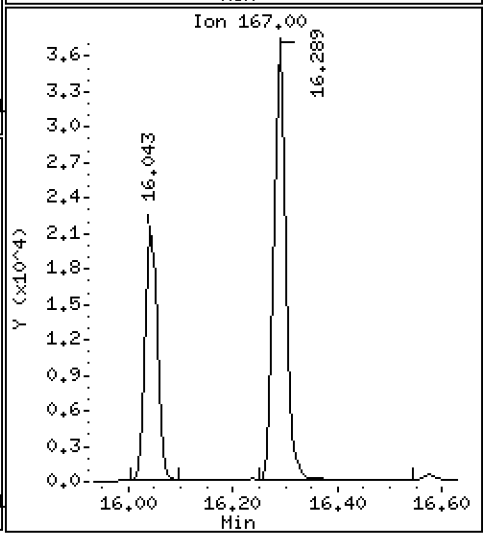


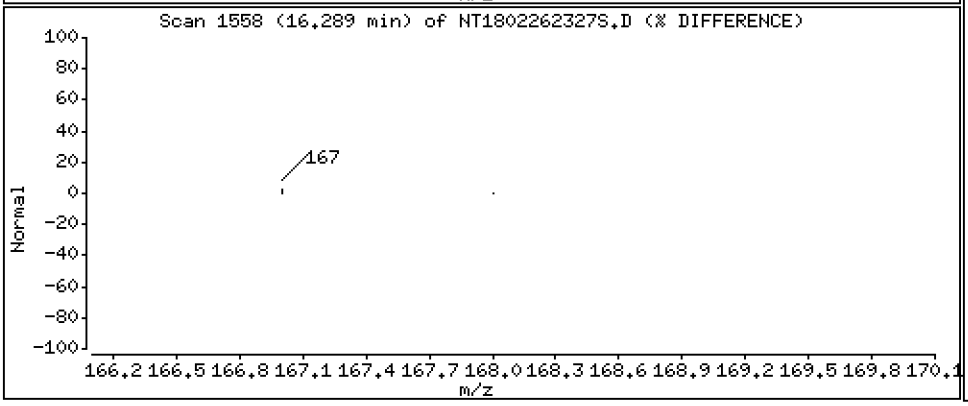












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262327S.D

Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

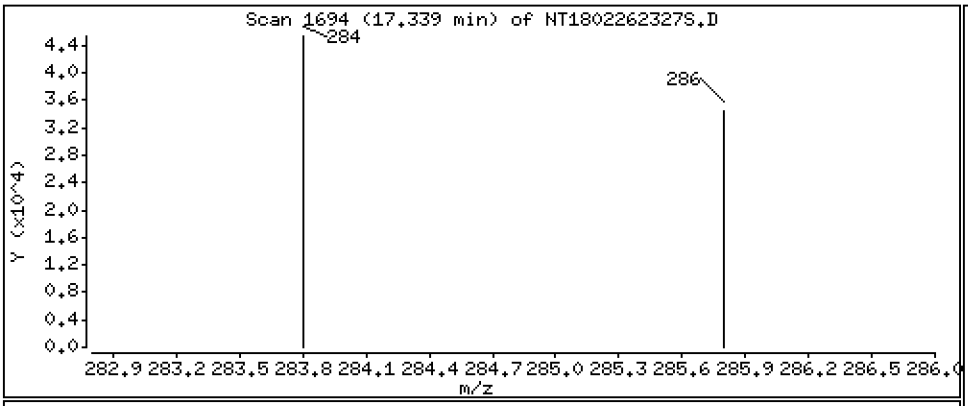
Operator: YZ

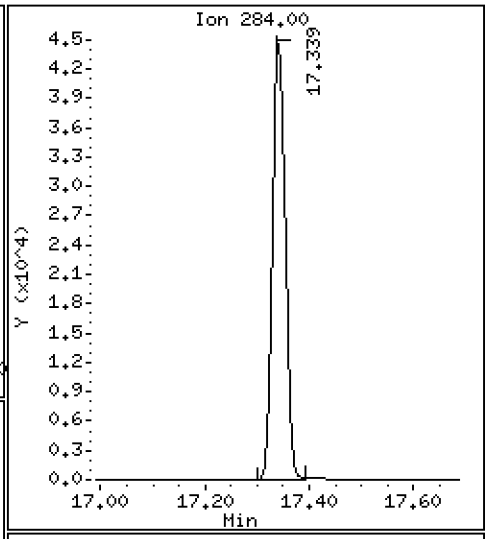
Column phase: ZB-5msi

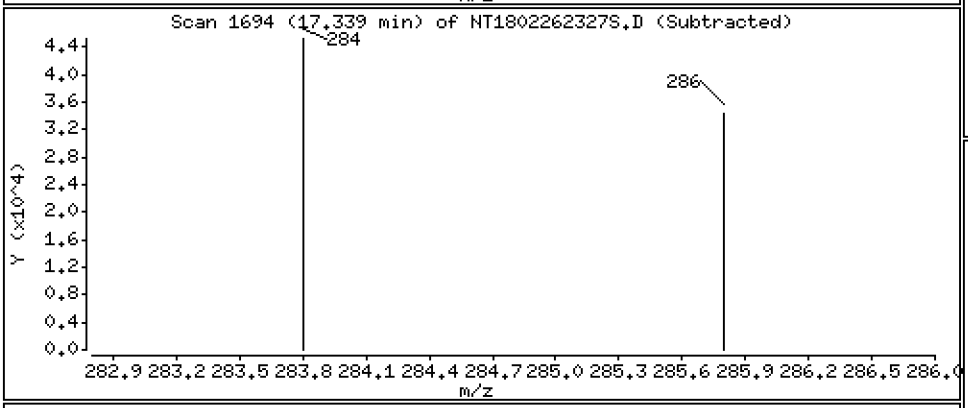
Column diameter: 0.25

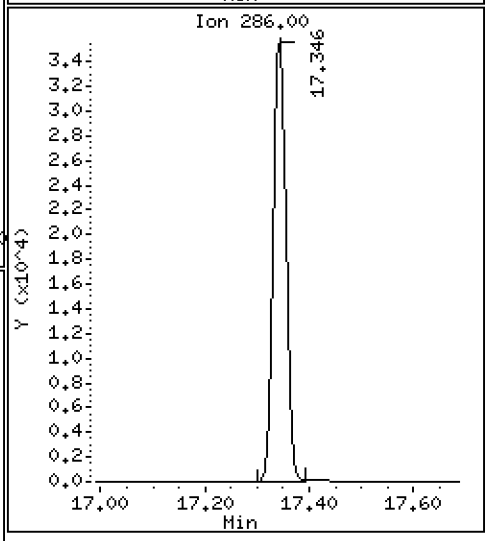
57 Hexachlorobenzene

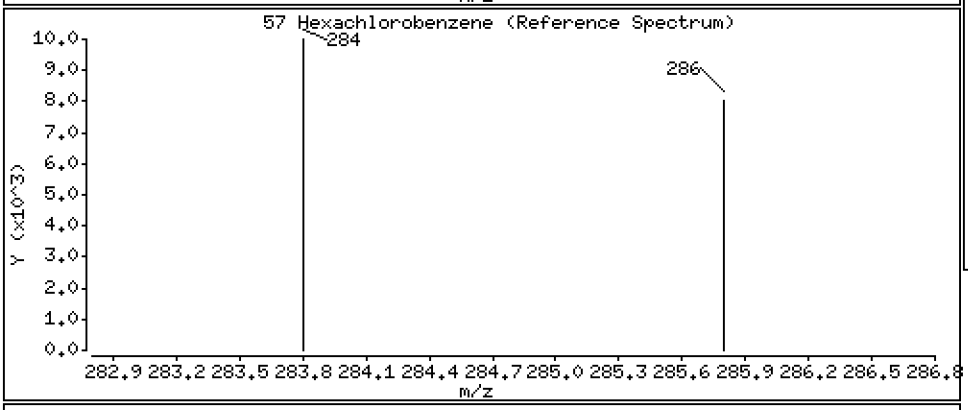
Concentration: 0.8636 ug/mL

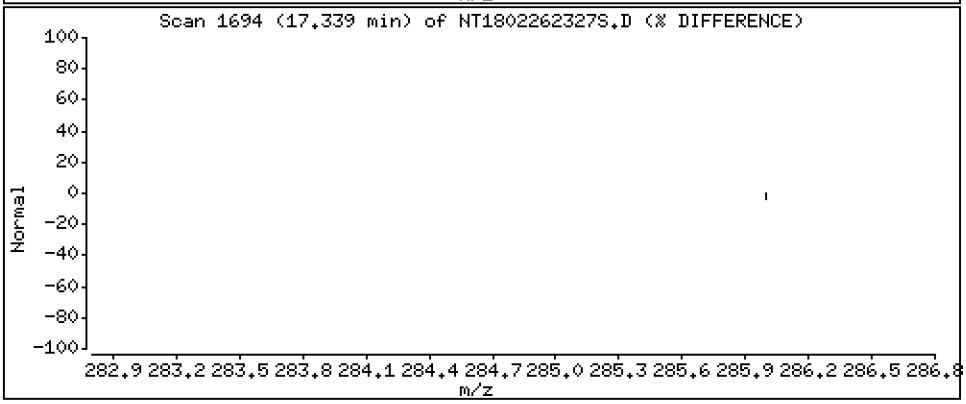












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262327S.D

Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

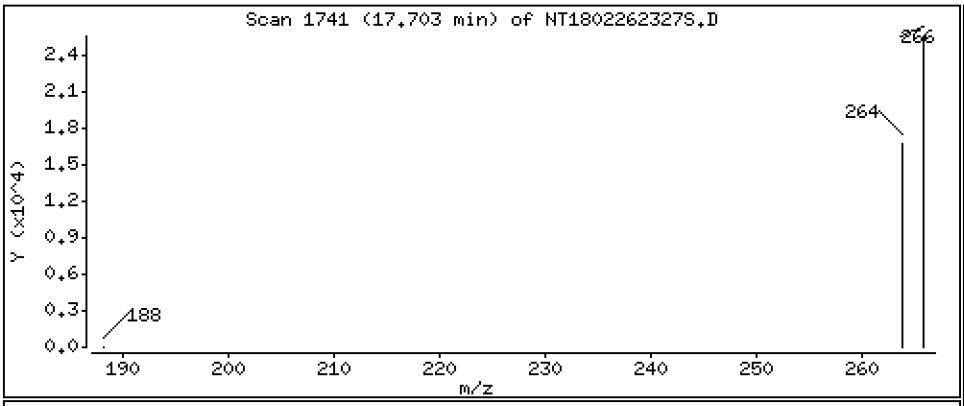
Operator: YZ

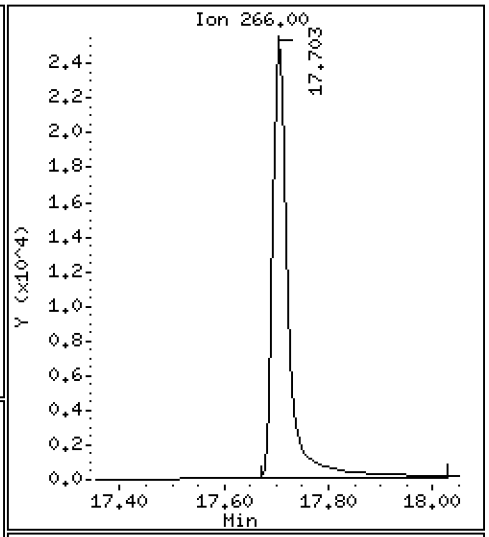
Column phase: ZB-5msi

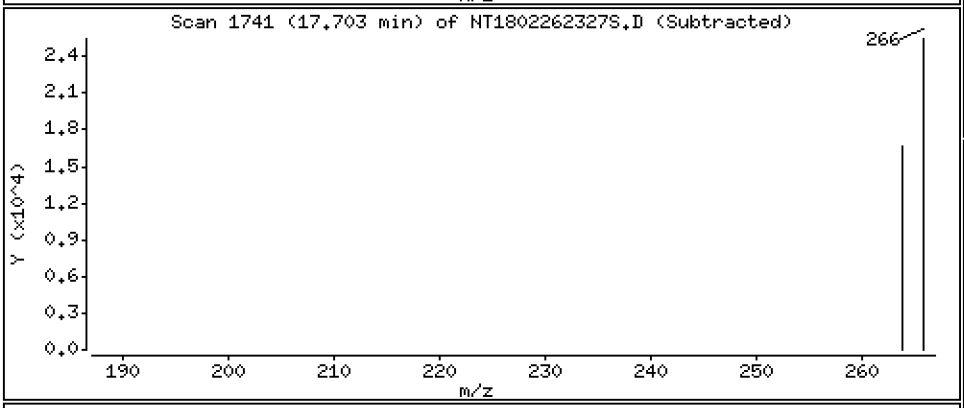
Column diameter: 0.25

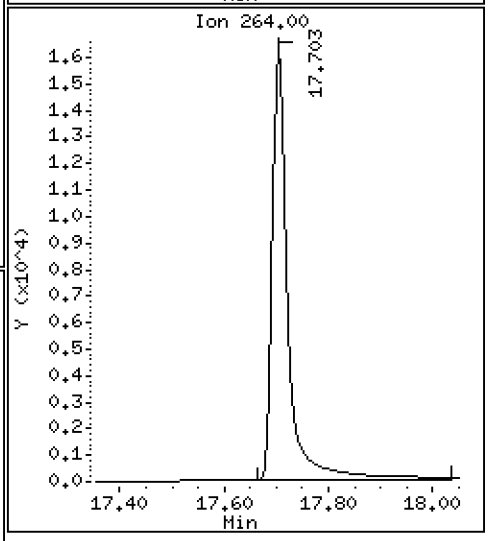
58 Pentachlorophenol

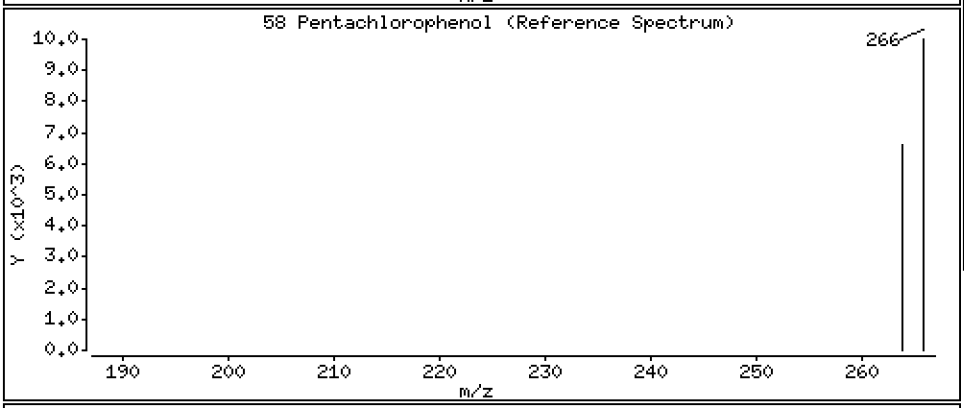
Concentration: 2.047 ug/mL

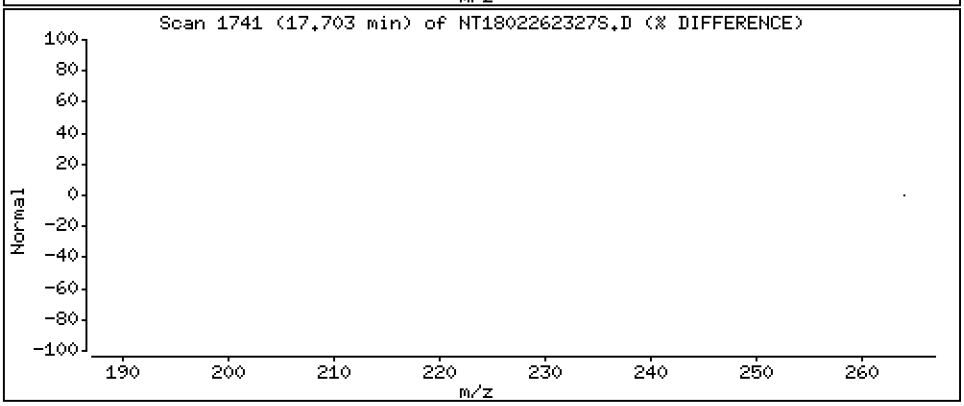












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262327S.D

Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

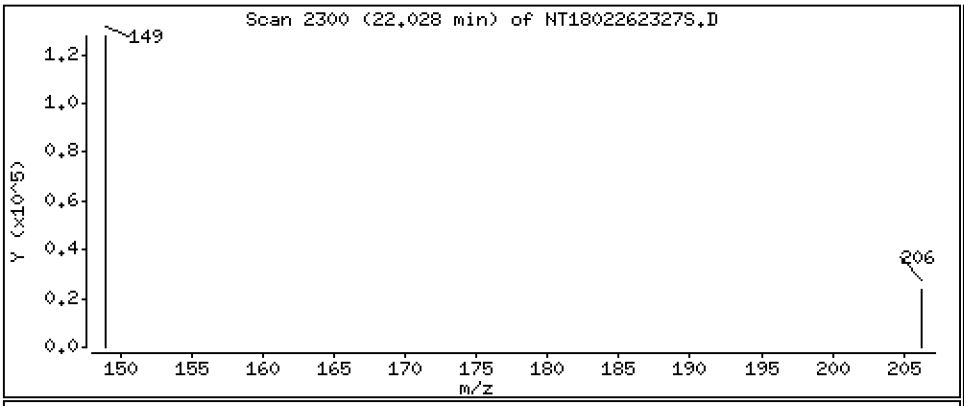
Operator: YZ

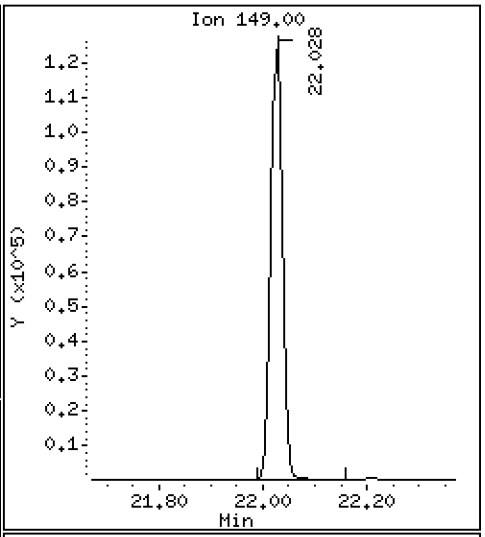
Column phase: ZB-5msi

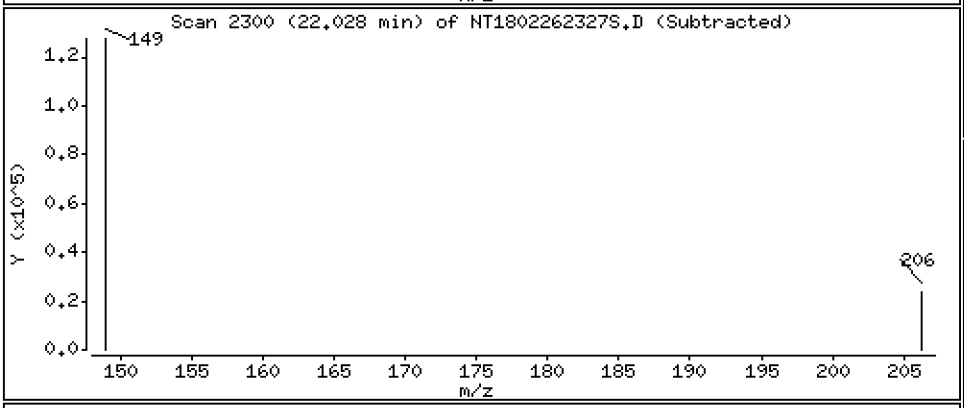
Column diameter: 0.25

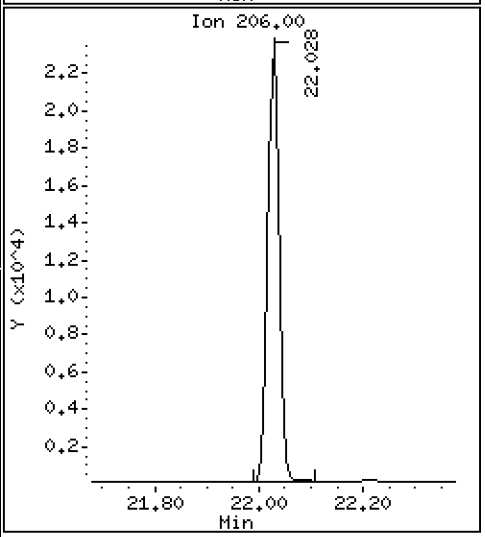
67 Butylbenzylphthalate

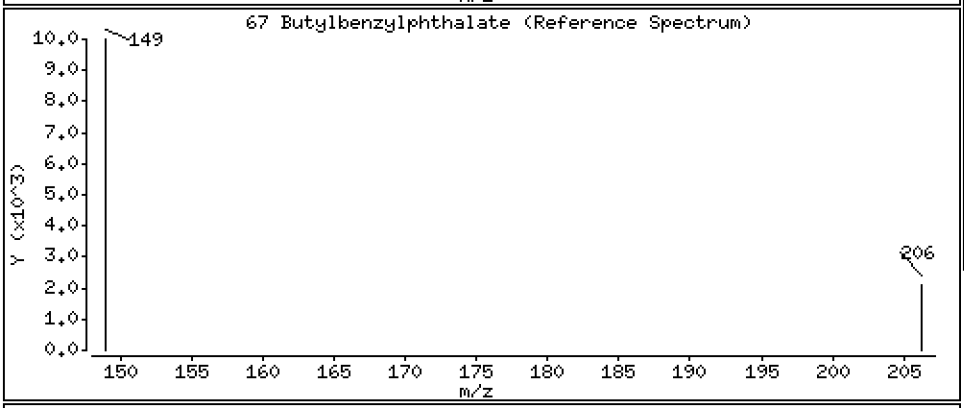
Concentration: 1.043 ug/mL

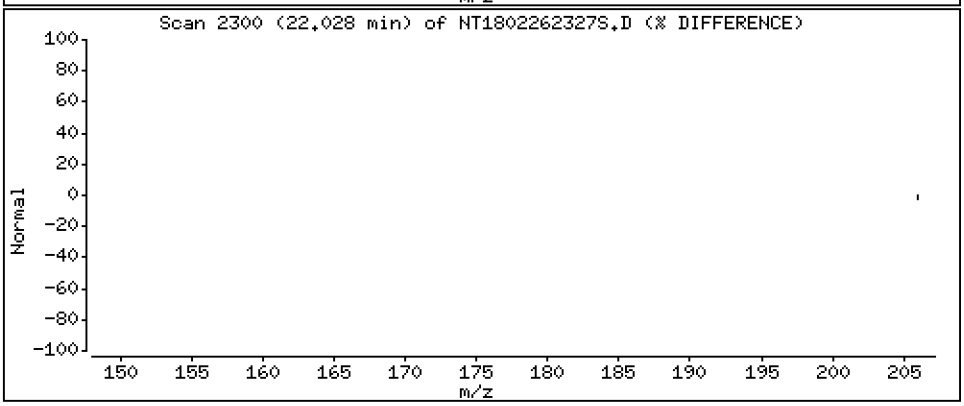












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262327S.D

Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

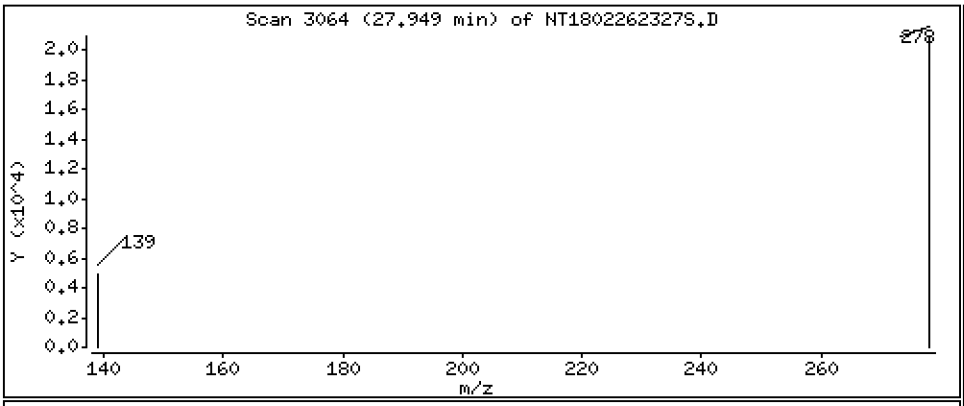
Operator: YZ

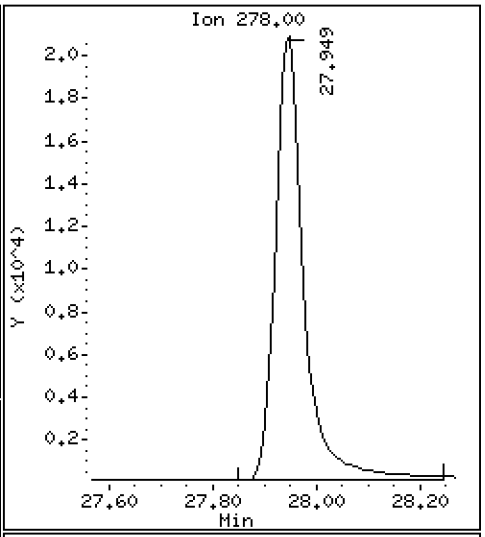
Column phase: ZB-5msi

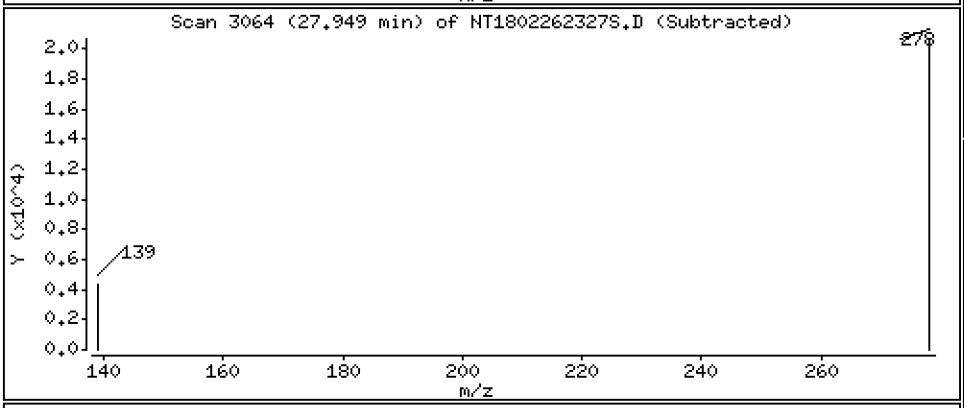
Column diameter: 0.25

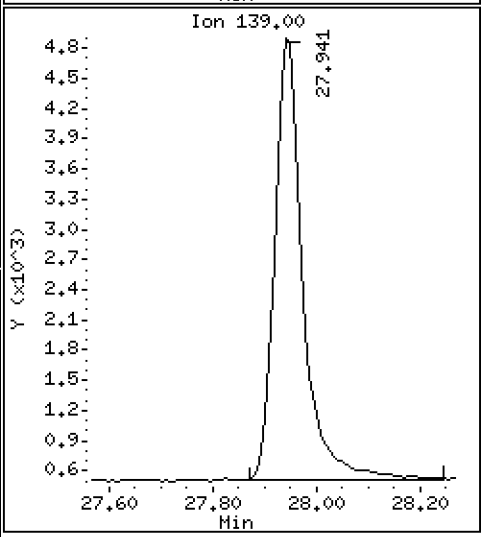
79 Dibenzo(a,h)anthracene

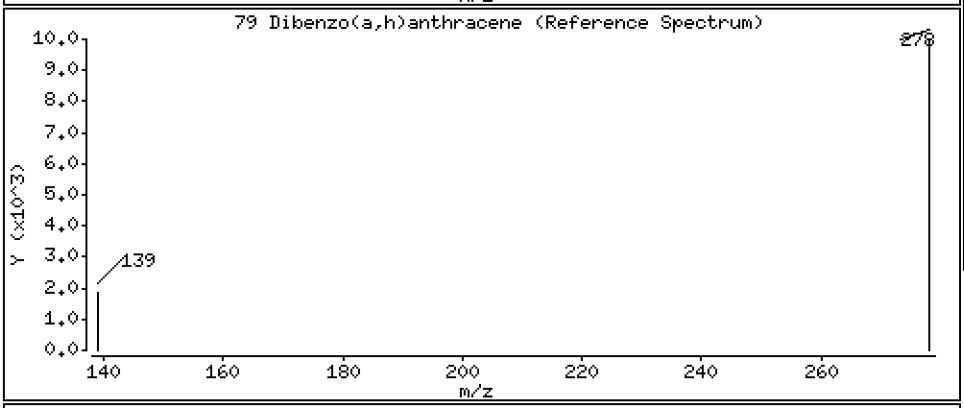
Concentration: 0.4934 ug/mL

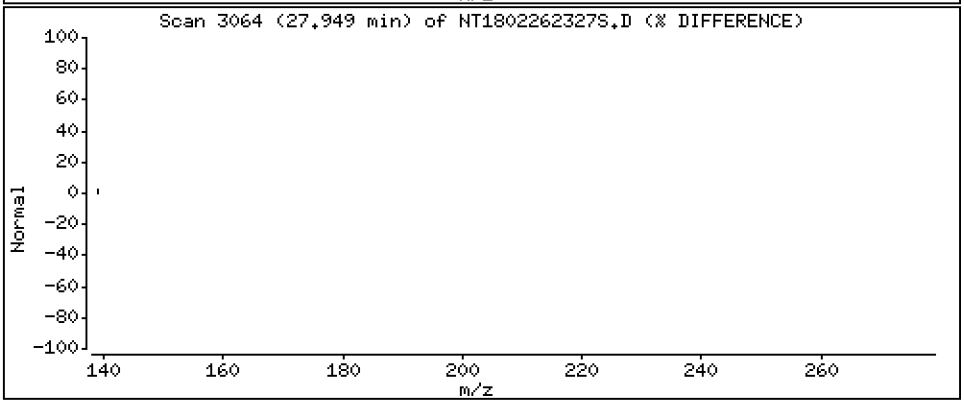












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Date : 27-FEB-2023 05:16

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-CCV1

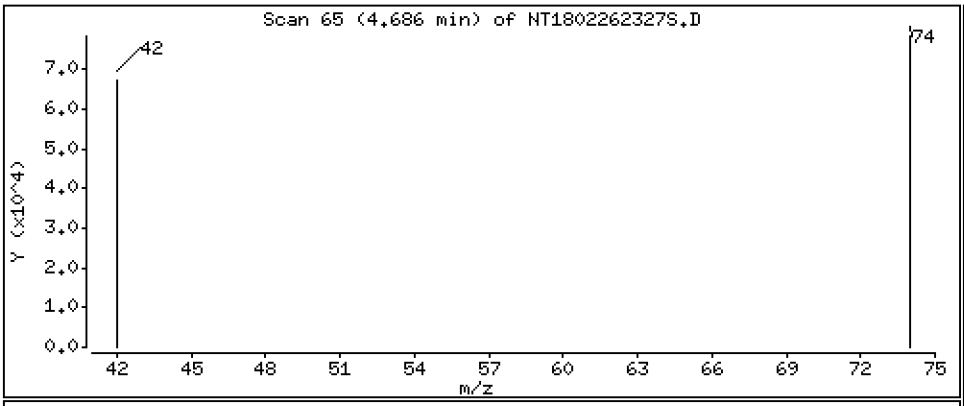
Operator: YZ

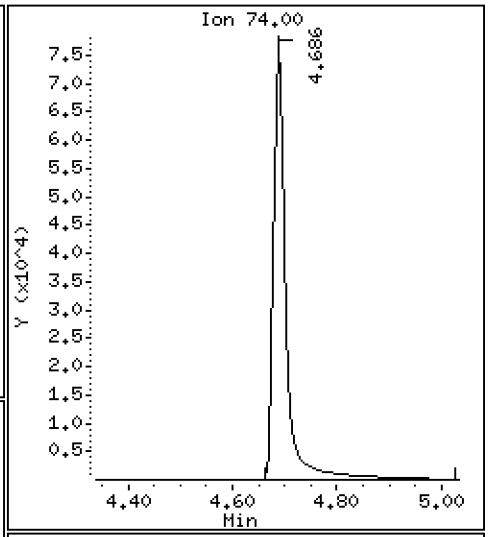
Column phase: ZB-5msi

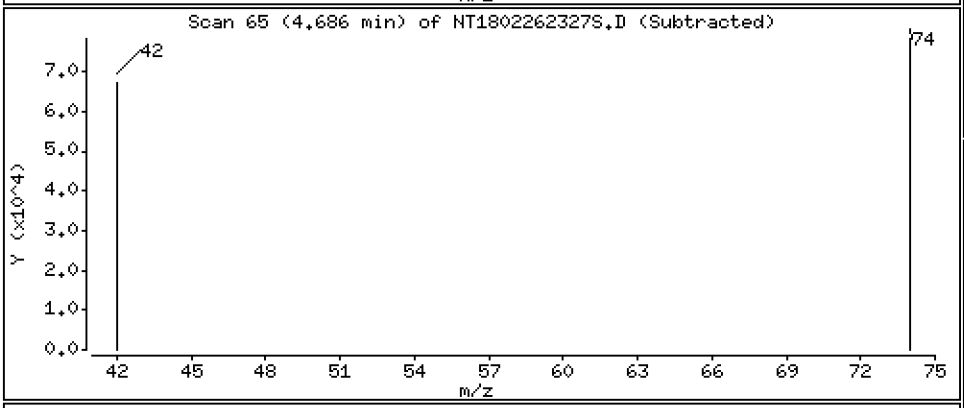
Column diameter: 0.25

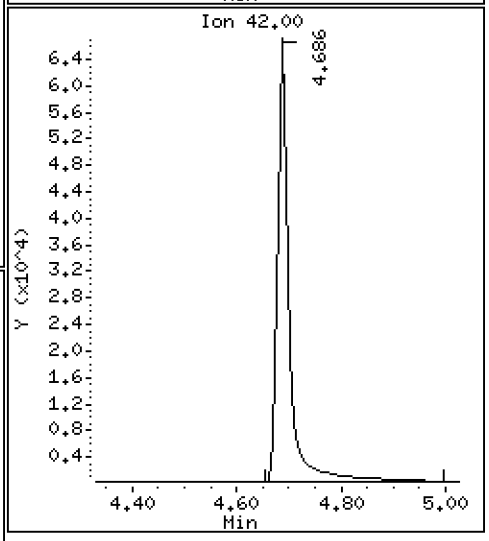
90 N-Nitrosodimethylamine

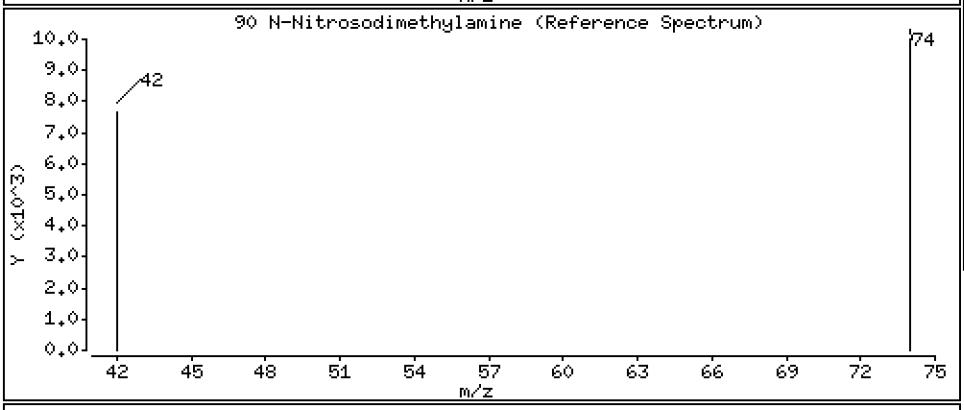
Concentration: 1.987 ug/mL

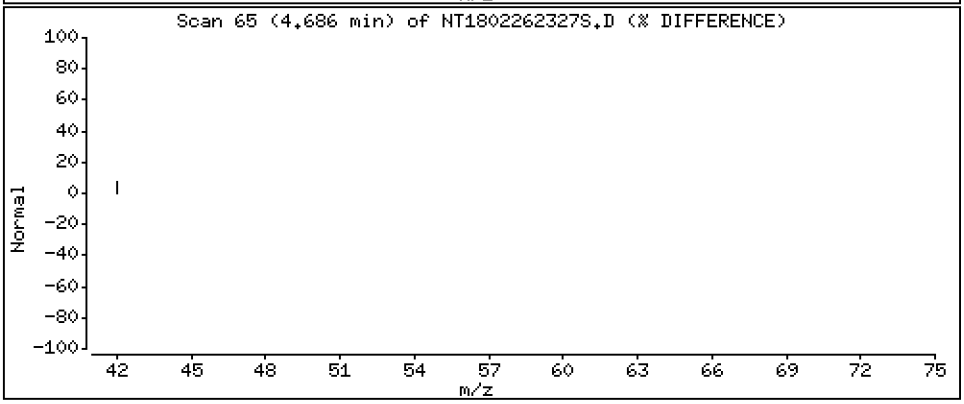












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262327S.D
Lab Smp Id: SLC0389-CCV1
Inj Date : 27-FEB-2023 05:16
Operator : YZ Inst ID: nt18.i
Smp Info : SLC0389-CCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:46 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.756	6.748	(0.757)	162728	1.60484	1.605(R)
	3	Phenol	94	8.332	8.324	(0.934)	131542	0.99443	0.9944
	7	1,3-Dichlorobenzene	146	8.858	8.850	(0.993)	123351	0.93133	0.9313
*	8	1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	314169	4.00000	
	9	1,4-Dichlorobenzene	146	8.951	8.943	(1.003)	125241	0.90547	0.9055
	11	Benzyl alcohol	79	9.214	9.191	(1.033)	93048	1.09720	1.097
	12	1,2-Dichlorobenzene	146	9.300	9.300	(1.043)	120699	0.91654	0.9165
	13	2-Methylphenol	108	9.424	9.416	(1.057)	109094	1.00287	1.003
	15	4-Methylphenol	108	9.696	9.680	(1.087)	111839	1.02468	1.025
	16	N-Nitroso-di-n-propylamine	70	9.742	9.735	(1.092)	73648	1.00172	1.002
	22	2,4-Dimethylphenol	107	10.723	10.715	(0.943)	210304	1.96468	1.965
	24	Benzoic acid	105	10.893	11.088	(0.958)	208451	4.77264	4.773
	26	1,2,4-Trichlorobenzene	180	11.285	11.285	(0.993)	102870	0.93846	0.9385
*	27	Naphthalene-d8	136	11.370	11.370	(1.000)	1199745	4.00000	
	30	Hexachlorobutadiene	225	11.772	11.772	(1.035)	60050	0.91307	0.9131
	39	Dimethylphthalate	163	14.465	14.465	(0.967)	230018	0.97761	0.9776
*	42	Acenaphthene-d10	162	14.952	14.945	(1.000)	612415	4.00000	
	50	Diethylphthalate	149	15.911	15.911	(1.064)	227300	1.05721	1.057
	54	N-Nitrosodiphenylamine	169	16.289	16.281	(0.907)	162260	0.92062	0.9206
	57	Hexachlorobenzene	284	17.338	17.338	(0.966)	73079	0.86363	0.8636
	58	Pentachlorophenol	266	17.702	17.702	(0.986)	51315	2.04677	2.047
*	59	Phenanthrene-d10	188	17.957	17.950	(1.000)	1218256	4.00000	
$	66	Terphenyl-d14	244	21.099	21.091	(0.918)	204207	1.05648	1.056(R)
	67	Butylbenzylphthalate	149	22.028	22.020	(0.958)	182738	1.04349	1.043
*	69	Chrysene-d12	240	22.988	22.980	(1.000)	1067483	4.00000	
*	77	Perylene-d12	264	25.481	25.473	(1.000)	549501	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.948	27.917	(1.097)	80567	0.49345	0.4934
	90	N-Nitrosodimethylamine	74	4.686	4.686	(0.525)	119893	1.98658	1.987

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262327S.D
Lab Smp Id: SLC0389-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	314169	12.41
27 Naphthalene-d8	1065527	532764	2131054	1199745	12.60
42 Acenaphthene-d10	544290	272145	1088580	612415	12.52
59 Phenanthrene-d10	1003412	501706	2006824	1218256	21.41
69 Chrysene-d12	936975	468488	1873950	1067483	13.93
77 Perylene-d12	1057771	528886	2115542	549501	-48.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	0.05
59 Phenanthrene-d10	17.95	17.45	18.45	17.96	0.04
69 Chrysene-d12	22.98	22.48	23.48	22.99	0.03
77 Perylene-d12	25.47	24.97	25.97	25.48	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262327S.D

Lab ID: SLC0389-CCV1
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   27-FEB-2023 05:16

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.958	0.975	-0.0172	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00036
Lab File ID:	NT1802262305S.D	Calibration Date:	02/25/2023
Sequence:	SLC0389	Injection Date:	02/26/23
Lab Sample ID:	SLC0389-LCV1	Injection Time:	14:31
Sequence Name:	ABN 0.2		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.10000	0.1	1.7610310	2.0503480		16.4	
1,2-Dichlorobenzene	A	0.10000	0.1	1.6766720	1.9114450		14.0	
Benzyl Alcohol	A	0.10000	0.09	1.0797360	1.0077710		-6.7	
Benzoic acid	A	0.40000	0.002	0.0982061	0.0006258		-99.6	
2,4-Dimethylphenol	A	0.20000	0.2	0.3568845	0.3642398		2.1	
1,2,4-Trichlorobenzene	A	0.10000	0.1	0.3654639	0.4055871		11.0	
N-Nitrosodiphenylamine	A	0.10000	0.1	0.5787015	0.5839475		0.9	
Pentachlorophenol	A	0.20000	0.005	0.0525310	0.0018825		-97.7	
2-Fluorophenol	A	0.15000	0.131	1.2910050	1.1235770		-13.0	
p-Terphenyl-d14	A	0.10000	0.101	0.7242850	0.7313962		1.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623058.D

Date : 26-FEB-2023 14:31

Client ID:

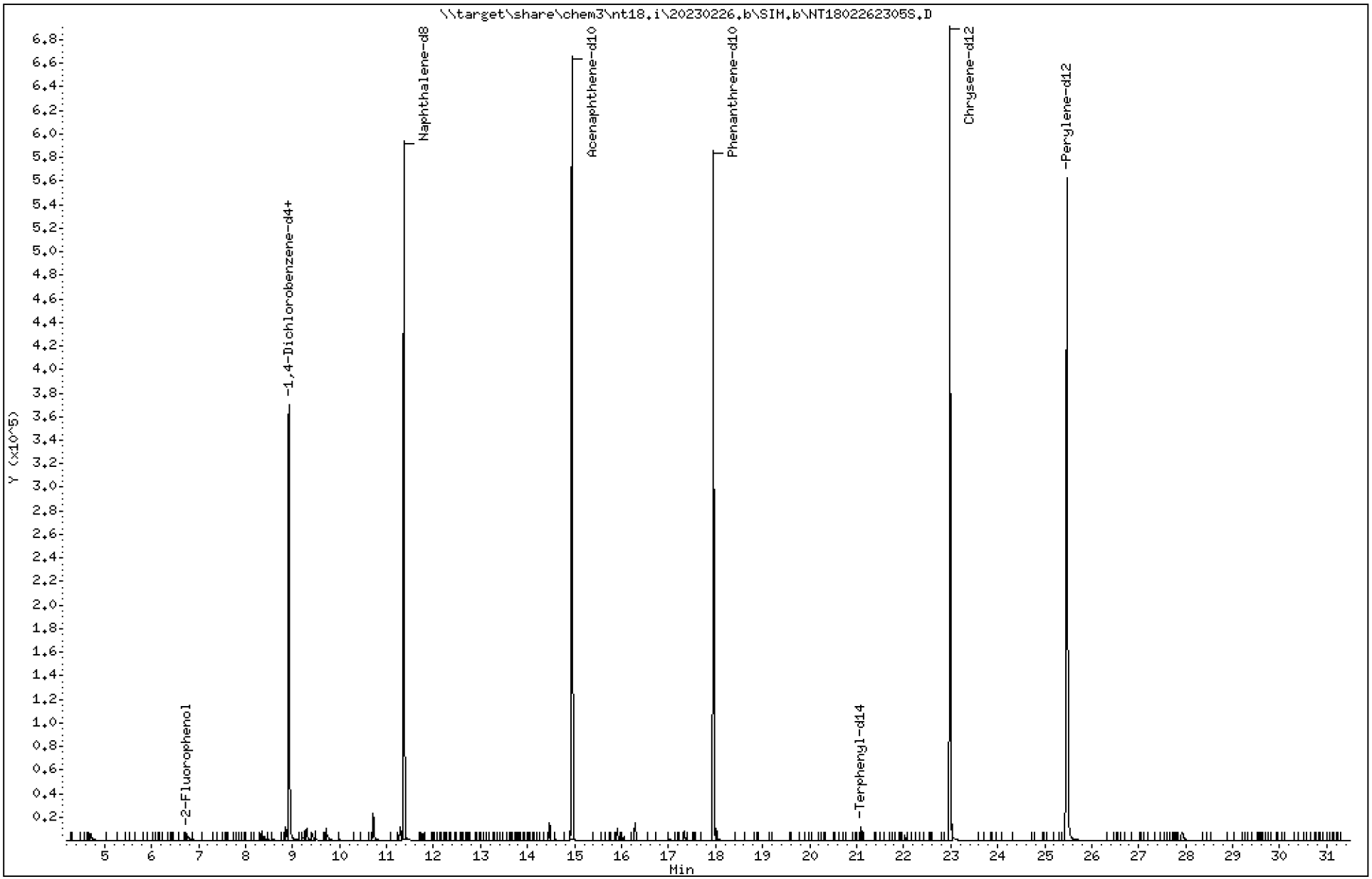
Sample Info: SLC0389-LCV1

Column phase: ZB-5msi

Instrument: nt18.i

Operator: YZ

Column diameter: 0.25



Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623055.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

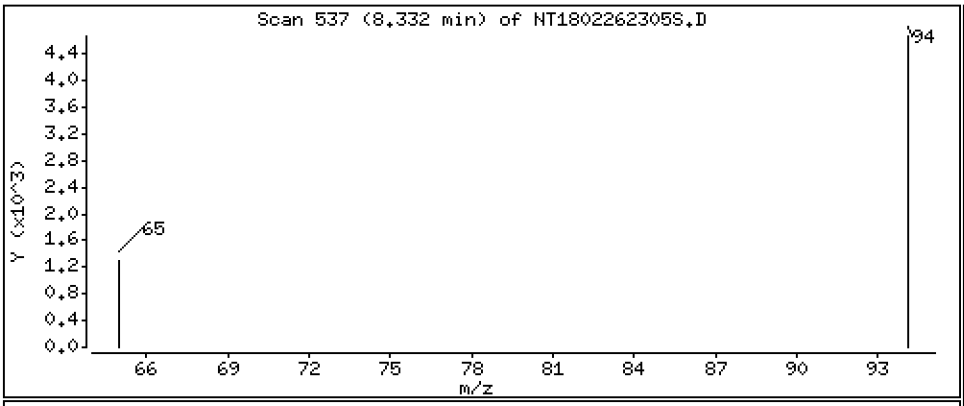
Operator: YZ

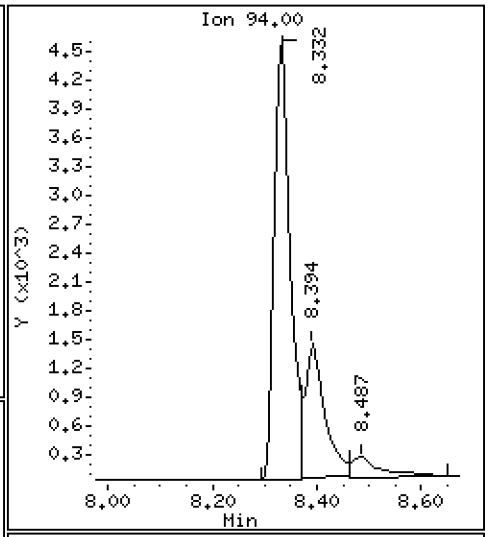
Column phase: ZB-5msi

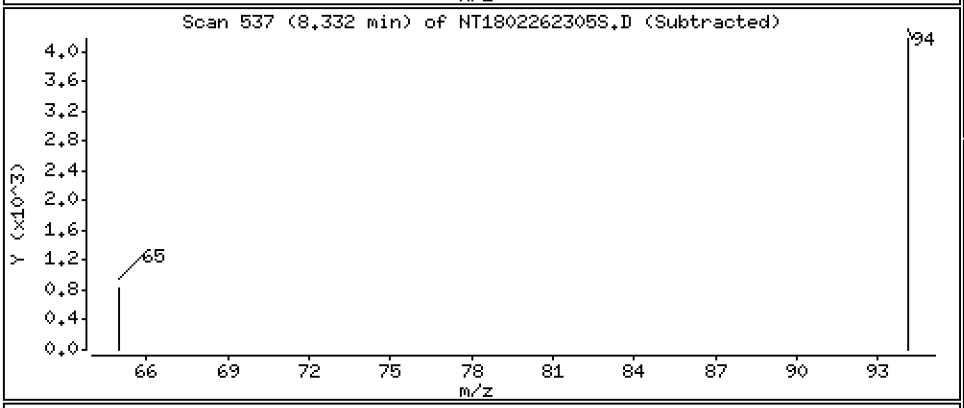
Column diameter: 0.25

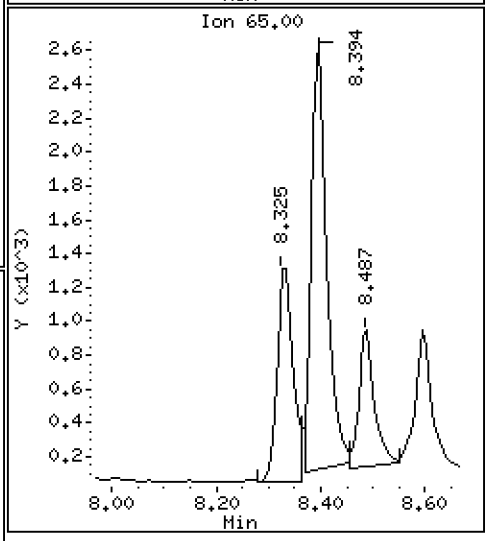
3 Phenol

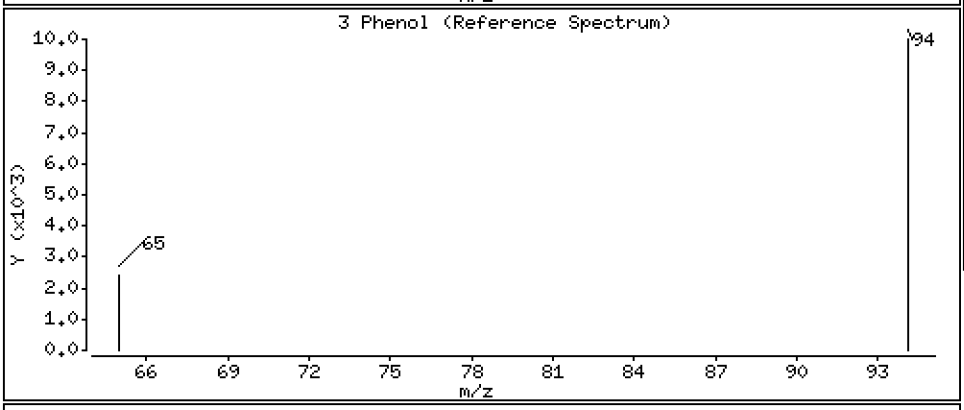
Concentration: 0.09222 ug/mL

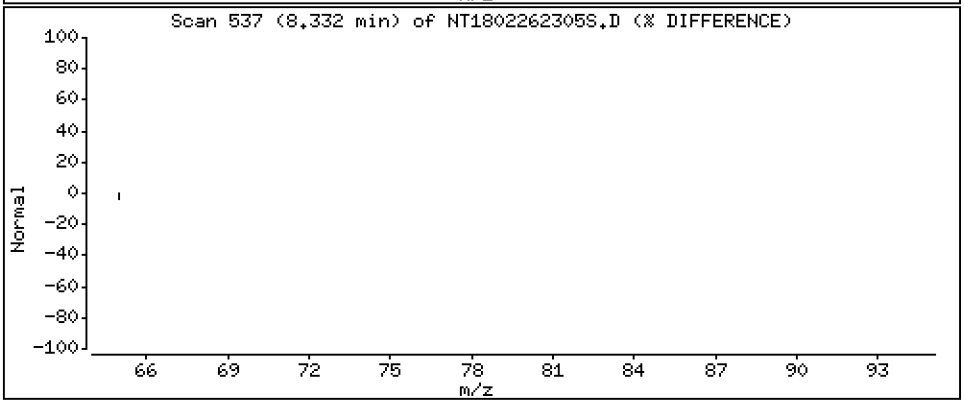












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT18022623055.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

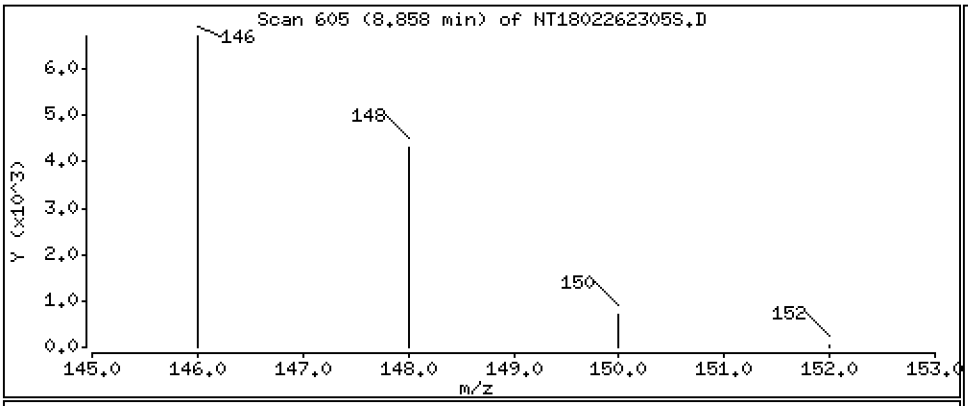
Operator: YZ

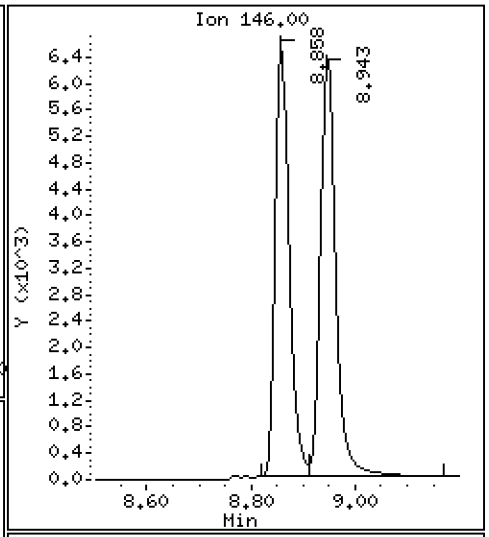
Column phase: ZB-5msi

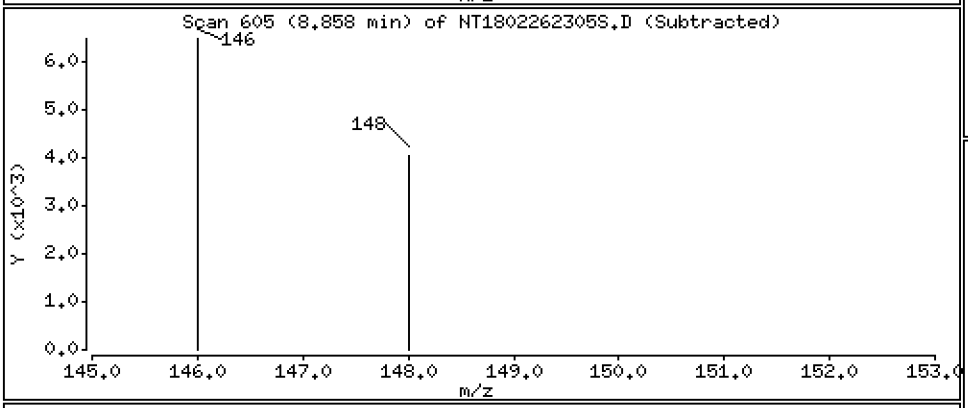
Column diameter: 0.25

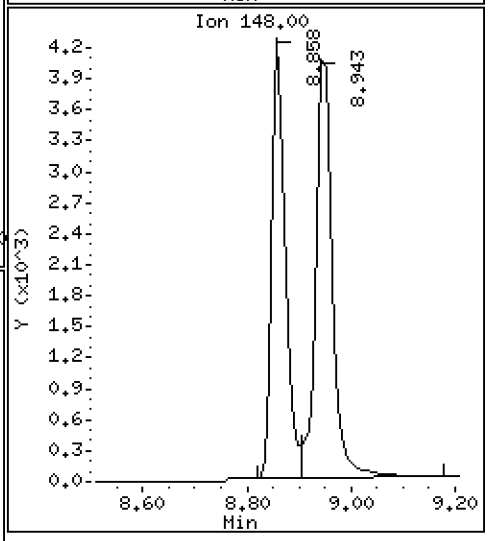
7 1,3-Dichlorobenzene

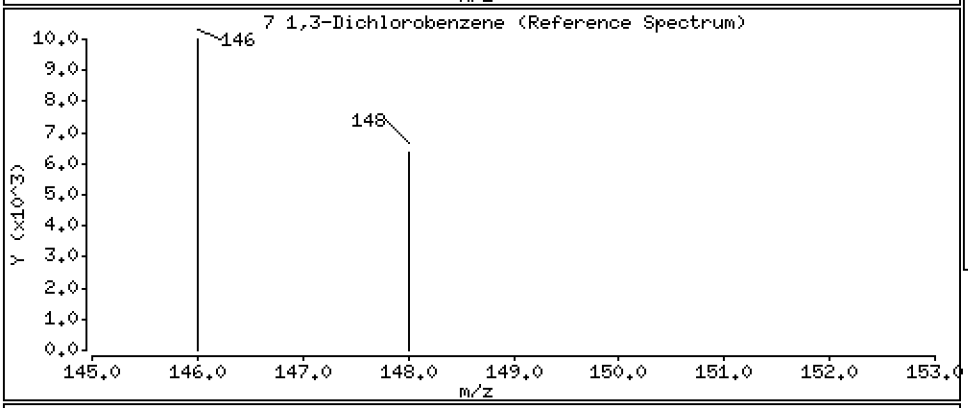
Concentration: 0.1118 ug/mL

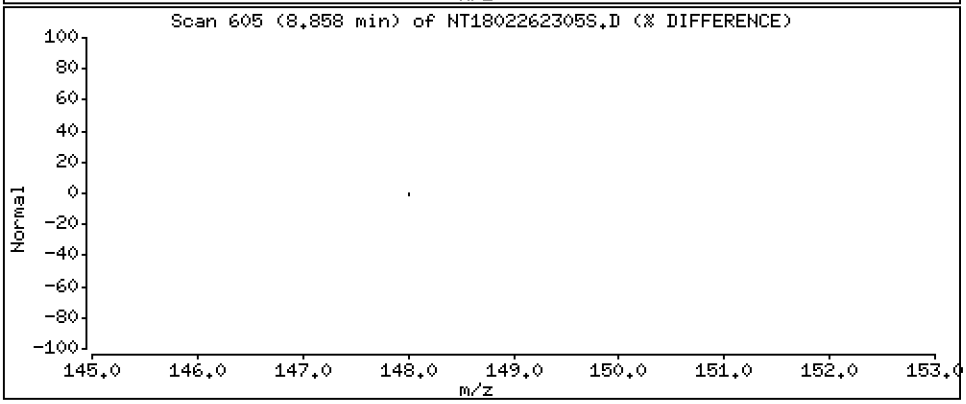












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

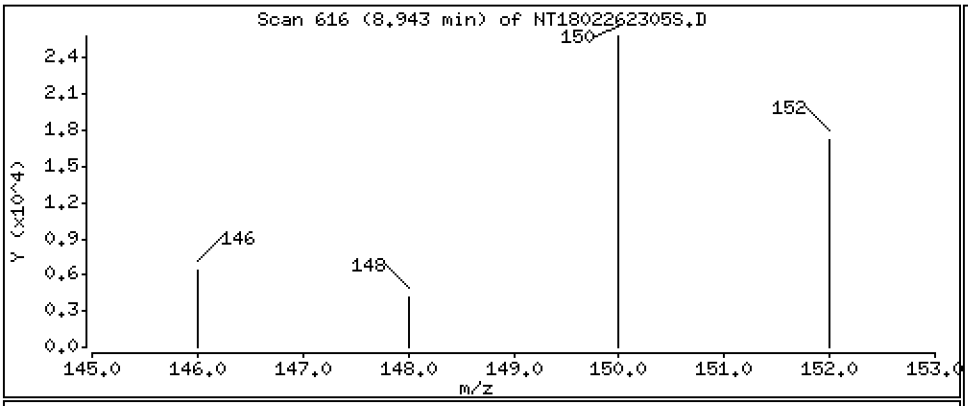
Operator: YZ

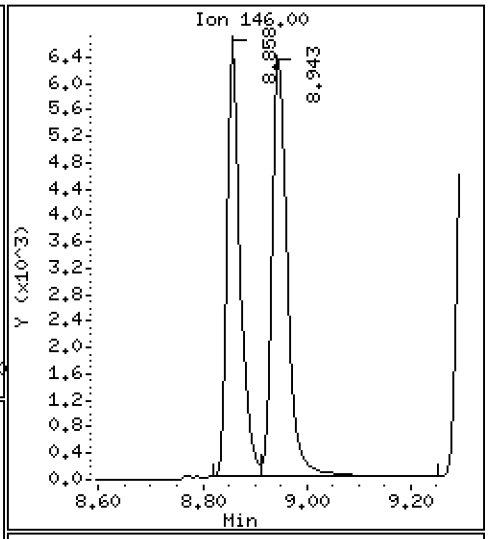
Column phase: ZB-5msi

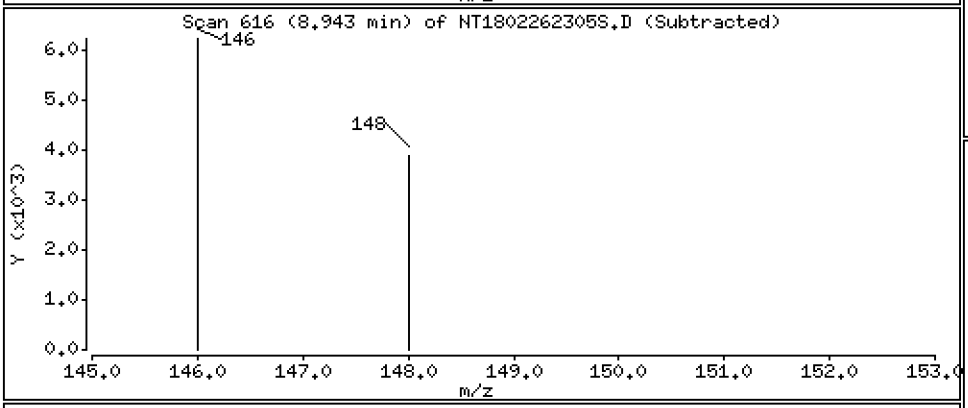
Column diameter: 0.25

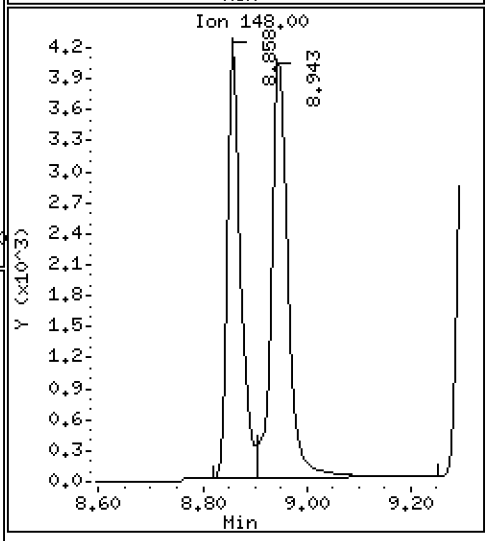
9 1,4-Dichlorobenzene

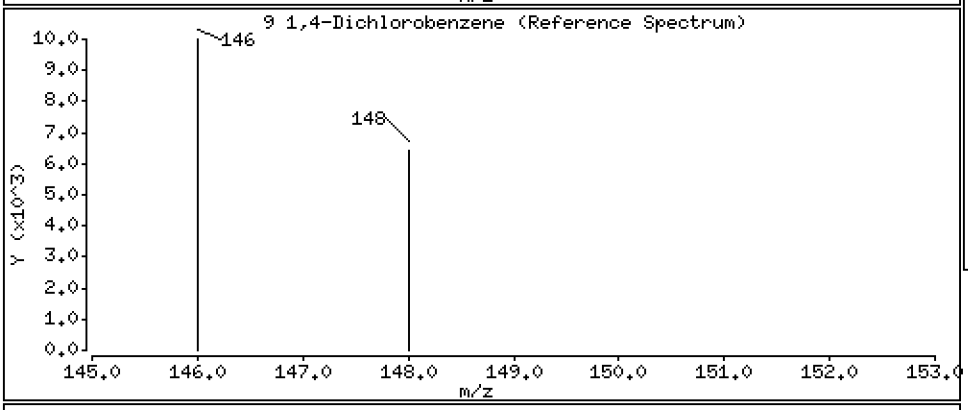
Concentration: 0.1164 ug/mL

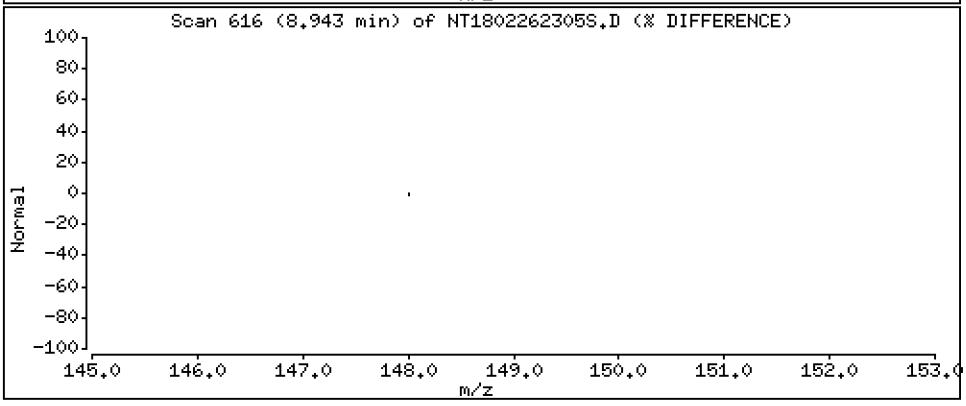












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

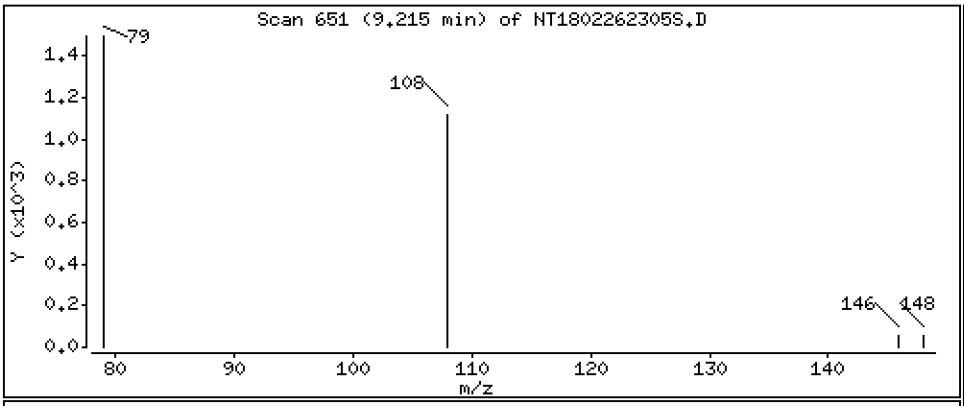
Operator: YZ

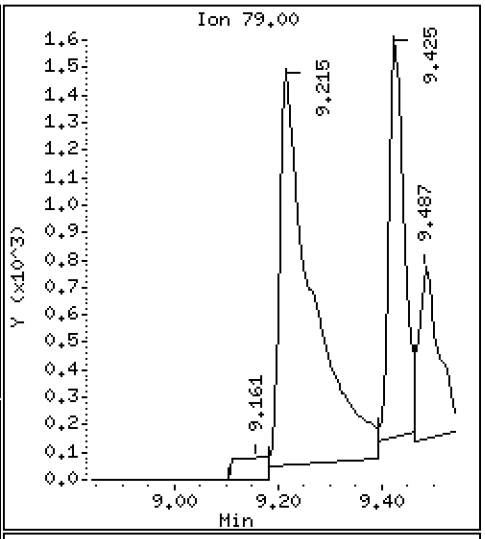
Column phase: ZB-5msi

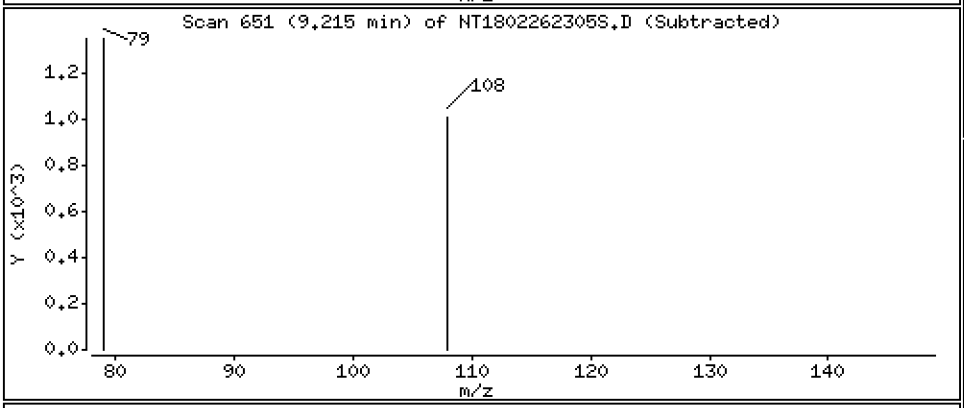
Column diameter: 0.25

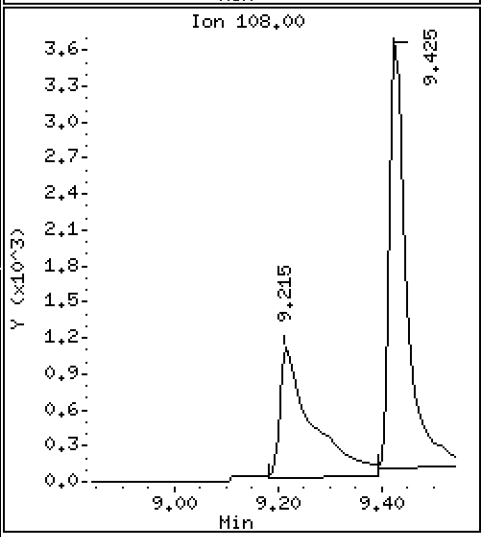
11 Benzyl alcohol

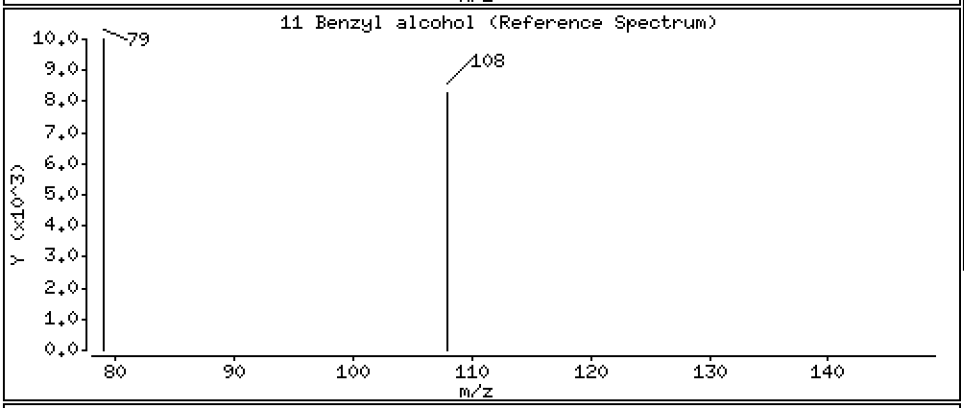
Concentration: 0.09333 ug/mL

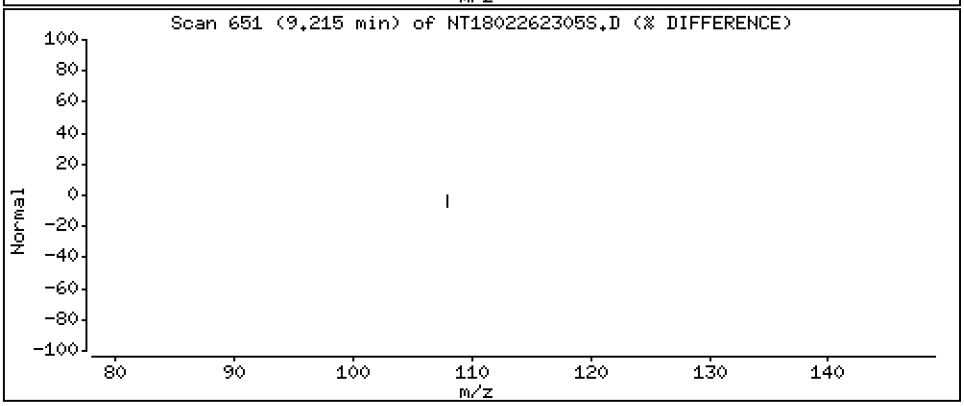












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

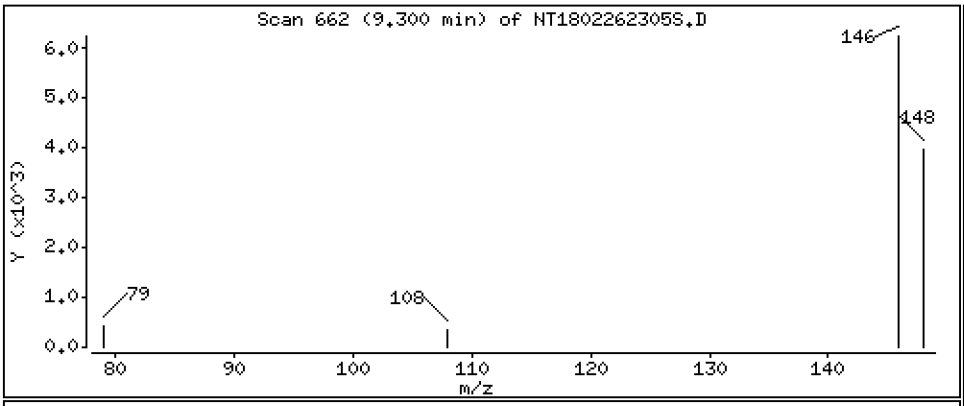
Operator: YZ

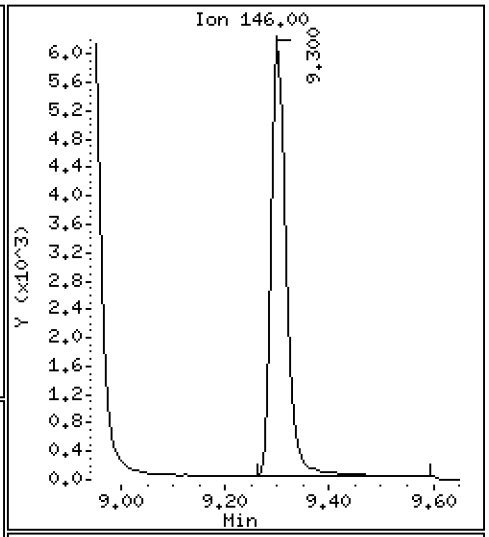
Column phase: ZB-5msi

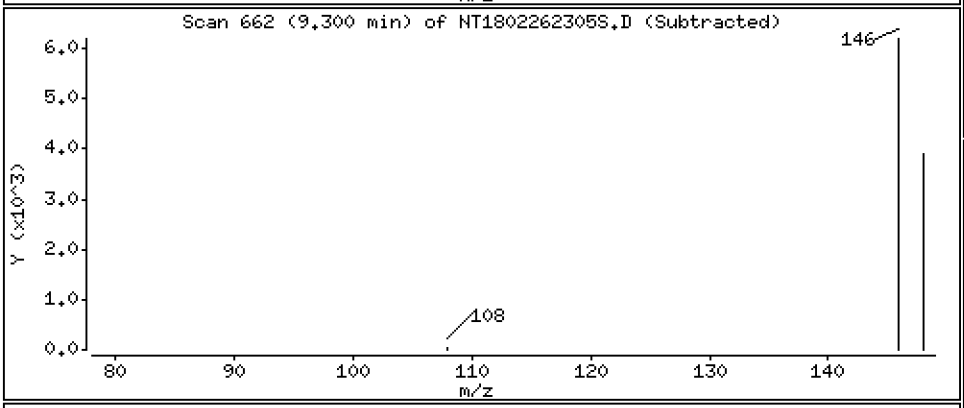
Column diameter: 0.25

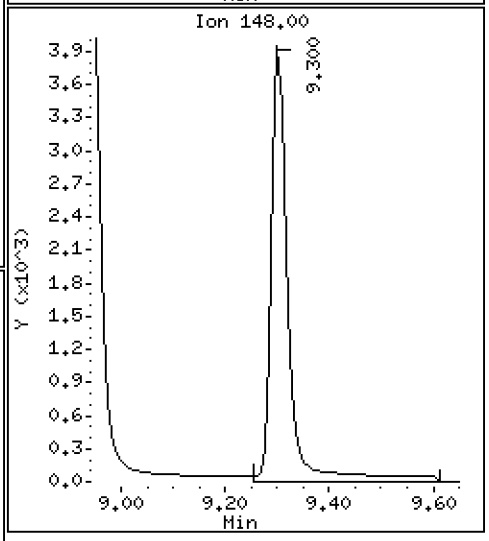
12 1,2-Dichlorobenzene

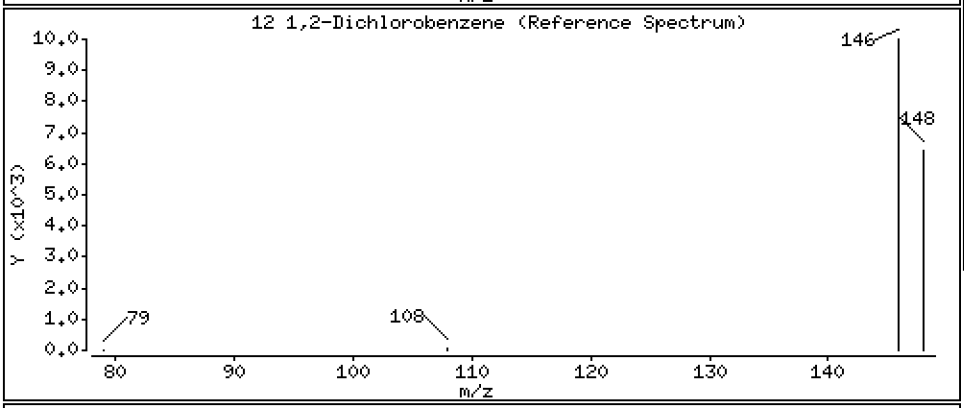
Concentration: 0.1140 ug/mL

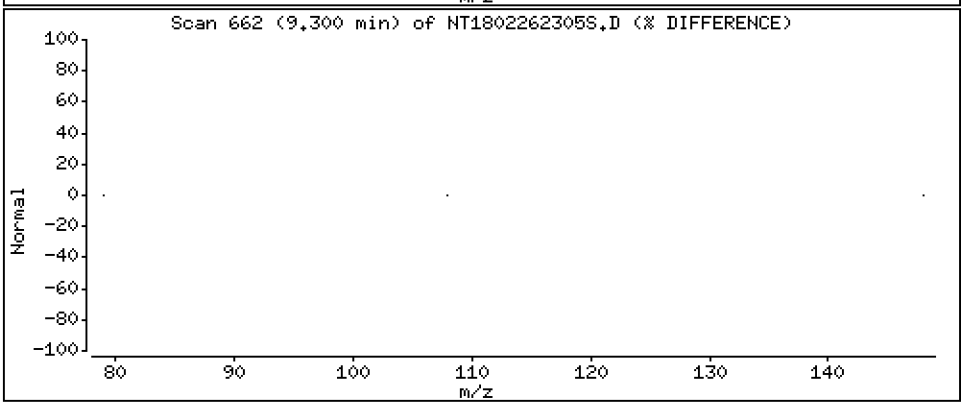












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Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

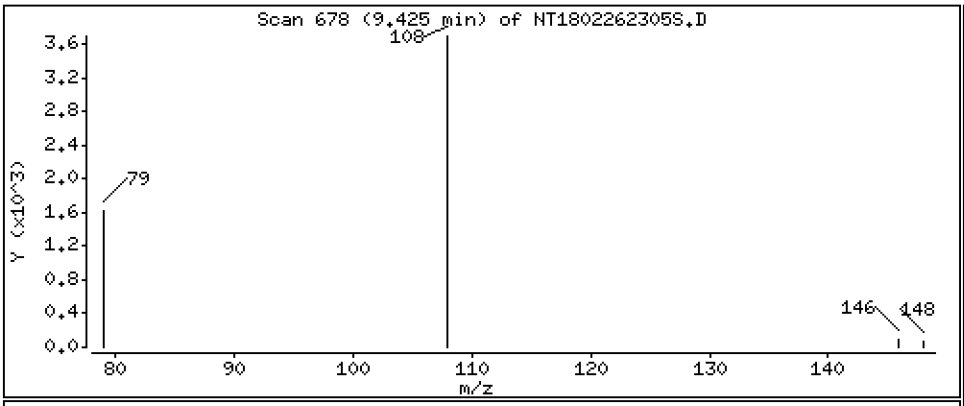
Operator: YZ

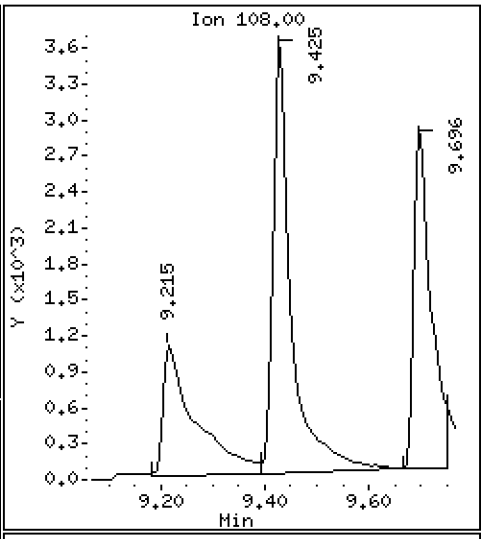
Column phase: ZB-5msi

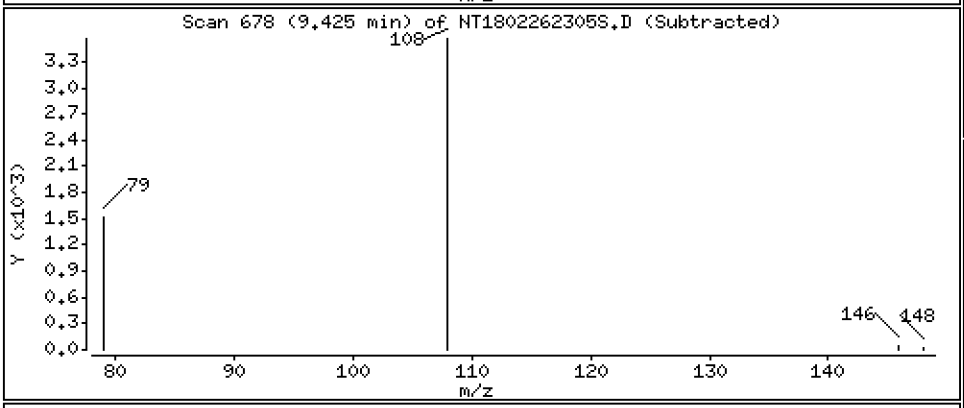
Column diameter: 0.25

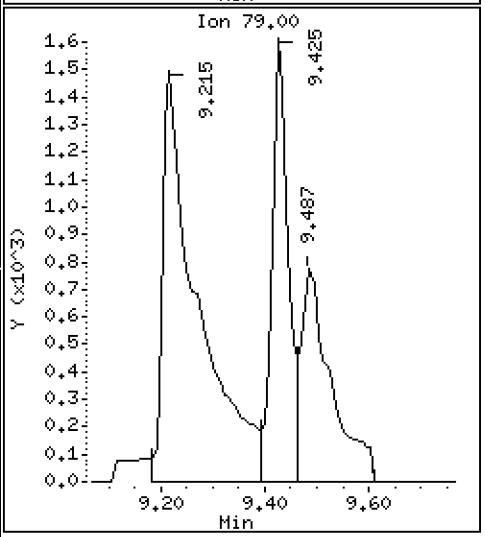
13 2-Methylphenol

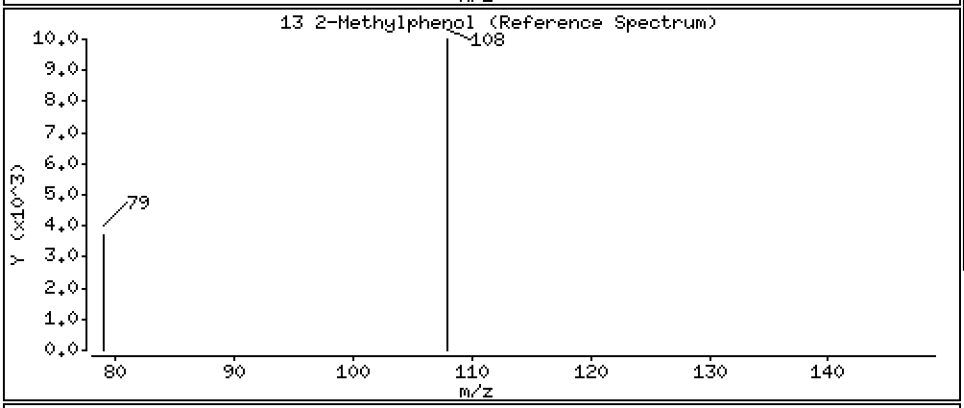
Concentration: 0.1023 ug/mL

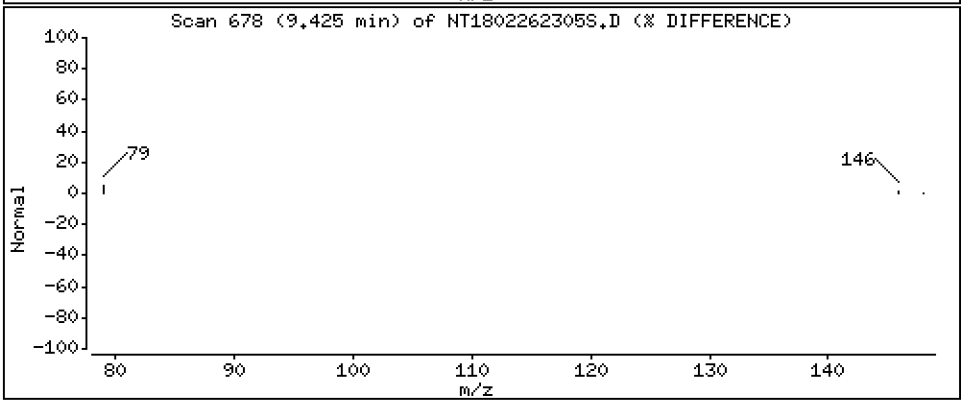












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

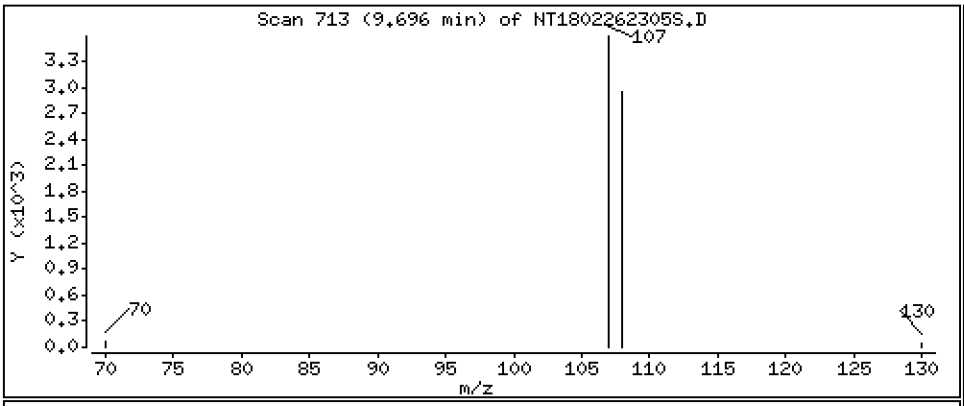
Operator: YZ

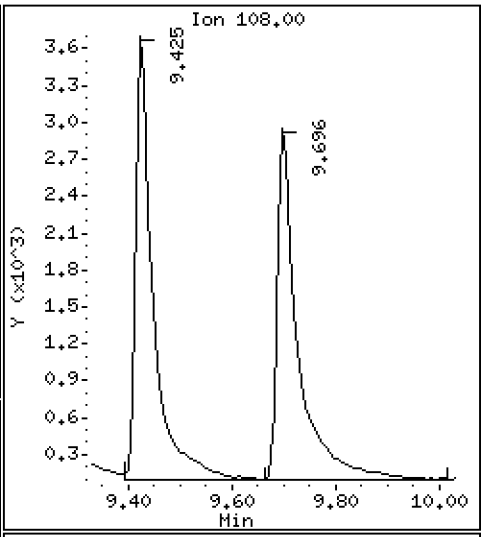
Column phase: ZB-5msi

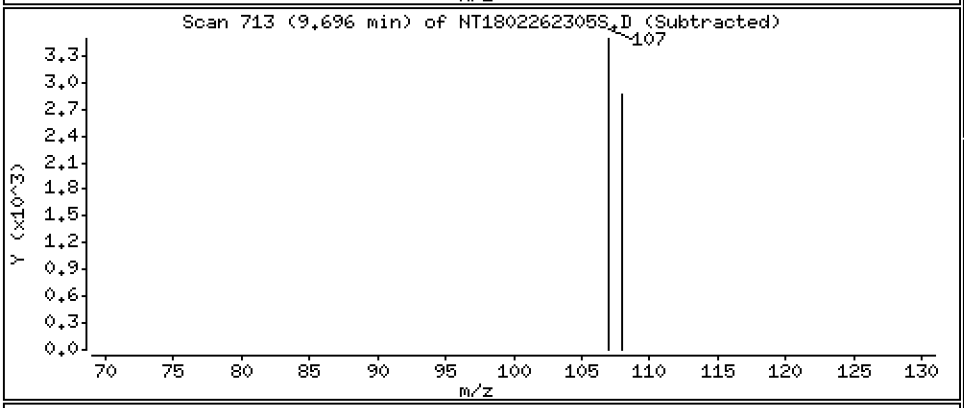
Column diameter: 0.25

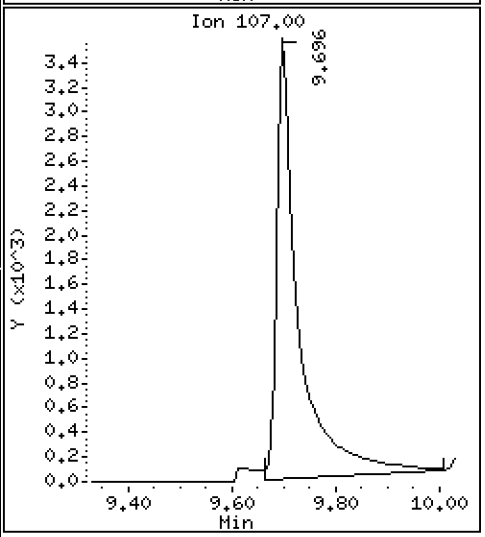
15 4-Methylphenol

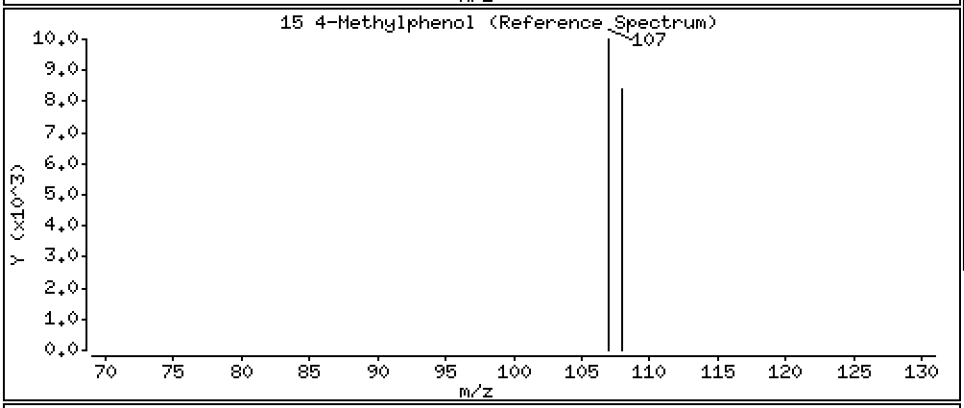
Concentration: 0.09390 ug/mL

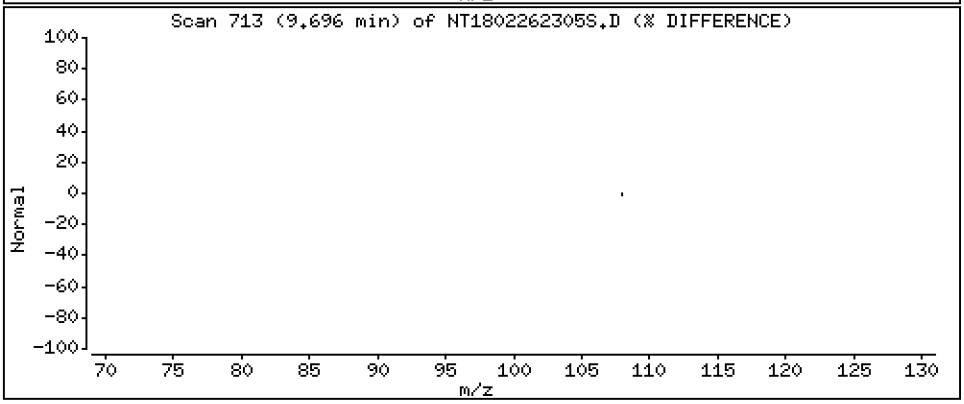












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

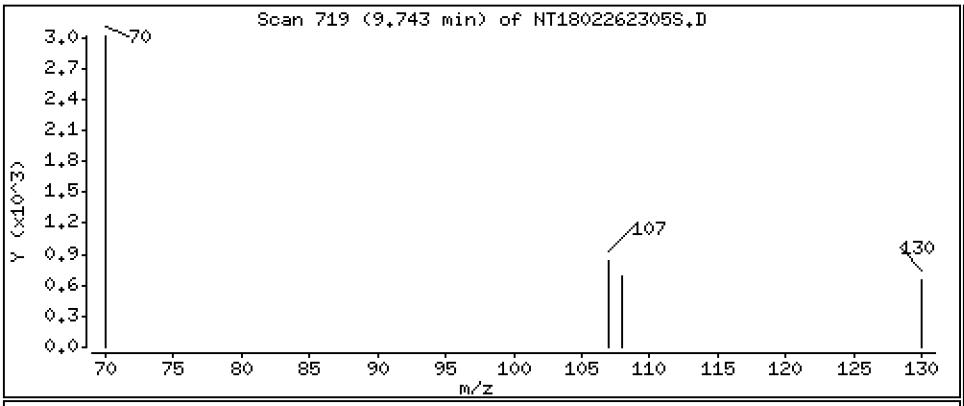
Operator: YZ

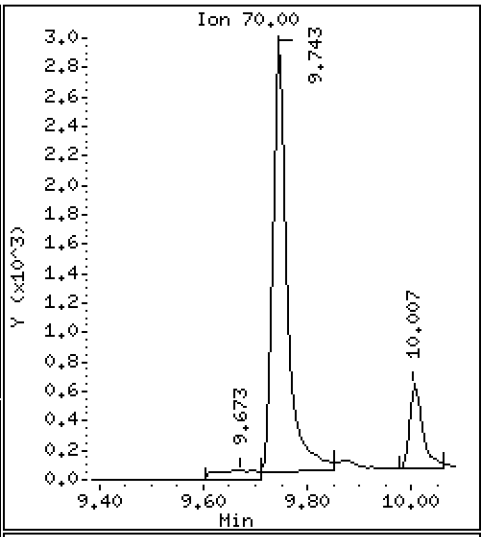
Column phase: ZB-5msi

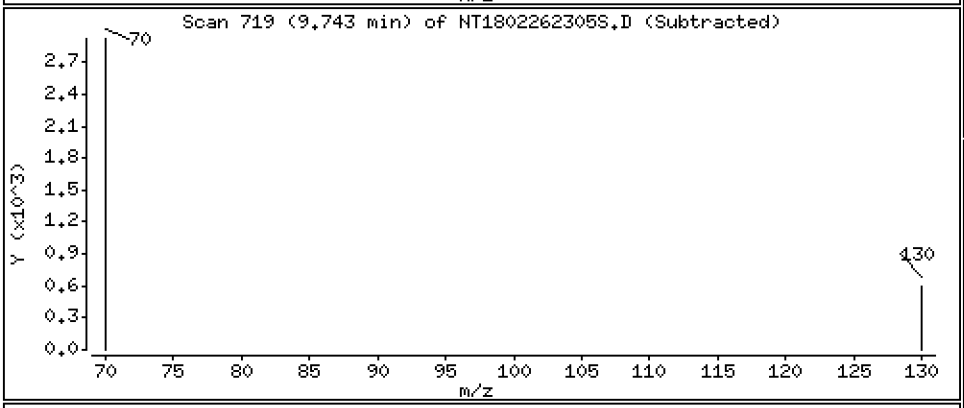
Column diameter: 0.25

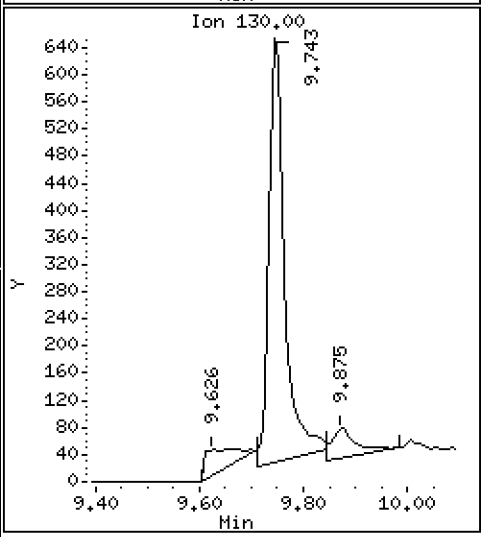
16 N-Nitroso-di-n-propylamine

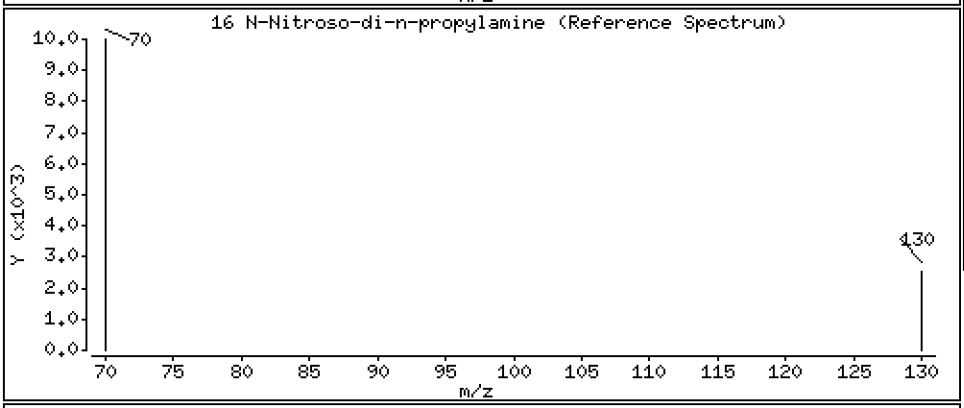
Concentration: 0.09619 ug/mL

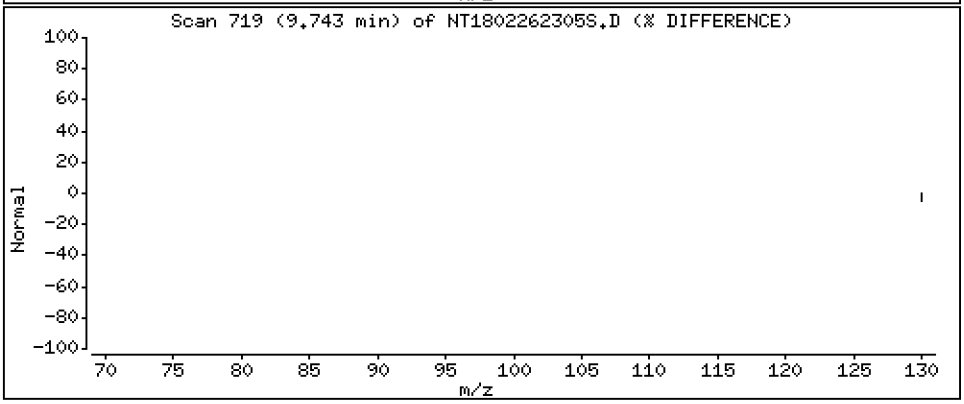












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

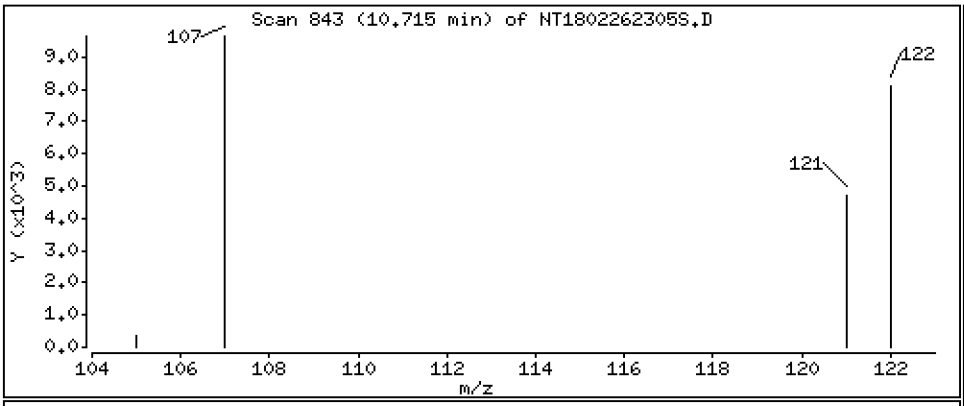
Operator: YZ

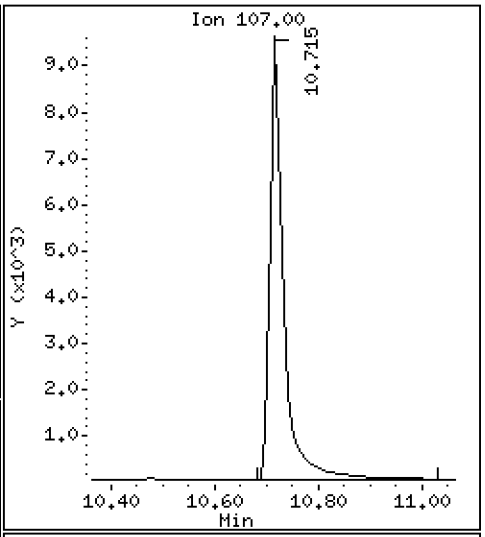
Column phase: ZB-5msi

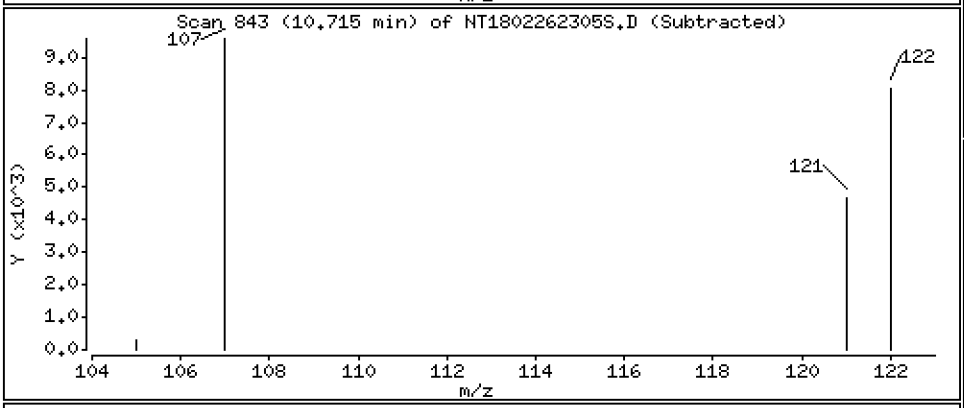
Column diameter: 0.25

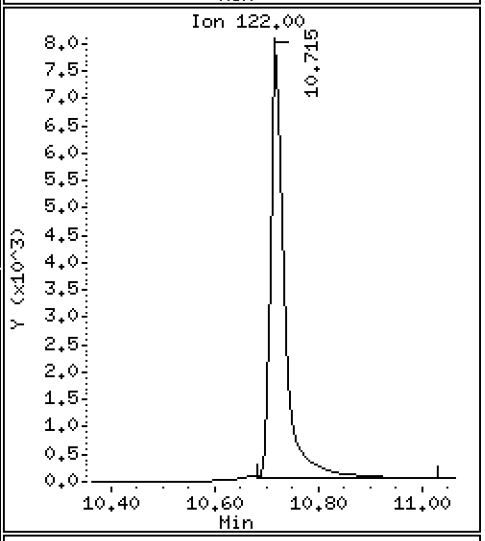
22 2,4-Dimethylphenol

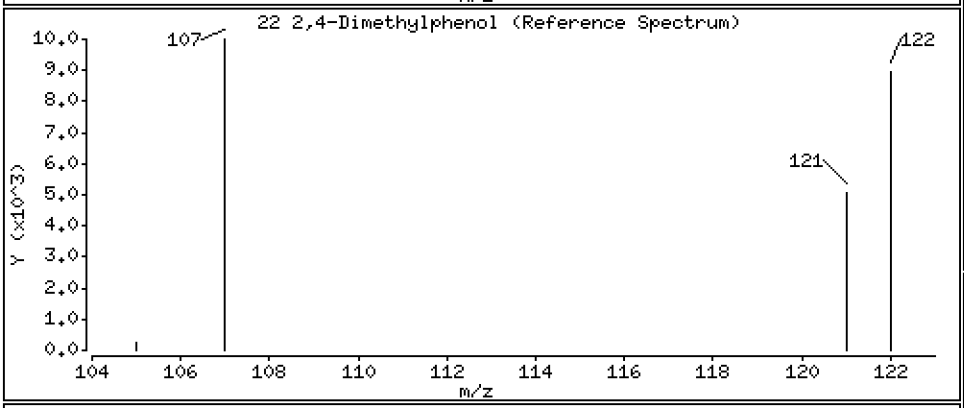
Concentration: 0.2041 ug/mL

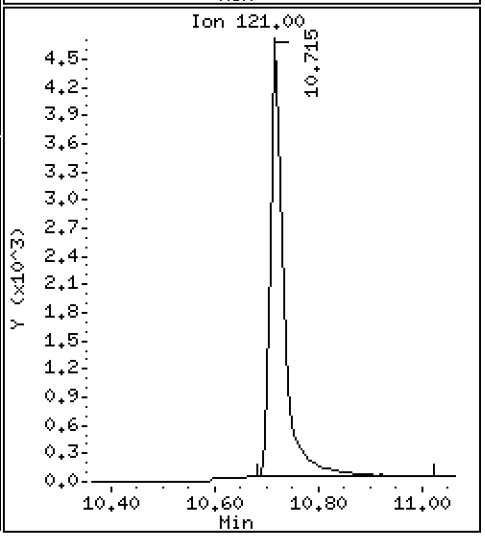


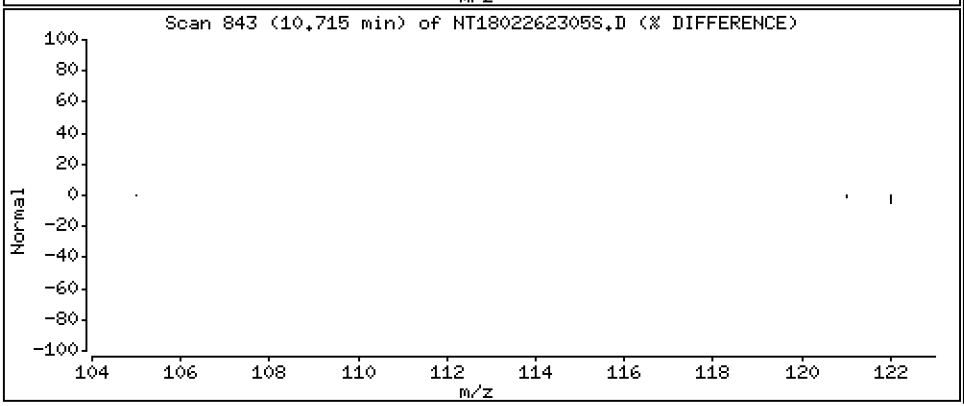












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

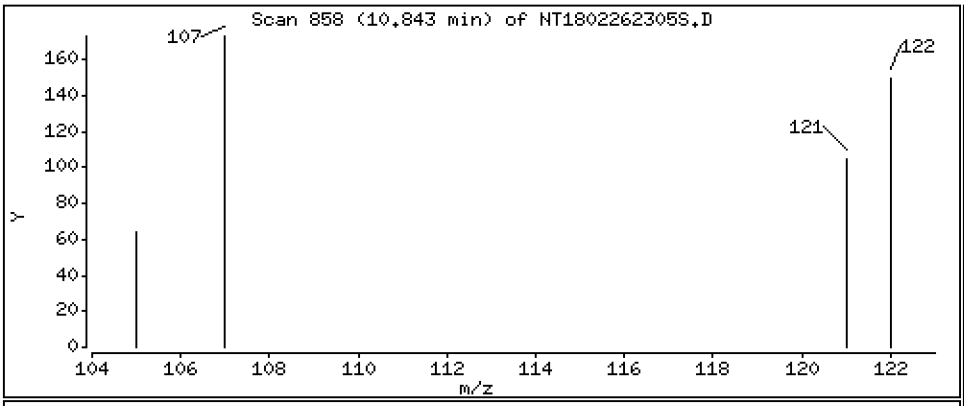
Operator: YZ

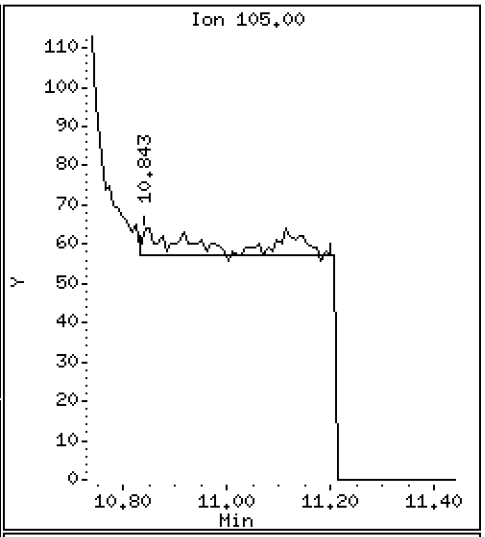
Column phase: ZB-5msi

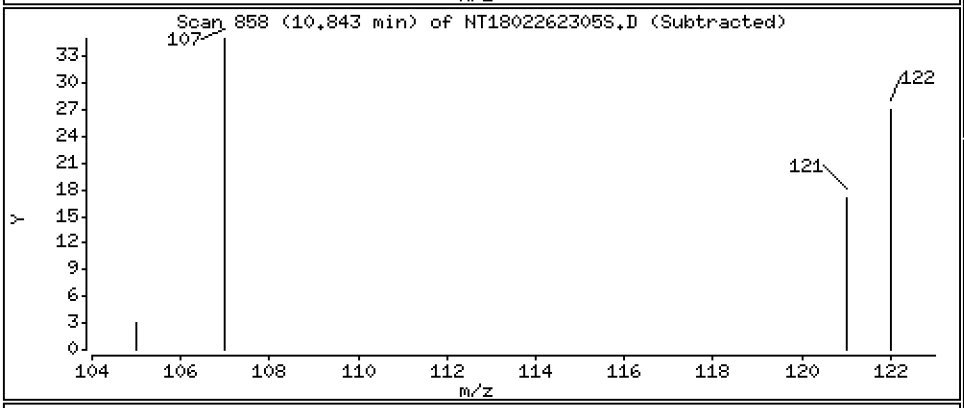
Column diameter: 0.25

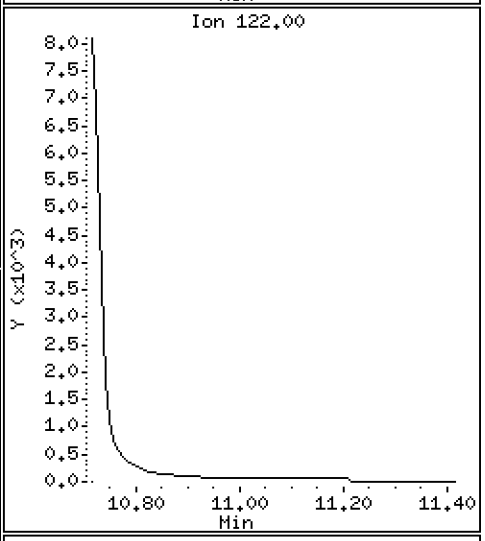
24 Benzoic acid

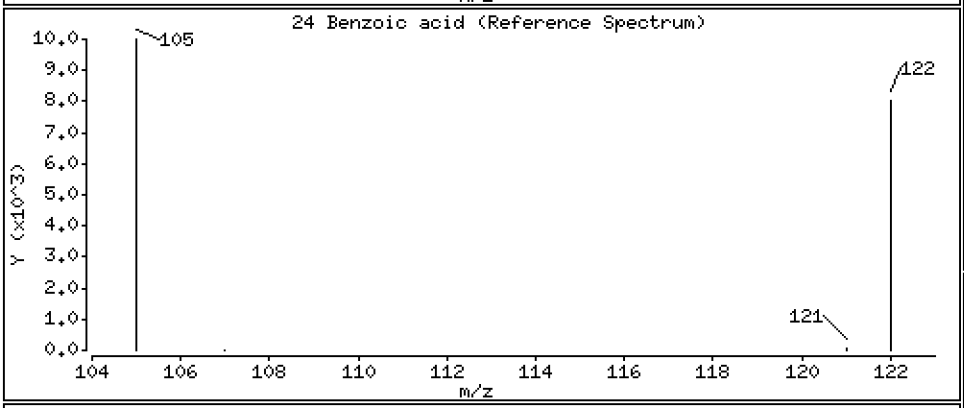
Concentration: 0.001740 ug/mL

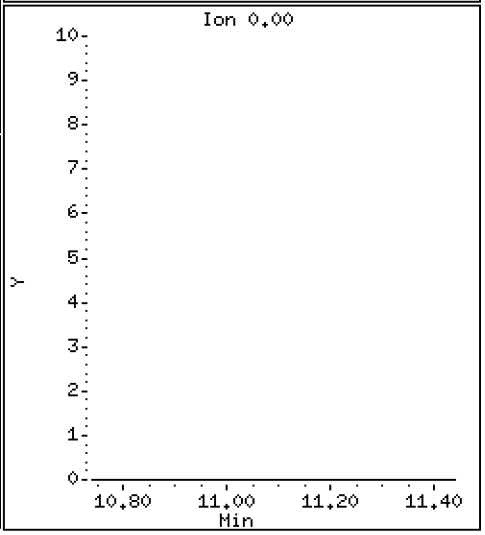


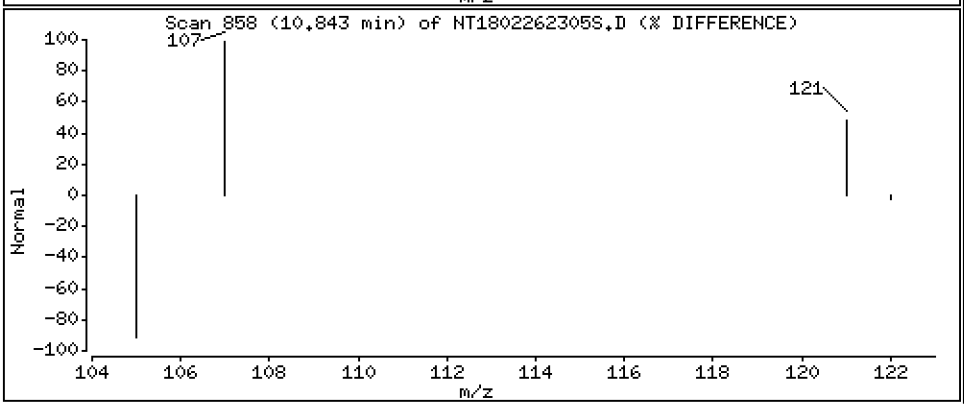












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Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

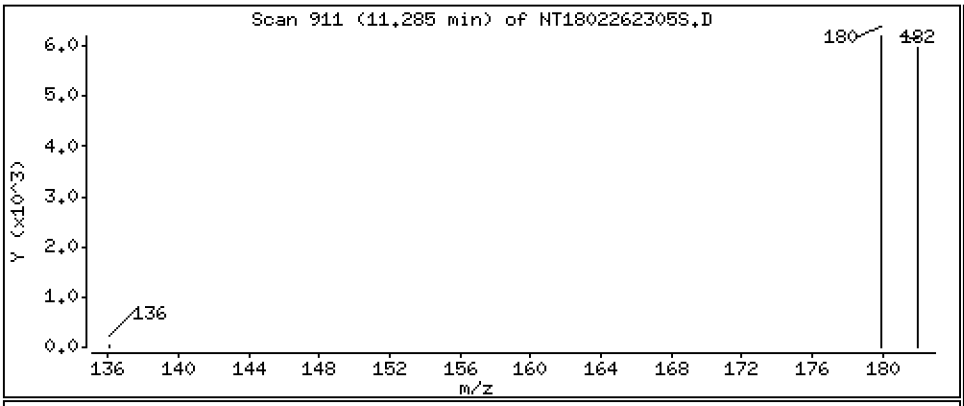
Operator: YZ

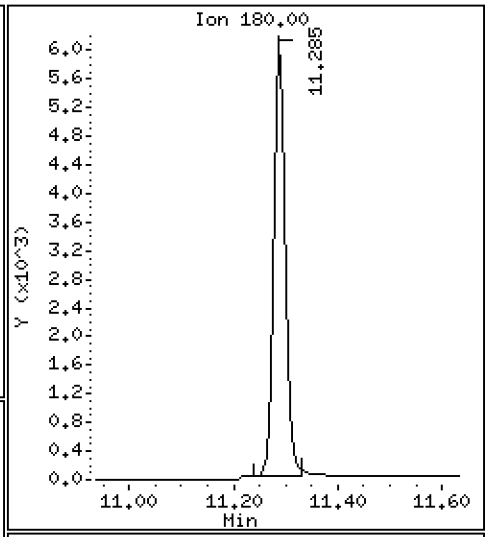
Column phase: ZB-5msi

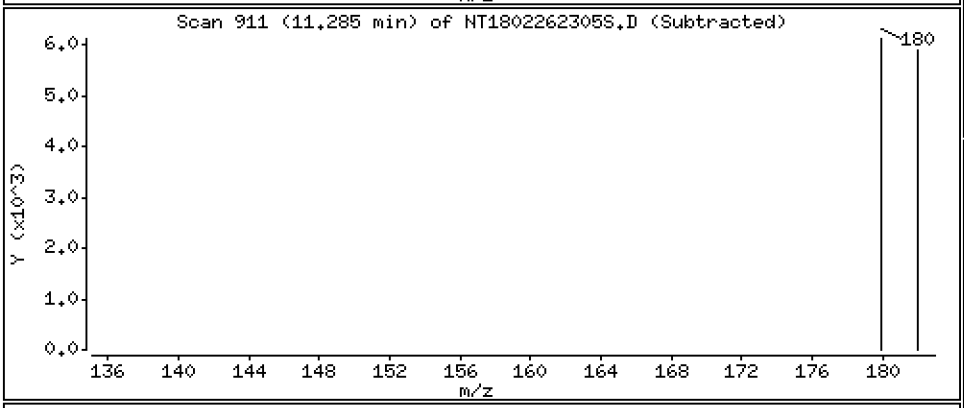
Column diameter: 0.25

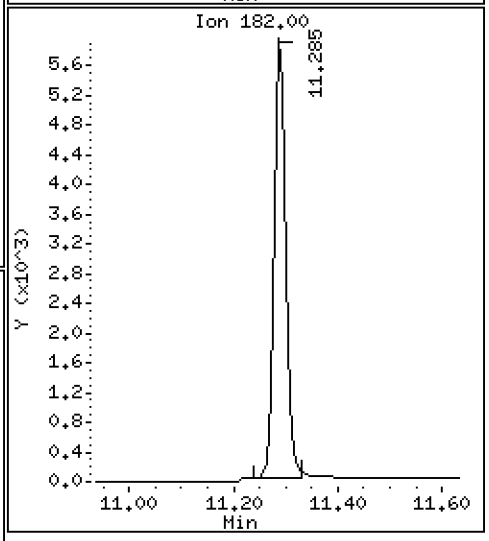
26 1,2,4-Trichlorobenzene

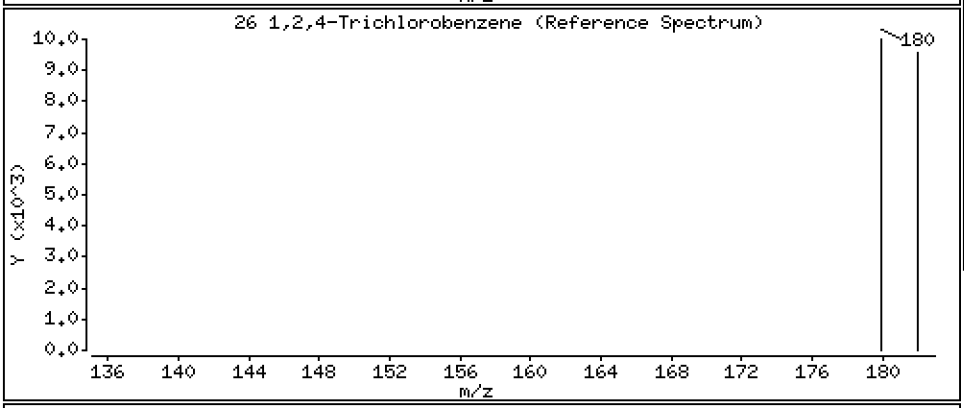
Concentration: 0.1110 ug/mL

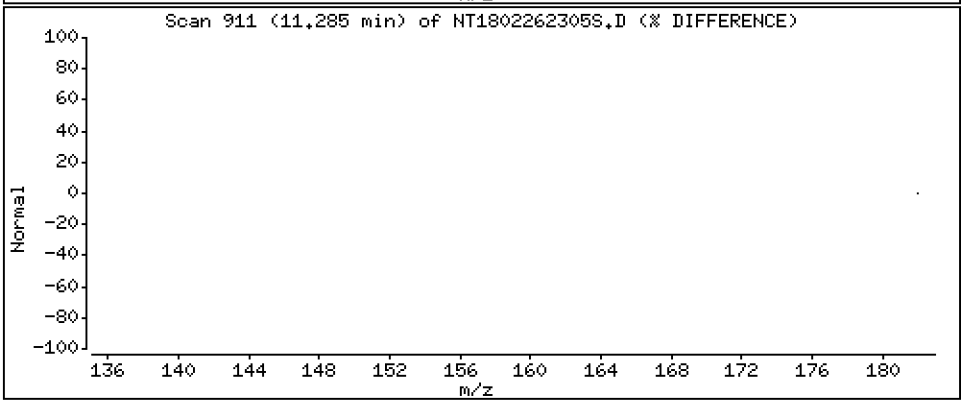












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

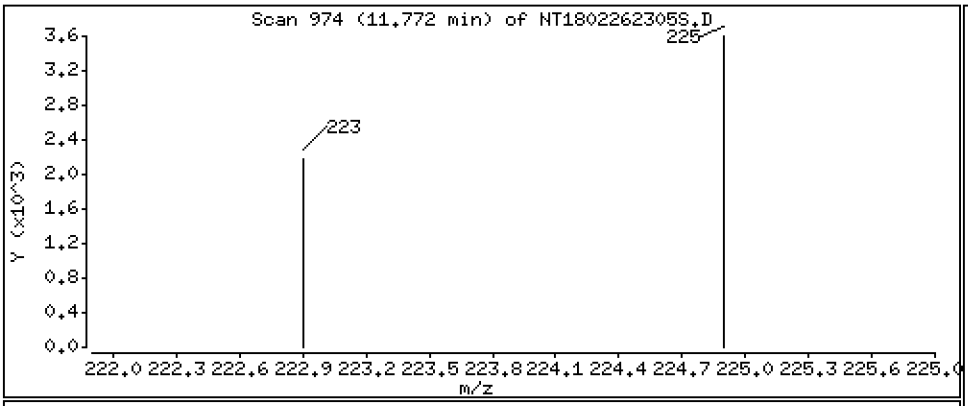
Operator: YZ

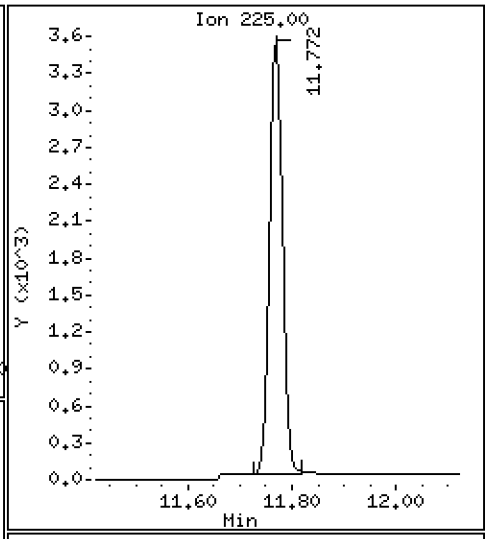
Column phase: ZB-5msi

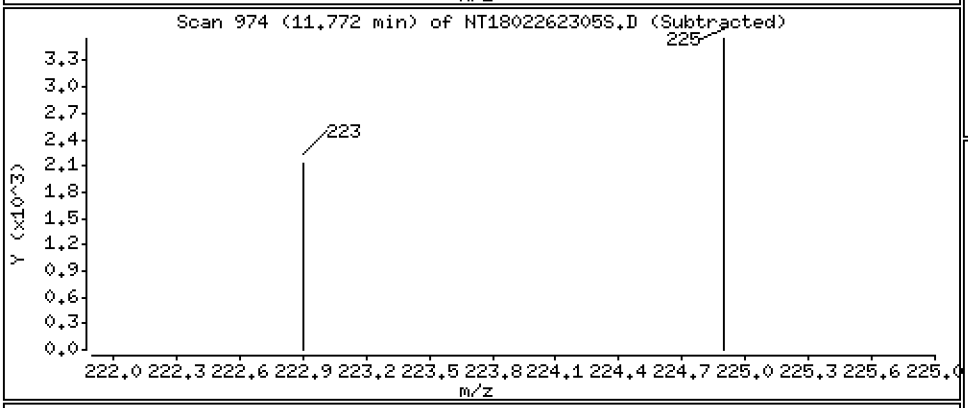
Column diameter: 0.25

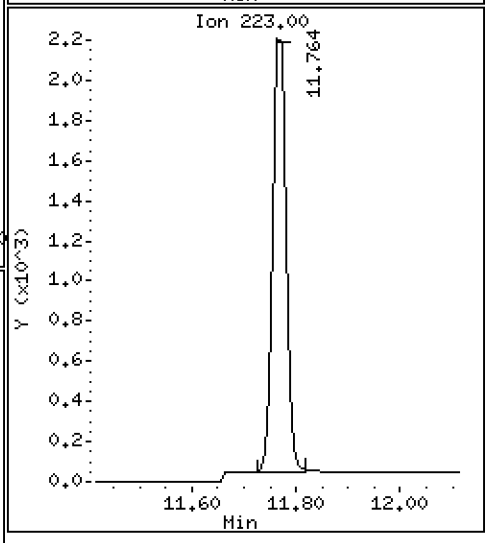
30 Hexachlorobutadiene

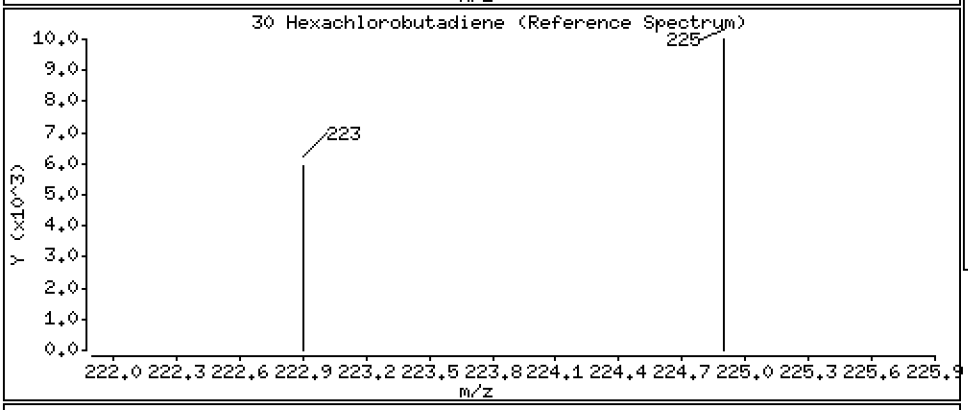
Concentration: 0.1105 ug/mL

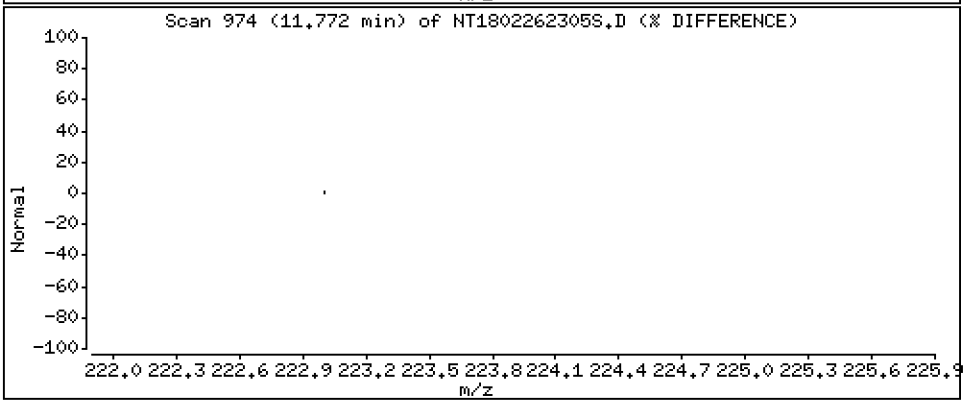












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

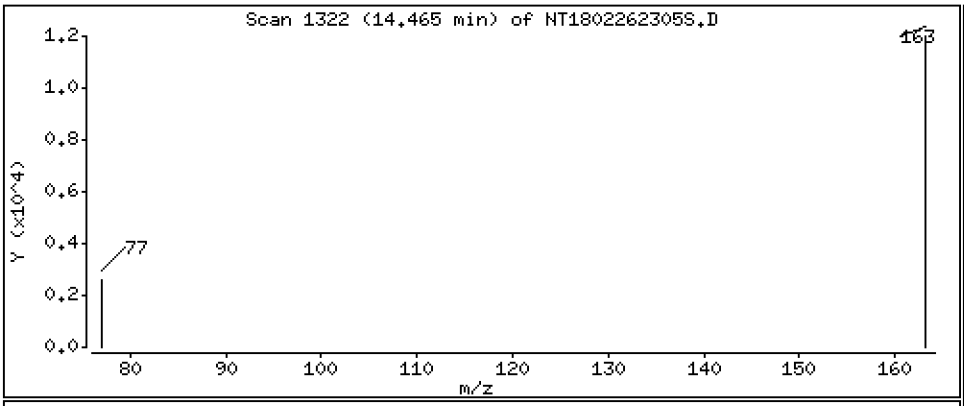
Operator: YZ

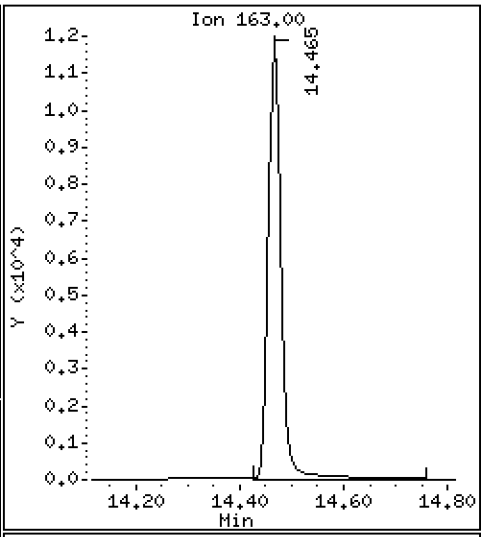
Column phase: ZB-5msi

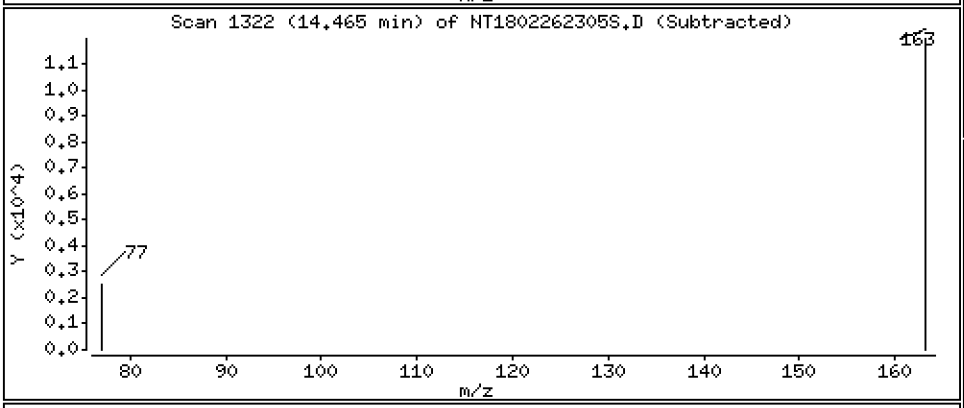
Column diameter: 0.25

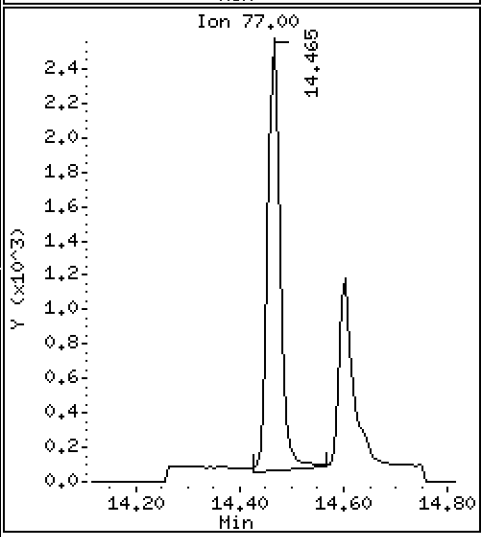
39 Dimethylphthalate

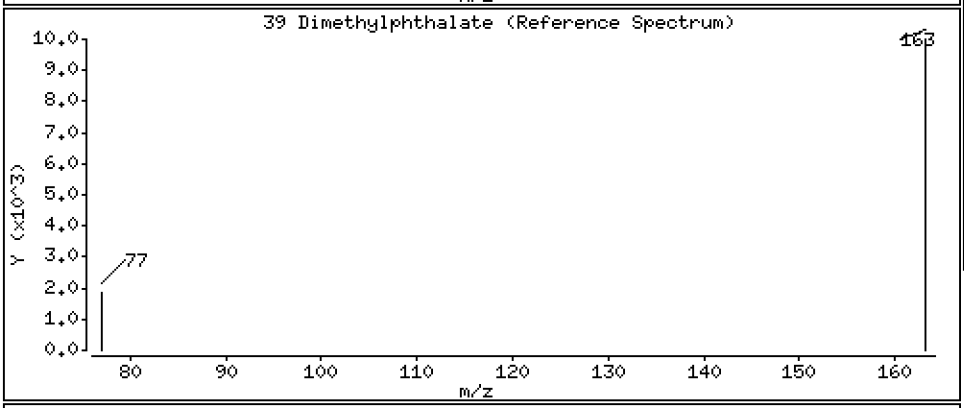
Concentration: 0.1060 ug/mL

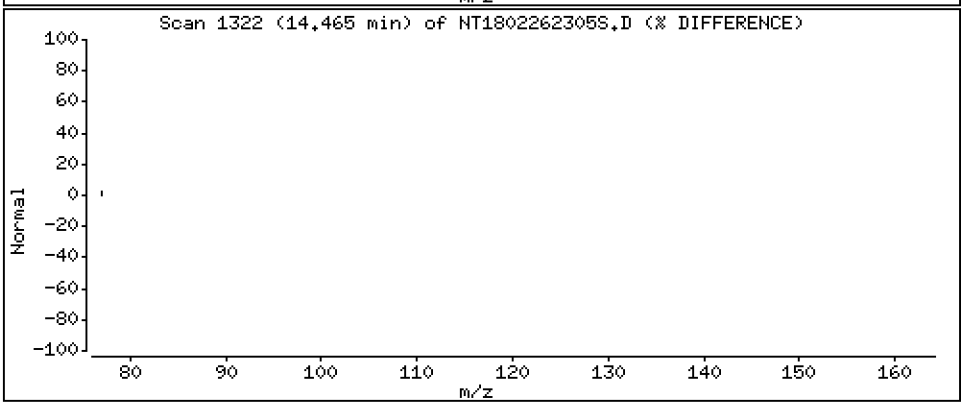












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

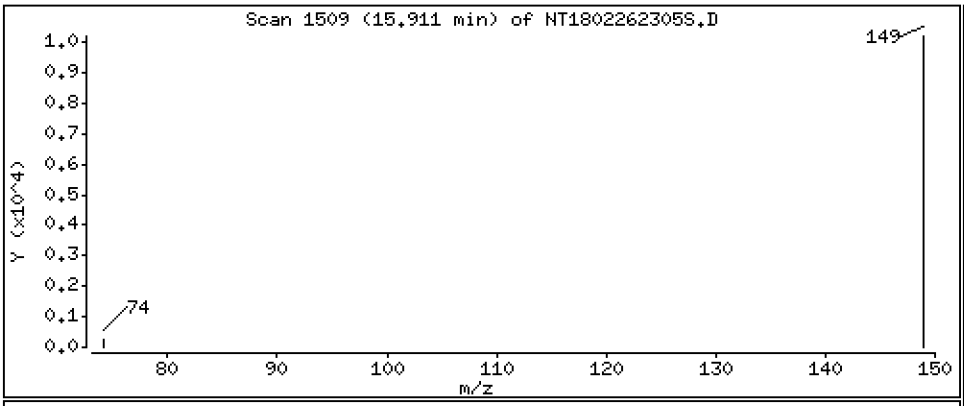
Operator: YZ

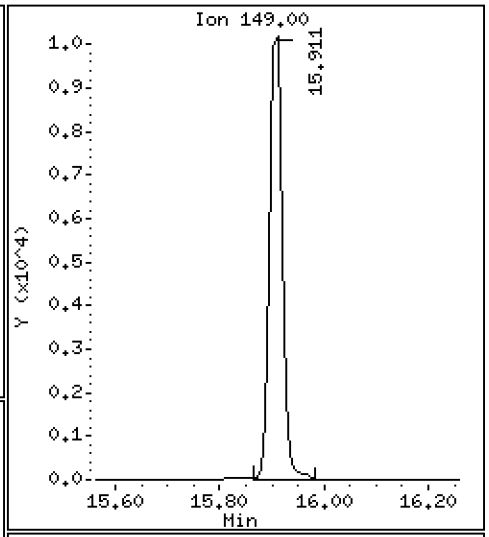
Column phase: ZB-5msi

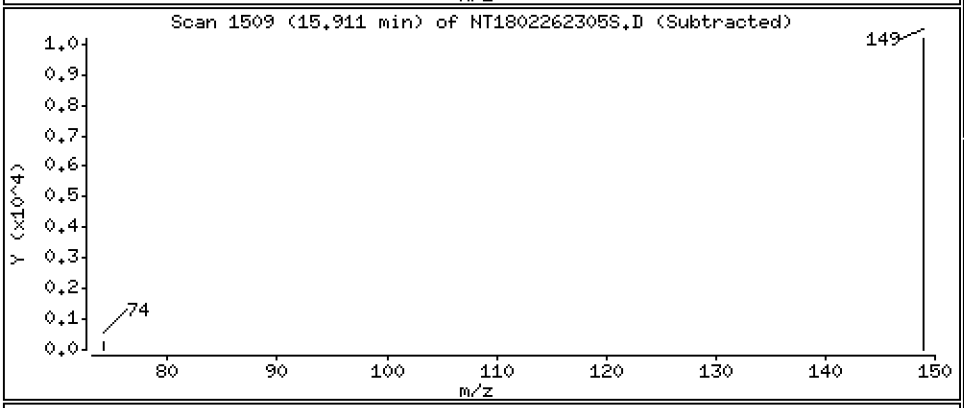
Column diameter: 0.25

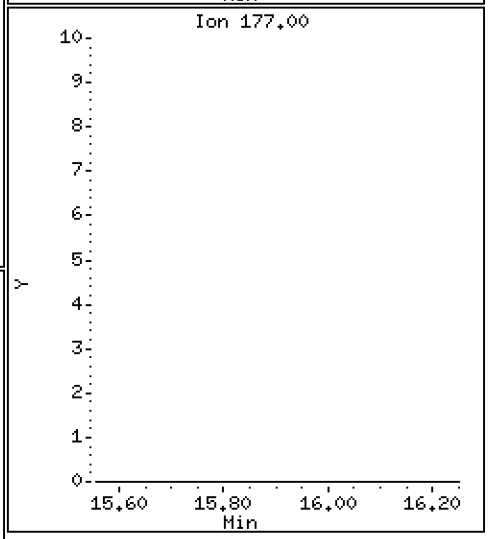
50 Diethylphthalate

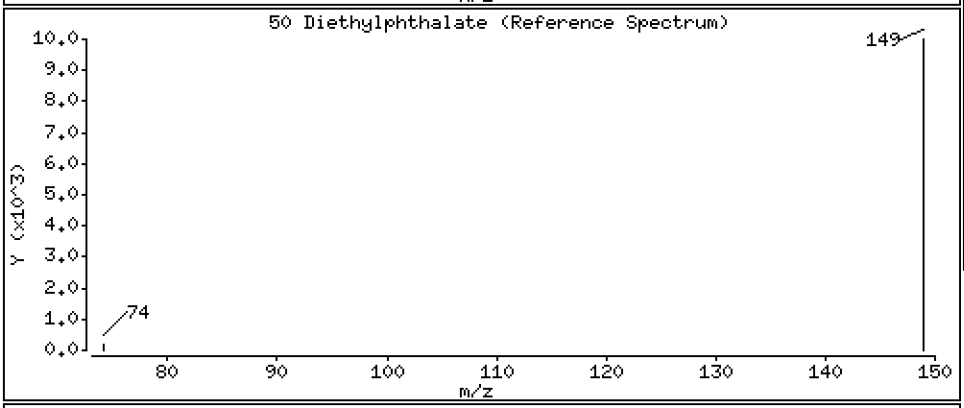
Concentration: 0.09630 ug/mL

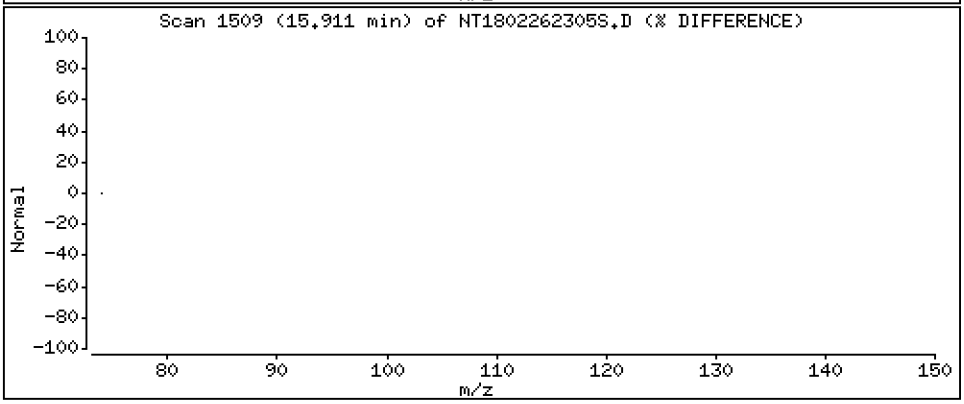












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

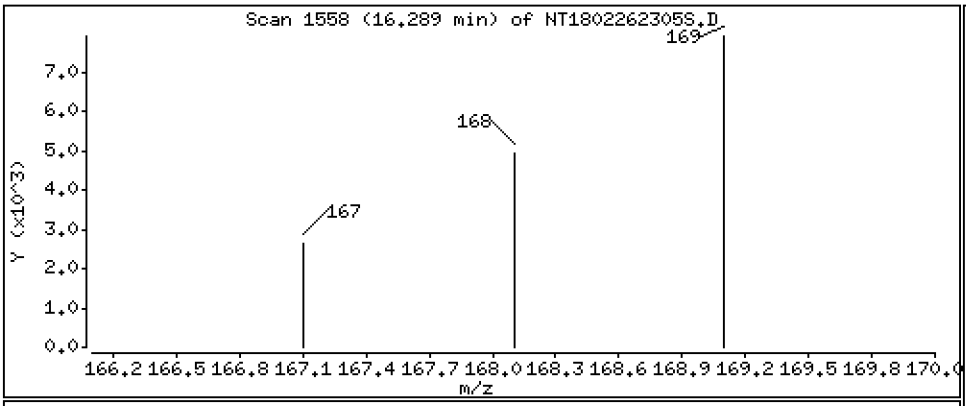
Operator: YZ

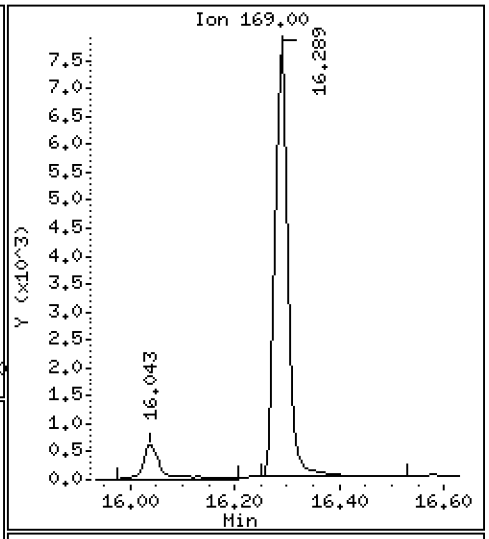
Column phase: ZB-5msi

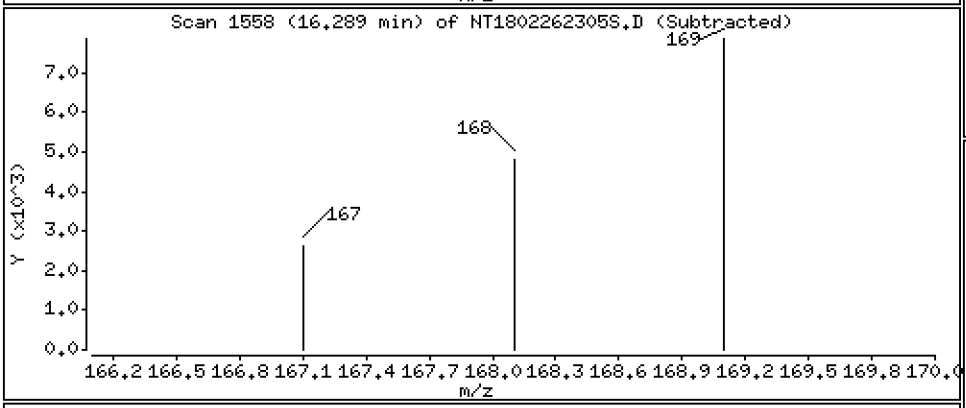
Column diameter: 0.25

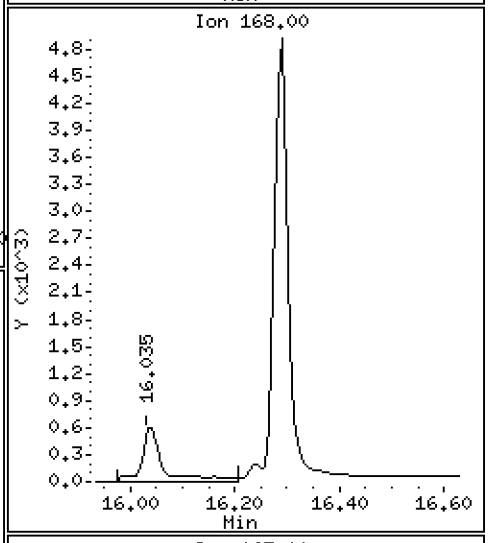
54 N-Nitrosodiphenylamine

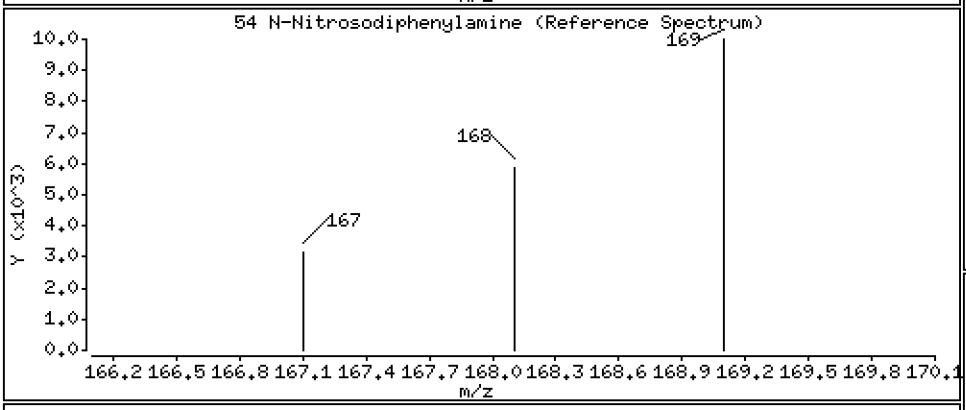
Concentration: 0.1009 ug/mL

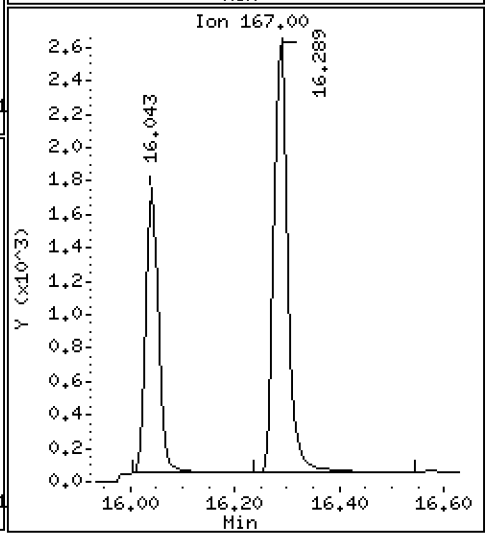


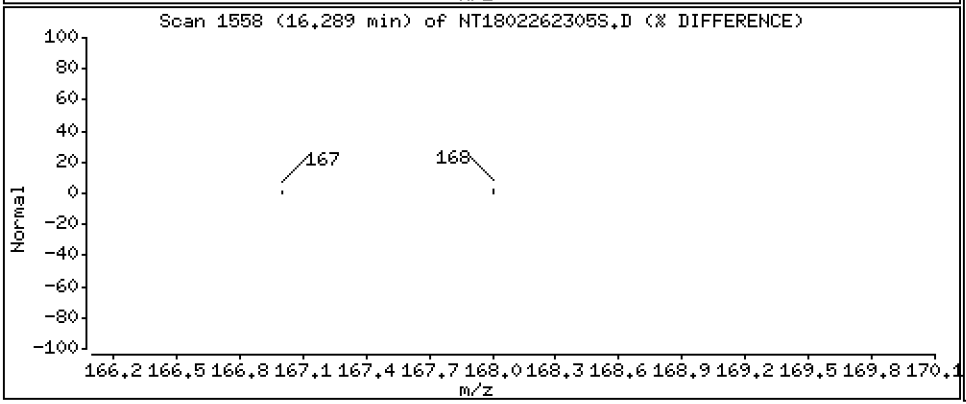












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

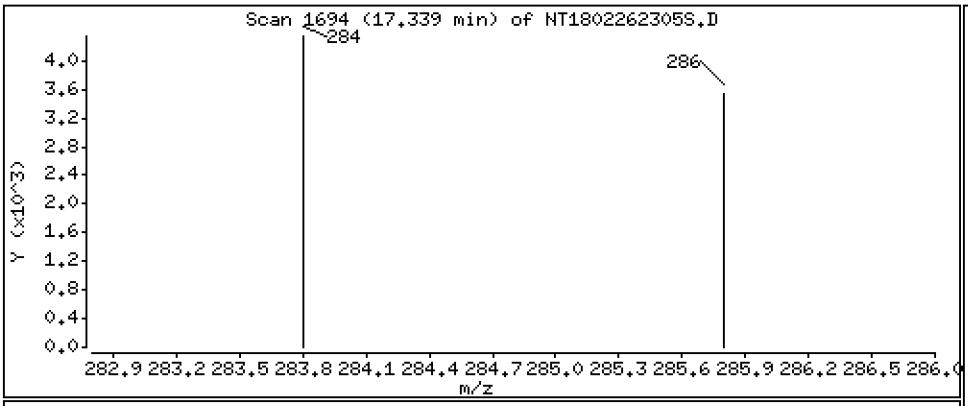
Operator: YZ

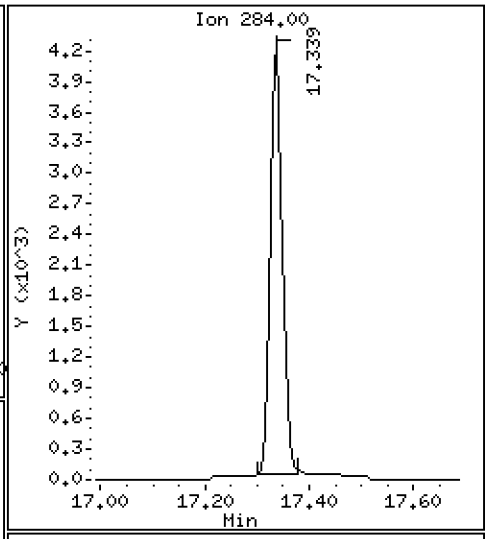
Column phase: ZB-5msi

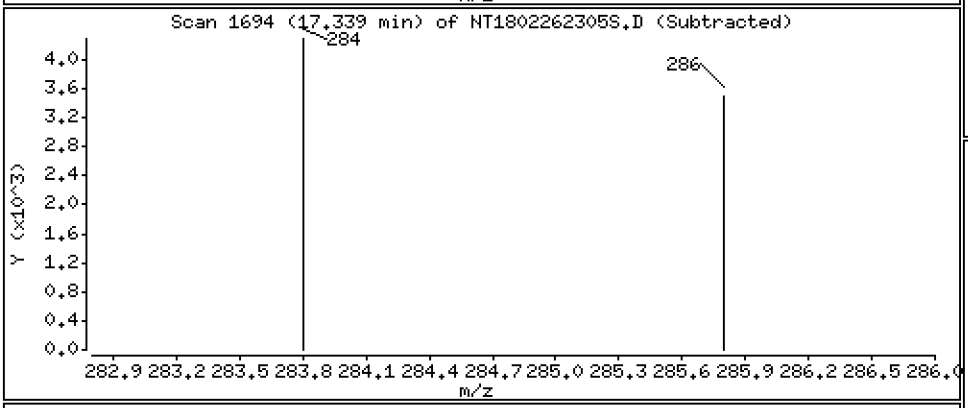
Column diameter: 0.25

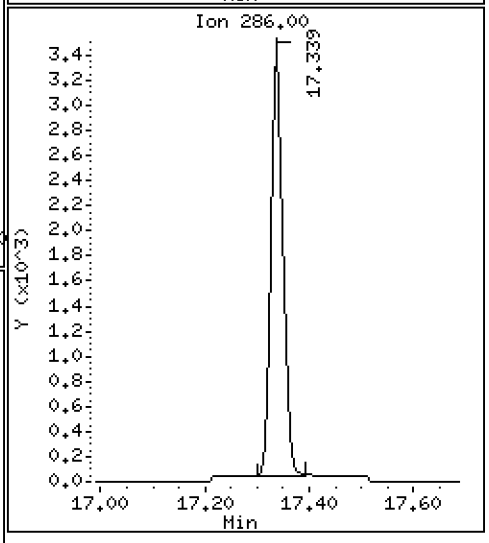
57 Hexachlorobenzene

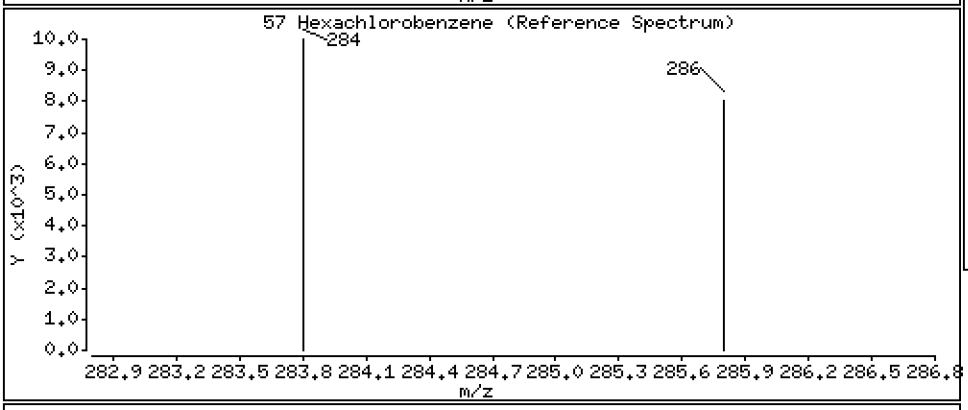
Concentration: 0.1073 ug/mL

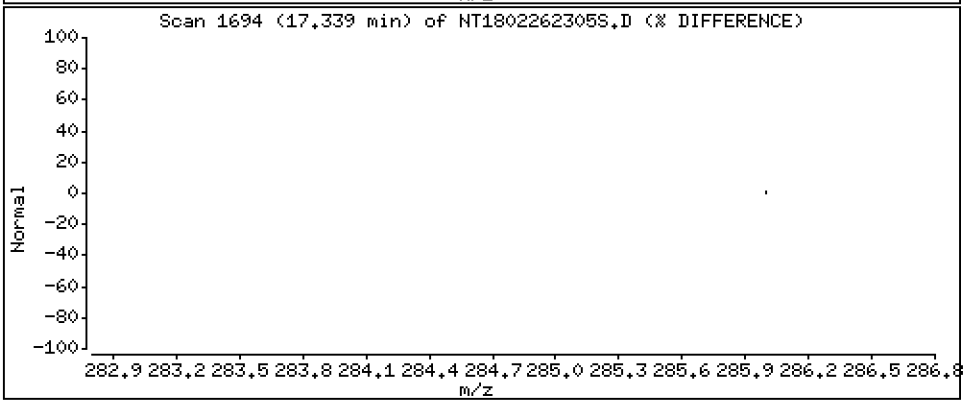












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

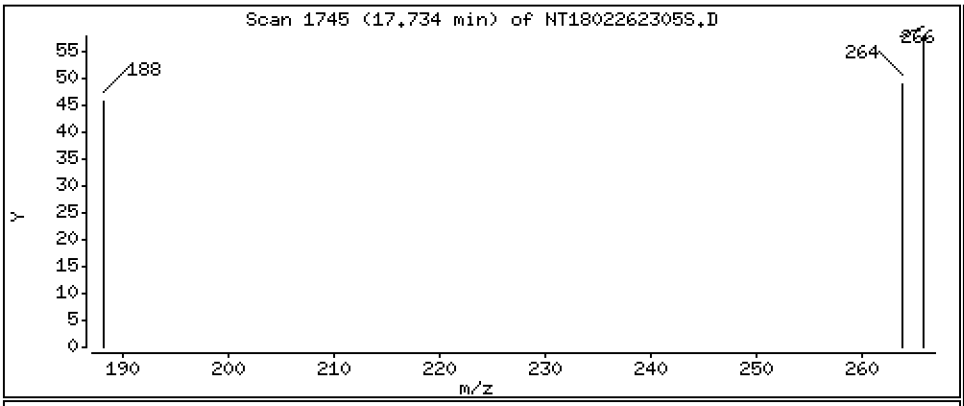
Operator: YZ

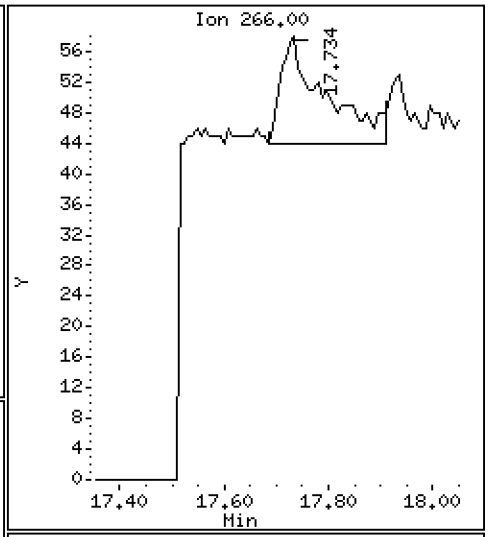
Column phase: ZB-5msi

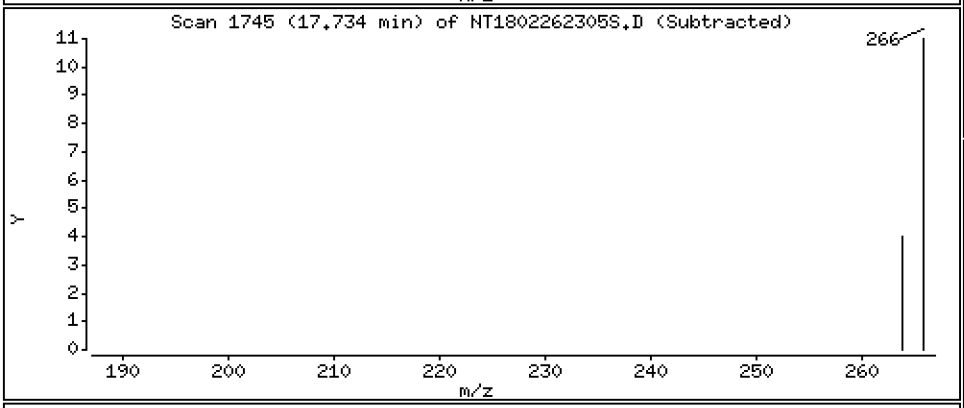
Column diameter: 0.25

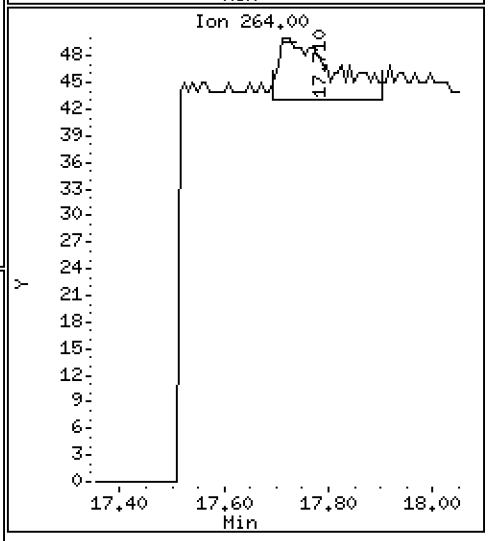
58 Pentachlorophenol

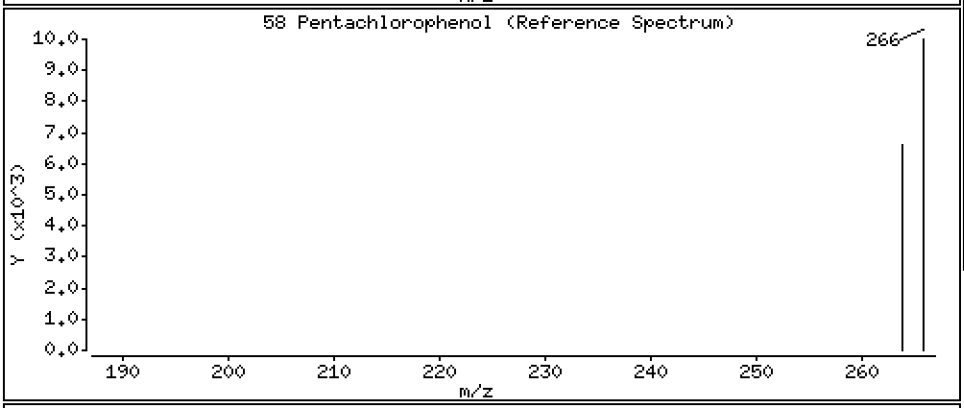
Concentration: 0.004629 ug/mL

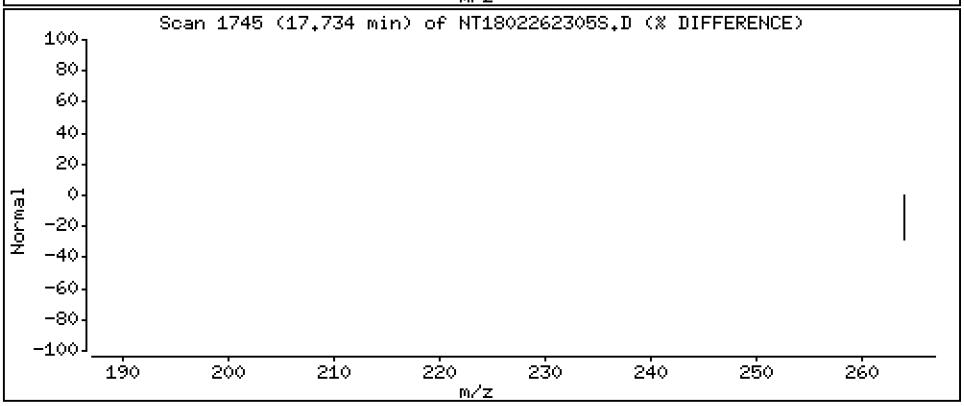












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

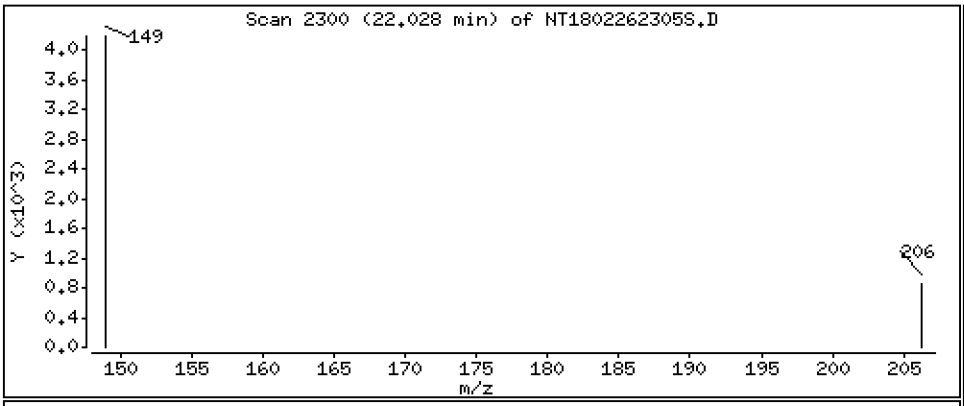
Operator: YZ

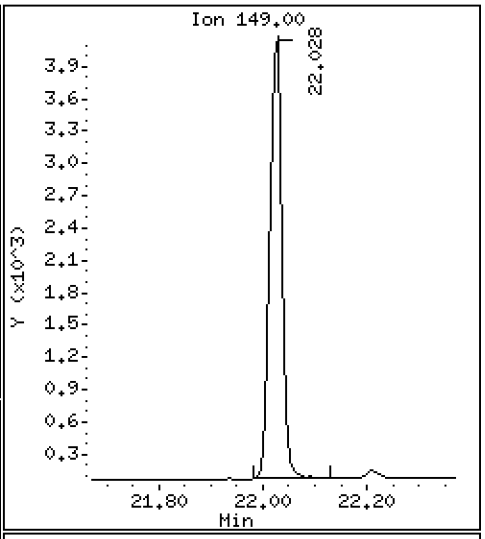
Column phase: ZB-5msi

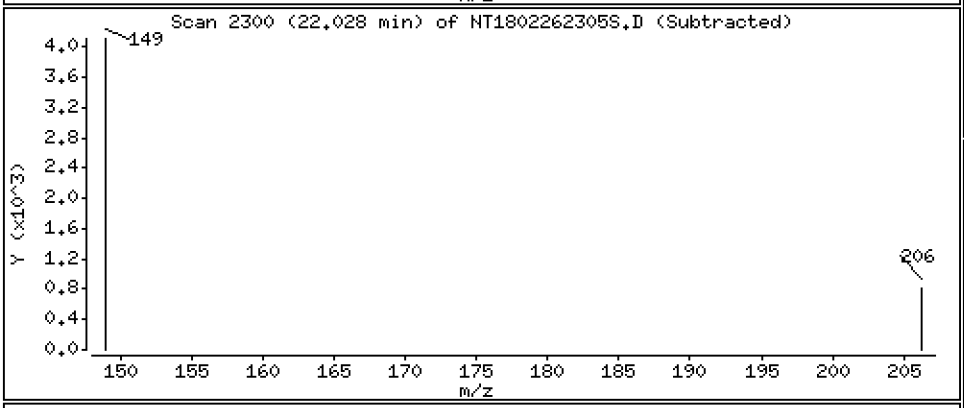
Column diameter: 0.25

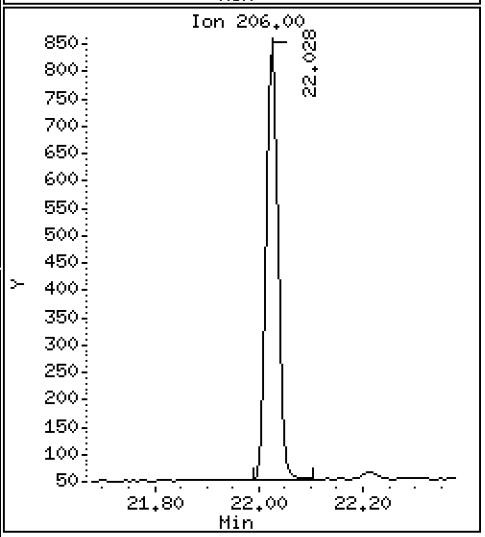
67 Butylbenzylphthalate

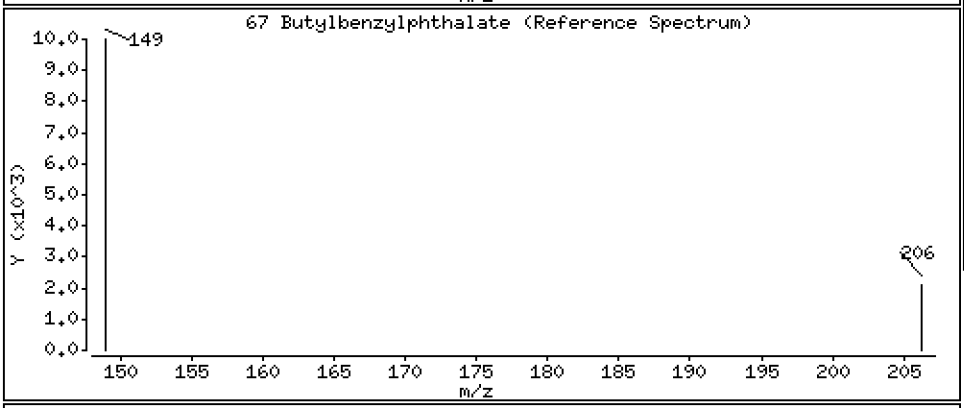
Concentration: 0.04710 ug/mL

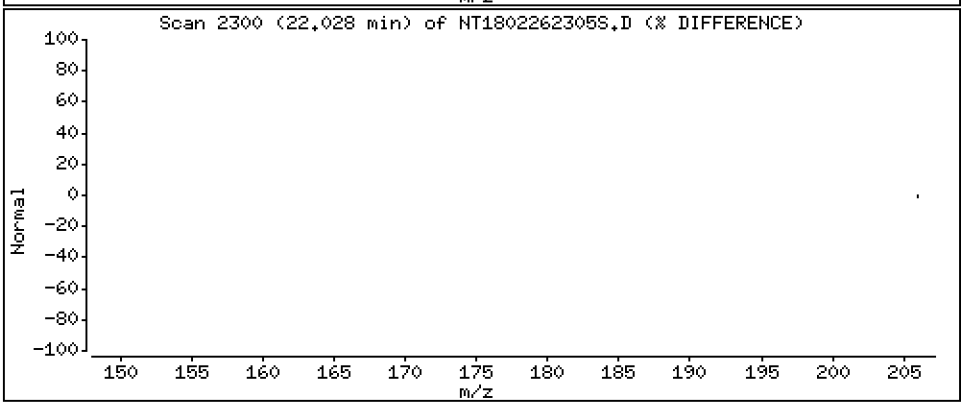












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

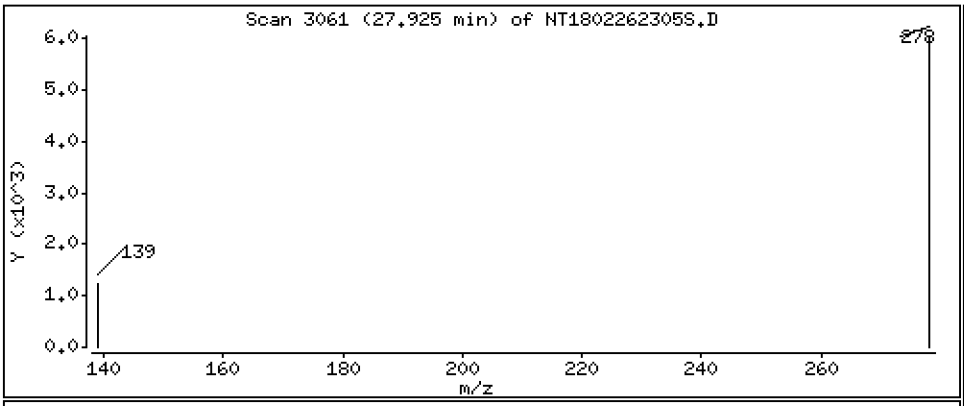
Operator: YZ

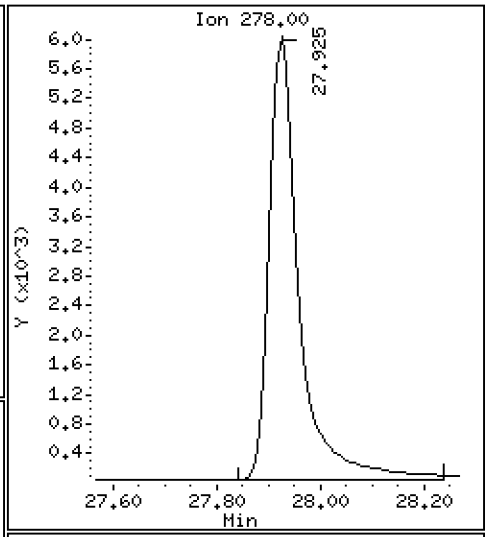
Column phase: ZB-5msi

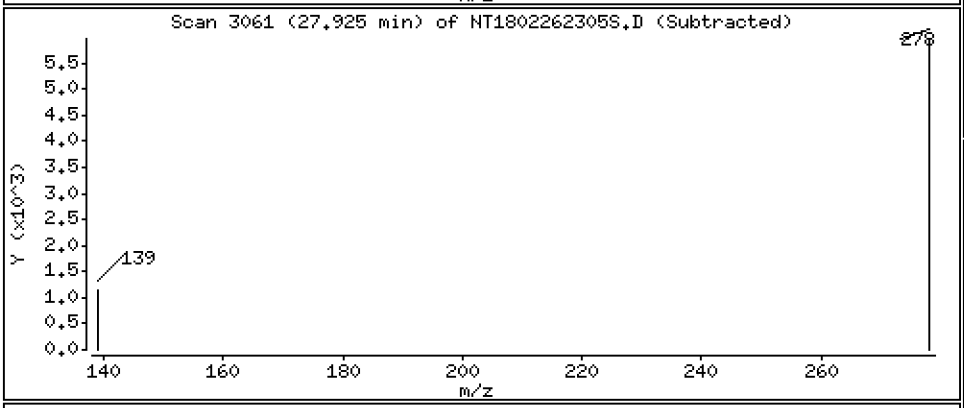
Column diameter: 0.25

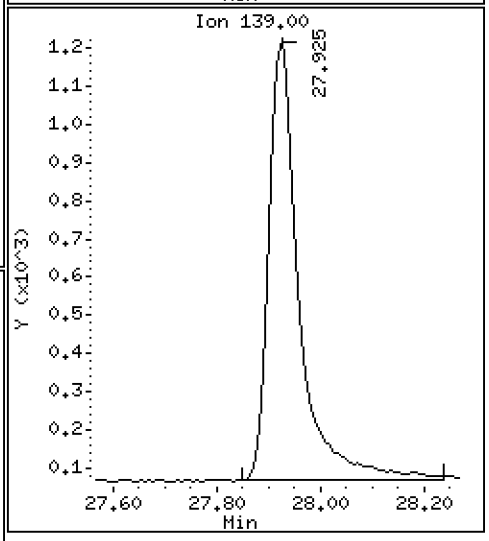
79 Dibenzo(a,h)anthracene

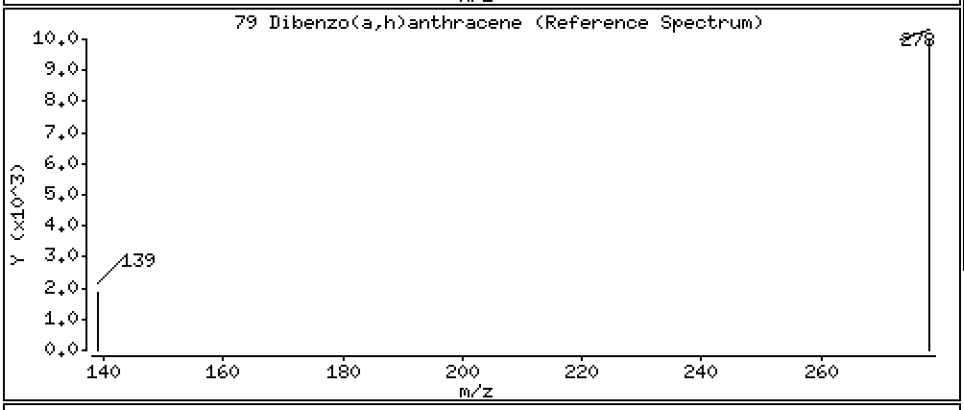
Concentration: 0.08550 ug/mL

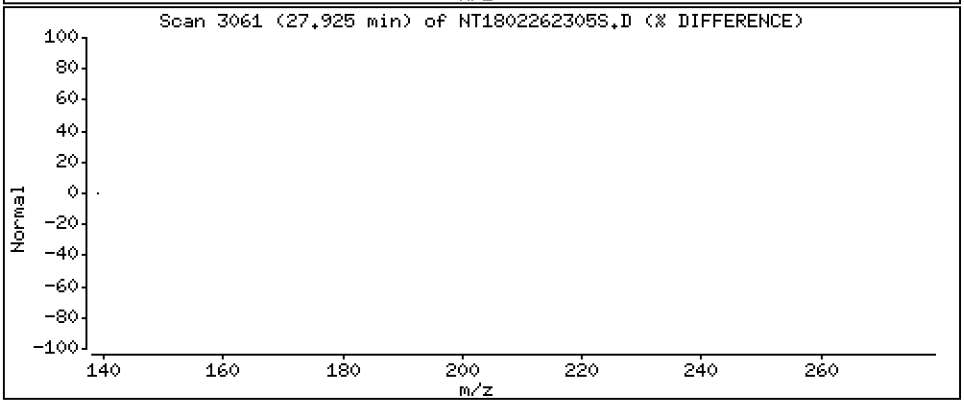












Data File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D

Date : 26-FEB-2023 14:31

Client ID:

Instrument: nt18.i

Sample Info: SLC0389-LCV1

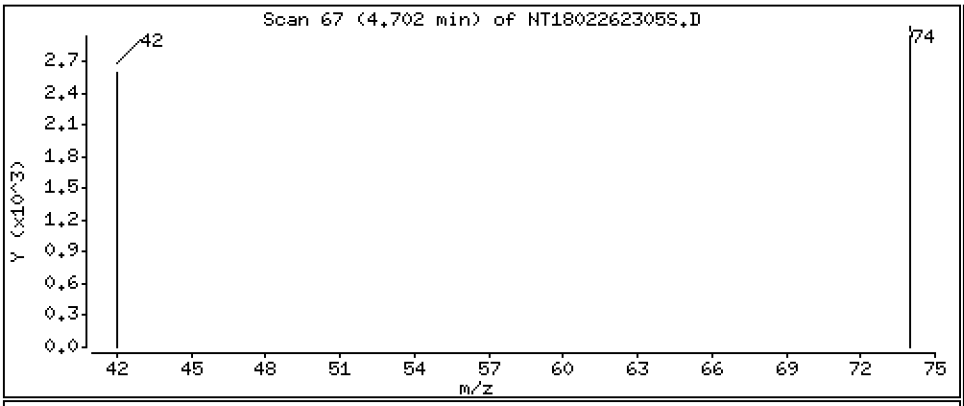
Operator: YZ

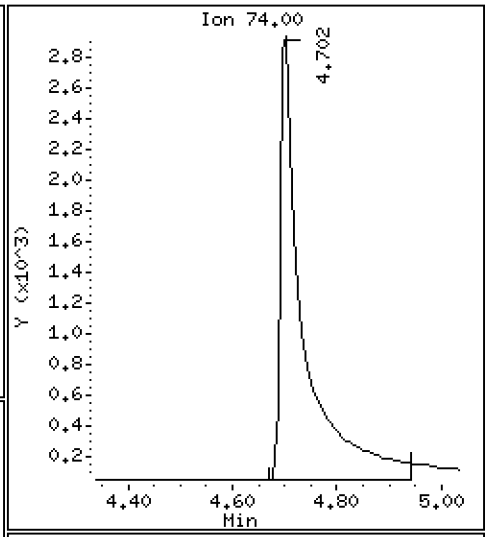
Column phase: ZB-5msi

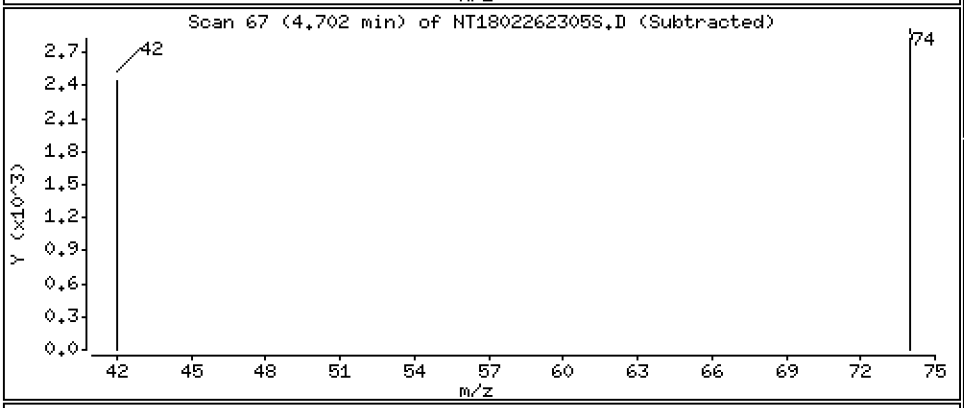
Column diameter: 0.25

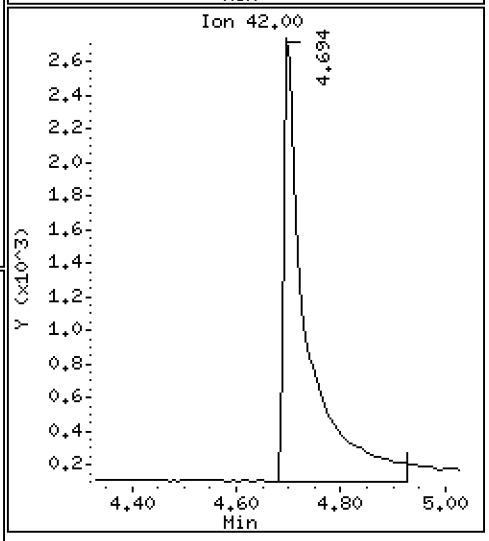
90 N-Nitrosodimethylamine

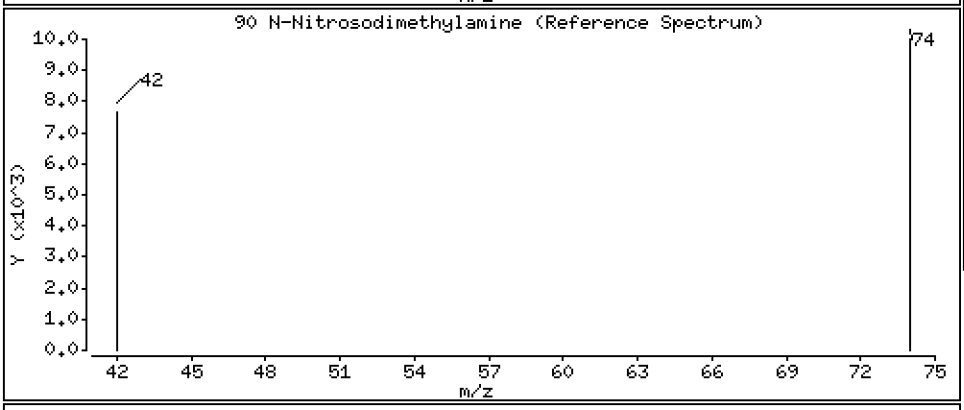
Concentration: 0.1903 ug/mL

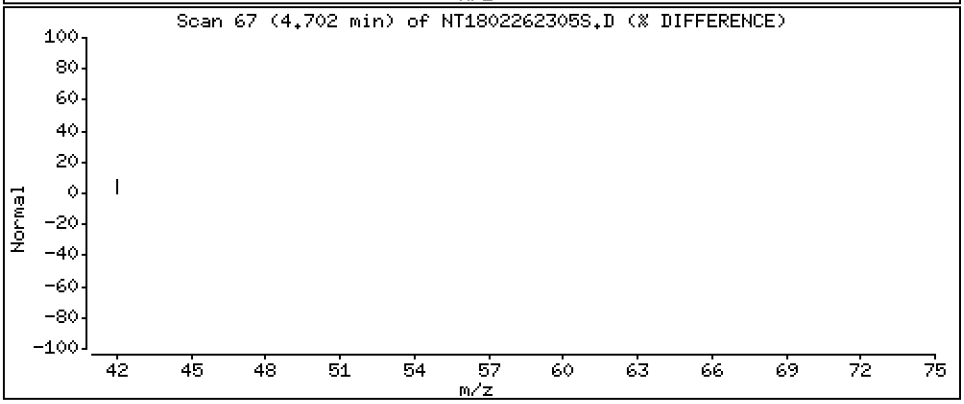












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230226.b\SIM.b\NT1802262305S.D
Lab Smp Id: SLC0389-LCV1
Inj Date : 26-FEB-2023 14:31
Operator : YZ Inst ID: nt18.i
Smp Info : SLC0389-LCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 11:52 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.756	6.748	(0.757)	10459	0.13055	0.1305(R)
	3	Phenol	94	8.332	8.324	(0.934)	9639	0.09222	0.09222
	7	1,3-Dichlorobenzene	146	8.858	8.850	(0.993)	11700	0.11180	0.1118
*	8	1,4-Dichlorobenzene-d4	152	8.920	8.920	(1.000)	248231	4.00000	
	9	1,4-Dichlorobenzene	146	8.943	8.943	(1.003)	12724	0.11643	0.1164
	11	Benzyl alcohol	79	9.214	9.191	(1.033)	6254	0.09333	0.09333
	12	1,2-Dichlorobenzene	146	9.300	9.300	(1.043)	11862	0.11400	0.1140
	13	2-Methylphenol	108	9.424	9.416	(1.057)	8792	0.10229	0.1023
	15	4-Methylphenol	108	9.696	9.680	(1.087)	8098	0.09390	0.09390
	16	N-Nitroso-di-n-propylamine	70	9.742	9.735	(1.092)	5588	0.09619	0.09619
	22	2,4-Dimethylphenol	107	10.715	10.715	(0.942)	17460	0.20412	0.2041
	24	Benzoic acid	105	10.842	11.088	(0.954)	60	0.00174	0.001740
	26	1,2,4-Trichlorobenzene	180	11.285	11.285	(0.993)	9721	0.11098	0.1110
*	27	Naphthalene-d8	136	11.370	11.370	(1.000)	958709	4.00000	
	30	Hexachlorobutadiene	225	11.772	11.772	(1.035)	5805	0.11046	0.1105
	39	Dimethylphthalate	163	14.465	14.465	(0.968)	19817	0.10597	0.1060
*	42	Acenaphthene-d10	162	14.945	14.945	(1.000)	486728	4.00000	
	50	Diethylphthalate	149	15.911	15.911	(1.065)	16456	0.09630	0.09630
	54	N-Nitrosodiphenylamine	169	16.289	16.281	(0.907)	13028	0.10091	0.1009
	57	Hexachlorobenzene	284	17.338	17.338	(0.966)	6651	0.10730	0.1073
	58	Pentachlorophenol	266	17.733	17.702	(0.988)	84	0.00463	0.004629(M)
*	59	Phenanthrene-d10	188	17.950	17.950	(1.000)	892409	4.00000	
$	66	Terphenyl-d14	244	21.091	21.091	(0.918)	14922	0.10098	0.1010(R)
	67	Butylbenzylphthalate	149	22.028	22.020	(0.959)	6367	0.04710	0.04710
*	69	Chrysene-d12	240	22.980	22.980	(1.000)	816083	4.00000	
*	77	Perylene-d12	264	25.473	25.473	(1.000)	937480	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.925	27.917	(1.096)	23817	0.08550	0.08550
	90	N-Nitrosodimethylamine	74	4.701	4.686	(0.527)	9075	0.19031	0.1903

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802262305S.D
Lab Smp Id: SLC0389-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230226.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-FEB-2023
Calibration Time: 12:48
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	279474	139737	558948	248231	-11.18
27 Naphthalene-d8	1065527	532764	2131054	958709	-10.02
42 Acenaphthene-d10	544290	272145	1088580	486728	-10.58
59 Phenanthrene-d10	1003412	501706	2006824	892409	-11.06
69 Chrysene-d12	936975	468488	1873950	816083	-12.90
77 Perylene-d12	1057771	528886	2115542	937480	-11.37

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.92	8.42	9.42	8.92	-0.00
27 Naphthalene-d8	11.37	10.87	11.87	11.37	-0.00
42 Acenaphthene-d10	14.95	14.45	15.45	14.95	-0.00
59 Phenanthrene-d10	17.95	17.45	18.45	17.95	-0.00
69 Chrysene-d12	22.98	22.48	23.48	22.98	-0.00
77 Perylene-d12	25.47	24.97	25.97	25.47	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802262305S.D

Lab ID: SLC0389-LCV1
nt18.i, 20230226.b\SIM.b\SIMABN2.m,   26-FEB-2023 14:31

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.954	0.975	-0.0216	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802262303S.D

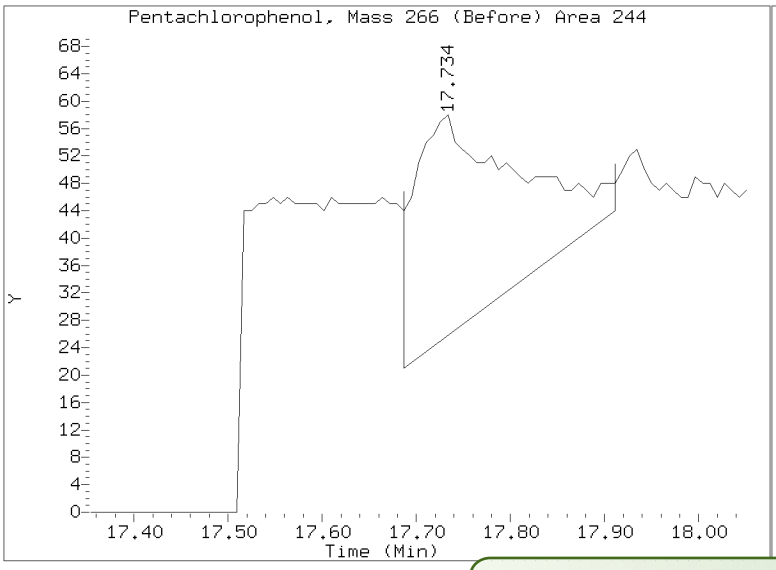
On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

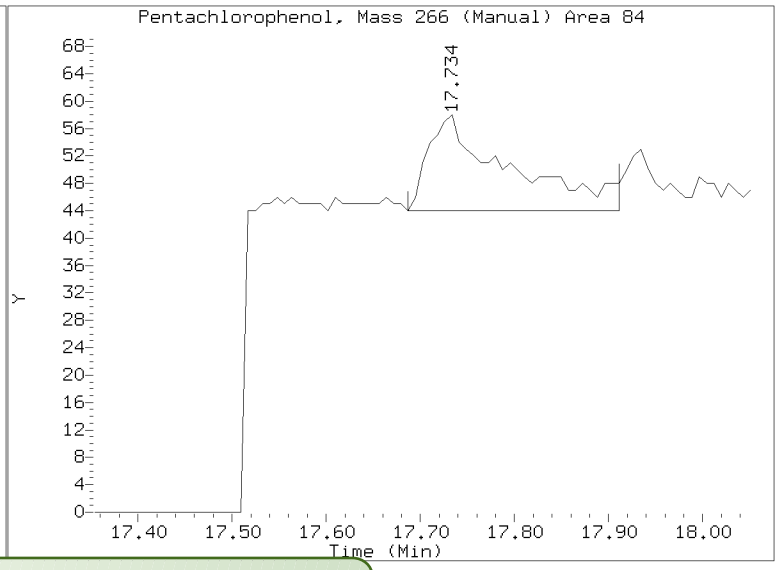
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt18.i/20230226.b/SIM.b/NT1802262305S.D
Injection Date: 26-FEB-2023 14:31
Lab ID:SLC0389-LCV1 Client ID:
Report Date: 03/24/2023 11:52





APPROVED

By Deenay Dunmore at 12:05 pm, Mar 24, 2023

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00036
Lab File ID:	NT1802272323S.D	Calibration Date:	02/25/2023
Sequence:	SLC0396	Injection Date:	02/28/23
Lab Sample ID:	SLC0396-CCV1	Injection Time:	13:55
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	1.0000	0.9	1.7610310	1.6044240		-8.9	+/-50
1,2-Dichlorobenzene	A	1.0000	0.9	1.6766720	1.5574630		-7.1	+/-50
Benzyl Alcohol	A	1.0000	0.8	1.0797360	0.8577098		-20.6	+/-50
Benzoic acid	A	4.0000	2.5	0.0982061	0.0892778		-38.3	+/-50
2,4-Dimethylphenol	A	2.0000	1.8	0.3568845	0.3195193		-10.5	+/-50
1,2,4-Trichlorobenzene	A	1.0000	1.0	0.3654639	0.3504969		-4.1	+/-50
N-Nitrosodiphenylamine	A	1.0000	0.9	0.5787015	0.5384939		-6.9	+/-50
Pentachlorophenol	A	2.0000	1.1	0.0525310	0.0429766		-47.5	+/-50
2-Fluorophenol	A	1.5000	1.56	1.2910050	1.3447220		4.2	+/-50
p-Terphenyl-d14	A	1.0000	1.12	0.7242850	0.8079286		11.5	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723238.D

Page 1

Date : 28-FEB-2023 13:55

Client ID:

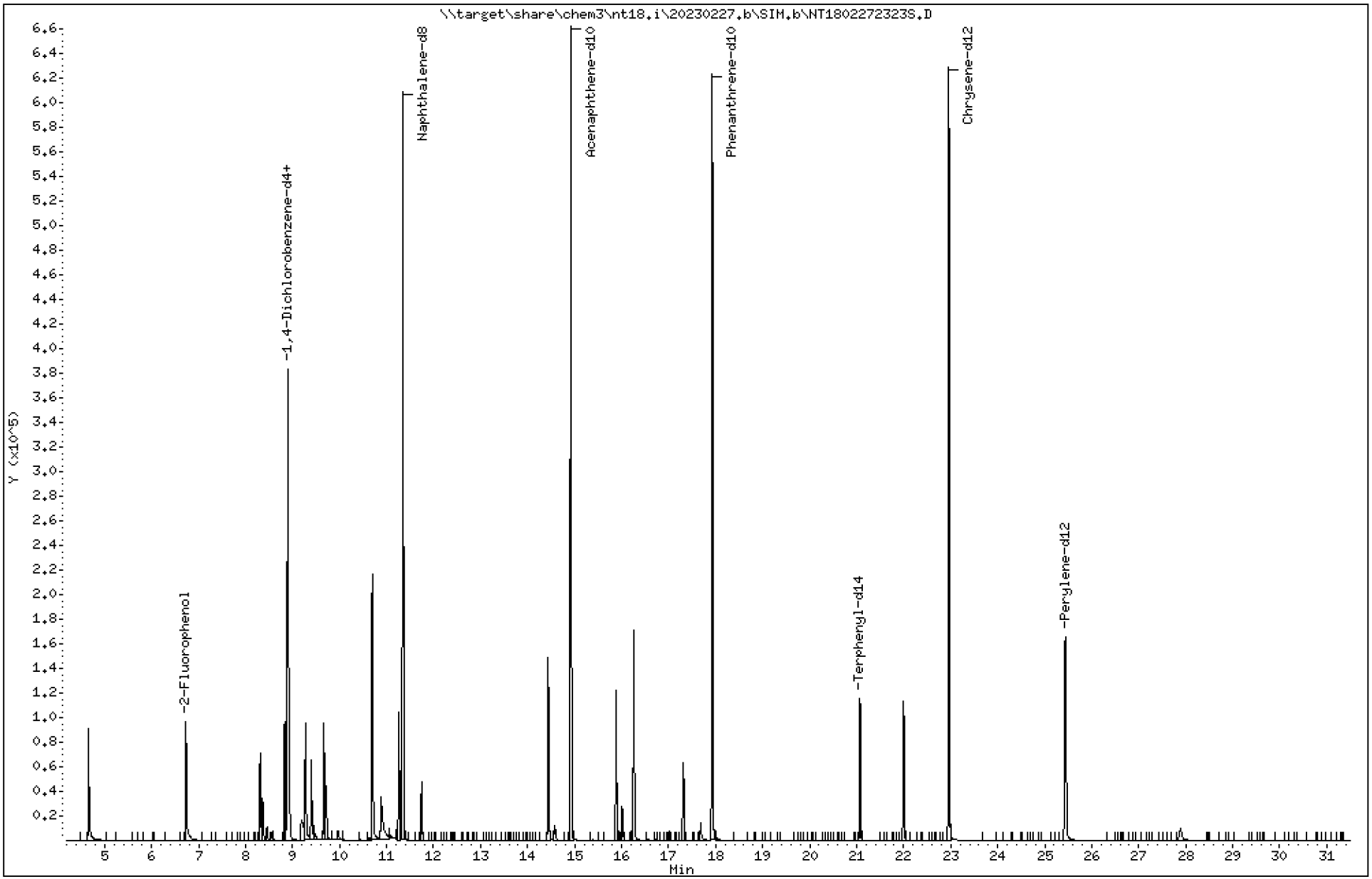
Instrument: nt18.i

Sample Info: SLC0396-CCV1

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

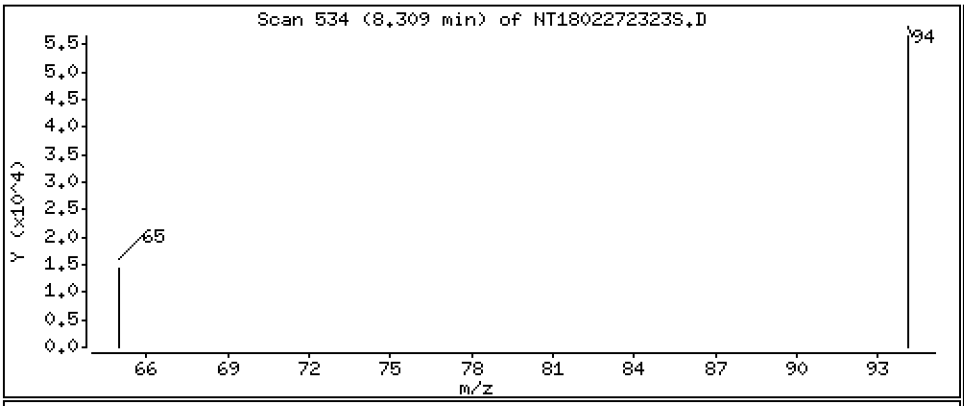
Operator: YZ

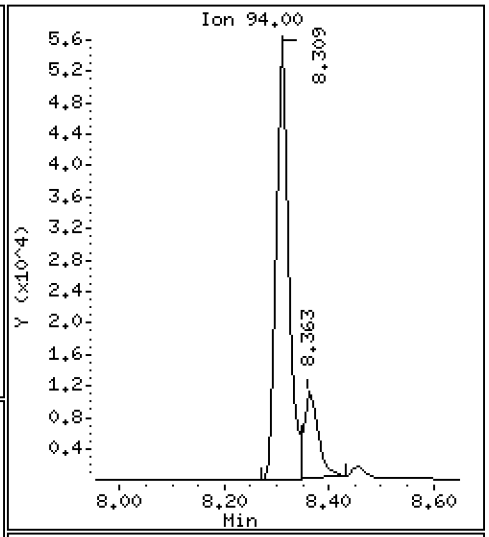
Column phase: ZB-5msi

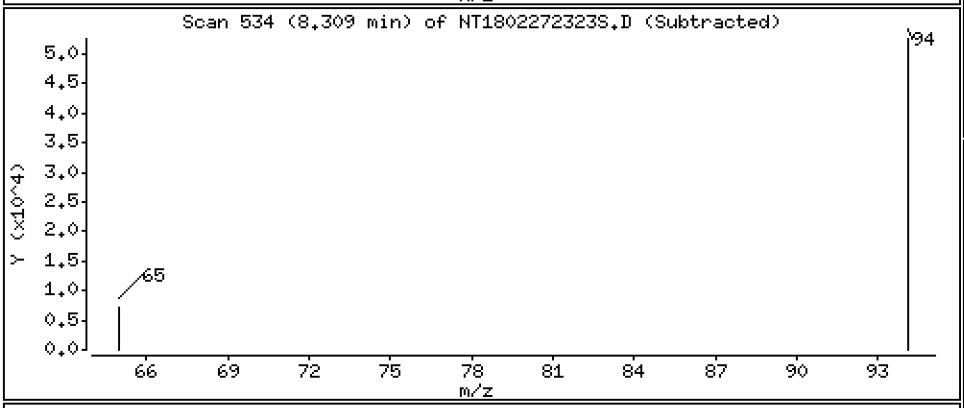
Column diameter: 0.25

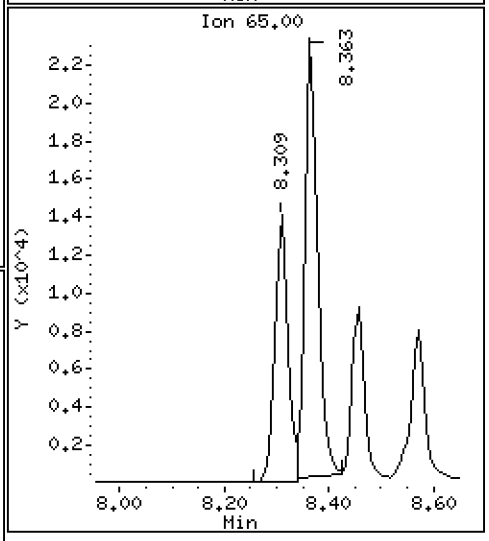
3 Phenol

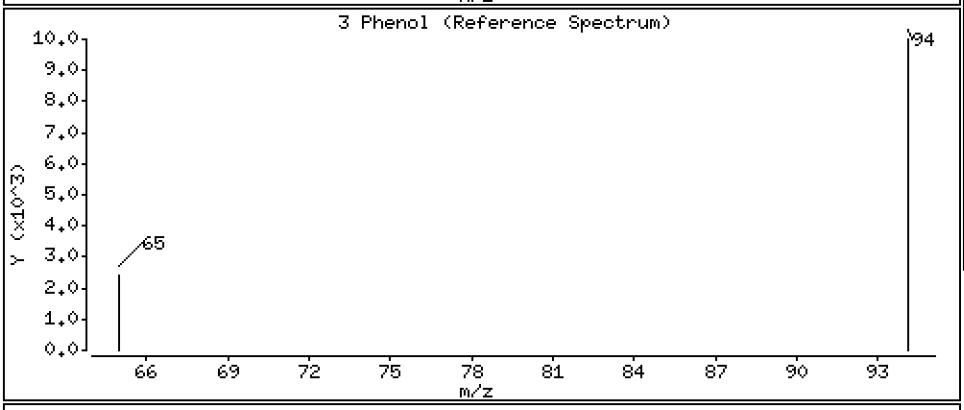
Concentration: 0.9264 ug/mL

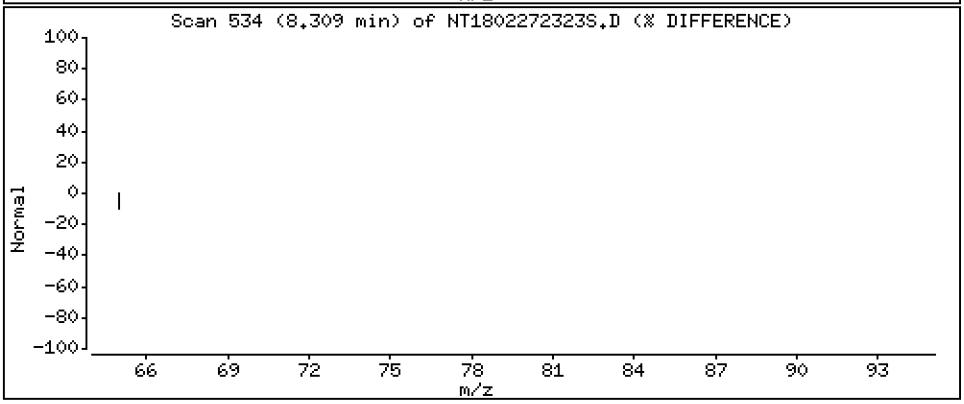












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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

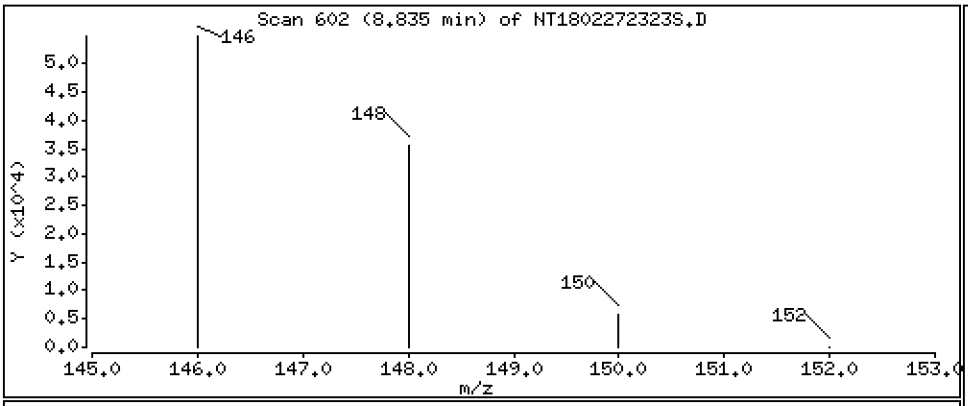
Operator: YZ

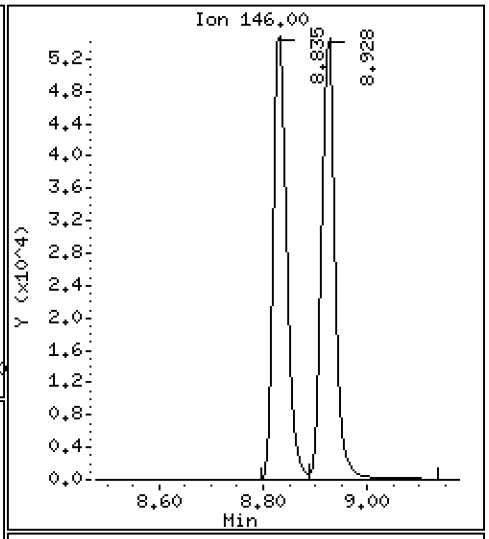
Column phase: ZB-5msi

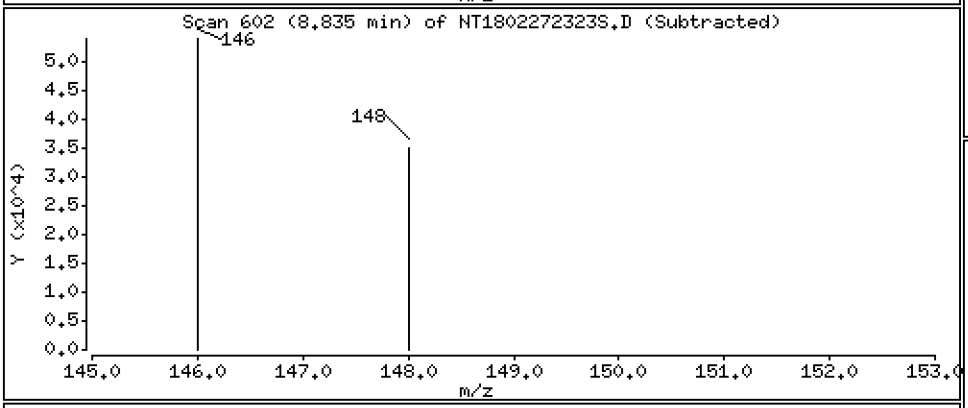
Column diameter: 0.25

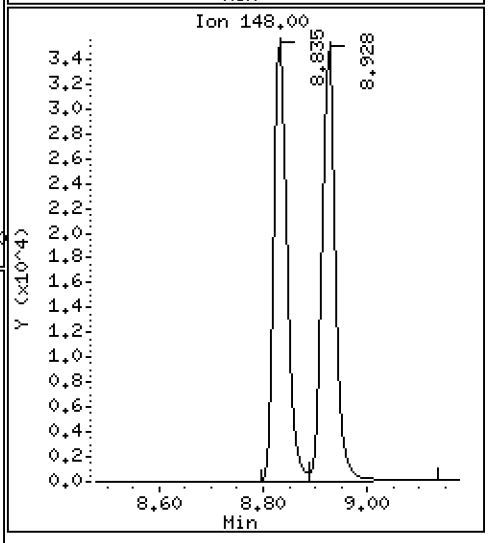
7 1,3-Dichlorobenzene

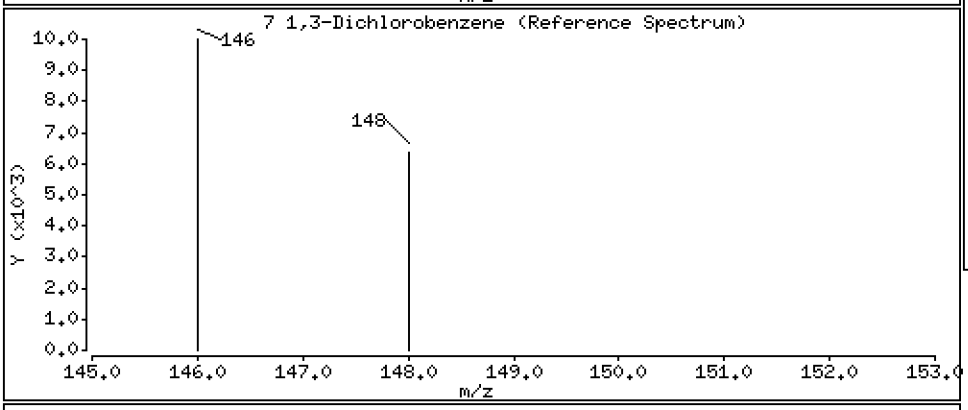
Concentration: 0.9426 ug/mL

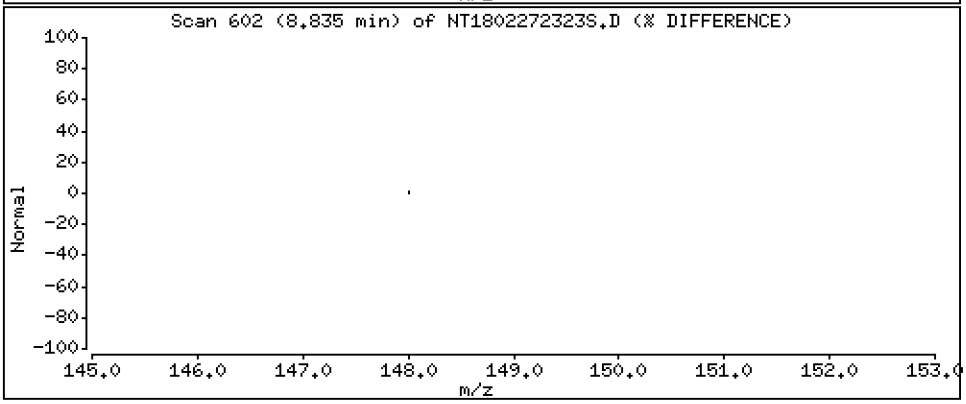












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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

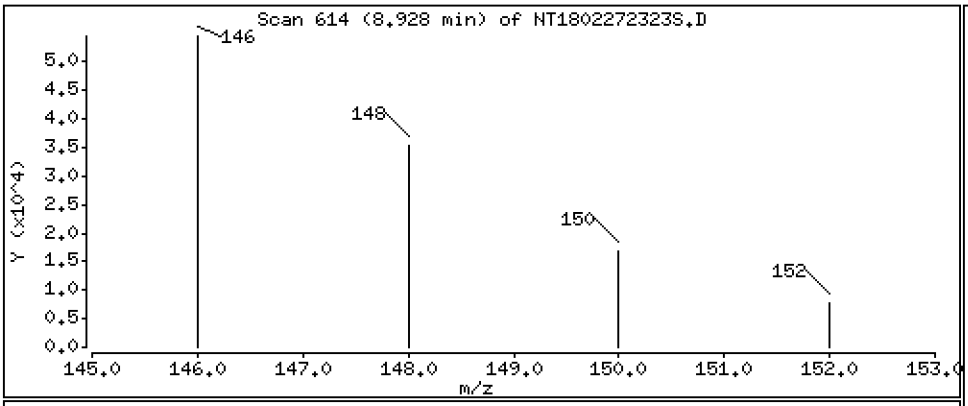
Operator: YZ

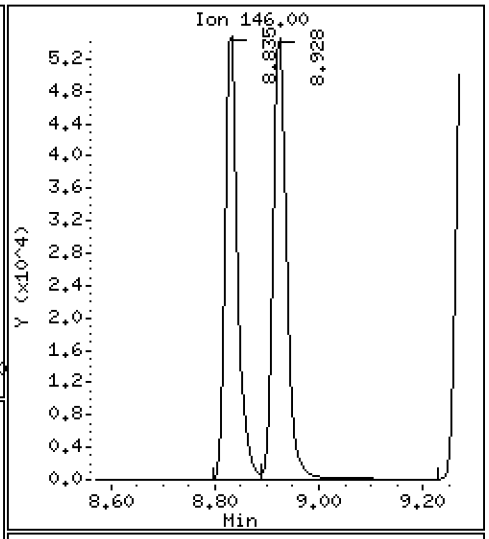
Column phase: ZB-5msi

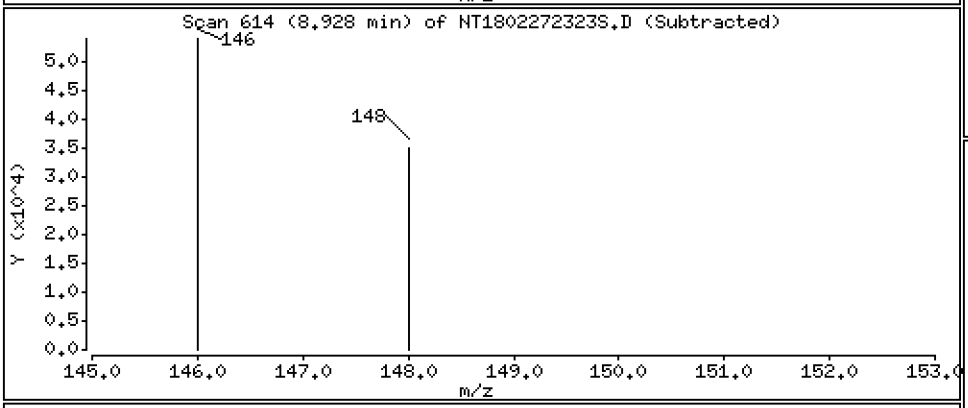
Column diameter: 0.25

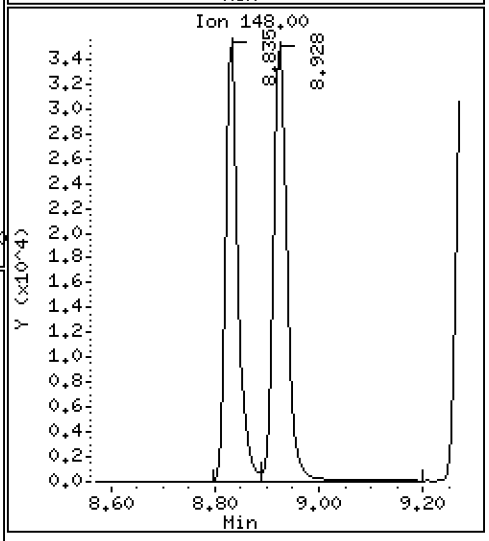
9 1,4-Dichlorobenzene

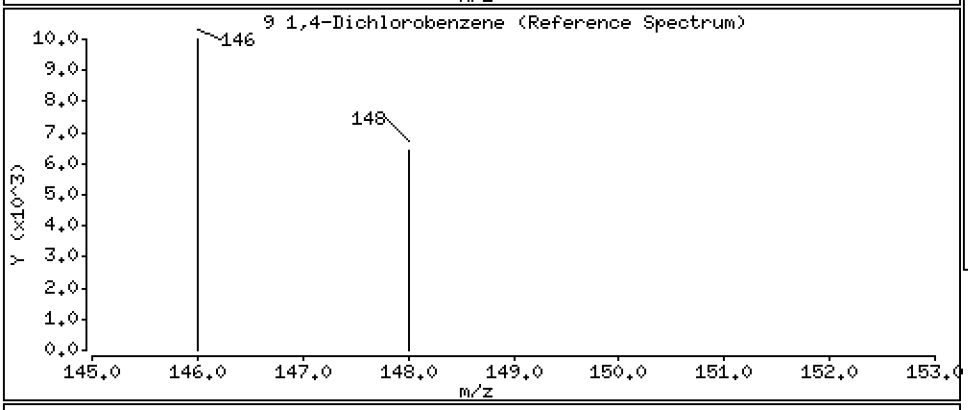
Concentration: 0.9111 ug/mL

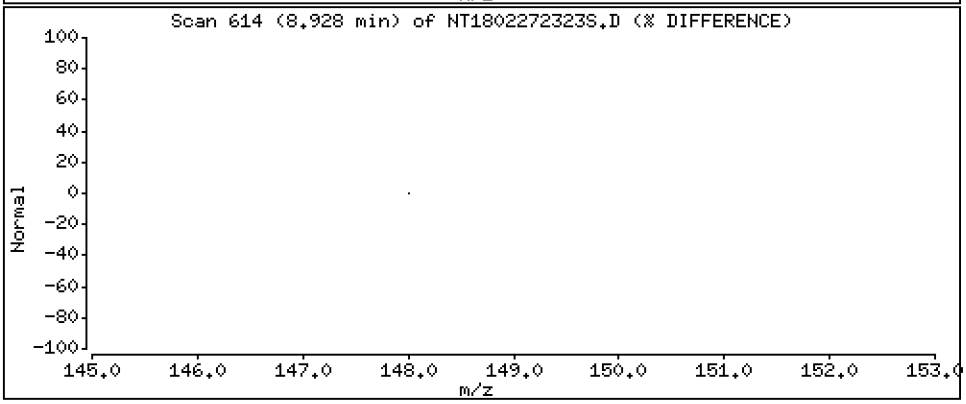












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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

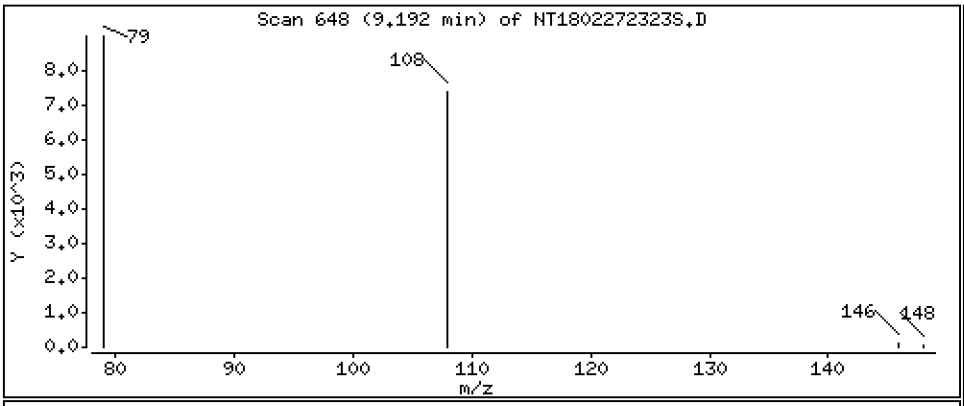
Operator: YZ

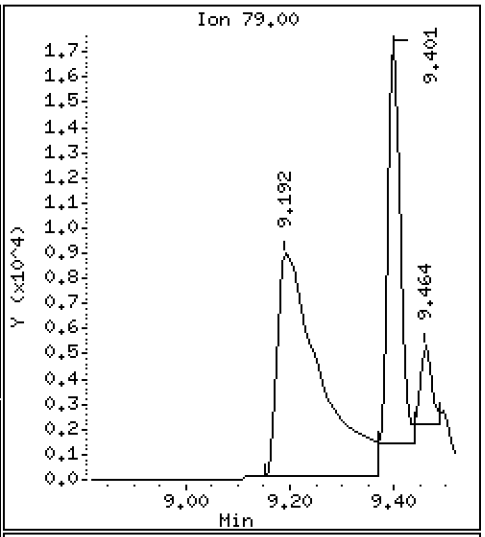
Column phase: ZB-5msi

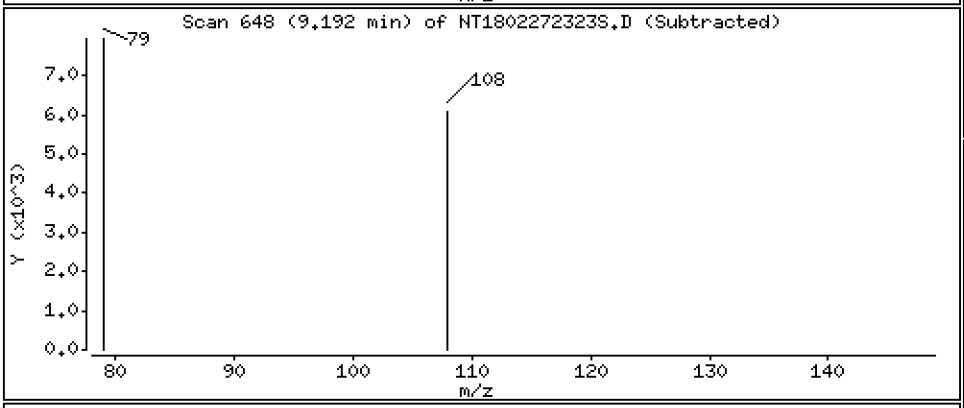
Column diameter: 0.25

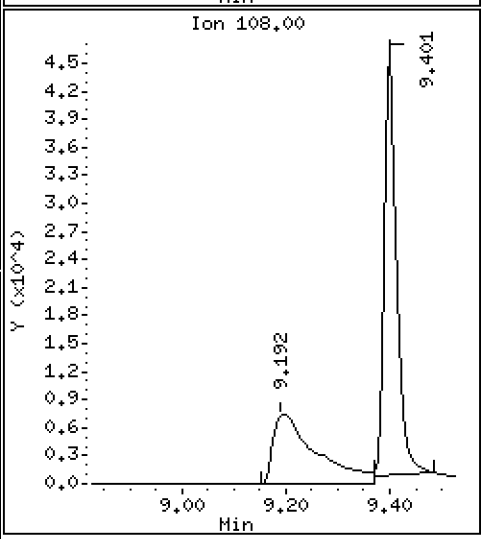
11 Benzyl alcohol

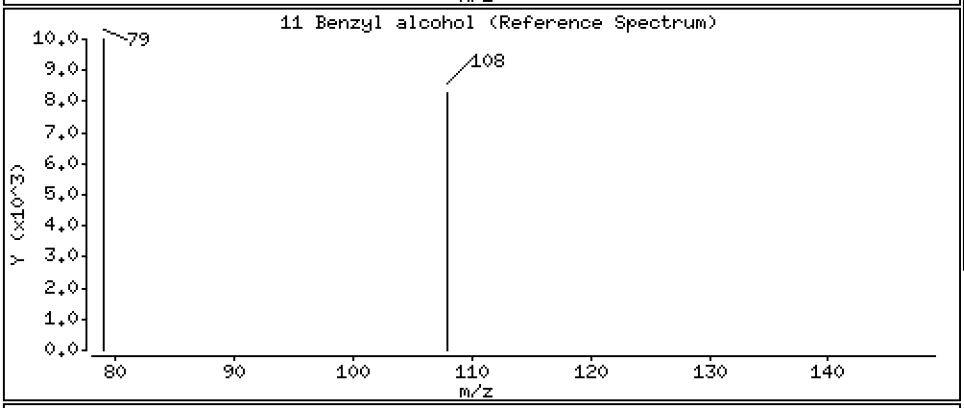
Concentration: 0.7944 ug/mL

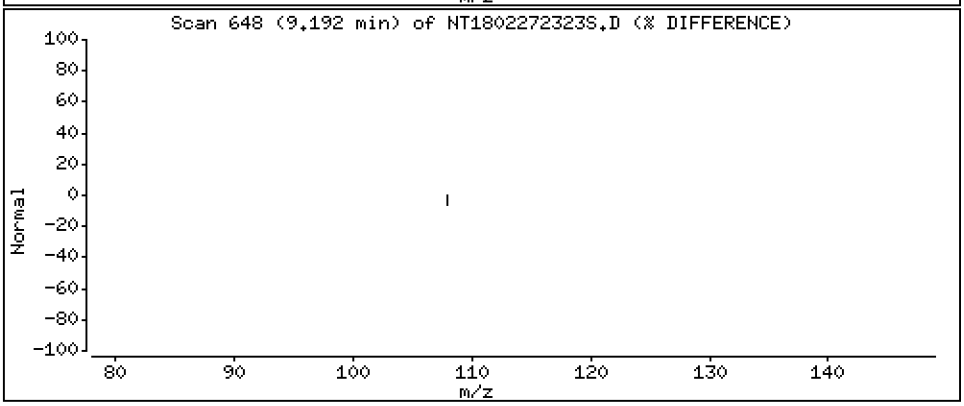












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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

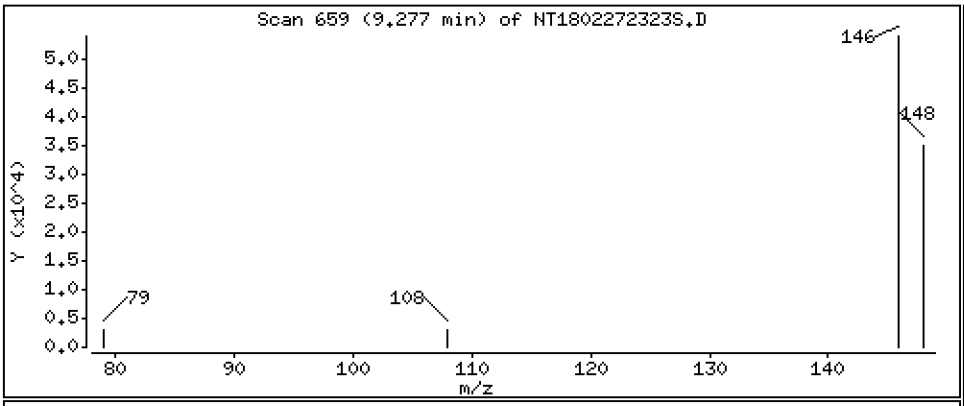
Operator: YZ

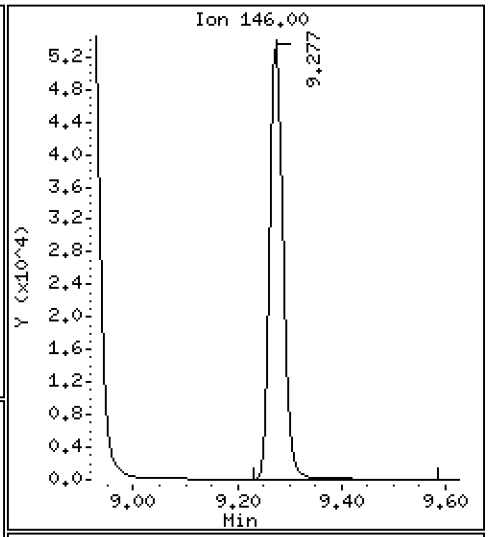
Column phase: ZB-5msi

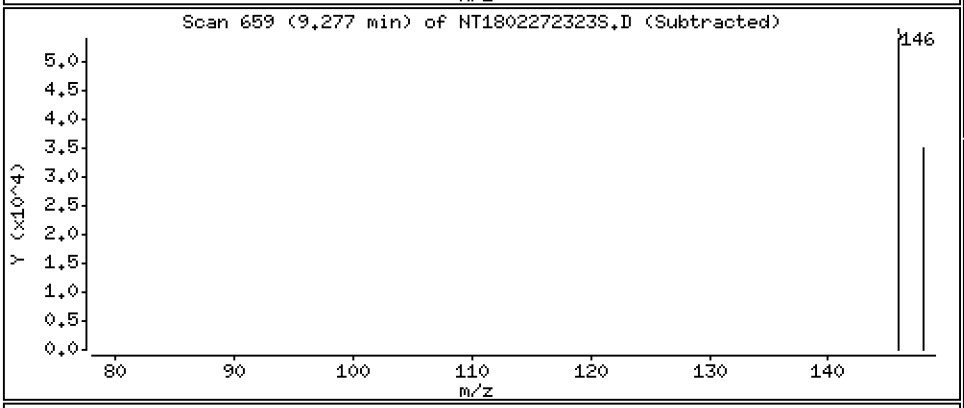
Column diameter: 0.25

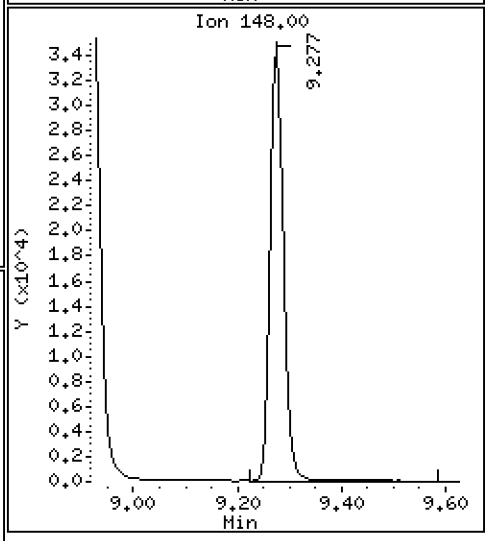
12 1,2-Dichlorobenzene

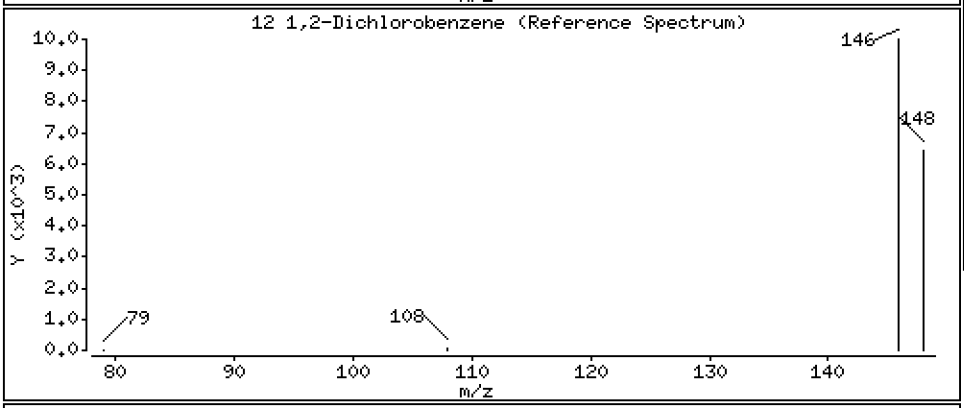
Concentration: 0.9289 ug/mL

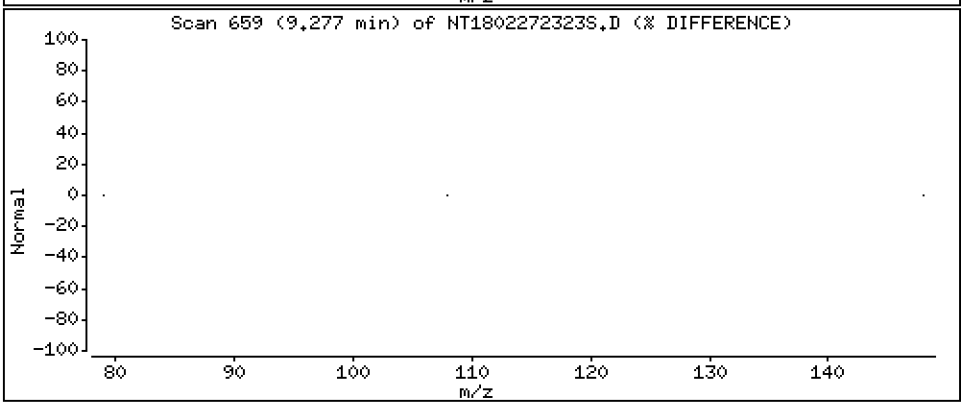












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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

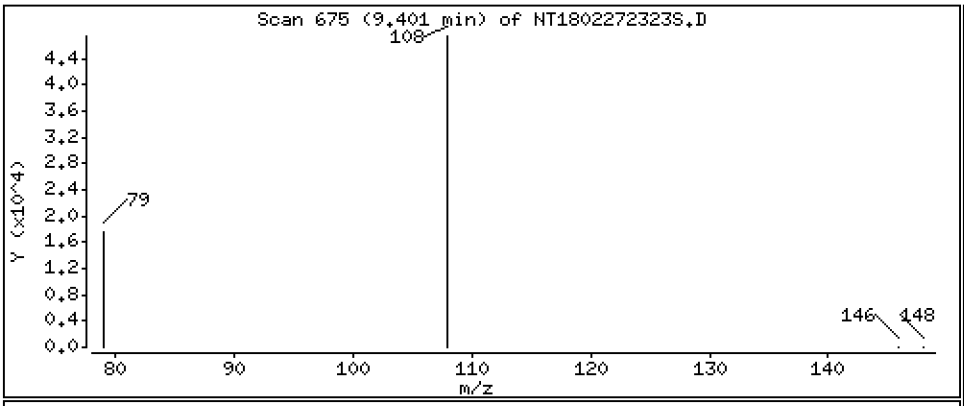
Operator: YZ

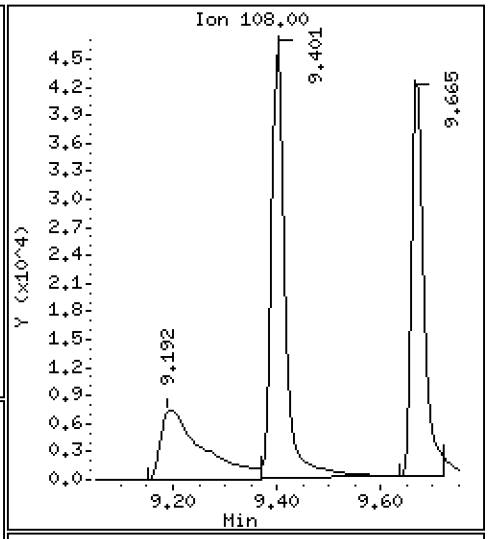
Column phase: ZB-5msi

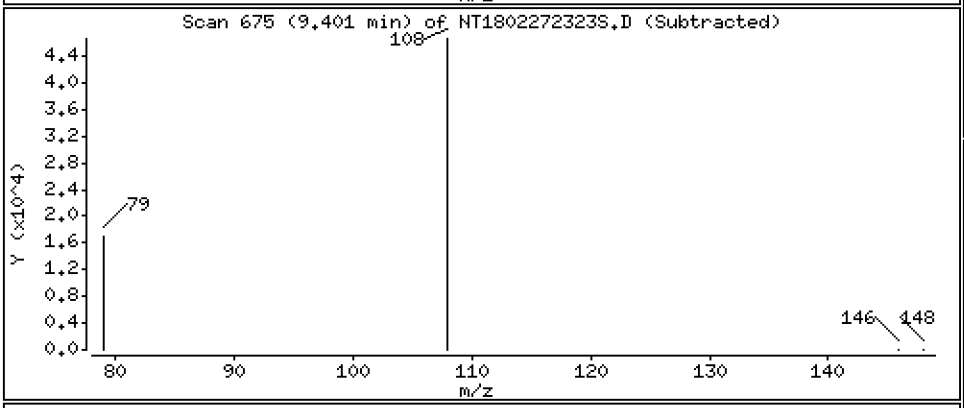
Column diameter: 0.25

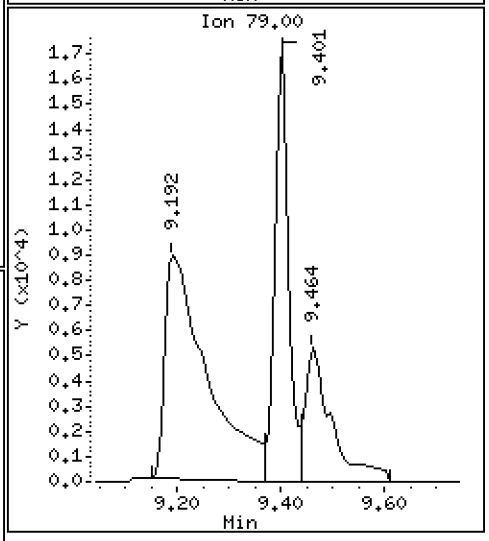
13 2-Methylphenol

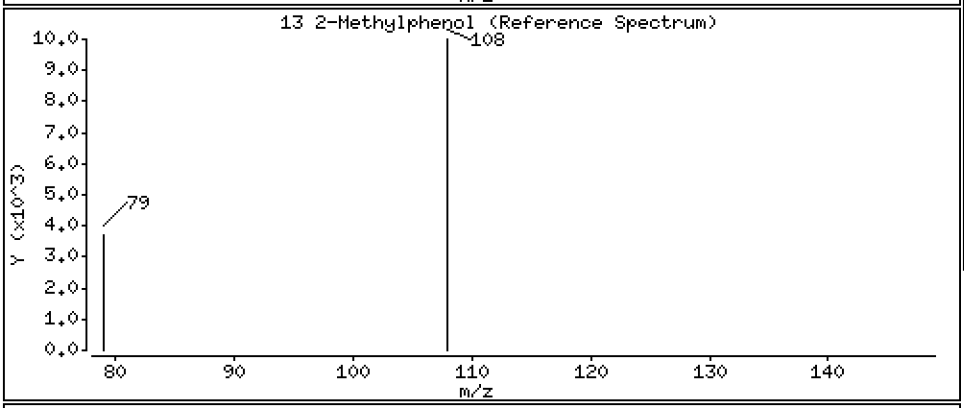
Concentration: 0.9848 ug/mL

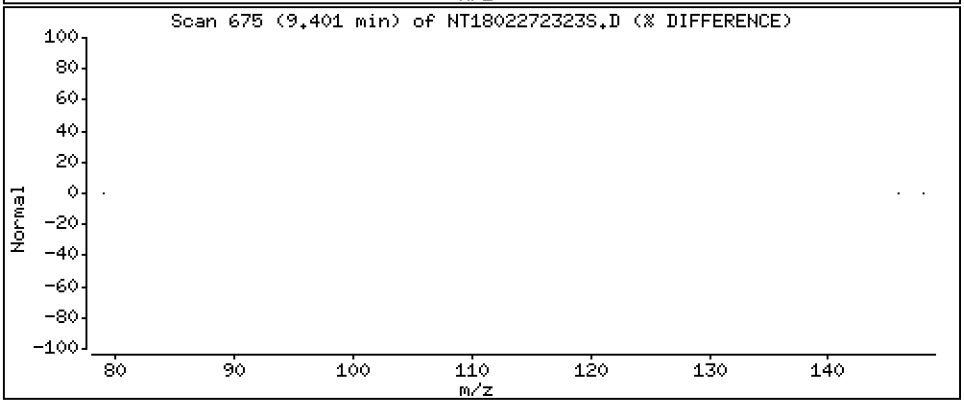












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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

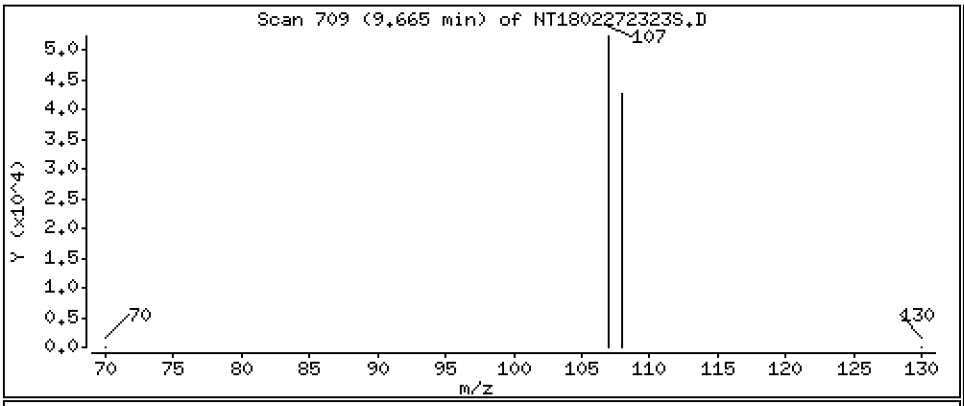
Operator: YZ

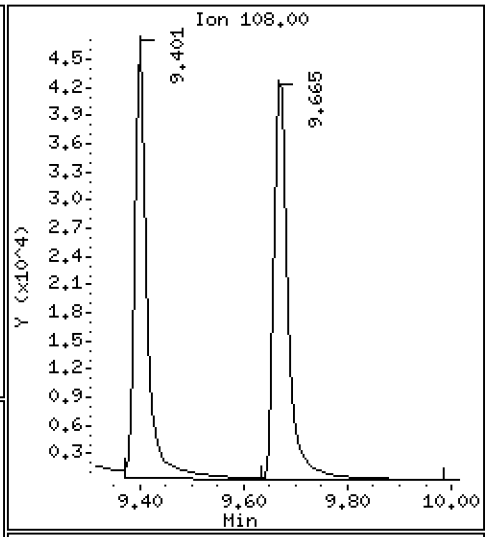
Column phase: ZB-5msi

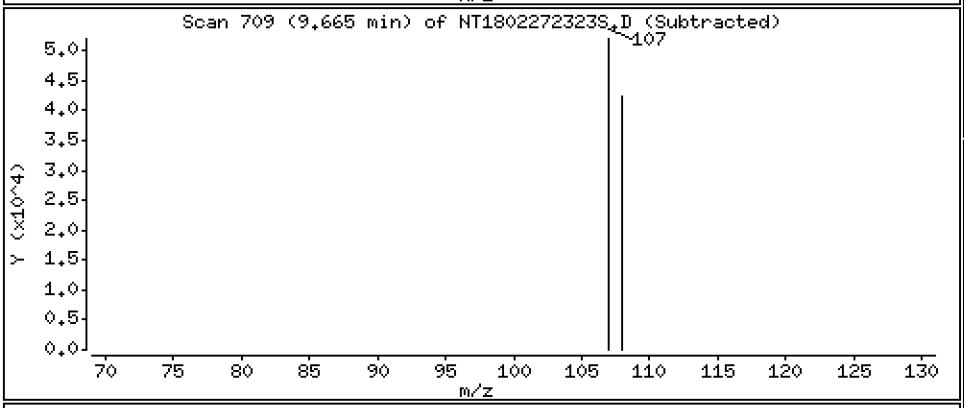
Column diameter: 0.25

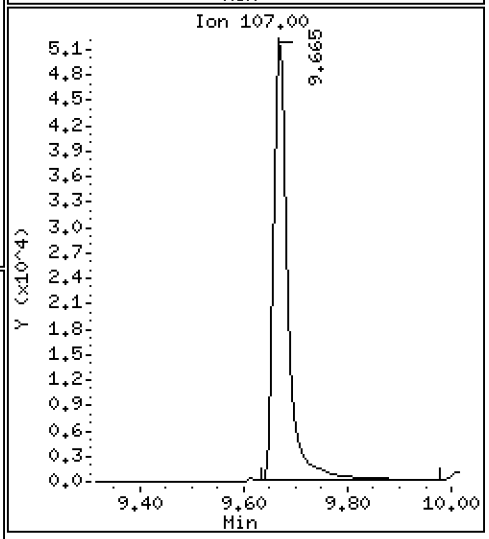
15 4-Methylphenol

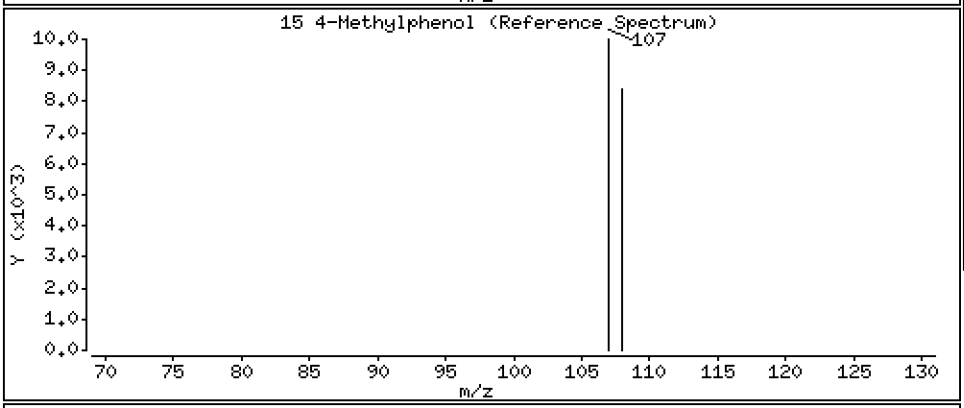
Concentration: 0.9658 ug/mL

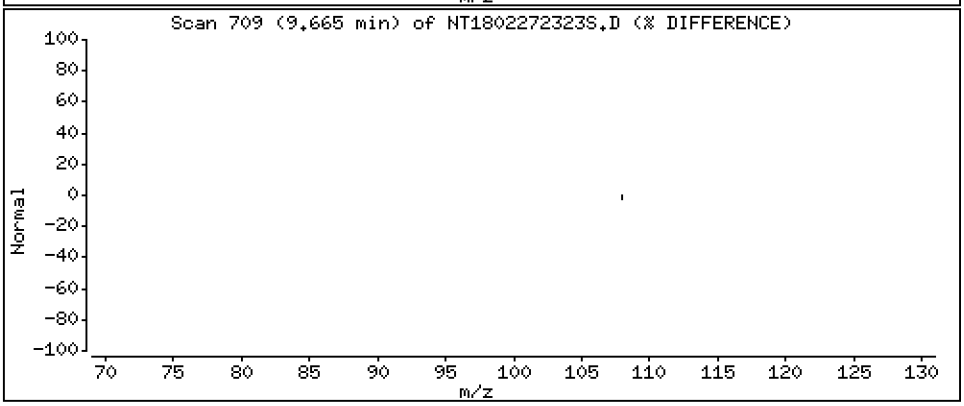












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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

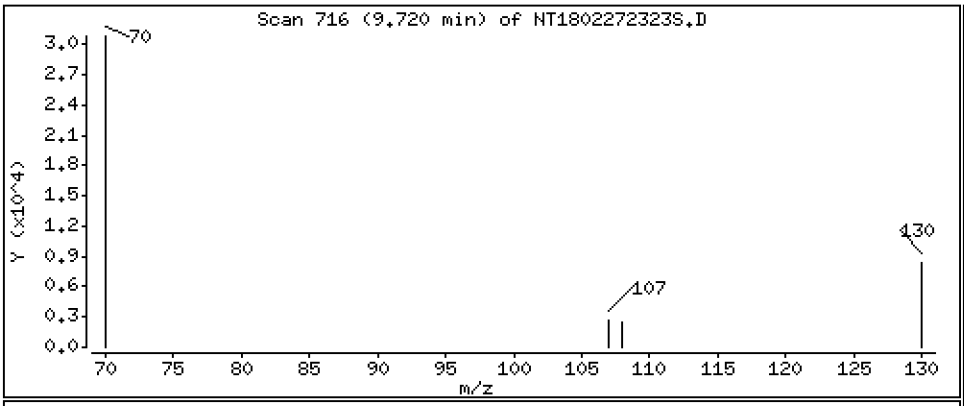
Operator: YZ

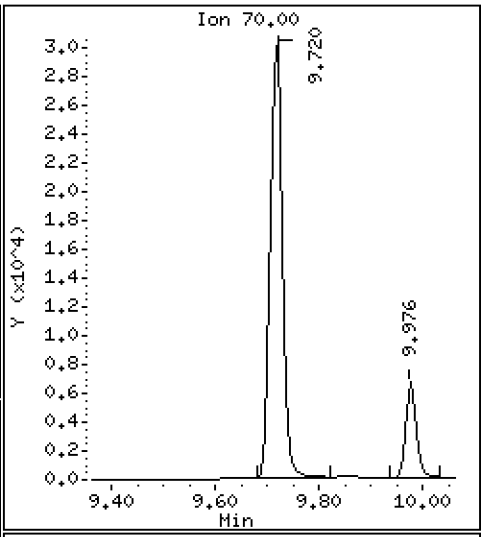
Column phase: ZB-5msi

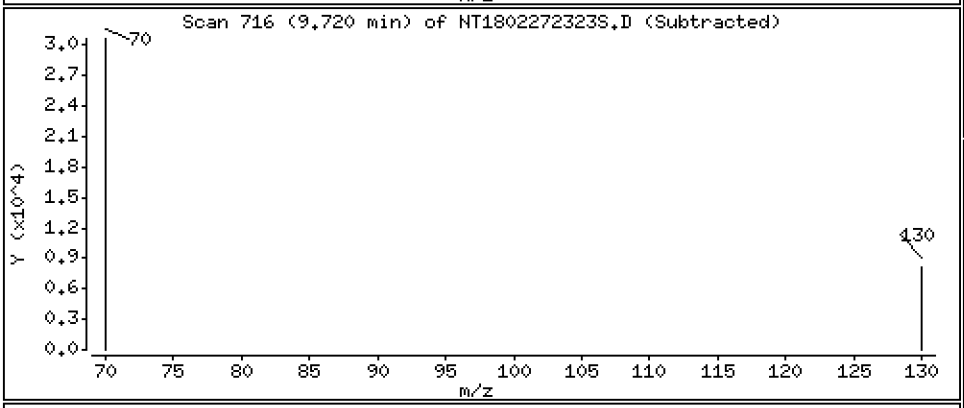
Column diameter: 0.25

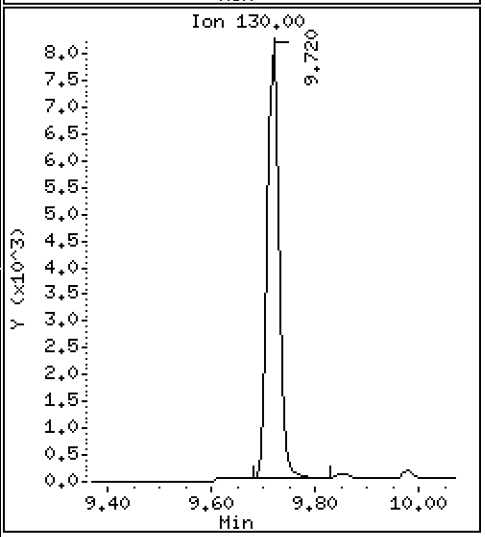
16 N-Nitroso-di-n-propylamine

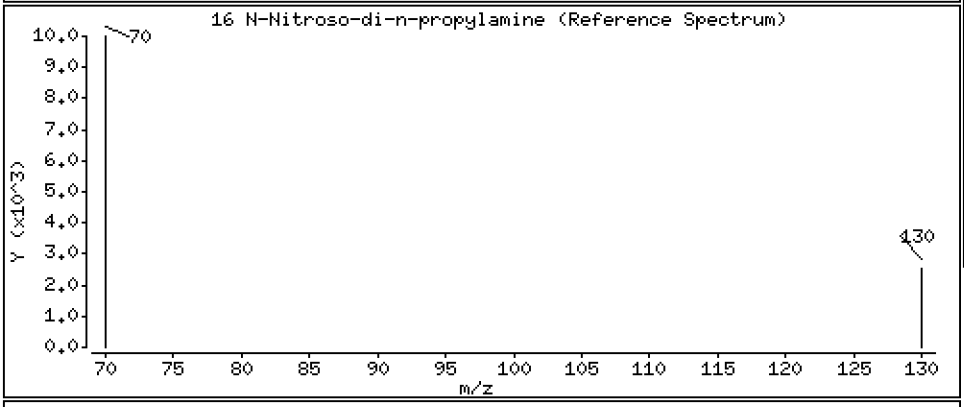
Concentration: 0.8542 ug/mL

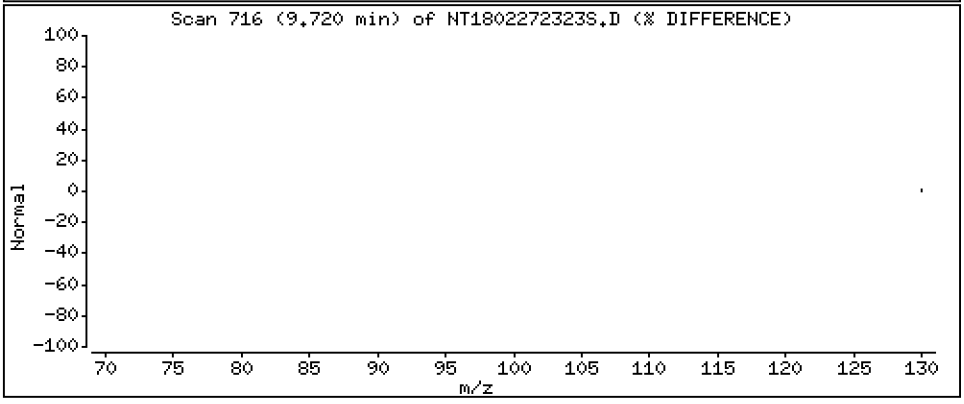












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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

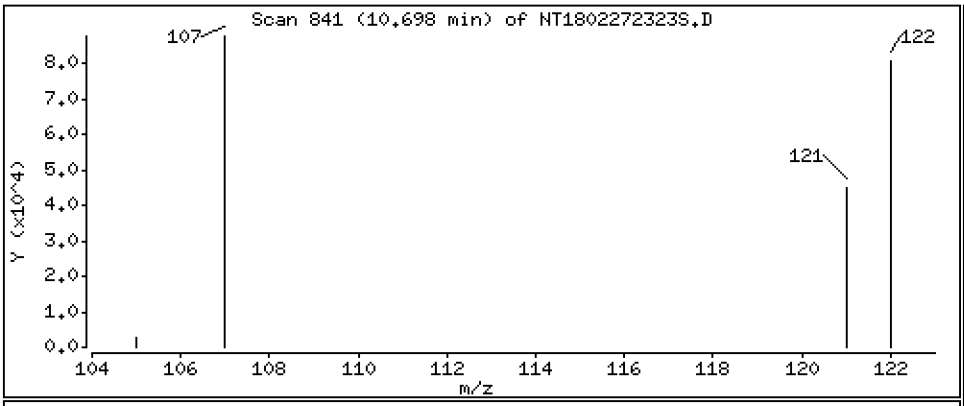
Operator: YZ

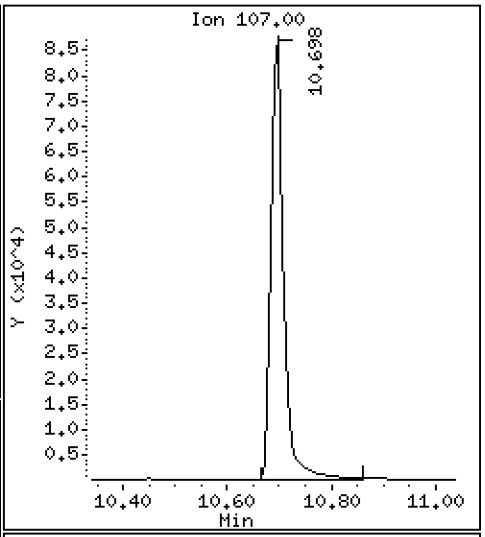
Column phase: ZB-5msi

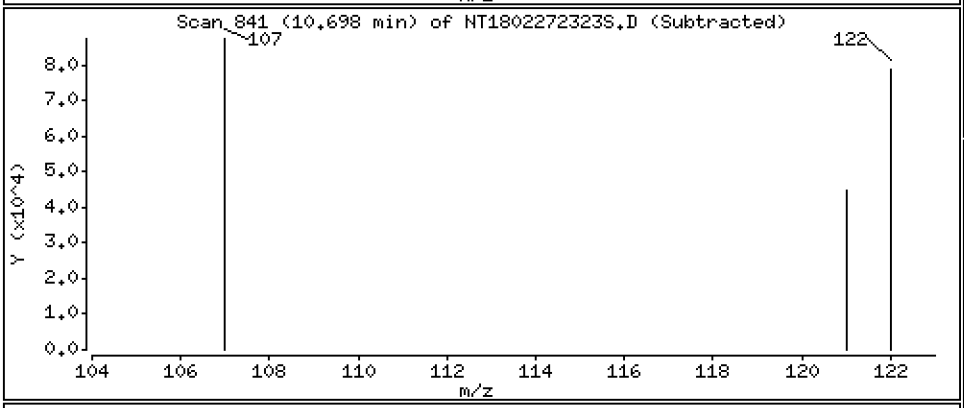
Column diameter: 0.25

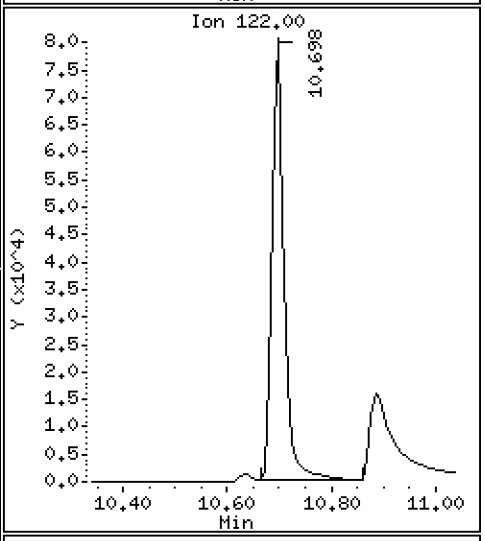
22 2,4-Dimethylphenol

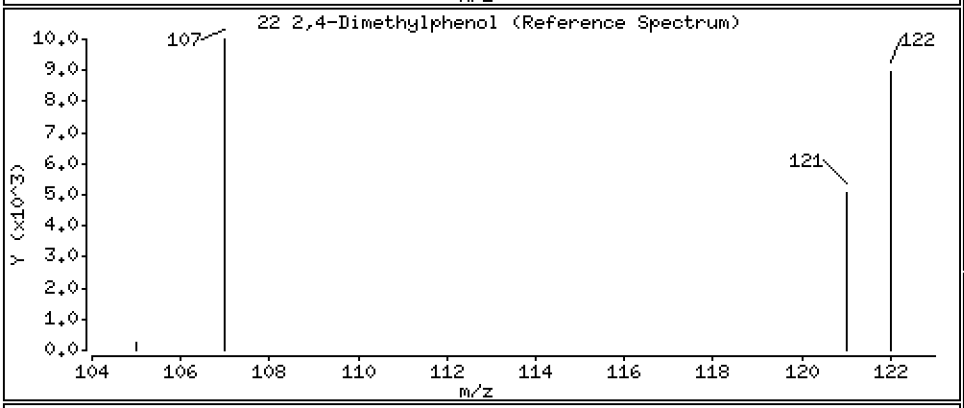
Concentration: 1.791 ug/mL

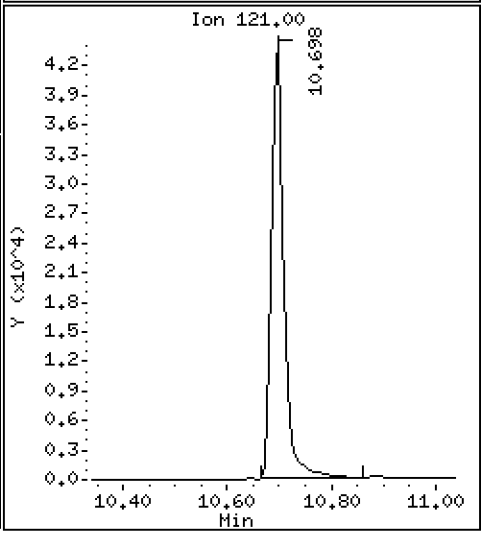


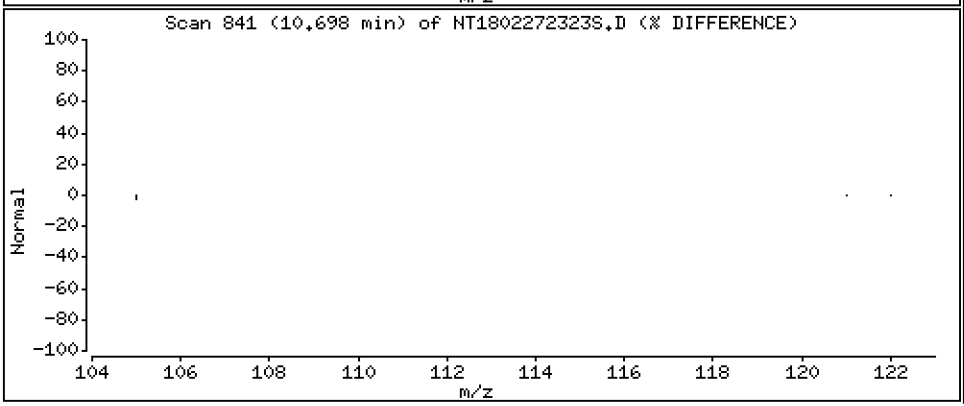












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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

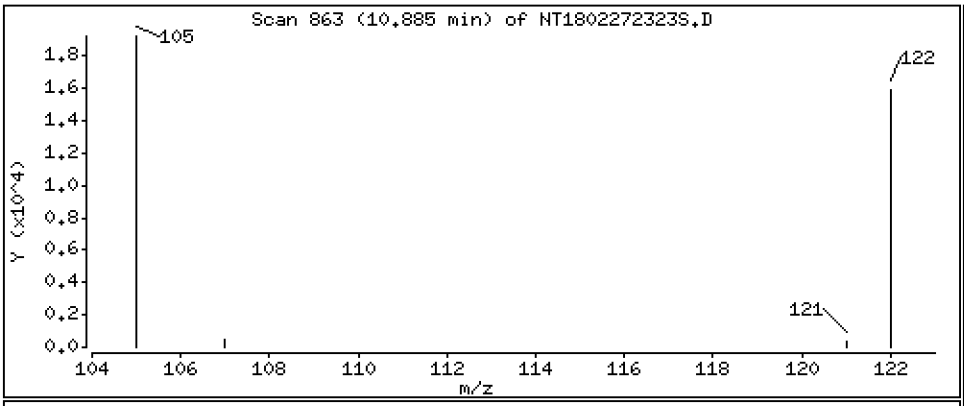
Operator: YZ

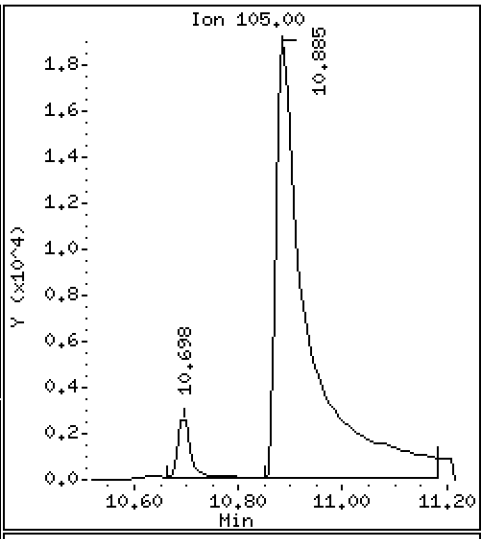
Column phase: ZB-5msi

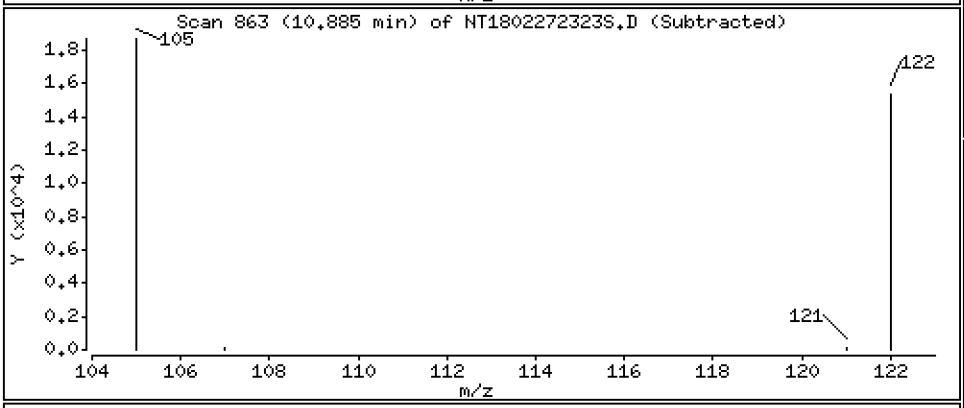
Column diameter: 0.25

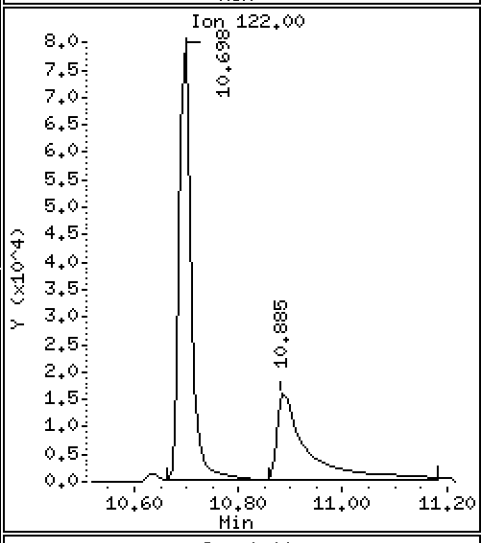
24 Benzoic acid

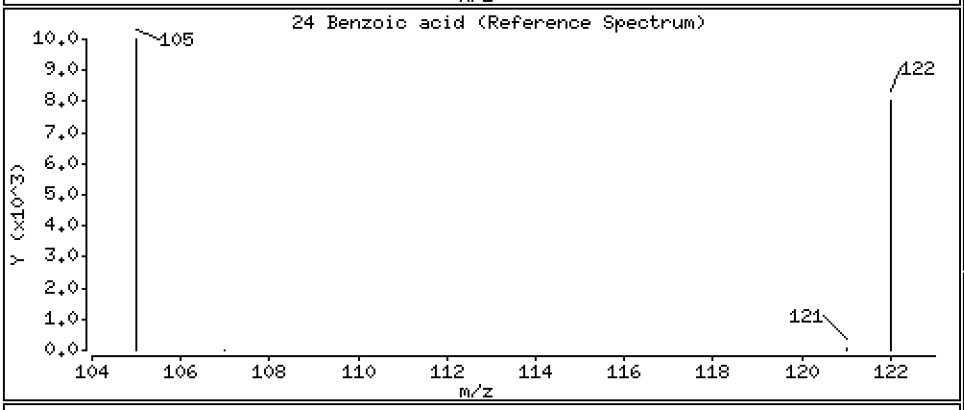
Concentration: 2.467 ug/mL

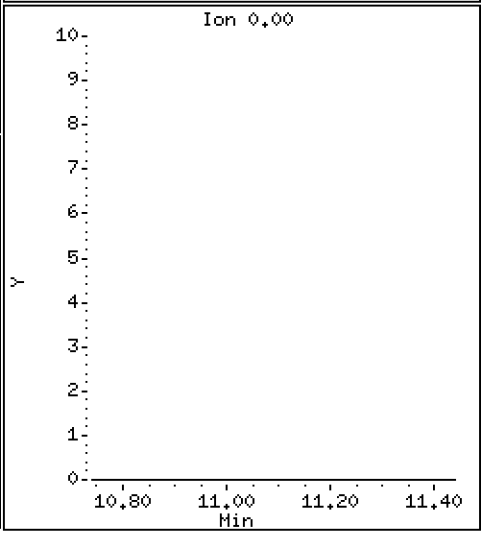


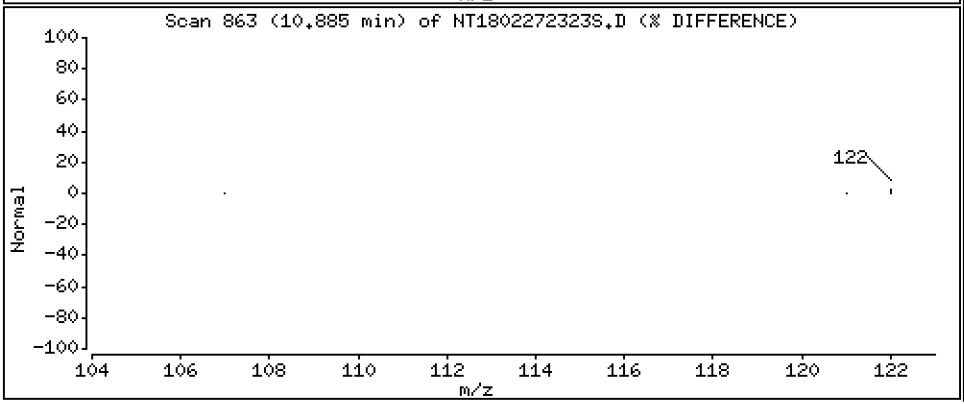












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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

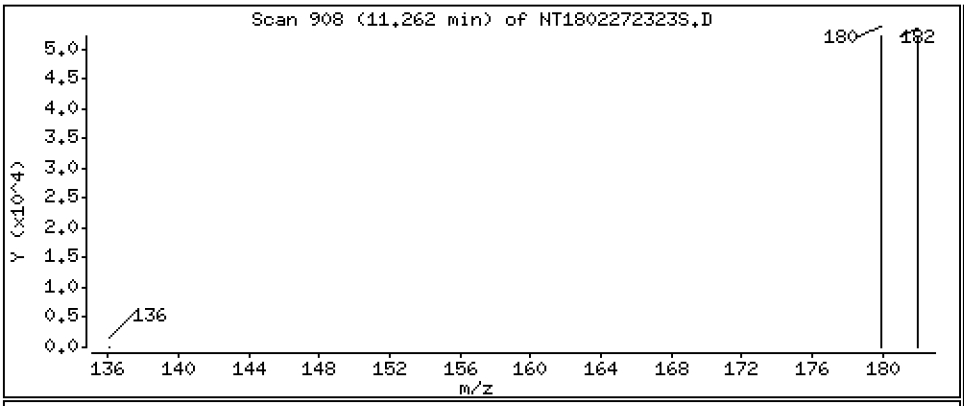
Operator: YZ

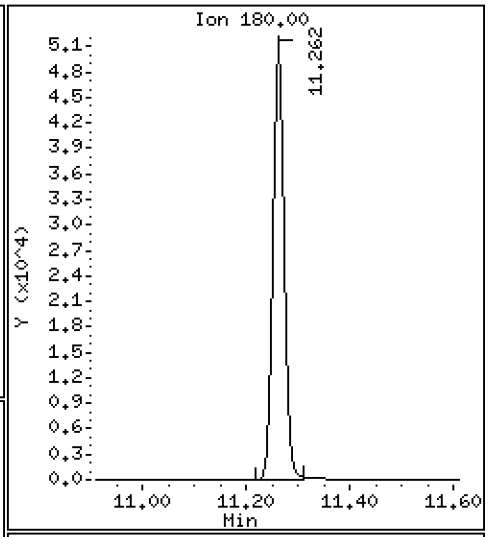
Column phase: ZB-5msi

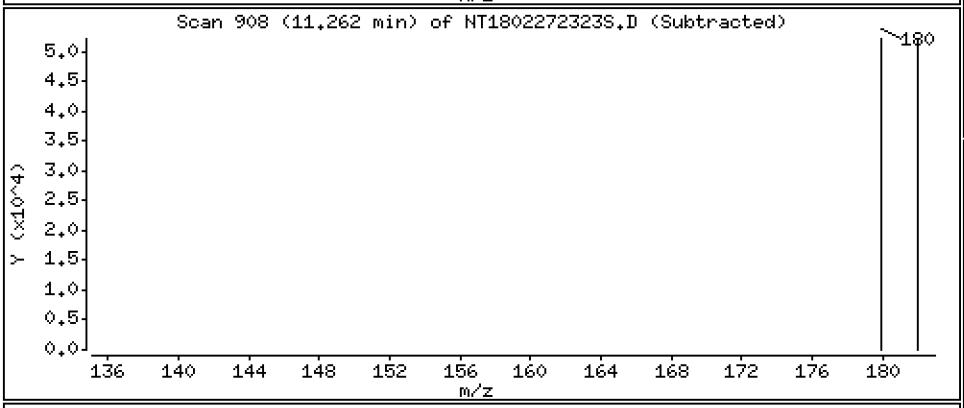
Column diameter: 0.25

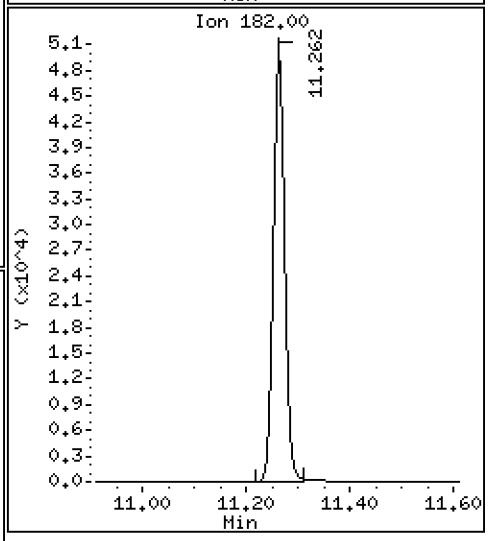
26 1,2,4-Trichlorobenzene

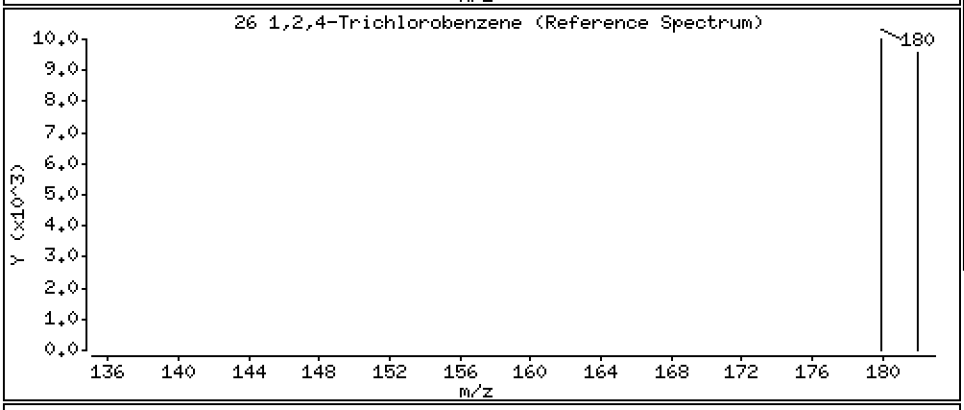
Concentration: 0.9590 ug/mL

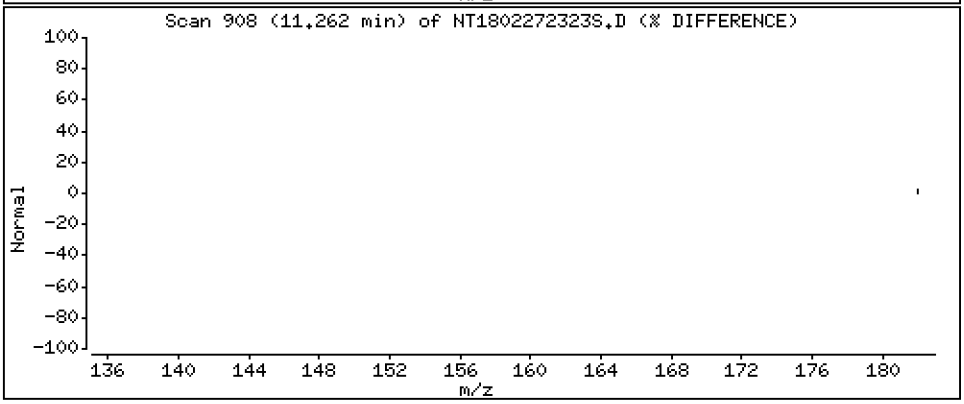












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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

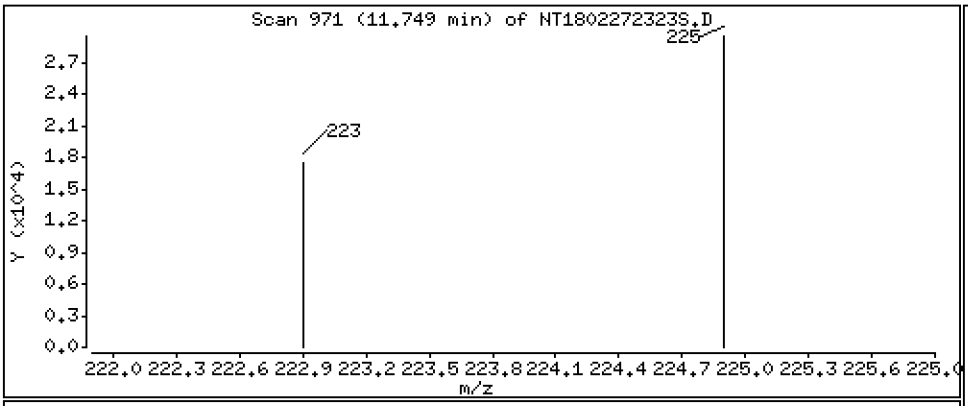
Operator: YZ

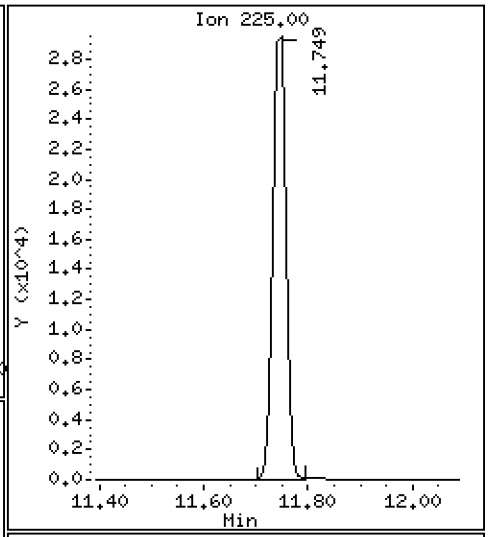
Column phase: ZB-5msi

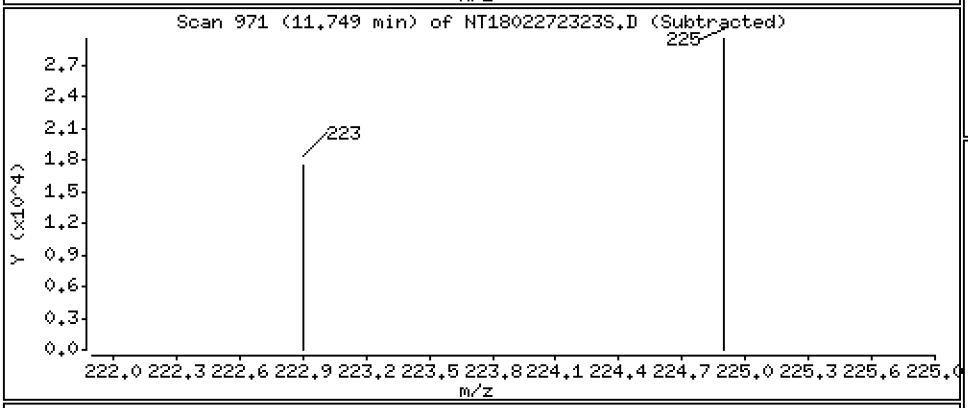
Column diameter: 0.25

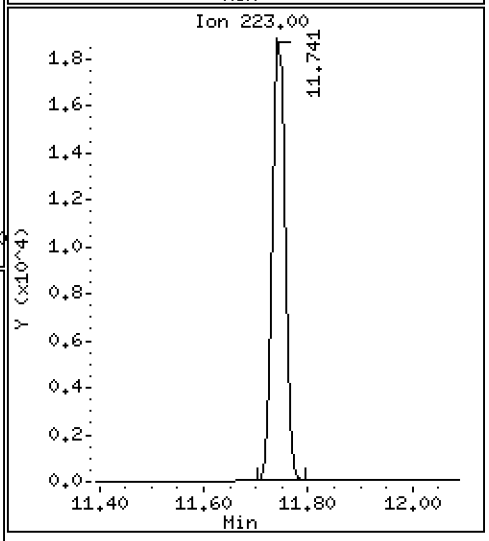
30 Hexachlorobutadiene

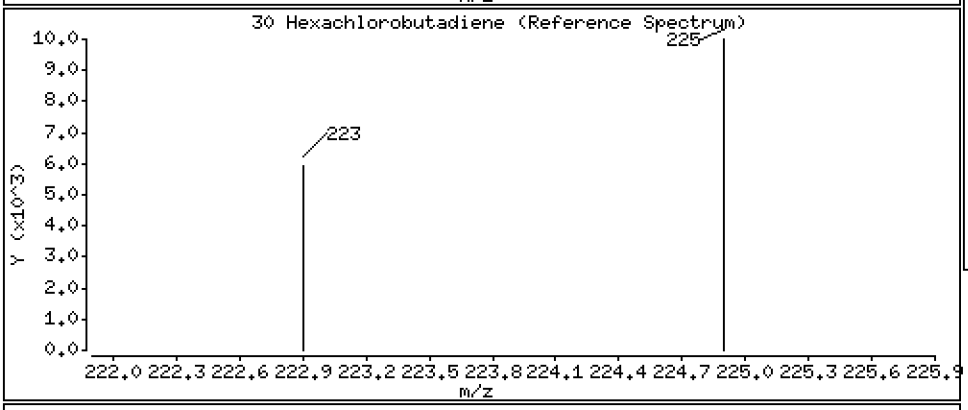
Concentration: 0.9681 ug/mL

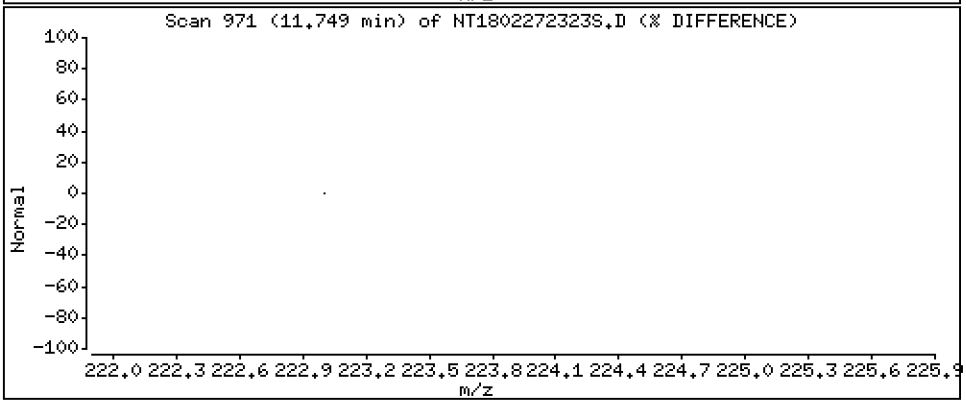












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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

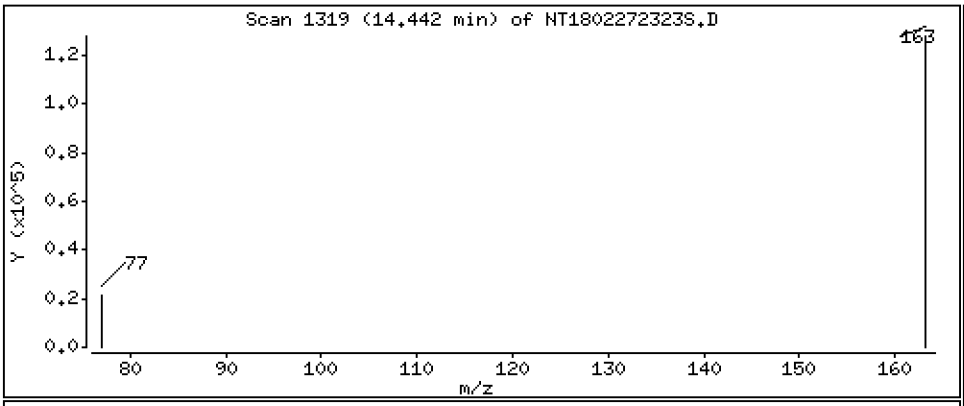
Operator: YZ

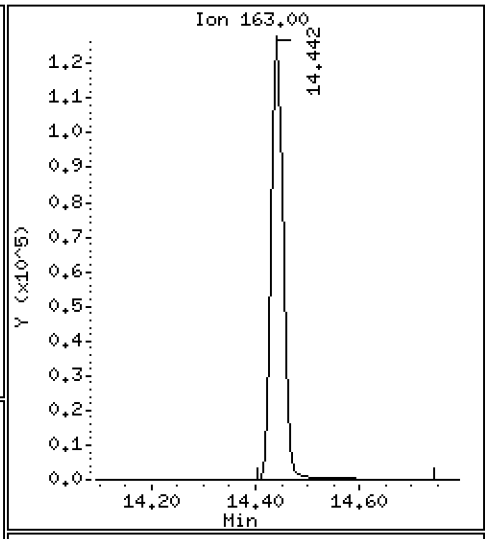
Column phase: ZB-5msi

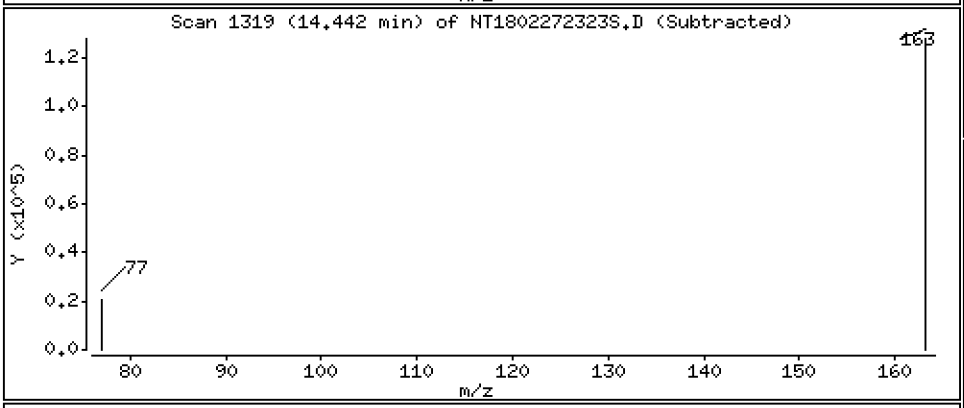
Column diameter: 0.25

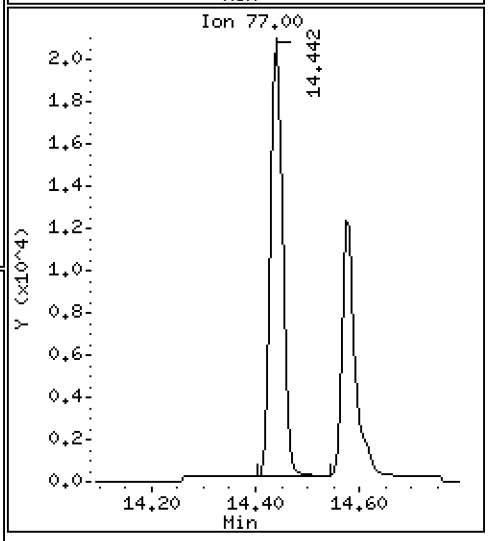
39 Dimethylphthalate

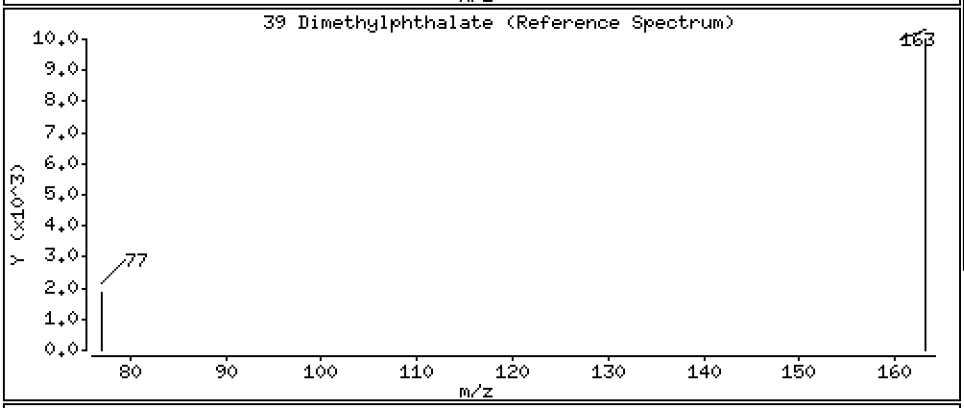
Concentration: 1.021 ug/mL

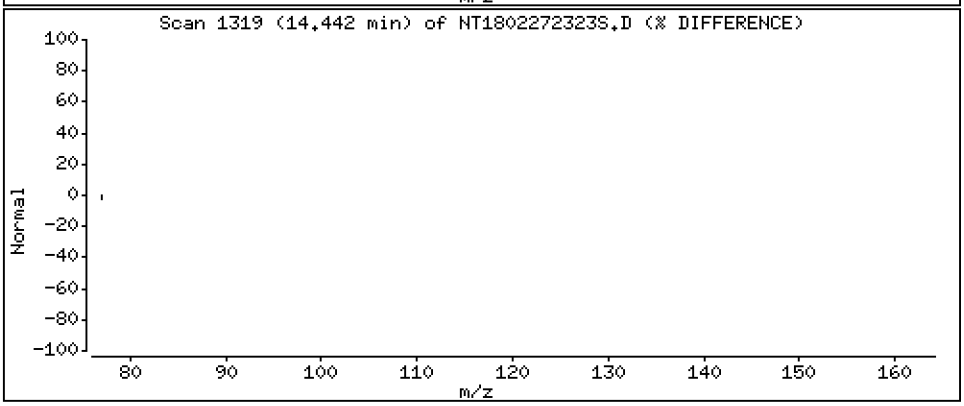












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Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

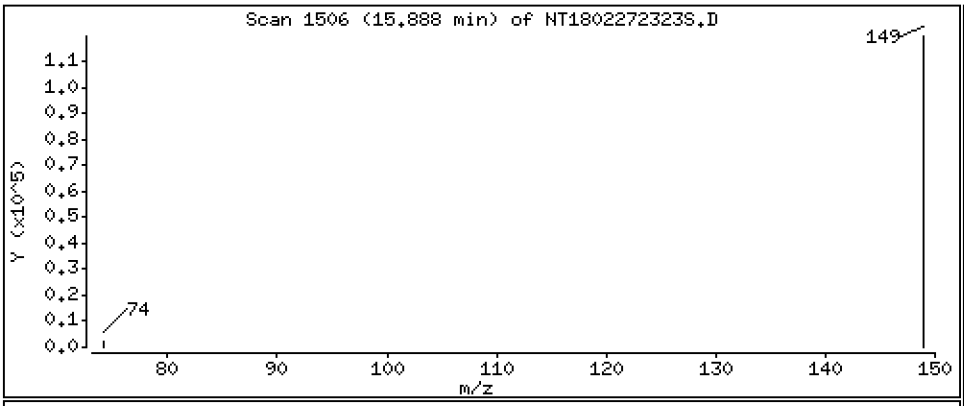
Operator: YZ

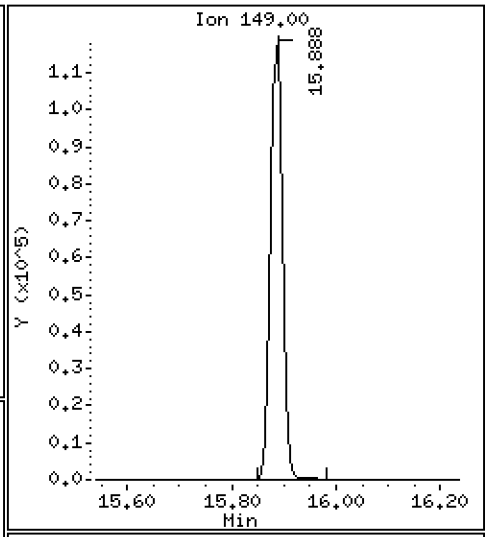
Column phase: ZB-5msi

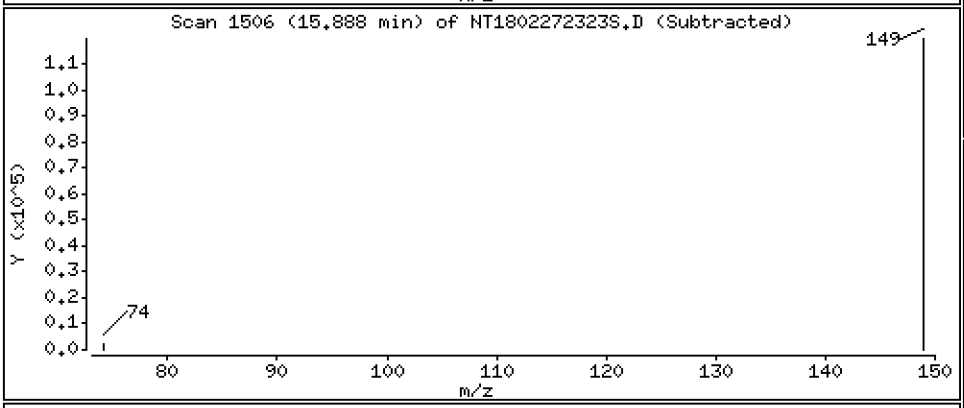
Column diameter: 0.25

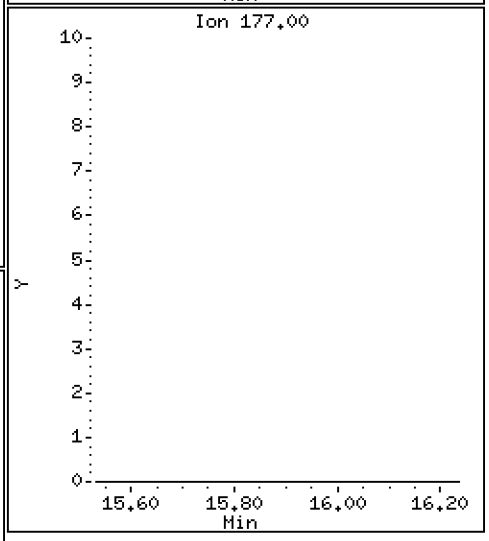
50 Diethylphthalate

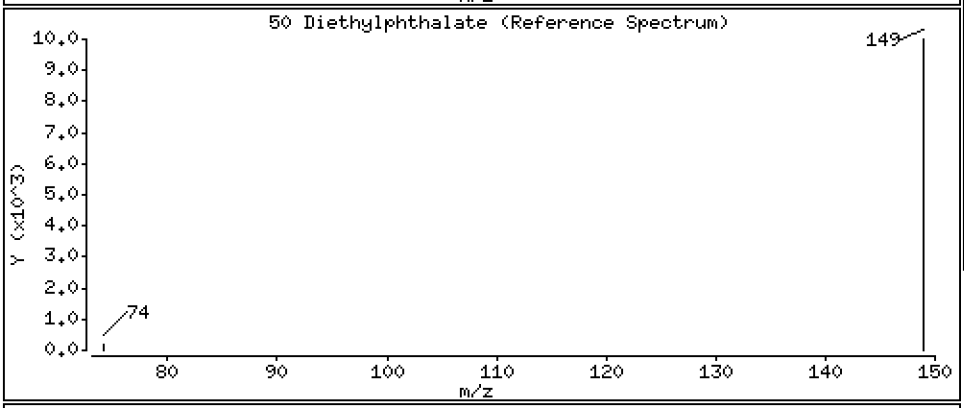
Concentration: 1.035 ug/mL

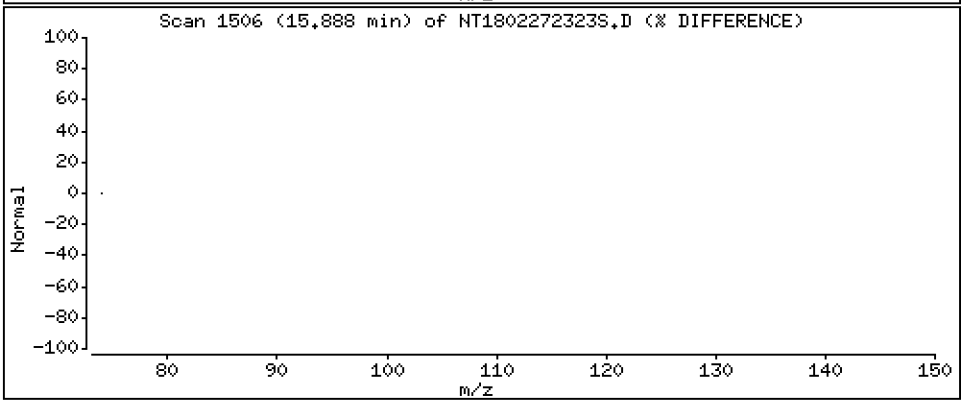












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272323S.D

Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

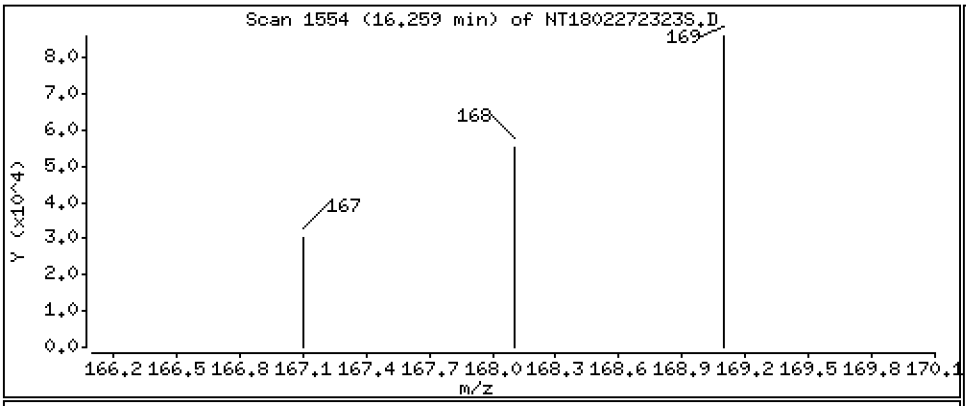
Operator: YZ

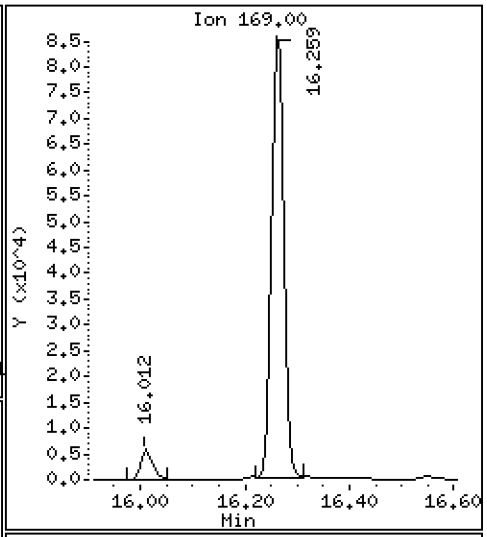
Column phase: ZB-5msi

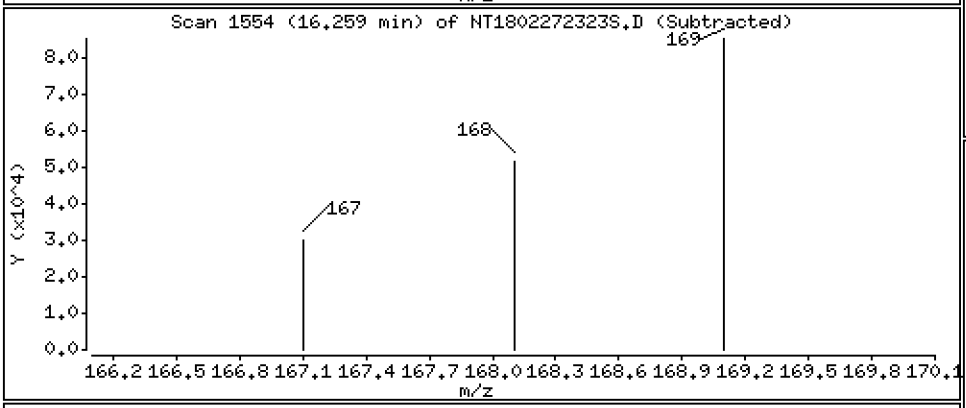
Column diameter: 0.25

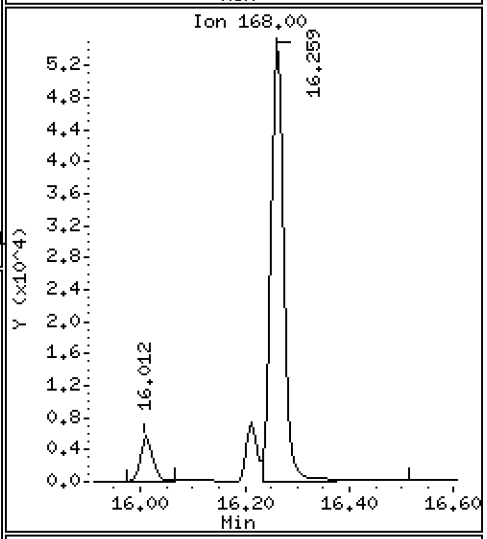
54 N-Nitrosodiphenylamine

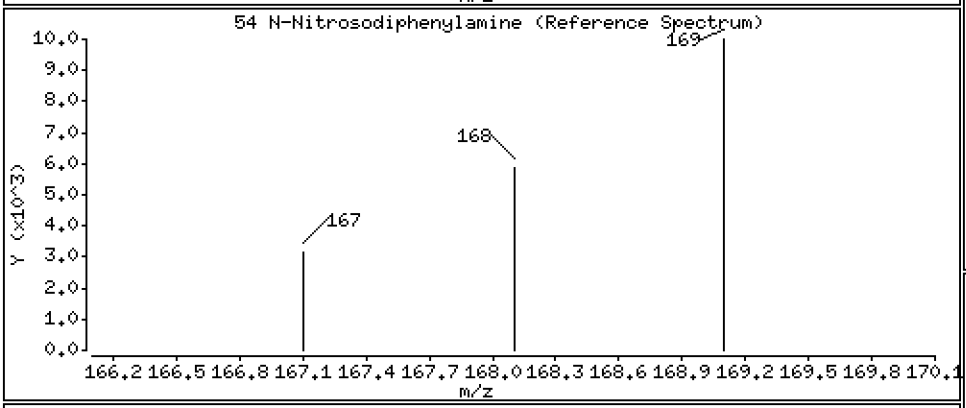
Concentration: 0.9305 ug/mL

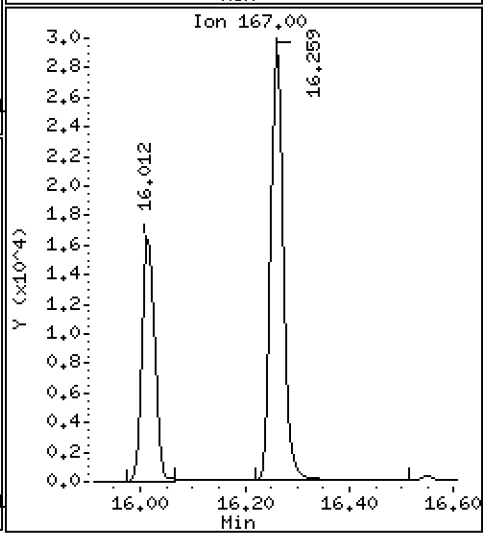


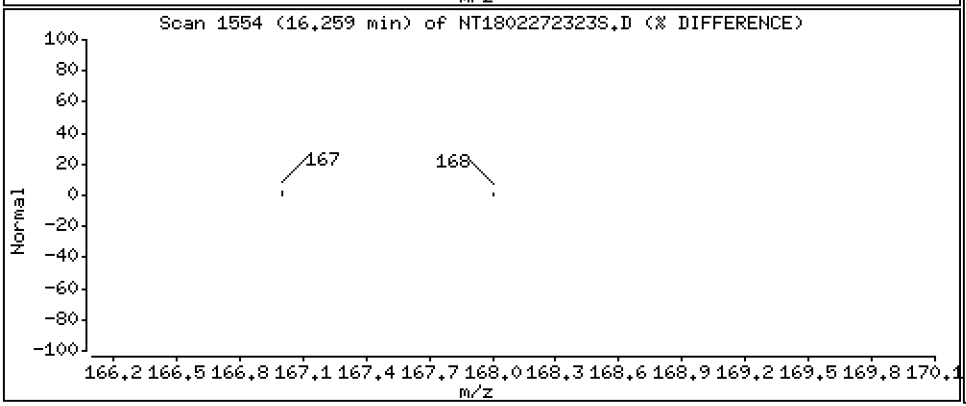












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272323S.D

Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

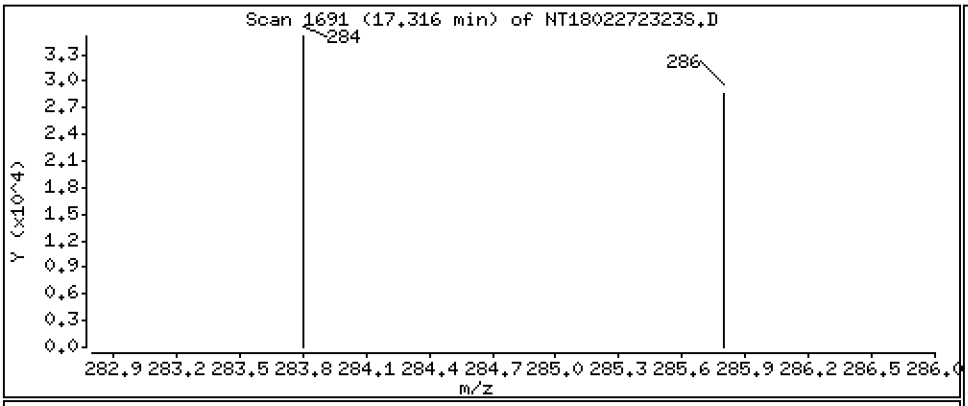
Operator: YZ

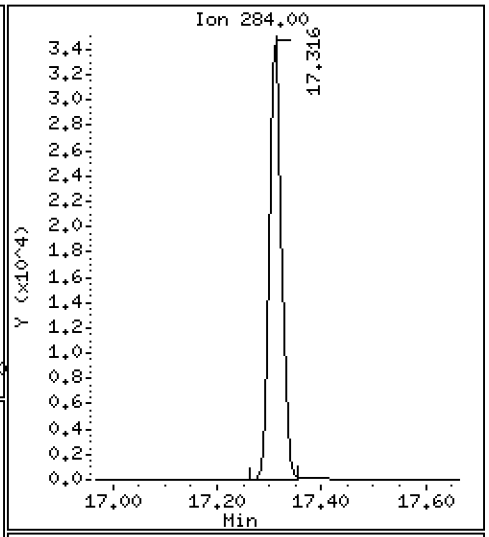
Column phase: ZB-5msi

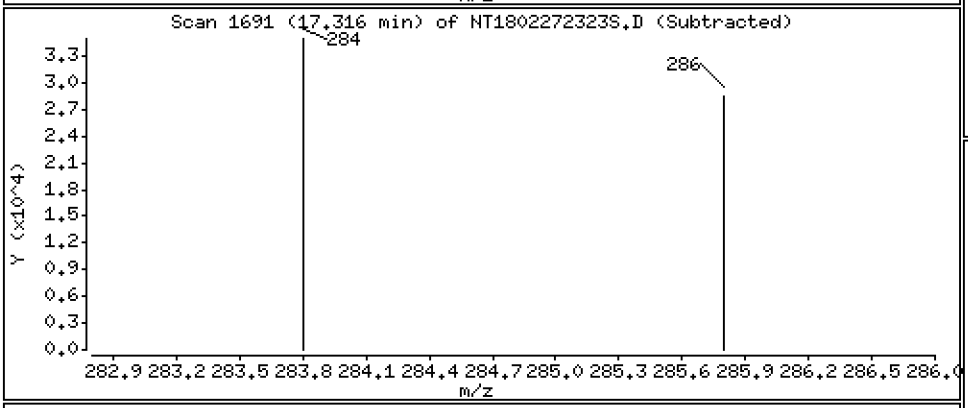
Column diameter: 0.25

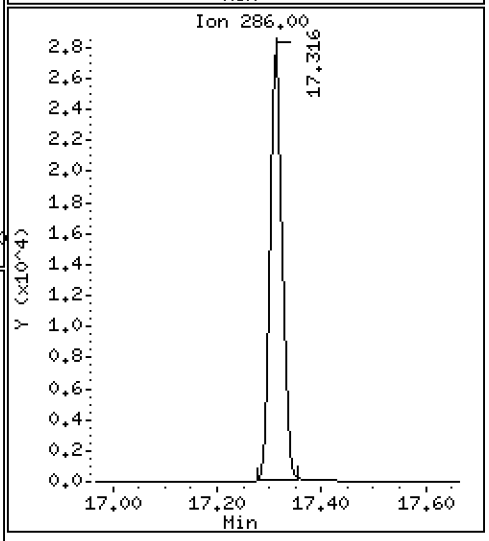
57 Hexachlorobenzene

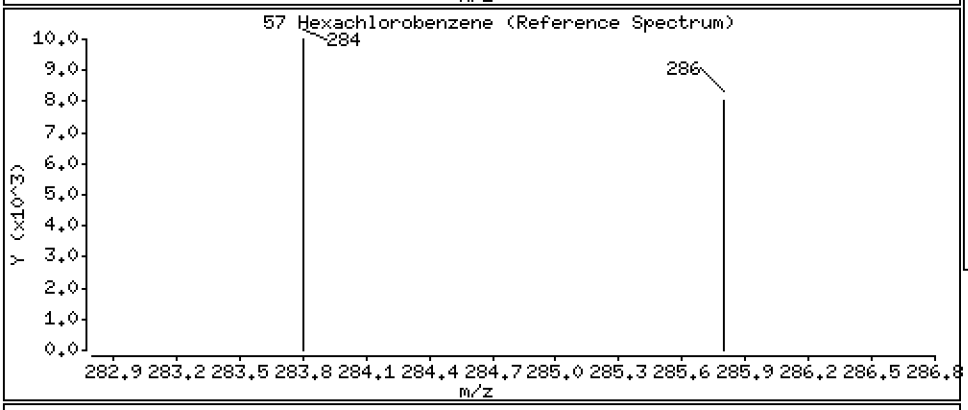
Concentration: 0.8208 ug/mL

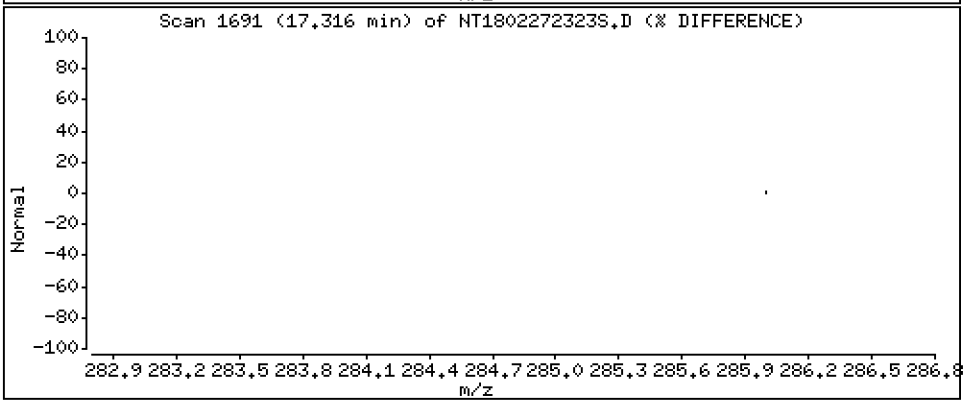












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272323S.D

Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

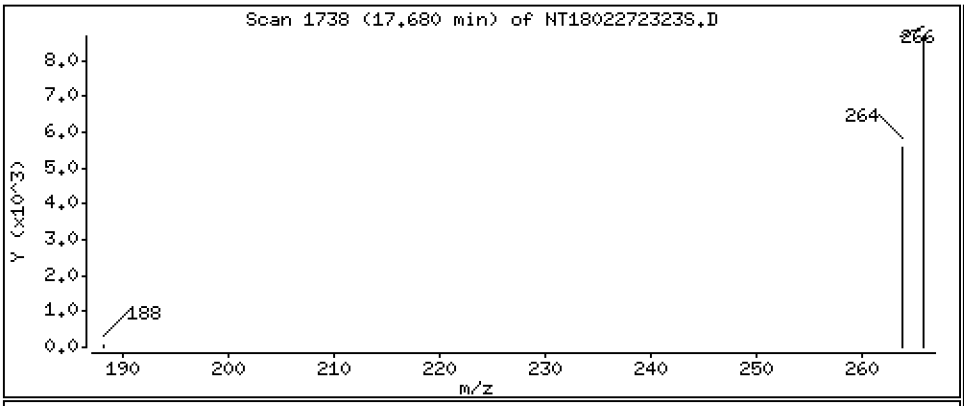
Operator: YZ

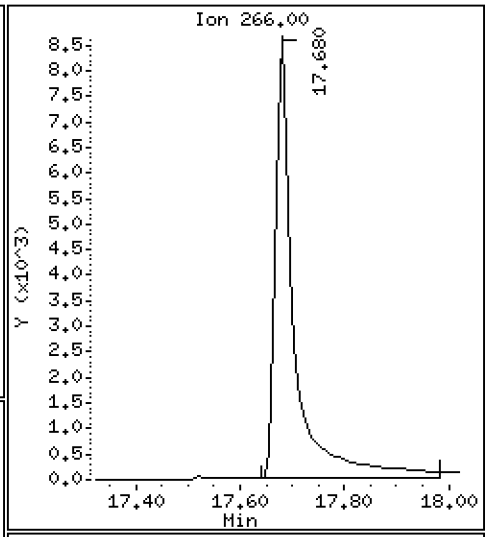
Column phase: ZB-5msi

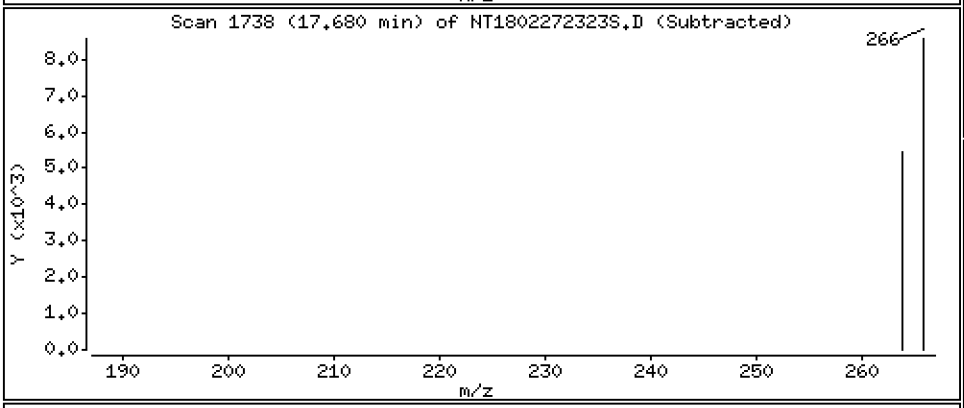
Column diameter: 0.25

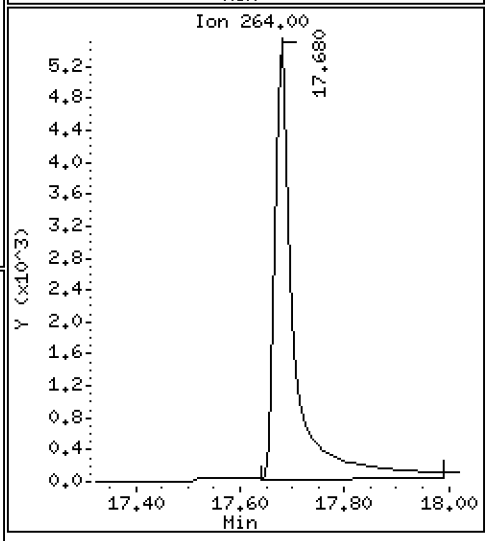
58 Pentachlorophenol

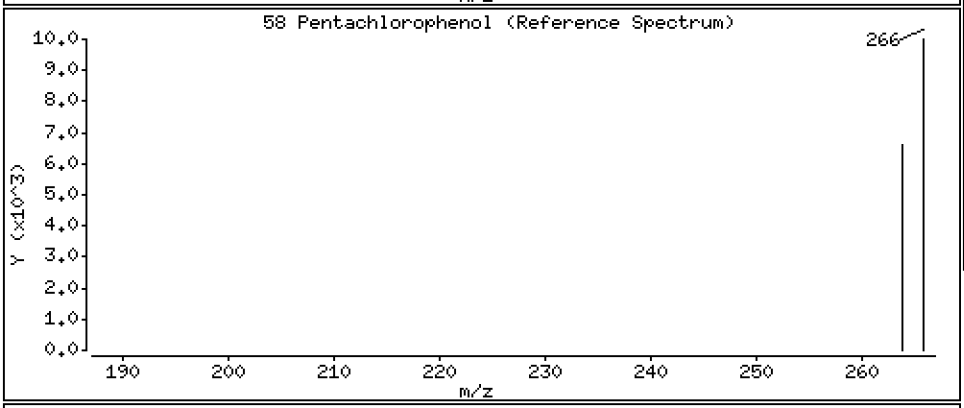
Concentration: 1.050 ug/mL

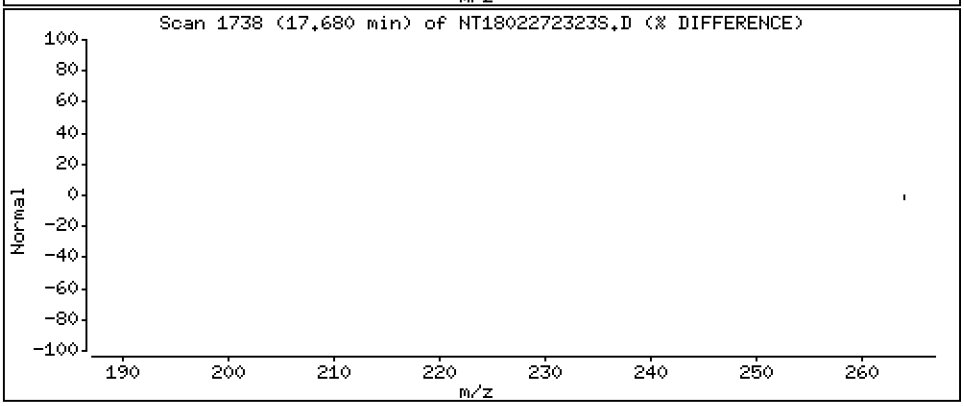












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272323S.D

Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

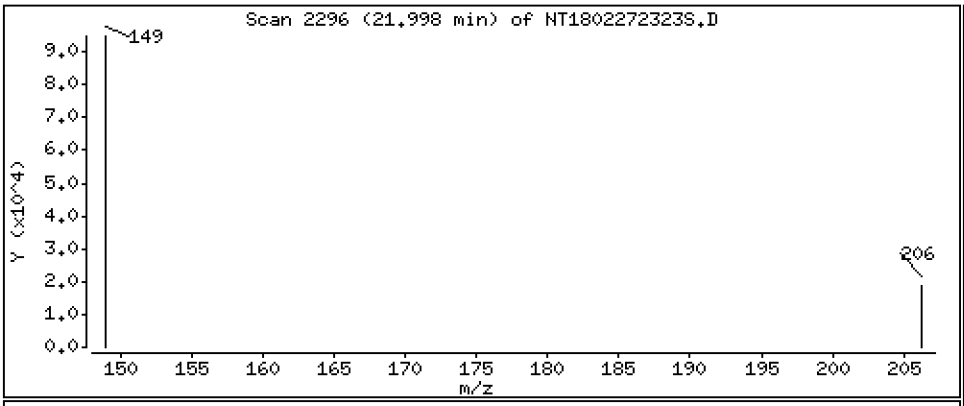
Operator: YZ

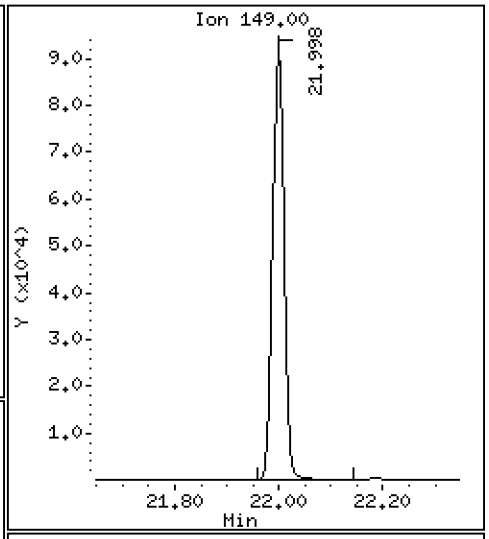
Column phase: ZB-5msi

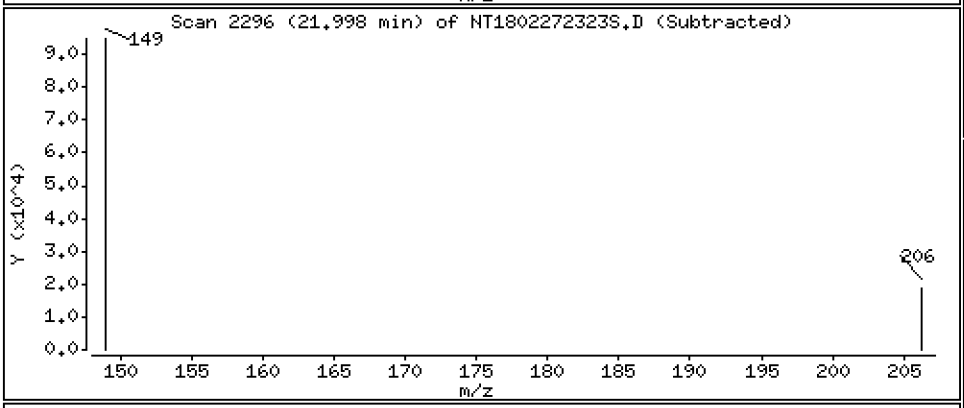
Column diameter: 0.25

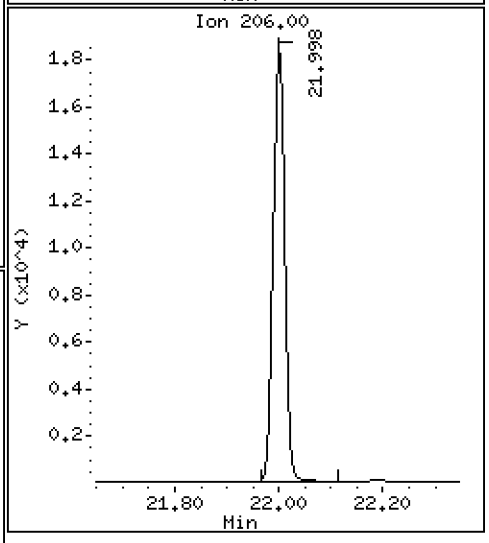
67 Butylbenzylphthalate

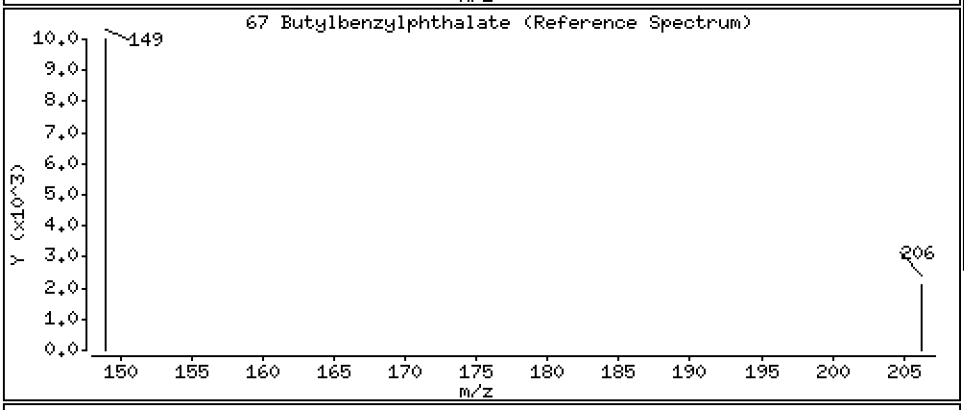
Concentration: 1.075 ug/mL

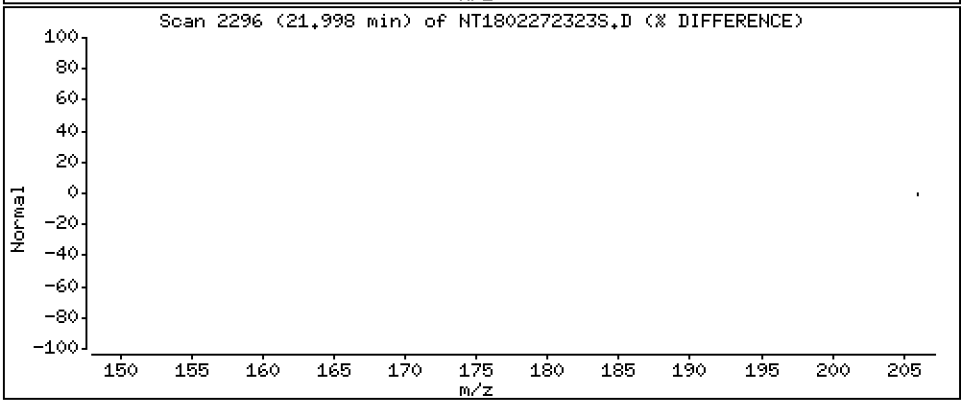












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272323S.D

Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

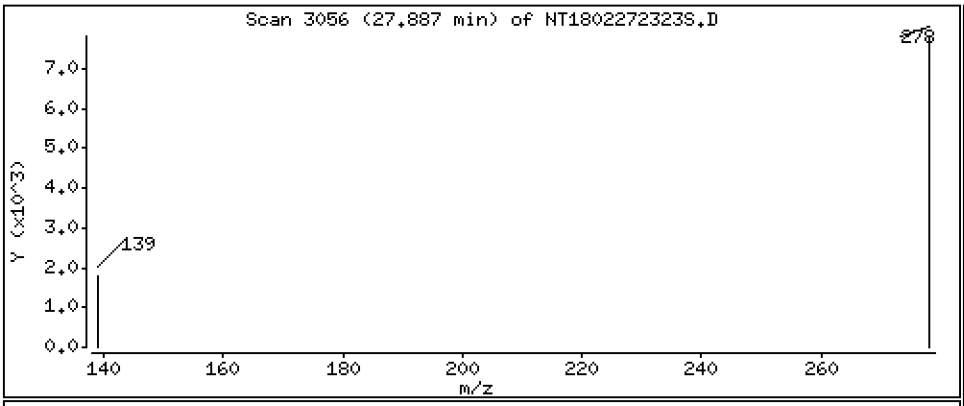
Operator: YZ

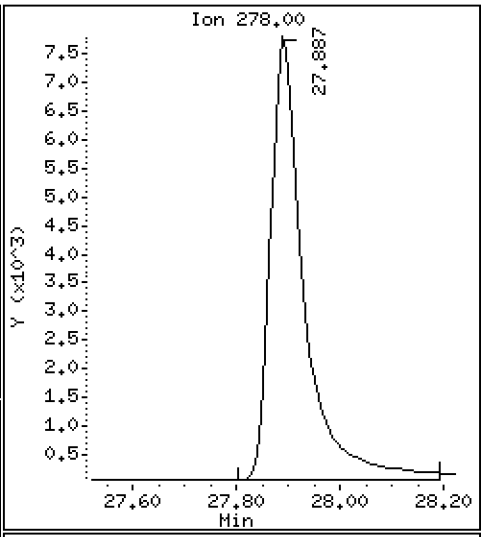
Column phase: ZB-5msi

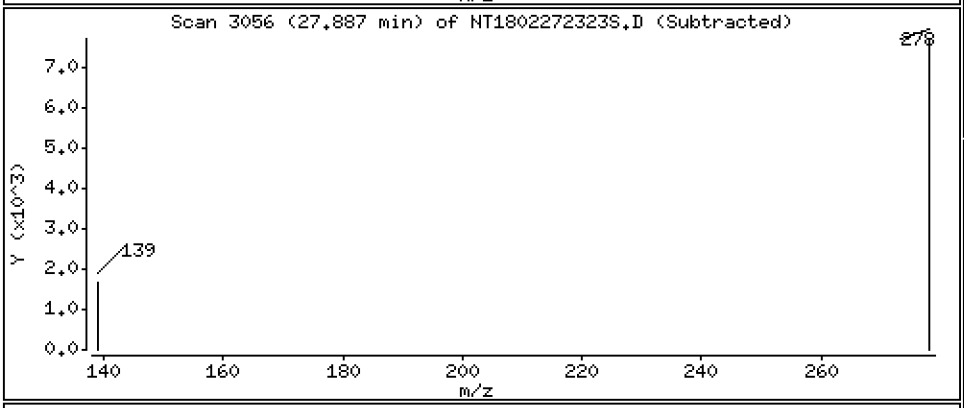
Column diameter: 0.25

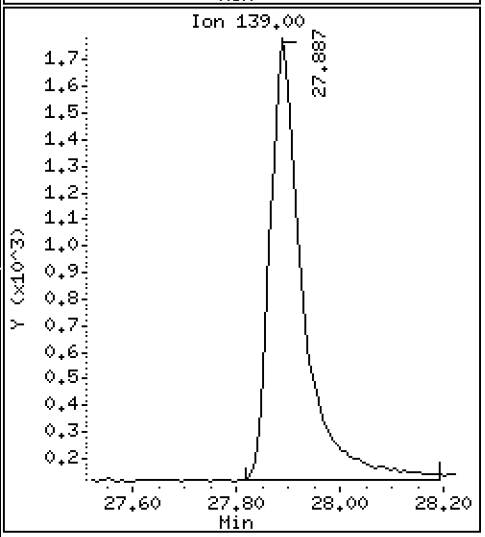
79 Dibenzo(a,h)anthracene

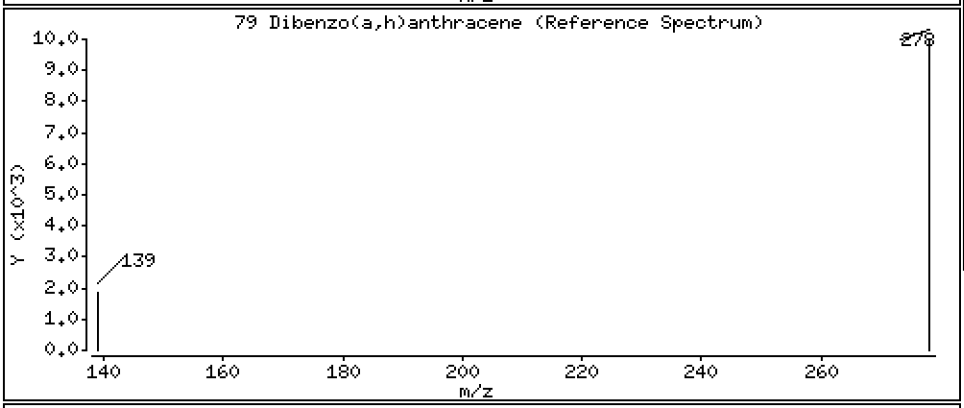
Concentration: 0.3970 ug/mL

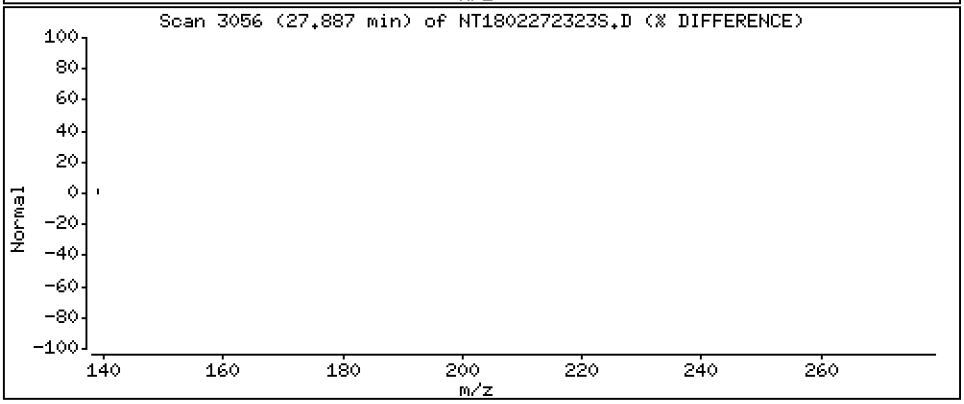












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272323S.D

Date : 28-FEB-2023 13:55

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-CCV1

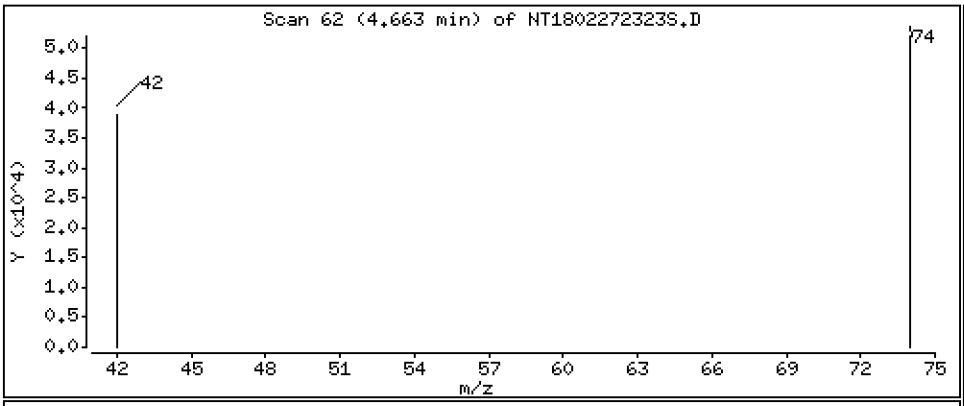
Operator: YZ

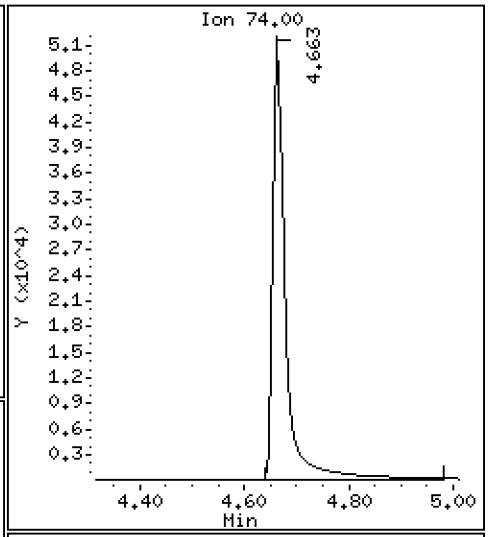
Column phase: ZB-5msi

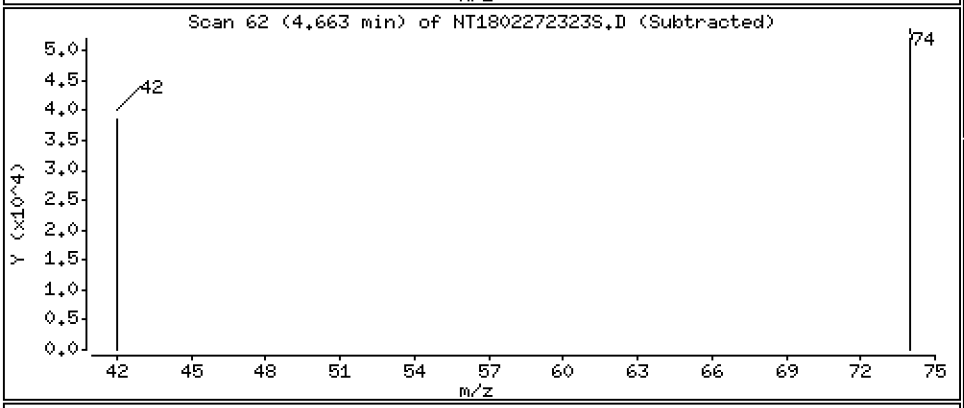
Column diameter: 0.25

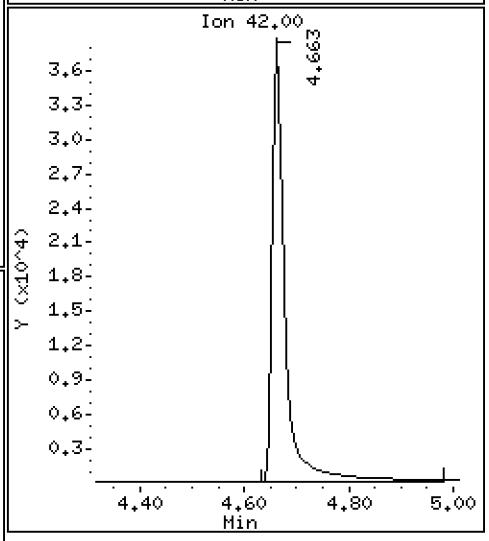
90 N-Nitrosodimethylamine

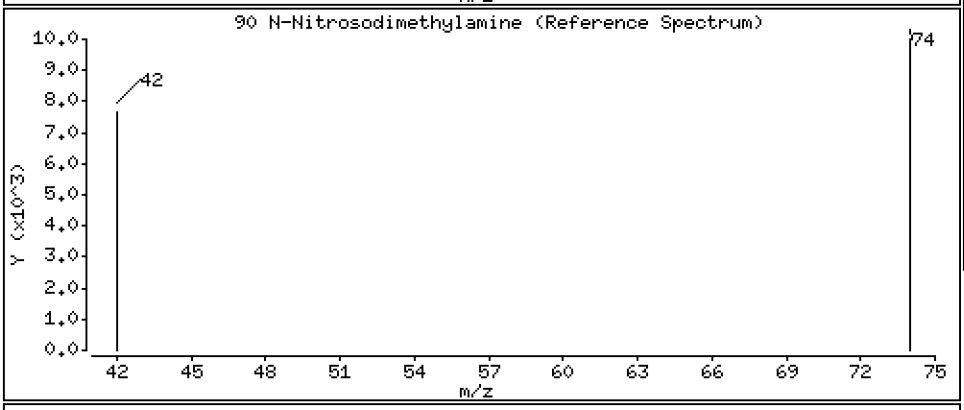
Concentration: 1.797 ug/mL

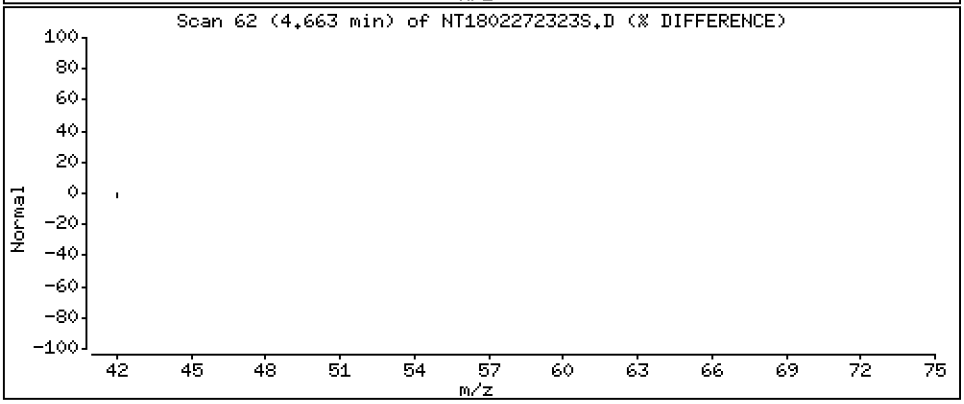












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272323S.D
Lab Smp Id: SLC0396-CCV1
Inj Date : 28-FEB-2023 13:55
Operator : YZ Inst ID: nt18.i
Smp Info : SLC0396-CCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 13:42 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.733	6.725	(0.757)	119194	1.56241	1.562(R)
	3	Phenol	94	8.309	8.301	(0.934)	92197	0.92640	0.9264
	7	1,3-Dichlorobenzene	146	8.834	8.827	(0.993)	93926	0.94259	0.9426
*	8	1,4-Dichlorobenzene-d4	152	8.896	8.896	(1.000)	236369	4.00000	
	9	1,4-Dichlorobenzene	146	8.927	8.920	(1.003)	94809	0.91107	0.9111
	11	Benzyl alcohol	79	9.191	9.168	(1.033)	50684	0.79437	0.7944
	12	1,2-Dichlorobenzene	146	9.277	9.277	(1.043)	92034	0.92890	0.9289
	13	2-Methylphenol	108	9.401	9.401	(1.057)	80602	0.98484	0.9848
	15	4-Methylphenol	108	9.665	9.665	(1.086)	79308	0.96579	0.9658
	16	N-Nitroso-di-n-propylamine	70	9.719	9.711	(1.092)	47250	0.85420	0.8542
	22	2,4-Dimethylphenol	107	10.698	10.689	(0.943)	145600	1.79060	1.791
	24	Benzoic acid	105	10.885	10.868	(0.959)	81365	2.46720	2.467
	26	1,2,4-Trichlorobenzene	180	11.262	11.262	(0.993)	79858	0.95905	0.9590
*	27	Naphthalene-d8	136	11.347	11.347	(1.000)	911369	4.00000	
	30	Hexachlorobutadiene	225	11.748	11.741	(1.035)	48364	0.96808	0.9681
	39	Dimethylphthalate	163	14.442	14.442	(0.968)	193037	1.02106	1.021
*	42	Acenaphthene-d10	162	14.921	14.921	(1.000)	492088	4.00000	
	50	Diethylphthalate	149	15.888	15.888	(1.065)	178823	1.03511	1.035
	54	N-Nitrosodiphenylamine	169	16.258	16.258	(0.907)	132216	0.93052	0.9305
	57	Hexachlorobenzene	284	17.315	17.315	(0.966)	55994	0.82083	0.8208
	58	Pentachlorophenol	266	17.679	17.671	(0.986)	21104	1.05034	1.050
*	59	Phenanthrene-d10	188	17.927	17.927	(1.000)	982117	4.00000	
$	66	Terphenyl-d14	244	21.068	21.068	(0.918)	150119	1.11548	1.115(R)
	67	Butylbenzylphthalate	149	21.997	21.997	(0.958)	131088	1.07546	1.075
*	69	Chrysene-d12	240	22.957	22.957	(1.000)	743229	4.00000	
*	77	Perylene-d12	264	25.442	25.442	(1.000)	297462	4.00000	
	79	Dibenzo(a,h)anthracene	278	27.886	27.871	(1.096)	35086	0.39697	0.3970
	90	N-Nitrosodimethylamine	74	4.663	4.663	(0.524)	81582	1.79672	1.797

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272323S.D
Lab Smp Id: SLC0396-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
8 1,4-Dichlorobenze	334128	167064	668256	236369	-29.26	
27 Naphthalene-d8	1260796	630398	2521592	911369	-27.71	
42 Acenaphthene-d10	648152	324076	1296304	492088	-24.08	
59 Phenanthrene-d10	1231995	615998	2463990	982117	-20.28	
69 Chrysene-d12	1126974	563487	2253948	743229	-34.05	
77 Perylene-d12	1243668	621834	2487336	297462	-76.08	<-

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	0.00
27 Naphthalene-d8	11.35	10.85	11.85	11.35	0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.92	0.00
59 Phenanthrene-d10	17.93	17.43	18.43	17.93	0.00
69 Chrysene-d12	22.96	22.46	23.46	22.96	0.00
77 Perylene-d12	25.44	24.94	25.94	25.44	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272323S.D

Lab ID: SLC0396-CCV1
nt18.i, 20230227.b\SIM.b\SIMABN2.m,   28-FEB-2023 13:55

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1802272303S.D

On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LOW-CONCENTRATION CONTINUING CALIBRATION CHECK

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT18	Calibration:	GC00036
Lab File ID:	NT1802272305S.D	Calibration Date:	02/25/2023
Sequence:	SLC0396	Injection Date:	02/27/23
Lab Sample ID:	SLC0396-LCV1	Injection Time:	19:50
Sequence Name:	ABN 0.2		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.10000	0.1	1.7610310	2.0448860		16.1	
1,2-Dichlorobenzene	A	0.10000	0.1	1.6766720	1.9268250		14.9	
Benzyl Alcohol	A	0.10000	0.08	1.0797360	0.9063804		-16.1	
Benzoic acid	A	0.40000	0.05	0.0982061	0.0196428		-86.3	
2,4-Dimethylphenol	A	0.20000	0.2	0.3568845	0.3828154		7.3	
1,2,4-Trichlorobenzene	A	0.10000	0.1	0.3654639	0.4059866		11.1	
N-Nitrosodiphenylamine	A	0.10000	0.1	0.5787015	0.6509551		12.5	
Pentachlorophenol	A	0.20000	0.06	0.0525310	0.0237662		-70.8	
2-Fluorophenol	A	0.15000	0.153	1.2910050	1.3177740		2.1	
p-Terphenyl-d14	A	0.10000	0.105	0.7242850	0.7572539		4.6	

* Values outside of QC limits

Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT18022723058.D

Date : 27-FEB-2023 19:50

Client ID:

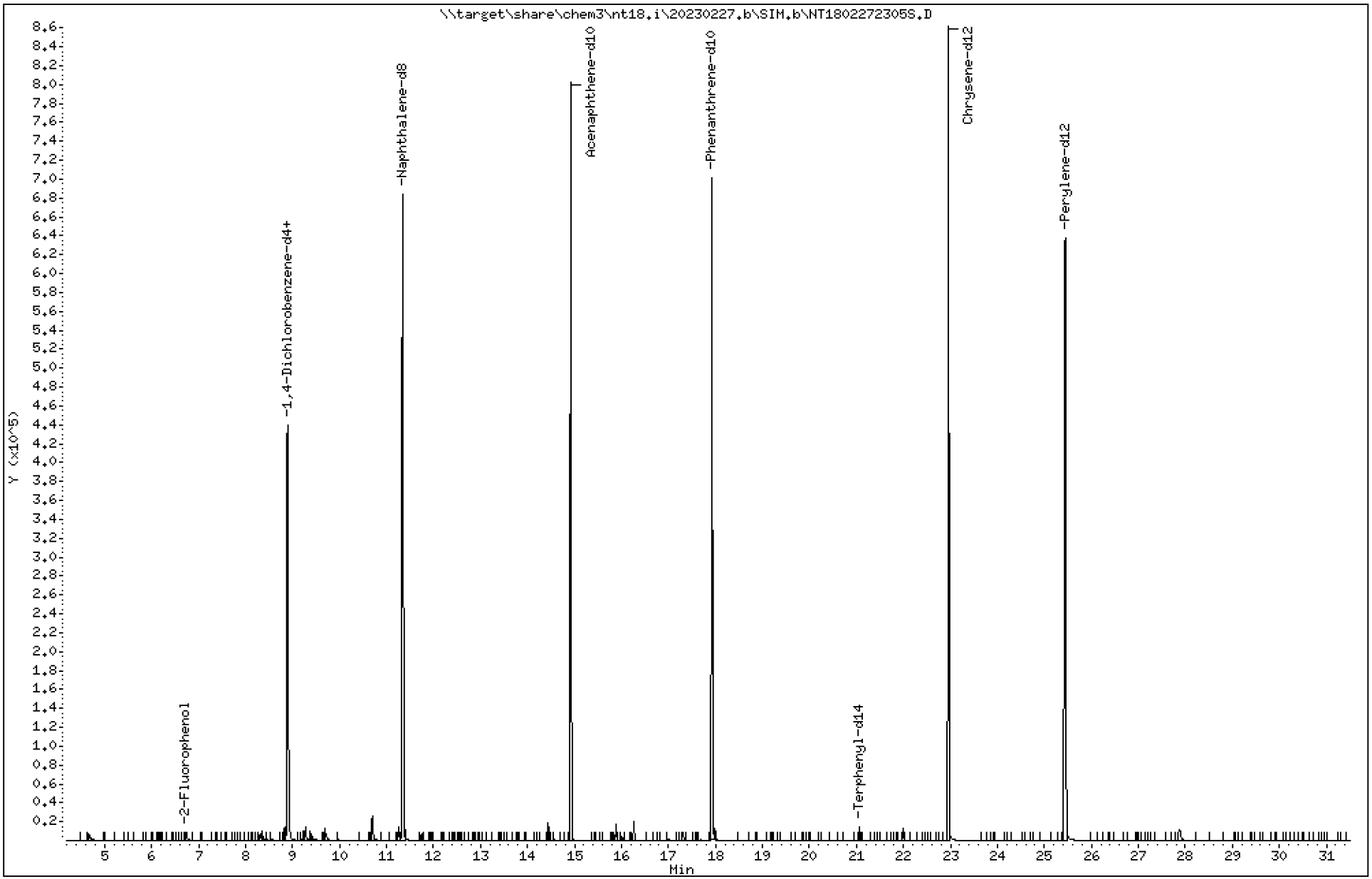
Instrument: nt18.i

Sample Info: SLC0396-LCV1

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

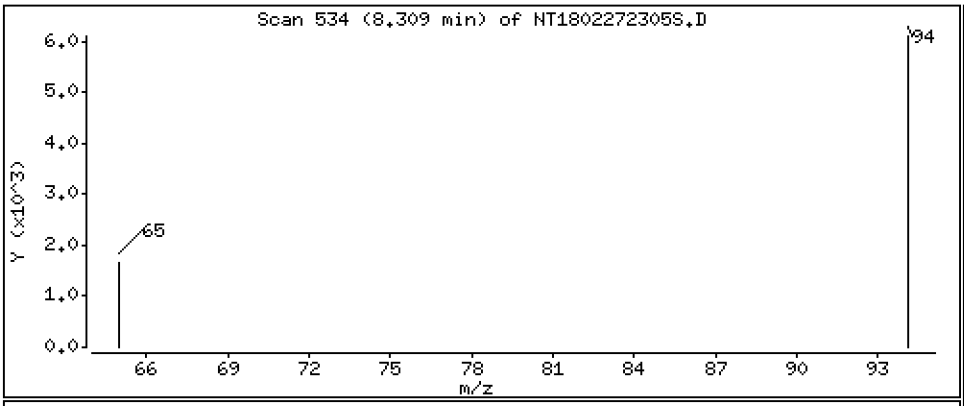
Operator: YZ

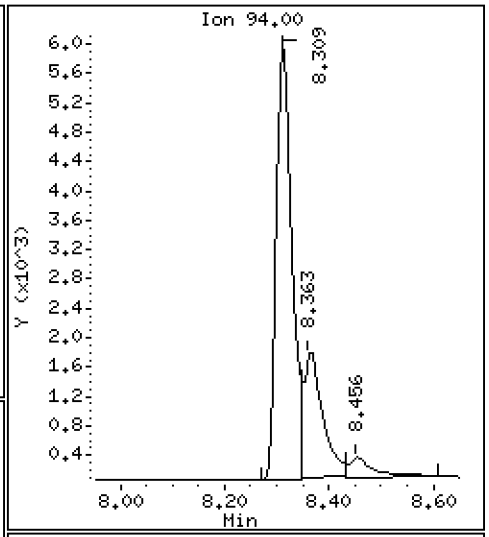
Column phase: ZB-5msi

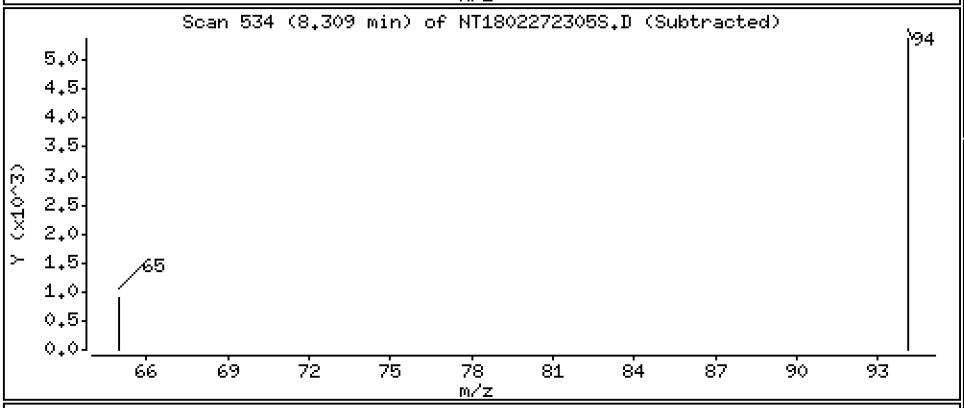
Column diameter: 0.25

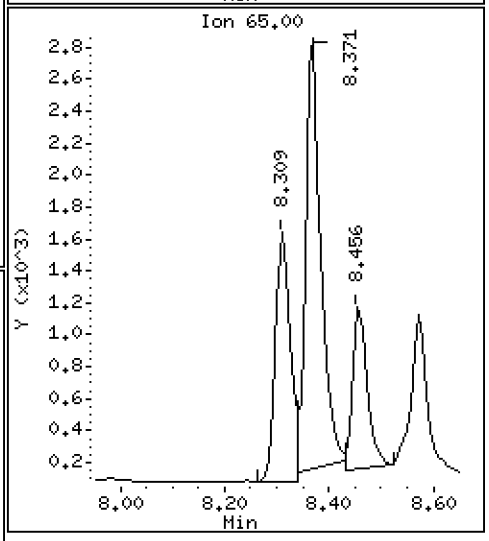
3 Phenol

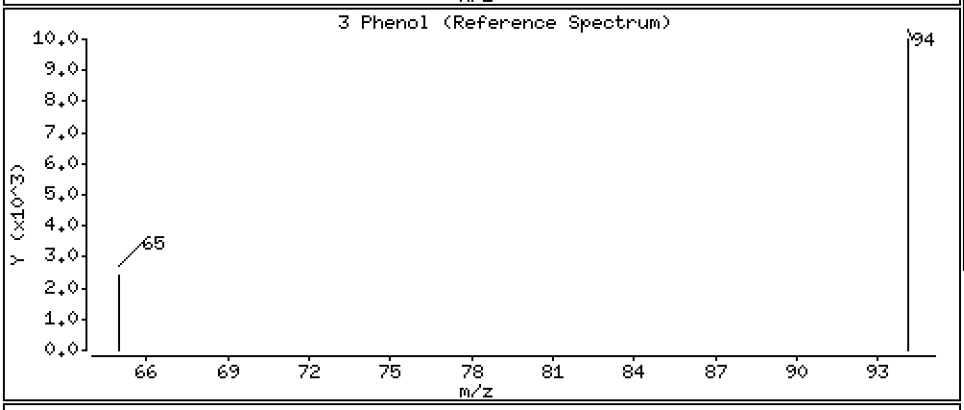
Concentration: 0.09547 ug/mL

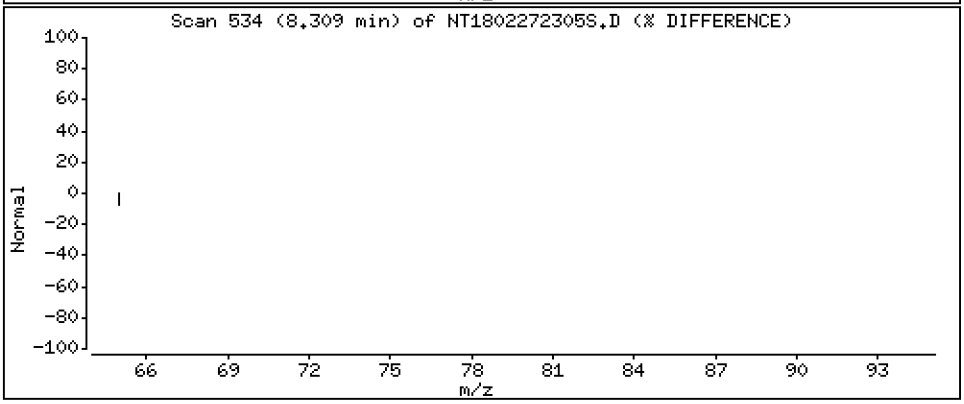












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

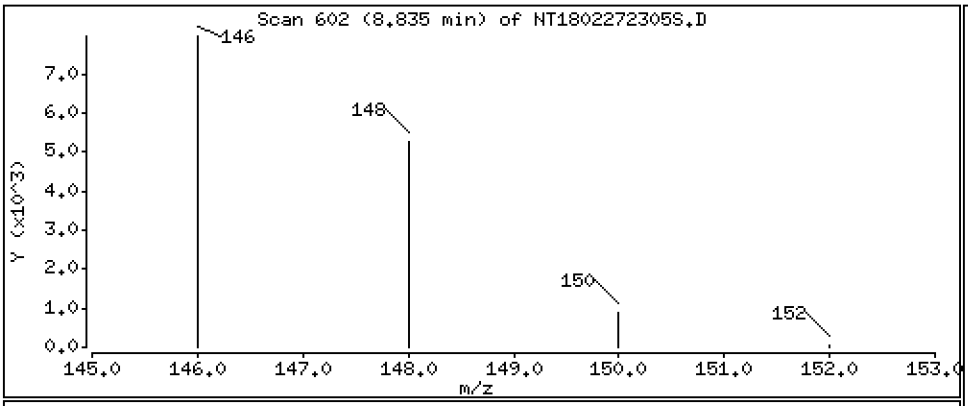
Operator: YZ

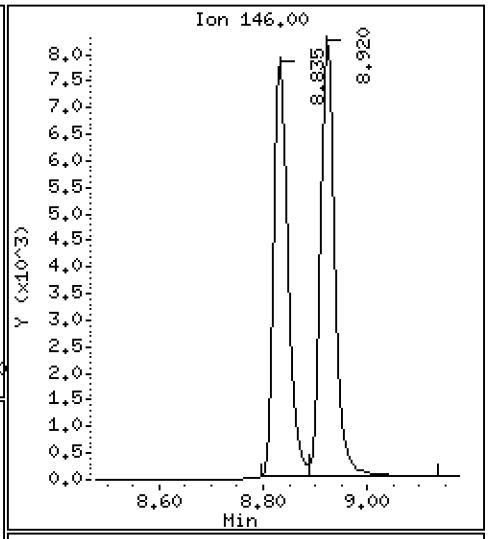
Column phase: ZB-5msi

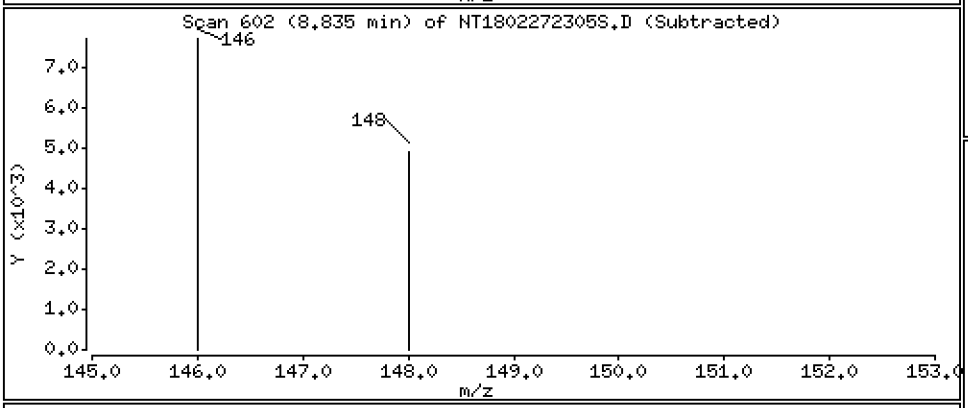
Column diameter: 0.25

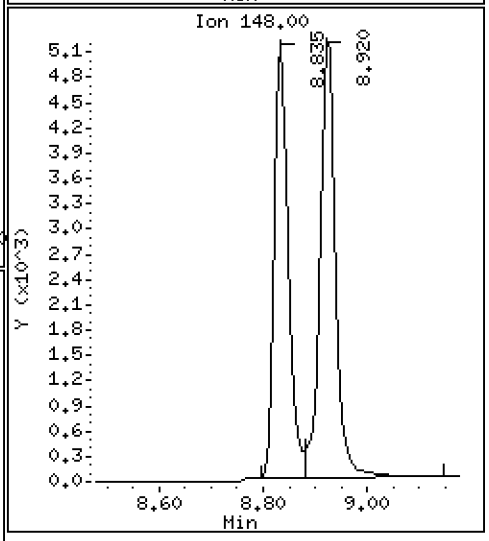
7 1,3-Dichlorobenzene

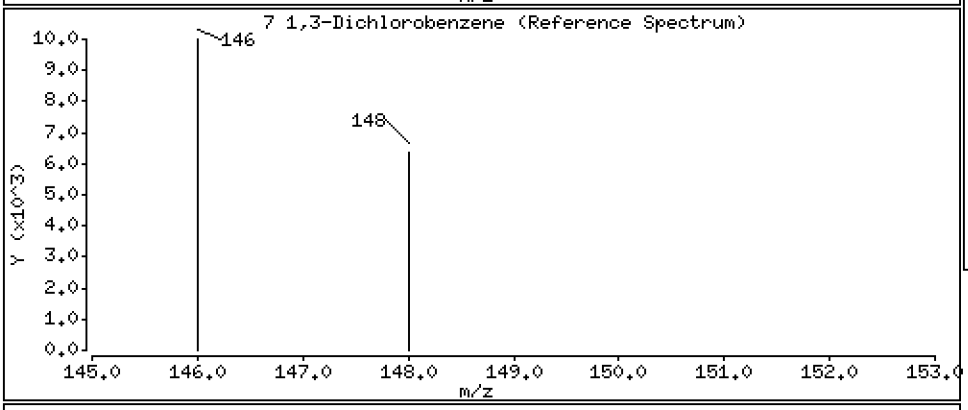
Concentration: 0.1132 ug/mL

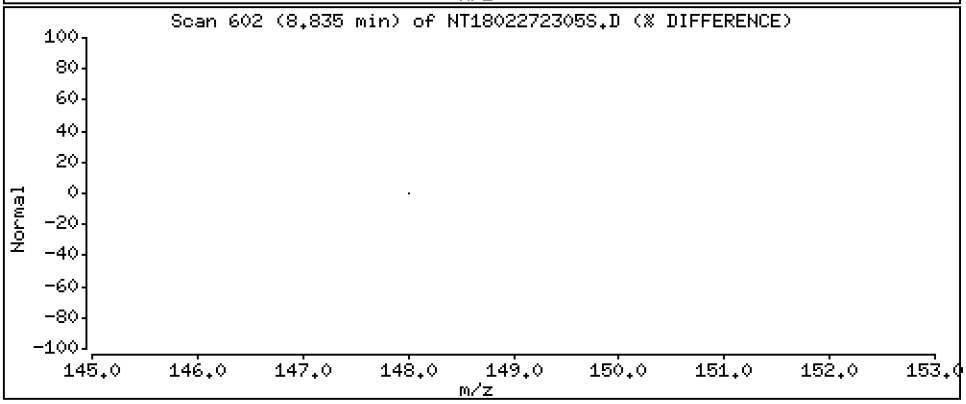












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

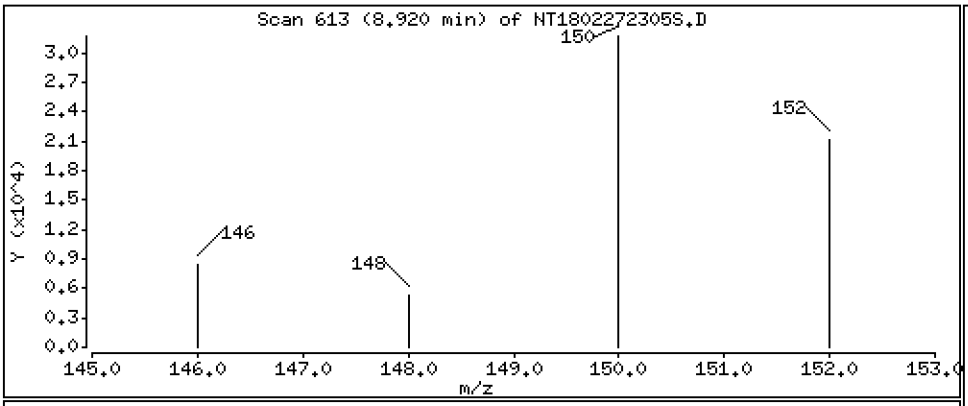
Operator: YZ

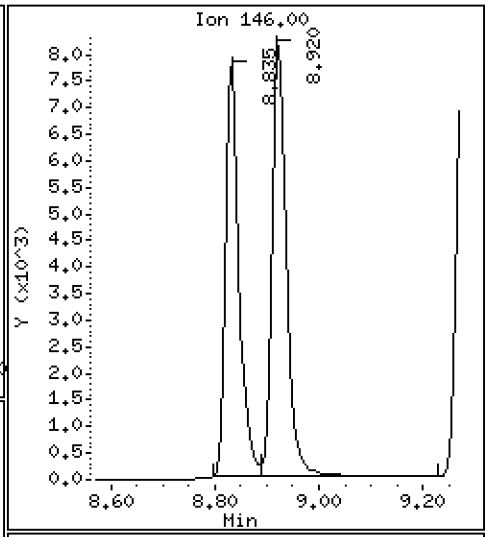
Column phase: ZB-5msi

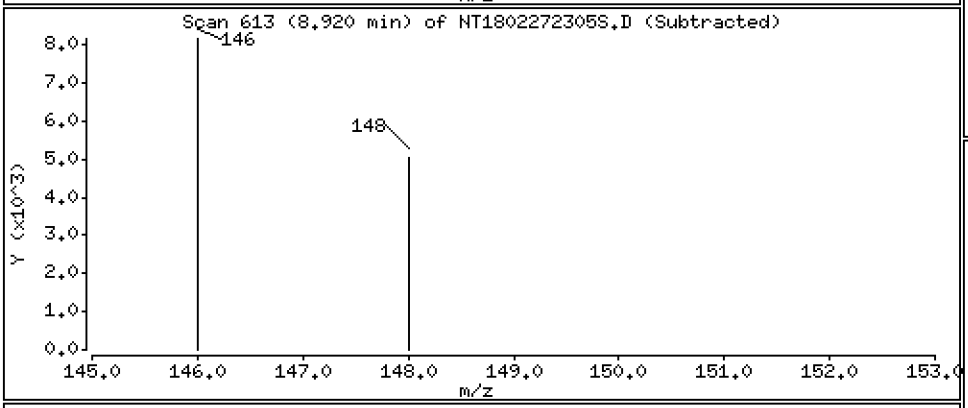
Column diameter: 0.25

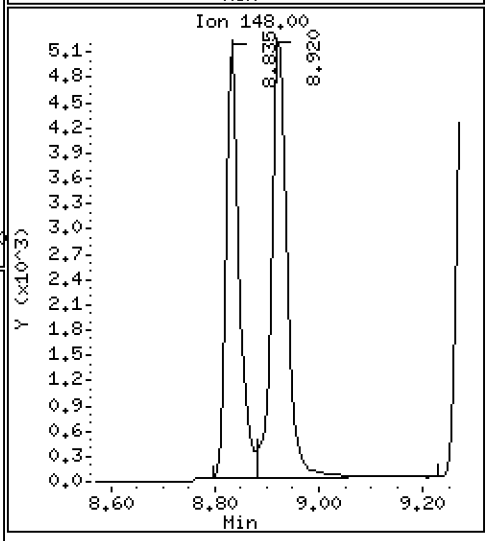
9 1,4-Dichlorobenzene

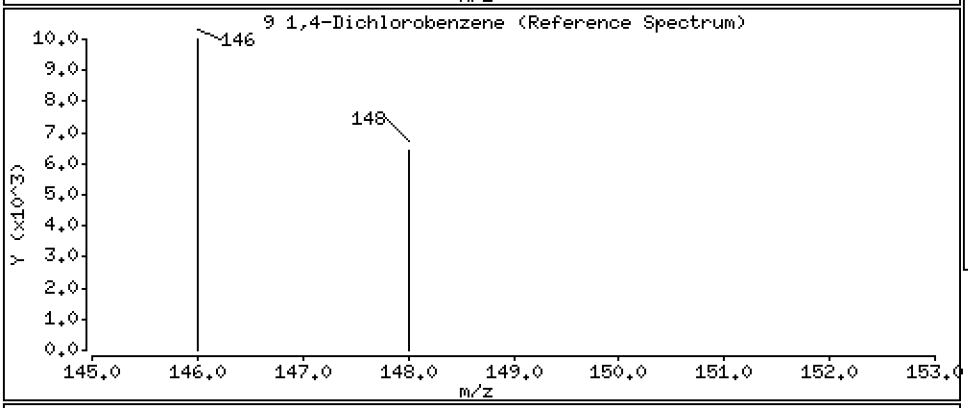
Concentration: 0.1161 ug/mL

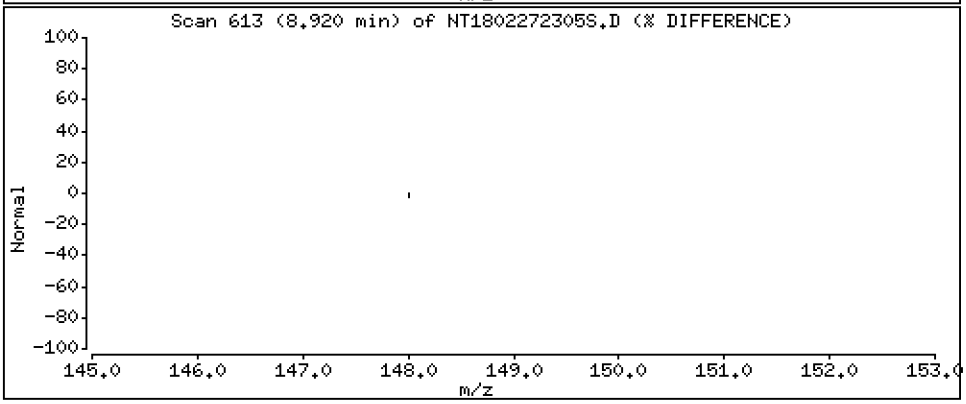












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

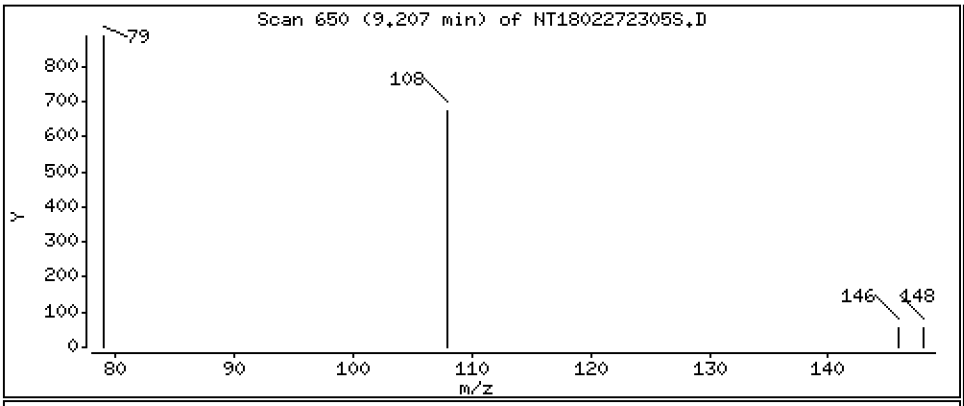
Operator: YZ

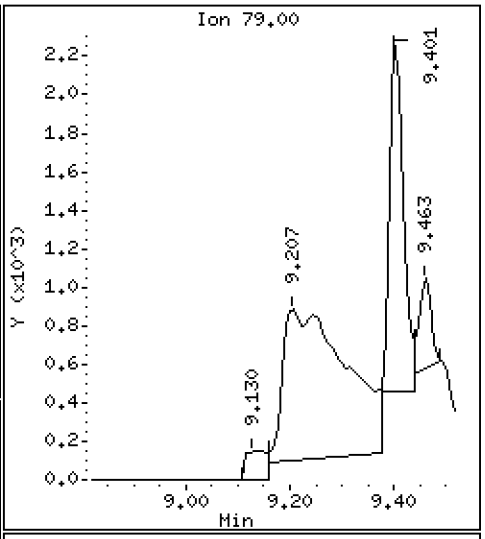
Column phase: ZB-5msi

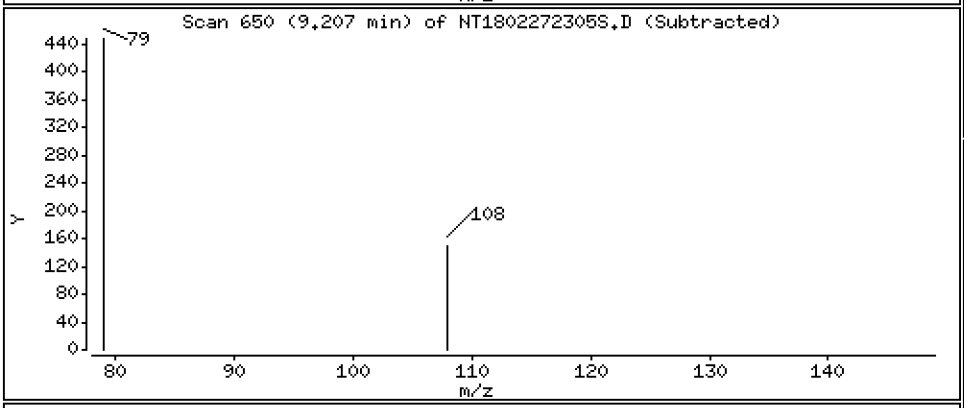
Column diameter: 0.25

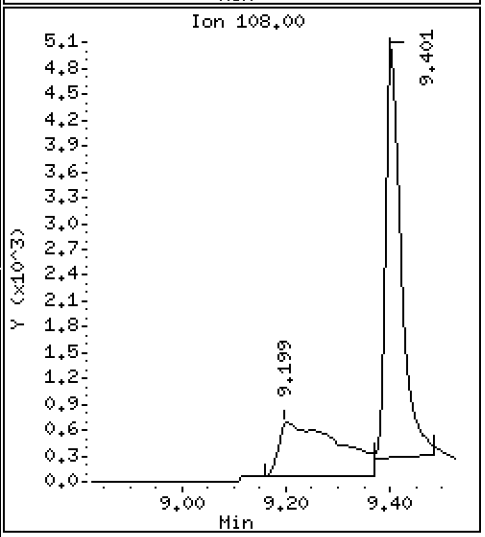
11 Benzyl alcohol

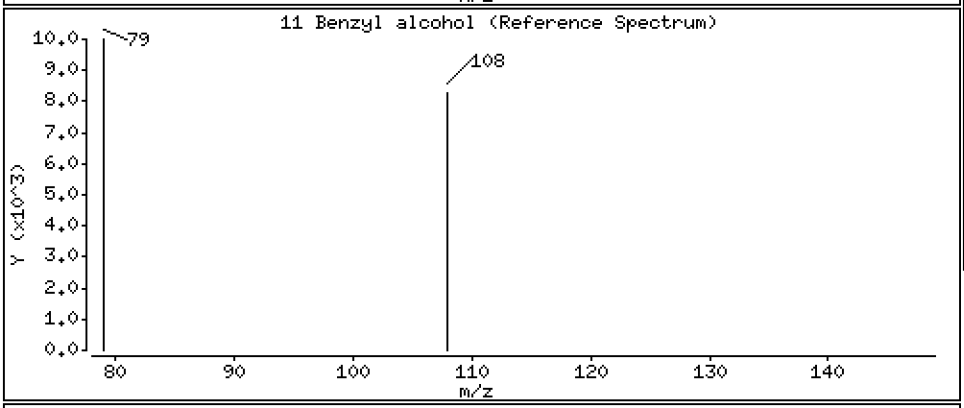
Concentration: 0.08394 ug/mL

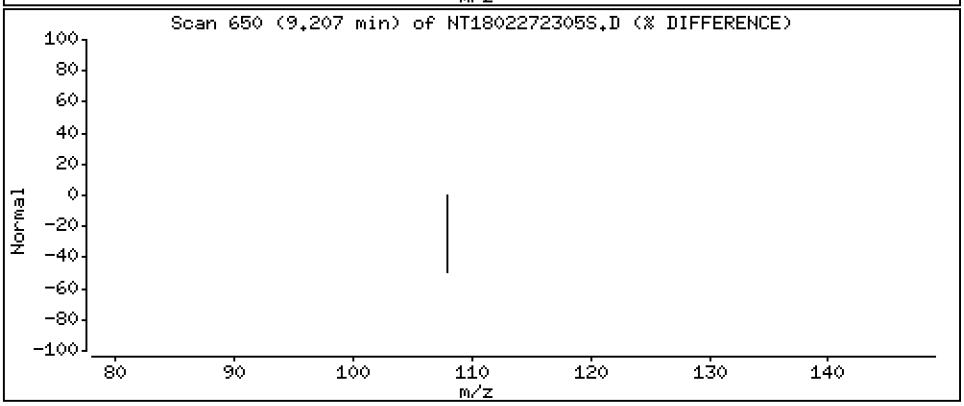












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

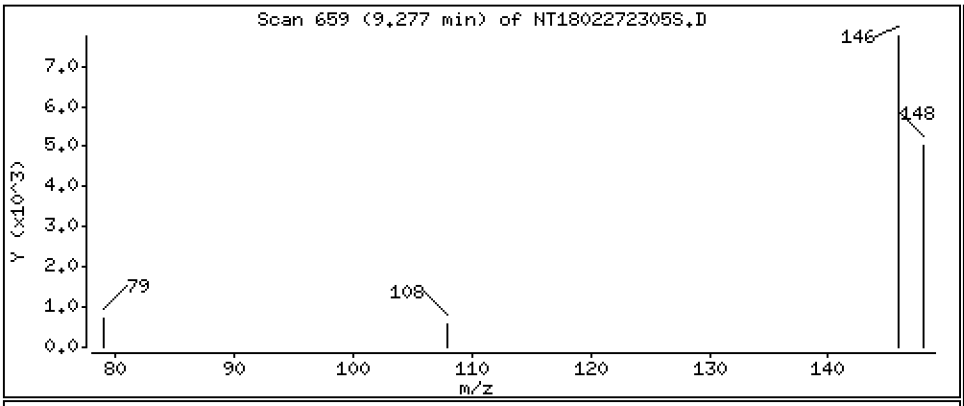
Operator: YZ

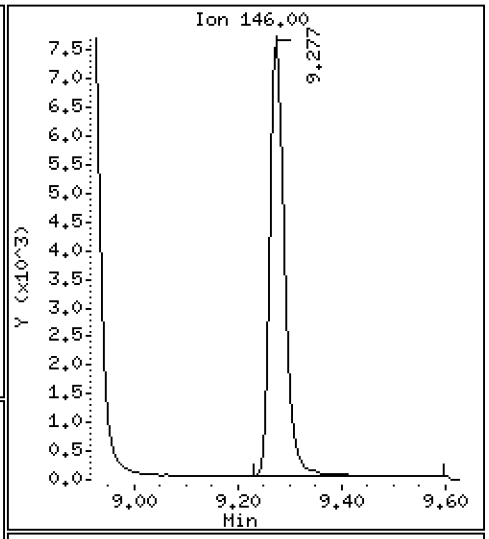
Column phase: ZB-5msi

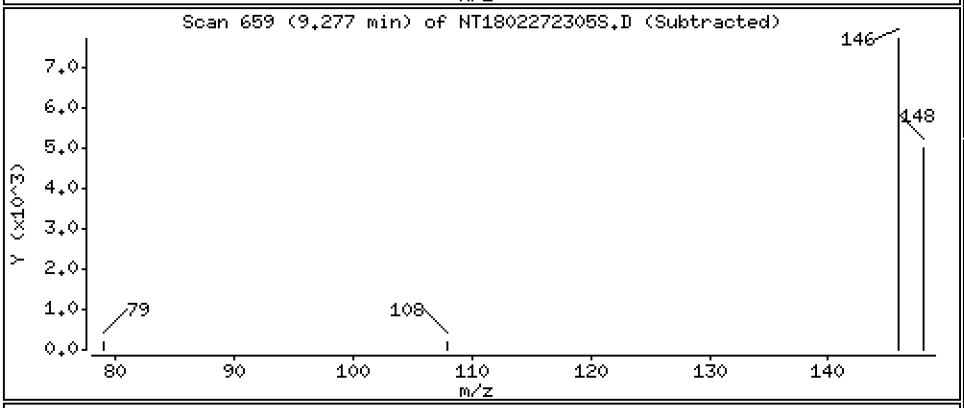
Column diameter: 0.25

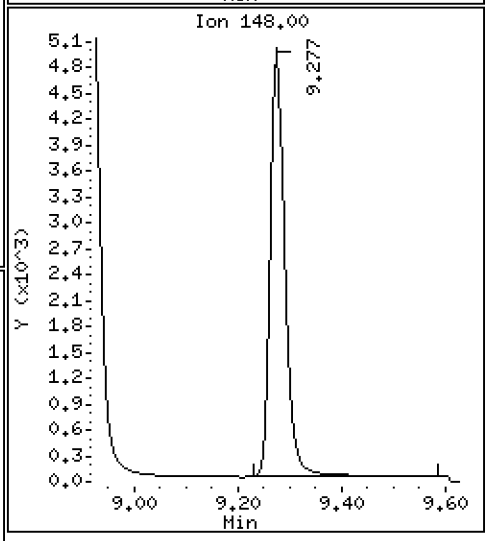
12 1,2-Dichlorobenzene

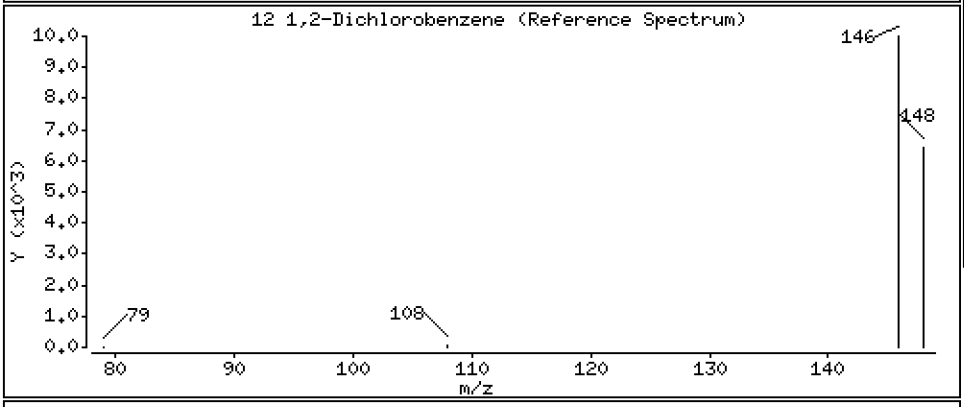
Concentration: 0.1149 ug/mL

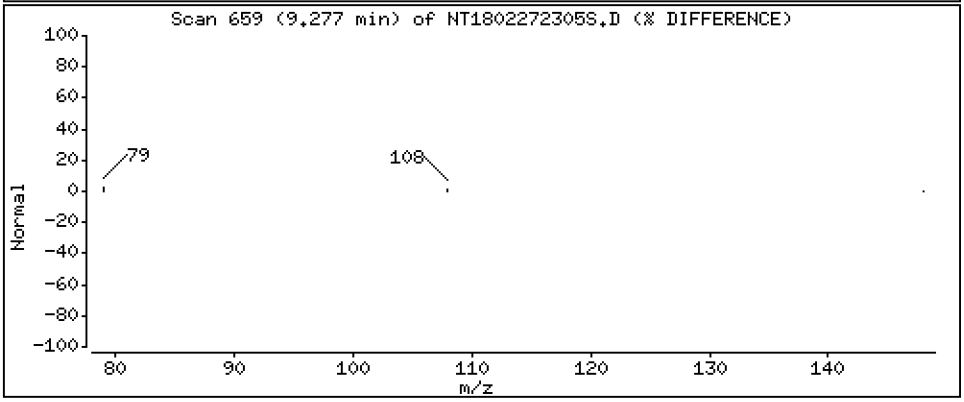












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

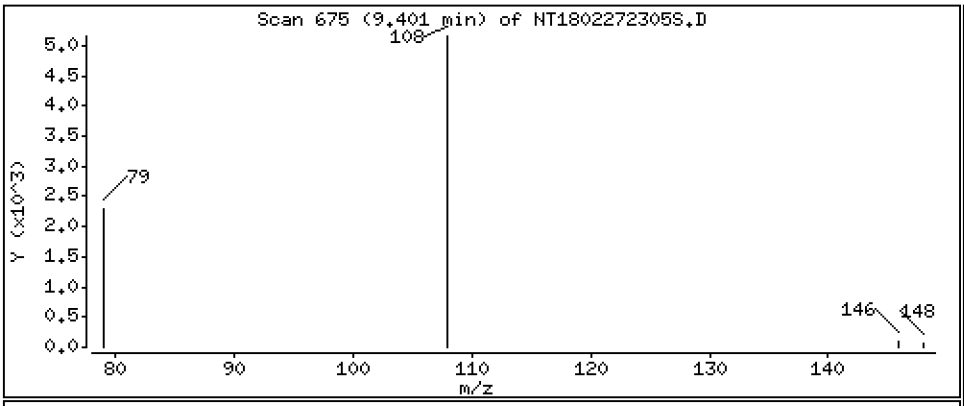
Operator: YZ

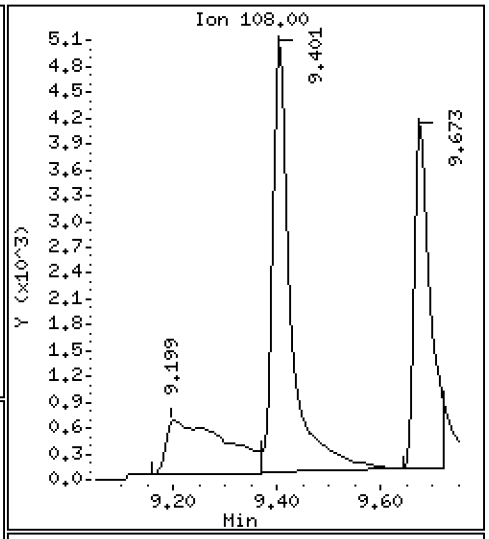
Column phase: ZB-5msi

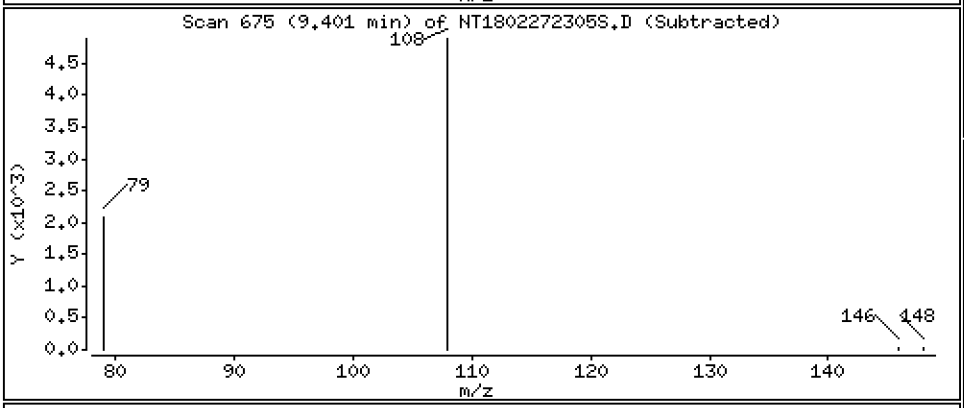
Column diameter: 0.25

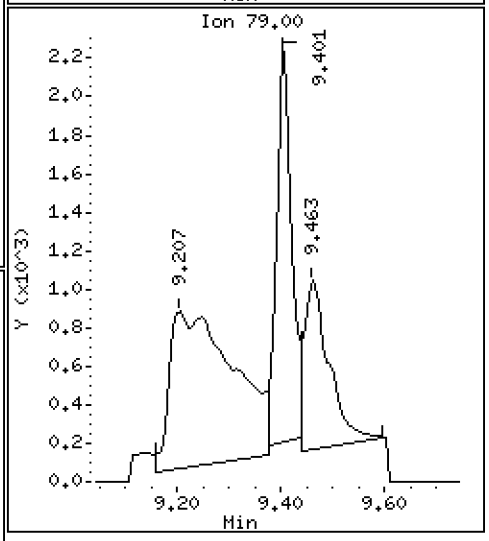
13 2-Methylphenol

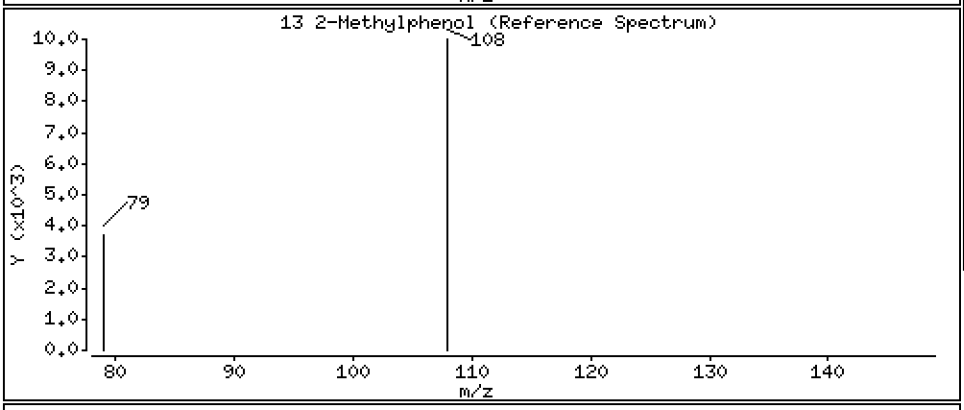
Concentration: 0.1138 ug/mL

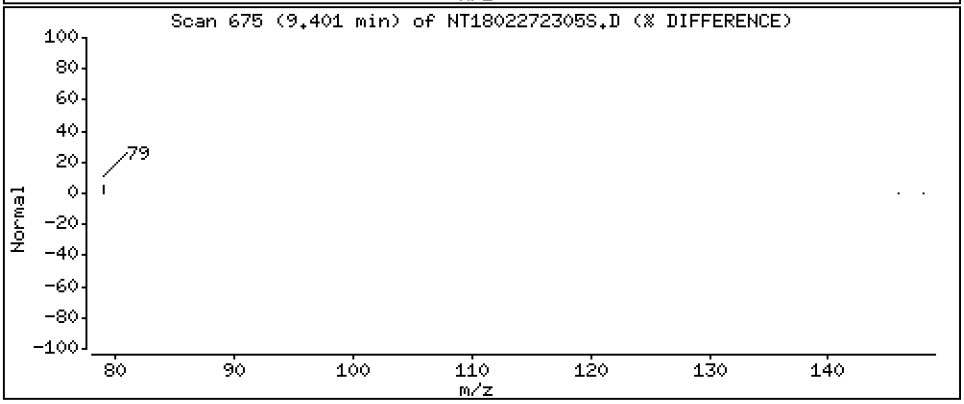












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

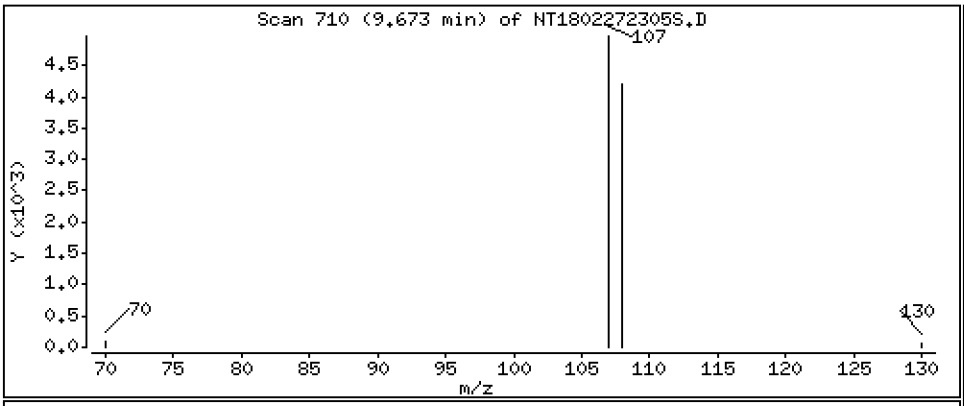
Operator: YZ

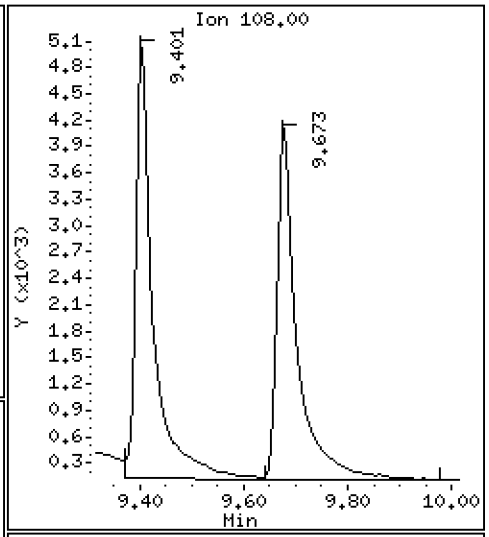
Column phase: ZB-5msi

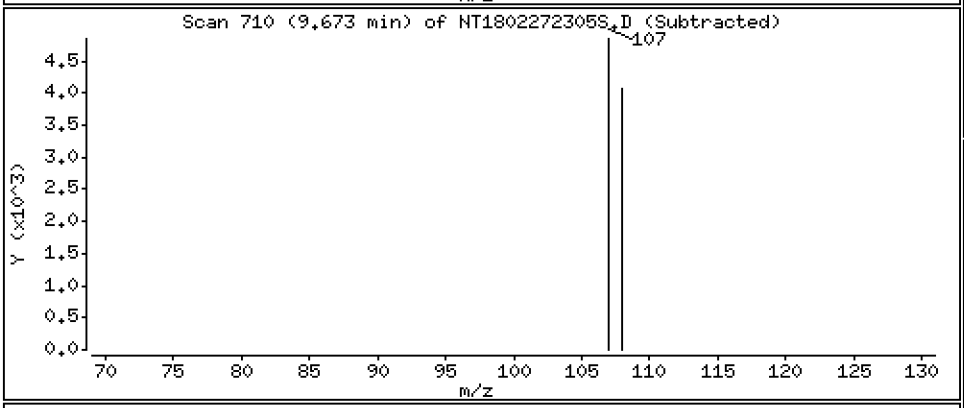
Column diameter: 0.25

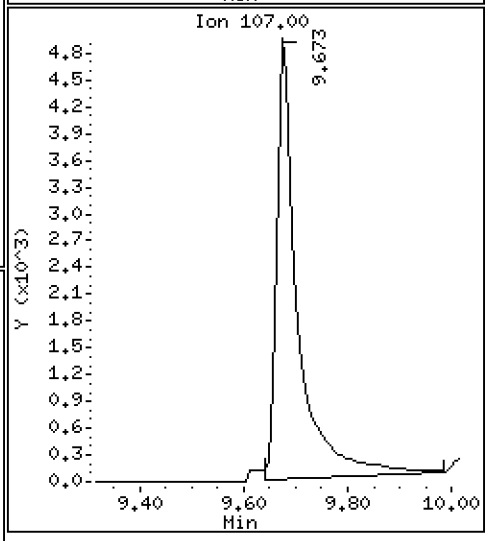
15 4-Methylphenol

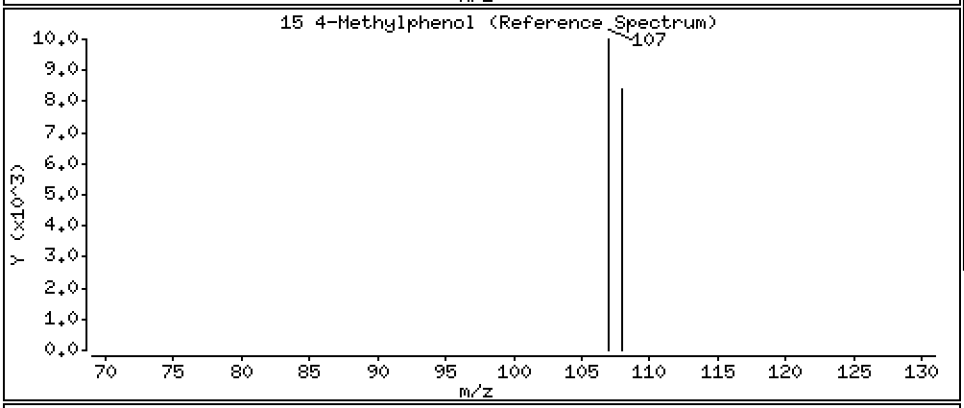
Concentration: 0.1020 ug/mL

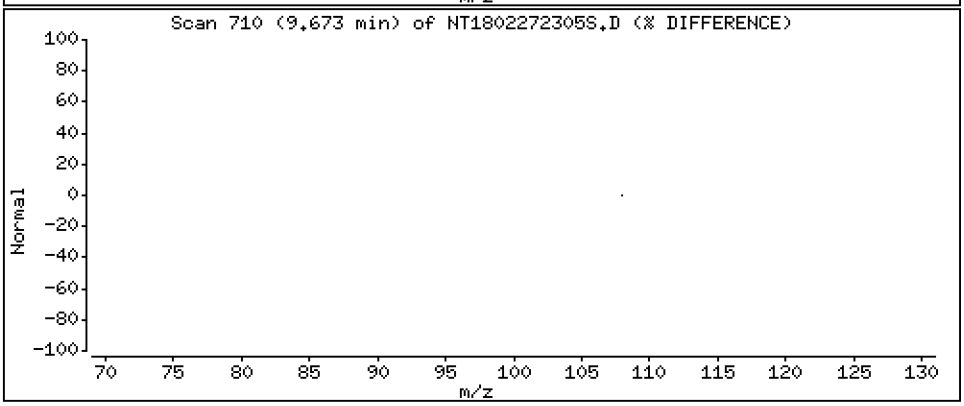












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

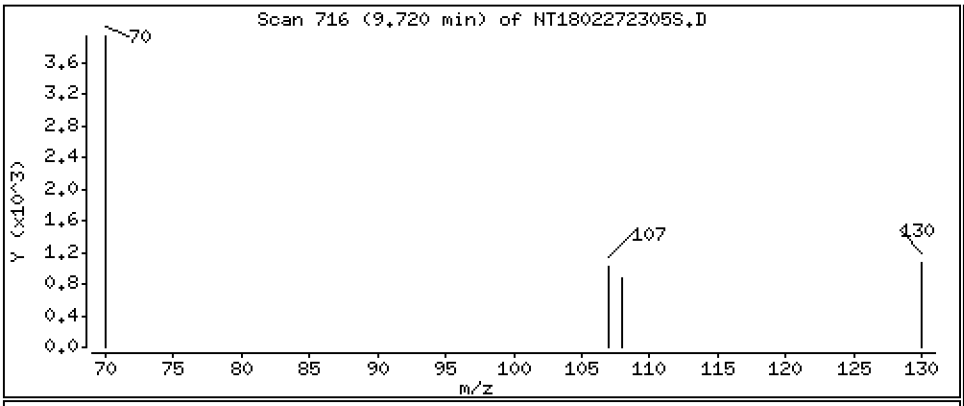
Operator: YZ

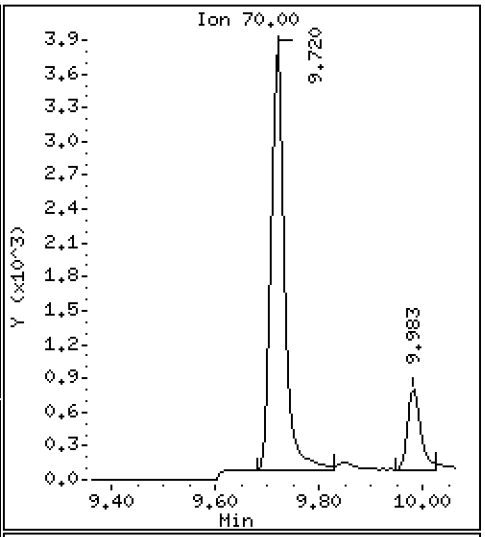
Column phase: ZB-5msi

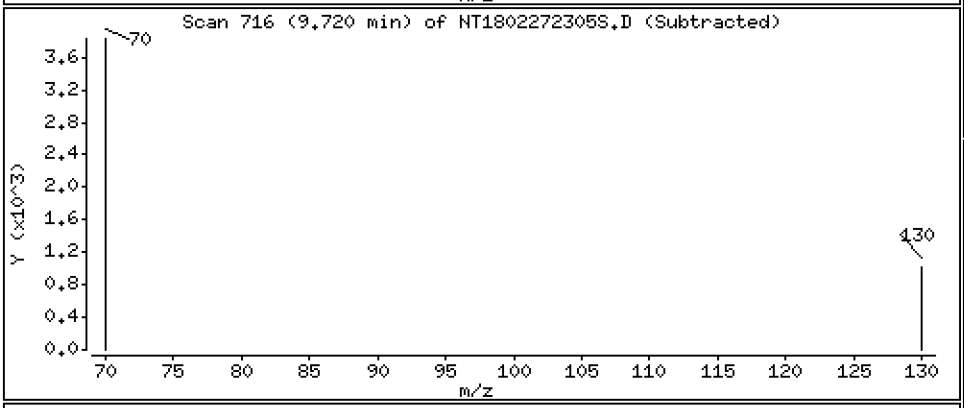
Column diameter: 0.25

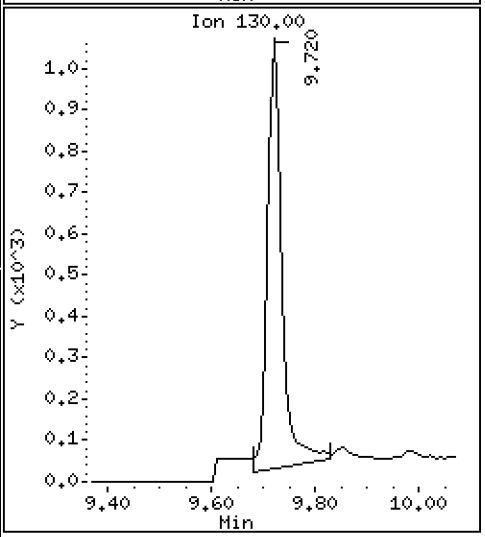
16 N-Nitroso-di-n-propylamine

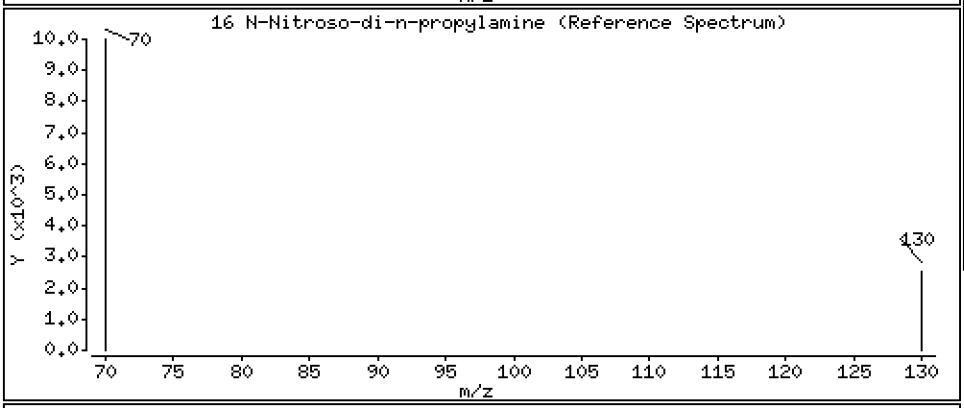
Concentration: 0.09354 ug/mL

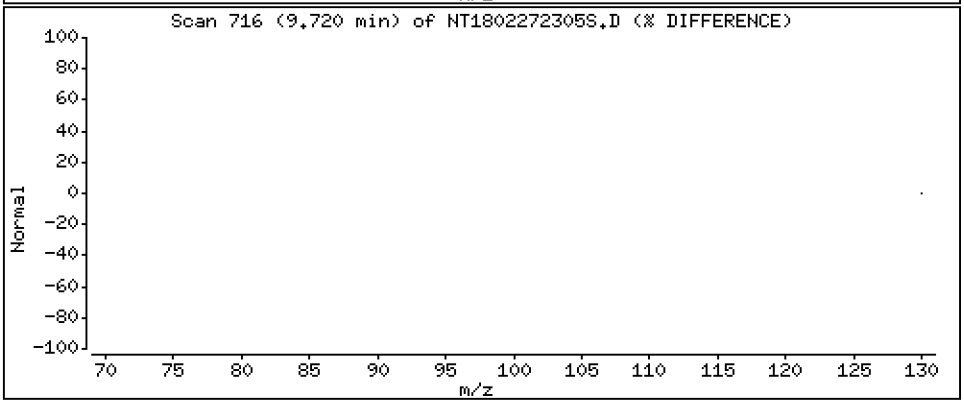












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

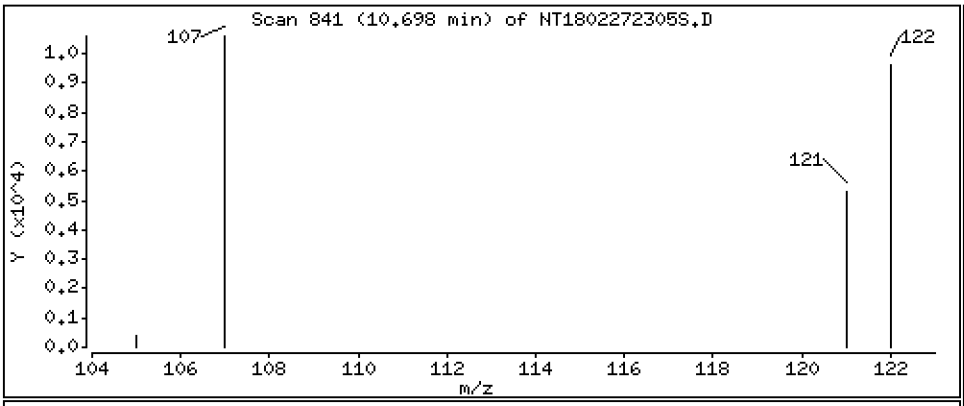
Operator: YZ

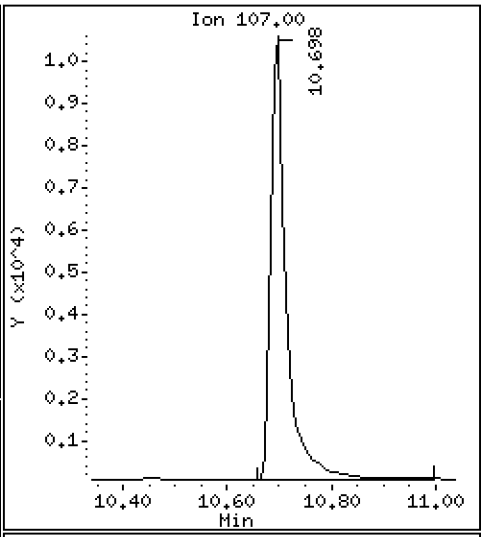
Column phase: ZB-5msi

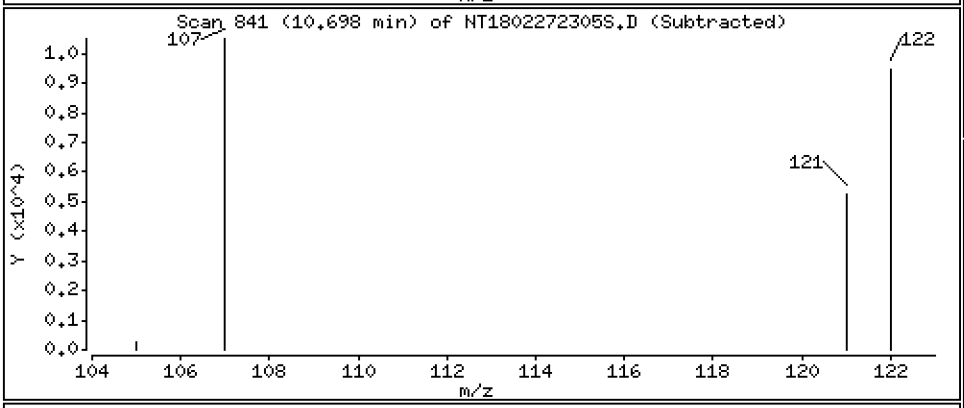
Column diameter: 0.25

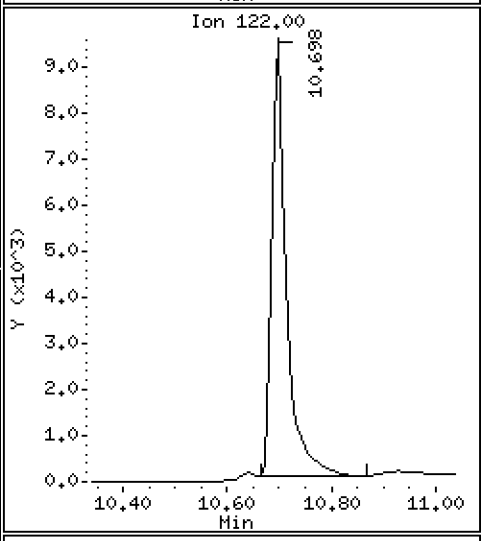
22 2,4-Dimethylphenol

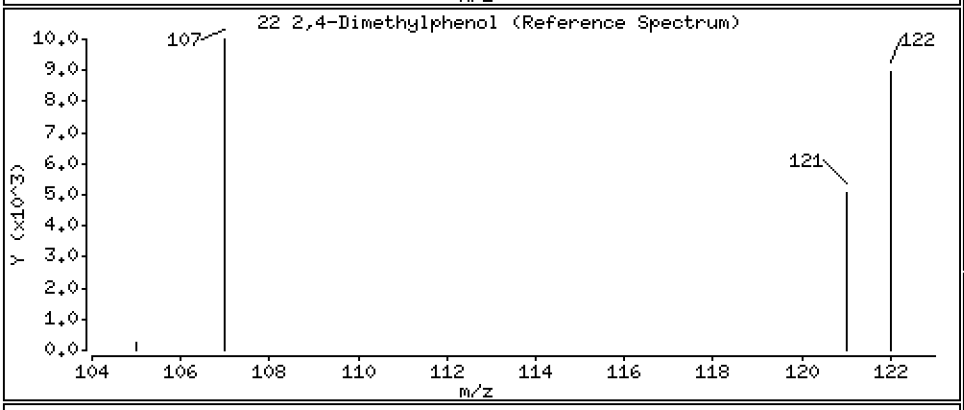
Concentration: 0.2145 ug/mL

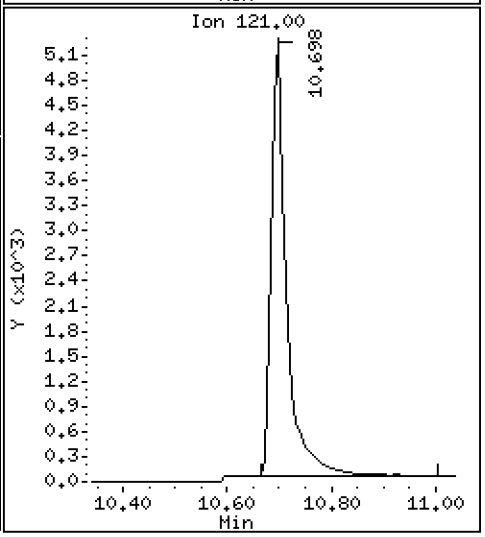


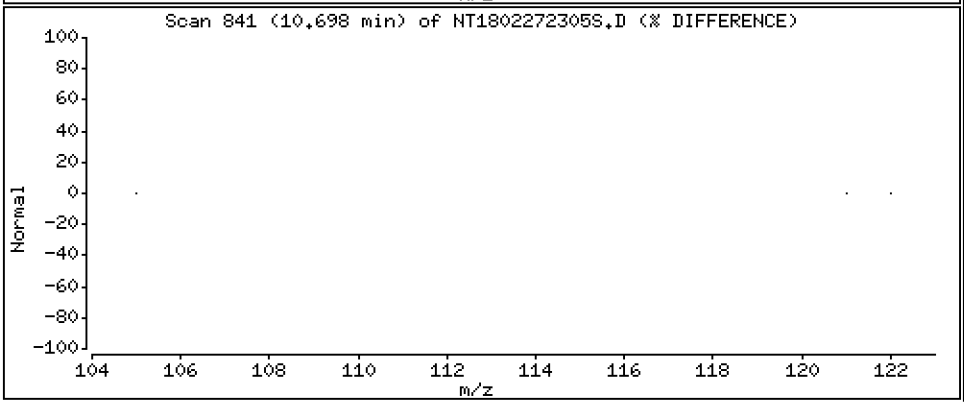












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Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

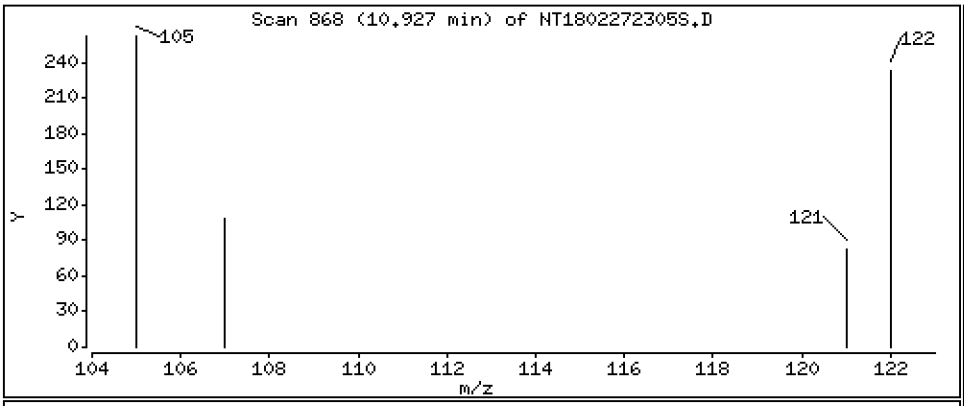
Operator: YZ

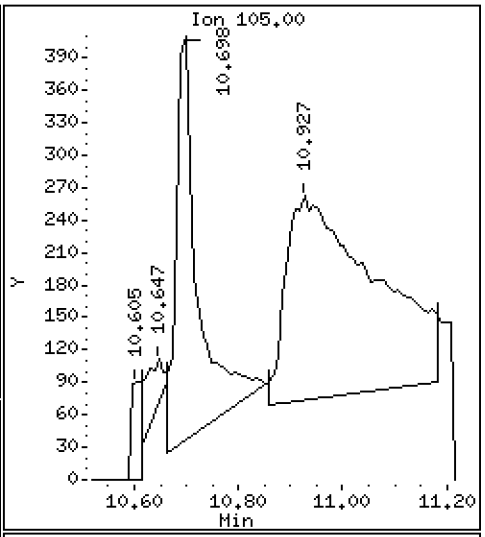
Column phase: ZB-5msi

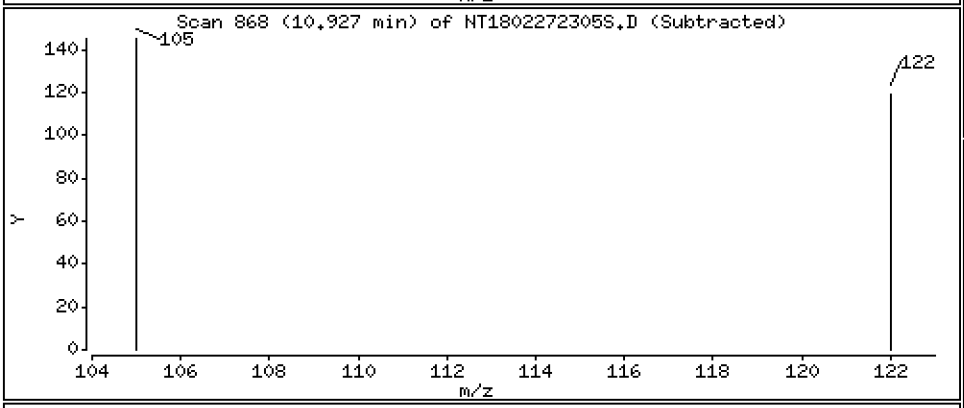
Column diameter: 0.25

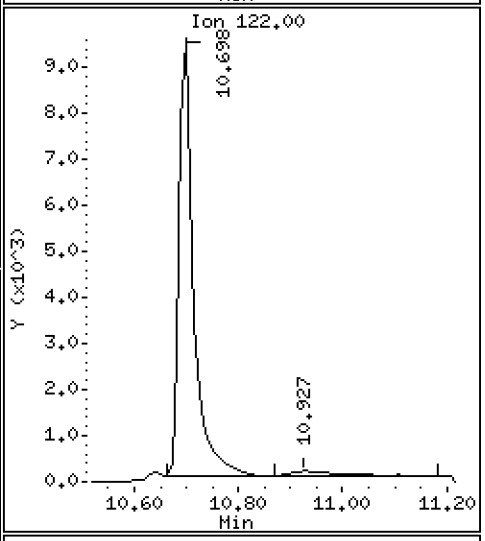
24 Benzoic acid

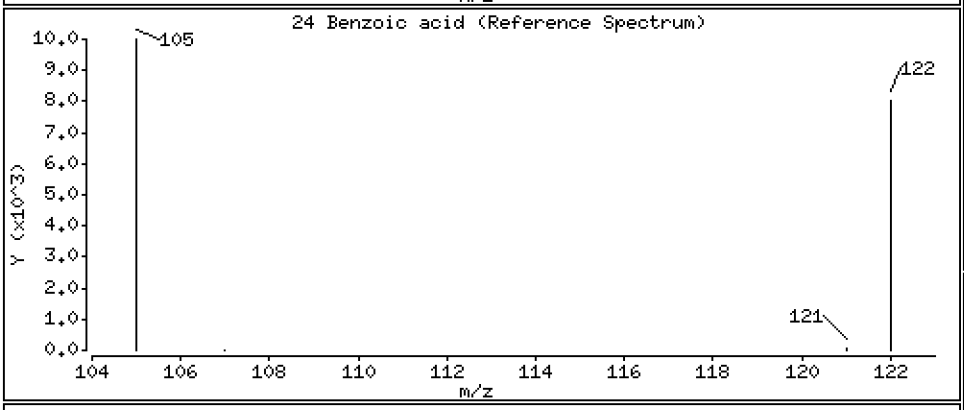
Concentration: 0.05462 ug/mL

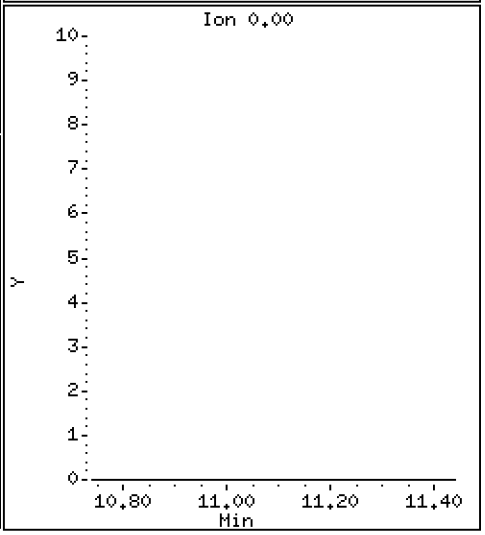


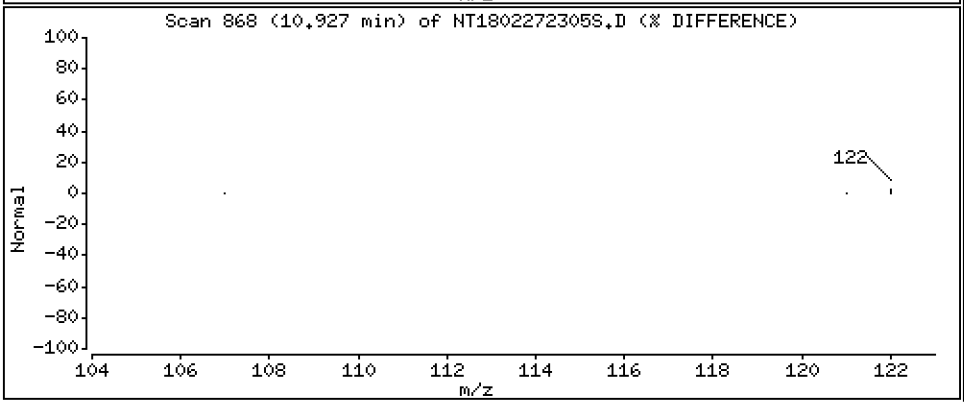












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Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

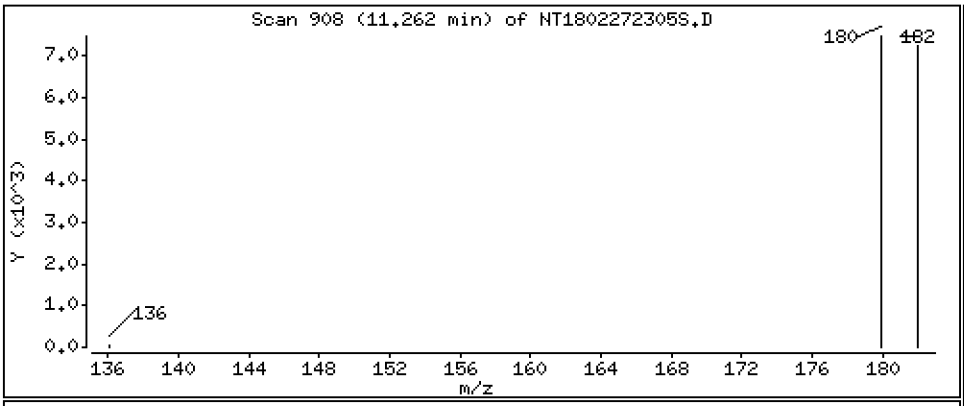
Operator: YZ

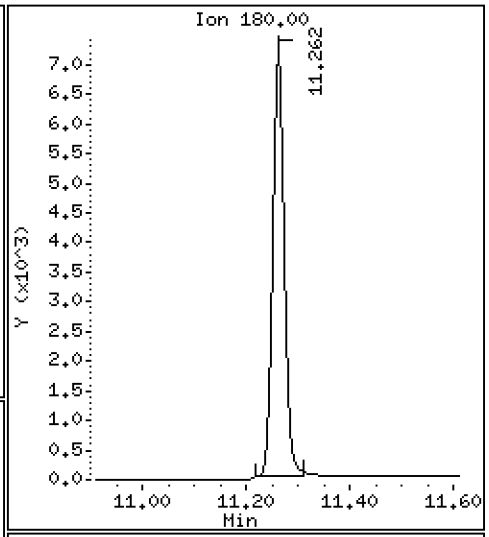
Column phase: ZB-5msi

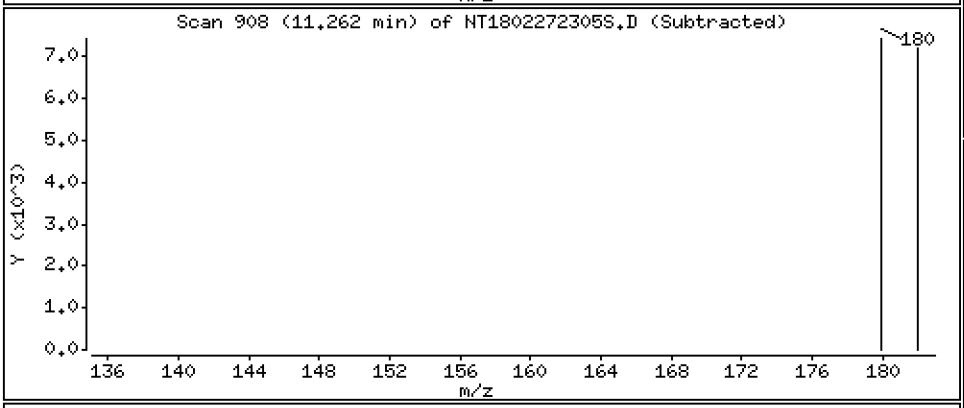
Column diameter: 0.25

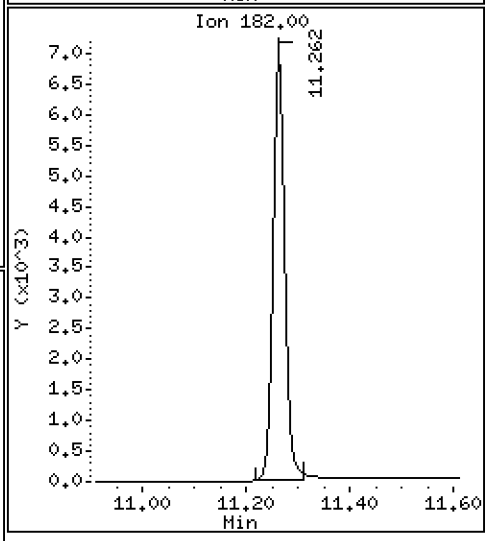
26 1,2,4-Trichlorobenzene

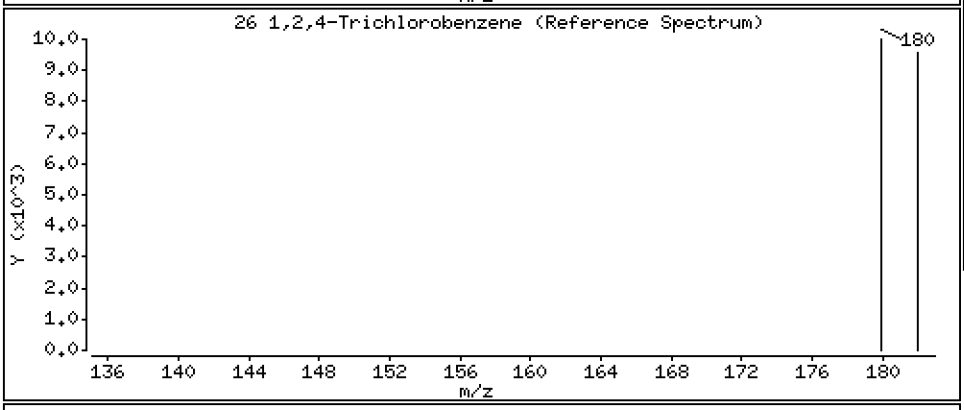
Concentration: 0.1111 ug/mL

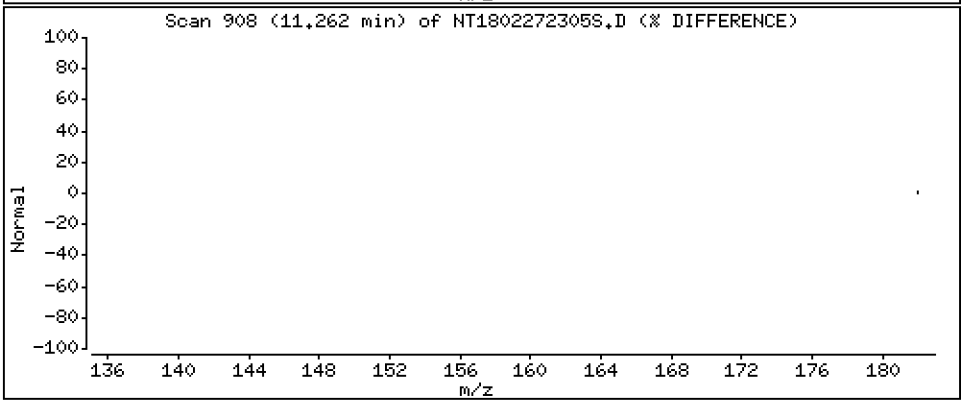












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Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

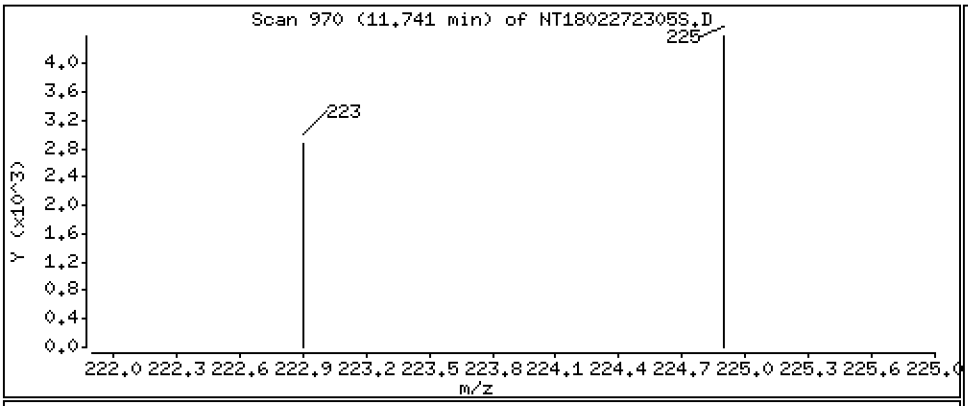
Operator: YZ

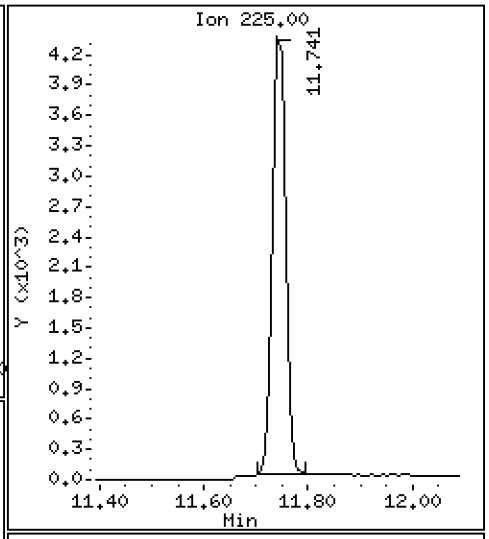
Column phase: ZB-5msi

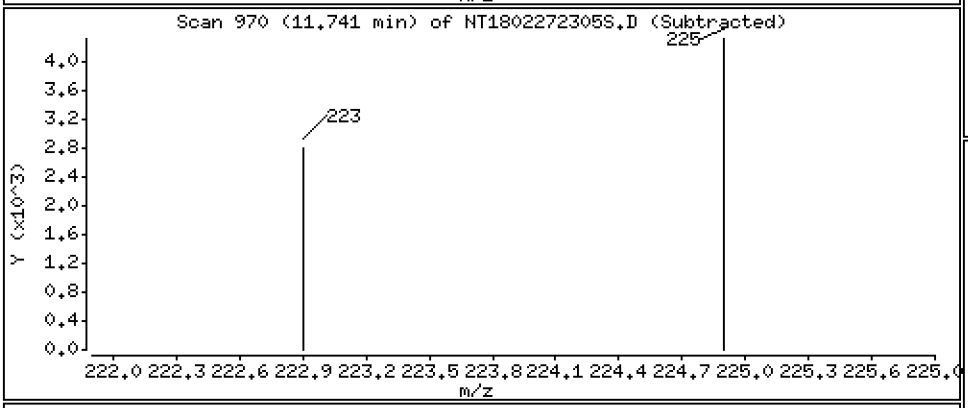
Column diameter: 0.25

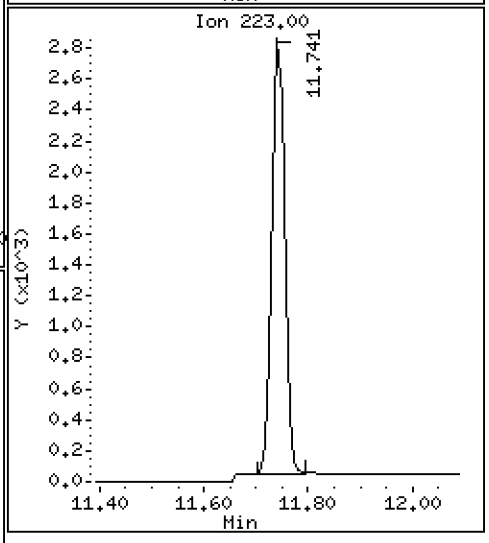
30 Hexachlorobutadiene

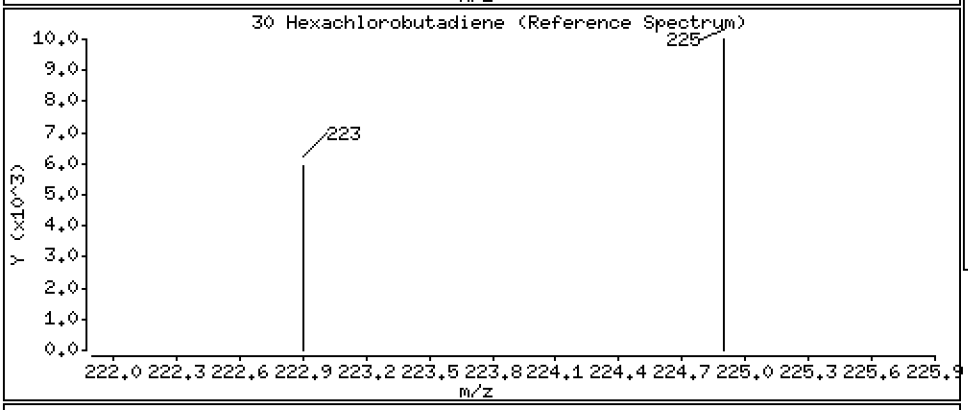
Concentration: 0.1158 ug/mL

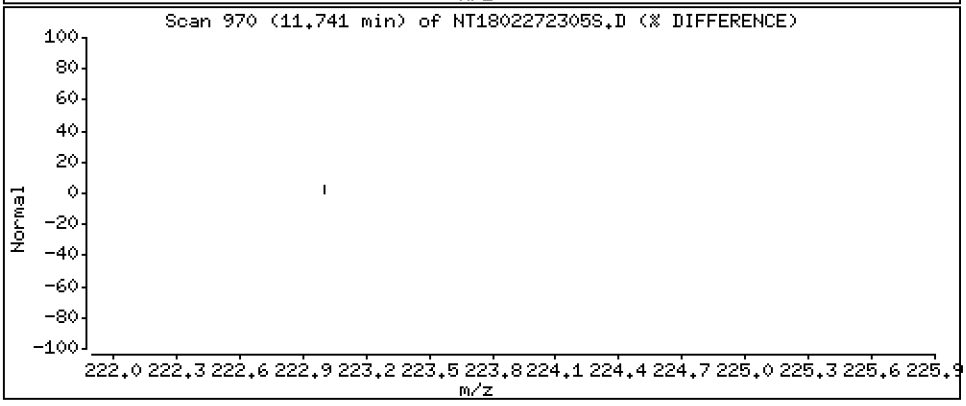












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Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

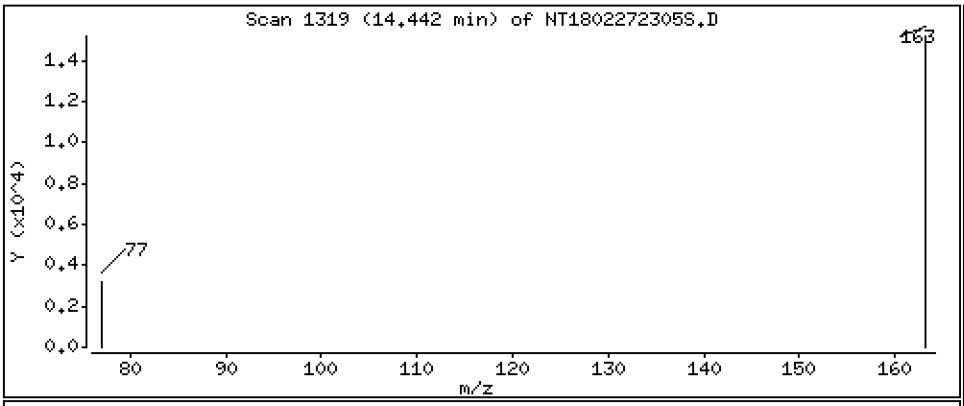
Operator: YZ

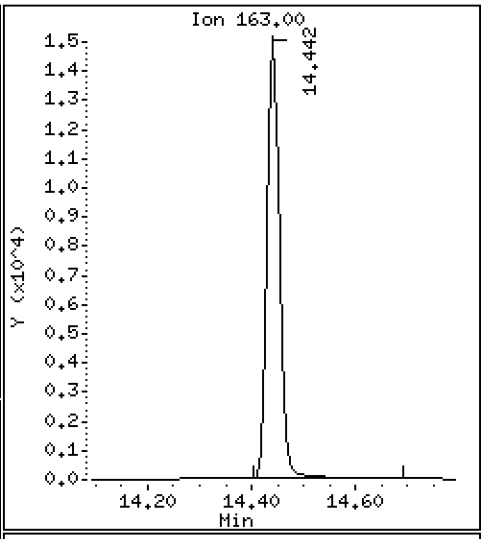
Column phase: ZB-5msi

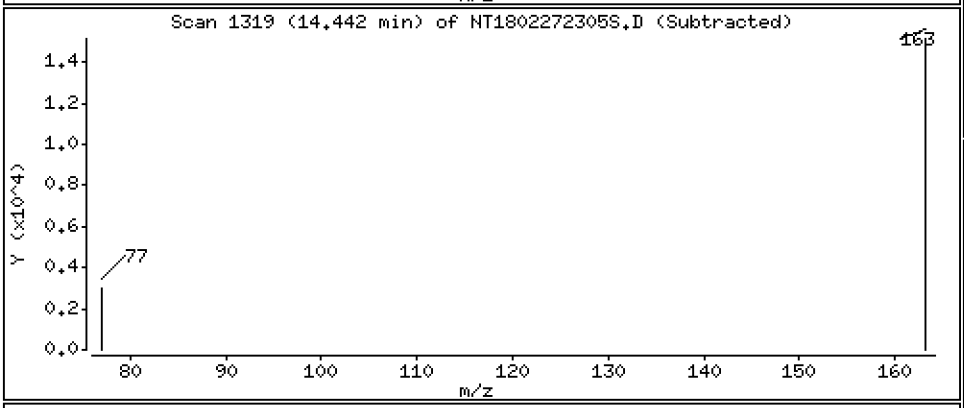
Column diameter: 0.25

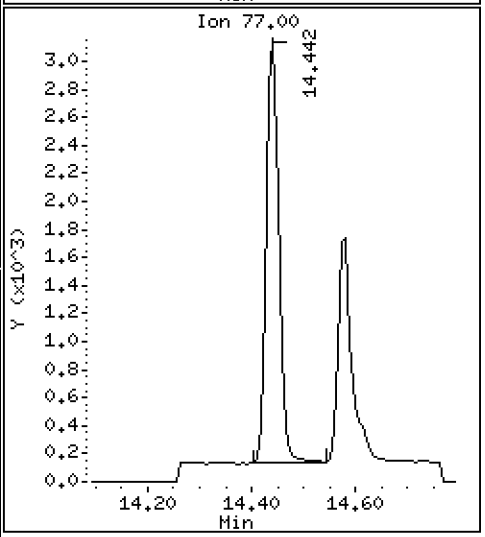
39 Dimethylphthalate

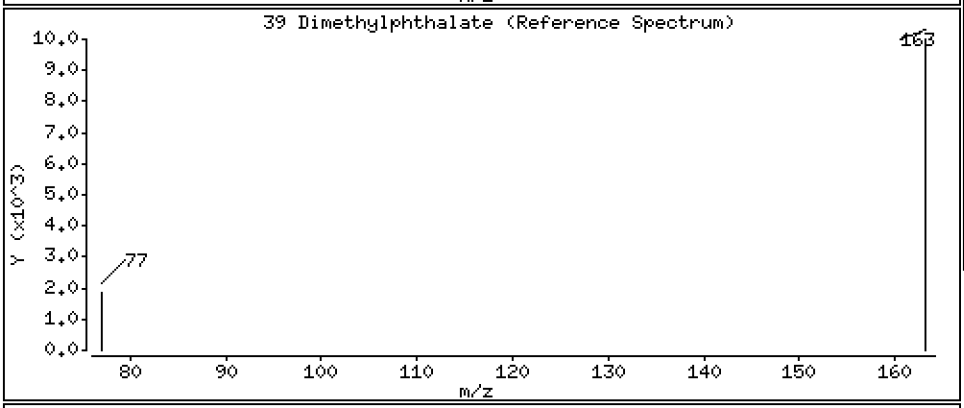
Concentration: 0.1045 ug/mL

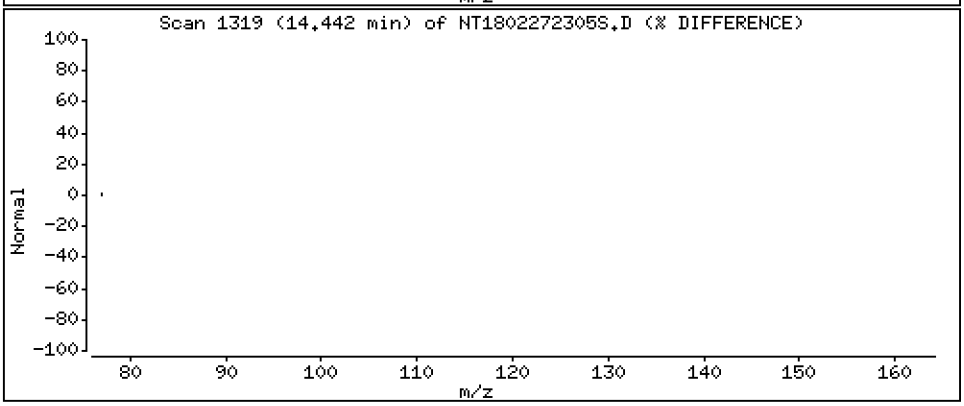












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Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

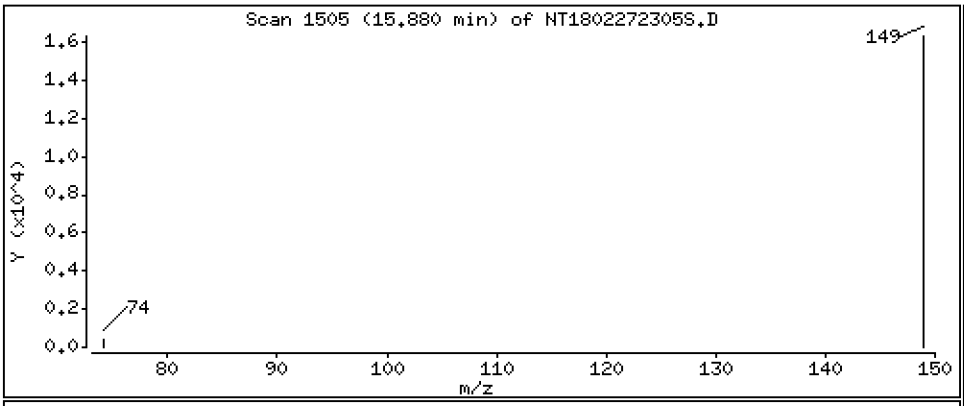
Operator: YZ

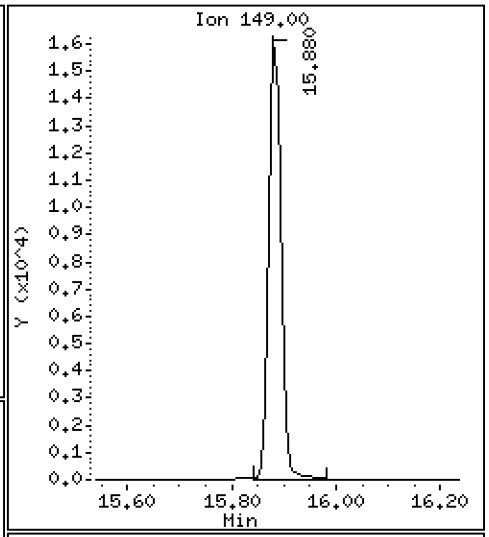
Column phase: ZB-5msi

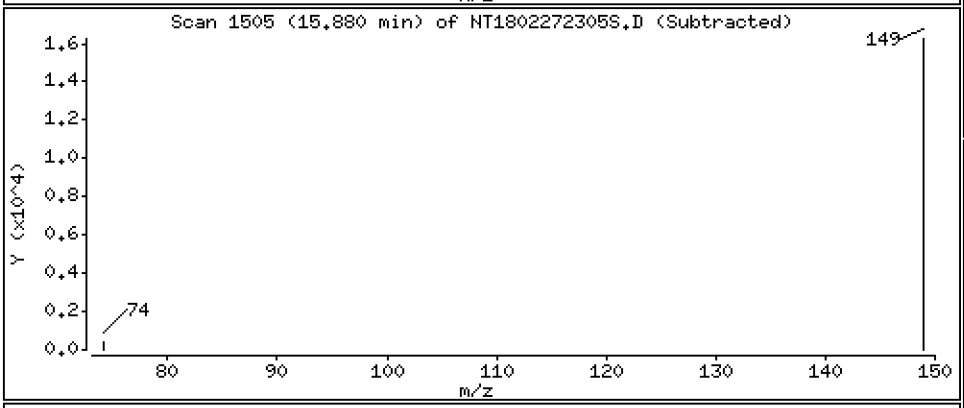
Column diameter: 0.25

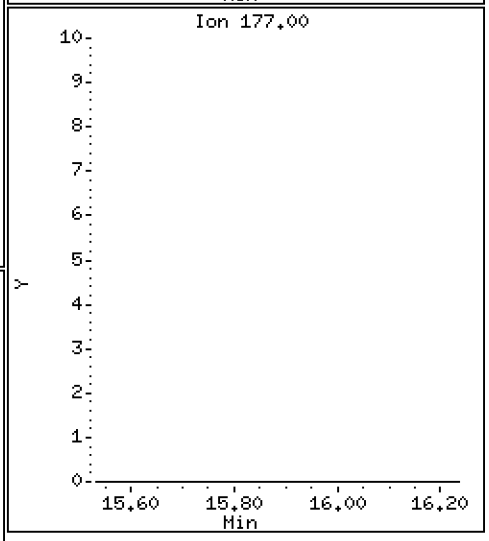
50 Diethylphthalate

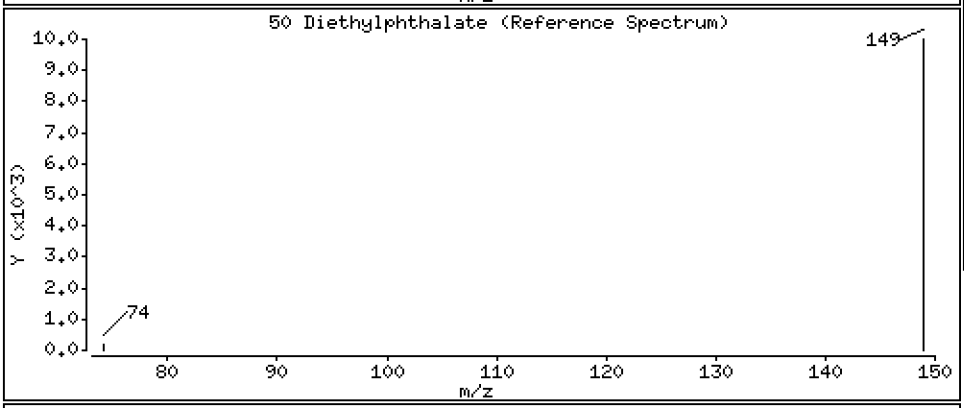
Concentration: 0.1217 ug/mL

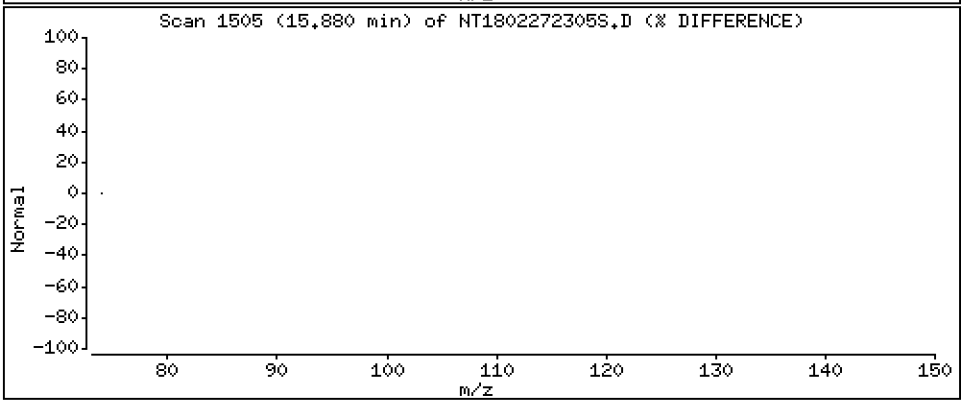












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

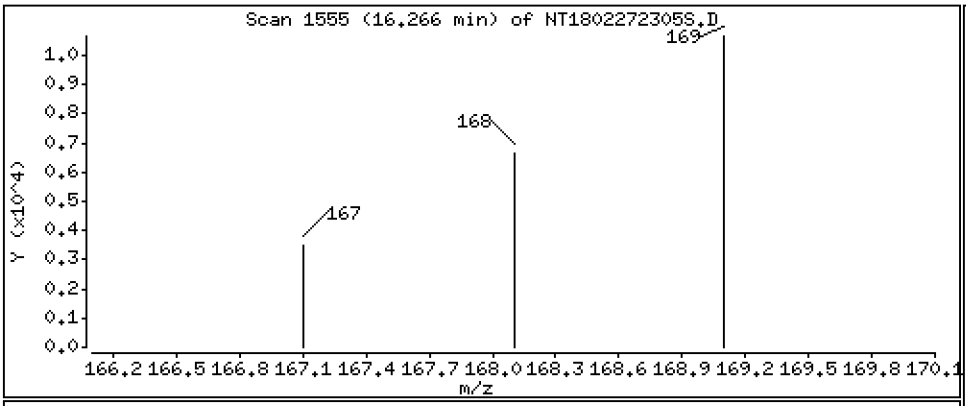
Operator: YZ

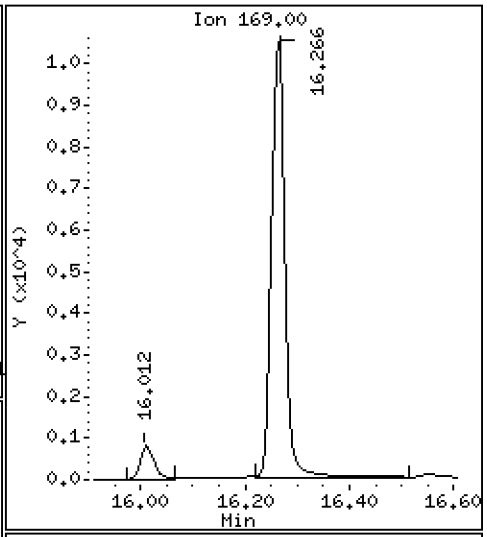
Column phase: ZB-5msi

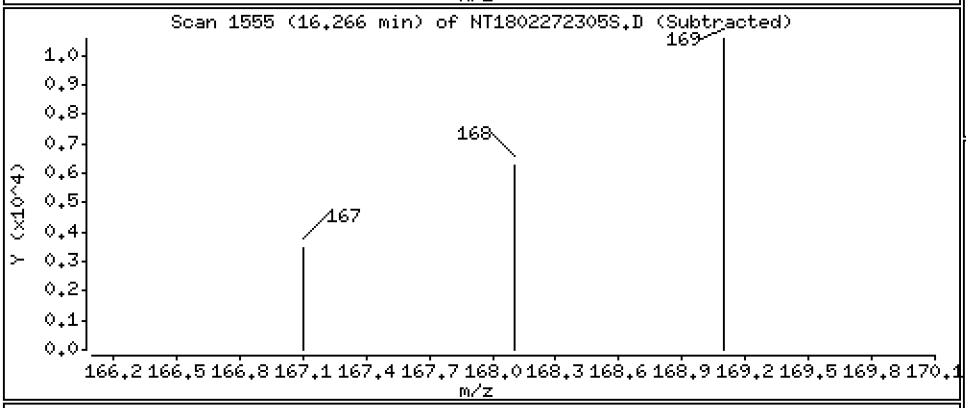
Column diameter: 0.25

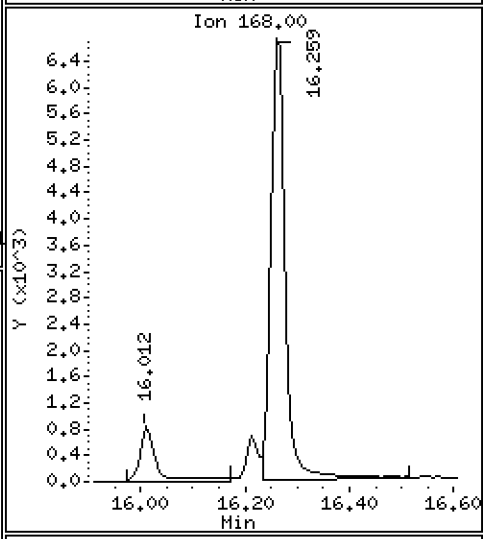
54 N-Nitrosodiphenylamine

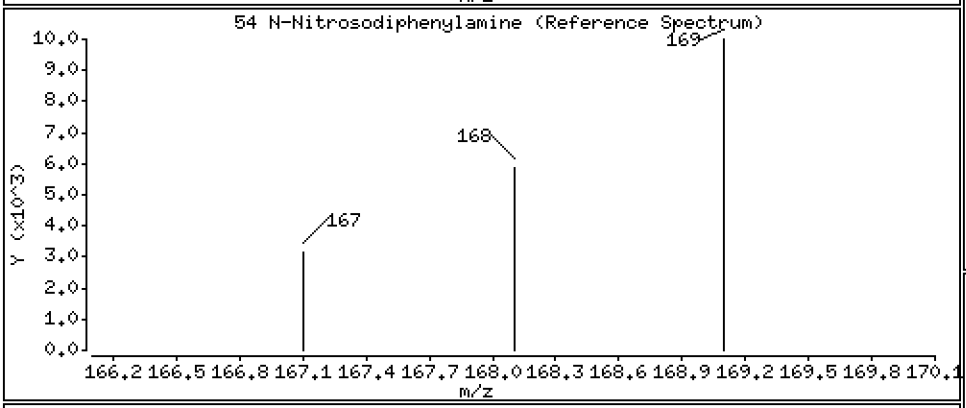
Concentration: 0.1125 ug/mL

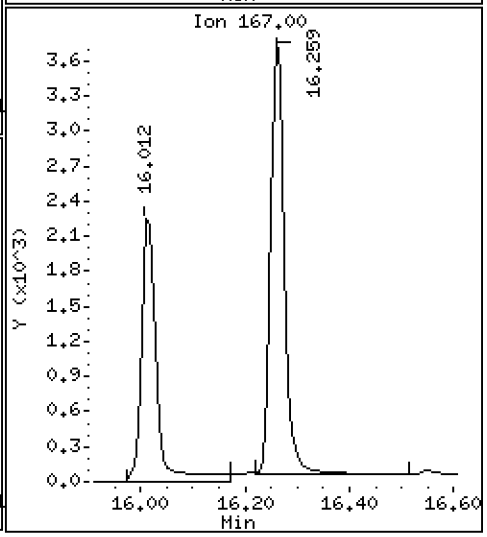


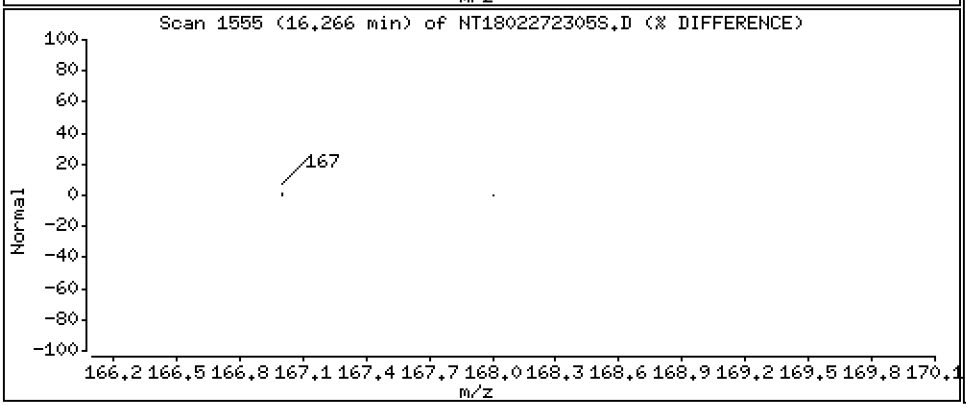












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

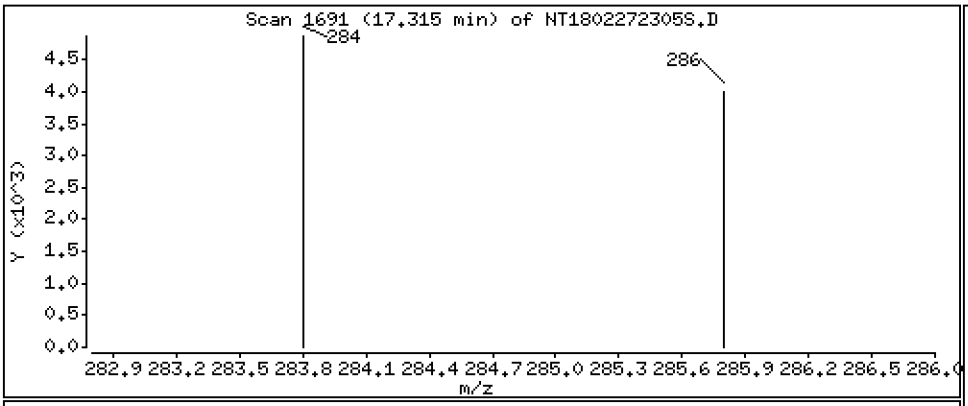
Operator: YZ

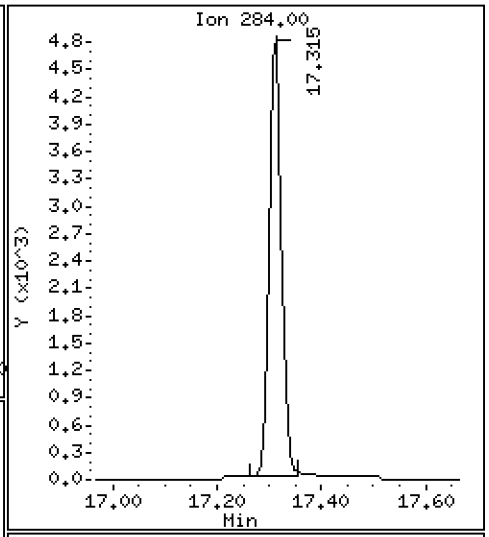
Column phase: ZB-5msi

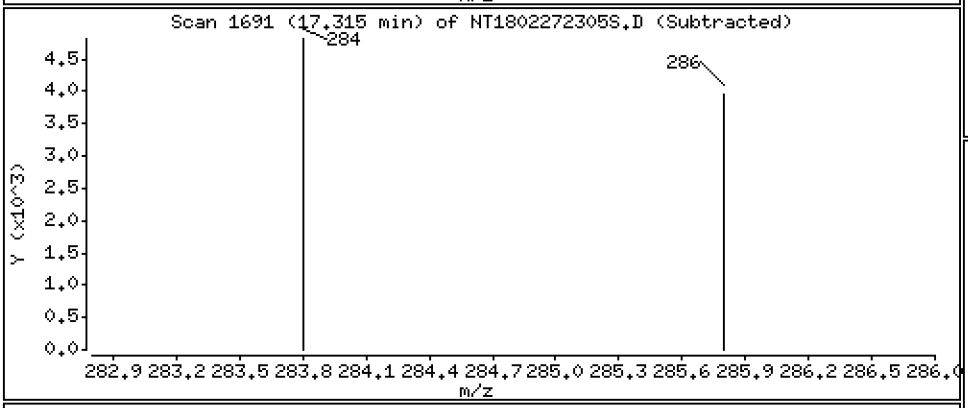
Column diameter: 0.25

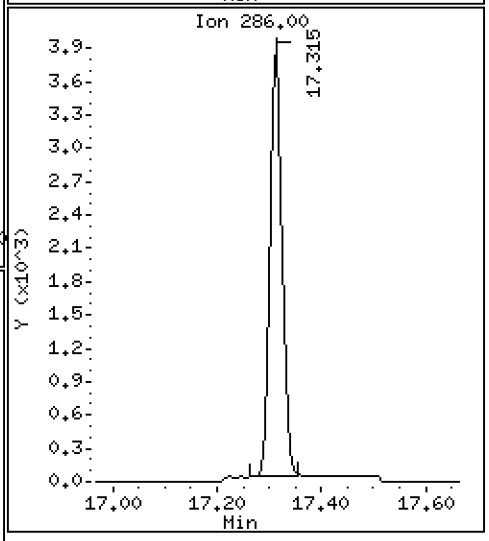
57 Hexachlorobenzene

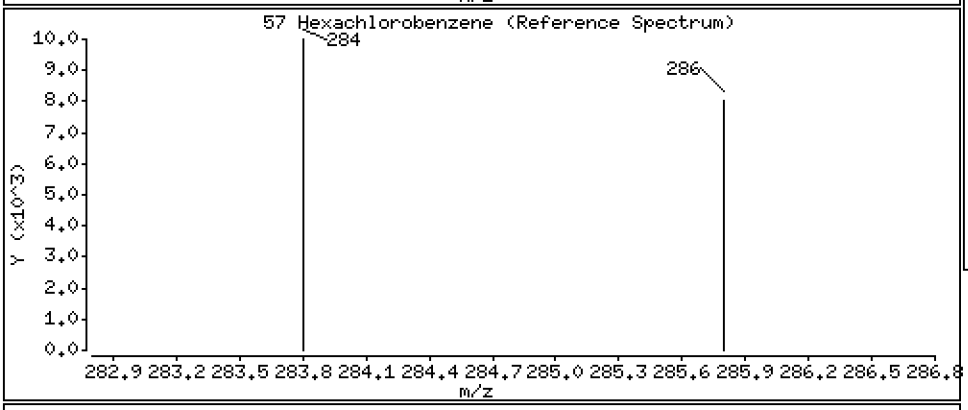
Concentration: 0.1016 ug/mL

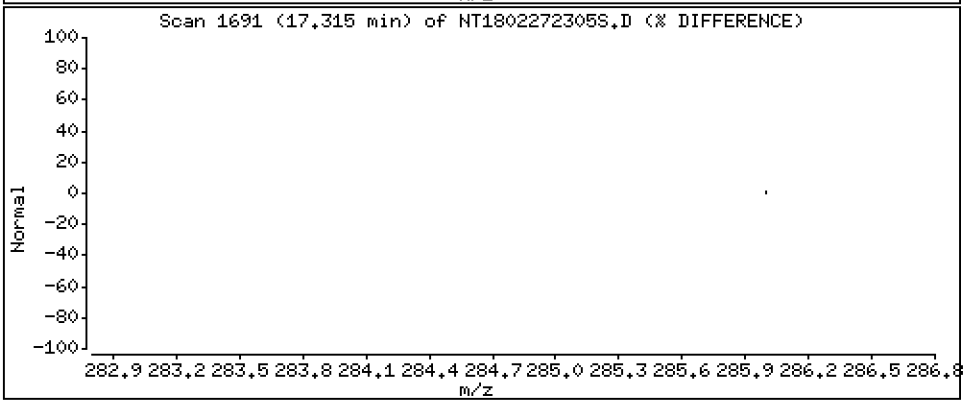












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

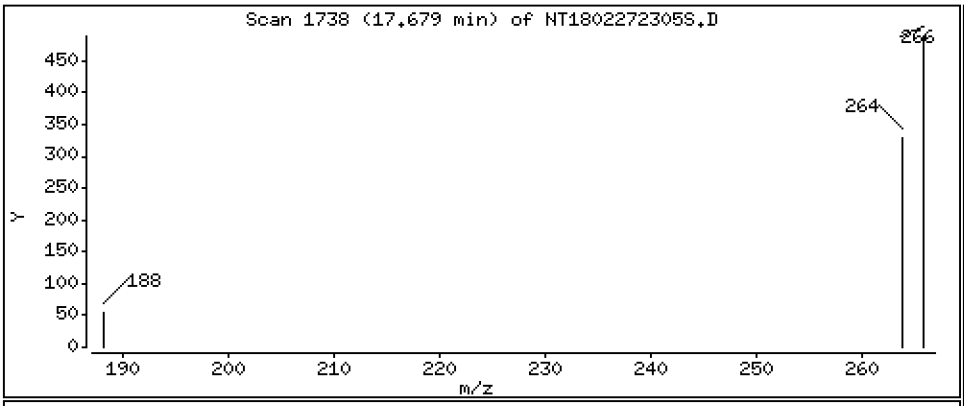
Operator: YZ

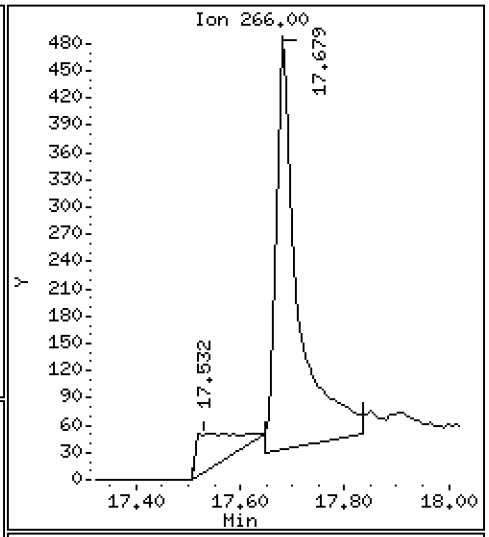
Column phase: ZB-5msi

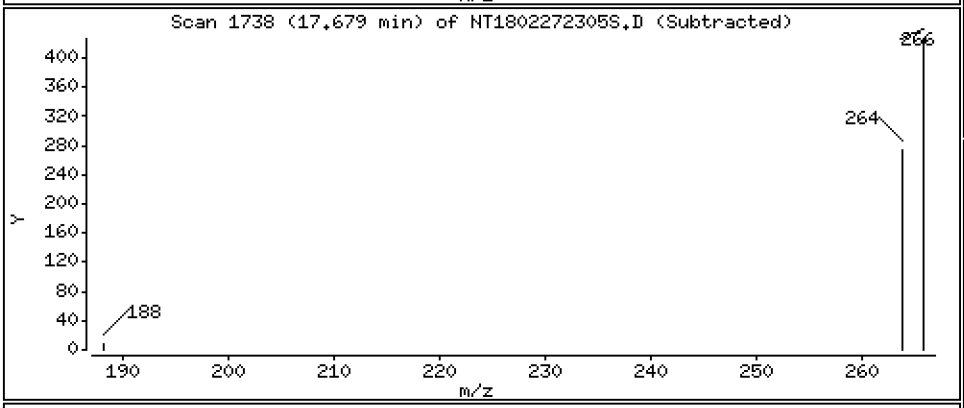
Column diameter: 0.25

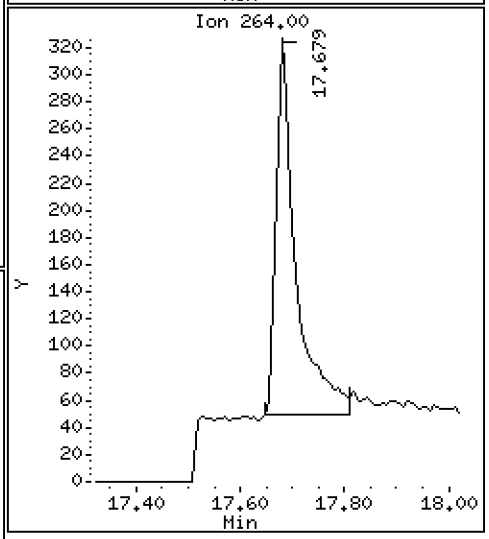
58 Pentachlorophenol

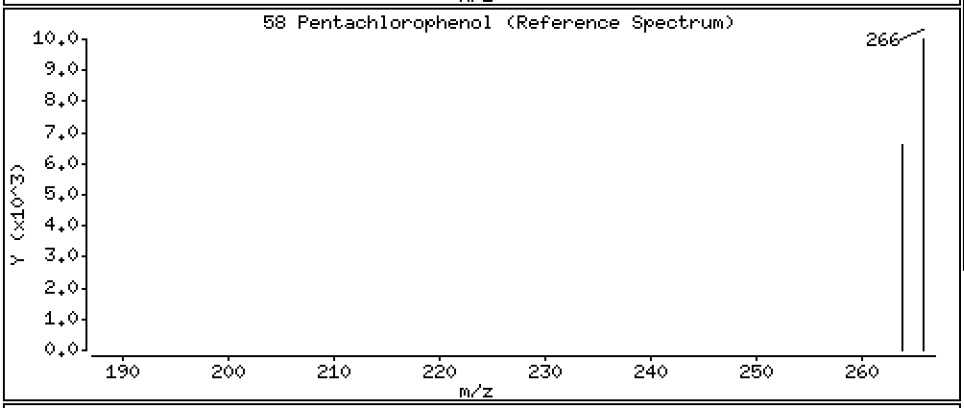
Concentration: 0.05842 ug/mL

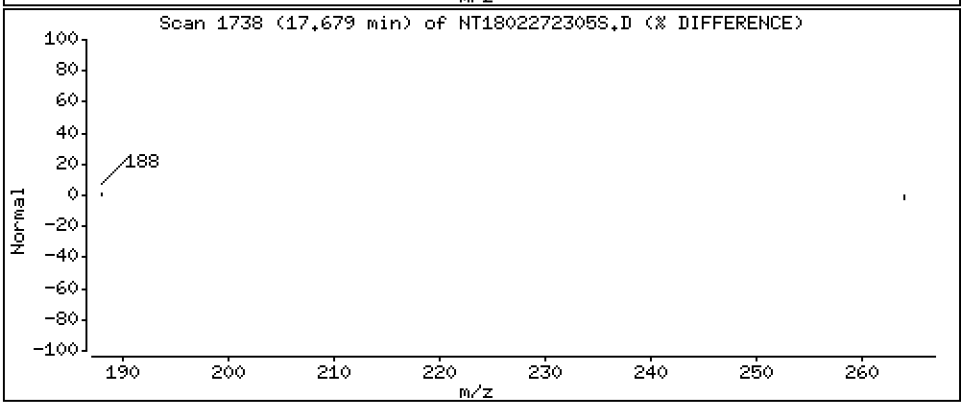












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

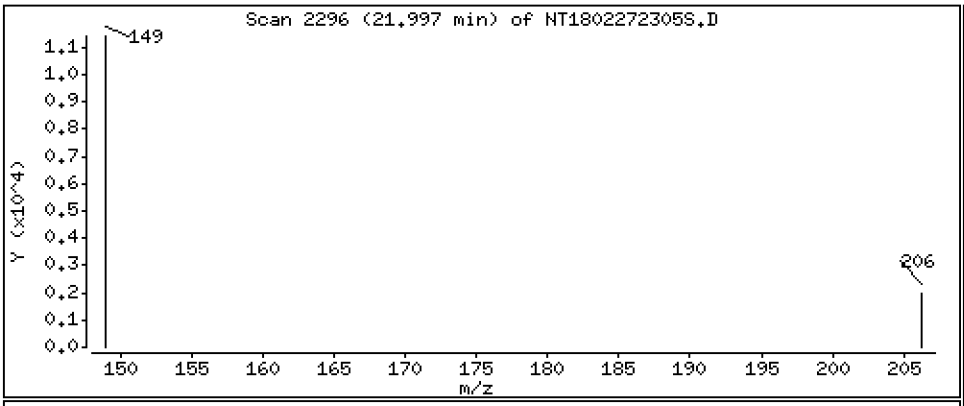
Operator: YZ

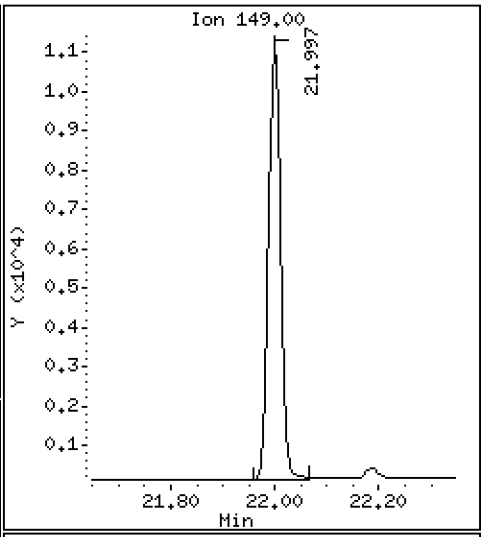
Column phase: ZB-5msi

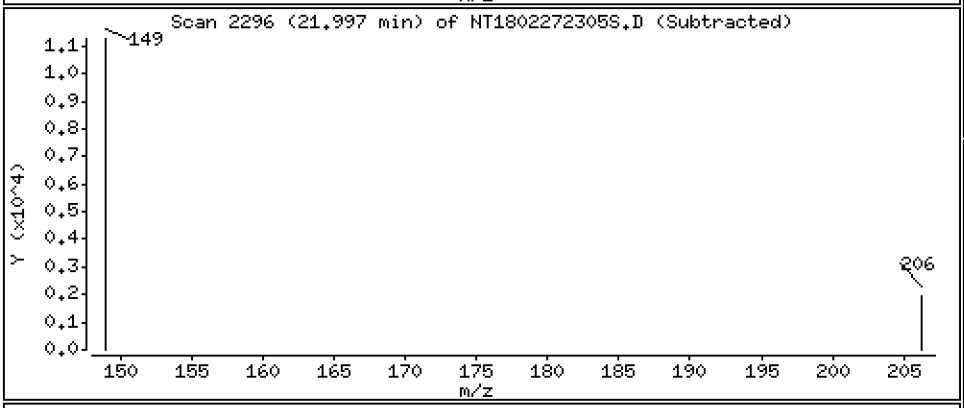
Column diameter: 0.25

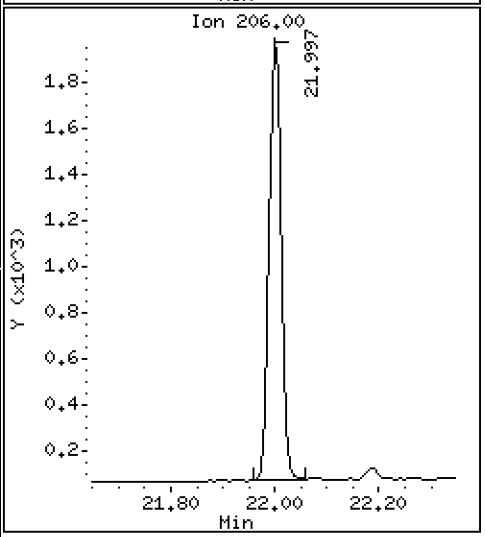
67 Butylbenzylphthalate

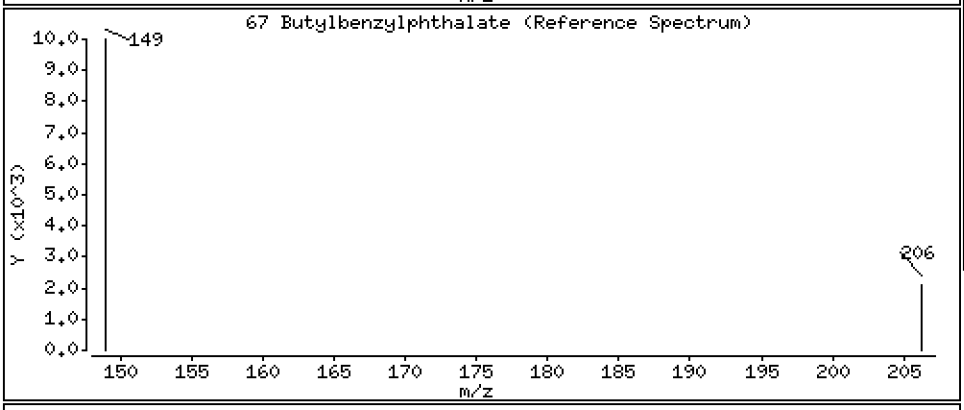
Concentration: 0.1031 ug/mL

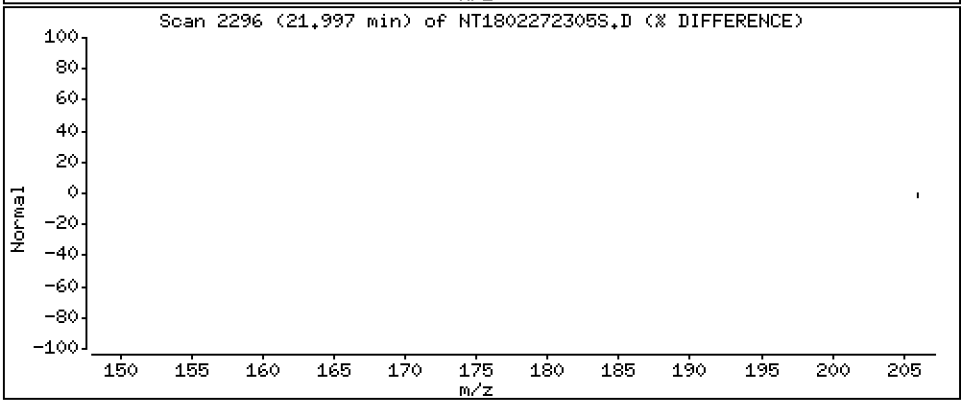












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

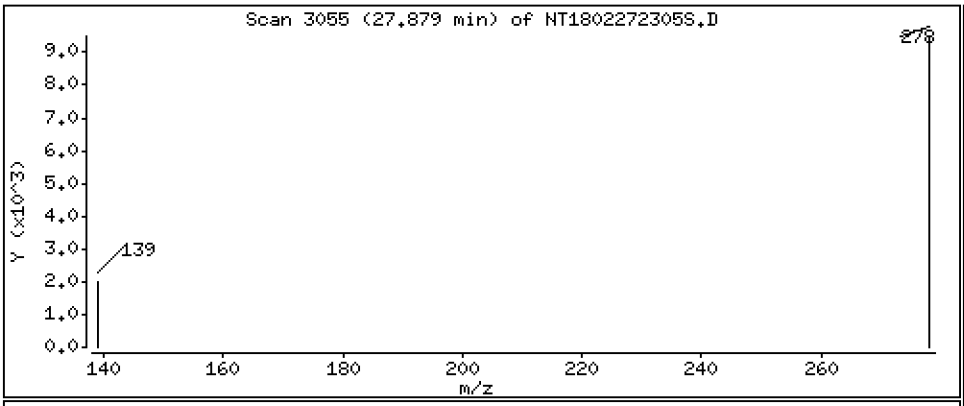
Operator: YZ

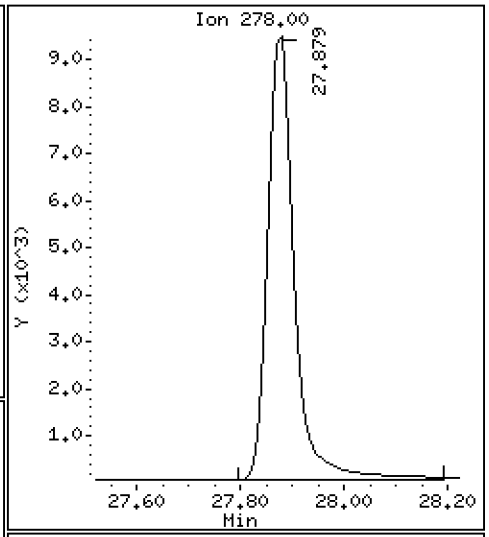
Column phase: ZB-5msi

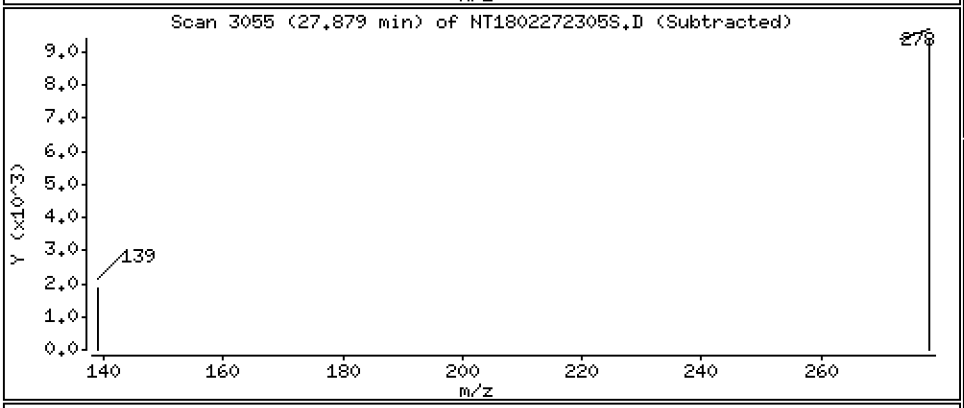
Column diameter: 0.25

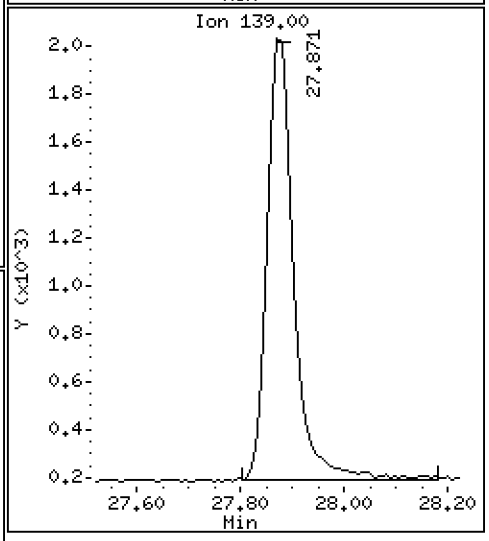
79 Dibenzo(a,h)anthracene

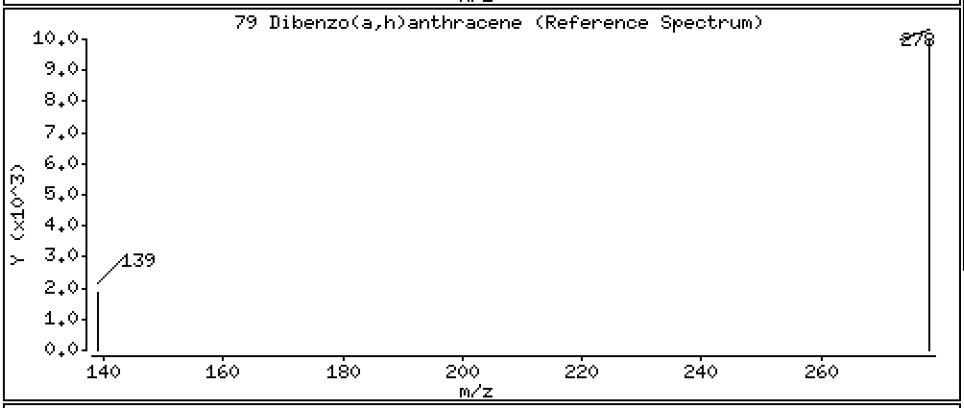
Concentration: 0.1022 ug/mL

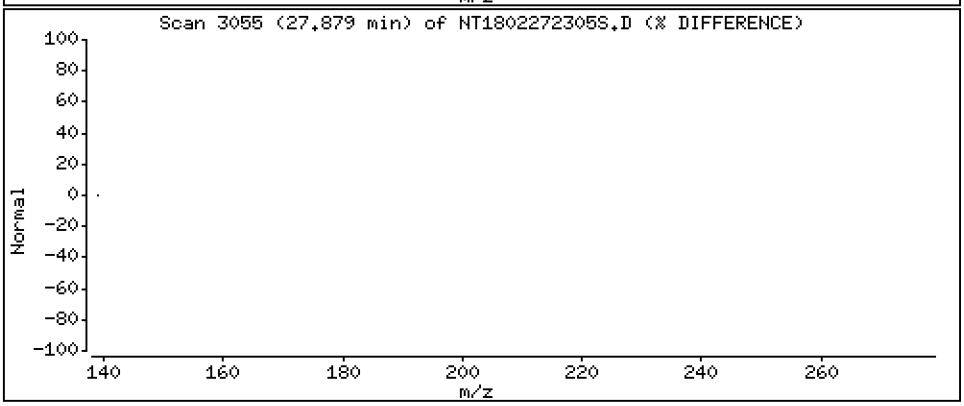












Data File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D

Date : 27-FEB-2023 19:50

Client ID:

Instrument: nt18.i

Sample Info: SLC0396-LCV1

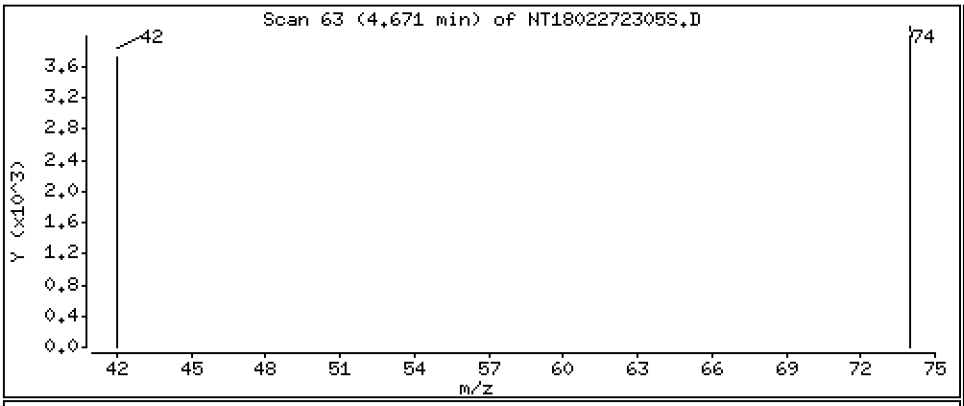
Operator: YZ

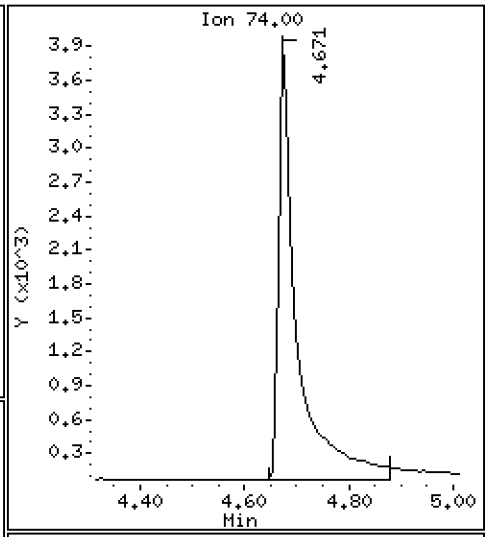
Column phase: ZB-5msi

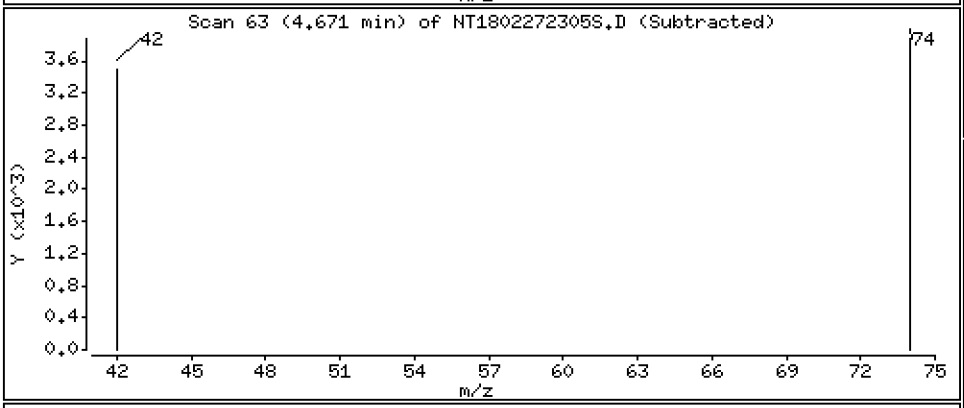
Column diameter: 0.25

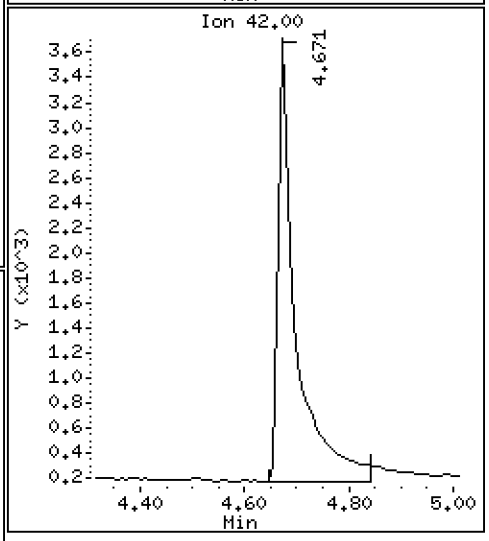
90 N-Nitrosodimethylamine

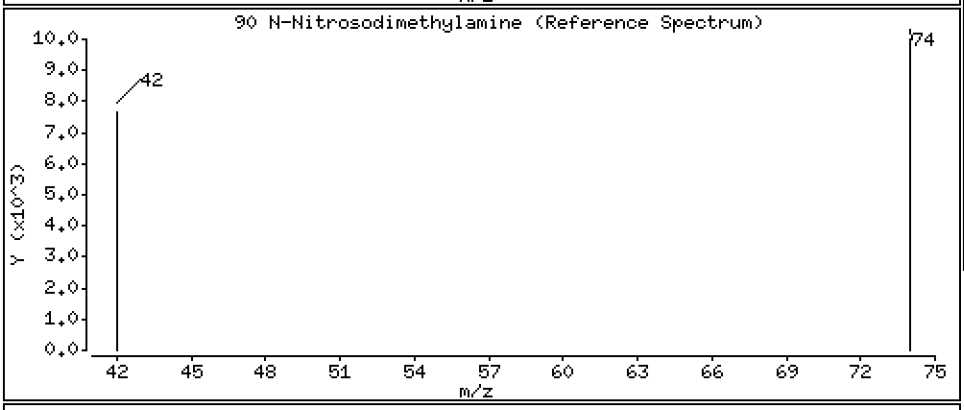
Concentration: 0.1652 ug/mL

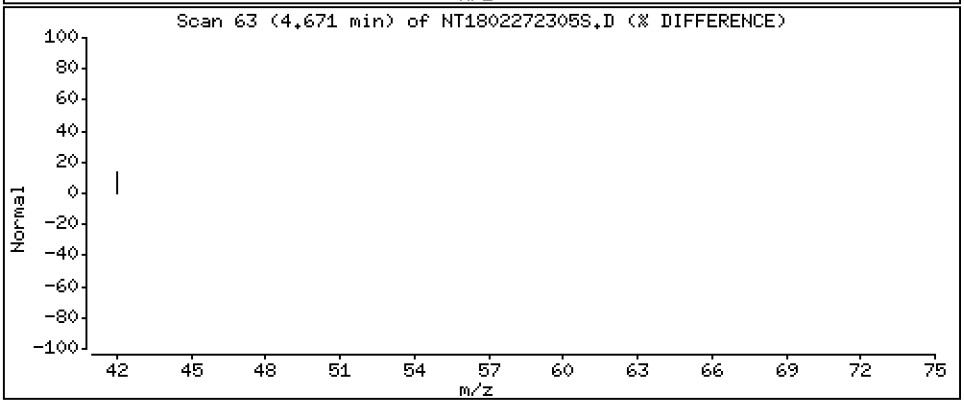












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt18.i\20230227.b\SIM.b\NT1802272305S.D
Lab Smp Id: SLC0396-LCV1
Inj Date : 27-FEB-2023 19:50
Operator : YZ Inst ID: nt18.i
Smp Info : SLC0396-LCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Meth Date : 24-Mar-2023 13:42 deenayd Quant Type: ISTD
Cal Date : 26-FEB-2023 02:45 Cal File: NT1802252310S.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: DEENAY-201905

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	6.733	6.725	(0.757)	14834	0.15311	0.1531(R)
	3 Phenol	94	8.309	8.301	(0.934)	12067	0.09547	0.09547
	7 1,3-Dichlorobenzene	146	8.834	8.827	(0.993)	14324	0.11319	0.1132
*	8 1,4-Dichlorobenzene-d4	152	8.896	8.896	(1.000)	300183	4.00000	
	9 1,4-Dichlorobenzene	146	8.920	8.920	(1.003)	15346	0.11612	0.1161
	11 Benzyl alcohol	79	9.207	9.168	(1.035)	6802	0.08394	0.08394
	12 1,2-Dichlorobenzene	146	9.277	9.277	(1.043)	14460	0.11492	0.1149
	13 2-Methylphenol	108	9.401	9.401	(1.057)	11833	0.11385	0.1138
	15 4-Methylphenol	108	9.673	9.665	(1.087)	10636	0.10199	0.1020
	16 N-Nitroso-di-n-propylamine	70	9.719	9.711	(1.092)	6571	0.09354	0.09354
	22 2,4-Dimethylphenol	107	10.698	10.689	(0.943)	21808	0.21453	0.2145
	24 Benzoic acid	105	10.927	10.868	(0.963)	2238	0.05462	0.05462
	26 1,2,4-Trichlorobenzene	180	11.262	11.262	(0.993)	11564	0.11109	0.1111
*	27 Naphthalene-d8	136	11.347	11.347	(1.000)	1139348	4.00000	
	30 Hexachlorobutadiene	225	11.741	11.741	(1.035)	7235	0.11584	0.1158
	39 Dimethylphthalate	163	14.442	14.442	(0.968)	23545	0.10446	0.1045
*	42 Acenaphthene-d10	162	14.921	14.921	(1.000)	586682	4.00000	
	50 Diethylphthalate	149	15.880	15.888	(1.064)	25068	0.12171	0.1217
	54 N-Nitrosodiphenylamine	169	16.266	16.258	(0.907)	17913	0.11249	0.1125
	57 Hexachlorobenzene	284	17.315	17.315	(0.966)	7766	0.10158	0.1016
	58 Pentachlorophenol	266	17.679	17.671	(0.986)	1308	0.05842	0.05842
*	59 Phenanthrene-d10	188	17.926	17.927	(1.000)	1100721	4.00000	
$	66 Terphenyl-d14	244	21.068	21.068	(0.918)	18642	0.10455	0.1046(R)
	67 Butylbenzylphthalate	149	21.997	21.997	(0.958)	16803	0.10306	0.1031
*	69 Chrysene-d12	240	22.957	22.957	(1.000)	984716	4.00000	
*	77 Perylene-d12	264	25.442	25.442	(1.000)	1087306	4.00000	
	79 Dibenzo(a,h)anthracene	278	27.878	27.871	(1.096)	33007	0.10217	0.1022
	90 N-Nitrosodimethylamine	74	4.670	4.663	(0.525)	9525	0.16518	0.1652

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt18.i
Lab File ID: NT1802272305S.D
Lab Smp Id: SLC0396-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: \\target\share\chem3\nt18.i\20230227.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 27-FEB-2023
Calibration Time: 17:43
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	334128	167064	668256	300183	-10.16
27 Naphthalene-d8	1260796	630398	2521592	1139348	-9.63
42 Acenaphthene-d10	648152	324076	1296304	586682	-9.48
59 Phenanthrene-d10	1231995	615998	2463990	1100721	-10.66
69 Chrysene-d12	1126974	563487	2253948	984716	-12.62
77 Perylene-d12	1243668	621834	2487336	1087306	-12.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.90	8.40	9.40	8.90	-0.00
27 Naphthalene-d8	11.35	10.85	11.85	11.35	-0.00
42 Acenaphthene-d10	14.92	14.42	15.42	14.92	-0.00
59 Phenanthrene-d10	17.93	17.43	18.43	17.93	-0.00
69 Chrysene-d12	22.96	22.46	23.46	22.96	-0.00
77 Perylene-d12	25.44	24.94	25.94	25.44	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1802272305S.D

Lab ID: SLC0396-LCV1
nt18.i, 20230227.b\SIM.b\SIMABN2.m,   27-FEB-2023 19:50

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.963	0.958	0.0052	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1802272303S.D

On Column LOD for nt18.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0213	Instrument:	NT8
		Calibration:	GA00050

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLA0213-TUN1	N823011901.D	NA	01/19/23 10:28
Initial Cal Blank	SLA0213-ICB1	N823011902.D	NA	01/19/23 10:59
8270 SIM PNA 0.1	SLA0213-CAL1	N823011903.D	NA	01/19/23 11:26
8270 SIM PNA 0.5	SLA0213-CAL2	N823011904.D	NA	01/19/23 11:58
8270 SIM PNA 1.0	SLA0213-CAL3	N823011905.D	NA	01/19/23 12:25
8270 SIM PNA 2.5	SLA0213-CAL4	N823011906.D	NA	01/19/23 12:52
8270 SIM PNA 5	SLA0213-CAL5	N823011907.D	NA	01/19/23 13:19
8270 SIM PNA 10	SLA0213-CAL6	N823011908.D	NA	01/19/23 13:46
8270 SIM PNA SCV	SLA0213-SCV1	N823011909.D	NA	01/19/23 14:58

Printed: 1/19/2023 8:45:16PM

ANALYSIS SEQUENCE

SLA0213

Instrument: NT8 Element Column ID: J006458
Calibration ID: GA00050

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SLA0213-TUN1	MS Tune	QC		1	K004775			
SLA0213-ICB1	Initial Cal Blank	QC		2		K008540		
SLA0213-CAL1	8270 SIM PNA 0.1	QC		3	L000603	K008540		
SLA0213-CAL2	8270 SIM PNA 0.5	QC		4	L000604	K008540		
SLA0213-CAL3	8270 SIM PNA 1.0	QC		5	L000605	K008540		
SLA0213-CAL4	8270 SIM PNA 2.5	QC		6	L000606	K008540		
SLA0213-CAL5	8270 SIM PNA 5	QC		7	L000607	K008540		
SLA0213-CAL6	8270 SIM PNA 10	QC		8	L000608	K008540		
SLA0213-SCV1	8270 SIM PNA SCV	QC		9	L000686	K008540		

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

	Time	Filename	LabID	ClientId	DF									
1	1028	N823011901.D	SLA0213-TUN1		1	|NO ISTDS FOUND||								
2	1059	N823011902.D	SLA0213-ICB1		1	| 4.92	52082||	7.20	30936||	9.24	59030||	14.22	50944||	18.12	47418|
3	1126	N823011903.D	SLA0213-CAL1		1	| 4.91	46132||	7.20	27261||	9.24	52158||	14.20	44953||	18.11	41635|
4	1158	N823011904.D	SLA0213-CAL2		1	| 4.91	45056||	7.20	26746||	9.24	50759||	14.21	44658||	18.11	42567|
5	1225	N823011905.D	SLA0213-CAL3		1	| 4.91	47180||	7.20	28206||	9.24	53233||	14.20	46493||	18.11	44587|
6	1252	N823011906.D	SLA0213-CAL4		1	| 4.91	44704||	7.20	26411||	9.24	49210||	14.20	42994||	18.11	40520|
7	1319	N823011907.D	SLA0213-CAL5		1	| 4.91	46542||	7.20	27638||	9.23	51351||	14.20	44781||	18.11	42187|
8	1346	N823011908.D	SLA0213-CAL6		1	| 4.91	46070||	7.20	26689||	9.24	50683||	14.21	43880||	18.11	40659|
9	1458	N823011909.D	SLA0213-SCV1		1	| 4.91	46346||	7.20	27709||	9.24	51685||	14.21	46582||	18.12	41743|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

ARI Job No.: SLA0 Method: FSIMPNA230119.m Instrument: nt8.i Date: 19-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1059	N823011902.D	SLA0213-ICB1		1	NO MANUAL INTEGRATION
1126	N823011903.D	SLA0213-CAL1		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene-d14,
1158	N823011904.D	SLA0213-CAL2		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene, Dibenzo(a,h)anthracene-d14,
1225	N823011905.D	SLA0213-CAL3		1	Total Benzofluoranthenes,
1252	N823011906.D	SLA0213-CAL4		1	Total Benzofluoranthenes,
1319	N823011907.D	SLA0213-CAL5		1	Total Benzofluoranthenes,
1346	N823011908.D	SLA0213-CAL6		1	Total Benzofluoranthenes,
1458	N823011909.D	SLA0213-SCV1		1	Total Benzofluoranthenes,

Security Status Report

Date: 19-Jan-2023 20:43

N823011901.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011902.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011903.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011904.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011905.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011906.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011907.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011908.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011909.D	Data Locked	jianqing, 19-Jan-2023 20:43

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0285	Instrument:	NT8
		Calibration:	GA00050

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLA0285-TUN1	N823012501.D	NA	01/25/23 13:24
Initial Cal Check	SLA0285-ICV1	N823012802.D	NA	01/25/23 14:49
Blank	BLA0411-BLK1	N823012803.D	Solid	01/25/23 15:27
LCS	BLA0411-BS1	N823012804.D	Solid	01/25/23 15:54
LCS Dup	BLA0411-BSD1	N823012805.D	Solid	01/25/23 16:21
Reference	BLA0411-SRM1	N823012806.D	Solid	01/25/23 16:48
LDW23-IT1194	23A0134-14	N823012807.D	Solid	01/25/23 17:15
LDW23-IT1194	BLA0411-MS1	N823012808.D	Solid	01/25/23 17:41
LDW23-IT1194	BLA0411-MSD1	N823012809.D	Solid	01/25/23 18:08
ZZZZZ	BLA0482-BLK1	N823012810.D	Solid	01/25/23 18:35
ZZZZZ	BLA0482-BS1	N823012811.D	Solid	01/25/23 19:02
ZZZZZ	23A0272-01	N823012812.D	Solid	01/25/23 19:29
ZZZZZ	23A0272-02	N823012813.D	Solid	01/25/23 19:56
Calibration Check	SLA0285-CCV1	N823012815.D	NA	01/25/23 20:49

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLA0285

Instrument: NT8
Calibration ID: GA00050

Printed: 2/1/2023 3:15:42PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLA0285-TUN1	QC		1		K004775			
SLA0285-ICV1	QC		2		L000606	K008540		
BLA0411-BLK1	QC		3			K008540		
BLA0411-BS1	QC		4			K008540		
BLA0411-BSD1	QC		5			K008540		
BLA0411-SRM1	QC		6			K008540		
23A0134-14	0E-SIM PAH (0.1ug/L or 5ug	C 01	7			K008540	Anchor QEA, LLC	
BLA0411-MS1	QC		8			K008540		
BLA0411-MSD1	QC		9			K008540		
BLA0482-BLK1	QC		10			K008540		
BLA0482-BS1	QC		11			K008540		
23A0272-01	0E-SIM PAH (0.1ug/L or 5ug	A 02	12			K008540	Spectra Laboratories	Version
23A0272-02	0E-SIM PAH (0.1ug/L or 5ug	A 02	13			K008540	Spectra Laboratories	Version
SLA0285-CCV1	QC		14		L000606	K008540		

Samples Loaded By Date

Data Processed By Date

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230125.b

	Time	Filename	LabID	ClientId	DF											
1	1324	N823012501.D	SLA0285-TUN1		1	NO ISTDS FOUND										
2	1449	N823012802.D	SLA0285-ICV1		1	4.91	46976	7.20	27652	9.24	51738	14.21	45383	18.12	41344	
3	1527	N823012803.D	BLA0411-BLK1		1	4.90	47372	7.20	28499	9.24	53245	14.22	44908	18.12	25782	
4	1554	N823012804.D	BLA0411-BS1		1	4.90	52723	7.19	30770	9.24	58224	14.21	49482	18.12	31209	
5	1621	N823012805.D	BLA0411-BSD1		1	4.90	52212	7.19	30480	9.24	58358	14.21	49974	18.12	32605	
6	1648	N823012806.D	BLA0411-SRM1		1	4.90	50185	7.19	29025	9.24	54075	14.21	49246	18.11	32012	
7	1715	N823012807.D	23A0134-14		1	4.90	53069	7.19	30603	9.24	50078	14.21	29029	18.12	28269	
8	1741	N823012808.D	BLA0411-MS1		1	4.90	52577	7.19	30265	9.24	49999	14.21	29509	18.12	28741	
9	1808	N823012809.D	BLA0411-MSD1		1	4.90	54711	7.19	28910	9.24	44792	14.22	26730	18.12	27532	
10	1835	N823012810.D	BLA0482-BLK1		1	4.90	52313	7.19	31136	9.24	58468	14.21	50540	18.12	39929	
11	1902	N823012811.D	BLA0482-BS1		1	4.89	53636	7.19	30905	9.23	58481	14.21	50536	18.12	41533	
12	1929	N823012812.D	23A0272-01		1	4.90	54316	7.19	31426	9.23	53365	14.21	30561	18.12	25971	
13	1956	N823012813.D	23A0272-02		1	4.90	56000	7.19	32365	9.23	57676	14.21	41877	18.12	24880	
14	2022	N823012814.D	23A0288-01	IS out, NR	3	4.90	54395	7.19	33144	9.24	49988	14.22	25206	18.13	20048	
15	2049	N823012815.D	SLA0285-CCV1		1	4.91	49734	7.19	29511	9.24	54962	14.21	47543	18.12	37553	

JZ 2/1/23

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230125.b

ARI Job No.: SLA0 Method: FSIMPNA230119.m Instrument: nt8.i Date: 25-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1449	N823012802.D	SLA0285-ICV1		1	Total Benzofluoranthenes,
1527	N823012803.D	BLA0411-BLK1		1	Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene,
1554	N823012804.D	BLA0411-BS1		1	Total Benzofluoranthenes,
1621	N823012805.D	BLA0411-BSD1		1	Total Benzofluoranthenes,
1648	N823012806.D	BLA0411-SRM1		1	2,6-Dimethylnaphthalene, Total Benzofluoranthenes,
1715	N823012807.D	23A0134-14		1	Naphthalene, Dibenzo(a,h)anthracene, 2-Methylnaphthalene, Acenaphthene, Dibenzofuran, Fluorene, Benzo(g,h,i)perylene, Total Benzofluoranthenes,
1741	N823012808.D	BLA0411-MS1		1	Total Benzofluoranthenes,
1808	N823012809.D	BLA0411-MSD1		1	Total Benzofluoranthenes,
1835	N823012810.D	BLA0482-BLK1		1	NO MANUAL INTEGRATION
1902	N823012811.D	BLA0482-BS1		1	Total Benzofluoranthenes,
1929	N823012812.D	23A0272-01		1	Acenaphthylene, Acenaphthene, Total Benzofluoranthenes,
1956	N823012813.D	23A0272-02		1	Acenaphthylene, Indeno(1,2,3-cd)pyrene, Acenaphthene, Perylene, Anthracene, Total Benzofluoranthenes, Benzo(k)fluoranthene,
2049	N823012815.D	SLA0285-CCV1		1	Total Benzofluoranthenes,

Security Status Report

Date: 01-Feb-2023 15:18

N823012501.D	Data Locked	jianqing, 01-Feb-2023 15:18
N823012802.D	Data Locked	jianqing, 01-Feb-2023 15:18
N823012803.D	Data Locked	jianqing, 01-Feb-2023 15:18
N823012804.D	Data Locked	jianqing, 01-Feb-2023 15:18
N823012805.D	Data Locked	jianqing, 01-Feb-2023 15:18
N823012806.D	Data Locked	jianqing, 01-Feb-2023 15:18
N823012807.D	Data Locked	jianqing, 01-Feb-2023 15:18
N823012808.D	Data Locked	jianqing, 01-Feb-2023 15:18
N823012809.D	Data Locked	jianqing, 01-Feb-2023 15:18
N823012810.D	Data Locked	jianqing, 01-Feb-2023 15:18
N823012811.D	Data Locked	jianqing, 01-Feb-2023 15:18
N823012812.D	Data Locked	jianqing, 01-Feb-2023 15:18
N823012813.D	Data Locked	jianqing, 01-Feb-2023 15:18
N823012815.D	Data Locked	jianqing, 01-Feb-2023 15:18

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0155	Instrument:	NT18
		Calibration:	GC00036

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0155-TUN1	NT1802252301S.D	NA	02/25/23 20:42
CAL 20.0	SLC0155-CAL9	NT1802252302S.D	NA	02/25/23 21:23
CAL 10.0	SLC0155-CAL8	NT1802252303S.D	NA	02/25/23 22:03
CAL 5.0	SLC0155-CAL7	NT1802252304S.D	NA	02/25/23 22:43
CAL 2.5	SLC0155-CAL6	NT1802252305S.D	NA	02/25/23 23:24
CAL 1.0	SLC0155-CAL5	NT1802252306S.D	NA	02/26/23 00:04
CAL 0.50	SLC0155-CAL4	NT1802252307S.D	NA	02/26/23 00:44
CAL 0.20	SLC0155-CAL3	NT1802252308S.D	NA	02/26/23 01:24
CAL 0.10	SLC0155-CAL2	NT1802252309S.D	NA	02/26/23 02:05
CAL 0.05	SLC0155-CAL1	NT1802252310S.D	NA	02/26/23 02:45
Instrument Blank	SLC0155-IBL1	NT1802252311S.D	NA	02/26/23 03:26
SCV 5.0	SLC0155-SCV1	NT1802252312S.D	NA	02/26/23 04:06

ANALYSIS SEQUENCE

SLC0155

Instrument ID: NT18
Calibration ID: GC00036
MS EM Level: 1153 EV

GCMS Description: Agilent 6890N/5975
GCMS Column ID: L001046

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0155-TUN1	MS Tune	QC		1	L002618		02/25/2023 20:42	NT1802252301S.D	VTS	
SLC0155-CAL1	CAL 0.05	QC		2	K011453	K010831	02/26/2023 02:45	NT1802252310S.D	YZ	
SLC0155-CAL2	CAL 0.10	QC		3	K011452	K010831	02/26/2023 02:05	NT1802252309S.D	YZ	
SLC0155-CAL3	CAL 0.20	QC		4	K011105	K010831	02/26/2023 01:24	NT1802252308S.D	YZ	
SLC0155-CAL4	CAL 0.50	QC		5	K011106	K010831	02/26/2023 00:44	NT1802252307S.D	YZ	
SLC0155-CAL5	CAL 1.0	QC		6	K011107	K010831	02/26/2023 00:04	NT1802252306S.D	YZ	
SLC0155-CAL6	CAL 2.5	QC		7	K011108	K010831	02/25/2023 23:24	NT1802252305S.D	YZ	
SLC0155-CAL7	CAL 5.0	QC		8	K011109	K010831	02/25/2023 22:43	NT1802252304S.D	YZ	
SLC0155-CAL8	CAL 10.0	QC		9	K011110	K010831	02/25/2023 22:03	NT1802252303S.D	YZ	
SLC0155-CAL9	CAL 20.0	QC		10	K011111	K010831	02/25/2023 21:23	NT1802252302S.D	YZ	
SLC0155-IBL1	Instrument Blank	QC		11	K005156	K010831	02/26/2023 03:26	NT1802252311S.D	YZ	
SLC0155-SCV1	SCV 5.0	QC		12	K010066	K010831	02/26/2023 04:06	NT1802252312S.D	YZ	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230225.b\SIM.b

	Time	Filename	LabID	ClientId	DF												
1	2042	NT1802252301S.D	SLC0155-TUN1		1	|NO ISTDS FOUND||											
2	2123	NT1802252302S.D	SLC0155-CAL9		1	| 8.92	242553||11.37	948838||14.95	483108||17.96	875517||23.00	876983||25.48	913405|					
3	2203	NT1802252303S.D	SLC0155-CAL8		1	| 8.92	211151||11.37	814885||14.95	414849||17.96	753296||22.99	710221||25.47	776282|					
4	2243	NT1802252304S.D	SLC0155-CAL7		1	| 8.91	227893||11.37	872096||14.94	445304||17.95	811272||22.98	752583||25.47	837877|					
5	2324	NT1802252305S.D	SLC0155-CAL6		1	| 8.91	144632||11.36	551283||14.94	280785||17.95	517337||22.98	457598||25.47	514372|					
6	0004	NT1802252306S.D	SLC0155-CAL5		1	| 8.91	234930||11.36	904391||14.94	465099||17.95	856800||22.98	764037||25.47	862908|					
7	0044	NT1802252307S.D	SLC0155-CAL4		1	| 8.91	224274||11.36	860117||14.95	438707||17.95	806644||22.98	713989||25.47	802049|					
8	0124	NT1802252308S.D	SLC0155-CAL3		1	| 8.91	210544||11.36	805750||14.95	411700||17.95	755703||22.98	680204||25.47	770907|					
9	0205	NT1802252309S.D	SLC0155-CAL2		1	| 8.91	211686||11.36	814315||14.95	412684||17.95	759191||22.98	680646||25.47	772740|					
10	0245	NT1802252310S.D	SLC0155-CAL1		1	| 8.91	220368||11.36	845524||14.94	431314||17.95	785946||22.98	703590||25.47	808633|					
11	0326	NT1802252311S.D	SLC0155-IBL1		1	| 8.91	210936||11.36	786897||14.95	393390||17.95	730871||22.98	647471||25.47	740369|					
12	0406	NT1802252312S.D	SLC0155-SCV1		1	| 8.91	213719||11.37	811198||14.95	413230||17.95	757386||22.99	711364||25.47	786043|					

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230225.b\SIM.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt18.i Date: 25-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2042	NT1802252301S.D	SLC0155-TUN1		1	NO MANUAL INTEGRATION
2123	NT1802252302S.D	SLC0155-CAL9		1	Benzoic acid,
2203	NT1802252303S.D	SLC0155-CAL8		1	NO MANUAL INTEGRATION
2243	NT1802252304S.D	SLC0155-CAL7		1	NO MANUAL INTEGRATION
2324	NT1802252305S.D	SLC0155-CAL6		1	NO MANUAL INTEGRATION
0004	NT1802252306S.D	SLC0155-CAL5		1	NO MANUAL INTEGRATION
0044	NT1802252307S.D	SLC0155-CAL4		1	Benzoic acid, Pentachlorophenol,
0124	NT1802252308S.D	SLC0155-CAL3		1	Pentachlorophenol,
0205	NT1802252309S.D	SLC0155-CAL2		1	Benzyl alcohol, Pentachlorophenol,
0245	NT1802252310S.D	SLC0155-CAL1		1	Benzyl alcohol,
0326	NT1802252311S.D	SLC0155-IBL1		1	NO MANUAL INTEGRATION
0406	NT1802252312S.D	SLC0155-SCV1		1	Terphenyl-d14,

Security Status Report

Date: 10-Mar-2023 16:30

NT1802252301S.D	Data Locked	deenayd, 10-
NT1802252302S.D	Data Locked	deenayd, 10-
NT1802252303S.D	Data Locked	deenayd, 10-
NT1802252304S.D	Data Locked	deenayd, 10-
NT1802252305S.D	Data Locked	deenayd, 10-
NT1802252306S.D	Data Locked	deenayd, 10-
NT1802252307S.D	Data Locked	deenayd, 10-
NT1802252308S.D	Data Locked	deenayd, 10-
NT1802252309S.D	Data Locked	deenayd, 10-
NT1802252310S.D	Data Locked	deenayd, 10-
NT1802252311S.D	Data Locked	deenayd, 10-
NT1802252312S.D	Data Locked	deenayd, 10-

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0389	Instrument:	NT18
		Calibration:	GC00036

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0389-TUN1	NT1802262301S.D	NA	02/26/23 11:52
Initial Cal Check	SLC0389-ICV1	NT1802262303S.D	NA	02/26/23 12:48
ABN 0.2	SLC0389-LCV1	NT1802262305S.D	NA	02/26/23 14:31
Blank	BLA0410-BLK2	NT1802262306S.D	Solid	02/26/23 15:11
LCS	BLA0410-BS2	NT1802262307S.D	Solid	02/26/23 15:52
LCS Dup	BLA0410-BSD2	NT1802262308S.D	Solid	02/26/23 16:32
Reference	BLA0410-SRM2	NT1802262309S.D	Solid	02/26/23 17:12
LDW23-SS1205	23A0134-01	NT1802262310S.D	Solid	02/26/23 17:52
LDW23-SS1188	23A0134-02	NT1802262311S.D	Solid	02/26/23 18:32
LDW23-SS1179	23A0134-03	NT1802262312S.D	Solid	02/26/23 19:12
LDW23-SS1242	23A0134-04	NT1802262313S.D	Solid	02/26/23 19:53
LDW23-SS1173	23A0134-05	NT1802262314S.D	Solid	02/26/23 20:33
LDW23-SS1160	23A0134-06	NT1802262315S.D	Solid	02/26/23 21:13
LDW23-SS1152	23A0134-07	NT1802262316S.D	Solid	02/26/23 21:53
LDW23-SS1131	23A0134-08	NT1802262317S.D	Solid	02/26/23 22:33
LDW23-SS1129	23A0134-09	NT1802262318S.D	Solid	02/26/23 23:14
LDW23-SS1124	23A0134-10	NT1802262319S.D	Solid	02/26/23 23:54
LDW23-SS1123	23A0134-11	NT1802262320S.D	Solid	02/27/23 00:34
Calibration Check	SLC0389-CCV1	NT1802262327S.D	NA	02/27/23 05:16

Printed: 3/24/2023 1:00:04PM

ANALYSIS SEQUENCE

SLC0389

Instrument ID: NT18
Calibration ID: GC00036
MS EM Level: 1176 EV

GCMS Description: Agilent 6890N/5975
GCMS Column ID: L001046

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0389-TUN1	MS Tune	QC		1	L002618		02/26/2023 11:52	NT1802262301S.D	VTS	
SLC0389-ICV1	Initial Cal Check	QC		2	K011107	K010831	02/26/2023 12:48	NT1802262303S.D	VTS	
SLC0389-LCV1	ABN 0.2	QC		3	K011452	K010831	02/26/2023 14:31	NT1802262305S.D	YZ	
BLA0410-BLK2	Blank	QC		4		K010831	02/26/2023 15:11	NT1802262306S.D	YZ	
BLA0410-BS2	LCS	QC		5		K010831	02/26/2023 15:52	NT1802262307S.D	YZ	
BLA0410-BSD2	LCS Dup	QC		6		K010831	02/26/2023 16:32	NT1802262308S.D	YZ	
BLA0410-SRM2	Reference	QC		7		K010831	02/26/2023 17:12	NT1802262309S.D	YZ	
23A0134-01	LDW23-SS1205	270E-SIM Dual Scan SVO	C 04	8		K010831	02/26/2023 17:52	NT1802262310S.D	YZ	
23A0134-02	LDW23-SS1188	270E-SIM Dual Scan SVO	C 04	9		K010831	02/26/2023 18:32	NT1802262311S.D	YZ	
23A0134-03	LDW23-SS1179	270E-SIM Dual Scan SVO	C 04	10		K010831	02/26/2023 19:12	NT1802262312S.D	YZ	
23A0134-04	LDW23-SS1242	270E-SIM Dual Scan SVO	C 04	11		K010831	02/26/2023 19:53	NT1802262313S.D	YZ	
23A0134-05	LDW23-SS1173	270E-SIM Dual Scan SVO	C 04	12		K010831	02/26/2023 20:33	NT1802262314S.D	YZ	
23A0134-06	LDW23-SS1160	270E-SIM Dual Scan SVO	C 04	13		K010831	02/26/2023 21:13	NT1802262315S.D	YZ	
23A0134-07	LDW23-SS1152	270E-SIM Dual Scan SVO	C 04	14		K010831	02/26/2023 21:53	NT1802262316S.D	YZ	
23A0134-08	LDW23-SS1131	270E-SIM Dual Scan SVO	C 04	15		K010831	02/26/2023 22:33	NT1802262317S.D	YZ	
23A0134-09	LDW23-SS1129	270E-SIM Dual Scan SVO	C 04	16		K010831	02/26/2023 23:14	NT1802262318S.D	YZ	
23A0134-10	LDW23-SS1124	270E-SIM Dual Scan SVO	C 04	17		K010831	02/26/2023 23:54	NT1802262319S.D	YZ	
23A0134-11	LDW23-SS1123	270E-SIM Dual Scan SVO	C 04	18		K010831	02/27/2023 00:34	NT1802262320S.D	YZ	
SLC0389-CCV1	Calibration Check	QC		19	K011107	K010831	02/27/2023 05:16	NT1802262327S.D	YZ	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230226.b\SIM.b

	Time	Filename	LabID	ClientId	DF							
1	1152	NT1802262301S.D	SLC0389-TUN1		1	NO ISTDS FOUND						
2	1208	NT1802262302S.D	SEQ-ICVFULL		1	8.92 244122	11.37 943164	14.95 501893	17.95 896502	22.98 842481	25.48 915681	24.02 1278043
3	1248	NT1802262303S.D	SLC0389-ICV1		1	8.92 279474	11.37 1065527	14.95 544290	17.95 1003412	22.98 936975	25.47 1057771	
4	1351	NT1802262304S.D	SEQ-LCVSIM200		1	8.92 246317	11.37 955582	14.95 484901	17.95 889384	22.98 823210	25.47 934582	
5	1431	NT1802262305S.D	SLC0389-LCV1		1	8.92 248231	11.37 958709	14.95 486728	17.95 892409	22.98 816083	25.47 937480	
6	1511	NT1802262306S.D	BLA0410-BLK2		1	8.92 266113	11.36 997822	14.95 503567	17.95 943982	22.98 870699	25.47 941927	
7	1552	NT1802262307S.D	BLA0410-BS2		1	8.92 279488	11.37 1067378	14.95 539372	17.95 997293	22.99 921638	25.47 987317	
8	1632	NT1802262308S.D	BLA0410-BSD2		1	8.92 280167	11.37 1065660	14.95 540980	17.95 991049	22.99 911845	25.47 994325	
9	1712	NT1802262309S.D	BLA0410-SRM2		1	8.92 269135	11.36 1018568	14.94 517478	17.95 962042	22.99 887480	25.47 913912	
10	1752	NT1802262310S.D	23A0134-01		1	8.92 273905	11.36 1018352	14.95 525682	17.95 1049091	22.99 1071324	25.48 1210320	
11	1832	NT1802262311S.D	23A0134-02		1	8.92 280364	11.36 1043302	14.94 544667	17.96 1068852	23.00 1177104	25.49 1289130	
12	1912	NT1802262312S.D	23A0134-03		1	8.92 279380	11.37 1050871	14.95 556876	17.96 1148131	23.00 1269300	25.50 1131402	
13	1953	NT1802262313S.D	23A0134-04		1	8.92 285118	11.37 1066525	14.95 555873	17.96 1166366	23.00 1225366	25.50 1058519	
14	2033	NT1802262314S.D	23A0134-05		1	8.92 272445	11.37 1015577	14.95 559199	17.96 1116618	23.00 1208643	25.50 972994	
15	2113	NT1802262315S.D	23A0134-06		1	8.92 267319	11.37 997192	14.94 514084	17.96 1021135	22.99 1091000	25.48 961118	
16	2153	NT1802262316S.D	23A0134-07		1	8.92 276268	11.37 1030347	14.94 544884	17.96 1062814	22.99 1150952	25.49 947474	
17	2233	NT1802262317S.D	23A0134-08		1	8.92 287469	11.37 1074326	14.95 565008	17.96 1166404	23.00 1225705	25.50 921587	
18	2314	NT1802262318S.D	23A0134-09		1	8.92 281633	11.37 1054869	14.95 549573	17.96 1148681	23.00 1242466	25.50 882037	
19	2354	NT1802262319S.D	23A0134-10		1	8.92 275834	11.37 1039013	14.95 552723	17.97 1156910	23.00 1175020	25.50 763486	
20	0034	NT1802262320S.D	23A0134-11		1	8.92 269426	11.37 1014744	14.95 525751	17.96 1109249	23.00 1161488	25.50 747791	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230226.b\SIM.b

	Time	Filename	LabID	ClientId	DF											
21	0114	NT1802262321S.D	230134-12		1	8.92	268661	11.37	1010263	14.95	522528	17.96	1103038	23.00	1122539	25.50	709864
22	0154	NT1802262322S.D	230134-13		1	8.92	273593	11.37	1038113	14.95	575465	17.97	1259355	23.03	1209994	25.54	752215
23	0235	NT1802262323S.D	BLA0410-MS1		1	8.92	284814	11.37	1109934	14.96	601104	17.97	1272971	23.04	1144639	25.54	696345
24	0315	NT1802262324S.D	BLA0410-MSD1		1	8.92	287159	11.37	1117784	14.96	607963	17.97	1328950	23.04	1183830	25.54	677950
25	0355	NT1802262325S.D	23A0134-14		1	8.92	290378	11.37	1088583	14.95	574652	17.97	1208010	23.01	1158992	25.51	584647
26	0436	NT1802262326S.D	SEQ-CCVFULL		1	8.93	303223	11.38	1171330	14.95	599311	17.96	1206022	23.00	1117676	25.48	529001
27	0516	NT1802262327S.D	SLC0389-CCV1		1	8.92	314169	11.37	1199745	14.95	612415	17.96	1218256	22.99	1067483	25.48	549501

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230226.b\SIM.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt18.i Date: 26-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1152	NT1802262301S.D	SLC0389-TUN1		1	dftpp,
1208	NT1802262302S.D	SEQ-ICVFULL		1	2,2'-oxybis(1-Chloropropane), Benzoic acid,
1248	NT1802262303S.D	SLC0389-ICV1		1	NO MANUAL INTEGRATION
1351	NT1802262304S.D	SEQ-LCVSIM200		1	Benzoic acid, Pentachlorophenol,
1431	NT1802262305S.D	SLC0389-LCV1		1	Pentachlorophenol,
1511	NT1802262306S.D	BLA0410-BLK2		1	1,4-Dichlorobenzene,
1552	NT1802262307S.D	BLA0410-BS2		1	NO MANUAL INTEGRATION
1632	NT1802262308S.D	BLA0410-BSD2		1	NO MANUAL INTEGRATION
1712	NT1802262309S.D	BLA0410-SRM2		1	Benzoic acid,
1752	NT1802262310S.D	23A0134-01		1	NO MANUAL INTEGRATION
1832	NT1802262311S.D	23A0134-02		1	Benzoic acid,
1912	NT1802262312S.D	23A0134-03		1	Benzoic acid,
1953	NT1802262313S.D	23A0134-04		1	Benzoic acid,
2033	NT1802262314S.D	23A0134-05		1	Benzoic acid,
2113	NT1802262315S.D	23A0134-06		1	Benzoic acid,
2153	NT1802262316S.D	23A0134-07		1	Benzoic acid,
2233	NT1802262317S.D	23A0134-08		1	Benzoic acid,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230226.b\SIM.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2314	NT18022623185.D	23A0134-09		1	Benzoic acid,
2354	NT18022623195.D	23A0134-10		1	Benzoic acid,
0034	NT18022623205.D	23A0134-11		1	Benzoic acid,
0114	NT18022623215.D	230134-12		1	Benzoic acid,
0154	NT18022623225.D	230134-13		1	Benzoic acid,
0235	NT18022623235.D	BLA0410-MS1		1	NO MANUAL INTEGRATION
0315	NT18022623245.D	BLA0410-MSD1		1	NO MANUAL INTEGRATION
0355	NT18022623255.D	23A0134-14		1	Benzoic acid,
0436	NT18022623265.D	SEQ-CCVFULL		1	NO MANUAL INTEGRATION
0516	NT18022623275.D	SLC0389-CCV1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 24-Mar-2023 12:52

NT1802262301S.D	Data Locked	deenayd, 24-
NT1802262302S.D	Data Locked	deenayd, 24-
NT1802262303S.D	Data Locked	deenayd, 24-
NT1802262304S.D	Data Locked	deenayd, 24-
NT1802262305S.D	Data Locked	deenayd, 24-
NT1802262306S.D	Data Locked	deenayd, 24-
NT1802262307S.D	Data Locked	deenayd, 24-
NT1802262308S.D	Data Locked	deenayd, 24-
NT1802262309S.D	Data Locked	deenayd, 24-
NT1802262310S.D	Data Locked	deenayd, 24-
NT1802262311S.D	Data Locked	deenayd, 24-
NT1802262312S.D	Data Locked	deenayd, 24-
NT1802262313S.D	Data Locked	deenayd, 24-
NT1802262314S.D	Data Locked	deenayd, 24-
NT1802262315S.D	Data Locked	deenayd, 24-
NT1802262316S.D	Data Locked	deenayd, 24-
NT1802262317S.D	Data Locked	deenayd, 24-
NT1802262318S.D	Data Locked	deenayd, 24-
NT1802262319S.D	Data Locked	deenayd, 24-
NT1802262320S.D	Data Locked	deenayd, 24-
NT1802262321S.D	Data Locked	deenayd, 24-
NT1802262322S.D	Data Locked	deenayd, 24-
NT1802262323S.D	Data Locked	deenayd, 24-
NT1802262324S.D	Data Locked	deenayd, 24-
NT1802262325S.D	Data Locked	deenayd, 24-
NT1802262326S.D	Data Locked	deenayd, 24-
NT1802262327S.D	Data Locked	deenayd, 24-

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0396	Instrument:	NT18
		Calibration:	GC00036

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0396-TUN1	NT1802272301S.D	NA	02/27/23 16:45
Initial Cal Check	SLC0396-ICV1	NT1802272303S.D	NA	02/27/23 17:43
ABN 0.2	SLC0396-LCV1	NT1802272305S.D	NA	02/27/23 19:50
LDW23-SS1116	23A0134-12	NT1802272307S.D	Solid	02/27/23 21:11
LDW23-IT1210	23A0134-13	NT1802272308S.D	Solid	02/27/23 21:51
LDW23-IT1210	BLA0410-MS2	NT1802272309S.D	Solid	02/27/23 22:32
LDW23-IT1210	BLA0410-MSD2	NT1802272310S.D	Solid	02/27/23 23:12
LDW23-SC1249	23A0134-15	NT1802272311S.D	Solid	02/27/23 23:53
Calibration Check	SLC0396-CCV1	NT1802272323S.D	NA	02/28/23 13:55

Analytical Resources, LLC
Analytical Chemists and Consultants

Printed: 3/24/2023 2:39:58PM

ANALYSIS SEQUENCE

SLC0396

Instrument ID: NT18
Calibration ID: GC00036
MS EM Level: EV

GCMS Description: Agilent 6890N/5975
GCMS Column ID: ZB-5MS

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0396-TUN1	MS Tune	QC		1	L002618		02/27/2023 16:45	NT1802272301S.D	VTS	
SLC0396-ICV1	Initial Cal Check	QC		2	K011107	K010831	02/27/2023 17:43	NT1802272303S.D	YZ	
SLC0396-LCV1	ABN 0.2	QC		3	K011452	K010831	02/27/2023 19:50	NT1802272305S.D	YZ	
23A0134-12	LDW23-SS1116	270E-SIM Dual Scan SVO	C 04	4		K010831	02/27/2023 21:11	NT1802272307S.D	YZ	
23A0134-13	LDW23-IT1210	270E-SIM Dual Scan SVO	C 04	5		K010831	02/27/2023 21:51	NT1802272308S.D	YZ	
BLA0410-MS2	Matrix Spike	QC		6		K010831	02/27/2023 22:32	NT1802272309S.D	YZ	
BLA0410-MSD2	Matrix Spike Dup	QC		7		K010831	02/27/2023 23:12	NT1802272310S.D	YZ	
23A0134-15	LDW23-SC1249	270E-SIM Dual Scan SVO	C 04	8		K010831	02/27/2023 23:53	NT1802272311S.D	YZ	
SLC0396-CCV1	Calibration Check	QC		9	K011107	K010831	02/28/2023 13:55	NT1802272323S.D	YZ	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230227.b\SIM.b

	Time	Filename	LabID	ClientId	DF											
1	1645	NT1802272301.D	SLC0396-TUN1		1	|NO ISTDS FOUND||										
2	1743	NT1802272303S.D	SLC0396-ICV1		1	| 8.90	334128||11.35	1260796||14.92	648152||17.93	1231995||22.96	1126974||25.44	1243668|				
3	1910	NT1802272304S.D	SEQ-LCV2		1	| 8.90	290127||11.35	1109139||14.92	568106||17.93	1069994||22.96	966158||25.44	1069416|				
4	1950	NT1802272305S.D	SLC0396-LCV1		1	| 8.90	300183||11.35	1139348||14.92	586682||17.93	1100721||22.96	984716||25.44	1087306|				
5	2030	NT1802272306S.D	SEQ-LCV3		1	| 8.90	323476||11.35	1226090||14.92	630094||17.93	1179753||22.96	1059518||25.44	1166304|				
6	2111	NT1802272307S.D	23A0134-12		1	| 8.90	302571||11.35	1121830||14.92	578626||17.93	1190397||22.97	1173751||25.46	1131971|				
7	2151	NT1802272308S.D	23A0134-13		1	| 8.90	284727||11.35	1070959||14.92	593078||17.93	1349245||22.99	1527229||25.48	1133677|				
8	2232	NT1802272309S.D	BLA0410-MS2		1	| 8.90	313068||11.35	1207922||14.93	666080||17.94	1566748||23.00	1529851||25.50	960465|				
9	2312	NT1802272310S.D	BLA0410-MSD2		1	| 8.90	313608||11.35	1198353||14.93	644797||17.94	1525603||23.00	1547346||25.50	944991|				
10	2353	NT1802272311S.D	23A0134-15		1	| 8.90	321946||11.35	1199423||14.92	621153||17.93	1330293||22.98	1329279||25.47	784597|				
11	0033	NT1802272312S.D	BLA0554-BLK1		1	| 8.90	329323||11.35	1208283||14.92	596405||17.93	1176193||22.97	1097554||25.44	759587|				
12	0114	NT1802272313S.D	BLA0554-BS1		1	| 8.90	338291||11.35	1269000||14.93	643087||17.93	1252048||22.97	1138817||25.44	778187|				
13	0154	NT1802272314S.D	BLA0554-BSD1		1	| 8.90	340603||11.35	1290173||14.93	653324||17.93	1258357||22.97	1153173||25.44	767990|				
14	0235	NT1802272315S.D	BLA0554-SRM1		1	| 8.90	328264||11.35	1236921||14.92	626338||17.93	1210523||22.97	1112260||25.44	774184|				
15	0315	NT1802272316S.D	23A0158-04		1	| 8.90	342550||11.35	1266247||14.92	652224||17.93	1397717||22.97	1397242||25.47	790889|				
16	0356	NT1802272317S.D	23A0158-05		1	| 8.90	329932||11.35	1200074||14.92	618148||17.93	1307064||22.97	1249161||25.46	712286|				
17	1315	NT1802272322S.D	SEQ-CCVFULL2		1	| 8.90	214750||11.35	831015||14.92	439752||17.93	876772||22.97	697953||25.44	282392|				
18	1355	NT1802272323S.D	SLC0396-CCV1		1	| 8.90	236369||11.35	911369||14.92	492088||17.93	982117||22.96	743229||25.44	297462|				

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230227.b\SIM.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt18.i Date: 27-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1645	NT1802272301.D	SLC0396-TUN1		1	NO MANUAL INTEGRATION
1743	NT1802272303S.D	SLC0396-ICV1		1	Benzyl alcohol,
1910	NT1802272304S.D	SEQ-LCV2		1	Benzyl alcohol,
1950	NT1802272305S.D	SLC0396-LCV1		1	NO MANUAL INTEGRATION
2030	NT1802272306S.D	SEQ-LCV3		1	Benzyl alcohol,
2111	NT1802272307S.D	23A0134-12		1	Benzoic acid,
2151	NT1802272308S.D	23A0134-13		1	Benzoic acid, Diethylphthalate,
2232	NT1802272309S.D	BLA0410-MS2		1	Benzyl alcohol,
2312	NT1802272310S.D	BLA0410-MSD2		1	Benzyl alcohol,
2353	NT1802272311S.D	23A0134-15		1	Benzoic acid,
0033	NT1802272312S.D	BLA0554-BLK1		1	NO MANUAL INTEGRATION
0114	NT1802272313S.D	BLA0554-BS1		1	Benzyl alcohol,
0154	NT1802272314S.D	BLA0554-BSD1		1	Benzyl alcohol,
0235	NT1802272315S.D	BLA0554-SRM1		1	Benzoic acid,
0315	NT1802272316S.D	23A0158-04		1	2,4-Dimethylphenol, Benzoic acid, Diethylphthalate,
0356	NT1802272317S.D	23A0158-05		1	2,4-Dimethylphenol, Benzoic acid, Pentachlorophenol,
1315	NT1802272322S.D	SEQ-CCVFULL2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230227.b\SIM.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1355	NT1802272323S.D	SLC0396-CCV1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 24-Mar-2023 14:38

NT1802272301.D	Data Locked	deenayd, 24-
NT1802272303S.D	Data Locked	deenayd, 24-
NT1802272304S.D	Data Locked	deenayd, 24-
NT1802272305S.D	Data Locked	deenayd, 24-
NT1802272306S.D	Data Locked	deenayd, 24-
NT1802272307S.D	Data Locked	deenayd, 24-
NT1802272308S.D	Data Locked	deenayd, 24-
NT1802272309S.D	Data Locked	deenayd, 24-
NT1802272310S.D	Data Locked	deenayd, 24-
NT1802272311S.D	Data Locked	deenayd, 24-
NT1802272312S.D	Data Locked	deenayd, 24-
NT1802272313S.D	Data Locked	deenayd, 24-
NT1802272314S.D	Data Locked	deenayd, 24-
NT1802272315S.D	Data Locked	deenayd, 24-
NT1802272316S.D	Data Locked	deenayd, 24-
NT1802272317S.D	Data Locked	deenayd, 24-
NT1802272322S.D	Data Locked	deenayd, 24-
NT1802272323S.D	Data Locked	deenayd, 24-

Analytical Resources, LLC
Analytical Chemists and Consultants

Printed: 3/24/2023 3:15:57PM

ANALYSIS SEQUENCE

SLC0396

Instrument ID: NT18
Calibration ID: GC00036
MS EM Level: 1200 EV

GCMS Description: Agilent 6890N/5975
GCMS Column ID: L001046

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0396-TUN1	MS Tune	QC		1	L002618		02/27/2023 16:45	NT1802272301S.D	VTS	
SLC0396-ICV1	Initial Cal Check	QC		2	K011107	K010831	02/27/2023 17:43	NT1802272303S.D	YZ	
SLC0396-LCV1	ABN 0.2	QC		3	K011452	K010831	02/27/2023 19:50	NT1802272305S.D	YZ	
23A0134-12	LDW23-SS1116	270E-SIM Dual Scan SVO	C 04	4		K010831	02/27/2023 21:11	NT1802272307S.D	YZ	
23A0134-13	LDW23-IT1210	270E-SIM Dual Scan SVO	C 04	5		K010831	02/27/2023 21:51	NT1802272308S.D	YZ	
BLA0410-MS2	Matrix Spike	QC		6		K010831	02/27/2023 22:32	NT1802272309S.D	YZ	
BLA0410-MSD2	Matrix Spike Dup	QC		7		K010831	02/27/2023 23:12	NT1802272310S.D	YZ	
23A0134-15	LDW23-SC1249	270E-SIM Dual Scan SVO	C 04	8		K010831	02/27/2023 23:53	NT1802272311S.D	YZ	
SLC0396-CCV1	Calibration Check	QC		9	K011107	K010831	02/28/2023 13:55	NT1802272323S.D	YZ	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230227.b\SIM.b

	Time	Filename	LabID	ClientId	DF											
1	1645	NT1802272301.D	SLC0396-TUN1		1	|NO ISTDS FOUND||										
2	1743	NT1802272303S.D	SLC0396-ICV1		1	8.90	334128	11.35	1260796	14.92	648152	17.93	1231995	22.96	1126974	25.44	1243668
3	1910	NT1802272304S.D	SEQ-LCV2		1	8.90	290127	11.35	1109139	14.92	568106	17.93	1069994	22.96	966158	25.44	1069416
4	1950	NT1802272305S.D	SLC0396-LCV1		1	8.90	300183	11.35	1139348	14.92	586682	17.93	1100721	22.96	984716	25.44	1087306
5	2030	NT1802272306S.D	SEQ-LCV3		1	8.90	323476	11.35	1226090	14.92	630094	17.93	1179753	22.96	1059518	25.44	1166304
6	2111	NT1802272307S.D	23A0134-12		1	8.90	302571	11.35	1121830	14.92	578626	17.93	1190397	22.97	1173751	25.46	1131971
7	2151	NT1802272308S.D	23A0134-13		1	8.90	284727	11.35	1070959	14.92	593078	17.93	1349245	22.99	1527229	25.48	1133677
8	2232	NT1802272309S.D	BLA0410-MS2		1	8.90	313068	11.35	1207922	14.93	666080	17.94	1566748	23.00	1529851	25.50	960465
9	2312	NT1802272310S.D	BLA0410-MSD2		1	8.90	313608	11.35	1198353	14.93	644797	17.94	1525603	23.00	1547346	25.50	944991
10	2353	NT1802272311S.D	23A0134-15		1	8.90	321946	11.35	1199423	14.92	621153	17.93	1330293	22.98	1329279	25.47	784597
11	0033	NT1802272312S.D	BLA0554-BLK1		1	8.90	329323	11.35	1208283	14.92	596405	17.93	1176193	22.97	1097554	25.44	759587
12	0114	NT1802272313S.D	BLA0554-BS1		1	8.90	338291	11.35	1269000	14.93	643087	17.93	1252048	22.97	1138817	25.44	778187
13	0154	NT1802272314S.D	BLA0554-BSD1		1	8.90	340603	11.35	1290173	14.93	653324	17.93	1258357	22.97	1153173	25.44	767990
14	0235	NT1802272315S.D	BLA0554-SRM1		1	8.90	328264	11.35	1236921	14.92	626338	17.93	1210523	22.97	1112260	25.44	774184
15	0315	NT1802272316S.D	23A0158-04		1	8.90	342550	11.35	1266247	14.92	652224	17.93	1397717	22.97	1397242	25.47	790889
16	0356	NT1802272317S.D	23A0158-05		1	8.90	329932	11.35	1200074	14.92	618148	17.93	1307064	22.97	1249161	25.46	712286
17	1315	NT1802272322S.D	SEQ-CCVFULL2		1	8.90	214750	11.35	831015	14.92	439752	17.93	876772	22.97	697953	25.44	282392
18	1355	NT1802272323S.D	SLC0396-CCV1		1	8.90	236369	11.35	911369	14.92	492088	17.93	982117	22.96	743229	25.44	297462

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230227.b\SIM.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt18.i Date: 27-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1645	NT1802272301.D	SLC0396-TUN1		1	NO MANUAL INTEGRATION
1743	NT1802272303S.D	SLC0396-ICV1		1	Benzyl alcohol,
1910	NT1802272304S.D	SEQ-LCV2		1	Benzyl alcohol,
1950	NT1802272305S.D	SLC0396-LCV1		1	NO MANUAL INTEGRATION
2030	NT1802272306S.D	SEQ-LCV3		1	Benzyl alcohol,
2111	NT1802272307S.D	23A0134-12		1	Benzoic acid,
2151	NT1802272308S.D	23A0134-13		1	Benzoic acid, Diethylphthalate,
2232	NT1802272309S.D	BLA0410-MS2		1	Benzyl alcohol,
2312	NT1802272310S.D	BLA0410-MSD2		1	Benzyl alcohol,
2353	NT1802272311S.D	23A0134-15		1	Benzoic acid,
0033	NT1802272312S.D	BLA0554-BLK1		1	NO MANUAL INTEGRATION
0114	NT1802272313S.D	BLA0554-BS1		1	Benzyl alcohol,
0154	NT1802272314S.D	BLA0554-BSD1		1	Benzyl alcohol,
0235	NT1802272315S.D	BLA0554-SRM1		1	Benzoic acid,
0315	NT1802272316S.D	23A0158-04		1	2,4-Dimethylphenol, Benzoic acid, Diethylphthalate,
0356	NT1802272317S.D	23A0158-05		1	2,4-Dimethylphenol, Benzoic acid, Pentachlorophenol,
1315	NT1802272322S.D	SEQ-CCVFULL2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt18.i\20230227.b\SIM.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1355	NT1802272323S.D	SLC0396-CCV1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 24-Mar-2023 14:38

NT1802272301.D	Data Locked	deenayd, 24-
NT1802272303S.D	Data Locked	deenayd, 24-
NT1802272304S.D	Data Locked	deenayd, 24-
NT1802272305S.D	Data Locked	deenayd, 24-
NT1802272306S.D	Data Locked	deenayd, 24-
NT1802272307S.D	Data Locked	deenayd, 24-
NT1802272308S.D	Data Locked	deenayd, 24-
NT1802272309S.D	Data Locked	deenayd, 24-
NT1802272310S.D	Data Locked	deenayd, 24-
NT1802272311S.D	Data Locked	deenayd, 24-
NT1802272312S.D	Data Locked	deenayd, 24-
NT1802272313S.D	Data Locked	deenayd, 24-
NT1802272314S.D	Data Locked	deenayd, 24-
NT1802272315S.D	Data Locked	deenayd, 24-
NT1802272316S.D	Data Locked	deenayd, 24-
NT1802272317S.D	Data Locked	deenayd, 24-
NT1802272322S.D	Data Locked	deenayd, 24-
NT1802272323S.D	Data Locked	deenayd, 24-

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0213	Instrument:	NT8
Calibration:	GA00050	Calibration Date:	01/19/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLA0213-ICB1 (Water)			Lab File ID: N823011902.D			Analyzed: 01/19/23 10:59		
2-Methylnaphthalene-d10			31 - 120		5.6415	-5.6415	N/A	
Dibenzo[a,h]anthracene-d14			10 - 125		20.5525	-20.5525	N/A	
Fluoranthene-d10			46 - 121		11.016	-11.0160	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0285	Instrument:	NT8
Calibration:	GA00050	Calibration Date:	01/19/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLA0285-ICV1 (Solid)				Lab File ID: N823012802.D			Analyzed: 01/25/23 14:49	
2-Methylnaphthalene-d10	2.5000	105	80 - 120	5.64	5.6415	-0.0015	N/A	
Dibenzo[a,h]anthracene-d14	2.5000	96.6	80 - 120	20.564	20.5525	0.0115	N/A	
Fluoranthene-d10	2.5000	110	80 - 120	11.018	11.016	0.0020	N/A	
BLA0411-BLK1 (Solid)				Lab File ID: N823012803.D			Analyzed: 01/25/23 15:27	
2-Methylnaphthalene-d10	150.00	102	32 - 120	5.64	5.6415	-0.0015	N/A	
Dibenzo[a,h]anthracene-d14	150.00	150	21 - 133	20.565	20.5525	0.0125	N/A	*
Fluoranthene-d10	150.00	125	36 - 134	11.022	11.016	0.0060	N/A	
BLA0411-BS1 (Solid)				Lab File ID: N823012804.D			Analyzed: 01/25/23 15:54	
2-Methylnaphthalene-d10	150.00	87.6	32 - 120	5.634	5.6415	-0.0075	N/A	
Dibenzo[a,h]anthracene-d14	150.00	132	21 - 133	20.561	20.5525	0.0085	N/A	
Fluoranthene-d10	150.00	109	36 - 134	11.015	11.016	-0.0010	N/A	
BLA0411-BSD1 (Solid)				Lab File ID: N823012805.D			Analyzed: 01/25/23 16:21	
2-Methylnaphthalene-d10	150.00	102	32 - 120	5.634	5.6415	-0.0075	N/A	
Dibenzo[a,h]anthracene-d14	150.00	148	21 - 133	20.568	20.5525	0.0155	N/A	*
Fluoranthene-d10	150.00	123	36 - 134	11.015	11.016	-0.0010	N/A	
BLA0411-SRM1 (Solid)				Lab File ID: N823012806.D			Analyzed: 01/25/23 16:48	
2-Methylnaphthalene-d10	300.00	98.5	32 - 120	5.634	5.6415	-0.0075	N/A	
Dibenzo[a,h]anthracene-d14	300.00	145	21 - 133	20.558	20.5525	0.0055	N/A	*
Fluoranthene-d10	300.00	126	36 - 134	11.019	11.016	0.0030	N/A	
23A0134-14 (Solid)				Lab File ID: N823012807.D			Analyzed: 01/25/23 17:15	
2-Methylnaphthalene-d10	149.99	91.3	32 - 120	5.634	5.6415	-0.0075	N/A	
Dibenzo[a,h]anthracene-d14	149.99	137	21 - 133	20.558	20.5525	0.0055	N/A	*
Fluoranthene-d10	149.99	98.3	36 - 134	11.019	11.016	0.0030	N/A	
BLA0411-MS1 (Solid)				Lab File ID: N823012808.D			Analyzed: 01/25/23 17:41	
2-Methylnaphthalene-d10	149.99	88.9	32 - 120	5.634	5.6415	-0.0075	N/A	
Dibenzo[a,h]anthracene-d14	149.99	151	21 - 133	20.565	20.5525	0.0125	N/A	*
Fluoranthene-d10	149.99	107	36 - 134	11.019	11.016	0.0030	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0285	Instrument:	NT8
Calibration:	GA00050	Calibration Date:	01/19/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLA0411-MSD1 (Solid)			Lab File ID: N823012809.D			Analyzed: 01/25/23 18:08		
2-Methylnaphthalene-d10	149.99	95.0	32 - 120	5.634	5.6415	-0.0075	N/A	
Dibenzo[a,h]anthracene-d14	149.99	149	21 - 133	20.571	20.5525	0.0185	N/A	*
Fluoranthene-d10	149.99	112	36 - 134	11.022	11.016	0.0060	N/A	
SLA0285-CCV1 (Solid)			Lab File ID: N823012815.D			Analyzed: 01/25/23 20:49		
2-Methylnaphthalene-d10	2.5000	106	50 - 150	5.637	5.6415	-0.0045	N/A	
Dibenzo[a,h]anthracene-d14	2.5000	85.8	50 - 150	20.561	20.5525	0.0085	N/A	
Fluoranthene-d10	2.5000	111	50 - 150	11.015	11.016	-0.0010	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0155	Instrument:	NT18
Calibration:	GC00036	Calibration Date:	02/26/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0155-SCV1 (Solid)			Lab File ID: NT1802252312S.D				Analyzed: 02/26/23 04:06	
2-Fluorophenol	7.5000		0 - 200		6.746333	-6.7463	N/A	
p-Terphenyl-d14	5.0000	0.0930	0 - 200	21.099	21.09444	0.0046	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0389	Instrument:	NT18
Calibration:	GC00036	Calibration Date:	02/26/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0389-ICV1 (Solid)			Lab File ID: NT1802262303S.D			Analyzed: 02/26/23 12:48		
2-Fluorophenol	1.5000	103	80 - 120	6.748	6.746333	0.0017	N/A	
p-Terphenyl-d14	1.0000	92.5	80 - 120	21.091	21.09444	-0.0034	N/A	
SLC0389-LCV1 (Solid)			Lab File ID: NT1802262305S.D			Analyzed: 02/26/23 14:31		
2-Fluorophenol	0.15000	87.0	0 - 200	6.756	6.746333	0.0097	N/A	
p-Terphenyl-d14	0.10000	101	0 - 200	21.091	21.09444	-0.0034	N/A	
BLA0410-BLK2 (Solid)			Lab File ID: NT1802262306S.D			Analyzed: 02/26/23 15:11		
2-Fluorophenol	750.00	56.2	27 - 120	6.764	6.746333	0.0177	N/A	
p-Terphenyl-d14	500.00	82.1	37 - 120	21.099	21.09444	0.0046	N/A	
BLA0410-BS2 (Solid)			Lab File ID: NT1802262307S.D			Analyzed: 02/26/23 15:52		
2-Fluorophenol	750.00	70.9	27 - 120	6.764	6.746333	0.0177	N/A	
p-Terphenyl-d14	500.00	83.1	37 - 120	21.099	21.09444	0.0046	N/A	
BLA0410-BSD2 (Solid)			Lab File ID: NT1802262308S.D			Analyzed: 02/26/23 16:32		
2-Fluorophenol	750.00	71.3	27 - 120	6.764	6.746333	0.0177	N/A	
p-Terphenyl-d14	500.00	82.2	37 - 120	21.099	21.09444	0.0046	N/A	
BLA0410-SRM2 (Solid)			Lab File ID: NT1802262309S.D			Analyzed: 02/26/23 17:12		
2-Fluorophenol	7500.0	72.6	27 - 120	6.771	6.746333	0.0247	N/A	
p-Terphenyl-d14	5000.0	87.0	37 - 120	21.099	21.09444	0.0046	N/A	
23A0134-01 (Solid)			Lab File ID: NT1802262310S.D			Analyzed: 02/26/23 17:52		
2-Fluorophenol	748.18	78.5	27 - 120	6.771	6.746333	0.0247	N/A	
p-Terphenyl-d14	498.79	75.8	37 - 120	21.099	21.09444	0.0046	N/A	
23A0134-02 (Solid)			Lab File ID: NT1802262311S.D			Analyzed: 02/26/23 18:32		
2-Fluorophenol	746.26	78.1	27 - 120	6.771	6.746333	0.0247	N/A	
p-Terphenyl-d14	497.51	81.3	37 - 120	21.099	21.09444	0.0046	N/A	
23A0134-03 (Solid)			Lab File ID: NT1802262312S.D			Analyzed: 02/26/23 19:12		
2-Fluorophenol	741.17	77.6	27 - 120	6.771	6.746333	0.0247	N/A	
p-Terphenyl-d14	494.11	81.1	37 - 120	21.114	21.09444	0.0196	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0389
Instrument: NT18
Calibration: GC00036
Calibration Date: 02/26/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0134-04 (Solid)			Lab File ID: NT1802262313S.D			Analyzed: 02/26/23 19:53		
2-Fluorophenol	747.42	70.9	27 - 120	6.764	6.746333	0.0177	N/A	
p-Terphenyl-d14	498.28	81.2	37 - 120	21.122	21.09444	0.0276	N/A	
23A0134-05 (Solid)			Lab File ID: NT1802262314S.D			Analyzed: 02/26/23 20:33		
2-Fluorophenol	728.84	78.5	27 - 120	6.771	6.746333	0.0247	N/A	
p-Terphenyl-d14	485.89	84.5	37 - 120	21.106	21.09444	0.0116	N/A	
23A0134-06 (Solid)			Lab File ID: NT1802262315S.D			Analyzed: 02/26/23 21:13		
2-Fluorophenol	742.89	79.2	27 - 120	6.771	6.746333	0.0247	N/A	
p-Terphenyl-d14	495.26	87.7	37 - 120	21.099	21.09444	0.0046	N/A	
23A0134-07 (Solid)			Lab File ID: NT1802262316S.D			Analyzed: 02/26/23 21:53		
2-Fluorophenol	737.90	75.2	27 - 120	6.771	6.746333	0.0247	N/A	
p-Terphenyl-d14	491.93	81.9	37 - 120	21.099	21.09444	0.0046	N/A	
23A0134-08 (Solid)			Lab File ID: NT1802262317S.D			Analyzed: 02/26/23 22:33		
2-Fluorophenol	733.60	73.5	27 - 120	6.771	6.746333	0.0247	N/A	
p-Terphenyl-d14	489.07	79.1	37 - 120	21.106	21.09444	0.0116	N/A	
23A0134-09 (Solid)			Lab File ID: NT1802262318S.D			Analyzed: 02/26/23 23:14		
2-Fluorophenol	730.56	75.9	27 - 120	6.779	6.746333	0.0327	N/A	
p-Terphenyl-d14	487.04	84.6	37 - 120	21.107	21.09444	0.0126	N/A	
23A0134-10 (Solid)			Lab File ID: NT1802262319S.D			Analyzed: 02/26/23 23:54		
2-Fluorophenol	749.99	69.7	27 - 120	6.779	6.746333	0.0327	N/A	
p-Terphenyl-d14	500.00	86.0	37 - 120	21.122	21.09444	0.0276	N/A	
23A0134-11 (Solid)			Lab File ID: NT1802262320S.D			Analyzed: 02/27/23 00:34		
2-Fluorophenol	748.80	76.9	27 - 120	6.779	6.746333	0.0327	N/A	
p-Terphenyl-d14	499.20	82.1	37 - 120	21.114	21.09444	0.0196	N/A	
SLC0389-CCV1 (Solid)			Lab File ID: NT1802262327S.D			Analyzed: 02/27/23 05:16		
2-Fluorophenol	1.5000	107	50 - 150	6.756	6.746333	0.0097	N/A	
p-Terphenyl-d14	1.0000	106	50 - 150	21.099	21.09444	0.0046	N/A	

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SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0396	Instrument:	NT18
Calibration:	GC00036	Calibration Date:	02/26/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0396-ICV1 (Solid)			Lab File ID: NT1802272303S.D			Analyzed: 02/27/23 17:43		
2-Fluorophenol	1.5000	96.9	80 - 120	6.725	6.746333	-0.0213	N/A	
p-Terphenyl-d14	1.0000	86.5	80 - 120	21.068	21.09444	-0.0264	N/A	
SLC0396-LCV1 (Solid)			Lab File ID: NT1802272305S.D			Analyzed: 02/27/23 19:50		
2-Fluorophenol	0.15000	102	0 - 200	6.733	6.746333	-0.0133	N/A	
p-Terphenyl-d14	0.10000	105	0 - 200	21.068	21.09444	-0.0264	N/A	
23A0134-12 (Solid)			Lab File ID: NT1802272307S.D			Analyzed: 02/27/23 21:11		
2-Fluorophenol	744.05	74.8	27 - 120	6.748	6.746333	0.0017	N/A	
p-Terphenyl-d14	496.03	72.4	37 - 120	21.083	21.09444	-0.0114	N/A	
23A0134-13 (Solid)			Lab File ID: NT1802272308S.D			Analyzed: 02/27/23 21:51		
2-Fluorophenol	750.05	69.6	27 - 120	6.748	6.746333	0.0017	N/A	
p-Terphenyl-d14	500.04	72.7	37 - 120	21.099	21.09444	0.0046	N/A	
BLA0410-MS2 (Solid)			Lab File ID: NT1802272309S.D			Analyzed: 02/27/23 22:32		
2-Fluorophenol	1351.6	67.8	27 - 120	6.748	6.746333	0.0017	N/A	
p-Terphenyl-d14	901.06	84.8	37 - 120	21.114	21.09444	0.0196	N/A	
BLA0410-MSD2 (Solid)			Lab File ID: NT1802272310S.D			Analyzed: 02/27/23 23:12		
2-Fluorophenol	1351.6	68.2	27 - 120	6.756	6.746333	0.0097	N/A	
p-Terphenyl-d14	901.06	84.5	37 - 120	21.106	21.09444	0.0116	N/A	
23A0134-15 (Solid)			Lab File ID: NT1802272311S.D			Analyzed: 02/27/23 23:53		
2-Fluorophenol	731.82	74.6	27 - 120	6.756	6.746333	0.0097	N/A	
p-Terphenyl-d14	487.88	81.0	37 - 120	21.099	21.09444	0.0046	N/A	
SLC0396-CCV1 (Solid)			Lab File ID: NT1802272323S.D			Analyzed: 02/28/23 13:55		
2-Fluorophenol	1.5000	104	50 - 150	6.733	6.746333	-0.0133	N/A	
p-Terphenyl-d14	1.0000	112	50 - 150	21.068	21.09444	-0.0264	N/A	

Analytical Resources, LLC
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INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0213	Instrument:	NT8
		Calibration:	GA00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Blank (SLA0213-ICB1)		(Water)		Lab File ID: N823011902.D				Analyzed: 01/19/23 10:59	
Naphthalene-d8	52082	4.916	44704	4.906	117	50 - 200	0.010	+/-0.50	
Acenaphthene-d10	30936	7.202	26411	7.196	117	50 - 200	0.006	+/-0.50	
Phenanthrene-d10	59030	9.241	49210	9.235	120	50 - 200	0.006	+/-0.50	
Chrysene-d12	50944	14.215	42994	14.202	118	50 - 200	0.013	+/-0.50	
Perylene-d12	47418	18.12	40520	18.111	117	50 - 200	0.009	+/-0.50	
Secondary Cal Check (SLA0213-SCV1)		(Water)		Lab File ID: N823011909.D				Analyzed: 01/19/23 14:58	
Naphthalene-d8	46346	4.913	44704	4.906	104	50 - 200	0.007	+/-0.50	
Acenaphthene-d10	27709	7.202	26411	7.196	105	50 - 200	0.006	+/-0.50	
Phenanthrene-d10	51685	9.238	49210	9.235	105	50 - 200	0.003	+/-0.50	
Chrysene-d12	46582	14.212	42994	14.202	108	50 - 200	0.010	+/-0.50	
Perylene-d12	41743	18.117	40520	18.111	103	50 - 200	0.006	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0285	Instrument:	NT8
		Calibration:	GA00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLA0285-ICV1)		(Solid)		Lab File ID: N823012802.D				Analyzed: 01/25/23 14:49	
Naphthalene-d8	46976	4.906	46976	4.906	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	27652	7.199	27652	7.199	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	51738	9.238	51738	9.238	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	45383	14.212	45383	14.212	100	50 - 200	0.000	+/-0.50	
Perylene-d12	41856	18.12	41856	18.12	100	50 - 200	0.000	+/-0.50	
Blank (BLA0411-BLK1)		(Solid)		Lab File ID: N823012803.D				Analyzed: 01/25/23 15:27	
Naphthalene-d8	47372	4.903	46976	4.906	101	50 - 200	-0.003	+/-0.50	
Acenaphthene-d10	28499	7.199	27652	7.199	103	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	53245	9.238	51738	9.238	103	50 - 200	0.000	+/-0.50	
Chrysene-d12	44908	14.215	45383	14.212	99	50 - 200	0.003	+/-0.50	
Perylene-d12	25782	18.124	41856	18.12	62	50 - 200	0.004	+/-0.50	
LCS (BLA0411-BS1)		(Solid)		Lab File ID: N823012804.D				Analyzed: 01/25/23 15:54	
Naphthalene-d8	52723	4.897	46976	4.906	112	50 - 200	-0.009	+/-0.50	
Acenaphthene-d10	30770	7.193	27652	7.199	111	50 - 200	-0.006	+/-0.50	
Phenanthrene-d10	58224	9.235	51738	9.238	113	50 - 200	-0.003	+/-0.50	
Chrysene-d12	49482	14.209	45383	14.212	109	50 - 200	-0.003	+/-0.50	
Perylene-d12	31209	18.117	41856	18.12	75	50 - 200	-0.003	+/-0.50	
LCS Dup (BLA0411-BSD1)		(Solid)		Lab File ID: N823012805.D				Analyzed: 01/25/23 16:21	
Naphthalene-d8	52212	4.897	46976	4.906	111	50 - 200	-0.009	+/-0.50	
Acenaphthene-d10	30480	7.192	27652	7.199	110	50 - 200	-0.007	+/-0.50	
Phenanthrene-d10	58358	9.235	51738	9.238	113	50 - 200	-0.003	+/-0.50	
Chrysene-d12	49974	14.209	45383	14.212	110	50 - 200	-0.003	+/-0.50	
Perylene-d12	32605	18.12	41856	18.12	78	50 - 200	0.000	+/-0.50	
Reference (BLA0411-SRM1)		(Solid)		Lab File ID: N823012806.D				Analyzed: 01/25/23 16:48	
Naphthalene-d8	50185	4.897	46976	4.906	107	50 - 200	-0.009	+/-0.50	
Acenaphthene-d10	29025	7.193	27652	7.199	105	50 - 200	-0.006	+/-0.50	
Phenanthrene-d10	54075	9.235	51738	9.238	105	50 - 200	-0.003	+/-0.50	
Chrysene-d12	49246	14.206	45383	14.212	109	50 - 200	-0.006	+/-0.50	
Perylene-d12	32012	18.114	41856	18.12	76	50 - 200	-0.006	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLA0285
SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: NT8
Calibration: GA00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-IT1194 (23A0134-14)		(Solid)		Lab File ID: N823012807.D				Analyzed: 01/25/23 17:15	
Naphthalene-d8	53069	4.897	46976	4.906	113	50 - 200	-0.009	+/-0.50	
Acenaphthene-d10	30603	7.193	27652	7.199	111	50 - 200	-0.006	+/-0.50	
Phenanthrene-d10	50078	9.235	51738	9.238	97	50 - 200	-0.003	+/-0.50	
Chrysene-d12	29029	14.206	45383	14.212	64	50 - 200	-0.006	+/-0.50	
Perylene-d12	28269	18.117	41856	18.12	68	50 - 200	-0.003	+/-0.50	
Matrix Spike (BLA0411-MS1)		(Solid)		Lab File ID: N823012808.D				Analyzed: 01/25/23 17:41	
Naphthalene-d8	52577	4.9	46976	4.906	112	50 - 200	-0.006	+/-0.50	
Acenaphthene-d10	30265	7.193	27652	7.199	109	50 - 200	-0.006	+/-0.50	
Phenanthrene-d10	49999	9.235	51738	9.238	97	50 - 200	-0.003	+/-0.50	
Chrysene-d12	29509	14.212	45383	14.212	65	50 - 200	0.000	+/-0.50	
Perylene-d12	28741	18.123	41856	18.12	69	50 - 200	0.003	+/-0.50	
Matrix Spike Dup (BLA0411-MSD1)		(Solid)		Lab File ID: N823012809.D				Analyzed: 01/25/23 18:08	
Naphthalene-d8	54711	4.897	46976	4.906	116	50 - 200	-0.009	+/-0.50	
Acenaphthene-d10	28910	7.192	27652	7.199	105	50 - 200	-0.007	+/-0.50	
Phenanthrene-d10	44792	9.235	51738	9.238	87	50 - 200	-0.003	+/-0.50	
Chrysene-d12	26730	14.215	45383	14.212	59	50 - 200	0.003	+/-0.50	
Perylene-d12	27532	18.123	41856	18.12	66	50 - 200	0.003	+/-0.50	
Calibration Check (SLA0285-CCV1)		(Water)		Lab File ID: N823012815.D				Analyzed: 01/25/23 20:49	
Naphthalene-d8	49734	4.906	46976	4.906	106	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	29511	7.192	27652	7.199	107	50 - 200	-0.007	+/-0.50	
Phenanthrene-d10	54962	9.235	51738	9.238	106	50 - 200	-0.003	+/-0.50	
Chrysene-d12	47543	14.209	45383	14.212	105	50 - 200	-0.003	+/-0.50	
Perylene-d12	37553	18.117	41856	18.12	90	50 - 200	-0.003	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0155	Instrument:	NT18
		Calibration:	GC00036

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLC0155-SCV1)		(Solid)	Lab File ID: NT1802252312S.D				Analyzed: 02/26/23 04:06		
1,4-Dichlorobenzene-d4	213719	8.912	234930	8.912	91	50 - 200	0.000	+/-0.50	
Naphthalene-d8	811198	11.37	904391	11.362	90	50 - 200	0.008	+/-0.50	
Acenaphthene-d10	413230	14.945	465099	14.944	89	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	757386	17.95	856800	17.95	88	50 - 200	0.000	+/-0.50	
Chrysene-d12	711364	22.988	764037	22.98	93	50 - 200	0.008	+/-0.50	
Perylene-d12	786043	25.473	862908	25.473	91	50 - 200	0.000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0389	Instrument:	NT18
		Calibration:	GC00036

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0389-ICV1)		(Solid)	Lab File ID: NT1802262303S.D				Analyzed: 02/26/23 12:48		
1,4-Dichlorobenzene-d4	279474	8.92	279474	8.92	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1065527	11.37	1065527	11.37	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	544290	14.945	544290	14.945	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1003412	17.95	1003412	17.95	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	936975	22.98	936975	22.98	100	50 - 200	0.000	+/-0.50	
Perylene-d12	1057771	25.473	1057771	25.473	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0389-LCV1)		(Solid)	Lab File ID: NT1802262305S.D				Analyzed: 02/26/23 14:31		
1,4-Dichlorobenzene-d4	248231	8.92	279474	8.92	89	50 - 200	0.000	+/-0.50	
Naphthalene-d8	958709	11.37	1065527	11.37	90	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	486728	14.945	544290	14.945	89	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	892409	17.95	1003412	17.95	89	50 - 200	0.000	+/-0.50	
Chrysene-d12	816083	22.98	936975	22.98	87	50 - 200	0.000	+/-0.50	
Perylene-d12	937480	25.473	1057771	25.473	89	50 - 200	0.000	+/-0.50	
Blank (BLA0410-BLK2)		(Solid)	Lab File ID: NT1802262306S.D				Analyzed: 02/26/23 15:11		
1,4-Dichlorobenzene-d4	266113	8.92	279474	8.92	95	50 - 200	0.000	+/-0.50	
Naphthalene-d8	997822	11.362	1065527	11.37	94	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	503567	14.945	544290	14.945	93	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	943982	17.95	1003412	17.95	94	50 - 200	0.000	+/-0.50	
Chrysene-d12	870699	22.98	936975	22.98	93	50 - 200	0.000	+/-0.50	
Perylene-d12	941927	25.473	1057771	25.473	89	50 - 200	0.000	+/-0.50	
LCS (BLA0410-BS2)		(Solid)	Lab File ID: NT1802262307S.D				Analyzed: 02/26/23 15:52		
1,4-Dichlorobenzene-d4	279488	8.92	279474	8.92	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1067378	11.37	1065527	11.37	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	539372	14.945	544290	14.945	99	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	997293	17.95	1003412	17.95	99	50 - 200	0.000	+/-0.50	
Chrysene-d12	921638	22.988	936975	22.98	98	50 - 200	0.008	+/-0.50	
Perylene-d12	987317	25.473	1057771	25.473	93	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0389	Instrument:	NT18
		Calibration:	GC00036

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (BLA0410-BSD2)		(Solid)	Lab File ID: NT1802262308S.D				Analyzed: 02/26/23 16:32		
1,4-Dichlorobenzene-d4	280167	8.92	279474	8.92	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1065660	11.37	1065527	11.37	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	540980	14.945	544290	14.945	99	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	991049	17.95	1003412	17.95	99	50 - 200	0.000	+/-0.50	
Chrysene-d12	911845	22.988	936975	22.98	97	50 - 200	0.008	+/-0.50	
Perylene-d12	994325	25.473	1057771	25.473	94	50 - 200	0.000	+/-0.50	
Reference (BLA0410-SRM2)		(Solid)	Lab File ID: NT1802262309S.D				Analyzed: 02/26/23 17:12		
1,4-Dichlorobenzene-d4	269135	8.92	279474	8.92	96	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1018568	11.362	1065527	11.37	96	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	517478	14.944	544290	14.945	95	50 - 200	-0.001	+/-0.50	
Phenanthrene-d10	962042	17.95	1003412	17.95	96	50 - 200	0.000	+/-0.50	
Chrysene-d12	887480	22.988	936975	22.98	95	50 - 200	0.008	+/-0.50	
Perylene-d12	913912	25.473	1057771	25.473	86	50 - 200	0.000	+/-0.50	
LDW23-SS1205 (23A0134-01)		(Solid)	Lab File ID: NT1802262310S.D				Analyzed: 02/26/23 17:52		
1,4-Dichlorobenzene-d4	273905	8.92	279474	8.92	98	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1018352	11.362	1065527	11.37	96	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	525682	14.945	544290	14.945	97	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1049091	17.95	1003412	17.95	105	50 - 200	0.000	+/-0.50	
Chrysene-d12	1071324	22.988	936975	22.98	114	50 - 200	0.008	+/-0.50	
Perylene-d12	1210320	25.481	1057771	25.473	114	50 - 200	0.008	+/-0.50	
LDW23-SS1188 (23A0134-02)		(Solid)	Lab File ID: NT1802262311S.D				Analyzed: 02/26/23 18:32		
1,4-Dichlorobenzene-d4	280364	8.919	279474	8.92	100	50 - 200	-0.001	+/-0.50	
Naphthalene-d8	1043302	11.362	1065527	11.37	98	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	544667	14.944	544290	14.945	100	50 - 200	-0.001	+/-0.50	
Phenanthrene-d10	1068852	17.957	1003412	17.95	107	50 - 200	0.007	+/-0.50	
Chrysene-d12	1177104	22.996	936975	22.98	126	50 - 200	0.016	+/-0.50	
Perylene-d12	1289130	25.489	1057771	25.473	122	50 - 200	0.016	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0389
SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: NT18
Calibration: GC00036

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1179 (23A0134-03)		(Solid)	Lab File ID: NT1802262312S.D				Analyzed: 02/26/23 19:12		
1,4-Dichlorobenzene-d4	279380	8.92	279474	8.92	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1050871	11.37	1065527	11.37	99	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	556876	14.945	544290	14.945	102	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1148131	17.958	1003412	17.95	114	50 - 200	0.008	+/-0.50	
Chrysene-d12	1269300	22.996	936975	22.98	135	50 - 200	0.016	+/-0.50	
Perylene-d12	1131402	25.504	1057771	25.473	107	50 - 200	0.031	+/-0.50	
LDW23-SS1242 (23A0134-04)		(Solid)	Lab File ID: NT1802262313S.D				Analyzed: 02/26/23 19:53		
1,4-Dichlorobenzene-d4	285118	8.92	279474	8.92	102	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1066525	11.37	1065527	11.37	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	555873	14.945	544290	14.945	102	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1166366	17.957	1003412	17.95	116	50 - 200	0.007	+/-0.50	
Chrysene-d12	1225366	22.996	936975	22.98	131	50 - 200	0.016	+/-0.50	
Perylene-d12	1058519	25.504	1057771	25.473	100	50 - 200	0.031	+/-0.50	
LDW23-SS1173 (23A0134-05)		(Solid)	Lab File ID: NT1802262314S.D				Analyzed: 02/26/23 20:33		
1,4-Dichlorobenzene-d4	272445	8.92	279474	8.92	97	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1015577	11.37	1065527	11.37	95	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	559199	14.945	544290	14.945	103	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1116618	17.957	1003412	17.95	111	50 - 200	0.007	+/-0.50	
Chrysene-d12	1208643	22.996	936975	22.98	129	50 - 200	0.016	+/-0.50	
Perylene-d12	972994	25.497	1057771	25.473	92	50 - 200	0.024	+/-0.50	
LDW23-SS1160 (23A0134-06)		(Solid)	Lab File ID: NT1802262315S.D				Analyzed: 02/26/23 21:13		
1,4-Dichlorobenzene-d4	267319	8.919	279474	8.92	96	50 - 200	-0.001	+/-0.50	
Naphthalene-d8	997192	11.37	1065527	11.37	94	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	514084	14.944	544290	14.945	94	50 - 200	-0.001	+/-0.50	
Phenanthrene-d10	1021135	17.957	1003412	17.95	102	50 - 200	0.007	+/-0.50	
Chrysene-d12	1091000	22.988	936975	22.98	116	50 - 200	0.008	+/-0.50	
Perylene-d12	961118	25.481	1057771	25.473	91	50 - 200	0.008	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0389
SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: NT18
Calibration: GC00036

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1152 (23A0134-07)		(Solid)	Lab File ID: NT1802262316S.D				Analyzed: 02/26/23 21:53		
1,4-Dichlorobenzene-d4	276268	8.919	279474	8.92	99	50 - 200	-0.001	+/-0.50	
Naphthalene-d8	1030347	11.37	1065527	11.37	97	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	544884	14.944	544290	14.945	100	50 - 200	-0.001	+/-0.50	
Phenanthrene-d10	1062814	17.957	1003412	17.95	106	50 - 200	0.007	+/-0.50	
Chrysene-d12	1150952	22.988	936975	22.98	123	50 - 200	0.008	+/-0.50	
Perylene-d12	947474	25.489	1057771	25.473	90	50 - 200	0.016	+/-0.50	
LDW23-SS1131 (23A0134-08)		(Solid)	Lab File ID: NT1802262317S.D				Analyzed: 02/26/23 22:33		
1,4-Dichlorobenzene-d4	287469	8.92	279474	8.92	103	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1074326	11.37	1065527	11.37	101	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	565008	14.952	544290	14.945	104	50 - 200	0.007	+/-0.50	
Phenanthrene-d10	1166404	17.957	1003412	17.95	116	50 - 200	0.007	+/-0.50	
Chrysene-d12	1225705	22.996	936975	22.98	131	50 - 200	0.016	+/-0.50	
Perylene-d12	921587	25.496	1057771	25.473	87	50 - 200	0.023	+/-0.50	
LDW23-SS1129 (23A0134-09)		(Solid)	Lab File ID: NT1802262318S.D				Analyzed: 02/26/23 23:14		
1,4-Dichlorobenzene-d4	281633	8.92	279474	8.92	101	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1054869	11.37	1065527	11.37	99	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	549573	14.952	544290	14.945	101	50 - 200	0.007	+/-0.50	
Phenanthrene-d10	1148681	17.958	1003412	17.95	114	50 - 200	0.008	+/-0.50	
Chrysene-d12	1242466	22.996	936975	22.98	133	50 - 200	0.016	+/-0.50	
Perylene-d12	882037	25.497	1057771	25.473	83	50 - 200	0.024	+/-0.50	
LDW23-SS1124 (23A0134-10)		(Solid)	Lab File ID: NT1802262319S.D				Analyzed: 02/26/23 23:54		
1,4-Dichlorobenzene-d4	275834	8.92	279474	8.92	99	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1039013	11.37	1065527	11.37	98	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	552723	14.952	544290	14.945	102	50 - 200	0.007	+/-0.50	
Phenanthrene-d10	1156910	17.965	1003412	17.95	115	50 - 200	0.015	+/-0.50	
Chrysene-d12	1175020	23.004	936975	22.98	125	50 - 200	0.024	+/-0.50	
Perylene-d12	763486	25.504	1057771	25.473	72	50 - 200	0.031	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0389	Instrument:	NT18
		Calibration:	GC00036

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1123 (23A0134-11)		(Solid)	Lab File ID: NT1802262320S.D				Analyzed: 02/27/23 00:34		
1,4-Dichlorobenzene-d4	269426	8.919	279474	8.92	96	50 - 200	-0.001	+/-0.50	
Naphthalene-d8	1014744	11.37	1065527	11.37	95	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	525751	14.952	544290	14.945	97	50 - 200	0.007	+/-0.50	
Phenanthrene-d10	1109249	17.957	1003412	17.95	111	50 - 200	0.007	+/-0.50	
Chrysene-d12	1161488	23.003	936975	22.98	124	50 - 200	0.023	+/-0.50	
Perylene-d12	747791	25.496	1057771	25.473	71	50 - 200	0.023	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0396	Instrument:	NT18
		Calibration:	GC00036

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0396-ICV1)		(Solid)	Lab File ID: NT1802272303S.D				Analyzed: 02/27/23 17:43		
1,4-Dichlorobenzene-d4	334128	8.896	334128	8.896	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1260796	11.347	1260796	11.347	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	648152	14.921	648152	14.921	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1231995	17.927	1231995	17.927	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	1126974	22.957	1126974	22.957	100	50 - 200	0.000	+/-0.50	
Perylene-d12	1243668	25.442	1243668	25.442	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0396-LCV1)		(Solid)	Lab File ID: NT1802272305S.D				Analyzed: 02/27/23 19:50		
1,4-Dichlorobenzene-d4	300183	8.896	334128	8.896	90	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1139348	11.347	1260796	11.347	90	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	586682	14.921	648152	14.921	91	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1100721	17.926	1231995	17.927	89	50 - 200	-0.001	+/-0.50	
Chrysene-d12	984716	22.957	1126974	22.957	87	50 - 200	0.000	+/-0.50	
Perylene-d12	1087306	25.442	1243668	25.442	87	50 - 200	0.000	+/-0.50	
LDW23-SS1116 (23A0134-12)		(Solid)	Lab File ID: NT1802272307S.D				Analyzed: 02/27/23 21:11		
1,4-Dichlorobenzene-d4	302571	8.896	334128	8.896	91	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1121830	11.347	1260796	11.347	89	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	578626	14.921	648152	14.921	89	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1190397	17.926	1231995	17.927	97	50 - 200	-0.001	+/-0.50	
Chrysene-d12	1173751	22.965	1126974	22.957	104	50 - 200	0.008	+/-0.50	
Perylene-d12	1131971	25.458	1243668	25.442	91	50 - 200	0.016	+/-0.50	
LDW23-IT1210 (23A0134-13)		(Solid)	Lab File ID: NT1802272308S.D				Analyzed: 02/27/23 21:51		
1,4-Dichlorobenzene-d4	284727	8.896	334128	8.896	85	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1070959	11.347	1260796	11.347	85	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	593078	14.921	648152	14.921	92	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1349245	17.934	1231995	17.927	110	50 - 200	0.007	+/-0.50	
Chrysene-d12	1527229	22.988	1126974	22.957	136	50 - 200	0.031	+/-0.50	
Perylene-d12	1133677	25.481	1243668	25.442	91	50 - 200	0.039	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0396
Instrument: NT18
Calibration: GC00036

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike (BLA0410-MS2)		(Solid)	Lab File ID: NT1802272309S.D				Analyzed: 02/27/23 22:32		
1,4-Dichlorobenzene-d4	313068	8.896	334128	8.896	94	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1207922	11.347	1260796	11.347	96	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	666080	14.929	648152	14.921	103	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1566748	17.942	1231995	17.927	127	50 - 200	0.015	+/-0.50	
Chrysene-d12	1529851	23.004	1126974	22.957	136	50 - 200	0.047	+/-0.50	
Perylene-d12	960465	25.497	1243668	25.442	77	50 - 200	0.055	+/-0.50	
Matrix Spike Dup (BLA0410-MSD2)		(Solid)	Lab File ID: NT1802272310S.D				Analyzed: 02/27/23 23:12		
1,4-Dichlorobenzene-d4	313608	8.896	334128	8.896	94	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1198353	11.347	1260796	11.347	95	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	644797	14.929	648152	14.921	99	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1525603	17.942	1231995	17.927	124	50 - 200	0.015	+/-0.50	
Chrysene-d12	1547346	22.996	1126974	22.957	137	50 - 200	0.039	+/-0.50	
Perylene-d12	944991	25.496	1243668	25.442	76	50 - 200	0.054	+/-0.50	
LDW23-SC1249 (23A0134-15)		(Solid)	Lab File ID: NT1802272311S.D				Analyzed: 02/27/23 23:53		
1,4-Dichlorobenzene-d4	321946	8.896	334128	8.896	96	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1199423	11.347	1260796	11.347	95	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	621153	14.921	648152	14.921	96	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1330293	17.934	1231995	17.927	108	50 - 200	0.007	+/-0.50	
Chrysene-d12	1329279	22.98	1126974	22.957	118	50 - 200	0.023	+/-0.50	
Perylene-d12	784597	25.473	1243668	25.442	63	50 - 200	0.031	+/-0.50	

HOLDING TIME SUMMARY

Analysis: EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1205 23A0134-01	01/06/23 08:28	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 17:52	38	40	
LDW23-SS1188 23A0134-02	01/06/23 09:36	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 18:32	38	40	
LDW23-SS1179 23A0134-03	01/06/23 09:52	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 19:12	38	40	
LDW23-SS1242 23A0134-04	01/06/23 11:04	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 19:53	38	40	
LDW23-SS1173 23A0134-05	01/06/23 11:22	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 20:33	38	40	
LDW23-SS1160 23A0134-06	01/06/23 11:41	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 21:13	38	40	
LDW23-SS1152 23A0134-07	01/06/23 12:29	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 21:53	38	40	
LDW23-SS1131 23A0134-08	01/06/23 12:43	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 22:33	38	40	
LDW23-SS1129 23A0134-09	01/06/23 12:57	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 23:14	38	40	
LDW23-SS1124 23A0134-10	01/06/23 13:15	01/06/23 17:26	01/19/23 13:35	13	365	02/26/23 23:54	38	40	
LDW23-SS1123 23A0134-11	01/06/23 13:29	01/06/23 17:26	01/19/23 13:35	13	365	02/27/23 00:34	38	40	
LDW23-SS1116 23A0134-12	01/06/23 13:44	01/06/23 17:26	01/19/23 13:35	12	365	02/27/23 21:11	39	40	
LDW23-IT1210 23A0134-13	01/06/23 14:12	01/06/23 17:26	01/19/23 13:35	12	365	02/27/23 21:51	39	40	
LDW23-IT1194 23A0134-14	01/06/23 14:41	01/06/23 17:26	01/19/23 10:45	12	365	01/25/23 17:15	6	40	
LDW23-SC1249 23A0134-15	01/06/23 13:46	01/06/23 17:26	01/19/23 13:35	12	365	02/27/23 23:53	39	40	
Matrix Spike BLA0410-MS2	01/06/23 14:12	01/06/23 17:26	01/19/23 13:35	12	365	02/27/23 22:32	39	40	
Matrix Spike Dup BLA0410-MSD2	01/06/23 14:12	01/06/23 17:26	01/19/23 13:35	12	365	02/27/23 23:12	39	40	
Matrix Spike BLA0411-MS1	01/06/23 14:41	01/06/23 17:26	01/19/23 10:45	12	365	01/25/23 17:41	6	40	
Matrix Spike Dup BLA0411-MSD1	01/06/23 14:41	01/06/23 17:26	01/19/23 10:45	12	365	01/25/23 18:08	6	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT18

Analyte	MDL	RL	Units
1,4-Dichlorobenzene	0.6	5.0	ug/kg
1,2-Dichlorobenzene	0.7	5.0	ug/kg
Benzyl Alcohol	2.5	20.0	ug/kg
Benzoic acid	13.4	100	ug/kg
2,4-Dimethylphenol	2.2	20.0	ug/kg
1,2,4-Trichlorobenzene	2.7	5.0	ug/kg
N-Nitrosodiphenylamine	1.3	5.0	ug/kg
Pentachlorophenol	2.1	20.0	ug/kg

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT8

Analyte	MDL	RL	Units
Benzo(a)anthracene	0.82	5.00	ug/kg
Chrysene	1.05	5.00	ug/kg
Benzo(b)fluoranthene	1.37	5.00	ug/kg
Benzo(k)fluoranthene	0.76	5.00	ug/kg
Benzo(a)pyrene	0.61	5.00	ug/kg
Indeno(1,2,3-cd)pyrene	1.05	5.00	ug/kg
Dibenzo(a,h)anthracene	0.89	5.00	ug/kg

I8227

Certificate of Analysis

SIGMA-ALDRICH

Product Name	Pentachlorophenol, 97%
Product Number	P2604
Product Brand	ALDRICH
CAS Number	87-86-5
Molecular Formula	C_6Cl_5OH
Molecular Weight	266.34

TEST	SPECIFICATION	LOT 07119HO RESULTS
APPEARANCE	WHITE TO OFF-WHITE OR LIGHT BLUE POWDER	OFF-WHITE POWDER
INFRARED SPECTRUM	CONFORMS TO STRUCTURE.	CONFORMS TO STRUCTURE AND STANDARD
TITRATION	97.5% - 102.5% (WITH AGNO3 AFTER OXYGEN	100.5 % (WITH AGNO3 AFTER OXYGEN COMBUSTION)
GAS LIQUID CHROMATOGRAPHY	97.5% (MINIMUM)	99.9 %
SOLUBILITY		100 MG/ML, 95% ETOH: VERY HAZY, FAINT YELLOW SOLUTION
QUALITY CONTROL ACCEPTANCE DATE		JUNE 2001

Barbara Rajzer

Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: NA

Chemical: Tributyl Phosphate

Manufacturer: Chemservice

Product #: O-916

Lot #: 59-57A

Purity: 99%

Analyst: VB

Element: B000954

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001873

Printed: 9/23/2013 11:47:03AM

Description:	SVOC 4,4 DDT	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	23-Sep-13
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 11:46 by JZ
Vendor:	Chem Service	Lot #:	198-128A
Vendor Catalog #:			

Comments

Neat, Purity @ 99.2%. (ARI#: 790A)

Analyte	CAS Number	Concentration	Units
4,4'-DDT	50-29-3	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 4,4' DDT

Manufacturer: Chem Service

Product #: _____

Lot #: 198-128A

Purity: 99.2%

Analyst: AB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001875

Printed: 9/23/2013 12:13:55PM

Description:	SVOC alpha-Terpineol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 12:13 by JZ
Vendor:	ACROS Organics	Lot #:	AD16481201
Vendor Catalog #:			

Comments

Neat, Purity @ 98%. (ARI#: I1582A)

Analyte	CAS Number	Concentration	Units
alpha-Terpineol	98-55-5	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: alpha-Terpineol

Manufacturer: Acros Organics

Product #: _____

Lot #: A0648170 1

Purity: 98%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001885

Printed: 9/23/2013 3:45:57PM

Description:	SVOA Dibutyl Phenyl phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 15:45 by JZ
Vendor:	Monsanto	Lot #:	N/A
Vendor Catalog #:			

Comments

Neat, Purity @ 98.9%.

Analyte	CAS Number	Concentration	Units
Dibutyl Phenyl Phosphate	2528-36-1	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Dibutyl Phenyl Phosphate

Manufacturer: Monsanto

Product #: N/A

Lot #: N/A

Purity: 98.9%

Analyst:

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001886

Printed: 9/23/2013 3:59:35PM

Description:	SVOC Triphenyl Phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 15:59 by JZ
Vendor:	Aldrich	Lot #:	04902CM
Vendor Catalog #:			

Comments

Neat, Purity @ 99%.

Analyte	CAS Number	Concentration	Units
Triphenyl Phosphate	115-86-6	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Triphenyl Phosphate

Manufacturer: Aldrich

Product #: _____

Lot #: 04907CM

Purity: 99%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001887

Printed: 9/23/2013 4:18:55PM

Description:	SVOC Butylated Hydroxytoluene	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 16:18 by JZ
Vendor:	SIGMA	Lot #:	39F-0197
Vendor Catalog #:			

Comments

neat,Purity @ 99.9%.

Analyte	CAS Number	Concentration	Units
Butylated Hydroxytoluene	128-37-0	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butylated Hydroxytoluene

Manufacturer: Sigma

Product #: _____

Lot #: 39F-0197

Purity: 99.8%

Analyst: AR

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001890

Printed: 9/23/2013 5:02:53PM

Description:	SVOC Butyl Diphenyl Phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 17:02 by JZ
Vendor:	Monsanto	Lot #:	N/A
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Butyl Diphenyl Phosphate	2752-95-6	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butyl Diphenyl Phosphate

Manufacturer: Monsanto

Product #: NA

Lot #: NA

Purity: 98%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001941

Printed: 9/25/2013 1:45:31PM

Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941
SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: _____

Lot #: bFH502I

Purity: 90 ~ 94%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001945

Printed: 9/25/2013 3:23:22PM

Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945
SVOC Benzoic Acid
Expires 12/31/2029
Prepared By Jianqing Zhou 12/31/2012

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0214339

Purity: 98%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001948

Printed: 9/25/2013 3:37:51PM

Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948
SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: KB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002054

Printed: 10/4/2013 6:32:21PM

Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL

B002054
SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 67-53

Purity: 99%

Analyst: AZ

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002135

Printed: 10/15/2013 12:07:39PM

Description:	SVOA Benzidine	Expires:	31-Dec-29
Standard Type:	Analyte Spike	Prepared:	15-Oct-13
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	15-Oct-13 12:07 by JZ
Vendor:	SIGMA	Lot #:	18C0024
Vendor Catalog #:			

Comments

Purity @ 95%. ARI#: 0467.

Analyte	CAS Number	Concentration	Units
Benzidine	92-87-5	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzidine

Manufacturer: Sigma

Product #: B-3503

Lot #: 18C0024

Purity: 98%

Analyst: [signature]

Cambridge Isotope Laboratories, Inc.

50 Frontage Road, Andover, MA 01810-5413 USA
800.322.1174 (N.AMERICA) 978.749.8000 (INTERNATIONAL)
www.isotope.com

CERTIFICATE OF ANALYSIS

Product Name: DIBENZ[A,H]ANTHRACENE
(Isotopic Label & Enrichment Specification) (D14, 97%)

Lot Number: PR-14764/09163DA2

Catalog Number: DLM-677-0

I295

Product Information

Chemical Purity Specification:	≥ 98%
Labeled CAS Number:	NA
Unlabeled CAS Number:	53-70-3
Molecular Weight:	292.5
Chemical Formula:	C22D14
Storage:	Store at room temperature away from light and moisture.
Stability:	Stable if stored under recommended conditions.

Certification

Cambridge Isotope Laboratories, Inc. guarantees that this material meets or exceeds the specifications stated. Absolute identity as well as chemical and isotopic purities are assured by the use of unambiguous synthetic routes and multiple chemical analyses whenever possible.

Approved by: Deborah E. Costa

Deborah E. Costa, Quality Assurance

Quality Control Tests and Results

GC/MS for Chemical Purity	99.3%
GC/MS for Isotopic Enrichment	97.4%
Melting Point Range Determination	263-265°C
1H NMR for Chemical Purity	Pass

E006466

SVOA-d14-Dibenz(a,h)anthracene-NEAT
Solvent / Lot: NA
Prep: 11/9/2016 by VS
Exp: 5/8/2030
Location:

Certificate of Analysis

Product Name:	1,2,4,5-Tetrachlorobenzene
Product Description:	98%
Product Brand:	Sigma-Aldrich
Product Number:	131857
Molecular Weight:	215.89
CAS Number:	95-94-3

TEST	SPECIFICATION	LOT 19309JR RESULTS
APPEARANCE	WHITE POWDER, CHIPS OR CRYSTALS	WHITE CHIPS
INFRARED SPECTRUM	CONFORMS TO STRUCTURE.	CONFORMS TO STRUCTURE AND STANDARD AS
** **		ILLUSTRATED ON PAGE 1011C OF EDITION I,
** **		VOLUME 1 OF "THE ALDRICH LIBRARY OF FT-IR
** **		SPECTRA".
GAS LIQUID	97.5% (MINIMUM)	99.9 %
QUALITY CONTROL		JULY 1997

Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

F009172
SVOC 1,2,4,5-Tetrachlorobenzene
Expires 12/31/2079
Prepared By Joshua Rains 10/6/2017

H000691

Data File: \\target\share\chem2\fid4a.i\20230317.b\423C1703.D

Page 1

Date : 17-MAR-2023 10:46

Client ID:

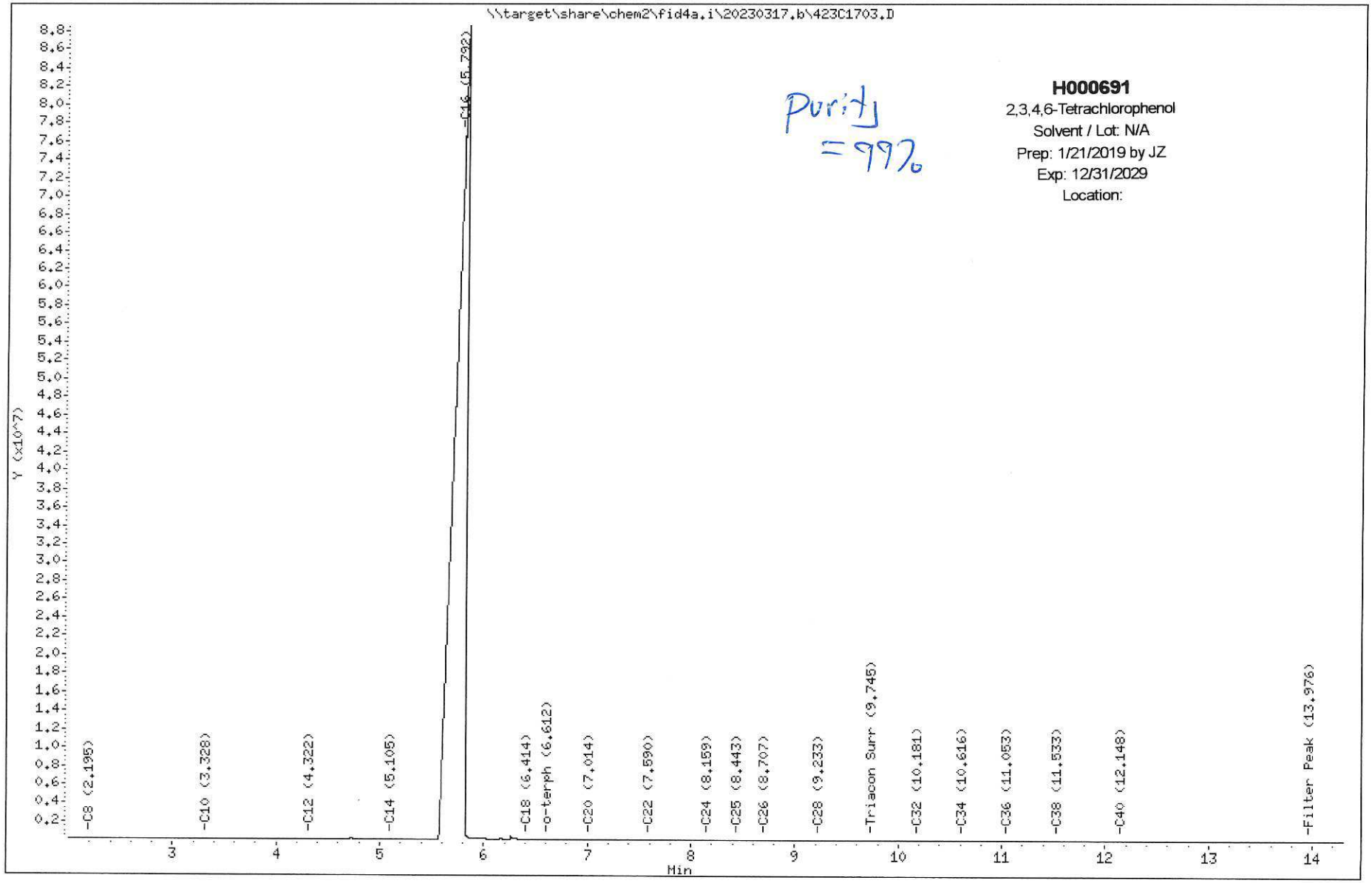
Instrument: fid4a.i

Sample Info: K007226

Operator: AA

Column phase: RTX-1

Column diameter: 0.25



Purity = 99%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
Lab Smp Id: K007226
Inj Date : 17-MAR-2023 10:46
Operator : AA Inst ID: fid4a.i
Smp Info : K007226
Misc Info :
Comment   :
Method   : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: tph.sub
Target Version: 4.14
Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
5.228	2027	2354	1.162	0.000	
5.276	4673	2682	0.574	0.000	
5.322	195	844	4.328	0.000	
5.331	977	1203	1.231	0.000	
5.356	490	993	2.027	0.000	
5.361	814	1044	1.283	0.000	
5.382	115	387	3.351	0.000	
5.399	619	960	1.551	0.000	
5.406	402	1035	2.576	0.000	
5.410	378	1122	2.968	0.000	
5.423	1663	1555	0.935	0.000	
5.452	5951	5020	0.844	0.000	
5.501	290	797	2.753	0.000	
5.523	2317	2472	1.067	0.000	
5.538	5946	6823	1.147	0.000	
5.792	501855376	76456669	0.152	74.449	6 C16
5.807	79757019	82319946	1.032	11.775	
5.823	77929961	88539160	1.136	11.505	
5.962	75333	84828	1.126	0.011	
5.986	474748	124326	0.262	0.070	
6.070	17103	57180	3.343	0.002	
6.074	120761	57565	0.477	0.017	
6.113	90233	47140	0.522	0.013	
6.165	407438	218439	0.536	0.060	
6.263	944101	374166	0.396	0.139	
6.414	114839	39498	0.344	0.016	7 C18
6.464	53190	31177	0.586	0.007	
6.523	31509	25870	0.821	0.004	
6.551	4785	23963	5.008	0.000	
6.559	51194	25409	0.496	0.007	
6.590	21354	21666	1.015	0.003	
6.612	35061	21127	0.603	0.005	$ 8 o-terph
6.638	17712	19934	1.125	0.002	
6.672	22159	19651	0.887	0.003	
6.683	26846	19268	0.718	0.003	
6.708	5413	18142	3.351	0.000	
6.713	24941	18247	0.732	0.003	
6.747	50657	18478	0.365	0.007	
6.795	23973	17444	0.728	0.003	
6.814	28457	17895	0.629	0.004	
6.837	10746	15445	1.437	0.001	
6.871	29974	21406	0.714	0.004	
6.874	4287	21471	5.009	0.000	
6.882	20520	21675	1.056	0.003	
6.944	32864	17445	0.531	0.004	
6.978	9138	15347	1.679	0.001	
7.014	4130	13830	3.348	0.000	9 C20
7.025	12567	14083	1.121	0.001	
7.038	4952	14274	2.882	0.000	
7.044	6508	14578	2.240	0.000	
7.050	25344	14736	0.581	0.003	
7.099	5531	12365	2.236	0.000	
7.108	16440	12371	0.752	0.002	
7.129	9415	11275	1.198	0.001	
7.175	3589	10327	2.878	0.000	
7.182	7285	10474	1.438	0.001	
7.212	11252	10002	0.889	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
	677340272	268782821		100.000	

Total unknown % area = 25.478

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CERTIFICATE OF ANALYSIS

2-Chloronaphthalene

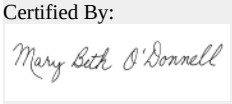
CATALOG NUMBER	N-10323-100MG
LOT NUMBER	10816400
DATE CERTIFIED	05/22/18
EXPIRATION DATE	05/31/24
CAS NUMBER	91-58-7
MOLECULAR FORMULA	C10H7Cl
MOLECULAR WEIGHT	162.62
STORAGE	Store at room temperature (20 - 25 °C).
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

I010152
2-Chloronaphthalene NEAT
Expires 12/31/2079
Prepared By Joshua Rains 10/29/2020

Analytical Test	Value
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:



Mary Beth O'Donnell
CSM/TC

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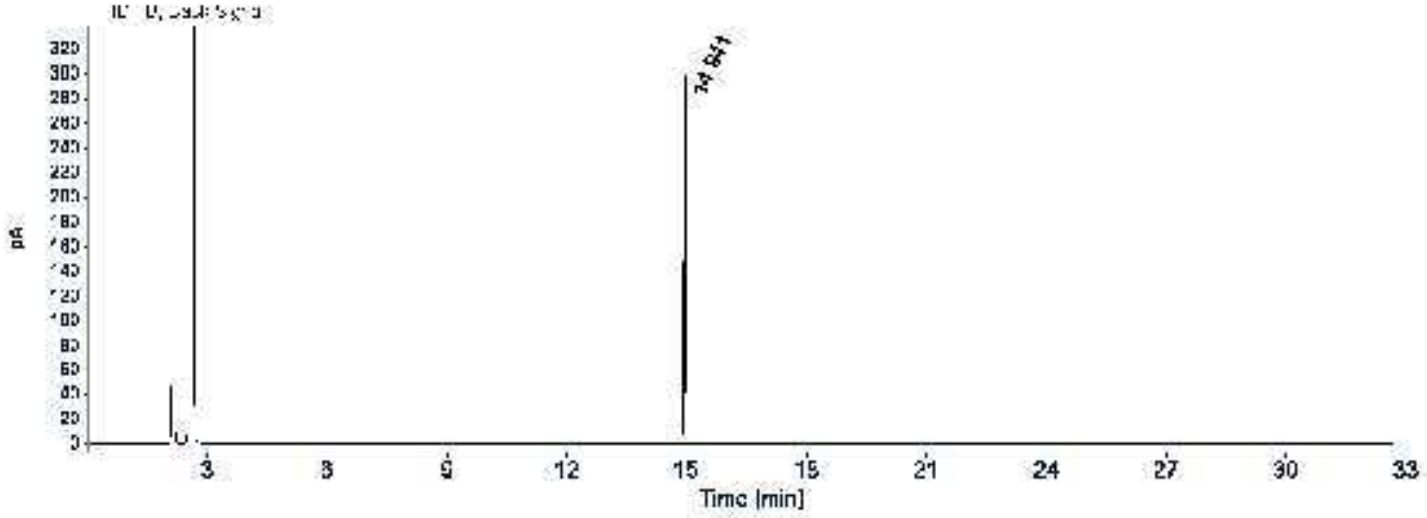
CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\Chem32\1\Data\2018 Data\0518\2-Chloronaphtthalene.D
Sample name: 2-Chloronaphthalene

Instrument: GC3
Injection date: 5/22/2018 1:12:52 PM
Acq. method: REAR_SCREEN.M
Location: 209
Injection volume: 1.0uL
Col Type: pn# 7HG-G006-17-C **Diameter** 250.000 **Length** 30.000



Signal: FID1 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
14.941	BB	0.0410	808.8124	308.5675	100.0000
		Sum	808.8124		

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAC9813
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9813.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005199
SVOA-ABN BASE STOCK-200-800ug/ml
Expires 5/31/2023
Prepared By Jianqing Zhou 5/18/2021

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE CAS# 91-94-1	802	µg/mL	99.9	LC27068
2,4-DINITROTOLUENE CAS# 121-14-2	802	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	801	µg/mL	99.9	LB79891
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	802	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	801	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	201	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	803	µg/mL	100.0	10126MG
4-CHLOROANILINE CAS# 106-47-8	803	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	802	µg/mL	99.9	LC05068
3-NITROANILINE CAS# 99-09-2	802	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	802	µg/mL	99.9	LC11400
PYRIDINE (LOW WATER) CAS# 110-86-1	802	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

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Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 12-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9813.01	12-May-2021	Original Release Date

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Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

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Certificate of Composition - Analytical Standard

ACID STOC"

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005200
SVOA-ABN ACID STOCK-200-800ug/ml
Solvent / Lot: DCM
Prep: 5/18/2021 by JZ
Exp: 5/31/2023
Location:

JZ 5/18/21

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

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CERTIFIED WEIGHT REPORT

Part Number: **70476**
Lot Number: 092220
Description: Benzo(j)fluoranthene

Expiration Date: 092225
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 23060

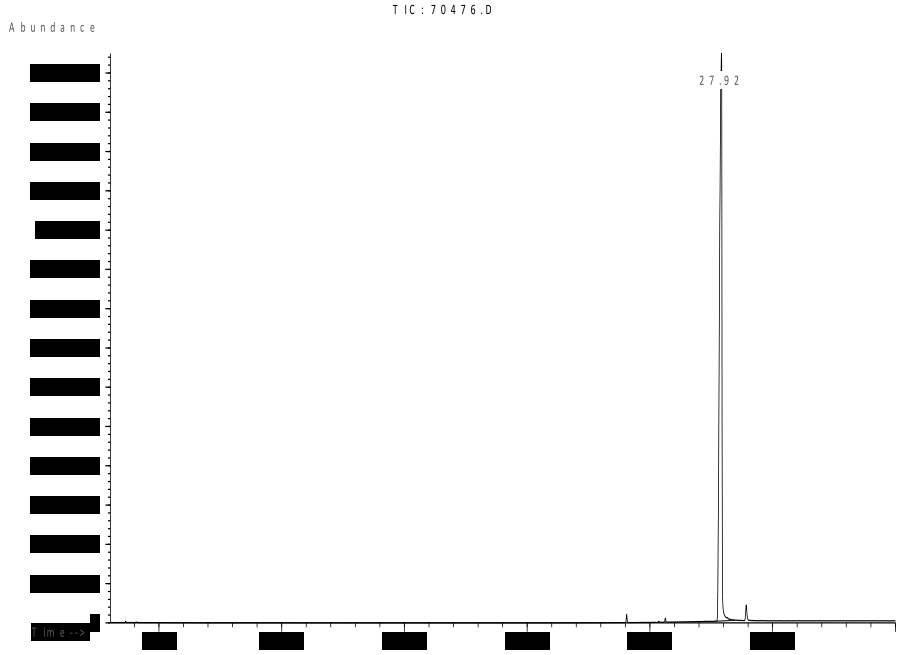
Solvent(s): **Lot#**
Methylene chloride 104929

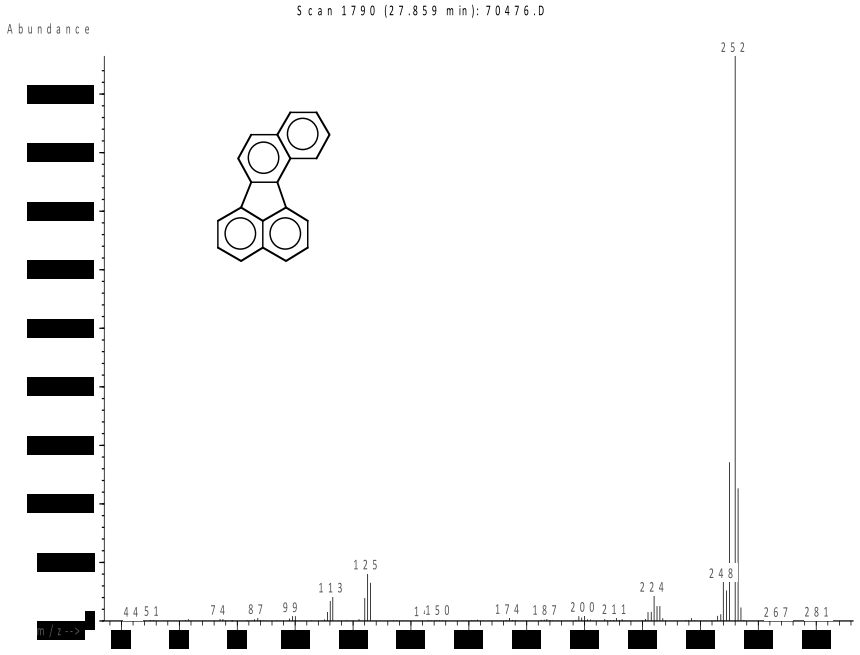
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

092220	
Formulated By: Benson Chan	DATE
092220	
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Benzo(j)fluoranthene	476	3-CSZ-153-20	1000	98.1	0.2	0.02547	0.02552	1001.8	5.7	205-82-3	0.2mg/m3	N/A

Method GC8MSD1M: Column:SBB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 290°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.





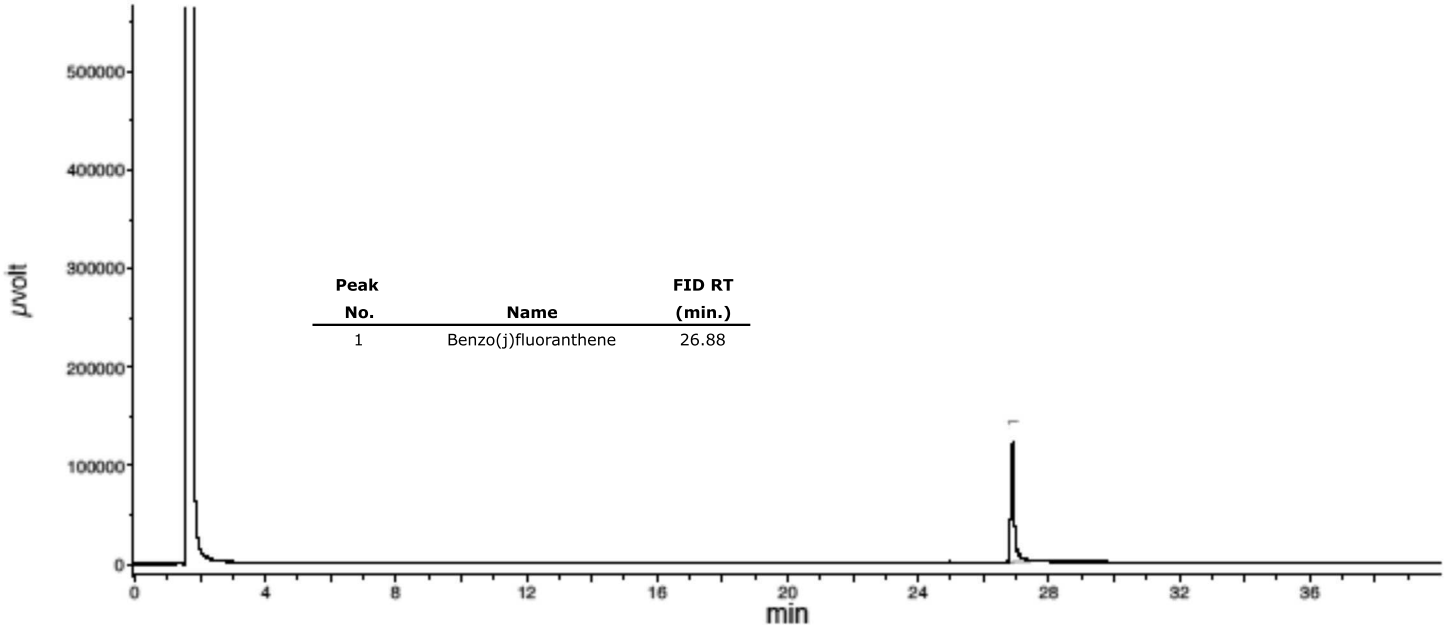
- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).**
- **Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.**
- **All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.**
- **Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).**

Run 31, "P70476 L092220 [1000µg/mL in MeCl2]"

Run Length: 40.00 min, 23999 points at 10 points/second.
Created: Thu, Sep 24, 2020 at 2:33:43 AM.
Sampled: Sequence "092120-GC9M2", Method "GC9-M2".
Analyzed using Method "GC9-M2".

Comments

GC9-M2 Analysis by Melissa Stonier
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates; Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) =360 mLOven Temp 1 = 50°C (1 min).
Rate = 10°C/min, Oven Temp 2 = 300°C (14 min), Total Run Time = 40 Minutes. Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = eDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 3



Peak No.	Name	FID RT (min.)
1	Benzo(j)fluoranthene	26.88

Agilent

Certificate of Analysis

J008074

SVOA PAH STD 2000ug/ml
Expires 6/30/2023
Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Number: 0006540449

Lot Issue Date: 11-Jun-2020

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Product Number: US-106N-1 **Lot Number:** 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Lot Number: CL16062
Description: Benzidines Standard
Certification Date: November 19, 2020
Storage: 4 °C
Expiration Date: November 30, 2030
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310
Benzidines std @2000ug/ml
Expires 11/30/2030
Prepared By Van Spohn 8/12/2021

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

Sigma-Aldrich

Product Name:	2,4,6-Tribromophenol
Product Description:	99%
Product Brand:	Sigma-Aldrich
Product Number:	137715
Molecular Weight:	330.80
Molecular Formula:	$Br_3C_6H_2OH$
CAS Number:	118-79-6

TEST	SPECIFICATION	LOT 05110PD RESULTS
APPEARANCE:	WHITE TO OFF-WHITE TO PINK FLAKES, CHUNKS,	PINK BEADS
INFRARED SPECTRUM:		CONFORMS TO STRUCTURE.
GAS LIQUID:	98.5% (MINIMUM)	99.9%
QUALITY CONTROL:		NOVEMBER 2005

Barbara Rajzer

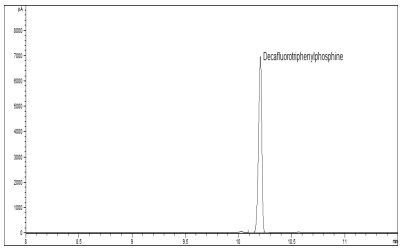
Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

J010541
SVOA-Tribromophenol-NEAT
Solvent / Lot: 05110PD
Prep: 10/1/2021 by VS
Exp: 3/30/2040
Location: voa freezer

Certificate of Analysis - Certified Reference Material

Decafluorotriphenylphosphine solution

Product no.: 48724-U
Lot no.: LRAD0628
Expiry Date: October 2024
Manufacturing Date: September 2021
Storage: ROOM TEMPERATURE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0628.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

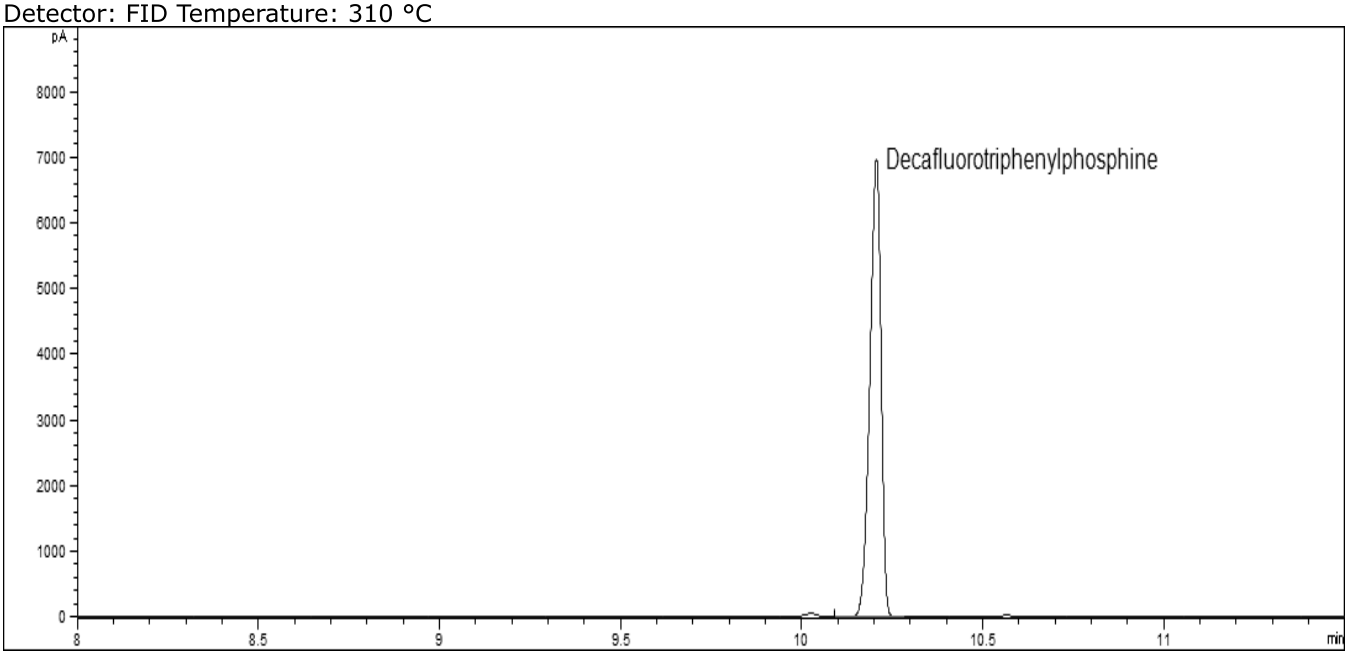


Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
DFTPP CAS# 5074-71-5	25.2 ± 2.6	mg/mL	97.0	10220909

ASSAY Method

METHOD: GC (BELLEFONTE)
Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.3 mL/min
Inlet Temperature: 250 °C Injection Volume: 1 µL
Injection Mode: 25:1
Temperature Program: 120 °C (Hold 0 min) @ 12 °C/min to 260 °C (Hold 0 min)
Detector: FID Temperature: 310 °C



Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Elution details:

EO	RT(MIN)	ANALYTE
1	10.206	Decafluorotriphenylphosphine

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Minimum sample size: 1 µL

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 30-Sep-2021

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0628.01	30-Sep-2021	Original Release Date

.

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246
Description: Benzoic Acid
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16693
Certification Date: May 6, 2021
Expiration Date: April 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 4.383%

K3238

A2LA ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

A2LA ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 25 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443
Description: Aniline
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17696
Certification Date: December 14, 2021
Expiration Date: December 31, 2029

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 0.760%

K 3239

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

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3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	*Units*	*Certified Value* [1,4]
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4ºC.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4ºC. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4ºC.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID	CRM143-50G
Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.

Description

Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

***k*:** Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date	January 05, 2021
Version	0-152021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 93462
Lot Number: 081021
Description: PAH Standard
30 components
Expiration Date: 081026
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

Solvent(s): Methylene chloride **Lot#** 105345

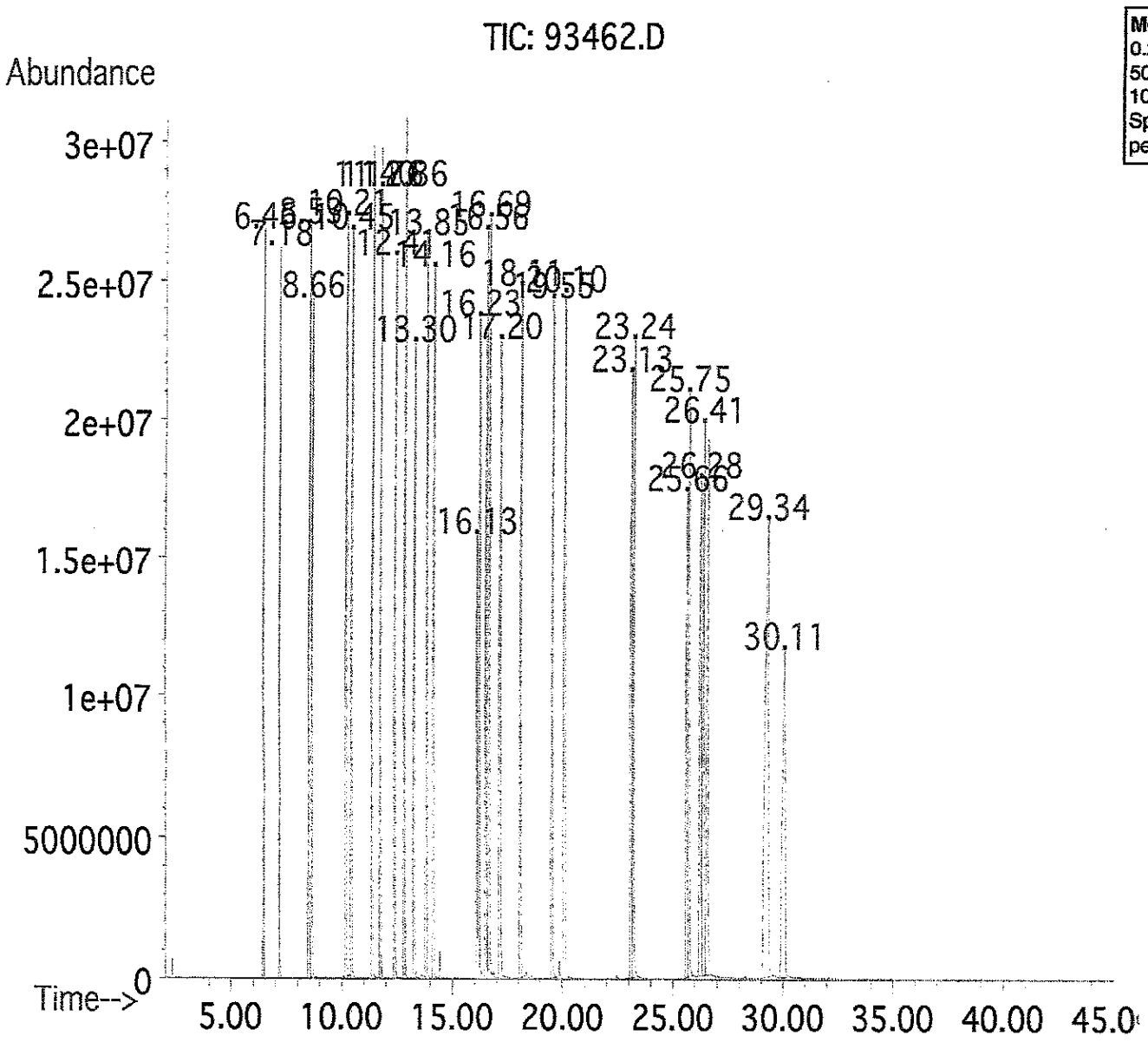
K3587

5E-05 Balance Uncertainty
Volume(s) shown below were combined and diluted to (mL): 20.0 0.001 Flask Uncertainty

Formulated By:	Prashant Chauhan	081021 DATE
Reviewed By:	Pedro L. Rentas	081021 DATE

Compound	Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc.(ug/mL)	Final Conc.(ug/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acenaphthene	10007	042420	0.50	10.00	0.042	2001.2	1000.4	9.4	83-32-9	N/A	ipr-rat 600mg/kg
2. Acenaphthylene	10007	042420	0.50	10.00	0.042	2000.2	999.9	9.4	208-96-8	N/A	N/A
3. Anthracene	10007	042420	0.50	10.00	0.042	2000.3	999.9	9.3	120-12-7	0.2mg/m3 (8H)	ipr-mus 430mg/kg
4. Benzo(a)anthracene	10007	042420	0.50	10.00	0.042	2001.3	1000.4	9.4	56-55-3	N/A	N/A
5. Benzo(a)pyrene	10007	042420	0.50	10.00	0.042	2000.0	999.8	9.3	50-32-8	0.2mg/m3 (8H)	scu-rat 50mg/kg
6. Benzo(b)fluoranthene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.3	205-99-2	N/A	N/A
7. Benzo(k)fluoranthene	10007	042420	0.50	10.00	0.042	2001.2	1000.4	9.4	207-08-9	N/A	N/A
8. Benzo(g,h,i)perylene	10007	042420	0.50	10.00	0.042	2000.0	999.8	9.3	191-24-2	N/A	N/A
9. Carbazole	10007	042420	0.50	10.00	0.042	2000.3	999.9	9.4	86-74-8	N/A	ipr-mus 200mg/kg
10. Chrysene	10007	042420	0.50	10.00	0.042	2000.8	1000.2	9.4	218-01-9	0.2mg/m3	N/A
11. Dibenzo(a,h)anthracene	10007	042420	0.50	10.00	0.042	2000.8	1000.2	9.4	53-70-3	0.2mg/m3	N/A
12. Fluoranthene	10007	042420	0.50	10.00	0.042	2000.3	999.9	9.4	206-44-0	N/A	orl-rat 2000mg/kg
13. Fluorene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.4	86-73-7	N/A	ipr-mus 2 g/kg
14. Indeno(1,2,3-cd)pyrene	10007	042420	0.50	10.00	0.042	2000.1	999.8	9.3	193-39-5	N/A	N/A
15. Naphthalene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.3	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
16. Phenanthrene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.4	85-01-8	0.2mg/m3/8H	orl-mus 700mg/kg
17. Pyrene	10007	042420	0.50	10.00	0.042	2001.0	1000.3	9.4	129-00-0	0.2mg/m3/8H	orl-rat 2700mg/kg
18. Benzo(e)pyrene	94851	081021	0.50	10.00	0.042	2002.1	1000.8	9.4	192-97-2	N/A	N/A
19. Biphenyl	94851	081021	0.50	10.00	0.042	2001.5	1000.5	9.4	92-52-4	0.2 ppm(1mg/m3/8H)	orl-rat 2400mg/kg
20. Decalin (49% cis, 51% trans)	94851	081021	0.50	10.00	0.042	2002.5	1001.0	9.4	91-17-8	N/A	N/A
21. Dibenzofuran	94851	081021	0.50	10.00	0.042	2002.3	1000.9	9.4	132-64-9	N/A	N/A
22. Dibenzothiophene	94851	081021	0.50	10.00	0.042	2002.5	1001.0	9.4	132-65-0	N/A	orl-mus 470 mg/kg
23. 2,6-Dimethylnaphthalene	94851	081021	0.50	10.00	0.042	2001.9	1000.7	9.4	581-42-0	N/A	N/A
24. 1-Methylnaphthalene	94851	081021	0.50	10.00	0.042	2002.2	1000.9	9.4	90-12-0	N/A	orl-rat 1840mg/kg
25. 2-Methylnaphthalene	94851	081021	0.50	10.00	0.042	2000.6	1000.1	9.4	91-57-6	N/A	orl-rat 1630mg/kg
26. 1-Methylphenanthrene	94851	081021	0.50	10.00	0.042	2002.3	1000.9	13.2	832-69-9	N/A	N/A
27. Pentachlorophenol	94851	081021	0.50	10.00	0.042	3961.5	1980.3	18.6	87-86-5	0.5mg/m3/8H (skin)	orl-rat 27mg/kg
28. Perylene	94851	081021	0.50	10.00	0.042	2001.9	1000.7	9.4	198-55-0	N/A	N/A
29. Thianaphthene	94851	081021	0.50	10.00	0.042	2003.1	1001.3	9.4	95-15-8	N/A	N/A
30. 2,3,5-Trimethylnaphthalene	94851	081021	0.50	10.00	0.042	2003.1	1001.3	9.5	2245-38-7	N/A	N/A

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



Method GC8MSD-2Long: Column:SPB-5 (30m X 0.25mm ID X 0.25μm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (14min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Gina McLane.

Retention Time (min.)	
Decahydronaphthalene (Decalin) (isomer)	6.46
Decahydronaphthalene (Decalin) (isomer)	7.18
Naphthalene	8.53
Thianaphthene	8.66
2-Methylnaphthalene	10.21
1-Methylnaphthalene	10.45
Biphenyl	11.4
2,6-Dimethylnaphthalene	11.76
Acenaphthylene	12.41
Acenaphthene	12.86
Dibenzofuran	13.3
2,3,5-Trimethylnaphthalene	13.85
Fluorene	14.16
Pentachlorophenol	16.13
Dibenzothiophene	16.23
Phenanthrene	16.56
Anthracene	16.69
Carbazole	17.2
1-Methylphenanthrene	18.11
Fluoranthene	19.55
Pyrene	20.1
Benzo(a)anthracene	23.13
Chrysene	23.24
Benzo(b)fluoranthene	25.66
Benzo(k)fluoranthene	25.75
Perylene	26.28
Benzo(a)pyrene	26.41
Benzo(e)pyrene	26.61
Indeno(1,2,3-cd)pyrene	29.34
Dibenzo(a,h)anthracene	29.34
Benzo(g,h,i)perylene	30.11

Certificate of Analysis

Phenova Certified Reference Materials are sold by Phenomenex.
411 Madrid Ave., Torrance, CA 90501 USA ▪ Tel: 310-212-0555 ▪ Fax: 310-328-7768 ▪ info@phenomenex.com
Access your MSDS and digital C of A at **www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards**

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101291	**Lot Number:**	CL11000
Description:	GC/MS Tuning Mix	**Certification Date:**	May 9, 2014
Storage:	4 °C	**Expiration Date:**	December 31, 2023
Provided As:	1 mL in 2 mL Ampoule in Methylene chloride	**Revision Date:**	August 5, 2015

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

K003891
GC/MS Tune solution-1000ug/ml
Solvent / Lot: CL11000
Prep: 4/22/2022 by VS
Exp: 12/31/2023
Location:

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL111110613_us

Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-103N-1 **Lot Issue Date:** 25-May-2021

Lot Number: 0006609664 **Expiration Date:** 30-Jun-2024

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
benzoic acid	000065-85-0	RM01884	2005 ± 10 µg/mL
o-cresol	000095-48-7	RM12877	2005 ± 10 µg/mL
p-cresol	000106-44-5	RM01988	2005 ± 10 µg/mL
2,4,5-trichlorophenol	000095-95-4	NT00344	2004 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

5/11/22

K004539
toxic sub mix#1
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 6/30/2024
Location:

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Phenols Standard
Product Number: US-107N-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006648297
Lot Issue Date: 17-Nov-2021
Expiration Date: 31-Dec-2024

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
4-chloro-3-methylphenol	2006 ±	10 µg/mL	000059-50-7	RM01885
2-chlorophenol	2007 ±	10 µg/mL	000095-57-8	RM01871
2,4-dichlorophenol	2005 ±	10 µg/mL	000120-83-2	RM13878
2,4-dimethylphenol	2006 ±	10 µg/mL	000105-67-9	RM13009
2,4-dinitrophenol	2006 ±	10 µg/mL	000051-28-5	RM02112
2-methyl-4,6-dinitrophenol	2005 ±	10 µg/mL	000534-52-1	RM02292
2-nitrophenol	2007 ±	10 µg/mL	000088-75-5	RM13445
4-nitrophenol	2006 ±	10 µg/mL	000100-02-7	RM03752
pentachlorophenol	2006 ±	10 µg/mL	000087-86-5	RM02474
phenol	2006 ±	10 µg/mL	000108-95-2	RM11471
2,4,6-trichlorophenol	2006 ±	10 µg/mL	000088-06-2	RM18096

Matrix: methylene chloride (dichloromethane)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

5/11/22

CSD-QA-015.1

K004540
phenols mix
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 12/31/2024
Location:

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: PAH Standard
Product Number: US-106N-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006627349
Lot Issue Date: 17-Sep-2021
Expiration Date: 31-Oct-2024

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
acenaphthene	2007 ±	10 µg/mL	000083-32-9	RM10879
acenaphthylene	2004 ±	10 µg/mL	000208-96-8	RM10891
anthracene	2006 ±	10 µg/mL	000120-12-7	RM14212
benz[a]anthracene	2006 ±	10 µg/mL	000056-55-3	RM16072
benzo[b]fluoranthene	2006 ±	10 µg/mL	000205-99-2	RM14571
benzo[k]fluoranthene	2006 ±	10 µg/mL	000207-08-9	RM18376
benzo[ghi]perylene	2006 ±	10 µg/mL	000191-24-2	RM15761
benzo[a]pyrene	2006 ±	10 µg/mL	000050-32-8	RM17573
chrysene	2007 ±	10 µg/mL	000218-01-9	RM13771
dibenz[a,h]anthracene	2006 ±	10 µg/mL	000053-70-3	RM06786
fluoranthene	2006 ±	10 µg/mL	000206-44-0	RM12277
fluorene	2006 ±	10 µg/mL	000086-73-7	RM09441
indeno[1,2,3-cd]pyrene	2006 ±	10 µg/mL	000193-39-5	RM14192
naphthalene	2007 ±	10 µg/mL	000091-20-3	RM10445
phenanthrene	2005 ±	10 µg/mL	000085-01-8	RM10495
pyrene	2005 ±	10 µg/mL	000129-00-0	RM16126

Matrix: methylene chloride/benzene (1:1)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

K004541
SVOA PAH STD 2000ug/ml
Solvent / Lot: DCM/BENZENE
Prep: 5/11/2022 by JZ
Exp: 10/31/2024
Location: Fridge 19

CSD-QA-015.1

11/22

Reference Materials Producer
Cert #2495.01

Certificate of Analysis

Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics**® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Mora

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory , please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Accredited to 17025 & Guide 34 ISO Certified to 9001

ACCREDITED
Reference Materials Producer
Cert #2495.01

ECS

Certificate of Analysis

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Nave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride **Manufactured Date:** 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Agilent

Certificate of Analysis

Product Name: 1-Methylnaphthalene Standard

Product Number: EPA-1225-1 **Lot Issue Date:** 19-Jul-2021

Lot Number: 0006624769 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-methylnaphthalene	000090-12-0	RM07712	999.3 ± 5.0 µg/mL

Matrix: methanol (methyl alcohol)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

K004543
1-Methylnaphthalene
Solvent / Lot: MEOH
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

5/11/22

Sample lot approver:
Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026
Page: 1 of 1
www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert
No. AT-1937

Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1 **Lot Issue Date:** 02-Jul-2021

Lot Number: 0006620643 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544
toxic sub mix#2
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

05/11/22

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0181243

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Elution Order	Compound	Gr (weig					
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ2508) **Purity** 99%	1,50					
				+/-	53.3632	µg/mL	Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot PR-31262) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,510.0	µg/mL	+/-	8.9689	µg/mL	Gravimetric
				+/-	44.1050	µg/mL	Unstressed
				+/-	53.5049	µg/mL	Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32542/022621DB1 **Purity** 99%	1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
				+/-	29.3255	µg/mL	Unstressed
				+/-	35.5754	µg/mL	Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,008.0	µg/mL	+/-	5.9872	µg/mL	Gravimetric
				+/-	29.4423	µg/mL	Unstressed
				+/-	35.7172	µg/mL	Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 19169) **Purity** 99%	1,006.0	µg/mL	+/-	5.9753	µg/mL	Gravimetric
				+/-	29.3839	µg/mL	Unstressed
				+/-	35.6463	µg/mL	Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

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6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.:	AL0-101246	**Lot Number:**	CL17953
Description:	Benzoic Acid	**Certification Date:**	January 31, 2022
Storage:	4 °C	**Expiration Date:**	January 31, 2032
Provided As:	1 mL in 2 mL Ampoule in Methylene Chloride		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603
Benzoic Acid @2000ug/ml
Solvent / Lot: N/A
Prep: 5/13/2022 by JZ
Exp: 1/31/2032
Location: GC

5/13/22

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

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6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17662
Certification Date: December 2, 2021
Expiration Date: November 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604
Benzidines std @2000ug/ml
Solvent / Lot: MeCl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 33913 **Lot No.:** A0183500

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2028 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Methylnaphthalene-d10	2,003.5 µg/mL	+/- 11.7578 µg/mL	Gravimetric
	CAS # 7297-45-2 (Lot EF-135)		+/- 90.2539 µg/mL	Unstressed
	Purity 96%		+/- 100.1449 µg/mL	Stressed
2	Fluoranthene-d10	2,006.0 µg/mL	+/- 11.7723 µg/mL	Gravimetric
	CAS # 93951-69-0 (Lot PR-20668)		+/- 90.3656 µg/mL	Unstressed
	Purity 99%		+/- 100.2689 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

K004605
SOMO 1.0 SIM DMC
Solvent / Lot: A0183500
Prep: 5/14/2022 by VS
Exp: 2/29/2028
Location:

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

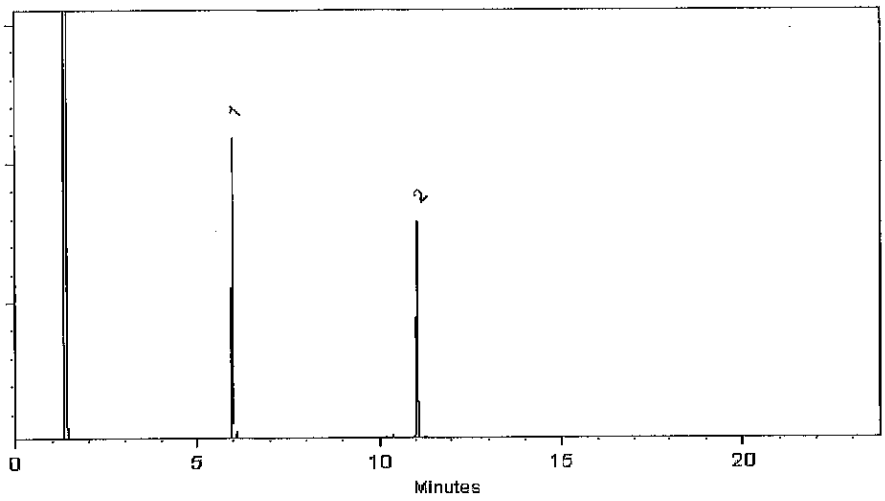
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cathleen Soltis - Mix Technician

Date Mixed: 29-Mar-2022 **Balance:** B345965662

Clara Windle - Operations Technician I

Date Passed: 01-Apr-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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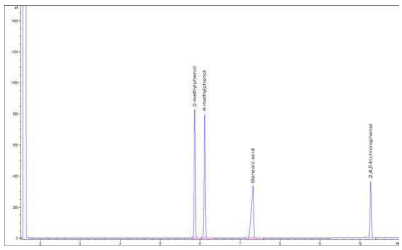
Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

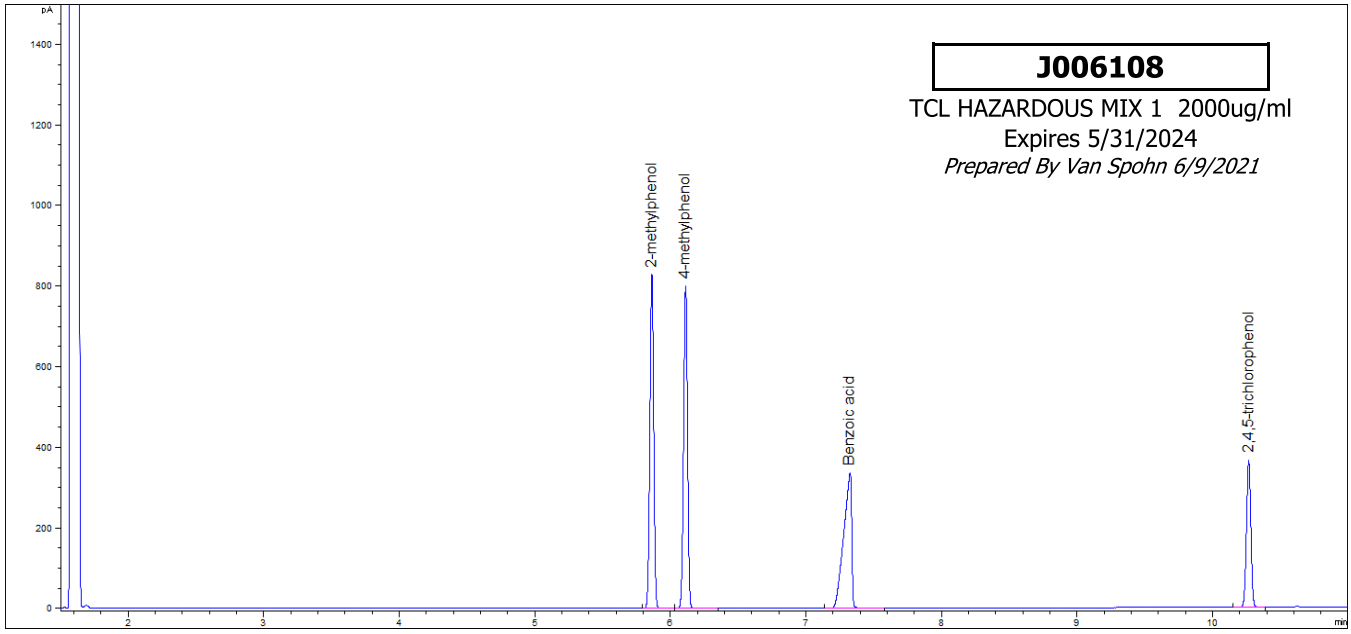
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Elution order*	*Raw Material Lot*
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:
Analytical Method Parameters:
Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
Carrier Gas: H2, Flow: 4.5 mL/min
Inlet Temperature: 170 °C, Injection Volume: 1 µL
Injection Mode: Split, Split Ratio: 20:1

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom}\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

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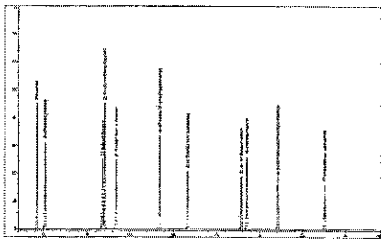
Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



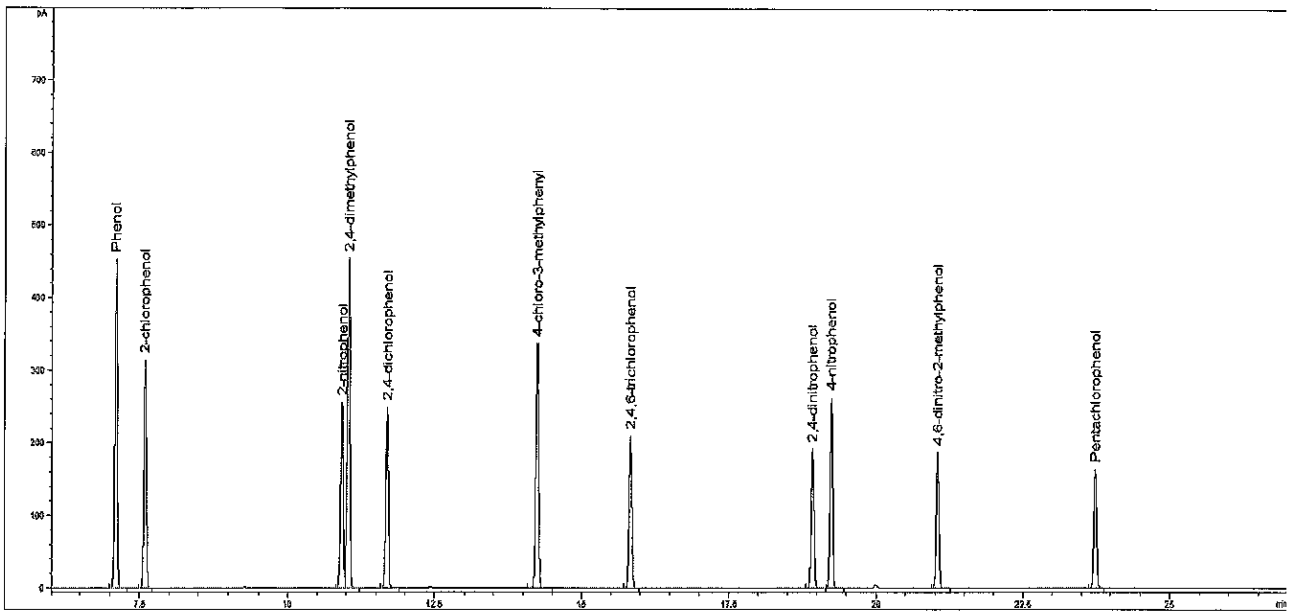
Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597
TCL Phenols Mix 2000ug/ml
Solvent / Lot: LRAD0139
Prep: 12/30/2021 by VS
Exp: 7/31/2024
Location:

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.



METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.5 mL/min
Inlet Temperature: 200 °C Injection Volume: 1.0 µL
Injection Mode: 25:1
Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)
Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorphenol
6	14.242	4-chloro-3-m3thylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{hom\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

K007194
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO187400
Prep: 8/5/2022 by VS
Exp: 4/30/2026
Location:

Certificate of Analysis

IAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0187400

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2026 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ3299) **Purity** 99%	1,508.0 µg/mL	+/- 8.9571 µg/mL +/- 44.0466 µg/mL +/- 53.4340 µg/mL	Gravimetric Unstressed Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot SL210831) **Purity** 99%	1,510.0 µg/mL	+/- 8.9689 µg/mL +/- 44.1050 µg/mL +/- 53.5049 µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,512.0 µg/mL	+/- 8.9808 µg/mL +/- 44.1635 µg/mL +/- 53.5758 µg/mL	Gravimetric Unstressed Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32597) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 29.3255 µg/mL +/- 35.5754 µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 29.3255 µg/mL +/- 35.5754 µg/mL	Gravimetric Unstressed Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 00021384) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 29.3255 µg/mL +/- 35.5754 µg/mL	Gravimetric Unstressed Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,502.0 µg/mL	+/- 8.9214 µg/mL +/- 43.8714 µg/mL +/- 53.2214 µg/mL	Gravimetric Unstressed Stressed

8	p-Terphenyl-d14		1,002.0	µg/mL	+/-	5.9516	µg/mL	Gravimetric
	CAS # 1718-51-0	(Lot PR-30504)			+/-	29.2671	µg/mL	Unstressed
	Purity 99%				+/-	35.5046	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

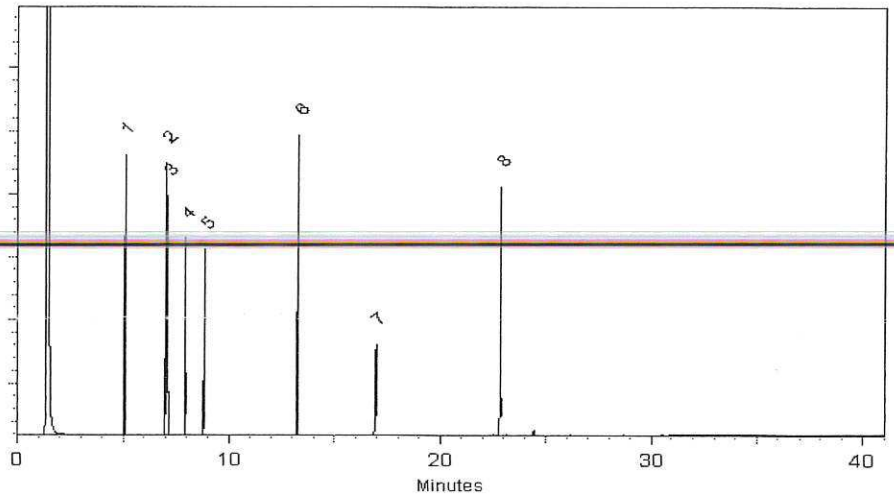
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bryan Snyder - Operations Tech I

Date Mixed: 17-Jul-2022 **Balance:** 1128353505

Christie Mills - Operations Tech II - ARM QC

Date Passed: 21-Jul-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18355
Certification Date: July 25, 2022
Expiration Date: August 31, 2023

K007995
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: N/A
Prep: 8/29/2022 by JZ
Exp: 8/31/2023
Location: FREEZER 44

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

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Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

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Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroiospropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

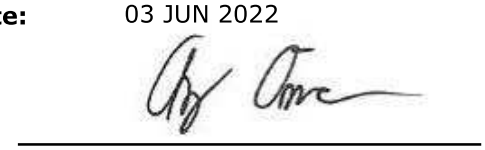
Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 03 JUN 2022



Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

Certificate of Analysis - Analytical Standard

PAHs in Soil

Product no.: SQC017-40G
Lot no.: LRAD3953
Expiry Date: October 2025
Manufacturing Date: October 2022
Storage: REFRIGERATE
Solvent/Matrix: SOIL
Certificate version: LRAD3953.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	*Units*	*Certified Value*
Naphthalene	µg/Kg	418 ± 39
Acenaphthene	µg/Kg	478 ± 51
Acenaphthylene	µg/Kg	557 ± 63
Anthracene	µg/Kg	393 ± 23
Benzo(a)anthracene	µg/Kg	110 ± 11
Benzo(a)pyrene	µg/Kg	159 ± 23
Benzo(b)fluoranthene	µg/Kg	318 ± 49
Benzo(g,h,i)perylene	µg/Kg	103 ± 18
Benzo(k)fluoranthene	µg/Kg	95.1 ± 16.0
Chrysene	µg/Kg	231 ± 24
Dibenz(a,h) anthracene	µg/Kg	220 ± 16
Fluoranthene	µg/Kg	303 ± 24
Fluorene	µg/Kg	340 ± 27
Indeno(1,2,3-cd) pyrene	µg/Kg	119 ± 14
Phenanthrene	µg/Kg	510 ± 30
Pyrene	µg/Kg	350 ± 25

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Informational Values:

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
Acenaphthene	µg/Kg	192 to 1041	141
Acenaphthylene	µg/Kg	13.1 to 1101	181
Anthracene	µg/Kg	166 to 619	75.4
Benzo(a)anthracene	µg/Kg	28.4 to 191	27.2
Benzo(a)pyrene	µg/Kg	0.00 to 327	56.2
Benzo(b)fluoranthene	µg/Kg	0.00 to 672	118
Benzo(g,h,i)perylene	µg/Kg	35.9 to 170	36.0
Benzo(k)fluoranthene	µg/Kg	0.00 to 215	39.9
Chrysene	µg/Kg	100.00 to 361	43.5
Dibenz(a,h) anthracene	µg/Kg	98.0 to 341	40.5
Fluoranthene	µg/Kg	176 to 518	57.0
Fluorene	µg/Kg	128 to 644	85.9
Indeno(1,2,3-cd) pyrene	µg/Kg	52.6 to 185	22.0
Naphthalene	µg/Kg	31.3 to 910	146
Phenanthrene	µg/Kg	255 to 953	116
Pyrene	µg/Kg	184 to 654	78.2

Additional Information: DESCRIPTION

This product consist of a 4 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested show homogeneity.

Four samples have been provided for your convenience (multiple methods, multiple analysts, etc.)

The soil has been chemically stabilized with 1 mL of acetone to minimize degradation of the sample.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Note: Sample extracts and calibration solutions should be in the same solvent.

All values are based on a wet weight basis, do not correct for moisture.

Assume a 10g sample size for all calculations.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: Package of 4 units of 10 g in amber jar

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 24 OCT 2022

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD3953.01	24 OCT 2022	Original release date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1205

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-01 C	File ID:	23013161.D
Sampled:	01/06/23 08:28	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 08:45
% Solids:	57.38	Preparation:	EPA 3546 (Microwave)	Initial/Final:	22.09 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.49	0.14	0.49	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.8894*	*8.71*	*110*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.8894*	*5.91*	*74.8*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.8894*	*6.46*	*81.9*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.8894*	*6.16*	*78.0*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013161.D
Data file 2: /20230131.b/B20230131.b/23013161.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0134-01
Client ID:
Injection Date: 01-FEB-2023 08:45
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.305	-0.005	22443	4.828	-0.005	3693	2.61	0.26	163.2*	alpha-BHC
4.683	-0.009	4364	5.327	0.018	6111	1.32	1.15	13.6	beta-BHC
4.880	0.005	33598	----			4.79	0.00	---	delta-BHC
4.611	-0.000	13630	5.220	-0.009	3658	1.83	0.31	142.2*	gamma-BHC (Lindane)
5.077	-0.015	8992	5.757	0.002	17629	1.36	1.64	19.1	Heptachlor
5.429	0.015	29561	6.146	-0.011	11136	3.98	0.91	125.6*	Aldrin
6.071	-0.017	18959	----			2.95	0.00	---	Heptachlor epoxide b
----			7.236	-0.021	8827	0.00	0.99	---	Endosulfan I
6.767	-0.023	71538	7.524	-0.028	46984	11.27	4.77	81.2*	Dieldrin
6.441	-0.011	54569	7.329	-0.013	35116	9.26	3.88	81.8*	4,4'-DDE
7.060	0.019	155140	7.895	0.020	176290	28.45	16.06	55.7*	Endrin
7.300	0.022	10344	8.062	-0.025	192699	2.11	17.13	156.2*	Endosulfan II
----			7.937	-0.012	46891	0.00	4.39	---	4,4'-DDD
----			8.708	0.022	123333	0.00	12.48	---	Endosulfan sulfate
----			8.264	-0.002	223224	0.00	21.66	---	4,4'-DDT
7.902	0.025	21868	8.936	0.028	4672	9.94	1.02	162.6*	Methoxychlor
----			9.217	0.007	148557	0.00	13.92	---	Endrin ketone
7.725	0.018	44305	8.402	-0.016	69587	11.32	8.77	25.4	Endrin aldehyde
----			7.051	0.025	100449	0.00	9.95	---	trans-Chlordane
6.391	0.015	31035	7.173	-0.012	6092	4.73	0.62	153.9*	cis-Chlordane
2.285	-0.018	5305	2.453	-0.029	63790	0.59	4.82	156.4*	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.799	-0.001	198691	4.190	-0.006	305778	32.76	31.21	4.9	Tetrachloro-m-xylene
9.315	-0.004	186042	10.414	-0.015	255417	44.15	29.94	38.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

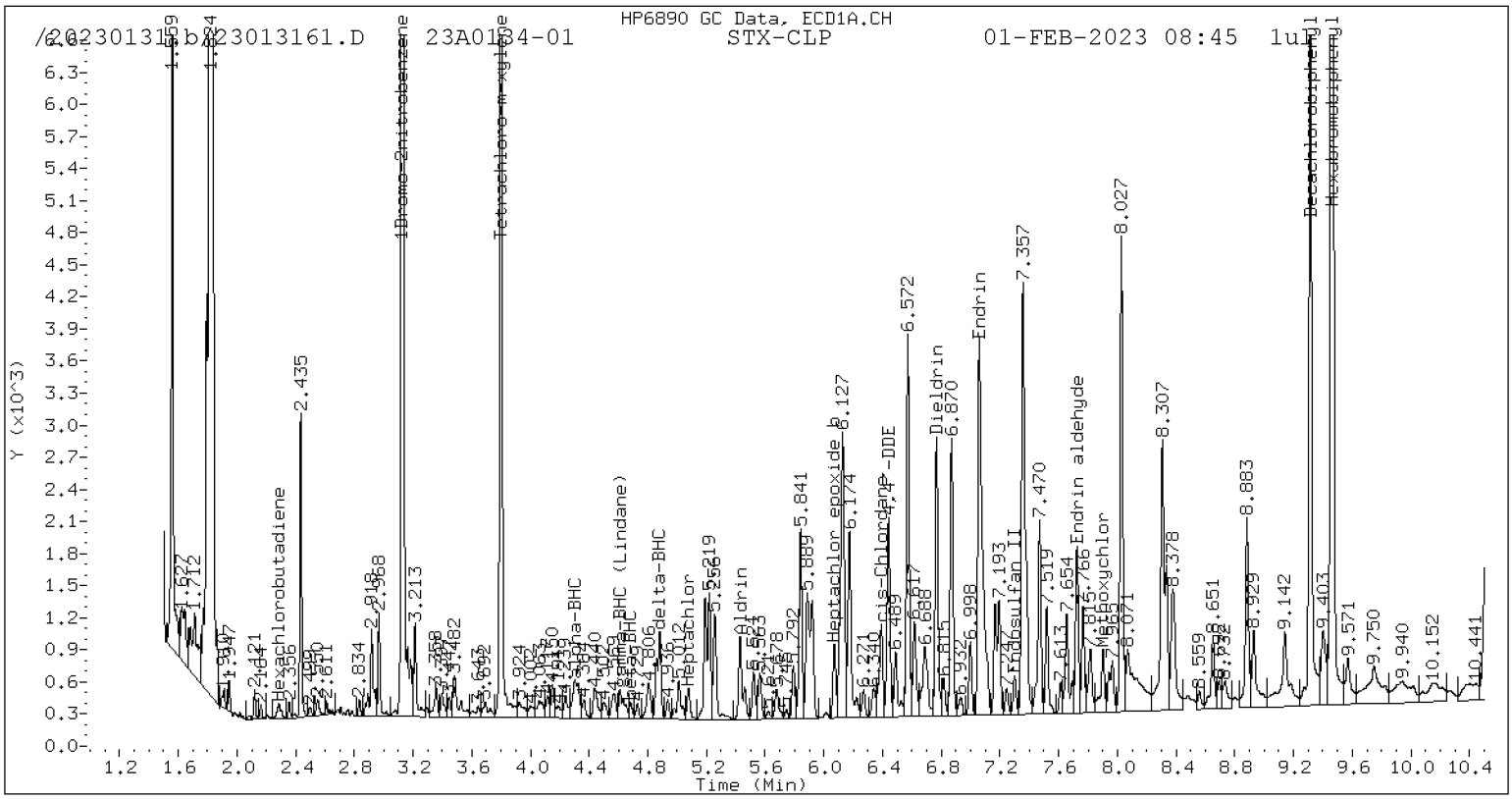
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	445929	-33.7
Hexabromobiphenyl	609723	415902	-31.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	696057	-30.8
Hexabromobiphenyl	769764	771896	0.3

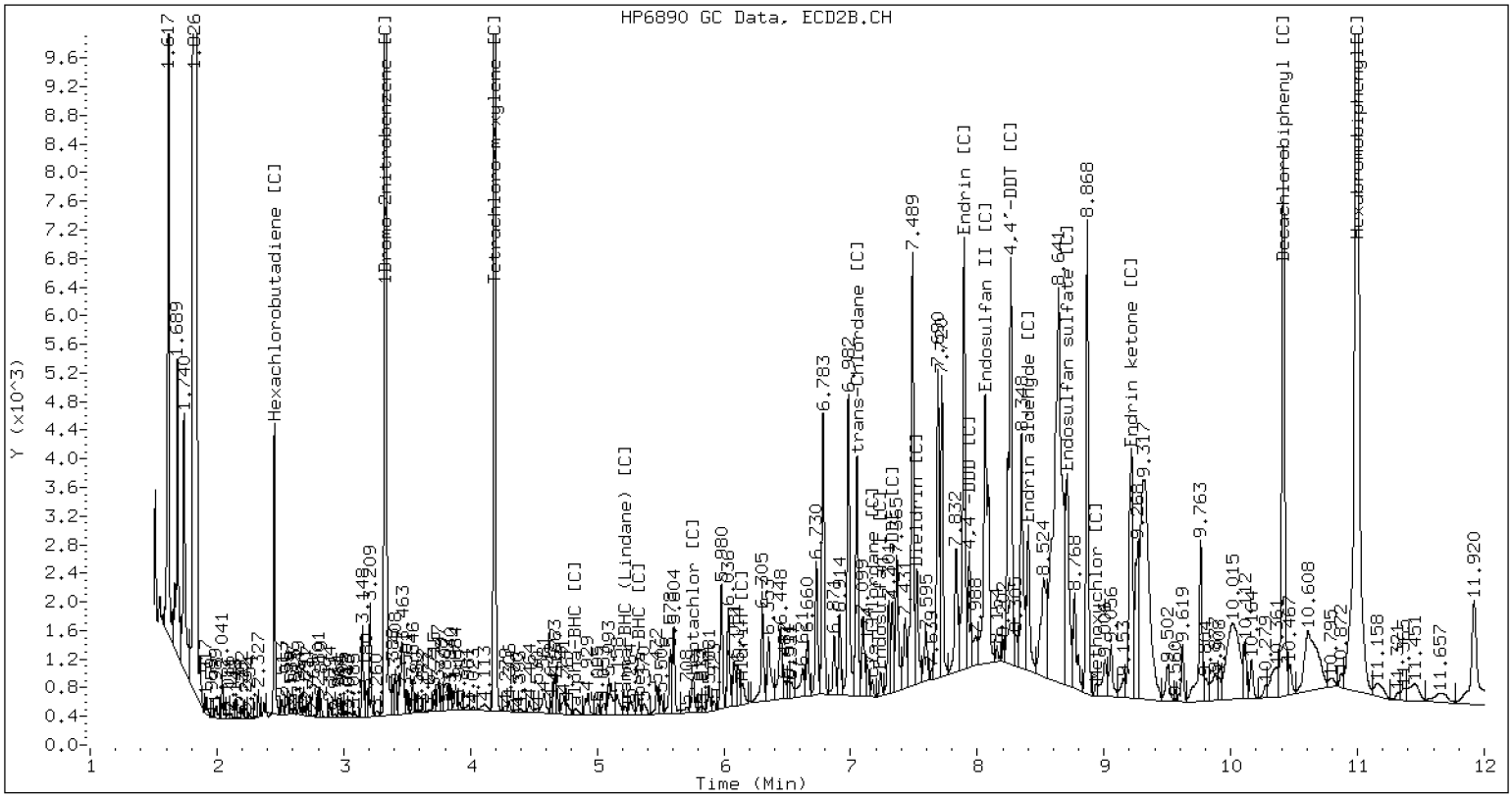
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230131.b/B20230131.b/23013161.D 23A0134-01 CLP2



CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, CLP-2

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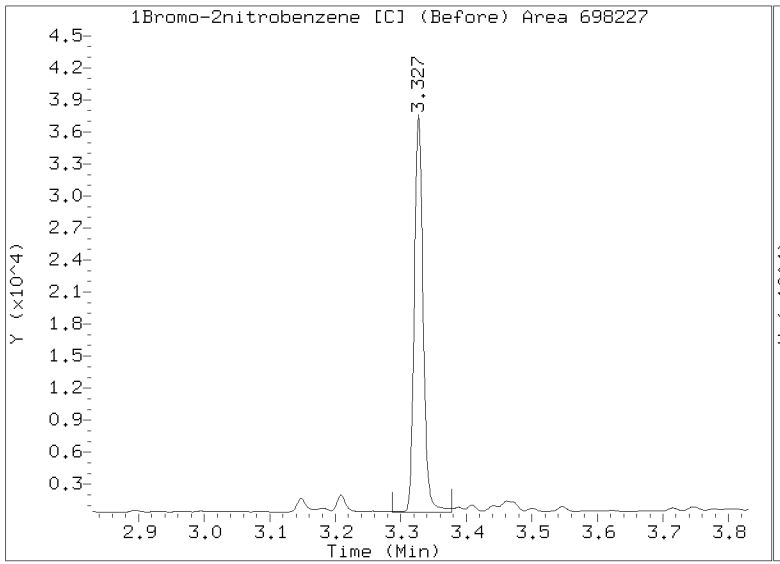
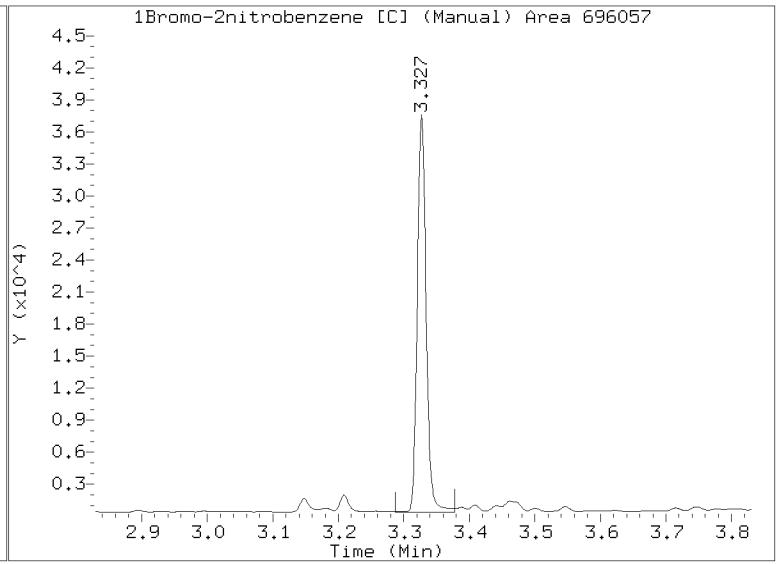
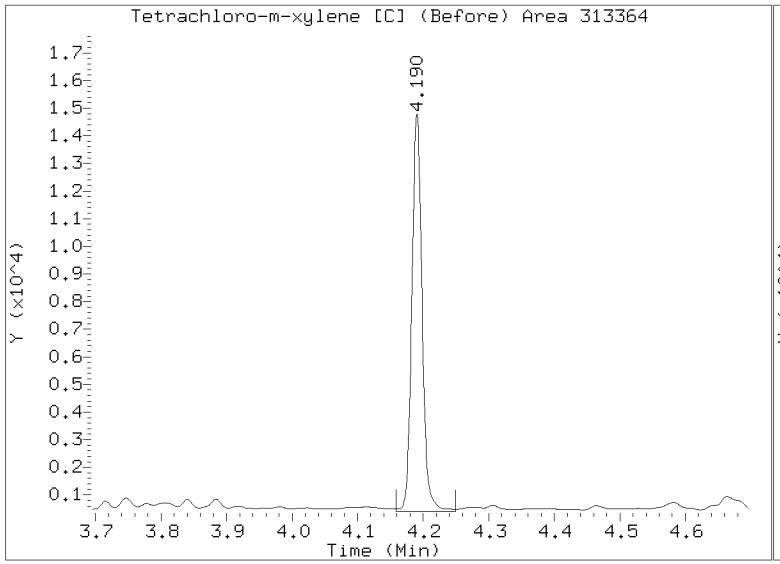
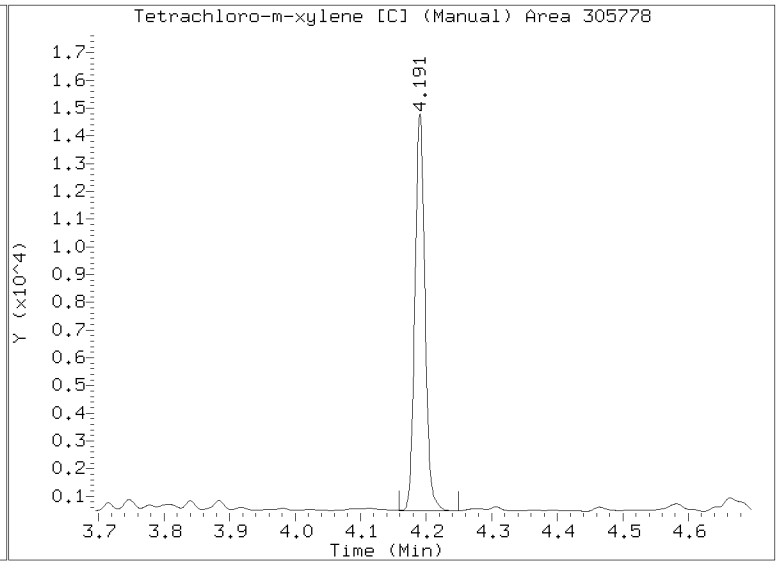
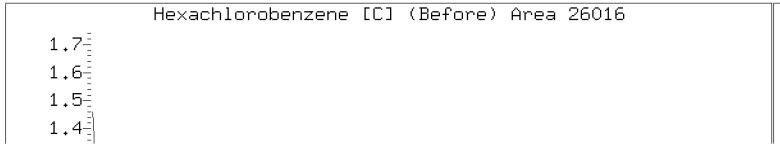
Lab ID:23A0134-01 Client ID:

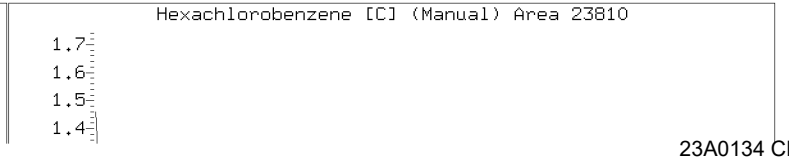












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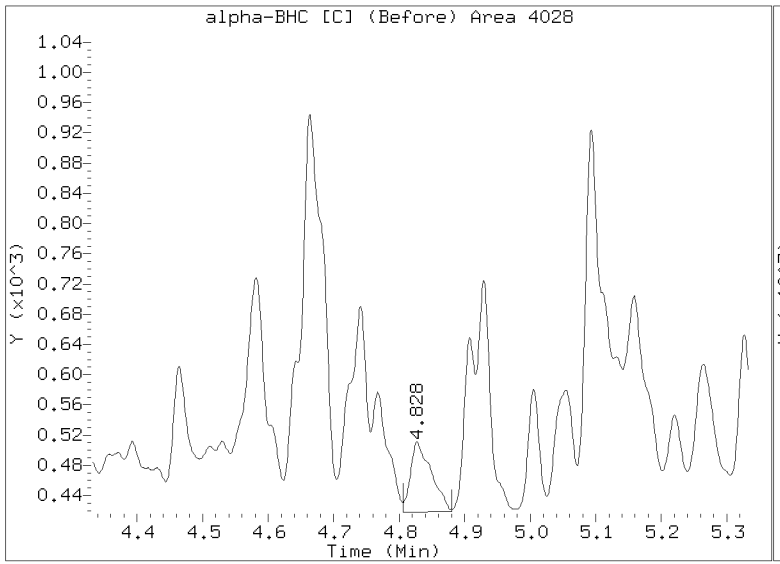

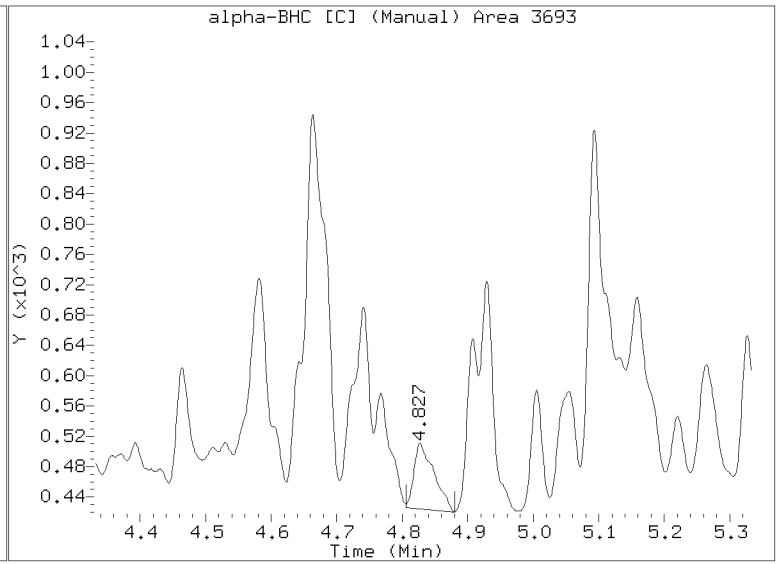

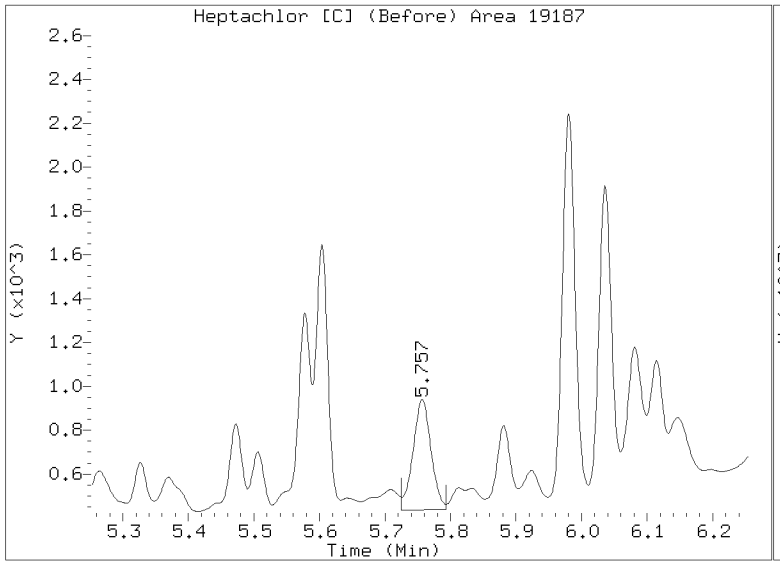

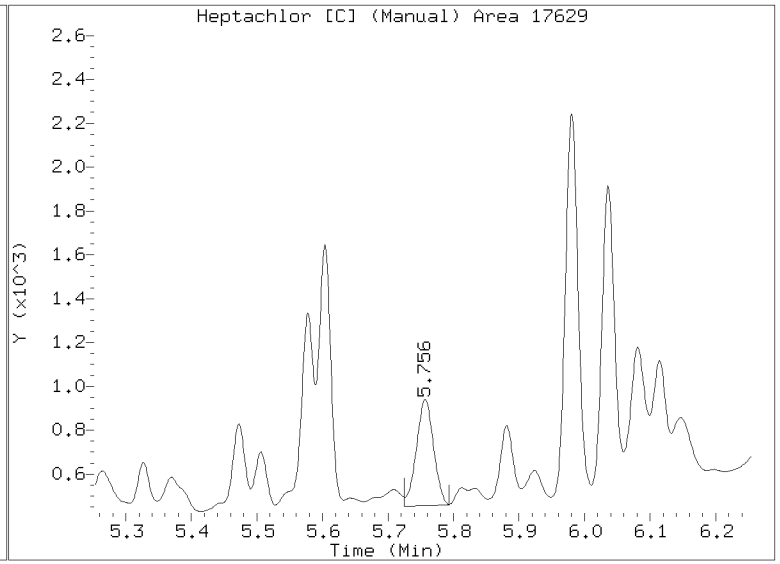

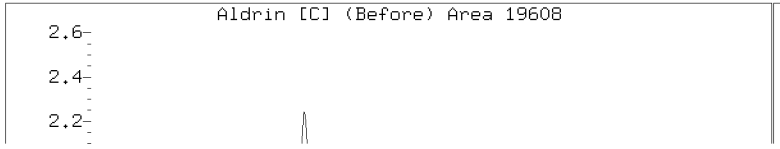

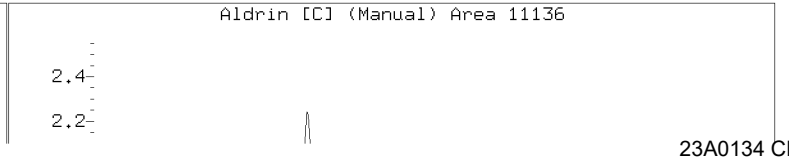

Manual Peak Adjustment Report, CLP-2

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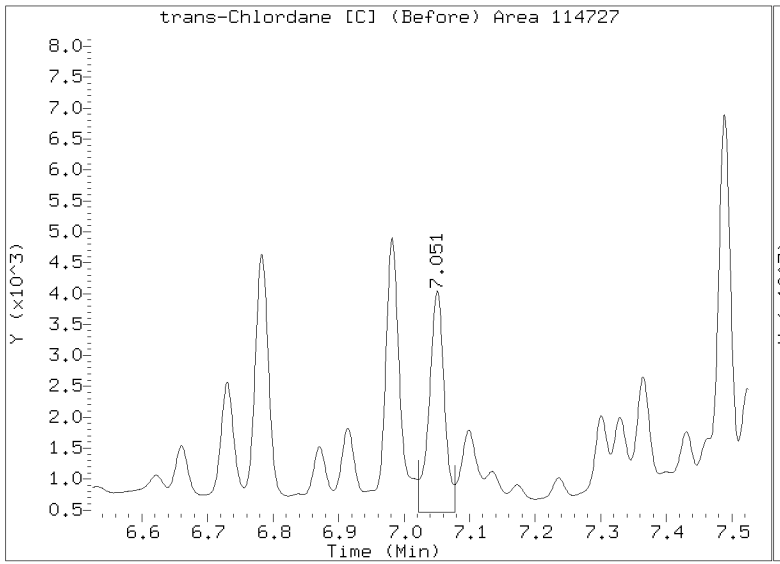

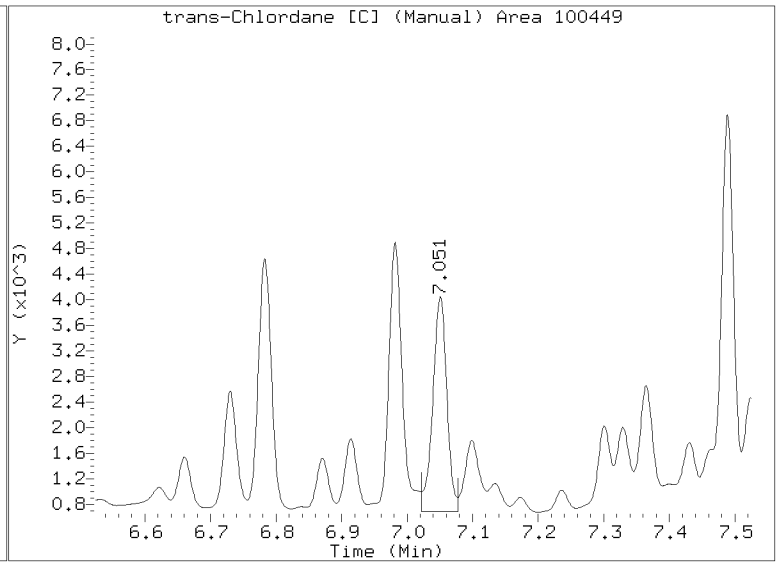

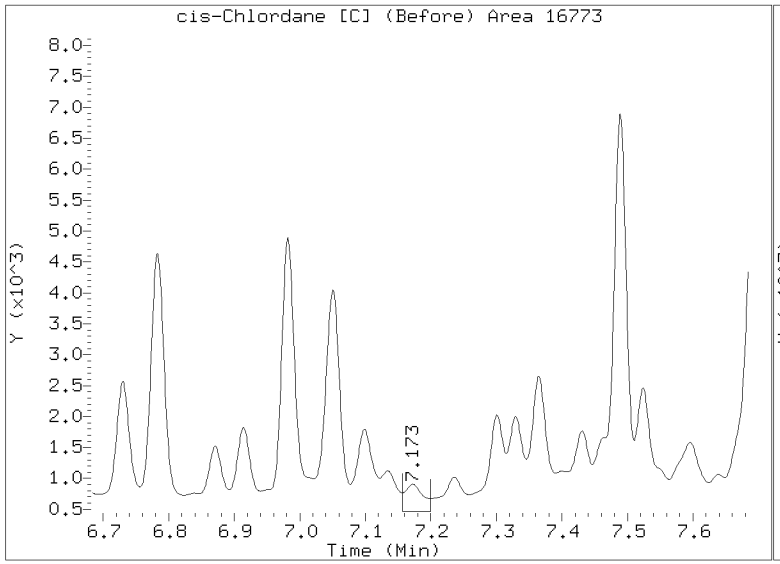

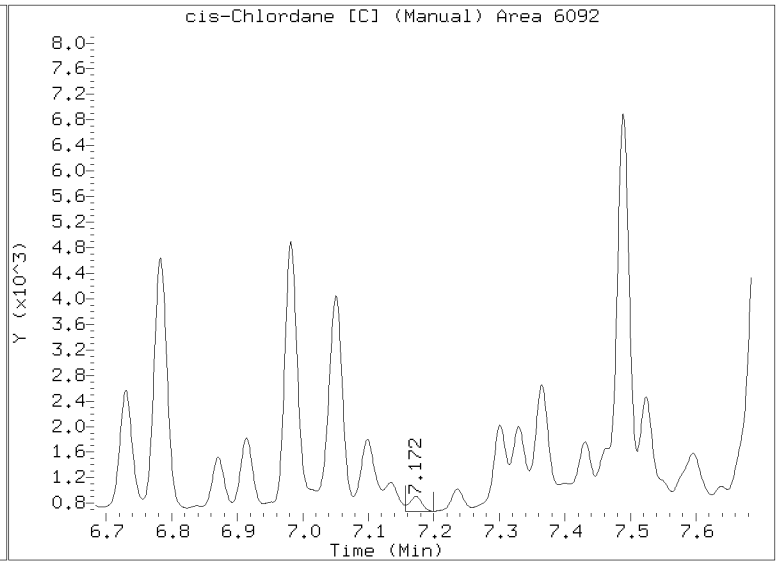

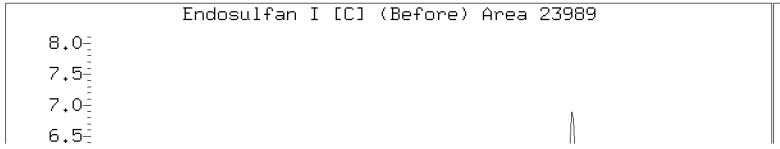

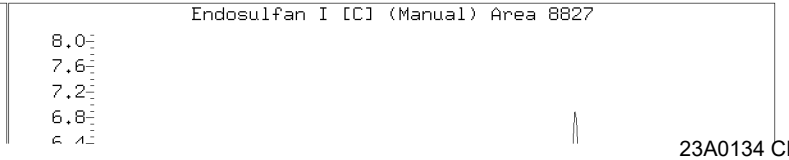

Manual Peak Adjustment Report, CLP-2

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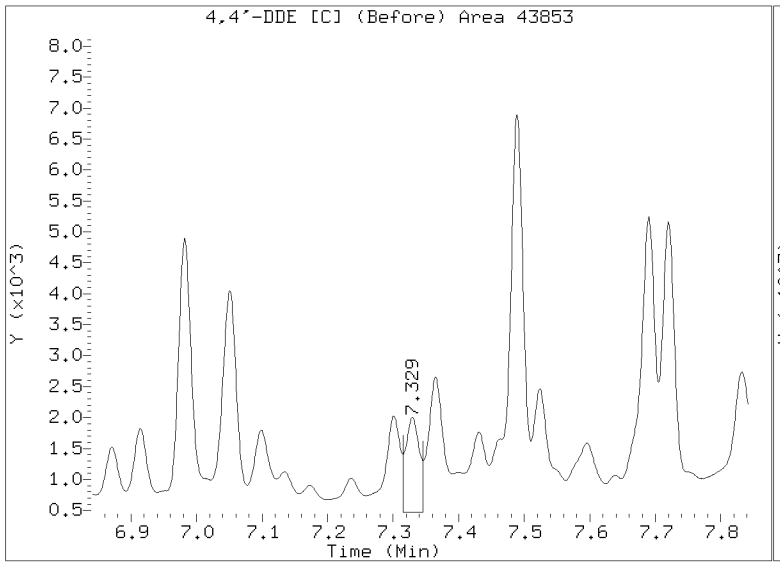

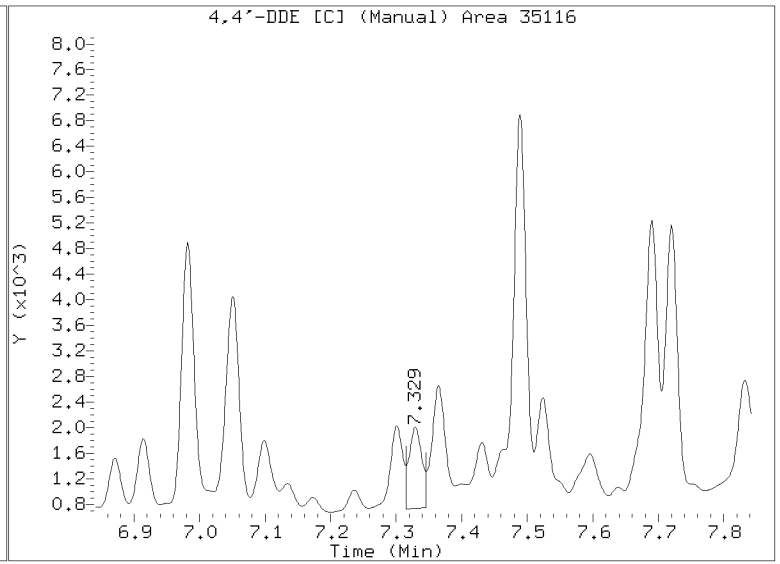

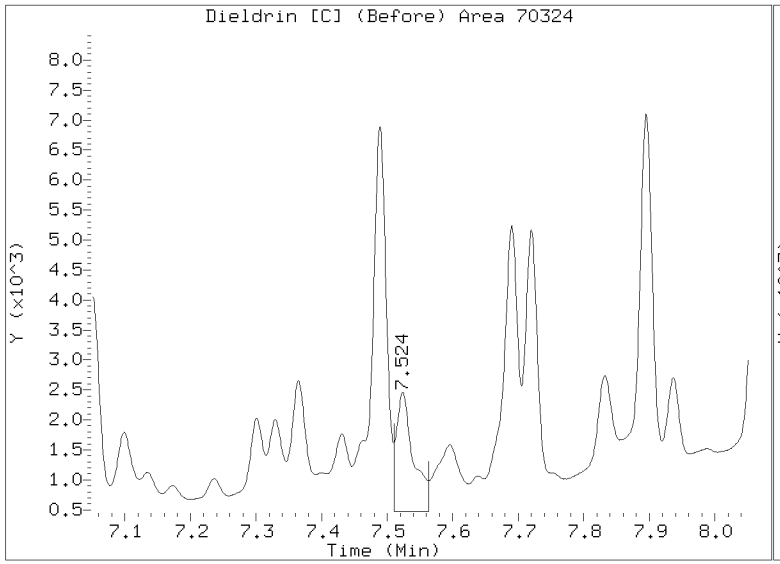

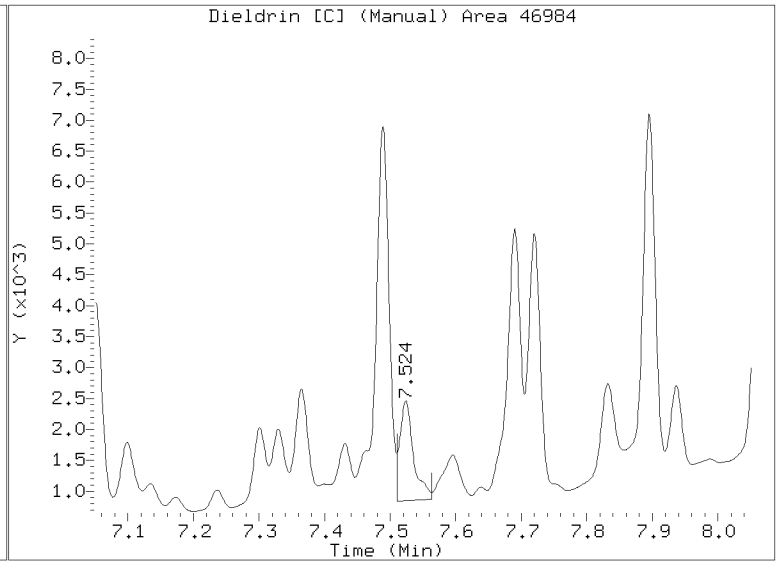

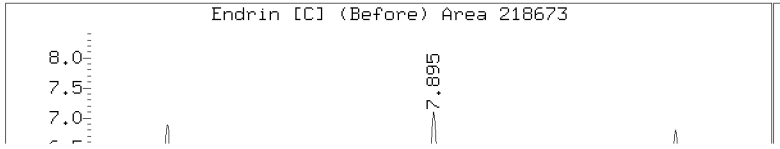

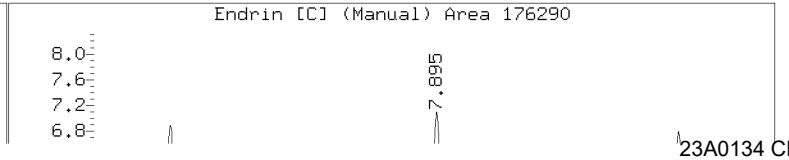

Manual Peak Adjustment Report, CLP-2

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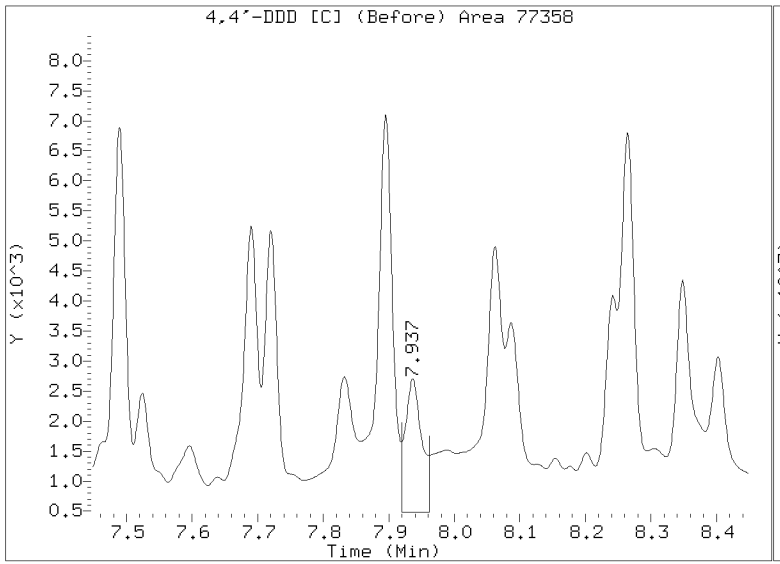

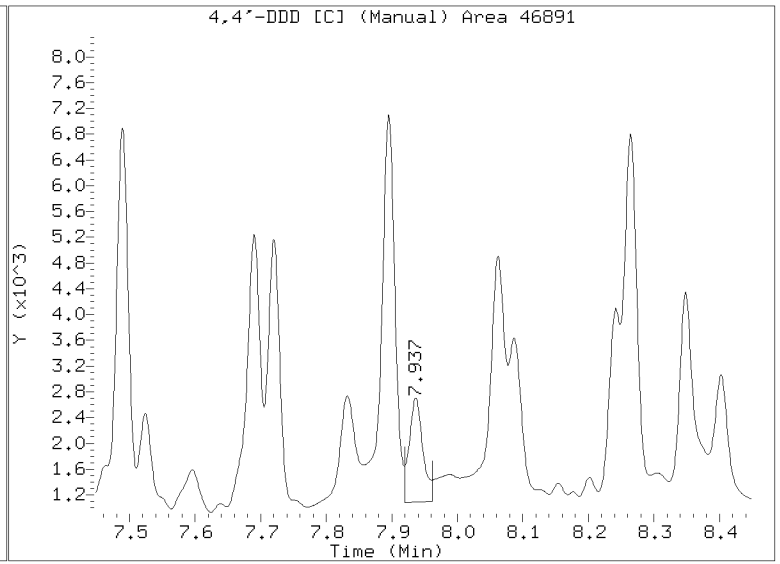

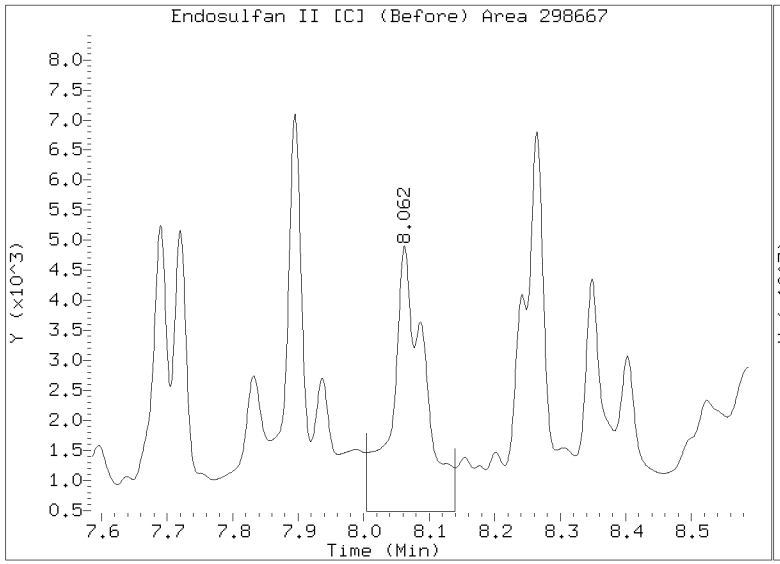

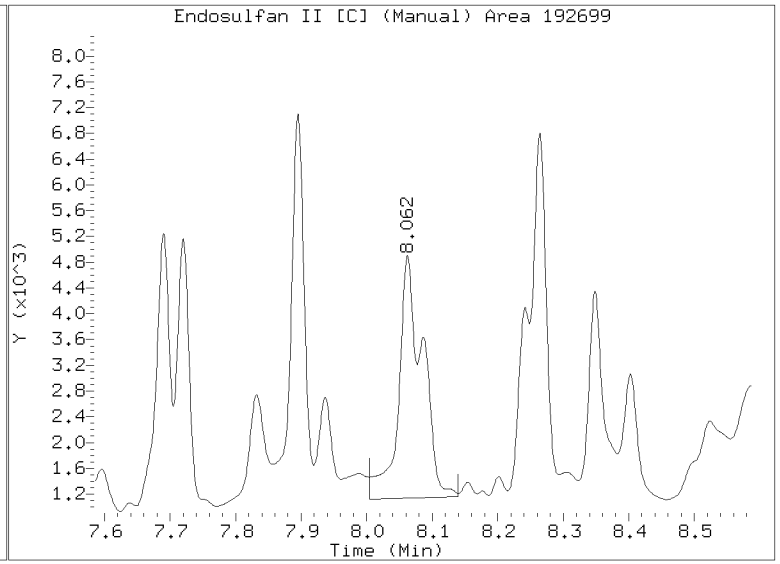

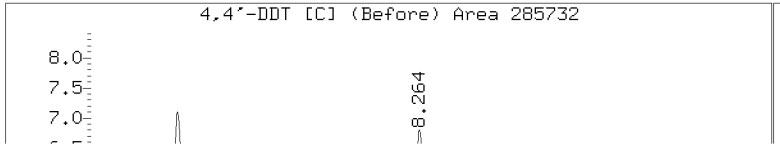

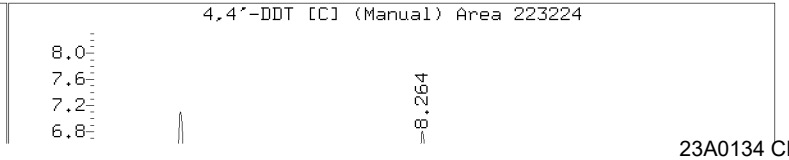

Manual Peak Adjustment Report, CLP-2

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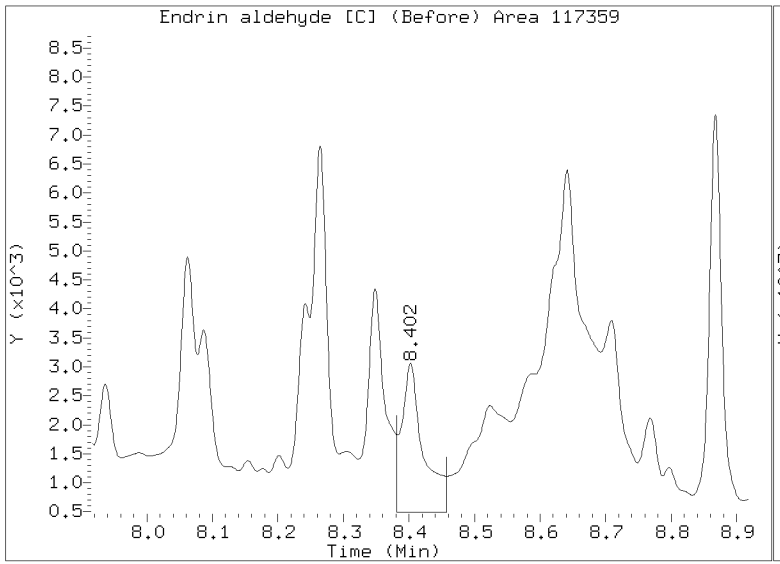
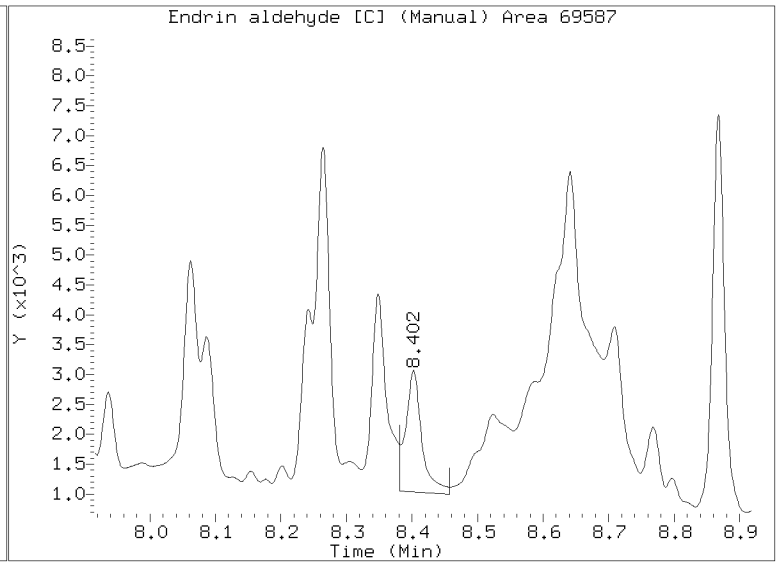
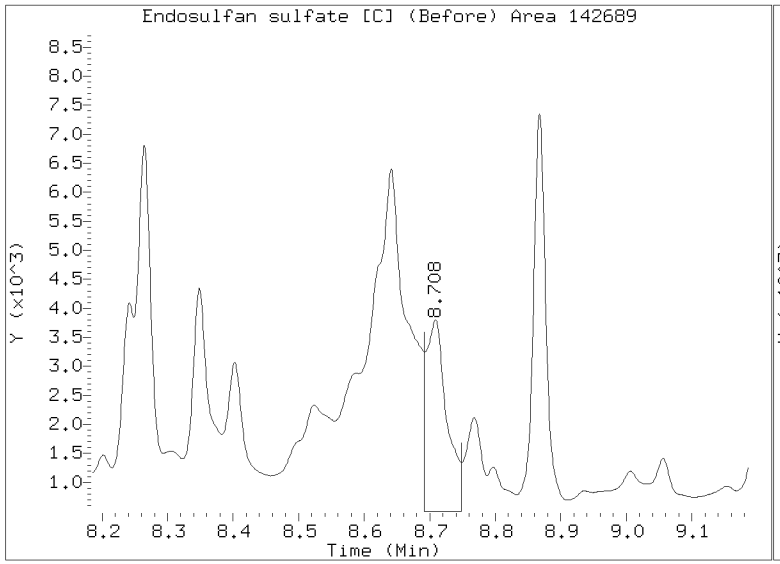
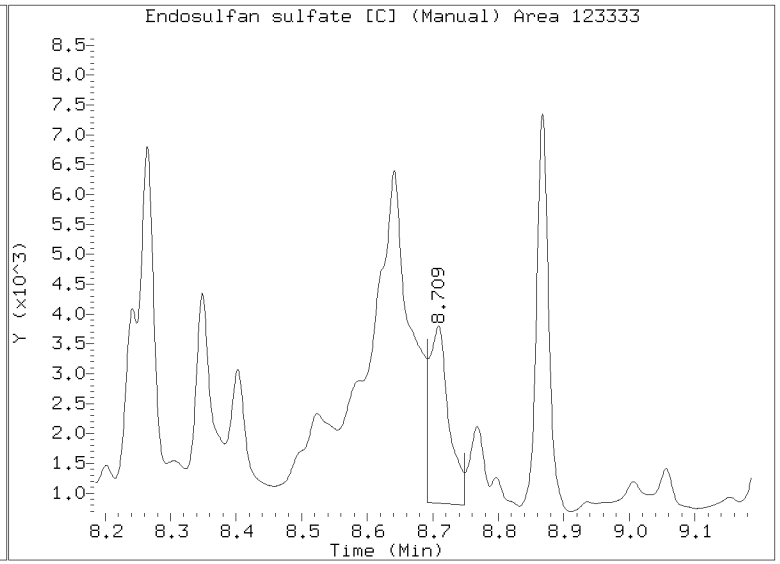
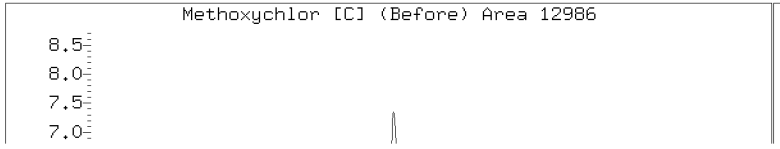
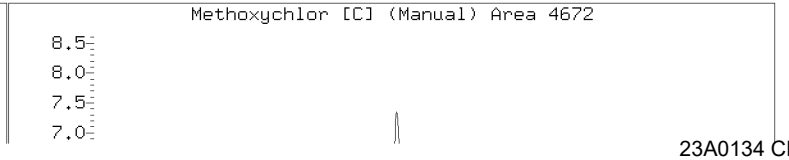






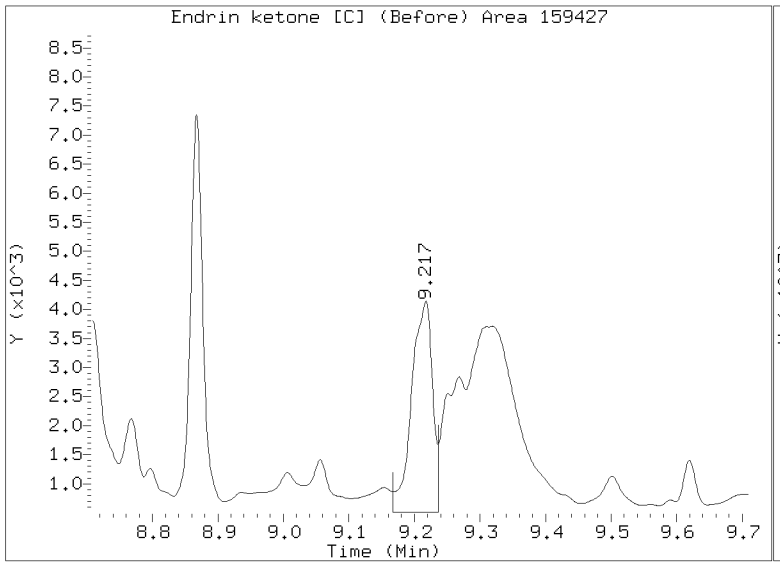


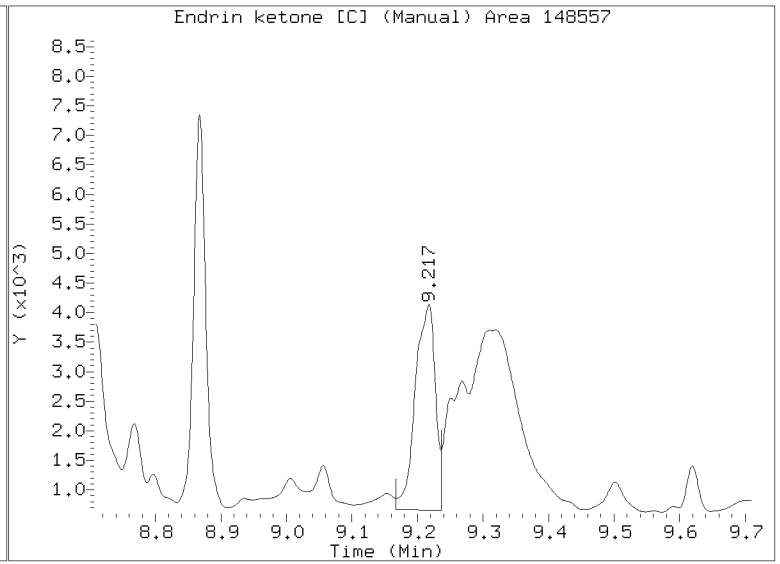


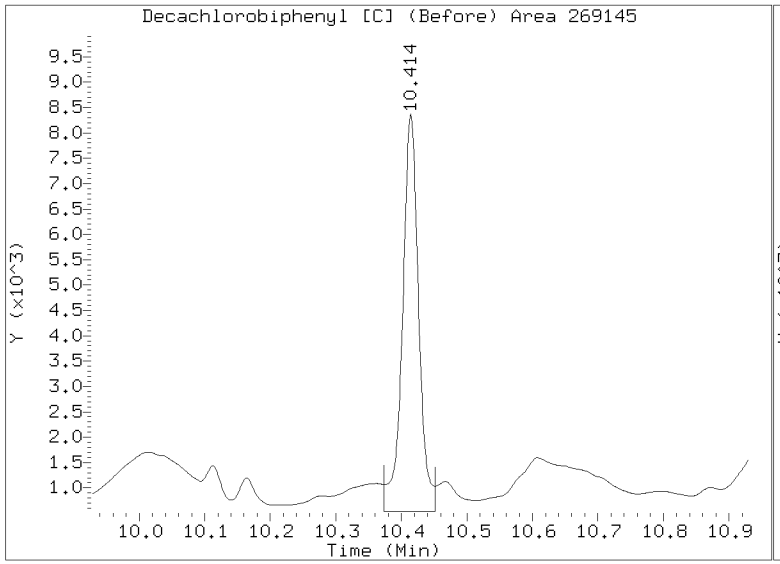


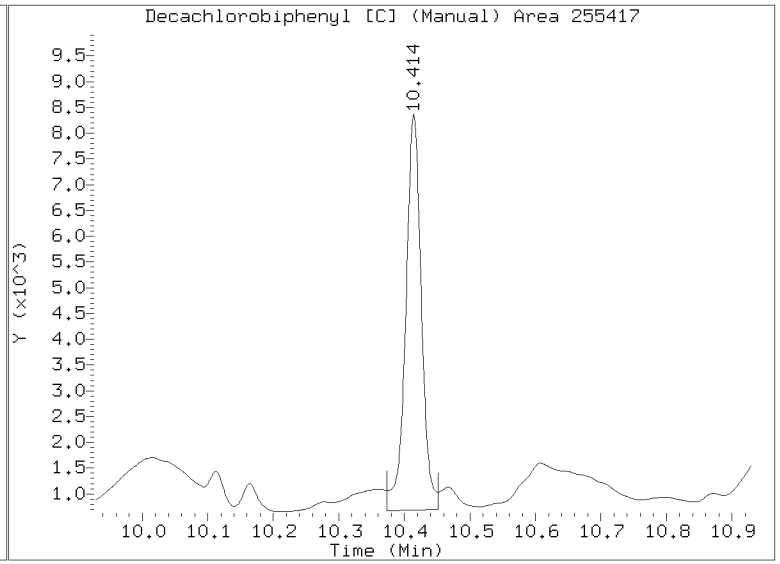
Manual Peak Adjustment Report, CLP-2

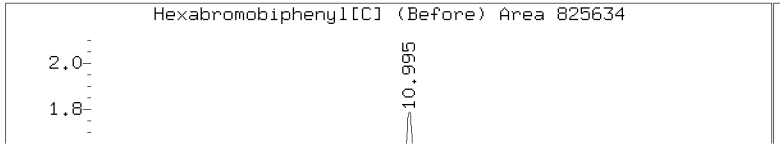
Datafile: /20230131.b/B20230131.b/23013161.D
Injection Date: 01-FEB-2023 08:45
Lab ID:23A0134-01 Client ID:

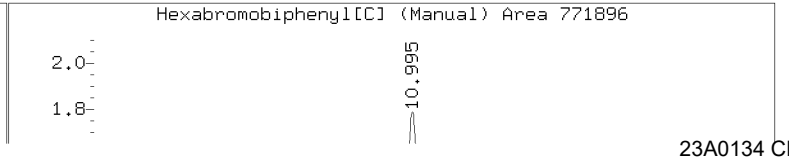












Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1188

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-02 C	File ID:	23013162.D
Sampled:	01/06/23 09:36	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 09:03
% Solids:	46.55	Preparation:	EPA 3546 (Microwave)	Initial/Final:	27.03 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9476*	*9.10*	*115*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9476*	*10.4*	*131*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9476*	*6.07*	*76.3*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9476*	*5.45*	*68.6*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013162.D
Data file 2: /20230131.b/B20230131.b/23013162.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0134-02
Client ID:
Injection Date: 01-FEB-2023 09:03
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.291	-0.020	39566	4.844	0.011	5758	4.38	0.41	165.6*	alpha-BHC M
4.684	-0.008	6239	5.326	0.017	10890	1.79	2.05	13.3	beta-BHC
4.881	0.005	54434	----			7.37	0.00	---	delta-BHC
4.611	-0.000	16782	5.220	-0.009	5510	2.14	0.46	128.7*	gamma-BHC (Lindane)
5.076	-0.016	14599	5.758	0.004	26724	2.10	2.49	17.2	Heptachlor
5.429	0.015	44005	6.152	-0.006	18116	5.64	1.48	116.9*	Aldrin
6.074	-0.014	21247	6.786	-0.029	144129	3.14	14.22	127.7*	Heptachlor epoxide b
----			7.238	-0.019	9601	0.00	1.07	---	Endosulfan I
6.770	-0.021	76123	7.525	-0.026	47954	11.40	4.86	80.5*	Dieldrin
6.443	-0.009	84303	7.331	-0.011	40145	13.60	4.43	101.7*	4,4'-DDE
7.062	0.021	178592	7.896	0.020	156914	34.25	25.37	29.8	Endrin
7.302	0.024	13532	8.087	0.000	88860	2.88	14.02	131.8*	Endosulfan II
----			7.938	-0.011	44845	0.00	7.45	---	4,4'-DDD
----			8.712	0.026	43210	0.00	7.76	---	Endosulfan sulfate
----			8.265	-0.002	305040	0.00	52.54	---	4,4'-DDT
7.905	0.028	27347	8.938	0.030	6375	13.00	2.48	135.9*	Methoxychlor
----			9.217	0.008	136581	0.00	22.72	---	Endrin ketone
7.727	0.020	45812	8.403	-0.015	44845	12.23	10.03	19.8	Endrin aldehyde
----			7.019	-0.006	23540	0.00	2.33	---	trans-Chlordane
6.393	0.017	52861	7.174	-0.011	8549	7.67	0.86	159.5*	cis-Chlordane
2.285	-0.019	7772	2.453	-0.029	77900	0.82	5.87	150.9*	Hexachlorobutadiene
----			4.683	-0.009	14708	0.00	1.16	---	Hexachlorobenzene
3.799	-0.002	194757	4.190	-0.006	269180	30.53	27.43	10.7	Tetrachloro-m-xylene
9.316	-0.002	184602	10.416	-0.013	251504	45.80	52.32	13.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

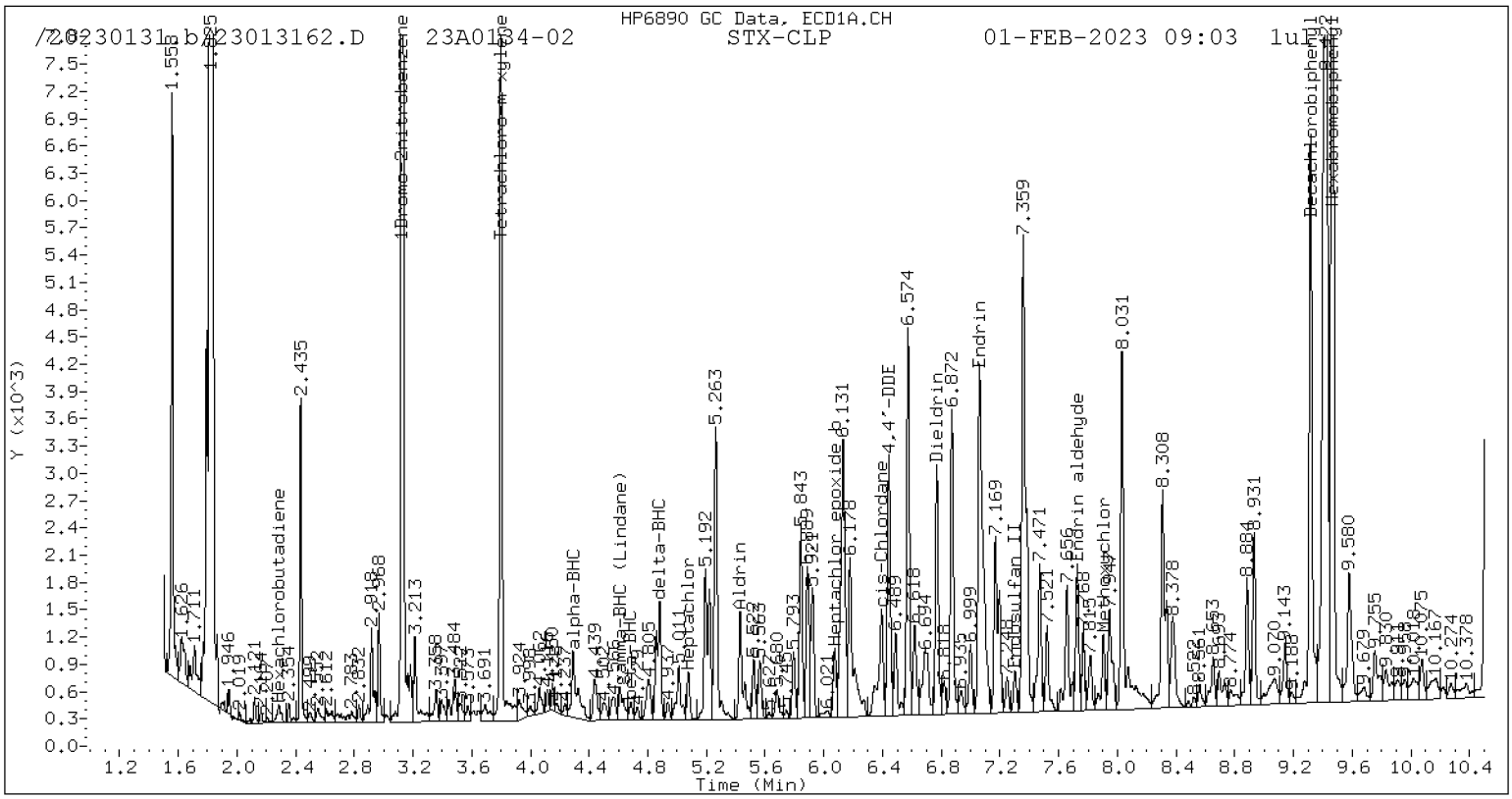
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	469110	-30.2
Hexabromobiphenyl	609723	397777	-34.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	697045	-30.7
Hexabromobiphenyl	769764	434969	-43.5

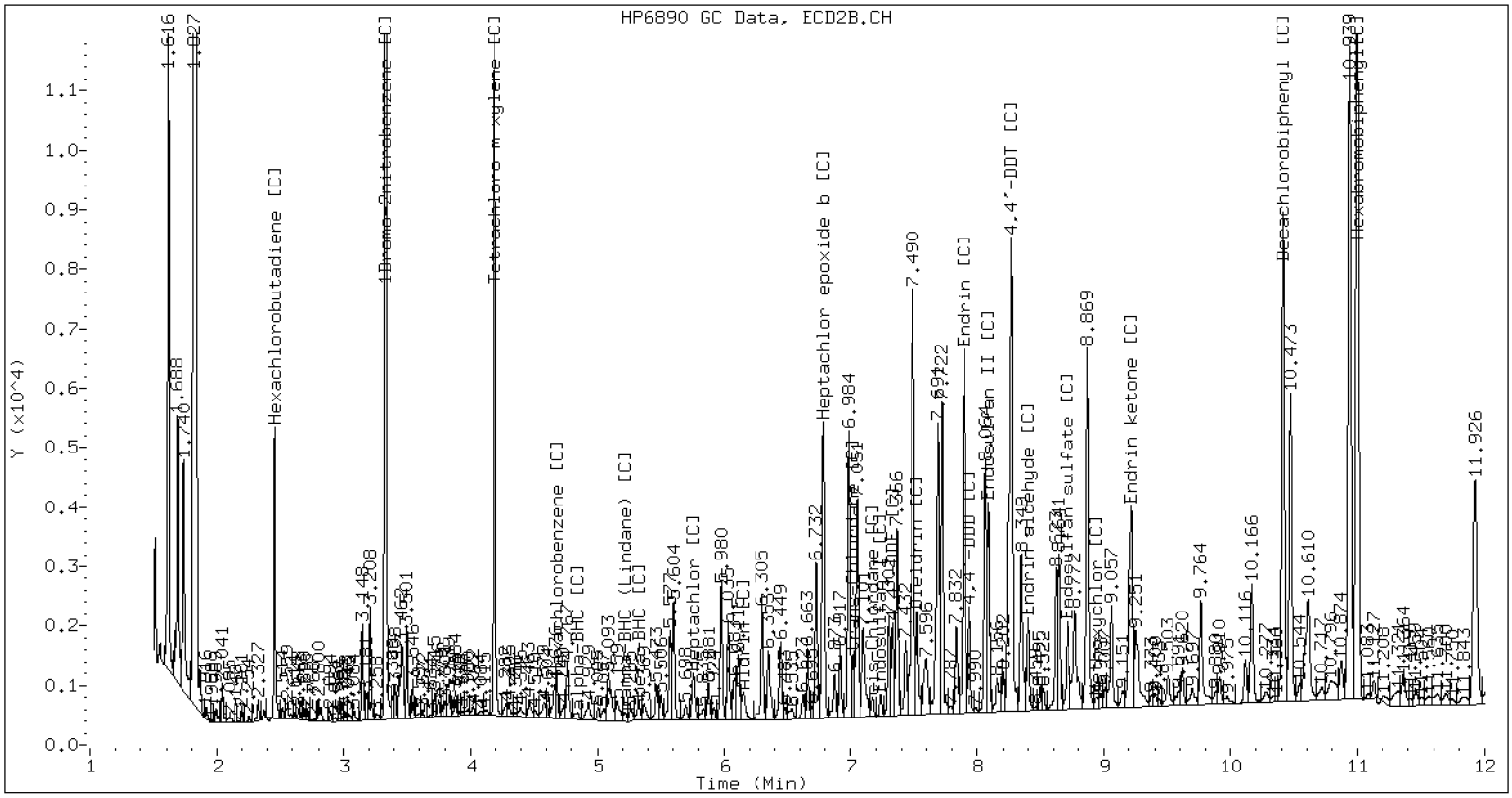
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

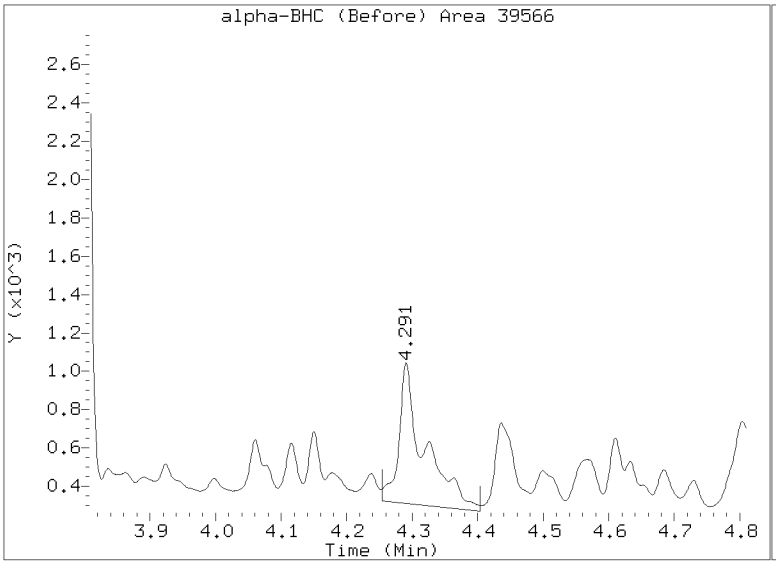
/20230131.b/B20230131.b/23013162.D 23A0134-02 CLP2

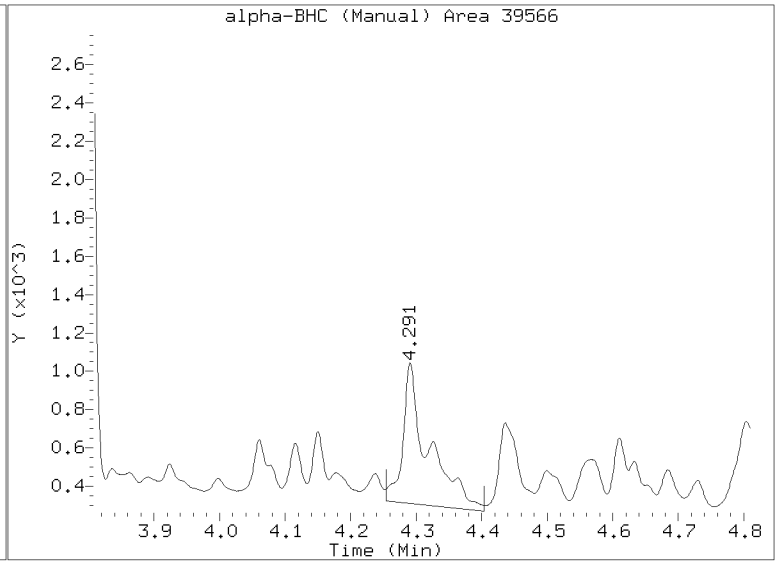


CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, STX-CLP

Datafile: /20230131.b/23013162.D
Injection Date: 01-FEB-2023 09:03
Lab ID:23A0134-02 Client ID:
Report Date: 02/03/2023 20:26





Manual Peak Adjustment Report, CLP-2

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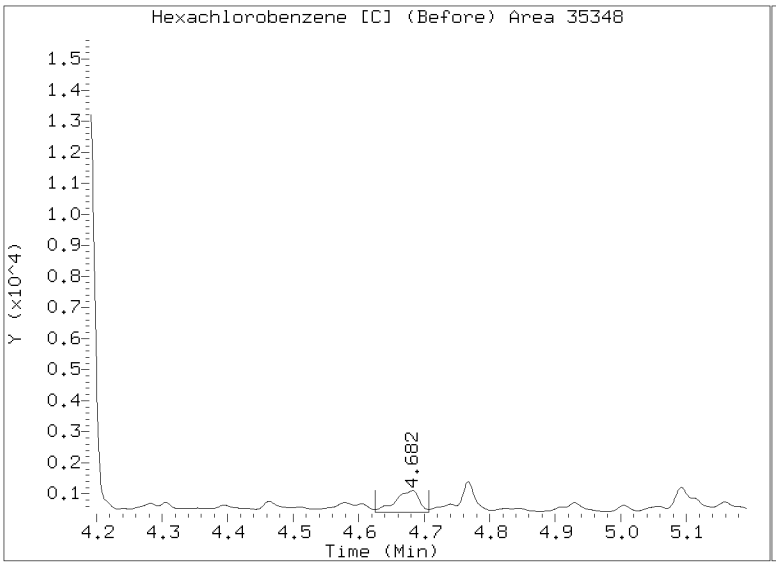
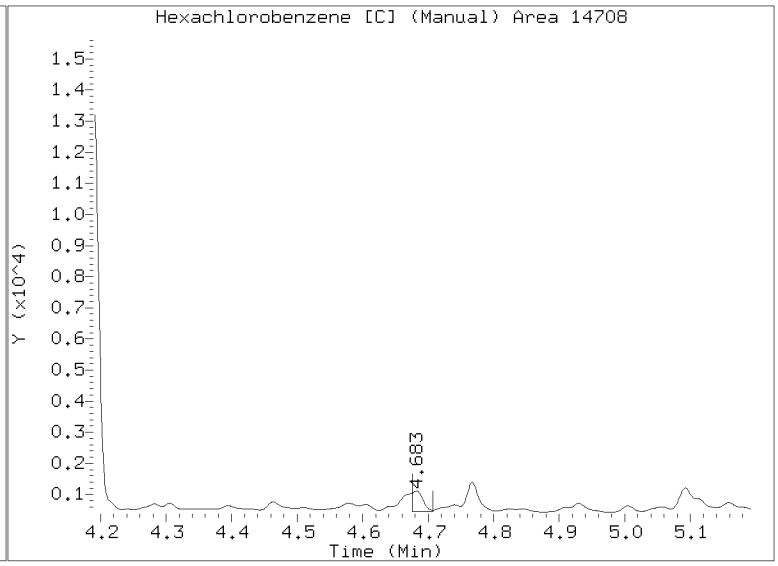
Injection Date: 01-FEB-2023 09:03
Lab ID:23A0134-02 Client ID:





Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1179

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-03 C	File ID:	23013163.D
Sampled:	01/06/23 09:52	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 09:21
% Solids:	47.33	Preparation:	EPA 3546 (Microwave)	Initial/Final:	26.5 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9729*	*8.80*	*110*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9729*	*9.12*	*114*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9729*	*6.03*	*75.7*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9729*	*6.13*	*76.9*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013163.D
Data file 2: /20230131.b/B20230131.b/23013163.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0134-03
Client ID:
Injection Date: 01-FEB-2023 09:21
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.325	0.015	33193	4.827	-0.006	5402	3.16	0.33	162.0*	alpha-BHC
4.683	-0.009	5164	5.326	0.017	11161	1.28	1.80	34.1	beta-BHC
4.881	0.005	73351	----			8.55	0.00	---	delta-BHC
4.610	-0.001	17924	5.219	-0.010	3797	1.97	0.27	151.0*	gamma-BHC (Lindane)
5.077	-0.016	16537	5.757	0.003	36184	2.04	2.89	34.5	Heptachlor
5.430	0.016	42653	6.152	-0.006	20542	4.70	1.44	106.3*	Aldrin
6.072	-0.017	26793	----			3.41	0.00	---	Heptachlor epoxide b
----			7.236	-0.021	11181	0.00	1.07	---	Endosulfan I
6.768	-0.023	115563	7.524	-0.027	66018	14.90	5.74	88.7*	Dieldrin
6.442	-0.009	118992	7.330	-0.012	53838	16.52	5.11	105.6*	4,4'-DDE
7.061	0.020	225073	7.896	0.020	195690	38.07	22.92	49.7*	Endrin
7.300	0.022	14151	8.087	-0.000	104633	2.66	11.95	127.2*	Endosulfan II
----			7.937	-0.012	55956	0.00	6.74	---	4,4'-DDD
----			8.712	0.025	58664	0.00	7.63	---	Endosulfan sulfate
----			8.265	-0.002	368772	0.00	46.00	---	4,4'-DDT
7.903	0.026	30585	8.937	0.028	11580	12.82	3.26	118.9*	Methoxychlor
----			9.218	0.008	165665	0.00	19.95	---	Endrin ketone
7.725	0.018	52066	8.402	-0.016	71586	12.27	11.59	5.6	Endrin aldehyde
----			7.050	0.025	155482	0.00	13.20	---	trans-Chlordane
6.391	0.016	73759	7.173	-0.012	12940	9.20	1.12	156.5*	cis-Chlordane
2.287	-0.016	13501	2.454	-0.029	96618	1.23	6.25	134.3*	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.798	-0.002	224392	4.190	-0.006	351554	30.27	30.76	1.6	Tetrachloro-m-xylene
9.315	-0.004	201713	10.415	-0.014	303625	44.15	45.74	3.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

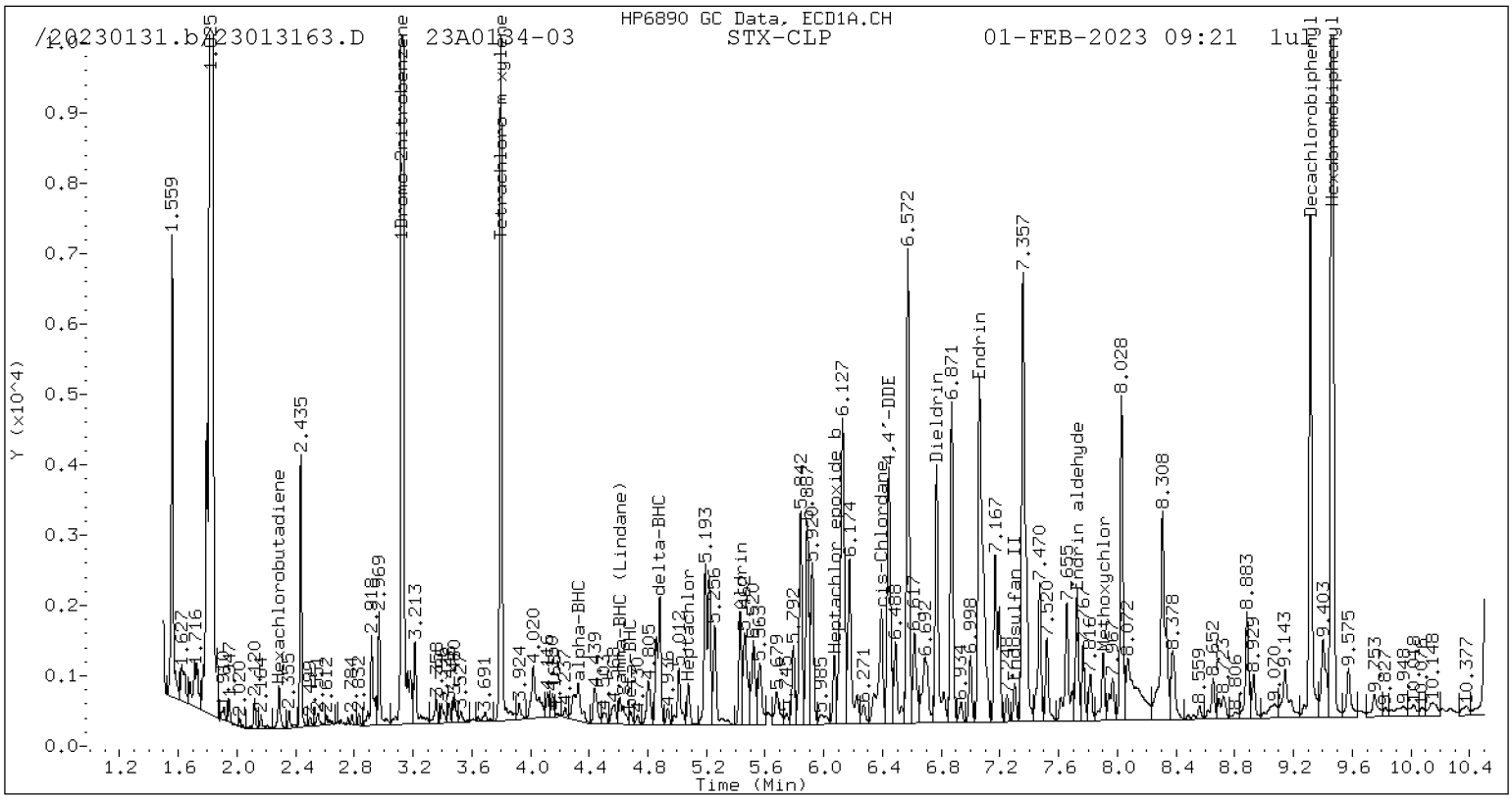
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	545092	-18.9
Hexabromobiphenyl	609723	450931	-26.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	811861	-19.3
Hexabromobiphenyl	769764	600608	-22.0

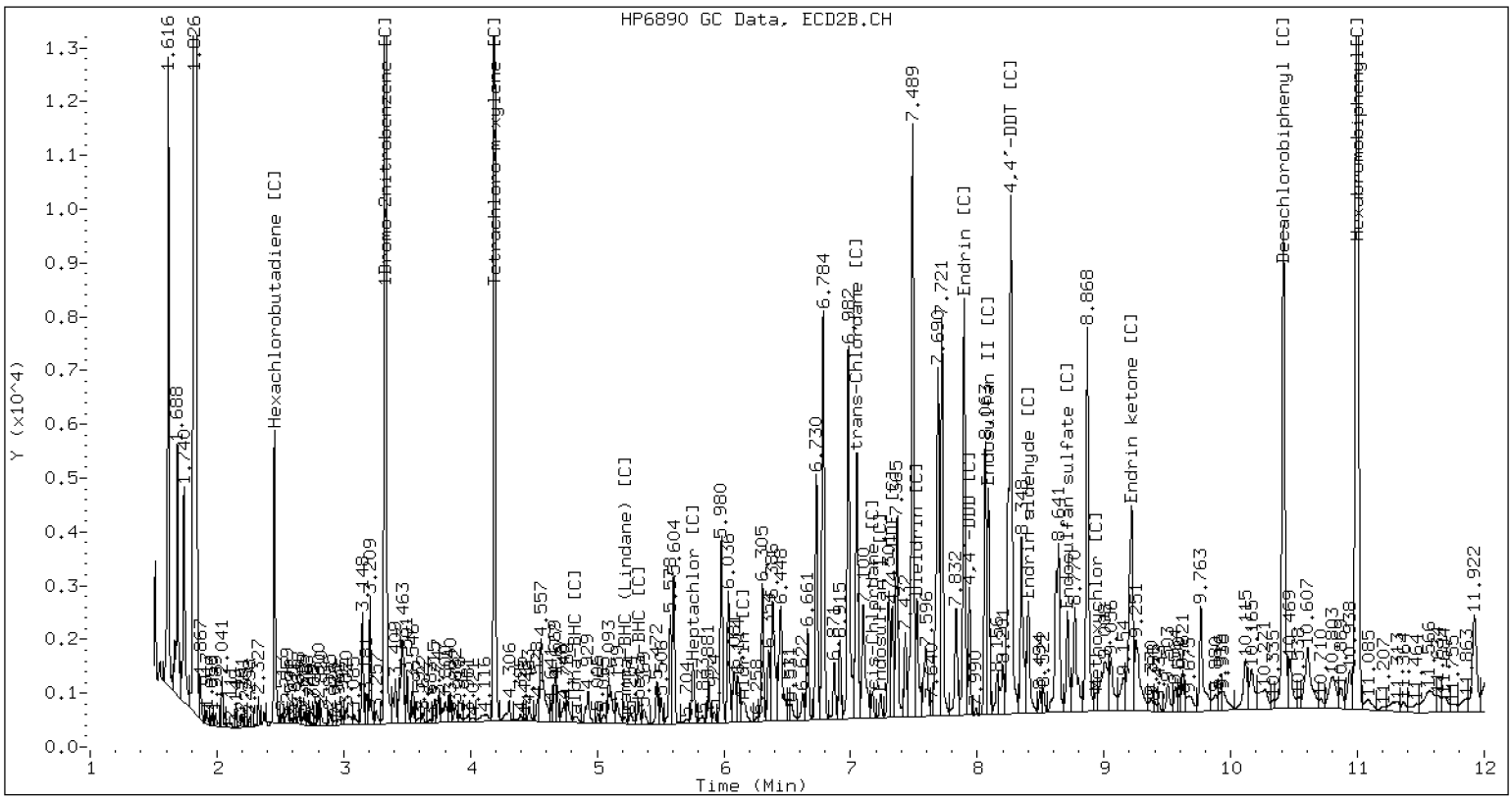
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

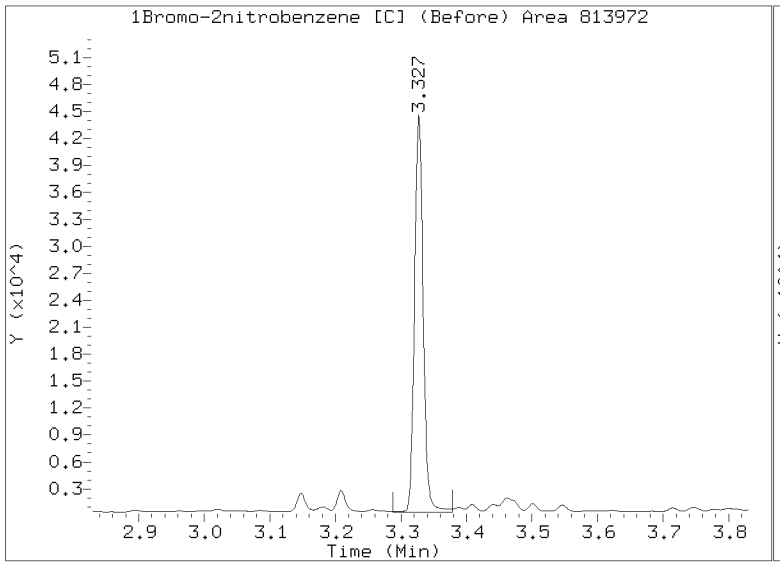
/20230131.b/B20230131.b/23013163.D 23A0134-03 CLP2

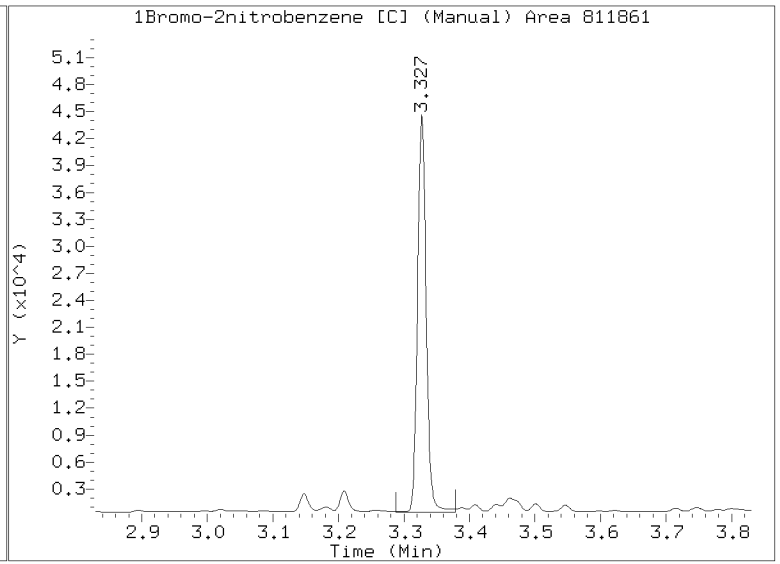


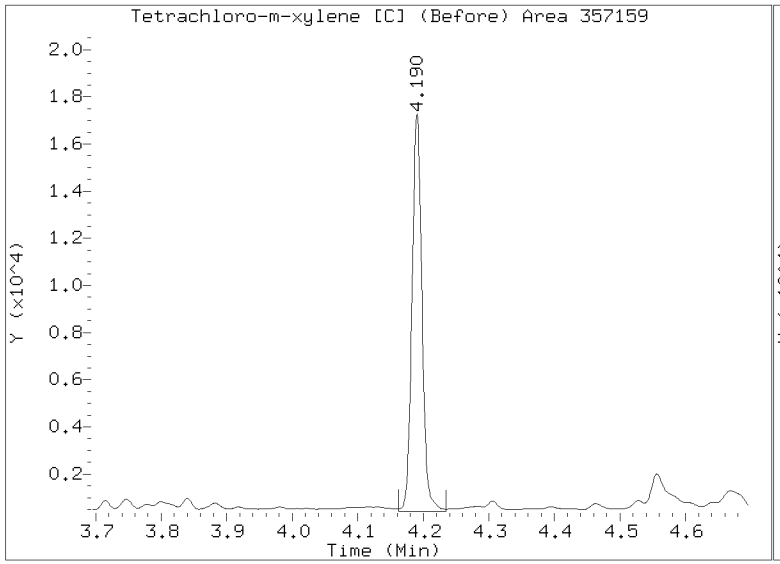
CLP-2 Manual Integration: NO

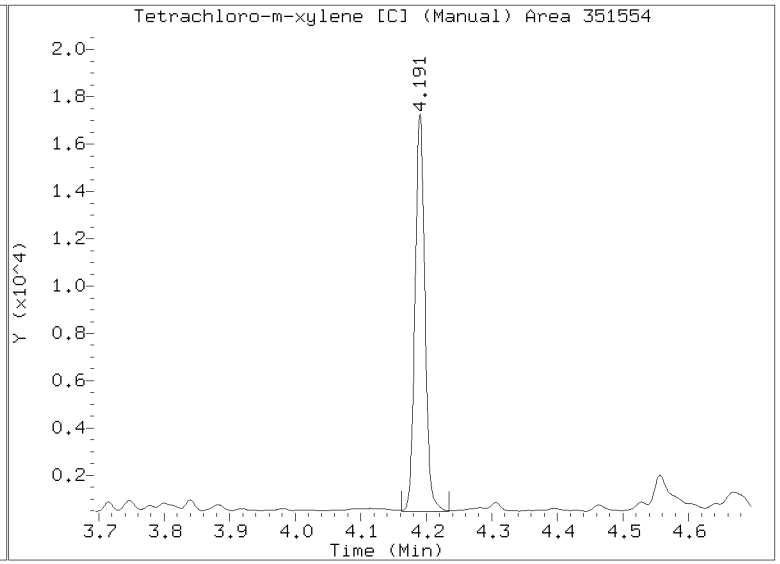
Manual Peak Adjustment Report, CLP-2

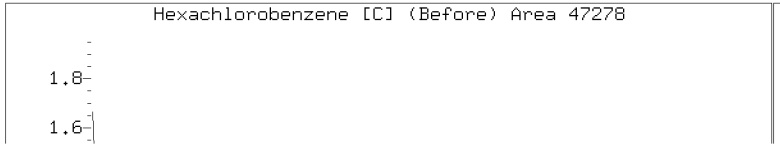
Datafile: /20230131.b/B20230131.b/23013163.D
Injection Date: 01-FEB-2023 09:21
Lab ID:23A0134-03 Client ID:

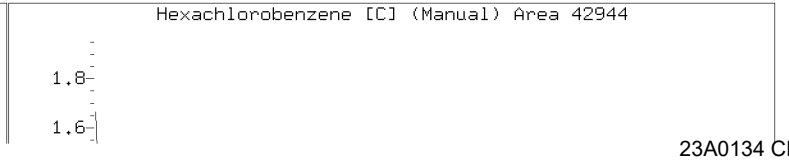






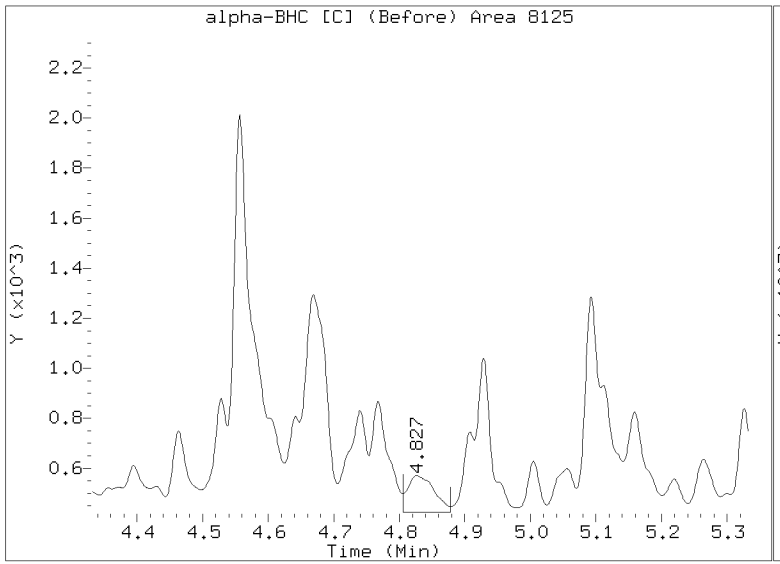


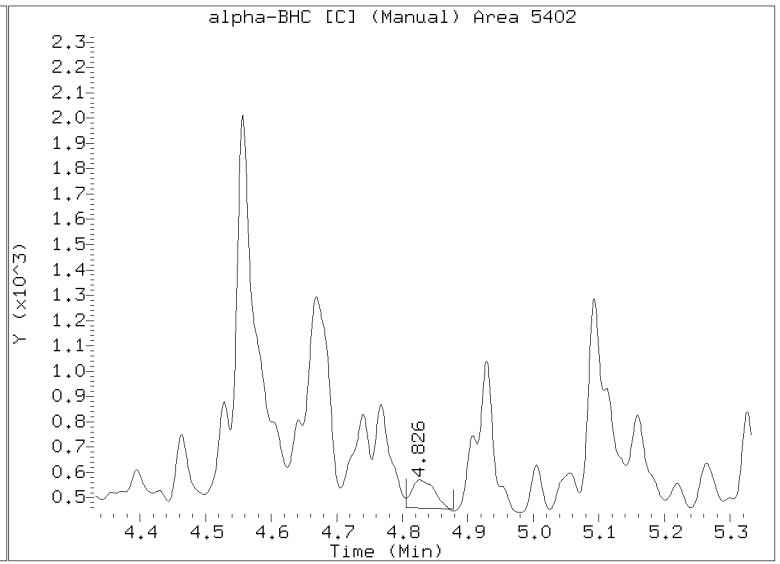


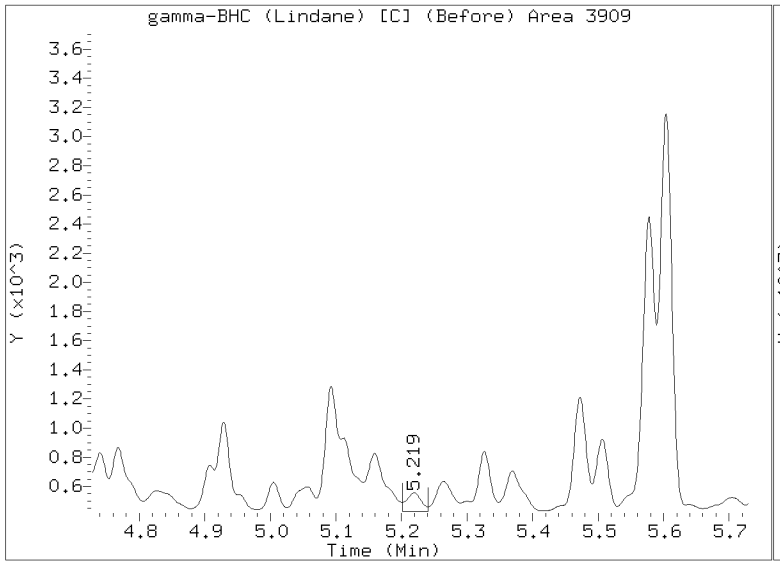


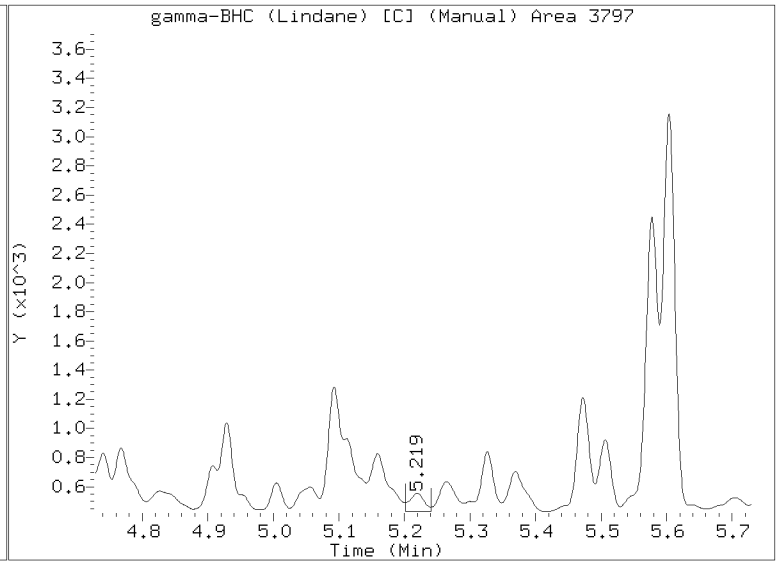
Manual Peak Adjustment Report, CLP-2

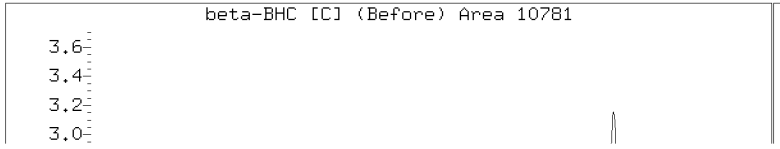
Datafile: /20230131.b/B20230131.b/23013163.D
Injection Date: 01-FEB-2023 09:21
Lab ID:23A0134-03 Client ID:

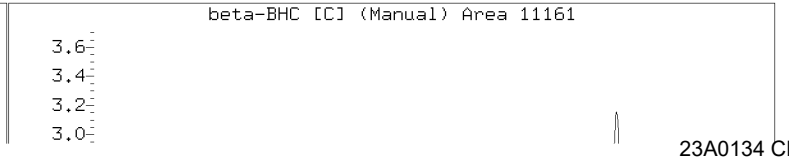






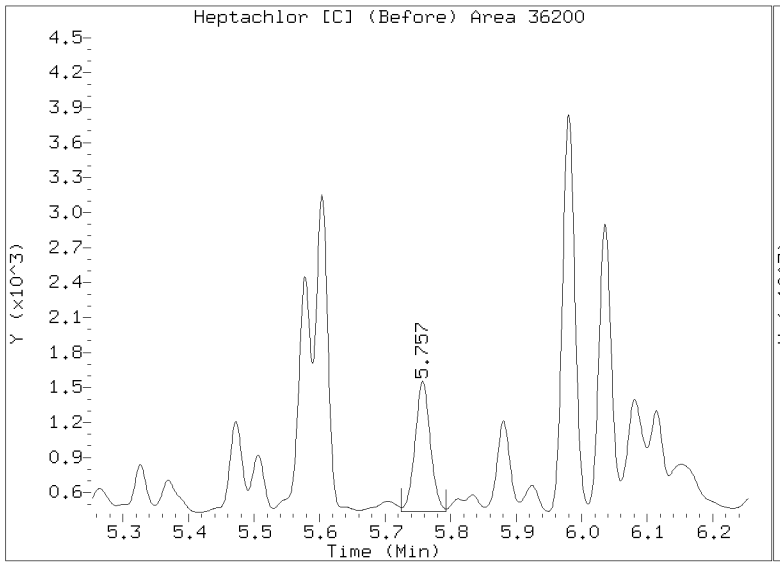


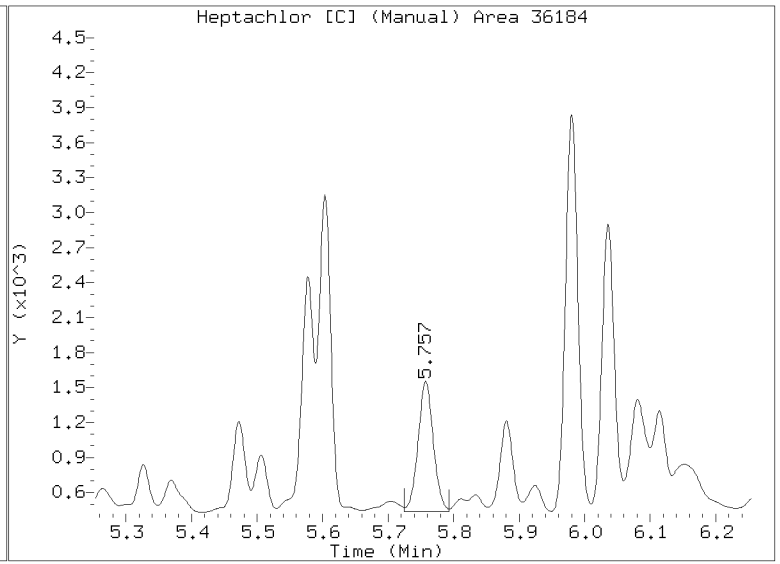


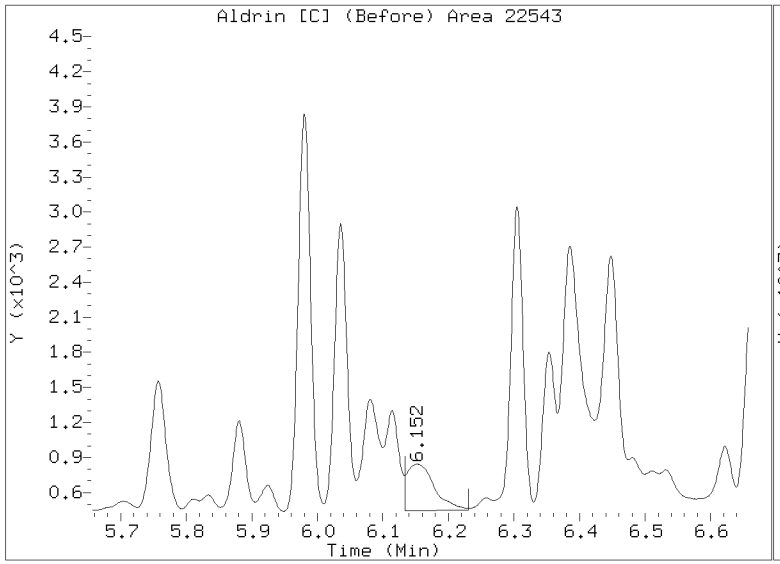


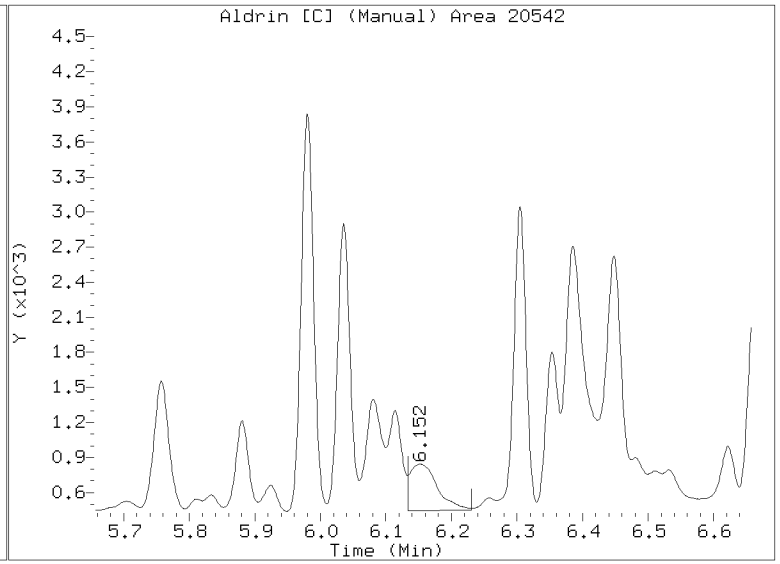
Manual Peak Adjustment Report, CLP-2

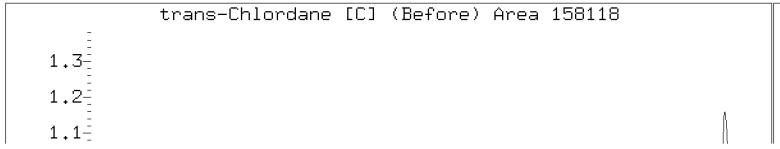
Datafile: /20230131.b/B20230131.b/23013163.D
Injection Date: 01-FEB-2023 09:21
Lab ID:23A0134-03 Client ID:

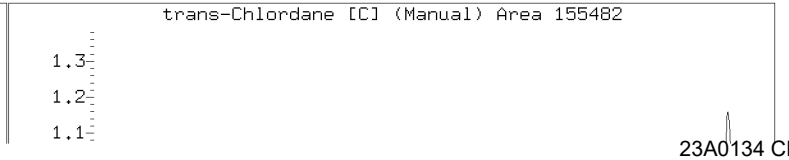












Manual Peak Adjustment Report, CLP-2

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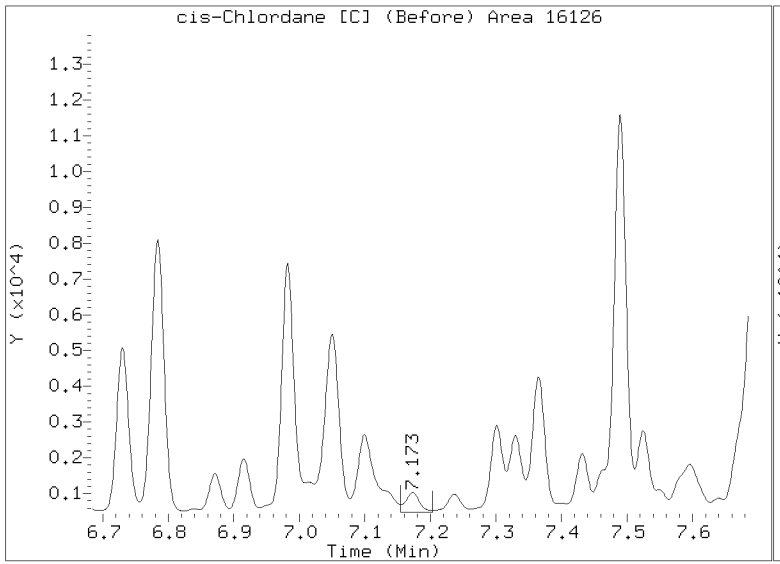

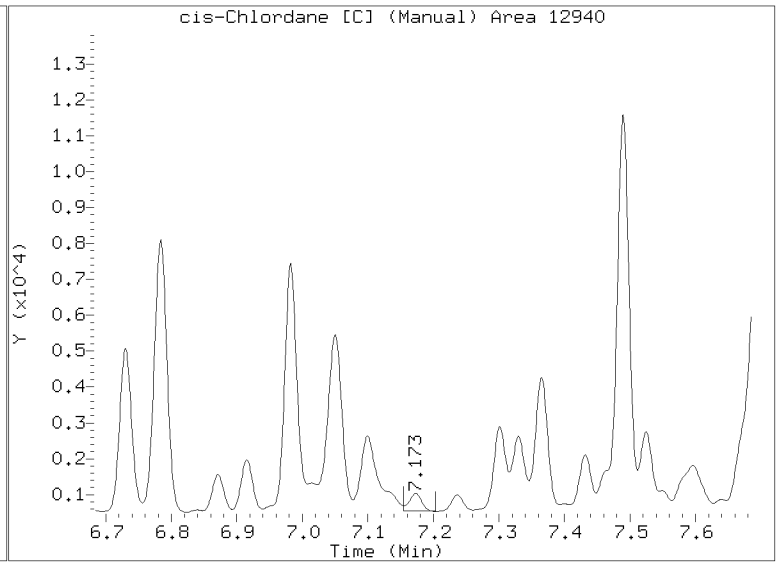

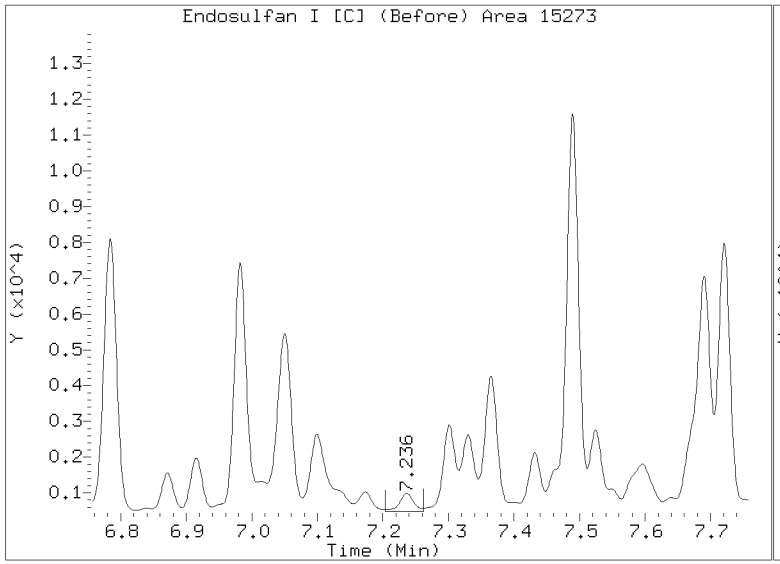

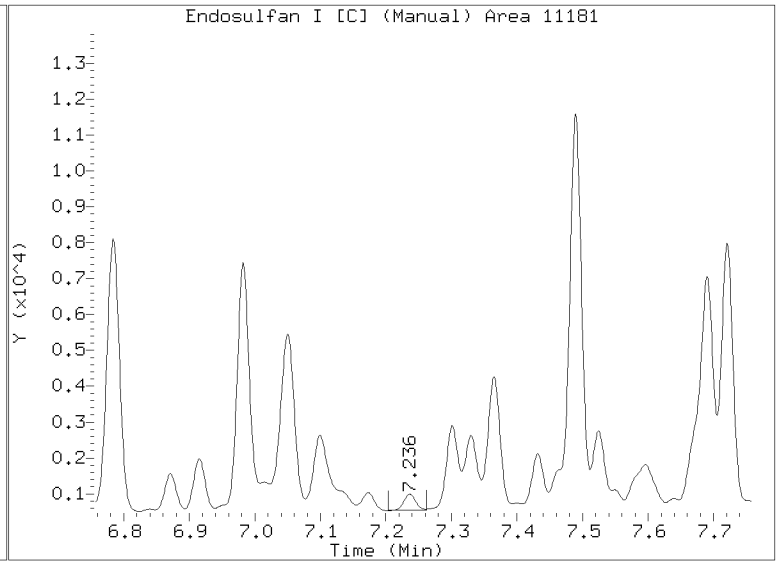

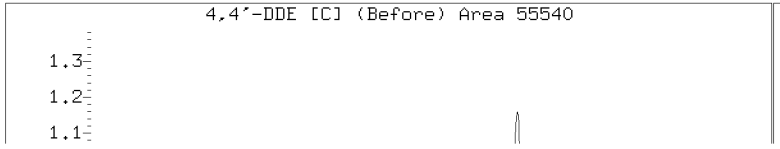

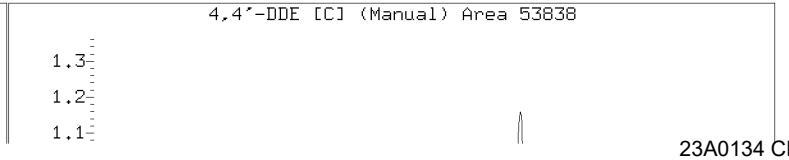

Manual Peak Adjustment Report, CLP-2

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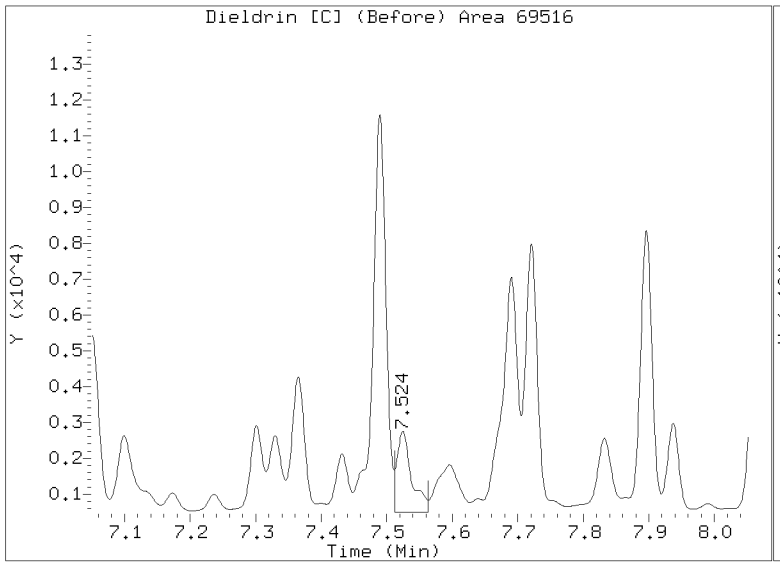

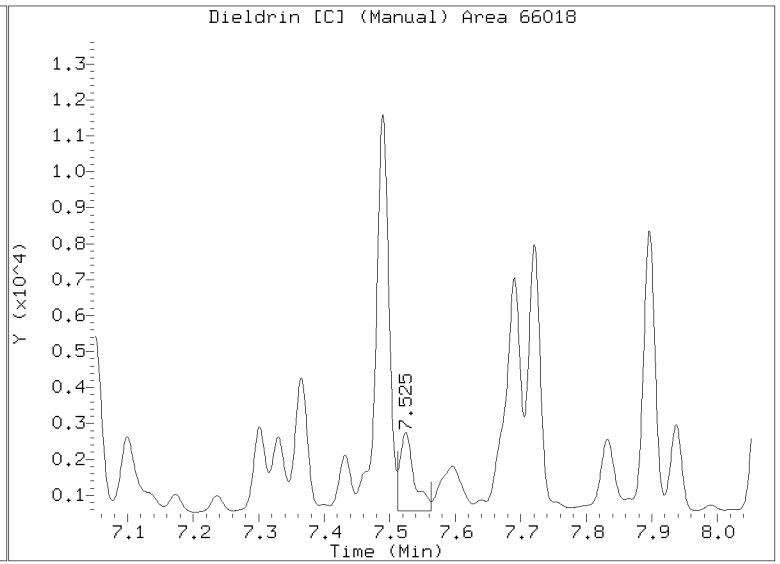

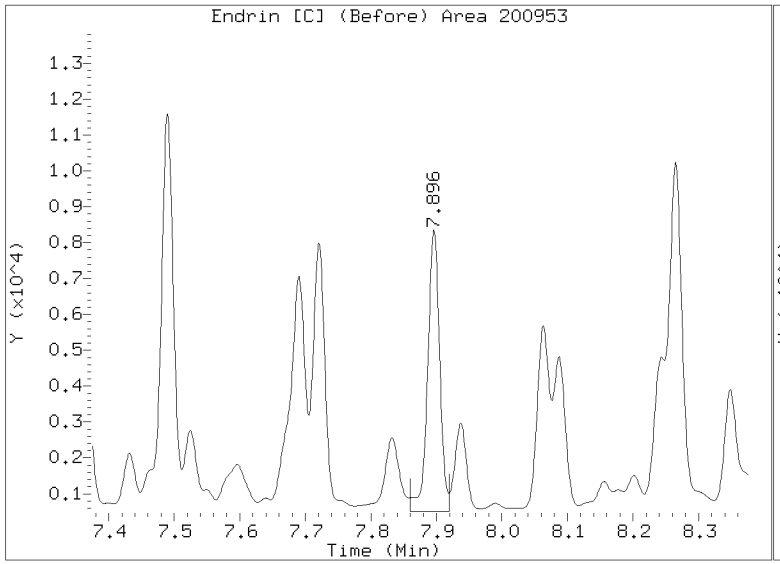

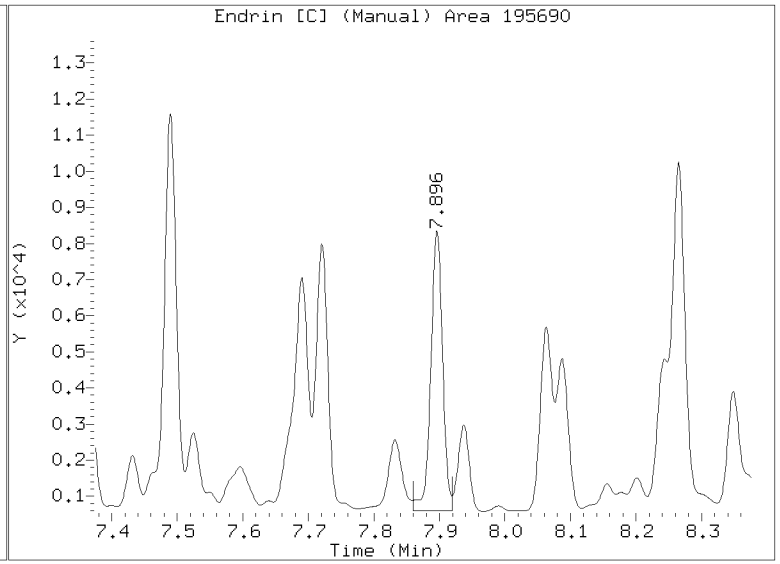

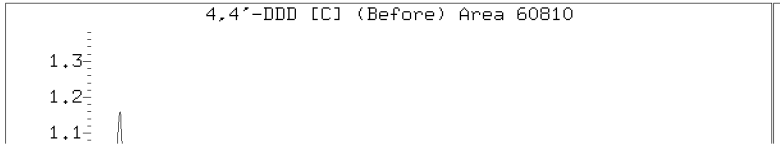

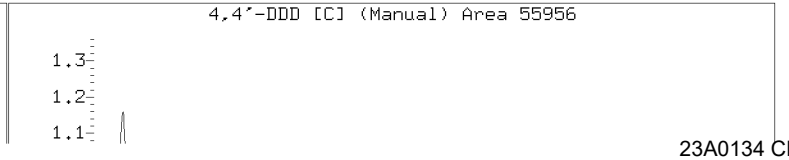

Manual Peak Adjustment Report, CLP-2

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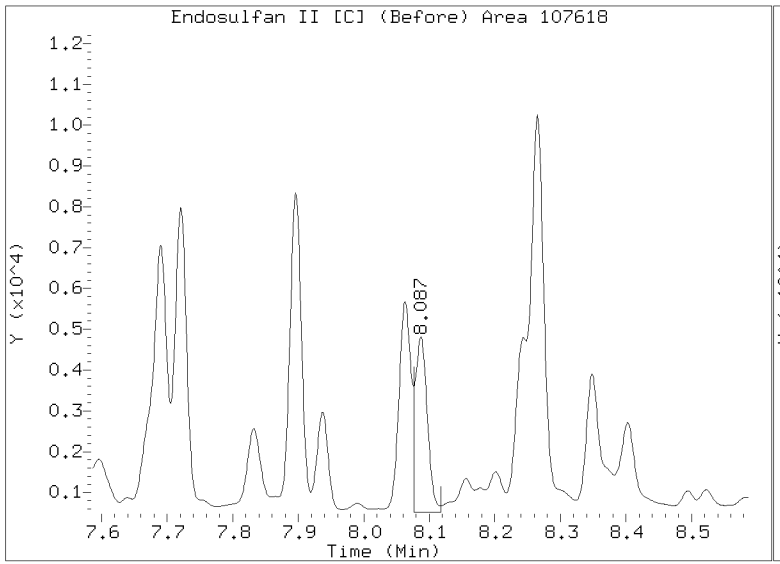

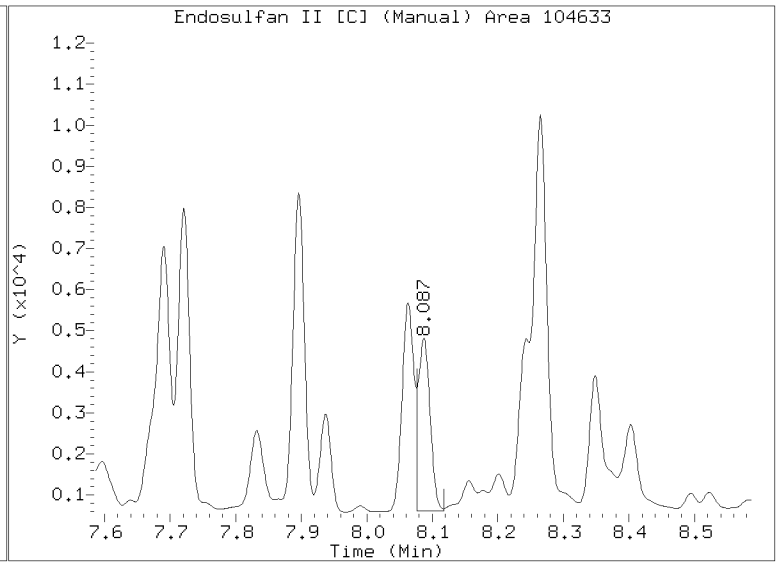

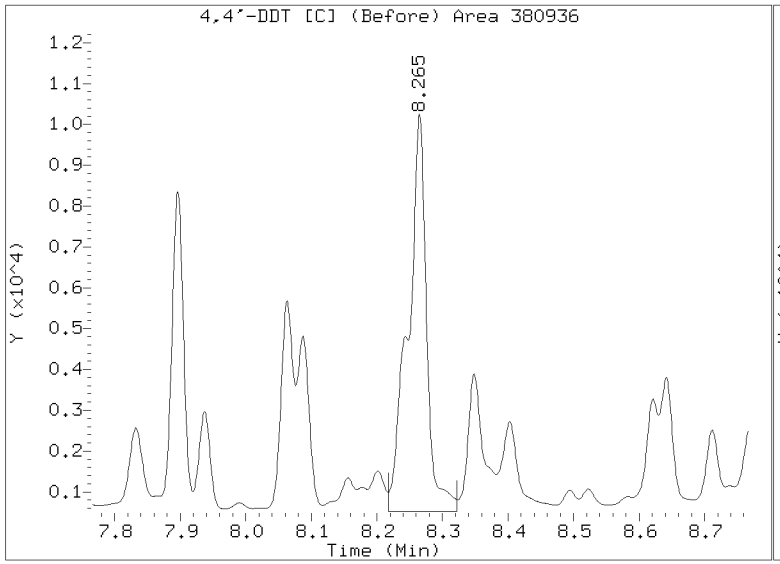

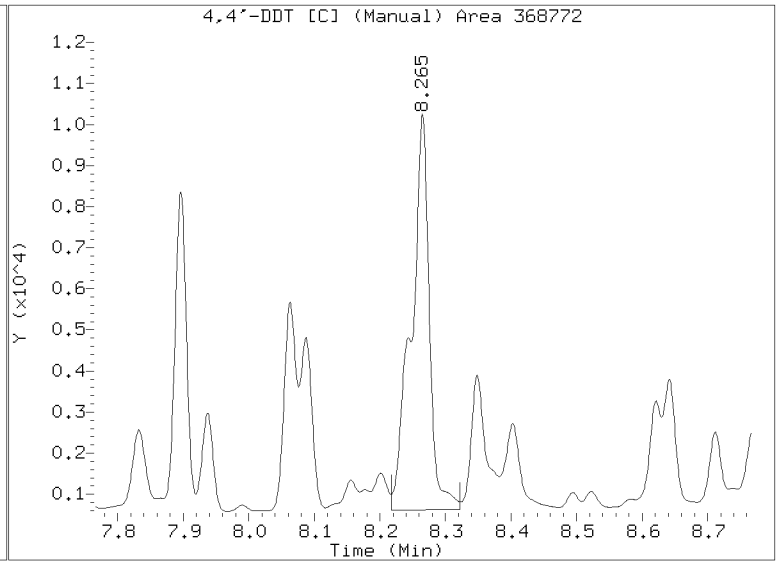

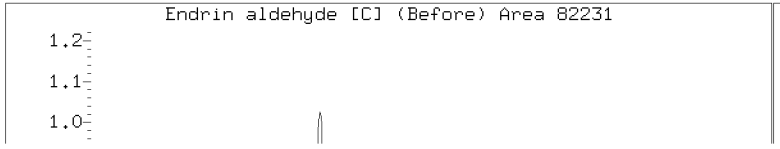

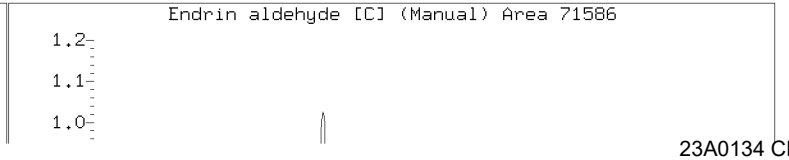

Manual Peak Adjustment Report, CLP-2

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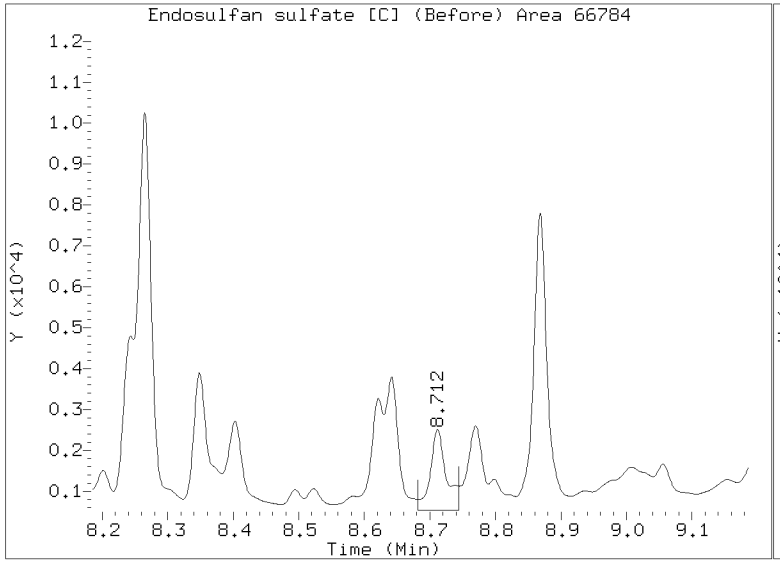
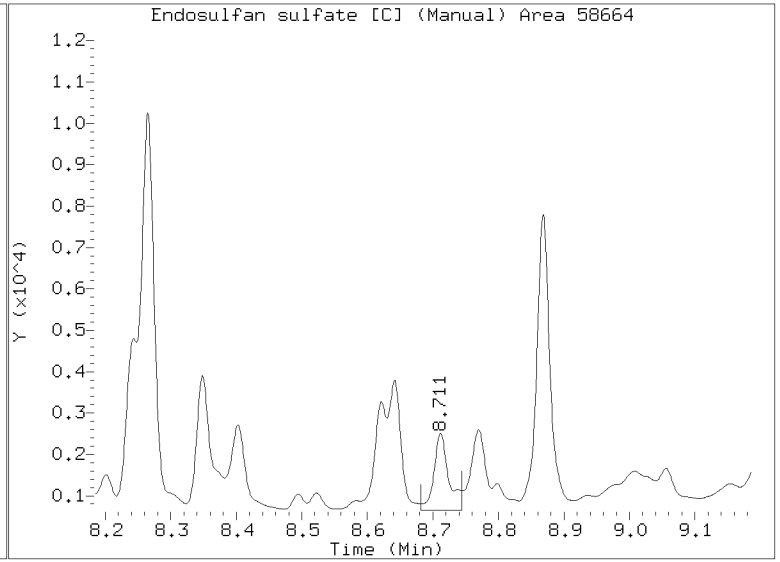
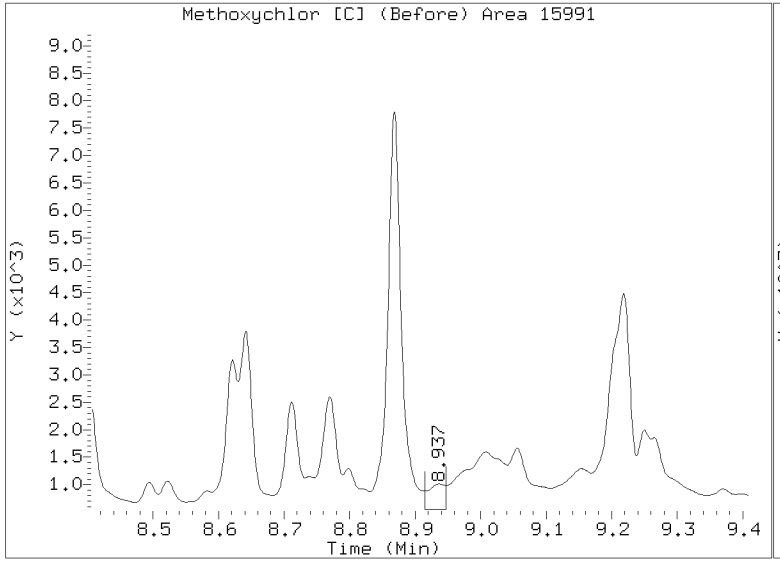
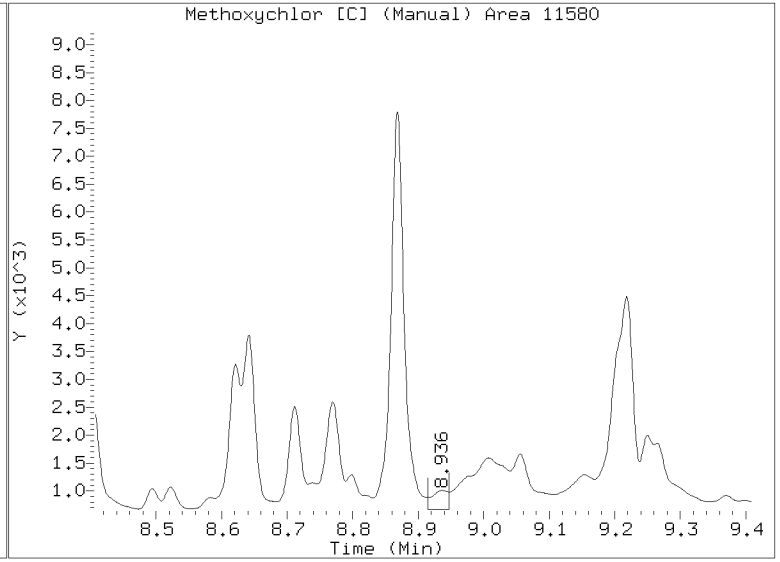
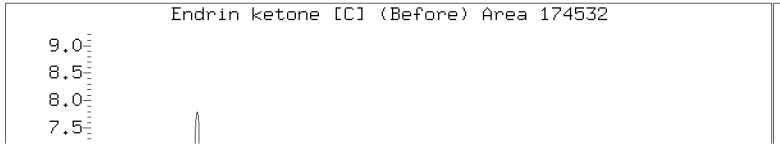
Lab ID:23A0134-03 Client ID:

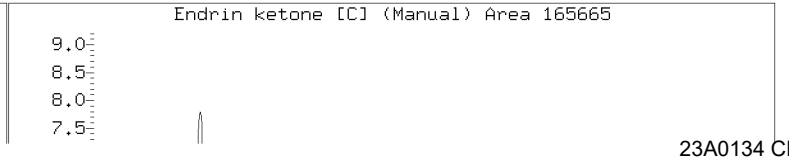












Manual Peak Adjustment Report, CLP-2

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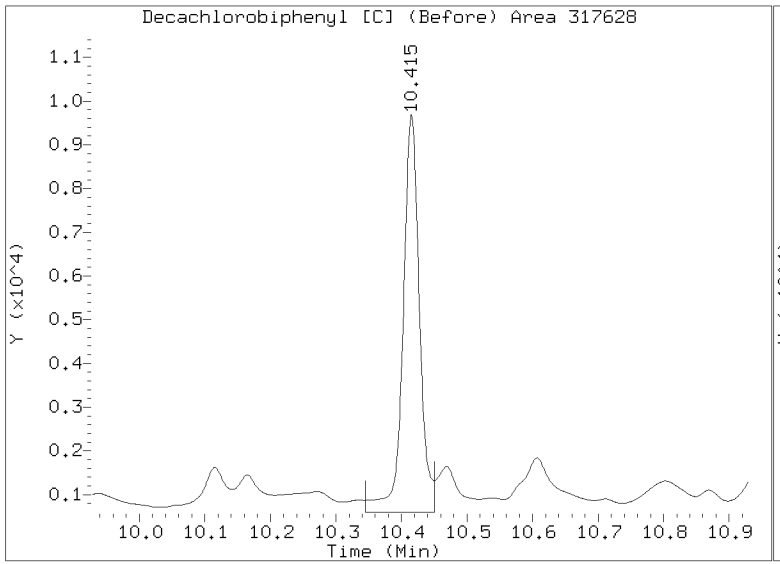
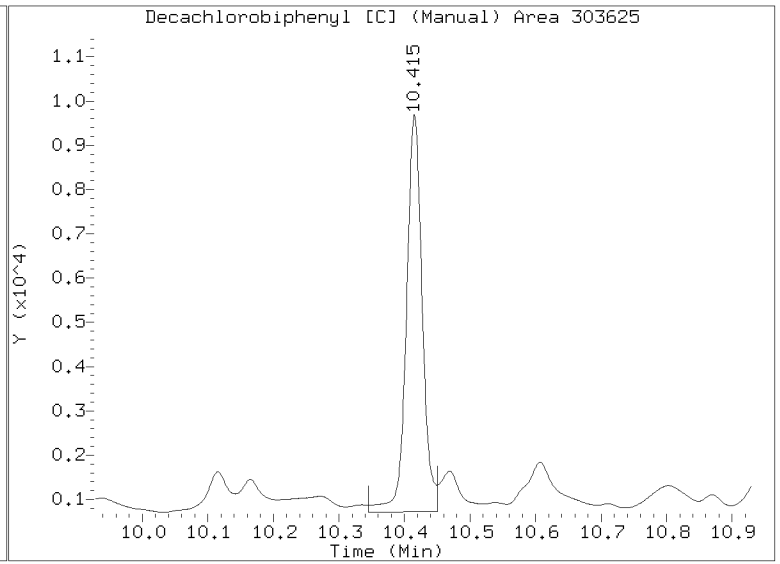
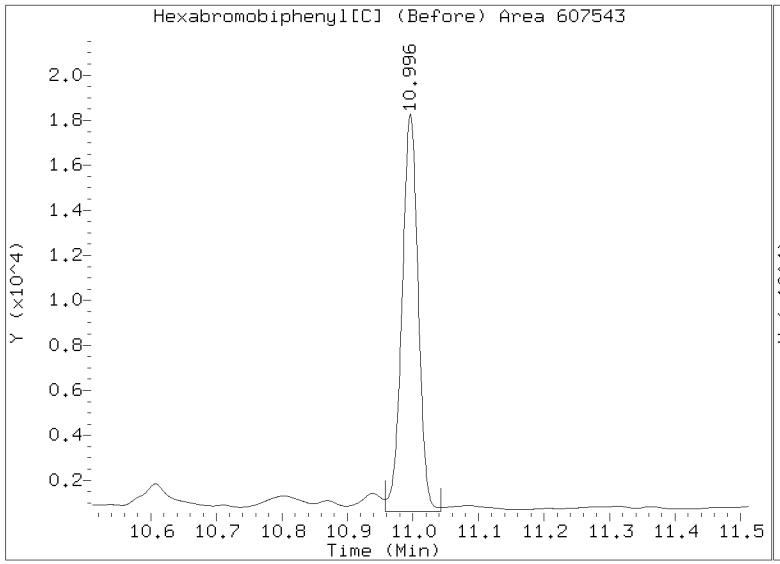
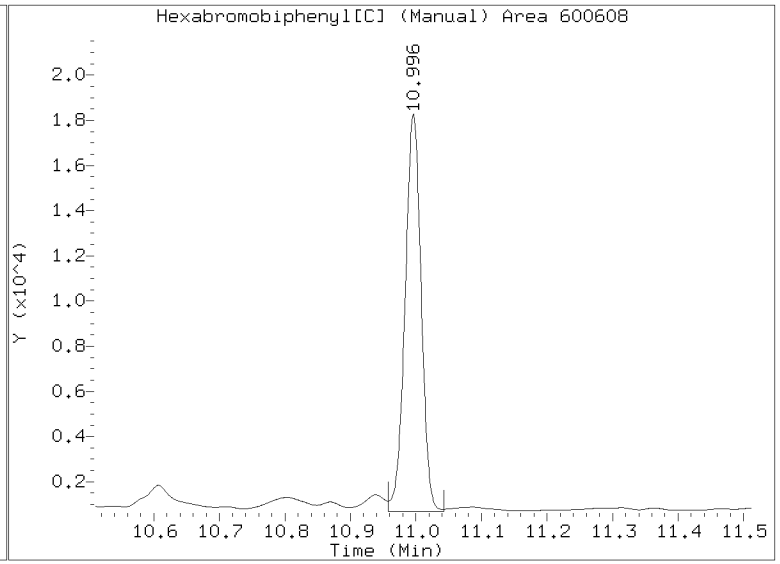








Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1242

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-04 C	File ID:	23013164.D
Sampled:	01/06/23 11:04	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 09:38
% Solids:	46.37	Preparation:	EPA 3546 (Microwave)	Initial/Final:	27.04 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.26	0.14	0.50	J

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9755*	*8.81*	*110*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9755*	*8.30*	*104*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9755*	*5.46*	*68.5*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9755*	*6.16*	*77.2*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013164.D
Data file 2: /20230131.b/B20230131.b/23013164.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0134-04
Client ID:
Injection Date: 01-FEB-2023 09:38
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.324	0.014	29528	4.832	-0.001	6697	2.99	0.47	145.3*	alpha-BHC
----			5.326	0.017	9743	0.00	1.81	---	beta-BHC
4.880	0.005	43345	----			5.36	0.00	---	delta-BHC
4.611	-0.000	24450	5.222	-0.007	6677	2.85	0.56	134.7*	gamma-BHC (Lindane)
5.077	-0.015	11559	5.756	0.001	24020	1.52	2.21	37.2	Heptachlor
5.429	0.015	35624	6.148	-0.009	14211	4.17	1.14	113.8*	Aldrin
6.071	-0.018	19660	6.838	0.024	2260	2.65	0.22	169.3*	Heptachlor epoxide b
----			7.236	-0.022	8366	0.00	0.92	---	Endosulfan I
6.767	-0.023	87568	7.524	-0.028	52186	11.98	5.22	78.6*	Dieldrin
6.441	-0.010	75430	7.330	-0.012	40517	11.12	4.42	86.2*	4,4'-DDE
7.060	0.019	183302	7.896	0.020	159885	36.27	21.72	50.2*	Endrin
7.300	0.022	10591	8.063	-0.024	95933	2.33	12.72	138.1*	Endosulfan II
----			7.937	-0.012	44214	0.00	6.18	---	4,4'-DDD
----			8.711	0.025	49894	0.00	7.53	---	Endosulfan sulfate
----			8.261	-0.006	353334	0.00	51.13	---	4,4'-DDT
7.902	0.025	21793	8.935	0.027	6458	10.69	2.11	134.0*	Methoxychlor
----			9.217	0.007	137294	0.00	19.19	---	Endrin ketone
7.725	0.018	46831	8.403	-0.015	50275	12.91	9.45	31.0	Endrin aldehyde
6.224	-0.006	8727	7.051	0.025	136705	1.16	13.35	168.0*	trans-Chlordane
6.390	0.015	46453	7.173	-0.012	9111	6.15	0.91	148.5*	cis-Chlordane
2.285	-0.019	6961	2.453	-0.029	88682	0.67	6.60	163.0*	Hexachlorobutadiene
4.149	-0.003	11903	4.684	-0.009	24955	1.30	1.94	39.7	Hexachlorobenzene MN
3.799	-0.002	191295	4.190	-0.006	306912	27.39	30.89	12.0	Tetrachloro-m-xylene
9.315	-0.004	172604	10.415	-0.015	238141	44.20	41.62	6.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

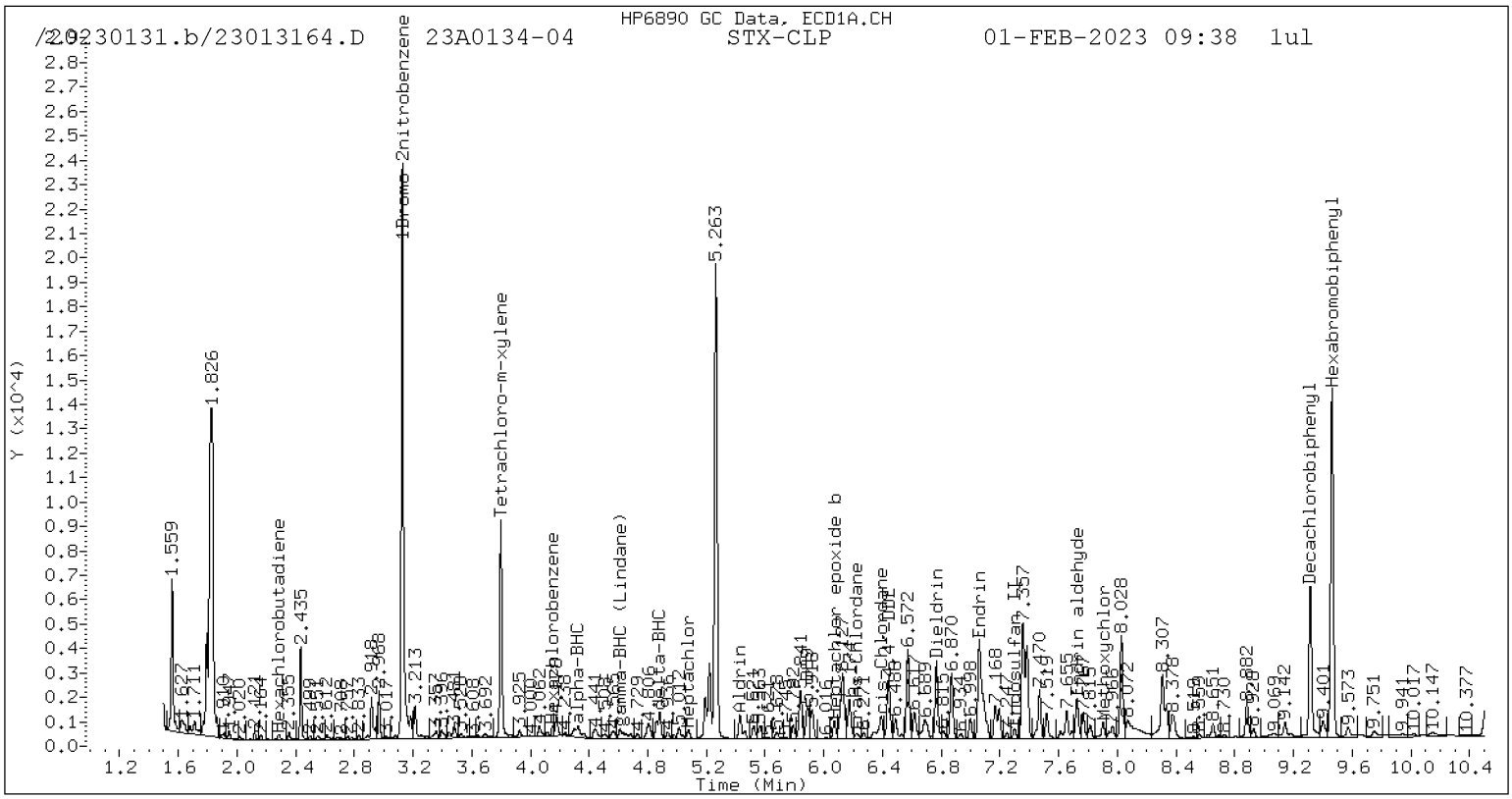
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	513563	-23.6
Hexabromobiphenyl	609723	385436	-36.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	705770	-29.9
Hexabromobiphenyl	769764	517647	-32.8

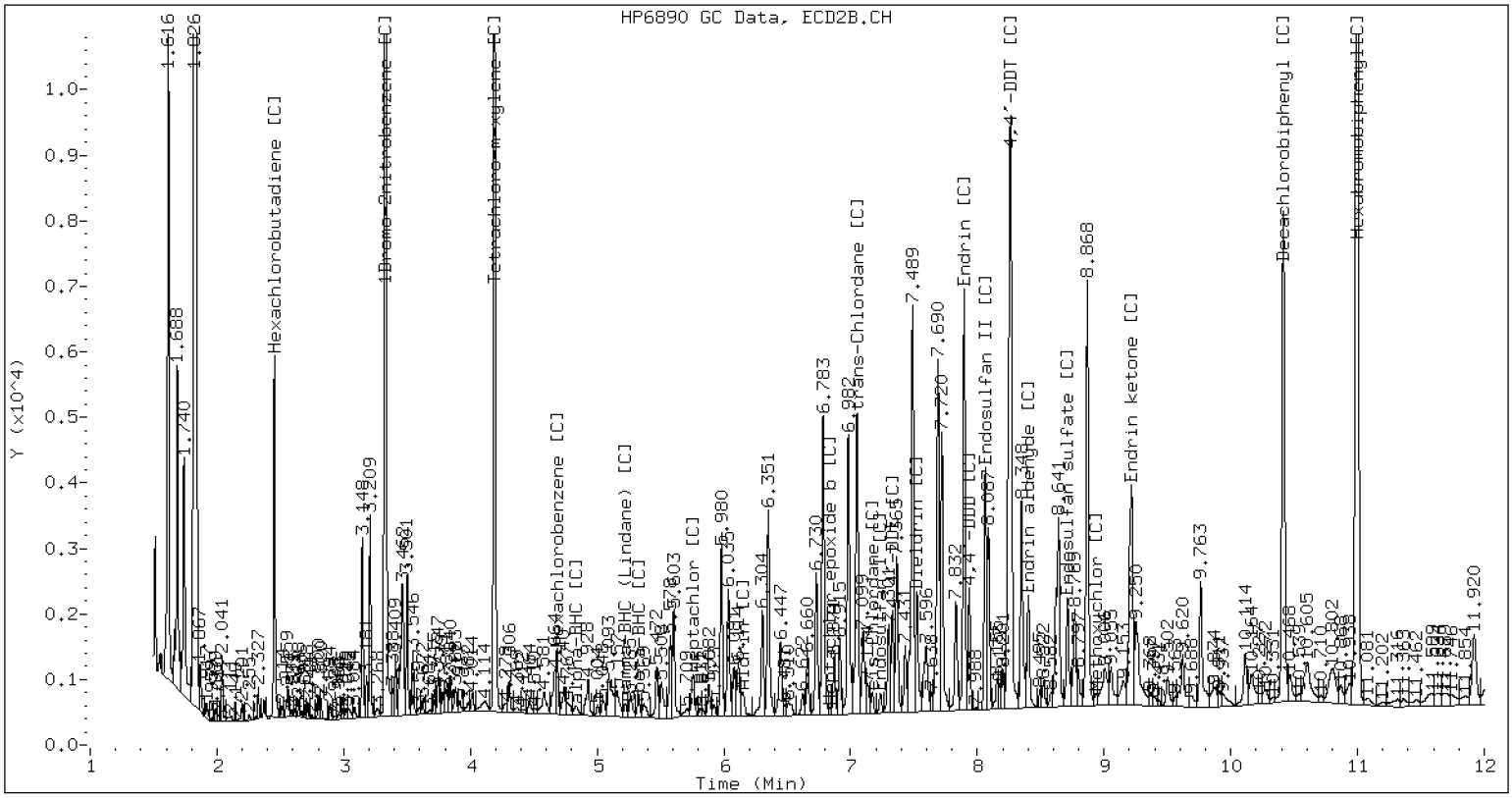
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

/20230131.b/B20230131.b/23013164.D 23A0134-04 CLP2



CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, STX-CLP

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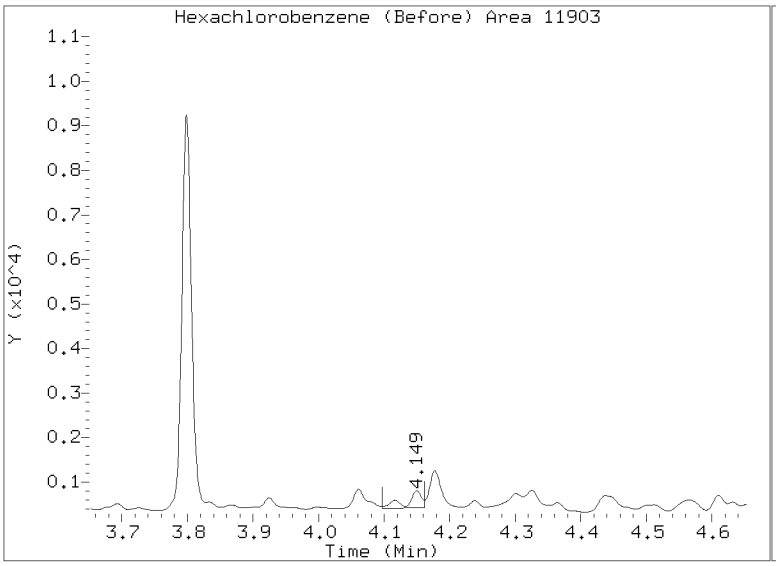
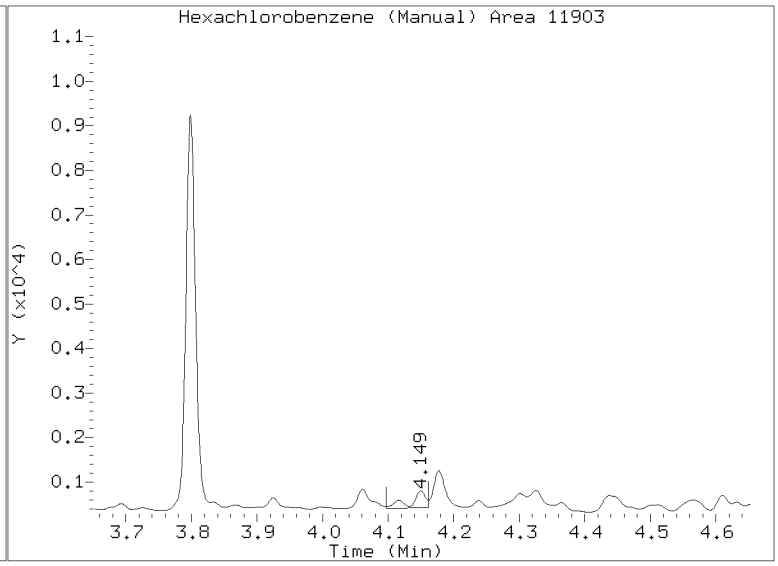
Injection Date: 01-FEB-2023 09:38
Lab ID:23A0134-04 Client ID:
Report Date: 02/03/2023 20:26





Manual Peak Adjustment Report, CLP-2

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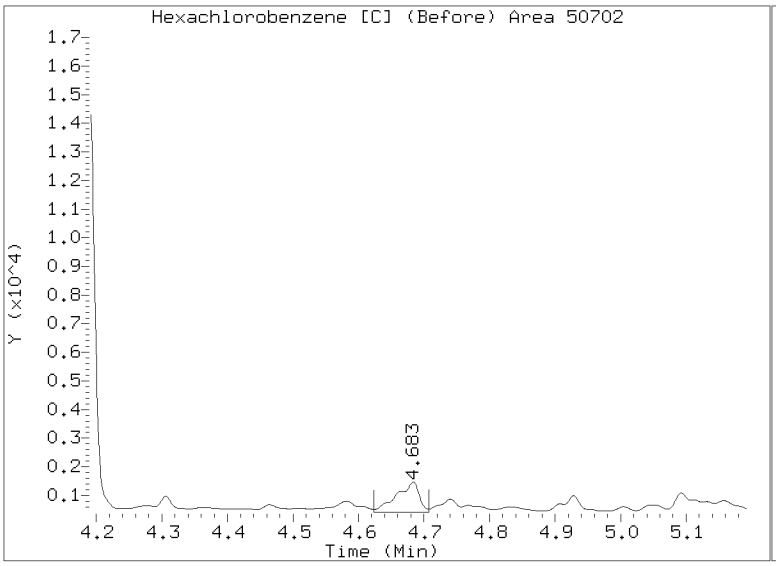
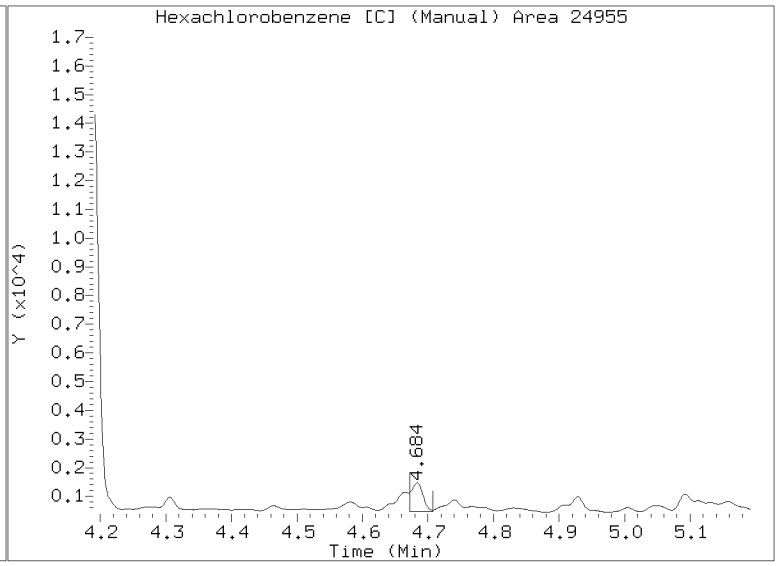
Lab ID:23A0134-04 Client ID:





Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1173

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-05 C	File ID:	23013165.D
Sampled:	01/06/23 11:22	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 09:56
% Solids:	47.16	Preparation:	EPA 3546 (Microwave)	Initial/Final:	27.88 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.48	0.14	0.48	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.6056*	*7.72*	*101*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.6056*	*7.70*	*101*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.6056*	*5.36*	*70.5*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.6056*	*5.52*	*72.6*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013165.D
Data file 2: /20230131.b/B20230131.b/23013165.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0134-05
Client ID:
Injection Date: 01-FEB-2023 09:56
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.301	-0.010	21950	4.822	-0.011	6965	2.44	0.50	132.3*	alpha-BHC M
4.683	-0.010	6731	5.326	0.017	9405	1.95	1.77	9.6	beta-BHC
4.880	0.004	62235	----			8.47	0.00	---	delta-BHC
4.610	-0.002	22941	5.218	-0.011	4458	2.94	0.38	154.8*	gamma-BHC (Lindane)
5.076	-0.017	16060	5.757	0.003	31596	2.32	2.94	23.6	Heptachlor
5.428	0.014	45950	6.147	-0.011	14687	5.92	1.20	132.7*	Aldrin
6.071	-0.018	19684	6.838	0.024	3489	2.92	0.34	157.9*	Heptachlor epoxide b
----			7.236	-0.022	9219	0.00	1.03	---	Endosulfan I
6.767	-0.024	75658	7.524	-0.028	49509	11.39	5.01	77.9*	Dieldrin
6.441	-0.011	80501	7.330	-0.012	45027	13.06	4.97	89.8*	4,4'-DDE
7.060	0.019	177269	7.895	0.020	163763	36.26	23.28	43.6*	Endrin
7.300	0.022	12776	8.086	-0.001	83816	2.90	11.62	120.1*	Endosulfan II
----			7.937	-0.012	45929	0.00	6.71	---	4,4'-DDD
----			8.711	0.025	39134	0.00	6.18	---	Endosulfan sulfate
----			8.264	-0.002	293930	0.00	44.50	---	4,4'-DDT
7.902	0.025	23802	8.936	0.027	7619	12.07	2.61	128.9*	Methoxychlor
----			9.217	0.008	128059	0.00	18.72	---	Endrin ketone
7.724	0.018	42236	8.402	-0.016	48822	12.03	9.60	22.5	Endrin aldehyde
6.223	-0.006	10620	7.049	0.023	110782	1.55	10.94	150.3*	trans-Chlordane
6.391	0.015	52760	7.173	-0.012	10174	7.69	1.03	152.9*	cis-Chlordane
2.284	-0.020	6480	2.453	-0.029	70262	0.69	5.29	153.9*	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.799	-0.002	179037	4.190	-0.006	285540	28.21	29.06	3.0	Tetrachloro-m-xylene
9.315	-0.004	153366	10.415	-0.014	221336	40.59	40.48	0.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

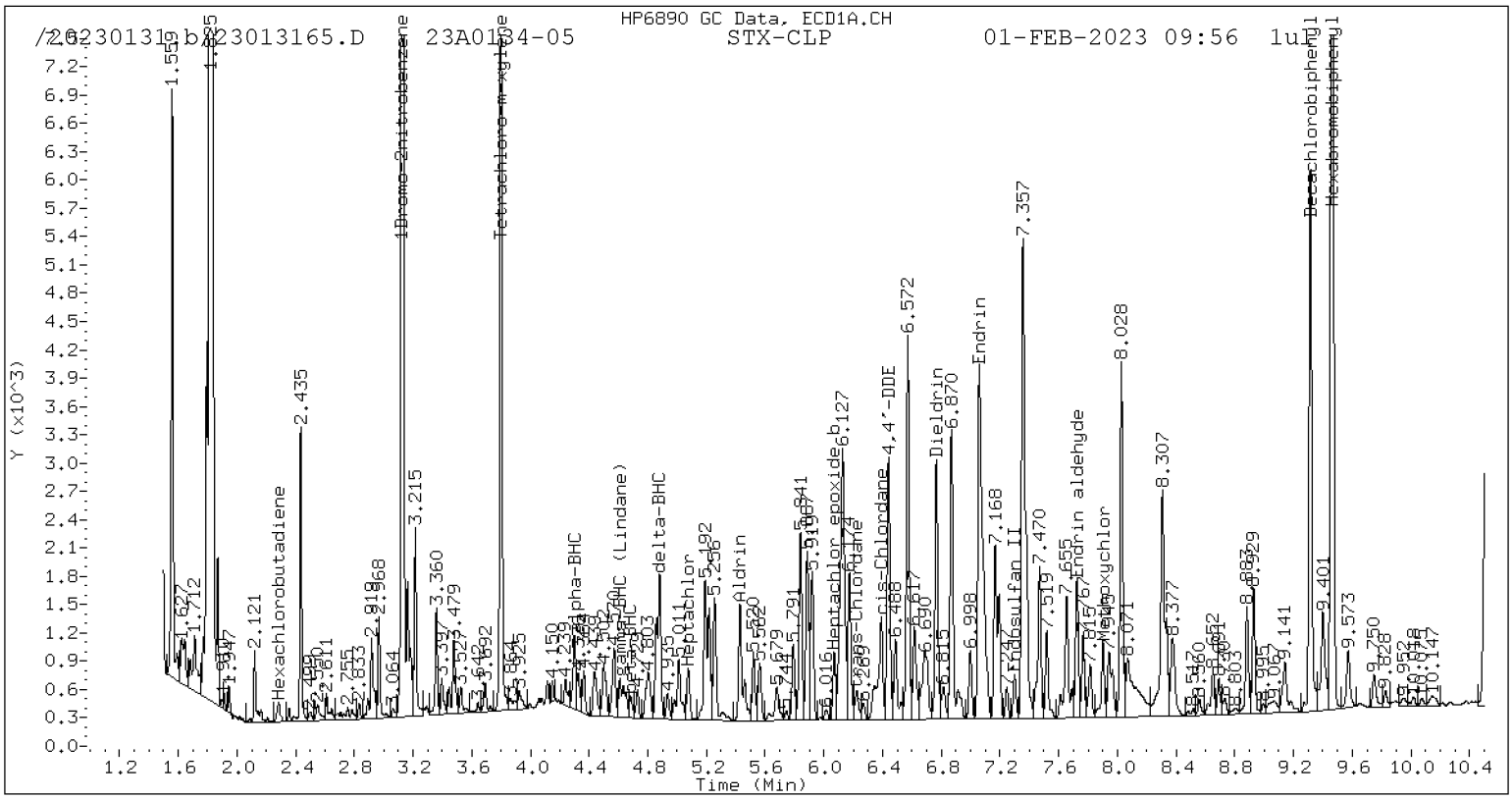
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	466715	-30.6
Hexabromobiphenyl	609723	372912	-38.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	698116	-30.6
Hexabromobiphenyl	769764	494769	-35.7

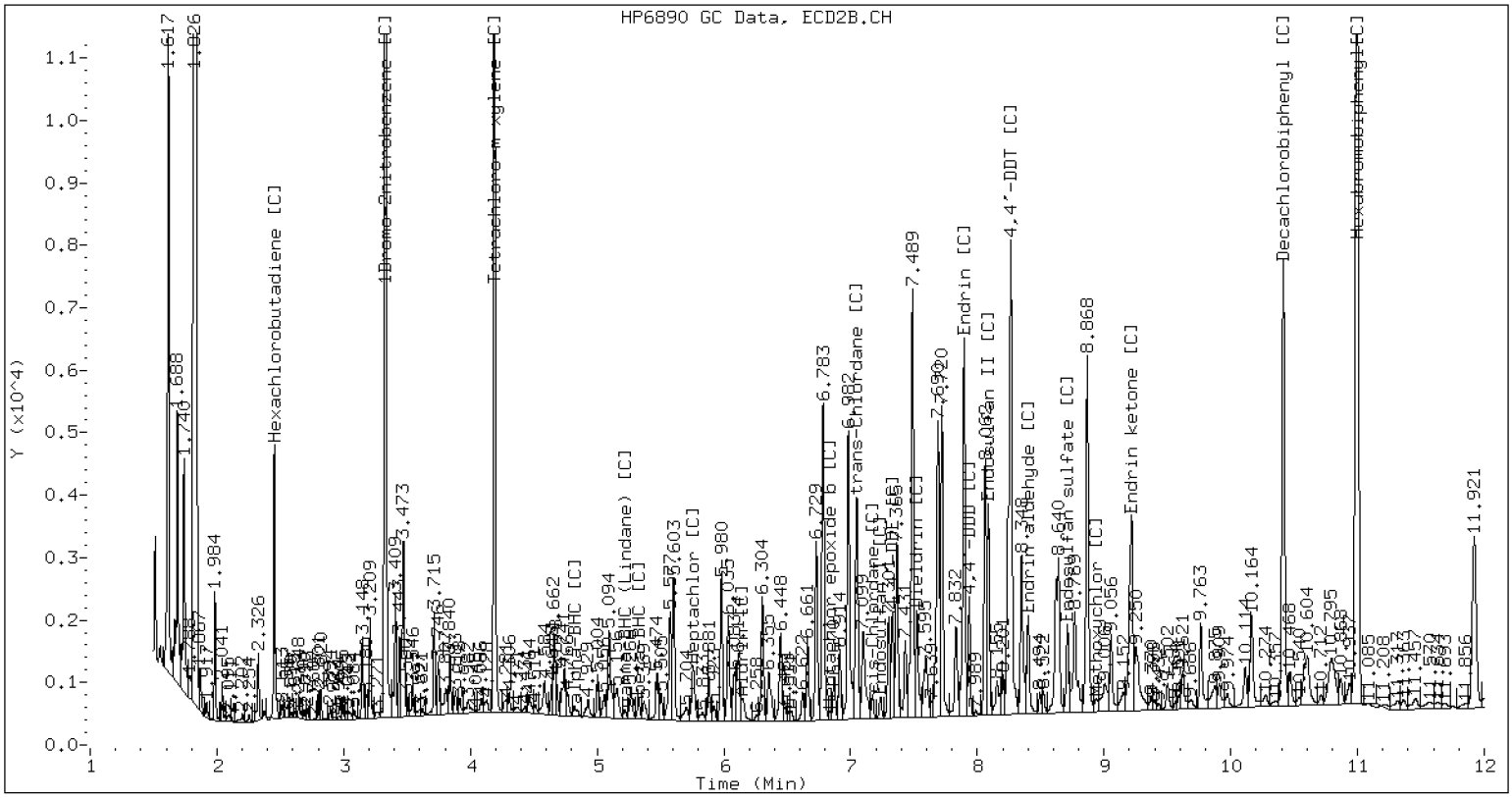
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

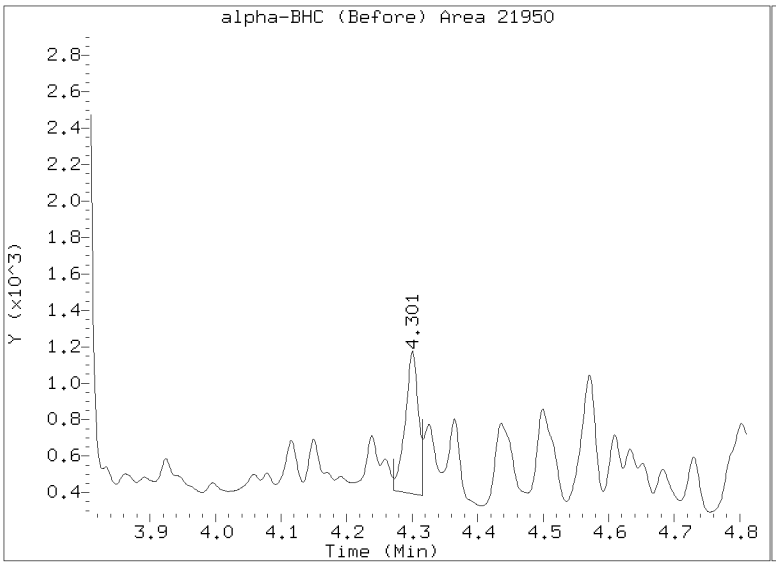
/20230131.b/B20230131.b/23013165.D 23A0134-05 CLP2

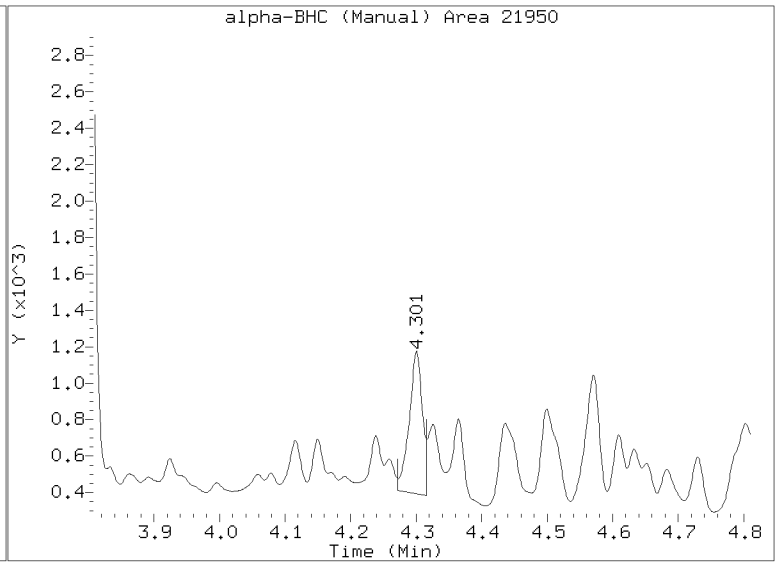


CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, STX-CLP

Datafile: /20230131.b/23013165.D
Injection Date: 01-FEB-2023 09:56
Lab ID:23A0134-05 Client ID:
Report Date: 02/03/2023 20:26





Manual Peak Adjustment Report, CLP-2

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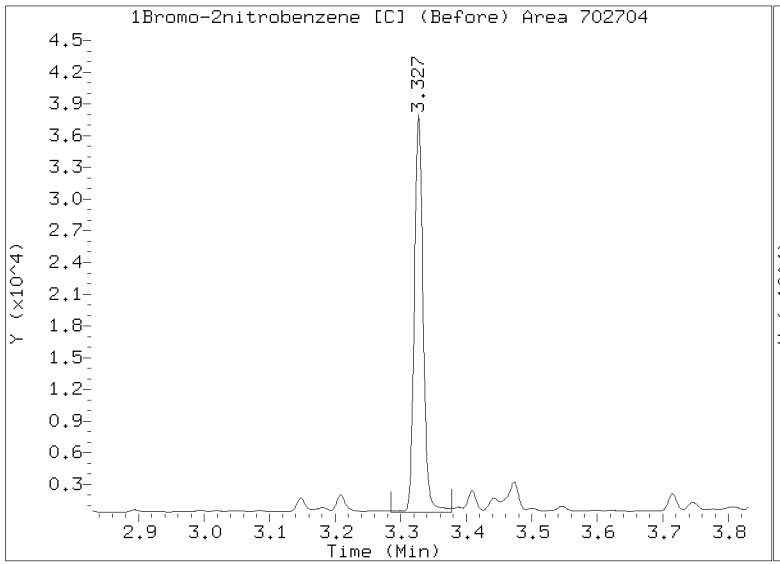
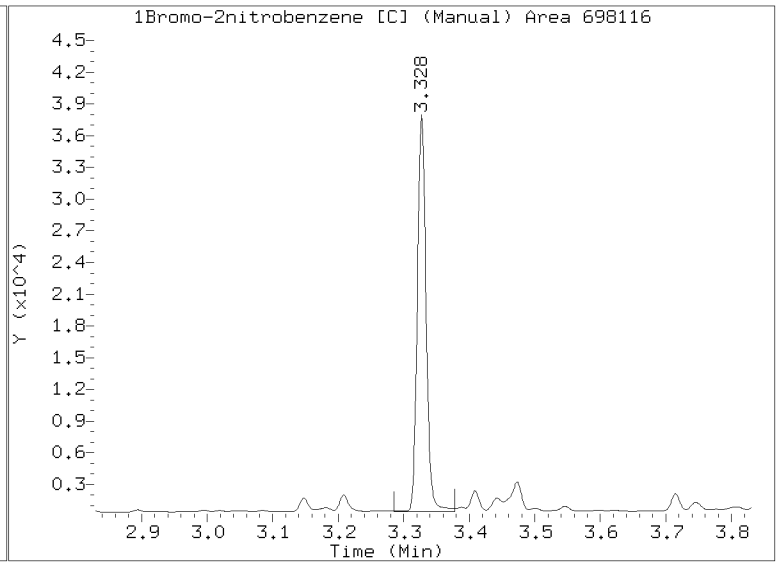
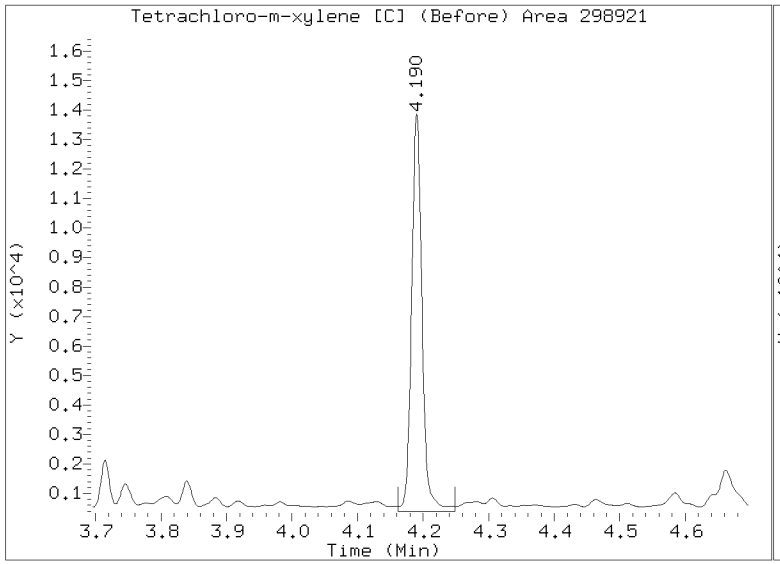
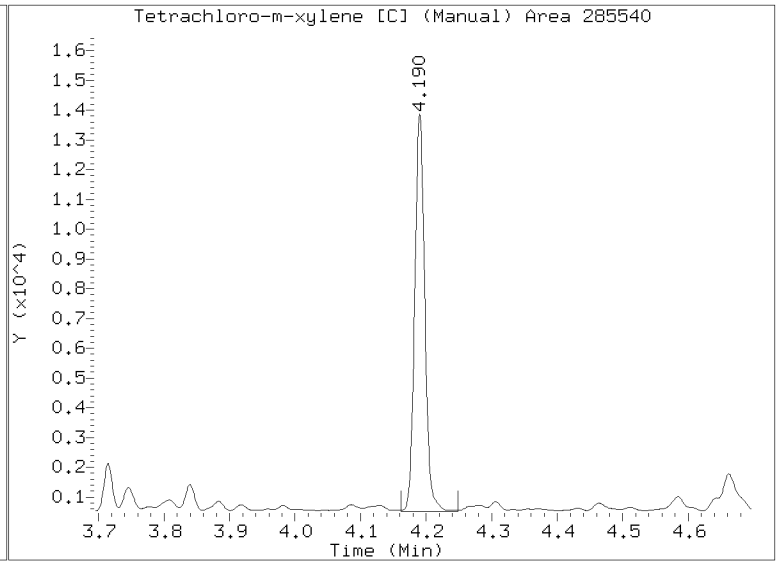
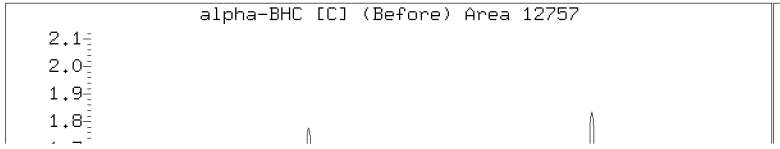
Lab ID:23A0134-05 Client ID:

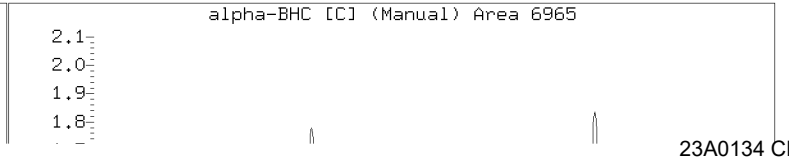












Manual Peak Adjustment Report, CLP-2

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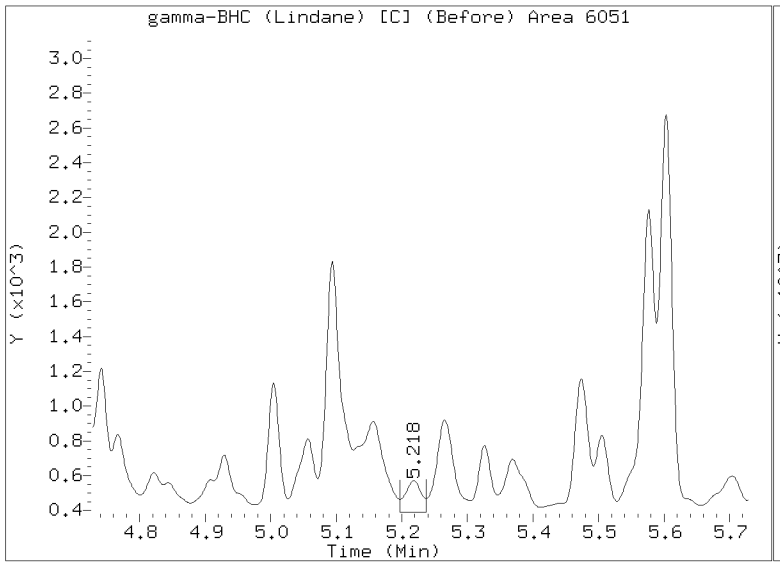
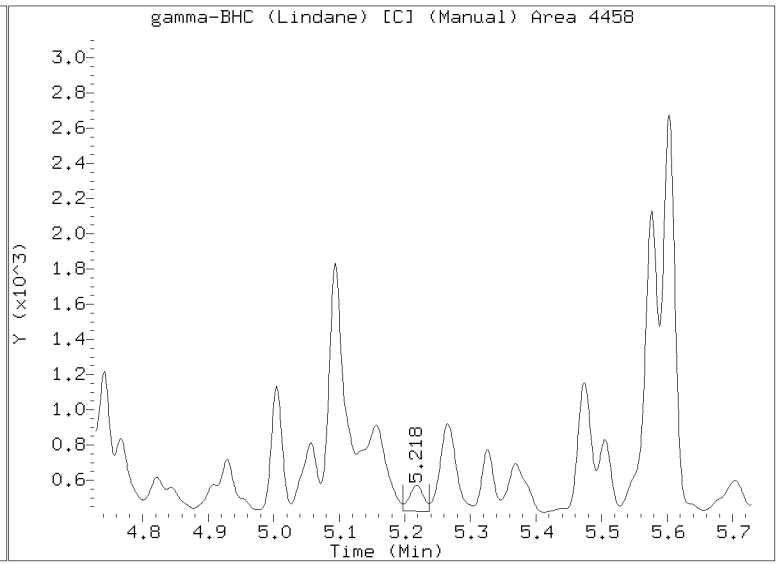
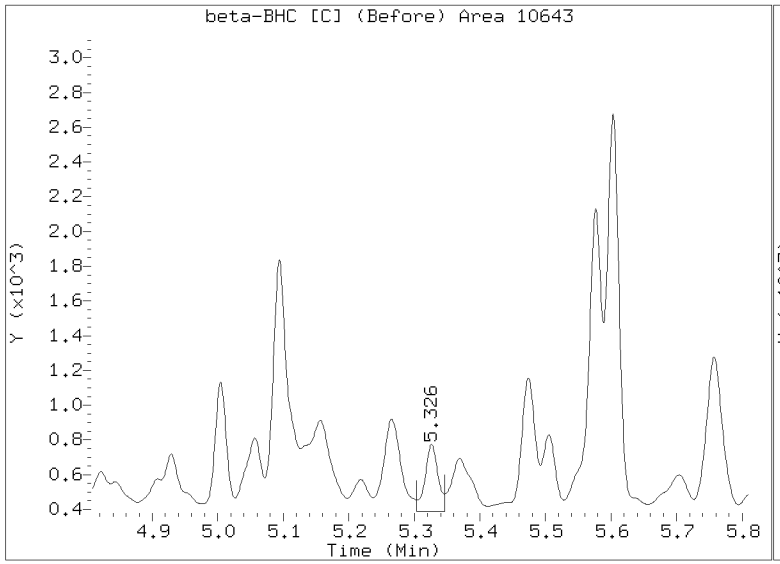
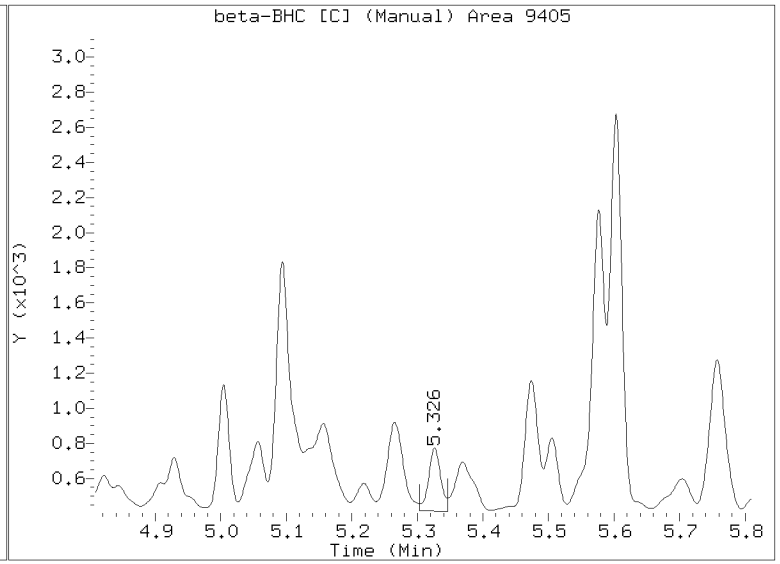
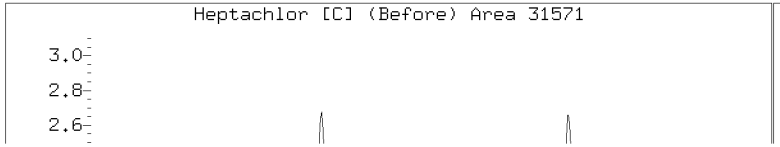
Lab ID:23A0134-05 Client ID:

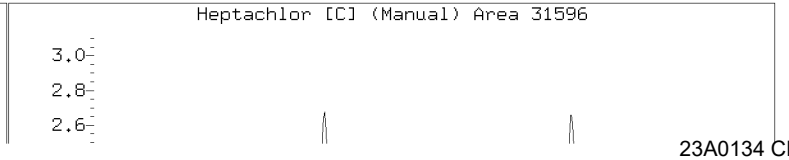












Manual Peak Adjustment Report, CLP-2

Datafile: /20230131.b/B20230131.b/23013165.D
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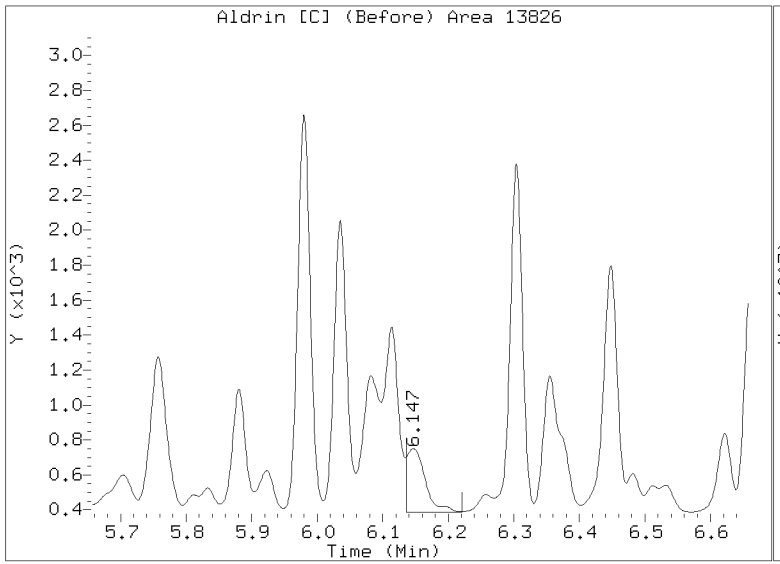
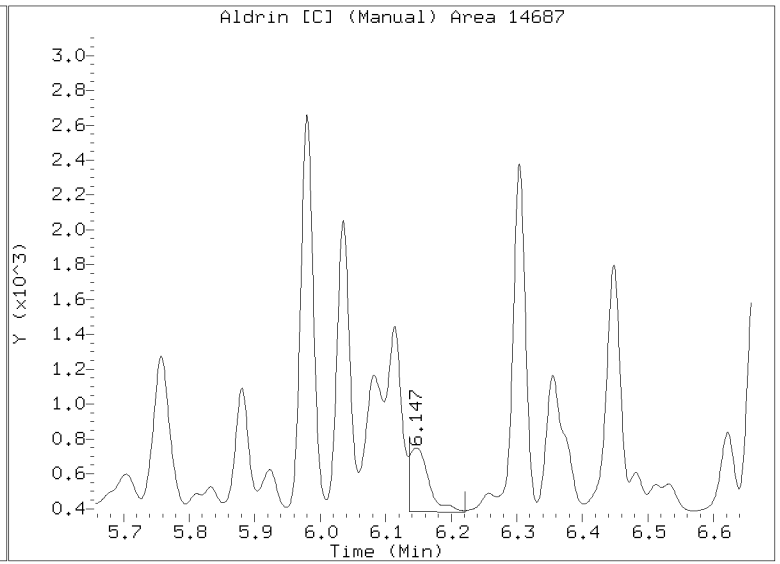
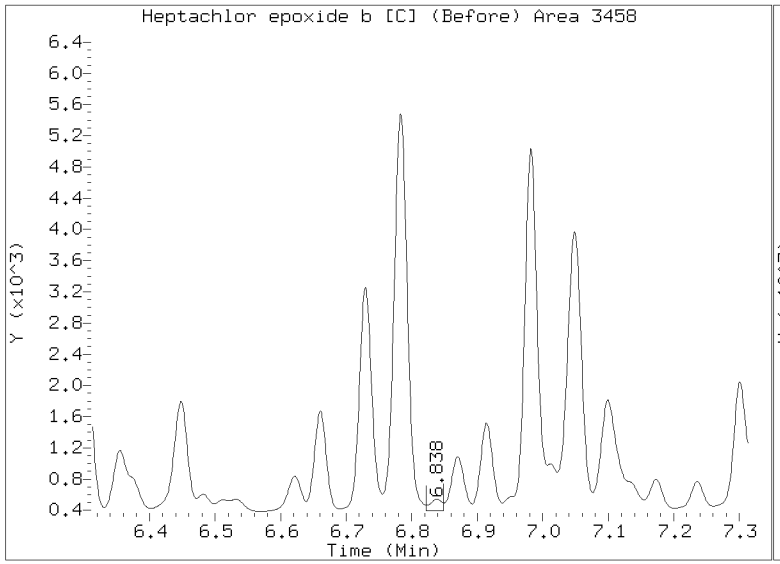
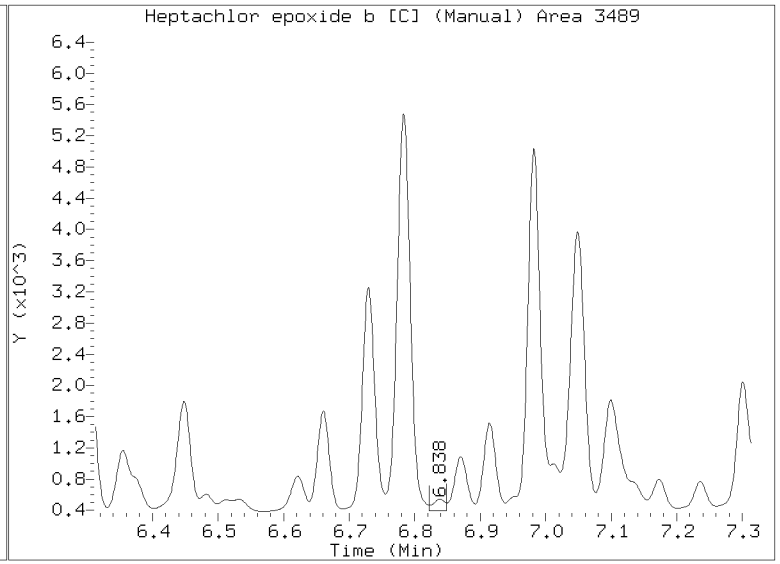
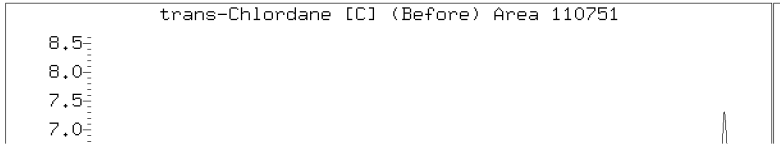
Lab ID:23A0134-05 Client ID:

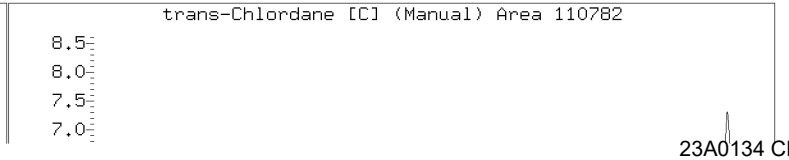






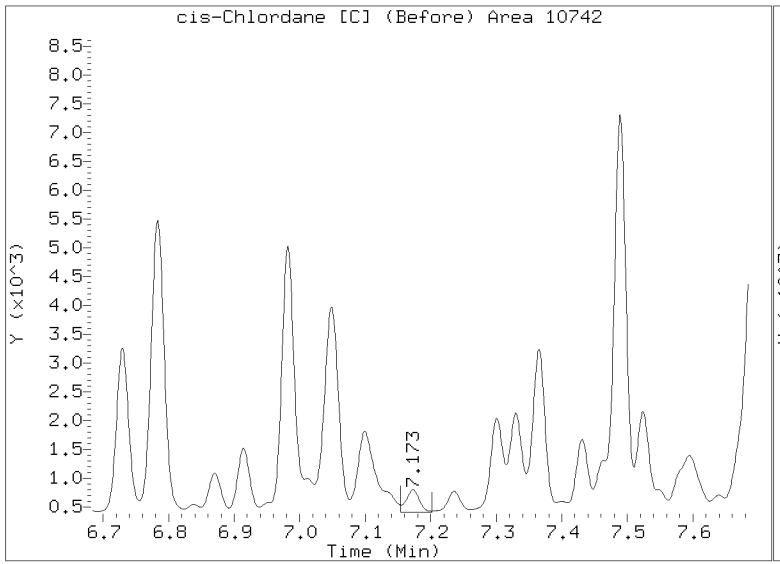


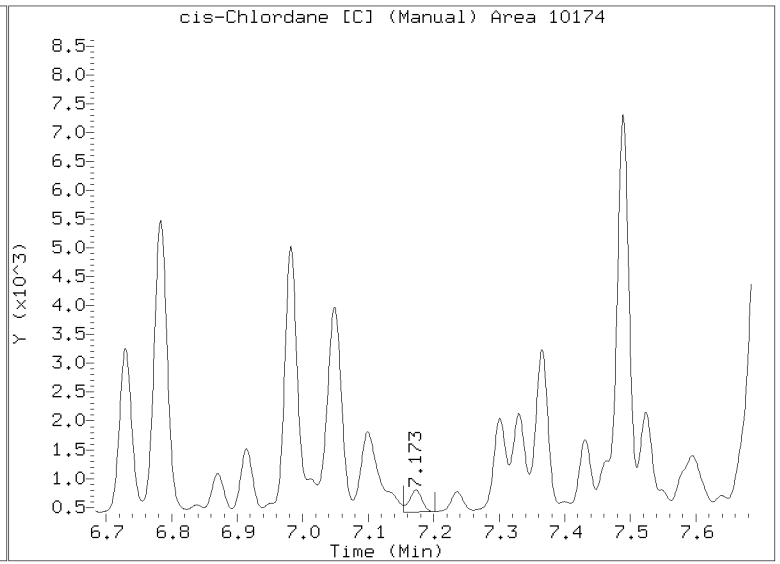


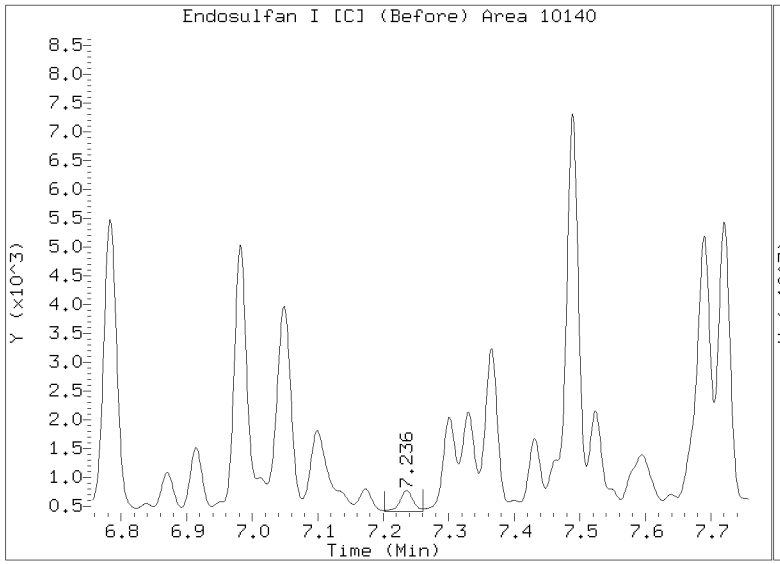


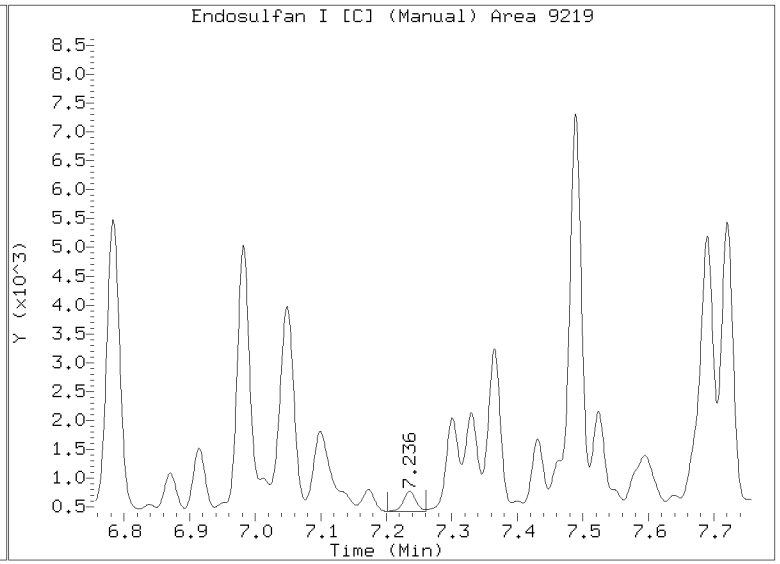
Manual Peak Adjustment Report, CLP-2

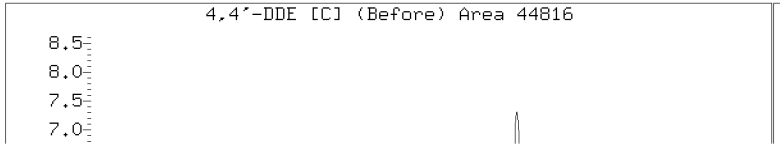
Datafile: /20230131.b/B20230131.b/23013165.D
Injection Date: 01-FEB-2023 09:56
Lab ID:23A0134-05 Client ID:

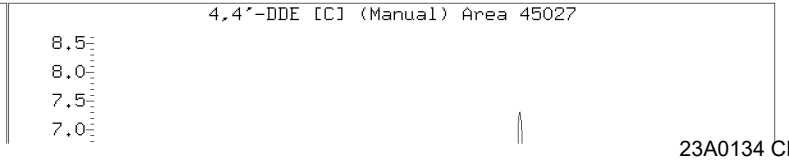












Manual Peak Adjustment Report, CLP-2

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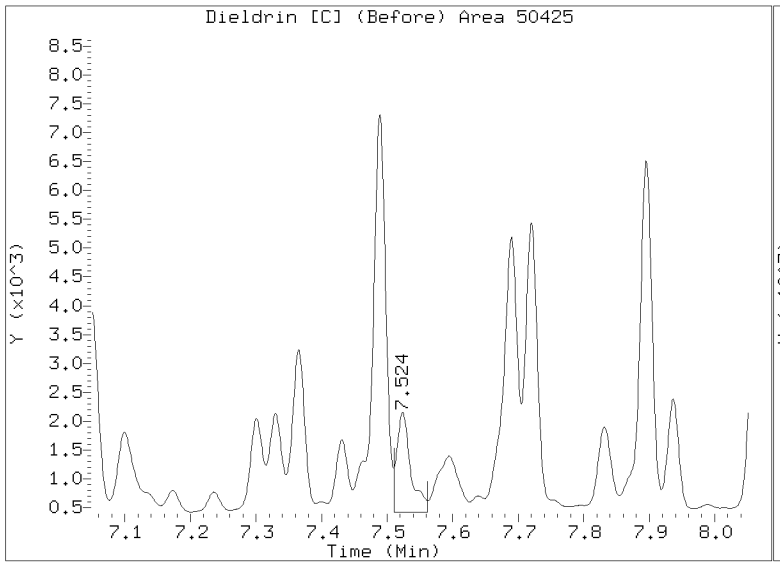
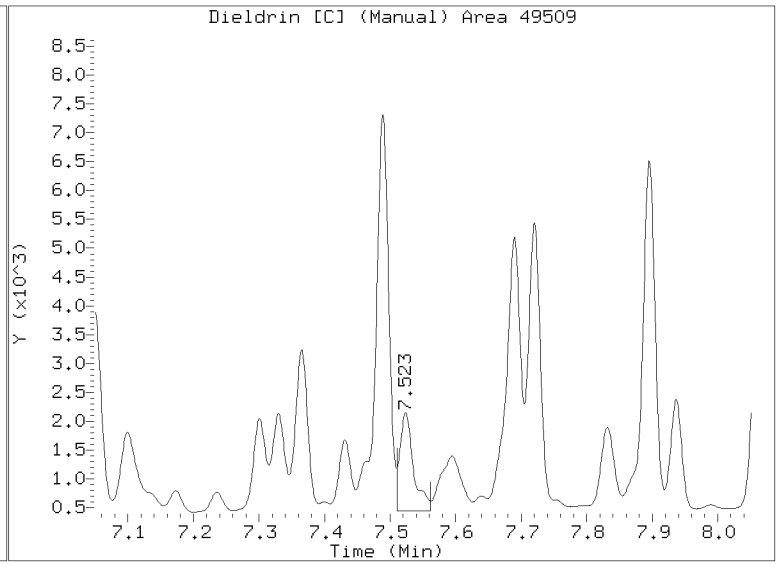
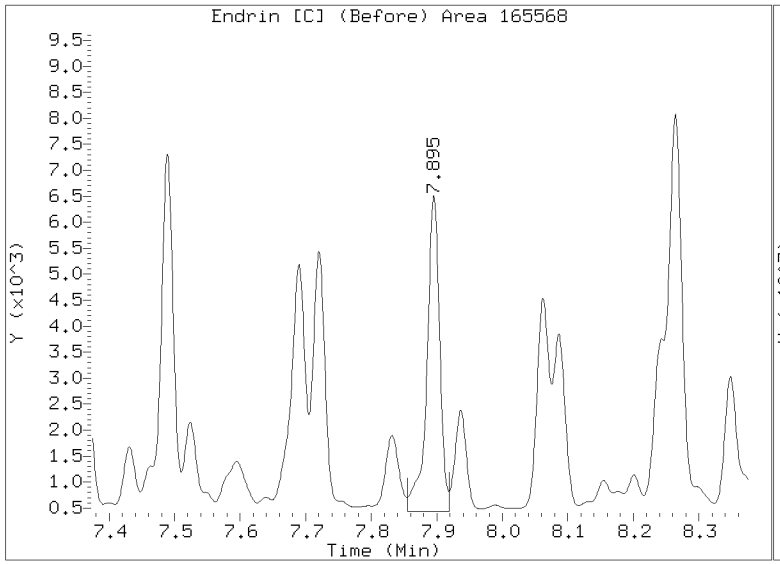
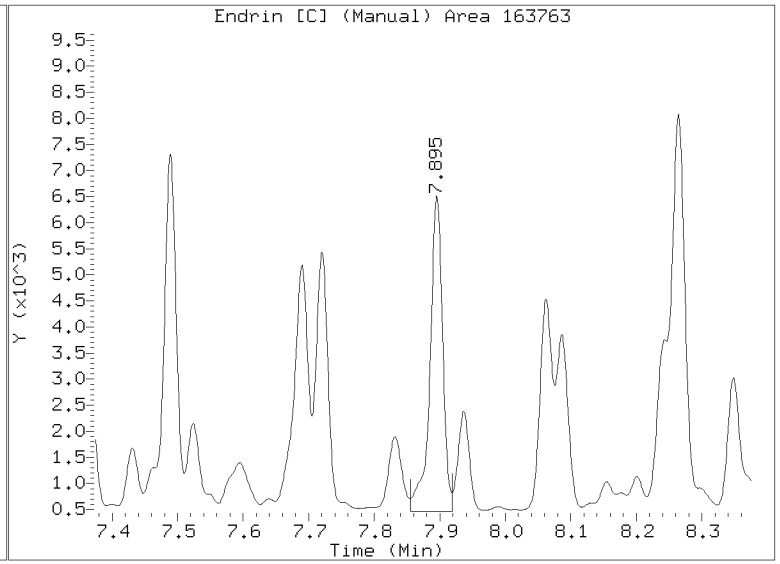
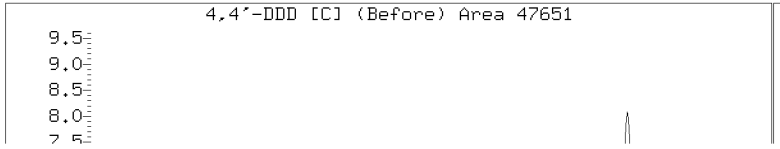
Injection Date: 01-FEB-2023 09:56
Lab ID:23A0134-05 Client ID:

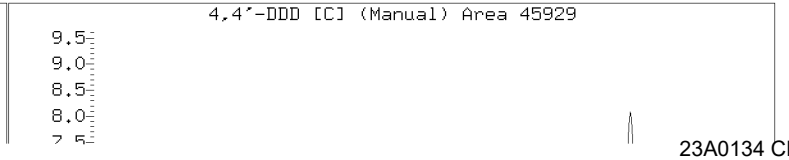






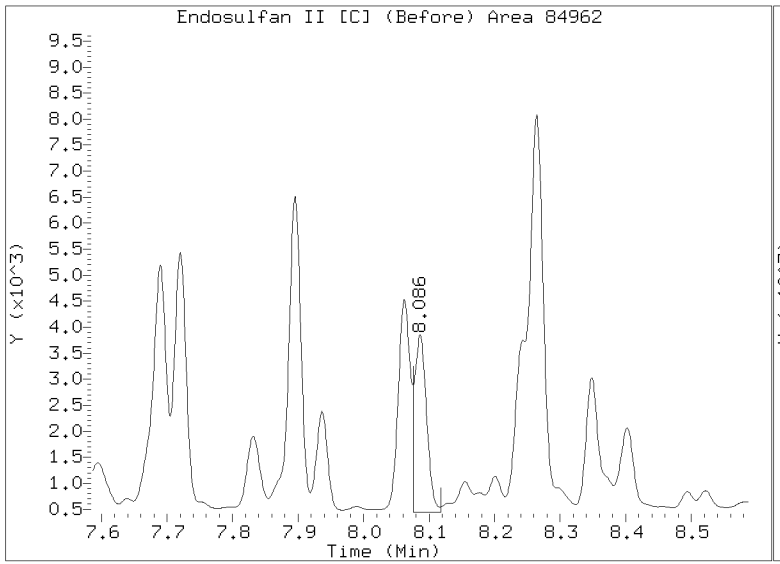


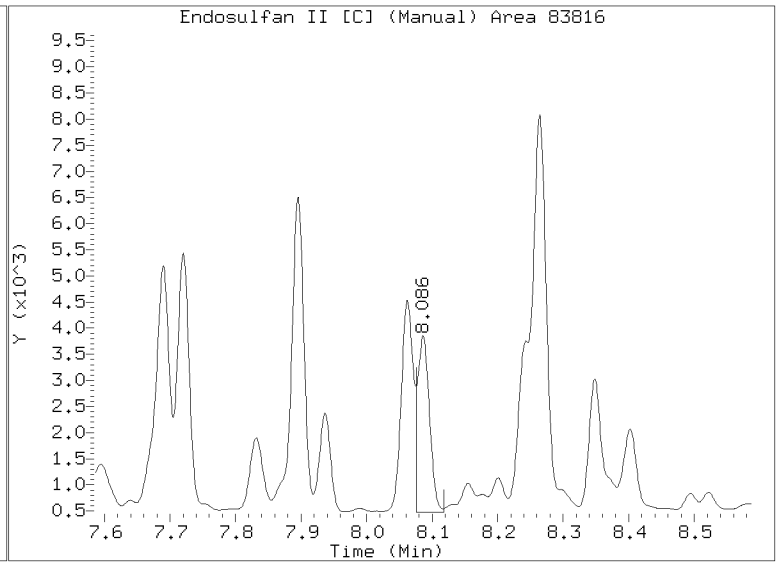


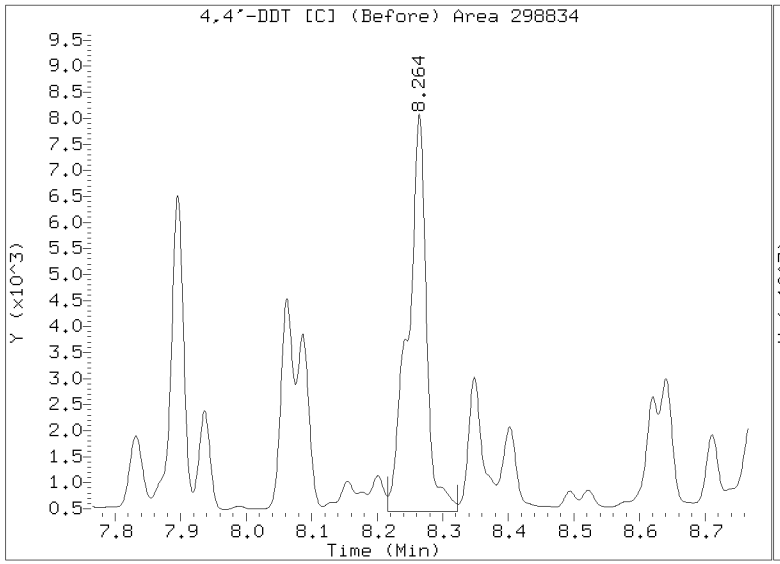


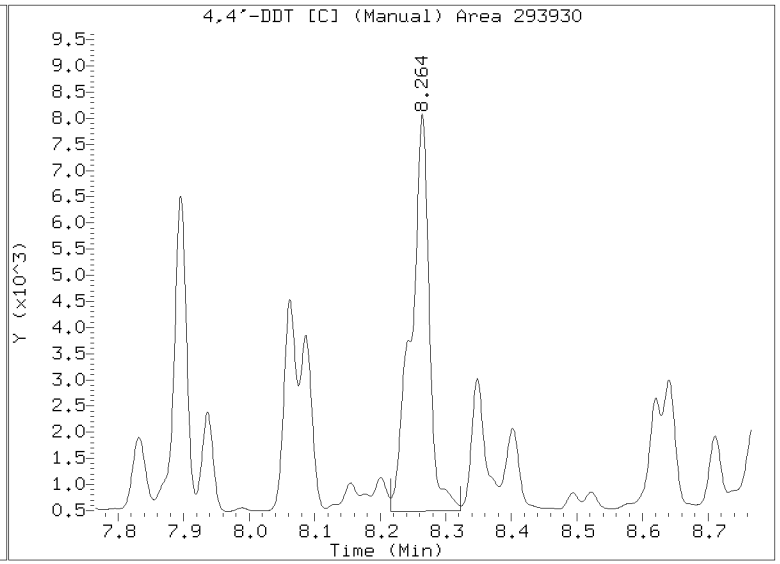
Manual Peak Adjustment Report, CLP-2

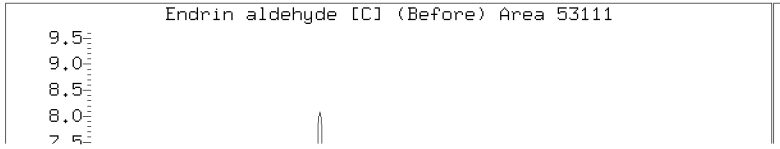
Datafile: /20230131.b/B20230131.b/23013165.D
Injection Date: 01-FEB-2023 09:56
Lab ID:23A0134-05 Client ID:

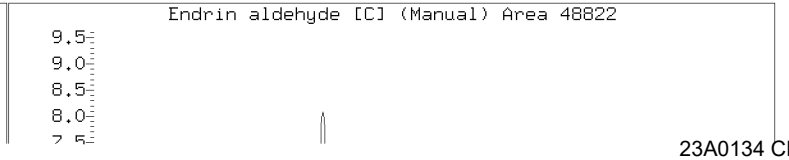






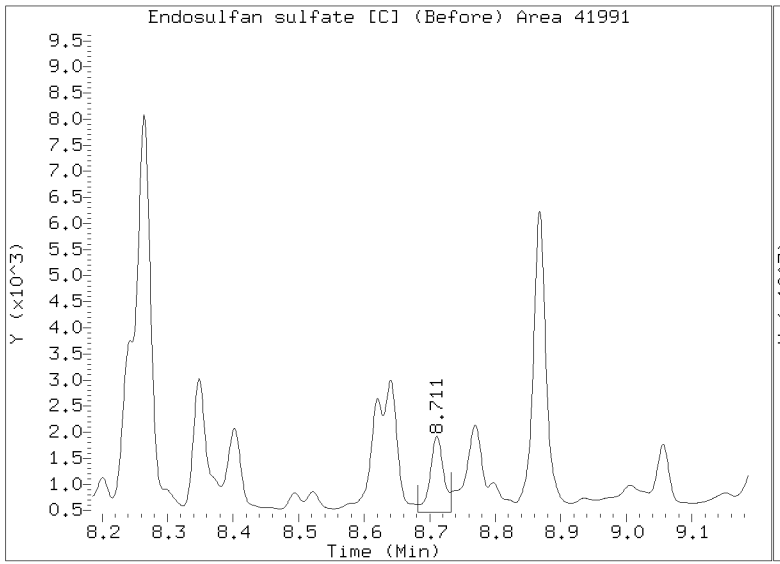


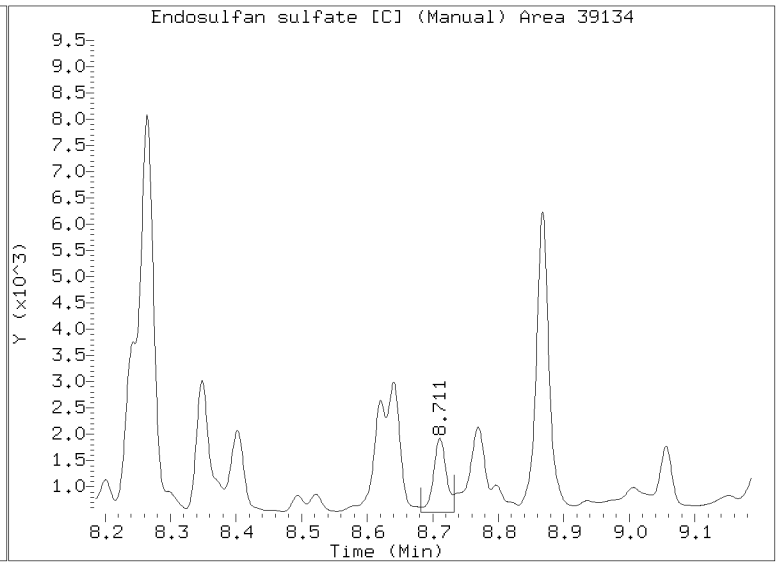


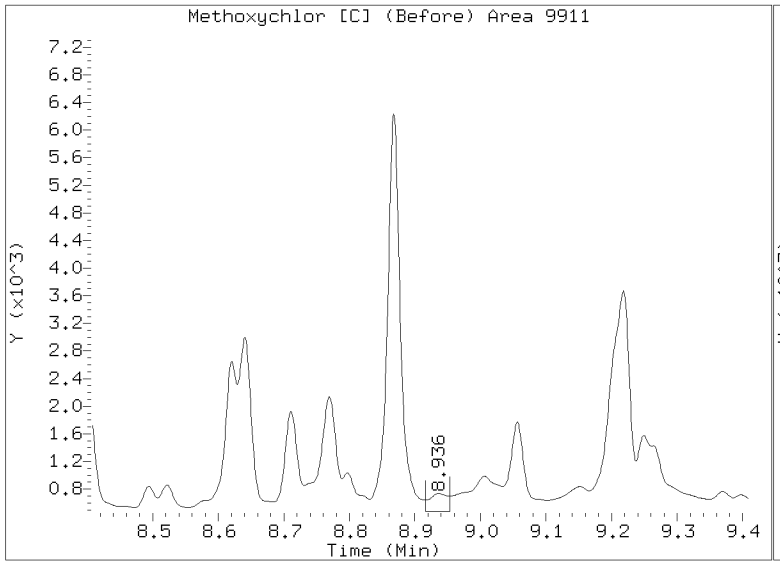


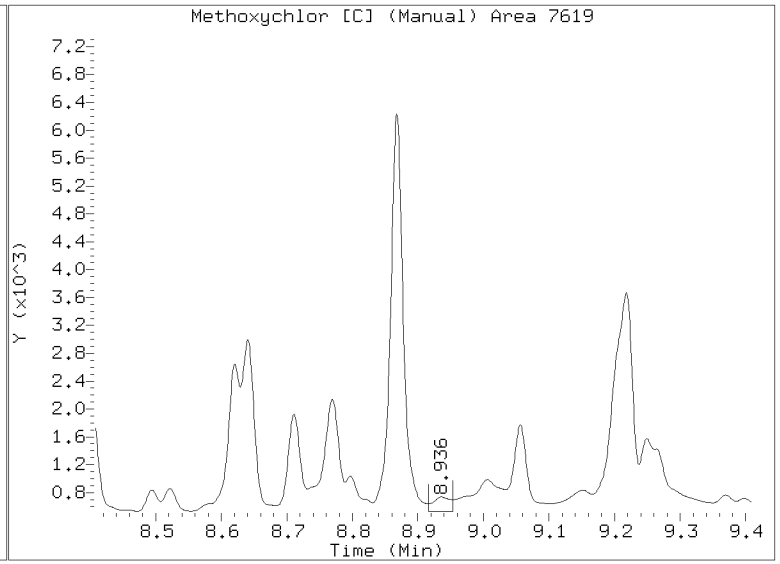
Manual Peak Adjustment Report, CLP-2

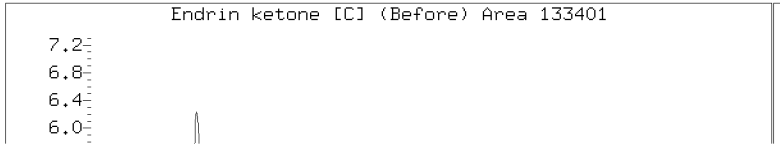
Datafile: /20230131.b/B20230131.b/23013165.D
Injection Date: 01-FEB-2023 09:56
Lab ID:23A0134-05 Client ID:

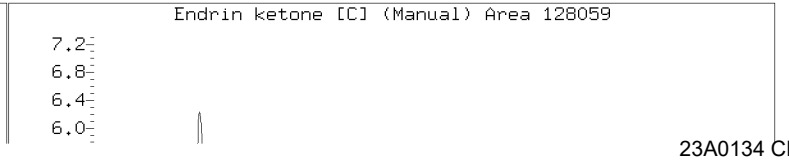






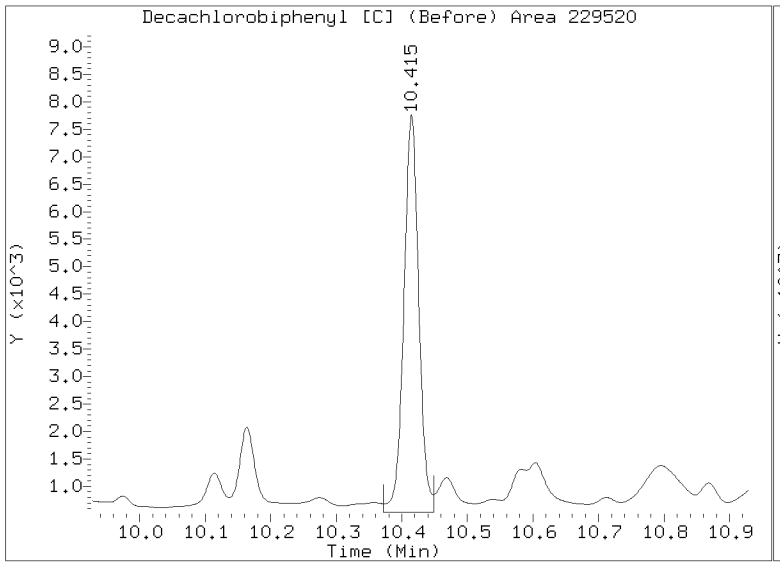


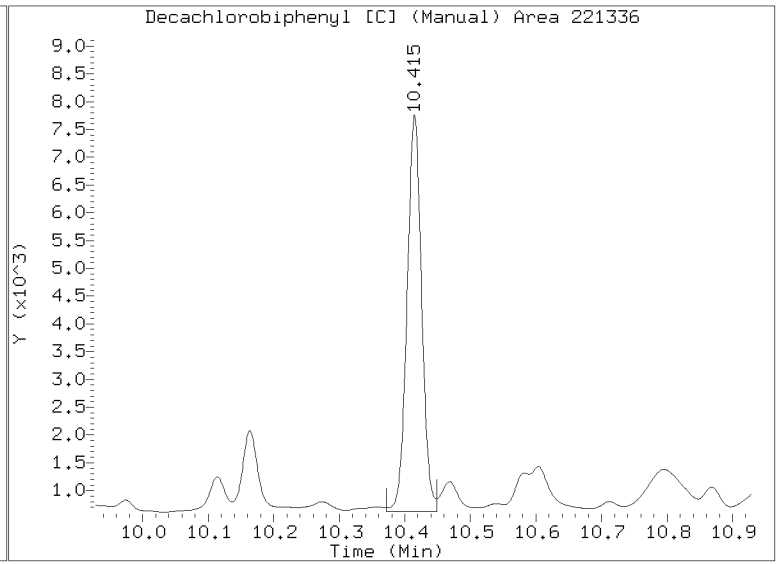


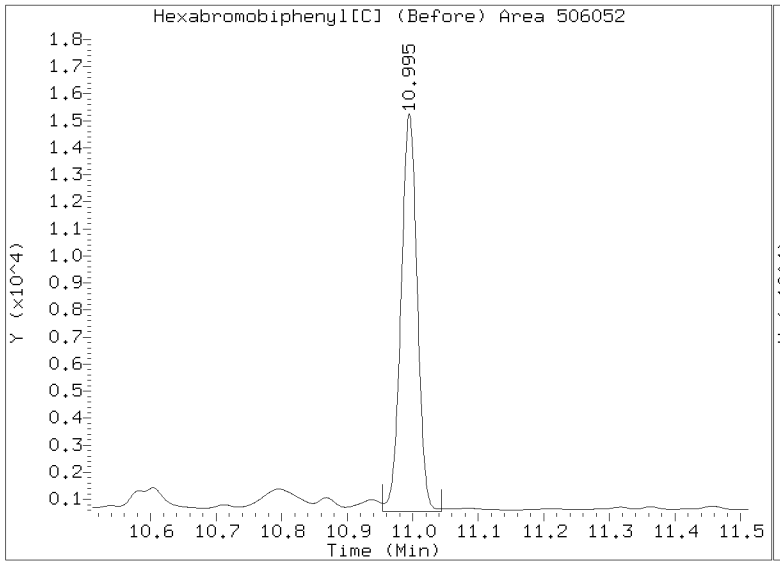


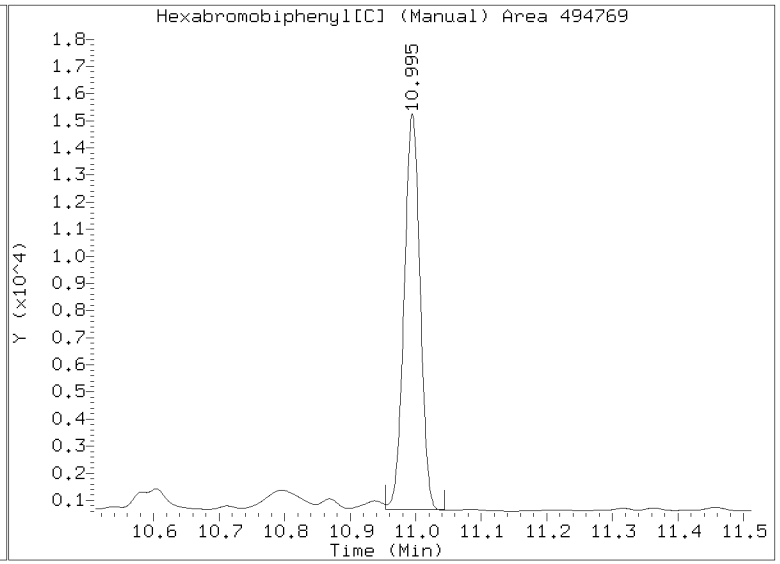
Manual Peak Adjustment Report, CLP-2

Datafile: /20230131.b/B20230131.b/23013165.D
Injection Date: 01-FEB-2023 09:56
Lab ID:23A0134-05 Client ID:









Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1160

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-06 C	File ID:	23013166.D
Sampled:	01/06/23 11:41	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 10:14
% Solids:	40.27	Preparation:	EPA 3546 (Microwave)	Initial/Final:	31.59 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.27	0.14	0.49	P1, J

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.8608*	*8.49*	*108*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.8608*	*8.27*	*105*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.8608*	*4.38*	*55.7*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.8608*	*5.41*	*68.8*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013166.D
Data file 2: /20230131.b/B20230131.b/23013166.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0134-06
Client ID:
Injection Date: 01-FEB-2023 10:14
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.299	-0.012	60694	4.821	-0.012	10648	5.57	0.76	151.9*	alpha-BHC
----			5.326	0.017	18559	0.00	3.49	---	beta-BHC
4.880	0.004	100707	----			11.31	0.00	---	delta-BHC
4.610	-0.001	57957	5.217	-0.012	5652	6.14	0.48	171.2*	gamma-BHC (Lindane)
5.076	-0.017	29026	5.757	0.003	54030	3.45	5.03	37.1	Heptachlor
5.429	0.015	66412	----			7.05	0.00	---	Aldrin
6.072	-0.016	21512	----			2.63	0.00	---	Heptachlor epoxide b
----			7.237	-0.021	11365	0.00	1.27	---	Endosulfan I
6.768	-0.023	107428	----			13.35	0.00	---	Dieldrin
6.442	-0.010	99453	7.330	-0.012	100888	13.31	11.13	17.8	4,4'-DDE
7.061	0.020	215348	7.896	0.020	231115	40.25	30.59	27.3	Endrin
7.301	0.023	15449	8.064	-0.024	226442	3.21	29.24	160.5*	Endosulfan II
----			7.937	-0.012	57902	0.00	7.88	---	4,4'-DDD
8.128	-0.013	59645	8.712	0.025	50521	13.04	7.43	54.9*	Endosulfan sulfate
----			8.261	-0.006	506403	0.00	71.39	---	4,4'-DDT
7.903	0.026	26366	----			12.22	0.00	---	Methoxychlor
----			9.216	0.006	241295	0.00	32.85	---	Endrin ketone
7.728	0.022	113540	8.402	-0.016	57673	29.56	10.56	94.7*	Endrin aldehyde
6.224	-0.005	32774	7.049	0.024	126260	3.95	12.48	103.8*	trans-Chlordane
6.388	0.012	86088	7.173	-0.011	30639	10.35	3.09	107.9*	cis-Chlordane
2.286	-0.018	18722	2.454	-0.029	73065	1.64	5.50	108.1*	Hexachlorobutadiene
4.150	-0.003	13758	4.683	-0.009	34206	1.36	2.69	65.6*	Hexachlorobenzene MN
3.799	-0.002	171574	4.190	-0.006	270313	22.30	27.52	21.0	Tetrachloro-m-xylene
9.315	-0.003	178719	10.415	-0.014	247075	43.22	42.07	2.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

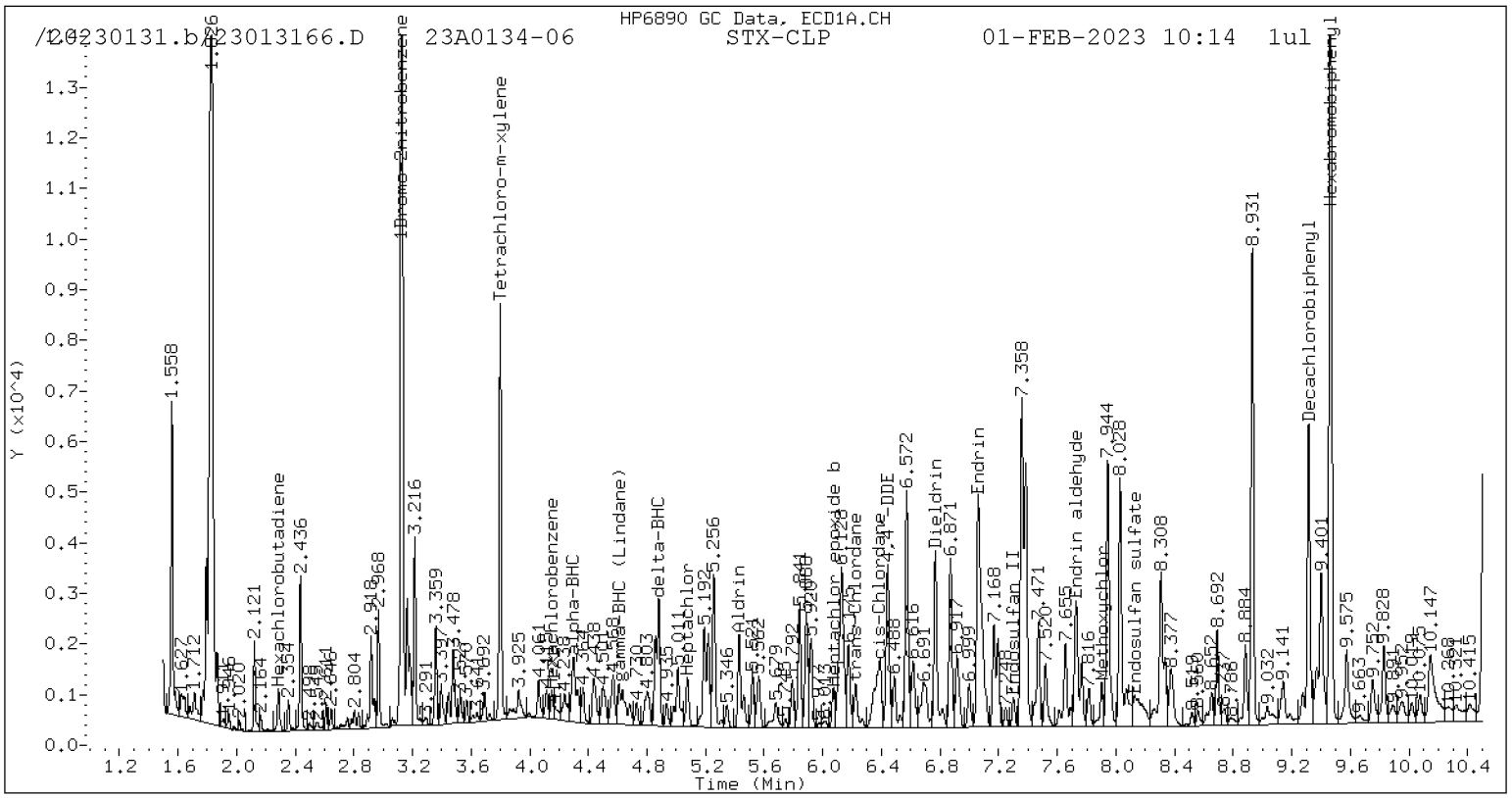
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	565759	-15.9
Hexabromobiphenyl	609723	408081	-33.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	697749	-30.7
Hexabromobiphenyl	769764	531419	-31.0

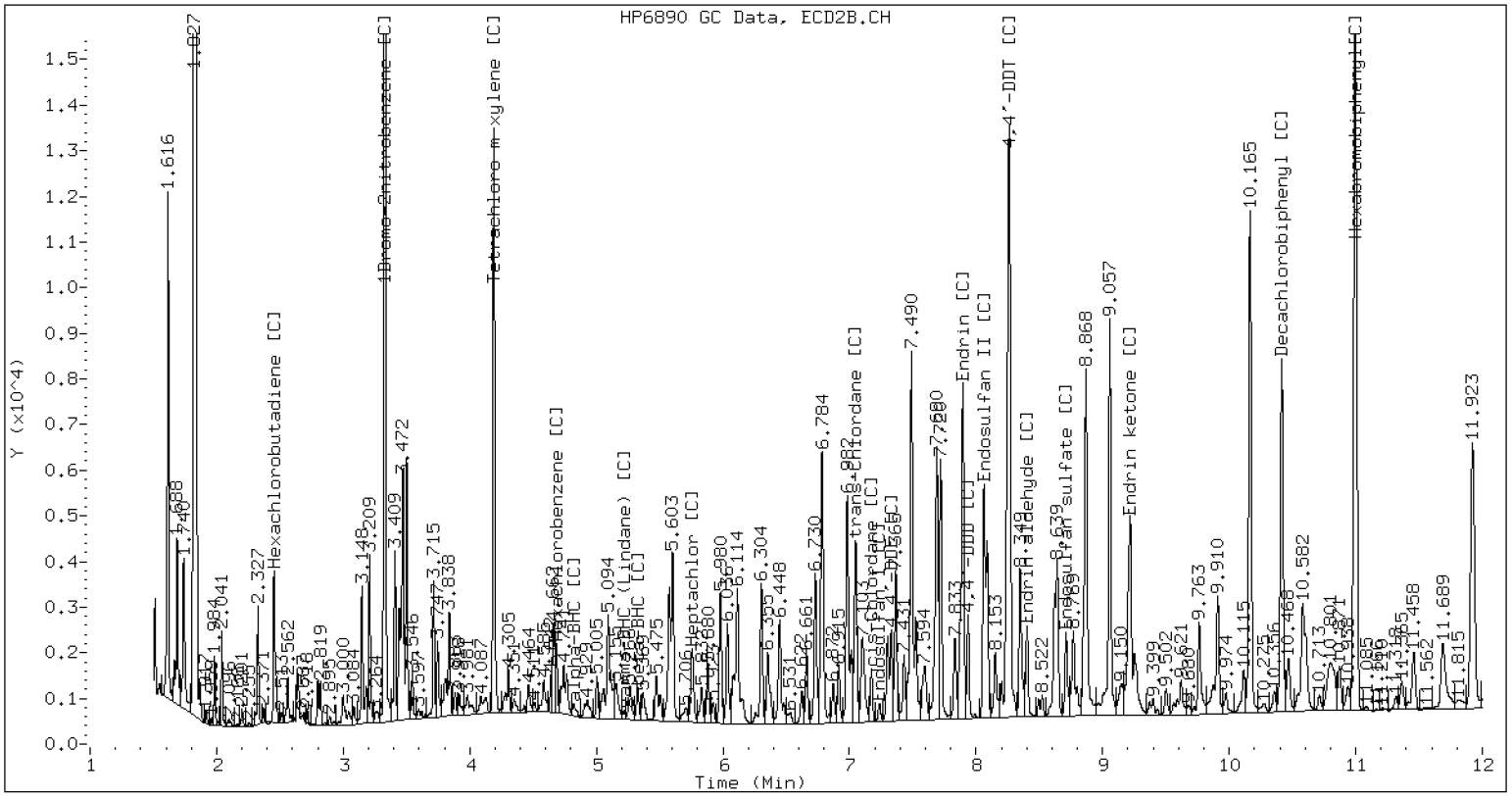
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

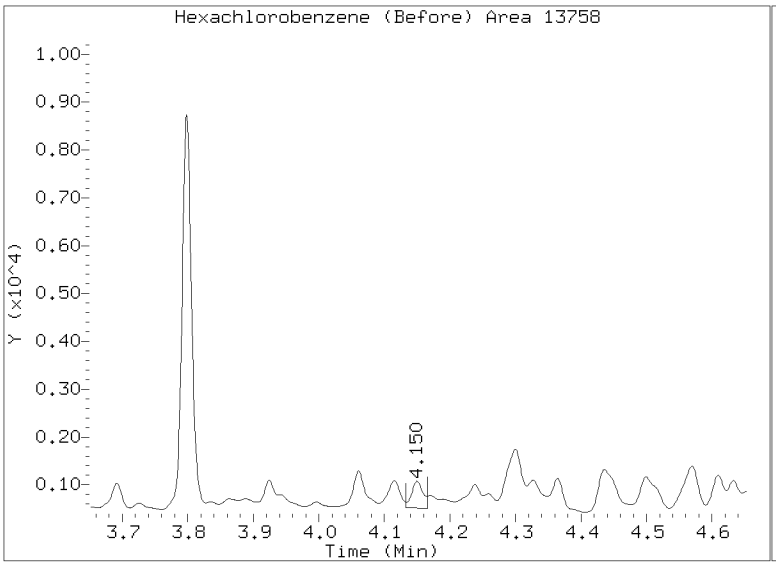
/20230131.b/B20230131.b/23013166.D 23A0134-06 CLP2

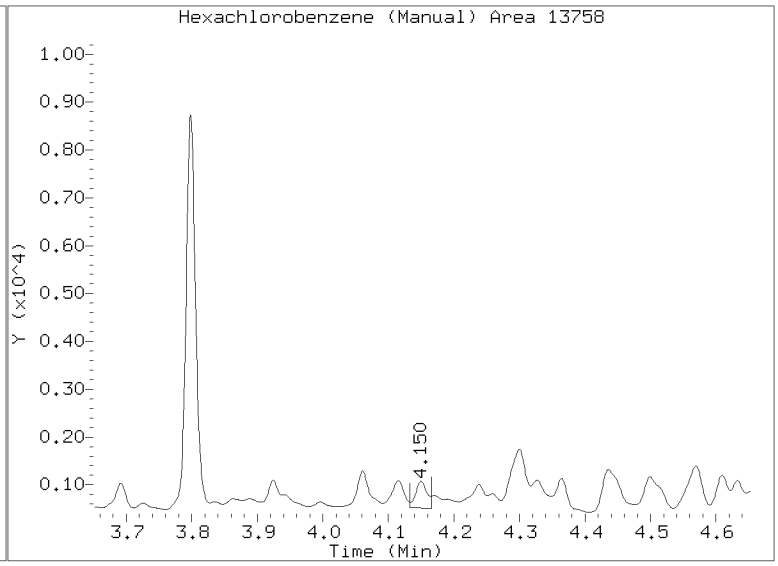


CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, STX-CLP

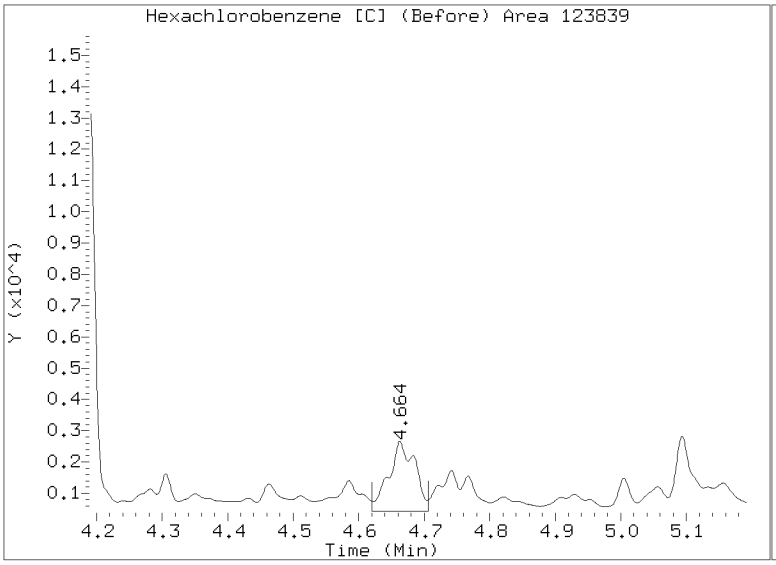
Datafile: /20230131.b/23013166.D
Injection Date: 01-FEB-2023 10:14
Lab ID:23A0134-06 Client ID:
Report Date: 02/03/2023 20:26

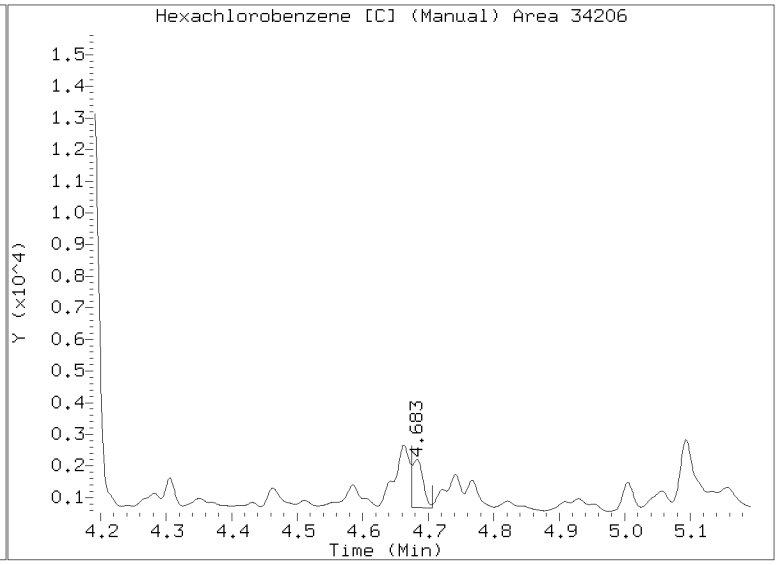




Manual Peak Adjustment Report, CLP-2

Datafile: /20230131.b/B20230131.b/23013166.D
Injection Date: 01-FEB-2023 10:14
Lab ID:23A0134-06 Client ID:





Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1152

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-07 C	File ID:	23013169.D
Sampled:	01/06/23 12:29	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 11:08
% Solids:	43.66	Preparation:	EPA 3546 (Microwave)	Initial/Final:	28.97 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.49	0.14	0.49	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9062*	*8.17*	*103*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9062*	*7.85*	*99.3*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9062*	*5.78*	*73.1*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9062*	*5.64*	*71.3*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013169.D
Data file 2: /20230131.b/B20230131.b/23013169.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0134-07
Client ID:
Injection Date: 01-FEB-2023 11:08
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2			
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD		Compound/Flag
4.300	-0.010	44974	4.821	-0.012	9322	3.30	0.43	154.3*		alpha-BHC
4.684	-0.009	10240	5.326	0.017	15167	1.95	1.82	7.0		beta-BHC
4.880	0.005	97808	----			8.79	0.00	---		delta-BHC
4.610	-0.001	31539	5.219	-0.010	5797	2.67	0.31	158.2*		gamma-BHC (Lindane)
5.076	-0.016	25351	5.758	0.003	48035	2.41	2.85	16.7		Heptachlor
5.429	0.015	68472	----			5.82	0.00	---		Aldrin
6.072	-0.017	32071	6.838	0.024	5530	3.14	0.35	160.1*		Heptachlor epoxide b
----			7.236	-0.022	16333	0.00	1.17	---		Endosulfan I
6.767	-0.023	161242	7.524	-0.027	80913	16.02	5.23	101.6*		Dieldrin
6.441	-0.011	136150	7.329	-0.013	78208	14.57	5.51	90.2*		4,4'-DDE
7.061	0.020	321455	7.896	0.020	290480	41.14	25.28	47.7*		Endrin
7.301	0.023	23112	8.063	-0.025	344783	3.29	29.28	159.6*		Endosulfan II
----			7.937	-0.012	79426	0.00	7.11	---		4,4'-DDD
----			8.711	0.025	67845	0.00	6.56	---		Endosulfan sulfate
----			8.265	-0.001	551901	0.00	51.17	---		4,4'-DDT
7.903	0.026	43807	8.935	0.026	8448	13.90	1.77	154.8*		Methoxychlor
----			9.218	0.009	246007	0.00	22.03	---		Endrin ketone
7.725	0.019	78905	8.403	-0.016	89121	14.06	10.73	26.9		Endrin aldehyde
6.223	-0.006	18112	7.049	0.024	173426	1.75	10.94	144.9*		trans-Chlordane
6.391	0.015	83760	7.173	-0.012	17783	8.06	1.15	150.1*		cis-Chlordane
2.284	-0.020	10572	2.454	-0.029	111872	0.74	5.38	151.6*		Hexachlorobutadiene
----			4.663	-0.030	63282	0.00	3.18	---		Hexachlorobenzene
3.799	-0.002	281340	4.190	-0.006	438649	29.25	28.52	2.5		Tetrachloro-m-xylene
9.315	-0.004	249618	10.414	-0.015	354545	41.33	39.70	4.0		Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

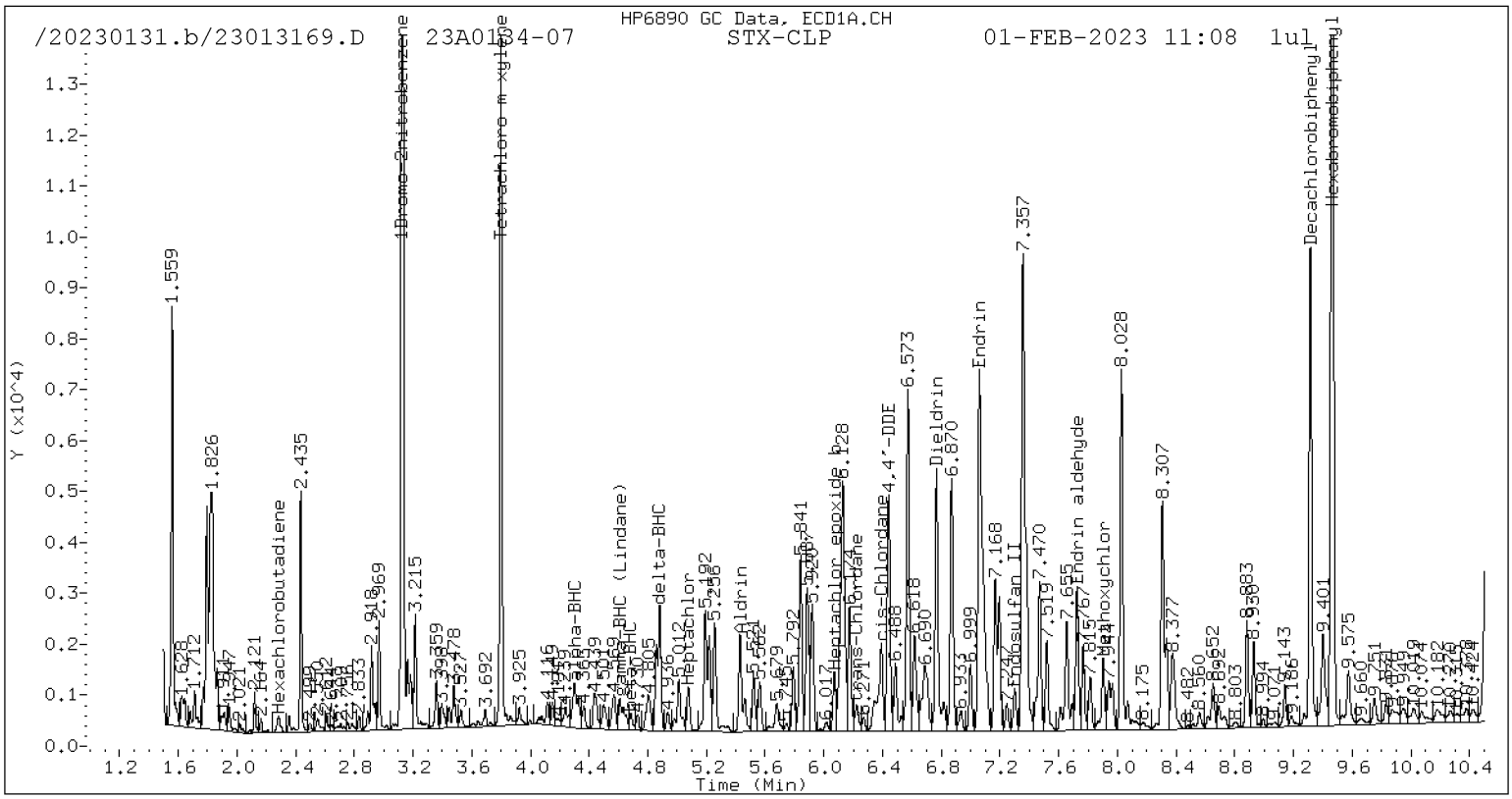
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	707321	5.2
Hexabromobiphenyl	609723	596052	-2.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1092714	8.6
Hexabromobiphenyl	769764	807984	5.0

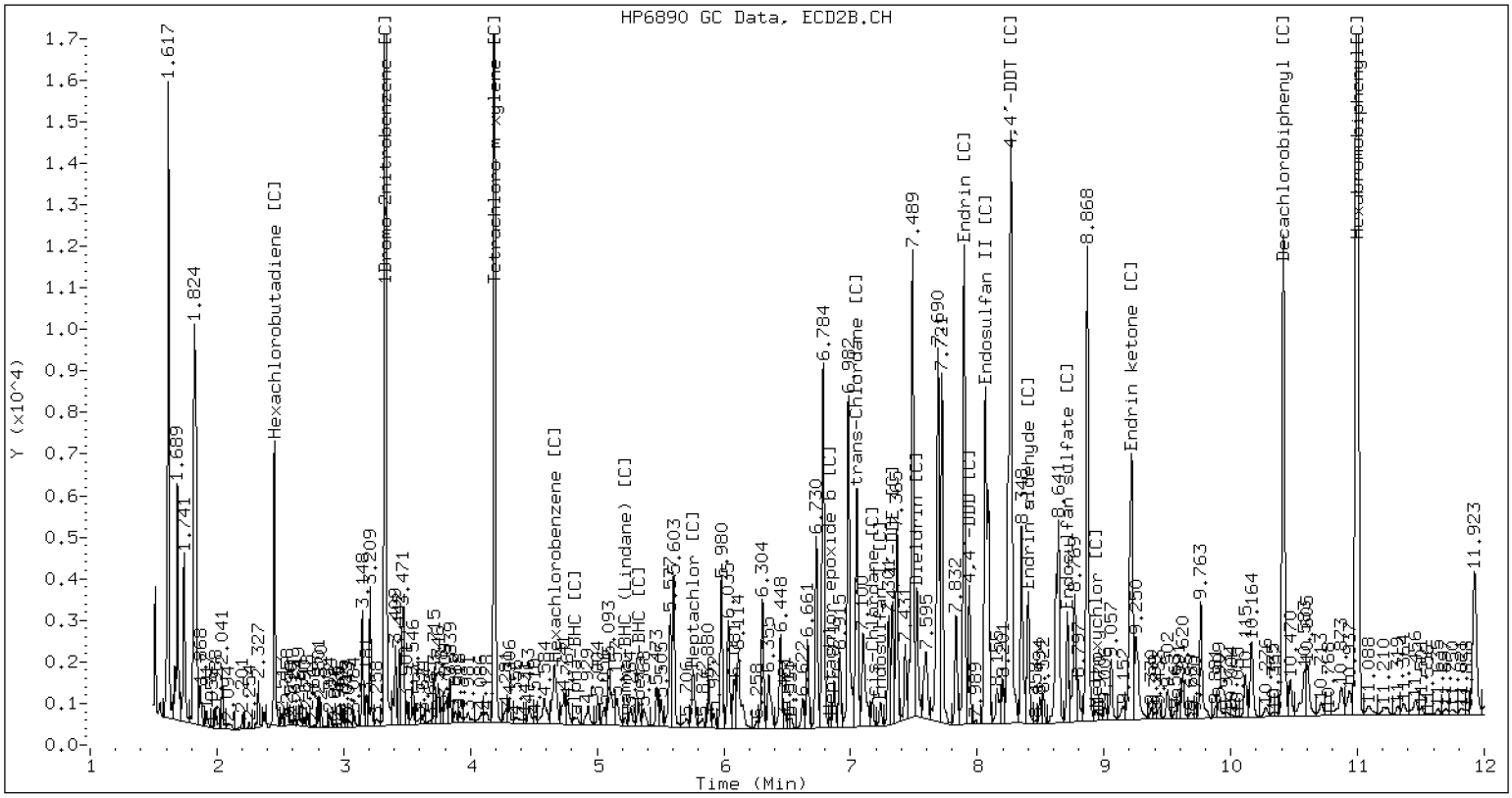
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230131.b/B20230131.b/23013169.D 23A0134-07 CLP2



CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, CLP-2

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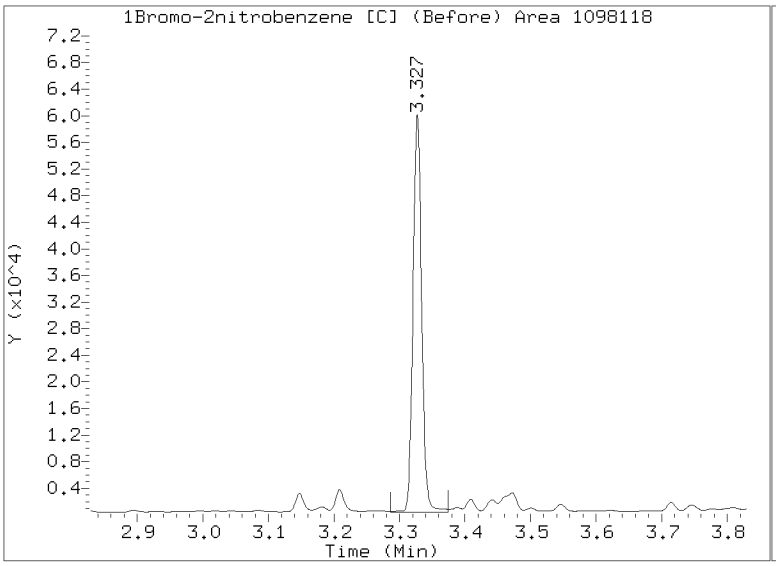
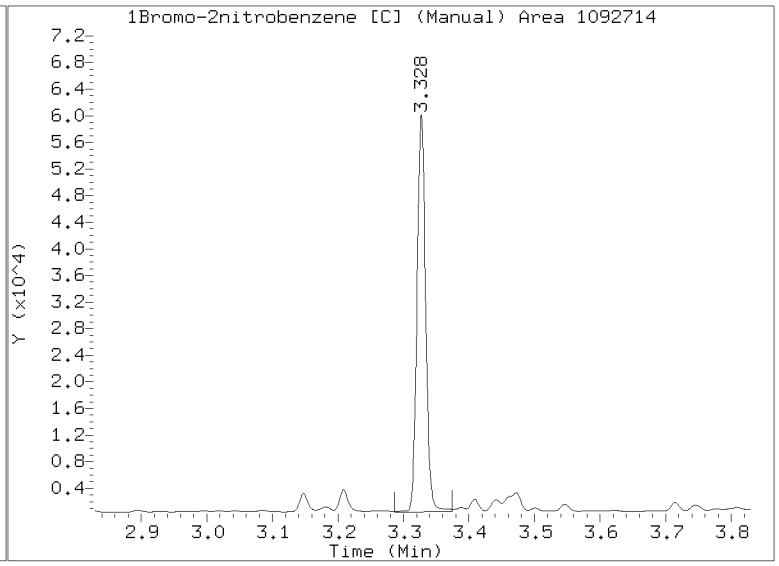
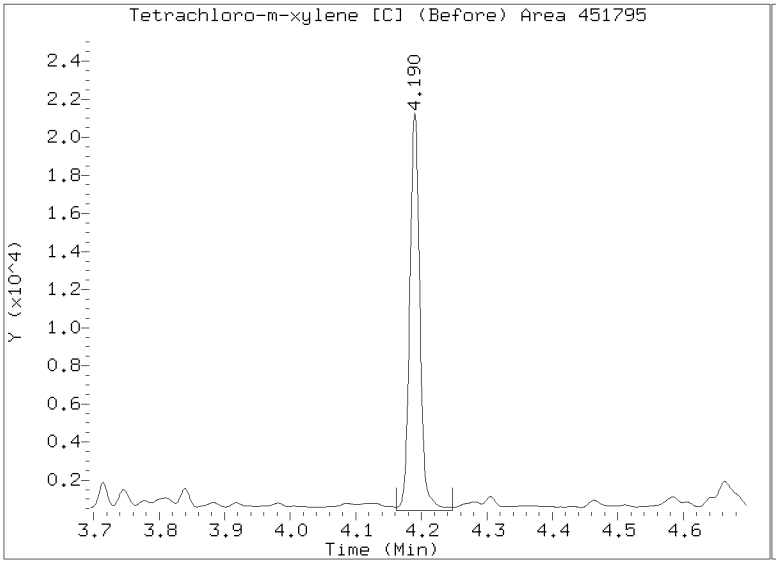
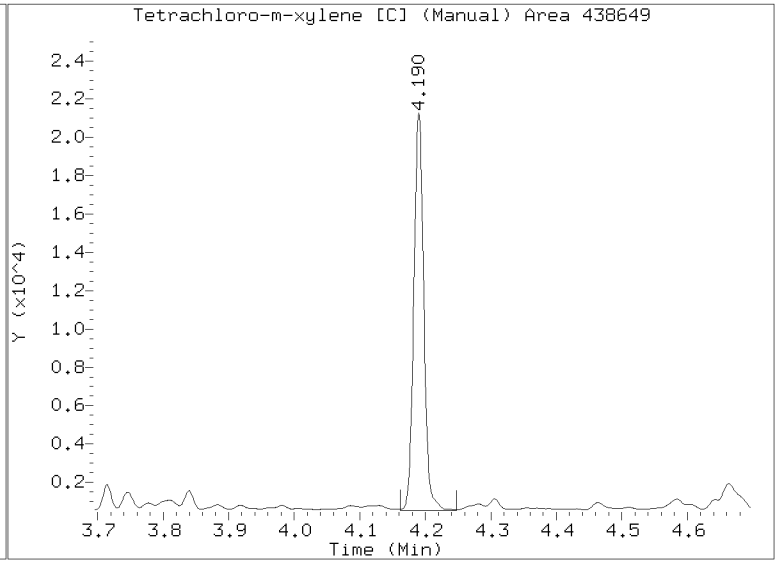
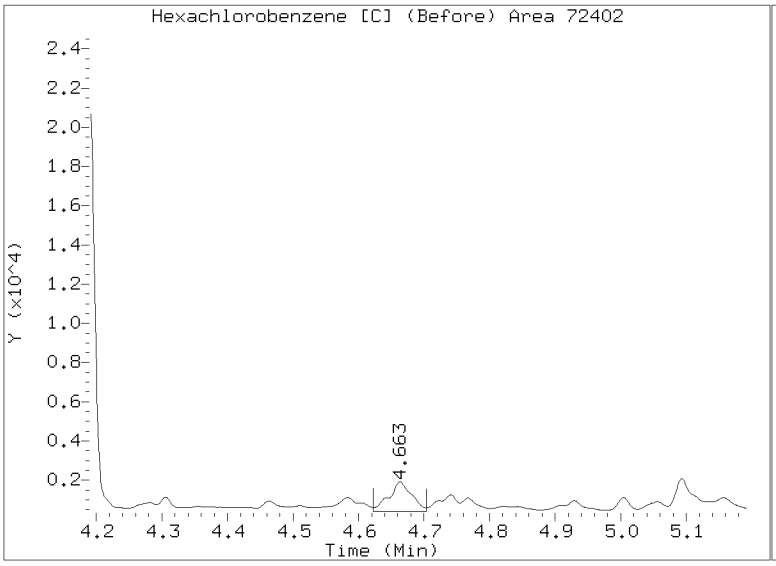
Lab ID:23A0134-07 Client ID:

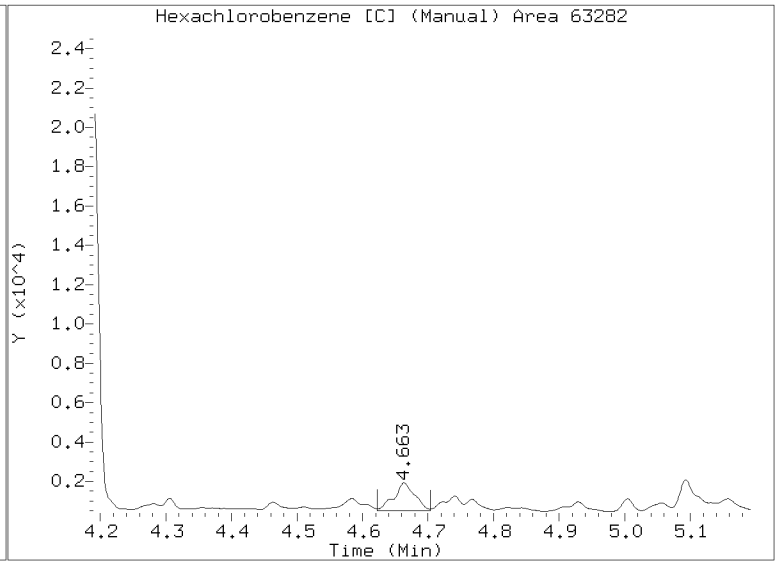












Manual Peak Adjustment Report, CLP-2

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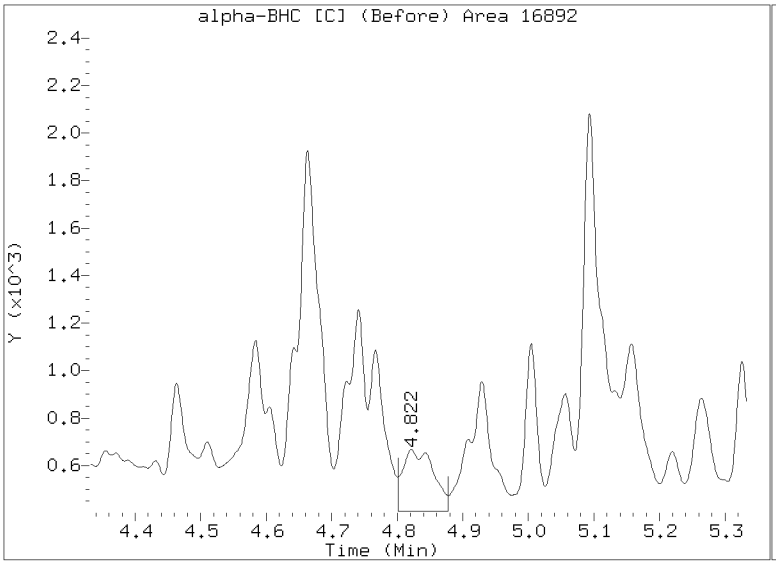
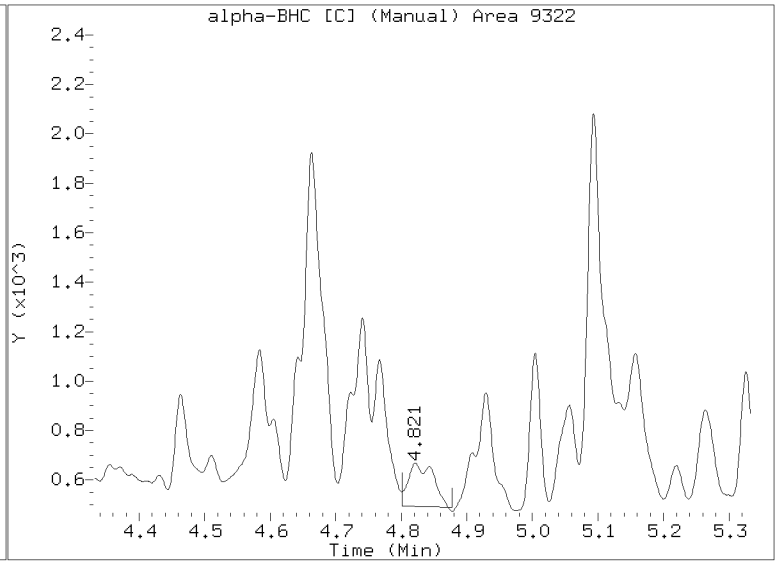
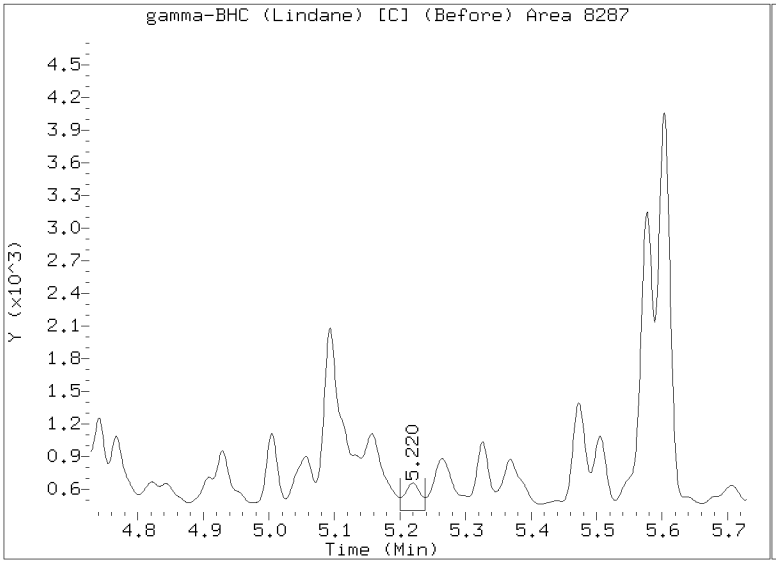
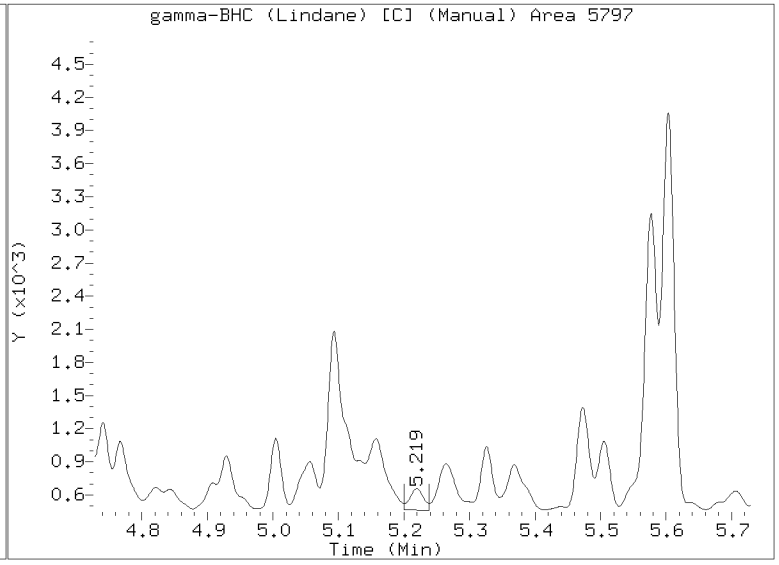
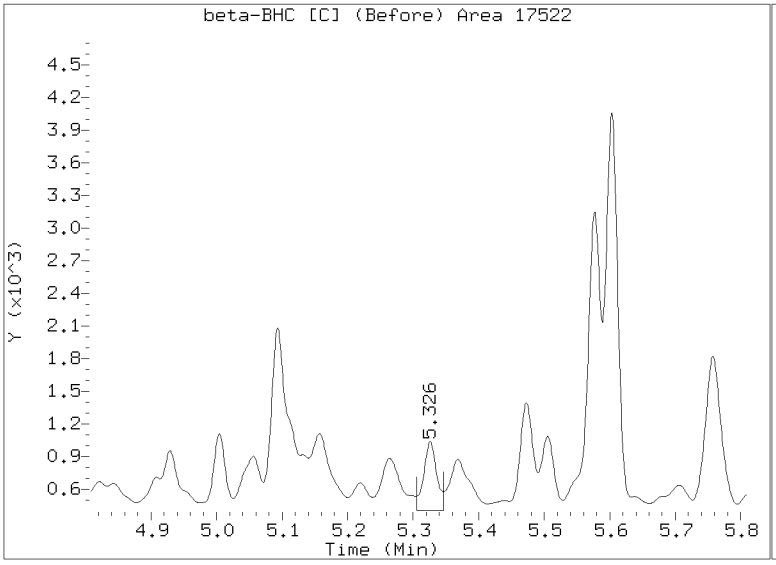
Lab ID:23A0134-07 Client ID:

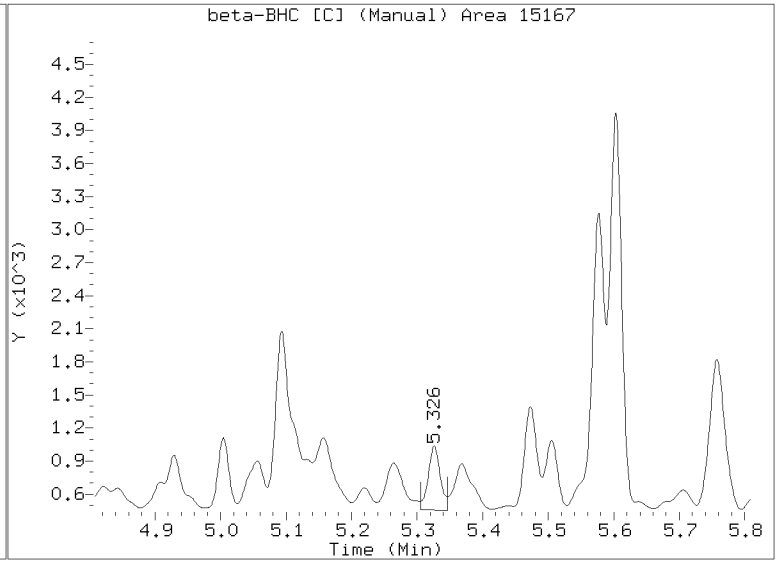












Manual Peak Adjustment Report, CLP-2

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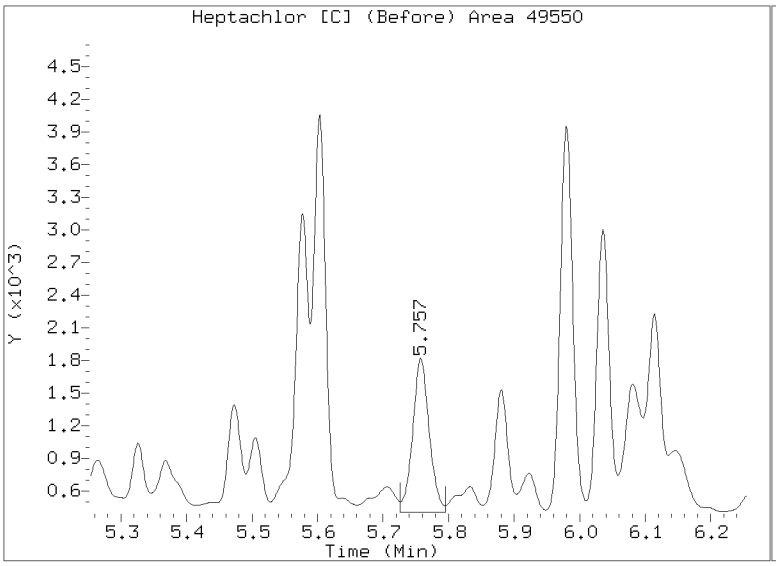
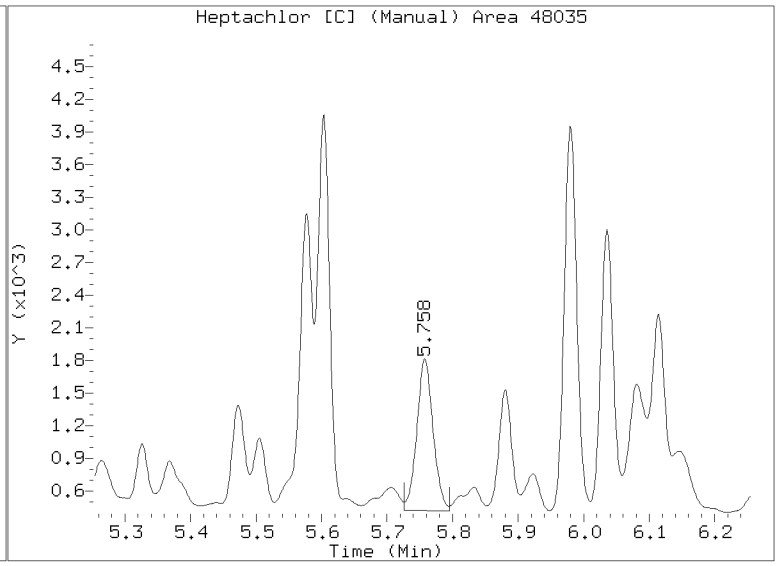
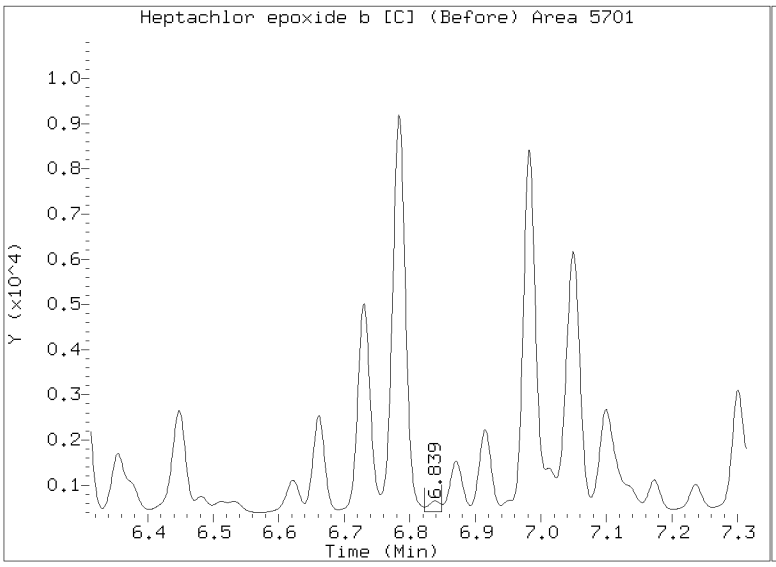
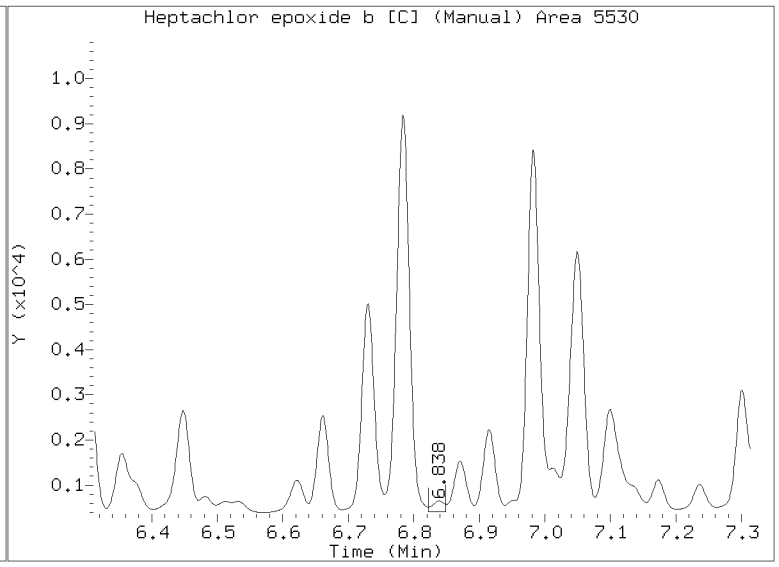
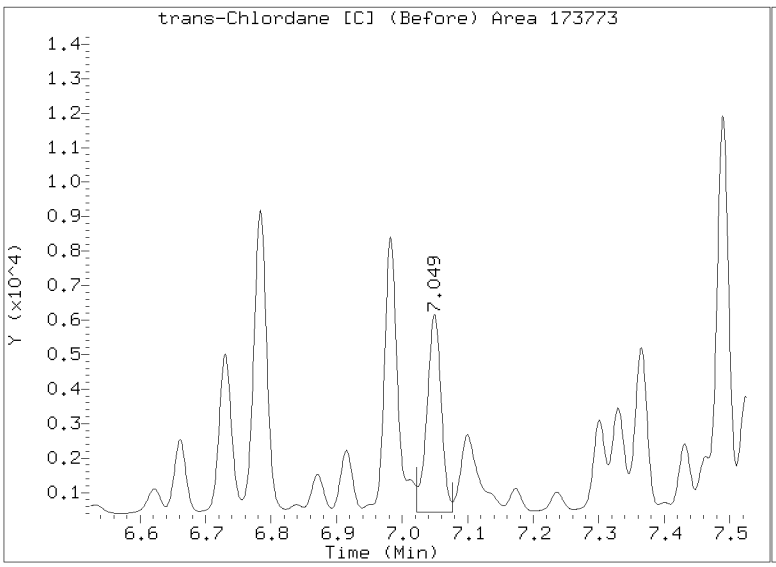
Lab ID:23A0134-07 Client ID:

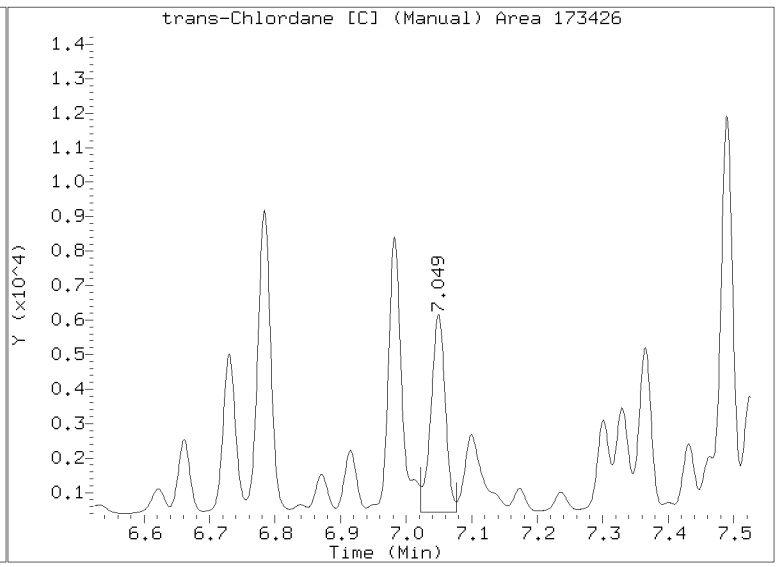












Manual Peak Adjustment Report, CLP-2

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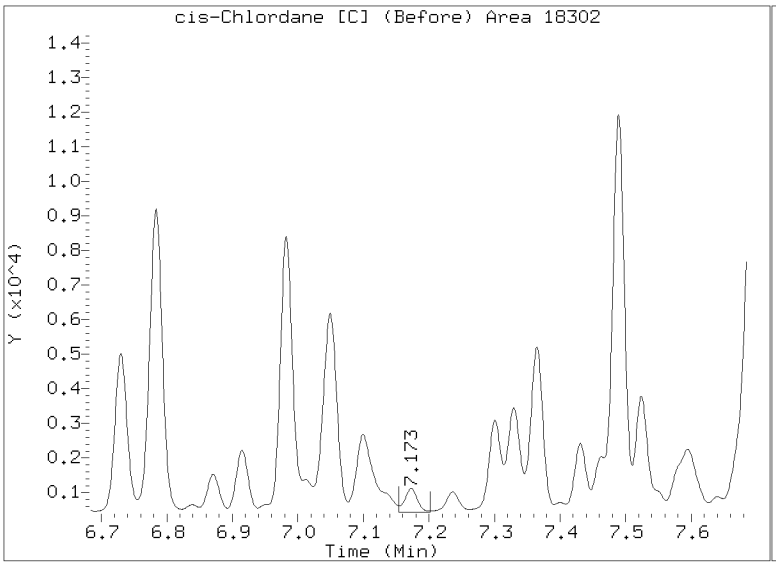

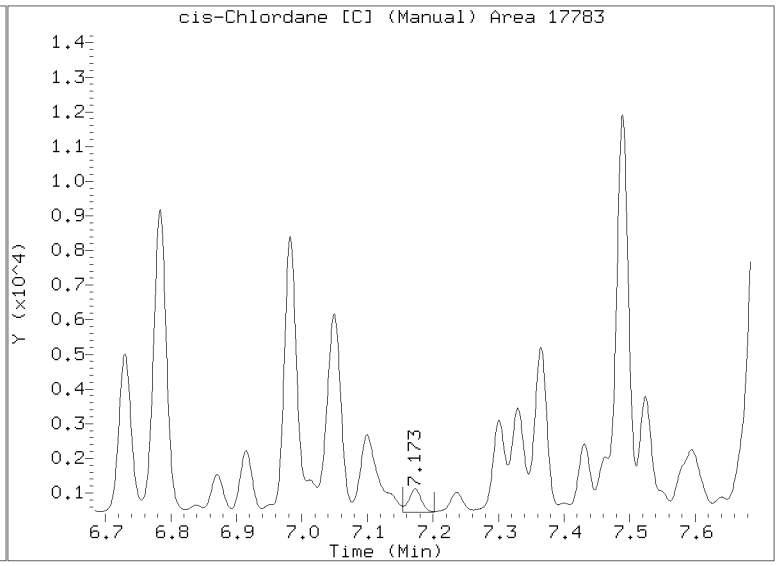

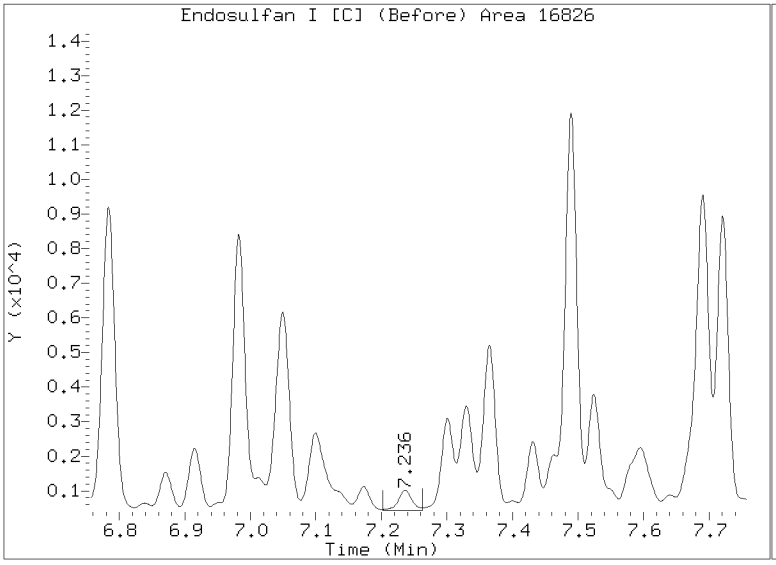

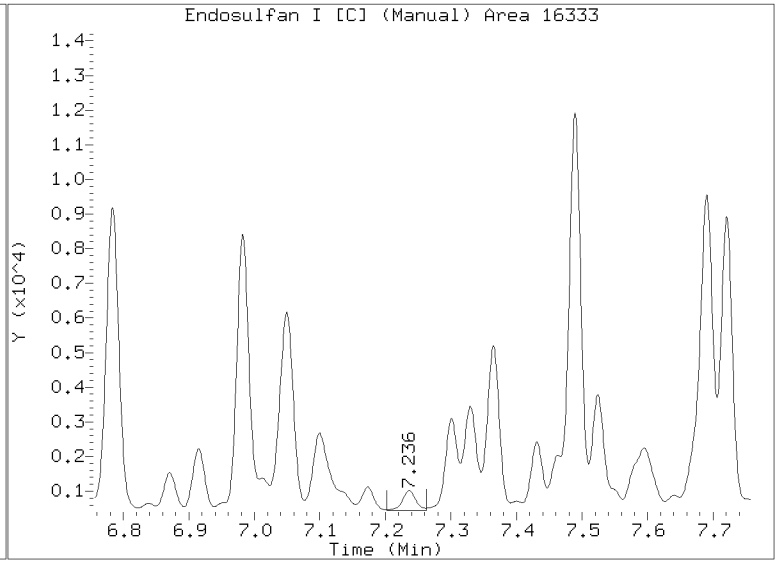

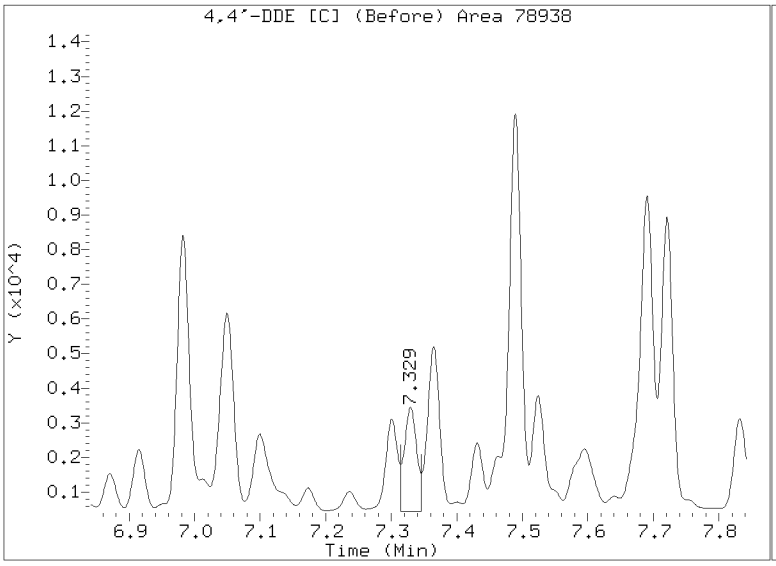

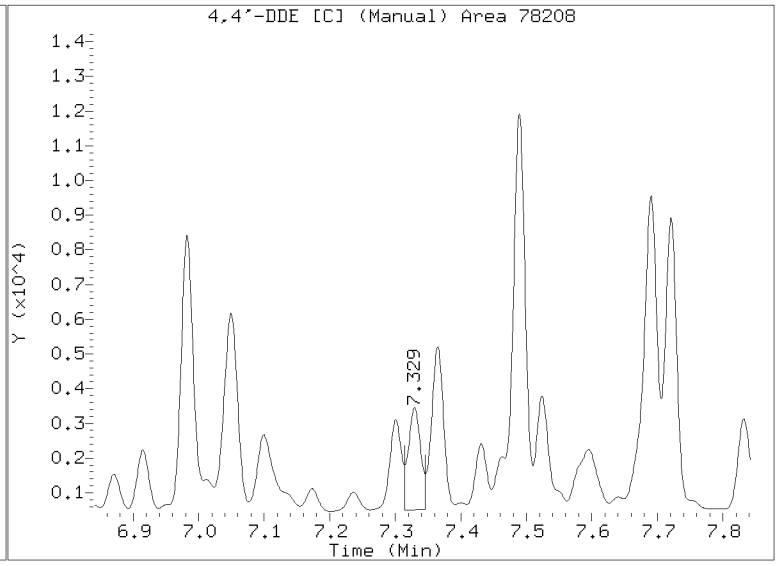

Manual Peak Adjustment Report, CLP-2

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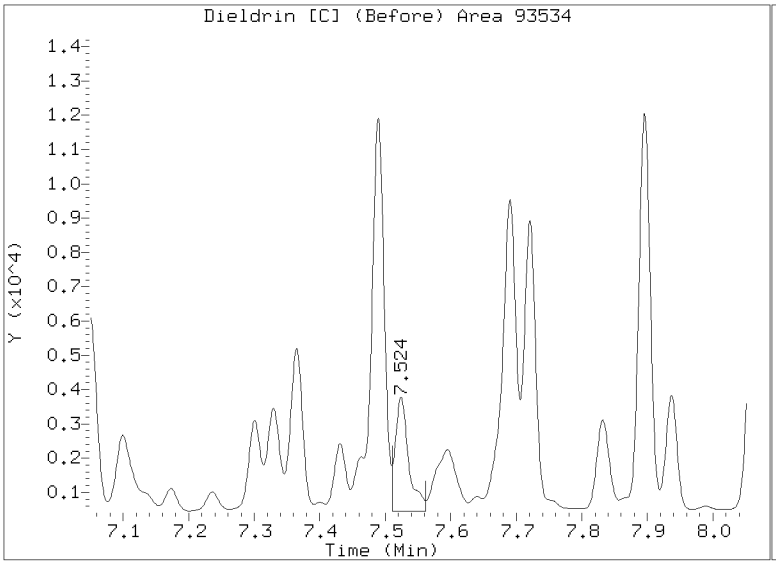

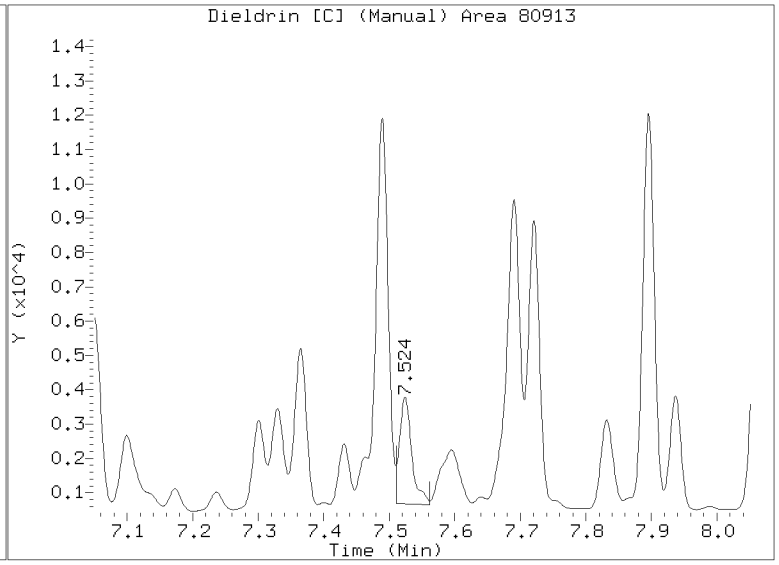

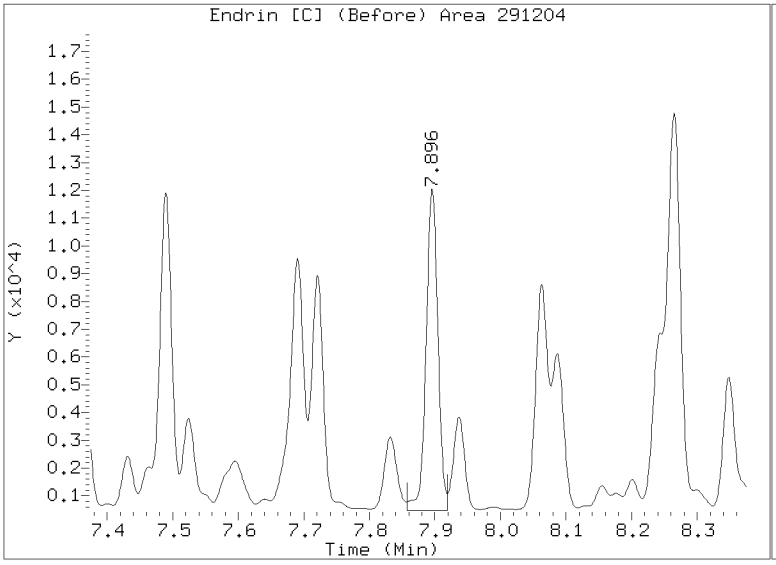

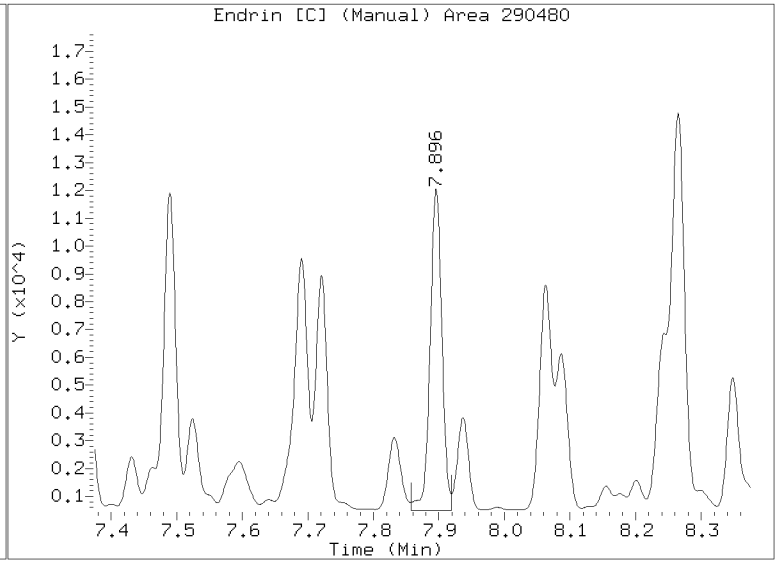

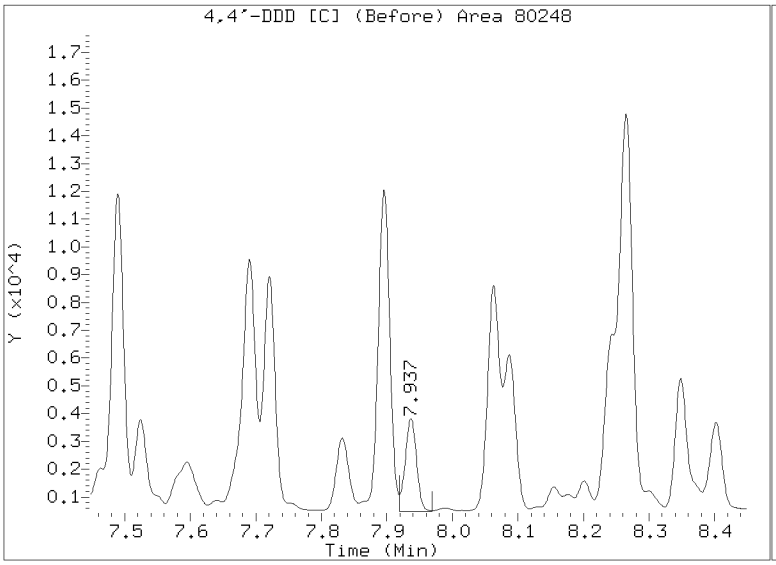

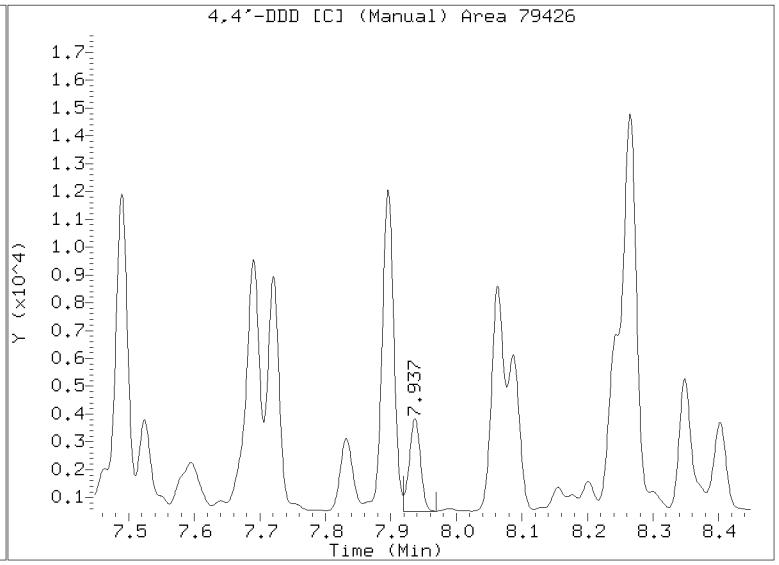

Manual Peak Adjustment Report, CLP-2

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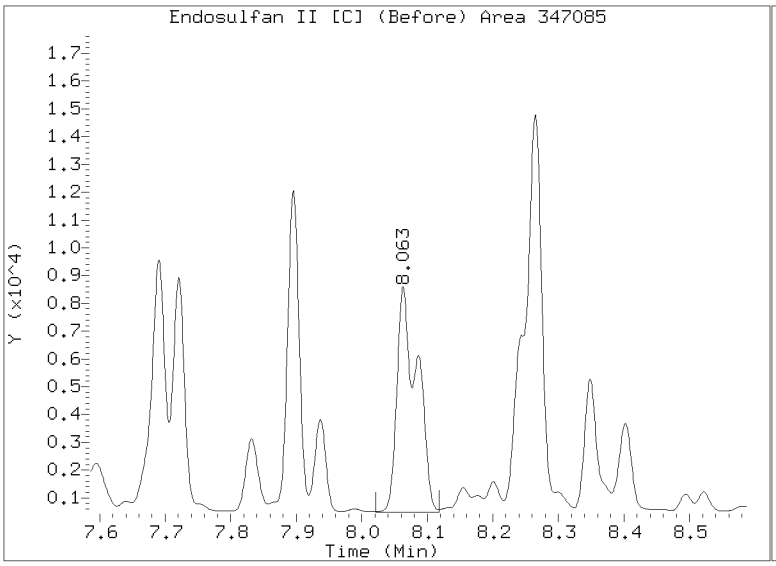

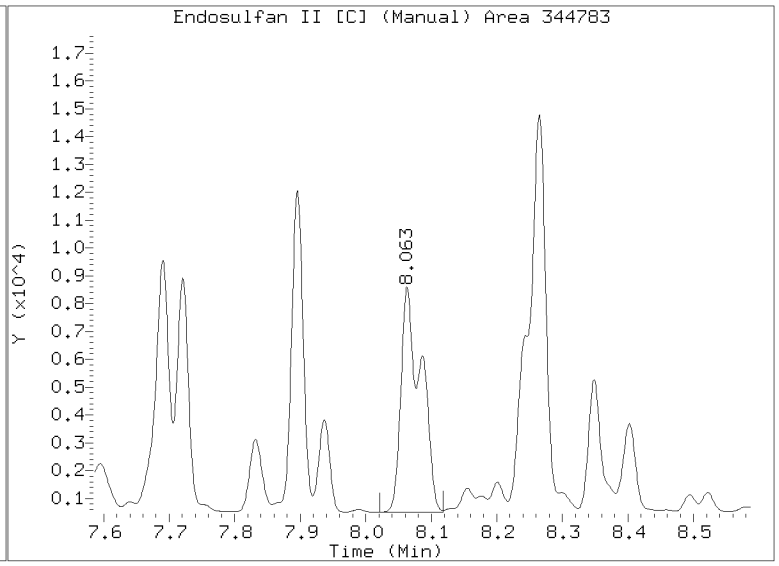

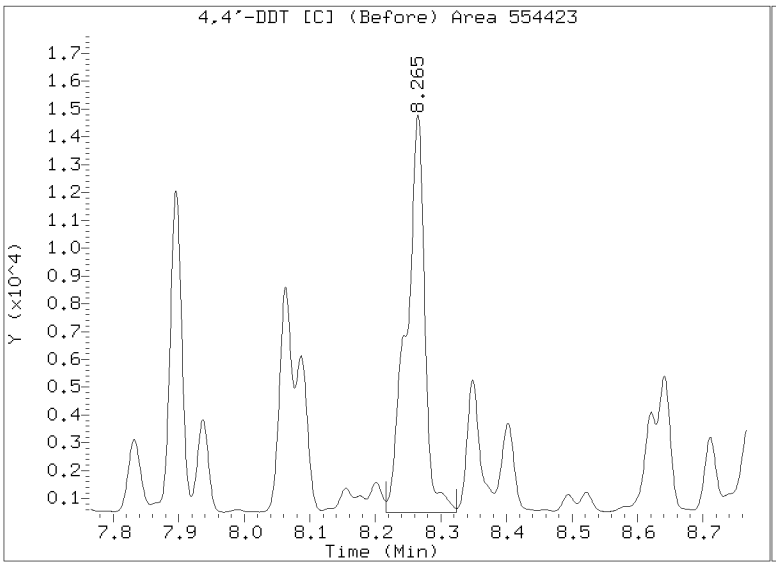

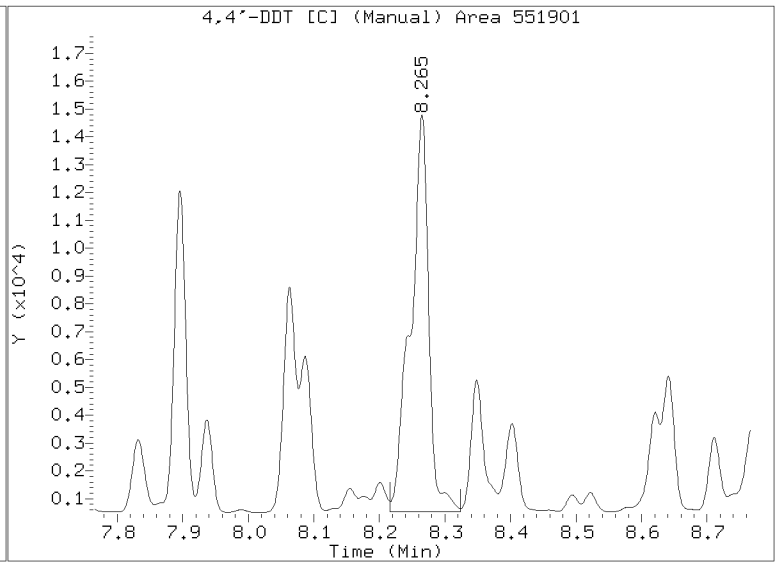

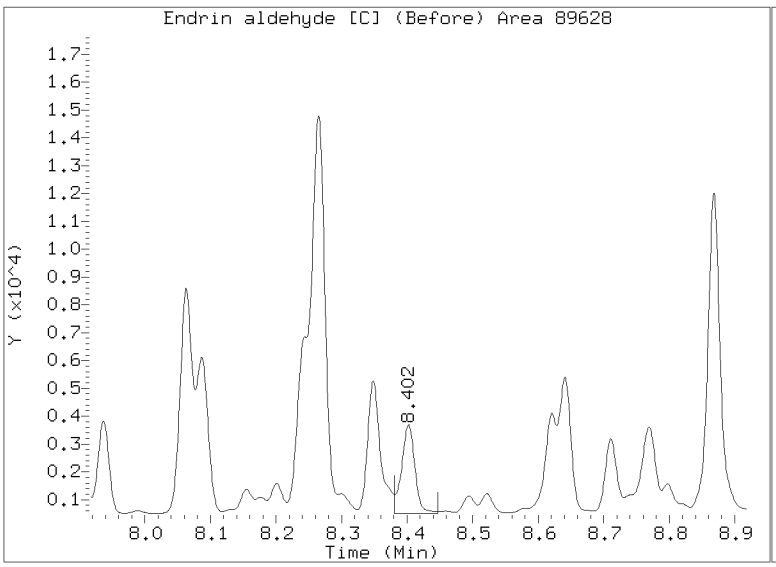

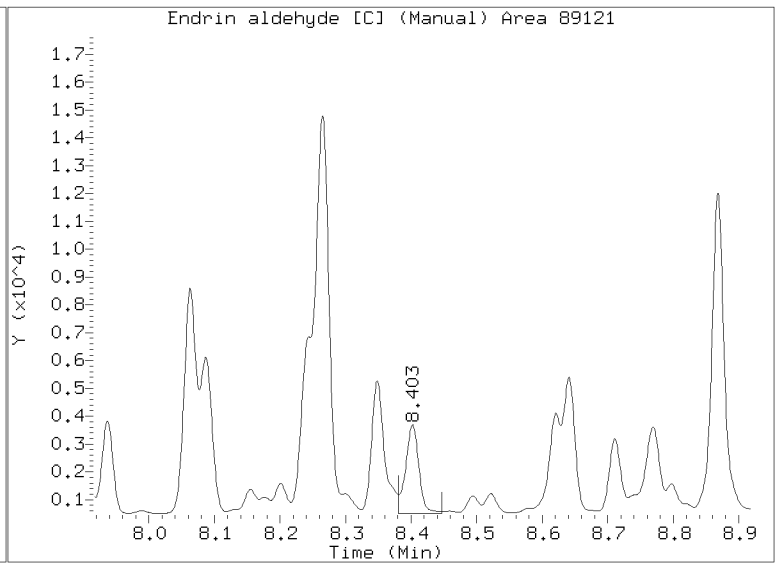

Manual Peak Adjustment Report, CLP-2

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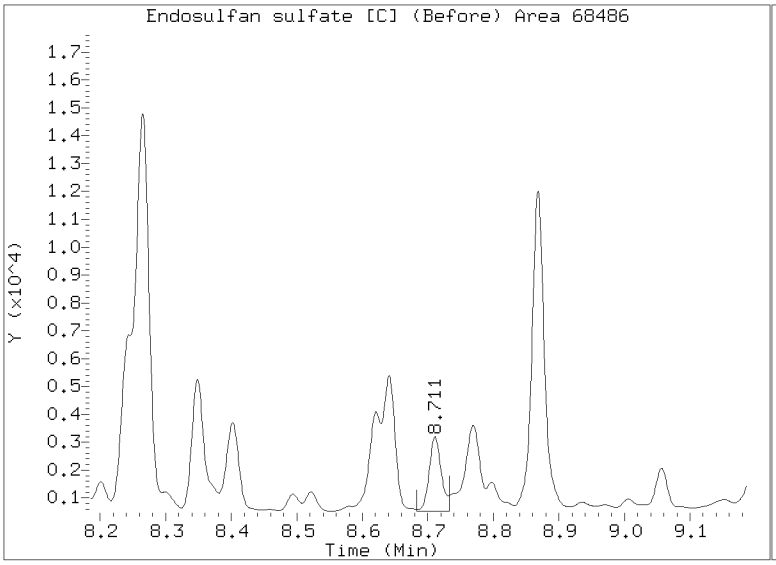

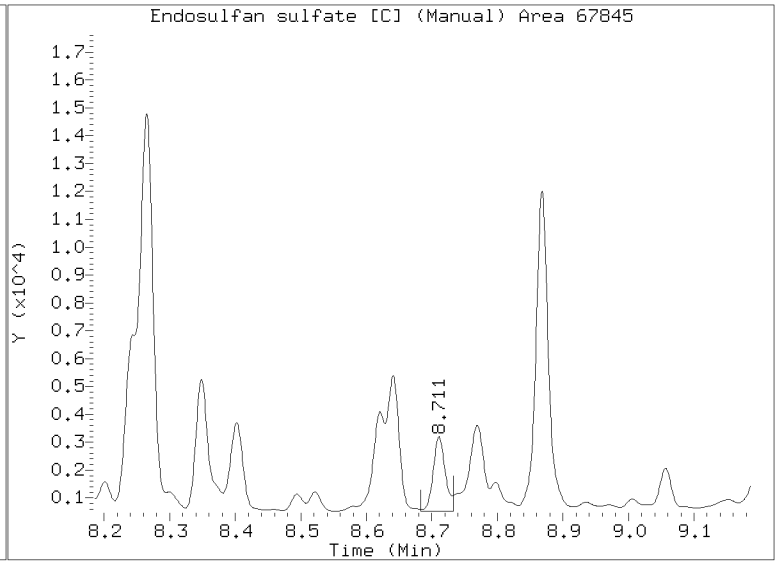

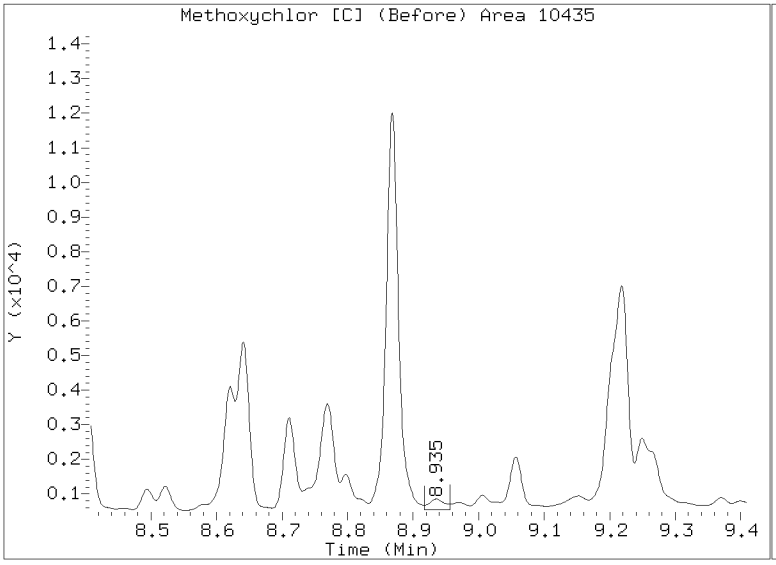

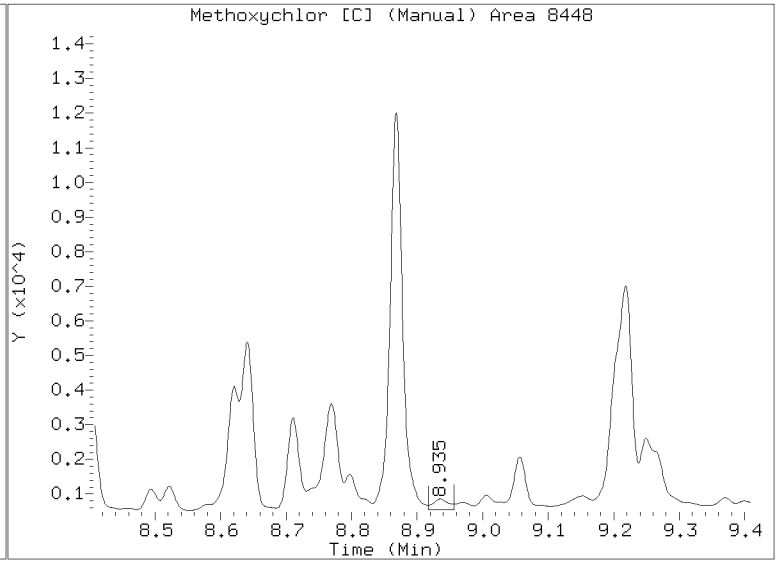

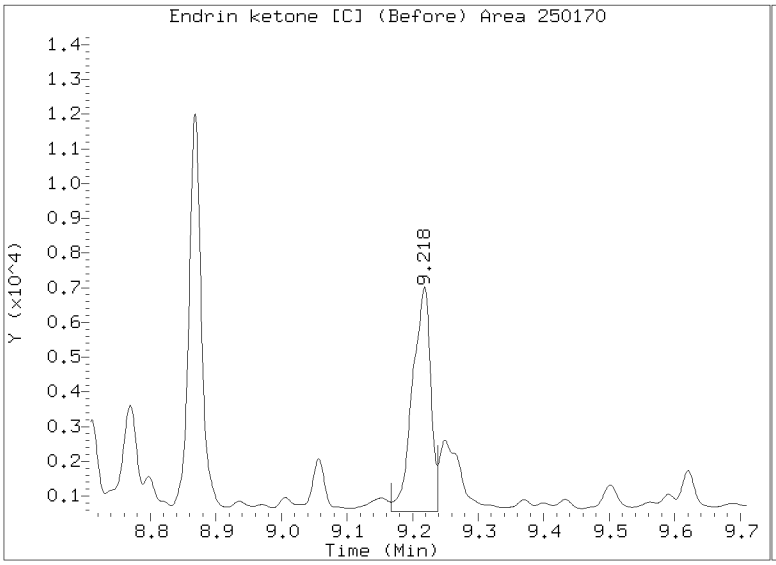

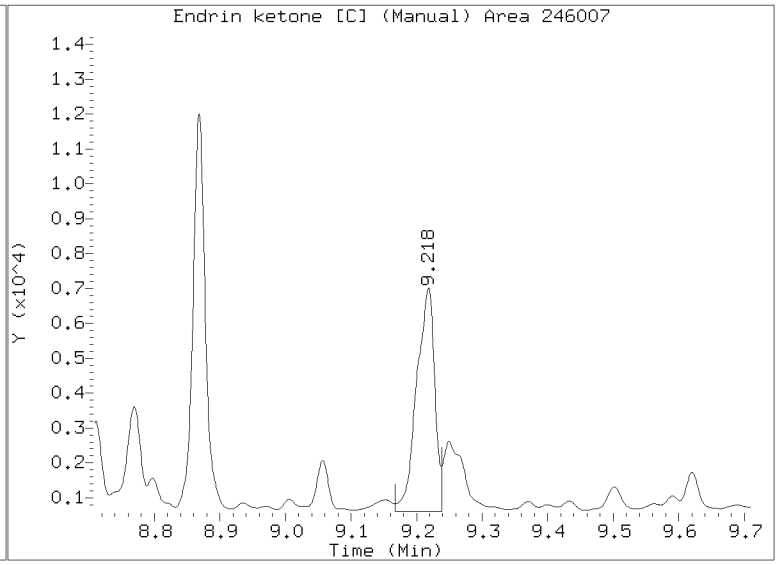

Manual Peak Adjustment Report, CLP-2

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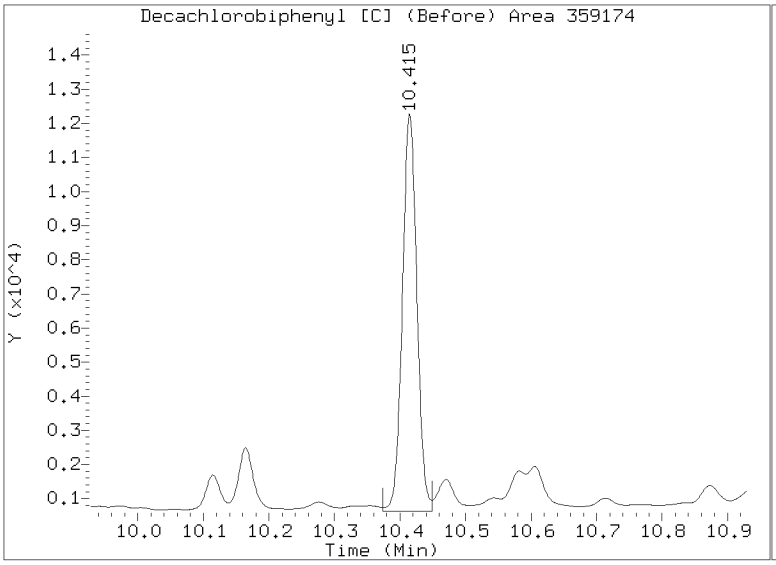
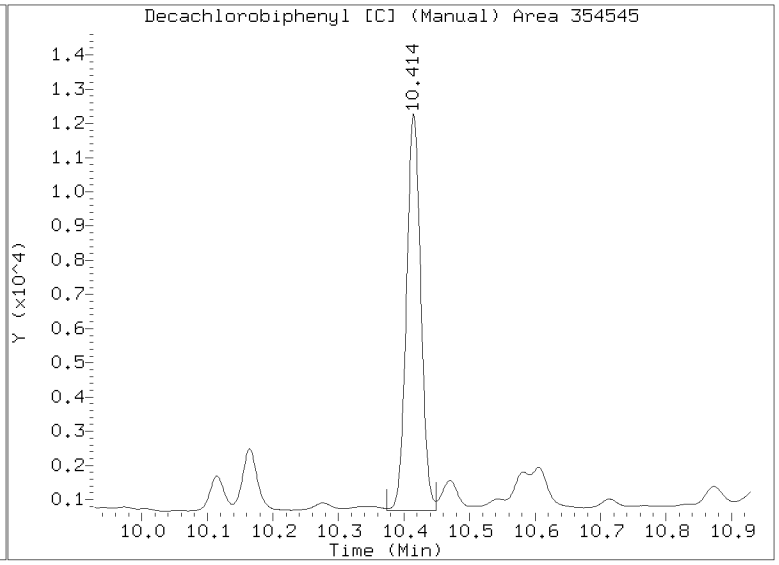
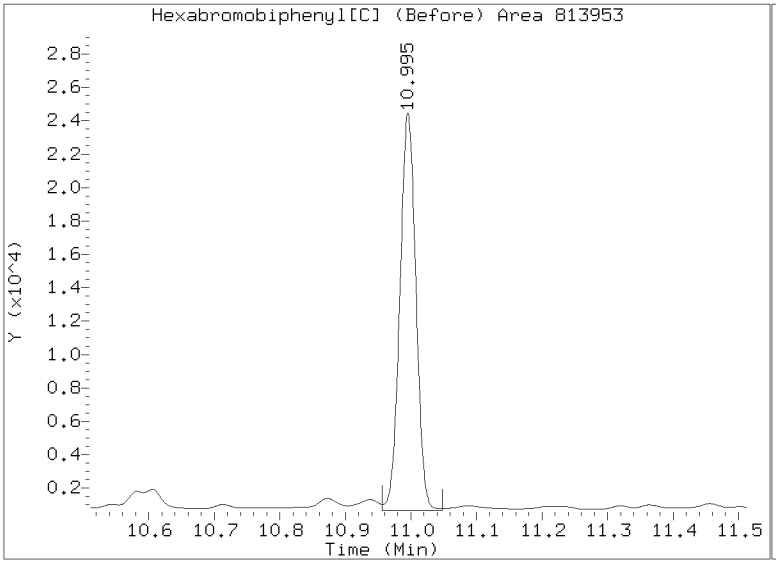
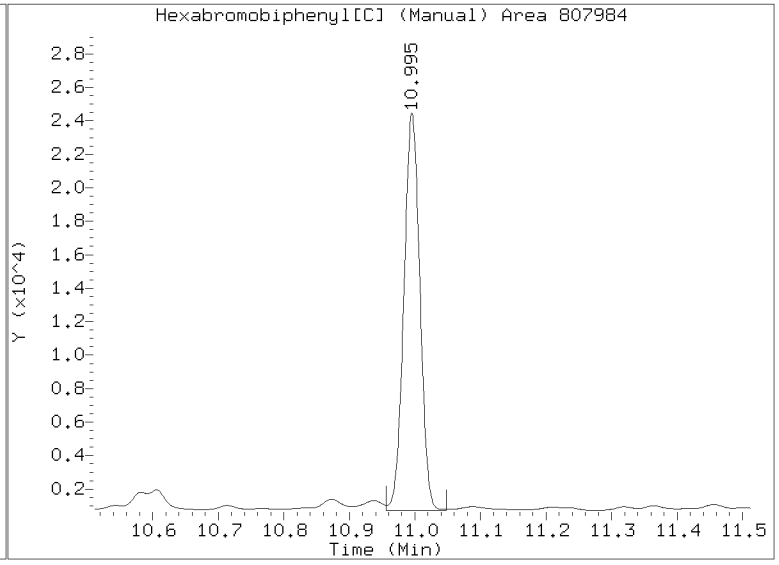
Lab ID:23A0134-07 Client ID:









Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1131

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-08 C	File ID:	23013170.D
Sampled:	01/06/23 12:43	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 11:26
% Solids:	54.73	Preparation:	EPA 3546 (Microwave)	Initial/Final:	22.91 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9753*	*8.22*	*103*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9753*	*7.56*	*94.8*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9753*	*5.58*	*69.9*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9753*	*5.46*	*68.5*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013170.D
Data file 2: /20230131.b/B20230131.b/23013170.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0134-08
Client ID:
Injection Date: 01-FEB-2023 11:26
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.299	-0.012	33568	4.826	-0.006	6542	3.80	0.47	156.4*	alpha-BHC
4.683	-0.009	7292	5.327	0.017	33456	2.15	6.26	97.9*	beta-BHC
4.880	0.004	136344	----			18.91	0.00	---	delta-BHC
4.633	0.021	54598	5.218	-0.011	11451	7.14	0.96	152.6*	gamma-BHC (Lindane)
5.075	-0.017	38933	5.757	0.003	101222	5.72	9.37	48.4*	Heptachlor
5.429	0.015	120548	----			15.81	0.00	---	Aldrin
----			6.785	-0.029	214950	0.00	21.08	---	Heptachlor epoxide b
----			7.236	-0.021	10054	0.00	1.12	---	Endosulfan I
6.767	-0.023	60182	----			9.23	0.00	---	Dieldrin
6.440	-0.011	76526	7.365	0.023	80177	12.64	8.81	35.8	4,4'-DDE
7.061	0.020	124836	7.895	0.020	105822	24.89	13.84	57.1*	Endrin
7.300	0.022	8135	8.085	-0.002	158793	1.80	20.26	167.3*	Endosulfan II
----			7.936	-0.013	35762	0.00	4.81	---	4,4'-DDD
8.125	-0.015	21601	8.711	0.025	39259	5.04	5.70	12.4	Endosulfan sulfate
----			8.264	-0.003	231927	0.00	32.31	---	4,4'-DDT
7.903	0.026	15816	----			7.82	0.00	---	Methoxychlor
----			9.216	0.006	147929	0.00	19.90	---	Endrin ketone
7.725	0.018	35131	8.402	-0.017	46047	9.76	8.33	15.8	Endrin aldehyde
6.224	-0.006	9141	7.046	0.020	218103	1.36	21.45	176.1*	trans-Chlordane
6.391	0.015	56437	7.172	-0.012	10682	8.38	1.07	154.5*	cis-Chlordane
2.302	-0.001	27517	2.453	-0.029	72737	2.98	5.45	58.7*	Hexachlorobutadiene
----			4.669	-0.024	32563	0.00	2.55	---	Hexachlorobenzene
3.798	-0.002	174258	4.190	-0.006	270235	27.96	27.39	2.1	Tetrachloro-m-xylene
9.315	-0.004	159872	10.414	-0.015	225358	41.25	37.92	8.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

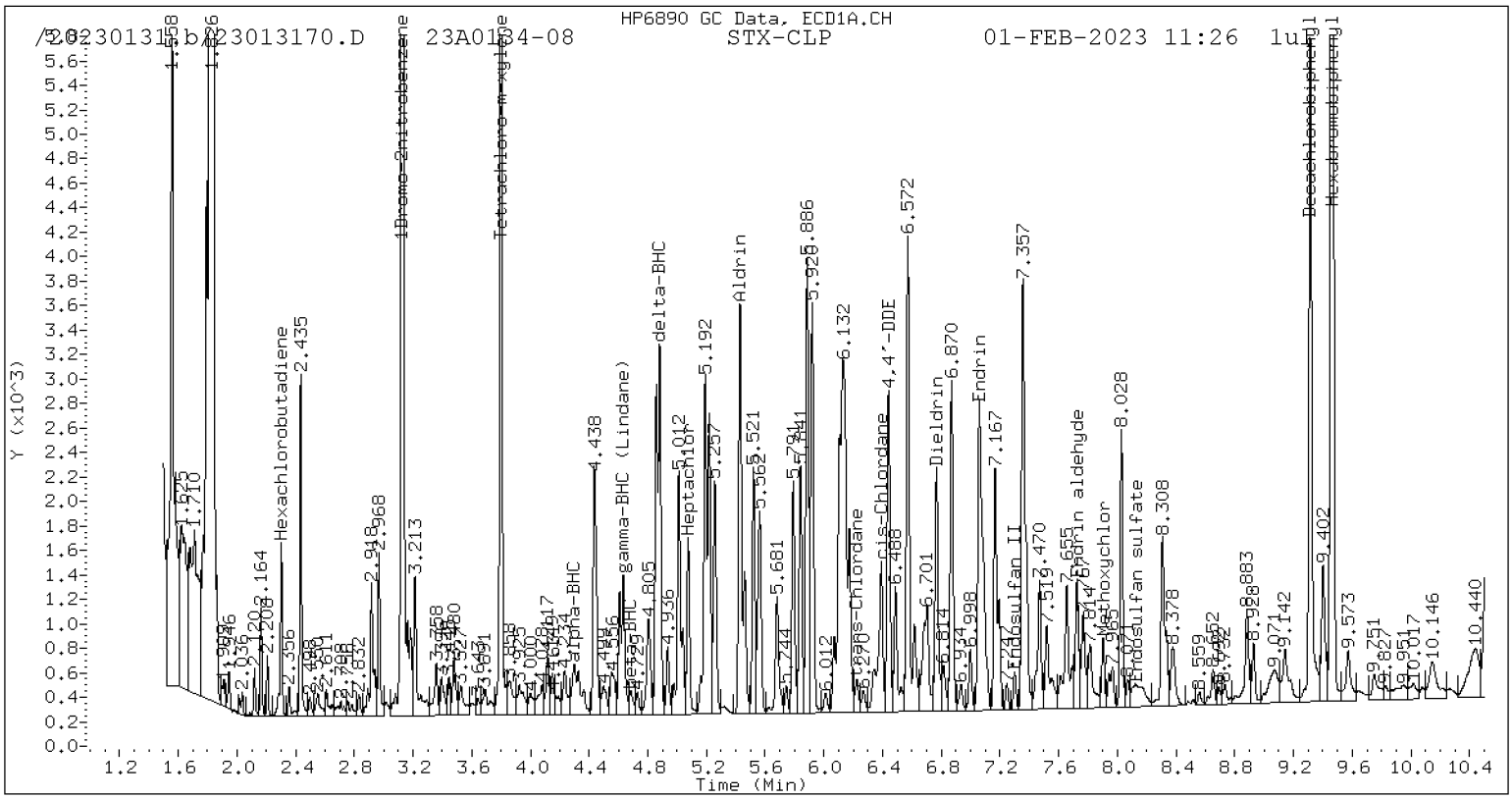
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	458247	-31.9
Hexabromobiphenyl	609723	382518	-37.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	700885	-30.4
Hexabromobiphenyl	769764	537723	-30.1

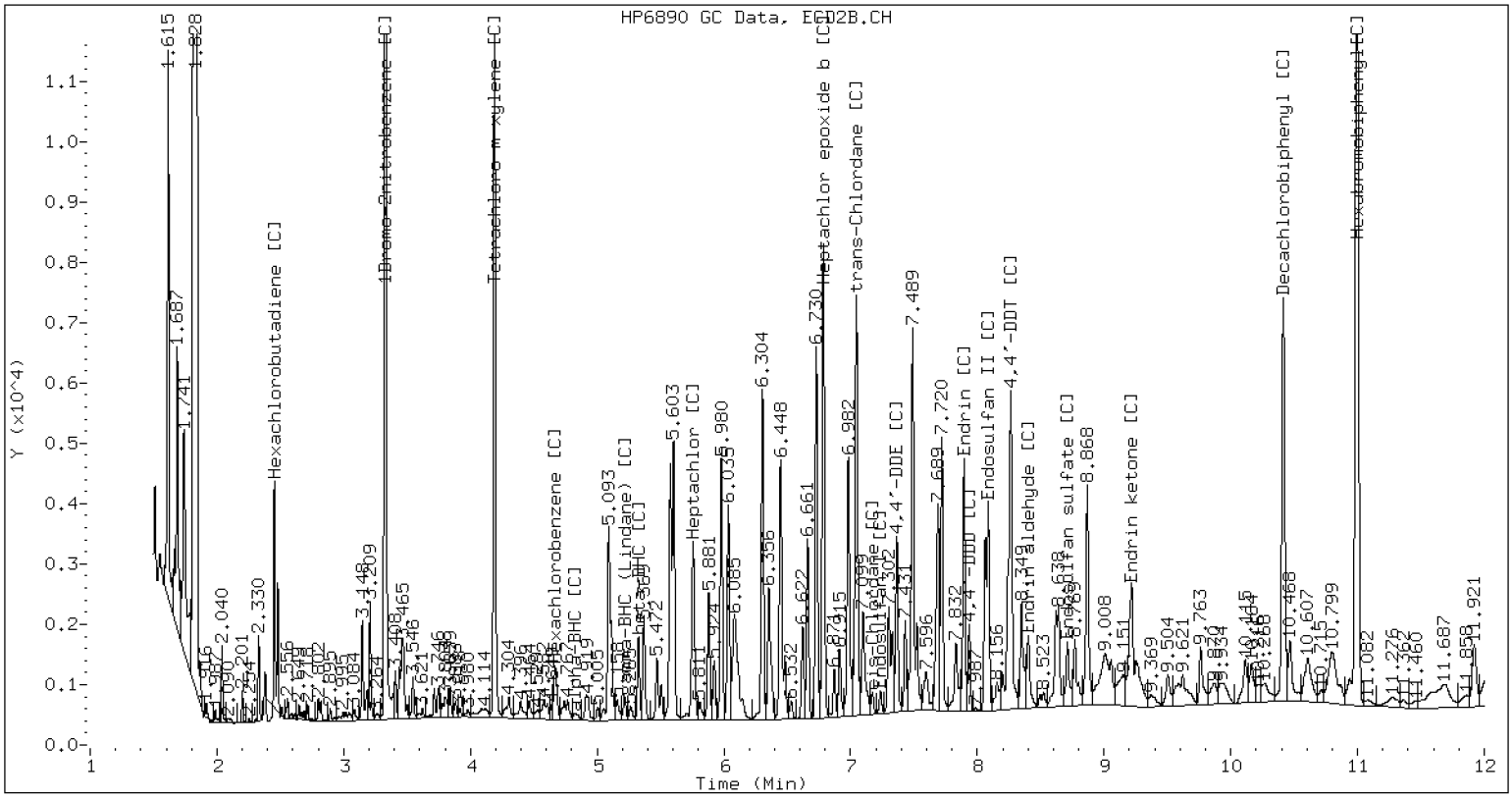
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

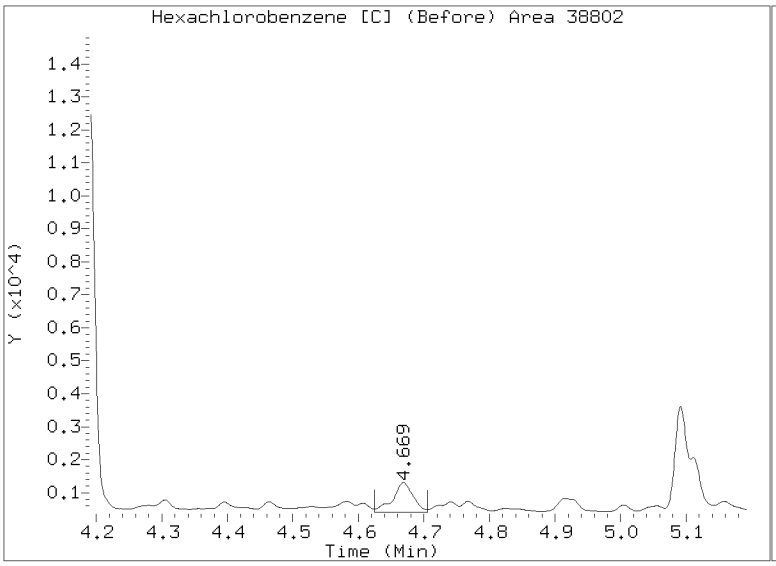
/20230131.b/B20230131.b/23013170.D 23A0134-08 CLP2

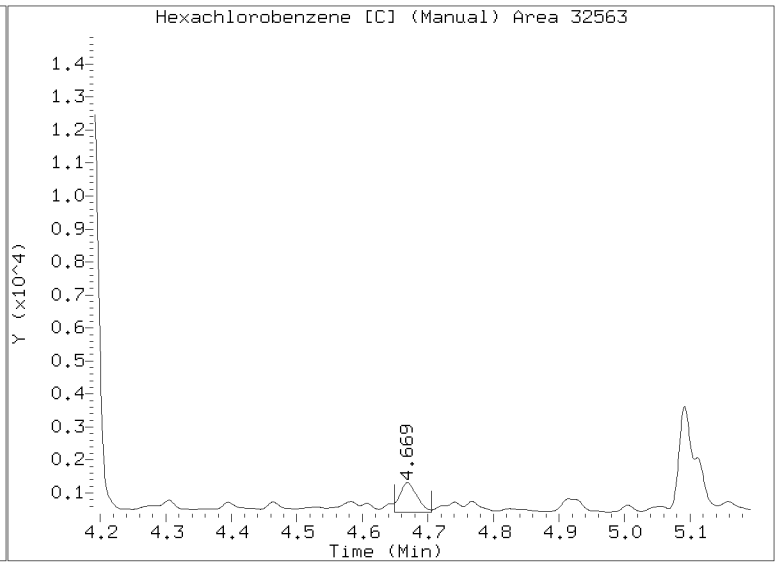


CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, CLP-2

Datafile: /20230131.b/B20230131.b/23013170.D
Injection Date: 01-FEB-2023 11:26
Lab ID:23A0134-08 Client ID:





Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1129

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-09 C	File ID:	23013171.D
Sampled:	01/06/23 12:57	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 11:44
% Solids:	48.04	Preparation:	EPA 3546 (Microwave)	Initial/Final:	26.87 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.48	0.14	0.48	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.7469*	*8.51*	*110*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.7469*	*7.86*	*101*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.7469*	*6.39*	*82.5*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.7469*	*6.08*	*78.4*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013171.D
Data file 2: /20230131.b/B20230131.b/23013171.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0134-09
Client ID:
Injection Date: 01-FEB-2023 11:44
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.300	-0.011	30475	4.841	0.008	6509	3.47	0.47	152.5*	alpha-BHC M
4.683	-0.010	7781	5.326	0.017	23212	2.30	4.40	62.4*	beta-BHC
4.880	0.005	118906	----			16.59	0.00	---	delta-BHC
4.610	-0.002	34123	5.219	-0.010	7890	4.49	0.67	148.1*	gamma-BHC (Lindane)
5.077	-0.015	33750	5.756	0.001	71069	4.99	6.66	28.7	Heptachlor
5.429	0.015	98857	----			13.04	0.00	---	Aldrin
6.068	-0.021	48354	6.784	-0.030	271527	7.35	26.93	114.2*	Heptachlor epoxide b
----			7.236	-0.021	14386	0.00	1.62	---	Endosulfan I
6.768	-0.023	138763	----			21.41	0.00	---	Dieldrin
6.444	-0.007	426707	7.330	-0.011	669510	70.89	74.37	4.8	4,4'-DDE
7.061	0.020	313246	7.895	0.020	270948	62.92	34.89	57.3*	Endrin
7.300	0.022	18330	8.064	-0.023	296639	4.09	37.27	160.4*	Endosulfan II
----			7.937	-0.012	130321	0.00	17.25	---	4,4'-DDD
----			8.711	0.025	67098	0.00	9.60	---	Endosulfan sulfate
----			8.261	-0.006	562508	0.00	77.16	---	4,4'-DDT
7.902	0.025	33150	8.935	0.027	11431	16.51	3.54	129.3*	Methoxychlor
----			9.215	0.006	287662	0.00	38.11	---	Endrin ketone
7.725	0.018	72643	8.402	-0.016	76032	20.32	13.54	40.0*	Endrin aldehyde
6.224	-0.006	51612	7.048	0.023	198139	7.73	19.71	87.3*	trans-Chlordane
6.389	0.013	109899	7.173	-0.012	43139	16.41	4.39	115.6*	cis-Chlordane
2.285	-0.019	9107	2.454	-0.028	81262	0.99	6.16	144.6*	Hexachlorobutadiene
----			4.669	-0.024	37308	0.00	2.95	---	Hexachlorobenzene
3.799	-0.002	204558	4.190	-0.006	306037	33.01	31.37	5.1	Tetrachloro-m-xylene
9.315	-0.004	169075	10.415	-0.014	244911	43.94	40.58	8.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

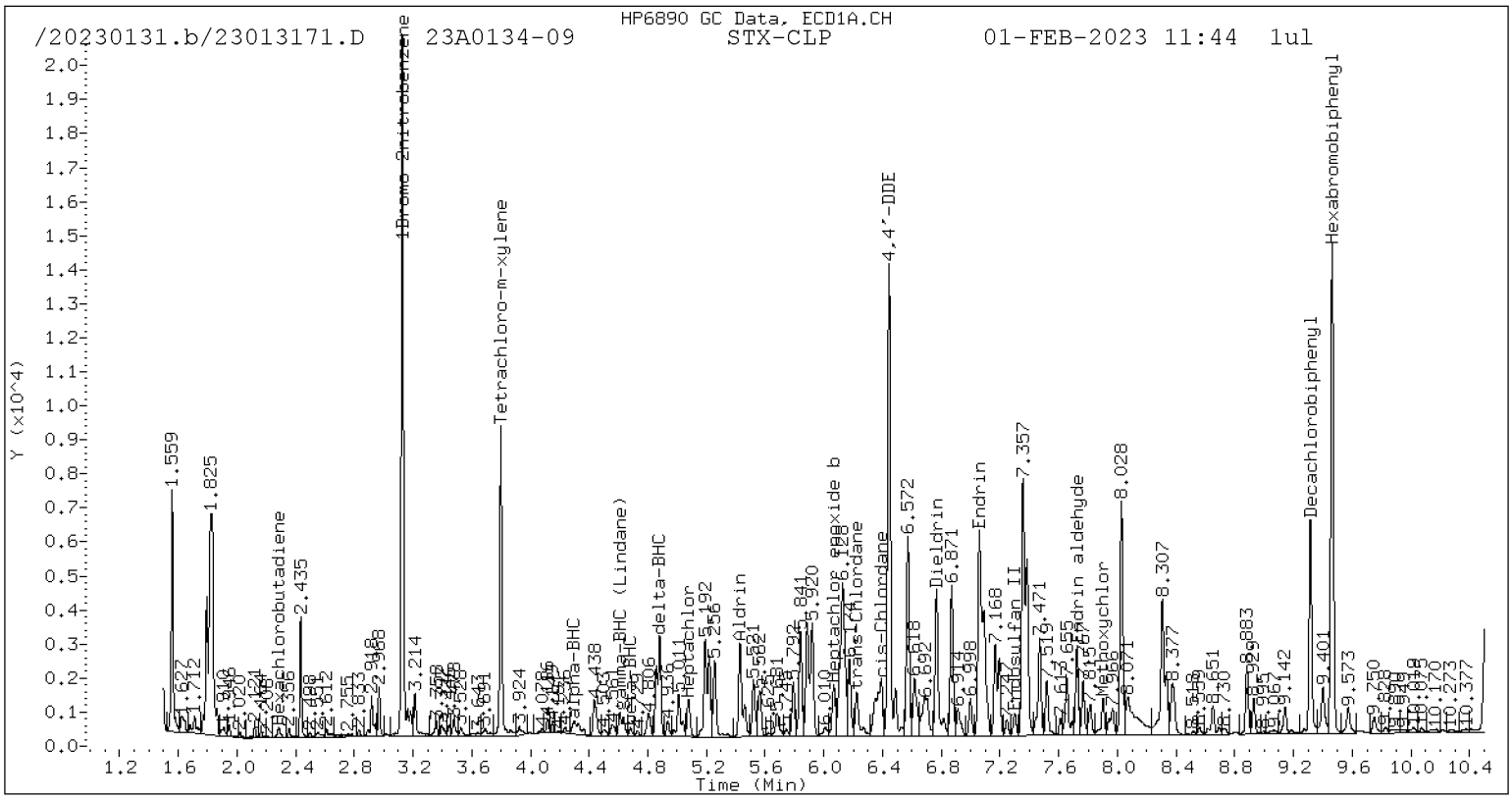
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	455613	-32.2
Hexabromobiphenyl	609723	379724	-37.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	693064	-31.1
Hexabromobiphenyl	769764	546099	-29.1

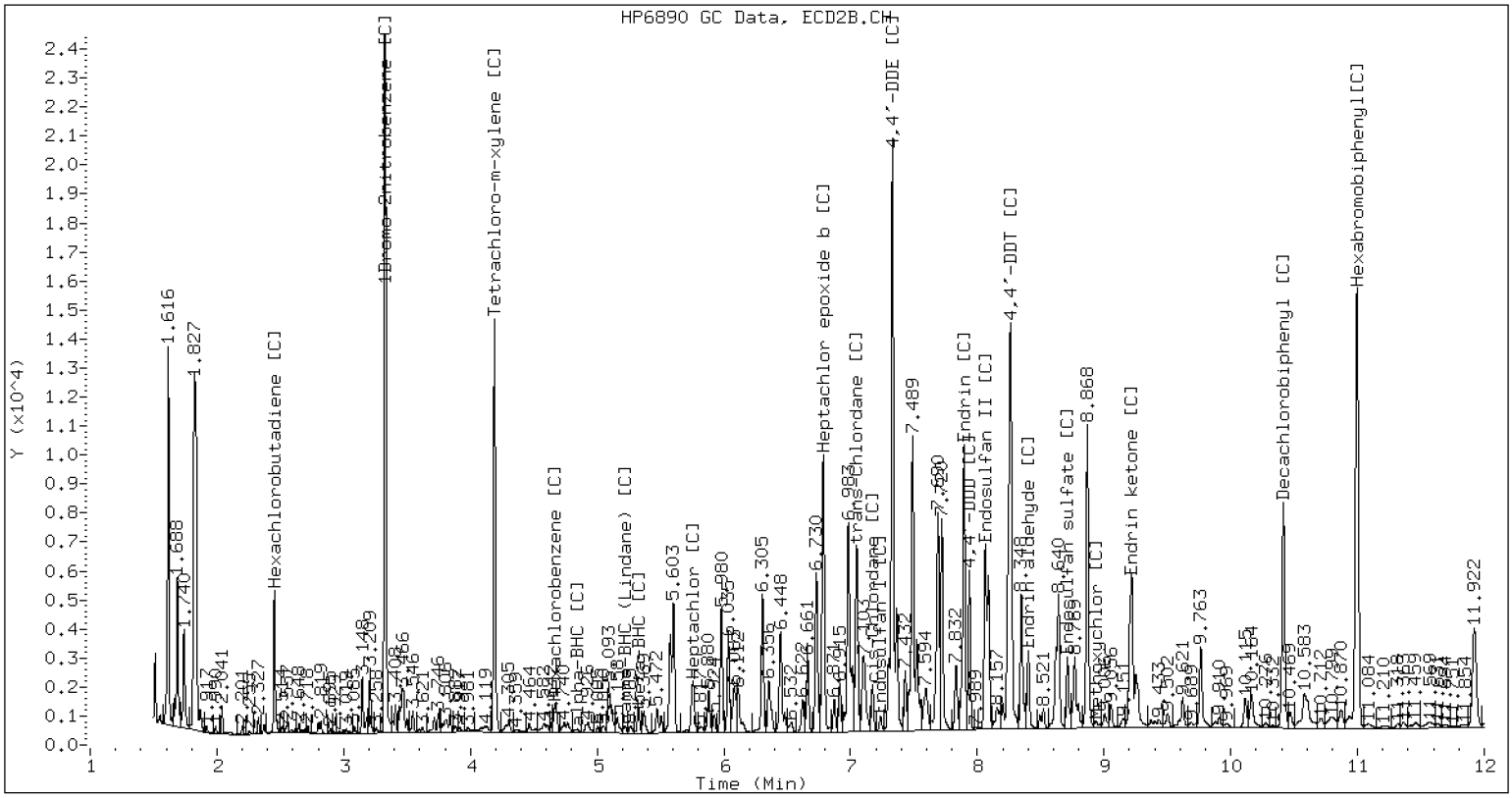
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

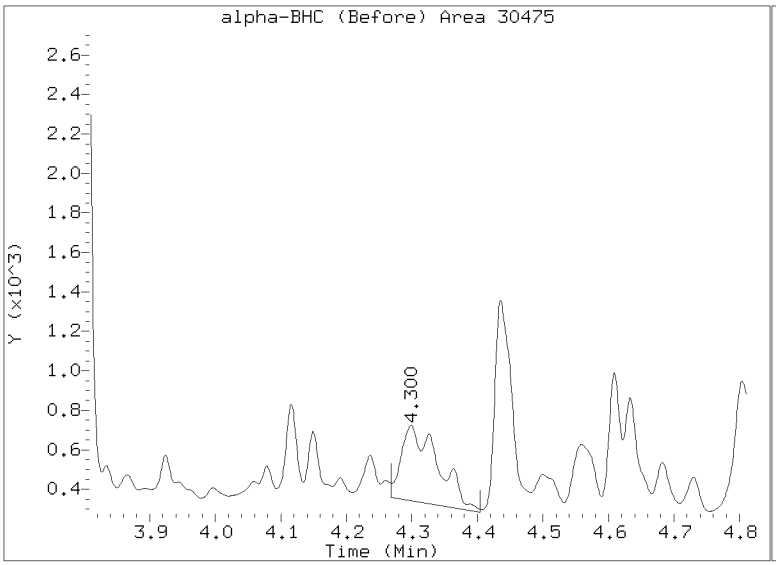
/20230131.b/B20230131.b/23013171.D 23A0134-09 CLP2

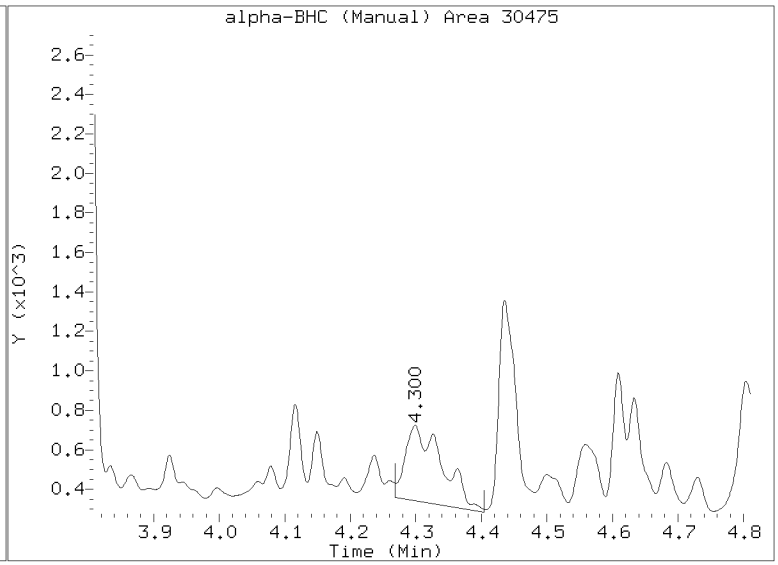


CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, STX-CLP

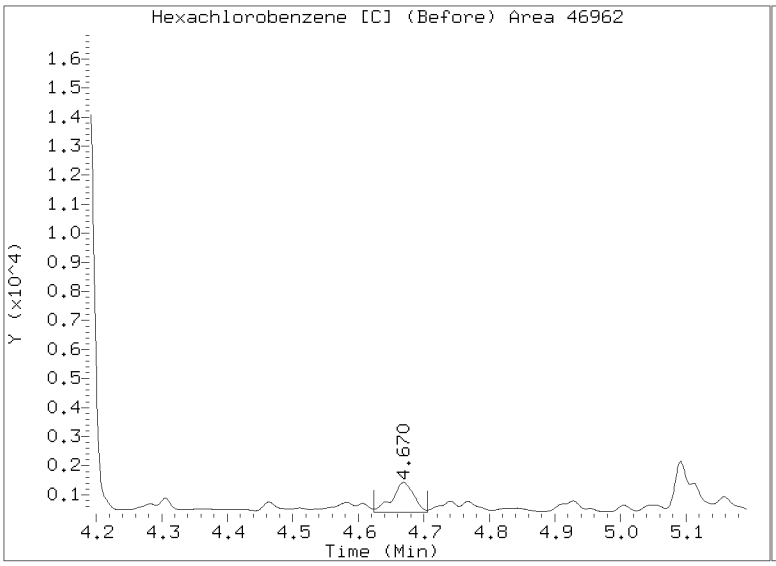
Datafile: /20230131.b/23013171.D
Injection Date: 01-FEB-2023 11:44
Lab ID:23A0134-09 Client ID:
Report Date: 02/03/2023 20:26

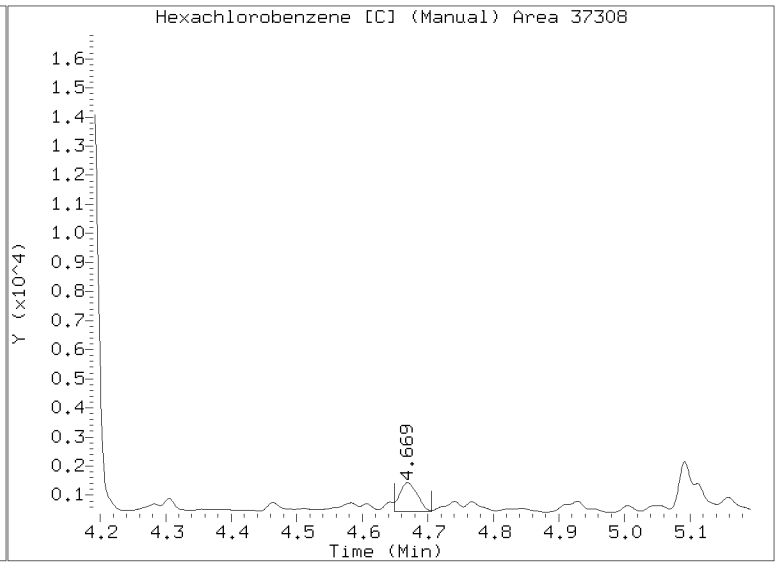




Manual Peak Adjustment Report, CLP-2

Datafile: /20230131.b/B20230131.b/23013171.D
Injection Date: 01-FEB-2023 11:44
Lab ID:23A0134-09 Client ID:





Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1124

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-10 C	File ID:	23013172.D
Sampled:	01/06/23 13:15	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 12:02
% Solids:	48.45	Preparation:	EPA 3546 (Microwave)	Initial/Final:	26.16 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.49	0.14	0.49	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.8898*	*8.68*	*110*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.8898*	*8.33*	*106*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.8898*	*6.11*	*77.5*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.8898*	*5.99*	*76.0*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013172.D
Data file 2: /20230131.b/B20230131.b/23013172.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0134-10
Client ID:
Injection Date: 01-FEB-2023 12:02
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.283	-0.028	56122	4.829	-0.003	4731	6.09	0.33	179.4*	alpha-BHC
----			5.326	0.017	7999	0.00	1.47	---	beta-BHC
4.880	0.005	41329	----			5.48	0.00	---	delta-BHC
4.611	-0.001	26285	5.221	-0.008	3056	3.29	0.25	171.6*	gamma-BHC (Lindane)
5.077	-0.016	11961	5.757	0.002	21490	1.68	1.95	14.9	Heptachlor
5.428	0.014	31399	----			3.94	0.00	---	Aldrin
6.071	-0.018	13229	----			1.91	0.00	---	Heptachlor epoxide b
----			7.236	-0.022	8282	0.00	0.90	---	Endosulfan I
6.767	-0.024	50888	----			7.47	0.00	---	Dieldrin
6.441	-0.010	53886	7.329	-0.013	64245	8.52	6.92	20.7	4,4'-DDE
7.060	0.019	117340	7.895	0.019	99715	22.80	13.43	51.7*	Endrin
7.300	0.022	6842	8.063	-0.024	116338	1.48	15.29	164.8*	Endosulfan II
----			7.936	-0.012	37498	0.00	5.19	---	4,4'-DDD
----			8.711	0.025	36686	0.00	5.49	---	Endosulfan sulfate
----			8.263	-0.003	199327	0.00	28.60	---	4,4'-DDT
7.902	0.025	14696	----			7.08	0.00	---	Methoxychlor
----			9.215	0.006	148305	0.00	20.55	---	Endrin ketone
7.725	0.018	27582	8.402	-0.016	38948	7.47	7.25	2.9	Endrin aldehyde
6.224	-0.006	8338	7.048	0.023	78210	1.19	7.54	145.6*	trans-Chlordane
6.390	0.014	36536	7.172	-0.012	10529	5.19	1.04	133.3*	cis-Chlordane
2.284	-0.020	9374	2.453	-0.029	59950	0.97	4.41	127.8*	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.799	-0.002	201811	4.190	-0.006	305726	30.98	30.39	1.9	Tetrachloro-m-xylene
9.314	-0.004	175062	10.414	-0.015	243751	44.02	42.23	4.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

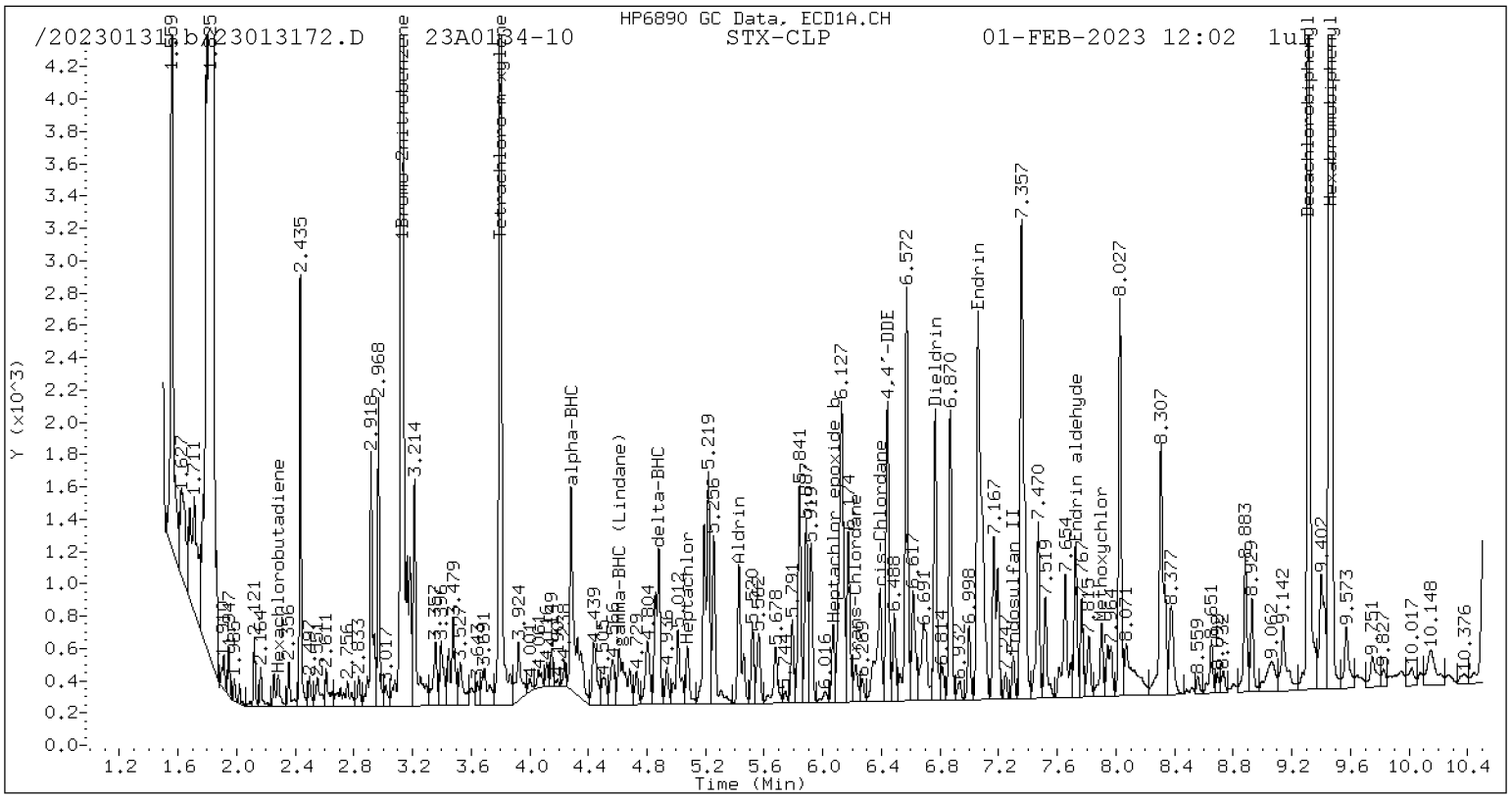
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	478995	-28.8
Hexabromobiphenyl	609723	392486	-35.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	714760	-29.0
Hexabromobiphenyl	769764	522197	-32.2

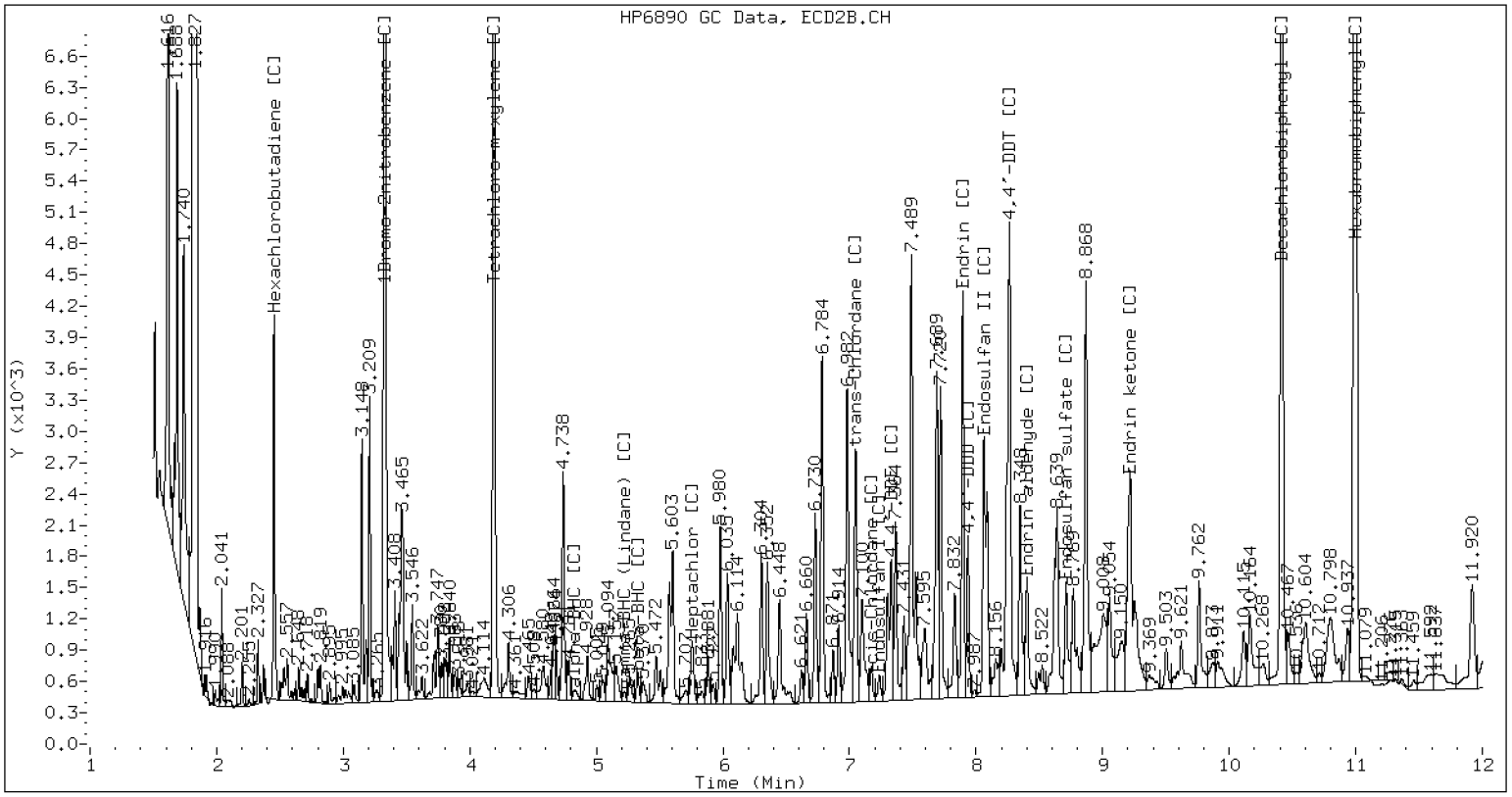
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

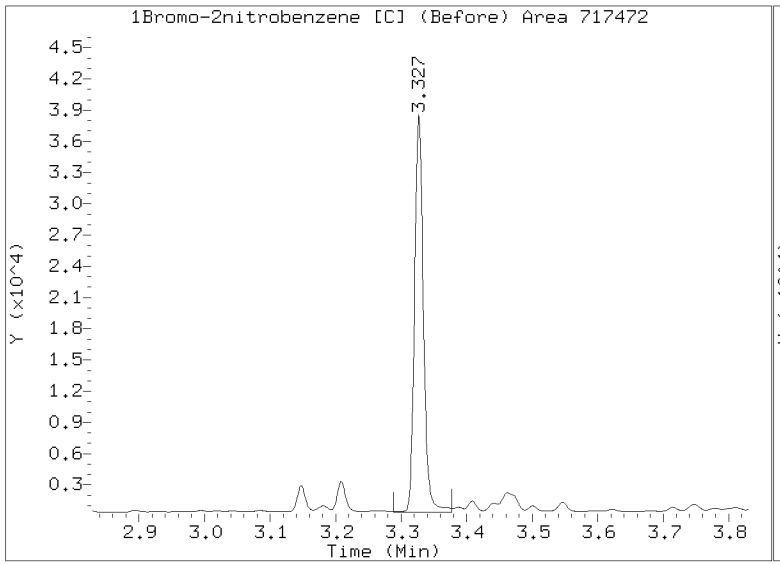
/20230131.b/B20230131.b/23013172.D 23A0134-10 CLP2

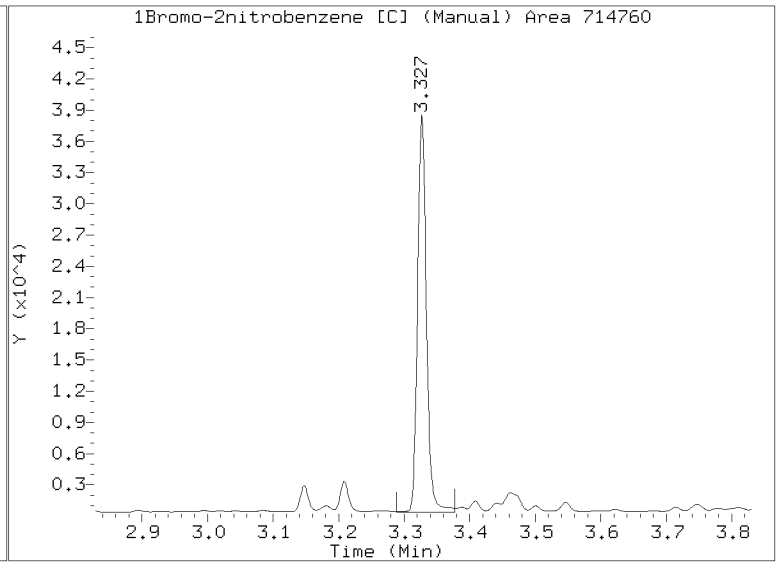


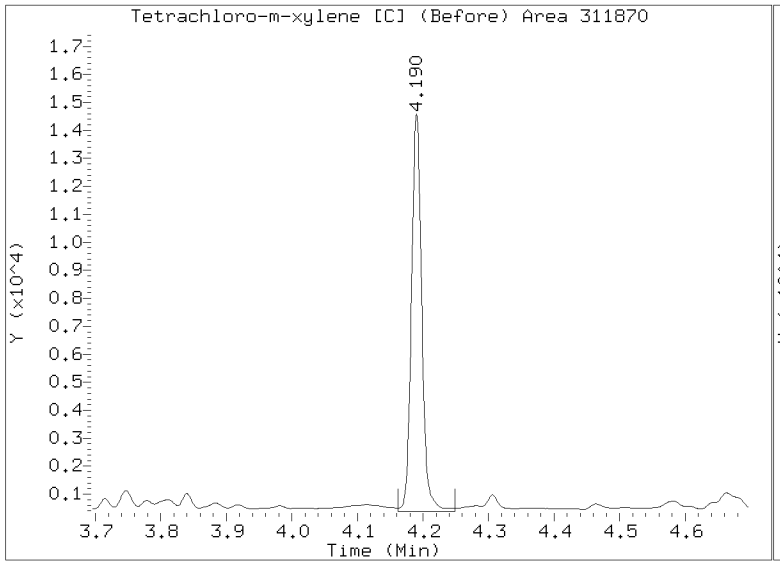
CLP-2 Manual Integration: NO

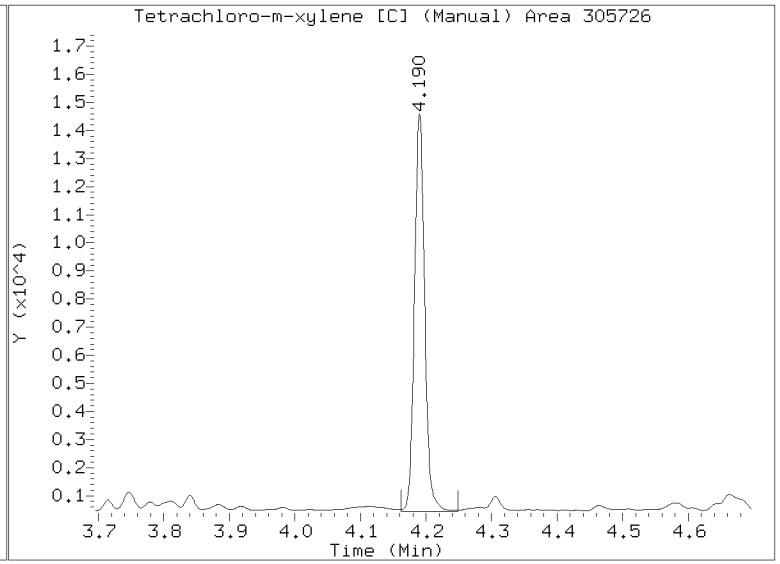
Manual Peak Adjustment Report, CLP-2

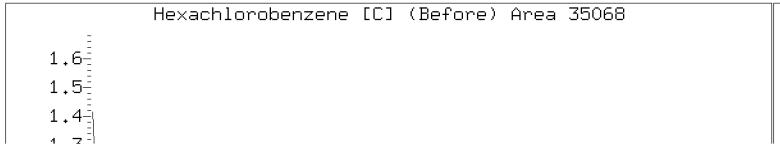
Datafile: /20230131.b/B20230131.b/23013172.D
Injection Date: 01-FEB-2023 12:02
Lab ID:23A0134-10 Client ID:

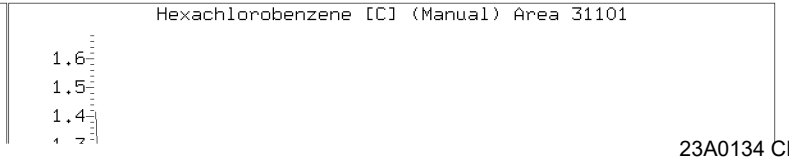






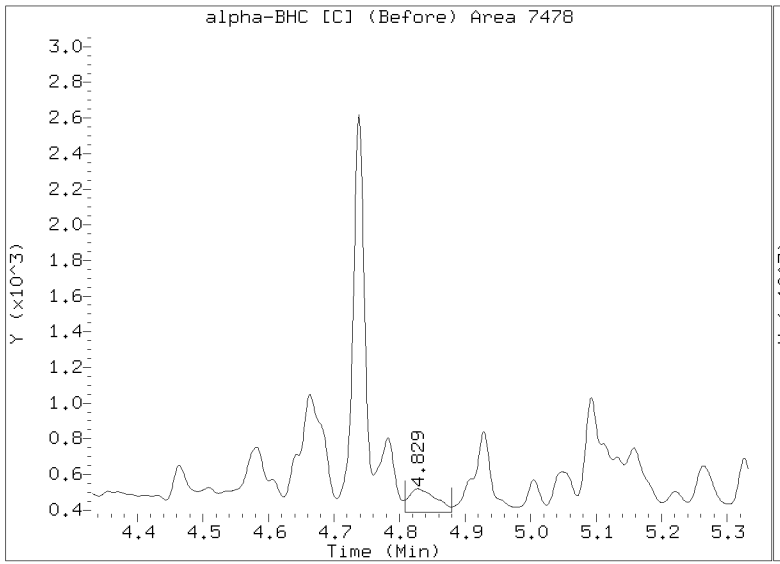


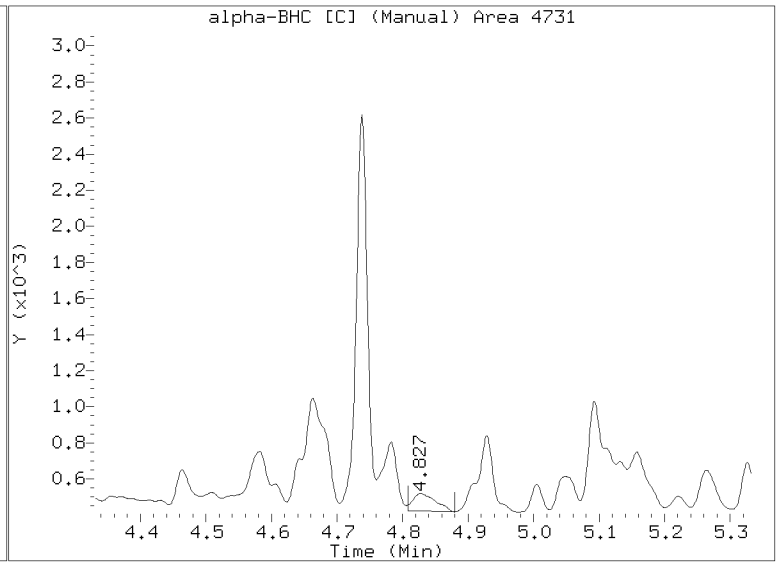


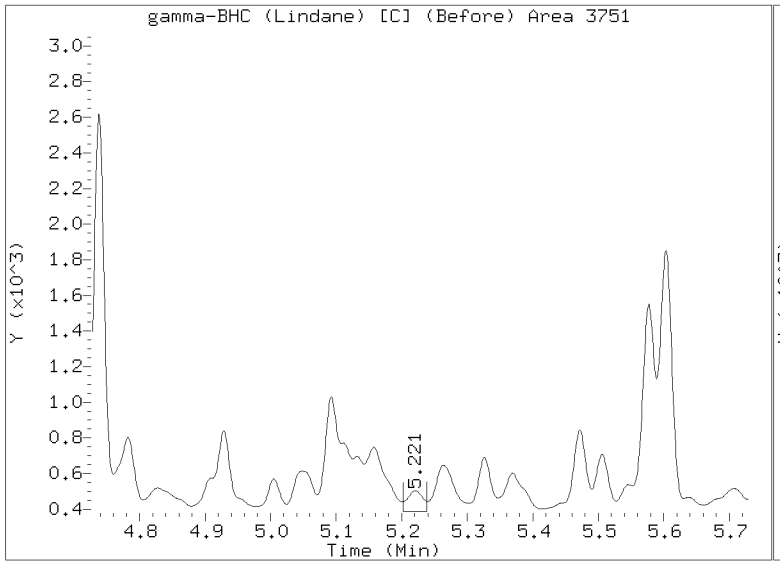


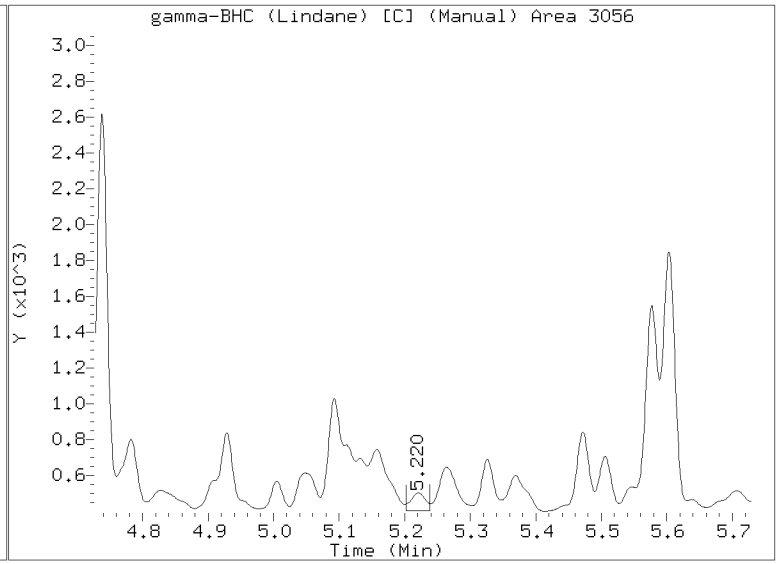
Manual Peak Adjustment Report, CLP-2

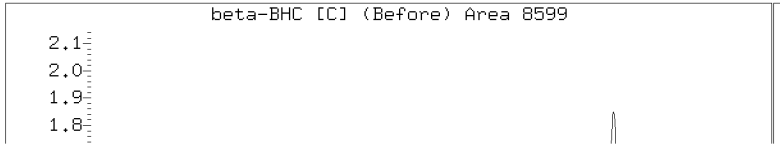
Datafile: /20230131.b/B20230131.b/23013172.D
Injection Date: 01-FEB-2023 12:02
Lab ID:23A0134-10 Client ID:

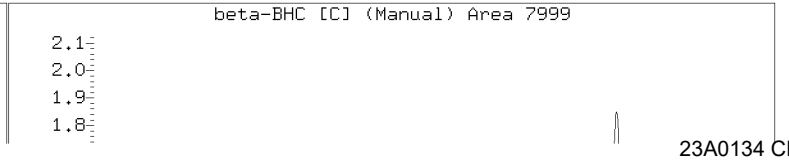












Manual Peak Adjustment Report, CLP-2

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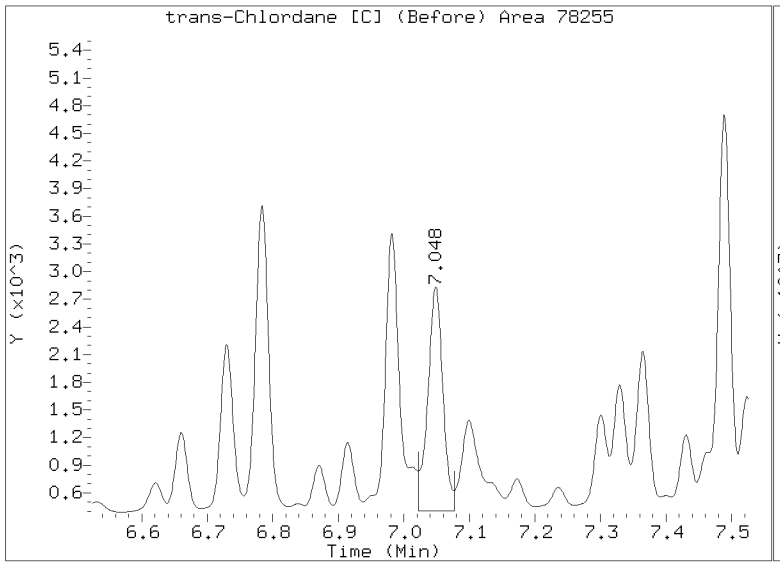
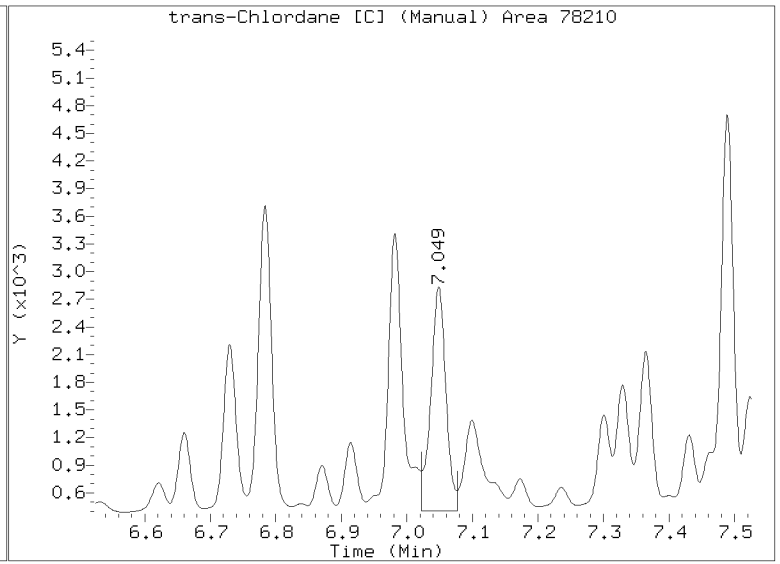
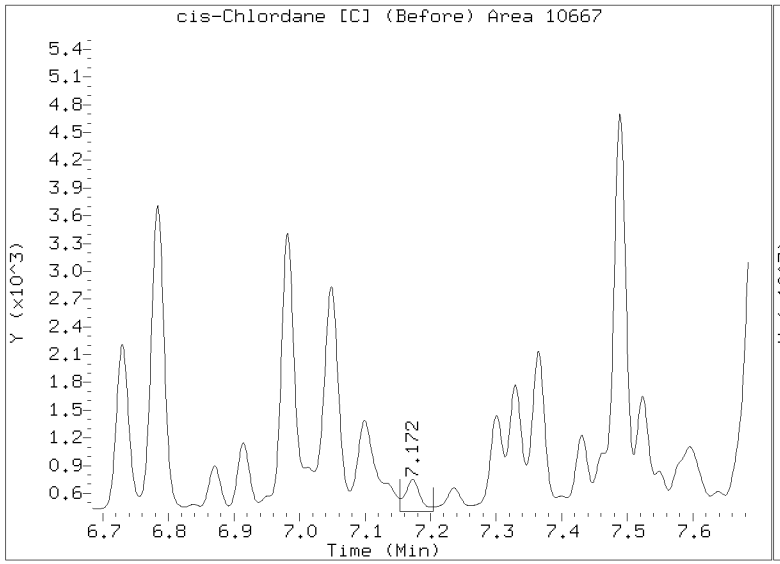
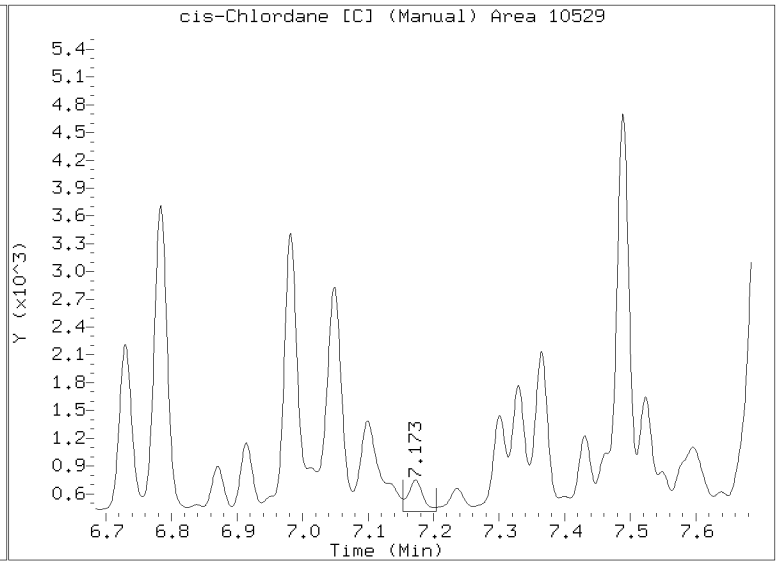
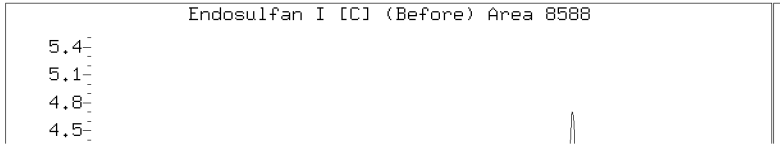
Injection Date: 01-FEB-2023 12:02
Lab ID:23A0134-10 Client ID:

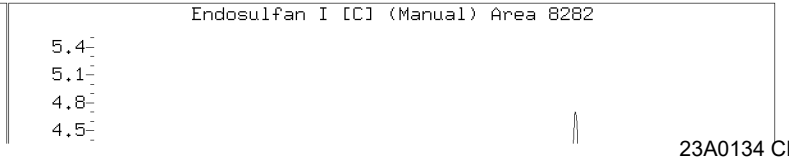












Manual Peak Adjustment Report, CLP-2

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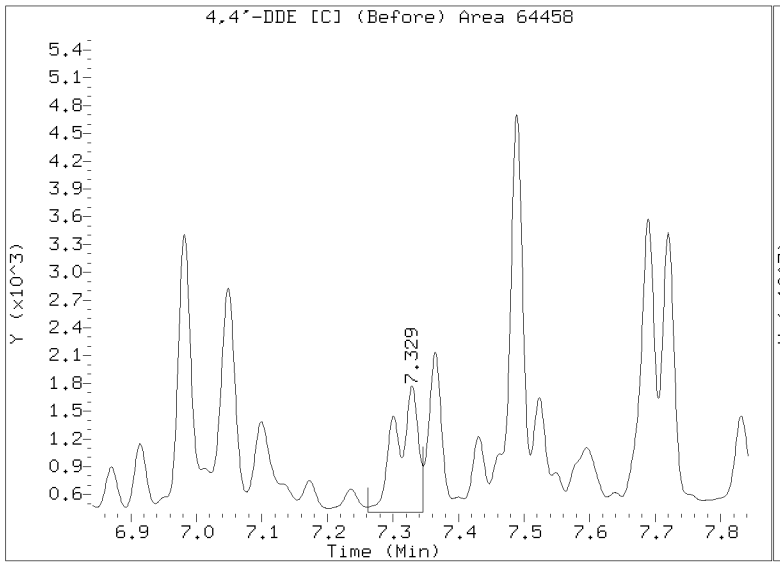
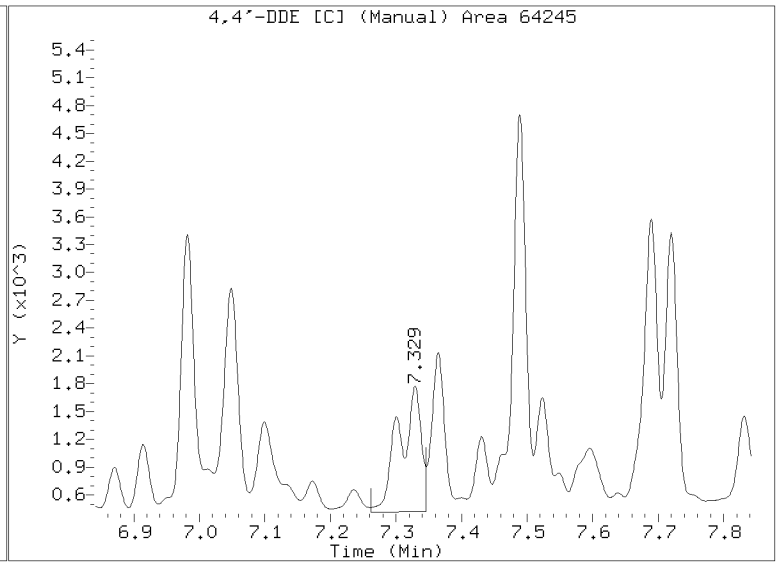
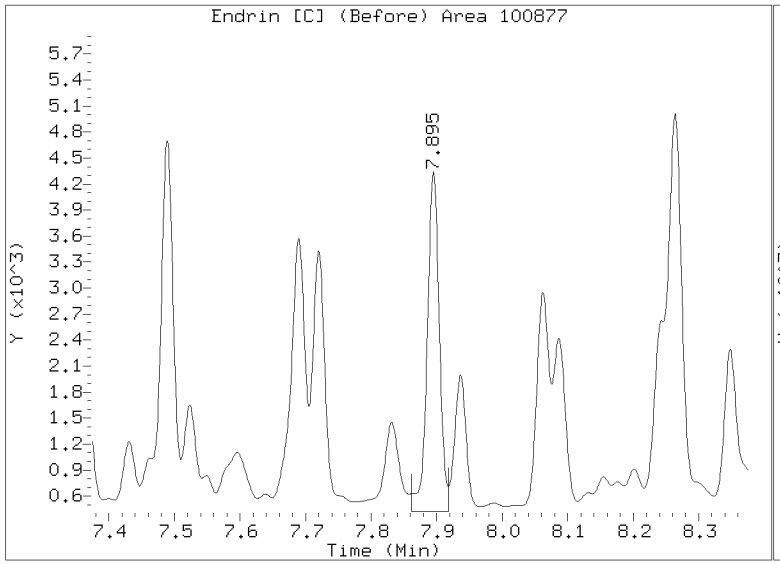
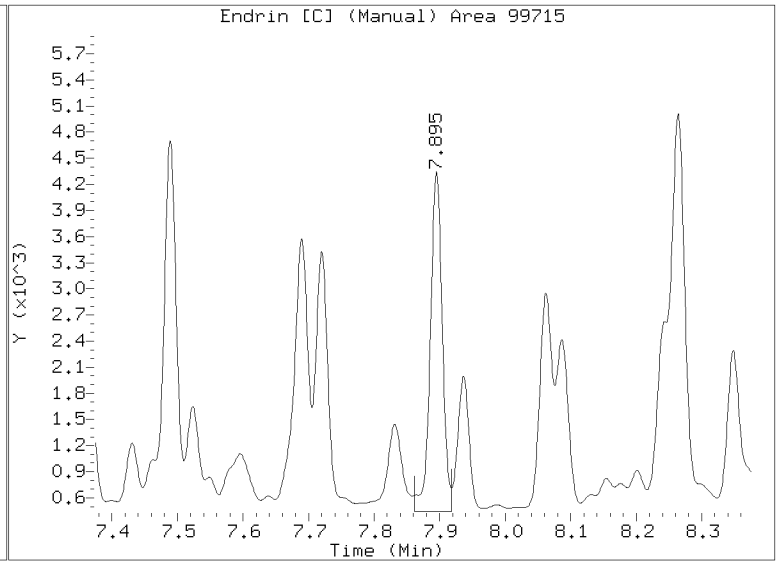
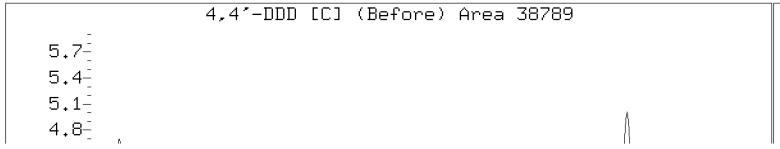
Lab ID:23A0134-10 Client ID:

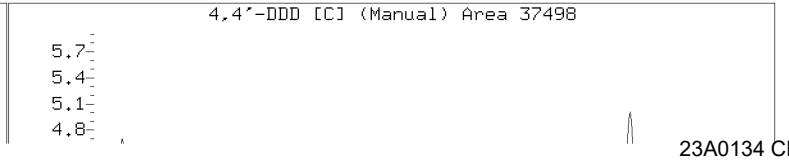












Manual Peak Adjustment Report, CLP-2

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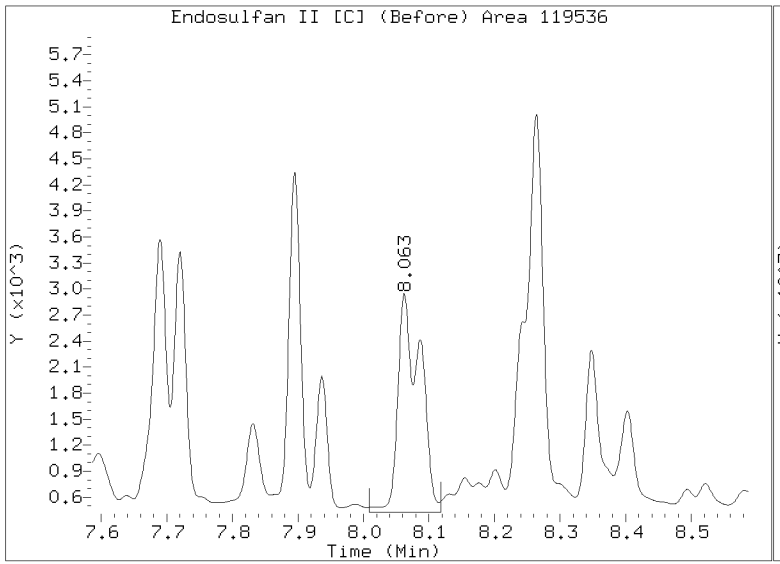
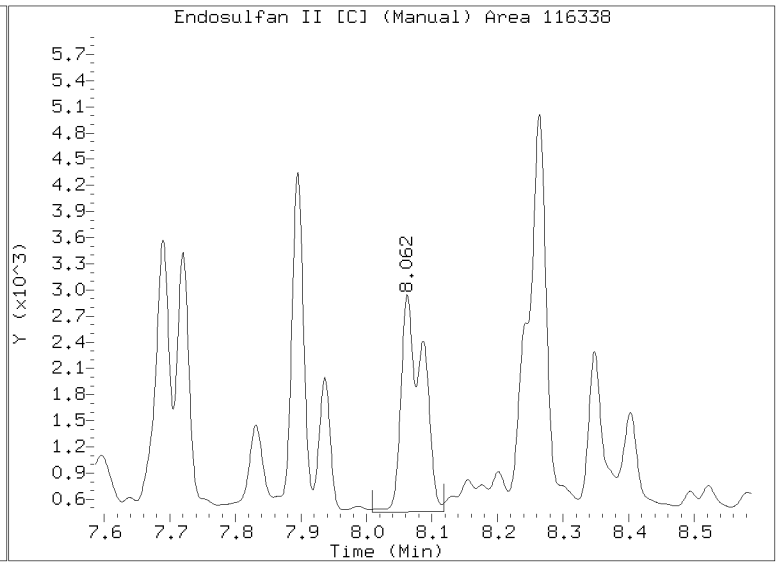
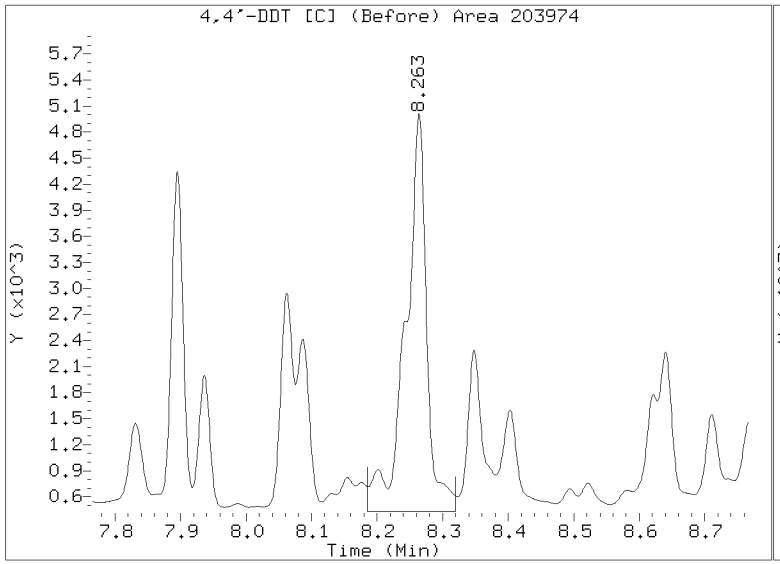
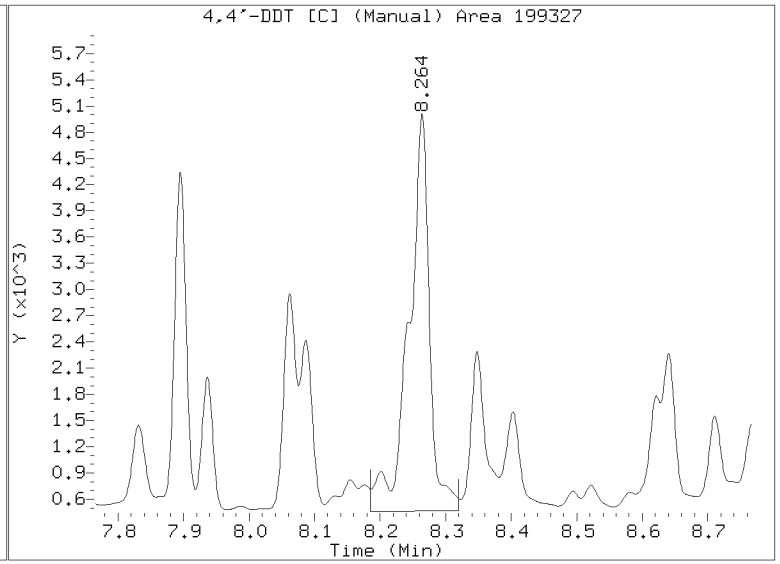
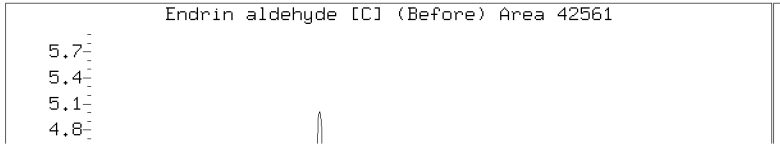
Lab ID:23A0134-10 Client ID:

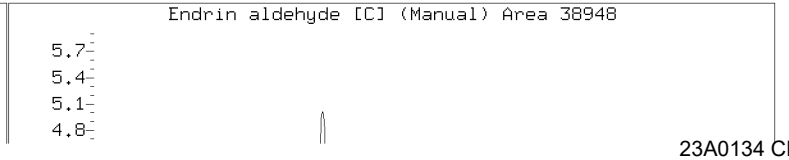












Manual Peak Adjustment Report, CLP-2

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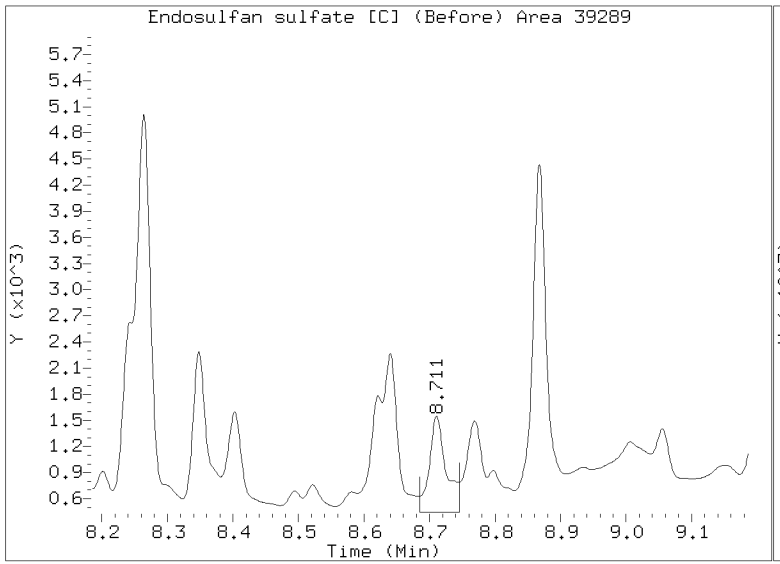
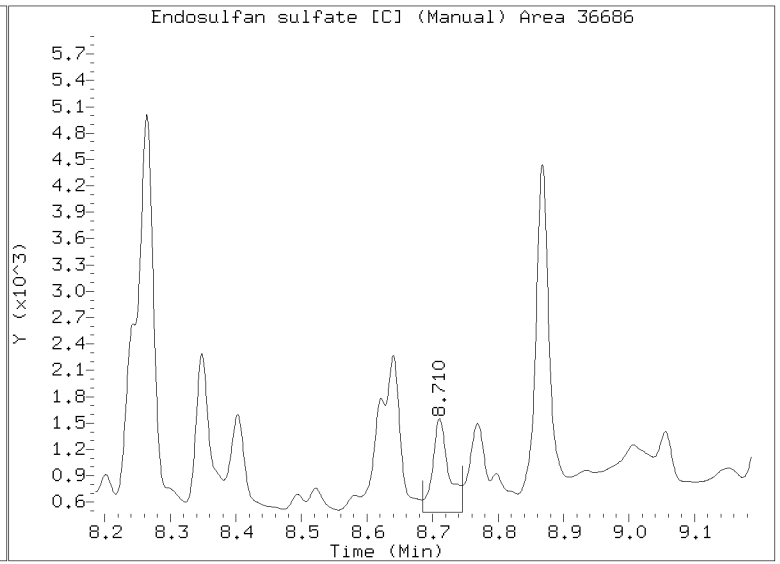
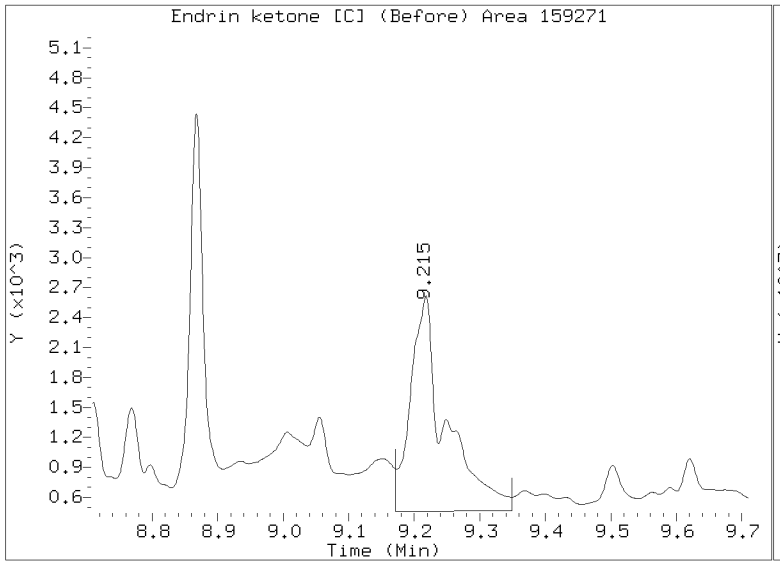
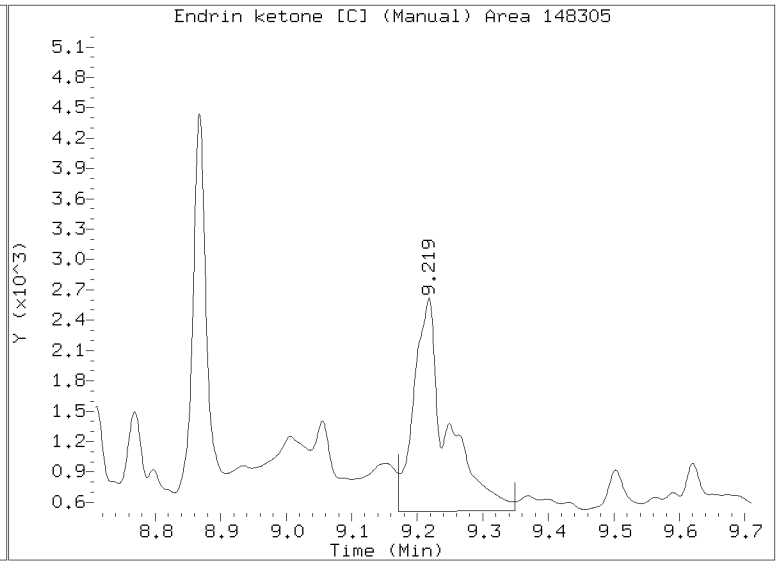
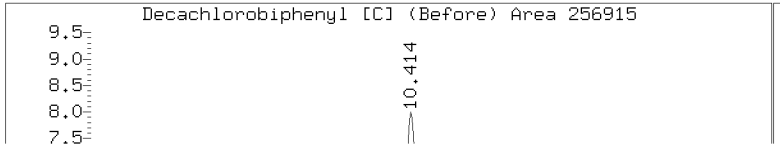
Lab ID:23A0134-10 Client ID:

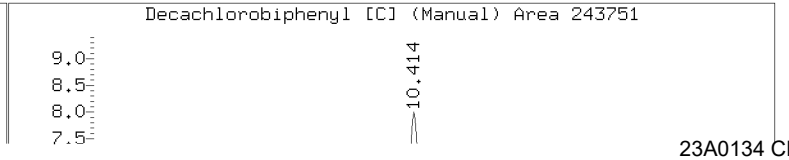












Manual Peak Adjustment Report, CLP-2

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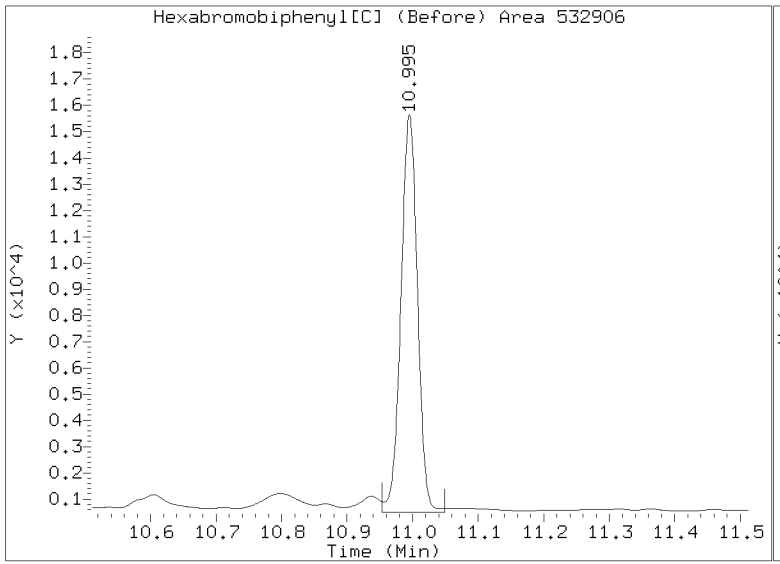
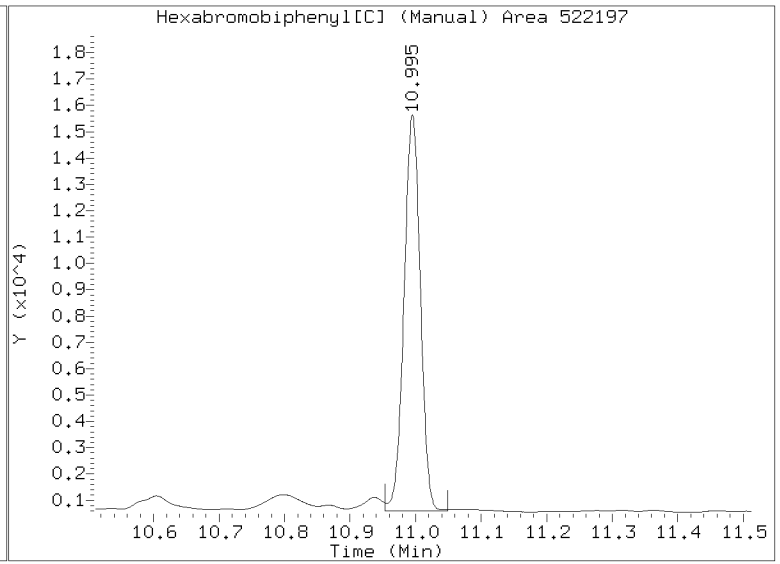
Lab ID:23A0134-10 Client ID:





Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1123

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-11 C	File ID:	23013173.D
Sampled:	01/06/23 13:29	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 12:20
% Solids:	51.95	Preparation:	EPA 3546 (Microwave)	Initial/Final:	24.69 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.49	0.14	0.49	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.7964*	*8.53*	*109*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.7964*	*8.08*	*104*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.7964*	*6.41*	*82.2*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.7964*	*5.92*	*75.9*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013173.D
Data file 2: /20230131.b/B20230131.b/23013173.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0134-11
Client ID:
Injection Date: 01-FEB-2023 12:20
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.323	0.013	29114	4.844	0.011	4073	3.34	0.28	169.3*	alpha-BHC
4.684	-0.009	4735	5.327	0.017	10897	1.41	1.95	32.4	beta-BHC
4.881	0.005	66197	----			9.28	0.00	---	delta-BHC
4.611	-0.001	17351	5.219	-0.010	3755	2.29	0.30	153.5*	gamma-BHC (Lindane)
5.076	-0.016	16358	5.758	0.003	32842	2.43	2.91	18.1	Heptachlor
5.430	0.016	52475	----			6.96	0.00	---	Aldrin
6.071	-0.017	22574	----			3.45	0.00	---	Heptachlor epoxide b
----			7.236	-0.021	10163	0.00	1.08	---	Endosulfan I
6.768	-0.023	82916	----			12.86	0.00	---	Dieldrin
6.442	-0.010	95547	7.330	-0.012	103514	15.96	10.89	37.8	4,4'-DDE
7.061	0.019	192542	7.896	0.020	164191	37.57	22.11	51.8*	Endrin
7.301	0.023	13796	8.064	-0.023	208334	2.99	27.37	160.6*	Endosulfan II
----			7.937	-0.012	54050	0.00	7.48	---	4,4'-DDD
----			8.712	0.026	40102	0.00	6.00	---	Endosulfan sulfate
----			8.264	-0.003	352236	0.00	50.52	---	4,4'-DDT
7.903	0.025	26140	8.937	0.028	7462	12.64	2.42	135.8*	Methoxychlor
----			9.215	0.005	189630	0.00	26.27	---	Endrin ketone
7.725	0.019	42814	8.403	-0.016	48074	11.64	8.95	26.1	Endrin aldehyde
6.224	-0.006	10464	7.049	0.024	129295	1.57	12.18	154.2*	trans-Chlordane
6.392	0.016	55749	7.173	-0.012	9763	8.37	0.94	159.6*	cis-Chlordane
2.288	-0.016	17450	2.455	-0.027	76086	1.91	5.46	96.4*	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.799	-0.002	202710	4.191	-0.006	312716	32.88	30.35	8.0	Tetrachloro-m-xylene
9.315	-0.004	173256	10.415	-0.014	239293	43.74	41.46	5.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

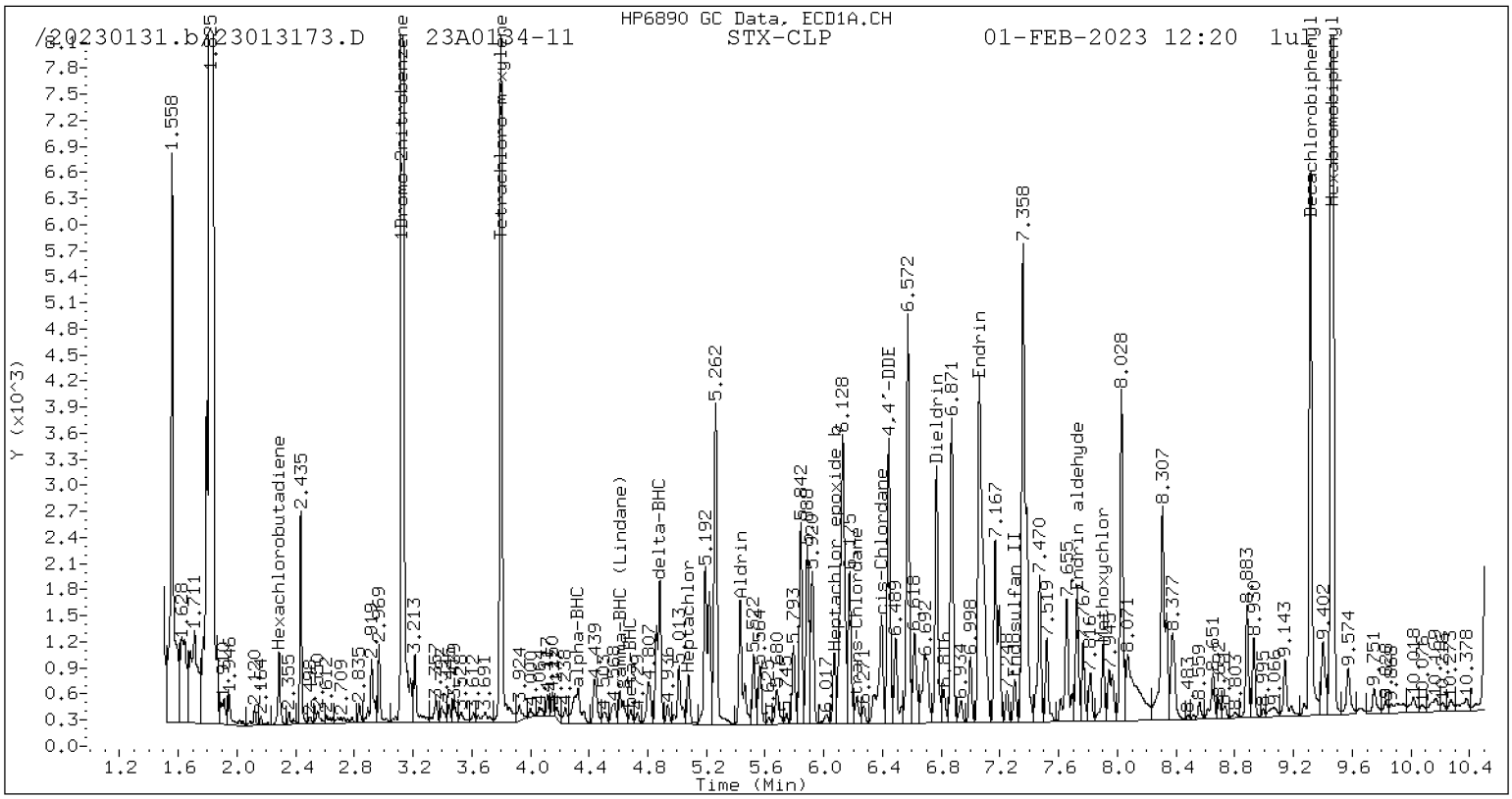
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	453287	-32.6
Hexabromobiphenyl	609723	390888	-35.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	731947	-27.3
Hexabromobiphenyl	769764	522273	-32.2

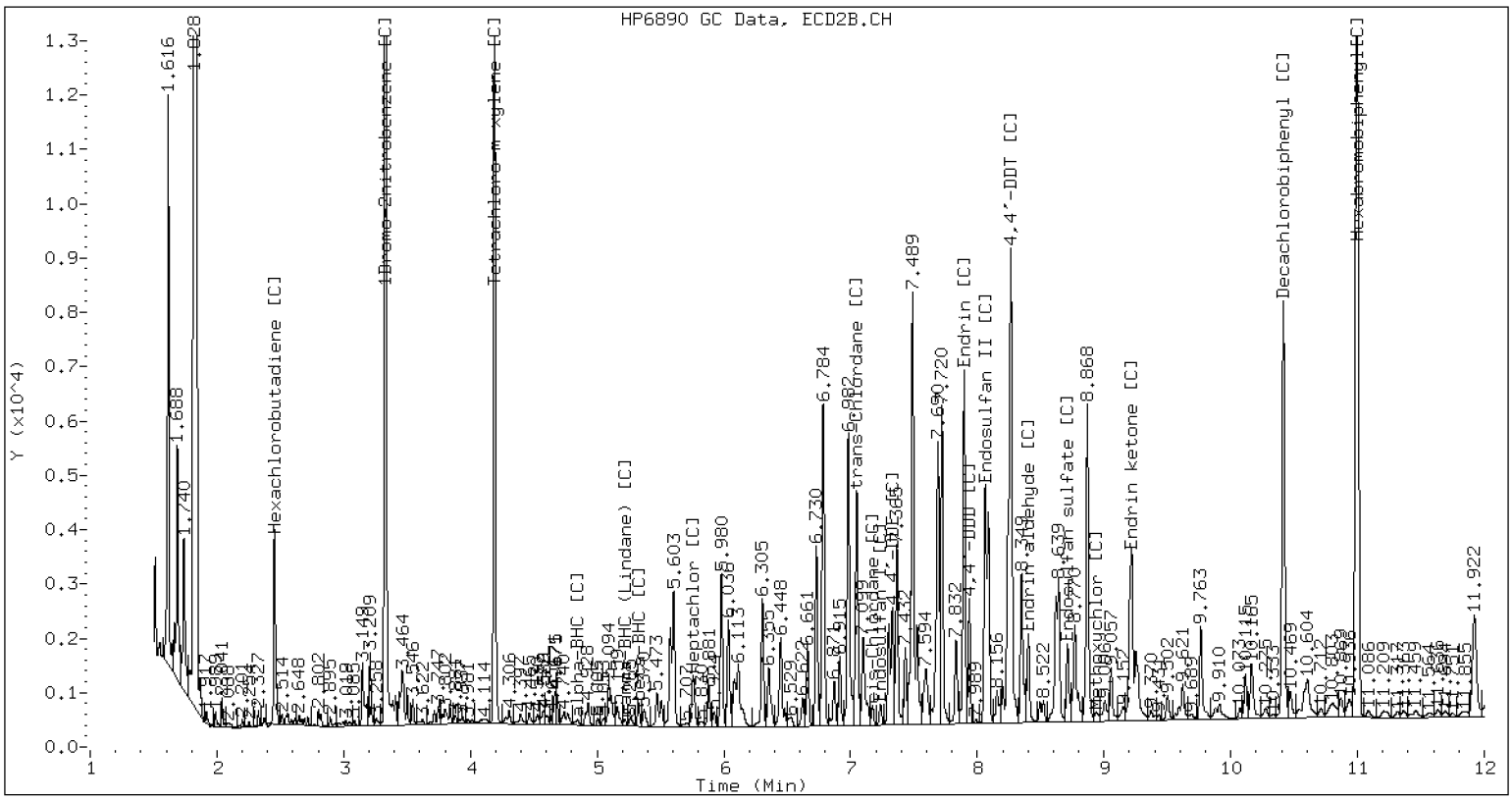
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230131.b/B20230131.b/23013173.D 23A0134-11 CLP2



CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, CLP-2

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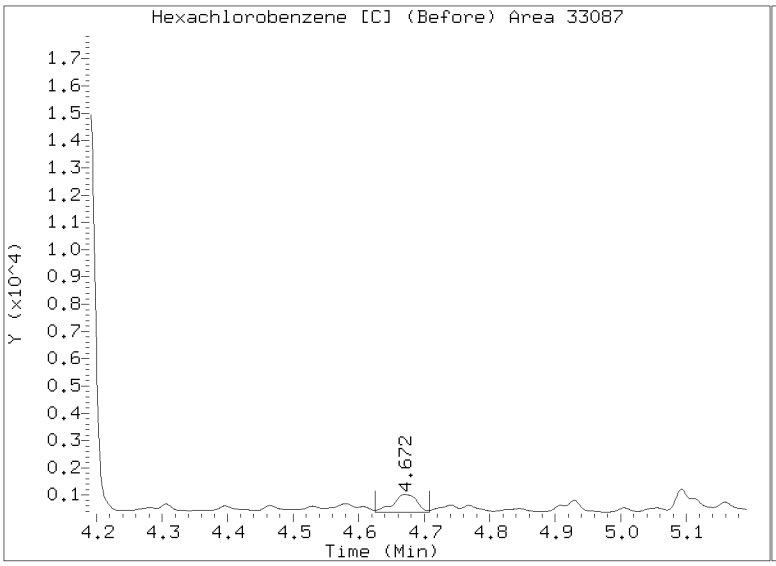
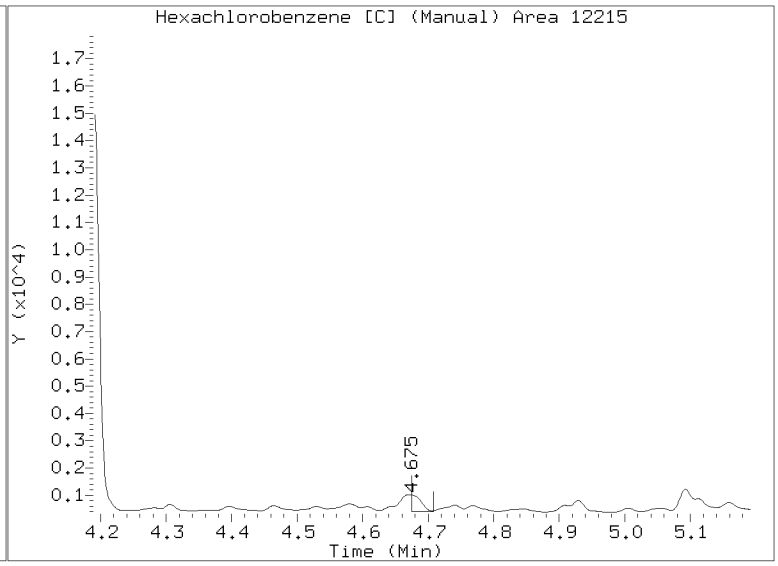
Injection Date: 01-FEB-2023 12:20
Lab ID:23A0134-11 Client ID:





Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1116

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-12 C	File ID:	23013174.D
Sampled:	01/06/23 13:44	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 12:38
% Solids:	58.81	Preparation:	EPA 3546 (Microwave)	Initial/Final:	21.26 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9981*	*8.37*	*105*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9981*	*8.28*	*103*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9981*	*5.72*	*71.5*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9981*	*5.90*	*73.8*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013174.D
Data file 2: /20230131.b/B20230131.b/23013174.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0134-12
Client ID:
Injection Date: 01-FEB-2023 12:38
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2			
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD		Compound/Flag
4.300	-0.010	51707	4.822	-0.011	11730	2.98	0.43	149.7*		alpha-BHC N
----			5.325	0.016	6906	0.00	0.66	---		beta-BHC
4.878	0.003	39239	----			2.77	0.00	---		delta-BHC
4.610	-0.002	44412	5.213	-0.016	3210	2.95	0.14	182.1*		gamma-BHC (Lindane) N
5.077	-0.015	11008	5.755	0.001	22077	0.82	1.05	24.2		Heptachlor N
5.428	0.014	31255	6.149	-0.009	21304	2.08	0.89	80.6*		Aldrin N
6.071	-0.018	14498	6.839	0.024	1855	1.12	0.09	169.1*		Heptachlor epoxide b
----			7.236	-0.021	8670	0.00	0.50	---		Endosulfan I
6.768	-0.023	55666	7.524	-0.027	43052	4.34	2.23	64.5*		Dieldrin N
6.441	-0.010	61210	7.330	-0.012	39508	5.14	2.23	79.1*		4,4'-DDE N
7.061	0.020	135933	7.896	0.020	109143	14.61	7.89	59.7*		Endrin N
7.300	0.022	7330	8.063	-0.024	73523	0.87	5.18	142.2*		Endosulfan II N
----			7.937	-0.012	45136	0.00	3.35	---		4,4'-DDD
----			8.710	0.024	43002	0.00	3.45	---		Endosulfan sulfate
----			8.264	-0.002	205373	0.00	15.81	---		4,4'-DDT
7.902	0.025	16859	----			4.49	0.00	---		Methoxychlor
----			9.217	0.007	116567	0.00	8.67	---		Endrin ketone
7.726	0.019	35572	8.404	-0.015	48020	5.32	4.80	10.3		Endrin aldehyde N
6.225	-0.005	10506	7.050	0.025	81962	0.80	4.14	135.5*		trans-Chlordane N
6.391	0.015	44042	7.173	-0.012	11365	3.33	0.59	140.0*		cis-Chlordane N
2.282	-0.021	9010	2.510	0.028	6997	0.50	0.27	59.3*		Hexachlorobutadiene
----			----			0.00	0.00	---		Hexachlorobenzene
3.797	-0.003	350224	4.189	-0.007	567655	28.59	29.53	3.2		Tetrachloro-m-xylene N
9.315	-0.004	301109	10.414	-0.015	445198	41.86	41.39	1.1		Decachlorobiphenyl N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

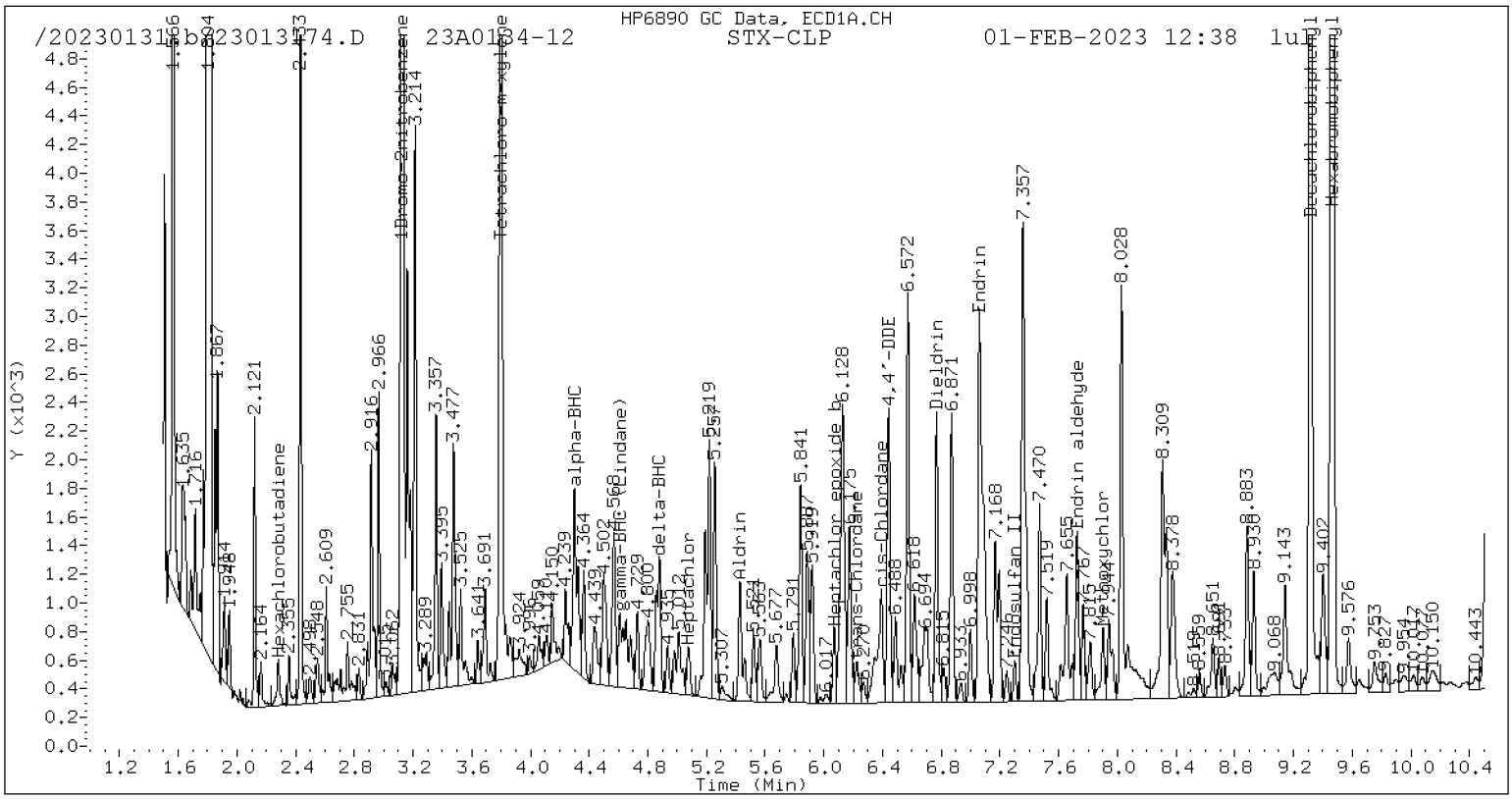
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	900885	34.0
Hexabromobiphenyl	609723	709847	16.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1365702	35.7
Hexabromobiphenyl	769764	973153	26.4

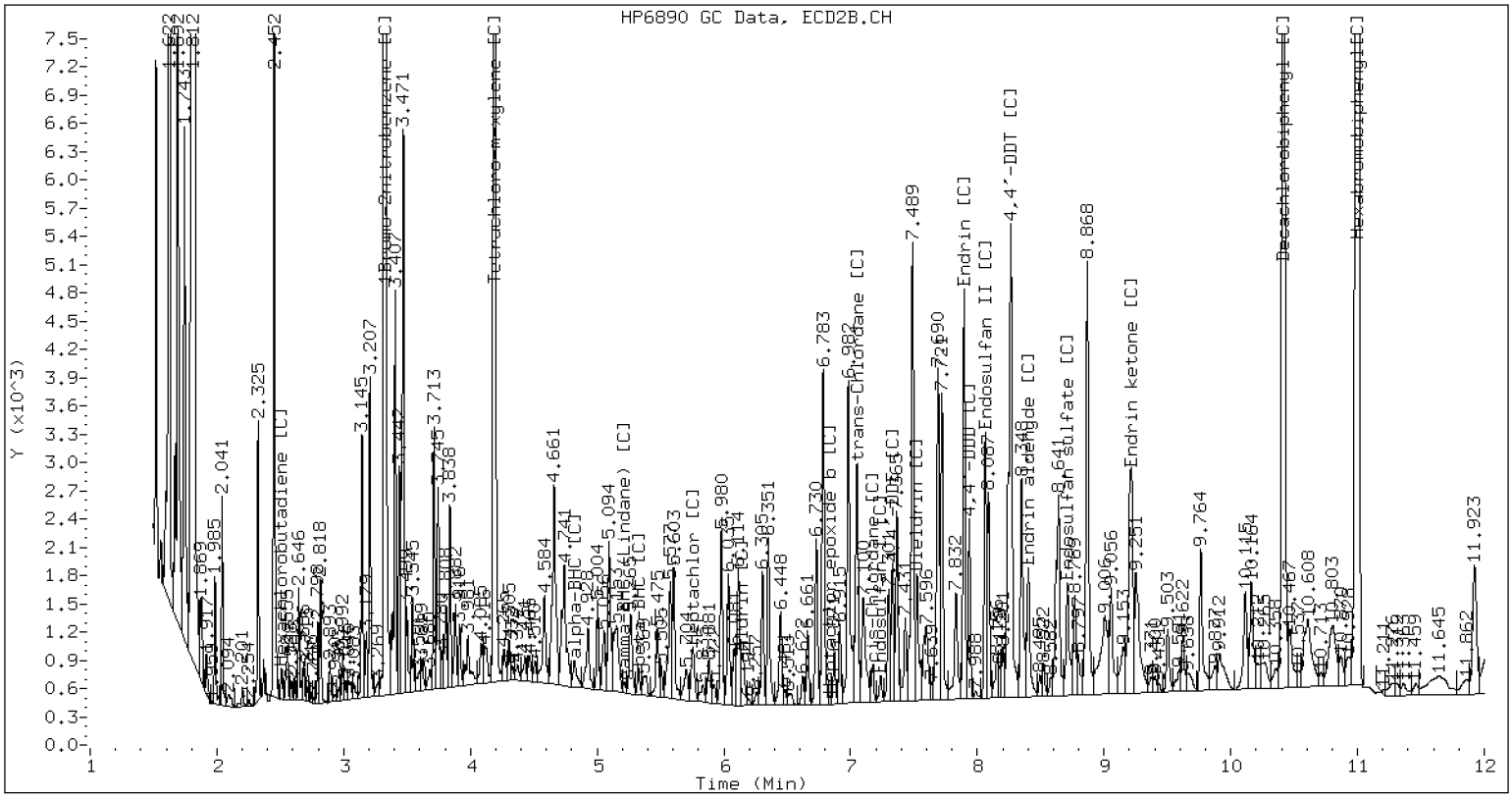
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230131.b/B20230131.b/23013174.D 23A0134-12 CLP2



CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, CLP-2

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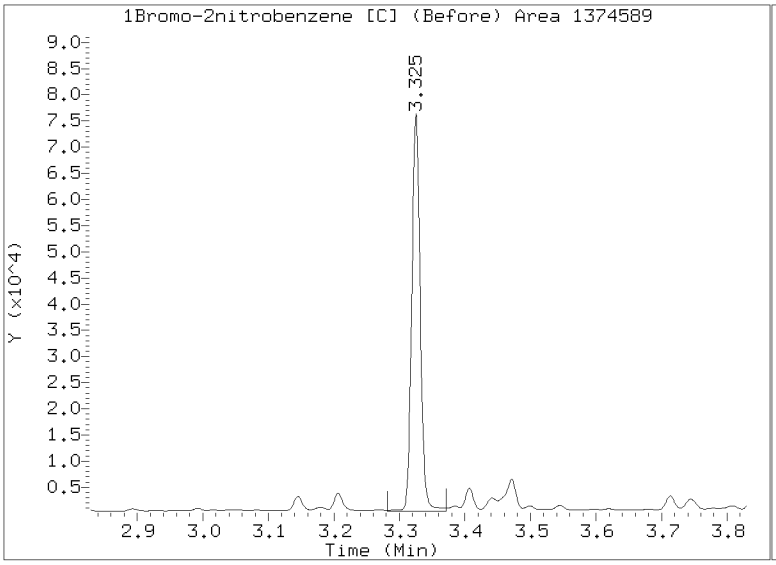
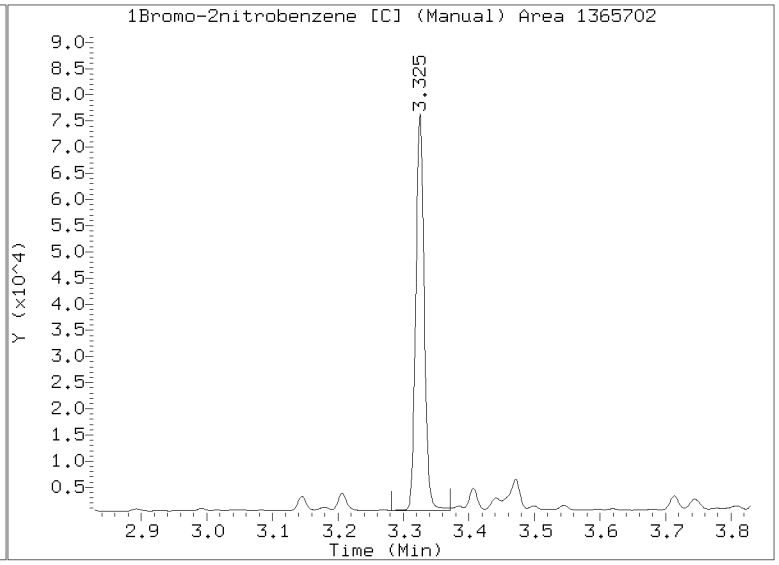
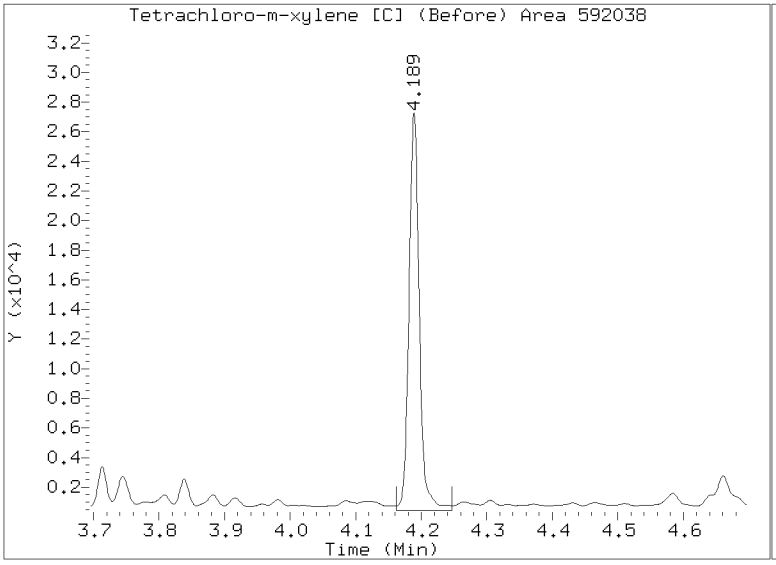
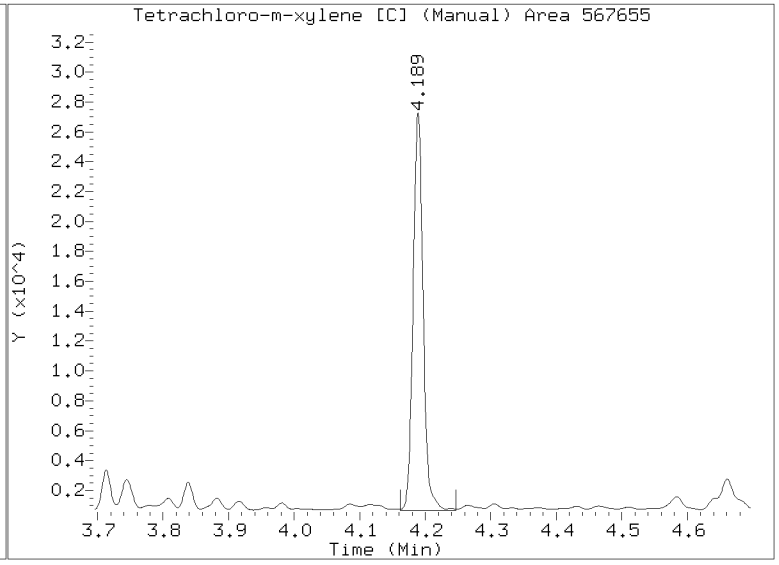
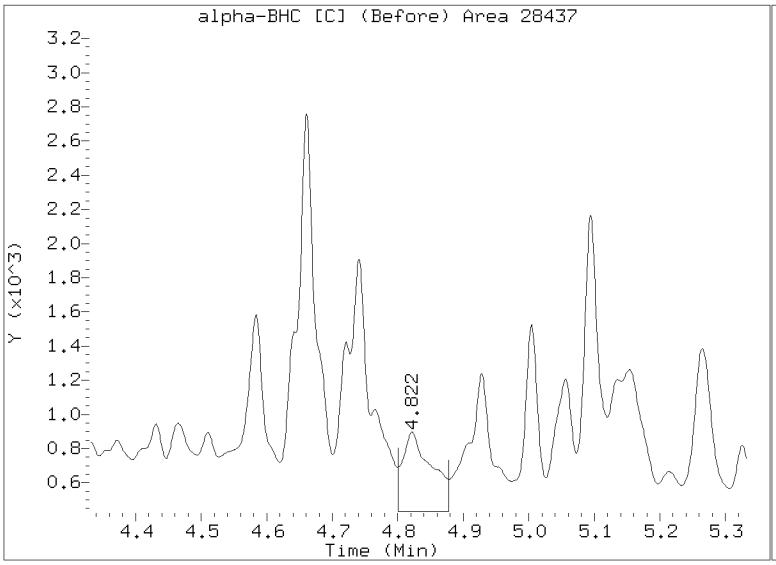
Lab ID:23A0134-12 Client ID:

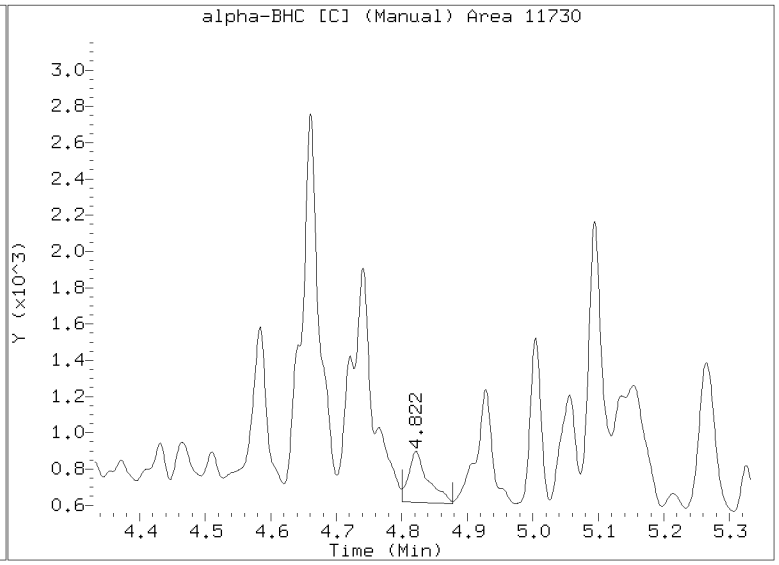












Manual Peak Adjustment Report, CLP-2

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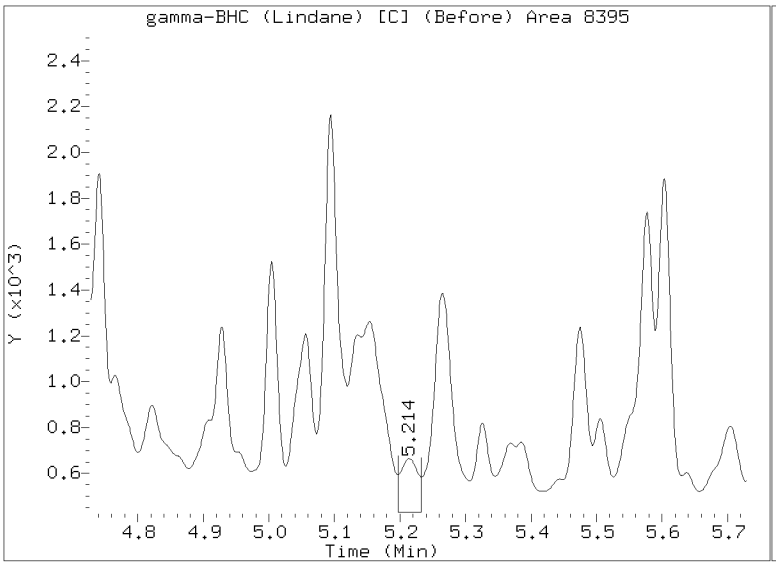
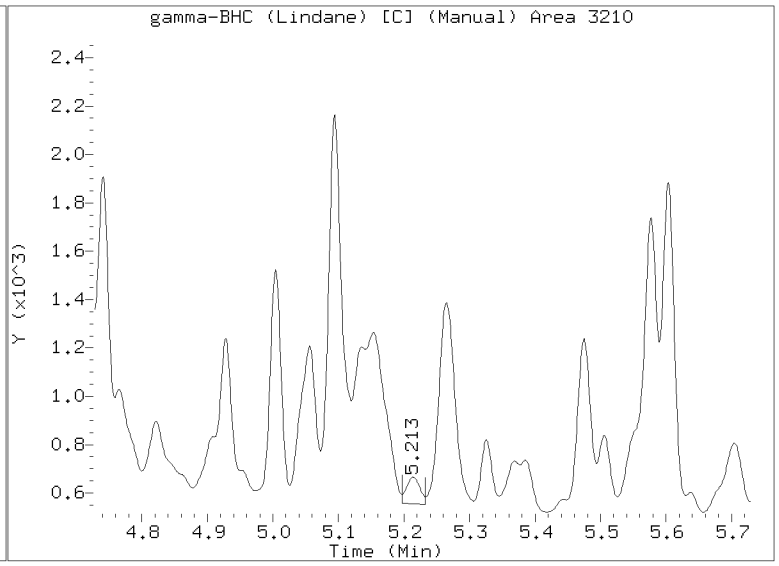
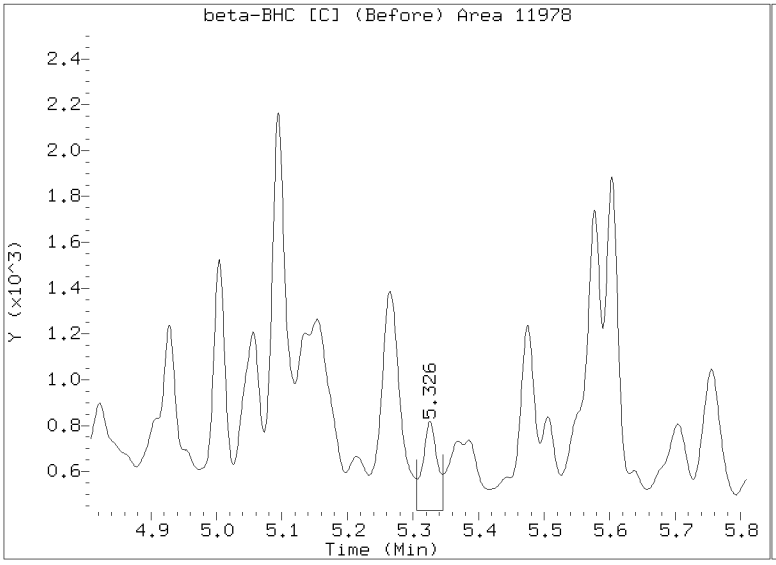
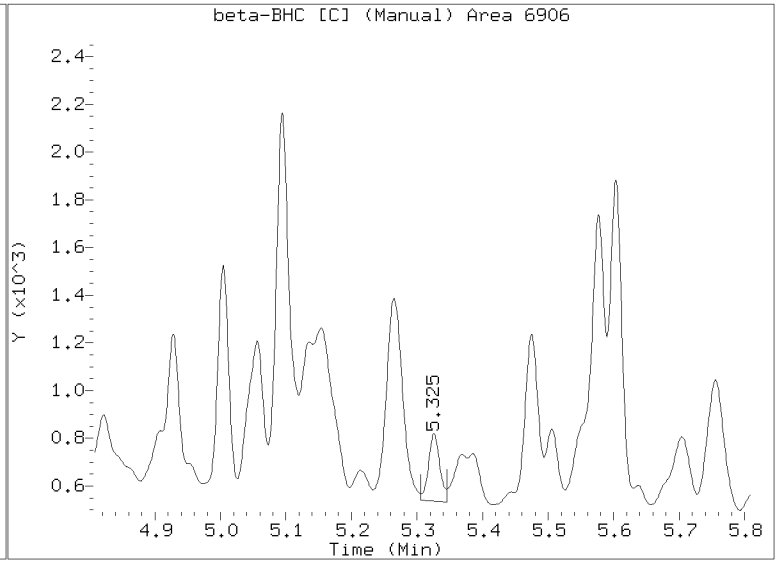
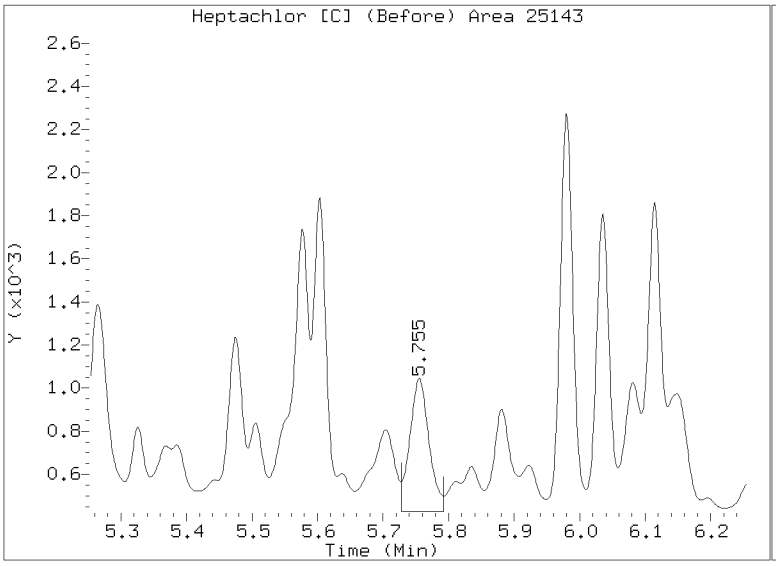
Lab ID:23A0134-12 Client ID:

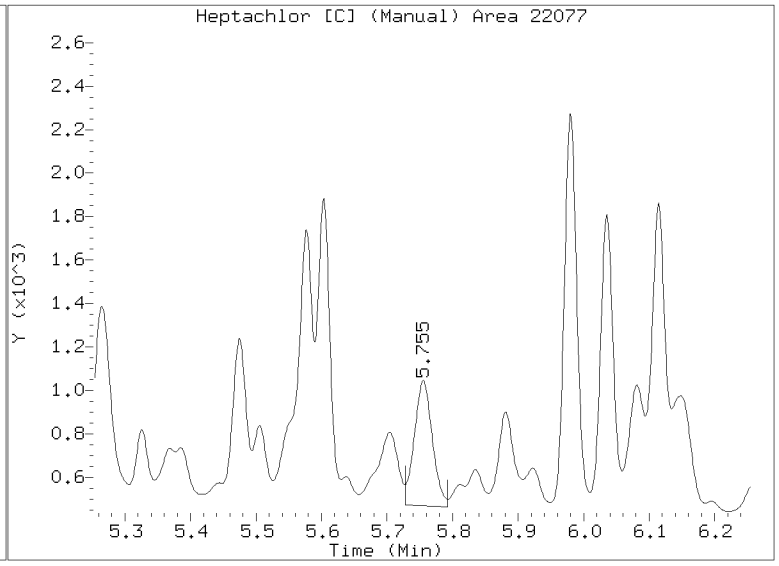












Manual Peak Adjustment Report, CLP-2

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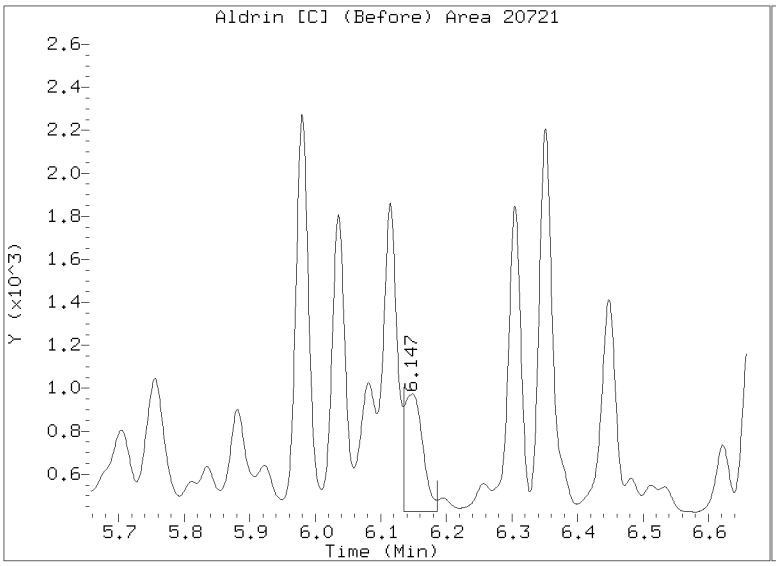

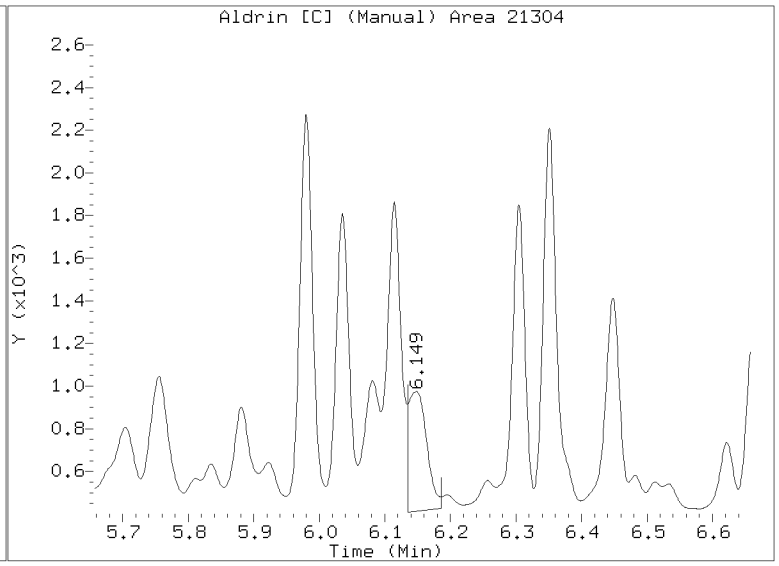

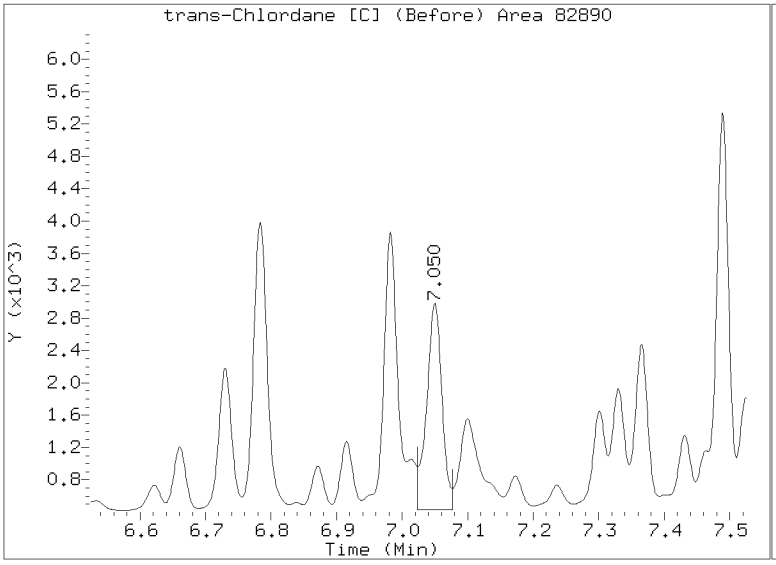

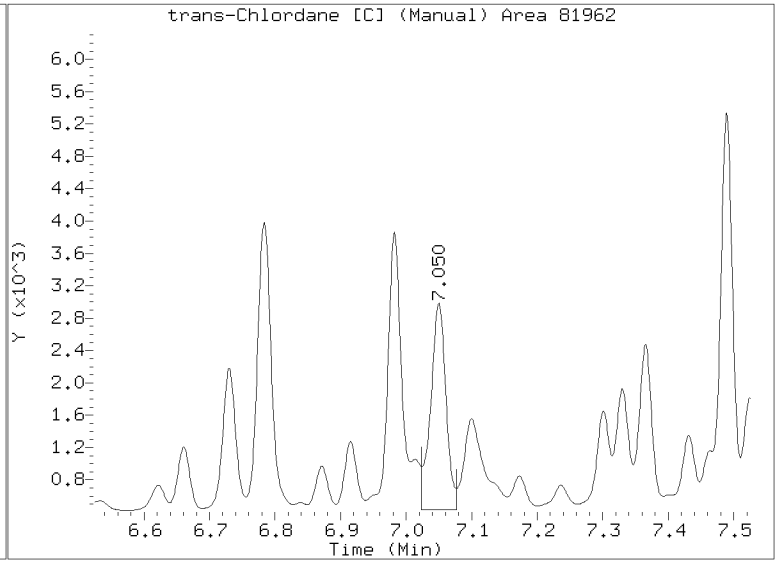

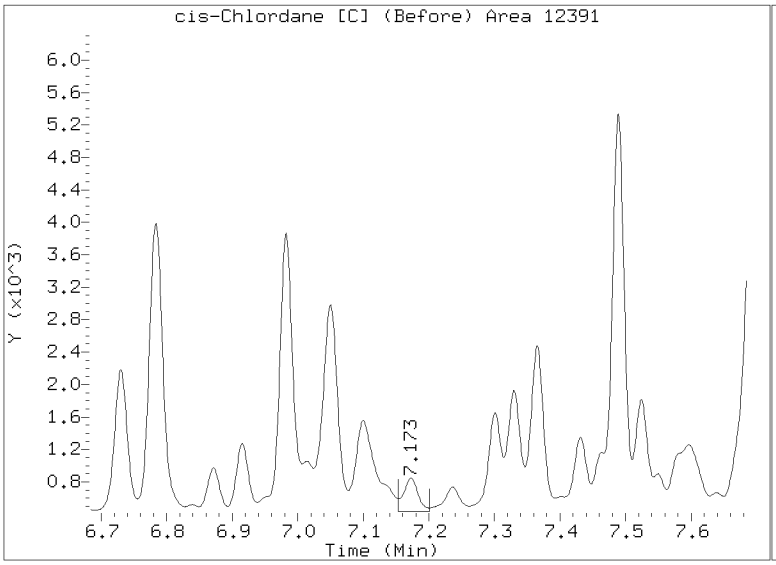

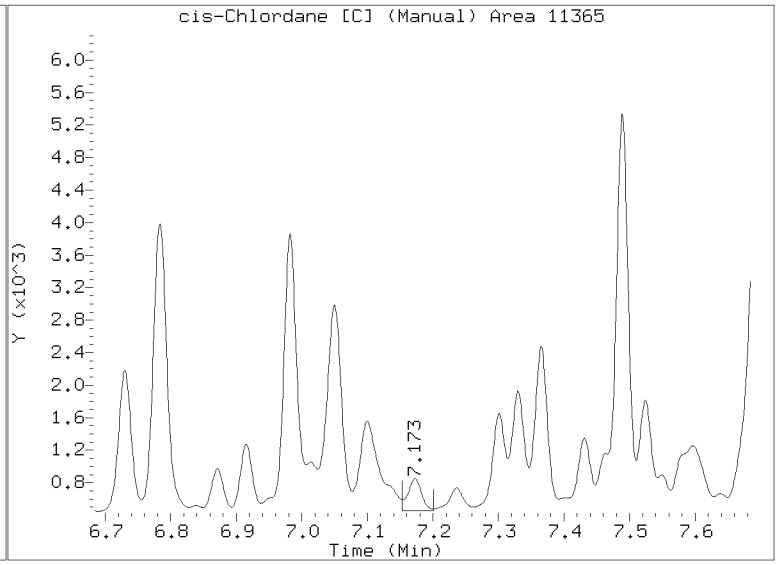

Manual Peak Adjustment Report, CLP-2

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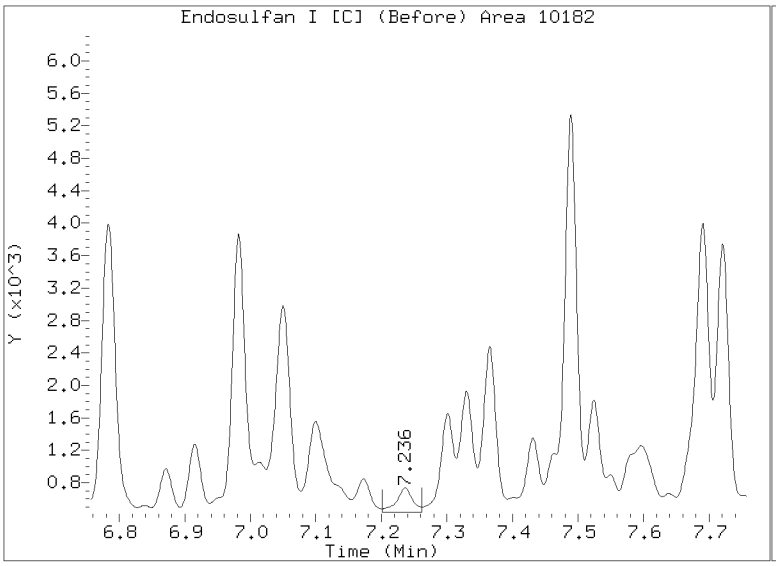

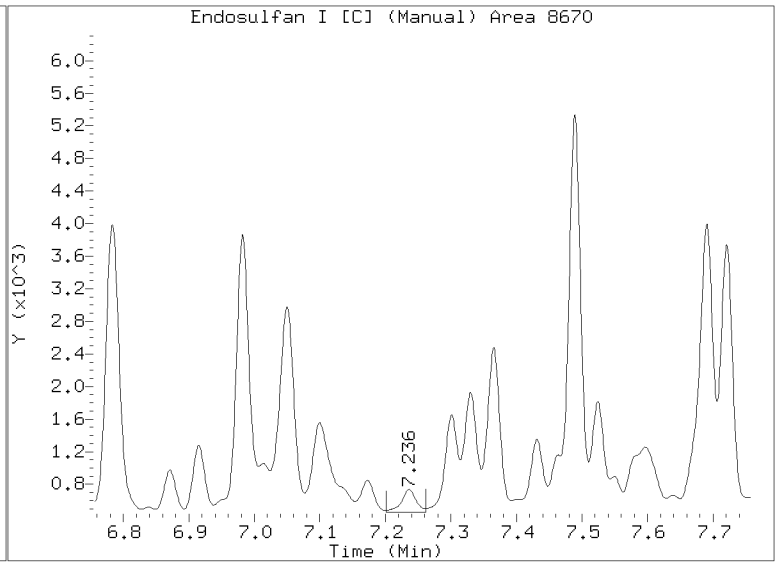

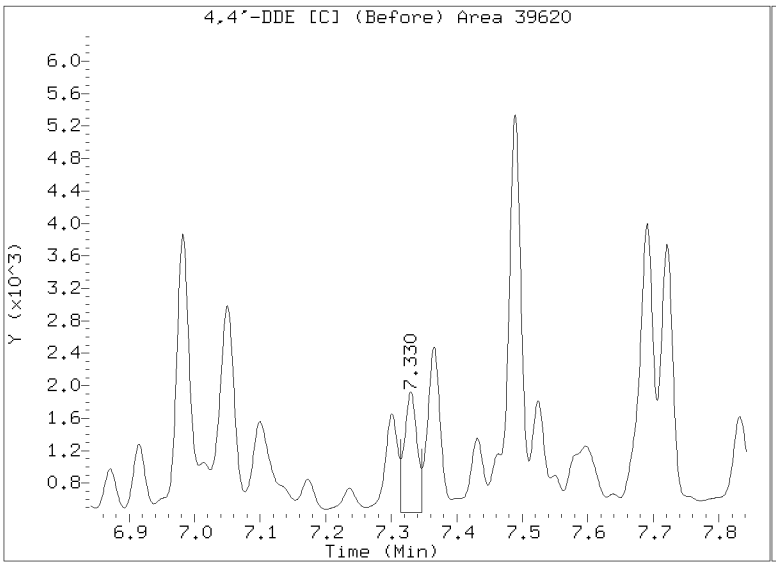

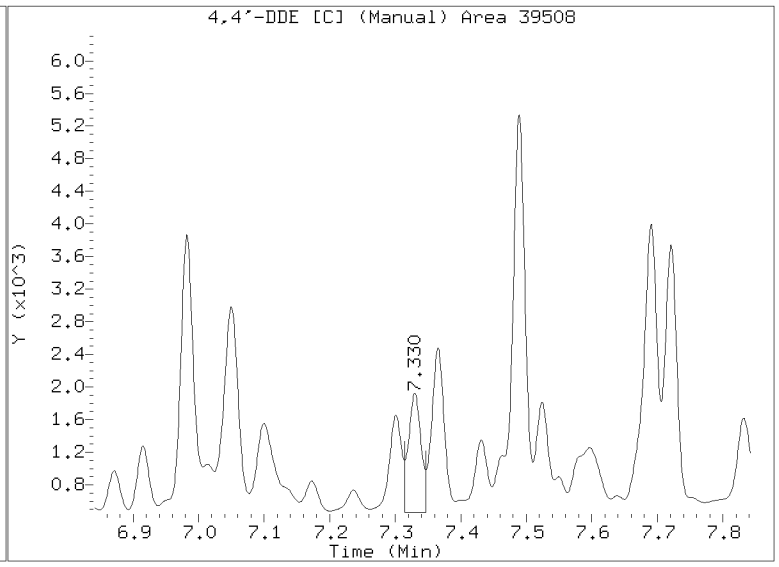

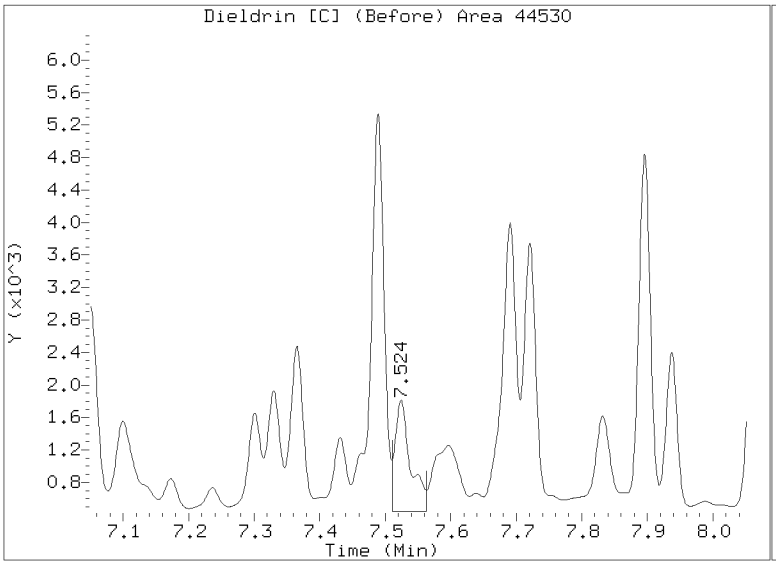

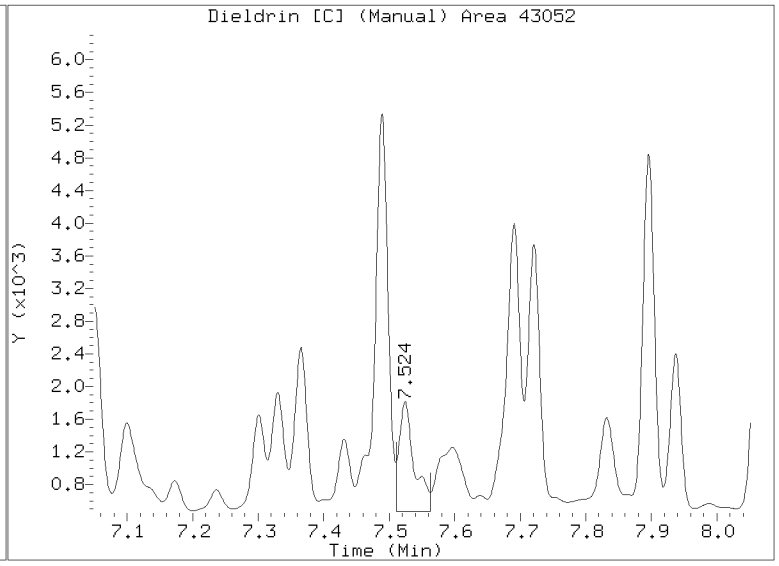

Manual Peak Adjustment Report, CLP-2

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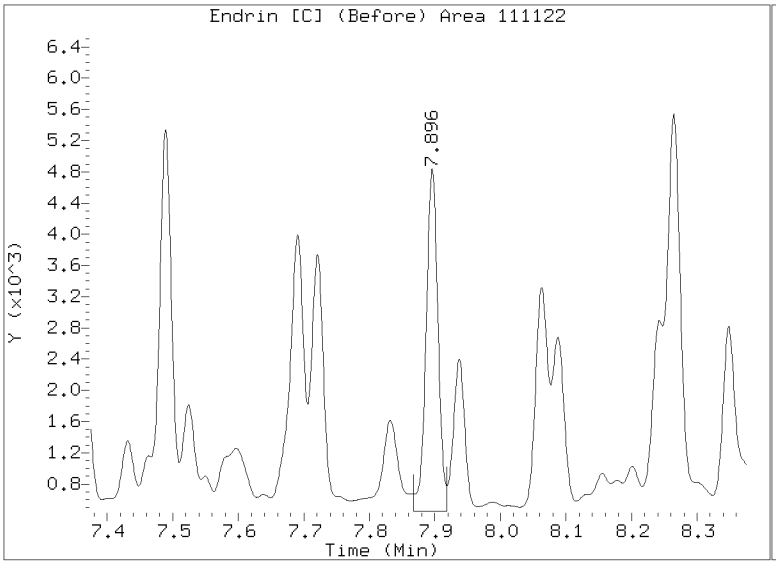
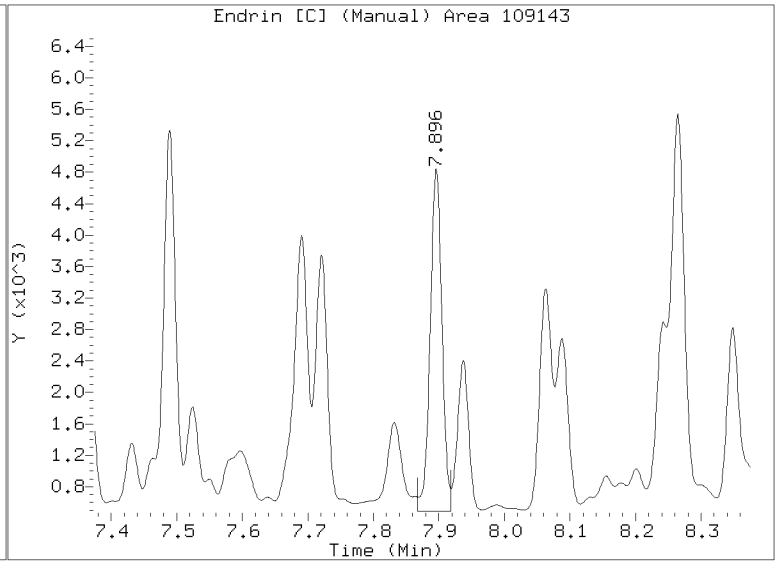
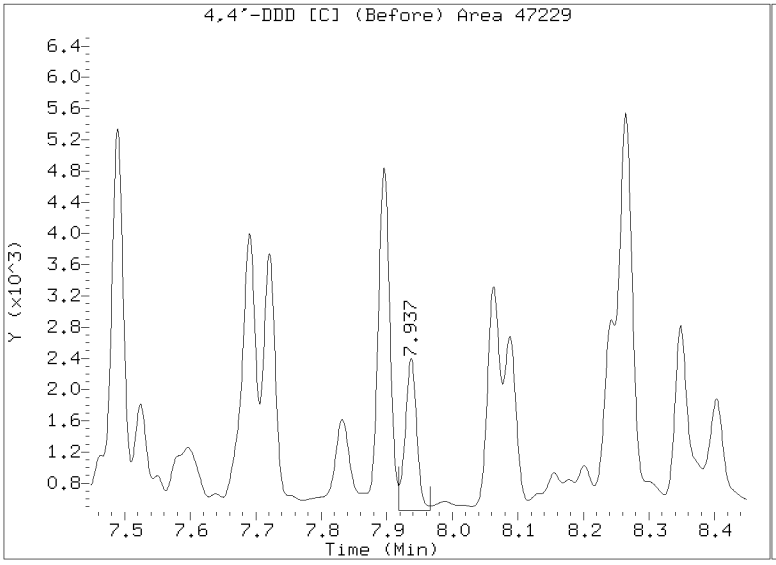
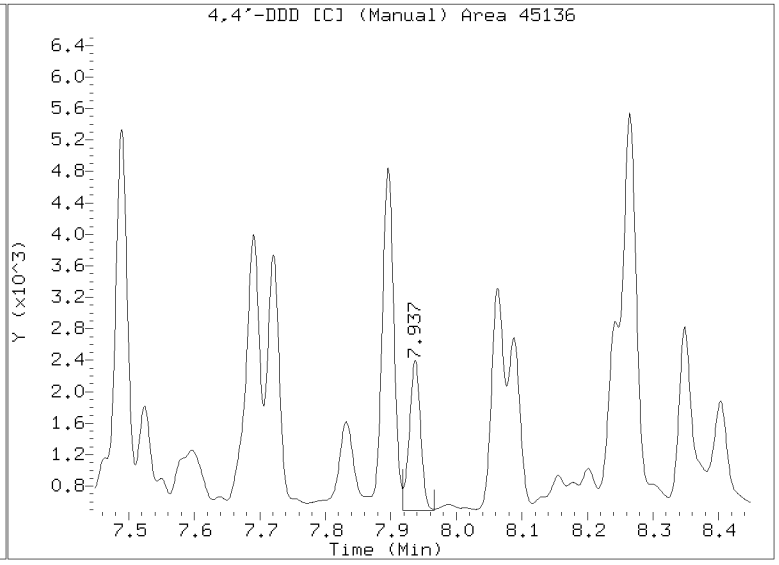
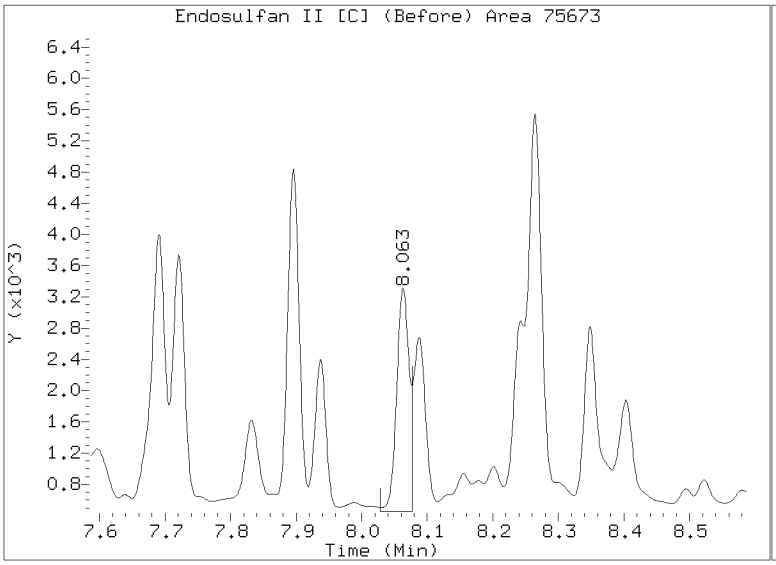
Lab ID:23A0134-12 Client ID:

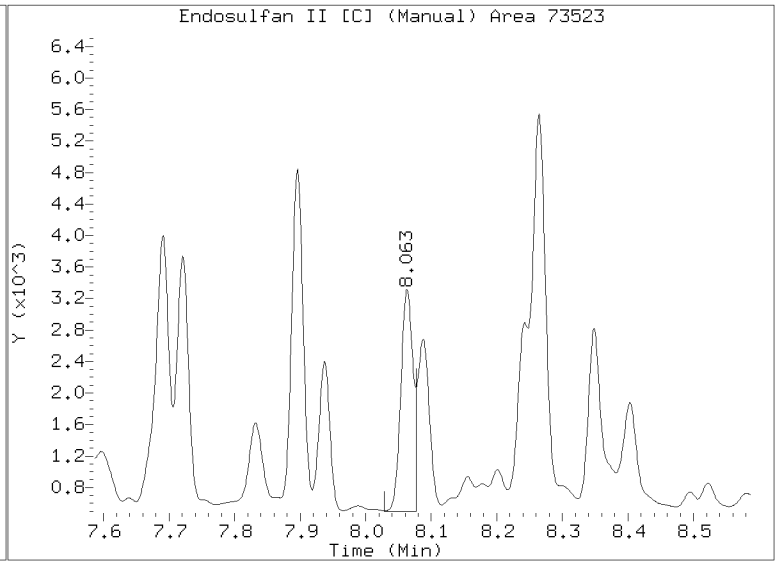












Manual Peak Adjustment Report, CLP-2

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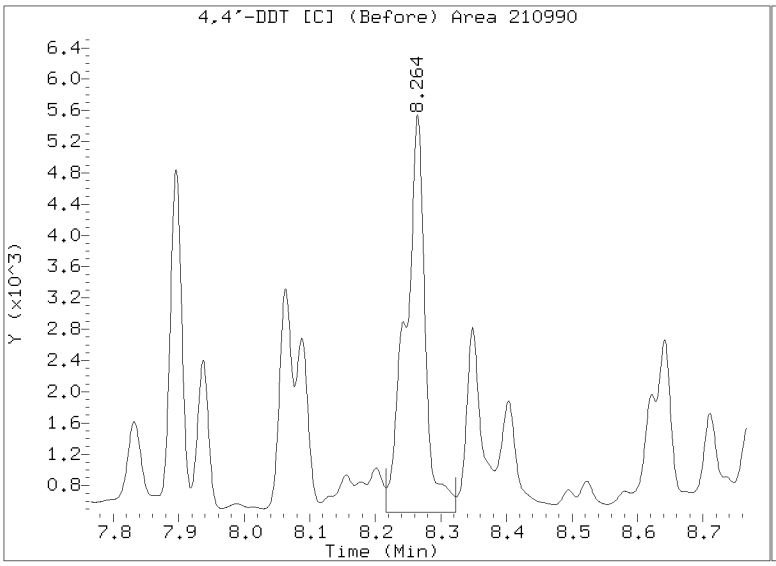

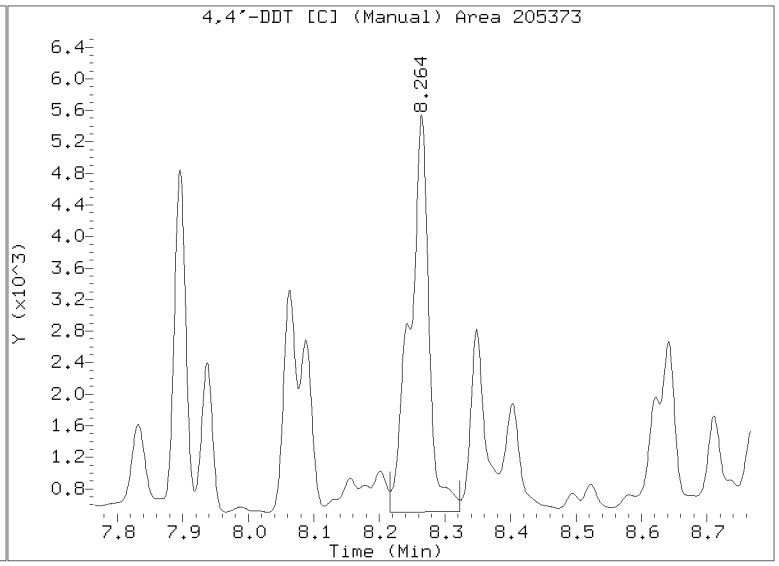

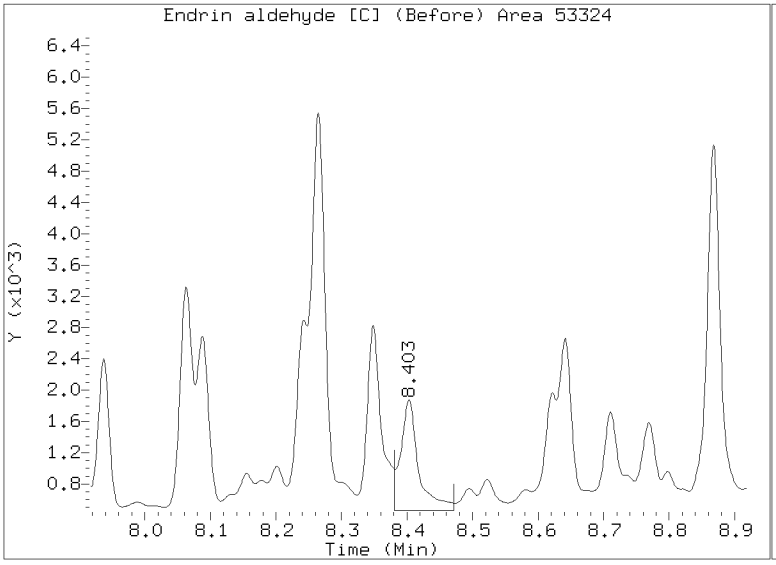

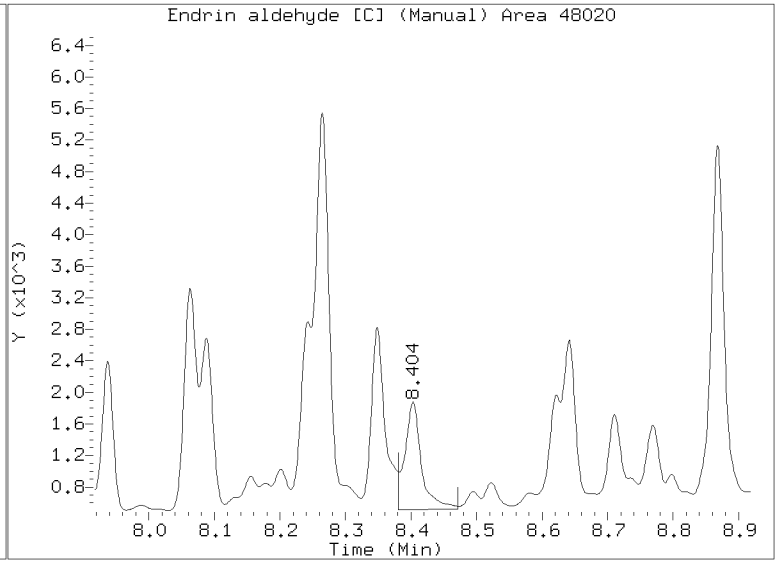

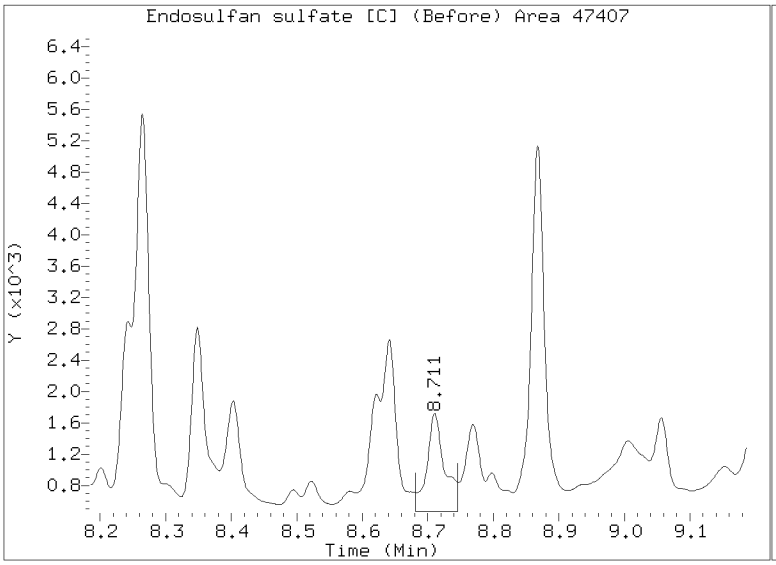

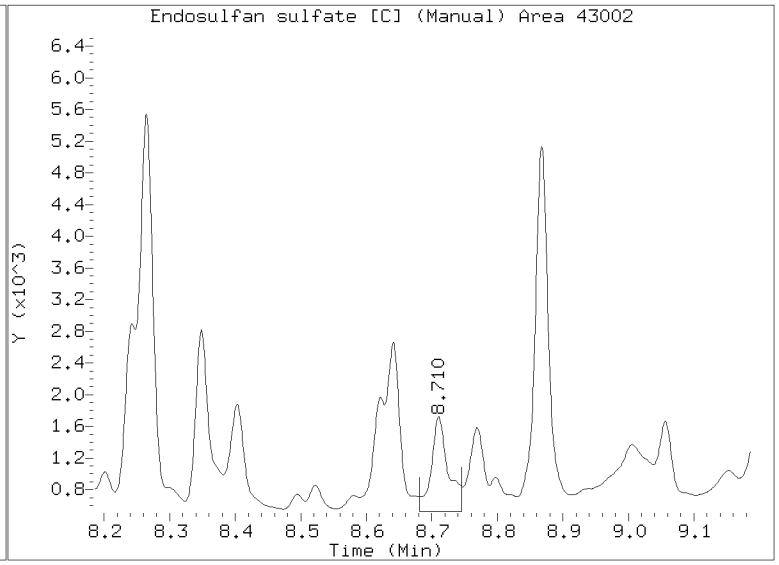

Manual Peak Adjustment Report, CLP-2

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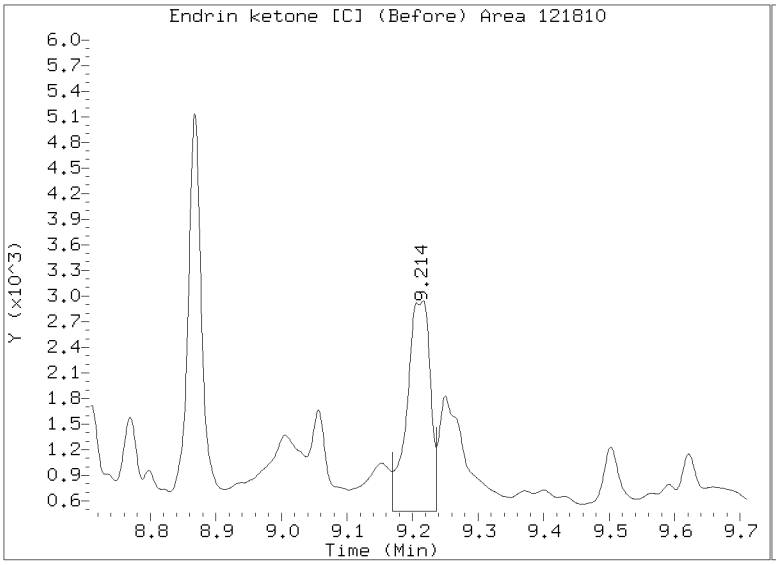
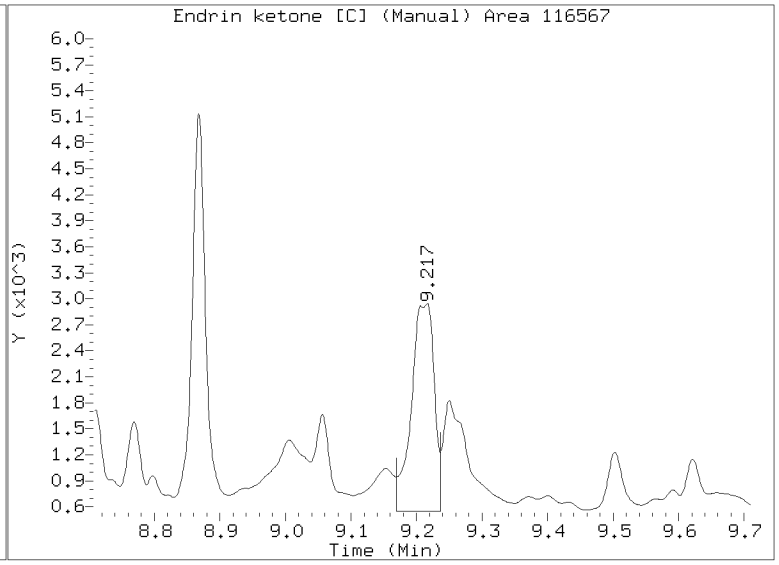
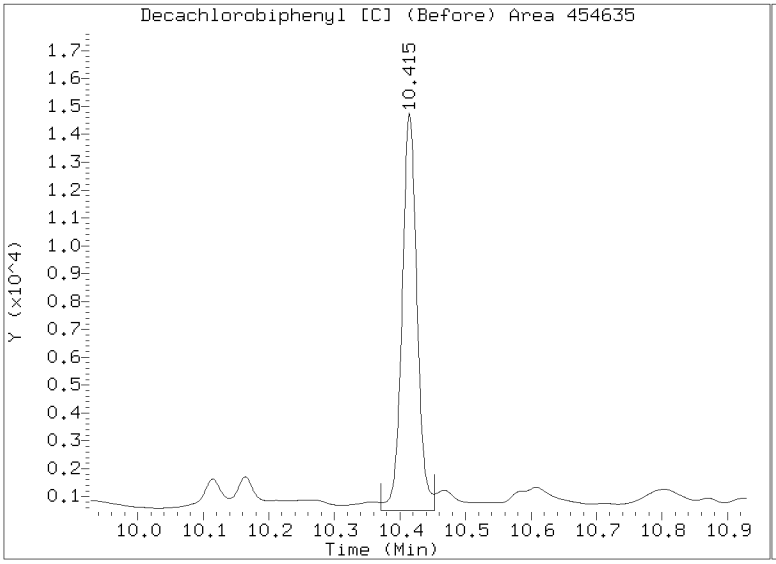
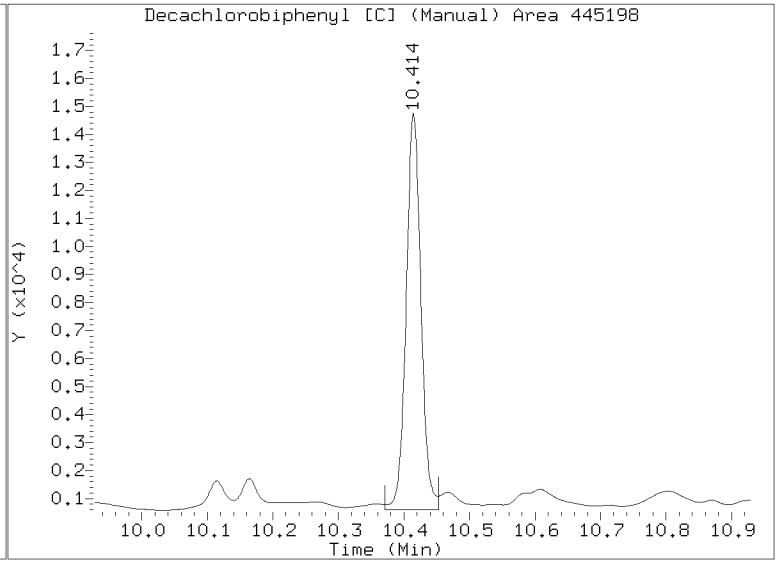
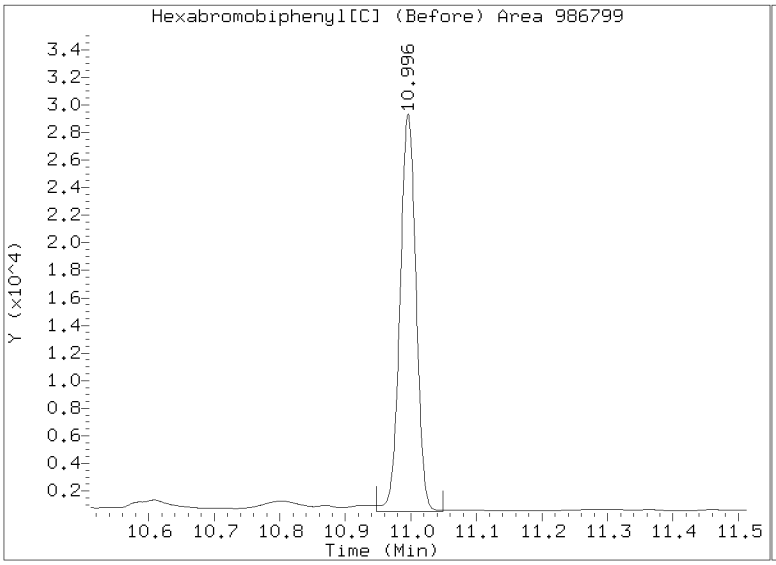
Lab ID:23A0134-12 Client ID:

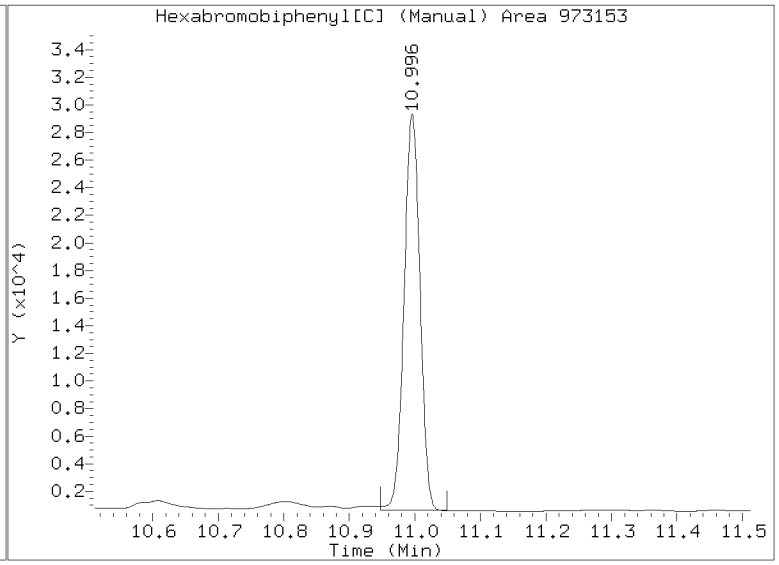












Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-IT1210

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-13 C	File ID:	23013175.D
Sampled:	01/06/23 14:12	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 12:56
% Solids:	55.49	Preparation:	EPA 3546 (Microwave)	Initial/Final:	22.71 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9354*	*12.3*	*155*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9354*	*10.9*	*138*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9354*	*5.91*	*74.5*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9354*	*5.50*	*69.3*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013175.D
Data file 2: /20230131.b/B20230131.b/23013175.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: 23A0134-13
Client ID:
Injection Date: 01-FEB-2023 12:56
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.302	-0.008	86322	4.823	-0.010	36278	10.57	2.59	121.3*	alpha-BHC N
----			5.327	0.018	160500	0.00	30.10	---	beta-BHC
4.882	0.006	998884	----			149.61	0.00	---	delta-BHC
4.610	-0.002	236444	5.219	-0.010	51780	33.38	4.35	153.9*	gamma-BHC (Lindane) N
5.076	-0.016	179534	5.757	0.003	484325	28.49	44.93	44.8*	Heptachlor N
5.430	0.016	1064799	6.141	-0.017	23692	150.76	1.92	195.0*	Aldrin N
6.074	-0.015	519808	6.786	-0.029	4212093	84.88	413.83	131.9*	Heptachlor epoxide b N
----			7.237	-0.020	266554	0.00	29.71	---	Endosulfan I
6.770	-0.021	1648687	7.526	-0.026	754705	273.06	76.14	112.8*	Dieldrin N
6.442	-0.009	1666938	7.368	0.026	2240571	297.36	246.50	18.7	4,4'-DDE N
7.064	0.023	3209363	7.899	0.023	3288630	539.73	454.38	17.2	Endrin N
7.301	0.023	245952	8.088	0.001	1984923	45.95	267.56	141.4*	Endosulfan II N
----			7.937	-0.012	189853	0.00	26.97	---	4,4'-DDD
----			8.713	0.027	457055	0.00	70.16	---	Endosulfan sulfate
----			8.268	0.001	6744251	0.00	992.55	---	4,4'-DDT
7.905	0.028	571334	8.936	0.028	52454	238.18	17.44	172.7*	Methoxychlor N
----			9.221	0.011	1662352	0.00	236.25	---	Endrin ketone
7.726	0.020	471606	8.405	-0.014	482439	110.46	92.19	18.0	Endrin aldehyde N
----			7.053	0.028	2605940	0.00	256.74	---	trans-Chlordane
6.394	0.018	897692	7.174	-0.011	38551	143.91	3.88	189.5*	cis-Chlordane N
2.284	-0.019	30480	2.454	-0.028	69836	3.56	5.24	38.2	Hexachlorobutadiene
----			4.667	-0.025	222816	0.00	17.46	---	Hexachlorobenzene
3.799	-0.001	172008	4.191	-0.006	272981	29.81	27.71	7.3	Tetrachloro-m-xylene N
9.318	-0.001	285822	10.416	-0.014	309892	62.20	55.08	12.1	Decachlorobiphenyl N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

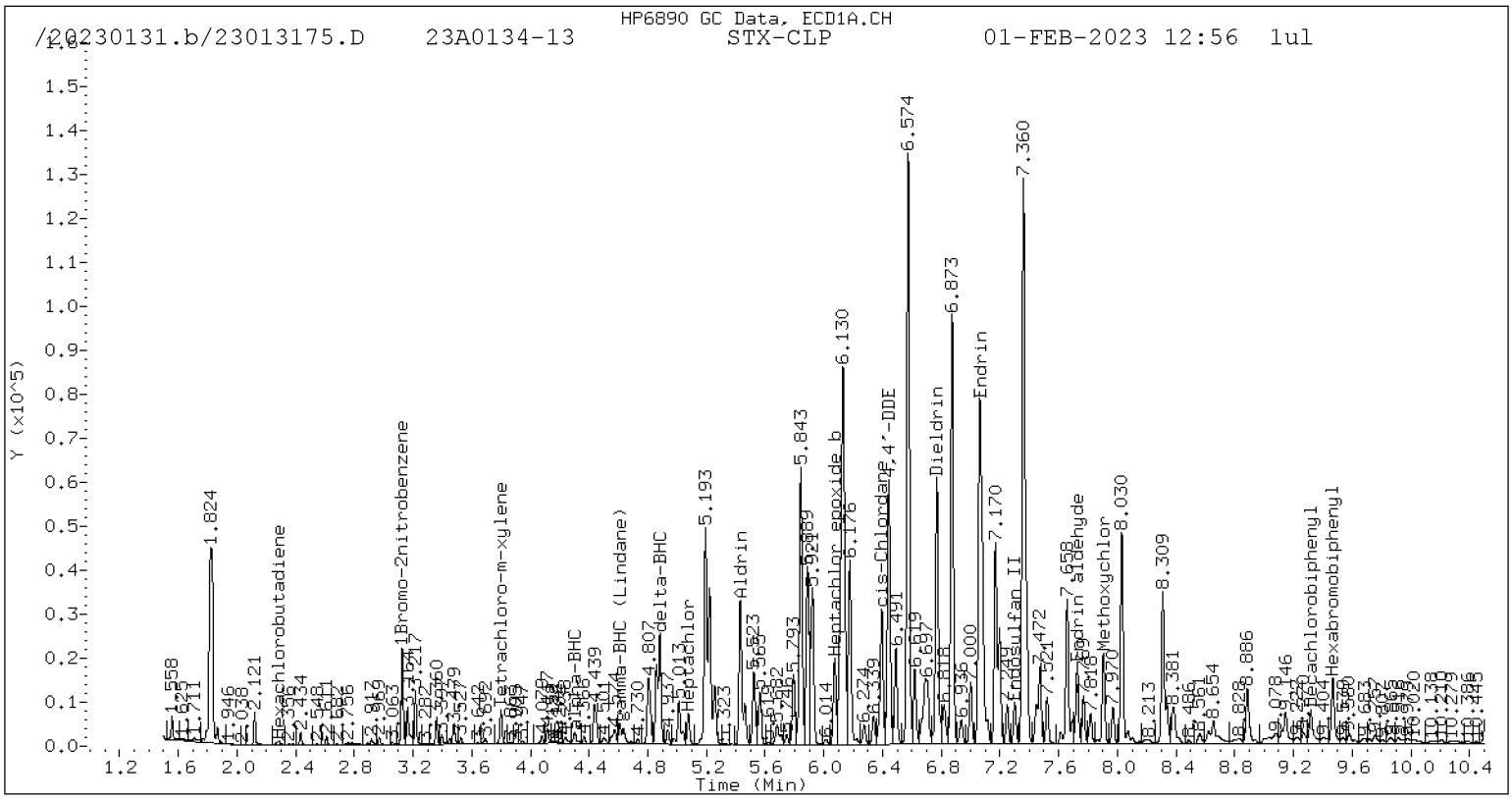
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	424345	-36.9
Hexabromobiphenyl	609723	453554	-25.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	699749	-30.5
Hexabromobiphenyl	769764	509028	-33.9

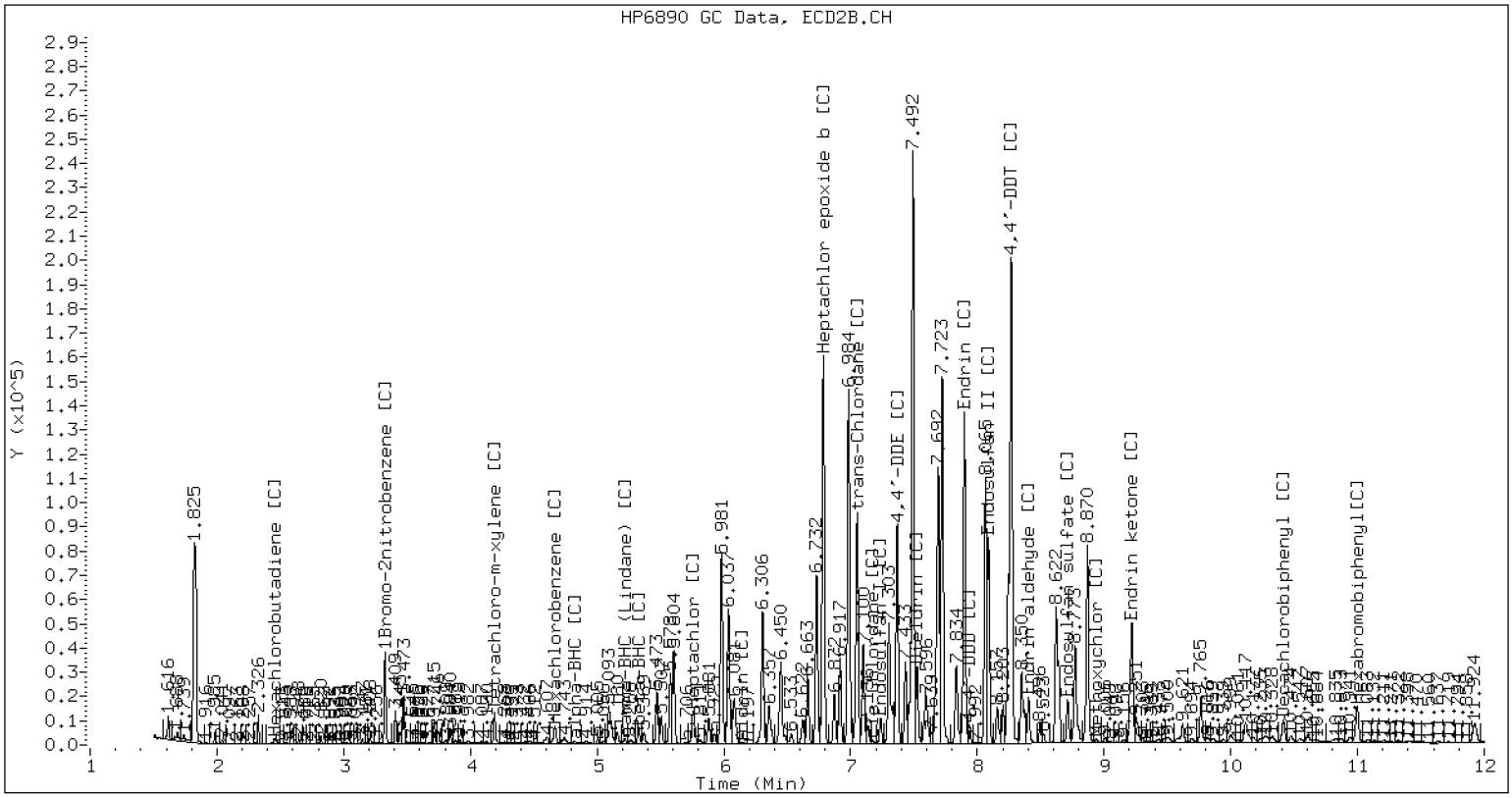
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230131.b/B20230131.b/23013175.D 23A0134-13 CLP2



CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, CLP-2

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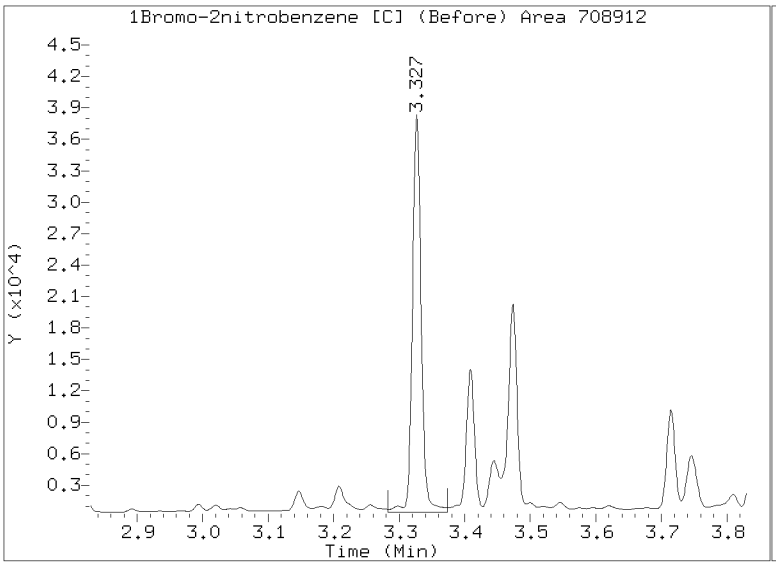
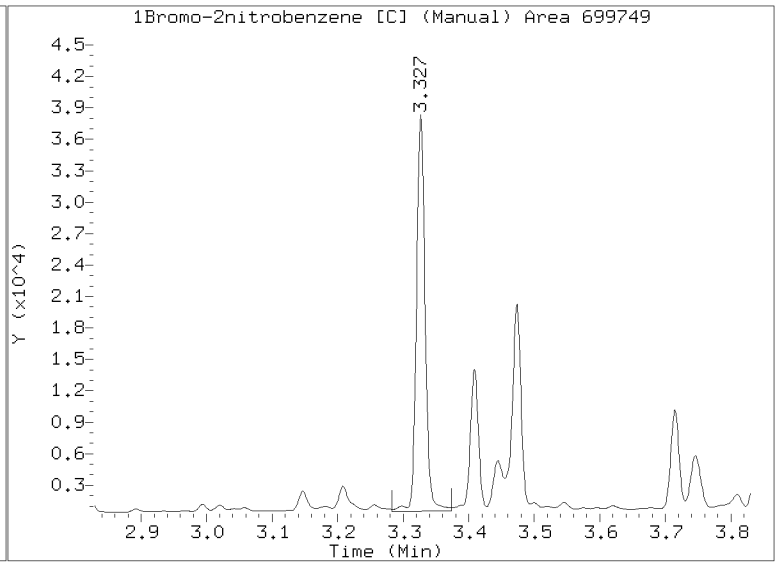
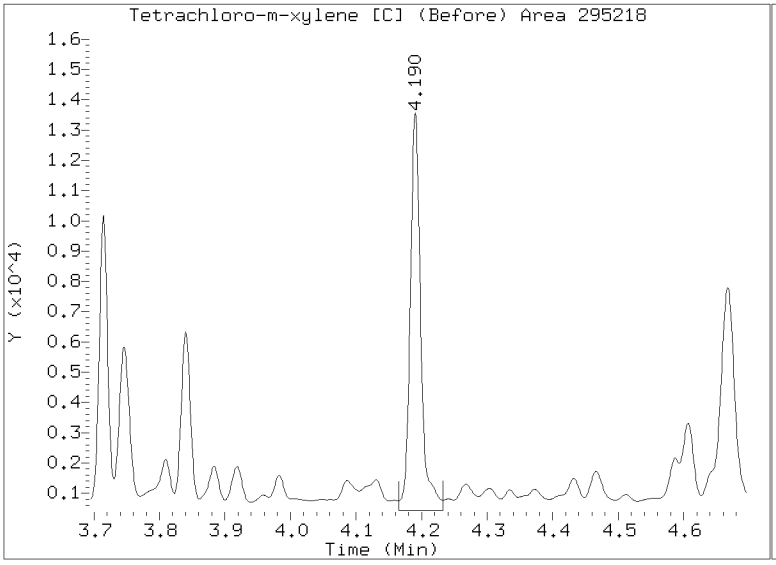
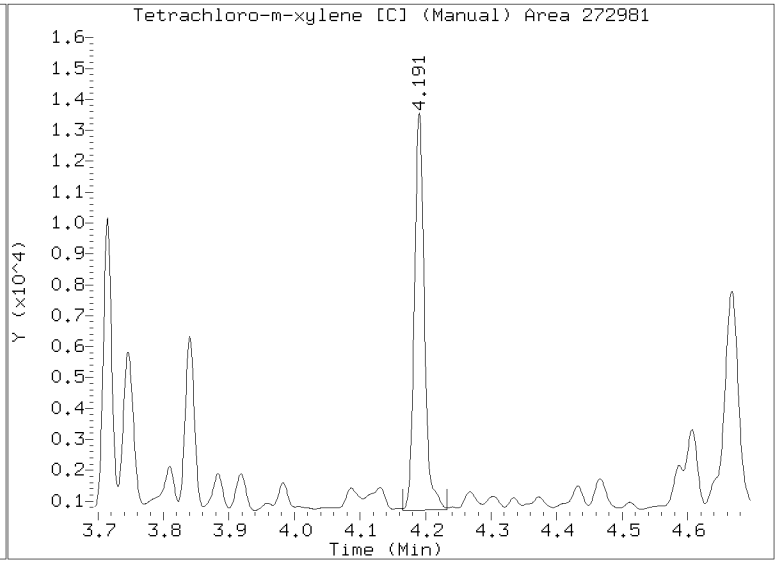
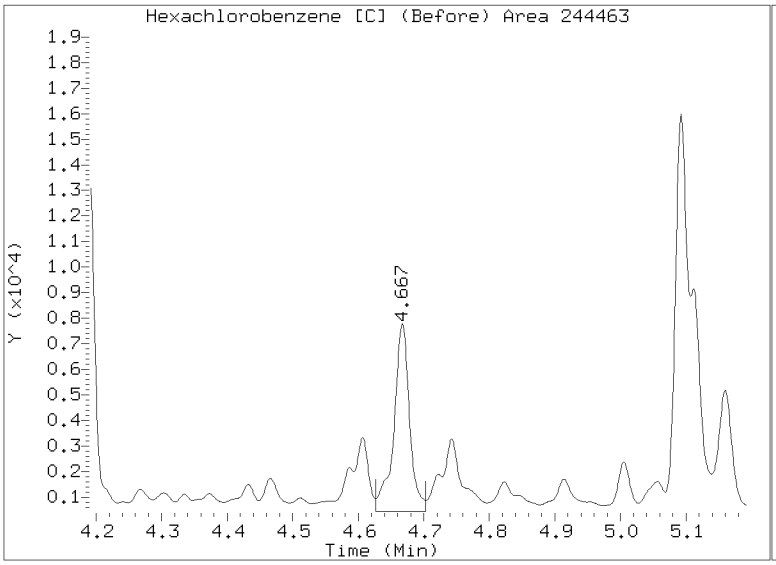
Injection Date: 01-FEB-2023 12:56
Lab ID:23A0134-13 Client ID:

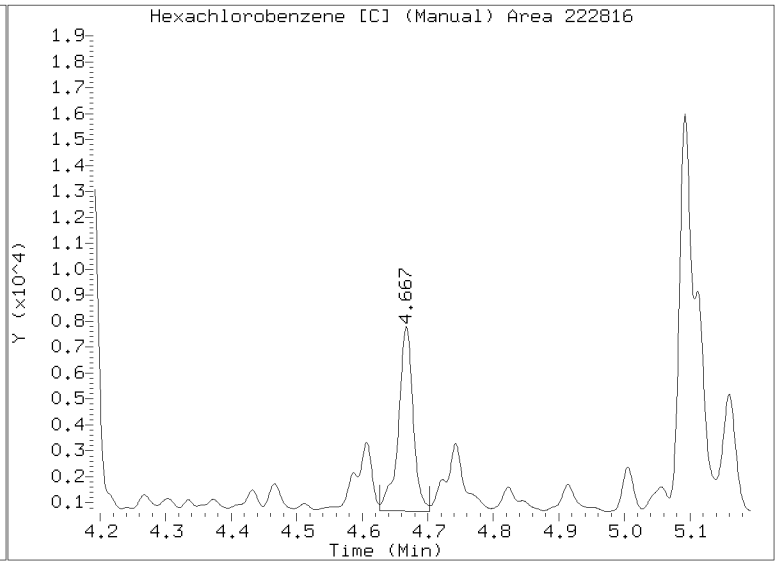












Manual Peak Adjustment Report, CLP-2

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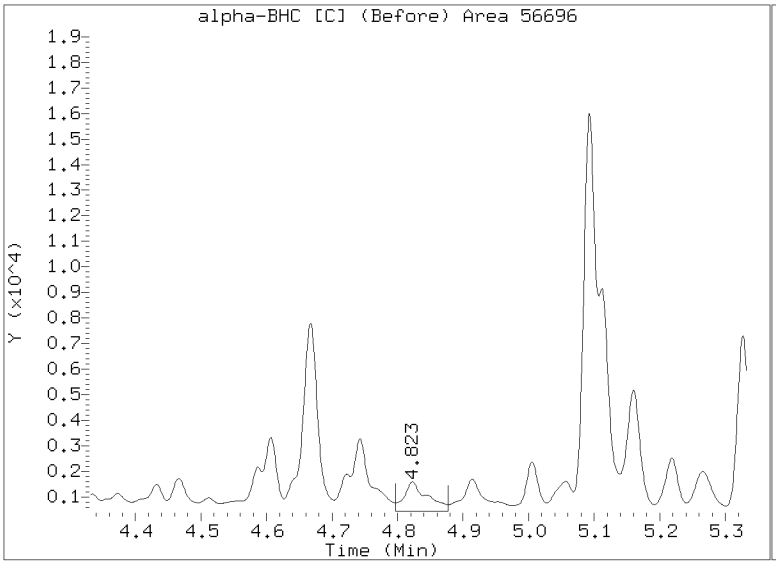

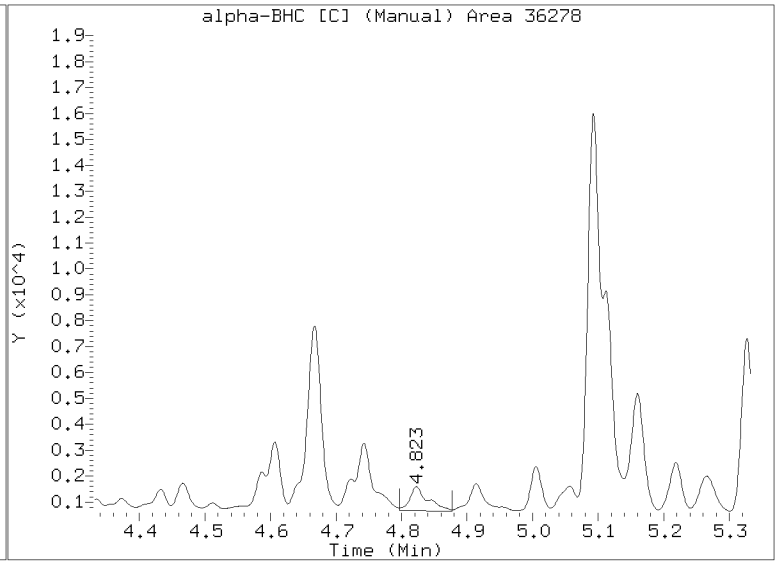

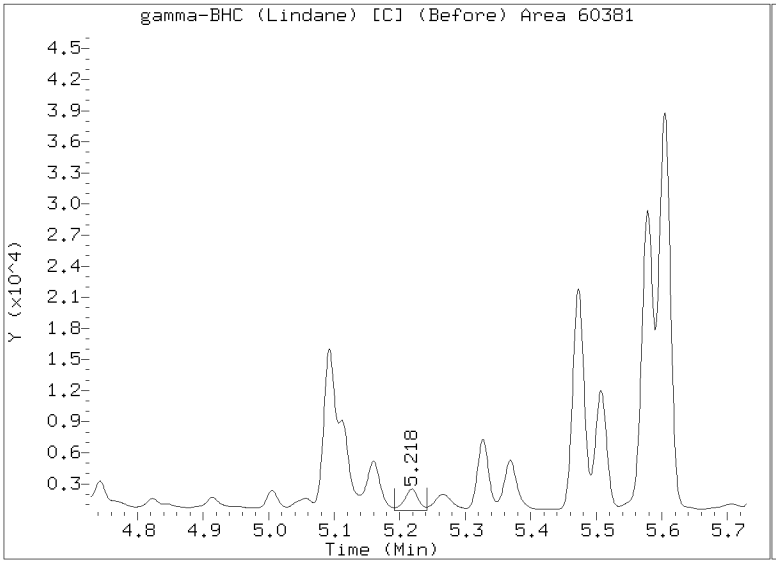

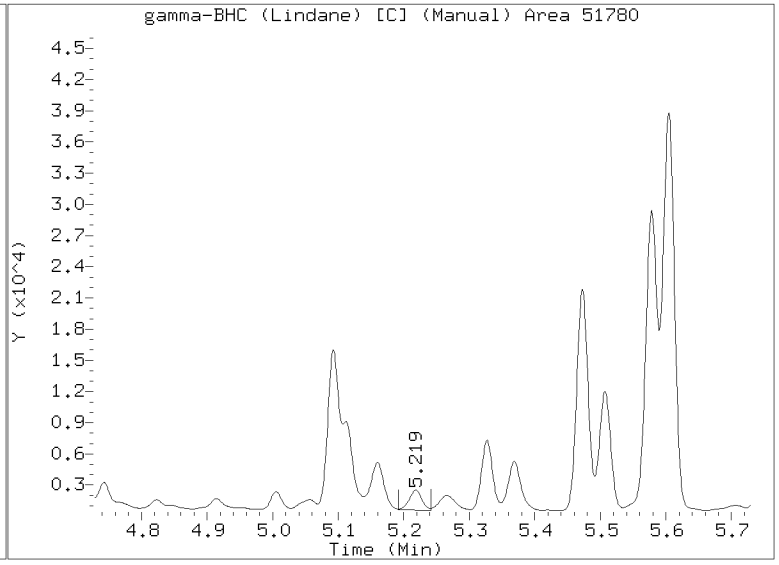

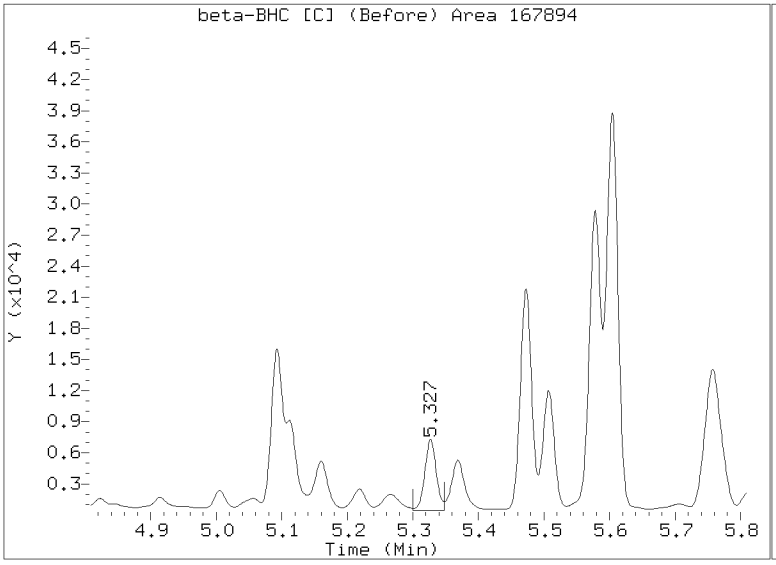

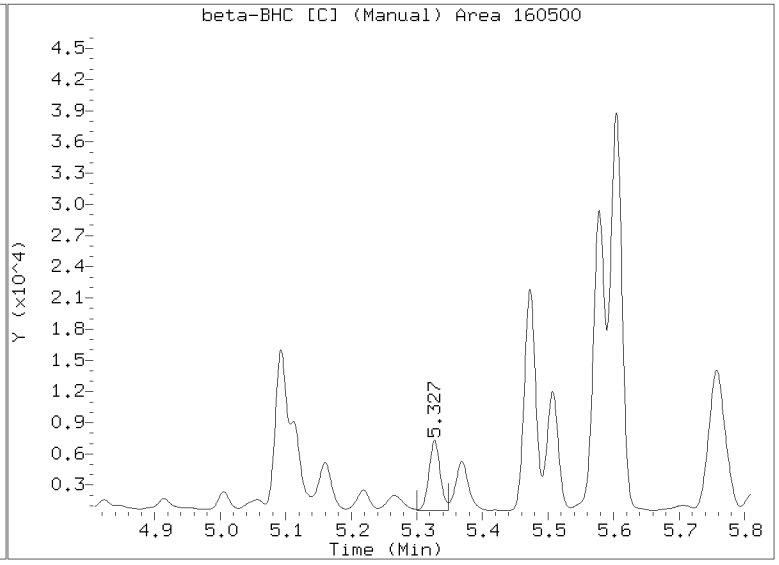

Manual Peak Adjustment Report, CLP-2

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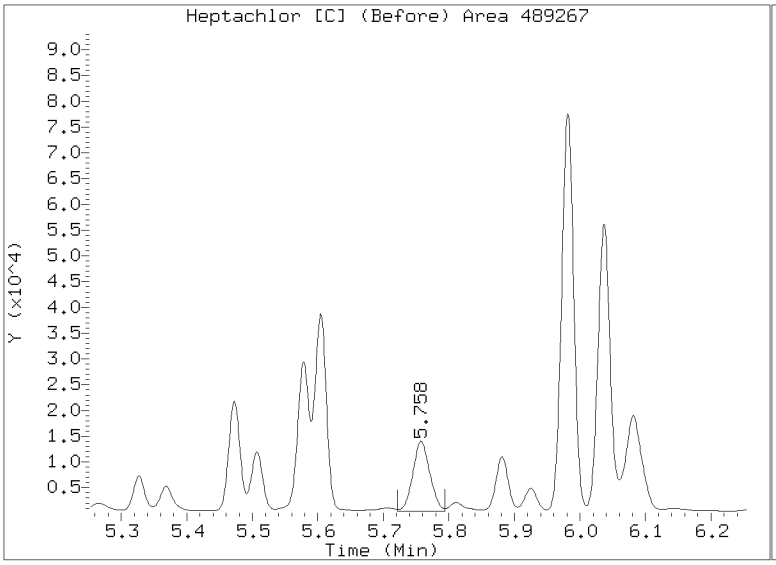

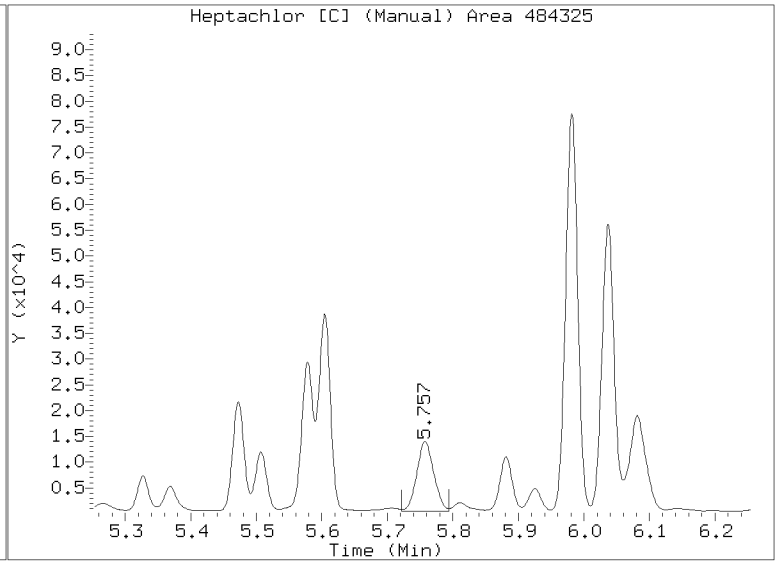

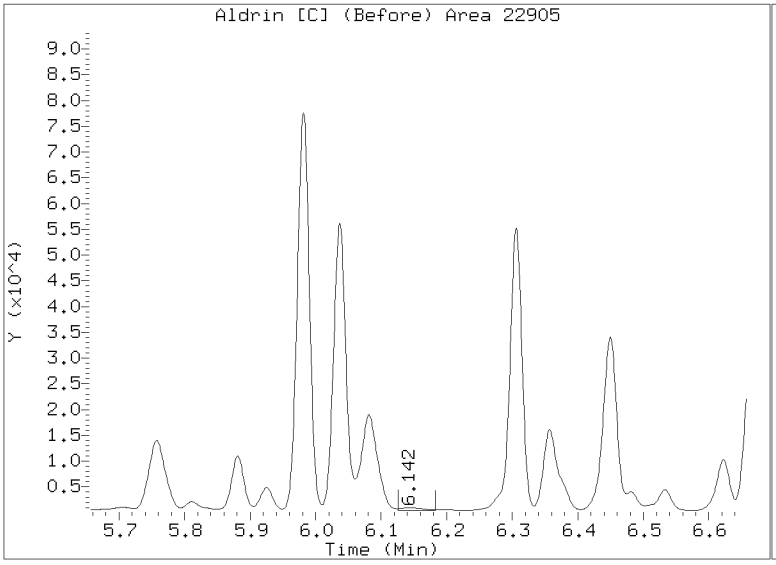

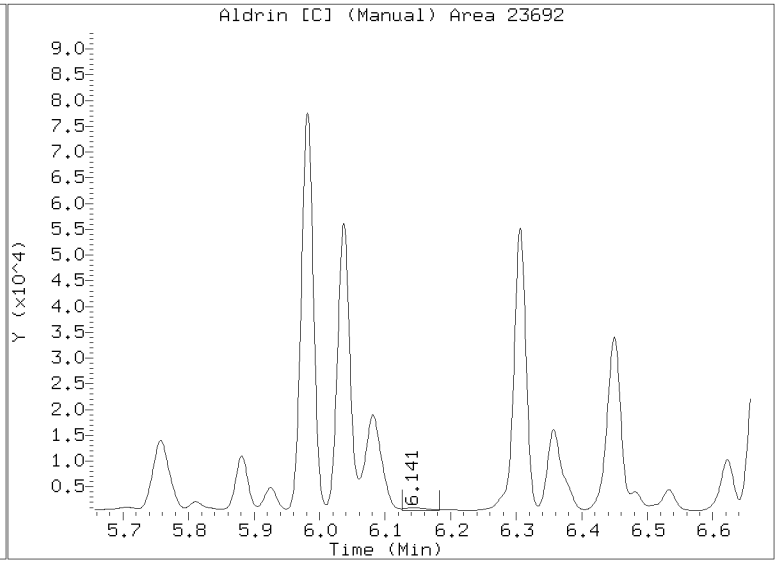

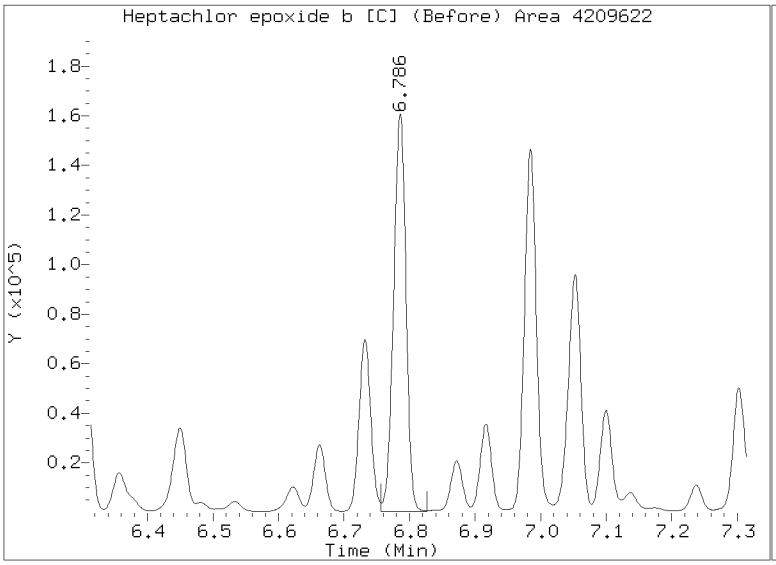

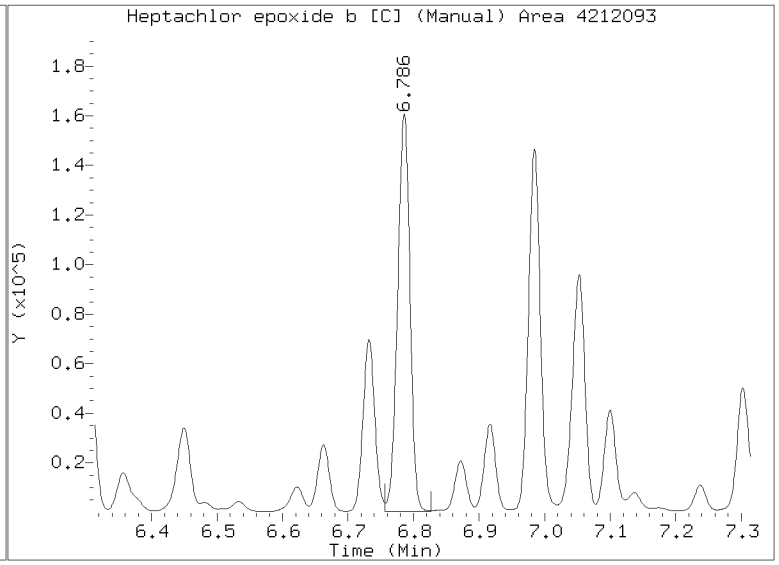

Manual Peak Adjustment Report, CLP-2

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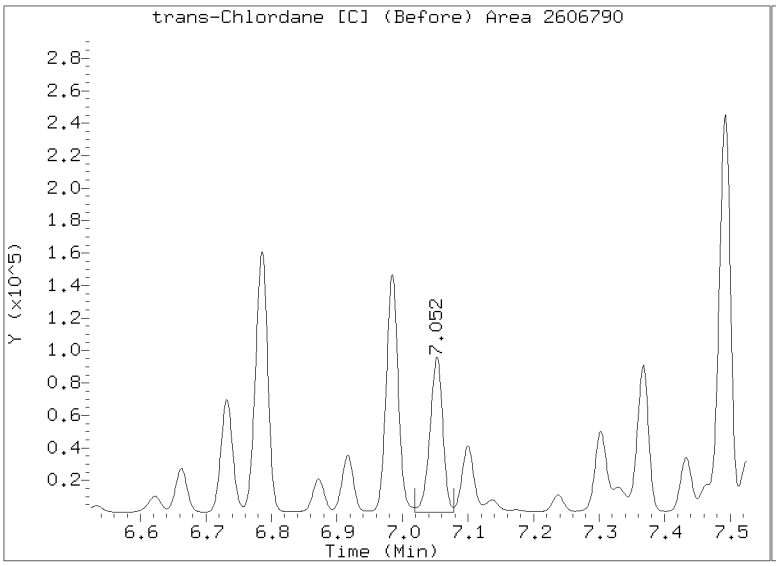

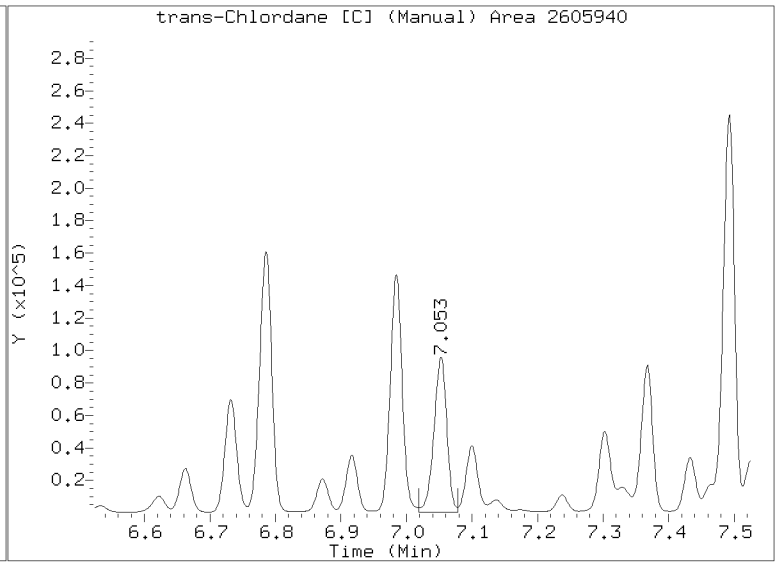

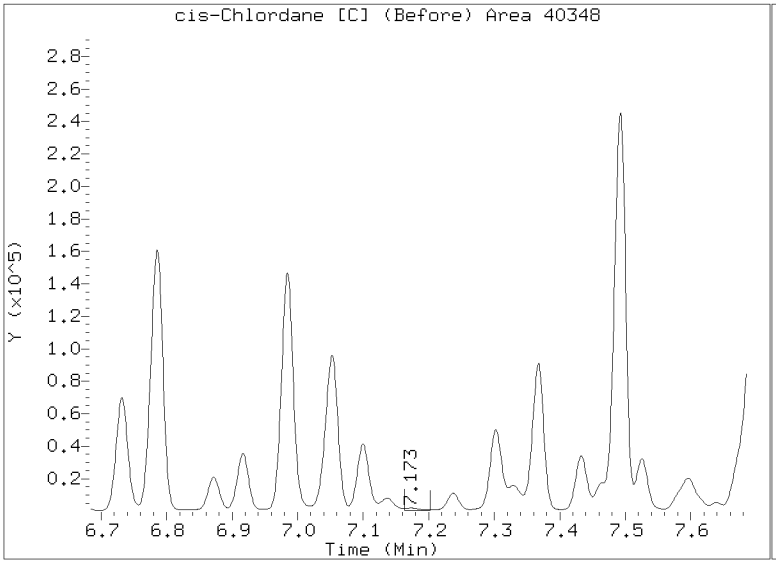

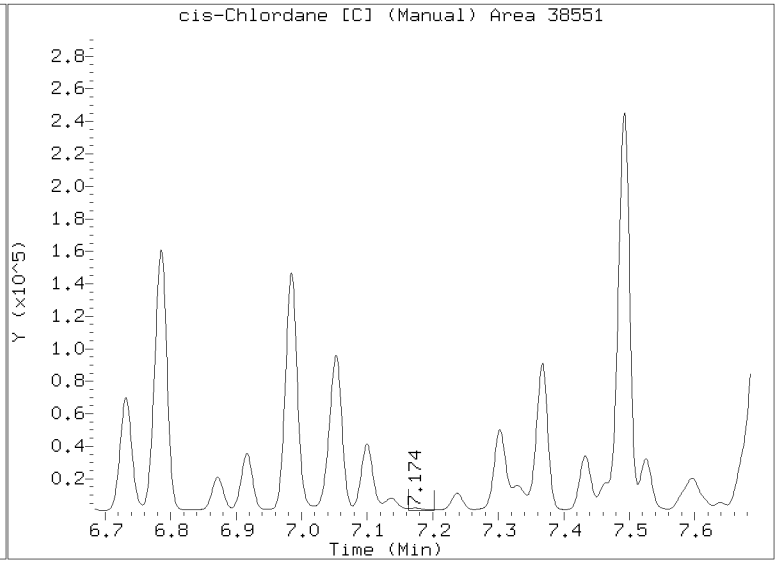

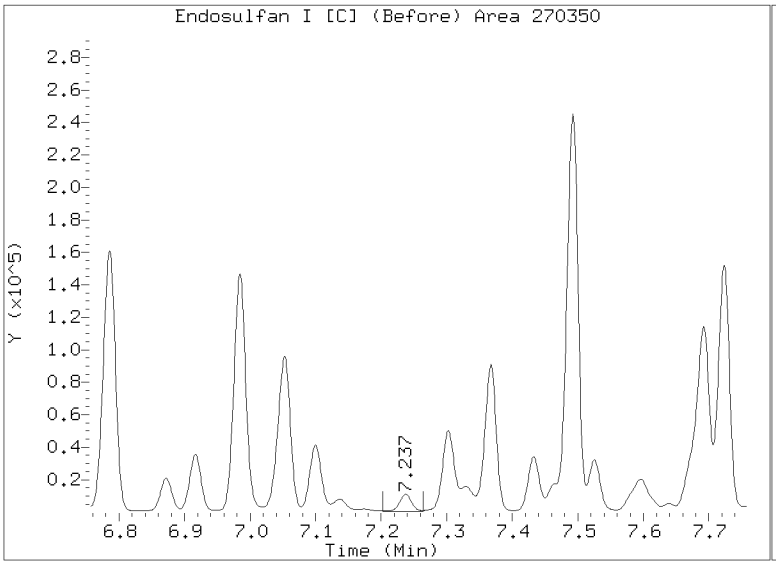

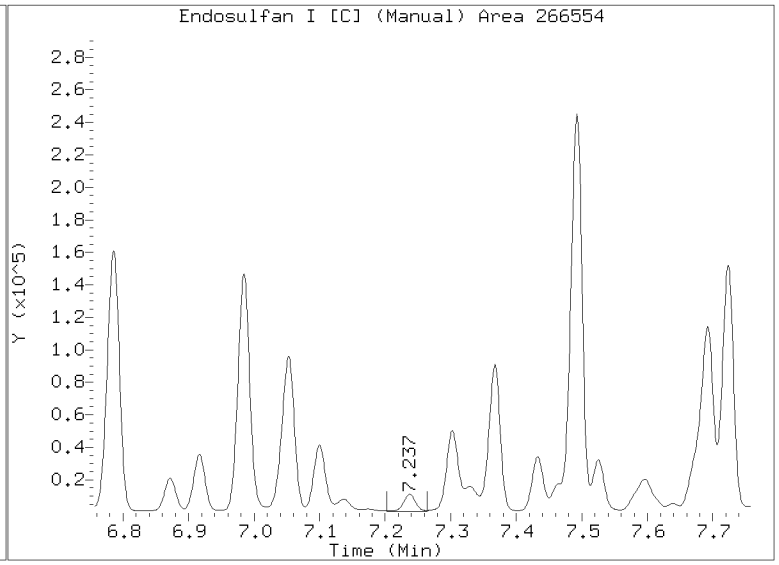

Manual Peak Adjustment Report, CLP-2

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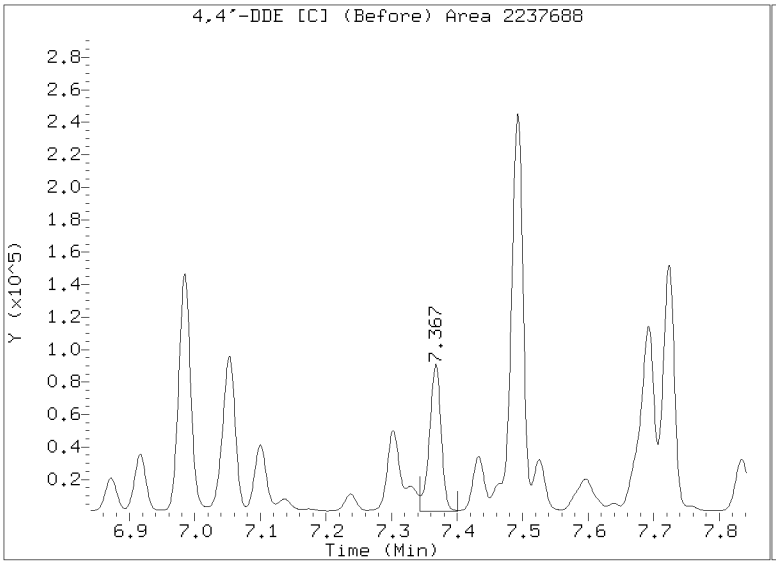

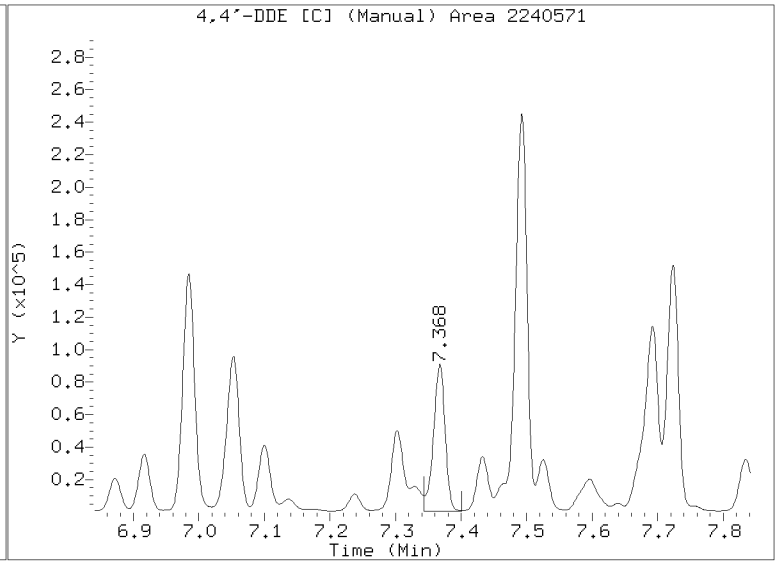

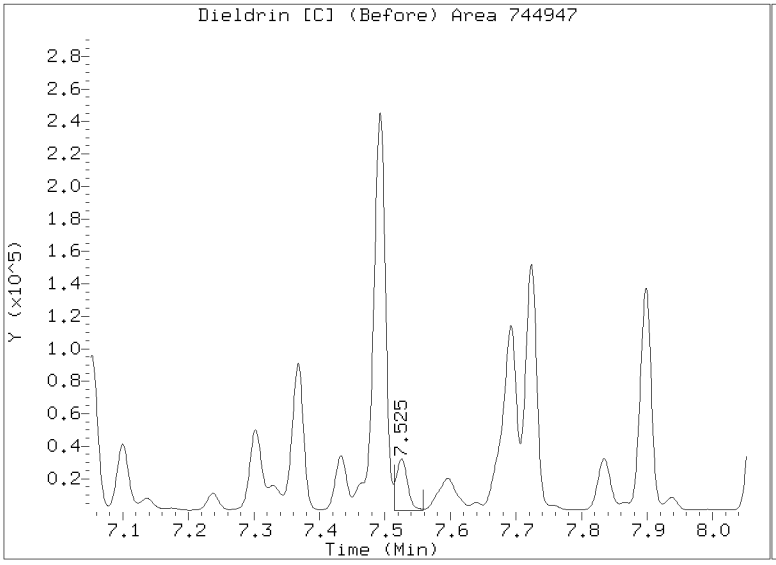

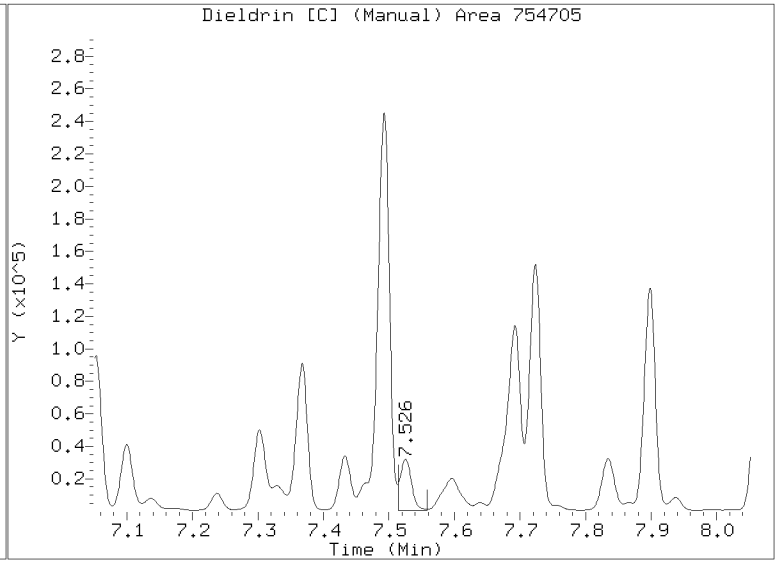

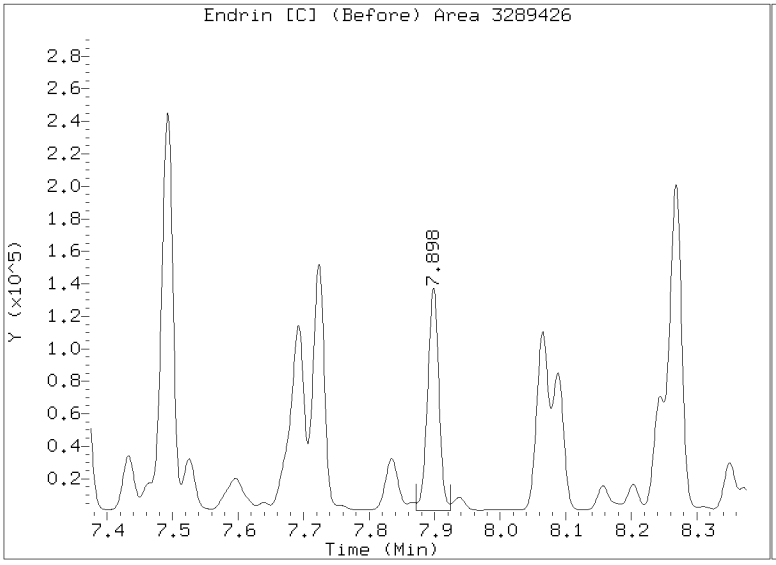

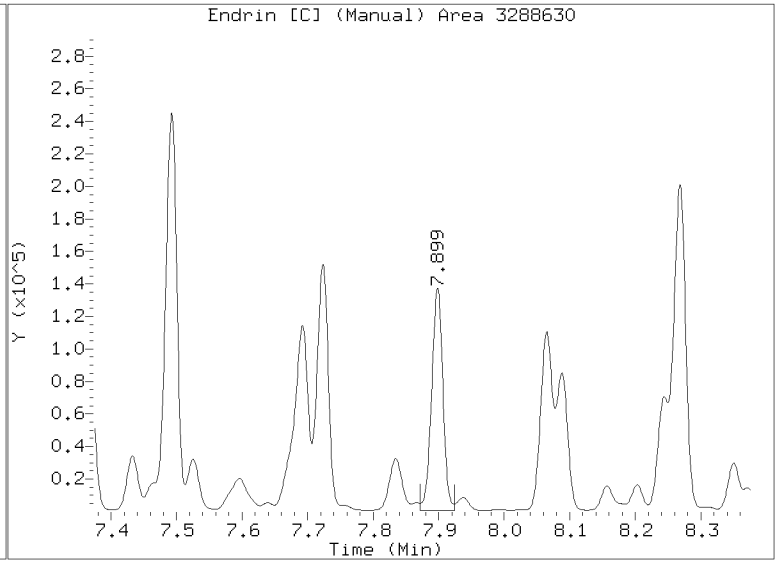

Manual Peak Adjustment Report, CLP-2

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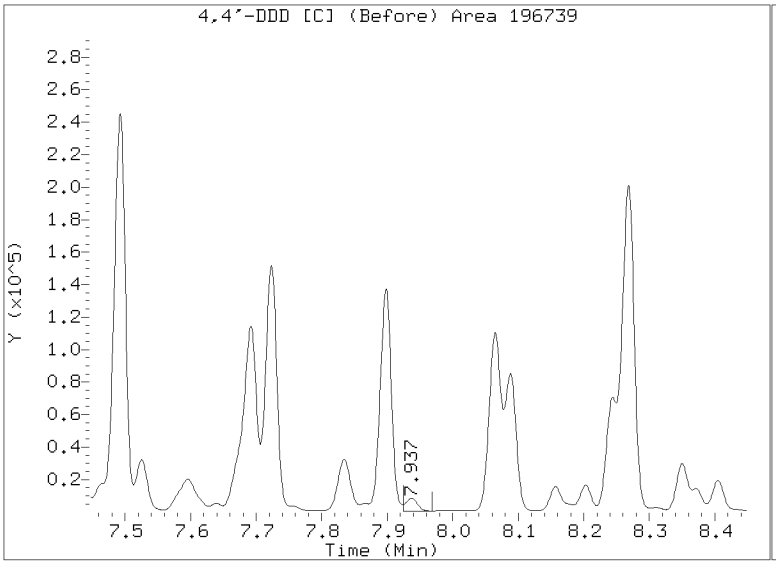
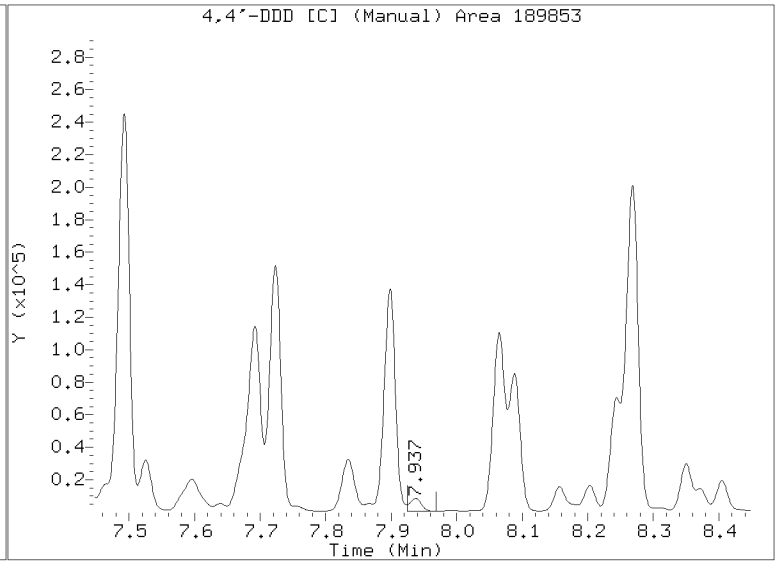
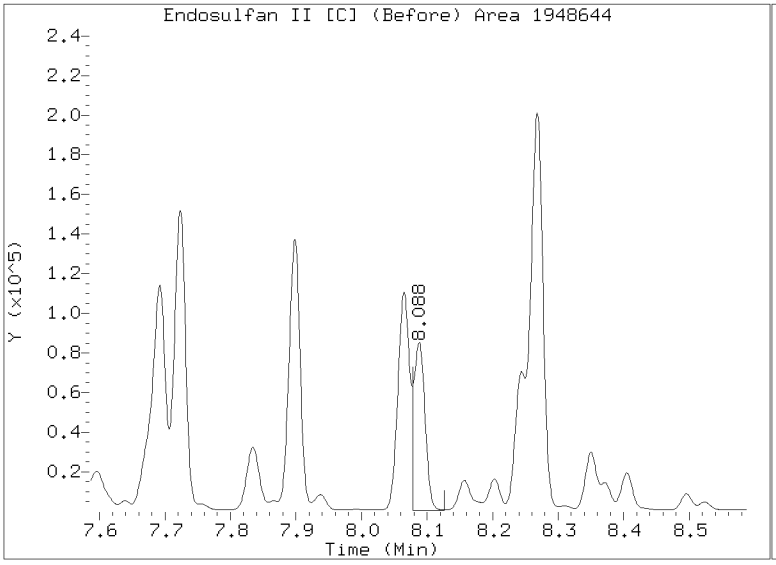
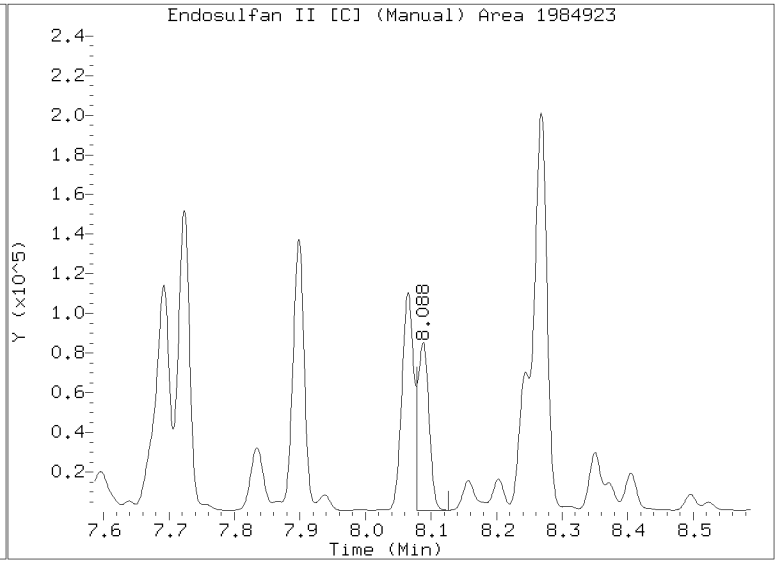
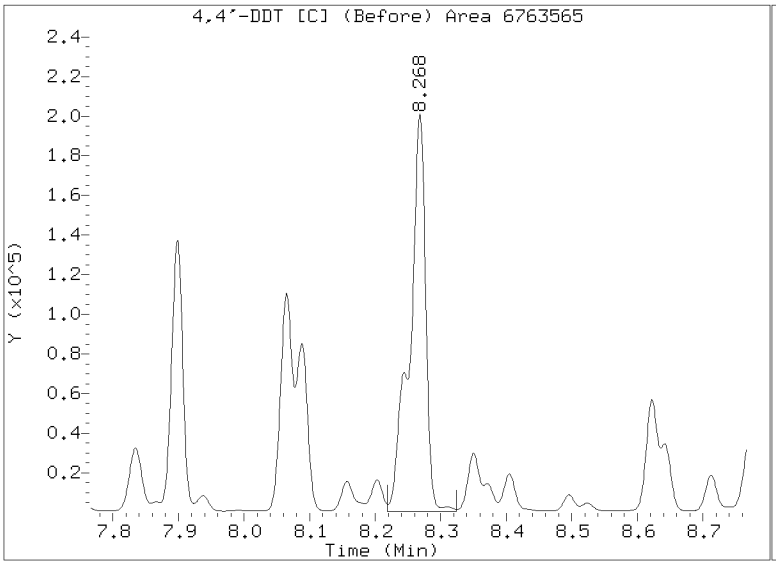
Injection Date: 01-FEB-2023 12:56
Lab ID:23A0134-13 Client ID:

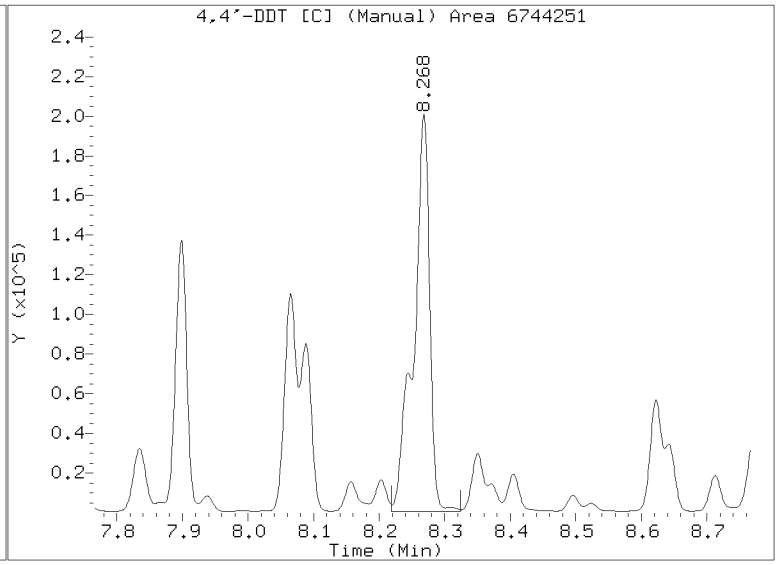












Manual Peak Adjustment Report, CLP-2

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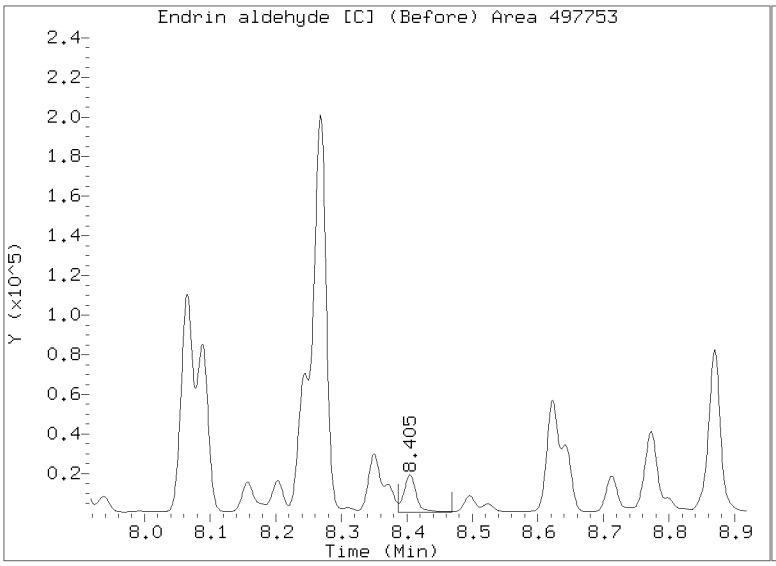
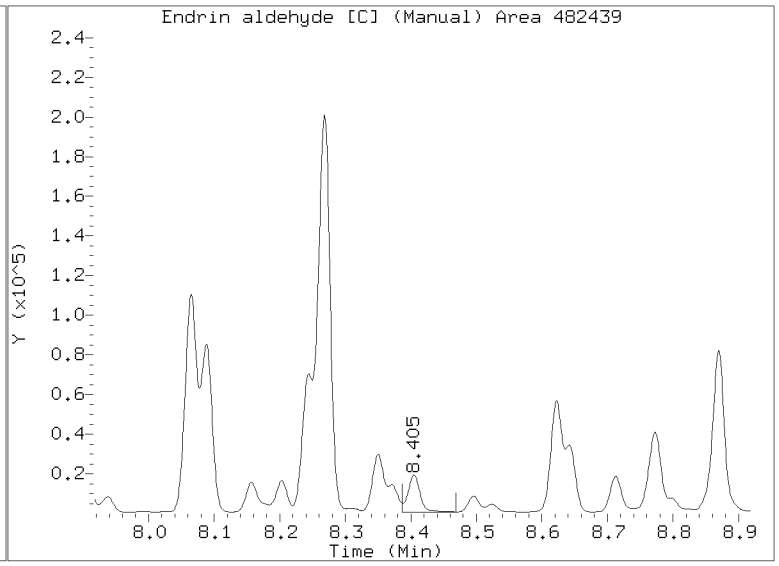
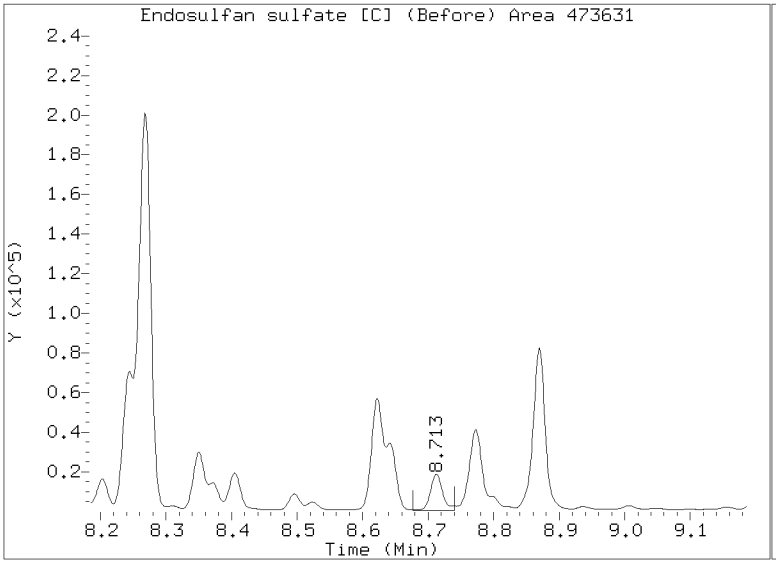
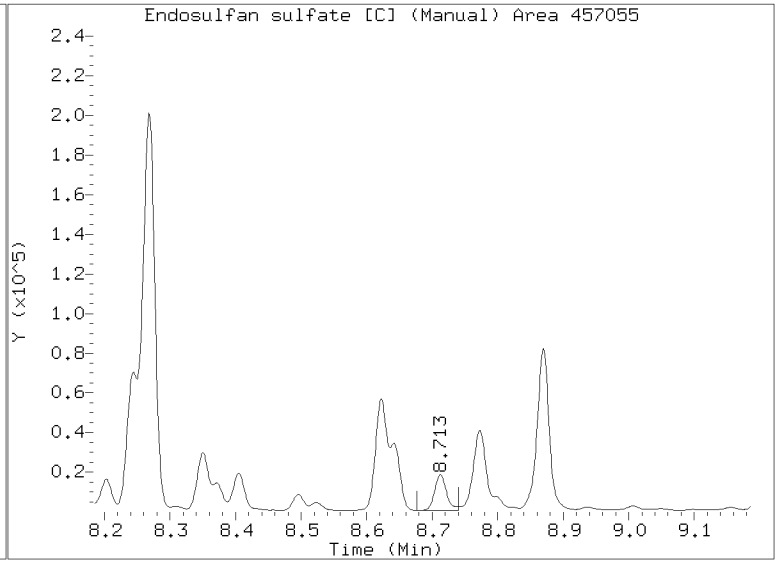
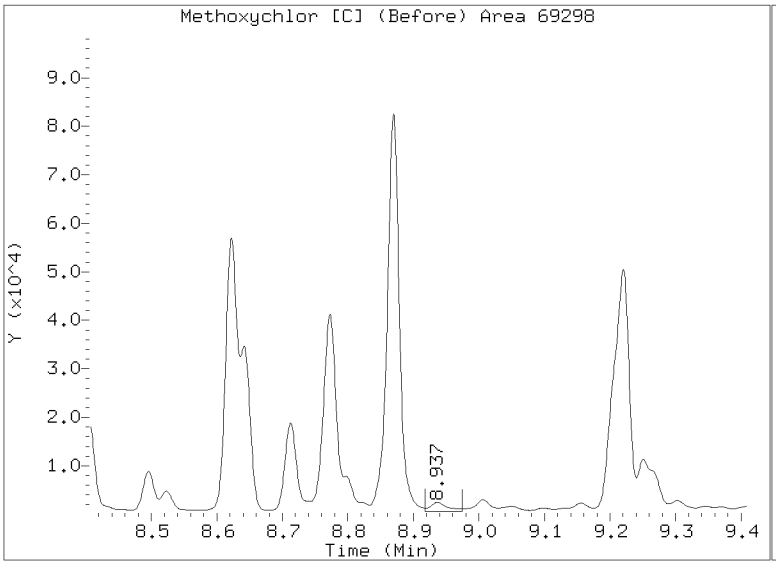
Injection Date: 01-FEB-2023 12:56
Lab ID:23A0134-13 Client ID:

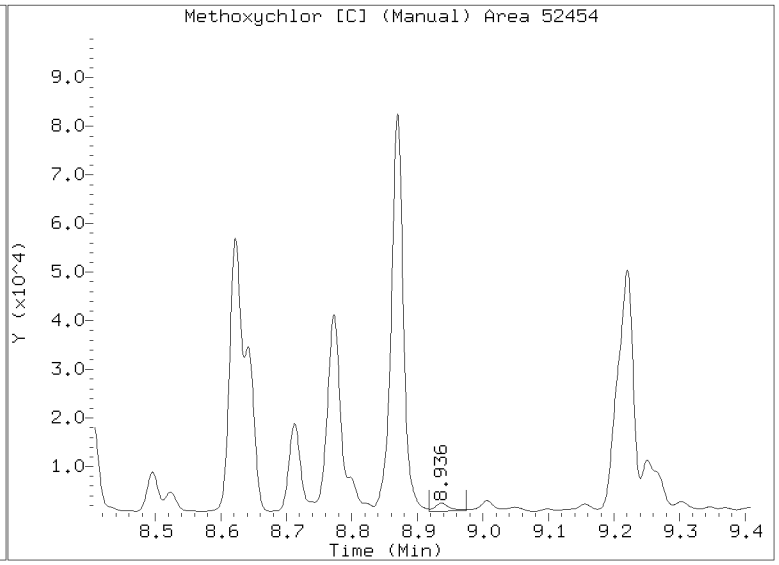












Manual Peak Adjustment Report, CLP-2

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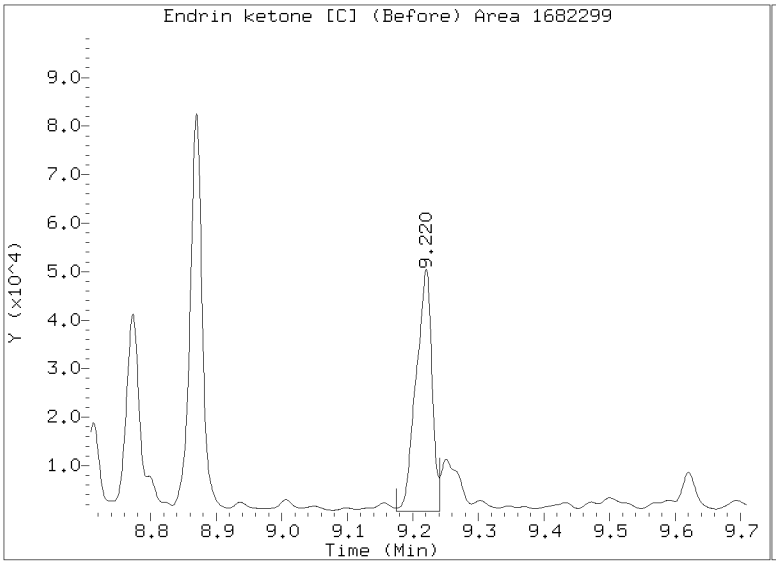
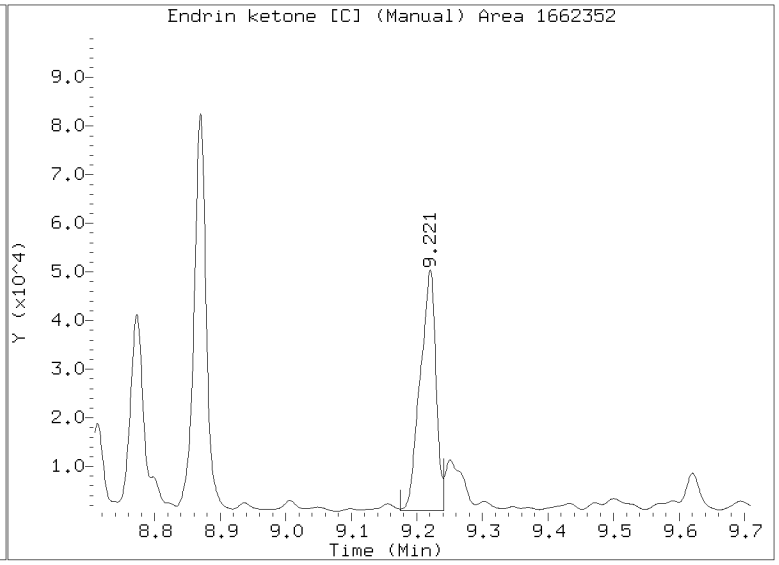
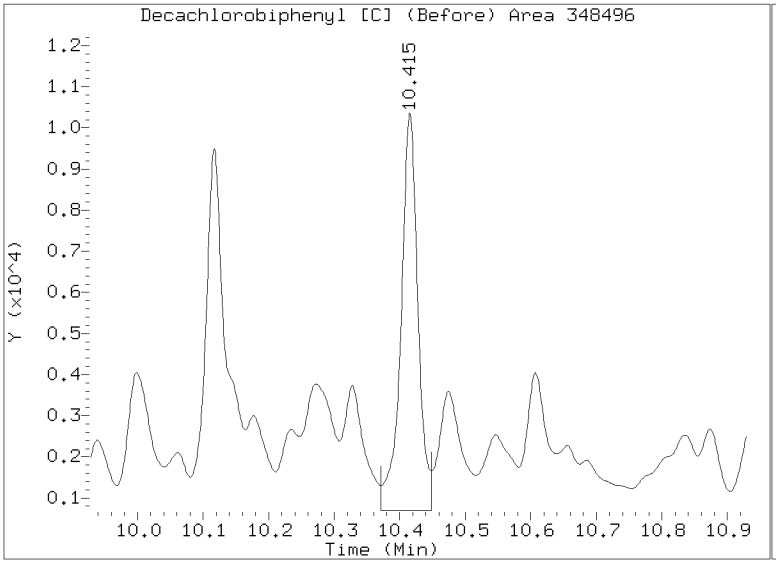
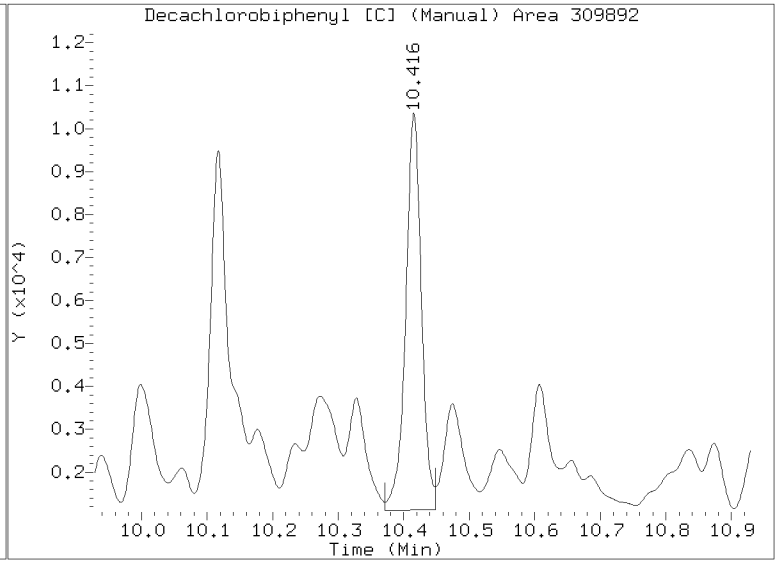
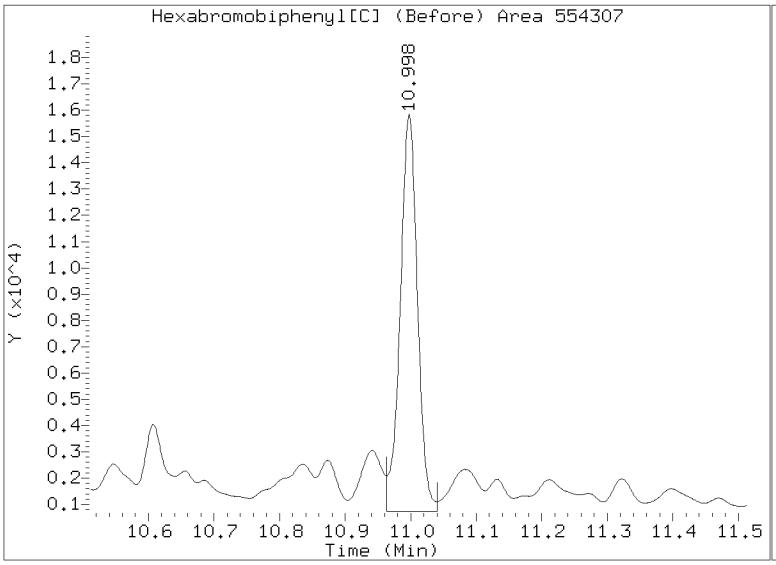
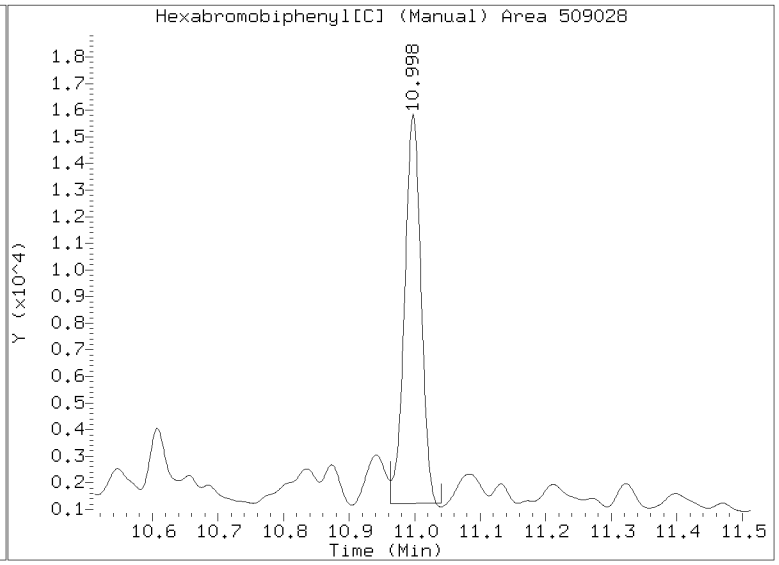












Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1249

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-15 C	File ID:	23020904.D
Sampled:	01/06/23 13:46	Prepared:	01/20/23 13:20	Analyzed:	02/09/23 20:24
% Solids:	50.09	Preparation:	EPA 3546 (Microwave)	Initial/Final:	25.35 g Wet / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0156	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.49	0.14	0.49	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.8754*	*7.98*	*101*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.8754*	*7.95*	*101*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.8754*	*5.64*	*71.7*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.8754*	*5.65*	*71.7*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230209.b/23020904.D
Data file 2: /20230209.b/B20230209.b/23020904.D
Method: \20230209.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: 23A0134-15
Client ID:
Injection Date: 09-FEB-2023 20:24
Report Date: 02/11/2023 07:03
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.294	-0.016	35608	4.824	-0.009	10159	3.78	0.74	134.8*	alpha-BHC
4.719	0.027	10261	5.317	0.008	9926	2.83	1.89	39.6	beta-BHC
4.871	-0.005	50283	----			6.53	0.00	---	delta-BHC
4.602	-0.009	36017	5.211	-0.018	5598	4.41	0.48	160.9*	gamma-BHC (Lindane)
5.068	-0.025	14059	5.746	-0.009	33254	1.93	3.13	47.4*	Heptachlor
5.418	0.004	41100	6.138	-0.020	17909	5.04	1.48	109.3*	Aldrin
6.060	-0.028	19966	----			2.83	0.00	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
6.805	0.014	11249	----			1.61	0.00	---	Dieldrin
6.430	-0.021	76207	7.355	0.013	65903	11.78	7.37	46.1*	4,4'-DDE
7.050	0.009	174513	7.887	0.011	149633	36.32	22.52	46.9*	Endrin
7.290	0.012	12089	----			2.79	0.00	---	Endosulfan II
----			7.928	-0.021	38078	0.00	5.89	---	4,4'-DDD
----			8.702	0.016	39497	0.00	6.60	---	Endosulfan sulfate
----			8.255	-0.012	270159	0.00	43.30	---	4,4'-DDT
7.892	0.015	32105	8.926	0.017	7633	16.56	2.76	142.8*	Methoxychlor
----			9.206	-0.004	167970	0.00	26.00	---	Endrin ketone
7.715	0.008	45849	8.393	-0.025	40074	13.29	8.34	45.8*	Endrin aldehyde
----			7.040	0.015	99200	0.00	9.93	---	trans-Chlordane
6.380	0.005	48098	7.163	-0.022	9088	6.68	0.93	151.1*	cis-Chlordane
2.281	-0.023	9654	2.507	0.025	3476	0.98	0.27	114.6*	Hexachlorobutadiene
4.142	-0.011	8212	----			0.94	0.00	---	Hexachlorobenzene
3.791	-0.009	190843	4.183	-0.014	278160	28.66	28.70	0.1	Tetrachloro-m-xylene
9.305	-0.014	150525	10.403	-0.026	208527	40.53	40.37	0.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

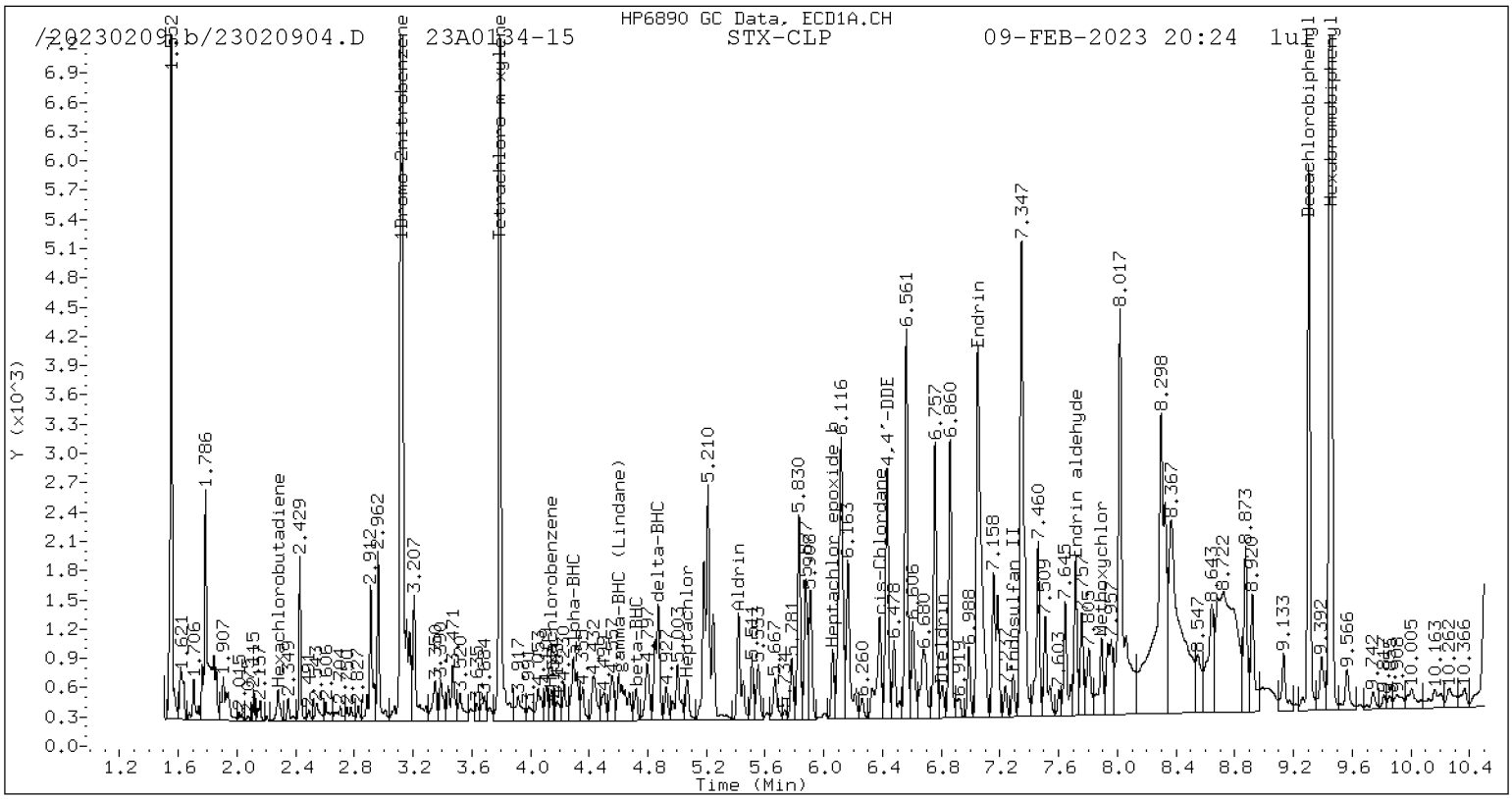
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	489642	-27.2
Hexabromobiphenyl	609723	366525	-39.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	688609	-31.6
Hexabromobiphenyl	769764	467380	-39.3

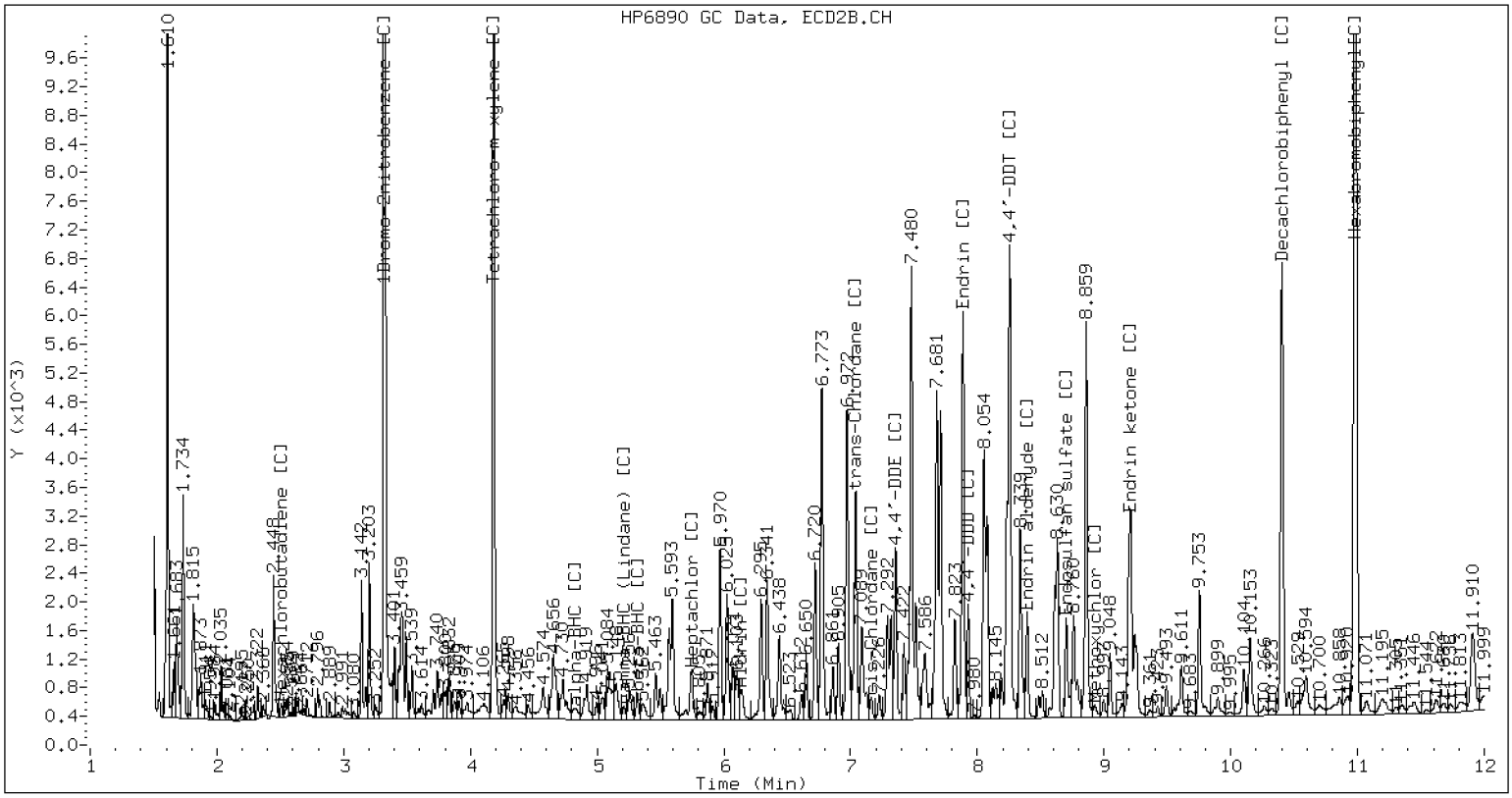
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

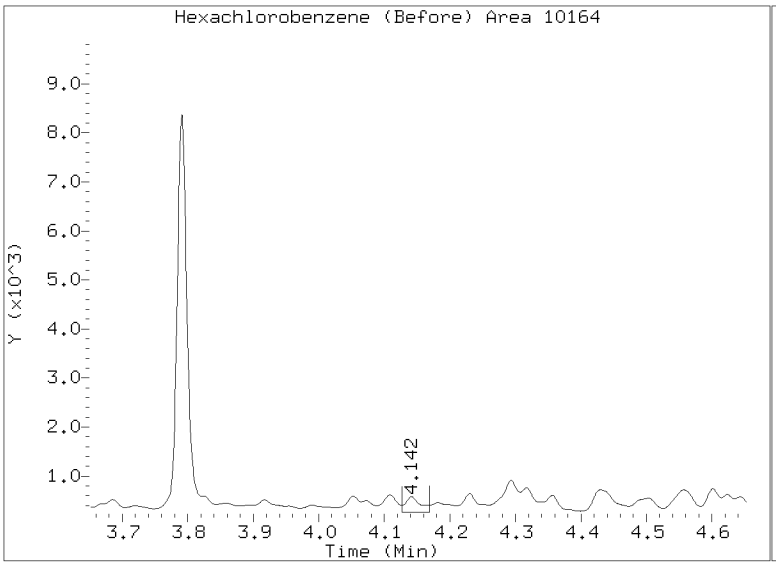
/20230209.b/B20230209.b/23020904.D 23A0134-15 CLP2

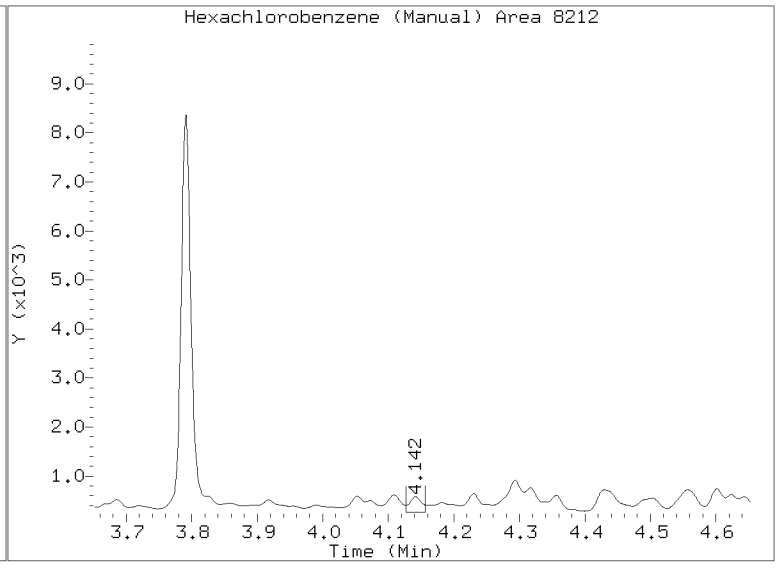


CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, STX-CLP

Datafile: /20230209.b/23020904.D
Injection Date: 09-FEB-2023 20:24
Lab ID:23A0134-15 Client ID:
Report Date: 02/11/2023 07:03





PREPARATION BATCH SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Batch: BLA0409 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1205	23A0134-01	23013161.D	01/20/23 13:20	
LDW23-SS1188	23A0134-02	23013162.D	01/20/23 13:20	
LDW23-SS1179	23A0134-03	23013163.D	01/20/23 13:20	
LDW23-SS1242	23A0134-04	23013164.D	01/20/23 13:20	
LDW23-SS1173	23A0134-05	23013165.D	01/20/23 13:20	
LDW23-SS1160	23A0134-06	23013166.D	01/20/23 13:20	
LDW23-SS1152	23A0134-07	23013169.D	01/20/23 13:20	
LDW23-SS1131	23A0134-08	23013170.D	01/20/23 13:20	
LDW23-SS1129	23A0134-09	23013171.D	01/20/23 13:20	
LDW23-SS1124	23A0134-10	23013172.D	01/20/23 13:20	
LDW23-SS1123	23A0134-11	23013173.D	01/20/23 13:20	
LDW23-SS1116	23A0134-12	23013174.D	01/20/23 13:20	
LDW23-IT1210	23A0134-13	23013175.D	01/20/23 13:20	
LDW23-SC1249	23A0134-15	23020904.D	01/20/23 13:20	
Blank	BLA0409-BLK1	23013155.D	01/20/23 13:20	
LCS	BLA0409-BS1	23013156.D	01/20/23 13:20	
LCS Dup	BLA0409-BSD1	23013157.D	01/20/23 13:20	
MRL Check	BLA0409-MRL1	23013158.D	01/20/23 13:20	
LDW23-SS1116	BLA0409-MS1	23013159.D	01/20/23 13:20	
LDW23-SS1116	BLA0409-MSD1	23013160.D	01/20/23 13:20	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0409

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

Matrix: Solid Date Prepared: 1/20/23 Balance ID: B139298002 Set Up By: CP 1/19/23

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
62	Toxaphene
44	WND

Analysis: 8081B Pest (PSDDA)

Lab Number & Container	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Actual	(REQ) GPC (1:1) 1 2 (3)	(Yes) / No) Acid Clean 5mL	(REQ) Sulfur C/U 4.5mL+0.5 mL ~~Ethyl Acetate~~	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0134-01 C	57.4	(21.79)	22.09	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0134-02 C	46.6	(26.85)	27.03	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0134-03 C	47.3	(26.41)	26.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0134-04 C	46.4	(26.96)	27.04	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0134-05 C	47.2	(26.51)	27.88	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0134-06 C	40.3	(31.04)	31.59	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0134-07 C	43.7	(28.63)	28.97	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0134-08 C	54.7	(22.84)	22.91	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0134-09 C	48.0	(26.02)	26.87	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0134-10 C	48.5	(25.80)	26.16	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0134-11 C	52.0	(24.06)	24.69	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0134-12 C	58.8	(21.26)	21.26	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0134-13 C	55.5	(22.53)	22.71	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0134-15 C	50.1	(24.96)	25.35	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Actual	(REQ) GPC (1:1) 1 2 (3)	(Yes) / No) Acid Clean 5mL	(REQ) Sulfur C/U 4.5mL+0.5 mL ~~Ethyl Acetate~~	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0409-BLK1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0409-BS1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0409-BSD1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0409-MRL1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0409-MS1	58.8	(21.26)	21.26	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0409-MSD1	58.8	(21.26)	21.26	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	Use 23A0134-12
										Use 23A0134-12

CR 1/20/23 CP 1/30/23 01/24/23 13:24

Client ID verified By Date Preparation Reviewed By Date Extraction Date and Time

Printed: 1/17/2023 10:10:05AM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0409

Prepared using: EPA 3546 (Microwave)
8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments
23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps

Microwave
(1) 2 3
CR 1/20/23
Analyst/Date

Pre GPC KD
100°C
(No Exchange)
(1) 3 (4) (5) 6
TWC 1/21/23
Analyst/Date

TurboVap
Pre GPC
1 2 3 (4) 5
LS 1/23/23
Analyst/Date

Post GPC KD
80 - 85°C
Hexane Exchange
(2 X 20 mL)
100°C
(1) (2) 3 (4) (5) 6
TWC 1/25/23
Analyst/Date

TurboVap
Pre-Cleanups
1 2 3 (4) 5
MKB 1/30/23
Analyst/Date

TurboVap
Post-Cleanups
1 2 (3) 4 5
CTO 1/30/23
Analyst/Date

Vialing
CTO 1/30/23
Analyst/Date

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: CR Date: 1/20/23	
Hexane	K008310
80:20 Hexane/Acetone	L000257
1:1 Hexane/Acetone	L000014
Neutral Glass Wool	K010562
Anhydrous Sodium Sulfate	L000092
Pre GPC KD Analyst: TWC Date: 1/21/23	
Hexane	K008310
Anhydrous Sodium Sulfate	N/A
Neutral Glass Wool	N/A
GPC Filter Prep Analyst: LS Date: 1/23/23	
Methylene Chloride	K010561
GPC Analyst: AA Date: 1-24-23	
Methylene Chloride	K008310 INF 1-21-23 L000008
GPC Calibration File	CLA0086 - GPC1
Post GPC KD Analyst: TWC Date: 1/25/23	
Methylene Chloride	L000898
Hexane	K011373
Vialing Analyst: CTO Date: 1/30/23	
Hexane	K011373
Sulfuric Acid	IC010364
Ethyl Acetate	N/A
Tetrabutylammonium hydrogensulfate (TBAS)	L000840
Sodium Sulfite	IC010363
Silica Gel (SPE) Darts	K011573

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 2µg/mL	N K011752 Exp Date: 1/23/23	50µL	CR	CT
Spike (Freezer) 0.5/1/5µg/mL	3 K011471 Exp Date: 6/18/23	100µL	CR	CT
QLS Spike 0.25-2.5µg/mL	QLS K011472 Exp Date: 6/18/23	25µL	CR	CT

MANUALLY ENTER EXPIRATION DATES!

(V) indicates a virtual standard combining two or more physical standards. In these cases the Standard ID refers to the virtual standard, not the parent standards.

If a Standard ID is missing, but should be present, check the standard definition in Element LIMS to be sure Standard Info 6 has the correct letter or number designator matching the vial designator inthe Standard ID column. If it is correct, check the batch and bench sheet in Element LIMS to be sure the correct standards are selected for surrogate(s) and spike(s).

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0409

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessels. 3. Add 1:1 Hex/ACE to the vessels (until solvent is 3" above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 15 min in cold water. Re-homogenize while cool. 7. Decant 1:1 Hex/ACE into Erlenmeyer flask using a funnel containing neutral glasswool. 8. Rinse with Hexane. 9. Microwave a 2nd time using 8:2 Hex/Ace (until solvent is 3" above soil layer after homogenization). 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with Hexane. 11. KD to 5mL at 100°C. (NO HEXANE EXCHANGE). 12. TurboVap 13. GPC 14. After GPC: KD at 80 - 85°C 15. Exchange to Hexane at 100°C 2 x 20 mL). 16. TurboVap. 17. Cleanups, If Acid cleaning do not add Ethyl Acetate for Sulfur Clean. Do Not Acid Clean if Acid liable compounds are requested. 18. Vial in Hexane. A. Need Total Solids Y / [N] B. Archive/Freeze [Y] / N	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PEST Extraction Batch: BLA0409

Total Solids Batch: BLA0362 Work Order(s): 23A0134 01-16

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-16	CR 1/16/23
☒ Standing Water Decanted (Not shared)= 01-16	CR 1/16/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen =01-16	CR 1/16/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	CR 1/16/23
☒ Multiple Jars Y / (N)	CR 1/16/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0264	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1179	23A0134-03	23013163.D	01/30/2023	
LDW23-SC1249	23A0134-15	23020904.D	01/30/2023	
LDW23-SS1116	23A0134-12	23013174.D	01/30/2023	
LDW23-SS1123	23A0134-11	23013173.D	01/30/2023	
LDW23-SS1124	23A0134-10	23013172.D	01/30/2023	
LDW23-SS1129	23A0134-09	23013171.D	01/30/2023	
LDW23-SS1131	23A0134-08	23013170.D	01/30/2023	
LDW23-SS1152	23A0134-07	23013169.D	01/30/2023	
LDW23-IT1210	23A0134-13	23013175.D	01/30/2023	
LDW23-SS1173	23A0134-05	23013165.D	01/30/2023	
MRL Check	BLA0409-MRL1	23013158.D	01/30/2023	
LDW23-SS1188	23A0134-02	23013162.D	01/30/2023	
LDW23-SS1205	23A0134-01	23013161.D	01/30/2023	
LDW23-SS1242	23A0134-04	23013164.D	01/30/2023	
Blank	BLA0409-BLK1	23013155.D	01/30/2023	
LCS	BLA0409-BS1	23013156.D	01/30/2023	
LCS Dup	BLA0409-BSD1	23013157.D	01/30/2023	
Matrix Spike	BLA0409-MS1	23013159.D	01/30/2023	
Matrix Spike Dup	BLA0409-MSD1	23013160.D	01/30/2023	
LDW23-SS1160	23A0134-06	23013166.D	01/30/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0264

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0166-GPC1** **Printed: 1/30/2023 2:56:33PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0134-01	C	LDW23-SS1205	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-02	C	LDW23-SS1188	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-03	C	LDW23-SS1179	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-04	C	LDW23-SS1242	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-05	C	LDW23-SS1173	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-06	C	LDW23-SS1160	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-07	C	LDW23-SS1152	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-08	C	LDW23-SS1131	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-09	C	LDW23-SS1129	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-10	C	LDW23-SS1124	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-11	C	LDW23-SS1123	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-12	C	LDW23-SS1116	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-13	C	LDW23-IT1210	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-15	C	LDW23-SC1249	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
BLA0409-BLK1	-	Blank	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-BS1	-	LCS	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-BSD1	-	LCS Dup	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-MRL1	-	MRL Check	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-MS1	-	Matrix Spike	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	1/30/2023	CTO	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0265	Cleanup Type:	Sulfuric Acid
Cleanup Method:	EPA 3665 Sulfuric Acid Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1179	23A0134-03	23013163.D	01/30/2023	
LDW23-SC1249	23A0134-15	23020904.D	01/30/2023	
LDW23-SS1116	23A0134-12	23013174.D	01/30/2023	
LDW23-SS1123	23A0134-11	23013173.D	01/30/2023	
LDW23-SS1124	23A0134-10	23013172.D	01/30/2023	
LDW23-SS1129	23A0134-09	23013171.D	01/30/2023	
LDW23-SS1131	23A0134-08	23013170.D	01/30/2023	
LDW23-SS1152	23A0134-07	23013169.D	01/30/2023	
LDW23-IT1210	23A0134-13	23013175.D	01/30/2023	
LDW23-SS1173	23A0134-05	23013165.D	01/30/2023	
MRL Check	BLA0409-MRL1	23013158.D	01/30/2023	
LDW23-SS1188	23A0134-02	23013162.D	01/30/2023	
LDW23-SS1205	23A0134-01	23013161.D	01/30/2023	
LDW23-SS1242	23A0134-04	23013164.D	01/30/2023	
Blank	BLA0409-BLK1	23013155.D	01/30/2023	
LCS	BLA0409-BS1	23013156.D	01/30/2023	
LCS Dup	BLA0409-BSD1	23013157.D	01/30/2023	
Matrix Spike	BLA0409-MS1	23013159.D	01/30/2023	
Matrix Spike Dup	BLA0409-MSD1	23013160.D	01/30/2023	
LDW23-SS1160	23A0134-06	23013166.D	01/30/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0265

Matrix: Solid **Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 1/30/2023 2:56:59PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0134-01	C	LDW23-SS1205	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-02	C	LDW23-SS1188	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-03	C	LDW23-SS1179	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-04	C	LDW23-SS1242	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-05	C	LDW23-SS1173	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-06	C	LDW23-SS1160	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-07	C	LDW23-SS1152	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-08	C	LDW23-SS1131	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-09	C	LDW23-SS1129	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-10	C	LDW23-SS1124	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-11	C	LDW23-SS1123	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-12	C	LDW23-SS1116	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-13	C	LDW23-IT1210	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-15	C	LDW23-SC1249	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
BLA0409-BLK1	-	Blank	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-BS1	-	LCS	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-BSD1	-	LCS Dup	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-MRL1	-	MRL Check	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-MS1	-	Matrix Spike	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	1/30/2023	CTO	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0266	Cleanup Type:	Sulfur
Cleanup Method:	EPA 3660B Sulfur Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1179	23A0134-03	23013163.D	01/30/2023	
LDW23-SC1249	23A0134-15	23020904.D	01/30/2023	
LDW23-SS1116	23A0134-12	23013174.D	01/30/2023	
LDW23-SS1123	23A0134-11	23013173.D	01/30/2023	
LDW23-SS1124	23A0134-10	23013172.D	01/30/2023	
LDW23-SS1129	23A0134-09	23013171.D	01/30/2023	
LDW23-SS1131	23A0134-08	23013170.D	01/30/2023	
LDW23-SS1152	23A0134-07	23013169.D	01/30/2023	
LDW23-IT1210	23A0134-13	23013175.D	01/30/2023	
LDW23-SS1173	23A0134-05	23013165.D	01/30/2023	
MRL Check	BLA0409-MRL1	23013158.D	01/30/2023	
LDW23-SS1188	23A0134-02	23013162.D	01/30/2023	
LDW23-SS1205	23A0134-01	23013161.D	01/30/2023	
LDW23-SS1242	23A0134-04	23013164.D	01/30/2023	
Blank	BLA0409-BLK1	23013155.D	01/30/2023	
LCS	BLA0409-BS1	23013156.D	01/30/2023	
LCS Dup	BLA0409-BSD1	23013157.D	01/30/2023	
Matrix Spike	BLA0409-MS1	23013159.D	01/30/2023	
Matrix Spike Dup	BLA0409-MSD1	23013160.D	01/30/2023	
LDW23-SS1160	23A0134-06	23013166.D	01/30/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0266

Matrix: Solid **Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL** **Printed: 1/30/2023 2:57:33PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0134-01	C	LDW23-SS1205	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-02	C	LDW23-SS1188	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-03	C	LDW23-SS1179	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-04	C	LDW23-SS1242	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-05	C	LDW23-SS1173	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-06	C	LDW23-SS1160	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-07	C	LDW23-SS1152	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-08	C	LDW23-SS1131	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-09	C	LDW23-SS1129	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-10	C	LDW23-SS1124	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-11	C	LDW23-SS1123	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-12	C	LDW23-SS1116	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-13	C	LDW23-IT1210	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-15	C	LDW23-SC1249	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
BLA0409-BLK1	-	Blank	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-BS1	-	LCS	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-BSD1	-	LCS Dup	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-MRL1	-	MRL Check	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-MS1	-	Matrix Spike	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	1/30/2023	CTO	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0267	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1179	23A0134-03	23013163.D	01/30/2023	
LDW23-SC1249	23A0134-15	23020904.D	01/30/2023	
LDW23-SS1116	23A0134-12	23013174.D	01/30/2023	
LDW23-SS1123	23A0134-11	23013173.D	01/30/2023	
LDW23-SS1124	23A0134-10	23013172.D	01/30/2023	
LDW23-SS1129	23A0134-09	23013171.D	01/30/2023	
LDW23-SS1131	23A0134-08	23013170.D	01/30/2023	
LDW23-SS1152	23A0134-07	23013169.D	01/30/2023	
LDW23-IT1210	23A0134-13	23013175.D	01/30/2023	
LDW23-SS1173	23A0134-05	23013165.D	01/30/2023	
MRL Check	BLA0409-MRL1	23013158.D	01/30/2023	
LDW23-SS1188	23A0134-02	23013162.D	01/30/2023	
LDW23-SS1205	23A0134-01	23013161.D	01/30/2023	
LDW23-SS1242	23A0134-04	23013164.D	01/30/2023	
Blank	BLA0409-BLK1	23013155.D	01/30/2023	
LCS	BLA0409-BS1	23013156.D	01/30/2023	
LCS Dup	BLA0409-BSD1	23013157.D	01/30/2023	
Matrix Spike	BLA0409-MS1	23013159.D	01/30/2023	
Matrix Spike Dup	BLA0409-MSD1	23013160.D	01/30/2023	
LDW23-SS1160	23A0134-06	23013166.D	01/30/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0267

Matrix: Solid **Cleanup using: Organics - EPA 3660C Silica Gel Cleanup - uL** **Printed: 1/30/2023 2:57:57PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0134-01	C	LDW23-SS1205	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-02	C	LDW23-SS1188	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-03	C	LDW23-SS1179	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-04	C	LDW23-SS1242	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-05	C	LDW23-SS1173	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-06	C	LDW23-SS1160	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-07	C	LDW23-SS1152	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-08	C	LDW23-SS1131	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-09	C	LDW23-SS1129	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-10	C	LDW23-SS1124	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-11	C	LDW23-SS1123	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-12	C	LDW23-SS1116	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-13	C	LDW23-IT1210	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
23A0134-15	C	LDW23-SC1249	C 01	2.5	2.5	8081B Pest (PSDDA)	1/30/2023	CTO	
BLA0409-BLK1	-	Blank	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-BS1	-	LCS	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-BSD1	-	LCS Dup	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-MRL1	-	MRL Check	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-MS1	-	Matrix Spike	-	2.5	2.5	-	1/30/2023	CTO	
BLA0409-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	1/30/2023	CTO	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8081B

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0409-BLK1	File ID:	23013155.D
Sampled:	N/A	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 06:58
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	12.5 g / 2.5 mL
Batch:	BLA0409	Sequence:	SLB0046	Calibration:	FL00041
Instrument:	ECD6	Column:	STX-CLP	Cleanups:	GPC, Silica Gel, Sulfur, Sulfuric Acid

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
118-74-1	Hexachlorobenzene	1	0.50	U	0.15	0.50

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl	8.0000	7.18	89.8	30 - 160	
Decachlorobiphenyl [2C]	8.0000	8.66	108	30 - 160	
Tetrachlorometaxylene	8.0000	5.39	67.4	30 - 160	
Tetrachlorometaxylene [2C]	8.0000	5.17	64.7	30 - 160	

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013155.D
Data file 2: /20230131.b/B20230131.b/23013155.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: BLA0409-BLK1
Client ID:
Injection Date: 01-FEB-2023 06:58
Report Date: 02/03/2023 20:25
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP on col	CLP2 on col	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response				
----			----			0.00	0.00	---	alpha-BHC
----			----			0.00	0.00	---	beta-BHC
----			----			0.00	0.00	---	delta-BHC
----			----			0.00	0.00	---	gamma-BHC (Lindane)
----			----			0.00	0.00	---	Heptachlor
----			----			0.00	0.00	---	Aldrin
----			----			0.00	0.00	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
----			----			0.00	0.00	---	Dieldrin
----			----			0.00	0.00	---	4,4'-DDE
----			----			0.00	0.00	---	Endrin
----			8.064	-0.023	98	0.00	0.01	---	Endosulfan II
----			----			0.00	0.00	---	4,4'-DDD
----			----			0.00	0.00	---	Endosulfan sulfate
----			----			0.00	0.00	---	4,4'-DDT
----			----			0.00	0.00	---	Methoxychlor
----			----			0.00	0.00	---	Endrin ketone
----			----			0.00	0.00	---	Endrin aldehyde
----			----			0.00	0.00	---	trans-Chlordane
----			----			0.00	0.00	---	cis-Chlordane
----			2.454	-0.028	107253	0.00	7.80	---	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.800	-0.001	165364	4.191	-0.005	263060	26.97	25.86	4.2	Tetrachloro-m-xylene
9.315	-0.004	142721	10.415	-0.014	239233	35.92	43.32	18.7	Decachlorobiphenyl N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

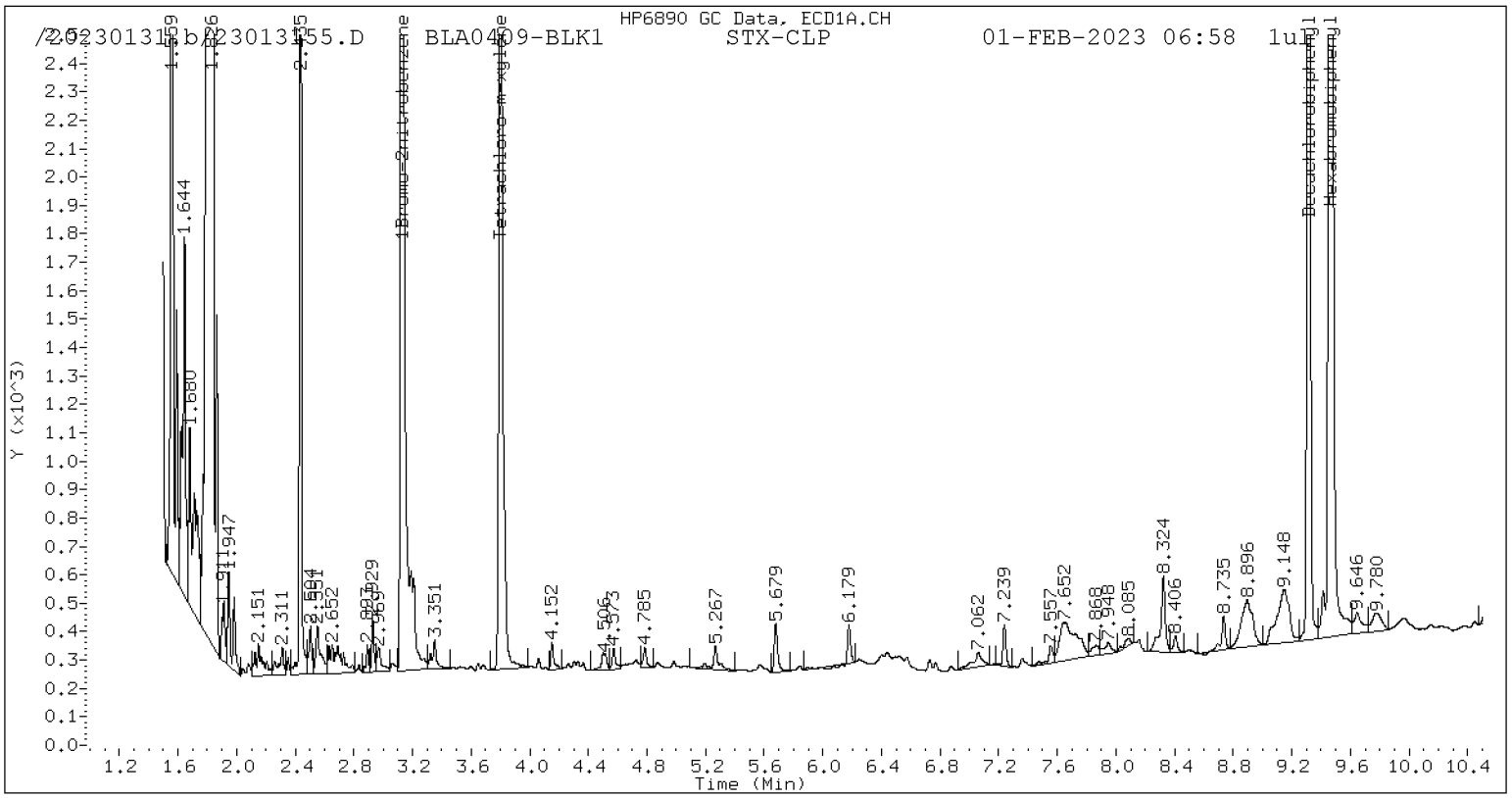
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	450913	-32.9
Hexabromobiphenyl	609723	392123	-35.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	722619	-28.2
Hexabromobiphenyl	769764	499643	-35.1

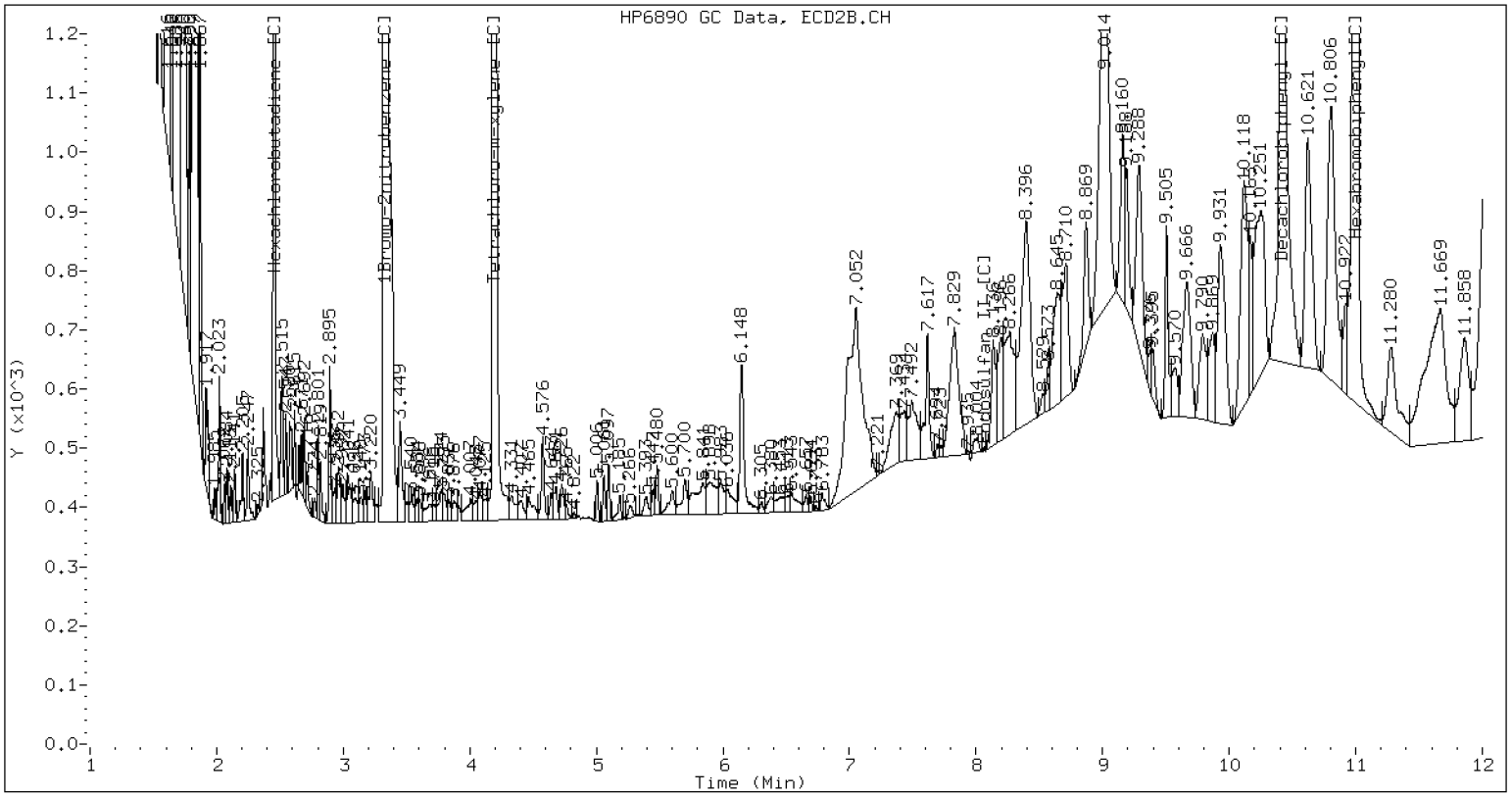
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

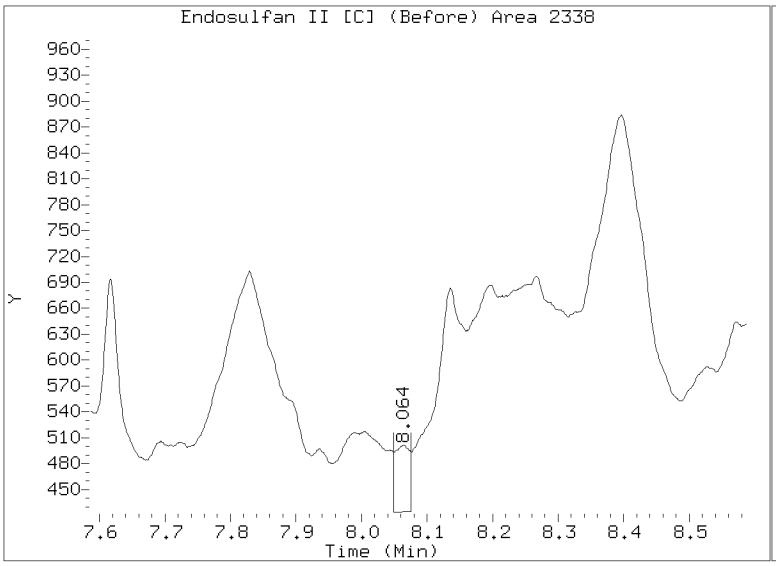
/20230131.b/B20230131.b/23013155.D BLA0409-BLK1 CLP2

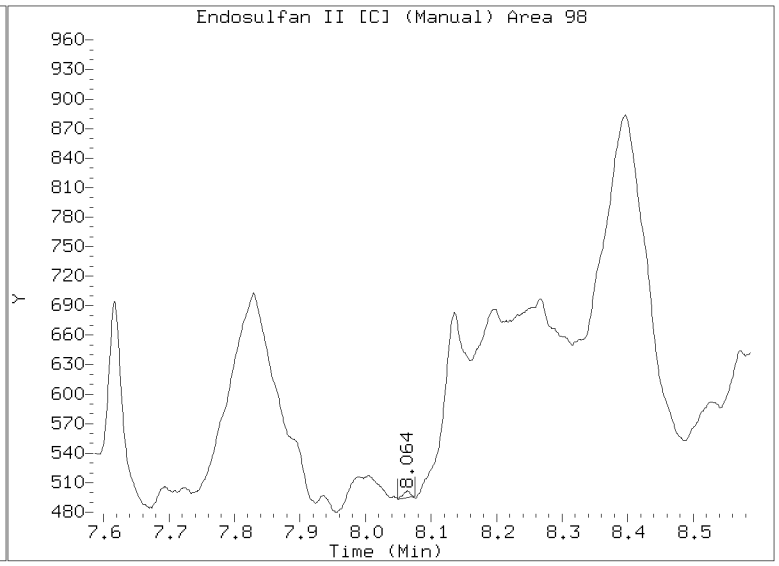


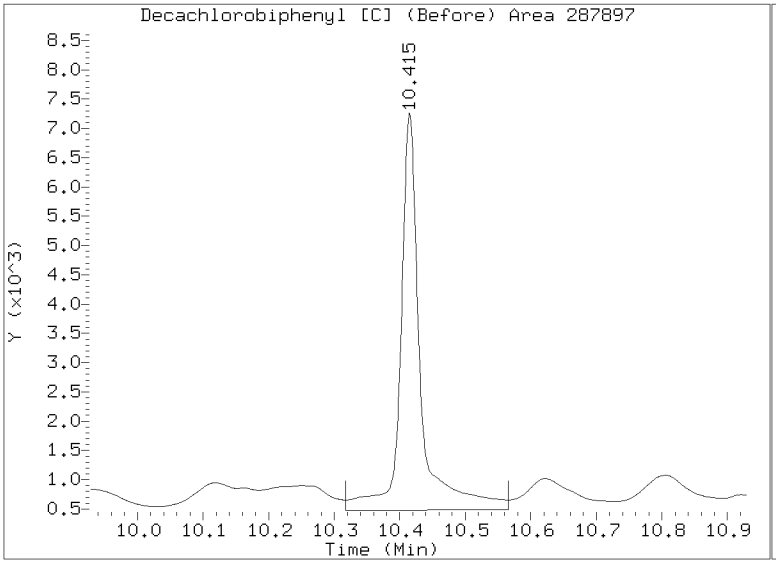
CLP-2 Manual Integration: YES

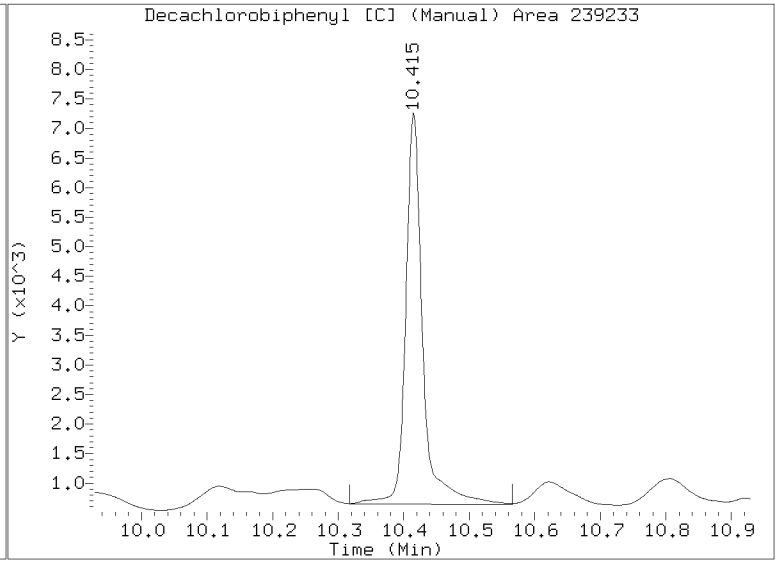
Manual Peak Adjustment Report, CLP-2

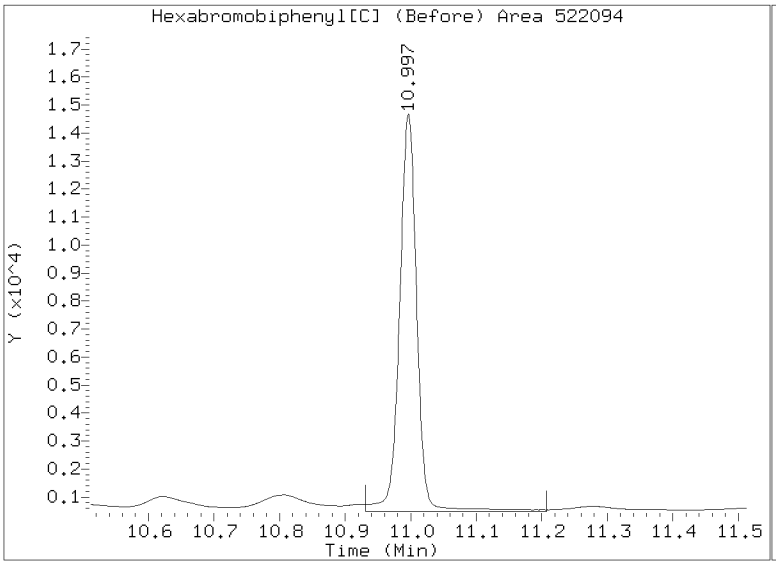
Datafile: /20230131.b/B20230131.b/23013155.D
Injection Date: 01-FEB-2023 06:58
Lab ID:BLA0409-BLK1 Client ID:

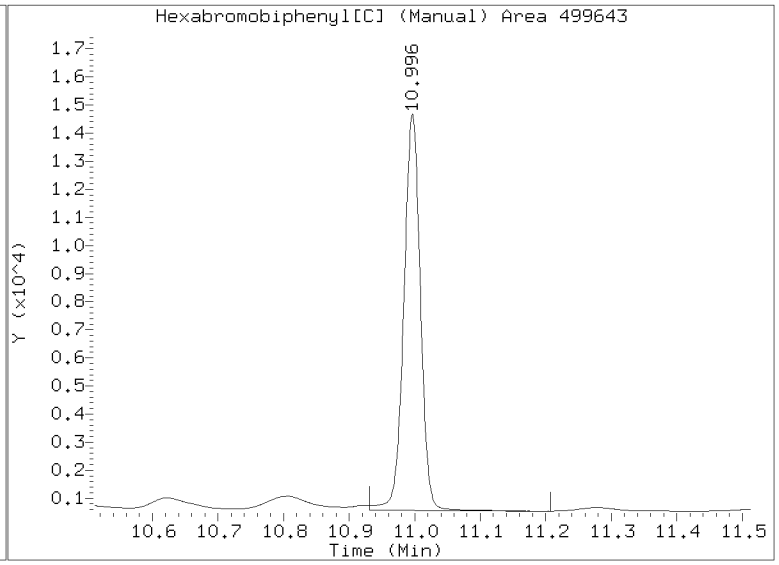












LCS / LCS DUPLICATE RECOVERY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/01/23 07:15
Batch:	BLA0409	Laboratory ID:	BLA0409-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	12.5 g / 2.5 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Hexachlorobenzene	4.00	2.73		68.2	26 - 128

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Hexachlorobenzene	4.00	2.68		66.9	1.93	30	26 - 128

* Indicates values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013156.D
Data file 2: /20230131.b/B20230131.b/23013156.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: BLA0409-BS1
Client ID:
Injection Date: 01-FEB-2023 07:15
Report Date: 02/03/2023 20:25
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.308	-0.003	128656	4.825	-0.008	211790	14.43	13.86	4.0	alpha-BHC
4.690	-0.003	52296	5.300	-0.009	83186	15.23	14.32	6.2	beta-BHC
4.873	-0.002	118303	5.651	-0.010	184469	16.23	14.65	10.2	delta-BHC
4.609	-0.003	118438	5.219	-0.010	191638	15.32	14.78	3.6	gamma-BHC (Lindane)
5.089	-0.004	108122	5.744	-0.010	172199	15.72	14.66	7.0	Heptachlor
5.410	-0.004	110825	6.147	-0.011	159288	14.38	11.87	19.1	Aldrin
6.083	-0.005	100872	6.803	-0.011	151983	15.09	13.70	9.7	Heptachlor epoxide b
6.527	-0.004	154127	7.247	-0.011	215093	25.13	22.00	13.3	Endosulfan I
----			7.550	-0.002	1057	0.00	0.10	---	Dieldrin
6.448	-0.004	196801	7.331	-0.011	281464	32.16	28.41	12.4	4,4'-DDE
----			7.874	-0.002	4013	0.00	0.53	---	Endrin
7.274	-0.004	38749	8.077	-0.011	55608	7.80	7.23	7.7	Endosulfan II
7.096	-0.004	170994	7.938	-0.010	238456	34.40	32.66	5.2	4,4'-DDD
8.137	-0.004	96697	8.675	-0.011	140049	20.50	20.73	1.1	Endosulfan sulfate
7.387	-0.004	159358	8.256	-0.010	211972	31.73	30.08	5.3	4,4'-DDT
7.875	-0.002	5362	8.898	-0.011	10977	2.41	3.52	37.5	Methoxychlor
8.410	-0.004	130972	9.199	-0.011	164662	24.24	22.56	7.2	Endrin ketone
7.703	-0.004	5665	8.408	-0.010	10594	1.43	1.95	30.9	Endrin aldehyde
6.225	-0.005	110525	7.014	-0.011	154219	16.28	13.94	15.5	trans-Chlordane
6.372	-0.004	104606	7.174	-0.011	146687	15.36	13.56	12.5	cis-Chlordane
2.303	-0.001	117042	2.481	-0.001	178698	12.53	12.31	1.7	Hexachlorobutadiene
4.151	-0.002	112987	4.685	-0.008	181676	13.65	13.06	4.4	Hexachlorobenzene
3.799	-0.001	189192	4.191	-0.006	313651	30.04	29.22	2.8	Tetrachloro-m-xylene
9.315	-0.003	164016	10.415	-0.014	224921	38.46	38.54	0.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

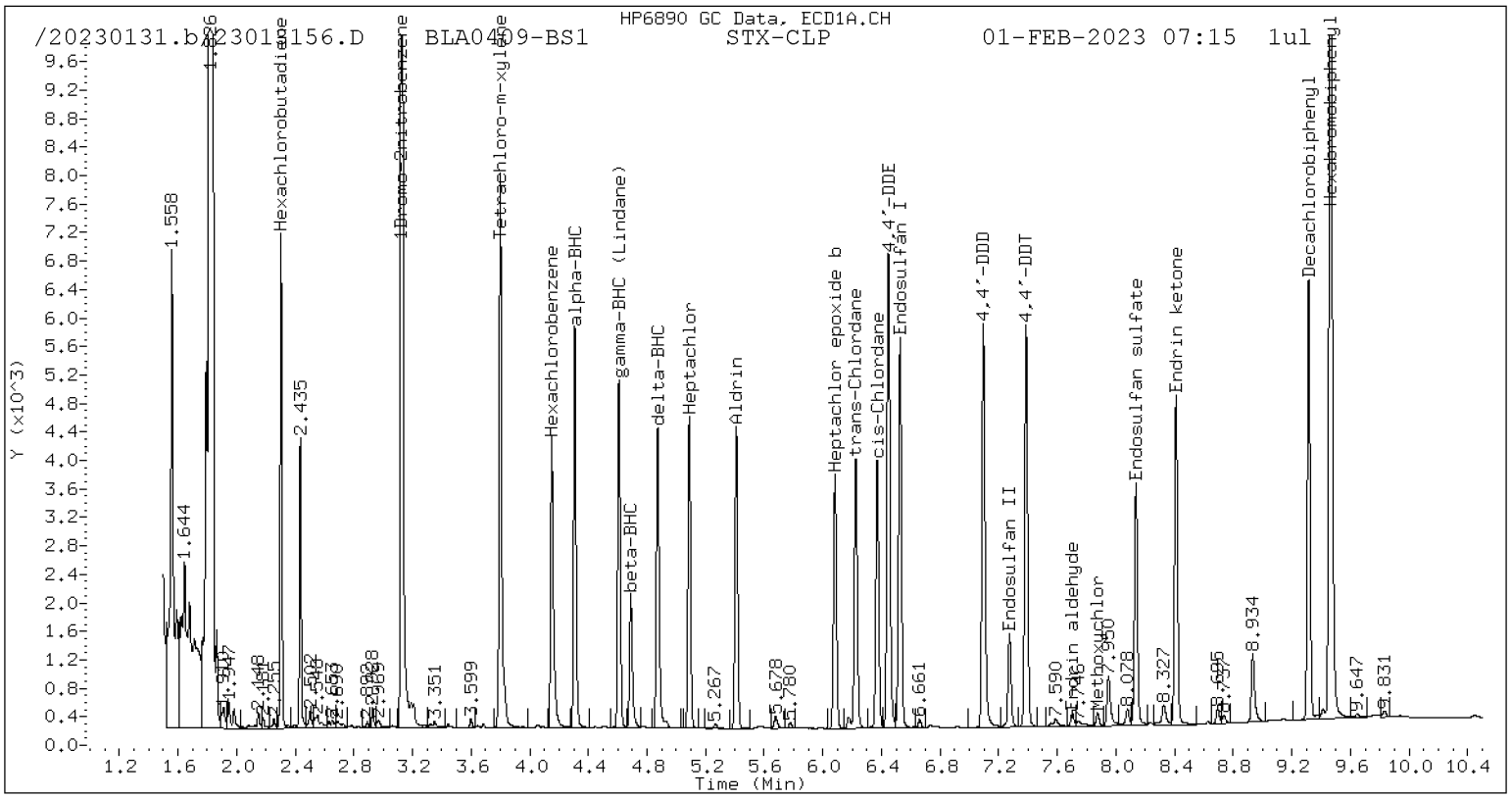
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	463171	-31.1
Hexabromobiphenyl	609723	420852	-31.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	762597	-24.2
Hexabromobiphenyl	769764	527977	-31.4

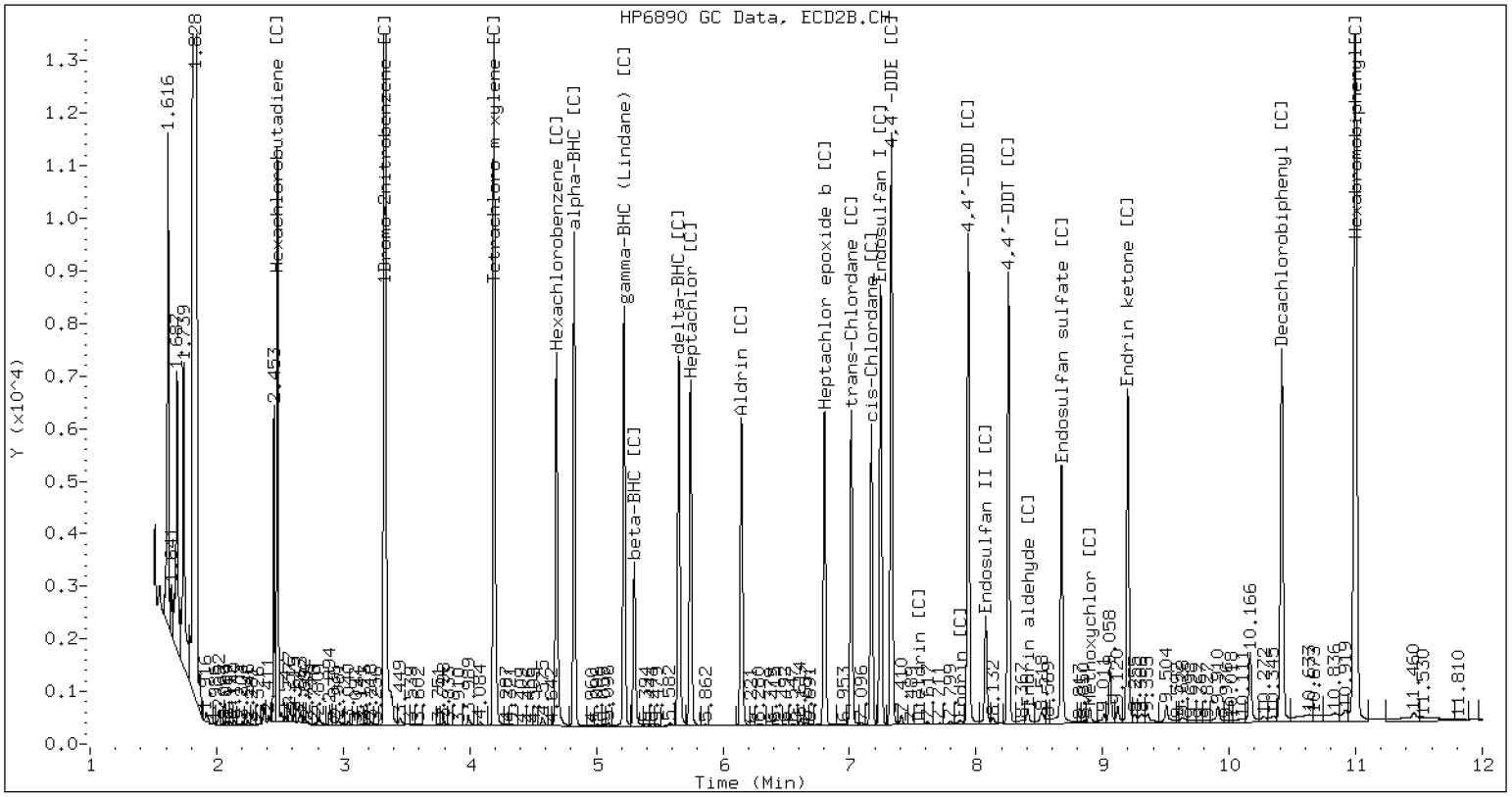
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230131.b/B20230131.b/23013156.D BLA0409-BS1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013157.D
Data file 2: /20230131.b/B20230131.b/23013157.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: BLA0409-BSD1
Client ID:
Injection Date: 01-FEB-2023 07:33
Report Date: 02/03/2023 20:25
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.308	-0.003	127140	4.825	-0.008	212046	14.19	13.86	2.3	alpha-BHC
4.690	-0.002	53437	5.301	-0.009	84983	15.49	14.61	5.8	beta-BHC
4.873	-0.003	119627	5.651	-0.010	190024	16.33	15.08	8.0	delta-BHC
4.609	-0.003	117325	5.220	-0.009	195738	15.10	15.08	0.2	gamma-BHC (Lindane)
5.089	-0.003	107337	5.744	-0.010	175217	15.53	14.90	4.1	Heptachlor
5.410	-0.004	110047	6.147	-0.011	160849	14.20	11.98	17.0	Aldrin
6.083	-0.005	100846	6.802	-0.012	154830	15.01	13.94	7.4	Heptachlor epoxide b
6.526	-0.005	155831	7.246	-0.011	224900	25.28	22.98	9.5	Endosulfan I
----			7.548	-0.004	721	0.00	0.07	---	Dieldrin
6.448	-0.004	196446	7.331	-0.011	291792	31.95	29.42	8.2	4,4'-DDE
----			7.874	-0.002	1721	0.00	0.23	---	Endrin
7.274	-0.004	36815	8.077	-0.010	52187	7.26	6.71	7.8	Endosulfan II
7.095	-0.004	172527	7.938	-0.010	246157	33.99	33.36	1.9	4,4'-DDD
8.136	-0.005	90939	8.675	-0.011	125523	18.88	18.38	2.7	Endosulfan sulfate
7.387	-0.004	162059	8.256	-0.011	219946	31.59	30.88	2.3	4,4'-DDT
7.875	-0.002	4365	8.898	-0.011	13391	1.92	4.25	75.5*	Methoxychlor
8.410	-0.004	131370	9.199	-0.011	175330	23.81	23.77	0.1	Endrin ketone
7.702	-0.004	8873	8.407	-0.011	15512	2.19	2.83	25.3	Endrin aldehyde
6.225	-0.005	109639	7.014	-0.012	159078	16.07	14.37	11.2	trans-Chlordane
6.371	-0.005	104050	7.173	-0.012	152134	15.21	14.04	8.0	cis-Chlordane
2.303	-0.001	115858	2.481	-0.001	265299	12.34	18.26	38.7	Hexachlorobutadiene
4.151	-0.002	111377	4.685	-0.007	180271	13.39	12.95	3.3	Hexachlorobenzene
3.799	-0.001	183002	4.191	-0.005	307235	28.91	28.59	1.1	Tetrachloro-m-xylene
9.315	-0.004	166719	10.414	-0.015	224127	38.28	38.01	0.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

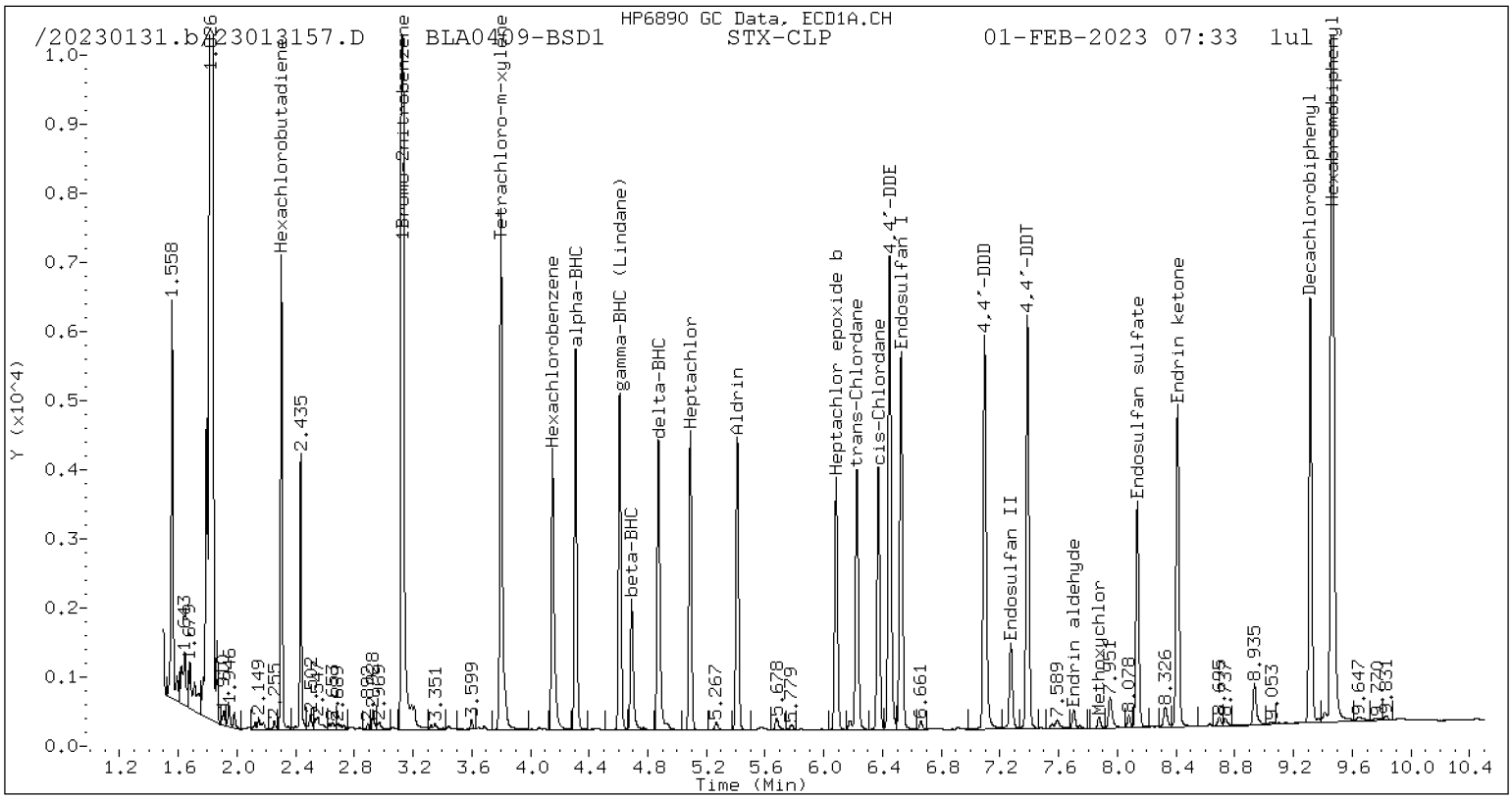
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	465465	-30.8
Hexabromobiphenyl	609723	429796	-29.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	763426	-24.1
Hexabromobiphenyl	769764	533501	-30.7

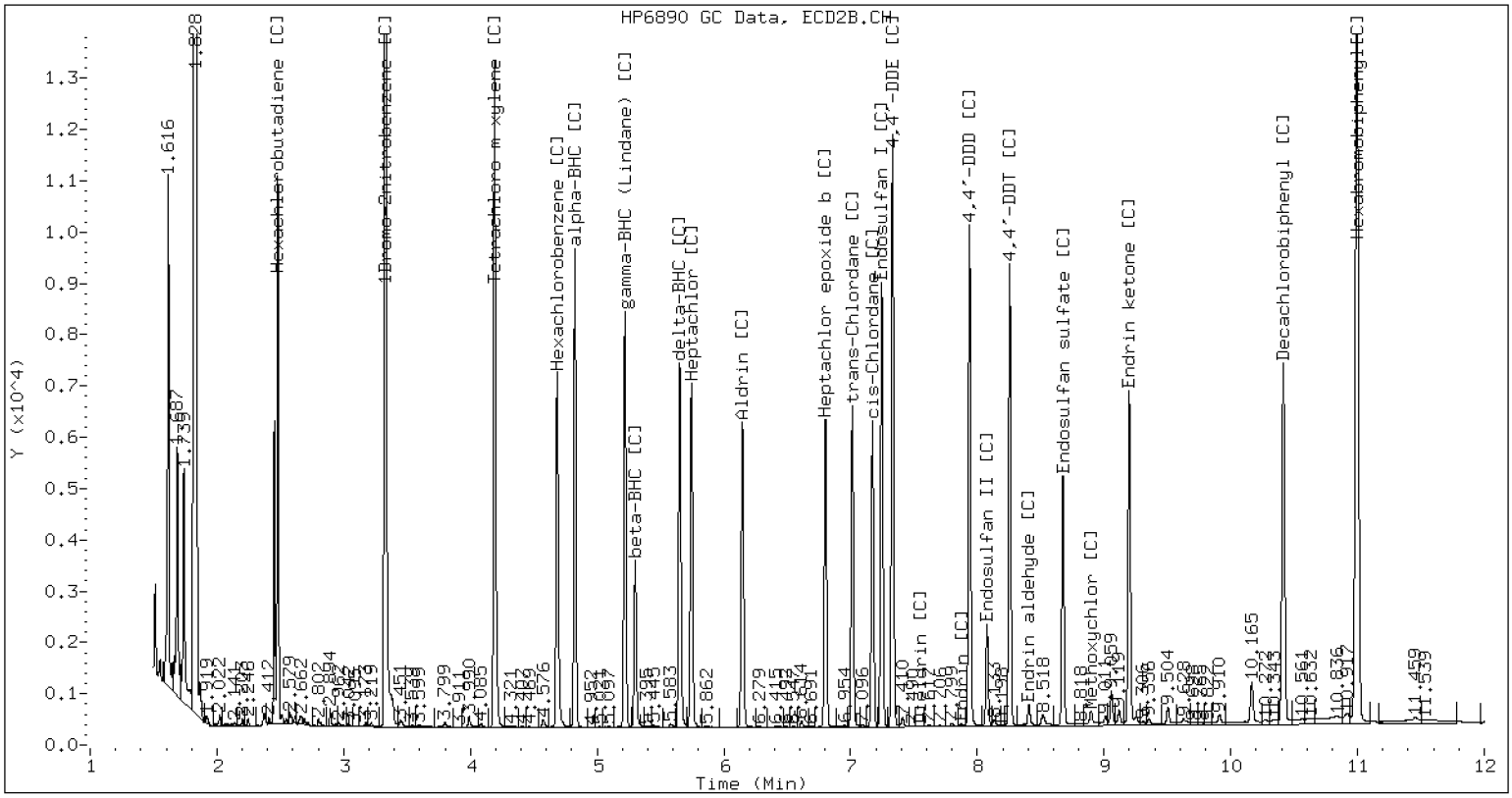
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230131.b/B20230131.b/23013157.D BLA0409-BSD1 CLP2



CLP-2 Manual Integration: NO

MS / MS DUPLICATE RECOVERY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/01/23 08:09
Batch:	BLA0409	Laboratory ID:	BLA0409-MS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike
Initial/Final:	21.26 g / 2.5 mL	Source Sample:	LDW23-SS1116

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Hexachlorobenzene	4.00	ND	U	3.08		77.0	26 - 128

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

MS / MS DUPLICATE RECOVERY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/01/23 08:27
Batch:	BLA0409	Laboratory ID:	BLA0409-MSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike Dup
Initial/Final:	21.26 g / 2.5 mL	Source Sample:	LDW23-SS1116

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Hexachlorobenzene	4.00	2.44		61.0	23.1	30	26 - 128

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013159.D
Data file 2: /20230131.b/B20230131.b/23013159.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: BLA0409-MS1
Client ID:
Injection Date: 01-FEB-2023 08:09
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.307	-0.003	136643	4.824	-0.008	185724	15.80	12.59	22.6	alpha-BHC N
4.690	-0.003	48989	5.300	-0.009	75921	14.71	13.54	8.3	beta-BHC N
4.871	-0.004	119671	5.651	-0.010	166893	16.93	13.74	20.8	delta-BHC N
4.608	-0.003	119663	5.219	-0.010	170780	15.96	13.65	15.6	gamma-BHC (Lindane) N
5.088	-0.004	101838	5.744	-0.010	174807	15.26	15.42	1.0	Heptachlor N
5.410	-0.004	107759	6.146	-0.012	180041	14.41	13.91	3.5	Aldrin
6.083	-0.006	94222	6.802	-0.013	184756	14.53	17.26	17.2	Heptachlor epoxide b
6.526	-0.005	134750	7.246	-0.011	199549	22.65	21.15	6.8	Endosulfan I
6.768	-0.023	49288	----			7.71	0.00	---	Dieldrin
6.445	-0.007	212003	7.330	-0.012	332699	35.72	34.81	2.6	4,4'-DDE
----			7.896	0.020	101993	0.00	12.83	---	Endrin
7.273	-0.005	48687	8.074	-0.013	162456	9.02	19.94	75.4*	Endosulfan II
7.093	-0.006	261820	7.938	-0.011	254873	48.47	32.96	38.1	4,4'-DDD
8.136	-0.005	88472	8.674	-0.012	175177	17.26	24.48	34.6	Endosulfan sulfate
7.385	-0.006	246735	8.257	-0.010	379053	45.21	50.79	11.6	4,4'-DDT
7.874	-0.003	18803	8.935	0.026	8268	7.77	2.50	102.6*	Methoxychlor
8.408	-0.006	248727	9.201	-0.008	408113	42.37	52.81	21.9	Endrin ketone
7.724	0.018	64158	8.404	-0.014	82889	14.90	14.42	3.3	Endrin aldehyde
6.224	-0.005	95290	7.014	-0.011	214050	14.47	20.06	32.4	trans-Chlordane
6.372	-0.004	108936	7.174	-0.011	144559	16.49	13.84	17.5	cis-Chlordane
2.303	-0.001	121541	2.481	-0.001	252374	13.41	18.02	29.3	Hexachlorobutadiene
4.150	-0.003	123579	4.684	-0.008	197417	15.39	14.71	4.5	Hexachlorobenzene N
3.799	-0.002	192141	4.190	-0.006	306253	31.45	29.57	6.2	Tetrachloro-m-xylene N
9.314	-0.005	200710	10.415	-0.014	252517	43.32	40.87	5.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

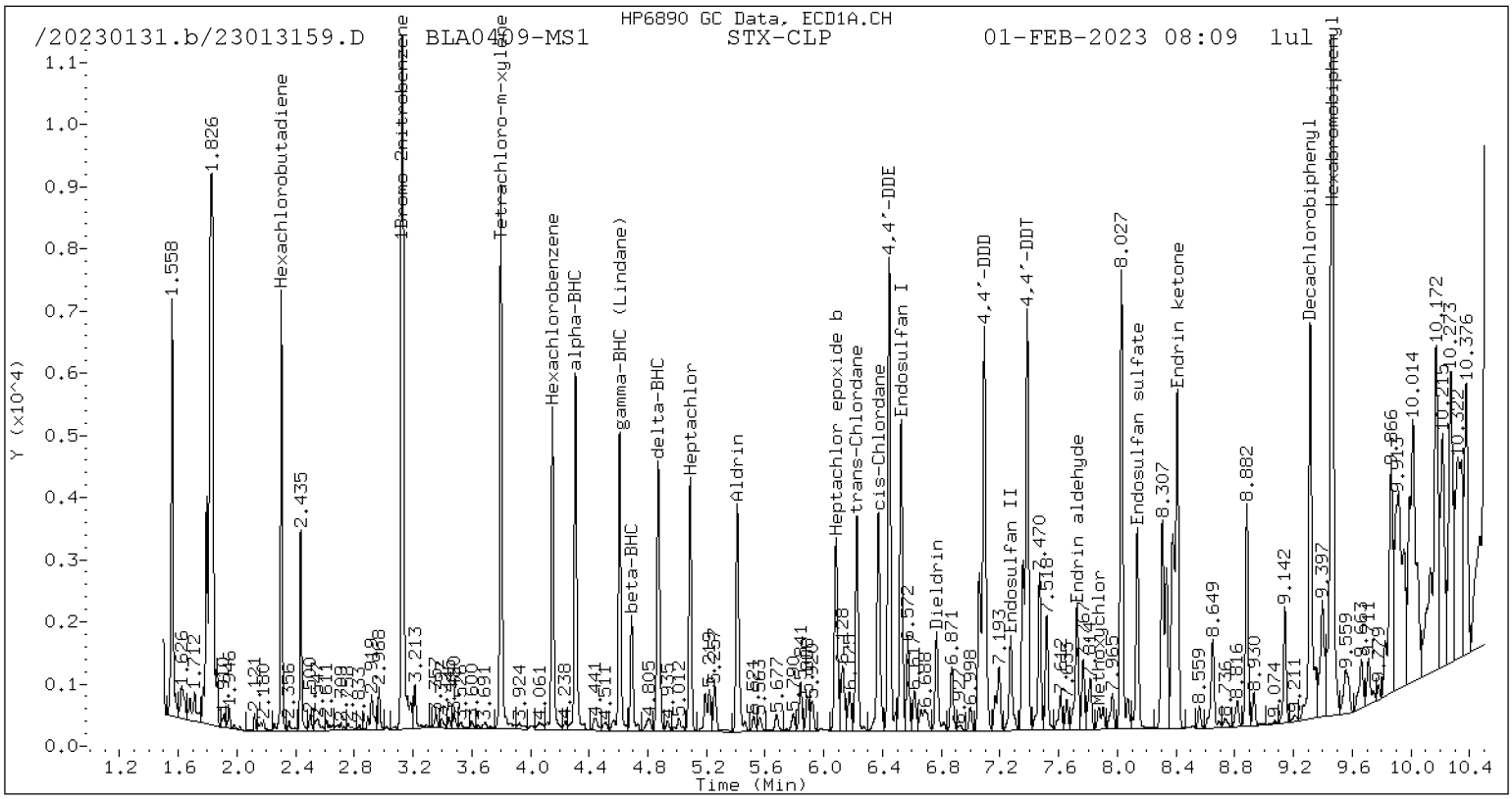
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	449269	-33.2
Hexabromobiphenyl	609723	457308	-25.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	735811	-26.9
Hexabromobiphenyl	769764	559056	-27.4

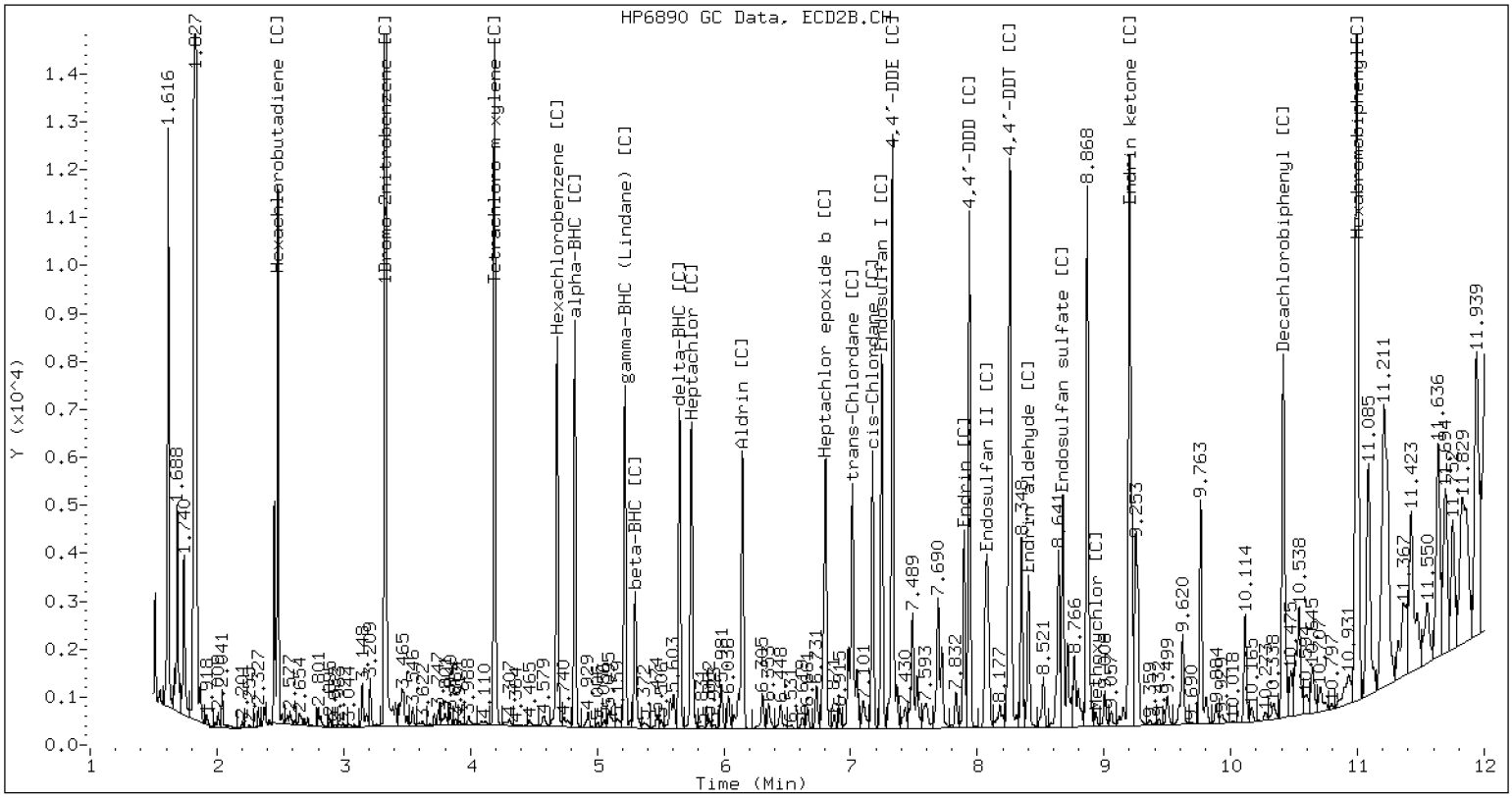
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

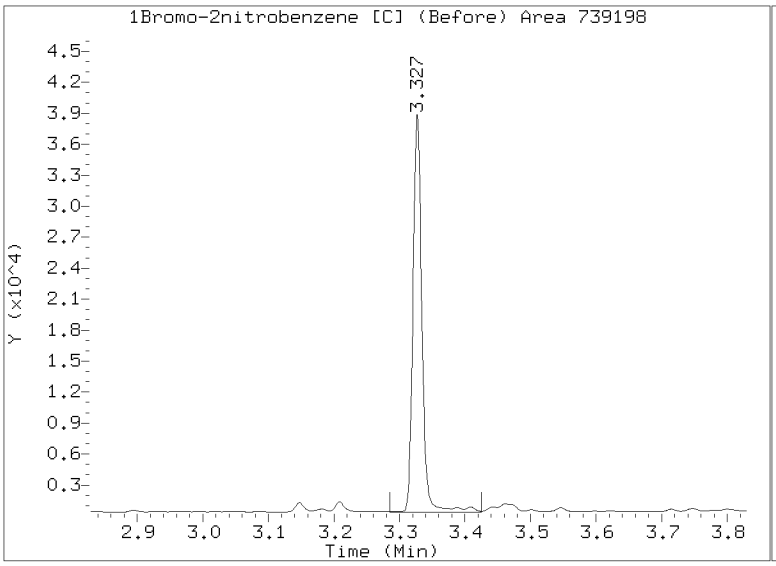
/20230131.b/B20230131.b/23013159.D BLA0409-MS1 CLP2

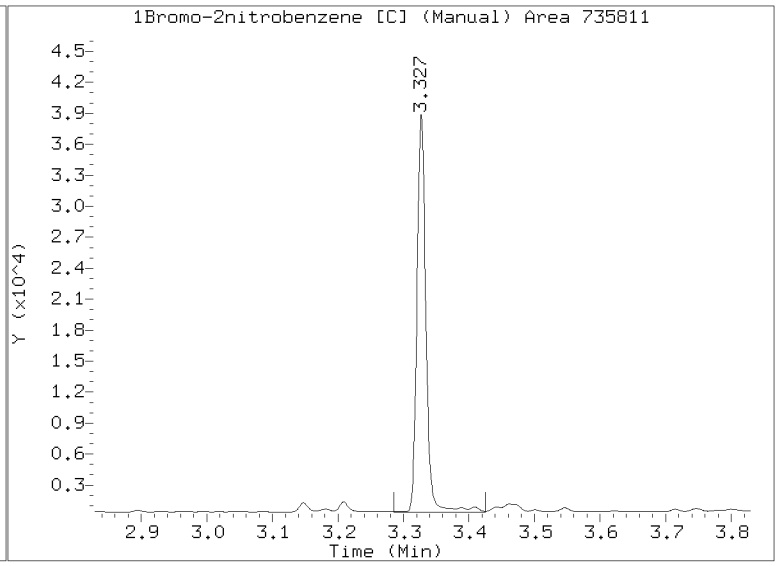


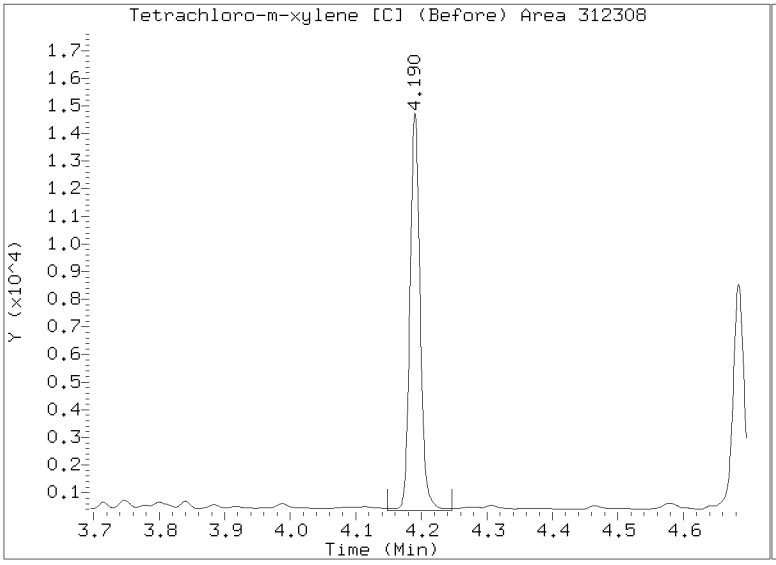
CLP-2 Manual Integration: YES

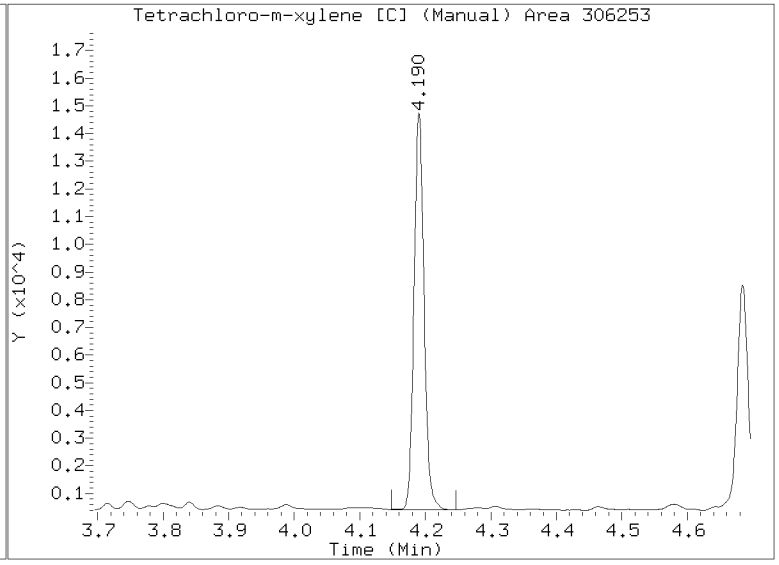
Manual Peak Adjustment Report, CLP-2

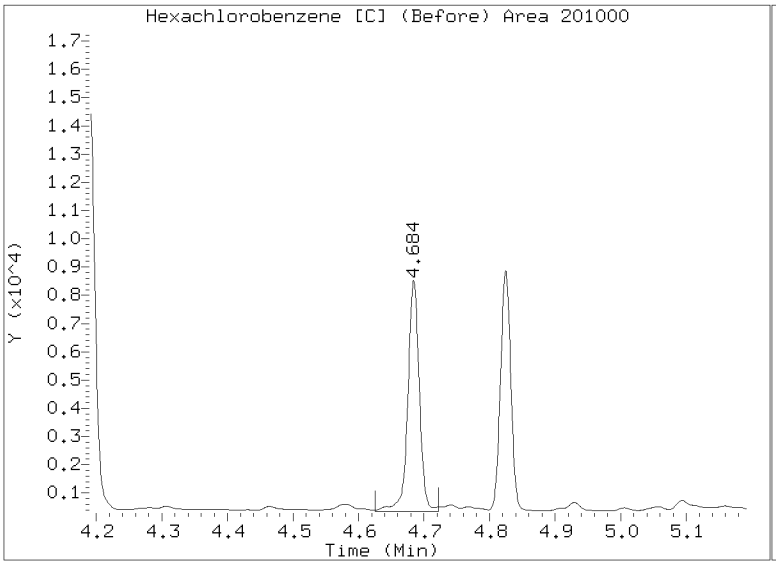
Datafile: /20230131.b/B20230131.b/23013159.D
Injection Date: 01-FEB-2023 08:09
Lab ID:BLA0409-MS1 Client ID:

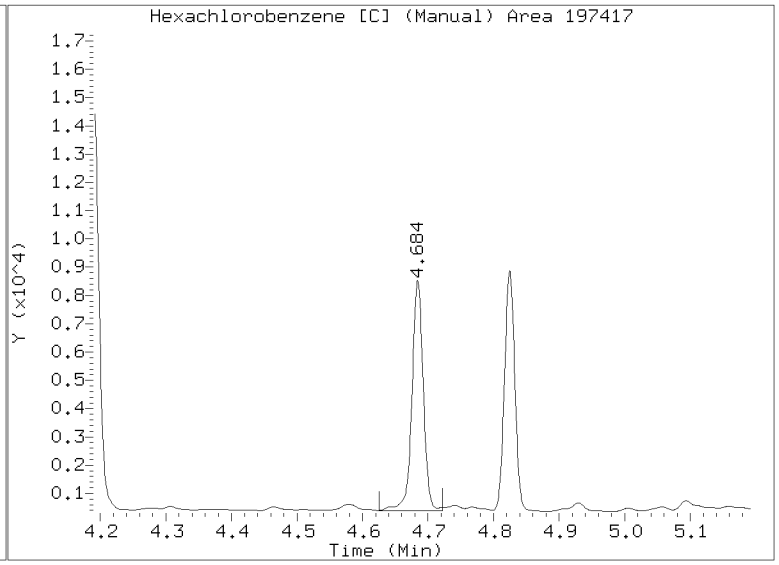












Manual Peak Adjustment Report, CLP-2

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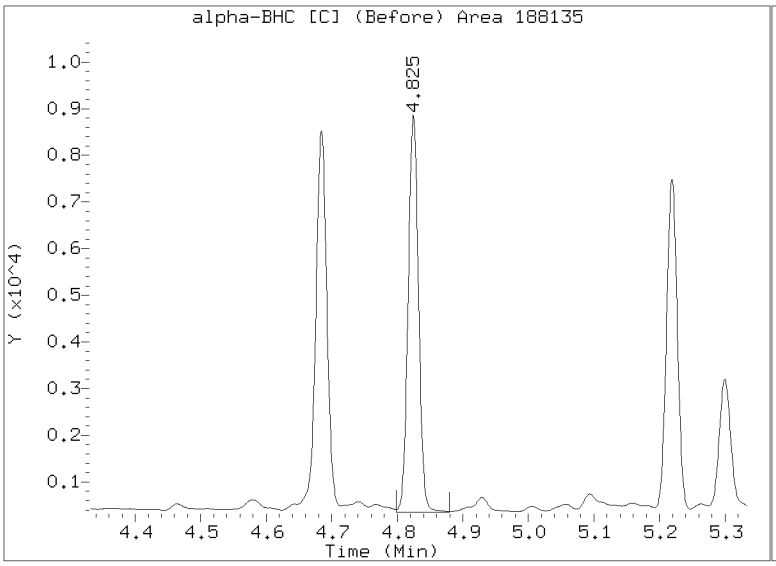
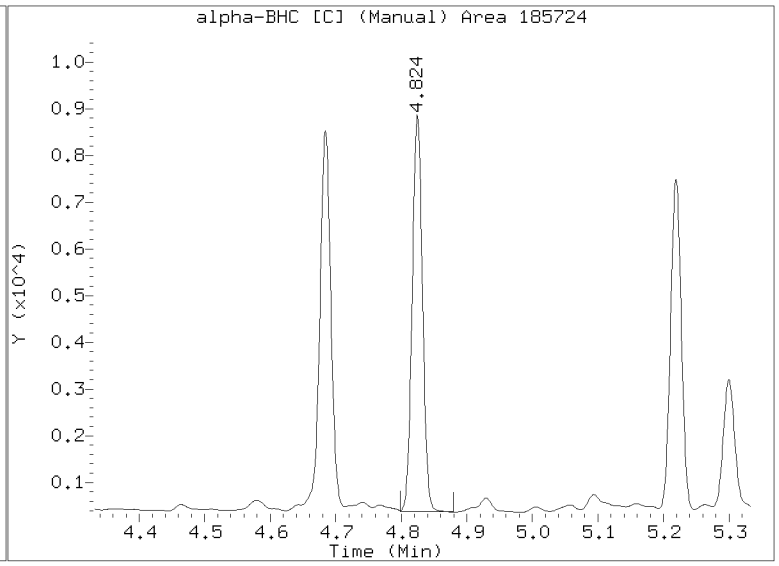
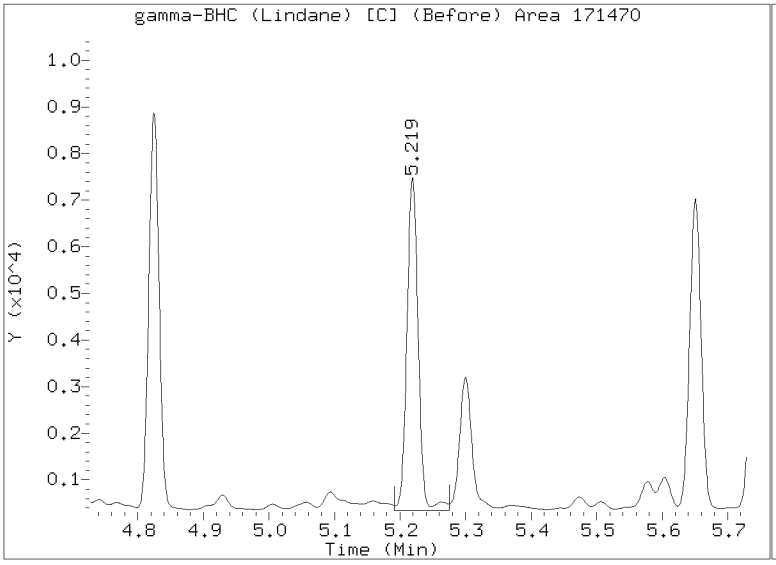
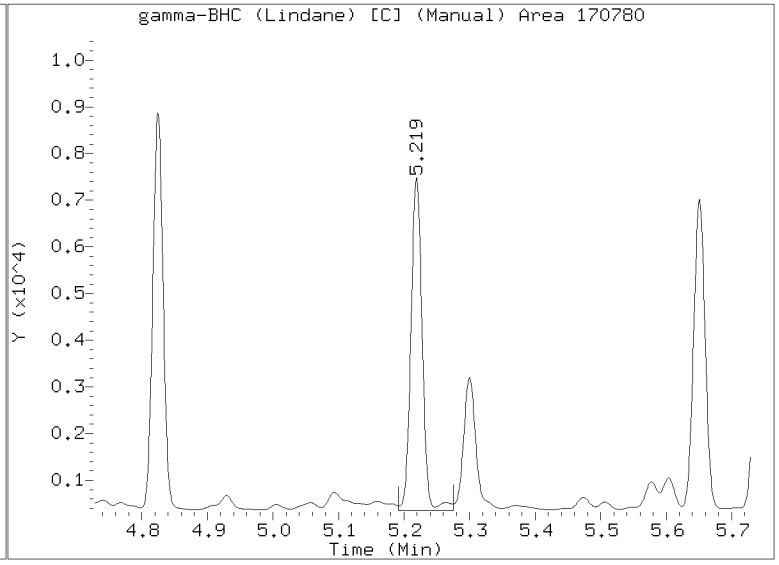
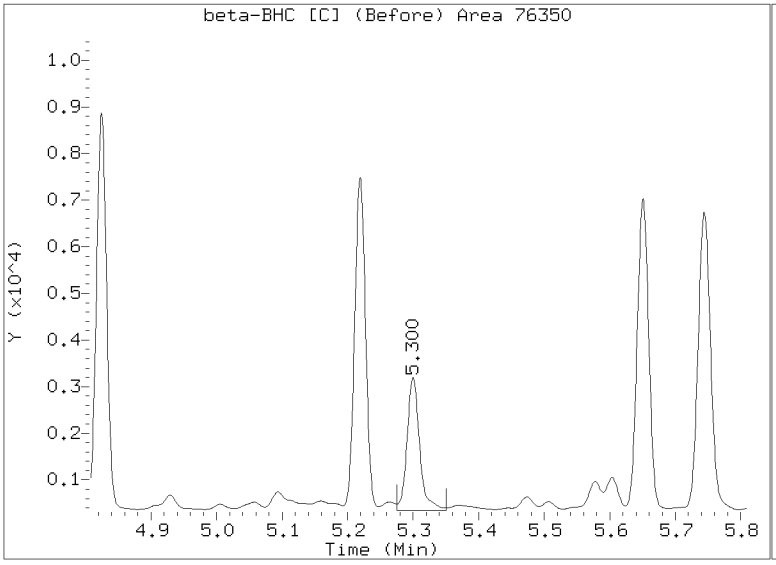
Injection Date: 01-FEB-2023 08:09
Lab ID:BLA0409-MS1 Client ID:

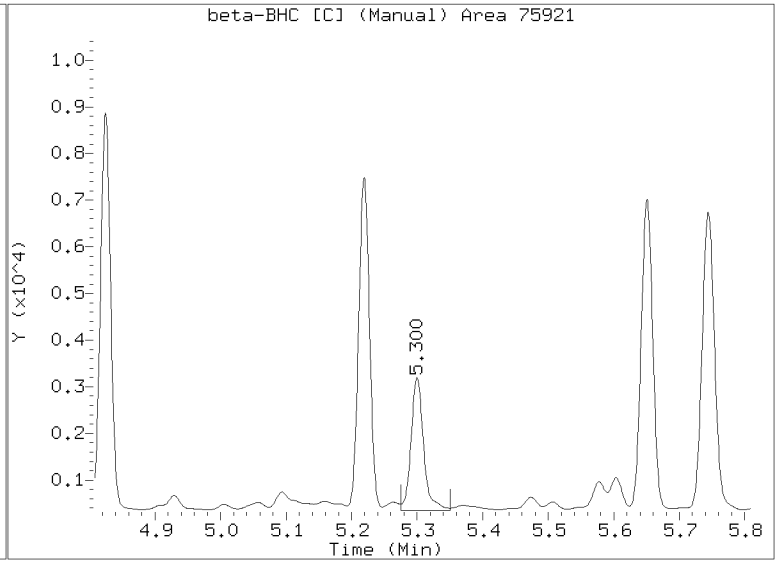






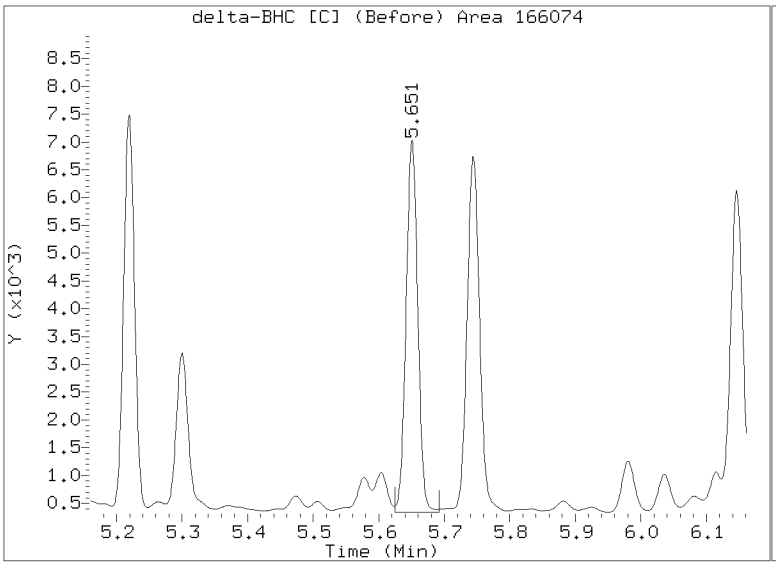


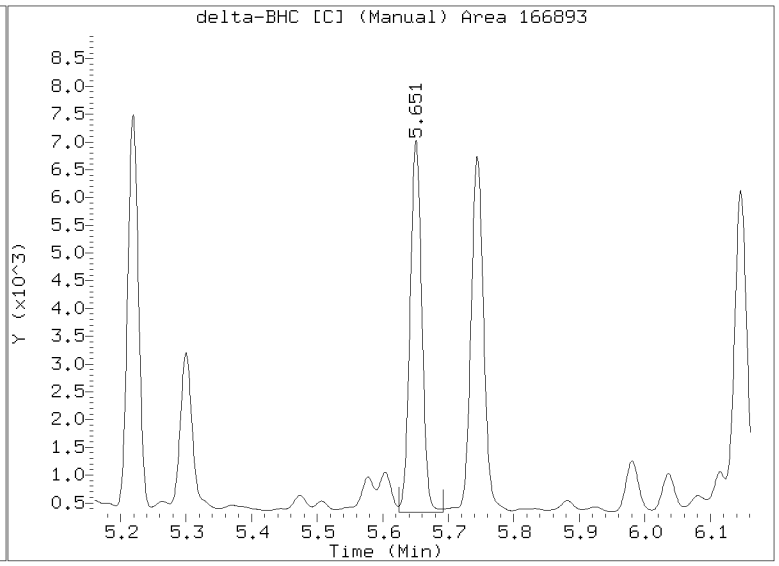


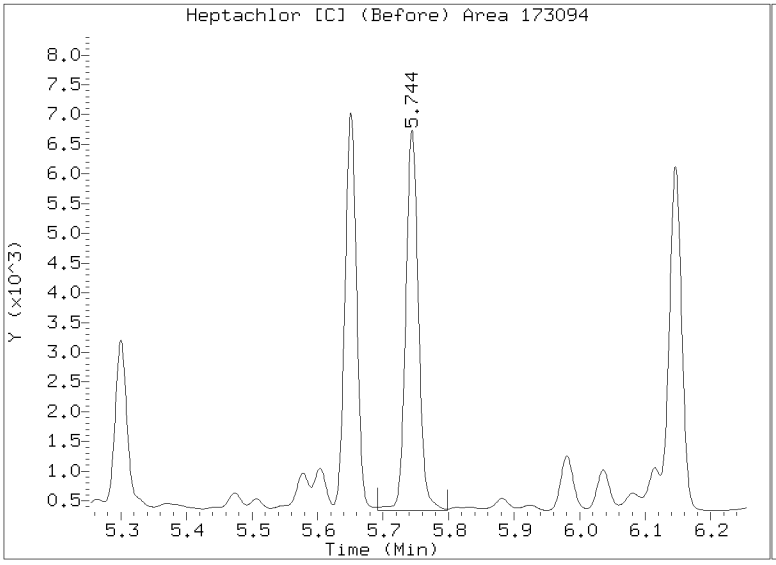


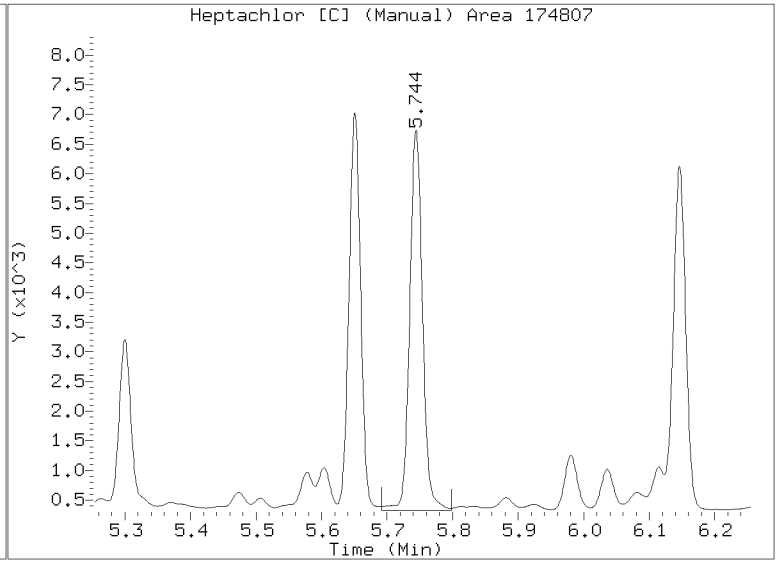
Manual Peak Adjustment Report, CLP-2

Datafile: /20230131.b/B20230131.b/23013159.D
Injection Date: 01-FEB-2023 08:09
Lab ID:BLA0409-MS1 Client ID:









Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013160.D
Data file 2: /20230131.b/B20230131.b/23013160.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: BLA0409-MSD1
Client ID:
Injection Date: 01-FEB-2023 08:27
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.307	-0.004	154145	4.825	-0.008	180755	16.10	12.18	27.8	alpha-BHC N
4.689	-0.004	67559	5.299	-0.010	85427	18.33	15.14	19.1	beta-BHC N
4.871	-0.004	117931	5.650	-0.011	165558	15.07	13.54	10.7	delta-BHC N
4.608	-0.004	157720	5.219	-0.010	164459	19.00	13.05	37.1	gamma-BHC (Lindane) N
5.088	-0.005	102669	5.744	-0.011	176024	13.90	15.42	10.4	Heptachlor N
5.409	-0.005	104158	6.146	-0.012	163917	12.58	12.58	0.0	Aldrin N
6.082	-0.007	167839	6.802	-0.012	173032	23.38	16.06	37.1	Heptachlor epoxide b N
6.525	-0.006	249708	7.246	-0.011	183658	37.91	19.34	64.9*	Endosulfan I N
6.767	-0.024	26641	----			3.76	0.00	---	Dieldrin
6.444	-0.007	303716	7.330	-0.011	439516	46.23	45.68	1.2	4,4'-DDE N
----			----			0.00	0.00	---	Endrin
7.273	-0.005	40943	8.079	-0.008	80695	8.68	5.00	53.8*	Endosulfan II N
7.092	-0.007	366404	7.937	-0.012	242372	77.60	15.82	132.3*	4,4'-DDD N
8.137	-0.003	235488	8.674	-0.012	325723	52.57	22.97	78.4*	Endosulfan sulfate N
7.386	-0.005	220668	8.256	-0.010	920263	46.25	62.23	29.5	4,4'-DDT N
7.868	-0.009	120499	----			56.99	0.00	---	Methoxychlor
8.409	-0.005	182537	9.198	-0.012	299276	35.57	19.54	58.2*	Endrin ketone N
----			8.396	-0.022	744666	0.00	65.38	---	Endrin aldehyde
6.224	-0.006	221930	7.013	-0.012	1469428	30.44	136.76	127.2*	trans-Chlordane N
6.371	-0.005	223546	7.174	-0.011	195886	30.58	18.64	48.5*	cis-Chlordane N
2.303	-0.001	111676	2.481	-0.001	226561	11.13	16.07	36.3	Hexachlorobutadiene
4.150	-0.003	108524	4.685	-0.008	186453	12.21	13.80	12.2	Hexachlorobenzene N
3.798	-0.002	188209	4.190	-0.006	363343	27.83	34.85	22.4	Tetrachloro-m-xylene N
9.314	-0.004	296951	10.416	-0.013	1932448	73.31	157.82	73.1*	Decachlorobiphenyl N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

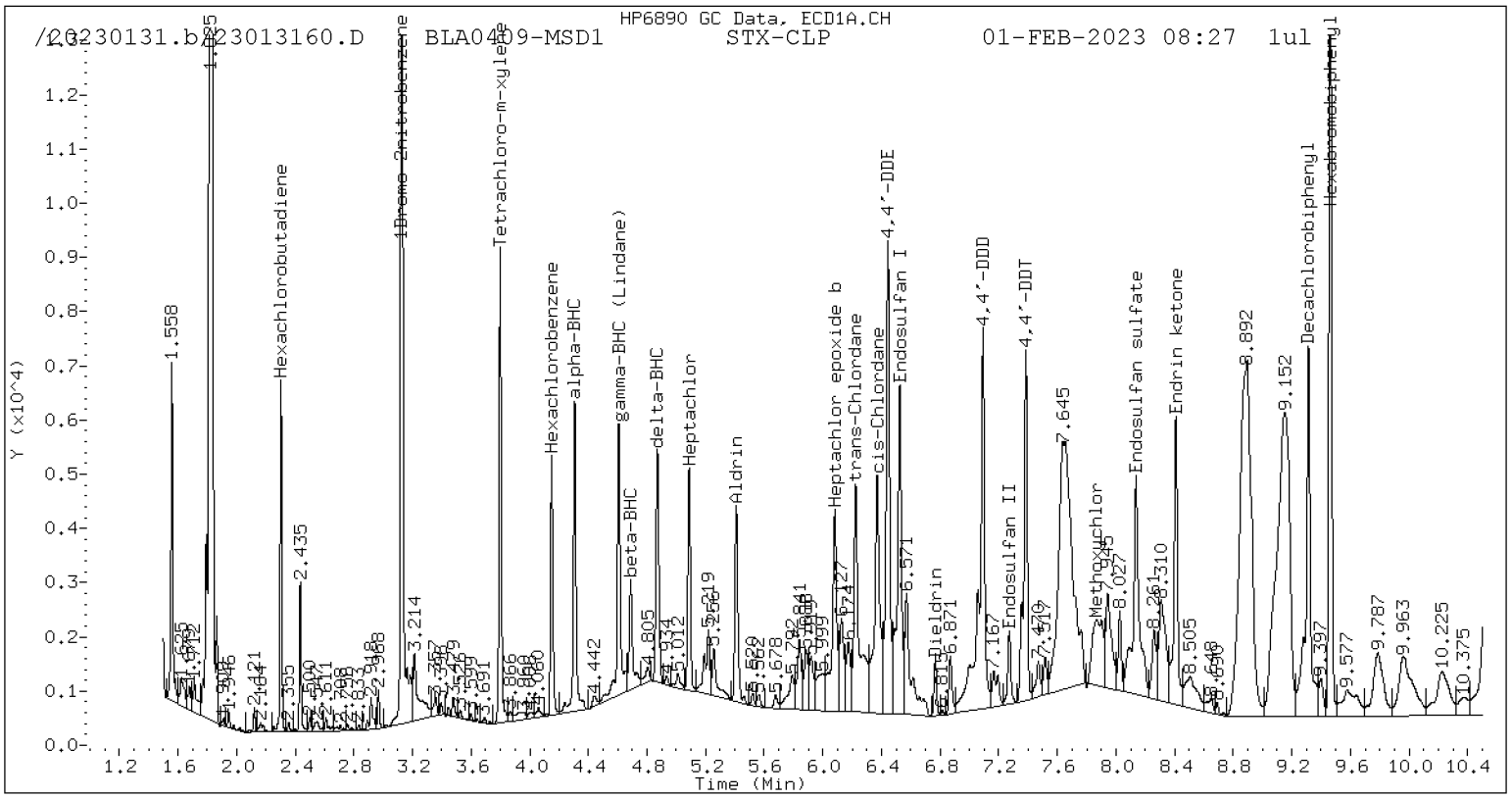
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	497329	-26.0
Hexabromobiphenyl	609723	399746	-34.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	740760	-26.4
Hexabromobiphenyl	769764	1107865	43.9

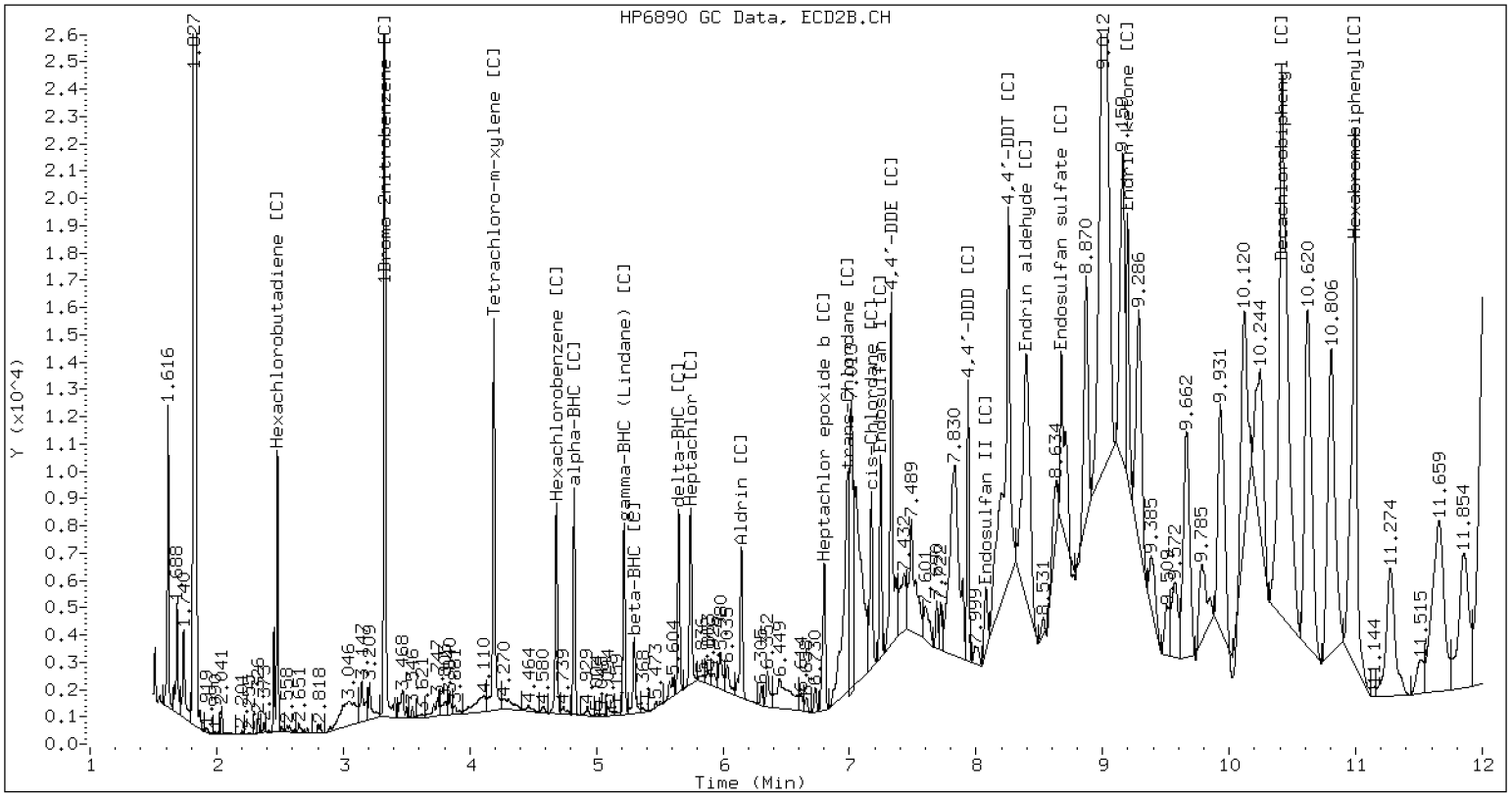
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230131.b/B20230131.b/23013160.D BLA0409-MSD1 CLP2



CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, CLP-2

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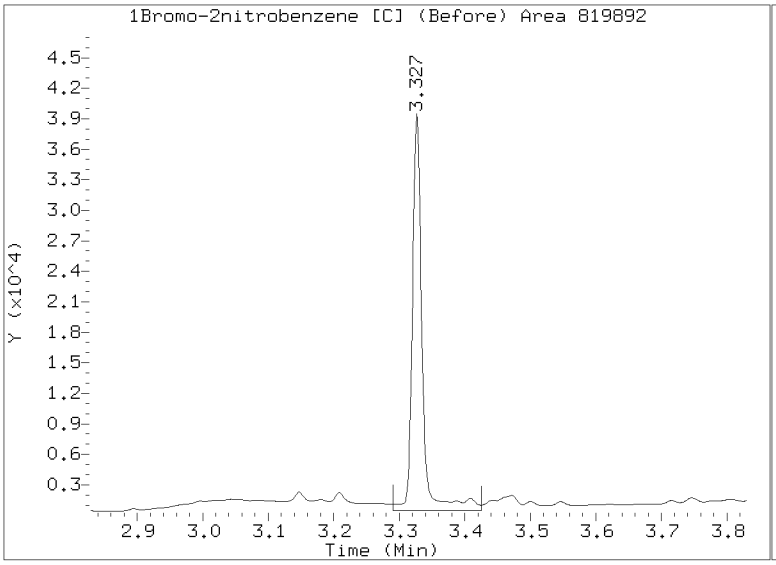
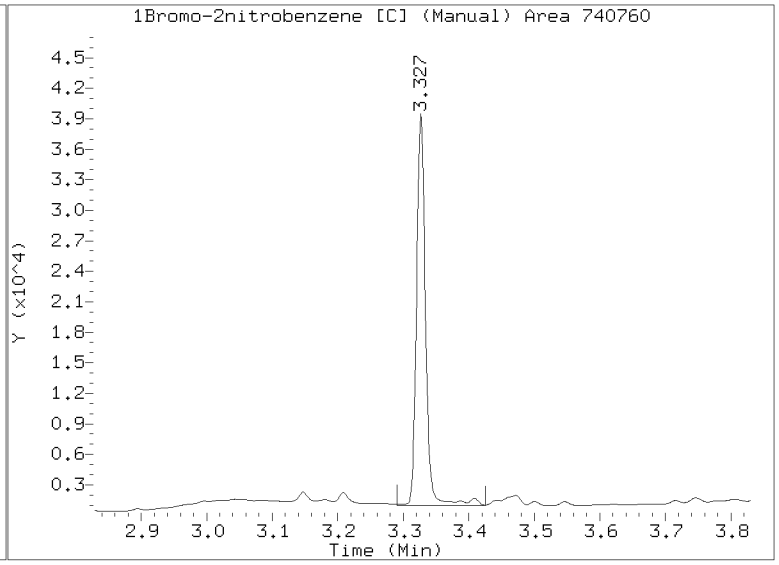
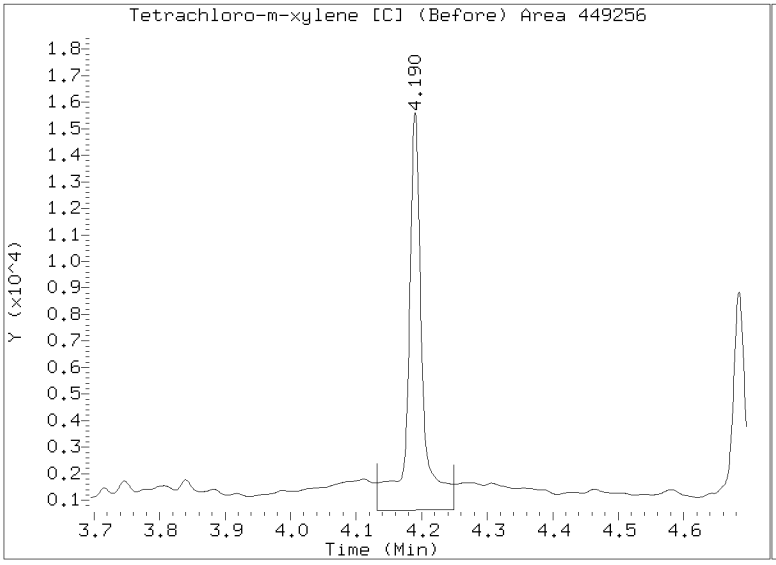
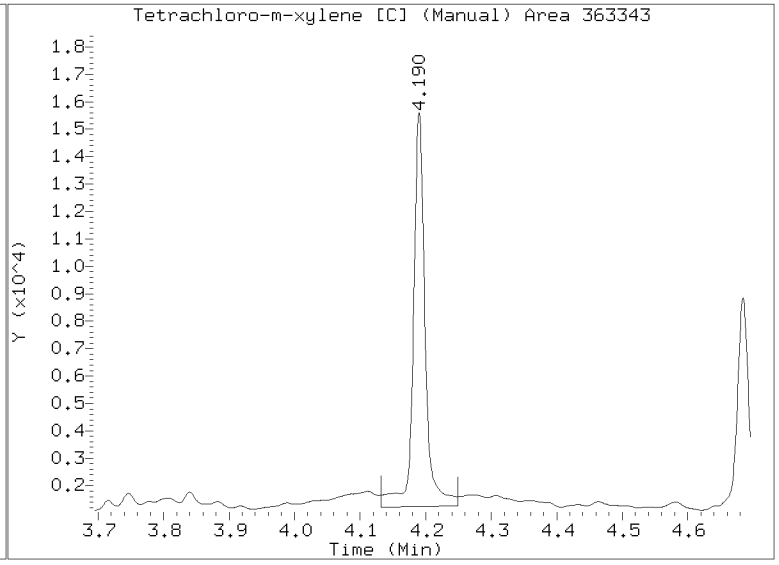
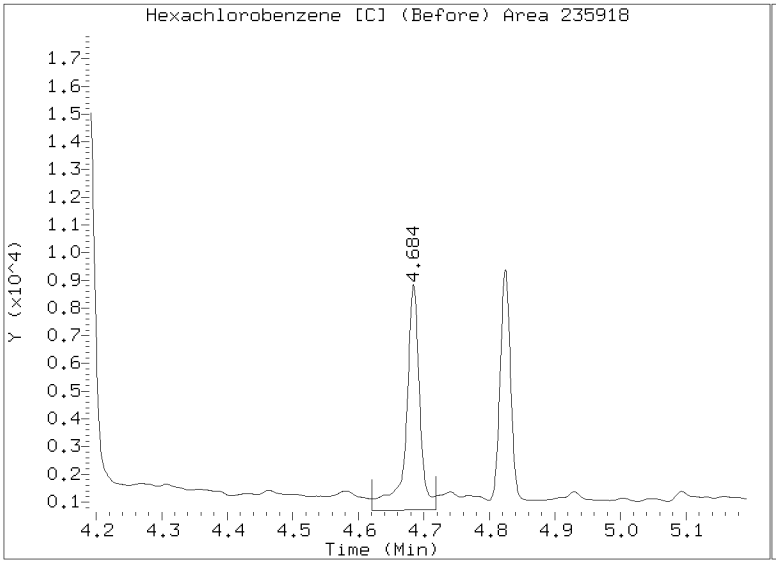
Injection Date: 01-FEB-2023 08:27
Lab ID:BLA0409-MSD1 Client ID:

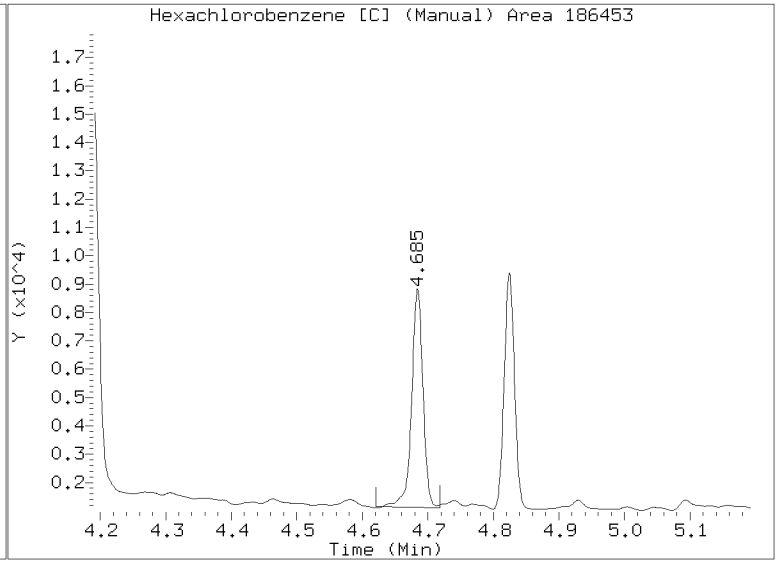






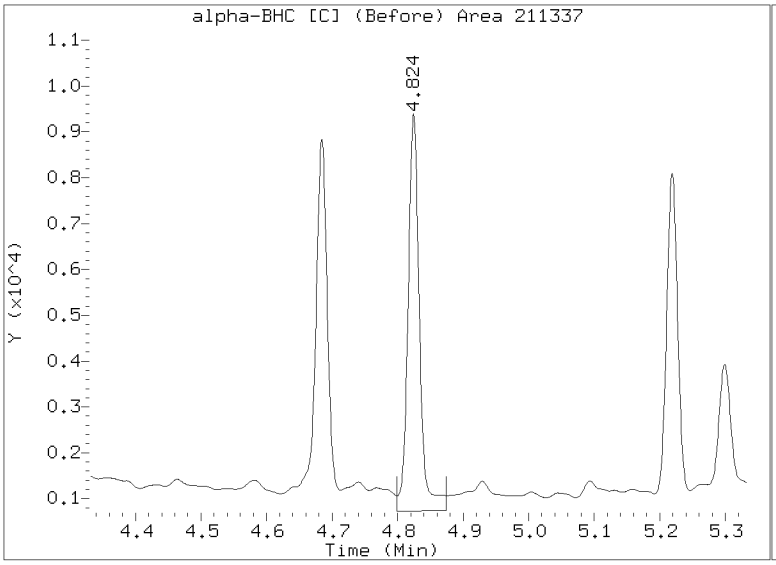


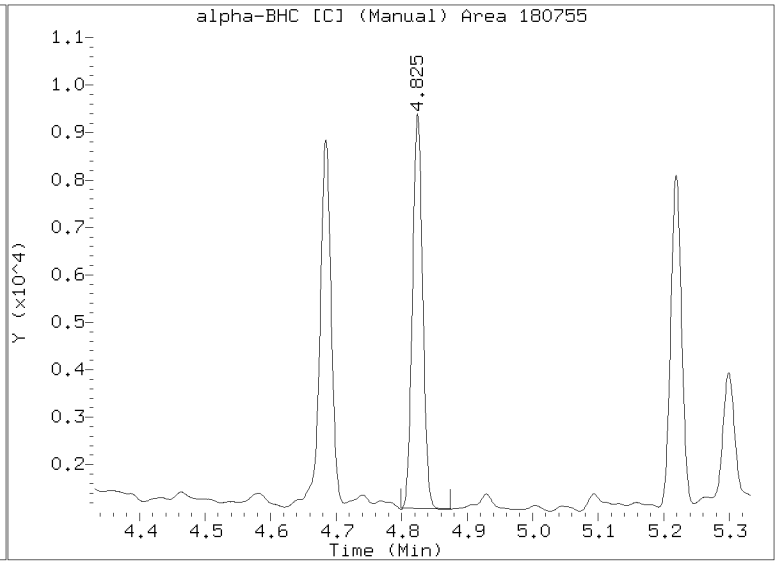


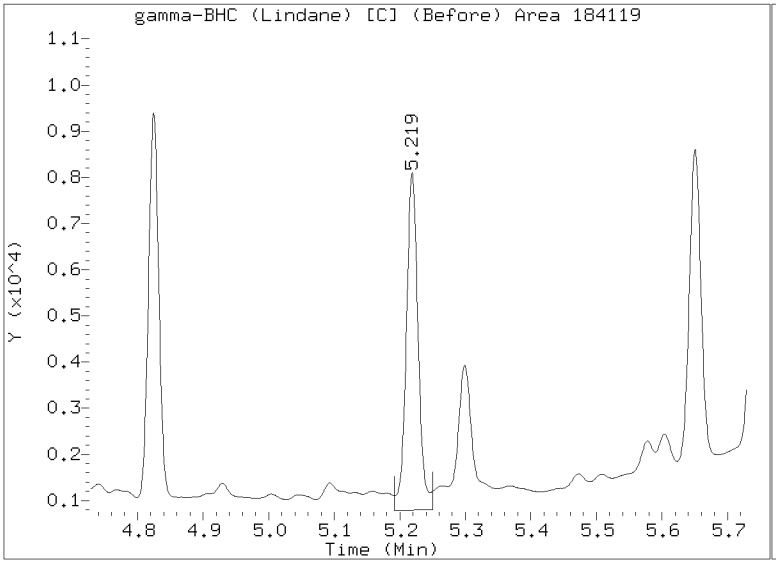


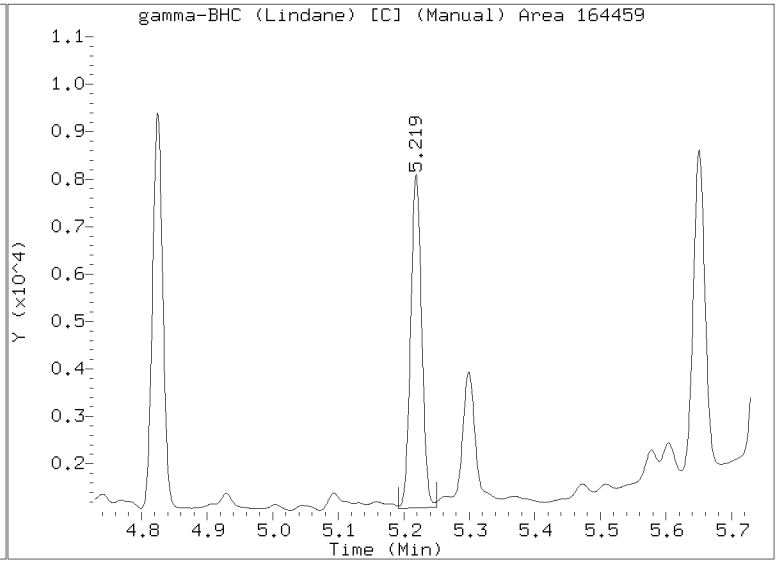
Manual Peak Adjustment Report, CLP-2

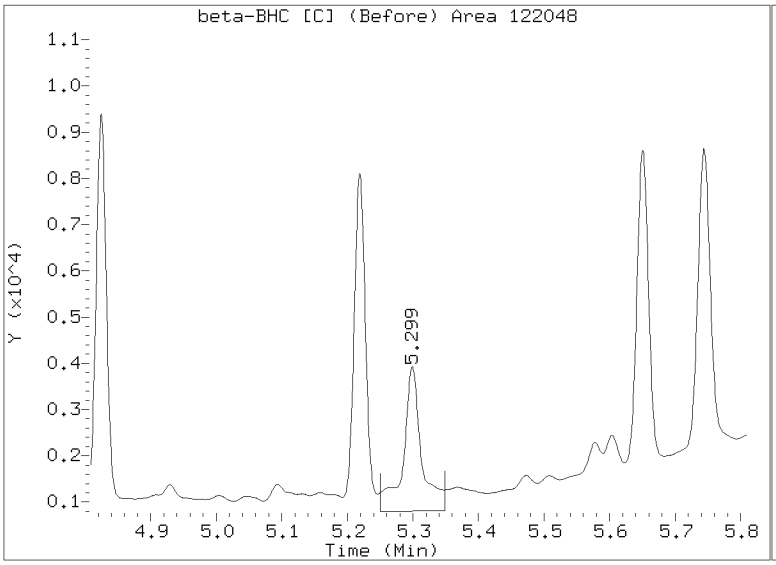
Datafile: /20230131.b/B20230131.b/23013160.D
Injection Date: 01-FEB-2023 08:27
Lab ID:BLA0409-MSD1 Client ID:

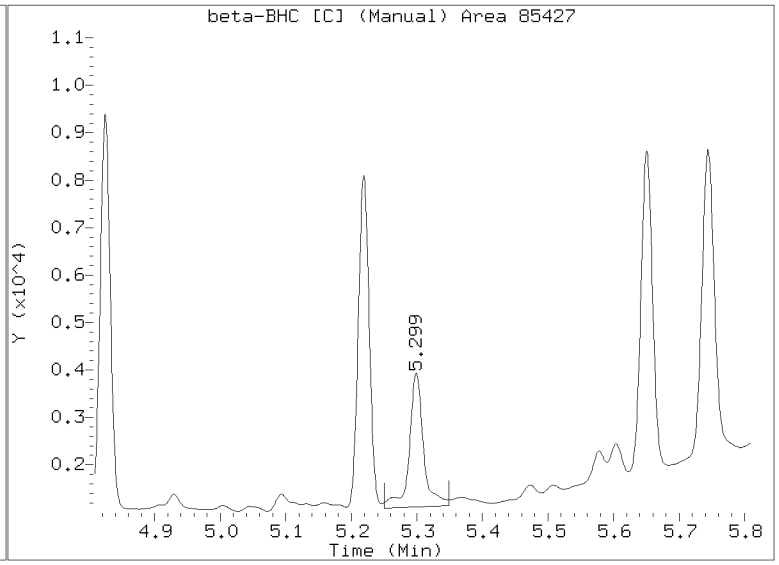












Manual Peak Adjustment Report, CLP-2

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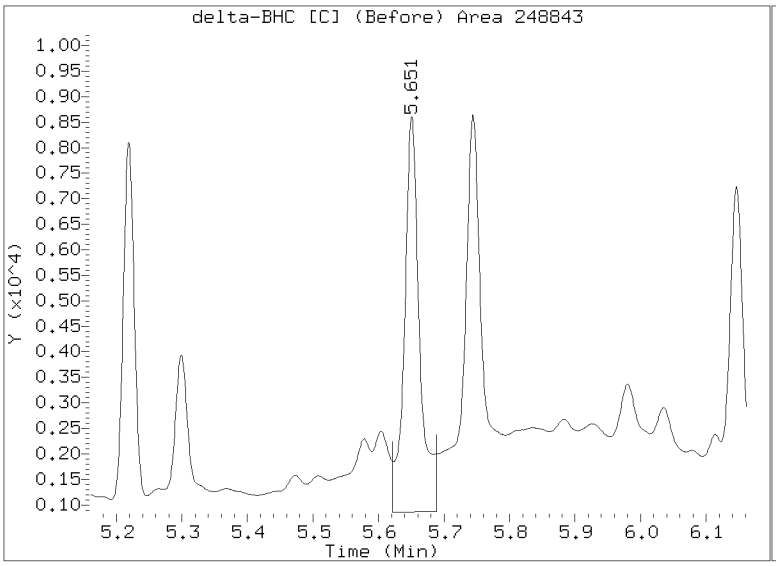

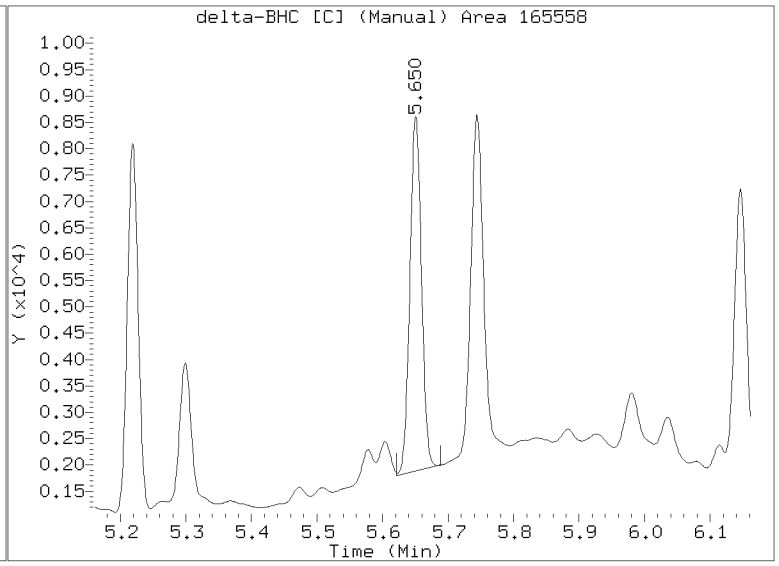

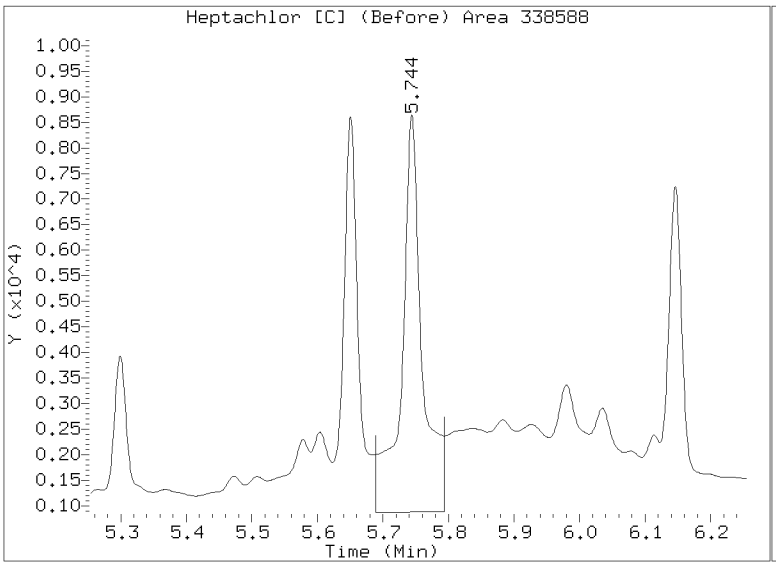

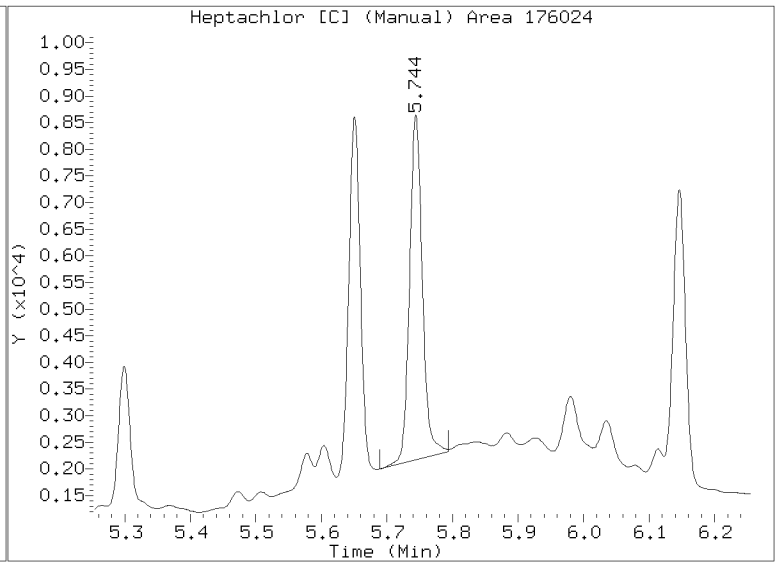

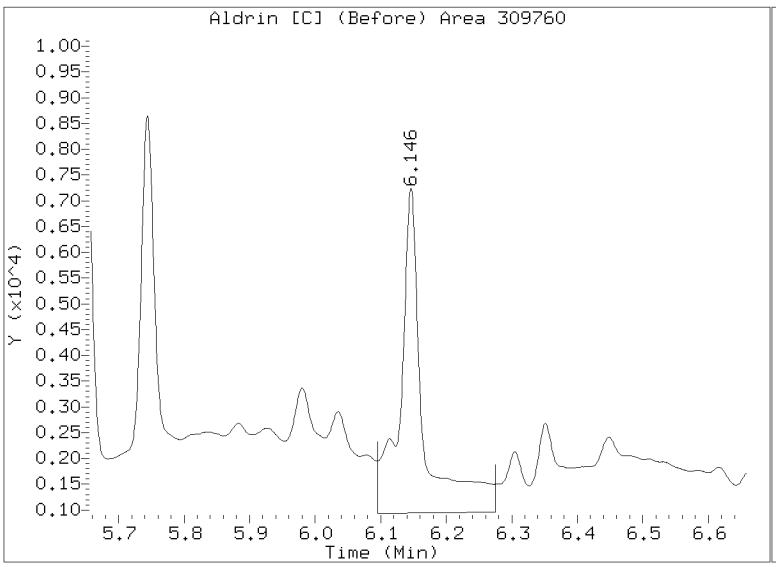

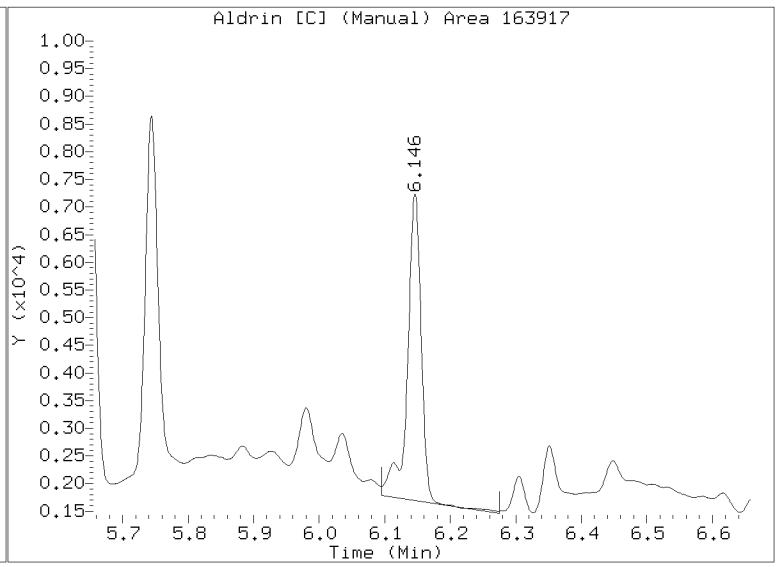

Manual Peak Adjustment Report, CLP-2

Datafile: /20230131.b/B20230131.b/23013160.D
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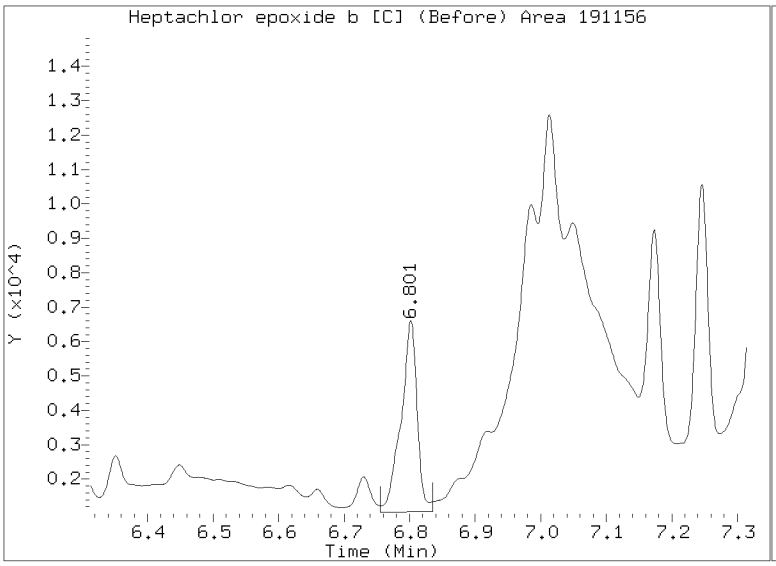
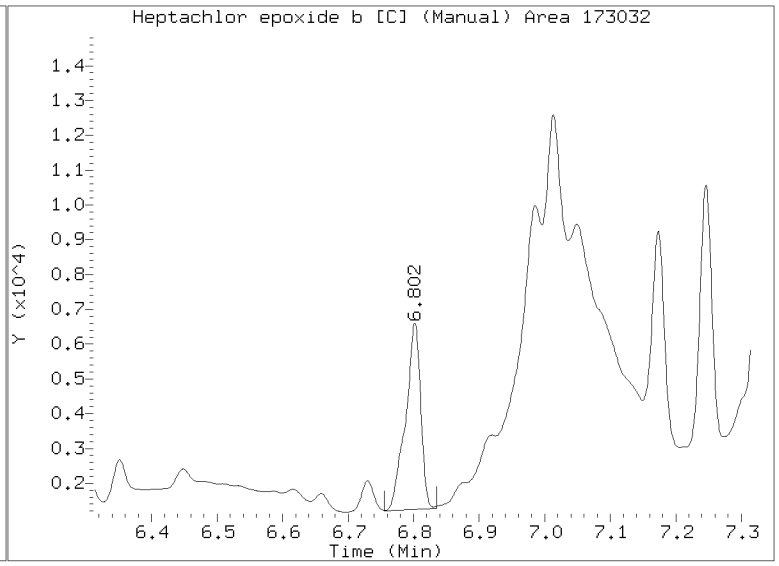
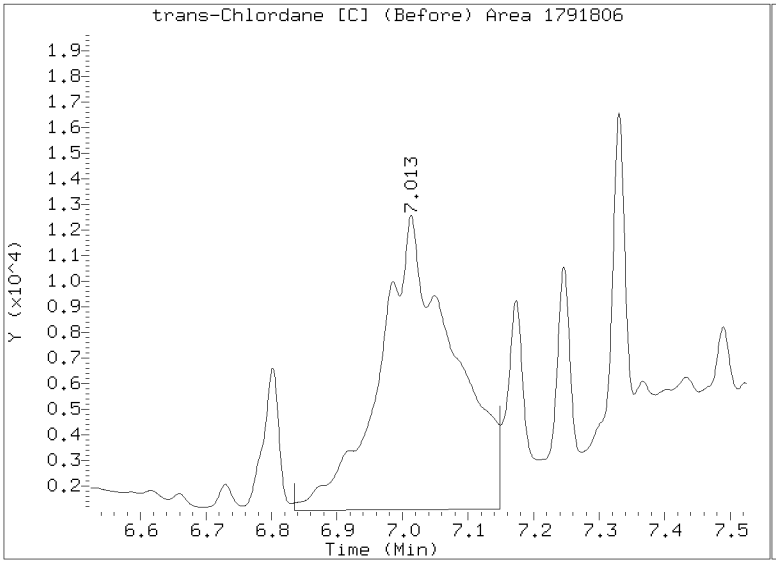
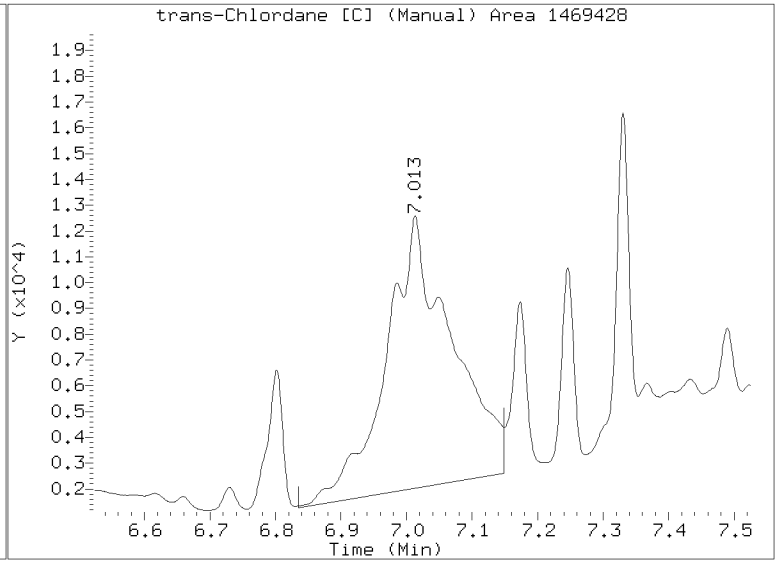
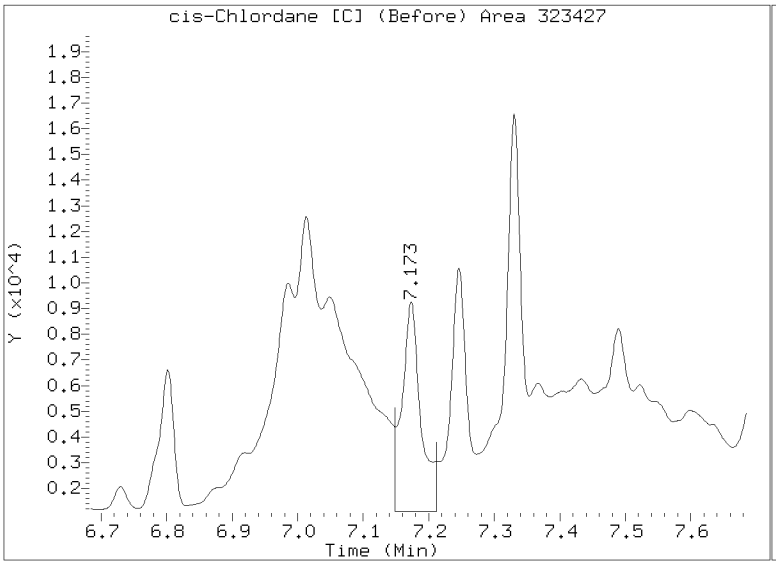
Lab ID:BLA0409-MSD1 Client ID:

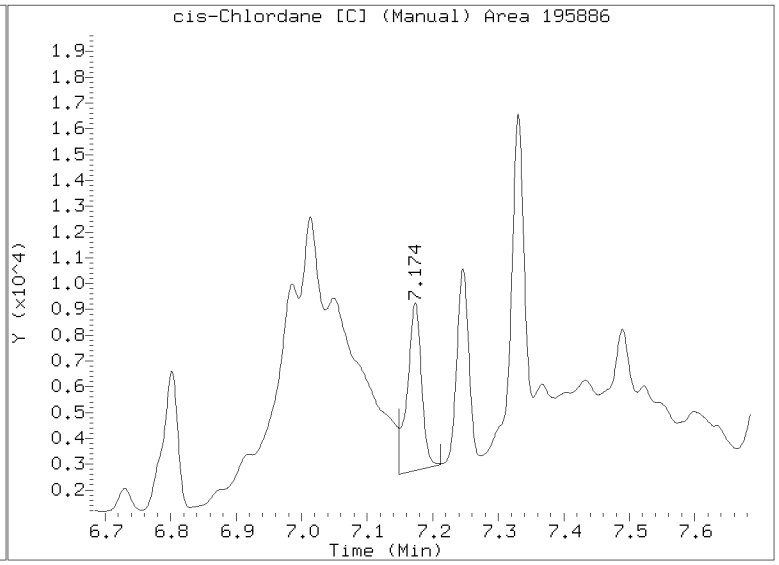












Manual Peak Adjustment Report, CLP-2

Datafile: /20230131.b/B20230131.b/23013160.D
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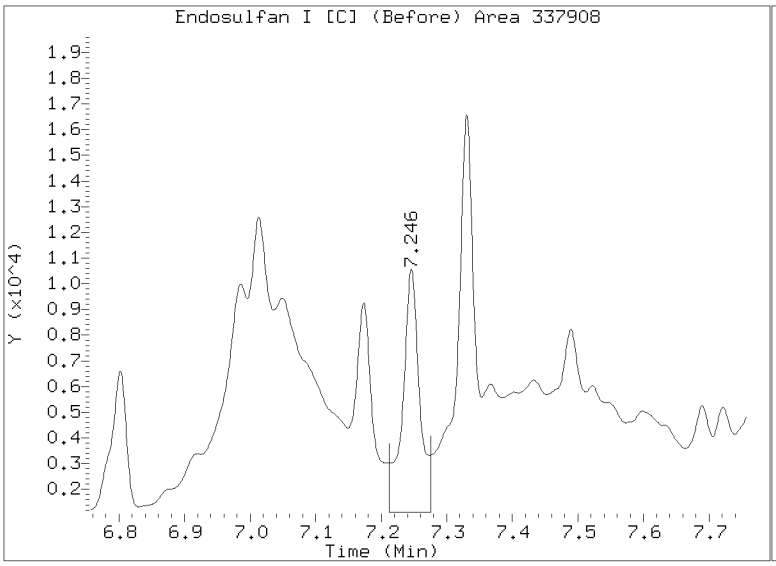
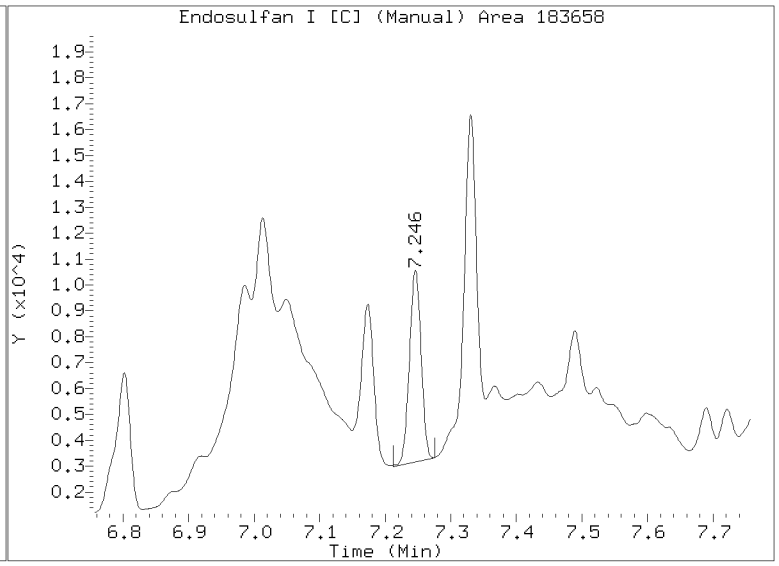
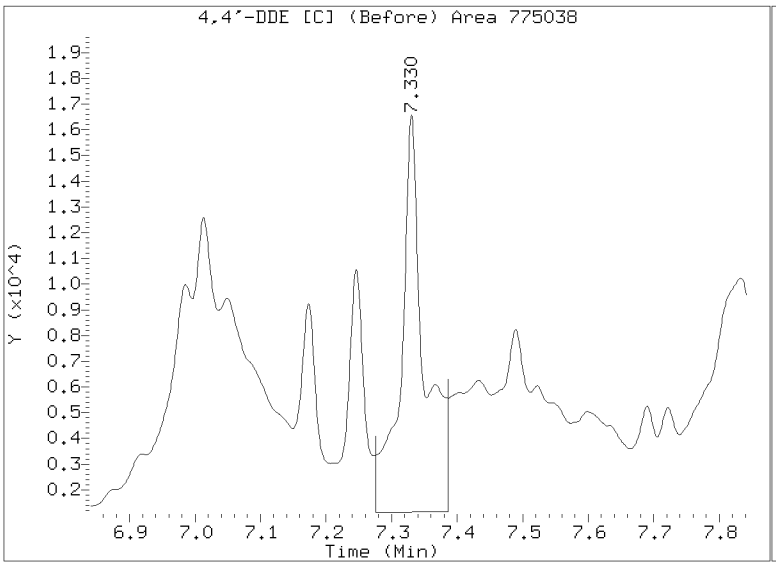
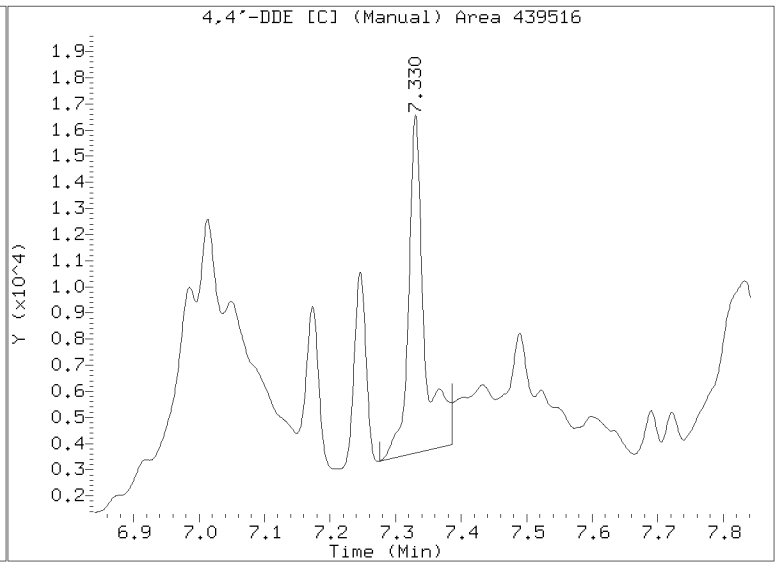
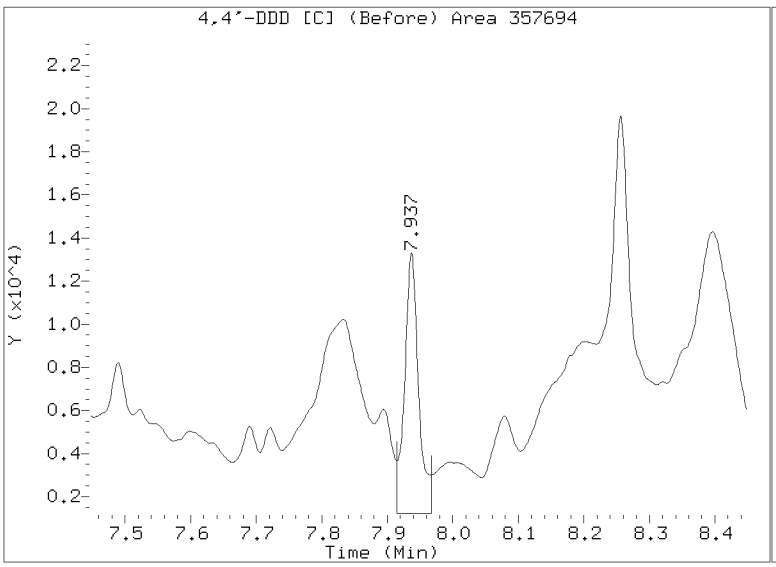
Lab ID:BLA0409-MSD1 Client ID:

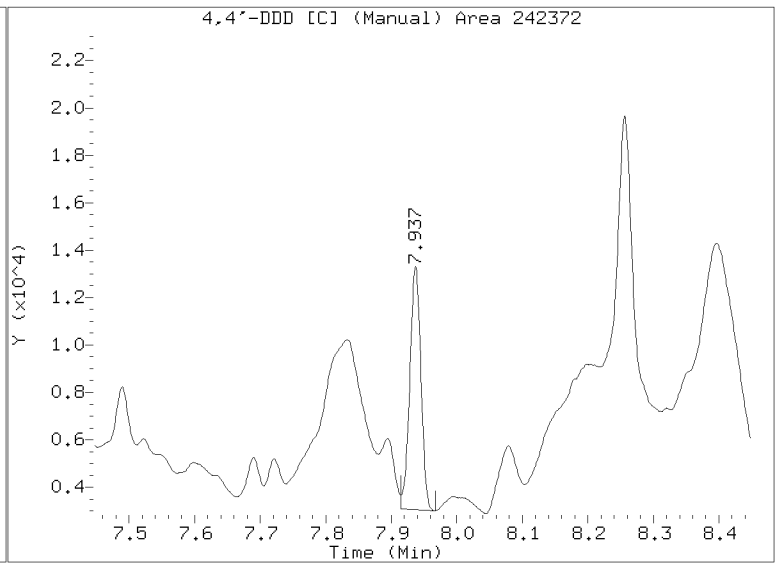






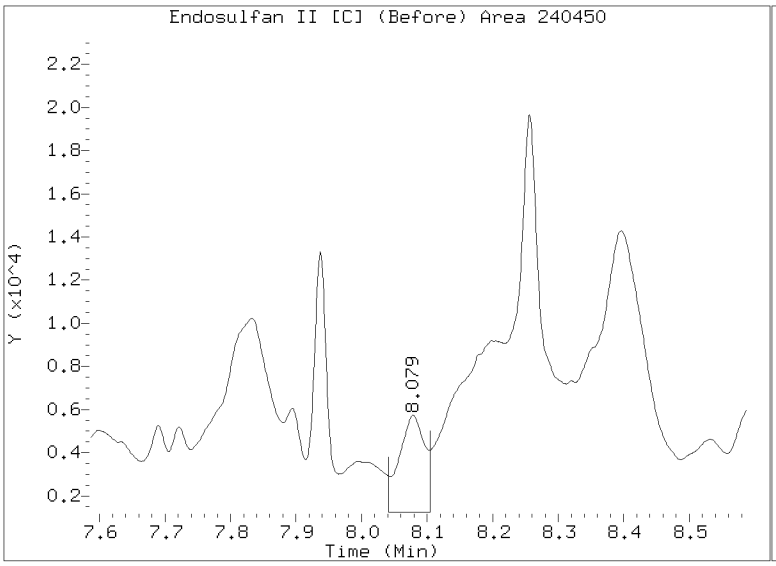


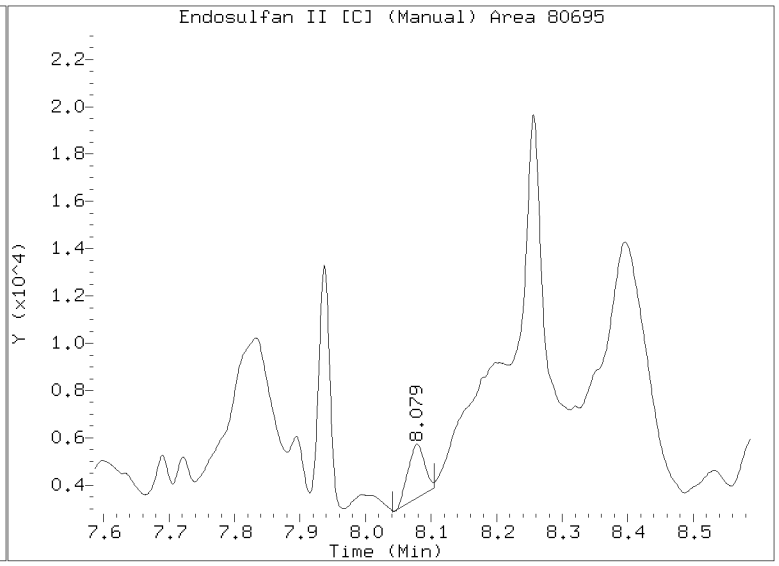


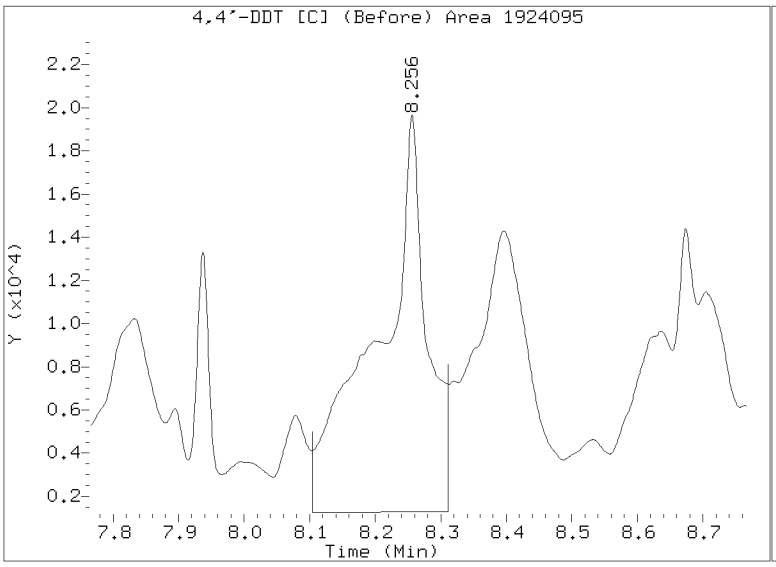


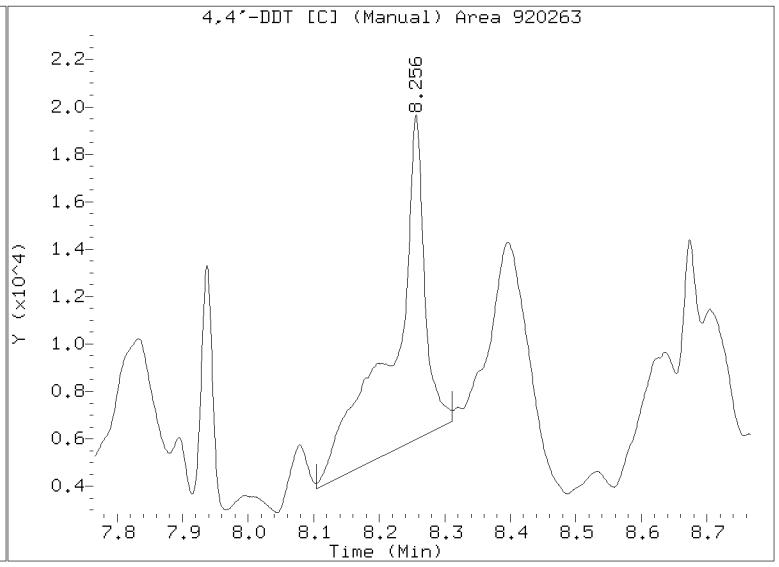
Manual Peak Adjustment Report, CLP-2

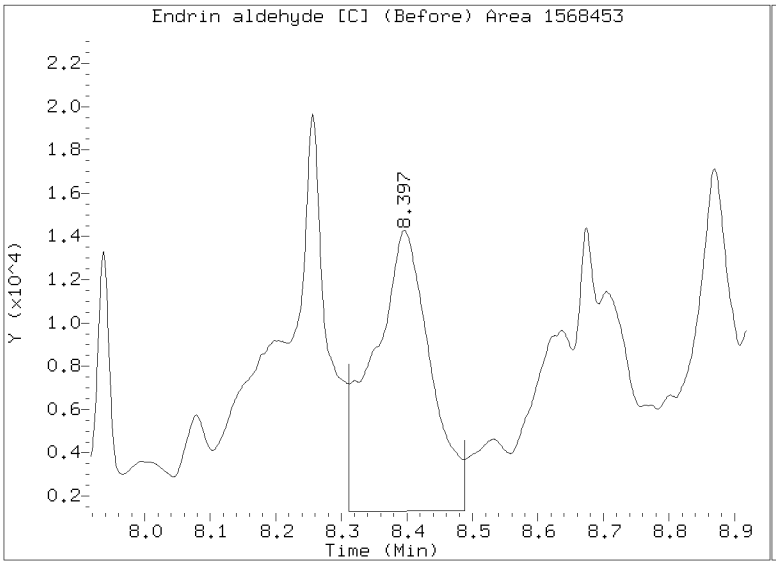
Datafile: /20230131.b/B20230131.b/23013160.D
Injection Date: 01-FEB-2023 08:27
Lab ID:BLA0409-MSD1 Client ID:

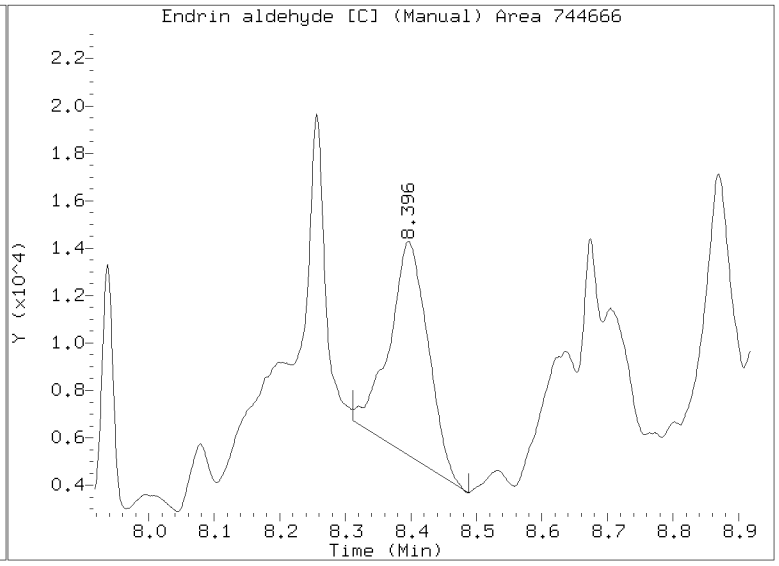












Manual Peak Adjustment Report, CLP-2

Datafile: /20230131.b/B20230131.b/23013160.D
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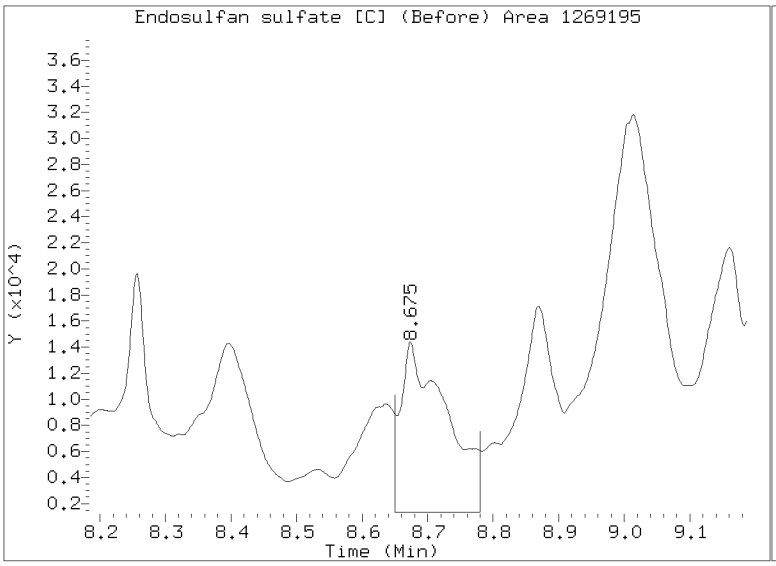
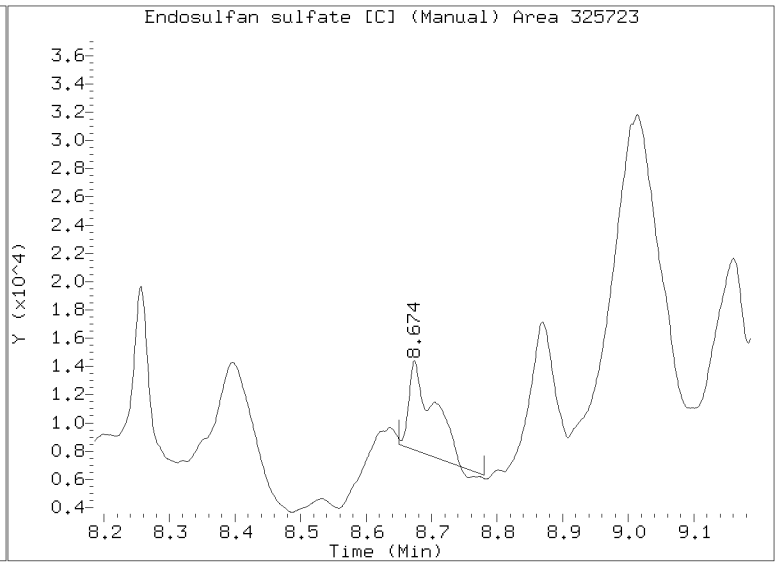
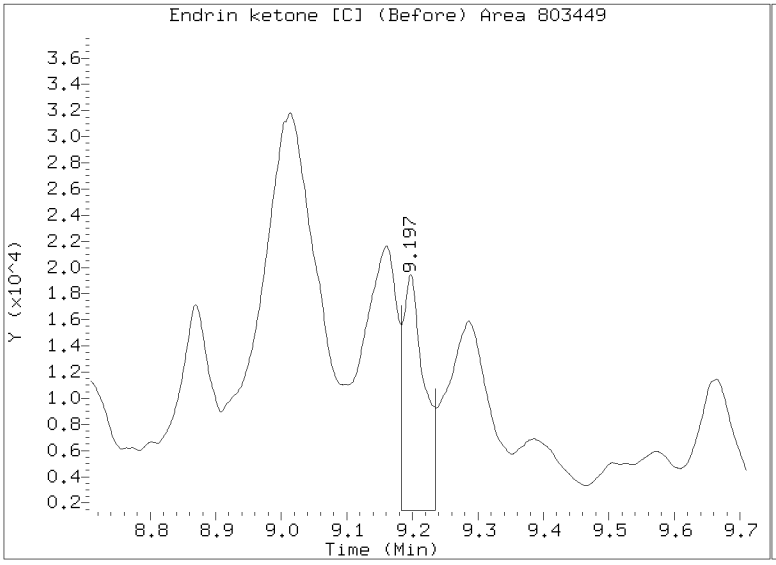
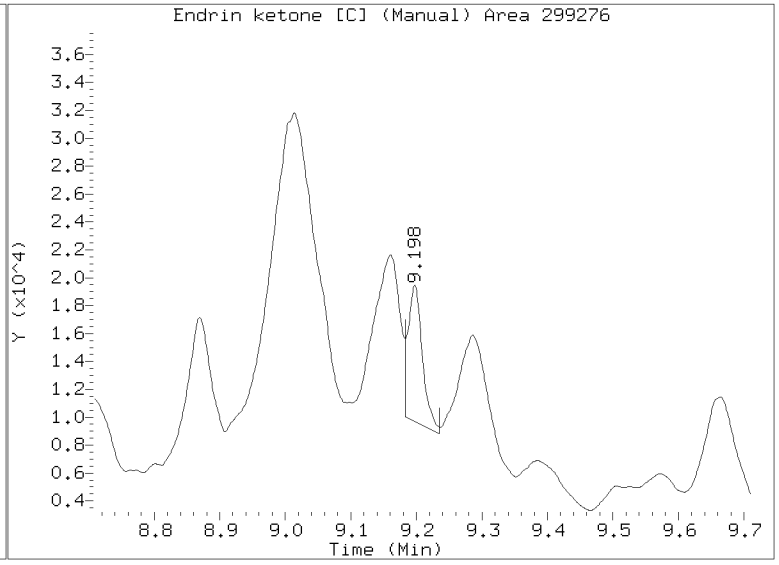
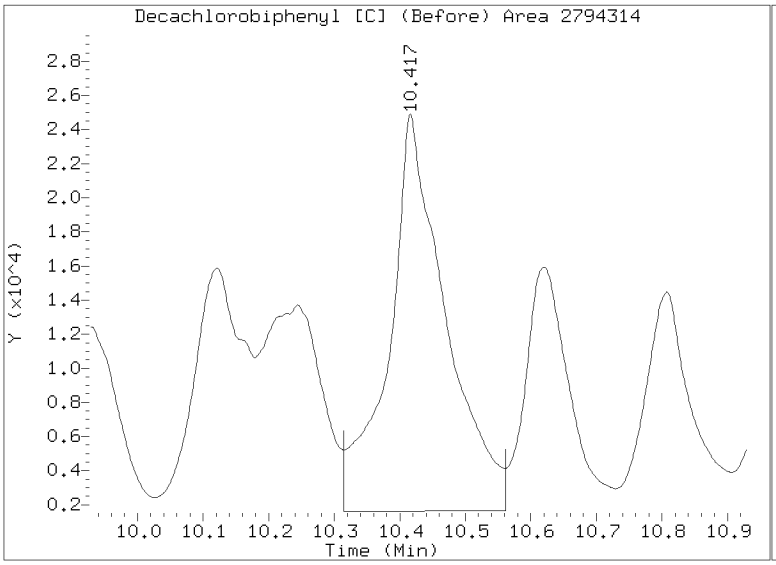
Lab ID:BLA0409-MSD1 Client ID:

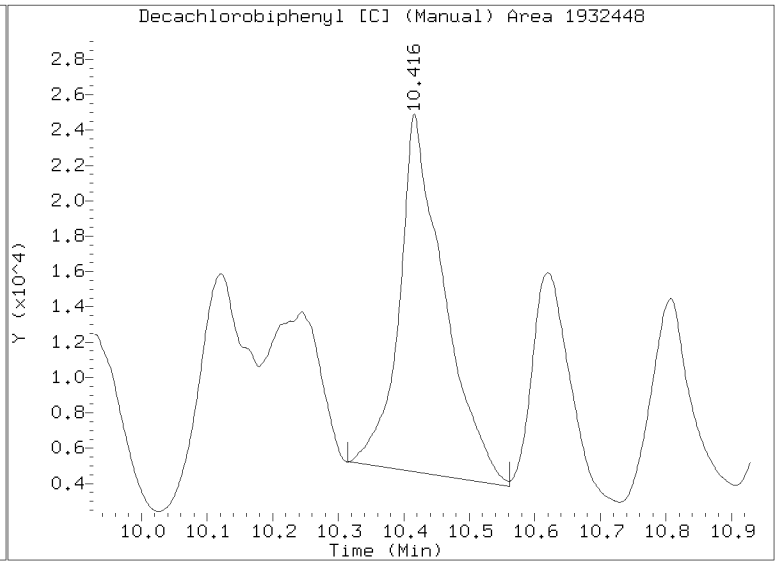












Manual Peak Adjustment Report, CLP-2

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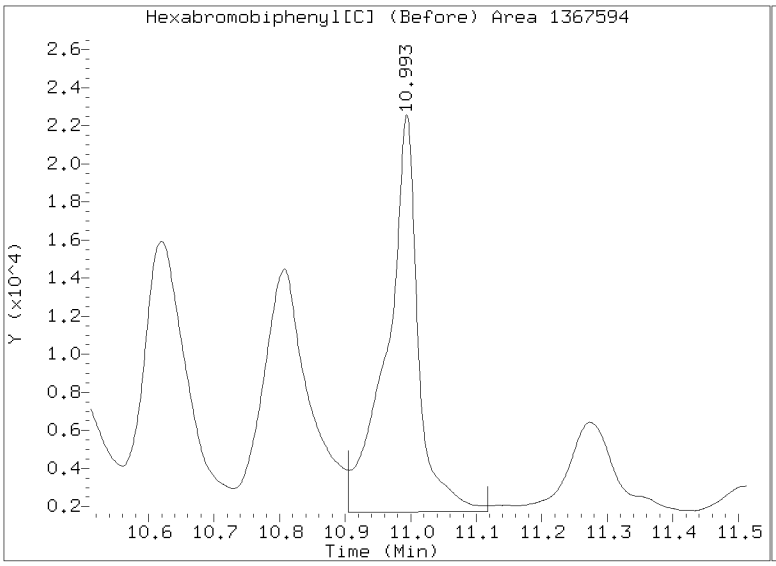

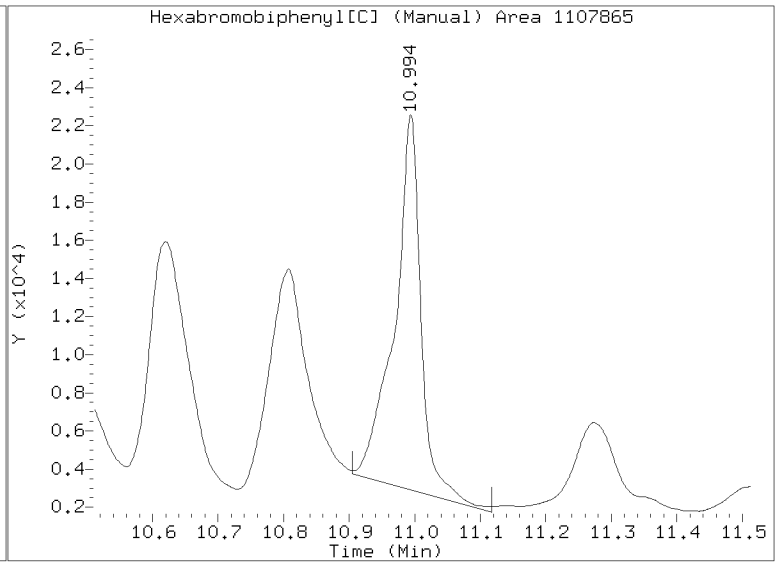

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
alpha-BHC			2.5	1.564682	5	1.558115	10	1.57359	20	1.566596	40	1.528219
beta-BHC			2.5	0.6501672	5	0.6116678	10	0.6049898	20	0.5910241	40	0.567415
gamma-BHC (Lindane)			2.5	1.364013	5	1.359107	10	1.367627	20	1.357913	40	1.317203
delta-BHC			2.5	1.267737	5	1.264366	10	1.278672	20	1.286232	40	1.255792
Heptachlor			2.5	1.26903	5	1.222902	10	1.218715	20	1.207966	40	1.145438
Aldrin			2.5	1.349967	5	1.349283	10	1.40535	20	1.372547	40	1.307197
Heptachlor Epoxide			2.5	1.231126	5	1.189593	10	1.20792	20	1.178021	40	1.104377
trans-Chlordane (beta-Chlordane)			2.5	1.262297	5	1.202181	10	1.202336	20	1.19062	40	1.128117
cis-Chlordane (alpha-chlordane)			2.5	1.308183	5	1.222582	10	1.200602	20	1.177182	40	1.111332
Endosulfan I			2.5	1.143813	5	1.097776	10	1.093658	20	1.076133	40	1.011287
4,4'-DDE			5	1.141182	10	1.108491	20	1.098369	40	1.077225	80	0.9961189
Dieldrin			5	1.225418	10	1.190449	20	1.185191	40	1.155764	80	1.077517
Endrin			5	1.158191	10	1.117563	20	1.079508	40	1.061387	80	0.9725989
Endosulfan II			5	0.9400399	10	0.9913797	20	1.005265	40	0.925043	80	0.9337917
4,4'-DDD			5	1.004568	10	0.9927897	20	0.9803235	40	0.9586353	80	0.8937077
Endrin Aldehyde			5	0.8167784	10	0.7834798	20	0.7706241	40	0.7573308	80	0.7147756
4,4'-DDT			5	1.007054	10	0.9936998	20	0.9768522	40	0.9722874	80	0.9123228
Endosulfan Sulfate			5	0.9534179	10	0.9413755	20	0.9158457	40	0.9056998	80	0.8542021
Endrin Ketone			5	1.134866	10	1.083274	20	1.043162	40	1.021136	80	0.9645492
Methoxychlor			25	0.4887243	50	0.4567517	100	0.4291758	200	0.4123964	400	0.380531
Hexachlorobutadiene			2.5	1.967135	5	1.727858	10	1.608612	20	1.550898	40	1.457962
Hexachlorobenzene			2.5	1.583946	5	1.509865	10	1.463674	20	1.414258	40	1.348389
Decachlorobiphenyl			5	0.9567749	10	0.8690419	20	0.8114883	40	0.7853665	80	0.7399881
Tetrachlorometaxylene			5	1.223478	10	1.154628	20	1.122612	40	1.064313	80	1.018952

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC	80	1.449687										
beta-BHC	80	0.5324503										
gamma-BHC (Lindane)	80	1.246178										
delta-BHC	80	1.199667										
Heptachlor	80	1.064858										
Aldrin	80	1.204866										
Heptachlor Epoxide	80	1.016142										
trans-Chlordane (beta-Chlordane)	80	1.050129										
cis-Chlordane (alpha-chlordane)	80	1.036345										
Endosulfan I	80	0.9344351										
4,4'-DDE	160	0.9196699										
Dieldrin	160	0.9953457										
Endrin	160	0.903669										
Endosulfan II	160	0.8694106										
4,4'-DDD	160	0.8394108										
Endrin Aldehyde	160	0.6754471										
4,4'-DDT	160	0.8666848										
Endosulfan Sulfate	160	0.808554										
Endrin Ketone	160	0.9150773										
Methoxychlor	800	0.3710888										
Hexachlorobutadiene	80	1.368623										
Hexachlorobenzene	80	1.259233										
2,4'-DDE					5	0.8703192	10	0.8471901	20	0.8231684	40	0.7887622
2,4'-DDD					5	0.761682	10	0.7418629	20	0.7301989	40	0.7053717
2,4'-DDT					5	0.8194572	10	0.8004965	20	0.7842725	40	0.7616258
Oxychlordane					5	1.016746	10	1.011016	20	0.9890796	40	0.9530961
cis-Nonachlor					5	1.323191	10	1.277938	20	1.243982	40	1.217703

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
trans-Nonachlor					5	1.347777	10	1.328677	20	1.28535	40	1.249062
Mirex					5	0.8317764	10	0.8043457	20	0.7641487	40	0.7481553
Decachlorobiphenyl	160	0.7008722										
Tetrachlorometaxylene	160	0.9437243										

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4'-DDE	80	0.7262802	160	0.6559468								
2,4'-DDD	80	0.6522807	160	0.6001736								
2,4'-DDT	80	0.7135595	160	0.6495601								
Oxychlordane	80	0.9018234	160	0.8351028								
cis-Nonachlor	80	1.140435	160	1.065099								
trans-Nonachlor	80	1.167639	160	1.085646								
Mirex	80	0.706171	160	0.6667706								

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 25		Level 26		Level 27		Level 28		Level 29		Level 30	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
alpha-BHC	1.540148	3.1			RSD (20)	
beta-BHC	0.5929524	6.8			RSD (20)	
gamma-BHC (Lindane)	1.33534	3.5			RSD (20)	
delta-BHC	1.258744	2.5			RSD (20)	
Heptachlor	1.188151	6.1			RSD (20)	
Aldrin	1.331535	5.2			RSD (20)	
Heptachlor Epoxide	1.15453	6.9			RSD (20)	
trans-Chlordane (beta-Chlordane)	1.172613	6.3			RSD (20)	
cis-Chlordane (alpha-chlordane)	1.176038	8.0			RSD (20)	
Endosulfan I	1.059517	7.1			RSD (20)	
4,4'-DDE	1.056843	7.9			RSD (20)	
Dieldrin	1.138281	7.6			RSD (20)	
Endrin	1.048819	9.0			RSD (20)	
Endosulfan II	0.944155	5.2			RSD (20)	
4,4'-DDD	0.9449058	6.9			RSD (20)	
Endrin Aldehyde	0.7530726	6.7			RSD (20)	
4,4'-DDT	0.9548168	5.7			RSD (20)	
Endosulfan Sulfate	0.8965158	6.2			RSD (20)	
Endrin Ketone	1.027011	7.7			RSD (20)	
Methoxychlor	0.4231113	10.6			RSD (20)	
Hexachlorobutadiene	1.613515	13.2			RSD (20)	
Hexachlorobenzene	1.429894	8.1			RSD (20)	
2,4'-DDE	0.7852778	10.3			RSD (20)	
2,4'-DDD	0.698595	8.8			RSD (20)	
2,4'-DDT	0.7548286	8.4			RSD (20)	
Oxychlordane	0.951144	7.5			RSD (20)	
cis-Nonachlor	1.211391	7.8			RSD (20)	
trans-Nonachlor	1.244025	8.1			RSD (20)	
Mirex	0.7535613	8.1			RSD (20)	
Decachlorobiphenyl	0.8105886	11.4			RSD (20)	
Tetrachlorometaxylene	1.087951	9.2			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
alpha-BHC [2C]			2.5	1.582358	5	1.586238	10	1.633164	20	1.640486	40	1.615441
beta-BHC [2C]			2.5	0.652782	5	0.6172948	10	0.6184608	20	0.6125812	40	0.5918008
gamma-BHC (Lindane) [2C]			2.5	1.355071	5	1.348783	10	1.381456	20	1.392772	40	1.366606
delta-BHC [2C]			2.5	1.323764	5	1.307234	10	1.339425	20	1.328433	40	1.331977
Heptachlor [2C]			2.5	1.270249	5	1.234236	10	1.258409	20	1.272245	40	1.215755
Aldrin [2C]			2.5	1.511397	5	1.416724	10	1.432636	20	1.430376	40	1.370917
Heptachlor Epoxide [2C]			2.5	1.2977	5	1.174596	10	1.174288	20	1.174706	40	1.114434
trans-Chlordane (beta-Chlordane) [2C]			2.5	1.25449	5	1.176102	10	1.164843	20	1.168848	40	1.125534
cis-Chlordane (alpha-chlordane) [2C]			2.5	1.258498	5	1.153199	10	1.135052	20	1.136251	40	1.089792
Endosulfan I [2C]			2.5	1.118263	5	1.044155	10	1.035412	20	1.034697	40	0.9885012
4,4'-DDE [2C]			5	1.120237	10	1.069625	20	1.064387	40	1.055415	80	0.9897135
Dieldrin [2C]			5	1.270008	10	1.162844	20	1.139359	40	1.136098	80	1.071389
Endrin [2C]			5	1.256912	10	1.17909	20	1.159477	40	1.149599	80	1.066056
Endosulfan II [2C]			5	1.296819	10	1.202961	20	1.188491	40	1.160501	80	1.099056
4,4'-DDD [2C]			5	1.234482	10	1.121556	20	1.117792	40	1.112003	80	1.04628
Endrin Aldehyde [2C]			5	0.9430111	10	0.8430348	20	0.8249196	40	0.8129946	80	0.7727701
4,4'-DDT [2C]			5	1.175911	10	1.077825	20	1.067612	40	1.073272	80	1.019364
Endosulfan Sulfate [2C]			5	1.137768	10	1.042553	20	1.030373	40	1.023023	80	0.9721732
Endrin Ketone [2C]			5	1.235631	10	1.119988	20	1.114405	40	1.100852	80	1.047659
Methoxychlor [2C]			25	0.5184064	50	0.4866753	100	0.4751666	200	0.4681736	400	0.4433957
Hexachlorobutadiene [2C]			2.5	1.975612	5	1.648845	10	1.492482	20	1.376096	40	1.341211
Hexachlorobenzene [2C]			2.5	1.602215	5	1.520618	10	1.491402	20	1.450251	40	1.385947
Decachlorobiphenyl [2C]			5	1.087142	10	0.9391597	20	0.8562421	40	0.8499592	80	0.8013928
Tetrachlorometaxylene [2C]			5	1.220863	10	1.179368	20	1.164832	40	1.127982	80	1.06878

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC [2C]	80	1.561903										
beta-BHC [2C]	80	0.5642956										
gamma-BHC (Lindane) [2C]	80	1.31891										
delta-BHC [2C]	80	1.29291										
Heptachlor [2C]	80	1.144118										
Aldrin [2C]	80	1.281263										
Heptachlor Epoxide [2C]	80	1.046144										
trans-Chlordane (beta-Chlordane) [2C]	80	1.072685										
cis-Chlordane (alpha-chlordane) [2C]	80	1.03859										
Endosulfan I [2C]	80	0.9325836										
4,4'-DDE [2C]	160	0.9356313										
Dieldrin [2C]	160	1.019365										
Endrin [2C]	160	1.013782										
Endosulfan II [2C]	160	1.047801										
4,4'-DDD [2C]	160	1.006382										
Endrin Aldehyde [2C]	160	0.7380269										
4,4'-DDT [2C]	160	0.9933936										
Endosulfan Sulfate [2C]	160	0.9372514										
Endrin Ketone [2C]	160	1.016567										
Methoxychlor [2C]	800	0.4436418										
Hexachlorobutadiene [2C]	80	1.300813										
Hexachlorobenzene [2C]	80	1.304223										
2,4'-DDE [2C]					5	0.8343307	10	0.8052418	20	0.7431295	40	0.7258871
2,4'-DDD [2C]					5	0.9097548	10	0.8797099	20	0.8273813	40	0.8164191
2,4'-DDT [2C]					5	0.9400077	10	0.8804604	20	0.8502582	40	0.8485216
Oxychlordane [2C]					5	0.9644685	10	0.9467754	20	0.9033255	40	0.8966281
cis-Nonachlor [2C]					5	1.449238	10	1.407074	20	1.376474	40	1.372123

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
trans-Nonachlor [2C]					5	1.488853	10	1.51762	20	1.451789	40	1.447663
Mirex [2C]					5	0.9331395	10	0.8115521	20	0.7946205	40	0.762682
Decachlorobiphenyl [2C]	160	0.7711875										
Tetrachlorometaxylene [2C]	160	0.9948184										

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4'-DDE [2C]	80	0.6667087	160	0.6020159								
2,4'-DDD [2C]	80	0.76623	160	0.7136982								
2,4'-DDT [2C]	80	0.7977257	160	0.7424898								
Oxychlordane [2C]	80	0.8433342	160	0.7909247								
cis-Nonachlor [2C]	80	1.313286	160	1.248174								
trans-Nonachlor [2C]	80	1.376815	160	1.306683								
Mirex [2C]	80	0.7399752	160	0.7075065								

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 25		Level 26		Level 27		Level 28		Level 29		Level 30	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
alpha-BHC [2C]	1.603265	1.9			RSD (20)	
beta-BHC [2C]	0.6095359	4.9			RSD (20)	
gamma-BHC (Lindane) [2C]	1.3606	1.9			RSD (20)	
delta-BHC [2C]	1.320624	1.3			RSD (20)	
Heptachlor [2C]	1.232502	3.9			RSD (20)	
Aldrin [2C]	1.407219	5.4			RSD (20)	
Heptachlor Epoxide [2C]	1.163645	7.1			RSD (20)	
trans-Chlordane (beta-Chlordane) [2C]	1.160417	5.2			RSD (20)	
cis-Chlordane (alpha-chlordane) [2C]	1.13523	6.5			RSD (20)	
Endosulfan I [2C]	1.025602	6.0			RSD (20)	
4,4'-DDE [2C]	1.039168	6.3			RSD (20)	
Dieldrin [2C]	1.133177	7.5			RSD (20)	
Endrin [2C]	1.137486	7.6			RSD (20)	
Endosulfan II [2C]	1.165938	7.4			RSD (20)	
4,4'-DDD [2C]	1.106416	7.0			RSD (20)	
Endrin Aldehyde [2C]	0.8224595	8.5			RSD (20)	
4,4'-DDT [2C]	1.067896	5.9			RSD (20)	
Endosulfan Sulfate [2C]	1.023857	6.7			RSD (20)	
Endrin Ketone [2C]	1.10585	6.8			RSD (20)	
Methoxychlor [2C]	0.4725766	6.0			RSD (20)	
Hexachlorobutadiene [2C]	1.52251	16.8			RSD (20)	
Hexachlorobenzene [2C]	1.459109	7.2			RSD (20)	
2,4'-DDE [2C]	0.7295523	11.8			RSD (20)	
2,4'-DDD [2C]	0.8188656	8.8			RSD (20)	
2,4'-DDT [2C]	0.8432439	8.1			RSD (20)	
Oxychlordane [2C]	0.8909094	7.3			RSD (20)	
cis-Nonachlor [2C]	1.361061	5.2			RSD (20)	
trans-Nonachlor [2C]	1.43157	5.4			RSD (20)	
Mirex [2C]	0.7915793	9.9			RSD (20)	
Decachlorobiphenyl [2C]	0.8841805	13.0			RSD (20)	
Tetrachlorometaxylene [2C]	1.126107	7.3			RSD (20)	

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-PEM1	DS1	QC		1	K007286	K006953		
SKL0233-CAL1	INDAA	QC		2	K011594	K006953		
SKL0233-CAL2	INDAB	QC		3	K011593	K006953		
SKL0233-CAL3	INDAC	QC		4	K011592	K006953		
SKL0233-CAL4	INDAD	QC		5	K011591	K006953		
SKL0233-CAL5	INDAE	QC		6	K011590	K006953		
SKL0233-CAL6	INDAF	QC		7	K011589	K006953		
SKL0233-CAL7	INDAG	QC		8	K011463	K006953		
SKL0233-CAL8	WNDA	QC		9	K011595	K006953		
SKL0233-CAL9	WNDB	QC		10	K007148	K006953		
SKL0233-CALA	WNDC	QC		11	K007147	K006953		
SKL0233-CALB	WNDD	QC		12	K007146	K006953		
SKL0233-CALC	WNDE	QC		13	K007145	K006953		
SKL0233-CALD	WNDF	QC		14	K007144	K006953		
SKL0233-CALE	WNDG	QC		15	K007093	K006953		
SKL0233-CALM	NOS1	QC		16	K007375	K006953		
SKL0233-CALN	NOS2	QC		17	K007374	K006953		
SKL0233-CALO	NOS3	QC		18	K007373	K006953		
SKL0233-CALP	NOS4	QC		19	K007372	K006953		
SKL0233-CALQ	NOS5	QC		20	K007371	K006953		
SKL0233-CALR	NOS6	QC		21	K007370	K006953		
SKL0233-CALS	NOS7	QC		22	K007287	K006953		

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ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-CALF	TOXAPH1	QC		23	K011601	K006953		
SKL0233-CALG	TOXAPH2	QC		24	K011600	K006953		
SKL0233-CALH	TOXAPH3	QC		25	K011599	K006953		
SKL0233-CALI	TOXAPH4	QC		26	K011598	K006953		
SKL0233-CALJ	TOXAPH5	QC		27	K011597	K006953		
SKL0233-CALK	TOXAPH6	QC		28	K011596	K006953		
SKL0233-CALL	TOXAPH7	QC		29	K008546	K006953		

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	14-DEC-2022 19:27	22121401.D	1	RINSE	
2	14-DEC-2022 19:44	22121402.D	1	RINSE	
3	14-DEC-2022 20:02	22121403.D	1	SEQ-IBL1	
4	14-DEC-2022 20:20	22121404.D	1	SEQ-PEM1	
5	14-DEC-2022 20:38	22121405.D	1	SEQ-CAL1	
6	14-DEC-2022 20:56	22121406.D	1	SEQ-CAL2	
7	14-DEC-2022 21:14	22121407.D	1	SEQ-CAL3	
8	14-DEC-2022 21:31	22121408.D	1	SEQ-CAL4	
9	14-DEC-2022 21:49	22121409.D	1	SEQ-CAL5	
10	14-DEC-2022 22:07	22121410.D	1	SEQ-CAL6	
11	14-DEC-2022 22:25	22121411.D	1	SEQ-CAL7	
12	14-DEC-2022 22:43	22121412.D	1	SEQ-CAL8	
13	14-DEC-2022 23:01	22121413.D	1	SEQ-CAL9	
14	14-DEC-2022 23:19	22121414.D	1	SEQ-CALA	
15	14-DEC-2022 23:36	22121415.D	1	SEQ-CALB	
16	14-DEC-2022 23:54	22121416.D	1	SEQ-CALC	
17	15-DEC-2022 00:12	22121417.D	1	SEQ-CALD	
18	15-DEC-2022 00:30	22121418.D	1	SEQ-CALE	
19	15-DEC-2022 00:48	22121419.D	1	SEQ-SCV1	
20	15-DEC-2022 01:06	22121420.D	1	SEQ-SCV2	
21	15-DEC-2022 01:24	22121421.D	1	SEQ-CAL1A	
22	15-DEC-2022 01:42	22121422.D	1	SEQ-CAL2A	
23	15-DEC-2022 01:59	22121423.D	1	SEQ-CAL3A	
24	15-DEC-2022 02:17	22121424.D	1	SEQ-CAL4A	
25	15-DEC-2022 02:35	22121425.D	1	SEQ-CAL5A	
26	15-DEC-2022 02:53	22121426.D	1	SEQ-CAL6A	
27	15-DEC-2022 03:11	22121427.D	1	SEQ-CAL7A	
28	15-DEC-2022 03:29	22121428.D	1	SEQ-CAL8A	
29	15-DEC-2022 03:46	22121429.D	1	SEQ-CAL9A	
30	15-DEC-2022 04:04	22121430.D	1	SEQ-CALAA	
31	15-DEC-2022 04:22	22121431.D	1	SEQ-CALAB	
32	15-DEC-2022 04:40	22121432.D	1	SEQ-CALAC	
33	15-DEC-2022 04:58	22121433.D	1	SEQ-CALAD	
34	15-DEC-2022 05:16	22121434.D	1	SEQ-CALAE	
35	15-DEC-2022 05:33	22121435.D	1	SEQ-PEM2	
36	15-DEC-2022 05:51	22121436.D	1	SEQ-ICV1	
37	15-DEC-2022 06:09	22121437.D	1	SEQ-ICV2	
38	15-DEC-2022 06:27	22121438.D	1	SEQ-ICV3	
39	15-DEC-2022 06:45	22121439.D	1	SEQ-ICV4	
40	15-DEC-2022 07:03	22121440.D	1	BKK0688-BLK1	
41	15-DEC-2022 07:21	22121441.D	1	BKK0688-BS1	
42	15-DEC-2022 07:39	22121442.D	1	BKK0688-BS2	
43	15-DEC-2022 07:57	22121443.D	1	BKK0688-BS3	
44	15-DEC-2022 08:15	22121444.D	1	BKK0688-BSD1	
45	15-DEC-2022 08:32	22121445.D	1	BKK0142-BLK1	
46	15-DEC-2022 08:50	22121446.D	1	BKK0142-BS1	
47	15-DEC-2022 09:08	22121447.D	1	BKK0142-BS2	
48	15-DEC-2022 09:26	22121448.D	1	BKK0142-BSD1	
49	15-DEC-2022 09:44	22121449.D	1	BKK0142-MS1	
50	15-DEC-2022 10:02	22121450.D	1	BKK0142-MSD1	

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b p

	Inject Date/Time	Filename	DF	LabID	ClientID
51	15-DEC-2022 10:20	22121451.D	1	22J0513-01	
52	15-DEC-2022 10:38	22121452.D	1	22J0513-04	
53	15-DEC-2022 10:55	22121453.D	1	22J0535-01	
54	15-DEC-2022 11:13	22121454.D	1	22K0429-01	
55	15-DEC-2022 11:31	22121455.D	1	22K0429-02	
56	15-DEC-2022 11:49	22121456.D	1	22K0429-03	
57	15-DEC-2022 12:07	22121457.D	1	SEQ-PEM3	
58	15-DEC-2022 12:25	22121458.D	1	SEQ-CCV1	
59	15-DEC-2022 12:43	22121459.D	1	SEQ-CCV2	
60	15-DEC-2022 13:01	22121460.D	1	SEQ-CCV3	
61	15-DEC-2022 13:19	22121461.D	1	SEQ-CCV4	
62	15-DEC-2022 13:36	22121462.D	1	BKK0380-BLK1	
63	15-DEC-2022 13:54	22121463.D	1	BKK0380-BS1	
64	15-DEC-2022 14:12	22121464.D	1	BKK0380-BSD1	
65	15-DEC-2022 14:30	22121465.D	1	22K0157-01	
66	15-DEC-2022 14:48	22121466.D	1	22K0230-01	
67	15-DEC-2022 15:06	22121467.D	1	22K0231-01	
68	15-DEC-2022 15:24	22121468.D	1	BKK0382-BLK1	
69	15-DEC-2022 15:42	22121469.D	1	BKK0382-BS1	
70	15-DEC-2022 16:00	22121470.D	1	BKK0382-BS2	
71	15-DEC-2022 16:18	22121471.D	1	BKK0382-BSD1	
72	15-DEC-2022 16:35	22121472.D	1	22K0075-01	
73	15-DEC-2022 16:53	22121473.D	1	SEQ-PEM4	
74	15-DEC-2022 17:11	22121474.D	1	SEQ-CCV5	
75	15-DEC-2022 17:29	22121475.D	1	SEQ-CCV6	
76	15-DEC-2022 17:47	22121476.D	1	SEQ-CCV7	
77	15-DEC-2022 18:05	22121477.D	1	SEQ-CCV8	
78	15-DEC-2022 18:23	22121478.D	1	BKK0537-BLK1	
79	15-DEC-2022 18:40	22121479.D	1	BKK0537-BS1	
80	15-DEC-2022 18:58	22121480.D	1	BKK0537-BS2	
81	15-DEC-2022 19:16	22121481.D	1	22K0194-01	
82	15-DEC-2022 19:34	22121482.D	1	22K0194-01RE1	10
83	15-DEC-2022 19:52	22121483.D	1	SEQ-PEM5	
84	15-DEC-2022 20:09	22121484.D	1	SEQ-CCV9	
85	15-DEC-2022 20:27	22121485.D	1	SEQ-CCVA	
86	15-DEC-2022 20:45	22121486.D	1	SEQ-CCVB	
87	15-DEC-2022 21:03	22121487.D	1	SEQ-CCVC	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 14-DEC-2022

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1113	22121454.D	22K0429-01		1	Heptachlor epoxide b,
1131	22121455.D	22K0429-02		1	Heptachlor epoxide b,
1149	22121456.D	22K0429-03		1	Hexachlorobenzene,
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2009	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane [C],
1113	22121454.D	22K0429-01		1	NO MANUAL INTEGRATION
1131	22121455.D	22K0429-02		1	Aldrin [C], Heptachlor epoxide b [C], trans-Chlordane [C],
1149	22121456.D	22K0429-03		1	Aldrin [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2010	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION

Security Status Report

Date: 17-Dec-2022 10:57

22121401.D	Data Locked	jrains, 17-Dec-2022 10:57
22121402.D	Data Locked	jrains, 17-Dec-2022 10:57
22121403.D	Data Locked	jrains, 17-Dec-2022 10:57
22121404.D	Data Locked	jrains, 17-Dec-2022 10:57
22121405.D	Data Locked	jrains, 17-Dec-2022 10:57
22121406.D	Data Locked	jrains, 17-Dec-2022 10:57
22121407.D	Data Locked	jrains, 17-Dec-2022 10:57
22121408.D	Data Locked	jrains, 17-Dec-2022 10:57
22121409.D	Data Locked	jrains, 17-Dec-2022 10:57
22121410.D	Data Locked	jrains, 17-Dec-2022 10:57
22121411.D	Data Locked	jrains, 17-Dec-2022 10:57
22121412.D	Data Locked	jrains, 17-Dec-2022 10:57
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22121414.D	Data Locked	jrains, 17-Dec-2022 10:57
22121415.D	Data Locked	jrains, 17-Dec-2022 10:57
22121416.D	Data Locked	jrains, 17-Dec-2022 10:57
22121417.D	Data Locked	jrains, 17-Dec-2022 10:57
22121418.D	Data Locked	jrains, 17-Dec-2022 10:57
22121419.D	Data Locked	jrains, 17-Dec-2022 10:57
22121420.D	Data Locked	jrains, 17-Dec-2022 10:57
22121421.D	Data Locked	jrains, 17-Dec-2022 10:57
22121422.D	Data Locked	jrains, 17-Dec-2022 10:57
22121423.D	Data Locked	jrains, 17-Dec-2022 10:57
22121424.D	Data Locked	jrains, 17-Dec-2022 10:57
22121425.D	Data Locked	jrains, 17-Dec-2022 10:57
22121426.D	Data Locked	jrains, 17-Dec-2022 10:57
22121427.D	Data Locked	jrains, 17-Dec-2022 10:57
22121428.D	Data Locked	jrains, 17-Dec-2022 10:57
22121429.D	Data Locked	jrains, 17-Dec-2022 10:57
22121430.D	Data Locked	jrains, 17-Dec-2022 10:57
22121431.D	Data Locked	jrains, 17-Dec-2022 10:57
22121432.D	Data Locked	jrains, 17-Dec-2022 10:57
22121433.D	Data Locked	jrains, 17-Dec-2022 10:57
22121434.D	Data Locked	jrains, 17-Dec-2022 10:57

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121428.D
Level 2: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121429.D
Level 3: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121430.D
Level 4: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121431.D
Level 5: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121432.D
Level 6: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121433.D
Level 7: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121434.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
1 Hexachlorobutadiene [C]	+++++	1.97561	1.64885	1.49248	1.37610	1.34121	1.30081	1.52251	16.761
5 Hexachlorobenzene [C]	+++++	1.60221	1.52062	1.49140	1.45025	1.38595	1.30422	1.45911	7.170
6 alpha-BHC [C]	+++++	1.58236	1.58624	1.63316	1.64049	1.61544	1.56190	1.60327	1.946
7 gamma-BHC (Lindane) [C]	+++++	1.35507	1.34878	1.38146	1.39277	1.36661	1.31891	1.36060	1.921
8 beta-BHC [C]	+++++	0.65278	0.61729	0.61846	0.61258	0.59180	0.56430	0.60954	4.856
9 delta-BHC [C]	+++++	1.32376	1.30723	1.33943	1.32843	1.33198	1.29291	1.32062	1.312
10 Heptachlor [C]	+++++	1.27025	1.23424	1.25841	1.27225	1.21576	1.14412	1.23250	3.937
11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
12 Aldrin [C]	+++++	1.51140	1.41672	1.43264	1.43038	1.37092	1.28126	1.40722	5.441
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Heptachlor epoxide b [C]	+++++	1.29770	1.17460	1.17429	1.17471	1.11443	1.04614	1.16364	7.144
15 cis-Chlordane [C]	+++++	1.25850	1.15320	1.13505	1.13625	1.08979	1.03859	1.13523	6.464
16 trans-Chlordane [C]	+++++	1.25449	1.17610	1.16484	1.16885	1.12553	1.07269	1.16042	5.185
17 Endosulfan I [C]	+++++	1.11826	1.04415	1.03541	1.03470	0.98850	0.93258	1.02560	6.032
18 4,4'-DDE [C]	+++++	1.12024	1.06963	1.06439	1.05541	0.98971	0.93563	1.03917	6.320
19 Dieldrin [C]	+++++	1.27001	1.16284	1.13936	1.13610	1.07139	1.01937	1.13318	7.532
20 Endrin [C]	+++++	1.25691	1.17909	1.15948	1.14960	1.06606	1.01378	1.13749	7.566
21 4,4'-DDD [C]	+++++	1.23448	1.12156	1.11779	1.11200	1.04628	1.00638	1.10642	7.049
22 Endosulfan II [C]	+++++	1.29682	1.20296	1.18849	1.16050	1.09906	1.04780	1.16594	7.425

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
23 4,4'-DDT [C]	+++++	1.17591	1.07782	1.06761	1.07327	1.01936	0.99339	1.06790	5.878
24 Endrin aldehyde [C]	+++++	0.94301	0.84303	0.82492	0.81299	0.77277	0.73803	0.82246	8.537
25 Endosulfan sulfate [C]	+++++	1.13777	1.04255	1.03037	1.02302	0.97217	0.93725	1.02386	6.702
26 Methoxychlor [C]	+++++	0.51841	0.48668	0.47517	0.46817	0.44340	0.44364	0.47258	5.996
27 Endrin ketone [C]	+++++	1.23563	1.11999	1.11440	1.10085	1.04766	1.01657	1.10585	6.827
29 Aroclor-1016(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
31 Aroclor-1232(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 Aroclor-1242(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
33 Aroclor-1248(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
34 Aroclor-1254(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
35 Aroclor-1260(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
36 Aroclor-1262(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
37 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 Toxaphene [C](1)	0.01492	0.01529	0.01573	0.01558	0.01527	0.01455	0.01387	0.01503	4.285
(2)	0.03524	0.03538	0.03581	0.03480	0.03351	0.03170	0.03010	0.03379	6.368
(3)	0.02615	0.02659	0.02671	0.02640	0.02571	0.02464	0.02387	0.02572	4.197
(4)	0.08868	0.08690	0.08740	0.08502	0.08225	0.07926	0.07782	0.08390	5.022
(5)	0.04138	0.04124	0.04193	0.04145	0.04102	0.04046	0.04062	0.04116	1.227
39 2,4-DDE [C]	+++++	0.83433	0.80524	0.74313	0.72589	0.66671	0.60202	0.72955	11.810

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
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Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
40 2,4-DDD [C]	+++++	0.90975	0.87971	0.82738	0.81642	0.76623	0.71370	0.81887	8.785
41 2,4-DDT [C]	+++++	0.94001	0.88046	0.85026	0.84852	0.79773	0.74249	0.84324	8.052
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Oxychlordane [C]	+++++	0.96447	0.94678	0.90333	0.89663	0.84333	0.79092	0.89091	7.271
44 trans-Nonachlor [C]	+++++	1.48885	1.51762	1.45179	1.44766	1.37681	1.30668	1.43157	5.406
45 cis-Nonachlor [C]	+++++	1.44924	1.40707	1.37647	1.37212	1.31329	1.24817	1.36106	5.224
46 Mirex [C]	+++++	0.93314	0.81155	0.79462	0.76268	0.73998	0.70751	0.79158	9.949
47 bis-(2-ethylhexyl) Phthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Chlordane (NOS) [C](1)	0.03877	0.03690	0.03764	0.03840	0.03761	0.03805	0.03764	0.03786	1.615
(2)	0.04647	0.04439	0.04416	0.04357	0.04103	0.03978	0.03825	0.04252	6.844
(3)	0.14135	0.14252	0.14927	0.15059	0.14418	0.14081	0.13812	0.14383	3.173

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
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Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
49 Trifluralin	*****	*****	*****	*****	*****	*****	*****	*****	*****
50 Dacthal	*****	*****	*****	*****	*****	*****	*****	*****	*****
51 Oxadiazon	*****	*****	*****	*****	*****	*****	*****	*****	*****
52 Kelthane	*****	*****	*****	*****	*****	*****	*****	*****	*****
53 Chlorpyrifos	*****	*****	*****	*****	*****	*****	*****	*****	*****
54 Methyl Parathion	*****	*****	*****	*****	*****	*****	*****	*****	*****
55 Ethyl Parathion	*****	*****	*****	*****	*****	*****	*****	*****	*****
56 Kepone [C]	*****	*****	*****	*****	*****	*****	*****	*****	*****
57 1-Chloropyrene	*****	*****	*****	*****	*****	*****	*****	*****	*****
$ 4 Tetrachloro-m-xylene [C]	*****	1.22086	1.17937	1.16483	1.12798	1.06878	0.99482	1.12611	7.306
$ 28 Decachlorobiphenyl [C]	*****	1.08714	0.93916	0.85624	0.84996	0.80139	0.77119	0.88418	12.973

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd6.i\20220809.b\22080909.D
Level 2: \\target\share\chem4\ecd6.i\20220809.b\22080910.D
Level 3: \\target\share\chem4\ecd6.i\20220809.b\22080911.D
Level 4: \\target\share\chem4\ecd6.i\20220809.b\22080912.D
Level 5: \\target\share\chem4\ecd6.i\20220809.b\22080913.D
Level 6: \\target\share\chem4\ecd6.i\20220809.b\22080914.D
Level 7: \\target\share\chem4\ecd6.i\20220809.b\22080915.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
1 Hexachlorobutadiene	+++++	1.64215	1.55667	1.51049	1.47308	1.40536		
	1.30292						1.48178	7.988
5 Hexachlorobenzene	+++++	1.48647	1.40778	1.36481	1.31957	1.25458		
	1.15582						1.33150	8.750
6 alpha-BHC	+++++	1.41183	1.40802	1.42270	1.42790	1.37811		
	1.29587						1.39074	3.567
7 gamma-BHC (Lindane)	+++++	1.20108	1.18733	1.20704	1.21598	1.18532		
	1.11861						1.18589	2.948
8 beta-BHC	+++++	0.65244	0.60612	0.58927	0.57533	0.54649		
	0.50588						0.57925	8.684
9 delta-BHC	+++++	1.15252	1.13315	1.18185	1.21952	1.21492		
	1.16159						1.17726	2.950
10 Heptachlor	+++++	1.18674	1.12881	1.11527	1.09009	1.03076		
	0.94214						1.08230	7.897
11 Aldrin	+++++	1.14505	1.10493	1.10576	1.09698	1.04621		
	0.96536						1.07738	5.877

ARI Labs, Inc.

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Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Heptachlor epoxide b	+++++	1.05278	0.99602	0.98316	0.95413	0.89408	0.81733	0.94959	8.751
15 cis-Chlordane	+++++	1.00217	0.95563	0.94931	0.93343	0.89233	0.82943	0.92705	6.424
16 trans-Chlordane	+++++	1.02223	0.96054	0.95840	0.94631	0.90606	0.84267	0.93937	6.420
17 Endosulfan I	+++++	1.10444	1.01004	0.97510	0.92642	0.86761	0.77363	0.94287	12.207
18 4,4'-DDE	+++++	0.85783	0.84618	0.86175	0.85068	0.80349	0.73346	0.82557	6.027
19 Dieldrin	+++++	1.02112	0.97469	0.96064	0.93395	0.87876	0.79720	0.92773	8.553
20 Endrin	+++++	1.03359	0.99258	1.01493	1.03951	0.95184	0.92125	0.99228	4.755
21 4,4'-DDD	+++++	1.26749	1.21690	1.21140	1.19455	1.09258	1.02286	1.16763	7.815
22 Endosulfan II	+++++	1.32213	1.30831	1.28817	1.25191	1.14300	1.05695	1.22841	8.614

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
23 4,4'-DDT	+++++	1.20278	1.19912	1.21231	1.21971	1.13284	1.06544	1.17203	5.186
24 Endrin aldehyde	+++++	1.05042	1.01673	1.00197	0.99460	0.91340	0.84575	0.97048	7.836
25 Methoxychlor	+++++	0.56408	0.54010	0.51985	0.50693	0.45626	0.43428	0.50358	9.854
26 Endosulfan sulfate	+++++	1.14290	1.11216	1.09802	1.09968	1.00734	0.94888	1.06816	6.922
27 Endrin ketone	+++++	1.47959	1.40243	1.34455	1.31335	1.19489	1.12695	1.31029	9.966
29 Aroclor-1016(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
31 Aroclor-1232(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 Aroclor-1242(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(6)	*****	*****	*****	*****	*****	*****	*****	*****	*****
33 Aroclor-1248(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
34 Aroclor-1254(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
35 Aroclor-1260(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
36 Aroclor-1262(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
37 Aroclor-1268(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
38 Toxaphene(1)	0.02824	0.03896	0.03693	0.03480	0.03418	0.02891	0.02792	0.03285	13.645
(2)	0.08343	0.10636	0.10204	0.09499	0.09608	0.08394	0.08263	0.09278	10.362
(3)	0.04776	0.06283	0.06069	0.06020	0.06090	0.05141	0.05119	0.05643	10.755
(4)	0.05098	0.07225	0.07089	0.06844	0.06847	0.06296	0.06388	0.06541	11.021
(5)	0.04955	0.06896	0.06748	0.06372	0.06603	0.05846	0.05934	0.06194	10.880

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
39 2,4-DDE	+++++	1.14103	1.08072	1.09005	1.06169	0.88466	0.89319	1.02522	10.614
40 2,4-DDD	+++++	1.08881	1.01841	0.99599	0.98400	0.85150	0.85318	0.96531	9.816
41 2,4-DDT	+++++	0.97799	0.97179	0.97332	0.98841	0.88743	0.88215	0.94685	5.117
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Oxychlordane	+++++	1.32927	1.24890	1.22496	1.20236	1.04785	1.05015	1.18392	9.540
44 trans-Nonachlor	+++++	1.68629	1.57989	1.58456	1.55669	1.34437	1.36253	1.51906	8.949
45 cis-Nonachlor	+++++	1.62941	1.55213	1.53413	1.52347	1.34758	1.35527	1.49033	7.639
46 Mirex	+++++	1.20478	1.11168	1.05006	1.00932	0.85381	0.85786	1.01459	13.749
47 bis-(2-ethylhexyl) Phthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Chlordane (NOS)(1)	0.06029	0.05735	0.05369	0.05005	0.04581	0.04808	0.04531	0.05151	11.230
(2)	0.15038	0.14213	0.13501	0.13074	0.12020	0.12674	0.12030	0.13221	8.482

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(3)	0.17221	0.15459	0.13623	0.13893	0.12753	0.13518	0.13160	0.14232	11.024
49 Trifluralin	*****	*****	*****	*****	*****	*****	*****	*****	*****
50 Dacthal	*****	*****	*****	*****	*****	*****	*****	*****	*****
51 Oxadiazon	*****	*****	*****	*****	*****	*****	*****	*****	*****
52 Kelthane	*****	*****	*****	*****	*****	*****	*****	*****	*****
53 Chlorpyrifos	*****	*****	*****	*****	*****	*****	*****	*****	*****
54 Methyl Parathion	*****	*****	*****	*****	*****	*****	*****	*****	*****
55 Ethyl Parathion	*****	*****	*****	*****	*****	*****	*****	*****	*****
56 Kepone	*****	*****	*****	*****	*****	*****	*****	*****	*****
57 1-Chloropyrene	*****	*****	*****	*****	*****	*****	*****	*****	*****
$ 4 Tetrachloro-m-xylene	*****	1.10401	1.05839	1.02629	0.99588	0.93352	0.85040	0.99475	9.166

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
$ 28 Decachlorobiphenyl	+++++	0.99444	0.96249	0.90111	0.87014	0.79161	0.75653	0.87939	10.607

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121405	22121406	22121407	22121408	22121409	22121410	22121411
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022
INJ.TIME:	20:38	20:56	21:14	21:31	21:49	22:07	22:25

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene	2.323	2.323	2.324	2.323	2.324	2.324	2.324	2.324	2.294-2.354	2.323	0.000
* 2 1Bromo-2nitrobenzene	3.151	3.151	3.152	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
* 3 Hexabromobiphenyl	9.504	9.503	9.504	9.505	9.505	9.504	9.504	9.505	9.475-9.535	9.504	0.001
$ 4 Tetrachloro-m-xylene	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.798-3.858	3.828	0.000
5 Hexachlorobenzene	4.182	4.182	4.183	4.183	4.182	4.183	4.182	4.182	4.152-4.212	4.183	0.000
6 alpha-BHC	4.342	4.342	4.343	4.343	4.342	4.342	4.342	4.342	4.312-4.372	4.342	0.000
7 gamma-BHC (Lindane)	4.645	4.645	4.646	4.646	4.645	4.646	4.645	4.645	4.615-4.675	4.645	0.000
8 beta-BHC	4.726	4.726	4.727	4.726	4.726	4.726	4.726	4.726	4.696-4.756	4.726	0.000
9 delta-BHC	4.909	4.909	4.910	4.910	4.909	4.910	4.910	4.909	4.879-4.939	4.910	0.000
10 Heptachlor	5.130	5.129	5.130	5.130	5.130	5.130	5.130	5.130	5.100-5.160	5.130	0.000
11 Aldrin	5.453	5.453	5.455	5.454	5.454	5.454	5.454	5.454	5.424-5.484	5.454	0.000
12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
14 Heptachlor epoxide b	6.130	6.130	6.132	6.131	6.130	6.130	6.130	6.130	6.100-6.160	6.131	0.001
15 cis-Chlordane	6.417	6.417	6.417	6.418	6.417	6.417	6.417	6.417	6.387-6.447	6.417	0.000
16 trans-Chlordane	6.270	6.271	6.271	6.271	6.271	6.271	6.271	6.271	6.241-6.301	6.271	0.000
17 Endosulfan I	6.572	6.572	6.573	6.573	6.572	6.572	6.573	6.572	6.542-6.602	6.573	0.000

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	6.489	6.489	6.490	6.490	6.489	6.489	6.490	6.489	6.459-6.519	6.489	0.000
	19 Dieldrin	6.831	6.832	6.832	6.832	6.831	6.832	6.832	6.831	6.801-6.861	6.832	0.000
	20 Endrin	7.081	7.081	7.082	7.082	7.081	7.082	7.082	7.081	7.051-7.111	7.082	0.000
	21 4,4'-DDD	7.135	7.136	7.136	7.136	7.135	7.136	7.135	7.135	7.105-7.165	7.136	0.000
	22 Endosulfan II	7.318	7.317	7.318	7.318	7.317	7.317	7.317	7.317	7.287-7.347	7.317	0.000
	23 4,4'-DDT	7.427	7.427	7.428	7.428	7.427	7.427	7.428	7.427	7.397-7.457	7.428	0.000
	24 Endrin aldehyde	7.746	7.746	7.746	7.746	7.746	7.746	7.746	7.746	7.716-7.776	7.746	0.000
	25 Methoxychlor	7.912	7.912	7.913	7.912	7.912	7.912	7.912	7.912	7.882-7.942	7.912	0.000
	26 Endosulfan sulfate	8.180	8.179	8.180	8.180	8.180	8.179	8.180	8.180	8.150-8.210	8.180	0.000
	27 Endrin ketone	8.453	8.452	8.454	8.453	8.453	8.453	8.454	8.453	8.423-8.483	8.453	0.001
$	28 Decachlorobiphenyl	9.355	9.354	9.355	9.355	9.355	9.355	9.356	9.355	9.325-9.385	9.355	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
	39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121405	22121406	22121407	22121408	22121409	22121410	22121411
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022
INJ.TIME:	20:38	20:56	21:14	21:31	21:49	22:07	22:25

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene [C	2.500	2.500	2.500	2.500	2.500	2.500	2.501	2.501	2.471-2.531	2.500	0.000
* 2 1Bromo-2nitrobenzene [	3.350	3.350	3.351	3.351	3.350	3.351	3.351	3.351	3.321-3.381	3.351	0.000
* 3 Hexabromobiphenyl[C]	11.054	11.053	11.054	11.054	11.053	11.053	11.054	11.054	11.024-11.084	11.054	0.000
$ 4 Tetrachloro-m-xylene [	4.220	4.220	4.220	4.220	4.220	4.221	4.220	4.220	4.190-4.250	4.220	0.000
5 Hexachlorobenzene [C]	4.718	4.718	4.718	4.718	4.718	4.718	4.718	4.718	4.688-4.748	4.718	0.000
6 alpha-BHC [C]	4.860	4.859	4.860	4.860	4.860	4.860	4.861	4.861	4.831-4.891	4.860	0.000
7 gamma-BHC (Lindane) [C	5.257	5.257	5.258	5.258	5.258	5.258	5.258	5.258	5.228-5.288	5.258	0.000
8 beta-BHC [C]	5.337	5.337	5.338	5.337	5.337	5.337	5.337	5.337	5.307-5.367	5.337	0.000
9 delta-BHC [C]	5.690	5.691	5.691	5.691	5.690	5.691	5.691	5.691	5.661-5.721	5.691	0.000
10 Heptachlor [C]	5.786	5.787	5.787	5.787	5.787	5.787	5.787	5.787	5.757-5.817	5.787	0.000
11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
12 Aldrin [C]	6.190	6.190	6.191	6.191	6.191	6.190	6.191	6.191	6.161-6.221	6.191	0.000
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
14 Heptachlor epoxide b [	6.845	6.845	6.845	6.846	6.845	6.846	6.845	6.845	6.815-6.875	6.845	0.000
15 cis-Chlordane [C]	7.215	7.215	7.216	7.216	7.216	7.215	7.216	7.216	7.186-7.246	7.215	0.000
16 trans-Chlordane [C]	7.056	7.055	7.056	7.056	7.056	7.056	7.056	7.056	7.026-7.086	7.056	0.000
17 Endosulfan I [C]	7.288	7.288	7.289	7.289	7.289	7.288	7.289	7.289	7.259-7.319	7.288	0.000

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	7.370	7.370	7.371	7.371	7.370	7.371	7.371	7.371	7.341-7.401	7.371	0.000
	19 Dieldrin [C]	7.582	7.582	7.583	7.583	7.582	7.582	7.583	7.583	7.553-7.613	7.582	0.000
	20 Endrin [C]	7.906	7.906	7.906	7.907	7.907	7.907	7.907	7.907	7.877-7.937	7.907	0.000
	21 4,4'-DDD [C]	7.976	7.976	7.976	7.977	7.976	7.976	7.976	7.976	7.946-8.006	7.976	0.000
	22 Endosulfan II [C]	8.117	8.116	8.117	8.117	8.117	8.117	8.117	8.117	8.087-8.147	8.117	0.000
	23 4,4'-DDT [C]	8.294	8.294	8.294	8.295	8.295	8.295	8.295	8.295	8.265-8.325	8.295	0.000
	24 Endrin aldehyde [C]	8.448	8.447	8.448	8.448	8.448	8.448	8.448	8.448	8.418-8.478	8.448	0.000
	25 Endosulfan sulfate [C]	8.715	8.714	8.715	8.715	8.715	8.715	8.715	8.715	8.685-8.745	8.715	0.000
	26 Methoxychlor [C]	8.935	8.934	8.935	8.936	8.935	8.935	8.936	8.936	8.906-8.966	8.935	0.001
	27 Endrin ketone [C]	9.239	9.239	9.239	9.240	9.239	9.239	9.240	9.240	9.210-9.270	9.239	0.000
$	28 Decachlorobiphenyl [C]	10.466	10.465	10.466	10.466	10.466	10.466	10.467	10.467	10.437-10.497	10.466	0.001
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
	39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121412	22121413	22121414	22121415	22121416	22121417	22121418
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	22:43	23:01	23:19	23:36	23:54	00:12	00:30

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.324	2.294-2.354	+++++	+++++
*	2 1Bromo-2nitrobenzene	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
*	3 Hexabromobiphenyl	9.504	9.504	9.504	9.504	9.504	9.504	9.504	9.505	9.475-9.535	9.504	0.000
$	4 Tetrachloro-m-xylene	+++++	+++++	+++++	+++++	3.800	3.800	3.800	3.828	3.798-3.858	3.800	0.000
	5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.182	4.152-4.212	+++++	+++++
	6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.342	4.312-4.372	+++++	+++++
	7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.645	4.615-4.675	+++++	+++++
	8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.726	4.696-4.756	+++++	+++++
	9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.909	4.879-4.939	+++++	+++++
	10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.130	5.100-5.160	+++++	+++++
	11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.454	5.424-5.484	+++++	+++++
	12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
	14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.130	6.100-6.160	+++++	+++++
	15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.417	6.387-6.447	+++++	+++++
	16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.271	6.241-6.301	+++++	+++++
	17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.572	6.542-6.602	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
	19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
	20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
	21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
	22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
	23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
	24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
	25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
	26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
	27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
$	28 Decachlorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.355	9.325-9.385	+++++	+++++
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
	39 2,4-DDE	6.106	6.106	6.106	6.106	6.106	6.106	6.106	6.106	6.076-6.136	6.106	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	6.681	6.681	6.681	6.681	6.681	6.681	6.680	6.681	6.651-6.711	6.681	0.000
41 2,4-DDT	6.956	6.957	6.956	6.956	6.957	6.956	6.956	6.957	6.927-6.987	6.956	0.000
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	6.014	6.015	6.014	6.015	6.014	6.014	6.014	6.014	5.984-6.044	6.015	0.000
44 trans-Nonachlor	6.397	6.398	6.398	6.398	6.397	6.397	6.397	6.397	6.367-6.427	6.398	0.000
45 cis-Nonachlor	7.112	7.112	7.111	7.112	7.112	7.112	7.112	7.112	7.082-7.142	7.112	0.000
46 Mirex	8.082	8.082	8.082	8.082	8.082	8.082	8.082	8.082	8.052-8.112	8.082	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121412	22121413	22121414	22121415	22121416	22121417	22121418
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	22:43	23:01	23:19	23:36	23:54	00:12	00:30

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.501	2.471-2.531	+++++	+++++
*	2 1Bromo-2nitrobenzene [	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.321-3.381	3.351	0.000
*	3 Hexabromobiphenyl[C]	11.054	11.054	11.054	11.054	11.054	11.054	11.054	11.054	11.024-11.084	11.054	0.000
$	4 Tetrachloro-m-xylene [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.220	4.190-4.250	+++++	+++++
	5 Hexachlorobenzene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.718	4.688-4.748	+++++	+++++
	6 alpha-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.861	4.831-4.891	+++++	+++++
	7 gamma-BHC (Lindane) [C	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.258	5.228-5.288	+++++	+++++
	8 beta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.337	5.307-5.367	+++++	+++++
	9 delta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.691	5.661-5.721	+++++	+++++
	10 Heptachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.787	5.757-5.817	+++++	+++++
	11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
	12 Aldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.191	6.161-6.221	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
	14 Heptachlor epoxide b [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.845	6.815-6.875	+++++	+++++
	15 cis-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.216	7.186-7.246	+++++	+++++
	16 trans-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.056	7.026-7.086	+++++	+++++
	17 Endosulfan I [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.289	7.259-7.319	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
	19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
	20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
	21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
	22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
	23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
	24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
	25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
	26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
	27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
$	28 Decachlorobiphenyl [C]	+++++	+++++	+++++	+++++	+++++	+++++	10.471	10.467	10.437-10.497	10.471	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
	39 2,4-DDE [C]	7.036	7.036	7.035	7.036	7.036	7.036	7.036	7.036	7.006-7.066	7.036	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	7.591	7.590	7.590	7.591	7.590	7.591	7.591	7.591	7.561-7.621	7.591	0.000
41 2,4-DDT [C]	7.913	7.914	7.913	7.913	7.913	7.914	7.913	7.913	7.883-7.943	7.913	0.000
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	6.741	6.741	6.741	6.741	6.741	6.741	6.741	6.741	6.711-6.771	6.741	0.000
44 trans-Nonachlor [C]	7.154	7.154	7.154	7.155	7.154	7.155	7.155	7.155	7.125-7.185	7.154	0.000
45 cis-Nonachlor [C]	7.975	7.975	7.975	7.975	7.975	7.975	7.975	7.975	7.945-8.005	7.975	0.000
46 Mirex [C]	9.223	9.223	9.222	9.223	9.222	9.223	9.223	9.223	9.193-9.253	9.223	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121421	22121422	22121423	22121424	22121425	22121426	22121427
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	01:24	01:42	01:59	02:17	02:35	02:53	03:11

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.324	2.294-2.354	+++++	+++++
*	2 1Bromo-2nitrobenzene	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
*	3 Hexabromobiphenyl	9.504	9.504	9.505	9.504	9.504	9.504	9.505	9.505	9.475-9.535	9.504	0.000
$	4 Tetrachloro-m-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.828	3.798-3.858	+++++	+++++
	5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.182	4.152-4.212	+++++	+++++
	6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.342	4.312-4.372	+++++	+++++
	7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.645	4.615-4.675	+++++	+++++
	8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.726	4.696-4.756	+++++	+++++
	9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.909	4.879-4.939	+++++	+++++
	10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.130	5.100-5.160	+++++	+++++
	11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.454	5.424-5.484	+++++	+++++
	12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
	14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.130	6.100-6.160	+++++	+++++
	15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.417	6.387-6.447	+++++	+++++
	16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.271	6.241-6.301	+++++	+++++
	17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.572	6.542-6.602	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
	19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
	20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
	21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
	22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
	23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
	24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
	25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
	26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
	27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
$	28 Decachlorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	9.380	9.355	9.325-9.385	9.380	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
	39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	5.593	5.593	5.593	5.593	5.593	5.592	5.593	5.593	5.563-5.623	5.593	0.000
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121421	22121422	22121423	22121424	22121425	22121426	22121427
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	01:24	01:42	01:59	02:17	02:35	02:53	03:11

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.501	2.471-2.531	+++++	+++++
* 2 1Bromo-2nitrobenzene [	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.321-3.381	3.351	0.000
* 3 Hexabromobiphenyl[C]	11.054	11.055	11.054	11.054	11.054	11.054	11.054	11.054	11.024-11.084	11.054	0.000
$ 4 Tetrachloro-m-xylene [	4.215	+++++	+++++	+++++	+++++	+++++	+++++	4.220	4.190-4.250	4.215	0.000
5 Hexachlorobenzene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.718	4.688-4.748	+++++	+++++
6 alpha-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.861	4.831-4.891	+++++	+++++
7 gamma-BHC (Lindane) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.258	5.228-5.288	+++++	+++++
8 beta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.337	5.307-5.367	+++++	+++++
9 delta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.691	5.661-5.721	+++++	+++++
10 Heptachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.787	5.757-5.817	+++++	+++++
11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
12 Aldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.191	6.161-6.221	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
14 Heptachlor epoxide b [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.845	6.815-6.875	+++++	+++++
15 cis-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.216	7.186-7.246	+++++	+++++
16 trans-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.056	7.026-7.086	+++++	+++++
17 Endosulfan I [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.289	7.259-7.319	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
	19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
	20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
	21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
	22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
	23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
	24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
	25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
	26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
	27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
$	28 Decachlorobiphenyl [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.467	10.437-10.497	+++++	+++++
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
	39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	5.612	5.612	5.612	5.611	5.612	5.612	5.612	5.612	5.582-5.642	5.612	0.000
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121428	22121429	22121430	22121431	22121432	22121433	22121434
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	03:29	03:46	04:04	04:22	04:40	04:58	05:16

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.324	2.294-2.354	+++++	+++++
*	2 1Bromo-2nitrobenzene	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
*	3 Hexabromobiphenyl	9.505	9.504	9.504	9.504	9.505	9.504	9.504	9.505	9.475-9.535	9.504	0.000
$	4 Tetrachloro-m-xylene	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.798-3.858	3.828	0.000
	5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.182	4.152-4.212	+++++	+++++
	6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.342	4.312-4.372	+++++	+++++
	7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.645	4.615-4.675	+++++	+++++
	8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.726	4.696-4.756	+++++	+++++
	9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.909	4.879-4.939	+++++	+++++
	10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.130	5.100-5.160	+++++	+++++
	11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.454	5.424-5.484	+++++	+++++
	12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
	14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.130	6.100-6.160	+++++	+++++
	15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.417	6.387-6.447	+++++	+++++
	16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.271	6.241-6.301	+++++	+++++
	17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.572	6.542-6.602	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
	19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
	20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
	21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
	22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
	23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
	24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
	25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
	26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
	27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
$	28 Decachlorobiphenyl	9.355	9.355	9.355	9.355	9.356	9.356	9.355	9.355	9.325-9.385	9.356	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	6.931	6.931	6.931	6.931	6.931	6.931	6.931	6.931	6.901-6.961	6.931	0.000
	39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121428	22121429	22121430	22121431	22121432	22121433	22121434
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	03:29	03:46	04:04	04:22	04:40	04:58	05:16

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.501	2.471-2.531	+++++	+++++
* 2 1Bromo-2nitrobenzene [	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.321-3.381	3.351	0.000
* 3 Hexabromobiphenyl[C]	11.055	11.054	11.054	11.055	11.054	11.054	11.054	11.054	11.024-11.084	11.054	0.000
$ 4 Tetrachloro-m-xylene [	4.221	4.220	4.220	4.221	4.221	4.221	4.221	4.220	4.190-4.250	4.221	0.000
5 Hexachlorobenzene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.718	4.688-4.748	+++++	+++++
6 alpha-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.861	4.831-4.891	+++++	+++++
7 gamma-BHC (Lindane) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.258	5.228-5.288	+++++	+++++
8 beta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.337	5.307-5.367	+++++	+++++
9 delta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.691	5.661-5.721	+++++	+++++
10 Heptachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.787	5.757-5.817	+++++	+++++
11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
12 Aldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.191	6.161-6.221	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
14 Heptachlor epoxide b [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.845	6.815-6.875	+++++	+++++
15 cis-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.216	7.186-7.246	+++++	+++++
16 trans-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.056	7.026-7.086	+++++	+++++
17 Endosulfan I [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.289	7.259-7.319	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
	19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
	20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
	21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
	22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
	23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
	24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
	25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
	26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
	27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
$	28 Decachlorobiphenyl [C]	10.467	10.467	10.467	10.466	10.466	10.466	10.467	10.467	10.437-10.497	10.466	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	7.125	7.125	7.125	7.125	7.126	7.126	7.126	7.126	7.096-7.156	7.125	0.000
	39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121403.D
Data file 2: /20221214.b/B20221214.b/22121403.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-IBL1
Client ID:
Injection Date: 14-DEC-2022 20:02
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	alpha-BHC
----			----			0.00	0.00	---	beta-BHC
----			----			0.00	0.00	---	delta-BHC
----			----			0.00	0.00	---	gamma-BHC (Lindane)
----			----			0.00	0.00	---	Heptachlor
----			----			0.00	0.00	---	Aldrin
----			6.824	-0.021	2291	0.00	0.14	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
----			7.597	0.015	1696	0.00	0.11	---	Dieldrin
----			----			0.00	0.00	---	4,4'-DDE
----			----			0.00	0.00	---	Endrin
----			8.135	0.018	285	0.00	0.02	---	Endosulfan II
----			7.975	-0.002	1369	0.00	0.12	---	4,4'-DDD
----			8.720	0.005	243	0.00	0.02	---	Endosulfan sulfate
----			----			0.00	0.00	---	4,4'-DDT
----			8.924	-0.013	546	0.00	0.11	---	Methoxychlor
8.444	-0.009	1962	9.226	-0.013	2888	0.23	0.25	10.1	Endrin ketone
----			----			0.00	0.00	---	Endrin aldehyde
----			7.070	0.014	4708	0.00	0.30	---	trans-Chlordane
----			7.219	0.003	810	0.00	0.05	---	cis-Chlordane
2.351	0.028	6378	2.512	0.012	33421	0.42	1.60	116.6*	Hexachlorobutadiene
4.183	0.001	4869	4.721	0.003	421	0.36	0.02	178.1*	Hexachlorobenzene
3.828	0.000	375293	4.220	-0.000	579767	36.70	37.46	2.1	Tetrachloro-m-xylene
9.356	0.001	243291	10.467	0.000	323668	35.86	35.40	1.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

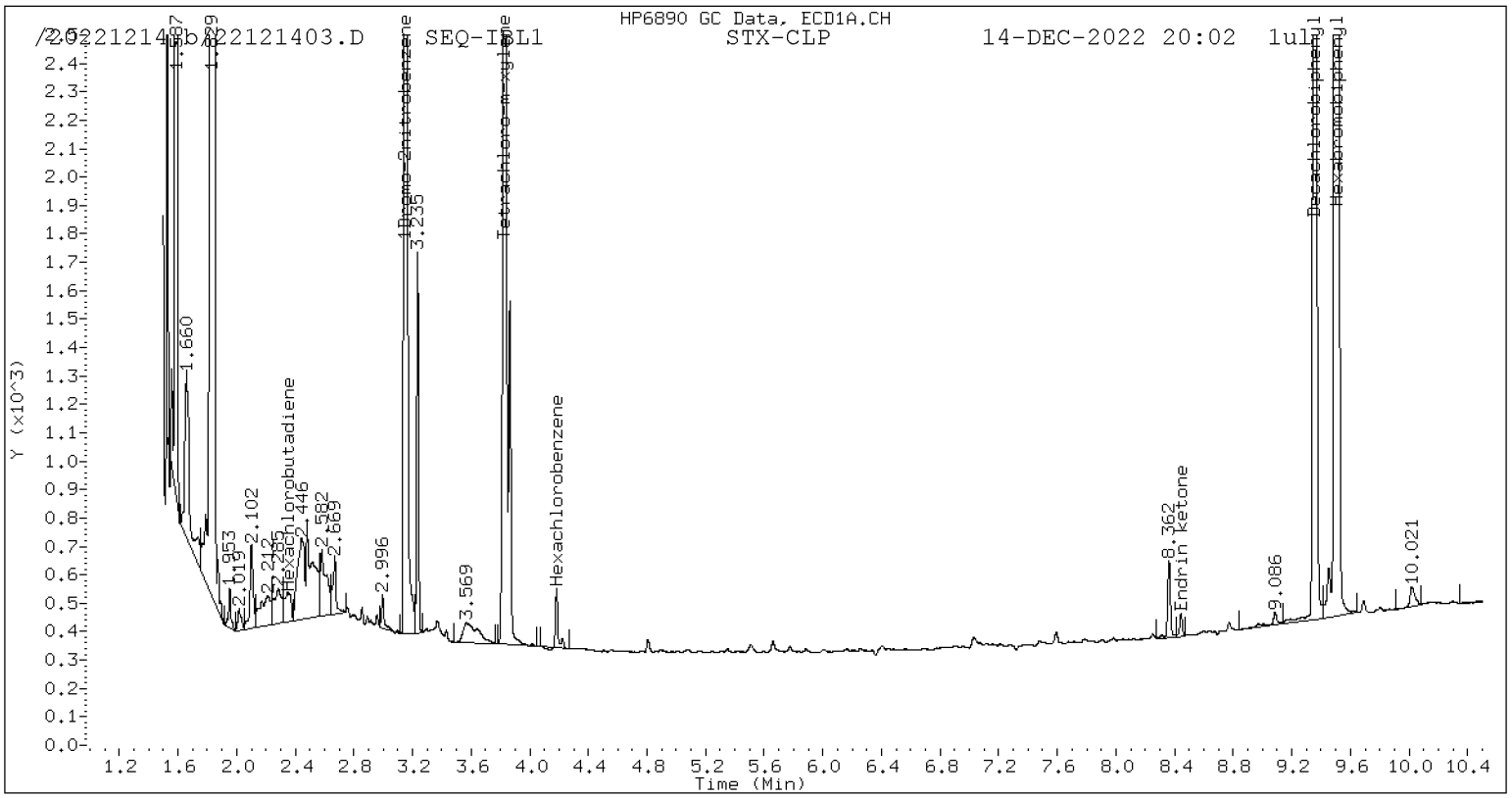
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	751998	5.8
Hexabromobiphenyl	641833	669495	4.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1099555	3.8
Hexabromobiphenyl	797125	827325	3.8

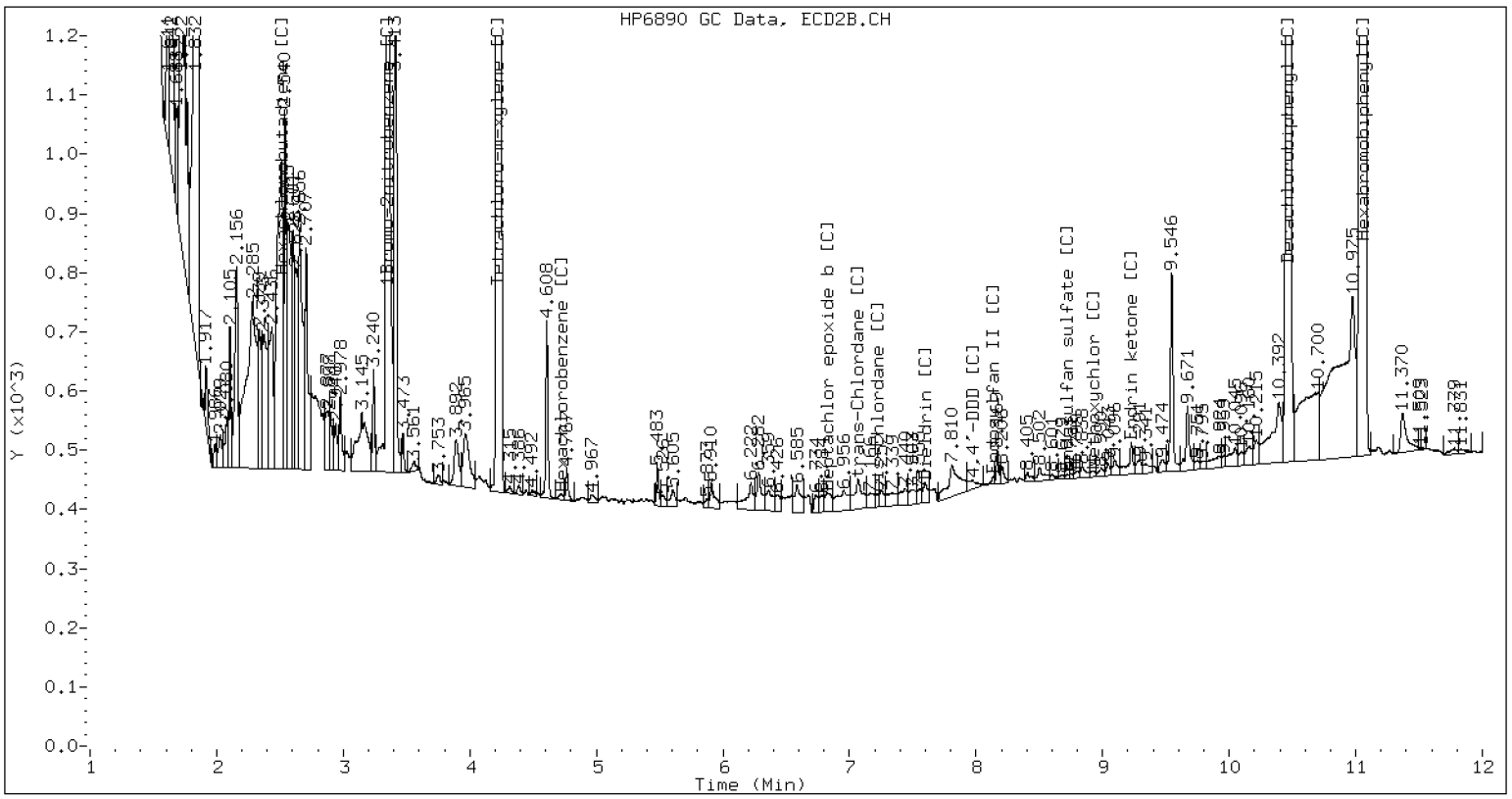
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121403.D SEQ-IBL1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121403.D
Data file 2: /20221214.b/B20221214.b/22121403.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-IBL1
Client ID:
Injection Date: 14-DEC-2022 20:02
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

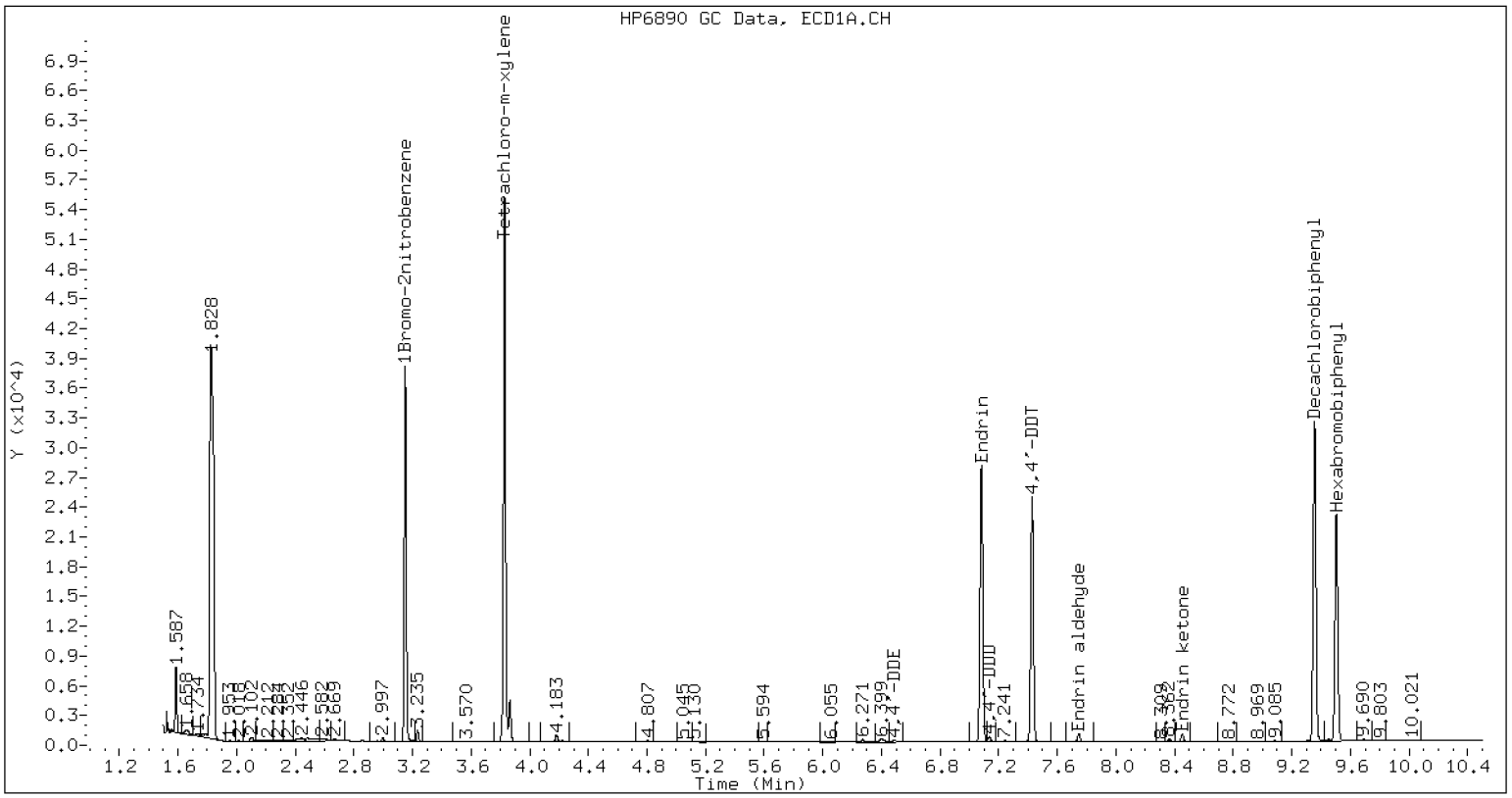
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.350	1005375
4,4'-DDE [C]	7.370	11906
Endrin [C]	7.907	1029194
4,4'-DDD [C]	7.977	32697
4,4'-DDT [C]	8.295	890195
Endrin ketone [C]	9.239	28268
Endrin aldehyde [C]	8.448	31426
Hexabromobiphenyl[C]	11.054	772586
Tetrachloro-m-xylene [C]	4.220	1890294
Decachlorobiphenyl [C]	10.467	1140978

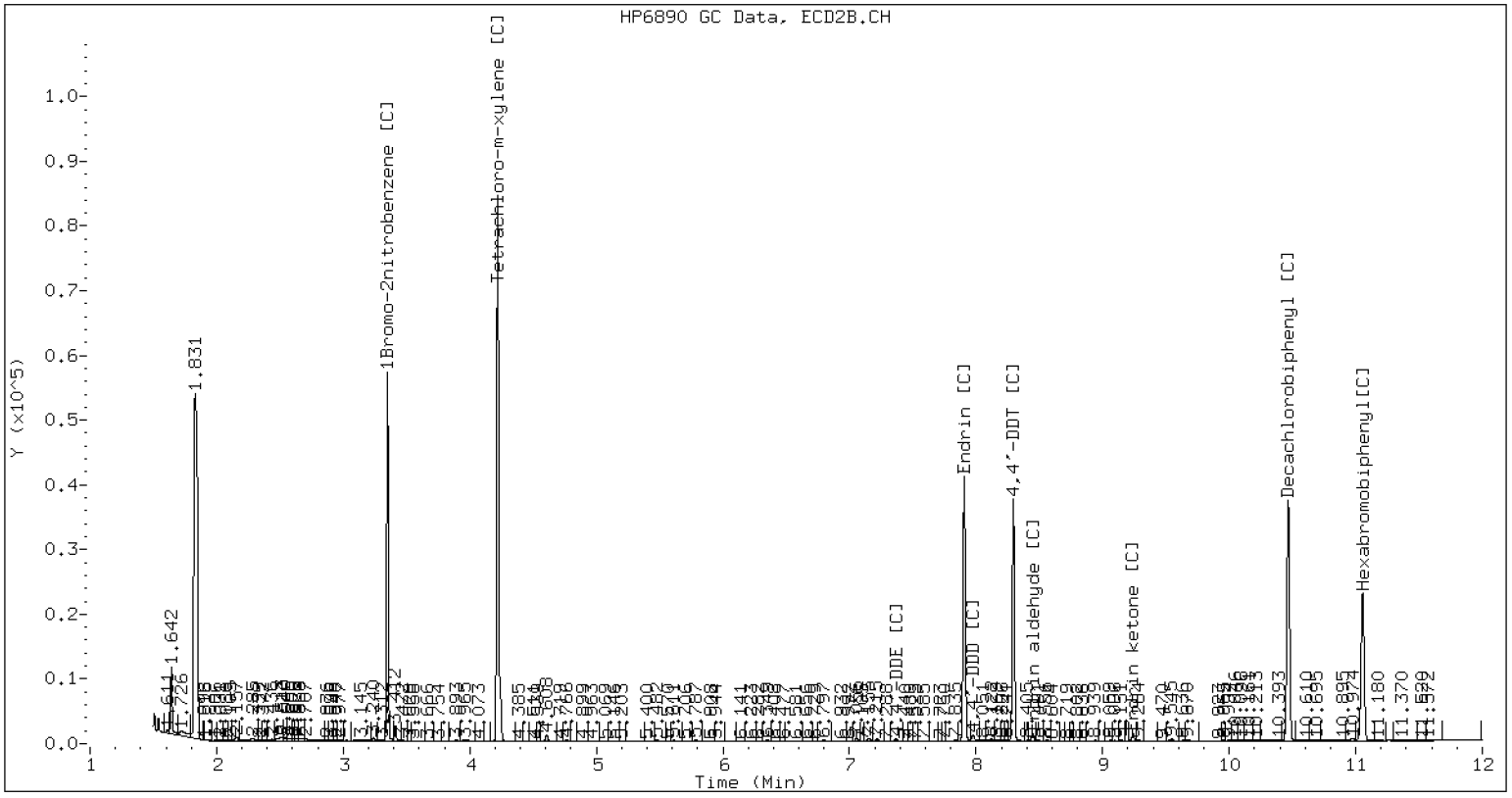
DDT Percent Breakdown = 4.8 %
((11906+32697) * 100)/(11906+32697+890195)

Endrin Percent Breakdown = 5.5 %
((31426+28268) * 100)/(31426+28268+1029194)

/20221214.b/22121404.D SEQ-PEM1 STX-CLP 14-DEC-2022 20:20 1ul



/20221214.b/B20221214.b/22121404.D SEQ-PEM1 CLP2 14-DEC-2022



7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121405.D
Data file 2: /20221214.b/B20221214.b/22121405.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1
Client ID:
Injection Date: 14-DEC-2022 20:38
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	-0.000	17720	4.860	-0.001	25579	1.30	1.22	6.4	alpha-BHC
4.726	-0.000	7513	5.337	-0.000	10927	1.43	1.37	4.4	beta-BHC
4.909	-0.000	14050	5.690	-0.000	21188	1.26	1.23	2.8	delta-BHC
4.645	-0.000	15329	5.257	-0.001	21981	1.30	1.24	4.9	gamma-BHC (Lindane)
5.130	-0.000	14540	5.786	-0.000	20395	1.38	1.27	8.9	Heptachlor
5.453	-0.001	15026	6.190	-0.001	24413	1.28	1.33	3.9	Aldrin
6.130	0.000	13937	6.845	-0.000	21959	1.37	1.44	5.6	Heptachlor epoxide b
6.572	-0.000	13220	7.288	-0.000	19257	1.41	1.44	1.8	Endosulfan I
6.831	0.000	27285	7.582	-0.001	43580	2.71	2.94	8.2	Dieldrin
6.489	0.000	25951	7.370	-0.001	37722	2.78	2.78	0.0	4,4'-DDE
7.081	0.000	24429	7.906	-0.001	31381	2.94	2.78	5.3	Endrin
7.318	0.001	19827	8.117	-0.000	30675	2.65	2.66	0.3	Endosulfan II
7.135	0.000	20434	7.976	-0.000	28995	2.73	2.65	3.0	4,4'-DDD
8.180	-0.000	19661	8.715	-0.000	26689	2.76	2.63	4.9	Endosulfan sulfate
7.427	0.000	20071	8.294	-0.001	26950	2.65	2.55	3.9	4,4'-DDT
7.912	-0.000	52385	8.935	-0.001	65896	15.60	14.07	10.3	Methoxychlor
8.453	-0.001	24276	9.239	-0.000	30129	2.98	2.75	8.0	Endrin ketone
7.746	-0.000	17209	8.448	-0.000	21218	2.88	2.60	10.1	Endrin aldehyde
6.270	-0.001	14829	7.056	-0.000	22517	1.43	1.48	3.7	trans-Chlordane
6.417	0.000	15767	7.215	-0.000	22150	1.52	1.49	1.6	cis-Chlordane
2.323	-0.001	27320	2.500	-0.001	42655	1.92	2.14	11.3	Hexachlorobutadiene
4.182	0.000	18555	4.718	-0.000	27377	1.47	1.44	2.2	Hexachlorobenzene
3.828	-0.000	28792	4.220	-0.001	41270	2.99	2.80	6.5	Tetrachloro-m-xylene
9.355	-0.000	21954	10.466	-0.000	30646	3.41	3.50	2.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

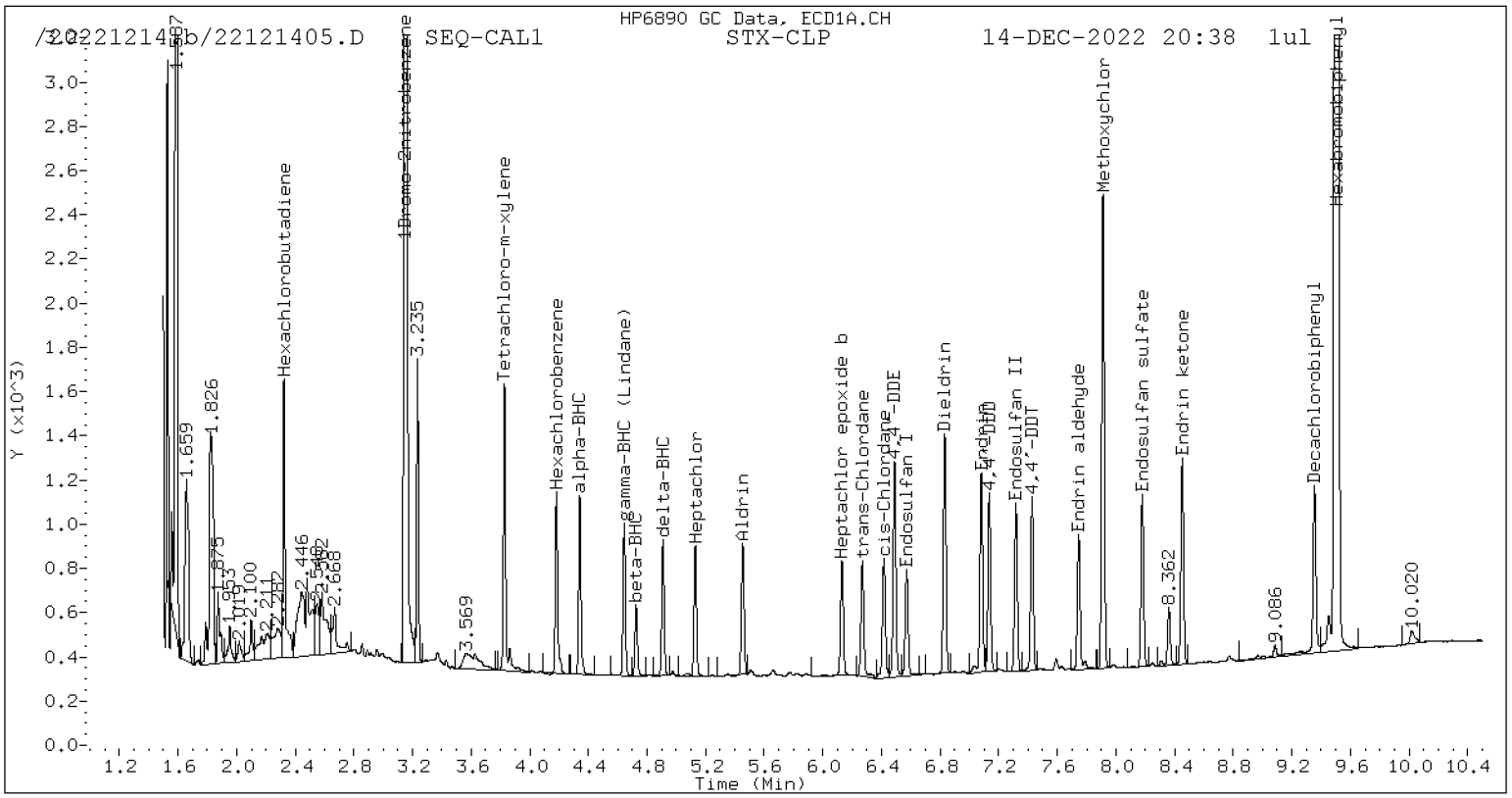
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	707324	-0.5
Hexabromobiphenyl	641833	634819	-1.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1045524	-1.3
Hexabromobiphenyl	797125	792558	-0.6

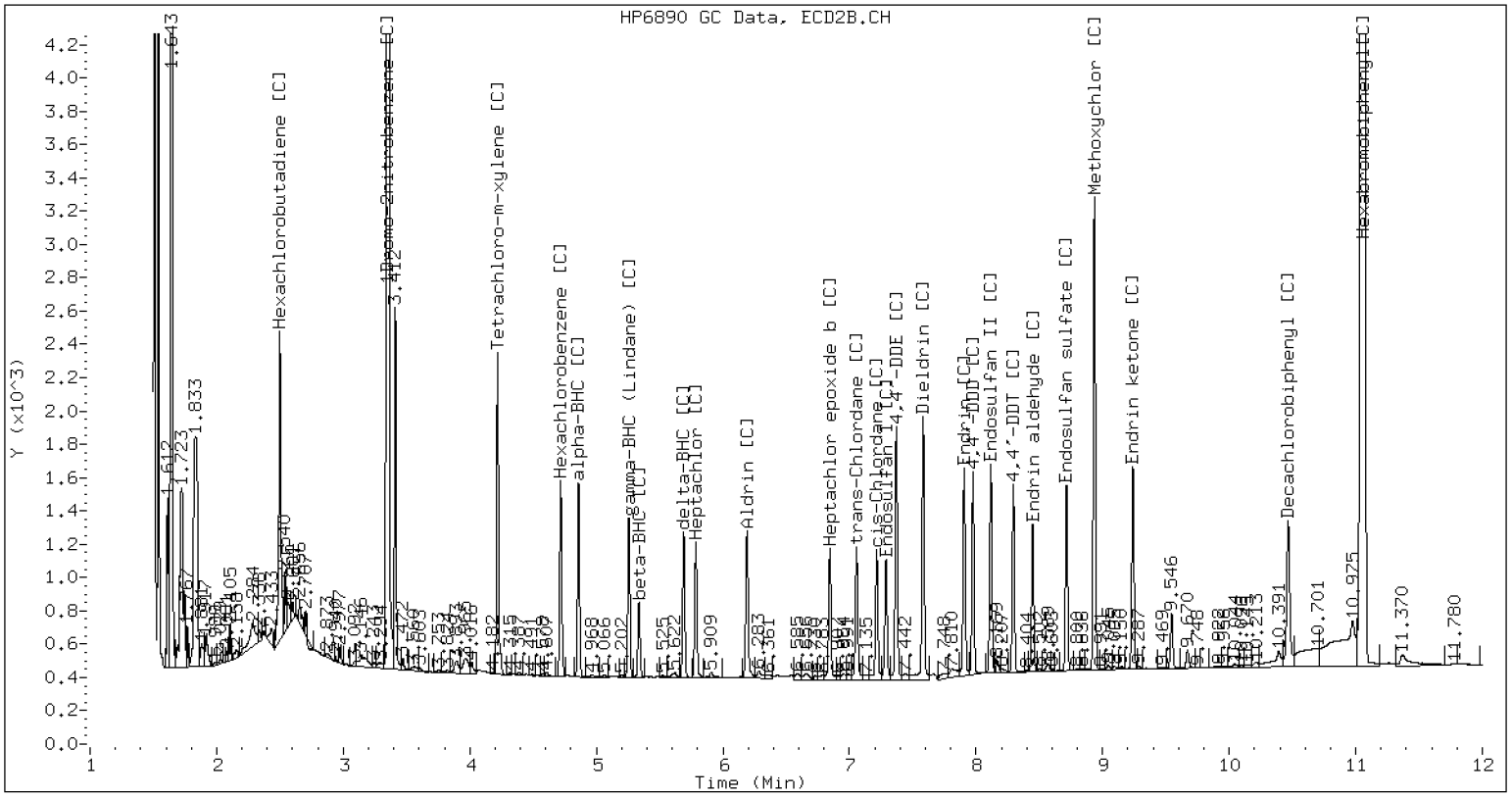
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121405.D SEQ-CAL1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121405.D
Data file 2: /20221214.b/B20221214.b/22121405.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1
Client ID:
Injection Date: 14-DEC-2022 20:38
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121406.D
Data file 2: /20221214.b/B20221214.b/22121406.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2
Client ID:
Injection Date: 14-DEC-2022 20:56
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	-0.000	35088	4.859	-0.001	52514	2.54	2.47	2.9	alpha-BHC
4.726	-0.000	14580	5.337	-0.000	21664	2.74	2.68	2.4	beta-BHC
4.909	-0.000	28429	5.691	-0.000	43932	2.52	2.51	0.5	delta-BHC
4.645	0.000	30588	5.257	-0.001	44971	2.55	2.49	2.5	gamma-BHC (Lindane)
5.129	-0.001	28458	5.787	-0.000	42156	2.67	2.58	3.6	Heptachlor
5.453	-0.001	30273	6.190	-0.001	50159	2.53	2.69	5.8	Aldrin
6.130	-0.001	27608	6.845	-0.001	43067	2.67	2.79	4.5	Heptachlor epoxide b
6.572	-0.000	25650	7.288	-0.001	37112	2.70	2.73	1.0	Endosulfan I
6.832	0.000	54960	7.582	-0.001	84296	5.38	5.60	4.0	Dieldrin
6.489	-0.000	51182	7.370	-0.001	74355	5.40	5.39	0.2	4,4'-DDE
7.081	0.000	46577	7.906	-0.001	63434	5.52	5.52	0.1	Endrin
7.317	0.001	37804	8.116	-0.001	65448	4.98	5.56	11.1	Endosulfan II
7.136	0.001	40399	7.976	-0.001	62302	5.32	5.58	4.8	4,4'-DDD
8.179	-0.001	38342	8.714	-0.001	57421	5.32	5.56	4.4	Endosulfan sulfate
7.427	-0.000	40499	8.294	-0.001	59346	5.27	5.51	4.3	4,4'-DDT
7.912	-0.000	98271	8.934	-0.002	130815	28.88	27.42	5.2	Methoxychlor
8.452	-0.001	45639	9.239	-0.001	62360	5.53	5.59	1.1	Endrin ketone
7.746	0.000	32847	8.447	-0.001	47592	5.42	5.73	5.6	Endrin aldehyde
6.271	0.000	28307	7.055	-0.001	41633	2.69	2.70	0.4	trans-Chlordane
6.417	0.000	29336	7.215	-0.000	41766	2.78	2.77	0.3	cis-Chlordane
2.323	-0.001	44113	2.500	-0.001	65565	3.05	3.24	6.2	Hexachlorobutadiene
4.182	-0.000	35520	4.718	-0.000	53173	2.77	2.75	0.9	Hexachlorobenzene
3.828	-0.000	54873	4.220	-0.001	81034	5.62	5.42	3.7	Tetrachloro-m-xylene
9.354	-0.001	38477	10.465	-0.001	54866	5.90	6.15	4.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

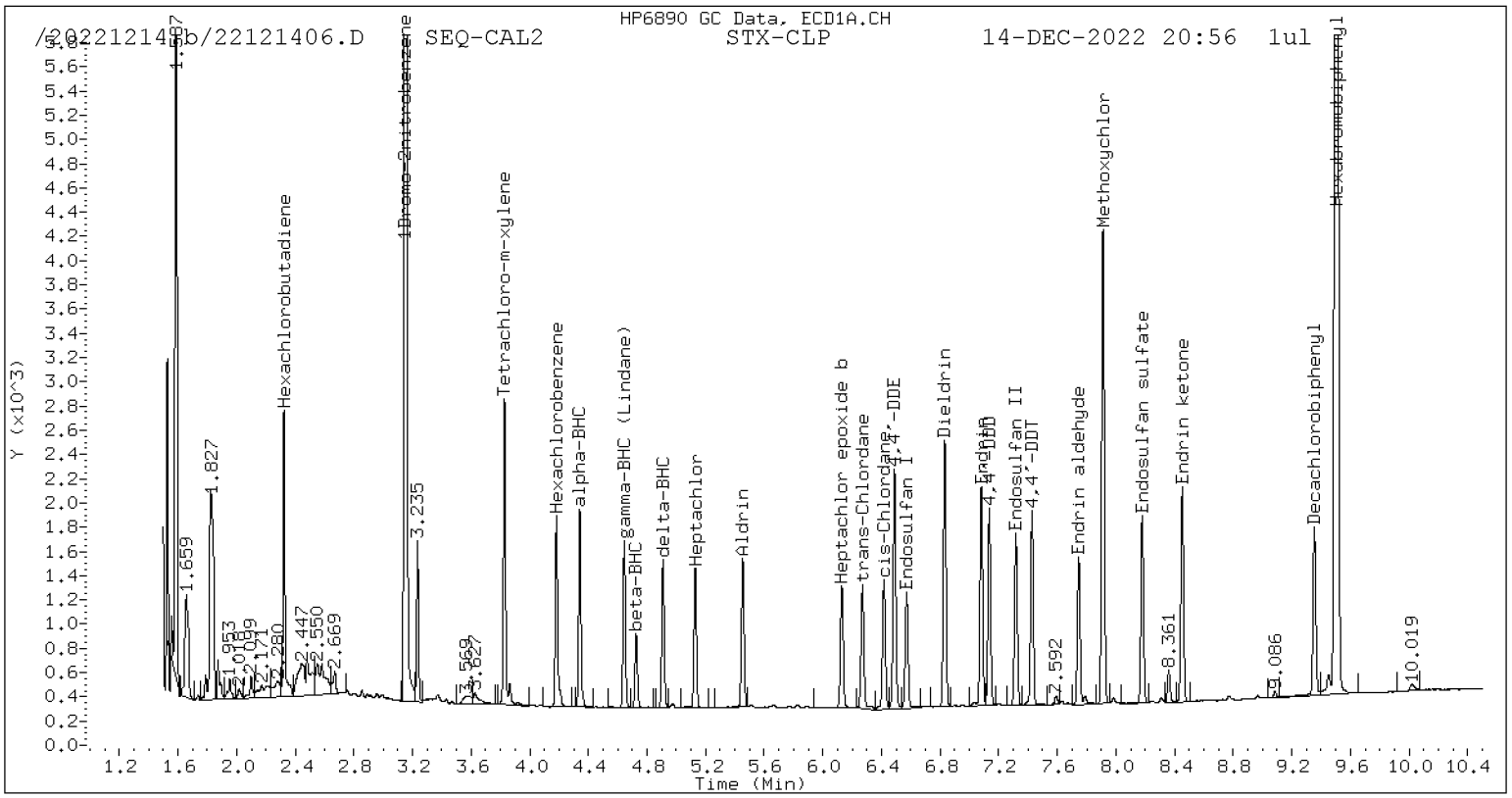
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	717600	1.0
Hexabromobiphenyl	641833	643445	0.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1061990	0.3
Hexabromobiphenyl	797125	807490	1.3

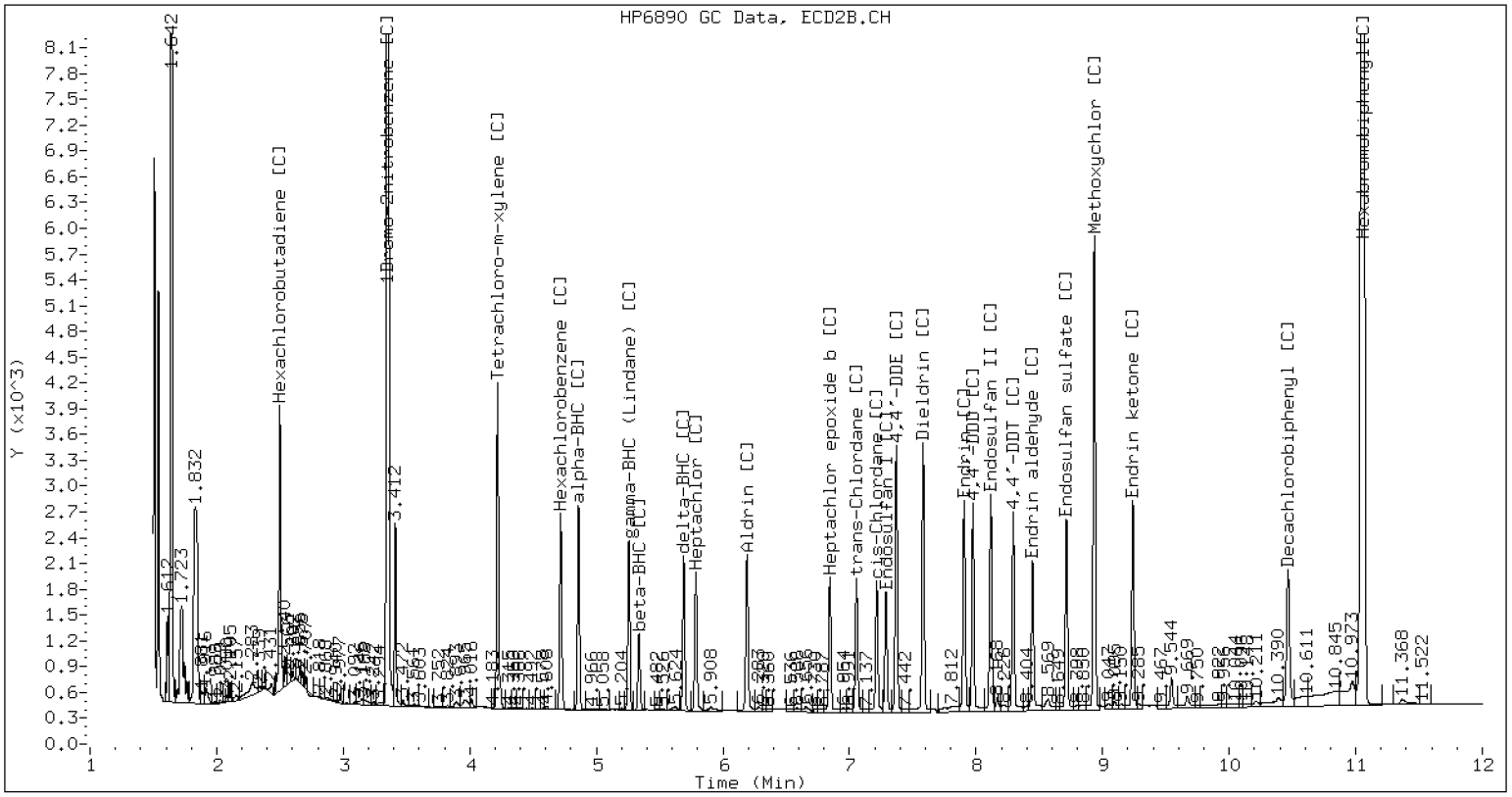
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121406.D SEQ-CAL2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121406.D
Data file 2: /20221214.b/B20221214.b/22121406.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2
Client ID:
Injection Date: 14-DEC-2022 20:56
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121407.D
Data file 2: /20221214.b/B20221214.b/22121407.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3
Client ID:
Injection Date: 14-DEC-2022 21:14
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.343	0.001	68202	4.860	-0.000	103195	5.06	4.95	2.2	alpha-BHC
4.727	0.000	26774	5.338	0.000	40159	5.16	5.06	1.8	beta-BHC
4.910	0.001	55344	5.691	0.000	85044	5.02	4.95	1.5	delta-BHC
4.646	0.001	59491	5.258	0.000	87747	5.09	4.96	2.6	gamma-BHC (Lindane)
5.130	0.000	53529	5.787	0.000	80295	5.15	5.01	2.7	Heptachlor
5.455	0.001	59061	6.191	0.000	92167	5.07	5.03	0.7	Aldrin
6.132	0.001	52071	6.845	-0.000	76415	5.15	5.05	2.1	Heptachlor epoxide b
6.573	0.001	48052	7.289	-0.000	67929	5.18	5.09	1.8	Endosulfan I
6.832	0.001	104217	7.583	-0.000	151301	10.46	10.26	1.9	Dieldrin
6.490	0.001	97042	7.371	0.000	139172	10.49	10.29	1.9	4,4'-DDE
7.082	0.001	87185	7.906	-0.001	115830	10.66	10.37	2.8	Endrin
7.318	0.001	77341	8.117	0.000	118175	10.50	10.32	1.8	Endosulfan II
7.136	0.001	77451	7.976	0.000	110178	10.51	10.14	3.6	4,4'-DDD
8.180	0.001	73440	8.715	0.000	102417	10.50	10.18	3.1	Endosulfan sulfate
7.428	0.001	77522	8.294	-0.001	105882	10.41	10.09	3.1	4,4'-DDT
7.913	0.001	178164	8.935	-0.001	239047	53.98	51.49	4.7	Methoxychlor
8.454	0.000	84510	9.239	-0.000	110024	10.55	10.13	4.1	Endrin ketone
7.746	0.001	61122	8.448	-0.000	82817	10.40	10.25	1.5	Endrin aldehyde
6.271	0.001	52622	7.056	-0.000	76513	5.13	5.07	1.1	trans-Chlordane
6.417	0.001	53515	7.216	0.000	75023	5.20	5.08	2.3	cis-Chlordane
2.324	-0.000	75632	2.500	-0.000	107268	5.35	5.41	1.1	Hexachlorobutadiene
4.183	0.001	66090	4.718	-0.000	98926	5.28	5.21	1.3	Hexachlorobenzene
3.828	0.000	101081	4.220	-0.000	153451	10.61	10.47	1.3	Tetrachloro-m-xylene
9.355	-0.000	67797	10.466	-0.000	92260	10.72	10.62	0.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

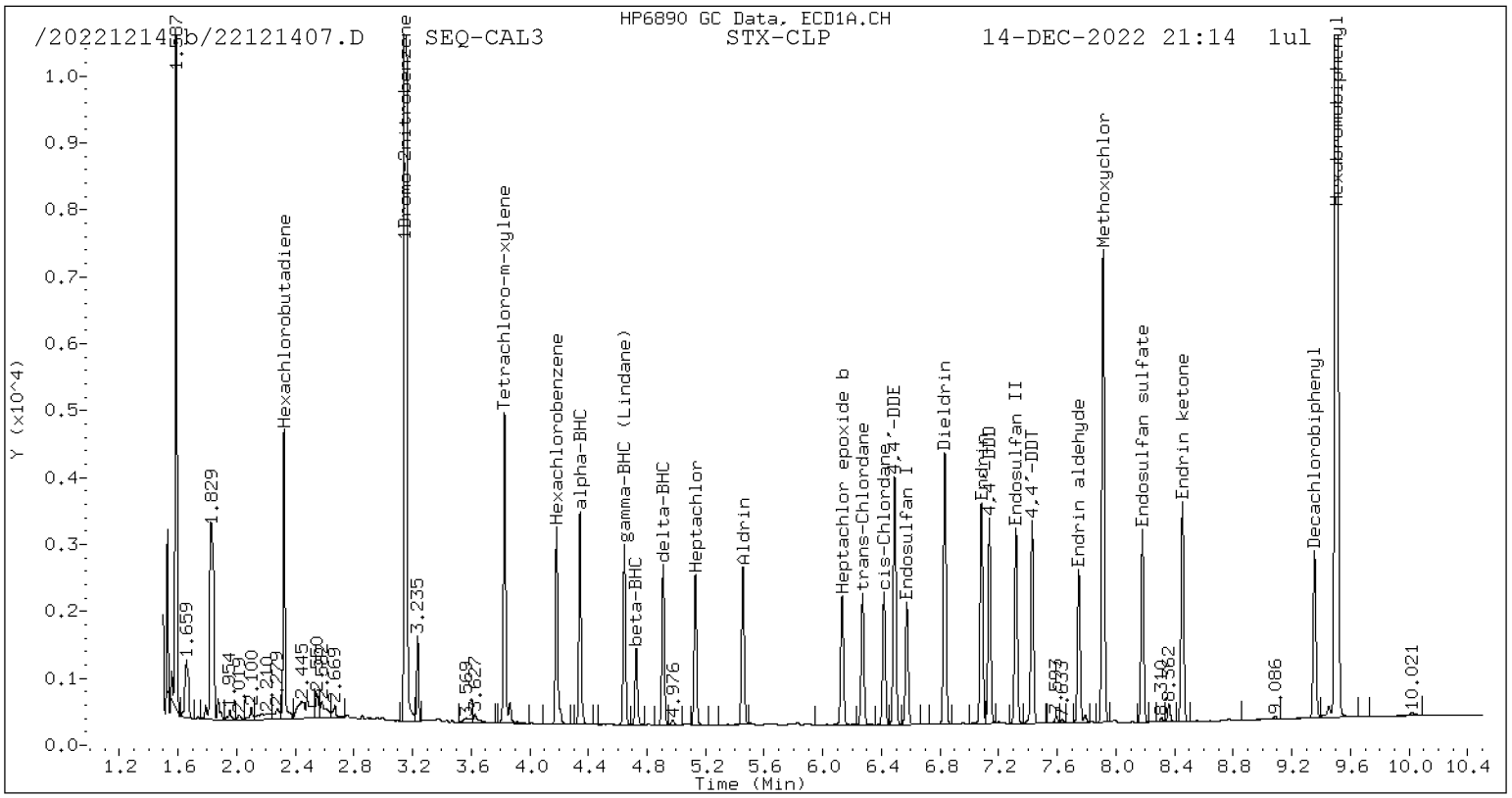
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	700354	-1.4
Hexabromobiphenyl	641833	624108	-2.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1040903	-1.7
Hexabromobiphenyl	797125	785894	-1.4

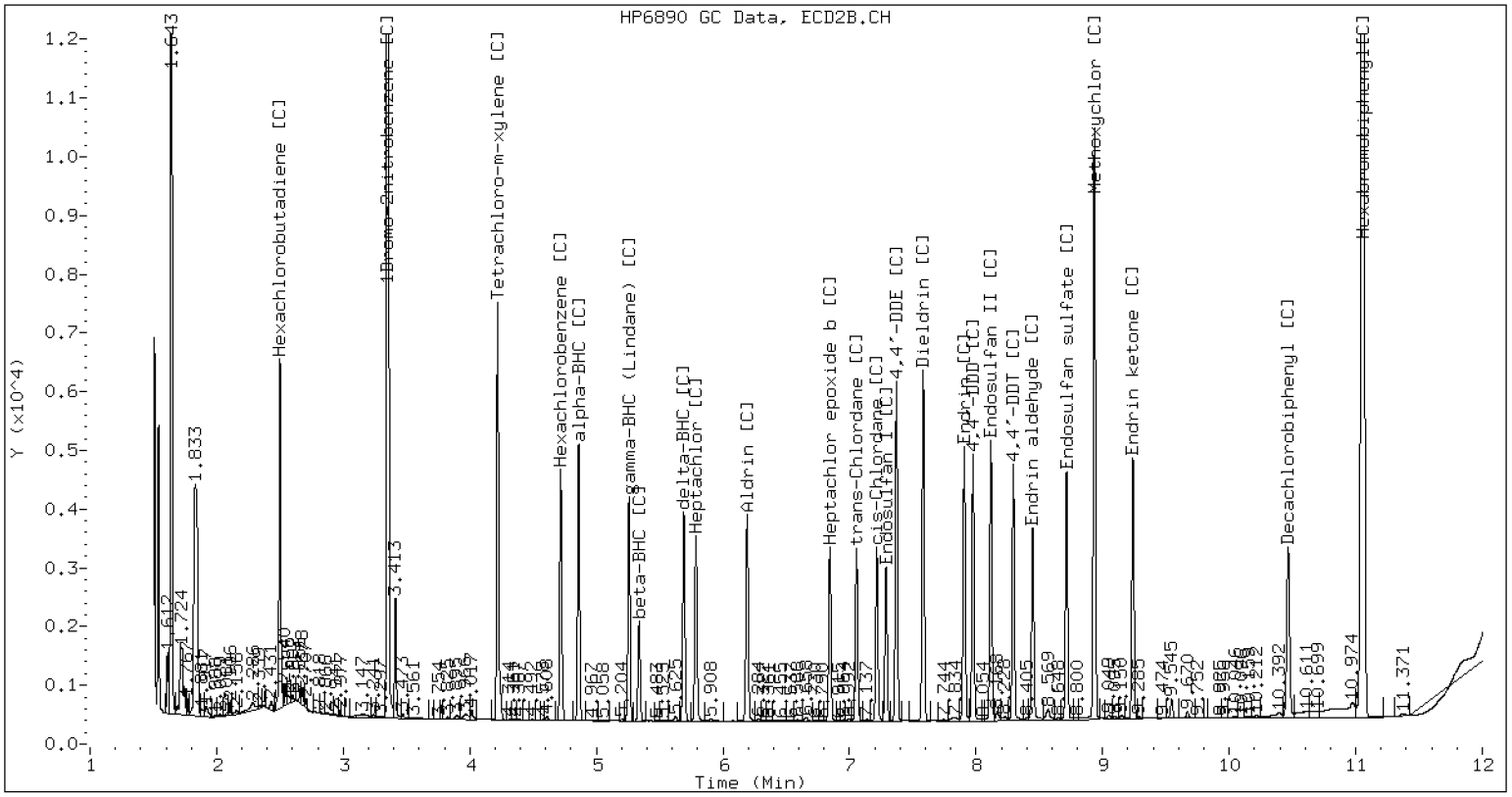
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121407.D SEQ-CAL3 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121407.D
Data file 2: /20221214.b/B20221214.b/22121407.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3
Client ID:
Injection Date: 14-DEC-2022 21:14
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121408.D
Data file 2: /20221214.b/B20221214.b/22121408.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4
Client ID:
Injection Date: 14-DEC-2022 21:31
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.343	0.000	139784	4.860	-0.000	216159	10.22	10.19	0.3	alpha-BHC
4.726	0.000	53742	5.337	0.000	81857	10.20	10.15	0.6	beta-BHC
4.910	0.001	113586	5.691	0.000	177281	10.16	10.14	0.2	delta-BHC
4.646	0.000	121488	5.258	0.000	182844	10.24	10.15	0.9	gamma-BHC (Lindane)
5.130	0.000	108260	5.787	-0.000	166558	10.26	10.21	0.5	Heptachlor
5.454	0.000	124839	6.191	0.000	189618	10.55	10.18	3.6	Aldrin
6.131	0.001	107301	6.846	0.001	155424	10.46	10.09	3.6	Heptachlor epoxide b
6.573	0.000	97151	7.289	0.000	137043	10.32	10.10	2.2	Endosulfan I
6.832	0.001	210564	7.583	0.000	301602	20.82	20.11	3.5	Dieldrin
6.490	0.001	195139	7.371	0.000	281756	20.79	20.49	1.5	4,4'-DDE
7.082	0.001	173216	7.907	-0.000	231062	20.59	20.39	1.0	Endrin
7.318	0.001	161303	8.117	0.001	236844	21.29	20.39	4.4	Endosulfan II
7.136	0.001	157301	7.977	0.001	222755	20.75	20.21	2.7	4,4'-DDD
8.180	0.000	146955	8.715	0.000	205334	20.43	20.13	1.5	Endosulfan sulfate
7.428	0.001	156744	8.295	-0.000	212755	20.46	19.99	2.3	4,4'-DDT
7.912	0.001	344324	8.936	-0.001	473459	101.43	100.55	0.9	Methoxychlor
8.453	-0.000	167384	9.240	0.000	222080	20.31	20.15	0.8	Endrin ketone
7.746	0.000	123653	8.448	0.000	164391	20.47	20.06	2.0	Endrin aldehyde
6.271	0.001	106805	7.056	0.000	154174	10.25	10.04	2.1	trans-Chlordane
6.418	0.001	106651	7.216	0.001	150231	10.21	10.00	2.1	cis-Chlordane
2.323	-0.000	142895	2.500	-0.001	197539	9.97	9.80	1.7	Hexachlorobutadiene
4.183	0.000	130020	4.718	0.000	197396	10.24	10.22	0.1	Hexachlorobenzene
3.828	0.000	199446	4.220	-0.000	308345	20.64	20.69	0.2	Tetrachloro-m-xylene
9.355	0.000	130210	10.466	-0.000	170633	20.02	19.37	3.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

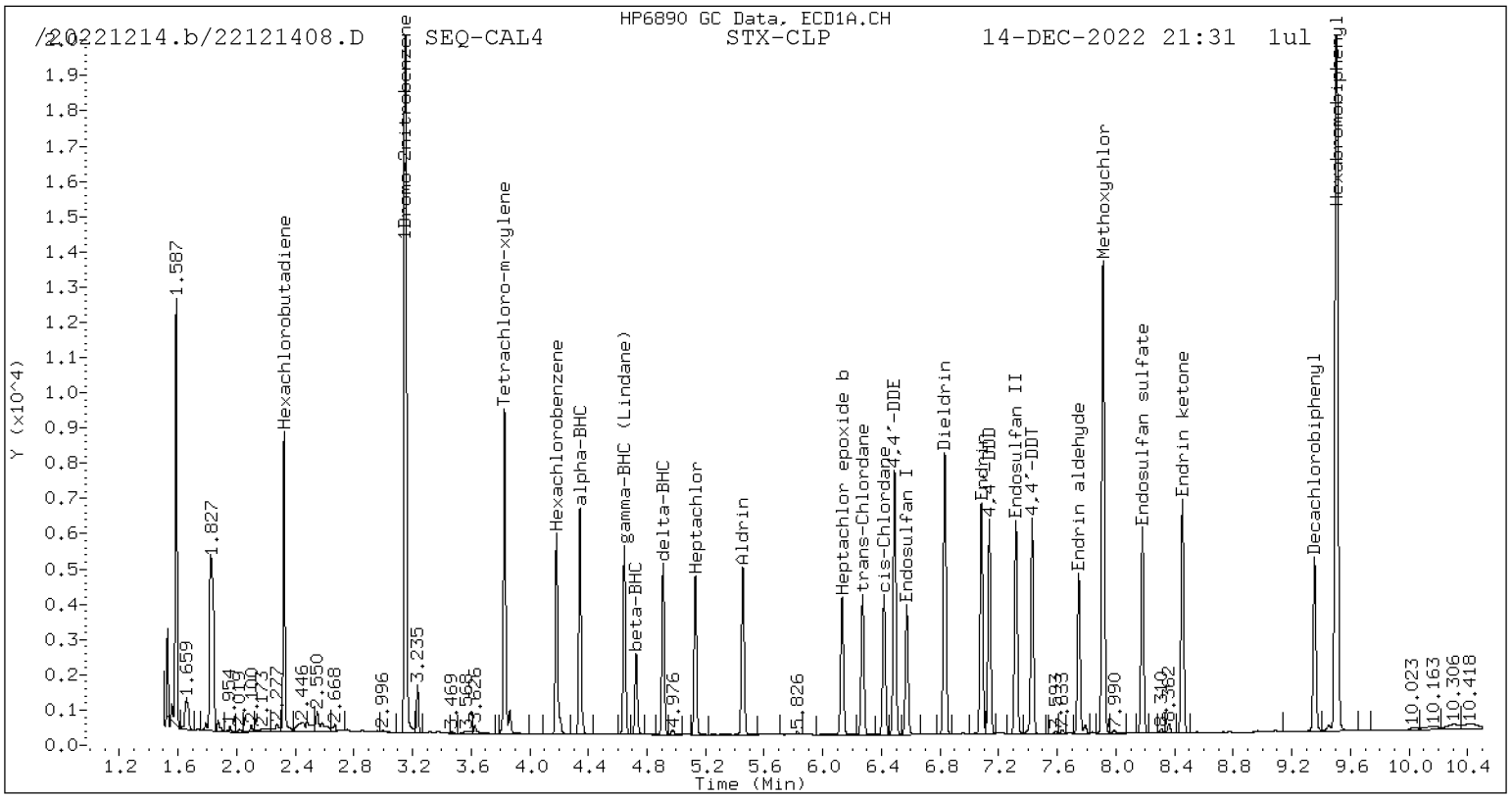
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	710650	0.0
Hexabromobiphenyl	641833	641833	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1058848	0.0
Hexabromobiphenyl	797125	797125	0.0

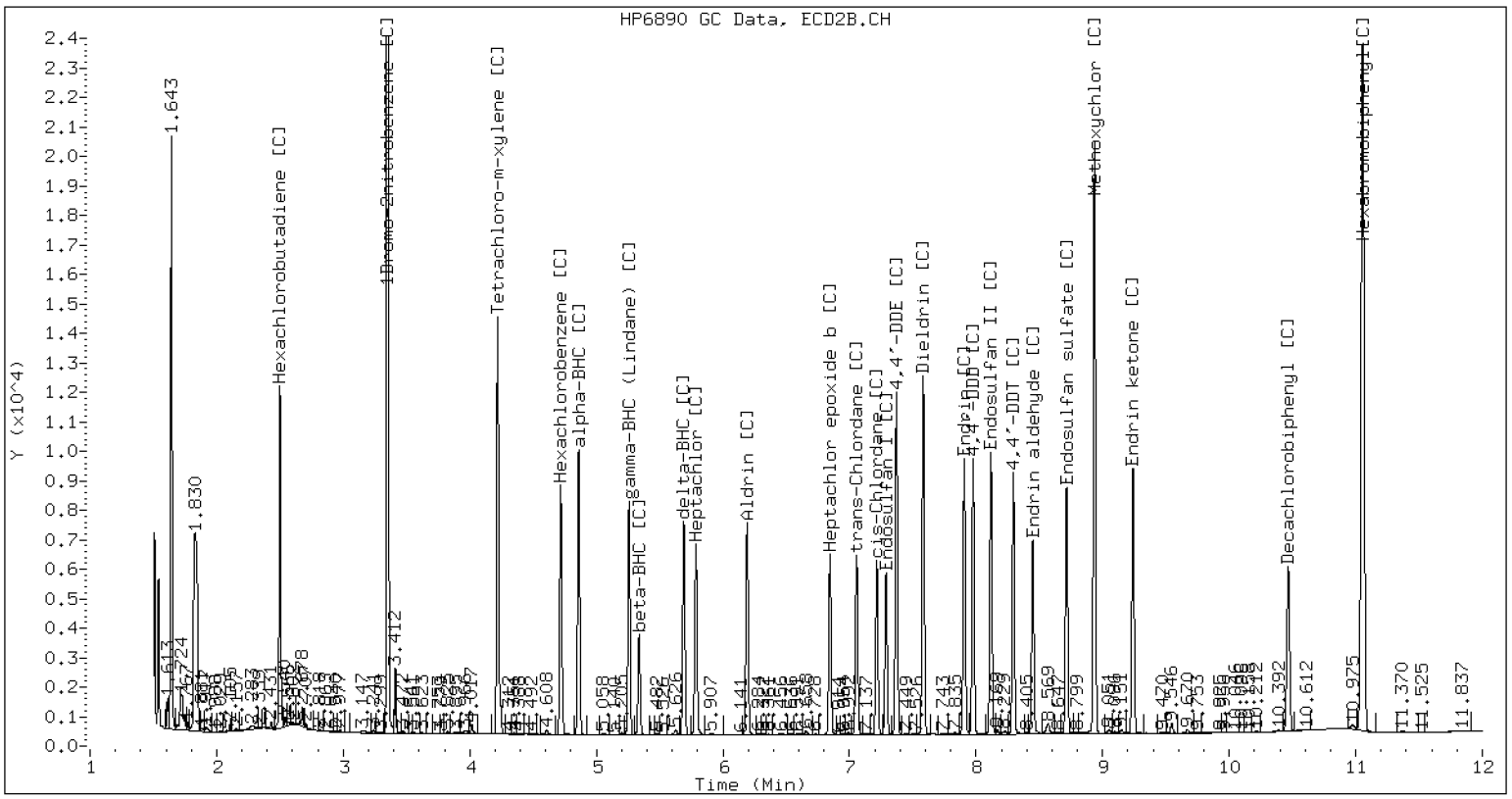
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121408.D SEQ-CAL4 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121408.D
Data file 2: /20221214.b/B20221214.b/22121408.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4
Client ID:
Injection Date: 14-DEC-2022 21:31
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121409.D
Data file 2: /20221214.b/B20221214.b/22121409.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5
Client ID:
Injection Date: 14-DEC-2022 21:49
Report Date: 12/16/2022 15:30
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	263355	4.860	-0.001	412780	20.34	20.46	0.6	alpha-BHC
4.726	0.000	99355	5.337	-0.000	154138	19.93	20.10	0.8	beta-BHC
4.909	0.000	216224	5.690	-0.000	334261	20.44	20.12	1.6	delta-BHC
4.645	0.000	228274	5.258	-0.000	350450	20.34	20.47	0.7	gamma-BHC (Lindane)
5.130	0.000	203067	5.787	-0.000	320123	20.33	20.64	1.5	Heptachlor
5.454	0.000	230734	6.191	-0.000	359912	20.62	20.33	1.4	Aldrin
6.130	0.000	198033	6.845	-0.000	295580	20.41	20.19	1.1	Heptachlor epoxide b
6.572	0.000	180905	7.289	-0.000	260351	20.31	20.18	0.7	Endosulfan I
6.831	0.000	388583	7.582	-0.000	571731	40.61	40.10	1.3	Dieldrin
6.489	0.000	362177	7.370	-0.000	531128	40.77	40.63	0.4	4,4'-DDE
7.081	0.000	323576	7.907	-0.000	442460	40.48	40.43	0.1	Endrin
7.317	0.000	282010	8.117	-0.000	446656	39.19	39.81	1.6	Endosulfan II
7.135	0.000	292251	7.976	-0.000	427990	40.58	40.20	0.9	4,4'-DDD
8.180	0.000	276113	8.715	0.000	393743	40.41	39.97	1.1	Endosulfan sulfate
7.427	0.000	296413	8.295	-0.000	413083	40.73	40.20	1.3	4,4'-DDT
7.912	0.000	628619	8.935	-0.001	900958	194.94	198.14	1.6	Methoxychlor
8.453	0.000	311305	9.239	-0.000	423698	39.77	39.82	0.1	Endrin ketone
7.746	0.000	230881	8.448	0.000	312907	40.23	39.54	1.7	Endrin aldehyde
6.271	0.000	200151	7.056	-0.000	294106	20.31	20.15	0.8	trans-Chlordane
6.417	0.000	197892	7.216	-0.000	285904	20.02	20.02	0.0	cis-Chlordane
2.324	0.000	260716	2.500	-0.000	346254	19.22	18.08	6.2	Hexachlorobutadiene
4.182	0.000	237746	4.718	-0.000	364913	19.78	19.88	0.5	Hexachlorobenzene
3.828	0.000	357836	4.220	-0.000	567647	39.13	40.07	2.4	Tetrachloro-m-xylene
9.355	0.000	239428	10.466	-0.001	327134	38.76	38.45	0.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

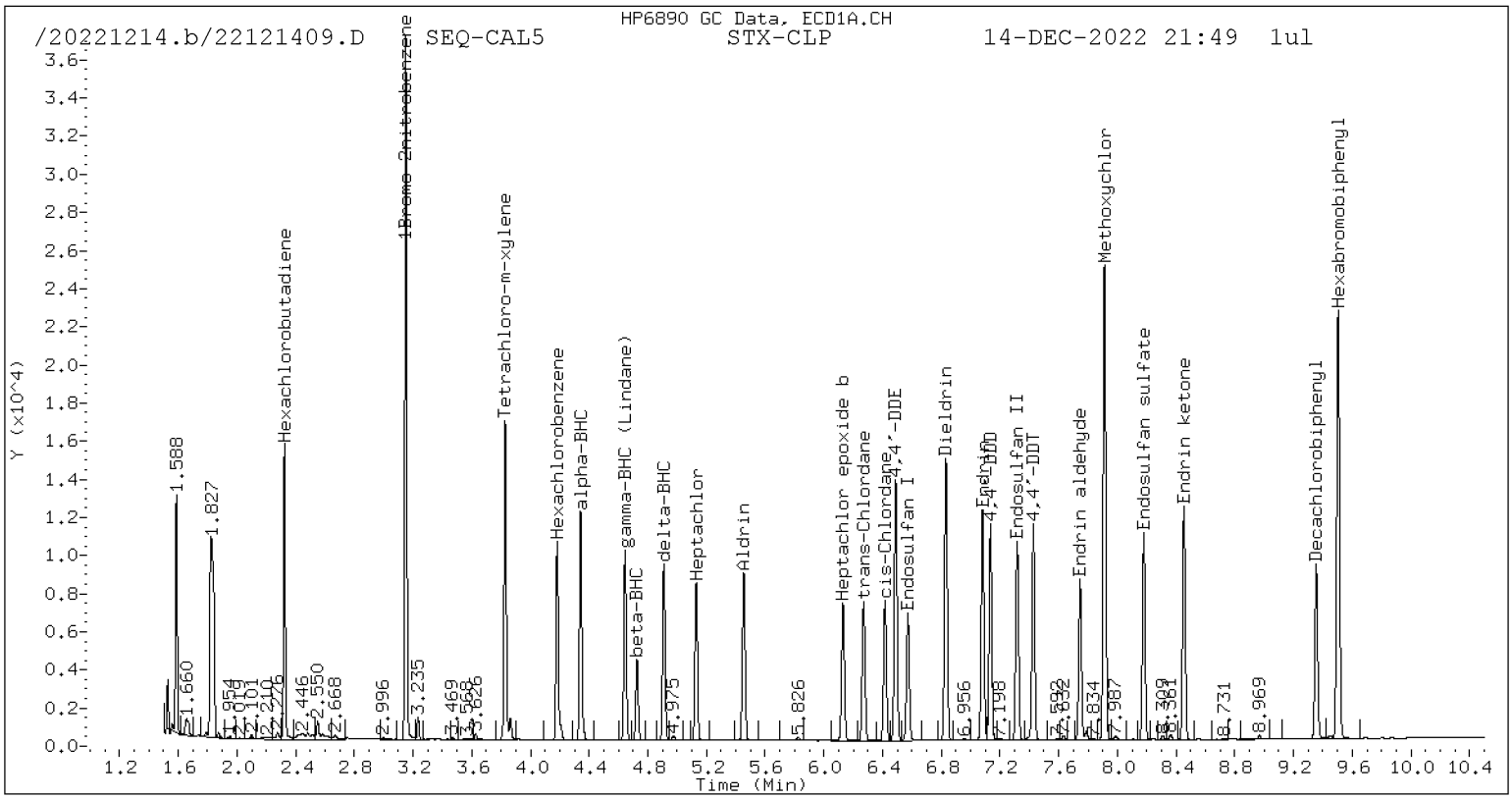
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	672426	0.0
Hexabromobiphenyl	609723	609723	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1006482	0.0
Hexabromobiphenyl	769764	769764	0.0

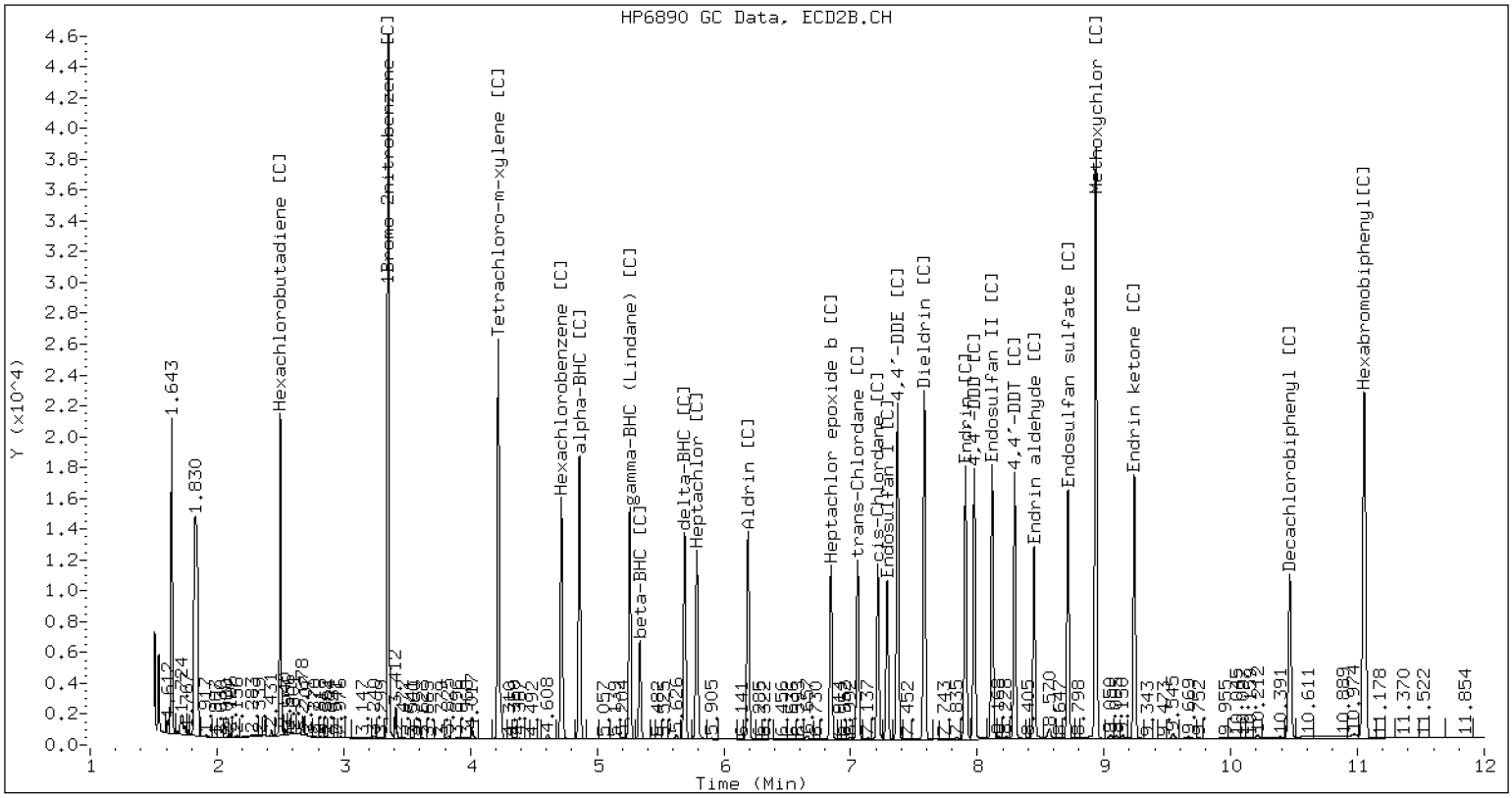
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121409.D SEQ-CAL5 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121409.D
Data file 2: /20221214.b/B20221214.b/22121409.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5
Client ID:
Injection Date: 14-DEC-2022 21:49
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121410.D
Data file 2: /20221214.b/B20221214.b/22121410.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6
Client ID:
Injection Date: 14-DEC-2022 22:07
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	535902	4.860	-0.000	849533	39.69	40.30	1.5	alpha-BHC
4.726	0.000	198976	5.337	-0.000	311218	38.28	38.84	1.4	beta-BHC
4.910	0.000	440370	5.691	0.000	700464	39.91	40.34	1.1	delta-BHC
4.646	0.000	461905	5.258	0.000	718675	39.46	40.18	1.8	gamma-BHC (Lindane)
5.130	0.000	401672	5.787	0.000	639345	38.56	39.46	2.3	Heptachlor
5.454	0.000	458396	6.190	-0.000	720942	39.27	38.97	0.8	Aldrin
6.130	0.000	387273	6.846	0.000	586062	38.26	38.31	0.1	Heptachlor epoxide b
6.572	-0.000	354629	7.288	-0.001	519836	38.18	38.55	1.0	Endosulfan I
6.832	0.000	755708	7.582	-0.000	1126850	75.73	75.64	0.1	Dieldrin
6.489	0.000	698620	7.371	-0.000	1040947	75.40	76.19	1.0	4,4'-DDE
7.082	0.000	615481	7.907	-0.000	858461	74.19	74.98	1.1	Endrin
7.317	0.000	590923	8.117	-0.000	885035	79.12	75.41	4.8	Endosulfan II
7.136	0.000	565557	7.976	-0.000	842536	75.67	75.65	0.0	4,4'-DDD
8.179	-0.001	540557	8.715	0.000	782860	76.22	75.96	0.3	Endosulfan sulfate
7.427	0.000	577337	8.295	-0.000	820861	76.44	76.36	0.1	4,4'-DDT
7.912	-0.000	1204040	8.935	-0.001	1785262	359.75	375.30	4.2	Methoxychlor
8.453	-0.001	610387	9.239	-0.000	843646	75.13	75.79	0.9	Endrin ketone
7.746	-0.000	452325	8.448	0.000	622287	75.93	75.17	1.0	Endrin aldehyde
6.271	0.000	395598	7.056	-0.000	591899	38.48	38.80	0.8	trans-Chlordane
6.417	0.001	389712	7.215	-0.000	573103	37.80	38.40	1.6	cis-Chlordane
2.324	0.000	511265	2.500	-0.000	705320	36.14	35.24	2.5	Hexachlorobutadiene
4.183	0.001	472841	4.718	0.000	728846	37.72	37.99	0.7	Hexachlorobenzene
3.828	-0.000	714634	4.221	0.000	1124106	74.93	75.93	1.3	Tetrachloro-m-xylene
9.355	-0.000	468280	10.466	-0.001	645336	73.03	72.51	0.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

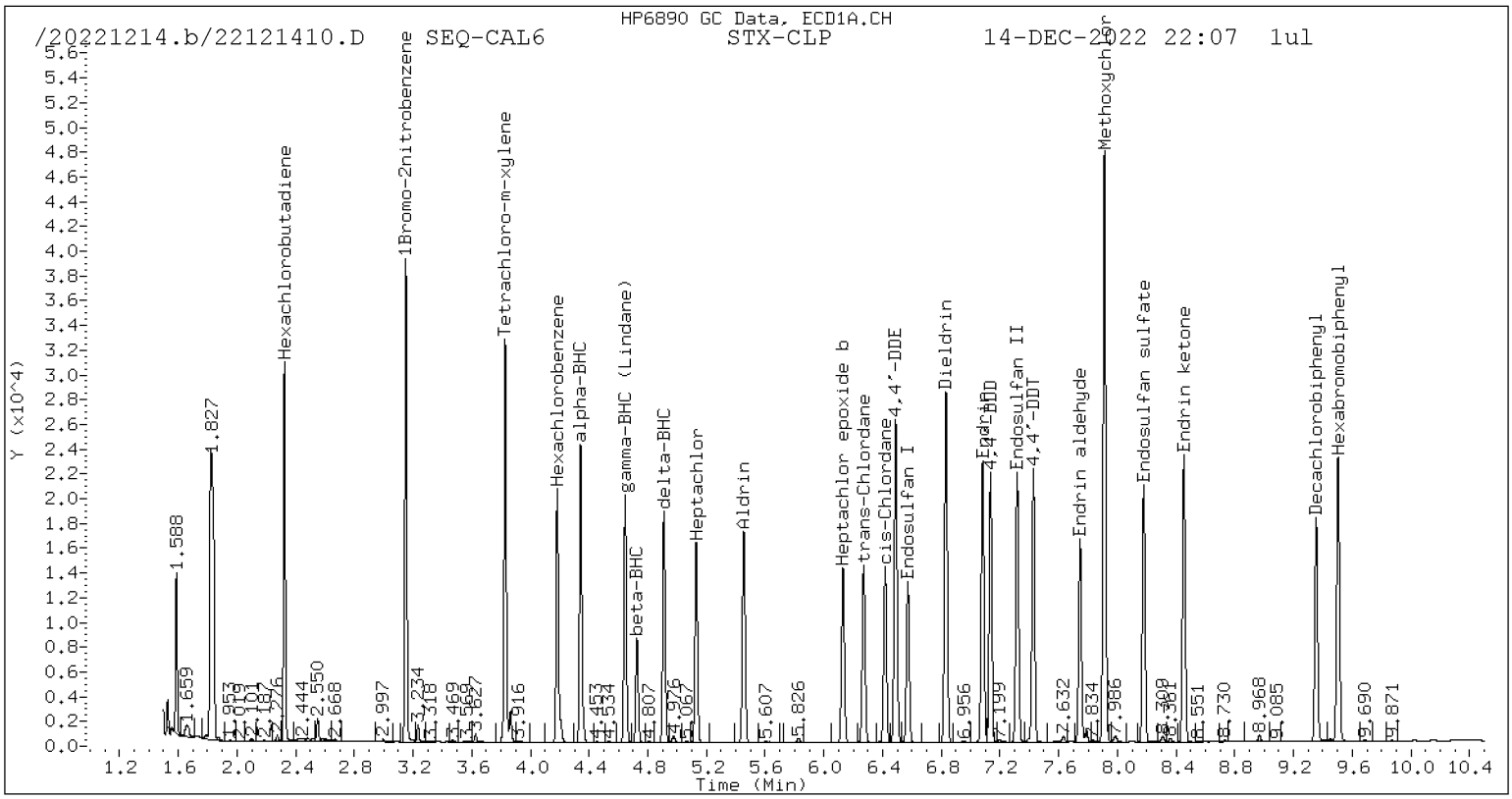
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	701342	-1.3
Hexabromobiphenyl	641833	632821	-1.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1051766	-0.7
Hexabromobiphenyl	797125	805268	1.0

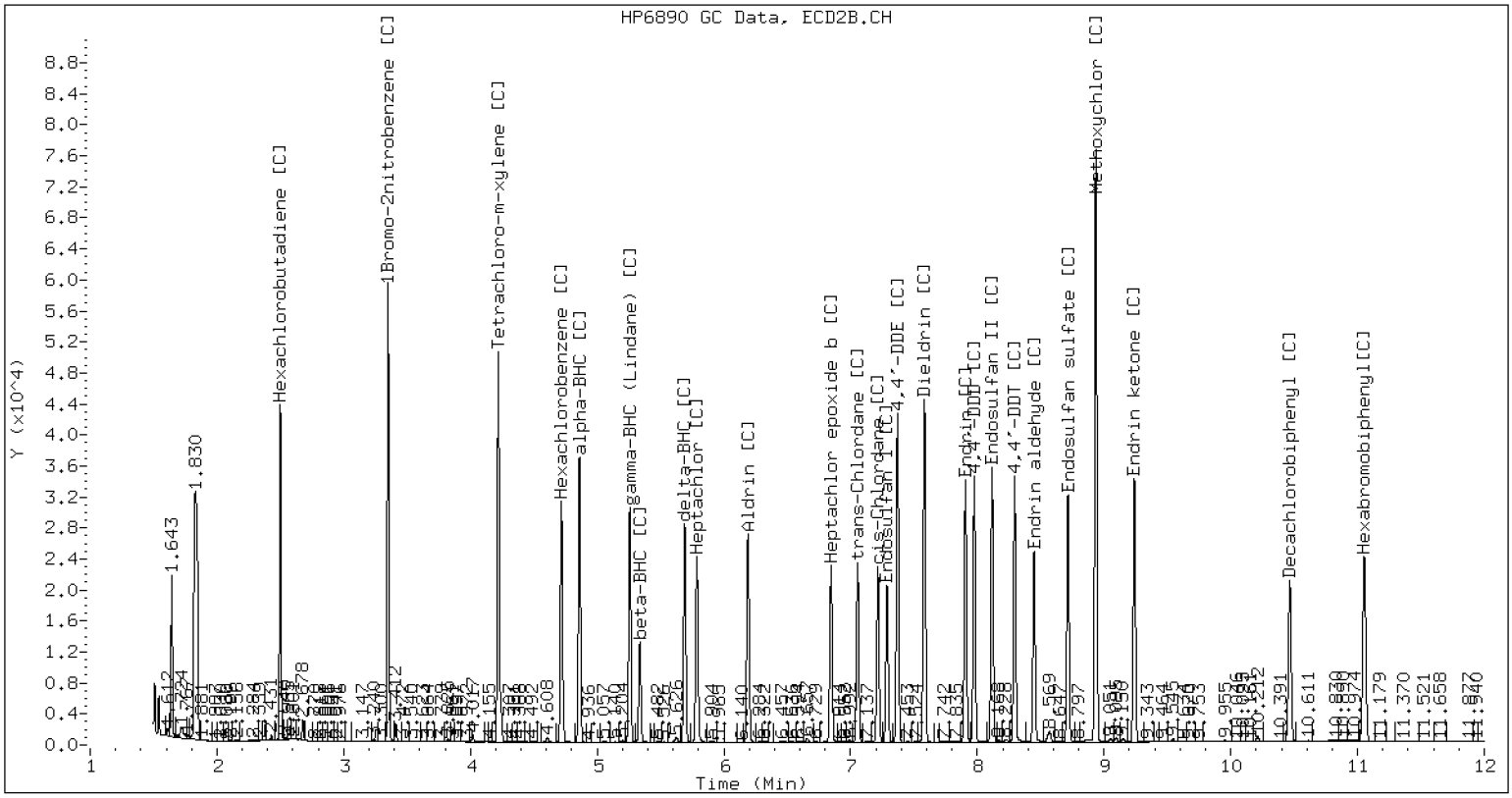
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121410.D SEQ-CAL6 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121410.D
Data file 2: /20221214.b/B20221214.b/22121410.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6
Client ID:
Injection Date: 14-DEC-2022 22:07
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121411.D
Data file 2: /20221214.b/B20221214.b/22121411.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7
Client ID:
Injection Date: 14-DEC-2022 22:25
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	1012605	4.861	0.000	1623058	75.30	77.94	3.4	alpha-BHC
4.726	0.000	371916	5.337	0.000	586390	71.84	74.06	3.1	beta-BHC
4.910	0.000	837966	5.691	0.000	1343533	76.25	78.32	2.7	delta-BHC
4.645	-0.000	870454	5.258	0.000	1370551	74.66	77.55	3.8	gamma-BHC (Lindane)
5.130	0.000	743802	5.787	0.000	1188915	71.70	74.26	3.5	Heptachlor
5.454	0.000	841598	6.191	0.000	1331430	72.39	72.84	0.6	Aldrin
6.130	-0.000	709774	6.845	0.000	1087105	70.41	71.92	2.1	Heptachlor epoxide b
6.573	0.000	652702	7.289	0.000	969098	70.56	72.74	3.1	Endosulfan I
6.832	0.000	1390496	7.583	0.000	2118555	139.91	143.93	2.8	Dieldrin
6.490	0.001	1284777	7.371	0.000	1944530	139.23	144.06	3.4	4,4'-DDE
7.082	0.001	1132487	7.907	0.000	1618631	137.86	142.60	3.4	Endrin
7.317	0.000	1089554	8.117	0.000	1672946	147.33	143.79	2.4	Endosulfan II
7.135	0.000	1051958	7.976	0.000	1606815	142.14	145.53	2.4	4,4'-DDD
8.180	0.000	1013288	8.715	0.000	1496440	144.30	146.47	1.5	Endosulfan sulfate
7.428	0.001	1086138	8.295	0.000	1586078	145.23	148.84	2.5	4,4'-DDT
7.912	0.001	2325261	8.936	0.000	3541650	701.64	751.02	6.8	Methoxychlor
8.454	0.000	1146784	9.240	0.000	1623077	142.56	147.08	3.1	Endrin ketone
7.746	-0.000	846477	8.448	0.000	1178353	143.51	143.57	0.0	Endrin aldehyde
6.271	0.000	733514	7.056	0.000	1114685	71.64	73.95	3.2	trans-Chlordane
6.417	0.001	723886	7.216	0.000	1079255	70.50	73.19	3.7	cis-Chlordane
2.324	0.000	955982	2.501	0.000	1351745	67.86	68.35	0.7	Hexachlorobutadiene
4.182	0.000	879573	4.718	0.000	1355289	70.45	71.51	1.5	Hexachlorobenzene
3.828	0.000	1318381	4.220	0.000	2067539	138.79	141.35	1.8	Tetrachloro-m-xylene
9.356	0.000	878340	10.467	0.000	1231298	138.34	139.55	0.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

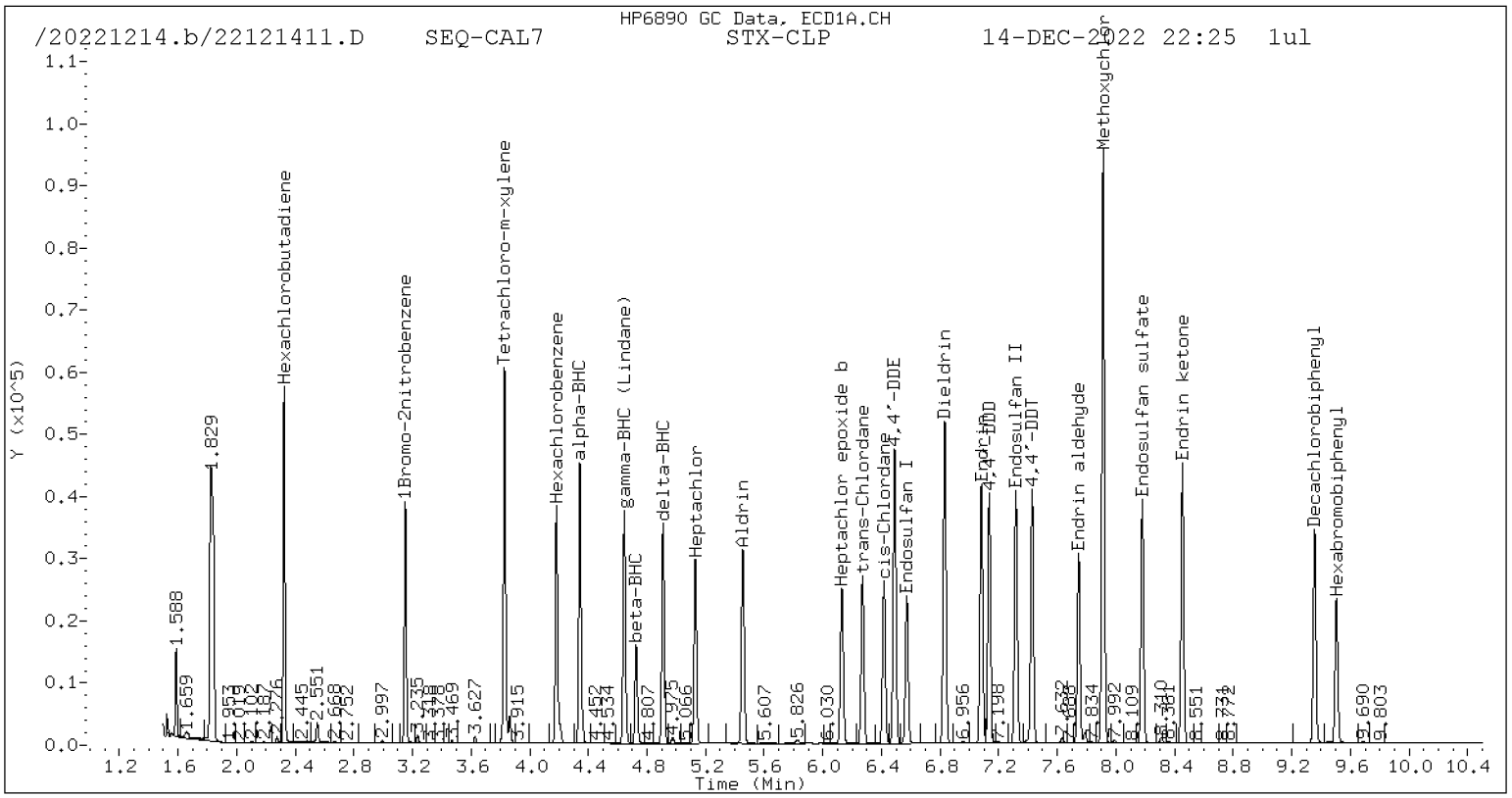
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	698499	-1.7
Hexabromobiphenyl	641833	626605	-2.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1039154	-1.9
Hexabromobiphenyl	797125	798313	0.1

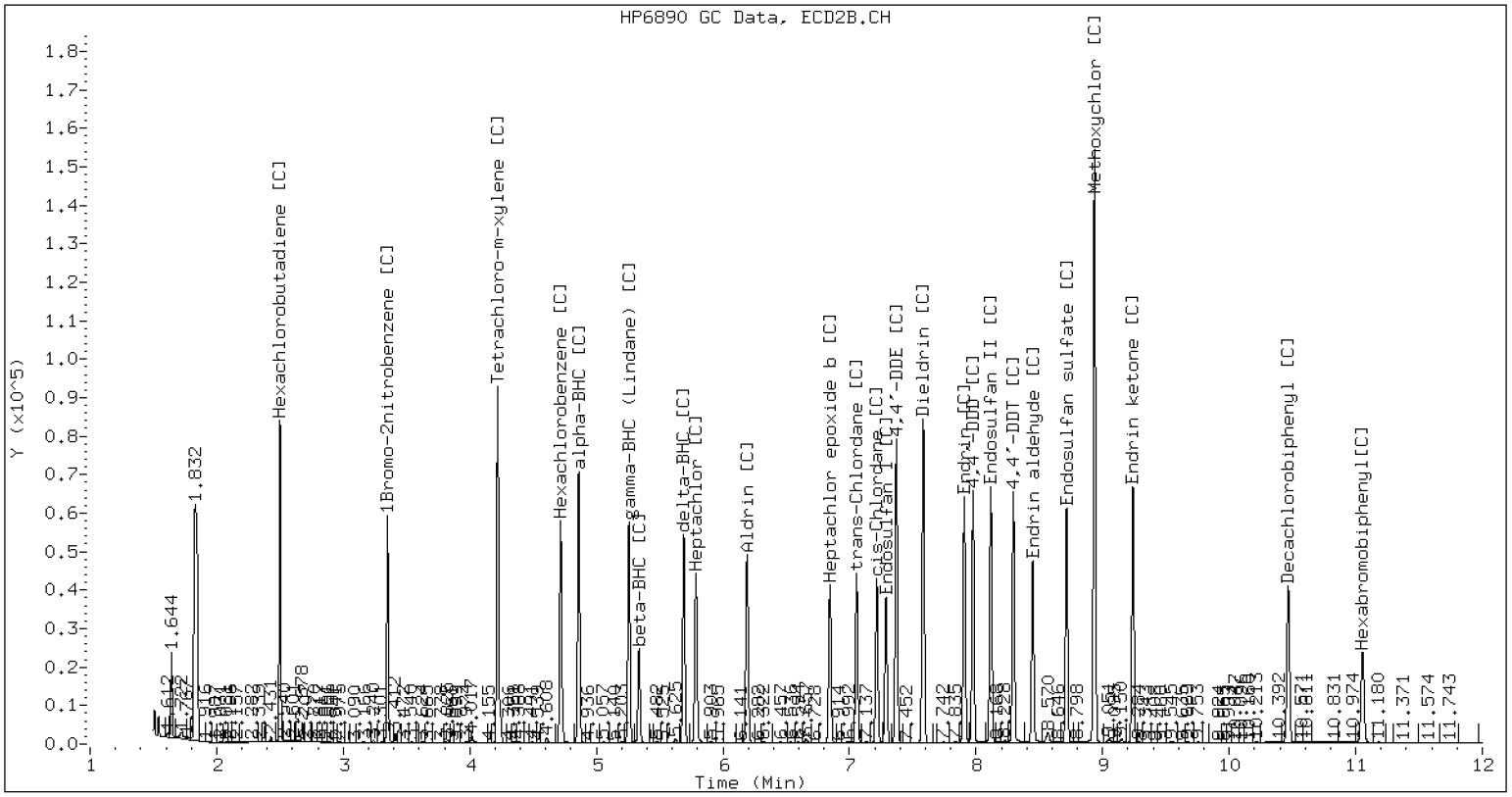
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121411.D SEQ-CAL7 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121411.D
Data file 2: /20221214.b/B20221214.b/22121411.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7
Client ID:
Injection Date: 14-DEC-2022 22:25
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121412.D
Data file 2: /20221214.b/B20221214.b/22121412.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8
Client ID:
Injection Date: 14-DEC-2022 22:43
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	22184	6.741	-0.000	34211	2.89	2.85	1.2	Oxychlordane
6.106	-0.000	18661	7.036	-0.000	30817	2.94	3.14	6.5	2,4-DDE
6.397	-0.000	30616	7.154	-0.001	41466	3.05	2.82	7.5	trans-Nonachlor
6.681	0.000	16263	7.591	0.000	26177	2.88	3.12	7.9	2,4-DDD
6.956	-0.001	17569	7.913	-0.000	24398	2.88	2.82	2.1	2,4-DDT
7.112	-0.000	29417	7.975	-0.000	37972	3.01	2.72	9.9	cis-Nonachlor
8.082	-0.000	18819	9.223	-0.000	24312	3.09	3.00	3.1	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

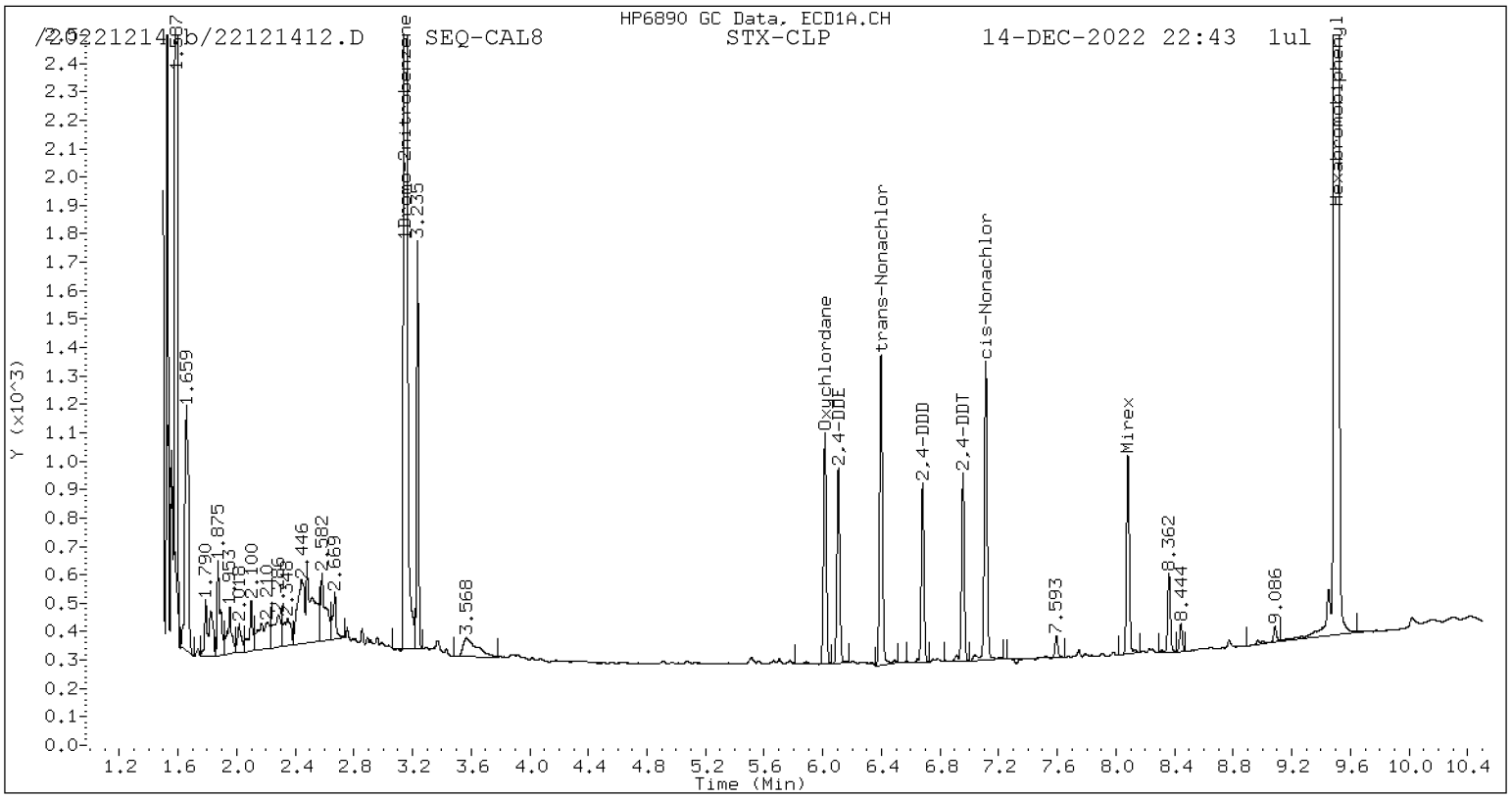
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	713898	0.5
Hexabromobiphenyl	641833	646441	0.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1076864	1.7
Hexabromobiphenyl	797125	820275	2.9

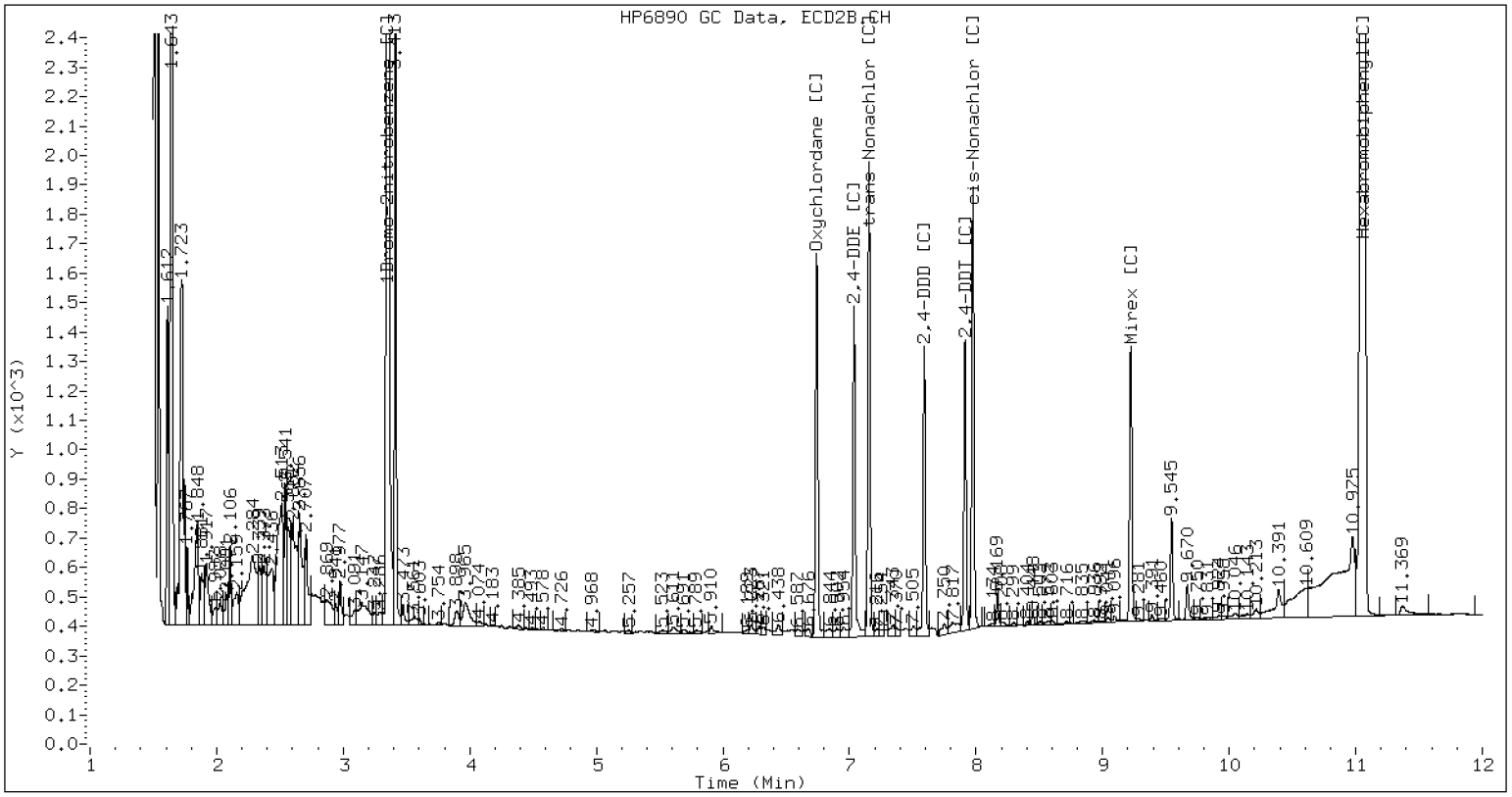
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121412.D SEQ-CAL8 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121412.D
Data file 2: /20221214.b/B20221214.b/22121412.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8
Client ID:
Injection Date: 14-DEC-2022 22:43
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121413.D
Data file 2: /20221214.b/B20221214.b/22121413.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9
Client ID:
Injection Date: 14-DEC-2022 23:01
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.015	0.000	39121	6.741	-0.000	61505	5.34	5.41	1.3	Oxychlordane
6.106	0.000	33487	7.036	-0.000	53206	5.54	5.72	3.1	2,4-DDE
6.398	0.000	51858	7.154	-0.001	72836	5.42	5.20	4.1	trans-Nonachlor
6.681	0.000	29307	7.590	-0.000	44506	5.45	5.55	1.9	2,4-DDD
6.957	-0.000	31530	7.914	0.000	45986	5.43	5.57	2.6	2,4-DDT
7.112	-0.000	50912	7.975	0.000	70898	5.46	5.32	2.6	cis-Nonachlor
8.082	-0.000	32004	9.223	-0.000	45650	5.52	5.89	6.6	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

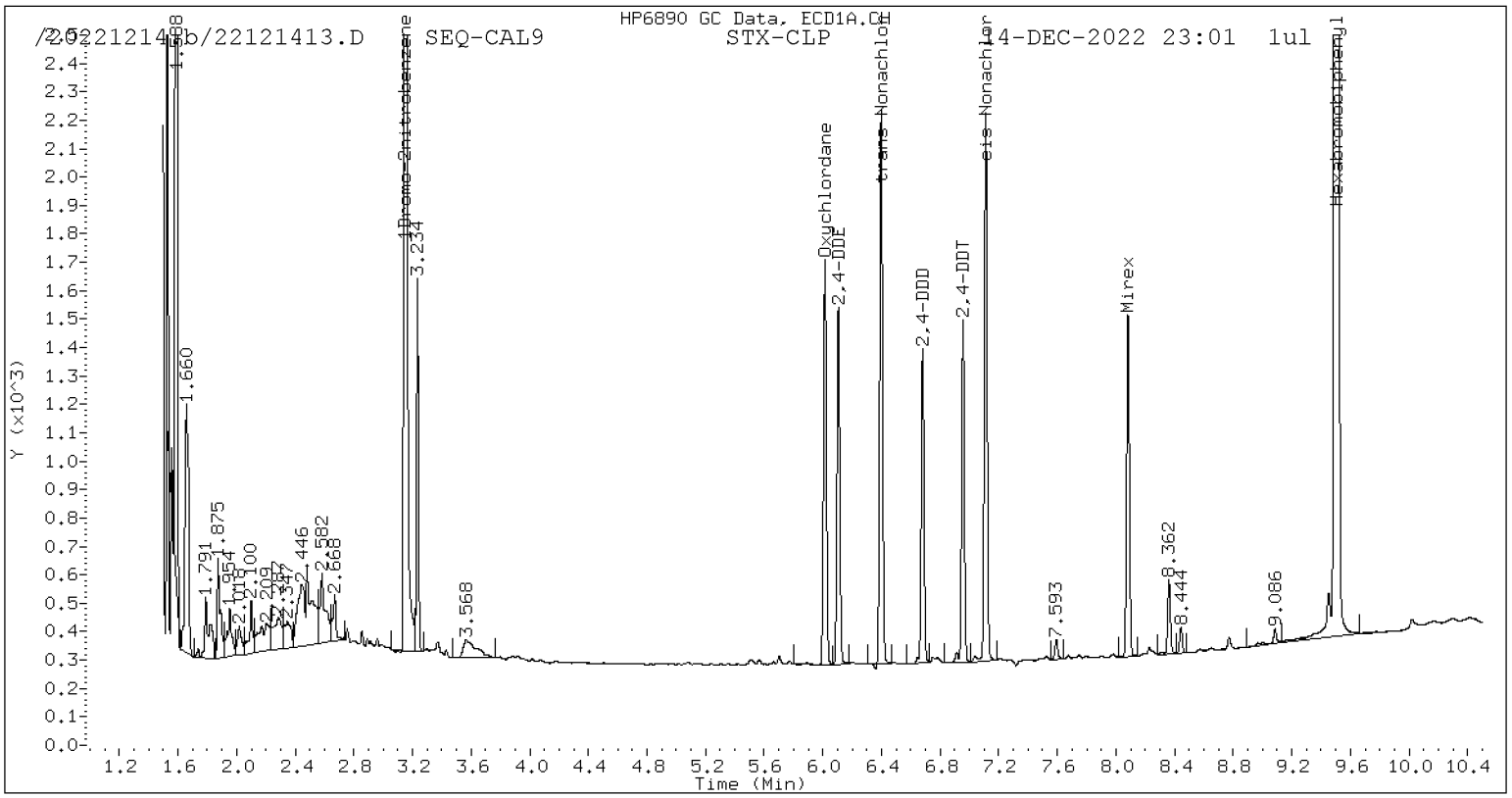
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672507	-5.4
Hexabromobiphenyl	641833	615627	-4.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1020334	-3.6
Hexabromobiphenyl	797125	782734	-1.8

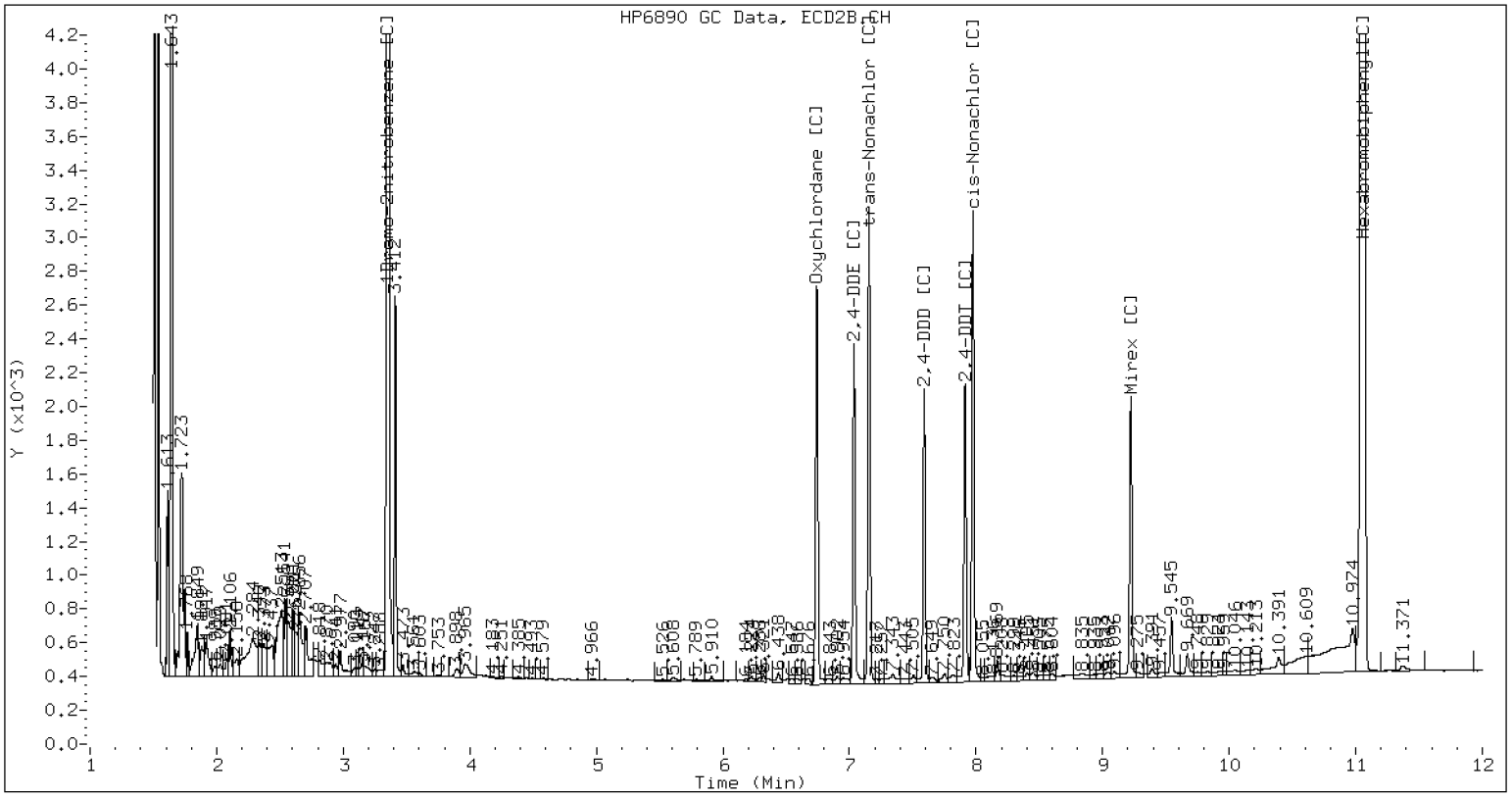
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121413.D SEQ-CAL9 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121413.D
Data file 2: /20221214.b/B20221214.b/22121413.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9
Client ID:
Injection Date: 14-DEC-2022 23:01
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121414.D
Data file 2: /20221214.b/B20221214.b/22121414.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALA
Client ID:
Injection Date: 14-DEC-2022 23:19
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	82473	6.741	-0.001	127500	10.63	10.63	0.0	Oxychlordane
6.106	-0.000	69109	7.035	-0.001	108440	10.79	11.04	2.3	2,4-DDE
6.398	0.000	108386	7.154	-0.001	157712	10.68	10.60	0.7	trans-Nonachlor
6.681	0.000	60517	7.590	-0.000	91420	10.62	10.74	1.2	2,4-DDD
6.956	-0.001	65300	7.913	0.000	91498	10.61	10.44	1.6	2,4-DDT
7.111	-0.001	104247	7.975	-0.000	146224	10.55	10.34	2.0	cis-Nonachlor
8.082	-0.000	65614	9.222	-0.000	84337	10.67	10.25	4.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

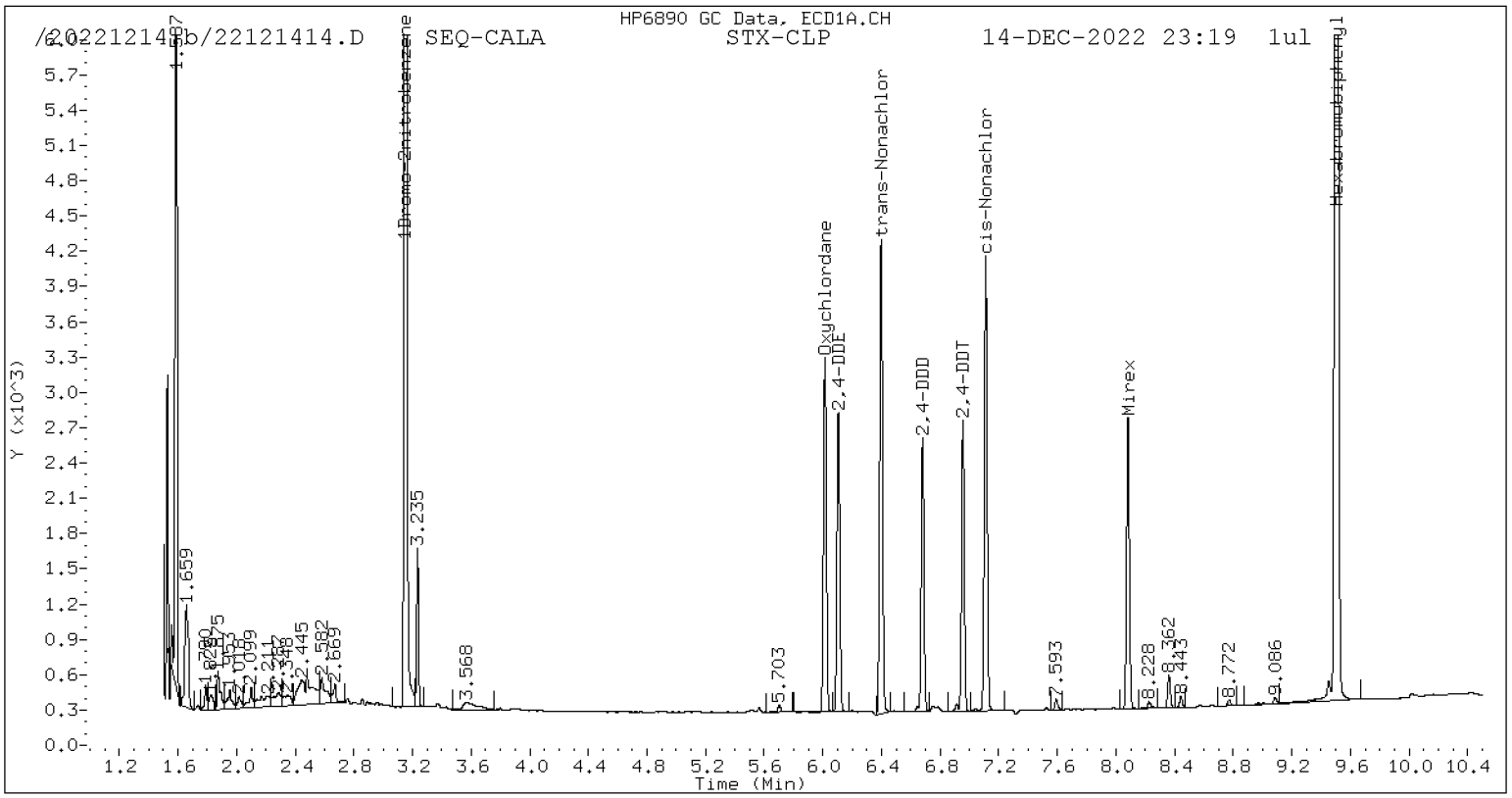
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	712122	0.2
Hexabromobiphenyl	641833	652595	1.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1077341	1.7
Hexabromobiphenyl	797125	831365	4.3

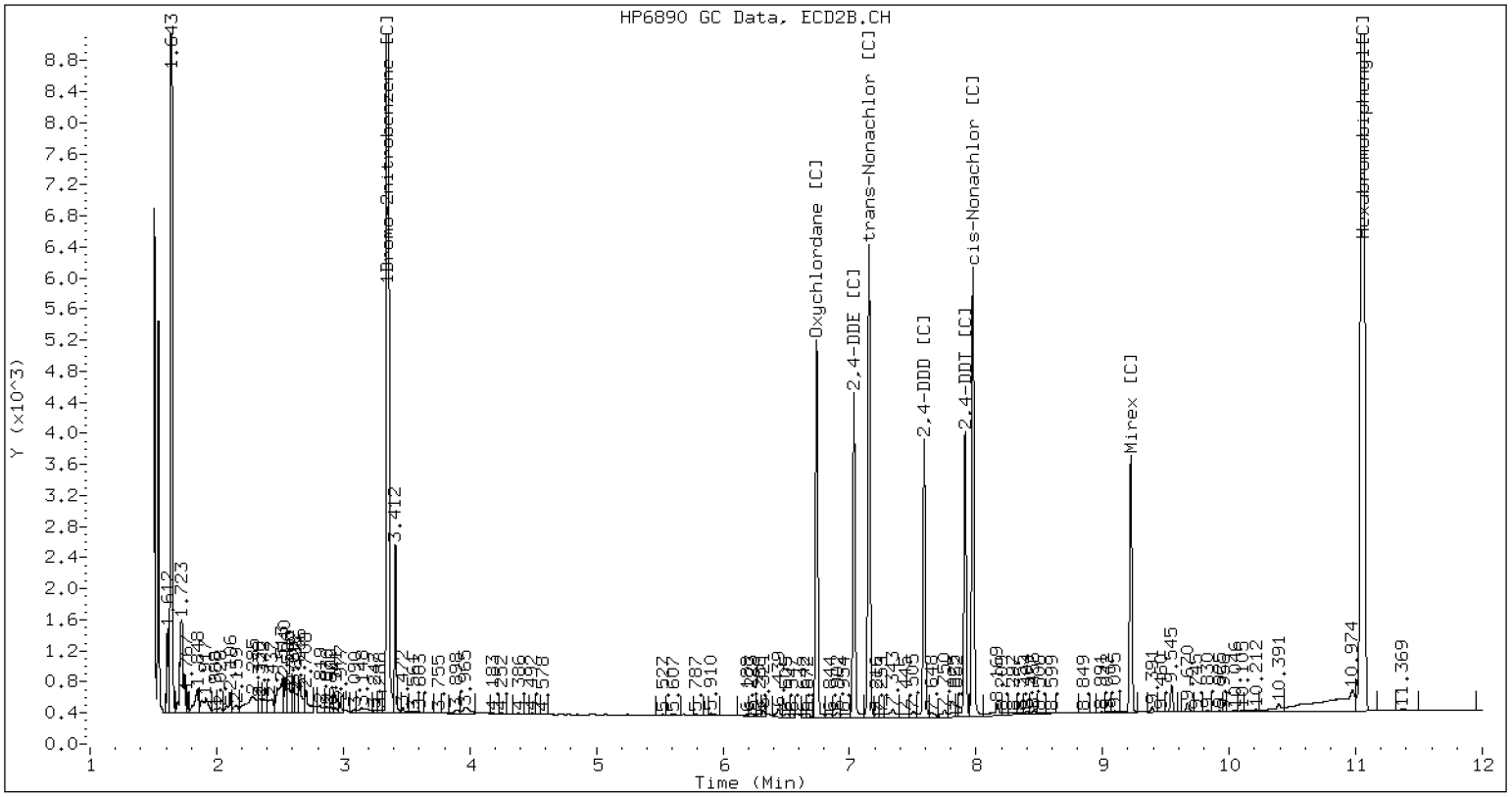
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121414.D SEQ-CALA CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121414.D
Data file 2: /20221214.b/B20221214.b/22121414.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALA
Client ID:
Injection Date: 14-DEC-2022 23:19
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121415.D
Data file 2: /20221214.b/B20221214.b/22121415.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALB
Client ID:
Injection Date: 14-DEC-2022 23:36
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.015	0.001	154379	6.741	-0.000	238017	20.80	20.28	2.5	Oxychlordane
6.106	-0.000	128483	7.036	-0.000	195807	20.97	20.37	2.9	2,4-DDE
6.398	0.000	200622	7.155	-0.000	289952	20.66	20.28	1.9	trans-Nonachlor
6.681	0.000	113972	7.591	0.000	165245	20.90	20.21	3.4	2,4-DDD
6.956	-0.001	122412	7.913	0.000	169814	20.78	20.17	3.0	2,4-DDT
7.112	-0.000	194165	7.975	-0.000	274910	20.54	20.23	1.5	cis-Nonachlor
8.082	-0.000	119271	9.223	0.000	158702	20.28	20.08	1.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

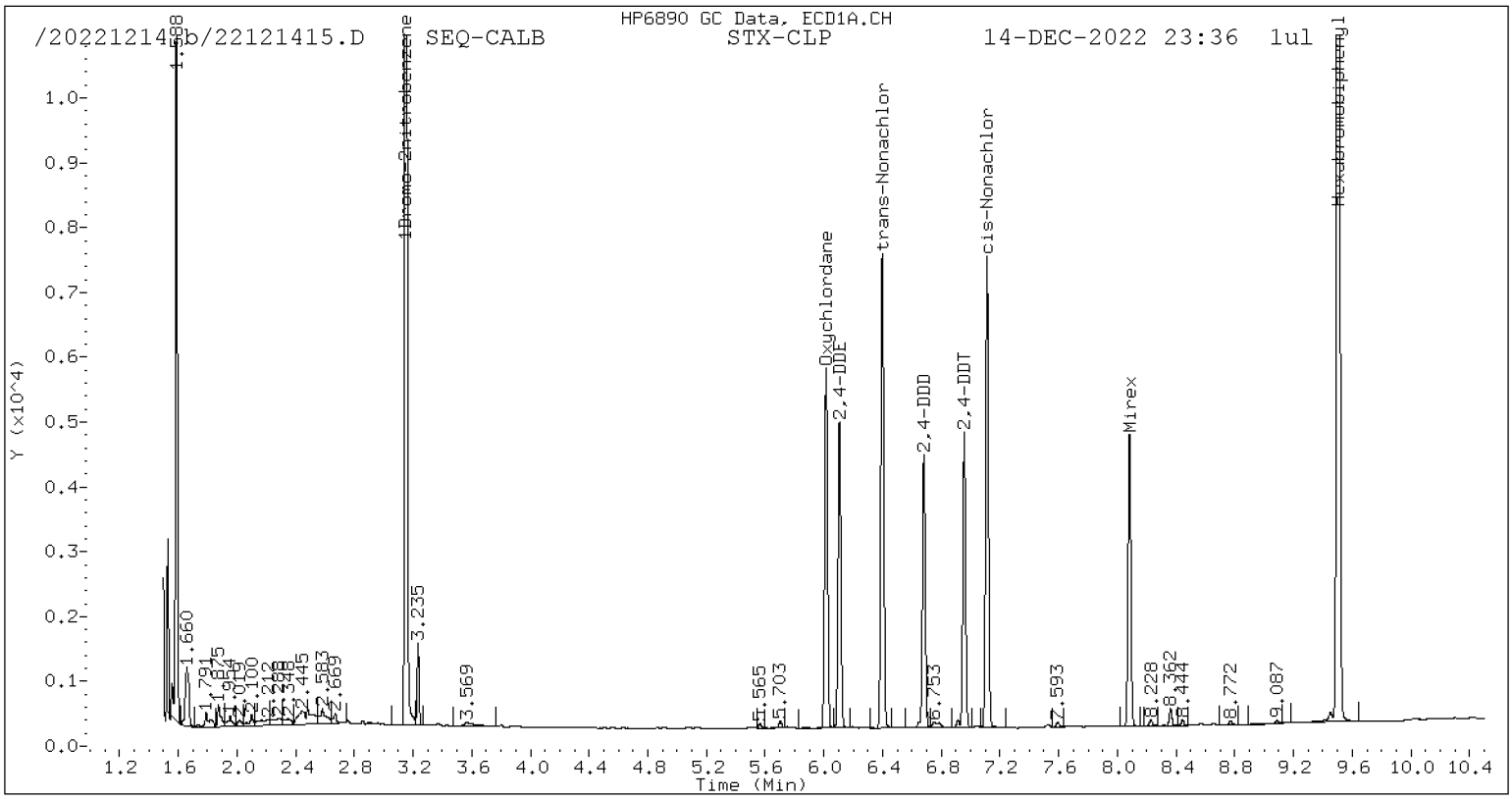
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	693450	-2.4
Hexabromobiphenyl	641833	624334	-2.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1053959	-0.5
Hexabromobiphenyl	797125	798882	0.2

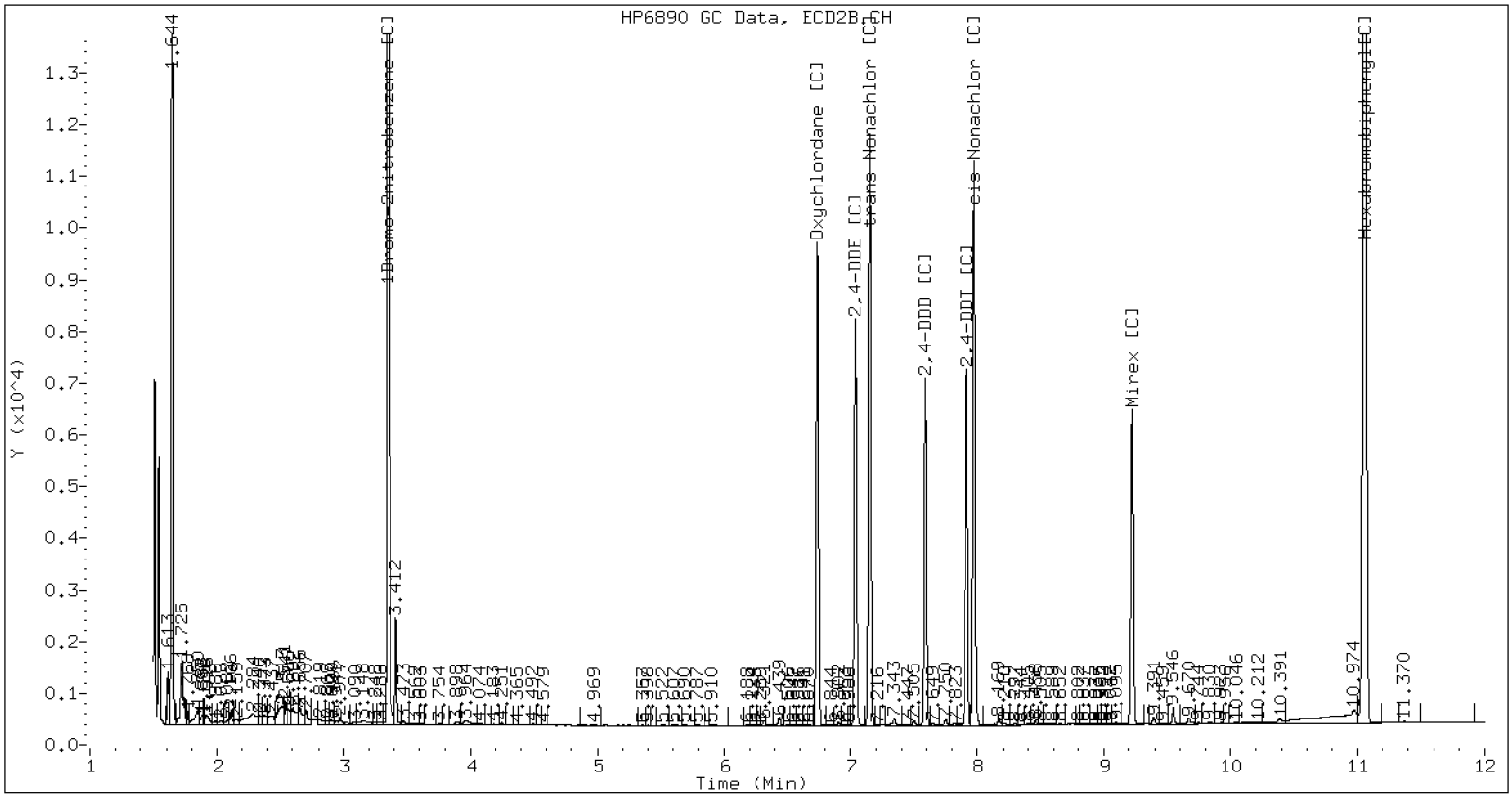
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121415.D SEQ-CALB CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121415.D
Data file 2: /20221214.b/B20221214.b/22121415.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALB
Client ID:
Injection Date: 14-DEC-2022 23:36
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121416.D
Data file 2: /20221214.b/B20221214.b/22121416.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALC
Client ID:
Injection Date: 14-DEC-2022 23:54
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	0.000	292499	6.741	-0.000	460731	40.08	40.26	0.4	Oxychlordane
6.106	0.000	242066	7.036	-0.000	372996	40.18	39.80	0.9	2,4-DDE
6.397	0.000	383329	7.154	-0.001	567971	40.16	40.45	0.7	trans-Nonachlor
6.681	0.000	216474	7.590	-0.000	320311	40.39	39.88	1.3	2,4-DDD
6.957	0.000	233738	7.913	-0.000	332906	40.36	40.25	0.3	2,4-DDT
7.112	0.000	373705	7.975	-0.000	538334	40.21	40.33	0.3	cis-Nonachlor
8.082	0.000	229604	9.222	-0.000	299228	39.71	38.54	3.0	Mirex
3.800	-0.028	1151	----			0.13	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

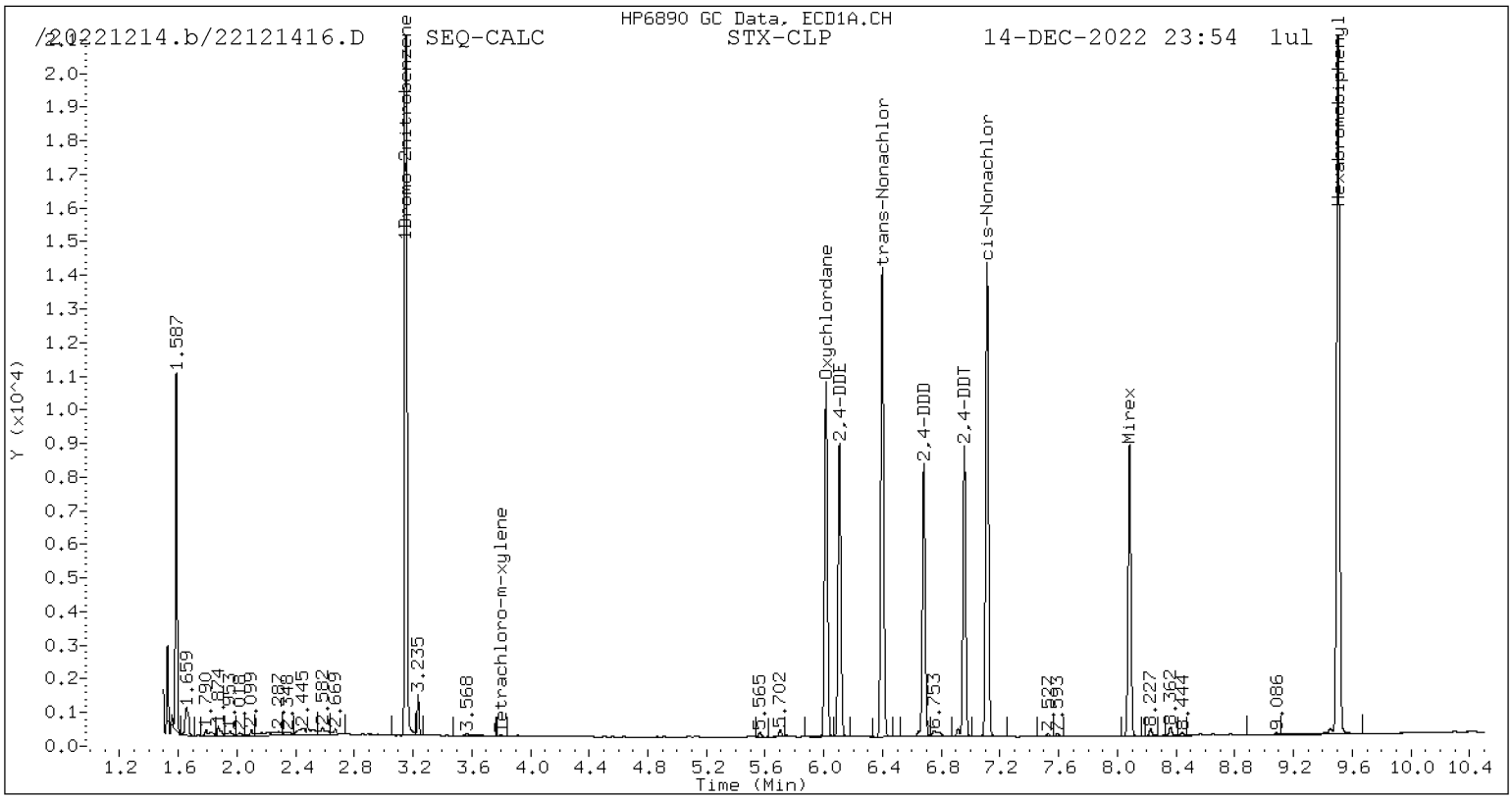
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	674573	-5.1
Hexabromobiphenyl	641833	613787	-4.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1027697	-2.9
Hexabromobiphenyl	797125	784673	-1.6

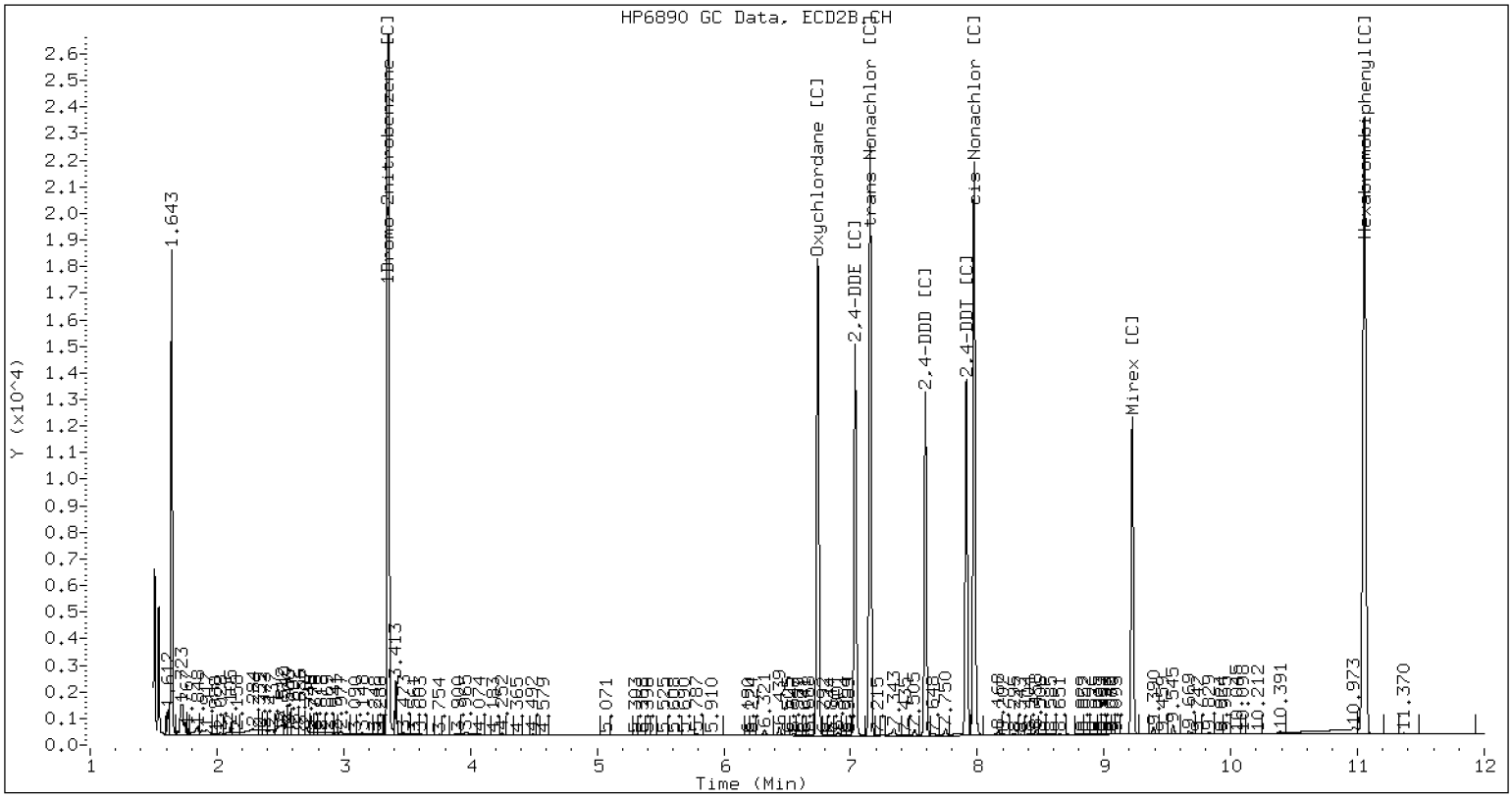
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121416.D SEQ-CALC CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121416.D
Data file 2: /20221214.b/B20221214.b/22121416.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALC
Client ID:
Injection Date: 14-DEC-2022 23:54
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121417.D
Data file 2: /20221214.b/B20221214.b/22121417.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALD
Client ID:
Injection Date: 15-DEC-2022 00:12
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	544254	6.741	-0.000	856443	75.85	75.73	0.2	Oxychlordane
6.106	-0.000	438313	7.036	-0.000	677072	73.99	73.11	1.2	2,4-DDE
6.397	-0.000	704675	7.155	0.000	1067899	75.09	76.94	2.4	trans-Nonachlor
6.681	0.000	393654	7.591	0.000	594311	74.70	74.86	0.2	2,4-DDD
6.956	-0.001	430636	7.914	0.000	618740	75.63	75.68	0.1	2,4-DDT
7.112	-0.000	688257	7.975	0.000	1018624	75.31	77.19	2.5	cis-Nonachlor
8.082	-0.001	426177	9.223	0.000	573947	74.97	74.78	0.2	Mirex
3.800	-0.028	2109	----			0.23	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

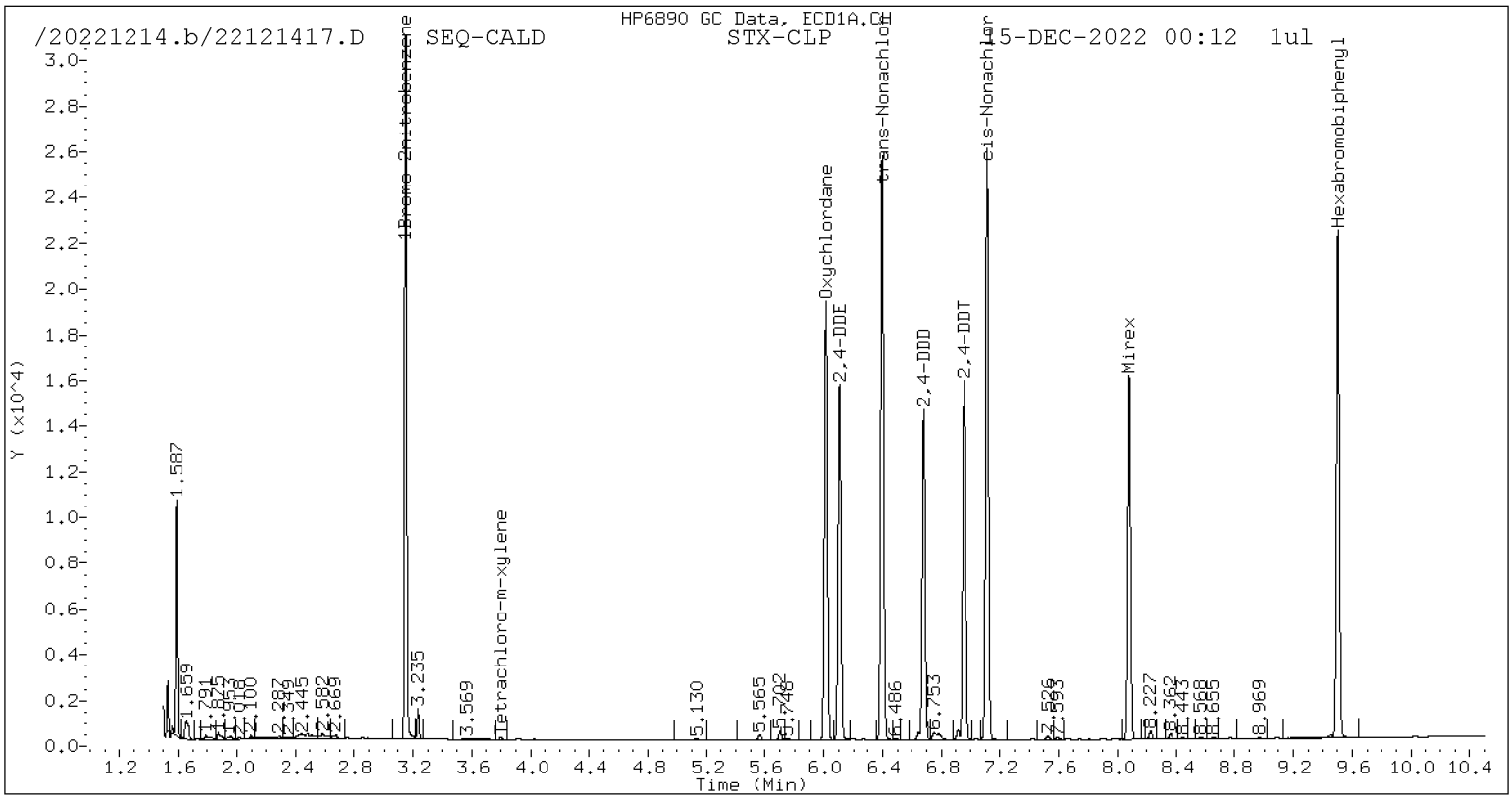
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	664375	-6.5
Hexabromobiphenyl	641833	603504	-6.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1015544	-4.1
Hexabromobiphenyl	797125	775630	-2.7

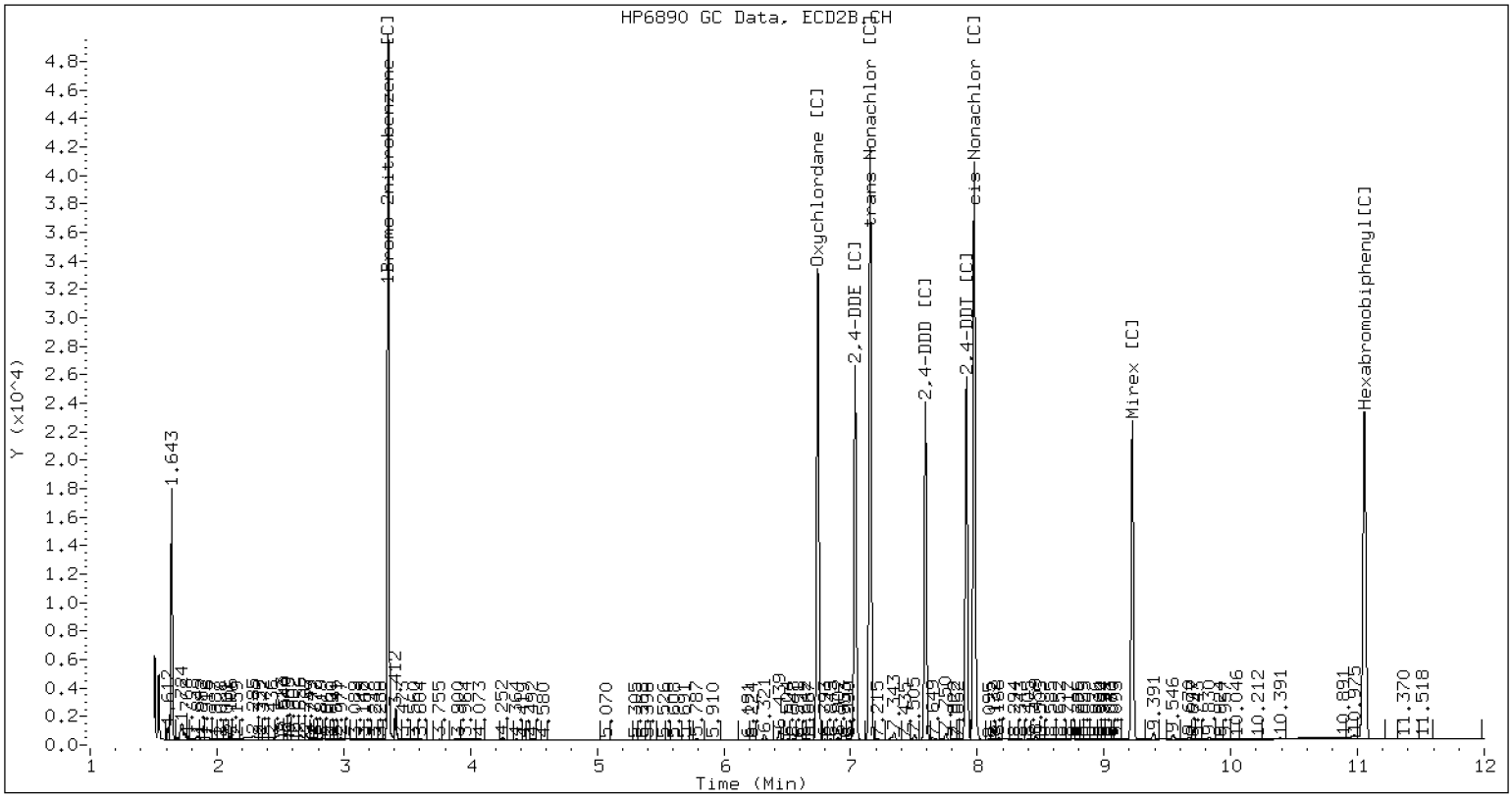
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121417.D SEQ-CALD CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121417.D
Data file 2: /20221214.b/B20221214.b/22121417.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALD
Client ID:
Injection Date: 15-DEC-2022 00:12
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121418.D
Data file 2: /20221214.b/B20221214.b/22121418.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALE
Client ID:
Injection Date: 15-DEC-2022 00:30
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	0.000	1020828	6.741	0.000	1630330	140.48	142.04	1.1	Oxychlordane
6.106	-0.000	801828	7.036	0.000	1240933	133.65	132.03	1.2	2,4-DDE
6.397	0.000	1327091	7.155	0.000	2047915	139.63	146.04	4.5	trans-Nonachlor
6.680	-0.000	733651	7.591	0.000	1118552	137.46	139.45	1.4	2,4-DDD
6.956	-0.001	794021	7.913	0.000	1163676	137.69	140.88	2.3	2,4-DDT
7.112	-0.000	1301975	7.975	0.000	1956215	140.68	146.73	4.2	cis-Nonachlor
8.082	-0.001	815059	9.223	0.000	1108848	141.57	143.01	1.0	Mirex
3.800	-0.028	3997	----			0.43	0.00	---	Tetrachloro-m-xylene
----			10.471	0.004	3393	0.00	0.39	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

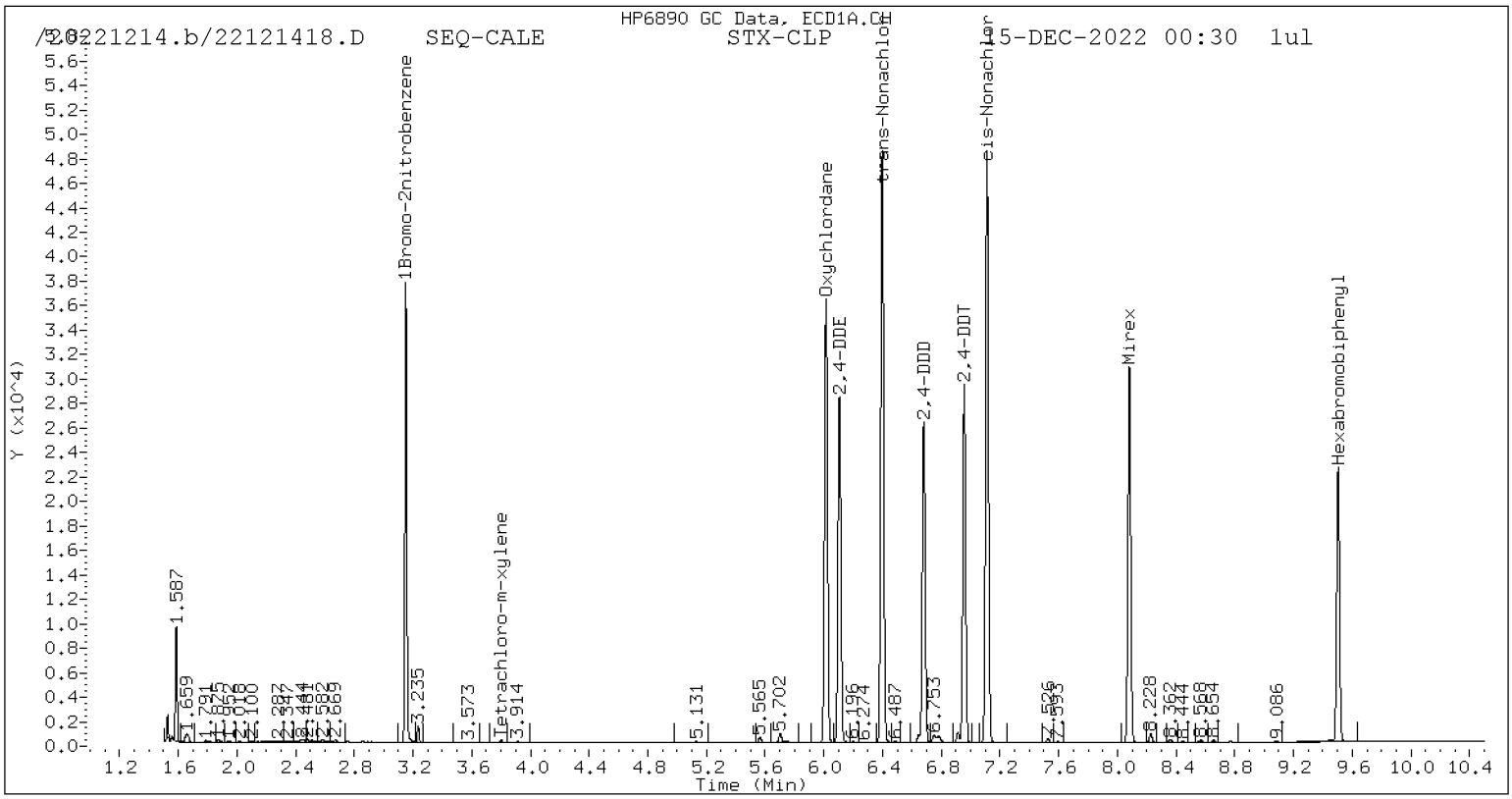
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	675789	-4.9
Hexabromobiphenyl	641833	611199	-4.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1030648	-2.7
Hexabromobiphenyl	797125	783631	-1.7

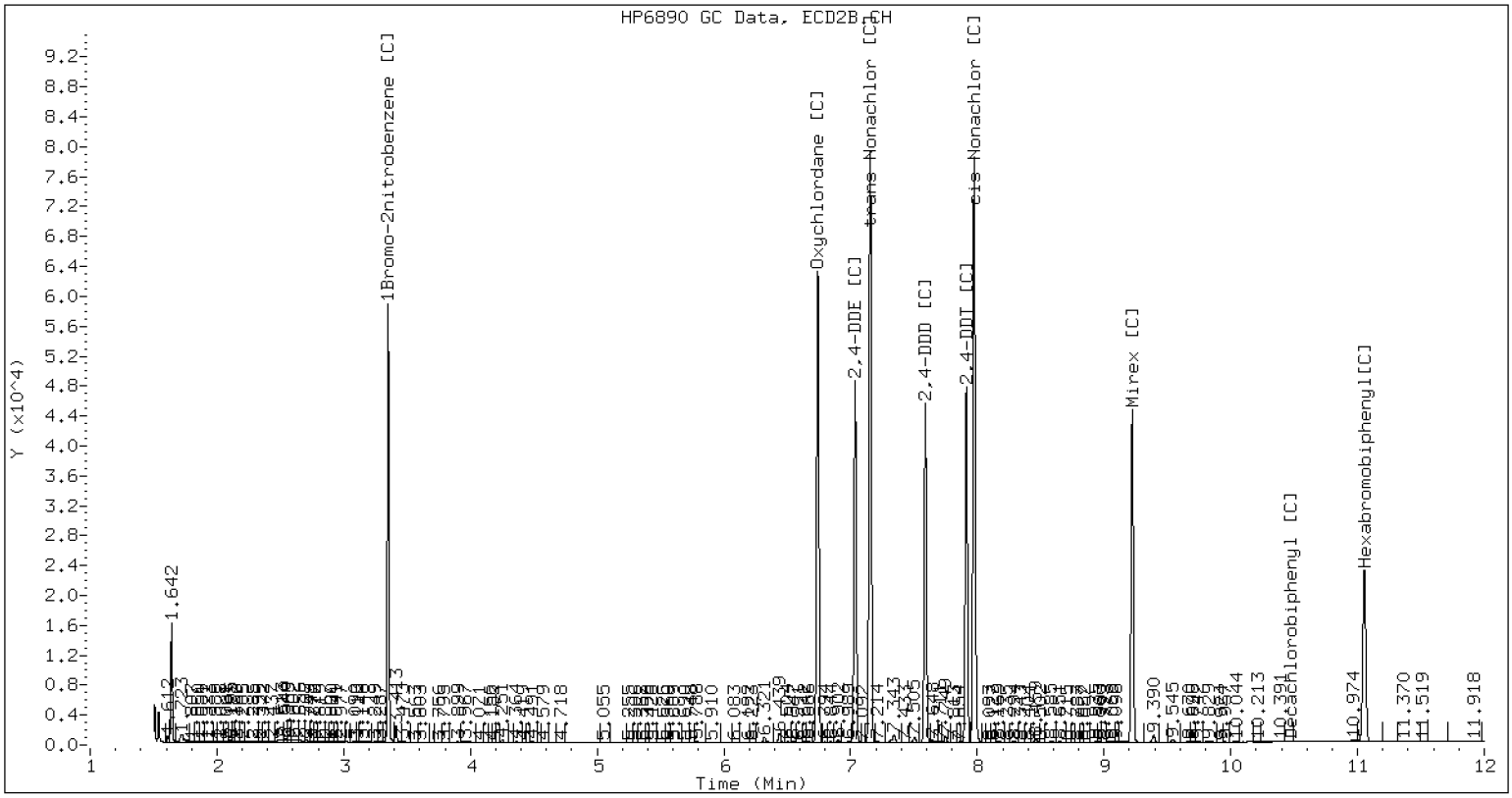
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121418.D SEQ-CALE CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121418.D
Data file 2: /20221214.b/B20221214.b/22121418.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALE
Client ID:
Injection Date: 15-DEC-2022 00:30
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121419.D
Data file 2: /20221214.b/B20221214.b/22121419.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV1
Client ID:
Injection Date: 15-DEC-2022 00:48
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	643235	4.860	-0.000	1047709	49.66	51.22	3.1	alpha-BHC
4.726	-0.000	242617	5.337	0.000	386388	48.66	49.69	2.1	beta-BHC
4.909	0.000	554797	5.692	0.001	897343	52.41	53.26	1.6	delta-BHC
4.646	0.001	573983	5.258	0.000	915596	51.11	52.75	3.1	gamma-BHC (Lindane)
5.130	0.000	495138	5.788	0.001	804002	49.55	51.13	3.1	Heptachlor
5.454	0.000	526615	6.191	0.000	842909	47.03	46.95	0.2	Aldrin
6.130	0.000	469481	6.846	0.000	724932	48.36	48.83	1.0	Heptachlor epoxide b
6.573	0.000	423102	7.289	-0.000	632890	47.49	48.37	1.8	Endosulfan I
6.832	0.000	478299	7.583	0.000	724854	49.97	50.14	0.3	Dieldrin
6.489	0.000	448741	7.371	0.000	670346	50.49	50.56	0.1	4,4'-DDE
7.082	0.001	396143	7.907	0.000	551004	50.36	50.73	0.7	Endrin
7.318	0.001	350431	8.118	0.001	537104	49.49	48.24	2.6	Endosulfan II
7.136	0.001	355688	7.977	0.001	525927	50.19	49.78	0.8	4,4'-DDD
8.180	0.000	347949	8.716	0.001	502438	51.75	51.39	0.7	Endosulfan sulfate
7.428	0.001	368644	8.295	-0.000	524685	51.48	51.45	0.1	4,4'-DDT
7.913	0.001	174306	8.935	-0.001	238791	54.93	52.91	3.7	Methoxychlor
8.454	0.000	394474	9.240	-0.000	540431	51.21	51.18	0.1	Endrin ketone
7.746	0.001	316262	8.448	0.000	449269	56.00	57.20	2.1	Endrin aldehyde
6.271	0.000	490842	7.056	0.000	748350	49.78	50.55	1.5	trans-Chlordane
6.417	0.001	469513	7.216	0.000	700871	47.47	48.39	1.9	cis-Chlordane
----			2.512	0.011	11364	0.00	0.59	---	Hexachlorobutadiene
----			4.719	0.001	634	0.00	0.03	---	Hexachlorobenzene
----			4.220	-0.000	1724	0.00	0.12	---	Tetrachloro-m-xylene
----			10.468	0.001	643	0.00	0.08	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

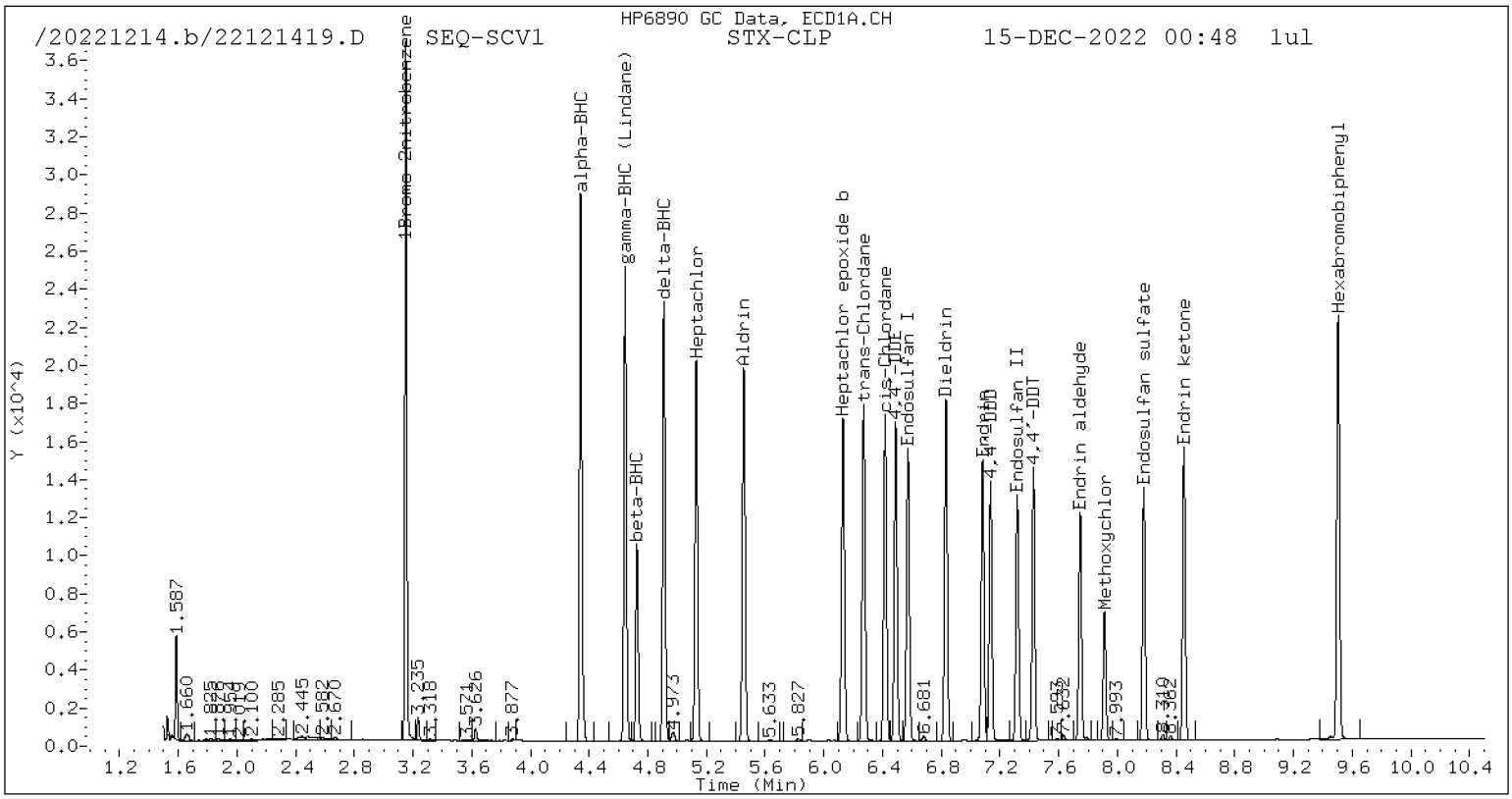
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672755	-5.3
Hexabromobiphenyl	641833	599983	-6.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1020655	-3.6
Hexabromobiphenyl	797125	763949	-4.2

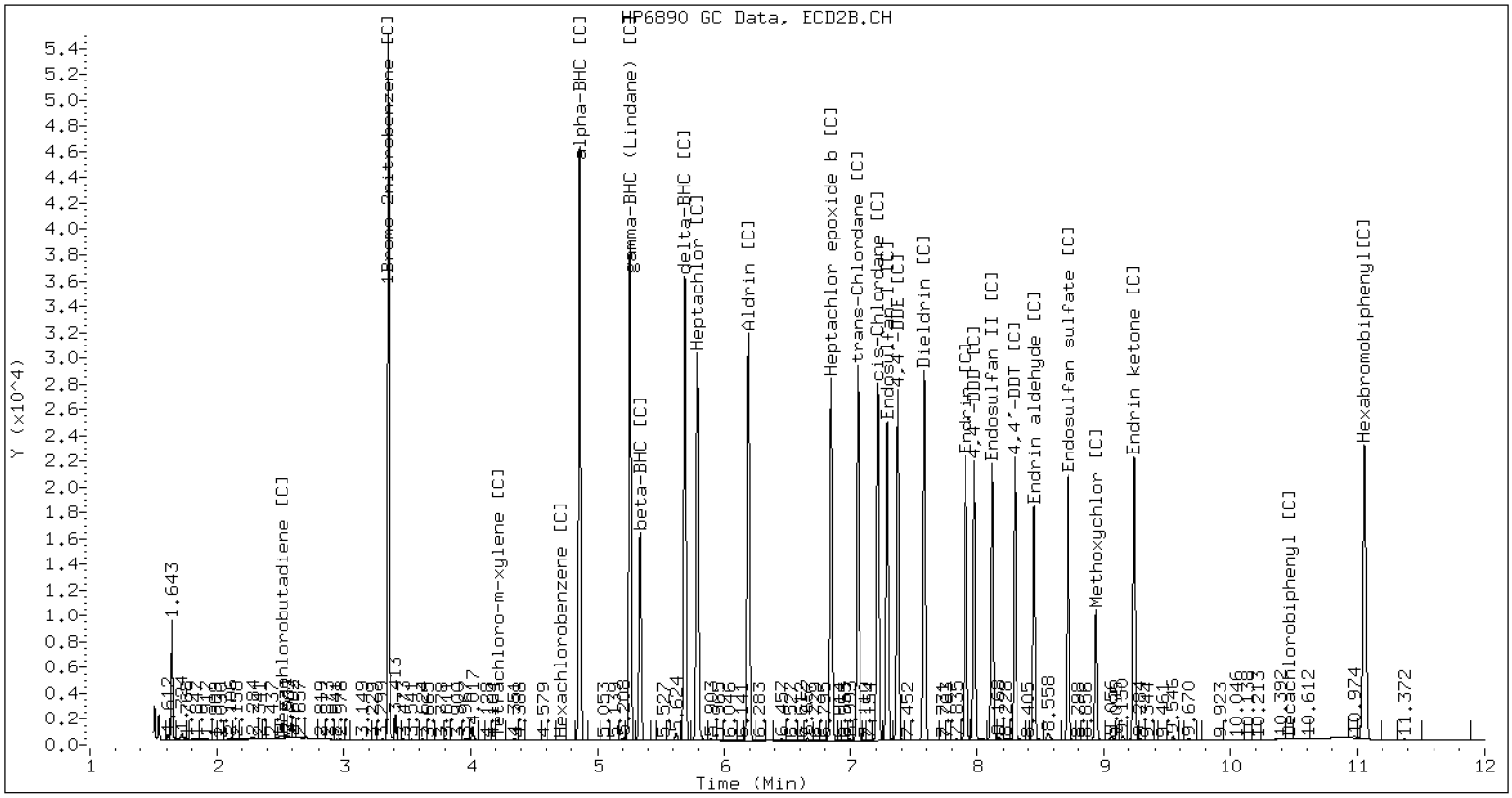
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121419.D SEQ-SCV1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121419.D
Data file 2: /20221214.b/B20221214.b/22121419.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV1
Client ID:
Injection Date: 15-DEC-2022 00:48
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121420.D
Data file 2: /20221214.b/B20221214.b/22121420.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV2
Client ID:
Injection Date: 15-DEC-2022 01:06
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	374516	6.741	0.000	591348	51.08	50.07	2.0	Oxychlordane
6.106	-0.000	261097	7.036	-0.000	403824	43.13	41.76	3.2	2,4-DDE
6.397	-0.000	444133	7.155	-0.000	657777	46.31	45.91	0.9	trans-Nonachlor
6.681	0.000	222534	7.591	0.000	334706	41.32	40.84	1.2	2,4-DDD
6.956	-0.001	262722	7.914	0.000	382016	45.15	45.26	0.2	2,4-DDT
7.111	-0.001	455894	7.975	0.000	655718	48.82	48.13	1.4	cis-Nonachlor
8.081	-0.001	256593	9.223	0.000	343173	44.17	43.31	2.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

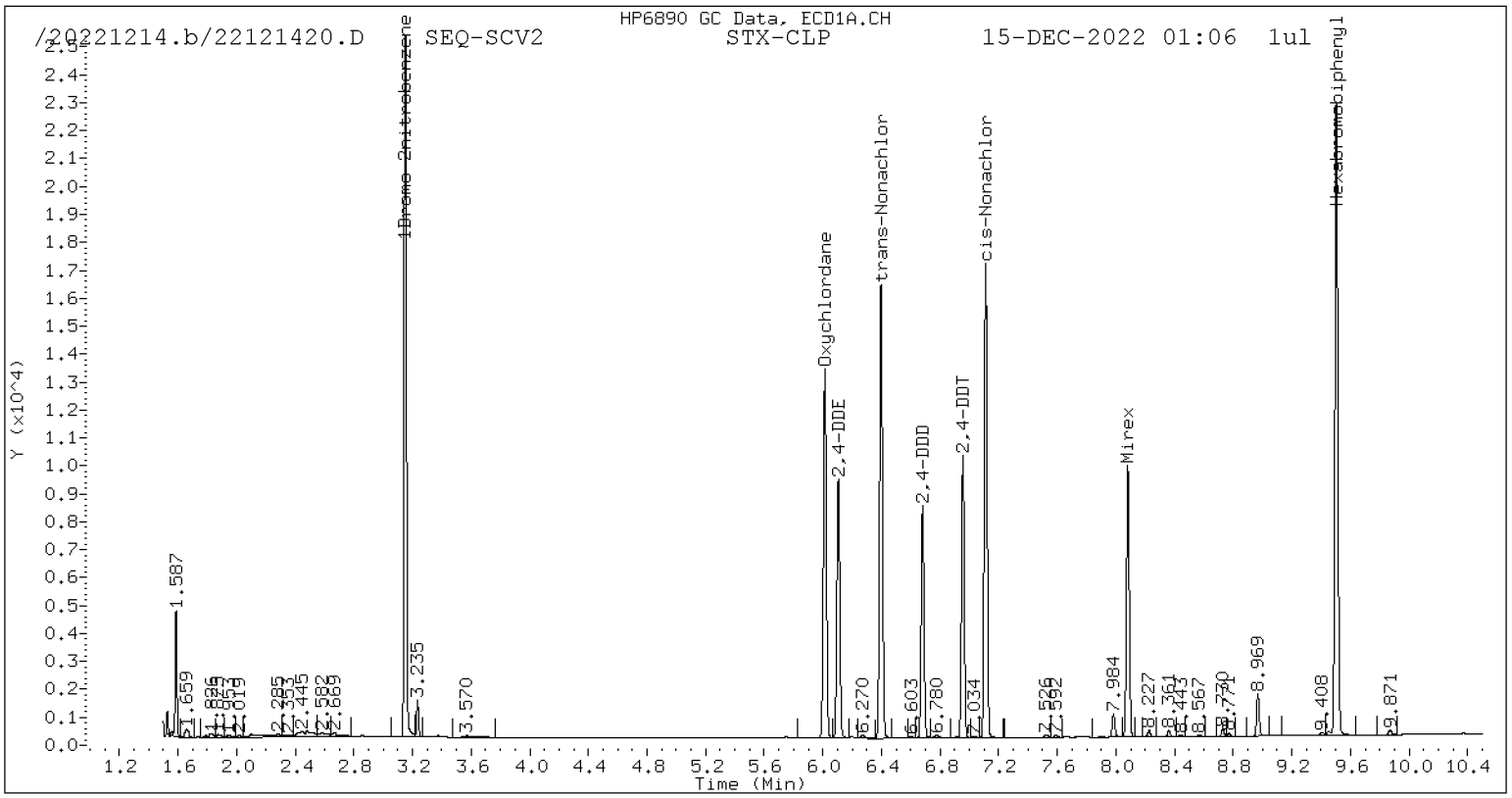
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	687052	-3.3
Hexabromobiphenyl	641833	616730	-3.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1060438	0.2
Hexabromobiphenyl	797125	800740	0.5

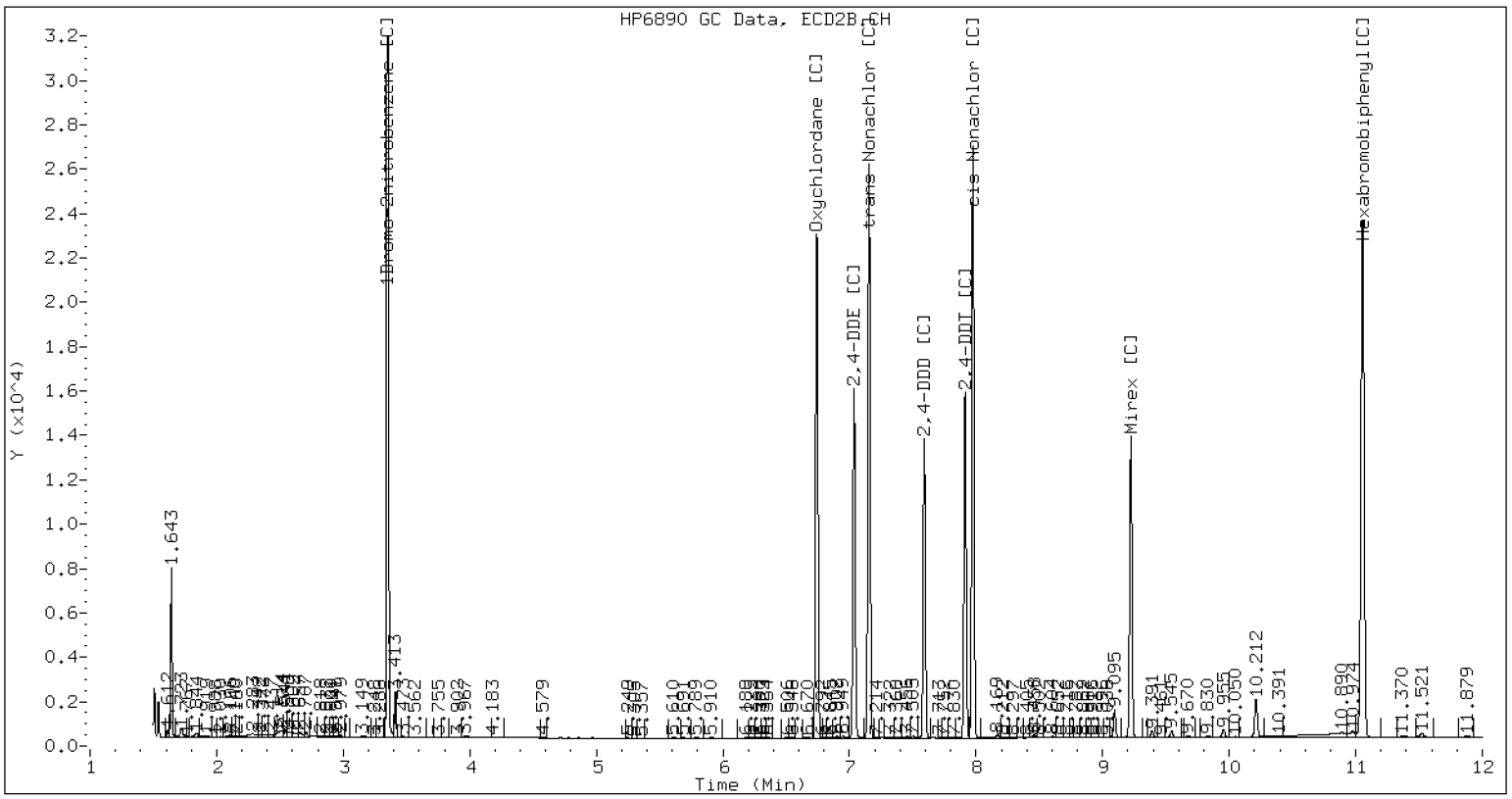
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121420.D SEQ-SCV2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121420.D
Data file 2: /20221214.b/B20221214.b/22121420.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV2
Client ID:
Injection Date: 15-DEC-2022 01:06
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121421.D
Data file 2: /20221214.b/B20221214.b/22121421.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1A
Client ID:
Injection Date: 15-DEC-2022 01:24
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			4.215	-0.006	361	0.00	0.02	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	601512	-15.4
Hexabromobiphenyl	641833	690103	7.5

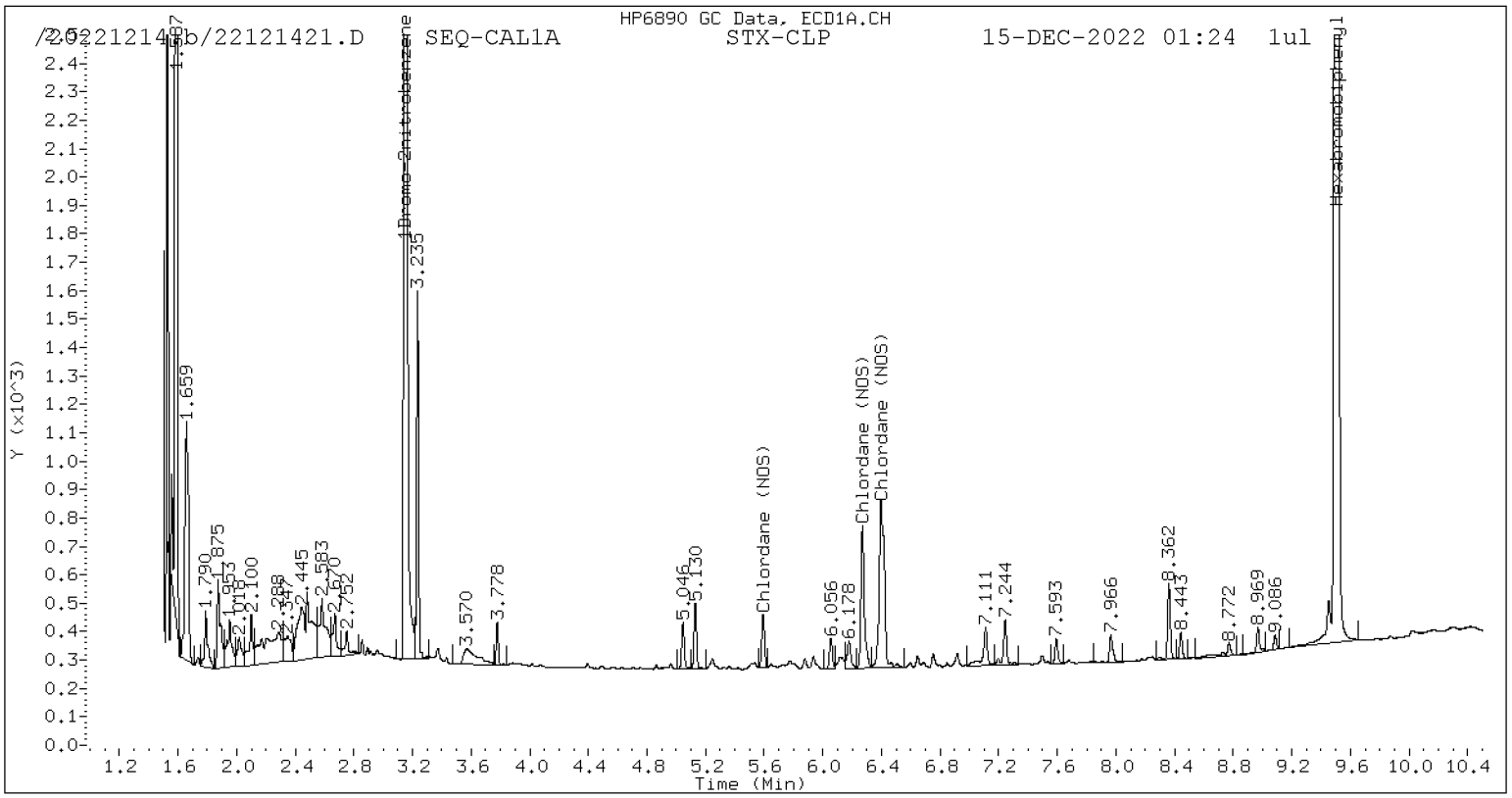
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	776759	-26.6
Hexabromobiphenyl	797125	1058847	32.8

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

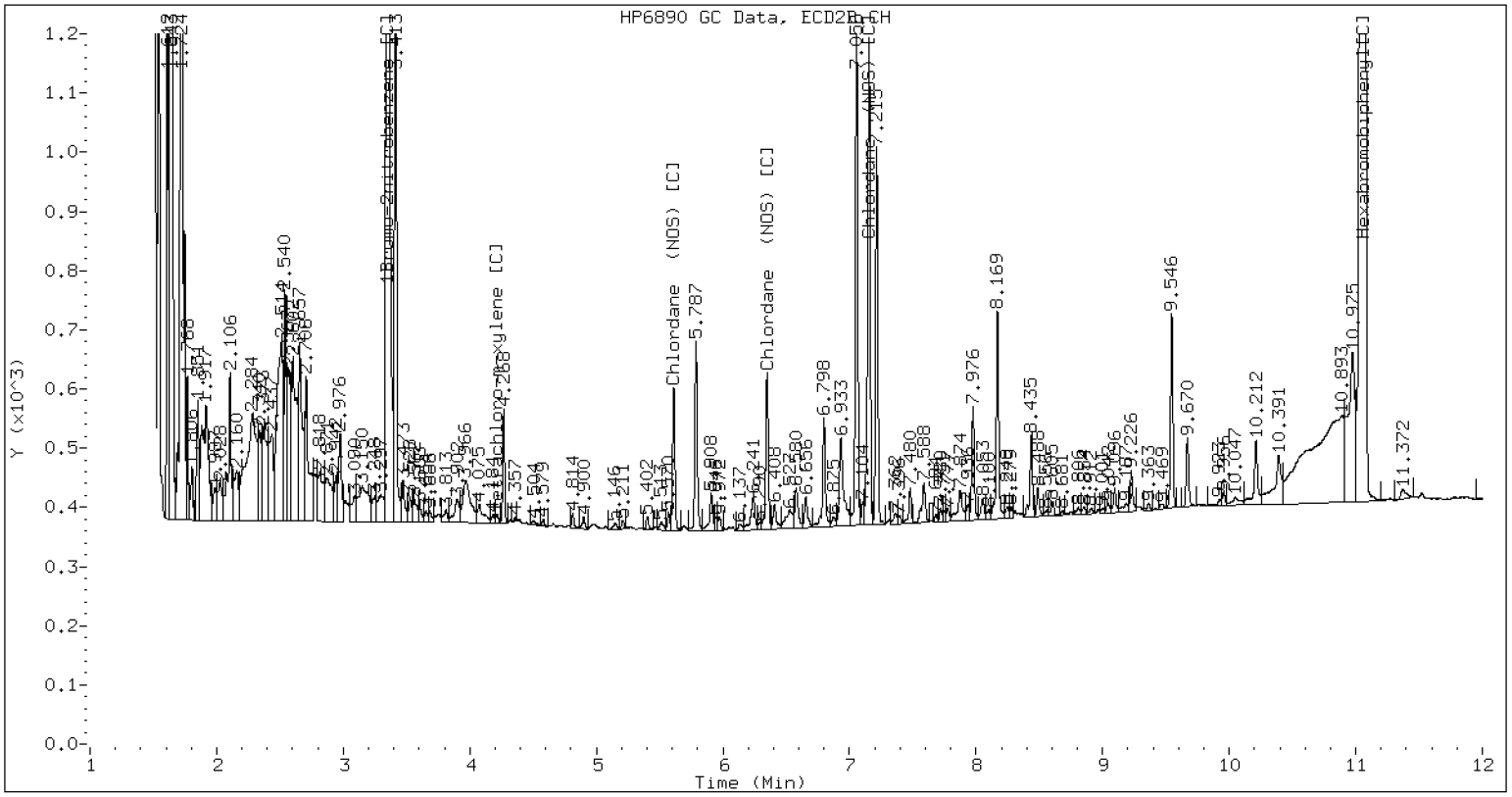
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.000	5054	13.1	1	5.612	-0.000	6415	12.8	
Chlordane (NOS)	2	6.271	-0.000	15913	12.4	2	6.349	-0.000	7689	13.7	
Chlordane (NOS)	3	6.399	0.000	29332	13.1	3	7.155	-0.001	23386	12.3	
Total STX-CLPAve (3 peaks): 12.882						Total CLP2Ave (3 peaks): 12.916				RPD = 0	
Corrected Ave (3 peaks): 12.882						Corrected Ave (3 peaks): 12.916				RPD = 0	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121421.D SEQ-CAL1A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121421.D
Data file 2: /20221214.b/B20221214.b/22121421.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1A
Client ID:
Injection Date: 15-DEC-2022 01:24
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121422.D
Data file 2: /20221214.b/B20221214.b/22121422.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2A
Client ID:
Injection Date: 15-DEC-2022 01:42
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	611280	-14.0
Hexabromobiphenyl	641833	704720	9.8

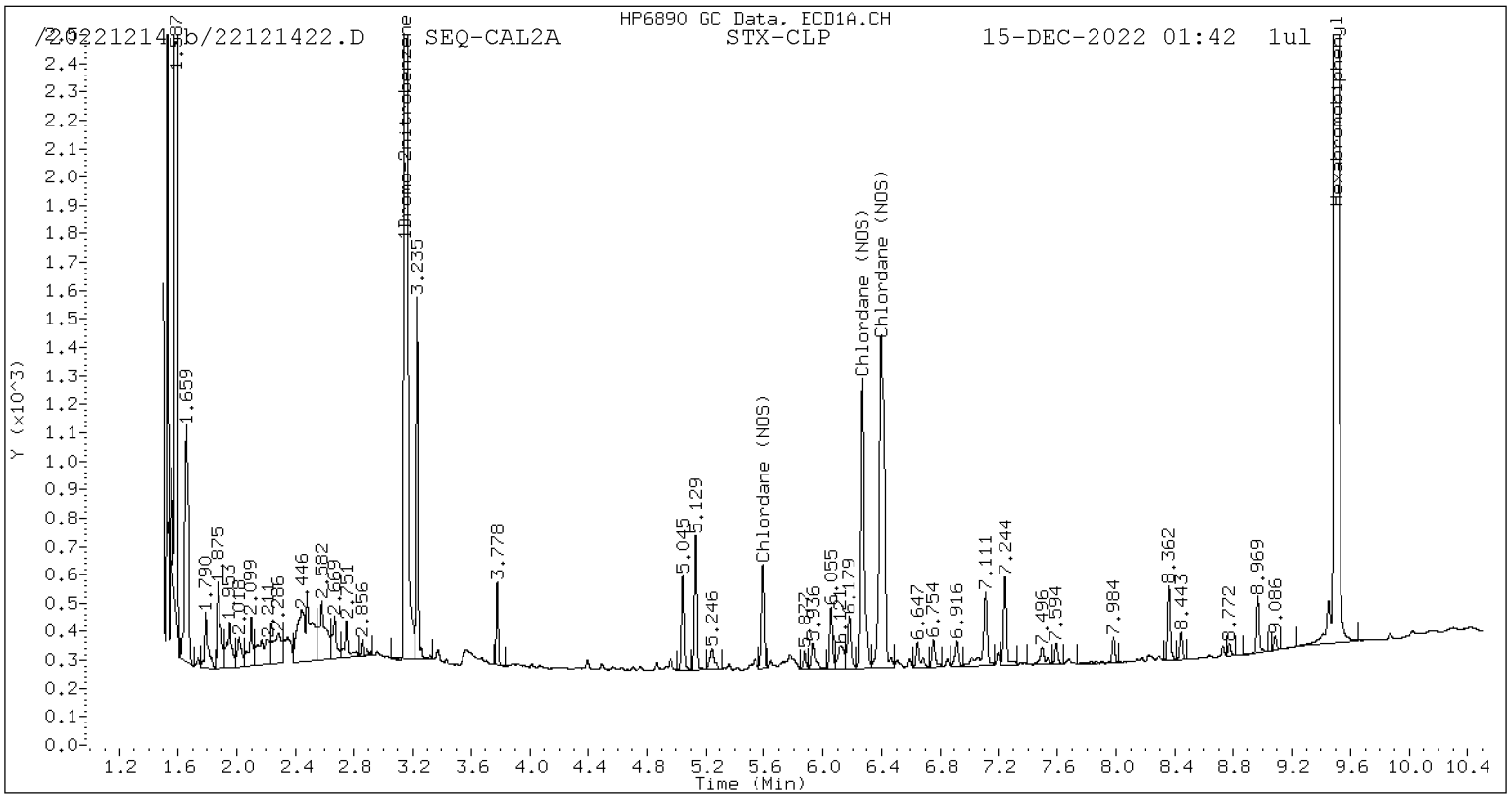
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	793365	-25.1
Hexabromobiphenyl	797125	1083049	35.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

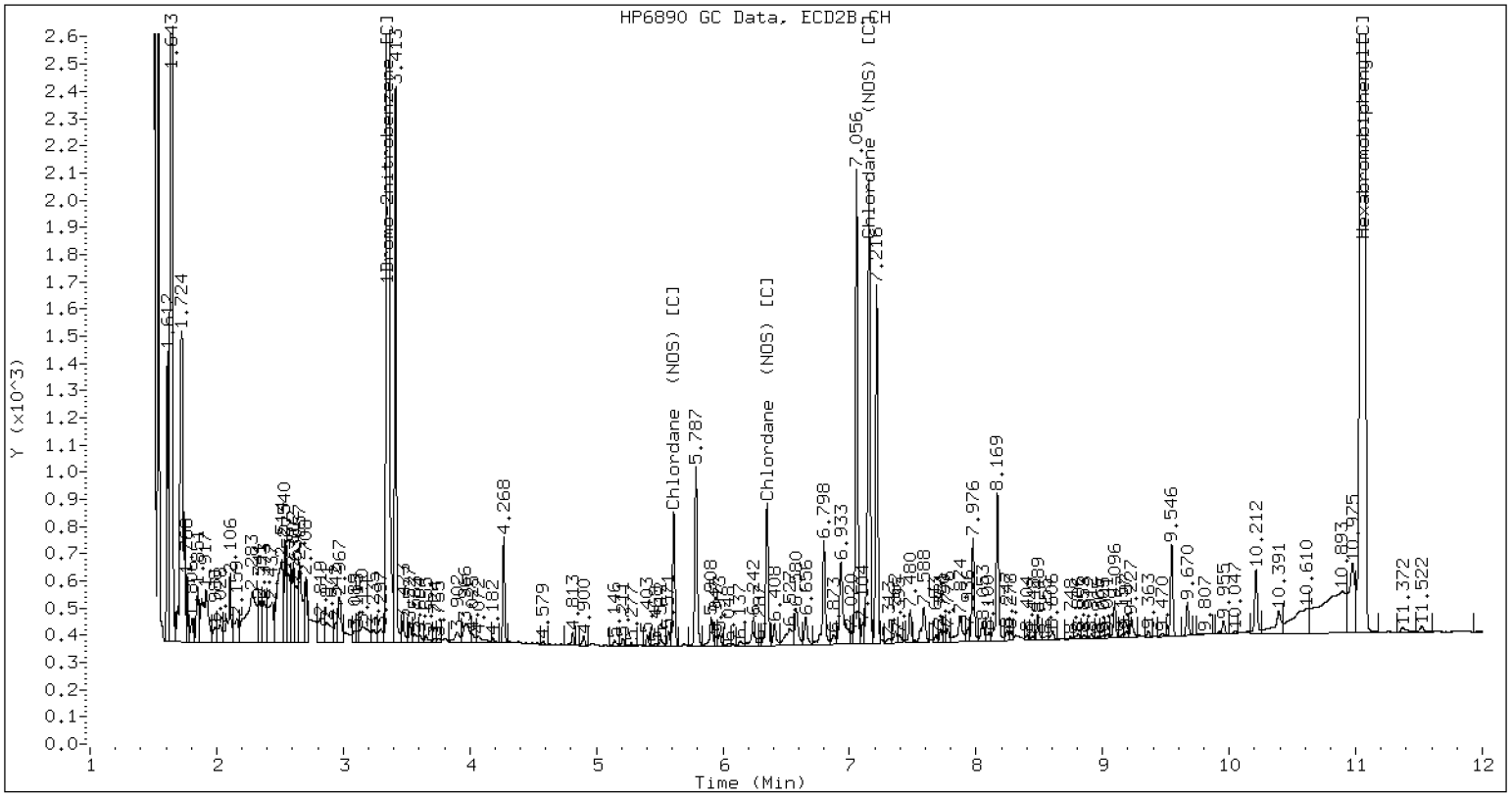
	STX-CLP Col				CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Chlordane (NOS)	1	5.593	0.000	10046	25.5	1	5.612	-0.000	12488	24.4
Chlordane (NOS)	2	6.271	-0.000	32715	25.0	2	6.348	-0.001	15023	26.1
Chlordane (NOS)	3	6.399	0.000	58016	25.4	3	7.155	-0.000	48236	24.8
Total STX-CLPAve (3 peaks): 25.309					Total CLP2Ave (3 peaks): 25.077				RPD = 1	
Corrected Ave (3 peaks): 25.309					Corrected Ave (3 peaks): 25.077				RPD = 1	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121422.D SEQ-CAL2A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121422.D
Data file 2: /20221214.b/B20221214.b/22121422.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2A
Client ID:
Injection Date: 15-DEC-2022 01:42
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121423.D
Data file 2: /20221214.b/B20221214.b/22121423.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3A
Client ID:
Injection Date: 15-DEC-2022 01:59
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	592438	-16.6
Hexabromobiphenyl	641833	685225	6.8

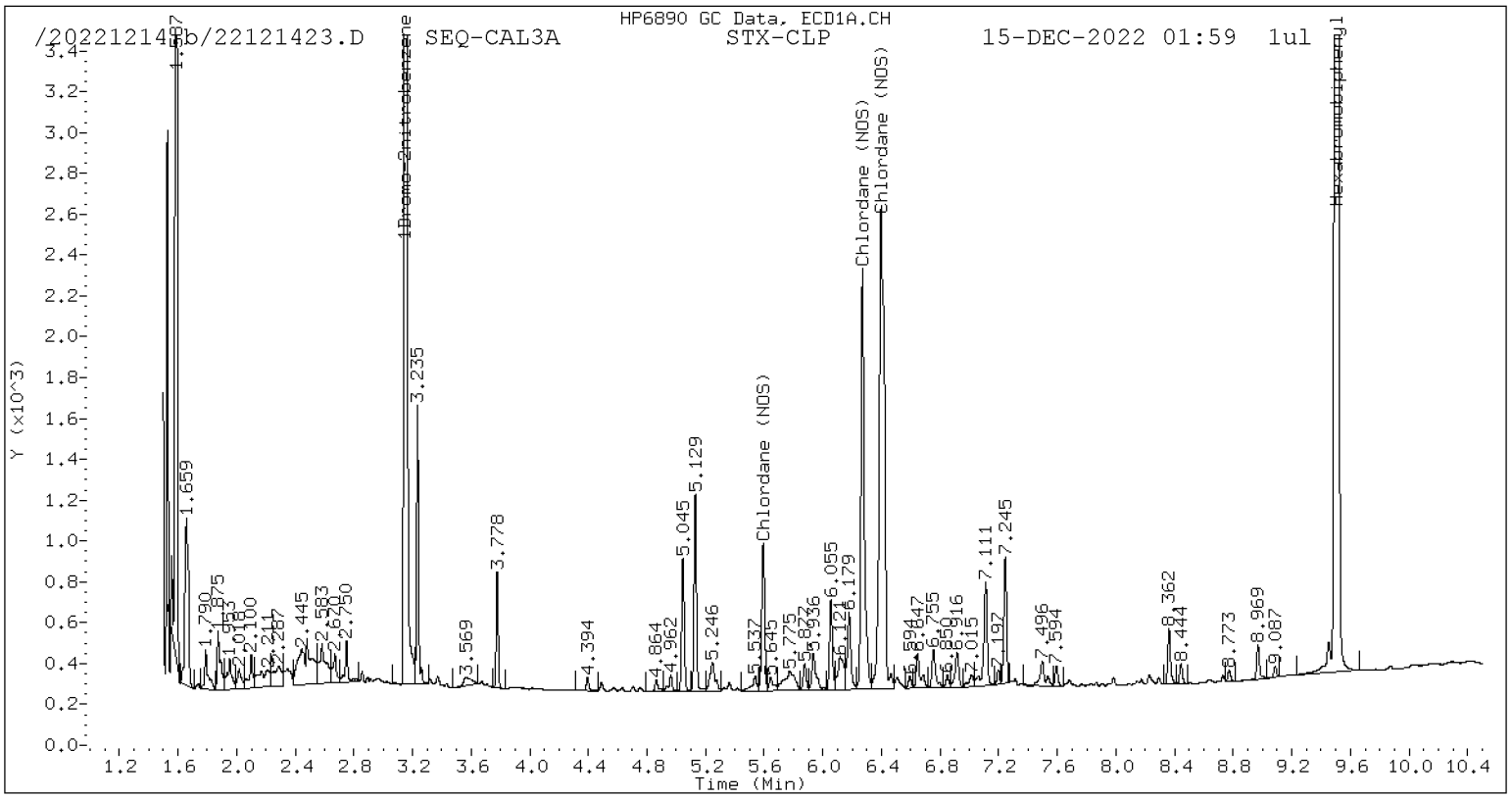
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	769029	-27.4
Hexabromobiphenyl	797125	1054742	32.3

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

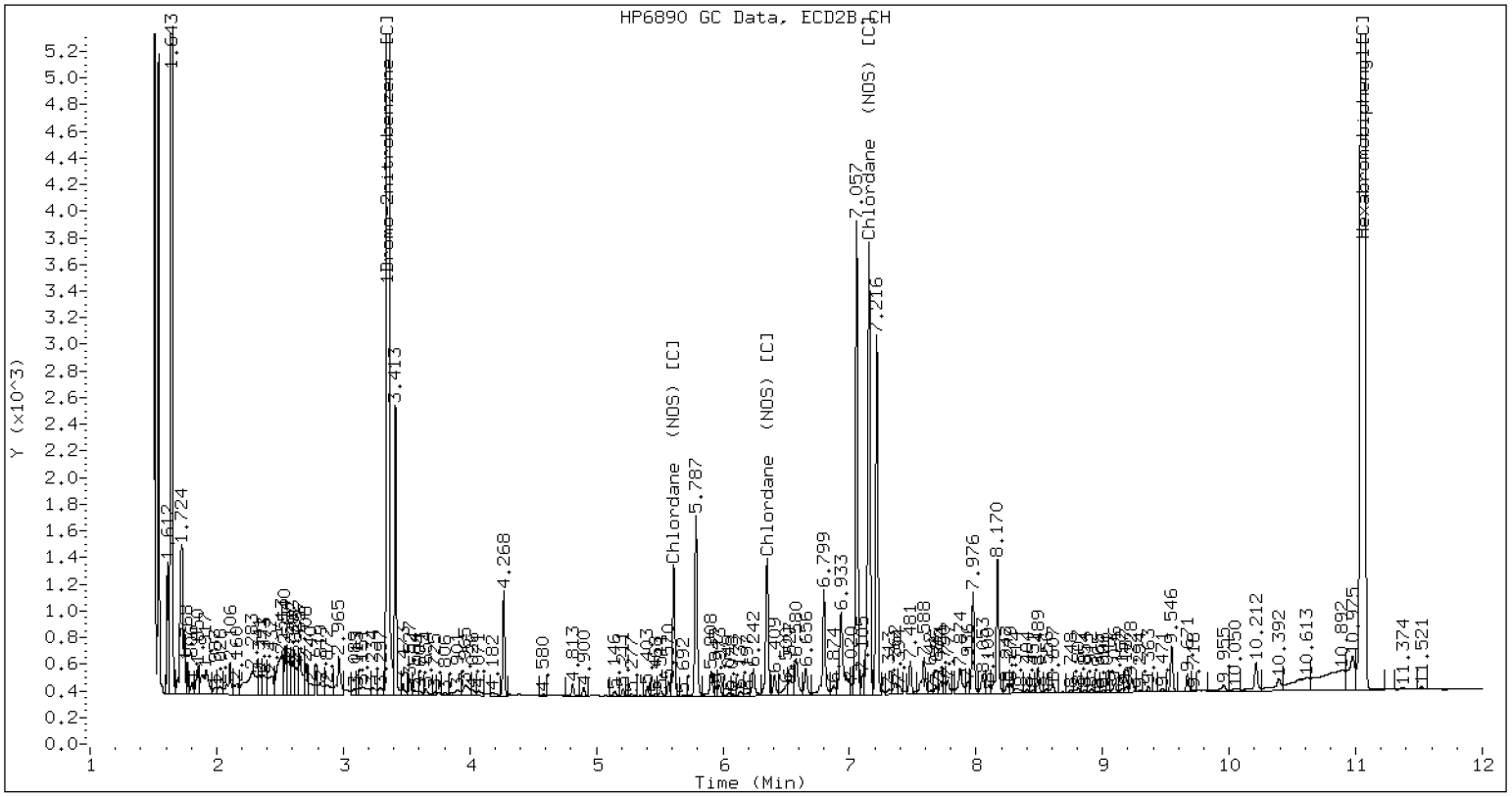
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.001	20502	53.5	1	5.612	-0.000	24816	49.7	
Chlordane (NOS)	2	6.271	-0.000	66320	52.2	2	6.349	0.000	29114	51.9	
Chlordane (NOS)	3	6.399	0.000	116820	52.6	3	7.155	-0.000	98401	51.9	
Total STX-CLPAve (3 peaks): 52.767						Total CLP2Ave (3 peaks): 51.179				RPD = 3	
Corrected Ave (3 peaks): 52.767						Corrected Ave (3 peaks): 51.179				RPD = 3	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121423.D SEQ-CAL3A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121423.D
Data file 2: /20221214.b/B20221214.b/22121423.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3A
Client ID:
Injection Date: 15-DEC-2022 01:59
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121424.D
Data file 2: /20221214.b/B20221214.b/22121424.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4A
Client ID:
Injection Date: 15-DEC-2022 02:17
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	584808	-17.7
Hexabromobiphenyl	641833	675665	5.3

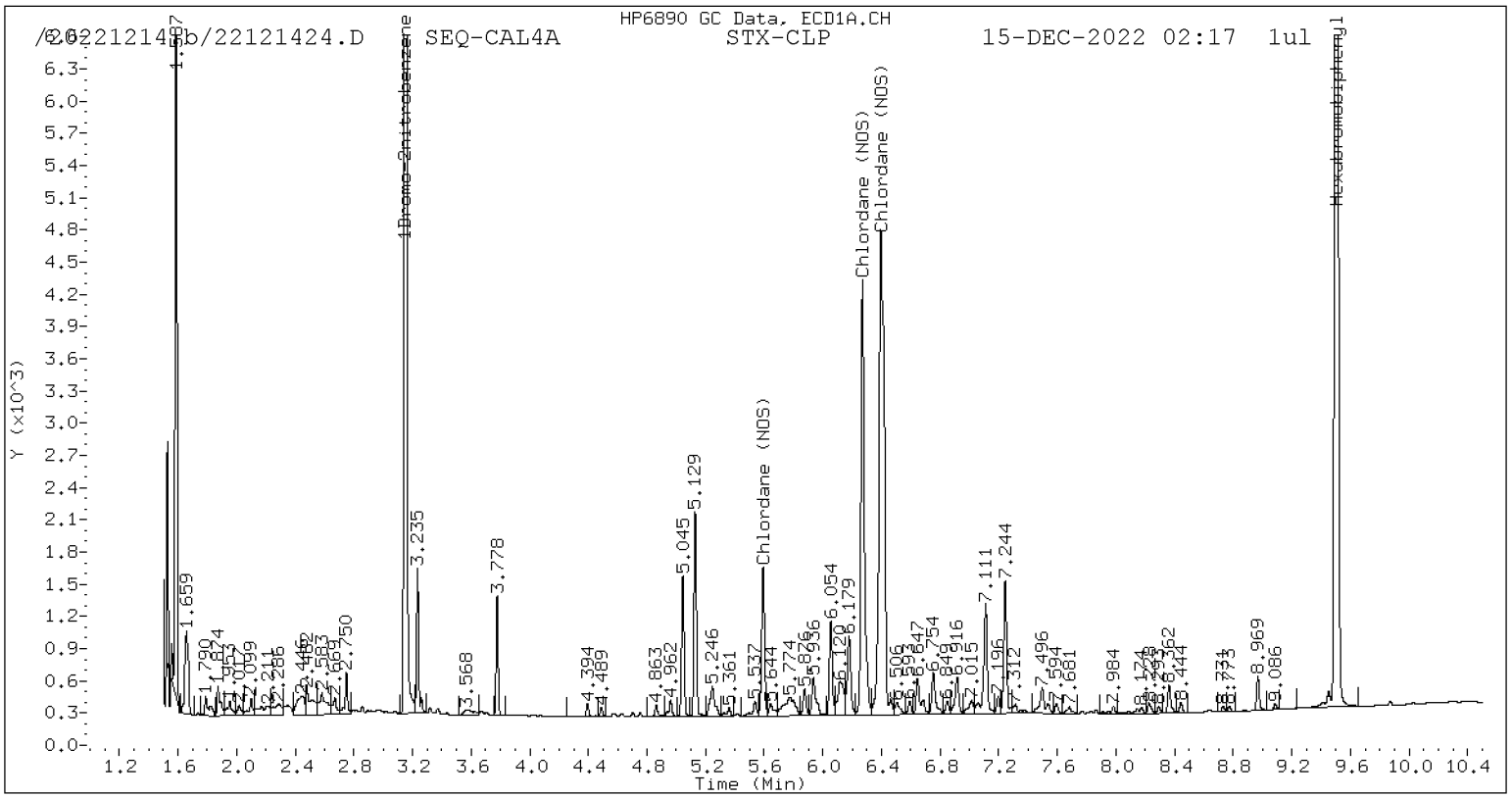
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	758204	-28.4
Hexabromobiphenyl	797125	1039488	30.4

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

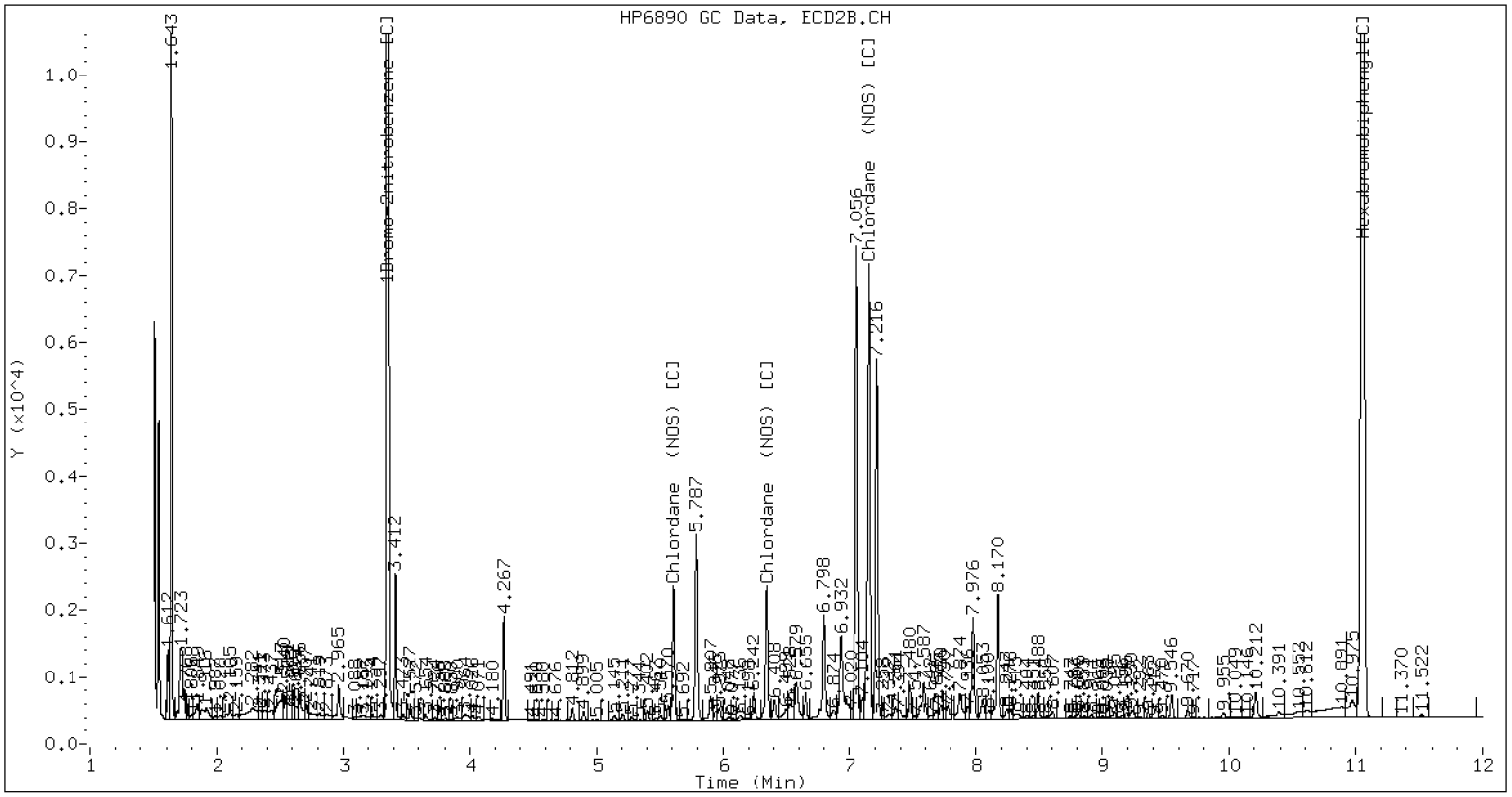
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	-0.000	39696	105.0	1	5.611	-0.001	49889	101.4	
Chlordane (NOS)	2	6.271	-0.000	131726	105.2	2	6.348	-0.001	56608	102.5	
Chlordane (NOS)	3	6.398	-0.001	229050	104.6	3	7.155	-0.000	195665	104.7	
Total STX-CLPAve (3 peaks): 104.931						Total CLP2Ave (3 peaks): 102.854				RPD = 2	
Corrected Ave (3 peaks): 104.931						Corrected Ave (3 peaks): 102.854				RPD = 2	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121424.D SEQ-CAL4A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121424.D
Data file 2: /20221214.b/B20221214.b/22121424.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4A
Client ID:
Injection Date: 15-DEC-2022 02:17
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121425.D
Data file 2: /20221214.b/B20221214.b/22121425.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5A
Client ID:
Injection Date: 15-DEC-2022 02:35
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	612592	-13.8
Hexabromobiphenyl	641833	705251	9.9

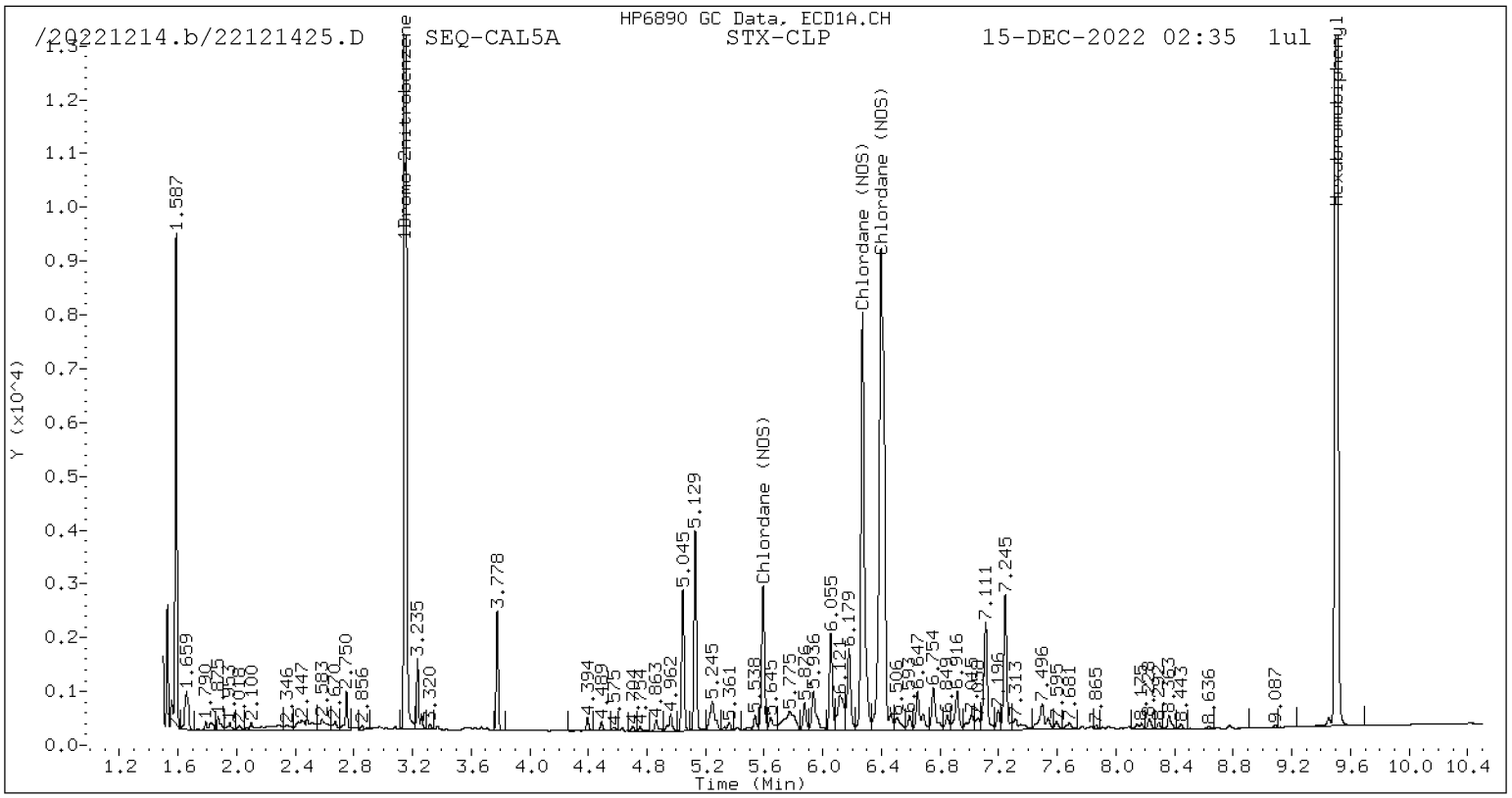
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	792856	-25.1
Hexabromobiphenyl	797125	1079718	35.5

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

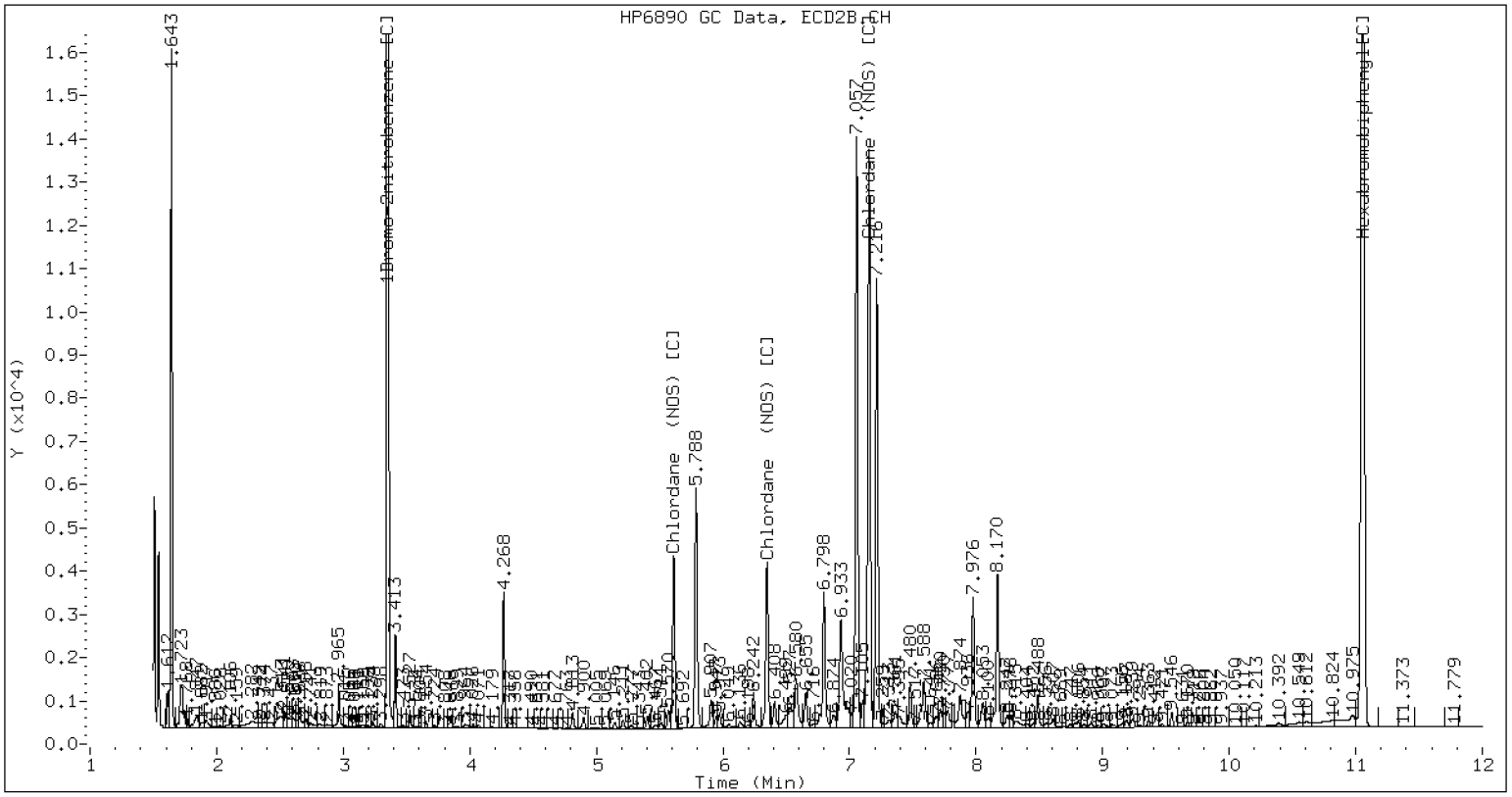
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.000	77307	196.0	1	5.612	-0.000	101527	198.7	
Chlordane (NOS)	2	6.271	0.000	261078	199.7	2	6.349	-0.001	110757	193.0	
Chlordane (NOS)	3	6.399	0.000	449301	196.5	3	7.155	-0.000	389197	200.5	
Total STX-CLPAve (3 peaks): 197.408						Total CLP2Ave (3 peaks): 197.390				RPD = 0	
Corrected Ave (3 peaks): 197.408						Corrected Ave (3 peaks): 197.390				RPD = 0	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121425.D SEQ-CAL5A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121425.D
Data file 2: /20221214.b/B20221214.b/22121425.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5A
Client ID:
Injection Date: 15-DEC-2022 02:35
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121426.D
Data file 2: /20221214.b/B20221214.b/22121426.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6A
Client ID:
Injection Date: 15-DEC-2022 02:53
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	603526	-15.1
Hexabromobiphenyl	641833	699031	8.9

Column 2

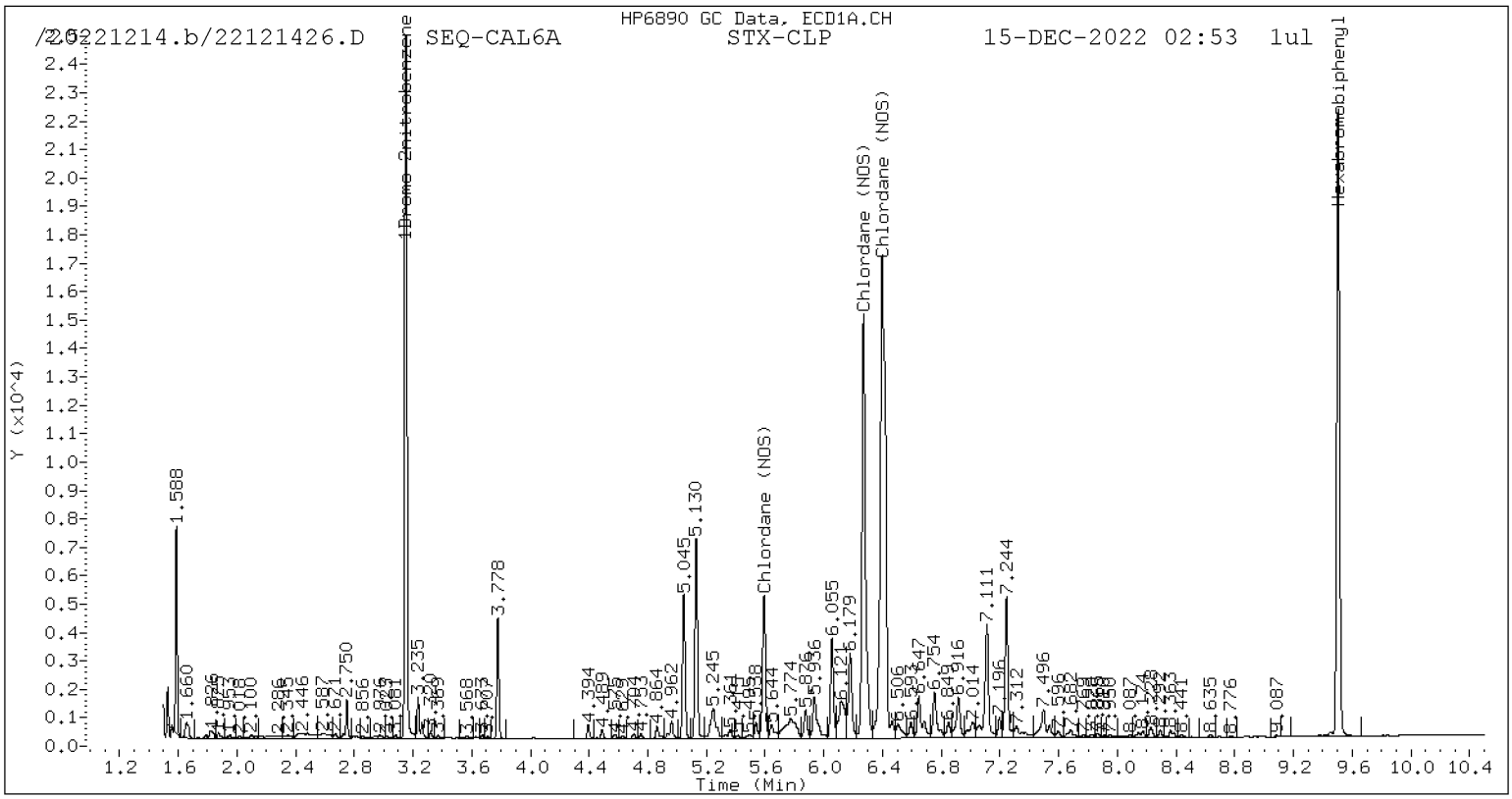
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	779405	-26.4
Hexabromobiphenyl	797125	1068976	34.1

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Chlordane (NOS)	1	5.592	-0.000	146950	375.8	1	5.612	-0.000	203386	402.0
Chlordane (NOS)	2	6.271	-0.000	503310	388.5	2	6.349	-0.000	212637	374.2
Chlordane (NOS)	3	6.399	0.000	857451	378.4	3	7.155	-0.000	752631	391.6

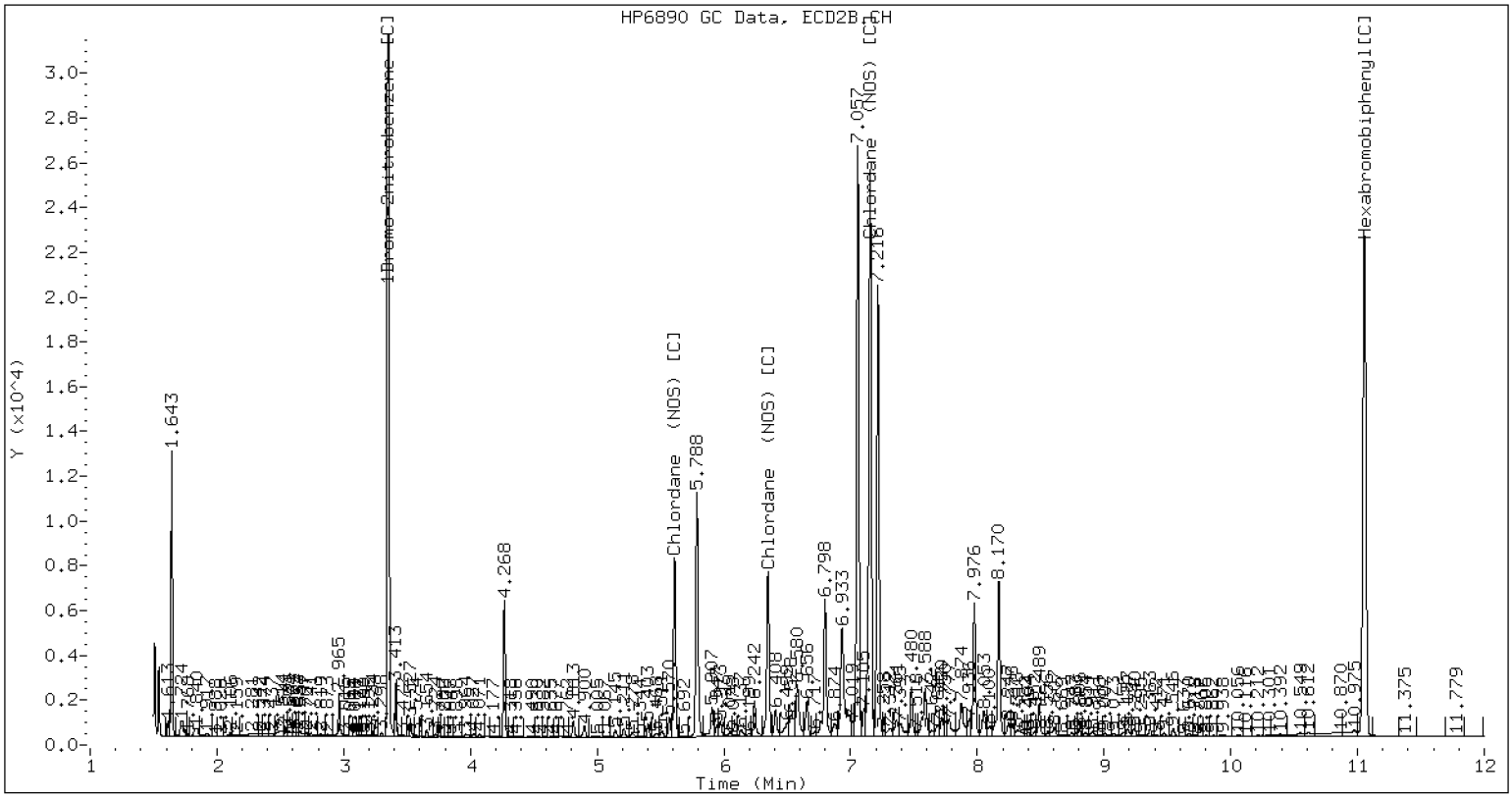
Total STX-CLPAve (3 peaks): 380.894 Total CLP2Ave (3 peaks): 389.290 RPD = 2
Corrected Ave (3 peaks): 380.894 Corrected Ave (3 peaks): 389.290 RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121426.D SEQ-CAL6A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121426.D
Data file 2: /20221214.b/B20221214.b/22121426.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6A
Client ID:
Injection Date: 15-DEC-2022 02:53
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121427.D
Data file 2: /20221214.b/B20221214.b/22121427.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7A
Client ID:
Injection Date: 15-DEC-2022 03:11
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP on col	CLP2 on col	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response				
----			----			0.00	0.00	---	Tetrachloro-m-xylene
9.380	0.025	1930	----			0.31	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	610159	-14.1
Hexabromobiphenyl	641833	692215	7.8

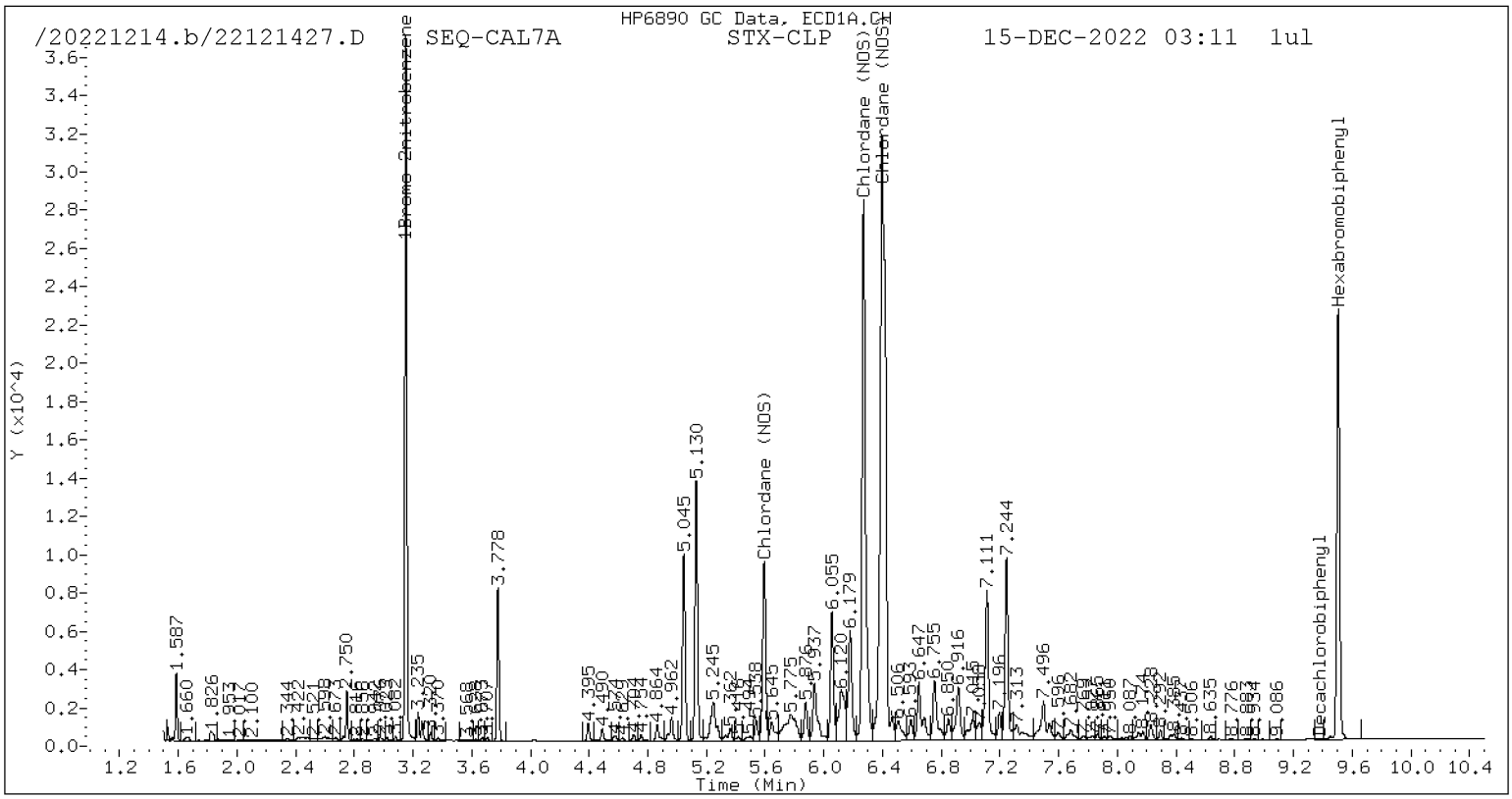
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	790388	-25.4
Hexabromobiphenyl	797125	1059143	32.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

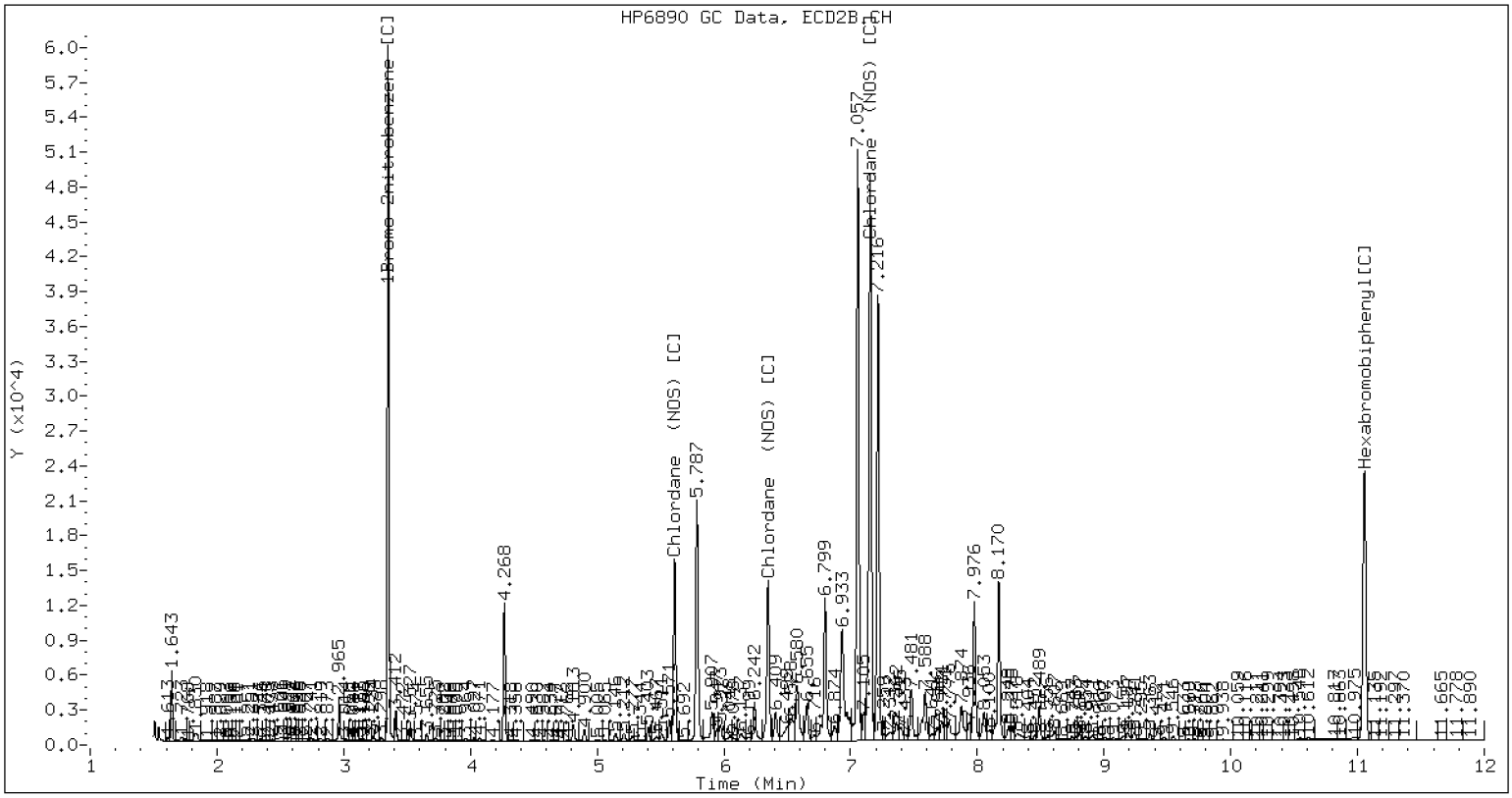
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.001	276980	715.3	1	5.612	0.000	398620	795.3	
Chlordane (NOS)	2	6.271	-0.000	961368	749.3	2	6.349	0.000	405170	719.7	
Chlordane (NOS)	3	6.399	-0.000	1631241	727.0	3	7.155	0.000	1462876	768.2	
Total STX-CLPAve (3 peaks): 730.539						Total CLP2Ave (3 peaks): 761.064				RPD = 4	
Corrected Ave (3 peaks): 730.539						Corrected Ave (3 peaks): 761.064				RPD = 4	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121427.D SEQ-CAL7A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121427.D
Data file 2: /20221214.b/B20221214.b/22121427.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7A
Client ID:
Injection Date: 15-DEC-2022 03:11
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121428.D
Data file 2: /20221214.b/B20221214.b/22121428.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8A
Client ID:
Injection Date: 15-DEC-2022 03:29
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	0.000	8893	4.221	0.000	14795	0.95	0.98	4.0	Tetrachloro-m-xylene
9.355	0.000	15511	10.467	0.000	24896	2.54	2.86	11.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	691781	-2.7
Hexabromobiphenyl	641833	602865	-6.1

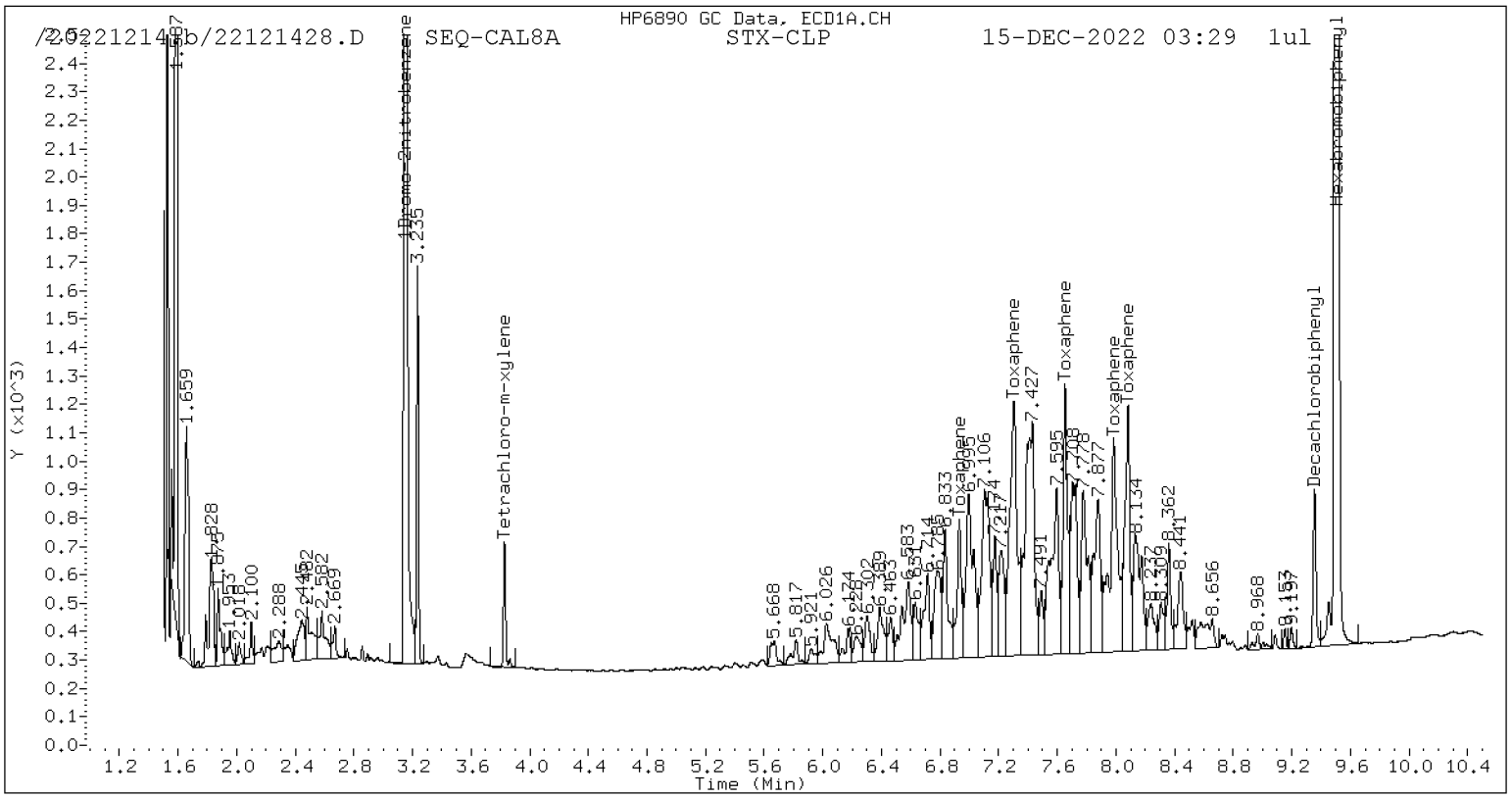
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1068328	0.9
Hexabromobiphenyl	797125	788806	-1.0

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

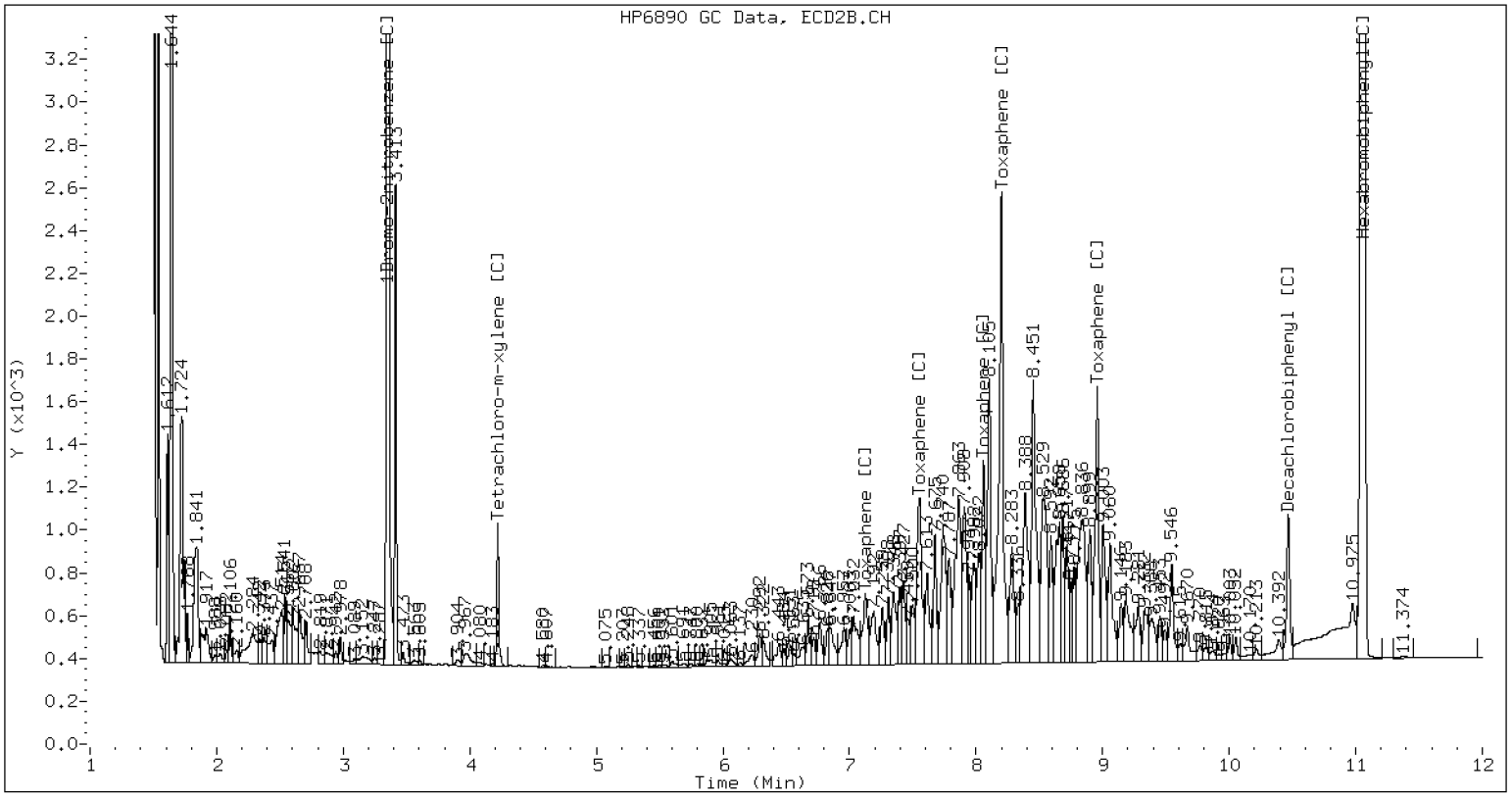
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	6.931	0.000	20939	118.9	1	7.125	-0.000	18390	124.1	
Toxaphene	2	7.304	0.000	62921	127.5	2	7.553	-0.000	43437	130.4	
Toxaphene	3	7.653	-0.000	40147	126.2	3	8.059	-0.001	32235	127.1	
Toxaphene	4	7.985	-0.001	56816	133.6	4	8.201	-0.001	109296	132.1	
Toxaphene	5	8.082	-0.000	39643	123.4	5	8.958	-0.001	50997	125.7	
Total STX-CLPAve (5 peaks): 125.907						Total CLP2Ave (5 peaks): 127.865					RPD = 2
Corrected Ave (5 peaks): 125.907						Corrected Ave (5 peaks): 127.865					RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121428.D SEQ-CAL8A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121428.D
Data file 2: /20221214.b/B20221214.b/22121428.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8A
Client ID:
Injection Date: 15-DEC-2022 03:29
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121429.D
Data file 2: /20221214.b/B20221214.b/22121429.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9A
Client ID:
Injection Date: 15-DEC-2022 03:46
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	18632	4.220	-0.000	29829	1.92	1.92	0.1	Tetrachloro-m-xylene
9.355	0.000	29179	10.467	0.000	44716	4.64	4.98	7.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	713620	0.4
Hexabromobiphenyl	641833	620026	-3.4

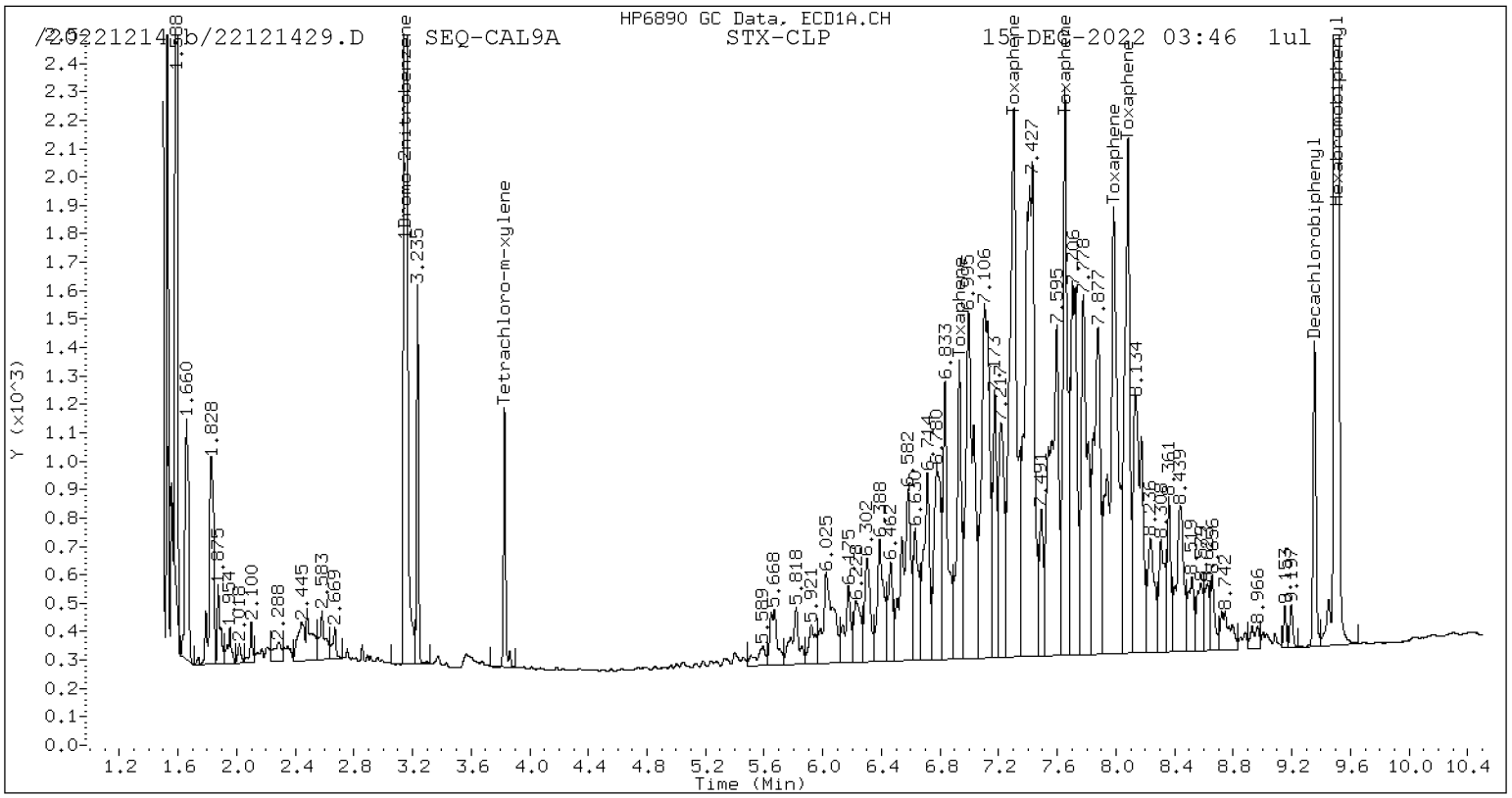
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1104488	4.3
Hexabromobiphenyl	797125	811719	1.8

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

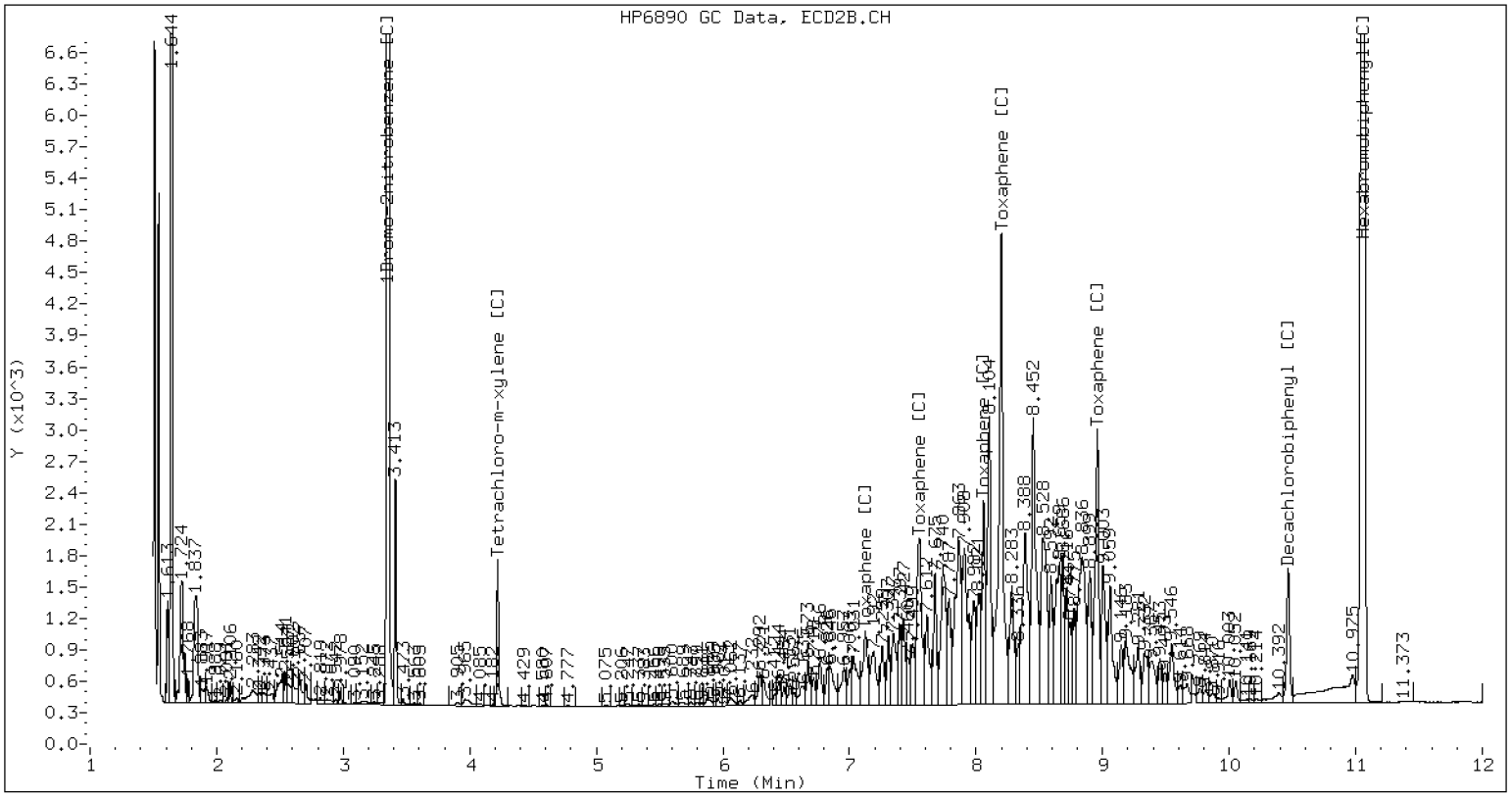
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	6.931	0.000	47415	261.8	1	7.125	-0.001	38790	254.4	
Toxaphene	2	7.302	-0.001	134642	265.2	2	7.552	-0.001	89754	261.8	
Toxaphene	3	7.652	-0.001	86679	264.9	3	8.059	-0.001	67442	258.4	
Toxaphene	4	7.985	-0.001	125891	287.7	4	8.200	-0.001	220426	258.9	
Toxaphene	5	8.081	-0.000	85903	260.0	5	8.958	-0.001	104601	250.5	
Total STX-CLPAve (5 peaks): 267.939						Total CLP2Ave (5 peaks): 256.784				RPD = 4	
Corrected Ave (5 peaks): 267.939						Corrected Ave (5 peaks): 256.784				RPD = 4	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121429.D SEQ-CAL9A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121429.D
Data file 2: /20221214.b/B20221214.b/22121429.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9A
Client ID:
Injection Date: 15-DEC-2022 03:46
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121430.D
Data file 2: /20221214.b/B20221214.b/22121430.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAA
Client ID:
Injection Date: 15-DEC-2022 04:04
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	37717	4.220	0.000	60469	3.98	3.98	0.0	Tetrachloro-m-xylene
9.355	0.000	57106	10.467	0.000	82418	9.20	9.32	1.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	696179	-2.0
Hexabromobiphenyl	641833	612804	-4.5

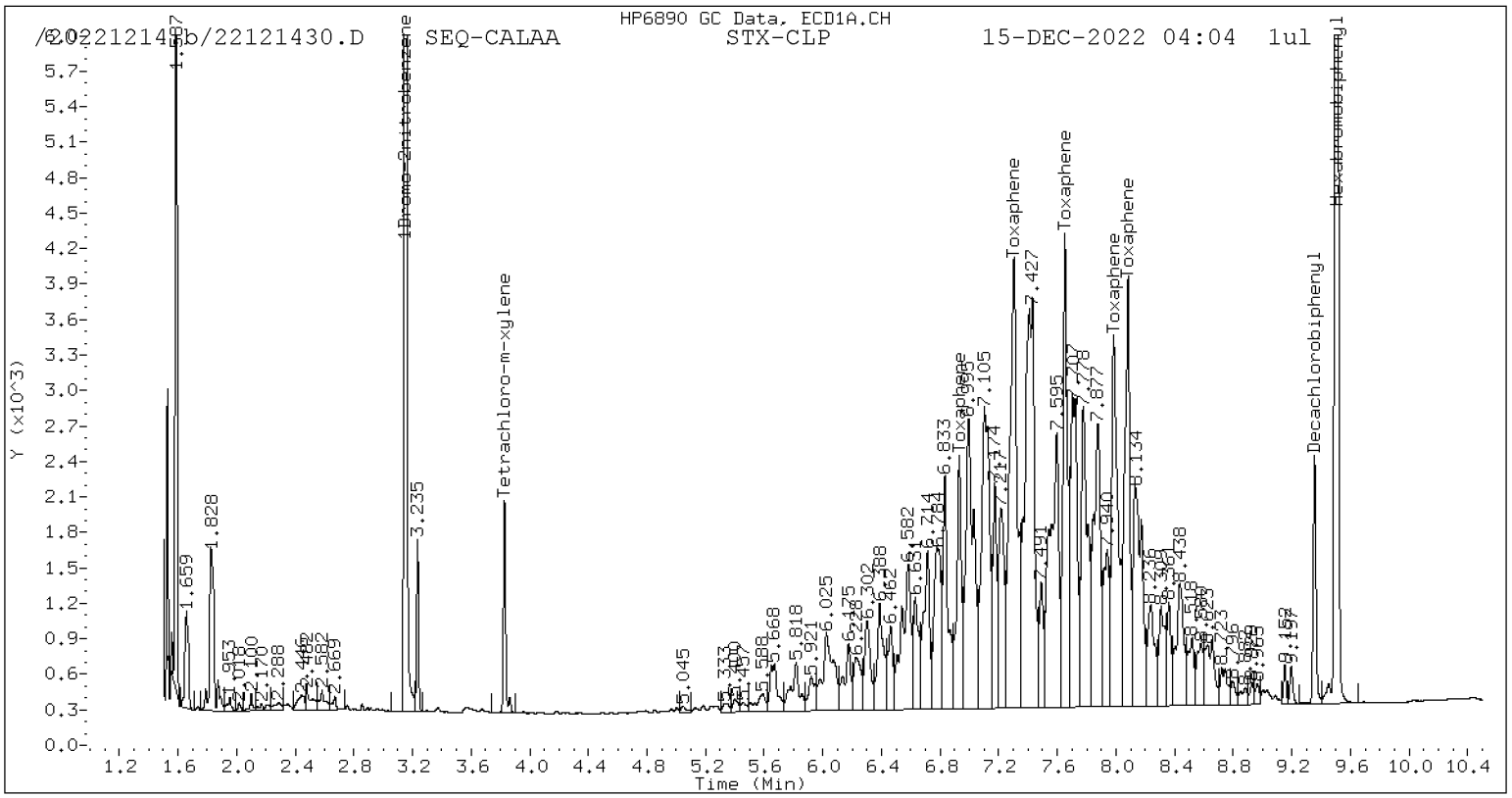
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1078803	1.9
Hexabromobiphenyl	797125	800071	0.4

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

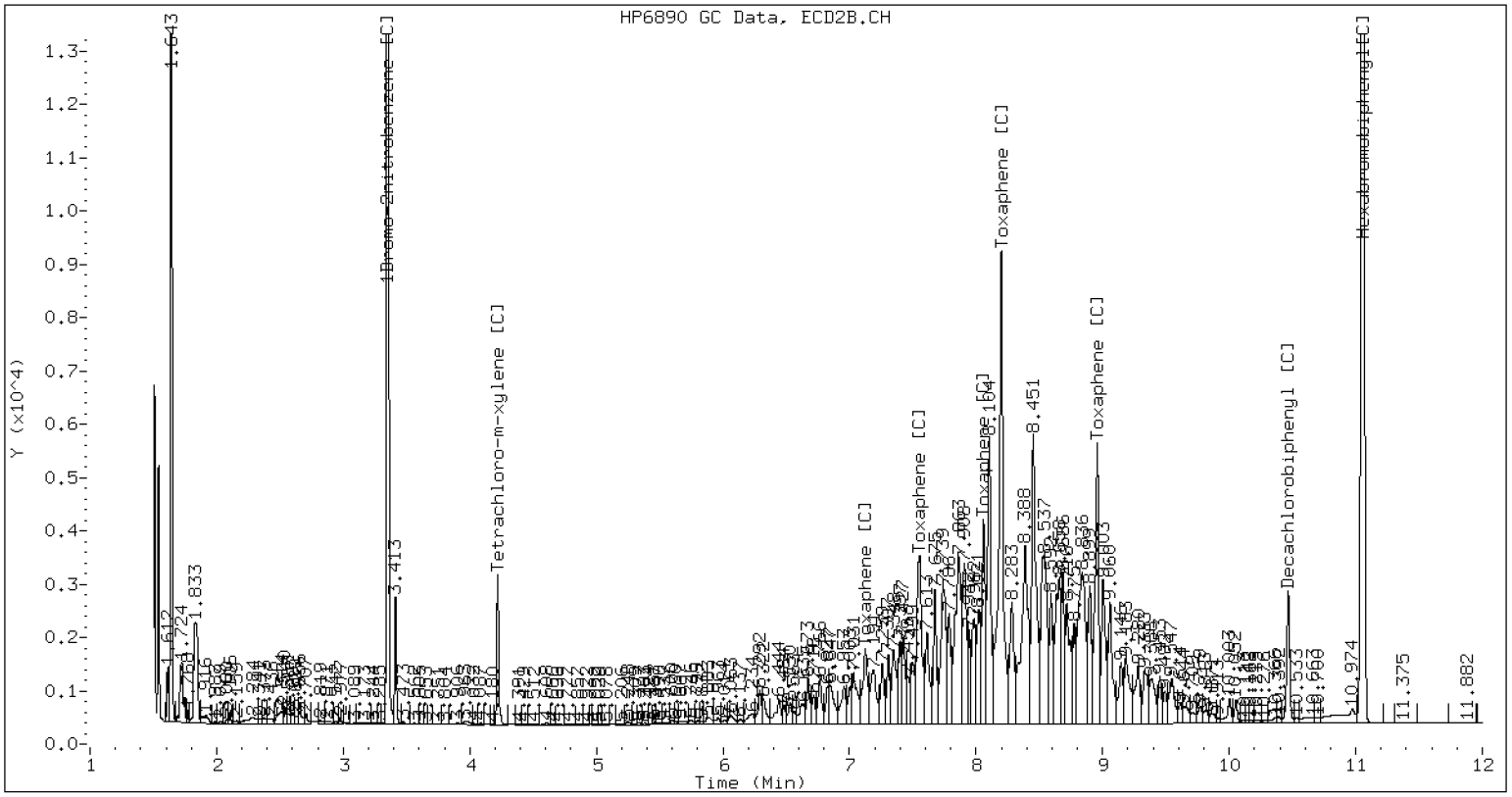
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	6.931	-0.000	96535	539.4	1	7.125	-0.001	78635	523.1	
Toxaphene	2	7.304	0.000	273576	545.2	2	7.553	-0.001	179081	529.9	
Toxaphene	3	7.652	-0.001	177095	547.7	3	8.059	-0.001	133547	519.1	
Toxaphene	4	7.985	-0.001	190443	440.4	4	8.200	-0.001	437035	520.8	
Toxaphene	5	8.082	-0.000	175009	535.8	5	8.958	-0.001	209659	509.4	
Total STX-CLPAve (5 peaks): 521.711						Total CLP2Ave (5 peaks): 520.468				RPD = 0	
Corrected Ave (5 peaks): 521.711						Corrected Ave (5 peaks): 520.468				RPD = 0	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121430.D SEQ-CALAA CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121430.D
Data file 2: /20221214.b/B20221214.b/22121430.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAA
Client ID:
Injection Date: 15-DEC-2022 04:04
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121431.D
Data file 2: /20221214.b/B20221214.b/22121431.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAB
Client ID:
Injection Date: 15-DEC-2022 04:22
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	0.000	74347	4.221	0.000	119694	7.73	7.77	0.5	Tetrachloro-m-xylene
9.355	-0.000	107024	10.466	-0.000	151970	17.00	17.11	0.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	706924	-0.5
Hexabromobiphenyl	641833	621486	-3.2

Column 2

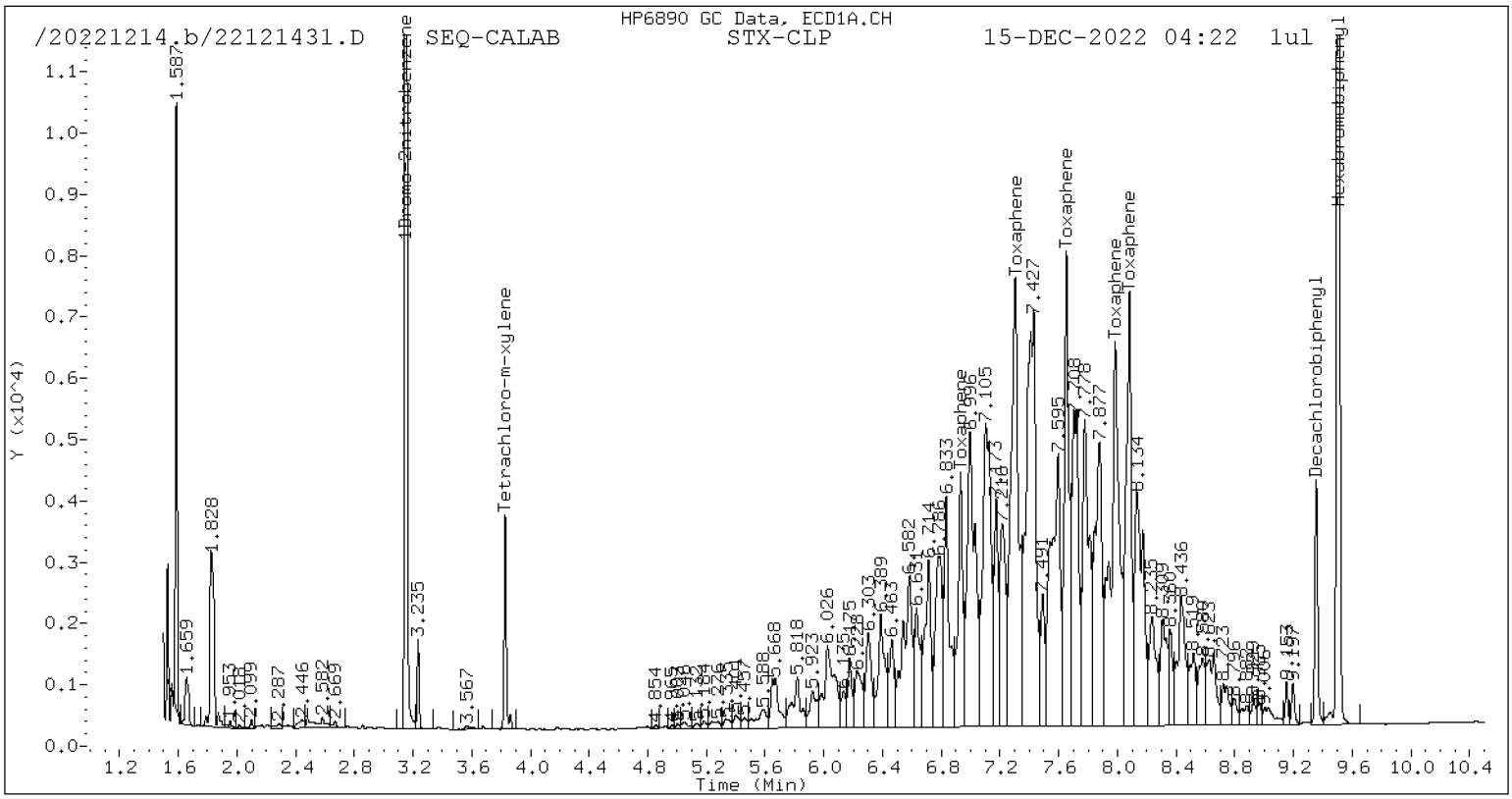
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1093936	3.3
Hexabromobiphenyl	797125	803782	0.8

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	0.000	192757	1062.0	1	7.125	-0.000	156515	1036.5
Toxaphene	2	7.303	-0.000	530863	1043.2	2	7.553	-0.001	349637	1029.8
Toxaphene	3	7.653	-0.000	344194	1049.6	3	8.059	-0.000	265296	1026.5
Toxaphene	4	7.986	-0.000	522105	1190.6	4	8.201	-0.001	854255	1013.3
Toxaphene	5	8.082	-0.000	345477	1043.0	5	8.958	-0.001	416452	1007.1

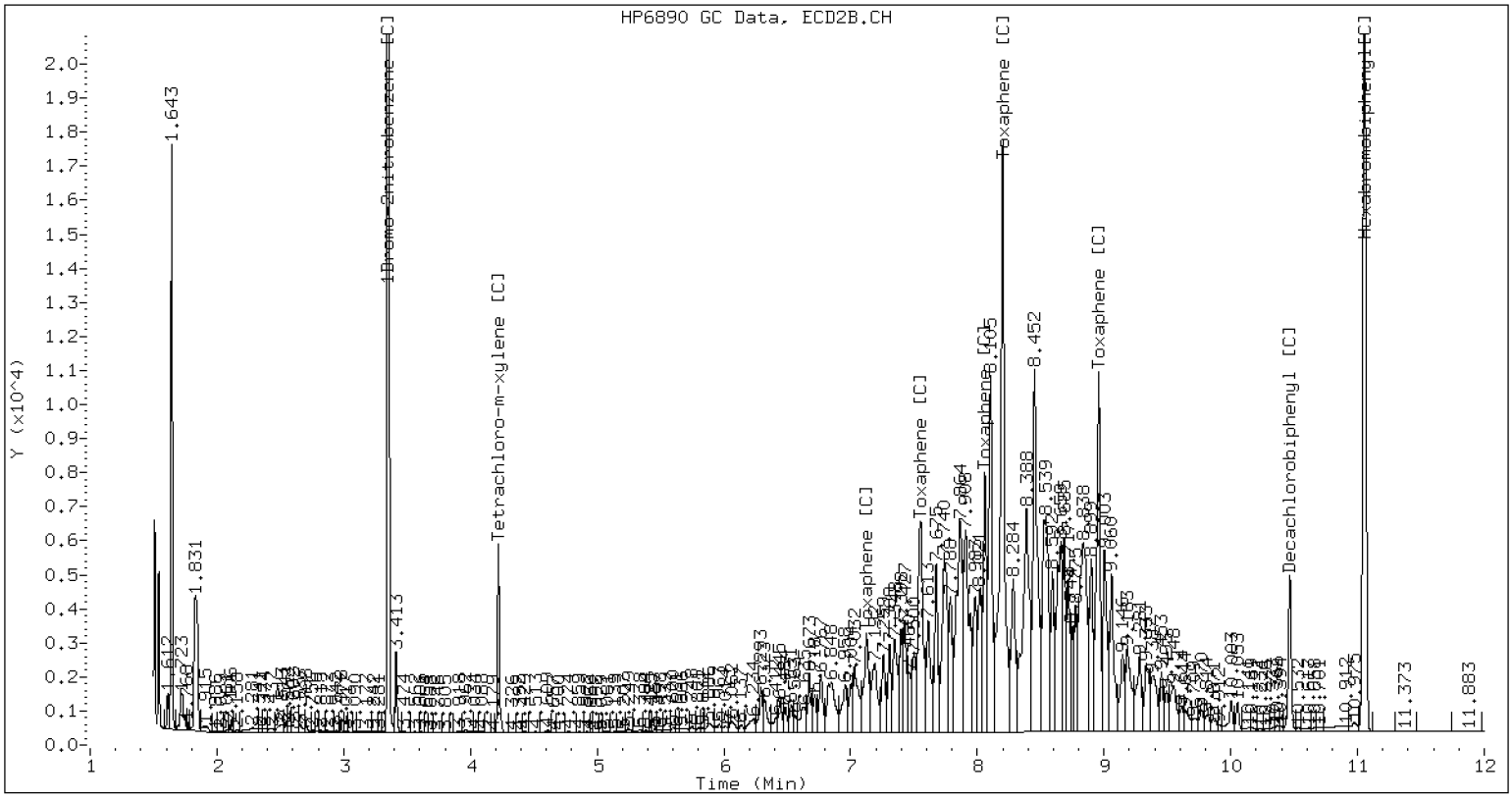
Total STX-CLPAve (5 peaks): 1077.665 Total CLP2Ave (5 peaks): 1022.630 RPD = 5
Corrected Ave (5 peaks): 1077.665 Corrected Ave (5 peaks): 1022.630 RPD = 5

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121431.D SEQ-CALAB CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121431.D
Data file 2: /20221214.b/B20221214.b/22121431.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAB
Client ID:
Injection Date: 15-DEC-2022 04:22
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121432.D
Data file 2: /20221214.b/B20221214.b/22121432.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAC
Client ID:
Injection Date: 15-DEC-2022 04:40
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	0.000	169388	4.221	0.000	273030	18.51	18.69	1.0	Tetrachloro-m-xylene
9.356	0.001	234532	10.466	-0.000	332716	40.53	40.11	1.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672958	-5.3
Hexabromobiphenyl	641833	571112	-11.0

Column 2

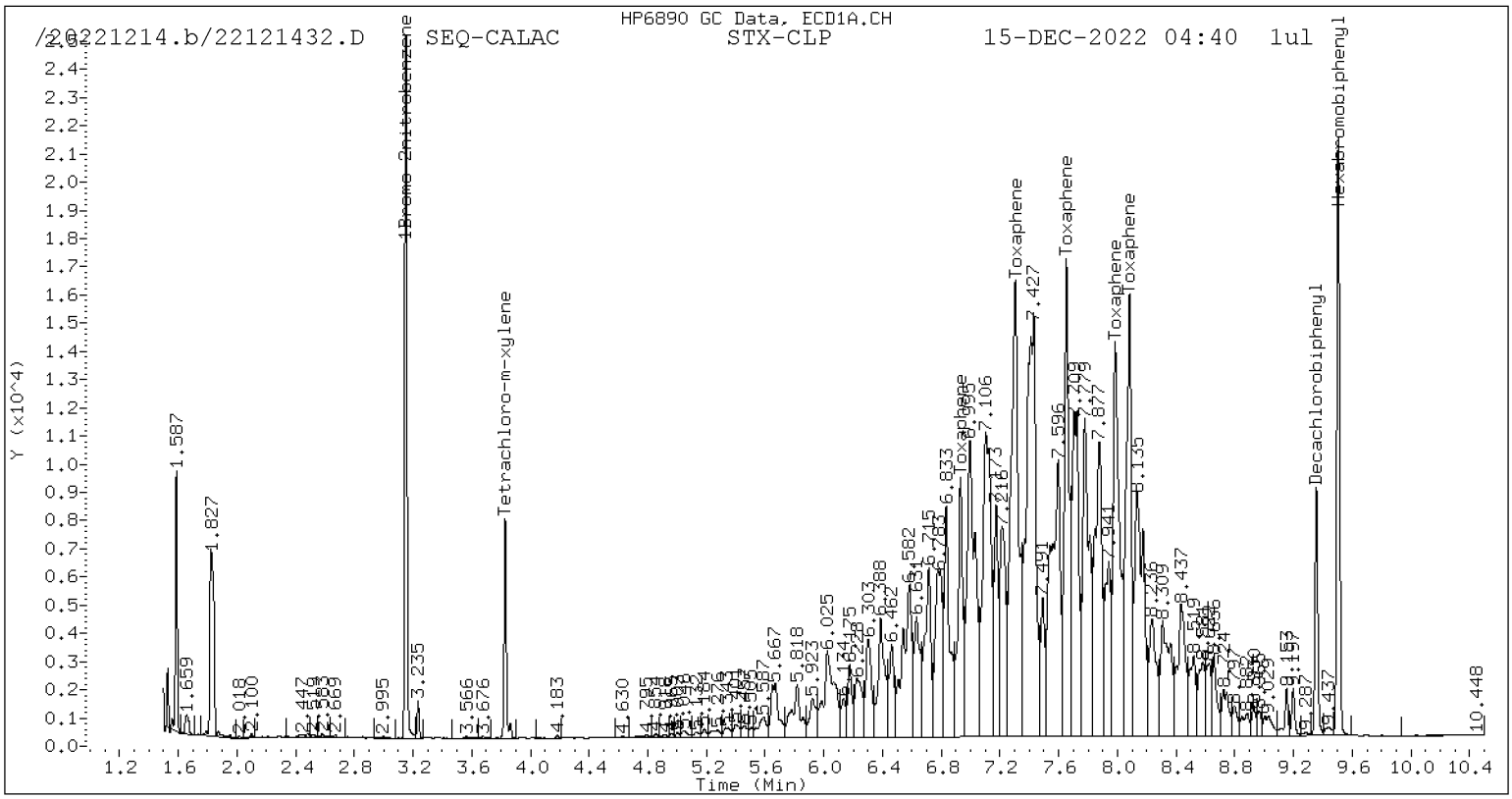
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1037593	-2.0
Hexabromobiphenyl	797125	750492	-5.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	0.000	432250	2591.5	1	7.126	-0.000	358061	2539.5
Toxaphene	2	7.303	0.000	1180375	2524.1	2	7.553	0.000	785942	2479.1
Toxaphene	3	7.653	0.000	762221	2529.4	3	8.059	-0.000	602985	2498.7
Toxaphene	4	7.986	0.000	863552	2142.9	4	8.201	-0.001	1929083	2450.8
Toxaphene	5	8.082	0.000	777497	2554.3	5	8.958	-0.001	962132	2492.0

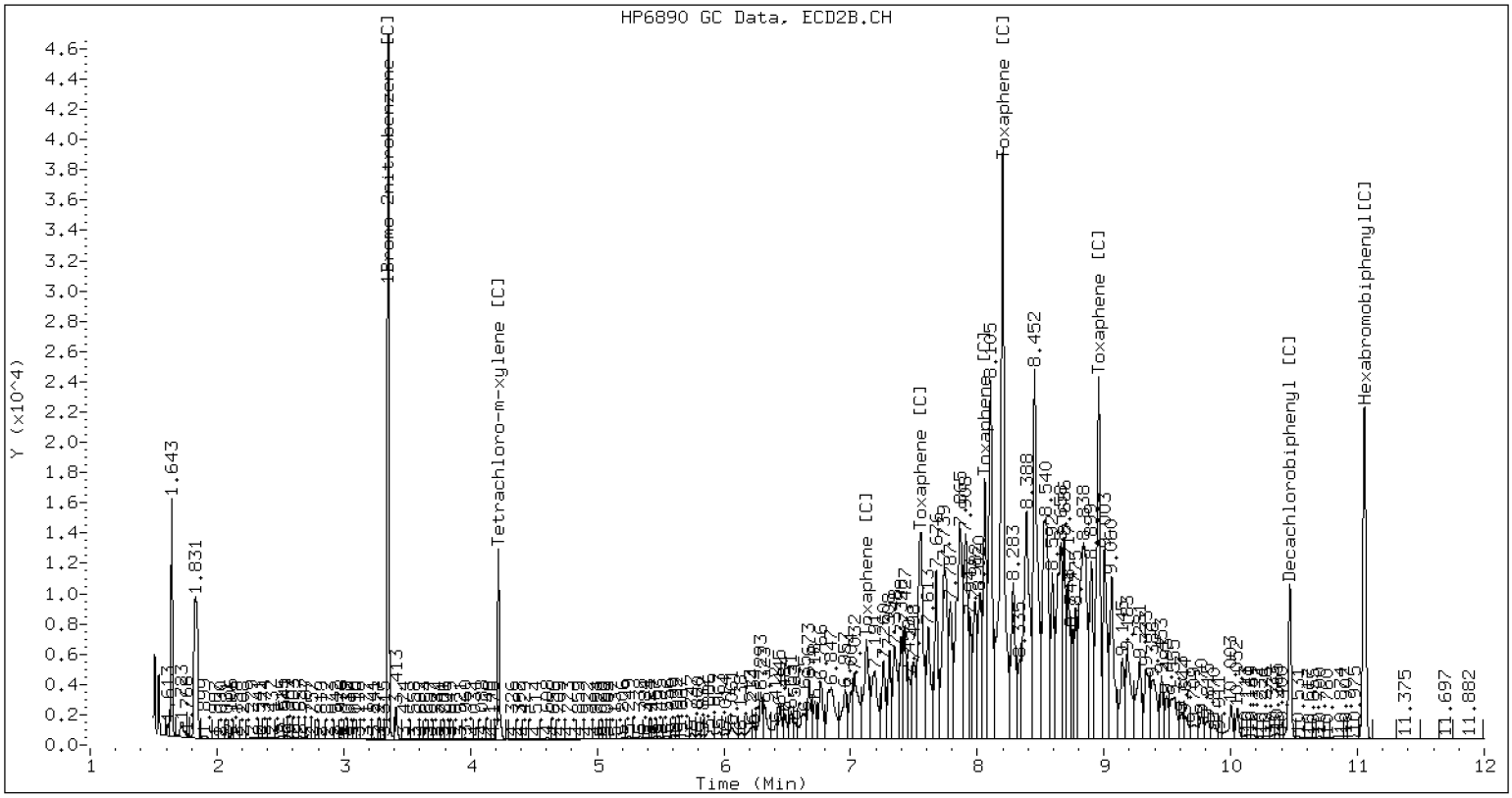
Total STX-CLPAve (5 peaks): 2468.427 Total CLP2Ave (5 peaks): 2492.024 RPD = 1
Corrected Ave (5 peaks): 2468.427 Corrected Ave (5 peaks): 2492.024 RPD = 1

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121432.D SEQ-CALAC CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121432.D
Data file 2: /20221214.b/B20221214.b/22121432.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAC
Client ID:
Injection Date: 15-DEC-2022 04:40
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121433.D
Data file 2: /20221214.b/B20221214.b/22121433.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAD
Client ID:
Injection Date: 15-DEC-2022 04:58
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	329284	4.221	0.000	536251	34.78	35.63	2.4	Tetrachloro-m-xylene
9.356	0.000	464116	10.466	-0.000	660536	76.95	77.19	0.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	696178	-2.0
Hexabromobiphenyl	641833	595287	-7.3

Column 2

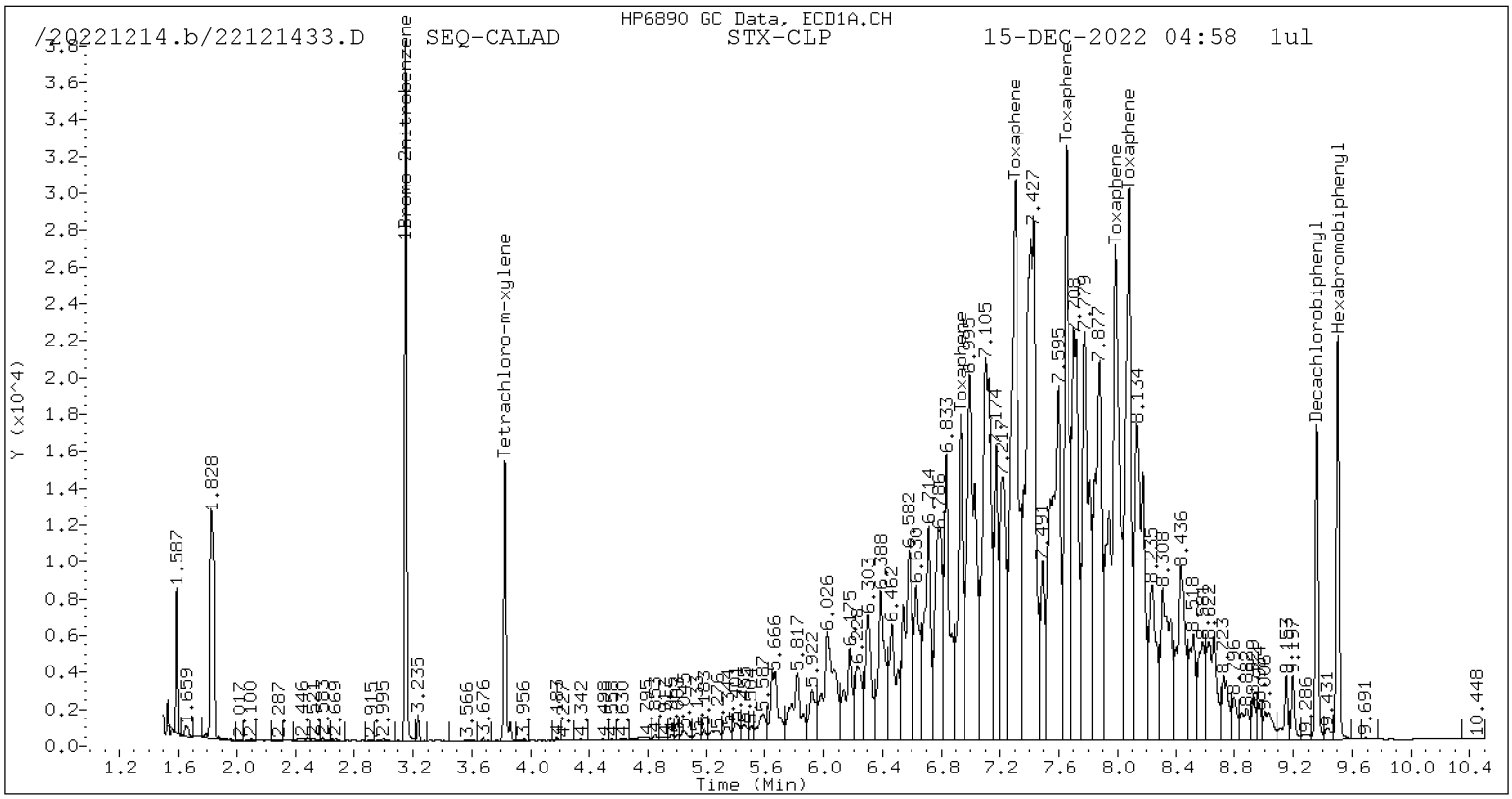
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1069205	1.0
Hexabromobiphenyl	797125	774218	-2.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	0.000	828531	4765.6	1	7.126	-0.000	704213	4841.5
Toxaphene	2	7.303	-0.000	2275106	4667.4	2	7.554	0.000	1533921	4690.3
Toxaphene	3	7.653	-0.000	1493693	4755.4	3	8.059	-0.001	1192086	4788.5
Toxaphene	4	7.986	0.000	2318449	5519.5	4	8.201	-0.001	3835448	4723.4
Toxaphene	5	8.081	-0.000	1509568	4758.0	5	8.958	-0.000	1957568	4914.8

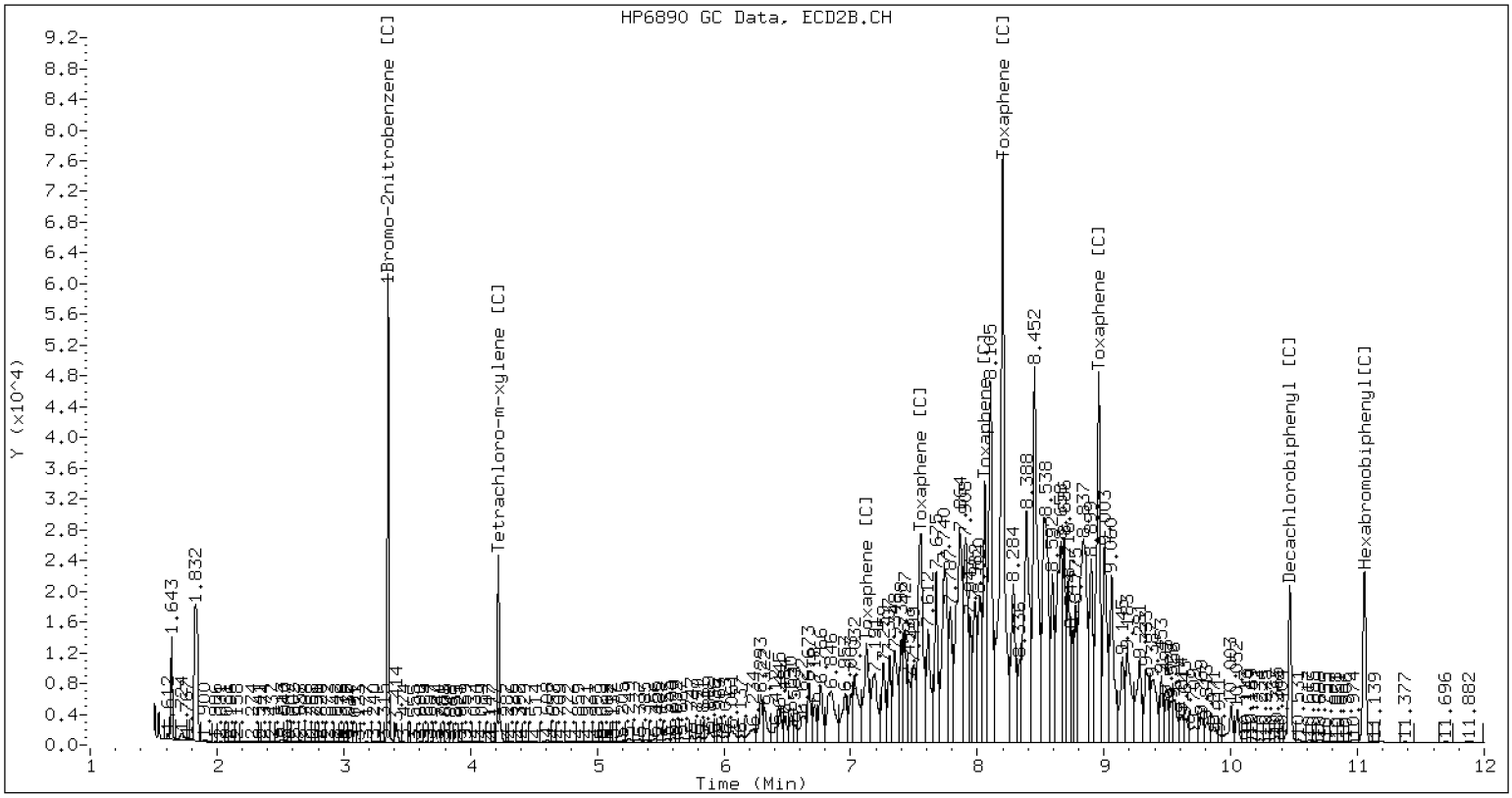
Total STX-CLPAve (5 peaks): 4893.192 Total CLP2Ave (5 peaks): 4791.694 RPD = 2
Corrected Ave (5 peaks): 4893.192 Corrected Ave (5 peaks): 4791.694 RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121433.D SEQ-CALAD CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121433.D
Data file 2: /20221214.b/B20221214.b/22121433.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAD
Client ID:
Injection Date: 15-DEC-2022 04:58
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121434.D
Data file 2: /20221214.b/B20221214.b/22121434.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAE
Client ID:
Injection Date: 15-DEC-2022 05:16
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	626937	4.221	0.000	1016753	65.66	67.54	2.8	Tetrachloro-m-xylene
9.355	0.000	899917	10.467	0.000	1293767	145.37	151.89	4.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	702143	-1.2
Hexabromobiphenyl	641833	610983	-4.8

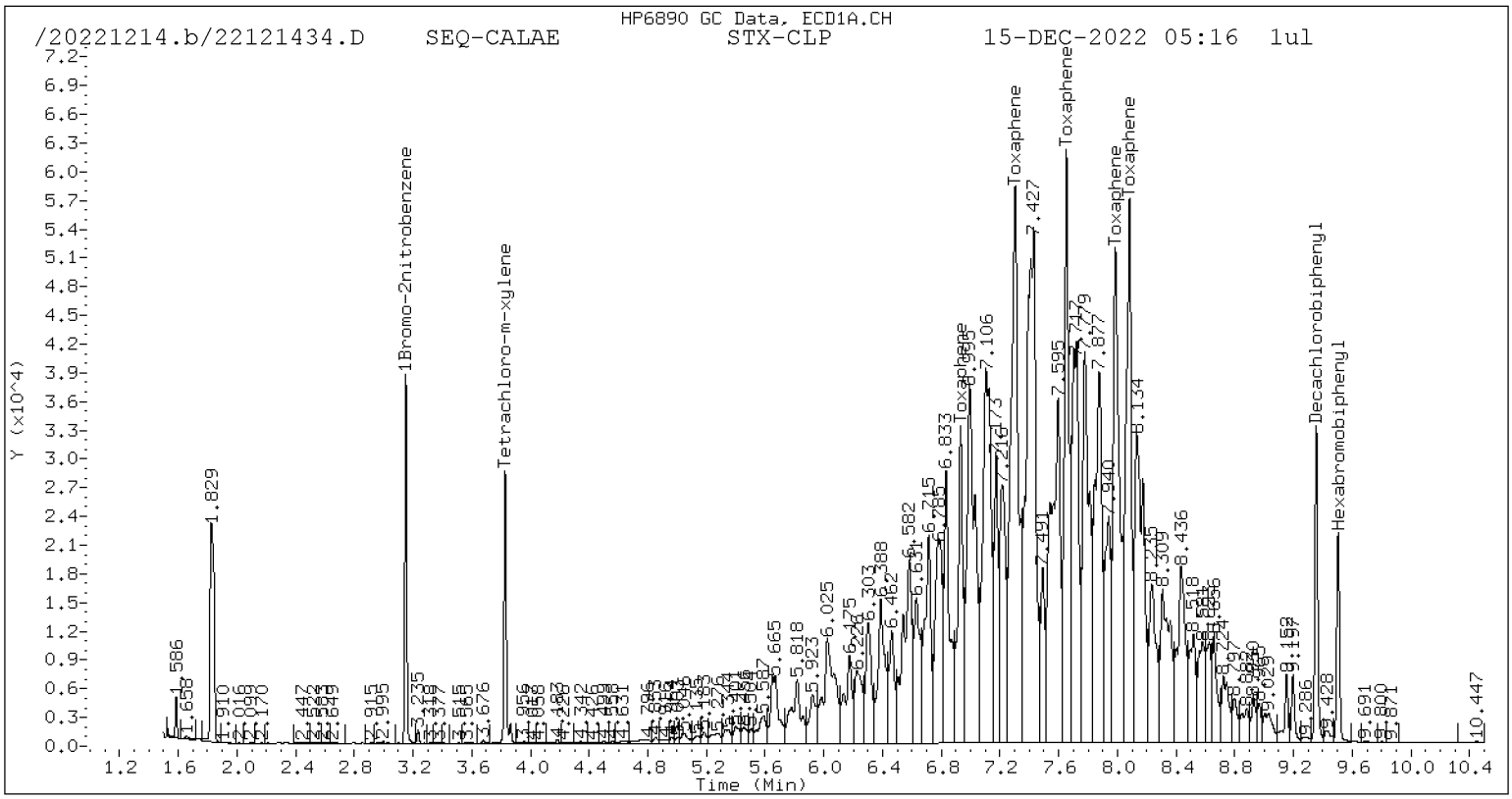
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1069521	1.0
Hexabromobiphenyl	797125	770702	-3.3

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

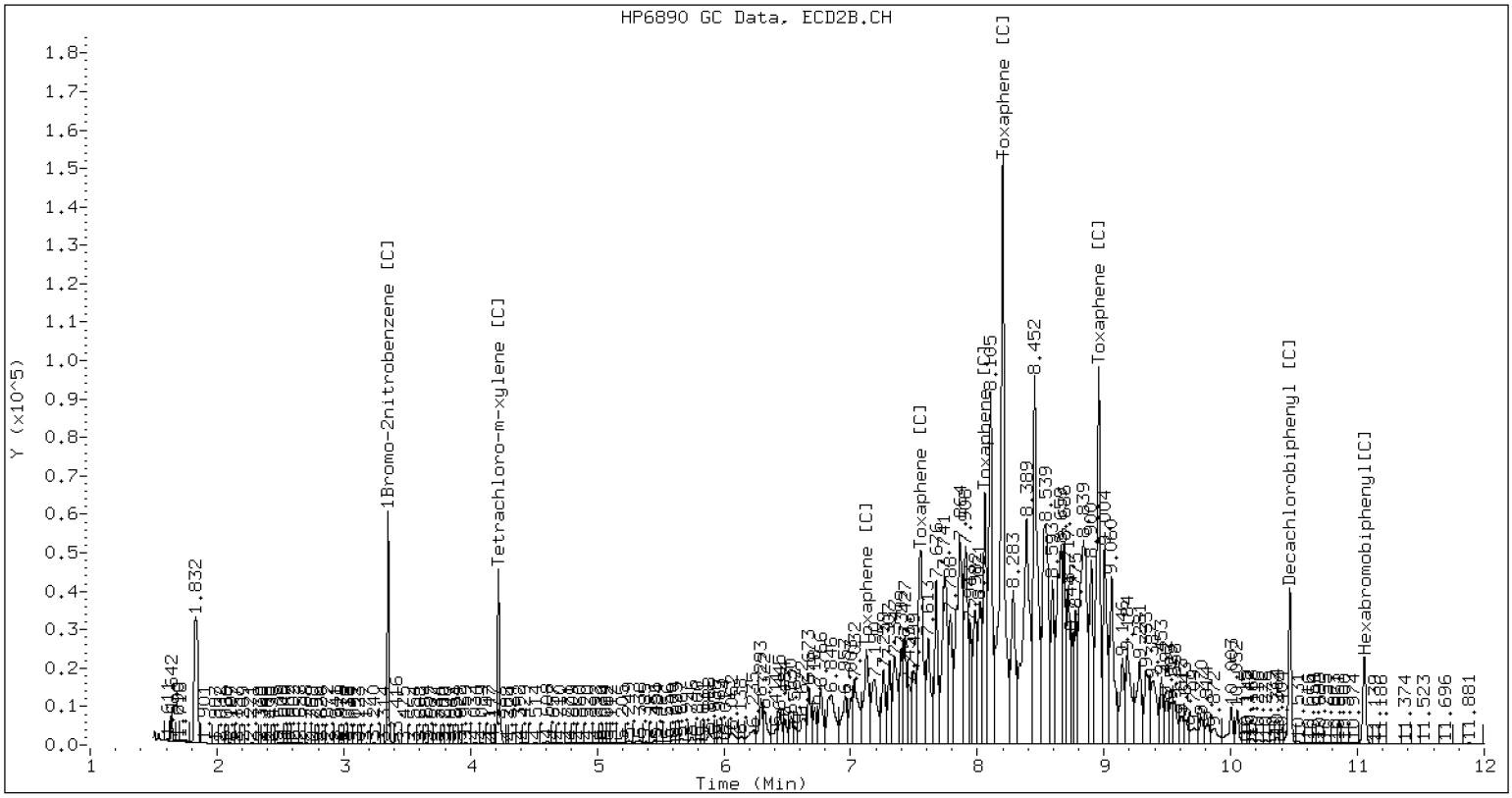
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	6.931	0.000	1553785	8707.6	1	7.126	0.000	1336419	9229.8	
Toxaphene	2	7.303	-0.000	4216546	8428.1	2	7.553	0.000	2900195	8908.4	
Toxaphene	3	7.653	-0.000	2652265	8227.0	3	8.060	0.000	2299294	9278.2	
Toxaphene	4	7.987	0.001	3225164	7480.8	4	8.201	0.000	7496819	9274.6	
Toxaphene	5	8.082	-0.000	2882252	8851.2	5	8.959	0.000	3913616	9870.7	
Total STX-CLPAve (5 peaks): 8338.950						Total CLP2Ave (5 peaks): 9312.318				RPD = 11	
Corrected Ave (5 peaks): 8338.950						Corrected Ave (5 peaks): 9312.318				RPD = 11	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121434.D SEQ-CALAE CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121434.D
Data file 2: /20221214.b/B20221214.b/22121434.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAE
Client ID:
Injection Date: 15-DEC-2022 05:16
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23013104.D	Calibration Date:	12/14/2022
Sequence:	SLB0046	Injection Date:	01/31/23
Lab Sample ID:	SLB0046-ICV1	Injection Time:	15:45
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Hexachlorobenzene	A	20.000	20.6	1.4298940	1.4742340		3.1	+/-20
Hexachlorobenzene [2C]	A	20.000	20.3	1.4591090	1.4837370		1.7	+/-20
Decachlorobiphenyl	A	40.000	39.6	0.8105886	0.8020704		-1.1	+/-20
Decachlorobiphenyl [2C]	A	40.000	40.6	0.8841805	0.8965048		1.4	+/-20
Tetrachlorometaxylene	A	40.000	39.8	1.0879510	1.0818030		-0.6	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.9	1.1261070	1.1220750		-0.4	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013104.D
Data file 2: /20230131.b/B20230131.b/23013104.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: SLB0046-ICV1
Client ID:
Injection Date: 31-JAN-2023 15:45
Report Date: 02/03/2023 20:24
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.308	-0.003	339941	4.826	-0.006	531982	22.82	22.39	1.9	alpha-BHC
4.691	-0.002	132273	5.302	-0.007	196989	23.06	21.80	5.6	beta-BHC
4.873	-0.003	300541	5.654	-0.008	376575	24.68	19.24	24.8	delta-BHC
4.608	-0.003	292759	5.222	-0.007	456061	22.67	22.61	0.2	gamma-BHC (Lindane)
5.089	-0.003	276088	5.747	-0.008	391781	24.02	21.45	11.3	Heptachlor
5.411	-0.003	289469	6.149	-0.009	438906	22.47	21.04	6.6	Aldrin
6.084	-0.004	246431	6.806	-0.009	357495	22.07	20.73	6.3	Heptachlor epoxide b
6.527	-0.003	232039	7.250	-0.008	311965	22.64	20.52	9.8	Endosulfan I
6.787	-0.004	483792	7.544	-0.008	680334	43.94	40.50	8.1	Dieldrin
6.449	-0.003	453594	7.335	-0.007	643639	44.37	41.79	6.0	4,4'-DDE
7.037	-0.004	409859	7.868	-0.008	532113	45.21	47.62	5.2	Endrin
7.275	-0.003	395569	8.080	-0.008	535026	48.47	46.72	3.7	Endosulfan II
7.097	-0.003	395719	7.942	-0.007	522214	48.45	48.05	0.8	4,4'-DDD
8.137	-0.003	358378	8.678	-0.008	482902	46.25	48.02	3.7	Endosulfan sulfate
7.389	-0.002	393326	8.259	-0.007	477242	47.66	45.50	4.6	4,4'-DDT
7.875	-0.002	836426	8.901	-0.008	1018921	228.71	219.50	4.1	Methoxychlor
8.411	-0.003	407990	9.202	-0.008	505285	45.96	46.52	1.2	Endrin ketone
7.704	-0.003	297678	8.410	-0.008	371232	45.73	45.95	0.5	Endrin aldehyde
6.226	-0.003	251747	7.017	-0.008	353947	22.20	20.58	7.6	trans-Chlordane
6.373	-0.003	246759	7.177	-0.008	341843	21.69	20.31	6.6	cis-Chlordane
2.302	-0.002	324715	2.480	-0.002	367476	20.81	16.28	24.4	Hexachlorobutadiene
4.150	-0.002	285199	4.686	-0.006	439861	20.62	20.34	1.4	Hexachlorobenzene
3.798	-0.002	418562	4.191	-0.005	665289	39.77	39.86	0.2	Tetrachloro-m-xylene
9.316	-0.002	277301	10.418	-0.011	352243	39.58	40.56	2.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

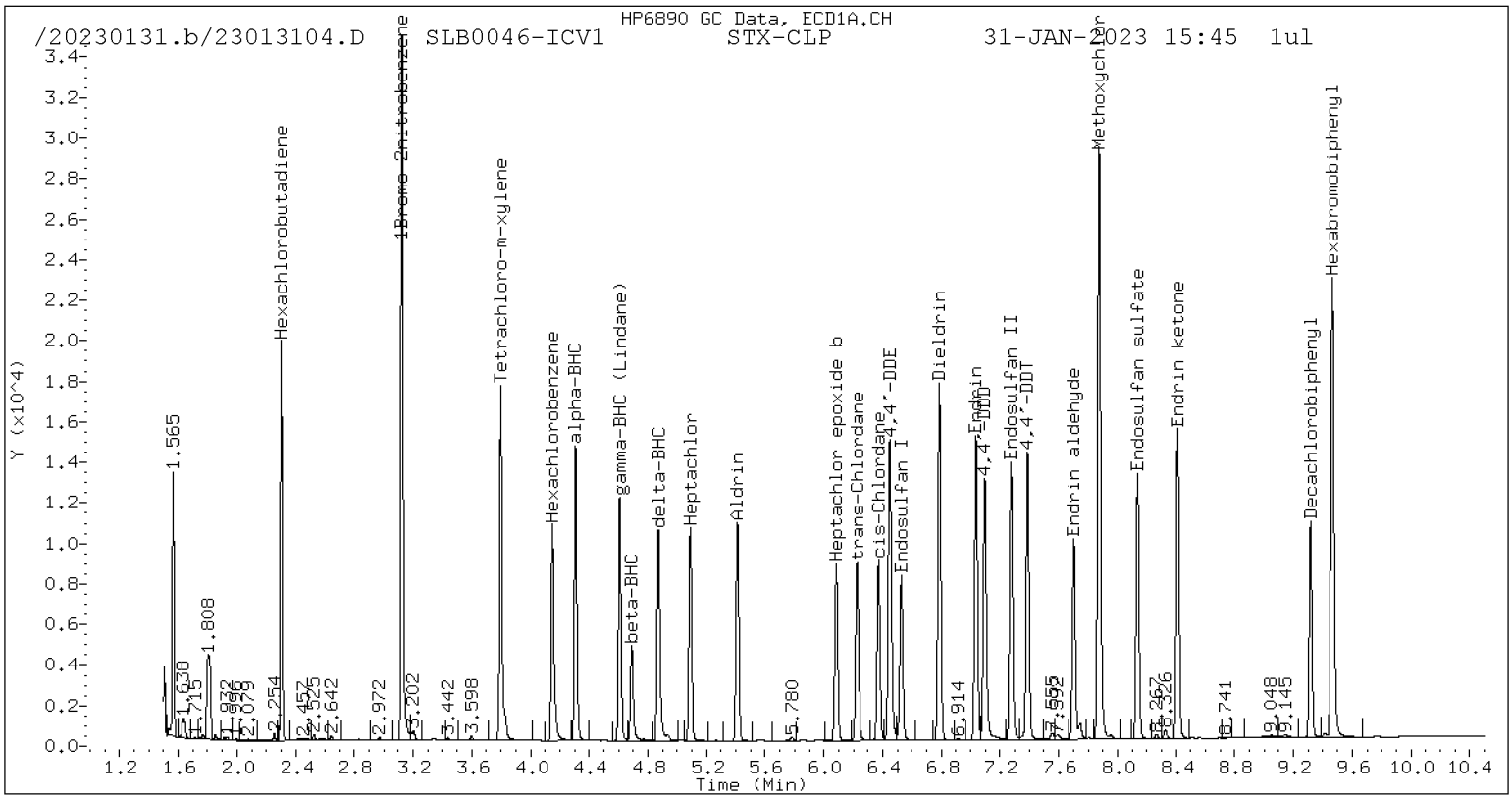
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	773823	15.1
Hexabromobiphenyl	609723	691463	13.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1185819	17.8
Hexabromobiphenyl	769764	785814	2.1

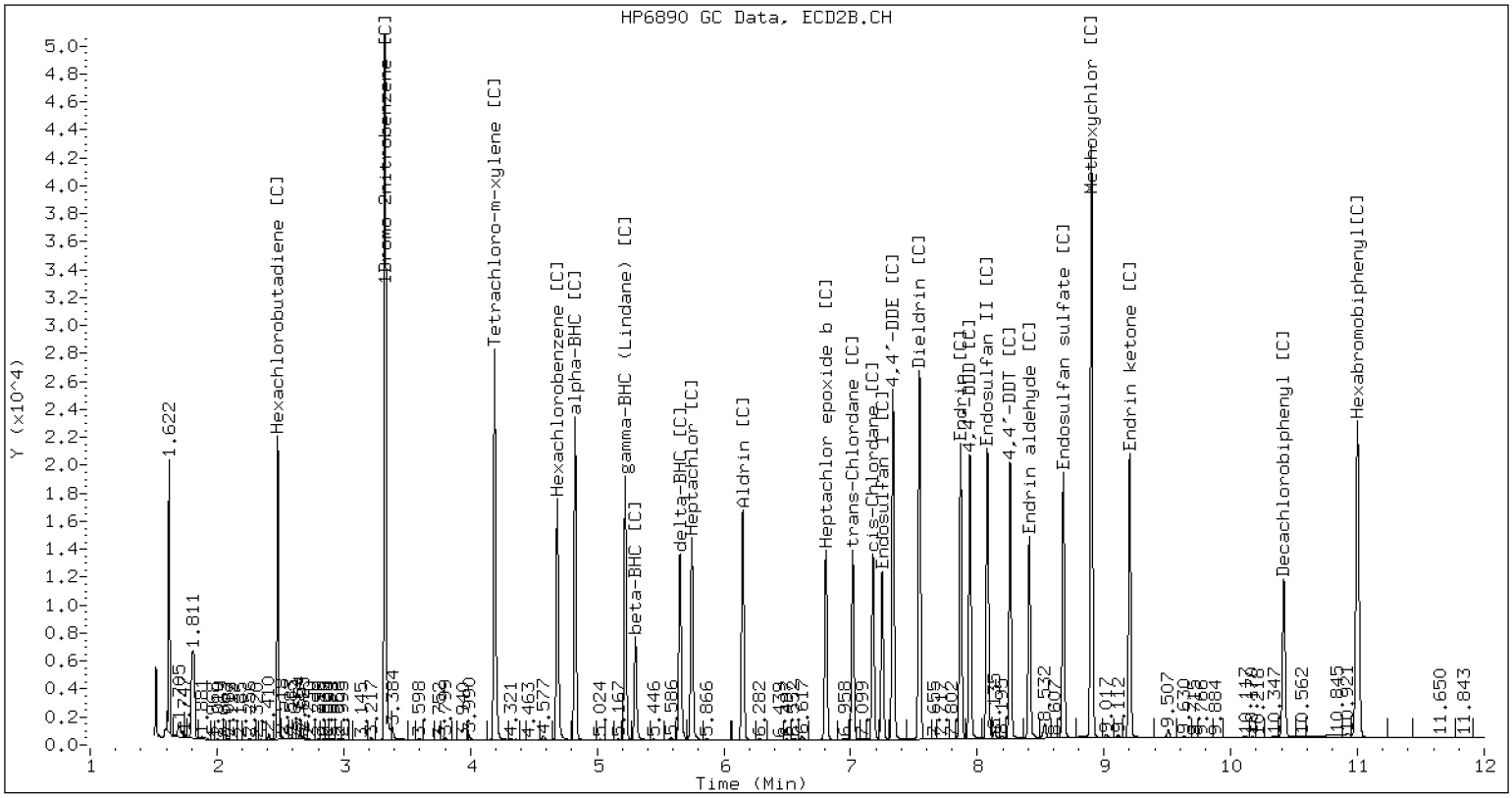
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230131.b/B20230131.b/23013104.D SLB0046-ICV1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23020903.D	Calibration Date:	12/14/2022
Sequence:	SLB0156	Injection Date:	02/09/23
Lab Sample ID:	SLB0156-ICV1	Injection Time:	20:06
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Hexachlorobenzene	A	20.000	20.9	1.4298940	1.4935180		4.4	+/-20
Hexachlorobenzene [2C]	A	20.000	20.5	1.4591090	1.4966290		2.6	+/-20
Decachlorobiphenyl	A	40.000	40.7	0.8105886	0.8252770		1.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.6	0.8841805	0.8749715		-1.0	+/-20
Tetrachlorometaxylene	A	40.000	36.4	1.0879510	0.9889924		-9.1	+/-20
Tetrachlorometaxylene [2C]	A	40.000	40.1	1.1261070	1.1300490		0.4	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230209.b/23020903.D
Data file 2: /20230209.b/B20230209.b/23020903.D
Method: \20230209.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: SEQ-ICV1
Client ID:
Injection Date: 09-FEB-2023 20:06
Report Date: 02/11/2023 06:17
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.300	-0.010	306244	4.816	-0.016	493208	22.56	22.35	0.9	alpha-BHC
4.682	-0.011	120773	5.292	-0.017	189765	23.10	22.62	2.1	beta-BHC
4.865	-0.011	260979	5.643	-0.018	250366	23.52	13.78	52.3*	delta-BHC
4.600	-0.011	245387	5.211	-0.018	420688	20.85	22.47	7.5	gamma-BHC (Lindane)
5.081	-0.012	247565	5.735	-0.019	373107	23.64	22.00	7.2	Heptachlor
5.401	-0.013	261893	6.137	-0.021	425807	22.31	21.99	1.5	Aldrin
6.074	-0.015	224967	6.794	-0.020	355677	22.10	22.21	0.5	Heptachlor epoxide b
6.517	-0.014	222801	7.238	-0.020	306609	23.85	21.72	9.4	Endosulfan I
6.777	-0.014	416136	7.531	-0.020	657500	41.47	42.16	1.6	Dieldrin
6.440	-0.011	413841	7.323	-0.019	622296	44.42	43.51	2.1	4,4'-DDE
7.027	-0.014	347428	7.856	-0.020	491309	42.22	44.52	5.3	Endrin
7.265	-0.013	340096	8.068	-0.019	532631	45.91	47.09	2.5	Endosulfan II
7.088	-0.011	367052	7.931	-0.018	530760	49.51	49.45	0.1	4,4'-DDD
8.128	-0.013	328801	8.667	-0.019	483017	46.74	48.63	3.9	Endosulfan sulfate
7.378	-0.013	325866	8.248	-0.018	481588	43.50	46.48	6.6	4,4'-DDT
7.867	-0.010	747608	8.891	-0.018	970314	225.20	211.64	6.2	Methoxychlor
8.401	-0.013	384430	9.190	-0.019	507905	47.71	47.34	0.8	Endrin ketone
7.693	-0.013	269326	8.399	-0.019	356930	45.58	44.73	1.9	Endrin aldehyde
6.217	-0.013	232325	7.005	-0.020	350520	22.47	21.95	2.4	trans-Chlordane
6.363	-0.013	213673	7.165	-0.020	311151	20.61	19.92	3.4	cis-Chlordane
2.296	-0.007	278841	2.474	-0.008	277393	19.60	13.24	38.8	Hexachlorobutadiene
4.143	-0.009	263321	4.677	-0.016	411948	20.89	20.51	1.8	Hexachlorobenzene
3.791	-0.009	348737	4.183	-0.014	622093	36.36	40.14	9.9	Tetrachloro-m-xylene
9.307	-0.011	259007	10.405	-0.024	339548	40.72	39.58	2.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

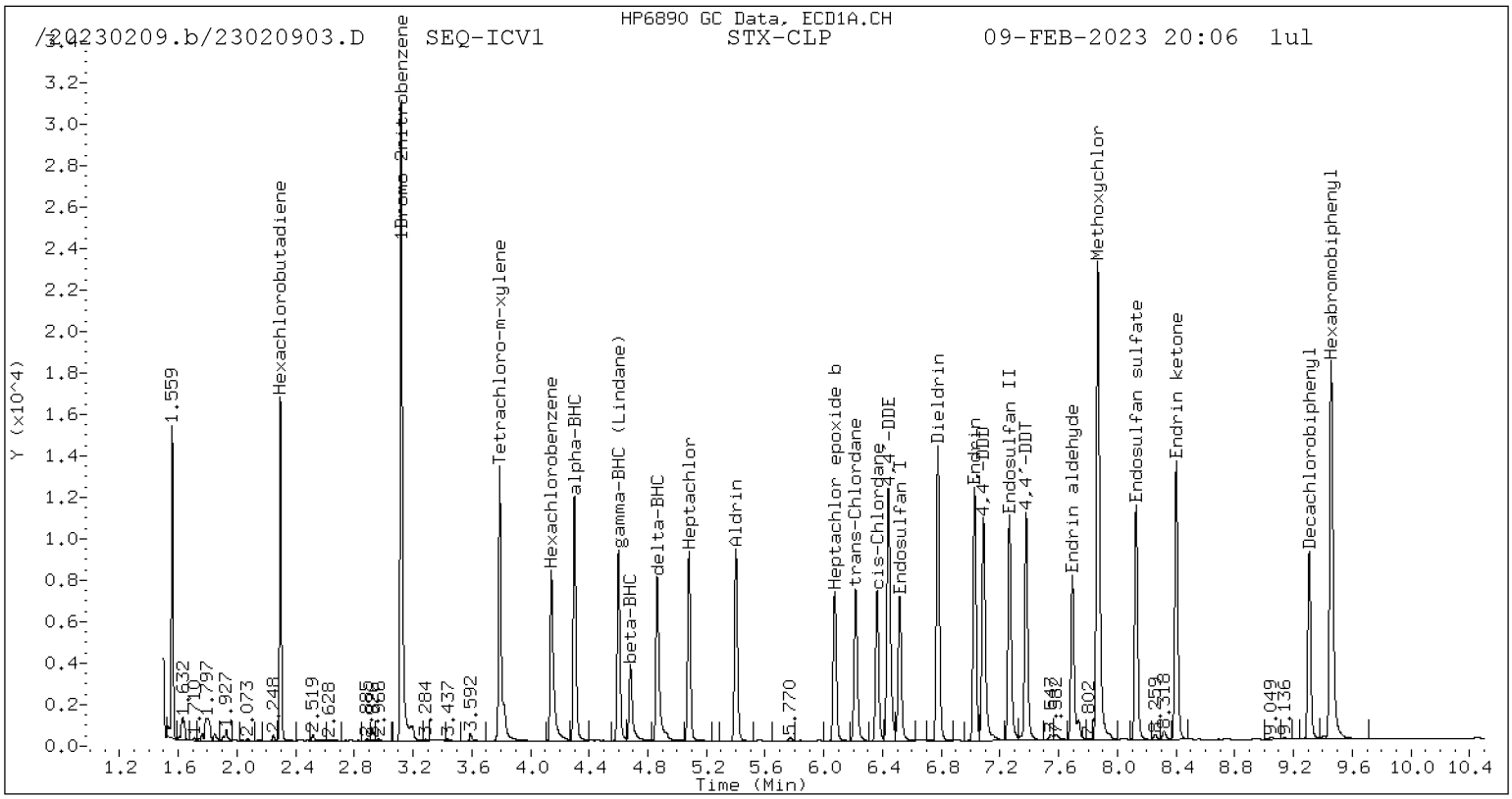
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	705237	4.9
Hexabromobiphenyl	609723	627685	2.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1101002	9.4
Hexabromobiphenyl	769764	776135	0.8

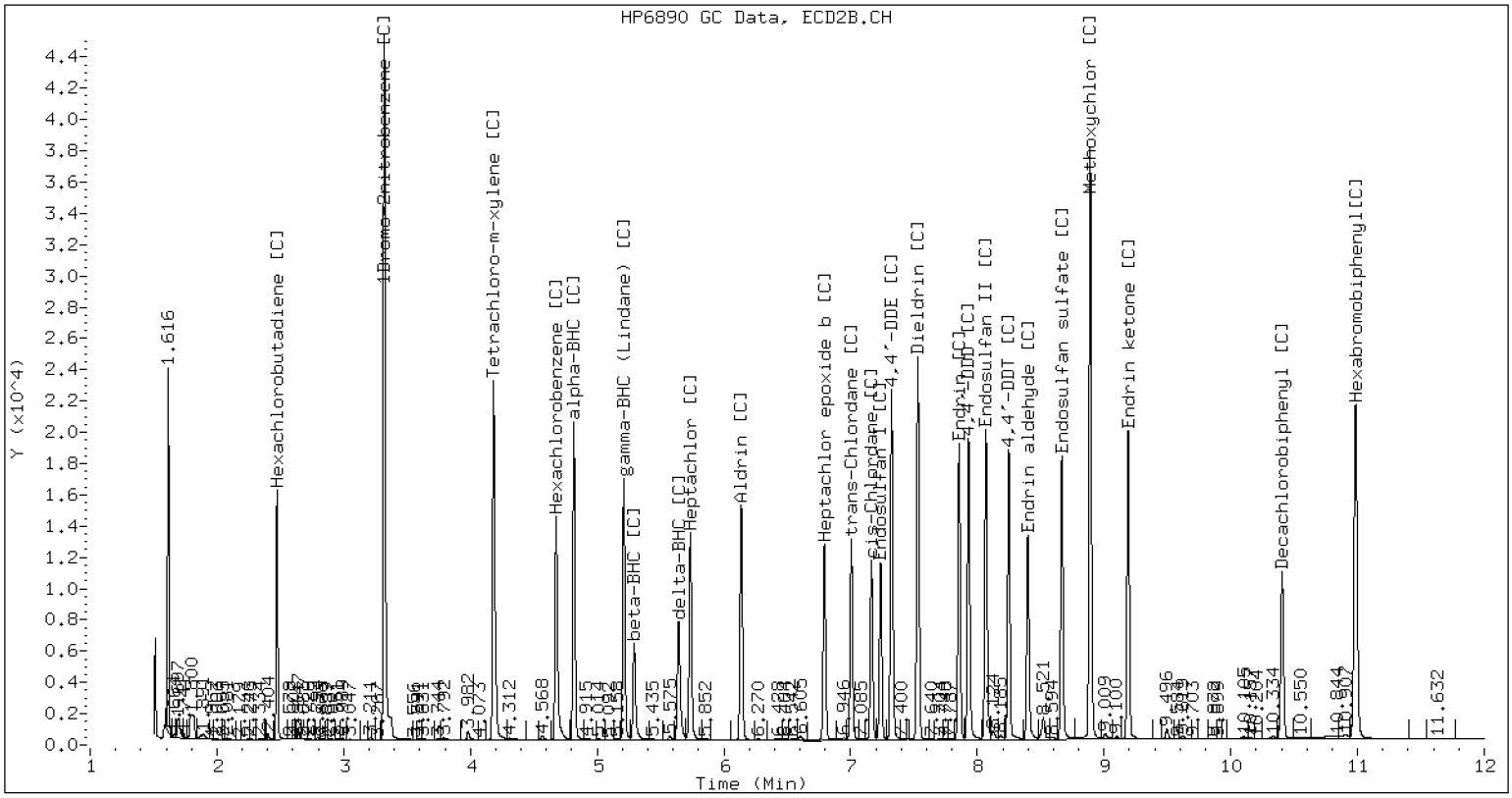
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230209.b/B20230209.b/23020903.D SEQ-ICV1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23013119.D	Calibration Date:	12/14/2022
Sequence:	SLB0046	Injection Date:	01/31/23
Lab Sample ID:	SLB0046-CCV1	Injection Time:	20:13
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	20.4	1.4298940	1.4613430		2.2	+/-20
Hexachlorobenzene [2C]	A	20.000	19.4	1.4591090	1.4143100		-3.1	+/-20
Decachlorobiphenyl	A	40.000	38.6	0.8105886	0.7815732		-3.6	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.5	0.8841805	0.8517637		-3.7	+/-20
Tetrachlorometaxylene	A	40.000	39.5	1.0879510	1.0751460		-1.2	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.2	1.1261070	1.0755440		-4.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013119.D
Data file 2: /20230131.b/B20230131.b/23013119.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: SLB0046-CCV1
Client ID:
Injection Date: 31-JAN-2023 20:13
Report Date: 02/03/2023 20:24
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2			
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag	
4.307	-0.003	326670	4.824	-0.008	529991	22.54	21.22	6.0	alpha-BHC	
4.690	-0.003	127237	5.300	-0.009	193333	22.81	20.36	11.3	beta-BHC	
4.873	-0.003	287577	5.651	-0.010	376730	24.28	18.31	28.0	delta-BHC	
4.608	-0.003	279903	5.220	-0.009	448196	22.28	21.15	5.2	gamma-BHC (Lindane)	
5.089	-0.004	266205	5.744	-0.010	405476	23.81	21.12	12.0	Heptachlor	
5.410	-0.004	276378	6.147	-0.011	424115	22.06	19.35	13.1	Aldrin	
6.084	-0.005	234577	6.803	-0.011	341041	21.59	18.82	13.8	Heptachlor epoxide b	N
6.527	-0.004	219796	7.247	-0.010	286826	22.05	17.95	20.5	Endosulfan I	N
6.787	-0.004	453215	7.541	-0.010	625108	42.32	35.42	17.8	Dieldrin	N
6.448	-0.003	427632	7.332	-0.010	591069	43.01	36.52	16.3	4,4'-DDE	N
7.037	-0.004	330347	7.865	-0.010	417157	38.08	38.02	0.2	Endrin	N
7.275	-0.003	372557	8.077	-0.010	485613	47.71	43.18	10.0	Endosulfan II	N
7.096	-0.003	367515	7.939	-0.010	479923	47.03	44.97	4.5	4,4'-DDD	N
8.137	-0.004	390937	8.675	-0.011	434818	52.73	44.03	18.0	Endosulfan sulfate	N
7.388	-0.003	361737	8.257	-0.009	449781	45.81	43.66	4.8	4,4'-DDT	N
7.875	-0.002	774813	8.899	-0.010	1009533	221.42	221.45	0.0	Methoxychlor	N
8.411	-0.004	389694	9.200	-0.010	494597	45.88	46.36	1.0	Endrin ketone	N
7.703	-0.004	288376	8.408	-0.010	349031	46.30	43.99	5.1	Endrin aldehyde	N
6.226	-0.004	237356	7.015	-0.011	330465	21.51	18.28	16.2	trans-Chlordane	N
6.372	-0.004	230997	7.175	-0.010	312410	20.88	17.67	16.6	cis-Chlordane	N
2.302	-0.001	312143	2.480	-0.002	380460	20.56	16.04	24.7	Hexachlorobutadiene	
4.151	-0.002	274990	4.684	-0.008	440588	20.44	19.39	5.3	Hexachlorobenzene	
3.799	-0.002	404634	4.190	-0.007	670110	39.53	38.20	3.4	Tetrachloro-m-xylene	
9.315	-0.003	258553	10.415	-0.014	328659	38.57	38.53	0.1	Decachlorobiphenyl	N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

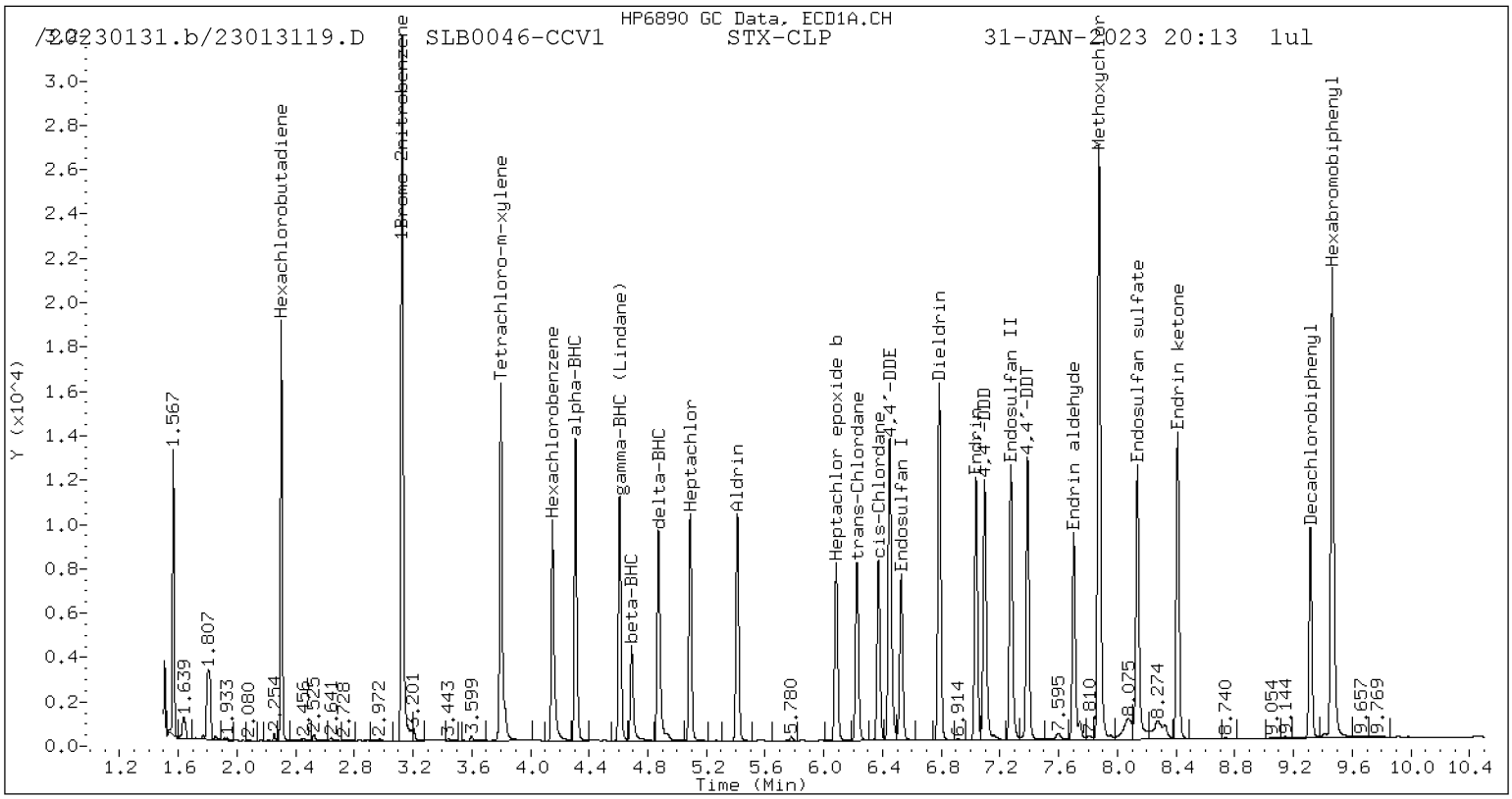
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	752705	11.9
Hexabromobiphenyl	609723	661622	8.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1246086	23.8
Hexabromobiphenyl	769764	771714	0.3

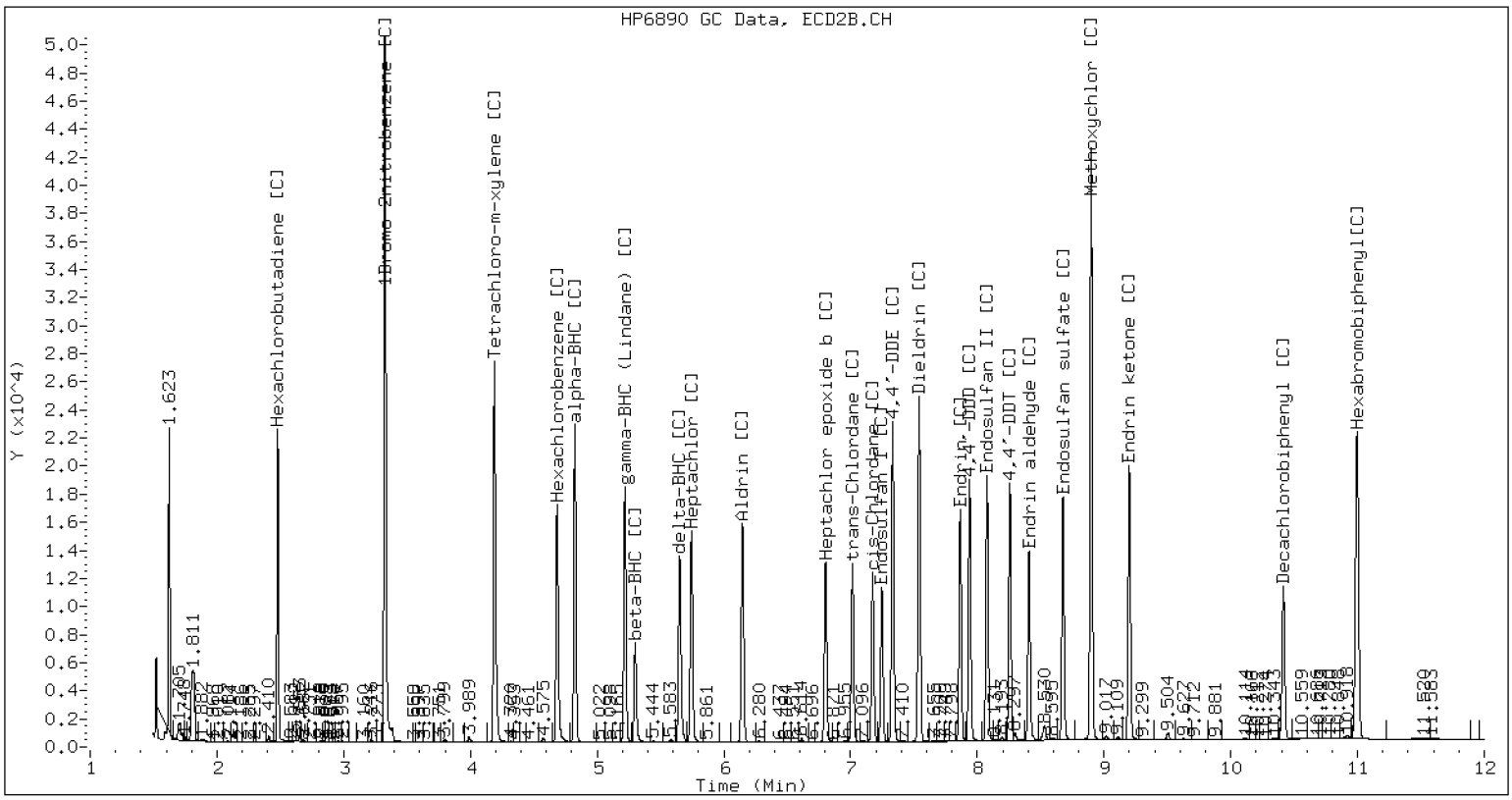
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

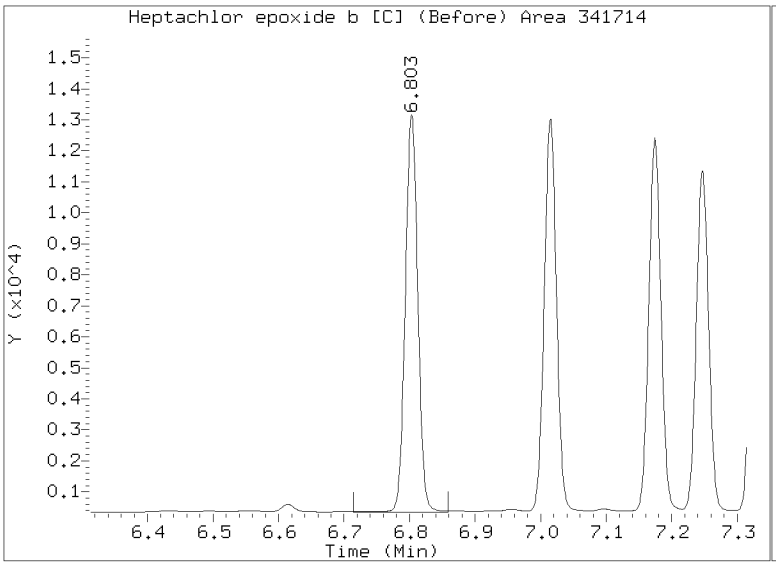
/20230131.b/B20230131.b/23013119.D SLB0046-CCV1 CLP2

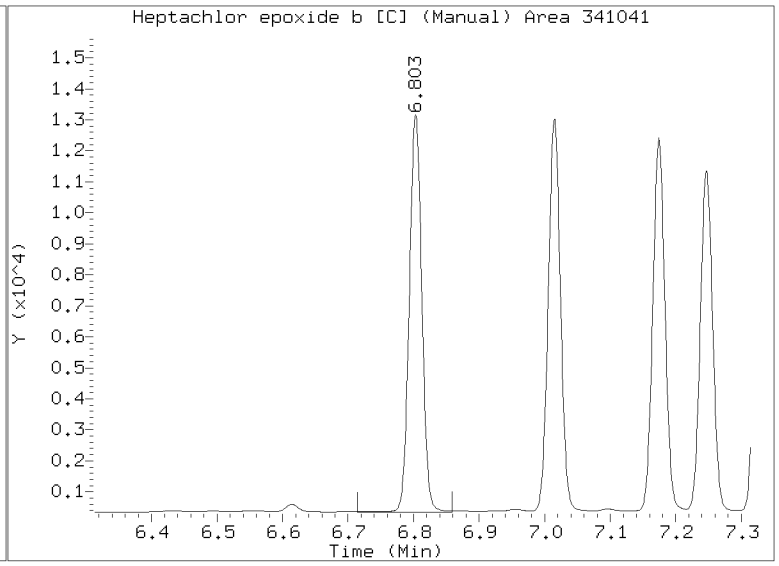


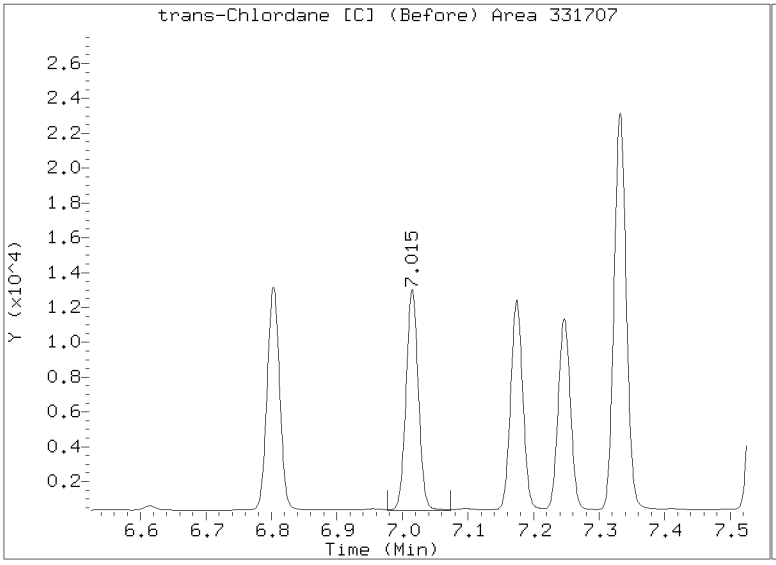
CLP-2 Manual Integration: YES

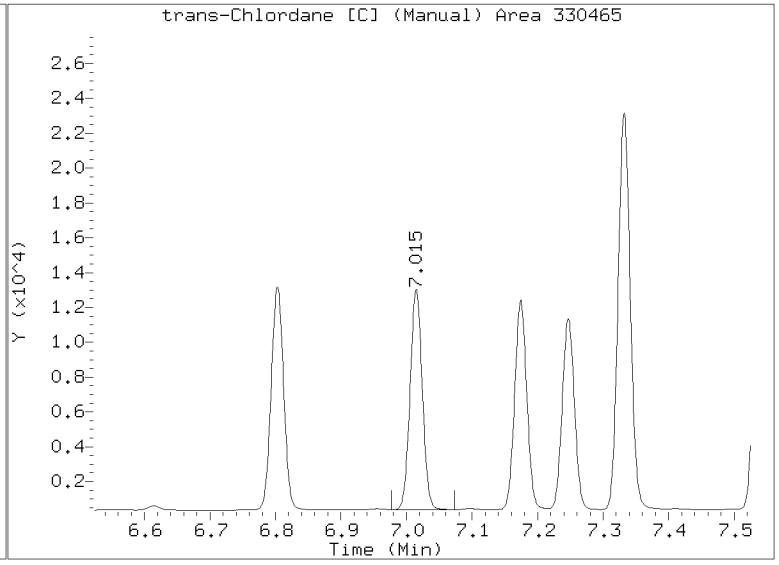
Manual Peak Adjustment Report, CLP-2

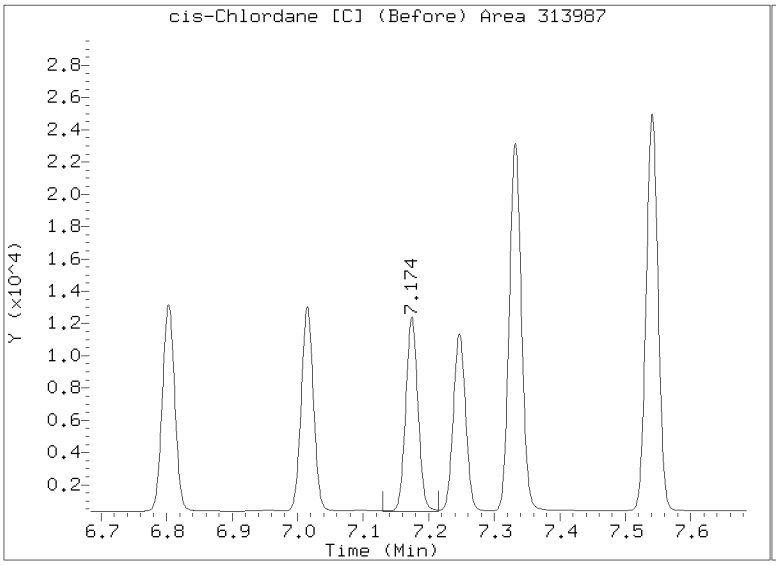
Datafile: /20230131.b/B20230131.b/23013119.D
Injection Date: 31-JAN-2023 20:13
Lab ID:SLB0046-CCV1 Client ID:

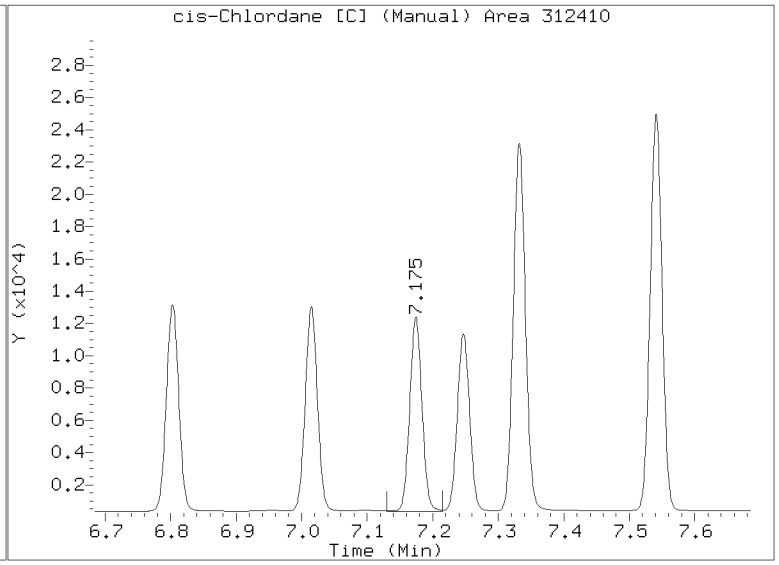






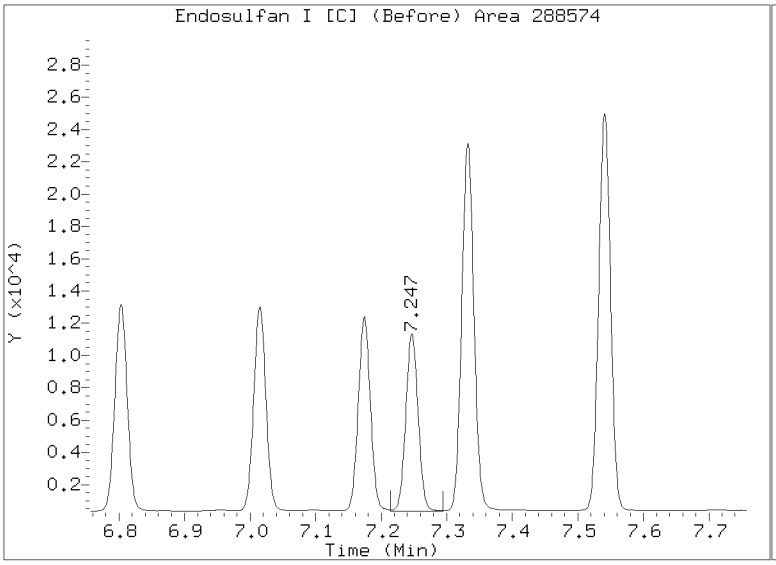


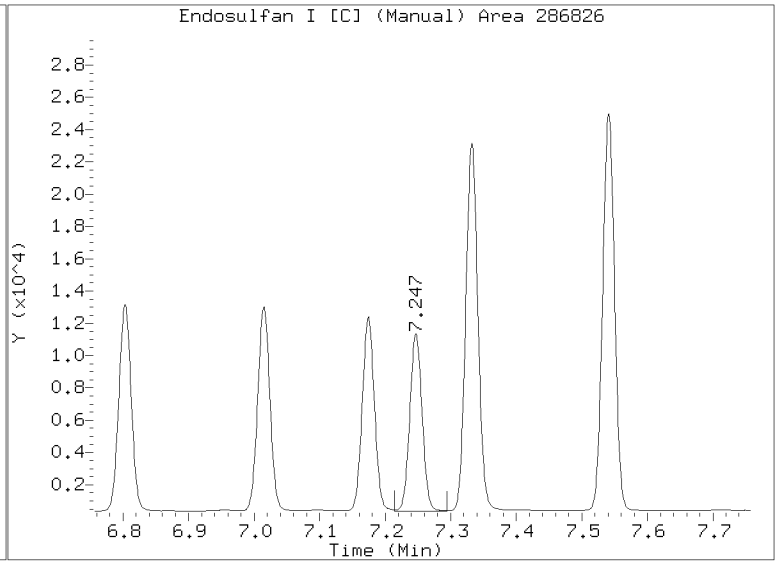


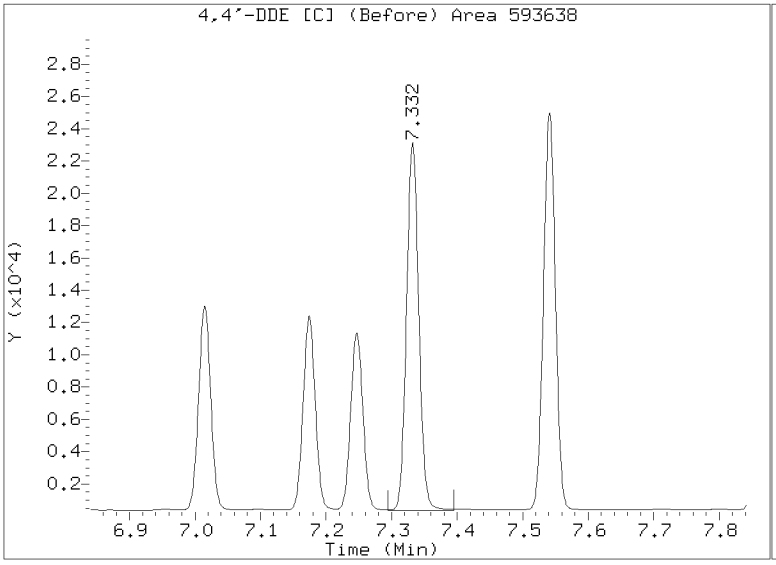


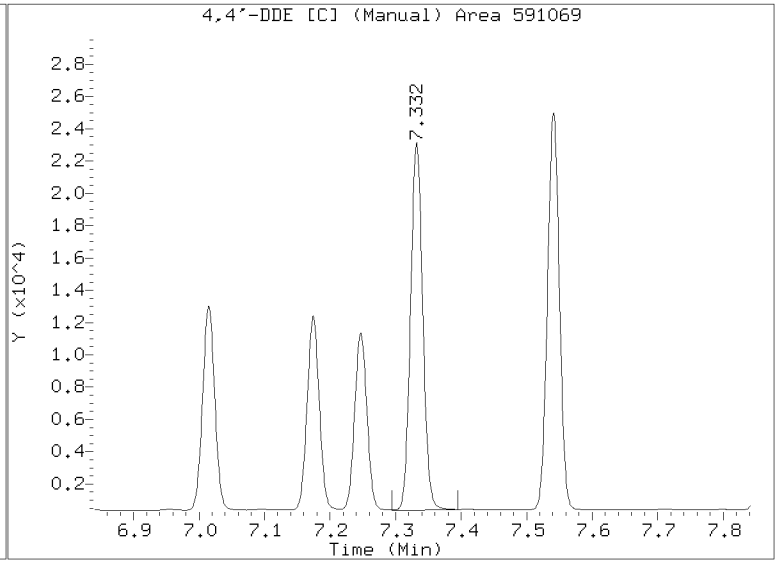
Manual Peak Adjustment Report, CLP-2

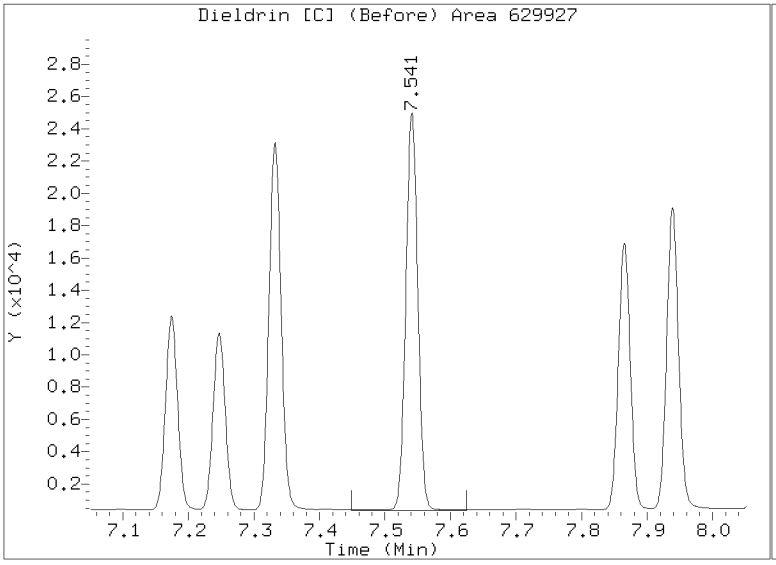
Datafile: /20230131.b/B20230131.b/23013119.D
Injection Date: 31-JAN-2023 20:13
Lab ID:SLB0046-CCV1 Client ID:

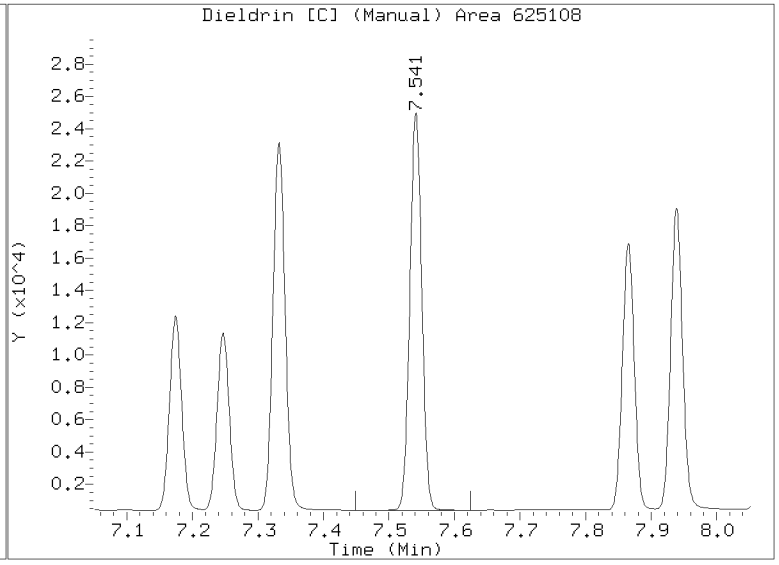






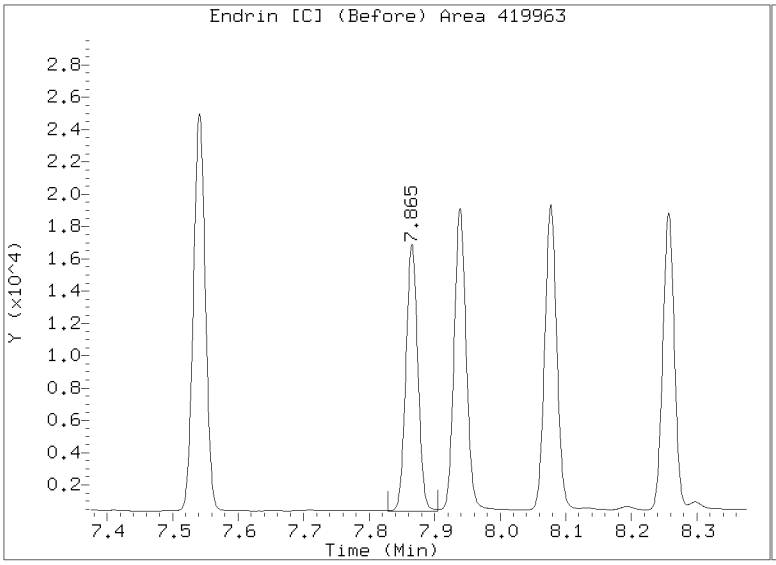


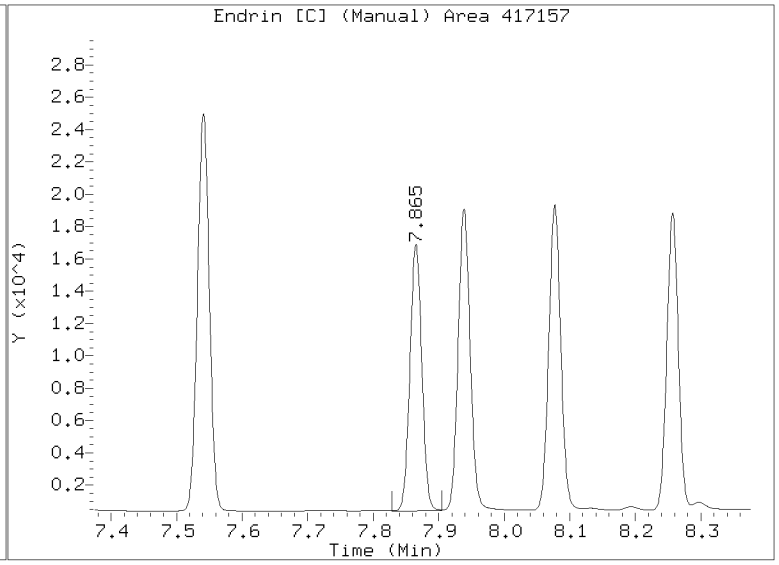


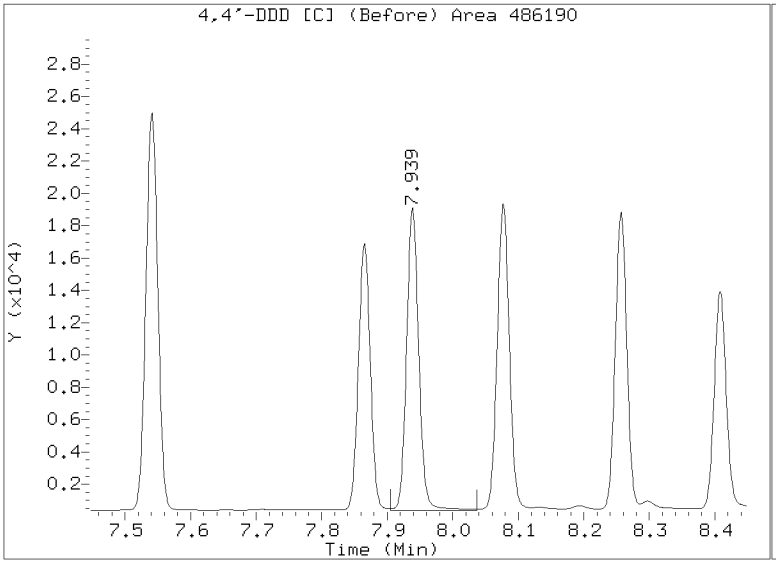


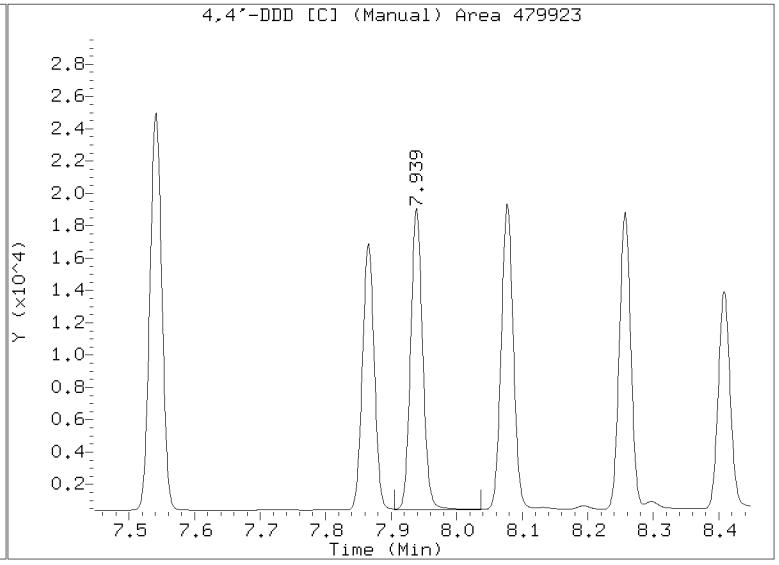
Manual Peak Adjustment Report, CLP-2

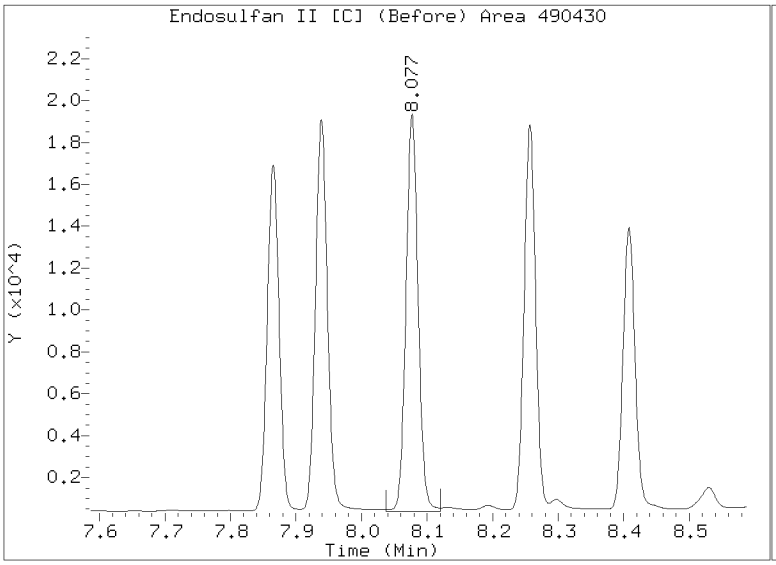
Datafile: /20230131.b/B20230131.b/23013119.D
Injection Date: 31-JAN-2023 20:13
Lab ID:SLB0046-CCV1 Client ID:

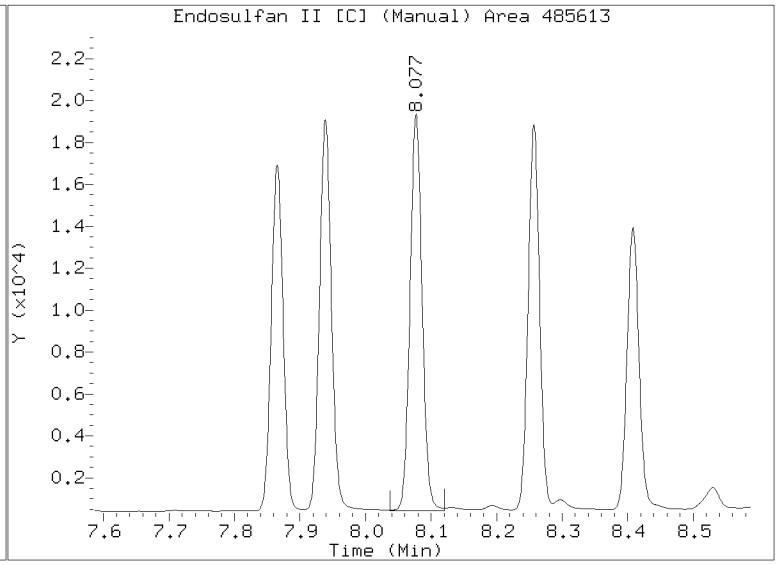






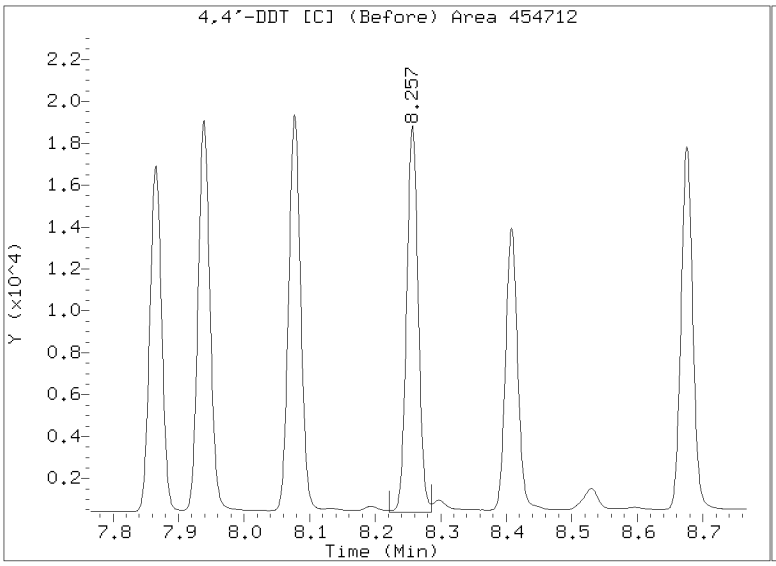


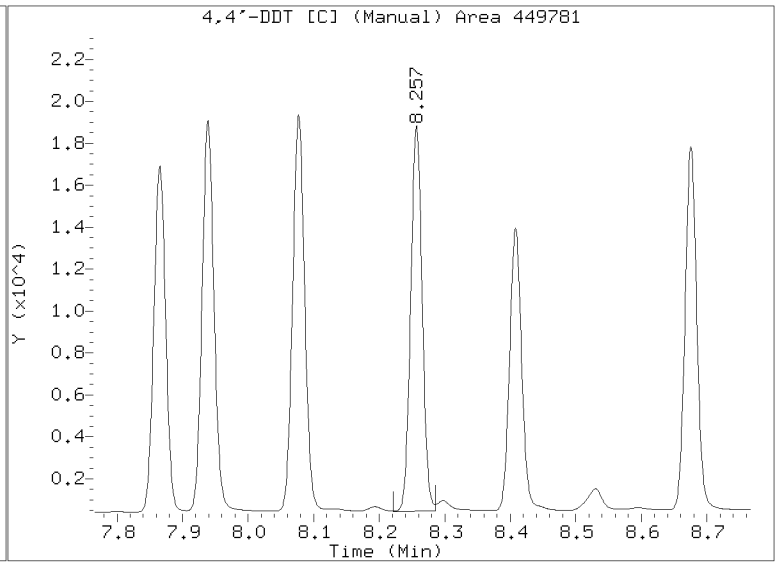


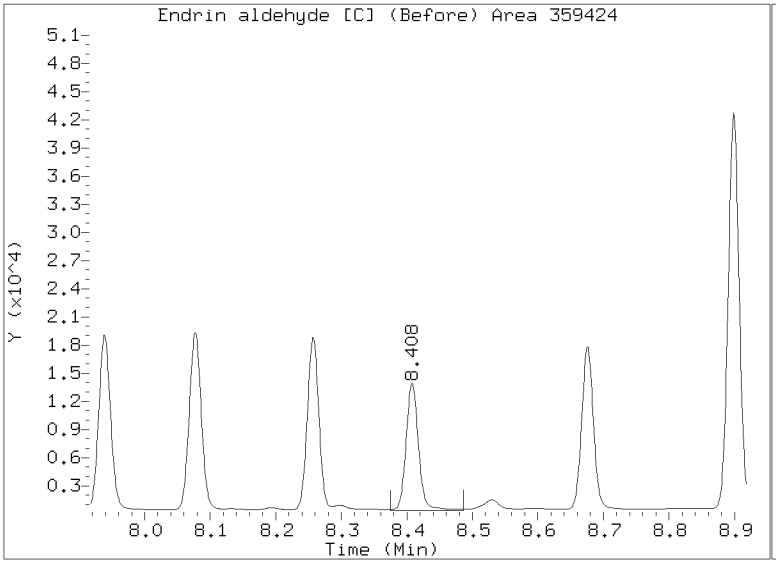


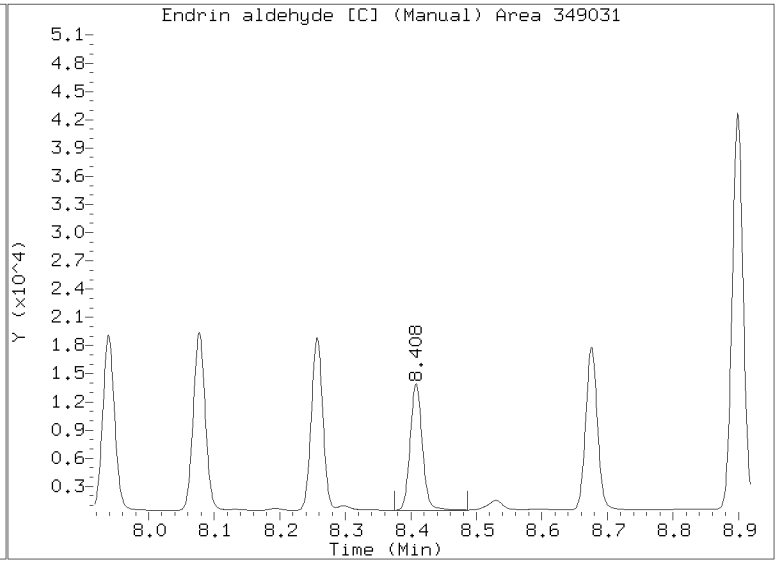
Manual Peak Adjustment Report, CLP-2

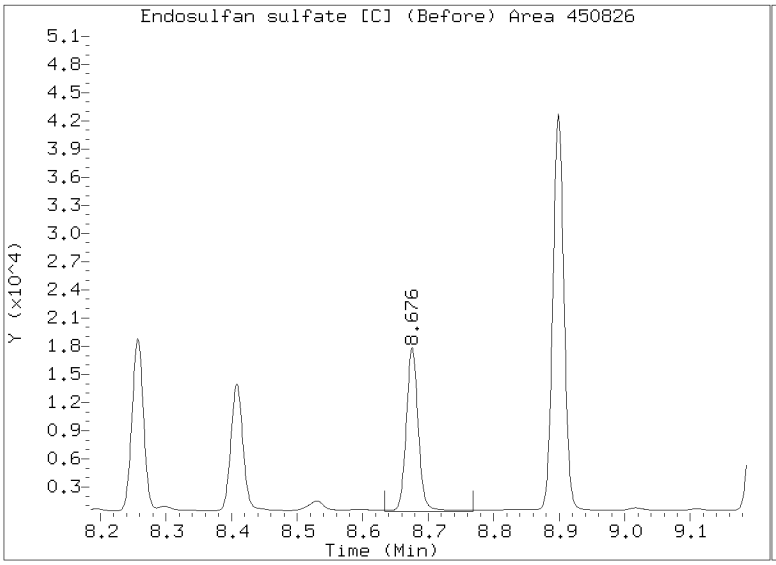
Datafile: /20230131.b/B20230131.b/23013119.D
Injection Date: 31-JAN-2023 20:13
Lab ID:SLB0046-CCV1 Client ID:

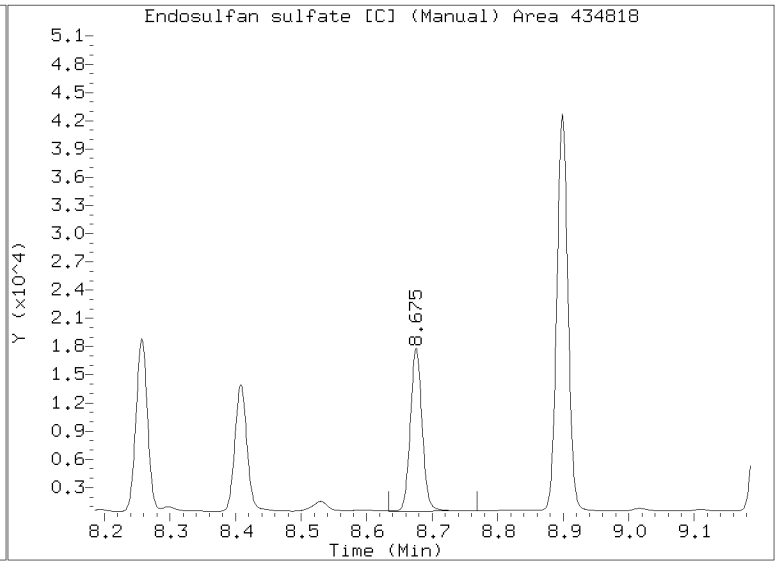






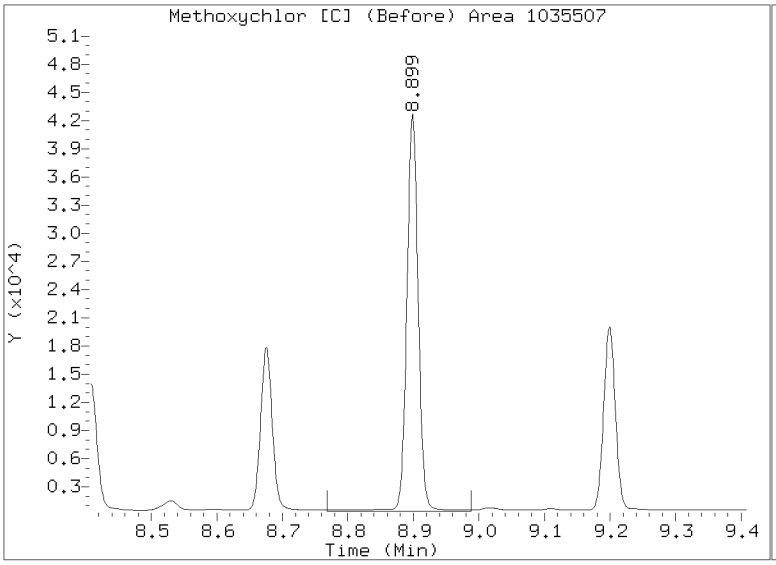


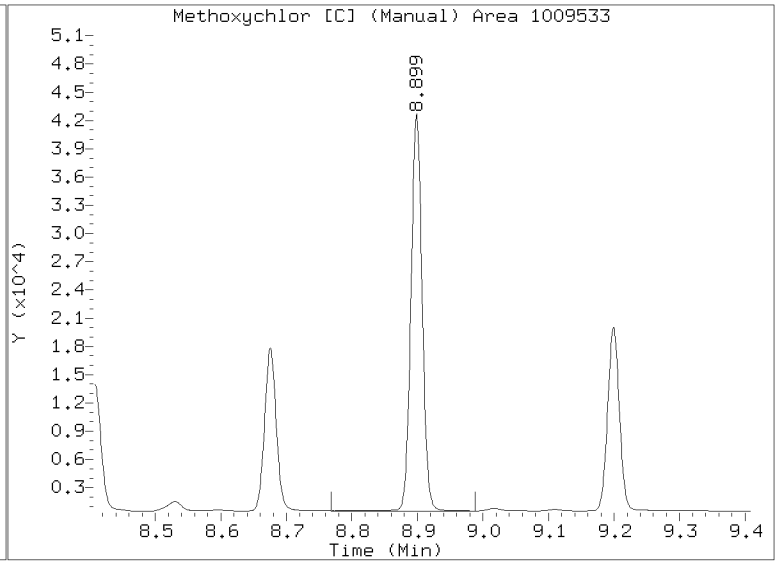


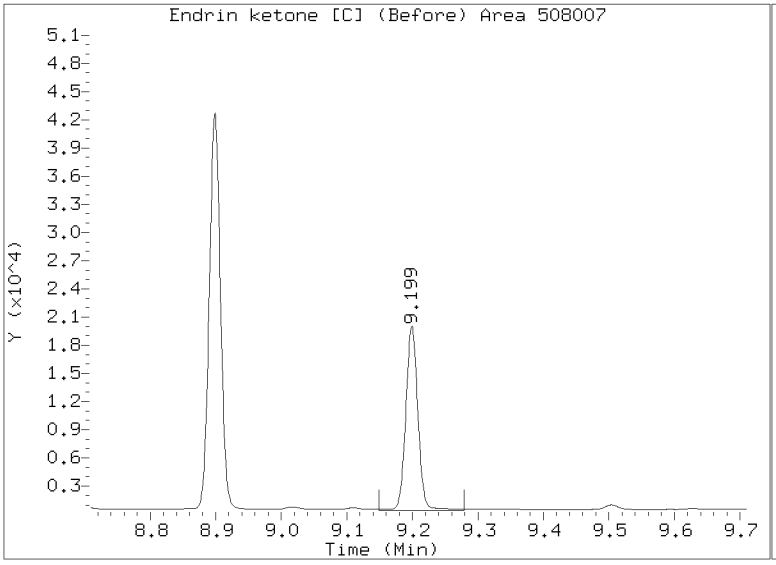


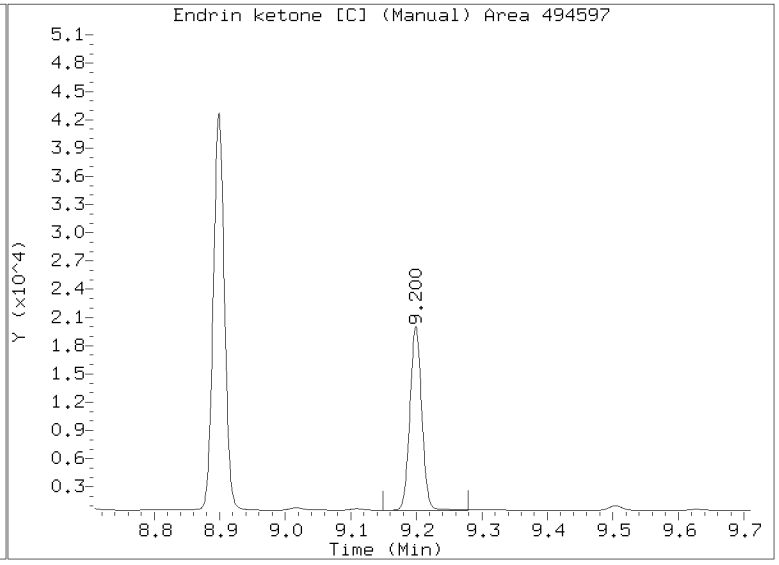
Manual Peak Adjustment Report, CLP-2

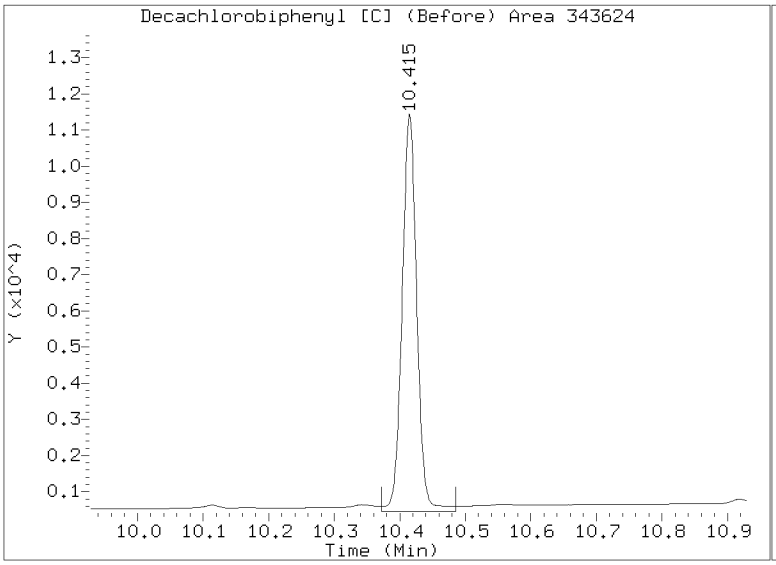
Datafile: /20230131.b/B20230131.b/23013119.D
Injection Date: 31-JAN-2023 20:13
Lab ID:SLB0046-CCV1 Client ID:

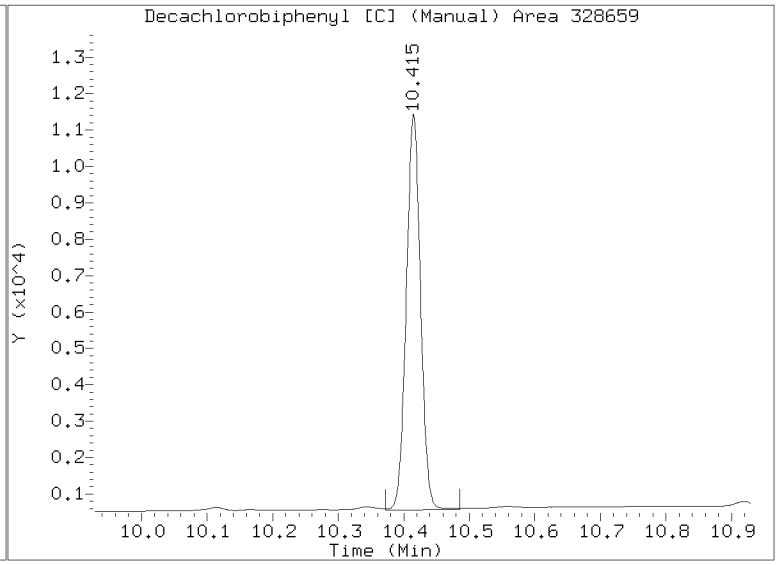






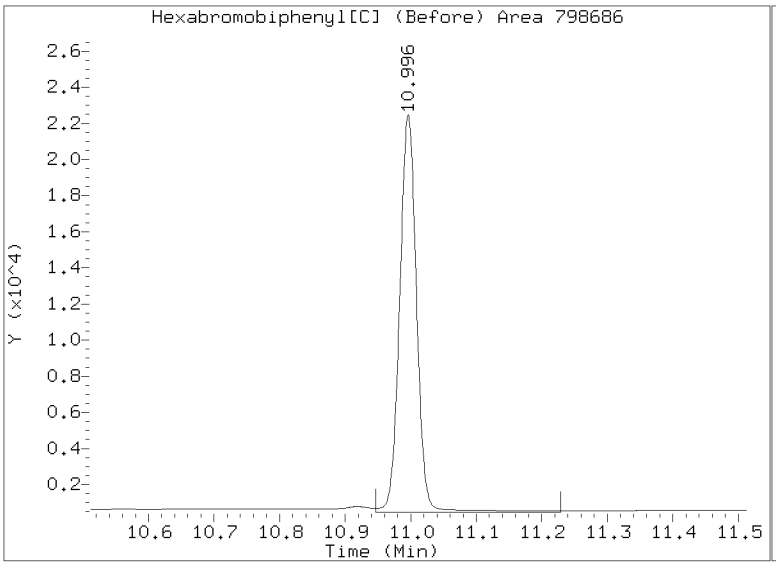


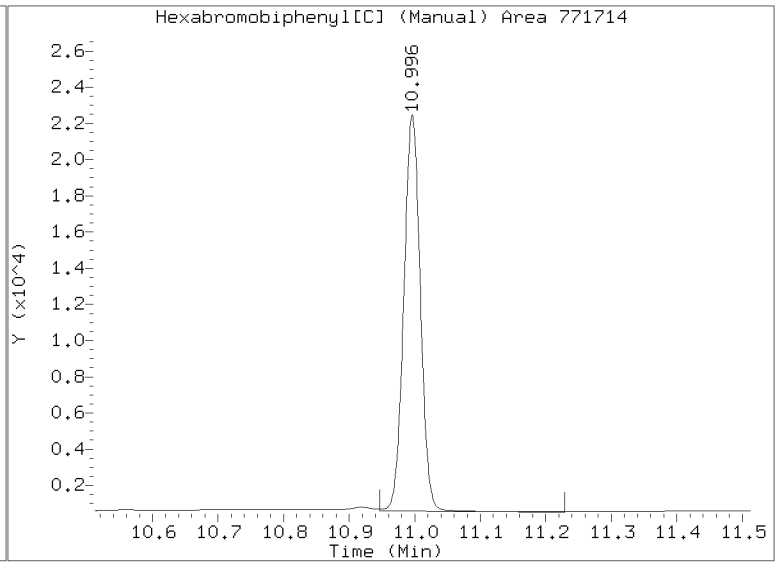




Manual Peak Adjustment Report, CLP-2

Datafile: /20230131.b/B20230131.b/23013119.D
Injection Date: 31-JAN-2023 20:13
Lab ID:SLB0046-CCV1 Client ID:





Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23013133.D	Calibration Date:	12/14/2022
Sequence:	SLB0046	Injection Date:	02/01/23
Lab Sample ID:	SLB0046-CCV2	Injection Time:	00:24
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	20.8	1.4298940	1.4886980		4.1	+/-20
Hexachlorobenzene [2C]	A	20.000	19.4	1.4591090	1.4151740		-3.0	+/-20
Decachlorobiphenyl	A	40.000	38.1	0.8105886	0.7729838		-4.6	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.6	0.8841805	0.8530642		-3.5	+/-20
Tetrachlorometaxylene	A	40.000	40.3	1.0879510	1.0954370		0.7	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.2	1.1261070	1.0741070		-4.6	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013133.D
Data file 2: /20230131.b/B20230131.b/23013133.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: SLB0046-CCV2
Client ID:
Injection Date: 01-FEB-2023 00:24
Report Date: 02/03/2023 20:25
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2			
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag	
4.308	-0.003	319886	4.825	-0.008	531509	22.70	21.24	6.7	alpha-BHC	
4.690	-0.002	125023	5.300	-0.009	193546	23.04	20.34	12.5	beta-BHC	
4.873	-0.002	281062	5.651	-0.010	375420	24.40	18.21	29.1	delta-BHC	
4.608	-0.003	273940	5.220	-0.009	449026	22.42	21.14	5.9	gamma-BHC (Lindane)	
5.089	-0.004	260963	5.745	-0.010	403206	24.00	20.96	13.6	Heptachlor	
5.410	-0.004	273044	6.147	-0.011	415255	22.41	18.90	17.0	Aldrin	
6.084	-0.004	230337	6.803	-0.011	336936	21.80	18.55	16.1	Heptachlor epoxide b	N
6.527	-0.003	217688	7.247	-0.010	281722	22.45	17.60	24.3	Endosulfan I	N
6.787	-0.004	445637	7.542	-0.010	620856	42.79	35.10	19.7	Dieldrin	N
6.450	-0.002	418166	7.332	-0.009	579030	43.24	35.69	19.1	4,4'-DDE	N
7.037	-0.004	295054	7.866	-0.010	368723	34.39	32.74	4.9	Endrin	N
7.275	-0.003	366639	8.077	-0.010	482566	47.47	41.81	12.7	Endosulfan II	N
7.097	-0.003	360518	7.939	-0.010	475770	46.64	43.44	7.1	4,4'-DDD	N
8.138	-0.003	373417	8.676	-0.010	444242	50.92	43.83	15.0	Endosulfan sulfate	N
7.388	-0.003	348140	8.257	-0.010	448899	44.57	42.46	4.8	4,4'-DDT	N
7.875	-0.002	746171	8.899	-0.010	1008824	215.57	215.63	0.0	Methoxychlor	N
8.411	-0.003	389397	9.199	-0.011	505444	46.35	46.17	0.4	Endrin ketone	N
7.704	-0.003	289752	8.408	-0.010	361641	47.03	44.42	5.7	Endrin aldehyde	N
6.226	-0.004	233021	7.015	-0.010	326814	21.72	18.04	18.5	trans-Chlordane	N
6.372	-0.003	227065	7.175	-0.010	307544	21.10	17.35	19.5	cis-Chlordane	N
2.303	-0.001	309268	2.480	-0.002	383080	20.95	16.12	26.1	Hexachlorobutadiene	
4.151	-0.002	272431	4.685	-0.008	441833	20.82	19.40	7.1	Hexachlorobenzene	
3.798	-0.002	400929	4.190	-0.006	670696	40.28	38.15	5.4	Tetrachloro-m-xylene	
9.316	-0.002	252940	10.415	-0.014	337810	38.14	38.59	1.2	Decachlorobiphenyl	N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

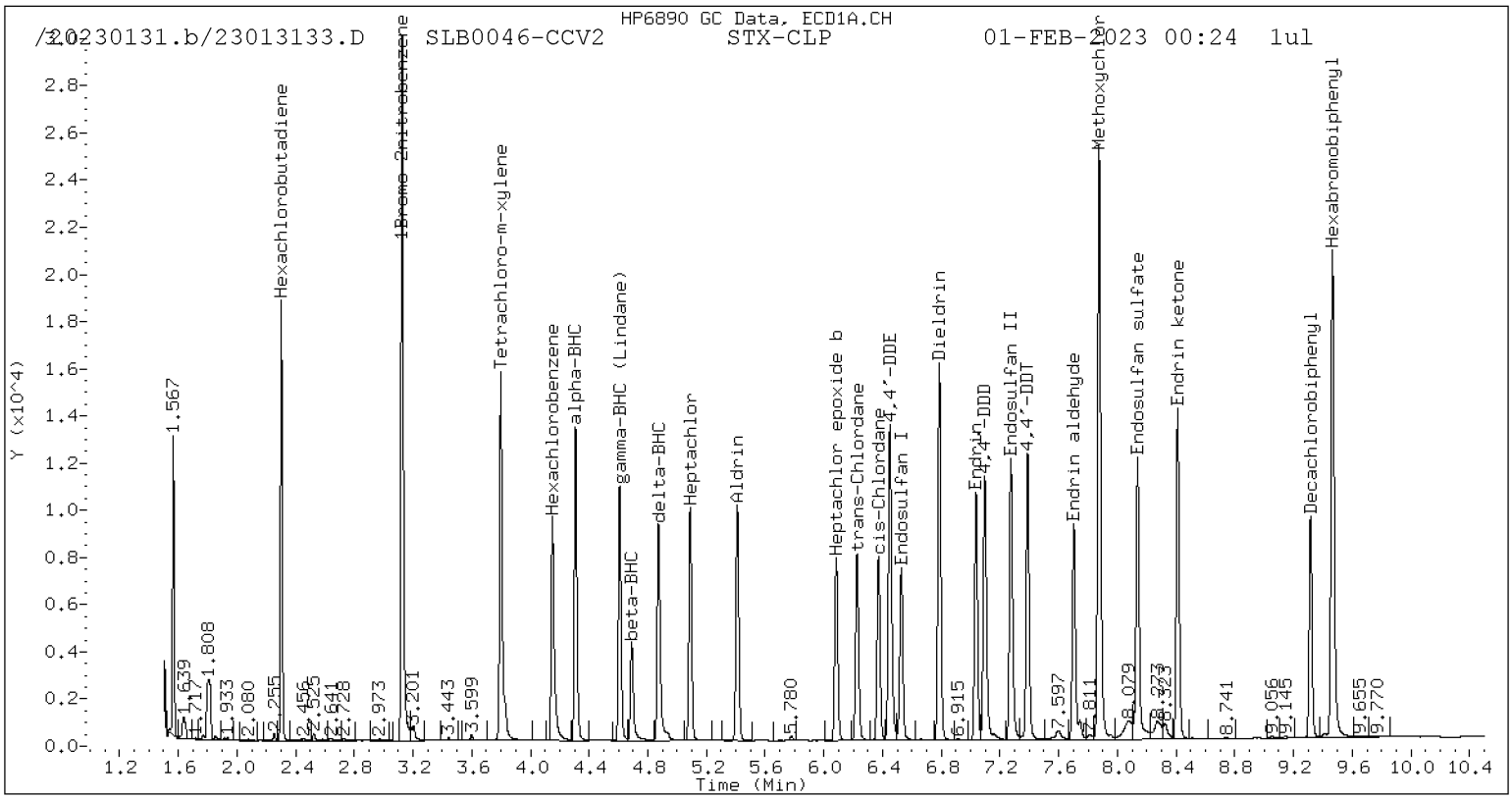
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	731998	8.9
Hexabromobiphenyl	609723	654451	7.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1248844	24.1
Hexabromobiphenyl	769764	791992	2.9

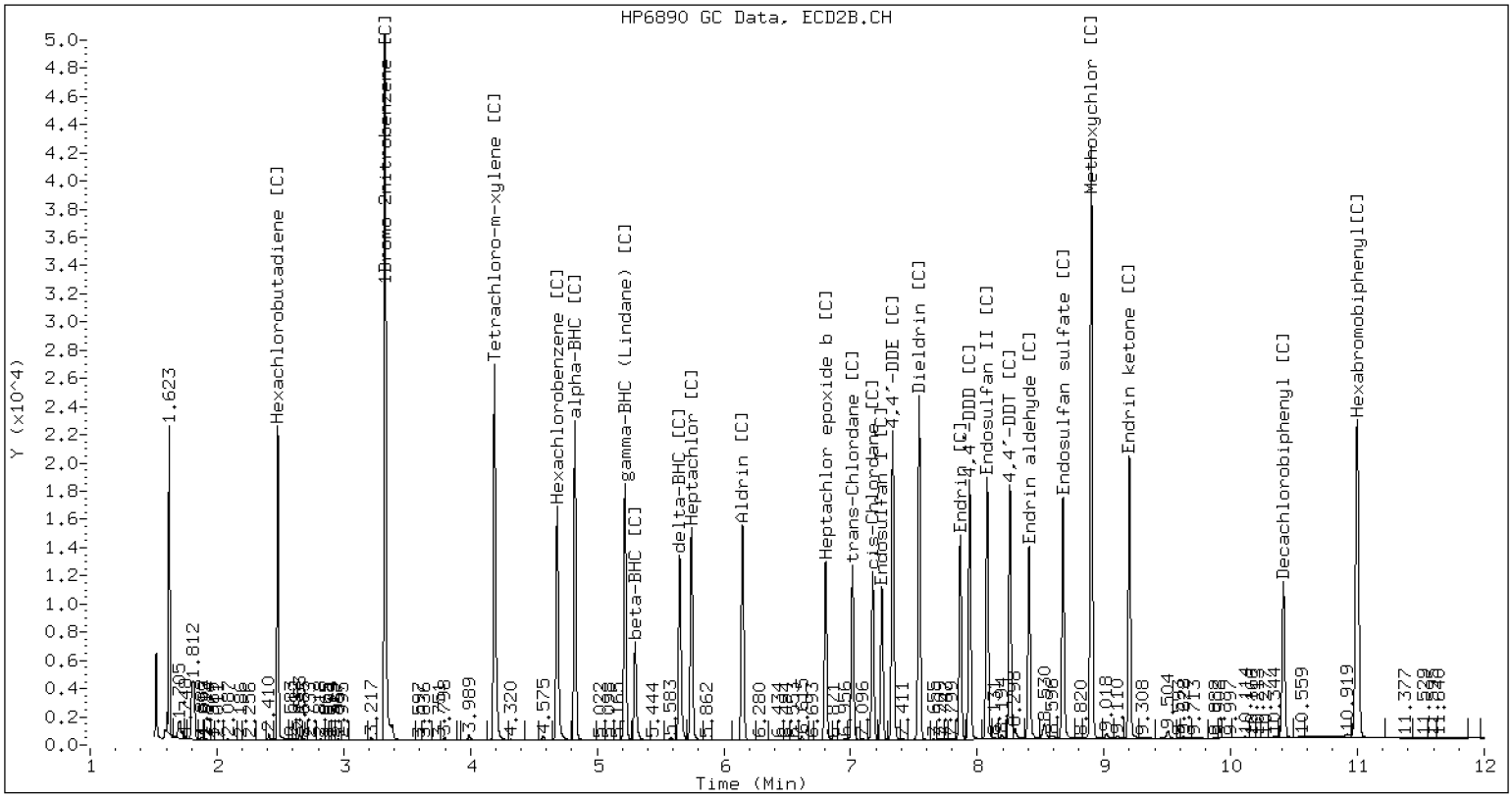
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

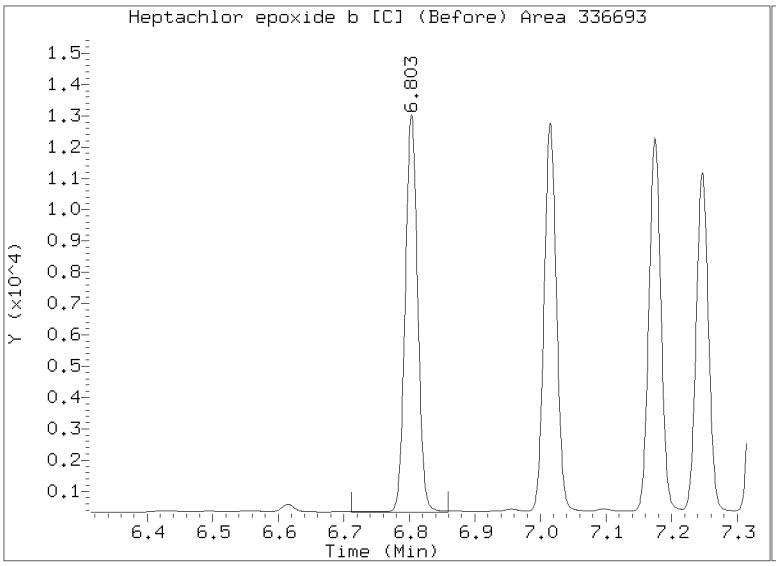
/20230131.b/B20230131.b/23013133.D SLB0046-CCV2 CLP2

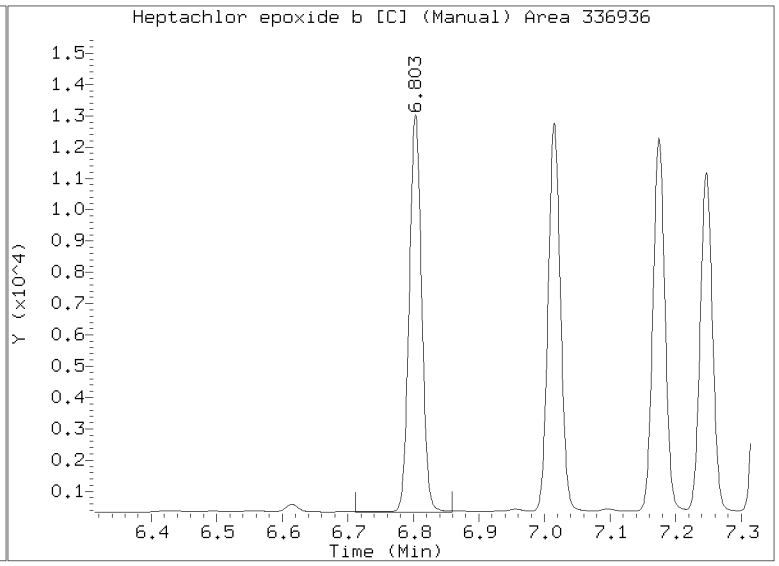


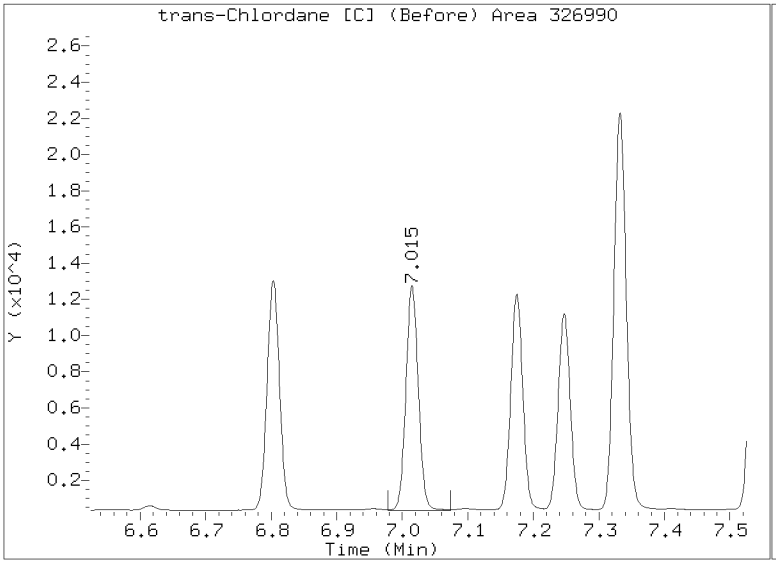
CLP-2 Manual Integration: YES

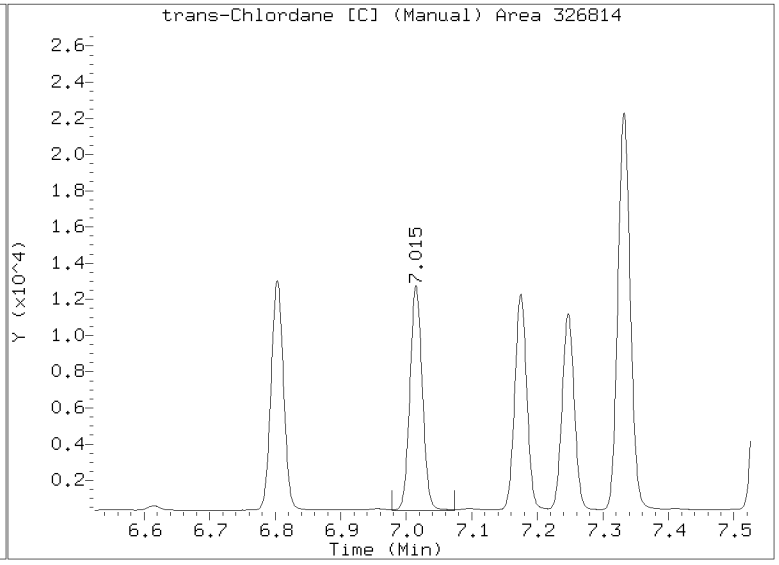
Manual Peak Adjustment Report, CLP-2

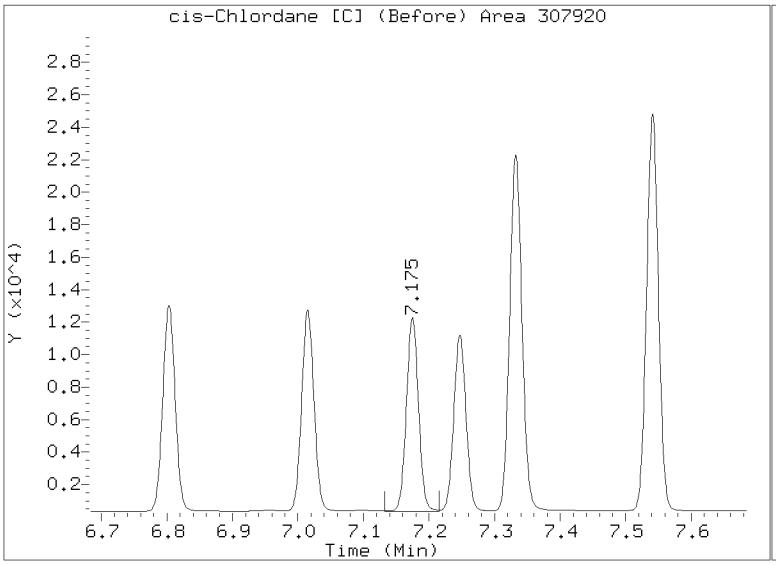
Datafile: /20230131.b/B20230131.b/23013133.D
Injection Date: 01-FEB-2023 00:24
Lab ID:SLB0046-CCV2 Client ID:

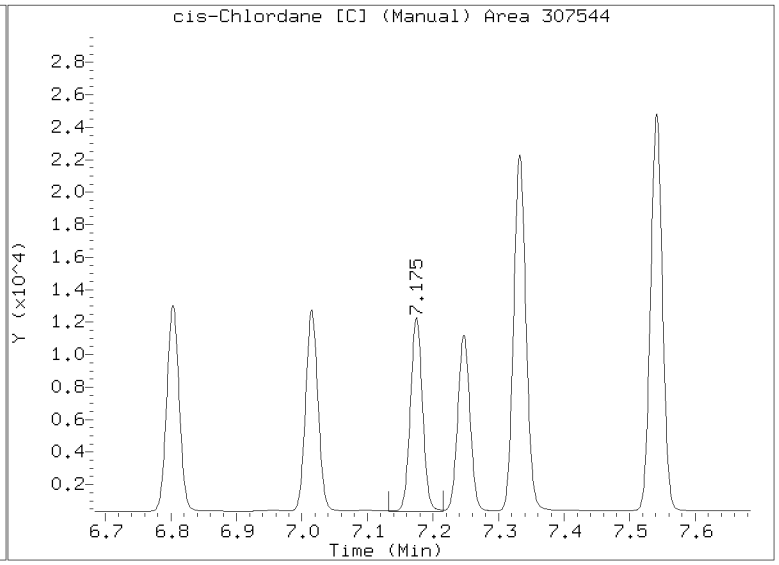












Manual Peak Adjustment Report, CLP-2

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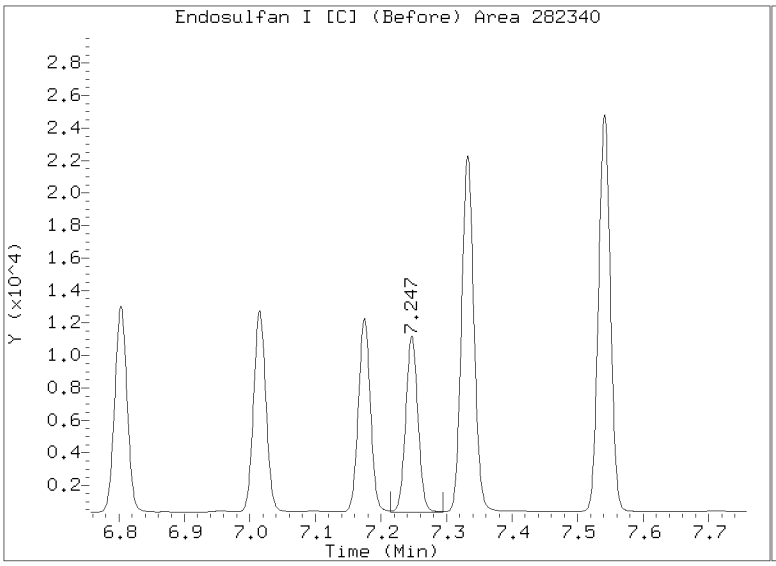
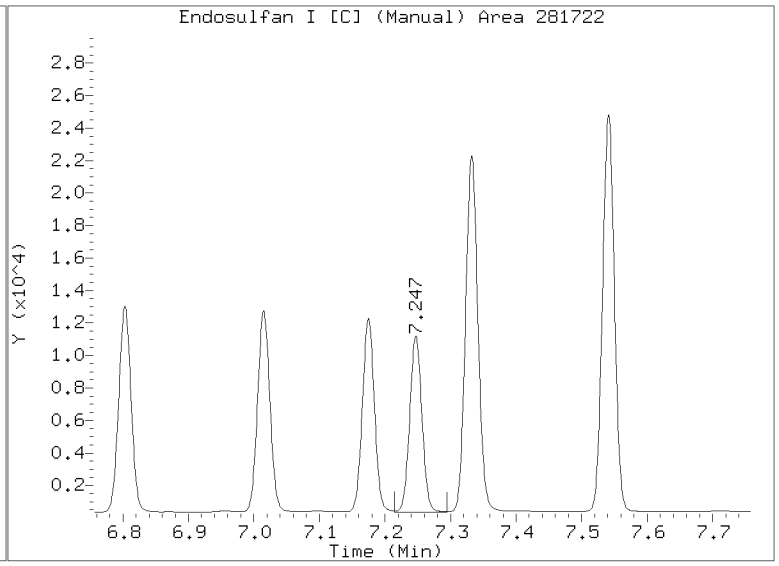
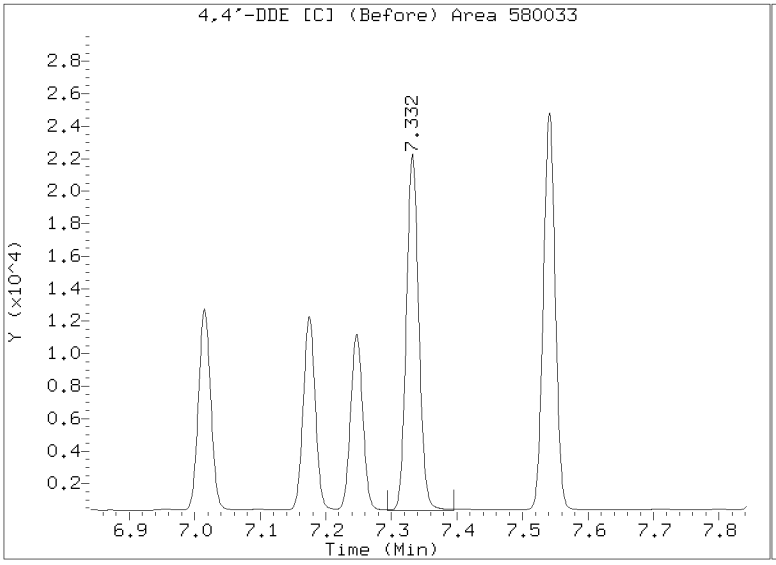
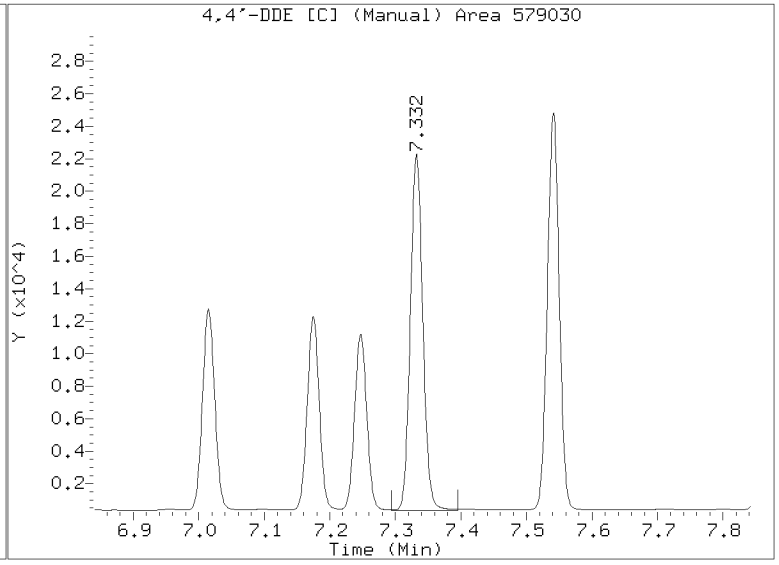
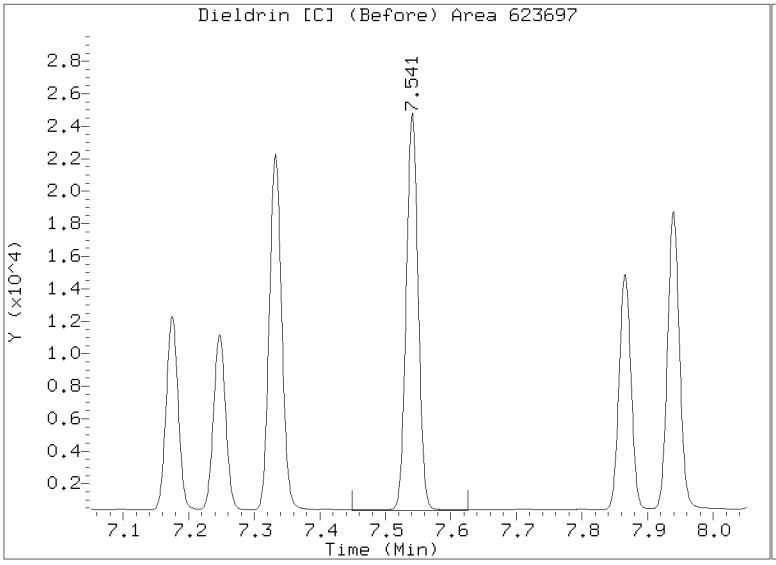
Lab ID:SLB0046-CCV2 Client ID:

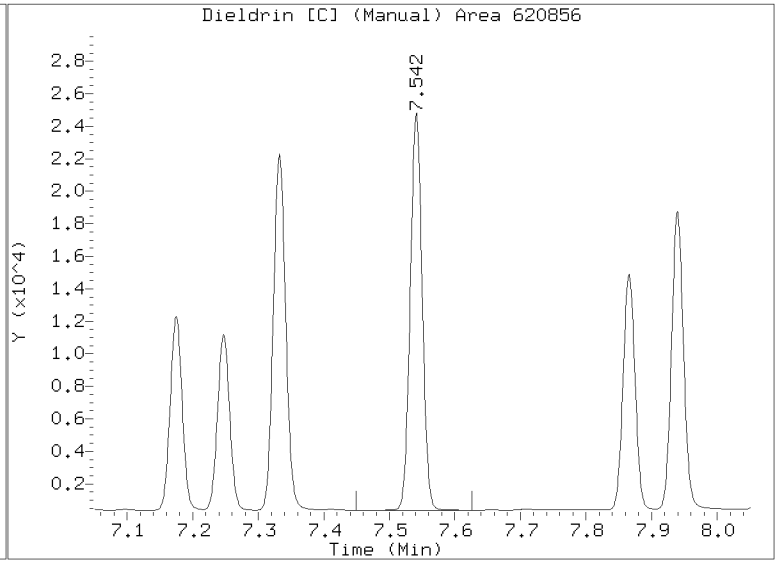






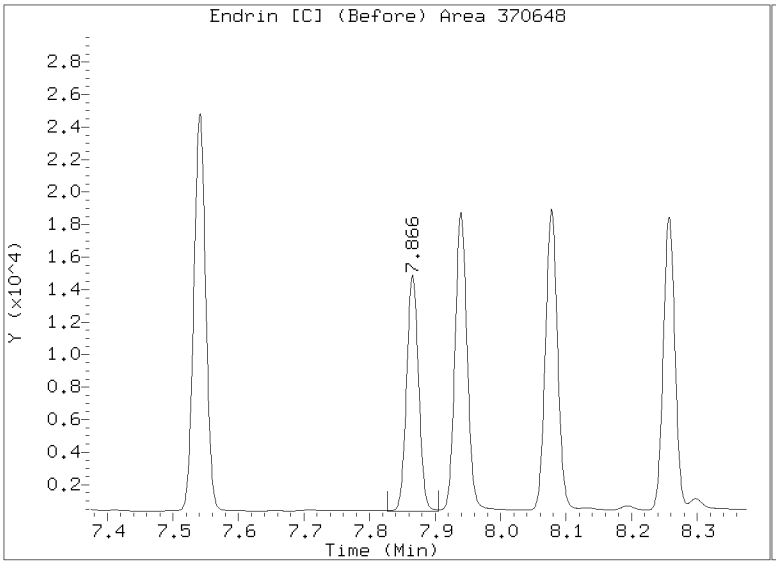


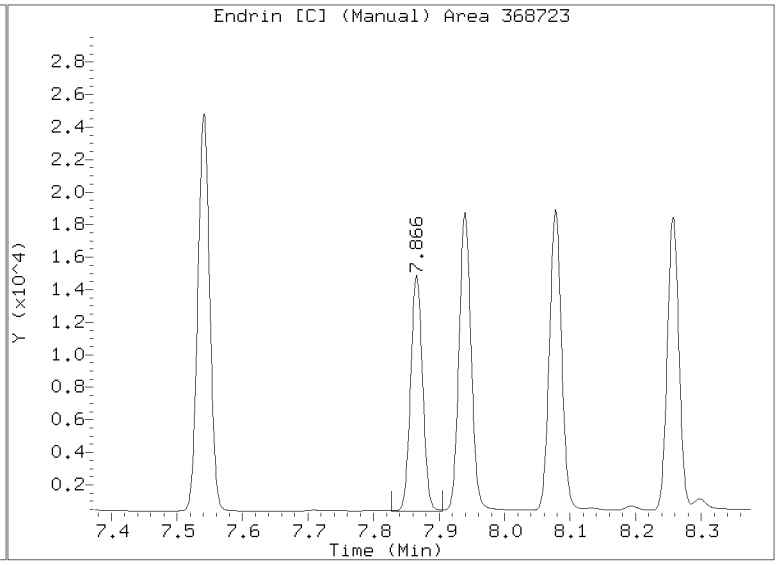


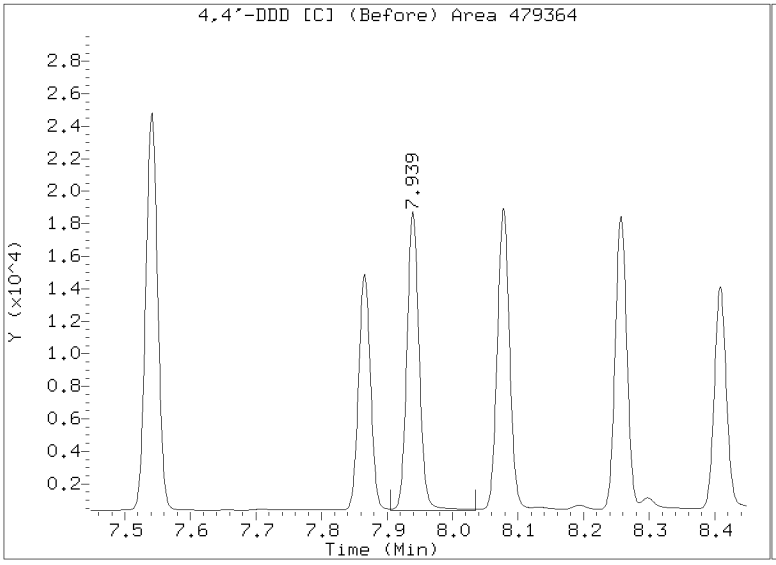


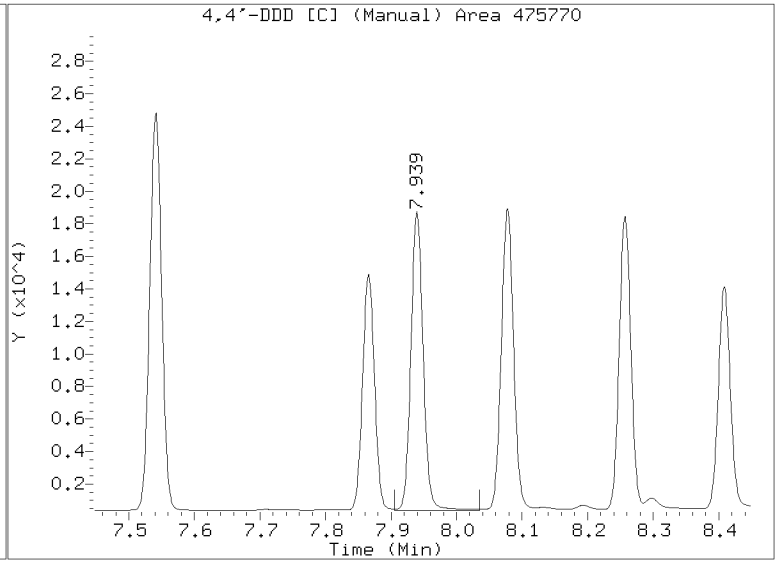
Manual Peak Adjustment Report, CLP-2

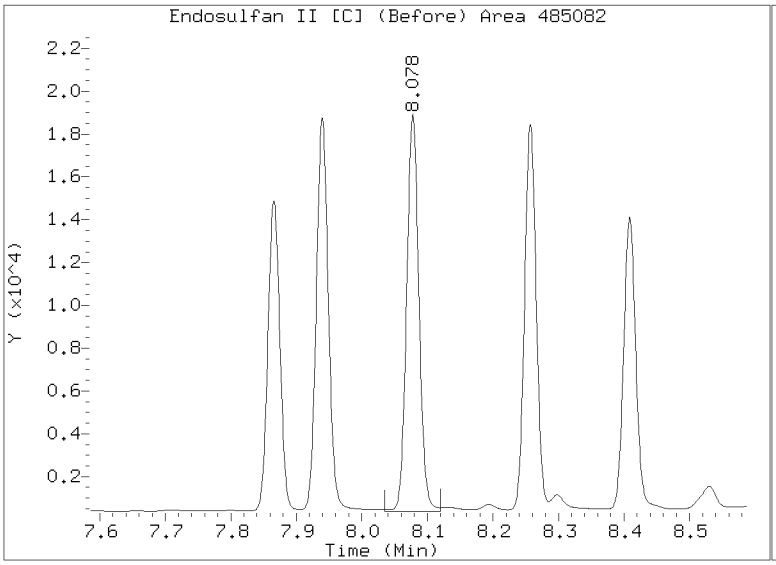
Datafile: /20230131.b/B20230131.b/23013133.D
Injection Date: 01-FEB-2023 00:24
Lab ID:SLB0046-CCV2 Client ID:

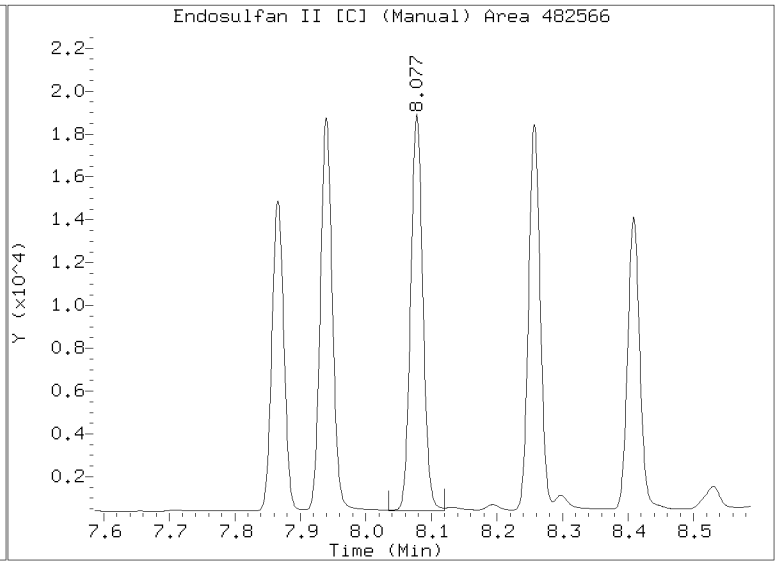












Manual Peak Adjustment Report, CLP-2

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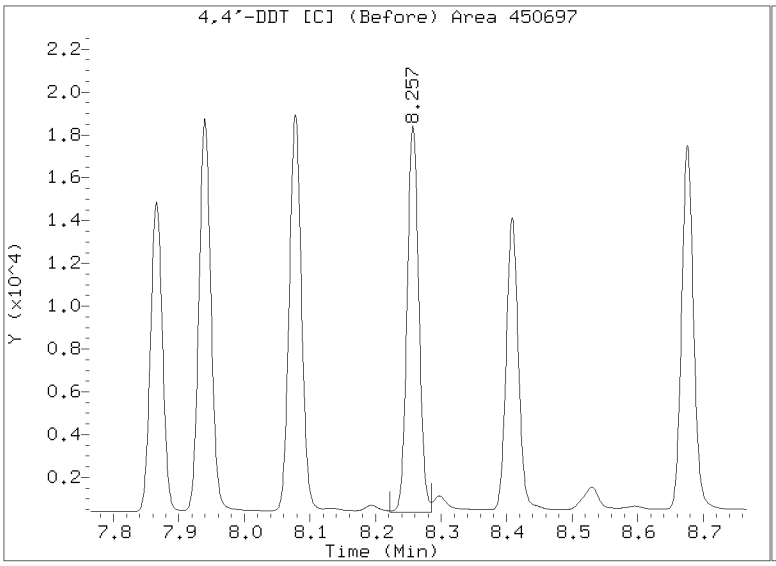
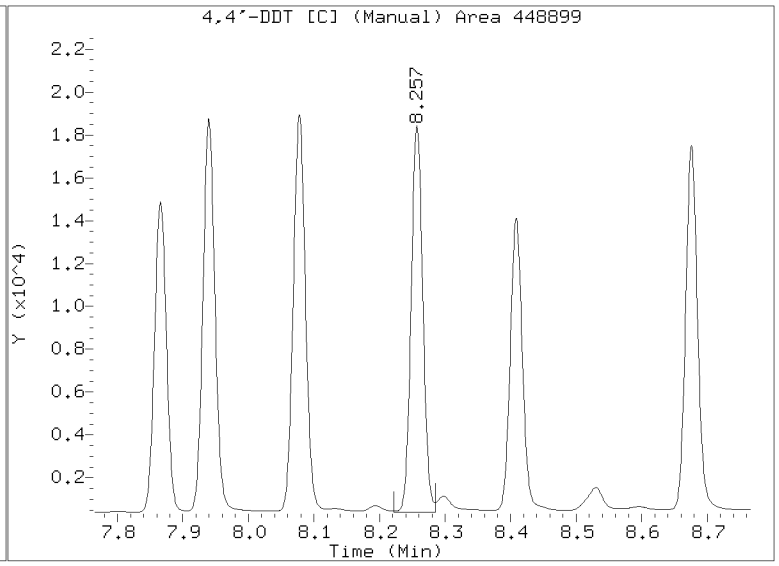
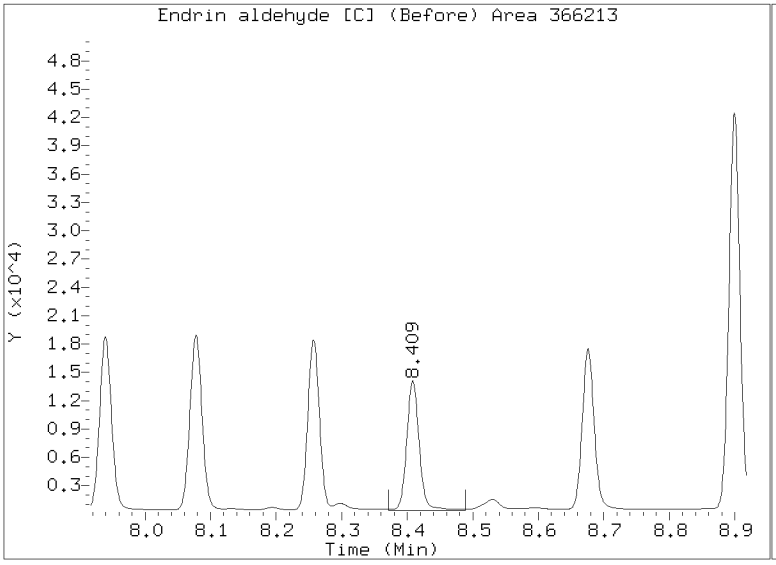
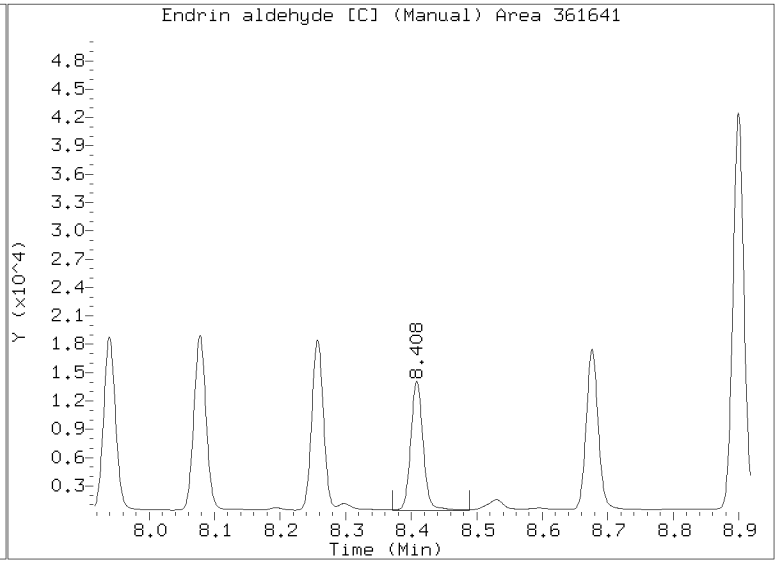
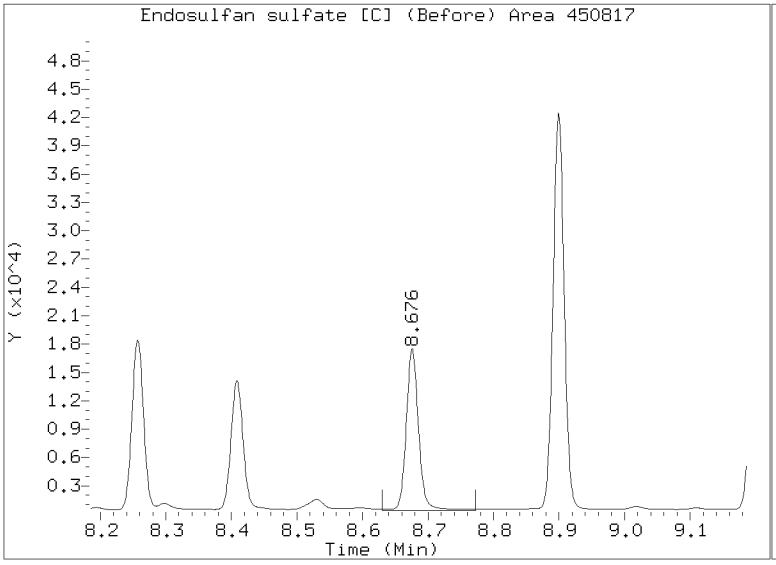
Injection Date: 01-FEB-2023 00:24
Lab ID:SLB0046-CCV2 Client ID:

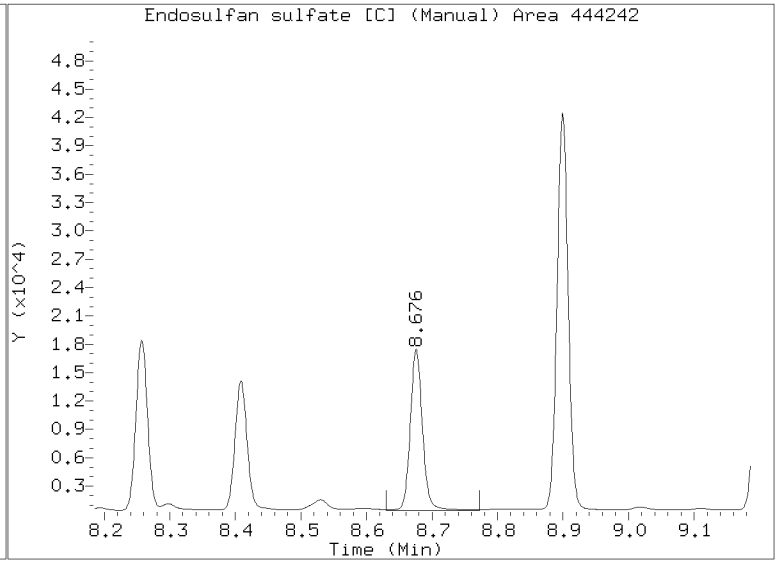












Manual Peak Adjustment Report, CLP-2

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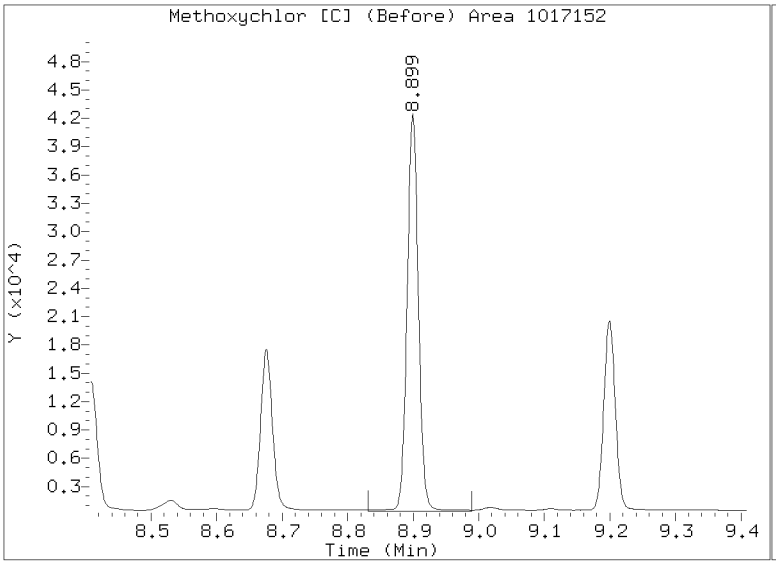
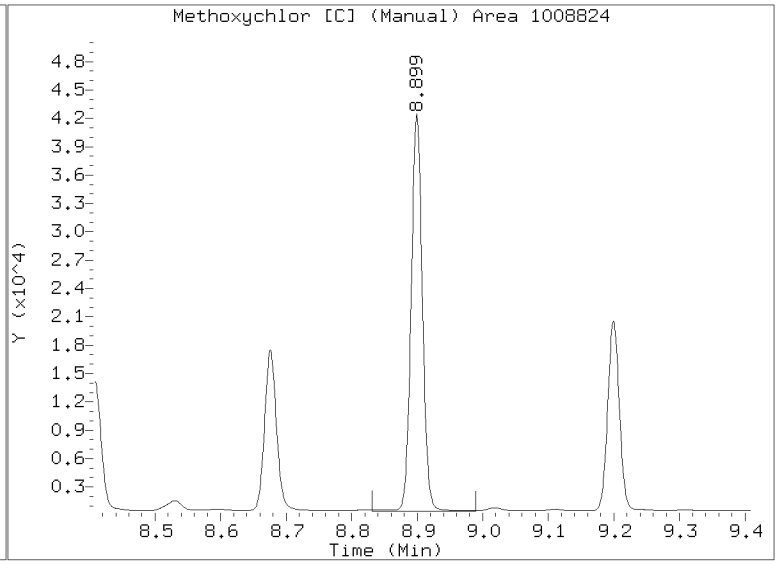
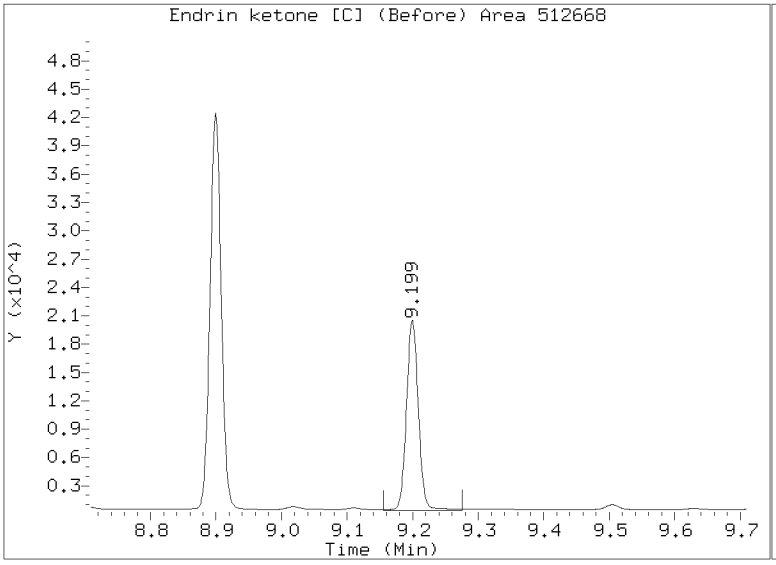
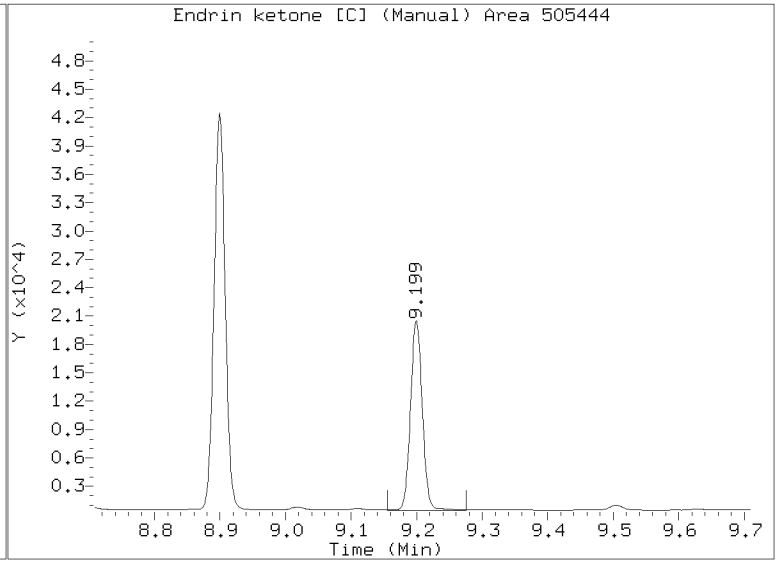
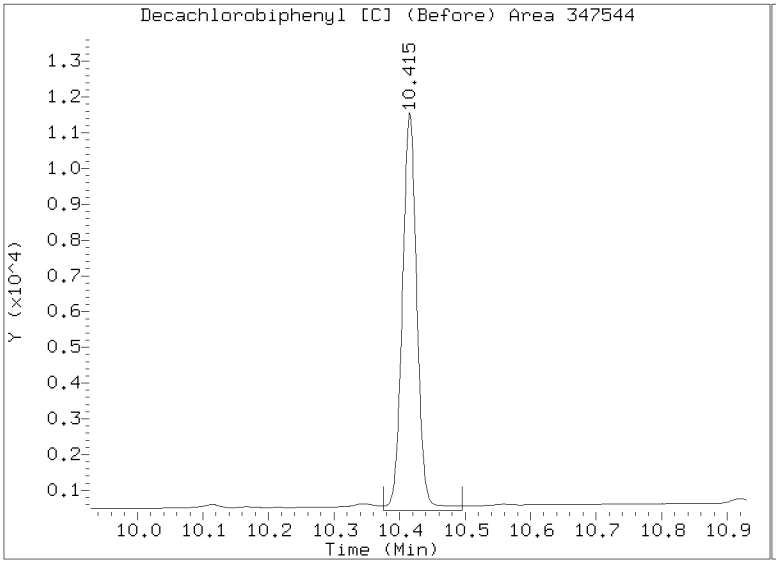
Injection Date: 01-FEB-2023 00:24
Lab ID:SLB0046-CCV2 Client ID:

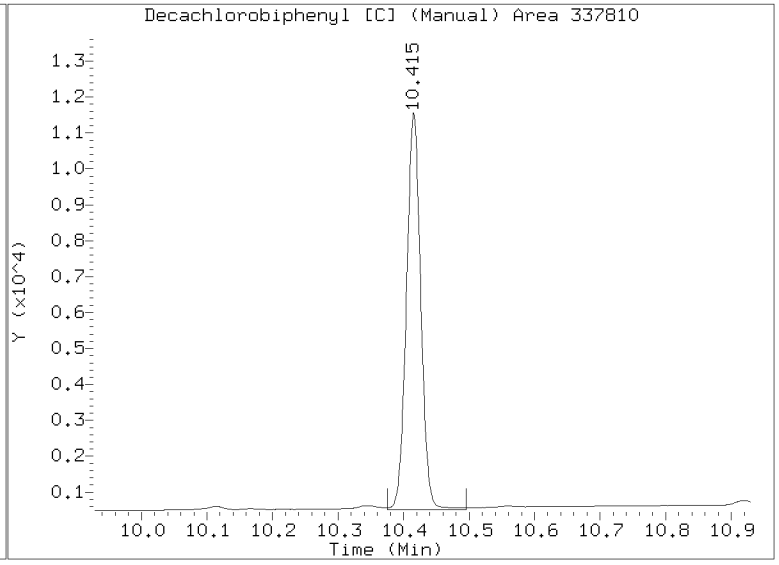












Manual Peak Adjustment Report, CLP-2

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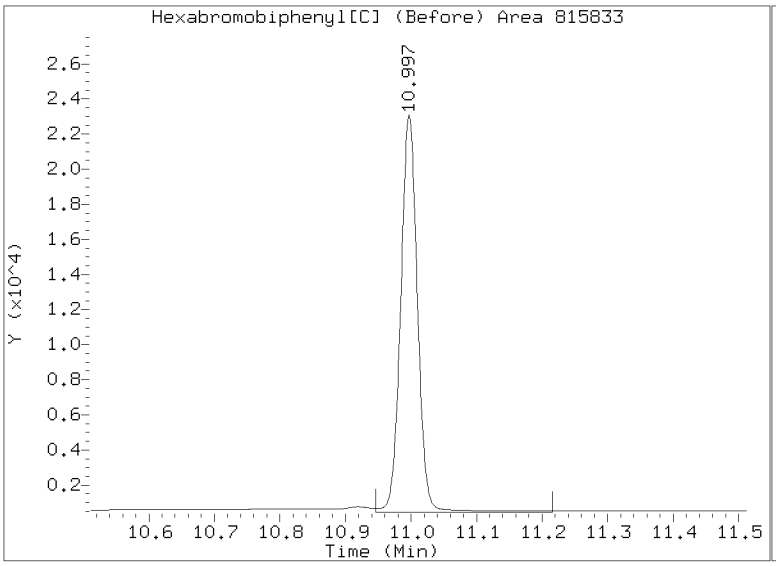
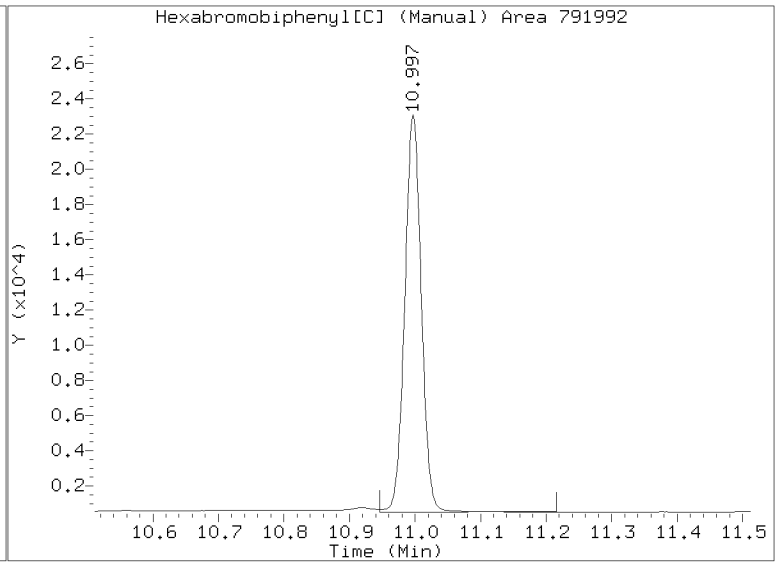
Lab ID:SLB0046-CCV2 Client ID:





CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23013150.D	Calibration Date:	12/14/2022
Sequence:	SLB0046	Injection Date:	02/01/23
Lab Sample ID:	SLB0046-CCV3	Injection Time:	05:28
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	20.4	1.4298940	1.4581270		2.0	+/-20
Hexachlorobenzene [2C]	A	20.000	19.7	1.4591090	1.4401090		-1.3	+/-20
Decachlorobiphenyl	A	40.000	38.9	0.8105886	0.7889394		-2.7	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.1	0.8841805	0.8416085		-4.8	+/-20
Tetrachlorometaxylene	A	40.000	39.7	1.0879510	1.0797150		-0.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.8	1.1261070	1.0935460		-2.9	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013150.D
Data file 2: /20230131.b/B20230131.b/23013150.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: SLB0046-CCV3
Client ID:
Injection Date: 01-FEB-2023 05:28
Report Date: 02/03/2023 20:25
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.309	-0.002	173972	4.825	-0.007	288811	21.48	20.93	2.6	alpha-BHC
4.692	-0.001	70984	5.301	-0.008	108686	22.76	20.72	9.4	beta-BHC
4.875	-0.000	152826	5.653	-0.009	213565	23.09	18.79	20.5	delta-BHC
4.610	-0.002	151179	5.220	-0.008	244937	21.53	20.92	2.9	gamma-BHC (Lindane)
5.090	-0.003	145714	5.745	-0.009	227067	23.32	21.41	8.6	Heptachlor
5.411	-0.003	152623	6.148	-0.010	234713	21.80	19.38	11.7	Aldrin
6.085	-0.004	131269	6.803	-0.011	192891	21.62	19.26	11.5	Heptachlor epoxide b
6.527	-0.004	128066	7.247	-0.010	165292	22.98	18.73	20.4	Endosulfan I
6.787	-0.003	260547	7.541	-0.010	364033	43.52	37.33	15.3	Dieldrin
6.451	-0.001	240152	7.333	-0.009	344807	43.21	38.55	11.4	4,4'-DDE
7.037	-0.004	144516	7.865	-0.011	180024	28.34	26.08	8.3	Endrin
7.276	-0.002	223924	8.077	-0.010	285715	48.79	40.38	18.8	Endosulfan II
7.098	-0.001	214503	7.939	-0.009	284456	46.70	42.37	9.7	4,4'-DDD
8.137	-0.003	245503	8.676	-0.011	278746	56.33	44.87	22.7	Endosulfan sulfate
7.389	-0.002	202811	8.257	-0.010	256555	43.69	39.59	9.8	4,4'-DDT
7.876	-0.001	424945	8.899	-0.010	560009	206.59	195.29	5.6	Methoxychlor
8.411	-0.004	235851	9.199	-0.010	308771	47.24	46.01	2.6	Endrin ketone
7.704	-0.003	179959	8.408	-0.010	229866	49.16	46.06	6.5	Endrin aldehyde
6.226	-0.003	132065	7.015	-0.011	189060	21.42	18.93	12.3	trans-Chlordane
6.373	-0.003	129446	7.175	-0.010	180316	20.93	18.46	12.6	cis-Chlordane
2.304	0.000	171272	2.482	-0.001	228108	20.18	17.41	14.8	Hexachlorobutadiene
4.152	-0.001	153368	4.685	-0.007	247890	20.39	19.74	3.3	Hexachlorobenzene
3.800	0.000	227132	4.191	-0.005	376470	39.70	38.84	2.2	Tetrachloro-m-xylene
9.316	-0.003	153414	10.415	-0.014	204279	38.93	38.07	2.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

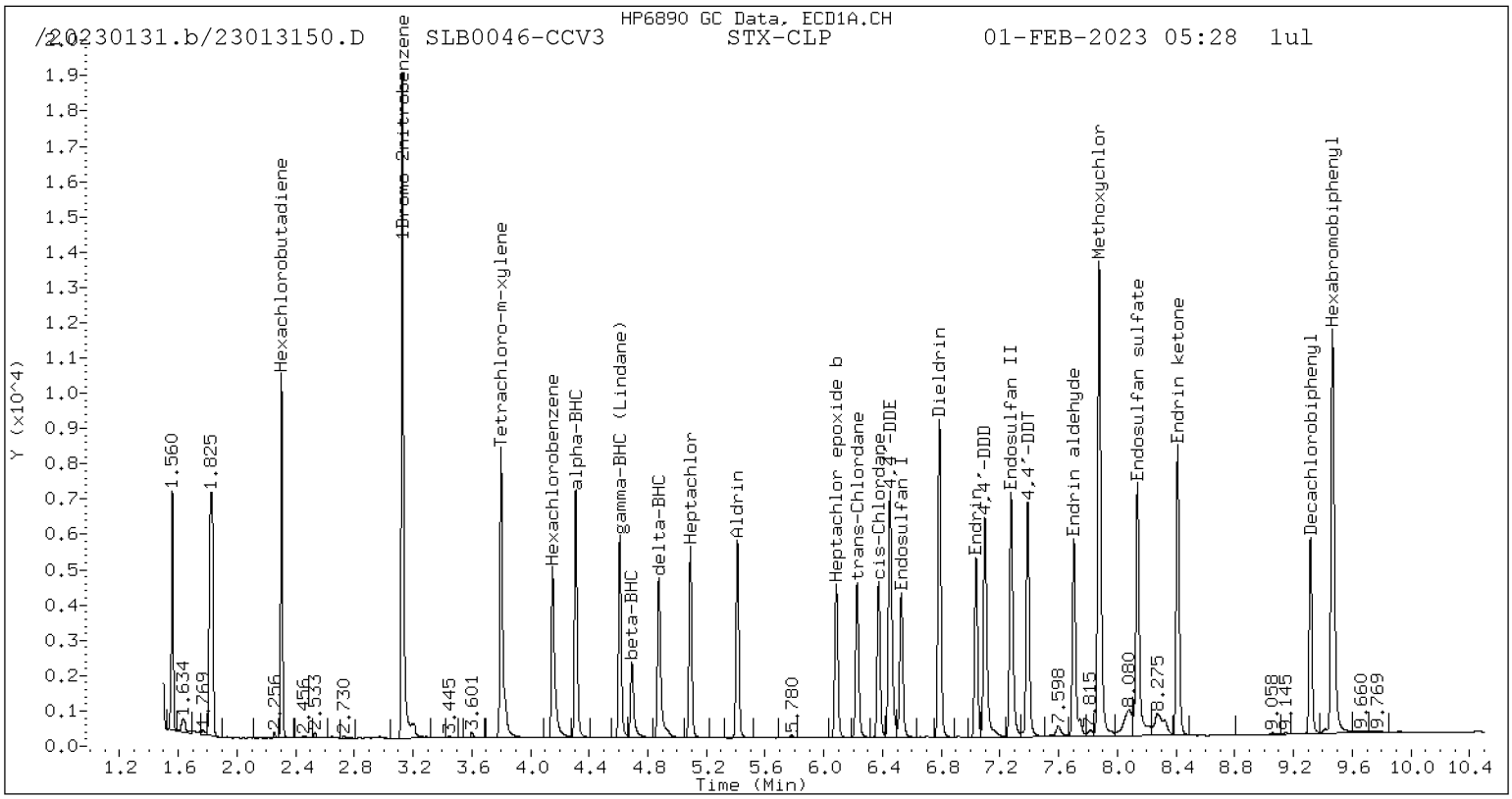
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	420726	-37.4
Hexabromobiphenyl	609723	388912	-36.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	688531	-31.6
Hexabromobiphenyl	769764	485449	-36.9

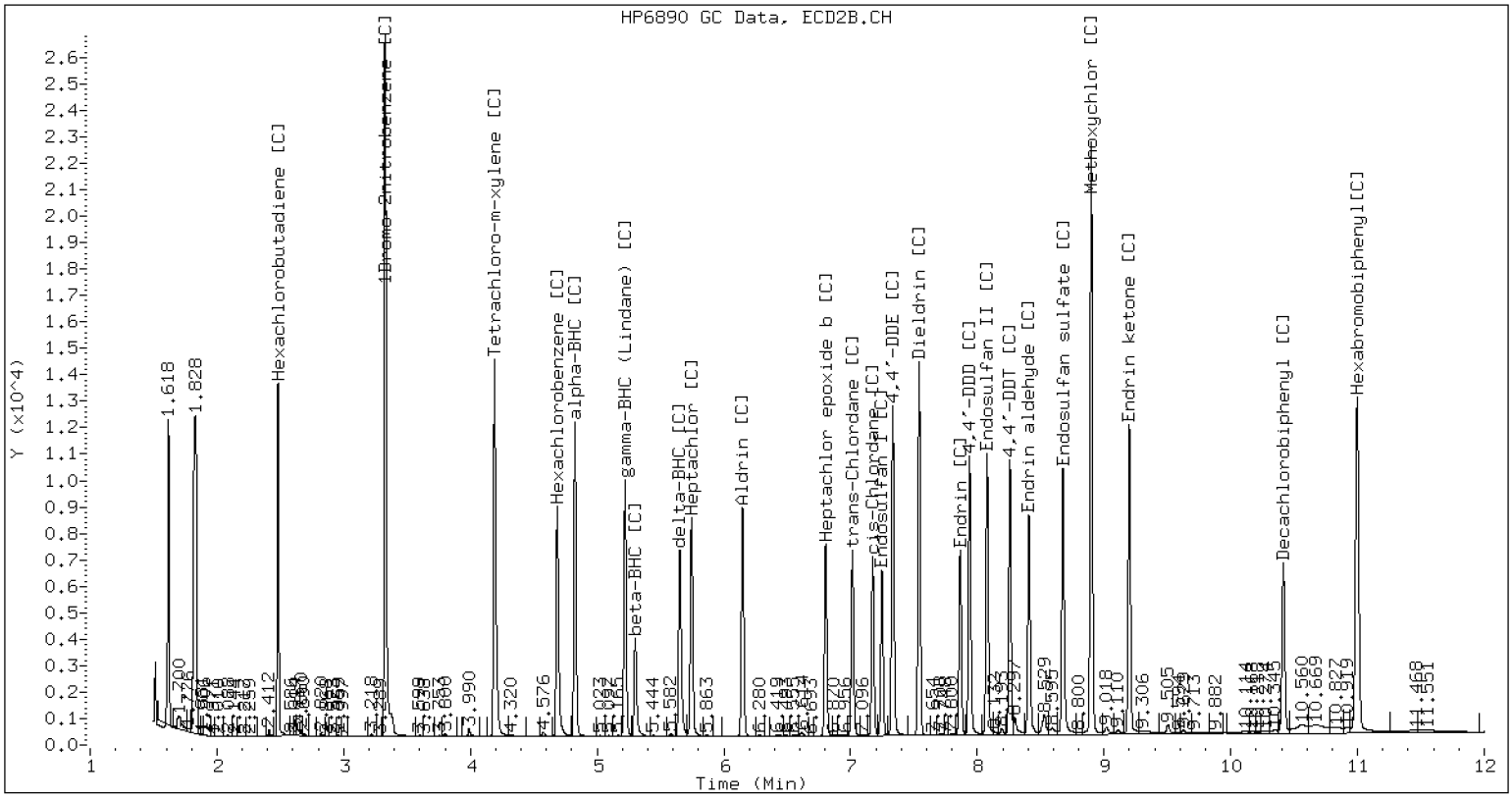
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230131.b/B20230131.b/23013150.D SLB0046-CCV3 CLP2



CLP-2 Manual Integration: NO

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23013168.D	Calibration Date:	12/14/2022
Sequence:	SLB0046	Injection Date:	02/01/23
Lab Sample ID:	SLB0046-CCV4	Injection Time:	10:50
Sequence Name:	INDAE3		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	20.7	1.4298940	1.4765750		3.3	+/-20
Hexachlorobenzene [2C]	A	20.000	20.1	1.4591090	1.4675110		0.6	+/-20
Decachlorobiphenyl	A	40.000	39.8	0.8105886	0.8071043		-0.4	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.6	0.8841805	0.8525866		-3.6	+/-20
Tetrachlorometaxylene	A	40.000	39.8	1.0879510	1.0837750		-0.4	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.6	1.1261070	1.1141620		-1.1	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013168.D
Data file 2: /20230131.b/B20230131.b/23013168.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: SLB0046-CCV4
Client ID:
Injection Date: 01-FEB-2023 10:50
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.309	-0.001	177899	4.826	-0.007	302568	21.63	21.37	1.2	alpha-BHC
4.692	-0.001	72505	5.301	-0.008	115014	22.90	21.36	6.9	beta-BHC
4.875	-0.000	152366	5.652	-0.009	218079	22.67	18.70	19.2	delta-BHC
4.610	-0.002	153789	5.220	-0.009	257890	21.57	21.46	0.5	gamma-BHC (Lindane)
5.090	-0.003	147717	5.745	-0.010	241950	23.28	22.23	4.6	Heptachlor
5.410	-0.004	155623	6.147	-0.011	254512	21.89	20.48	6.7	Aldrin
6.085	-0.004	135446	6.803	-0.011	209408	21.97	20.38	7.5	Heptachlor epoxide b
6.528	-0.003	134390	7.247	-0.011	182775	23.75	20.18	16.3	Endosulfan I
6.787	-0.004	270227	7.540	-0.011	407719	44.46	40.74	8.7	Dieldrin
6.451	-0.000	245737	7.332	-0.010	381711	43.54	41.59	4.6	4,4'-DDE
7.037	-0.004	124572	7.865	-0.011	168525	23.73	22.59	4.9	Endrin
7.276	-0.002	249717	8.077	-0.010	323999	52.83	42.37	22.0	Endosulfan II
7.098	-0.001	228895	7.939	-0.010	321630	48.39	44.32	8.8	4,4'-DDD
8.137	-0.004	515846	8.675	-0.011	311017	114.94	46.32	85.1*	Endosulfan sulfate
7.389	-0.002	226226	8.256	-0.010	291199	47.33	41.58	12.9	4,4'-DDT
7.876	-0.001	419480	8.898	-0.010	568380	198.04	183.38	7.7	Methoxychlor
8.411	-0.003	251145	9.199	-0.011	339990	48.85	46.88	4.1	Endrin ketone
7.704	-0.003	200858	8.408	-0.010	266269	53.28	49.36	7.6	Endrin aldehyde
6.227	-0.003	136291	7.015	-0.011	206940	21.77	20.19	7.5	trans-Chlordane
6.373	-0.003	133049	7.174	-0.011	198490	21.19	19.80	6.8	cis-Chlordane
2.304	-0.000	173777	2.482	-0.001	238489	20.17	17.74	12.8	Hexachlorobutadiene
4.153	-0.000	157696	4.686	-0.007	259227	20.65	20.12	2.6	Hexachlorobenzene
3.800	0.000	231491	4.191	-0.005	393620	39.85	39.58	0.7	Tetrachloro-m-xylene
9.315	-0.003	161619	10.414	-0.015	223668	39.83	38.57	3.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

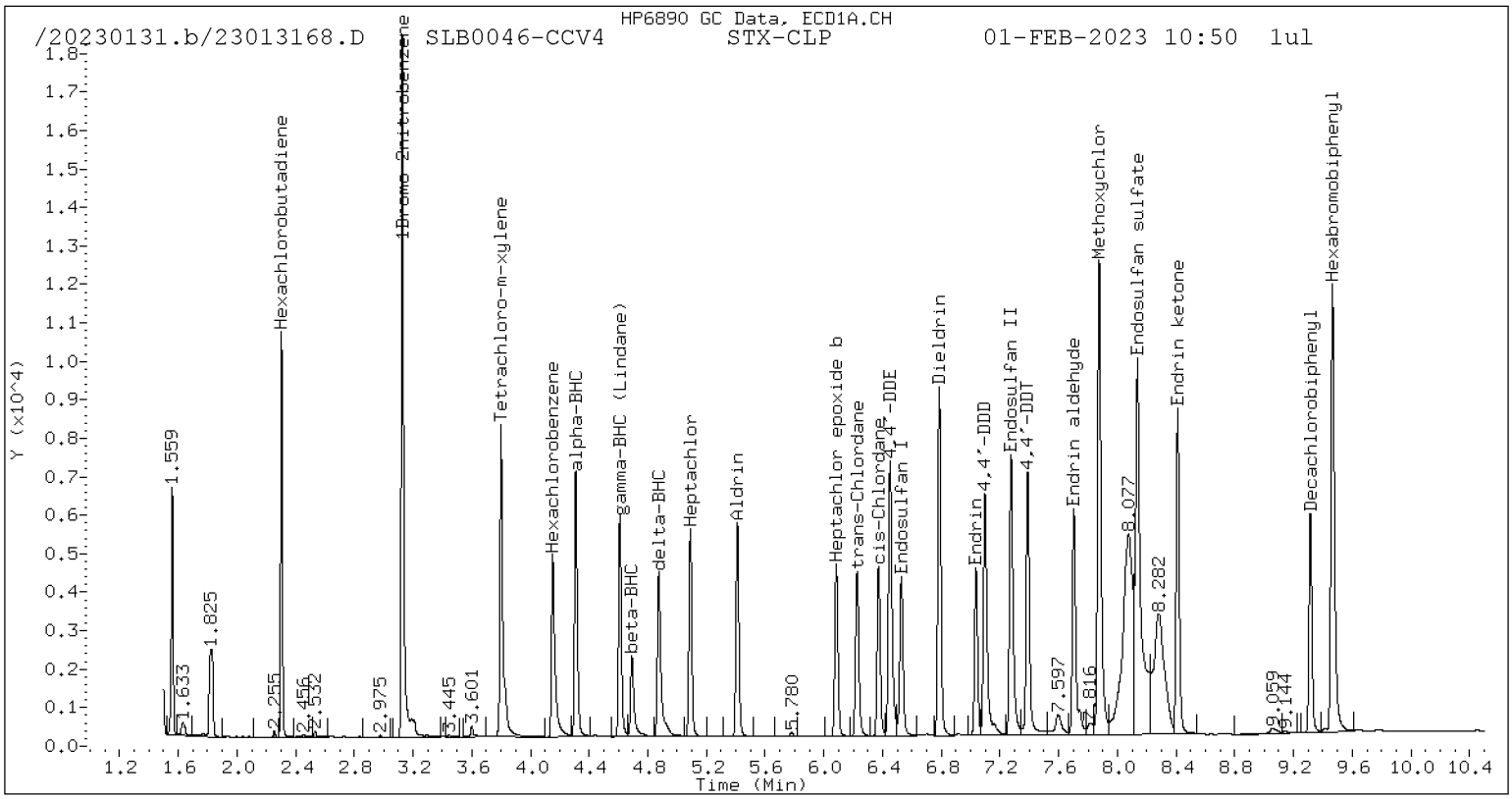
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	427194	-36.5
Hexabromobiphenyl	609723	400491	-34.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	706576	-29.8
Hexabromobiphenyl	769764	524681	-31.8

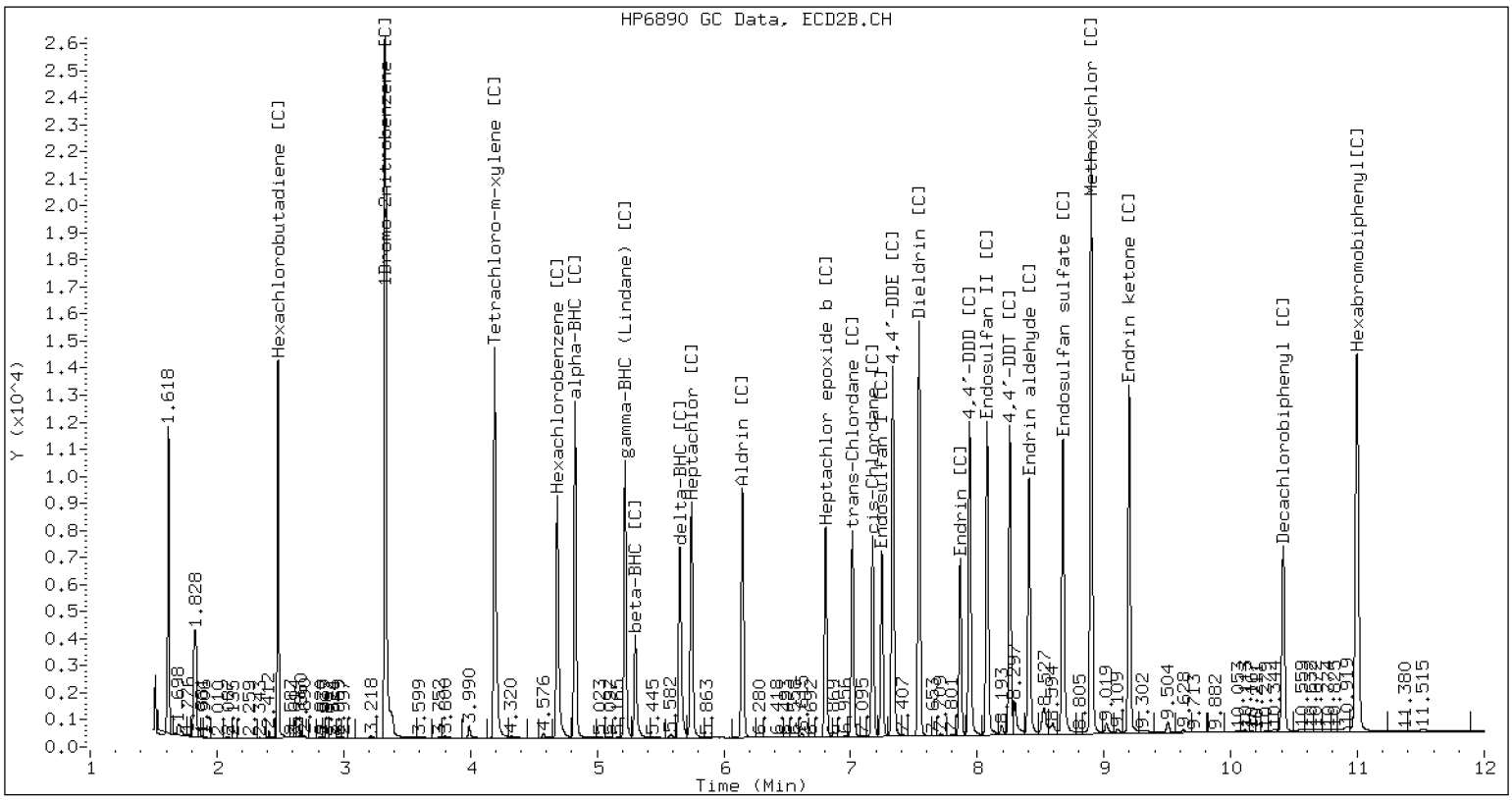
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230131.b/B20230131.b/23013168.D SLB0046-CCV4 CLP2



CLP-2 Manual Integration: NO

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23013178.D	Calibration Date:	12/14/2022
Sequence:	SLB0046	Injection Date:	02/01/23
Lab Sample ID:	SLB0046-CCV5	Injection Time:	13:49
Sequence Name:	INDA3		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	20.8	1.4298940	1.4872310		4.0	+/-20
Hexachlorobenzene [2C]	A	20.000	20.3	1.4591090	1.4792510		1.4	+/-20
Decachlorobiphenyl	A	40.000	39.5	0.8105886	0.8006349		-1.2	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.8	0.8841805	0.8584043		-2.9	+/-20
Tetrachlorometaxylene	A	40.000	40.5	1.0879510	1.1018320		1.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	40.0	1.1261070	1.1268850		0.07	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230131.b/23013178.D
Data file 2: /20230131.b/B20230131.b/23013178.D
Method: \20230131.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR/AA

ARI ID: SLB0046-CCV5
Client ID:
Injection Date: 01-FEB-2023 13:49
Report Date: 02/03/2023 20:26
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.309	-0.001	183954	4.825	-0.008	315633	21.84	21.64	0.9	alpha-BHC
4.692	-0.001	75279	5.301	-0.008	119878	23.21	21.62	7.1	beta-BHC
4.875	-0.001	155556	5.653	-0.008	225873	22.60	18.80	18.3	delta-BHC
4.610	-0.002	158595	5.220	-0.009	269131	21.72	21.74	0.1	gamma-BHC (Lindane)
5.090	-0.003	152399	5.745	-0.010	252215	23.45	22.49	4.2	Heptachlor
5.411	-0.003	160468	6.147	-0.011	266557	22.03	20.82	5.7	Aldrin
6.085	-0.004	139941	6.803	-0.011	219067	22.16	20.69	6.8	Heptachlor epoxide b
6.527	-0.003	140413	7.247	-0.011	192495	24.23	20.63	16.0	Endosulfan I
6.787	-0.003	277736	7.541	-0.010	429556	44.61	41.67	6.8	Dieldrin
6.451	-0.000	254372	7.332	-0.009	405873	44.01	42.93	2.5	4,4'-DDE
7.037	-0.004	120147	7.865	-0.011	167310	21.58	21.20	1.8	Endrin
7.276	-0.002	260107	8.077	-0.010	347911	51.91	43.00	18.8	Endosulfan II
7.098	-0.001	235686	7.939	-0.009	343545	46.99	44.74	4.9	4,4'-DDD
8.137	-0.004	231156	8.676	-0.010	341596	48.58	48.08	1.0	Endosulfan sulfate
7.389	-0.002	220658	8.257	-0.010	305647	43.54	41.24	5.4	4,4'-DDT
7.876	-0.001	422627	8.899	-0.010	583656	188.19	177.97	5.6	Methoxychlor
8.411	-0.003	257688	9.199	-0.010	352356	47.27	45.92	2.9	Endrin ketone
7.704	-0.003	204184	8.408	-0.010	286006	51.08	50.11	1.9	Endrin aldehyde
6.226	-0.003	141315	7.015	-0.011	217232	22.03	20.58	6.8	trans-Chlordane
6.373	-0.003	137868	7.174	-0.011	208094	21.43	20.15	6.2	cis-Chlordane
2.303	-0.000	179520	2.481	-0.001	246917	20.34	17.83	13.2	Hexachlorobutadiene
4.153	-0.000	162683	4.686	-0.007	269139	20.80	20.28	2.6	Hexachlorobenzene
3.801	0.000	241051	4.191	-0.005	410057	40.51	40.03	1.2	Tetrachloro-m-xylene
9.316	-0.003	169978	10.415	-0.014	238275	39.51	38.83	1.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

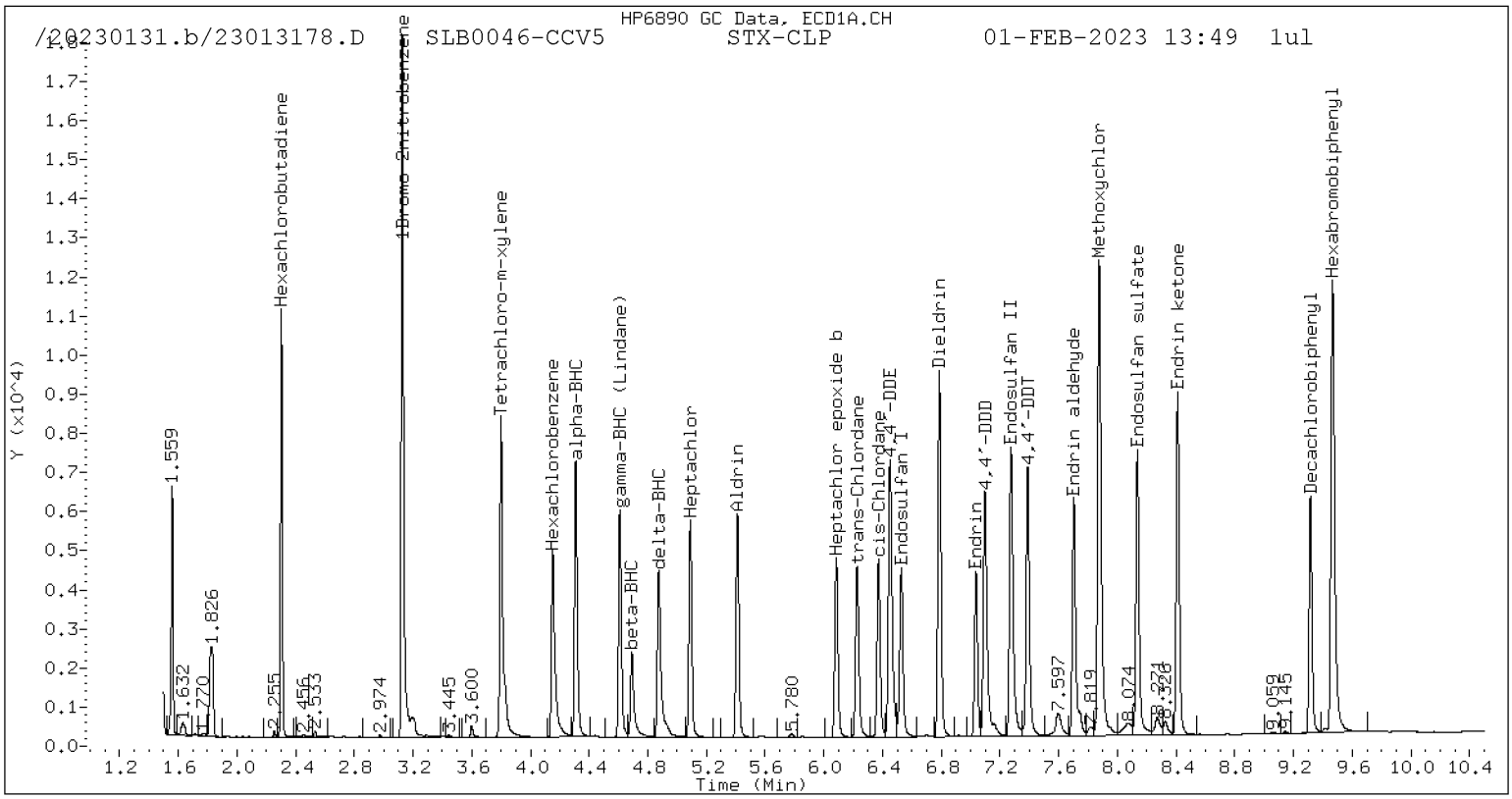
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	437546	-34.9
Hexabromobiphenyl	609723	424608	-30.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	727771	-27.7
Hexabromobiphenyl	769764	555158	-27.9

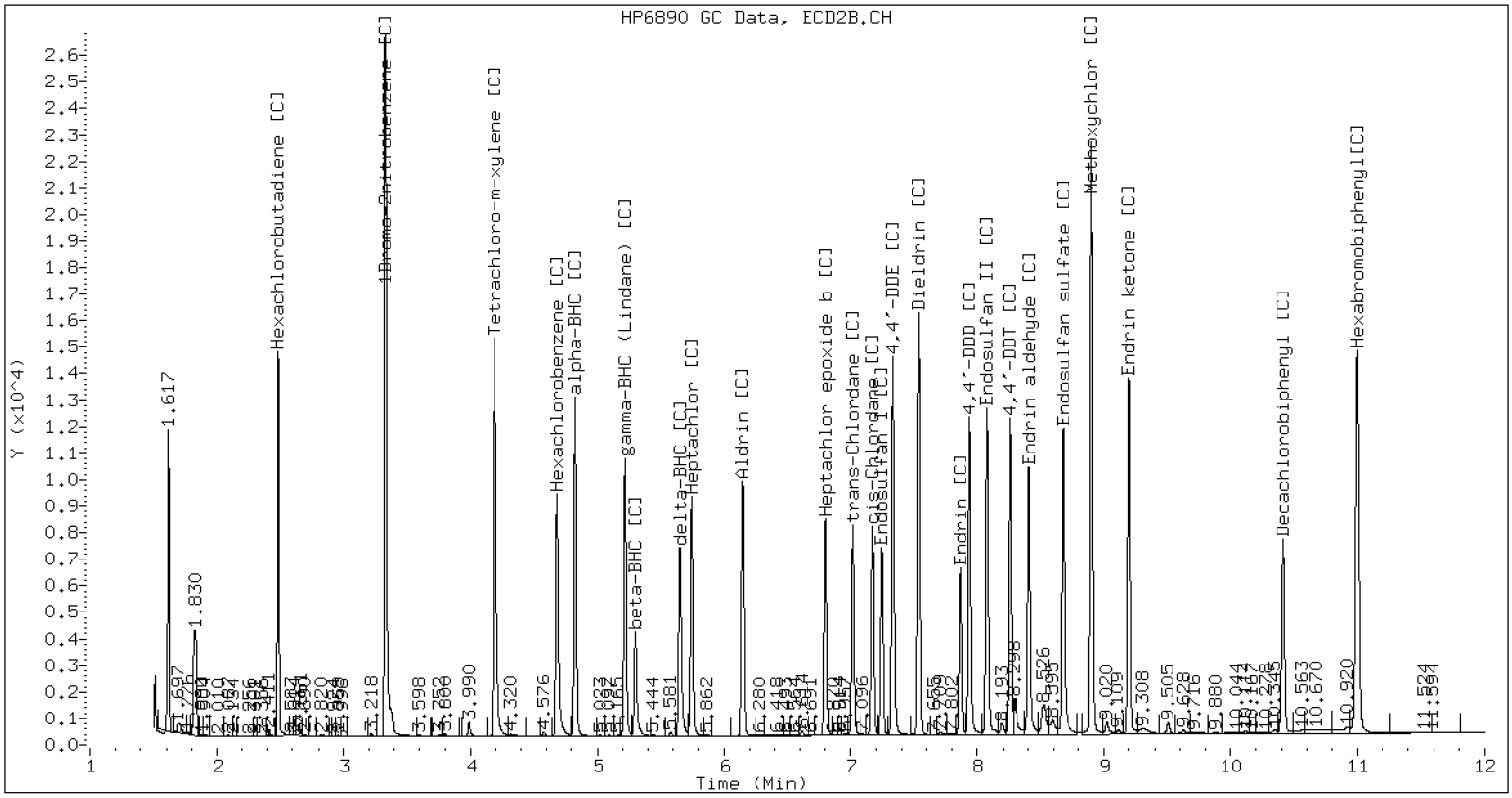
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230131.b/B20230131.b/23013178.D SLB0046-CCV5 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23020920.D	Calibration Date:	12/14/2022
Sequence:	SLB0156	Injection Date:	02/10/23
Lab Sample ID:	SLB0156-CCV1	Injection Time:	01:10
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	21.7	1.4298940	1.5522790		8.6	+/-20
Hexachlorobenzene [2C]	A	20.000	19.2	1.4591090	1.4036620		-3.8	+/-20
Decachlorobiphenyl	A	40.000	40.3	0.8105886	0.8166619		0.7	+/-20
Decachlorobiphenyl [2C]	A	40.000	41.3	0.8841805	0.9129236		3.3	+/-20
Tetrachlorometaxylene	A	40.000	39.9	1.0879510	1.0862260		-0.2	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.3	1.1261070	1.0775590		-4.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230209.b/23020920.D
Data file 2: /20230209.b/B20230209.b/23020920.D
Method: \20230209.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: SEQ-CCV1
Client ID:
Injection Date: 10-FEB-2023 01:10
Report Date: 02/11/2023 06:18
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.301	-0.009	162721	4.817	-0.016	251816	22.96	20.24	12.6	alpha-BHC
4.684	-0.009	64541	5.292	-0.017	95371	23.66	20.17	15.9	beta-BHC
4.867	-0.009	136484	5.643	-0.018	141855	23.56	13.84	52.0*	delta-BHC
4.602	-0.010	132085	5.211	-0.018	211508	21.50	20.04	7.0	gamma-BHC (Lindane)
5.081	-0.011	134855	5.735	-0.019	193638	24.67	20.25	19.7	Heptachlor
5.401	-0.013	140568	6.137	-0.021	203493	22.94	18.64	20.7	Aldrin
6.075	-0.014	120019	6.793	-0.021	168574	22.59	18.67	19.0	Heptachlor epoxide b
6.518	-0.013	118843	7.237	-0.020	137802	24.38	17.32	33.9	Endosulfan I
6.778	-0.013	222835	7.531	-0.020	297123	42.55	33.80	22.9	Dieldrin
6.442	-0.010	213444	7.324	-0.018	280623	43.89	34.81	23.1	4,4'-DDE
7.028	-0.014	156734	7.856	-0.020	186803	37.70	36.16	4.2	Endrin
7.265	-0.013	182927	8.068	-0.019	238666	48.88	45.07	8.1	Endosulfan II
7.089	-0.010	186547	7.931	-0.018	226858	49.80	45.15	9.8	4,4'-DDD
8.128	-0.013	200004	8.666	-0.020	213005	56.28	45.81	20.5	Endosulfan sulfate
7.380	-0.011	175165	8.248	-0.018	223070	46.28	45.99	0.6	4,4'-DDT
7.867	-0.010	405802	8.890	-0.018	491922	241.94	229.20	5.4	Methoxychlor
8.401	-0.013	200773	9.190	-0.020	247948	49.32	49.37	0.1	Endrin ketone
7.694	-0.013	148679	8.399	-0.019	168469	49.80	45.10	9.9	Endrin aldehyde
6.217	-0.012	122104	7.005	-0.020	158474	22.63	17.60	25.0	trans-Chlordane
6.363	-0.012	113012	7.165	-0.020	146555	20.88	16.64	22.6	cis-Chlordane
2.298	-0.006	157884	2.476	-0.007	165186	21.27	13.98	41.3*	Hexachlorobutadiene
4.146	-0.007	142850	4.678	-0.015	217809	21.71	19.24	12.1	Hexachlorobenzene
3.793	-0.007	199922	4.184	-0.012	334414	39.94	38.28	4.2	Tetrachloro-m-xylene
9.307	-0.011	129494	10.404	-0.025	165849	40.30	41.30	2.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

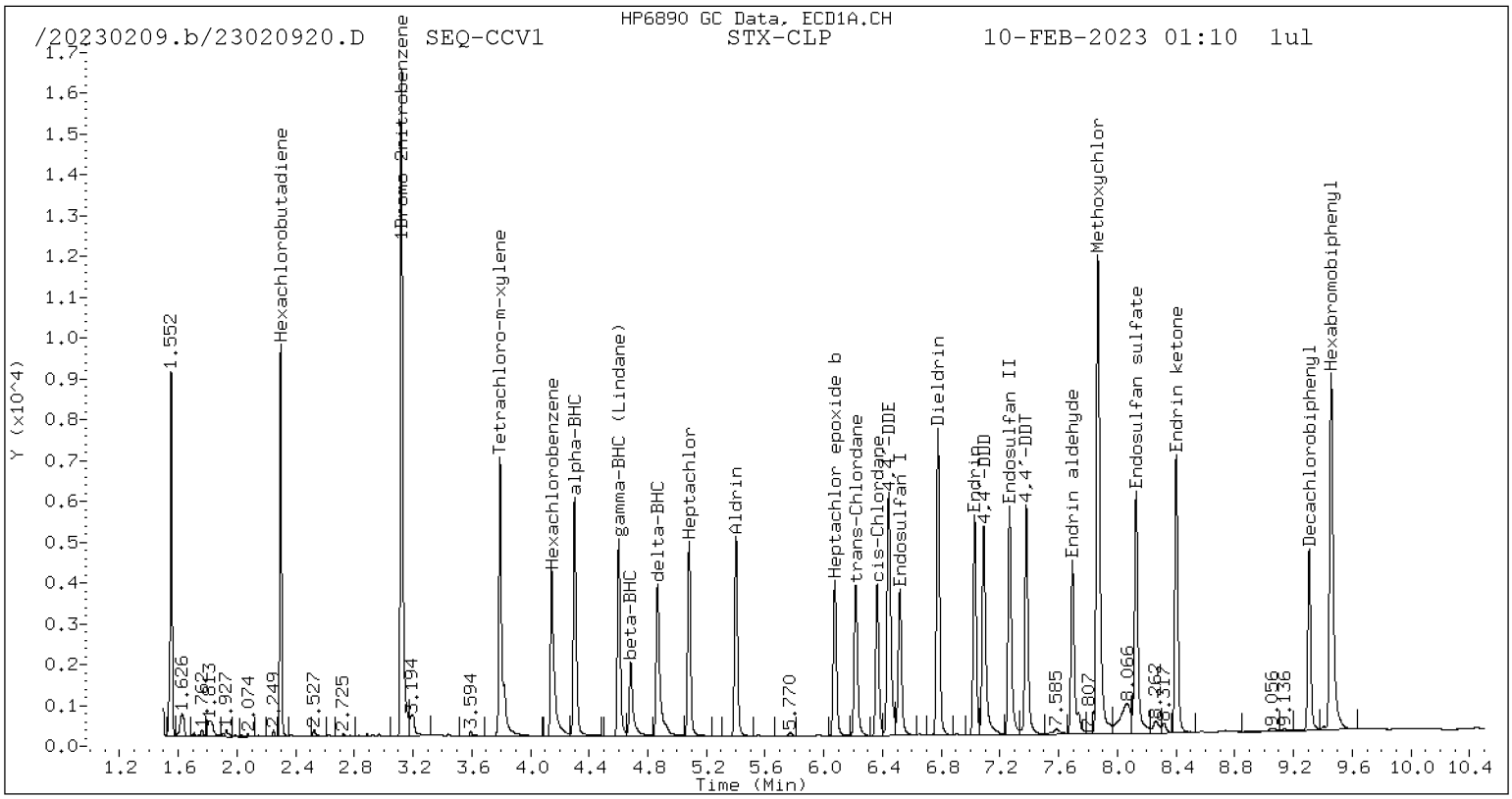
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	368104	-45.3
Hexabromobiphenyl	609723	317130	-48.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	620688	-38.3
Hexabromobiphenyl	769764	363336	-52.8 <-

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

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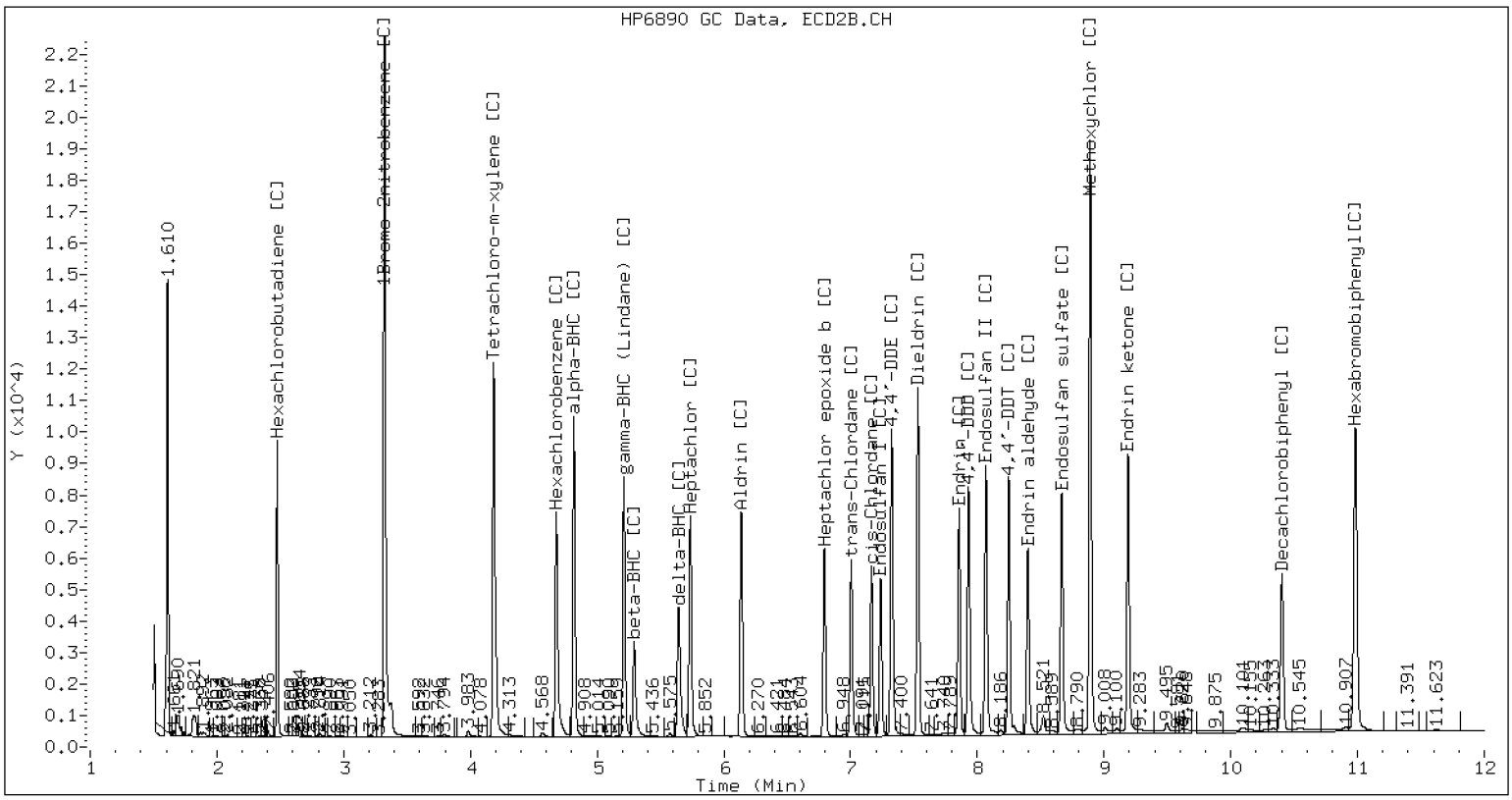


CLP-2 Manual Integration: NO

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23020937.D	Calibration Date:	12/14/2022
Sequence:	SLB0156	Injection Date:	02/10/23
Lab Sample ID:	SLB0156-CCV2	Injection Time:	06:14
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	22.1	1.4298940	1.5789030		10.4	+/-20
Hexachlorobenzene [2C]	A	20.000	21.5	1.4591090	1.5655310		7.3	+/-20
Decachlorobiphenyl	A	40.000	40.2	0.8105886	0.8146360		0.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.3	0.8841805	0.8685354		-1.8	+/-20
Tetrachlorometaxylene	A	40.000	38.1	1.0879510	1.0355220		-4.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	42.0	1.1261070	1.1825410		5.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230209.b/23020937.D
Data file 2: /20230209.b/B20230209.b/23020937.D
Method: \20230209.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: SEQ-CCV2
Client ID:
Injection Date: 10-FEB-2023 06:14
Report Date: 02/11/2023 06:18
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.300	-0.010	341995	4.816	-0.017	535660	24.42	23.51	3.8	alpha-BHC
4.682	-0.011	132500	5.291	-0.018	200138	24.57	23.11	6.2	beta-BHC
4.864	-0.011	290769	5.642	-0.020	270119	25.40	14.39	55.3*	delta-BHC
4.600	-0.011	268659	5.210	-0.019	457187	22.12	23.65	6.6	gamma-BHC (Lindane)
5.080	-0.013	274318	5.734	-0.021	409846	25.39	23.40	8.2	Heptachlor
5.401	-0.013	285653	6.136	-0.022	448862	23.59	22.45	5.0	Aldrin
6.073	-0.015	243576	6.793	-0.022	381512	23.20	23.07	0.6	Heptachlor epoxide b
6.516	-0.014	242526	7.237	-0.021	324240	25.17	22.25	12.3	Endosulfan I
6.777	-0.014	447796	7.530	-0.021	702282	43.26	43.61	0.8	Dieldrin
6.440	-0.012	450506	7.322	-0.019	664768	46.88	45.02	4.0	4,4'-DDE
7.027	-0.015	313052	7.855	-0.021	426906	34.93	35.31	1.1	Endrin
7.264	-0.014	382614	8.067	-0.021	560428	47.42	45.22	4.8	Endosulfan II
7.087	-0.012	398319	7.929	-0.020	553296	49.33	47.05	4.7	4,4'-DDD
8.127	-0.014	402098	8.665	-0.021	507786	52.49	46.66	11.8	Endosulfan sulfate
7.378	-0.013	371942	8.247	-0.020	529722	45.59	46.67	2.3	4,4'-DDT
7.866	-0.011	819804	8.890	-0.019	1085505	226.75	216.09	4.8	Methoxychlor
8.400	-0.014	434923	9.189	-0.021	580082	49.56	49.35	0.4	Endrin ketone
7.693	-0.014	324471	8.398	-0.021	409721	50.42	46.87	7.3	Endrin aldehyde
6.216	-0.014	252626	7.004	-0.021	371351	23.69	22.52	5.1	trans-Chlordane
6.362	-0.014	230867	7.164	-0.021	326282	21.59	20.23	6.5	cis-Chlordane
2.296	-0.007	302418	2.474	-0.008	297263	20.61	13.74	40.0*	Hexachlorobutadiene
4.143	-0.010	287159	4.676	-0.017	444935	22.08	21.46	2.9	Hexachlorobenzene
3.791	-0.010	376666	4.182	-0.014	672173	38.07	42.00	9.8	Tetrachloro-m-xylene
9.306	-0.013	278443	10.403	-0.026	369293	40.20	39.29	2.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

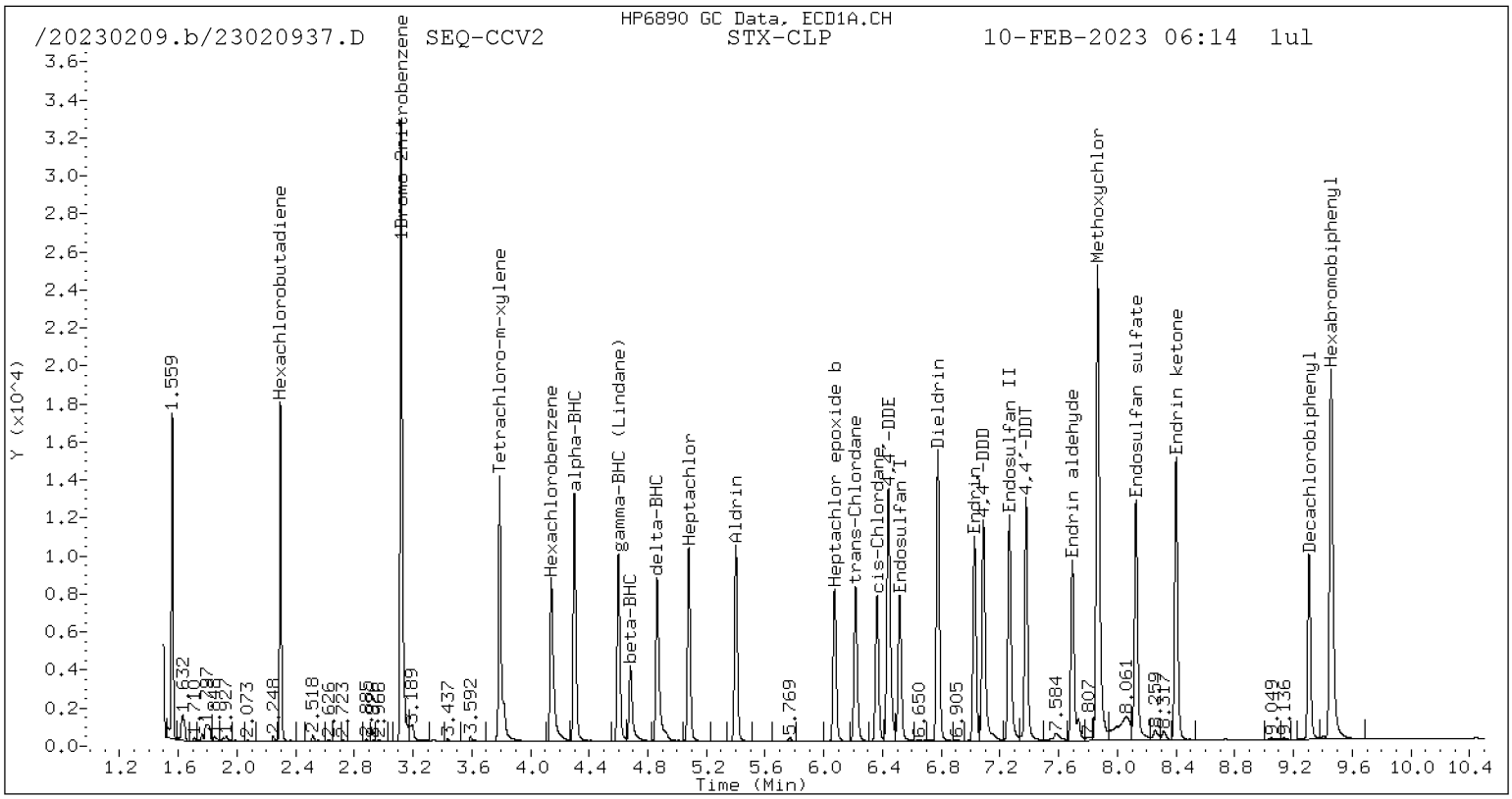
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	727490	8.2
Hexabromobiphenyl	609723	683601	12.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1136828	13.0
Hexabromobiphenyl	769764	850381	10.5

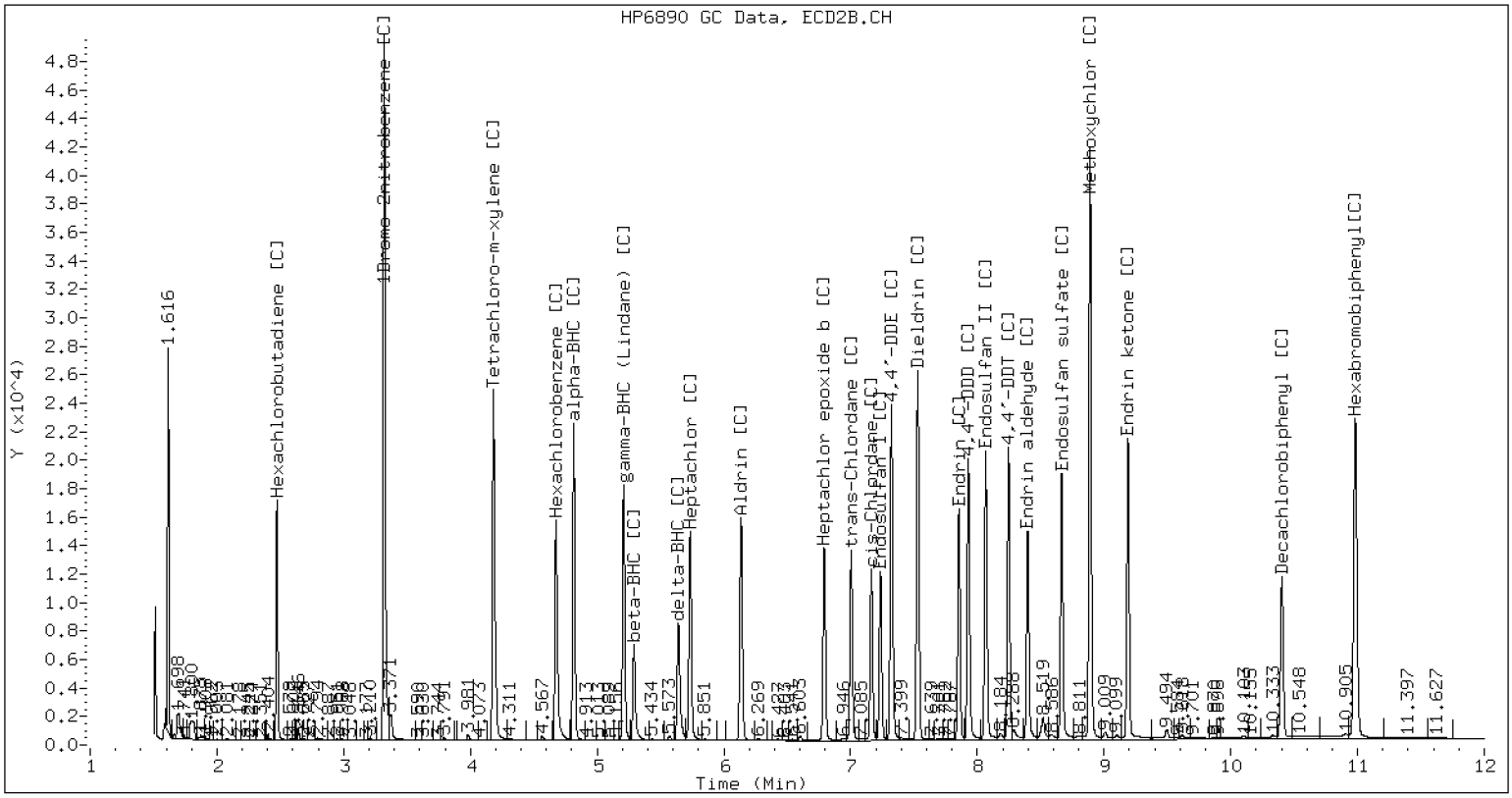
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230209.b/B20230209.b/23020937.D SEQ-CCV2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23020949.D	Calibration Date:	12/14/2022
Sequence:	SLB0156	Injection Date:	02/10/23
Lab Sample ID:	SLB0156-CCV3	Injection Time:	09:48
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	22.1	1.4298940	1.5802990		10.5	+/-20
Hexachlorobenzene [2C]	A	20.000	21.5	1.4591090	1.5693060		7.6	+/-20
Decachlorobiphenyl	A	40.000	40.3	0.8105886	0.8160173		0.7	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.1	0.8841805	0.8639957		-2.3	+/-20
Tetrachlorometaxylene	A	40.000	38.1	1.0879510	1.0373350		-4.7	+/-20
Tetrachlorometaxylene [2C]	A	40.000	42.0	1.1261070	1.1819770		5.0	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230209.b/23020949.D
Data file 2: /20230209.b/B20230209.b/23020949.D
Method: \20230209.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: SEQ-CCV3
Client ID:
Injection Date: 10-FEB-2023 09:48
Report Date: 02/11/2023 06:18
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.300	-0.010	348828	4.816	-0.017	559302	24.18	23.77	1.7	alpha-BHC
4.683	-0.010	136931	5.291	-0.018	210709	24.66	23.55	4.6	beta-BHC
4.865	-0.011	299584	5.642	-0.019	281467	25.41	14.52	54.6*	delta-BHC
4.601	-0.011	276190	5.210	-0.019	472664	22.09	23.67	6.9	gamma-BHC (Lindane)
5.080	-0.012	281975	5.735	-0.020	428103	25.34	23.66	6.8	Heptachlor
5.401	-0.013	294263	6.137	-0.021	470710	23.60	22.79	3.5	Aldrin
6.074	-0.014	249611	6.793	-0.021	384711	23.09	22.52	2.5	Heptachlor epoxide b
6.517	-0.014	250059	7.237	-0.021	324708	25.20	21.57	15.5	Endosulfan I
6.777	-0.014	461028	7.531	-0.020	701738	43.25	42.19	2.5	Dieldrin
6.440	-0.011	463410	7.323	-0.019	666767	46.82	43.71	6.9	4,4'-DDE
7.027	-0.014	308999	7.855	-0.021	410472	33.39	33.63	0.7	Endrin
7.264	-0.014	393371	8.068	-0.020	556392	47.22	44.48	6.0	Endosulfan II
7.088	-0.012	408687	7.930	-0.019	547911	49.02	46.15	6.0	4,4'-DDD
8.127	-0.013	384692	8.666	-0.020	503790	48.64	45.86	5.9	Endosulfan sulfate
7.378	-0.013	380801	8.247	-0.019	528288	45.20	46.11	2.0	4,4'-DDT
7.866	-0.011	850439	8.891	-0.018	1101314	227.82	217.20	4.8	Methoxychlor
8.401	-0.013	448760	9.190	-0.020	574487	49.53	48.42	2.3	Endrin ketone
7.693	-0.014	335271	8.398	-0.020	410005	50.46	46.46	8.3	Endrin aldehyde
6.217	-0.013	260215	7.005	-0.020	372921	23.70	21.89	7.9	trans-Chlordane
6.362	-0.013	236516	7.165	-0.020	328611	21.48	19.72	8.5	cis-Chlordane
2.297	-0.007	312594	2.474	-0.008	306095	20.69	13.70	40.7*	Hexachlorobutadiene
4.144	-0.009	295988	4.677	-0.016	460698	22.10	21.51	2.7	Hexachlorobenzene
3.791	-0.009	388583	4.182	-0.014	693981	38.14	41.98	9.6	Tetrachloro-m-xylene
9.307	-0.012	287977	10.403	-0.026	370814	40.27	39.09	3.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

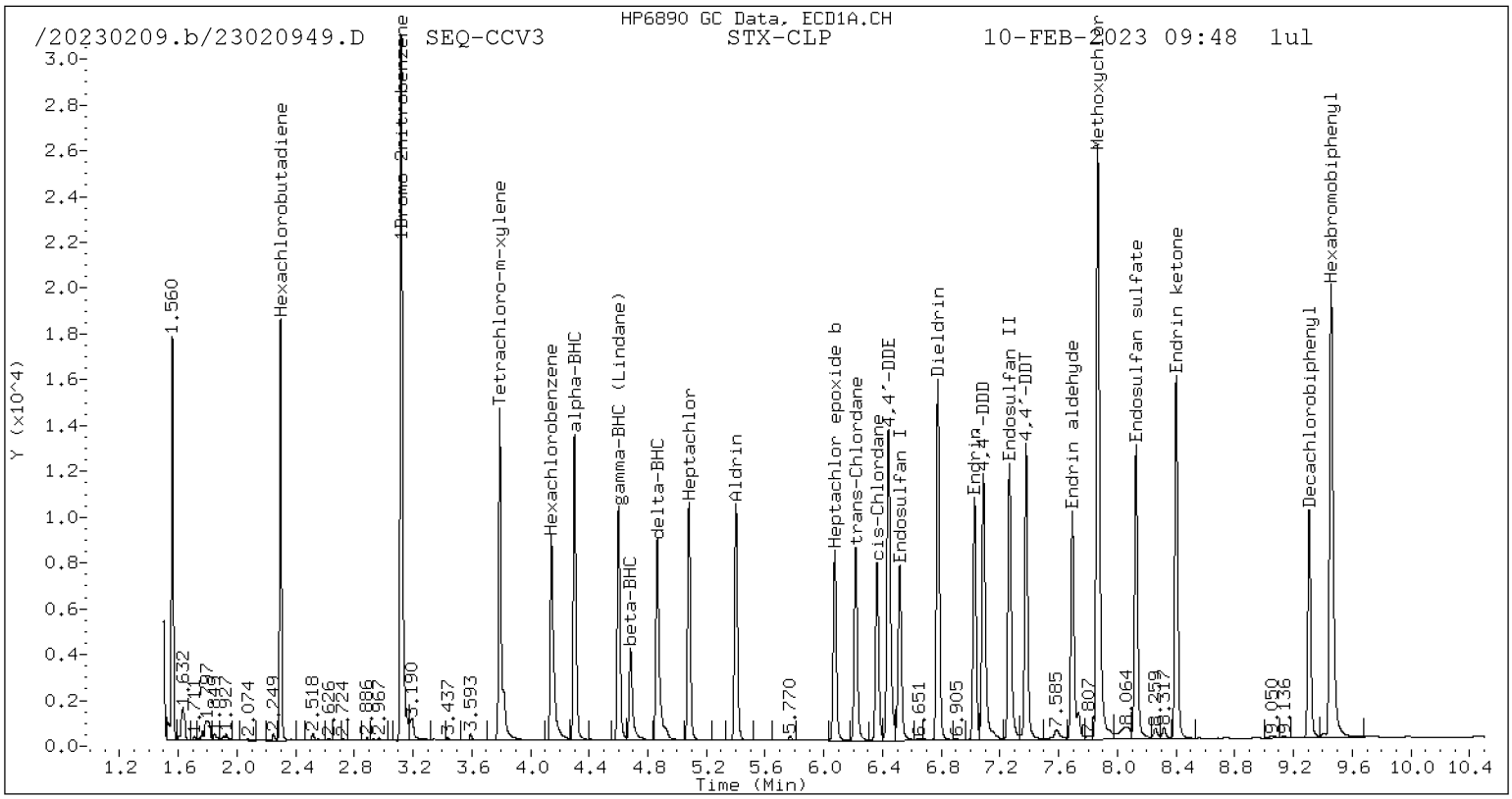
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	749195	11.4
Hexabromobiphenyl	609723	705811	15.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1174272	16.7
Hexabromobiphenyl	769764	858370	11.5

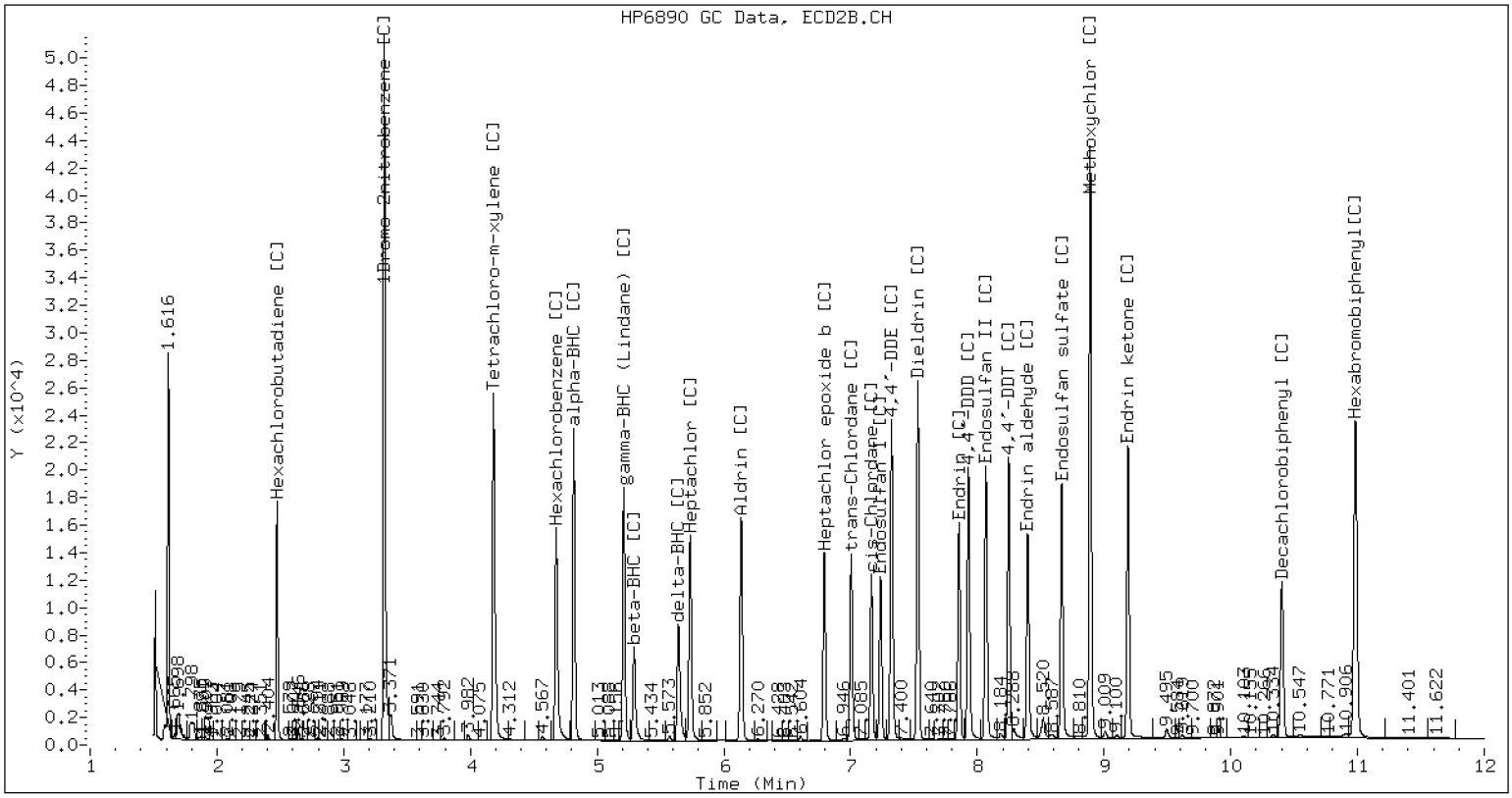
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230209.b/B20230209.b/23020949.D SEQ-CCV3 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS1

EPA 8081B

Laboratory:	Analytical Resources, LLC	Laboratory ID:	SKL0233-PEM1	File ID:	22121404.D
Client:	Anchor QEA, LLC	Matrix:	Water	Instrument:	ECD6
Project:	AOC5 MR Phase 1	Analyzed:	12/14/2022	Sequence:	SKL0233
SDG:	23A0134	Calibration:	FL00041	Column:	1

PEM COMPOUND	RT	Response
4,4'-DDE	6.49	6258
Endrin	7.08	745471
4,4'-DDD	7.14	15566
Endrin Aldehyde	7.75	21328
4,4'-DDT	7.43	629664
Endrin Ketone	8.45	19276

4,4'-DDT %Breakdown (1): 3.3

Endrin %Breakdown (1): 5.2

Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS1

EPA 8081B

Laboratory:	Analytical Resources, LLC	Laboratory ID:	SKL0233-PEM1	File ID:	22121404.D
Client:	Anchor QEA, LLC	Matrix:	Water	Instrument:	ECD6
Project:	AOC5 MR Phase 1	Analyzed:	12/14/2022	Sequence:	SKL0233
SDG:	23A0134	Calibration:	FL00041	Column:	2

PEM COMPOUND	RT	Response
4,4'-DDE	7.37	11906
Endrin	7.91	1029194
4,4'-DDD	7.98	32697
Endrin Aldehyde	8.45	31426
4,4'-DDT	8.30	890195
Endrin Ketone	9.24	28268

4,4'-DDT %Breakdown (1): 4.8

Endrin %Breakdown (1): 5.5

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

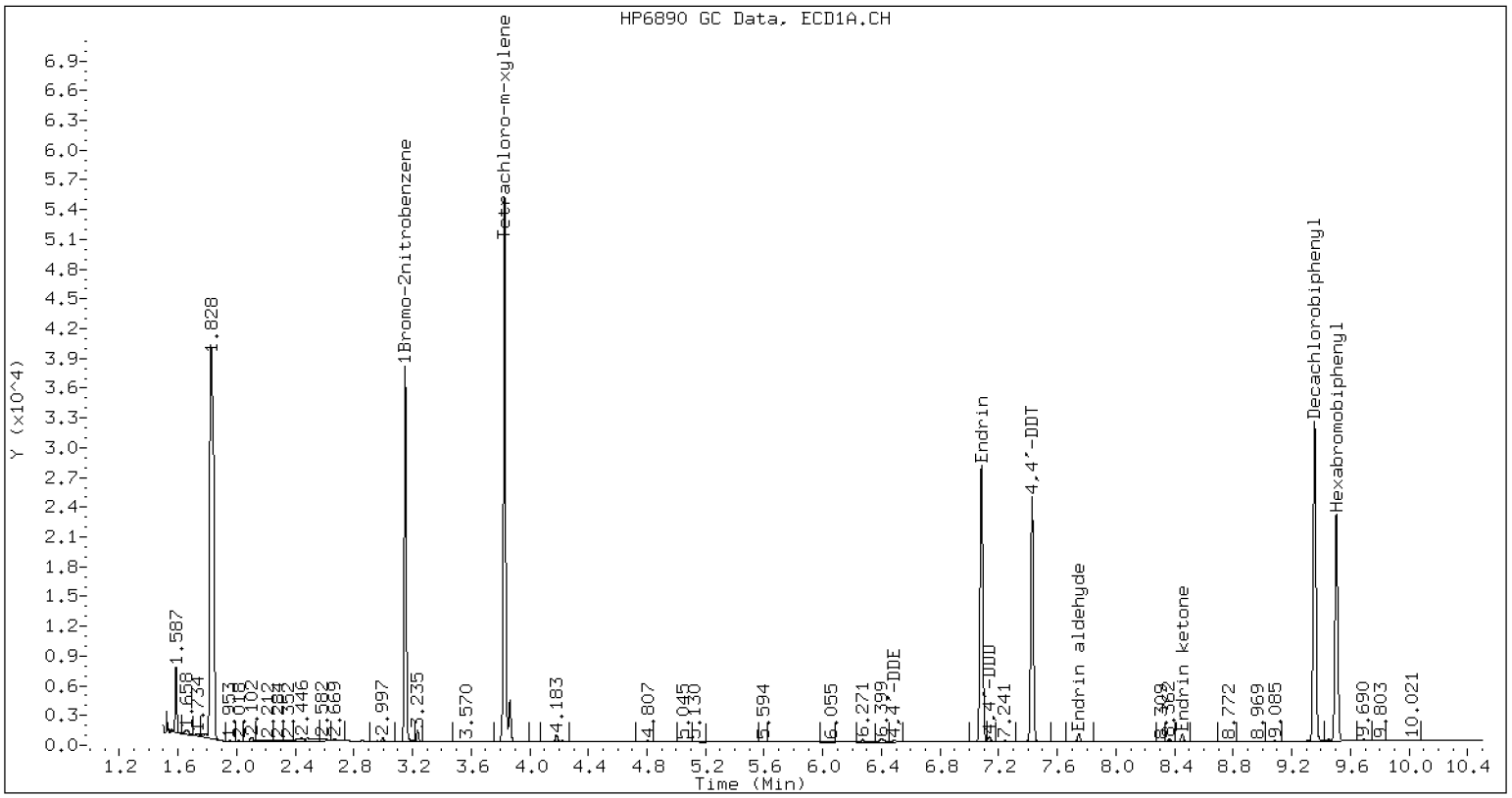
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.350	1005375
4,4'-DDE [C]	7.370	11906
Endrin [C]	7.907	1029194
4,4'-DDD [C]	7.977	32697
4,4'-DDT [C]	8.295	890195
Endrin ketone [C]	9.239	28268
Endrin aldehyde [C]	8.448	31426
Hexabromobiphenyl[C]	11.054	772586
Tetrachloro-m-xylene [C]	4.220	1890294
Decachlorobiphenyl [C]	10.467	1140978

DDT Percent Breakdown = 4.8 %
((11906+32697) * 100)/(11906+32697+890195)

Endrin Percent Breakdown = 5.5 %
((31426+28268) * 100)/(31426+28268+1029194)

/20221214.b/22121404.D SEQ-PEM1 STX-CLP 14-DEC-2022 20:20 1ul



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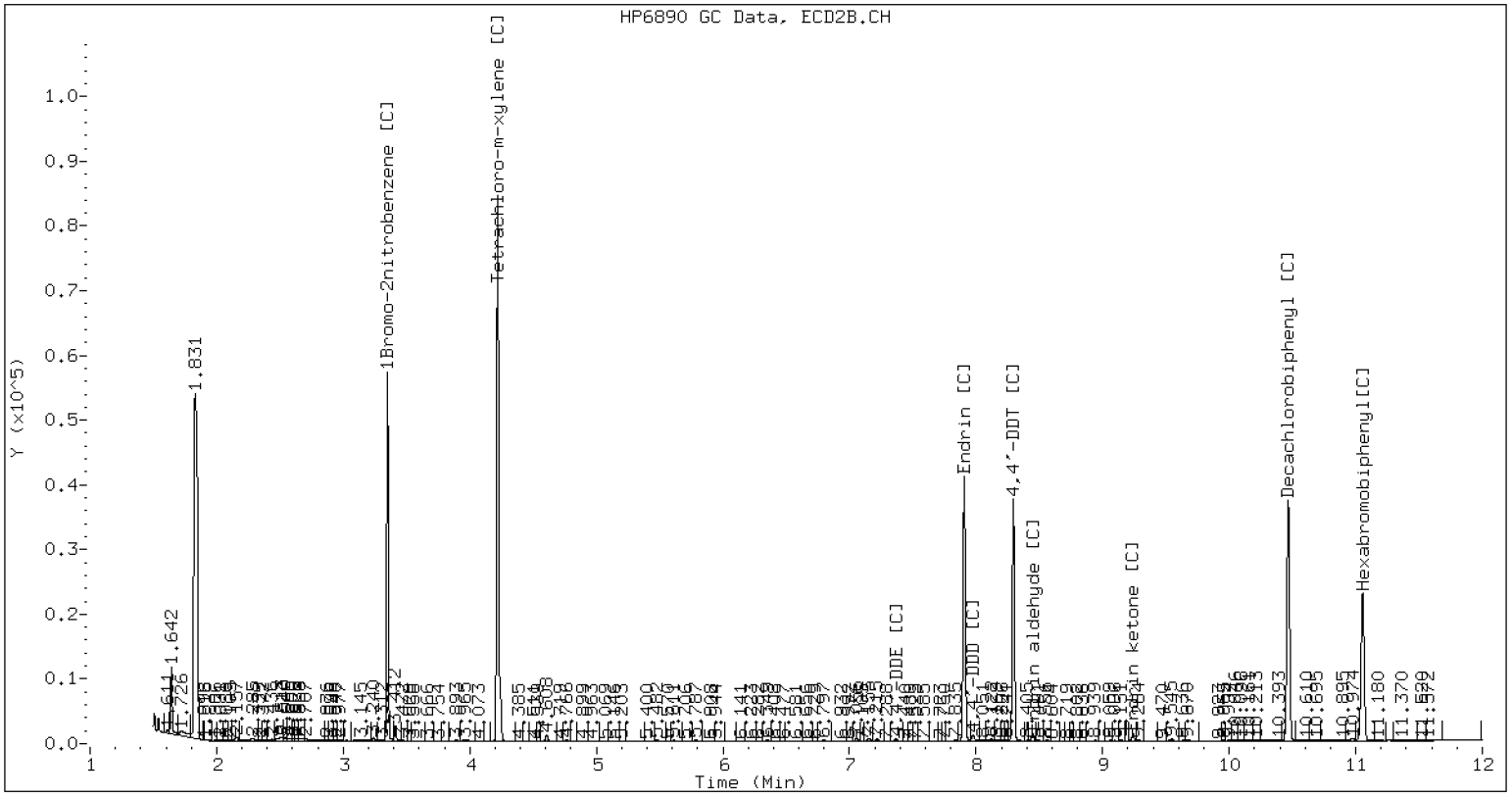

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SKL0233
Instrument: ECD6
Calibration: FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Performance Mix	SKL0233-PEM1	22121404.D	22121404.D	NA	12/14/22 20:20
Cal Standard	SKL0233-CAL1	22121405.D	22121405.D	NA	12/14/22 20:38
Cal Standard	SKL0233-CAL2	22121406.D	22121406.D	NA	12/14/22 20:56
Cal Standard	SKL0233-CAL3	22121407.D	22121407.D	NA	12/14/22 21:14
Cal Standard	SKL0233-CAL4	22121408.D	22121408.D	NA	12/14/22 21:31
Cal Standard	SKL0233-CAL5	22121409.D	22121409.D	NA	12/14/22 21:49
Cal Standard	SKL0233-CAL6	22121410.D	22121410.D	NA	12/14/22 22:07
Cal Standard	SKL0233-CAL7	22121411.D	22121411.D	NA	12/14/22 22:25
Cal Standard	SKL0233-CAL8	22121412.D	22121412.D	NA	12/14/22 22:43
Cal Standard	SKL0233-CAL9	22121413.D	22121413.D	NA	12/14/22 23:01
Cal Standard	SKL0233-CALA	22121414.D	22121414.D	NA	12/14/22 23:19
Cal Standard	SKL0233-CALB	22121415.D	22121415.D	NA	12/14/22 23:36
Cal Standard	SKL0233-CALC	22121416.D	22121416.D	NA	12/14/22 23:54
Cal Standard	SKL0233-CALD	22121417.D	22121417.D	NA	12/15/22 00:12
Cal Standard	SKL0233-CALE	22121418.D	22121418.D	NA	12/15/22 00:30

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-PEM1	DS1	QC		1	K007286	K006953		
SKL0233-CAL1	INDAA	QC		2	K011594	K006953		
SKL0233-CAL2	INDAB	QC		3	K011593	K006953		
SKL0233-CAL3	INDAC	QC		4	K011592	K006953		
SKL0233-CAL4	INDAD	QC		5	K011591	K006953		
SKL0233-CAL5	INDAE	QC		6	K011590	K006953		
SKL0233-CAL6	INDAF	QC		7	K011589	K006953		
SKL0233-CAL7	INDAG	QC		8	K011463	K006953		
SKL0233-CAL8	WNDA	QC		9	K011595	K006953		
SKL0233-CAL9	WNDB	QC		10	K007148	K006953		
SKL0233-CALA	WNDC	QC		11	K007147	K006953		
SKL0233-CALB	WNDD	QC		12	K007146	K006953		
SKL0233-CALC	WNDE	QC		13	K007145	K006953		
SKL0233-CALD	WNDF	QC		14	K007144	K006953		
SKL0233-CALE	WNDG	QC		15	K007093	K006953		
SKL0233-CALM	NOS1	QC		16	K007375	K006953		
SKL0233-CALN	NOS2	QC		17	K007374	K006953		
SKL0233-CALO	NOS3	QC		18	K007373	K006953		
SKL0233-CALP	NOS4	QC		19	K007372	K006953		
SKL0233-CALQ	NOS5	QC		20	K007371	K006953		
SKL0233-CALR	NOS6	QC		21	K007370	K006953		
SKL0233-CALS	NOS7	QC		22	K007287	K006953		

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-CALF	TOXAPH1	QC		23	K011601	K006953		
SKL0233-CALG	TOXAPH2	QC		24	K011600	K006953		
SKL0233-CALH	TOXAPH3	QC		25	K011599	K006953		
SKL0233-CALI	TOXAPH4	QC		26	K011598	K006953		
SKL0233-CALJ	TOXAPH5	QC		27	K011597	K006953		
SKL0233-CALK	TOXAPH6	QC		28	K011596	K006953		
SKL0233-CALL	TOXAPH7	QC		29	K008546	K006953		

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	14-DEC-2022 19:27	22121401.D	1	RINSE	
2	14-DEC-2022 19:44	22121402.D	1	RINSE	
3	14-DEC-2022 20:02	22121403.D	1	SEQ-IBL1	
4	14-DEC-2022 20:20	22121404.D	1	SEQ-PEM1	
5	14-DEC-2022 20:38	22121405.D	1	SEQ-CAL1	
6	14-DEC-2022 20:56	22121406.D	1	SEQ-CAL2	
7	14-DEC-2022 21:14	22121407.D	1	SEQ-CAL3	
8	14-DEC-2022 21:31	22121408.D	1	SEQ-CAL4	
9	14-DEC-2022 21:49	22121409.D	1	SEQ-CAL5	
10	14-DEC-2022 22:07	22121410.D	1	SEQ-CAL6	
11	14-DEC-2022 22:25	22121411.D	1	SEQ-CAL7	
12	14-DEC-2022 22:43	22121412.D	1	SEQ-CAL8	
13	14-DEC-2022 23:01	22121413.D	1	SEQ-CAL9	
14	14-DEC-2022 23:19	22121414.D	1	SEQ-CALA	
15	14-DEC-2022 23:36	22121415.D	1	SEQ-CALB	
16	14-DEC-2022 23:54	22121416.D	1	SEQ-CALC	
17	15-DEC-2022 00:12	22121417.D	1	SEQ-CALD	
18	15-DEC-2022 00:30	22121418.D	1	SEQ-CALE	
19	15-DEC-2022 00:48	22121419.D	1	SEQ-SCV1	
20	15-DEC-2022 01:06	22121420.D	1	SEQ-SCV2	
21	15-DEC-2022 01:24	22121421.D	1	SEQ-CAL1A	
22	15-DEC-2022 01:42	22121422.D	1	SEQ-CAL2A	
23	15-DEC-2022 01:59	22121423.D	1	SEQ-CAL3A	
24	15-DEC-2022 02:17	22121424.D	1	SEQ-CAL4A	
25	15-DEC-2022 02:35	22121425.D	1	SEQ-CAL5A	
26	15-DEC-2022 02:53	22121426.D	1	SEQ-CAL6A	
27	15-DEC-2022 03:11	22121427.D	1	SEQ-CAL7A	
28	15-DEC-2022 03:29	22121428.D	1	SEQ-CAL8A	
29	15-DEC-2022 03:46	22121429.D	1	SEQ-CAL9A	
30	15-DEC-2022 04:04	22121430.D	1	SEQ-CALAA	
31	15-DEC-2022 04:22	22121431.D	1	SEQ-CALAB	
32	15-DEC-2022 04:40	22121432.D	1	SEQ-CALAC	
33	15-DEC-2022 04:58	22121433.D	1	SEQ-CALAD	
34	15-DEC-2022 05:16	22121434.D	1	SEQ-CALAE	
35	15-DEC-2022 05:33	22121435.D	1	SEQ-PEM2	
36	15-DEC-2022 05:51	22121436.D	1	SEQ-ICV1	
37	15-DEC-2022 06:09	22121437.D	1	SEQ-ICV2	
38	15-DEC-2022 06:27	22121438.D	1	SEQ-ICV3	
39	15-DEC-2022 06:45	22121439.D	1	SEQ-ICV4	
40	15-DEC-2022 07:03	22121440.D	1	BKK0688-BLK1	
41	15-DEC-2022 07:21	22121441.D	1	BKK0688-BS1	
42	15-DEC-2022 07:39	22121442.D	1	BKK0688-BS2	
43	15-DEC-2022 07:57	22121443.D	1	BKK0688-BS3	
44	15-DEC-2022 08:15	22121444.D	1	BKK0688-BSD1	
45	15-DEC-2022 08:32	22121445.D	1	BKK0142-BLK1	
46	15-DEC-2022 08:50	22121446.D	1	BKK0142-BS1	
47	15-DEC-2022 09:08	22121447.D	1	BKK0142-BS2	
48	15-DEC-2022 09:26	22121448.D	1	BKK0142-BSD1	
49	15-DEC-2022 09:44	22121449.D	1	BKK0142-MS1	
50	15-DEC-2022 10:02	22121450.D	1	BKK0142-MSD1	

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b p

	Inject Date/Time	Filename	DF	LabID	ClientID
51	15-DEC-2022 10:20	22121451.D	1	22J0513-01	
52	15-DEC-2022 10:38	22121452.D	1	22J0513-04	
53	15-DEC-2022 10:55	22121453.D	1	22J0535-01	
54	15-DEC-2022 11:13	22121454.D	1	22K0429-01	
55	15-DEC-2022 11:31	22121455.D	1	22K0429-02	
56	15-DEC-2022 11:49	22121456.D	1	22K0429-03	
57	15-DEC-2022 12:07	22121457.D	1	SEQ-PEM3	
58	15-DEC-2022 12:25	22121458.D	1	SEQ-CCV1	
59	15-DEC-2022 12:43	22121459.D	1	SEQ-CCV2	
60	15-DEC-2022 13:01	22121460.D	1	SEQ-CCV3	
61	15-DEC-2022 13:19	22121461.D	1	SEQ-CCV4	
62	15-DEC-2022 13:36	22121462.D	1	BKK0380-BLK1	
63	15-DEC-2022 13:54	22121463.D	1	BKK0380-BS1	
64	15-DEC-2022 14:12	22121464.D	1	BKK0380-BSD1	
65	15-DEC-2022 14:30	22121465.D	1	22K0157-01	
66	15-DEC-2022 14:48	22121466.D	1	22K0230-01	
67	15-DEC-2022 15:06	22121467.D	1	22K0231-01	
68	15-DEC-2022 15:24	22121468.D	1	BKK0382-BLK1	
69	15-DEC-2022 15:42	22121469.D	1	BKK0382-BS1	
70	15-DEC-2022 16:00	22121470.D	1	BKK0382-BS2	
71	15-DEC-2022 16:18	22121471.D	1	BKK0382-BSD1	
72	15-DEC-2022 16:35	22121472.D	1	22K0075-01	
73	15-DEC-2022 16:53	22121473.D	1	SEQ-PEM4	
74	15-DEC-2022 17:11	22121474.D	1	SEQ-CCV5	
75	15-DEC-2022 17:29	22121475.D	1	SEQ-CCV6	
76	15-DEC-2022 17:47	22121476.D	1	SEQ-CCV7	
77	15-DEC-2022 18:05	22121477.D	1	SEQ-CCV8	
78	15-DEC-2022 18:23	22121478.D	1	BKK0537-BLK1	
79	15-DEC-2022 18:40	22121479.D	1	BKK0537-BS1	
80	15-DEC-2022 18:58	22121480.D	1	BKK0537-BS2	
81	15-DEC-2022 19:16	22121481.D	1	22K0194-01	
82	15-DEC-2022 19:34	22121482.D	1	22K0194-01RE1	10
83	15-DEC-2022 19:52	22121483.D	1	SEQ-PEM5	
84	15-DEC-2022 20:09	22121484.D	1	SEQ-CCV9	
85	15-DEC-2022 20:27	22121485.D	1	SEQ-CCVA	
86	15-DEC-2022 20:45	22121486.D	1	SEQ-CCVB	
87	15-DEC-2022 21:03	22121487.D	1	SEQ-CCVC	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 14-DEC-2022

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1113	22121454.D	22K0429-01		1	Heptachlor epoxide b,
1131	22121455.D	22K0429-02		1	Heptachlor epoxide b,
1149	22121456.D	22K0429-03		1	Hexachlorobenzene,
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2009	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane [C],
1113	22121454.D	22K0429-01		1	NO MANUAL INTEGRATION
1131	22121455.D	22K0429-02		1	Aldrin [C], Heptachlor epoxide b [C], trans-Chlordane [C],
1149	22121456.D	22K0429-03		1	Aldrin [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2010	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION

Security Status Report

Date: 17-Dec-2022 10:57

22121401.D	Data Locked	jrains, 17-Dec-2022 10:57
22121402.D	Data Locked	jrains, 17-Dec-2022 10:57
22121403.D	Data Locked	jrains, 17-Dec-2022 10:57
22121404.D	Data Locked	jrains, 17-Dec-2022 10:57
22121405.D	Data Locked	jrains, 17-Dec-2022 10:57
22121406.D	Data Locked	jrains, 17-Dec-2022 10:57
22121407.D	Data Locked	jrains, 17-Dec-2022 10:57
22121408.D	Data Locked	jrains, 17-Dec-2022 10:57
22121409.D	Data Locked	jrains, 17-Dec-2022 10:57
22121410.D	Data Locked	jrains, 17-Dec-2022 10:57
22121411.D	Data Locked	jrains, 17-Dec-2022 10:57
22121412.D	Data Locked	jrains, 17-Dec-2022 10:57
22121413.D	Data Locked	jrains, 17-Dec-2022 10:57
22121414.D	Data Locked	jrains, 17-Dec-2022 10:57
22121415.D	Data Locked	jrains, 17-Dec-2022 10:57
22121416.D	Data Locked	jrains, 17-Dec-2022 10:57
22121417.D	Data Locked	jrains, 17-Dec-2022 10:57
22121418.D	Data Locked	jrains, 17-Dec-2022 10:57
22121419.D	Data Locked	jrains, 17-Dec-2022 10:57
22121420.D	Data Locked	jrains, 17-Dec-2022 10:57
22121421.D	Data Locked	jrains, 17-Dec-2022 10:57
22121422.D	Data Locked	jrains, 17-Dec-2022 10:57
22121423.D	Data Locked	jrains, 17-Dec-2022 10:57
22121424.D	Data Locked	jrains, 17-Dec-2022 10:57
22121425.D	Data Locked	jrains, 17-Dec-2022 10:57
22121426.D	Data Locked	jrains, 17-Dec-2022 10:57
22121427.D	Data Locked	jrains, 17-Dec-2022 10:57
22121428.D	Data Locked	jrains, 17-Dec-2022 10:57
22121429.D	Data Locked	jrains, 17-Dec-2022 10:57
22121430.D	Data Locked	jrains, 17-Dec-2022 10:57
22121431.D	Data Locked	jrains, 17-Dec-2022 10:57
22121432.D	Data Locked	jrains, 17-Dec-2022 10:57
22121433.D	Data Locked	jrains, 17-Dec-2022 10:57
22121434.D	Data Locked	jrains, 17-Dec-2022 10:57

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0046
Instrument: ECD6
Calibration: FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLB0046-ICV1	23013104.D	23013104.D	NA	01/31/23 15:45
Calibration Check	SLB0046-CCV1	23013119.D	23013119.D	NA	01/31/23 20:13
Calibration Check	SLB0046-CCV2	23013133.D	23013133.D	NA	02/01/23 00:24
Calibration Check	SLB0046-CCV3	23013150.D	23013150.D	NA	02/01/23 05:28
Blank	BLA0409-BLK1	23013155.D	23013155.D	Solid	02/01/23 06:58
LCS	BLA0409-BS1	23013156.D	23013156.D	Solid	02/01/23 07:15
LCS Dup	BLA0409-BSD1	23013157.D	23013157.D	Solid	02/01/23 07:33
MRL Check	BLA0409-MRL1	23013158.D	23013158.D	Solid	02/01/23 07:51
LDW23-SS1116	BLA0409-MS1	23013159.D	23013159.D	Solid	02/01/23 08:09
LDW23-SS1116	BLA0409-MSD1	23013160.D	23013160.D	Solid	02/01/23 08:27
LDW23-SS1205	23A0134-01	23013161.D	23013161.D	Solid	02/01/23 08:45
LDW23-SS1188	23A0134-02	23013162.D	23013162.D	Solid	02/01/23 09:03
LDW23-SS1179	23A0134-03	23013163.D	23013163.D	Solid	02/01/23 09:21
LDW23-SS1242	23A0134-04	23013164.D	23013164.D	Solid	02/01/23 09:38
LDW23-SS1173	23A0134-05	23013165.D	23013165.D	Solid	02/01/23 09:56
LDW23-SS1160	23A0134-06	23013166.D	23013166.D	Solid	02/01/23 10:14
Calibration Check	SLB0046-CCV4	23013168.D	23013168.D	NA	02/01/23 10:50
LDW23-SS1152	23A0134-07	23013169.D	23013169.D	Solid	02/01/23 11:08
LDW23-SS1131	23A0134-08	23013170.D	23013170.D	Solid	02/01/23 11:26
LDW23-SS1129	23A0134-09	23013171.D	23013171.D	Solid	02/01/23 11:44
LDW23-SS1124	23A0134-10	23013172.D	23013172.D	Solid	02/01/23 12:02
LDW23-SS1123	23A0134-11	23013173.D	23013173.D	Solid	02/01/23 12:20
LDW23-SS1116	23A0134-12	23013174.D	23013174.D	Solid	02/01/23 12:38
LDW23-IT1210	23A0134-13	23013175.D	23013175.D	Solid	02/01/23 12:56
Calibration Check	SLB0046-CCV5	23013178.D	23013178.D	NA	02/01/23 13:49

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLB0046

Instrument: ECD6
Calibration ID: FL00041

Printed: 2/3/2023 3:55:03PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0046-PEM1	QC		1		K007286	L000844		
SLB0046-ICV1	QC		2		L000845	L000844		
BLA0336-BLK1	QC		3			L000844		
BLA0336-BS1	QC		4			L000844		
BLA0336-BSD1	QC		5			L000844		
BLA0336-MS1	QC		6			L000844		
BLA0336-MSD1	QC		7			L000844		
23A0100-01	8081B Pest (PSDDA)	A 02	8			L000844	Anchor QEA, LLC	
23A0100-02	8081B Pest (PSDDA)	A 02	9			L000844	Anchor QEA, LLC	
23A0100-03	8081B Pest (PSDDA)	A 02	10			L000844	Anchor QEA, LLC	
23A0100-04	8081B Pest (PSDDA)	A 02	11			L000844	Anchor QEA, LLC	
23A0100-05	8081B Pest (PSDDA)	A 02	12			L000844	Anchor QEA, LLC	
23A0100-06	8081B Pest (PSDDA)	A 02	13			L000844	Anchor QEA, LLC	
23A0100-07	8081B Pest (PSDDA)	A 02	14			L000844	Anchor QEA, LLC	
23A0100-08	8081B Pest (PSDDA)	A 02	15			L000844	Anchor QEA, LLC	
23A0100-09	8081B Pest (PSDDA)	A 02	16			L000844	Anchor QEA, LLC	
23A0100-10	8081B Pest (PSDDA)	A 02	17			L000844	Anchor QEA, LLC	
SLB0046-PEM2	QC		18		K007286	L000844		
SLB0046-CCV1	QC		19		L000845	L000844		
23A0100-11	8081B Pest (PSDDA)	A 02	20			L000844	Anchor QEA, LLC	
23A0100-12	8081B Pest (PSDDA)	A 02	21			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLB0046

Instrument: ECD6
Calibration ID: FL00041

Printed: 2/3/2023 3:55:03PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
23A0100-13	8081B Pest (PSDDA)	A 02	22			L000844	Anchor QEA, LLC	
23A0100-14	8081B Pest (PSDDA)	A 02	23			L000844	Anchor QEA, LLC	
23A0100-15	8081B Pest (PSDDA)	A 02	24			L000844	Anchor QEA, LLC	
23A0100-16	8081B Pest (PSDDA)	A 02	25			L000844	Anchor QEA, LLC	
23A0100-17	8081B Pest (PSDDA)	A 02	26			L000844	Anchor QEA, LLC	
23A0100-18	8081B Pest (PSDDA)	A 02	27			L000844	Anchor QEA, LLC	
23A0100-19	8081B Pest (PSDDA)	A 02	28			L000844	Anchor QEA, LLC	
23A0100-20	8081B Pest (PSDDA)	A 02	29			L000844	Anchor QEA, LLC	
SLB0046-PEM3	QC		30		K007286	L000844		
SLB0046-CCV2	QC		31		L000845	L000844		
BLA0392-BLK1	QC		32			L000844		
BLA0392-BS1	QC		33			L000844		
BLA0392-BSD1	QC		34			L000844		
BLA0392-MS1	QC		35			L000844		
BLA0392-MSD1	QC		36			L000844		
22L0417-03	8081B Pest (PSDDA)	A 04	37			L000844	Anchor QEA, LLC	
22L0417-04	8081B Pest (PSDDA)	A 04	38			L000844	Anchor QEA, LLC	
23A0133-03	8081B Pest (PSDDA)	C 01	39			L000844	Anchor QEA, LLC	
23A0133-07	8081B Pest (PSDDA)	C 01	40			L000844	Anchor QEA, LLC	
23A0133-09	8081B Pest (PSDDA)	C 01	41			L000844	Anchor QEA, LLC	
23A0133-08	8081B Pest (PSDDA)	C 01	42			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLB0046

Instrument: ECD6
Calibration ID: FL00041

Printed: 2/3/2023 3:55:03PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
23A0133-11	8081B Pest (PSDDA)	C 01	43			L000844	Anchor QEA, LLC	
23A0133-10	8081B Pest (PSDDA)	C 01	44			L000844	Anchor QEA, LLC	
23A0133-12	8081B Pest (PSDDA)	C 01	45			L000844	Anchor QEA, LLC	
23A0133-06	8081B Pest (PSDDA)	C 01	46			L000844	Anchor QEA, LLC	
23A0133-13	8081B Pest (PSDDA)	C 01	47			L000844	Anchor QEA, LLC	
23A0133-14	8081B Pest (PSDDA)	C 01	48			L000844	Anchor QEA, LLC	
SLB0046-PEM4	QC		49		K007286	L000844		
SLB0046-CCV3	QC		50		L000845	L000844		
23A0133-15	8081B Pest (PSDDA)	C 01	51			L000844	Anchor QEA, LLC	
23A0133-16	8081B Pest (PSDDA)	C 01	52			L000844	Anchor QEA, LLC	
BLA0409-BLK1	QC		53			L000844		
BLA0409-BS1	QC		54			L000844		
BLA0409-BSD1	QC		55			L000844		
BLA0409-MRL1	QC		56			L000844		
BLA0409-MS1	QC		57			L000844		
BLA0409-MSD1	QC		58			L000844		
23A0134-01	8081B Pest (PSDDA)	C 01	59			L000844	Anchor QEA, LLC	
23A0134-02	8081B Pest (PSDDA)	C 01	60			L000844	Anchor QEA, LLC	
23A0134-03	8081B Pest (PSDDA)	C 01	61			L000844	Anchor QEA, LLC	
23A0134-04	8081B Pest (PSDDA)	C 01	62			L000844	Anchor QEA, LLC	
23A0134-05	8081B Pest (PSDDA)	C 01	63			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLB0046

Instrument: ECD6
Calibration ID: FL00041

Printed: 2/3/2023 3:55:03PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
23A0134-06	8081B Pest (PSDDA)	C 01	64			L000844	Anchor QEA, LLC	
23A0134-07	8081B Pest (PSDDA)	C 01	65			L000844	Anchor QEA, LLC	
23A0134-08	8081B Pest (PSDDA)	C 01	66			L000844	Anchor QEA, LLC	
23A0134-09	8081B Pest (PSDDA)	C 01	67			L000844	Anchor QEA, LLC	
23A0134-10	8081B Pest (PSDDA)	C 01	68			L000844	Anchor QEA, LLC	
SLB0046-PEM5	QC		69		K007286	L000844		
SLB0046-CCV4	QC		70		L000845	L000844		
23A0134-11	8081B Pest (PSDDA)	C 01	71			L000844	Anchor QEA, LLC	
23A0134-12	8081B Pest (PSDDA)	C 01	72			L000844	Anchor QEA, LLC	
23A0134-13	8081B Pest (PSDDA)	C 01	73			L000844	Anchor QEA, LLC	
SLB0046-PEM6	QC		74		K007286	L000844		
SLB0046-CCV5	QC		75		L000845	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230131.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	31-JAN-2023 15:28	23013103.D	1	SLB0046-PEM1	
2	31-JAN-2023 15:45	23013104.D	1	SLB0046-ICV1	
3	31-JAN-2023 16:03	23013105.D	1	BLA0336-BLK1	
4	31-JAN-2023 16:21	23013106.D	1	BLA0336-BS1	
5	31-JAN-2023 16:39	23013107.D	1	BLA0336-BSD1	
6	31-JAN-2023 16:57	23013108.D	1	23A0100-01	
7	31-JAN-2023 17:15	23013109.D	1	23A0100-02	
8	31-JAN-2023 17:32	23013110.D	1	23A0100-03	
9	31-JAN-2023 17:50	23013111.D	1	23A0100-04	
10	31-JAN-2023 18:08	23013112.D	1	23A0100-05	
11	31-JAN-2023 18:26	23013113.D	1	23A0100-06	
12	31-JAN-2023 18:44	23013114.D	1	23A0100-07	
13	31-JAN-2023 19:02	23013115.D	1	23A0100-08	
14	31-JAN-2023 19:20	23013116.D	1	23A0100-09	
15	31-JAN-2023 19:38	23013117.D	1	23A0100-10	
16	31-JAN-2023 19:55	23013118.D	1	SLB0046-PEM2	
17	31-JAN-2023 20:13	23013119.D	1	SLB0046-CCV1	
18	31-JAN-2023 20:31	23013120.D	1	23A0100-11	
19	31-JAN-2023 20:49	23013121.D	1	23A0100-12	
20	31-JAN-2023 21:07	23013122.D	1	23A0100-13	
21	31-JAN-2023 21:25	23013123.D	1	23A0100-14	
22	31-JAN-2023 21:43	23013124.D	1	23A0100-15	
23	31-JAN-2023 22:01	23013125.D	1	23A0100-16	
24	31-JAN-2023 22:19	23013126.D	1	23A0100-17	
25	31-JAN-2023 22:37	23013127.D	1	BLA0336-MS1	
26	31-JAN-2023 22:55	23013128.D	1	BLA0336-MSD1	
27	31-JAN-2023 23:13	23013129.D	1	23A0100-18	
28	31-JAN-2023 23:30	23013130.D	1	23A0100-19	
29	31-JAN-2023 23:48	23013131.D	1	23A0100-20	
30	01-FEB-2023 00:06	23013132.D	1	SLB0046-PEM3	
31	01-FEB-2023 00:24	23013133.D	1	SLB0046-CCV2	
32	01-FEB-2023 00:42	23013134.D	1	BLA0392-BLK1	
33	01-FEB-2023 01:00	23013135.D	1	BLA0392-BS1	
34	01-FEB-2023 01:18	23013136.D	1	BLA0392-BSD1	
35	01-FEB-2023 01:36	23013137.D	1	23A0133-03	
36	01-FEB-2023 01:54	23013138.D	1	23A0133-06	
37	01-FEB-2023 02:12	23013139.D	1	23A0133-07	
38	01-FEB-2023 02:30	23013140.D	1	23A0133-08	
39	01-FEB-2023 02:48	23013141.D	1	BLA0392-MS1	
40	01-FEB-2023 03:05	23013142.D	1	BLA0392-MSD1	
41	01-FEB-2023 03:23	23013143.D	1	23A0133-09	
42	01-FEB-2023 03:41	23013144.D	1	23A0133-10	
43	01-FEB-2023 03:59	23013145.D	1	23A0133-11	
44	01-FEB-2023 04:17	23013146.D	1	23A0133-12	
45	01-FEB-2023 04:35	23013147.D	1	23A0133-13	
46	01-FEB-2023 04:53	23013148.D	1	23A0133-14	
47	01-FEB-2023 05:10	23013149.D	1	SLB0046-PEM4	
48	01-FEB-2023 05:28	23013150.D	1	SLB0046-CCV3	
49	01-FEB-2023 05:46	23013151.D	1	23A0133-15	
50	01-FEB-2023 06:04	23013152.D	1	23A0133-16	

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230131.b p

	Inject Date/Time	Filename	DF	LabID	ClientID
51	01-FEB-2023 06:22	23013153.D	1	22L0417-03	
52	01-FEB-2023 06:40	23013154.D	1	22L0417-04	
53	01-FEB-2023 06:58	23013155.D	1	BLA0409-BLK1	
54	01-FEB-2023 07:15	23013156.D	1	BLA0409-BS1	
55	01-FEB-2023 07:33	23013157.D	1	BLA0409-BSD1	
56	01-FEB-2023 07:51	23013158.D	1	BLA0409-MRL1	
57	01-FEB-2023 08:09	23013159.D	1	BLA0409-MS1	
58	01-FEB-2023 08:27	23013160.D	1	BLA0409-MSD1	
59	01-FEB-2023 08:45	23013161.D	1	23A0134-01	
60	01-FEB-2023 09:03	23013162.D	1	23A0134-02	
61	01-FEB-2023 09:21	23013163.D	1	23A0134-03	
62	01-FEB-2023 09:38	23013164.D	1	23A0134-04	
63	01-FEB-2023 09:56	23013165.D	1	23A0134-05	
64	01-FEB-2023 10:14	23013166.D	1	23A0134-06	
65	01-FEB-2023 10:32	23013167.D	1	SLB0046-PEM5	
66	01-FEB-2023 10:50	23013168.D	1	SLB0046-CCV4	
67	01-FEB-2023 11:08	23013169.D	1	23A0134-07	
68	01-FEB-2023 11:26	23013170.D	1	23A0134-08	
69	01-FEB-2023 11:44	23013171.D	1	23A0134-09	
70	01-FEB-2023 12:02	23013172.D	1	23A0134-10	
71	01-FEB-2023 12:20	23013173.D	1	23A0134-11	
72	01-FEB-2023 12:38	23013174.D	1	23A0134-12	
73	01-FEB-2023 12:56	23013175.D	1	23A0134-13	
74	01-FEB-2023 13:14	23013176.D	1	23A0134-15	
75	01-FEB-2023 13:31	23013177.D	1	SLB0046-PEM6	
76	01-FEB-2023 13:49	23013178.D	1	SLB0046-CCV5	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230131.b

ARI Job No.: SLB0 Method: PEST.m Instrument: ecd6.i Date: 31-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1528	23013103.D	SLB0046-PEM1		1	NO MANUAL INTEGRATION
1545	23013104.D	SLB0046-ICV1		1	NO MANUAL INTEGRATION
1603	23013105.D	BLA0336-BLK1		1	NO MANUAL INTEGRATION
1621	23013106.D	BLA0336-BS1		1	NO MANUAL INTEGRATION
1639	23013107.D	BLA0336-BSD1		1	NO MANUAL INTEGRATION
1657	23013108.D	23A0100-01		1	NO MANUAL INTEGRATION
1715	23013109.D	23A0100-02		1	NO MANUAL INTEGRATION
1732	23013110.D	23A0100-03		1	NO MANUAL INTEGRATION
1750	23013111.D	23A0100-04		1	NO MANUAL INTEGRATION
1808	23013112.D	23A0100-05		1	NO MANUAL INTEGRATION
1826	23013113.D	23A0100-06		1	NO MANUAL INTEGRATION
1844	23013114.D	23A0100-07		1	NO MANUAL INTEGRATION
1902	23013115.D	23A0100-08		1	NO MANUAL INTEGRATION
1920	23013116.D	23A0100-09		1	NO MANUAL INTEGRATION
1938	23013117.D	23A0100-10		1	NO MANUAL INTEGRATION
1955	23013118.D	SLB0046-PEM2		1	NO MANUAL INTEGRATION
2013	23013119.D	SLB0046-CCV1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230131.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2031	23013120.D	23A0100-11		1	NO MANUAL INTEGRATION
2049	23013121.D	23A0100-12		1	Hexachlorobenzene,
2107	23013122.D	23A0100-13		1	NO MANUAL INTEGRATION
2125	23013123.D	23A0100-14		1	NO MANUAL INTEGRATION
2143	23013124.D	23A0100-15		1	NO MANUAL INTEGRATION
2201	23013125.D	23A0100-16		1	NO MANUAL INTEGRATION
2219	23013126.D	23A0100-17		1	NO MANUAL INTEGRATION
2237	23013127.D	BLA0336-MS1		1	NO MANUAL INTEGRATION
2255	23013128.D	BLA0336-MSD1		1	NO MANUAL INTEGRATION
2313	23013129.D	23A0100-18		1	Hexachlorobenzene,
2330	23013130.D	23A0100-19		1	Hexachlorobenzene,
2348	23013131.D	23A0100-20		1	NO MANUAL INTEGRATION
0006	23013132.D	SLB0046-PEM3		1	NO MANUAL INTEGRATION
0024	23013133.D	SLB0046-CCV2		1	NO MANUAL INTEGRATION
0042	23013134.D	BLA0392-BLK1		1	NO MANUAL INTEGRATION
0100	23013135.D	BLA0392-BS1		1	NO MANUAL INTEGRATION
0118	23013136.D	BLA0392-BSD1		1	NO MANUAL INTEGRATION
0136	23013137.D	23A0133-03		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230131.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0154	23013138.D	23A0133-06		1	NO MANUAL INTEGRATION
0212	23013139.D	23A0133-07		1	NO MANUAL INTEGRATION
0230	23013140.D	23A0133-08		1	NO MANUAL INTEGRATION
0248	23013141.D	BLA0392-MS1		1	NO MANUAL INTEGRATION
0305	23013142.D	BLA0392-MSD1		1	NO MANUAL INTEGRATION
0323	23013143.D	23A0133-09		1	NO MANUAL INTEGRATION
0341	23013144.D	23A0133-10		1	NO MANUAL INTEGRATION
0359	23013145.D	23A0133-11		1	alpha-BHC,
0417	23013146.D	23A0133-12		1	NO MANUAL INTEGRATION
0435	23013147.D	23A0133-13		1	NO MANUAL INTEGRATION
0453	23013148.D	23A0133-14		1	Hexachlorobenzene,
0510	23013149.D	SLB0046-PEM4		1	NO MANUAL INTEGRATION
0528	23013150.D	SLB0046-CCV3		1	NO MANUAL INTEGRATION
0546	23013151.D	23A0133-15		1	Hexachlorobenzene,
0604	23013152.D	23A0133-16		1	NO MANUAL INTEGRATION
0622	23013153.D	22L0417-03		1	NO MANUAL INTEGRATION
0640	23013154.D	22L0417-04		1	NO MANUAL INTEGRATION
0658	23013155.D	BLA0409-BLK1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230131.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0715	23013156.D	BLA0409-BS1		1	NO MANUAL INTEGRATION
0733	23013157.D	BLA0409-BSD1		1	NO MANUAL INTEGRATION
0751	23013158.D	BLA0409-MRL1		1	NO MANUAL INTEGRATION
0809	23013159.D	BLA0409-MS1		1	NO MANUAL INTEGRATION
0827	23013160.D	BLA0409-MSD1		1	NO MANUAL INTEGRATION
0845	23013161.D	23A0134-01		1	NO MANUAL INTEGRATION
0903	23013162.D	23A0134-02		1	alpha-BHC,
0921	23013163.D	23A0134-03		1	NO MANUAL INTEGRATION
0938	23013164.D	23A0134-04		1	Hexachlorobenzene,
0956	23013165.D	23A0134-05		1	alpha-BHC,
1014	23013166.D	23A0134-06		1	Hexachlorobenzene,
1032	23013167.D	SLB0046-PEM5		1	NO MANUAL INTEGRATION
1050	23013168.D	SLB0046-CCV4		1	NO MANUAL INTEGRATION
1108	23013169.D	23A0134-07		1	NO MANUAL INTEGRATION
1126	23013170.D	23A0134-08		1	NO MANUAL INTEGRATION
1144	23013171.D	23A0134-09		1	alpha-BHC,
1202	23013172.D	23A0134-10		1	NO MANUAL INTEGRATION
1220	23013173.D	23A0134-11		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230131.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1238	23013174.D	23A0134-12		1	NO MANUAL INTEGRATION
1256	23013175.D	23A0134-13		1	NO MANUAL INTEGRATION
1314	23013176.D	23A0134-15		1	NO MANUAL INTEGRATION
1331	23013177.D	SLB0046-PEM6		1	NO MANUAL INTEGRATION
1349	23013178.D	SLB0046-CCV5		1	NO MANUAL INTEGRATION

Security Status Report

Date: 04-Feb-2023 11:13

23013103.D	Data Locked	yev, 04-
23013104.D	Data Locked	yev, 04-
23013105.D	Data Locked	yev, 04-
23013106.D	Data Locked	yev, 04-
23013107.D	Data Locked	yev, 04-
23013108.D	Data Locked	yev, 04-
23013109.D	Data Locked	yev, 04-
23013110.D	Data Locked	yev, 04-
23013111.D	Data Locked	yev, 04-
23013112.D	Data Locked	yev, 04-
23013113.D	Data Locked	yev, 04-
23013114.D	Data Locked	yev, 04-
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23013116.D	Data Locked	yev, 04-
23013117.D	Data Locked	yev, 04-
23013118.D	Data Locked	yev, 04-
23013119.D	Data Locked	yev, 04-
23013120.D	Data Locked	yev, 04-
23013121.D	Data Locked	yev, 04-
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23013163.D	Data Locked	yev, 04-

23013164.D	Data Locked	yev, 04-
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23013166.D	Data Locked	yev, 04-
23013167.D	Data Locked	yev, 04-
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23013170.D	Data Locked	yev, 04-
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23013172.D	Data Locked	yev, 04-
23013173.D	Data Locked	yev, 04-
23013174.D	Data Locked	yev, 04-
23013175.D	Data Locked	yev, 04-
23013176.D	Data Locked	yev, 04-
23013177.D	Data Locked	yev, 04-
23013178.D	Data Locked	yev, 04-

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0156	Instrument:	ECD6
		Calibration:	FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLB0156-ICV1	23020903.D	23020903.D	NA	02/09/23 20:06
LDW23-SC1249	23A0134-15	23020904.D	23020904.D	Solid	02/09/23 20:24
Calibration Check	SLB0156-CCV1	23020920.D	23020920.D	NA	02/10/23 01:10
Calibration Check	SLB0156-CCV2	23020937.D	23020937.D	NA	02/10/23 06:14
Calibration Check	SLB0156-CCV3	23020949.D	23020949.D	NA	02/10/23 09:48

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLB0156

Instrument: ECD6
Calibration ID: FL00041

Printed: 2/11/2023 12:06:57PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0156-ICV1	QC		1		L000845	L000844		
23A0134-15	8081B Pest (PSDDA)	C 01	2			L000844	Anchor QEA, LLC	
BLA0553-BLK1	QC		3			L000844		
BLA0553-BS1	QC		4			L000844		
BLA0553-BSD1	QC		5			L000844		
BLA0553-MS1	QC		6			L000844		
BLA0553-MSD1	QC		7			L000844		
23A0158-04	8081B Pest (PSDDA)	A 01	8			L000844	Anchor QEA, LLC	
23A0158-05	8081B Pest (PSDDA)	A 01	9			L000844	Anchor QEA, LLC	
23A0158-06	8081B Pest (PSDDA)	A 01	10			L000844	Anchor QEA, LLC	
23A0158-07	8081B Pest (PSDDA)	A 01	11			L000844	Anchor QEA, LLC	
23A0158-08	8081B Pest (PSDDA)	A 01	12			L000844	Anchor QEA, LLC	
23A0158-09	8081B Pest (PSDDA)	A 01	13			L000844	Anchor QEA, LLC	
23A0158-10	8081B Pest (PSDDA)	A 01	14			L000844	Anchor QEA, LLC	
23A0158-11	8081B Pest (PSDDA)	A 01	15			L000844	Anchor QEA, LLC	
23A0158-12	8081B Pest (PSDDA)	A 01	16			L000844	Anchor QEA, LLC	
SLB0156-PEM1	QC		17		K007286	L000844		
SLB0156-CCV1	QC		18		L000845	L000844		
23A0158-13	8081B Pest (PSDDA)	A 01	19			L000844	Anchor QEA, LLC	
23A0158-14	8081B Pest (PSDDA)	A 01	20			L000844	Anchor QEA, LLC	
23A0158-15	8081B Pest (PSDDA)	A 01	21			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLB0156

Instrument: ECD6
Calibration ID: FL00041

Printed: 2/11/2023 12:06:57PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
23A0158-16	8081B Pest (PSDDA)	A 01	22			L000844	Anchor QEA, LLC	
BLA0556-BLK1	QC		23			L000844		
BLA0556-BS1	QC		24			L000844		
BLA0556-BSD1	QC		25			L000844		
BLA0556-MS1	QC		26			L000844		
BLA0556-MSD1	QC		27			L000844		
23A0179-01	8081B Pest (PSDDA)	A 01	28			L000844	Anchor QEA, LLC	
23A0179-02	8081B Pest (PSDDA)	A 01	29			L000844	Anchor QEA, LLC	
23A0179-03	8081B Pest (PSDDA)	A 01	30			L000844	Anchor QEA, LLC	
23A0179-04	8081B Pest (PSDDA)	A 01	31			L000844	Anchor QEA, LLC	
23A0179-05	8081B Pest (PSDDA)	A 01	32			L000844	Anchor QEA, LLC	
23A0179-06	8081B Pest (PSDDA)	A 01	33			L000844	Anchor QEA, LLC	
SLB0156-PEM2	QC		34		K007286	L000844		
SLB0156-CCV2	QC		35		L000845	L000844		
23A0179-07	8081B Pest (PSDDA)	A 01	36			L000844	Anchor QEA, LLC	
23A0179-08	8081B Pest (PSDDA)	A 01	37			L000844	Anchor QEA, LLC	
23A0179-09	8081B Pest (PSDDA)	A 01	38			L000844	Anchor QEA, LLC	
23A0179-10	8081B Pest (PSDDA)	A 01	39			L000844	Anchor QEA, LLC	
23A0179-11	8081B Pest (PSDDA)	A 01	40			L000844	Anchor QEA, LLC	
23A0179-12	8081B Pest (PSDDA)	A 01	41			L000844	Anchor QEA, LLC	
23A0180-01	8081B Pest (PSDDA)	A 01	42			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLB0156

Instrument: ECD6
Calibration ID: FL00041

Printed: 2/11/2023 12:06:57PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
23A0180-02	8081B Pest (PSDDA)	A 01	43			L000844	Anchor QEA, LLC	
23A0180-03	8081B Pest (PSDDA)	A 01	44			L000844	Anchor QEA, LLC	
23A0180-04	8081B Pest (PSDDA)	A 01	45			L000844	Anchor QEA, LLC	
SLB0156-PEM3	QC		46		K007286	L000844		
SLB0156-CCV3	QC		47		L000845	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230209.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	09-FEB-2023 19:30	23020901.D	1	RINSE	
2	09-FEB-2023 19:48	23020902.D	1	SEQ-PEM1	
3	09-FEB-2023 20:06	23020903.D	1	SEQ-ICV1	
4	09-FEB-2023 20:24	23020904.D	1	23A0134-15	
5	09-FEB-2023 20:41	23020905.D	1	BLA0553-BLK1	
6	09-FEB-2023 20:59	23020906.D	1	BLA0553-BS1	
7	09-FEB-2023 21:17	23020907.D	1	BLA0553-BSD1	
8	09-FEB-2023 21:35	23020908.D	1	BLA0553-MS1	
9	09-FEB-2023 21:53	23020909.D	1	BLA0553-MSD1	
10	09-FEB-2023 22:11	23020910.D	1	23A0158-04	
11	09-FEB-2023 22:29	23020911.D	1	23A0158-05	
12	09-FEB-2023 22:47	23020912.D	1	23A0158-06	
13	09-FEB-2023 23:05	23020913.D	1	23A0158-07	
14	09-FEB-2023 23:23	23020914.D	1	23A0158-08	
15	09-FEB-2023 23:40	23020915.D	1	23A0158-09	
16	09-FEB-2023 23:58	23020916.D	1	23A0158-10	
17	10-FEB-2023 00:16	23020917.D	1	23A0158-11	
18	10-FEB-2023 00:34	23020918.D	1	23A0158-12	
19	10-FEB-2023 00:52	23020919.D	1	SEQ-PEM2	
20	10-FEB-2023 01:10	23020920.D	1	SEQ-CCV1	
21	10-FEB-2023 01:28	23020921.D	1	23A0158-13	
22	10-FEB-2023 01:46	23020922.D	1	23A0158-14	
23	10-FEB-2023 02:04	23020923.D	1	23A0158-15	
24	10-FEB-2023 02:21	23020924.D	1	23A0158-16	
25	10-FEB-2023 02:39	23020925.D	1	BLA0556-BLK1	
26	10-FEB-2023 02:57	23020926.D	1	BLA0556-BS1	
27	10-FEB-2023 03:15	23020927.D	1	BLA0556-BSD1	
28	10-FEB-2023 03:33	23020928.D	1	BLA0556-MS1	
29	10-FEB-2023 03:51	23020929.D	1	BLA0556-MSD1	
30	10-FEB-2023 04:09	23020930.D	1	23A0179-01	
31	10-FEB-2023 04:26	23020931.D	1	23A0179-02	
32	10-FEB-2023 04:44	23020932.D	1	23A0179-03	
33	10-FEB-2023 05:02	23020933.D	1	23A0179-04	
34	10-FEB-2023 05:20	23020934.D	1	23A0179-05	
35	10-FEB-2023 05:38	23020935.D	1	23A0179-06	
36	10-FEB-2023 05:56	23020936.D	1	SEQ-PEM3	
37	10-FEB-2023 06:14	23020937.D	1	SEQ-CCV2	
38	10-FEB-2023 06:32	23020938.D	1	23A0179-07	
39	10-FEB-2023 06:49	23020939.D	1	23A0179-08	
40	10-FEB-2023 07:07	23020940.D	1	23A0179-09	
41	10-FEB-2023 07:25	23020941.D	1	23A0179-10	
42	10-FEB-2023 07:43	23020942.D	1	23A0179-11	
43	10-FEB-2023 08:01	23020943.D	1	23A0179-12	
44	10-FEB-2023 08:19	23020944.D	1	23A0180-01	
45	10-FEB-2023 08:37	23020945.D	1	23A0180-02	
46	10-FEB-2023 08:54	23020946.D	1	23A0180-03	
47	10-FEB-2023 09:12	23020947.D	1	23A0180-04	
48	10-FEB-2023 09:30	23020948.D	1	SEQ-PEM4	
49	10-FEB-2023 09:48	23020949.D	1	SEQ-CCV3	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230209.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 09-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1930	23020901.D	RINSE		1	NO MANUAL INTEGRATION
1948	23020902.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2006	23020903.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
2024	23020904.D	23A0134-15		1	Hexachlorobenzene,
2041	23020905.D	BLA0553-BLK1		1	NO MANUAL INTEGRATION
2059	23020906.D	BLA0553-BS1		1	NO MANUAL INTEGRATION
2117	23020907.D	BLA0553-BSD1		1	NO MANUAL INTEGRATION
2135	23020908.D	BLA0553-MS1		1	NO MANUAL INTEGRATION
2153	23020909.D	BLA0553-MSD1		1	NO MANUAL INTEGRATION
2211	23020910.D	23A0158-04		1	Hexachlorobenzene,
2229	23020911.D	23A0158-05		1	NO MANUAL INTEGRATION
2247	23020912.D	23A0158-06		1	NO MANUAL INTEGRATION
2305	23020913.D	23A0158-07		1	NO MANUAL INTEGRATION
2323	23020914.D	23A0158-08		1	NO MANUAL INTEGRATION
2340	23020915.D	23A0158-09		1	Hexachlorobenzene,
2358	23020916.D	23A0158-10		1	NO MANUAL INTEGRATION
0016	23020917.D	23A0158-11		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230209.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0034	23020918.D	23A0158-12		1	NO MANUAL INTEGRATION
0052	23020919.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
0110	23020920.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
0128	23020921.D	23A0158-13		1	NO MANUAL INTEGRATION
0146	23020922.D	23A0158-14		1	NO MANUAL INTEGRATION
0204	23020923.D	23A0158-15		1	Hexachlorobenzene,
0221	23020924.D	23A0158-16		1	NO MANUAL INTEGRATION
0239	23020925.D	BLA0556-BLK1		1	NO MANUAL INTEGRATION
0257	23020926.D	BLA0556-BS1		1	NO MANUAL INTEGRATION
0315	23020927.D	BLA0556-BSD1		1	NO MANUAL INTEGRATION
0333	23020928.D	BLA0556-MS1		1	NO MANUAL INTEGRATION
0351	23020929.D	BLA0556-MSD1		1	NO MANUAL INTEGRATION
0409	23020930.D	23A0179-01		1	Hexachlorobenzene,
0426	23020931.D	23A0179-02		1	Hexachlorobenzene,
0444	23020932.D	23A0179-03		1	NO MANUAL INTEGRATION
0502	23020933.D	23A0179-04		1	NO MANUAL INTEGRATION
0520	23020934.D	23A0179-05		1	Hexachlorobenzene,
0538	23020935.D	23A0179-06		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230209.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0556	23020936.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
0614	23020937.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
0632	23020938.D	23A0179-07		1	NO MANUAL INTEGRATION
0649	23020939.D	23A0179-08		1	NO MANUAL INTEGRATION
0707	23020940.D	23A0179-09		1	NO MANUAL INTEGRATION
0725	23020941.D	23A0179-10		1	NO MANUAL INTEGRATION
0743	23020942.D	23A0179-11		1	NO MANUAL INTEGRATION
0801	23020943.D	23A0179-12		1	NO MANUAL INTEGRATION
0819	23020944.D	23A0180-01		1	NO MANUAL INTEGRATION
0837	23020945.D	23A0180-02		1	NO MANUAL INTEGRATION
0854	23020946.D	23A0180-03		1	NO MANUAL INTEGRATION
0912	23020947.D	23A0180-04		1	NO MANUAL INTEGRATION
0930	23020948.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
0948	23020949.D	SEQ-CCV3		1	NO MANUAL INTEGRATION

Security Status Report

Date: 11-Feb-2023 11:35

23020901.D	Data Locked	yev, 11-
23020902.D	Data Locked	yev, 11-
23020903.D	Data Locked	yev, 11-
23020904.D	Data Locked	yev, 11-
23020905.D	Data Locked	yev, 11-
23020906.D	Data Locked	yev, 11-
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23020946.D	Data Locked	yev, 11-
23020947.D	Data Locked	yev, 11-
23020948.D	Data Locked	yev, 11-
23020949.D	Data Locked	yev, 11-

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SKL0233	Instrument:	ECD6
Calibration:	FL00041	Calibration Date:	12/15/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SKL0233-PEM1 (Water)				Lab File ID: 22121404.D			Analyzed: 12/14/22 20:20	
Decachlorobiphenyl	160.00	83.0	0 - 200	9.355	9.354666	0.0003	+/-0.1	
Decachlorobiphenyl [2C]	160.00	83.5	0 - 200	10.466	10.4655	0.0005	+/-0.1	
Tetrachlorometaxylene	160.00	78.1	0 - 200	3.828	3.827833	0.0002	+/-0.1	
Tetrachlorometaxylene [2C]	160.00	83.5	0 - 200	4.22	4.219666	0.0003	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0046
Instrument: ECD6
Calibration: FL00041
Calibration Date: 12/14/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0046-ICV1 (Solid)				Lab File ID: 23013104.D			Analyzed: 01/31/23 15:45	
Decachlorobiphenyl	40.000	98.9	80 - 120	9.316	9.354666	-0.0387	+/-0.1	
Decachlorobiphenyl [2C]	40.000	101	80 - 120	10.418	10.4655	-0.0475	+/-0.1	
Tetrachlorometaxylene	40.000	99.4	80 - 120	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	99.6	80 - 120	4.191	4.219666	-0.0287	+/-0.1	
SLB0046-CCV1 (Solid)				Lab File ID: 23013119.D			Analyzed: 01/31/23 20:13	
Decachlorobiphenyl	40.000	96.4	80 - 120	9.315	9.354666	-0.0397	+/-0.1	
Decachlorobiphenyl [2C]	40.000	96.3	80 - 120	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	40.000	98.8	80 - 120	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	95.5	80 - 120	4.189	4.219666	-0.0307	+/-0.1	
SLB0046-CCV2 (Solid)				Lab File ID: 23013133.D			Analyzed: 02/01/23 00:24	
Decachlorobiphenyl	40.000	95.4	80 - 120	9.316	9.354666	-0.0387	+/-0.1	
Decachlorobiphenyl [2C]	40.000	96.5	80 - 120	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	40.000	101	80 - 120	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	95.4	80 - 120	4.19	4.219666	-0.0297	+/-0.1	
SLB0046-CCV3 (Solid)				Lab File ID: 23013150.D			Analyzed: 02/01/23 05:28	
Decachlorobiphenyl	40.000	97.3	80 - 120	9.316	9.354666	-0.0387	+/-0.1	
Decachlorobiphenyl [2C]	40.000	95.2	80 - 120	10.415	10.4655	-0.0505	+/-0.1	
Tetrachlorometaxylene	40.000	99.2	80 - 120	3.8	3.827833	-0.0278	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	97.1	80 - 120	4.19	4.219666	-0.0297	+/-0.1	
BLA0409-BLK1 (Solid)				Lab File ID: 23013155.D			Analyzed: 02/01/23 06:58	
Decachlorobiphenyl	8.0000	89.8	30 - 160	9.314	9.354666	-0.0407	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	108	30 - 160	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	8.0000	67.4	30 - 160	3.799	3.827833	-0.0288	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	64.7	30 - 160	4.191	4.219666	-0.0287	+/-0.1	
BLA0409-BS1 (Solid)				Lab File ID: 23013156.D			Analyzed: 02/01/23 07:15	
Decachlorobiphenyl	8.0000	96.2	30 - 160	9.315	9.354666	-0.0397	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	96.4	30 - 160	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	8.0000	75.1	30 - 160	3.799	3.827833	-0.0288	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	73.0	30 - 160	4.19	4.219666	-0.0297	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0046	Instrument:	ECD6
Calibration:	FL00041	Calibration Date:	12/15/2022

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLA0409-BSD1 (Solid)				Lab File ID: 23013157.D			Analyzed: 02/01/23 07:33	
Decachlorobiphenyl	8.0000	95.7	30 - 160	9.314	9.354666	-0.0407	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	95.0	30 - 160	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	8.0000	72.3	30 - 160	3.799	3.827833	-0.0288	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	71.5	30 - 160	4.19	4.219666	-0.0297	+/-0.1	
BLA0409-MRL1 (Solid)				Lab File ID: 23013158.D			Analyzed: 02/01/23 07:51	
Decachlorobiphenyl	8.0000	94.7	30 - 160	9.315	9.354666	-0.0397	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	99.0	30 - 160	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	8.0000	77.9	30 - 160	3.799	3.827833	-0.0288	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	74.0	30 - 160	4.19	4.219666	-0.0297	+/-0.1	
BLA0409-MS1 (Solid)				Lab File ID: 23013159.D			Analyzed: 02/01/23 08:09	
Decachlorobiphenyl	7.9981	108	30 - 160	9.314	9.354666	-0.0407	+/-0.1	
Decachlorobiphenyl [2C]	7.9981	102	30 - 160	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	7.9981	78.6	30 - 160	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	7.9981	73.9	30 - 160	4.19	4.219666	-0.0297	+/-0.1	
BLA0409-MSD1 (Solid)				Lab File ID: 23013160.D			Analyzed: 02/01/23 08:27	
Decachlorobiphenyl	7.9981	183	30 - 160	9.314	9.354666	-0.0407	+/-0.1	NRS
Decachlorobiphenyl [2C]	7.9981	395	30 - 160	10.416	10.4655	-0.0495	+/-0.1	NRS
Tetrachlorometaxylene	7.9981	69.6	30 - 160	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	7.9981	87.1	30 - 160	4.19	4.219666	-0.0297	+/-0.1	
23A0134-01 (Solid)				Lab File ID: 23013161.D			Analyzed: 02/01/23 08:45	
Decachlorobiphenyl	7.8894	110	30 - 160	9.314	9.354666	-0.0407	+/-0.1	
Decachlorobiphenyl [2C]	7.8894	74.8	30 - 160	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	7.8894	81.9	30 - 160	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	7.8894	78.0	30 - 160	4.19	4.219666	-0.0297	+/-0.1	
23A0134-02 (Solid)				Lab File ID: 23013162.D			Analyzed: 02/01/23 09:03	
Decachlorobiphenyl	7.9476	115	30 - 160	9.316	9.354666	-0.0387	+/-0.1	
Decachlorobiphenyl [2C]	7.9476	131	30 - 160	10.415	10.4655	-0.0505	+/-0.1	
Tetrachlorometaxylene	7.9476	76.3	30 - 160	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	7.9476	68.6	30 - 160	4.19	4.219666	-0.0297	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0046
Instrument: ECD6
Calibration: FL00041
Calibration Date: 12/15/2022

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0134-03 (Solid)				Lab File ID: 23013163.D			Analyzed: 02/01/23 09:21	
Decachlorobiphenyl	7.9729	110	30 - 160	9.315	9.354666	-0.0397	+/-0.1	
Decachlorobiphenyl [2C]	7.9729	114	30 - 160	10.415	10.4655	-0.0505	+/-0.1	
Tetrachlorometaxylene	7.9729	75.7	30 - 160	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	7.9729	76.9	30 - 160	4.19	4.219666	-0.0297	+/-0.1	
23A0134-04 (Solid)				Lab File ID: 23013164.D			Analyzed: 02/01/23 09:38	
Decachlorobiphenyl	7.9755	110	30 - 160	9.314	9.354666	-0.0407	+/-0.1	
Decachlorobiphenyl [2C]	7.9755	104	30 - 160	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	7.9755	68.5	30 - 160	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	7.9755	77.2	30 - 160	4.19	4.219666	-0.0297	+/-0.1	
23A0134-05 (Solid)				Lab File ID: 23013165.D			Analyzed: 02/01/23 09:56	
Decachlorobiphenyl	7.6056	101	30 - 160	9.315	9.354666	-0.0397	+/-0.1	
Decachlorobiphenyl [2C]	7.6056	101	30 - 160	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	7.6056	70.5	30 - 160	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	7.6056	72.6	30 - 160	4.19	4.219666	-0.0297	+/-0.1	
23A0134-06 (Solid)				Lab File ID: 23013166.D			Analyzed: 02/01/23 10:14	
Decachlorobiphenyl	7.8608	108	30 - 160	9.315	9.354666	-0.0397	+/-0.1	
Decachlorobiphenyl [2C]	7.8608	105	30 - 160	10.415	10.4655	-0.0505	+/-0.1	
Tetrachlorometaxylene	7.8608	55.7	30 - 160	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	7.8608	68.8	30 - 160	4.19	4.219666	-0.0297	+/-0.1	
SLB0046-CCV4 (Solid)				Lab File ID: 23013168.D			Analyzed: 02/01/23 10:50	
Decachlorobiphenyl	40.000	99.6	80 - 120	9.315	9.354666	-0.0397	+/-0.1	
Decachlorobiphenyl [2C]	40.000	96.4	80 - 120	10.413	10.4655	-0.0525	+/-0.1	
Tetrachlorometaxylene	40.000	99.6	80 - 120	3.8	3.827833	-0.0278	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	98.9	80 - 120	4.191	4.219666	-0.0287	+/-0.1	
23A0134-07 (Solid)				Lab File ID: 23013169.D			Analyzed: 02/01/23 11:08	
Decachlorobiphenyl	7.9062	103	30 - 160	9.314	9.354666	-0.0407	+/-0.1	
Decachlorobiphenyl [2C]	7.9062	99.3	30 - 160	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	7.9062	73.1	30 - 160	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	7.9062	71.3	30 - 160	4.19	4.219666	-0.0297	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0046
Instrument: ECD6
Calibration: FL00041
Calibration Date: 12/15/2022

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0134-08 (Solid)				Lab File ID: 23013170.D			Analyzed: 02/01/23 11:26	
Decachlorobiphenyl	7.9753	103	30 - 160	9.314	9.354666	-0.0407	+/-0.1	
Decachlorobiphenyl [2C]	7.9753	94.8	30 - 160	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	7.9753	69.9	30 - 160	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	7.9753	68.5	30 - 160	4.19	4.219666	-0.0297	+/-0.1	
23A0134-09 (Solid)				Lab File ID: 23013171.D			Analyzed: 02/01/23 11:44	
Decachlorobiphenyl	7.7469	110	30 - 160	9.315	9.354666	-0.0397	+/-0.1	
Decachlorobiphenyl [2C]	7.7469	101	30 - 160	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	7.7469	82.5	30 - 160	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	7.7469	78.4	30 - 160	4.189	4.219666	-0.0307	+/-0.1	
23A0134-10 (Solid)				Lab File ID: 23013172.D			Analyzed: 02/01/23 12:02	
Decachlorobiphenyl	7.8898	110	30 - 160	9.314	9.354666	-0.0407	+/-0.1	
Decachlorobiphenyl [2C]	7.8898	106	30 - 160	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	7.8898	77.5	30 - 160	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	7.8898	76.0	30 - 160	4.19	4.219666	-0.0297	+/-0.1	
23A0134-11 (Solid)				Lab File ID: 23013173.D			Analyzed: 02/01/23 12:20	
Decachlorobiphenyl	7.7964	109	30 - 160	9.315	9.354666	-0.0397	+/-0.1	
Decachlorobiphenyl [2C]	7.7964	104	30 - 160	10.415	10.4655	-0.0505	+/-0.1	
Tetrachlorometaxylene	7.7964	82.2	30 - 160	3.798	3.827833	-0.0298	+/-0.1	
Tetrachlorometaxylene [2C]	7.7964	75.9	30 - 160	4.19	4.219666	-0.0297	+/-0.1	
23A0134-12 (Solid)				Lab File ID: 23013174.D			Analyzed: 02/01/23 12:38	
Decachlorobiphenyl	7.9981	105	30 - 160	9.314	9.354666	-0.0407	+/-0.1	
Decachlorobiphenyl [2C]	7.9981	103	30 - 160	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	7.9981	71.5	30 - 160	3.797	3.827833	-0.0308	+/-0.1	
Tetrachlorometaxylene [2C]	7.9981	73.8	30 - 160	4.189	4.219666	-0.0307	+/-0.1	
23A0134-13 (Solid)				Lab File ID: 23013175.D			Analyzed: 02/01/23 12:56	
Decachlorobiphenyl	7.9354	155	30 - 160	9.318	9.354666	-0.0367	+/-0.1	
Decachlorobiphenyl [2C]	7.9354	138	30 - 160	10.415	10.4655	-0.0505	+/-0.1	
Tetrachlorometaxylene	7.9354	74.5	30 - 160	3.799	3.827833	-0.0288	+/-0.1	
Tetrachlorometaxylene [2C]	7.9354	69.3	30 - 160	4.19	4.219666	-0.0297	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0046	Instrument:	ECD6
Calibration:	FL00041	Calibration Date:	12/14/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0046-CCV5 (Solid)				Lab File ID: 23013178.D			Analyzed: 02/01/23 13:49	
Decachlorobiphenyl	40.000	98.8	80 - 120	9.315	9.354666	-0.0397	+/-0.1	
Decachlorobiphenyl [2C]	40.000	97.1	80 - 120	10.414	10.4655	-0.0515	+/-0.1	
Tetrachlorometaxylene	40.000	101	80 - 120	3.8	3.827833	-0.0278	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	100	80 - 120	4.19	4.219666	-0.0297	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0156
Instrument: ECD6
Calibration: FL00041
Calibration Date: 12/14/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0156-ICV1 (Solid)				Lab File ID: 23020903.D			Analyzed: 02/09/23 20:06	
Decachlorobiphenyl	40.000	102	80 - 120	9.307	9.354666	-0.0477	+/-0.1	
Decachlorobiphenyl [2C]	40.000	99.0	80 - 120	10.404	10.4655	-0.0615	+/-0.1	
Tetrachlorometaxylene	40.000	90.9	80 - 120	3.791	3.827833	-0.0368	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	100	80 - 120	4.182	4.219666	-0.0377	+/-0.1	
23A0134-15 (Solid)				Lab File ID: 23020904.D			Analyzed: 02/09/23 20:24	
Decachlorobiphenyl	7.8754	101	30 - 160	9.304	9.354666	-0.0507	+/-0.1	
Decachlorobiphenyl [2C]	7.8754	101	30 - 160	10.403	10.4655	-0.0625	+/-0.1	
Tetrachlorometaxylene	7.8754	71.7	30 - 160	3.791	3.827833	-0.0368	+/-0.1	
Tetrachlorometaxylene [2C]	7.8754	71.7	30 - 160	4.182	4.219666	-0.0377	+/-0.1	
SLB0156-CCV1 (Solid)				Lab File ID: 23020920.D			Analyzed: 02/10/23 01:10	
Decachlorobiphenyl	40.000	101	80 - 120	9.307	9.354666	-0.0477	+/-0.1	
Decachlorobiphenyl [2C]	40.000	103	80 - 120	10.403	10.4655	-0.0625	+/-0.1	
Tetrachlorometaxylene	40.000	99.8	80 - 120	3.793	3.827833	-0.0348	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	95.7	80 - 120	4.183	4.219666	-0.0367	+/-0.1	
SLB0156-CCV2 (Solid)				Lab File ID: 23020937.D			Analyzed: 02/10/23 06:14	
Decachlorobiphenyl	40.000	100	80 - 120	9.306	9.354666	-0.0487	+/-0.1	
Decachlorobiphenyl [2C]	40.000	98.2	80 - 120	10.403	10.4655	-0.0625	+/-0.1	
Tetrachlorometaxylene	40.000	95.2	80 - 120	3.79	3.827833	-0.0378	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	105	80 - 120	4.181	4.219666	-0.0387	+/-0.1	
SLB0156-CCV3 (Solid)				Lab File ID: 23020949.D			Analyzed: 02/10/23 09:48	
Decachlorobiphenyl	40.000	101	80 - 120	9.307	9.354666	-0.0477	+/-0.1	
Decachlorobiphenyl [2C]	40.000	97.7	80 - 120	10.403	10.4655	-0.0625	+/-0.1	
Tetrachlorometaxylene	40.000	95.3	80 - 120	3.791	3.827833	-0.0368	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	105	80 - 120	4.182	4.219666	-0.0377	+/-0.1	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SKL0233	Instrument:	ECD6
		Calibration:	FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Performance Mix (SKL0233-PEM1)		(Water)		Lab File ID: 22121404.D				Analyzed: 12/14/22 20:20	
1-Bromo-2-Nitrobenzene	683485	3.15	672426	3.15	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	619012	9.503	609723	9.504	102	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1005375	3.35	1006482	3.35	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	772586	11.054	769764	11.053	100	50 - 200	0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0046	Instrument:	ECD6
		Calibration:	FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLB0046-ICV1)		(Solid)		Lab File ID: 23013104.D			Analyzed: 01/31/23 15:45		
1-Bromo-2-Nitrobenzene	773823	3.125	773823	3.125	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	691463	9.465	691463	9.465	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1185819	3.326	1185819	3.326	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	785814	10.999	785814	10.999	100	50 - 200	0.000	+/-0.50	
Blank (BLA0409-BLK1)		(Solid)		Lab File ID: 23013155.D			Analyzed: 02/01/23 06:58		
1-Bromo-2-Nitrobenzene	450913	3.127	773823	3.125	58	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	392123	9.463	691463	9.465	57	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	722619	3.327	1185819	3.326	61	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	499643	10.996	785814	10.999	64	50 - 200	-0.003	+/-0.50	
LCS (BLA0409-BS1)		(Solid)		Lab File ID: 23013156.D			Analyzed: 02/01/23 07:15		
1-Bromo-2-Nitrobenzene	463171	3.126	773823	3.125	60	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	420852	9.464	691463	9.465	61	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	762597	3.326	1185819	3.326	64	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	527977	10.996	785814	10.999	67	50 - 200	-0.003	+/-0.50	
LCS Dup (BLA0409-BSD1)		(Solid)		Lab File ID: 23013157.D			Analyzed: 02/01/23 07:33		
1-Bromo-2-Nitrobenzene	465465	3.126	773823	3.125	60	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	429796	9.464	691463	9.465	62	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	763426	3.327	1185819	3.326	64	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	533501	10.995	785814	10.999	68	50 - 200	-0.004	+/-0.50	
MRL Check (BLA0409-MRL1)		(Solid)		Lab File ID: 23013158.D			Analyzed: 02/01/23 07:51		
1-Bromo-2-Nitrobenzene	594210	3.127	773823	3.125	77	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	561984	9.464	691463	9.465	81	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1025762	3.327	1185819	3.326	87	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	722095	10.995	785814	10.999	92	50 - 200	-0.004	+/-0.50	
Matrix Spike (BLA0409-MS1)		(Solid)		Lab File ID: 23013159.D			Analyzed: 02/01/23 08:09		
1-Bromo-2-Nitrobenzene	449269	3.126	773823	3.125	58	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	457308	9.462	691463	9.465	66	50 - 200	-0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	735811	3.326	1185819	3.326	62	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	559056	10.994	785814	10.999	71	50 - 200	-0.005	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLB0046

SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: ECD6
Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike Dup (BLA0409-MSD1)		(Solid)		Lab File ID: 23013160.D				Analyzed: 02/01/23 08:27	
1-Bromo-2-Nitrobenzene	497329	3.126	773823	3.125	64	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	399746	9.462	691463	9.465	58	50 - 200	-0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	740760	3.327	1185819	3.326	62	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	1107865	10.993	785814	10.999	141	50 - 200	-0.006	+/-0.50	
LDW23-SS1205 (23A0134-01)		(Solid)		Lab File ID: 23013161.D				Analyzed: 02/01/23 08:45	
1-Bromo-2-Nitrobenzene	445929	3.126	773823	3.125	58	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	415902	9.462	691463	9.465	60	50 - 200	-0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	696057	3.327	1185819	3.326	59	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	771896	10.994	785814	10.999	98	50 - 200	-0.005	+/-0.50	
LDW23-SS1188 (23A0134-02)		(Solid)		Lab File ID: 23013162.D				Analyzed: 02/01/23 09:03	
1-Bromo-2-Nitrobenzene	469110	3.126	773823	3.125	61	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	397777	9.464	691463	9.465	58	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	697045	3.326	1185819	3.326	59	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	434969	10.996	785814	10.999	55	50 - 200	-0.003	+/-0.50	
LDW23-SS1179 (23A0134-03)		(Solid)		Lab File ID: 23013163.D				Analyzed: 02/01/23 09:21	
1-Bromo-2-Nitrobenzene	545092	3.126	773823	3.125	70	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	450931	9.463	691463	9.465	65	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	811861	3.327	1185819	3.326	68	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	600608	10.996	785814	10.999	76	50 - 200	-0.003	+/-0.50	
LDW23-SS1242 (23A0134-04)		(Solid)		Lab File ID: 23013164.D				Analyzed: 02/01/23 09:38	
1-Bromo-2-Nitrobenzene	513563	3.126	773823	3.125	66	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	385436	9.462	691463	9.465	56	50 - 200	-0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	705770	3.327	1185819	3.326	60	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	517647	10.994	785814	10.999	66	50 - 200	-0.005	+/-0.50	
LDW23-SS1173 (23A0134-05)		(Solid)		Lab File ID: 23013165.D				Analyzed: 02/01/23 09:56	
1-Bromo-2-Nitrobenzene	466715	3.126	773823	3.125	60	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	372912	9.463	691463	9.465	54	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	698116	3.327	1185819	3.326	59	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	494769	10.994	785814	10.999	63	50 - 200	-0.005	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLB0046
SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: ECD6
Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1160 (23A0134-06)		(Solid)		Lab File ID: 23013166.D			Analyzed: 02/01/23 10:14		
1-Bromo-2-Nitrobenzene	565759	3.126	773823	3.125	73	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	408081	9.463	691463	9.465	59	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	697749	3.327	1185819	3.326	59	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	531419	10.996	785814	10.999	68	50 - 200	-0.003	+/-0.50	
LDW23-SS1152 (23A0134-07)		(Solid)		Lab File ID: 23013169.D			Analyzed: 02/01/23 11:08		
1-Bromo-2-Nitrobenzene	707321	3.126	773823	3.125	91	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	596052	9.463	691463	9.465	86	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1092714	3.327	1185819	3.326	92	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	807984	10.995	785814	10.999	103	50 - 200	-0.004	+/-0.50	
LDW23-SS1131 (23A0134-08)		(Solid)		Lab File ID: 23013170.D			Analyzed: 02/01/23 11:26		
1-Bromo-2-Nitrobenzene	458247	3.126	773823	3.125	59	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	382518	9.462	691463	9.465	55	50 - 200	-0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	700885	3.327	1185819	3.326	59	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	537723	10.995	785814	10.999	68	50 - 200	-0.004	+/-0.50	
LDW23-SS1129 (23A0134-09)		(Solid)		Lab File ID: 23013171.D			Analyzed: 02/01/23 11:44		
1-Bromo-2-Nitrobenzene	455613	3.126	773823	3.125	59	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	379724	9.463	691463	9.465	55	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	693064	3.327	1185819	3.326	58	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	546099	10.995	785814	10.999	69	50 - 200	-0.004	+/-0.50	
LDW23-SS1124 (23A0134-10)		(Solid)		Lab File ID: 23013172.D			Analyzed: 02/01/23 12:02		
1-Bromo-2-Nitrobenzene	478995	3.126	773823	3.125	62	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	392486	9.462	691463	9.465	57	50 - 200	-0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	714760	3.327	1185819	3.326	60	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	522197	10.995	785814	10.999	66	50 - 200	-0.004	+/-0.50	
LDW23-SS1123 (23A0134-11)		(Solid)		Lab File ID: 23013173.D			Analyzed: 02/01/23 12:20		
1-Bromo-2-Nitrobenzene	453287	3.126	773823	3.125	59	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	390888	9.463	691463	9.465	57	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	731947	3.327	1185819	3.326	62	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	522273	10.995	785814	10.999	66	50 - 200	-0.004	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0046	Instrument:	ECD6
		Calibration:	FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1116 (23A0134-12)		(Solid)		Lab File ID: 23013174.D				Analyzed: 02/01/23 12:38	
1-Bromo-2-Nitrobenzene	900885	3.124	773823	3.125	116	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	709847	9.463	691463	9.465	103	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1365702	3.325	1185819	3.326	115	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	973153	10.996	785814	10.999	124	50 - 200	-0.003	+/-0.50	
LDW23-IT1210 (23A0134-13)		(Solid)		Lab File ID: 23013175.D				Analyzed: 02/01/23 12:56	
1-Bromo-2-Nitrobenzene	424345	3.126	773823	3.125	55	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	453554	9.468	691463	9.465	66	50 - 200	0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	699749	3.327	1185819	3.326	59	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	509028	10.998	785814	10.999	65	50 - 200	-0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0156	Instrument:	ECD6
		Calibration:	FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLB0156-ICV1)		(Solid)		Lab File ID: 23020903.D				Analyzed: 02/09/23 20:06	
1-Bromo-2-Nitrobenzene	705237	3.119	705237	3.119	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	627685	9.457	627685	9.457	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1101002	3.319	1101002	3.319	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	776135	10.984	776135	10.984	100	50 - 200	0.000	+/-0.50	
LDW23-SC1249 (23A0134-15)		(Solid)		Lab File ID: 23020904.D				Analyzed: 02/09/23 20:24	
1-Bromo-2-Nitrobenzene	489642	3.12	705237	3.119	69	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	366525	9.452	627685	9.457	58	50 - 200	-0.005	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	688609	3.321	1101002	3.319	63	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl [2C]	467380	10.982	776135	10.984	60	50 - 200	-0.002	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-04	File ID:	23013164.D
Sampled:	01/06/23 11:04	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 09:38
Solids:	46.37	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD6
Batch:	BLA0409	Sequence:	SLB0046		
GC Column(1):	STX-CLP			GC Column(2):	STX-CLPII

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Hexachlorobenzene	* 1	4.149	4.182	0.033	11903	0.26	40.
	2	4.683	4.717833	0.0348	24955	0.39	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-06	File ID:	23013166.D
Sampled:	01/06/23 11:41	Prepared:	01/20/23 13:20	Analyzed:	02/01/23 10:14
Solids:	40.27	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD6
Batch:	BLA0409	Sequence:	SLB0046		
GC Column(1):	STX-CLP			GC Column(2):	STX-CLPII

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Hexachlorobenzene	* 1	4.149	4.182	0.033	13758	0.27	65.
	2	4.683	4.717833	0.0348	34206	0.53	

* Column used for quantitation

HOLDING TIME SUMMARY

Analysis: EPA 8081B

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1205 23A0134-01	01/06/23 08:28	01/06/23 17:26	01/20/23 13:20	14	365	02/01/23 08:45	12	40	
LDW23-SS1188 23A0134-02	01/06/23 09:36	01/06/23 17:26	01/20/23 13:20	14	365	02/01/23 09:03	12	40	
LDW23-SS1179 23A0134-03	01/06/23 09:52	01/06/23 17:26	01/20/23 13:20	14	365	02/01/23 09:21	12	40	
LDW23-SS1242 23A0134-04	01/06/23 11:04	01/06/23 17:26	01/20/23 13:20	14	365	02/01/23 09:38	12	40	
LDW23-SS1173 23A0134-05	01/06/23 11:22	01/06/23 17:26	01/20/23 13:20	14	365	02/01/23 09:56	12	40	
LDW23-SS1160 23A0134-06	01/06/23 11:41	01/06/23 17:26	01/20/23 13:20	14	365	02/01/23 10:14	12	40	
LDW23-SS1152 23A0134-07	01/06/23 12:29	01/06/23 17:26	01/20/23 13:20	14	365	02/01/23 11:08	12	40	
LDW23-SS1131 23A0134-08	01/06/23 12:43	01/06/23 17:26	01/20/23 13:20	14	365	02/01/23 11:26	12	40	
LDW23-SS1129 23A0134-09	01/06/23 12:57	01/06/23 17:26	01/20/23 13:20	14	365	02/01/23 11:44	12	40	
LDW23-SS1124 23A0134-10	01/06/23 13:15	01/06/23 17:26	01/20/23 13:20	14	365	02/01/23 12:02	12	40	
LDW23-SS1123 23A0134-11	01/06/23 13:29	01/06/23 17:26	01/20/23 13:20	13	365	02/01/23 12:20	12	40	
LDW23-SS1116 23A0134-12	01/06/23 13:44	01/06/23 17:26	01/20/23 13:20	13	365	02/01/23 12:38	12	40	
LDW23-IT1210 23A0134-13	01/06/23 14:12	01/06/23 17:26	01/20/23 13:20	13	365	02/01/23 12:56	12	40	
LDW23-SC1249 23A0134-15	01/06/23 13:46	01/06/23 17:26	01/20/23 13:20	13	365	02/09/23 20:24	20	40	
Matrix Spike BLA0409-MS1	01/06/23 13:44	01/06/23 17:26	01/20/23 13:20	13	365	02/01/23 08:09	12	40	
Matrix Spike Dup BLA0409-MSD1	01/06/23 13:44	01/06/23 17:26	01/20/23 13:20	13	365	02/01/23 08:27	12	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ECD6

Analyte	MDL	RL	Units
Hexachlorobenzene	0.15	0.50	ug/kg
Hexachlorobenzene [2C]	0.15	0.50	ug/kg

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: S-279N
Description: Tetrachloro-m-xylene
Lot: 0052481B-1
Solvent: N/A
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: Jul 28, 2005
Expiration: Jul 28, 2015
Sample Size: 100 mg
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

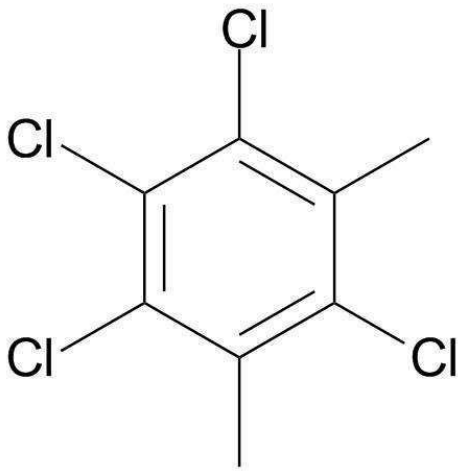
ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration	Certified Analyte Concentration[1]
Tetrachloro-meta-xylene	877-09-8	96.0	N/A	N/A

Identification:

Molecular formula: C8H6Cl4
Molecular weight: 243.94



C000147
tetrachlormetaxylene
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] The Uncertainty calculated for this product is ±2.4%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Metrological traceability is established through in-house validated methods.

Purity, if stated, is equal to 100% minus found impurity components. Impurity components have not been identified.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

AccuStandard
125 Market Street
New Haven, CT 06513
(203) 786-5290

CERTIFICATE OF PRODUCT DATA

PRODUCT: C-209N
DESCRIPTION: 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl
LOT #: 990521LB-AC
SOLVENT: N/A

EXPIRATION: Jul 28, 2015

This product is guaranteed accurate to ±0.5% of the Certified Analyte concentration through the Expiration Date on the Label.

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1]	Certified Analyte Concentration[2]
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	100	N/A	N/A

C000148
decachlorbiphenyl
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

* I1768A

Certified by: R. Cooper

1. All weights are traceable through National Institute of Standards & Technology, Test No. 822/254480
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is ±4% which is the Combined Uncertainty uc(y). It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is Uc(y) *K where K is the coverage factor at the 95% confidence level (K=2).
3. A product with a suffix (-1A, -2B, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

Please note: AccuStandard follows the U.S. conventions in reporting numerical values, on both certificates and labels.

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

This product was manufactured in accordance to quality system requirements of ISO 9001:2000 and ISO 17025

* Recertified 2 4-6-09 JS

Analytical Standard Record

Standard ID: C000148 **Printed: 4/23/2015 11:54:44AM**

Description:	decachlorbiphenyl	Expires:	15-Jan-2020
Standard Type:	Other	Prepared:	15-Jan-2014
Solvent:	na/a	Prepared By:	Joshua Rains
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	27-Feb-2015 13:03 by JGR
Vendor:	Accustandard	Lot #:	990521lb-ac
Vendor Catalog #:			

Comments

see i1768a
SOM calibrations added 06/12/14 sdrd

Analyte	CAS Number	Concentration	Units
Decachlorobiphenyl [2C]	2051-24-3	1000000	ug/mL
Decachlorobiphenyl	2051-24-3	1000000	ug/mL
DCB 1660 [2C]	2051-24-3	1000000	ug/mL
DCB 1660	2051-24-3	1000000	ug/mL
DCB [2C]	2051-24-3	1000000	ug/mL
DCB (A) [2C]	2051-24-3	1000000	ug/mL
DCB (A)	2051-24-3	1000000	ug/mL
DCB	2051-24-3	1000000	ug/mL

Reviewed By Date

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CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 219051741-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jun 5, 2020
Expiration: Jun 5, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Mirex	2385-85-5	98.2	100.2	98.4

I007970
Mirex 2d source
Solvent / Lot: MeOH
Prep: 9/7/2020 by JR
Exp: 6/5/2024
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-026S
Description: o,p'-DDE
Lot: 218021093-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Feb 10, 2020
Expiration: Feb 10, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDE	3424-82-6	99.9	100.4	100.3

I7971

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 822-275872-11

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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CERTIFICATE OF ANALYSIS

Catalog No: P-184S
Description: trans-Nonachlor
Lot: 218011470
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jan 30, 2018
Expiration: Jan 30, 2028
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
trans-Nonachlor	39765-80-5	99.0	100.2	99.2

I 7974

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 822-275872-11

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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CERTIFICATE OF ANALYSIS

Catalog No: P-024S
Description: o,p'-DDD
Lot: 220051307
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: May 27, 2020
Expiration: Jun 27, 2022
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDD	53-19-0	100.0	100.2	100.2

I010773
o,p-DDD
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 6/27/2022
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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Certified By: Larry Decker, Organic QC Manager

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1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this .

4 **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: P-331S
Description: Oxychlordane Isomer
Lot: 218101131
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Oct 8, 2018
Expiration: Nov 8, 2020
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Oxychlordane Isomer	27304-13-8	97.7	102.4*	100.0

I010795
Oxychlordane isomer
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 6/20/2022
Location:

* Weight compensated to 100% purity.

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.

4 **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

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CERTIFICATE OF ANALYSIS

Catalog No: P-297S
Description: cis-Nonachlor
Lot: 217121240
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Dec 13, 2017
Expiration: Dec 13, 2020
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
cis-Nonachlor	5103-73-1	98.6	100.4	99.0

I010796
cis-Nonochlor-Accustd-100ug/ml
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 11/27/2022
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

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1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 11.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: APP-9-112-D-20X
Description: Hexachlorobenzene in Dichloromethane
Lot: 219051389
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: May 13, 2019
Expiration: May 13, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobenzene	118-74-1	99.0	2002	1982

J006504
Hexachlorobenzene
Solvent / Lot: Dichloromethane
Prep: 6/21/2021 by YZ
Exp: 5/13/2029
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this .

4 **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: P-028S
Description: o,p'-DDT
Lot: 221071322
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jul 21, 2021
Expiration: Aug 21, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDT	789-02-6	99.9	100.1	100.0

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: P-024S
Description: o,p'-DDD
Lot: 220051307-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jul 6, 2021
Expiration: Aug 6, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDD	53-19-0	100.0	100.2	100.2

K 0448

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: P-331S
Description: Oxychlordane Isomer
Lot: 221051706
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: May 28, 2021
Expiration: Jun 28, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Oxychlordane Isomer	27304-13-8	99.2	100.1	99.3

K000449
Oxychlordane isomer
Solvent / Lot: methanol
Prep: 1/13/2022 by YZ
Exp: 6/28/2023
Location:

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: P-297S
Description: cis-Nonachlor
Lot: 221041461
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Apr 22, 2021
Expiration: Apr 22, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
cis-Nonachlor	5103-73-1	98.6	101.1	99.7

K 000450

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:
Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-184S
Description: trans-Nonachlor
Lot: 220091107
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Sep 11, 2020
Expiration: Sep 11, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB AR-1463 ANAB AT-1339 ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
trans-Nonachlor	39765-80-5	99.0	100.2	99.2

K-0045 1

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

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CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 219051741-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jun 5, 2020
Expiration: Jun 5, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED AR-1463 ANAB ACCREDITED AT-1339 ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Mirex	2385-85-5	98.2	100.2	98.4

K 000452

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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K 000452

CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 221121451
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Dec 27, 2021
Expiration: Dec 27, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Mirex	2385-85-5	98.2	100.0	98.2

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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Rev. 7/20

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CERTIFICATE OF ANALYSIS

Catalog No: M-8081-DS
Description: 4,4'-DDT & Endrin
Lot: 221031488-04
Solvent: Hexane
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Apr 8, 2022
Expiration: May 8, 2023
Sample Size: 1 mL
Components: 2
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
4,4'-DDT	50-29-3	100.0	200.9	200.9
Endrin	72-20-8	99.8	200.0	199.6

K7002

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32292 **Lot No.:** A0185477

Description : Organochlorine Pesticide Mix AB # 2

Organochlorine Pesticide Mix AB # 2 8-80 µg/mL, Hexane/Toluene(1:1), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	alpha-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-84-6 (Lot 12307600)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
2	gamma-BHC (Lindane)	8.0 µg/mL	+/- 0.0654 µg/mL	Gravimetric
	CAS # 58-89-9 (Lot 13087200)		+/- 0.3672 µg/mL	Unstressed
	Purity 99%		+/- 0.5281 µg/mL	Stressed
3	beta-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-85-7 (Lot 0588007-4)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
4	delta-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-86-8 (Lot 13112400)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
5	Heptachlor	8.0 µg/mL	+/- 0.0654 µg/mL	Gravimetric
	CAS # 76-44-8 (Lot 803759)		+/- 0.3672 µg/mL	Unstressed
	Purity 99%		+/- 0.5281 µg/mL	Stressed
6	Aldrin	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 309-00-2 (Lot 12983100)		+/- 0.3702 µg/mL	Unstressed
	Purity 96%		+/- 0.5323 µg/mL	Stressed
7	Heptachlor epoxide (isomer B)	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 1024-57-3 (Lot 13168200)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed

8	trans-Chlordane		8.0	µg/mL	+/-	0.0657	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot 32943)			+/-	0.3689	µg/mL	Unstressed
	Purity 98%				+/-	0.5305	µg/mL	Stressed
9	cis-Chlordane		8.0	µg/mL	+/-	0.0657	µg/mL	Gravimetric
	CAS # 5103-71-9	(Lot 31766)			+/-	0.3689	µg/mL	Unstressed
	Purity 98%				+/-	0.5305	µg/mL	Stressed
10	Endosulfan I		8.0	µg/mL	+/-	0.0654	µg/mL	Gravimetric
	CAS # 959-98-8	(Lot BCCF4060)			+/-	0.3672	µg/mL	Unstressed
	Purity 99%				+/-	0.5281	µg/mL	Stressed
11	4,4'-DDE		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 72-55-9	(Lot GHYQG)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed
12	Dieldrin		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 60-57-1	(Lot 11129900)			+/-	0.7408	µg/mL	Unstressed
	Purity 98%				+/-	1.0653	µg/mL	Stressed
13	Endrin		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 72-20-8	(Lot 13157400)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
14	4,4'-DDD		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 72-54-8	(Lot HAN02)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
15	Endosulfan II		16.0	µg/mL	+/-	0.1309	µg/mL	Gravimetric
	CAS # 33213-65-9	(Lot 12448900)			+/-	0.7345	µg/mL	Unstressed
	Purity 99%				+/-	1.0562	µg/mL	Stressed
16	4,4'-DDT		16.1	µg/mL	+/-	0.1315	µg/mL	Gravimetric
	CAS # 50-29-3	(Lot 220428JLM)			+/-	0.7378	µg/mL	Unstressed
	Purity 98%				+/-	1.0610	µg/mL	Stressed
17	Endrin aldehyde		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 7421-93-4	(Lot 30720)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed
18	Endosulfan sulfate		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 1031-07-8	(Lot BCCB0424)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
19	Methoxychlor		80.2	µg/mL	+/-	0.5781	µg/mL	Gravimetric
	CAS # 72-43-5	(Lot 13027000)			+/-	3.6697	µg/mL	Unstressed
	Purity 98%				+/-	5.2871	µg/mL	Stressed
20	Endrin ketone		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 53494-70-5	(Lot 13026800)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

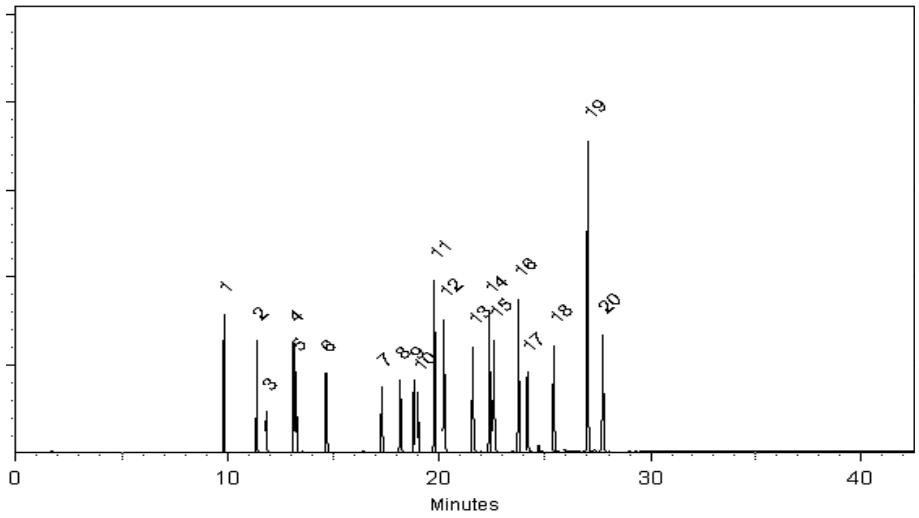
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 19-May-2022 **Balance:** B442140311

Fang-Yun Lo - QC Analyst

Date Passed: 26-May-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X
Description: Hexachlorobutadiene
Lot: 222031188
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Mar 11, 2022
Expiration: Apr 11, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X
Description: Hexachlorobutadiene
Lot: 222031188
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Mar 11, 2022
Expiration: Apr 11, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

K011468

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1205

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-01 C	File ID:	02012316ECD7.D
Sampled:	01/06/23 08:28	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 16:56
% Solids:	57.38	Preparation:	EPA 3546 (Microwave)	Initial/Final:	21.79 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	1	1	22.7	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	37.3	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	29.3	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9980*	*6.54*	*81.8*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9980*	*5.49*	*68.6*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9980*	*6.23*	*77.9*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9980*	*6.43*	*80.4*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012316ECD7.D
Data file 2: /230201.b/230201.b/02012316ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-01
Client ID:
Injection Date: 01-FEB-2023 16:56
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.001	208534	5.683	-0.002	160633	27.4	32.2	15.9	Tetrachloro-m-xylene
13.885	-0.005	165817	14.112	-0.004	181655	32.7	31.2	4.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	537787	6.8
Hexabromobiphenyl	647433	473973	-26.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	369372	9.6
Hexabromobiphenyl	382032	367379	-3.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.395	-0.007	24602	91.4	1	8.298	-0.005	22949	137.4
Aroclor-1248	2	8.564	-0.012	20068	58.5	2	8.704	-0.005	19290	107.3
Aroclor-1248	3	8.982	-0.013	62652	95.4	3	9.136	-0.016	24580	111.9
Aroclor-1248	4	9.284	-0.007	68019	209.3	4	9.531	-0.045	24985	92.0
		Total Col1Ave (4 peaks):			113.7		Total Col2Ave (4 peaks):			112.2 RPD = 1
		Corrected Ave (3 peaks):			81.8		Corrected Ave (3 peaks):			103.8 RPD = 24
Aroclor-1254	1	9.284	-0.012	68019	124.1	1	9.436	-0.008	46253	172.6
Aroclor-1254	2	9.361	-0.012	26652	113.9	2	9.955	-0.009	23675	109.3
Aroclor-1254	3	9.656	-0.007	50568	144.0	3	10.103	-0.012	79796	168.9
Aroclor-1254	4	9.785	-0.017	94613	137.5	4	10.354	-0.011	102403	216.7
Aroclor-1254	5	10.114	-0.049	115864	258.9	5	10.552	-0.010	69926	265.7
		Total Col1Ave (5 peaks):			155.7		Total Col2Ave (5 peaks):			186.6 RPD = 18
		Corrected Ave (4 peaks):			129.9		Corrected Ave (4 peaks):			166.9 RPD = 25
Aroclor-1260	1	11.032	-0.009	38733	145.6	1	11.642	-0.007	38430	145.0
Aroclor-1260	2	11.347	-0.011	32564	119.1	2	11.903	-0.010	80162	119.6
Aroclor-1260	3	11.717	-0.014	94555	131.4	3	12.422	-0.010	31672	189.5
Aroclor-1260	4	12.118	-0.016	48433	130.3	4	12.486	-0.011	57364	132.2
Aroclor-1260	5	12.233	-0.008	23577	145.5	NS	---			----
		Total Col1Ave (5 peaks):			134.4		Total Col2Ave (4 peaks):			146.6 RPD = 9
		Corrected Ave (4 peaks):			131.6		Corrected Ave (3 peaks):			132.2 RPD = 1
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 1846636 Col1 Total PCB = 0.3 ppm*

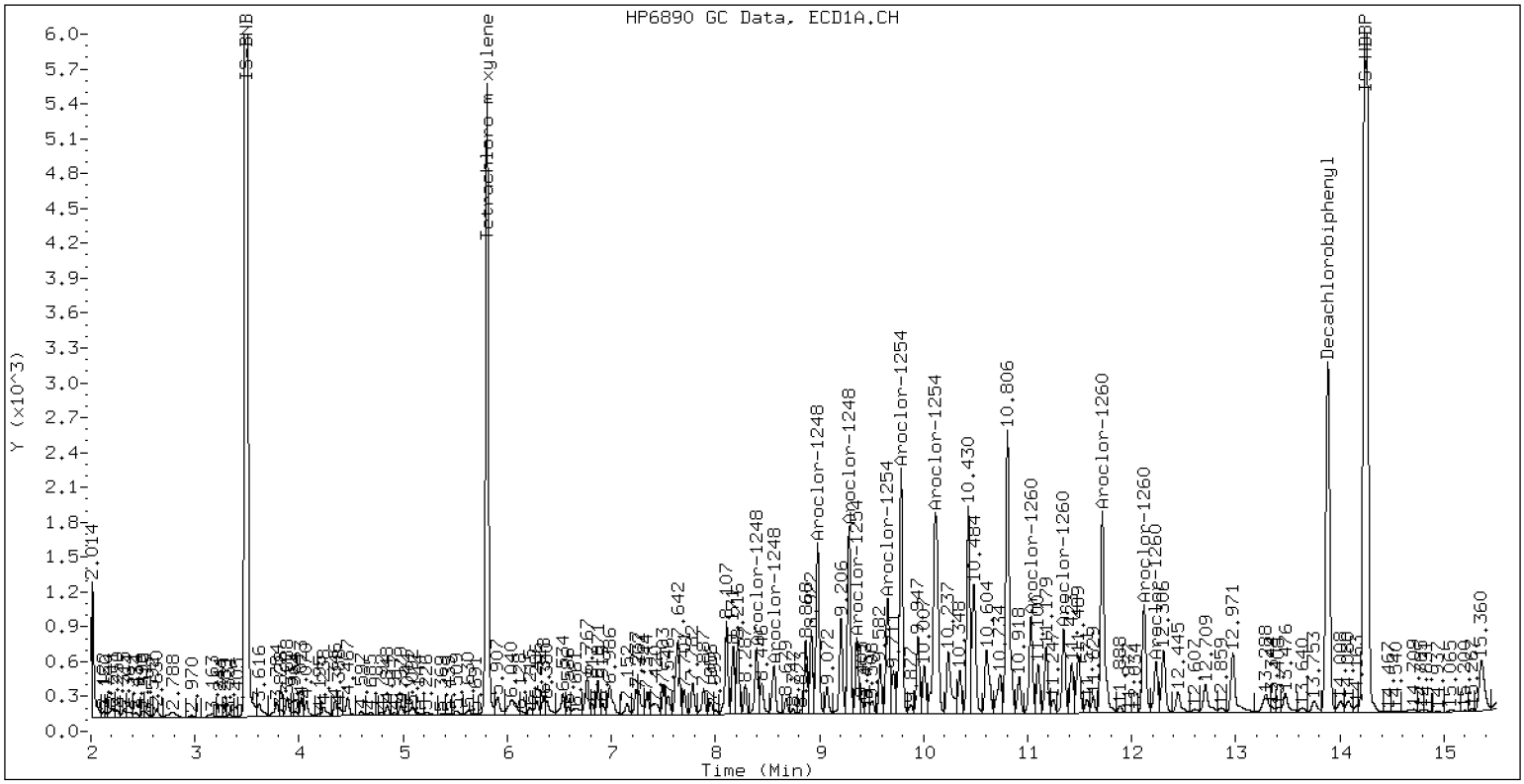
Total PCB Area Col2 (5.784 - 14.016) = 1469540 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

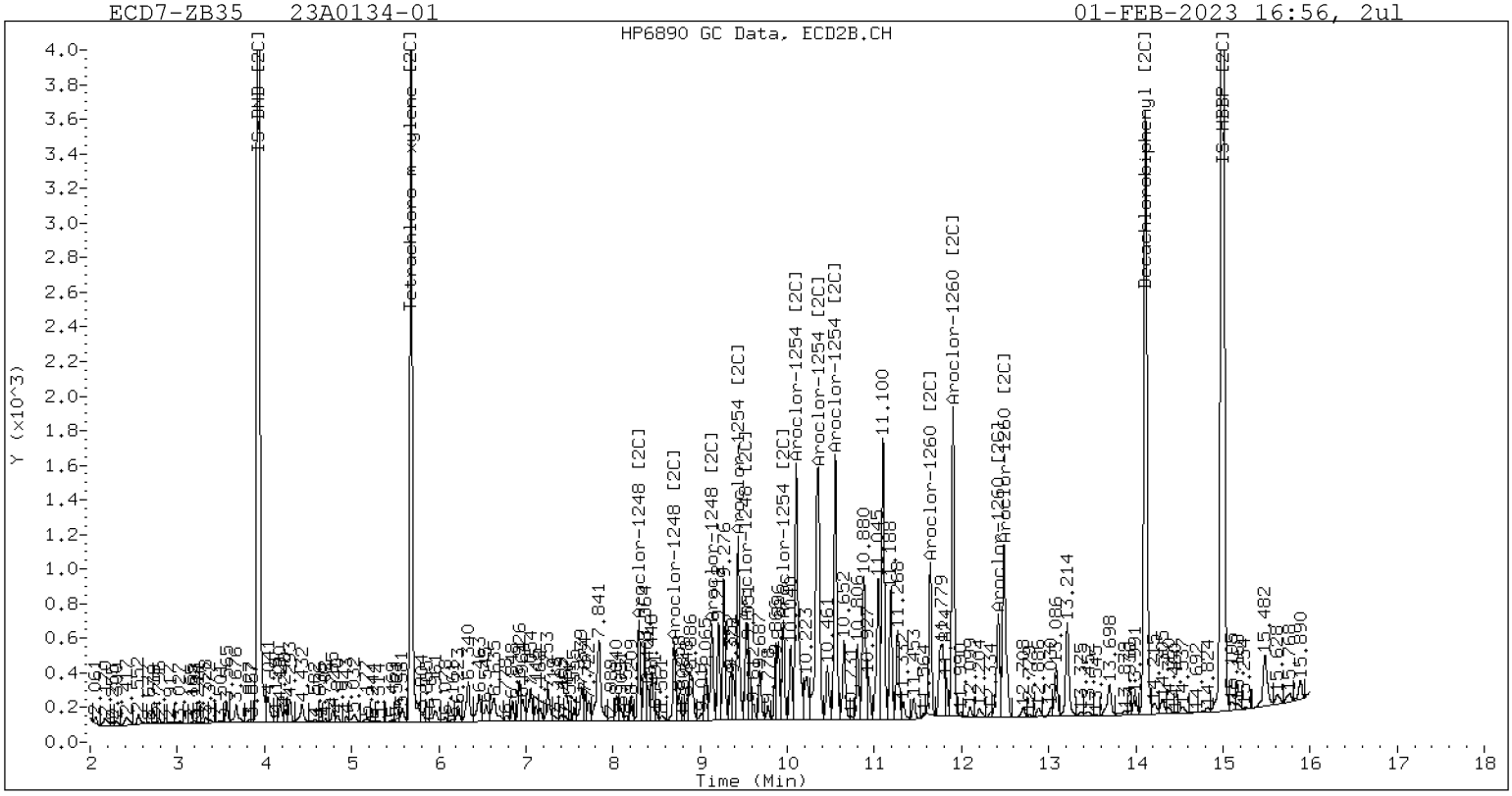
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-01 01-FEB-2023 16:56, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0134-01 01-FEB-2023 16:56, 2ul

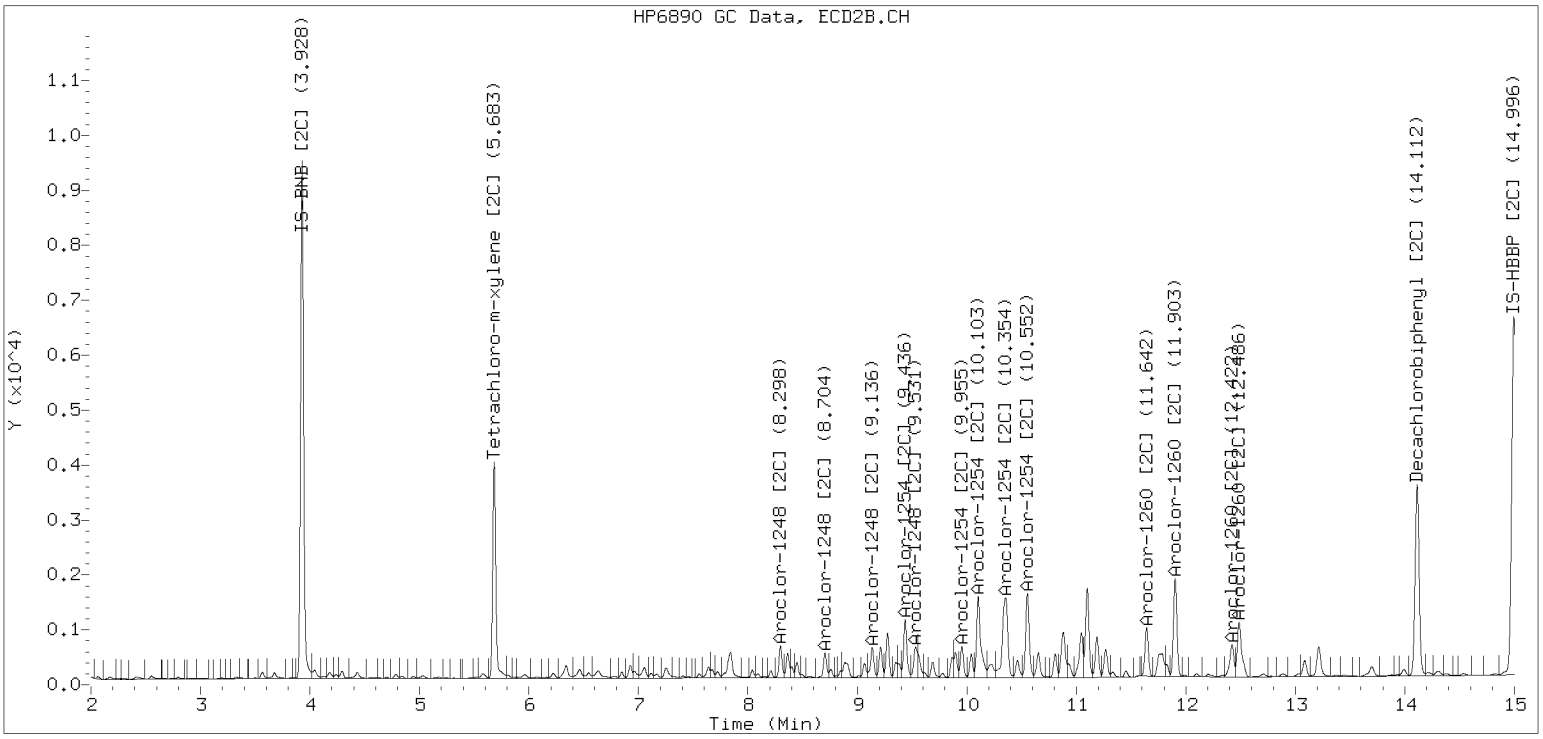


ZB-35 Manual Integration: YES

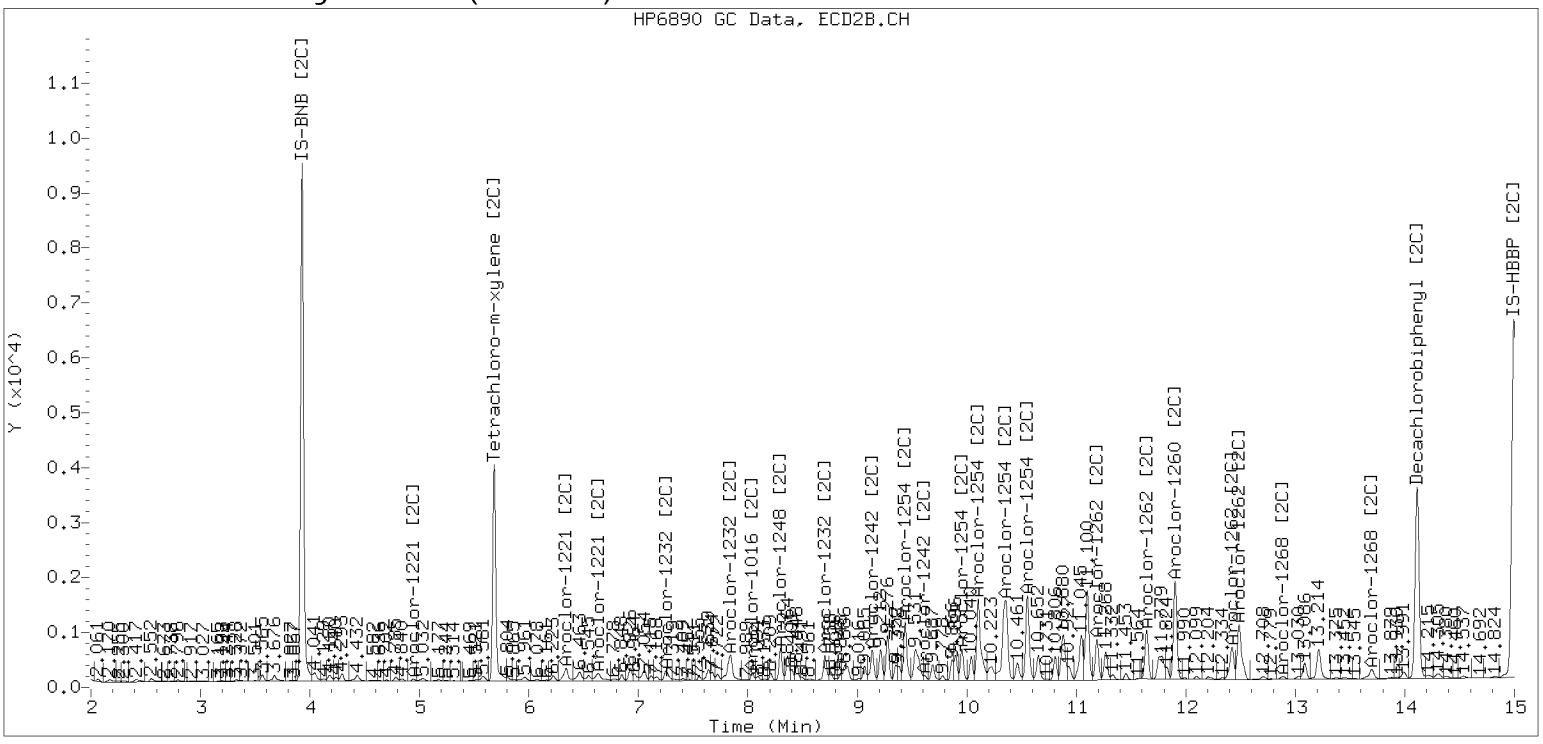
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230201.b/230201.b/02012316ECD7.D Injection Date: 01-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1188

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-02 C	File ID:	02012317ECD7.D
Sampled:	01/06/23 09:36	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 17:17
% Solids:	46.55	Preparation:	EPA 3546 (Microwave)	Initial/Final:	26.87 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	30.9	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	56.5	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	35.3	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9949*	*6.86*	*85.8*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9949*	*4.41*	*55.1*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9949*	*5.78*	*72.3*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9949*	*5.82*	*72.8*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012317ECD7.D
Data file 2: /230201.b/230201.b/02012317ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-02
Client ID:
Injection Date: 01-FEB-2023 17:17
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.804	-0.003	167892	5.680	-0.004	142401	22.1	29.1	27.6	Tetrachloro-m-xylene
13.885	-0.006	162145	14.113	-0.003	196644	34.3	28.9	17.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	538655	7.0
Hexabromobiphenyl	647433	441834	-31.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	361800	7.4
Hexabromobiphenyl	382032	428402	12.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.394	-0.009	32205	119.5	1	8.297	-0.006	27539	168.4
Aroclor-1248	2	8.561	-0.015	23823	69.3	2	8.704	-0.006	26996	153.4
Aroclor-1248	3	8.981	-0.015	79703	121.2	3	9.135	-0.018	35323	164.2
Aroclor-1248	4	9.283	-0.008	94389	290.0	4	9.529	-0.046	35415	133.1
		Total Col1Ave (4 peaks):			150.0		Total Col2Ave (4 peaks):			154.8 RPD = 3
		Corrected Ave (3 peaks):			103.3		Corrected Ave (3 peaks):			150.2 RPD = 37
Aroclor-1254	1	9.283	-0.013	94389	171.9	1	9.436	-0.008	65429	249.3
Aroclor-1254	2	9.360	-0.013	34407	146.8	2	9.954	-0.010	39506	186.2
Aroclor-1254	3	9.653	-0.010	71331	202.8	3	10.103	-0.013	118612	256.3
Aroclor-1254	4	9.784	-0.018	128431	186.3	4	10.340	-0.025	145458	314.3
Aroclor-1254	5	10.119	-0.044	151823	338.7	5	10.553	-0.010	105174	408.0
		Total Col1Ave (5 peaks):			209.3		Total Col2Ave (5 peaks):			282.8 RPD = 30
		Corrected Ave (4 peaks):			177.0		Corrected Ave (4 peaks):			251.5 RPD = 35
Aroclor-1260	1	11.031	-0.010	41321	166.7	1	11.641	-0.008	54219	175.4
Aroclor-1260	2	11.347	-0.010	38581	151.4	2	11.903	-0.010	102213	130.7
Aroclor-1260	3	11.716	-0.016	121345	180.9	3	12.420	-0.012	51390	263.7
Aroclor-1260	4	12.117	-0.018	57317	165.4	4	12.487	-0.011	69202	136.8
Aroclor-1260	5	12.232	-0.009	26537	175.6	NS	---			----
		Total Col1Ave (5 peaks):			168.0		Total Col2Ave (4 peaks):			176.6 RPD = 5
		Corrected Ave (4 peaks):			164.8		Corrected Ave (3 peaks):			147.6 RPD = 11
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 2319643 Col1 Total PCB = 0.4 ppm*

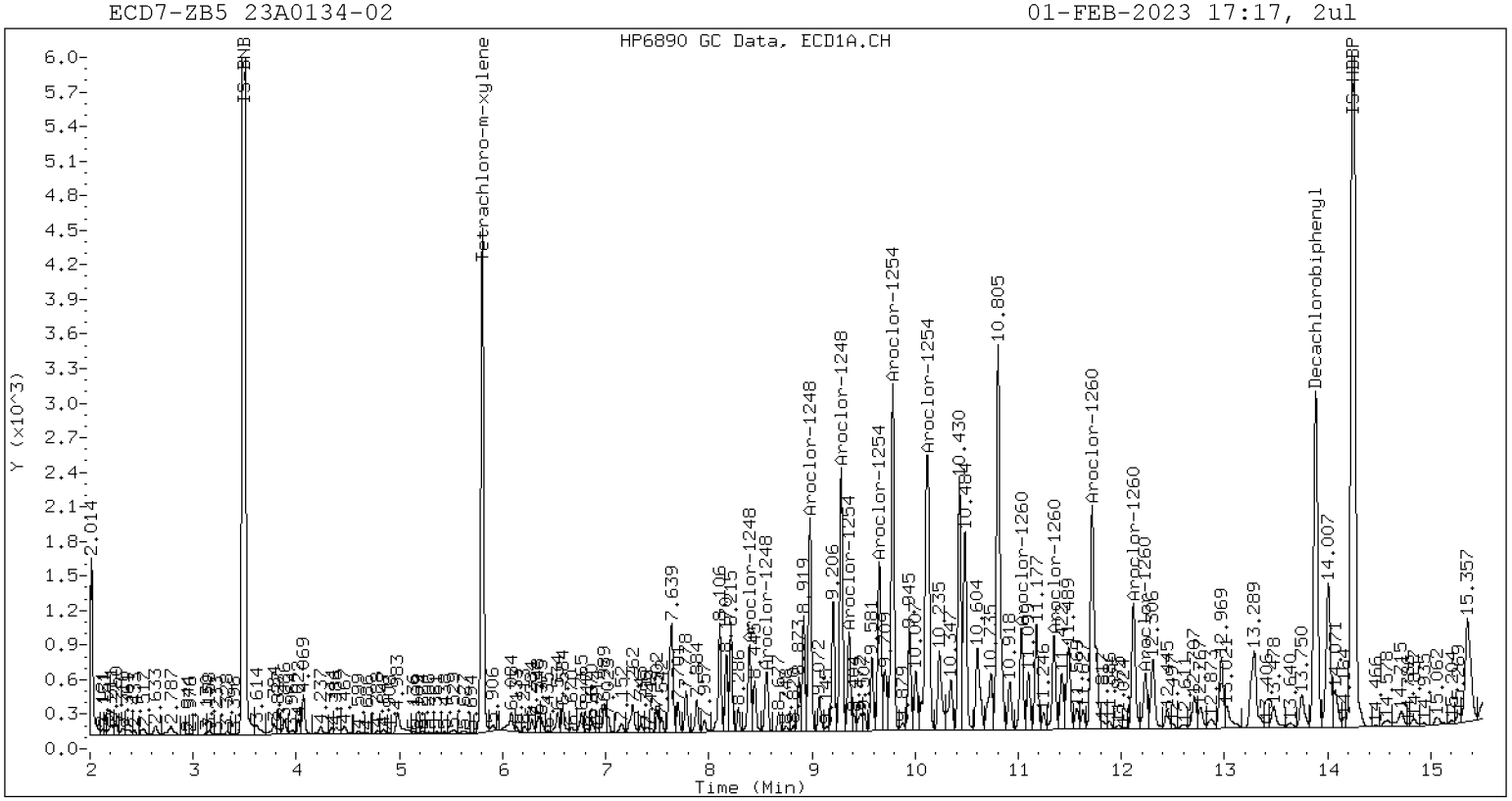
Total PCB Area Col2 (5.784 - 14.016) = 2049176 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

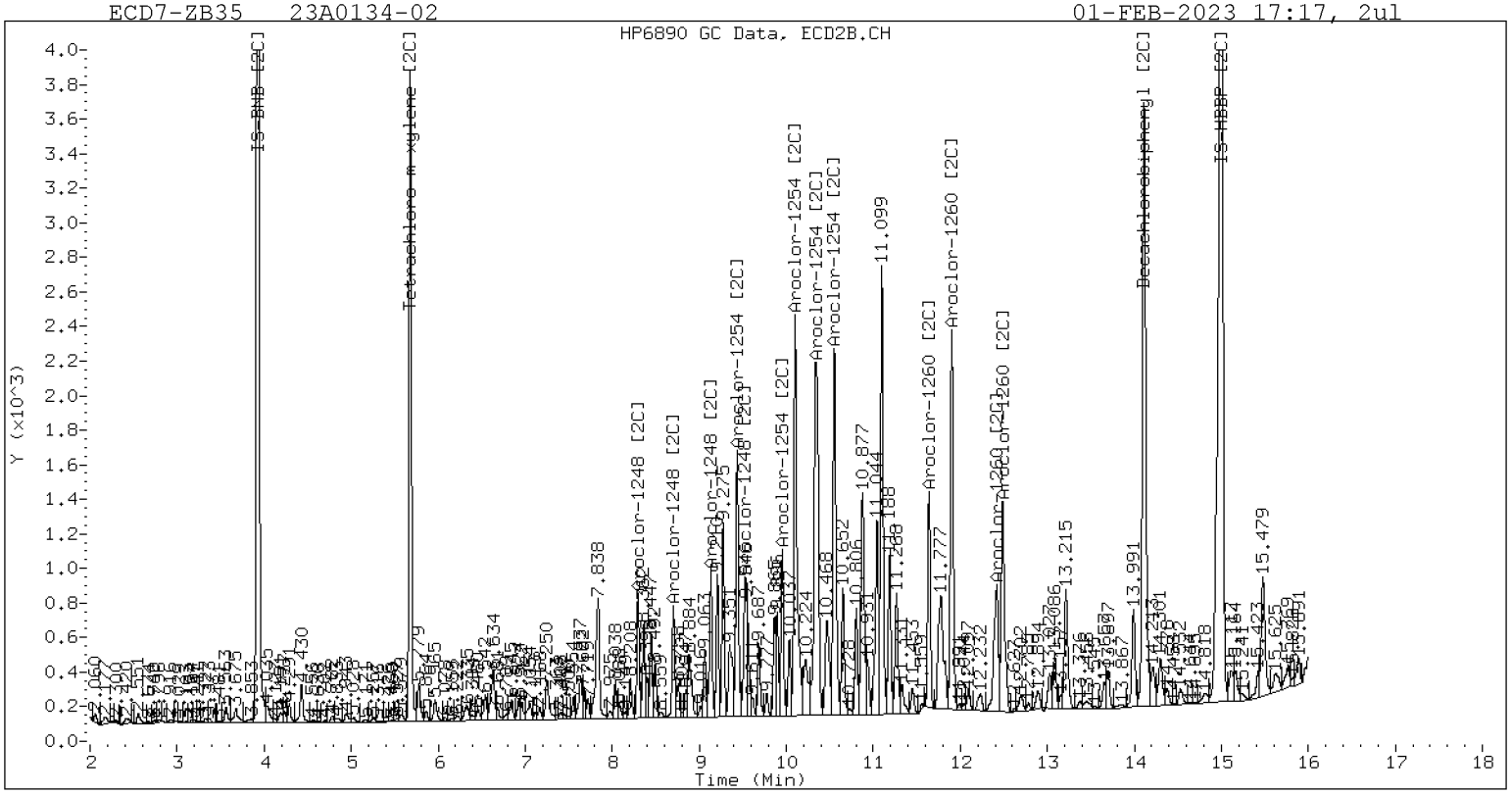
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-02 01-FEB-2023 17:17, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0134-02 01-FEB-2023 17:17, 2ul

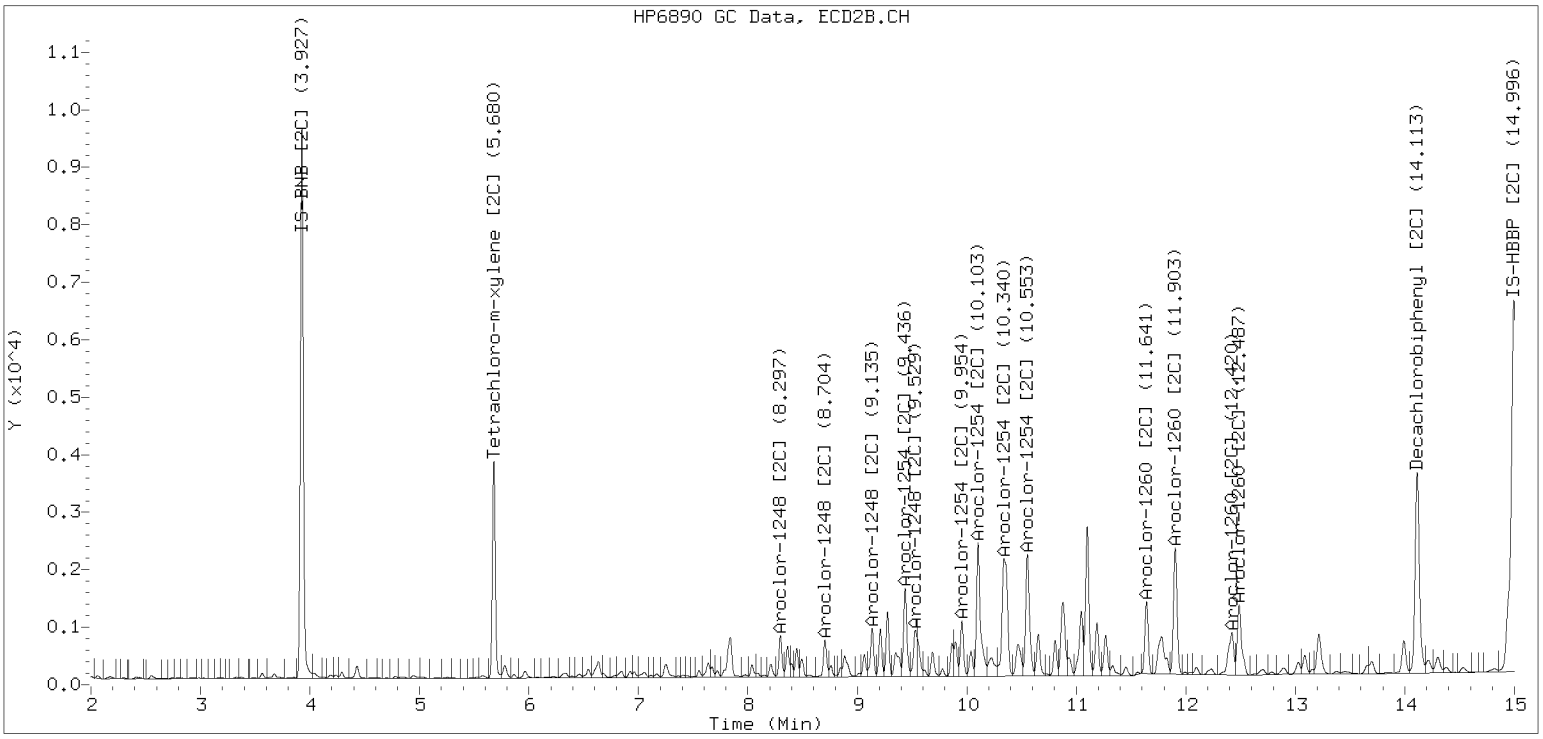


ZB-35 Manual Integration: YES

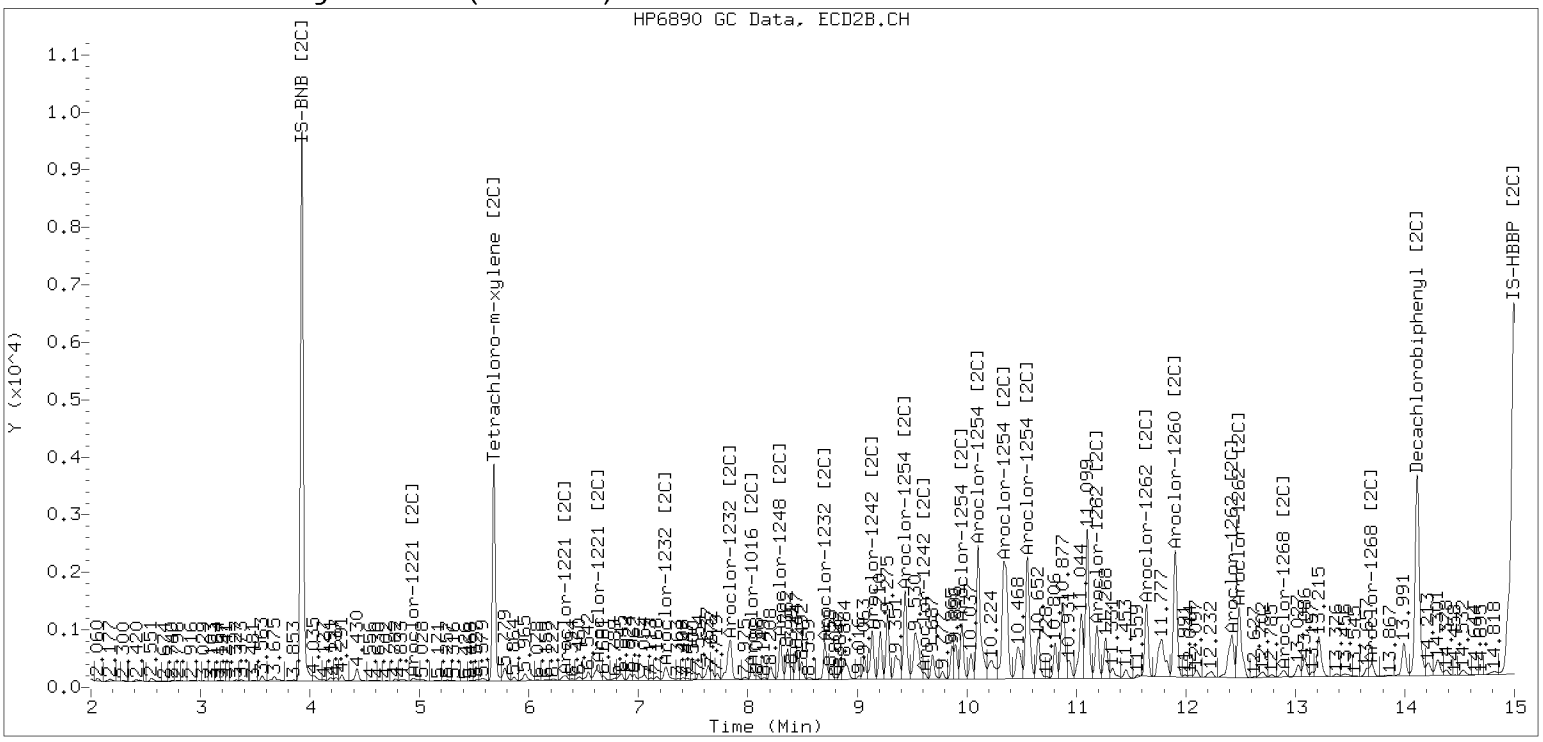
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230201.b/230201.b/02012317ECD7.D Injection Date: 01-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1179

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-03 C	File ID:	02022304ECD7.D
Sampled:	01/06/23 09:52	Prepared:	01/20/23 13:50	Analyzed:	02/02/23 10:03
% Solids:	47.33	Preparation:	EPA 3546 (Microwave)	Initial/Final:	26.42 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0023	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	10	40.0	15.6	40.0	U
11104-28-2	Aroclor 1221	1	10	40.0	15.6	40.0	U
11141-16-5	Aroclor 1232	1	10	40.0	15.6	40.0	U
53469-21-9	Aroclor 1242	1	10	40.0	15.6	40.0	U
12672-29-6	Aroclor 1248	2	10	78.8	15.6	40.0	D
11097-69-1	Aroclor 1254	1	10	102	15.6	40.0	D
11096-82-5	Aroclor 1260	1	10	92.8	5.9	40.0	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9971*	*8.54*	*107*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9971*	*6.87*	*85.8*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9971*	*7.52*	*94.1*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9971*	*7.75*	*96.9*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230202.b/02022304ECD7.D
Data file 2: /230202.b/230202.b/02022304ECD7.D
Method: \\target\share\chem4\ecd7.i\230202.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-03RE1
Client ID:
Injection Date: 02-FEB-2023 10:03
Report Date: 02/02/2023 11:38
Matrix: NONE
Dilution Factor: 10.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.003	25969	5.683	-0.001	20019	3.4	3.9	12.1	Tetrachloro-m-xylene
13.885	-0.006	28779	14.115	-0.003	25646	4.3	3.8	12.7	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	535030	6.3
Hexabromobiphenyl	647433	630027	-2.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	382170	13.4
Hexabromobiphenyl	382032	429461	12.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.397	-0.008	5741	21.4	1	8.300	-0.004	4509	26.1
Aroclor-1248	2	8.563	-0.017	7643	22.4	2	8.706	-0.005	3545	19.1
Aroclor-1248	3	8.987	-0.012	12800	19.6	3	9.135	-0.019	16619	73.1
Aroclor-1248	4	9.288	-0.006	16126	49.9	4	9.506	-0.072	74045	263.5
		Total Col1Ave (4 peaks):			28.3		Total Col2Ave (4 peaks):			95.5 RPD = 108*
		Corrected Ave (3 peaks):			21.1		Corrected Ave (3 peaks):			39.4 RPD = 60*
Aroclor-1254	1	9.288	-0.011	16126	29.6	1	9.434	-0.010	18885	68.1
Aroclor-1254	2	9.367	-0.011	10923	46.9	2	9.958	-0.006	6700	29.9
Aroclor-1254	3	9.662	-0.007	20157	57.7	3	10.106	-0.009	20857	42.7
Aroclor-1254	4	9.800	-0.009	47862	69.9	4	10.310	-0.055	298718	611.1
Aroclor-1254	5	10.116	-0.061	26479	59.5	5	10.565	0.002	163281	599.7
		Total Col1Ave (5 peaks):			52.7		Total Col2Ave (5 peaks):			270.3 RPD = 135*
		Corrected Ave (4 peaks):			48.4		Corrected Ave (4 peaks):			185.1 RPD = 117*
					51.025					46.9
Aroclor-1260	1	11.024	-0.020	324791	918.8	1	11.642	-0.008	15367	49.6
Aroclor-1260	2	11.351	-0.010	12910	35.5	2	11.905	-0.009	15909	20.3
Aroclor-1260	3	11.719	-0.016	27490	28.7	3	12.423	-0.010	12796	65.5
Aroclor-1260	4	12.129	-0.010	25285	51.2	4	12.490	-0.008	17097	33.7
Aroclor-1260	5	12.235	-0.009	15147	70.3	NS	---			----
		Total Col1Ave (5 peaks):			220.9		Total Col2Ave (4 peaks):			42.3 RPD = 136*
		Corrected Ave (4 peaks):			46.4		Corrected Ave (3 peaks):			34.5 RPD = 29
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.909 - 13.792) = 3262054 Col1 Total PCB = 0.5 ppm*

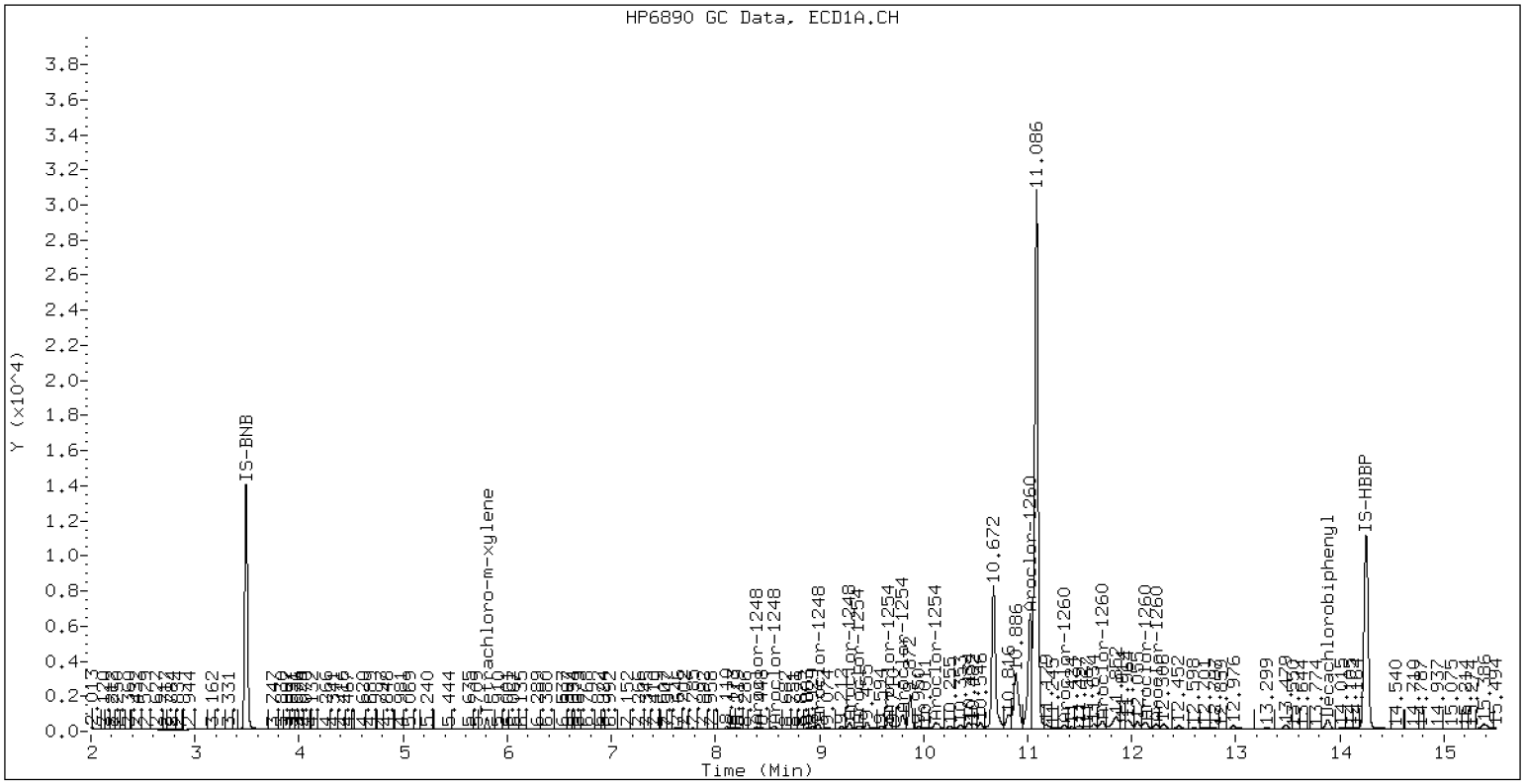
Total PCB Area Col2 (5.784 - 14.018) = 2093725 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

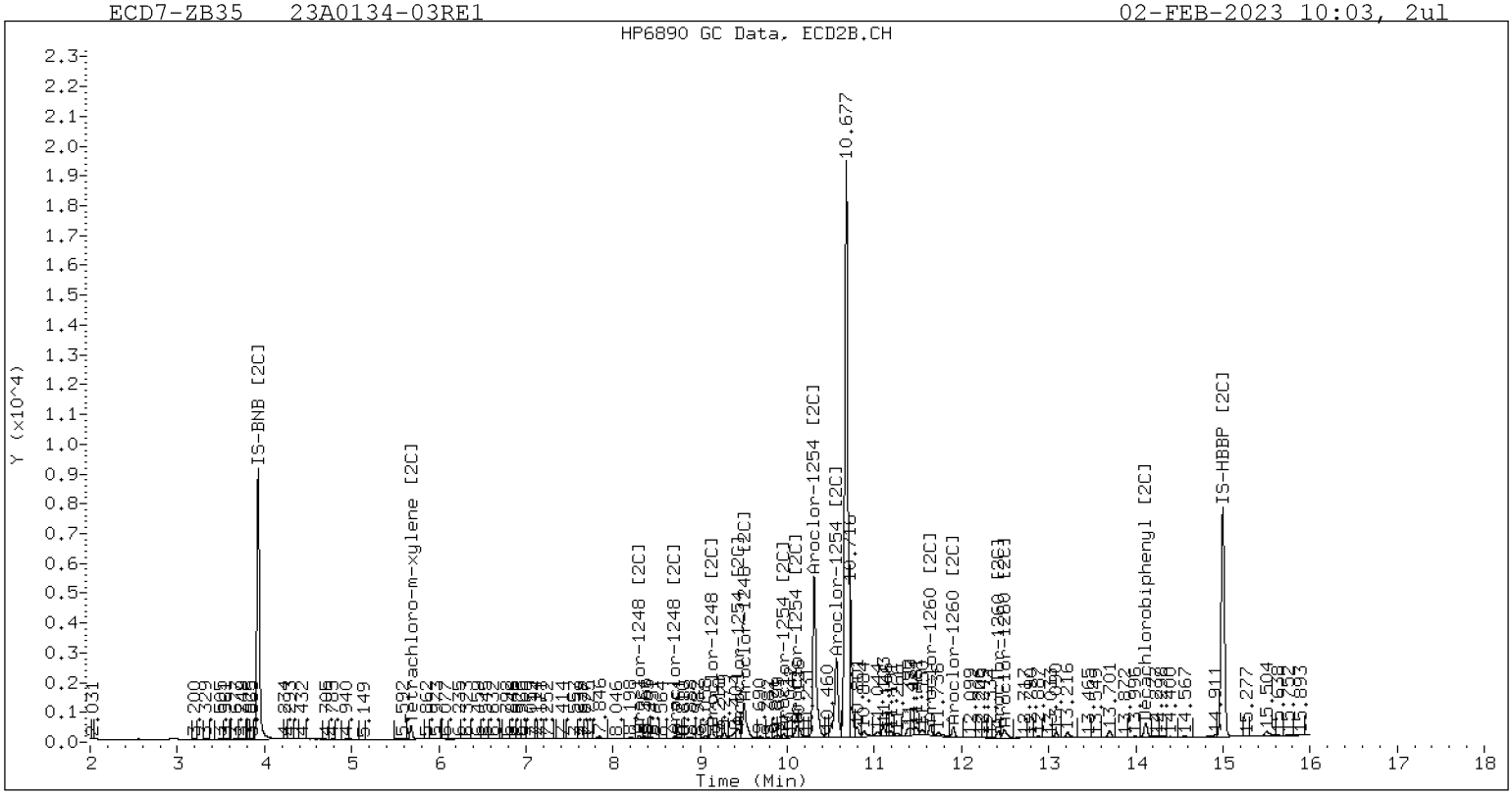
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-03RE1 02-FEB-2023 10:03, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0134-03RE1 02-FEB-2023 10:03, 2ul

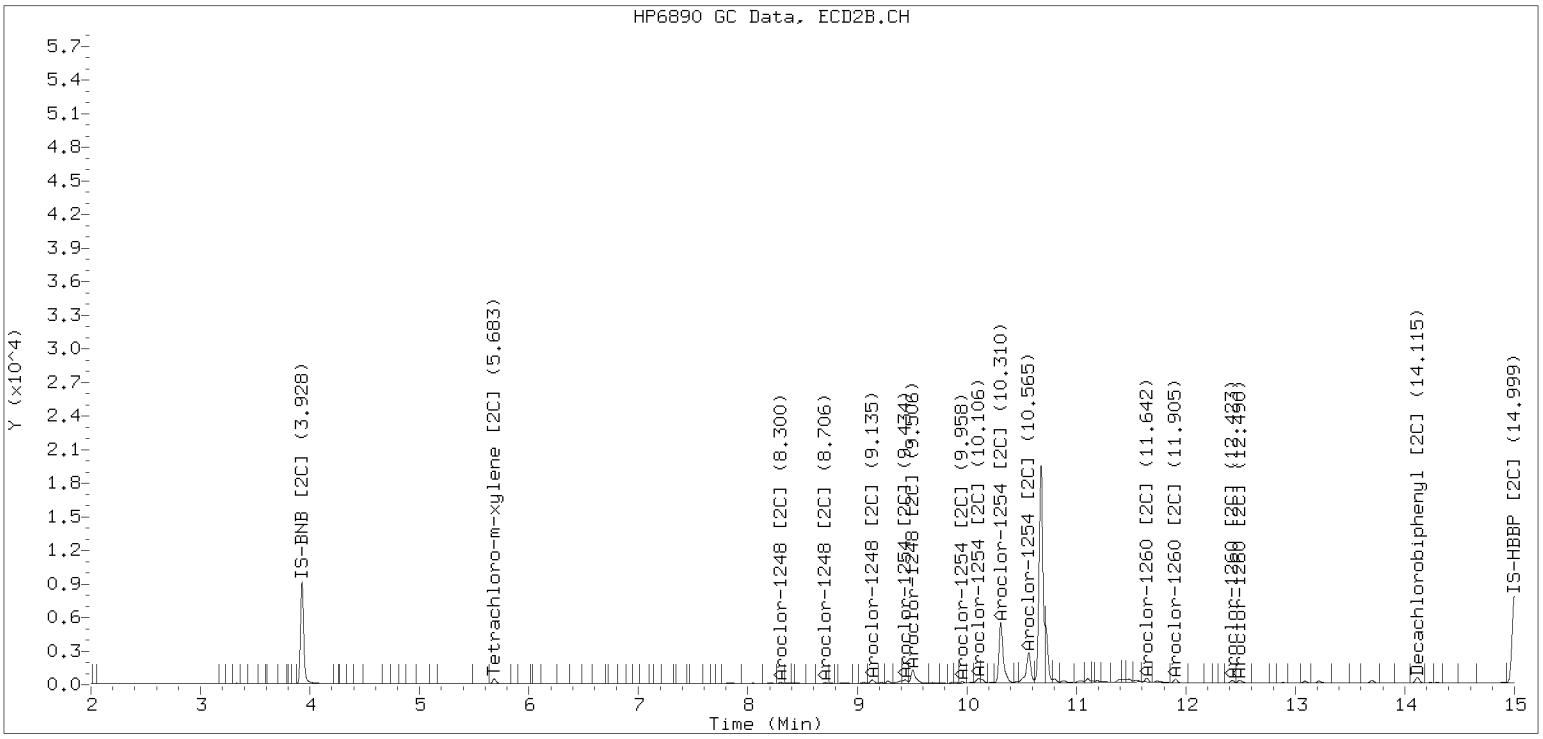


ZB-35 Manual Integration: YES

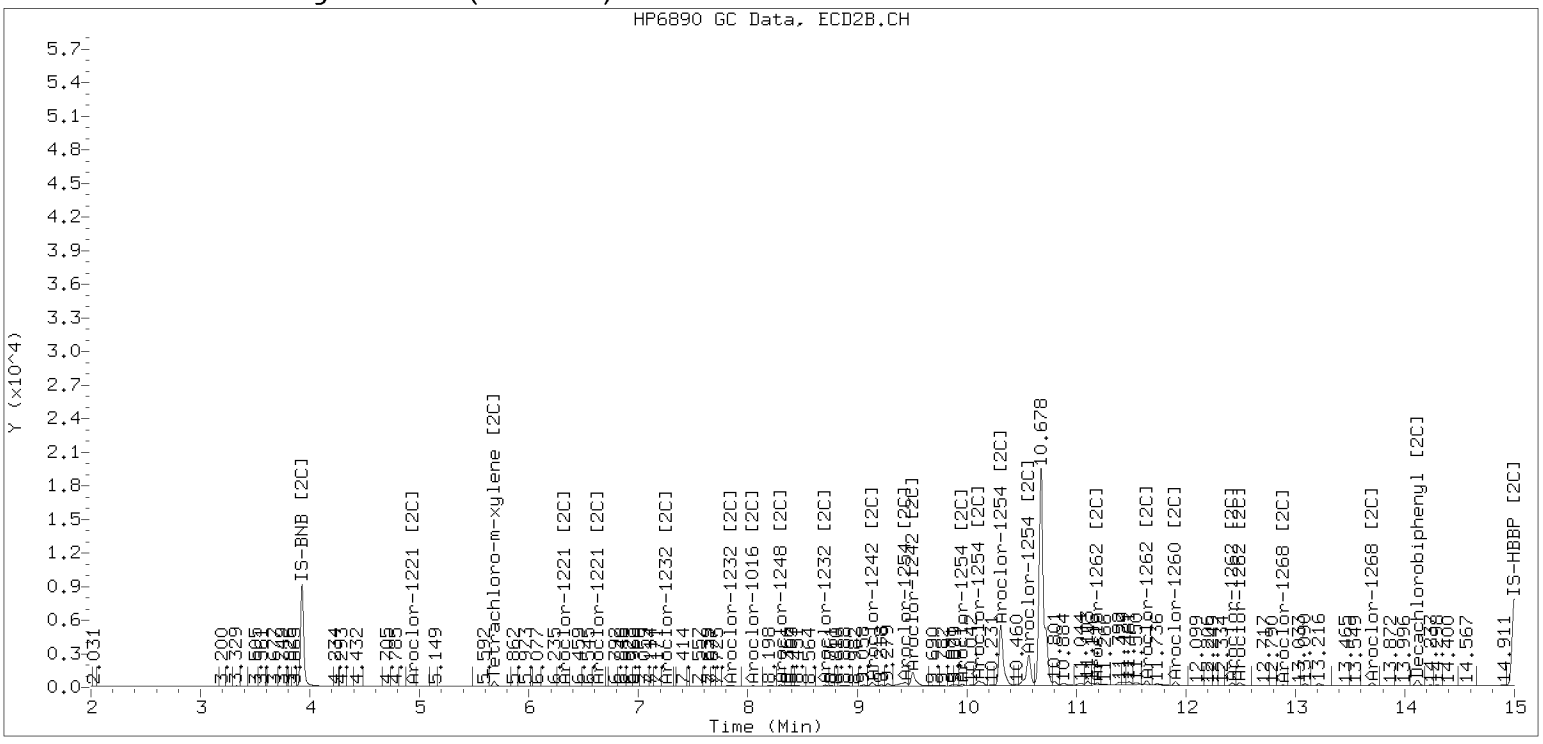
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230202.b/230202.b/02022304ECD7.D Injection Date: 02-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1242

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-04 C	File ID:	02012319ECD7.D
Sampled:	01/06/23 11:04	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 17:59
% Solids:	46.37	Preparation:	EPA 3546 (Microwave)	Initial/Final:	26.97 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	27.0	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	48.5	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	38.8	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9962*	*7.21*	*90.2*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9962*	*5.21*	*65.1*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9962*	*6.10*	*76.3*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9962*	*6.05*	*75.7*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012319ECD7.D
Data file 2: /230201.b/230201.b/02012319ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-04
Client ID:
Injection Date: 01-FEB-2023 17:59
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.002	194780	5.681	-0.003	152423	26.0	30.3	15.0	Tetrachloro-m-xylene
13.884	-0.006	165381	14.114	-0.002	166508	36.1	30.5	16.7	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	529029	5.1
Hexabromobiphenyl	647433	428641	-33.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	372558	10.6
Hexabromobiphenyl	382032	343942	-10.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.395	-0.007	25811	97.5	1	8.297	-0.006	30945	183.8
Aroclor-1248	2	8.562	-0.014	20651	61.2	2	8.703	-0.006	21135	116.6
Aroclor-1248	3	8.982	-0.013	74730	115.7	3	9.136	-0.016	27104	122.4
Aroclor-1248	4	9.285	-0.006	83859	262.4	4	9.530	-0.046	32179	117.5
		Total Col1Ave (4 peaks):			134.2		Total Col2Ave (4 peaks):			135.0 RPD = 1
		Corrected Ave (3 peaks):			91.5		Corrected Ave (3 peaks):			118.8 RPD = 26
Aroclor-1254	1	9.285	-0.012	83859	155.5	1	9.436	-0.008	59810	221.3
Aroclor-1254	2	9.360	-0.012	35313	153.4	2	9.954	-0.010	29339	134.3
Aroclor-1254	3	9.656	-0.007	60576	175.3	3	10.103	-0.013	105768	221.9
Aroclor-1254	4	9.785	-0.016	120895	178.6	4	10.353	-0.012	139274	292.2
Aroclor-1254	5	10.116	-0.047	150991	343.0	5	10.552	-0.010	91027	342.9
		Total Col1Ave (5 peaks):			201.2		Total Col2Ave (5 peaks):			242.5 RPD = 19
		Corrected Ave (4 peaks):			165.7		Corrected Ave (4 peaks):			217.4 RPD = 27
Aroclor-1260	1	11.031	-0.010	52646	218.9	1	11.642	-0.007	47674	192.1
Aroclor-1260	2	11.346	-0.011	36828	149.0	2	11.903	-0.010	96233	153.3
Aroclor-1260	3	11.717	-0.015	111260	171.0	3	12.422	-0.011	40947	261.7
Aroclor-1260	4	12.117	-0.017	58400	173.7	4	12.487	-0.011	68549	168.7
Aroclor-1260	5	12.232	-0.009	32330	220.6	NS	---			----
		Total Col1Ave (5 peaks):			186.6		Total Col2Ave (4 peaks):			194.0 RPD = 4
		Corrected Ave (4 peaks):			178.1		Corrected Ave (3 peaks):			171.4 RPD = 4
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 2236078 Col1 Total PCB = 0.4 ppm*

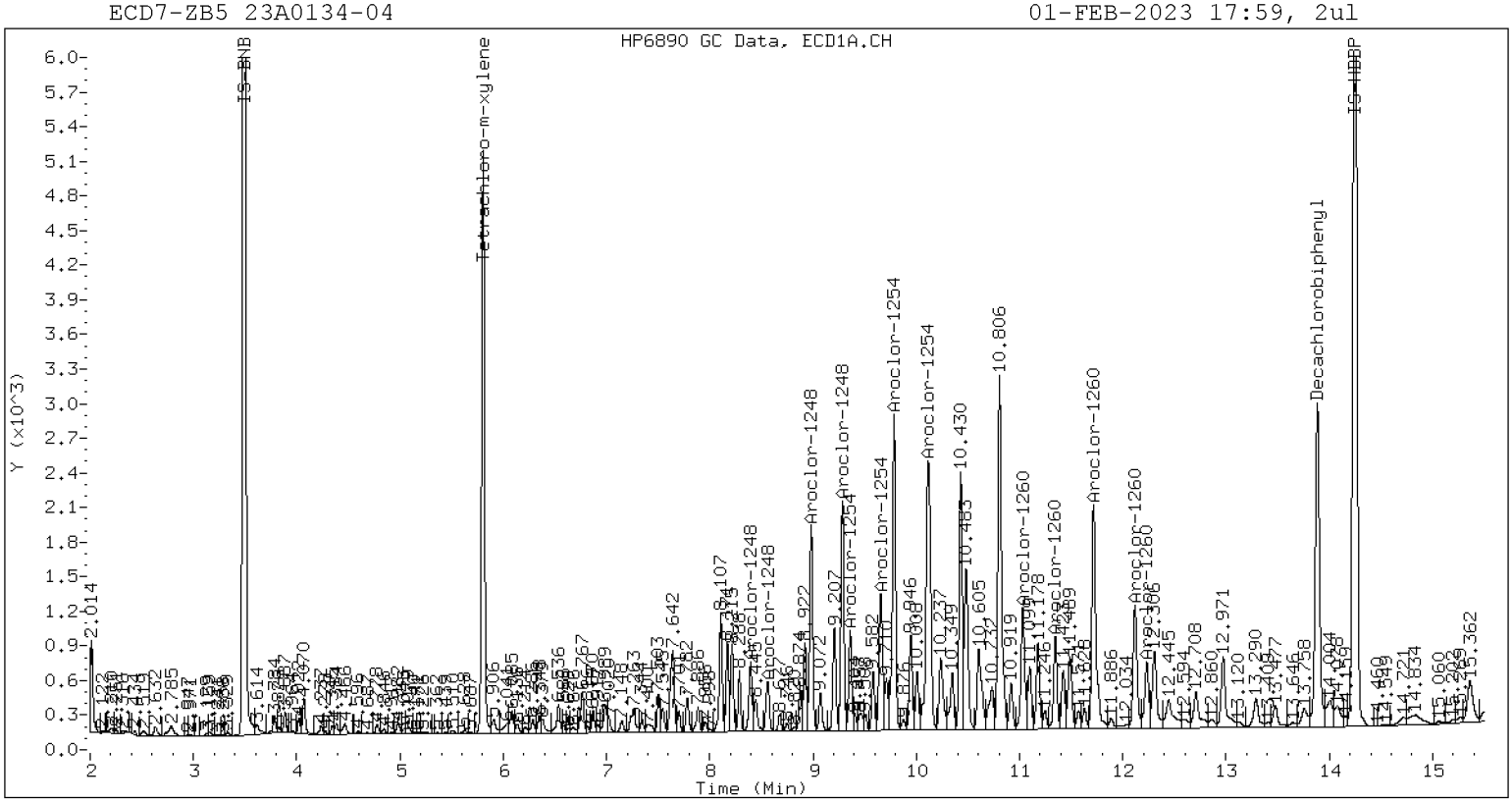
Total PCB Area Col2 (5.784 - 14.016) = 1813762 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

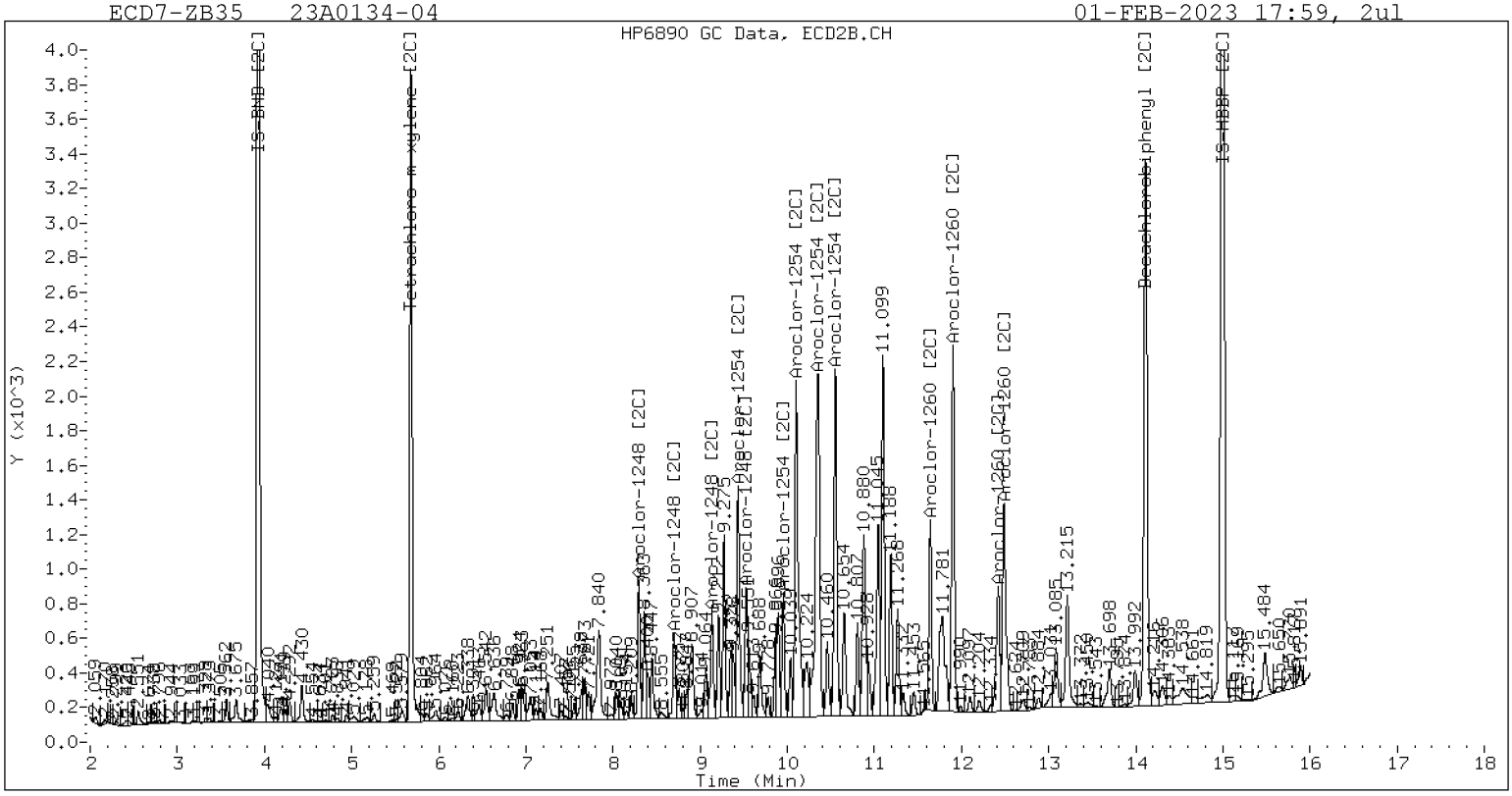
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-04 01-FEB-2023 17:59, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0134-04 01-FEB-2023 17:59, 2ul

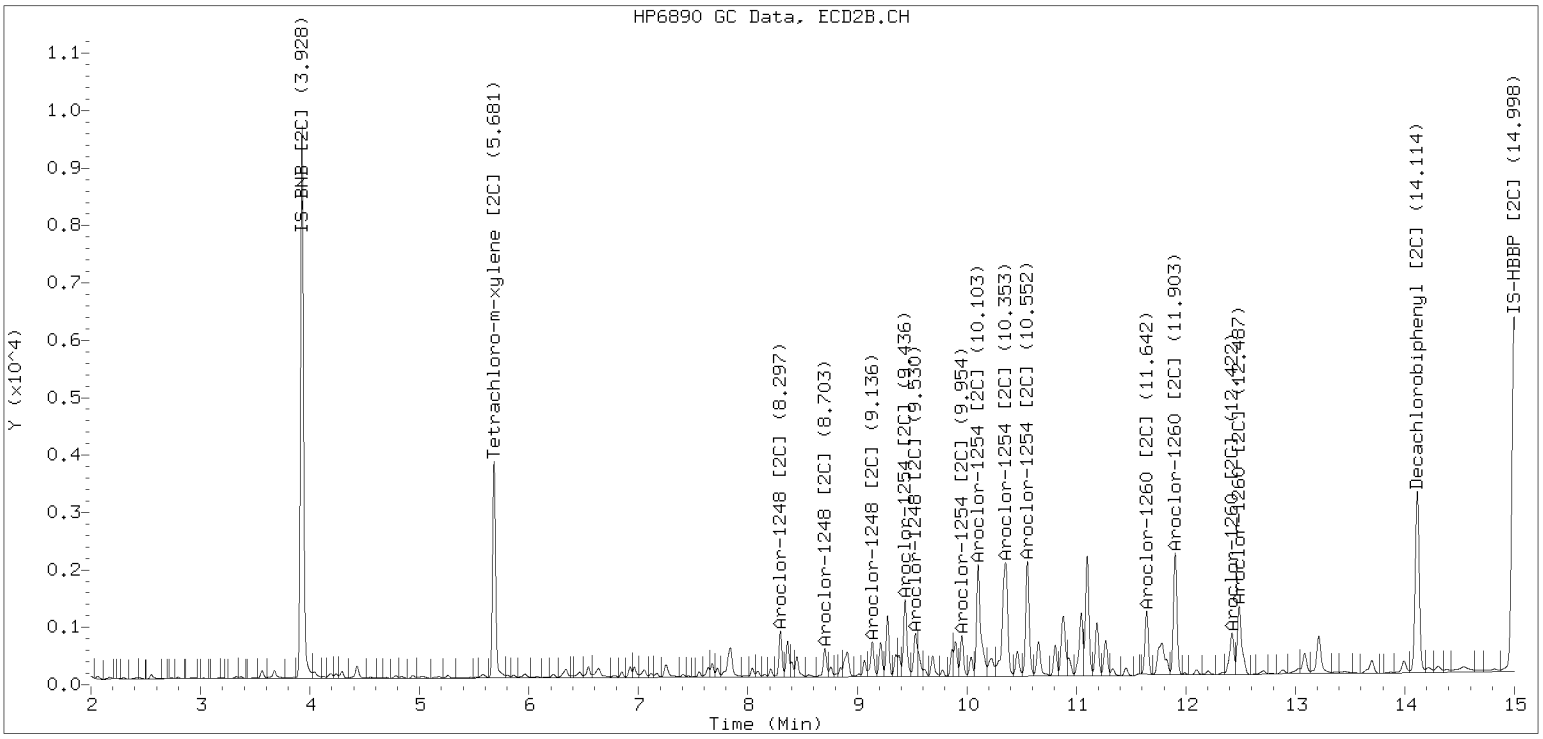


ZB-35 Manual Integration: YES

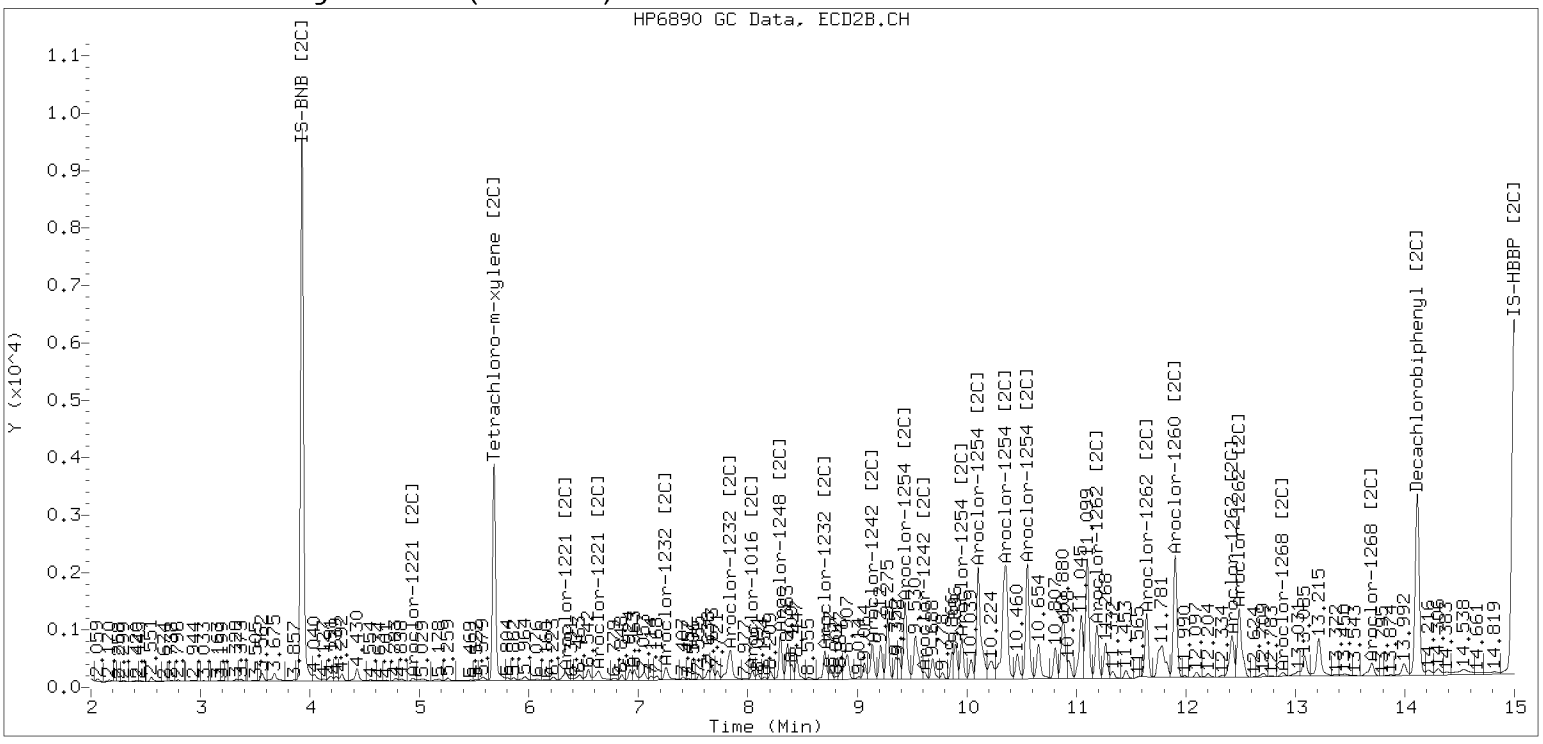
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230201.b/230201.b/02012319ECD7.D Injection Date: 01-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1173

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-05 C	File ID:	02012320ECD7.D
Sampled:	01/06/23 11:22	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 18:20
% Solids:	47.16	Preparation:	EPA 3546 (Microwave)	Initial/Final:	26.55 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	1	1	37.7	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	62.4	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	40.3	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9866*	*6.09*	*76.3*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9866*	*4.75*	*59.5*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9866*	*5.83*	*73.0*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9866*	*5.38*	*67.4*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012320ECD7.D
Data file 2: /230201.b/230201.b/02012320ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-05
Client ID:
Injection Date: 01-FEB-2023 18:20
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.002	183235	5.681	-0.003	141073	23.8	26.9	12.4	Tetrachloro-m-xylene
13.884	-0.006	144058	14.112	-0.004	166695	30.5	29.2	4.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	544937	8.3
Hexabromobiphenyl	647433	441364	-31.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	387266	14.9
Hexabromobiphenyl	382032	359826	-5.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.394	-0.008	38810	142.4	1	8.297	-0.006	35760	204.3
Aroclor-1248	2	8.563	-0.013	28092	80.8	2	8.704	-0.006	29481	156.5
Aroclor-1248	3	8.982	-0.013	101643	152.8	3	9.136	-0.017	44766	194.4
Aroclor-1248	4	9.284	-0.007	124631	378.5	4	9.530	-0.045	41797	146.8
		Total Col1Ave (4 peaks):			188.6		Total Col2Ave (4 peaks):			175.5 RPD = 7
		Corrected Ave (3 peaks):			125.3		Corrected Ave (3 peaks):			165.9 RPD = 28
Aroclor-1254	1	9.284	-0.012	124631	224.4	1	9.436	-0.008	84980	302.5
Aroclor-1254	2	9.360	-0.013	45014	189.8	2	9.954	-0.010	52346	230.5
Aroclor-1254	3	9.653	-0.010	94309	265.0	3	10.102	-0.013	146824	296.4
Aroclor-1254	4	9.784	-0.017	165677	237.6	4	10.342	-0.022	175825	354.9
Aroclor-1254	5	10.122	-0.041	197026	434.5	5	10.552	-0.011	104722	379.6
		Total Col1Ave (5 peaks):			270.3		Total Col2Ave (5 peaks):			312.8 RPD = 15
		Corrected Ave (4 peaks):			229.2		Corrected Ave (4 peaks):			296.1 RPD = 25
Aroclor-1260	1	11.031	-0.010	40819	164.8	1	11.641	-0.008	57687	222.2
Aroclor-1260	2	11.347	-0.011	36344	142.8	2	11.903	-0.011	92136	140.3
Aroclor-1260	3	11.717	-0.015	116841	174.4	3	12.419	-0.013	47474	290.0
Aroclor-1260	4	12.117	-0.018	56200	162.3	4	12.485	-0.012	65480	154.1
Aroclor-1260	5	12.233	-0.008	23751	157.4	NS	---			----
		Total Col1Ave (5 peaks):			160.3		Total Col2Ave (4 peaks):			201.6 RPD = 23
		Corrected Ave (4 peaks):			156.8		Corrected Ave (3 peaks):			172.2 RPD = 9
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 2621236 Col1 Total PCB = 0.4 ppm*

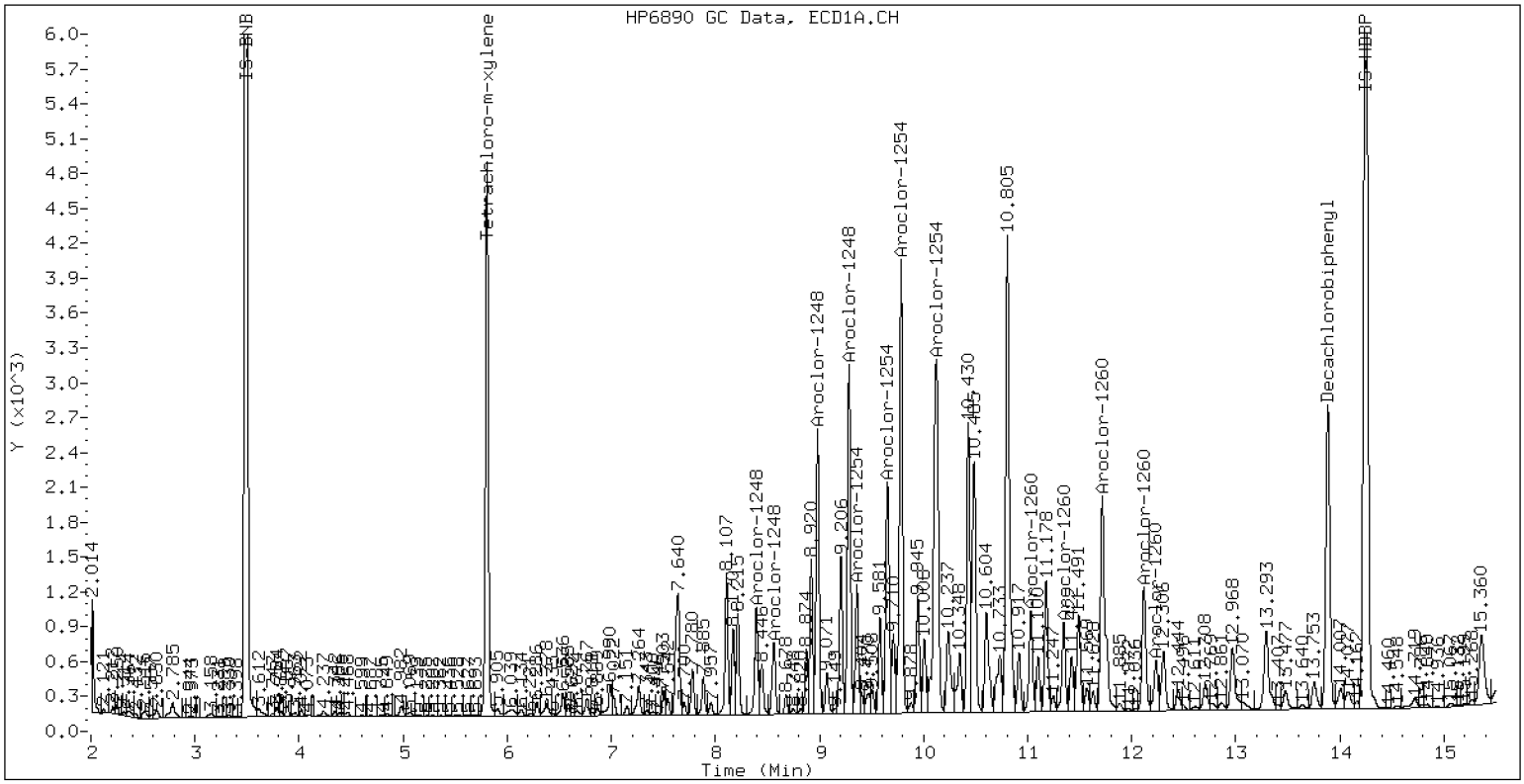
Total PCB Area Col2 (5.784 - 14.016) = 2152471 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-05 01-FEB-2023 18:20, 2ul



ZB-5 Manual Integration: NO

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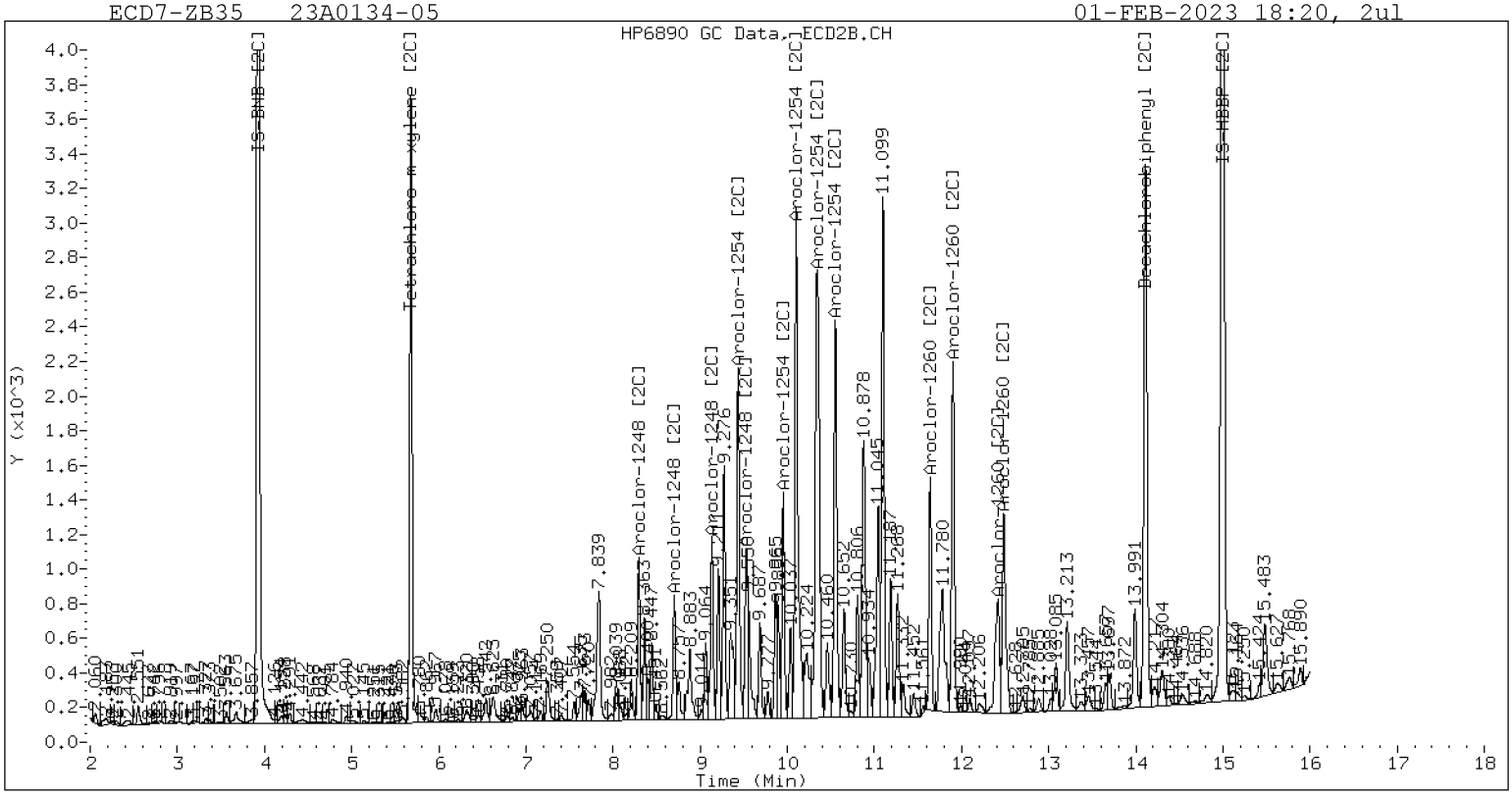
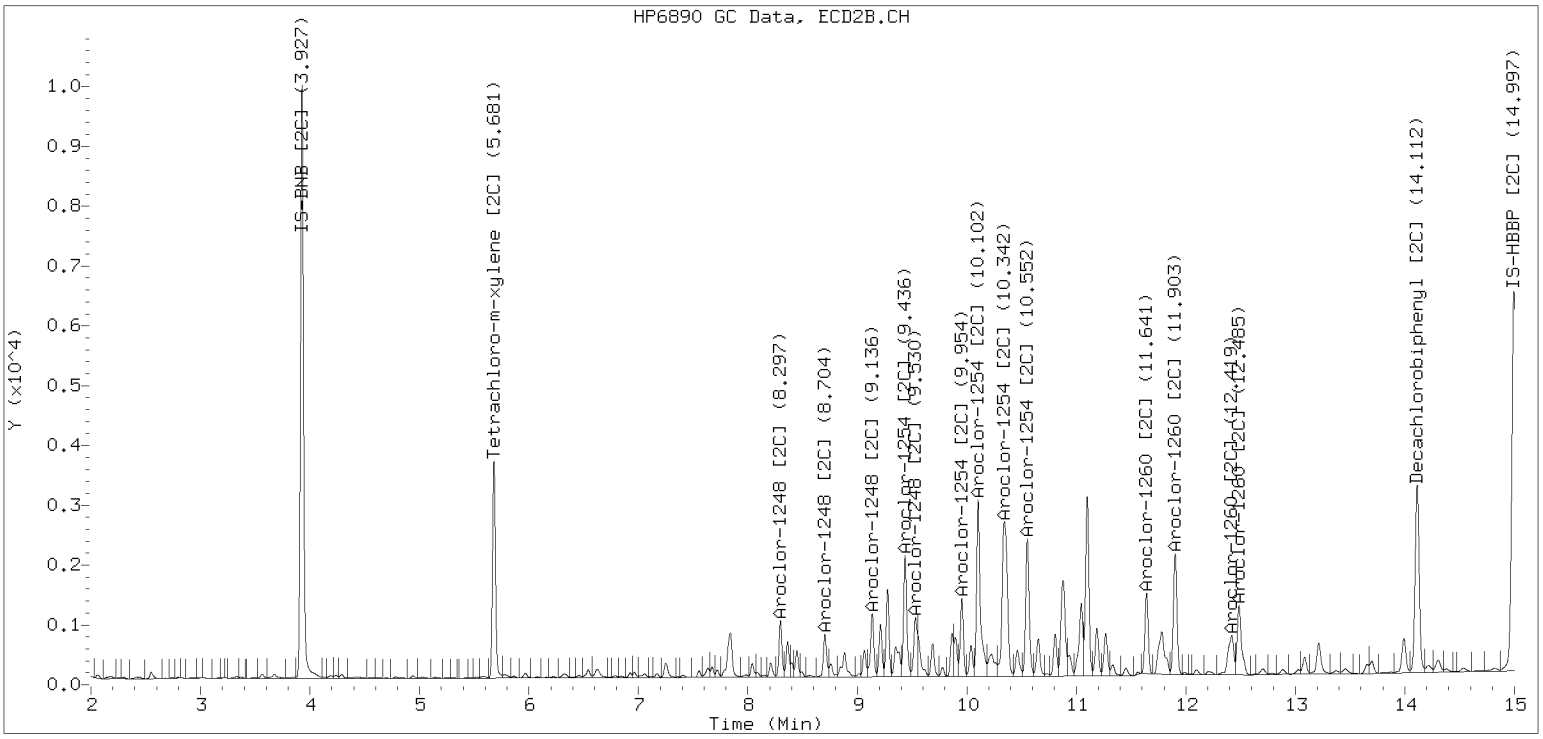


ZB-35 Manual Integration: YES

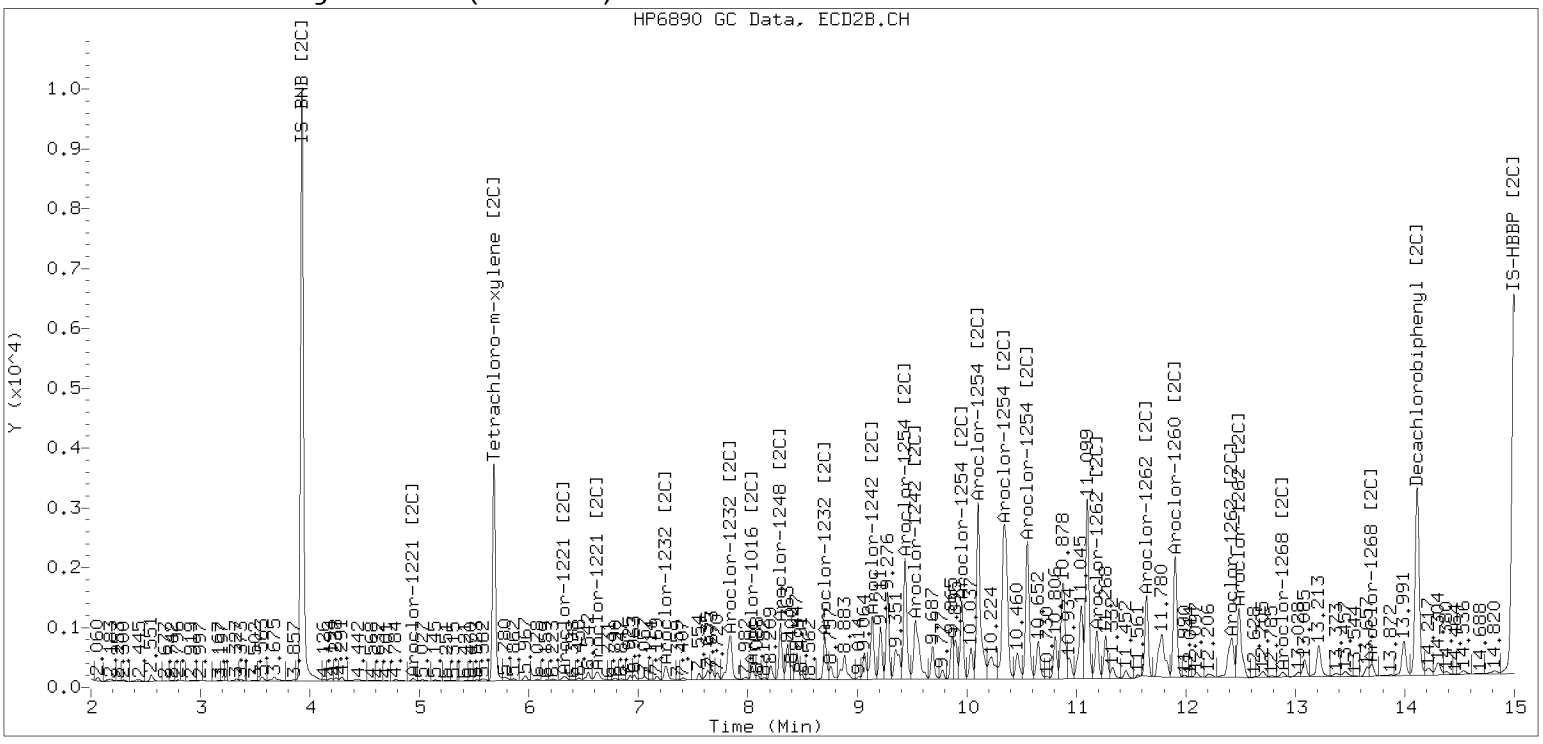
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230201.b/230201.b/02012320ECD7.D Injection Date: 01-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1160

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-06 C	File ID:	02012321ECD7.D
Sampled:	01/06/23 11:41	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 18:41
% Solids:	40.27	Preparation:	EPA 3546 (Microwave)	Initial/Final:	31.1 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	1	1	41.1	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	55.6	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	37.6	0.6	4.0	P1

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9847*	*6.26*	*78.4*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9847*	*4.77*	*59.7*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9847*	*6.07*	*76.0*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9847*	*5.35*	*67.0*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012321ECD7.D
Data file 2: /230201.b/230201.b/02012321ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-06
Client ID:
Injection Date: 01-FEB-2023 18:41
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.002	180659	5.681	-0.003	136642	23.9	26.8	11.6	Tetrachloro-m-xylene
13.884	-0.006	154121	14.112	-0.004	183610	31.4	30.4	3.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	535263	6.3
Hexabromobiphenyl	647433	459665	-29.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	377027	11.9
Hexabromobiphenyl	382032	380712	-0.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.380	-0.022	84032	313.8	1	8.297	-0.006	30758	180.5
Aroclor-1248	2	8.562	-0.014	34523	101.1	2	8.703	-0.006	33522	182.7
Aroclor-1248	3	8.981	-0.014	84896	129.9	3	9.136	-0.017	41871	186.8
Aroclor-1248	4	9.284	-0.007	90444	279.7	4	9.531	-0.045	66456	239.7
		Total Col1Ave (4 peaks):			206.1		Total Col2Ave (4 peaks):			197.4 RPD = 4
		Corrected Ave (3 peaks):			170.2		Corrected Ave (3 peaks):			183.3 RPD = 7
Aroclor-1254	1	9.284	-0.012	90444	165.8	1	9.436	-0.008	67056	245.2
Aroclor-1254	2	9.360	-0.013	34022	146.1	2	9.954	-0.011	37575	170.0
Aroclor-1254	3	9.655	-0.008	77214	220.9	3	10.102	-0.013	122194	253.4
Aroclor-1254	4	9.784	-0.018	137698	201.0	4	10.350	-0.015	155443	322.3
Aroclor-1254	5	10.116	-0.046	168563	378.5	5	10.552	-0.011	107879	401.6
		Total Col1Ave (5 peaks):			222.5		Total Col2Ave (5 peaks):			278.5 RPD = 22
		Corrected Ave (4 peaks):			183.5		Corrected Ave (4 peaks):			247.7 RPD = 30
Aroclor-1260	1	11.031	-0.010	52518	203.6	1	11.641	-0.008	61582	224.2
Aroclor-1260	2	11.346	-0.011	50210	189.4	2	11.902	-0.011	113650	163.6
Aroclor-1260	3	11.719	-0.013	107971	154.7	3	12.392	-0.040	132253	763.6
Aroclor-1260	4	12.117	-0.017	74013	205.2	4	12.485	-0.012	80000	177.9
Aroclor-1260	5	12.232	-0.010	37766	240.3	NS	---			----
		Total Col1Ave (5 peaks):			198.6		Total Col2Ave (4 peaks):			332.3 RPD = 50*
		Corrected Ave (4 peaks):			188.2		Corrected Ave (3 peaks):			188.6 RPD = 0
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 3397016 Col1 Total PCB = 0.5 ppm*

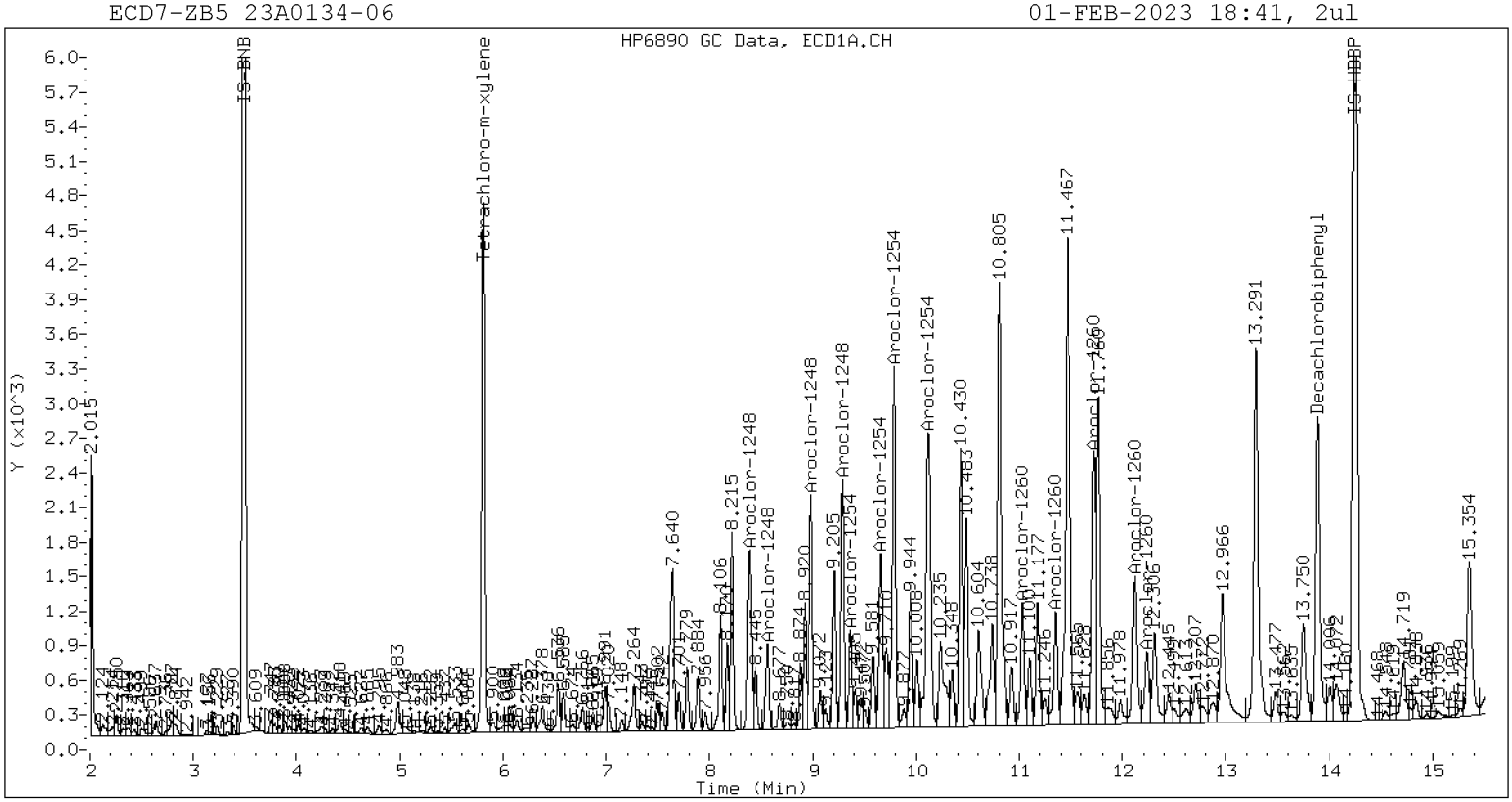
Total PCB Area Col2 (5.784 - 14.016) = 2538473 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

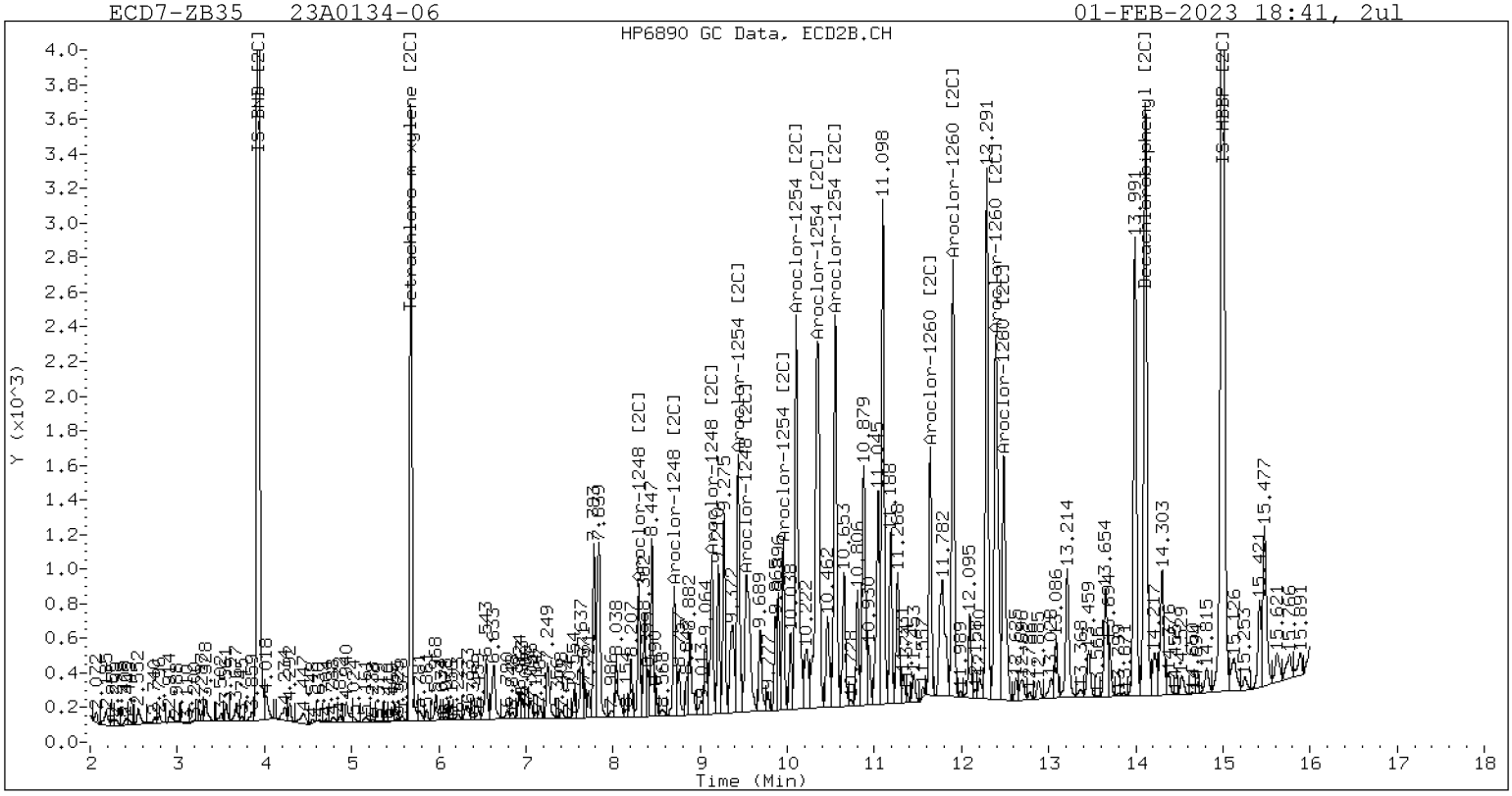
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-06 01-FEB-2023 18:41, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0134-06 01-FEB-2023 18:41, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1152

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-07 C	File ID:	02012322ECD7.D
Sampled:	01/06/23 12:29	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 19:02
% Solids:	43.66	Preparation:	EPA 3546 (Microwave)	Initial/Final:	28.65 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	30.9	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	51.0	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	36.3	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9945*	*6.32*	*79.1*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9945*	*4.35*	*54.4*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9945*	*6.11*	*76.4*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9945*	*5.48*	*68.6*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012322ECD7.D
Data file 2: /230201.b/230201.b/02012322ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-07
Client ID:
Injection Date: 01-FEB-2023 19:02
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.804	-0.003	165641	5.680	-0.004	139610	21.8	27.4	23.0	Tetrachloro-m-xylene
13.883	-0.007	142542	14.112	-0.004	175303	31.6	30.6	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	538420	7.0
Hexabromobiphenyl	647433	421449	-34.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	376488	11.7
Hexabromobiphenyl	382032	361386	-5.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.393	-0.009	33457	124.2	1	8.296	-0.007	27839	163.6
Aroclor-1248	2	8.562	-0.014	26063	75.9	2	8.703	-0.007	27825	151.9
Aroclor-1248	3	8.979	-0.016	78793	119.9	3	9.134	-0.019	38455	171.8
Aroclor-1248	4	9.283	-0.008	87429	268.8	4	9.529	-0.047	36161	130.6
		Total Col1Ave (4 peaks):			147.2		Total Col2Ave (4 peaks):			154.5 RPD = 5
		Corrected Ave (3 peaks):			106.7		Corrected Ave (3 peaks):			148.7 RPD = 33
Aroclor-1254	1	9.283	-0.013	87429	159.3	1	9.435	-0.008	63706	233.2
Aroclor-1254	2	9.359	-0.013	32841	140.2	2	9.954	-0.010	36889	167.1
Aroclor-1254	3	9.655	-0.008	72351	205.8	3	10.102	-0.013	111368	231.3
Aroclor-1254	4	9.783	-0.018	119813	173.9	4	10.343	-0.022	140163	291.0
Aroclor-1254	5	10.120	-0.043	144806	323.2	5	10.552	-0.011	94831	353.5
		Total Col1Ave (5 peaks):			200.5		Total Col2Ave (5 peaks):			255.2 RPD = 24
		Corrected Ave (4 peaks):			169.8		Corrected Ave (4 peaks):			230.7 RPD = 30
Aroclor-1260	1	11.031	-0.010	37289	157.7	1	11.641	-0.008	48760	187.0
Aroclor-1260	2	11.347	-0.011	34232	140.8	2	11.903	-0.010	87901	133.3
Aroclor-1260	3	11.717	-0.015	84055	131.4	3	12.422	-0.011	43047	261.8
Aroclor-1260	4	12.117	-0.017	52516	158.8	4	12.486	-0.011	61548	144.2
Aroclor-1260	5	12.233	-0.009	23524	163.2	NS	---			----
		Total Col1Ave (5 peaks):			150.4		Total Col2Ave (4 peaks):			181.6 RPD = 19
		Corrected Ave (4 peaks):			147.2		Corrected Ave (3 peaks):			154.8 RPD = 5
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 2266379 Col1 Total PCB = 0.4 ppm*

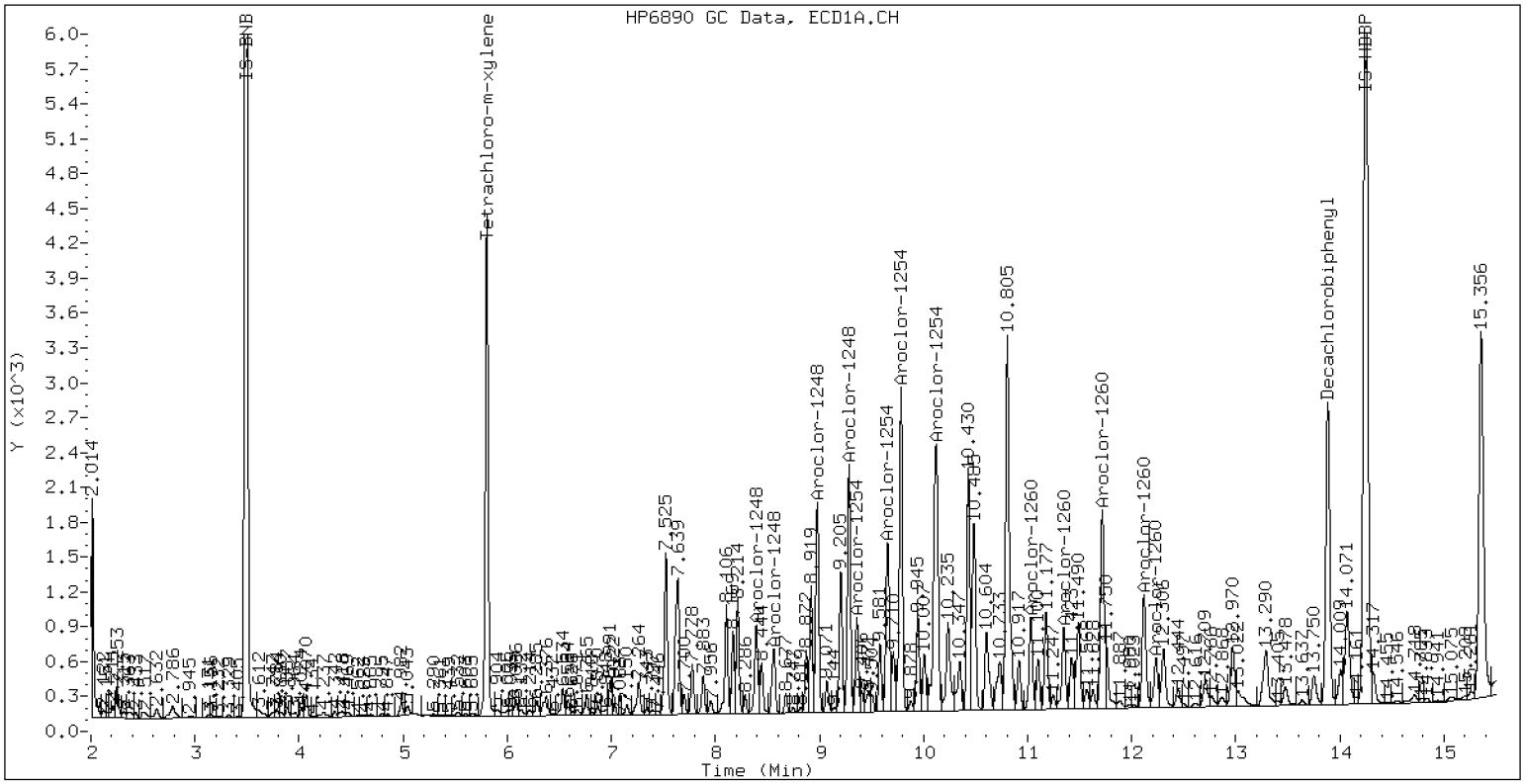
Total PCB Area Col2 (5.784 - 14.016) = 1964812 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

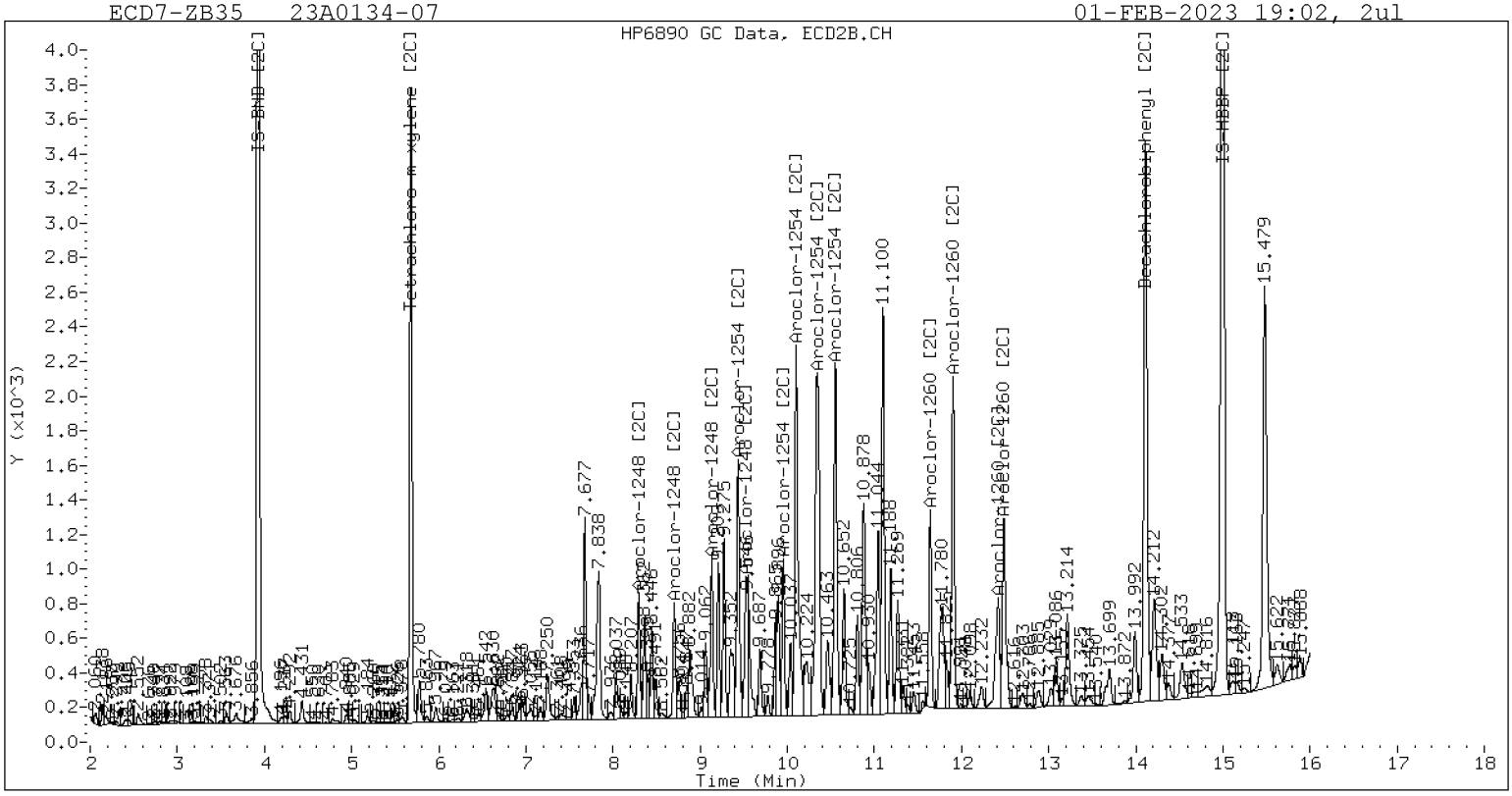
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-07 01-FEB-2023 19:02, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0134-07 01-FEB-2023 19:02, 2ul

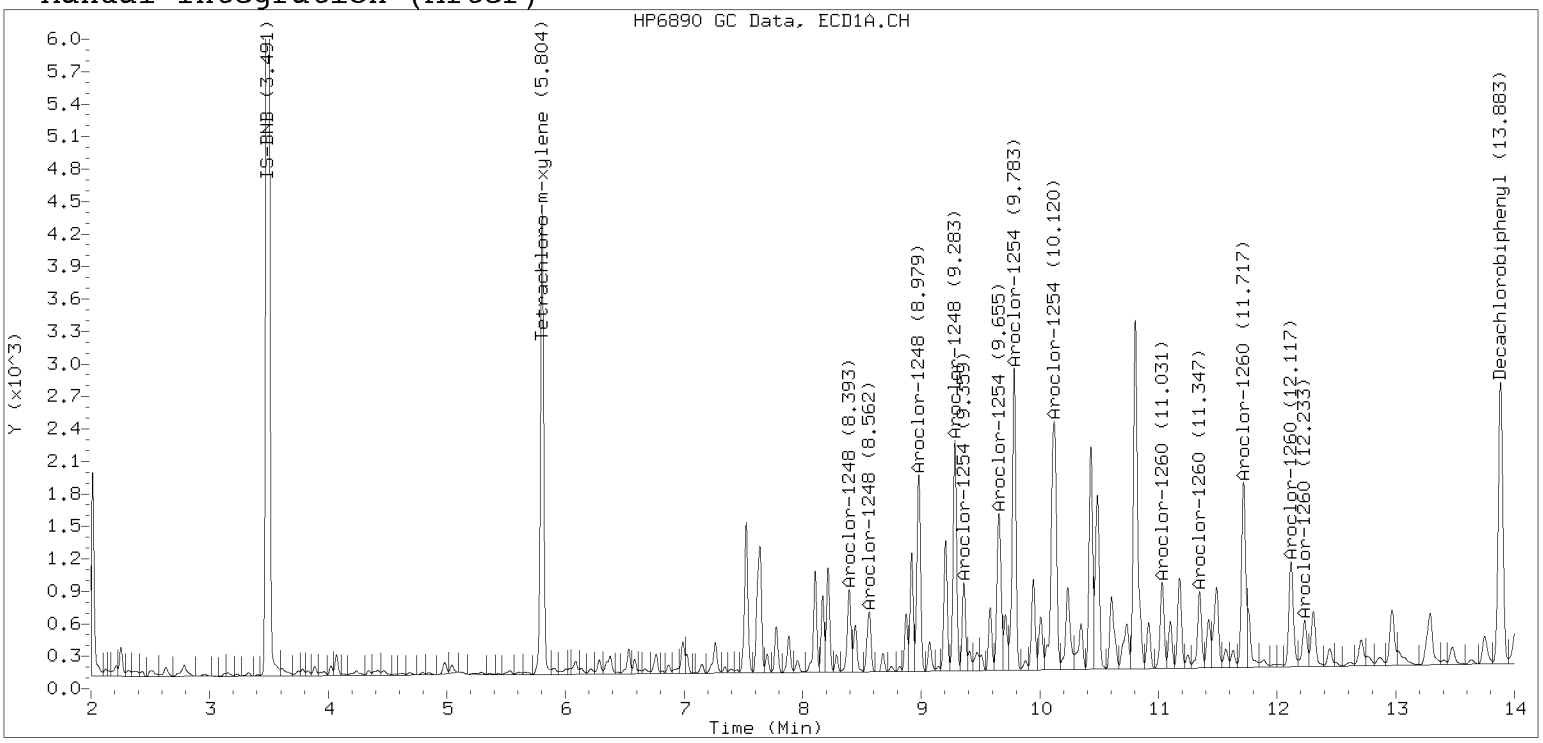


ZB-35 Manual Integration: YES

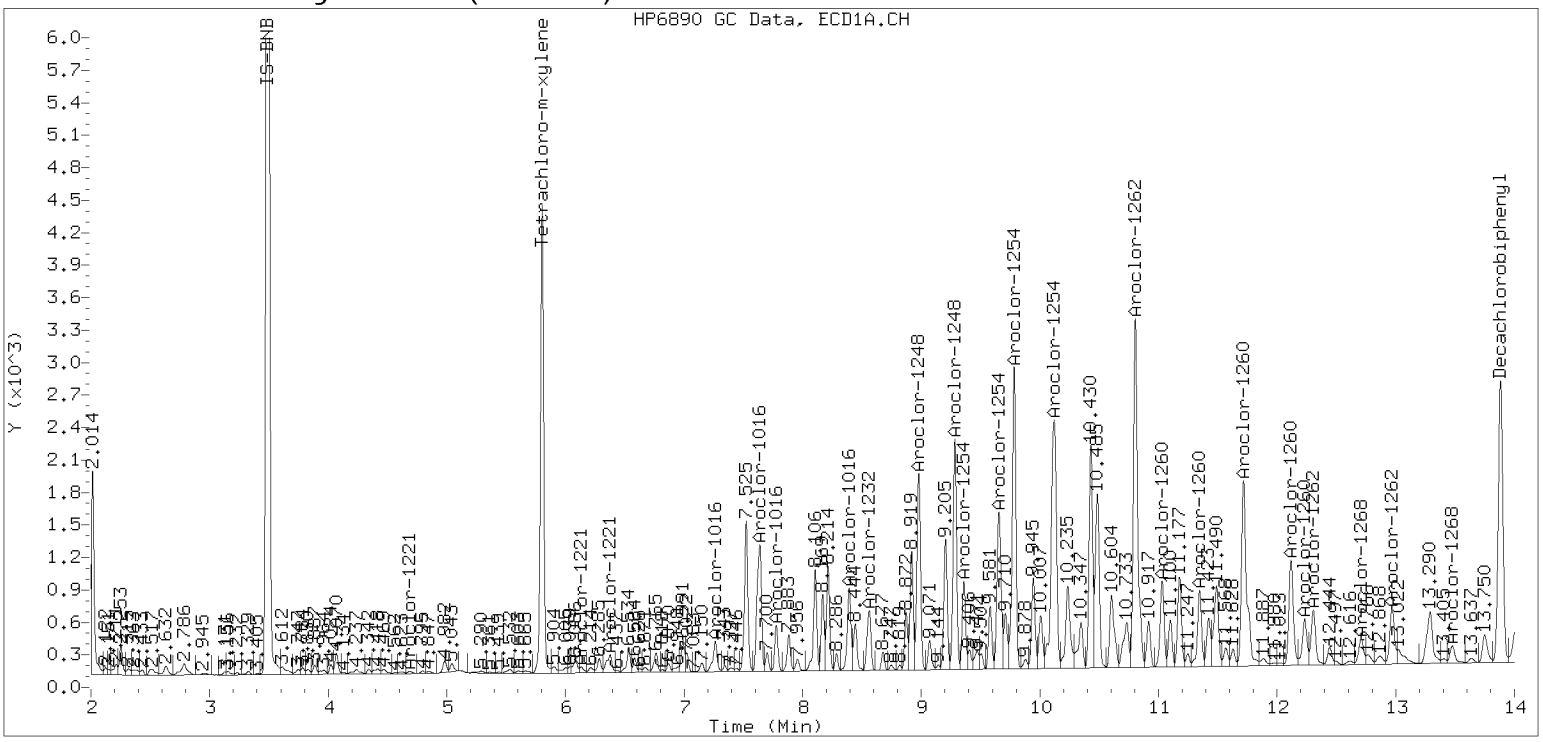
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230201.b/02012322ECD7.D Injection Date: 01-FEB-2023 19:02

Manual Integration (After)



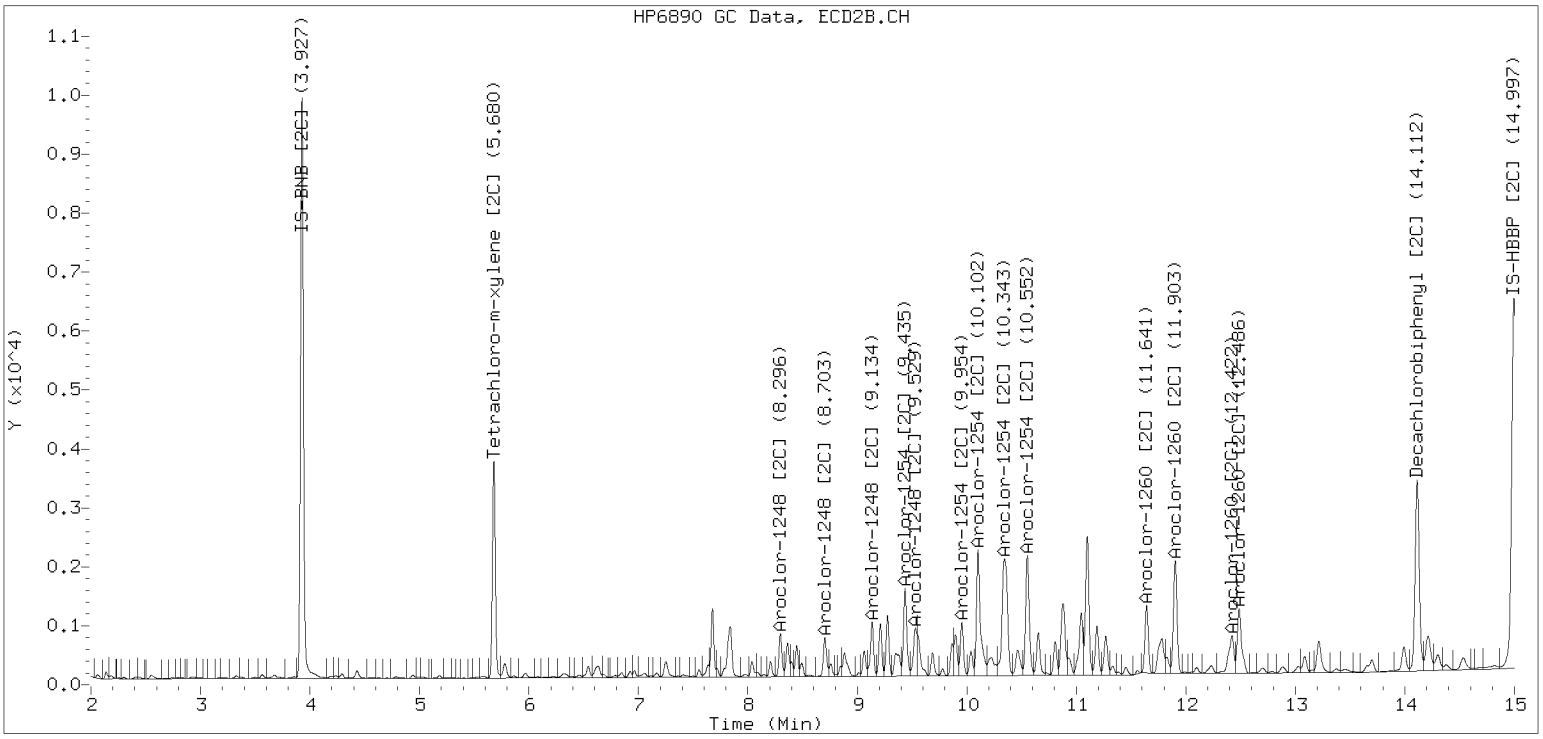
Processed Integration (Before)



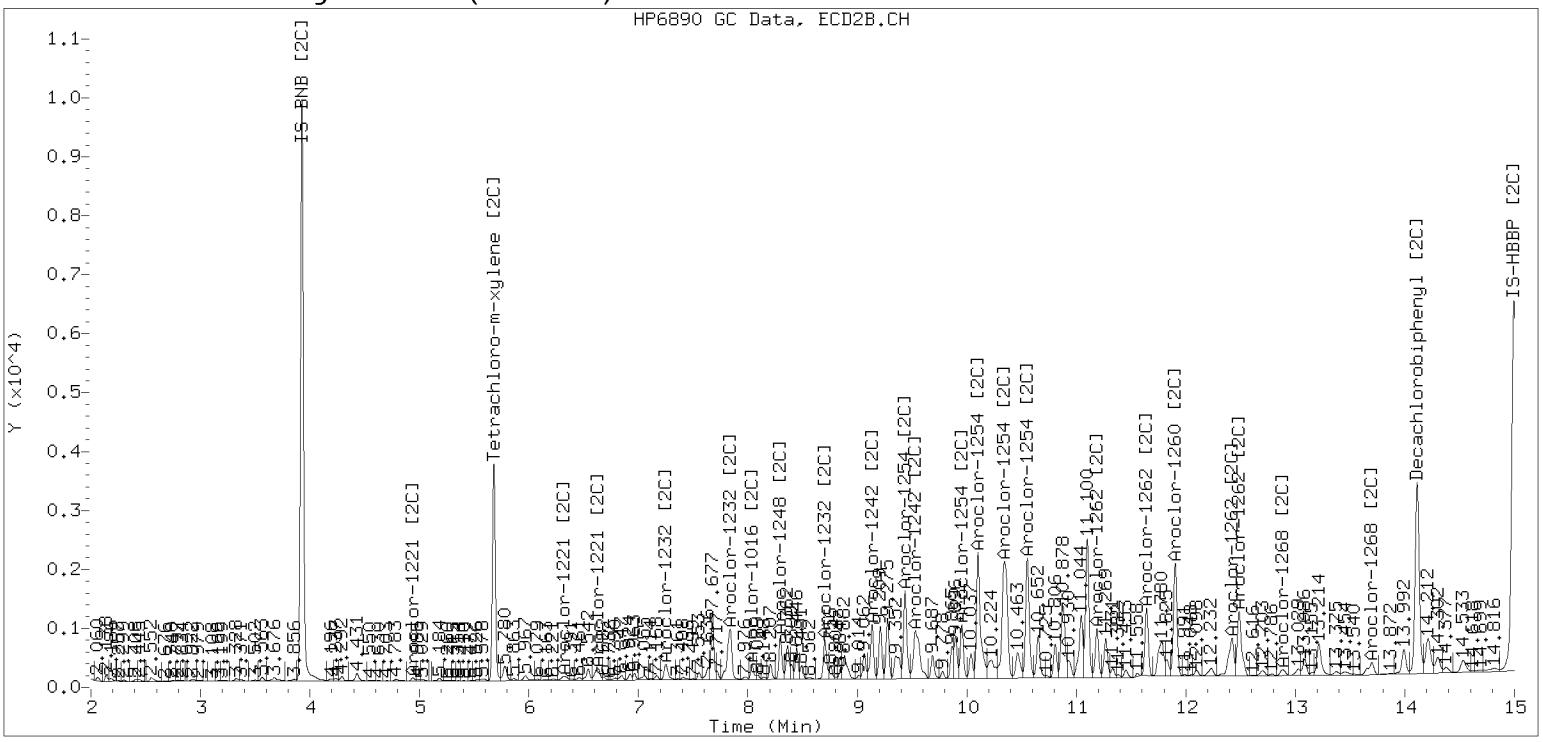
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230201.b/230201.b/02012322ECD7.D Injection Date: 01-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1131

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-08 C	File ID:	02012323ECD7.D
Sampled:	01/06/23 12:43	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 19:23
% Solids:	54.73	Preparation:	EPA 3546 (Microwave)	Initial/Final:	22.84 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	1	1	28.8	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	51.3	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	68.8	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9998*	*6.86*	*85.8*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9998*	*5.51*	*68.8*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9998*	*6.53*	*81.6*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9998*	*6.34*	*79.2*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012323ECD7.D
Data file 2: /230201.b/230201.b/02012323ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-08
Client ID:
Injection Date: 01-FEB-2023 19:23
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.001	198686	5.683	-0.001	158552	27.5	31.7	14.1	Tetrachloro-m-xylene
13.883	-0.007	154457	14.113	-0.003	178855	34.3	32.6	5.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	510519	1.4
Hexabromobiphenyl	647433	420923	-35.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	370018	9.8
Hexabromobiphenyl	382032	345243	-9.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.396	-0.006	28534	111.7	1	8.298	-0.005	23235	138.9
Aroclor-1248	2	8.559	-0.017	46525	142.8	2	8.704	-0.005	20933	116.3
Aroclor-1248	3	8.982	-0.013	61401	98.5	3	9.137	-0.016	26778	121.7
Aroclor-1248	4	9.284	-0.007	68987	223.7	4	9.576	-0.000	44589	163.9
		Total Col1Ave (4 peaks):			144.2		Total Col2Ave (4 peaks):			135.2 RPD = 6
		Corrected Ave (3 peaks):			117.7		Corrected Ave (3 peaks):			125.6 RPD = 7
Aroclor-1254	1	9.284	-0.012	68987	132.6	1	9.437	-0.007	50418	187.8
Aroclor-1254	2	9.359	-0.013	45571	205.1	2	9.958	-0.006	61963	285.6
Aroclor-1254	3	9.662	-0.001	100661	301.9	3	10.102	-0.014	88409	186.8
Aroclor-1254	4	9.779	-0.022	151253	231.5	4	10.333	-0.032	165981	350.7
Aroclor-1254	5	10.118	-0.045	111962	263.6	5	10.553	-0.010	71673	271.9
		Total Col1Ave (5 peaks):			227.0		Total Col2Ave (5 peaks):			256.5 RPD = 12
		Corrected Ave (4 peaks):			208.2		Corrected Ave (4 peaks):			233.0 RPD = 11
Aroclor-1260	1	11.032	-0.009	71884	304.4	1	11.641	-0.008	62517	251.0
Aroclor-1260	2	11.303	-0.054	174639	719.3	2	11.902	-0.011	127919	203.0
Aroclor-1260	3	11.716	-0.016	126837	198.5	3	12.422	-0.010	102588	653.2
Aroclor-1260	4	12.118	-0.017	42644	129.1	4	12.488	-0.010	109342	268.1
Aroclor-1260	5	12.251	0.010	115374	801.5	NS	---			----
		Total Col1Ave (5 peaks):			430.6		Total Col2Ave (4 peaks):			343.8 RPD = 22
		Corrected Ave (4 peaks):			337.8		Corrected Ave (3 peaks):			240.7 RPD = 34
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 3358036 Col1 Total PCB = 0.6 ppm*

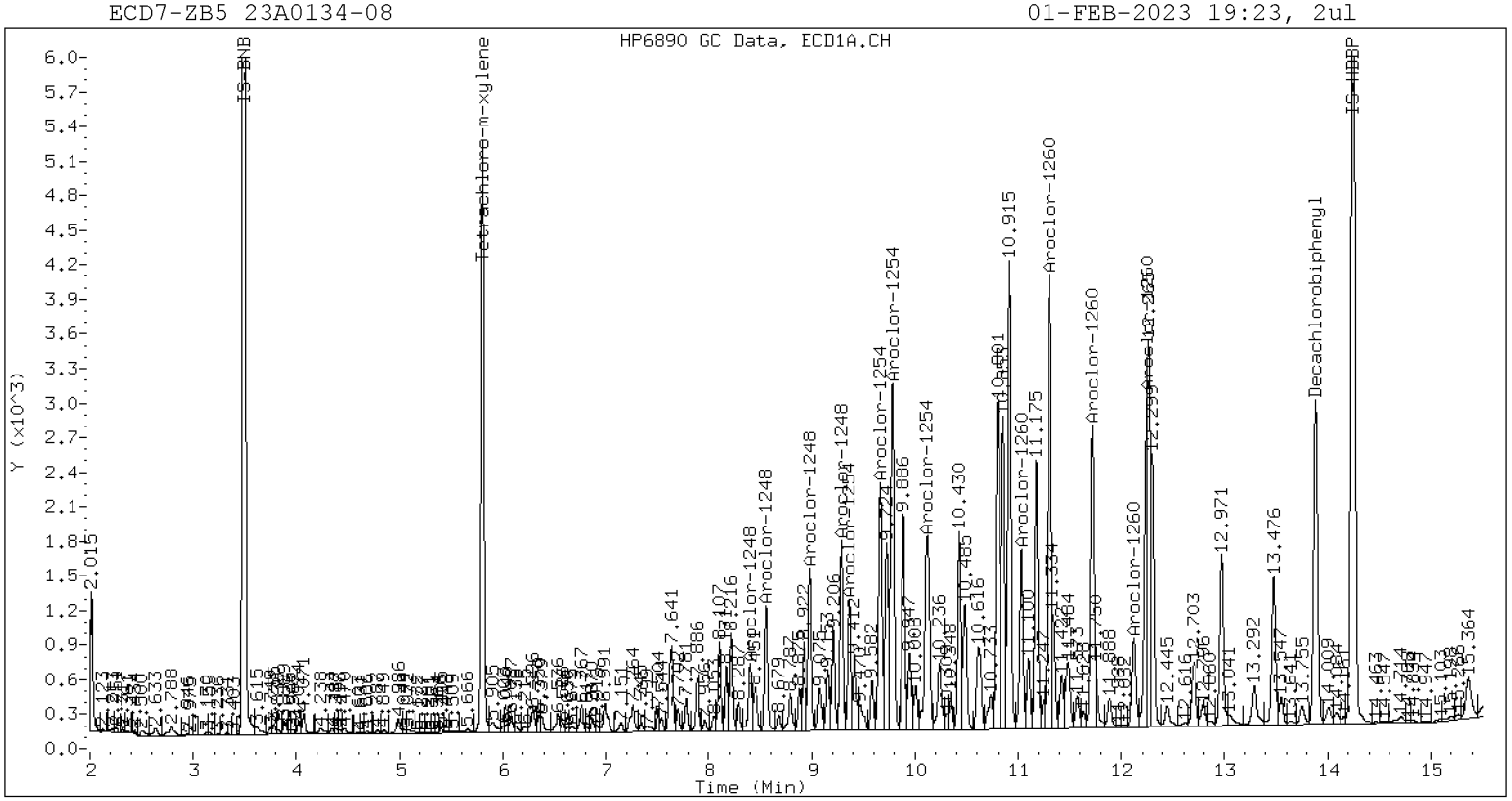
Total PCB Area Col2 (5.784 - 14.016) = 2823208 Col2 Total PCB = 0.7 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

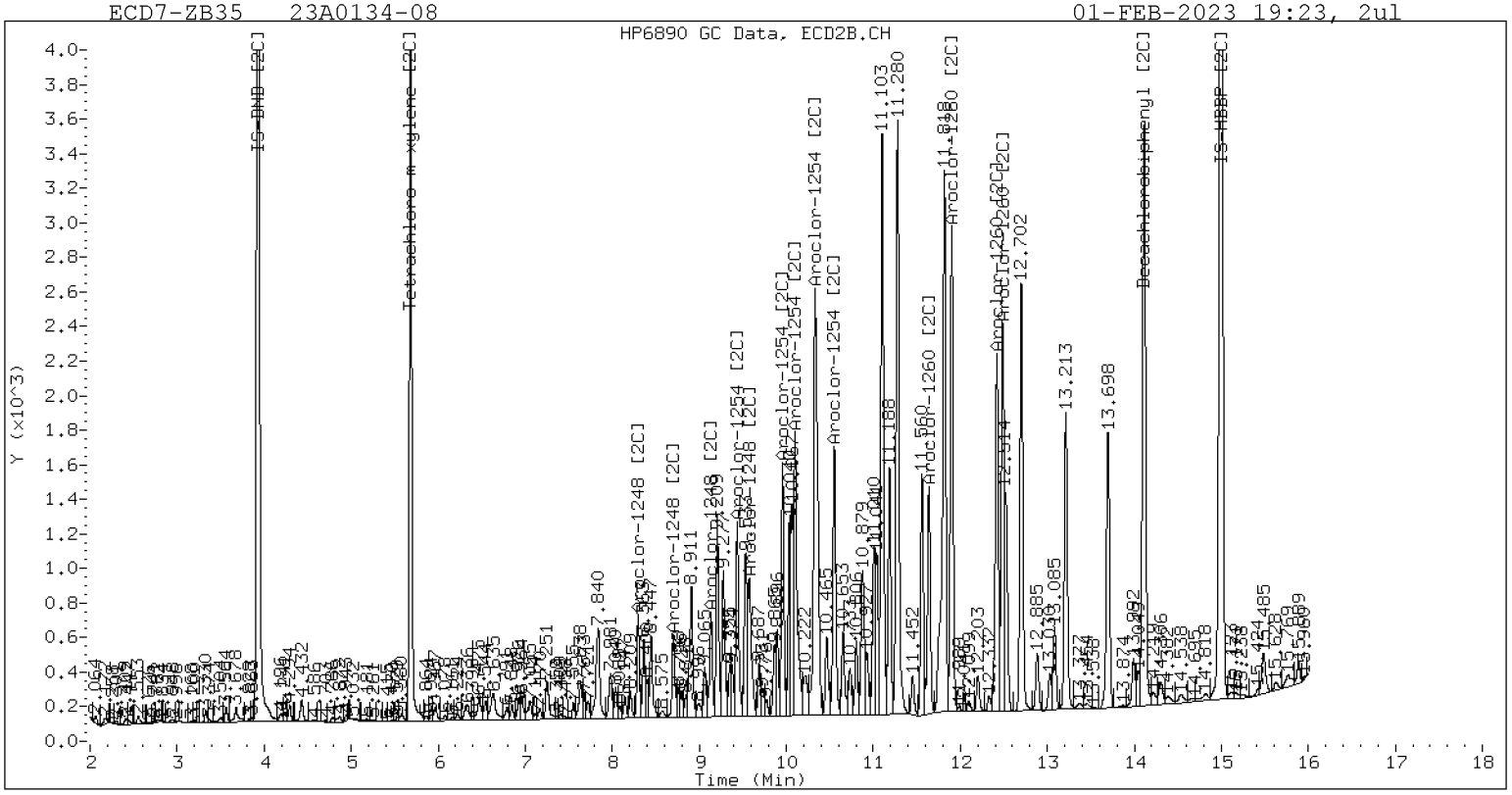
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-08 01-FEB-2023 19:23, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0134-08 01-FEB-2023 19:23, 2ul

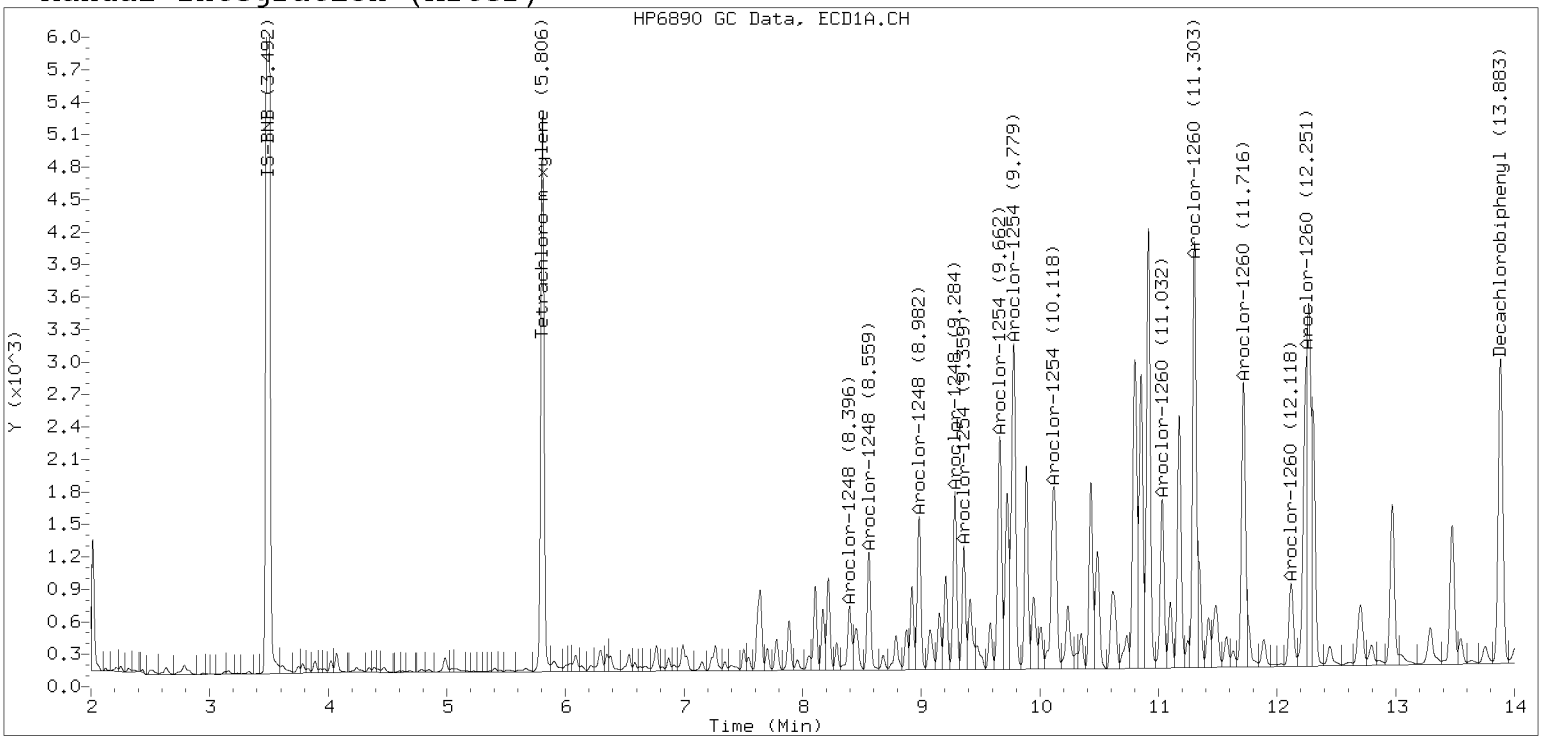


ZB-35 Manual Integration: YES

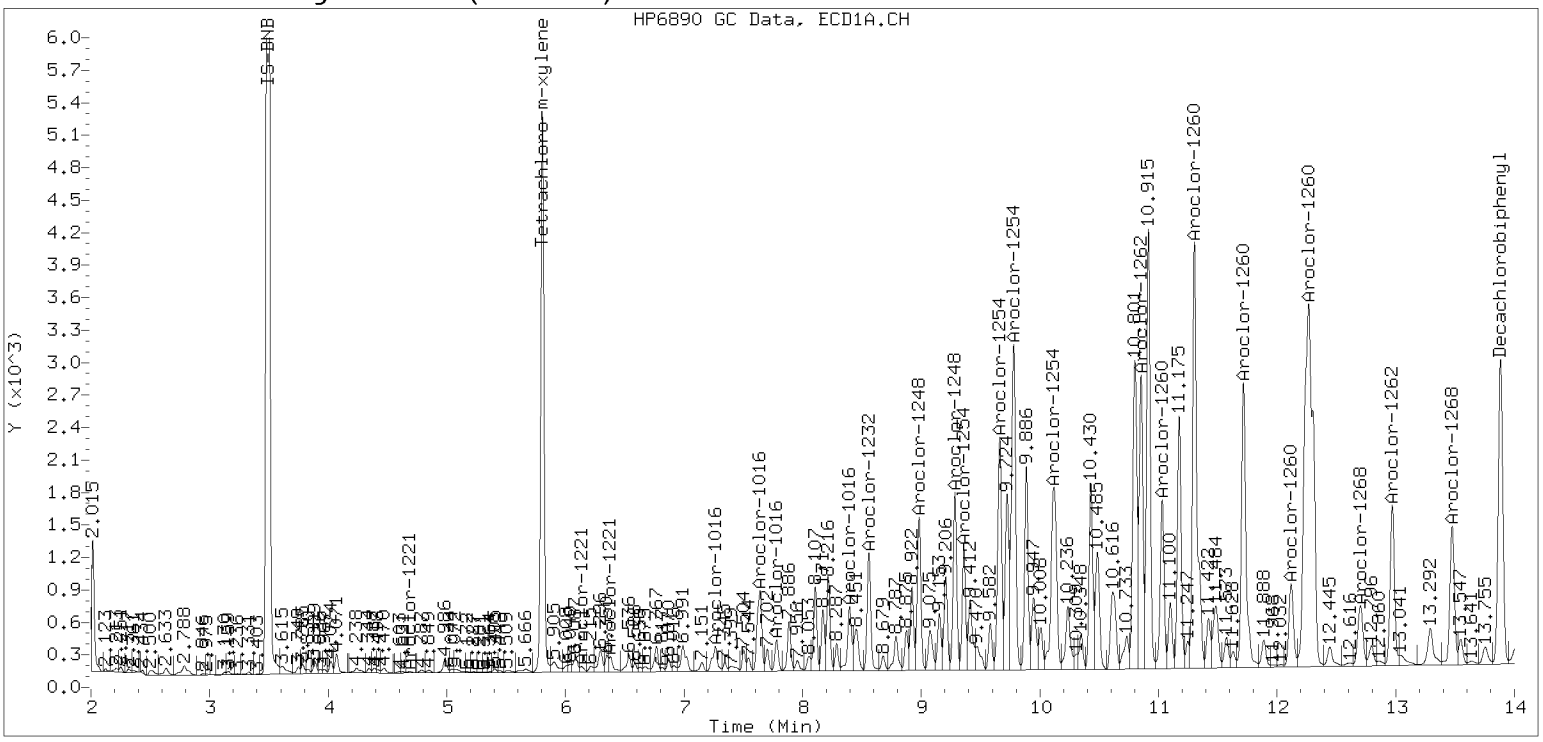
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230201.b/02012323ECD7.D Injection Date: 01-FEB-2023 19:23

Manual Integration (After)



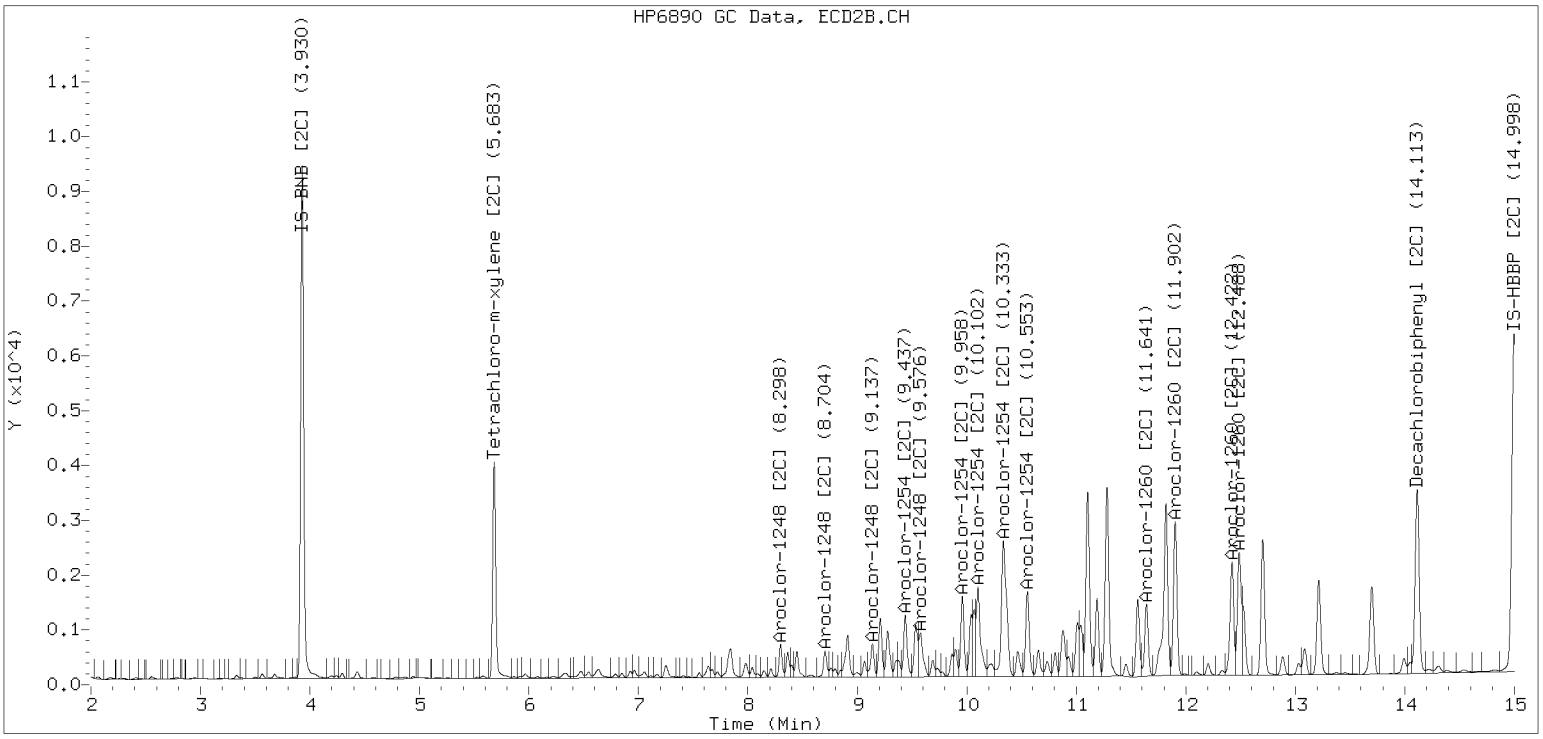
Processed Integration (Before)



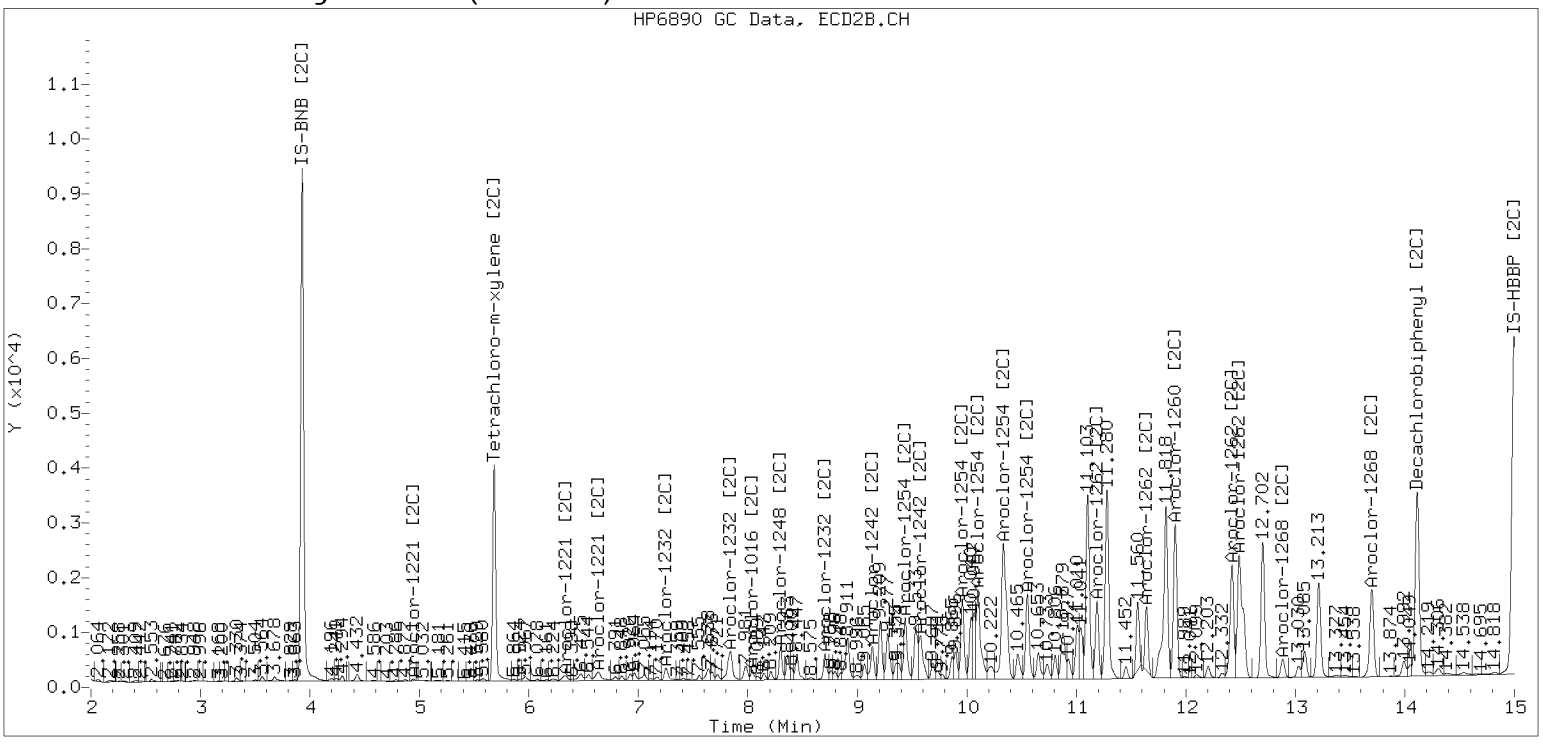
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230201.b/230201.b/02012323ECD7.D Injection Date: 01-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1129

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-09 C	File ID:	02012324ECD7.D
Sampled:	01/06/23 12:57	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 19:44
% Solids:	48.04	Preparation:	EPA 3546 (Microwave)	Initial/Final:	26.06 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	62.0	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	79.3	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	63.9	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9877*	*6.85*	*85.8*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9877*	*5.29*	*66.2*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9877*	*6.72*	*84.2*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9877*	*6.02*	*75.3*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012324ECD7.D
Data file 2: /230201.b/230201.b/02012324ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-09
Client ID:
Injection Date: 01-FEB-2023 19:44
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.002	185949	5.681	-0.003	143969	26.5	30.1	12.9	Tetrachloro-m-xylene
13.884	-0.006	147924	14.113	-0.003	177781	34.3	33.7	1.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	496676	-1.3
Hexabromobiphenyl	647433	403224	-37.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	353342	4.9
Hexabromobiphenyl	382032	332768	-12.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.395	-0.007	68192	274.5	1	8.298	-0.005	52046	325.9
Aroclor-1248	2	8.564	-0.012	63470	200.3	2	8.704	-0.006	55617	323.5
Aroclor-1248	3	8.981	-0.014	146929	242.4	3	9.136	-0.017	71900	342.3
Aroclor-1248	4	9.284	-0.007	142442	474.7	4	9.552	-0.023	65048	250.4
		Total Col1Ave (4 peaks):			297.9		Total Col2Ave (4 peaks):			310.5 RPD = 4
		Corrected Ave (3 peaks):			239.0		Corrected Ave (3 peaks):			299.9 RPD = 23
Aroclor-1254	1	9.284	-0.012	142442	281.4	1	9.436	-0.008	100714	392.9
Aroclor-1254	2	9.360	-0.013	53193	246.1	2	9.954	-0.010	52816	254.9
Aroclor-1254	3	9.667	0.004	271164	836.1	3	10.103	-0.013	166409	368.2
Aroclor-1254	4	9.785	-0.016	187658	295.3	4	10.348	-0.017	199389	441.1
Aroclor-1254	5	10.119	-0.044	220160	532.7	5	10.553	-0.010	132876	527.8
		Total Col1Ave (5 peaks):			438.3		Total Col2Ave (5 peaks):			397.0 RPD = 10
		Corrected Ave (4 peaks):			338.9		Corrected Ave (4 peaks):			364.3 RPD = 7
Aroclor-1260	1	11.032	-0.009	67740	299.4	1	11.642	-0.007	76744	319.7
Aroclor-1260	2	11.347	-0.011	59153	254.4	2	11.903	-0.010	159886	263.3
Aroclor-1260	3	11.717	-0.015	158518	258.9	3	12.422	-0.010	61961	409.3
Aroclor-1260	4	12.117	-0.017	95884	303.1	4	12.487	-0.011	113253	288.1
Aroclor-1260	5	12.233	-0.009	40782	295.8	NS	---			----
		Total Col1Ave (5 peaks):			282.3		Total Col2Ave (4 peaks):			320.1 RPD = 13
		Corrected Ave (4 peaks):			277.1		Corrected Ave (3 peaks):			290.4 RPD = 5
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 3795631 Col1 Total PCB = 0.7 ppm*

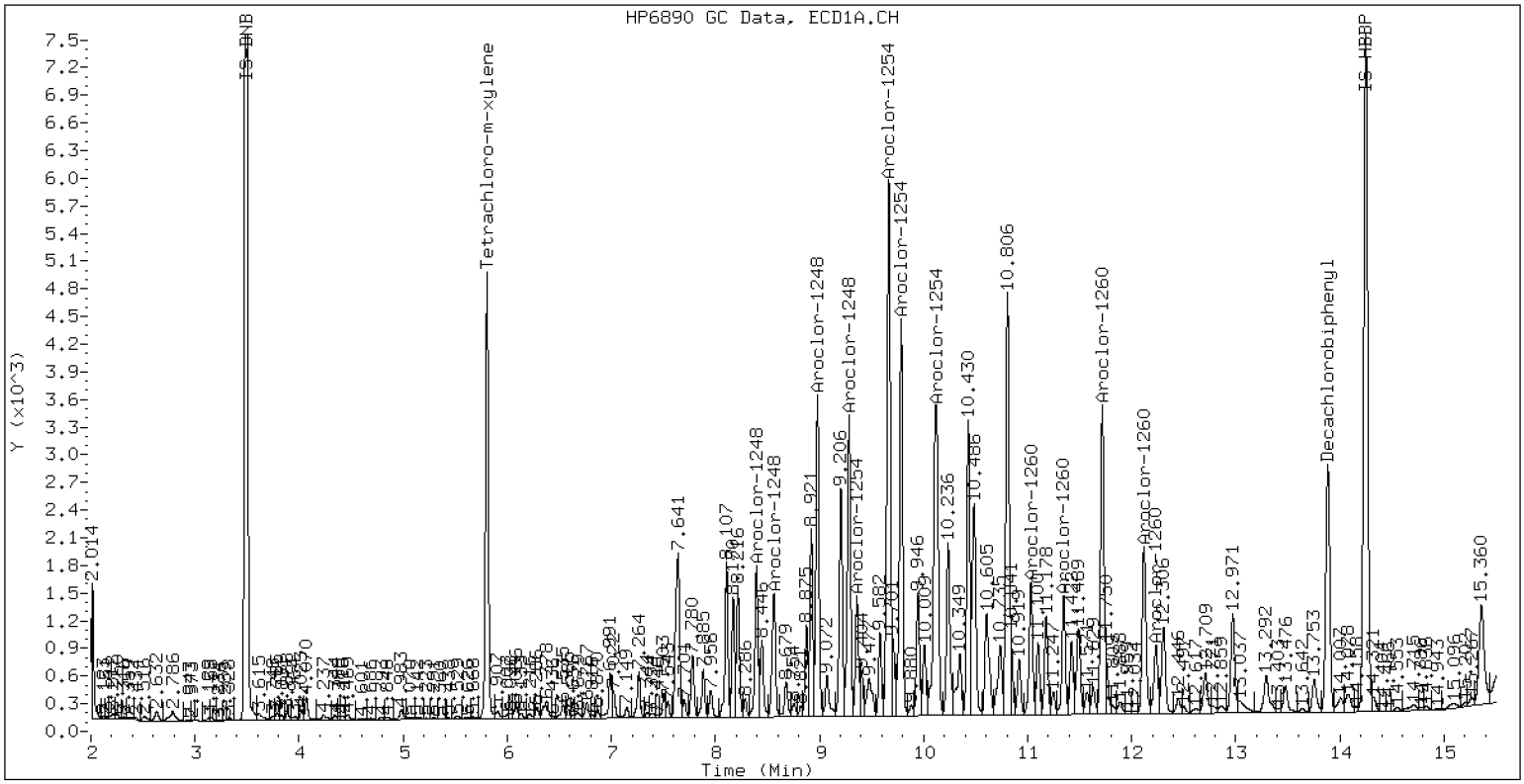
Total PCB Area Col2 (5.784 - 14.016) = 3116624 Col2 Total PCB = 0.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

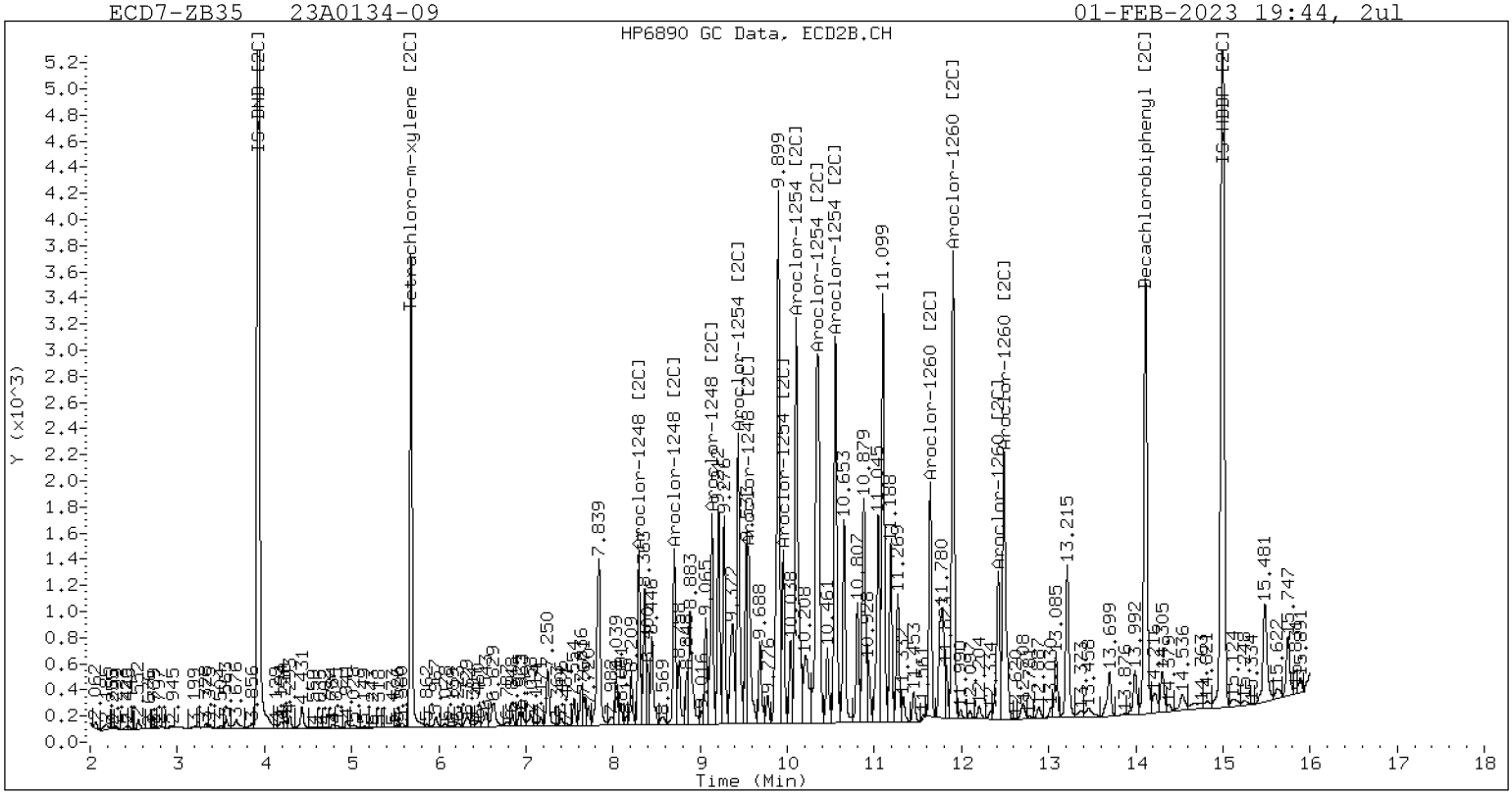
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-09 01-FEB-2023 19:44, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0134-09 01-FEB-2023 19:44, 2ul

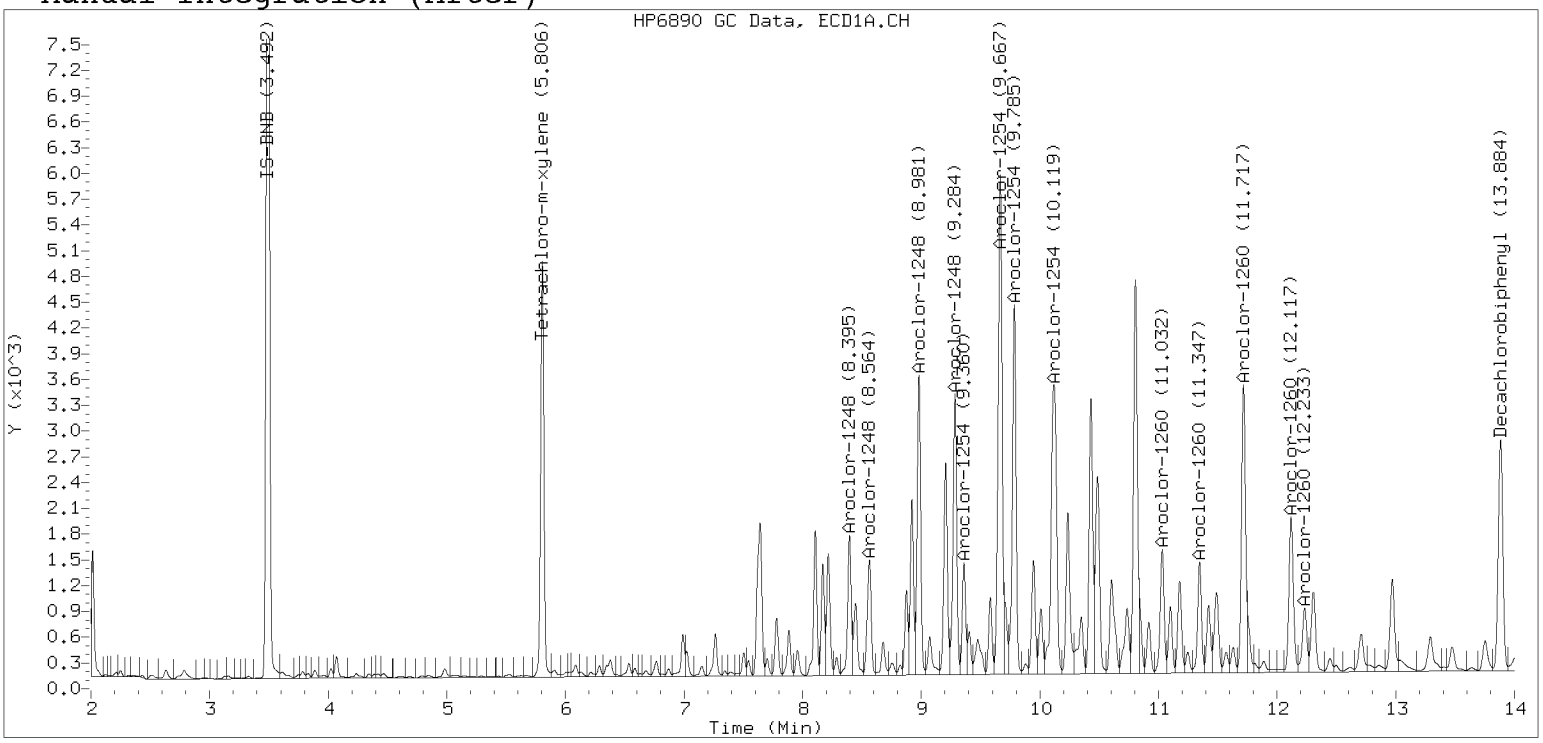


ZB-35 Manual Integration: NO

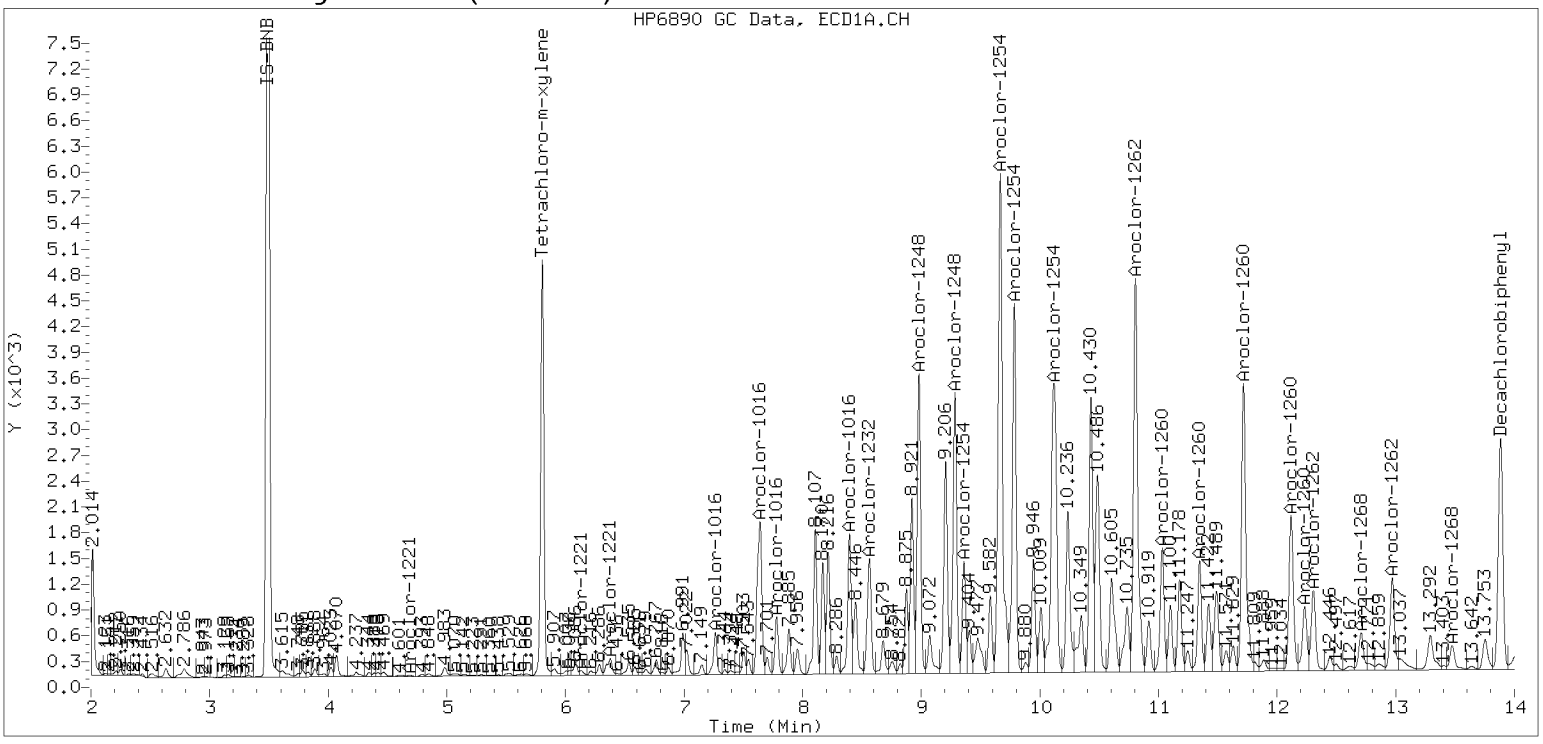
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230201.b/02012324ECD7.D Injection Date: 01-FEB-2023 19:44

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1124

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-10 C	File ID:	02012325ECD7.D
Sampled:	01/06/23 13:15	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 20:05
% Solids:	48.45	Preparation:	EPA 3546 (Microwave)	Initial/Final:	25.8 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	27.0	1.6	4.0	P1
11097-69-1	Aroclor 1254	2	1	39.2	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	30.4	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9999*	*6.62*	*82.7*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9999*	*5.25*	*65.6*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9999*	*6.37*	*79.6*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9999*	*6.16*	*77.0*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012325ECD7.D
Data file 2: /230201.b/230201.b/02012325ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-10
Client ID:
Injection Date: 01-FEB-2023 20:05
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.804	-0.003	187170	5.680	-0.004	150673	26.3	30.8	15.9	Tetrachloro-m-xylene
13.885	-0.005	146346	14.113	-0.003	173003	33.1	31.8	3.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	504264	0.2
Hexabromobiphenyl	647433	413452	-36.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	361863	7.4
Hexabromobiphenyl	382032	342467	-10.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.394	-0.008	23433	92.9	1	8.297	-0.006	22619	138.3
Aroclor-1248	2	8.562	-0.014	18612	57.8	2	8.703	-0.006	20227	114.9
Aroclor-1248	3	8.982	-0.013	56774	92.2	3	9.136	-0.017	26260	122.1
Aroclor-1248	4	9.284	-0.007	65489	215.0	4	9.531	-0.044	43927	165.1
		Total Col1Ave (4 peaks):			114.5		Total Col2Ave (4 peaks):			135.1 RPD = 17
		Corrected Ave (3 peaks):			81.0		Corrected Ave (3 peaks):			125.1 RPD = 43*
Aroclor-1254	1	9.284	-0.012	65489	127.4	1	9.436	-0.008	47963	182.7
Aroclor-1254	2	9.360	-0.013	25136	114.6	2	9.954	-0.010	25541	120.4
Aroclor-1254	3	9.656	-0.007	51723	157.1	3	10.102	-0.013	80786	174.5
Aroclor-1254	4	9.784	-0.017	90362	140.0	4	10.351	-0.014	107983	233.3
Aroclor-1254	5	10.116	-0.047	109402	260.7	5	10.553	-0.010	69229	268.5
		Total Col1Ave (5 peaks):			160.0		Total Col2Ave (5 peaks):			195.9 RPD = 20
		Corrected Ave (4 peaks):			134.8		Corrected Ave (4 peaks):			177.7 RPD = 27
Aroclor-1260	1	11.031	-0.010	36009	155.2	1	11.642	-0.007	36952	149.6
Aroclor-1260	2	11.345	-0.012	27688	116.1	2	11.902	-0.011	74934	119.9
Aroclor-1260	3	11.716	-0.016	86475	137.8	3	12.422	-0.010	33306	213.8
Aroclor-1260	4	12.118	-0.017	41221	127.1	4	12.486	-0.011	50435	124.7
Aroclor-1260	5	12.233	-0.009	20433	144.5	NS	---			----
		Total Col1Ave (5 peaks):			136.1		Total Col2Ave (4 peaks):			152.0 RPD = 11
		Corrected Ave (4 peaks):			131.4		Corrected Ave (3 peaks):			131.4 RPD = 0
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 1688219 Col1 Total PCB = 0.3 ppm*

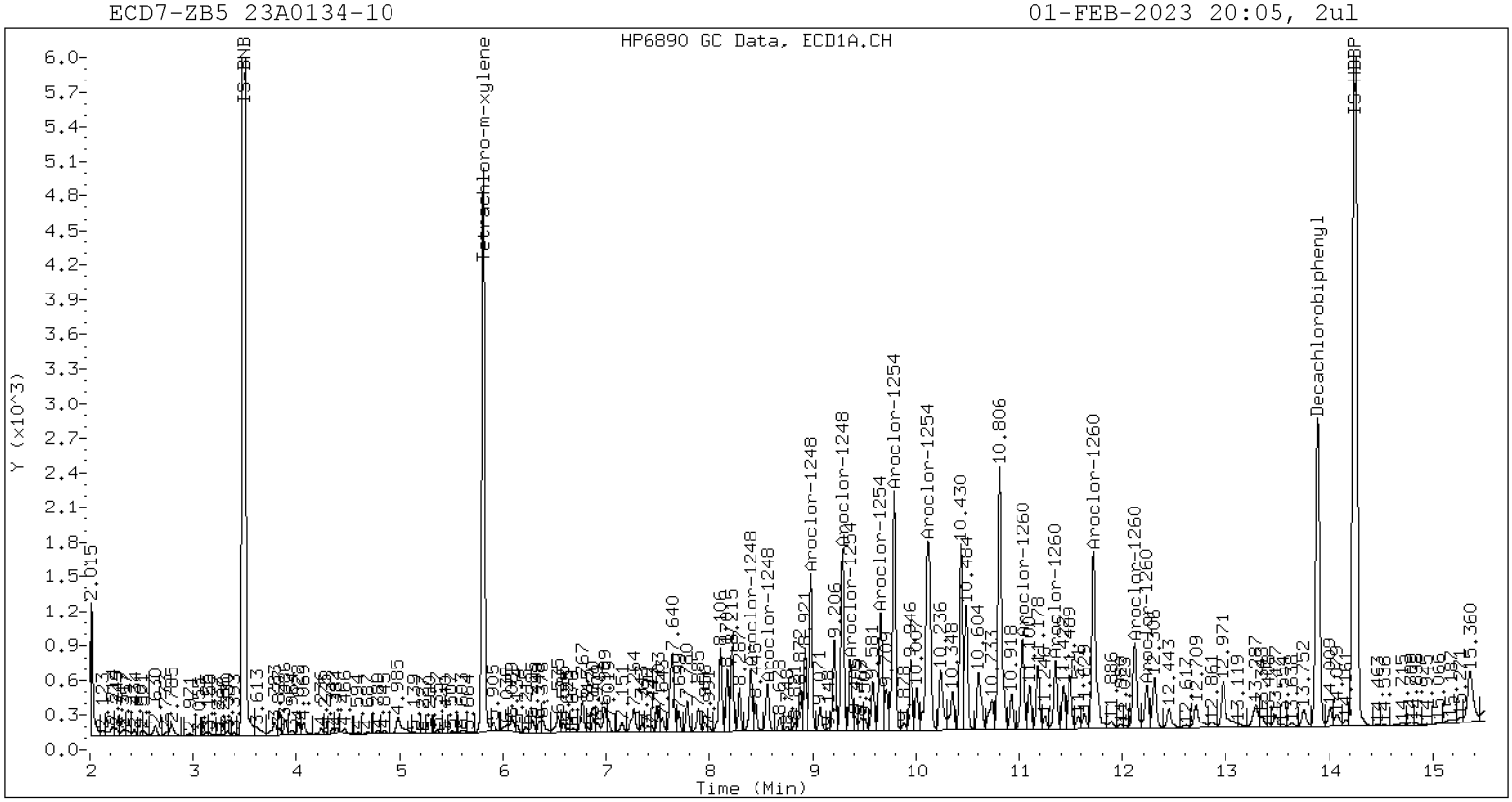
Total PCB Area Col2 (5.784 - 14.016) = 1470769 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

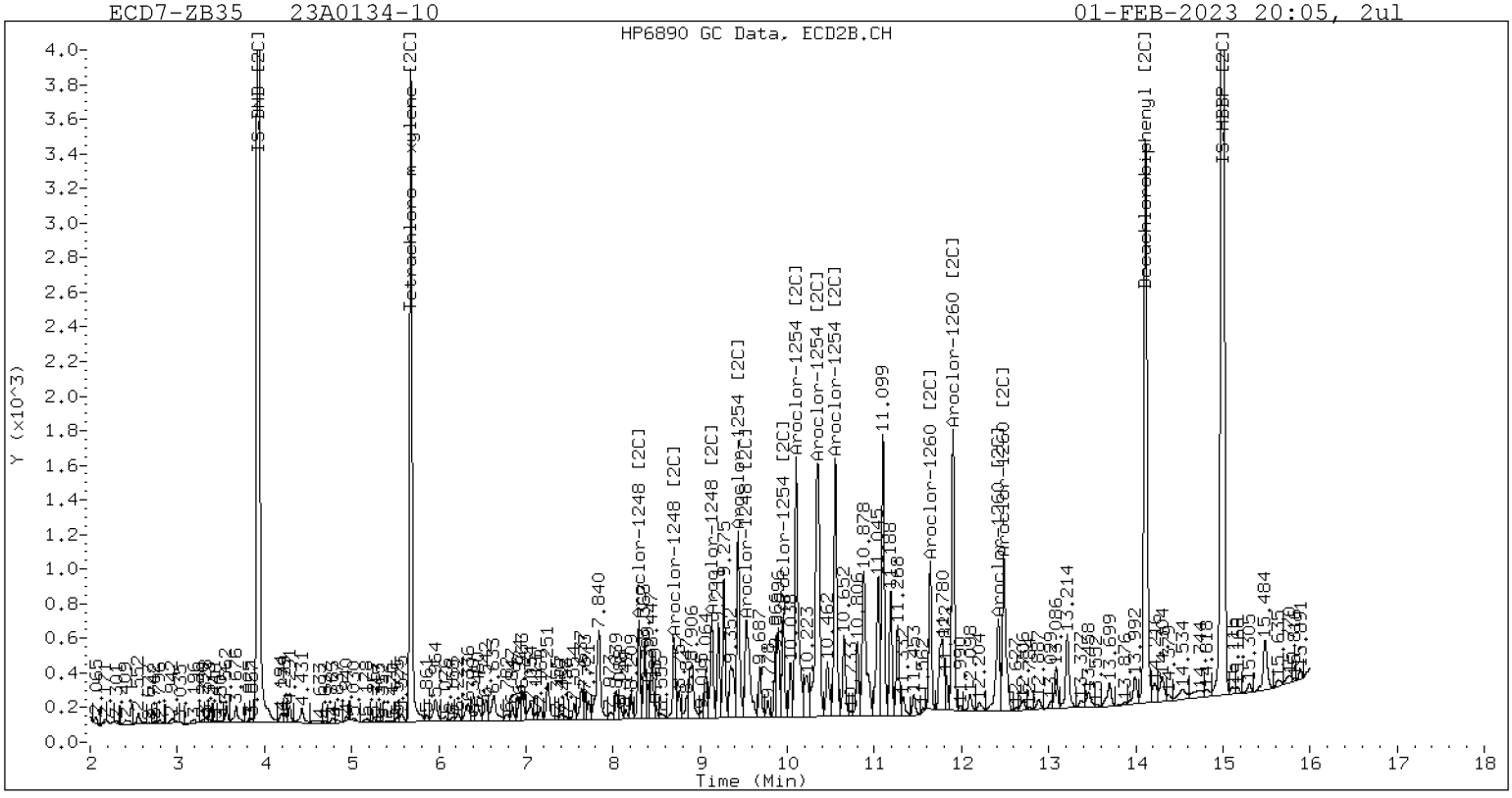
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-10 01-FEB-2023 20:05, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0134-10 01-FEB-2023 20:05, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1123

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-11 C	File ID:	02012328ECD7.D
Sampled:	01/06/23 13:29	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 21:08
% Solids:	51.95	Preparation:	EPA 3546 (Microwave)	Initial/Final:	24.07 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	35.6	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	56.7	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	37.0	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9972*	*6.69*	*83.7*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9972*	*5.40*	*67.5*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9972*	*6.27*	*78.3*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9972*	*6.24*	*78.1*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012328ECD7.D
Data file 2: /230201.b/230201.b/02012328ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-11
Client ID:
Injection Date: 01-FEB-2023 21:08
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.804	-0.003	189593	5.681	-0.003	149067	27.0	31.2	14.5	Tetrachloro-m-xylene
13.884	-0.006	157893	14.114	-0.002	178896	33.5	31.3	6.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	496708	-1.3
Hexabromobiphenyl	647433	441042	-31.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	353059	4.8
Hexabromobiphenyl	382032	359699	-5.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.394	-0.008	37261	150.0	1	8.297	-0.006	33319	208.8
Aroclor-1248	2	8.562	-0.014	30355	95.8	2	8.703	-0.006	29337	170.8
Aroclor-1248	3	8.981	-0.014	92048	151.8	3	9.135	-0.017	41871	199.5
Aroclor-1248	4	9.284	-0.007	98897	329.5	4	9.531	-0.044	34565	133.2
		Total Col1Ave (4 peaks):			181.8		Total Col2Ave (4 peaks):			178.0 RPD = 2
		Corrected Ave (3 peaks):			132.5		Corrected Ave (3 peaks):			167.8 RPD = 24
Aroclor-1254	1	9.284	-0.012	98897	195.4	1	9.436	-0.008	69516	271.4
Aroclor-1254	2	9.360	-0.012	38643	178.8	2	9.954	-0.010	37777	182.5
Aroclor-1254	3	9.657	-0.006	83291	256.8	3	10.103	-0.013	118499	262.4
Aroclor-1254	4	9.784	-0.017	135721	213.5	4	10.350	-0.015	146277	323.9
Aroclor-1254	5	10.120	-0.043	168666	408.1	5	10.552	-0.010	95026	377.8
		Total Col1Ave (5 peaks):			250.5		Total Col2Ave (5 peaks):			283.6 RPD = 12
		Corrected Ave (4 peaks):			211.1		Corrected Ave (4 peaks):			260.0 RPD = 21
Aroclor-1260	1	11.031	-0.010	43802	177.0	1	11.642	-0.007	50661	195.2
Aroclor-1260	2	11.345	-0.012	35139	138.1	2	11.903	-0.011	92972	141.6
Aroclor-1260	3	11.716	-0.016	108030	161.3	3	12.422	-0.010	40072	244.9
Aroclor-1260	4	12.117	-0.018	54654	158.0	4	12.486	-0.011	67089	157.9
Aroclor-1260	5	12.233	-0.008	25316	167.9	NS	---			----
		Total Col1Ave (5 peaks):			160.5		Total Col2Ave (4 peaks):			184.9 RPD = 14
		Corrected Ave (4 peaks):			156.3		Corrected Ave (3 peaks):			164.9 RPD = 5
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 3333405 Col1 Total PCB = 0.6 ppm*

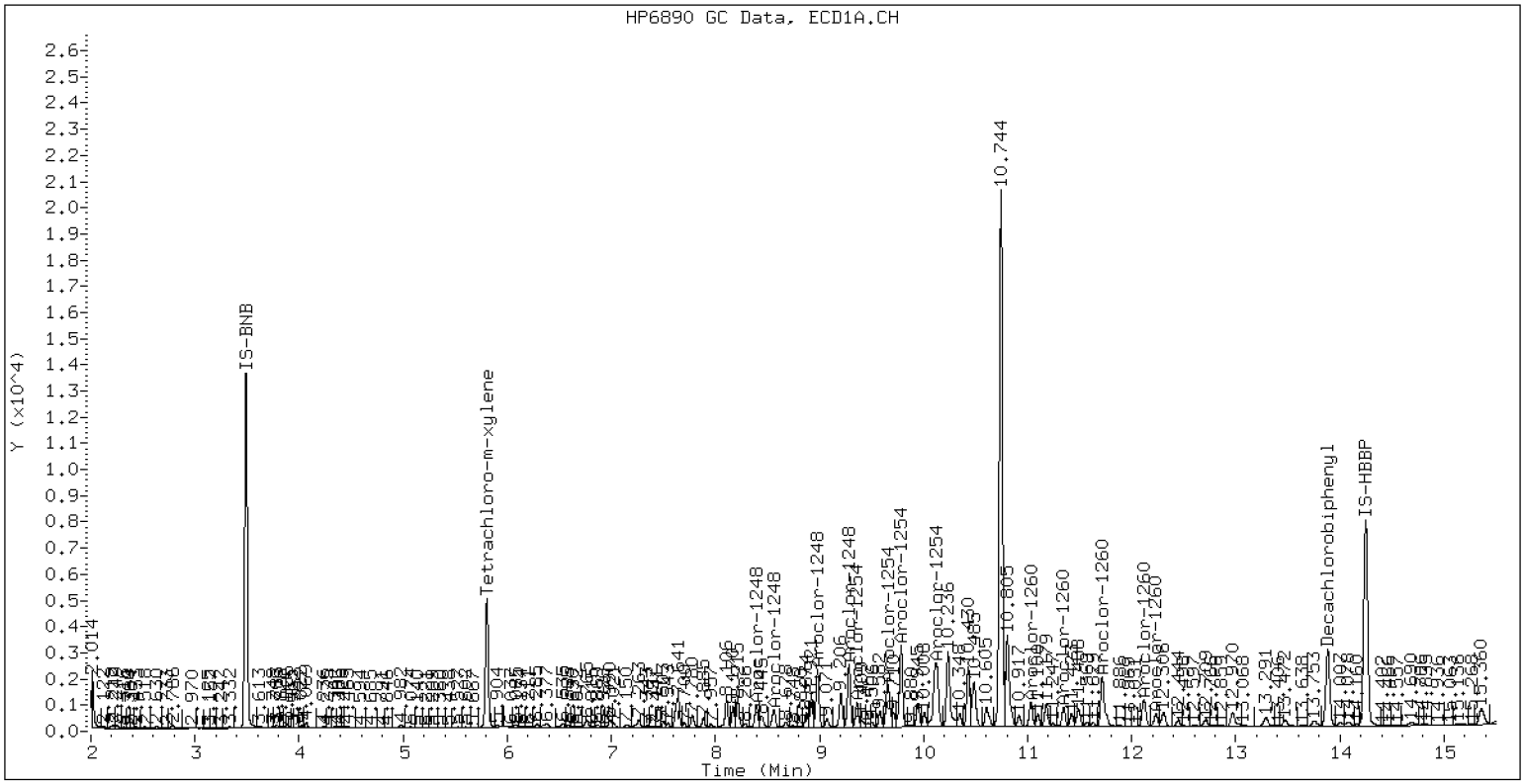
Total PCB Area Col2 (5.784 - 14.016) = 2663561 Col2 Total PCB = 0.7 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

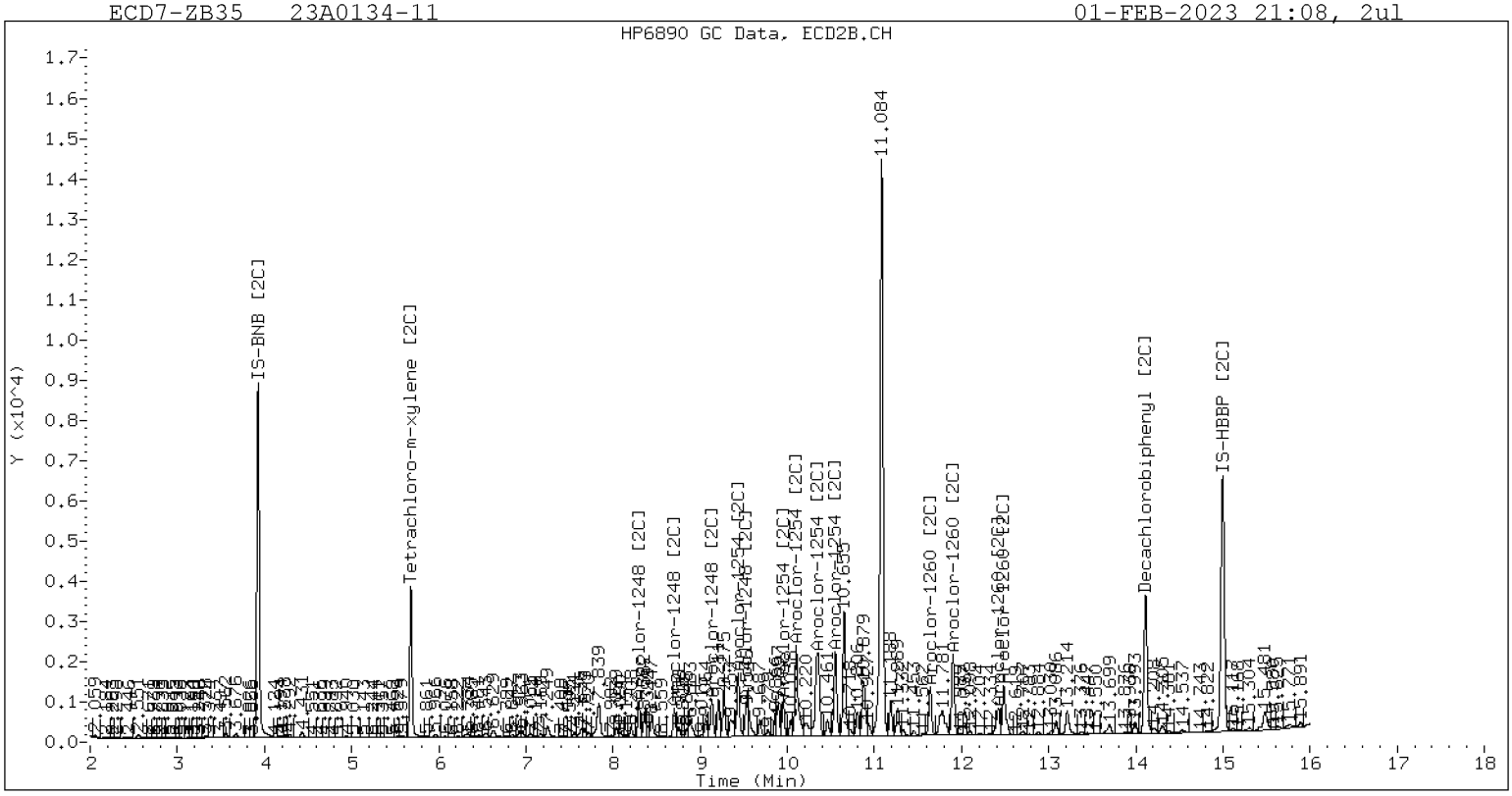
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-11 01-FEB-2023 21:08, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0134-11 01-FEB-2023 21:08, 2ul

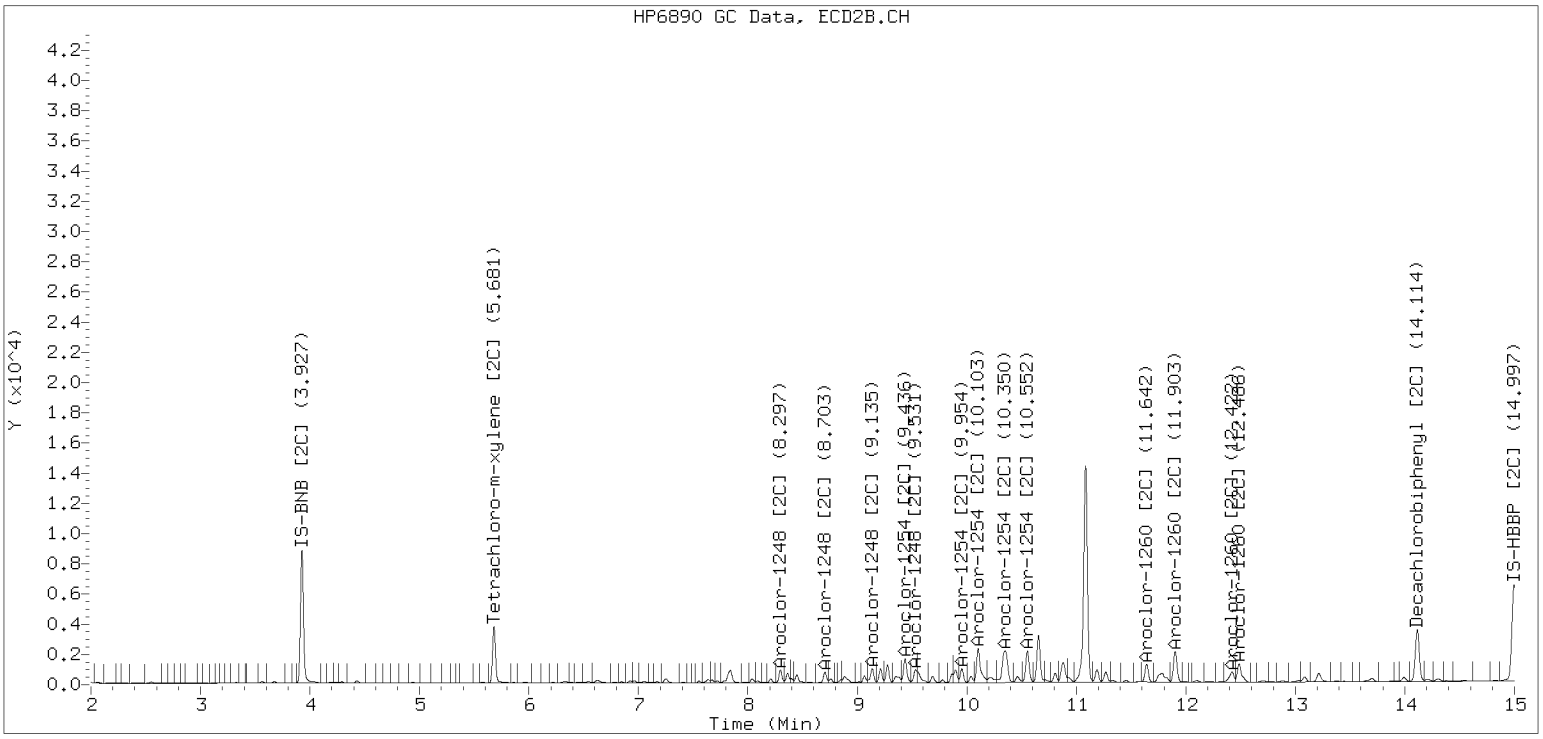


ZB-35 Manual Integration: YES

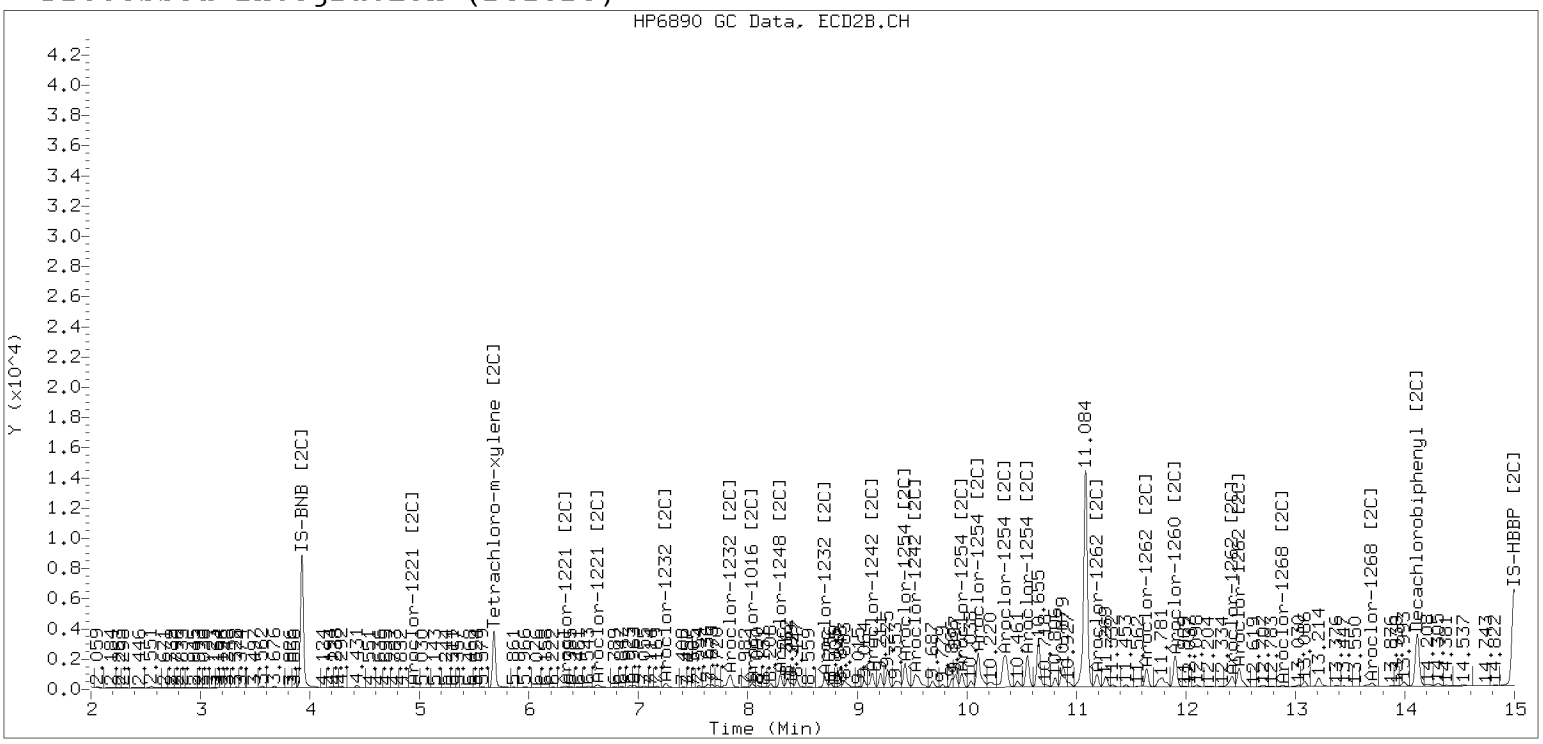
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230201.b/230201.b/02012328ECD7.D Injection Date: 01-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1116

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-12 C	File ID:	02012329ECD7.D
Sampled:	01/06/23 13:44	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 21:29
% Solids:	58.81	Preparation:	EPA 3546 (Microwave)	Initial/Final:	21.28 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	13.2	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	22.8	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	17.8	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9906*	*7.31*	*91.5*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9906*	*5.92*	*74.1*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9906*	*6.84*	*85.6*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9906*	*6.89*	*86.2*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012329ECD7.D
Data file 2: /230201.b/230201.b/02012329ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-12
Client ID:
Injection Date: 01-FEB-2023 21:29
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.003	207969	5.681	-0.003	165063	29.6	34.5	15.1	Tetrachloro-m-xylene
13.886	-0.004	171892	14.113	-0.003	189643	36.6	34.2	6.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	496436	-1.4
Hexabromobiphenyl	647433	438990	-32.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	354150	5.1
Hexabromobiphenyl	382032	349188	-8.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.394	-0.008	14358	57.8	1	8.297	-0.005	13407	83.7
Aroclor-1248	2	8.563	-0.013	11209	35.4	2	8.703	-0.006	11097	64.4
Aroclor-1248	3	8.983	-0.012	32836	54.2	3	9.136	-0.016	14088	66.9
Aroclor-1248	4	9.284	-0.007	37334	124.5	4	9.532	-0.044	12850	49.3
		Total Col1Ave (4 peaks):			68.0		Total Col2Ave (4 peaks):			66.1 RPD = 3
		Corrected Ave (3 peaks):			49.1		Corrected Ave (3 peaks):			60.2 RPD = 20
Aroclor-1254	1	9.284	-0.012	37334	73.8	1	9.436	-0.007	26963	104.9
Aroclor-1254	2	9.360	-0.012	14177	65.6	2	9.954	-0.010	13226	63.7
Aroclor-1254	3	9.659	-0.004	31468	97.1	3	10.102	-0.013	42893	94.7
Aroclor-1254	4	9.785	-0.016	52179	82.1	4	10.352	-0.013	63398	139.9
Aroclor-1254	5	10.112	-0.051	58616	141.9	5	10.553	-0.010	42283	167.6
		Total Col1Ave (5 peaks):			92.1		Total Col2Ave (5 peaks):			114.2 RPD = 21
		Corrected Ave (4 peaks):			79.7		Corrected Ave (4 peaks):			100.8 RPD = 23
Aroclor-1260	1	11.030	-0.011	18392	74.7	1	11.643	-0.006	18286	72.6
Aroclor-1260	2	11.342	-0.016	15488	61.2	2	11.903	-0.010	38405	60.3
Aroclor-1260	3	11.716	-0.016	35588	53.4	3	12.420	-0.012	23235	146.3
Aroclor-1260	4	12.119	-0.016	29721	86.3	4	12.486	-0.011	31711	76.9
Aroclor-1260	5	12.237	-0.004	15627	104.1	NS	---			----
		Total Col1Ave (5 peaks):			75.9		Total Col2Ave (4 peaks):			89.0 RPD = 16
		Corrected Ave (4 peaks):			68.9		Corrected Ave (3 peaks):			69.9 RPD = 1
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 1108407 Col1 Total PCB = 0.2 ppm*

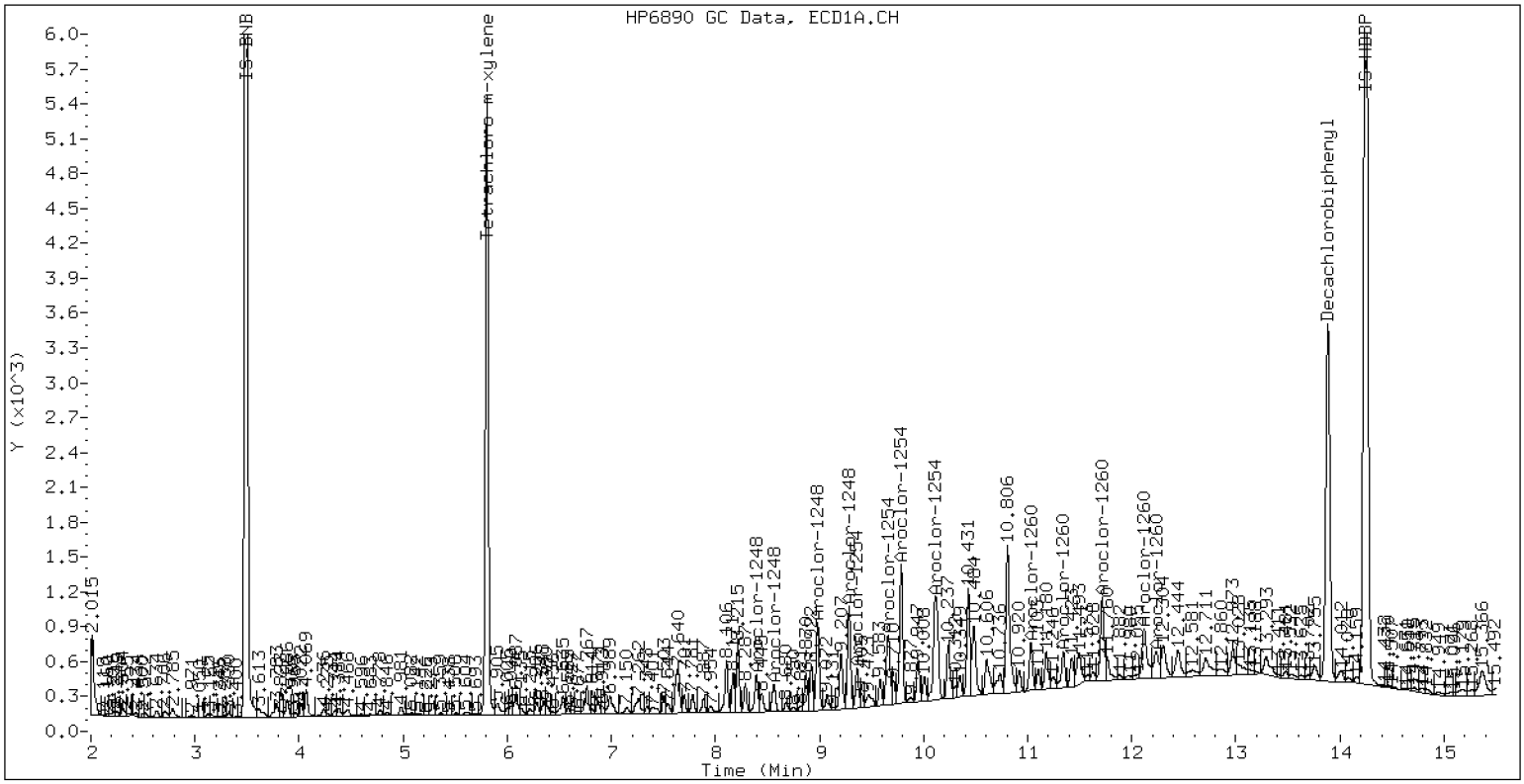
Total PCB Area Col2 (5.784 - 14.016) = 929529 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

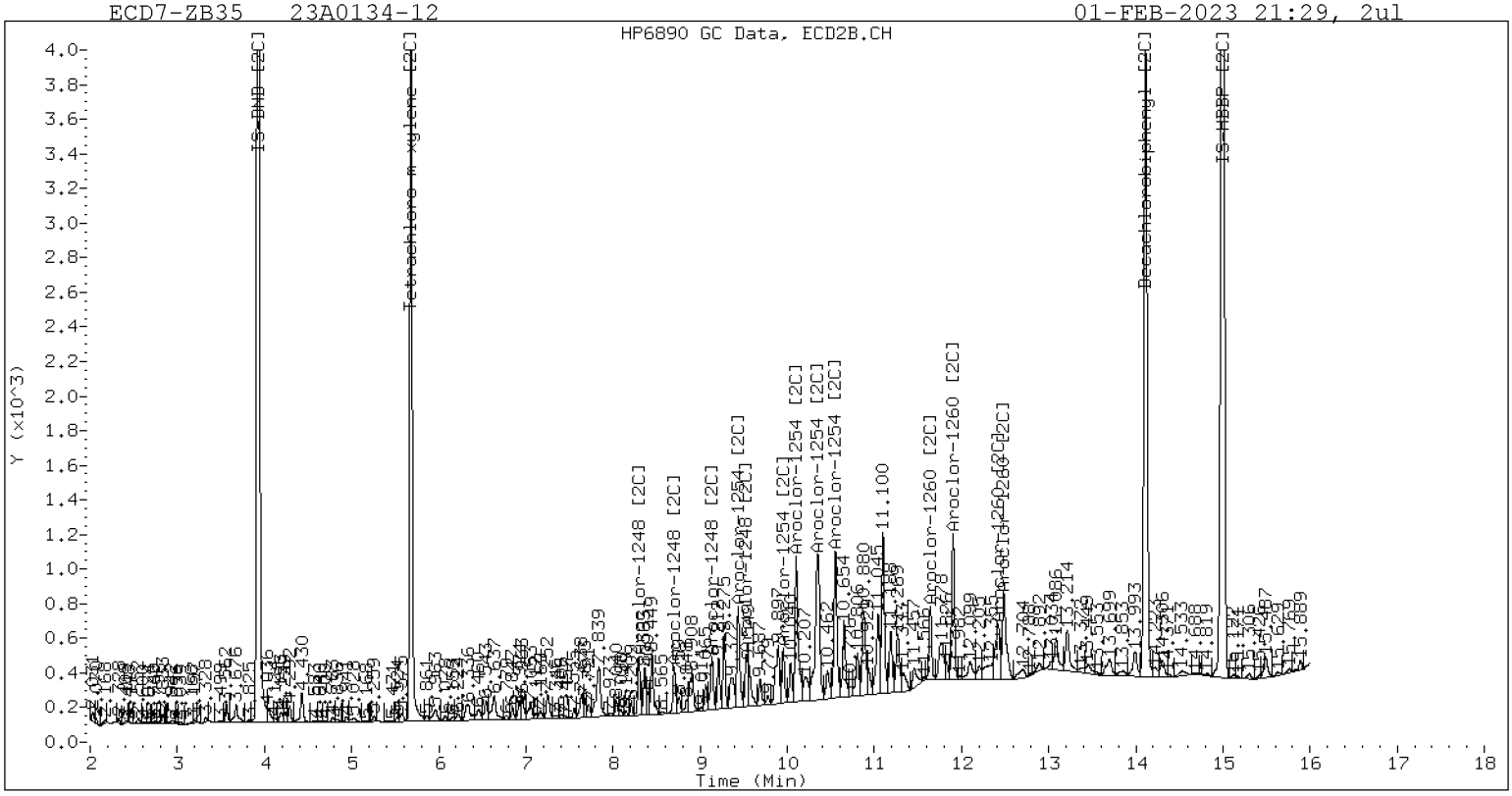
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-12 01-FEB-2023 21:29, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0134-12 01-FEB-2023 21:29, 2ul

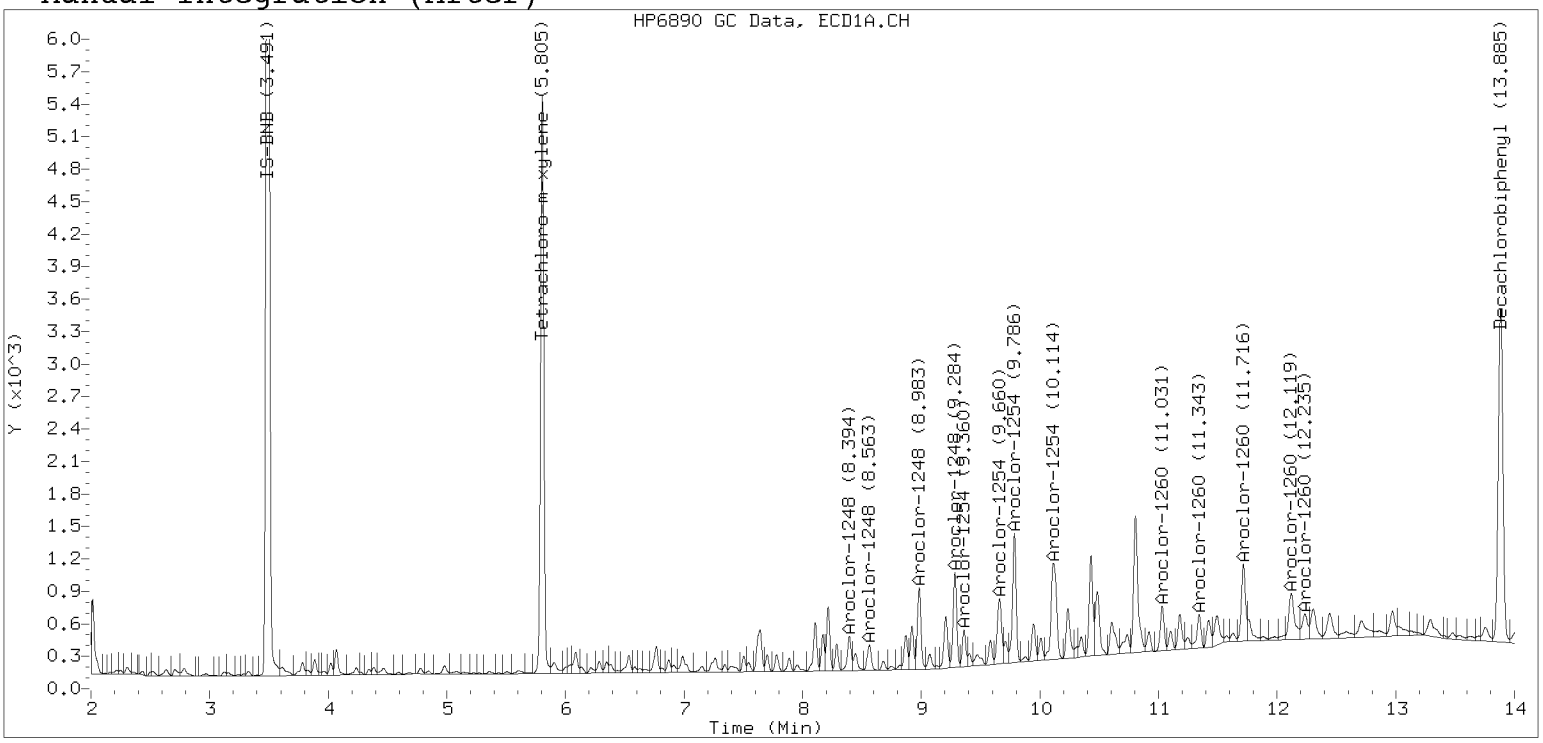


ZB-35 Manual Integration: YES

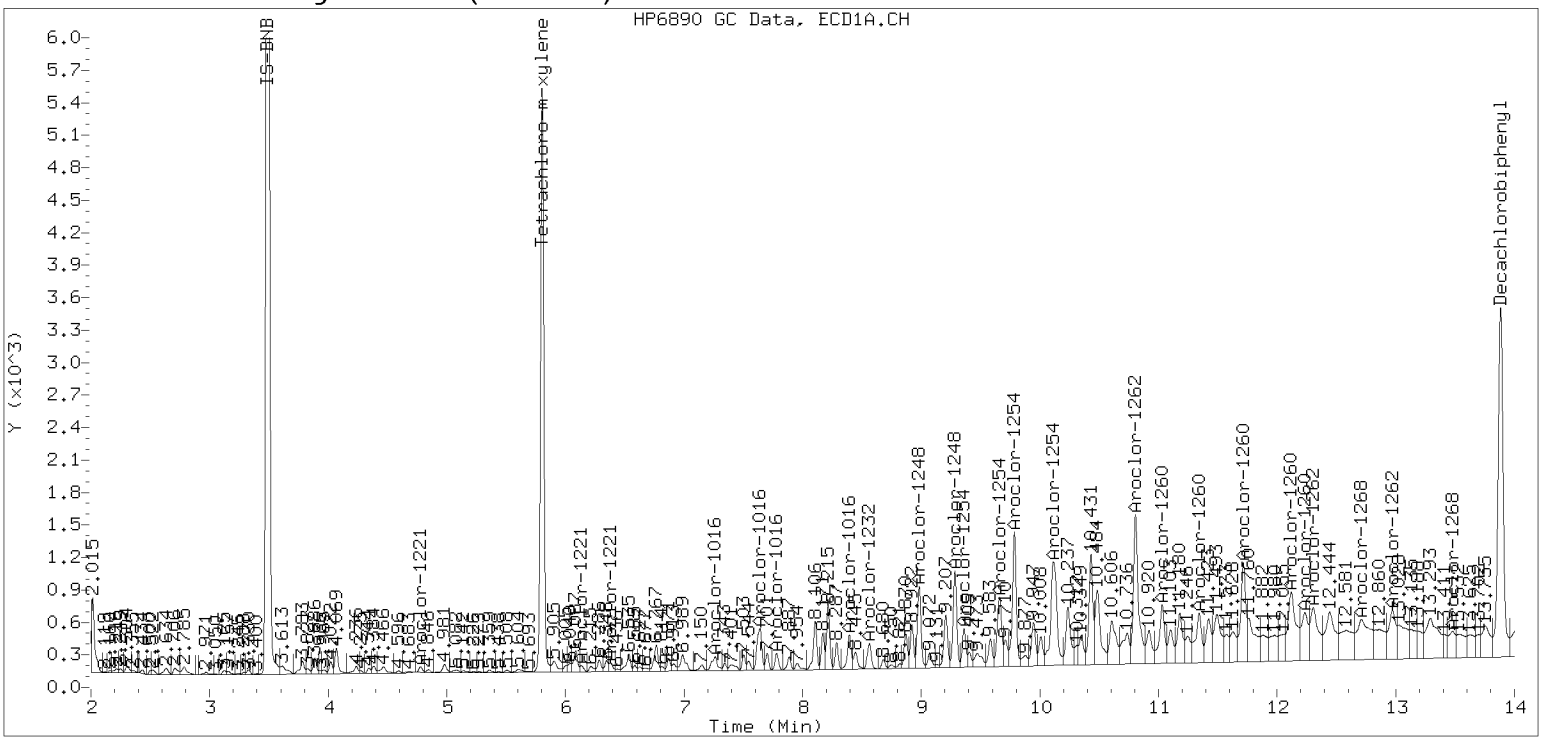
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230201.b/02012329ECD7.D Injection Date: 01-FEB-2023 21:29

Manual Integration (After)



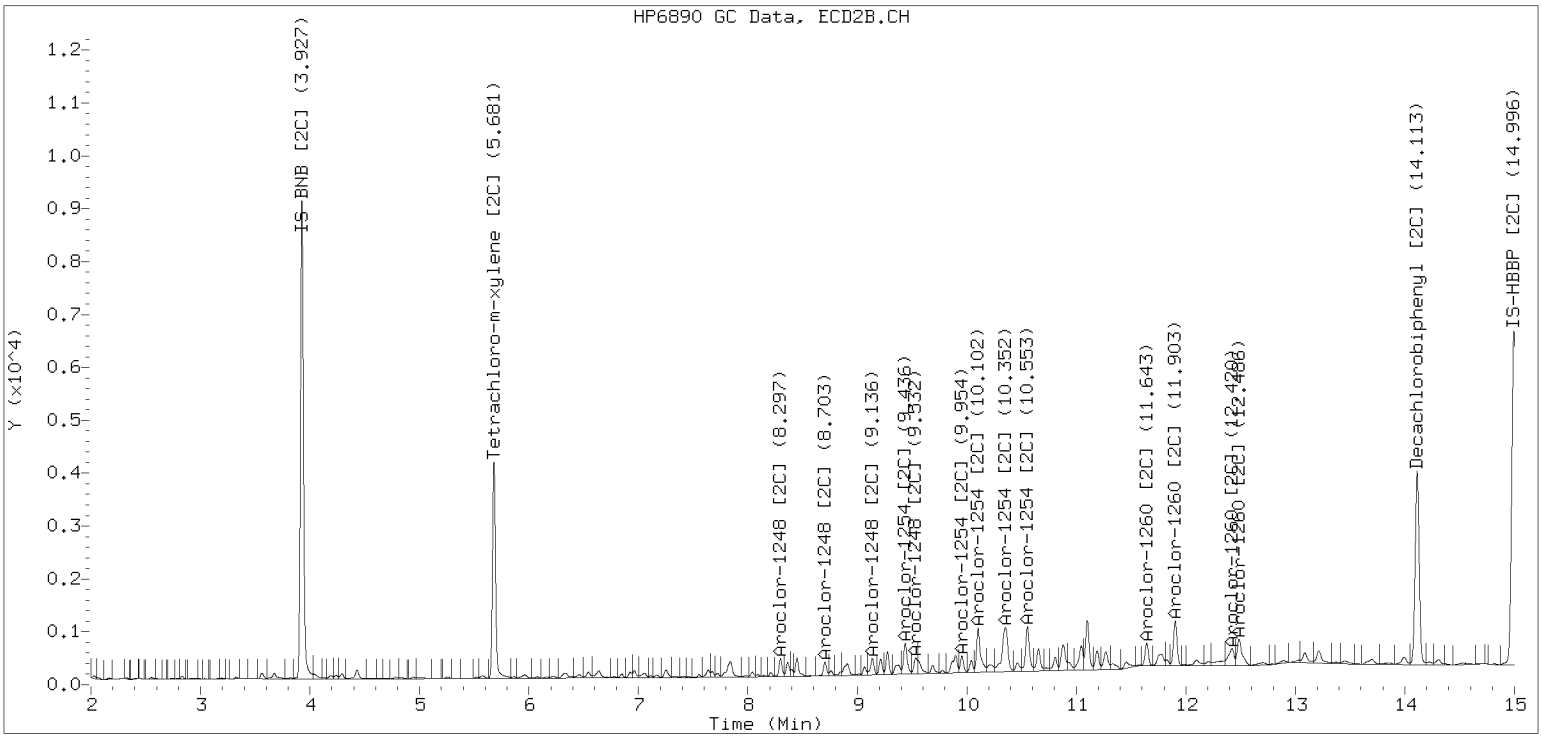
Processed Integration (Before)



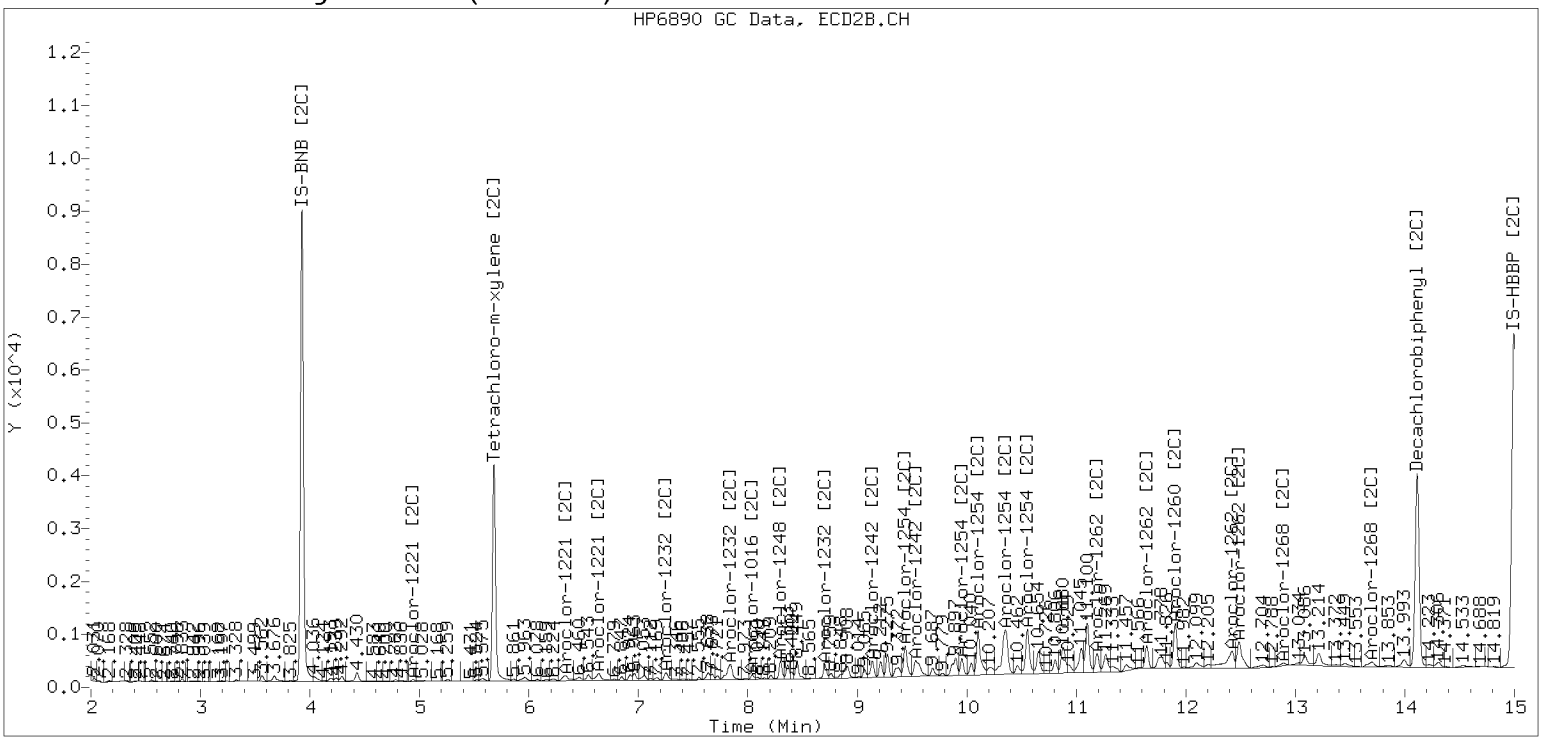
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230201.b/230201.b/02012329ECD7.D Injection Date: 01-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-IT1210

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-13 C	File ID:	02022305ECD7.D
Sampled:	01/06/23 14:12	Prepared:	01/20/23 13:50	Analyzed:	02/02/23 10:24
% Solids:	55.49	Preparation:	EPA 3546 (Microwave)	Initial/Final:	22.6 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0023	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	10	39.9	15.5	39.9	U
11104-28-2	Aroclor 1221	1	10	39.9	15.5	39.9	U
11141-16-5	Aroclor 1232	1	10	39.9	15.5	39.9	U
53469-21-9	Aroclor 1242	1	10	39.9	15.5	39.9	U
12672-29-6	Aroclor 1248	2	10	1130	15.5	39.9	D
11097-69-1	Aroclor 1254	2	10	1780	15.5	39.9	D
11096-82-5	Aroclor 1260	2	10	617	5.9	39.9	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9740*	*11.5*	*144*	*40 - 126*	*
Tetrachlorometaxylene	*1*	*7.9740*	*5.70*	*71.5*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9740*	*10.9*	*136*	*40 - 126*	*
Tetrachlorometaxylene	*2*	*7.9740*	*6.53*	*81.9*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230202.b/02022305ECD7.D
Data file 2: /230202.b/230202.b/02022305ECD7.D
Method: \\target\share\chem4\ecd7.i\230202.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-13RE1
Client ID:
Injection Date: 02-FEB-2023 10:24
Report Date: 02/02/2023 11:38
Matrix: NONE
Dilution Factor: 10.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.804	-0.005	20488	5.681	-0.003	15787	2.9	3.3	13.6	Tetrachloro-m-xylene
13.884	-0.007	31093	14.112	-0.005	33618	5.8	5.5	5.7	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	507153	0.8
Hexabromobiphenyl	647433	503593	-22.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	356426	5.8
Hexabromobiphenyl	382032	388366	1.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.395	-0.010	107425	423.4	1	8.298	-0.006	126659	786.1
Aroclor-1248	2	8.564	-0.016	88963	274.9	2	8.704	-0.006	89347	515.2
Aroclor-1248	3	8.983	-0.016	335225	541.5	3	9.137	-0.016	116993	552.1
Aroclor-1248	4	9.286	-0.008	377833	1233.1	4	9.530	-0.047	164842	629.0
		Total Col1Ave (4 peaks):			618.2		Total Col2Ave (4 peaks):			620.6 RPD = 0
		Corrected Ave (3 peaks):			413.3		Corrected Ave (3 peaks):			565.4 RPD = 31
Aroclor-1254	1	9.286	-0.013	377833	731.0	1	9.437	-0.007	231229	894.2
Aroclor-1254	2	9.361	-0.017	144816	656.2	2	9.955	-0.009	132685	634.8
Aroclor-1254	3	9.652	-0.018	210190	634.7	3	10.104	-0.011	432833	949.4
Aroclor-1254	4	9.787	-0.022	501059	772.1	4	10.342	-0.022	469538	1029.9
Aroclor-1254	5	10.125	-0.052	517606	1226.6	5	10.554	-0.009	242596	955.3
		Total Col1Ave (5 peaks):			804.1		Total Col2Ave (5 peaks):			892.7 RPD = 10
		Corrected Ave (4 peaks):			698.5		Corrected Ave (4 peaks):			858.4 RPD = 21
Aroclor-1260	1	11.032	-0.011	65155	230.6	1	11.643	-0.008	136448	487.0
Aroclor-1260	2	11.349	-0.011	62254	214.3	2	11.905	-0.010	169970	239.8
Aroclor-1260	3	11.718	-0.016	168330	220.1	3	12.425	-0.008	45164	255.6
Aroclor-1260	4	12.119	-0.021	115845	293.2	4	12.489	-0.009	117672	256.5
Aroclor-1260	5	12.233	-0.010	33792	196.2	NS	---			----
		Total Col1Ave (5 peaks):			230.9		Total Col2Ave (4 peaks):			309.7 RPD = 29
		Corrected Ave (4 peaks):			215.3		Corrected Ave (3 peaks):			250.6 RPD = 15
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.909 - 13.792) = 6338676 Col1 Total PCB = 1.1 ppm*

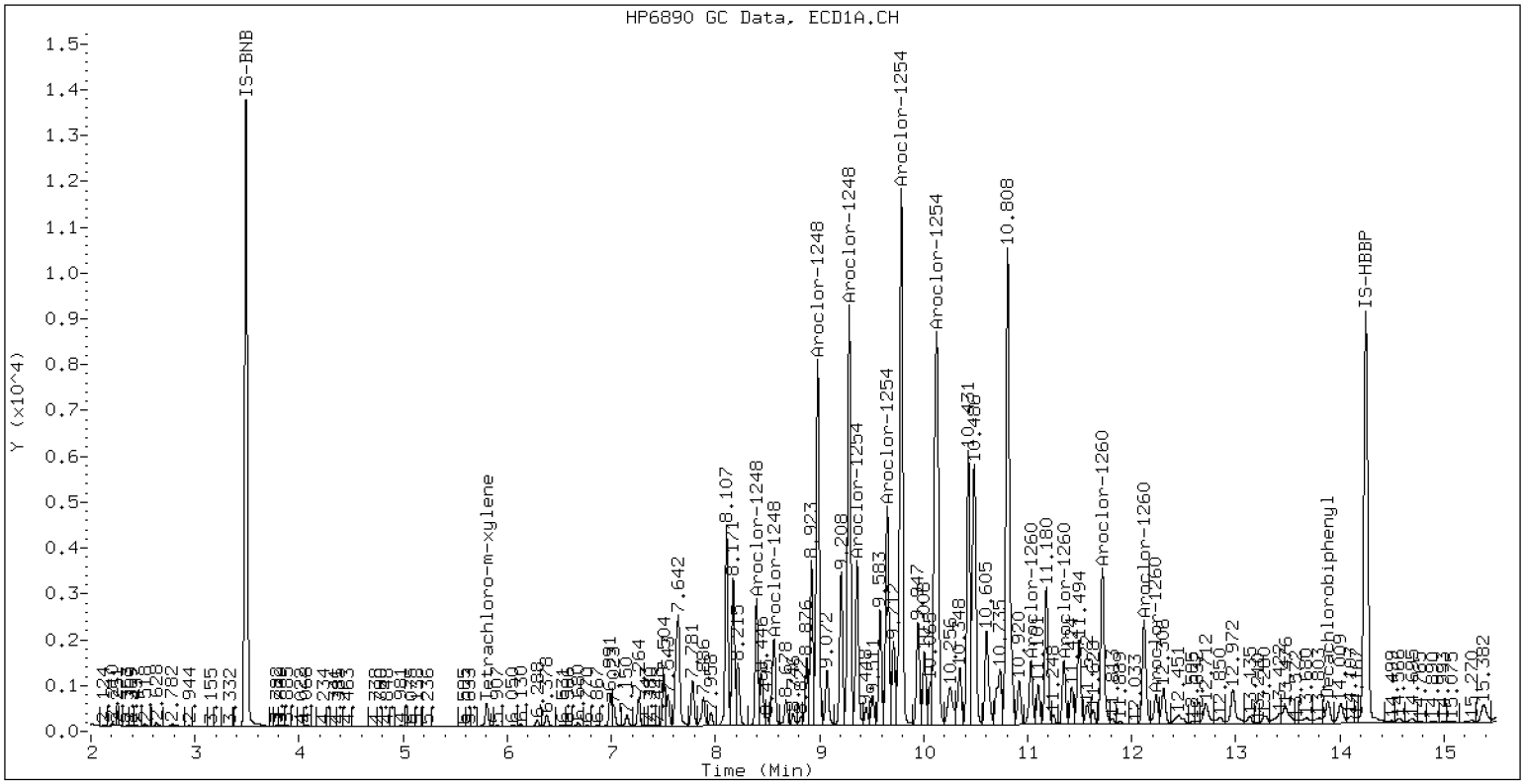
Total PCB Area Col2 (5.784 - 14.018) = 5108298 Col2 Total PCB = 1.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

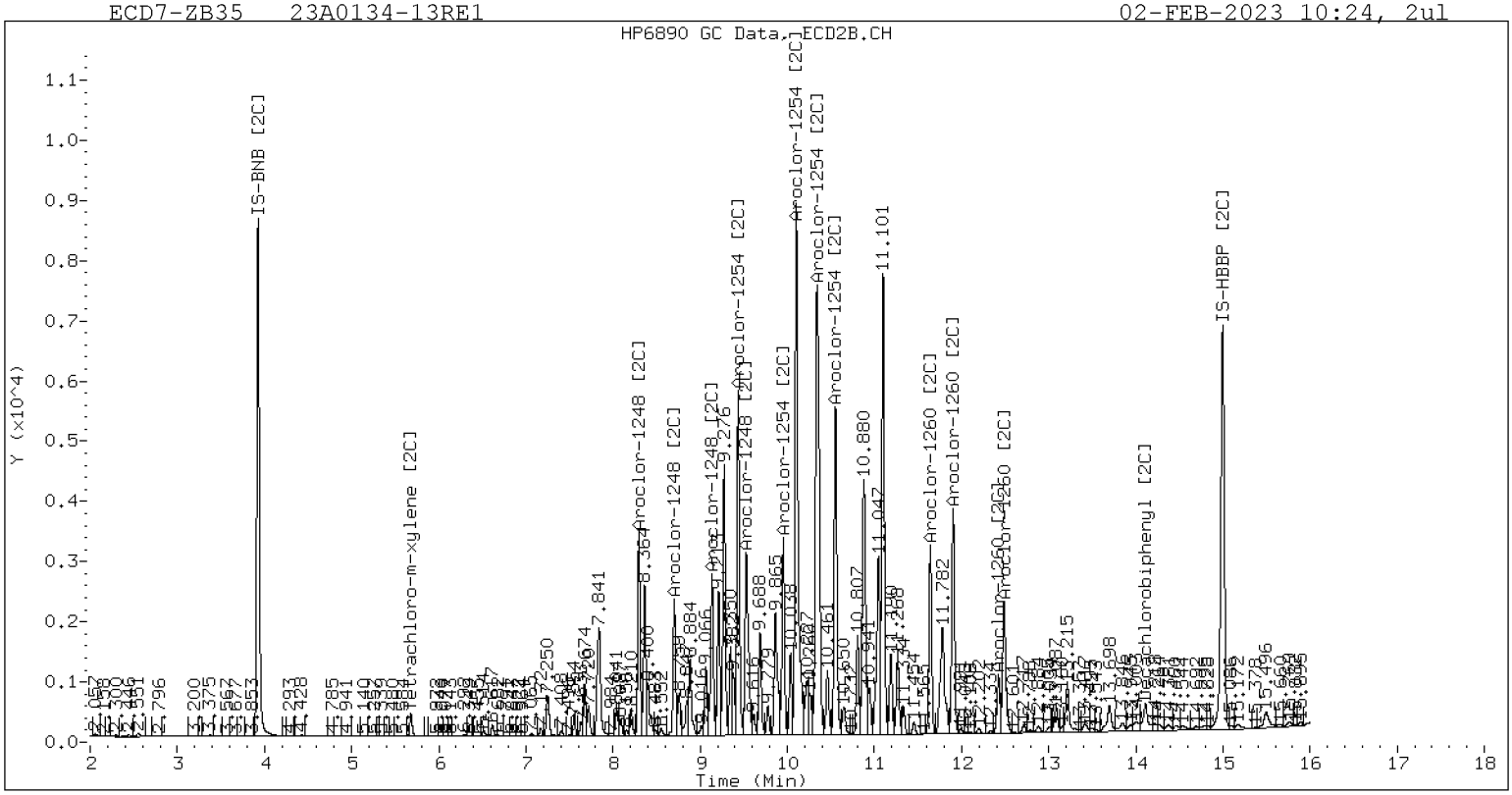
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-13RE1 02-FEB-2023 10:24, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0134-13RE1 02-FEB-2023 10:24, 2ul

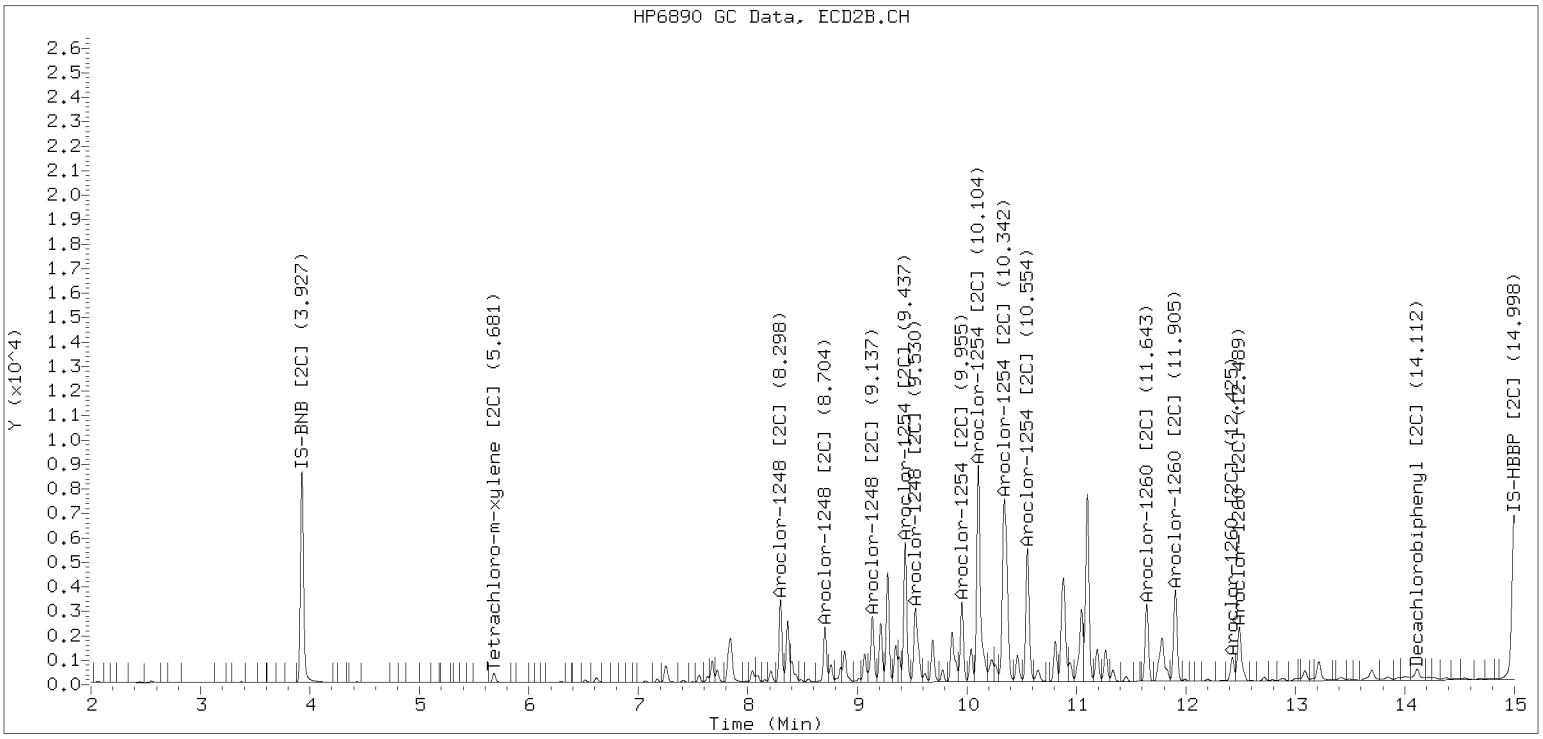


ZB-35 Manual Integration: YES

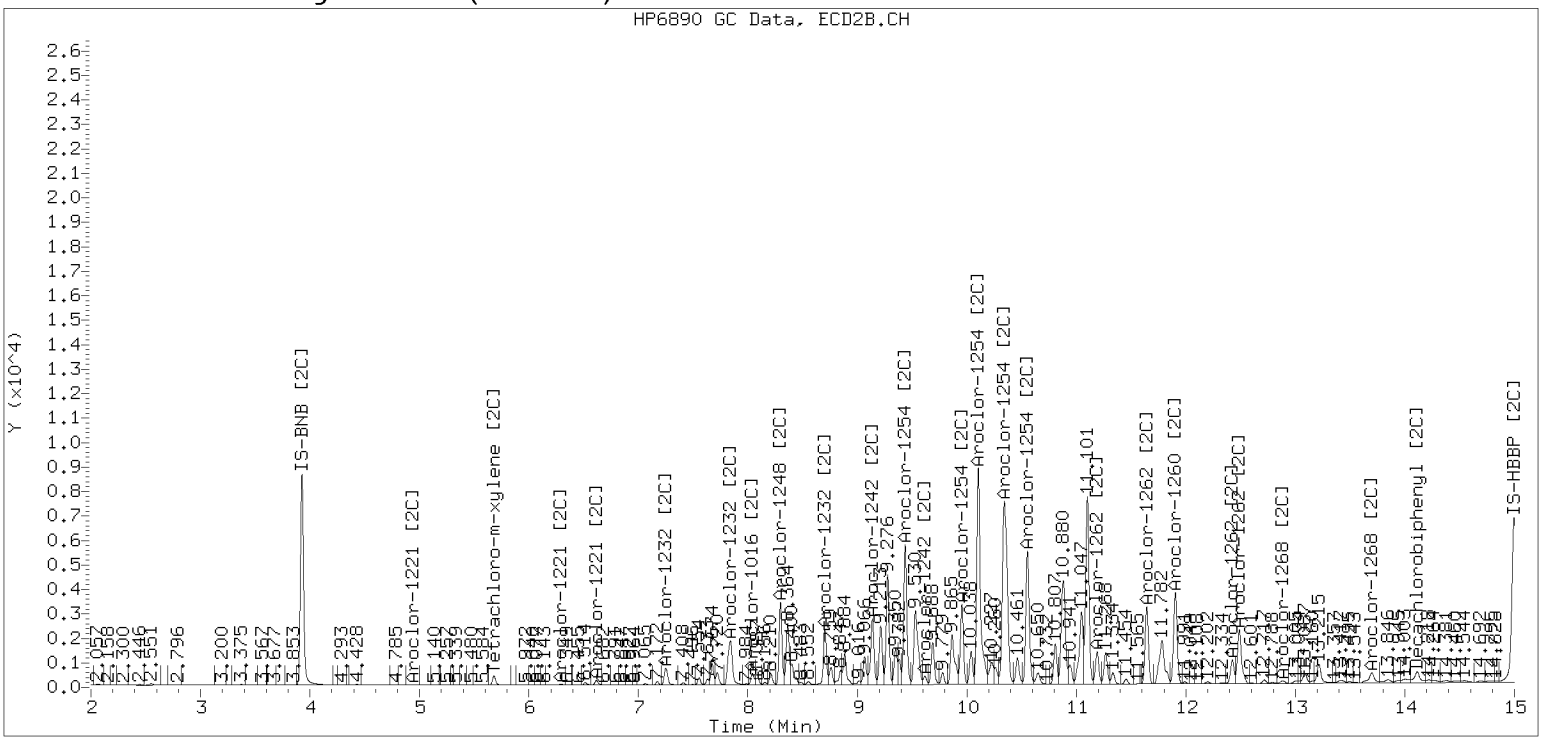
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230202.b/230202.b/02022305ECD7.D Injection Date: 02-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-IT1194

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-14 C	File ID:	02012331ECD7.D
Sampled:	01/06/23 14:41	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 22:11
% Solids:	73.05	Preparation:	EPA 3546 (Microwave)	Initial/Final:	17.13 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	10.3	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	30.3	1.6	4.0	
11096-82-5	Aroclor 1260	1	1	25.0	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9914*	*6.81*	*85.3*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9914*	*5.79*	*72.4*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9914*	*7.23*	*90.5*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9914*	*6.48*	*81.0*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012331ECD7.D
Data file 2: /230201.b/230201.b/02012331ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-14
Client ID:
Injection Date: 01-FEB-2023 22:11
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.002	212911	5.682	-0.002	166545	29.0	32.4	11.2	Tetrachloro-m-xylene
13.885	-0.005	143946	14.114	-0.002	181226	34.1	36.2	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	519953	3.3
Hexabromobiphenyl	647433	394613	-39.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	380038	12.8
Hexabromobiphenyl	382032	315472	-17.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.396	-0.006	7749	29.8	1	8.299	-0.004	8065	46.9
Aroclor-1248	2	8.565	-0.011	5597	16.9	2	8.705	-0.005	7147	38.7
Aroclor-1248	3	8.984	-0.011	37493	59.1	3	9.139	-0.014	9543	42.2
Aroclor-1248	4	9.286	-0.005	53487	170.3	4	9.531	-0.044	21899	78.4
		Total Col1Ave (4 peaks):			69.0		Total Col2Ave (4 peaks):			51.6 RPD = 29
		Corrected Ave (3 peaks):			35.2		Corrected Ave (3 peaks):			42.6 RPD = 19
Aroclor-1254	1	9.286	-0.010	53487	100.9	1	9.438	-0.005	35891	130.2
Aroclor-1254	2	9.362	-0.011	22178	98.0	2	9.956	-0.008	18504	83.0
Aroclor-1254	3	9.653	-0.010	28299	83.3	3	10.105	-0.010	65683	135.1
Aroclor-1254	4	9.788	-0.014	68696	103.3	4	10.355	-0.010	102405	210.7
Aroclor-1254	5	10.114	-0.049	92653	214.2	5	10.554	-0.009	54229	200.3
		Total Col1Ave (5 peaks):			119.9		Total Col2Ave (5 peaks):			151.9 RPD = 23
		Corrected Ave (4 peaks):			96.4		Corrected Ave (4 peaks):			137.2 RPD = 35
Aroclor-1260	1	11.033	-0.008	43011	194.3	1	11.643	-0.006	32628	143.4
Aroclor-1260	2	11.349	-0.009	19862	87.3	2	11.905	-0.008	50368	87.5
Aroclor-1260	3	11.719	-0.013	57416	95.8	3	12.424	-0.008	18824	131.2
Aroclor-1260	4	12.120	-0.015	38533	124.5	4	12.488	-0.009	34815	93.4
Aroclor-1260	5	12.234	-0.007	16746	124.1	NS	---			----
		Total Col1Ave (5 peaks):			125.2		Total Col2Ave (4 peaks):			113.9 RPD = 9
		Corrected Ave (4 peaks):			107.9		Corrected Ave (3 peaks):			104.0 RPD = 4
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 1361099 Col1 Total PCB = 0.2 ppm*

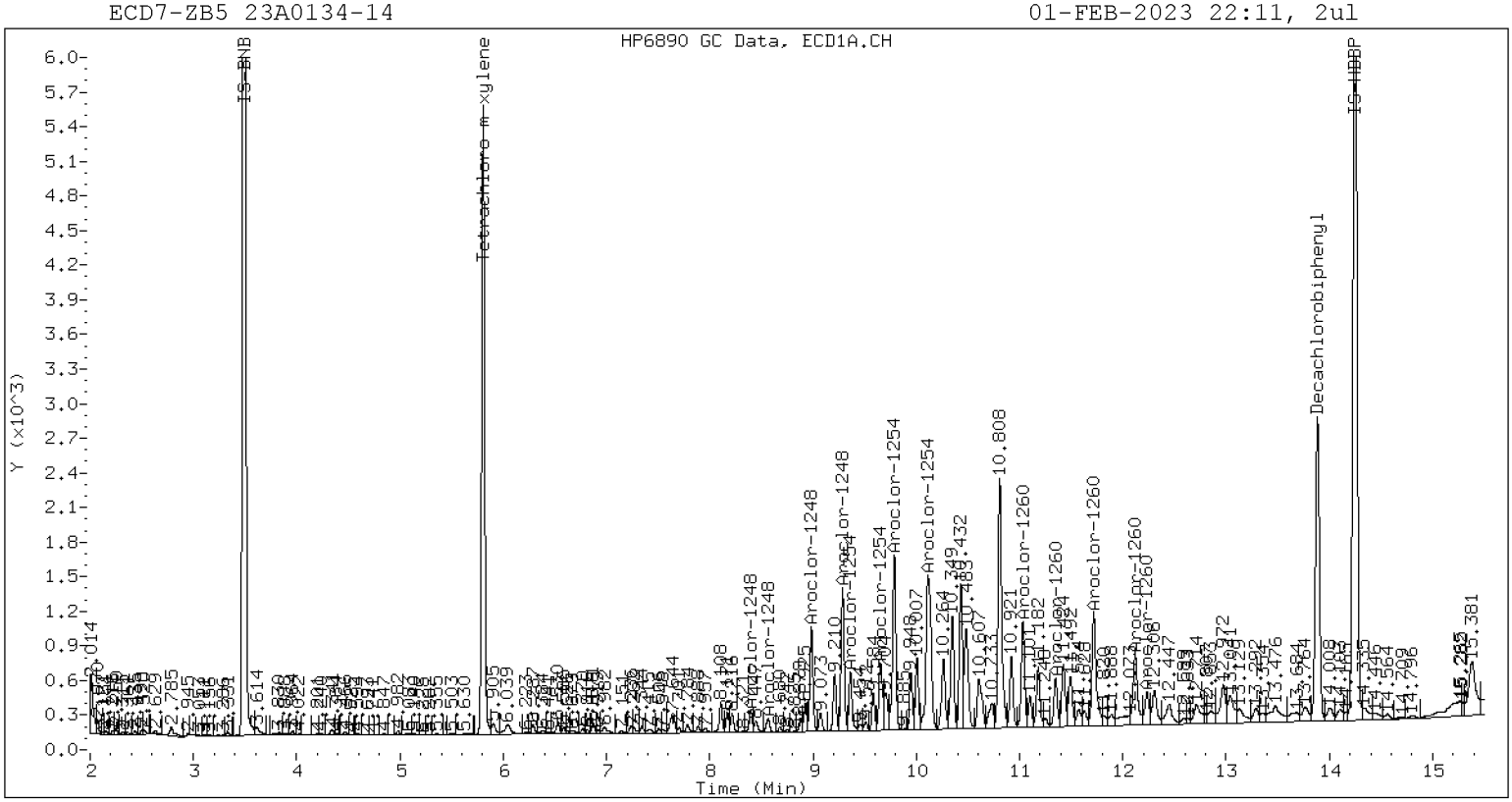
Total PCB Area Col2 (5.784 - 14.016) = 1104039 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

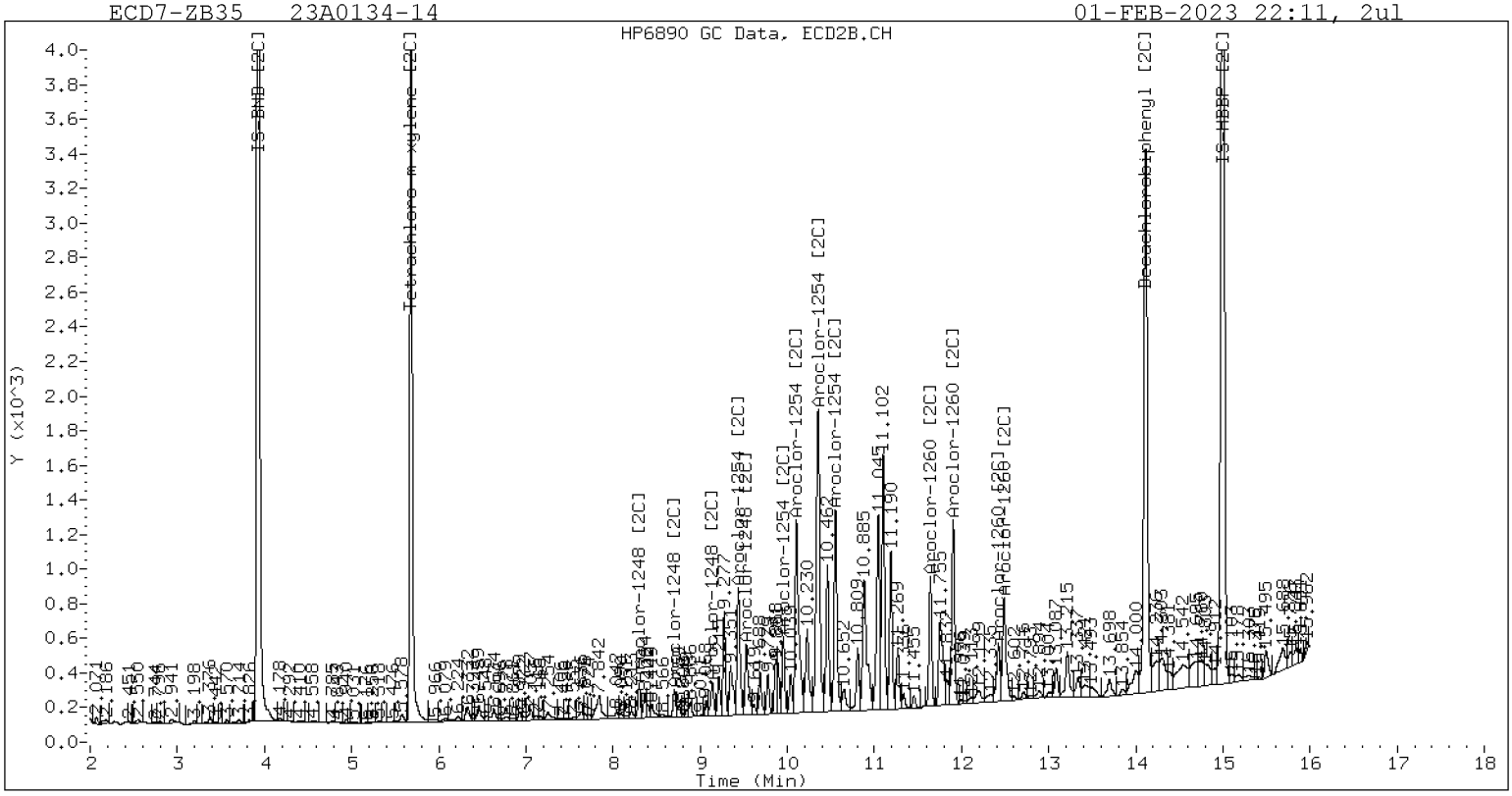
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-14 01-FEB-2023 22:11, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0134-14 01-FEB-2023 22:11, 2ul

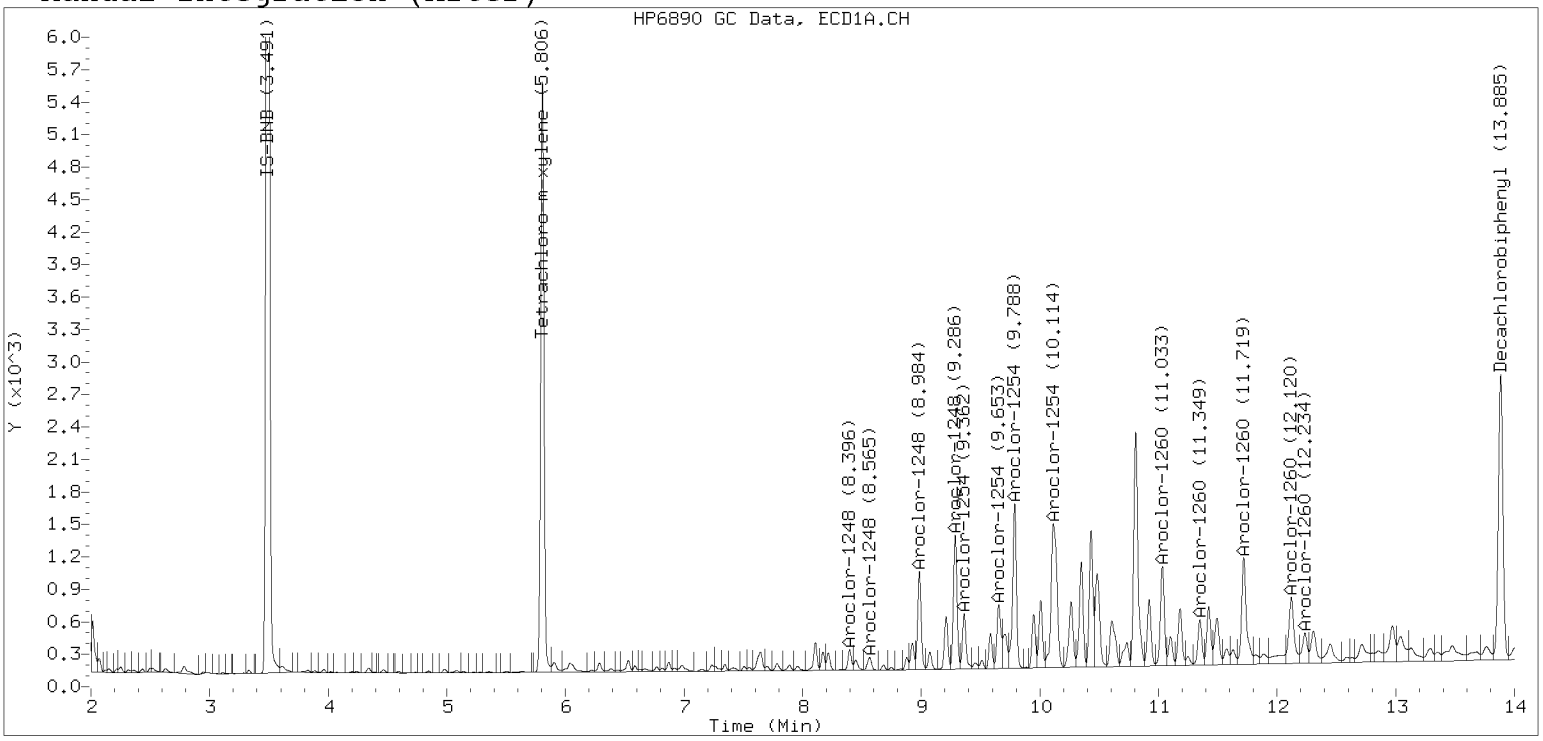


ZB-35 Manual Integration: YES

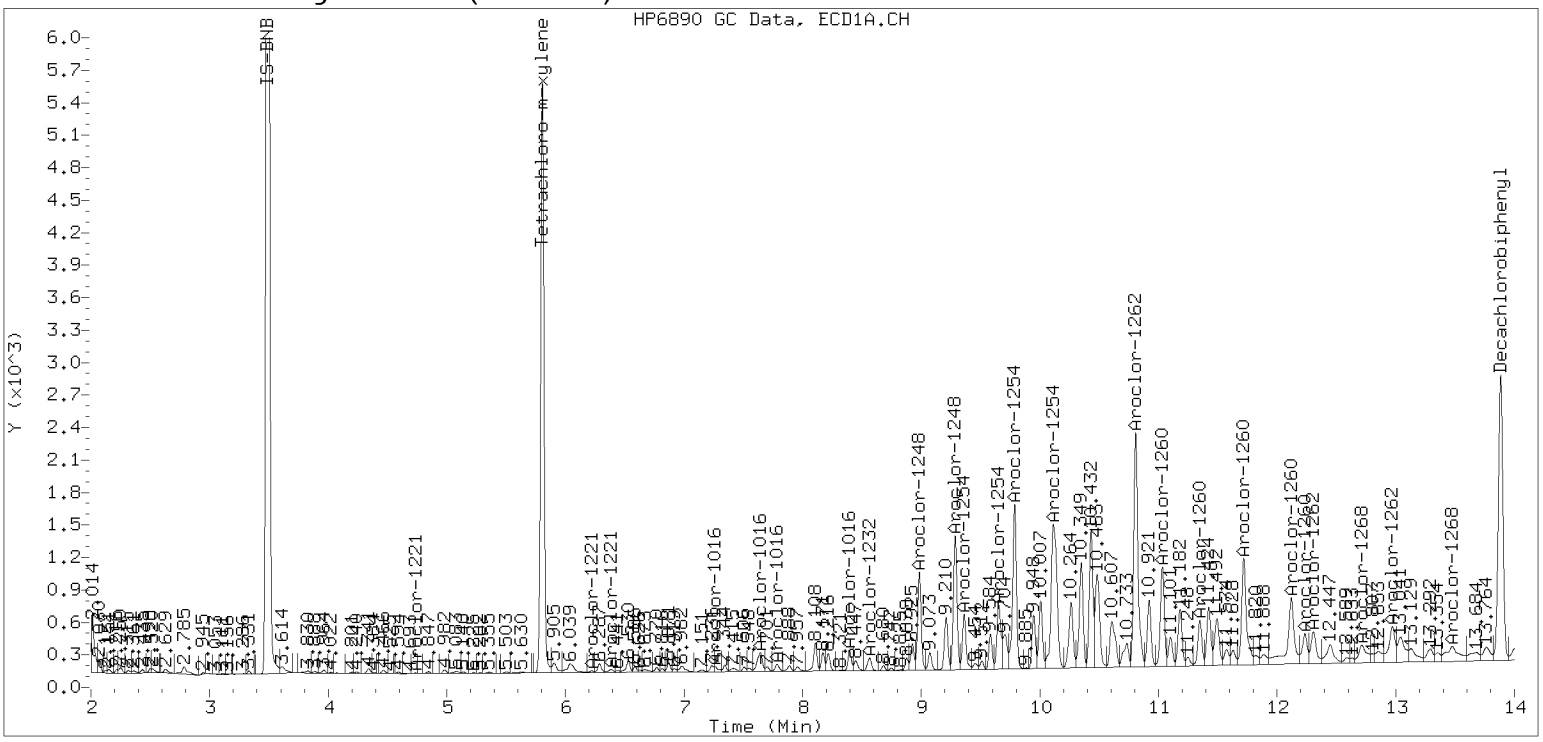
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230201.b/02012331ECD7.D Injection Date: 01-FEB-2023 22:11

Manual Integration (After)



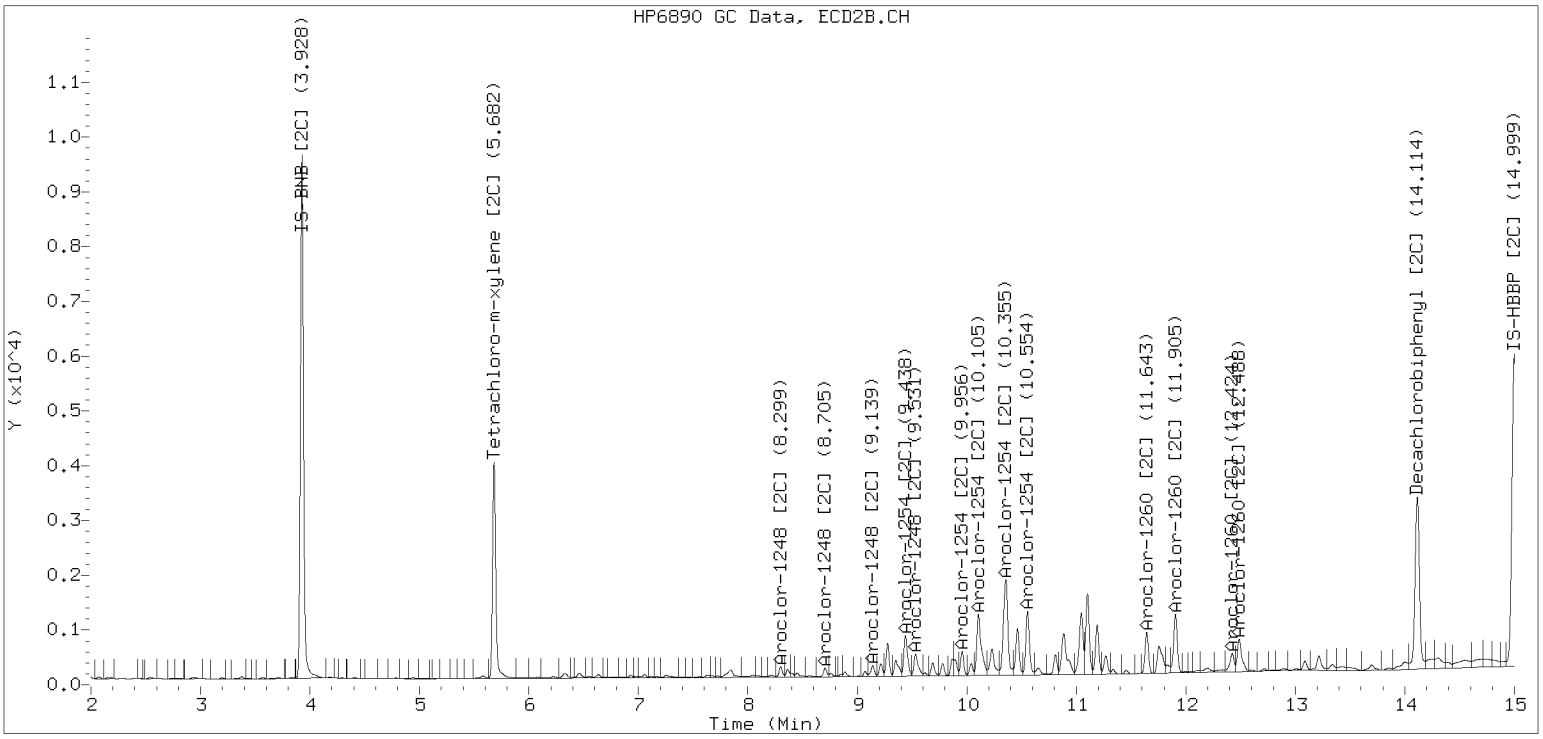
Processed Integration (Before)



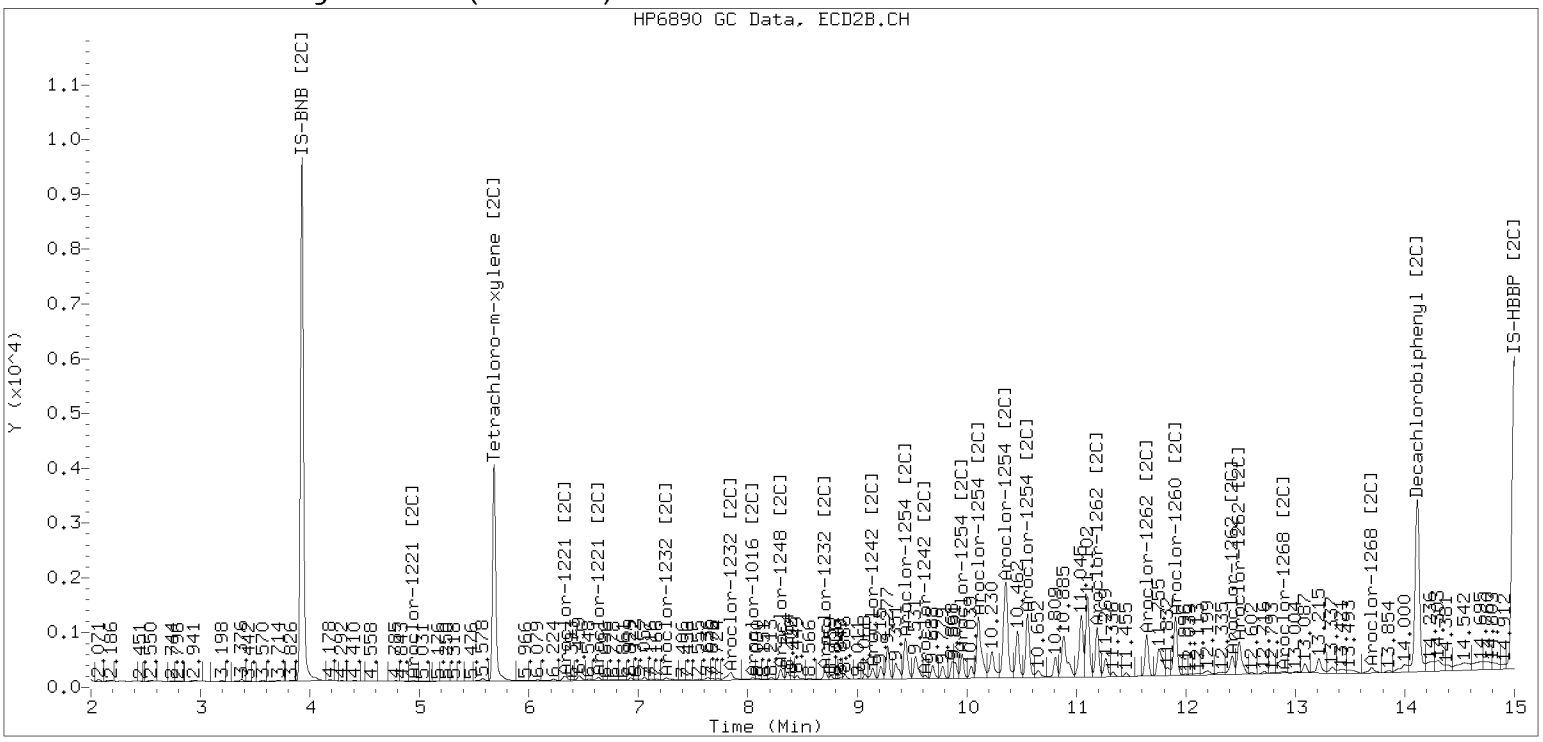
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230201.b/230201.b/02012331ECD7.D Injection Date: 01-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1249

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-15 C	File ID:	02012332ECD7.D
Sampled:	01/06/23 13:46	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 22:32
% Solids:	50.09	Preparation:	EPA 3546 (Microwave)	Initial/Final:	24.96 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	30.0	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	52.0	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	40.4	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9984*	*6.66*	*83.2*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9984*	*5.31*	*66.3*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9984*	*6.34*	*79.2*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9984*	*6.12*	*76.6*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012332ECD7.D
Data file 2: /230201.b/230201.b/02012332ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-15
Client ID:
Injection Date: 01-FEB-2023 22:32
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.002	189959	5.681	-0.003	148481	26.5	30.6	14.3	Tetrachloro-m-xylene
13.884	-0.006	146505	14.114	-0.002	171190	33.3	31.7	4.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	506511	0.6
Hexabromobiphenyl	647433	411515	-36.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	358618	6.4
Hexabromobiphenyl	382032	340303	-10.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.394	-0.008	30312	119.6	1	8.298	-0.005	30377	187.4
Aroclor-1248	2	8.562	-0.014	23857	73.8	2	8.704	-0.006	24072	138.0
Aroclor-1248	3	8.982	-0.013	83078	134.4	3	9.136	-0.016	31697	148.7
Aroclor-1248	4	9.284	-0.007	92423	302.0	4	9.530	-0.045	33490	127.0
		Total Col1Ave (4 peaks):			157.5		Total Col2Ave (4 peaks):			150.3 RPD = 5
		Corrected Ave (3 peaks):			109.3		Corrected Ave (3 peaks):			137.9 RPD = 23
Aroclor-1254	1	9.284	-0.012	92423	179.0	1	9.436	-0.008	63637	244.6
Aroclor-1254	2	9.360	-0.013	36895	167.4	2	9.955	-0.009	32668	155.3
Aroclor-1254	3	9.655	-0.008	67959	205.5	3	10.103	-0.012	111498	243.1
Aroclor-1254	4	9.784	-0.017	127358	196.5	4	10.352	-0.013	140041	305.3
Aroclor-1254	5	10.117	-0.046	150874	358.0	5	10.553	-0.010	90071	352.5
		Total Col1Ave (5 peaks):			221.3		Total Col2Ave (5 peaks):			260.2 RPD = 16
		Corrected Ave (4 peaks):			187.1		Corrected Ave (4 peaks):			237.1 RPD = 24
Aroclor-1260	1	11.032	-0.009	45719	198.0	1	11.642	-0.007	49130	200.1
Aroclor-1260	2	11.347	-0.011	35193	148.3	2	11.903	-0.010	97631	157.2
Aroclor-1260	3	11.717	-0.014	109384	175.1	3	12.422	-0.010	42504	274.5
Aroclor-1260	4	12.118	-0.017	52659	163.1	4	12.487	-0.011	70582	175.6
Aroclor-1260	5	12.233	-0.008	28075	199.5	NS	---			----
		Total Col1Ave (5 peaks):			176.8		Total Col2Ave (4 peaks):			201.9 RPD = 13
		Corrected Ave (4 peaks):			171.1		Corrected Ave (3 peaks):			177.6 RPD = 4
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 2221919 Col1 Total PCB = 0.4 ppm*

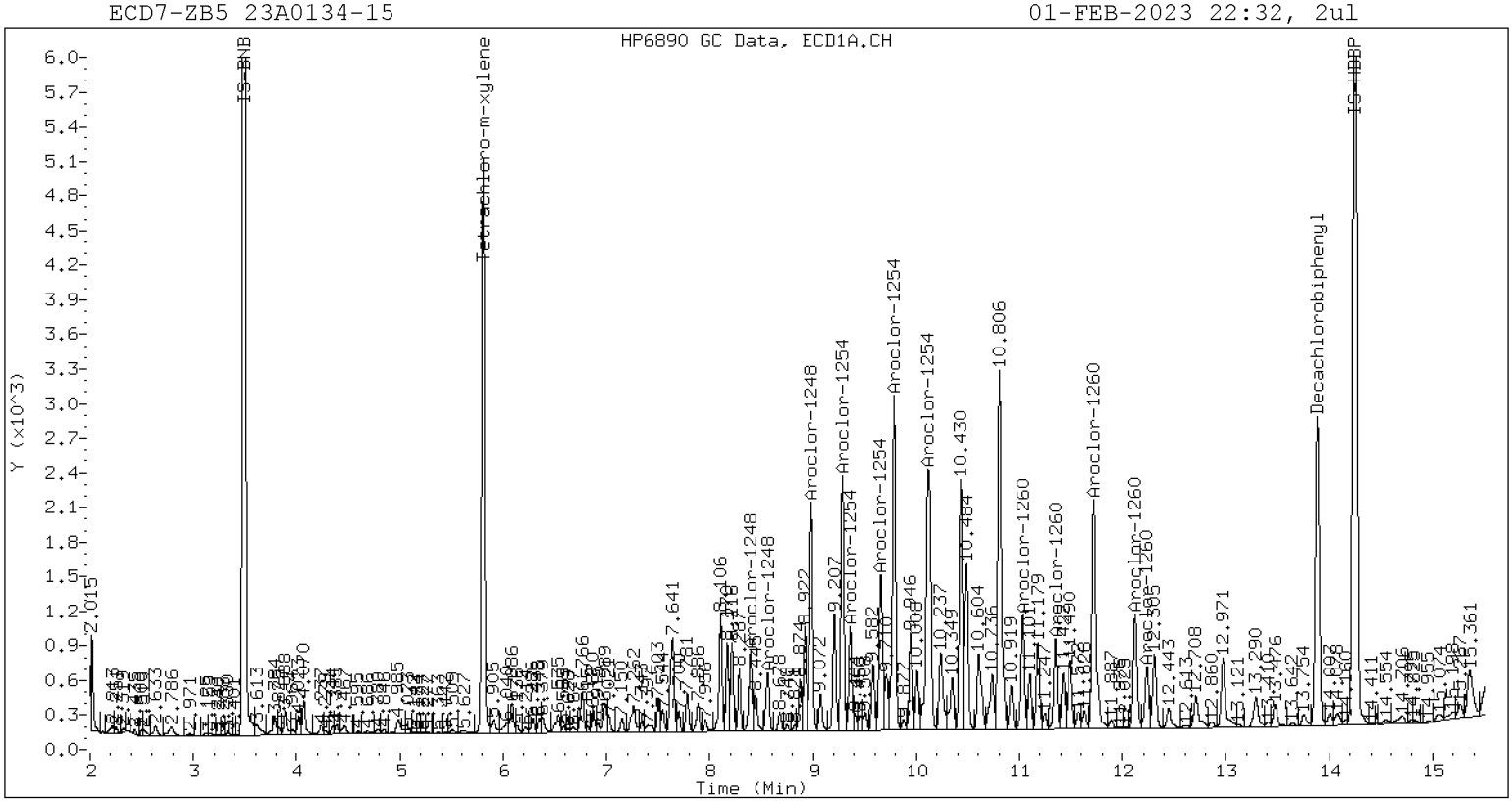
Total PCB Area Col2 (5.784 - 14.016) = 1871747 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

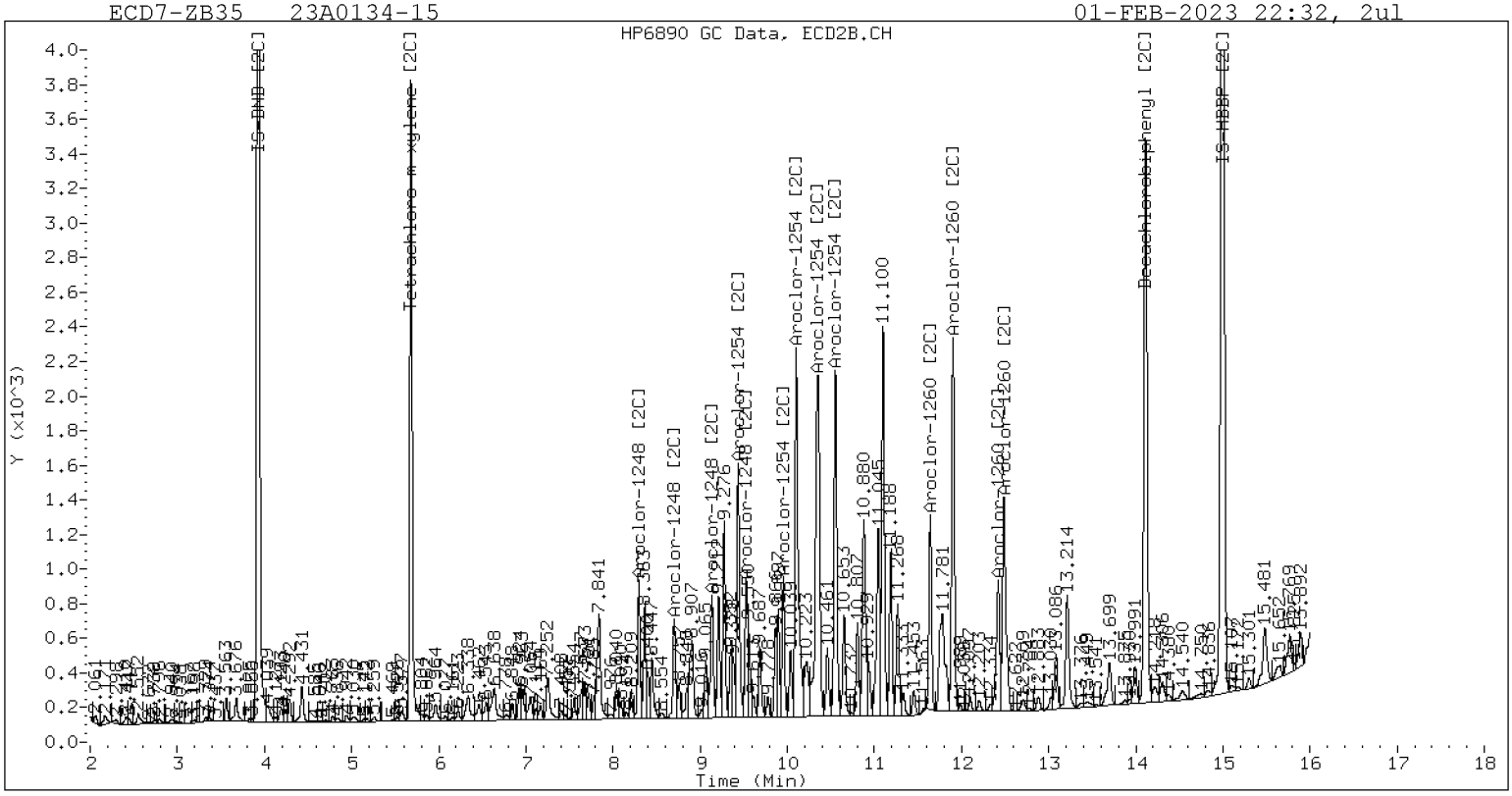
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-15 01-FEB-2023 22:32, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0134-15 01-FEB-2023 22:32, 2ul

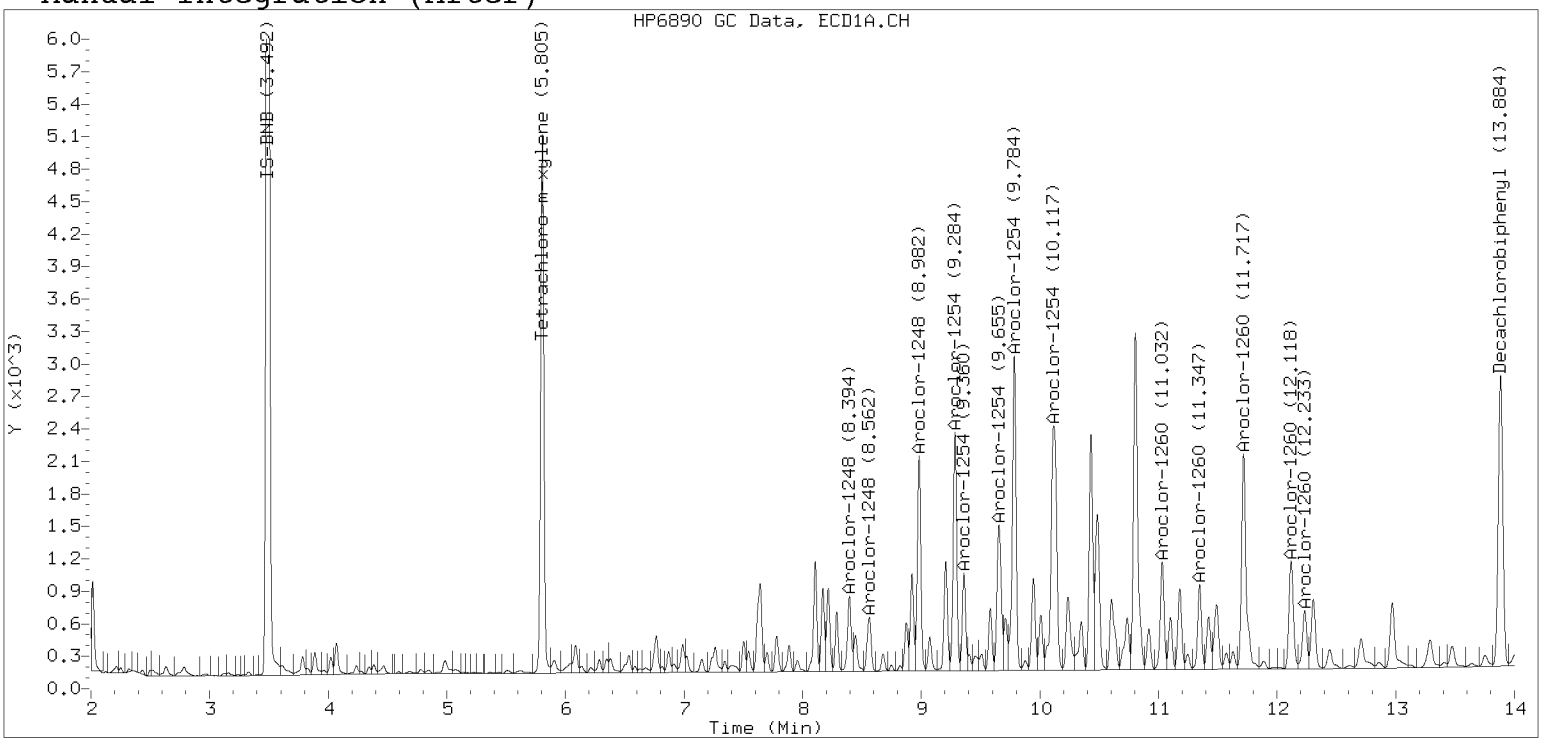


ZB-35 Manual Integration: YES

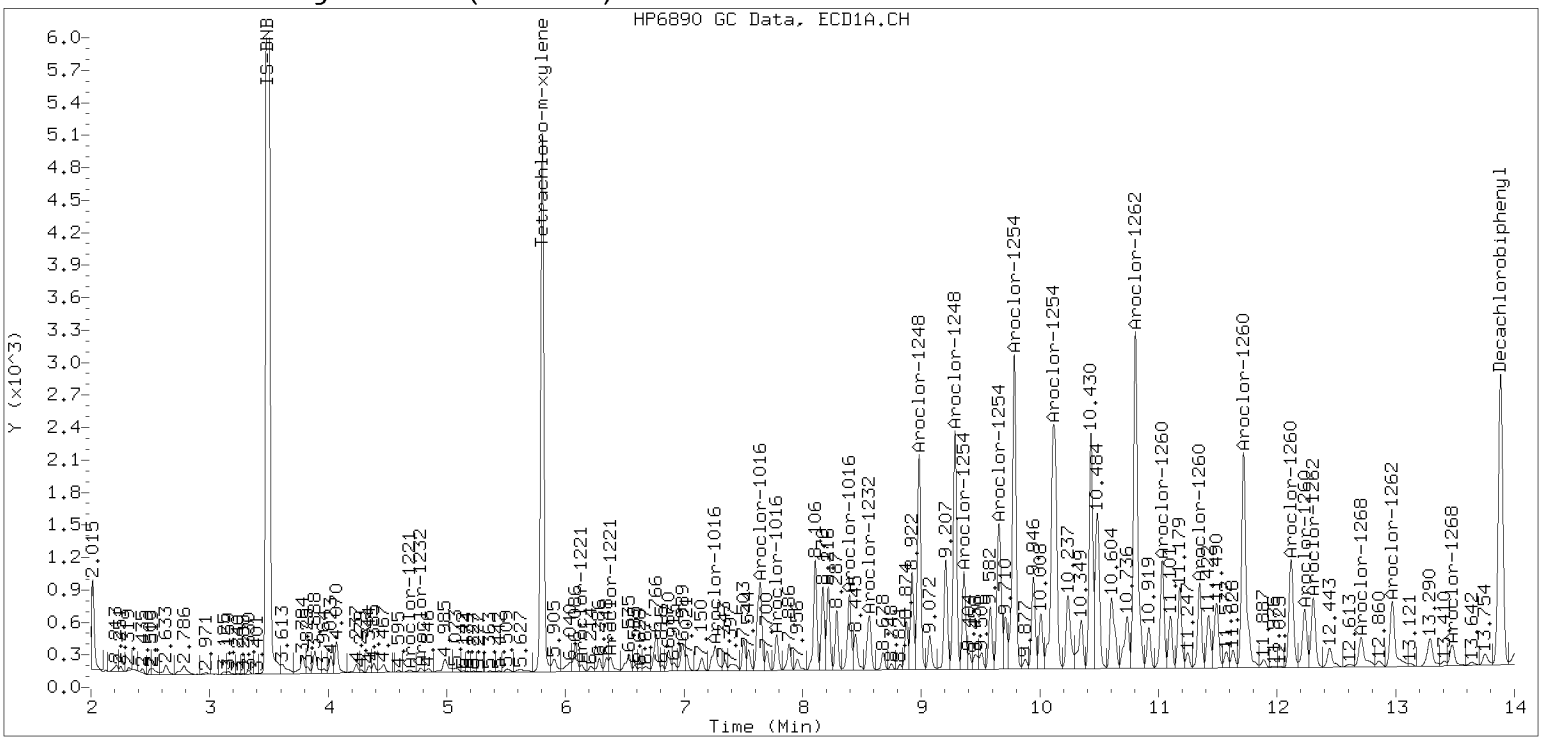
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230201.b/02012332ECD7.D Injection Date: 01-FEB-2023 22:32

Manual Integration (After)



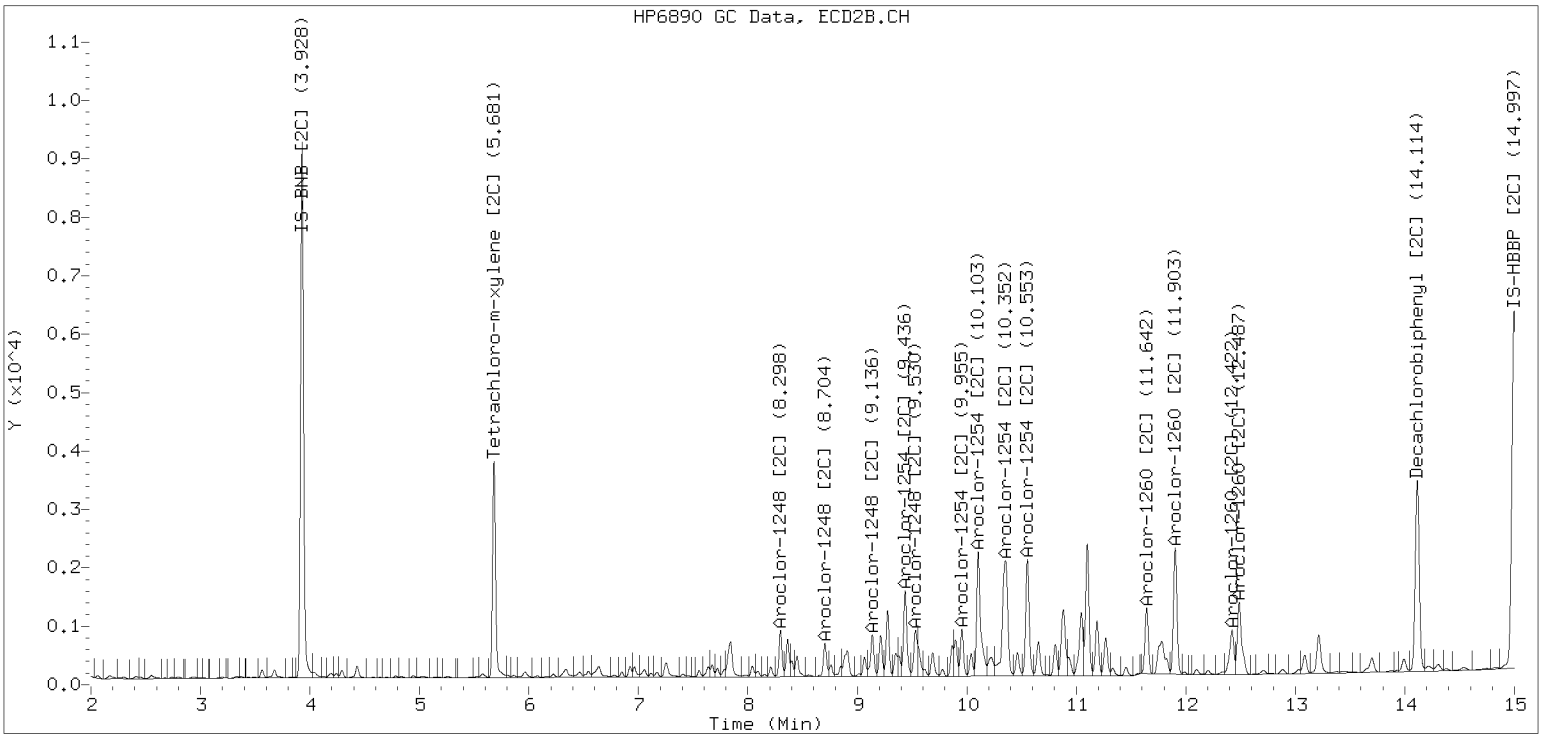
Processed Integration (Before)



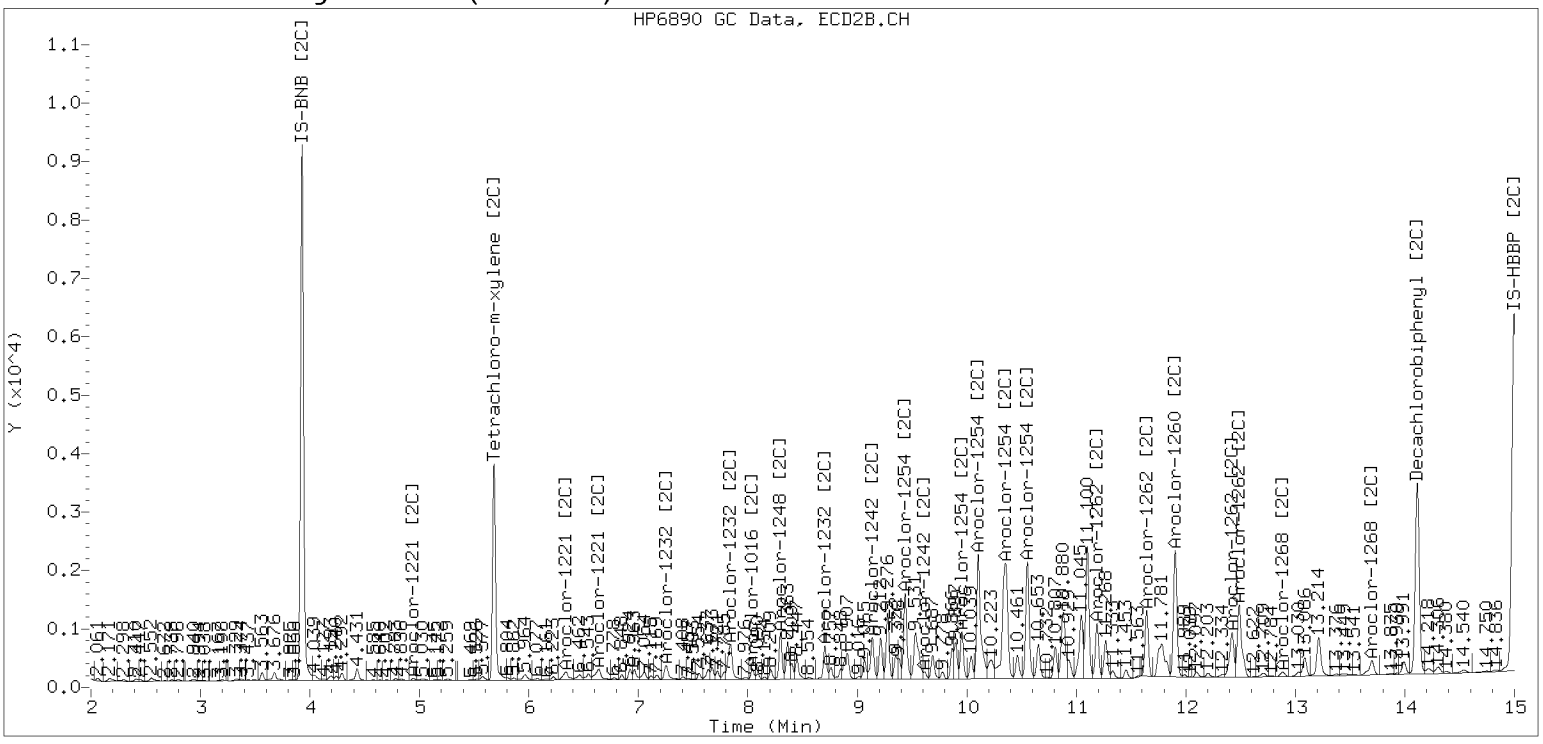
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230201.b/230201.b/02012332ECD7.D Injection Date: 01-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1077

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0134-16 B	File ID:	02012333ECD7.D
Sampled:	01/06/23 15:10	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 22:53
% Solids:	76.81	Preparation:	EPA 3546 (Microwave)	Initial/Final:	16.29 g Wet / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	33.8	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	62.0	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	53.6	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9921*	*7.08*	*88.5*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9921*	*5.42*	*67.9*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9921*	*7.43*	*92.9*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9921*	*6.14*	*76.9*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012333ECD7.D
Data file 2: /230201.b/230201.b/02012333ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0134-16
Client ID:
Injection Date: 01-FEB-2023 22:53
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.002	198675	5.681	-0.003	150553	27.2	30.7	12.4	Tetrachloro-m-xylene
13.885	-0.006	153596	14.113	-0.003	189777	35.4	37.2	4.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	517697	2.9
Hexabromobiphenyl	647433	405503	-37.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	362239	7.5
Hexabromobiphenyl	382032	321747	-15.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.395	-0.007	34244	132.2	1	8.298	-0.005	28780	175.8
Aroclor-1248	2	8.562	-0.014	34308	103.9	2	8.704	-0.006	30377	172.4
Aroclor-1248	3	8.982	-0.014	109899	173.9	3	9.136	-0.016	39970	185.6
Aroclor-1248	4	9.284	-0.007	106398	340.2	4	9.531	-0.045	38321	143.9
		Total Col1Ave (4 peaks):			187.5		Total Col2Ave (4 peaks):			169.4 RPD = 10
		Corrected Ave (3 peaks):			136.7		Corrected Ave (3 peaks):			164.0 RPD = 18
Aroclor-1254	1	9.284	-0.012	106398	201.7	1	9.436	-0.008	69885	265.9
Aroclor-1254	2	9.360	-0.012	42699	189.5	2	9.955	-0.009	40968	192.9
Aroclor-1254	3	9.656	-0.007	83988	248.4	3	10.104	-0.011	137868	297.5
Aroclor-1254	4	9.785	-0.016	153125	231.2	4	10.353	-0.012	166019	358.3
Aroclor-1254	5	10.115	-0.048	187729	435.8	5	10.554	-0.009	112800	437.1
		Total Col1Ave (5 peaks):			261.3		Total Col2Ave (5 peaks):			310.3 RPD = 17
		Corrected Ave (4 peaks):			217.7		Corrected Ave (4 peaks):			278.7 RPD = 25
Aroclor-1260	1	11.032	-0.009	53748	236.2	1	11.643	-0.006	68292	294.2
Aroclor-1260	2	11.349	-0.008	50542	216.1	2	11.904	-0.009	125336	213.4
Aroclor-1260	3	11.718	-0.014	154853	251.5	3	12.421	-0.011	51708	353.3
Aroclor-1260	4	12.118	-0.016	76457	240.3	4	12.487	-0.010	80541	211.9
Aroclor-1260	5	12.234	-0.007	27441	197.9	NS	---			----
		Total Col1Ave (5 peaks):			228.4		Total Col2Ave (4 peaks):			268.2 RPD = 16
		Corrected Ave (4 peaks):			222.6		Corrected Ave (3 peaks):			239.9 RPD = 7
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.790) = 2733835 Col1 Total PCB = 0.5 ppm*

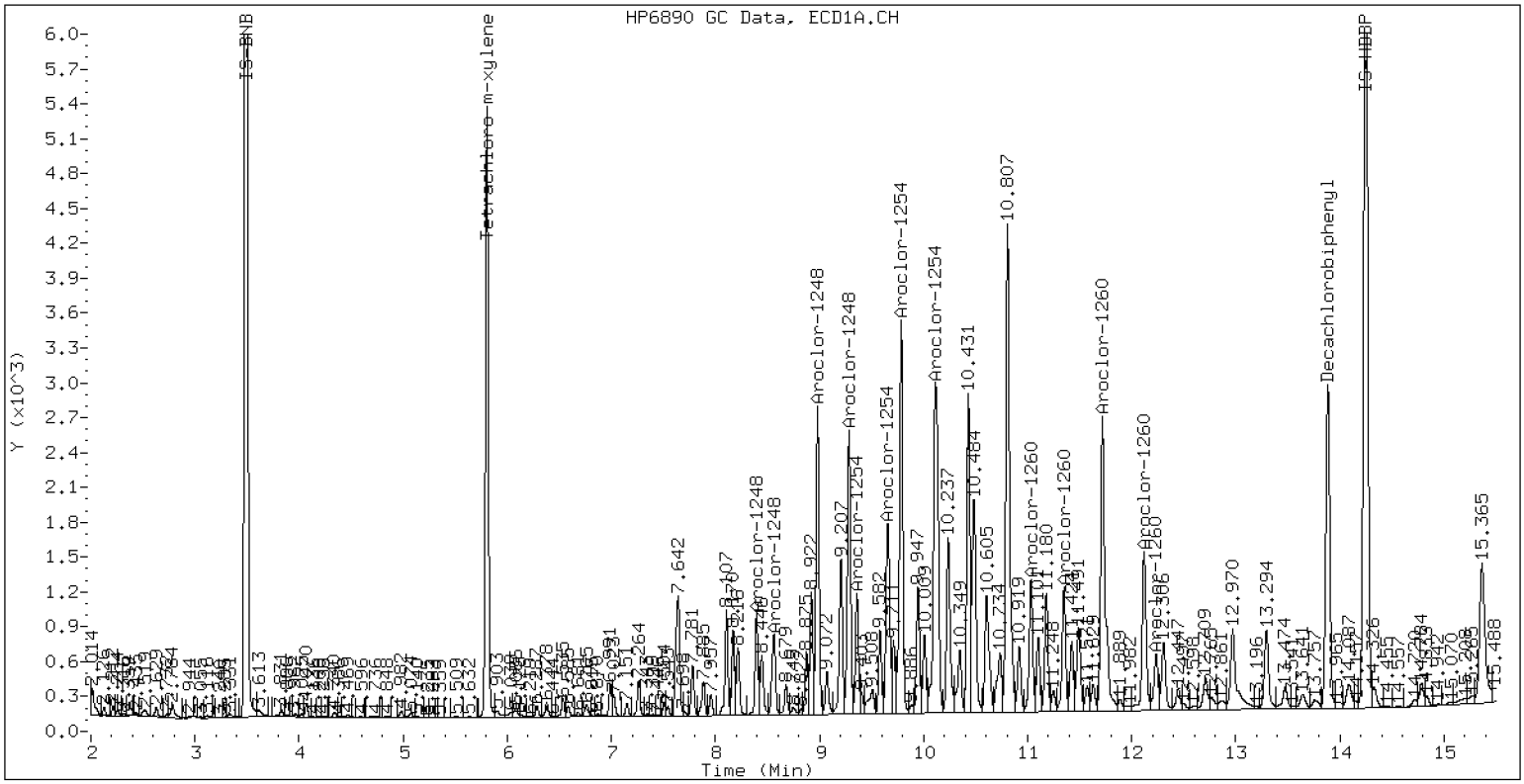
Total PCB Area Col2 (5.784 - 14.016) = 2235979 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

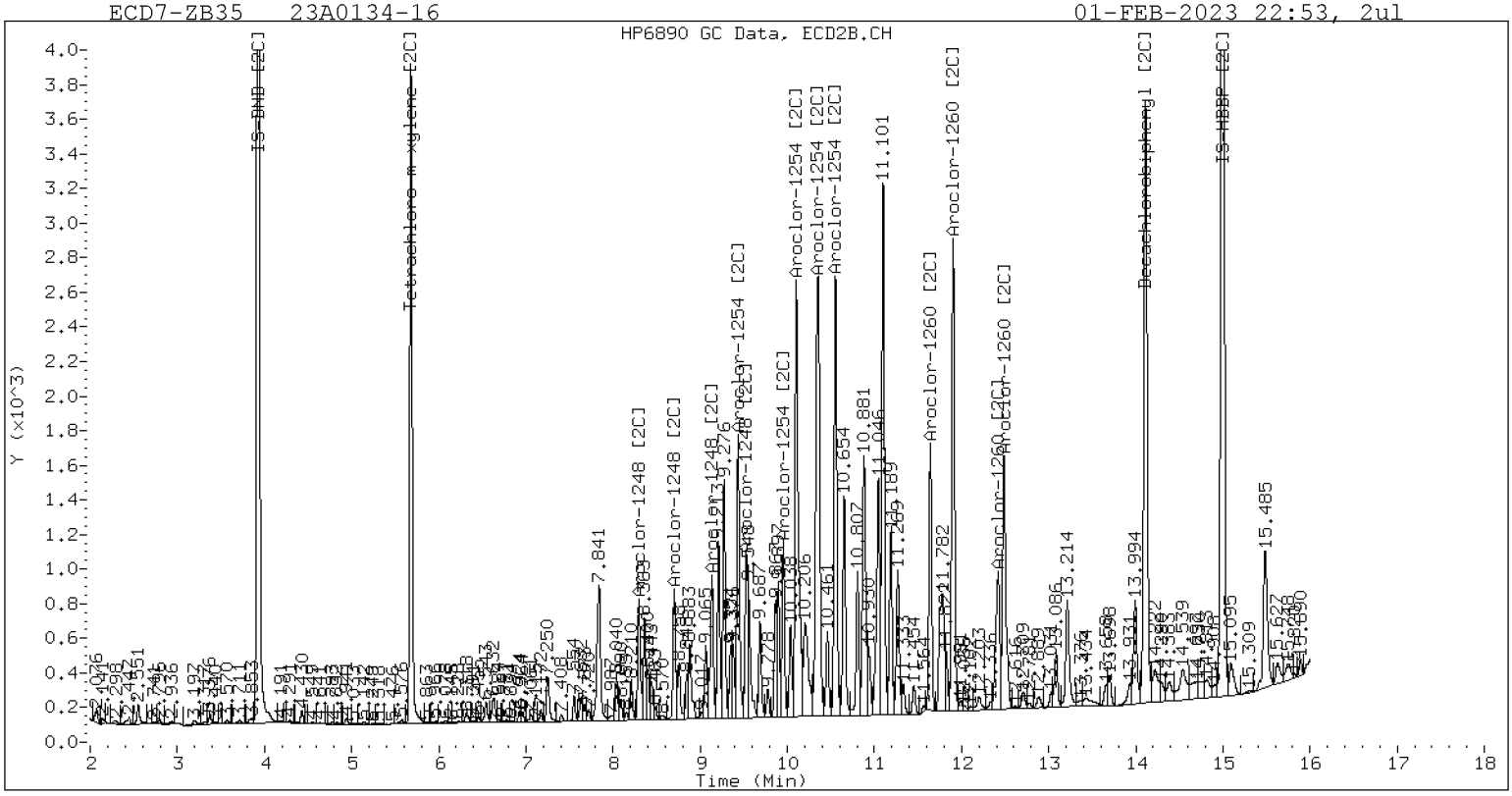
PCB Dual Column Chromatograms

ECD7-ZB5 23A0134-16 01-FEB-2023 22:53, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0134-16 01-FEB-2023 22:53, 2ul

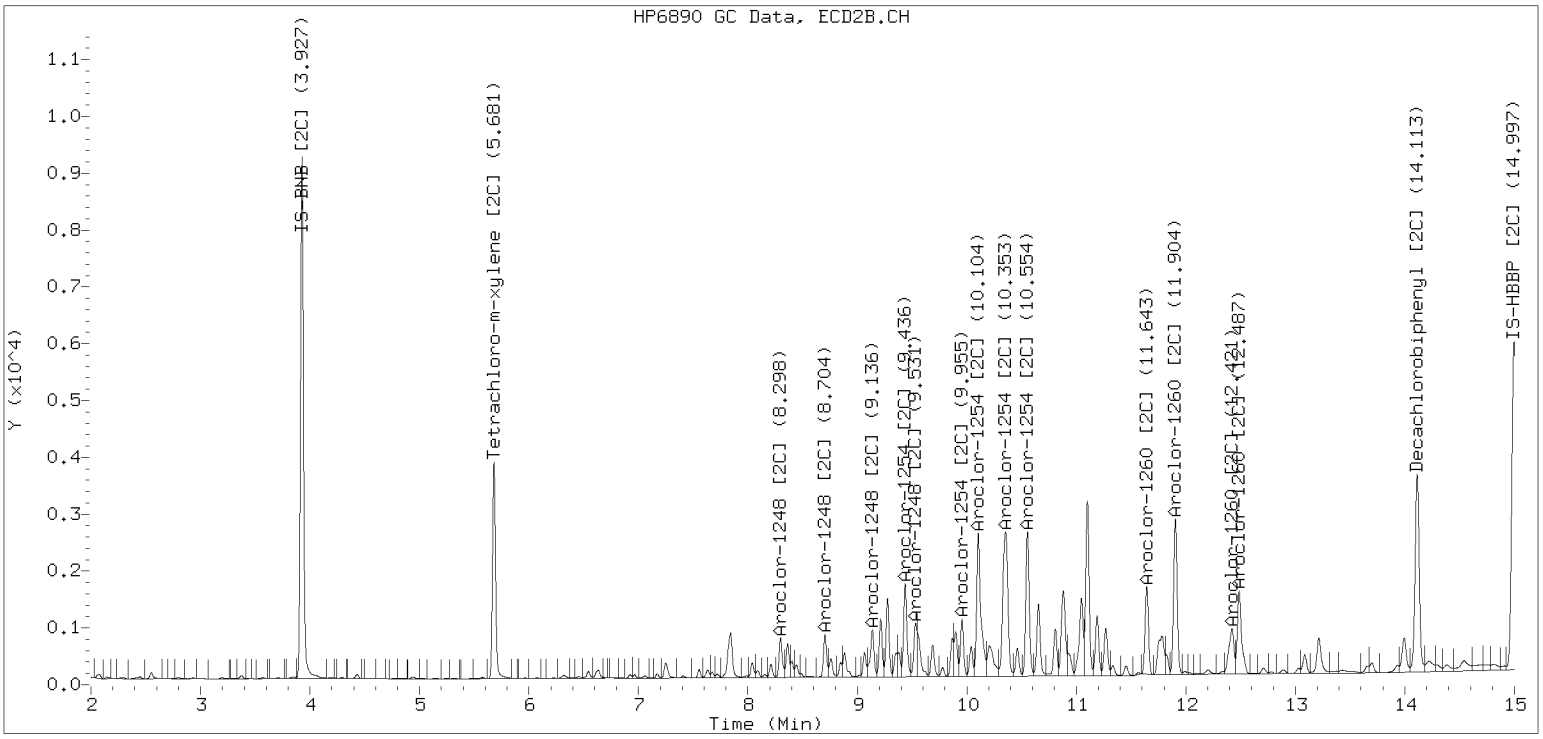


ZB-35 Manual Integration: YES

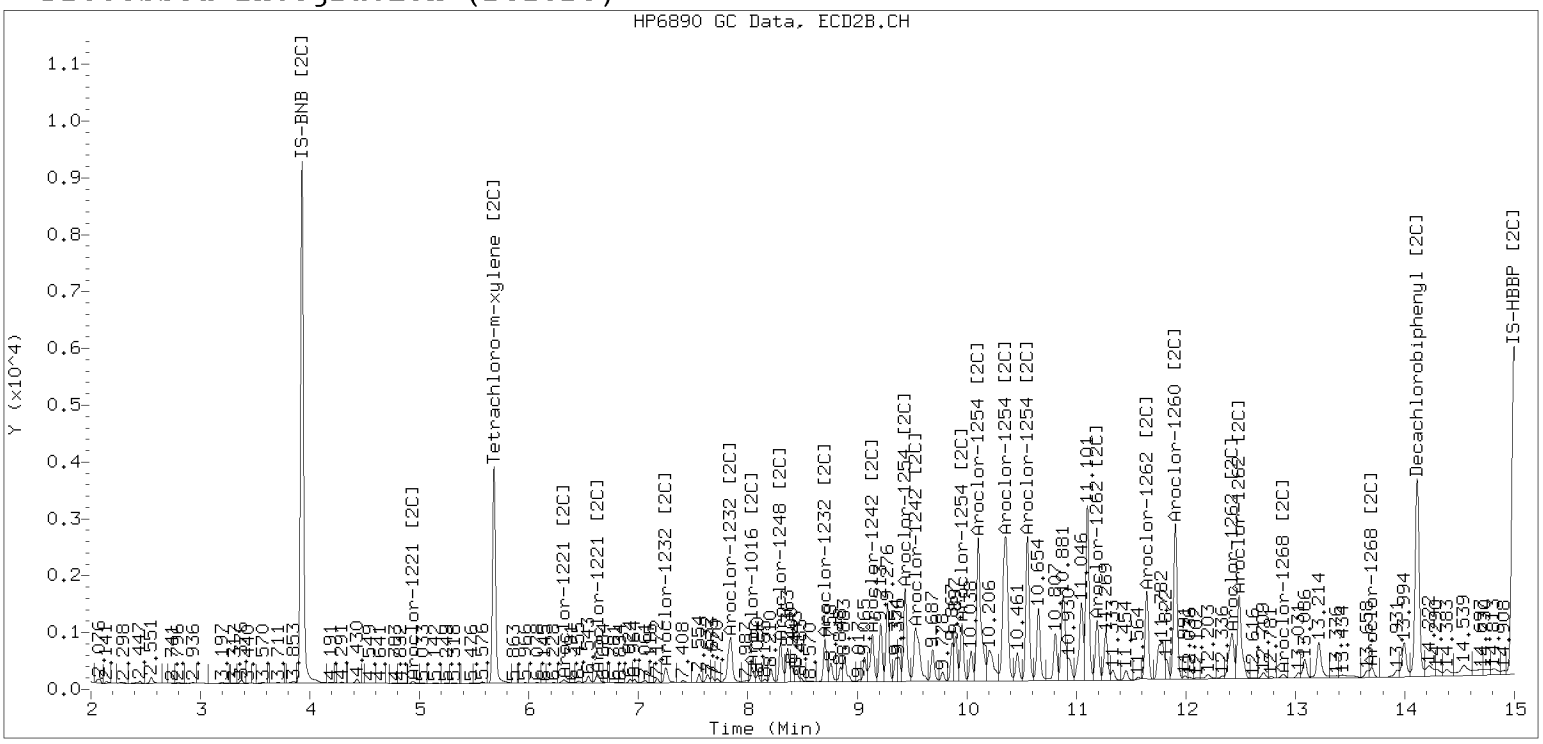
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230201.b/230201.b/02012333ECD7.D Injection Date: 01-FEB-2023

Manual Integration (After)



Processed Integration (Before)



PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Batch: BLA0412 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1205	23A0134-01	02012316ECD7.D	01/20/23 13:50	
LDW23-SS1188	23A0134-02	02012317ECD7.D	01/20/23 13:50	
LDW23-SS1179	23A0134-03	02022304ECD7.D	01/20/23 13:50	
LDW23-SS1242	23A0134-04	02012319ECD7.D	01/20/23 13:50	
LDW23-SS1173	23A0134-05	02012320ECD7.D	01/20/23 13:50	
LDW23-SS1160	23A0134-06	02012321ECD7.D	01/20/23 13:50	
LDW23-SS1152	23A0134-07	02012322ECD7.D	01/20/23 13:50	
LDW23-SS1131	23A0134-08	02012323ECD7.D	01/20/23 13:50	
LDW23-SS1129	23A0134-09	02012324ECD7.D	01/20/23 13:50	
LDW23-SS1124	23A0134-10	02012325ECD7.D	01/20/23 13:50	
LDW23-SS1123	23A0134-11	02012328ECD7.D	01/20/23 13:50	
LDW23-SS1116	23A0134-12	02012329ECD7.D	01/20/23 13:50	
LDW23-IT1210	23A0134-13	02022305ECD7.D	01/20/23 13:50	
LDW23-IT1194	23A0134-14	02012331ECD7.D	01/20/23 13:50	
LDW23-SC1249	23A0134-15	02012332ECD7.D	01/20/23 13:50	
LDW23-SC1077	23A0134-16	02012333ECD7.D	01/20/23 13:50	
Blank	BLA0412-BLK1	02012310ECD7.D	01/20/23 13:50	
LCS	BLA0412-BS1	02012311ECD7.D	01/20/23 13:50	
LCS Dup	BLA0412-BSD1	02012312ECD7.D	01/20/23 13:50	
LDW23-SC1077	BLA0412-MS1	02012334ECD7.D	01/20/23 13:50	
LDW23-SC1077	BLA0412-MSD1	02012335ECD7.D	01/20/23 13:50	
Reference	BLA0412-SRM1	02012313ECD7.D	01/20/23 13:50	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0412

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:7 Aroclors)

Matrix: Solid **Date Prepared:** 01/20/23 **Balance ID:** B1464/2614 **Set Up By:** CD 1/17/23

WO Comments
23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
QLS 5	QLS Spike

Analysis: 8082A PCB Solid 4

Lab Number & Container	% Solids	Initial (g) Target Dry: 12.5 (Wet) Actual	(REQ) Acid C/U (5mL)	(REQ) Sulfur C/U (5mL) 1 2 3	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0134-01 C	57.4	(21.79) 21.79	5mL	5mL	2mL	2.5	1.0	
23A0134-02 C	46.6	(26.85) 26.87	5mL	5mL	2mL	2.5	1.0	
23A0134-03 C	47.3	(26.41) 26.42	5mL	5mL	2mL	2.5	1.0	
23A0134-04 C	46.4	(26.96) 26.97	5mL	5mL	2mL	2.5	1.0	
23A0134-05 C	47.2	(26.51) 26.55	5mL	5mL	2mL	2.5	1.0	
23A0134-06 C	40.3	(31.04) 31.10	5mL	5mL	2mL	2.5	1.0	
23A0134-07 C	43.7	(28.63) 28.65	5mL	5mL	2mL	2.5	1.0	
23A0134-08 C	54.7	(22.84) 22.84	5mL	5mL	2mL	2.5	1.0	
23A0134-09 C	48.0	(26.02) 26.06	5mL	5mL	2mL	2.5	1.0	
23A0134-10 C	48.5	(25.80) 25.80	5mL	5mL	2mL	2.5	1.0	
23A0134-11 C	52.0	(24.06) 24.07	5mL	5mL	2mL	2.5	1.0	
23A0134-12 C	58.8	(21.26) 21.28	5mL	5mL	2mL	2.5	1.0	
23A0134-13 C	55.5	(22.53) 22.60	5mL	5mL	2mL	2.5	1.0	
23A0134-14 C	73.1	(17.11) 17.13	5mL	5mL	2mL	2.5	1.0	
23A0134-15 C	50.1	(24.96) 24.96	5mL	5mL	2mL	2.5	1.0	
23A0134-16 B	76.8	(16.27) 16.29	5mL	5mL	2mL	2.5	1.0	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 12.5 (Wet) Actual	(REQ) Acid C/U (5mL)	(REQ) Sulfur C/U (5mL) 1 2 3	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0412-BLK1	100.0	(12.50) 12.54	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLA0412-BS1	100.0	(12.50) 12.56	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLA0412-BSD1	100.0	(12.50) 12.54	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLA0412-MS1	76.8	(16.27) 16.27	5mL	5mL	2mL	2.5	1.0	Use 23A0134-16
BLA0412-MSD1	76.8	(16.27) 16.27	5mL	5mL	2mL	2.5	1.0	Use 23A0134-16
BLA0412-SRM1	100.0	~~(12.50)~~ (2.50) 2.50 +1g DI WATER	5mL	5mL	2mL	2.5	1.0	Use ~~K010816~~ K011478 CD 1/20/23

CD 01/20/23 — Client ID verified By — Date

LJ 2/1/23 — Preparation Reviewed By — Date

01/20/23 13:50 — Extraction Date and Time

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0412

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:7 Aroclors)

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps

Microwave
1 (2) 3
CT 01/24/23
Analyst/Date

KD
100°C
Hexane Exchange
(2 X 20 mL)
(1) 2 3 (4) (5) 6
TWC 1/27/23
Analyst/Date

TurboVap
Pre Cleanups
1 2 3 (4) 5
LJ 1/31/23
Analyst/Date

TurboVap
Post Cleanups
1 2 (3) 4 5
2/1/31
Analyst/Date

Vialing
2/1/31
Analyst/Date

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: CT/CV Date: 01/24/23	
Neutral Glass Wool	L000350
1:1 Hexane/Acetone	L000646
Hexane	K000310
Anhydrous Sodium Sulfate	L000453
KD Analyst: TWC Date: 1/27/23	
Anhydrous Sodium Sulfate	N/A
Hexane	K011373
Vialing Analyst: LJ Date: 2/1/31	
Hexane	K011373
Concentrated Sulfuric Acid	L001033
Silica Gel (SPE) Darts	K011573
Sodium Sulfite	K010363
Tetrabutylammonium hydrogensulfate (TBAS)	L000840

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 2µg/mL	N K011752 (V) Exp Date: 1/23/2023	50µL	CT	
Spike 20µg/mL	1 K008150 (V) Exp Date: 3/5/2023	63µL	CT	

MANUALLY ENTER EXPIRATION DATES!

(V) indicates a virtual standard combining two or more physical standards. In these cases the Standard ID refers to the virtual standard, not the parent standards.

If a Standard ID is missing, but should be present, check the standard definition in Element LIMS to be sure Standard Info 6 has the correct letter or number designator matching the vial designator inthe Standard ID column. If it is correct, check the batch and bench sheet in Element LIMS to be sure the correct standards are selected for surrogate(s) and spike(s).

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0412

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:7 Aroclors)

WO Comments

23A0134: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh soil/sed into beakers-lightly dry with sodium sulfate. 2. Transfer to microwave vessel(s). Note: (do not fill vessels more than 2/3rd full. Some samples may require two vessels). 3. Add 1:1 Hexane/Acetone until the solvent layer is 3 inches above the soil layer after homogenization. 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-Re-homogenize while hot then cool vessels in R-05 15 minutes. Re-homogenize while cool. 7. Decant 1:1 Hex/Ace into Erlenmeyer flask with sodium sulfate in bottom and funnel with neutral glasswool plug. 8. Re-homogenize and rinse with 1:1 Hexane/Acetone. 9. Let cool and decant solvent then empty the soil into the funnel and rinse with Hexane. 10. KD on 100° bath. 11. Exchange (2 X with 20mL) Hexane. 12. TurboVap. 13. Clean-ups. 14. TurboVap. 15. Vial with Hexane. A. Need Total Solids Y / [N] B. Archive/Freeze [Y] N	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

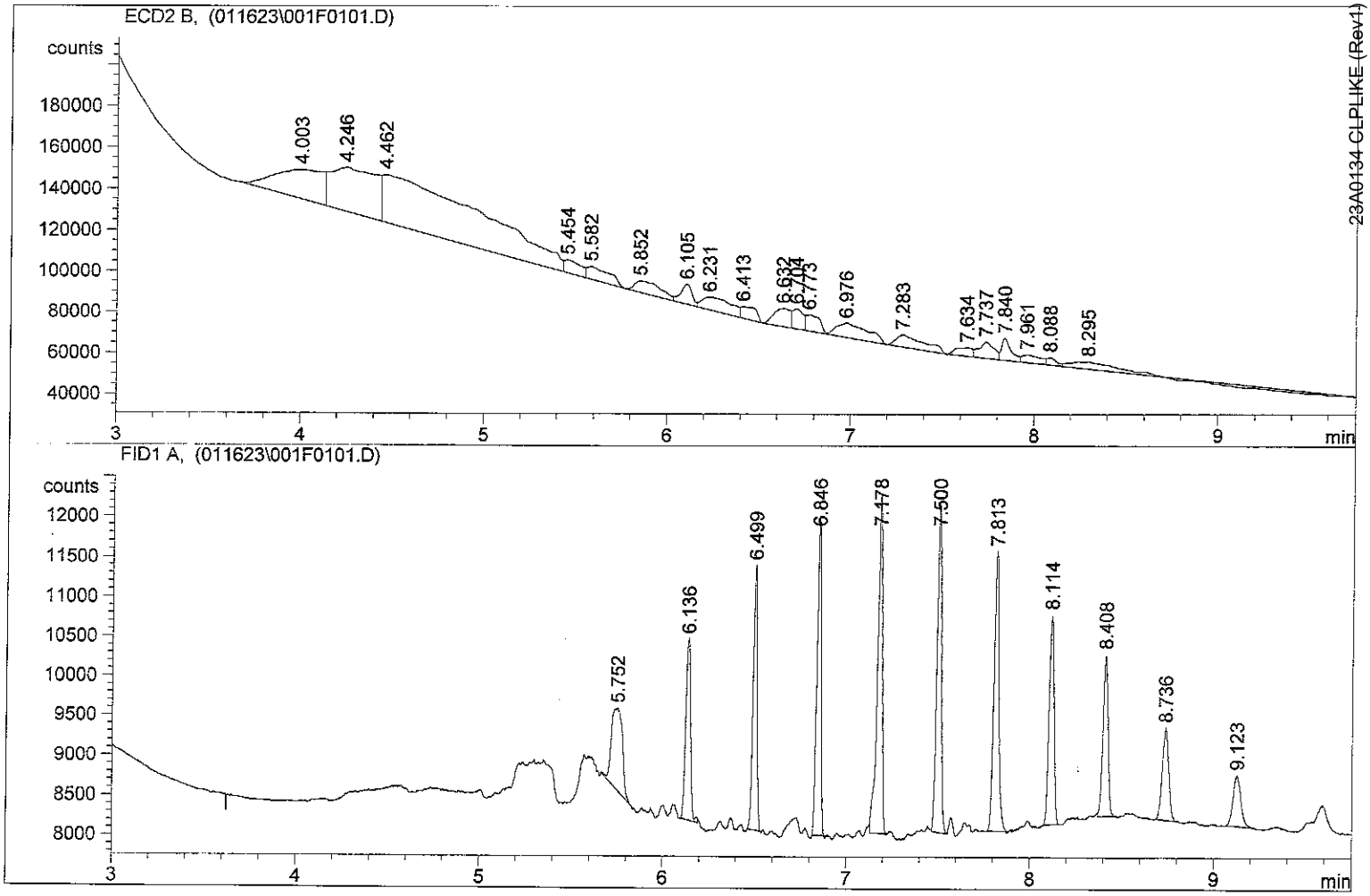
Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PCB Extraction Batch BLA0412

Total Solids Batch: BLA0362 Work Order(s): 23A0134 01-16

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-16	CR 1/16/23
☒ Standing Water Decanted (Not shared)= 01-16	CR 1/16/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen =01-16	CR 1/16/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	CR 1/16/23
☒ Multiple Jars Y / (N)	CR 1/16/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

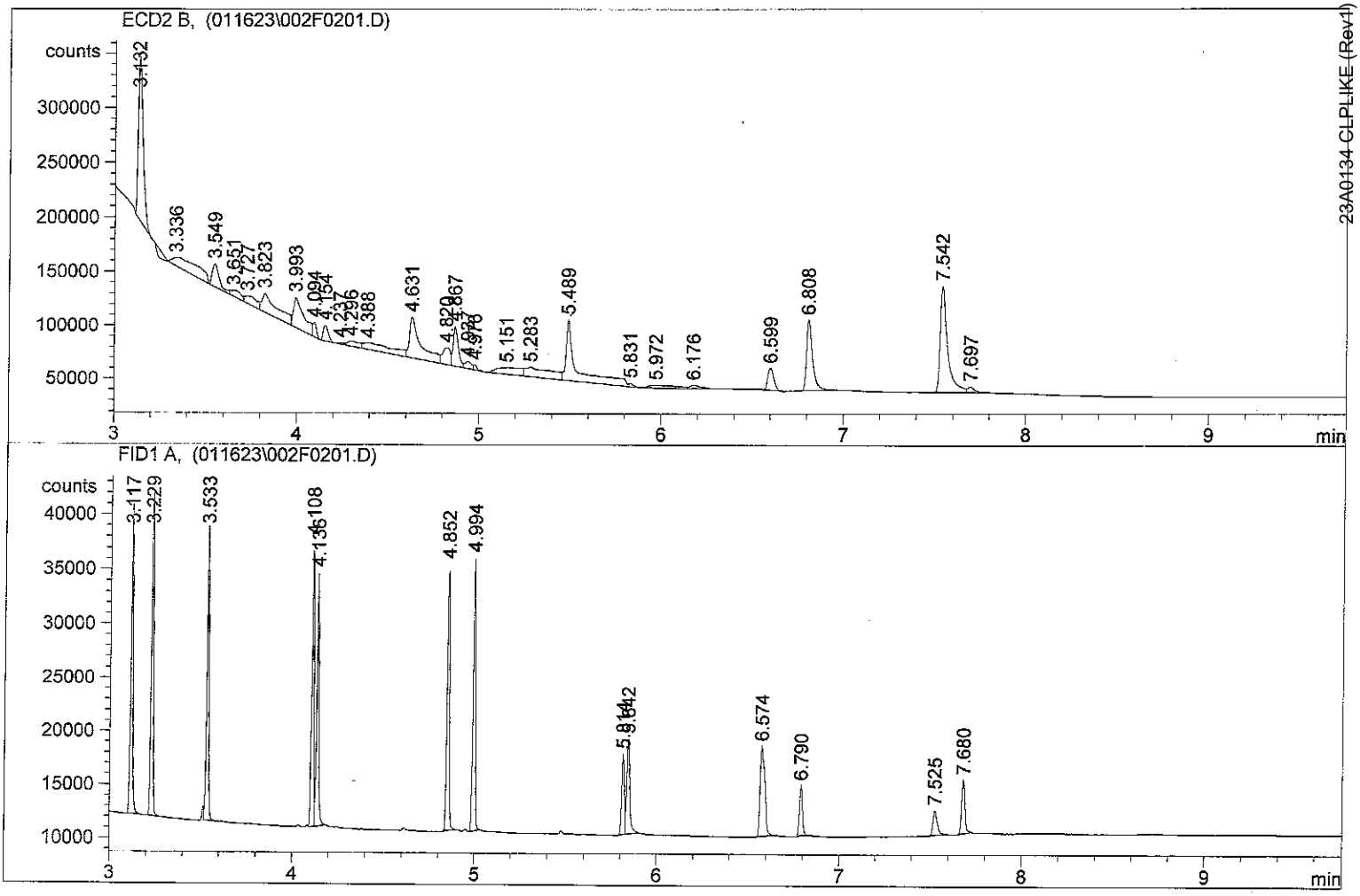
Injection Date	: 1/16/2023 5:10:50 PM	Seq. Line :	1
Sample Name	: DCM RINSE	Location :	Vial 1
Acq. Operator	: CRR	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011623.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

Injection Date : 1/16/2023 5:25:01 PM Seq. Line : 2
Sample Name : PNA STD 10PPM Location : Vial 2
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

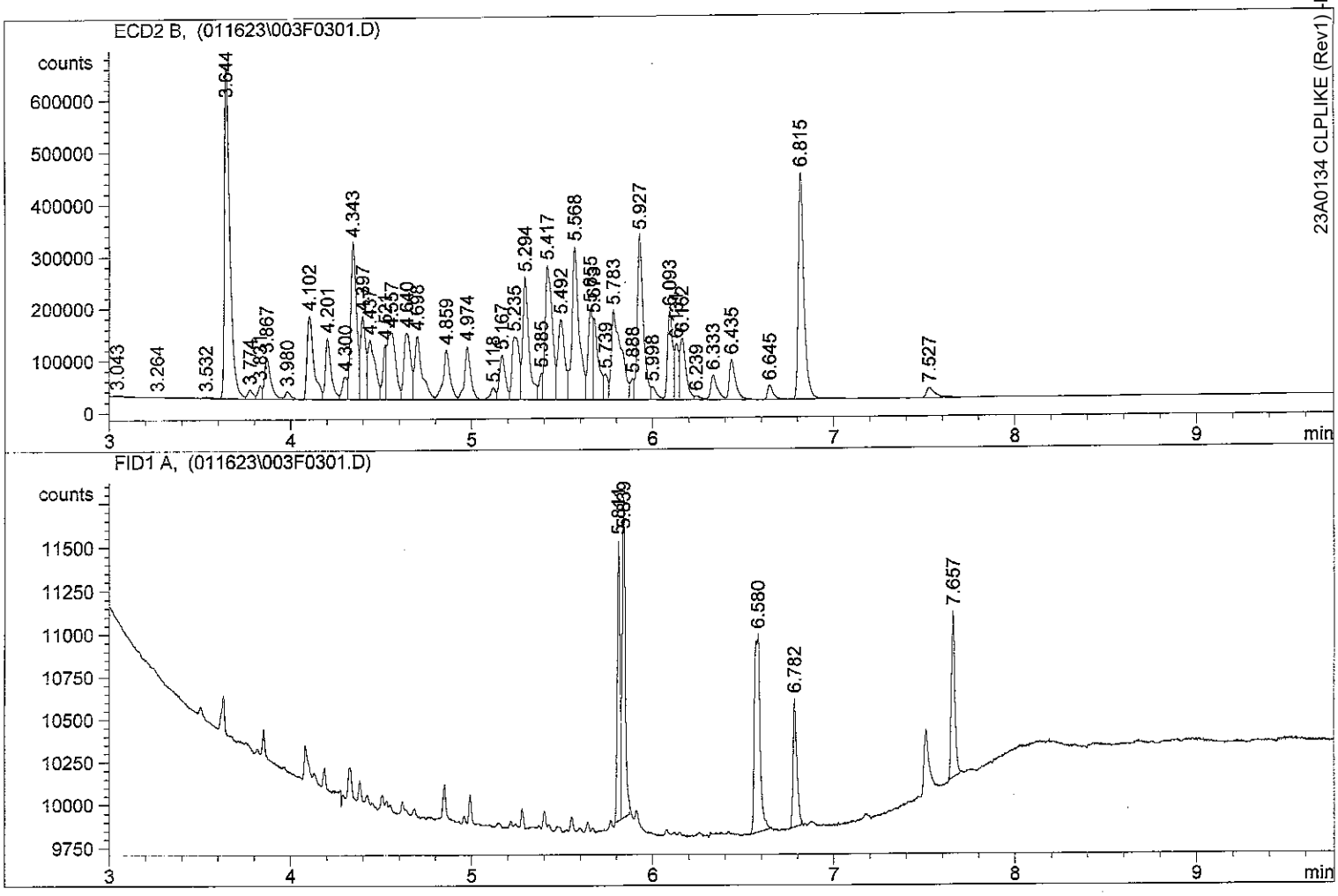


*** End of Report ***

Injection Date : 1/16/2023 5:39:24 PM
Sample Name : AR1660 1PPM
Acq. Operator : CRR

Seq. Line : 3
Location : Vial 3
Inj : 1
Inj Volume : 1 µl

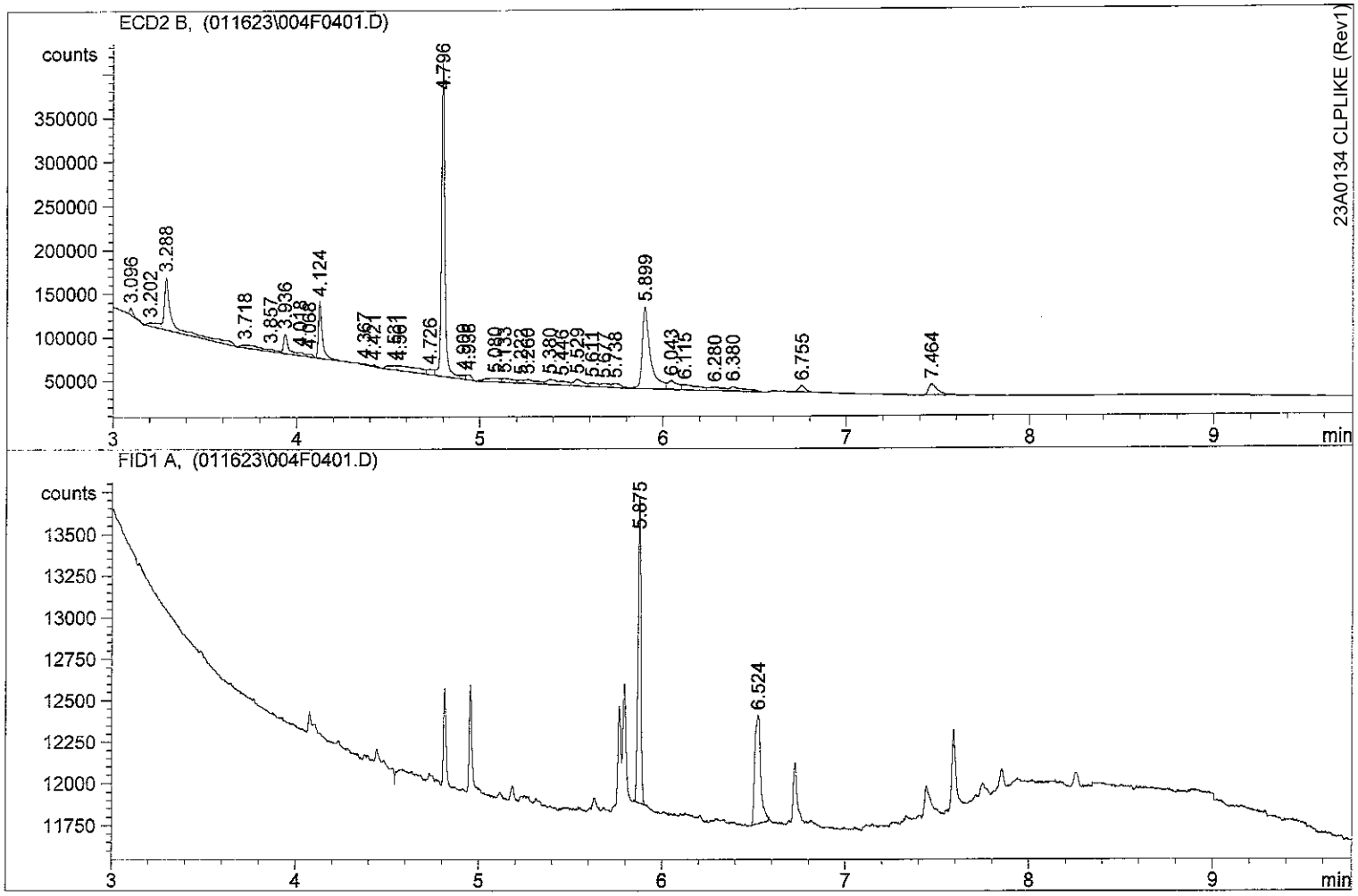
Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date : 1/16/2023 5:54:33 PM Seq. Line : 4
Sample Name : 23A0134 01 Location : Vial 4
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

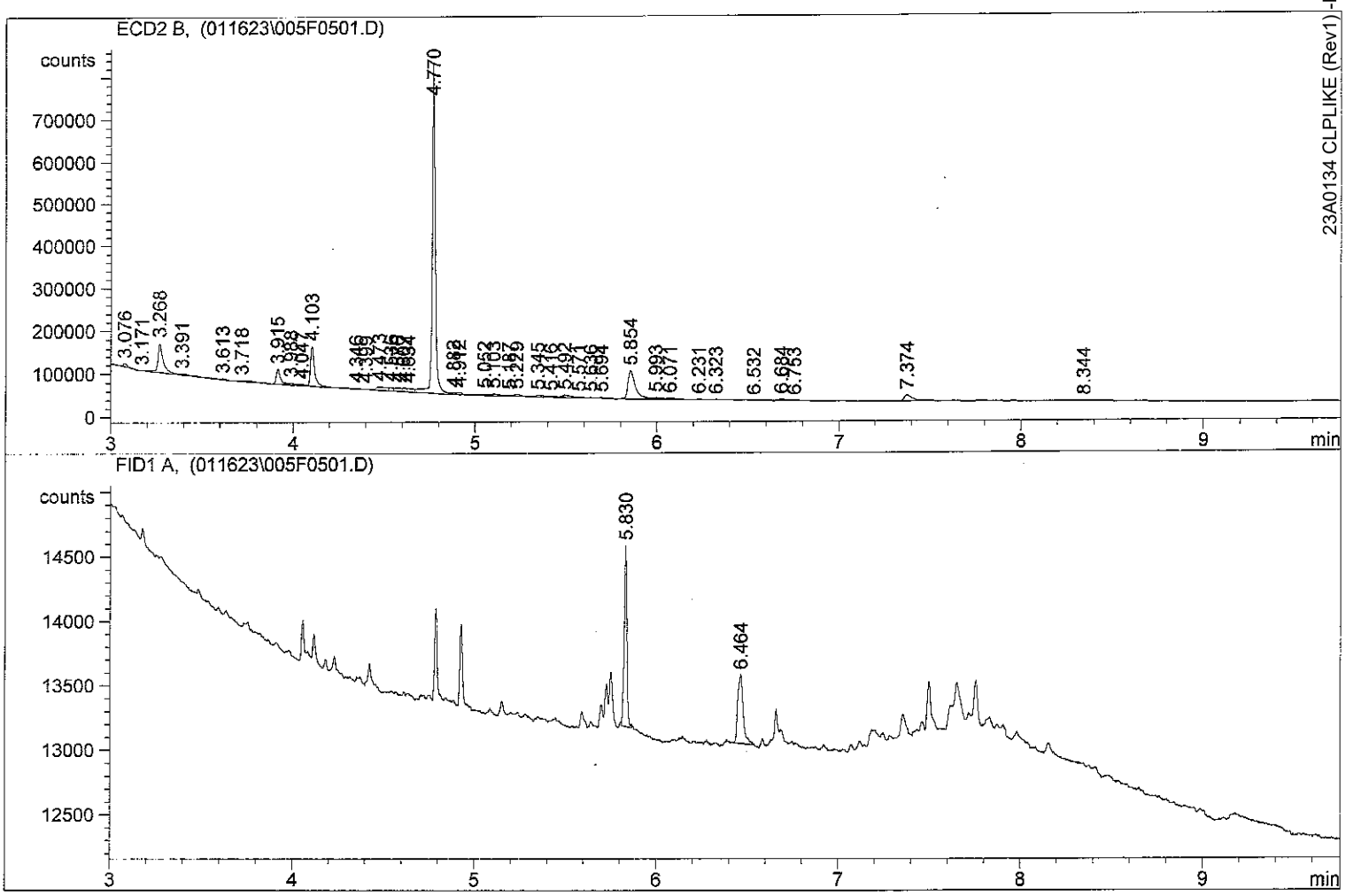


*** End of Report ***

Injection Date : 1/16/2023 6:08:30 PM
Sample Name : 23A0134 02
Acq. Operator : CRR

Seq. Line : 5
Location : Vial 5
Inj : 1
Inj Volume : 1 µl

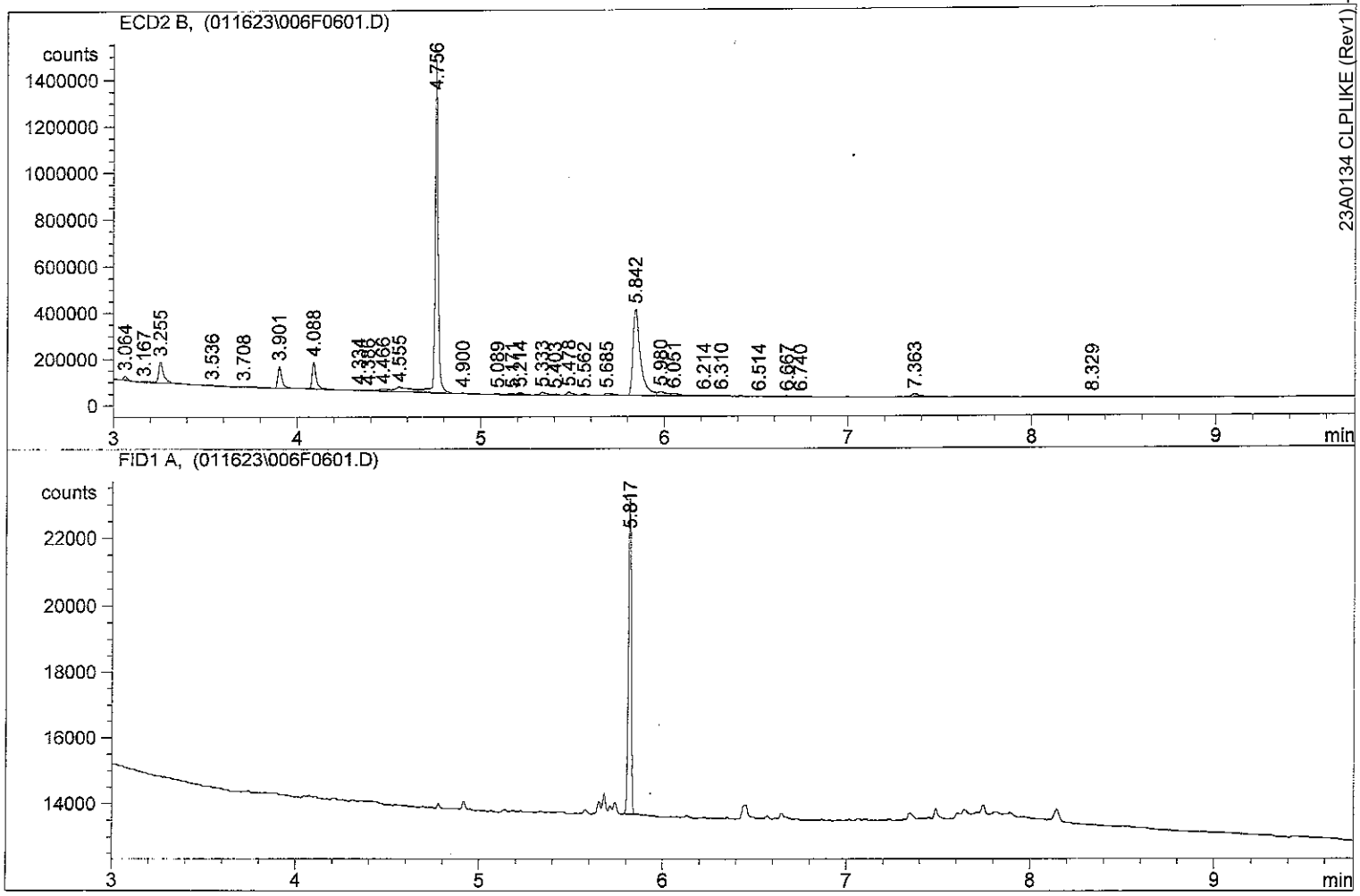
Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date : 1/16/2023 6:23:02 PM Seq. Line : 6
Sample Name : 23A0134 03 Location : Vial 6
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

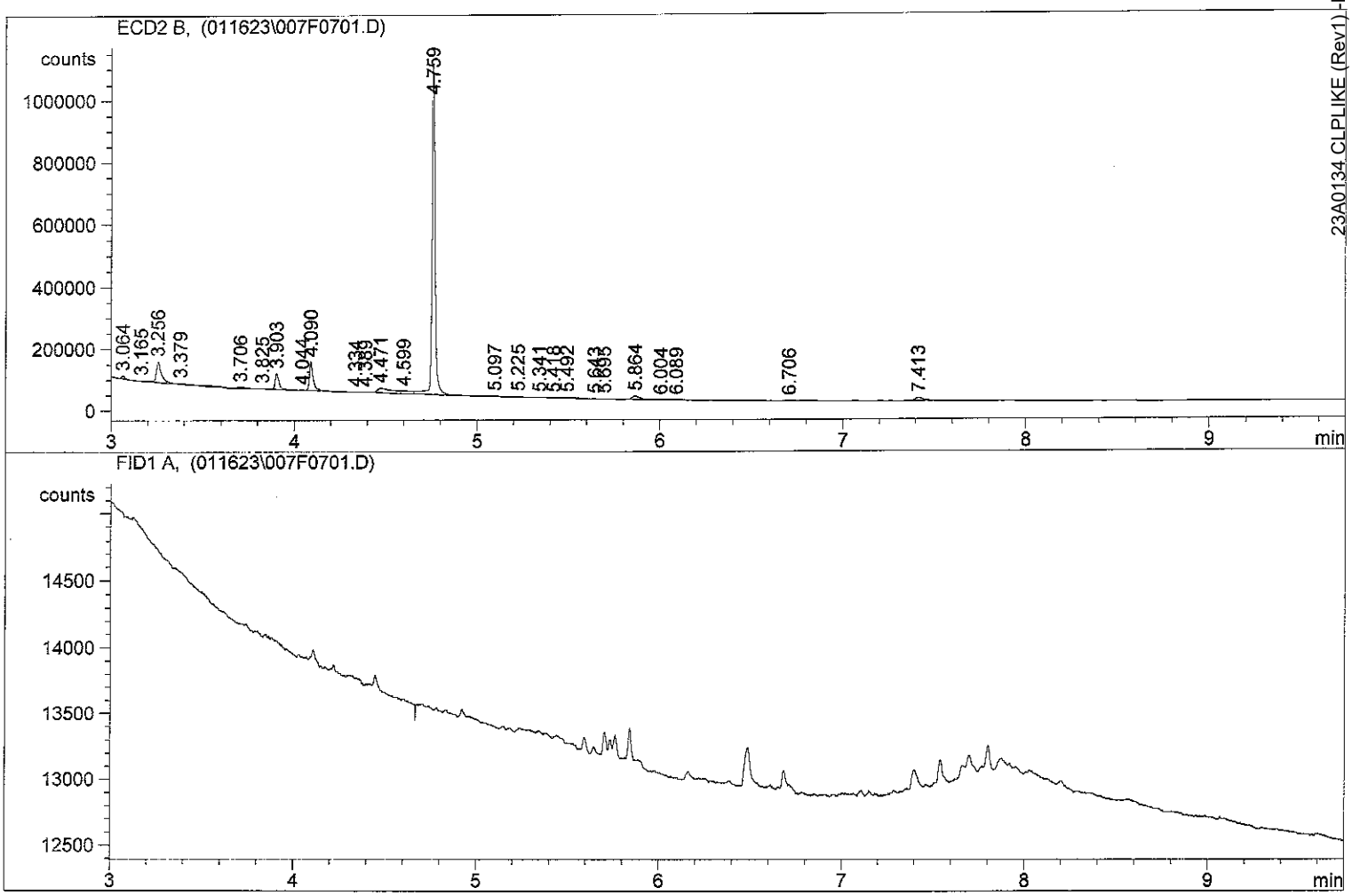
Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date : 1/16/2023 6:36:44 PM Seq. Line : 7
Sample Name : 23A0134 04 Location : Vial 7
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

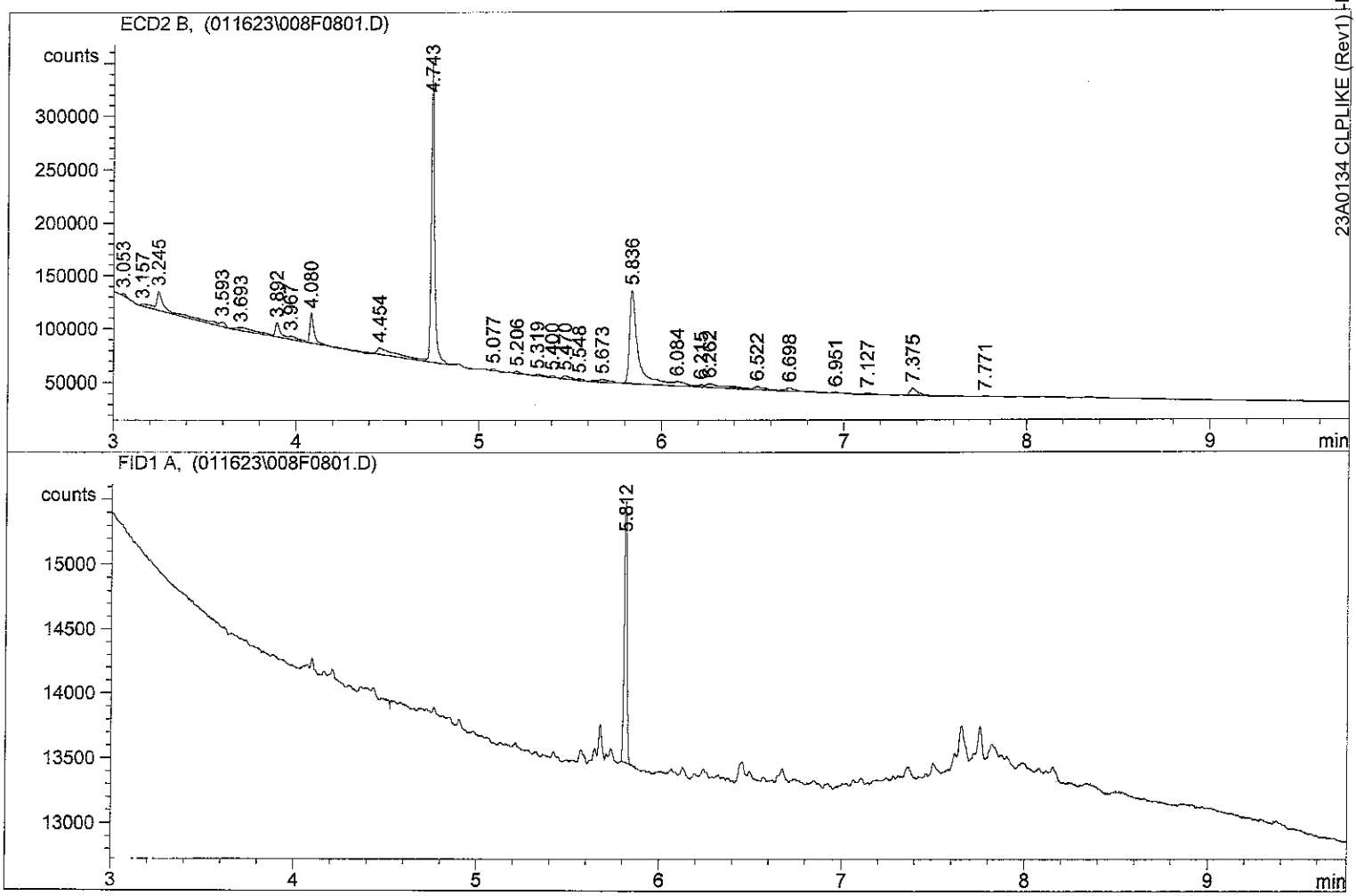
Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date : 1/16/2023 6:54:55 PM Seq. Line : 8
Sample Name : 23A0134 05 Location : Vial 8
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

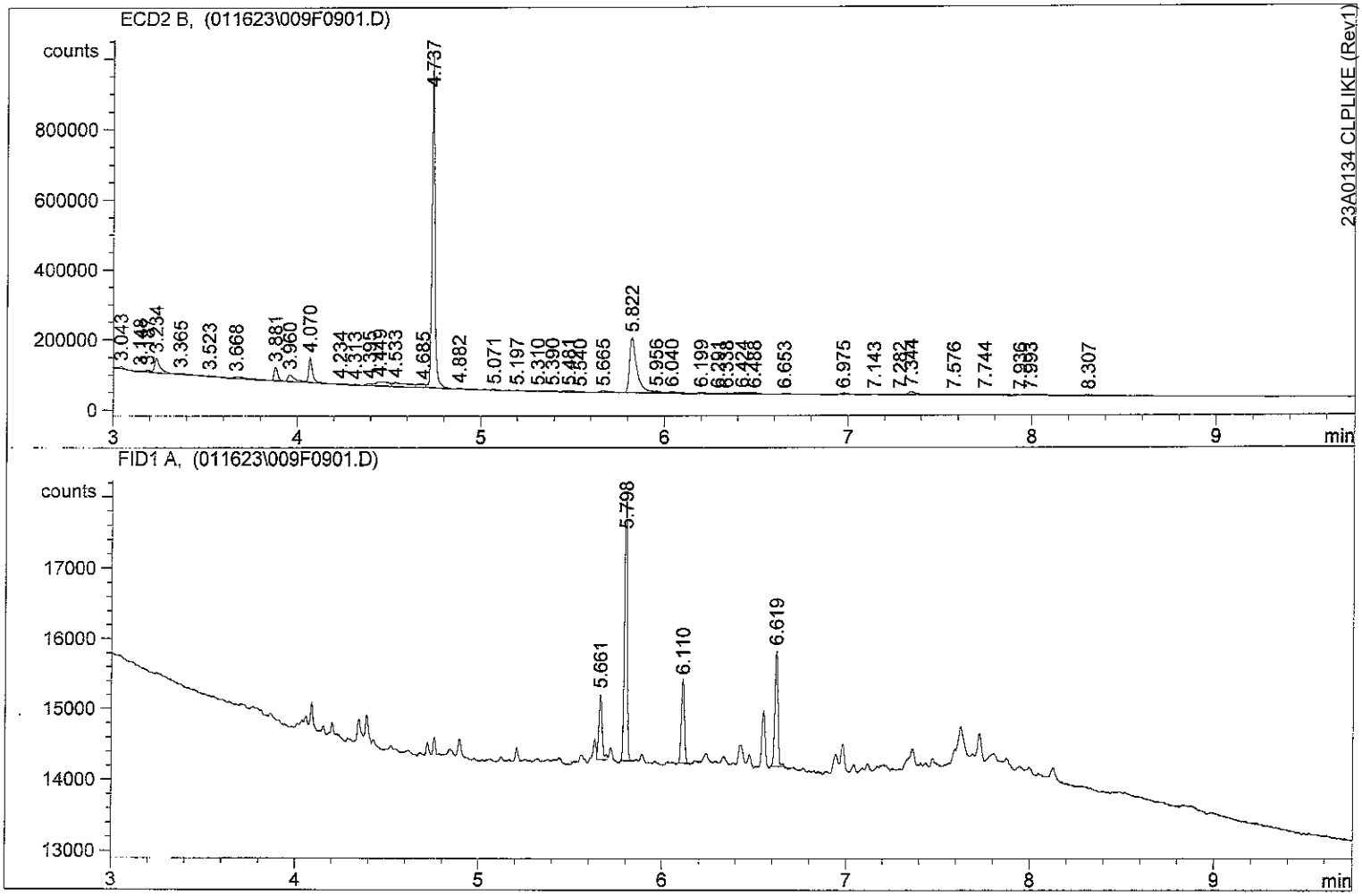
Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date : 1/16/2023 7:08:51 PM Seq. Line : 9
Sample Name : 23A0134 06 Location : Vial 9
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

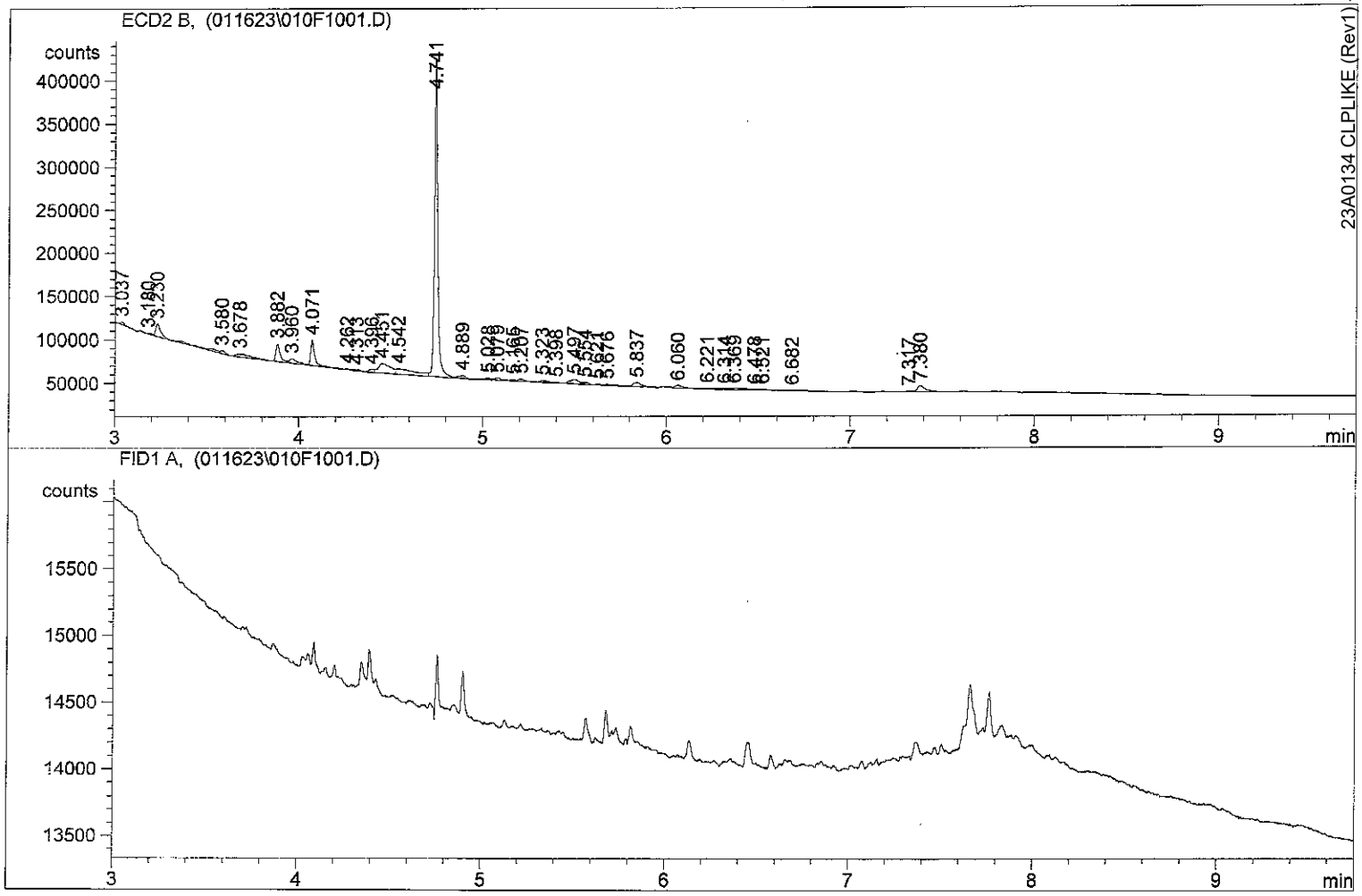
Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date : 1/16/2023 7:23:24 PM Seq. Line : 10
Sample Name : 23A0134 07 Location : Vial 10
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

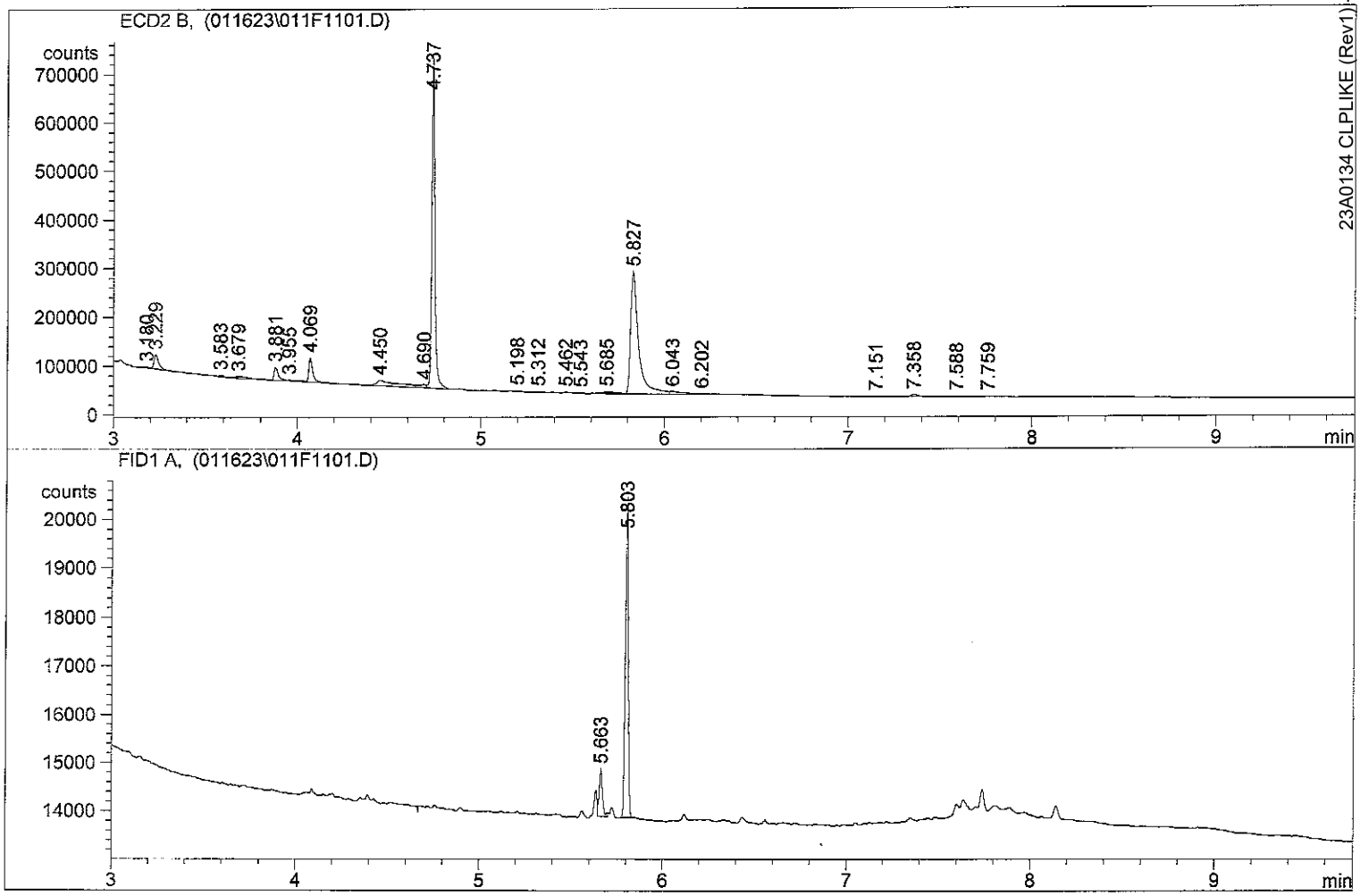
Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date : 1/16/2023 7:38:33 PM Seq. Line : 11
Sample Name : 23A0134 08 Location : Vial 11
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

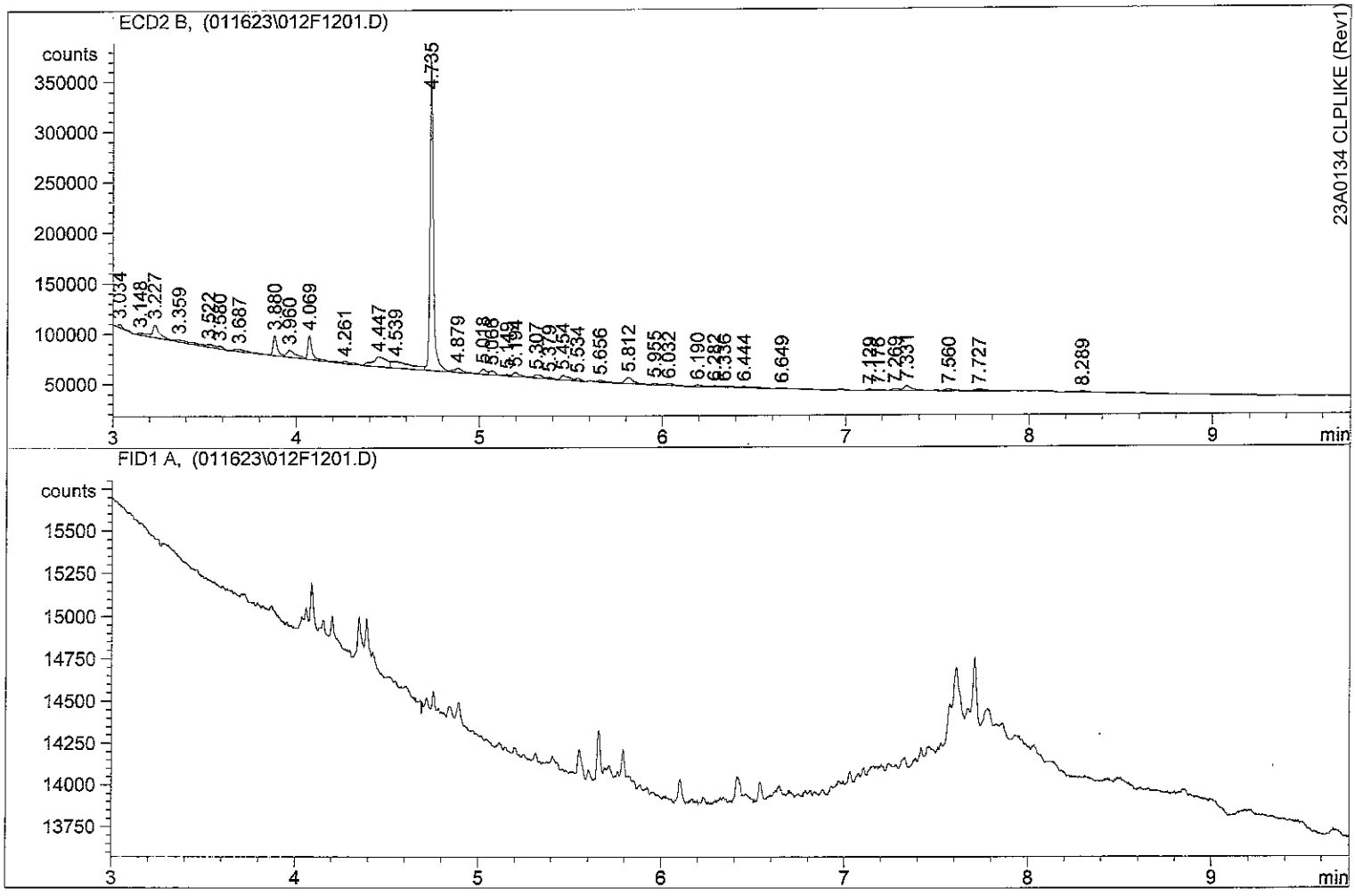
Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date : 1/16/2023 7:52:30 PM Seq. Line : 12
Sample Name : 23A0134 09 Location : Vial 12
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



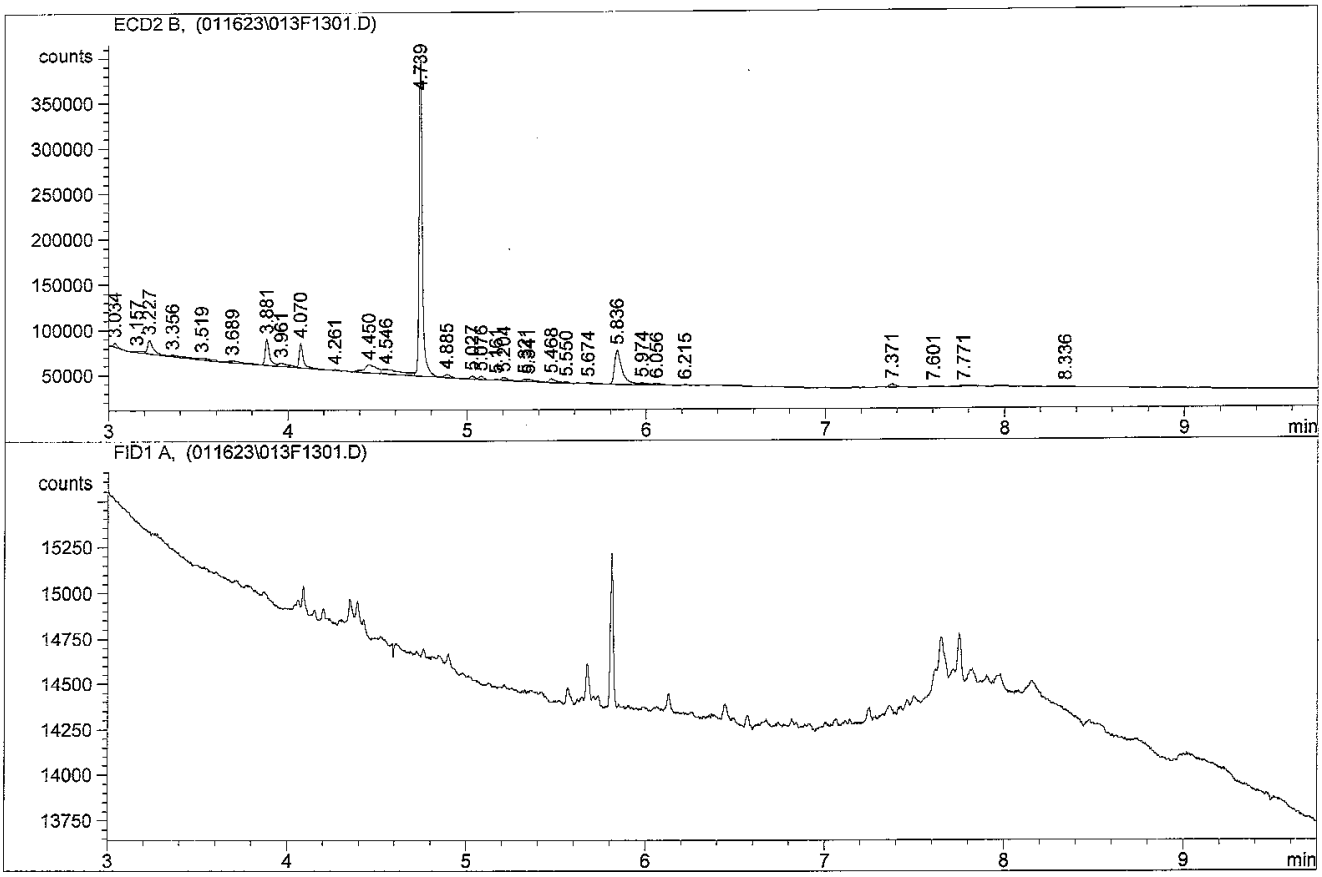
*** End of Report ***

Data File C:\HPCHEM\1\DATA\011623\014F1401.D Sample Name: 23A0134 11

Injection Date	: 1/16/2023 8:21:02 PM	Seq. Line	: 14
Sample Name	: 23A0134 11	Location	: Vial 14
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011623.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			

Data File C:\HPCHEM\1\DATA\011623\013F1301.D Sample Name: 23A0134 10

Injection Date	: 1/16/2023 8:07:05 PM	Seq. Line	: 13
Sample Name	: 23A0134 10	Location	: Vial 13
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\011623.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			

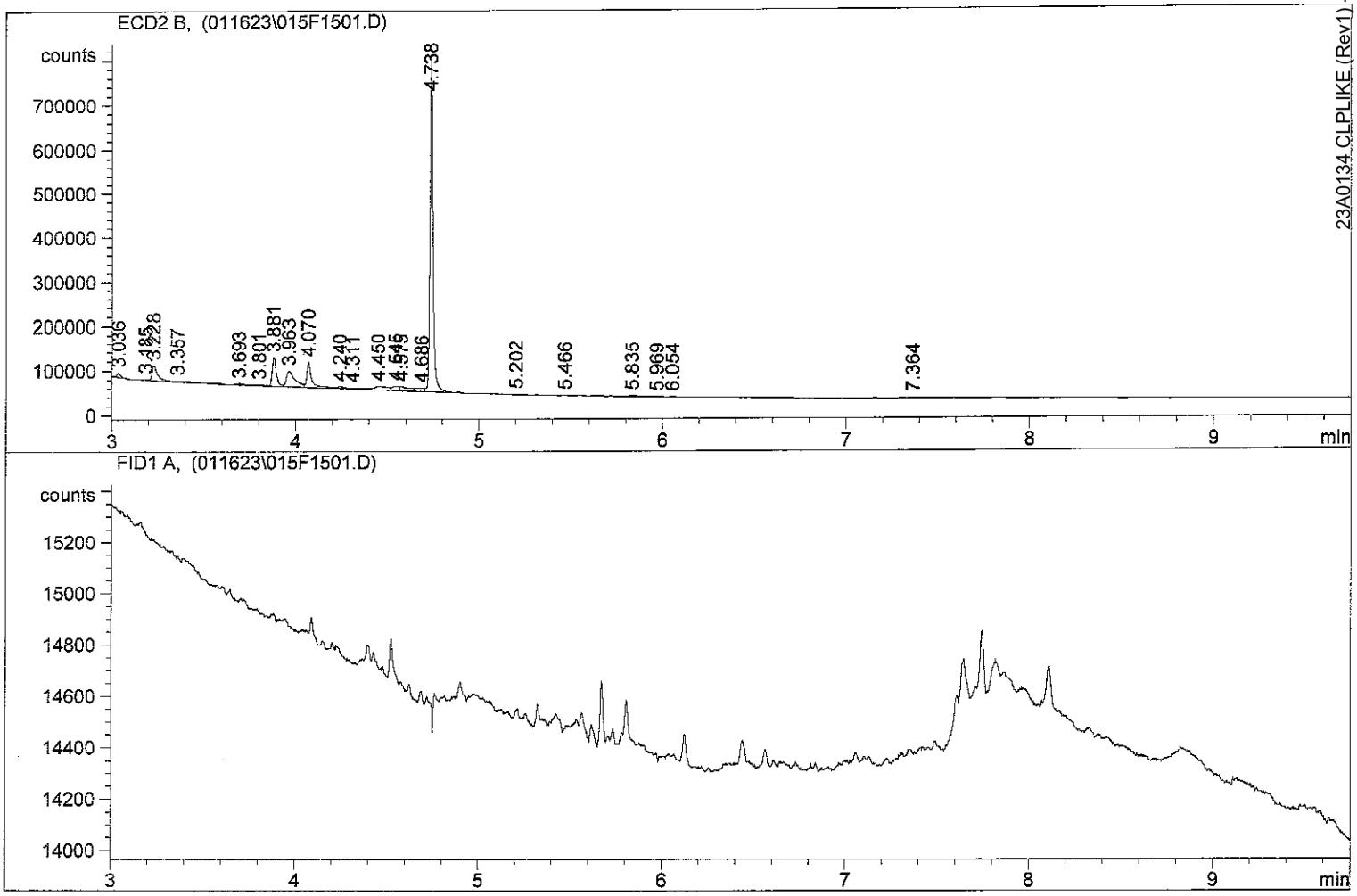


*** End of Report ***

Injection Date : 1/16/2023 8:35:34 PM
Sample Name : 23A0134 12
Acq. Operator : CRR

Seq. Line : 15
Location : Vial 15
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

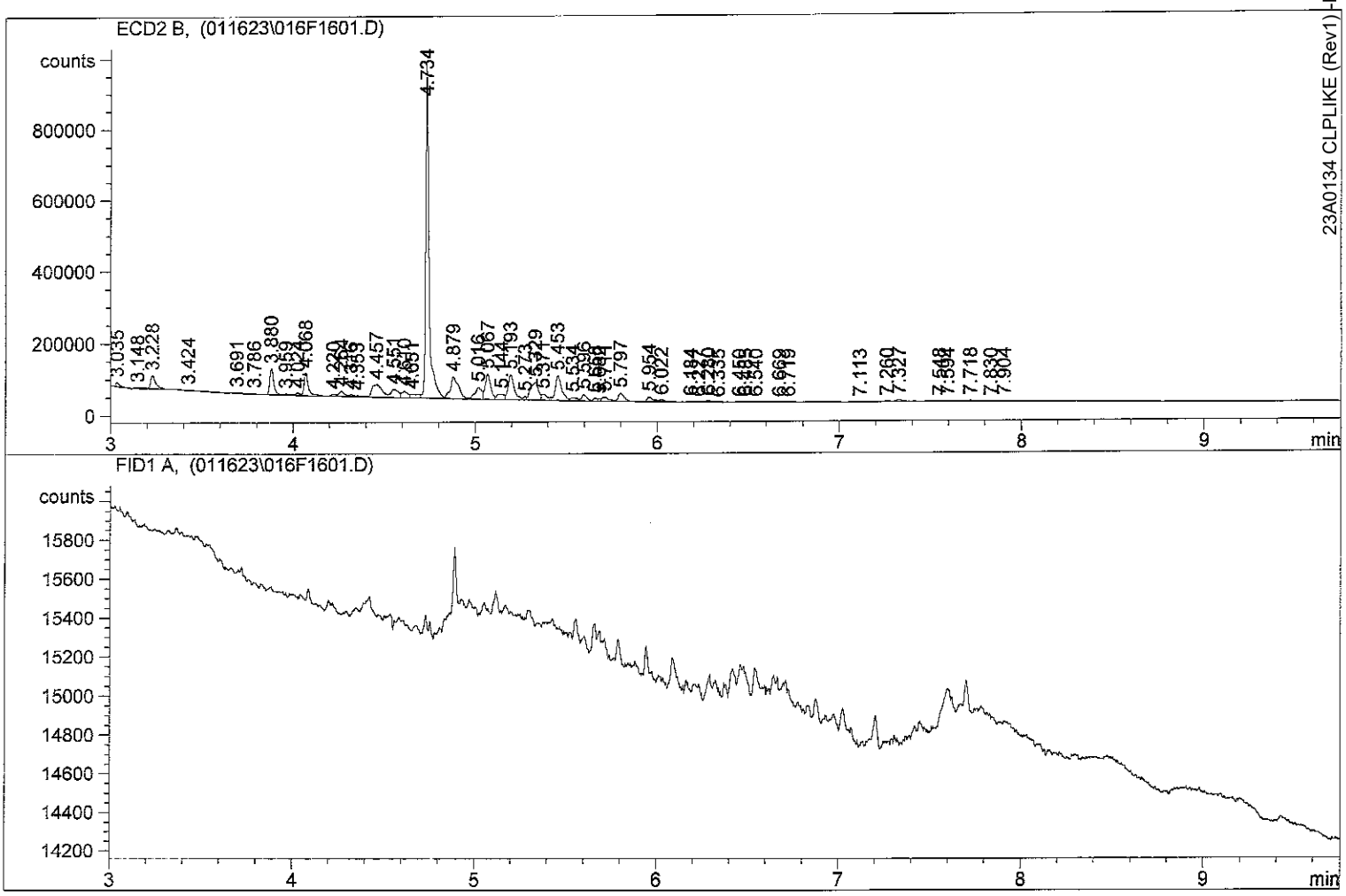


*** End of Report ***

Injection Date : 1/16/2023 8:49:32 PM
Sample Name : 23A0134 13
Acq. Operator : CRR

Seq. Line : 16
Location : Vial 16
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

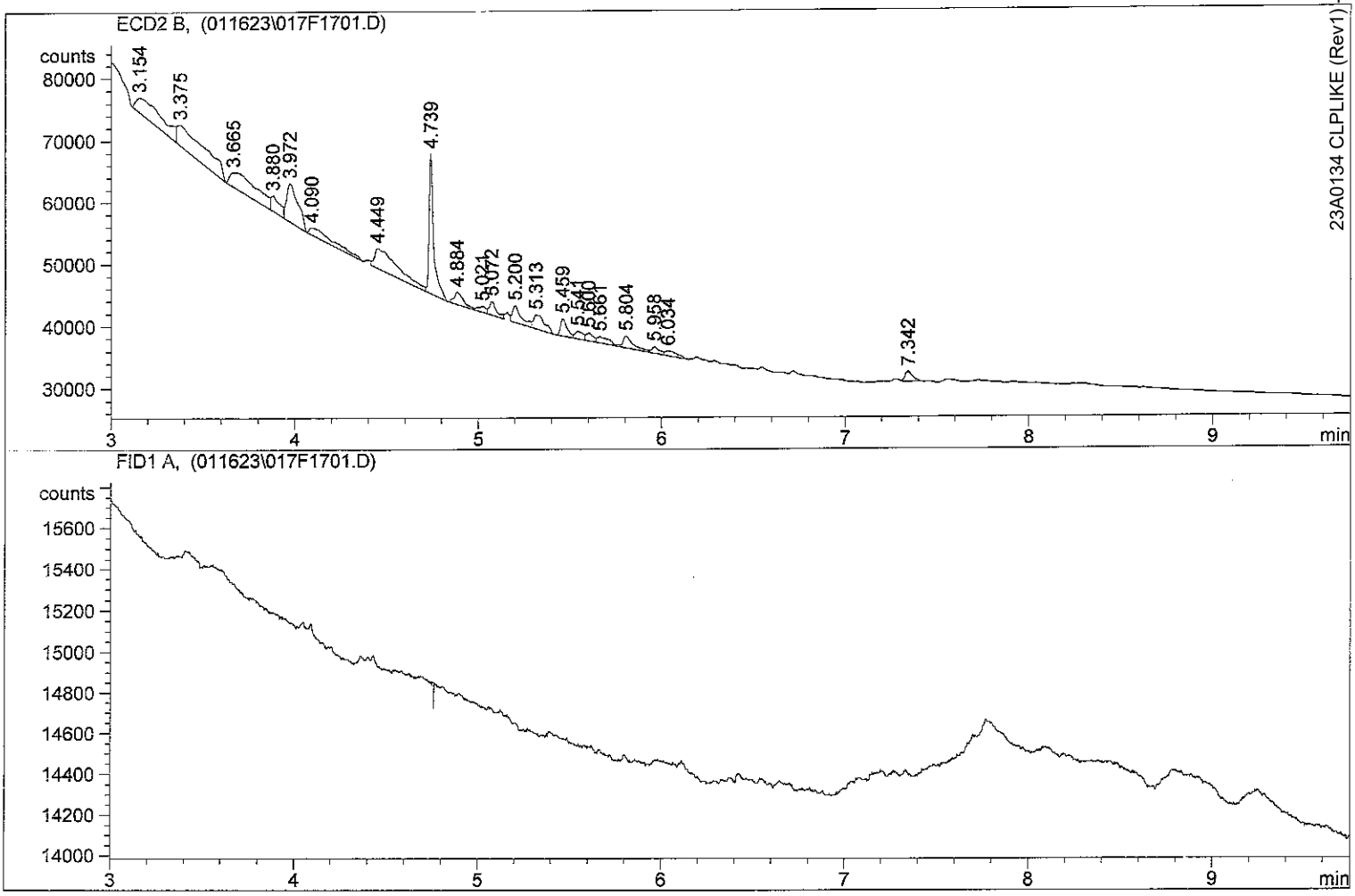


*** End of Report ***

Injection Date : 1/16/2023 9:04:05 PM
Sample Name : 23A0134 14
Acq. Operator : CRR

Seq. Line : 17
Location : Vial 17
Inj : 1
Inj Volume : 1 µl

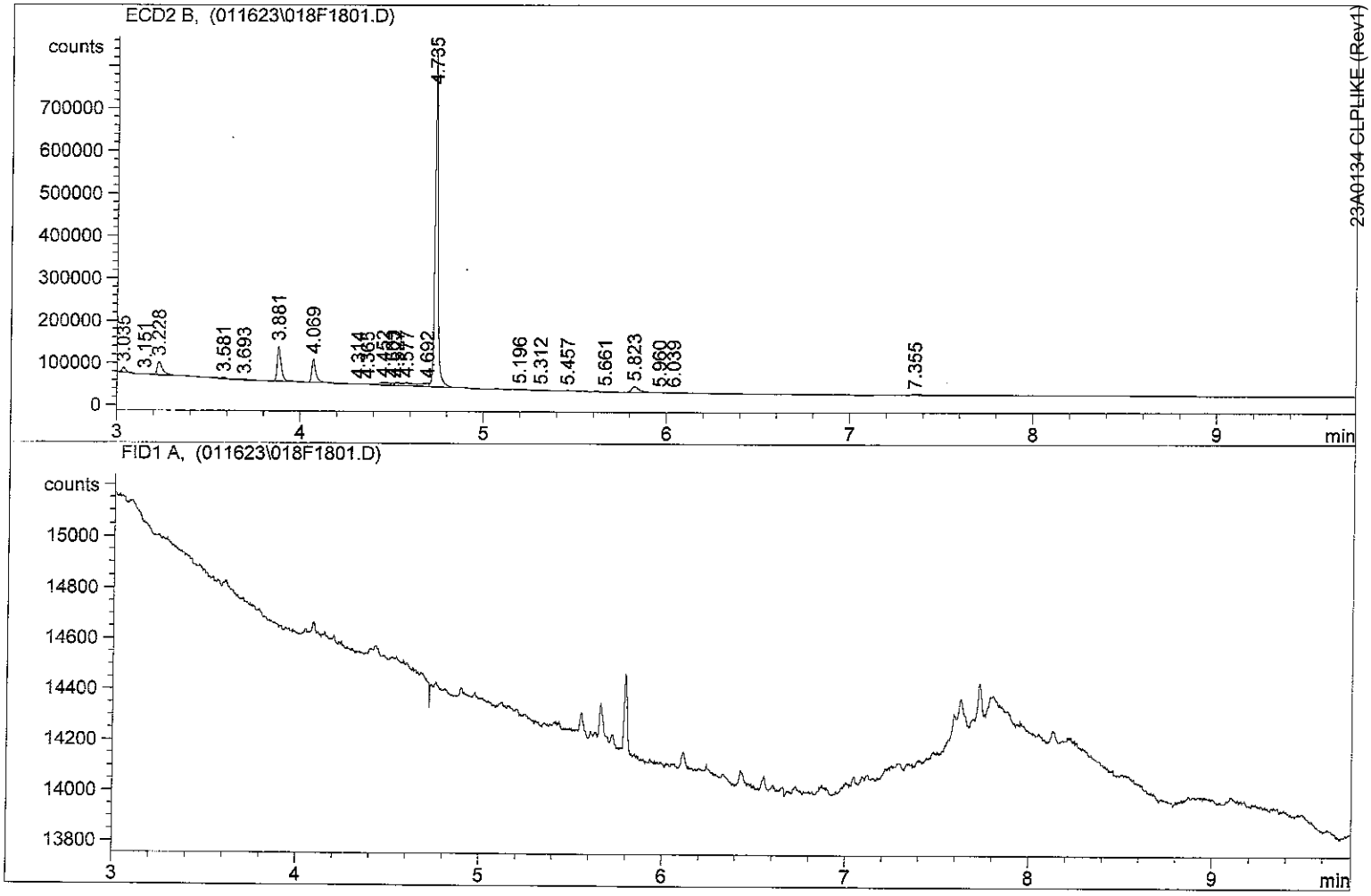
Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date : 1/16/2023 9:18:01 PM Seq. Line : 18
Sample Name : 23A0134 15 Location : Vial 18
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

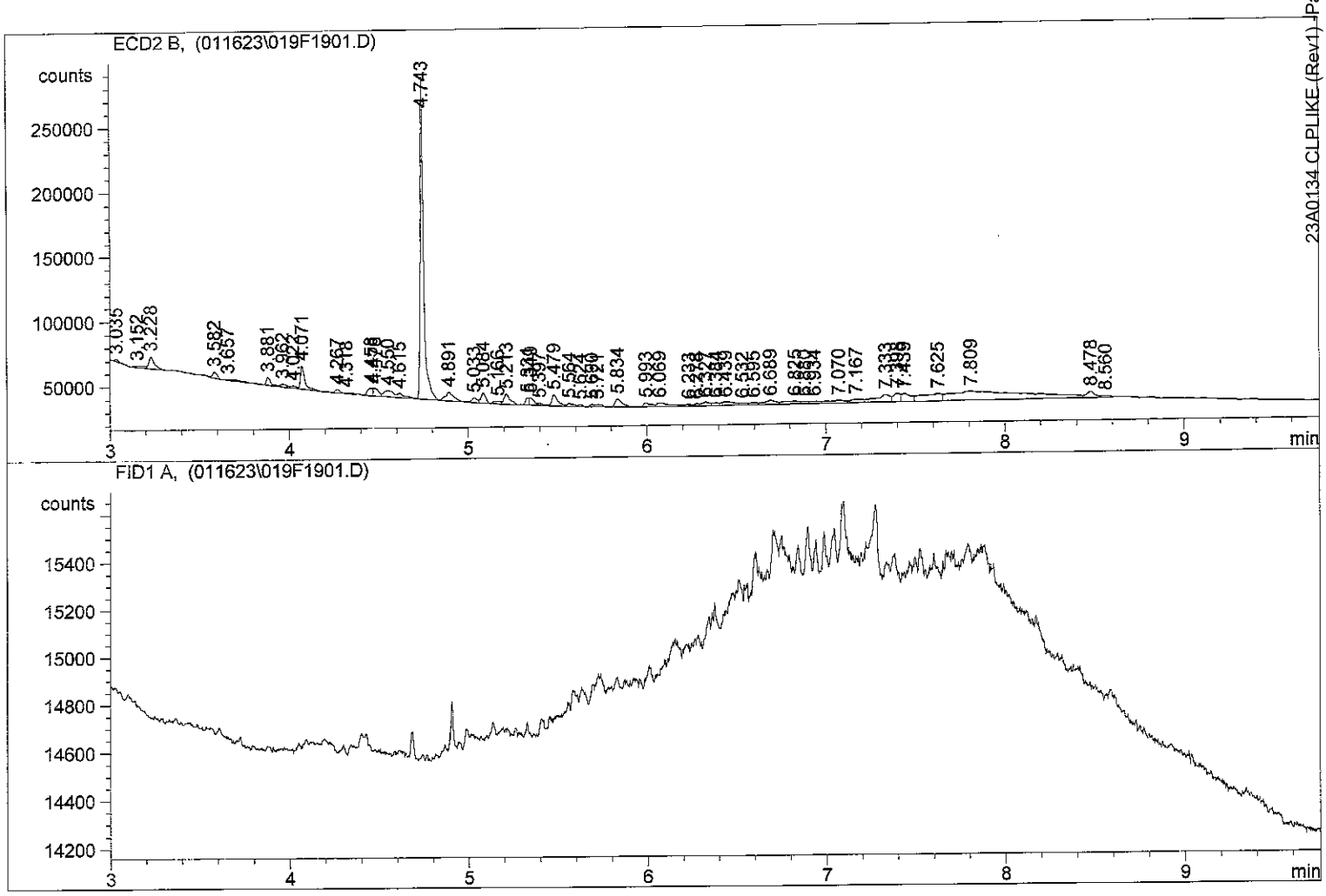


*** End of Report ***

Injection Date : 1/16/2023 9:32:37 PM
Sample Name : 23A0134 16
Acq. Operator : CRR

Seq. Line : 19
Location : Vial 19
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\011623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0001	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1173	23A0134-05	02012320ECD7.D	02/01/2023	
LDW23-IT1210	23A0134-13	02022305ECD7.D	02/01/2023	
LDW23-SC1077	23A0134-16	02012333ECD7.D	02/01/2023	
LDW23-SC1249	23A0134-15	02012332ECD7.D	02/01/2023	
LDW23-SS1116	23A0134-12	02012329ECD7.D	02/01/2023	
LDW23-SS1123	23A0134-11	02012328ECD7.D	02/01/2023	
LDW23-SS1124	23A0134-10	02012325ECD7.D	02/01/2023	
LDW23-SS1129	23A0134-09	02012324ECD7.D	02/01/2023	
LDW23-SS1131	23A0134-08	02012323ECD7.D	02/01/2023	
LDW23-IT1194	23A0134-14	02012331ECD7.D	02/01/2023	
LDW23-SS1160	23A0134-06	02012321ECD7.D	02/01/2023	
Reference	BLA0412-SRM1	02012313ECD7.D	02/01/2023	
LDW23-SS1179	23A0134-03	02022304ECD7.D	02/01/2023	
LDW23-SS1188	23A0134-02	02012317ECD7.D	02/01/2023	
LDW23-SS1205	23A0134-01	02012316ECD7.D	02/01/2023	
LDW23-SS1242	23A0134-04	02012319ECD7.D	02/01/2023	
Blank	BLA0412-BLK1	02012310ECD7.D	02/01/2023	
LCS	BLA0412-BS1	02012311ECD7.D	02/01/2023	
LCS Dup	BLA0412-BSD1	02012312ECD7.D	02/01/2023	
Matrix Spike	BLA0412-MS1	02012334ECD7.D	02/01/2023	
Matrix Spike Dup	BLA0412-MSD1	02012335ECD7.D	02/01/2023	
LDW23-SS1152	23A0134-07	02012322ECD7.D	02/01/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0001

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL** **Printed: 2/1/2023 12:08:56PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0134-01	C	LDW23-SS1205	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-02	C	LDW23-SS1188	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-03	C	LDW23-SS1179	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-04	C	LDW23-SS1242	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-05	C	LDW23-SS1173	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-06	C	LDW23-SS1160	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-07	C	LDW23-SS1152	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-08	C	LDW23-SS1131	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-09	C	LDW23-SS1129	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-10	C	LDW23-SS1124	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-11	C	LDW23-SS1123	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-12	C	LDW23-SS1116	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-13	C	LDW23-IT1210	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-14	C	LDW23-IT1194	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-15	C	LDW23-SC1249	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-16	B	LDW23-SC1077	B 01	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
BLA0412-BLK1	-	Blank	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-BS1	-	LCS	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-BSD1	-	LCS Dup	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-MS1	-	Matrix Spike	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-SRM1	-	Reference	-	2.5	2.5	-	2/1/2023	LMJ	

CLEANUP BENCH SHEET

CLB0001

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL** **Printed: 2/1/2023 12:08:56PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0002	Cleanup Type:	Sulfur
Cleanup Method:	EPA 3660B Sulfur Cleanup - uL	Analysis:	EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1173	23A0134-05	02012320ECD7.D	02/01/2023	
LDW23-IT1210	23A0134-13	02022305ECD7.D	02/01/2023	
LDW23-SC1077	23A0134-16	02012333ECD7.D	02/01/2023	
LDW23-SC1249	23A0134-15	02012332ECD7.D	02/01/2023	
LDW23-SS1116	23A0134-12	02012329ECD7.D	02/01/2023	
LDW23-SS1123	23A0134-11	02012328ECD7.D	02/01/2023	
LDW23-SS1124	23A0134-10	02012325ECD7.D	02/01/2023	
LDW23-SS1129	23A0134-09	02012324ECD7.D	02/01/2023	
LDW23-SS1131	23A0134-08	02012323ECD7.D	02/01/2023	
LDW23-IT1194	23A0134-14	02012331ECD7.D	02/01/2023	
LDW23-SS1160	23A0134-06	02012321ECD7.D	02/01/2023	
Reference	BLA0412-SRM1	02012313ECD7.D	02/01/2023	
LDW23-SS1179	23A0134-03	02022304ECD7.D	02/01/2023	
LDW23-SS1188	23A0134-02	02012317ECD7.D	02/01/2023	
LDW23-SS1205	23A0134-01	02012316ECD7.D	02/01/2023	
LDW23-SS1242	23A0134-04	02012319ECD7.D	02/01/2023	
Blank	BLA0412-BLK1	02012310ECD7.D	02/01/2023	
LCS	BLA0412-BS1	02012311ECD7.D	02/01/2023	
LCS Dup	BLA0412-BSD1	02012312ECD7.D	02/01/2023	
Matrix Spike	BLA0412-MS1	02012334ECD7.D	02/01/2023	
Matrix Spike Dup	BLA0412-MSD1	02012335ECD7.D	02/01/2023	
LDW23-SS1152	23A0134-07	02012322ECD7.D	02/01/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0002

Matrix: Solid **Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL** **Printed: 2/1/2023 12:09:47PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0134-01	C	LDW23-SS1205	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-02	C	LDW23-SS1188	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-03	C	LDW23-SS1179	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-04	C	LDW23-SS1242	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-05	C	LDW23-SS1173	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-06	C	LDW23-SS1160	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-07	C	LDW23-SS1152	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-08	C	LDW23-SS1131	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-09	C	LDW23-SS1129	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-10	C	LDW23-SS1124	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-11	C	LDW23-SS1123	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-12	C	LDW23-SS1116	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-13	C	LDW23-IT1210	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-14	C	LDW23-IT1194	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-15	C	LDW23-SC1249	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-16	B	LDW23-SC1077	B 01	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
BLA0412-BLK1	-	Blank	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-BS1	-	LCS	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-BSD1	-	LCS Dup	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-MS1	-	Matrix Spike	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-SRM1	-	Reference	-	2.5	2.5	-	2/1/2023	LMJ	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0002

Matrix: Solid **Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL** **Printed: 2/1/2023 12:09:47PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0003	Cleanup Type:	Sulfuric Acid
Cleanup Method:	EPA 3665 Sulfuric Acid Cleanup - uL	Analysis:	EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1173	23A0134-05	02012320ECD7.D	02/01/2023	
LDW23-IT1210	23A0134-13	02022305ECD7.D	02/01/2023	
LDW23-SC1077	23A0134-16	02012333ECD7.D	02/01/2023	
LDW23-SC1249	23A0134-15	02012332ECD7.D	02/01/2023	
LDW23-SS1116	23A0134-12	02012329ECD7.D	02/01/2023	
LDW23-SS1123	23A0134-11	02012328ECD7.D	02/01/2023	
LDW23-SS1124	23A0134-10	02012325ECD7.D	02/01/2023	
LDW23-SS1129	23A0134-09	02012324ECD7.D	02/01/2023	
LDW23-SS1131	23A0134-08	02012323ECD7.D	02/01/2023	
LDW23-IT1194	23A0134-14	02012331ECD7.D	02/01/2023	
LDW23-SS1160	23A0134-06	02012321ECD7.D	02/01/2023	
Reference	BLA0412-SRM1	02012313ECD7.D	02/01/2023	
LDW23-SS1179	23A0134-03	02022304ECD7.D	02/01/2023	
LDW23-SS1188	23A0134-02	02012317ECD7.D	02/01/2023	
LDW23-SS1205	23A0134-01	02012316ECD7.D	02/01/2023	
LDW23-SS1242	23A0134-04	02012319ECD7.D	02/01/2023	
Blank	BLA0412-BLK1	02012310ECD7.D	02/01/2023	
LCS	BLA0412-BS1	02012311ECD7.D	02/01/2023	
LCS Dup	BLA0412-BSD1	02012312ECD7.D	02/01/2023	
Matrix Spike	BLA0412-MS1	02012334ECD7.D	02/01/2023	
Matrix Spike Dup	BLA0412-MSD1	02012335ECD7.D	02/01/2023	
LDW23-SS1152	23A0134-07	02012322ECD7.D	02/01/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0003

Matrix: Solid **Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 2/1/2023 12:10:34PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0134-01	C	LDW23-SS1205	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-02	C	LDW23-SS1188	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-03	C	LDW23-SS1179	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-04	C	LDW23-SS1242	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-05	C	LDW23-SS1173	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-06	C	LDW23-SS1160	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-07	C	LDW23-SS1152	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-08	C	LDW23-SS1131	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-09	C	LDW23-SS1129	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-10	C	LDW23-SS1124	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-11	C	LDW23-SS1123	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-12	C	LDW23-SS1116	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-13	C	LDW23-IT1210	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-14	C	LDW23-IT1194	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-15	C	LDW23-SC1249	C 03	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
23A0134-16	B	LDW23-SC1077	B 01	2.5	2.5	8082A PCB Solid 4	2/1/2023	LMJ	
BLA0412-BLK1	-	Blank	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-BS1	-	LCS	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-BSD1	-	LCS Dup	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-MS1	-	Matrix Spike	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/1/2023	LMJ	
BLA0412-SRM1	-	Reference	-	2.5	2.5	-	2/1/2023	LMJ	

CLEANUP BENCH SHEET

CLB0003

Matrix: Solid **Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 2/1/2023 12:10:34PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8082A

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0412-BLK1	File ID:	02012310ECD7.D
Sampled:	N/A	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 14:50
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	12.5 g / 2.5 mL
Batch:	BLA0412	Sequence:	SLB0012	Calibration:	GA00061
Instrument:	ECD7	Column:	ZB5	Cleanups:	Silica Gel, Sulfur, Sulfuric Acid

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
12674-11-2	Aroclor 1016	1	4.0	U	1.6	4.0
11104-28-2	Aroclor 1221	1	4.0	U	1.6	4.0
11141-16-5	Aroclor 1232	1	4.0	U	1.6	4.0
53469-21-9	Aroclor 1242	1	4.0	U	1.6	4.0
12672-29-6	Aroclor 1248	1	4.0	U	1.6	4.0
11097-69-1	Aroclor 1254	1	4.0	U	1.6	4.0
11096-82-5	Aroclor 1260	1	4.0	U	0.6	4.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl	8.0000	7.54	94.2	40 - 126	
Tetrachlorometaxylene	8.0000	6.95	86.9	44 - 120	
Decachlorobiphenyl [2C]	8.0000	7.95	99.4	40 - 126	
Tetrachlorometaxylene [2C]	8.0000	6.87	85.8	44 - 120	

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012310ECD7.D
Data file 2: /230201.b/230201.b/02012310ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0412-BLK1
Client ID:
Injection Date: 01-FEB-2023 14:50
Report Date: 02/01/2023 15:25
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.823	0.014	299290	5.680	-0.005	193991	34.7	34.3	1.2	Tetrachloro-m-xylene
13.900	0.008	400892	14.118	-0.000	343385	37.7	39.8	5.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	609489	21.1
Hexabromobiphenyl	647433	994893	53.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	418025	24.1
Hexabromobiphenyl	382032	544183	42.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	---			0.0	2	---			0.0
Aroclor-1248	3	---			0.0	3	---			0.0
Aroclor-1248	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	---			0.0
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	---			0.0	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	---			0.0	5	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	---			0.0	1	---			0.0
Aroclor-1260	2	---			0.0	2	---			0.0
Aroclor-1260	3	---			0.0	3	---			0.0
Aroclor-1260	4	---			0.0	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 60083 Col1 Total PCB = 0.0 ppm*

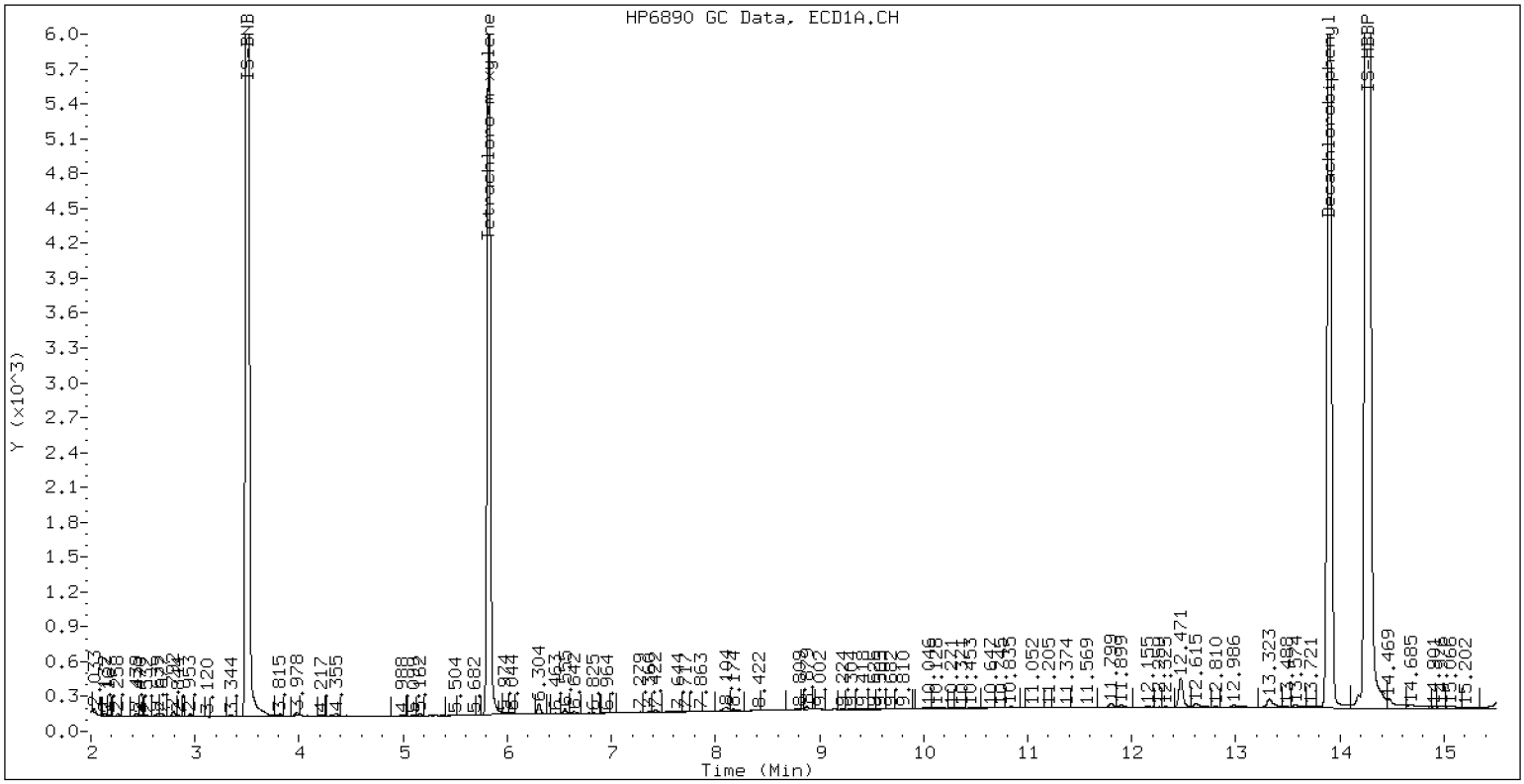
Total PCB Area Col2 (5.784 - 14.018) = 40689 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

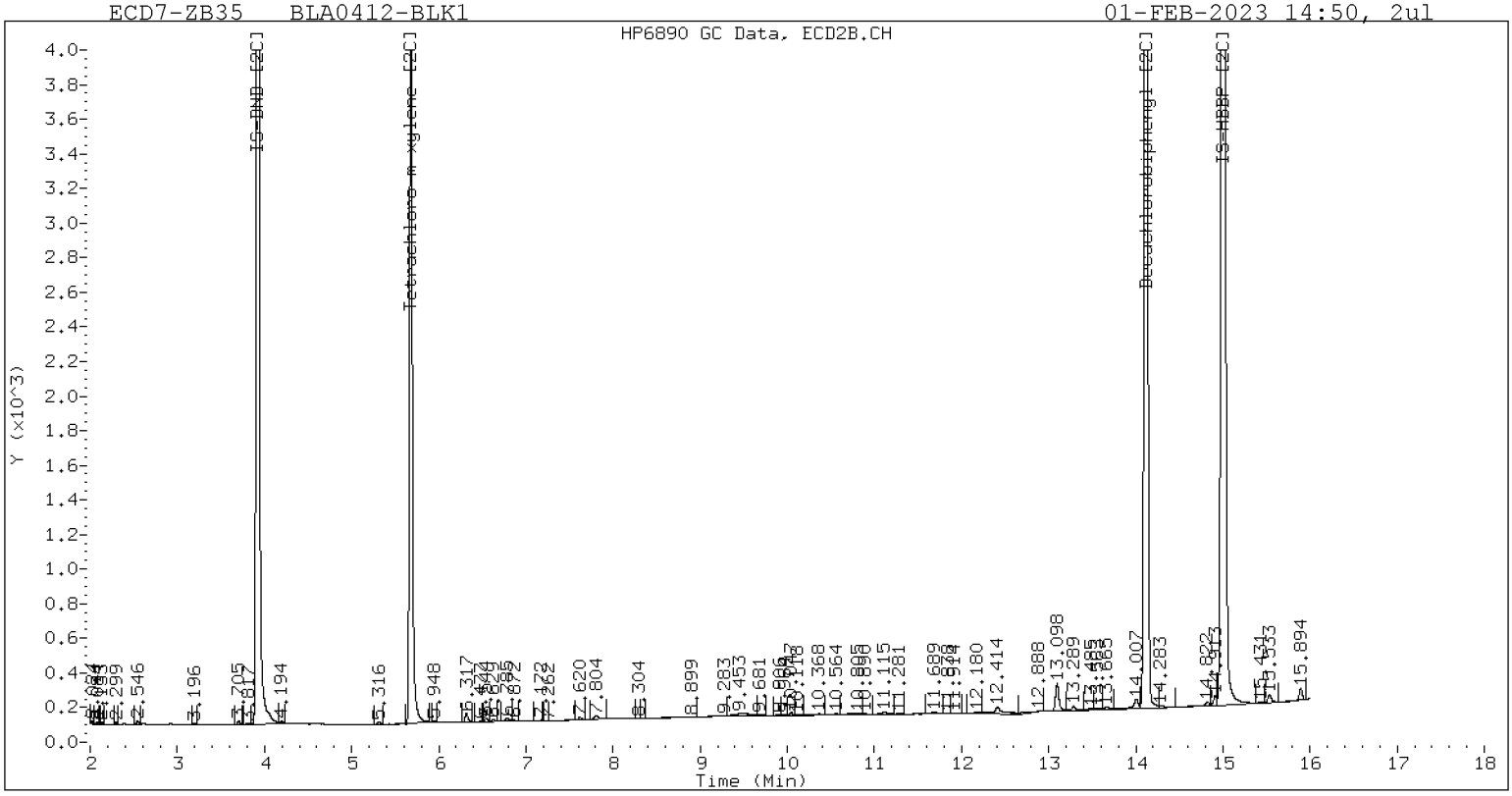
PCB Dual Column Chromatograms

ECD7-ZB5 BLA0412-BLK1 01-FEB-2023 14:50, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0412-BLK1 01-FEB-2023 14:50, 2ul



ZB-35 Manual Integration: NO

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/01/23 15:11
Batch:	BLA0412	Laboratory ID:	BLA0412-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	12.5 g / 2.5 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Aroclor 1016 [2C]	101	104		103	56 - 120
Aroclor 1260 [2C]	101	95.0		94.3	58 - 120

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Aroclor 1016 [2C]	101	88.6		87.9	15.8	30	56 - 120
Aroclor 1260 [2C]	101	77.0		76.4	21.0	30	58 - 120

* Indicates values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012311ECD7.D
Data file 2: /230201.b/230201.b/02012311ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0412-BS1
Client ID:
Injection Date: 01-FEB-2023 15:11
Report Date: 02/01/2023 15:58
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.002	301067	5.684	-0.001	192680	35.6	34.5	3.2	Tetrachloro-m-xylene
13.892	0.001	388310	14.117	-0.001	360537	37.8	40.1	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	597719	18.8
Hexabromobiphenyl	647433	959288	48.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	412788	22.5
Hexabromobiphenyl	382032	565871	48.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.000	109334	492.3	1	7.252	-0.001	110246	492.4
Aroclor-1016	2	7.648	-0.002	377348	512.7	2	7.845	-0.005	261609	533.2
Aroclor-1016	3	7.786	-0.002	152897	451.6	3	8.045	-0.004	108252	540.7
Aroclor-1016	4	8.402	0.000	118400	543.6	4	8.301	-0.002	80237	511.2
	Total Col1Ave (4 peaks):				500.0		Total Col2Ave (4 peaks):			519.4 RPD = 4
	Corrected Ave (3 peaks):				485.5		Corrected Ave (3 peaks):			512.3 RPD = 5
Aroclor-1221	1	4.733	0.001	662	15.0	1	4.958	-0.001	442	14.6
Aroclor-1221	2	6.131	-0.002	11769	130.3	2	6.295	-0.003	11078	167.1
Aroclor-1221	3	6.382	-0.002	66467	316.9	3	6.618	-0.004	43275	386.7
	Total Col1Ave (3 peaks):				154.1		Total Col2Ave (3 peaks):			189.4 RPD = 21
	Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks			
Aroclor-1232	1	4.733	0.000	662	24.0	1	4.958	-0.001	442	24.1
Aroclor-1232	2	6.131	-0.002	11769	189.3	2	7.252	-0.005	110246	1073.3
Aroclor-1232	3	7.648	-0.010	377348	1213.9	3	7.845	-0.009	261609	1250.5
Aroclor-1232	4	8.574	-0.011	147327	1107.3	4	8.708	-0.006	84589	1455.3
	Total Col1Ave (4 peaks):				633.6		Total Col2Ave (4 peaks):			950.8 RPD = 40*
	Corrected Ave (3 peaks):				440.2		Corrected Ave (3 peaks):			782.7 RPD = 56*
Aroclor-1242	1	7.269	-0.002	109334	597.4	1	7.252	-0.004	110246	610.7
Aroclor-1242	2	7.648	-0.007	377348	630.0	2	7.845	-0.008	261609	652.4
Aroclor-1242	3	8.402	-0.004	118400	665.3	3	9.148	-0.012	14122	112.5
Aroclor-1242	4	8.574	-0.008	147327	548.0	4	9.572	-0.015	8364	50.3
	Total Col1Ave (4 peaks):				610.2		Total Col2Ave (4 peaks):			356.4 RPD = 52*
	Corrected Ave (3 peaks):				591.8		Corrected Ave (3 peaks):			257.8 RPD = 79*
Aroclor-1248	1	8.402	-0.000	118400	396.0	1	8.301	-0.002	80237	430.0
Aroclor-1248	2	8.574	-0.002	147327	386.3	2	8.708	-0.003	84589	421.2
Aroclor-1248	3	8.991	-0.004	113444	155.5	3	9.148	-0.005	14122	57.5
Aroclor-1248	4	9.295	0.004	119966	332.2	4	9.572	-0.005	8364	27.6
	Total Col1Ave (4 peaks):				317.5		Total Col2Ave (4 peaks):			234.1 RPD = 30
	Corrected Ave (3 peaks):				291.3		Corrected Ave (3 peaks):			168.8 RPD = 53*
Aroclor-1254	1	9.295	-0.001	119966	196.9	1	9.443	-0.001	70531	235.5
Aroclor-1254	2	---			0.0	2	9.963	-0.001	15389	63.6
Aroclor-1254	3	9.662	-0.001	23389	59.9	3	10.141	0.025	159550	302.2
Aroclor-1254	4	9.798	-0.004	69634	91.0	4	10.365	-0.000	200276	379.3
Aroclor-1254	5	10.116	-0.046	312756	628.9	5	10.561	-0.003	260341	885.2
	Total Col1Ave (4 peaks):				244.2		Total Col2Ave (5 peaks):			373.2 RPD = 42*
	Corrected Ave (3 peaks):				116.0		Corrected Ave (4 peaks):			245.1 RPD = 72*
Aroclor-1260	1	11.041	0.000	255013	473.8	1	11.648	-0.002	193487	474.0
Aroclor-1260	2	11.358	0.001	263798	476.8	2	11.912	-0.003	460909	446.3
Aroclor-1260	3	11.731	-0.001	660280	453.3	3	12.431	-0.002	135228	525.3
Aroclor-1260	4	12.133	-0.001	344921	458.3	4	12.495	-0.003	304236	455.2
Aroclor-1260	5	12.242	0.000	138389	421.9	NS	---			----
	Total Col1Ave (5 peaks):				456.8		Total Col2Ave (4 peaks):			475.2 RPD = 4
	Corrected Ave (4 peaks):				451.8		Corrected Ave (3 peaks):			458.5 RPD = 1
Aroclor-1262	1	10.819	-0.013	503035	1296.7	1	11.195	-0.005	182389	329.3
Aroclor-1262	2	12.242	-0.004	138389	226.0	2	11.648	-0.005	193487	410.8
Aroclor-1262	3	12.316	-0.005	165048	248.3	3	12.431	-0.003	135228	269.6
Aroclor-1262	4	12.983	-0.006	147878	244.1	4	12.495	-0.008	304236	378.8
	Total Col1Ave (4 peaks):				503.8		Total Col2Ave (4 peaks):			347.1 RPD = 37
	Corrected Ave (3 peaks):				239.5		Corrected Ave (3 peaks):			325.9 RPD = 31
Aroclor-1268	1	12.242	-0.003	138389	87.3	1	12.431	-0.003	135228	102.3
Aroclor-1268	2	12.316	-0.002	165048	104.4	2	12.495	-0.006	304236	216.4
Aroclor-1268	3	12.720	0.021	73048	55.8	3	12.889	-0.004	7561	6.5
Aroclor-1268	4	13.483	-0.006	30666	7.9	4	13.704	-0.004	37282	10.3
	Total Col1Ave (4 peaks):				63.9		Total Col2Ave (4 peaks):			83.9 RPD = 27

Corrected Ave (3 peaks): 50.3 Corrected Ave (3 peaks): 39.7 RPD = 24

Total PCB Area Col1 (5.907 - 13.790) = 6973823 Col1 Total PCB = 1.0 ppm*

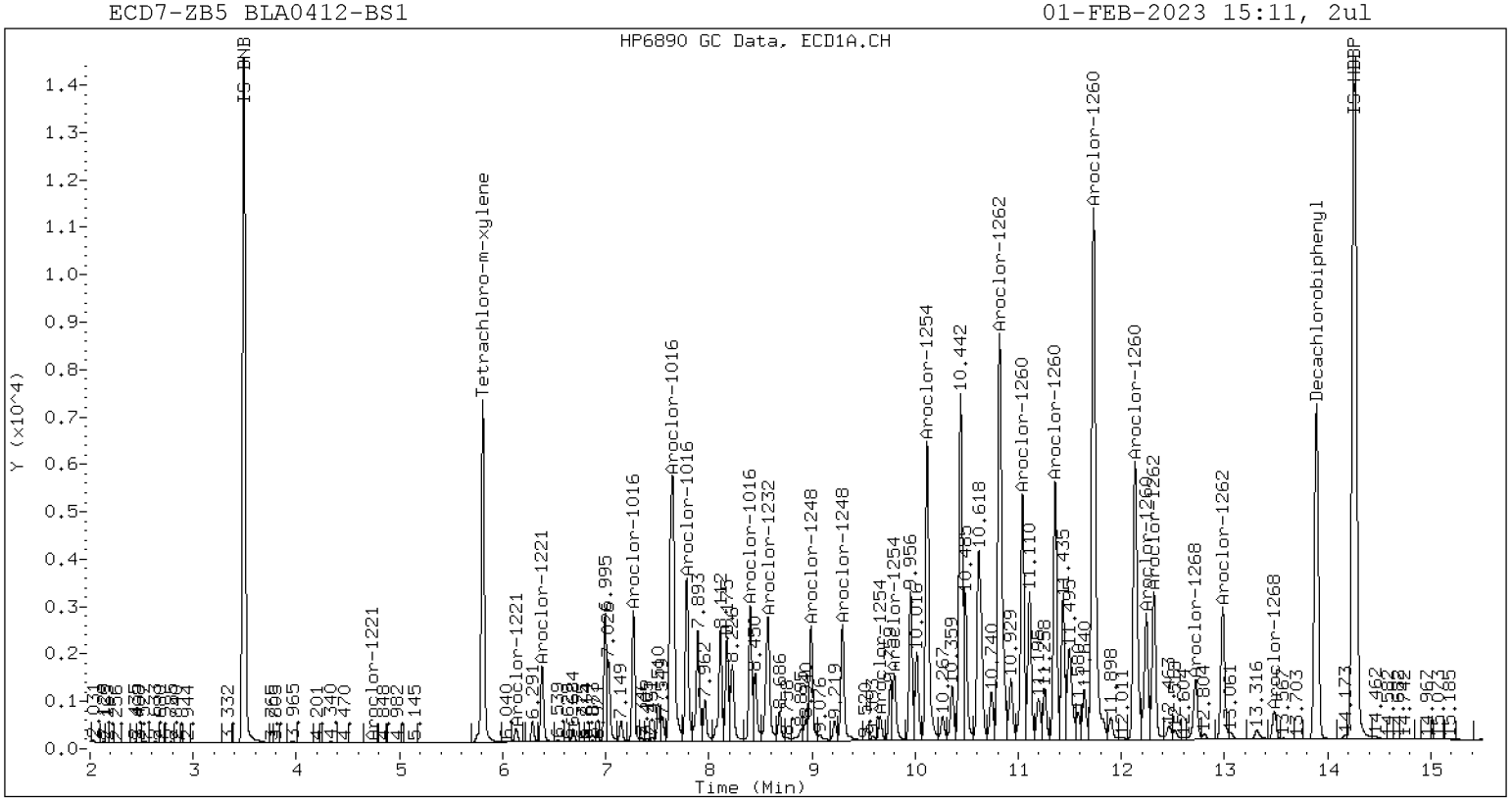
Total PCB Area Col2 (5.784 - 14.018) = 4702668 Col2 Total PCB = 1.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

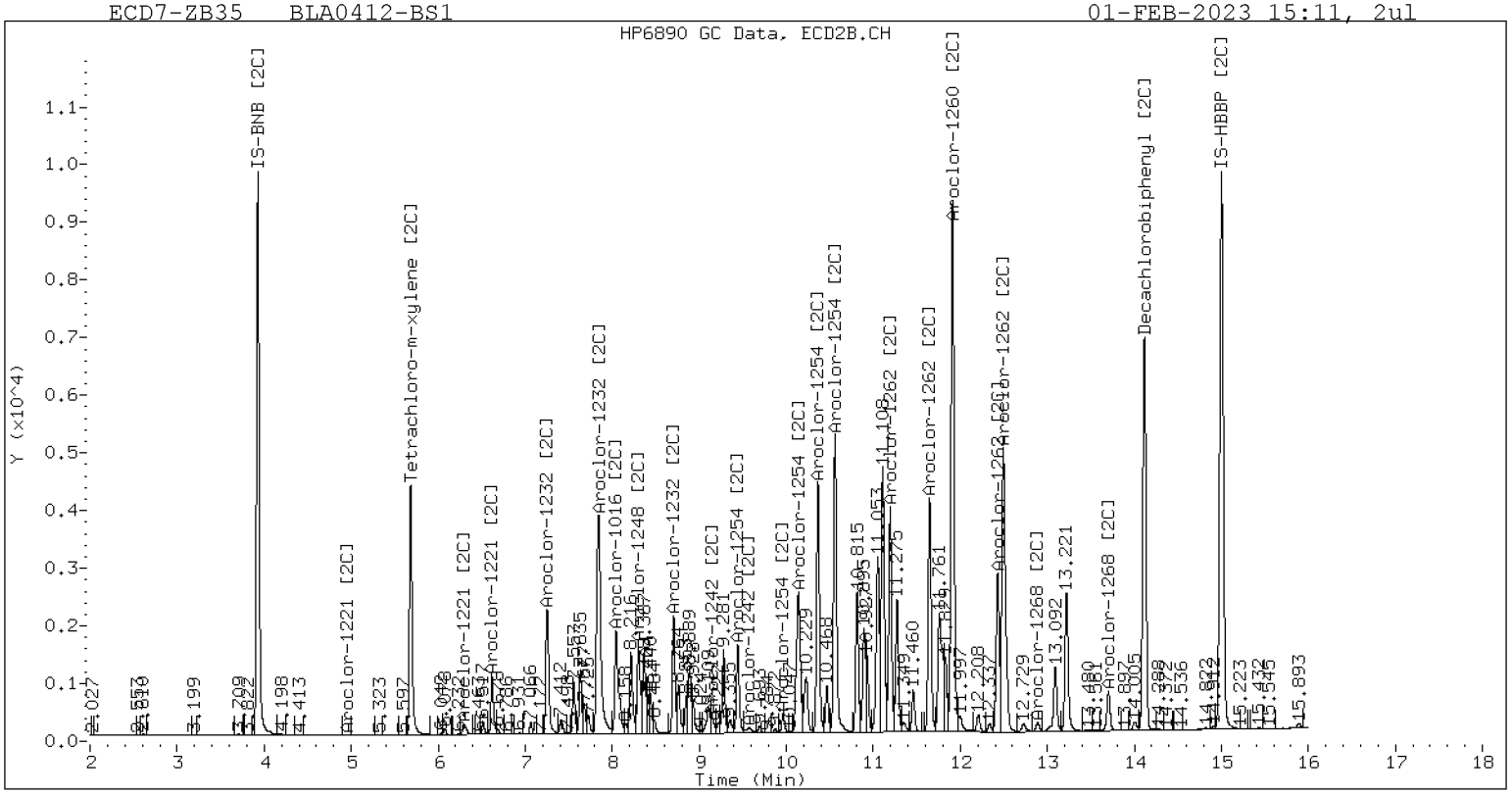
PCB Dual Column Chromatograms

ECD7-ZB5 BLA0412-BS1 01-FEB-2023 15:11, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0412-BS1 01-FEB-2023 15:11, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012312ECD7.D
Data file 2: /230201.b/230201.b/02012312ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0412-BSD1
Client ID:
Injection Date: 01-FEB-2023 15:32
Report Date: 02/01/2023 15:58
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.001	302256	5.684	-0.000	195203	37.0	35.7	3.7	Tetrachloro-m-xylene
13.890	-0.000	416948	14.117	-0.001	369547	38.1	39.8	4.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	577711	14.8
Hexabromobiphenyl	647433	1023147	58.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	404622	20.1
Hexabromobiphenyl	382032	584382	53.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.268	-0.001	92573	431.2	1	7.252	-0.001	93102	424.2
Aroclor-1016	2	7.647	-0.003	316482	444.9	2	7.845	-0.005	220322	458.1
Aroclor-1016	3	7.784	-0.003	127955	391.0	3	8.045	-0.004	90065	458.9
Aroclor-1016	4	8.400	-0.002	97875	464.9	4	8.301	-0.002	66339	431.2
Total Col1Ave (4 peaks):					433.0	Total Col2Ave (4 peaks):				443.1 RPD = 2
Corrected Ave (3 peaks):					422.4	Corrected Ave (3 peaks):				437.8 RPD = 4
Aroclor-1221	1	4.732	-0.001	433	10.1	1	4.959	0.000	380	12.8
Aroclor-1221	2	6.131	-0.003	11164	127.9	2	6.296	-0.002	9858	151.7
Aroclor-1221	3	6.381	-0.003	56774	280.1	3	6.619	-0.003	40234	366.7
Total Col1Ave (3 peaks):					139.4	Total Col2Ave (3 peaks):				177.1 RPD = 24
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.732	-0.001	433	16.2	1	4.959	-0.000	380	21.1
Aroclor-1232	2	6.131	-0.003	11164	185.8	2	7.252	-0.005	93102	924.7
Aroclor-1232	3	7.647	-0.011	316482	1053.4	3	7.845	-0.009	220322	1074.4
Aroclor-1232	4	8.573	-0.012	122174	950.0	4	8.707	-0.006	70082	1230.1
Total Col1Ave (4 peaks):					551.4	Total Col2Ave (4 peaks):				812.6 RPD = 38
Corrected Ave (3 peaks):					384.0	Corrected Ave (3 peaks):				673.4 RPD = 55*
Aroclor-1242	1	7.268	-0.003	92573	523.3	1	7.252	-0.004	93102	526.1
Aroclor-1242	2	7.647	-0.008	316482	546.7	2	7.845	-0.008	220322	560.5
Aroclor-1242	3	8.400	-0.006	97875	569.0	3	9.147	-0.013	11920	96.8
Aroclor-1242	4	8.573	-0.009	122174	470.2	4	9.573	-0.014	6874	42.1
Total Col1Ave (4 peaks):					527.3	Total Col2Ave (4 peaks):				306.4 RPD = 53*
Corrected Ave (3 peaks):					513.4	Corrected Ave (3 peaks):				221.7 RPD = 79*
Aroclor-1248	1	8.400	-0.002	97875	338.7	1	8.301	-0.002	66339	362.7
Aroclor-1248	2	8.573	-0.003	122174	331.4	2	8.707	-0.003	70082	356.0
Aroclor-1248	3	8.990	-0.005	94192	133.6	3	9.147	-0.006	11920	49.6
Aroclor-1248	4	9.293	0.002	100865	289.0	4	9.573	-0.004	6874	23.1
Total Col1Ave (4 peaks):					273.2	Total Col2Ave (4 peaks):				197.8 RPD = 32
Corrected Ave (3 peaks):					251.3	Corrected Ave (3 peaks):				142.9 RPD = 55*
Aroclor-1254	1	9.293	-0.003	100865	171.3	1	9.442	-0.002	58093	197.9
Aroclor-1254	2	---			0.0	2	9.963	-0.002	12419	52.3
Aroclor-1254	3	9.660	-0.003	19763	52.4	3	10.141	0.025	131123	253.3
Aroclor-1254	4	9.797	-0.005	57270	77.5	4	10.365	-0.001	164454	317.7
Aroclor-1254	5	10.115	-0.048	258174	537.1	5	10.560	-0.004	213306	739.9
Total Col1Ave (4 peaks):					209.6	Total Col2Ave (5 peaks):				312.3 RPD = 39
Corrected Ave (3 peaks):					100.4	Corrected Ave (4 peaks):				205.3 RPD = 69*
Aroclor-1260	1	11.040	-0.001	208742	363.6	1	11.649	-0.002	161113	382.2
Aroclor-1260	2	11.356	-0.002	216981	367.7	2	11.913	-0.002	379930	356.2
Aroclor-1260	3	11.729	-0.003	557506	358.9	3	12.431	-0.002	115015	432.6
Aroclor-1260	4	12.132	-0.003	282392	351.8	4	12.495	-0.003	254348	368.5
Aroclor-1260	5	12.240	-0.001	113418	324.2	NS	---			----
Total Col1Ave (5 peaks):					353.2	Total Col2Ave (4 peaks):				384.9 RPD = 9
Corrected Ave (4 peaks):					349.6	Corrected Ave (3 peaks):				368.9 RPD = 5
Aroclor-1262	1	10.818	-0.014	410845	992.9	1	11.195	-0.006	149874	262.0
Aroclor-1262	2	12.240	-0.005	113418	173.7	2	11.649	-0.004	161113	331.3
Aroclor-1262	3	12.314	-0.007	136356	192.3	3	12.431	-0.004	115015	222.1
Aroclor-1262	4	12.982	-0.007	126695	196.1	4	12.495	-0.008	254348	306.6
Total Col1Ave (4 peaks):					388.8	Total Col2Ave (4 peaks):				280.5 RPD = 32
Corrected Ave (3 peaks):					187.4	Corrected Ave (3 peaks):				263.6 RPD = 34
Aroclor-1268	1	12.240	-0.004	113418	67.1	1	12.431	-0.003	115015	84.3
Aroclor-1268	2	12.314	-0.004	136356	80.9	2	12.495	-0.006	254348	175.1
Aroclor-1268	3	12.718	0.019	60055	43.0	3	12.889	-0.004	5525	4.6
Aroclor-1268	4	13.483	-0.006	38038	9.2	4	13.705	-0.003	70287	18.8
Total Col1Ave (4 peaks):					50.0	Total Col2Ave (4 peaks):				70.7 RPD = 34

Corrected Ave (3 peaks): 39.8 Corrected Ave (3 peaks): 35.9 RPD = 10

Total PCB Area Col1 (5.907 - 13.790) = 5842859 Col1 Total PCB = 0.9 ppm*

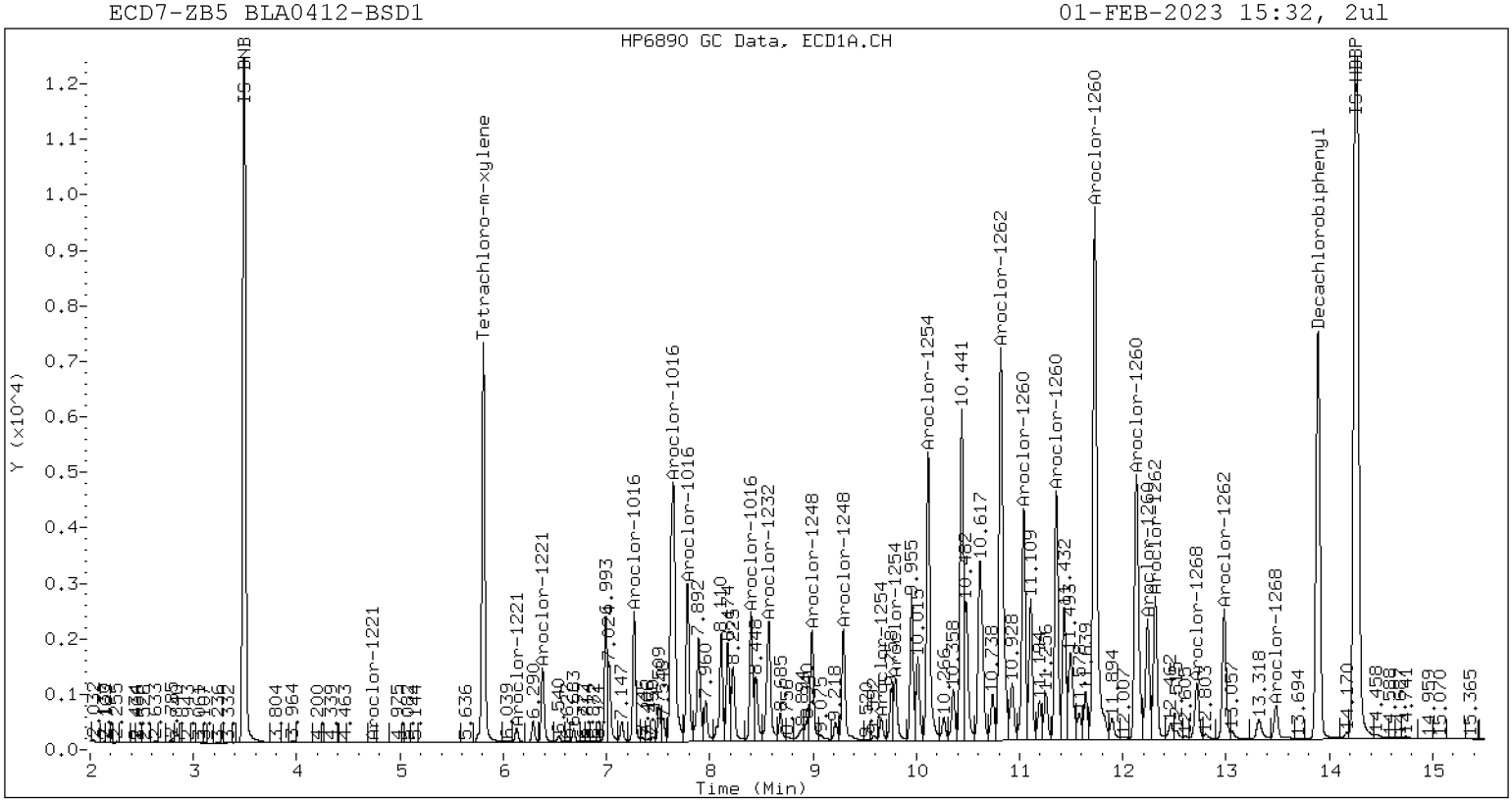
Total PCB Area Col2 (5.784 - 14.018) = 3929698 Col2 Total PCB = 0.9 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

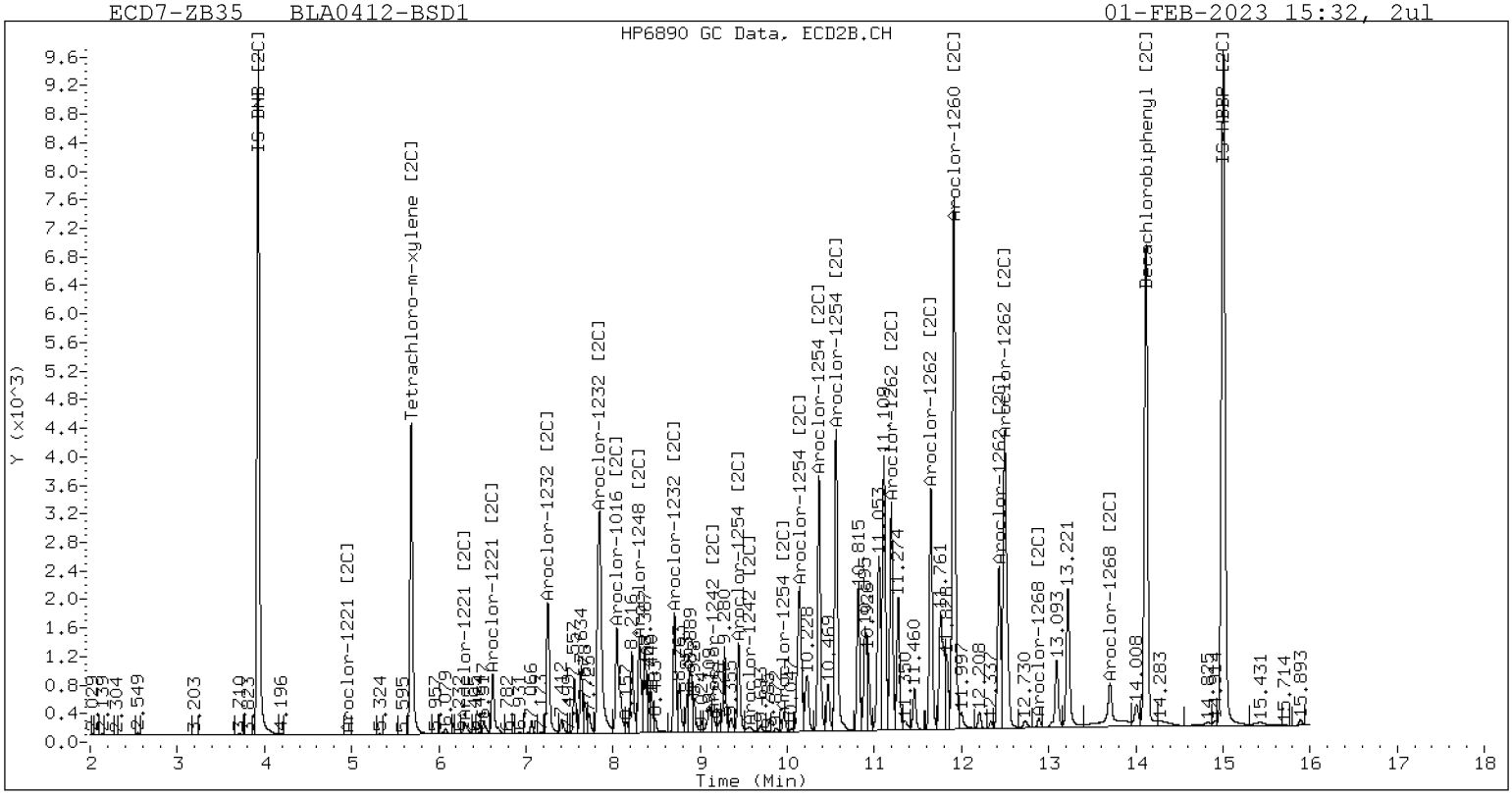
PCB Dual Column Chromatograms

ECD7-ZB5 BLA0412-BSD1 01-FEB-2023 15:32, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0412-BSD1 01-FEB-2023 15:32, 2ul



ZB-35 Manual Integration: NO

MS / MS DUPLICATE RECOVERY
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/01/23 23:14
Batch:	BLA0412	Laboratory ID:	BLA0412-MS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike
Initial/Final:	16.27 g / 2.5 mL	Source Sample:	LDW23-SC1077

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #		QC LIMITS REC.
Aroclor 1016	101	ND	U	70.2		69.6		56 - 120
Aroclor 1260 [2C]	101	53.6		109	*	54.9	*	58 - 120

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

MS / MS DUPLICATE RECOVERY
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/01/23 23:35
Batch:	BLA0412	Laboratory ID:	BLA0412-MSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike Dup
Initial/Final:	16.27 g / 2.5 mL	Source Sample:	LDW23-SC1077

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor 1016	101	66.4		65.9	5.52	30	56 - 120
Aroclor 1260 [2C]	101	105	*	50.9 *	3.97	30	58 - 120

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012334ECD7.D
Data file 2: /230201.b/230201.b/02012334ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0412-MS1
Client ID:
Injection Date: 01-FEB-2023 23:14
Report Date: 02/02/2023 09:54
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.002	208880	5.681	-0.003	155147	28.7	31.1	8.1	Tetrachloro-m-xylene
13.885	-0.005	156752	14.113	-0.003	187169	35.7	36.0	0.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	514787	2.3
Hexabromobiphenyl	647433	410162	-36.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	368550	9.4
Hexabromobiphenyl	382032	327484	-14.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1016	1	7.265	-0.004	62629	327.4	1	7.250	-0.004	72757	364.0
Aroclor-1016	2	7.641	-0.008	235158	371.0	2	7.840	-0.009	176704	403.4
Aroclor-1016	3	7.779	-0.008	81148	278.3	3	8.039	-0.009	65366	365.7
Aroclor-1016	4	8.395	-0.007	80178	427.4	4	8.297	-0.006	62035	442.7
Total Col1Ave (4 peaks):					351.0	Total Col2Ave (4 peaks):				393.9 RPD = 12
Corrected Ave (3 peaks):					325.6	Corrected Ave (3 peaks):				377.7 RPD = 15
Aroclor-1221	1	4.732	-0.001	519	13.6	1	4.941	-0.018	1469	54.4
Aroclor-1221	2	6.127	-0.006	7650	98.3	2	6.293	-0.005	7761	131.1
Aroclor-1221	3	6.378	-0.006	41769	231.3	3	6.616	-0.007	30312	303.3
Total Col1Ave (3 peaks):					114.4	Total Col2Ave (3 peaks):				162.9 RPD = 35
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.732	-0.002	519	21.8	1	4.941	-0.019	1469	89.6
Aroclor-1232	2	6.127	-0.006	7650	142.9	2	7.250	-0.007	72757	793.4
Aroclor-1232	3	7.641	-0.017	235158	878.4	3	7.840	-0.015	176704	946.1
Aroclor-1232	4	8.564	-0.021	84178	734.6	4	8.703	-0.010	68940	1328.4
Total Col1Ave (4 peaks):					444.4	Total Col2Ave (4 peaks):				789.4 RPD = 56*
Corrected Ave (3 peaks):					299.8	Corrected Ave (3 peaks):				609.7 RPD = 68*
Aroclor-1242	1	7.265	-0.006	62629	397.3	1	7.250	-0.006	72757	451.4
Aroclor-1242	2	7.641	-0.014	235158	455.8	2	7.840	-0.013	176704	493.6
Aroclor-1242	3	8.395	-0.011	80178	523.1	3	9.137	-0.023	52792	470.8
Aroclor-1242	4	8.564	-0.018	84178	363.6	4	9.532	-0.055	69132	465.2
Total Col1Ave (4 peaks):					435.0	Total Col2Ave (4 peaks):				470.3 RPD = 8
Corrected Ave (3 peaks):					405.6	Corrected Ave (3 peaks):				462.5 RPD = 13
Aroclor-1248	1	8.395	-0.007	80178	311.3	1	8.297	-0.005	62035	372.4
Aroclor-1248	2	8.564	-0.012	84178	256.3	2	8.703	-0.006	68940	384.5
Aroclor-1248	3	8.982	-0.013	144013	229.2	3	9.137	-0.016	52792	240.9
Aroclor-1248	4	9.285	-0.006	137459	442.0	4	9.532	-0.043	69132	255.1
Total Col1Ave (4 peaks):					309.7	Total Col2Ave (4 peaks):				313.2 RPD = 1
Corrected Ave (3 peaks):					265.6	Corrected Ave (3 peaks):				289.5 RPD = 9
Aroclor-1254	1	9.285	-0.011	137459	262.0	1	9.436	-0.008	93038	348.0
Aroclor-1254	2	9.360	-0.013	40616	181.3	2	9.955	-0.009	44102	204.1
Aroclor-1254	3	9.655	-0.008	84597	251.7	3	10.105	-0.011	194178	411.9
Aroclor-1254	4	9.785	-0.016	180046	273.3	4	10.358	-0.007	232924	494.1
Aroclor-1254	5	10.111	-0.052	273933	639.5	5	10.553	-0.010	205599	783.0
Total Col1Ave (5 peaks):					321.6	Total Col2Ave (5 peaks):				448.2 RPD = 33
Corrected Ave (4 peaks):					242.1	Corrected Ave (4 peaks):				364.5 RPD = 40*
Aroclor-1260	1	11.032	-0.009	123062	534.7	1	11.642	-0.007	136586	578.1
Aroclor-1260	2	11.348	-0.009	123107	520.4	2	11.904	-0.009	304145	508.9
Aroclor-1260	3	11.717	-0.014	307094	493.1	3	12.423	-0.009	87867	589.8
Aroclor-1260	4	12.119	-0.016	163952	509.5	4	12.487	-0.011	194741	503.4
Aroclor-1260	5	12.232	-0.009	61179	436.2	NS	---			----
Total Col1Ave (5 peaks):					498.8	Total Col2Ave (4 peaks):				545.0 RPD = 9
Corrected Ave (4 peaks):					489.8	Corrected Ave (3 peaks):				530.1 RPD = 8
Aroclor-1262	1	10.807	-0.025	350878	2115.3	1	11.189	-0.011	114134	356.1
Aroclor-1262	2	12.232	-0.013	61179	233.7	2	11.642	-0.011	136586	501.1
Aroclor-1262	3	12.306	-0.015	72284	254.3	3	12.423	-0.011	87867	302.7
Aroclor-1262	4	12.971	-0.018	78763	304.1	4	12.487	-0.017	194741	419.0
Total Col1Ave (4 peaks):					726.9	Total Col2Ave (4 peaks):				394.7 RPD = 59*
Corrected Ave (3 peaks):					264.0	Corrected Ave (3 peaks):				359.3 RPD = 31
Aroclor-1268	1	12.232	-0.012	61179	90.3	1	12.423	-0.010	87867	114.9
Aroclor-1268	2	12.306	-0.012	72284	107.0	2	12.487	-0.015	194741	239.3
Aroclor-1268	3	12.708	0.009	40568	72.5	3	12.886	-0.007	6655	9.8
Aroclor-1268	4	13.476	-0.013	23485	14.1	4	13.699	-0.010	23853	11.4
Total Col1Ave (4 peaks):					71.0	Total Col2Ave (4 peaks):				93.9 RPD = 28

Corrected Ave (3 peaks): 59.0 Corrected Ave (3 peaks): 45.4 RPD = 26

Total PCB Area Col1 (5.907 - 13.790) = 4728810 Col1 Total PCB = 0.8 ppm*

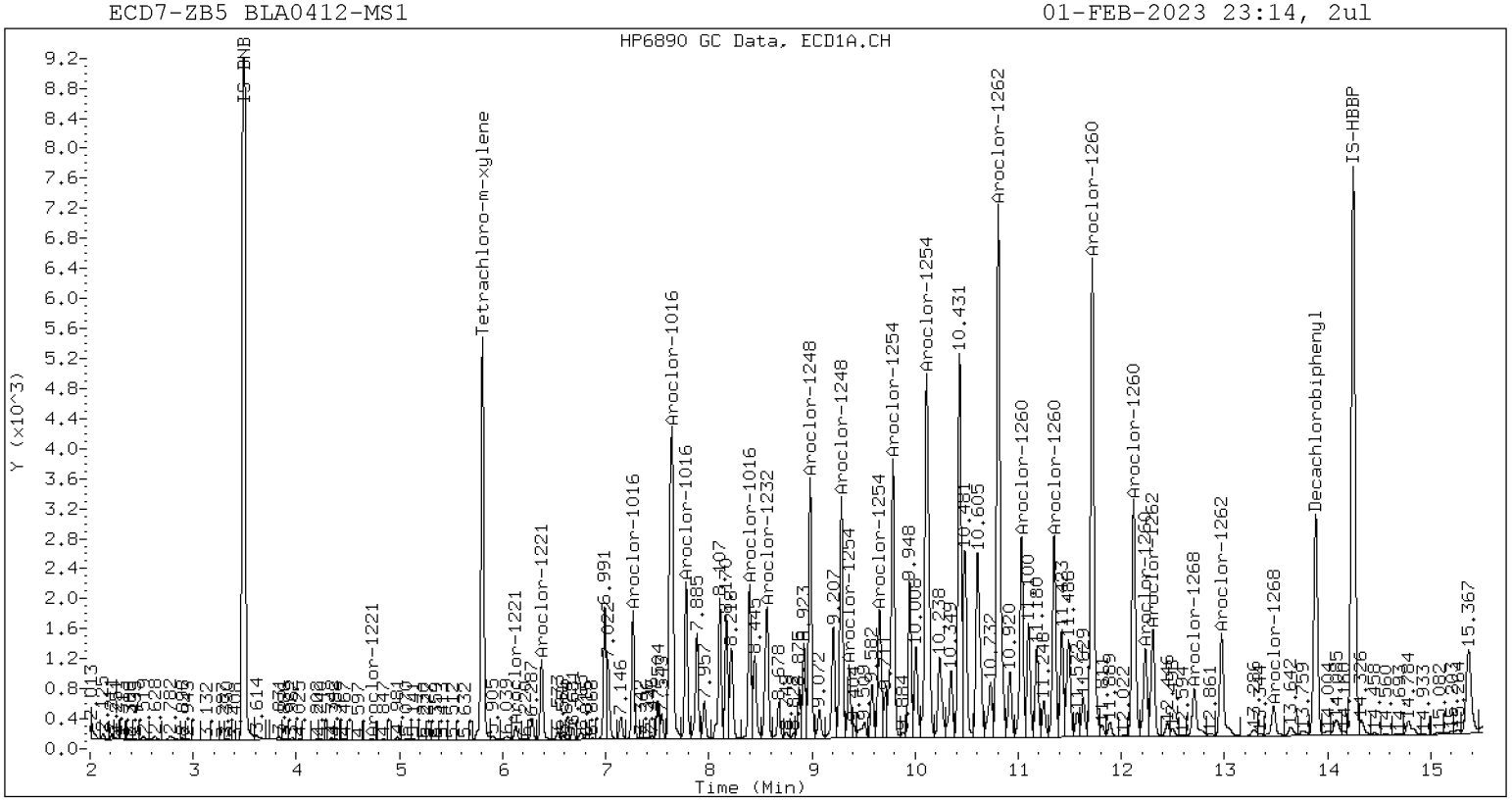
Total PCB Area Col2 (5.784 - 14.016) = 3977372 Col2 Total PCB = 1.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

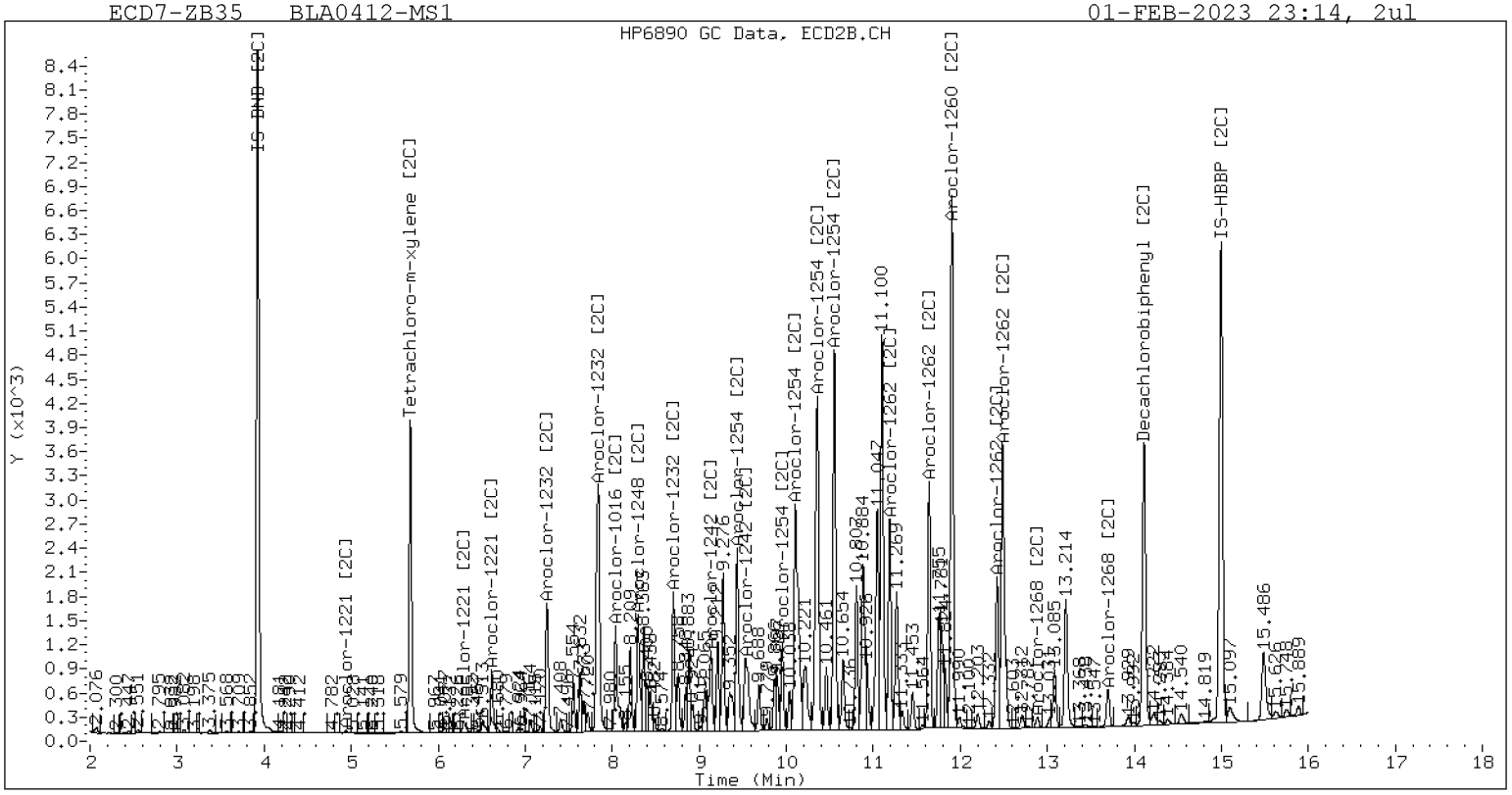
PCB Dual Column Chromatograms

ECD7-ZB5 BLA0412-MS1 01-FEB-2023 23:14, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0412-MS1 01-FEB-2023 23:14, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012335ECD7.D
Data file 2: /230201.b/230201.b/02012335ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0412-MSD1
Client ID:
Injection Date: 01-FEB-2023 23:35
Report Date: 02/02/2023 09:54
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.002	207516	5.681	-0.003	155174	28.0	30.7	9.1	Tetrachloro-m-xylene
13.883	-0.007	139789	14.112	-0.004	171794	35.1	35.4	0.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	524301	4.2
Hexabromobiphenyl	647433	372336	-42.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	374160	11.1
Hexabromobiphenyl	382032	305934	-19.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.265	-0.005	61899	317.7	1	7.249	-0.004	71827	353.9
Aroclor-1016	2	7.641	-0.009	224578	347.9	2	7.839	-0.010	170459	383.3
Aroclor-1016	3	7.780	-0.008	78041	262.8	3	8.039	-0.009	63398	349.4
Aroclor-1016	4	8.395	-0.007	76483	400.3	4	8.297	-0.006	59817	420.4
Total Col1Ave (4 peaks):					332.2	Total Col2Ave (4 peaks):				376.8 RPD = 13
Corrected Ave (3 peaks):					309.4	Corrected Ave (3 peaks):				362.2 RPD = 16
Aroclor-1221	1	4.732	-0.001	224	5.8	1	4.942	-0.017	1809	66.0
Aroclor-1221	2	6.128	-0.006	7560	95.4	2	6.293	-0.005	7907	131.6
Aroclor-1221	3	6.378	-0.006	40041	217.7	3	6.616	-0.006	30426	299.9
Total Col1Ave (3 peaks):					106.3	Total Col2Ave (3 peaks):				165.8 RPD = 44*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.732	-0.001	224	9.3	1	4.942	-0.018	1809	108.7
Aroclor-1232	2	6.128	-0.005	7560	138.7	2	7.249	-0.007	71827	771.5
Aroclor-1232	3	7.641	-0.018	224578	823.6	3	7.839	-0.015	170459	898.9
Aroclor-1232	4	8.564	-0.021	80108	686.4	4	8.703	-0.011	66341	1259.2
Total Col1Ave (4 peaks):					414.5	Total Col2Ave (4 peaks):				759.6 RPD = 59*
Corrected Ave (3 peaks):					278.1	Corrected Ave (3 peaks):				593.1 RPD = 72*
Aroclor-1242	1	7.265	-0.006	61899	385.6	1	7.249	-0.007	71827	438.9
Aroclor-1242	2	7.641	-0.015	224578	427.4	2	7.839	-0.014	170459	469.0
Aroclor-1242	3	8.395	-0.012	76483	489.9	3	9.136	-0.024	47031	413.2
Aroclor-1242	4	8.564	-0.018	80108	339.7	4	9.531	-0.056	61296	406.3
Total Col1Ave (4 peaks):					410.7	Total Col2Ave (4 peaks):				431.9 RPD = 5
Corrected Ave (3 peaks):					384.2	Corrected Ave (3 peaks):				419.5 RPD = 9
Aroclor-1248	1	8.395	-0.007	76483	291.6	1	8.297	-0.006	59817	353.7
Aroclor-1248	2	8.564	-0.012	80108	239.4	2	8.703	-0.007	66341	364.4
Aroclor-1248	3	8.982	-0.013	133187	208.1	3	9.136	-0.017	47031	211.4
Aroclor-1248	4	9.284	-0.007	126426	399.1	4	9.531	-0.045	61296	222.8
Total Col1Ave (4 peaks):					284.6	Total Col2Ave (4 peaks):				288.1 RPD = 1
Corrected Ave (3 peaks):					246.4	Corrected Ave (3 peaks):				262.6 RPD = 6
Aroclor-1254	1	9.284	-0.012	126426	236.6	1	9.436	-0.008	85291	314.2
Aroclor-1254	2	9.360	-0.013	36336	159.3	2	9.954	-0.010	39145	178.4
Aroclor-1254	3	9.655	-0.008	76215	222.6	3	10.104	-0.011	175013	365.7
Aroclor-1254	4	9.784	-0.017	161165	240.2	4	10.357	-0.008	206928	432.4
Aroclor-1254	5	10.110	-0.053	242777	556.5	5	10.552	-0.011	185546	696.0
Total Col1Ave (5 peaks):					283.0	Total Col2Ave (5 peaks):				397.3 RPD = 34
Corrected Ave (4 peaks):					214.7	Corrected Ave (4 peaks):				322.7 RPD = 40*
Aroclor-1260	1	11.032	-0.009	109188	522.6	1	11.641	-0.008	121660	551.2
Aroclor-1260	2	11.348	-0.010	108419	504.9	2	11.903	-0.010	275840	494.0
Aroclor-1260	3	11.717	-0.014	269149	476.1	3	12.422	-0.010	78671	565.3
Aroclor-1260	4	12.118	-0.017	142146	486.6	4	12.486	-0.011	175201	484.8
Aroclor-1260	5	12.232	-0.009	53758	422.2	NS	---			----
Total Col1Ave (5 peaks):					482.5	Total Col2Ave (4 peaks):				523.8 RPD = 8
Corrected Ave (4 peaks):					472.5	Corrected Ave (3 peaks):				510.0 RPD = 8
Aroclor-1262	1	10.805	-0.027	307356	2041.2	1	11.188	-0.012	102824	343.4
Aroclor-1262	2	12.232	-0.014	53758	226.2	2	11.641	-0.012	121660	477.8
Aroclor-1262	3	12.305	-0.016	63081	244.5	3	12.422	-0.012	78671	290.1
Aroclor-1262	4	12.971	-0.018	70051	297.9	4	12.486	-0.017	175201	403.5
Total Col1Ave (4 peaks):					702.5	Total Col2Ave (4 peaks):				378.7 RPD = 60*
Corrected Ave (3 peaks):					256.2	Corrected Ave (3 peaks):				345.7 RPD = 30
Aroclor-1268	1	12.232	-0.013	53758	87.4	1	12.422	-0.011	78671	110.1
Aroclor-1268	2	12.305	-0.013	63081	102.8	2	12.486	-0.015	175201	230.5
Aroclor-1268	3	12.707	0.008	35858	70.6	3	12.886	-0.008	6127	9.7
Aroclor-1268	4	13.476	-0.013	19993	13.3	4	13.697	-0.011	21654	11.1
Total Col1Ave (4 peaks):					68.5	Total Col2Ave (4 peaks):				90.3 RPD = 27

Corrected Ave (3 peaks): 57.1 Corrected Ave (3 peaks): 43.6 RPD = 27

Total PCB Area Col1 (5.907 - 13.790) = 4274443 Col1 Total PCB = 0.7 ppm*

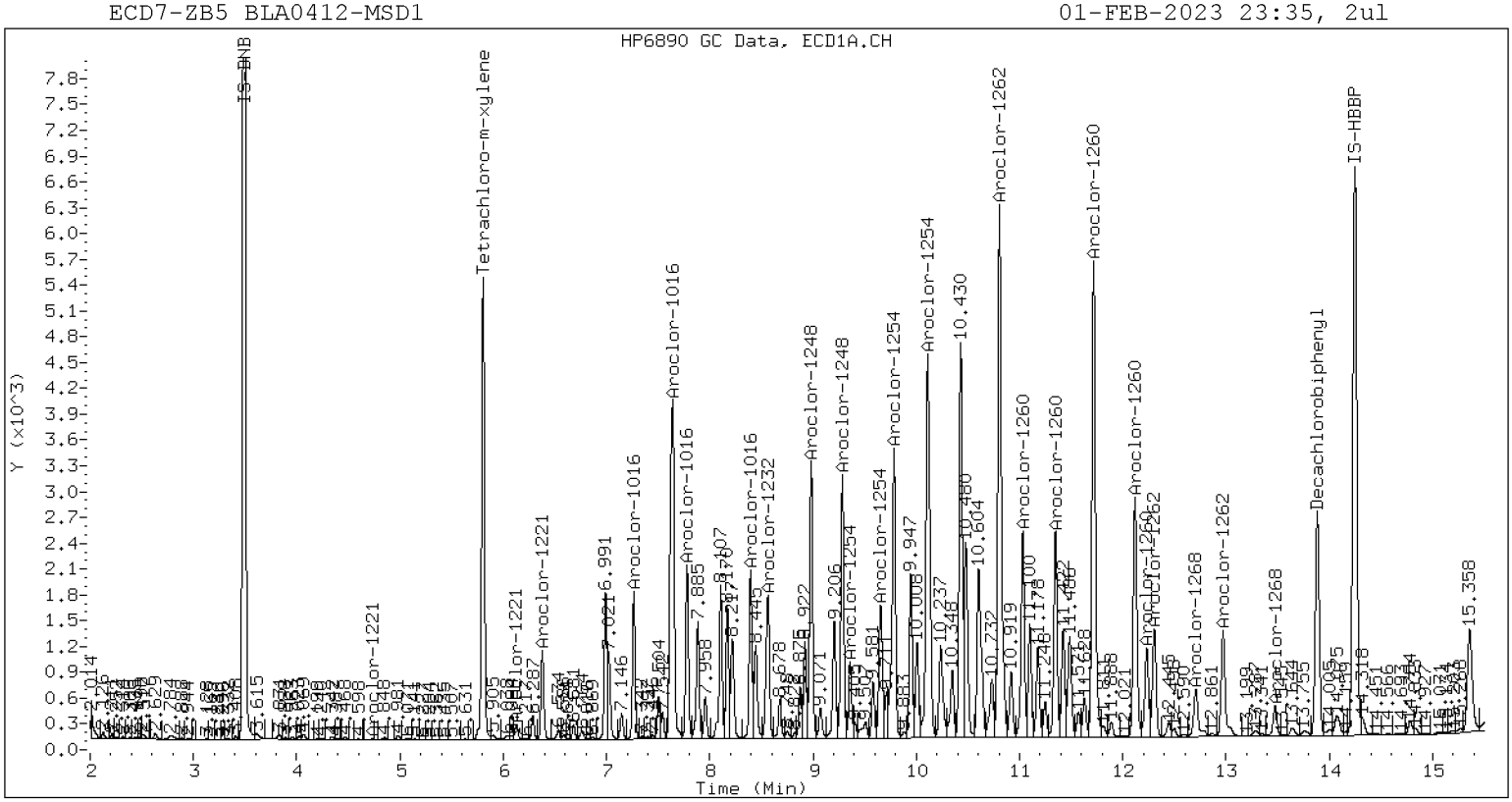
Total PCB Area Col2 (5.784 - 14.016) = 3626243 Col2 Total PCB = 0.9 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

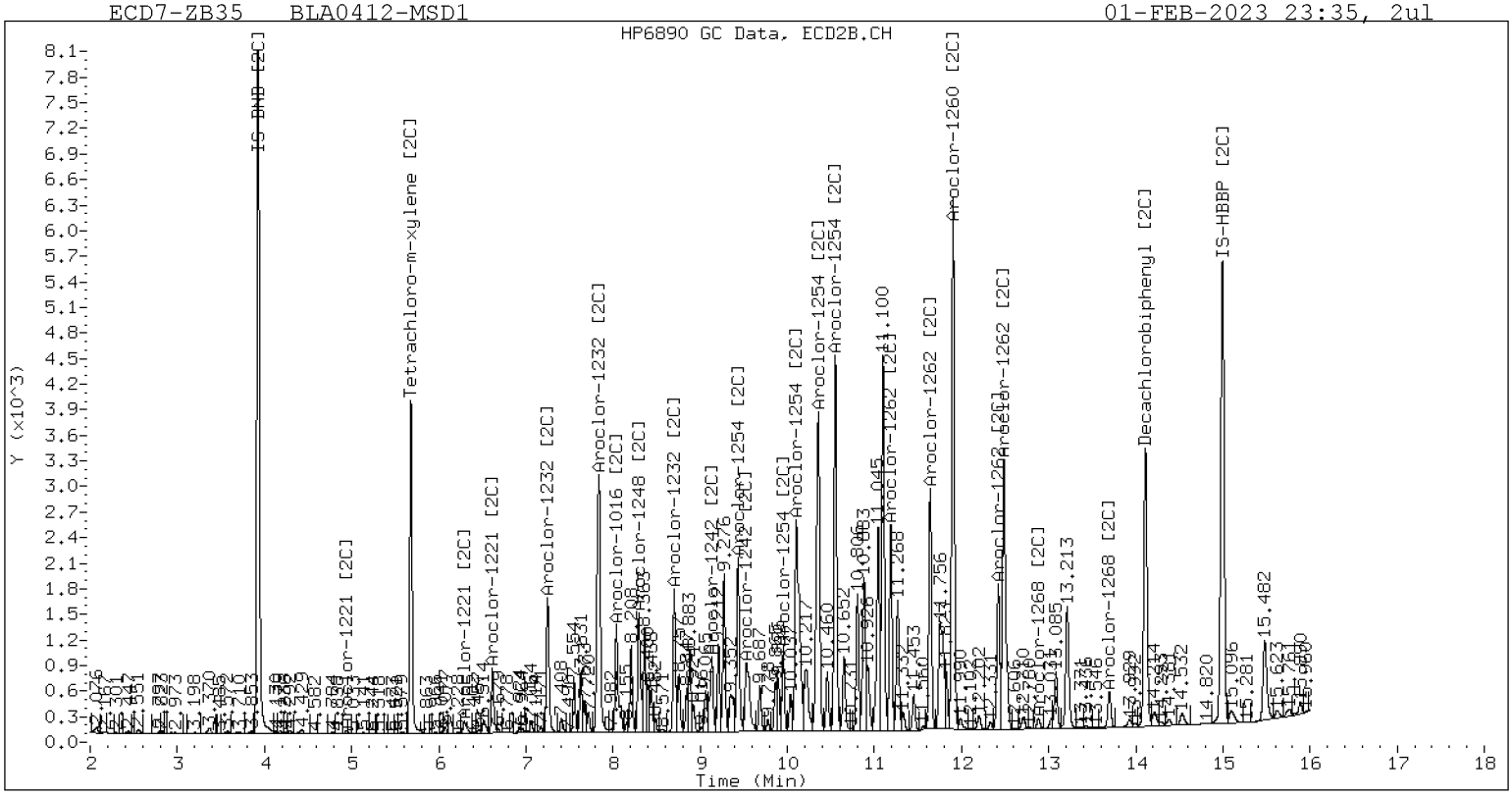
PCB Dual Column Chromatograms

ECD7-ZB5 BLA0412-MSD1 01-FEB-2023 23:35, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0412-MSD1 01-FEB-2023 23:35, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0412-SRM1
Batch: BLA0412
Initial/Final: 2.5 g / 2.5 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 02/01/2023 15:53
Standard ID: K010816
Expires: 05/17/2023
Standard Lot#: PSRM0165
Description: Puget Sound reference-SRM

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Aroclor 1260	108.00	73.4	2.9	20.0		68.0	38 - 167
Aroclor 1260 [2C]	108.00	85.7	2.9	20.0		79.4	38 - 167

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012313ECD7.D
Data file 2: /230201.b/230201.b/02012313ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0412-SRM1
Client ID:
Injection Date: 01-FEB-2023 15:53
Report Date: 02/01/2023 16:40
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.001	236792	5.684	-0.001	171663	29.4	32.2	9.1	Tetrachloro-m-xylene
13.886	-0.004	267014	14.115	-0.003	256070	33.5	32.4	3.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	569603	13.2
Hexabromobiphenyl	647433	745340	15.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	394327	17.0
Hexabromobiphenyl	382032	498003	30.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.302	0.032	1999	9.4	1	7.256	0.003	7053	33.0
Aroclor-1016	2	7.645	-0.004	8555	12.2	2	7.842	-0.008	11814	25.2
Aroclor-1016	3	7.786	-0.001	4542	14.1	3	8.044	-0.005	2512	13.1
Aroclor-1016	4	8.399	-0.003	7255	35.0	4	8.300	-0.003	7667	51.1
Total Col1Ave (4 peaks):					17.7	Total Col2Ave (4 peaks):				30.6 RPD = 54*
Corrected Ave (3 peaks):					11.9	Corrected Ave (3 peaks):				23.8 RPD = 67*
Aroclor-1221	1	4.684	-0.049	361	8.6	1	4.944	-0.015	763	26.4
Aroclor-1221	2	6.161	0.027	986	11.5	2	6.339	0.040	7701	121.6
Aroclor-1221	3	6.393	0.009	3056	15.3	3	6.638	0.015	3946	36.9
Total Col1Ave (3 peaks):					11.8	Total Col2Ave (3 peaks):				61.6 RPD = 136*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.684	-0.049	361	13.7	1	4.944	-0.016	763	43.5
Aroclor-1232	2	6.161	0.027	986	16.6	2	7.256	-0.001	7053	71.9
Aroclor-1232	3	7.645	-0.013	8555	28.9	3	7.842	-0.012	11814	59.1
Aroclor-1232	4	8.568	-0.017	5327	42.0	4	8.706	-0.007	5983	107.8
Total Col1Ave (4 peaks):					25.3	Total Col2Ave (4 peaks):				70.6 RPD = 94*
Corrected Ave (3 peaks):					19.8	Corrected Ave (3 peaks):				58.2 RPD = 99*
Aroclor-1242	1	7.302	0.031	1999	11.5	1	7.256	0.000	7053	40.9
Aroclor-1242	2	7.645	-0.010	8555	15.0	2	7.842	-0.011	11814	30.8
Aroclor-1242	3	8.399	-0.008	7255	42.8	3	9.141	-0.018	7805	65.1
Aroclor-1242	4	8.568	-0.014	5327	20.8	4	9.534	-0.053	13617	85.6
Total Col1Ave (4 peaks):					22.5	Total Col2Ave (4 peaks):				55.6 RPD = 85*
Corrected Ave (3 peaks):					15.7	Corrected Ave (3 peaks):				45.6 RPD = 97*
Aroclor-1248	1	8.399	-0.004	7255	25.5	1	8.300	-0.003	7667	43.0
Aroclor-1248	2	8.568	-0.008	5327	14.7	2	8.706	-0.004	5983	31.2
Aroclor-1248	3	8.988	-0.008	20040	28.8	3	9.141	-0.012	7805	33.3
Aroclor-1248	4	9.288	-0.003	28501	82.8	4	9.534	-0.043	13617	47.0
Total Col1Ave (4 peaks):					37.9	Total Col2Ave (4 peaks):				38.6 RPD = 2
Corrected Ave (3 peaks):					23.0	Corrected Ave (3 peaks):				35.8 RPD = 44*
Aroclor-1254	1	9.288	-0.008	28501	49.1	1	9.439	-0.005	20345	71.1
Aroclor-1254	2	9.364	-0.009	8194	33.1	2	9.958	-0.006	9434	40.8
Aroclor-1254	3	9.659	-0.004	16676	44.8	3	10.109	-0.006	37443	74.2
Aroclor-1254	4	9.789	-0.012	37461	51.4	4	10.361	-0.005	47330	93.8
Aroclor-1254	5	10.112	-0.051	60520	127.7	5	10.556	-0.008	46879	166.9
Total Col1Ave (5 peaks):					61.2	Total Col2Ave (5 peaks):				89.4 RPD = 37
Corrected Ave (4 peaks):					44.6	Corrected Ave (4 peaks):				70.0 RPD = 44*
Aroclor-1260	1	11.034	-0.007	33380	79.8	1	11.645	-0.005	30172	84.0
Aroclor-1260	2	11.347	-0.010	27063	63.0	2	11.906	-0.009	69223	76.2
Aroclor-1260	3	11.721	-0.011	84967	75.1	3	12.425	-0.009	24126	106.5
Aroclor-1260	4	12.123	-0.012	44986	76.9	4	12.489	-0.009	44819	76.2
Aroclor-1260	5	12.235	-0.006	18435	72.3	NS	---			----
Total Col1Ave (5 peaks):					73.4	Total Col2Ave (4 peaks):				85.7 RPD = 15
Corrected Ave (4 peaks):					71.8	Corrected Ave (3 peaks):				78.8 RPD = 9
Aroclor-1262	1	10.811	-0.022	79636	264.2	1	11.191	-0.009	28398	58.3
Aroclor-1262	2	12.235	-0.010	18435	38.7	2	11.645	-0.008	30172	72.8
Aroclor-1262	3	12.308	-0.012	22106	42.8	3	12.425	-0.010	24126	54.7
Aroclor-1262	4	12.975	-0.014	21132	44.9	4	12.489	-0.014	44819	63.4
Total Col1Ave (4 peaks):					97.7	Total Col2Ave (4 peaks):				62.3 RPD = 44*
Corrected Ave (3 peaks):					42.1	Corrected Ave (3 peaks):				58.8 RPD = 33
Aroclor-1268	1	12.235	-0.010	18435	15.0	1	12.425	-0.009	24126	20.7
Aroclor-1268	2	12.308	-0.010	22106	18.0	2	12.489	-0.012	44819	36.2
Aroclor-1268	3	12.713	0.014	10952	10.8	3	12.889	-0.004	998	1.0
Aroclor-1268	4	13.479	-0.010	3631	1.2	4	13.700	-0.009	6381	2.0
Total Col1Ave (4 peaks):					11.2	Total Col2Ave (4 peaks):				15.0 RPD = 29

Corrected Ave (3 peaks): 9.0 Corrected Ave (3 peaks): 7.9 RPD = 13

Total PCB Area Col1 (5.907 - 13.790) = 1025659 Col1 Total PCB = 0.2 ppm*

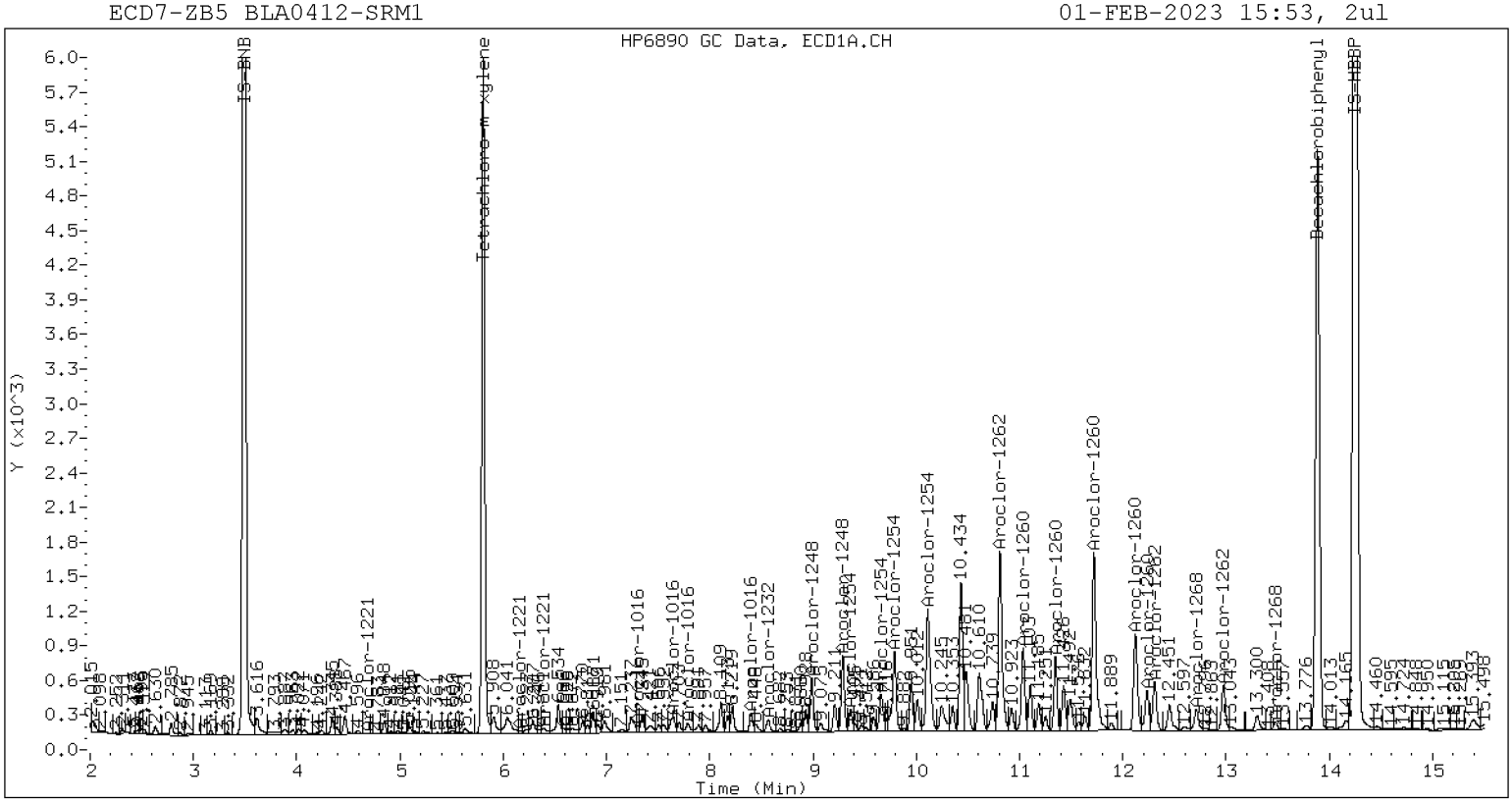
Total PCB Area Col2 (5.784 - 14.018) = 833667 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

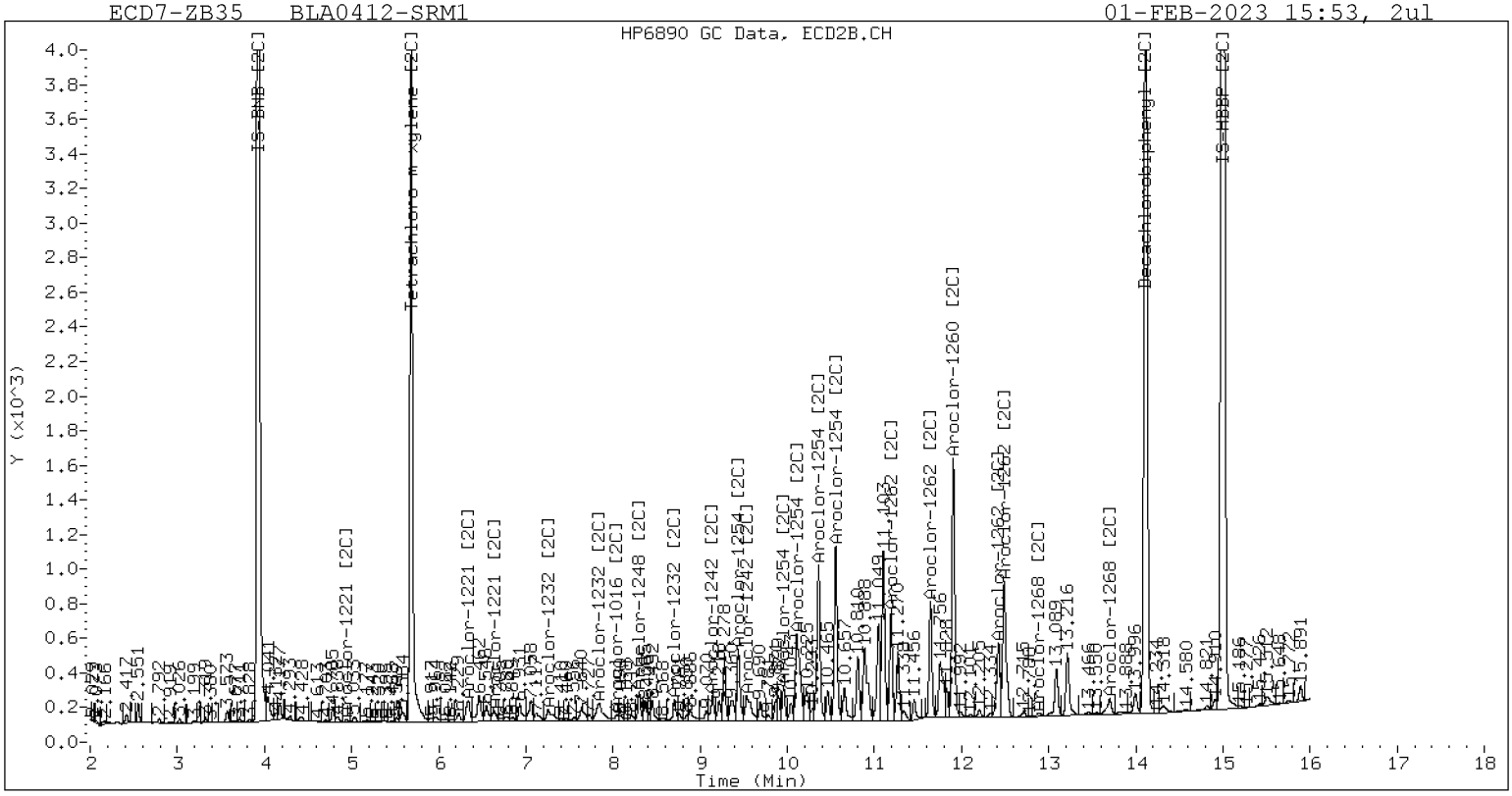
PCB Dual Column Chromatograms

ECD7-ZB5 BLA0412-SRM1 01-FEB-2023 15:53, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0412-SRM1 01-FEB-2023 15:53, 2ul



ZB-35 Manual Integration: NO

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1016	250	5.167707E-02	20	4.942809E-02	50	5.153925E-02	1000	4.662732E-02	100	5.549196E-02	500	4.928929E-02
Aroclor-1016 (1)	250	3.017861E-02	20	2.947465E-02	50	3.102226E-02	1000	2.635254E-02	100	3.309682E-02	500	2.824148E-02
Aroclor-1016 (2)	250	0.1020346	20	9.270426E-02	50	9.811961E-02	1000	9.356138E-02	100	0.1059789	500	0.0986114
Aroclor-1016 (3)	250	4.399859E-02	20	4.877736E-02	50	4.899883E-02	1000	3.795541E-02	100	0.0512744	500	4.091133E-02
Aroclor-1016 (4)	250	3.049651E-02	20	2.675607E-02	50	2.801628E-02	1000	2.863996E-02	100	3.161774E-02	500	2.939295E-02
Aroclor 1260	250	6.608884E-02	20	6.779653E-02	50	6.325495E-02	1000	5.469674E-02	100	5.850835E-02	500	5.278897E-02
Aroclor-1260 (1)	250	5.181373E-02	20	4.727423E-02	50	4.542797E-02	1000	0.0403981	100	0.0442757	500	0.0401323
Aroclor-1260 (2)	250	5.350015E-02	20	4.939797E-02	50	4.636355E-02	1000	4.208491E-02	100	4.449674E-02	500	4.100371E-02
Aroclor-1260 (3)	250	0.1331674	20	0.1373712	50	0.1282887	1000	0.1078965	100	0.1173998	500	0.1046798
Aroclor-1260 (4)	250	6.473121E-02	20	7.197922E-02	50	0.0663805	1000	5.863707E-02	100	5.997377E-02	500	5.485394E-02
Aroclor-1260 (5)	250	2.723173E-02	20	3.295998E-02	50	2.981405E-02	1000	2.446709E-02	100	2.639578E-02	500	2.327509E-02
Decachlorobiphenyl	40	0.8481341	3.2	0.8644195	8	0.9030151	160	0.7914512	16	0.9308139	80	0.7957625
Tetrachlorometaxylene	40	1.149655	3.2	1.100393	8	1.102173	160	1.094607	16	1.219974	80	1.117921

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1221							250	0.0153579				
Aroclor-1221 (1)							250	5.913051E-03				
Aroclor-1221 (2)							250	1.209121E-02				
Aroclor-1221 (3)							250	2.806945E-02				
Aroclor 1232									250	1.785602E-02		
Aroclor-1232 (1)									250	3.691407E-03		
Aroclor-1232 (2)									250	8.319285E-03		
Aroclor-1232 (3)									250	4.160486E-02		
Aroclor-1232 (4)									250	1.780851E-02		
Aroclor 1242	250	0.0411165										
Aroclor-1242 (1)	250	2.449677E-02										
Aroclor-1242 (2)	250	8.016926E-02										
Aroclor-1242 (3)	250	2.381903E-02										
Aroclor-1242 (4)	250	3.598092E-02										
Aroclor 1248			250	0.0592639								
Aroclor-1248 (1)			250	4.001993E-02								
Aroclor-1248 (2)			250	5.105008E-02								
Aroclor-1248 (3)			250	9.765126E-02								
Aroclor-1248 (4)			250	4.833435E-02								
Aroclor 1254					250	6.750332E-02						
Aroclor-1254 (1)					250	8.153293E-02						
Aroclor-1254 (2)					250	0.0348121						
Aroclor-1254 (3)					250	5.224052E-02						
Aroclor-1254 (4)					250	0.1023658						
Aroclor-1254 (5)					250	6.656523E-02						
Aroclor-1262 (1)							250	3.235265E-02				
Aroclor-1262 (2)							250	5.106336E-02				
Aroclor-1262 (3)							250	5.543866E-02				

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor-1262 (4)							250	5.051654E-02				
Aroclor-1268 (1)									250	0.132157		
Aroclor-1268 (2)									250	0.1317955		
Aroclor-1268 (3)									250	0.1091938		
Aroclor-1268 (4)									250	0.3237404		

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor 1016	0.0506755	5.9			RSD (20)	
Aroclor-1016 (1)	2.972773E-02	7.8			RSD (20)	
Aroclor-1016 (2)	9.850169E-02	5.1			RSD (20)	
Aroclor-1016 (3)	4.531932E-02	11.5			RSD (20)	
Aroclor-1016 (4)	2.915325E-02	6.0			RSD (20)	
Aroclor 1221		0.0			RSD (20)	
Aroclor-1221 (1)		0.0			RSD (20)	
Aroclor-1221 (2)		0.0			RSD (20)	
Aroclor-1221 (3)		0.0			RSD (20)	
Aroclor 1232		0.0			RSD (20)	
Aroclor-1232 (1)		0.0			RSD (20)	
Aroclor-1232 (2)		0.0			RSD (20)	
Aroclor-1232 (3)		0.0			RSD (20)	
Aroclor-1232 (4)		0.0			RSD (20)	
Aroclor 1242		0.0			RSD (20)	
Aroclor-1242 (1)		0.0			RSD (20)	
Aroclor-1242 (2)		0.0			RSD (20)	
Aroclor-1242 (3)		0.0			RSD (20)	
Aroclor-1242 (4)		0.0			RSD (20)	
Aroclor 1248		0.0			RSD (20)	
Aroclor-1248 (1)		0.0			RSD (20)	
Aroclor-1248 (2)		0.0			RSD (20)	
Aroclor-1248 (3)		0.0			RSD (20)	
Aroclor-1248 (4)		0.0			RSD (20)	
Aroclor 1254		0.0			RSD (20)	
Aroclor-1254 (1)		0.0			RSD (20)	
Aroclor-1254 (2)		0.0			RSD (20)	
Aroclor-1254 (3)		0.0			RSD (20)	
Aroclor-1254 (4)		0.0			RSD (20)	
Aroclor-1254 (5)		0.0			RSD (20)	
Aroclor 1260	0.0605224	10.2			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor-1260 (1)	0.044887	9.8			RSD (20)	
Aroclor-1260 (2)	4.614117E-02	10.2			RSD (20)	
Aroclor-1260 (3)	0.1214672	11.2			RSD (20)	
Aroclor-1260 (4)	6.275928E-02	9.8			RSD (20)	
Aroclor-1260 (5)	2.735729E-02	13.0			RSD (20)	
Aroclor-1262 (1)		0.0			RSD (20)	
Aroclor-1262 (2)		0.0			RSD (20)	
Aroclor-1262 (3)		0.0			RSD (20)	
Aroclor-1262 (4)		0.0			RSD (20)	
Aroclor-1268 (1)		0.0			RSD (20)	
Aroclor-1268 (2)		0.0			RSD (20)	
Aroclor-1268 (3)		0.0			RSD (20)	
Aroclor-1268 (4)		0.0			RSD (20)	
Decachlorobiphenyl	0.8555994	6.6			RSD (20)	
Tetrachlorometaxylene	1.130787	4.2			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
Aroclor 1016 [2C]	250	5.292579E-02	20	4.676037E-02	50	5.470557E-02	1000	4.853417E-02	100	5.747899E-02	500	5.114174E-02
Aroclor-1016 (1) [2C]	250	4.314113E-02	20	4.423802E-02	50	4.724251E-02	1000	3.795138E-02	100	4.677646E-02	500	4.099489E-02
Aroclor-1016 (2) [2C]	250	9.823746E-02	20	8.511696E-02	50	9.615173E-02	1000	9.129912E-02	100	0.1041709	500	9.554107E-02
Aroclor-1016 (3) [2C]	250	4.028886E-02	20	2.918885E-02	50	0.0416533	1000	3.764267E-02	100	4.478001E-02	500	3.925449E-02
Aroclor-1016 (4) [2C]	250	3.003571E-02	20	2.849763E-02	50	3.377476E-02	1000	2.724351E-02	100	3.418865E-02	500	0.0287764
Aroclor 1260 [2C]	250	0.0868269	20	8.456297E-02	50	8.682148E-02	1000	7.954321E-02	100	8.639013E-02	500	7.778218E-02
Aroclor-1260 (1) [2C]	250	6.129497E-02	20	6.075052E-02	50	5.973709E-02	1000	5.307059E-02	100	5.911734E-02	500	5.231082E-02
Aroclor-1260 (2) [2C]	250	0.1536701	20	0.147481	50	0.1510614	1000	0.1380864	100	0.1518107	500	0.1339581
Aroclor-1260 (3) [2C]	250	3.647192E-02	20	3.683006E-02	50	3.729426E-02	1000	3.693906E-02	100	3.582131E-02	500	3.500995E-02
Aroclor-1260 (4) [2C]	250	0.0958705	20	9.319031E-02	50	9.919317E-02	1000	9.007677E-02	100	9.881117E-02	500	8.984983E-02
Decachlorobiphenyl [2C]	40	1.292085	3.2	1.209146	8	1.271224	160	1.30389	16	1.311901	80	1.229614
Tetrachlorometaxylene [2C]	40	1.096753	3.2	1.043423	8	1.105211	160	1.038509	16	1.153217	80	1.051873

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1221 [2C]							250	1.346872E-02				
Aroclor-1221 (1) [2C]							250	5.864614E-03				
Aroclor-1221 (2) [2C]							250	1.285084E-02				
Aroclor-1221 (3) [2C]							250	2.169068E-02				
Aroclor 1232 [2C]									250	0.0188178		
Aroclor-1232 (1) [2C]									250	3.556924E-03		
Aroclor-1232 (2) [2C]									250	1.990636E-02		
Aroclor-1232 (3) [2C]									250	4.054321E-02		
Aroclor-1232 (4) [2C]									250	1.126471E-02		
Aroclor 1242 [2C]	250	4.232355E-02										
Aroclor-1242 (1) [2C]	250	3.498756E-02										
Aroclor-1242 (2) [2C]	250	7.771274E-02										
Aroclor-1242 (3) [2C]	250	2.433789E-02										
Aroclor-1242 (4) [2C]	250	3.225599E-02										
Aroclor 1248 [2C]			250	4.536727E-02								
Aroclor-1248 (1) [2C]			250	0.036162								
Aroclor-1248 (2) [2C]			250	3.892353E-02								
Aroclor-1248 (3) [2C]			250	4.756205E-02								
Aroclor-1248 (4) [2C]			250	5.882148E-02								
Aroclor 1254 [2C]					250	7.332193E-02						
Aroclor-1254 (1) [2C]					250	5.803883E-02						
Aroclor-1254 (2) [2C]					250	4.691175E-02						
Aroclor-1254 (3) [2C]					250	0.1023304						
Aroclor-1254 (4) [2C]					250	0.1023323						
Aroclor-1254 (5) [2C]					250	5.699633E-02						
Aroclor-1262 (1) [2C]							250	7.829705E-02				
Aroclor-1262 (2) [2C]							250	6.658267E-02				
Aroclor-1262 (3) [2C]							250	7.090313E-02				

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor-1262 (4) [2C]							250	0.1135497				
Aroclor-1268 (1) [2C]									250	0.1868176		
Aroclor-1268 (2) [2C]									250	0.1988025		
Aroclor-1268 (3) [2C]									250	0.1654822		
Aroclor-1268 (4) [2C]									250	0.5111759		

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor 1016 [2C]	5.192444E-02	7.6			RSD (20)	
Aroclor-1016 (1) [2C]	4.339073E-02	8.1			RSD (20)	
Aroclor-1016 (2) [2C]	9.508621E-02	6.8			RSD (20)	
Aroclor-1016 (3) [2C]	3.880136E-02	13.6			RSD (20)	
Aroclor-1016 (4) [2C]	3.041944E-02	9.5			RSD (20)	
Aroclor 1221 [2C]		0.0			RSD (20)	
Aroclor-1221 (1) [2C]		0.0			RSD (20)	
Aroclor-1221 (2) [2C]		0.0			RSD (20)	
Aroclor-1221 (3) [2C]		0.0			RSD (20)	
Aroclor 1232 [2C]		0.0			RSD (20)	
Aroclor-1232 (1) [2C]		0.0			RSD (20)	
Aroclor-1232 (2) [2C]		0.0			RSD (20)	
Aroclor-1232 (3) [2C]		0.0			RSD (20)	
Aroclor-1232 (4) [2C]		0.0			RSD (20)	
Aroclor 1242 [2C]		0.0			RSD (20)	
Aroclor-1242 (1) [2C]		0.0			RSD (20)	
Aroclor-1242 (2) [2C]		0.0			RSD (20)	
Aroclor-1242 (3) [2C]		0.0			RSD (20)	
Aroclor-1242 (4) [2C]		0.0			RSD (20)	
Aroclor 1248 [2C]		0.0			RSD (20)	
Aroclor-1248 (1) [2C]		0.0			RSD (20)	
Aroclor-1248 (2) [2C]		0.0			RSD (20)	
Aroclor-1248 (3) [2C]		0.0			RSD (20)	
Aroclor-1248 (4) [2C]		0.0			RSD (20)	
Aroclor 1254 [2C]		0.0			RSD (20)	
Aroclor-1254 (1) [2C]		0.0			RSD (20)	
Aroclor-1254 (2) [2C]		0.0			RSD (20)	
Aroclor-1254 (3) [2C]		0.0			RSD (20)	
Aroclor-1254 (4) [2C]		0.0			RSD (20)	
Aroclor-1254 (5) [2C]		0.0			RSD (20)	
Aroclor 1260 [2C]	8.365448E-02	4.8			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor-1260 (1) [2C]	5.771356E-02	6.9			RSD (20)	
Aroclor-1260 (2) [2C]	0.1460113	5.5			RSD (20)	
Aroclor-1260 (3) [2C]	3.639443E-02	2.3			RSD (20)	
Aroclor-1260 (4) [2C]	9.449863E-02	4.4			RSD (20)	
Aroclor-1262 (1) [2C]		0.0			RSD (20)	
Aroclor-1262 (2) [2C]		0.0			RSD (20)	
Aroclor-1262 (3) [2C]		0.0			RSD (20)	
Aroclor-1262 (4) [2C]		0.0			RSD (20)	
Aroclor-1268 (1) [2C]		0.0			RSD (20)	
Aroclor-1268 (2) [2C]		0.0			RSD (20)	
Aroclor-1268 (3) [2C]		0.0			RSD (20)	
Aroclor-1268 (4) [2C]		0.0			RSD (20)	
Decachlorobiphenyl [2C]	1.269643	3.3			RSD (20)	
Tetrachlorometaxylene [2C]	1.081498	4.2			RSD (20)	

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLA0281

Instrument: ECD7
Calibration ID: GA00061

Printed: 1/26/2023 11:51:52AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLA0281-CAL1	QC		1		L000856	K006953		
SLA0281-CAL2	QC		2		L000859	K006953		
SLA0281-CAL3	QC		3		L000858	K006953		
SLA0281-CAL4	QC		4		L000731	K006953		
SLA0281-CAL5	QC		5		L000857	K006953		
SLA0281-CAL6	QC		6		L000855	K006953		
SLA0281-CAL7	QC		7		L000860	K006953		
SLA0281-CAL8	QC		8		L000861	K006953		
SLA0281-CAL9	QC		9		L000862	K006953		
SLA0281-CALA	QC		10		L000863	K006953		
SLA0281-CALB	QC		11		L000864	K006953		
SLA0281-SCV1	QC		12		K007655	K006953		
SLA0281-SCV2	QC		13		K007656	K006953		
SLA0281-SCV3	QC		14		K007657	K006953		
SLA0281-SCV4	QC		15		K007658	K006953		
SLA0281-SCV5	QC		16		K007659	K006953		
SLA0281-SCV6	QC		17		K007660	K006953		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230124.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	24-JAN-2023 15:39	01242312ECD7.D	1	IB	
2	24-JAN-2023 16:00	01242313ECD7.D	1	0.25PPM AR1660	
3	24-JAN-2023 16:21	01242314ECD7.D	1	0.02PPM AR1660	
4	24-JAN-2023 16:42	01242315ECD7.D	1	0.05PPM AR1660	
5	24-JAN-2023 17:03	01242316ECD7.D	1	1.0PPM AR1660	
6	24-JAN-2023 17:24	01242317ECD7.D	1	0.1PPM AR1660	
7	24-JAN-2023 17:45	01242318ECD7.D	1	0.5PPM AR1660	
8	24-JAN-2023 18:06	01242319ECD7.D	1	0.25PPM 1242	
9	24-JAN-2023 18:27	01242320ECD7.D	1	0.25PPM 1248	
10	24-JAN-2023 18:48	01242321ECD7.D	1	0.25PPM 1254	
11	24-JAN-2023 19:09	01242322ECD7.D	1	0.25PPM 2162	
12	24-JAN-2023 19:30	01242323ECD7.D	1	0.25PPM 3268	
13	24-JAN-2023 19:51	01242324ECD7.D	1	AR1660 SCV	
14	24-JAN-2023 20:12	01242325ECD7.D	1	AR1242 SCV	
15	24-JAN-2023 20:33	01242326ECD7.D	1	AR1248 SCV	
16	24-JAN-2023 20:54	01242327ECD7.D	1	AR1254 SCV	
17	24-JAN-2023 21:15	01242328ECD7.D	1	AR2162 SCV	
18	24-JAN-2023 21:36	01242329ECD7.D	1	AR3268 SCV	
19	24-JAN-2023 21:57	01242330ECD7.D	1	DDTS	
20	24-JAN-2023 22:18	01242331ECD7.D	1	DDT BD	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230124.b

ARI Job No.: IB Method: PCB.m Instrument: ecd7.i Date: 24-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1539	01242312ECD7.D	IB		1	NO MANUAL INTEGRATION
1600	01242313ECD7.D	0.25PPM	AR1660	1	NO MANUAL INTEGRATION
1621	01242314ECD7.D	0.02PPM	AR1660	1	NO MANUAL INTEGRATION
1642	01242315ECD7.D	0.05PPM	AR1660	1	NO MANUAL INTEGRATION
1703	01242316ECD7.D	1.0PPM	AR1660	1	NO MANUAL INTEGRATION
1724	01242317ECD7.D	0.1PPM	AR1660	1	NO MANUAL INTEGRATION
1745	01242318ECD7.D	0.5PPM	AR1660	1	NO MANUAL INTEGRATION
1806	01242319ECD7.D	0.25PPM	1242	1	NO MANUAL INTEGRATION
1827	01242320ECD7.D	0.25PPM	1248	1	NO MANUAL INTEGRATION
1848	01242321ECD7.D	0.25PPM	1254	1	NO MANUAL INTEGRATION
1909	01242322ECD7.D	0.25PPM	2162	1	NO MANUAL INTEGRATION
1930	01242323ECD7.D	0.25PPM	3268	1	NO MANUAL INTEGRATION
1951	01242324ECD7.D	AR1660	SCV	1	NO MANUAL INTEGRATION
2012	01242325ECD7.D	AR1242	SCV	1	NO MANUAL INTEGRATION
2033	01242326ECD7.D	AR1248	SCV	1	NO MANUAL INTEGRATION
2054	01242327ECD7.D	AR1254	SCV	1	NO MANUAL INTEGRATION
2115	01242328ECD7.D	AR2162	SCV	1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230124.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2136	01242329ECD7.D	AR3268 SCV		1	NO MANUAL INTEGRATION
2157	01242330ECD7.D	DDTS		1	NO MANUAL INTEGRATION
2218	01242331ECD7.D	DDT BD		1	NO MANUAL INTEGRATION

Security Status Report

Date: 26-Jan-2023 11:55

01242301ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242302ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242303ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242304ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242305ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242306ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242307ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242308ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242309ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242310ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242311ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242312ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242313ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242314ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242315ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242316ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242317ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242318ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242319ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242320ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242321ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242322ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242323ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242324ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242325ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242326ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242327ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242328ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242329ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242330ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242331ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
Last Edit : 25-Jan-2023 10:02 JoshuaR
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd7.i\230124.b\01242314ECD7.D
Level 2: \\target\share\chem4\ecd7.i\230124.b\01242315ECD7.D
Level 3: \\target\share\chem4\ecd7.i\230124.b\01242317ECD7.D
Level 4: \\target\share\chem4\ecd7.i\230124.b\01242313ECD7.D
Level 5: \\target\share\chem4\ecd7.i\230124.b\01242318ECD7.D
Level 6: \\target\share\chem4\ecd7.i\230124.b\01242316ECD7.D
Level 7: \\target\share\chem4\ecd7.i\230124.b\01242323ECD7.D
Level 8: \\target\share\chem4\ecd7.i\230124.b\01242330ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
2 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00591	+++++	0.00591	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01209	+++++	0.01209	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02807	+++++	0.02807	0.000
3 Aroclor-1242(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.02450	+++++	0.02450	0.000

(2)	+++++	+++++	+++++	+++++	+++++	+++++			
	0.08017	+++++					0.08017	0.000	
(3)	+++++	+++++	+++++	+++++	+++++	+++++			
	0.02382	+++++					0.02382	0.000	
(4)	+++++	+++++	+++++	+++++	+++++	+++++			
	0.03598	+++++					0.03598	0.000	
4 Aroclor-1232(1)	+++++	+++++	+++++	+++++	+++++	+++++			
	0.00369	+++++					0.00369	0.000	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
Last Edit : 25-Jan-2023 10:02 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.00832	+++++	0.00832	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.04160	+++++	0.04160	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.01781	+++++	0.01781	0.000
7 Aroclor-1016(1)	0.02947	0.03102	0.03310	0.03018	0.02824	0.02635	+++++	+++++	0.02973	7.802
(2)	0.09270	0.09812	0.10598	0.10203	0.09861	0.09356	+++++	+++++	0.09850	5.108
(3)	0.04878	0.04900	0.05127	0.04400	0.04091	0.03796	+++++	+++++	0.04532	11.523
(4)	0.02676	0.02802	0.03162	0.03050	0.02939	0.02864	+++++	+++++	0.02915	5.988
6 Aroclor-1248(1)	+++++	+++++	+++++	+++++	+++++	+++++				

	0.04002	+++++				0.04002	0.000	
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05105	+++++				0.05105	0.000	
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.09765	+++++				0.09765	0.000	
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.04833	+++++				0.04833	0.000	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
Last Edit : 25-Jan-2023 10:02 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	250.000 Level 7	0.000e+00 Level 8						
8 Aroclor-1254(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.08153	+++++					0.08153	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03481	+++++					0.03481	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05224	+++++					0.05224	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.10237	+++++					0.10237	0.000
(5)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.06657	+++++					0.06657	0.000
9 Aroclor-1260(1)	0.04727	0.04543	0.04428	0.05181	0.04013	0.04040		
	+++++	+++++					0.04489	9.818
(2)	0.04940	0.04636	0.04450	0.05350	0.04100	0.04208		
	+++++	+++++					0.04614	10.182
(3)	0.13737	0.12829	0.11740	0.13317	0.10468	0.10790		

	+++++	+++++					0.12147	11.161
(4)	0.07198	0.06638	0.05997	0.06473	0.05485	0.05864		
	+++++	+++++					0.06276	9.803
(5)	0.03296	0.02981	0.02640	0.02723	0.02328	0.02447		
	+++++	+++++					0.02736	13.015
10 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03235	+++++					0.03235	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
Last Edit : 25-Jan-2023 10:02 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.05106	+++++							0.05106	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.05544	+++++							0.05544	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.05052	+++++							0.05052	0.000
11 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.13216	+++++							0.13216	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.13180	+++++							0.13180	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.10919	+++++							0.10919	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.32374	+++++							0.32374	0.000
42 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++				

	+++++	904					904	0.000
43 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	1034					1034	0.000
44 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	2557					2557	0.000
46 4,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	1539					1539	0.000
___	___	___	___	___	___	___	___	___

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
Last Edit : 25-Jan-2023 10:02 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1484	1484	0.000
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 1 Tetrachloro-m-xylene	1.10039	1.10217	1.21997	1.14965	1.11792	1.09461	+++++	+++++	1.13079	4.246
$ 13 Decachlorobiphenyl	0.86442	0.90302	0.93081	0.84813	0.79576	0.79145	+++++	+++++	0.85560	6.556

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Last Edit : 25-Jan-2023 09:58 JoshuaR
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242314ECD7.D
Level 2: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242315ECD7.D
Level 3: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242317ECD7.D
Level 4: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242313ECD7.D
Level 5: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242318ECD7.D
Level 6: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242316ECD7.D
Level 7: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242323ECD7.D
Level 8: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242330ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
1 Aroclor-1221 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00586	+++++	0.00586	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01285	+++++	0.01285	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02169	+++++	0.02169	0.000
4 Aroclor-1232 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00356	+++++	0.00356	0.000

(2)	+++++	+++++	+++++	+++++	+++++	+++++			
	0.01991	+++++					0.01991	0.000	
(3)	+++++	+++++	+++++	+++++	+++++	+++++			
	0.04054	+++++					0.04054	0.000	
(4)	+++++	+++++	+++++	+++++	+++++	+++++			
	0.01126	+++++					0.01126	0.000	
3 Aroclor-1242 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++			
	0.03499	+++++					0.03499	0.000	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Last Edit : 25-Jan-2023 09:58 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	___ RRF	% RSD
	250.000 Level 7	0.000e+00 Level 8						
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.07771	+++++					0.07771	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.02434	+++++					0.02434	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03226	+++++					0.03226	0.000
6 Aroclor-1248 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03616	+++++					0.03616	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03892	+++++					0.03892	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.04756	+++++					0.04756	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05882	+++++					0.05882	0.000
7 Aroclor-1016 [2C](1)	0.04424	0.04724	0.04678	0.04314	0.04099	0.03795		

	+++++	+++++				0.04339	8.142	
(2)	0.08512	0.09615	0.10417	0.09824	0.09554	0.09130		
	+++++	+++++				0.09509	6.775	
(3)	0.02919	0.04165	0.04478	0.04029	0.03925	0.03764		
	+++++	+++++				0.03880	13.639	
(4)	0.02850	0.03377	0.03419	0.03004	0.02878	0.02724		
	+++++	+++++				0.03042	9.538	

ARI Labs, Inc.

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Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Last Edit : 25-Jan-2023 09:58 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	250.000 Level 7	0.000e+00 Level 8						
8 Aroclor-1254 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05804	+++++					0.05804	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.04691	+++++					0.04691	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.10233	+++++					0.10233	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.10233	+++++					0.10233	0.000
(5)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05700	+++++					0.05700	0.000
10 Aroclor-1262 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.07830	+++++					0.07830	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.06658	+++++					0.06658	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		

	0.07090	+++++				0.07090	0.000	
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.11355	+++++				0.11355	0.000	
9 Aroclor-1260 [2C]	(1)	0.06075	0.05974	0.05912	0.06129	0.05231	0.05307	
	+++++	+++++				0.05771	6.881	
	(2)	0.14748	0.15106	0.15181	0.15367	0.13396	0.13809	
	+++++	+++++				0.14601	5.547	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Last Edit : 25-Jan-2023 09:58 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
(3)	0.03683	0.03729	0.03582	0.03647	0.03501	0.03694	#####	#####	0.03639	2.314
(4)	0.09319	0.09919	0.09881	0.09587	0.08985	0.09008	#####	#####	0.09450	4.373
11 Aroclor-1268 [2C](1)	#####	#####	#####	#####	#####	#####	0.18682	#####	0.18682	0.000
(2)	#####	#####	#####	#####	#####	#####	0.19880	#####	0.19880	0.000
(3)	#####	#####	#####	#####	#####	#####	0.16548	#####	0.16548	0.000
(4)	#####	#####	#####	#####	#####	#####	0.51118	#####	0.51118	0.000
41 2,4-DDE [2C]	#####	#####	#####	#####	#####	#####	#####	1528	1528	0.000
42 2,4-DDD [2C]	#####	#####	#####	#####	#####	#####				

	+++++	866					866	0.000	
44 4,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	863					863	0.000	
45 4,4-DDD/2,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	1162					1162	0.000	
46 4,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	1277					1277	0.000	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Last Edit : 25-Jan-2023 09:58 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	___ RRF	% RSD
	250.000 Level 7	0.000e+00 Level 8						
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 2 Tetrachloro-m-xylene [2C]	1.04342	1.10521	1.15322	1.09675	1.05187	1.03851		
	+++++	+++++					1.08150	4.159
$ 13 Decachlorobiphenyl [2C]	1.20915	1.27122	1.31190	1.29209	1.22961	1.30389		
	+++++	+++++					1.26964	3.291

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230124.b
Inst ID: ecd7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	01242313ECD7	01242314ECD7	01242315ECD7	01242316ECD7	01242317ECD7	01242318ECD7
INJ.DATE:	24-JAN-2023	24-JAN-2023	24-JAN-2023	24-JAN-2023	24-JAN-2023	24-JAN-2023
INJ.TIME:	16:00	16:21	16:42	17:03	17:24	17:45

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 41 IS-BNB	3.493	3.492	3.492	3.492	3.492	3.493	3.492	3.392-3.592	3.492	0.000
$ 1 Tetrachloro-m-xylene	5.810	5.809	5.809	5.809	5.808	5.809	5.809	5.709-5.909	5.809	0.001
2 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	4.733	4.633-4.833	+++++	+++++
3 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	7.271	7.171-7.371	+++++	+++++
4 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	4.733	4.633-4.833	+++++	+++++
7 Aroclor-1016	7.272	7.272	7.271	7.270	7.271	7.270	7.270	7.170-7.370	7.271	0.001
6 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	8.406	8.306-8.505	+++++	+++++
8 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	9.299	9.199-9.399	+++++	+++++
9 Aroclor-1260	11.047	11.049	11.048	11.043	11.046	11.044	11.044	10.944-11.144	11.046	0.002
10 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	10.832	10.732-10.932	+++++	+++++
11 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	12.245	12.145-12.345	+++++	+++++
$ 13 Decachlorobiphenyl	13.894	13.892	13.893	13.892	13.892	13.891	13.892	13.792-13.992	13.892	0.001
* 12 IS-HBBP	14.267	14.265	14.265	14.264	14.264	14.264	14.266	14.166-14.366	14.265	0.001
42 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	9.263	9.213-9.313	+++++	+++++
43 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	9.805	9.755-9.855	+++++	+++++
44 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.296	10.246-10.346	+++++	+++++
46 4,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	9.687	9.587-9.787	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230124.b
Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	10.281	10.181-10.381	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.758	10.658-10.858	+++++	+++++
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.842	1.742-1.942	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	6.708	6.608-6.808	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230124.b\230124.b
Inst ID: ecd7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	01242313ECD7	01242314ECD7	01242315ECD7	01242316ECD7	01242317ECD7	01242318ECD7
INJ.DATE:	24-JAN-2023	24-JAN-2023	24-JAN-2023	24-JAN-2023	24-JAN-2023	24-JAN-2023
INJ.TIME:	16:00	16:21	16:42	17:03	17:24	17:45

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 40 IS-BNB [2C]	3.928	3.929	3.929	3.929	3.928	3.929	3.929	3.829-4.029	3.929	0.001
$ 2 Tetrachloro-m-xylene [	5.685	5.686	5.687	5.685	5.686	5.686	5.687	5.587-5.787	5.686	0.001
1 Aroclor-1221 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	4.959	4.859-5.059	+++++	+++++
4 Aroclor-1232 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	4.960	4.860-5.060	+++++	+++++
3 Aroclor-1242 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	7.256	7.156-7.356	+++++	+++++
6 Aroclor-1248 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	8.305	8.205-8.405	+++++	+++++
7 Aroclor-1016 [2C]	7.255	7.257	7.256	7.254	7.255	7.254	7.255	7.155-7.355	7.255	0.001
8 Aroclor-1254 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	9.448	9.348-9.548	+++++	+++++
10 Aroclor-1262 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	11.200	11.100-11.300	+++++	+++++
9 Aroclor-1260 [2C]	11.653	11.655	11.655	11.653	11.655	11.653	11.653	11.553-11.753	11.654	0.001
11 Aroclor-1268 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	12.434	12.334-12.534	+++++	+++++
$ 13 Decachlorobiphenyl [2C	14.120	14.121	14.120	14.122	14.119	14.120	14.120	14.020-14.220	14.120	0.001
* 12 IS-HBBP [2C]	15.008	15.008	15.009	15.007	15.008	15.009	15.009	14.909-15.109	15.008	0.000
41 2,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++	9.912	9.862-9.962	+++++	+++++
42 2,4-DDD [2C]	+++++	+++++	+++++	+++++	+++++	+++++	9.538	9.488-9.588	+++++	+++++
44 4,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++	10.211	10.111-10.311	+++++	+++++
45 4,4-DDD/2,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	10.666	10.566-10.766	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230124.b\230124.b
Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
46 4,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	11.095	10.995-11.195	+++++	+++++
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.703	1.603-1.803	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	7.178	7.078-7.278	+++++	+++++

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242312ECD7.D
Data file 2: /230124.b/230124.b/01242312ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: IB
Client ID:
Injection Date: 24-JAN-2023 15:39
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.822	0.013	272340	5.680	-0.007	171573	36.5	36.4	0.1	Tetrachloro-m-xylene
13.900	0.008	252989	14.120	-0.000	223176	37.3	38.6	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	528068	4.9
Hexabromobiphenyl	647433	634177	-2.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	348301	3.4
Hexabromobiphenyl	382032	364259	-4.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	7.852	0.064	162	0.5	3	---			0.0
Aroclor-1016	4	8.431	0.027	495	2.6	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.317	0.019	1908	34.1
Aroclor-1221	3	---			0.0	3	6.630	0.007	299	3.2
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	7.208	-0.049	26	0.3
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	8.730	0.017	33	0.7
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	7.208	-0.048	26	0.2
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	8.431	0.024	495	3.1	3	9.151	-0.008	93	0.9
Aroclor-1242	4	8.630	0.049	1101	4.6	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.431	0.025	495	1.9	1	---			0.0
Aroclor-1248	2	8.630	0.050	1101	3.3	2	8.730	0.018	33	0.2
Aroclor-1248	3	---			0.0	3	9.151	-0.005	93	0.4
Aroclor-1248	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	9.474	0.026	9010	35.7
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	9.571	-0.099	114	0.3	3	---			0.0
Aroclor-1254	4	9.770	-0.038	104	0.2	4	---			0.0
Aroclor-1254	5	---			0.0	5	10.525	-0.044	482	1.9
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	11.066	0.023	262	0.7	1	11.703	0.050	189	0.7
Aroclor-1260	2	---			0.0	2	11.832	-0.086	97	0.1
Aroclor-1260	3	11.803	0.069	4470	4.6	3	12.414	-0.022	2209	13.3
Aroclor-1260	4	12.089	-0.051	661	1.3	4	---			0.0
Aroclor-1260	5	12.282	0.038	5183	23.9	NS	---			----
	Total Col1Ave (4 peaks):				7.7	Total Col2Ave (3 peaks):				4.7 RPD = 47*
	Corrected Ave (3 peaks):				2.2	Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.789	-0.043	941	3.7	1	---			0.0
Aroclor-1262	2	12.282	0.036	5183	12.8	2	11.703	0.051	189	0.6
Aroclor-1262	3	---			0.0	3	12.414	-0.020	2209	6.8
Aroclor-1262	4	12.982	-0.007	2811	7.0	4	---			0.0
	Total Col1Ave (3 peaks):				7.8	Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	12.282	0.037	5183	4.9	1	12.414	-0.020	2209	2.6
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.705	0.006	3092	3.6	3	12.894	0.001	724	1.0
Aroclor-1268	4	13.500	0.011	13310	5.2	4	13.708	-0.000	2974	1.3
	Total Col1Ave (3 peaks):				4.6	Total Col2Ave (3 peaks):				1.6 RPD = 96*
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 89790 Col1 Total PCB = 0.0 ppm*

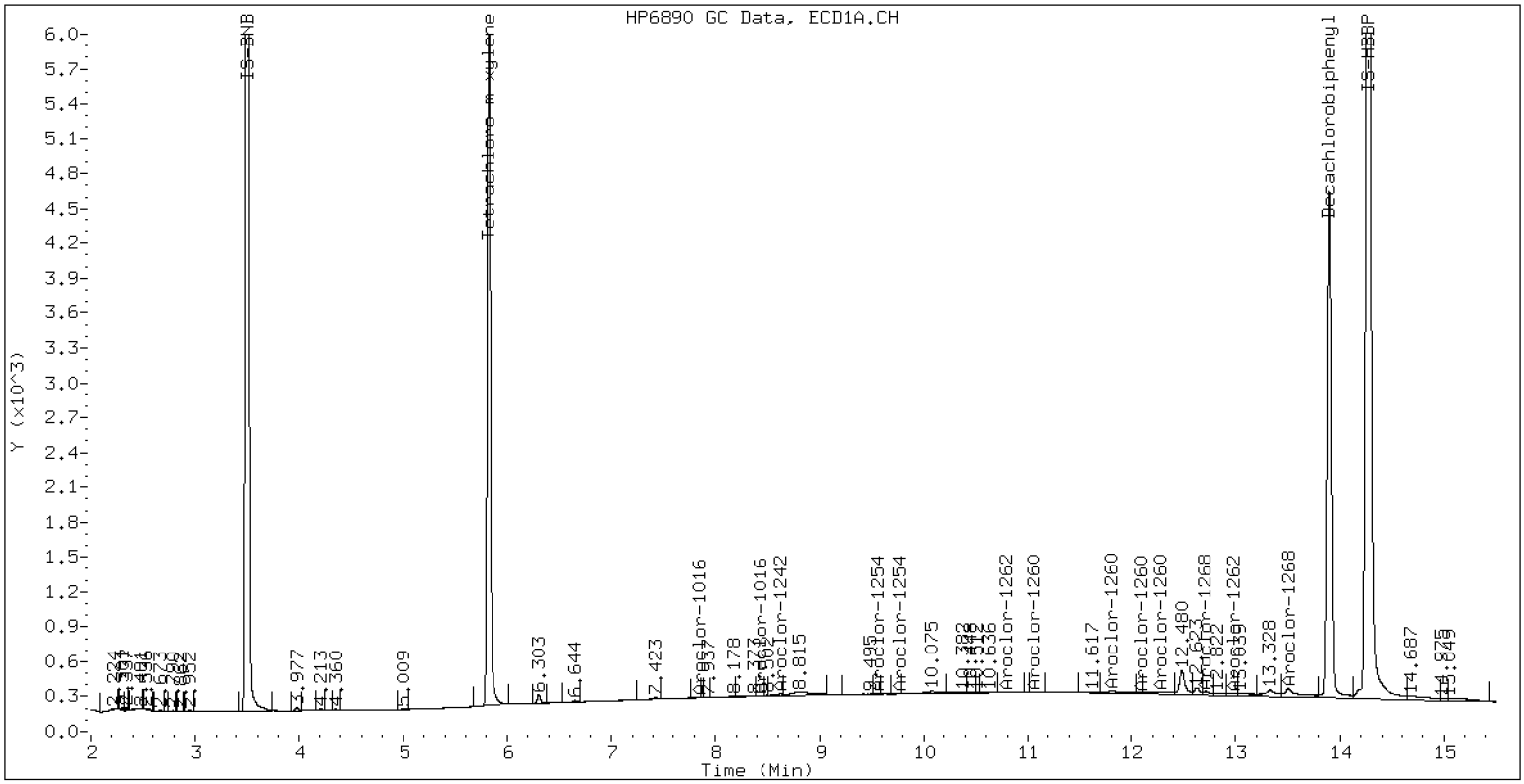
Total PCB Area Col2 (5.787 - 14.020) = 40020 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

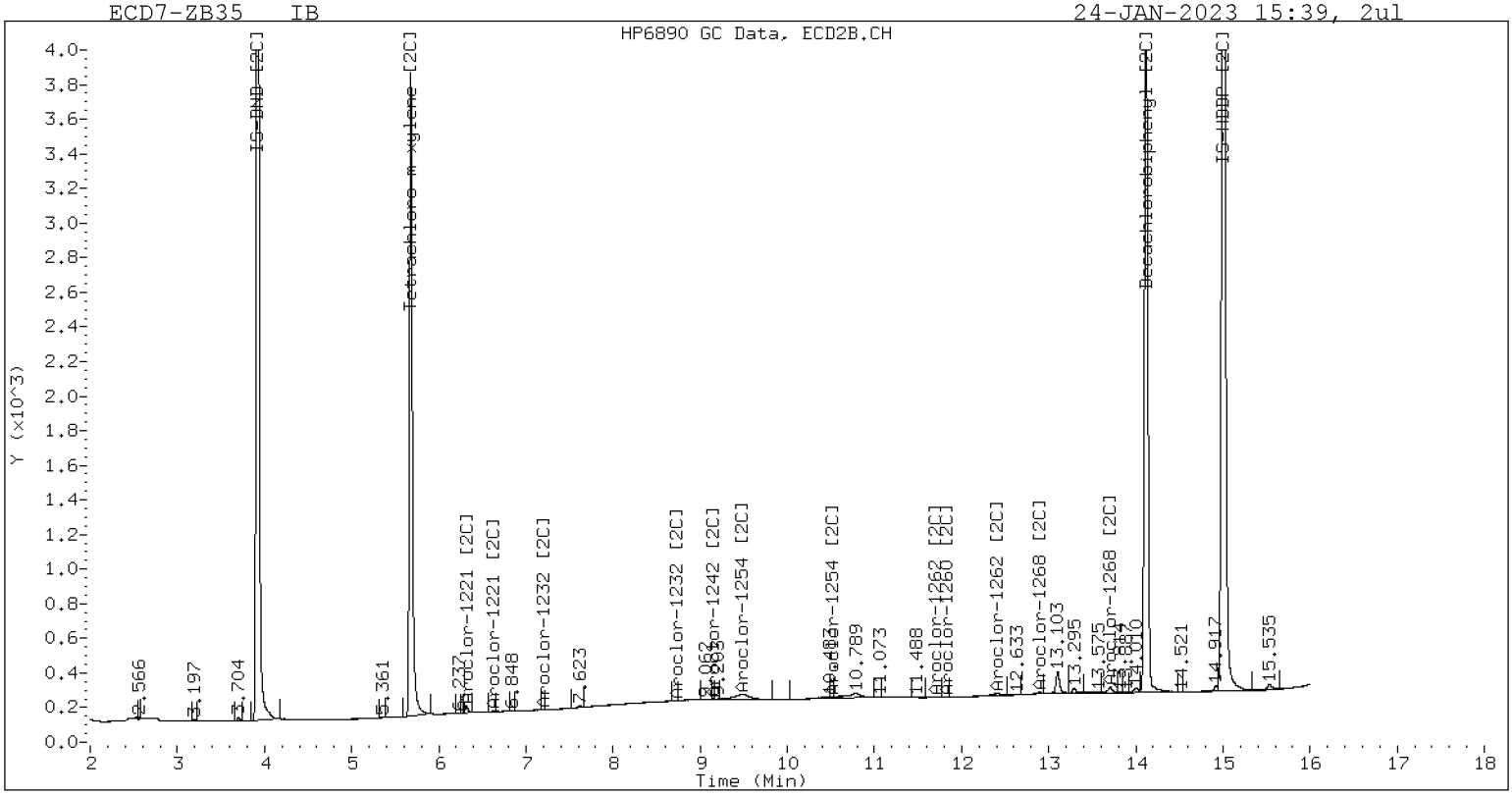
PCB Dual Column Chromatograms

ECD7-ZB5 IB 24-JAN-2023 15:39, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 IB 24-JAN-2023 15:39, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242313ECD7.D
Data file 2: /230124.b/230124.b/01242313ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 16:00
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.810	0.001	289321	5.685	-0.002	184754	40.7	40.6	0.3	Tetrachloro-m-xylene
13.894	0.002	274555	14.120	0.000	246809	39.7	40.7	2.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503318	0.0
Hexabromobiphenyl	647433	647433	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	336911	0.0
Hexabromobiphenyl	382032	382032	0.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	47467	253.8	1	7.255	0.000	45421	248.6
Aroclor-1016	2	7.654	0.004	160487	259.0	2	7.851	0.000	103429	258.3
Aroclor-1016	3	7.791	0.003	69204	242.7	3	8.050	0.000	42418	259.6
Aroclor-1016	4	8.406	0.003	47967	261.5	4	8.305	0.000	31623	246.8
	Total Col1Ave (4 peaks):				254.2	Total Col2Ave (4 peaks):				253.3 RPD = 0
	Corrected Ave (3 peaks):				251.8	Corrected Ave (3 peaks):				251.2 RPD = 0
		CalAmt %D:			1.7		CalAmt %D:			1.3
Aroclor-1260	1	11.047	0.003	104831	288.6	1	11.653	0.000	73177	265.5
Aroclor-1260	2	11.362	0.002	108243	289.9	2	11.918	0.000	183459	263.1
Aroclor-1260	3	11.738	0.004	269428	274.1	3	12.436	0.000	43542	250.5
Aroclor-1260	4	12.142	0.002	130966	257.9	4	12.502	0.000	114455	253.6
Aroclor-1260	5	12.246	0.002	55096	248.9	NS	---			----
	Total Col1Ave (5 peaks):				271.8	Total Col2Ave (4 peaks):				258.2 RPD = 5
	Corrected Ave (4 peaks):				267.3	Corrected Ave (3 peaks):				255.8 RPD = 4
		CalAmt %D:			8.7		CalAmt %D:			3.3

Total PCB Area Col1 (5.909 - 13.792) = 2930230 Col1 Total PCB = 0.5 ppm*

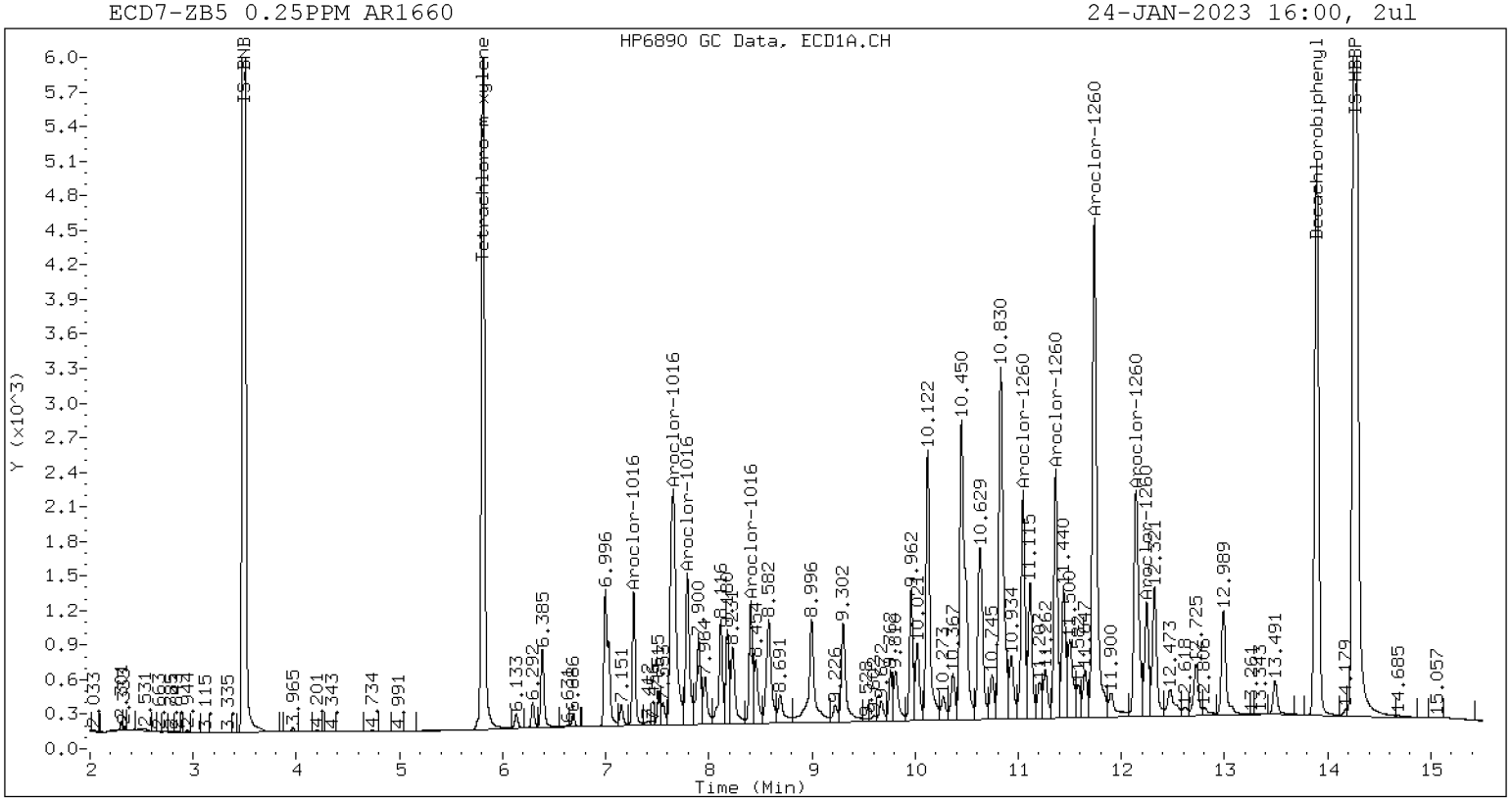
Total PCB Area Col2 (5.787 - 14.020) = 1777050 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

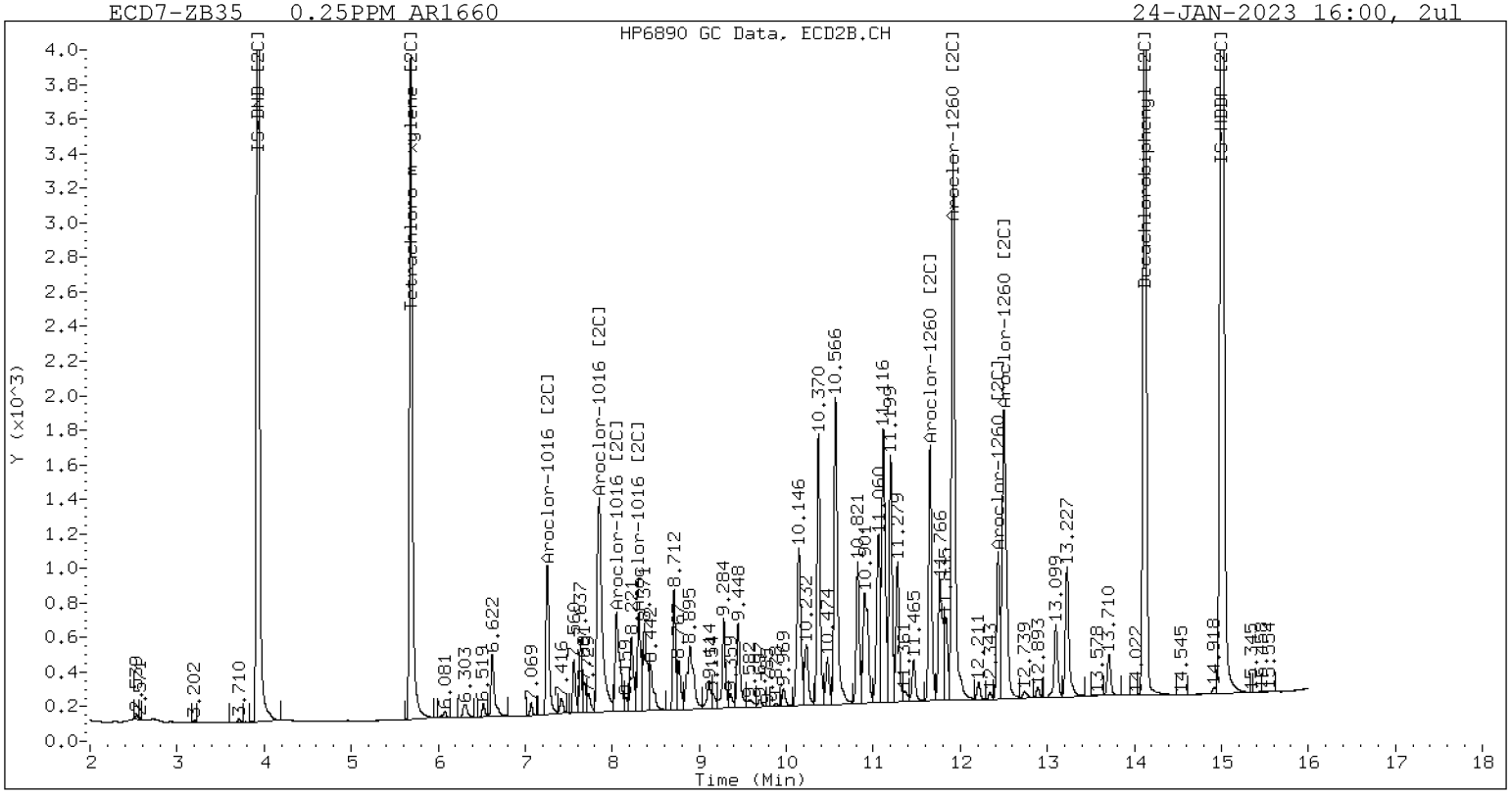
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM AR1660 24-JAN-2023 16:00, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM AR1660 24-JAN-2023 16:00, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242314ECD7.D
Data file 2: /230124.b/230124.b/01242314ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.02PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 16:21
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	21307	5.686	-0.000	13767	3.1	3.1	0.9	Tetrachloro-m-xylene
13.892	0.000	23054	14.121	0.001	19257	3.2	3.0	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	484077	-3.8
Hexabromobiphenyl	647433	666748	3.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	329852	-2.1
Hexabromobiphenyl	382032	398153	4.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	3567	19.8	1	7.257	0.002	3648	20.4
Aroclor-1016	2	7.663	0.012	11219	18.8	2	7.858	0.007	7019	17.9
Aroclor-1016	3	7.796	0.008	5903	21.5	3	8.058	0.007	2407	15.0
Aroclor-1016	4	8.410	0.006	3238	18.4	4	8.308	0.003	2350	18.7
Total Col1Ave (4 peaks):					19.6	Total Col2Ave (4 peaks):				18.0 RPD = 9
Corrected Ave (3 peaks):					19.0	Corrected Ave (3 peaks):				17.2 RPD = 10
CalAmt %D:					-1.8	CalAmt %D:				-9.9
Aroclor-1260	1	11.049	0.005	7880	21.1	1	11.655	0.002	6047	21.1
Aroclor-1260	2	11.365	0.005	8234	21.4	2	11.923	0.005	14680	20.2
Aroclor-1260	3	11.742	0.008	22898	22.6	3	12.438	0.002	3666	20.2
Aroclor-1260	4	12.149	0.009	11998	22.9	4	12.506	0.004	9276	19.7
Aroclor-1260	5	12.247	0.003	5494	24.1	NS	---			----
Total Col1Ave (5 peaks):					22.4	Total Col2Ave (4 peaks):				20.3 RPD = 10
Corrected Ave (4 peaks):					22.0	Corrected Ave (3 peaks):				20.1 RPD = 9
CalAmt %D:					12.1	CalAmt %D:				1.5

Total PCB Area Col1 (5.909 - 13.792) = 256211 Col1 Total PCB = 0.0 ppm*

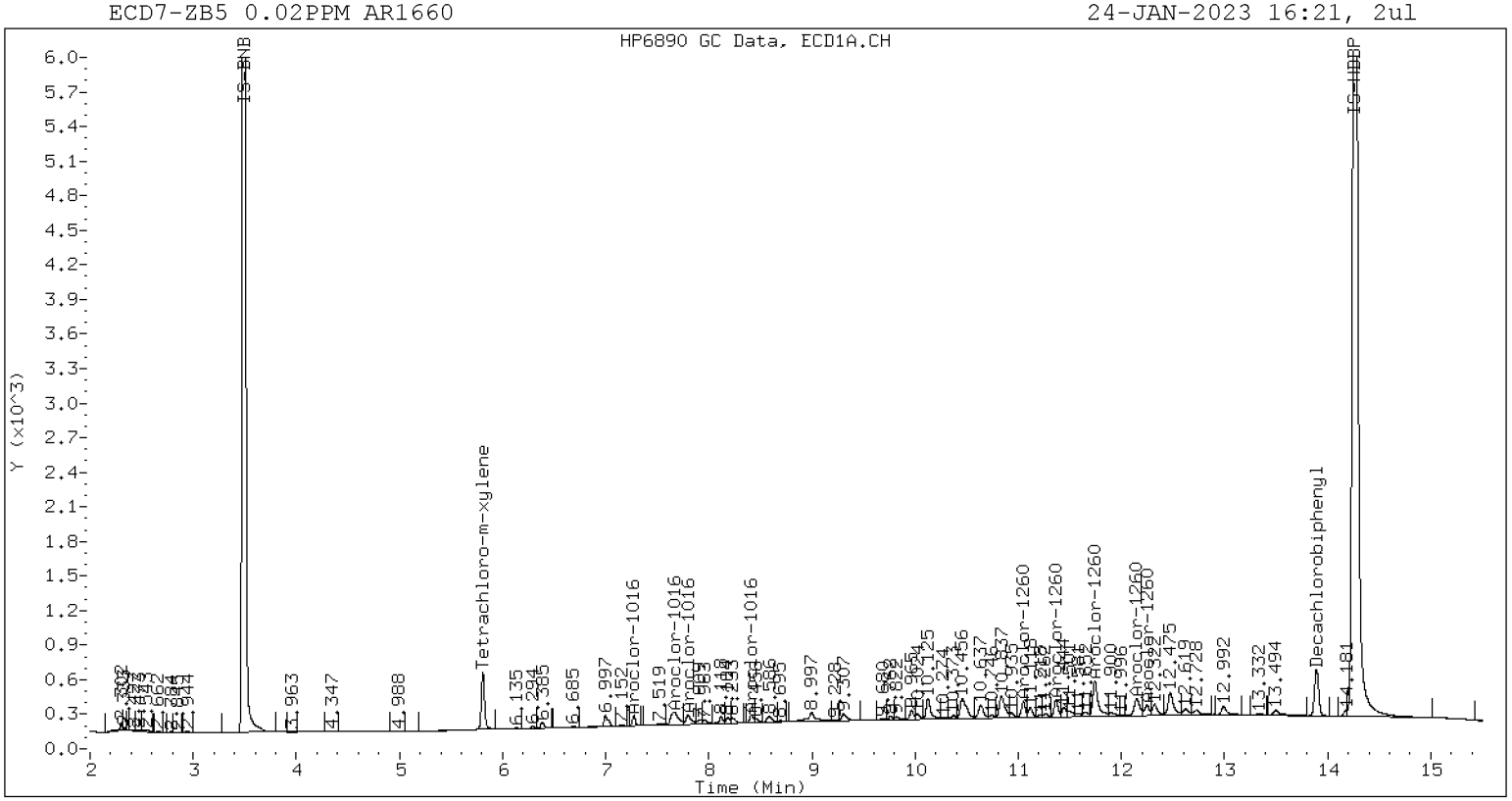
Total PCB Area Col2 (5.787 - 14.020) = 146434 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

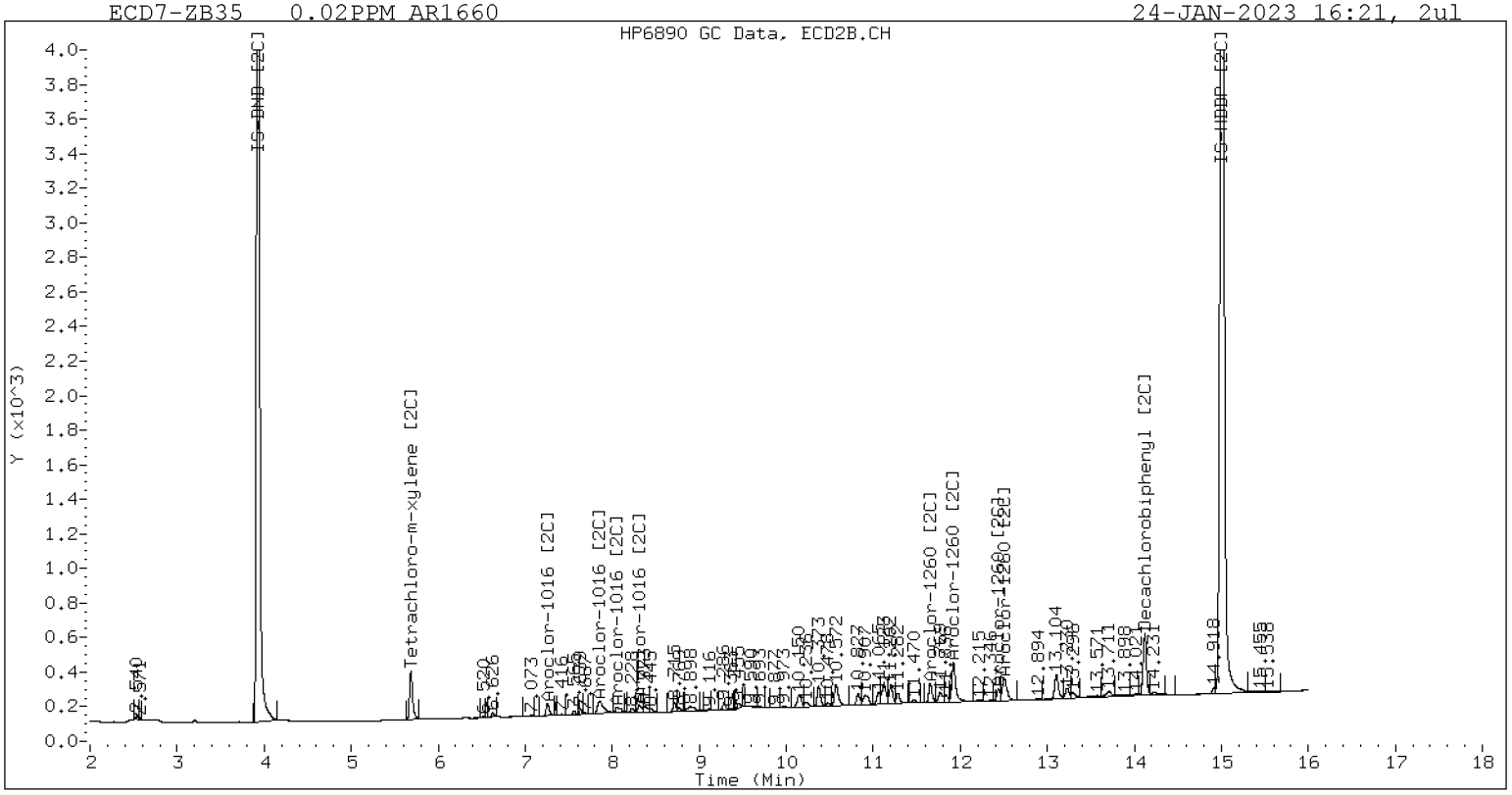
PCB Dual Column Chromatograms

ECD7-ZB5 0.02PPM AR1660 24-JAN-2023 16:21, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.02PPM AR1660 24-JAN-2023 16:21, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242315ECD7.D
Data file 2: /230124.b/230124.b/01242315ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.05PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 16:42
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	53503	5.687	-0.000	36922	7.8	8.2	4.7	Tetrachloro-m-xylene
13.893	0.001	62544	14.120	-0.000	52782	8.4	8.0	5.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	485432	-3.6
Hexabromobiphenyl	647433	692613	7.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	334072	-0.8
Hexabromobiphenyl	382032	415206	8.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.002	9412	52.2	1	7.256	0.001	9864	54.4
Aroclor-1016	2	7.657	0.007	29769	49.8	2	7.855	0.004	20076	50.6
Aroclor-1016	3	7.795	0.006	14866	54.1	3	8.055	0.004	8697	53.7
Aroclor-1016	4	8.409	0.005	8500	48.1	4	8.308	0.003	7052	55.5
Total Col1Ave (4 peaks):					51.0	Total Col2Ave (4 peaks):				53.5 RPD = 5
Corrected Ave (3 peaks):					50.0	Corrected Ave (3 peaks):				52.9 RPD = 6
CalAmt %D:					2.0	CalAmt %D:				7.1
Aroclor-1260	1	11.048	0.005	19665	50.6	1	11.655	0.002	15502	51.8
Aroclor-1260	2	11.364	0.003	20070	50.2	2	11.921	0.003	39201	51.7
Aroclor-1260	3	11.740	0.006	55534	52.8	3	12.439	0.003	9678	51.2
Aroclor-1260	4	12.145	0.006	28735	52.9	4	12.506	0.004	25741	52.5
Aroclor-1260	5	12.246	0.002	12906	54.5	NS	---			----
Total Col1Ave (5 peaks):					52.2	Total Col2Ave (4 peaks):				51.8 RPD = 1
Corrected Ave (4 peaks):					51.6	Corrected Ave (3 peaks):				51.6 RPD = 0
CalAmt %D:					4.4	CalAmt %D:				3.6

Total PCB Area Col1 (5.909 - 13.792) = 600311 Col1 Total PCB = 0.1 ppm*

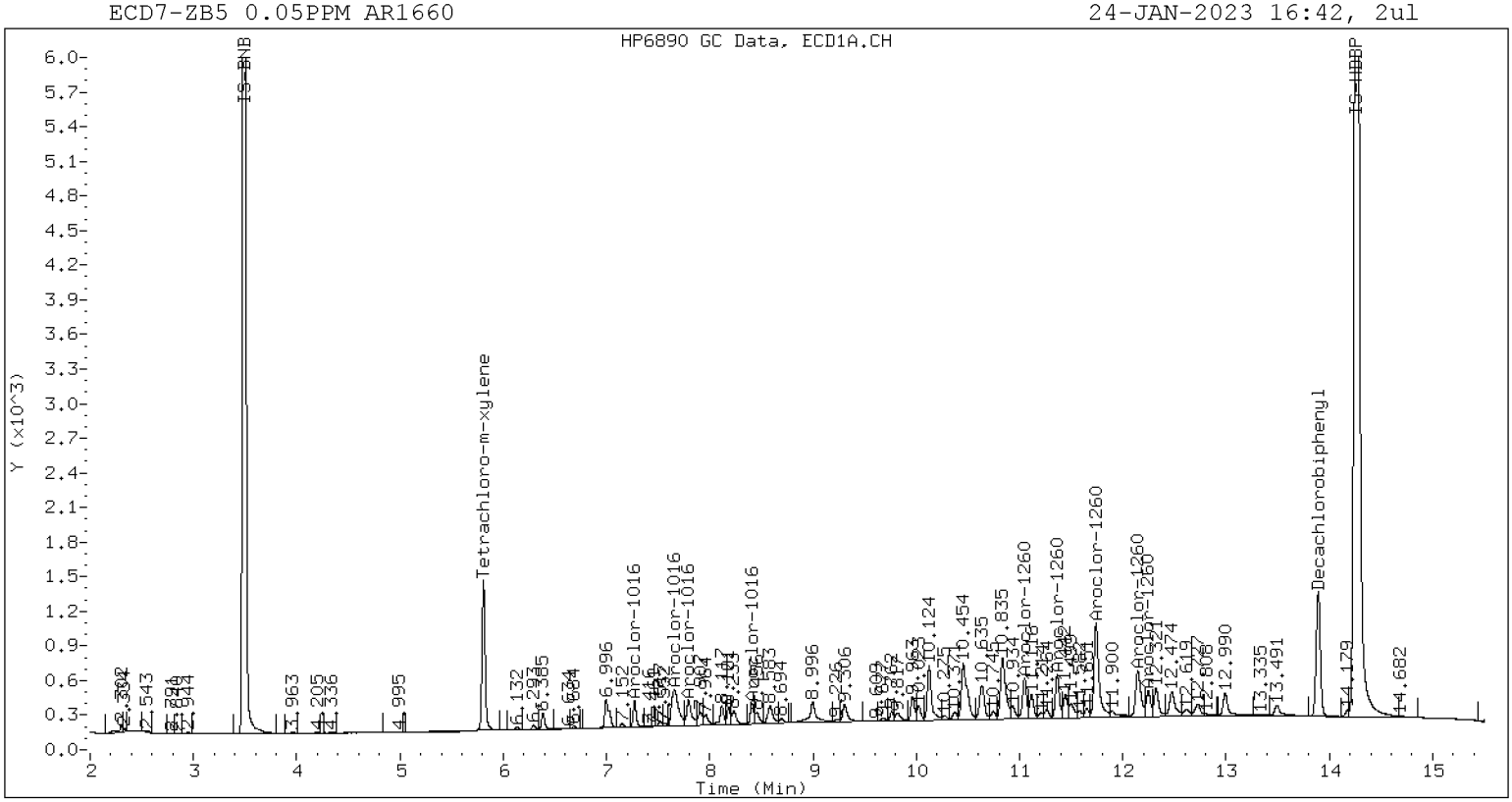
Total PCB Area Col2 (5.787 - 14.020) = 383666 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

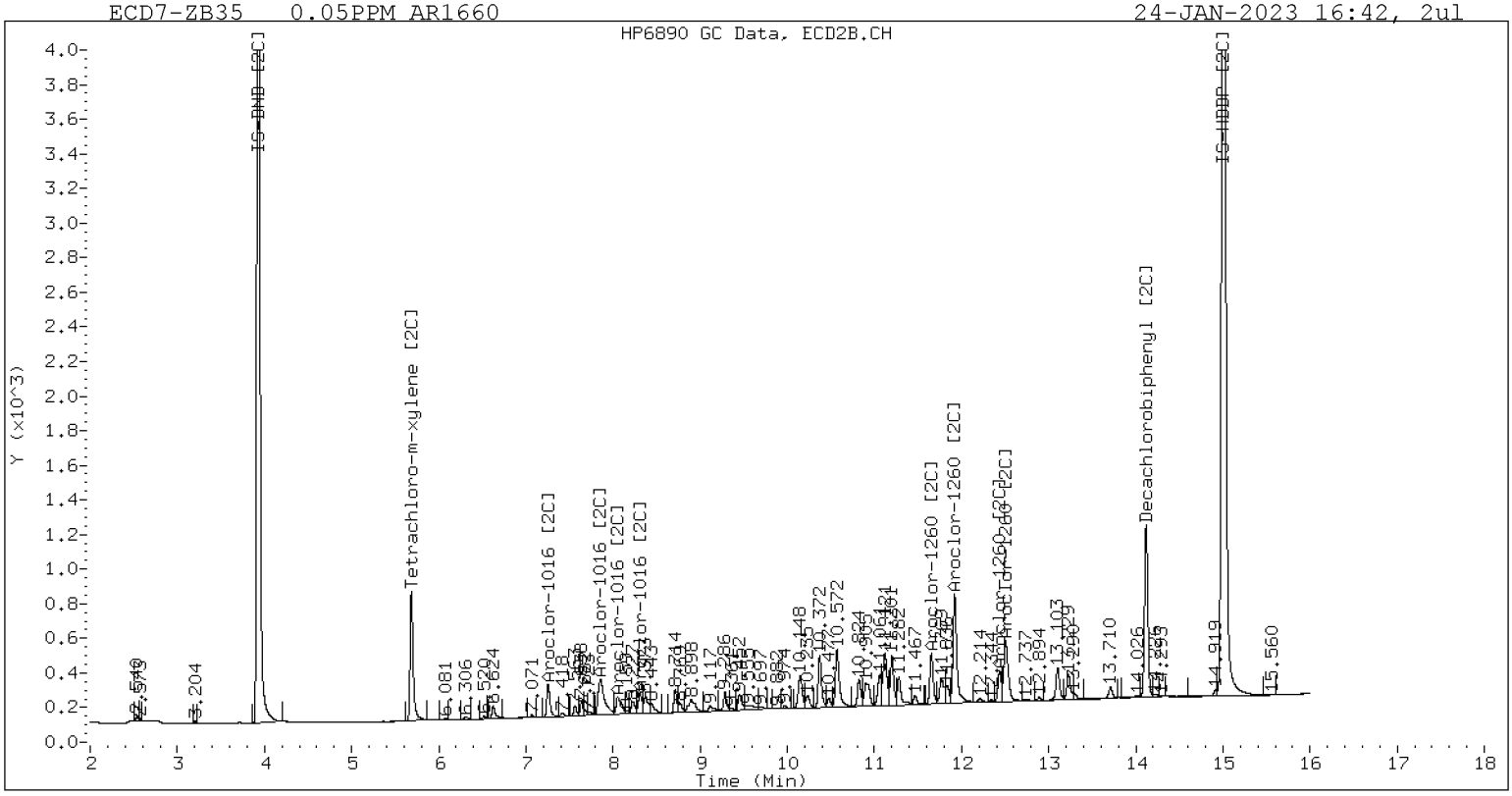
PCB Dual Column Chromatograms

ECD7-ZB5 0.05PPM AR1660 24-JAN-2023 16:42, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.05PPM AR1660 24-JAN-2023 16:42, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242316ECD7.D
Data file 2: /230124.b/230124.b/01242316ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 1.0PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 17:03
Report Date: 01/25/2023 11:34
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	1033475	5.685	-0.002	672800	154.9	153.6	0.8	Tetrachloro-m-xylene
13.892	0.000	1125556	14.122	0.002	1078539	148.0	164.3	10.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	472076	-6.2
Hexabromobiphenyl	647433	711071	9.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	323926	-3.9
Hexabromobiphenyl	382032	413585	8.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	-0.000	155505	886.5	1	7.254	-0.001	153668	874.6
Aroclor-1016	2	7.649	-0.001	552101	949.8	2	7.849	-0.002	369677	960.2
Aroclor-1016	3	7.786	-0.002	223973	837.5	3	8.048	-0.003	152418	970.1
Aroclor-1016	4	8.402	-0.001	169003	982.4	4	8.304	-0.001	110311	895.6
Total Col1Ave (4 peaks):					914.1	Total Col2Ave (4 peaks):				925.1 RPD = 1
Corrected Ave (3 peaks):					891.3	Corrected Ave (3 peaks):				910.1 RPD = 2
CalAmt %D:					-8.6	CalAmt %D:				-7.5
Aroclor-1260	1	11.043	-0.001	359074	900.0	1	11.653	-0.001	274365	919.6
Aroclor-1260	2	11.360	-0.000	374067	912.1	2	11.917	-0.000	713881	945.7
Aroclor-1260	3	11.733	-0.001	959026	888.3	3	12.436	-0.000	190968	1015.0
Aroclor-1260	4	12.137	-0.002	521189	934.3	4	12.502	-0.000	465680	953.2
Aroclor-1260	5	12.242	-0.002	217473	894.4	NS	---			----
Total Col1Ave (5 peaks):					905.8	Total Col2Ave (4 peaks):				958.4 RPD = 6
Corrected Ave (4 peaks):					898.7	Corrected Ave (3 peaks):				939.5 RPD = 4
CalAmt %D:					-9.4	CalAmt %D:				-4.2

Total PCB Area Col1 (5.909 - 13.792) = 10234908 Col1 Total PCB = 1.9 ppm*

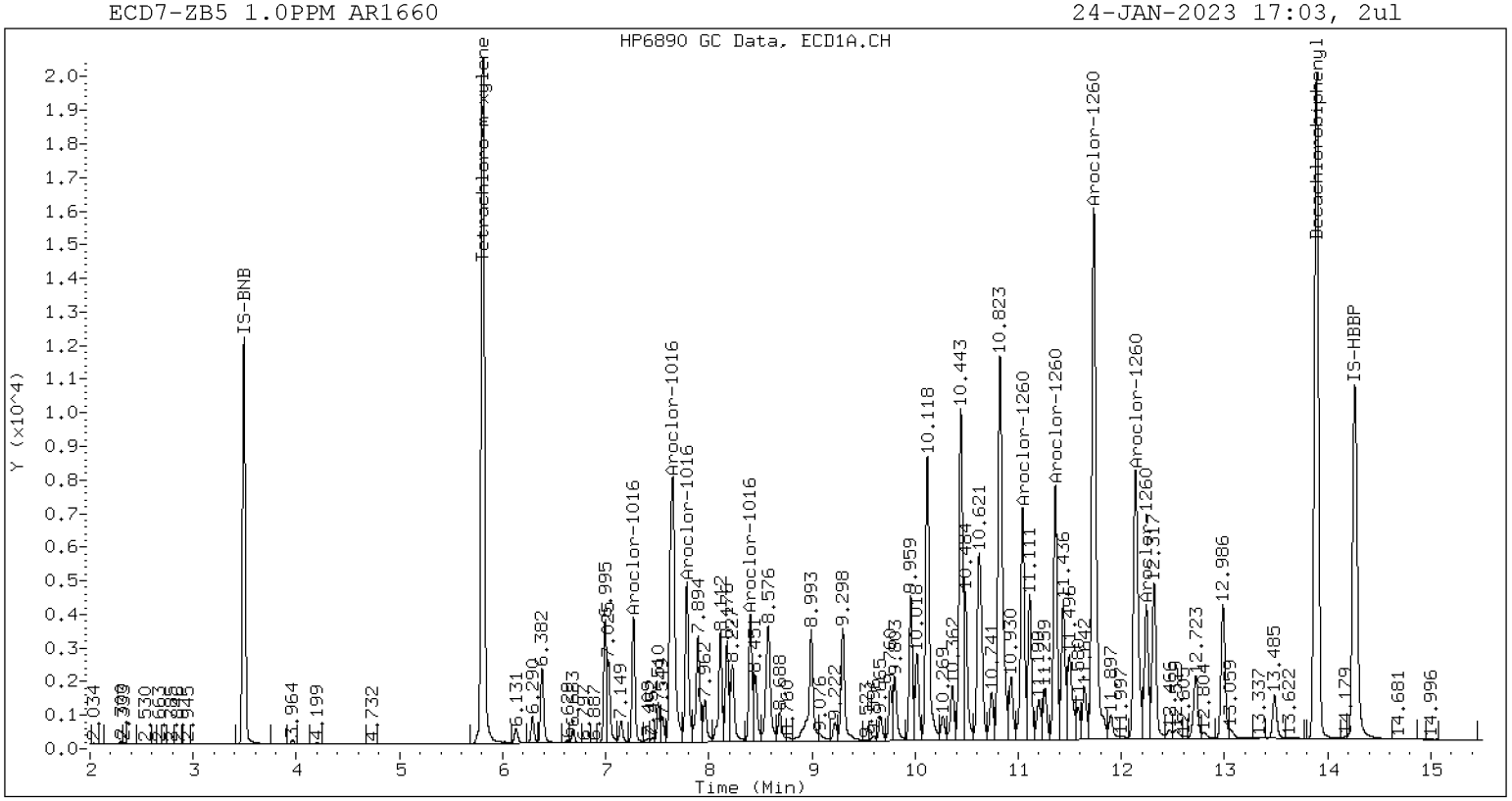
Total PCB Area Col2 (5.787 - 14.020) = 6685547 Col2 Total PCB = 2.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

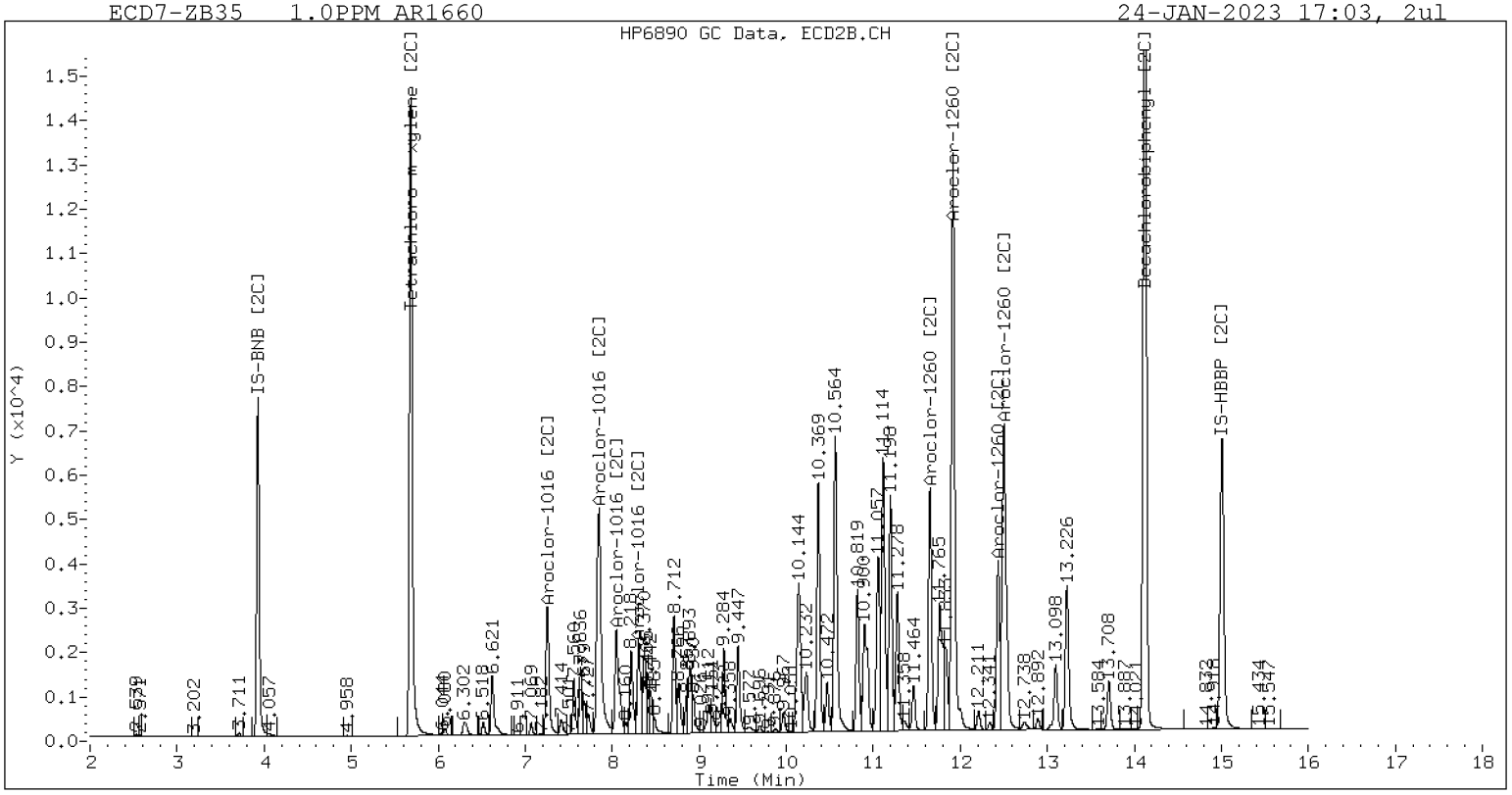
PCB Dual Column Chromatograms

ECD7-ZB5 1.0PPM AR1660 24-JAN-2023 17:03, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 1.0PPM AR1660 24-JAN-2023 17:03, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242317ECD7.D
Data file 2: /230124.b/230124.b/01242317ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.1PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 17:24
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.001	117058	5.686	-0.001	76340	17.3	17.1	1.2	Tetrachloro-m-xylene
13.892	0.000	140818	14.119	-0.001	113773	17.4	16.5	5.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	479756	-4.7
Hexabromobiphenyl	647433	756424	16.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	330987	-1.8
Hexabromobiphenyl	382032	433619	13.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	19848	111.3	1	7.255	0.000	19353	107.8
Aroclor-1016	2	7.656	0.005	63555	107.6	2	7.853	0.002	43099	109.6
Aroclor-1016	3	7.793	0.004	30749	113.1	3	8.053	0.003	18527	115.4
Aroclor-1016	4	8.406	0.003	18961	108.5	4	8.307	0.002	14145	112.4
Total Col1Ave (4 peaks):					110.1	Total Col2Ave (4 peaks):				111.3 RPD = 1
Corrected Ave (3 peaks):					109.1	Corrected Ave (3 peaks):				109.9 RPD = 1
CalAmt %D:					10.1	CalAmt %D:				11.3
Aroclor-1260	1	11.046	0.002	41864	98.6	1	11.655	0.001	32043	102.4
Aroclor-1260	2	11.362	0.001	42073	96.4	2	11.920	0.002	82285	104.0
Aroclor-1260	3	11.739	0.004	111005	96.7	3	12.437	0.001	19416	98.4
Aroclor-1260	4	12.144	0.004	56707	95.6	4	12.504	0.002	53558	104.6
Aroclor-1260	5	12.245	0.001	24958	96.5	NS	---			----
Total Col1Ave (5 peaks):					96.8	Total Col2Ave (4 peaks):				102.3 RPD = 6
Corrected Ave (4 peaks):					96.3	Corrected Ave (3 peaks):				101.6 RPD = 5
CalAmt %D:					-3.2	CalAmt %D:				2.3

Total PCB Area Col1 (5.909 - 13.792) = 1238855 Col1 Total PCB = 0.2 ppm*

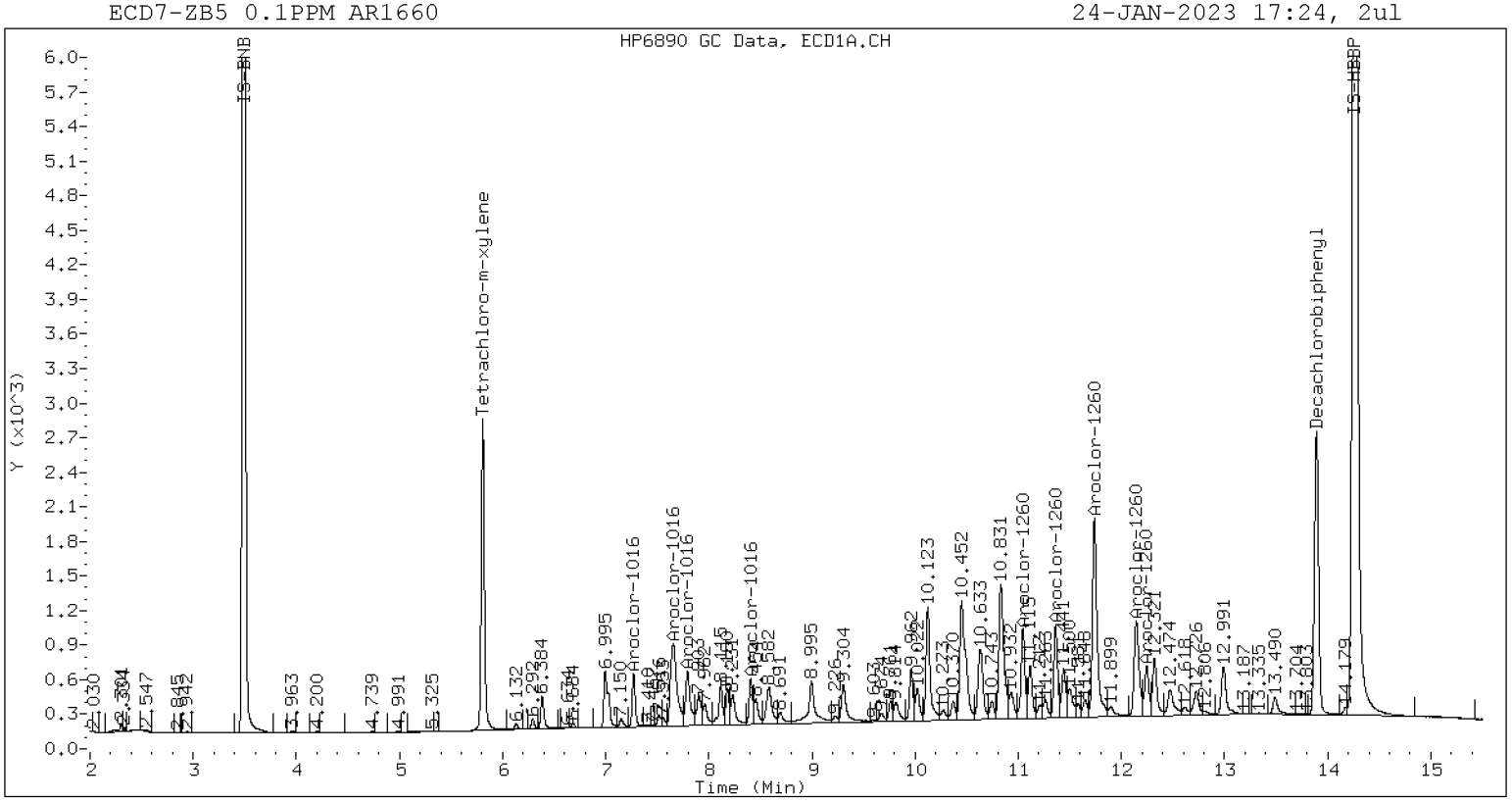
Total PCB Area Col2 (5.787 - 14.020) = 777713 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

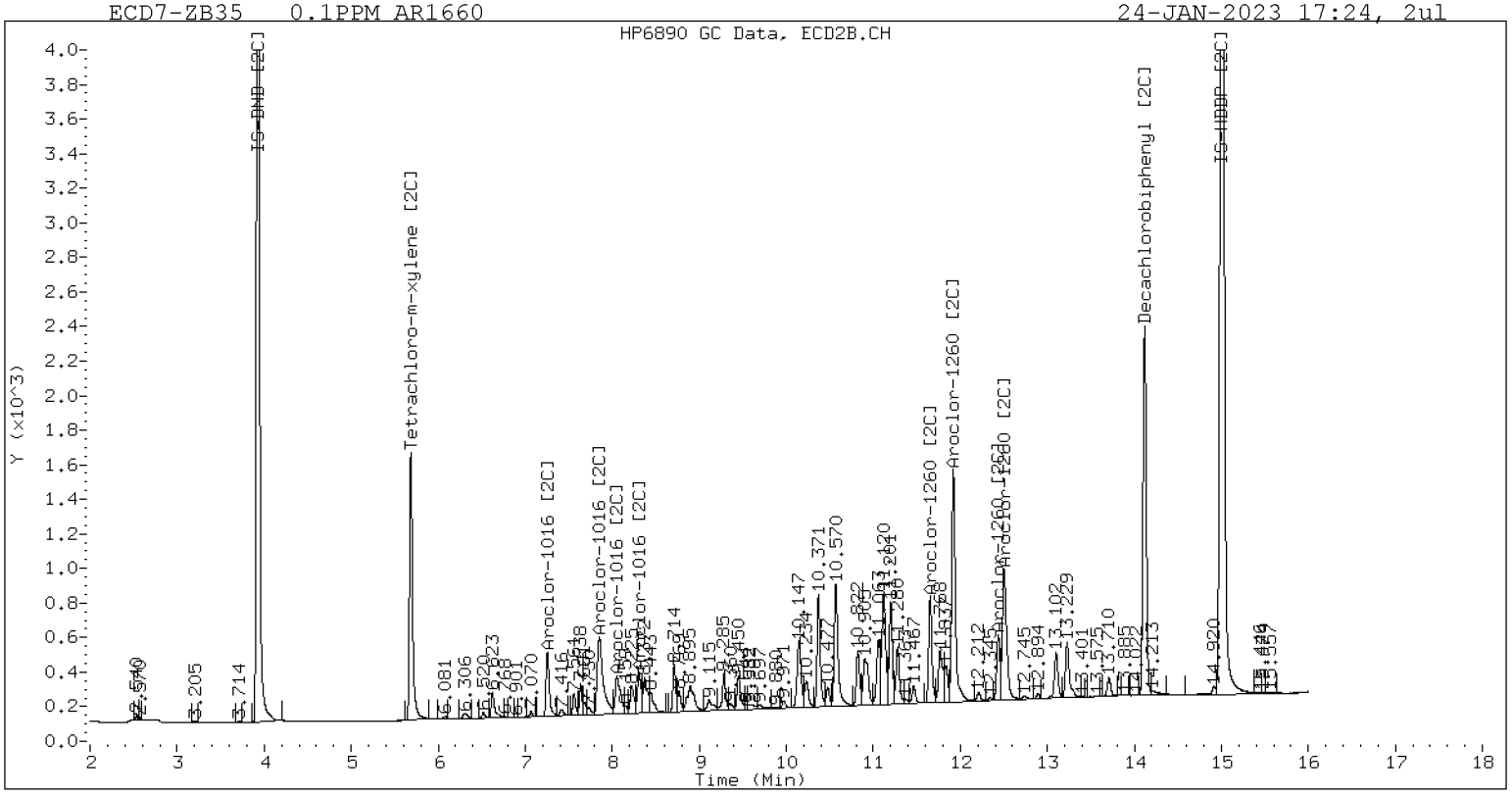
PCB Dual Column Chromatograms

ECD7-ZB5 0.1PPM AR1660 24-JAN-2023 17:24, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.1PPM AR1660 24-JAN-2023 17:24, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242318ECD7.D
Data file 2: /230124.b/230124.b/01242318ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.5PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 17:45
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	534053	5.686	-0.000	348900	79.1	77.8	1.6	Tetrachloro-m-xylene
13.891	-0.001	614978	14.120	0.000	552784	74.4	77.5	4.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	477720	-5.1
Hexabromobiphenyl	647433	772816	19.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331694	-1.5
Hexabromobiphenyl	382032	449559	17.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	0.000	84322	475.0	1	7.254	-0.000	84986	472.4
Aroclor-1016	2	7.650	0.000	294429	500.6	2	7.850	-0.001	198065	502.4
Aroclor-1016	3	7.789	0.000	122151	451.4	3	8.050	-0.000	81378	505.8
Aroclor-1016	4	8.404	0.000	87760	504.1	4	8.305	-0.000	59656	473.0
Total Col1Ave (4 peaks):					482.8	Total Col2Ave (4 peaks):				488.4 RPD = 1
Corrected Ave (3 peaks):					475.6	Corrected Ave (3 peaks):				482.6 RPD = 1
CalAmt %D:					-3.4	CalAmt %D:				-2.3
Aroclor-1260	1	11.044	0.000	193843	447.0	1	11.653	-0.000	146980	453.2
Aroclor-1260	2	11.361	0.000	198052	444.3	2	11.917	-0.001	376388	458.7
Aroclor-1260	3	11.734	0.000	505614	430.9	3	12.436	-0.000	98369	481.0
Aroclor-1260	4	12.139	0.000	264950	437.0	4	12.501	-0.001	252455	475.4
Aroclor-1260	5	12.244	0.000	112421	425.4	NS	---			----
Total Col1Ave (5 peaks):					436.9	Total Col2Ave (4 peaks):				467.1 RPD = 7
Corrected Ave (4 peaks):					434.4	Corrected Ave (3 peaks):				462.4 RPD = 6
CalAmt %D:					-12.6	CalAmt %D:				-6.6

Total PCB Area Col1 (5.909 - 13.792) = 5412241 Col1 Total PCB = 1.0 ppm*

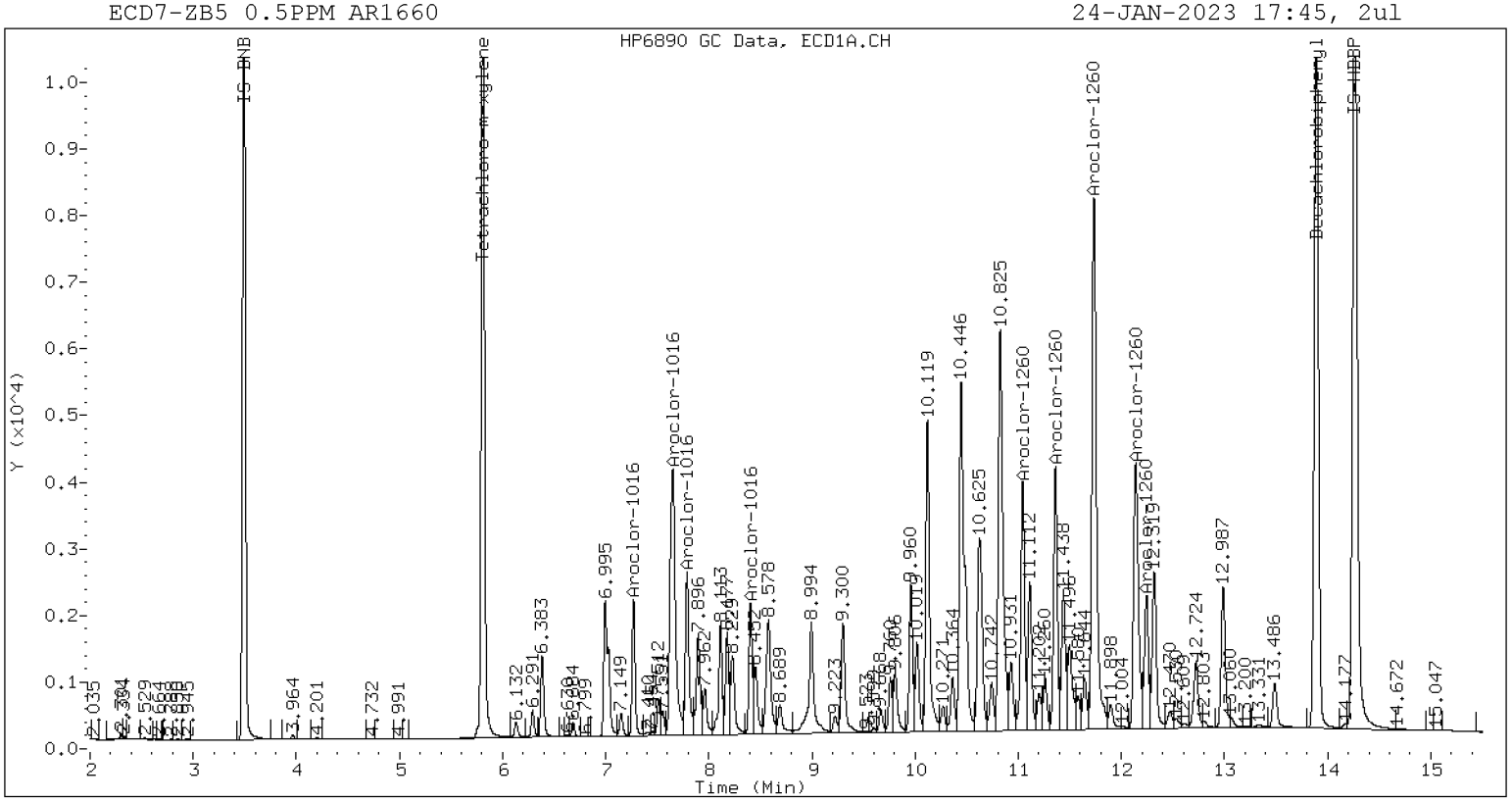
Total PCB Area Col2 (5.787 - 14.020) = 3551064 Col2 Total PCB = 1.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

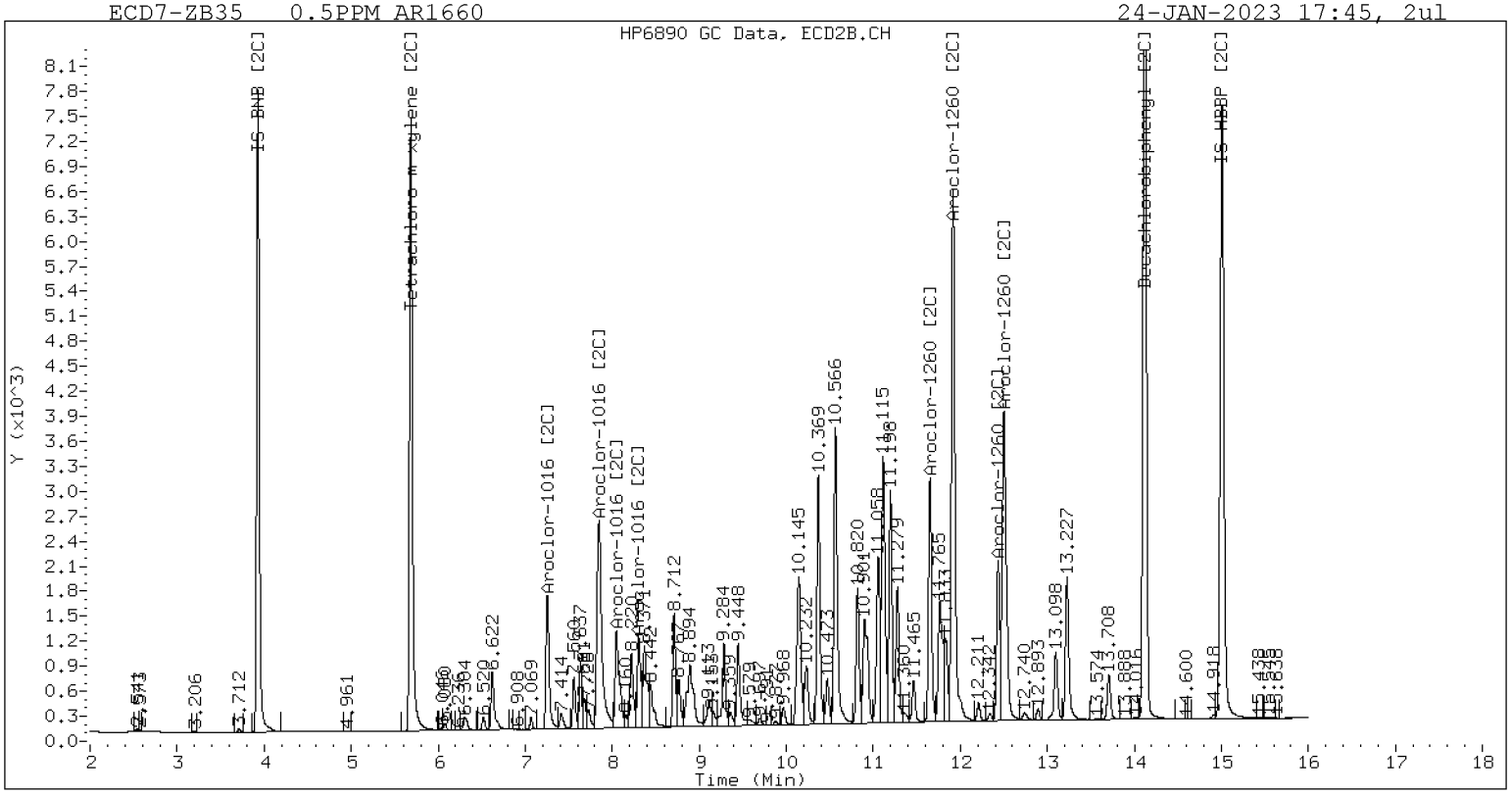
PCB Dual Column Chromatograms

ECD7-ZB5 0.5PPM AR1660 24-JAN-2023 17:45, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.5PPM AR1660 24-JAN-2023 17:45, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242319ECD7.D
Data file 2: /230124.b/230124.b/01242319ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 1242
Client ID:
Injection Date: 24-JAN-2023 18:06
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	317773	5.686	-0.000	205627	47.7	46.6	2.2	Tetrachloro-m-xylene
13.892	-0.000	322814	14.121	0.001	269935	36.0	36.5	1.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	471690	-6.3
Hexabromobiphenyl	647433	839322	29.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	326260	-3.2
Hexabromobiphenyl	382032	466396	22.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	7.271	0.000	36109	250.0	1	7.256	0.000	35672	250.0
Aroclor-1242	2	7.655	0.000	118172	250.0	2	7.853	0.000	79233	250.0
Aroclor-1242	3	8.407	0.000	35110	250.0	3	9.160	0.000	24814	250.0
Aroclor-1242	4	8.581	0.000	53037	250.0	4	9.587	0.000	32887	250.0

Total Col1Ave (4 peaks): 250.0 Total Col2Ave (4 peaks): 250.0 RPD = 0

Corrected Ave (3 peaks): 250.0 Corrected Ave (3 peaks): 250.0 RPD = 0

Total PCB Area Col1 (5.909 - 13.792) = 930958 Col1 Total PCB = 0.2 ppm*

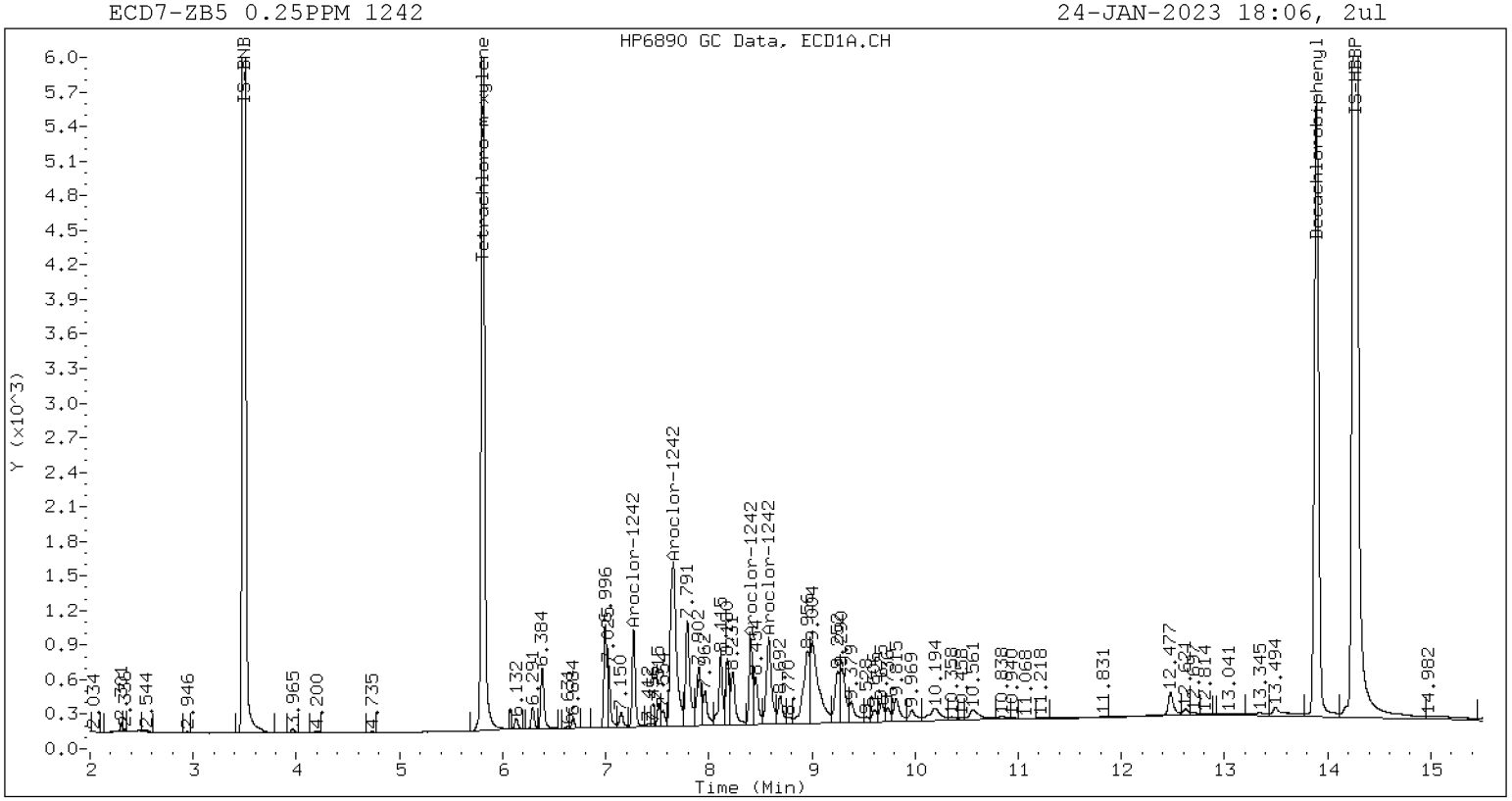
Total PCB Area Col2 (5.787 - 14.020) = 567613 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

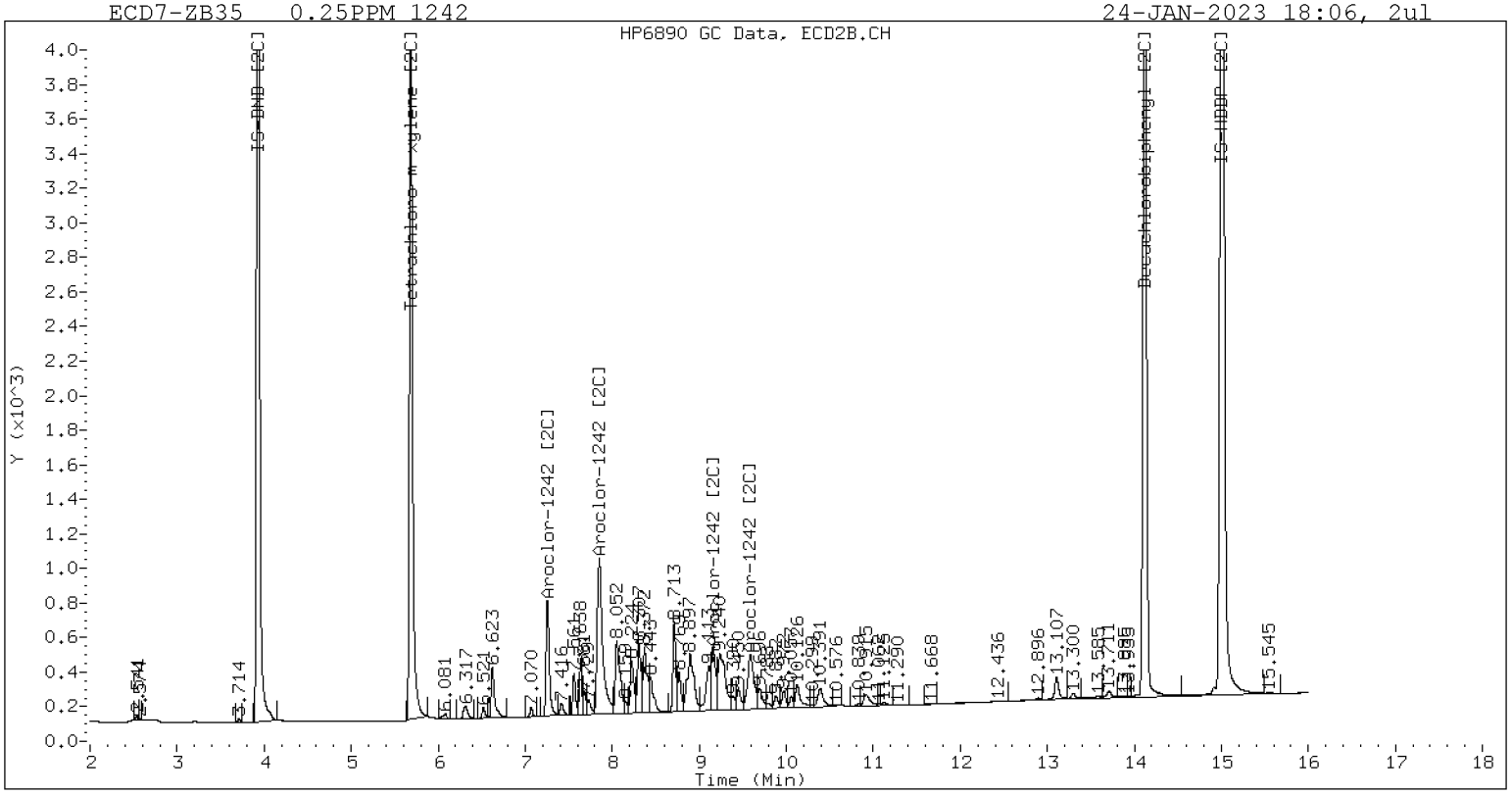
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 1242 24-JAN-2023 18:06, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 1242 24-JAN-2023 18:06, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242320ECD7.D
Data file 2: /230124.b/230124.b/01242320ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 1248
Client ID:
Injection Date: 24-JAN-2023 18:27
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	266561	5.686	-0.001	171841	38.5	38.0	1.3	Tetrachloro-m-xylene
13.892	0.001	334524	14.120	0.000	281569	36.6	37.7	3.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	489828	-2.7
Hexabromobiphenyl	647433	855612	32.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	334539	-0.7
Hexabromobiphenyl	382032	470415	23.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.406	0.000	61259	250.0	1	8.305	0.000	37805	250.0
Aroclor-1248	2	8.580	0.000	78143	250.0	2	8.712	0.000	40692	250.0
Aroclor-1248	3	8.999	0.000	149476	250.0	3	9.156	0.000	49723	250.0
Aroclor-1248	4	9.294	0.000	73986	250.0	4	9.582	0.000	61494	250.0

Total Col1Ave (4 peaks): 250.0 Total Col2Ave (4 peaks): 250.0 RPD = 0

Corrected Ave (3 peaks): 250.0 Corrected Ave (3 peaks): 250.0 RPD = 0

Total PCB Area Col1 (5.909 - 13.792) = 1237662 Col1 Total PCB = 0.2 ppm*

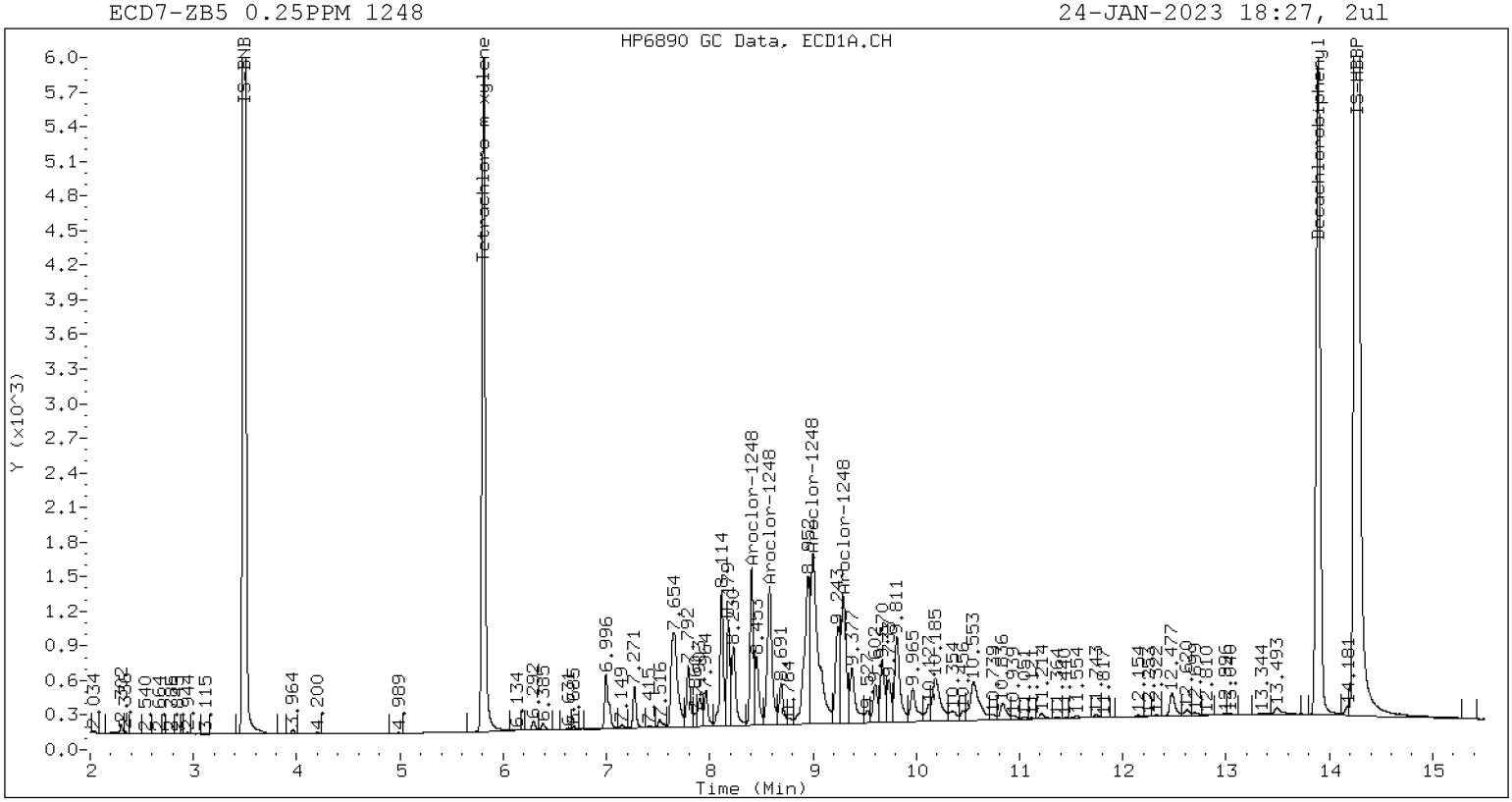
Total PCB Area Col2 (5.787 - 14.020) = 773955 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

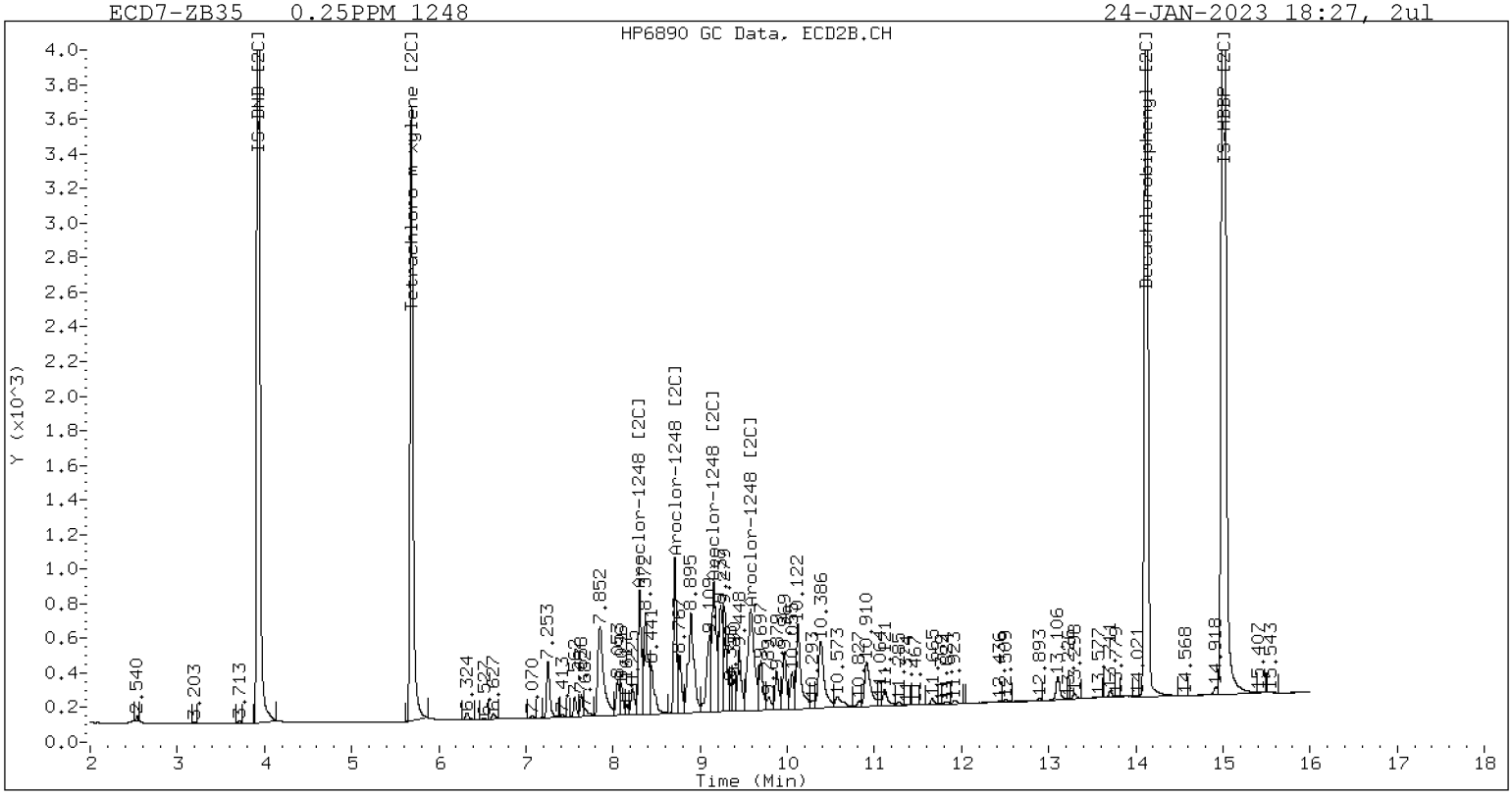
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 1248 24-JAN-2023 18:27, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 1248 24-JAN-2023 18:27, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242321ECD7.D
Data file 2: /230124.b/230124.b/01242321ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 1254
Client ID:
Injection Date: 24-JAN-2023 18:48
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.001	258819	5.684	-0.002	171764	37.7	38.1	1.1	Tetrachloro-m-xylene
13.893	0.001	343162	14.119	-0.001	283996	36.8	37.9	2.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	486231	-3.4
Hexabromobiphenyl	647433	871523	34.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	333658	-1.0
Hexabromobiphenyl	382032	471925	23.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.299	0.000	123887	250.0	1	9.448	0.000	60516	250.0
Aroclor-1254	2	9.378	0.000	52896	250.0	2	9.969	0.000	48914	250.0
Aroclor-1254	3	9.669	0.000	79378	250.0	3	10.121	0.000	106698	250.0
Aroclor-1254	4	9.808	0.000	155542	250.0	4	10.372	0.000	106700	250.0
Aroclor-1254	5	10.177	0.000	101144	250.0	5	10.569	0.000	59429	250.0

Total Col1Ave (5 peaks): 250.0 Total Col2Ave (5 peaks): 250.0 RPD = 0

Corrected Ave (4 peaks): 250.0 Corrected Ave (4 peaks): 250.0 RPD = 0

Total PCB Area Col1 (5.909 - 13.792) = 1659821 Col1 Total PCB = 0.3 ppm*

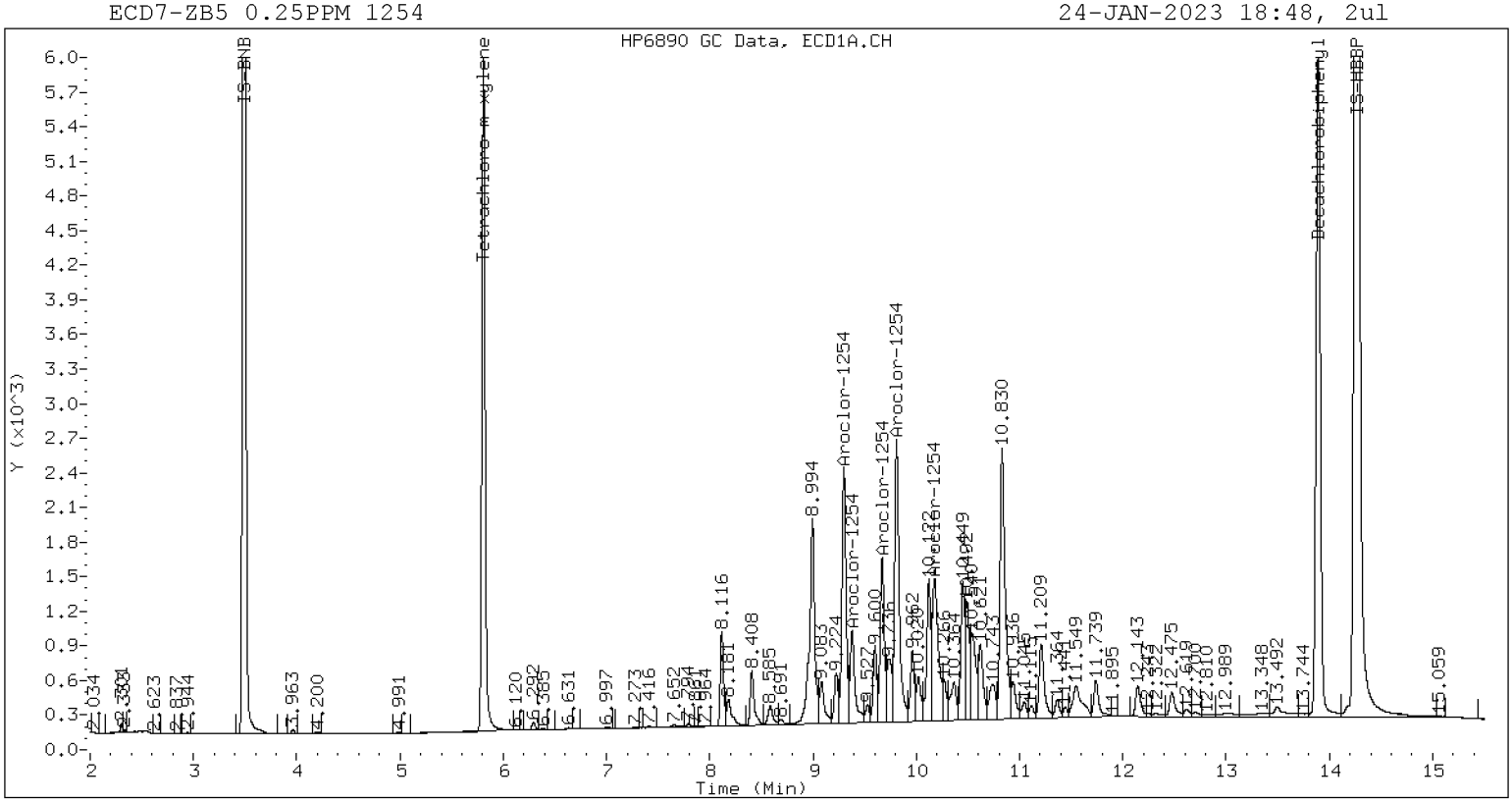
Total PCB Area Col2 (5.787 - 14.020) = 1016659 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

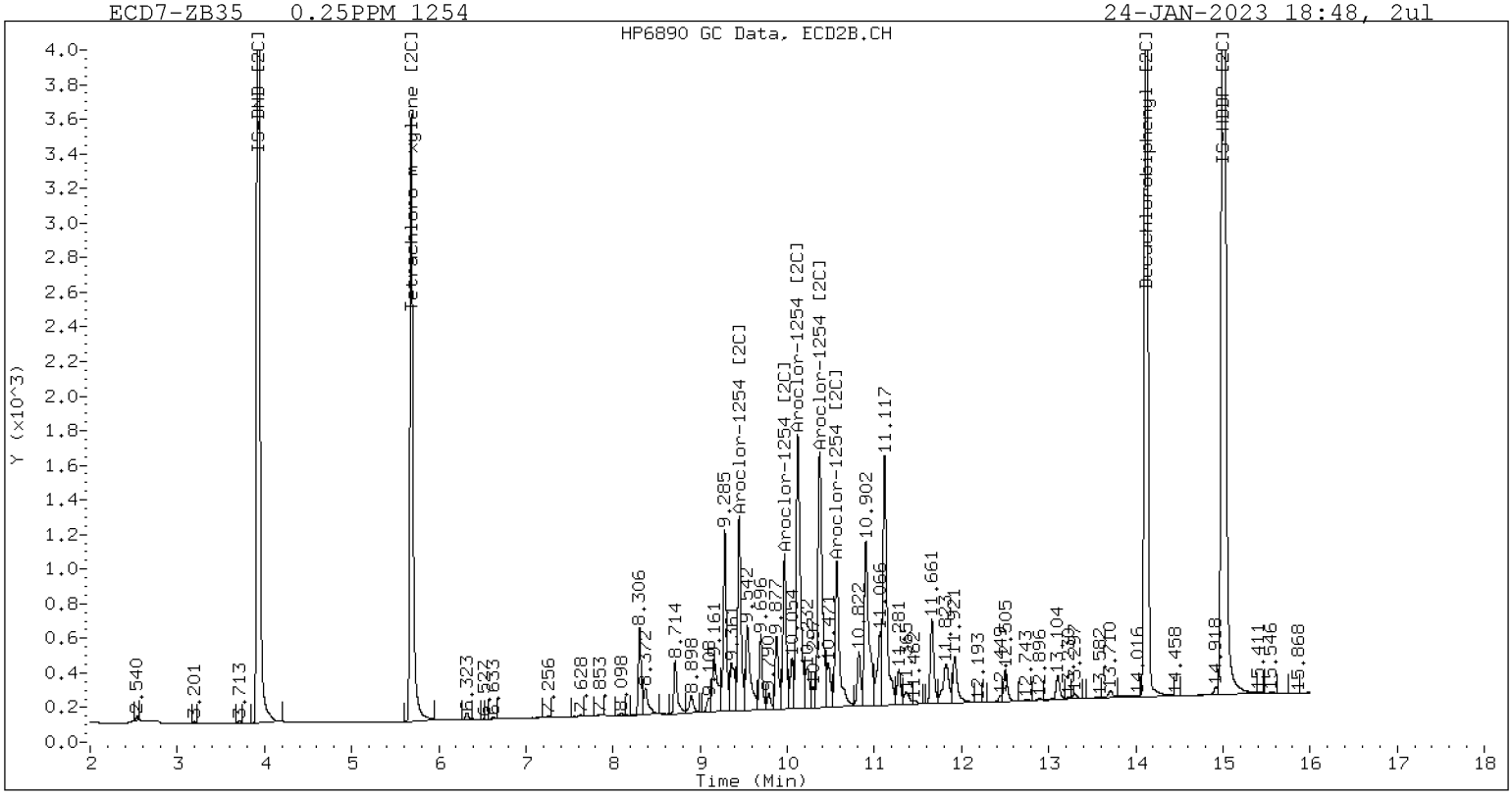
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 1254 24-JAN-2023 18:48, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 1254 24-JAN-2023 18:48, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242322ECD7.D
Data file 2: /230124.b/230124.b/01242322ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR2162.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 2162
Client ID:
Injection Date: 24-JAN-2023 19:09
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	272296	5.686	-0.001	173237	39.1	38.6	1.3	Tetrachloro-m-xylene
13.893	0.001	347331	14.120	-0.000	282892	36.8	37.2	1.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	492470	-2.2
Hexabromobiphenyl	647433	883652	36.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331807	-1.5
Hexabromobiphenyl	382032	479356	25.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1221	1	4.733	0.000	9100	250.0	1	4.959	0.000	6081	250.0
Aroclor-1221	2	6.134	0.000	18608	250.0	2	6.298	0.000	13325	250.0
Aroclor-1221	3	6.384	0.000	43198	250.0	3	6.623	0.000	22491	250.0
Total Col1Ave (3 peaks):					250.0	Total Col2Ave (3 peaks):				250.0 RPD = 0
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.832	0.000	89339	250.0	1	11.200	0.000	117288	250.0
Aroclor-1262	2	12.246	0.000	141007	250.0	2	11.653	0.000	99740	250.0
Aroclor-1262	3	12.321	0.000	153089	250.0	3	12.434	0.000	106212	250.0
Aroclor-1262	4	12.989	0.000	139497	250.0	4	12.504	0.000	170096	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.909 - 13.792) = 2446612 Col1 Total PCB = 0.4 ppm*

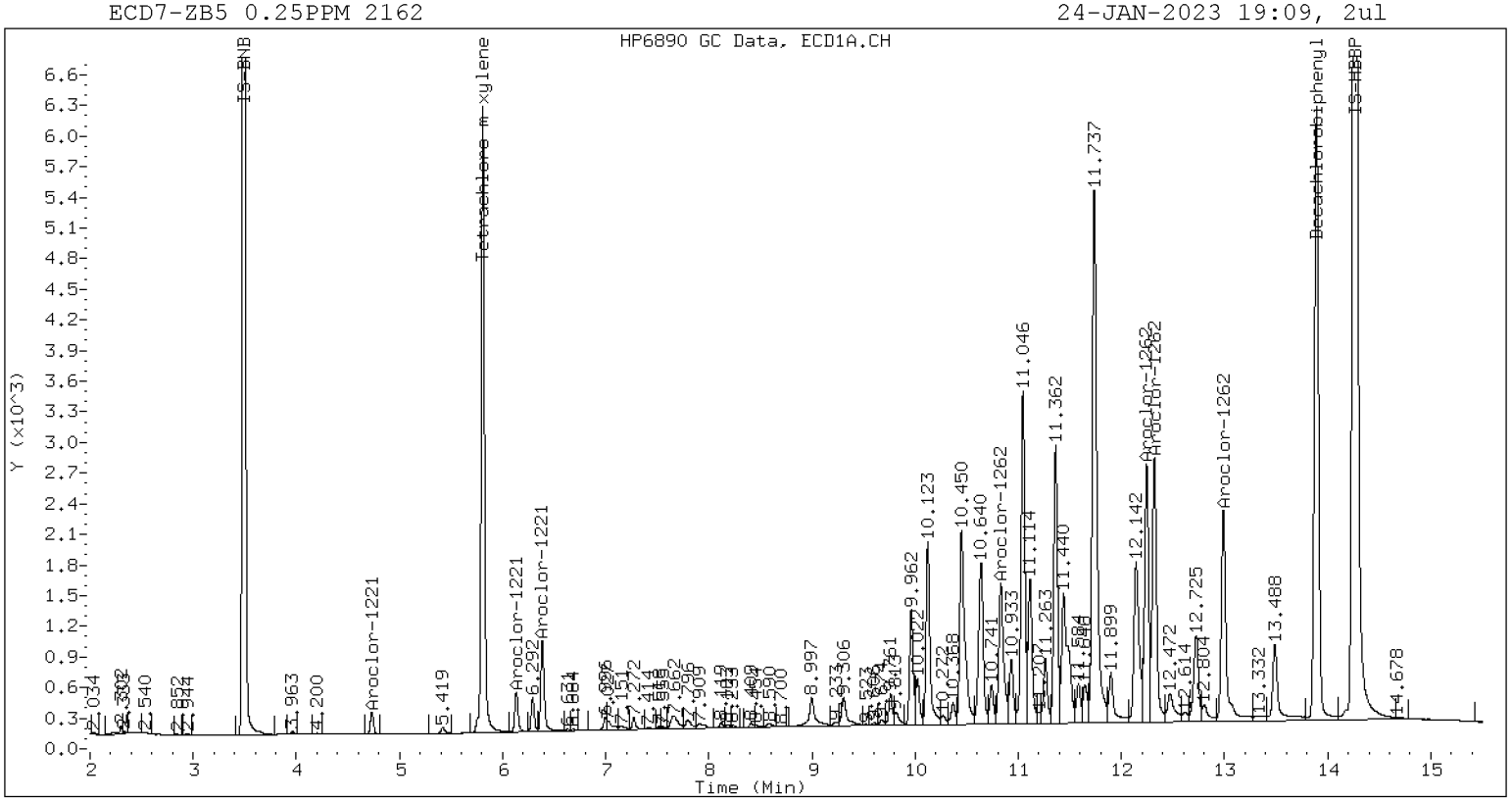
Total PCB Area Col2 (5.787 - 14.020) = 1558387 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

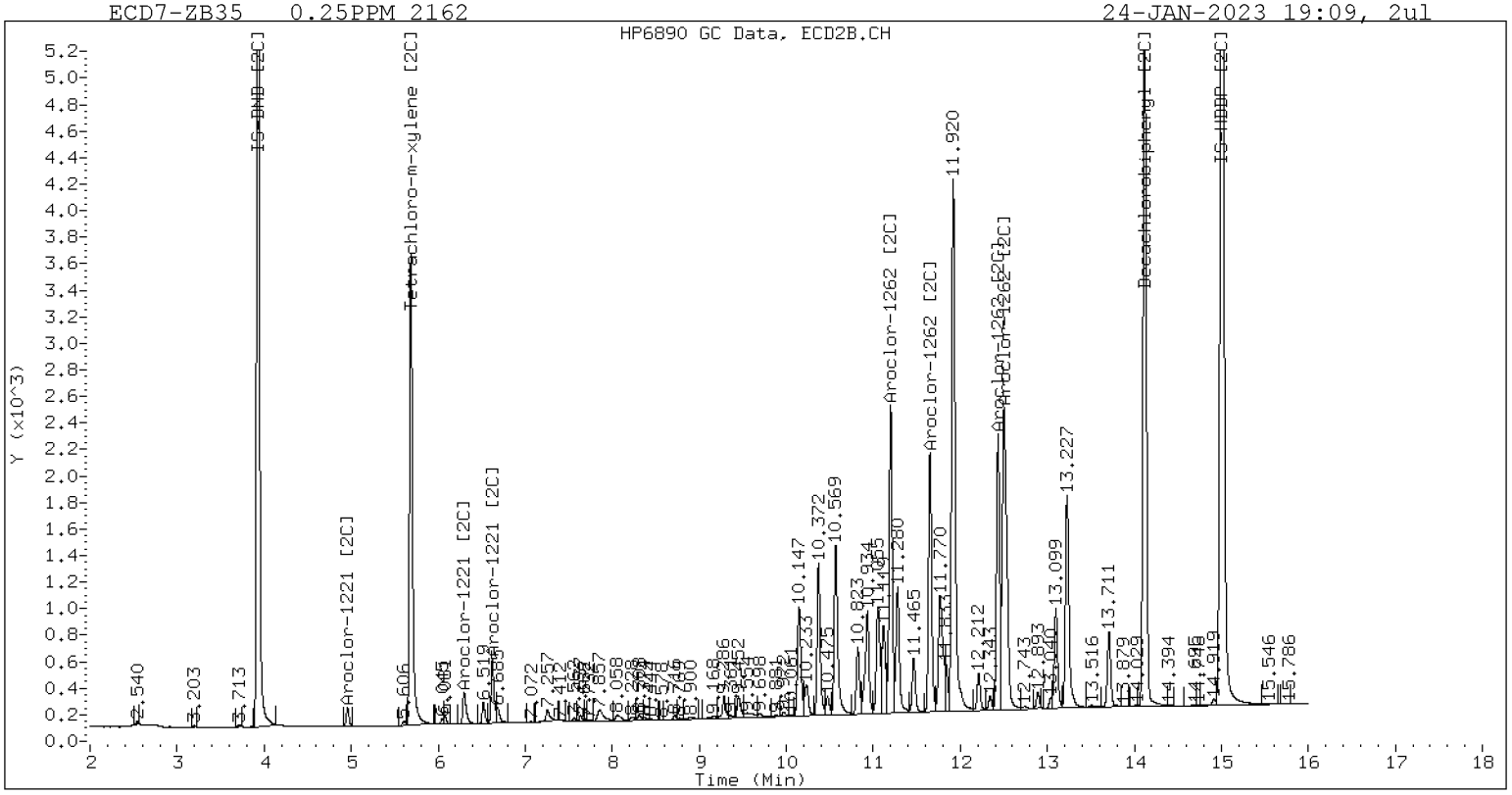
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 2162 24-JAN-2023 19:09, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 2162 24-JAN-2023 19:09, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242323ECD7.D
Data file 2: /230124.b/230124.b/01242323ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR3268.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 3268
Client ID:
Injection Date: 24-JAN-2023 19:30
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	277108	5.687	0.000	177359	39.7	39.1	1.5	Tetrachloro-m-xylene
13.892	0.000	525503	14.120	0.000	438987	53.8	57.7	7.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	493427	-2.0
Hexabromobiphenyl	647433	913614	41.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	335121	-0.5
Hexabromobiphenyl	382032	479458	25.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1232	1	4.733	0.000	5692	250.0	1	4.960	0.000	3725	250.0
Aroclor-1232	2	6.133	0.000	12828	250.0	2	7.257	0.000	20847	250.0
Aroclor-1232	3	7.658	0.000	64153	250.0	3	7.854	0.000	42459	250.0
Aroclor-1232	4	8.584	0.000	27460	250.0	4	8.714	0.000	11797	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0
Aroclor-1268	1	12.245	0.000	377314	250.0	1	12.434	0.000	279910	250.0
Aroclor-1268	2	12.318	0.000	376282	250.0	2	12.501	0.000	297867	250.0
Aroclor-1268	3	12.699	0.000	311753	250.0	3	12.893	0.000	247943	250.0
Aroclor-1268	4	13.489	0.000	924293	250.0	4	13.709	0.000	765898	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.909 - 13.792) = 3136879 Col1 Total PCB = 0.5 ppm*

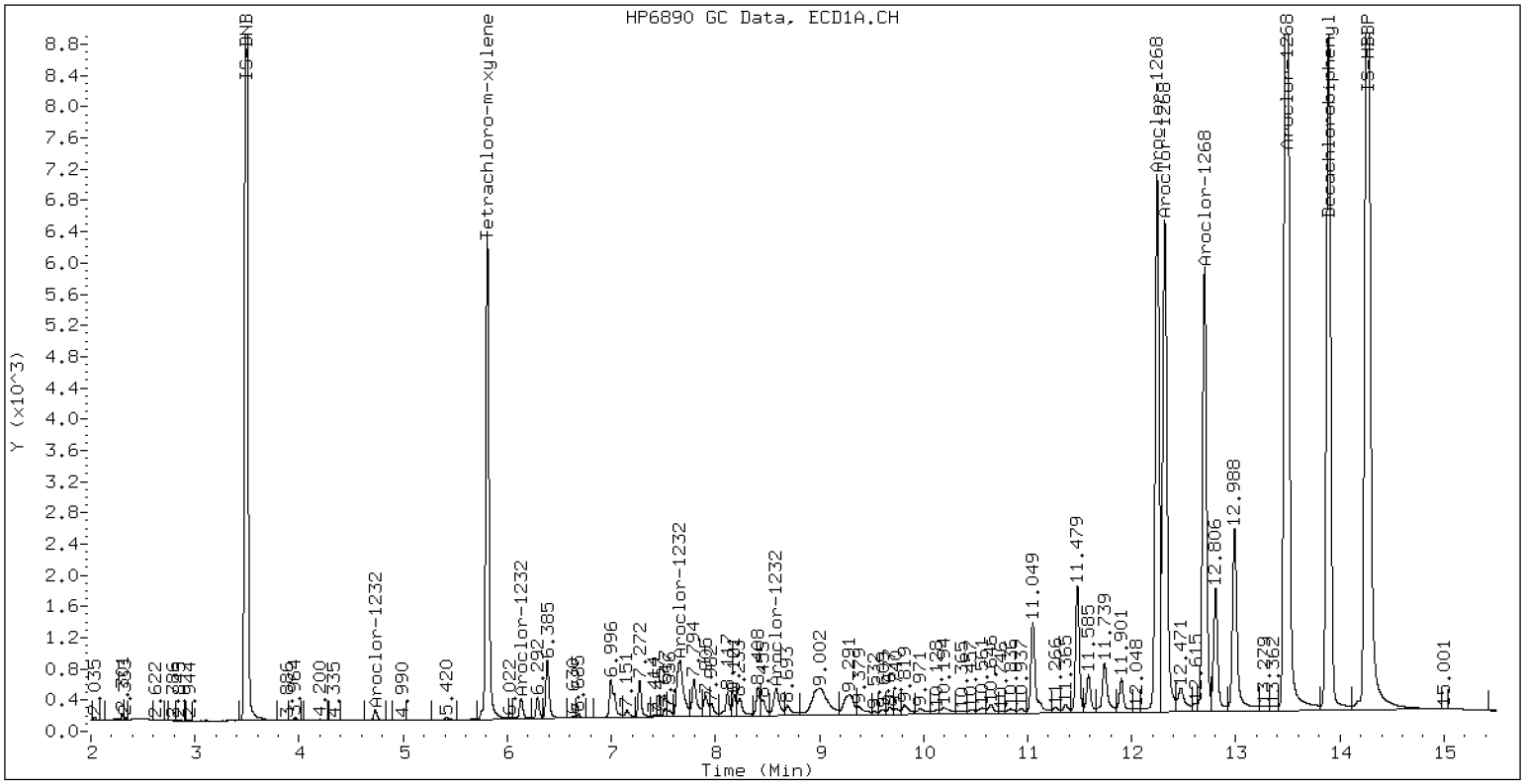
Total PCB Area Col2 (5.787 - 14.020) = 2269104 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

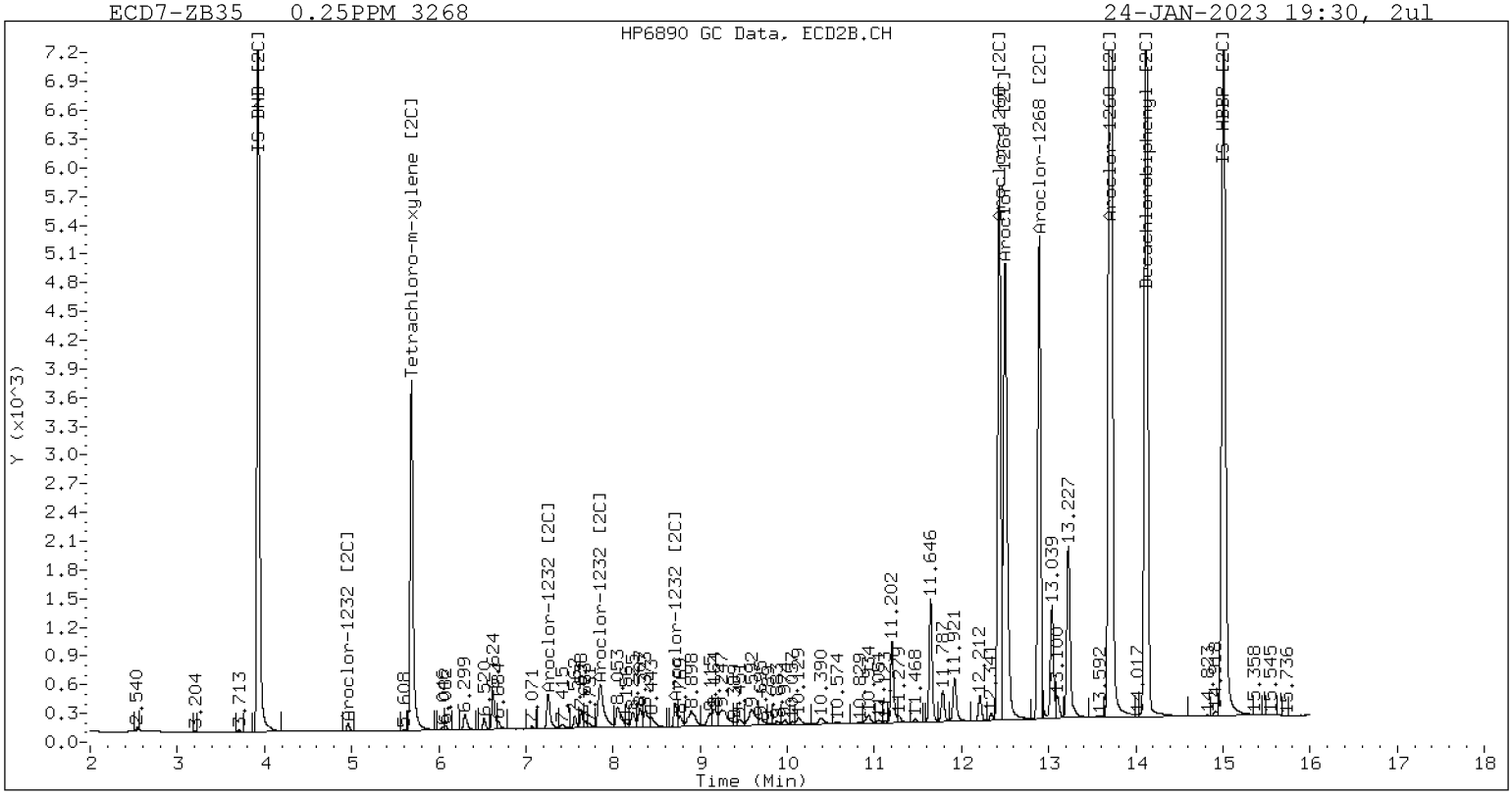
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 3268 24-JAN-2023 19:30, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 3268 24-JAN-2023 19:30, 2ul

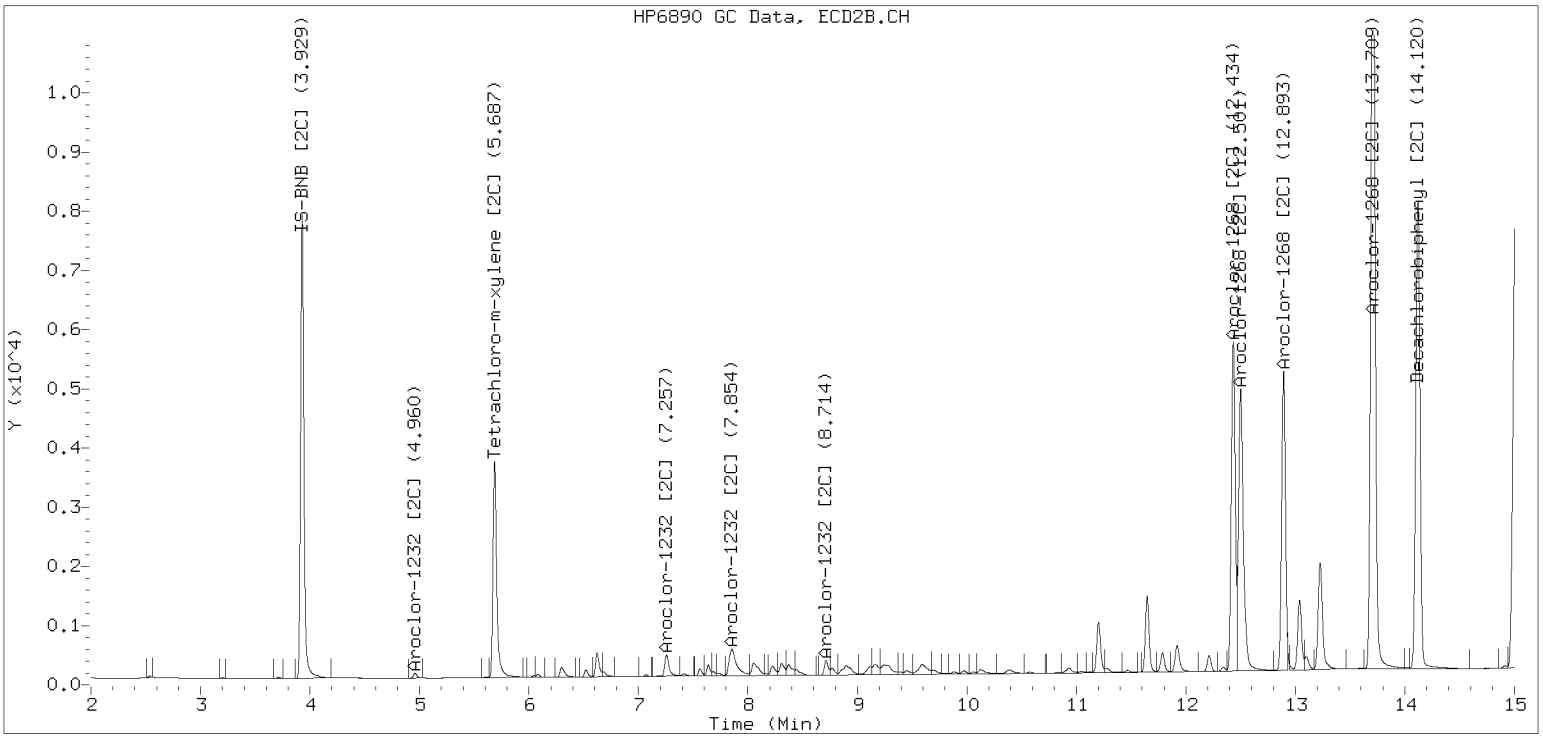


ZB-35 Manual Integration: YES

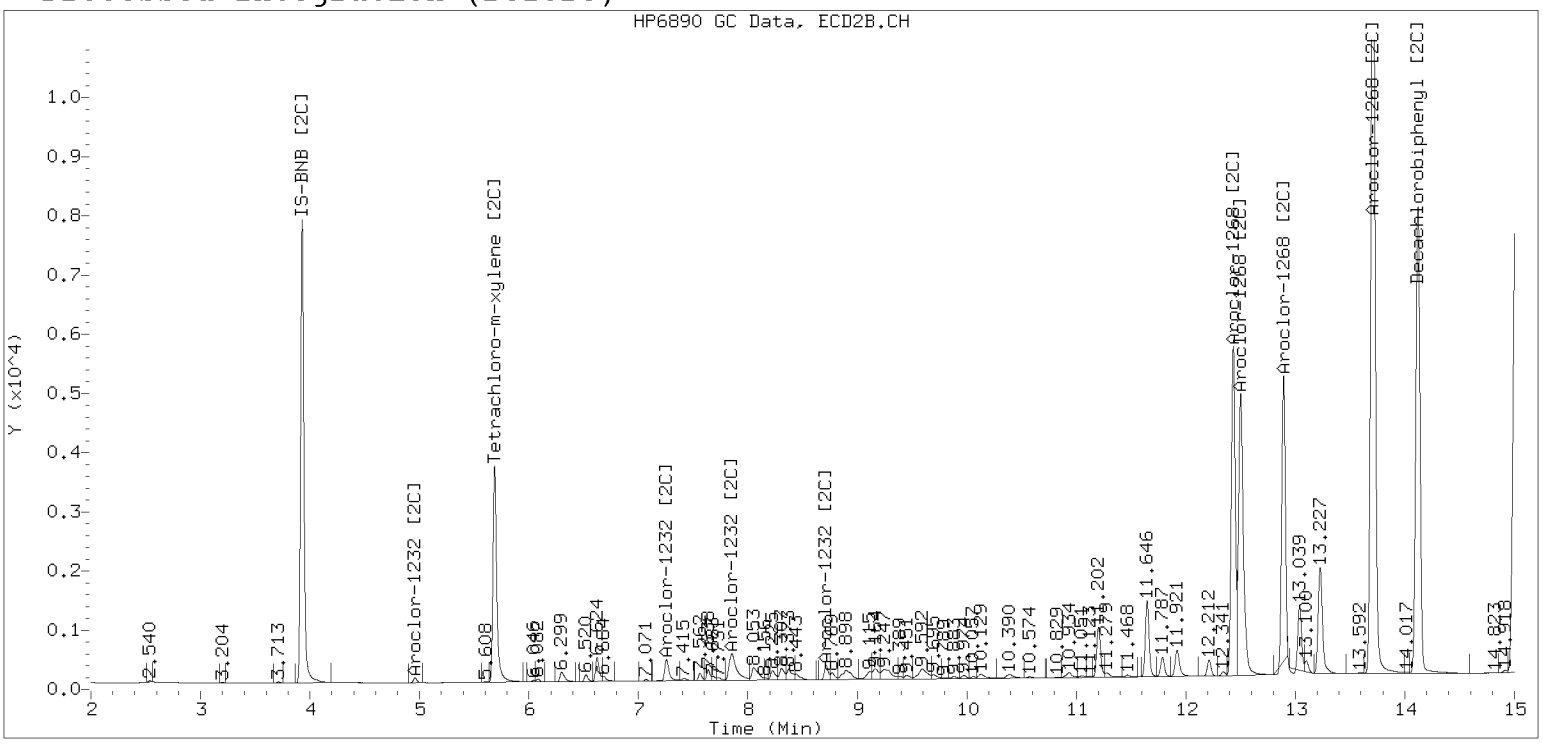
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230124.b/230124.b/01242323ECD7.D Injection Date: 24-JAN-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242324ECD7.D
Data file 2: /230124.b/230124.b/01242324ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 SCV
Client ID:
Injection Date: 24-JAN-2023 19:51
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	268739	5.686	-0.001	172961	37.5	37.3	0.6	Tetrachloro-m-xylene
13.891	-0.000	381489	14.121	0.001	320416	37.9	40.2	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	506576	0.6
Hexabromobiphenyl	647433	940129	45.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	343102	1.8
Hexabromobiphenyl	382032	501702	31.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	40958	217.6	1	7.255	0.001	40190	216.0
Aroclor-1016	2	7.655	0.004	135282	216.9	2	7.852	0.001	90338	221.5
Aroclor-1016	3	7.791	0.003	61557	214.5	3	8.052	0.002	37810	227.2
Aroclor-1016	4	8.406	0.002	40372	218.7	4	8.306	0.000	28171	215.9
Total Col1Ave (4 peaks):					216.9	Total Col2Ave (4 peaks):				220.2 RPD = 1
Corrected Ave (3 peaks):					216.3	Corrected Ave (3 peaks):				217.8 RPD = 1
Aroclor-1221	1	4.732	-0.001	256	6.8	1	---			0.0
Aroclor-1221	2	6.131	-0.002	4742	61.9	2	6.302	0.004	5037	91.4
Aroclor-1221	3	6.384	-0.000	27448	154.4	3	6.623	-0.000	18931	203.5
Total Col1Ave (3 peaks):					74.4	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.732	-0.001	256	11.0	1	---			0.0
Aroclor-1232	2	6.131	-0.002	4742	90.0	2	7.255	-0.001	40190	470.8
Aroclor-1232	3	7.655	-0.004	135282	513.5	3	7.852	-0.002	90338	519.5
Aroclor-1232	4	8.581	-0.003	56938	504.9	4	8.713	-0.001	27776	574.9
Total Col1Ave (4 peaks):					279.8	Total Col2Ave (3 peaks):				521.7 RPD = 60*
Corrected Ave (3 peaks):					202.0	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	-0.000	40958	264.0	1	7.255	-0.000	40190	267.8
Aroclor-1242	2	7.655	-0.001	135282	266.5	2	7.852	-0.001	90338	271.0
Aroclor-1242	3	8.406	-0.001	40372	267.7	3	9.115	-0.045	15827	151.6
Aroclor-1242	4	8.581	-0.000	56938	249.9	4	9.587	0.001	3186	23.0
Total Col1Ave (4 peaks):					262.0	Total Col2Ave (4 peaks):				178.4 RPD = 38
Corrected Ave (3 peaks):					260.1	Corrected Ave (3 peaks):				147.5 RPD = 55*
Aroclor-1248	1	8.406	0.000	40372	159.3	1	8.306	0.000	28171	181.6
Aroclor-1248	2	8.581	0.001	56938	176.1	2	8.713	0.000	27776	166.4
Aroclor-1248	3	8.995	-0.004	58213	94.1	3	9.115	-0.042	15827	77.6
Aroclor-1248	4	9.304	0.010	36620	119.6	4	9.587	0.006	3186	12.6
Total Col1Ave (4 peaks):					137.3	Total Col2Ave (4 peaks):				109.6 RPD = 22
Corrected Ave (3 peaks):					124.4	Corrected Ave (3 peaks):				85.5 RPD = 37
Aroclor-1254	1	9.304	0.005	36620	70.9	1	9.450	0.002	20792	83.5
Aroclor-1254	2	---			0.0	2	9.972	0.003	2640	13.1
Aroclor-1254	3	9.673	0.003	4075	12.3	3	10.148	0.027	52902	120.5
Aroclor-1254	4	9.813	0.004	14733	22.7	4	10.372	0.000	71680	163.3
Aroclor-1254	5	10.122	-0.055	119528	283.6	5	10.569	-0.000	98559	403.2
Total Col1Ave (4 peaks):					97.4	Total Col2Ave (5 peaks):				156.7 RPD = 47*
Corrected Ave (3 peaks):					35.3	Corrected Ave (4 peaks):				95.1 RPD = 92*
Aroclor-1260	1	11.045	0.002	116435	220.7	1	11.654	0.000	81795	226.0
Aroclor-1260	2	11.362	0.001	116918	215.6	2	11.920	0.002	217887	238.0
Aroclor-1260	3	11.738	0.003	303264	212.5	3	12.437	0.001	56212	246.3
Aroclor-1260	4	12.143	0.004	141534	191.9	4	12.502	0.000	142689	240.8
Aroclor-1260	5	12.246	0.002	68446	212.9	NS	---			----
Total Col1Ave (5 peaks):					210.7	Total Col2Ave (4 peaks):				237.8 RPD = 12
Corrected Ave (4 peaks):					208.2	Corrected Ave (3 peaks):				234.9 RPD = 12
Aroclor-1262	1	10.830	-0.002	169725	446.4	1	11.200	0.000	83995	171.1
Aroclor-1262	2	12.246	0.000	68446	114.1	2	11.654	0.001	81795	195.9
Aroclor-1262	3	12.320	-0.000	84201	129.2	3	12.437	0.003	56212	126.4
Aroclor-1262	4	12.989	-0.000	78065	131.5	4	12.502	-0.001	142689	200.4
Total Col1Ave (4 peaks):					205.3	Total Col2Ave (4 peaks):				173.4 RPD = 17
Corrected Ave (3 peaks):					124.9	Corrected Ave (3 peaks):				164.5 RPD = 27
Aroclor-1268	1	12.246	0.001	68446	44.1	1	12.437	0.003	56212	48.0
Aroclor-1268	2	12.320	0.002	84201	54.4	2	12.502	0.001	142689	114.4
Aroclor-1268	3	12.726	0.027	33020	25.7	3	12.894	0.001	1495	1.4
Aroclor-1268	4	13.490	0.001	16019	4.2	4	13.709	0.001	10120	3.2
Total Col1Ave (4 peaks):					32.1	Total Col2Ave (4 peaks):				41.8 RPD = 26
Corrected Ave (3 peaks):					24.7	Corrected Ave (3 peaks):				17.5 RPD = 34

Total PCB Area Col1 (5.909 - 13.792) = 2789370 Col1 Total PCB = 0.5 ppm*

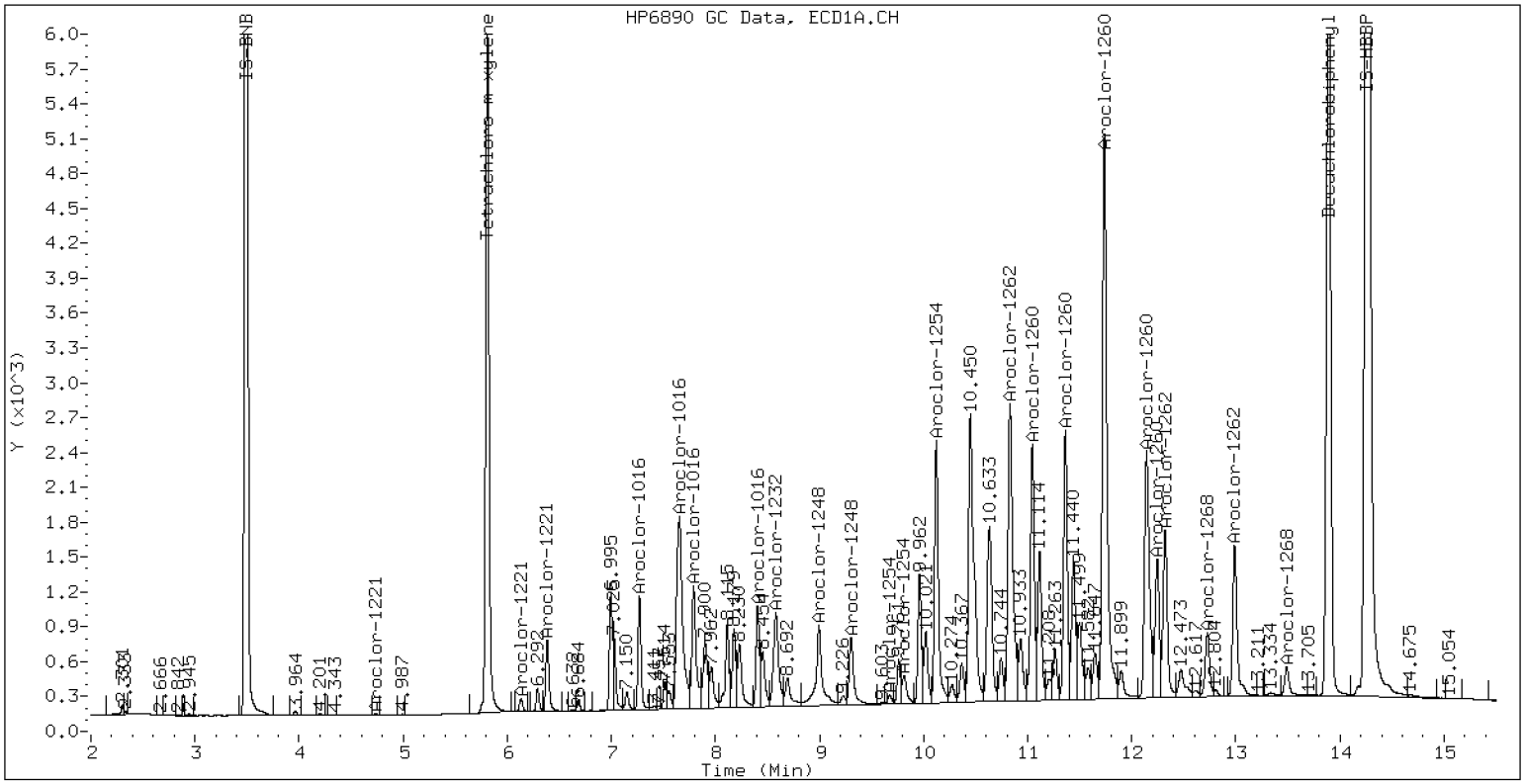
Total PCB Area Col2 (5.787 - 14.020) = 1810543 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

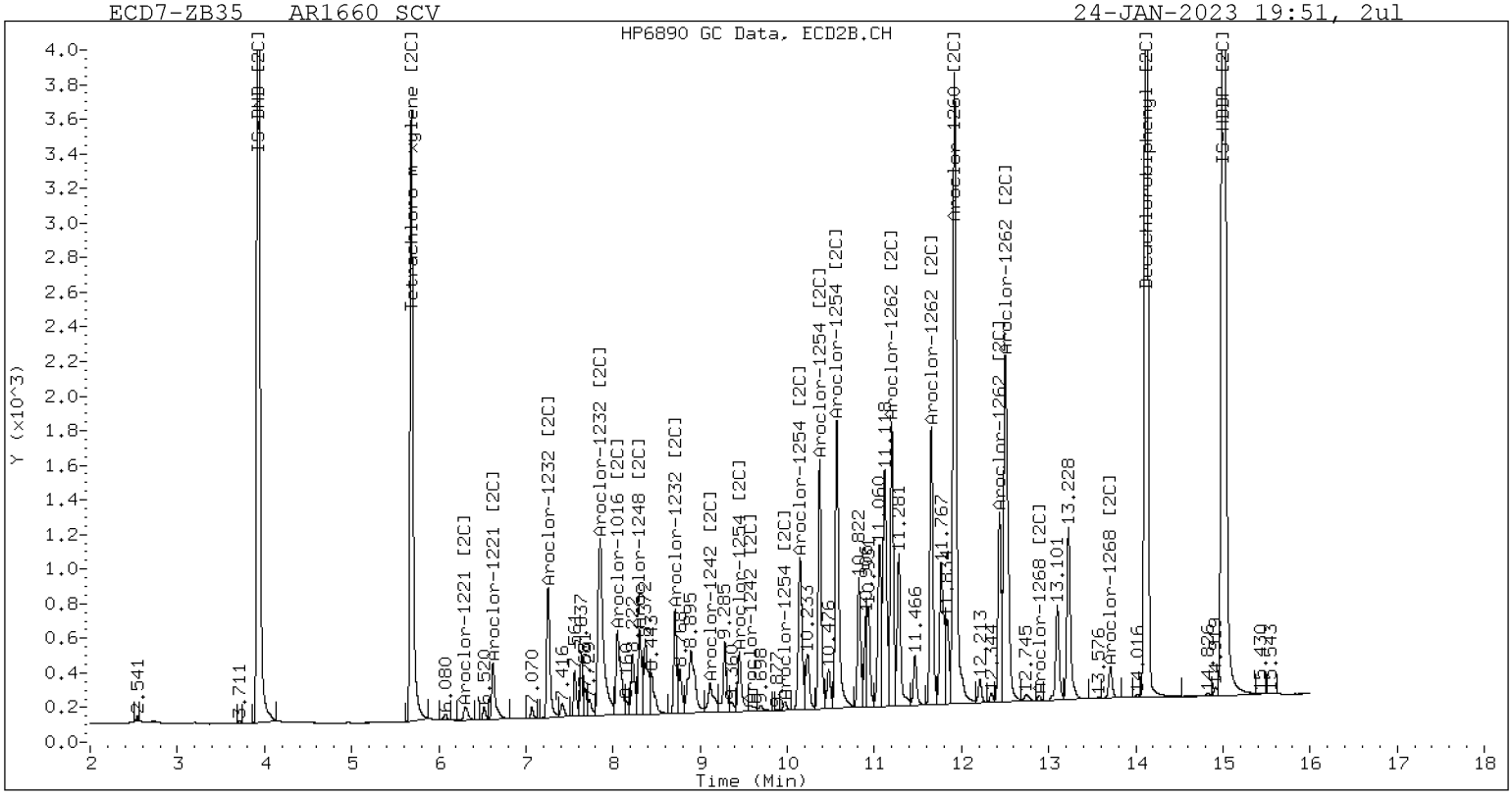
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660 SCV 24-JAN-2023 19:51, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660 SCV 24-JAN-2023 19:51, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242325ECD7.D
Data file 2: /230124.b/230124.b/01242325ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242 SCV
Client ID:
Injection Date: 24-JAN-2023 20:12
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	268580	5.686	-0.001	172592	37.8	37.4	1.1	Tetrachloro-m-xylene
13.892	0.001	392918	14.121	0.001	323869	38.5	40.3	4.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503089	-0.0
Hexabromobiphenyl	647433	953137	47.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	341704	1.4
Hexabromobiphenyl	382032	505860	32.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	29901	159.9	1	7.255	0.000	32077	173.1
Aroclor-1016	2	7.653	0.003	107333	173.3	2	7.851	-0.000	71438	175.9
Aroclor-1016	3	7.790	0.002	45013	157.9	3	8.051	0.001	29072	175.4
Aroclor-1016	4	8.406	0.002	32958	179.8	4	8.306	0.001	21761	167.5
Total Col1Ave (4 peaks):					167.7	Total Col2Ave (4 peaks):				173.0 RPD = 3
Corrected Ave (3 peaks):					163.7	Corrected Ave (3 peaks):				172.0 RPD = 5
Aroclor-1221	1	4.737	0.004	141	3.8	1	---			0.0
Aroclor-1221	2	6.133	-0.001	3649	48.0	2	6.317	0.018	4290	78.2
Aroclor-1221	3	6.384	-0.000	21189	120.0	3	6.624	0.001	14613	157.7
Total Col1Ave (3 peaks):					57.3	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.737	0.003	141	6.1	1	---			0.0
Aroclor-1232	2	6.133	-0.001	3649	69.7	2	7.255	-0.002	32077	377.3
Aroclor-1232	3	7.653	-0.005	107333	410.2	3	7.851	-0.004	71438	412.5
Aroclor-1232	4	8.581	-0.003	59617	532.3	4	8.713	-0.000	22563	468.9
Total Col1Ave (4 peaks):					254.6	Total Col2Ave (3 peaks):				419.6 RPD = 49*
Corrected Ave (3 peaks):					162.0	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	29901	194.1	1	7.255	-0.001	32077	214.6
Aroclor-1242	2	7.653	-0.002	107333	212.9	2	7.851	-0.002	71438	215.2
Aroclor-1242	3	8.406	-0.000	32958	220.0	3	9.156	-0.004	27374	263.3
Aroclor-1242	4	8.581	-0.000	59617	263.5	4	9.581	-0.006	34156	247.9
Total Col1Ave (4 peaks):					222.6	Total Col2Ave (4 peaks):				235.3 RPD = 6
Corrected Ave (3 peaks):					209.0	Corrected Ave (3 peaks):				225.9 RPD = 8
Aroclor-1248	1	8.406	0.001	32958	131.0	1	8.306	0.001	21761	140.9
Aroclor-1248	2	8.581	0.001	59617	185.7	2	8.713	0.001	22563	135.7
Aroclor-1248	3	9.003	0.004	72557	118.2	3	9.156	-0.000	27374	134.7
Aroclor-1248	4	9.296	0.003	28122	92.5	4	9.581	-0.001	34156	135.9
Total Col1Ave (4 peaks):					131.8	Total Col2Ave (4 peaks):				136.8 RPD = 4
Corrected Ave (3 peaks):					113.9	Corrected Ave (3 peaks):				135.5 RPD = 17
Aroclor-1254	1	9.296	-0.002	28122	54.8	1	9.448	0.000	11650	47.0
Aroclor-1254	2	9.380	0.002	9292	42.4	2	9.968	-0.001	7642	38.1
Aroclor-1254	3	9.671	0.001	12871	39.2	3	10.120	-0.001	16012	36.6
Aroclor-1254	4	9.808	-0.000	22113	34.4	4	10.378	0.007	16300	37.3
Aroclor-1254	5	10.176	-0.001	17771	42.5	5	10.572	0.004	4439	18.2
Total Col1Ave (5 peaks):					42.7	Total Col2Ave (5 peaks):				35.5 RPD = 18
Corrected Ave (4 peaks):					39.6	Corrected Ave (4 peaks):				32.6 RPD = 19
Aroclor-1260	1	11.047	0.003	741	1.4	1	11.663	0.010	1794	4.9
Aroclor-1260	2	11.366	0.006	379	0.7	2	11.923	0.005	1208	1.3
Aroclor-1260	3	11.745	0.011	860	0.6	3	12.507	0.071	977	4.2
Aroclor-1260	4	12.154	0.014	1536	2.1	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
Total Col1Ave (4 peaks):					1.2	Total Col2Ave (3 peaks):				3.5 RPD = 99*
Corrected Ave (3 peaks):					0.9	Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.836	0.004	10654	27.6	1	11.120	-0.080	8071	16.3
Aroclor-1262	2	12.154	-0.092	1536	2.5	2	11.663	0.010	1794	4.3
Aroclor-1262	3	---			0.0	3	12.507	0.073	977	2.2
Aroclor-1262	4	13.040	0.051	1739	2.9	4	---			0.0
Total Col1Ave (3 peaks):					11.0	Total Col2Ave (3 peaks):				7.6 RPD = 37
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.154	-0.091	1536	1.0	1	12.507	0.073	977	0.8
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.623	-0.076	5080	3.9	3	12.894	0.001	98	0.1
Aroclor-1268	4	13.501	0.012	2725	0.7	4	13.707	-0.001	1566	0.5
Total Col1Ave (3 peaks):					1.9	Total Col2Ave (3 peaks):				0.5 RPD = 120*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 915887 Col1 Total PCB = 0.2 ppm*

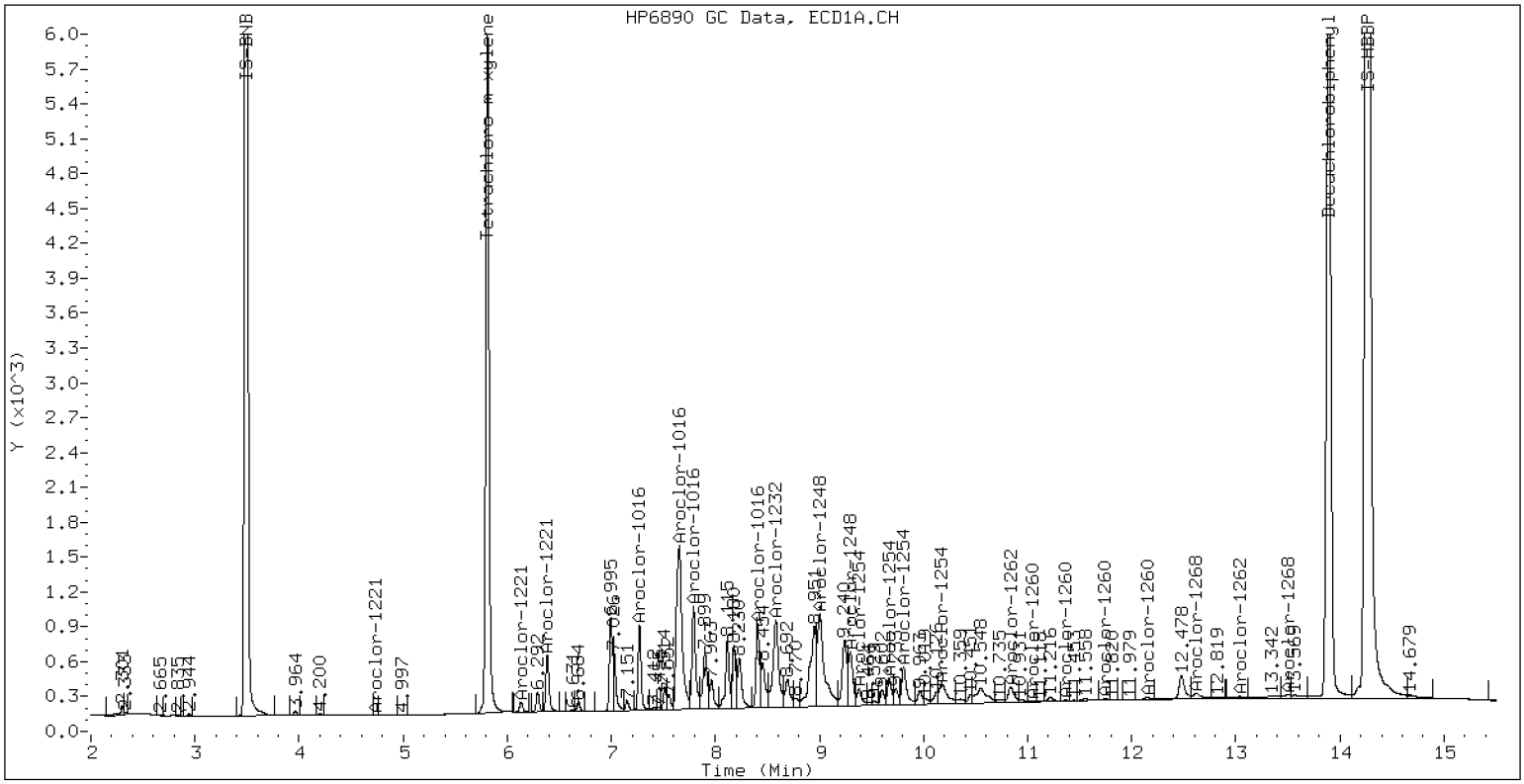
Total PCB Area Col2 (5.787 - 14.020) = 575897 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

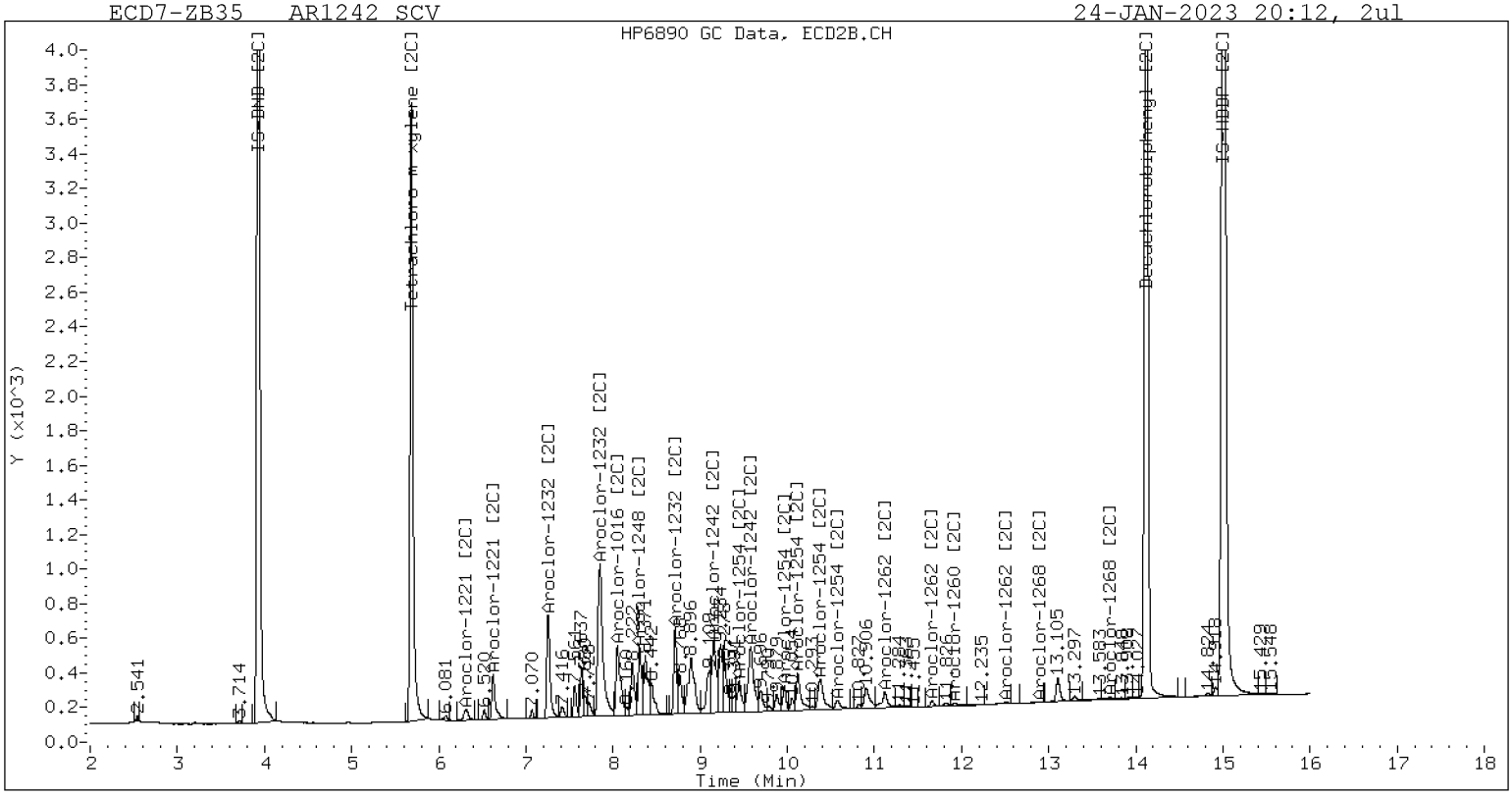
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242 SCV 24-JAN-2023 20:12, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242 SCV 24-JAN-2023 20:12, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242326ECD7.D
Data file 2: /230124.b/230124.b/01242326ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248 SCV
Client ID:
Injection Date: 24-JAN-2023 20:33
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	263982	5.686	-0.001	169991	36.8	36.5	0.6	Tetrachloro-m-xylene
13.892	0.001	400655	14.121	0.001	316171	38.3	39.6	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	508189	1.0
Hexabromobiphenyl	647433	979067	51.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	344105	2.1
Hexabromobiphenyl	382032	503378	31.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	14777	78.3	1	7.254	-0.001	16100	86.3
Aroclor-1016	2	7.655	0.004	70114	112.1	2	7.853	0.002	47184	115.4
Aroclor-1016	3	7.794	0.006	27212	94.5	3	8.053	0.003	9427	56.5
Aroclor-1016	4	8.406	0.003	59884	323.4	4	8.306	0.001	36680	280.3
Total Col1Ave (4 peaks):					152.0	Total Col2Ave (4 peaks):				134.6 RPD = 12
Corrected Ave (3 peaks):					94.9	Corrected Ave (3 peaks):				86.0 RPD = 10
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.133	-0.000	591	7.7	2	6.323	0.025	1820	32.9
Aroclor-1221	3	6.386	0.001	2453	13.8	3	6.627	0.004	1477	15.8
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.133	-0.000	591	11.2	2	7.254	-0.002	16100	188.0
Aroclor-1232	3	7.655	-0.004	70114	265.3	3	7.853	-0.001	47184	270.6
Aroclor-1232	4	8.581	-0.003	76286	674.3	4	8.714	0.000	39330	811.7
Total Col1Ave (3 peaks):					316.9	Total Col2Ave (3 peaks):				423.4 RPD = 29
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	14777	95.0	1	7.254	-0.002	16100	107.0
Aroclor-1242	2	7.655	-0.001	70114	137.7	2	7.853	0.000	47184	141.2
Aroclor-1242	3	8.406	-0.000	59884	395.8	3	9.159	-0.001	46988	448.9
Aroclor-1242	4	8.581	-0.000	76286	333.8	4	9.584	-0.003	56615	408.1
Total Col1Ave (4 peaks):					240.5	Total Col2Ave (4 peaks):				276.3 RPD = 14
Corrected Ave (3 peaks):					188.8	Corrected Ave (3 peaks):				218.7 RPD = 15
Aroclor-1248	1	8.406	0.001	59884	235.6	1	8.306	0.001	36680	235.8
Aroclor-1248	2	8.581	0.001	76286	235.2	2	8.714	0.002	39330	234.9
Aroclor-1248	3	9.000	0.001	148805	239.9	3	9.159	0.003	46988	229.7
Aroclor-1248	4	9.295	0.001	73114	238.1	4	9.584	0.002	56615	223.8
Total Col1Ave (4 peaks):					237.2	Total Col2Ave (4 peaks):				231.0 RPD = 3
Corrected Ave (3 peaks):					236.3	Corrected Ave (3 peaks):				229.5 RPD = 3
Aroclor-1254	1	9.295	-0.004	73114	141.2	1	9.449	0.001	20314	81.4
Aroclor-1254	2	9.378	0.000	36561	165.3	2	9.970	0.000	18678	92.6
Aroclor-1254	3	9.672	0.003	30736	92.6	3	10.124	0.003	35321	80.2
Aroclor-1254	4	9.813	0.004	53537	82.3	4	10.387	0.015	35188	79.9
Aroclor-1254	5	10.192	0.015	40119	94.9	5	10.575	0.006	7386	30.1
Total Col1Ave (5 peaks):					115.3	Total Col2Ave (5 peaks):				72.9 RPD = 45*
Corrected Ave (4 peaks):					102.7	Corrected Ave (4 peaks):				67.9 RPD = 41*
Aroclor-1260	1	11.054	0.010	1868	3.4	1	11.664	0.011	2055	5.7
Aroclor-1260	2	11.366	0.005	1375	2.4	2	11.926	0.009	1303	1.4
Aroclor-1260	3	11.745	0.010	2137	1.4	3	12.439	0.003	395	1.7
Aroclor-1260	4	12.147	0.008	1650	2.1	4	12.507	0.005	890	1.5
Aroclor-1260	5	12.255	0.011	558	1.7	NS	---			----
Total Col1Ave (5 peaks):					2.2	Total Col2Ave (4 peaks):				2.6 RPD = 15
Corrected Ave (4 peaks):					1.9	Corrected Ave (3 peaks):				1.5 RPD = 22
Aroclor-1262	1	10.837	0.005	12736	32.2	1	11.122	-0.078	7136	14.5
Aroclor-1262	2	12.255	0.010	558	0.9	2	11.664	0.011	2055	4.9
Aroclor-1262	3	12.327	0.006	596	0.9	3	12.439	0.004	395	0.9
Aroclor-1262	4	12.996	0.007	1113	1.8	4	12.507	0.003	890	1.2
Total Col1Ave (4 peaks):					8.9	Total Col2Ave (4 peaks):				5.4 RPD = 50*
Corrected Ave (3 peaks):					1.2	Corrected Ave (3 peaks):				2.3 RPD = 65*
Aroclor-1268	1	12.255	0.010	558	0.3	1	12.439	0.005	395	0.3
Aroclor-1268	2	12.327	0.009	596	0.4	2	12.507	0.005	890	0.7
Aroclor-1268	3	12.706	0.007	1161	0.9	3	12.896	0.003	166	0.2
Aroclor-1268	4	13.504	0.016	3330	0.8	4	13.717	0.009	469	0.1
Total Col1Ave (4 peaks):					0.6	Total Col2Ave (4 peaks):				0.3 RPD = 57*
Corrected Ave (3 peaks):					0.5	Corrected Ave (3 peaks):				0.2 RPD = 83*

Total PCB Area Col1 (5.909 - 13.792) = 1230760 Col1 Total PCB = 0.2 ppm*

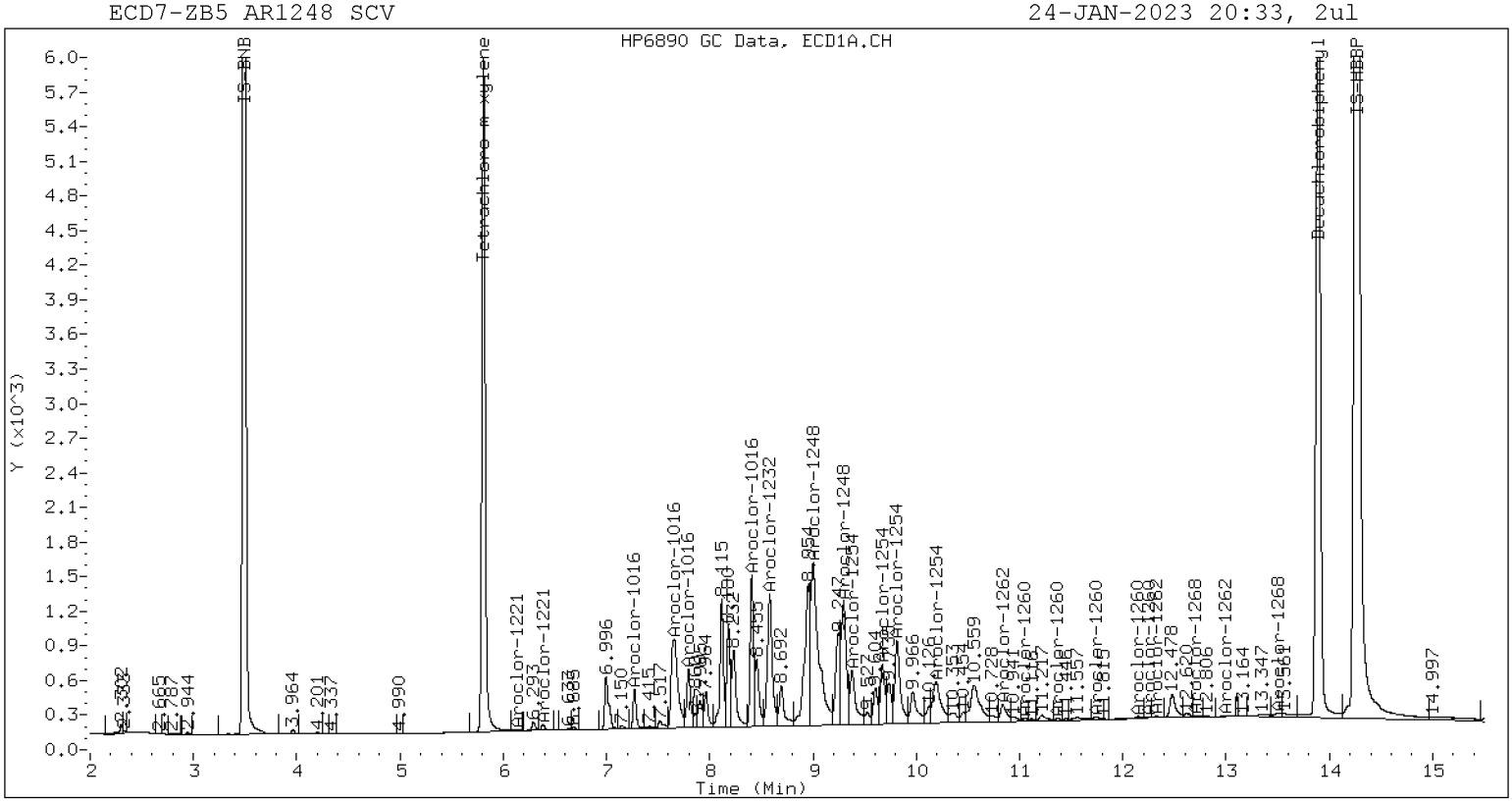
Total PCB Area Col2 (5.787 - 14.020) = 742749 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

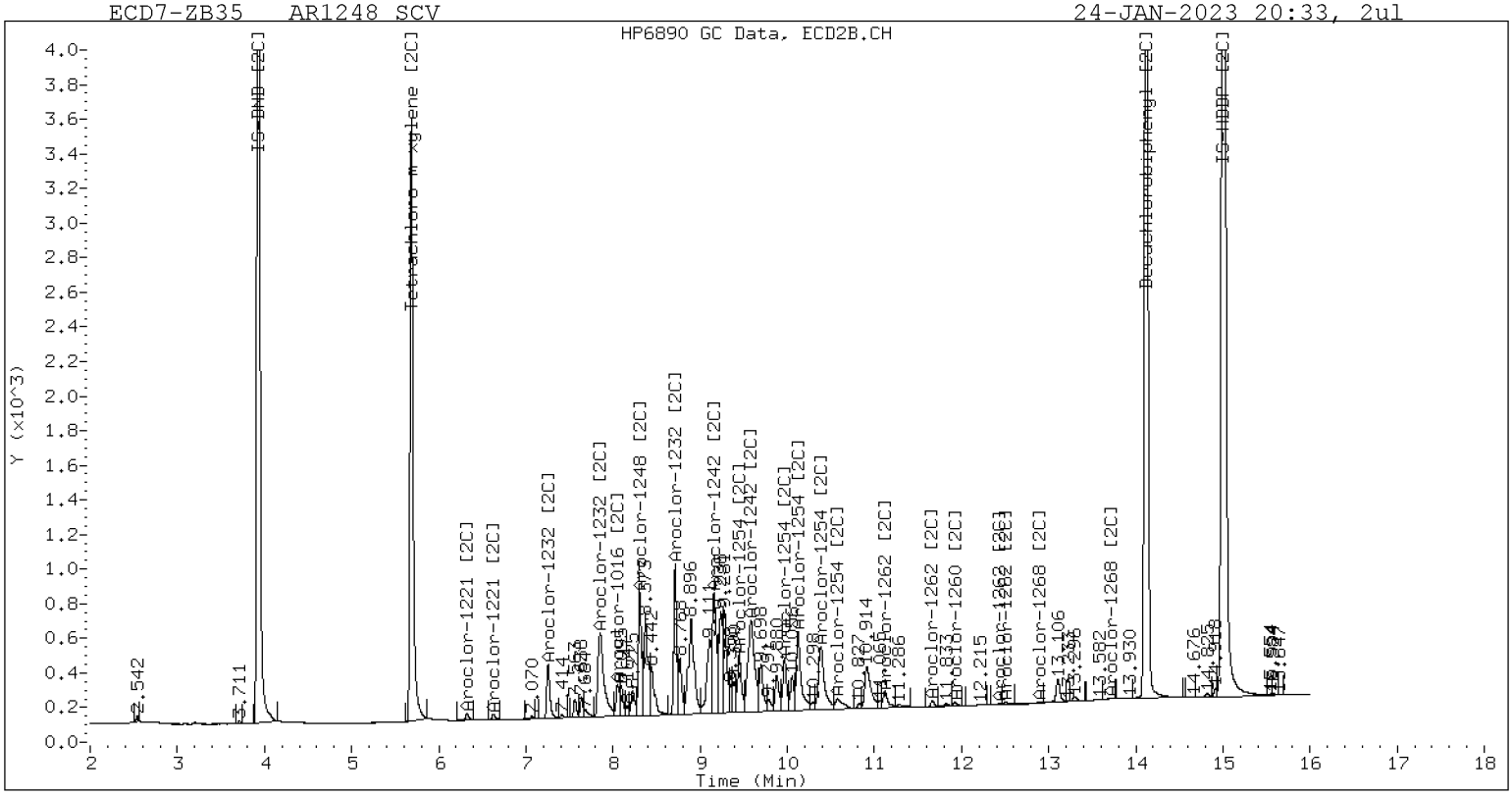
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248 SCV 24-JAN-2023 20:33, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248 SCV 24-JAN-2023 20:33, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242327ECD7.D
Data file 2: /230124.b/230124.b/01242327ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254 SCV
Client ID:
Injection Date: 24-JAN-2023 20:54
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	261398	5.686	-0.001	169839	36.7	36.6	0.1	Tetrachloro-m-xylene
13.892	0.001	383983	14.121	0.001	323233	37.1	39.5	6.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	504424	0.2
Hexabromobiphenyl	647433	968338	49.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	342969	1.8
Hexabromobiphenyl	382032	515045	34.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.273	0.003	320	1.7	1	7.258	0.003	332	1.8
Aroclor-1016	2	7.658	0.008	991	1.6	2	---			0.0
Aroclor-1016	3	7.795	0.007	662	2.3	3	8.097	0.047	515	3.1
Aroclor-1016	4	8.408	0.005	21378	116.3	4	8.307	0.002	20446	156.8
	Total Col1Ave (4 peaks):				30.5	Total Col2Ave (3 peaks):			53.9	RPD = 55*
	Corrected Ave (3 peaks):				1.9	Corrected Ave: < 3 Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.325	0.026	1749	31.7
Aroclor-1221	3	---			0.0	3	6.633	0.011	321	3.5
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	7.258	0.001	332	3.9
Aroclor-1232	3	7.658	-0.000	991	3.8	3	---			0.0
Aroclor-1232	4	8.587	0.003	8887	79.1	4	8.715	0.001	14030	290.5
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	7.273	0.002	320	2.1	1	7.258	0.002	332	2.2
Aroclor-1242	2	7.658	0.003	991	2.0	2	---			0.0
Aroclor-1242	3	8.408	0.002	21378	142.3	3	9.164	0.004	26593	254.9
Aroclor-1242	4	8.587	0.006	8887	39.2	4	9.543	-0.043	34385	248.7
	Total Col1Ave (4 peaks):				46.4	Total Col2Ave (3 peaks):			168.6	RPD = 114*
	Corrected Ave (3 peaks):				14.4	Corrected Ave: < 3 Peaks				
Aroclor-1248	1	8.408	0.003	21378	84.7	1	8.307	0.001	20446	131.9
Aroclor-1248	2	8.587	0.007	8887	27.6	2	8.715	0.003	14030	84.1
Aroclor-1248	3	8.995	-0.004	110289	179.1	3	9.164	0.007	26593	130.4
Aroclor-1248	4	9.300	0.007	113143	371.2	4	9.543	-0.038	34385	136.4
	Total Col1Ave (4 peaks):				165.7	Total Col2Ave (4 peaks):			120.7	RPD = 31
	Corrected Ave (3 peaks):				97.2	Corrected Ave (3 peaks):			115.5	RPD = 17
Aroclor-1254	1	9.300	0.002	113143	220.1	1	9.449	0.001	56453	226.9
Aroclor-1254	2	9.379	0.001	49468	225.4	2	9.970	0.001	45325	225.4
Aroclor-1254	3	9.671	0.002	72811	221.0	3	10.122	0.002	97044	221.2
Aroclor-1254	4	9.811	0.002	140530	217.7	4	10.374	0.002	98778	225.2
Aroclor-1254	5	10.182	0.005	92254	219.8	5	10.570	0.001	57171	234.0
	Total Col1Ave (5 peaks):				220.8	Total Col2Ave (5 peaks):			226.5	RPD = 3
	Corrected Ave (4 peaks):				219.7	Corrected Ave (4 peaks):			224.7	RPD = 2
Aroclor-1260	1	11.045	0.002	8960	16.5	1	11.661	0.008	26985	72.6
Aroclor-1260	2	11.364	0.004	9237	16.5	2	11.923	0.006	19882	21.2
Aroclor-1260	3	11.741	0.007	21268	14.5	3	12.505	0.069	13190	56.3
Aroclor-1260	4	12.146	0.007	19041	25.1	4	---			0.0
Aroclor-1260	5	12.321	0.077	1835	5.5	NS	---			----
	Total Col1Ave (5 peaks):				15.6	Total Col2Ave (3 peaks):			50.0	RPD = 105*
	Corrected Ave (4 peaks):				13.3	Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.832	0.000	157590	402.4	1	11.119	-0.081	92414	183.3
Aroclor-1262	2	12.321	0.075	1835	3.0	2	11.661	0.008	26985	63.0
Aroclor-1262	3	---			0.0	3	12.505	0.071	13190	28.9
Aroclor-1262	4	12.995	0.006	843	1.4	4	---			0.0
	Total Col1Ave (3 peaks):				135.6	Total Col2Ave (3 peaks):			91.7	RPD = 39
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.321	0.076	1835	1.1	1	12.505	0.072	13190	11.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.720	0.021	1314	1.0	3	12.891	-0.002	169	0.2
Aroclor-1268	4	13.504	0.016	1169	0.3	4	13.706	-0.002	1132	0.3
	Total Col1Ave (3 peaks):				0.8	Total Col2Ave (3 peaks):			3.8	RPD = 130*
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 1507519 Col1 Total PCB = 0.3 ppm*

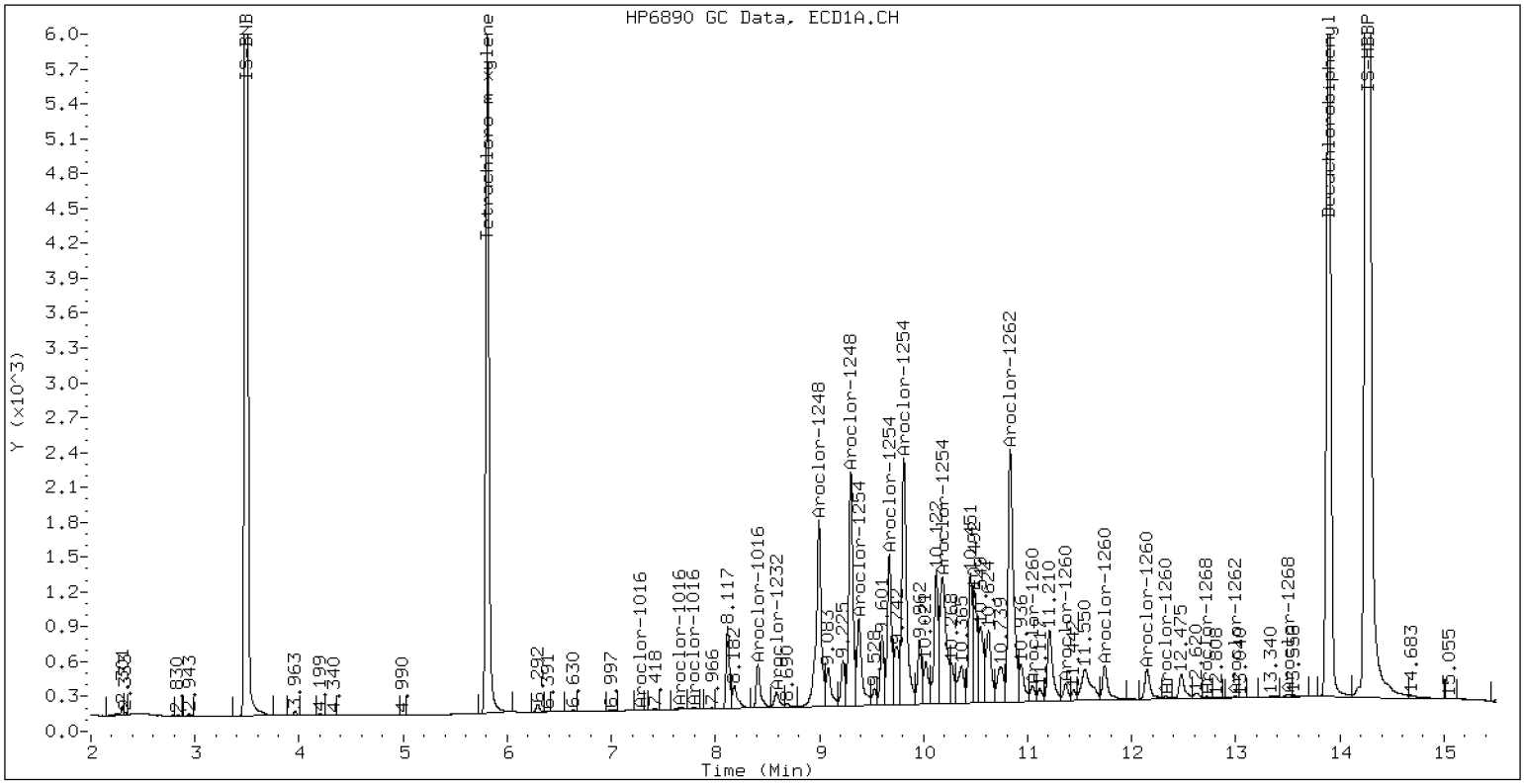
Total PCB Area Col2 (5.787 - 14.020) = 951047 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

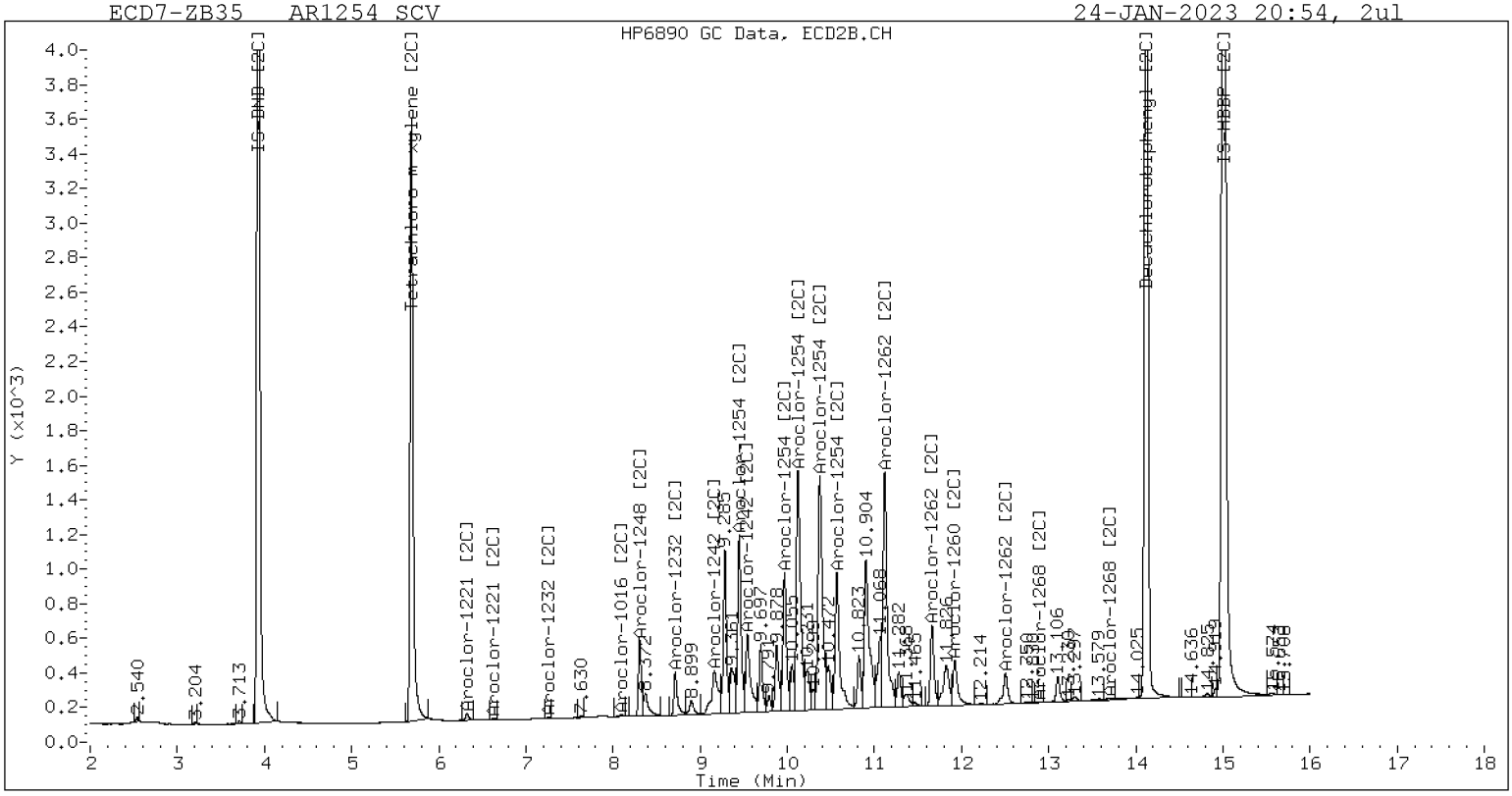
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254 SCV 24-JAN-2023 20:54, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254 SCV 24-JAN-2023 20:54, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242328ECD7.D
Data file 2: /230124.b/230124.b/01242328ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162 SCV
Client ID:
Injection Date: 24-JAN-2023 21:15
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	265357	5.685	-0.001	170984	37.3	37.2	0.3	Tetrachloro-m-xylene
13.891	-0.001	397332	14.119	-0.001	326981	37.5	39.5	5.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503473	0.0
Hexabromobiphenyl	647433	991997	53.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	340361	1.0
Hexabromobiphenyl	382032	521975	36.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	5326	28.5	1	7.257	0.002	6708	36.3
Aroclor-1016	2	7.664	0.013	11965	19.3	2	7.856	0.005	7233	17.9
Aroclor-1016	3	7.797	0.009	6015	21.1	3	8.058	0.008	2997	18.2
Aroclor-1016	4	8.410	0.006	3771	20.6	4	8.308	0.002	2065	16.0
Total Col1Ave (4 peaks):					22.4	Total Col2Ave (4 peaks):				22.1 RPD = 1
Corrected Ave (3 peaks):					20.3	Corrected Ave (3 peaks):				17.3 RPD = 16
Aroclor-1221	1	4.732	-0.000	9097	244.5	1	4.959	-0.000	6157	246.8
Aroclor-1221	2	6.133	-0.000	16114	211.8	2	6.297	-0.001	12807	234.2
Aroclor-1221	3	6.384	0.000	40299	228.1	3	6.622	-0.000	21707	235.2
Total Col1Ave (3 peaks):					228.1	Total Col2Ave (3 peaks):				238.7 RPD = 5
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.732	-0.001	9097	391.6	1	4.959	-0.001	6157	406.9
Aroclor-1232	2	6.133	0.000	16114	307.8	2	7.257	0.000	6708	79.2
Aroclor-1232	3	7.664	0.005	11965	45.7	3	7.856	0.001	7233	41.9
Aroclor-1232	4	8.589	0.004	2837	25.3	4	8.716	0.002	1869	39.0
Total Col1Ave (4 peaks):					192.6	Total Col2Ave (4 peaks):				141.7 RPD = 30
Corrected Ave (3 peaks):					126.3	Corrected Ave (3 peaks):				53.4 RPD = 81*
Aroclor-1242	1	7.272	0.001	5326	34.5	1	7.257	0.001	6708	45.1
Aroclor-1242	2	7.664	0.008	11965	23.7	2	7.856	0.003	7233	21.9
Aroclor-1242	3	8.410	0.004	3771	25.2	3	9.169	0.009	1956	18.9
Aroclor-1242	4	8.589	0.007	2837	12.5	4	9.544	-0.043	5978	43.6
Total Col1Ave (4 peaks):					24.0	Total Col2Ave (4 peaks):				32.3 RPD = 30
Corrected Ave (3 peaks):					20.5	Corrected Ave (3 peaks):				28.1 RPD = 31
Aroclor-1248	1	8.410	0.005	3771	15.0	1	8.308	0.002	2065	13.4
Aroclor-1248	2	8.589	0.008	2837	8.8	2	8.716	0.004	1869	11.3
Aroclor-1248	3	8.997	-0.002	36022	58.6	3	9.169	0.012	1956	9.7
Aroclor-1248	4	9.305	0.011	30853	101.4	4	9.544	-0.038	5978	23.9
Total Col1Ave (4 peaks):					46.0	Total Col2Ave (4 peaks):				14.6 RPD = 104*
Corrected Ave (3 peaks):					27.5	Corrected Ave (3 peaks):				11.5 RPD = 82*
Aroclor-1254	1	9.305	0.006	30853	60.1	1	9.451	0.003	17617	71.3
Aroclor-1254	2	9.376	-0.002	5370	24.5	2	9.970	0.001	2849	14.3
Aroclor-1254	3	9.673	0.003	5543	16.9	3	10.146	0.026	88151	202.5
Aroclor-1254	4	9.810	0.002	14544	22.6	4	10.370	-0.002	107074	245.9
Aroclor-1254	5	10.121	-0.056	180016	429.7	5	10.567	-0.002	141725	584.5
Total Col1Ave (5 peaks):					110.8	Total Col2Ave (5 peaks):				223.7 RPD = 68*
Corrected Ave (4 peaks):					31.0	Corrected Ave (4 peaks):				133.5 RPD = 125*
Aroclor-1260	1	11.044	0.001	310806	558.4	1	11.652	-0.001	187682	498.4
Aroclor-1260	2	11.361	0.000	263161	460.0	2	11.917	-0.000	450612	473.0
Aroclor-1260	3	11.735	0.000	629605	418.0	3	12.433	-0.003	206042	867.7
Aroclor-1260	4	12.141	0.001	210012	269.9	4	12.502	-0.000	326457	529.5
Aroclor-1260	5	12.244	-0.000	268425	791.3	NS	---			----
Total Col1Ave (5 peaks):					499.5	Total Col2Ave (4 peaks):				592.1 RPD = 17
Corrected Ave (4 peaks):					426.6	Corrected Ave (3 peaks):				500.3 RPD = 16
Aroclor-1262	1	10.828	-0.005	171094	426.5	1	11.200	0.000	219731	430.1
Aroclor-1262	2	12.244	-0.002	268425	423.9	2	11.652	-0.001	187682	432.0
Aroclor-1262	3	12.319	-0.002	291581	424.2	3	12.433	-0.001	206042	445.4
Aroclor-1262	4	12.988	-0.001	257735	411.5	4	12.502	-0.002	326457	440.6
Total Col1Ave (4 peaks):					421.5	Total Col2Ave (4 peaks):				437.0 RPD = 4
Corrected Ave (3 peaks):					419.8	Corrected Ave (3 peaks):				434.3 RPD = 3
Aroclor-1268	1	12.244	-0.001	268425	163.8	1	12.433	-0.000	206042	169.0
Aroclor-1268	2	12.319	0.001	291581	178.4	2	12.502	0.000	326457	251.7
Aroclor-1268	3	12.725	0.026	108693	80.3	3	12.892	-0.001	10062	9.3
Aroclor-1268	4	13.486	-0.003	95646	23.8	4	13.710	0.001	59437	17.8
Total Col1Ave (4 peaks):					111.6	Total Col2Ave (4 peaks):				112.0 RPD = 0

Corrected Ave (3 peaks): 89.3 Corrected Ave (3 peaks): 65.4 RPD = 31

Total PCB Area Col1 (5.909 - 13.792) = 4409992 Col1 Total PCB = 0.8 ppm*

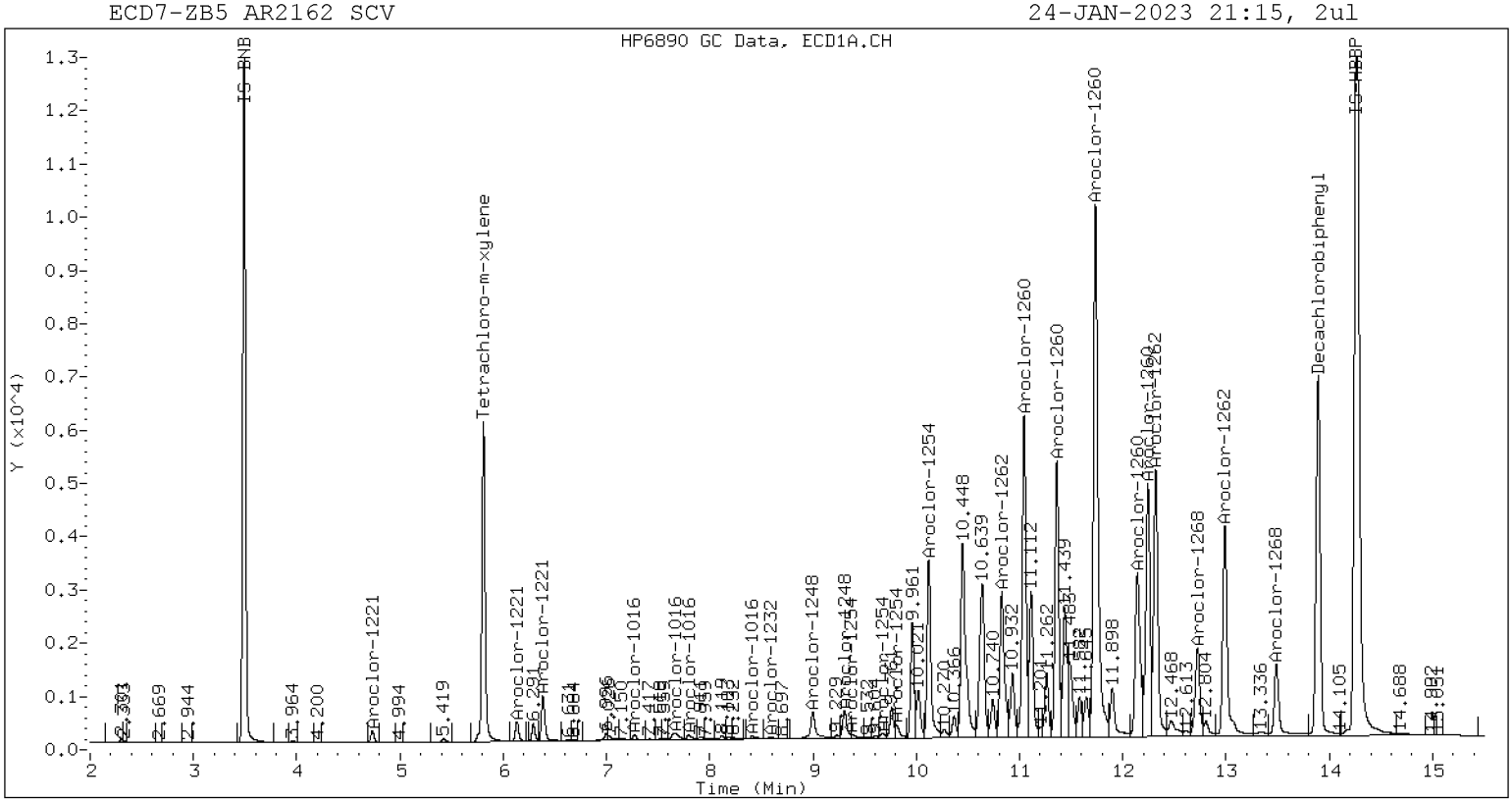
Total PCB Area Col2 (5.787 - 14.020) = 2874073 Col2 Total PCB = 0.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

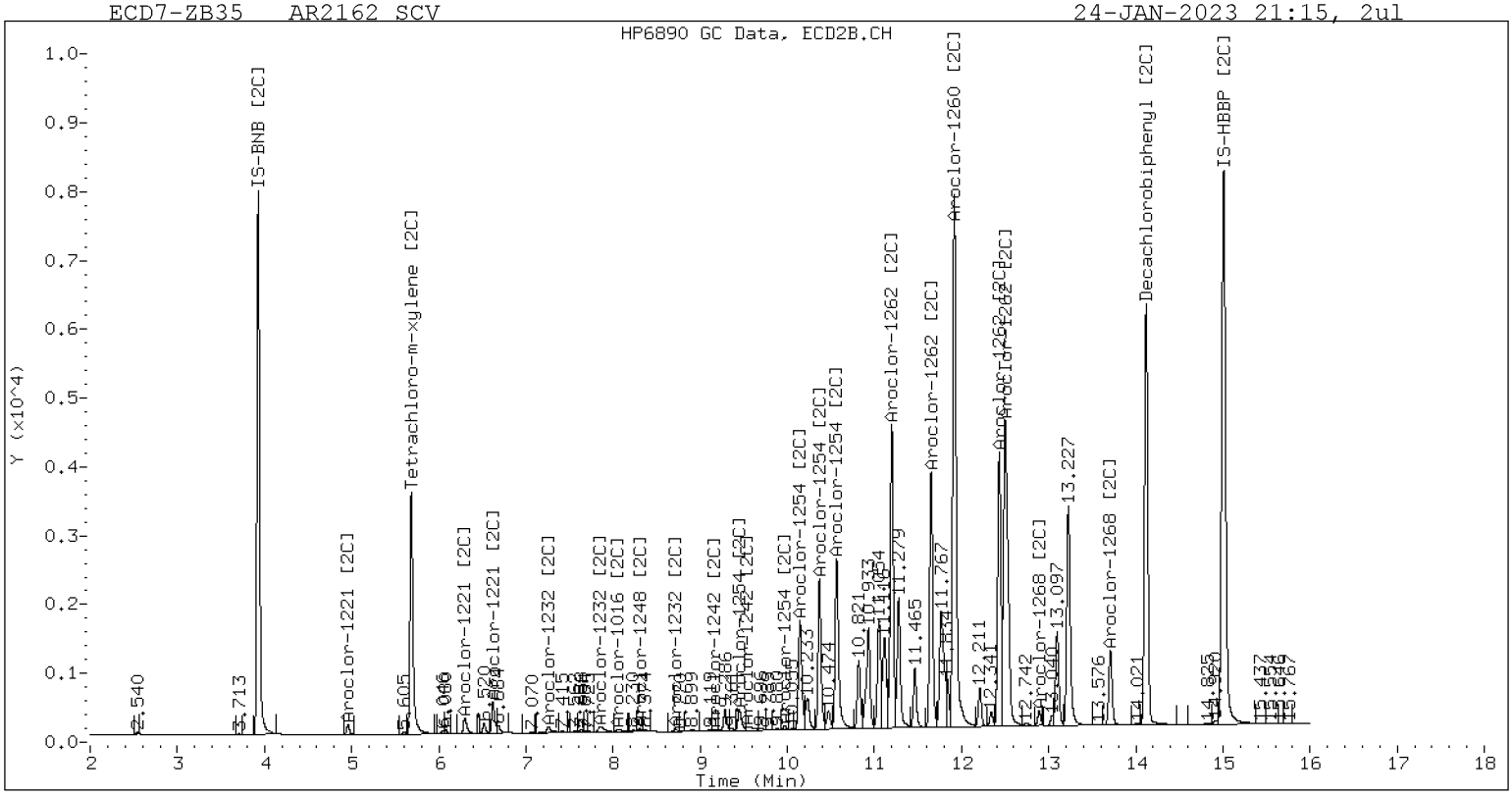
PCB Dual Column Chromatograms

ECD7-ZB5 AR2162 SCV 24-JAN-2023 21:15, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162 SCV 24-JAN-2023 21:15, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242329ECD7.D
Data file 2: /230124.b/230124.b/01242329ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268 SCV
Client ID:
Injection Date: 24-JAN-2023 21:36
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.810	0.001	250455	5.687	0.000	162795	36.4	36.3	0.2	Tetrachloro-m-xylene
13.892	0.000	551946	14.120	0.000	461901	54.6	57.9	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	487061	-3.2
Hexabromobiphenyl	647433	944934	46.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331721	-1.5
Hexabromobiphenyl	382032	502401	31.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016 1	7.272	0.002	19363	107.0	1	7.256	0.001	19791	110.0
Aroclor-1016 2	7.659	0.009	58630	97.8	2	7.856	0.005	40139	101.8
Aroclor-1016 3	7.794	0.006	28286	102.5	3	8.055	0.005	17412	108.2
Aroclor-1016 4	8.408	0.004	17373	97.9	4	8.308	0.003	11962	94.8
Total Col1Ave (4 peaks):				101.3	Total Col2Ave (4 peaks):				103.7 RPD = 2
Corrected Ave (3 peaks):				99.4	Corrected Ave (3 peaks):				101.6 RPD = 2
Aroclor-1221 1	4.735	0.002	5022	139.5	1	4.961	0.002	3409	140.2
Aroclor-1221 2	6.134	0.001	8987	122.1	2	6.299	0.001	7677	144.1
Aroclor-1221 3	6.385	0.001	29368	171.8	3	6.624	0.001	16198	180.1
Total Col1Ave (3 peaks):				144.5	Total Col2Ave (3 peaks):				154.8 RPD = 7
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				
Aroclor-1232 1	4.735	0.002	5022	223.5	1	4.961	0.002	3409	231.1
Aroclor-1232 2	6.134	0.001	8987	177.4	2	7.256	-0.001	19791	239.8
Aroclor-1232 3	7.659	0.001	58630	231.5	3	7.856	0.001	40139	238.8
Aroclor-1232 4	8.585	0.000	24991	230.5	4	8.715	0.001	11476	245.7
Total Col1Ave (4 peaks):				215.7	Total Col2Ave (4 peaks):				238.8 RPD = 10
Corrected Ave (3 peaks):				210.5	Corrected Ave (3 peaks):				236.6 RPD = 12
Aroclor-1242 1	7.272	0.001	19363	129.8	1	7.256	0.000	19791	136.4
Aroclor-1242 2	7.659	0.004	58630	120.1	2	7.856	0.002	40139	124.6
Aroclor-1242 3	8.408	0.001	17373	119.8	3	9.166	0.006	11813	117.1
Aroclor-1242 4	8.585	0.003	24991	114.1	4	9.595	0.009	16549	123.7
Total Col1Ave (4 peaks):				121.0	Total Col2Ave (4 peaks):				125.4 RPD = 4
Corrected Ave (3 peaks):				118.0	Corrected Ave (3 peaks):				121.8 RPD = 3
Aroclor-1248 1	8.408	0.002	17373	71.3	1	8.308	0.003	11962	79.8
Aroclor-1248 2	8.585	0.005	24991	80.4	2	8.715	0.003	11476	71.1
Aroclor-1248 3	9.001	0.002	67631	113.8	3	9.166	0.009	11813	59.9
Aroclor-1248 4	9.293	-0.001	30983	105.3	4	9.595	0.014	16549	67.9
Total Col1Ave (4 peaks):				92.7	Total Col2Ave (4 peaks):				69.7 RPD = 28
Corrected Ave (3 peaks):				85.7	Corrected Ave (3 peaks):				66.3 RPD = 26
Aroclor-1254 1	9.293	-0.006	30983	62.4	1	9.451	0.003	3749	15.6
Aroclor-1254 2	9.381	0.003	9071	42.8	2	9.974	0.005	2452	12.6
Aroclor-1254 3	9.678	0.009	5199	16.3	3	10.131	0.010	4718	11.1
Aroclor-1254 4	9.820	0.012	8864	14.2	4	10.389	0.018	4224	10.0
Aroclor-1254 5	10.195	0.018	8085	19.9	5	10.573	0.004	1573	6.7
Total Col1Ave (5 peaks):				31.1	Total Col2Ave (5 peaks):				11.2 RPD = 94*
Corrected Ave (4 peaks):				23.3	Corrected Ave (4 peaks):				10.1 RPD = 79*
Aroclor-1260 1	11.050	0.006	66852	126.1	1	11.647	-0.006	57235	157.9
Aroclor-1260 2	11.366	0.006	6269	11.5	2	11.919	0.002	25368	27.7
Aroclor-1260 3	11.741	0.007	41446	28.9	3	12.434	-0.002	262014	1146.4
Aroclor-1260 4	12.052	-0.088	2691	3.6	4	12.502	-0.000	277060	466.9
Aroclor-1260 5	12.245	0.002	349286	1080.9	NS	---			----
Total Col1Ave (5 peaks):				250.2	Total Col2Ave (4 peaks):				449.7 RPD = 57*
Corrected Ave (4 peaks):				42.5	Corrected Ave (3 peaks):				217.5 RPD = 135*
Aroclor-1262 1	10.838	0.006	4520	11.8	1	11.203	0.003	40576	82.5
Aroclor-1262 2	12.245	-0.000	349286	579.1	2	11.647	-0.006	57235	136.9
Aroclor-1262 3	12.318	-0.002	349715	534.1	3	12.434	-0.001	262014	588.4
Aroclor-1262 4	12.988	-0.001	141905	237.8	4	12.502	-0.002	277060	388.5
Total Col1Ave (4 peaks):				340.7	Total Col2Ave (4 peaks):				299.1 RPD = 13
Corrected Ave (3 peaks):				261.2	Corrected Ave (3 peaks):				202.6 RPD = 25
Aroclor-1268 1	12.245	0.001	349286	223.8	1	12.434	0.000	262014	223.3
Aroclor-1268 2	12.318	0.000	349715	224.6	2	12.502	0.000	277060	221.9
Aroclor-1268 3	12.699	0.000	289328	224.3	3	12.893	-0.000	208928	201.0
Aroclor-1268 4	13.490	0.001	849299	222.1	4	13.710	0.002	725831	226.1
Total Col1Ave (4 peaks):				223.7	Total Col2Ave (4 peaks):				218.1 RPD = 3

Corrected Ave (3 peaks): 223.4 Corrected Ave (3 peaks): 215.4 RPD = 4

Total PCB Area Col1 (5.909 - 13.792) = 2866092 Col1 Total PCB = 0.5 ppm*

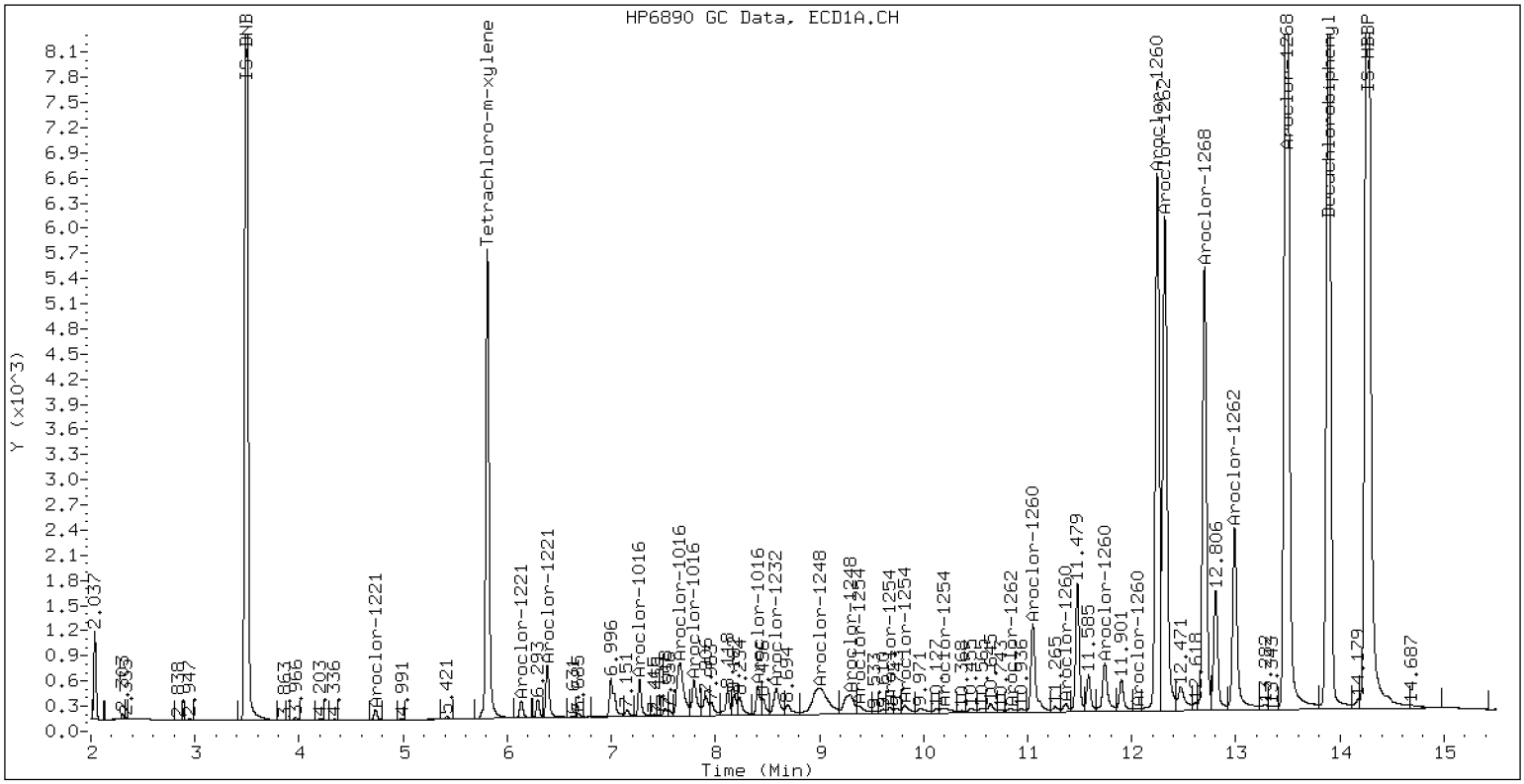
Total PCB Area Col2 (5.787 - 14.020) = 2084481 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

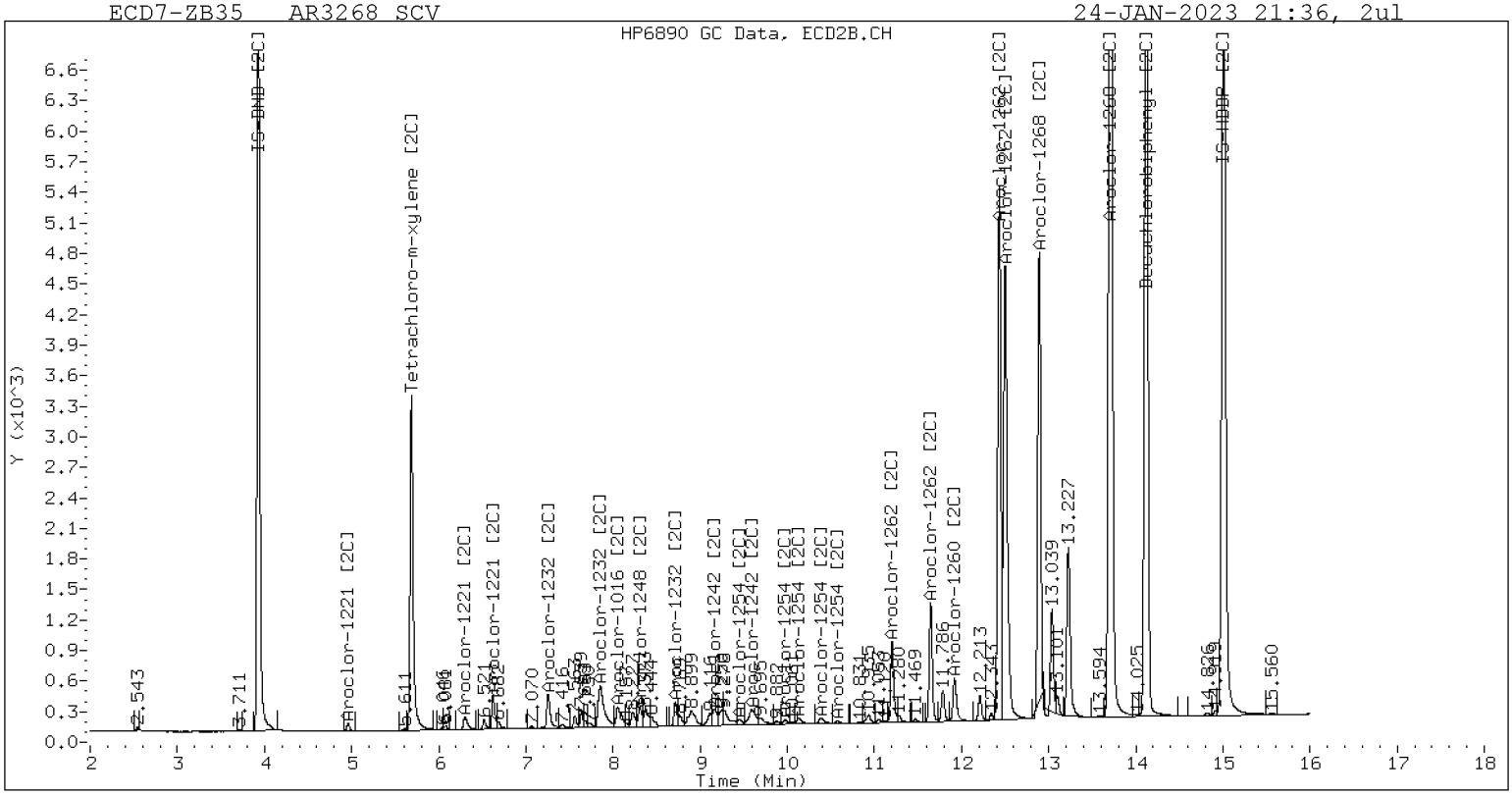
PCB Dual Column Chromatograms

ECD7-ZB5 AR3268 SCV 24-JAN-2023 21:36, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR3268 SCV 24-JAN-2023 21:36, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230124.b/01242330ECD7.D ARI ID: DDTS

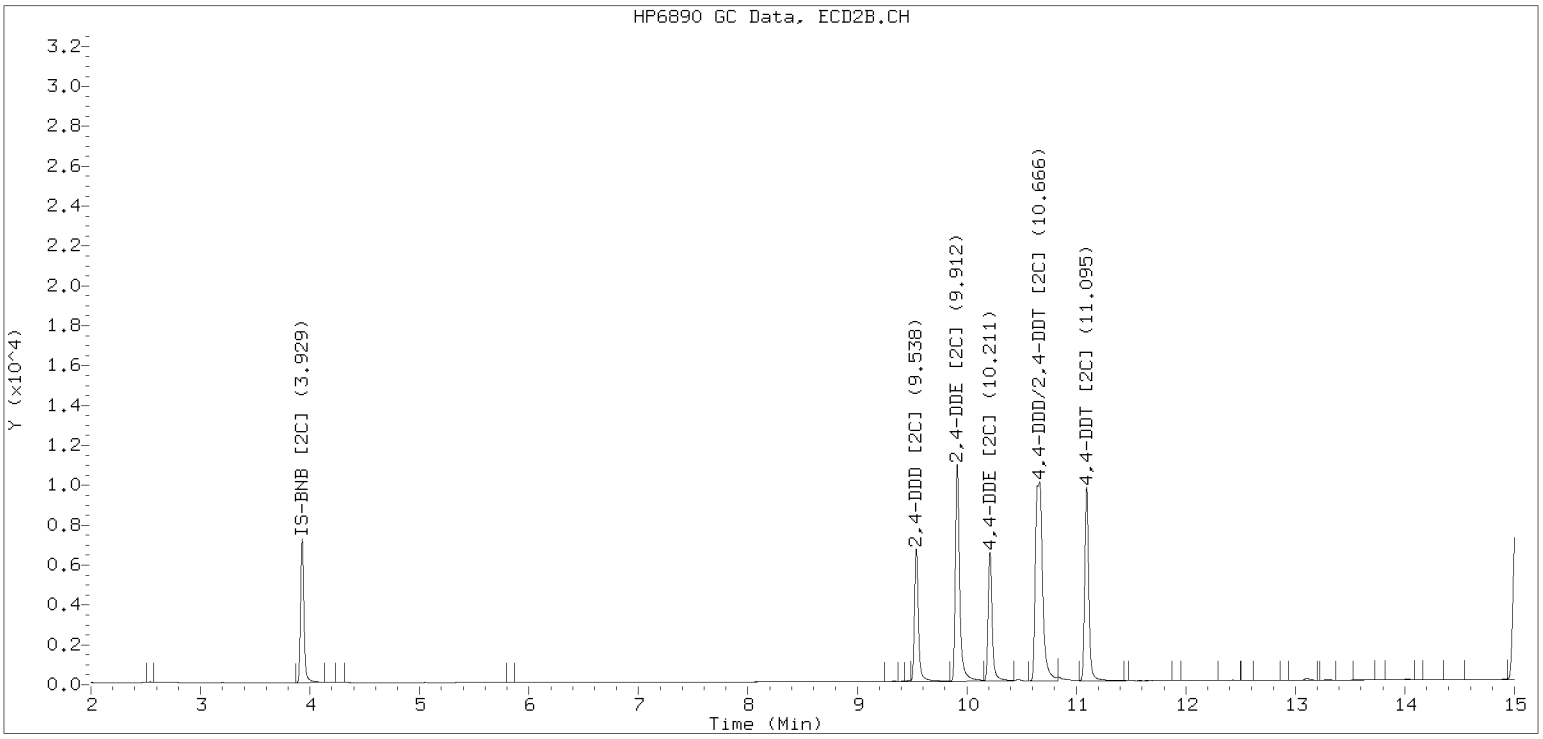
ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
9.263	0.000	519078	9.912	0.000	601473	0.100	0.100	0.0	2,4-DDE
10.296	0.000	1468204	10.666	0.000	915087	0.100	0.200#	66.7*	2,4-DDT
9.687	0.000	883988	10.211	0.000	339715	0.100	0.100	0.0	4,4-DDE
0.000	-10.281	0	10.666	0.000	915087	0.000	0.200#	----	4,4-DDD

\# Indicates value is from co-eluting peaks
* Indicates RPD > 40%

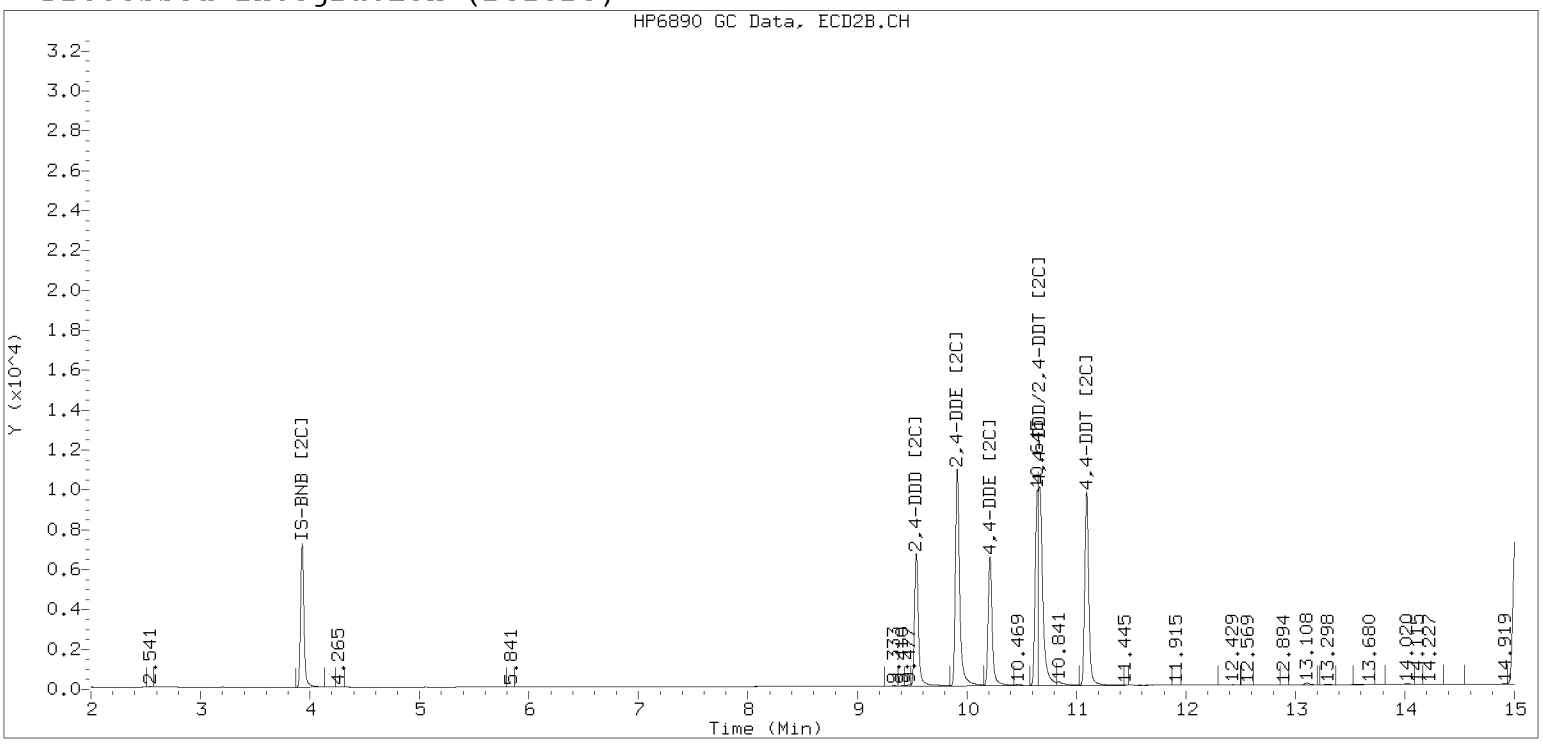
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230124.b/230124.b/01242330ECD7.D Injection Date: 24-JAN-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242331ECD7.D
Data file 2: /230124.b/230124.b/01242331ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: DDT BD
Client ID:
Injection Date: 24-JAN-2023 22:18
Report Date: 01/25/2023 10:54
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	249607	0.000	0.000	0	36.2	0.1	198.6*	Tetrachloro-m-xylene
13.893	0.001	342925	0.000	0.000	0	33.3	0.1	198.4*	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	488086	-3.0
Hexabromobiphenyl	647433	963404	48.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	334787	-0.6
Hexabromobiphenyl	382032	334787	-12.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	3.929	-0.000	334787	80.0
Aroclor-1016	2	---			0.0	NS	---			----
Aroclor-1016	3	---			0.0	NS	---			----
Aroclor-1016	4	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	9.924	0.012	8335	0.0
Aroclor-1221	2	---			0.0	NS	---			----
Aroclor-1221	3	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	NS	---			----
Aroclor-1232	3	---			0.0	NS	---			----
Aroclor-1232	4	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	NS	---			----
Aroclor-1242	3	---			0.0	NS	---			----
Aroclor-1242	4	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	10.681	0.016	29738	0.0
Aroclor-1248	2	---			0.0	NS	---			----
Aroclor-1248	3	8.973	-0.026	2304	3.9	NS	---			----
Aroclor-1248	4	9.235	-0.059	1484	5.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	9.235	-0.064	1484	3.0	1	11.098	0.003	696435	0.1
Aroclor-1254	2	9.378	-0.000	295	1.4	NS	---			----
Aroclor-1254	3	9.703	0.034	11396	35.8	NS	---			----
Aroclor-1254	4	---			0.0	NS	---			----
Aroclor-1254	5	10.272	0.095	32481	80.0	NS	---			----
	Total Col1Ave (4 peaks):				30.0	Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	11.115	0.071	9308	17.2	1	---			0.0
Aroclor-1260	2	11.344	-0.016	232461	418.4	NS	---			----
Aroclor-1260	3	11.698	-0.036	294	0.2	NS	---			----
Aroclor-1260	4	---			0.0	NS	---			----
Aroclor-1260	5	---			0.0	NS	---			----
	Total Col1Ave (3 peaks):				145.3	Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	10.763	-0.070	892438	2290.6	1	---			0.0
Aroclor-1262	2	---			0.0	NS	---			----
Aroclor-1262	3	---			0.0	NS	---			----
Aroclor-1262	4	12.990	0.001	748	1.2	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	NS	---			----
Aroclor-1268	3	12.620	-0.079	4678	3.6	NS	---			----
Aroclor-1268	4	13.510	0.021	3115	0.8	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 1961348 Col1 Total PCB = 0.3 ppm*

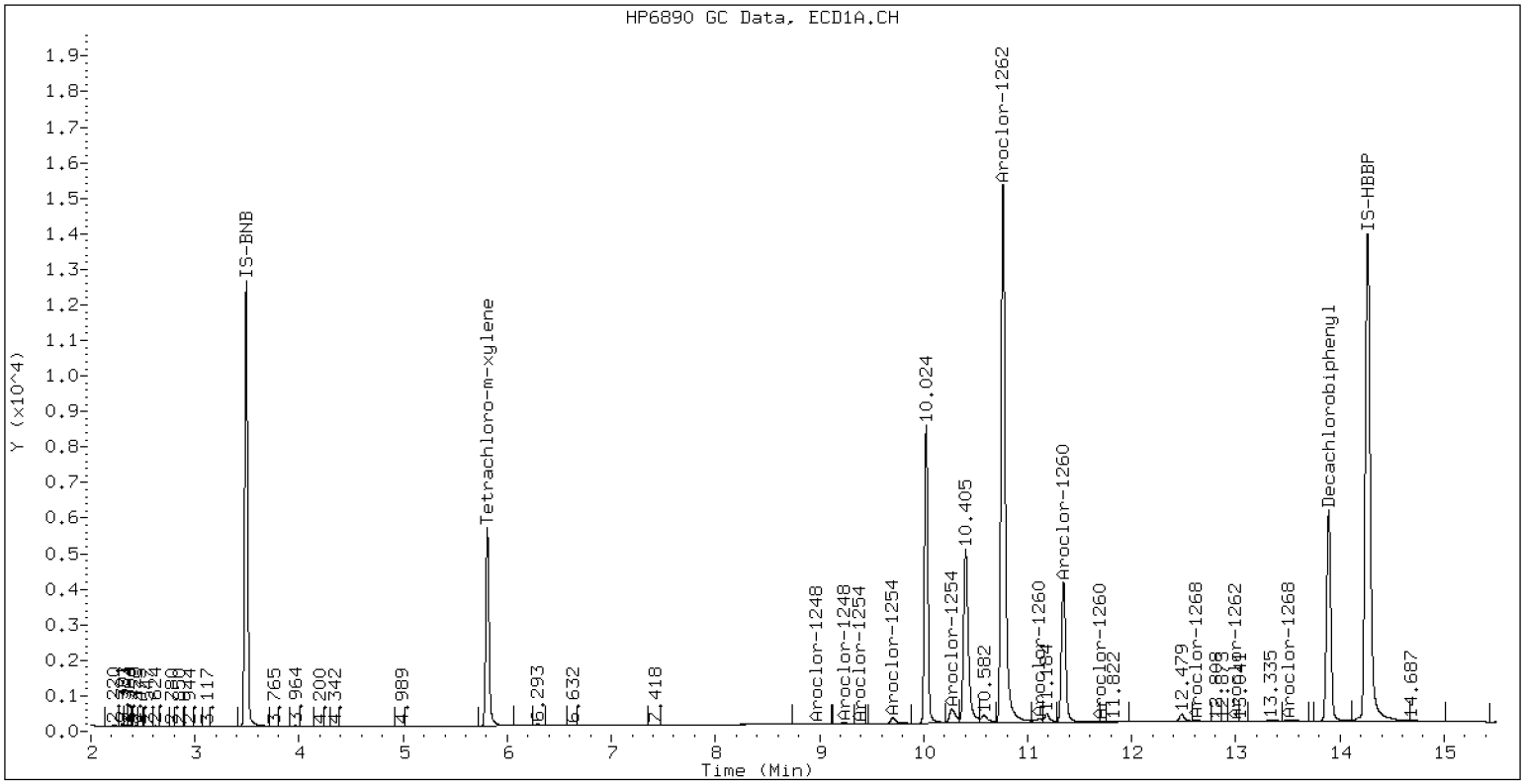
Total PCB Area Col2 (5.909 - 13.792) = 1177441 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

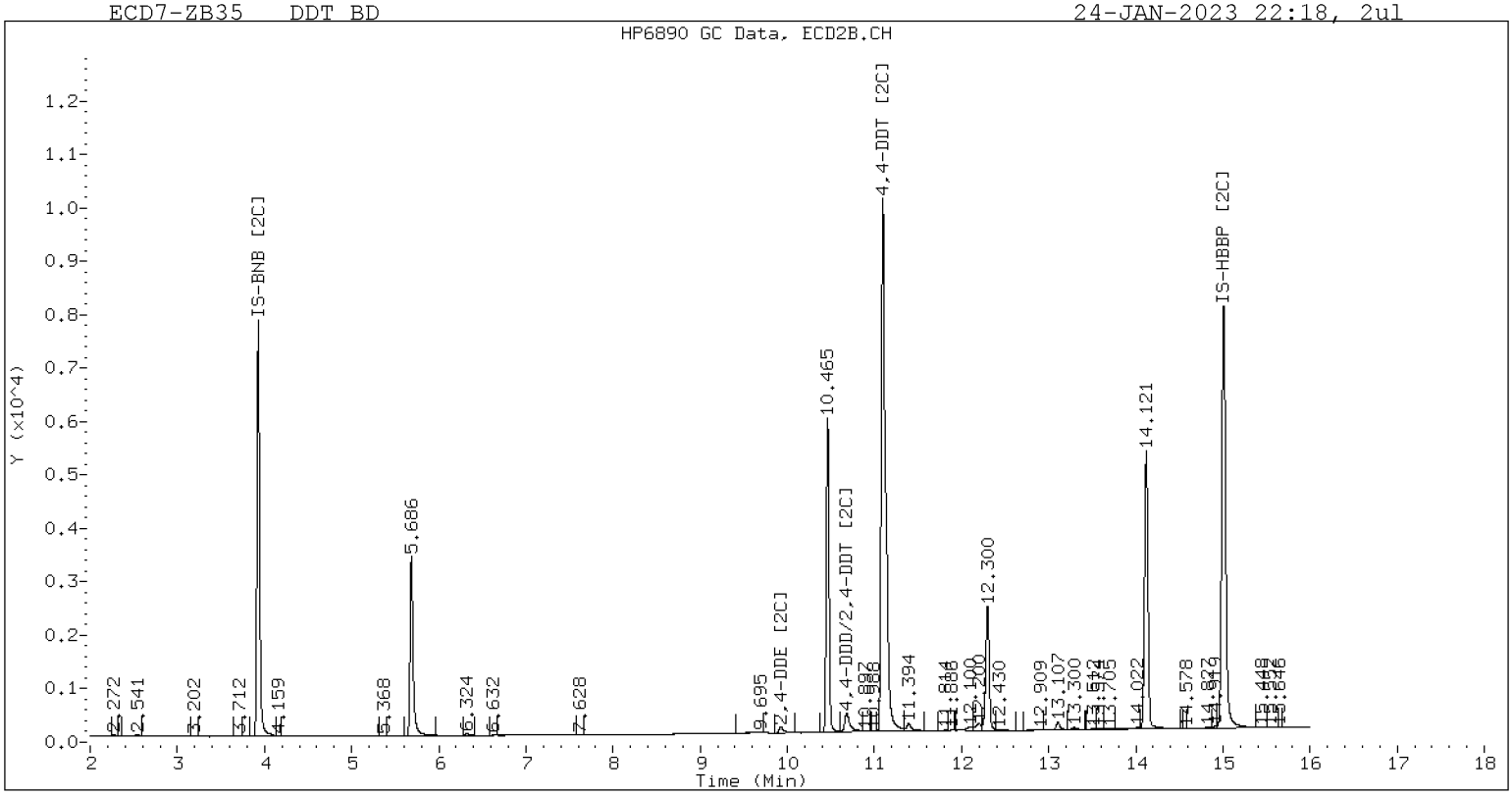
PCB Dual Column Chromatograms

ECD7-ZB5 DDT BD 24-JAN-2023 22:18, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 DDT BD 24-JAN-2023 22:18, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00061
Laboratory ID: SLA0281-SCV1
Sequence: SLA0281
Sequence Name: AR1660SCV1
Standard ID: K007655

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1016	250.00	217	-13.2	20.00
Aroclor 1016 [2C]	250.00	220	-11.9	20.00
Aroclor 1260	250.00	211	-15.7	20.00
Aroclor 1260 [2C]	250.00	238	-4.9	20.00
Decachlorobiphenyl	40.000	37.9	-5.1	20.00
Tetrachlorometaxylene	40.000	37.5	-6.2	20.00
Decachlorobiphenyl [2C]	40.000	40.2	0.6	20.00
Tetrachlorometaxylene [2C]	40.000	37.3	-6.8	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242324ECD7.D
Data file 2: /230124.b/230124.b/01242324ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 SCV
Client ID:
Injection Date: 24-JAN-2023 19:51
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	268739	5.686	-0.001	172961	37.5	37.3	0.6	Tetrachloro-m-xylene
13.891	-0.000	381489	14.121	0.001	320416	37.9	40.2	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	506576	0.6
Hexabromobiphenyl	647433	940129	45.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	343102	1.8
Hexabromobiphenyl	382032	501702	31.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	40958	217.6	1	7.255	0.001	40190	216.0
Aroclor-1016	2	7.655	0.004	135282	216.9	2	7.852	0.001	90338	221.5
Aroclor-1016	3	7.791	0.003	61557	214.5	3	8.052	0.002	37810	227.2
Aroclor-1016	4	8.406	0.002	40372	218.7	4	8.306	0.000	28171	215.9
Total Col1Ave (4 peaks):					216.9	Total Col2Ave (4 peaks):				220.2 RPD = 1
Corrected Ave (3 peaks):					216.3	Corrected Ave (3 peaks):				217.8 RPD = 1
Aroclor-1221	1	4.732	-0.001	256	6.8	1	---			0.0
Aroclor-1221	2	6.131	-0.002	4742	61.9	2	6.302	0.004	5037	91.4
Aroclor-1221	3	6.384	-0.000	27448	154.4	3	6.623	-0.000	18931	203.5
Total Col1Ave (3 peaks):					74.4	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.732	-0.001	256	11.0	1	---			0.0
Aroclor-1232	2	6.131	-0.002	4742	90.0	2	7.255	-0.001	40190	470.8
Aroclor-1232	3	7.655	-0.004	135282	513.5	3	7.852	-0.002	90338	519.5
Aroclor-1232	4	8.581	-0.003	56938	504.9	4	8.713	-0.001	27776	574.9
Total Col1Ave (4 peaks):					279.8	Total Col2Ave (3 peaks):				521.7 RPD = 60*
Corrected Ave (3 peaks):					202.0	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	-0.000	40958	264.0	1	7.255	-0.000	40190	267.8
Aroclor-1242	2	7.655	-0.001	135282	266.5	2	7.852	-0.001	90338	271.0
Aroclor-1242	3	8.406	-0.001	40372	267.7	3	9.115	-0.045	15827	151.6
Aroclor-1242	4	8.581	-0.000	56938	249.9	4	9.587	0.001	3186	23.0
Total Col1Ave (4 peaks):					262.0	Total Col2Ave (4 peaks):				178.4 RPD = 38
Corrected Ave (3 peaks):					260.1	Corrected Ave (3 peaks):				147.5 RPD = 55*
Aroclor-1248	1	8.406	0.000	40372	159.3	1	8.306	0.000	28171	181.6
Aroclor-1248	2	8.581	0.001	56938	176.1	2	8.713	0.000	27776	166.4
Aroclor-1248	3	8.995	-0.004	58213	94.1	3	9.115	-0.042	15827	77.6
Aroclor-1248	4	9.304	0.010	36620	119.6	4	9.587	0.006	3186	12.6
Total Col1Ave (4 peaks):					137.3	Total Col2Ave (4 peaks):				109.6 RPD = 22
Corrected Ave (3 peaks):					124.4	Corrected Ave (3 peaks):				85.5 RPD = 37
Aroclor-1254	1	9.304	0.005	36620	70.9	1	9.450	0.002	20792	83.5
Aroclor-1254	2	---			0.0	2	9.972	0.003	2640	13.1
Aroclor-1254	3	9.673	0.003	4075	12.3	3	10.148	0.027	52902	120.5
Aroclor-1254	4	9.813	0.004	14733	22.7	4	10.372	0.000	71680	163.3
Aroclor-1254	5	10.122	-0.055	119528	283.6	5	10.569	-0.000	98559	403.2
Total Col1Ave (4 peaks):					97.4	Total Col2Ave (5 peaks):				156.7 RPD = 47*
Corrected Ave (3 peaks):					35.3	Corrected Ave (4 peaks):				95.1 RPD = 92*
Aroclor-1260	1	11.045	0.002	116435	220.7	1	11.654	0.000	81795	226.0
Aroclor-1260	2	11.362	0.001	116918	215.6	2	11.920	0.002	217887	238.0
Aroclor-1260	3	11.738	0.003	303264	212.5	3	12.437	0.001	56212	246.3
Aroclor-1260	4	12.143	0.004	141534	191.9	4	12.502	0.000	142689	240.8
Aroclor-1260	5	12.246	0.002	68446	212.9	NS	---			----
Total Col1Ave (5 peaks):					210.7	Total Col2Ave (4 peaks):				237.8 RPD = 12
Corrected Ave (4 peaks):					208.2	Corrected Ave (3 peaks):				234.9 RPD = 12
Aroclor-1262	1	10.830	-0.002	169725	446.4	1	11.200	0.000	83995	171.1
Aroclor-1262	2	12.246	0.000	68446	114.1	2	11.654	0.001	81795	195.9
Aroclor-1262	3	12.320	-0.000	84201	129.2	3	12.437	0.003	56212	126.4
Aroclor-1262	4	12.989	-0.000	78065	131.5	4	12.502	-0.001	142689	200.4
Total Col1Ave (4 peaks):					205.3	Total Col2Ave (4 peaks):				173.4 RPD = 17
Corrected Ave (3 peaks):					124.9	Corrected Ave (3 peaks):				164.5 RPD = 27
Aroclor-1268	1	12.246	0.001	68446	44.1	1	12.437	0.003	56212	48.0
Aroclor-1268	2	12.320	0.002	84201	54.4	2	12.502	0.001	142689	114.4
Aroclor-1268	3	12.726	0.027	33020	25.7	3	12.894	0.001	1495	1.4
Aroclor-1268	4	13.490	0.001	16019	4.2	4	13.709	0.001	10120	3.2
Total Col1Ave (4 peaks):					32.1	Total Col2Ave (4 peaks):				41.8 RPD = 26
Corrected Ave (3 peaks):					24.7	Corrected Ave (3 peaks):				17.5 RPD = 34

Total PCB Area Col1 (5.909 - 13.792) = 2789370 Col1 Total PCB = 0.5 ppm*

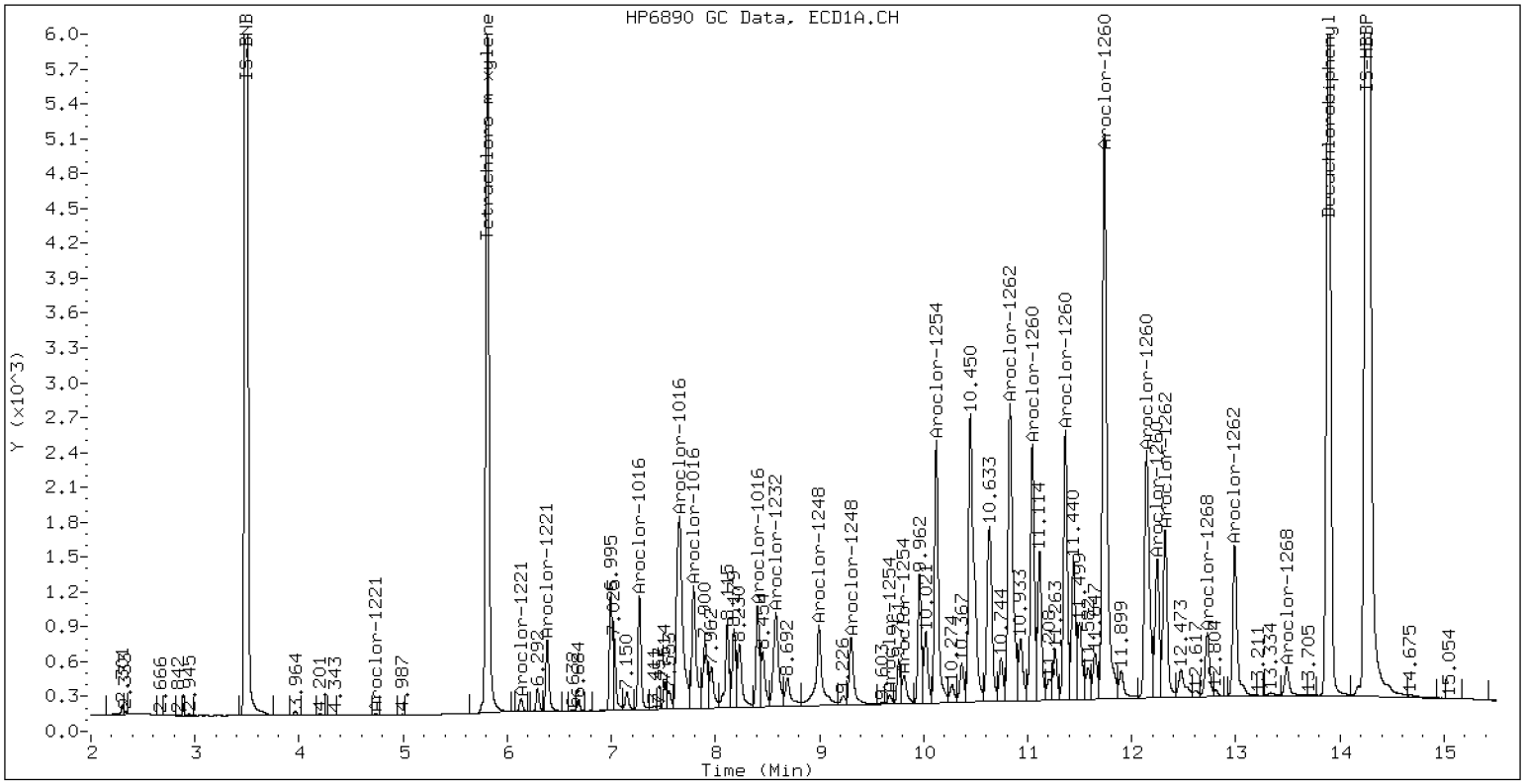
Total PCB Area Col2 (5.787 - 14.020) = 1810543 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

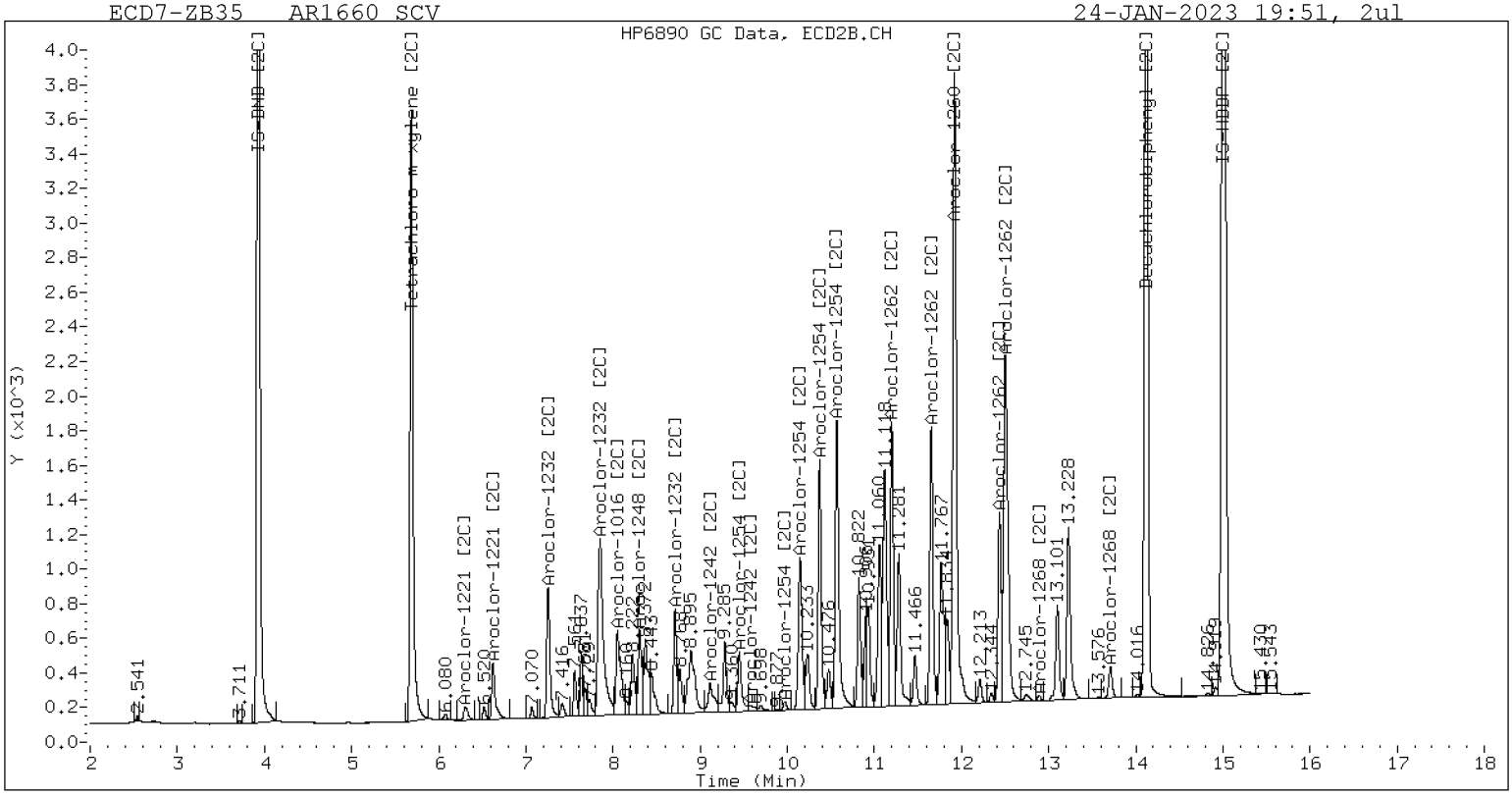
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660 SCV 24-JAN-2023 19:51, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660 SCV 24-JAN-2023 19:51, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00061
Laboratory ID: SLA0281-SCV2
Sequence: SLA0281
Sequence Name: AR1242SCV2
Standard ID: K007656

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1242	250.00	223	-10.9	20.00
Aroclor 1242 [2C]	250.00	235	-5.9	20.00
Decachlorobiphenyl	40.000	38.5	-3.6	20.00
Tetrachlorometaxylene	40.000	37.8	-5.6	20.00
Decachlorobiphenyl [2C]	40.000	40.3	0.9	20.00
Tetrachlorometaxylene [2C]	40.000	37.4	-6.6	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242325ECD7.D
Data file 2: /230124.b/230124.b/01242325ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242 SCV
Client ID:
Injection Date: 24-JAN-2023 20:12
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	268580	5.686	-0.001	172592	37.8	37.4	1.1	Tetrachloro-m-xylene
13.892	0.001	392918	14.121	0.001	323869	38.5	40.3	4.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503089	-0.0
Hexabromobiphenyl	647433	953137	47.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	341704	1.4
Hexabromobiphenyl	382032	505860	32.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	29901	159.9	1	7.255	0.000	32077	173.1
Aroclor-1016	2	7.653	0.003	107333	173.3	2	7.851	-0.000	71438	175.9
Aroclor-1016	3	7.790	0.002	45013	157.9	3	8.051	0.001	29072	175.4
Aroclor-1016	4	8.406	0.002	32958	179.8	4	8.306	0.001	21761	167.5
Total Col1Ave (4 peaks):					167.7	Total Col2Ave (4 peaks):				173.0 RPD = 3
Corrected Ave (3 peaks):					163.7	Corrected Ave (3 peaks):				172.0 RPD = 5
Aroclor-1221	1	4.737	0.004	141	3.8	1	---			0.0
Aroclor-1221	2	6.133	-0.001	3649	48.0	2	6.317	0.018	4290	78.2
Aroclor-1221	3	6.384	-0.000	21189	120.0	3	6.624	0.001	14613	157.7
Total Col1Ave (3 peaks):					57.3	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.737	0.003	141	6.1	1	---			0.0
Aroclor-1232	2	6.133	-0.001	3649	69.7	2	7.255	-0.002	32077	377.3
Aroclor-1232	3	7.653	-0.005	107333	410.2	3	7.851	-0.004	71438	412.5
Aroclor-1232	4	8.581	-0.003	59617	532.3	4	8.713	-0.000	22563	468.9
Total Col1Ave (4 peaks):					254.6	Total Col2Ave (3 peaks):				419.6 RPD = 49*
Corrected Ave (3 peaks):					162.0	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	29901	194.1	1	7.255	-0.001	32077	214.6
Aroclor-1242	2	7.653	-0.002	107333	212.9	2	7.851	-0.002	71438	215.2
Aroclor-1242	3	8.406	-0.000	32958	220.0	3	9.156	-0.004	27374	263.3
Aroclor-1242	4	8.581	-0.000	59617	263.5	4	9.581	-0.006	34156	247.9
Total Col1Ave (4 peaks):					222.6	Total Col2Ave (4 peaks):				235.3 RPD = 6
Corrected Ave (3 peaks):					209.0	Corrected Ave (3 peaks):				225.9 RPD = 8
Aroclor-1248	1	8.406	0.001	32958	131.0	1	8.306	0.001	21761	140.9
Aroclor-1248	2	8.581	0.001	59617	185.7	2	8.713	0.001	22563	135.7
Aroclor-1248	3	9.003	0.004	72557	118.2	3	9.156	-0.000	27374	134.7
Aroclor-1248	4	9.296	0.003	28122	92.5	4	9.581	-0.001	34156	135.9
Total Col1Ave (4 peaks):					131.8	Total Col2Ave (4 peaks):				136.8 RPD = 4
Corrected Ave (3 peaks):					113.9	Corrected Ave (3 peaks):				135.5 RPD = 17
Aroclor-1254	1	9.296	-0.002	28122	54.8	1	9.448	0.000	11650	47.0
Aroclor-1254	2	9.380	0.002	9292	42.4	2	9.968	-0.001	7642	38.1
Aroclor-1254	3	9.671	0.001	12871	39.2	3	10.120	-0.001	16012	36.6
Aroclor-1254	4	9.808	-0.000	22113	34.4	4	10.378	0.007	16300	37.3
Aroclor-1254	5	10.176	-0.001	17771	42.5	5	10.572	0.004	4439	18.2
Total Col1Ave (5 peaks):					42.7	Total Col2Ave (5 peaks):				35.5 RPD = 18
Corrected Ave (4 peaks):					39.6	Corrected Ave (4 peaks):				32.6 RPD = 19
Aroclor-1260	1	11.047	0.003	741	1.4	1	11.663	0.010	1794	4.9
Aroclor-1260	2	11.366	0.006	379	0.7	2	11.923	0.005	1208	1.3
Aroclor-1260	3	11.745	0.011	860	0.6	3	12.507	0.071	977	4.2
Aroclor-1260	4	12.154	0.014	1536	2.1	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
Total Col1Ave (4 peaks):					1.2	Total Col2Ave (3 peaks):				3.5 RPD = 99*
Corrected Ave (3 peaks):					0.9	Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.836	0.004	10654	27.6	1	11.120	-0.080	8071	16.3
Aroclor-1262	2	12.154	-0.092	1536	2.5	2	11.663	0.010	1794	4.3
Aroclor-1262	3	---			0.0	3	12.507	0.073	977	2.2
Aroclor-1262	4	13.040	0.051	1739	2.9	4	---			0.0
Total Col1Ave (3 peaks):					11.0	Total Col2Ave (3 peaks):				7.6 RPD = 37
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.154	-0.091	1536	1.0	1	12.507	0.073	977	0.8
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.623	-0.076	5080	3.9	3	12.894	0.001	98	0.1
Aroclor-1268	4	13.501	0.012	2725	0.7	4	13.707	-0.001	1566	0.5
Total Col1Ave (3 peaks):					1.9	Total Col2Ave (3 peaks):				0.5 RPD = 120*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 915887 Col1 Total PCB = 0.2 ppm*

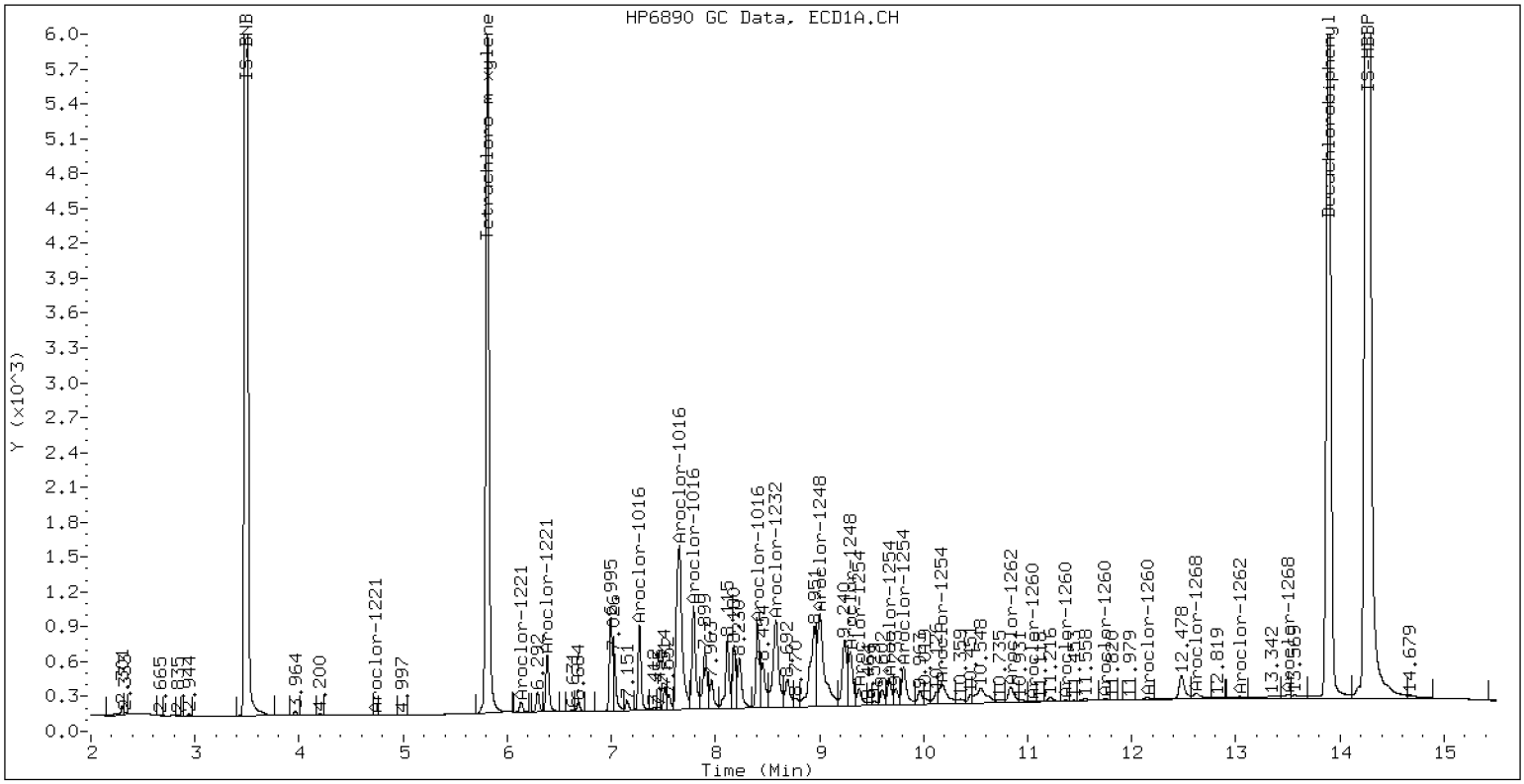
Total PCB Area Col2 (5.787 - 14.020) = 575897 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

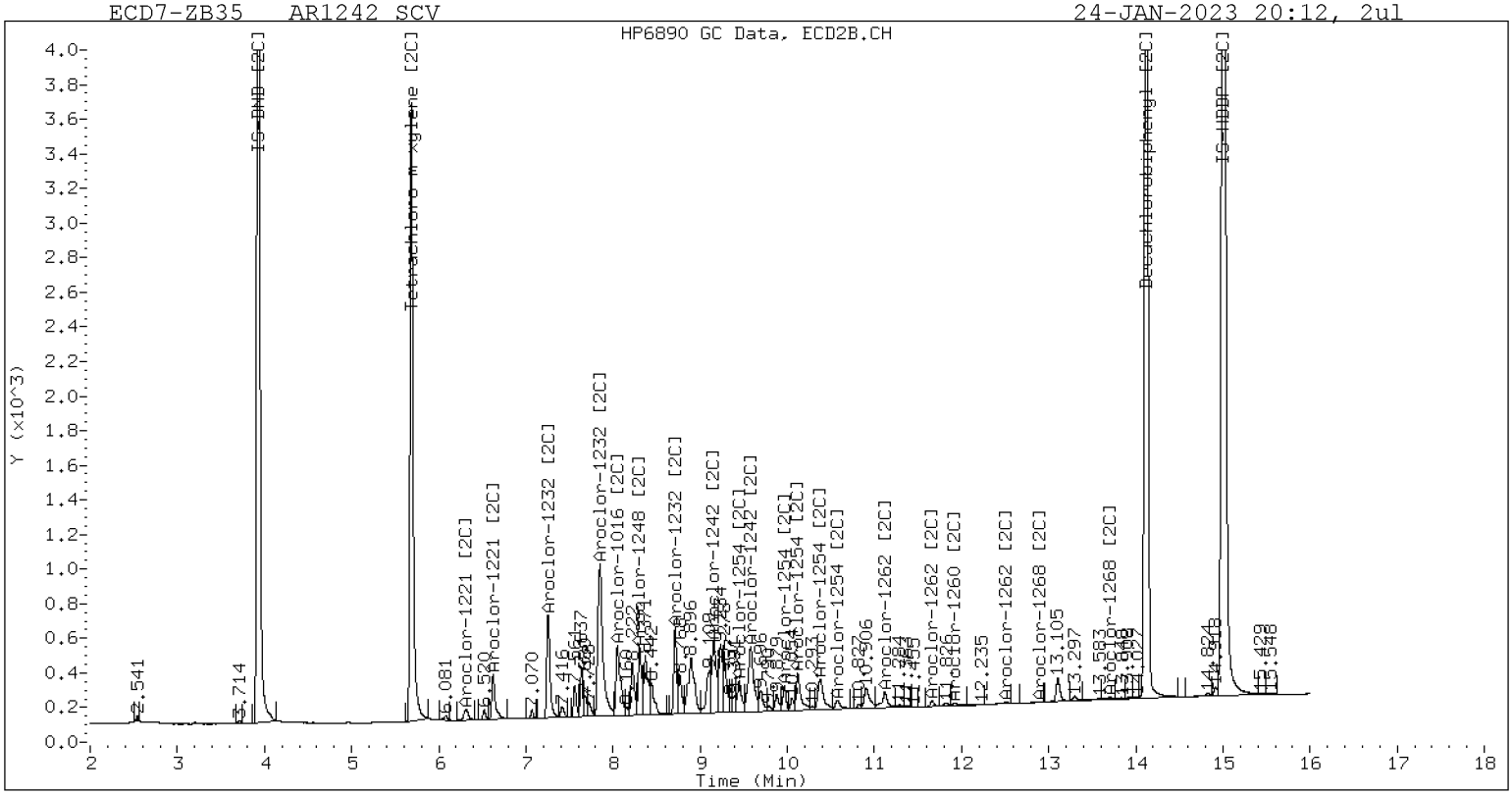
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242 SCV 24-JAN-2023 20:12, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242 SCV 24-JAN-2023 20:12, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00061
Laboratory ID: SLA0281-SCV3
Sequence: SLA0281
Sequence Name: AR1248SCV3
Standard ID: K007657

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1248	250.00	237	-5.1	20.00
Aroclor 1248 [2C]	250.00	231	-7.6	20.00
Decachlorobiphenyl	40.000	38.3	-4.3	20.00
Tetrachlorometaxylene	40.000	36.8	-8.1	20.00
Decachlorobiphenyl [2C]	40.000	39.6	-1.1	20.00
Tetrachlorometaxylene [2C]	40.000	36.5	-8.6	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242326ECD7.D
Data file 2: /230124.b/230124.b/01242326ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248 SCV
Client ID:
Injection Date: 24-JAN-2023 20:33
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	263982	5.686	-0.001	169991	36.8	36.5	0.6	Tetrachloro-m-xylene
13.892	0.001	400655	14.121	0.001	316171	38.3	39.6	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	508189	1.0
Hexabromobiphenyl	647433	979067	51.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	344105	2.1
Hexabromobiphenyl	382032	503378	31.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	14777	78.3	1	7.254	-0.001	16100	86.3
Aroclor-1016	2	7.655	0.004	70114	112.1	2	7.853	0.002	47184	115.4
Aroclor-1016	3	7.794	0.006	27212	94.5	3	8.053	0.003	9427	56.5
Aroclor-1016	4	8.406	0.003	59884	323.4	4	8.306	0.001	36680	280.3
Total Col1Ave (4 peaks):					152.0	Total Col2Ave (4 peaks):				134.6 RPD = 12
Corrected Ave (3 peaks):					94.9	Corrected Ave (3 peaks):				86.0 RPD = 10
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.133	-0.000	591	7.7	2	6.323	0.025	1820	32.9
Aroclor-1221	3	6.386	0.001	2453	13.8	3	6.627	0.004	1477	15.8
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.133	-0.000	591	11.2	2	7.254	-0.002	16100	188.0
Aroclor-1232	3	7.655	-0.004	70114	265.3	3	7.853	-0.001	47184	270.6
Aroclor-1232	4	8.581	-0.003	76286	674.3	4	8.714	0.000	39330	811.7
Total Col1Ave (3 peaks):					316.9	Total Col2Ave (3 peaks):				423.4 RPD = 29
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	14777	95.0	1	7.254	-0.002	16100	107.0
Aroclor-1242	2	7.655	-0.001	70114	137.7	2	7.853	0.000	47184	141.2
Aroclor-1242	3	8.406	-0.000	59884	395.8	3	9.159	-0.001	46988	448.9
Aroclor-1242	4	8.581	-0.000	76286	333.8	4	9.584	-0.003	56615	408.1
Total Col1Ave (4 peaks):					240.5	Total Col2Ave (4 peaks):				276.3 RPD = 14
Corrected Ave (3 peaks):					188.8	Corrected Ave (3 peaks):				218.7 RPD = 15
Aroclor-1248	1	8.406	0.001	59884	235.6	1	8.306	0.001	36680	235.8
Aroclor-1248	2	8.581	0.001	76286	235.2	2	8.714	0.002	39330	234.9
Aroclor-1248	3	9.000	0.001	148805	239.9	3	9.159	0.003	46988	229.7
Aroclor-1248	4	9.295	0.001	73114	238.1	4	9.584	0.002	56615	223.8
Total Col1Ave (4 peaks):					237.2	Total Col2Ave (4 peaks):				231.0 RPD = 3
Corrected Ave (3 peaks):					236.3	Corrected Ave (3 peaks):				229.5 RPD = 3
Aroclor-1254	1	9.295	-0.004	73114	141.2	1	9.449	0.001	20314	81.4
Aroclor-1254	2	9.378	0.000	36561	165.3	2	9.970	0.000	18678	92.6
Aroclor-1254	3	9.672	0.003	30736	92.6	3	10.124	0.003	35321	80.2
Aroclor-1254	4	9.813	0.004	53537	82.3	4	10.387	0.015	35188	79.9
Aroclor-1254	5	10.192	0.015	40119	94.9	5	10.575	0.006	7386	30.1
Total Col1Ave (5 peaks):					115.3	Total Col2Ave (5 peaks):				72.9 RPD = 45*
Corrected Ave (4 peaks):					102.7	Corrected Ave (4 peaks):				67.9 RPD = 41*
Aroclor-1260	1	11.054	0.010	1868	3.4	1	11.664	0.011	2055	5.7
Aroclor-1260	2	11.366	0.005	1375	2.4	2	11.926	0.009	1303	1.4
Aroclor-1260	3	11.745	0.010	2137	1.4	3	12.439	0.003	395	1.7
Aroclor-1260	4	12.147	0.008	1650	2.1	4	12.507	0.005	890	1.5
Aroclor-1260	5	12.255	0.011	558	1.7	NS	---			----
Total Col1Ave (5 peaks):					2.2	Total Col2Ave (4 peaks):				2.6 RPD = 15
Corrected Ave (4 peaks):					1.9	Corrected Ave (3 peaks):				1.5 RPD = 22
Aroclor-1262	1	10.837	0.005	12736	32.2	1	11.122	-0.078	7136	14.5
Aroclor-1262	2	12.255	0.010	558	0.9	2	11.664	0.011	2055	4.9
Aroclor-1262	3	12.327	0.006	596	0.9	3	12.439	0.004	395	0.9
Aroclor-1262	4	12.996	0.007	1113	1.8	4	12.507	0.003	890	1.2
Total Col1Ave (4 peaks):					8.9	Total Col2Ave (4 peaks):				5.4 RPD = 50*
Corrected Ave (3 peaks):					1.2	Corrected Ave (3 peaks):				2.3 RPD = 65*
Aroclor-1268	1	12.255	0.010	558	0.3	1	12.439	0.005	395	0.3
Aroclor-1268	2	12.327	0.009	596	0.4	2	12.507	0.005	890	0.7
Aroclor-1268	3	12.706	0.007	1161	0.9	3	12.896	0.003	166	0.2
Aroclor-1268	4	13.504	0.016	3330	0.8	4	13.717	0.009	469	0.1
Total Col1Ave (4 peaks):					0.6	Total Col2Ave (4 peaks):				0.3 RPD = 57*
Corrected Ave (3 peaks):					0.5	Corrected Ave (3 peaks):				0.2 RPD = 83*

Total PCB Area Col1 (5.909 - 13.792) = 1230760 Col1 Total PCB = 0.2 ppm*

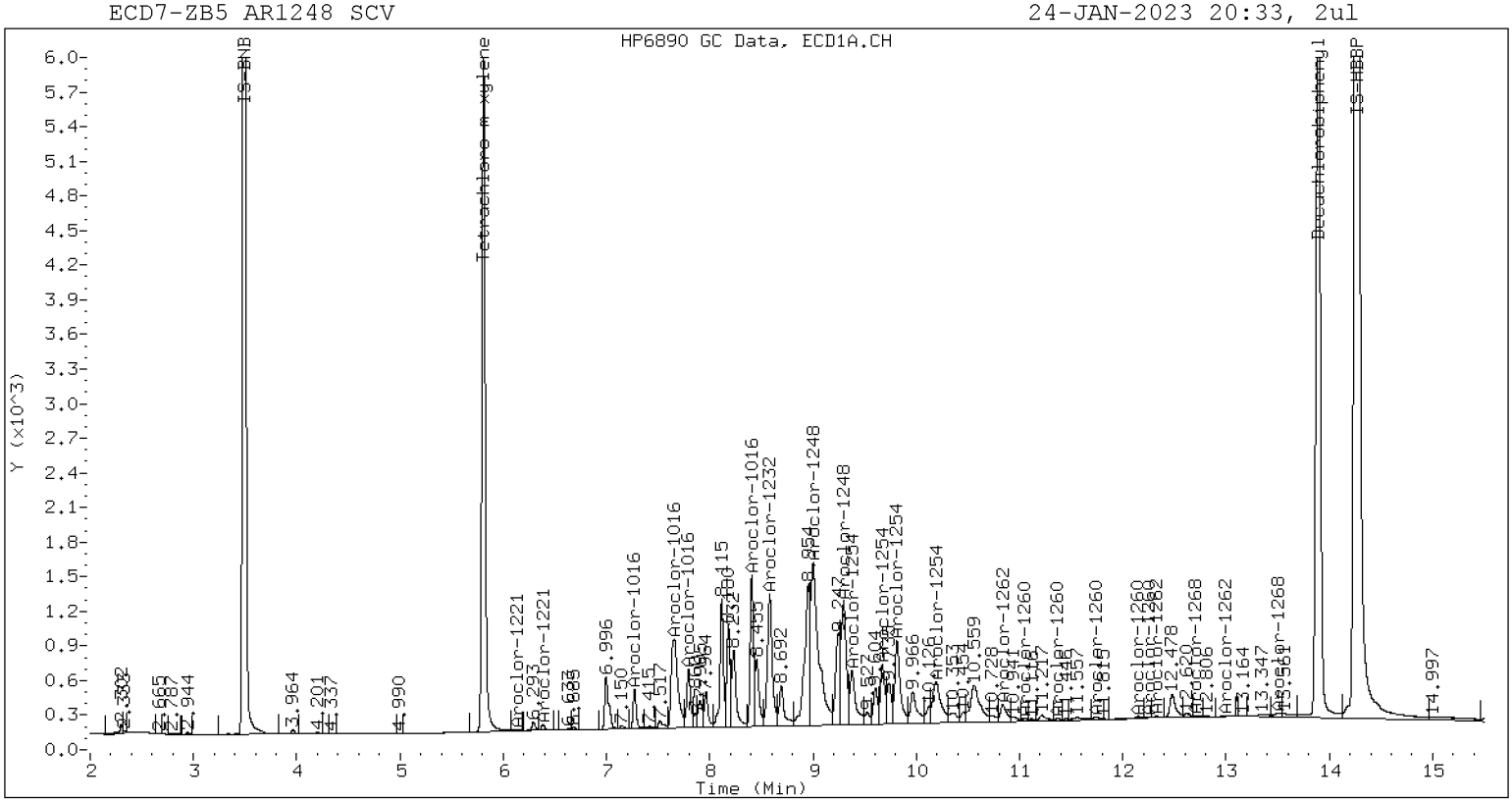
Total PCB Area Col2 (5.787 - 14.020) = 742749 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

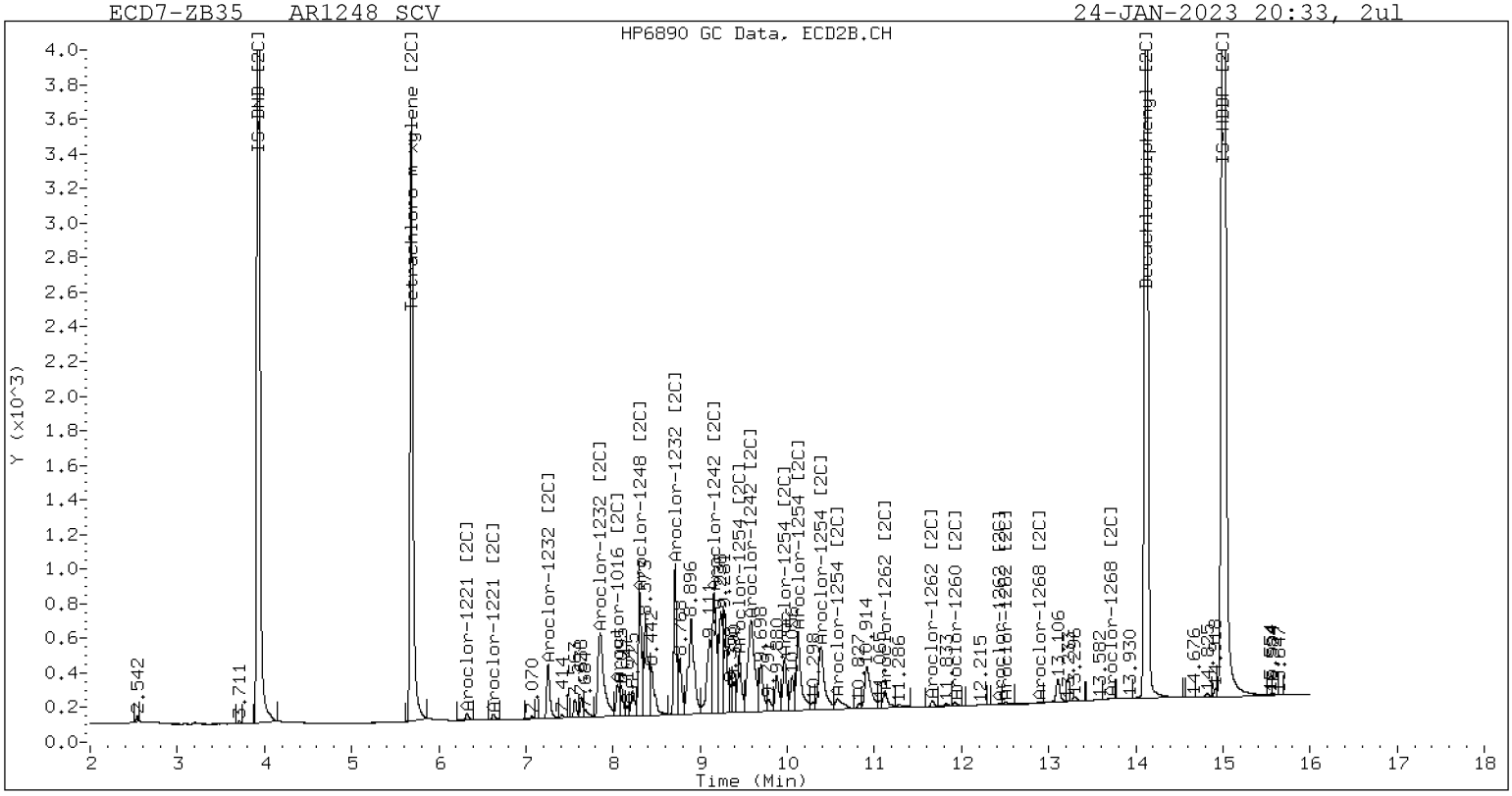
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248 SCV 24-JAN-2023 20:33, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248 SCV 24-JAN-2023 20:33, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00061
Laboratory ID: SLA0281-SCV4
Sequence: SLA0281
Sequence Name: AR1254SCV4
Standard ID: K007658

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1254	250.00	221	-11.7	20.00
Aroclor 1254 [2C]	250.00	227	-9.4	20.00
Decachlorobiphenyl	40.000	37.1	-7.3	20.00
Tetrachlorometaxylene	40.000	36.7	-8.3	20.00
Decachlorobiphenyl [2C]	40.000	39.5	-1.1	20.00
Tetrachlorometaxylene [2C]	40.000	36.6	-8.4	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242327ECD7.D
Data file 2: /230124.b/230124.b/01242327ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254 SCV
Client ID:
Injection Date: 24-JAN-2023 20:54
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	261398	5.686	-0.001	169839	36.7	36.6	0.1	Tetrachloro-m-xylene
13.892	0.001	383983	14.121	0.001	323233	37.1	39.5	6.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	504424	0.2
Hexabromobiphenyl	647433	968338	49.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	342969	1.8
Hexabromobiphenyl	382032	515045	34.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.273	0.003	320	1.7	1	7.258	0.003	332	1.8
Aroclor-1016	2	7.658	0.008	991	1.6	2	---			0.0
Aroclor-1016	3	7.795	0.007	662	2.3	3	8.097	0.047	515	3.1
Aroclor-1016	4	8.408	0.005	21378	116.3	4	8.307	0.002	20446	156.8
	Total Col1Ave (4 peaks):				30.5	Total Col2Ave (3 peaks):			53.9	RPD = 55*
	Corrected Ave (3 peaks):				1.9	Corrected Ave: < 3 Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.325	0.026	1749	31.7
Aroclor-1221	3	---			0.0	3	6.633	0.011	321	3.5
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	7.258	0.001	332	3.9
Aroclor-1232	3	7.658	-0.000	991	3.8	3	---			0.0
Aroclor-1232	4	8.587	0.003	8887	79.1	4	8.715	0.001	14030	290.5
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	7.273	0.002	320	2.1	1	7.258	0.002	332	2.2
Aroclor-1242	2	7.658	0.003	991	2.0	2	---			0.0
Aroclor-1242	3	8.408	0.002	21378	142.3	3	9.164	0.004	26593	254.9
Aroclor-1242	4	8.587	0.006	8887	39.2	4	9.543	-0.043	34385	248.7
	Total Col1Ave (4 peaks):				46.4	Total Col2Ave (3 peaks):			168.6	RPD = 114*
	Corrected Ave (3 peaks):				14.4	Corrected Ave: < 3 Peaks				
Aroclor-1248	1	8.408	0.003	21378	84.7	1	8.307	0.001	20446	131.9
Aroclor-1248	2	8.587	0.007	8887	27.6	2	8.715	0.003	14030	84.1
Aroclor-1248	3	8.995	-0.004	110289	179.1	3	9.164	0.007	26593	130.4
Aroclor-1248	4	9.300	0.007	113143	371.2	4	9.543	-0.038	34385	136.4
	Total Col1Ave (4 peaks):				165.7	Total Col2Ave (4 peaks):			120.7	RPD = 31
	Corrected Ave (3 peaks):				97.2	Corrected Ave (3 peaks):			115.5	RPD = 17
Aroclor-1254	1	9.300	0.002	113143	220.1	1	9.449	0.001	56453	226.9
Aroclor-1254	2	9.379	0.001	49468	225.4	2	9.970	0.001	45325	225.4
Aroclor-1254	3	9.671	0.002	72811	221.0	3	10.122	0.002	97044	221.2
Aroclor-1254	4	9.811	0.002	140530	217.7	4	10.374	0.002	98778	225.2
Aroclor-1254	5	10.182	0.005	92254	219.8	5	10.570	0.001	57171	234.0
	Total Col1Ave (5 peaks):				220.8	Total Col2Ave (5 peaks):			226.5	RPD = 3
	Corrected Ave (4 peaks):				219.7	Corrected Ave (4 peaks):			224.7	RPD = 2
Aroclor-1260	1	11.045	0.002	8960	16.5	1	11.661	0.008	26985	72.6
Aroclor-1260	2	11.364	0.004	9237	16.5	2	11.923	0.006	19882	21.2
Aroclor-1260	3	11.741	0.007	21268	14.5	3	12.505	0.069	13190	56.3
Aroclor-1260	4	12.146	0.007	19041	25.1	4	---			0.0
Aroclor-1260	5	12.321	0.077	1835	5.5	NS	---			----
	Total Col1Ave (5 peaks):				15.6	Total Col2Ave (3 peaks):			50.0	RPD = 105*
	Corrected Ave (4 peaks):				13.3	Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.832	0.000	157590	402.4	1	11.119	-0.081	92414	183.3
Aroclor-1262	2	12.321	0.075	1835	3.0	2	11.661	0.008	26985	63.0
Aroclor-1262	3	---			0.0	3	12.505	0.071	13190	28.9
Aroclor-1262	4	12.995	0.006	843	1.4	4	---			0.0
	Total Col1Ave (3 peaks):				135.6	Total Col2Ave (3 peaks):			91.7	RPD = 39
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.321	0.076	1835	1.1	1	12.505	0.072	13190	11.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.720	0.021	1314	1.0	3	12.891	-0.002	169	0.2
Aroclor-1268	4	13.504	0.016	1169	0.3	4	13.706	-0.002	1132	0.3
	Total Col1Ave (3 peaks):				0.8	Total Col2Ave (3 peaks):			3.8	RPD = 130*
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 1507519 Col1 Total PCB = 0.3 ppm*

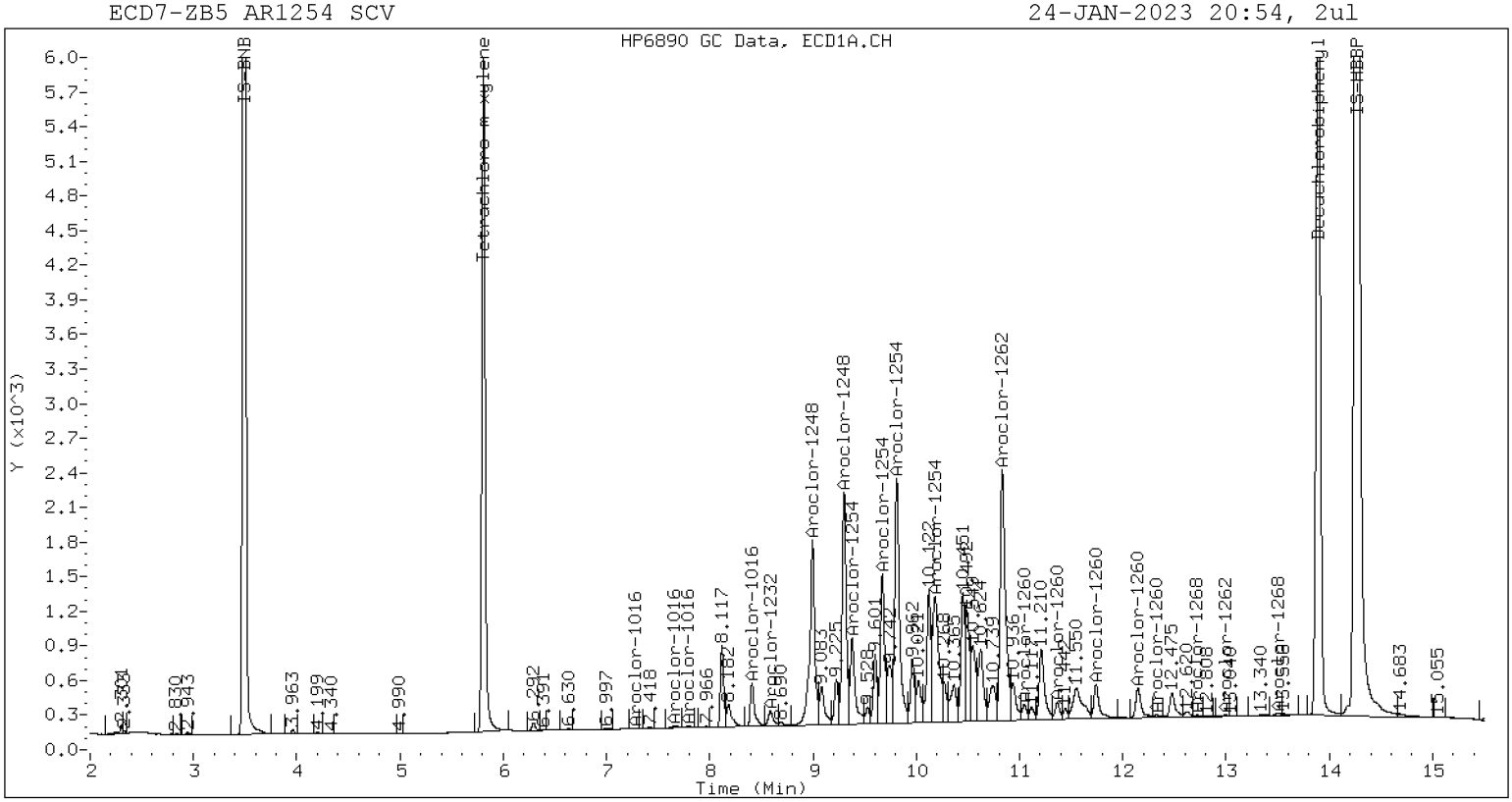
Total PCB Area Col2 (5.787 - 14.020) = 951047 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

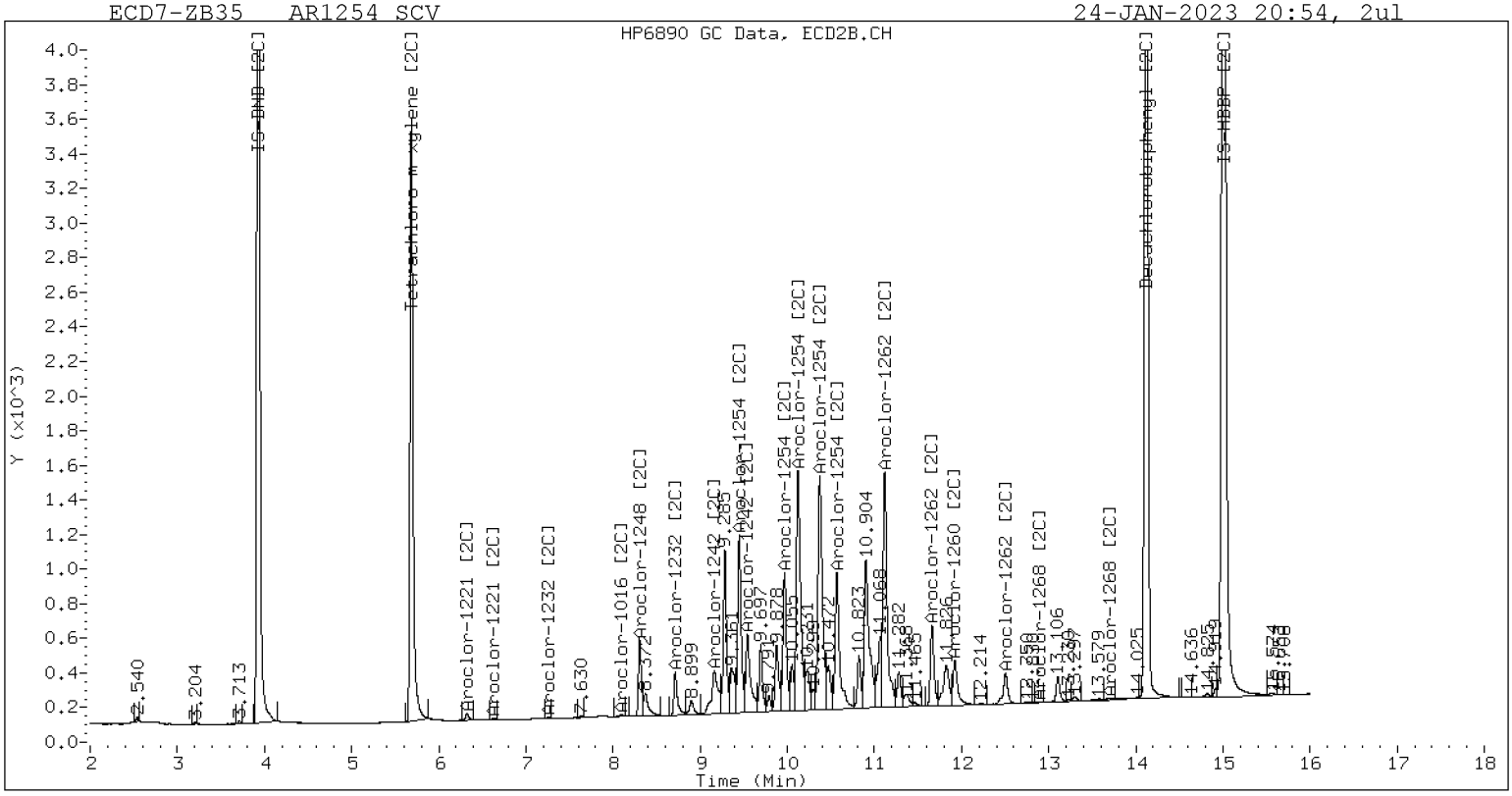
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254 SCV 24-JAN-2023 20:54, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254 SCV 24-JAN-2023 20:54, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00061
Laboratory ID: SLA0281-SCV5
Sequence: SLA0281
Sequence Name: AR2162SCV5
Standard ID: K007659

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1221	250.00	228	-8.8	20.00
Aroclor 1221 [2C]	250.00	239	-4.5	20.00
Decachlorobiphenyl	40.000	37.5	-6.4	20.00
Tetrachlorometaxylene	40.000	37.3	-6.8	20.00
Decachlorobiphenyl [2C]	40.000	39.5	-1.3	20.00
Tetrachlorometaxylene [2C]	40.000	37.2	-7.1	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242328ECD7.D
Data file 2: /230124.b/230124.b/01242328ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162 SCV
Client ID:
Injection Date: 24-JAN-2023 21:15
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	265357	5.685	-0.001	170984	37.3	37.2	0.3	Tetrachloro-m-xylene
13.891	-0.001	397332	14.119	-0.001	326981	37.5	39.5	5.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503473	0.0
Hexabromobiphenyl	647433	991997	53.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	340361	1.0
Hexabromobiphenyl	382032	521975	36.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	5326	28.5	1	7.257	0.002	6708	36.3
Aroclor-1016	2	7.664	0.013	11965	19.3	2	7.856	0.005	7233	17.9
Aroclor-1016	3	7.797	0.009	6015	21.1	3	8.058	0.008	2997	18.2
Aroclor-1016	4	8.410	0.006	3771	20.6	4	8.308	0.002	2065	16.0
Total Col1Ave (4 peaks):					22.4	Total Col2Ave (4 peaks):				22.1 RPD = 1
Corrected Ave (3 peaks):					20.3	Corrected Ave (3 peaks):				17.3 RPD = 16
Aroclor-1221	1	4.732	-0.000	9097	244.5	1	4.959	-0.000	6157	246.8
Aroclor-1221	2	6.133	-0.000	16114	211.8	2	6.297	-0.001	12807	234.2
Aroclor-1221	3	6.384	0.000	40299	228.1	3	6.622	-0.000	21707	235.2
Total Col1Ave (3 peaks):					228.1	Total Col2Ave (3 peaks):				238.7 RPD = 5
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.732	-0.001	9097	391.6	1	4.959	-0.001	6157	406.9
Aroclor-1232	2	6.133	0.000	16114	307.8	2	7.257	0.000	6708	79.2
Aroclor-1232	3	7.664	0.005	11965	45.7	3	7.856	0.001	7233	41.9
Aroclor-1232	4	8.589	0.004	2837	25.3	4	8.716	0.002	1869	39.0
Total Col1Ave (4 peaks):					192.6	Total Col2Ave (4 peaks):				141.7 RPD = 30
Corrected Ave (3 peaks):					126.3	Corrected Ave (3 peaks):				53.4 RPD = 81*
Aroclor-1242	1	7.272	0.001	5326	34.5	1	7.257	0.001	6708	45.1
Aroclor-1242	2	7.664	0.008	11965	23.7	2	7.856	0.003	7233	21.9
Aroclor-1242	3	8.410	0.004	3771	25.2	3	9.169	0.009	1956	18.9
Aroclor-1242	4	8.589	0.007	2837	12.5	4	9.544	-0.043	5978	43.6
Total Col1Ave (4 peaks):					24.0	Total Col2Ave (4 peaks):				32.3 RPD = 30
Corrected Ave (3 peaks):					20.5	Corrected Ave (3 peaks):				28.1 RPD = 31
Aroclor-1248	1	8.410	0.005	3771	15.0	1	8.308	0.002	2065	13.4
Aroclor-1248	2	8.589	0.008	2837	8.8	2	8.716	0.004	1869	11.3
Aroclor-1248	3	8.997	-0.002	36022	58.6	3	9.169	0.012	1956	9.7
Aroclor-1248	4	9.305	0.011	30853	101.4	4	9.544	-0.038	5978	23.9
Total Col1Ave (4 peaks):					46.0	Total Col2Ave (4 peaks):				14.6 RPD = 104*
Corrected Ave (3 peaks):					27.5	Corrected Ave (3 peaks):				11.5 RPD = 82*
Aroclor-1254	1	9.305	0.006	30853	60.1	1	9.451	0.003	17617	71.3
Aroclor-1254	2	9.376	-0.002	5370	24.5	2	9.970	0.001	2849	14.3
Aroclor-1254	3	9.673	0.003	5543	16.9	3	10.146	0.026	88151	202.5
Aroclor-1254	4	9.810	0.002	14544	22.6	4	10.370	-0.002	107074	245.9
Aroclor-1254	5	10.121	-0.056	180016	429.7	5	10.567	-0.002	141725	584.5
Total Col1Ave (5 peaks):					110.8	Total Col2Ave (5 peaks):				223.7 RPD = 68*
Corrected Ave (4 peaks):					31.0	Corrected Ave (4 peaks):				133.5 RPD = 125*
Aroclor-1260	1	11.044	0.001	310806	558.4	1	11.652	-0.001	187682	498.4
Aroclor-1260	2	11.361	0.000	263161	460.0	2	11.917	-0.000	450612	473.0
Aroclor-1260	3	11.735	0.000	629605	418.0	3	12.433	-0.003	206042	867.7
Aroclor-1260	4	12.141	0.001	210012	269.9	4	12.502	-0.000	326457	529.5
Aroclor-1260	5	12.244	-0.000	268425	791.3	NS	---			----
Total Col1Ave (5 peaks):					499.5	Total Col2Ave (4 peaks):				592.1 RPD = 17
Corrected Ave (4 peaks):					426.6	Corrected Ave (3 peaks):				500.3 RPD = 16
Aroclor-1262	1	10.828	-0.005	171094	426.5	1	11.200	0.000	219731	430.1
Aroclor-1262	2	12.244	-0.002	268425	423.9	2	11.652	-0.001	187682	432.0
Aroclor-1262	3	12.319	-0.002	291581	424.2	3	12.433	-0.001	206042	445.4
Aroclor-1262	4	12.988	-0.001	257735	411.5	4	12.502	-0.002	326457	440.6
Total Col1Ave (4 peaks):					421.5	Total Col2Ave (4 peaks):				437.0 RPD = 4
Corrected Ave (3 peaks):					419.8	Corrected Ave (3 peaks):				434.3 RPD = 3
Aroclor-1268	1	12.244	-0.001	268425	163.8	1	12.433	-0.000	206042	169.0
Aroclor-1268	2	12.319	0.001	291581	178.4	2	12.502	0.000	326457	251.7
Aroclor-1268	3	12.725	0.026	108693	80.3	3	12.892	-0.001	10062	9.3
Aroclor-1268	4	13.486	-0.003	95646	23.8	4	13.710	0.001	59437	17.8
Total Col1Ave (4 peaks):					111.6	Total Col2Ave (4 peaks):				112.0 RPD = 0

Corrected Ave (3 peaks): 89.3 Corrected Ave (3 peaks): 65.4 RPD = 31

Total PCB Area Col1 (5.909 - 13.792) = 4409992 Col1 Total PCB = 0.8 ppm*

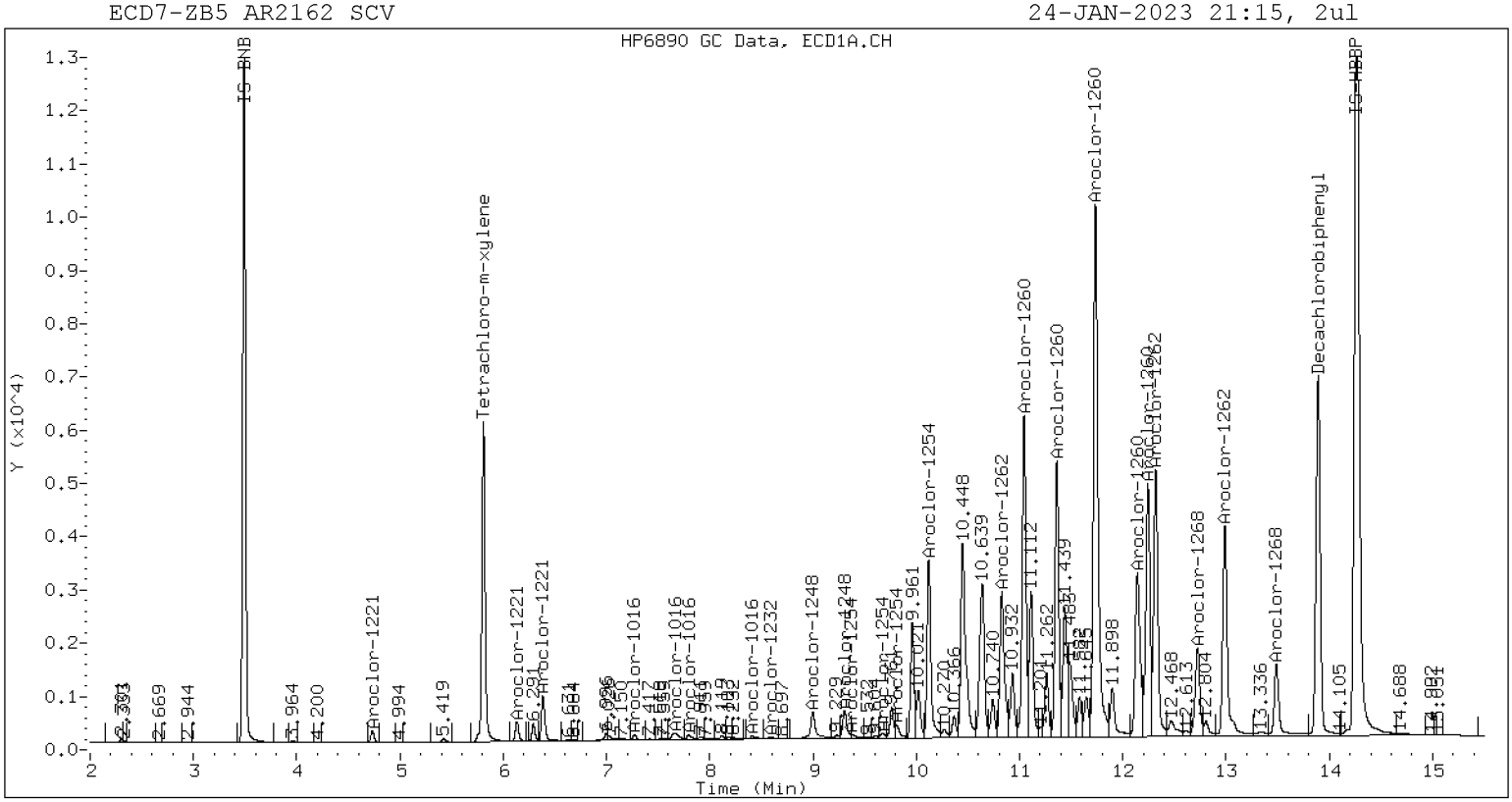
Total PCB Area Col2 (5.787 - 14.020) = 2874073 Col2 Total PCB = 0.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

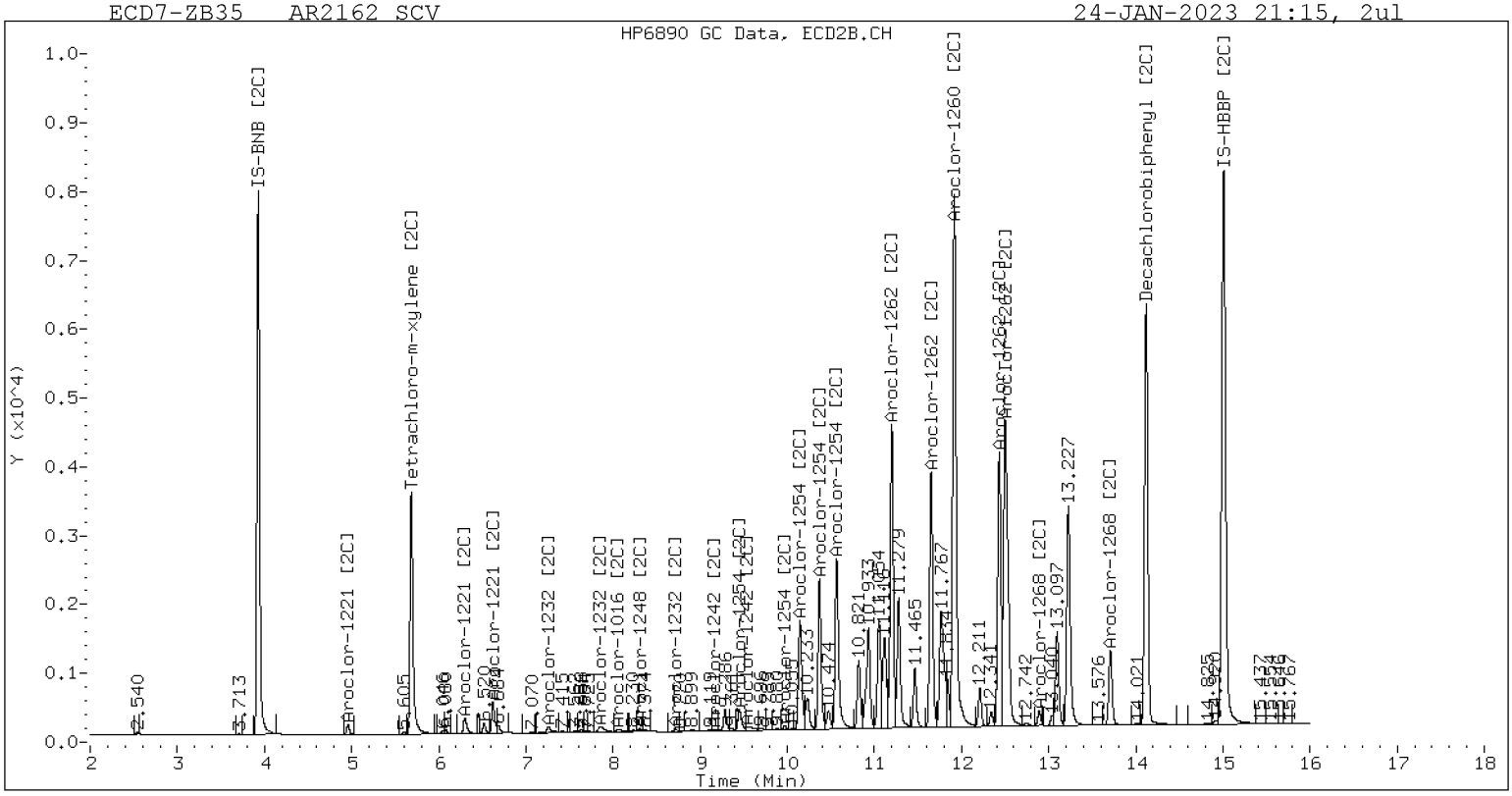
PCB Dual Column Chromatograms

ECD7-ZB5 AR2162 SCV 24-JAN-2023 21:15, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162 SCV 24-JAN-2023 21:15, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00061
Laboratory ID: SLA0281-SCV6
Sequence: SLA0281
Sequence Name: AR3268SCV6
Standard ID: K007660

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1232	250.00	216	-13.7	20.00
Aroclor 1232 [2C]	250.00	239	-4.5	20.00
Decachlorobiphenyl	40.000	54.6	36.5	20.00
Tetrachlorometaxylene	40.000	36.4	-9.1	20.00
Decachlorobiphenyl [2C]	40.000	57.9	44.8	20.00
Tetrachlorometaxylene [2C]	40.000	36.3	-9.2	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242329ECD7.D
Data file 2: /230124.b/230124.b/01242329ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268 SCV
Client ID:
Injection Date: 24-JAN-2023 21:36
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.810	0.001	250455	5.687	0.000	162795	36.4	36.3	0.2	Tetrachloro-m-xylene
13.892	0.000	551946	14.120	0.000	461901	54.6	57.9	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	487061	-3.2
Hexabromobiphenyl	647433	944934	46.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331721	-1.5
Hexabromobiphenyl	382032	502401	31.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	19363	107.0	1	7.256	0.001	19791	110.0
Aroclor-1016	2	7.659	0.009	58630	97.8	2	7.856	0.005	40139	101.8
Aroclor-1016	3	7.794	0.006	28286	102.5	3	8.055	0.005	17412	108.2
Aroclor-1016	4	8.408	0.004	17373	97.9	4	8.308	0.003	11962	94.8
Total Col1Ave (4 peaks):					101.3	Total Col2Ave (4 peaks):				103.7 RPD = 2
Corrected Ave (3 peaks):					99.4	Corrected Ave (3 peaks):				101.6 RPD = 2
Aroclor-1221	1	4.735	0.002	5022	139.5	1	4.961	0.002	3409	140.2
Aroclor-1221	2	6.134	0.001	8987	122.1	2	6.299	0.001	7677	144.1
Aroclor-1221	3	6.385	0.001	29368	171.8	3	6.624	0.001	16198	180.1
Total Col1Ave (3 peaks):					144.5	Total Col2Ave (3 peaks):				154.8 RPD = 7
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.735	0.002	5022	223.5	1	4.961	0.002	3409	231.1
Aroclor-1232	2	6.134	0.001	8987	177.4	2	7.256	-0.001	19791	239.8
Aroclor-1232	3	7.659	0.001	58630	231.5	3	7.856	0.001	40139	238.8
Aroclor-1232	4	8.585	0.000	24991	230.5	4	8.715	0.001	11476	245.7
Total Col1Ave (4 peaks):					215.7	Total Col2Ave (4 peaks):				238.8 RPD = 10
Corrected Ave (3 peaks):					210.5	Corrected Ave (3 peaks):				236.6 RPD = 12
Aroclor-1242	1	7.272	0.001	19363	129.8	1	7.256	0.000	19791	136.4
Aroclor-1242	2	7.659	0.004	58630	120.1	2	7.856	0.002	40139	124.6
Aroclor-1242	3	8.408	0.001	17373	119.8	3	9.166	0.006	11813	117.1
Aroclor-1242	4	8.585	0.003	24991	114.1	4	9.595	0.009	16549	123.7
Total Col1Ave (4 peaks):					121.0	Total Col2Ave (4 peaks):				125.4 RPD = 4
Corrected Ave (3 peaks):					118.0	Corrected Ave (3 peaks):				121.8 RPD = 3
Aroclor-1248	1	8.408	0.002	17373	71.3	1	8.308	0.003	11962	79.8
Aroclor-1248	2	8.585	0.005	24991	80.4	2	8.715	0.003	11476	71.1
Aroclor-1248	3	9.001	0.002	67631	113.8	3	9.166	0.009	11813	59.9
Aroclor-1248	4	9.293	-0.001	30983	105.3	4	9.595	0.014	16549	67.9
Total Col1Ave (4 peaks):					92.7	Total Col2Ave (4 peaks):				69.7 RPD = 28
Corrected Ave (3 peaks):					85.7	Corrected Ave (3 peaks):				66.3 RPD = 26
Aroclor-1254	1	9.293	-0.006	30983	62.4	1	9.451	0.003	3749	15.6
Aroclor-1254	2	9.381	0.003	9071	42.8	2	9.974	0.005	2452	12.6
Aroclor-1254	3	9.678	0.009	5199	16.3	3	10.131	0.010	4718	11.1
Aroclor-1254	4	9.820	0.012	8864	14.2	4	10.389	0.018	4224	10.0
Aroclor-1254	5	10.195	0.018	8085	19.9	5	10.573	0.004	1573	6.7
Total Col1Ave (5 peaks):					31.1	Total Col2Ave (5 peaks):				11.2 RPD = 94*
Corrected Ave (4 peaks):					23.3	Corrected Ave (4 peaks):				10.1 RPD = 79*
Aroclor-1260	1	11.050	0.006	66852	126.1	1	11.647	-0.006	57235	157.9
Aroclor-1260	2	11.366	0.006	6269	11.5	2	11.919	0.002	25368	27.7
Aroclor-1260	3	11.741	0.007	41446	28.9	3	12.434	-0.002	262014	1146.4
Aroclor-1260	4	12.052	-0.088	2691	3.6	4	12.502	-0.000	277060	466.9
Aroclor-1260	5	12.245	0.002	349286	1080.9	NS	---			----
Total Col1Ave (5 peaks):					250.2	Total Col2Ave (4 peaks):				449.7 RPD = 57*
Corrected Ave (4 peaks):					42.5	Corrected Ave (3 peaks):				217.5 RPD = 135*
Aroclor-1262	1	10.838	0.006	4520	11.8	1	11.203	0.003	40576	82.5
Aroclor-1262	2	12.245	-0.000	349286	579.1	2	11.647	-0.006	57235	136.9
Aroclor-1262	3	12.318	-0.002	349715	534.1	3	12.434	-0.001	262014	588.4
Aroclor-1262	4	12.988	-0.001	141905	237.8	4	12.502	-0.002	277060	388.5
Total Col1Ave (4 peaks):					340.7	Total Col2Ave (4 peaks):				299.1 RPD = 13
Corrected Ave (3 peaks):					261.2	Corrected Ave (3 peaks):				202.6 RPD = 25
Aroclor-1268	1	12.245	0.001	349286	223.8	1	12.434	0.000	262014	223.3
Aroclor-1268	2	12.318	0.000	349715	224.6	2	12.502	0.000	277060	221.9
Aroclor-1268	3	12.699	0.000	289328	224.3	3	12.893	-0.000	208928	201.0
Aroclor-1268	4	13.490	0.001	849299	222.1	4	13.710	0.002	725831	226.1
Total Col1Ave (4 peaks):					223.7	Total Col2Ave (4 peaks):				218.1 RPD = 3

Corrected Ave (3 peaks): 223.4 Corrected Ave (3 peaks): 215.4 RPD = 4

Total PCB Area Col1 (5.909 - 13.792) = 2866092 Col1 Total PCB = 0.5 ppm*

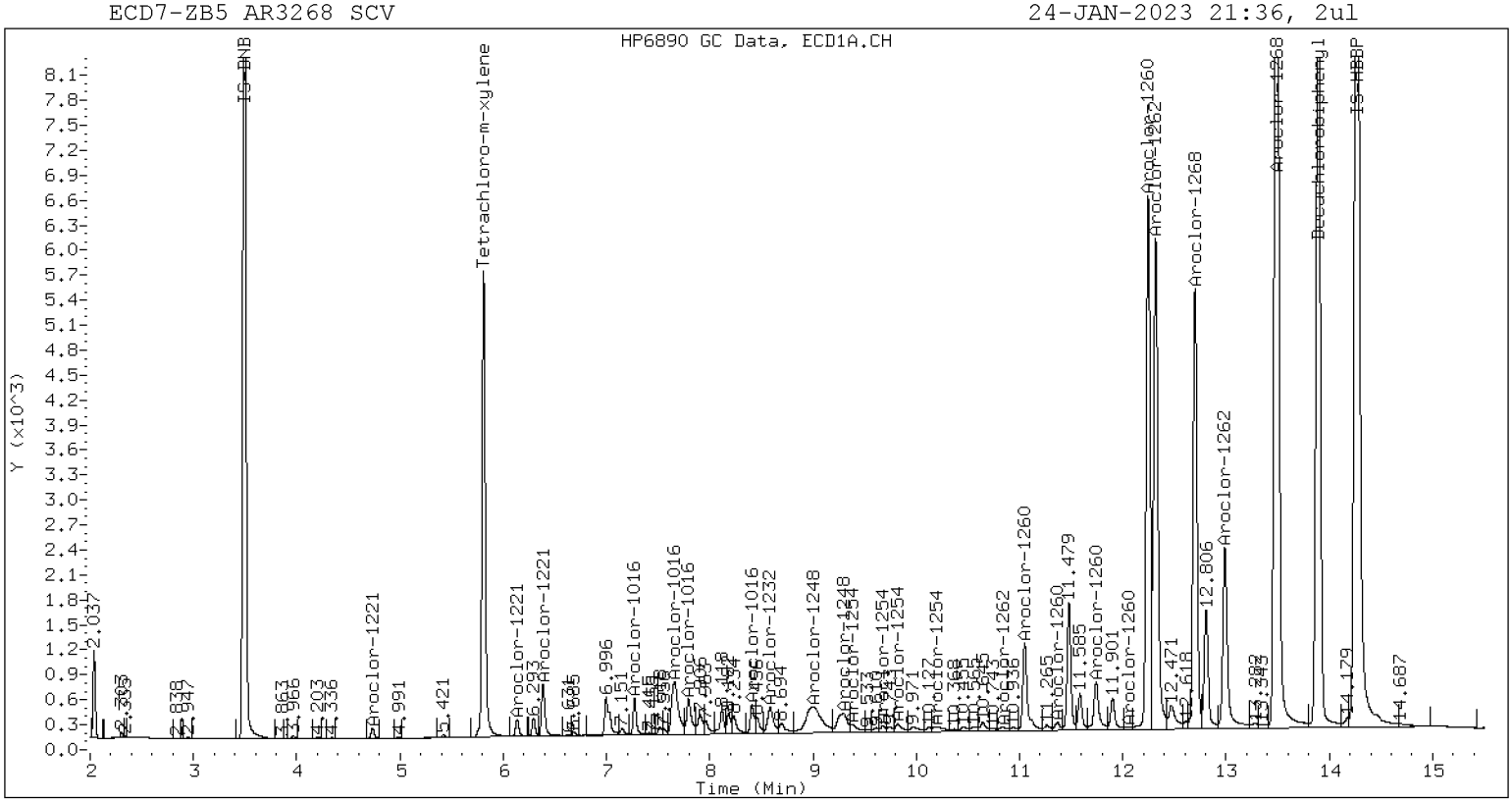
Total PCB Area Col2 (5.787 - 14.020) = 2084481 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

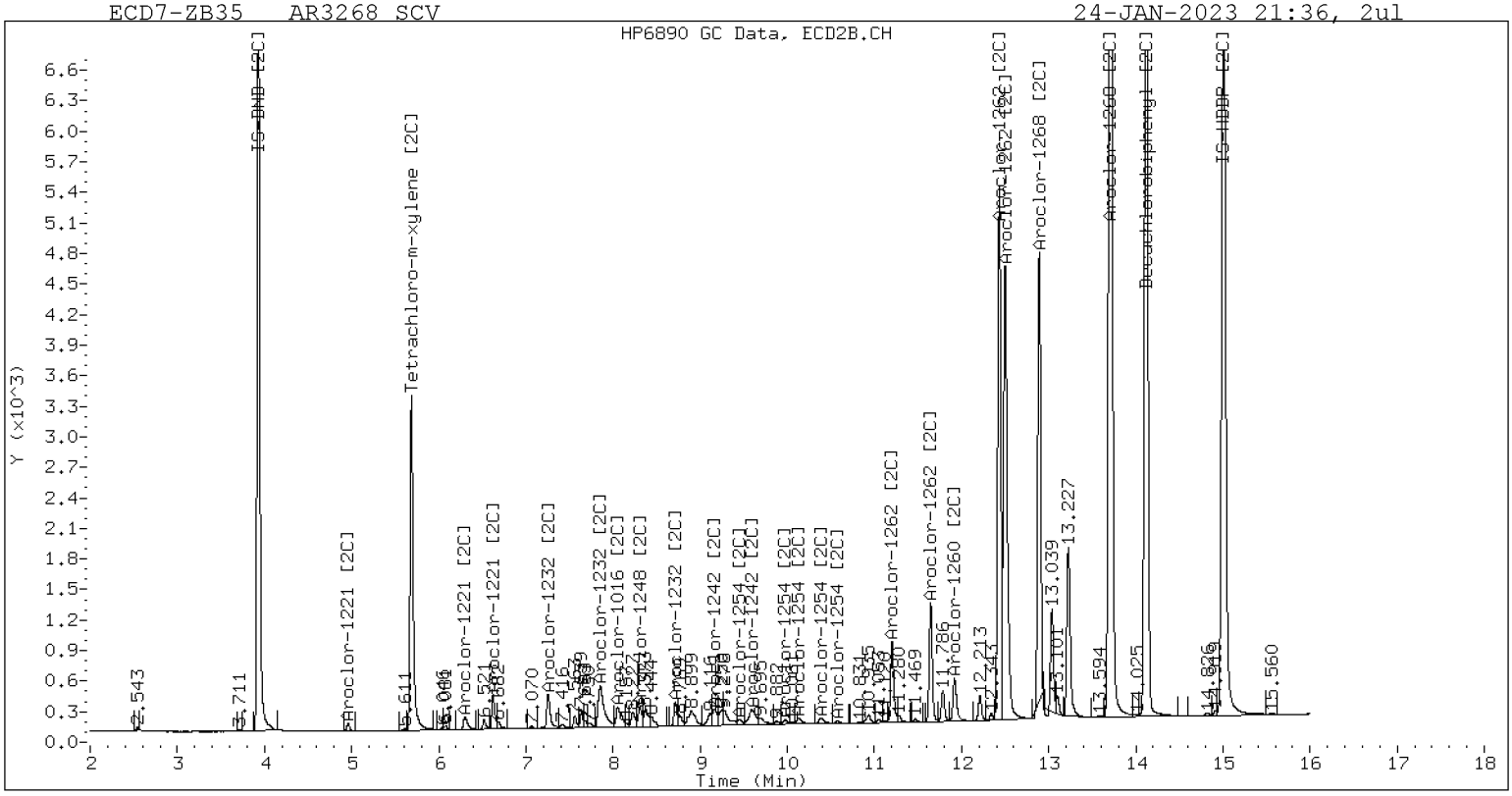
PCB Dual Column Chromatograms

ECD7-ZB5 AR3268 SCV 24-JAN-2023 21:36, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR3268 SCV 24-JAN-2023 21:36, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02012302ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0012	Injection Date:	02/01/23
Lab Sample ID:	SLB0012-ICV1	Injection Time:	09:46
Sequence Name:	AR1254ICV1		

		CONC. (ug/L)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Aroclor 1254	A	250.00	244	0.0675033	0.0663845		-2.6	+/-20
Aroclor-1254 (1)	A	250.00	240	0.0815329	0.0781562			
Aroclor-1254 (2)	A	250.00	227	0.0348121	0.0315954			
Aroclor-1254 (3)	A	250.00	248	0.0522405	0.0519194			
Aroclor-1254 (4)	A	250.00	254	0.1023658	0.1039686			
Aroclor-1254 (5)	A	250.00	249	0.0665652	0.0662828			
Aroclor 1254 [2C]	A	250.00	247	0.0733219	0.0728153		-1.1	+/-20
Aroclor-1254 (1) [2C]	A	250.00	255	0.0580388	0.0591513			
Aroclor-1254 (2) [2C]	A	250.00	257	0.0469118	0.0482192			
Aroclor-1254 (3) [2C]	A	250.00	247	0.1023304	0.1011999			
Aroclor-1254 (4) [2C]	A	250.00	257	0.1023323	0.1052443			
Aroclor-1254 (5) [2C]	A	250.00	220	0.0569963	0.0502621			
Decachlorobiphenyl	A	40.000	37.8	0.8555994	0.8086669		-5.5	+/-20
Tetrachlorometaxylene	A	40.000	39.7	1.1307870	1.1234200		-0.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.0	1.2696430	1.1415930		-10.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.9	1.0814980	1.0788300		-0.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012302ECD7.D
Data file 2: /230201.b/230201.b/02012302ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254ICV1
Client ID:
Injection Date: 01-FEB-2023 09:46
Report Date: 02/01/2023 15:25
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.001	278279	5.683	-0.001	188259	39.7	39.9	0.4	Tetrachloro-m-xylene
13.893	0.002	306023	14.118	0.000	265207	37.8	36.0	5.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	495414	-1.6
Hexabromobiphenyl	647433	756858	16.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	349006	3.6
Hexabromobiphenyl	382032	464626	21.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1254	1	9.296	-0.003	120999	239.6	1	9.445	0.000	64513	254.8
Aroclor-1254	2	9.372	-0.005	48915	226.9	2	9.965	0.000	52590	257.0
Aroclor-1254	3	9.663	-0.006	80380	248.5	3	10.116	0.000	110373	247.2
Aroclor-1254	4	9.801	-0.007	160961	253.9	4	10.366	0.000	114784	257.1
Aroclor-1254	5	10.163	-0.014	102617	248.9	5	10.564	0.000	54818	220.5

Total Col1Ave (5 peaks): 243.6 Total Col2Ave (5 peaks): 247.3 RPD = 2

Corrected Ave (4 peaks): 241.0 Corrected Ave (4 peaks): 244.9 RPD = 2

CalAmt %D: -2.6 CalAmt %D: -1.1

Total PCB Area Col1 (5.909 - 13.792) = 1630995 Col1 Total PCB = 0.3 ppm*

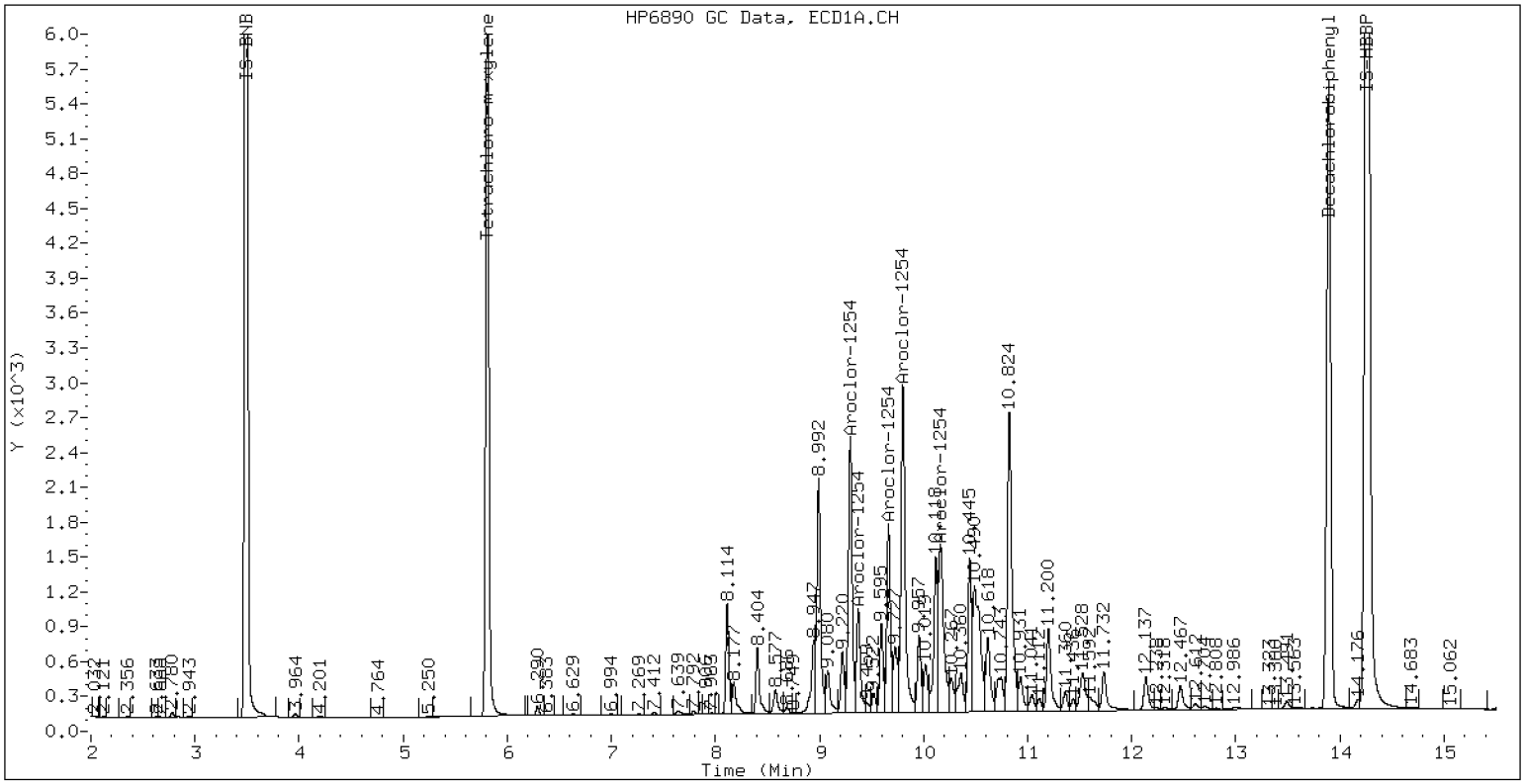
Total PCB Area Col2 (5.784 - 14.018) = 1073599 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

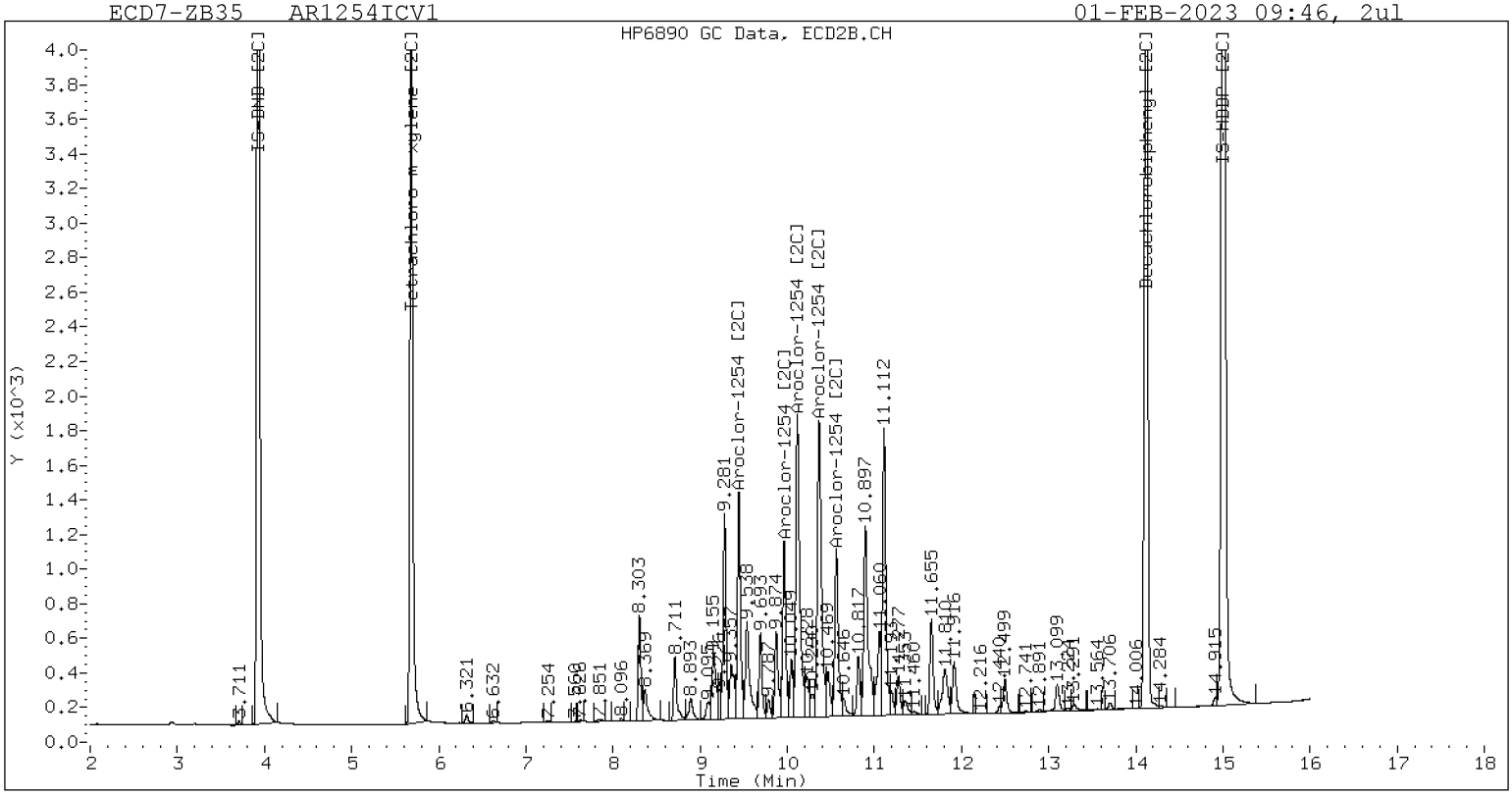
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254ICV1 01-FEB-2023 09:46, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254ICV1 01-FEB-2023 09:46, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02012303ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0012	Injection Date:	02/01/23
Lab Sample ID:	SLB0012-ICV2	Injection Time:	10:07
Sequence Name:	AR1660ICV2		

		CONC. (ug/L)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
Aroclor 1016	A	250.00	259	0.0506755	0.0526280		3.4	+/-20	
Aroclor-1016 (1)	A	250.00	259	0.0297277	0.0308283		3.6		
Aroclor-1016 (2)	A	250.00	265	0.0985017	0.1044877		6.0		
Aroclor-1016 (3)	A	250.00	242	0.0453193	0.0438859		-3.2		
Aroclor-1016 (4)	A	250.00	268	0.0291533	0.0313103		7.2		
Aroclor 1016 [2C]	A	250.00	266	0.0519244	0.0554291		6.5	+/-20	
Aroclor-1016 (1) [2C]	A	250.00	262	0.0433907	0.0454883		4.8		
Aroclor-1016 (2) [2C]	A	250.00	268	0.0950862	0.1020070		7.2		
Aroclor-1016 (3) [2C]	A	250.00	272	0.0388014	0.0422560		8.8		
Aroclor-1016 (4) [2C]	A	250.00	263	0.0304194	0.0319651		5.2		
Aroclor 1260	A	250.00	199	0.0605224	0.0485047		-20.2	+/-20	*
Aroclor-1260 (1)	A	250.00	208	0.0448870	0.0372847		-16.8		
Aroclor-1260 (2)	A	250.00	207	0.0461412	0.0381757		-17.2		
Aroclor-1260 (3)	A	250.00	201	0.1214672	0.0975020		-19.6		
Aroclor-1260 (4)	A	250.00	197	0.0627593	0.0493877		-21.2		
Aroclor-1260 (5)	A	250.00	184	0.0273573	0.0201735		-26.4		
Aroclor 1260 [2C]	A	250.00	224	0.0836545	0.0746569		-10.4	+/-20	
Aroclor-1260 (1) [2C]	A	250.00	226	0.0577136	0.0523033		-9.6		
Aroclor-1260 (2) [2C]	A	250.00	222	0.1460113	0.1297957		-11.2		
Aroclor-1260 (3) [2C]	A	250.00	227	0.0363944	0.0330970		-9.2		
Aroclor-1260 (4) [2C]	A	250.00	221	0.0944986	0.0834316		-11.6		
Decachlorobiphenyl	A	40.000	36.1	0.8555994	0.7717455		-9.8	+/-20	
Tetrachlorometaxylene	A	40.000	42.2	1.1307870	1.1934520		5.5	+/-20	
Decachlorobiphenyl [2C]	A	40.000	38.4	1.2696430	1.2182300		-4.0	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	41.7	1.0814980	1.1280120		4.3	+/-20	

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012303ECD7.D
Data file 2: /230201.b/230201.b/02012303ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660ICV2
Client ID:
Injection Date: 01-FEB-2023 10:07
Report Date: 02/01/2023 15:25
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.002	279315	5.684	0.000	188166	42.2	41.7	1.2	Tetrachloro-m-xylene
13.890	-0.001	308070	14.118	0.000	276336	36.1	38.4	6.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	468079	-7.0
Hexabromobiphenyl	647433	798372	23.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	333624	-1.0
Hexabromobiphenyl	382032	453668	18.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.000	45094	259.3	1	7.253	0.000	47425	262.1
Aroclor-1016	2	7.649	-0.001	152839	265.2	2	7.850	0.000	106350	268.2
Aroclor-1016	3	7.787	-0.001	64194	242.1	3	8.049	-0.000	44055	272.3
Aroclor-1016	4	8.402	-0.002	45799	268.5	4	8.304	0.000	33326	262.7
Total Col1Ave (4 peaks):					258.8	Total Col2Ave (4 peaks):				266.3 RPD = 3
Corrected Ave (3 peaks):					255.5	Corrected Ave (3 peaks):				264.3 RPD = 3
CalAmt %D:					3.5	CalAmt %D:				6.5
Aroclor-1260	1	11.041	-0.003	93022	207.7	1	11.650	0.000	74151	226.6
Aroclor-1260	2	11.359	-0.002	95245	206.8	2	11.914	-0.001	184013	222.2
Aroclor-1260	3	11.731	-0.004	243259	200.7	3	12.432	-0.002	46922	227.3
Aroclor-1260	4	12.135	-0.004	123218	196.7	4	12.497	-0.001	118282	220.7
Aroclor-1260	5	12.240	-0.003	50331	184.4	NS	---			----
Total Col1Ave (5 peaks):					199.3	Total Col2Ave (4 peaks):				224.2 RPD = 12
Corrected Ave (4 peaks):					197.2	Corrected Ave (3 peaks):				223.2 RPD = 12
CalAmt %D:					-20.3	CalAmt %D:				-10.3

Total PCB Area Col1 (5.909 - 13.792) = 2663537 Col1 Total PCB = 0.5 ppm*

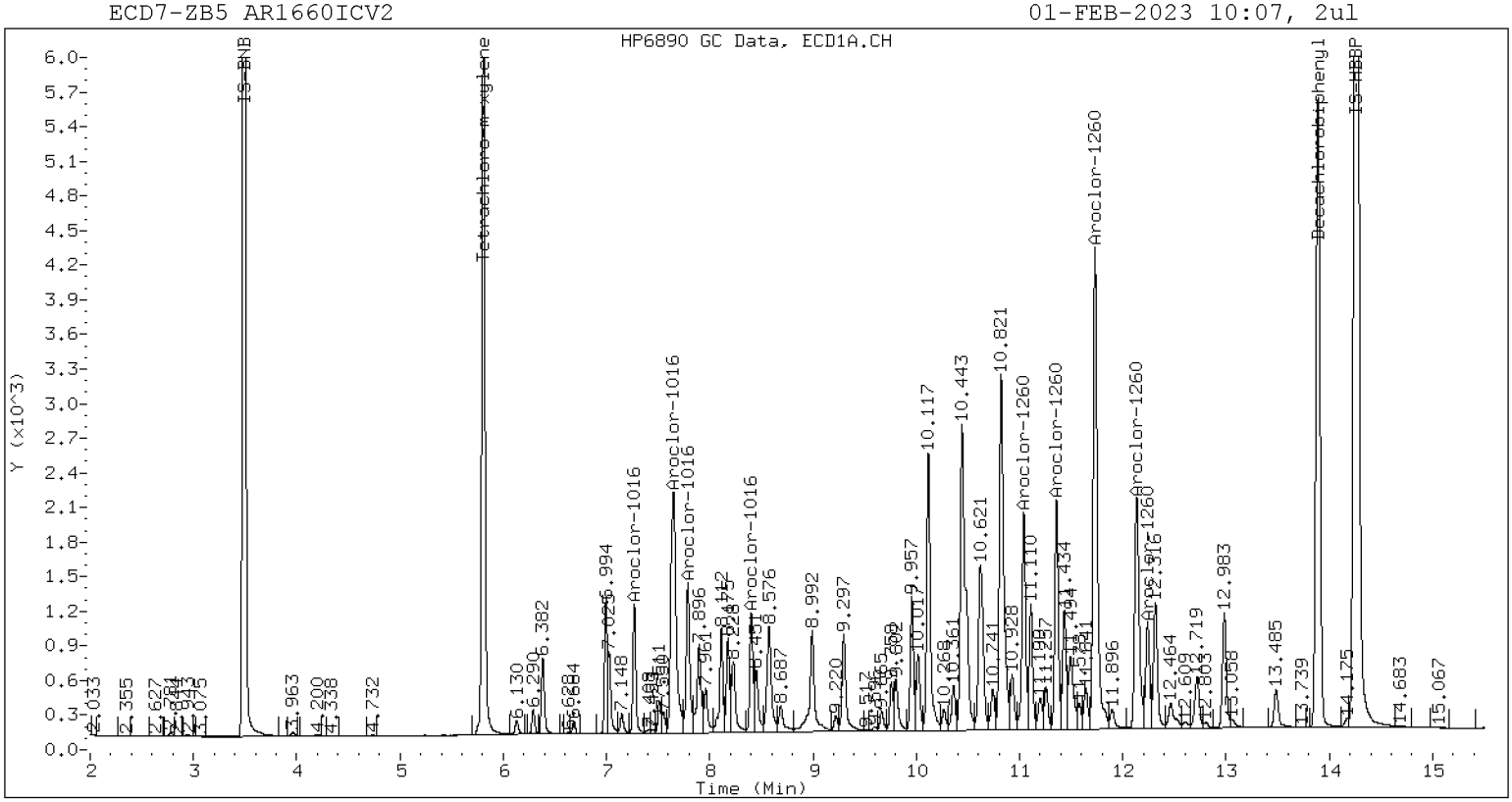
Total PCB Area Col2 (5.784 - 14.018) = 1812633 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

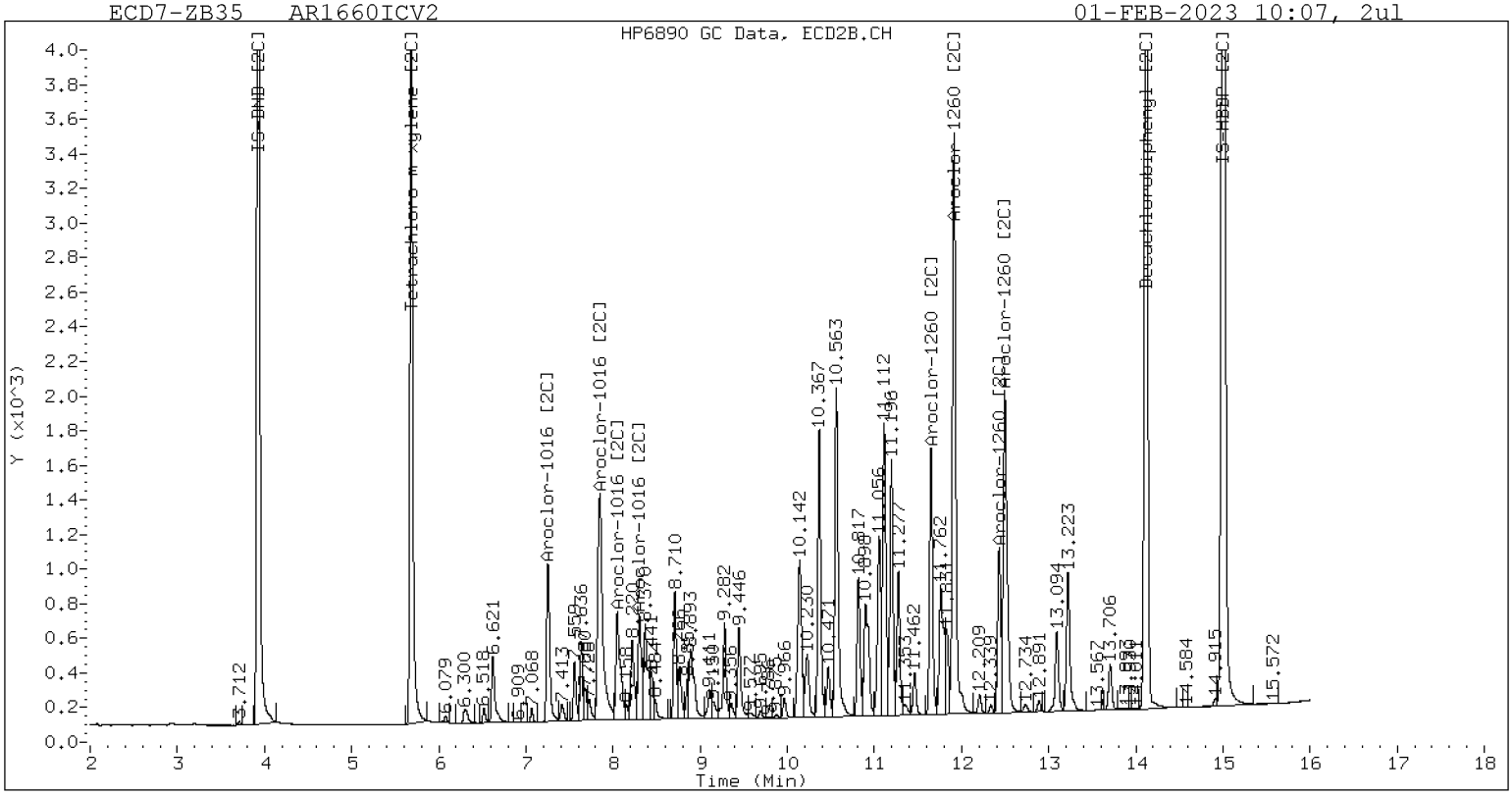
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660ICV2 01-FEB-2023 10:07, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660ICV2 01-FEB-2023 10:07, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02022302ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0023	Injection Date:	02/02/23
Lab Sample ID:	SLB0023-ICV1	Injection Time:	09:21
Sequence Name:	AR1254ICV1		

		CONC. (ug/L)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Aroclor 1254	A	250.00	230	0.0675033	0.0627365		-7.9	+/-20
Aroclor-1254 (1)	A	250.00	224	0.0815329	0.0731101			
Aroclor-1254 (2)	A	250.00	217	0.0348121	0.0302704			
Aroclor-1254 (3)	A	250.00	234	0.0522405	0.0488353			
Aroclor-1254 (4)	A	250.00	241	0.1023658	0.0988380			
Aroclor-1254 (5)	A	250.00	235	0.0665652	0.0626287			
Aroclor 1254 [2C]	A	250.00	241	0.0733219	0.0709878		-3.6	+/-20
Aroclor-1254 (1) [2C]	A	250.00	249	0.0580388	0.0578219			
Aroclor-1254 (2) [2C]	A	250.00	251	0.0469118	0.0471862			
Aroclor-1254 (3) [2C]	A	250.00	238	0.1023304	0.0975128			
Aroclor-1254 (4) [2C]	A	250.00	252	0.1023323	0.1033506			
Aroclor-1254 (5) [2C]	A	250.00	215	0.0569963	0.0490673			
Decachlorobiphenyl	A	40.000	38.8	0.8555994	0.8296170		-3.0	+/-20
Tetrachlorometaxylene	A	40.000	39.2	1.1307870	1.1082900		-2.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.9	1.2696430	1.2022370		-5.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.6	1.0814980	1.0719120		-1.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230202.b/02022302ECD7.D
Data file 2: /230202.b/230202.b/02022302ECD7.D
Method: \\target\share\chem4\ecd7.i\230202.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254ICV1
Client ID:
Injection Date: 02-FEB-2023 09:21
Report Date: 02/02/2023 11:38
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.002	272635	5.683	-0.001	187814	39.2	39.6	1.1	Tetrachloro-m-xylene
13.892	0.000	250473	14.117	-0.001	229635	38.8	37.9	2.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	491992	-2.3
Hexabromobiphenyl	647433	603828	-6.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	350428	4.0
Hexabromobiphenyl	382032	382013	-0.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.294	-0.005	112405	224.2	1	9.444	0.000	63320	249.1
Aroclor-1254	2	9.371	-0.007	46540	217.4	2	9.964	0.000	51673	251.5
Aroclor-1254	3	9.661	-0.009	75083	233.7	3	10.115	0.000	106785	238.2
Aroclor-1254	4	9.799	-0.010	151961	241.4	4	10.365	0.000	113178	252.5
Aroclor-1254	5	10.158	-0.020	96290	235.2	5	10.562	0.000	53733	215.2

Total Col1Ave (5 peaks): 230.4 Total Col2Ave (5 peaks): 241.3 RPD = 5

Corrected Ave (4 peaks): 227.6 Corrected Ave (4 peaks): 238.5 RPD = 5

CalAmt %D: -7.9 CalAmt %D: -3.5

Total PCB Area Col1 (5.909 - 13.792) = 1557334 Col1 Total PCB = 0.3 ppm*

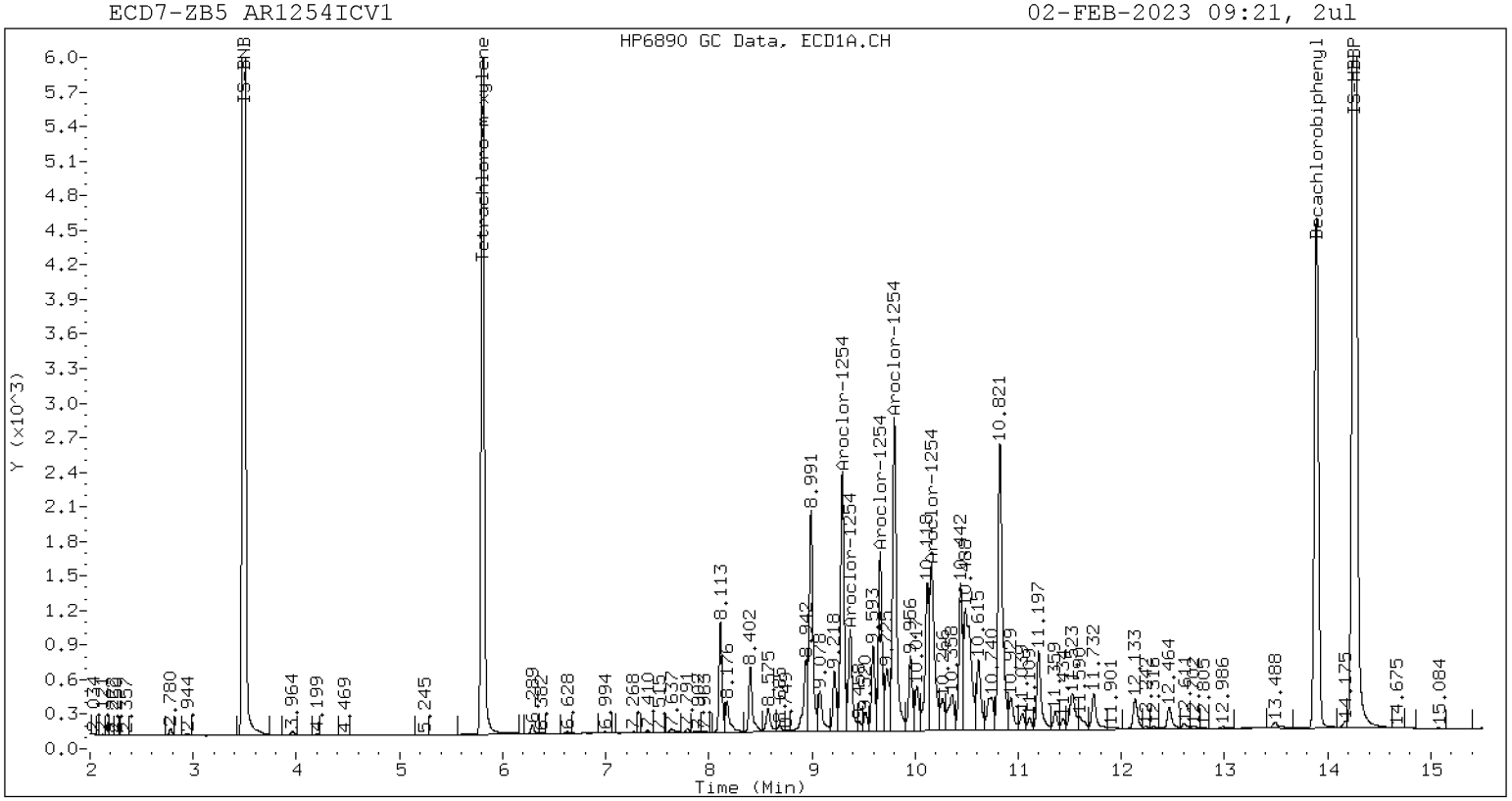
Total PCB Area Col2 (5.784 - 14.018) = 1044456 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

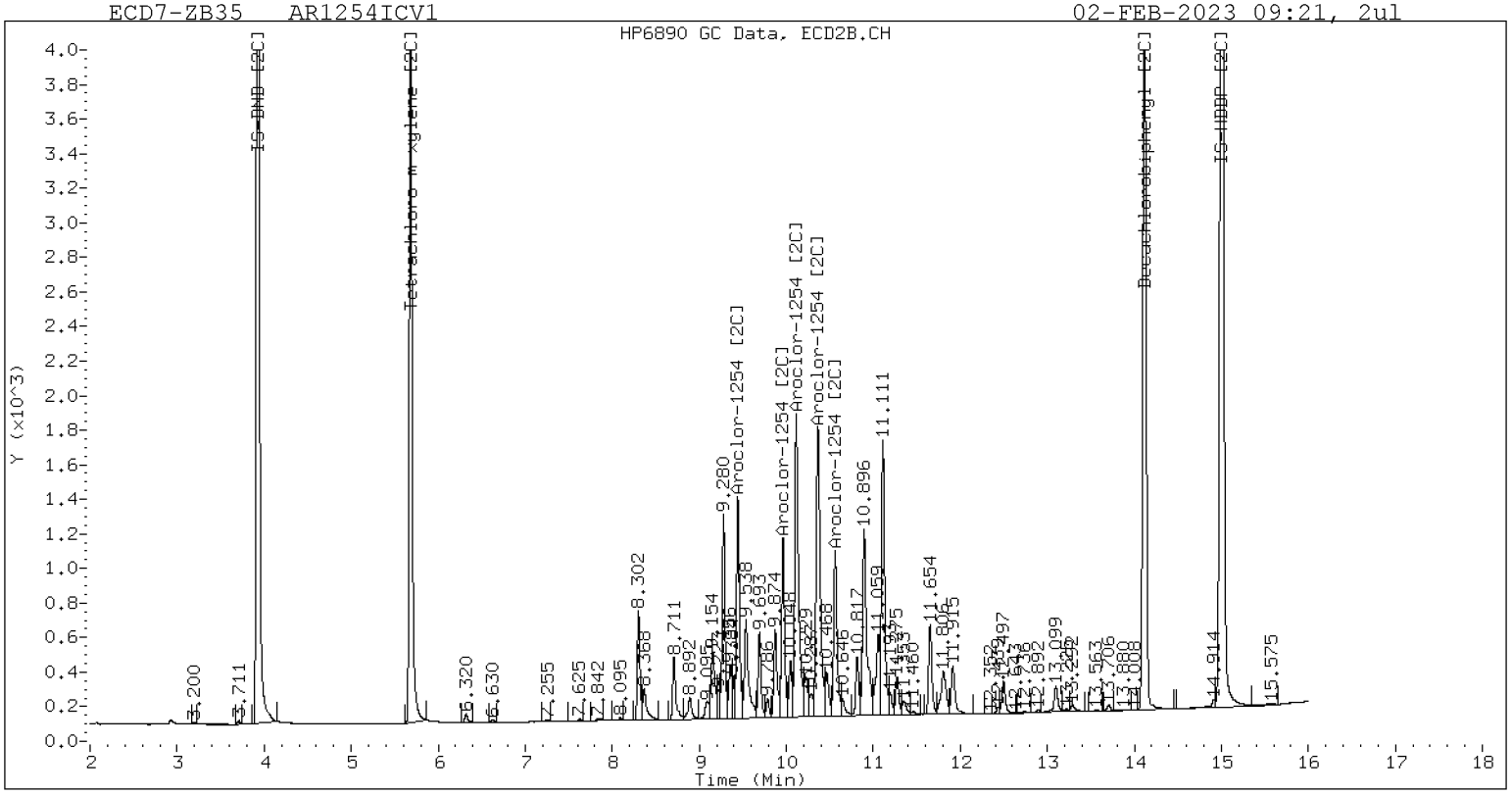
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254ICV1 02-FEB-2023 09:21, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254ICV1 02-FEB-2023 09:21, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02022303ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0023	Injection Date:	02/02/23
Lab Sample ID:	SLB0023-ICV2	Injection Time:	09:42
Sequence Name:	AR1660ICV2		

		CONC. (ug/L)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Aroclor 1016	A	250.00	260	0.0506755	0.0528387		3.9	+/-20
Aroclor-1016 (1)	A	250.00	259	0.0297277	0.0308466		3.6	
Aroclor-1016 (2)	A	250.00	267	0.0985017	0.1050501		6.8	
Aroclor-1016 (3)	A	250.00	242	0.0453193	0.0438422		-3.2	
Aroclor-1016 (4)	A	250.00	271	0.0291533	0.0316160		8.4	
Aroclor 1016 [2C]	A	250.00	269	0.0519244	0.0558444		7.4	+/-20
Aroclor-1016 (1) [2C]	A	250.00	265	0.0433907	0.0459929		6.0	
Aroclor-1016 (2) [2C]	A	250.00	269	0.0950862	0.1024892		7.6	
Aroclor-1016 (3) [2C]	A	250.00	274	0.0388014	0.0425222		9.6	
Aroclor-1016 (4) [2C]	A	250.00	266	0.0304194	0.0323735		6.4	
Aroclor 1260	A	250.00	227	0.0605224	0.0552310		-9.0	+/-20
Aroclor-1260 (1)	A	250.00	244	0.0448870	0.0438879		-2.4	
Aroclor-1260 (2)	A	250.00	241	0.0461412	0.0445687		-3.6	
Aroclor-1260 (3)	A	250.00	227	0.1214672	0.1102617		-9.2	
Aroclor-1260 (4)	A	250.00	219	0.0627593	0.0549211		-12.4	
Aroclor-1260 (5)	A	250.00	206	0.0273573	0.0225158		-17.6	
Aroclor 1260 [2C]	A	250.00	247	0.0836545	0.0815802		-1.2	+/-20
Aroclor-1260 (1) [2C]	A	250.00	258	0.0577136	0.0596251		3.2	
Aroclor-1260 (2) [2C]	A	250.00	238	0.1460113	0.1390456		-4.8	
Aroclor-1260 (3) [2C]	A	250.00	252	0.0363944	0.0367450		0.8	
Aroclor-1260 (4) [2C]	A	250.00	240	0.0944986	0.0909052		-4.0	
Decachlorobiphenyl	A	40.000	38.6	0.8555994	0.8246179		-3.5	+/-20
Tetrachlorometaxylene	A	40.000	42.1	1.1307870	1.1908070		5.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.3	1.2696430	1.2481530		-1.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	41.9	1.0814980	1.1319460		4.8	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230202.b/02022303ECD7.D
Data file 2: /230202.b/230202.b/02022303ECD7.D
Method: \\target\share\chem4\ecd7.i\230202.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660ICV2
Client ID:
Injection Date: 02-FEB-2023 09:42
Report Date: 02/02/2023 11:38
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.002	277592	5.684	0.000	190468	42.1	41.9	0.6	Tetrachloro-m-xylene
13.892	-0.000	273273	14.117	-0.000	241477	38.6	39.3	2.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	466225	-7.4
Hexabromobiphenyl	647433	662787	2.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	336532	-0.1
Hexabromobiphenyl	382032	386935	1.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.268	-0.001	44942	259.4	1	7.252	0.000	48369	265.0
Aroclor-1016	2	7.648	-0.002	153053	266.6	2	7.848	-0.001	107784	269.5
Aroclor-1016	3	7.786	-0.002	63876	241.9	3	8.047	-0.001	44719	274.0
Aroclor-1016	4	8.401	-0.003	46063	271.1	4	8.303	-0.000	34046	266.1
Total Col1Ave (4 peaks):					259.7	Total Col2Ave (4 peaks):				268.6 RPD = 3
Corrected Ave (3 peaks):					256.0	Corrected Ave (3 peaks):				266.8 RPD = 4
CalAmt %D:					3.9	CalAmt %D:				7.4
Aroclor-1260	1	11.041	-0.003	90901	244.4	1	11.649	-0.002	72097	258.3
Aroclor-1260	2	11.357	-0.003	92311	241.5	2	11.912	-0.002	168130	238.1
Aroclor-1260	3	11.730	-0.004	228375	226.9	3	12.432	-0.001	44431	252.4
Aroclor-1260	4	12.133	-0.006	113753	218.8	4	12.496	-0.002	109920	240.5
Aroclor-1260	5	12.241	-0.003	46635	205.8	NS	---			----
Total Col1Ave (5 peaks):					227.5	Total Col2Ave (4 peaks):				247.3 RPD = 8
Corrected Ave (4 peaks):					223.2	Corrected Ave (3 peaks):				243.7 RPD = 9
CalAmt %D:					-9.0	CalAmt %D:				-1.1

Total PCB Area Col1 (5.909 - 13.792) = 2584682 Col1 Total PCB = 0.5 ppm*

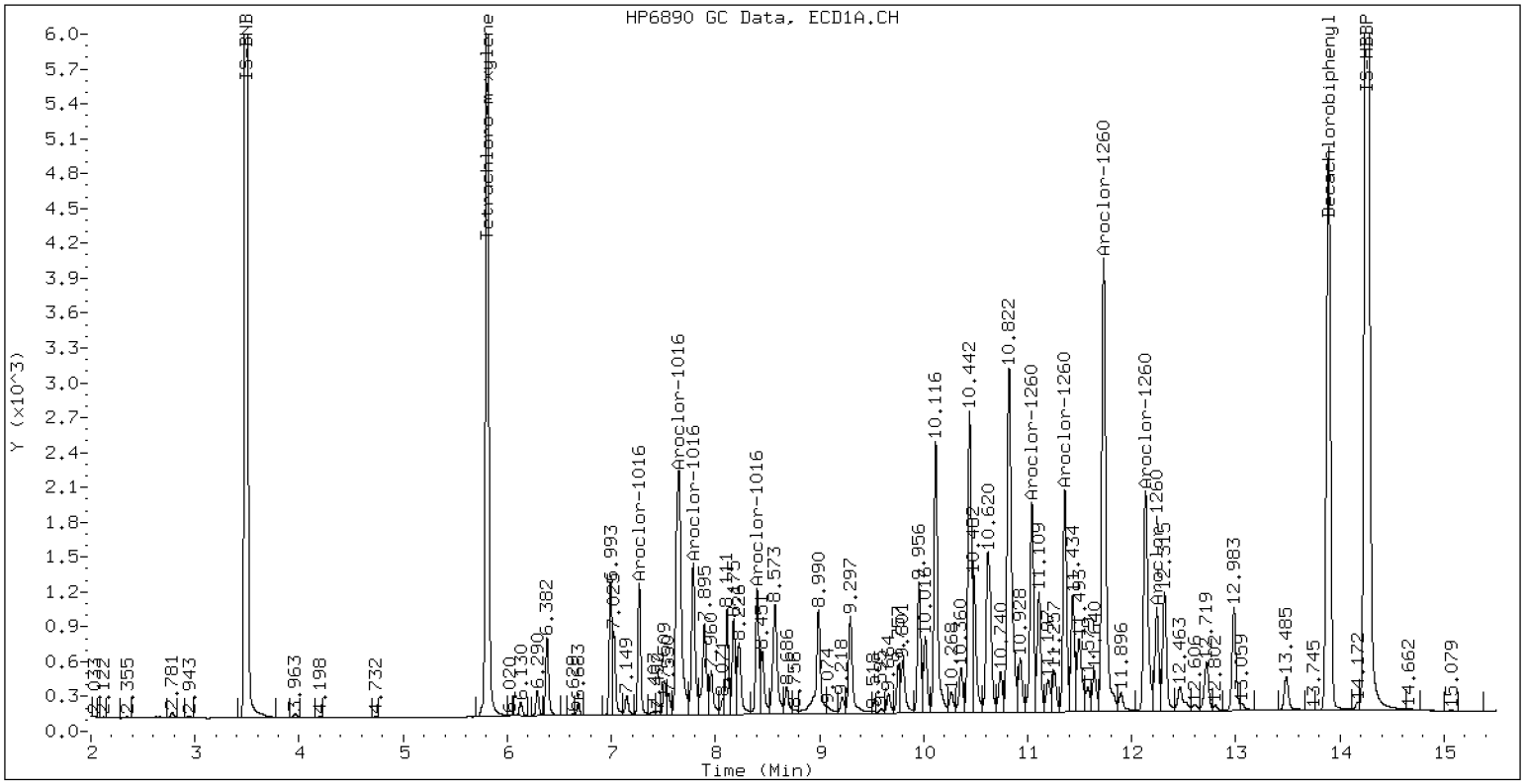
Total PCB Area Col2 (5.784 - 14.018) = 1790864 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

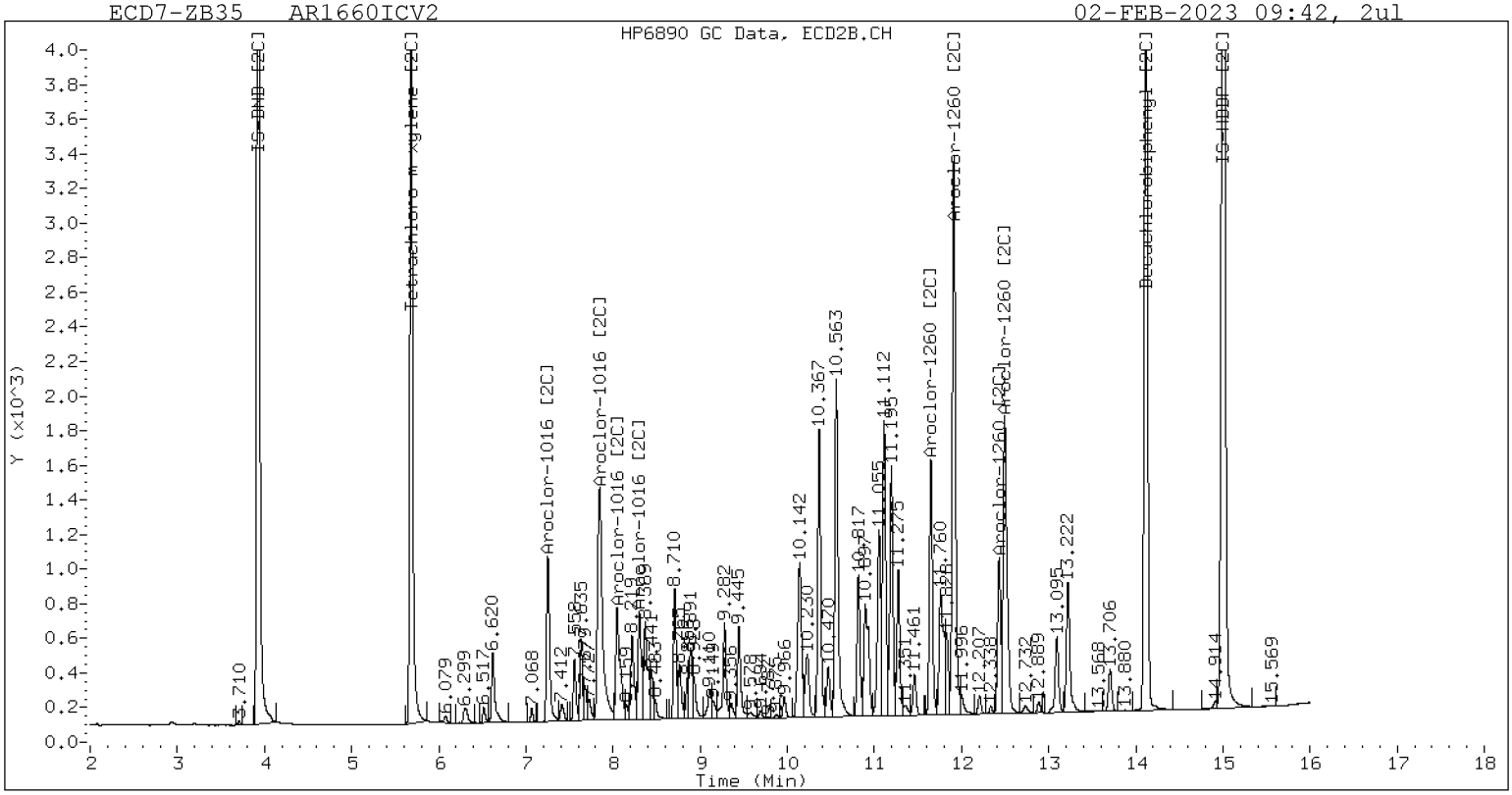
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660ICV2 02-FEB-2023 09:42, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660ICV2 02-FEB-2023 09:42, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	01242324ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLA0281	Injection Date:	01/24/23
Lab Sample ID:	SLA0281-SCV1	Injection Time:	19:51
Sequence Name:	AR1660SCV1		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	217	0.0506755	0.0439293		-13.2	+/-20
Aroclor 1016 [2C]	A	250.00	220	0.0519244	0.0458194		-11.9	+/-20
Aroclor 1260	A	250.00	211	0.0605224	0.0508252		-15.7	+/-20
Aroclor 1260 [2C]	A	250.00	238	0.0836545	0.0795027		-4.9	+/-20
Decachlorobiphenyl	A	40.000	37.9	0.8555994	0.8115673		-5.1	+/-20
Tetrachlorometaxylene	A	40.000	37.5	1.1307870	1.0610020		-6.2	+/-20
Decachlorobiphenyl [2C]	A	40.000	40.2	1.2696430	1.2773160		0.6	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.3	1.0814980	1.0082190		-6.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242324ECD7.D
Data file 2: /230124.b/230124.b/01242324ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 SCV
Client ID:
Injection Date: 24-JAN-2023 19:51
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	268739	5.686	-0.001	172961	37.5	37.3	0.6	Tetrachloro-m-xylene
13.891	-0.000	381489	14.121	0.001	320416	37.9	40.2	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	506576	0.6
Hexabromobiphenyl	647433	940129	45.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	343102	1.8
Hexabromobiphenyl	382032	501702	31.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	40958	217.6	1	7.255	0.001	40190	216.0
Aroclor-1016	2	7.655	0.004	135282	216.9	2	7.852	0.001	90338	221.5
Aroclor-1016	3	7.791	0.003	61557	214.5	3	8.052	0.002	37810	227.2
Aroclor-1016	4	8.406	0.002	40372	218.7	4	8.306	0.000	28171	215.9
Total Col1Ave (4 peaks):					216.9	Total Col2Ave (4 peaks):				220.2 RPD = 1
Corrected Ave (3 peaks):					216.3	Corrected Ave (3 peaks):				217.8 RPD = 1
Aroclor-1221	1	4.732	-0.001	256	6.8	1	---			0.0
Aroclor-1221	2	6.131	-0.002	4742	61.9	2	6.302	0.004	5037	91.4
Aroclor-1221	3	6.384	-0.000	27448	154.4	3	6.623	-0.000	18931	203.5
Total Col1Ave (3 peaks):					74.4	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.732	-0.001	256	11.0	1	---			0.0
Aroclor-1232	2	6.131	-0.002	4742	90.0	2	7.255	-0.001	40190	470.8
Aroclor-1232	3	7.655	-0.004	135282	513.5	3	7.852	-0.002	90338	519.5
Aroclor-1232	4	8.581	-0.003	56938	504.9	4	8.713	-0.001	27776	574.9
Total Col1Ave (4 peaks):					279.8	Total Col2Ave (3 peaks):				521.7 RPD = 60*
Corrected Ave (3 peaks):					202.0	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	-0.000	40958	264.0	1	7.255	-0.000	40190	267.8
Aroclor-1242	2	7.655	-0.001	135282	266.5	2	7.852	-0.001	90338	271.0
Aroclor-1242	3	8.406	-0.001	40372	267.7	3	9.115	-0.045	15827	151.6
Aroclor-1242	4	8.581	-0.000	56938	249.9	4	9.587	0.001	3186	23.0
Total Col1Ave (4 peaks):					262.0	Total Col2Ave (4 peaks):				178.4 RPD = 38
Corrected Ave (3 peaks):					260.1	Corrected Ave (3 peaks):				147.5 RPD = 55*
Aroclor-1248	1	8.406	0.000	40372	159.3	1	8.306	0.000	28171	181.6
Aroclor-1248	2	8.581	0.001	56938	176.1	2	8.713	0.000	27776	166.4
Aroclor-1248	3	8.995	-0.004	58213	94.1	3	9.115	-0.042	15827	77.6
Aroclor-1248	4	9.304	0.010	36620	119.6	4	9.587	0.006	3186	12.6
Total Col1Ave (4 peaks):					137.3	Total Col2Ave (4 peaks):				109.6 RPD = 22
Corrected Ave (3 peaks):					124.4	Corrected Ave (3 peaks):				85.5 RPD = 37
Aroclor-1254	1	9.304	0.005	36620	70.9	1	9.450	0.002	20792	83.5
Aroclor-1254	2	---			0.0	2	9.972	0.003	2640	13.1
Aroclor-1254	3	9.673	0.003	4075	12.3	3	10.148	0.027	52902	120.5
Aroclor-1254	4	9.813	0.004	14733	22.7	4	10.372	0.000	71680	163.3
Aroclor-1254	5	10.122	-0.055	119528	283.6	5	10.569	-0.000	98559	403.2
Total Col1Ave (4 peaks):					97.4	Total Col2Ave (5 peaks):				156.7 RPD = 47*
Corrected Ave (3 peaks):					35.3	Corrected Ave (4 peaks):				95.1 RPD = 92*
Aroclor-1260	1	11.045	0.002	116435	220.7	1	11.654	0.000	81795	226.0
Aroclor-1260	2	11.362	0.001	116918	215.6	2	11.920	0.002	217887	238.0
Aroclor-1260	3	11.738	0.003	303264	212.5	3	12.437	0.001	56212	246.3
Aroclor-1260	4	12.143	0.004	141534	191.9	4	12.502	0.000	142689	240.8
Aroclor-1260	5	12.246	0.002	68446	212.9	NS	---			----
Total Col1Ave (5 peaks):					210.7	Total Col2Ave (4 peaks):				237.8 RPD = 12
Corrected Ave (4 peaks):					208.2	Corrected Ave (3 peaks):				234.9 RPD = 12
Aroclor-1262	1	10.830	-0.002	169725	446.4	1	11.200	0.000	83995	171.1
Aroclor-1262	2	12.246	0.000	68446	114.1	2	11.654	0.001	81795	195.9
Aroclor-1262	3	12.320	-0.000	84201	129.2	3	12.437	0.003	56212	126.4
Aroclor-1262	4	12.989	-0.000	78065	131.5	4	12.502	-0.001	142689	200.4
Total Col1Ave (4 peaks):					205.3	Total Col2Ave (4 peaks):				173.4 RPD = 17
Corrected Ave (3 peaks):					124.9	Corrected Ave (3 peaks):				164.5 RPD = 27
Aroclor-1268	1	12.246	0.001	68446	44.1	1	12.437	0.003	56212	48.0
Aroclor-1268	2	12.320	0.002	84201	54.4	2	12.502	0.001	142689	114.4
Aroclor-1268	3	12.726	0.027	33020	25.7	3	12.894	0.001	1495	1.4
Aroclor-1268	4	13.490	0.001	16019	4.2	4	13.709	0.001	10120	3.2
Total Col1Ave (4 peaks):					32.1	Total Col2Ave (4 peaks):				41.8 RPD = 26
Corrected Ave (3 peaks):					24.7	Corrected Ave (3 peaks):				17.5 RPD = 34

Total PCB Area Col1 (5.909 - 13.792) = 2789370 Col1 Total PCB = 0.5 ppm*

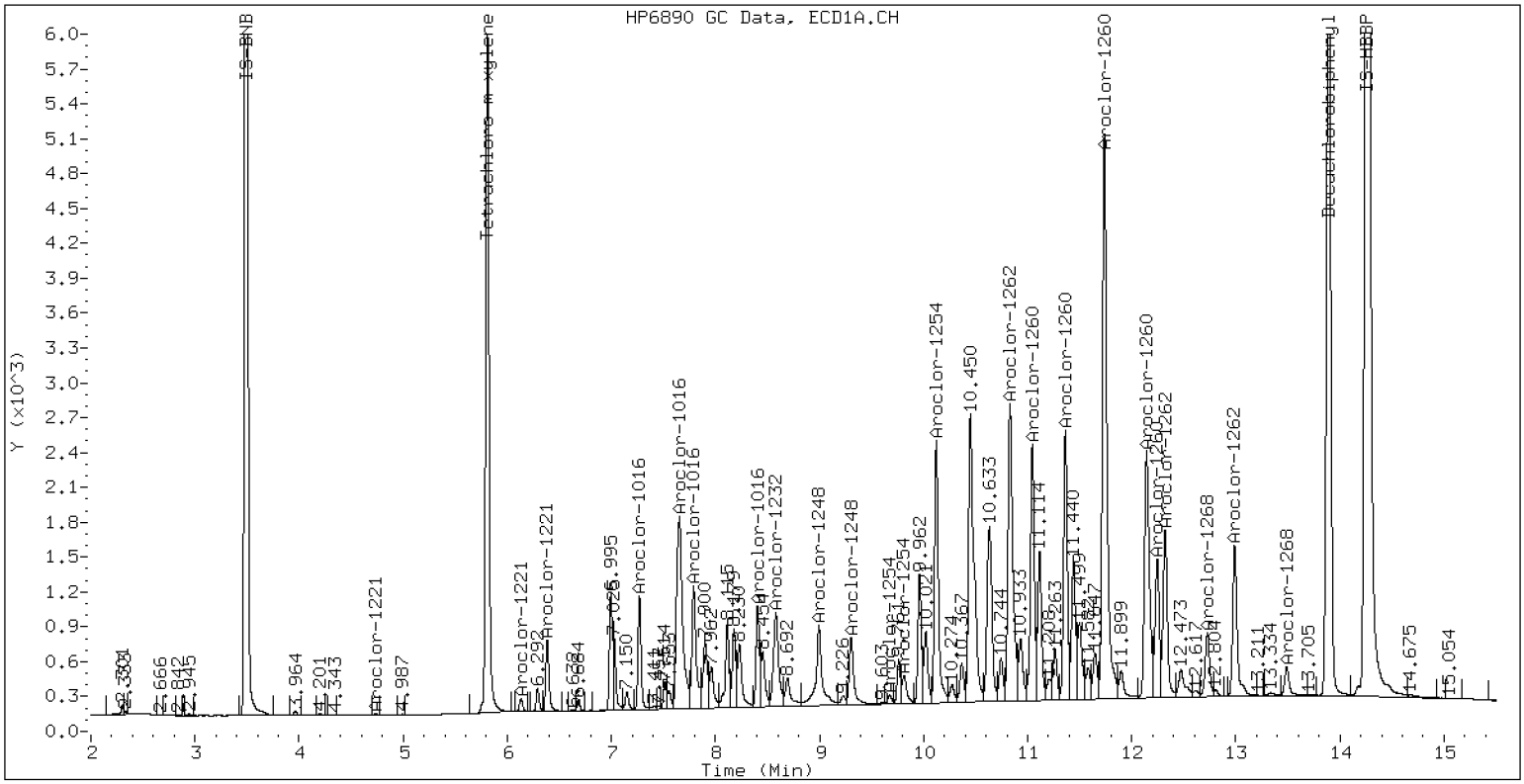
Total PCB Area Col2 (5.787 - 14.020) = 1810543 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

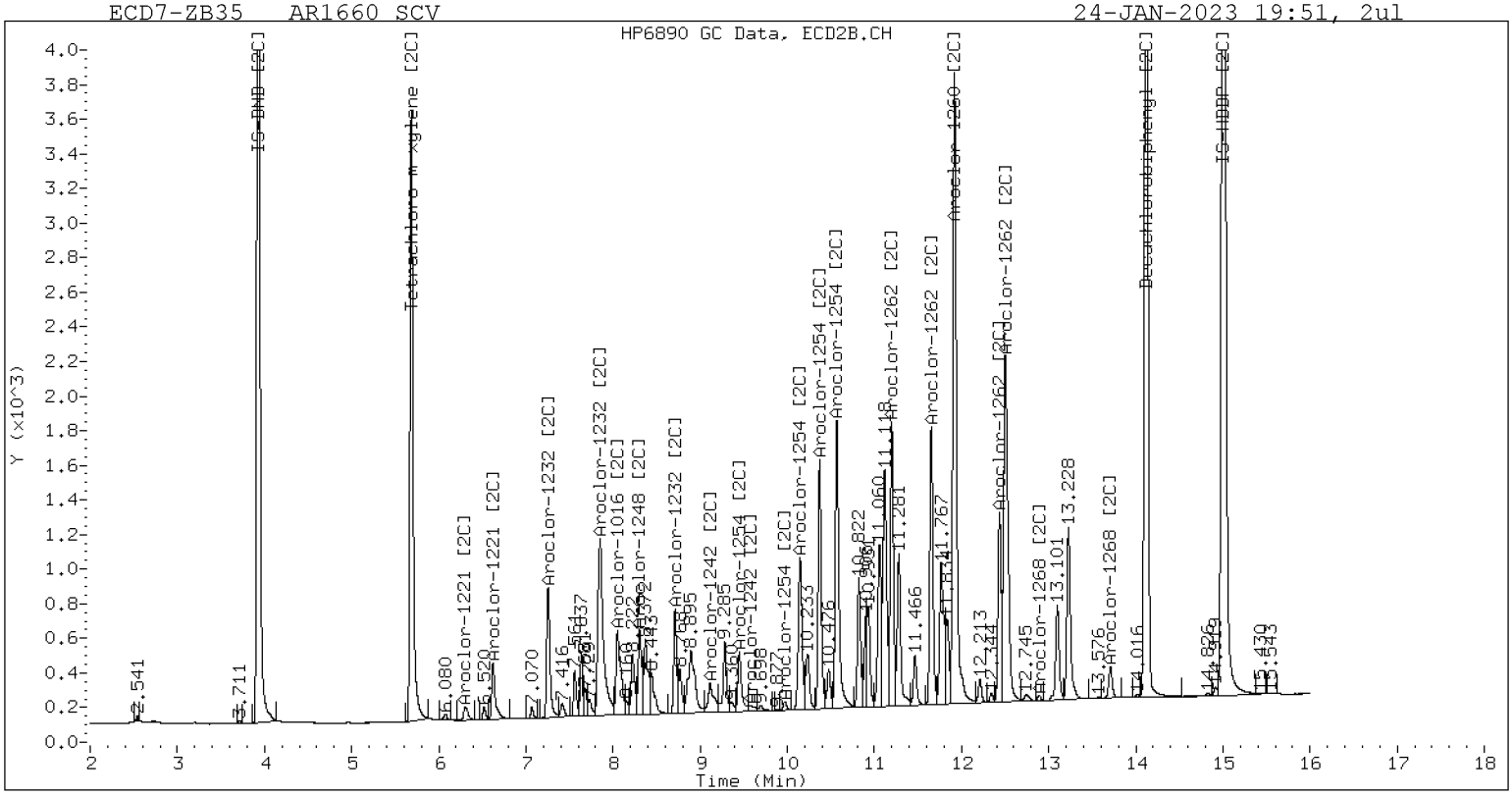
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660 SCV 24-JAN-2023 19:51, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660 SCV 24-JAN-2023 19:51, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	01242325ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLA0281	Injection Date:	01/24/23
Lab Sample ID:	SLA0281-SCV2	Injection Time:	20:12
Sequence Name:	AR1242SCV2		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	223	0.0411165	0.0365437		-10.9	+/-20
Aroclor 1242 [2C]	A	250.00	235	0.0423236	0.0386405		-5.9	+/-20
Decachlorobiphenyl	A	40.000	38.5	0.8555994	0.8244733		-3.6	+/-20
Tetrachlorometaxylene	A	40.000	37.8	1.1307870	1.0677240		-5.6	+/-20
Decachlorobiphenyl [2C]	A	40.000	40.3	1.2696430	1.2804690		0.9	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.4	1.0814980	1.0101840		-6.6	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242325ECD7.D
Data file 2: /230124.b/230124.b/01242325ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242 SCV
Client ID:
Injection Date: 24-JAN-2023 20:12
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	268580	5.686	-0.001	172592	37.8	37.4	1.1	Tetrachloro-m-xylene
13.892	0.001	392918	14.121	0.001	323869	38.5	40.3	4.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503089	-0.0
Hexabromobiphenyl	647433	953137	47.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	341704	1.4
Hexabromobiphenyl	382032	505860	32.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	29901	159.9	1	7.255	0.000	32077	173.1
Aroclor-1016	2	7.653	0.003	107333	173.3	2	7.851	-0.000	71438	175.9
Aroclor-1016	3	7.790	0.002	45013	157.9	3	8.051	0.001	29072	175.4
Aroclor-1016	4	8.406	0.002	32958	179.8	4	8.306	0.001	21761	167.5
Total Col1Ave (4 peaks):					167.7	Total Col2Ave (4 peaks):				173.0 RPD = 3
Corrected Ave (3 peaks):					163.7	Corrected Ave (3 peaks):				172.0 RPD = 5
Aroclor-1221	1	4.737	0.004	141	3.8	1	---			0.0
Aroclor-1221	2	6.133	-0.001	3649	48.0	2	6.317	0.018	4290	78.2
Aroclor-1221	3	6.384	-0.000	21189	120.0	3	6.624	0.001	14613	157.7
Total Col1Ave (3 peaks):					57.3	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.737	0.003	141	6.1	1	---			0.0
Aroclor-1232	2	6.133	-0.001	3649	69.7	2	7.255	-0.002	32077	377.3
Aroclor-1232	3	7.653	-0.005	107333	410.2	3	7.851	-0.004	71438	412.5
Aroclor-1232	4	8.581	-0.003	59617	532.3	4	8.713	-0.000	22563	468.9
Total Col1Ave (4 peaks):					254.6	Total Col2Ave (3 peaks):				419.6 RPD = 49*
Corrected Ave (3 peaks):					162.0	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	29901	194.1	1	7.255	-0.001	32077	214.6
Aroclor-1242	2	7.653	-0.002	107333	212.9	2	7.851	-0.002	71438	215.2
Aroclor-1242	3	8.406	-0.000	32958	220.0	3	9.156	-0.004	27374	263.3
Aroclor-1242	4	8.581	-0.000	59617	263.5	4	9.581	-0.006	34156	247.9
Total Col1Ave (4 peaks):					222.6	Total Col2Ave (4 peaks):				235.3 RPD = 6
Corrected Ave (3 peaks):					209.0	Corrected Ave (3 peaks):				225.9 RPD = 8
Aroclor-1248	1	8.406	0.001	32958	131.0	1	8.306	0.001	21761	140.9
Aroclor-1248	2	8.581	0.001	59617	185.7	2	8.713	0.001	22563	135.7
Aroclor-1248	3	9.003	0.004	72557	118.2	3	9.156	-0.000	27374	134.7
Aroclor-1248	4	9.296	0.003	28122	92.5	4	9.581	-0.001	34156	135.9
Total Col1Ave (4 peaks):					131.8	Total Col2Ave (4 peaks):				136.8 RPD = 4
Corrected Ave (3 peaks):					113.9	Corrected Ave (3 peaks):				135.5 RPD = 17
Aroclor-1254	1	9.296	-0.002	28122	54.8	1	9.448	0.000	11650	47.0
Aroclor-1254	2	9.380	0.002	9292	42.4	2	9.968	-0.001	7642	38.1
Aroclor-1254	3	9.671	0.001	12871	39.2	3	10.120	-0.001	16012	36.6
Aroclor-1254	4	9.808	-0.000	22113	34.4	4	10.378	0.007	16300	37.3
Aroclor-1254	5	10.176	-0.001	17771	42.5	5	10.572	0.004	4439	18.2
Total Col1Ave (5 peaks):					42.7	Total Col2Ave (5 peaks):				35.5 RPD = 18
Corrected Ave (4 peaks):					39.6	Corrected Ave (4 peaks):				32.6 RPD = 19
Aroclor-1260	1	11.047	0.003	741	1.4	1	11.663	0.010	1794	4.9
Aroclor-1260	2	11.366	0.006	379	0.7	2	11.923	0.005	1208	1.3
Aroclor-1260	3	11.745	0.011	860	0.6	3	12.507	0.071	977	4.2
Aroclor-1260	4	12.154	0.014	1536	2.1	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
Total Col1Ave (4 peaks):					1.2	Total Col2Ave (3 peaks):				3.5 RPD = 99*
Corrected Ave (3 peaks):					0.9	Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.836	0.004	10654	27.6	1	11.120	-0.080	8071	16.3
Aroclor-1262	2	12.154	-0.092	1536	2.5	2	11.663	0.010	1794	4.3
Aroclor-1262	3	---			0.0	3	12.507	0.073	977	2.2
Aroclor-1262	4	13.040	0.051	1739	2.9	4	---			0.0
Total Col1Ave (3 peaks):					11.0	Total Col2Ave (3 peaks):				7.6 RPD = 37
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.154	-0.091	1536	1.0	1	12.507	0.073	977	0.8
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.623	-0.076	5080	3.9	3	12.894	0.001	98	0.1
Aroclor-1268	4	13.501	0.012	2725	0.7	4	13.707	-0.001	1566	0.5
Total Col1Ave (3 peaks):					1.9	Total Col2Ave (3 peaks):				0.5 RPD = 120*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 915887 Col1 Total PCB = 0.2 ppm*

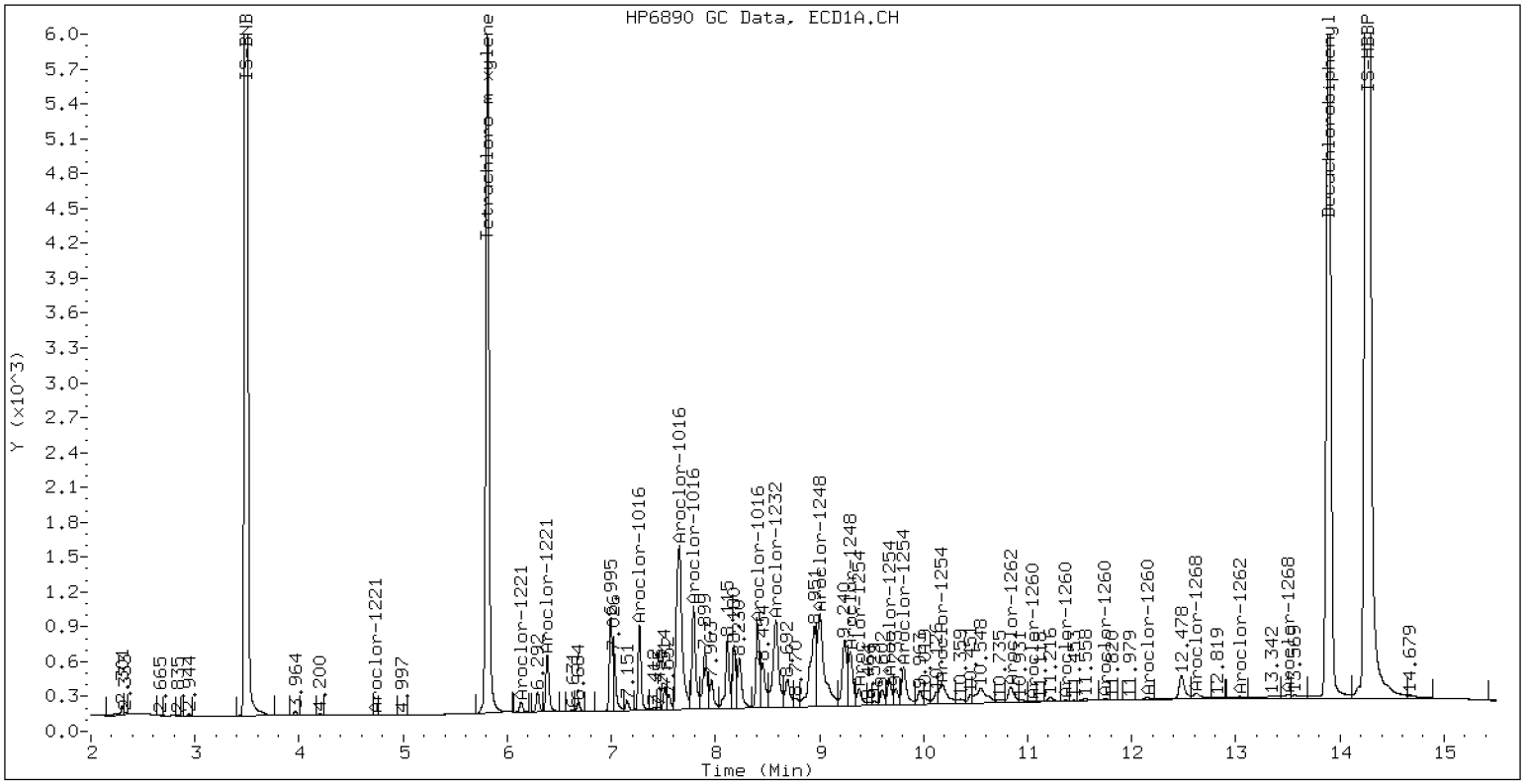
Total PCB Area Col2 (5.787 - 14.020) = 575897 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

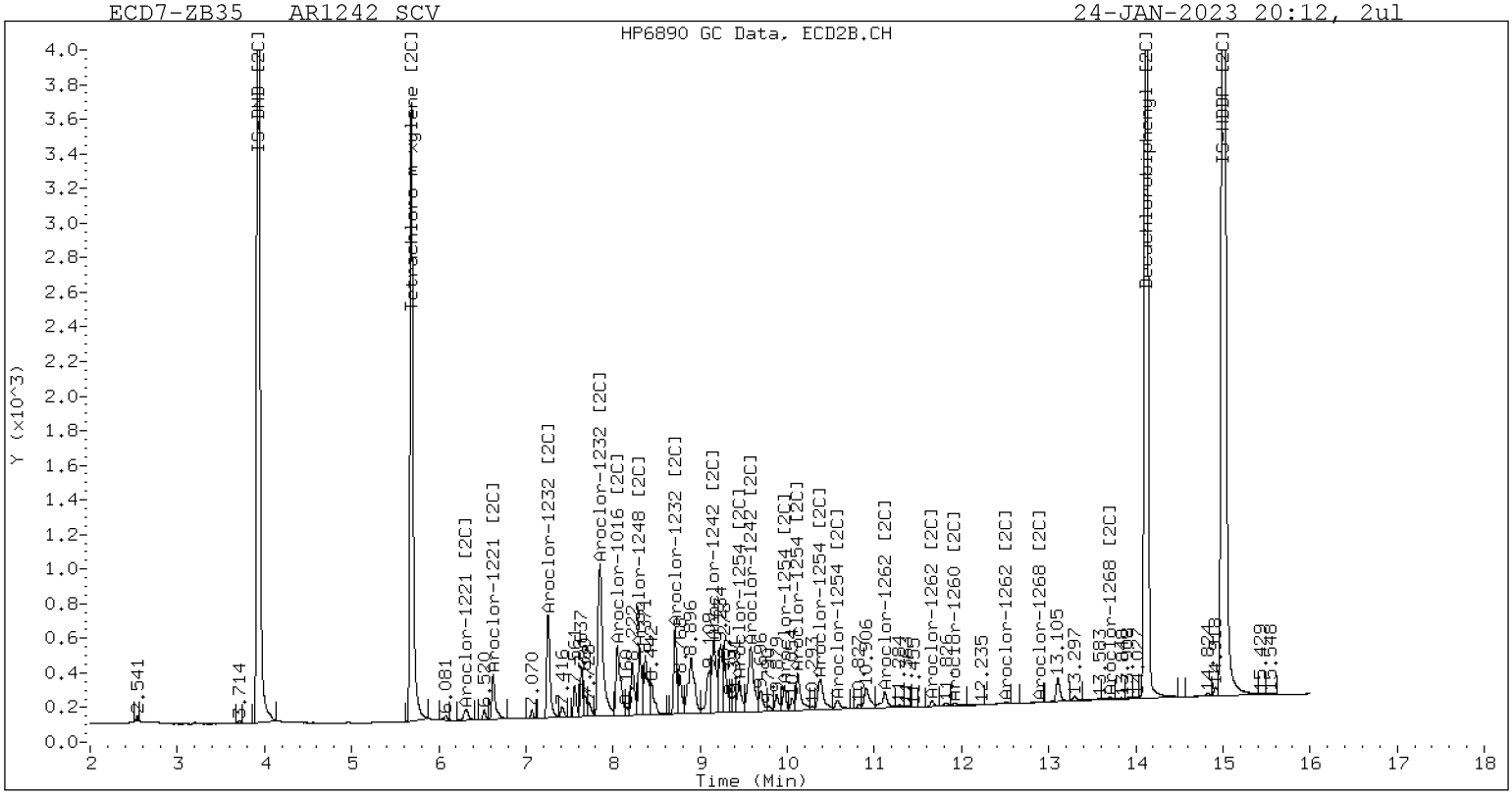
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242 SCV 24-JAN-2023 20:12, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242 SCV 24-JAN-2023 20:12, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	01242326ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLA0281	Injection Date:	01/24/23
Lab Sample ID:	SLA0281-SCV3	Injection Time:	20:33
Sequence Name:	AR1248SCV3		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	237	0.0592639	0.0563710		-5.1	+/-20
Aroclor 1248 [2C]	A	250.00	231	0.0453673	0.0417577		-7.6	+/-20
Decachlorobiphenyl	A	40.000	38.3	0.8555994	0.8184425		-4.3	+/-20
Tetrachlorometaxylene	A	40.000	36.8	1.1307870	1.0389130		-8.1	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.6	1.2696430	1.2561970		-1.1	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.5	1.0814980	0.9880182		-8.6	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242326ECD7.D
Data file 2: /230124.b/230124.b/01242326ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248 SCV
Client ID:
Injection Date: 24-JAN-2023 20:33
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	263982	5.686	-0.001	169991	36.8	36.5	0.6	Tetrachloro-m-xylene
13.892	0.001	400655	14.121	0.001	316171	38.3	39.6	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	508189	1.0
Hexabromobiphenyl	647433	979067	51.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	344105	2.1
Hexabromobiphenyl	382032	503378	31.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	14777	78.3	1	7.254	-0.001	16100	86.3
Aroclor-1016	2	7.655	0.004	70114	112.1	2	7.853	0.002	47184	115.4
Aroclor-1016	3	7.794	0.006	27212	94.5	3	8.053	0.003	9427	56.5
Aroclor-1016	4	8.406	0.003	59884	323.4	4	8.306	0.001	36680	280.3
Total Col1Ave (4 peaks):					152.0	Total Col2Ave (4 peaks):				134.6 RPD = 12
Corrected Ave (3 peaks):					94.9	Corrected Ave (3 peaks):				86.0 RPD = 10
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.133	-0.000	591	7.7	2	6.323	0.025	1820	32.9
Aroclor-1221	3	6.386	0.001	2453	13.8	3	6.627	0.004	1477	15.8
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.133	-0.000	591	11.2	2	7.254	-0.002	16100	188.0
Aroclor-1232	3	7.655	-0.004	70114	265.3	3	7.853	-0.001	47184	270.6
Aroclor-1232	4	8.581	-0.003	76286	674.3	4	8.714	0.000	39330	811.7
Total Col1Ave (3 peaks):					316.9	Total Col2Ave (3 peaks):				423.4 RPD = 29
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	14777	95.0	1	7.254	-0.002	16100	107.0
Aroclor-1242	2	7.655	-0.001	70114	137.7	2	7.853	0.000	47184	141.2
Aroclor-1242	3	8.406	-0.000	59884	395.8	3	9.159	-0.001	46988	448.9
Aroclor-1242	4	8.581	-0.000	76286	333.8	4	9.584	-0.003	56615	408.1
Total Col1Ave (4 peaks):					240.5	Total Col2Ave (4 peaks):				276.3 RPD = 14
Corrected Ave (3 peaks):					188.8	Corrected Ave (3 peaks):				218.7 RPD = 15
Aroclor-1248	1	8.406	0.001	59884	235.6	1	8.306	0.001	36680	235.8
Aroclor-1248	2	8.581	0.001	76286	235.2	2	8.714	0.002	39330	234.9
Aroclor-1248	3	9.000	0.001	148805	239.9	3	9.159	0.003	46988	229.7
Aroclor-1248	4	9.295	0.001	73114	238.1	4	9.584	0.002	56615	223.8
Total Col1Ave (4 peaks):					237.2	Total Col2Ave (4 peaks):				231.0 RPD = 3
Corrected Ave (3 peaks):					236.3	Corrected Ave (3 peaks):				229.5 RPD = 3
Aroclor-1254	1	9.295	-0.004	73114	141.2	1	9.449	0.001	20314	81.4
Aroclor-1254	2	9.378	0.000	36561	165.3	2	9.970	0.000	18678	92.6
Aroclor-1254	3	9.672	0.003	30736	92.6	3	10.124	0.003	35321	80.2
Aroclor-1254	4	9.813	0.004	53537	82.3	4	10.387	0.015	35188	79.9
Aroclor-1254	5	10.192	0.015	40119	94.9	5	10.575	0.006	7386	30.1
Total Col1Ave (5 peaks):					115.3	Total Col2Ave (5 peaks):				72.9 RPD = 45*
Corrected Ave (4 peaks):					102.7	Corrected Ave (4 peaks):				67.9 RPD = 41*
Aroclor-1260	1	11.054	0.010	1868	3.4	1	11.664	0.011	2055	5.7
Aroclor-1260	2	11.366	0.005	1375	2.4	2	11.926	0.009	1303	1.4
Aroclor-1260	3	11.745	0.010	2137	1.4	3	12.439	0.003	395	1.7
Aroclor-1260	4	12.147	0.008	1650	2.1	4	12.507	0.005	890	1.5
Aroclor-1260	5	12.255	0.011	558	1.7	NS	---			----
Total Col1Ave (5 peaks):					2.2	Total Col2Ave (4 peaks):				2.6 RPD = 15
Corrected Ave (4 peaks):					1.9	Corrected Ave (3 peaks):				1.5 RPD = 22
Aroclor-1262	1	10.837	0.005	12736	32.2	1	11.122	-0.078	7136	14.5
Aroclor-1262	2	12.255	0.010	558	0.9	2	11.664	0.011	2055	4.9
Aroclor-1262	3	12.327	0.006	596	0.9	3	12.439	0.004	395	0.9
Aroclor-1262	4	12.996	0.007	1113	1.8	4	12.507	0.003	890	1.2
Total Col1Ave (4 peaks):					8.9	Total Col2Ave (4 peaks):				5.4 RPD = 50*
Corrected Ave (3 peaks):					1.2	Corrected Ave (3 peaks):				2.3 RPD = 65*
Aroclor-1268	1	12.255	0.010	558	0.3	1	12.439	0.005	395	0.3
Aroclor-1268	2	12.327	0.009	596	0.4	2	12.507	0.005	890	0.7
Aroclor-1268	3	12.706	0.007	1161	0.9	3	12.896	0.003	166	0.2
Aroclor-1268	4	13.504	0.016	3330	0.8	4	13.717	0.009	469	0.1
Total Col1Ave (4 peaks):					0.6	Total Col2Ave (4 peaks):				0.3 RPD = 57*
Corrected Ave (3 peaks):					0.5	Corrected Ave (3 peaks):				0.2 RPD = 83*

Total PCB Area Col1 (5.909 - 13.792) = 1230760 Col1 Total PCB = 0.2 ppm*

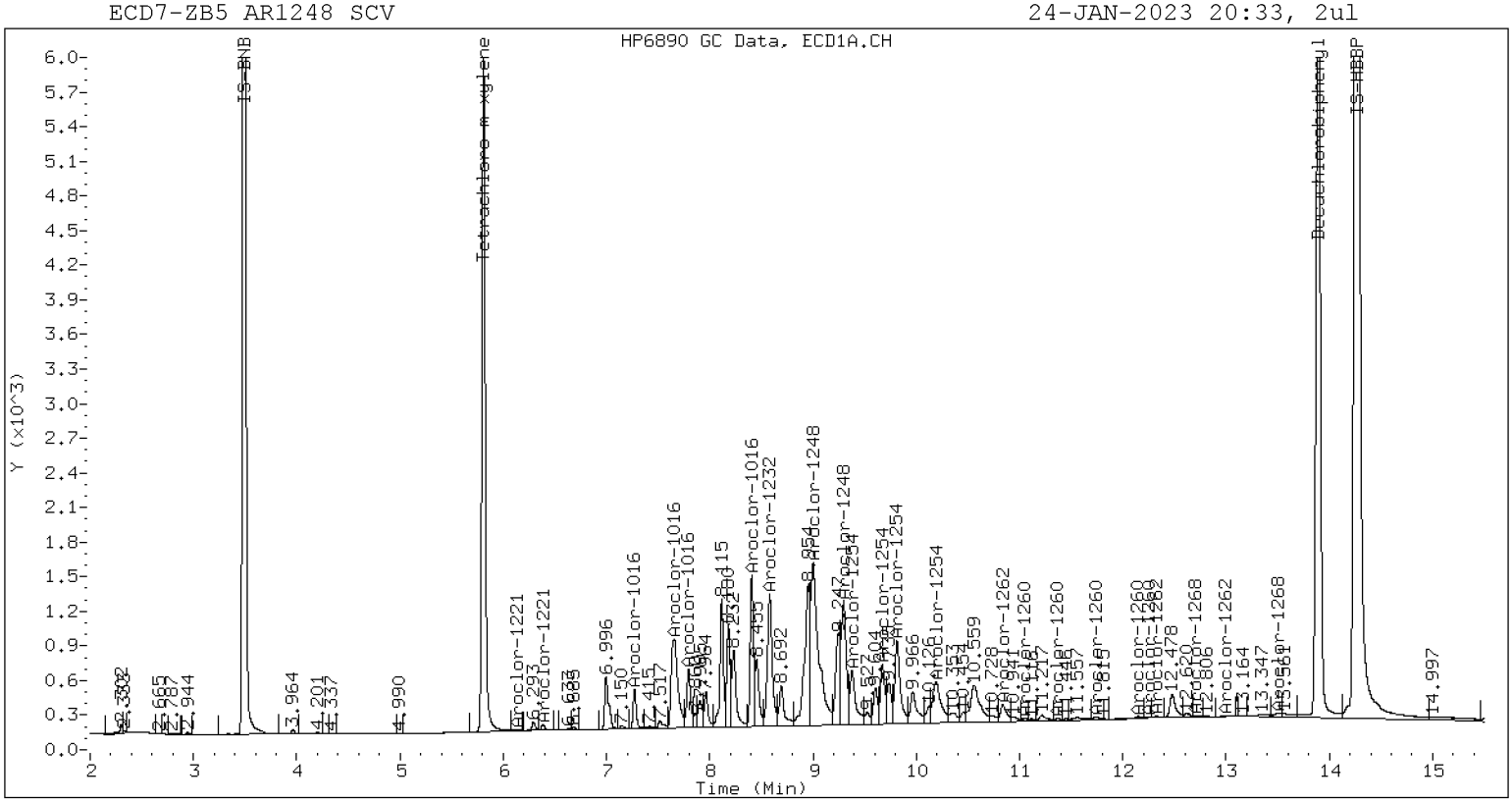
Total PCB Area Col2 (5.787 - 14.020) = 742749 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

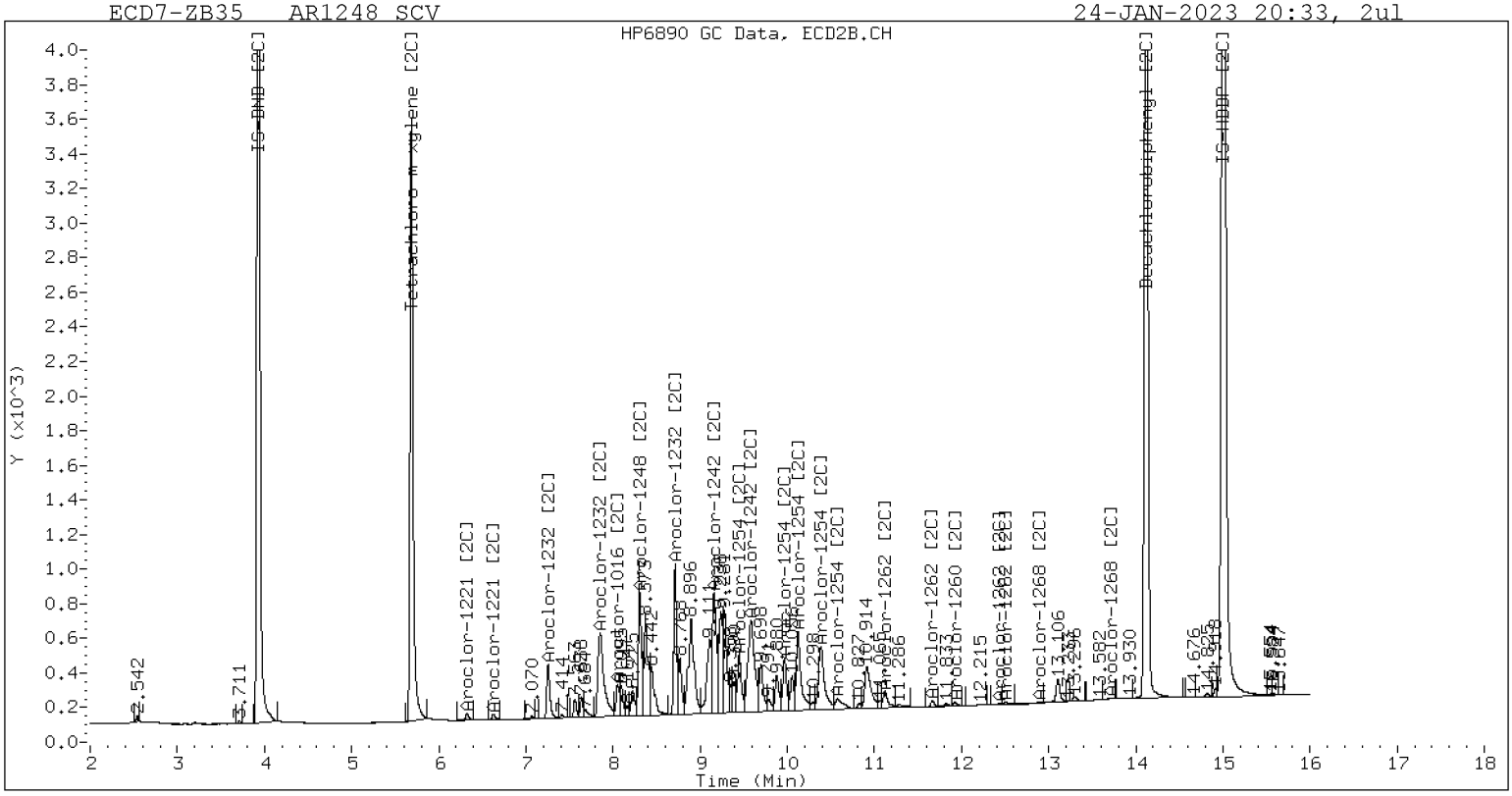
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248 SCV 24-JAN-2023 20:33, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248 SCV 24-JAN-2023 20:33, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	01242327ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLA0281	Injection Date:	01/24/23
Lab Sample ID:	SLA0281-SCV4	Injection Time:	20:54
Sequence Name:	AR1254SCV4		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1254	A	250.00	221	0.0675033	0.0594048		-11.7	+/-20
Aroclor 1254 [2C]	A	250.00	227	0.0733219	0.0662023		-9.4	+/-20
Decachlorobiphenyl	A	40.000	37.1	0.8555994	0.7930764		-7.3	+/-20
Tetrachlorometaxylene	A	40.000	36.7	1.1307870	1.0364220		-8.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.5	1.2696430	1.2551640		-1.1	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.6	1.0814980	0.9904044		-8.4	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242327ECD7.D
Data file 2: /230124.b/230124.b/01242327ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254 SCV
Client ID:
Injection Date: 24-JAN-2023 20:54
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	261398	5.686	-0.001	169839	36.7	36.6	0.1	Tetrachloro-m-xylene
13.892	0.001	383983	14.121	0.001	323233	37.1	39.5	6.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	504424	0.2
Hexabromobiphenyl	647433	968338	49.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	342969	1.8
Hexabromobiphenyl	382032	515045	34.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.273	0.003	320	1.7	1	7.258	0.003	332	1.8
Aroclor-1016	2	7.658	0.008	991	1.6	2	---			0.0
Aroclor-1016	3	7.795	0.007	662	2.3	3	8.097	0.047	515	3.1
Aroclor-1016	4	8.408	0.005	21378	116.3	4	8.307	0.002	20446	156.8
	Total Col1Ave (4 peaks):				30.5	Total Col2Ave (3 peaks):				53.9 RPD = 55*
	Corrected Ave (3 peaks):				1.9	Corrected Ave: < 3 Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.325	0.026	1749	31.7
Aroclor-1221	3	---			0.0	3	6.633	0.011	321	3.5
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	7.258	0.001	332	3.9
Aroclor-1232	3	7.658	-0.000	991	3.8	3	---			0.0
Aroclor-1232	4	8.587	0.003	8887	79.1	4	8.715	0.001	14030	290.5
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	7.273	0.002	320	2.1	1	7.258	0.002	332	2.2
Aroclor-1242	2	7.658	0.003	991	2.0	2	---			0.0
Aroclor-1242	3	8.408	0.002	21378	142.3	3	9.164	0.004	26593	254.9
Aroclor-1242	4	8.587	0.006	8887	39.2	4	9.543	-0.043	34385	248.7
	Total Col1Ave (4 peaks):				46.4	Total Col2Ave (3 peaks):				168.6 RPD = 114*
	Corrected Ave (3 peaks):				14.4	Corrected Ave: < 3 Peaks				
Aroclor-1248	1	8.408	0.003	21378	84.7	1	8.307	0.001	20446	131.9
Aroclor-1248	2	8.587	0.007	8887	27.6	2	8.715	0.003	14030	84.1
Aroclor-1248	3	8.995	-0.004	110289	179.1	3	9.164	0.007	26593	130.4
Aroclor-1248	4	9.300	0.007	113143	371.2	4	9.543	-0.038	34385	136.4
	Total Col1Ave (4 peaks):				165.7	Total Col2Ave (4 peaks):				120.7 RPD = 31
	Corrected Ave (3 peaks):				97.2	Corrected Ave (3 peaks):				115.5 RPD = 17
Aroclor-1254	1	9.300	0.002	113143	220.1	1	9.449	0.001	56453	226.9
Aroclor-1254	2	9.379	0.001	49468	225.4	2	9.970	0.001	45325	225.4
Aroclor-1254	3	9.671	0.002	72811	221.0	3	10.122	0.002	97044	221.2
Aroclor-1254	4	9.811	0.002	140530	217.7	4	10.374	0.002	98778	225.2
Aroclor-1254	5	10.182	0.005	92254	219.8	5	10.570	0.001	57171	234.0
	Total Col1Ave (5 peaks):				220.8	Total Col2Ave (5 peaks):				226.5 RPD = 3
	Corrected Ave (4 peaks):				219.7	Corrected Ave (4 peaks):				224.7 RPD = 2
Aroclor-1260	1	11.045	0.002	8960	16.5	1	11.661	0.008	26985	72.6
Aroclor-1260	2	11.364	0.004	9237	16.5	2	11.923	0.006	19882	21.2
Aroclor-1260	3	11.741	0.007	21268	14.5	3	12.505	0.069	13190	56.3
Aroclor-1260	4	12.146	0.007	19041	25.1	4	---			0.0
Aroclor-1260	5	12.321	0.077	1835	5.5	NS	---			----
	Total Col1Ave (5 peaks):				15.6	Total Col2Ave (3 peaks):				50.0 RPD = 105*
	Corrected Ave (4 peaks):				13.3	Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.832	0.000	157590	402.4	1	11.119	-0.081	92414	183.3
Aroclor-1262	2	12.321	0.075	1835	3.0	2	11.661	0.008	26985	63.0
Aroclor-1262	3	---			0.0	3	12.505	0.071	13190	28.9
Aroclor-1262	4	12.995	0.006	843	1.4	4	---			0.0
	Total Col1Ave (3 peaks):				135.6	Total Col2Ave (3 peaks):				91.7 RPD = 39
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.321	0.076	1835	1.1	1	12.505	0.072	13190	11.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.720	0.021	1314	1.0	3	12.891	-0.002	169	0.2
Aroclor-1268	4	13.504	0.016	1169	0.3	4	13.706	-0.002	1132	0.3
	Total Col1Ave (3 peaks):				0.8	Total Col2Ave (3 peaks):				3.8 RPD = 130*
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 1507519 Col1 Total PCB = 0.3 ppm*

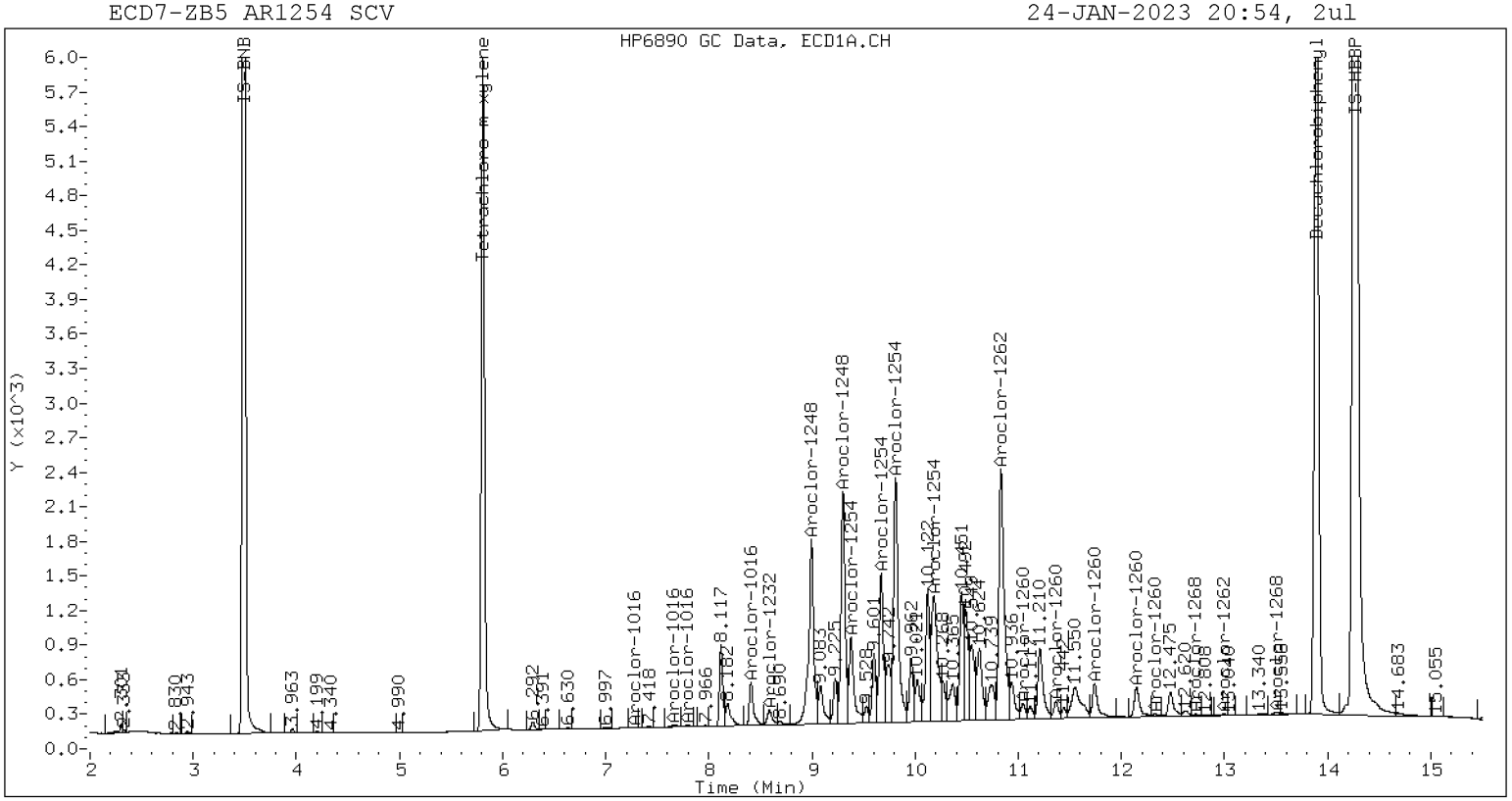
Total PCB Area Col2 (5.787 - 14.020) = 951047 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

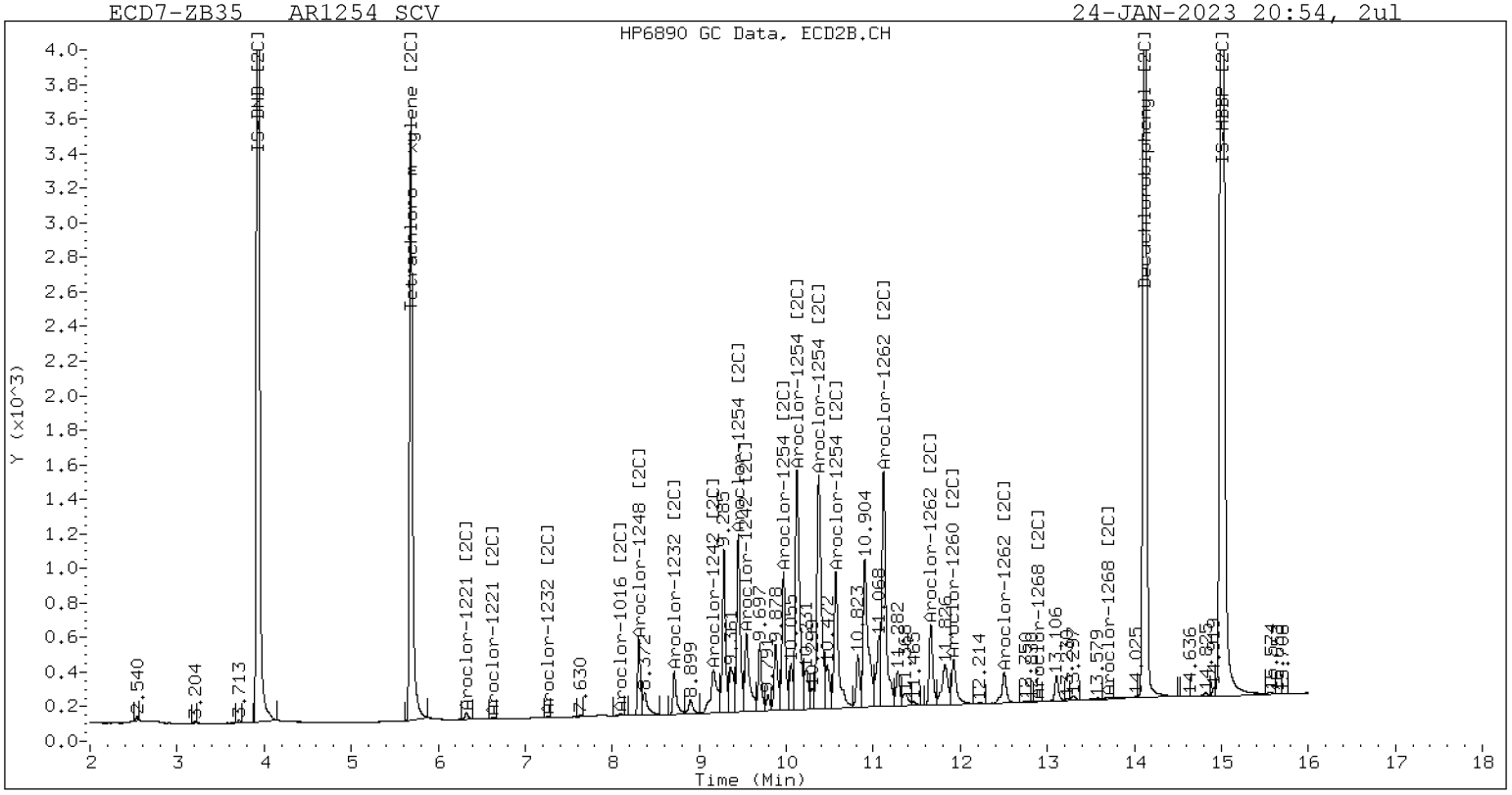
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254 SCV 24-JAN-2023 20:54, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254 SCV 24-JAN-2023 20:54, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	01242328ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLA0281	Injection Date:	01/24/23
Lab Sample ID:	SLA0281-SCV5	Injection Time:	21:15
Sequence Name:	AR2162SCV5		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1221	A	250.00	228	0.0153579	0.0138791		-8.8	+/-20
Aroclor 1221 [2C]	A	250.00	239	0.0134687	0.0127460		-4.5	+/-20
Decachlorobiphenyl	A	40.000	37.5	0.8555994	0.8010750		-6.4	+/-20
Tetrachlorometaxylene	A	40.000	37.3	1.1307870	1.0541060		-6.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.5	1.2696430	1.2528610		-1.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.2	1.0814980	1.0047210		-7.1	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242328ECD7.D
Data file 2: /230124.b/230124.b/01242328ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162 SCV
Client ID:
Injection Date: 24-JAN-2023 21:15
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	265357	5.685	-0.001	170984	37.3	37.2	0.3	Tetrachloro-m-xylene
13.891	-0.001	397332	14.119	-0.001	326981	37.5	39.5	5.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503473	0.0
Hexabromobiphenyl	647433	991997	53.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	340361	1.0
Hexabromobiphenyl	382032	521975	36.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	5326	28.5	1	7.257	0.002	6708	36.3
Aroclor-1016	2	7.664	0.013	11965	19.3	2	7.856	0.005	7233	17.9
Aroclor-1016	3	7.797	0.009	6015	21.1	3	8.058	0.008	2997	18.2
Aroclor-1016	4	8.410	0.006	3771	20.6	4	8.308	0.002	2065	16.0
Total Col1Ave (4 peaks):					22.4	Total Col2Ave (4 peaks):				22.1 RPD = 1
Corrected Ave (3 peaks):					20.3	Corrected Ave (3 peaks):				17.3 RPD = 16
Aroclor-1221	1	4.732	-0.000	9097	244.5	1	4.959	-0.000	6157	246.8
Aroclor-1221	2	6.133	-0.000	16114	211.8	2	6.297	-0.001	12807	234.2
Aroclor-1221	3	6.384	0.000	40299	228.1	3	6.622	-0.000	21707	235.2
Total Col1Ave (3 peaks):					228.1	Total Col2Ave (3 peaks):				238.7 RPD = 5
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.732	-0.001	9097	391.6	1	4.959	-0.001	6157	406.9
Aroclor-1232	2	6.133	0.000	16114	307.8	2	7.257	0.000	6708	79.2
Aroclor-1232	3	7.664	0.005	11965	45.7	3	7.856	0.001	7233	41.9
Aroclor-1232	4	8.589	0.004	2837	25.3	4	8.716	0.002	1869	39.0
Total Col1Ave (4 peaks):					192.6	Total Col2Ave (4 peaks):				141.7 RPD = 30
Corrected Ave (3 peaks):					126.3	Corrected Ave (3 peaks):				53.4 RPD = 81*
Aroclor-1242	1	7.272	0.001	5326	34.5	1	7.257	0.001	6708	45.1
Aroclor-1242	2	7.664	0.008	11965	23.7	2	7.856	0.003	7233	21.9
Aroclor-1242	3	8.410	0.004	3771	25.2	3	9.169	0.009	1956	18.9
Aroclor-1242	4	8.589	0.007	2837	12.5	4	9.544	-0.043	5978	43.6
Total Col1Ave (4 peaks):					24.0	Total Col2Ave (4 peaks):				32.3 RPD = 30
Corrected Ave (3 peaks):					20.5	Corrected Ave (3 peaks):				28.1 RPD = 31
Aroclor-1248	1	8.410	0.005	3771	15.0	1	8.308	0.002	2065	13.4
Aroclor-1248	2	8.589	0.008	2837	8.8	2	8.716	0.004	1869	11.3
Aroclor-1248	3	8.997	-0.002	36022	58.6	3	9.169	0.012	1956	9.7
Aroclor-1248	4	9.305	0.011	30853	101.4	4	9.544	-0.038	5978	23.9
Total Col1Ave (4 peaks):					46.0	Total Col2Ave (4 peaks):				14.6 RPD = 104*
Corrected Ave (3 peaks):					27.5	Corrected Ave (3 peaks):				11.5 RPD = 82*
Aroclor-1254	1	9.305	0.006	30853	60.1	1	9.451	0.003	17617	71.3
Aroclor-1254	2	9.376	-0.002	5370	24.5	2	9.970	0.001	2849	14.3
Aroclor-1254	3	9.673	0.003	5543	16.9	3	10.146	0.026	88151	202.5
Aroclor-1254	4	9.810	0.002	14544	22.6	4	10.370	-0.002	107074	245.9
Aroclor-1254	5	10.121	-0.056	180016	429.7	5	10.567	-0.002	141725	584.5
Total Col1Ave (5 peaks):					110.8	Total Col2Ave (5 peaks):				223.7 RPD = 68*
Corrected Ave (4 peaks):					31.0	Corrected Ave (4 peaks):				133.5 RPD = 125*
Aroclor-1260	1	11.044	0.001	310806	558.4	1	11.652	-0.001	187682	498.4
Aroclor-1260	2	11.361	0.000	263161	460.0	2	11.917	-0.000	450612	473.0
Aroclor-1260	3	11.735	0.000	629605	418.0	3	12.433	-0.003	206042	867.7
Aroclor-1260	4	12.141	0.001	210012	269.9	4	12.502	-0.000	326457	529.5
Aroclor-1260	5	12.244	-0.000	268425	791.3	NS	---			----
Total Col1Ave (5 peaks):					499.5	Total Col2Ave (4 peaks):				592.1 RPD = 17
Corrected Ave (4 peaks):					426.6	Corrected Ave (3 peaks):				500.3 RPD = 16
Aroclor-1262	1	10.828	-0.005	171094	426.5	1	11.200	0.000	219731	430.1
Aroclor-1262	2	12.244	-0.002	268425	423.9	2	11.652	-0.001	187682	432.0
Aroclor-1262	3	12.319	-0.002	291581	424.2	3	12.433	-0.001	206042	445.4
Aroclor-1262	4	12.988	-0.001	257735	411.5	4	12.502	-0.002	326457	440.6
Total Col1Ave (4 peaks):					421.5	Total Col2Ave (4 peaks):				437.0 RPD = 4
Corrected Ave (3 peaks):					419.8	Corrected Ave (3 peaks):				434.3 RPD = 3
Aroclor-1268	1	12.244	-0.001	268425	163.8	1	12.433	-0.000	206042	169.0
Aroclor-1268	2	12.319	0.001	291581	178.4	2	12.502	0.000	326457	251.7
Aroclor-1268	3	12.725	0.026	108693	80.3	3	12.892	-0.001	10062	9.3
Aroclor-1268	4	13.486	-0.003	95646	23.8	4	13.710	0.001	59437	17.8
Total Col1Ave (4 peaks):					111.6	Total Col2Ave (4 peaks):				112.0 RPD = 0

Corrected Ave (3 peaks): 89.3 Corrected Ave (3 peaks): 65.4 RPD = 31

Total PCB Area Col1 (5.909 - 13.792) = 4409992 Col1 Total PCB = 0.8 ppm*

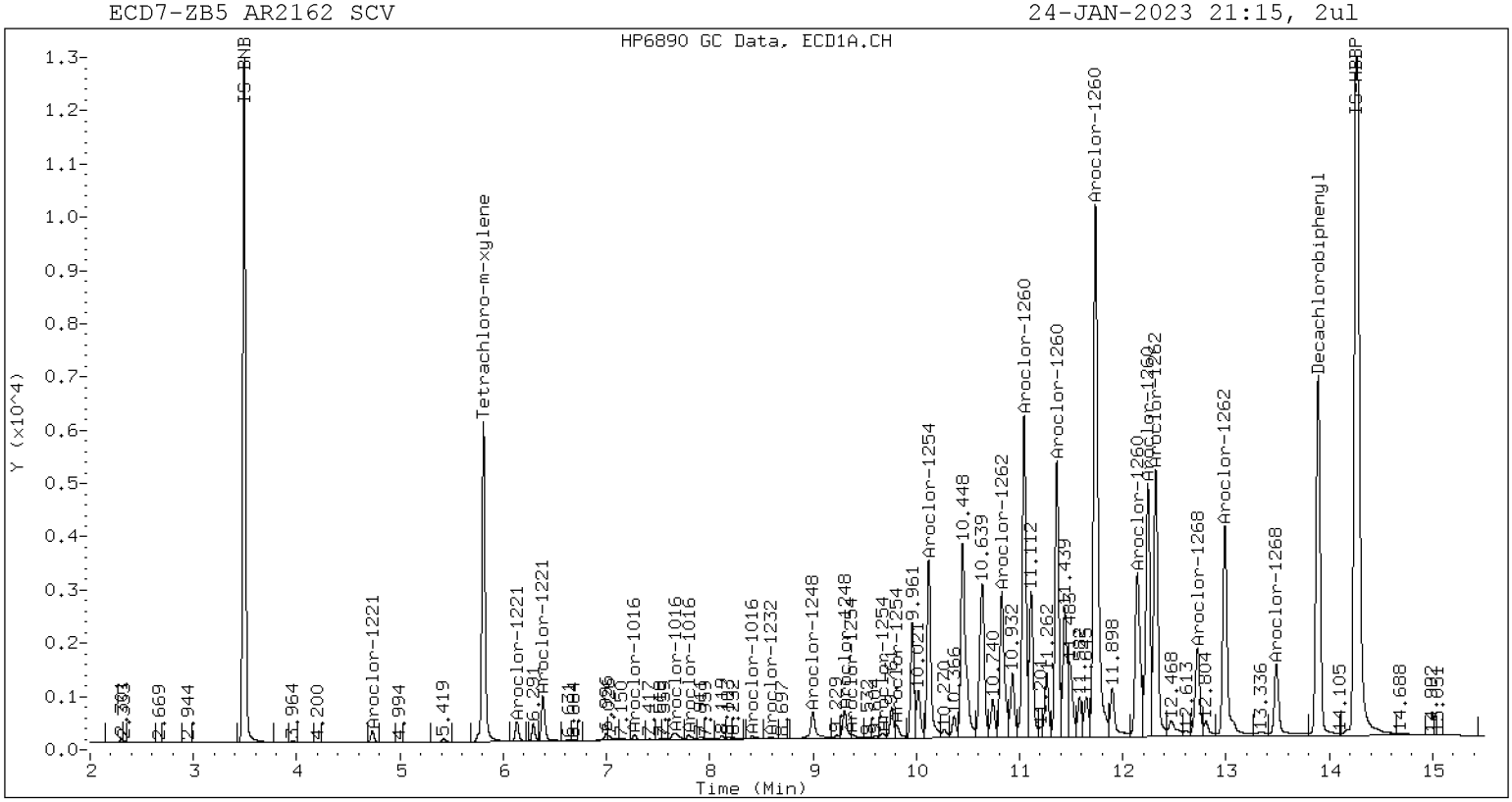
Total PCB Area Col2 (5.787 - 14.020) = 2874073 Col2 Total PCB = 0.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

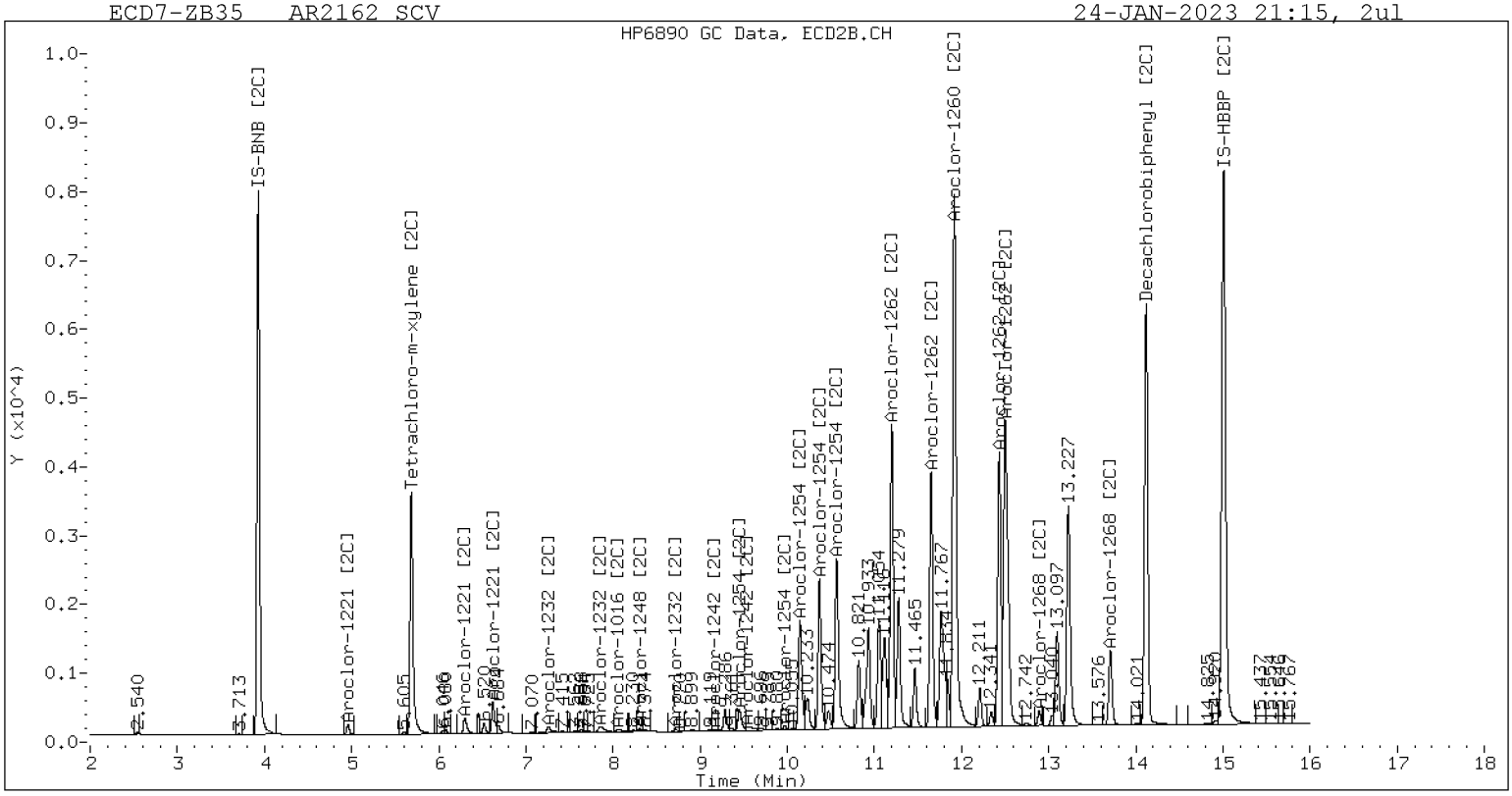
PCB Dual Column Chromatograms

ECD7-ZB5 AR2162 SCV 24-JAN-2023 21:15, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162 SCV 24-JAN-2023 21:15, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	01242329ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLA0281	Injection Date:	01/24/23
Lab Sample ID:	SLA0281-SCV6	Injection Time:	21:36
Sequence Name:	AR3268SCV6		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1232	A	250.00	216	0.0178560	0.0160358		-13.7	+/-20
Aroclor 1232 [2C]	A	250.00	239	0.0188178	0.0180429		-4.5	+/-20
Decachlorobiphenyl	A	40.000	54.6	0.8555994	1.1682210		36.5	+/-20
Tetrachlorometaxylene	A	40.000	36.4	1.1307870	1.0284340		-9.1	+/-20
Decachlorobiphenyl [2C]	A	40.000	57.9	1.2696430	1.8387740		44.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.3	1.0814980	0.9815176		-9.2	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242329ECD7.D
Data file 2: /230124.b/230124.b/01242329ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268 SCV
Client ID:
Injection Date: 24-JAN-2023 21:36
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.810	0.001	250455	5.687	0.000	162795	36.4	36.3	0.2	Tetrachloro-m-xylene
13.892	0.000	551946	14.120	0.000	461901	54.6	57.9	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	487061	-3.2
Hexabromobiphenyl	647433	944934	46.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331721	-1.5
Hexabromobiphenyl	382032	502401	31.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	19363	107.0	1	7.256	0.001	19791	110.0
Aroclor-1016	2	7.659	0.009	58630	97.8	2	7.856	0.005	40139	101.8
Aroclor-1016	3	7.794	0.006	28286	102.5	3	8.055	0.005	17412	108.2
Aroclor-1016	4	8.408	0.004	17373	97.9	4	8.308	0.003	11962	94.8
Total Col1Ave (4 peaks):		101.3				Total Col2Ave (4 peaks):		103.7	RPD = 2	
Corrected Ave (3 peaks):		99.4				Corrected Ave (3 peaks):		101.6	RPD = 2	
Aroclor-1221	1	4.735	0.002	5022	139.5	1	4.961	0.002	3409	140.2
Aroclor-1221	2	6.134	0.001	8987	122.1	2	6.299	0.001	7677	144.1
Aroclor-1221	3	6.385	0.001	29368	171.8	3	6.624	0.001	16198	180.1
Total Col1Ave (3 peaks):		144.5				Total Col2Ave (3 peaks):		154.8	RPD = 7	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.735	0.002	5022	223.5	1	4.961	0.002	3409	231.1
Aroclor-1232	2	6.134	0.001	8987	177.4	2	7.256	-0.001	19791	239.8
Aroclor-1232	3	7.659	0.001	58630	231.5	3	7.856	0.001	40139	238.8
Aroclor-1232	4	8.585	0.000	24991	230.5	4	8.715	0.001	11476	245.7
Total Col1Ave (4 peaks):		215.7				Total Col2Ave (4 peaks):		238.8	RPD = 10	
Corrected Ave (3 peaks):		210.5				Corrected Ave (3 peaks):		236.6	RPD = 12	
Aroclor-1242	1	7.272	0.001	19363	129.8	1	7.256	0.000	19791	136.4
Aroclor-1242	2	7.659	0.004	58630	120.1	2	7.856	0.002	40139	124.6
Aroclor-1242	3	8.408	0.001	17373	119.8	3	9.166	0.006	11813	117.1
Aroclor-1242	4	8.585	0.003	24991	114.1	4	9.595	0.009	16549	123.7
Total Col1Ave (4 peaks):		121.0				Total Col2Ave (4 peaks):		125.4	RPD = 4	
Corrected Ave (3 peaks):		118.0				Corrected Ave (3 peaks):		121.8	RPD = 3	
Aroclor-1248	1	8.408	0.002	17373	71.3	1	8.308	0.003	11962	79.8
Aroclor-1248	2	8.585	0.005	24991	80.4	2	8.715	0.003	11476	71.1
Aroclor-1248	3	9.001	0.002	67631	113.8	3	9.166	0.009	11813	59.9
Aroclor-1248	4	9.293	-0.001	30983	105.3	4	9.595	0.014	16549	67.9
Total Col1Ave (4 peaks):		92.7				Total Col2Ave (4 peaks):		69.7	RPD = 28	
Corrected Ave (3 peaks):		85.7				Corrected Ave (3 peaks):		66.3	RPD = 26	
Aroclor-1254	1	9.293	-0.006	30983	62.4	1	9.451	0.003	3749	15.6
Aroclor-1254	2	9.381	0.003	9071	42.8	2	9.974	0.005	2452	12.6
Aroclor-1254	3	9.678	0.009	5199	16.3	3	10.131	0.010	4718	11.1
Aroclor-1254	4	9.820	0.012	8864	14.2	4	10.389	0.018	4224	10.0
Aroclor-1254	5	10.195	0.018	8085	19.9	5	10.573	0.004	1573	6.7
Total Col1Ave (5 peaks):		31.1				Total Col2Ave (5 peaks):		11.2	RPD = 94*	
Corrected Ave (4 peaks):		23.3				Corrected Ave (4 peaks):		10.1	RPD = 79*	
Aroclor-1260	1	11.050	0.006	66852	126.1	1	11.647	-0.006	57235	157.9
Aroclor-1260	2	11.366	0.006	6269	11.5	2	11.919	0.002	25368	27.7
Aroclor-1260	3	11.741	0.007	41446	28.9	3	12.434	-0.002	262014	1146.4
Aroclor-1260	4	12.052	-0.088	2691	3.6	4	12.502	-0.000	277060	466.9
Aroclor-1260	5	12.245	0.002	349286	1080.9	NS	---			----
Total Col1Ave (5 peaks):		250.2				Total Col2Ave (4 peaks):		449.7	RPD = 57*	
Corrected Ave (4 peaks):		42.5				Corrected Ave (3 peaks):		217.5	RPD = 135*	
Aroclor-1262	1	10.838	0.006	4520	11.8	1	11.203	0.003	40576	82.5
Aroclor-1262	2	12.245	-0.000	349286	579.1	2	11.647	-0.006	57235	136.9
Aroclor-1262	3	12.318	-0.002	349715	534.1	3	12.434	-0.001	262014	588.4
Aroclor-1262	4	12.988	-0.001	141905	237.8	4	12.502	-0.002	277060	388.5
Total Col1Ave (4 peaks):		340.7				Total Col2Ave (4 peaks):		299.1	RPD = 13	
Corrected Ave (3 peaks):		261.2				Corrected Ave (3 peaks):		202.6	RPD = 25	
Aroclor-1268	1	12.245	0.001	349286	223.8	1	12.434	0.000	262014	223.3
Aroclor-1268	2	12.318	0.000	349715	224.6	2	12.502	0.000	277060	221.9
Aroclor-1268	3	12.699	0.000	289328	224.3	3	12.893	-0.000	208928	201.0
Aroclor-1268	4	13.490	0.001	849299	222.1	4	13.710	0.002	725831	226.1
Total Col1Ave (4 peaks):		223.7				Total Col2Ave (4 peaks):		218.1	RPD = 3	

Corrected Ave (3 peaks): 223.4 Corrected Ave (3 peaks): 215.4 RPD = 4

Total PCB Area Col1 (5.909 - 13.792) = 2866092 Col1 Total PCB = 0.5 ppm*

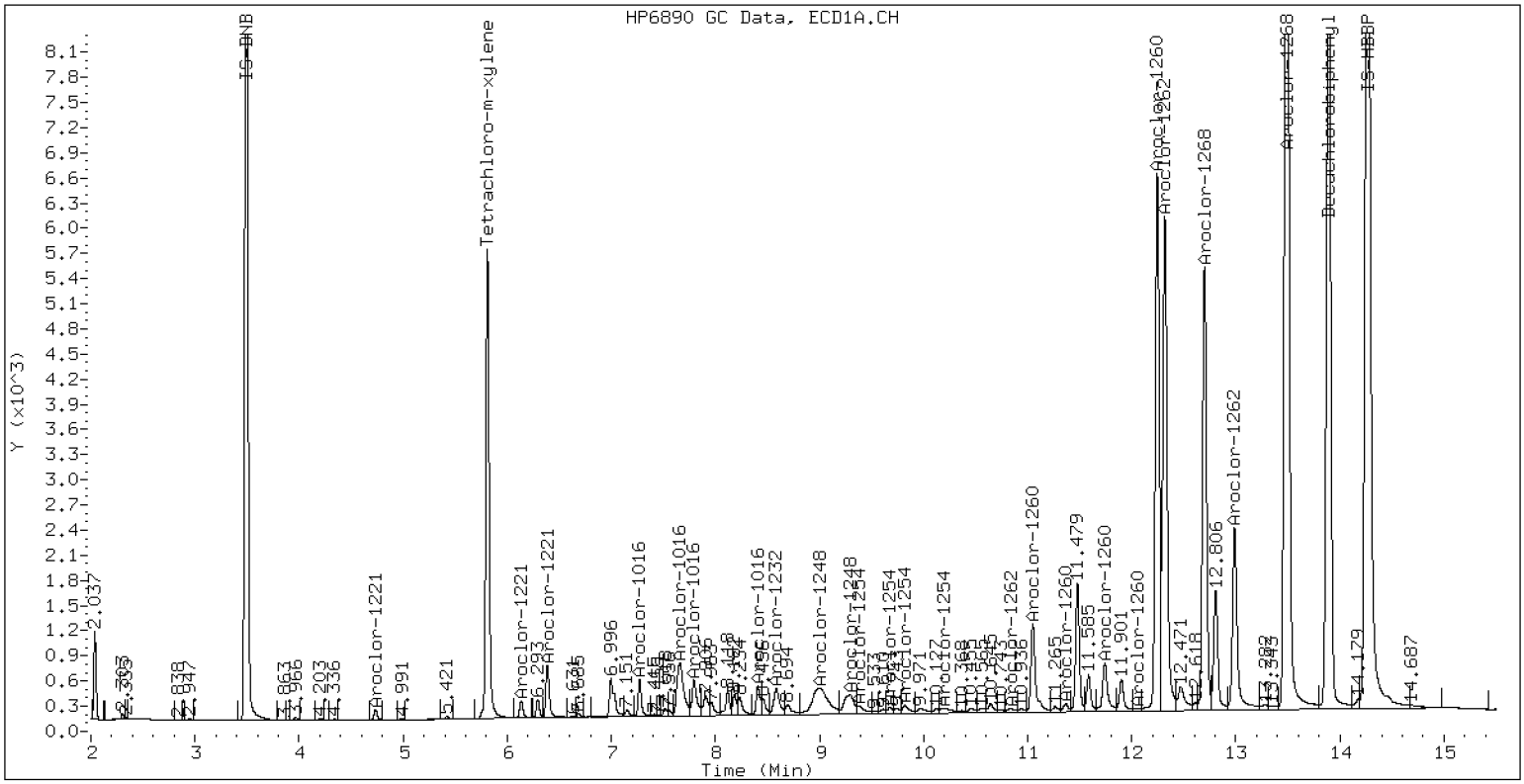
Total PCB Area Col2 (5.787 - 14.020) = 2084481 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

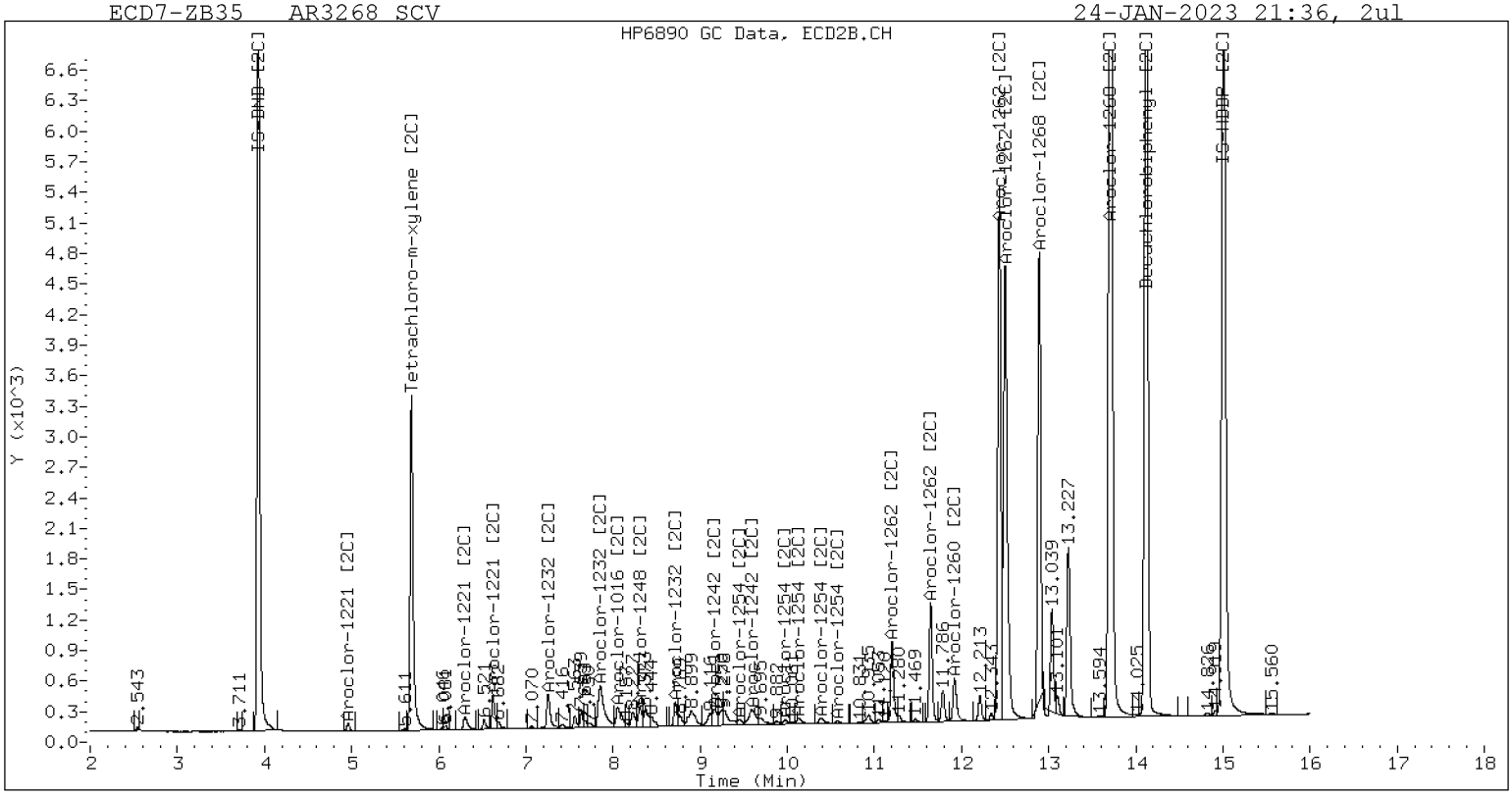
PCB Dual Column Chromatograms

ECD7-ZB5 AR3268 SCV 24-JAN-2023 21:36, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR3268 SCV 24-JAN-2023 21:36, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02012308ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0012	Injection Date:	02/01/23
Lab Sample ID:	SLB0012-CCV1	Injection Time:	11:52
Sequence Name:	AR1248CCV1		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	213	0.0592639	0.0484642		-14.7	+/-20
Aroclor-1248 (1)	A	250.00	244		0.0390338			
Aroclor-1248 (2)	A	250.00	240		0.0489723			
Aroclor-1248 (3)	A	250.00	175		0.0682782			
Aroclor-1248 (4)	A	250.00	194		0.0375723			
Aroclor 1248 [2C]	A	250.00	241	0.0453673	0.0436092		-3.5	+/-20
Aroclor-1248 (1) [2C]	A	250.00	251		0.0363088			
Aroclor-1248 (2) [2C]	A	250.00	242		0.0377289			
Aroclor-1248 (3) [2C]	A	250.00	240		0.0457537			
Aroclor-1248 (4) [2C]	A	250.00	232		0.0546454			
Decachlorobiphenyl	A	40.000	34.1	0.8555994	0.7290369		-14.8	+/-20
Tetrachlorometaxylene	A	40.000	39.6	1.1307870	1.1181120		-1.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.0	1.2696430	1.1424470		-10.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.4	1.0814980	1.0654260		-1.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012308ECD7.D
Data file 2: /230201.b/230201.b/02012308ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248CCV1
Client ID:
Injection Date: 01-FEB-2023 11:52
Report Date: 02/01/2023 15:25
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.001	255227	5.685	0.001	178737	39.6	39.4	0.4	Tetrachloro-m-xylene
13.890	-0.002	187805	14.117	-0.001	198154	34.1	36.0	5.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	456532	-9.3
Hexabromobiphenyl	647433	515214	-20.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	335522	-0.4
Hexabromobiphenyl	382032	346894	-9.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.402	-0.003	55688	243.8	1	8.304	0.000	38070	251.0
Aroclor-1248	2	8.576	-0.004	69867	239.8	2	8.711	0.000	39559	242.3
Aroclor-1248	3	8.995	-0.004	97410	174.8	3	9.153	0.000	47973	240.5
Aroclor-1248	4	9.291	-0.003	53603	194.3	4	9.577	0.000	57296	232.3
Total Col1Ave (4 peaks):					213.2	Total Col2Ave (4 peaks):				241.5 RPD = 12
Corrected Ave (3 peaks):					203.0	Corrected Ave (3 peaks):				238.4 RPD = 16
CalAmt %D:					-14.7	CalAmt %D:				-3.4

Total PCB Area Col1 (5.909 - 13.792) = 1043662 Col1 Total PCB = 0.2 ppm*

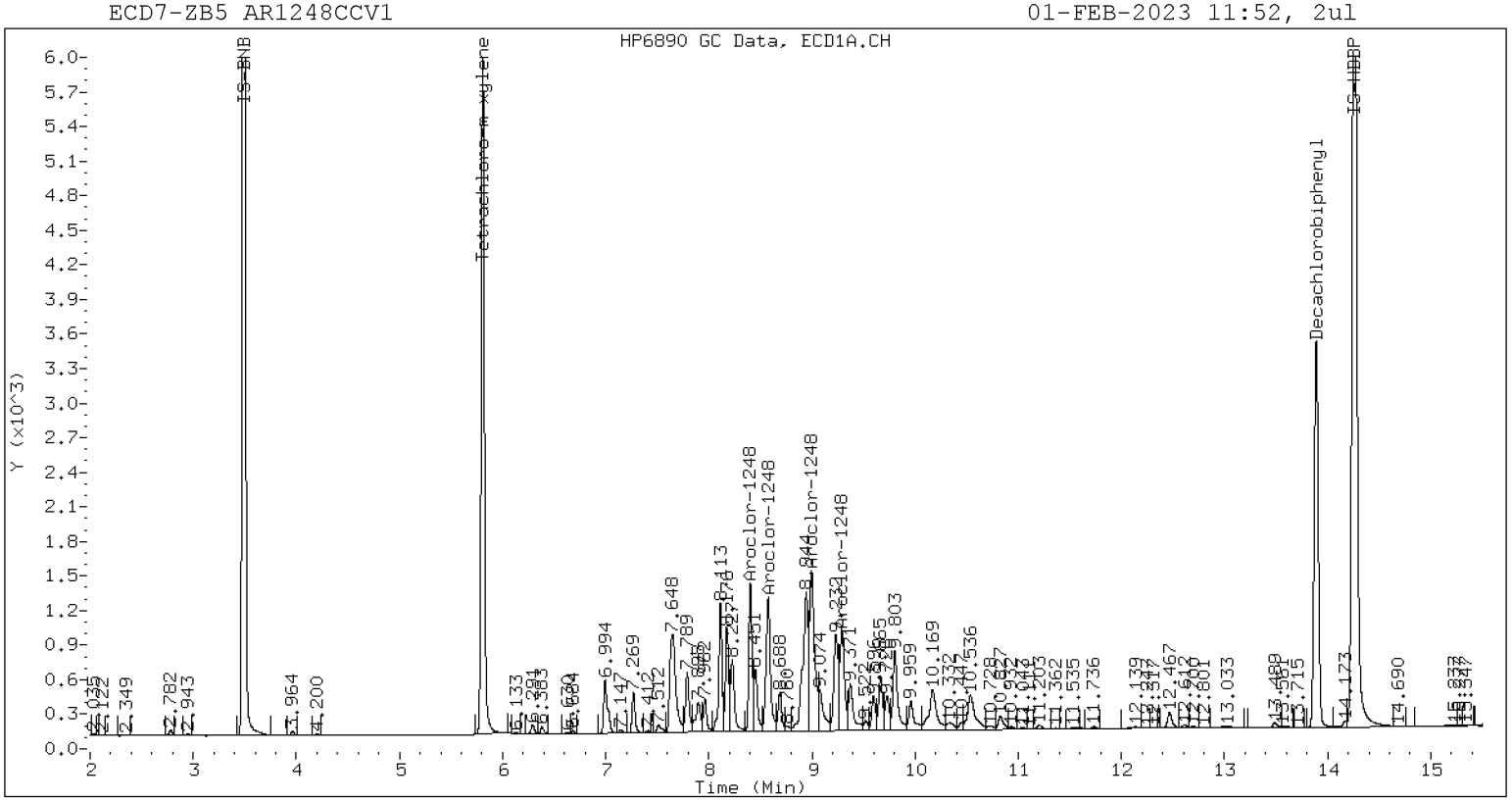
Total PCB Area Col2 (5.784 - 14.018) = 731663 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

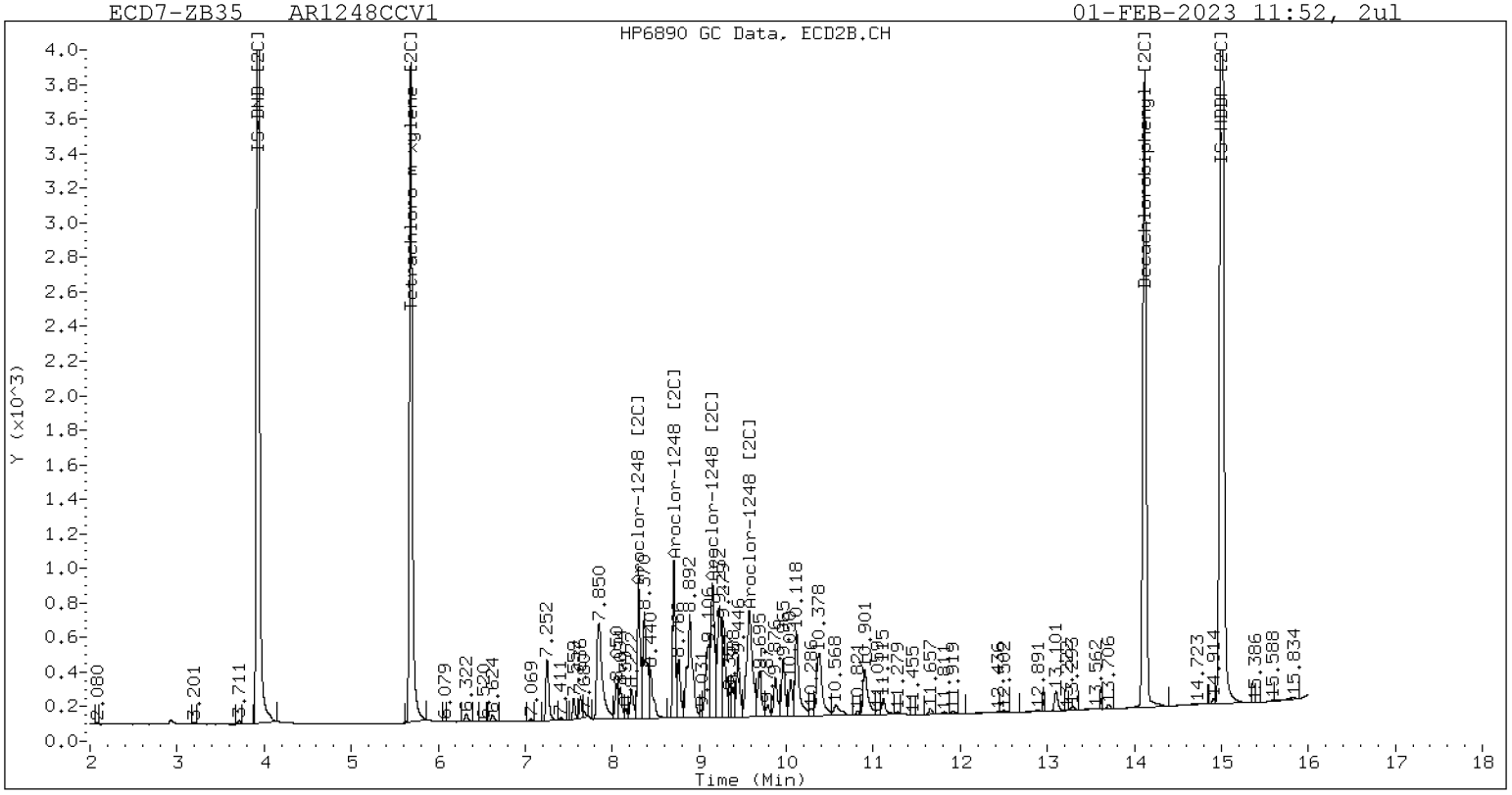
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248CCV1 01-FEB-2023 11:52, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248CCV1 01-FEB-2023 11:52, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02012309ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0012	Injection Date:	02/01/23
Lab Sample ID:	SLB0012-CCV2	Injection Time:	12:13
Sequence Name:	AR1660CCV2		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	258	0.0506755	0.0525358		3.2	+/-20
Aroclor-1016 (1)	A	250.00	261	0.0297277	0.0310260		4.4	
Aroclor-1016 (2)	A	250.00	265	0.0985017	0.1044194		6.0	
Aroclor-1016 (3)	A	250.00	242	0.0453193	0.0439465		-3.2	
Aroclor-1016 (4)	A	250.00	264	0.0291533	0.0307511		5.6	
Aroclor 1016 [2C]	A	250.00	268	0.0519244	0.0557854		7.2	+/-20
Aroclor-1016 (1) [2C]	A	250.00	264	0.0433907	0.0458436		5.6	
Aroclor-1016 (2) [2C]	A	250.00	269	0.0950862	0.1024551		7.6	
Aroclor-1016 (3) [2C]	A	250.00	276	0.0388014	0.0427967		10.4	
Aroclor-1016 (4) [2C]	A	250.00	263	0.0304194	0.0320463		5.2	
Aroclor 1260	A	250.00	222	0.0605224	0.0539596		-11.2	+/-20
Aroclor-1260 (1)	A	250.00	242	0.0448870	0.0434041		-3.2	
Aroclor-1260 (2)	A	250.00	237	0.0461412	0.0436919		-5.2	
Aroclor-1260 (3)	A	250.00	223	0.1214672	0.1082057		-10.8	
Aroclor-1260 (4)	A	250.00	211	0.0627593	0.0528957		-15.6	
Aroclor-1260 (5)	A	250.00	197	0.0273573	0.0216007		-21.2	
Aroclor 1260 [2C]	A	250.00	238	0.0836545	0.0792101		-4.8	+/-20
Aroclor-1260 (1) [2C]	A	250.00	240	0.0577136	0.0554287		-4.0	
Aroclor-1260 (2) [2C]	A	250.00	236	0.1460113	0.1375803		-5.6	
Aroclor-1260 (3) [2C]	A	250.00	241	0.0363944	0.0351462		-3.6	
Aroclor-1260 (4) [2C]	A	250.00	235	0.0944986	0.0886852		-6.0	
Decachlorobiphenyl	A	40.000	37.5	0.8555994	0.8026723		-6.3	+/-20
Tetrachlorometaxylene	A	40.000	42.4	1.1307870	1.1991480		6.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.2	1.2696430	1.2127670		-4.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	41.7	1.0814980	1.1267660		4.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012309ECD7.D
Data file 2: /230201.b/230201.b/02012309ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV2
Client ID:
Injection Date: 01-FEB-2023 12:13
Report Date: 02/01/2023 15:25
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.002	272892	5.684	0.000	184669	42.4	41.7	1.8	Tetrachloro-m-xylene
13.890	-0.002	259695	14.118	0.000	241605	37.5	38.2	1.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	455143	-9.6
Hexabromobiphenyl	647433	647076	-0.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	327786	-2.7
Hexabromobiphenyl	382032	398436	4.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.001	44129	260.9	1	7.253	0.000	46959	264.1
Aroclor-1016	2	7.650	-0.001	148518	265.0	2	7.850	0.000	104948	269.4
Aroclor-1016	3	7.787	-0.001	62506	242.4	3	8.049	0.000	43838	275.7
Aroclor-1016	4	8.402	-0.002	43738	263.7	4	8.304	0.000	32826	263.4
Total Col1Ave (4 peaks):					258.0	Total Col2Ave (4 peaks):				268.2 RPD = 4
Corrected Ave (3 peaks):					255.7	Corrected Ave (3 peaks):				265.6 RPD = 4
CalAmt %D:					3.2	CalAmt %D:				7.3
Aroclor-1260	1	11.041	-0.003	87768	241.7	1	11.650	0.000	69015	240.1
Aroclor-1260	2	11.358	-0.003	88350	236.7	2	11.915	0.000	171303	235.6
Aroclor-1260	3	11.732	-0.003	218804	222.7	3	12.433	0.000	43761	241.4
Aroclor-1260	4	12.135	-0.005	106961	210.7	4	12.498	0.000	110423	234.6
Aroclor-1260	5	12.241	-0.003	43679	197.4	NS	---			----
Total Col1Ave (5 peaks):					221.9	Total Col2Ave (4 peaks):				237.9 RPD = 7
Corrected Ave (4 peaks):					216.9	Corrected Ave (3 peaks):				236.8 RPD = 9
CalAmt %D:					-11.3	CalAmt %D:				-4.8

Total PCB Area Col1 (5.909 - 13.792) = 2501590 Col1 Total PCB = 0.5 ppm*

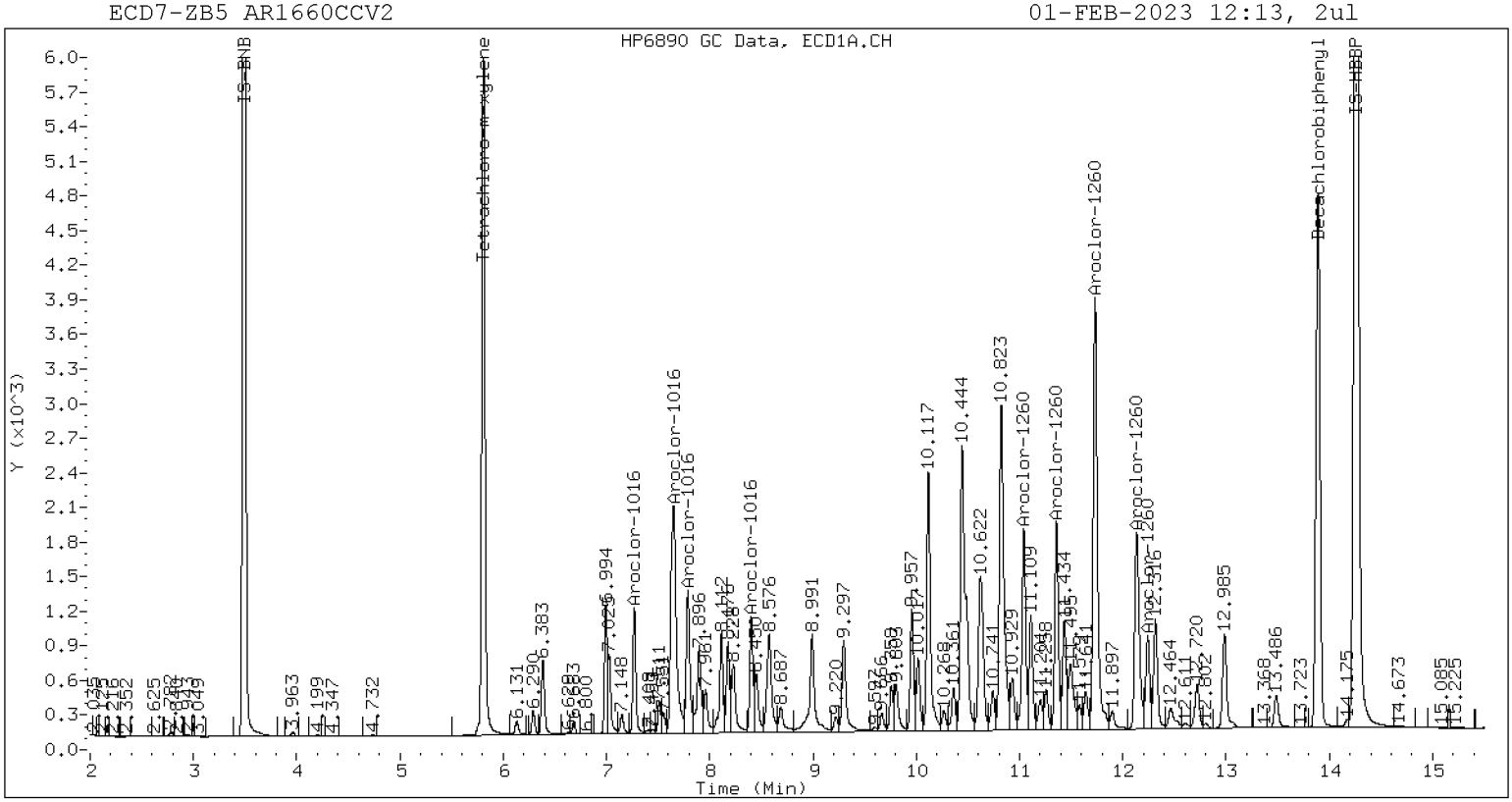
Total PCB Area Col2 (5.784 - 14.018) = 1726440 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

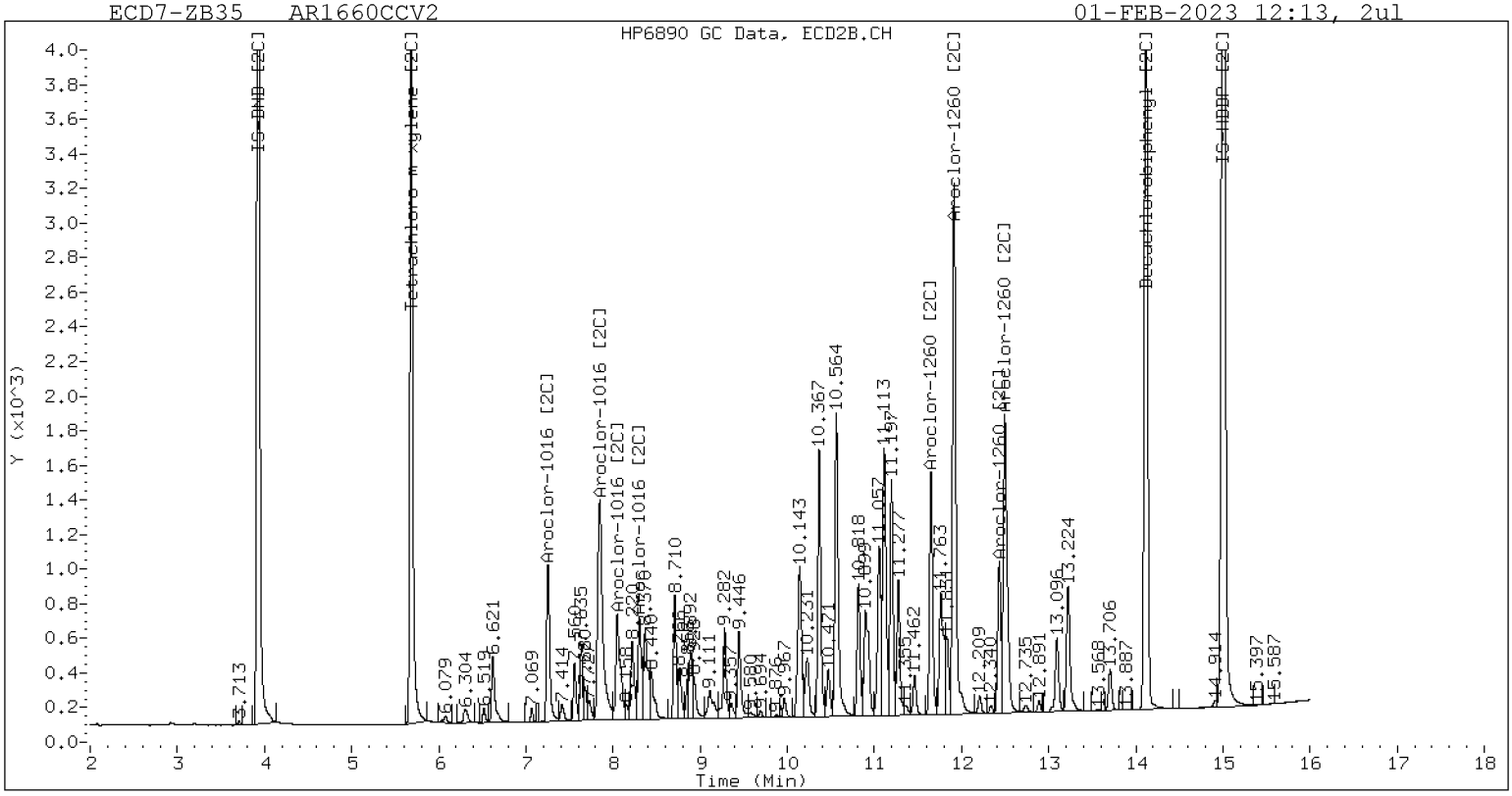
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV2 01-FEB-2023 12:13, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV2 01-FEB-2023 12:13, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02012314ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0012	Injection Date:	02/01/23
Lab Sample ID:	SLB0012-CCV3	Injection Time:	16:14
Sequence Name:	AR1242CCV3		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	253	0.0411165	0.0416730		1.2	+/-20
Aroclor-1242 (1)	A	250.00	251		0.0245760			
Aroclor-1242 (2)	A	250.00	254		0.0814729			
Aroclor-1242 (3)	A	250.00	254		0.0242567			
Aroclor-1242 (4)	A	250.00	253		0.0363864			
Aroclor 1242 [2C]	A	250.00	259	0.0423236	0.0438853		3.6	+/-20
Aroclor-1242 (1) [2C]	A	250.00	262		0.0366541			
Aroclor-1242 (2) [2C]	A	250.00	261		0.0811628			
Aroclor-1242 (3) [2C]	A	250.00	265		0.0257839			
Aroclor-1242 (4) [2C]	A	250.00	248		0.0319406			
Decachlorobiphenyl	A	40.000	33.9	0.8555994	0.7253589		-15.3	+/-20
Tetrachlorometaxylene	A	40.000	48.5	1.1307870	1.3699850		21.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	35.6	1.2696430	1.1298110		-11.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	48.4	1.0814980	1.3077520		21.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012314ECD7.D
Data file 2: /230201.b/230201.b/02012314ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242CCV3
Client ID:
Injection Date: 01-FEB-2023 16:14
Report Date: 02/01/2023 16:40
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.002	334986	5.686	0.002	224887	48.5	48.4	0.2	Tetrachloro-m-xylene
13.890	0.000	285428	14.118	0.000	268434	33.9	35.6	4.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	489036	-2.8
Hexabromobiphenyl	647433	786998	21.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	343929	2.1
Hexabromobiphenyl	382032	475184	24.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	7.270	-0.001	37558	250.8	1	7.254	-0.002	39395	261.9
Aroclor-1242	2	7.652	-0.004	124510	254.1	2	7.851	-0.002	87232	261.1
Aroclor-1242	3	8.404	-0.003	37070	254.6	3	9.155	-0.004	27712	264.9
Aroclor-1242	4	8.577	-0.004	55607	252.8	4	9.582	-0.005	34329	247.6
Total Col1Ave (4 peaks):					253.1	Total Col2Ave (4 peaks):				258.9 RPD = 2
Corrected Ave (3 peaks):					252.6	Corrected Ave (3 peaks):				256.9 RPD = 2
CalAmt %D:					1.2	CalAmt %D:				3.5

Total PCB Area Col1 (5.907 - 13.790) = 928881 Col1 Total PCB = 0.2 ppm*

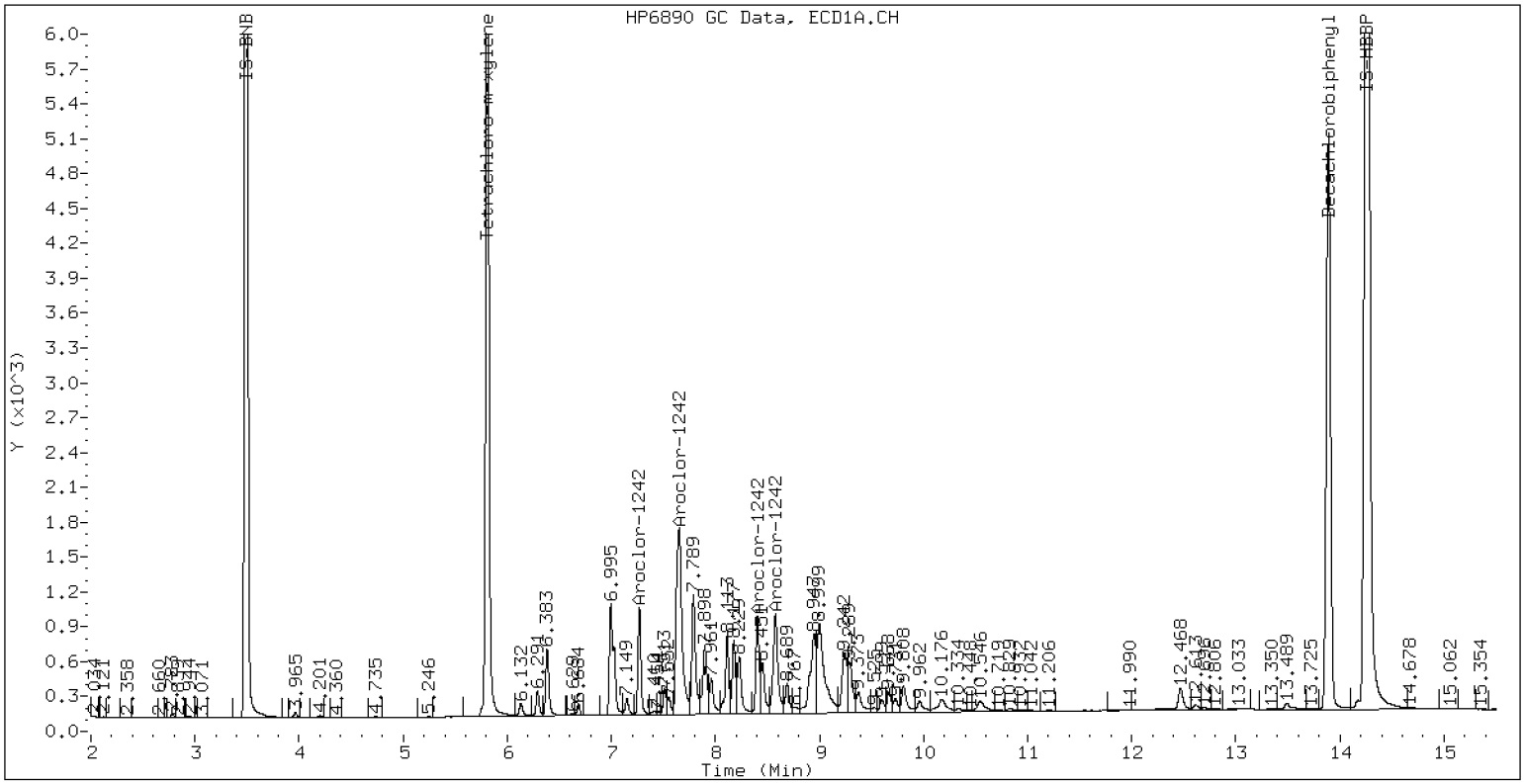
Total PCB Area Col2 (5.784 - 14.018) = 617099 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

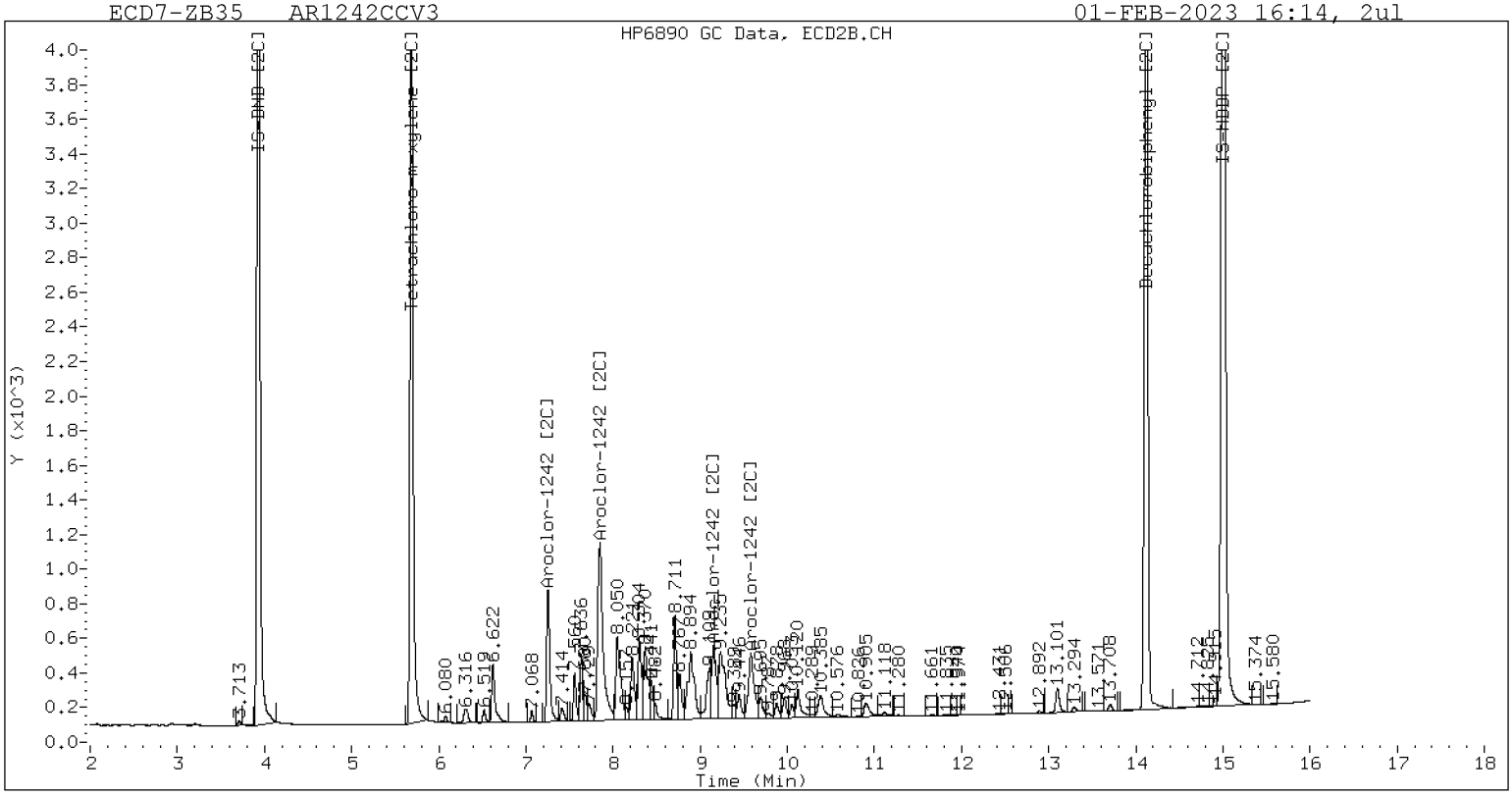
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242CCV3 01-FEB-2023 16:14, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242CCV3 01-FEB-2023 16:14, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02012315ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0012	Injection Date:	02/01/23
Lab Sample ID:	SLB0012-CCV4	Injection Time:	16:35
Sequence Name:	AR1660CCV4		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Aroclor 1016	A	250.00	255	0.0506755	0.0519258		2.0	+/-20	
Aroclor-1016 (1)	A	250.00	256	0.0297277	0.0304934		2.4		
Aroclor-1016 (2)	A	250.00	261	0.0985017	0.1029785		4.4		
Aroclor-1016 (3)	A	250.00	240	0.0453193	0.0435343		-4.0		
Aroclor-1016 (4)	A	250.00	263	0.0291533	0.0306970		5.2		
Aroclor 1016 [2C]	A	250.00	268	0.0519244	0.0556422		7.0	+/-20	
Aroclor-1016 (1) [2C]	A	250.00	262	0.0433907	0.0454292		4.8		
Aroclor-1016 (2) [2C]	A	250.00	269	0.0950862	0.1023416		7.6		
Aroclor-1016 (3) [2C]	A	250.00	274	0.0388014	0.0425671		9.6		
Aroclor-1016 (4) [2C]	A	250.00	265	0.0304194	0.0322309		6.0		
Aroclor 1260	A	250.00	193	0.0605224	0.0470129		-22.7	+/-20	*
Aroclor-1260 (1)	A	250.00	200	0.0448870	0.0358673		-20.0		
Aroclor-1260 (2)	A	250.00	200	0.0461412	0.0368356		-20.0		
Aroclor-1260 (3)	A	250.00	194	0.1214672	0.0944764		-22.4		
Aroclor-1260 (4)	A	250.00	191	0.0627593	0.0480351		-23.6		
Aroclor-1260 (5)	A	250.00	181	0.0273573	0.0198500		-27.6		
Aroclor 1260 [2C]	A	250.00	220	0.0836545	0.0732287		-12.2	+/-20	
Aroclor-1260 (1) [2C]	A	250.00	218	0.0577136	0.0502160		-12.8		
Aroclor-1260 (2) [2C]	A	250.00	217	0.1460113	0.1269313		-13.2		
Aroclor-1260 (3) [2C]	A	250.00	222	0.0363944	0.0323127		-11.2		
Aroclor-1260 (4) [2C]	A	250.00	221	0.0944986	0.0834549		-11.6		
Decachlorobiphenyl	A	40.000	36.2	0.8555994	0.7737796		-9.5	+/-20	
Tetrachlorometaxylene	A	40.000	41.7	1.1307870	1.1790690		4.3	+/-20	
Decachlorobiphenyl [2C]	A	40.000	38.0	1.2696430	1.2055190		-5.0	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	41.5	1.0814980	1.1222090		3.8	+/-20	

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012315ECD7.D
Data file 2: /230201.b/230201.b/02012315ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV4
Client ID:
Injection Date: 01-FEB-2023 16:35
Report Date: 02/01/2023 16:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.001	284461	5.685	0.001	190651	41.7	41.5	0.5	Tetrachloro-m-xylene
13.891	0.001	337660	14.117	-0.001	294034	36.2	38.0	4.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	482518	-4.1
Hexabromobiphenyl	647433	872755	34.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	339778	0.9
Hexabromobiphenyl	382032	487813	27.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	0.001	45980	256.4	1	7.254	0.001	48237	261.7
Aroclor-1016	2	7.652	0.002	155278	261.4	2	7.850	0.000	108667	269.1
Aroclor-1016	3	7.788	0.001	65644	240.2	3	8.049	0.000	45198	274.3
Aroclor-1016	4	8.403	0.001	46287	263.2	4	8.304	0.000	34223	264.9
Total Col1Ave (4 peaks):					255.3	Total Col2Ave (4 peaks):				267.5 RPD = 5
Corrected Ave (3 peaks):					252.7	Corrected Ave (3 peaks):				265.2 RPD = 5
CalAmt %D:					2.1	CalAmt %D:				7.0
Aroclor-1260	1	11.042	0.001	97823	199.8	1	11.651	0.000	76550	217.5
Aroclor-1260	2	11.358	0.001	100464	199.6	2	11.915	0.000	193496	217.3
Aroclor-1260	3	11.731	-0.000	257671	194.4	3	12.432	-0.001	49258	222.0
Aroclor-1260	4	12.136	0.002	131009	191.3	4	12.498	0.000	127220	220.8
Aroclor-1260	5	12.242	0.001	54138	181.4	NS	---			----
Total Col1Ave (5 peaks):					193.3	Total Col2Ave (4 peaks):				219.4 RPD = 13
Corrected Ave (4 peaks):					191.7	Corrected Ave (3 peaks):				218.5 RPD = 13
CalAmt %D:					-22.7	CalAmt %D:				-12.2

Total PCB Area Col1 (5.907 - 13.790) = 2775692 Col1 Total PCB = 0.5 ppm*

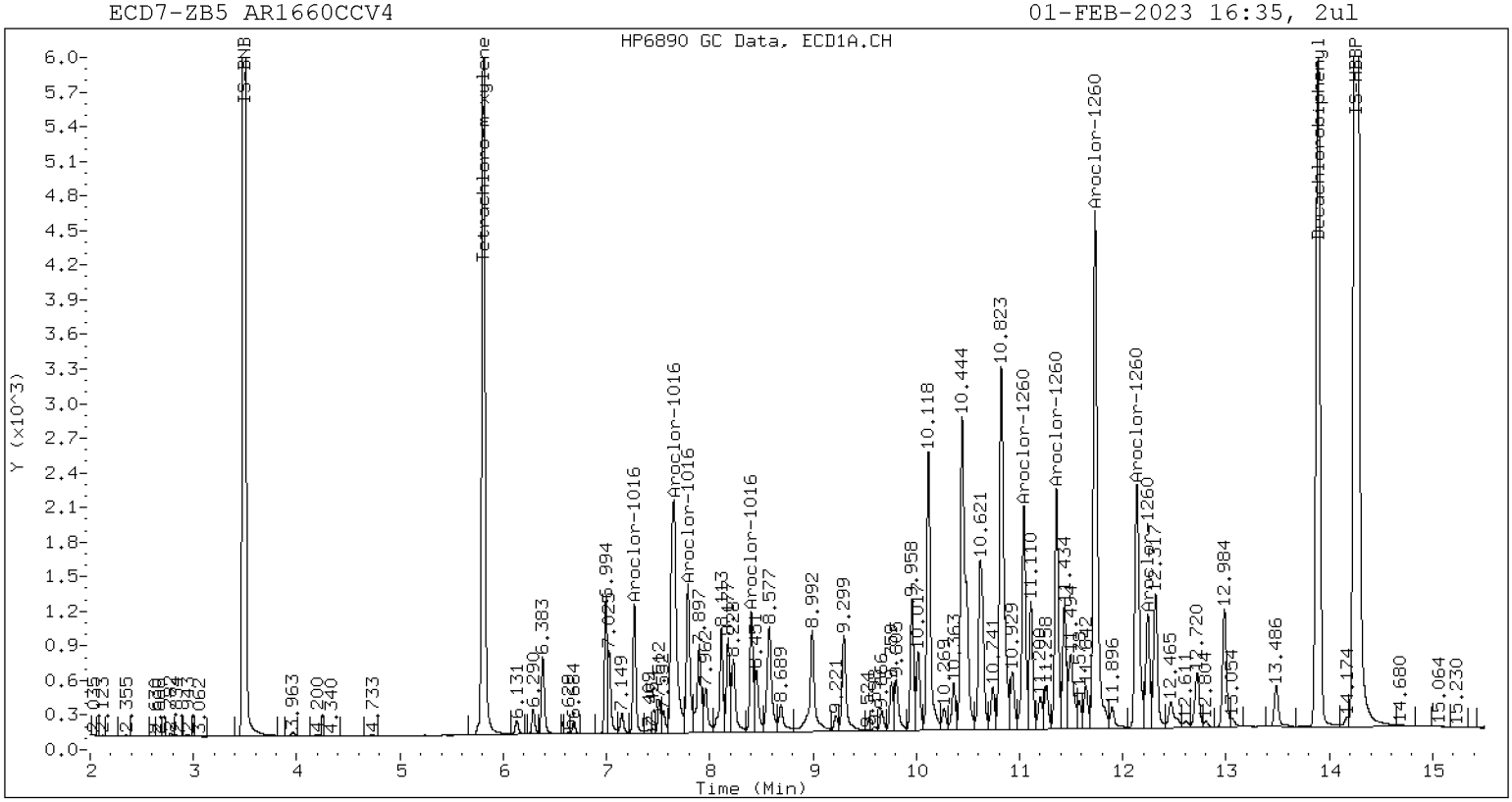
Total PCB Area Col2 (5.784 - 14.018) = 1880561 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

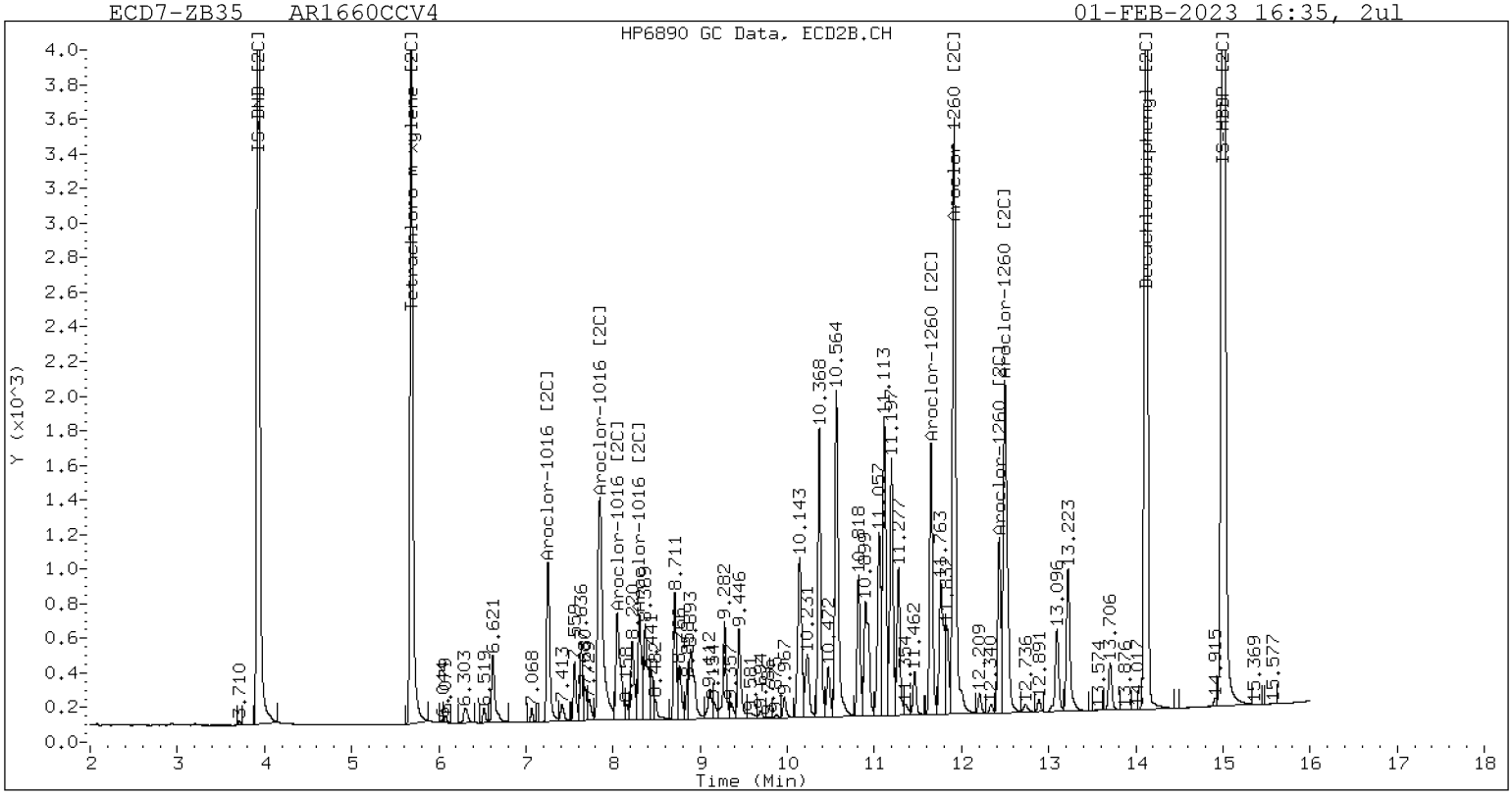
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV4 01-FEB-2023 16:35, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV4 01-FEB-2023 16:35, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02012326ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0012	Injection Date:	02/01/23
Lab Sample ID:	SLB0012-CCV5	Injection Time:	20:26
Sequence Name:	AR1254CCV5		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1254	A	250.00	195	0.0675033	0.0530650		-21.8	+/-20 *
Aroclor-1254 (1)	A	250.00	203		0.0661095			
Aroclor-1254 (2)	A	250.00	188		0.0262285			
Aroclor-1254 (3)	A	250.00	198		0.0414359			
Aroclor-1254 (4)	A	250.00	198		0.0810067			
Aroclor-1254 (5)	A	250.00	190		0.0505443			
Aroclor 1254 [2C]	A	250.00	212	0.0733219	0.0620571		-15.4	+/-20
Aroclor-1254 (1) [2C]	A	250.00	229		0.0531171			
Aroclor-1254 (2) [2C]	A	250.00	224		0.0419794			
Aroclor-1254 (3) [2C]	A	250.00	211		0.0865402			
Aroclor-1254 (4) [2C]	A	250.00	214		0.0875952			
Aroclor-1254 (5) [2C]	A	250.00	180		0.0410535			
Decachlorobiphenyl	A	40.000	35.3	0.8555994	0.7549823		-11.8	+/-20
Tetrachlorometaxylene	A	40.000	38.8	1.1307870	1.0980720		-3.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.6	1.2696430	1.1631720		-8.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.8	1.0814980	1.0759940		-0.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012326ECD7.D
Data file 2: /230201.b/230201.b/02012326ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254CCV5
Client ID:
Injection Date: 01-FEB-2023 20:26
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.000	262253	5.684	0.000	186679	38.8	39.8	2.4	Tetrachloro-m-xylene
13.889	-0.001	159507	14.116	-0.000	180572	35.3	36.6	3.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	477661	-5.1
Hexabromobiphenyl	647433	422545	-34.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	346989	3.0
Hexabromobiphenyl	382032	310482	-18.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.294	-0.002	98681	202.7	1	9.444	0.000	57597	228.8
Aroclor-1254	2	9.371	-0.001	39151	188.4	2	9.964	0.000	45520	223.7
Aroclor-1254	3	9.663	-0.000	61851	198.3	3	10.115	0.000	93839	211.4
Aroclor-1254	4	9.800	-0.002	120918	197.8	4	10.365	0.000	94983	214.0
Aroclor-1254	5	10.162	-0.001	75447	189.8	5	10.563	0.000	44516	180.1

Total Col1Ave (5 peaks): 195.4 Total Col2Ave (5 peaks): 211.6 RPD = 8

Corrected Ave (4 peaks): 193.6 Corrected Ave (4 peaks): 207.3 RPD = 7

CalAmt %D: -21.8 CalAmt %D: -15.4

Total PCB Area Col1 (5.907 - 13.790) = 1195900 Col1 Total PCB = 0.2 ppm*

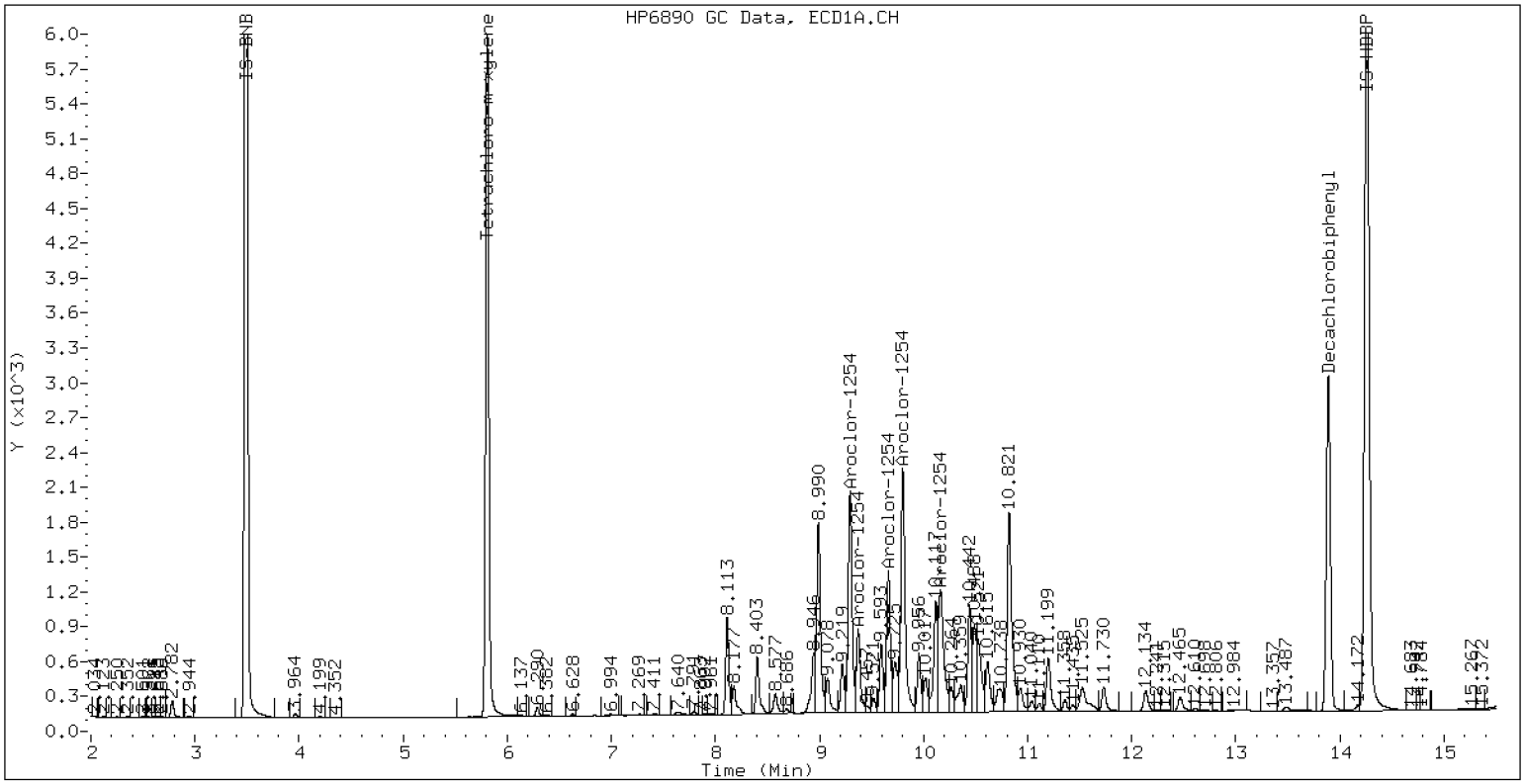
Total PCB Area Col2 (5.784 - 14.016) = 903510 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

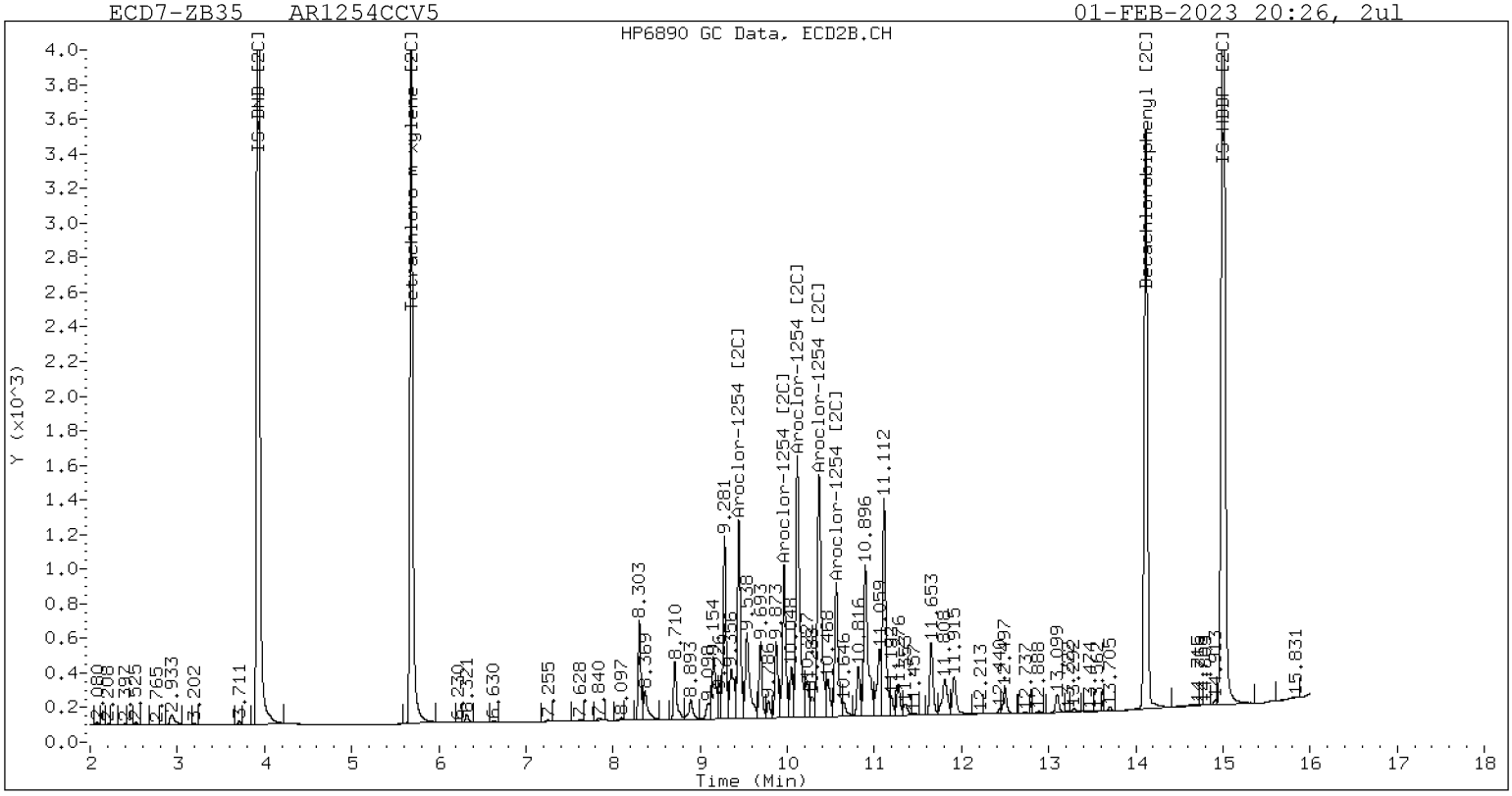
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254CCV5 01-FEB-2023 20:26, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254CCV5 01-FEB-2023 20:26, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02012327ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0012	Injection Date:	02/01/23
Lab Sample ID:	SLB0012-CCV6	Injection Time:	20:47
Sequence Name:	AR1660CCV6		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	253	0.0506755	0.0515784		1.2	+/-20
Aroclor-1016 (1)	A	250.00	257	0.0297277	0.0305865		2.8	
Aroclor-1016 (2)	A	250.00	260	0.0985017	0.1026277		4.0	
Aroclor-1016 (3)	A	250.00	237	0.0453193	0.0429767		-5.2	
Aroclor-1016 (4)	A	250.00	258	0.0291533	0.0301226		3.2	
Aroclor 1016 [2C]	A	250.00	267	0.0519244	0.0557193		6.9	+/-20
Aroclor-1016 (1) [2C]	A	250.00	264	0.0433907	0.0458718		5.6	
Aroclor-1016 (2) [2C]	A	250.00	269	0.0950862	0.1024844		7.6	
Aroclor-1016 (3) [2C]	A	250.00	275	0.0388014	0.0427490		10.0	
Aroclor-1016 (4) [2C]	A	250.00	261	0.0304194	0.0317720		4.4	
Aroclor 1260	A	250.00	254	0.0605224	0.0617266		1.8	+/-20
Aroclor-1260 (1)	A	250.00	276	0.0448870	0.0494995		10.4	
Aroclor-1260 (2)	A	250.00	268	0.0461412	0.0494231		7.2	
Aroclor-1260 (3)	A	250.00	254	0.1214672	0.1231755		1.6	
Aroclor-1260 (4)	A	250.00	244	0.0627593	0.0613724		-2.4	
Aroclor-1260 (5)	A	250.00	230	0.0273573	0.0251627		-8.0	
Aroclor 1260 [2C]	A	250.00	252	0.0836545	0.0837736		0.7	+/-20
Aroclor-1260 (1) [2C]	A	250.00	256	0.0577136	0.0590023		2.4	
Aroclor-1260 (2) [2C]	A	250.00	251	0.1460113	0.1465426		0.4	
Aroclor-1260 (3) [2C]	A	250.00	256	0.0363944	0.0372023		2.4	
Aroclor-1260 (4) [2C]	A	250.00	244	0.0944986	0.0923473		-2.4	
Decachlorobiphenyl	A	40.000	38.7	0.8555994	0.8282077		-3.3	+/-20
Tetrachlorometaxylene	A	40.000	41.9	1.1307870	1.1835120		4.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.4	1.2696430	1.2184740		-4.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	41.7	1.0814980	1.1280500		4.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012327ECD7.D
Data file 2: /230201.b/230201.b/02012327ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV6
Client ID:
Injection Date: 01-FEB-2023 20:47
Report Date: 02/02/2023 09:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.001	275940	5.685	0.000	191077	41.9	41.7	0.3	Tetrachloro-m-xylene
13.890	-0.000	211646	14.117	0.001	215963	38.7	38.4	0.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	466307	-7.4
Hexabromobiphenyl	647433	511094	-21.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	338774	0.6
Hexabromobiphenyl	382032	354481	-7.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.001	44571	257.2	1	7.253	-0.000	48563	264.3
Aroclor-1016	2	7.650	0.000	149550	260.5	2	7.849	-0.000	108497	269.5
Aroclor-1016	3	7.787	-0.000	62626	237.1	3	8.049	0.000	45257	275.4
Aroclor-1016	4	8.402	0.000	43895	258.3	4	8.303	-0.000	33636	261.1
Total Col1Ave (4 peaks):					253.3	Total Col2Ave (4 peaks):				267.6 RPD = 5
Corrected Ave (3 peaks):					250.9	Corrected Ave (3 peaks):				265.0 RPD = 5
CalAmt %D:					1.3	CalAmt %D:				7.0
Aroclor-1260	1	11.041	0.000	79059	275.7	1	11.650	0.001	65360	255.6
Aroclor-1260	2	11.357	-0.000	78937	267.8	2	11.914	0.001	162333	250.9
Aroclor-1260	3	11.730	-0.001	196732	253.5	3	12.433	0.001	41211	255.5
Aroclor-1260	4	12.135	-0.000	98022	244.5	4	12.497	-0.001	102298	244.3
Aroclor-1260	5	12.240	-0.001	40189	229.9	NS	---			----
Total Col1Ave (5 peaks):					254.3	Total Col2Ave (4 peaks):				251.6 RPD = 1
Corrected Ave (4 peaks):					248.9	Corrected Ave (3 peaks):				250.3 RPD = 1
CalAmt %D:					1.7	CalAmt %D:				0.6

Total PCB Area Col1 (5.907 - 13.790) = 2367582 Col1 Total PCB = 0.4 ppm*

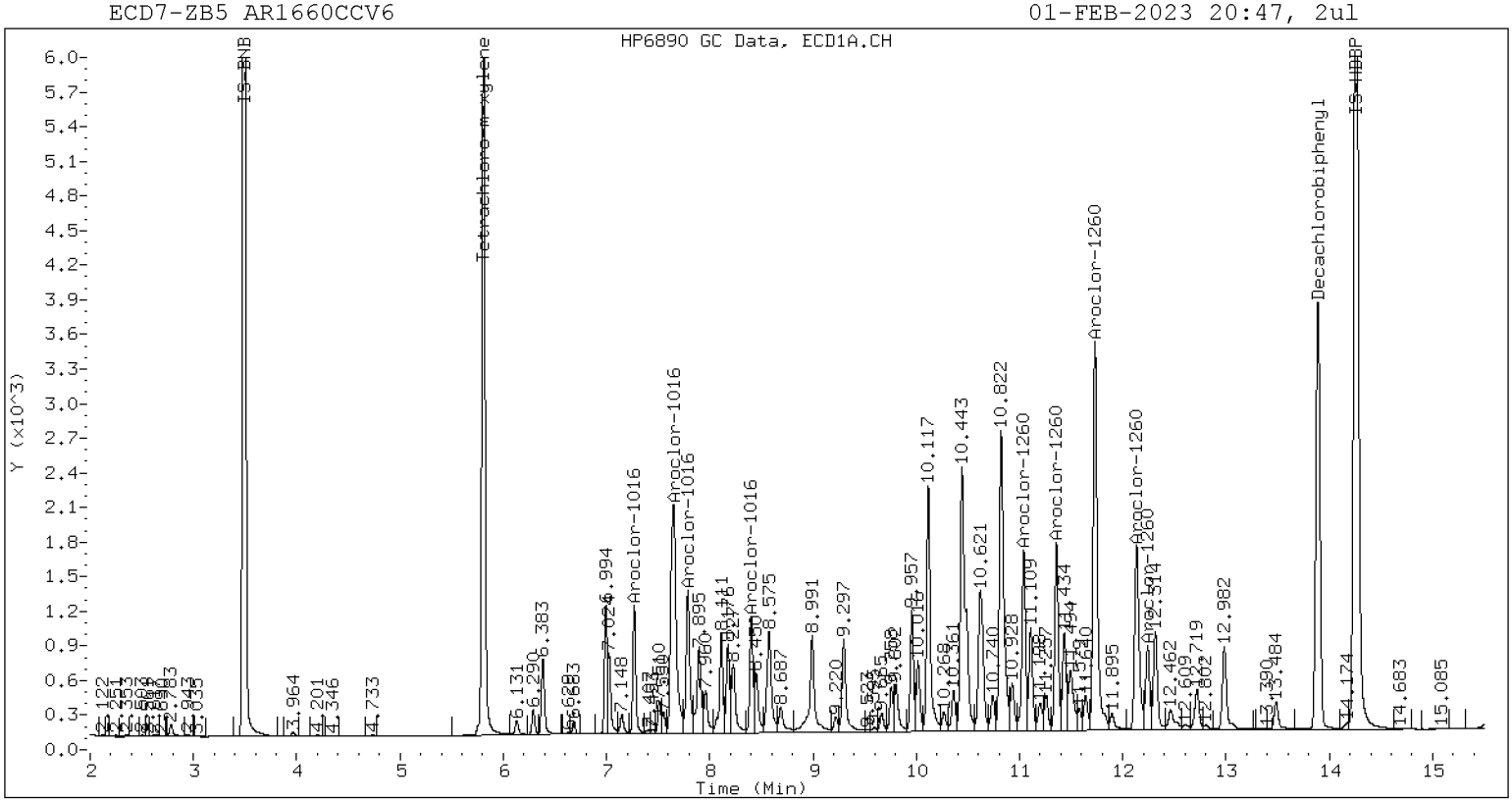
Total PCB Area Col2 (5.784 - 14.016) = 1691120 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

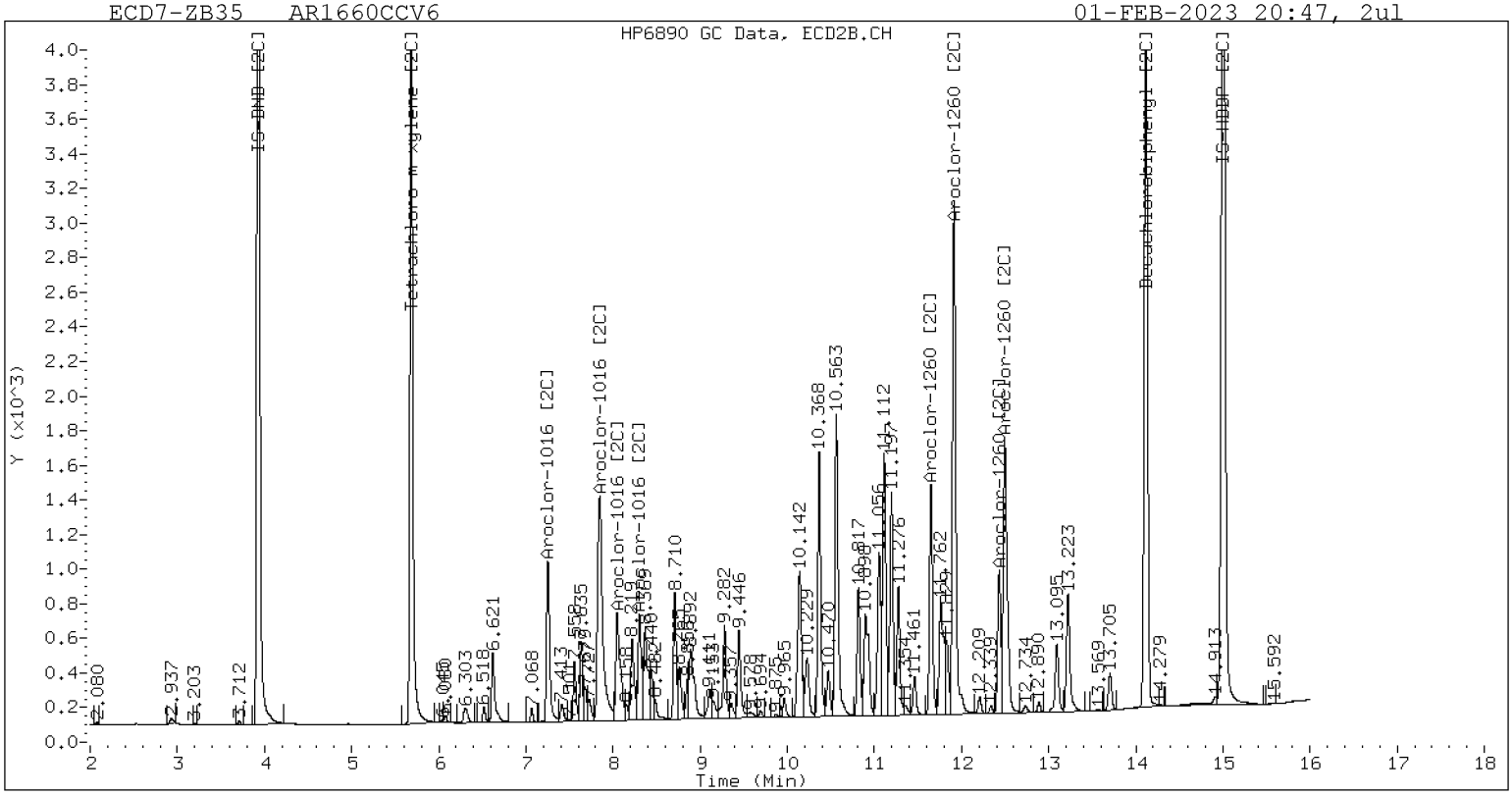
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV6 01-FEB-2023 20:47, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV6 01-FEB-2023 20:47, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02012336ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0012	Injection Date:	02/01/23
Lab Sample ID:	SLB0012-CCV7	Injection Time:	23:56
Sequence Name:	AR1248CCV7		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	180	0.0592639	0.0407470		-27.9	+/-20 *
Aroclor-1248 (1)	A	250.00	213		0.0341619			
Aroclor-1248 (2)	A	250.00	208		0.0424708			
Aroclor-1248 (3)	A	250.00	144		0.0560997			
Aroclor-1248 (4)	A	250.00	156		0.0302555			
Aroclor 1248 [2C]	A	250.00	221	0.0453673	0.0399145		-11.5	+/-20
Aroclor-1248 (1) [2C]	A	250.00	231		0.0334518			
Aroclor-1248 (2) [2C]	A	250.00	222		0.0345363			
Aroclor-1248 (3) [2C]	A	250.00	221		0.0420586			
Aroclor-1248 (4) [2C]	A	250.00	211		0.0496114			
Decachlorobiphenyl	A	40.000	34.8	0.8555994	0.7446385		-13.0	+/-20
Tetrachlorometaxylene	A	40.000	37.7	1.1307870	1.0656700		-5.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.8	1.2696430	1.1682520		-8.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.2	1.0814980	1.0609670		-2.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012336ECD7.D
Data file 2: /230201.b/230201.b/02012336ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248CCV7
Client ID:
Injection Date: 01-FEB-2023 23:56
Report Date: 02/02/2023 09:54
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.000	252203	5.684	-0.001	183447	37.7	39.2	4.0	Tetrachloro-m-xylene
13.890	-0.000	130276	14.117	0.001	158700	34.8	36.8	5.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	473323	-6.0
Hexabromobiphenyl	647433	349904	-46.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	345811	2.6
Hexabromobiphenyl	382032	271688	-28.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.401	-0.001	50530	213.4	1	8.303	0.000	36150	231.3
Aroclor-1248	2	8.574	-0.002	62820	208.0	2	8.710	0.000	37322	221.8
Aroclor-1248	3	8.994	-0.001	82979	143.6	3	9.153	0.000	45451	221.1
Aroclor-1248	4	9.290	-0.001	44752	156.5	4	9.576	0.000	53613	210.9
Total Col1Ave (4 peaks):					180.4	Total Col2Ave (4 peaks):				221.3 RPD = 20
Corrected Ave (3 peaks):					169.4	Corrected Ave (3 peaks):				217.9 RPD = 25
CalAmt %D:					-27.8	CalAmt %D:				-11.5

Total PCB Area Col1 (5.907 - 13.790) = 932013 Col1 Total PCB = 0.2 ppm*

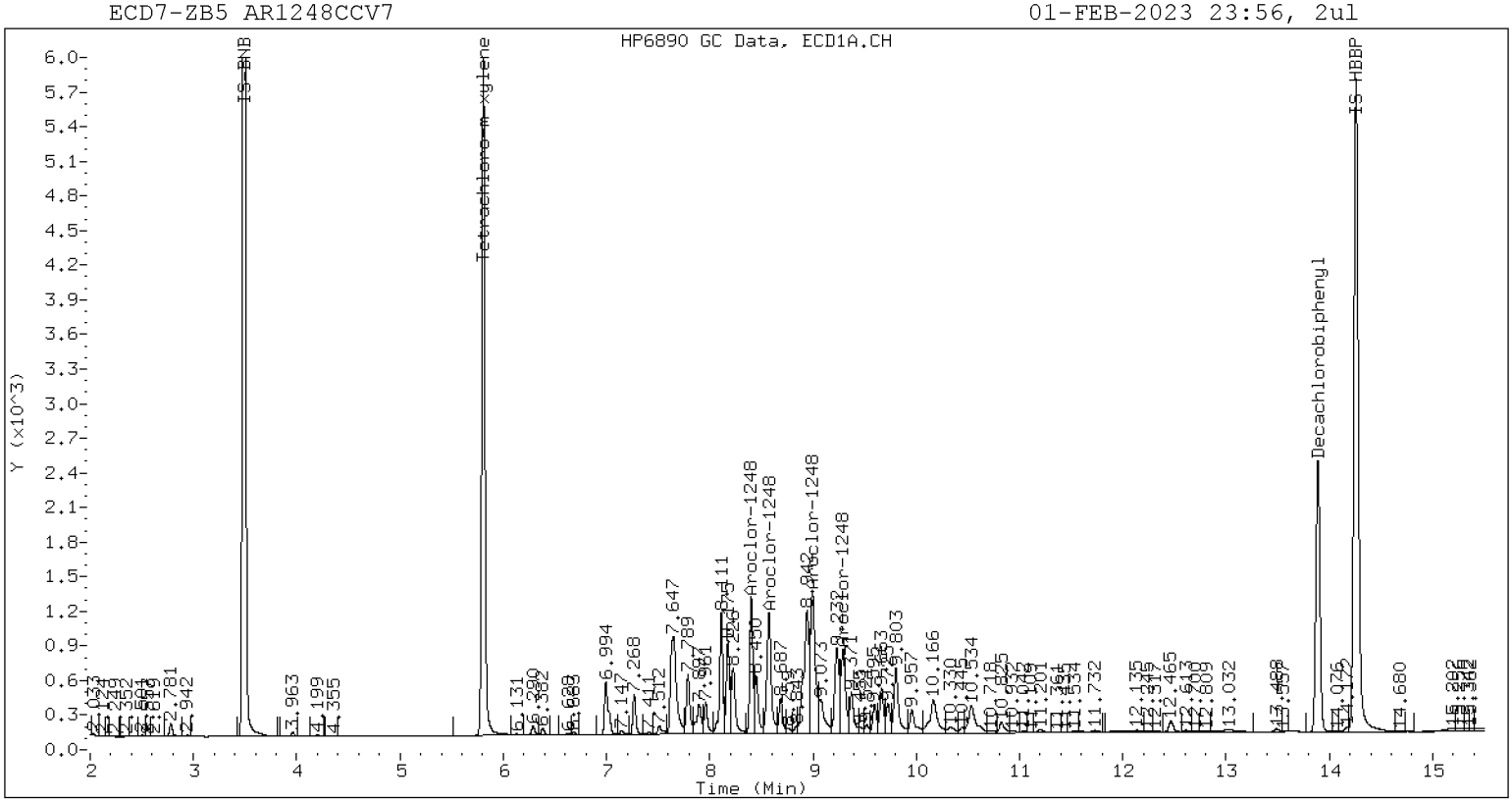
Total PCB Area Col2 (5.784 - 14.016) = 698365 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

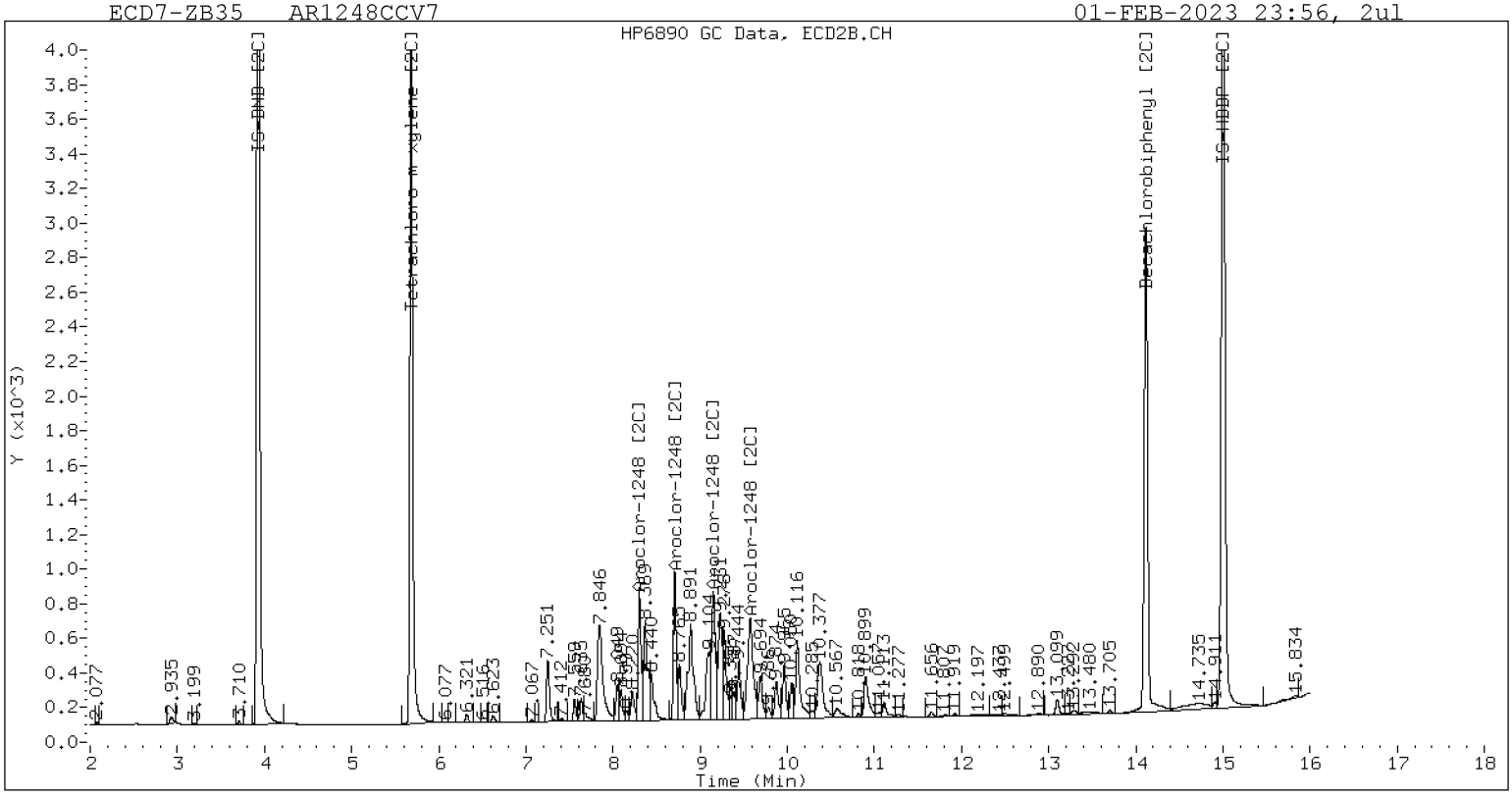
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248CCV7 01-FEB-2023 23:56, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248CCV7 01-FEB-2023 23:56, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02012337ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0012	Injection Date:	02/02/23
Lab Sample ID:	SLB0012-CCV8	Injection Time:	00:17
Sequence Name:	AR1660CCV8		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	249	0.0506755	0.0506814		-0.4	+/-20
Aroclor-1016 (1)	A	250.00	254	0.0297277	0.0302097		1.6	
Aroclor-1016 (2)	A	250.00	256	0.0985017	0.1008198		2.4	
Aroclor-1016 (3)	A	250.00	232	0.0453193	0.0420331		-7.2	
Aroclor-1016 (4)	A	250.00	254	0.0291533	0.0296629		1.6	
Aroclor 1016 [2C]	A	250.00	262	0.0519244	0.0546185		4.9	+/-20
Aroclor-1016 (1) [2C]	A	250.00	261	0.0433907	0.0452941		4.4	
Aroclor-1016 (2) [2C]	A	250.00	264	0.0950862	0.1004994		5.6	
Aroclor-1016 (3) [2C]	A	250.00	268	0.0388014	0.0415848		7.2	
Aroclor-1016 (4) [2C]	A	250.00	256	0.0304194	0.0310956		2.4	
Aroclor 1260	A	250.00	261	0.0605224	0.0632861		4.4	+/-20
Aroclor-1260 (1)	A	250.00	293	0.0448870	0.0525837		17.2	
Aroclor-1260 (2)	A	250.00	281	0.0461412	0.0518073		12.4	
Aroclor-1260 (3)	A	250.00	259	0.1214672	0.1257458		3.6	
Aroclor-1260 (4)	A	250.00	244	0.0627593	0.0613174		-2.4	
Aroclor-1260 (5)	A	250.00	228	0.0273573	0.0249763		-8.8	
Aroclor 1260 [2C]	A	250.00	264	0.0836545	0.0878943		5.6	+/-20
Aroclor-1260 (1) [2C]	A	250.00	270	0.0577136	0.0624670		8.0	
Aroclor-1260 (2) [2C]	A	250.00	262	0.1460113	0.1532333		4.8	
Aroclor-1260 (3) [2C]	A	250.00	268	0.0363944	0.0390727		7.2	
Aroclor-1260 (4) [2C]	A	250.00	256	0.0944986	0.0968042		2.4	
Decachlorobiphenyl	A	40.000	38.6	0.8555994	0.8263913		-3.5	+/-20
Tetrachlorometaxylene	A	40.000	42.0	1.1307870	1.1860400		5.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.8	1.2696430	1.2313120		-3.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	42.0	1.0814980	1.1344420		5.0	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230201.b/02012337ECD7.D
Data file 2: /230201.b/230201.b/02012337ECD7.D
Method: \\target\share\chem4\ecd7.i\230201.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV8
Client ID:
Injection Date: 02-FEB-2023 00:17
Report Date: 02/02/2023 09:54
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.000	274168	5.684	0.000	192166	42.0	42.0	0.0	Tetrachloro-m-xylene
13.890	-0.000	180507	14.116	0.000	194077	38.6	38.8	0.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	462325	-8.1
Hexabromobiphenyl	647433	436856	-32.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	338785	0.6
Hexabromobiphenyl	382032	315236	-17.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.001	43646	254.1	1	7.253	0.000	47953	261.0
Aroclor-1016	2	7.650	-0.000	145661	255.9	2	7.849	0.000	106399	264.2
Aroclor-1016	3	7.787	-0.001	60728	231.9	3	8.049	0.000	44026	267.9
Aroclor-1016	4	8.402	-0.000	42856	254.4	4	8.303	0.000	32921	255.6
Total Col1Ave (4 peaks):					249.0	Total Col2Ave (4 peaks):				262.2 RPD = 5
Corrected Ave (3 peaks):					246.8	Corrected Ave (3 peaks):				260.3 RPD = 5
CalAmt %D:					-0.4	CalAmt %D:				4.9
Aroclor-1260	1	11.040	-0.000	71786	292.9	1	11.649	0.000	61537	270.6
Aroclor-1260	2	11.357	-0.000	70726	280.7	2	11.913	0.000	150952	262.4
Aroclor-1260	3	11.731	-0.001	171665	258.8	3	12.432	0.000	38491	268.4
Aroclor-1260	4	12.134	-0.001	83709	244.3	4	12.497	0.000	95363	256.1
Aroclor-1260	5	12.241	-0.001	34097	228.2	NS	---			----
Total Col1Ave (5 peaks):					261.0	Total Col2Ave (4 peaks):				264.4 RPD = 1
Corrected Ave (4 peaks):					253.0	Corrected Ave (3 peaks):				262.3 RPD = 4
CalAmt %D:					4.4	CalAmt %D:				5.7

Total PCB Area Col1 (5.907 - 13.790) = 2196626 Col1 Total PCB = 0.4 ppm*

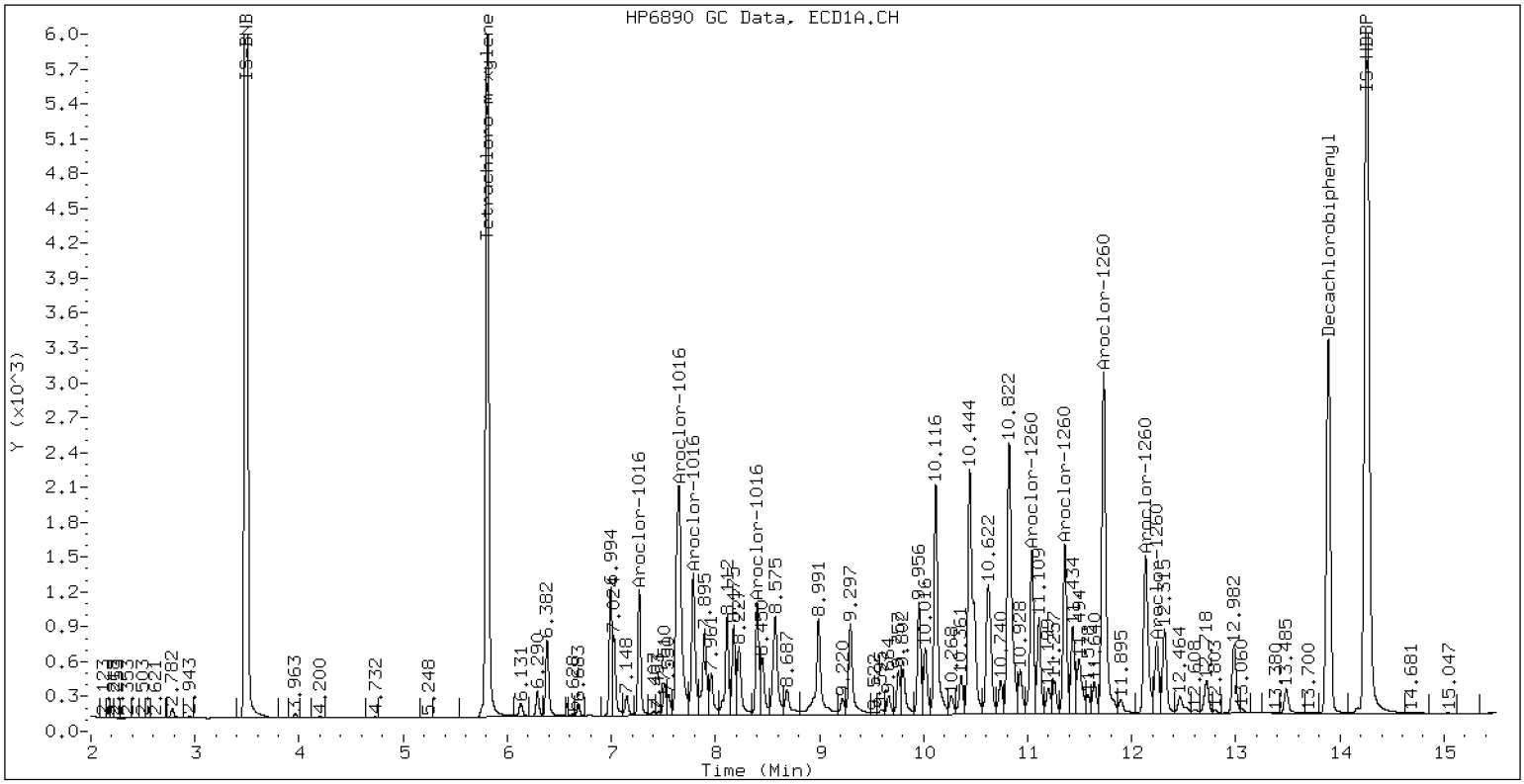
Total PCB Area Col2 (5.784 - 14.016) = 1616114 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

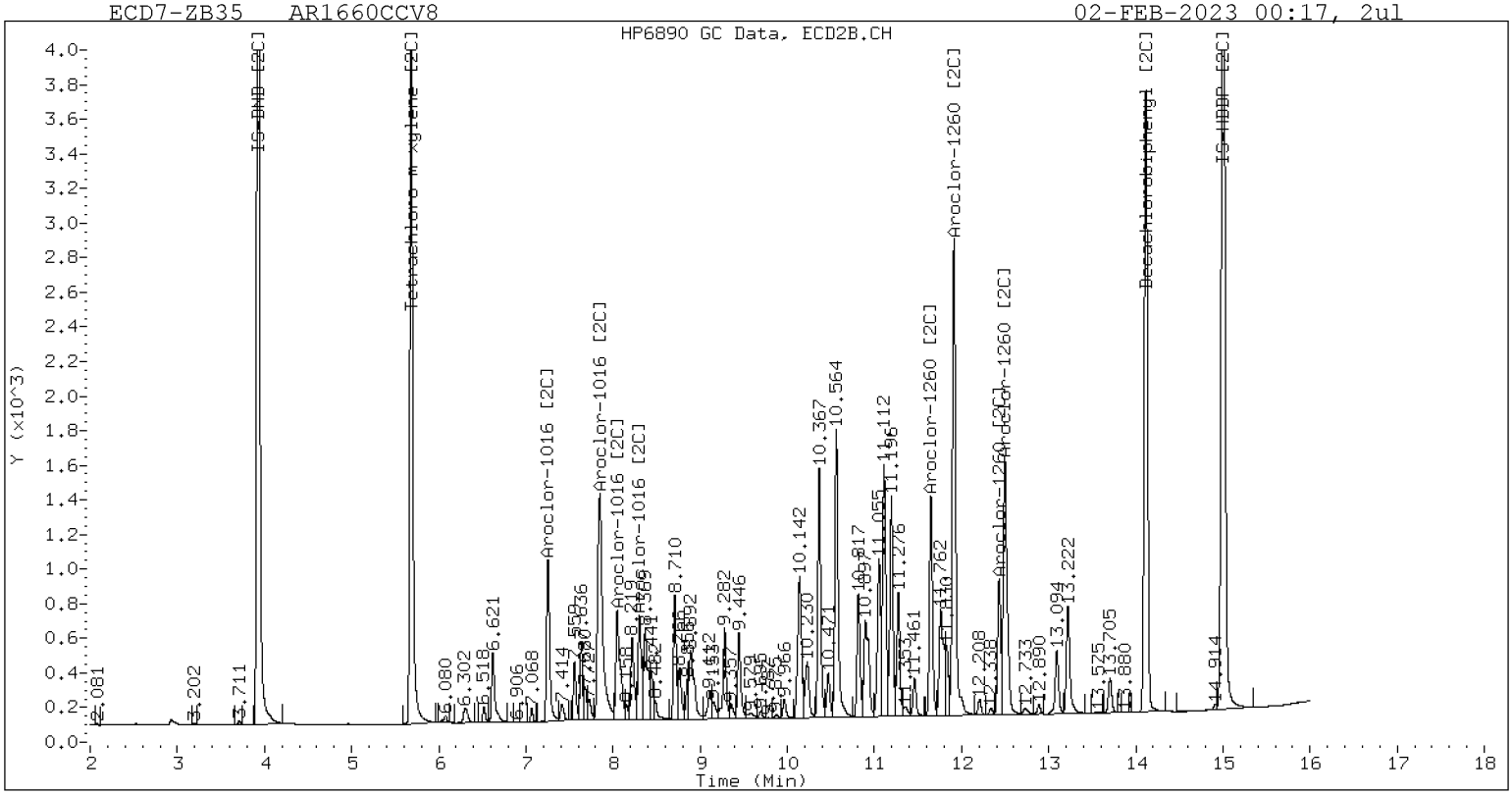
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV8 02-FEB-2023 00:17, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV8 02-FEB-2023 00:17, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02022306ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0023	Injection Date:	02/02/23
Lab Sample ID:	SLB0023-CCV1	Injection Time:	10:45
Sequence Name:	AR1248CCV1		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	216	0.0592639	0.0491937		-13.6	+/-20
Aroclor-1248 (1)	A	250.00	249		0.0399146			
Aroclor-1248 (2)	A	250.00	246		0.0501892			
Aroclor-1248 (3)	A	250.00	178		0.0697483			
Aroclor-1248 (4)	A	250.00	191		0.0369227			
Aroclor 1248 [2C]	A	250.00	248	0.0453673	0.0447825		-1.0	+/-20
Aroclor-1248 (1) [2C]	A	250.00	256		0.0370987			
Aroclor-1248 (2) [2C]	A	250.00	246		0.0383745			
Aroclor-1248 (3) [2C]	A	250.00	249		0.0474520			
Aroclor-1248 (4) [2C]	A	250.00	239		0.0562048			
Decachlorobiphenyl	A	40.000	34.4	0.8555994	0.7348847		-14.0	+/-20
Tetrachlorometaxylene	A	40.000	39.2	1.1307870	1.1094890		-2.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.8	1.2696430	1.2003740		-5.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.4	1.0814980	1.0659590		-1.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230202.b/02022306ECD7.D
Data file 2: /230202.b/230202.b/02022306ECD7.D
Method: \\target\share\chem4\ecd7.i\230202.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248CCV1
Client ID:
Injection Date: 02-FEB-2023 10:45
Report Date: 02/02/2023 11:38
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.001	263912	5.685	0.001	184880	39.2	39.4	0.5	Tetrachloro-m-xylene
13.890	-0.001	229887	14.119	0.001	231437	34.4	37.8	9.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	475736	-5.5
Hexabromobiphenyl	647433	625641	-3.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	346880	3.0
Hexabromobiphenyl	382032	385608	0.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.403	-0.003	59340	249.3	1	8.304	0.000	40215	256.5
Aroclor-1248	2	8.576	-0.004	74615	245.8	2	8.711	0.000	41598	246.5
Aroclor-1248	3	8.995	-0.004	103693	178.6	3	9.153	0.000	51438	249.4
Aroclor-1248	4	9.292	-0.002	54892	191.0	4	9.577	0.000	60926	238.9
Total Col1Ave (4 peaks):					216.2	Total Col2Ave (4 peaks):				247.8 RPD = 14
Corrected Ave (3 peaks):					205.1	Corrected Ave (3 peaks):				244.9 RPD = 18
CalAmt %D:					-13.5	CalAmt %D:				-0.9

Total PCB Area Col1 (5.909 - 13.792) = 1124347 Col1 Total PCB = 0.2 ppm*

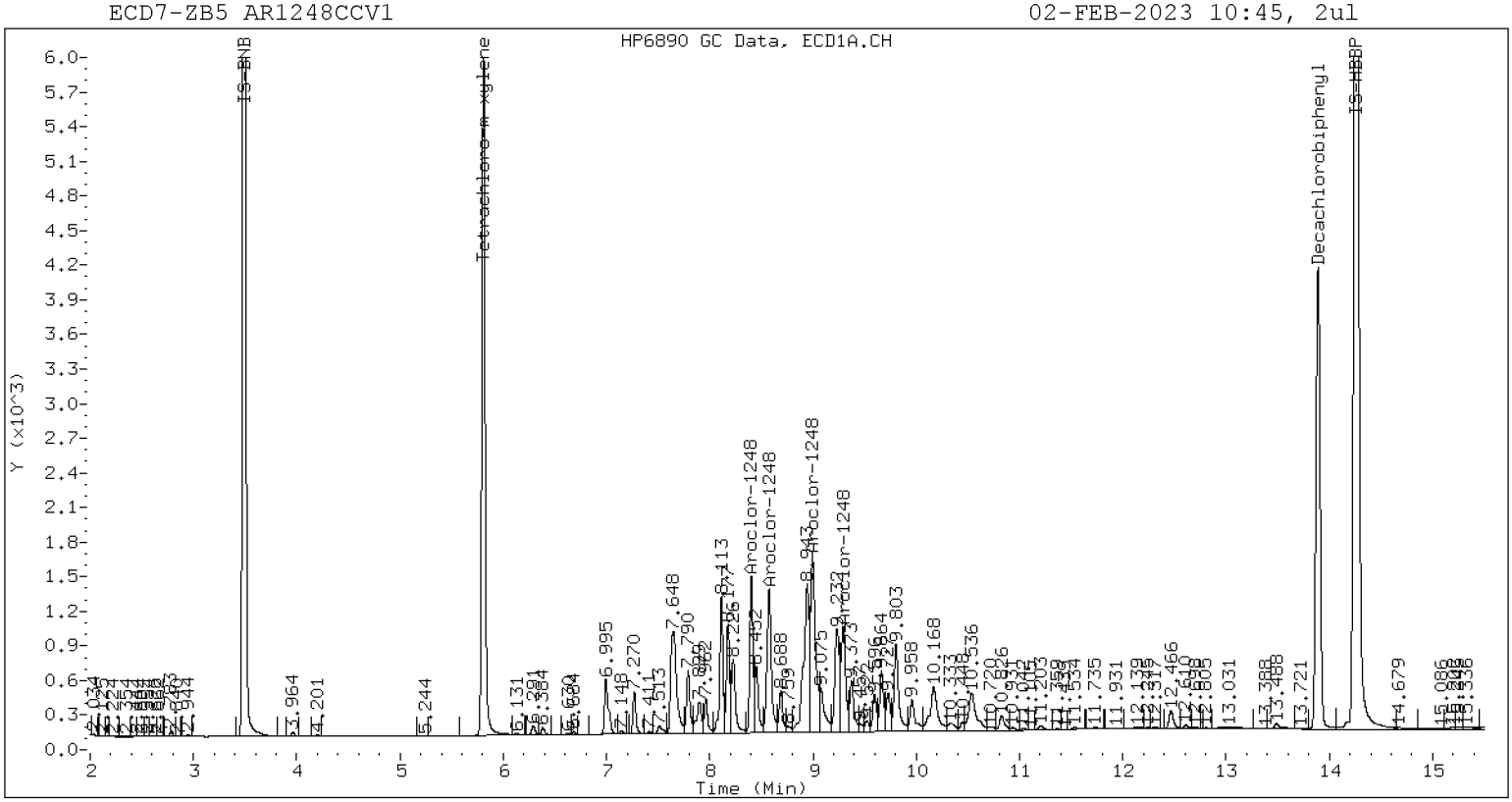
Total PCB Area Col2 (5.784 - 14.018) = 790585 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

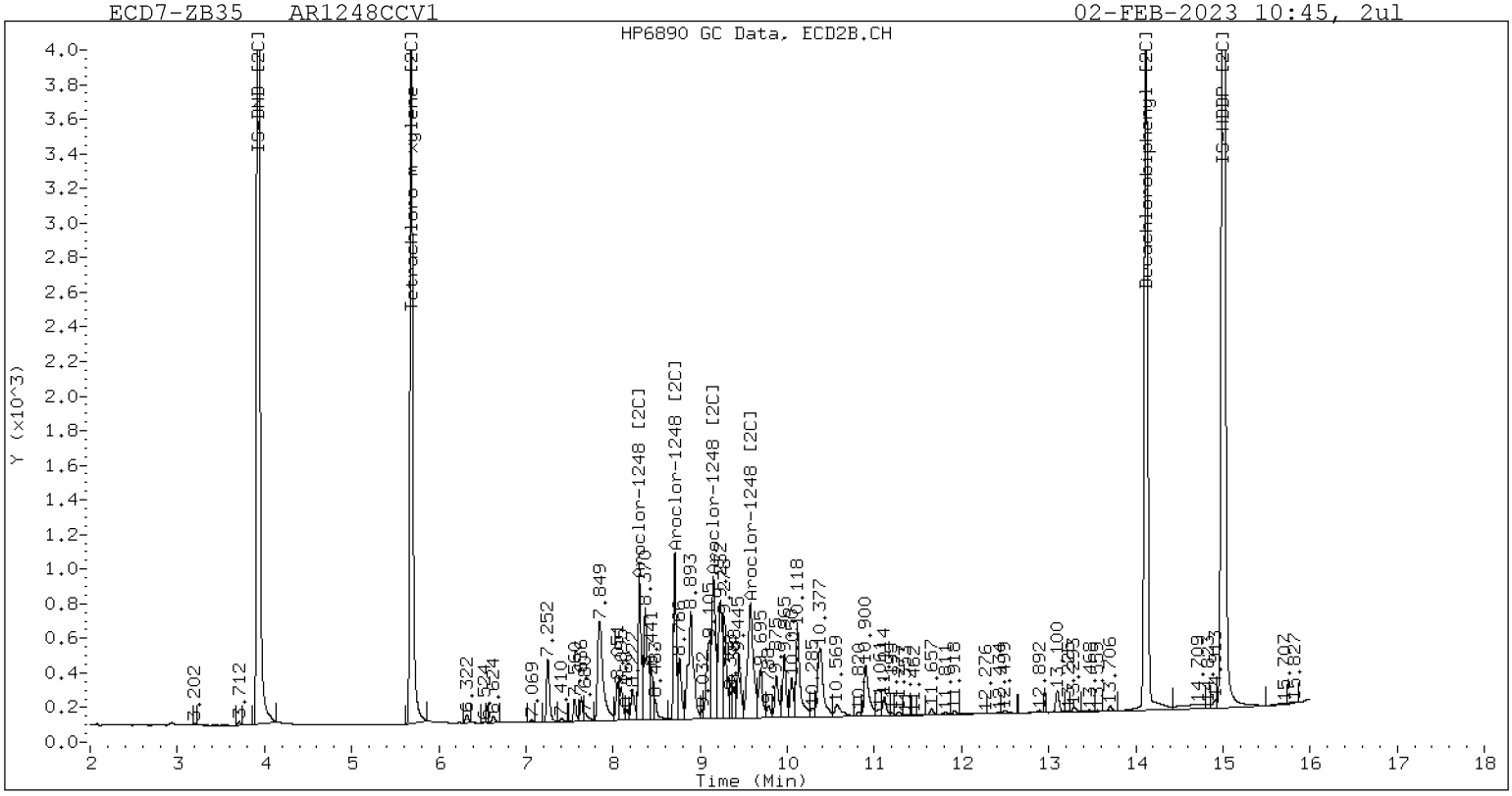
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248CCV1 02-FEB-2023 10:45, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248CCV1 02-FEB-2023 10:45, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02022307ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0023	Injection Date:	02/02/23
Lab Sample ID:	SLB0023-CCV2	Injection Time:	11:06
Sequence Name:	AR1660CCV2		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	253	0.0506755	0.0516446		1.3	+/-20
Aroclor-1016 (1)	A	250.00	256	0.0297277	0.0304429		2.4	
Aroclor-1016 (2)	A	250.00	261	0.0985017	0.1030049		4.4	
Aroclor-1016 (3)	A	250.00	237	0.0453193	0.0429332		-5.2	
Aroclor-1016 (4)	A	250.00	259	0.0291533	0.0301975		3.6	
Aroclor 1016 [2C]	A	250.00	271	0.0519244	0.0563025		8.2	+/-20
Aroclor-1016 (1) [2C]	A	250.00	266	0.0433907	0.0462108		6.4	
Aroclor-1016 (2) [2C]	A	250.00	271	0.0950862	0.1032278		8.4	
Aroclor-1016 (3) [2C]	A	250.00	279	0.0388014	0.0433365		11.6	
Aroclor-1016 (4) [2C]	A	250.00	266	0.0304194	0.0324350		6.4	
Aroclor 1260	A	250.00	216	0.0605224	0.0521919		-13.6	+/-20
Aroclor-1260 (1)	A	250.00	227	0.0448870	0.0406945		-9.2	
Aroclor-1260 (2)	A	250.00	218	0.0461412	0.0402654		-12.8	
Aroclor-1260 (3)	A	250.00	212	0.1214672	0.1032712		-15.2	
Aroclor-1260 (4)	A	250.00	216	0.0627593	0.0541034		-13.6	
Aroclor-1260 (5)	A	250.00	207	0.0273573	0.0226251		-17.2	
Aroclor 1260 [2C]	A	250.00	247	0.0836545	0.0821651		-1.3	+/-20
Aroclor-1260 (1) [2C]	A	250.00	247	0.0577136	0.0570500		-1.2	
Aroclor-1260 (2) [2C]	A	250.00	245	0.1460113	0.1429045		-2.0	
Aroclor-1260 (3) [2C]	A	250.00	251	0.0363944	0.0366050		0.4	
Aroclor-1260 (4) [2C]	A	250.00	244	0.0944986	0.0921008		-2.4	
Decachlorobiphenyl	A	40.000	37.0	0.8555994	0.7921125		-7.5	+/-20
Tetrachlorometaxylene	A	40.000	42.1	1.1307870	1.1907930		5.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.1	1.2696430	1.2415380		-2.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	41.4	1.0814980	1.1203410		3.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230202.b/02022307ECD7.D
Data file 2: /230202.b/230202.b/02022307ECD7.D
Method: \\target\share\chem4\ecd7.i\230202.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV2
Client ID:
Injection Date: 02-FEB-2023 11:06
Report Date: 02/02/2023 11:38
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.002	271031	5.684	0.000	186036	42.1	41.4	1.6	Tetrachloro-m-xylene
13.889	-0.002	268157	14.118	0.000	248849	37.0	39.1	5.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	455211	-9.6
Hexabromobiphenyl	647433	677068	4.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	332106	-1.4
Hexabromobiphenyl	382032	400872	4.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.268	-0.002	43306	256.0	1	7.252	0.000	47959	266.2
Aroclor-1016	2	7.649	-0.001	146528	261.4	2	7.849	0.000	107133	271.4
Aroclor-1016	3	7.787	-0.002	61074	236.8	3	8.049	0.000	44976	279.2
Aroclor-1016	4	8.401	-0.003	42957	259.0	4	8.303	0.000	33662	266.6
Total Col1Ave (4 peaks):					253.3	Total Col2Ave (4 peaks):				270.9 RPD = 7
Corrected Ave (3 peaks):					250.6	Corrected Ave (3 peaks):				268.1 RPD = 7
CalAmt %D:					1.3	CalAmt %D:				8.3
Aroclor-1260	1	11.041	-0.003	86103	226.6	1	11.651	0.000	71468	247.1
Aroclor-1260	2	11.358	-0.003	85195	218.2	2	11.914	0.000	179020	244.7
Aroclor-1260	3	11.730	-0.004	218505	212.5	3	12.433	0.000	45856	251.4
Aroclor-1260	4	12.135	-0.005	114474	215.5	4	12.498	0.000	115377	243.7
Aroclor-1260	5	12.241	-0.002	47871	206.8	NS	---			----
Total Col1Ave (5 peaks):					215.9	Total Col2Ave (4 peaks):				246.7 RPD = 13
Corrected Ave (4 peaks):					213.2	Corrected Ave (3 peaks):				245.2 RPD = 14
CalAmt %D:					-13.6	CalAmt %D:				-1.3

Total PCB Area Col1 (5.909 - 13.792) = 2501019 Col1 Total PCB = 0.5 ppm*

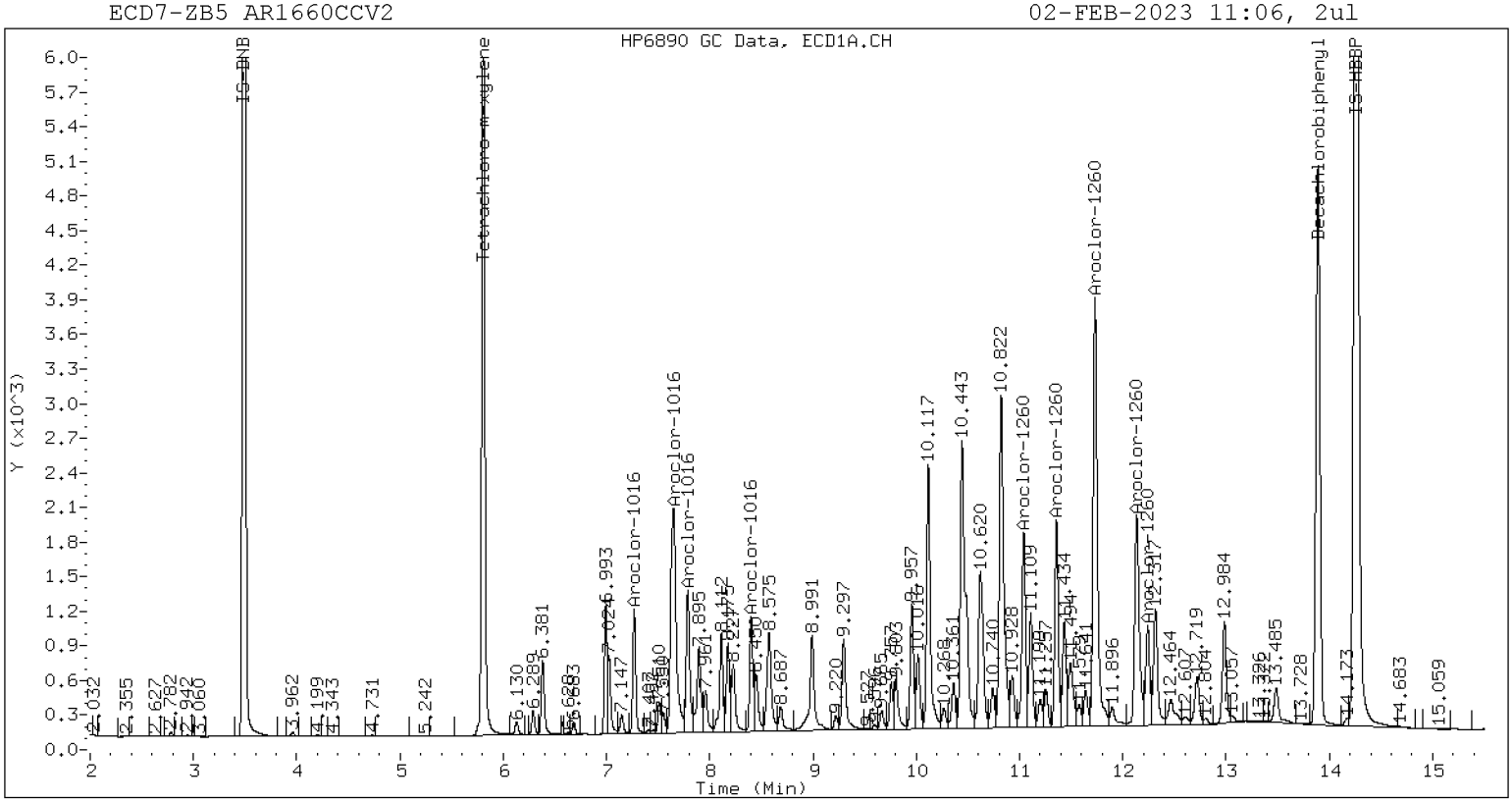
Total PCB Area Col2 (5.784 - 14.018) = 1787471 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

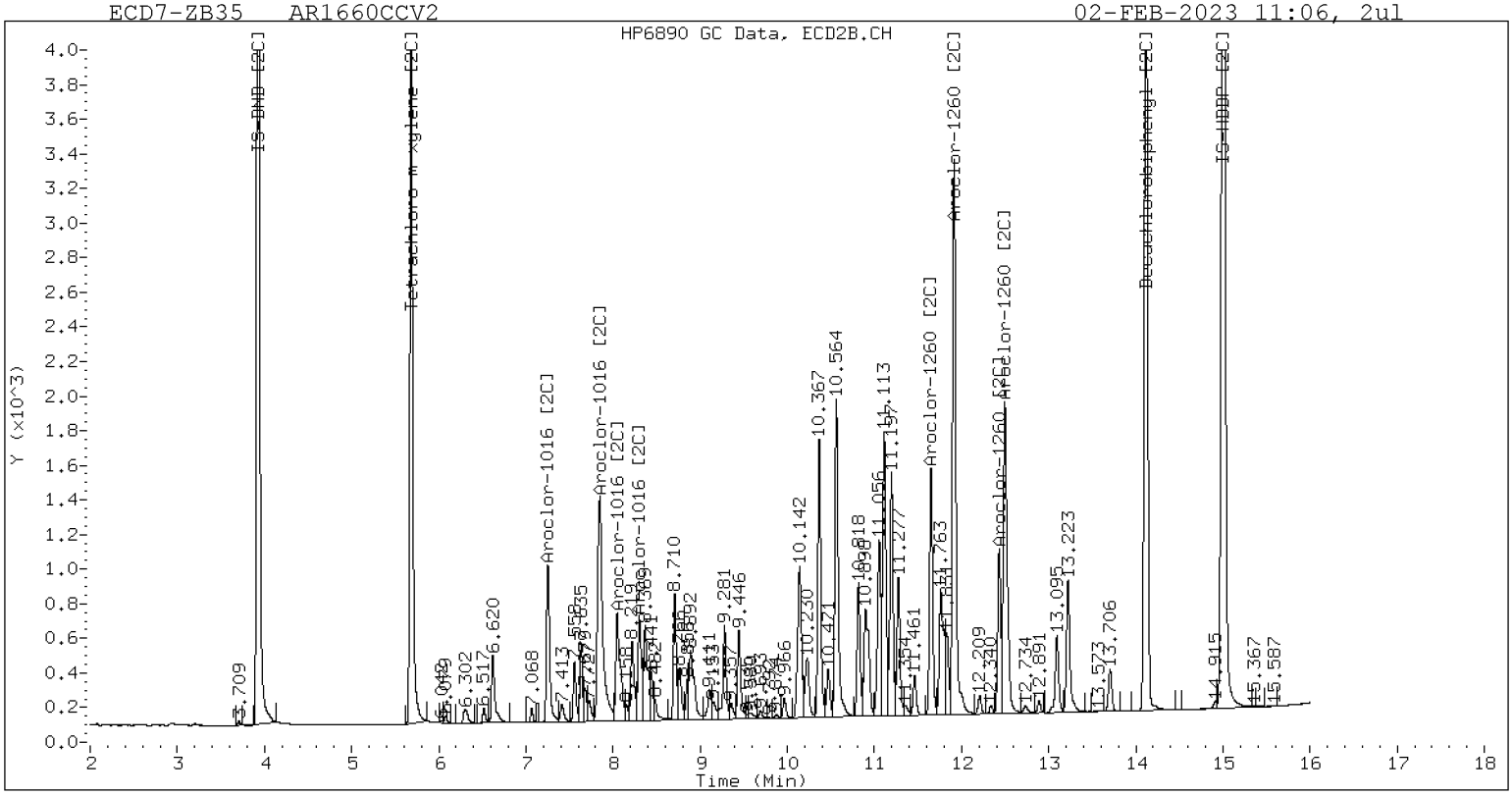
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV2 02-FEB-2023 11:06, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV2 02-FEB-2023 11:06, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02022312ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0023	Injection Date:	02/02/23
Lab Sample ID:	SLB0023-CCV3	Injection Time:	15:09
Sequence Name:	AR1242CCV3		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	252	0.0411165	0.0414373		0.8	+/-20
Aroclor-1242 (1)	A	250.00	250		0.0244583			
Aroclor-1242 (2)	A	250.00	253		0.0810135			
Aroclor-1242 (3)	A	250.00	254		0.0242096			
Aroclor-1242 (4)	A	250.00	251		0.0360678			
Aroclor 1242 [2C]	A	250.00	253	0.0423236	0.0428929		1.1	+/-20
Aroclor-1242 (1) [2C]	A	250.00	260		0.0364341			
Aroclor-1242 (2) [2C]	A	250.00	256		0.0794500			
Aroclor-1242 (3) [2C]	A	250.00	258		0.0250816			
Aroclor-1242 (4) [2C]	A	250.00	237		0.0306058			
Decachlorobiphenyl	A	40.000	34.6	0.8555994	0.7395303		-13.5	+/-20
Tetrachlorometaxylene	A	40.000	48.4	1.1307870	1.3676330		21.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.9	1.2696430	1.2342560		-2.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	48.7	1.0814980	1.3165350		21.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230202.b/02022312ECD7.D
Data file 2: /230202.b/230202.b/02022312ECD7.D
Method: \\target\share\chem4\ecd7.i\230202.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242CCV3
Client ID:
Injection Date: 02-FEB-2023 15:09
Report Date: 02/02/2023 16:03
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	0.001	318521	5.686	0.002	221659	48.4	48.7	0.6	Tetrachloro-m-xylene
13.890	0.000	266533	14.118	0.000	267670	34.6	38.9	11.7	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	465799	-7.5
Hexabromobiphenyl	647433	720817	11.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	336731	-0.1
Hexabromobiphenyl	382032	433735	13.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	7.269	-0.002	35602	249.6	1	7.254	-0.002	38339	260.3
Aroclor-1242	2	7.651	-0.004	117925	252.6	2	7.850	-0.003	83604	255.6
Aroclor-1242	3	8.402	-0.005	35240	254.1	3	9.155	-0.004	26393	257.6
Aroclor-1242	4	8.576	-0.006	52501	250.6	4	9.581	-0.006	32206	237.2
Total Col1Ave (4 peaks):					251.7	Total Col2Ave (4 peaks):				252.7 RPD = 0
Corrected Ave (3 peaks):					250.9	Corrected Ave (3 peaks):				250.1 RPD = 0
CalAmt %D:					0.7	CalAmt %D:				1.1

Total PCB Area Col1 (5.907 - 13.789) = 866479 Col1 Total PCB = 0.2 ppm*

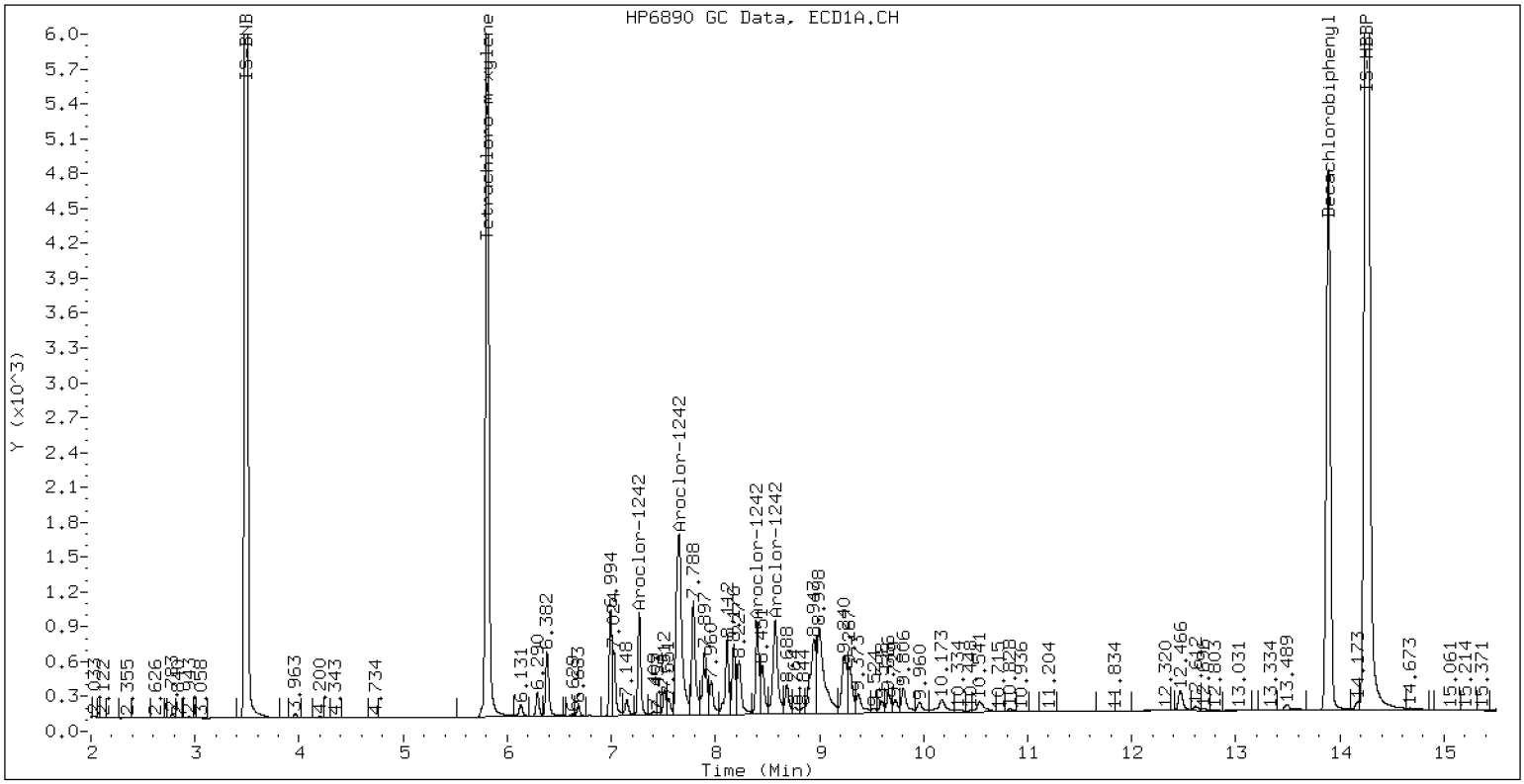
Total PCB Area Col2 (5.784 - 14.018) = 628042 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

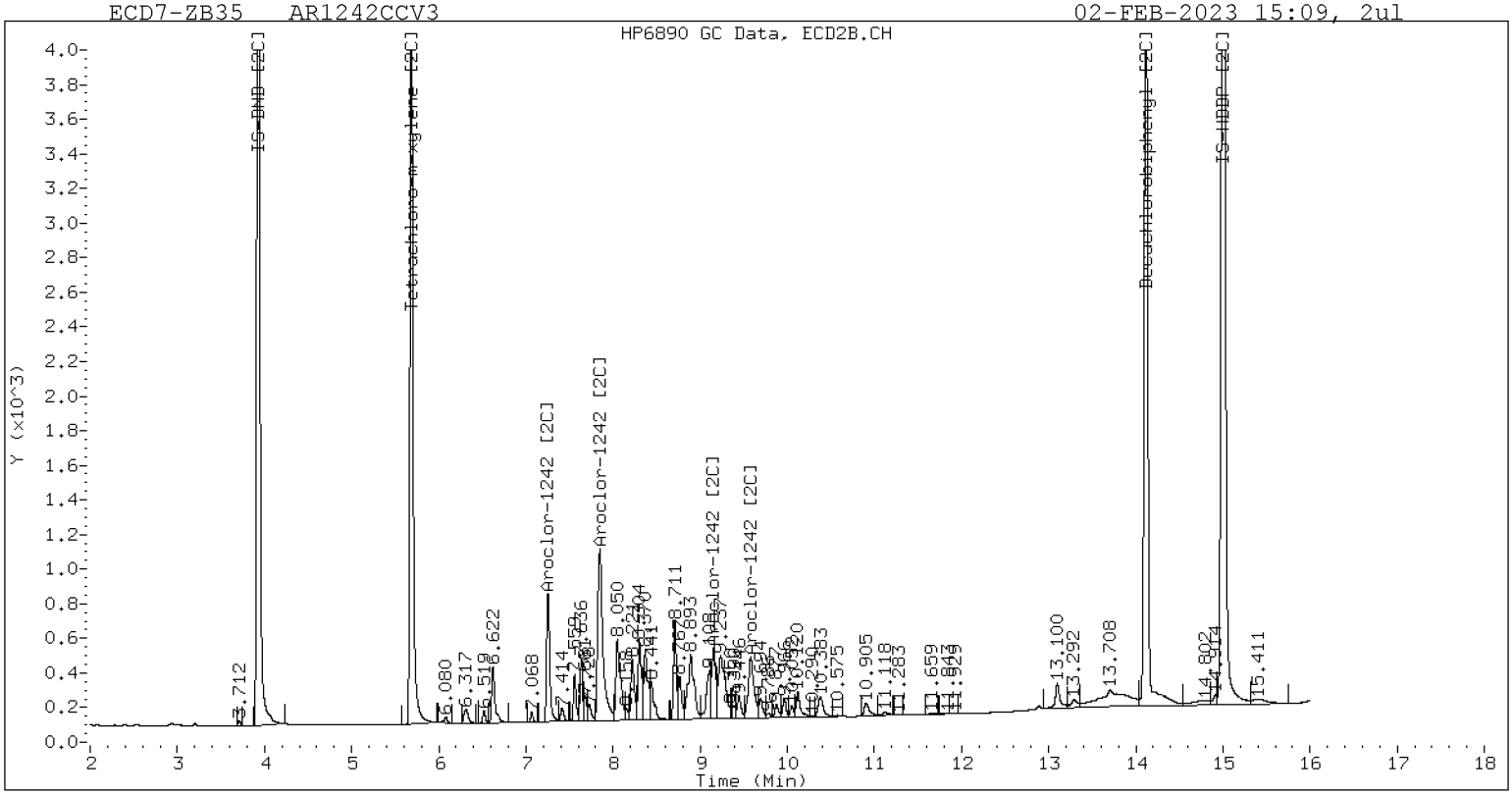
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242CCV3 02-FEB-2023 15:09, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242CCV3 02-FEB-2023 15:09, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02022313ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0023	Injection Date:	02/02/23
Lab Sample ID:	SLB0023-CCV4	Injection Time:	15:30
Sequence Name:	AR1660CCV4		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	254	0.0506755	0.0515609		1.5	+/-20
Aroclor-1016 (1)	A	250.00	256	0.0297277	0.0304337		2.4	
Aroclor-1016 (2)	A	250.00	258	0.0985017	0.1018700		3.2	
Aroclor-1016 (3)	A	250.00	240	0.0453193	0.0435234		-4.0	
Aroclor-1016 (4)	A	250.00	261	0.0291533	0.0304164		4.4	
Aroclor 1016 [2C]	A	250.00	265	0.0519244	0.0549900		5.8	+/-20
Aroclor-1016 (1) [2C]	A	250.00	259	0.0433907	0.0449097		3.6	
Aroclor-1016 (2) [2C]	A	250.00	265	0.0950862	0.1009475		6.0	
Aroclor-1016 (3) [2C]	A	250.00	271	0.0388014	0.0421090		8.4	
Aroclor-1016 (4) [2C]	A	250.00	263	0.0304194	0.0319938		5.2	
Aroclor 1260	A	250.00	205	0.0605224	0.0497485		-18.2	+/-20
Aroclor-1260 (1)	A	250.00	214	0.0448870	0.0383727		-14.4	
Aroclor-1260 (2)	A	250.00	213	0.0461412	0.0393882		-14.8	
Aroclor-1260 (3)	A	250.00	206	0.1214672	0.1000322		-17.6	
Aroclor-1260 (4)	A	250.00	200	0.0627593	0.0501683		-20.0	
Aroclor-1260 (5)	A	250.00	190	0.0273573	0.0207809		-24.0	
Aroclor 1260 [2C]	A	250.00	230	0.0836545	0.0765773		-8.2	+/-20
Aroclor-1260 (1) [2C]	A	250.00	228	0.0577136	0.0527520		-8.8	
Aroclor-1260 (2) [2C]	A	250.00	228	0.1460113	0.1329974		-8.8	
Aroclor-1260 (3) [2C]	A	250.00	233	0.0363944	0.0339585		-6.8	
Aroclor-1260 (4) [2C]	A	250.00	229	0.0944986	0.0866011		-8.4	
Decachlorobiphenyl	A	40.000	36.9	0.8555994	0.7886385		-7.8	+/-20
Tetrachlorometaxylene	A	40.000	41.6	1.1307870	1.1774470		4.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.1	1.2696430	1.2420260		-2.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	41.4	1.0814980	1.1197210		3.5	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230202.b/02022313ECD7.D
Data file 2: /230202.b/230202.b/02022313ECD7.D
Method: \\target\share\chem4\ecd7.i\230202.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV4
Client ID:
Injection Date: 02-FEB-2023 15:30
Report Date: 02/02/2023 16:02
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.002	271813	5.686	0.002	184997	41.7	41.4	0.6	Tetrachloro-m-xylene
13.890	0.000	308416	14.118	0.000	276090	36.9	39.1	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	461699	-8.3
Hexabromobiphenyl	647433	782148	20.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	330434	-1.9
Hexabromobiphenyl	382032	444580	16.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	0.001	43910	255.9	1	7.254	0.002	46374	258.8
Aroclor-1016	2	7.650	0.001	146979	258.5	2	7.850	0.002	104239	265.4
Aroclor-1016	3	7.788	0.001	62796	240.1	3	8.049	0.001	43482	271.3
Aroclor-1016	4	8.403	0.002	43885	260.8	4	8.305	0.002	33037	262.9
Total Col1Ave (4 peaks):					253.9	Total Col2Ave (4 peaks):				264.6 RPD = 4
Corrected Ave (3 peaks):					251.5	Corrected Ave (3 peaks):				262.4 RPD = 4
CalAmt %D:					1.5	CalAmt %D:				5.8
Aroclor-1260	1	11.041	0.000	93791	213.7	1	11.651	-0.000	73289	228.5
Aroclor-1260	2	11.358	-0.000	96273	213.4	2	11.914	-0.000	184775	227.7
Aroclor-1260	3	11.731	0.001	244500	205.9	3	12.432	-0.002	47179	233.3
Aroclor-1260	4	12.134	-0.000	122622	199.8	4	12.498	0.000	120316	229.1
Aroclor-1260	5	12.241	-0.000	50793	189.9	NS	---			----
Total Col1Ave (5 peaks):					204.6	Total Col2Ave (4 peaks):				229.6 RPD = 12
Corrected Ave (4 peaks):					202.3	Corrected Ave (3 peaks):				228.4 RPD = 12
CalAmt %D:					-18.2	CalAmt %D:				-8.1

Total PCB Area Col1 (5.907 - 13.789) = 2662497 Col1 Total PCB = 0.5 ppm*

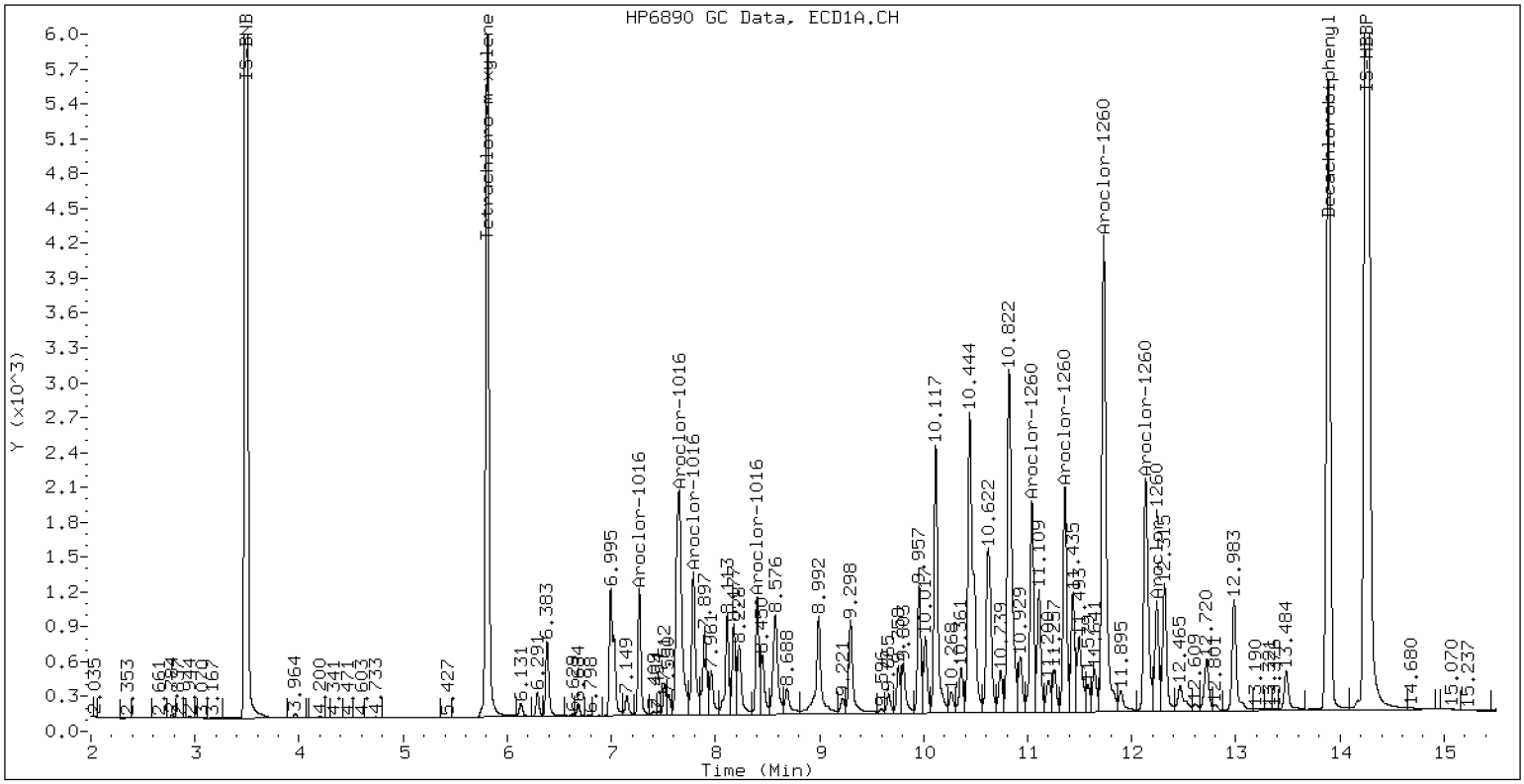
Total PCB Area Col2 (5.784 - 14.018) = 1795743 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

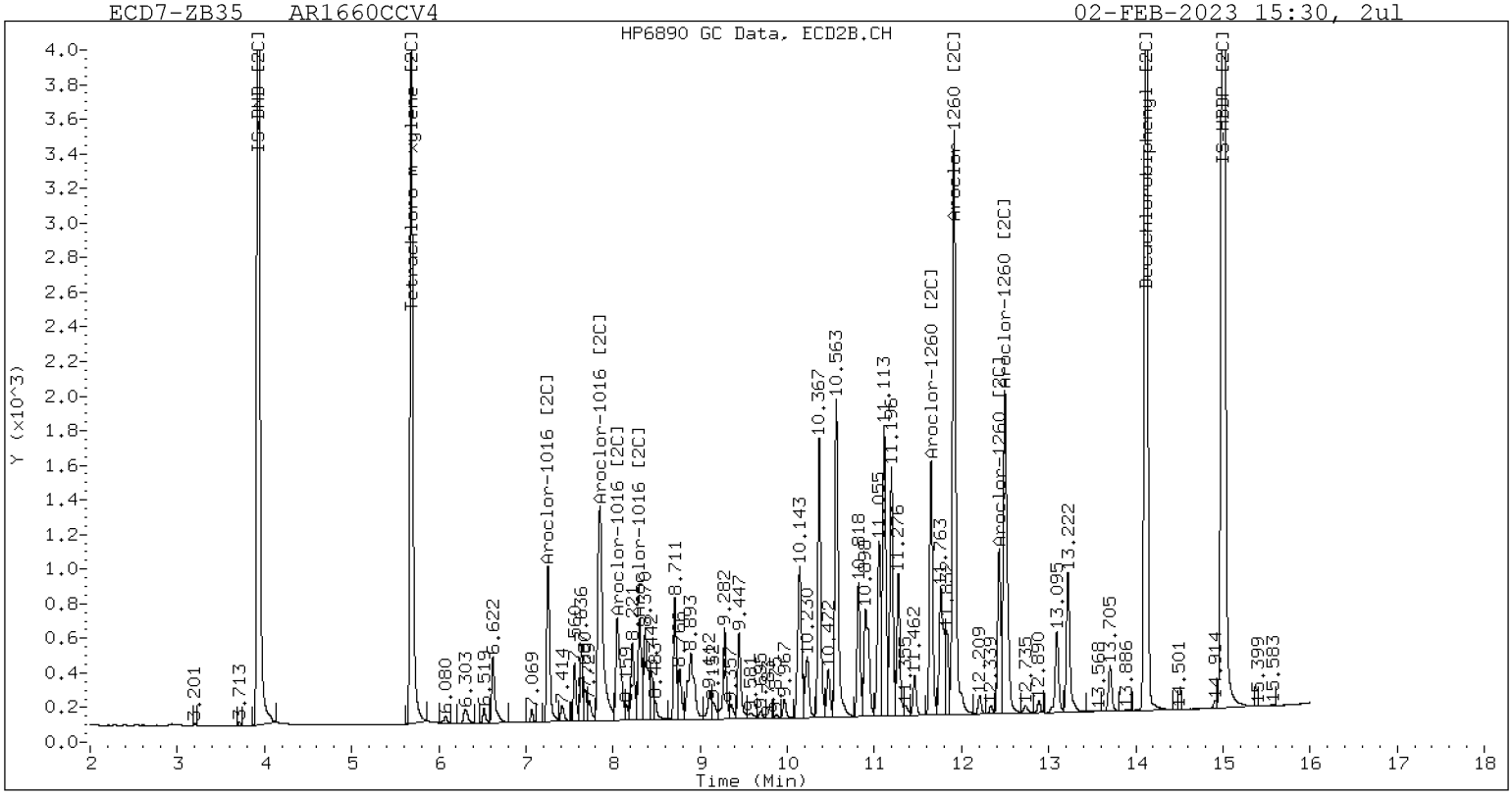
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV4 02-FEB-2023 15:30, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV4 02-FEB-2023 15:30, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLA0281
Instrument: ECD7
Calibration: GA00061

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Cal Standard	SLA0281-CAL1	01242313ECD7.D	01242313ECD7.D	NA	01/24/23 16:00
Cal Standard	SLA0281-CAL2	01242314ECD7.D	01242314ECD7.D	NA	01/24/23 16:21
Cal Standard	SLA0281-CAL3	01242315ECD7.D	01242315ECD7.D	NA	01/24/23 16:42
Cal Standard	SLA0281-CAL4	01242316ECD7.D	01242316ECD7.D	NA	01/24/23 17:03
Cal Standard	SLA0281-CAL5	01242317ECD7.D	01242317ECD7.D	NA	01/24/23 17:24
Cal Standard	SLA0281-CAL6	01242318ECD7.D	01242318ECD7.D	NA	01/24/23 17:45
Cal Standard	SLA0281-CAL7	01242319ECD7.D	01242319ECD7.D	NA	01/24/23 18:06
Cal Standard	SLA0281-CAL8	01242320ECD7.D	01242320ECD7.D	NA	01/24/23 18:27
Cal Standard	SLA0281-CAL9	01242321ECD7.D	01242321ECD7.D	NA	01/24/23 18:48
Cal Standard	SLA0281-CALA	01242322ECD7.D	01242322ECD7.D	NA	01/24/23 19:09
Cal Standard	SLA0281-CALB	01242323ECD7.D	01242323ECD7.D	NA	01/24/23 19:30
Secondary Cal Check	SLA0281-SCV1	01242324ECD7.D	01242324ECD7.D	NA	01/24/23 19:51
Secondary Cal Check	SLA0281-SCV2	01242325ECD7.D	01242325ECD7.D	NA	01/24/23 20:12
Secondary Cal Check	SLA0281-SCV3	01242326ECD7.D	01242326ECD7.D	NA	01/24/23 20:33
Secondary Cal Check	SLA0281-SCV4	01242327ECD7.D	01242327ECD7.D	NA	01/24/23 20:54
Secondary Cal Check	SLA0281-SCV5	01242328ECD7.D	01242328ECD7.D	NA	01/24/23 21:15
Secondary Cal Check	SLA0281-SCV6	01242329ECD7.D	01242329ECD7.D	NA	01/24/23 21:36

Security Status Report

Date: 26-Jan-2023 15:41

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01242336ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242337ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
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01242339ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
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01242341ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
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01242360ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242361ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
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01242379ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242380ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242381ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242382ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242383ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242384ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242385ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242386ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242387ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242388ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242389ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242390ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242391ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0012
Instrument: ECD7
Calibration: GA00061

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLB0012-ICV1	02012302ECD7.D	02012302ECD7.D	NA	02/01/23 09:46
Initial Cal Check	SLB0012-ICV2	02012303ECD7.D	02012303ECD7.D	NA	02/01/23 10:07
Calibration Check	SLB0012-CCV1	02012308ECD7.D	02012308ECD7.D	NA	02/01/23 11:52
Calibration Check	SLB0012-CCV2	02012309ECD7.D	02012309ECD7.D	NA	02/01/23 12:13
Blank	BLA0412-BLK1	02012310ECD7.D	02012310ECD7.D	Solid	02/01/23 14:50
LCS	BLA0412-BS1	02012311ECD7.D	02012311ECD7.D	Solid	02/01/23 15:11
LCS Dup	BLA0412-BSD1	02012312ECD7.D	02012312ECD7.D	Solid	02/01/23 15:32
Reference	BLA0412-SRM1	02012313ECD7.D	02012313ECD7.D	Solid	02/01/23 15:53
Calibration Check	SLB0012-CCV3	02012314ECD7.D	02012314ECD7.D	NA	02/01/23 16:14
Calibration Check	SLB0012-CCV4	02012315ECD7.D	02012315ECD7.D	NA	02/01/23 16:35
LDW23-SS1205	23A0134-01	02012316ECD7.D	02012316ECD7.D	Solid	02/01/23 16:56
LDW23-SS1188	23A0134-02	02012317ECD7.D	02012317ECD7.D	Solid	02/01/23 17:17
LDW23-SS1242	23A0134-04	02012319ECD7.D	02012319ECD7.D	Solid	02/01/23 17:59
LDW23-SS1173	23A0134-05	02012320ECD7.D	02012320ECD7.D	Solid	02/01/23 18:20
LDW23-SS1160	23A0134-06	02012321ECD7.D	02012321ECD7.D	Solid	02/01/23 18:41
LDW23-SS1152	23A0134-07	02012322ECD7.D	02012322ECD7.D	Solid	02/01/23 19:02
LDW23-SS1131	23A0134-08	02012323ECD7.D	02012323ECD7.D	Solid	02/01/23 19:23
LDW23-SS1129	23A0134-09	02012324ECD7.D	02012324ECD7.D	Solid	02/01/23 19:44
LDW23-SS1124	23A0134-10	02012325ECD7.D	02012325ECD7.D	Solid	02/01/23 20:05
Calibration Check	SLB0012-CCV5	02012326ECD7.D	02012326ECD7.D	NA	02/01/23 20:26
Calibration Check	SLB0012-CCV6	02012327ECD7.D	02012327ECD7.D	NA	02/01/23 20:47
LDW23-SS1123	23A0134-11	02012328ECD7.D	02012328ECD7.D	Solid	02/01/23 21:08
LDW23-SS1116	23A0134-12	02012329ECD7.D	02012329ECD7.D	Solid	02/01/23 21:29
LDW23-IT1194	23A0134-14	02012331ECD7.D	02012331ECD7.D	Solid	02/01/23 22:11
LDW23-SC1249	23A0134-15	02012332ECD7.D	02012332ECD7.D	Solid	02/01/23 22:32
LDW23-SC1077	23A0134-16	02012333ECD7.D	02012333ECD7.D	Solid	02/01/23 22:53
LDW23-SC1077	BLA0412-MS1	02012334ECD7.D	02012334ECD7.D	Solid	02/01/23 23:14
LDW23-SC1077	BLA0412-MSD1	02012335ECD7.D	02012335ECD7.D	Solid	02/01/23 23:35
Calibration Check	SLB0012-CCV7	02012336ECD7.D	02012336ECD7.D	NA	02/01/23 23:56

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0012	Instrument:	ECD7
		Calibration:	GA00061

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Calibration Check	SLB0012-CCV8	02012337ECD7.D	02012337ECD7.D	NA	02/02/23 00:17

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLB0012

Instrument: ECD7
Calibration ID: GA00061

Printed: 2/2/2023 10:46:23AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0012-ICV1	QC		1		L000862	L000844		
SLB0012-ICV2	QC		2		L000856	L000844		
23A0133-01	8082A PCB Solid 4	B 01	3			L000844	Anchor QEA, LLC	
23A0133-10	8082A PCB Solid 4	C 03	4			L000844	Anchor QEA, LLC	
23A0133-12	8082A PCB Solid 4	C 03	5			L000844	Anchor QEA, LLC	
23A0133-14	8082A PCB Solid 4	C 03	6			L000844	Anchor QEA, LLC	
SLB0012-CCV1	QC		7		L000861	L000844		
SLB0012-CCV2	QC		8		L000856	L000844		
BLA0412-BLK1	QC		9			L000844		
BLA0412-BS1	QC		10			L000844		
BLA0412-BSD1	QC		11			L000844		
BLA0412-SRM1	QC		12			L000844		
23A0134-01	8082A PCB Solid 4	C 03	13			L000844	Anchor QEA, LLC	
23A0134-02	8082A PCB Solid 4	C 03	14			L000844	Anchor QEA, LLC	
23A0134-04	8082A PCB Solid 4	C 03	15			L000844	Anchor QEA, LLC	
23A0134-05	8082A PCB Solid 4	C 03	16			L000844	Anchor QEA, LLC	
23A0134-06	8082A PCB Solid 4	C 03	17			L000844	Anchor QEA, LLC	
23A0134-07	8082A PCB Solid 4	C 03	18			L000844	Anchor QEA, LLC	
23A0134-08	8082A PCB Solid 4	C 03	19			L000844	Anchor QEA, LLC	
23A0134-09	8082A PCB Solid 4	C 03	20			L000844	Anchor QEA, LLC	
23A0134-10	8082A PCB Solid 4	C 03	21			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLB0012

Instrument: ECD7
Calibration ID: GA00061

Printed: 2/2/2023 10:46:23AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0012-CCV3	QC		22		L000860	L000844		
SLB0012-CCV4	QC		23		L000856	L000844		
23A0134-11	8082A PCB Solid 4	C 03	24			L000844	Anchor QEA, LLC	
23A0134-12	8082A PCB Solid 4	C 03	25			L000844	Anchor QEA, LLC	
23A0134-14	8082A PCB Solid 4	C 03	26			L000844	Anchor QEA, LLC	
23A0134-15	8082A PCB Solid 4	C 03	27			L000844	Anchor QEA, LLC	
23A0134-16	8082A PCB Solid 4	B 01	28			L000844	Anchor QEA, LLC	
BLA0412-MS1	QC		29			L000844		
BLA0412-MSD1	QC		30			L000844		
SLB0012-CCV5	QC		31		L000862	L000844		
SLB0012-CCV6	QC		32		L000856	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230201.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	01-FEB-2023 09:25	02012301ECD7.D	1	DDTS	
2	01-FEB-2023 09:46	02012302ECD7.D	1	AR1254ICV1	
3	01-FEB-2023 10:07	02012303ECD7.D	1	AR1660ICV2	
4	01-FEB-2023 10:28	02012304ECD7.D	1	23A0133-01	
5	01-FEB-2023 10:49	02012305ECD7.D	5	23A0133-10RE1	
6	01-FEB-2023 11:10	02012306ECD7.D	1	23A0133-12	
7	01-FEB-2023 11:31	02012307ECD7.D	1	23A0133-14	
8	01-FEB-2023 11:52	02012308ECD7.D	1	AR1248CCV1	
9	01-FEB-2023 12:13	02012309ECD7.D	1	AR1660CCV2	
10	01-FEB-2023 14:50	02012310ECD7.D	1	BLA0412-BLK1	
11	01-FEB-2023 15:11	02012311ECD7.D	1	BLA0412-BS1	
12	01-FEB-2023 15:32	02012312ECD7.D	1	BLA0412-BSD1	
13	01-FEB-2023 15:53	02012313ECD7.D	1	BLA0412-SRM1	
14	01-FEB-2023 16:14	02012314ECD7.D	1	AR1242CCV3	
15	01-FEB-2023 16:35	02012315ECD7.D	1	AR1660CCV4	
16	01-FEB-2023 16:56	02012316ECD7.D	1	23A0134-01	
17	01-FEB-2023 17:17	02012317ECD7.D	1	23A0134-02	
18	01-FEB-2023 17:38	02012318ECD7.D	1	23A0134-03	
19	01-FEB-2023 17:59	02012319ECD7.D	1	23A0134-04	
20	01-FEB-2023 18:20	02012320ECD7.D	1	23A0134-05	
21	01-FEB-2023 18:41	02012321ECD7.D	1	23A0134-06	
22	01-FEB-2023 19:02	02012322ECD7.D	1	23A0134-07	
23	01-FEB-2023 19:23	02012323ECD7.D	1	23A0134-08	
24	01-FEB-2023 19:44	02012324ECD7.D	1	23A0134-09	
25	01-FEB-2023 20:05	02012325ECD7.D	1	23A0134-10	
26	01-FEB-2023 20:26	02012326ECD7.D	1	AR1254CCV5	
27	01-FEB-2023 20:47	02012327ECD7.D	1	AR1660CCV6	
28	01-FEB-2023 21:08	02012328ECD7.D	1	23A0134-11	
29	01-FEB-2023 21:29	02012329ECD7.D	1	23A0134-12	
30	01-FEB-2023 21:50	02012330ECD7.D	1	23A0134-13	
31	01-FEB-2023 22:11	02012331ECD7.D	1	23A0134-14	
32	01-FEB-2023 22:32	02012332ECD7.D	1	23A0134-15	
33	01-FEB-2023 22:53	02012333ECD7.D	1	23A0134-16	
34	01-FEB-2023 23:14	02012334ECD7.D	1	BLA0412-MS1	
35	01-FEB-2023 23:35	02012335ECD7.D	1	BLA0412-MSD1	
36	01-FEB-2023 23:56	02012336ECD7.D	1	AR1248CCV7	
37	02-FEB-2023 00:17	02012337ECD7.D	1	AR1660CCV8	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230201.b

ARI Job No.: DDTS Method: PCB.m Instrument: ecd7.i Date: 01-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0925	02012301ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0946	02012302ECD7.D	AR1254ICV1		1	NO MANUAL INTEGRATION
1007	02012303ECD7.D	AR1660ICV2		1	NO MANUAL INTEGRATION
1028	02012304ECD7.D	23A0133-01		1	Aroclor-1254,
1049	02012305ECD7.D	23A0133-10RE1		5	Aroclor-1254,
1110	02012306ECD7.D	23A0133-12		1	Aroclor-1254,
1131	02012307ECD7.D	23A0133-14		1	NO MANUAL INTEGRATION
1152	02012308ECD7.D	AR1248CCV1		1	NO MANUAL INTEGRATION
1213	02012309ECD7.D	AR1660CCV2		1	NO MANUAL INTEGRATION
1450	02012310ECD7.D	BLA0412-BLK1		1	NO MANUAL INTEGRATION
1511	02012311ECD7.D	BLA0412-BS1		1	NO MANUAL INTEGRATION
1532	02012312ECD7.D	BLA0412-BSD1		1	NO MANUAL INTEGRATION
1553	02012313ECD7.D	BLA0412-SRM1		1	NO MANUAL INTEGRATION
1614	02012314ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
1635	02012315ECD7.D	AR1660CCV4		1	NO MANUAL INTEGRATION
1656	02012316ECD7.D	23A0134-01		1	NO MANUAL INTEGRATION
1717	02012317ECD7.D	23A0134-02		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230201.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1738	02012318ECD7.D	23A0134-03		1	NO MANUAL INTEGRATION
1759	02012319ECD7.D	23A0134-04		1	NO MANUAL INTEGRATION
1820	02012320ECD7.D	23A0134-05		1	NO MANUAL INTEGRATION
1841	02012321ECD7.D	23A0134-06		1	NO MANUAL INTEGRATION
1902	02012322ECD7.D	23A0134-07		1	Aroclor-1260,
1923	02012323ECD7.D	23A0134-08		1	Aroclor-1260,
1944	02012324ECD7.D	23A0134-09		1	Aroclor-1254, Aroclor-1260,
2005	02012325ECD7.D	23A0134-10		1	NO MANUAL INTEGRATION
2026	02012326ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION
2047	02012327ECD7.D	AR1660CCV6		1	NO MANUAL INTEGRATION
2108	02012328ECD7.D	23A0134-11		1	NO MANUAL INTEGRATION
2129	02012329ECD7.D	23A0134-12		1	Aroclor-1248, Aroclor-1254, Aroclor-1260, IS-HBBP, Decachlorobiphenyl,
2150	02012330ECD7.D	23A0134-13		1	NO MANUAL INTEGRATION
2211	02012331ECD7.D	23A0134-14		1	Aroclor-1260,
2232	02012332ECD7.D	23A0134-15		1	Aroclor-1248,
2253	02012333ECD7.D	23A0134-16		1	NO MANUAL INTEGRATION
2314	02012334ECD7.D	BLA0412-MS1		1	NO MANUAL INTEGRATION
2335	02012335ECD7.D	BLA0412-MSD1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230201.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2356	02012336ECD7.D	AR1248CCV7		1	NO MANUAL INTEGRATION
0017	02012337ECD7.D	AR1660CCV8		1	NO MANUAL INTEGRATION
0925	02012301ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0946	02012302ECD7.D	AR1254ICV1		1	NO MANUAL INTEGRATION
1007	02012303ECD7.D	AR1660ICV2		1	NO MANUAL INTEGRATION
1028	02012304ECD7.D	23A0133-01		1	Aroclor-1248 [2C],
1049	02012305ECD7.D	23A0133-10RE1		5	NO MANUAL INTEGRATION
1110	02012306ECD7.D	23A0133-12		1	Aroclor-1248 [2C], Aroclor-1254 [2C],
1131	02012307ECD7.D	23A0133-14		1	Aroclor-1248 [2C],
1152	02012308ECD7.D	AR1248CCV1		1	NO MANUAL INTEGRATION
1213	02012309ECD7.D	AR1660CCV2		1	NO MANUAL INTEGRATION
1450	02012310ECD7.D	BLA0412-BLK1		1	NO MANUAL INTEGRATION
1511	02012311ECD7.D	BLA0412-BS1		1	NO MANUAL INTEGRATION
1532	02012312ECD7.D	BLA0412-BSD1		1	NO MANUAL INTEGRATION
1553	02012313ECD7.D	BLA0412-SRM1		1	NO MANUAL INTEGRATION
1614	02012314ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
1635	02012315ECD7.D	AR1660CCV4		1	NO MANUAL INTEGRATION
1656	02012316ECD7.D	23A0134-01		1	Aroclor-1248 [2C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230201.b\230201.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1717	02012317ECD7.D	23A0134-02		1	Aroclor-1248 [2C],
1738	02012318ECD7.D	23A0134-03		1	NO MANUAL INTEGRATION
1759	02012319ECD7.D	23A0134-04		1	Aroclor-1248 [2C],
1820	02012320ECD7.D	23A0134-05		1	Aroclor-1248 [2C],
1841	02012321ECD7.D	23A0134-06		1	NO MANUAL INTEGRATION
1902	02012322ECD7.D	23A0134-07		1	Aroclor-1248 [2C],
1923	02012323ECD7.D	23A0134-08		1	Aroclor-1260 [2C],
1944	02012324ECD7.D	23A0134-09		1	NO MANUAL INTEGRATION
2005	02012325ECD7.D	23A0134-10		1	NO MANUAL INTEGRATION
2026	02012326ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION
2047	02012327ECD7.D	AR1660CCV6		1	NO MANUAL INTEGRATION
2108	02012328ECD7.D	23A0134-11		1	Aroclor-1248 [2C],
2129	02012329ECD7.D	23A0134-12		1	Aroclor-1248 [2C], Aroclor-1260 [2C],
2150	02012330ECD7.D	23A0134-13		1	NO MANUAL INTEGRATION
2211	02012331ECD7.D	23A0134-14		1	Aroclor-1248 [2C],
2232	02012332ECD7.D	23A0134-15		1	Aroclor-1248 [2C],
2253	02012333ECD7.D	23A0134-16		1	Aroclor-1248 [2C],
2314	02012334ECD7.D	BLA0412-MS1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230201.b\230201.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2335	02012335ECD7.D	BLA0412-MSD1		1	NO MANUAL INTEGRATION
2356	02012336ECD7.D	AR1248CCV7		1	NO MANUAL INTEGRATION
0017	02012337ECD7.D	AR1660CCV8		1	NO MANUAL INTEGRATION

Security Status Report

Date: 02-Feb-2023 10:45

02012301ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
02012302ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
02012303ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
02012304ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
02012305ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
02012306ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
02012307ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
02012308ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
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02012324ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
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02012327ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
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02012333ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
02012334ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
02012335ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
02012336ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45
02012337ECD7.D	Data Locked	richardl, 02-Feb-2023 10:45

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0023	Instrument:	ECD7
		Calibration:	GA00061

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLB0023-ICV1	02022302ECD7.D	02022302ECD7.D	NA	02/02/23 09:21
Initial Cal Check	SLB0023-ICV2	02022303ECD7.D	02022303ECD7.D	NA	02/02/23 09:42
LDW23-SS1179	23A0134-03	02022304ECD7.D	02022304ECD7.D	Solid	02/02/23 10:03
LDW23-IT1210	23A0134-13	02022305ECD7.D	02022305ECD7.D	Solid	02/02/23 10:24
Calibration Check	SLB0023-CCV1	02022306ECD7.D	02022306ECD7.D	NA	02/02/23 10:45
Calibration Check	SLB0023-CCV2	02022307ECD7.D	02022307ECD7.D	NA	02/02/23 11:06
Calibration Check	SLB0023-CCV3	02022312ECD7.D	02022312ECD7.D	NA	02/02/23 15:09
Calibration Check	SLB0023-CCV4	02022313ECD7.D	02022313ECD7.D	NA	02/02/23 15:30

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLB0023

Instrument: ECD7
Calibration ID: GA00061

Printed: 2/2/2023 11:47:18AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0023-ICV1	QC		1		L000862	L000844		
SLB0023-ICV2	QC		2		L000856	L000844		
23A0134-03	8082A PCB Solid 4	C 03	3				Anchor QEA, LLC	
23A0134-13	8082A PCB Solid 4	C 03	4				Anchor QEA, LLC	
SLB0023-CCV1	QC		5		L000861	L000844		
SLB0023-CCV2	QC		6		L000856	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230202.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	02-FEB-2023 09:00	02022301ECD7.D	1	DDTS	
2	02-FEB-2023 09:21	02022302ECD7.D	1	AR1254ICV1	
3	02-FEB-2023 09:42	02022303ECD7.D	1	AR1660ICV2	
4	02-FEB-2023 10:03	02022304ECD7.D	10	23A0134-03RE1	
5	02-FEB-2023 10:24	02022305ECD7.D	10	23A0134-13RE1	
6	02-FEB-2023 10:45	02022306ECD7.D	1	AR1248CCV1	
7	02-FEB-2023 11:06	02022307ECD7.D	1	AR1660CCV2	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230202.b

ARI Job No.: DDTS Method: PCB.m Instrument: ecd7.i Date: 02-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0900	02022301ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0921	02022302ECD7.D	AR1254ICV1		1	NO MANUAL INTEGRATION
0942	02022303ECD7.D	AR1660ICV2		1	NO MANUAL INTEGRATION
1003	02022304ECD7.D	23A0134-03RE1		10	NO MANUAL INTEGRATION
1024	02022305ECD7.D	23A0134-13RE1		10	NO MANUAL INTEGRATION
1045	02022306ECD7.D	AR1248CCV1		1	NO MANUAL INTEGRATION
1106	02022307ECD7.D	AR1660CCV2		1	NO MANUAL INTEGRATION
0900	02022301ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0921	02022302ECD7.D	AR1254ICV1		1	NO MANUAL INTEGRATION
0942	02022303ECD7.D	AR1660ICV2		1	NO MANUAL INTEGRATION
1003	02022304ECD7.D	23A0134-03RE1		10	Aroclor-1254 [2C],
1024	02022305ECD7.D	23A0134-13RE1		10	Aroclor-1248 [2C],
1045	02022306ECD7.D	AR1248CCV1		1	NO MANUAL INTEGRATION
1106	02022307ECD7.D	AR1660CCV2		1	NO MANUAL INTEGRATION

Security Status Report

Date: 02-Feb-2023 11:39

02022301ECD7.D	Data Locked	richardl, 02-Feb-2023 11:39
02022302ECD7.D	Data Locked	richardl, 02-Feb-2023 11:39
02022303ECD7.D	Data Locked	richardl, 02-Feb-2023 11:39
02022304ECD7.D	Data Locked	richardl, 02-Feb-2023 11:39
02022305ECD7.D	Data Locked	richardl, 02-Feb-2023 11:39
02022306ECD7.D	Data Locked	richardl, 02-Feb-2023 11:39
02022307ECD7.D	Data Locked	richardl, 02-Feb-2023 11:39

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLB0023

Instrument: ECD7
Calibration ID: GA00061

Printed: 2/3/2023 10:26:58AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0023-ICV1	QC		1		L000862	L000844		
SLB0023-ICV2	QC		2		L000856	L000844		
23A0134-03	8082A PCB Solid 4	C 03	3				Anchor QEA, LLC	
23A0134-13	8082A PCB Solid 4	C 03	4				Anchor QEA, LLC	
SLB0023-CCV1	QC		5		L000861	L000844		
SLB0023-CCV2	QC		6		L000856	L000844		
BLA0290-BLK1	QC		7			L000844		
BLA0290-BS1	QC		8			L000844		
BLA0290-BSD1	QC		9			L000844		
BLA0290-SRM1	QC		10			L000844		
SLB0023-CCV3	QC		11		L000860	L000844		
SLB0023-CCV4	QC		12		L000856	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230202.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	02-FEB-2023 09:00	02022301ECD7.D	1	DDTS	
2	02-FEB-2023 09:21	02022302ECD7.D	1	AR1254ICV1	
3	02-FEB-2023 09:42	02022303ECD7.D	1	AR1660ICV2	
4	02-FEB-2023 10:03	02022304ECD7.D	10	23A0134-03RE1	
5	02-FEB-2023 10:24	02022305ECD7.D	10	23A0134-13RE1	
6	02-FEB-2023 10:45	02022306ECD7.D	1	AR1248CCV1	
7	02-FEB-2023 11:06	02022307ECD7.D	1	AR1660CCV2	
8	02-FEB-2023 13:45	02022308ECD7.D	1	BLA0290-BLK1	
9	02-FEB-2023 14:06	02022309ECD7.D	1	BLA0290-BS1	
10	02-FEB-2023 14:27	02022310ECD7.D	1	BLA0290-BSD1	
11	02-FEB-2023 14:48	02022311ECD7.D	1	BLA0290-SRM1	
12	02-FEB-2023 15:09	02022312ECD7.D	1	AR1242CCV3	
13	02-FEB-2023 15:30	02022313ECD7.D	1	AR1660CCV4	
14	02-FEB-2023 15:51	02022314ECD7.D	1	23A0099-01	
15	02-FEB-2023 16:13	02022315ECD7.D	1	23A0099-02	
16	02-FEB-2023 16:34	02022316ECD7.D	1	23A0099-03	
17	02-FEB-2023 16:55	02022317ECD7.D	1	23A0099-04	
18	02-FEB-2023 17:16	02022318ECD7.D	1	23A0099-05	
19	02-FEB-2023 17:37	02022319ECD7.D	1	23A0099-06	
20	02-FEB-2023 17:58	02022320ECD7.D	1	23A0099-07	
21	02-FEB-2023 18:19	02022321ECD7.D	1	23A0099-08	
22	02-FEB-2023 18:40	02022322ECD7.D	1	23A0099-09	
23	02-FEB-2023 19:01	02022323ECD7.D	1	23A0099-10	
24	02-FEB-2023 19:22	02022324ECD7.D	1	AR1254CCV5	
25	02-FEB-2023 19:43	02022325ECD7.D	1	AR1660CCV6	
26	02-FEB-2023 20:04	02022326ECD7.D	1	23A0099-11	
27	02-FEB-2023 20:25	02022327ECD7.D	1	23A0099-12	
28	02-FEB-2023 20:46	02022328ECD7.D	1	BLA0290-MS1	
29	02-FEB-2023 21:07	02022329ECD7.D	1	BLA0290-MSD1	
30	02-FEB-2023 21:28	02022330ECD7.D	1	23A0099-13	
31	02-FEB-2023 21:49	02022331ECD7.D	1	AR1248CCV7	
32	02-FEB-2023 22:10	02022332ECD7.D	1	AR1660CCV68	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230202.b

ARI Job No.: DDTS Method: PCB.m Instrument: ecd7.i Date: 02-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0900	02022301ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0921	02022302ECD7.D	AR1254ICV1		1	NO MANUAL INTEGRATION
0942	02022303ECD7.D	AR1660ICV2		1	NO MANUAL INTEGRATION
1003	02022304ECD7.D	23A0134-03RE1		10	NO MANUAL INTEGRATION
1024	02022305ECD7.D	23A0134-13RE1		10	NO MANUAL INTEGRATION
1045	02022306ECD7.D	AR1248CCV1		1	NO MANUAL INTEGRATION
1106	02022307ECD7.D	AR1660CCV2		1	NO MANUAL INTEGRATION
1345	02022308ECD7.D	BLA0290-BLK1		1	NO MANUAL INTEGRATION
1406	02022309ECD7.D	BLA0290-BS1		1	NO MANUAL INTEGRATION
1427	02022310ECD7.D	BLA0290-BSD1		1	NO MANUAL INTEGRATION
1448	02022311ECD7.D	BLA0290-SRM1		1	NO MANUAL INTEGRATION
1509	02022312ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
1530	02022313ECD7.D	AR1660CCV4		1	NO MANUAL INTEGRATION
1551	02022314ECD7.D	23A0099-01		1	NO MANUAL INTEGRATION
1613	02022315ECD7.D	23A0099-02		1	NO MANUAL INTEGRATION
1634	02022316ECD7.D	23A0099-03		1	NO MANUAL INTEGRATION
1655	02022317ECD7.D	23A0099-04		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230202.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1716	02022318ECD7.D	23A0099-05		1	NO MANUAL INTEGRATION
1737	02022319ECD7.D	23A0099-06		1	NO MANUAL INTEGRATION
1758	02022320ECD7.D	23A0099-07		1	NO MANUAL INTEGRATION
1819	02022321ECD7.D	23A0099-08		1	NO MANUAL INTEGRATION
1840	02022322ECD7.D	23A0099-09		1	NO MANUAL INTEGRATION
1901	02022323ECD7.D	23A0099-10		1	NO MANUAL INTEGRATION
1922	02022324ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION
1943	02022325ECD7.D	AR1660CCV6		1	NO MANUAL INTEGRATION
2004	02022326ECD7.D	23A0099-11		1	NO MANUAL INTEGRATION
2025	02022327ECD7.D	23A0099-12		1	Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248,
2046	02022328ECD7.D	BLA0290-MS1		1	NO MANUAL INTEGRATION
2107	02022329ECD7.D	BLA0290-MSD1		1	NO MANUAL INTEGRATION
2128	02022330ECD7.D	23A0099-13		1	NO MANUAL INTEGRATION
2149	02022331ECD7.D	AR1248CCV7		1	NO MANUAL INTEGRATION
2210	02022332ECD7.D	AR1660CCV68		1	NO MANUAL INTEGRATION
0900	02022301ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0921	02022302ECD7.D	AR1254ICV1		1	NO MANUAL INTEGRATION
0942	02022303ECD7.D	AR1660ICV2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230202.b\230202.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1003	02022304ECD7.D	23A0134-03RE1		10	Aroclor-1254 [2C],
1024	02022305ECD7.D	23A0134-13RE1		10	Aroclor-1248 [2C],
1045	02022306ECD7.D	AR1248CCV1		1	NO MANUAL INTEGRATION
1106	02022307ECD7.D	AR1660CCV2		1	NO MANUAL INTEGRATION
1345	02022308ECD7.D	BLA0290-BLK1		1	NO MANUAL INTEGRATION
1406	02022309ECD7.D	BLA0290-BS1		1	NO MANUAL INTEGRATION
1427	02022310ECD7.D	BLA0290-BSD1		1	NO MANUAL INTEGRATION
1448	02022311ECD7.D	BLA0290-SRM1		1	NO MANUAL INTEGRATION
1509	02022312ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
1530	02022313ECD7.D	AR1660CCV4		1	NO MANUAL INTEGRATION
1551	02022314ECD7.D	23A0099-01		1	NO MANUAL INTEGRATION
1613	02022315ECD7.D	23A0099-02		1	NO MANUAL INTEGRATION
1634	02022316ECD7.D	23A0099-03		1	NO MANUAL INTEGRATION
1655	02022317ECD7.D	23A0099-04		1	NO MANUAL INTEGRATION
1716	02022318ECD7.D	23A0099-05		1	NO MANUAL INTEGRATION
1737	02022319ECD7.D	23A0099-06		1	NO MANUAL INTEGRATION
1758	02022320ECD7.D	23A0099-07		1	NO MANUAL INTEGRATION
1819	02022321ECD7.D	23A0099-08		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230202.b\230202.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1840	02022322ECD7.D	23A0099-09		1	NO MANUAL INTEGRATION
1901	02022323ECD7.D	23A0099-10		1	NO MANUAL INTEGRATION
1922	02022324ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION
1943	02022325ECD7.D	AR1660CCV6		1	NO MANUAL INTEGRATION
2004	02022326ECD7.D	23A0099-11		1	NO MANUAL INTEGRATION
2025	02022327ECD7.D	23A0099-12		1	Aroclor-1016 [2C], Aroclor-1221 [2C], Aroclor-1232 [2C], Aroclor-1242 [2C], Aroclor-1248 [2C], Aroclor-1254 [2C], Aroclor-1262 [2C], Tetrachloro-m-xylene [2C],
2046	02022328ECD7.D	BLA0290-MS1		1	NO MANUAL INTEGRATION
2107	02022329ECD7.D	BLA0290-MSD1		1	NO MANUAL INTEGRATION
2128	02022330ECD7.D	23A0099-13		1	NO MANUAL INTEGRATION
2149	02022331ECD7.D	AR1248CCV7		1	NO MANUAL INTEGRATION
2210	02022332ECD7.D	AR1660CCV68		1	NO MANUAL INTEGRATION

Security Status Report

Date: 03-Feb-2023 10:24

02022301ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022302ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022303ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022304ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022305ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022306ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022307ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022308ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022309ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022310ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022311ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022312ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022313ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022314ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022315ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022316ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022317ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022318ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022319ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022320ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022321ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022322ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022323ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022324ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022325ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022326ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022327ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022328ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022329ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022330ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022331ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24
02022332ECD7.D	Data Locked	richardl, 03-Feb-2023 10:24

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLA0281
Instrument: ECD7
Calibration: GA00061
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLA0281-SCV1 (Solid)			Lab File ID: 01242324ECD7.D			Analyzed: 01/24/23 19:51		
Decachlorobiphenyl	40.000	94.9	80 - 120	13.891	13.892	-0.0010	N/A	
Tetrachlorometaxylene	40.000	93.8	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	101	80 - 120	14.12	14.12017	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	93.2	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV2 (Solid)			Lab File ID: 01242325ECD7.D			Analyzed: 01/24/23 20:12		
Decachlorobiphenyl	40.000	96.4	80 - 120	13.892	13.892	0.0000	N/A	
Tetrachlorometaxylene	40.000	94.4	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	101	80 - 120	14.121	14.12017	0.0008	N/A	
Tetrachlorometaxylene [2C]	40.000	93.4	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV3 (Solid)			Lab File ID: 01242326ECD7.D			Analyzed: 01/24/23 20:33		
Decachlorobiphenyl	40.000	95.7	80 - 120	13.892	13.892	0.0000	N/A	
Tetrachlorometaxylene	40.000	91.9	80 - 120	5.809	5.808667	0.0003	N/A	
Decachlorobiphenyl [2C]	40.000	98.9	80 - 120	14.12	14.12017	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	91.4	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV4 (Solid)			Lab File ID: 01242327ECD7.D			Analyzed: 01/24/23 20:54		
Decachlorobiphenyl	40.000	92.7	80 - 120	13.892	13.892	0.0000	N/A	
Tetrachlorometaxylene	40.000	91.7	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	98.9	80 - 120	14.121	14.12017	0.0008	N/A	
Tetrachlorometaxylene [2C]	40.000	91.6	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV5 (Solid)			Lab File ID: 01242328ECD7.D			Analyzed: 01/24/23 21:15		
Decachlorobiphenyl	40.000	93.6	80 - 120	13.89	13.892	-0.0020	N/A	
Tetrachlorometaxylene	40.000	93.2	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	98.7	80 - 120	14.119	14.12017	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	92.9	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV6 (Solid)			Lab File ID: 01242329ECD7.D			Analyzed: 01/24/23 21:36		
Decachlorobiphenyl	40.000	137	80 - 120	13.892	13.892	0.0000	N/A	
Tetrachlorometaxylene	40.000	90.9	80 - 120	5.809	5.808667	0.0003	N/A	
Decachlorobiphenyl [2C]	40.000	145	80 - 120	14.12	14.12017	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	90.8	80 - 120	5.686	5.685333	0.0007	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0012
Instrument: ECD7
Calibration: GA00061
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0012-ICV1 (Solid)			Lab File ID: 02012302ECD7.D			Analyzed: 02/01/23 09:46		
Decachlorobiphenyl	40.000	94.5	80 - 120	13.893	13.892	0.0010	N/A	
Tetrachlorometaxylene	40.000	99.3	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	90.0	80 - 120	14.118	14.12017	-0.0022	N/A	
Tetrachlorometaxylene [2C]	40.000	99.8	80 - 120	5.683	5.685333	-0.0023	N/A	
SLB0012-ICV2 (Solid)			Lab File ID: 02012303ECD7.D			Analyzed: 02/01/23 10:07		
Decachlorobiphenyl	40.000	90.3	80 - 120	13.89	13.892	-0.0020	N/A	
Tetrachlorometaxylene	40.000	106	80 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	96.0	80 - 120	14.118	14.12017	-0.0022	N/A	
Tetrachlorometaxylene [2C]	40.000	104	80 - 120	5.684	5.685333	-0.0013	N/A	
SLB0012-CCV1 (Solid)			Lab File ID: 02012308ECD7.D			Analyzed: 02/01/23 11:52		
Decachlorobiphenyl	40.000	85.3	80 - 120	13.89	13.892	-0.0020	N/A	
Tetrachlorometaxylene	40.000	99.0	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	90.0	80 - 120	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	98.5	80 - 120	5.684	5.685333	-0.0013	N/A	
SLB0012-CCV2 (Solid)			Lab File ID: 02012309ECD7.D			Analyzed: 02/01/23 12:13		
Decachlorobiphenyl	40.000	93.8	80 - 120	13.89	13.892	-0.0020	N/A	
Tetrachlorometaxylene	40.000	106	80 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	95.5	80 - 120	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	104	80 - 120	5.684	5.685333	-0.0013	N/A	
BLA0412-BLK1 (Solid)			Lab File ID: 02012310ECD7.D			Analyzed: 02/01/23 14:50		
Decachlorobiphenyl	8.0000	94.2	40 - 126	13.9	13.892	0.0080	N/A	
Tetrachlorometaxylene	8.0000	86.9	44 - 120	5.823	5.808667	0.0143	N/A	
Decachlorobiphenyl [2C]	8.0000	99.4	40 - 126	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	8.0000	85.8	44 - 120	5.679	5.685333	-0.0063	N/A	
BLA0412-BS1 (Solid)			Lab File ID: 02012311ECD7.D			Analyzed: 02/01/23 15:11		
Decachlorobiphenyl	8.0000	94.6	40 - 126	13.891	13.892	-0.0010	N/A	
Tetrachlorometaxylene	8.0000	89.1	44 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	8.0000	100	40 - 126	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	8.0000	86.3	44 - 120	5.683	5.685333	-0.0023	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0012
Instrument: ECD7
Calibration: GA00061
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLA0412-BSD1 (Solid)			Lab File ID: 02012312ECD7.D			Analyzed: 02/01/23 15:32		
Decachlorobiphenyl	8.0000	95.3	40 - 126	13.89	13.892	-0.0020	N/A	
Tetrachlorometaxylene	8.0000	92.5	44 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	8.0000	99.6	40 - 126	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	8.0000	89.2	44 - 120	5.684	5.685333	-0.0013	N/A	
BLA0412-SRM1 (Solid)			Lab File ID: 02012313ECD7.D			Analyzed: 02/01/23 15:53		
Decachlorobiphenyl	40.000	83.7	40 - 126	13.885	13.892	-0.0070	N/A	
Tetrachlorometaxylene	40.000	73.5	44 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	40.000	81.0	40 - 126	14.114	14.12017	-0.0062	N/A	
Tetrachlorometaxylene [2C]	40.000	80.5	44 - 120	5.683	5.685333	-0.0023	N/A	
SLB0012-CCV3 (Solid)			Lab File ID: 02012314ECD7.D			Analyzed: 02/01/23 16:14		
Decachlorobiphenyl	40.000	84.8	80 - 120	13.89	13.892	-0.0020	N/A	
Tetrachlorometaxylene	40.000	121	80 - 120	5.809	5.808667	0.0003	N/A	
Decachlorobiphenyl [2C]	40.000	89.0	80 - 120	14.118	14.12017	-0.0022	N/A	
Tetrachlorometaxylene [2C]	40.000	121	80 - 120	5.686	5.685333	0.0007	N/A	
SLB0012-CCV4 (Solid)			Lab File ID: 02012315ECD7.D			Analyzed: 02/01/23 16:35		
Decachlorobiphenyl	40.000	90.5	80 - 120	13.891	13.892	-0.0010	N/A	
Tetrachlorometaxylene	40.000	104	80 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	95.0	80 - 120	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	104	80 - 120	5.685	5.685333	-0.0003	N/A	
23A0134-01 (Solid)			Lab File ID: 02012316ECD7.D			Analyzed: 02/01/23 16:56		
Decachlorobiphenyl	7.9980	81.8	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9980	68.6	44 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	7.9980	77.9	40 - 126	14.112	14.12017	-0.0082	N/A	
Tetrachlorometaxylene [2C]	7.9980	80.4	44 - 120	5.682	5.685333	-0.0033	N/A	
23A0134-02 (Solid)			Lab File ID: 02012317ECD7.D			Analyzed: 02/01/23 17:17		
Decachlorobiphenyl	7.9949	85.8	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9949	55.1	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	7.9949	72.3	40 - 126	14.112	14.12017	-0.0082	N/A	
Tetrachlorometaxylene [2C]	7.9949	72.8	44 - 120	5.679	5.685333	-0.0063	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0012
Instrument: ECD7
Calibration: GA00061
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0134-04 (Solid)			Lab File ID: 02012319ECD7.D			Analyzed: 02/01/23 17:59		
Decachlorobiphenyl	7.9962	90.2	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9962	65.1	44 - 120	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	7.9962	76.3	40 - 126	14.113	14.12017	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.9962	75.7	44 - 120	5.681	5.685333	-0.0043	N/A	
23A0134-05 (Solid)			Lab File ID: 02012320ECD7.D			Analyzed: 02/01/23 18:20		
Decachlorobiphenyl	7.9866	76.3	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9866	59.5	44 - 120	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	7.9866	73.0	40 - 126	14.111	14.12017	-0.0092	N/A	
Tetrachlorometaxylene [2C]	7.9866	67.4	44 - 120	5.681	5.685333	-0.0043	N/A	
23A0134-06 (Solid)			Lab File ID: 02012321ECD7.D			Analyzed: 02/01/23 18:41		
Decachlorobiphenyl	7.9847	78.4	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9847	59.7	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	7.9847	76.0	40 - 126	14.111	14.12017	-0.0092	N/A	
Tetrachlorometaxylene [2C]	7.9847	67.0	44 - 120	5.68	5.685333	-0.0053	N/A	
23A0134-07 (Solid)			Lab File ID: 02012322ECD7.D			Analyzed: 02/01/23 19:02		
Decachlorobiphenyl	7.9945	79.1	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	7.9945	54.4	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	7.9945	76.4	40 - 126	14.111	14.12017	-0.0092	N/A	
Tetrachlorometaxylene [2C]	7.9945	68.6	44 - 120	5.68	5.685333	-0.0053	N/A	
23A0134-08 (Solid)			Lab File ID: 02012323ECD7.D			Analyzed: 02/01/23 19:23		
Decachlorobiphenyl	7.9998	85.8	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	7.9998	68.8	44 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	7.9998	81.6	40 - 126	14.113	14.12017	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.9998	79.2	44 - 120	5.682	5.685333	-0.0033	N/A	
23A0134-09 (Solid)			Lab File ID: 02012324ECD7.D			Analyzed: 02/01/23 19:44		
Decachlorobiphenyl	7.9877	85.8	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9877	66.2	44 - 120	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	7.9877	84.2	40 - 126	14.113	14.12017	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.9877	75.3	44 - 120	5.681	5.685333	-0.0043	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0012
Instrument: ECD7
Calibration: GA00061
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0134-10 (Solid)			Lab File ID: 02012325ECD7.D			Analyzed: 02/01/23 20:05		
Decachlorobiphenyl	7.9999	82.7	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9999	65.6	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	7.9999	79.6	40 - 126	14.113	14.12017	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.9999	77.0	44 - 120	5.68	5.685333	-0.0053	N/A	
SLB0012-CCV5 (Solid)			Lab File ID: 02012326ECD7.D			Analyzed: 02/01/23 20:26		
Decachlorobiphenyl	40.000	88.3	80 - 120	13.888	13.892	-0.0040	N/A	
Tetrachlorometaxylene	40.000	97.0	80 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	91.5	80 - 120	14.115	14.12017	-0.0052	N/A	
Tetrachlorometaxylene [2C]	40.000	99.5	80 - 120	5.684	5.685333	-0.0013	N/A	
SLB0012-CCV6 (Solid)			Lab File ID: 02012327ECD7.D			Analyzed: 02/01/23 20:47		
Decachlorobiphenyl	40.000	96.8	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	105	80 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	96.0	80 - 120	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	40.000	104	80 - 120	5.684	5.685333	-0.0013	N/A	
23A0134-11 (Solid)			Lab File ID: 02012328ECD7.D			Analyzed: 02/01/23 21:08		
Decachlorobiphenyl	7.9972	83.7	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9972	67.5	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	7.9972	78.3	40 - 126	14.114	14.12017	-0.0062	N/A	
Tetrachlorometaxylene [2C]	7.9972	78.1	44 - 120	5.68	5.685333	-0.0053	N/A	
23A0134-12 (Solid)			Lab File ID: 02012329ECD7.D			Analyzed: 02/01/23 21:29		
Decachlorobiphenyl	7.9906	91.5	40 - 126	13.886	13.892	-0.0060	N/A	
Tetrachlorometaxylene	7.9906	74.1	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	7.9906	85.6	40 - 126	14.112	14.12017	-0.0082	N/A	
Tetrachlorometaxylene [2C]	7.9906	86.2	44 - 120	5.68	5.685333	-0.0053	N/A	
23A0134-14 (Solid)			Lab File ID: 02012331ECD7.D			Analyzed: 02/01/23 22:11		
Decachlorobiphenyl	7.9914	85.3	40 - 126	13.885	13.892	-0.0070	N/A	
Tetrachlorometaxylene	7.9914	72.4	44 - 120	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	7.9914	90.5	40 - 126	14.114	14.12017	-0.0062	N/A	
Tetrachlorometaxylene [2C]	7.9914	81.0	44 - 120	5.681	5.685333	-0.0043	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0012
Instrument: ECD7
Calibration: GA00061
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0134-15 (Solid)			Lab File ID: 02012332ECD7.D			Analyzed: 02/01/23 22:32		
Decachlorobiphenyl	7.9984	83.2	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	7.9984	66.3	44 - 120	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	7.9984	79.2	40 - 126	14.113	14.12017	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.9984	76.6	44 - 120	5.681	5.685333	-0.0043	N/A	
23A0134-16 (Solid)			Lab File ID: 02012333ECD7.D			Analyzed: 02/01/23 22:53		
Decachlorobiphenyl	7.9921	88.5	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9921	67.9	44 - 120	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	7.9921	92.9	40 - 126	14.112	14.12017	-0.0082	N/A	
Tetrachlorometaxylene [2C]	7.9921	76.9	44 - 120	5.681	5.685333	-0.0043	N/A	
BLA0412-MS1 (Solid)			Lab File ID: 02012334ECD7.D			Analyzed: 02/01/23 23:14		
Decachlorobiphenyl	8.0019	89.3	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	8.0019	71.8	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	8.0019	90.0	40 - 126	14.113	14.12017	-0.0072	N/A	
Tetrachlorometaxylene [2C]	8.0019	77.8	44 - 120	5.68	5.685333	-0.0053	N/A	
BLA0412-MSD1 (Solid)			Lab File ID: 02012335ECD7.D			Analyzed: 02/01/23 23:35		
Decachlorobiphenyl	8.0019	87.8	40 - 126	13.882	13.892	-0.0100	N/A	
Tetrachlorometaxylene	8.0019	70.0	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	8.0019	88.5	40 - 126	14.112	14.12017	-0.0082	N/A	
Tetrachlorometaxylene [2C]	8.0019	76.7	44 - 120	5.681	5.685333	-0.0043	N/A	
SLB0012-CCV7 (Solid)			Lab File ID: 02012336ECD7.D			Analyzed: 02/01/23 23:56		
Decachlorobiphenyl	40.000	87.0	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	94.3	80 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	40.000	92.0	80 - 120	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	98.0	80 - 120	5.683	5.685333	-0.0023	N/A	
SLB0012-CCV8 (Solid)			Lab File ID: 02012337ECD7.D			Analyzed: 02/02/23 00:17		
Decachlorobiphenyl	40.000	96.5	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	105	80 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	97.0	80 - 120	14.115	14.12017	-0.0052	N/A	
Tetrachlorometaxylene [2C]	40.000	105	80 - 120	5.684	5.685333	-0.0013	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0023
Instrument: ECD7
Calibration: GA00061
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0023-ICV1 (Solid)			Lab File ID: 02022302ECD7.D			Analyzed: 02/02/23 09:21		
Decachlorobiphenyl	40.000	97.0	80 - 120	13.891	13.892	-0.0010	N/A	
Tetrachlorometaxylene	40.000	98.0	80 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	94.8	80 - 120	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	99.0	80 - 120	5.683	5.685333	-0.0023	N/A	
SLB0023-ICV2 (Solid)			Lab File ID: 02022303ECD7.D			Analyzed: 02/02/23 09:42		
Decachlorobiphenyl	40.000	96.5	80 - 120	13.891	13.892	-0.0010	N/A	
Tetrachlorometaxylene	40.000	105	80 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	40.000	98.3	80 - 120	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	105	80 - 120	5.683	5.685333	-0.0023	N/A	
23A0134-03 (Solid)			Lab File ID: 02022304ECD7.D			Analyzed: 02/02/23 10:03		
Decachlorobiphenyl	7.9971	107	40 - 126	13.885	13.892	-0.0070	N/A	
Tetrachlorometaxylene	7.9971	85.8	44 - 120	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	7.9971	94.1	40 - 126	14.114	14.12017	-0.0062	N/A	
Tetrachlorometaxylene [2C]	7.9971	96.9	44 - 120	5.683	5.685333	-0.0023	N/A	
23A0134-13 (Solid)			Lab File ID: 02022305ECD7.D			Analyzed: 02/02/23 10:24		
Decachlorobiphenyl	7.9740	144	40 - 126	13.884	13.892	-0.0080	N/A	*
Tetrachlorometaxylene	7.9740	71.5	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	7.9740	136	40 - 126	14.112	14.12017	-0.0082	N/A	*
Tetrachlorometaxylene [2C]	7.9740	81.9	44 - 120	5.68	5.685333	-0.0053	N/A	
SLB0023-CCV1 (Solid)			Lab File ID: 02022306ECD7.D			Analyzed: 02/02/23 10:45		
Decachlorobiphenyl	40.000	86.0	80 - 120	13.89	13.892	-0.0020	N/A	
Tetrachlorometaxylene	40.000	98.0	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	94.5	80 - 120	14.118	14.12017	-0.0022	N/A	
Tetrachlorometaxylene [2C]	40.000	98.5	80 - 120	5.684	5.685333	-0.0013	N/A	
SLB0023-CCV2 (Solid)			Lab File ID: 02022307ECD7.D			Analyzed: 02/02/23 11:06		
Decachlorobiphenyl	40.000	92.5	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	105	80 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	40.000	97.8	80 - 120	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	104	80 - 120	5.683	5.685333	-0.0023	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0023	Instrument:	ECD7
Calibration:	GA00061	Calibration Date:	01/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0023-CCV3 (Solid)			Lab File ID: 02022312ECD7.D			Analyzed: 02/02/23 15:09		
Decachlorobiphenyl	40.000	86.5	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	121	80 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	97.3	80 - 120	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	122	80 - 120	5.685	5.685333	-0.0003	N/A	
SLB0023-CCV4 (Solid)			Lab File ID: 02022313ECD7.D			Analyzed: 02/02/23 15:30		
Decachlorobiphenyl	40.000	92.3	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	104	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	97.8	80 - 120	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	104	80 - 120	5.685	5.685333	-0.0003	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0281	Instrument:	ECD7
		Calibration:	GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLA0281-SCV1)		(Solid)	Lab File ID: 01242324ECD7.D				Analyzed: 01/24/23 19:51		
1-Bromo-2-Nitrobenzene	506576	3.491	503318	3.492	101	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	940129	14.264	647433	14.266	145	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	343102	3.928	336911	3.928	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	501702	15.008	382032	15.008	131	50 - 200	0.000	+/-0.50	
Secondary Cal Check (SLA0281-SCV2)		(Solid)	Lab File ID: 01242325ECD7.D				Analyzed: 01/24/23 20:12		
1-Bromo-2-Nitrobenzene	503089	3.492	503318	3.492	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	953137	14.265	647433	14.266	147	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	341704	3.929	336911	3.928	101	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	505860	15.007	382032	15.008	132	50 - 200	-0.001	+/-0.50	
Secondary Cal Check (SLA0281-SCV3)		(Solid)	Lab File ID: 01242326ECD7.D				Analyzed: 01/24/23 20:33		
1-Bromo-2-Nitrobenzene	508189	3.491	503318	3.492	101	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	979067	14.265	647433	14.266	151	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	344105	3.928	336911	3.928	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	503378	15.007	382032	15.008	132	50 - 200	-0.001	+/-0.50	
Secondary Cal Check (SLA0281-SCV4)		(Solid)	Lab File ID: 01242327ECD7.D				Analyzed: 01/24/23 20:54		
1-Bromo-2-Nitrobenzene	504424	3.491	503318	3.492	100	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	968338	14.265	647433	14.266	150	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	342969	3.928	336911	3.928	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	515045	15.01	382032	15.008	135	50 - 200	0.002	+/-0.50	
Secondary Cal Check (SLA0281-SCV5)		(Solid)	Lab File ID: 01242328ECD7.D				Analyzed: 01/24/23 21:15		
1-Bromo-2-Nitrobenzene	503473	3.491	503318	3.492	100	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	991997	14.264	647433	14.266	153	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	340361	3.928	336911	3.928	101	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	521975	15.008	382032	15.008	137	50 - 200	0.000	+/-0.50	
Secondary Cal Check (SLA0281-SCV6)		(Solid)	Lab File ID: 01242329ECD7.D				Analyzed: 01/24/23 21:36		
1-Bromo-2-Nitrobenzene	487061	3.494	503318	3.492	97	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	944934	14.266	647433	14.266	146	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	331721	3.93	336911	3.928	98	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl [2C]	502401	15.007	382032	15.008	132	50 - 200	-0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0012
Instrument: ECD7
Calibration: GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLB0012-ICV1)		(Solid)	Lab File ID: 02012302ECD7.D				Analyzed: 02/01/23 09:46		
1-Bromo-2-Nitrobenzene	495414	3.492	495414	3.492	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	756858	14.263	756858	14.263	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	349006	3.927	349006	3.927	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	464626	15.005	464626	15.005	100	50 - 200	0.000	+/-0.50	
Initial Cal Check (SLB0012-ICV2)		(Solid)	Lab File ID: 02012303ECD7.D				Analyzed: 02/01/23 10:07		
1-Bromo-2-Nitrobenzene	468079	3.491	468079	3.491	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	798372	14.26	798372	14.26	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	333624	3.927	333624	3.927	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	453668	15.003	453668	15.003	100	50 - 200	0.000	+/-0.50	
Blank (BLA0412-BLK1)		(Solid)	Lab File ID: 02012310ECD7.D				Analyzed: 02/01/23 14:50		
1-Bromo-2-Nitrobenzene	609489	3.503	468079	3.491	130	50 - 200	0.012	+/-0.50	
Hexabromobiphenyl	994893	14.267	798372	14.26	125	50 - 200	0.007	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	418025	3.922	333624	3.927	125	50 - 200	-0.005	+/-0.50	
Hexabromobiphenyl [2C]	544183	15.003	453668	15.003	120	50 - 200	0.000	+/-0.50	
LCS (BLA0412-BS1)		(Solid)	Lab File ID: 02012311ECD7.D				Analyzed: 02/01/23 15:11		
1-Bromo-2-Nitrobenzene	597719	3.491	468079	3.491	128	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	959288	14.259	798372	14.26	120	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	412788	3.928	333624	3.927	124	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	565871	15.003	453668	15.003	125	50 - 200	0.000	+/-0.50	
LCS Dup (BLA0412-BSD1)		(Solid)	Lab File ID: 02012312ECD7.D				Analyzed: 02/01/23 15:32		
1-Bromo-2-Nitrobenzene	577711	3.491	468079	3.491	123	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	1023147	14.259	798372	14.26	128	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	404622	3.928	333624	3.927	121	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	584382	15.004	453668	15.003	129	50 - 200	0.001	+/-0.50	
Reference (BLA0412-SRM1)		(Solid)	Lab File ID: 02012313ECD7.D				Analyzed: 02/01/23 15:53		
1-Bromo-2-Nitrobenzene	569603	3.491	468079	3.491	122	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	745340	14.251	798372	14.26	93	50 - 200	-0.009	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	394327	3.928	333624	3.927	118	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	498003	14.999	453668	15.003	110	50 - 200	-0.004	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLB0012
SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: ECD7
Calibration: GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1205 (23A0134-01)		(Solid)	Lab File ID: 02012316ECD7.D				Analyzed: 02/01/23 16:56		
1-Bromo-2-Nitrobenzene	537787	3.491	468079	3.491	115	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	473973	14.248	798372	14.26	59	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	369372	3.928	333624	3.927	111	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	367379	14.995	453668	15.003	81	50 - 200	-0.008	+/-0.50	
LDW23-SS1188 (23A0134-02)		(Solid)	Lab File ID: 02012317ECD7.D				Analyzed: 02/01/23 17:17		
1-Bromo-2-Nitrobenzene	538655	3.49	468079	3.491	115	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	441834	14.247	798372	14.26	55	50 - 200	-0.013	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	361800	3.926	333624	3.927	108	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	428402	14.995	453668	15.003	94	50 - 200	-0.008	+/-0.50	
LDW23-SS1242 (23A0134-04)		(Solid)	Lab File ID: 02012319ECD7.D				Analyzed: 02/01/23 17:59		
1-Bromo-2-Nitrobenzene	529029	3.491	468079	3.491	113	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	428641	14.248	798372	14.26	54	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	372558	3.927	333624	3.927	112	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	343942	14.997	453668	15.003	76	50 - 200	-0.006	+/-0.50	
LDW23-SS1173 (23A0134-05)		(Solid)	Lab File ID: 02012320ECD7.D				Analyzed: 02/01/23 18:20		
1-Bromo-2-Nitrobenzene	544937	3.49	468079	3.491	116	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	441364	14.247	798372	14.26	55	50 - 200	-0.013	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	387266	3.927	333624	3.927	116	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	359826	14.996	453668	15.003	79	50 - 200	-0.007	+/-0.50	
LDW23-SS1160 (23A0134-06)		(Solid)	Lab File ID: 02012321ECD7.D				Analyzed: 02/01/23 18:41		
1-Bromo-2-Nitrobenzene	535263	3.491	468079	3.491	114	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	459665	14.249	798372	14.26	58	50 - 200	-0.011	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	377027	3.927	333624	3.927	113	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	380712	14.996	453668	15.003	84	50 - 200	-0.007	+/-0.50	
LDW23-SS1152 (23A0134-07)		(Solid)	Lab File ID: 02012322ECD7.D				Analyzed: 02/01/23 19:02		
1-Bromo-2-Nitrobenzene	538420	3.49	468079	3.491	115	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	421449	14.248	798372	14.26	53	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	376488	3.927	333624	3.927	113	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	361386	14.996	453668	15.003	80	50 - 200	-0.007	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLB0012
SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: ECD7
Calibration: GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1131 (23A0134-08)		(Solid)	Lab File ID: 02012323ECD7.D				Analyzed: 02/01/23 19:23		
1-Bromo-2-Nitrobenzene	510519	3.492	468079	3.491	109	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	420923	14.247	798372	14.26	53	50 - 200	-0.013	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	370018	3.929	333624	3.927	111	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl [2C]	345243	14.997	453668	15.003	76	50 - 200	-0.006	+/-0.50	
LDW23-SS1129 (23A0134-09)		(Solid)	Lab File ID: 02012324ECD7.D				Analyzed: 02/01/23 19:44		
1-Bromo-2-Nitrobenzene	496676	3.491	468079	3.491	106	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	403224	14.248	798372	14.26	51	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	353342	3.927	333624	3.927	106	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	332768	14.997	453668	15.003	73	50 - 200	-0.006	+/-0.50	
LDW23-SS1124 (23A0134-10)		(Solid)	Lab File ID: 02012325ECD7.D				Analyzed: 02/01/23 20:05		
1-Bromo-2-Nitrobenzene	504264	3.49	468079	3.491	108	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	413452	14.248	798372	14.26	52	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	361863	3.927	333624	3.927	108	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	342467	14.996	453668	15.003	75	50 - 200	-0.007	+/-0.50	
LDW23-SS1123 (23A0134-11)		(Solid)	Lab File ID: 02012328ECD7.D				Analyzed: 02/01/23 21:08		
1-Bromo-2-Nitrobenzene	496708	3.49	468079	3.491	106	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	441042	14.248	798372	14.26	55	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	353059	3.927	333624	3.927	106	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	359699	14.997	453668	15.003	79	50 - 200	-0.006	+/-0.50	
LDW23-SS1116 (23A0134-12)		(Solid)	Lab File ID: 02012329ECD7.D				Analyzed: 02/01/23 21:29		
1-Bromo-2-Nitrobenzene	496436	3.49	468079	3.491	106	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	438990	14.248	798372	14.26	55	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	354150	3.927	333624	3.927	106	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	349188	14.996	453668	15.003	77	50 - 200	-0.007	+/-0.50	
LDW23-IT1194 (23A0134-14)		(Solid)	Lab File ID: 02012331ECD7.D				Analyzed: 02/01/23 22:11		
1-Bromo-2-Nitrobenzene	519953	3.491	468079	3.491	111	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	394613	14.249	798372	14.26	49	50 - 200	-0.011	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	380038	3.927	333624	3.927	114	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	315472	14.999	453668	15.003	70	50 - 200	-0.004	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0012	Instrument:	ECD7
		Calibration:	GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1249 (23A0134-15)		(Solid)		Lab File ID: 02012332ECD7.D				Analyzed: 02/01/23 22:32	
1-Bromo-2-Nitrobenzene	506511	3.491	468079	3.491	108	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	411515	14.248	798372	14.26	52	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	358618	3.927	333624	3.927	107	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	340303	14.996	453668	15.003	75	50 - 200	-0.007	+/-0.50	
LDW23-SC1077 (23A0134-16)		(Solid)		Lab File ID: 02012333ECD7.D				Analyzed: 02/01/23 22:53	
1-Bromo-2-Nitrobenzene	517697	3.49	468079	3.491	111	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	405503	14.247	798372	14.26	51	50 - 200	-0.013	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	362239	3.927	333624	3.927	109	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	321747	14.997	453668	15.003	71	50 - 200	-0.006	+/-0.50	
Matrix Spike (BLA0412-MS1)		(Solid)		Lab File ID: 02012334ECD7.D				Analyzed: 02/01/23 23:14	
1-Bromo-2-Nitrobenzene	514787	3.49	468079	3.491	110	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	410162	14.248	798372	14.26	51	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	368550	3.926	333624	3.927	110	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	327484	14.997	453668	15.003	72	50 - 200	-0.006	+/-0.50	
Matrix Spike Dup (BLA0412-MSD1)		(Solid)		Lab File ID: 02012335ECD7.D				Analyzed: 02/01/23 23:35	
1-Bromo-2-Nitrobenzene	524301	3.49	468079	3.491	112	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	372336	14.247	798372	14.26	47	50 - 200	-0.013	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	374160	3.927	333624	3.927	112	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	305934	14.996	453668	15.003	67	50 - 200	-0.007	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0023
Instrument: ECD7
Calibration: GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLB0023-ICV1)		(Solid)	Lab File ID: 02022302ECD7.D				Analyzed: 02/02/23 09:21		
1-Bromo-2-Nitrobenzene	491992	3.492	491992	3.492	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	603828	14.261	603828	14.261	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	350428	3.926	350428	3.926	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	382013	15.005	382013	15.005	100	50 - 200	0.000	+/-0.50	
Initial Cal Check (SLB0023-ICV2)		(Solid)	Lab File ID: 02022303ECD7.D				Analyzed: 02/02/23 09:42		
1-Bromo-2-Nitrobenzene	466225	3.491	466225	3.491	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	662787	14.26	662787	14.26	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	336532	3.926	336532	3.926	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	386935	15.004	386935	15.004	100	50 - 200	0.000	+/-0.50	
LDW23-SS1179 (23A0134-03)		(Solid)	Lab File ID: 02022304ECD7.D				Analyzed: 02/02/23 10:03		
1-Bromo-2-Nitrobenzene	535030	3.491	466225	3.491	115	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	630027	14.252	662787	14.26	95	50 - 200	-0.008	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	382170	3.927	336532	3.926	114	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	429461	14.999	386935	15.004	111	50 - 200	-0.005	+/-0.50	
LDW23-IT1210 (23A0134-13)		(Solid)	Lab File ID: 02022305ECD7.D				Analyzed: 02/02/23 10:24		
1-Bromo-2-Nitrobenzene	507153	3.49	466225	3.491	109	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	503593	14.248	662787	14.26	76	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	356426	3.926	336532	3.926	106	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	388366	14.997	386935	15.004	100	50 - 200	-0.007	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-01	File ID:	02012316ECD7.D
Sampled:	01/06/23 08:28	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 16:56
Solids:	57.38	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.395	8.405	0.01	43835.25	22.7	1.3
	2	8.297	8.305	0.008	22951	22.4	
Aroclor 1254	1	9.284	9.298	0.014	71143.2	31.1	18.1
	* 2	9.436	9.447	0.011	64410.6	37.3	
Aroclor 1260	1	11.031	11.04533	0.0143	47572.4	26.9	8.5
	* 2	11.642	11.65333	0.0113	51907	29.3	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-02	File ID:	02012317ECD7.D
Sampled:	01/06/23 09:36	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 17:17
Solids:	46.55	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.393	8.405	0.012	57530	30.0	3.
	* 2	8.296	8.305	0.009	31318.25	30.9	
Aroclor 1254	1	9.283	9.298	0.015	96076.2	41.8	29.9
	* 2	9.435	9.447	0.012	94835.8	56.5	
Aroclor 1260	1	11.03	11.04533	0.0153	57020.2	33.6	4.9
	* 2	11.641	11.65333	0.0123	69256	35.3	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-04	File ID:	02012319ECD7.D
Sampled:	01/06/23 11:04	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 17:59
Solids:	46.37	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.394	8.405	0.011	51262.75	26.8	.7
	* 2	8.296	8.305	0.009	27840.75	27.0	
Aroclor 1254	1	9.284	9.298	0.014	90326.8	40.2	18.7
	* 2	9.436	9.447	0.011	85043.6	48.5	
Aroclor 1260	1	11.031	11.04533	0.0143	58292.8	37.3	3.9
	* 2	11.642	11.65333	0.0113	63350.75	38.8	

* Column used for quantitation

Analytical Resources, LLC
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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-05	File ID:	02012320ECD7.D
Sampled:	01/06/23 11:22	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 18:20
Solids:	47.16	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.393	8.405	0.012	73294	37.7	7.4
	2	8.297	8.305	0.008	37951	35.0	
Aroclor 1254	1	9.283	9.298	0.015	125331.4	54.0	14.4
	* 2	9.435	9.447	0.012	112939.4	62.4	
Aroclor 1260	1	11.03	11.04533	0.0153	54791	32.0	23.
	* 2	11.641	11.65333	0.0123	65694.25	40.3	

* Column used for quantitation

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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-06	File ID:	02012321ECD7.D
Sampled:	01/06/23 11:41	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 18:41
Solids:	40.27	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.38	8.405	0.025	73473.75	41.1	4.2
	2	8.296	8.305	0.009	43151.75	39.4	
Aroclor 1254	1	9.283	9.298	0.015	101588.2	44.4	22.4
	* 2	9.436	9.447	0.011	98029.4	55.6	
Aroclor 1260	1	11.03	11.04533	0.0153	64495.6	39.7	5.4
	* 2	11.641	11.65333	0.0123	96871.25	37.6	

* Column used for quantitation

Analytical Resources, LLC
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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-07	File ID:	02012322ECD7.D
Sampled:	01/06/23 12:29	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 19:02
Solids:	43.66	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.393	8.405	0.012	56435.5	29.4	5.
	* 2	8.296	8.305	0.009	32570	30.9	
Aroclor 1254	1	9.283	9.298	0.015	91448	40.1	23.9
	* 2	9.435	9.447	0.012	89391.4	51.0	
Aroclor 1260	1	11.03	11.04533	0.0153	46323.2	30.1	18.7
	* 2	11.641	11.65333	0.0123	60314	36.3	

* Column used for quantitation

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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-08	File ID:	02012323ECD7.D
Sampled:	01/06/23 12:43	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 19:23
Solids:	54.73	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.395	8.405	0.01	51361.75	28.8	6.5
	2	8.297	8.305	0.008	28883.75	27.0	
Aroclor 1254	1	9.284	9.298	0.014	95686.8	45.4	12.2
	* 2	9.436	9.447	0.011	87688.8	51.3	
Aroclor 1260	1	11.031	11.04533	0.0143	106275.6	86.1	22.3
	* 2	11.64	11.65333	0.0133	100591.5	68.8	

* Column used for quantitation

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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-09	File ID:	02012324ECD7.D
Sampled:	01/06/23 12:57	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 19:44
Solids:	48.04	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.394	8.405	0.011	105258.3	59.5	4.1
	* 2	8.297	8.305	0.008	61152.75	62.0	
Aroclor 1254	1	9.284	9.298	0.014	174923.4	87.5	9.8
	* 2	9.435	9.447	0.012	130440.8	79.3	
Aroclor 1260	1	11.031	11.04533	0.0143	84415.4	56.4	12.5
	* 2	11.642	11.65333	0.0113	102961	63.9	

* Column used for quantitation

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-10	File ID:	02012325ECD7.D
Sampled:	01/06/23 13:15	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 20:05
Solids:	48.45	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.394	8.405	0.011	41077	16.2	50.
	* 2	8.296	8.305	0.009	28258.25	27.0	
Aroclor 1254	1	9.284	9.298	0.014	68422.4	32.0	20.2
	* 2	9.435	9.447	0.012	66300.4	39.2	
Aroclor 1260	1	11.031	11.04533	0.0143	42365.2	27.2	11.1
	* 2	11.641	11.65333	0.0123	48906.75	30.4	

* Column used for quantitation

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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-11	File ID:	02012328ECD7.D
Sampled:	01/06/23 13:29	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 21:08
Solids:	51.95	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.394	8.405	0.011	64640.25	36.3	1.9
	* 2	8.296	8.305	0.009	34773	35.6	
Aroclor 1254	1	9.283	9.298	0.015	105043.6	50.1	12.4
	* 2	9.435	9.447	0.012	93419	56.7	
Aroclor 1260	1	11.031	11.04533	0.0143	53388.2	32.1	14.2
	* 2	11.641	11.65333	0.0123	62698.5	37.0	

* Column used for quantitation

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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-12	File ID:	02012329ECD7.D
Sampled:	01/06/23 13:44	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 21:29
Solids:	58.81	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.393	8.405	0.012	23934.25	9.8	29.6
	* 2	8.297	8.305	0.008	12860.5	13.2	
Aroclor 1254	1	9.284	9.298	0.014	38754.8	15.9	35.7
	* 2	9.436	9.447	0.011	37752.6	22.8	
Aroclor 1260	1	11.03	11.04533	0.0153	22963.2	15.2	15.8
	* 2	11.642	11.65333	0.0113	27909.25	17.8	

* Column used for quantitation

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-14	File ID:	02012331ECD7.D
Sampled:	01/06/23 14:41	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 22:11
Solids:	73.05	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.396	8.405	0.009	26081.5	13.8	29.
	* 2	8.298	8.305	0.007	11663.5	10.3	
Aroclor 1254	1	9.286	9.298	0.012	53062.6	24.0	23.2
	* 2	9.438	9.447	0.009	55342.4	30.3	
Aroclor 1260	* 1	11.032	11.04533	0.0133	35113.6	25.0	9.6
	2	11.643	11.65333	0.0103	34158.75	22.7	

* Column used for quantitation

Analytical Resources, LLC
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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-15	File ID:	02012332ECD7.D
Sampled:	01/06/23 13:46	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 22:32
Solids:	50.09	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.394	8.405	0.011	57417.5	31.5	4.9
	* 2	8.297	8.305	0.008	29909	30.0	
Aroclor 1254	1	9.284	9.298	0.014	95101.8	44.2	16.2
	* 2	9.436	9.447	0.011	87583	52.0	
Aroclor 1260	1	11.031	11.04533	0.0143	54206	35.4	13.2
	* 2	11.641	11.65333	0.0123	64961.75	40.4	

* Column used for quantitation

Analytical Resources, LLC
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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-16	File ID:	02012333ECD7.D
Sampled:	01/06/23 15:10	Prepared:	01/20/23 13:50	Analyzed:	02/01/23 22:53
Solids:	76.81	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0012		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.395	8.405	0.01	71212.25	27.3	21.3
	* 2	8.297	8.305	0.008	34362	33.8	
Aroclor 1254	1	9.283	9.298	0.015	114787.8	52.2	17.2
	* 2	9.436	9.447	0.011	105508	62.0	
Aroclor 1260	1	11.032	11.04533	0.0133	72608.2	45.6	16.1
	* 2	11.642	11.65333	0.0113	81469.25	53.6	

* Column used for quantitation

Analytical Resources, LLC
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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-03	File ID:	02022304ECD7.D
Sampled:	01/06/23 09:52	Prepared:	01/20/23 13:50	Analyzed:	02/02/23 10:03
Solids:	47.33	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0023		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.397	8.405	0.008	10577.5	56.6	32.8
	* 2	8.299	8.305	0.006	24679.5	78.8	
Aroclor 1254	* 1	9.287	9.298	0.011	24309.4	102	8.4
	2	9.433	9.447	0.014	101688.2	93.8	
Aroclor 1260	* 1	11.023	11.04533	0.0223	81124.6	92.8	9.4
	2	11.642	11.65333	0.0113	15292.25	84.5	

* Column used for quantitation

Analytical Resources, LLC
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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-13	File ID:	02022305ECD7.D
Sampled:	01/06/23 14:12	Prepared:	01/20/23 13:50	Analyzed:	02/02/23 10:24
Solids:	55.49	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0412	Sequence:	SLB0023		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.395	8.405	0.01	227361.5	824	31.3
	* 2	8.297	8.305	0.008	124460.3	1130	
Aroclor 1254	1	9.285	9.298	0.013	350300.8	1390	24.6
	* 2	9.436	9.447	0.011	301776.2	1780	
Aroclor 1260	1	11.032	11.04533	0.0133	89075.2	460	29.2
	* 2	11.642	11.65333	0.0113	117313.5	617	

* Column used for quantitation

HOLDING TIME SUMMARY

Analysis: EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1205 23A0134-01	01/06/23 08:28	01/06/23 17:26	01/20/23 13:50	14	365	02/01/23 16:56	12	40	
LDW23-SS1188 23A0134-02	01/06/23 09:36	01/06/23 17:26	01/20/23 13:50	14	365	02/01/23 17:17	12	40	
LDW23-SS1179 23A0134-03	01/06/23 09:52	01/06/23 17:26	01/20/23 13:50	14	365	02/02/23 10:03	13	40	
LDW23-SS1242 23A0134-04	01/06/23 11:04	01/06/23 17:26	01/20/23 13:50	14	365	02/01/23 17:59	12	40	
LDW23-SS1173 23A0134-05	01/06/23 11:22	01/06/23 17:26	01/20/23 13:50	14	365	02/01/23 18:20	12	40	
LDW23-SS1160 23A0134-06	01/06/23 11:41	01/06/23 17:26	01/20/23 13:50	14	365	02/01/23 18:41	12	40	
LDW23-SS1152 23A0134-07	01/06/23 12:29	01/06/23 17:26	01/20/23 13:50	14	365	02/01/23 19:02	12	40	
LDW23-SS1131 23A0134-08	01/06/23 12:43	01/06/23 17:26	01/20/23 13:50	14	365	02/01/23 19:23	12	40	
LDW23-SS1129 23A0134-09	01/06/23 12:57	01/06/23 17:26	01/20/23 13:50	14	365	02/01/23 19:44	12	40	
LDW23-SS1124 23A0134-10	01/06/23 13:15	01/06/23 17:26	01/20/23 13:50	14	365	02/01/23 20:05	12	40	
LDW23-SS1123 23A0134-11	01/06/23 13:29	01/06/23 17:26	01/20/23 13:50	14	365	02/01/23 21:08	12	40	
LDW23-SS1116 23A0134-12	01/06/23 13:44	01/06/23 17:26	01/20/23 13:50	14	365	02/01/23 21:29	12	40	
LDW23-IT1210 23A0134-13	01/06/23 14:12	01/06/23 17:26	01/20/23 13:50	13	365	02/02/23 10:24	13	40	
LDW23-IT1194 23A0134-14	01/06/23 14:41	01/06/23 17:26	01/20/23 13:50	13	365	02/01/23 22:11	12	40	
LDW23-SC1249 23A0134-15	01/06/23 13:46	01/06/23 17:26	01/20/23 13:50	14	365	02/01/23 22:32	12	40	
LDW23-SC1077 23A0134-16	01/06/23 15:10	01/06/23 17:26	01/20/23 13:50	13	365	02/01/23 22:53	12	40	
Matrix Spike BLA0412-MS1	01/06/23 15:10	01/06/23 17:26	01/20/23 13:50	13	365	02/01/23 23:14	12	40	
Matrix Spike Dup BLA0412-MSD1	01/06/23 15:10	01/06/23 17:26	01/20/23 13:50	13	365	02/01/23 23:35	12	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ECD7

Analyte	MDL	RL	Units
Aroclor 1016	1.6	4.0	ug/kg
Aroclor 1016 [2C]	1.6	4.0	ug/kg
Aroclor 1221	1.6	4.0	ug/kg
Aroclor 1221 [2C]	1.6	4.0	ug/kg
Aroclor 1232	1.6	4.0	ug/kg
Aroclor 1232 [2C]	1.6	4.0	ug/kg
Aroclor 1242	1.6	4.0	ug/kg
Aroclor 1242 [2C]	1.6	4.0	ug/kg
Aroclor 1248	1.6	4.0	ug/kg
Aroclor 1248 [2C]	1.6	4.0	ug/kg
Aroclor 1254	1.6	4.0	ug/kg
Aroclor 1254 [2C]	1.6	4.0	ug/kg
Aroclor 1260	0.6	4.0	ug/kg
Aroclor 1260 [2C]	0.6	4.0	ug/kg

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: S-279N
Description: Tetrachloro-m-xylene
Lot: 0052481B-1
Solvent: N/A
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: Jul 28, 2005
Expiration: Jul 28, 2015
Sample Size: 100 mg
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

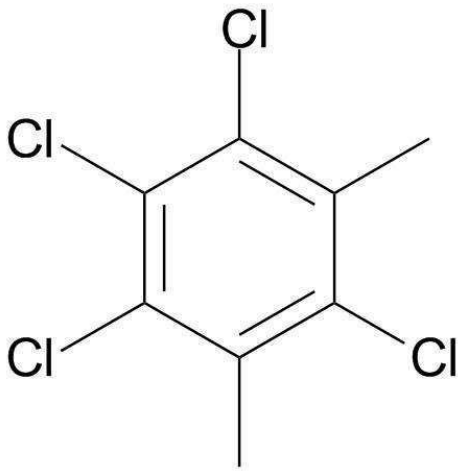
ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration	Certified Analyte Concentration[1]
Tetrachloro-meta-xylene	877-09-8	96.0	N/A	N/A

Identification:

Molecular formula: C8H6Cl4
Molecular weight: 243.94



C000147
tetrachlormetaxylene
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] The Uncertainty calculated for this product is ±2.4%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Metrological traceability is established through in-house validated methods.

Purity, if stated, is equal to 100% minus found impurity components. Impurity components have not been identified.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

AccuStandard
125 Market Street
New Haven, CT 06513
(203) 786-5290

CERTIFICATE OF PRODUCT DATA

PRODUCT: C-209N
DESCRIPTION: 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl
LOT #: 990521LB-AC
SOLVENT: N/A

EXPIRATION: Jul 28, 2015

This product is guaranteed accurate to ±0.5% of the Certified Analyte concentration through the Expiration Date on the Label.

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1]	Certified Analyte Concentration[2]
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	100	N/A	N/A

C000148
decachlorbiphenyl
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

* I1768A

Certified by: R. Cooper

Please note: AccuStandard follows the U.S. conventions in reporting numerical values, on both certificates and labels.

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through National Institute of Standards & Technology, Test No. 822/264480
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is ±4% which is the Combined Uncertainty uc(y). It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is Uc(y) *K where K is the coverage factor at the 95% confidence level (K=2).
3. A product with a suffix (-1A, -2B, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

This product was manufactured in accordance to quality system requirements of ISO 9001:2000 and ISO 17025

* Recertified 2 4-6-09 JS

Analytical Standard Record

Standard ID: C000148 **Printed: 4/23/2015 11:54:44AM**

Description:	decachlorbiphenyl	Expires:	15-Jan-2020
Standard Type:	Other	Prepared:	15-Jan-2014
Solvent:	na/a	Prepared By:	Joshua Rains
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	27-Feb-2015 13:03 by JGR
Vendor:	Accustandard	Lot #:	990521lb-ac
Vendor Catalog #:			

Comments

see i1768a
SOM calibrations added 06/12/14 sdrd

Analyte	CAS Number	Concentration	Units
Decachlorobiphenyl [2C]	2051-24-3	1000000	ug/mL
Decachlorobiphenyl	2051-24-3	1000000	ug/mL
DCB 1660 [2C]	2051-24-3	1000000	ug/mL
DCB 1660	2051-24-3	1000000	ug/mL
DCB [2C]	2051-24-3	1000000	ug/mL
DCB (A) [2C]	2051-24-3	1000000	ug/mL
DCB (A)	2051-24-3	1000000	ug/mL
DCB	2051-24-3	1000000	ug/mL

Reviewed By Date

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Access your MSDS and digital C of A at **www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards**

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101461
Description: Aroclor 1254
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Hexane

Lot Number: CL13053
Certification Date: November 29, 2018
Expiration Date: November 30, 2026

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1254	11097-69-1	1000	± 0.246%

I09808
Recd. JP
02/24/20

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Certificate No. 2427.02

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Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL111110613_us

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101462
Description: Aroclor 1260
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Hexane

Lot Number: CL16516
Certification Date: March 4, 2021
Expiration Date: February 28, 2029

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1260	11096-82-5	1000	± 0.553%

J006465

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101468
Description: Aroclor 1221
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL14017
Certification Date: August 20, 2019
Expiration Date: August 31, 2027

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1221	11104-28-2	1000	± 0.553%

J00466
Rcd JK
06/18/21

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Certicate No. 2427.02

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101469
Description: Aroclor 1232
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL14914
Certification Date: January 31, 2020
Expiration Date: January 31, 2028

Andrea L Gill
Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1232	11141-16-5	1000	± 0.738%

J006467 JR
read
06/18/21

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3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

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[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101470
Description: Aroclor 1242
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL14018
Certification Date: August 20, 2019
Expiration Date: August 31, 2027

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1242	53469-21-9	1000	± 0.553%

J006468
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3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

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[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.:	AL0-101471	**Lot Number:**	CL15384
Description:	Aroclor 1248	**Certification Date:**	June 19, 2020
Storage:	4 °C	**Expiration Date:**	June 30, 2028
Provided As:	1 mL in 2 mL Ampoule in Isooctane		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1248	12672-29-6	1000	± 0.520%

JJ06469
Reed, JR
06/18/21

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Reference Material Producer
Certicate No. 2427.02

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3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

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Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101474
Description: Aroclor 1262
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL11330
Certification Date: May 15, 2015
Expiration Date: April 30, 2023
Revision Date: April 2, 2018

Andrea L Gill
Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1262	37324-23-5	1000	± 0.516%

J 00647
Rec'd JK
06/18/21

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

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Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL111110613_us

Certificate of Analysis

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Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO Guide 34[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.

4. Instruction: Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.

12. Period of Validity: The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
[3] ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

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Access your MSDS and digital C of A at **www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards**

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101475	**Lot Number:**	CL11331
Description:	Aroclor 1268	**Certification Date:**	May 15, 2015
Storage:	4 °C	**Expiration Date:**	April 30, 2023
Provided As:	1 mL in 2 mL Ampoule in Isooctane	**Revision Date:**	April 2, 2018

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1268	11100-14-4	1000	± 0.516%

J006472
Rec'd
06/18/21

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Reference Material Producer
Certificate No. 2427.02

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Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
Certificate No. 2427.03

IL11110613_us

Certificate of Analysis

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO Guide 34[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.

4. Instruction: Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.

12. Period of Validity: The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
[3] ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certificate No. 2427.02

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Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

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Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101467
Description: Aroclor 1016
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL16555
Certification Date: June 22, 2021
Expiration Date: February 28, 2029

J012591
AROCLOR 1016
Expires 2/28/2029
Prepared By Joshua Rains 11/26/2021

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1016	12674-11-2	1000	± 0.310%

ACCREDITED
Reference Material Producer
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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Certicate No. 2427.03

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

Agilent

Aroclor 1016 Solution

Product Number: PP-282 **Page:** 1 of 1

Lot Number: CR-0761 **Lot Issue Date:** 28-Feb-2017 **Expiration Date:** 31-Mar-2025

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1016	012674-11-2	NT01016	100.2 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1254 JR
Reed
02/05/22

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

John Russo
President

Monica Bourgeois
Director of QA/RA

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 9001
Registered
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Certificate of Analysis

Product Name: Aroclor 1260 Standard

Product Number: PP-362-1 **Lot Issue Date:** 20-Jan-2021

Lot Number: 0006582048 **Expiration Date:** 28-Feb-2025

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1260	011096-82-5	NT01023	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K 1255

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

M Bourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

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ISO 17025 Cert
No. AT-1937

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Agilent

Certificate of Analysis
ISO Guide 34

Aroclor 1242 Solution

Product Number: PP-312 **Page:** 1 of 1

Lot Number: CS-6293 **Lot Issue Date:** 04-Jan-2019 **Expiration Date:** 31-Jan-2023

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1242	053469-21-9	NT01020	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1256

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No. AT-1937

ISO 17034

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Reference Material Certificate

Product Name:	Aroclor 1248 Standard	**Lot Number:**	0006626997
Product Number:	PP-342-1	**Lot Issue Date:**	17-Aug-2021
Storage Conditions:	Store at Room Temperature (15° to 30°C).	**Expiration Date:**	30-Sep-2025

	CERTIFIED VALUES				
Component Name	Concentration		Expanded Uncertainty	CAS#	Analyte Lot
Aroclor 1248	100.3	±	0.5 µg/mL	012672-29-6	NT01582

Matrix: isooctane (2,2,4-trimethylpentane)

K1257

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:
The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Certificate of Analysis

Agilent

Aroclor 1254 Solution

Product Number: PP-352 **Page:** 1 of 1

Lot Number: CS-2321 **Lot Issue Date:** 04-May-2018 **Expiration Date:** 31-May-2026

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1254	011097-69-1	RM00922	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1258

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

John Russo
President

Monica Bourgeois
Director of QA/RA

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

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TUV USA, Inc.

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Certificate of Analysis

Product Name: Aroclor 1221 Standard

Product Number: PP-292-1 **Lot Issue Date:** 28-Apr-2020

Lot Number: 0006535333 **Expiration Date:** 31-May-2024

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1221	011104-28-2	RM04278	100.2 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K1259

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

MBourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert No. AT-1937

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Certificate of Analysis
ISO 17034

Aroclor 1262 Standard

Product Number: PP-372-1 **Page:** 1 of 1

Lot Number: 0006499800 **Lot Issue Date:** 04-Nov-2019 **Expiration Date:** 30-Nov-2023

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1262	037324-23-5	RM14263	100.0 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1260

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

Agilent

Certificate of Analysis
ISO 17034

Aroclor 1232 Standard

Product Number: PP-302-1 **Page:** 1 of 1

Lot Number: CF-2197A **Lot Issue Date:** 05-Jul-2016 **Expiration Date:** 31-Aug-2023

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1232	011141-16-5	NT01717	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1261

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

M Bourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No. AT-1937

Agilent

Certificate of Analysis

Product Name: Aroclor 1268 Standard

Product Number: PP-382-1 **Lot Issue Date:** 09-Feb-2021

Lot Number: 0006587800 **Expiration Date:** 31-Mar-2029

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1268	011100-14-4	RM00937	100.0 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K1262

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

M Bourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 1

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Phenova Certified Reference Materials are sold by Phenomenex.
411 Madrid Ave., Torrance, CA 90501 USA ▪ Tel: 310-212-0555 ▪ Fax: 310-328-7768 ▪ info@phenomenex.com
Access your MSDS and digital C of A at **www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards**

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101467	**Lot Number:**	CL12975
Description:	Aroclor 1016	**Certification Date:**	November 19, 2018
Storage:	4 °C	**Expiration Date:**	October 31, 2026
Provided As:	1 mL in 2 mL Ampoule in Isooctane		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1016	12674-11-2	1000	± 0.553%

K5829

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL11110613_us

Certificate of Analysis

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411 Madrid Ave., Torrance, CA 90501 USA ▪ Tel: 310-212-0555 ▪ Fax: 310-328-7768 ▪ info@phenomenex.com
Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO Guide 34[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.

4. Instruction: Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

   $$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.

12. Period of Validity: The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
[3] ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

ILT1116613_US

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101462
Description: Aroclor 1260
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Hexane

Lot Number: CL18021
Certification Date: February 14, 2022
Expiration Date: February 28, 2030

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1260	11096-82-5	1000	± 0.553%

K005830

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 15546

Order Number: CB014961

Date Shipped: 11/17/2022

AirBill No(s): 519204142414

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712

To: Kelly Bottem
Analytical Resources, Inc.
4611 S. 134th Place SUITE 100
Tukwila WA 98168
206-695-6211

Sample ID	Sigma ID	Qty	Description/Remarks	→ Catalogue Number
Ka1085 – PSRM0164	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
KO 10816 PSRM0165	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
KO1081 7 PSRM0166	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM

11/17/2022

PUGET SOUND SRM FOR THE LOCKHEED WEST SEATTLE SF SITE 5-YEAR REVIEW MONITORING.

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	11/17/2022 (1400)	Phillip	10:22 11/18/22
Custody Seal(s): Present/Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Report No. 00, 9/11/2014

SMP Version 3.3

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1160

Form 1
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-06 B	File ID:	23022316
Sampled:	01/06/23 11:41	Prepared:	01/24/23 13:10	Analyzed:	02/23/23 22:35
% Solids:	46.51	Preparation:	EPA 1613	Initial/Final:	21.5 g Wet / 20 uL
Result Basis:	Dry	Sequence:	SLB0345	Calibration:	GB00010
Batch:	BLA0261	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	0.737	0.655-0.886	0.097	1.00	1.27	ng/kg	B
1746-01-6	2,3,7,8-TCDD	1	0.554	0.655-0.886	0.053	1.00	0.468	ng/kg	EMPC, J
57117-41-6	1,2,3,7,8-PeCDF	1	1.525	1.318-1.783	0.224	1.00	1.32	ng/kg	
57117-31-4	2,3,4,7,8-PeCDF	1	1.226	1.318-1.783	0.210	1.00	2.25	ng/kg	EMPC
40321-76-4	1,2,3,7,8-PeCDD	1	1.712	1.318-1.783	0.322	1.00	2.58	ng/kg	
70648-26-9	1,2,3,4,7,8-HxCDF	1	1.205	1.054-1.426	0.121	1.00	5.31	ng/kg	B
57117-44-9	1,2,3,6,7,8-HxCDF	1	1.138	1.054-1.426	0.116	1.00	2.32	ng/kg	
60851-34-5	2,3,4,6,7,8-HxCDF	1	1.306	1.054-1.426	0.127	1.00	3.51	ng/kg	
72918-21-9	1,2,3,7,8,9-HxCDF	1	1.024	1.054-1.426	0.153	1.00	1.25	ng/kg	EMPC, B
39227-28-6	1,2,3,4,7,8-HxCDD	1	1.280	1.054-1.426	0.207	1.00	2.63	ng/kg	
57653-85-7	1,2,3,6,7,8-HxCDD	1	1.230	1.054-1.426	0.191	1.00	11.3	ng/kg	
19408-74-3	1,2,3,7,8,9-HxCDD	1	1.146	1.054-1.426	0.202	1.00	5.41	ng/kg	B
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	1.116	0.893-1.208	0.198	1.00	91.0	ng/kg	
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	1.060	0.893-1.208	0.277	1.00	5.12	ng/kg	
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.049	0.893-1.208	0.504	2.50	364	ng/kg	B
39001-02-0	OCDF	1	0.886	0.757-1.024	0.298	2.50	329	ng/kg	
3268-87-9	OCDD	1	0.873	0.757-1.024	0.536	10.0	3220	ng/kg	B

Homologue Groups

55722-27-5	Total TCDF	1	0.000			1.00	26.4	ng/kg	
41903-57-5	Total TCDD	1	0.000			1.00	6.74	ng/kg	
30402-15-4	Total PeCDF	1	0.000			1.00	43.0	ng/kg	
36088-22-9	Total PeCDD	1	0.000			1.00	12.9	ng/kg	
55684-94-1	Total HxCDF	1	0.000			1.00	87.9	ng/kg	
34465-46-8	Total HxCDD	1	0.000			1.00	97.9	ng/kg	
38998-75-3	Total HpCDF	1	0.000			1.00	334	ng/kg	
37871-00-4	Total HpCDD	1	0.000			1.00	968	ng/kg	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 12.73

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 12.73

LDW23-SS1160

Form 2

ORGANIC ANALYSIS DATA SHEET

EPA 1613B

Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-06	File ID:	23022316
Sampled:	01/06/23 11:41	Prepared:	01/24/23 13:10	Analyzed:	02/23/23 22:35
Solids Wt%:	46.51	Preparation:	EPA 1613	Initial/Final:	21.5 g / 20 uL
Result Basis:	Dry	Sequence:	SLB0345	Calibration:	GB00010
Batch:	BLA0261	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF		0.767	0.655-0.886	0.067	85.1	24 - 169 %	
13C12-2,3,7,8-TCDD		0.779	0.655-0.886	0.105	110	25 - 164 %	
13C12-1,2,3,7,8-PeCDF		1.570	1.318-1.783	0.102	73.8	24 - 185 %	
13C12-2,3,4,7,8-PeCDF		1.578	1.318-1.783	0.106	74.3	21 - 178 %	
13C12-1,2,3,7,8-PeCDD		1.675	1.318-1.783	0.086	58.6	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF		0.507	0.434-0.587	0.128	103	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF		0.512	0.434-0.587	0.125	107	26 - 123 %	
13C12-2,3,4,6,7,8-HxCDF		0.509	0.434-0.587	0.133	100	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF		0.510	0.434-0.587	0.146	85.4	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD		1.219	1.054-1.426	0.136	107	32 - 141 %	
13C12-1,2,3,6,7,8-HxCDD		1.218	1.054-1.426	0.131	111	28 - 130 %	
13C12-1,2,3,4,6,7,8-HpCDF		0.444	0.374-0.506	0.137	86.6	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF		0.454	0.374-0.506	0.157	89.7	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD		1.085	0.893-1.208	0.172	89.8	23 - 140 %	
13C12-OCDD		0.928	0.757-1.024	0.152	63.5	17 - 157 %	
37Cl4-2,3,7,8-TCDD		328.000		0.021	89.5	35 - 197 %	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:14:07 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: 23A0134-06, Name: 23022316, Date: 23-Feb-2023, Time: 22:35:35, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	26.000	1.000	3.099e3	4.204e3	0.876	0.737	0.770	1198	1652	4.90e4	6.22e4	40.9	37.7	NO	dd	bd	0.633
12378-PeCDF	30.164	1.001	3.323e3	2.179e3	0.845	1.525	1.550	2381	2261	5.60e4	3.31e4	23.5	14.6	NO	bb	bb	0.660
23478-PeCDF	31.513	1.001	5.386e3	4.395e3	0.911	1.226	1.550	2381	2261	8.45e4	6.15e4	35.5	27.2	YES	bb	db	1.125
123478-HxCDF	35.133	1.001	1.435e4	1.192e4	1.182	1.205	1.240	2124	1097	2.28e5	1.88e5	107.6	171.8	NO	dd	dd	2.655
234678-HxCDF	36.125	1.000	9.551e3	7.311e3	1.229	1.306	1.240	2124	1097	8.96e4	7.24e4	42.2	66.0	NO	bb	MM	1.756
123678-HxCDF	35.267	1.001	6.865e3	6.031e3	1.248	1.138	1.240	2124	1097	1.02e5	8.89e4	48.1	81.0	NO	db	dd	1.160
123789-HxCDF	37.117	1.000	2.283e3	2.229e3	1.187	1.024	1.240	2124	1097	3.56e4	3.29e4	16.7	30.0	YES	bd	MM	0.623
1234678-HpCDF	38.977	1.000	1.996e5	1.789e5	1.204	1.116	1.050	2144	2479	3.05e6	2.84e6	1422.8	1146.0	NO	bb	bd	45.477
1234789-HpCDF	41.250	1.000	9.606e3	9.064e3	1.165	1.060	1.050	2144	2479	1.37e5	1.19e5	63.8	48.1	NO	MM	MM	2.562
OCDF	45.563	1.006	3.533e5	3.986e5	1.186	0.886	0.890	1576	1208	3.81e6	4.29e6	2418.0	3550.9	NO	bd	dd	164.491
2378-TCDD	26.636	1.000	1.092e3	1.973e3	1.236	0.554	0.770	852	975	1.81e4	2.75e4	21.2	28.2	YES	bd	bd	0.234
12378-PeCDD	31.769	1.001	4.148e3	2.423e3	1.087	1.712	1.550	1617	2254	6.32e4	3.54e4	39.1	15.7	NO	bb	bb	1.289
123478-HxCDD	36.259	1.000	5.598e3	4.372e3	0.987	1.280	1.240	2041	2201	9.61e4	7.17e4	47.1	32.6	NO	bd	bd	1.314
123678-HxCDD	36.381	1.001	2.625e4	2.134e4	1.021	1.230	1.240	2041	2201	4.10e5	3.46e5	201.1	157.1	NO	dd	dd	5.673
123789-HxCDD	36.760	1.011	1.131e4	9.870e3	0.985	1.146	1.240	2041	2201	1.84e5	1.65e5	89.9	74.9	NO	bb	bb	2.703
1234678-HpCDD	40.503	1.001	6.303e5	6.011e5	1.253	1.049	1.050	4053	4454	9.51e6	8.99e6	2346.1	2019.2	NO	bb	bb	181.776
OCDD	45.316	1.000	3.185e6	3.646e6	1.103	0.873	0.890	2898	1760	3.80e7	4.37e7	13128.6	24828.4	NO	bb	bb	1607.632
13C-2378-TCDF	25.986	1.007	5.719e5	7.455e5	1.768	0.767	0.770	1534	1280	8.76e6	1.15e7	5710.1	8960.4	NO	bb	bb	85.077
13C-12378-PeCDF	30.142	1.168	6.028e5	3.839e5	1.527	1.570	1.550	1939	1745	8.99e6	5.82e6	4639.0	3332.5	NO	bd	bd	73.770
13C-23478-PeCDF	31.490	1.220	5.839e5	3.700e5	1.466	1.578	1.550	1939	1745	8.90e6	5.70e6	4590.8	3266.6	NO	bb	bb	74.277
13C-123478-HxCDF	35.111	0.955	2.816e5	5.558e5	1.054	0.507	0.510	1358	1532	4.53e6	8.94e6	3334.4	5834.6	NO	bd	bd	103.187
13C-123678-HxCDF	35.245	0.959	3.016e5	5.894e5	1.080	0.512	0.510	1358	1532	4.52e6	8.81e6	3329.4	5748.9	NO	db	db	107.112
13C-234678-HxCDF	36.125	0.983	2.637e5	5.179e5	1.014	0.509	0.510	1358	1532	4.17e6	8.12e6	3067.4	5304.3	NO	bb	bb	100.040
13C-123789-HxCDF	37.128	1.010	2.061e5	4.043e5	0.928	0.510	0.510	1358	1532	3.59e6	7.09e6	2645.3	4630.6	NO	bb	bb	85.407
13C-1234678-HpCDF	38.966	1.060	2.125e5	4.788e5	1.036	0.444	0.440	1094	1937	3.57e6	8.01e6	3264.3	4136.5	NO	bb	bb	86.621
13C-1234789-HpCDF	41.239	1.122	1.952e5	4.300e5	0.905	0.454	0.440	1094	1937	2.69e6	5.88e6	2457.5	3038.3	NO	bb	bd	89.707
13C-1234-TCDD	25.802	0.000	3.859e5	4.899e5	1.000	0.788	0.770	1678	1070	6.28e6	7.90e6	3742.3	7383.1	NO	bb	bb	100.000
13C-2378-TCDD	26.622	1.032	4.641e5	5.958e5	1.103	0.779	0.770	1678	1070	7.28e6	9.27e6	4339.7	8668.8	NO	bb	bb	109.721
13C-12378-PeCDD	31.747	1.230	2.936e5	1.753e5	0.914	1.675	1.550	880	984	4.15e6	2.56e6	4715.8	2602.4	NO	bd	bb	58.568
13C-123478-HxCDD	36.248	0.986	4.224e5	3.465e5	0.933	1.219	1.240	1772	933	6.83e6	5.62e6	3858.2	6020.5	NO	bd	bd	107.012
13C-123678-HxCDD	36.359	0.989	4.512e5	3.706e5	0.965	1.218	1.240	1772	933	7.17e6	5.84e6	4049.7	6257.3	NO	db	db	110.614
13C-1234678-HpCDD	40.481	1.102	2.815e5	2.594e5	0.782	1.085	1.050	1455	1424	4.21e6	3.85e6	2890.8	2701.3	NO	bb	bb	89.801
13C-OCDD	45.298	1.233	3.709e5	3.998e5	0.788	0.928	0.890	1270	1294	4.55e6	4.95e6	3581.4	3822.0	NO	bb	bb	126.937
13C-123789-HxCDD	36.749	0.000	4.209e5	3.493e5	1.000	1.205	1.240	1772	933	7.01e6	5.82e6	3955.5	6240.2	NO	bb	bb	100.000
37CL-2378-TCDD	26.636	1.032	3.870e5		1.233			609		5.92e6		9723.2			bb		35.820

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:14:07 Pacific Standard Time

ID: 23A0134-06, Name: 23022316, Date: 23-Feb-2023, Time: 22:35:35, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.469	0.865	1.732e3	2.689e3	1.064	0.644	0.770	1198	1652	2.71e4	4.02e4	22.6	24.4	YES	bb	bb	0.315
1289-TCDF	27.483	1.058	3.942e2	7.015e2	0.858	0.562	0.770	1198	1652	4.92e3	7.13e3	4.1	4.3	YES	dd	bd	0.097
13468-PECDF					1.013		1.550	969	1164								
12389-PECDF					0.844		1.550	2381	2261								
123468-HXCDF	33.462	0.953	1.814e4	1.436e4	1.197	1.264	1.240	2124	1097	2.85e5	2.22e5	134.0	202.6	NO	bb	bb	3.241
1368-TCDD	23.754	0.892	5.921e3	7.787e3	1.084	0.760	0.770	852	975	9.60e4	1.27e5	112.6	130.4	NO	bd	bb	1.193
1289-TCDD	27.257	1.024	1.989e2	3.506e2	0.975	0.567	0.770	852	975	3.52e3	6.40e3	4.1	6.6	YES	bb	db	0.053
12479-PECDD					1.837		1.550	1617	2254								
12389-PECDD	32.159	1.013	1.262e3	5.300e2	1.252	2.380	1.550	1617	2254	1.40e4	8.27e3	8.7	3.7	YES	bb	bb	0.305
124679-HXCDD	34.242	0.945	6.660e4	5.480e4	1.033	1.215	1.240	2041	2201	1.02e6	8.20e5	499.3	372.6	NO	bb	bd	15.284
1234679-HPCDD	39.434	0.974	1.071e6	1.029e6	1.286	1.040	1.050	4053	4454	1.74e7	1.68e7	4284.1	3776.2	NO	bb	bb	301.977
Total-tetrafurans			7.095e4		0.933			1198		9.97e5							13.179
Total-penta1			5.215e4					969		7.38e5							9.567
Total-pentafurans			6.145e4		0.866			2381		8.29e5							11.929
Total-hexafurans			2.311e5		1.208			2124		3.56e6							43.963
Total-heptafurans			6.842e5		1.185			2144		1.06e7							167.026
Total-Furans			1.454e6		1.067			1198		2.06e7							410.335
Total-tetradioxins			1.711e4		1.099			852		2.54e5							3.372
Total-pentadioxins			2.480e4		1.392			1617		3.20e5							6.465
Total-hexadioxins			2.161e5		1.007			2041		3.00e6							48.926
Total-heptadioxins			1.701e6		1.269			4053		2.69e7							483.753
Total-Dioxins			5.144e6		1.165			852		6.85e7							2150.147
Total-TEQ			6.598e6					852		8.91e7							2560.482
FUNCTION1 PFK			3.737e6					500097		1.69e7							
FUNCTION2 PFK			5.906e6					196806		1.58e7							0.000
FUNCTION3 PFK			9.313e6					394209		2.35e7							0.000
FUNCTION4 PFK			2.004e5					322778		1.98e6							
FUNCTION5 PFK			7.523e6					123996		8.60e6							
FUNCTION1 HXCD...			3.203e3					691		5.42e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			6.521e2					848		1.25e4							0.000
FUNCTION3 OCDPE			5.618e2					723		1.23e4							0.000
FUNCTION4 NCDPE			9.178e4					809		1.55e6							0.000
FUNCTION5 DCDPE			0.000e0					646		0.00e0							

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.09	2.839e3	3.332e3	0.933	0.85	0.77	34.2	YES	NO	dd	dd	0.502
2	Total-tetrafurans	23.98	4.202e3	5.441e3	0.933	0.77	0.77	53.4	YES	NO	dd	dd	0.785
3	Total-tetrafurans	23.73	5.300e3	6.734e3	0.933	0.79	0.77	65.8	YES	NO	dd	dd	0.979
4	Total-tetrafurans	23.46	2.961e3	3.428e3	0.933	0.86	0.77	36.6	YES	NO	dd	dd	0.520
5	Total-tetrafurans	23.32	6.131e3	8.419e3	0.933	0.73	0.77	76.1	YES	NO	bd	bd	1.184
6	Total-tetrafurans	22.74	3.046e3	3.832e3	0.933	0.79	0.77	36.8	YES	NO	bd	bb	0.560
7	Total-tetrafurans	26.23	3.587e3	4.797e3	0.933	0.75	0.77	49.4	YES	NO	dd	dd	0.682
8	Total-tetrafurans	26.13	3.511e3	5.083e3	0.933	0.69	0.77	43.3	YES	NO	dd	dd	0.699
9	2378-TCDF	26.00	3.099e3	4.204e3	0.876	0.74	0.77	40.9	YES	NO	dd	bd	0.633
10	Total-tetrafurans	25.76	6.999e3	8.168e3	0.933	0.86	0.77	58.4	YES	NO	dd	bb	1.234
11	Total-tetrafurans	25.49	1.730e3	2.267e3	0.933	0.76	0.77	20.6	YES	NO	dd	bb	0.325
12	Total-tetrafurans	25.31	2.105e3	2.482e3	0.933	0.85	0.77	26.5	YES	NO	bd	bb	0.373
13	Total-tetrafurans	25.08	3.018e3	4.515e3	0.933	0.67	0.77	40.3	YES	NO	bb	db	0.613
14	Total-tetrafurans	24.88	6.055e3	7.321e3	0.933	0.83	0.77	69.1	YES	NO	db	dd	1.089
15	Total-tetrafurans	24.66	6.245e3	7.859e3	0.933	0.79	0.77	69.8	YES	NO	dd	dd	1.148
16	Total-tetrafurans	24.42	7.924e2	1.103e3	0.933	0.72	0.77	9.5	YES	NO	dd	dd	0.154
17	Total-tetrafurans	24.25	6.104e3	7.633e3	0.933	0.80	0.77	58.8	YES	NO	dd	dd	1.118
18	Total-tetrafurans	27.62	3.228e3	3.908e3	0.933	0.83	0.77	43.2	YES	NO	dd	db	0.581

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-penta1	28.10	2.959e2	2.196e2		1.35	1.55	4.6	YES	NO	bb	bb	0.057
2	Total-penta1	27.43	5.186e4	3.419e4		1.52	1.55	757.3	YES	NO	bb	bb	9.510

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PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	29.14	1.650e4	1.043e4	0.866	1.58	1.55	92.0	YES	NO	dd	db	3.204
2	Total-pentafurans	29.06	7.053e3	4.338e3	0.866	1.63	1.55	53.7	YES	NO	dd	dd	1.355
3	Total-pentafurans	28.95	1.216e4	6.892e3	0.866	1.76	1.55	53.0	YES	NO	dd	dd	2.266
4	Total-pentafurans	31.36	3.531e3	2.354e3	0.866	1.50	1.55	26.0	YES	NO	db	dd	0.700
5	Total-pentafurans	31.25	3.592e3	2.325e3	0.866	1.55	1.55	22.7	YES	NO	bd	bd	0.704
6	Total-pentafurans	30.48	1.444e3	1.033e3	0.866	1.40	1.55	10.2	YES	NO	dd	dd	0.295
7	Total-pentafurans	30.36	4.379e3	3.146e3	0.866	1.39	1.55	28.3	YES	NO	bd	bd	0.895
8	12378-PeCDF	30.16	3.323e3	2.179e3	0.845	1.52	1.55	23.5	YES	NO	bb	bb	0.660
9	Total-pentafurans	29.82	9.475e3	6.090e3	0.866	1.56	1.55	38.6	YES	NO	db	db	1.851

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123468-HXCDF	33.46	1.814e4	1.436e4	1.197	1.26	1.24	134.0	YES	NO	bb	bb	3.241
2	234678-HxCDF	36.13	9.551e3	7.311e3	1.229	1.31	1.24	42.2	YES	NO	bb	MM	1.756
3	123678-HxCDF	35.27	6.865e3	6.031e3	1.248	1.14	1.24	48.1	YES	NO	db	dd	1.160
4	123478-HxCDF	35.13	1.435e4	1.192e4	1.182	1.20	1.24	107.6	YES	NO	dd	dd	2.655
5	Total-hexafurans	34.98	3.529e3	3.038e3	1.208	1.16	1.24	27.8	YES	NO	bd	bd	0.697
6	Total-hexafurans	34.51	1.134e5	9.273e4	1.208	1.22	1.24	853.2	YES	NO	bd	bd	21.866
7	Total-hexafurans	34.21	1.464e3	1.352e3	1.208	1.08	1.24	11.1	YES	NO	bb	bb	0.299
8	Total-hexafurans	33.69	6.379e4	5.208e4	1.208	1.22	1.24	450.2	YES	NO	bd	bb	12.291

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptafurans	39.66	4.708e5	4.488e5	1.185	1.05	1.05	3433.9	YES	NO	bd	bd	117.915
2	Total-heptafurans	39.40	2.983e3	3.165e3	1.185	0.94	1.05	24.0	YES	NO	bb	db	0.788
3	1234678-HpCDF	38.98	1.996e5	1.789e5	1.204	1.12	1.05	1422.8	YES	NO	bb	bd	45.477
4	1234789-HpCDF	41.25	9.606e3	9.064e3	1.165	1.06	1.05	63.8	YES	NO	MM	MM	2.562
5	Total-heptafurans	41.02	1.169e3	1.041e3	1.185	1.12	1.05	9.4	YES	NO	bd	bd	0.283

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.09	2.839e3	3.332e3	0.933	0.85	0.77	34.2	YES	NO	dd	dd	0.502
2	Total-tetrafurans	23.98	4.202e3	5.441e3	0.933	0.77	0.77	53.4	YES	NO	dd	dd	0.785
3	Total-tetrafurans	23.73	5.300e3	6.734e3	0.933	0.79	0.77	65.8	YES	NO	dd	dd	0.979
4	Total-tetrafurans	23.46	2.961e3	3.428e3	0.933	0.86	0.77	36.6	YES	NO	dd	dd	0.520
5	Total-tetrafurans	23.32	6.131e3	8.419e3	0.933	0.73	0.77	76.1	YES	NO	bd	bd	1.184
6	Total-tetrafurans	22.74	3.046e3	3.832e3	0.933	0.79	0.77	36.8	YES	NO	bd	bb	0.560
7	Total-Furans	21.58	1.389e2	2.009e2	1.067	0.69	0.77	1.7	NO	NO	db	bb	0.024
8	Total-Furans	21.40	9.938e2	1.191e3	1.067	0.83	0.77	14.2	YES	NO	bd	bb	0.155
9	Total-tetrafurans	26.23	3.587e3	4.797e3	0.933	0.75	0.77	49.4	YES	NO	dd	dd	0.682
10	Total-tetrafurans	26.13	3.511e3	5.083e3	0.933	0.69	0.77	43.3	YES	NO	dd	dd	0.699
11	2378-TCDF	26.00	3.099e3	4.204e3	0.876	0.74	0.77	40.9	YES	NO	dd	bd	0.633
12	Total-tetrafurans	25.76	6.999e3	8.168e3	0.933	0.86	0.77	58.4	YES	NO	dd	bb	1.234
13	Total-tetrafurans	25.49	1.730e3	2.267e3	0.933	0.76	0.77	20.6	YES	NO	dd	bb	0.325
14	Total-tetrafurans	25.31	2.105e3	2.482e3	0.933	0.85	0.77	26.5	YES	NO	bd	bb	0.373
15	Total-tetrafurans	25.08	3.018e3	4.515e3	0.933	0.67	0.77	40.3	YES	NO	bb	db	0.613
16	Total-tetrafurans	24.88	6.055e3	7.321e3	0.933	0.83	0.77	69.1	YES	NO	db	dd	1.089
17	Total-tetrafurans	24.66	6.245e3	7.859e3	0.933	0.79	0.77	69.8	YES	NO	dd	dd	1.148
18	Total-tetrafurans	24.42	7.924e2	1.103e3	0.933	0.72	0.77	9.5	YES	NO	dd	dd	0.154
19	Total-tetrafurans	24.25	6.104e3	7.633e3	0.933	0.80	0.77	58.8	YES	NO	dd	dd	1.118
20	Total-tetrafurans	27.62	3.228e3	3.908e3	0.933	0.83	0.77	43.2	YES	NO	dd	db	0.581
21	Total-pentafurans	29.14	1.650e4	1.043e4	0.866	1.58	1.55	92.0	YES	NO	dd	db	3.204
22	Total-pentafurans	29.06	7.053e3	4.338e3	0.866	1.63	1.55	53.7	YES	NO	dd	dd	1.355
23	Total-pentafurans	28.95	1.216e4	6.892e3	0.866	1.76	1.55	53.0	YES	NO	dd	dd	2.266
24	Total-pentafurans	31.36	3.531e3	2.354e3	0.866	1.50	1.55	26.0	YES	NO	db	dd	0.700
25	Total-pentafurans	31.25	3.592e3	2.325e3	0.866	1.55	1.55	22.7	YES	NO	bd	bd	0.704
26	Total-pentafurans	30.48	1.444e3	1.033e3	0.866	1.40	1.55	10.2	YES	NO	dd	dd	0.295
27	Total-pentafurans	30.36	4.379e3	3.146e3	0.866	1.39	1.55	28.3	YES	NO	bd	bd	0.895
28	12378-PeCDF	30.16	3.323e3	2.179e3	0.845	1.52	1.55	23.5	YES	NO	bb	bb	0.660
29	Total-pentafurans	29.82	9.475e3	6.090e3	0.866	1.56	1.55	38.6	YES	NO	db	db	1.851
30	123468-HXCDF	33.46	1.814e4	1.436e4	1.197	1.26	1.24	134.0	YES	NO	bb	bb	3.241
31	234678-HxCDF	36.13	9.551e3	7.311e3	1.229	1.31	1.24	42.2	YES	NO	bb	MM	1.756
32	123678-HxCDF	35.27	6.865e3	6.031e3	1.248	1.14	1.24	48.1	YES	NO	db	dd	1.160
33	123478-HxCDF	35.13	1.435e4	1.192e4	1.182	1.20	1.24	107.6	YES	NO	dd	dd	2.655
34	Total-hexafurans	34.98	3.529e3	3.038e3	1.208	1.16	1.24	27.8	YES	NO	bd	bd	0.697
35	Total-hexafurans	34.51	1.134e5	9.273e4	1.208	1.22	1.24	853.2	YES	NO	bd	bd	21.866
36	Total-hexafurans	34.21	1.464e3	1.352e3	1.208	1.08	1.24	11.1	YES	NO	bb	bb	0.299
37	Total-hexafurans	33.69	6.379e4	5.208e4	1.208	1.22	1.24	450.2	YES	NO	bd	bb	12.291

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-heptafurans	39.66	4.708e5	4.488e5	1.185	1.05	1.05	3433.9	YES	NO	bd	bd	117.915
39	Total-heptafurans	39.40	2.983e3	3.165e3	1.185	0.94	1.05	24.0	YES	NO	bb	db	0.788
40	1234678-HpCDF	38.98	1.996e5	1.789e5	1.204	1.12	1.05	1422.8	YES	NO	bb	bd	45.477
41	1234789-HpCDF	41.25	9.606e3	9.064e3	1.165	1.06	1.05	63.8	YES	NO	MM	MM	2.562
42	Total-heptafurans	41.02	1.169e3	1.041e3	1.185	1.12	1.05	9.4	YES	NO	bd	bd	0.283
43	OCDF	45.56	3.533e5	3.986e5	1.186	0.89	0.89	2418.0	YES	NO	bd	dd	164.491
44	Total-penta1	28.10	2.959e2	2.196e2		1.35	1.55	4.6	YES	NO	bb	bb	0.057
45	Total-penta1	27.43	5.186e4	3.419e4		1.52	1.55	757.3	YES	NO	bb	bb	9.510

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	24.95	1.662e3	2.003e3	1.099	0.83	0.77	27.5	YES	NO	dd	dd	0.315
2	Total-tetradioxins	24.76	1.502e3	1.919e3	1.099	0.78	0.77	21.8	YES	NO	bd	bd	0.294
3	Total-tetradioxins	24.02	3.473e3	4.258e3	1.099	0.82	0.77	65.4	YES	NO	bb	bd	0.664
4	1368-TCDD	23.75	5.921e3	7.787e3	1.084	0.76	0.77	112.6	YES	NO	bd	bb	1.193
5	Total-tetradioxins	26.76	8.240e2	9.630e2	1.099	0.86	0.77	12.3	YES	NO	db	db	0.153
6	Total-tetradioxins	26.27	1.572e3	2.325e3	1.099	0.68	0.77	19.1	YES	NO	bb	bb	0.335
7	Total-tetradioxins	25.82	1.011e3	1.256e3	1.099	0.80	0.77	17.1	YES	NO	dd	dd	0.195
8	Total-tetradioxins	25.60	8.483e2	1.114e3	1.099	0.76	0.77	15.0	YES	NO	dd	dd	0.169
9	Total-tetradioxins	25.51	2.976e2	3.519e2	1.099	0.85	0.77	6.9	YES	NO	bd	bd	0.056

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.77	4.148e3	2.423e3	1.087	1.71	1.55	39.1	YES	NO	bb	bb	1.289
2	Total-pentadioxins	31.09	1.729e3	1.215e3	1.392	1.42	1.55	15.3	YES	NO	bb	bb	0.451
3	Total-pentadioxins	30.38	3.759e3	2.286e3	1.392	1.64	1.55	36.5	YES	NO	bd	bb	0.926
4	Total-pentadioxins	30.15	5.154e3	3.194e3	1.392	1.61	1.55	47.4	YES	NO	bb	bb	1.279
5	Total-pentadioxins	29.11	1.001e4	6.432e3	1.392	1.56	1.55	59.9	YES	NO	bb	bb	2.519

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.76	1.131e4	9.870e3	0.985	1.15	1.24	89.9	YES	NO	bb	bb	2.703
2	123678-HxCDD	36.38	2.625e4	2.134e4	1.021	1.23	1.24	201.1	YES	NO	dd	dd	5.673
3	123478-HxCDD	36.26	5.598e3	4.372e3	0.987	1.28	1.24	47.1	YES	NO	bd	bd	1.314
4	Total-hexadioxins	35.48	1.229e4	9.591e3	1.007	1.28	1.24	91.6	YES	NO	db	db	2.734
5	Total-hexadioxins	35.38	7.442e4	6.043e4	1.007	1.23	1.24	389.0	YES	NO	bd	bd	16.845
6	Total-hexadioxins	35.01	1.967e4	1.535e4	1.007	1.28	1.24	151.6	YES	NO	db	bb	4.374
7	124679-HXCDD	34.24	6.660e4	5.480e4	1.033	1.22	1.24	499.3	YES	NO	bb	bd	15.284

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.50	6.303e5	6.011e5	1.253	1.05	1.05	2346.1	YES	NO	bb	bb	181.776
2	1234679-HPCDD	39.43	1.071e6	1.029e6	1.286	1.04	1.05	4284.1	YES	NO	bb	bb	301.977

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	24.95	1.662e3	2.003e3	1.099	0.83	0.77	27.5	YES	NO	dd	dd	0.315
2	Total-tetradioxins	24.76	1.502e3	1.919e3	1.099	0.78	0.77	21.8	YES	NO	bd	bd	0.294
3	Total-tetradioxins	24.02	3.473e3	4.258e3	1.099	0.82	0.77	65.4	YES	NO	bb	bd	0.664
4	1368-TCDD	23.75	5.921e3	7.787e3	1.084	0.76	0.77	112.6	YES	NO	bd	bb	1.193
5	Total-tetradioxins	26.76	8.240e2	9.630e2	1.099	0.86	0.77	12.3	YES	NO	db	db	0.153
6	Total-tetradioxins	26.27	1.572e3	2.325e3	1.099	0.68	0.77	19.1	YES	NO	bb	bb	0.335
7	Total-tetradioxins	25.82	1.011e3	1.256e3	1.099	0.80	0.77	17.1	YES	NO	dd	dd	0.195
8	Total-tetradioxins	25.60	8.483e2	1.114e3	1.099	0.76	0.77	15.0	YES	NO	dd	dd	0.169
9	Total-tetradioxins	25.51	2.976e2	3.519e2	1.099	0.85	0.77	6.9	YES	NO	bd	bd	0.056
10	12378-PeCDD	31.77	4.148e3	2.423e3	1.087	1.71	1.55	39.1	YES	NO	bb	bb	1.289
11	Total-pentadioxins	31.09	1.729e3	1.215e3	1.392	1.42	1.55	15.3	YES	NO	bb	bb	0.451
12	Total-pentadioxins	30.38	3.759e3	2.286e3	1.392	1.64	1.55	36.5	YES	NO	bd	bb	0.926
13	Total-pentadioxins	30.15	5.154e3	3.194e3	1.392	1.61	1.55	47.4	YES	NO	bb	bb	1.279
14	Total-pentadioxins	29.11	1.001e4	6.432e3	1.392	1.56	1.55	59.9	YES	NO	bb	bb	2.519
15	123789-HxCDD	36.76	1.131e4	9.870e3	0.985	1.15	1.24	89.9	YES	NO	bb	bb	2.703
16	123678-HxCDD	36.38	2.625e4	2.134e4	1.021	1.23	1.24	201.1	YES	NO	dd	dd	5.673
17	123478-HxCDD	36.26	5.598e3	4.372e3	0.987	1.28	1.24	47.1	YES	NO	bd	bd	1.314
18	Total-hexadioxins	35.48	1.229e4	9.591e3	1.007	1.28	1.24	91.6	YES	NO	db	db	2.734
19	Total-hexadioxins	35.38	7.442e4	6.043e4	1.007	1.23	1.24	389.0	YES	NO	bd	bd	16.845
20	Total-hexadioxins	35.01	1.967e4	1.535e4	1.007	1.28	1.24	151.6	YES	NO	db	bb	4.374
21	124679-HXCDD	34.24	6.660e4	5.480e4	1.033	1.22	1.24	499.3	YES	NO	bb	bd	15.284
22	1234678-HpCDD	40.50	6.303e5	6.011e5	1.253	1.05	1.05	2346.1	YES	NO	bb	bb	181.776
23	1234679-HPCDD	39.43	1.071e6	1.029e6	1.286	1.04	1.05	4284.1	YES	NO	bb	bb	301.977
24	OCDD	45.32	3.185e6	3.646e6	1.103	0.87	0.89	13128.6	YES	NO	bb	bb	1607.6...

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.09	2.839e3	3.332e3	0.933	0.85	0.77	34.2	YES	NO	dd	dd	0.502
2	Total-tetrafurans	23.98	4.202e3	5.441e3	0.933	0.77	0.77	53.4	YES	NO	dd	dd	0.785
3	Total-tetrafurans	23.73	5.300e3	6.734e3	0.933	0.79	0.77	65.8	YES	NO	dd	dd	0.979
4	Total-tetrafurans	23.46	2.961e3	3.428e3	0.933	0.86	0.77	36.6	YES	NO	dd	dd	0.520
5	Total-tetrafurans	23.32	6.131e3	8.419e3	0.933	0.73	0.77	76.1	YES	NO	bd	bd	1.184
6	Total-tetrafurans	22.74	3.046e3	3.832e3	0.933	0.79	0.77	36.8	YES	NO	bd	bb	0.560
7	Total-Furans	21.58	1.389e2	2.009e2	1.067	0.69	0.77	1.7	NO	NO	db	bb	0.024
8	Total-Furans	21.40	9.938e2	1.191e3	1.067	0.83	0.77	14.2	YES	NO	bd	bb	0.155
9	Total-tetrafurans	26.23	3.587e3	4.797e3	0.933	0.75	0.77	49.4	YES	NO	dd	dd	0.682
10	Total-tetrafurans	26.13	3.511e3	5.083e3	0.933	0.69	0.77	43.3	YES	NO	dd	dd	0.699
11	2378-TCDF	26.00	3.099e3	4.204e3	0.876	0.74	0.77	40.9	YES	NO	dd	bd	0.633
12	Total-tetrafurans	25.76	6.999e3	8.168e3	0.933	0.86	0.77	58.4	YES	NO	dd	bb	1.234
13	Total-tetrafurans	25.49	1.730e3	2.267e3	0.933	0.76	0.77	20.6	YES	NO	dd	bb	0.325
14	Total-tetrafurans	25.31	2.105e3	2.482e3	0.933	0.85	0.77	26.5	YES	NO	bd	bb	0.373
15	Total-tetrafurans	25.08	3.018e3	4.515e3	0.933	0.67	0.77	40.3	YES	NO	bb	db	0.613
16	Total-tetrafurans	24.88	6.055e3	7.321e3	0.933	0.83	0.77	69.1	YES	NO	db	dd	1.089
17	Total-tetrafurans	24.66	6.245e3	7.859e3	0.933	0.79	0.77	69.8	YES	NO	dd	dd	1.148
18	Total-tetrafurans	24.42	7.924e2	1.103e3	0.933	0.72	0.77	9.5	YES	NO	dd	dd	0.154
19	Total-tetrafurans	24.25	6.104e3	7.633e3	0.933	0.80	0.77	58.8	YES	NO	dd	dd	1.118
20	Total-tetrafurans	27.62	3.228e3	3.908e3	0.933	0.83	0.77	43.2	YES	NO	dd	db	0.581
21	Total-pentafurans	29.14	1.650e4	1.043e4	0.866	1.58	1.55	92.0	YES	NO	dd	db	3.204
22	Total-pentafurans	29.06	7.053e3	4.338e3	0.866	1.63	1.55	53.7	YES	NO	dd	dd	1.355
23	Total-pentafurans	28.95	1.216e4	6.892e3	0.866	1.76	1.55	53.0	YES	NO	dd	dd	2.266
24	Total-pentafurans	31.36	3.531e3	2.354e3	0.866	1.50	1.55	26.0	YES	NO	db	dd	0.700
25	Total-pentafurans	31.25	3.592e3	2.325e3	0.866	1.55	1.55	22.7	YES	NO	bd	bd	0.704
26	Total-pentafurans	30.48	1.444e3	1.033e3	0.866	1.40	1.55	10.2	YES	NO	dd	dd	0.295
27	Total-pentafurans	30.36	4.379e3	3.146e3	0.866	1.39	1.55	28.3	YES	NO	bd	bd	0.895
28	12378-PeCDF	30.16	3.323e3	2.179e3	0.845	1.52	1.55	23.5	YES	NO	bb	bb	0.660
29	Total-pentafurans	29.82	9.475e3	6.090e3	0.866	1.56	1.55	38.6	YES	NO	db	db	1.851
30	123468-HXCDF	33.46	1.814e4	1.436e4	1.197	1.26	1.24	134.0	YES	NO	bb	bb	3.241
31	234678-HxCDF	36.13	9.551e3	7.311e3	1.229	1.31	1.24	42.2	YES	NO	bb	MM	1.756
32	123678-HxCDF	35.27	6.865e3	6.031e3	1.248	1.14	1.24	48.1	YES	NO	db	dd	1.160
33	123478-HxCDF	35.13	1.435e4	1.192e4	1.182	1.20	1.24	107.6	YES	NO	dd	dd	2.655
34	Total-hexafurans	34.98	3.529e3	3.038e3	1.208	1.16	1.24	27.8	YES	NO	bd	bd	0.697
35	Total-hexafurans	34.51	1.134e5	9.273e4	1.208	1.22	1.24	853.2	YES	NO	bd	bd	21.866
36	Total-hexafurans	34.21	1.464e3	1.352e3	1.208	1.08	1.24	11.1	YES	NO	bb	bb	0.299
37	Total-hexafurans	33.69	6.379e4	5.208e4	1.208	1.22	1.24	450.2	YES	NO	bd	bb	12.291

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-heptafurans	39.66	4.708e5	4.488e5	1.185	1.05	1.05	3433.9	YES	NO	bd	bd	117.915
39	Total-heptafurans	39.40	2.983e3	3.165e3	1.185	0.94	1.05	24.0	YES	NO	bb	db	0.788
40	1234678-HpCDF	38.98	1.996e5	1.789e5	1.204	1.12	1.05	1422.8	YES	NO	bb	bd	45.477
41	1234789-HpCDF	41.25	9.606e3	9.064e3	1.165	1.06	1.05	63.8	YES	NO	MM	MM	2.562
42	Total-heptafurans	41.02	1.169e3	1.041e3	1.185	1.12	1.05	9.4	YES	NO	bd	bd	0.283
43	OCDF	45.56	3.533e5	3.986e5	1.186	0.89	0.89	2418.0	YES	NO	bd	dd	164.491
44	Total-penta1	28.10	2.959e2	2.196e2		1.35	1.55	4.6	YES	NO	bb	bb	0.057
45	Total-penta1	27.43	5.186e4	3.419e4		1.52	1.55	757.3	YES	NO	bb	bb	9.510
46	Total-tetradioxins	24.95	1.662e3	2.003e3	1.099	0.83	0.77	27.5	YES	NO	dd	dd	0.315
47	Total-tetradioxins	24.76	1.502e3	1.919e3	1.099	0.78	0.77	21.8	YES	NO	bd	bd	0.294
48	Total-tetradioxins	24.02	3.473e3	4.258e3	1.099	0.82	0.77	65.4	YES	NO	bb	bd	0.664
49	1368-TCDD	23.75	5.921e3	7.787e3	1.084	0.76	0.77	112.6	YES	NO	bd	bb	1.193
50	Total-tetradioxins	26.76	8.240e2	9.630e2	1.099	0.86	0.77	12.3	YES	NO	db	db	0.153
51	Total-tetradioxins	26.27	1.572e3	2.325e3	1.099	0.68	0.77	19.1	YES	NO	bb	bb	0.335
52	Total-tetradioxins	25.82	1.011e3	1.256e3	1.099	0.80	0.77	17.1	YES	NO	dd	dd	0.195
53	Total-tetradioxins	25.60	8.483e2	1.114e3	1.099	0.76	0.77	15.0	YES	NO	dd	dd	0.169
54	Total-tetradioxins	25.51	2.976e2	3.519e2	1.099	0.85	0.77	6.9	YES	NO	bd	bd	0.056
55	12378-PeCDD	31.77	4.148e3	2.423e3	1.087	1.71	1.55	39.1	YES	NO	bb	bb	1.289
56	Total-pentadioxins	31.09	1.729e3	1.215e3	1.392	1.42	1.55	15.3	YES	NO	bb	bb	0.451
57	Total-pentadioxins	30.38	3.759e3	2.286e3	1.392	1.64	1.55	36.5	YES	NO	bd	bb	0.926
58	Total-pentadioxins	30.15	5.154e3	3.194e3	1.392	1.61	1.55	47.4	YES	NO	bb	bb	1.279
59	Total-pentadioxins	29.11	1.001e4	6.432e3	1.392	1.56	1.55	59.9	YES	NO	bb	bb	2.519
60	123789-HxCDD	36.76	1.131e4	9.870e3	0.985	1.15	1.24	89.9	YES	NO	bb	bb	2.703
61	123678-HxCDD	36.38	2.625e4	2.134e4	1.021	1.23	1.24	201.1	YES	NO	dd	dd	5.673
62	123478-HxCDD	36.26	5.598e3	4.372e3	0.987	1.28	1.24	47.1	YES	NO	bd	bd	1.314
63	Total-hexadioxins	35.48	1.229e4	9.591e3	1.007	1.28	1.24	91.6	YES	NO	db	db	2.734
64	Total-hexadioxins	35.38	7.442e4	6.043e4	1.007	1.23	1.24	389.0	YES	NO	bd	bd	16.845
65	Total-hexadioxins	35.01	1.967e4	1.535e4	1.007	1.28	1.24	151.6	YES	NO	db	bb	4.374
66	124679-HXCDD	34.24	6.660e4	5.480e4	1.033	1.22	1.24	499.3	YES	NO	bb	bd	15.284
67	1234678-HpCDD	40.50	6.303e5	6.011e5	1.253	1.05	1.05	2346.1	YES	NO	bb	bb	181.776
68	1234679-HPCDD	39.43	1.071e6	1.029e6	1.286	1.04	1.05	4284.1	YES	NO	bb	bb	301.977
69	OCDD	45.32	3.185e6	3.646e6	1.103	0.87	0.89	13128.6	YES	NO	bb	bb	1607.6...

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	27.44	2.957e5					4.3	YES		bb		
2	FUNCTION1 PFK	25.59	5.337e4					2.5	NO		bb		
3	FUNCTION1 PFK	24.12	6.694e5					1.3	NO		bb		
4	FUNCTION1 PFK	23.57	4.527e5					4.5	YES		bb		
5	FUNCTION1 PFK	21.79	8.213e4					2.8	NO		db		
6	FUNCTION1 PFK	21.66	5.794e5					7.2	YES		bd		
7	FUNCTION1 PFK	21.34	1.604e6					11.2	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	32.63	1.342e6					21.6	YES		bb		0.000
2	FUNCTION2 PFK	30.11	2.586e6					17.8	YES		db		0.000
3	FUNCTION2 PFK	29.65	1.069e5					12.2	YES		bd		0.000
4	FUNCTION2 PFK	29.44	1.871e6					28.5	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.34	1.706e6					11.2	YES		bb		0.000
2	FUNCTION3 PFK	36.82	6.331e6					26.6	YES		db		0.000
3	FUNCTION3 PFK	36.34	7.907e5					12.8	YES		dd		0.000
4	FUNCTION3 PFK	36.04	2.286e5					4.5	YES		bd		0.000
5	FUNCTION3 PFK	34.21	5.967e4					0.9	NO		bb		0.000
6	FUNCTION3 PFK	33.99	1.974e5					3.7	YES		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.14	1.148e4					1.4	NO		bb		
2	FUNCTION4 PFK	40.04	1.890e5					4.7	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.12	7.523e6					69.3	YES		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.80	2.014e2					5.2	YES		bb		0.000
2	FUNCTION1 HXCD...	24.08	1.536e2					4.0	YES		db		0.000
3	FUNCTION1 HXCD...	23.98	1.058e2					2.6	NO		bd		0.000
4	FUNCTION1 HXCD...	22.54	1.792e2					4.4	YES		bb		0.000
5	FUNCTION1 HXCD...	27.74	7.568e1					3.3	YES		bb		0.000
6	FUNCTION1 HXCD...	27.02	1.378e2					3.3	YES		bb		0.000
7	FUNCTION1 HXCD...	26.14	2.350e3					55.6	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.31	7.300e1					1.5	NO		db		0.000
2	FUNCTION2 HPCD...	30.14	4.262e2					7.8	YES		bd		0.000
3	FUNCTION2 HPCD...	28.98	7.836e1					3.3	YES		bb		0.000
4	FUNCTION2 HPCD...	28.47	7.459e1					2.1	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.76	1.400e2					3.1	YES		bb		0.000
2	FUNCTION3 OCDPE	36.37	1.024e2					2.8	NO		bb		0.000
3	FUNCTION3 OCDPE	34.64	7.257e1					2.1	NO		bb		0.000
4	FUNCTION3 OCDPE	34.48	7.369e1					3.1	YES		db		0.000
5	FUNCTION3 OCDPE	34.44	8.839e1					3.5	YES		dd		0.000
6	FUNCTION3 OCDPE	34.40	8.473e1					2.4	NO		bd		0.000

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ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	39.65	8.135e1					3.4	YES		db		0.000
2	FUNCTION4 NCDPE	39.59	8.215e1					2.8	NO		bd		0.000
3	FUNCTION4 NCDPE	38.64	9.153e4					1904.9	YES		bb		0.000
4	FUNCTION4 NCDPE	38.32	9.052e1					3.2	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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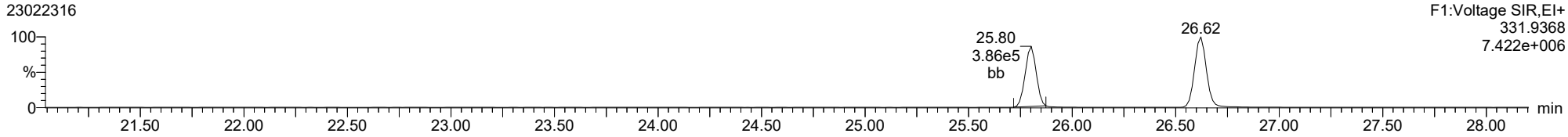
ID: 23A0134-06, Name: 23022316, Date: 23-Feb-2023, Time: 22:35:35, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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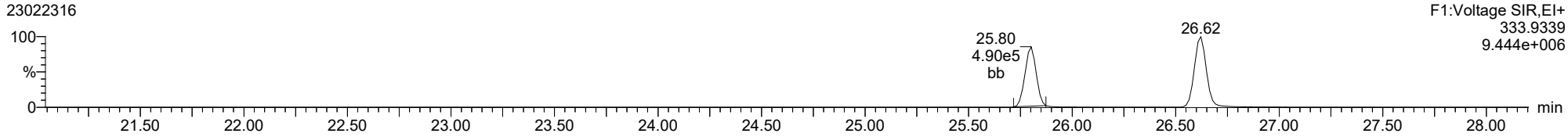
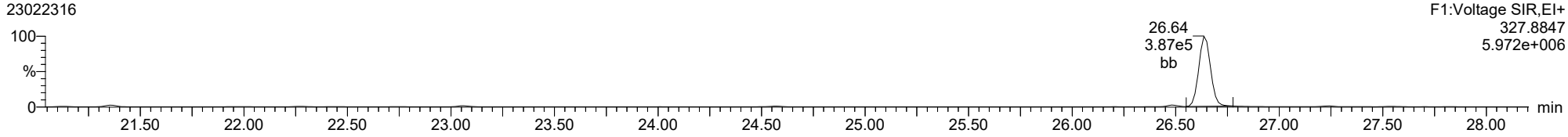


37CL-2378-TCDD



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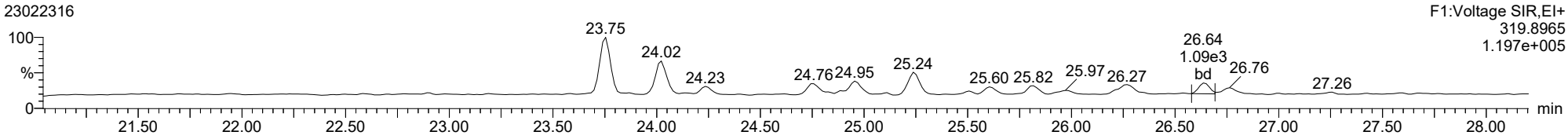

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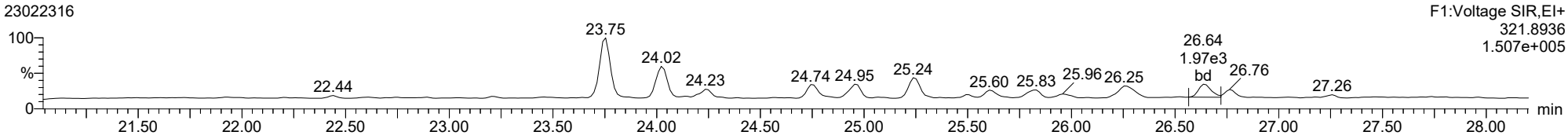

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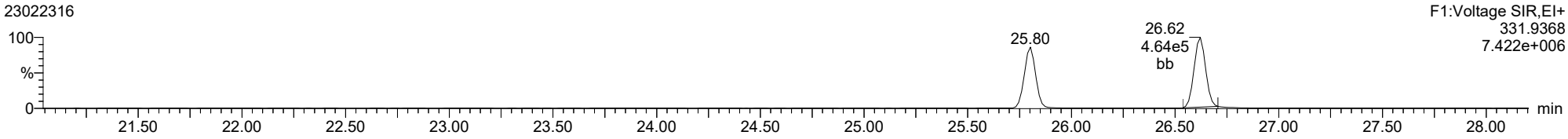

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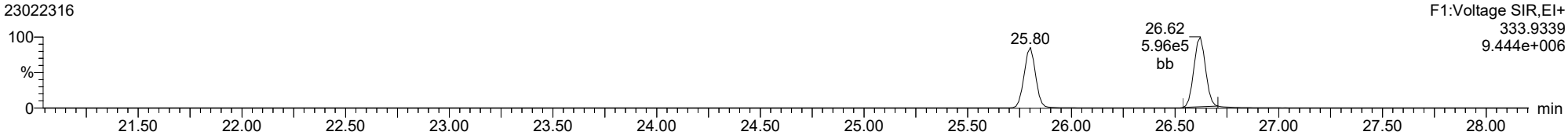

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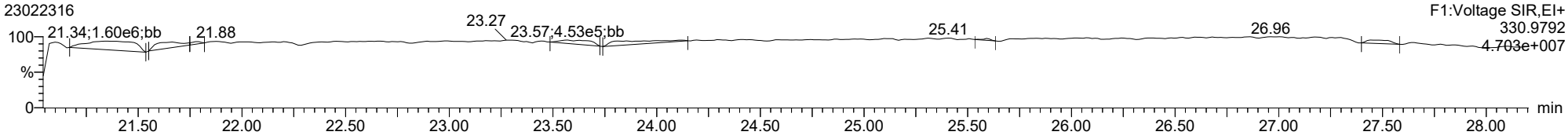

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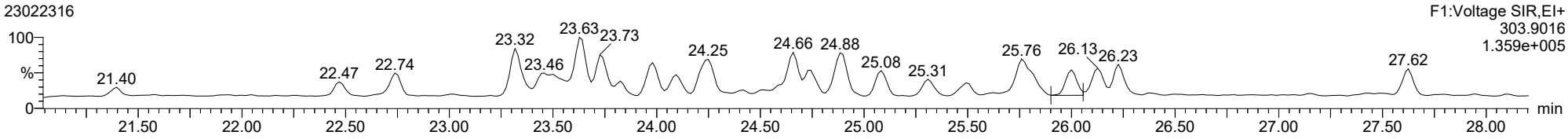

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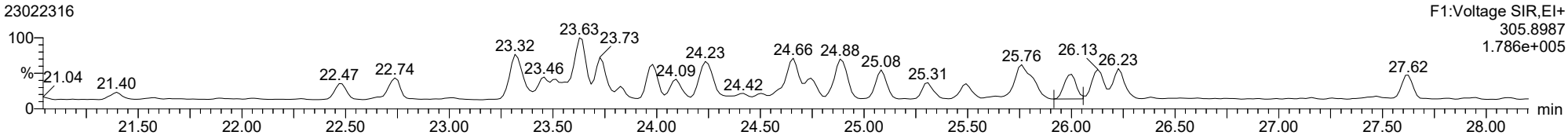

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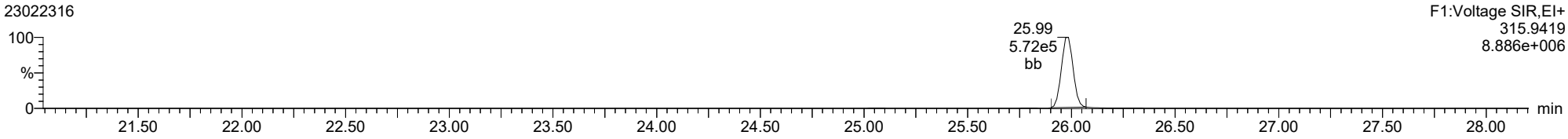

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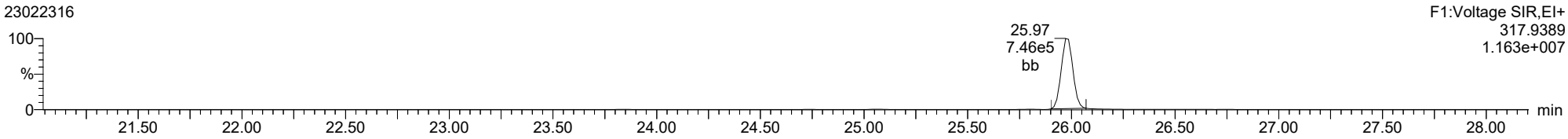

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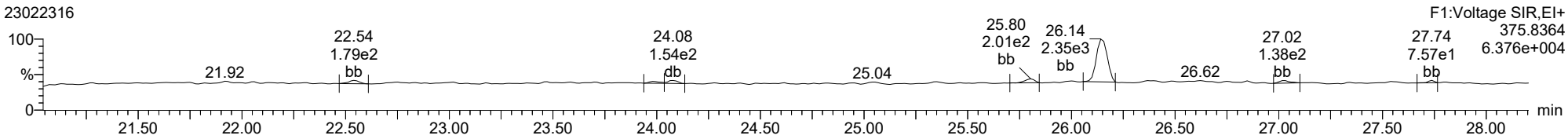

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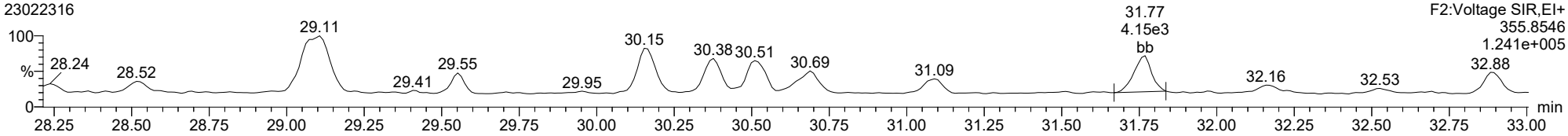
12378-PeCDD



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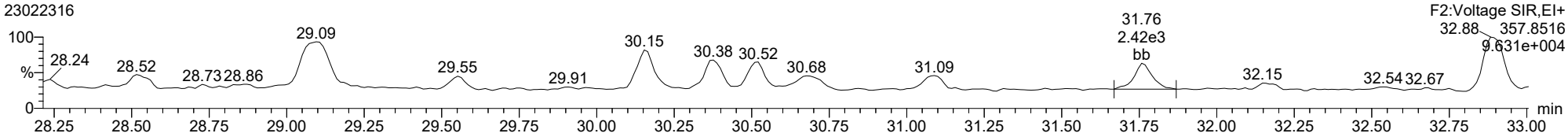

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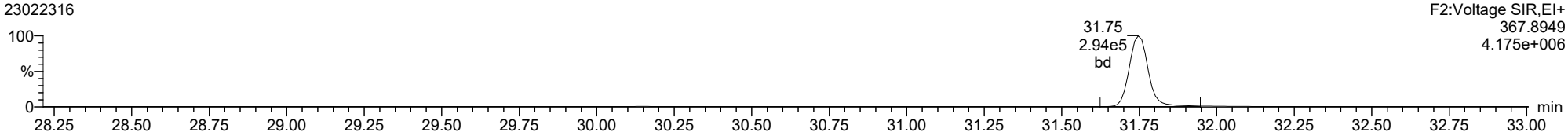

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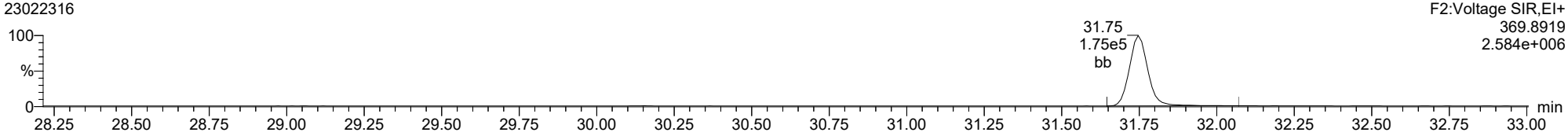
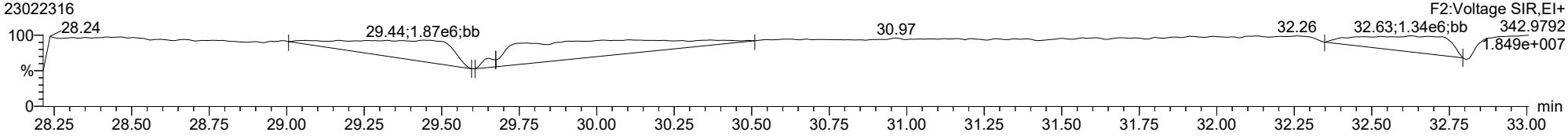


FUNCTION2 PFK



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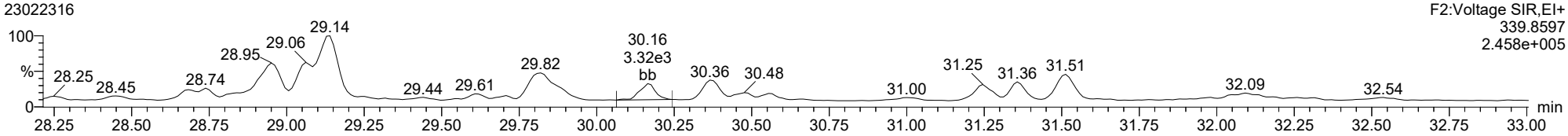

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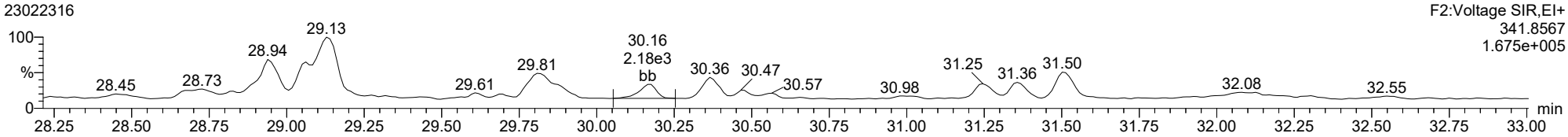

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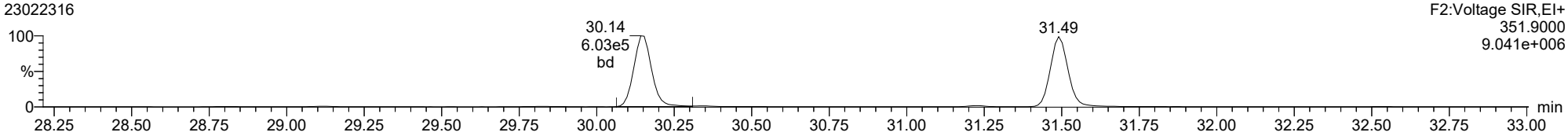

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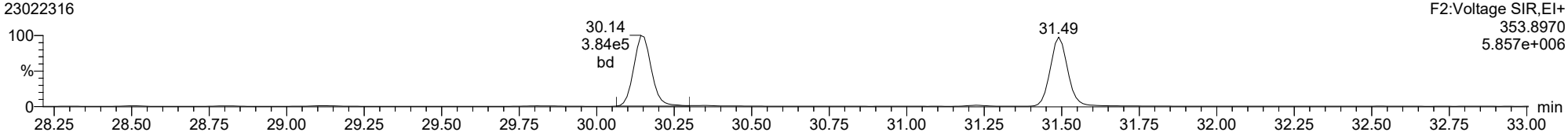
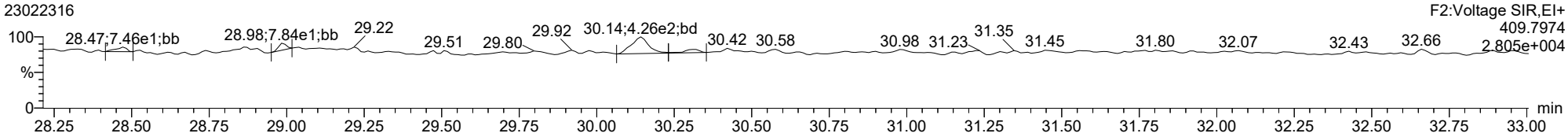


FUNCTION2 HPCDPE



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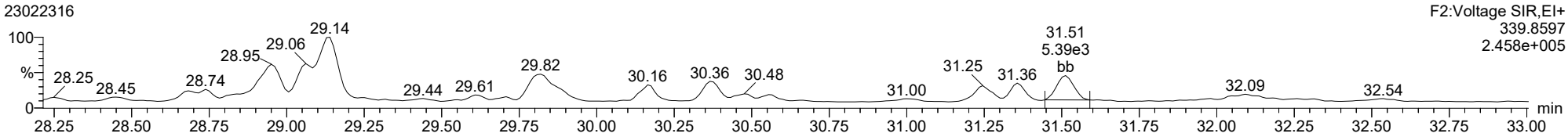
23478-PeCDF



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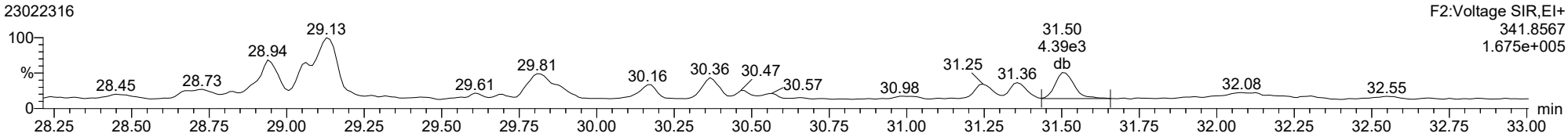

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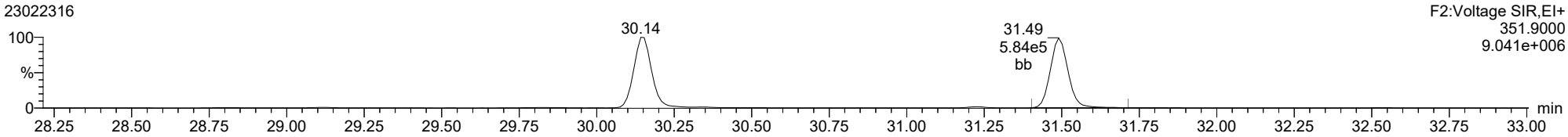

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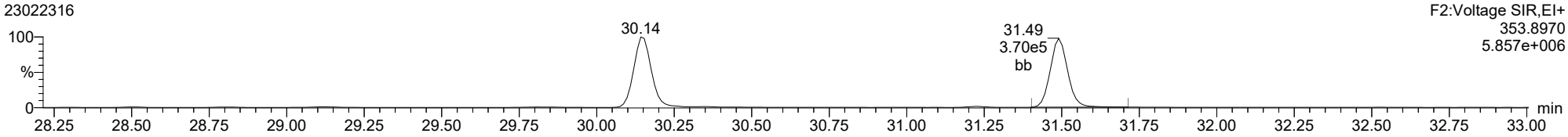
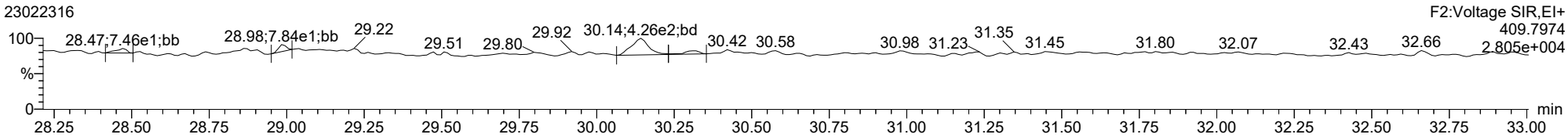


FUNCTION2 HPCDPE



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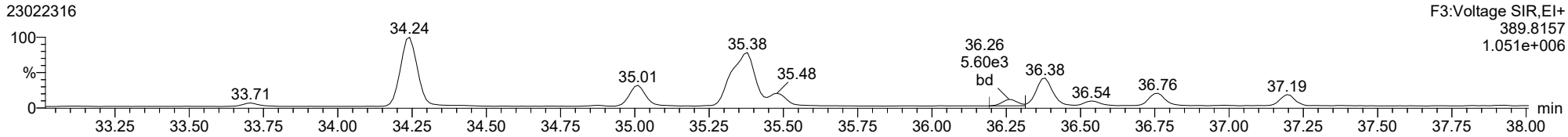
123478-HxCDD



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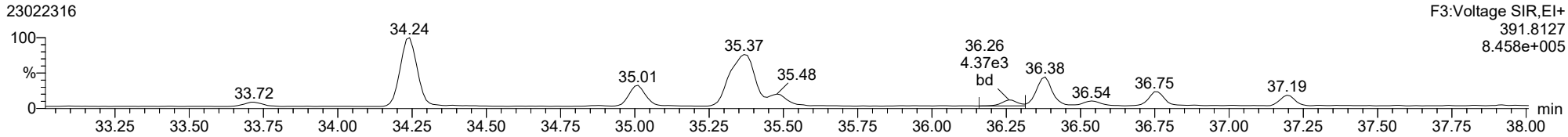

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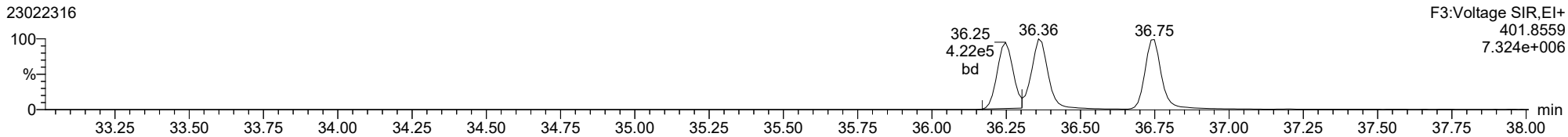

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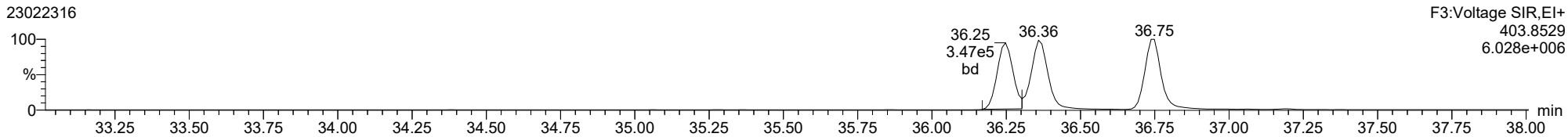

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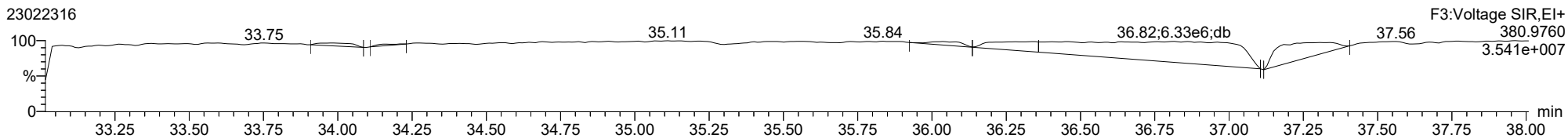

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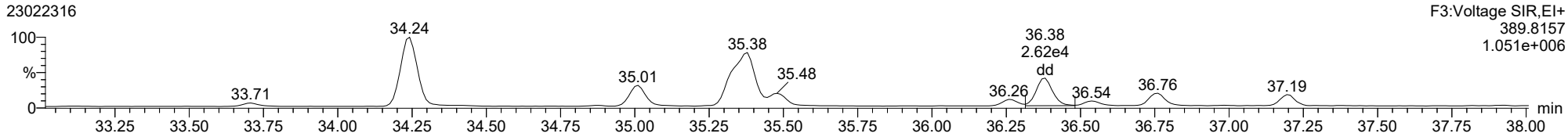

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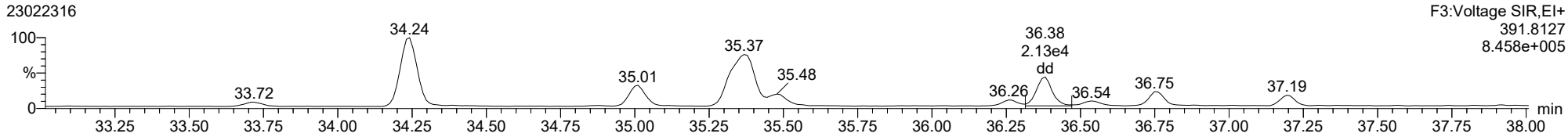

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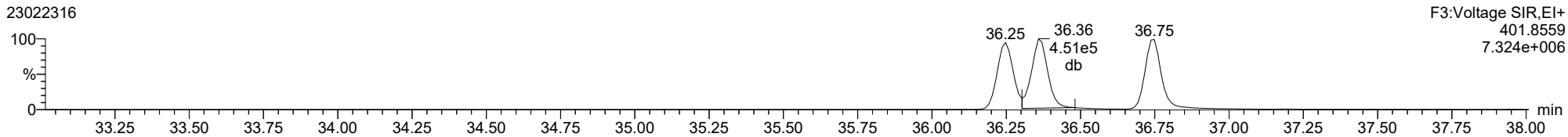

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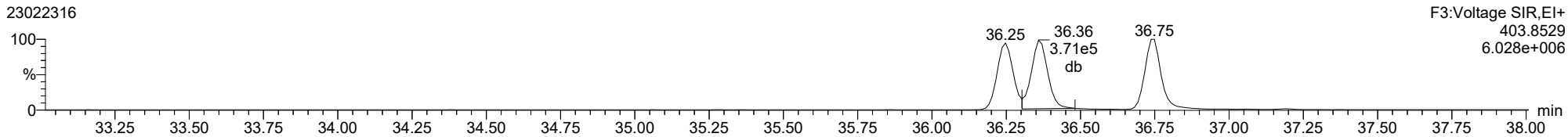

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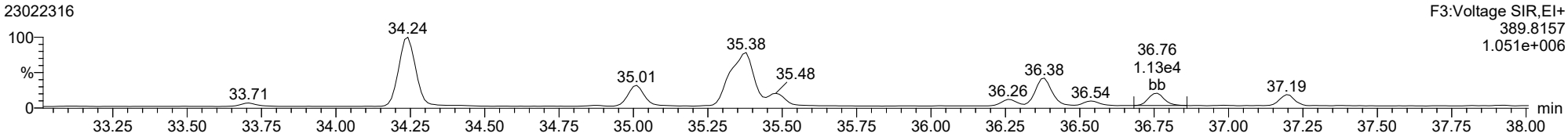

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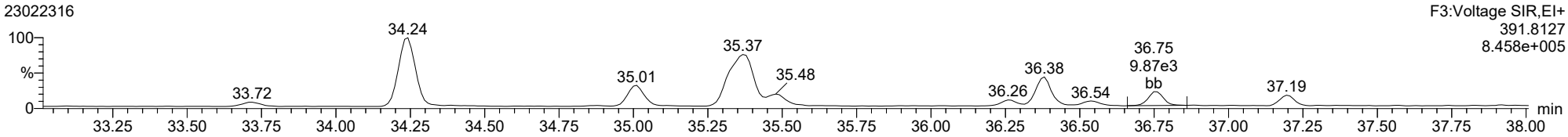

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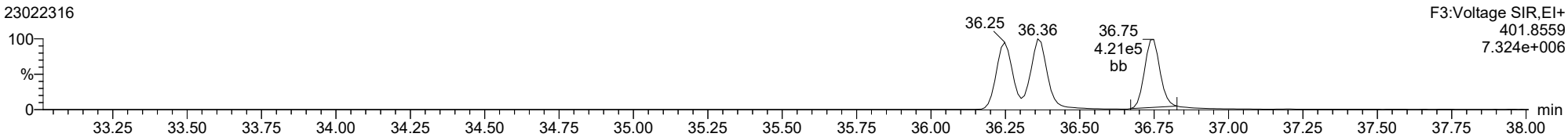

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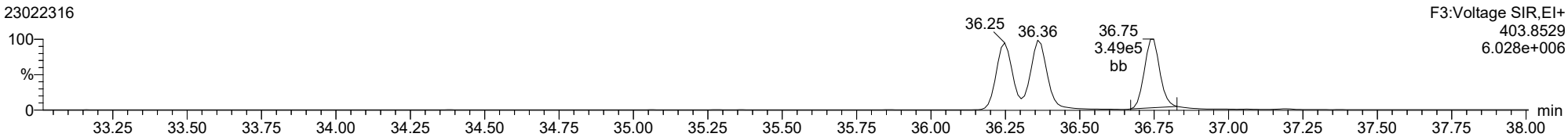

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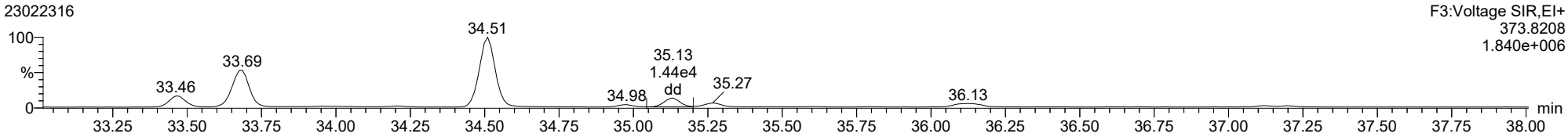

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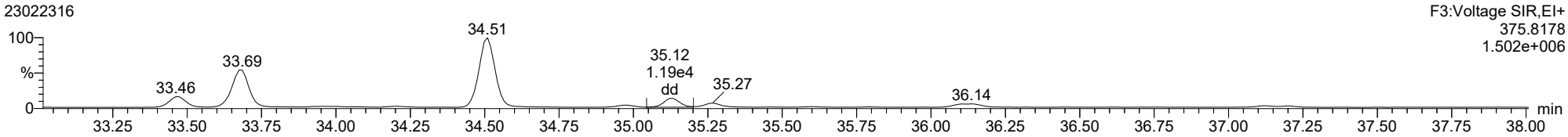

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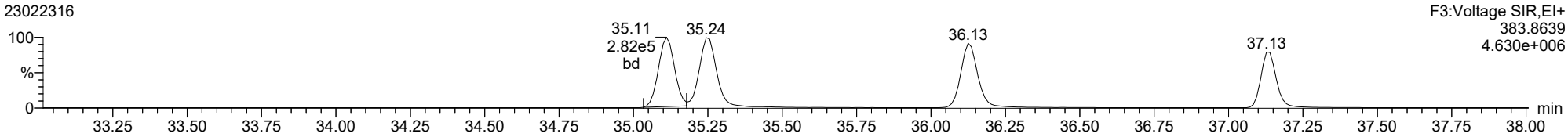

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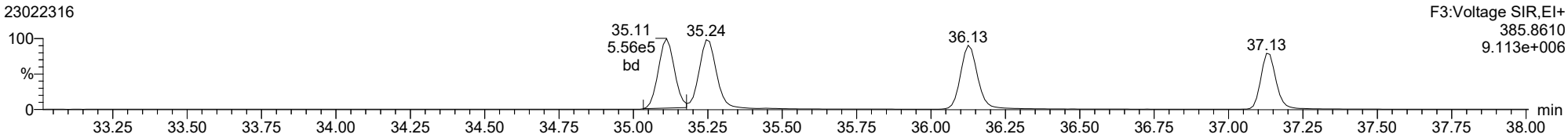

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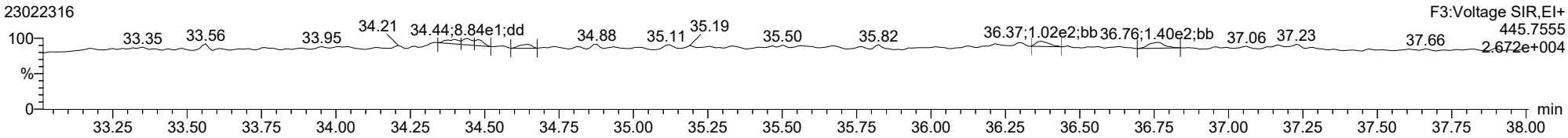

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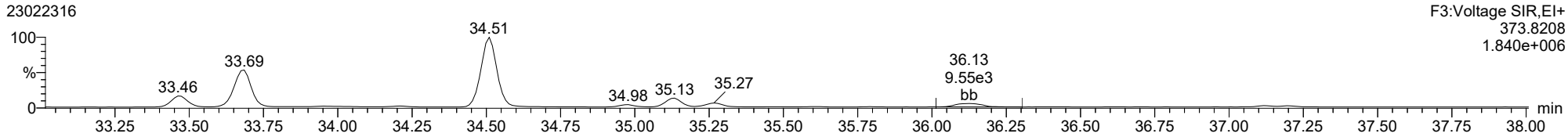

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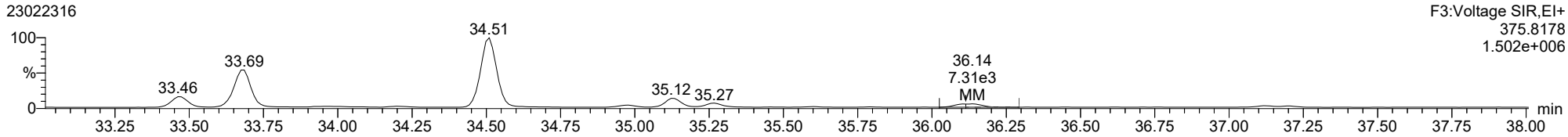

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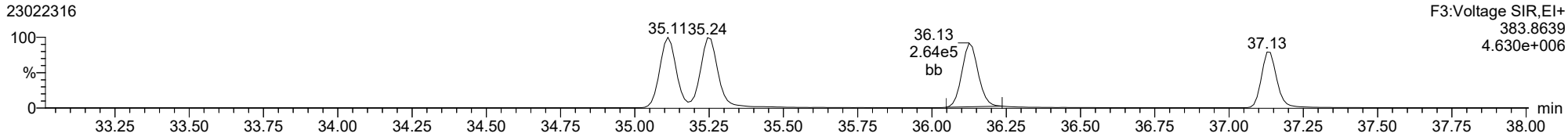

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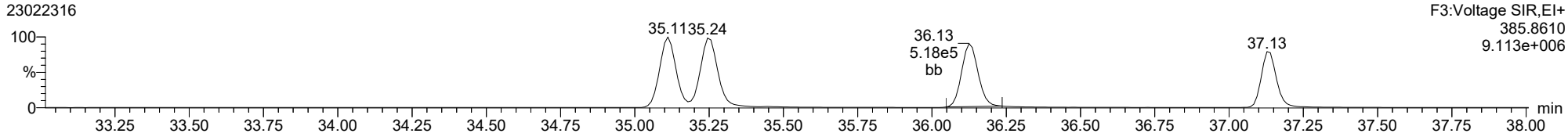

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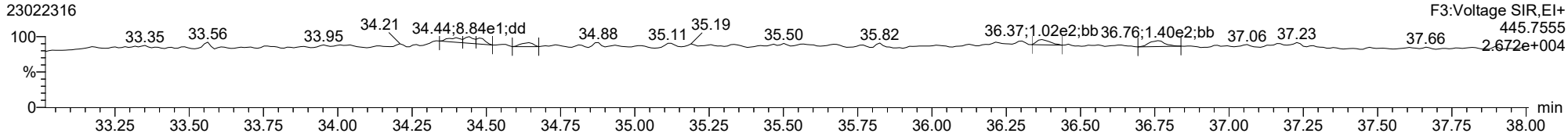

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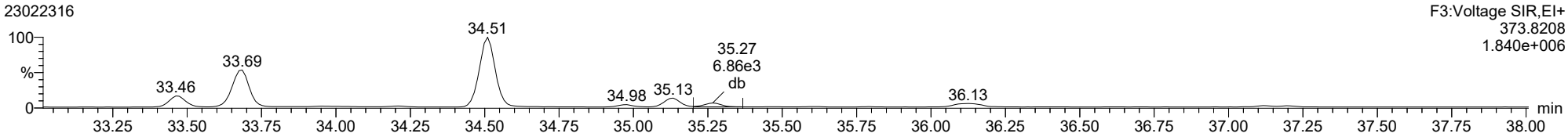

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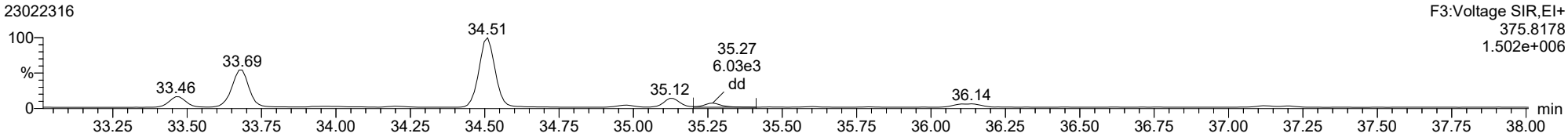

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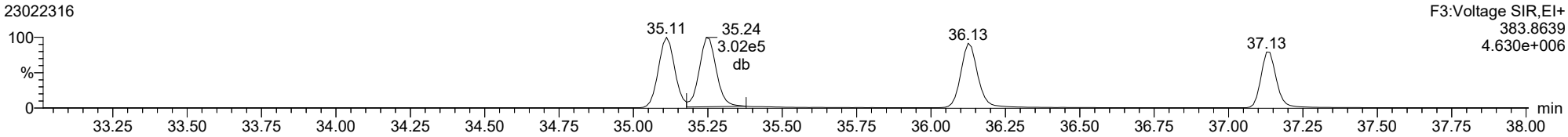

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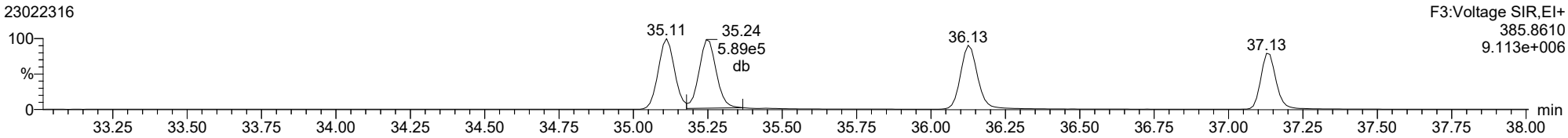

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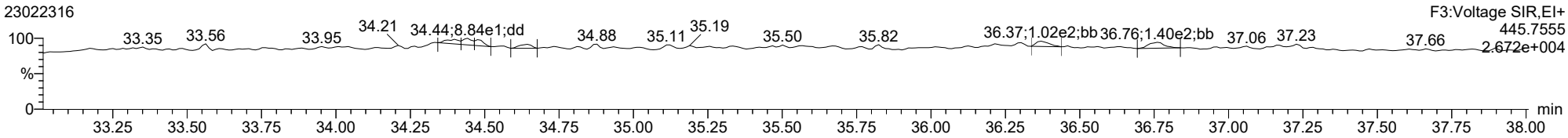

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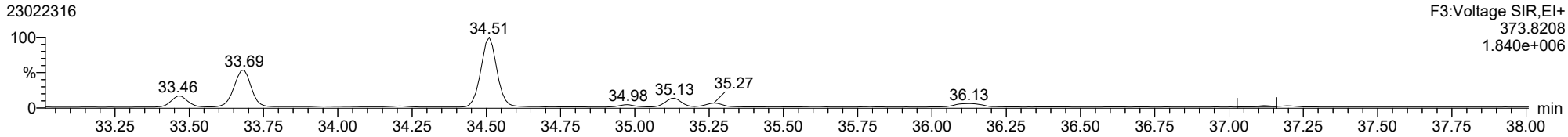

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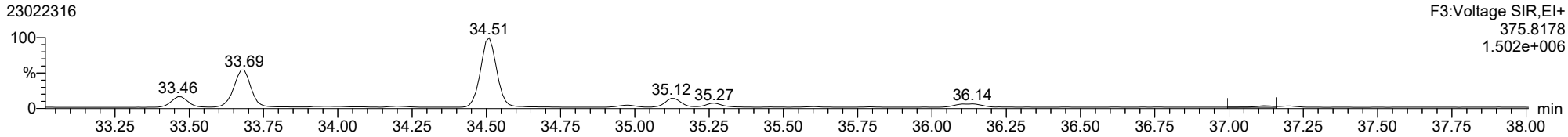

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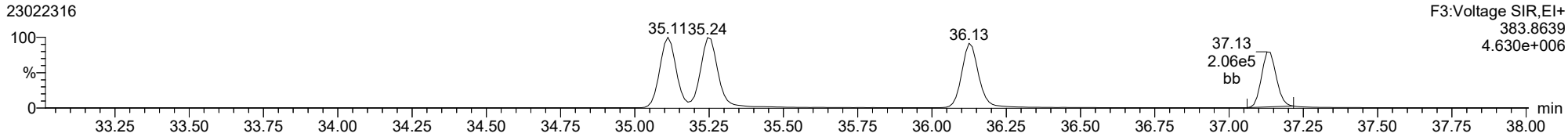

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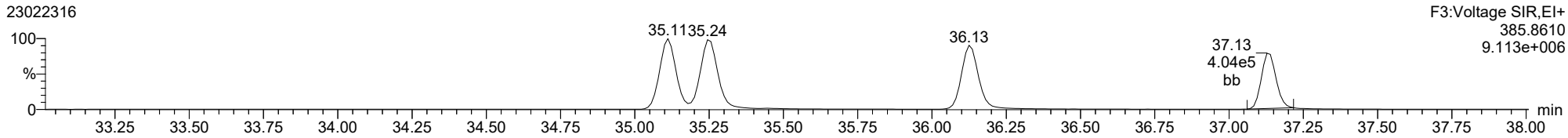

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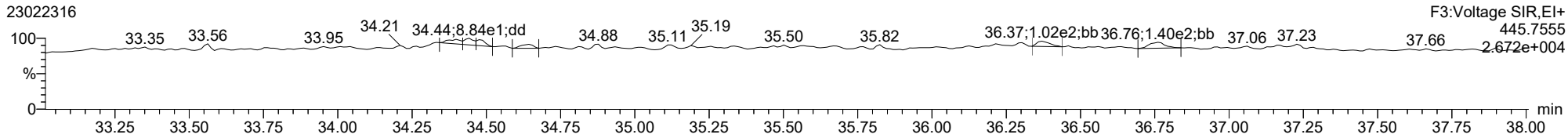

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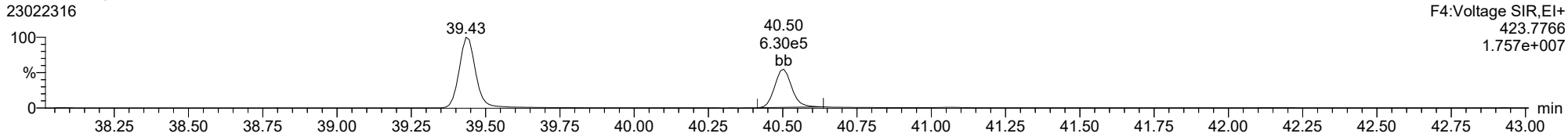

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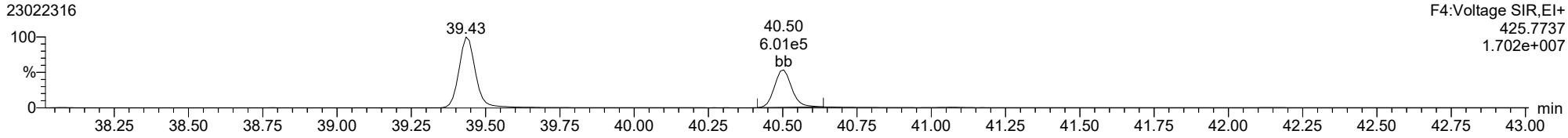

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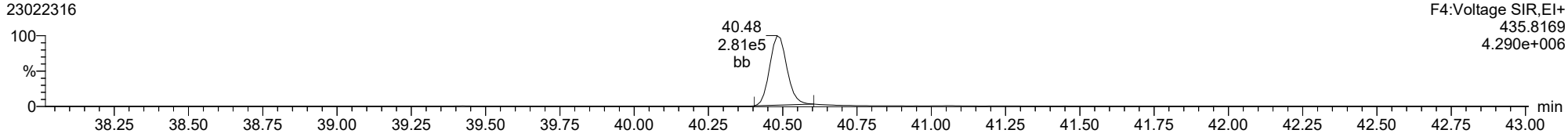

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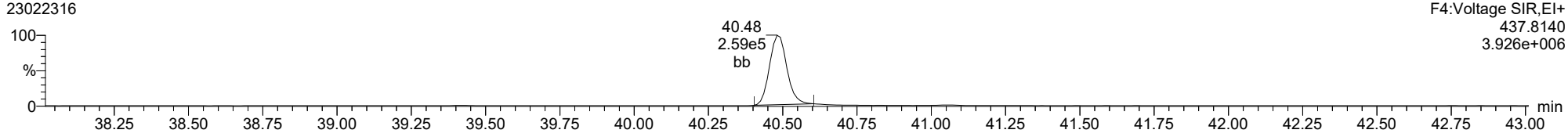

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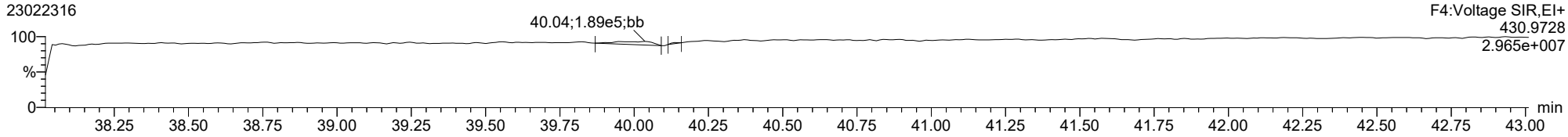

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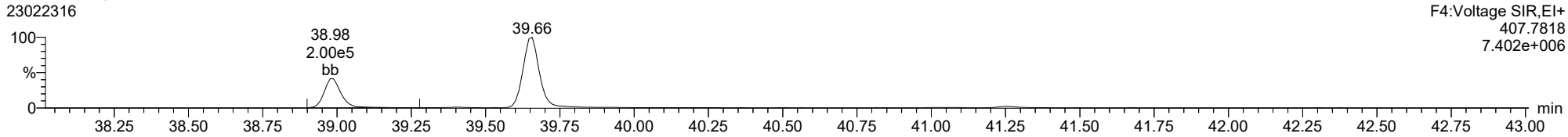

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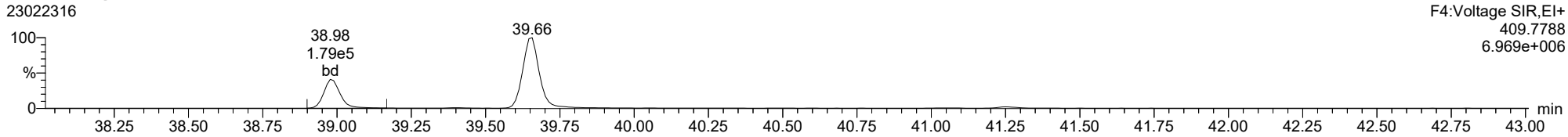

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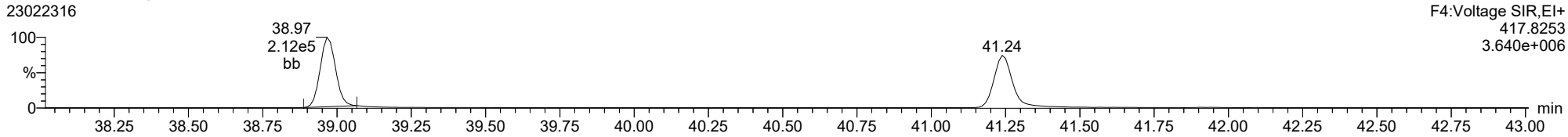

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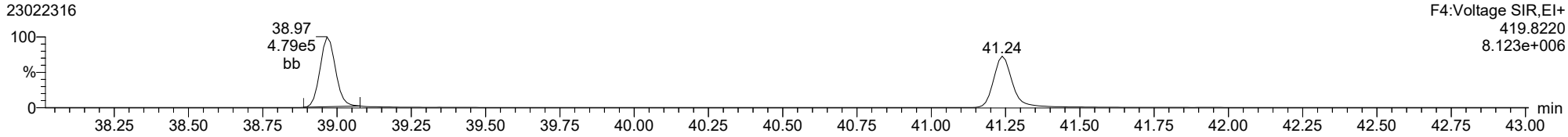

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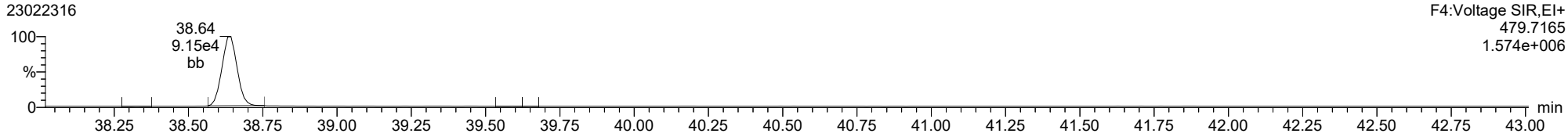

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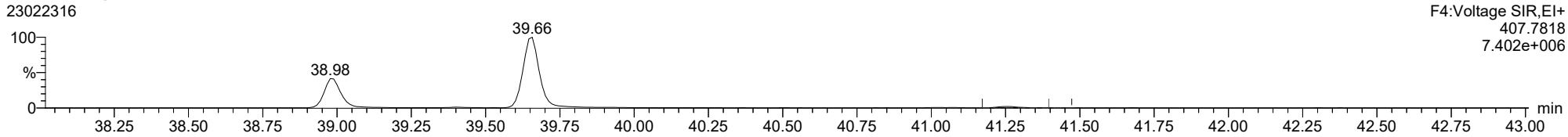

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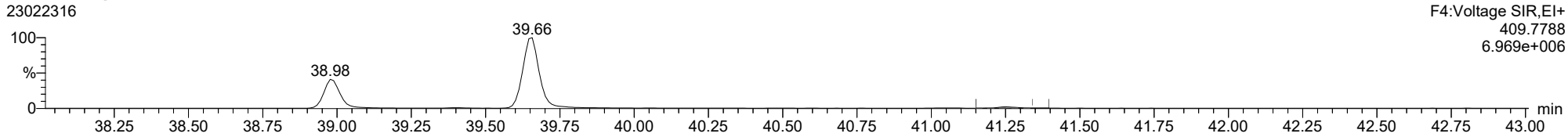

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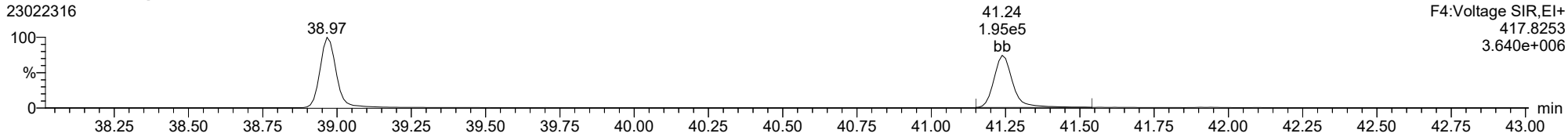

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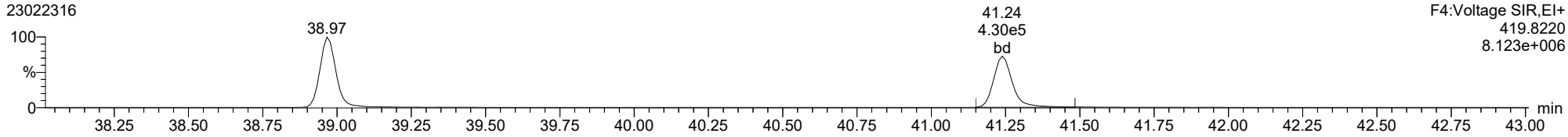

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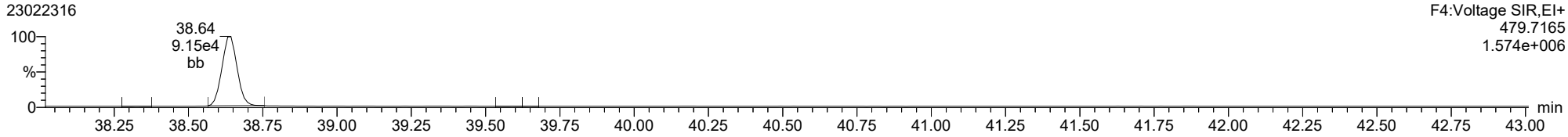

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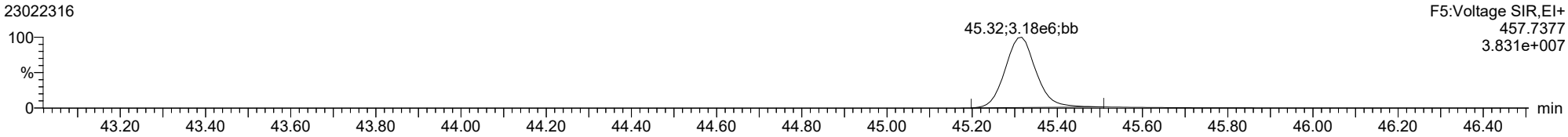

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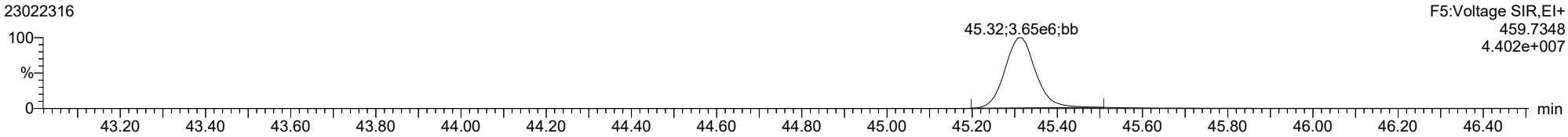

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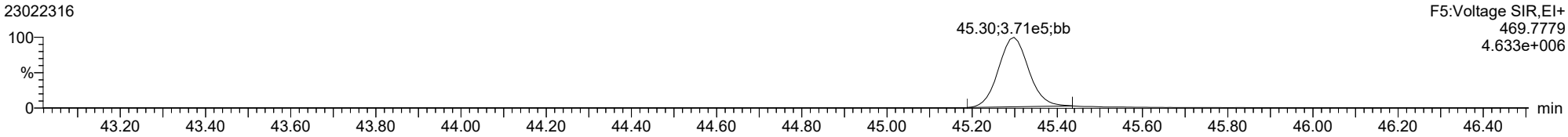

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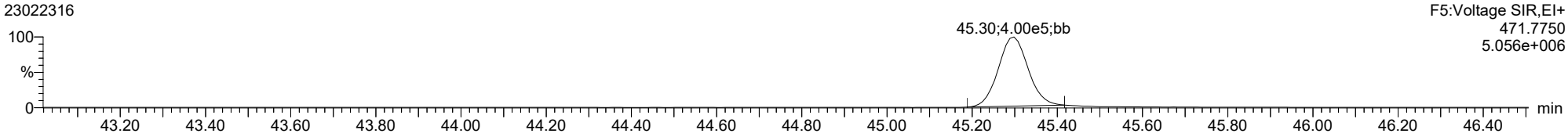
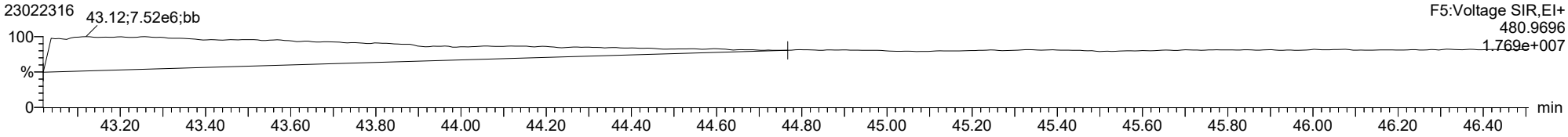


FUNCTION5 PFK



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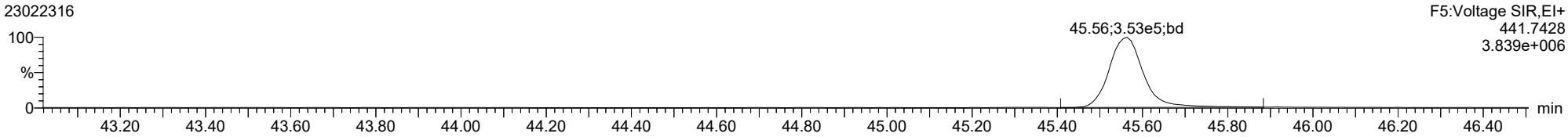

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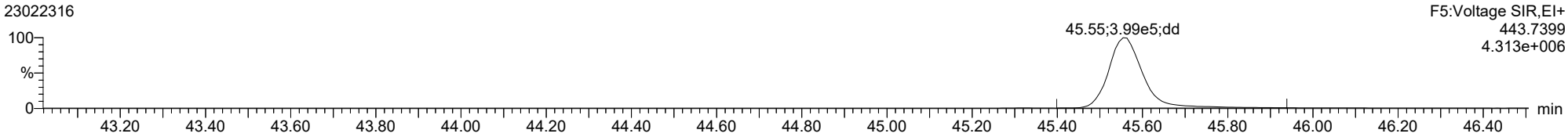
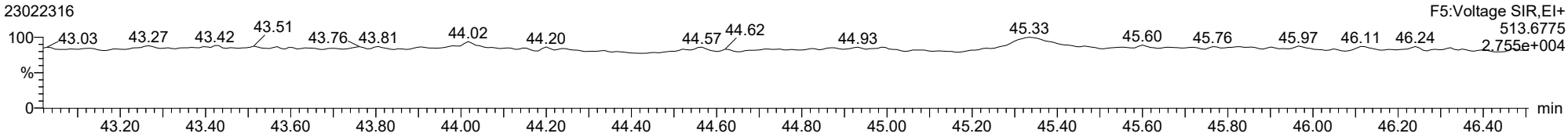


FUNCTION5 DCDPE



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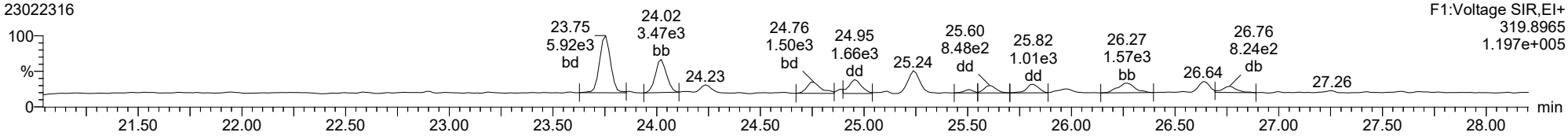
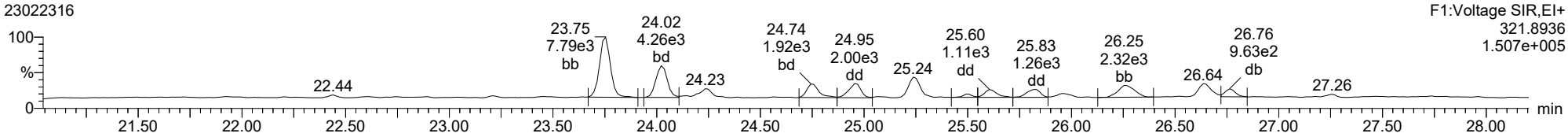
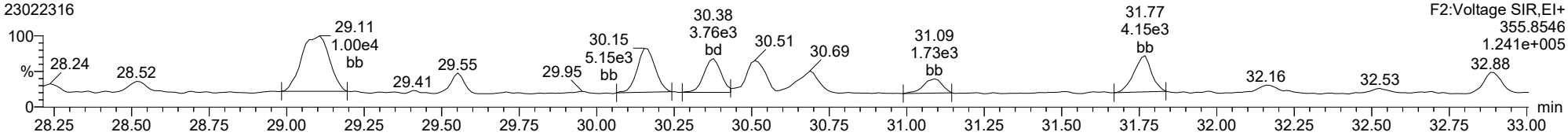
Total-tetradioxins



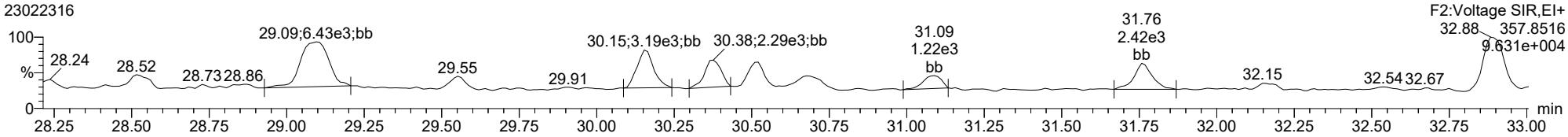
Total-tetradioxins



Total-pentadioxins

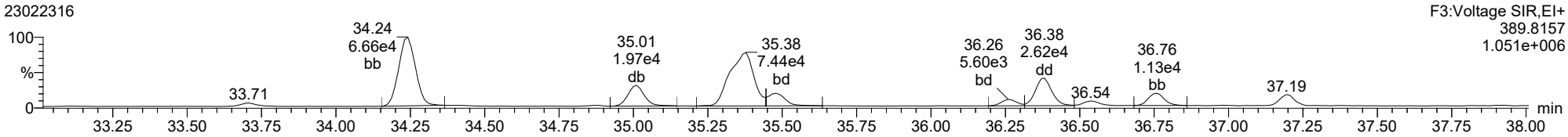


Total-pentadioxins



ID: 23A0134-06, Name: 23022316, Date: 23-Feb-2023, Time: 22:35:35, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins



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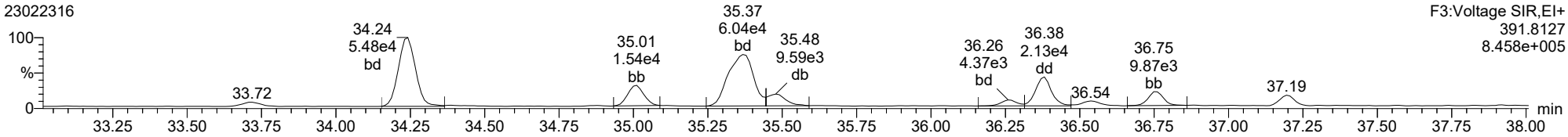

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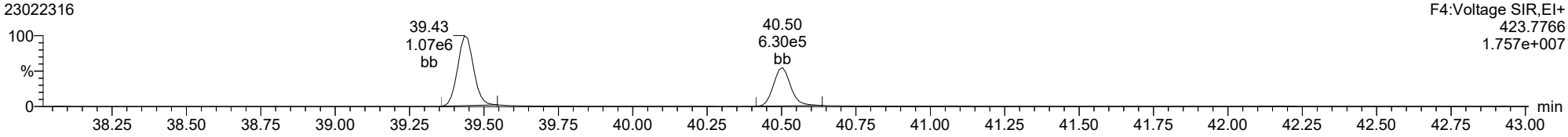

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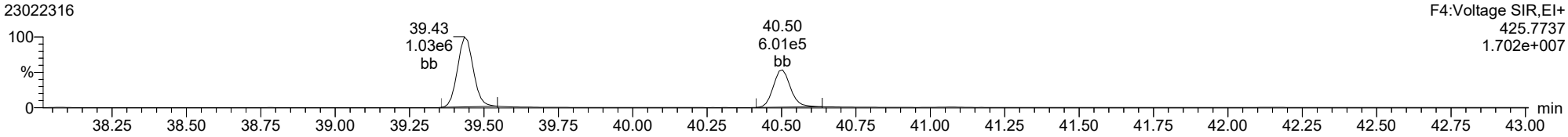

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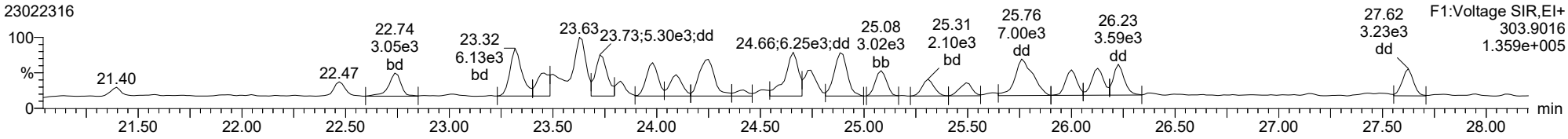
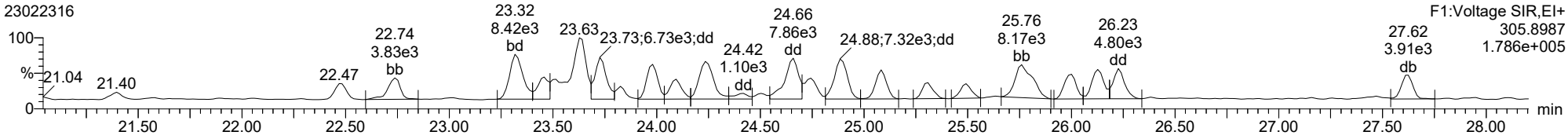
Printed: Friday, February 24, 2023 15:14:07 Pacific Standard Time

ID: 23A0134-06, Name: 23022316, Date: 23-Feb-2023, Time: 22:35:35, Conditions: AUTOSPEC01, User: pk

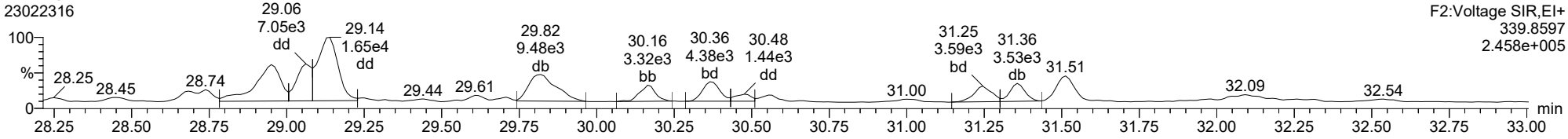
Total-tetrafurans



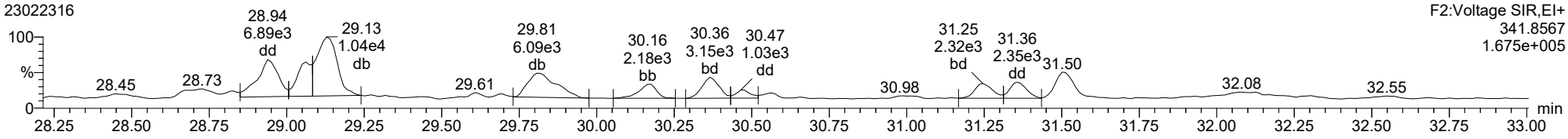
Total-tetrafurans



Total-pentafurans



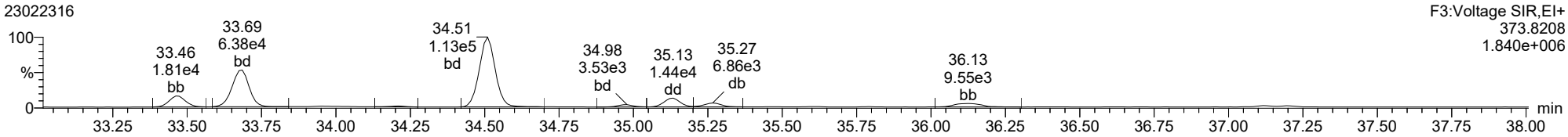
Total-pentafurans



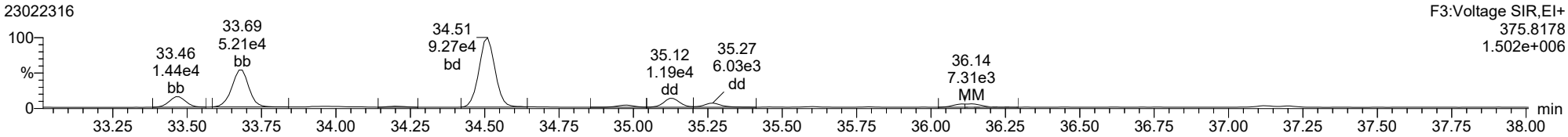
Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:14:07 Pacific Standard Time

ID: 23A0134-06, Name: 23022316, Date: 23-Feb-2023, Time: 22:35:35, Conditions: AUTOSPEC01, User: pk

Total-hexafurans



Total-hexafurans



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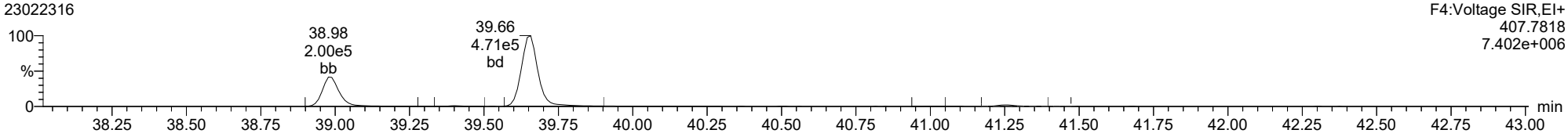
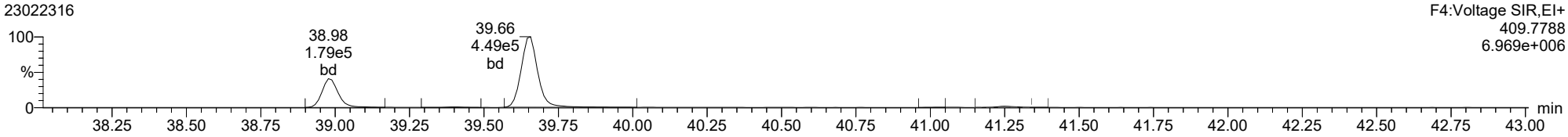


Total-heptafurans



Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-IT1194

Form 1
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-14 B	File ID:	23022317
Sampled:	01/06/23 14:41	Prepared:	01/24/23 13:10	Analyzed:	02/23/23 23:25
% Solids:	75.11	Preparation:	EPA 1613	Initial/Final:	13.34 g Wet / 20 uL
Result Basis:	Dry	Sequence:	SLB0345	Calibration:	GB00010
Batch:	BLA0261	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	0.996	0.655-0.886	0.084	0.998	0.360	ng/kg	EMPC, J, B
1746-01-6	2,3,7,8-TCDD	1	0.331	0.655-0.886	0.053	0.998	0.180	ng/kg	EMPC, J
57117-41-6	1,2,3,7,8-PeCDF	1	3.087	1.318-1.783	0.126	0.998	0.253	ng/kg	EMPC, J
57117-31-4	2,3,4,7,8-PeCDF	1	1.197	1.318-1.783	0.126	0.998	0.376	ng/kg	EMPC, J
40321-76-4	1,2,3,7,8-PeCDD	1	2.332	1.318-1.783	0.140	0.998	0.597	ng/kg	EMPC, J
70648-26-9	1,2,3,4,7,8-HxCDF	1	1.273	1.054-1.426	0.073	0.998	1.04	ng/kg	B
57117-44-9	1,2,3,6,7,8-HxCDF	1	1.149	1.054-1.426	0.065	0.998	0.447	ng/kg	J
60851-34-5	2,3,4,6,7,8-HxCDF	1	1.177	1.054-1.426	0.072	0.998	0.556	ng/kg	J
72918-21-9	1,2,3,7,8,9-HxCDF	1	0.875	1.054-1.426	0.085	0.998	0.300	ng/kg	EMPC, J, B
39227-28-6	1,2,3,4,7,8-HxCDD	1	0.985	1.054-1.426	0.114	0.998	0.429	ng/kg	EMPC, J
57653-85-7	1,2,3,6,7,8-HxCDD	1	1.239	1.054-1.426	0.109	0.998	1.62	ng/kg	
19408-74-3	1,2,3,7,8,9-HxCDD	1	1.198	1.054-1.426	0.114	0.998	1.35	ng/kg	B
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	1.015	0.893-1.208	0.100	0.998	11.0	ng/kg	
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	1.048	0.893-1.208	0.169	0.998	0.886	ng/kg	J
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.016	0.893-1.208	0.243	2.50	49.6	ng/kg	B
39001-02-0	OCDF	1	0.882	0.757-1.024	0.130	2.50	25.4	ng/kg	
3268-87-9	OCDD	1	0.869	0.757-1.024	0.337	9.98	423	ng/kg	B

Homologue Groups

55722-27-5	Total TCDF	1	0.000			0.998	5.17	ng/kg
41903-57-5	Total TCDD	1	0.000			0.998	0.557	ng/kg
30402-15-4	Total PeCDF	1	0.000			0.998	3.15	ng/kg
36088-22-9	Total PeCDD	1	0.000			0.998	0.576	ng/kg
55684-94-1	Total HxCDF	1	0.000			0.998	13.0	ng/kg
34465-46-8	Total HxCDD	1	0.000			0.998	14.1	ng/kg
38998-75-3	Total HpCDF	1	0.000			0.998	35.9	ng/kg
37871-00-4	Total HpCDD	1	0.000			0.998	120	ng/kg

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 2.26
Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 2.26

LDW23-IT1194

Form 2

ORGANIC ANALYSIS DATA SHEET

EPA 1613B

Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0134-14	File ID:	23022317
Sampled:	01/06/23 14:41	Prepared:	01/24/23 13:10	Analyzed:	02/23/23 23:25
Solids Wt%:	75.11	Preparation:	EPA 1613	Initial/Final:	13.34 g / 20 uL
Result Basis:	Dry	Sequence:	SLB0345	Calibration:	GB00010
Batch:	BLA0261	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF		0.763	0.655-0.886	0.066	85.2	24 - 169 %	
13C12-2,3,7,8-TCDD		0.779	0.655-0.886	0.140	114	25 - 164 %	
13C12-1,2,3,7,8-PeCDF		1.555	1.318-1.783	0.185	107	24 - 185 %	
13C12-2,3,4,7,8-PeCDF		1.558	1.318-1.783	0.192	104	21 - 178 %	
13C12-1,2,3,7,8-PeCDD		1.696	1.318-1.783	0.108	84.8	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF		0.506	0.434-0.587	0.198	105	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF		0.508	0.434-0.587	0.193	111	26 - 123 %	
13C12-2,3,4,6,7,8-HxCDF		0.492	0.434-0.587	0.206	105	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF		0.514	0.434-0.587	0.225	101	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD		1.257	1.054-1.426	0.191	113	32 - 141 %	
13C12-1,2,3,6,7,8-HxCDD		1.267	1.054-1.426	0.184	119	28 - 130 %	
13C12-1,2,3,4,6,7,8-HpCDF		0.443	0.374-0.506	0.135	90.1	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF		0.447	0.374-0.506	0.154	79.4	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD		1.081	0.893-1.208	0.155	95.8	23 - 140 %	
13C12-OCDD		0.915	0.757-1.024	0.156	76.2	17 - 157 %	
37Cl4-2,3,7,8-TCDD		328.000		0.044	88.8	35 - 197 %	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:14:23 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: 23A0134-14, Name: 23022317, Date: 23-Feb-2023, Time: 23:25:00, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.972	1.000	7.529e2	7.563e2	0.876	0.996	0.770	880	990	1.16e4	1.09e4	13.1	11.0	YES	MM	bd	0.181
12378-PeCDF	30.153	1.001	8.389e2	2.718e2	0.845	3.087	1.550	1422	1352	9.27e3	5.92e3	6.5	4.4	YES	bb	bb	0.127
23478-PeCDF	31.490	1.001	8.994e2	7.511e2	0.911	1.197	1.550	1422	1352	1.74e4	1.20e4	12.2	8.8	YES	bb	db	0.188
123478-HxCDF	35.100	1.000	2.752e3	2.161e3	1.182	1.273	1.240	904	982	4.32e4	3.59e4	47.8	36.6	NO	bd	bd	0.521
234678-HxCDF	36.091	1.000	1.421e3	1.207e3	1.229	1.177	1.240	904	982	1.61e4	1.33e4	17.8	13.6	NO	bb	bb	0.279
123678-HxCDF	35.234	1.000	1.294e3	1.126e3	1.248	1.149	1.240	904	982	2.04e4	1.36e4	22.6	13.9	NO	db	db	0.224
123789-HxCDF	37.105	1.000	5.639e2	6.447e2	1.187	0.875	1.240	904	982	7.83e3	8.17e3	8.7	8.3	YES	MM	MM	0.150
1234678-HpCDF	38.966	1.000	2.244e4	2.210e4	1.204	1.015	1.050	1172	1117	3.64e5	3.64e5	310.7	325.6	NO	bb	bd	5.496
1234789-HpCDF	41.250	1.001	1.371e3	1.308e3	1.165	1.048	1.050	1172	1117	2.08e4	1.93e4	17.8	17.3	NO	bb	bb	0.444
OCDF	45.545	1.006	3.068e4	3.477e4	1.186	0.882	0.890	675	666	3.29e5	3.76e5	486.8	564.7	NO	bd	bd	12.740
2378-TCDD	26.608	1.000	2.213e2	6.683e2	1.236	0.331	0.770	779	584	3.63e3	1.08e4	4.7	18.5	YES	bd	bd	0.090
12378-PeCDD	31.735	1.000	1.116e3	4.787e2	1.087	2.332	1.550	979	923	1.55e4	8.17e3	15.8	8.9	YES	bd	bb	0.299
123478-HxCDD	36.214	1.000	7.997e2	8.115e2	0.987	0.985	1.240	1292	1110	1.67e4	1.53e4	12.9	13.7	YES	bd	bd	0.215
123678-HxCDD	36.336	1.000	3.793e3	3.062e3	1.021	1.239	1.240	1292	1110	6.29e4	5.06e4	48.7	45.6	NO	db	db	0.811
123789-HxCDD	36.715	1.011	2.875e3	2.400e3	0.985	1.198	1.240	1292	1110	4.44e4	3.65e4	34.3	32.9	NO	bb	bb	0.674
1234678-HpCDD	40.481	1.000	8.477e4	8.341e4	1.253	1.016	1.050	2474	1555	1.28e6	1.26e6	516.7	810.0	NO	bb	bb	24.856
OCDD	45.288	1.000	4.706e5	5.418e5	1.103	0.869	0.890	1964	1271	5.47e6	6.18e6	2784.2	4860.9	NO	bb	bd	211.974
13C-2378-TCDF	25.958	1.007	4.130e5	5.410e5	1.768	0.763	0.770	1028	907	6.62e6	8.73e6	6444.0	9628.3	NO	bb	bb	85.249
13C-12378-PeCDF	30.131	1.168	6.319e5	4.064e5	1.527	1.555	1.550	1998	2707	9.51e6	6.03e6	4760.4	2228.6	NO	bd	bd	107.414
13C-23478-PeCDF	31.468	1.220	5.856e5	3.759e5	1.466	1.558	1.550	1998	2707	8.82e6	5.63e6	4414.0	2079.3	NO	bd	bd	103.593
13C-123478-HxCDF	35.089	0.956	2.678e5	5.298e5	1.054	0.506	0.510	1581	2705	4.37e6	8.62e6	2765.8	3186.3	NO	bd	bd	104.987
13C-123678-HxCDF	35.222	0.960	2.919e5	5.742e5	1.080	0.508	0.510	1581	2705	4.69e6	9.05e6	2966.4	3346.0	NO	db	db	111.222
13C-234678-HxCDF	36.091	0.983	2.534e5	5.146e5	1.014	0.492	0.510	1581	2705	4.23e6	8.47e6	2672.0	3129.7	NO	bb	bb	105.005
13C-123789-HxCDF	37.116	1.011	2.298e5	4.476e5	0.928	0.514	0.510	1581	2705	3.79e6	7.34e6	2399.4	2715.2	NO	bb	bb	101.238
13C-1234678-HpCDF	38.954	1.061	2.066e5	4.664e5	1.036	0.443	0.440	1223	1642	3.49e6	7.67e6	2850.8	4670.4	NO	bb	bb	90.078
13C-1234789-HpCDF	41.216	1.123	1.599e5	3.580e5	0.905	0.447	0.440	1223	1642	2.15e6	4.83e6	1759.5	2941.5	NO	bd	bb	79.363
13C-1234-TCDD	25.788	0.000	2.746e5	3.583e5	1.000	0.766	0.770	1657	929	4.34e6	5.56e6	2616.7	5981.7	NO	bb	bb	100.000
13C-2378-TCDD	26.593	1.031	3.500e5	4.490e5	1.103	0.779	0.770	1657	929	5.44e6	7.07e6	3281.0	7608.2	NO	bb	bb	114.446
13C-12378-PeCDD	31.724	1.230	3.086e5	1.819e5	0.914	1.696	1.550	755	891	4.71e6	2.75e6	6240.6	3086.7	NO	bd	bb	84.778
13C-123478-HxCDD	36.203	0.986	4.227e5	3.364e5	0.933	1.257	1.240	1527	2120	7.12e6	5.68e6	4663.8	2678.3	NO	bd	bd	112.839
13C-123678-HxCDD	36.325	0.990	4.628e5	3.653e5	0.965	1.267	1.240	1527	2120	7.22e6	5.71e6	4730.9	2695.2	NO	db	db	119.057
13C-1234678-HpCDD	40.470	1.103	2.805e5	2.596e5	0.782	1.081	1.050	1293	1195	4.12e6	3.73e6	3187.1	3120.9	NO	bb	bb	95.798
13C-OCDD	45.270	1.233	4.140e5	4.522e5	0.788	0.915	0.890	1153	1376	4.98e6	5.52e6	4321.6	4016.5	NO	bb	bb	152.407
13C-123789-HxCDD	36.704	0.000	4.032e5	3.179e5	1.000	1.268	1.240	1527	2120	6.87e6	5.49e6	4498.9	2590.3	NO	bb	bb	100.000
37CL-2378-TCDD	26.622	1.032	2.772e5		1.233			901		4.30e6		4768.7			bb		35.504

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ID: 23A0134-14, Name: 23022317, Date: 23-Feb-2023, Time: 23:25:00, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.455	0.865	3.321e2	3.458e2	1.064	0.960	0.770	880	990	5.93e3	5.56e3	6.7	5.6	YES	bb	db	0.067
1289-TCDF	27.469	1.058	9.447e1	7.611e1	0.858	1.241	0.770	880	990	1.88e3	1.62e3	2.1	1.6	YES	dd	bd	0.021
13468-PECDF					1.013		1.550	672	791								
12389-PECDF					0.844		1.550	1422	1352								
123468-HXCDF	33.440	0.953	3.018e3	2.697e3	1.197	1.119	1.240	904	982	4.63e4	4.17e4	51.2	42.4	NO	bb	bb	0.598
1368-TCDD	23.726	0.892	7.021e2	9.428e2	1.084	0.745	0.770	779	584	1.19e4	1.62e4	15.2	27.7	NO	bb	bb	0.190
1289-TCDD					0.975		0.770	779	584								
12479-PECDD	29.050	0.916	8.338e2	1.003e3	1.837	0.832	1.550	979	923	1.40e4	1.15e4	14.3	12.4	YES	db	bd	0.204
12389-PECDD					1.252		1.550	979	923								
124679-HXCDD	34.220	0.945	9.128e3	7.306e3	1.033	1.250	1.240	1292	1110	1.49e5	1.23e5	115.1	110.8	NO	bb	bb	2.096
1234679-HPCDD	39.423	0.974	1.252e5	1.186e5	1.286	1.055	1.050	2474	1555	2.02e6	1.91e6	815.2	1228.2	NO	bb	bb	35.098
Total-tetrafurans			9.942e3		0.933			880		1.46e5							2.592
Total-penta1			8.312e3					672		1.19e5							1.475
Total-pentafurans			5.258e2		0.866			1422		8.13e3							0.103
Total-hexafurans			3.433e4		1.208			904		5.26e5							6.532
Total-heptafurans			6.700e4		1.185			1172		1.08e6							18.007
Total-Furans			1.508e5		1.067			880		2.21e6							41.449
Total-tetradioxins			1.032e3		1.099			779		1.59e4							0.279
Total-pentadioxins			1.147e3		1.392			979		2.06e4							0.288
Total-hexadioxins			3.124e4		1.007			1292		4.34e5							7.076
Total-heptadioxins			2.100e5		1.269			2474		3.29e6							59.955
Total-Dioxins			7.140e5		1.165			779		9.23e6							279.572
Total-TEQ			8.648e5					779		1.14e7							321.020
FUNCTION1 PFK			8.192e7					409509		5.94e7							
FUNCTION2 PFK			1.101e4					272281		4.15e5							0.000
FUNCTION3 PFK			0.000e0					349543		0.00e0							
FUNCTION4 PFK			3.018e7					225433		1.64e7							
FUNCTION5 PFK			4.609e6					148616		4.09e7							
FUNCTION1 HXCD...			5.184e2					528		1.08e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			3.155e2					804		6.57e3							0.000
FUNCTION3 OCDPE			2.340e2					802		4.39e3							0.000
FUNCTION4 NCDPE			6.064e3					636		9.64e4							0.000
FUNCTION5 DCDPE			0.000e0					628		0.00e0							

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.97	8.271e2	1.136e3	0.933	0.73	0.77	15.8	YES	NO	dd	dd	0.221
2	Total-tetrafurans	23.81	3.973e2	4.700e2	0.933	0.85	0.77	6.6	YES	NO	dd	dd	0.097
3	Total-tetrafurans	23.71	1.024e3	1.161e3	0.933	0.88	0.77	17.5	YES	NO	dd	dd	0.245
4	Total-tetrafurans	23.61	1.251e3	1.881e3	0.933	0.67	0.77	17.8	YES	NO	dd	dd	0.352
5	Total-tetrafurans	23.30	1.227e3	1.641e3	0.933	0.75	0.77	18.1	YES	NO	bd	bd	0.322
6	Total-tetrafurans	23.02	1.717e2	2.035e2	0.933	0.84	0.77	4.1	YES	NO	bb	bb	0.042
7	Total-tetrafurans	22.72	6.259e2	8.471e2	0.933	0.74	0.77	12.0	YES	NO	db	bb	0.166
8	Total-tetrafurans	26.11	6.443e2	7.760e2	0.933	0.83	0.77	10.5	YES	NO	dd	dd	0.160
9	Total-tetrafurans	25.05	5.362e2	6.335e2	0.933	0.85	0.77	8.2	YES	NO	db	db	0.131
10	Total-tetrafurans	24.73	5.487e2	7.926e2	0.933	0.69	0.77	10.6	YES	NO	dd	dd	0.151
11	Total-tetrafurans	24.64	1.429e3	1.852e3	0.933	0.77	0.77	22.2	YES	NO	dd	dd	0.369
12	Total-tetrafurans	24.53	1.620e2	2.340e2	0.933	0.69	0.77	3.4	YES	NO	dd	dd	0.045
13	Total-tetrafurans	27.61	1.098e3	1.497e3	0.933	0.73	0.77	19.1	YES	NO	db	db	0.292

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-penta1	27.40	8.312e3	5.734e3		1.45	1.55	176.4	YES	NO	bb	bd	1.475

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	31.23	5.258e2	3.648e2	0.866	1.44	1.55	5.7	YES	NO	bd	bd	0.103

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexafurans	34.94	3.886e2	3.666e2	1.208	1.06	1.24	7.4	YES	NO	bb	bb	0.080
2	Total-hexafurans	34.49	1.448e4	1.133e4	1.208	1.28	1.24	247.0	YES	NO	bb	bb	2.748
3	Total-hexafurans	33.65	1.097e4	8.583e3	1.208	1.28	1.24	188.1	YES	NO	bd	bb	2.081
4	123468-HXCDF	33.44	3.018e3	2.697e3	1.197	1.12	1.24	51.2	YES	NO	bb	bb	0.598
5	234678-HxCDF	36.09	1.421e3	1.207e3	1.229	1.18	1.24	17.8	YES	NO	bb	bb	0.279
6	123678-HxCDF	35.23	1.294e3	1.126e3	1.248	1.15	1.24	22.6	YES	NO	db	db	0.224
7	123478-HxCDF	35.10	2.752e3	2.161e3	1.182	1.27	1.24	47.8	YES	NO	bd	bd	0.521

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HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.25	1.371e3	1.308e3	1.165	1.05	1.05	17.8	YES	NO	bb	bb	0.444
2	Total-heptafurans	39.63	4.319e4	4.193e4	1.185	1.03	1.05	594.9	YES	NO	bd	bb	12.067
3	1234678-HpCDF	38.97	2.244e4	2.210e4	1.204	1.02	1.05	310.7	YES	NO	bb	bd	5.496

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.97	8.271e2	1.136e3	0.933	0.73	0.77	15.8	YES	NO	dd	dd	0.221
2	Total-tetrafurans	23.81	3.973e2	4.700e2	0.933	0.85	0.77	6.6	YES	NO	dd	dd	0.097
3	Total-tetrafurans	23.71	1.024e3	1.161e3	0.933	0.88	0.77	17.5	YES	NO	dd	dd	0.245
4	Total-tetrafurans	23.61	1.251e3	1.881e3	0.933	0.67	0.77	17.8	YES	NO	dd	dd	0.352
5	Total-tetrafurans	23.30	1.227e3	1.641e3	0.933	0.75	0.77	18.1	YES	NO	bd	bd	0.322
6	Total-tetrafurans	23.02	1.717e2	2.035e2	0.933	0.84	0.77	4.1	YES	NO	bb	bb	0.042
7	Total-tetrafurans	22.72	6.259e2	8.471e2	0.933	0.74	0.77	12.0	YES	NO	db	bb	0.166
8	Total-tetrafurans	26.11	6.443e2	7.760e2	0.933	0.83	0.77	10.5	YES	NO	dd	dd	0.160
9	Total-tetrafurans	25.05	5.362e2	6.335e2	0.933	0.85	0.77	8.2	YES	NO	db	db	0.131
10	Total-tetrafurans	24.73	5.487e2	7.926e2	0.933	0.69	0.77	10.6	YES	NO	dd	dd	0.151
11	Total-tetrafurans	24.64	1.429e3	1.852e3	0.933	0.77	0.77	22.2	YES	NO	dd	dd	0.369
12	Total-tetrafurans	24.53	1.620e2	2.340e2	0.933	0.69	0.77	3.4	YES	NO	dd	dd	0.045
13	Total-tetrafurans	27.61	1.098e3	1.497e3	0.933	0.73	0.77	19.1	YES	NO	db	db	0.292
14	Total-pentafurans	31.23	5.258e2	3.648e2	0.866	1.44	1.55	5.7	YES	NO	bd	bd	0.103
15	Total-hexafurans	34.94	3.886e2	3.666e2	1.208	1.06	1.24	7.4	YES	NO	bb	bb	0.080
16	Total-hexafurans	34.49	1.448e4	1.133e4	1.208	1.28	1.24	247.0	YES	NO	bb	bb	2.748
17	Total-hexafurans	33.65	1.097e4	8.583e3	1.208	1.28	1.24	188.1	YES	NO	bd	bb	2.081
18	123468-HXCDF	33.44	3.018e3	2.697e3	1.197	1.12	1.24	51.2	YES	NO	bb	bb	0.598
19	234678-HxCDF	36.09	1.421e3	1.207e3	1.229	1.18	1.24	17.8	YES	NO	bb	bb	0.279
20	123678-HxCDF	35.23	1.294e3	1.126e3	1.248	1.15	1.24	22.6	YES	NO	db	db	0.224
21	123478-HxCDF	35.10	2.752e3	2.161e3	1.182	1.27	1.24	47.8	YES	NO	bd	bd	0.521
22	1234789-HpCDF	41.25	1.371e3	1.308e3	1.165	1.05	1.05	17.8	YES	NO	bb	bb	0.444
23	Total-heptafurans	39.63	4.319e4	4.193e4	1.185	1.03	1.05	594.9	YES	NO	bd	bb	12.067
24	1234678-HpCDF	38.97	2.244e4	2.210e4	1.204	1.02	1.05	310.7	YES	NO	bb	bd	5.496
25	OCDF	45.54	3.068e4	3.477e4	1.186	0.88	0.89	486.8	YES	NO	bd	bd	12.740
26	Total-penta1	27.40	8.312e3	5.734e3		1.45	1.55	176.4	YES	NO	bb	bd	1.475

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TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.24	3.302e2	4.516e2	1.099	0.73	0.77	5.1	YES	NO	bb	bb	0.089
2	1368-TCDD	23.73	7.021e2	9.428e2	1.084	0.74	0.77	15.2	YES	NO	bb	bb	0.190

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentadioxins	30.35	8.196e2	5.849e2	1.392	1.40	1.55	12.4	YES	NO	bd	bd	0.206
2	Total-pentadioxins	29.52	3.272e2	2.378e2	1.392	1.38	1.55	8.6	YES	NO	bb	bb	0.083

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.72	2.875e3	2.400e3	0.985	1.20	1.24	34.3	YES	NO	bb	bb	0.674
2	Total-hexadioxins	36.49	4.124e2	3.214e2	1.007	1.28	1.24	6.0	YES	NO	bb	bd	0.092
3	123678-HxCDD	36.34	3.793e3	3.062e3	1.021	1.24	1.24	48.7	YES	NO	db	db	0.811
4	Total-hexadioxins	35.35	1.284e4	1.024e4	1.007	1.25	1.24	105.1	YES	NO	dd	bd	2.890
5	Total-hexadioxins	34.99	2.190e3	1.907e3	1.007	1.15	1.24	26.3	YES	NO	bd	bb	0.513
6	124679-HXCDD	34.22	9.128e3	7.306e3	1.033	1.25	1.24	115.1	YES	NO	bb	bb	2.096

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.48	8.477e4	8.341e4	1.253	1.02	1.05	516.7	YES	NO	bb	bb	24.856
2	1234679-HPCDD	39.42	1.252e5	1.186e5	1.286	1.06	1.05	815.2	YES	NO	bb	bb	35.098

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.24	3.302e2	4.516e2	1.099	0.73	0.77	5.1	YES	NO	bb	bb	0.089
2	1368-TCDD	23.73	7.021e2	9.428e2	1.084	0.74	0.77	15.2	YES	NO	bb	bb	0.190
3	Total-pentadioxins	30.35	8.196e2	5.849e2	1.392	1.40	1.55	12.4	YES	NO	bd	bd	0.206
4	Total-pentadioxins	29.52	3.272e2	2.378e2	1.392	1.38	1.55	8.6	YES	NO	bb	bb	0.083
5	123789-HxCDD	36.72	2.875e3	2.400e3	0.985	1.20	1.24	34.3	YES	NO	bb	bb	0.674
6	Total-hexadioxins	36.49	4.124e2	3.214e2	1.007	1.28	1.24	6.0	YES	NO	bb	bd	0.092
7	123678-HxCDD	36.34	3.793e3	3.062e3	1.021	1.24	1.24	48.7	YES	NO	db	db	0.811
8	Total-hexadioxins	35.35	1.284e4	1.024e4	1.007	1.25	1.24	105.1	YES	NO	dd	bd	2.890
9	Total-hexadioxins	34.99	2.190e3	1.907e3	1.007	1.15	1.24	26.3	YES	NO	bd	bb	0.513
10	124679-HXCDD	34.22	9.128e3	7.306e3	1.033	1.25	1.24	115.1	YES	NO	bb	bb	2.096
11	1234678-HpCDD	40.48	8.477e4	8.341e4	1.253	1.02	1.05	516.7	YES	NO	bb	bb	24.856
12	1234679-HPCDD	39.42	1.252e5	1.186e5	1.286	1.06	1.05	815.2	YES	NO	bb	bb	35.098
13	OCDD	45.29	4.706e5	5.418e5	1.103	0.87	0.89	2784.2	YES	NO	bb	bd	211.974

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.97	8.271e2	1.136e3	0.933	0.73	0.77	15.8	YES	NO	dd	dd	0.221
2	Total-tetrafurans	23.81	3.973e2	4.700e2	0.933	0.85	0.77	6.6	YES	NO	dd	dd	0.097
3	Total-tetrafurans	23.71	1.024e3	1.161e3	0.933	0.88	0.77	17.5	YES	NO	dd	dd	0.245
4	Total-tetrafurans	23.61	1.251e3	1.881e3	0.933	0.67	0.77	17.8	YES	NO	dd	dd	0.352
5	Total-tetrafurans	23.30	1.227e3	1.641e3	0.933	0.75	0.77	18.1	YES	NO	bd	bd	0.322
6	Total-tetrafurans	23.02	1.717e2	2.035e2	0.933	0.84	0.77	4.1	YES	NO	bb	bb	0.042
7	Total-tetrafurans	22.72	6.259e2	8.471e2	0.933	0.74	0.77	12.0	YES	NO	db	bb	0.166
8	Total-tetrafurans	26.11	6.443e2	7.760e2	0.933	0.83	0.77	10.5	YES	NO	dd	dd	0.160
9	Total-tetrafurans	25.05	5.362e2	6.335e2	0.933	0.85	0.77	8.2	YES	NO	db	db	0.131
10	Total-tetrafurans	24.73	5.487e2	7.926e2	0.933	0.69	0.77	10.6	YES	NO	dd	dd	0.151
11	Total-tetrafurans	24.64	1.429e3	1.852e3	0.933	0.77	0.77	22.2	YES	NO	dd	dd	0.369
12	Total-tetrafurans	24.53	1.620e2	2.340e2	0.933	0.69	0.77	3.4	YES	NO	dd	dd	0.045
13	Total-tetrafurans	27.61	1.098e3	1.497e3	0.933	0.73	0.77	19.1	YES	NO	db	db	0.292
14	Total-pentafurans	31.23	5.258e2	3.648e2	0.866	1.44	1.55	5.7	YES	NO	bd	bd	0.103
15	Total-hexafurans	34.94	3.886e2	3.666e2	1.208	1.06	1.24	7.4	YES	NO	bb	bb	0.080
16	Total-hexafurans	34.49	1.448e4	1.133e4	1.208	1.28	1.24	247.0	YES	NO	bb	bb	2.748
17	Total-hexafurans	33.65	1.097e4	8.583e3	1.208	1.28	1.24	188.1	YES	NO	bd	bb	2.081
18	123468-HXCDF	33.44	3.018e3	2.697e3	1.197	1.12	1.24	51.2	YES	NO	bb	bb	0.598
19	234678-HxCDF	36.09	1.421e3	1.207e3	1.229	1.18	1.24	17.8	YES	NO	bb	bb	0.279
20	123678-HxCDF	35.23	1.294e3	1.126e3	1.248	1.15	1.24	22.6	YES	NO	db	db	0.224
21	123478-HxCDF	35.10	2.752e3	2.161e3	1.182	1.27	1.24	47.8	YES	NO	bd	bd	0.521
22	1234789-HpCDF	41.25	1.371e3	1.308e3	1.165	1.05	1.05	17.8	YES	NO	bb	bb	0.444
23	Total-heptafurans	39.63	4.319e4	4.193e4	1.185	1.03	1.05	594.9	YES	NO	bd	bb	12.067
24	1234678-HpCDF	38.97	2.244e4	2.210e4	1.204	1.02	1.05	310.7	YES	NO	bb	bd	5.496
25	OCDF	45.54	3.068e4	3.477e4	1.186	0.88	0.89	486.8	YES	NO	bd	bd	12.740
26	Total-penta1	27.40	8.312e3	5.734e3		1.45	1.55	176.4	YES	NO	bb	bd	1.475
27	Total-tetradioxins	25.24	3.302e2	4.516e2	1.099	0.73	0.77	5.1	YES	NO	bb	bb	0.089
28	1368-TCDD	23.73	7.021e2	9.428e2	1.084	0.74	0.77	15.2	YES	NO	bb	bb	0.190
29	Total-pentadioxins	30.35	8.196e2	5.849e2	1.392	1.40	1.55	12.4	YES	NO	bd	bd	0.206
30	Total-pentadioxins	29.52	3.272e2	2.378e2	1.392	1.38	1.55	8.6	YES	NO	bb	bb	0.083
31	123789-HxCDD	36.72	2.875e3	2.400e3	0.985	1.20	1.24	34.3	YES	NO	bb	bb	0.674
32	Total-hexadioxins	36.49	4.124e2	3.214e2	1.007	1.28	1.24	6.0	YES	NO	bb	bd	0.092
33	123678-HxCDD	36.34	3.793e3	3.062e3	1.021	1.24	1.24	48.7	YES	NO	db	db	0.811
34	Total-hexadioxins	35.35	1.284e4	1.024e4	1.007	1.25	1.24	105.1	YES	NO	dd	bd	2.890
35	Total-hexadioxins	34.99	2.190e3	1.907e3	1.007	1.15	1.24	26.3	YES	NO	bd	bb	0.513
36	124679-HXCDD	34.22	9.128e3	7.306e3	1.033	1.25	1.24	115.1	YES	NO	bb	bb	2.096
37	1234678-HpCDD	40.48	8.477e4	8.341e4	1.253	1.02	1.05	516.7	YES	NO	bb	bb	24.856

ID: 23A0134-14, Name: 23022317, Date: 23-Feb-2023, Time: 23:25:00, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	1234679-HPCDD	39.42	1.252e5	1.186e5	1.286	1.06	1.05	815.2	YES	NO	bb	bb	35.098
39	OCDD	45.29	4.706e5	5.418e5	1.103	0.87	0.89	2784.2	YES	NO	bb	bd	211.974

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	24.04	2.807e7					44.3	YES		db		
2	FUNCTION1 PFK	23.19	4.014e7					48.8	YES		dd		
3	FUNCTION1 PFK	21.11	1.371e7					52.0	YES		bd		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	32.14	1.101e4					1.5	NO		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.50	5.182e6					36.2	YES		db		
2	FUNCTION4 PFK	40.40	2.500e7					36.5	YES		bd		

ID: 23A0134-14, Name: 23022317, Date: 23-Feb-2023, Time: 23:25:00, Conditions: AUTOSPEC01, User: pk

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.34	1.376e6					37.5	YES		dd		
2	FUNCTION5 PFK	43.19	3.416e5					43.1	YES		dd		
3	FUNCTION5 PFK	43.14	3.605e5					45.2	YES		dd		
4	FUNCTION5 PFK	43.10	2.419e5					44.9	YES		dd		
5	FUNCTION5 PFK	43.06	3.757e5					46.4	YES		bd		
6	FUNCTION5 PFK	46.29	1.010e3					0.7	NO		bb		
7	FUNCTION5 PFK	45.95	3.687e3					1.3	NO		bb		
8	FUNCTION5 PFK	45.87	9.890e3					1.8	NO		bb		
9	FUNCTION5 PFK	45.83	7.364e2					0.5	NO		bb		
10	FUNCTION5 PFK	45.79	6.176e2					0.5	NO		bb		
11	FUNCTION5 PFK	45.70	1.287e4					1.4	NO		bb		
12	FUNCTION5 PFK	45.57	3.825e3					1.0	NO		bb		
13	FUNCTION5 PFK	45.48	3.454e3					1.1	NO		db		
14	FUNCTION5 PFK	45.42	8.511e3					1.7	NO		bd		
15	FUNCTION5 PFK	45.27	5.343e3					1.2	NO		bb		
16	FUNCTION5 PFK	44.69	1.966e3					0.8	NO		db		
17	FUNCTION5 PFK	44.63	1.095e4					1.9	NO		bd		
18	FUNCTION5 PFK	44.39	2.898e3					0.6	NO		bb		
19	FUNCTION5 PFK	44.22	4.155e5					3.3	YES		db		
20	FUNCTION5 PFK	43.86	3.766e5					16.7	YES		dd		
21	FUNCTION5 PFK	43.70	1.055e6					23.7	YES		dd		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	28.05	7.727e1					3.9	YES		bb		0.000
2	FUNCTION1 HXCD...	26.35	9.947e1					4.1	YES		bb		0.000
3	FUNCTION1 HXCD...	26.13	1.821e2					7.5	YES		bb		0.000
4	FUNCTION1 HXCD...	25.77	8.614e1					2.0	NO		bb		0.000
5	FUNCTION1 HXCD...	23.94	7.344e1					3.0	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.64	7.504e1					2.4	NO		bb		0.000
2	FUNCTION2 HPCD...	31.53	1.510e2					3.5	YES		bb		0.000
3	FUNCTION2 HPCD...	29.14	8.955e1					2.2	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	35.28	1.071e2					1.9	NO		bb		0.000
2	FUNCTION3 OCDPE	34.39	1.269e2					3.6	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	38.62	6.064e3					151.7	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
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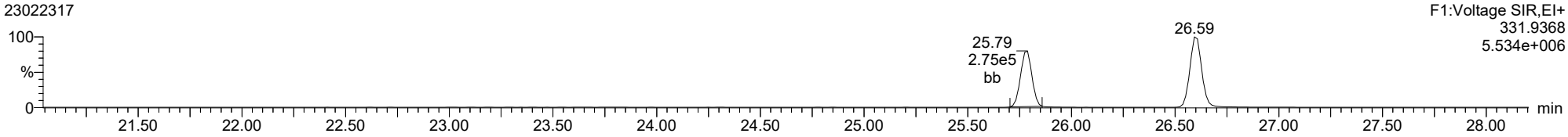

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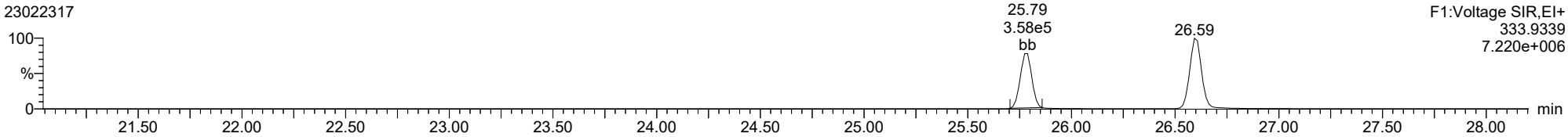

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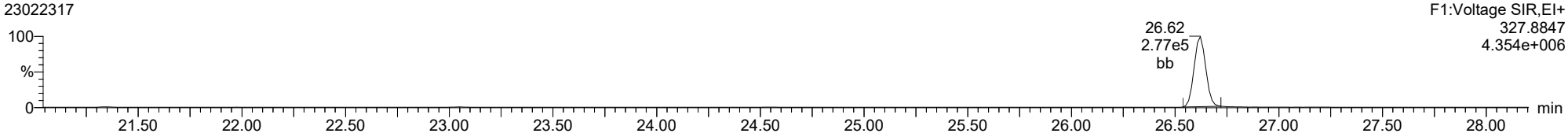

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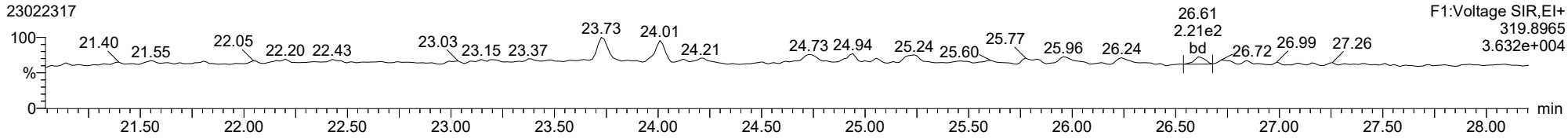

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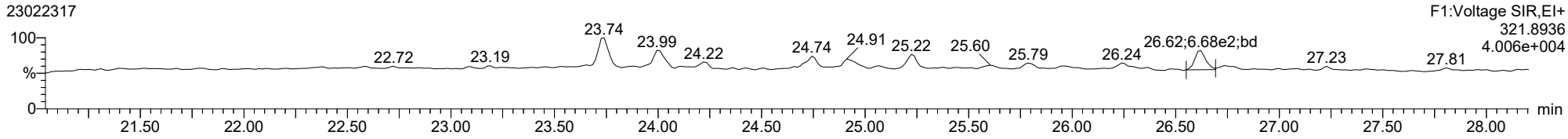

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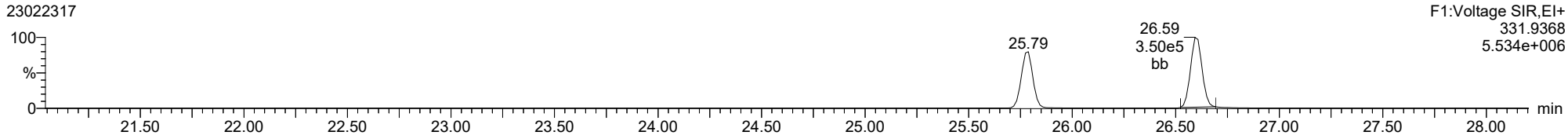

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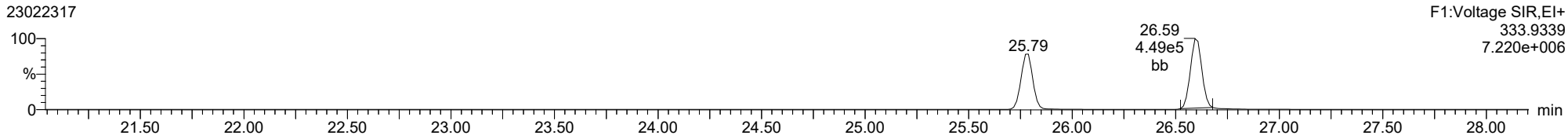

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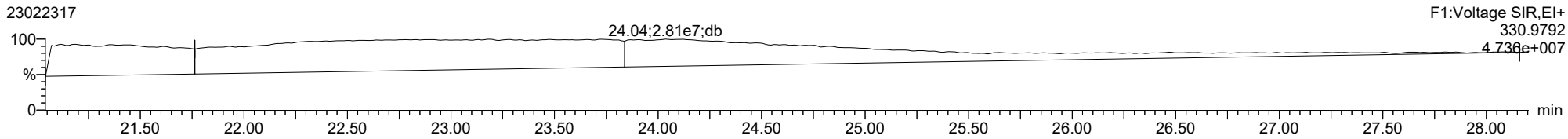

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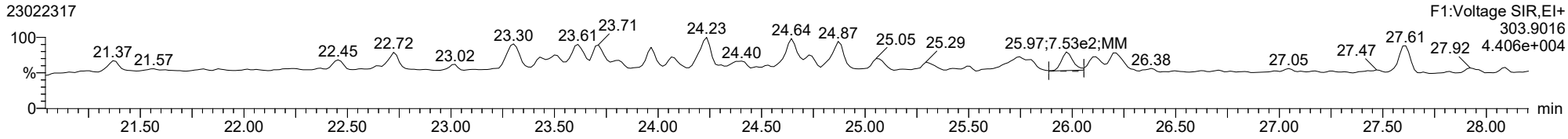

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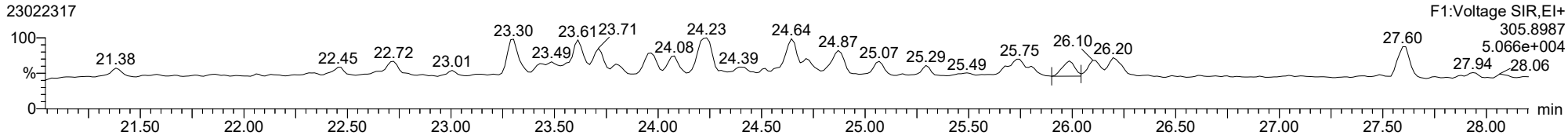

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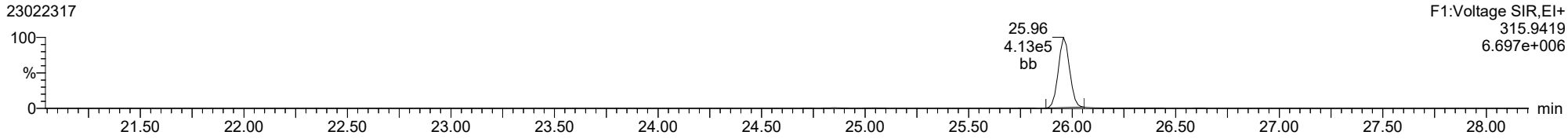

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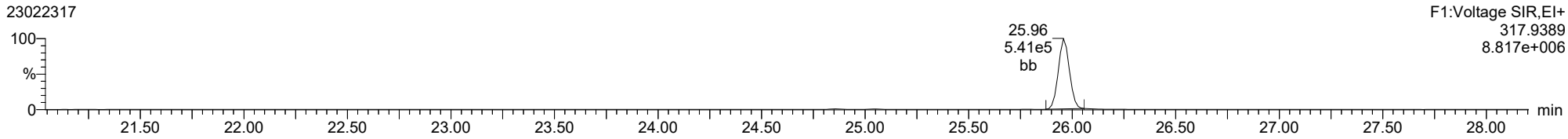

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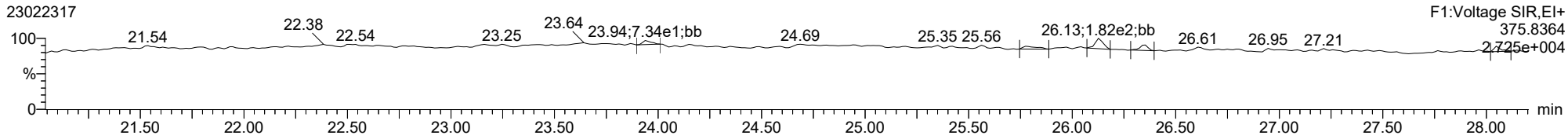

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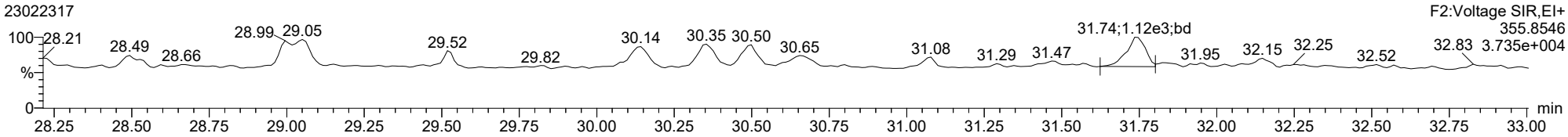

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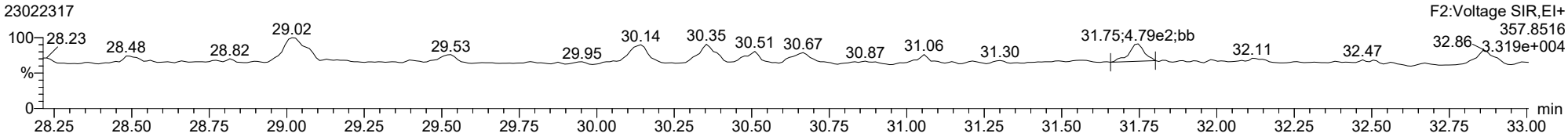

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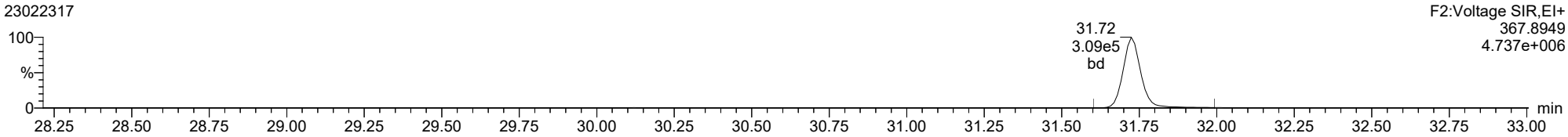

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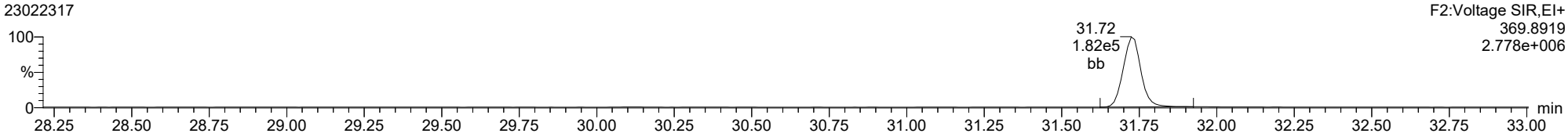

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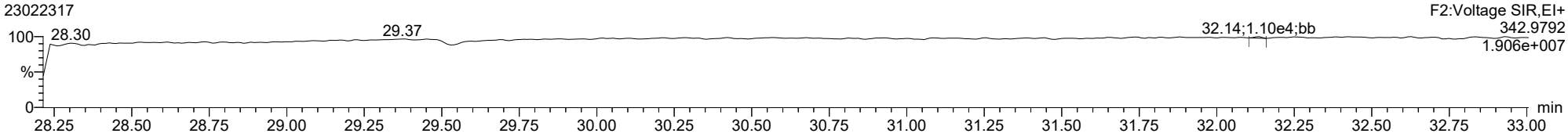

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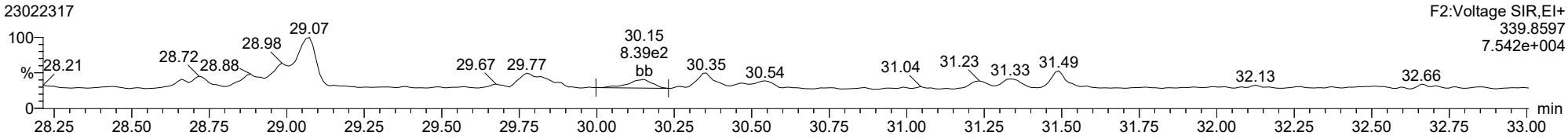

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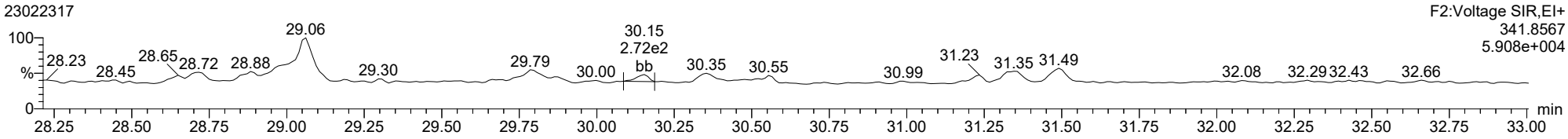

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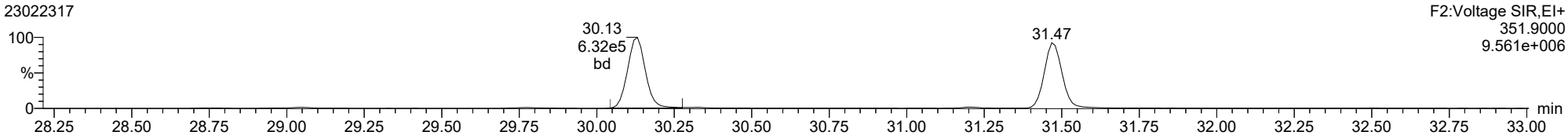

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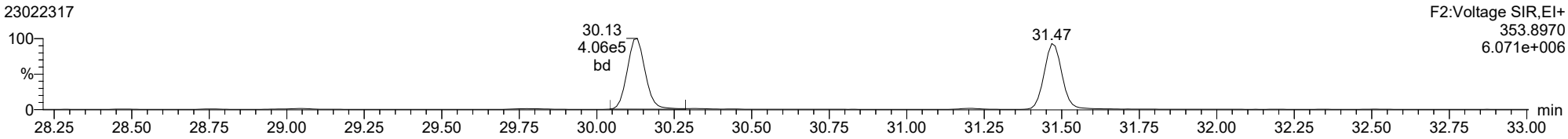

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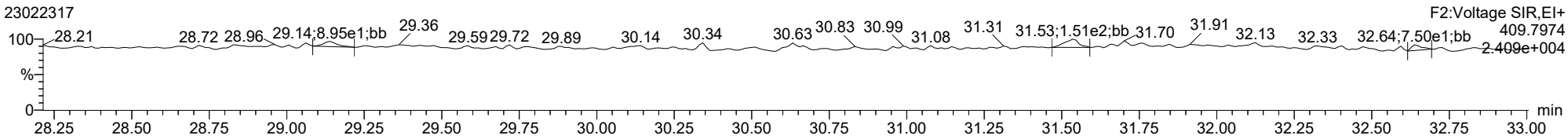

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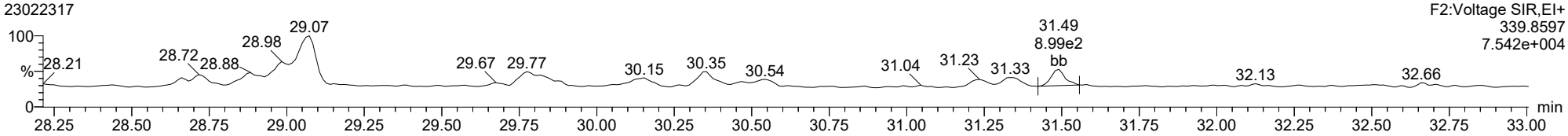

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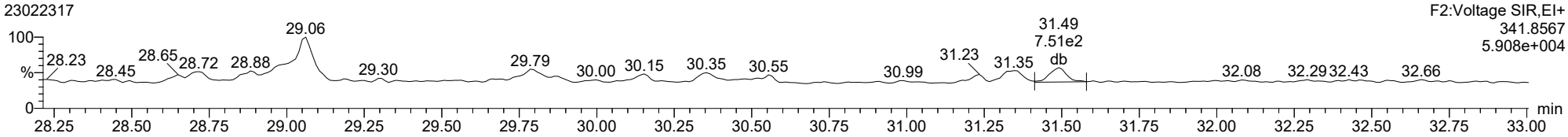

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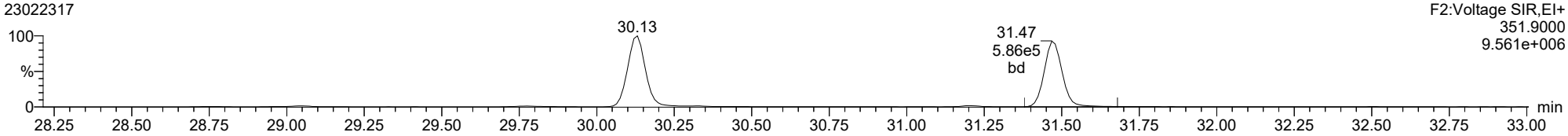

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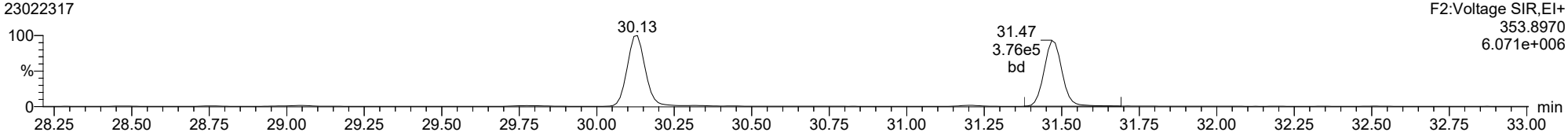

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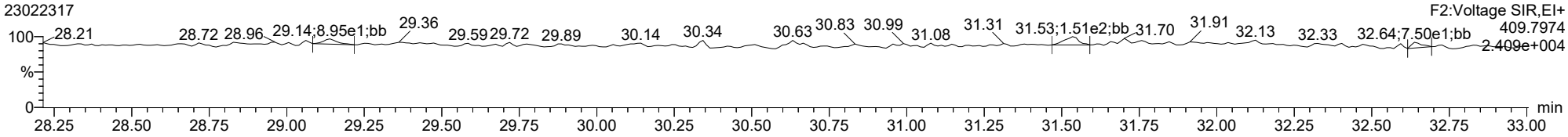

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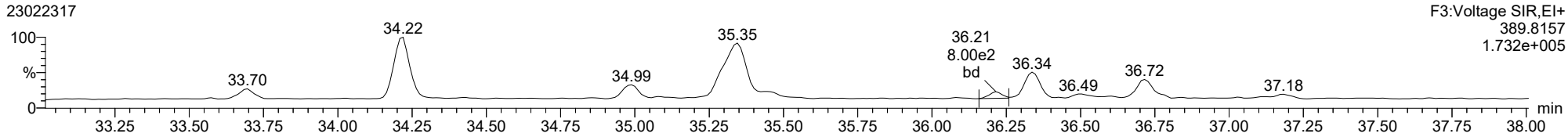

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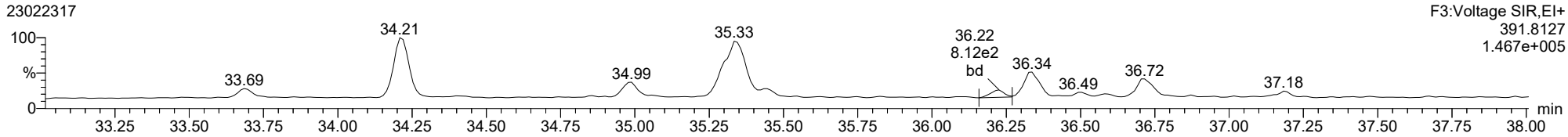

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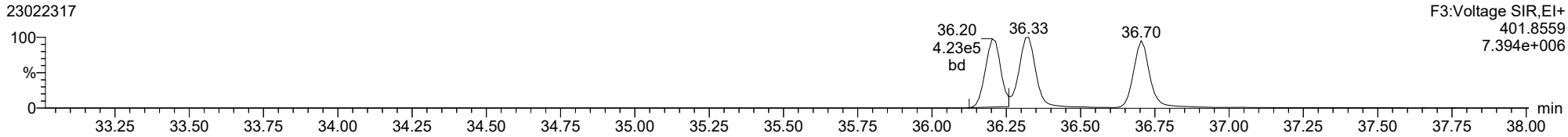

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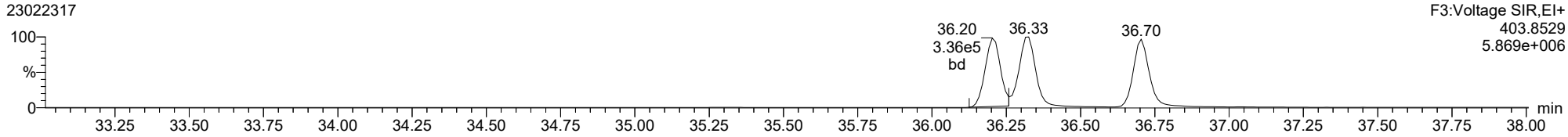

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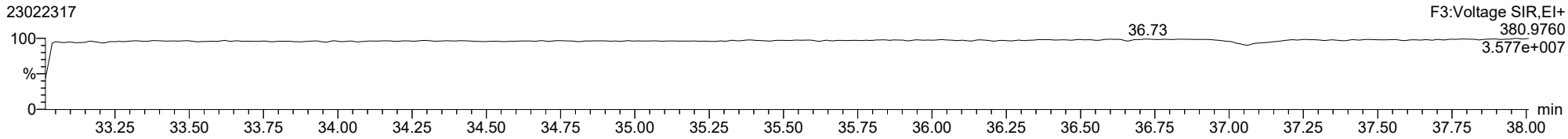

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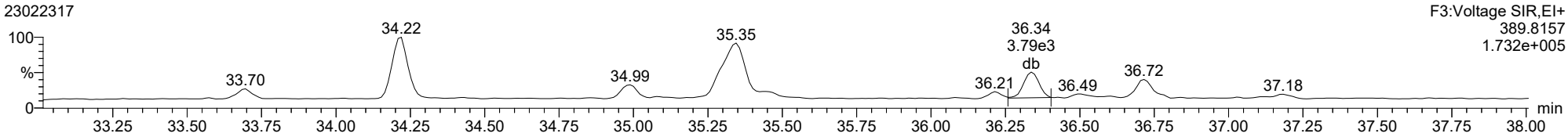

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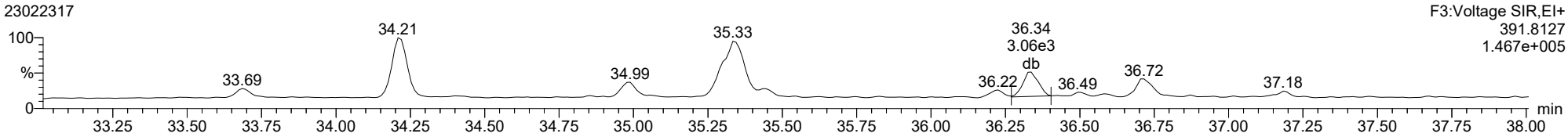

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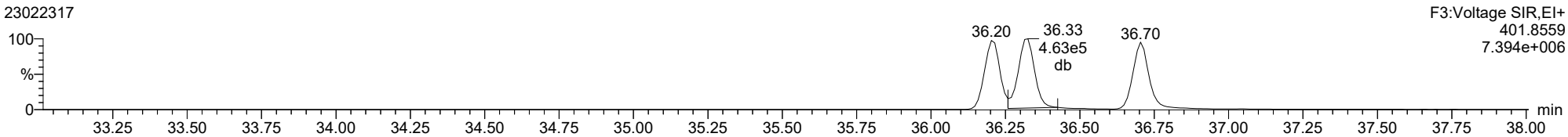

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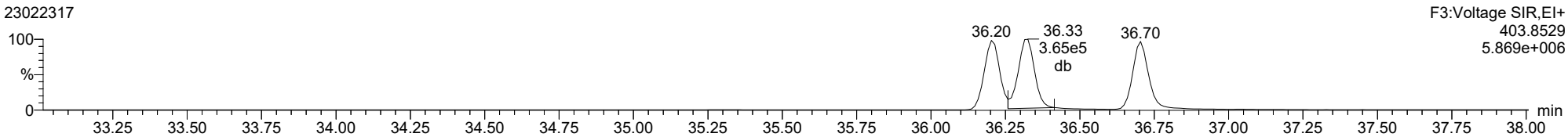

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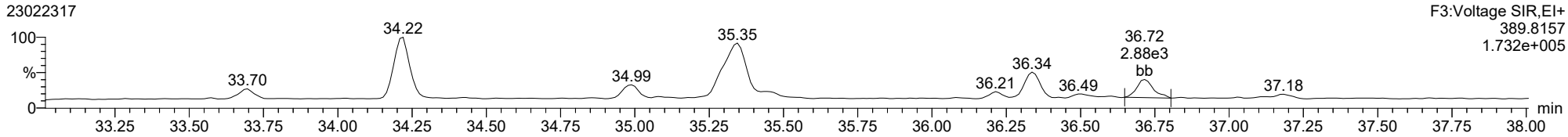

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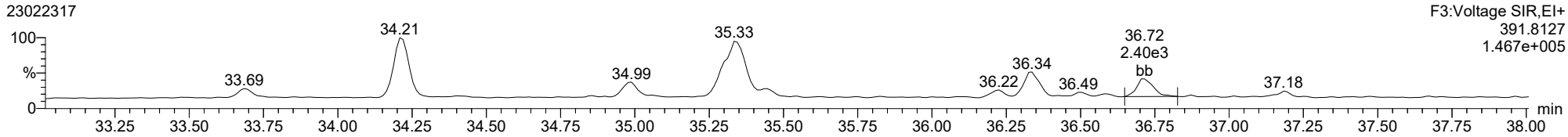

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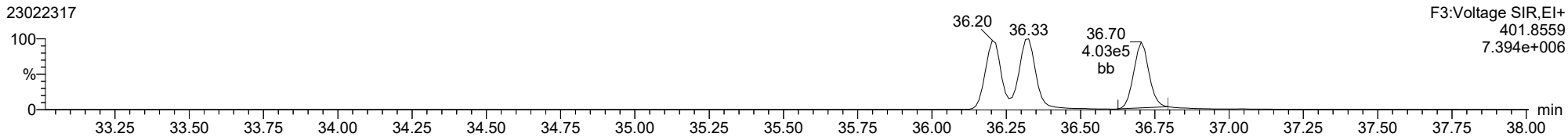

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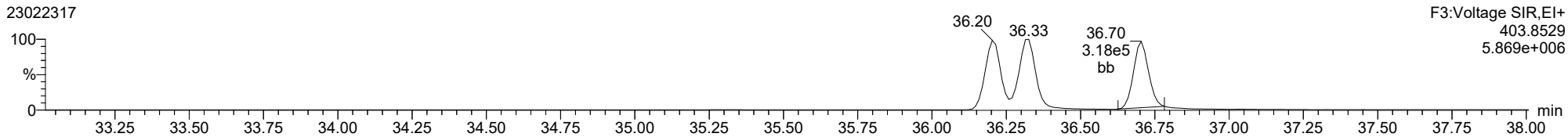

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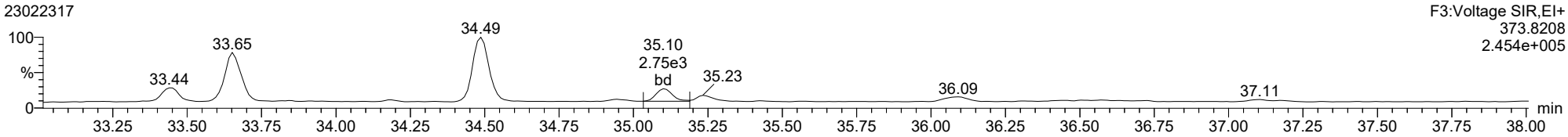

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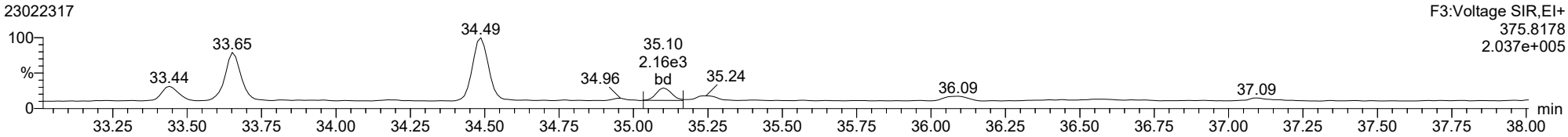

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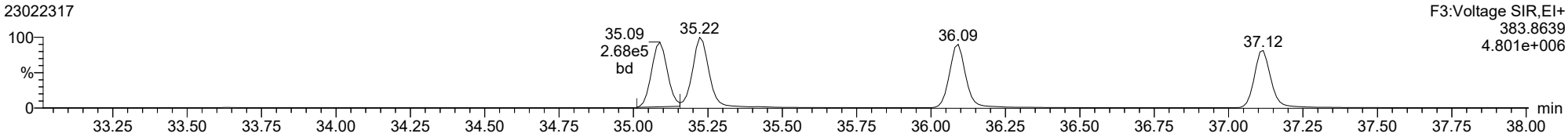

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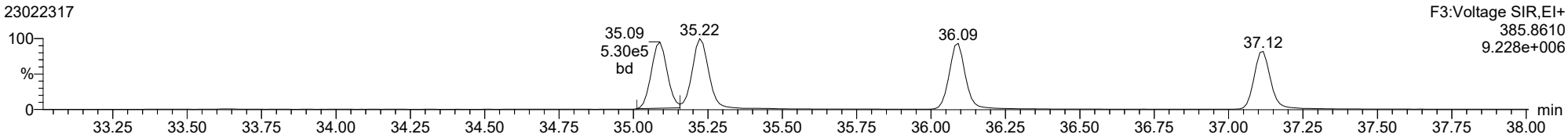

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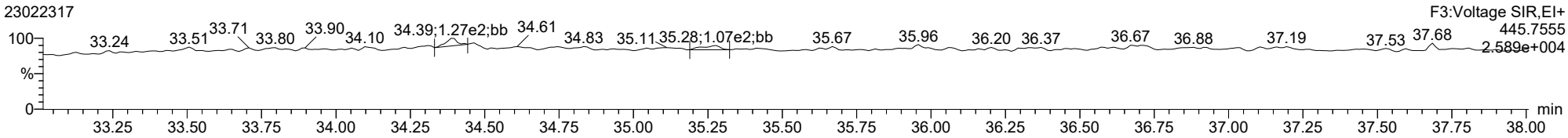

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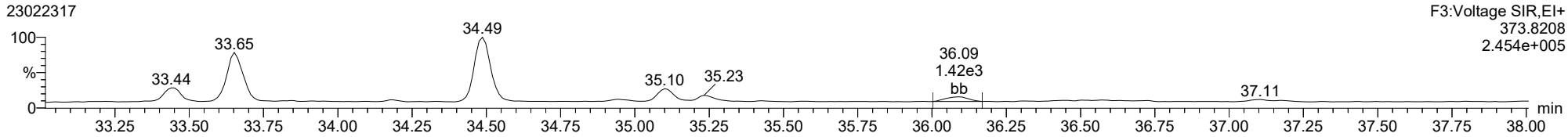

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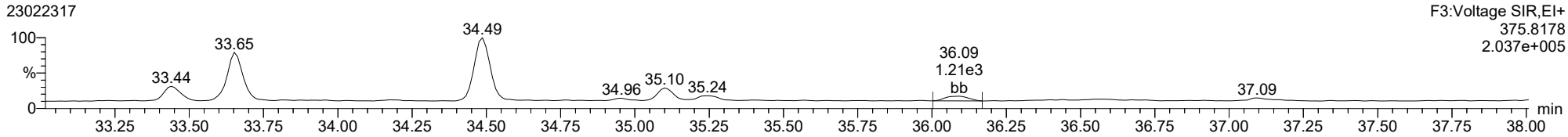

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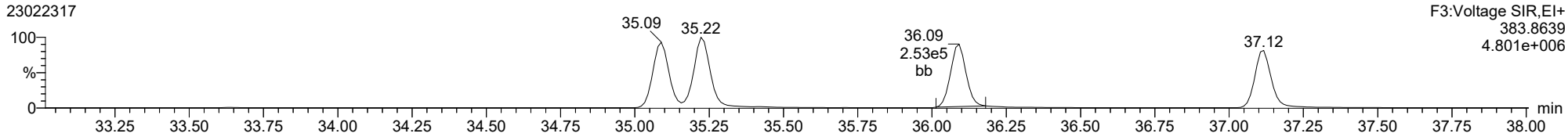

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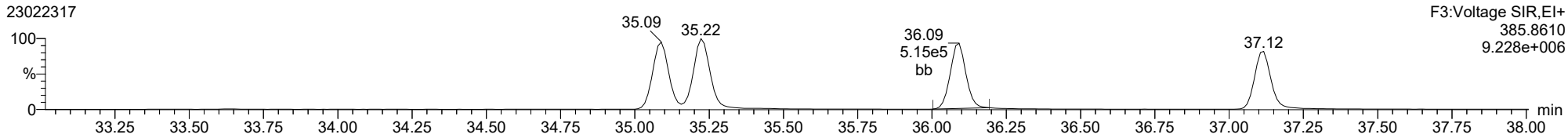

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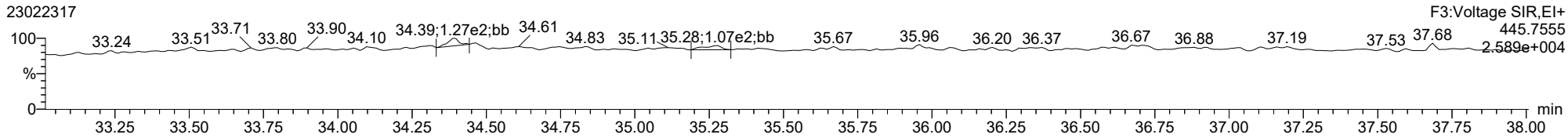

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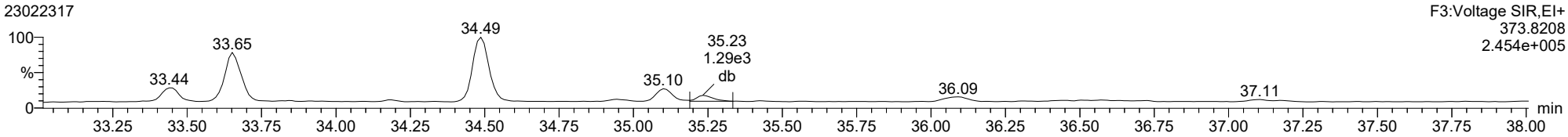

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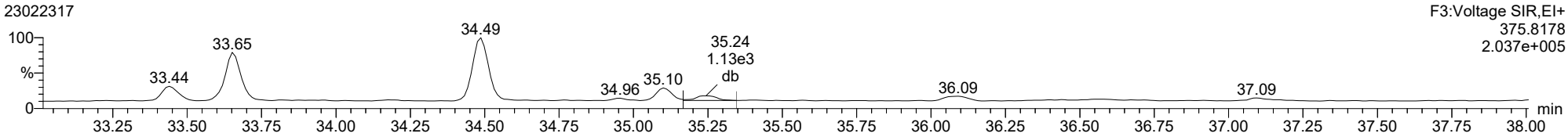

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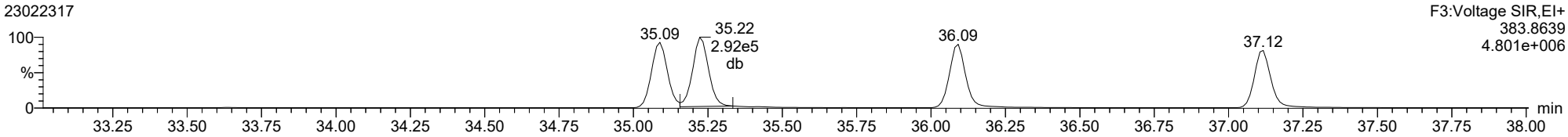

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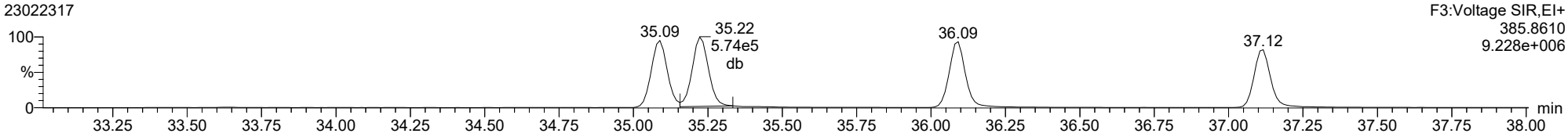

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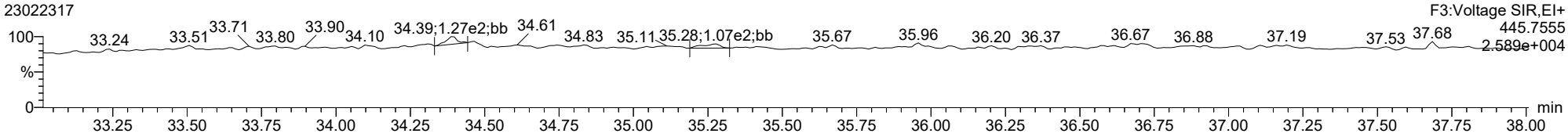

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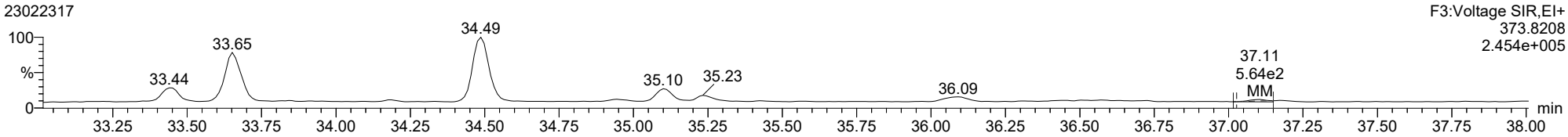

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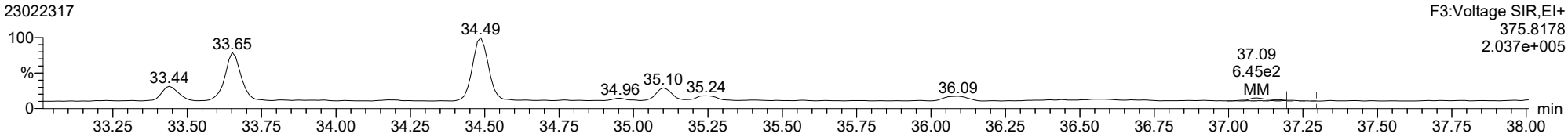

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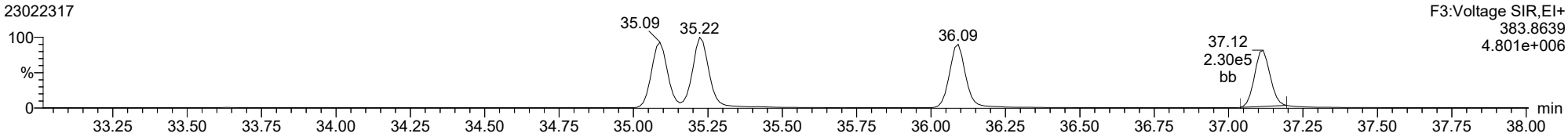

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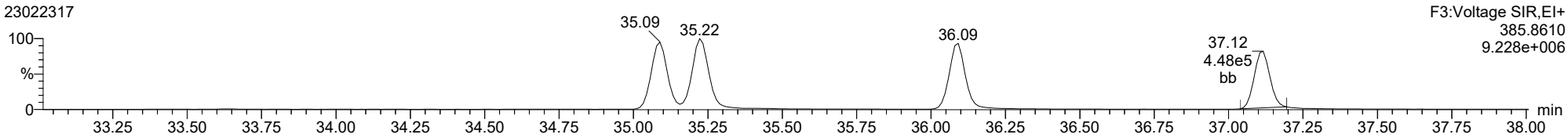

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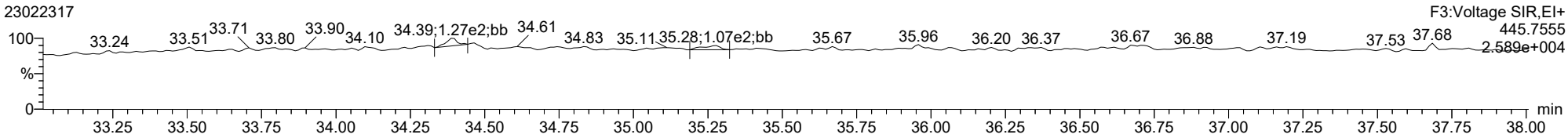

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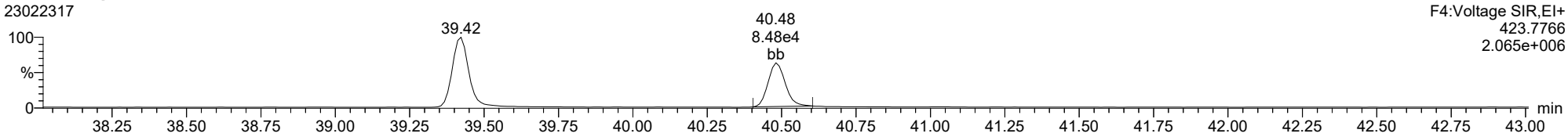

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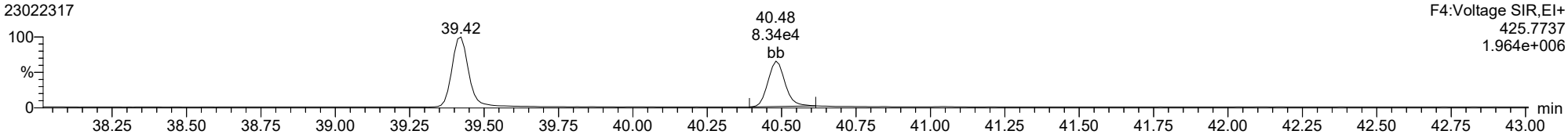

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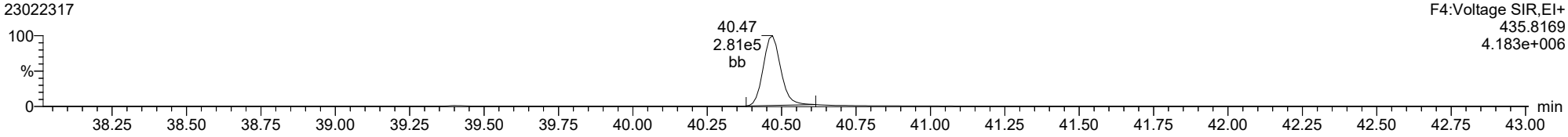

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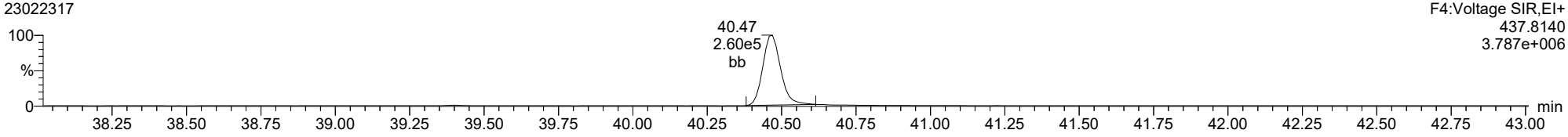

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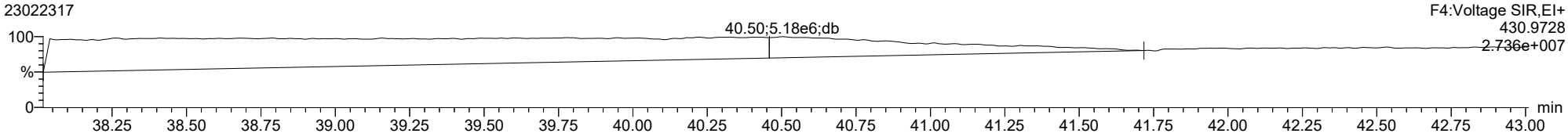

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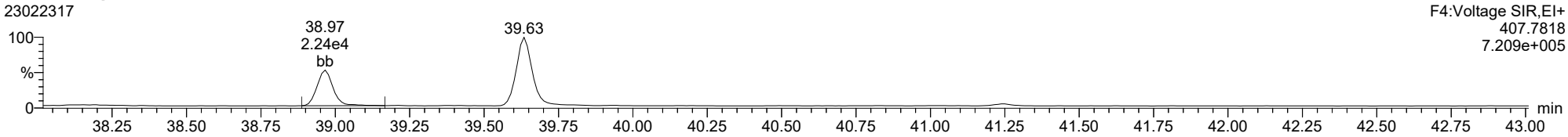

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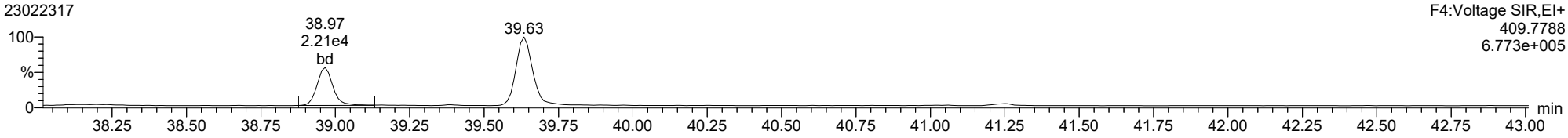

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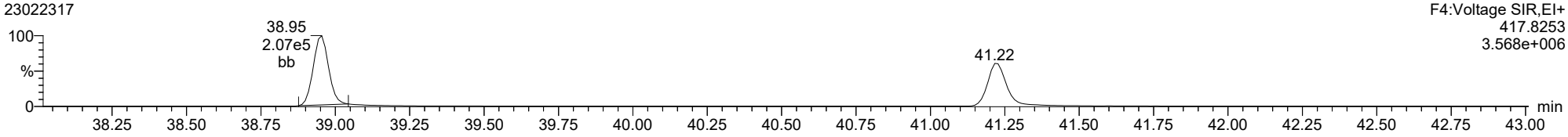

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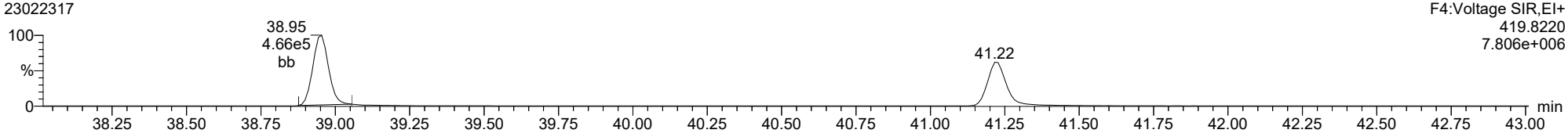

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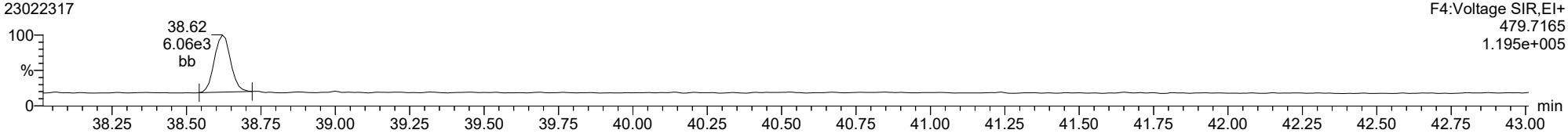

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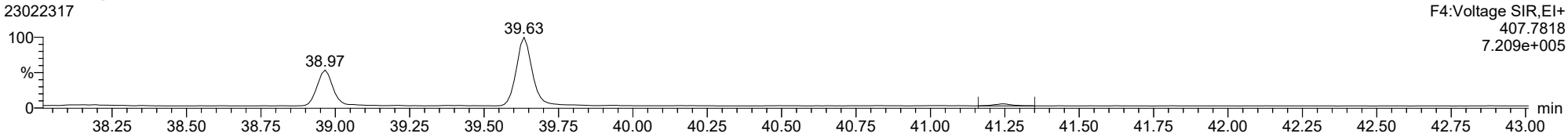

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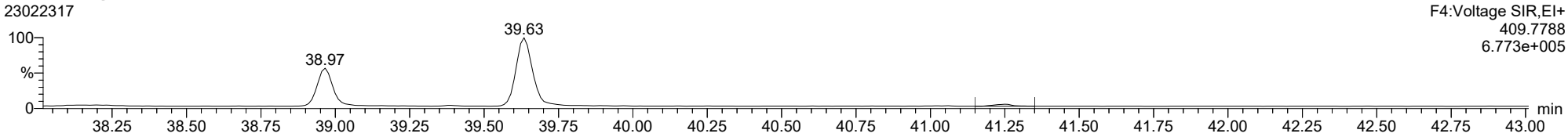

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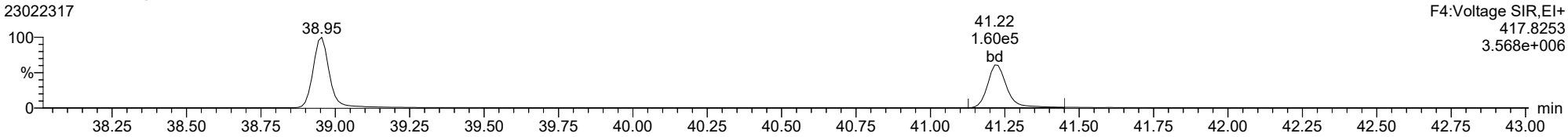

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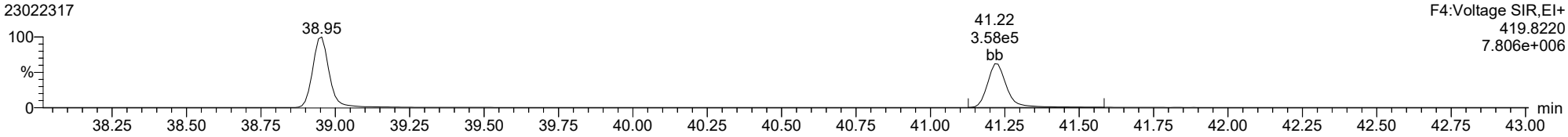

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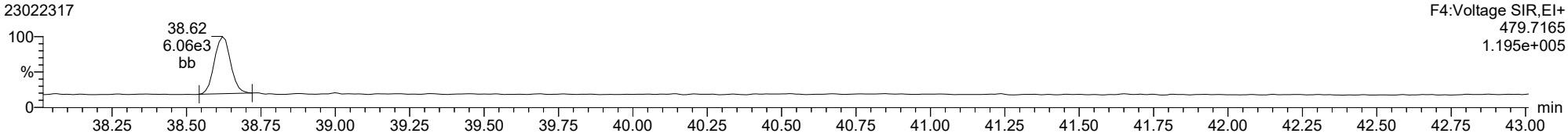

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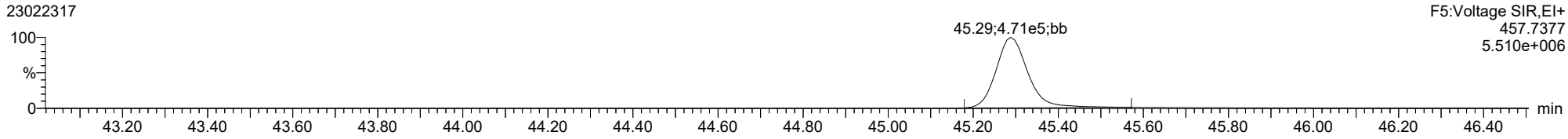

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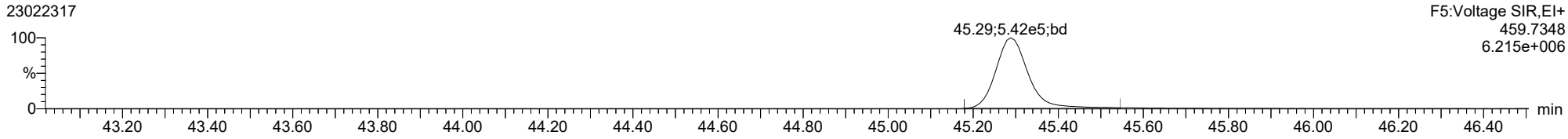

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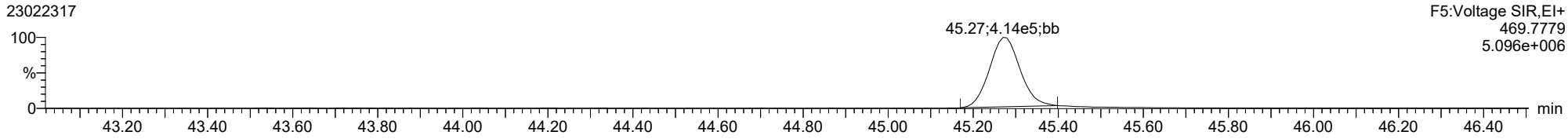

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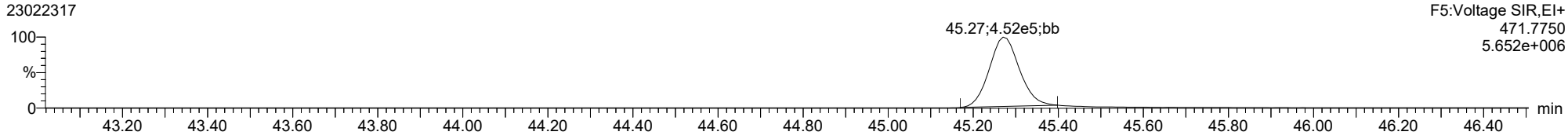

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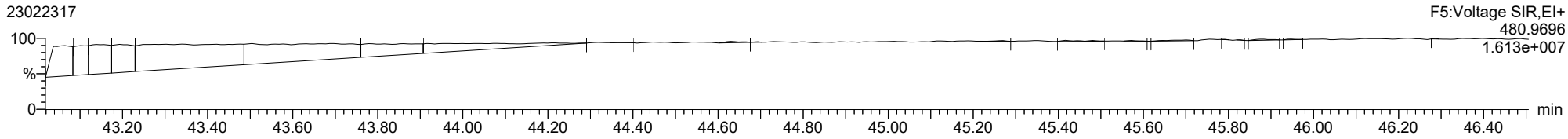

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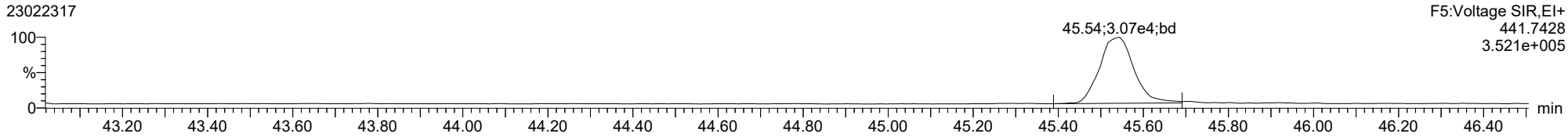
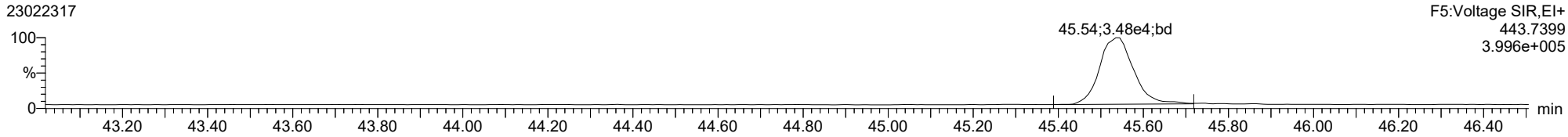
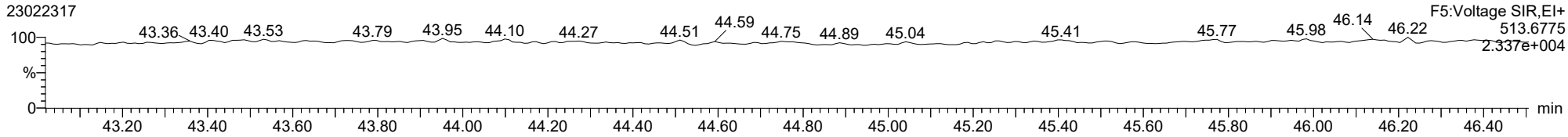
OCDF



OCDF

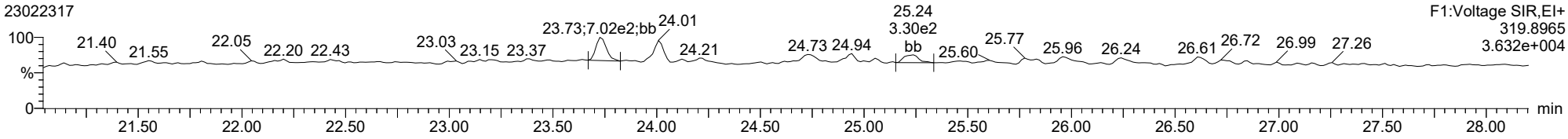


FUNCTION5 DCDPE

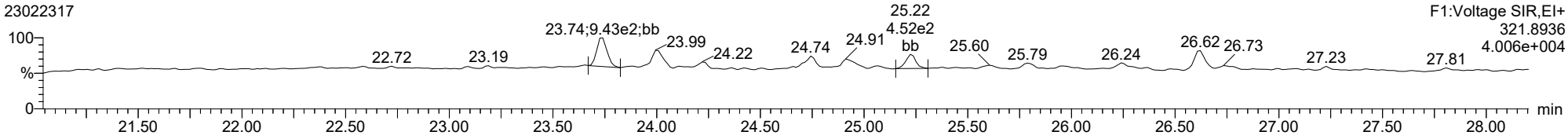


ID: 23A0134-14, Name: 23022317, Date: 23-Feb-2023, Time: 23:25:00, Conditions: AUTOSPEC01, User: pk

Total-tetradioxins



Total-tetradioxins



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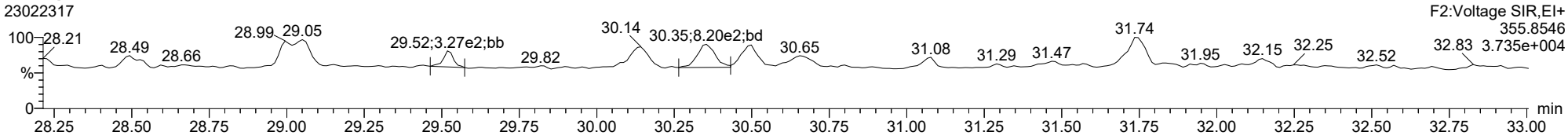
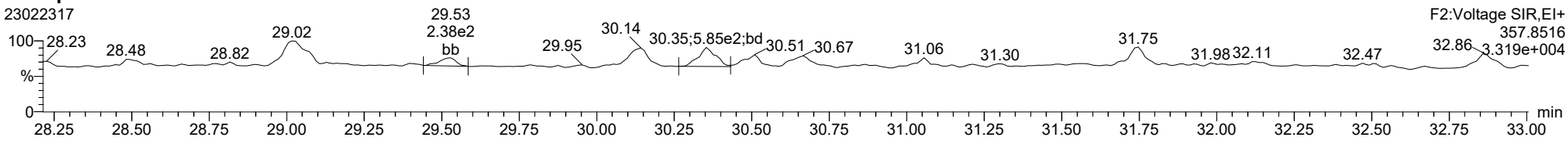
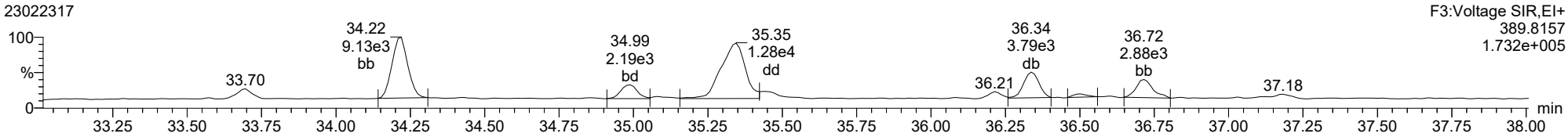


Total-pentadioxins

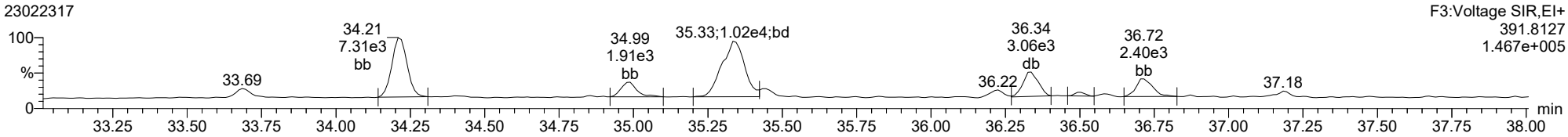


ID: 23A0134-14, Name: 23022317, Date: 23-Feb-2023, Time: 23:25:00, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins



Total-hexadioxins



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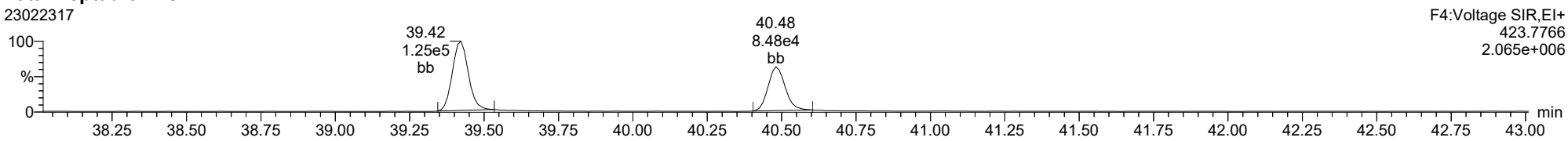
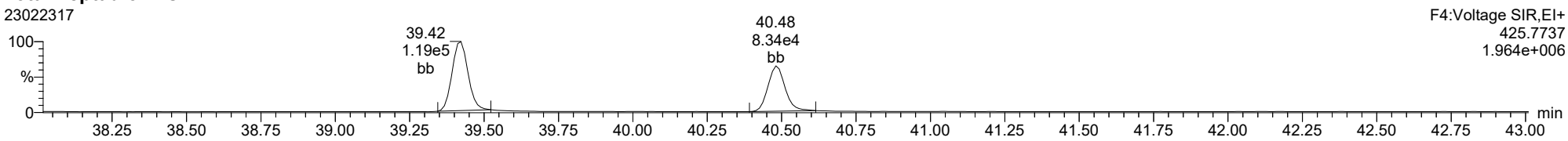
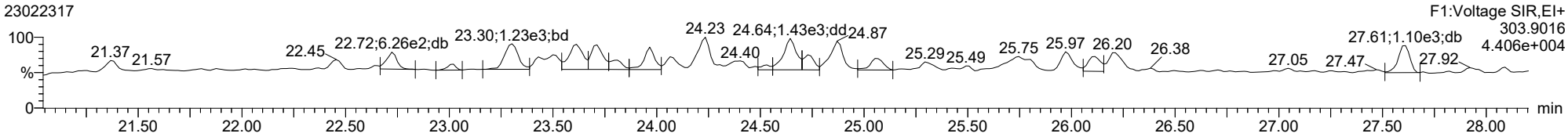


Total-heptadioxins

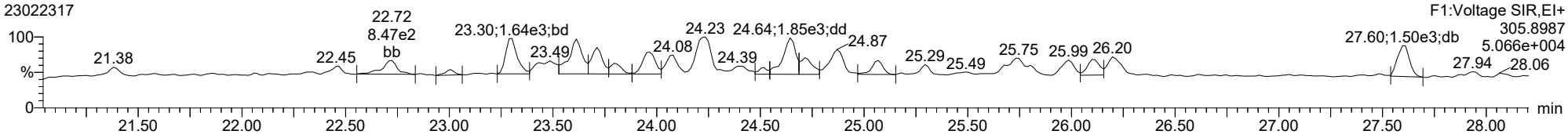


ID: 23A0134-14, Name: 23022317, Date: 23-Feb-2023, Time: 23:25:00, Conditions: AUTOSPEC01, User: pk

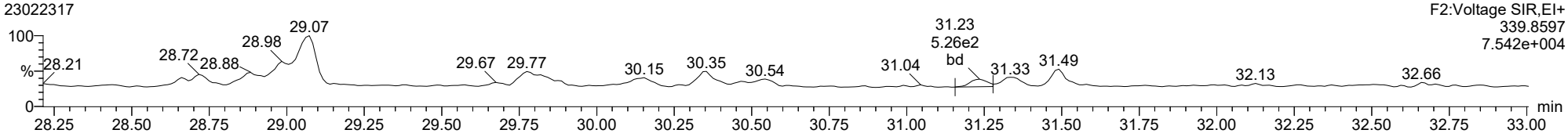
Total-tetrafurans



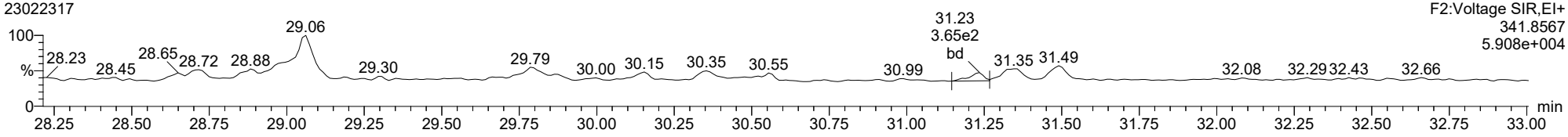
Total-tetrafurans



Total-pentafurans

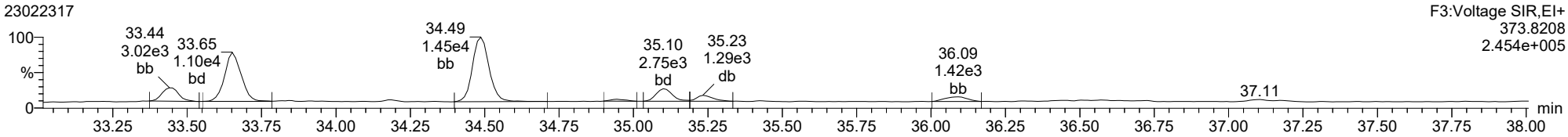


Total-pentafurans

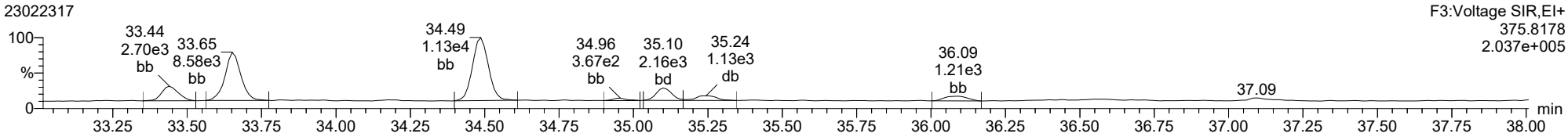


ID: 23A0134-14, Name: 23022317, Date: 23-Feb-2023, Time: 23:25:00, Conditions: AUTOSPEC01, User: pk

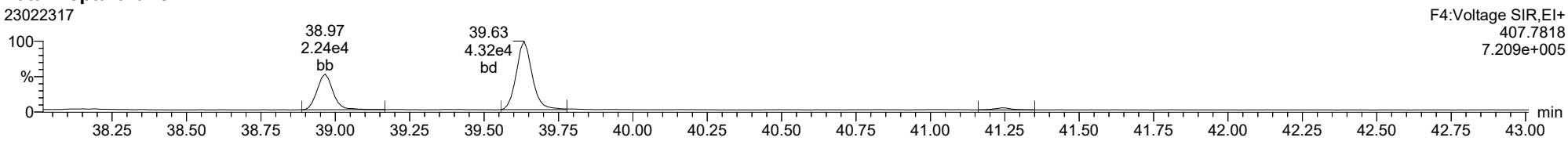
Total-hexafurans



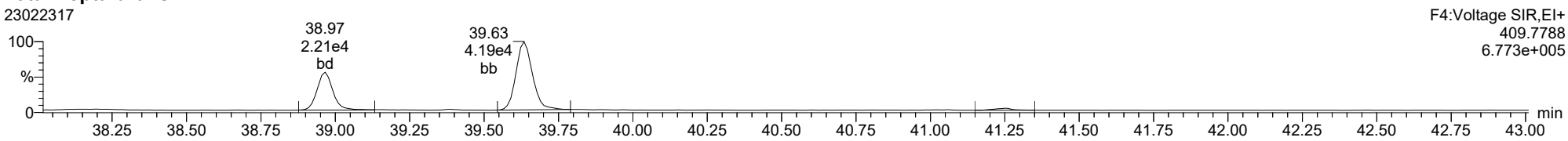
Total-hexafurans



Total-heptafurans



Total-heptafurans



PREPARATION BATCH SUMMARY

EPA 1613B

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Batch: BLA0261 Batch Matrix: Solid Preparation: EPA 1613

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1160	23A0134-06	23022316	01/24/23 13:10	
LDW23-IT1194	23A0134-14	23022317	01/24/23 13:10	
Blank	BLA0261-BLK1	23022304	01/24/23 13:10	
LCS	BLA0261-BS1	23022401	01/24/23 13:10	
Reference	BLA0261-SRM1	23022306	01/24/23 13:10	

Analytical Resources, LLC
Analytical Chemists and Consultants

HRGCMS Dioxin/Furan Preparation Bench Sheet EPA Methods 8290A or 1613B

Batch: BLA0261

Solid Samples

ARI Work Orders: 23A0100,23A0133,23A0134,23A0207

Matrix (circle one)	(Soil)	Sediment	Oil Tissue
Extraction Method	Start Date/Time:	End Date/Time:	
(Soxhlet) SepF Shake out	1/24/23 13:10	1/25/23 0512	

Reagents/Equipment Used	NA	ID / Lot Number	Initials	Date
Glasswool		JQ12850	TW	1/26/23
Basic Silica		KQ02255	TW	1/26/23
Acid Silica		KQ11012	TW	1/26/23
Activated Florisil		KQ05756	TW	1/26/23
Balance		24650344	TW	1/24/23
Toluene		KQ11233	TW	1/24/23
Hexane		KQ08316	TW	1/25/23
CH2Cl2		KQ10561	TW	1/26/23
H2SO4		KQ09796	TW	1/25/23
Na2SO4		LQ00453	TW	1/24/23
Other (RM)		KQ11479	TW	1/24/23
0% Silica		KQ11054	TW	1/26/23
Nonane		HQ06038	TW	1/27/23

Lab Number & Container	Sample Name	% Solids	Sample Weight Equal to dry (g) (Target Dry)	Actual	RotoVap 45 °C	Water Trap Vol (mL)	Final Vol. (uL)
23A0100-09 C	LDW23-SS1226	55.33	(18.07)	18.08	(1)/2	6.5	20
23A0100-21 C	LDW23-SS1154	52.92	(18.90)	18.91	1/(2)	6.5	20
23A0133-06 B	LDW23-SC1241	48.97	(20.42)	20.44	(1)/2	7.0	20
23A0133-07 B	LDW23-IT1217	63.85	(15.66)	15.68	1/(2)	6.0	20
23A0133-10 B	LDW23-SC1215	54.04	(18.51)	18.53	(1)/2	7.0	20
23A0133-11 B	LDW23-SC1222	56.13	(17.82)	17.83	1/(2)	7.5	20
23A0134-06 B	LDW23-SS1160	46.51	(21.50)	21.52	(1)/2	10.0	20
23A0134-14 B	LDW23-IT1194	75.11	(13.31)	13.34	1/(2)	3.0	20
23A0207-02 B	LDW23-IT1089	80.6	(12.41)	12.41	(1)/2	2.0	20
23A0207-10 B	LDW23-IT1097	74.39	(13.44)	13.44	1/(2)	2.5	20
23A0207-17 B	LDW23-IT1209	64.48	(15.51)	15.52	(1)/2	5.5	20
BLA0261-BLK1	Blank	100	()	10.00	(1)/2	0.0	20
BLA0261-BS1	LCS	100	()	10.00	1/(2)	0.0	20
BLA0261-DUP1	Duplicate 23A0100-09C	55.33	(18.07)	18.08	(1)/2	6.5	20
BLA0261-SRM1	Reference	100	()	10.04	1/(2)	0.0	20
Prep Analyst / Date:				1/24/23 TW	1/25/23 TW	1/25/23 TW	

Standards Used	Vol	ID / Lot Number	Concentration	Expiration Date	Analyst	Witness	Date
Recovery Standard	1.0 mL	KQ11158	2/4 ng/mL	12/2/23	TW	M	1/24/23
OPR	1.0 mL	KQ06403	0.2/1.0/2.0 ng/mL	6/3/23	TW	M	1/24/23
~~QLS Standard~~	~~1.0 mL~~		0.1/0.5/0.1ng/mL ng/n				
Cleanu-up Standard	1.0 mL	KQ11157	0.8 ng/mL	12/2/23	TW	M	1/26/23

Verify Client ID

Analyst / Date: TW 1/24/23

Acid Clean (Y) N

Analyst / Date: TW 1/25/23

Silica-Florisil Clean (Y) N

Analyst / Date: TW 1/26/23

Supervisor Review By 2/3/23 Date

Printed: 1/18/2023 5:28:59AM

3083F

TOTAL SOLIDS BENCHSHEET

Method HRSM01.2

(dry at 110 C)

Batch:	BLA0191
Date:	1/11/2023 5:17
Analyst:	TW
Drying Oven:	18
Analytical Balance:	24650344

Instrumentation

Batch drying time

Record times as mm/dd/yy hh:mm

Date/time in oven:	1/10/2023 12:03
Date/time out:	1/11/2023 5:17
Elapsed hrs:	17.2

Oven Temp, C 111

TS (%) calculated as:

Final dry wt (g) = (Dry Wt - Tare Wt)

111 TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)

Oven Temps, °C

Start Temp:	111
End Temp:	111

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0100-09	0.7800	11.1900	6.5400	5.76	**55.33%**	Yes
23A0100-21	0.8100	11.2600	6.3400	5.53	**52.92%**	Yes
23A0133-06	0.8200	11.4800	6.0400	5.22	**48.97%**	Yes
23A0133-07	0.8100	11.3500	7.5400	6.73	**63.85%**	No
23A0133-10	0.8100	11.7100	6.7000	5.89	**54.04%**	Yes
23A0133-11	0.8000	11.3300	6.7100	5.91	**56.13%**	Yes
23A0134-06	0.8100	11.5400	5.8000	4.99	**46.51%**	Yes
23A0134-14	0.7900	11.7600	9.0300	8.24	**75.11%**	Yes

TOTAL SOLIDS BENCHSHEET

Method HRSM01.2

(dry at 110 C)

Instrumentation

Batch:	BLA0191
Date:	1/11/23 ϕ517
Analyst:	TW
Drying Oven:	ϕ18
Analytical Balance:	24650344

Batch drying time

Record times as mm/dd/yy hh:mm

Date/time in oven:	ϕ1/10/23	12:03
Date/time out:	1/11/23	~~ϕ7 0517~~ 1/11/23
Elapsed hrs:	0.0	

Oven Temp, C: 111

TS (%) calculated as:

Final dry wt (g) = (Dry Wt - Tare Wt)

TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)

Oven Temps, °C

Start Temp:	111
End Temp:	111

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0100-09 C	ϕ.78	11.19	6.54			No ~~Yes~~
23A0100-21 C	ϕ.81	11.26	6.34			No ~~Yes~~
23A0133-06 B	ϕ.82	11.48	6.64			No ~~Yes~~
23A0133-07	ϕ.81	11.35	7.54			No
23A0133-10	ϕ.81	11.71	6.76			No ~~Yes~~
23A0133-11	ϕ.80	11.33	6.71			No ~~Yes~~
23A0134-06	ϕ.81	11.54	≤ 8ϕ			No ~~Yes~~
23A0134-14	0.79	11.76	9.ϕ3			No ~~Yes~~

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

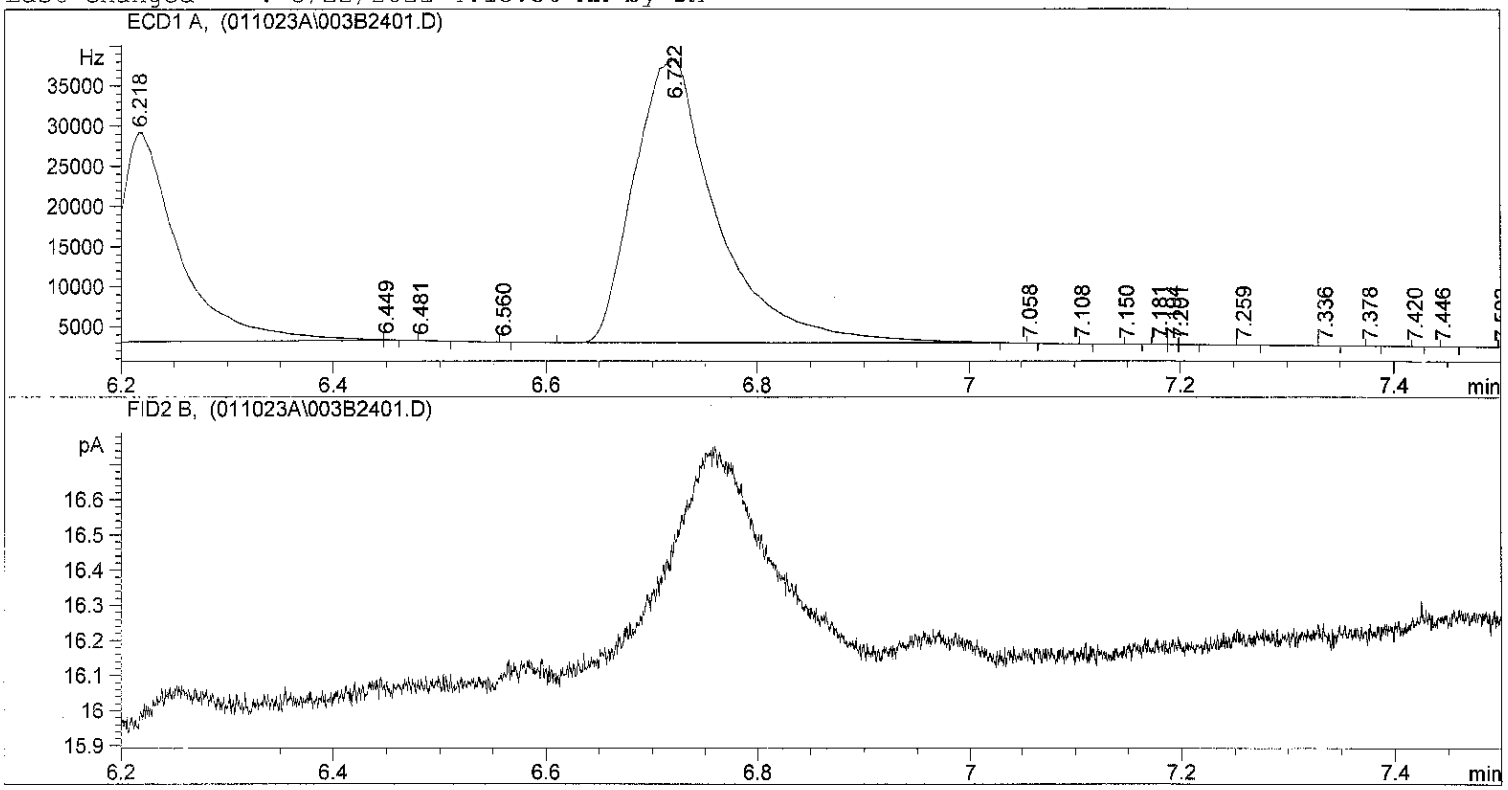
Extraction Parameter: DIOXIN Extraction Batch: ~~BLA0191~~ M1/7123

Total Solids Batch: BLA0191 Work Order(s): 23A0100, 133, 134

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☑ Standing Water Decanted (Not shared)= 100-9, 21, 133-06, 10, 11, 134-06, 14	TW 1/10/23
☐ Standing Water Homogenized (Shared samples)=	
☑ Clay/Clumps (Difficult to homogenize)= 100-9, 21, 133-06, 07, 10, 11, 134-06, 14	TW 1/10/23
☐ Rocks (%+size)?	
☑ Organics (Leaves/sticks/grass)= 100-9, 21, 134-06, 14 = roots, fine organics	TW 1/10/23
☑ Oily, obvious fuel/sulfur odors= 100-9, 21, 133-06, 10, 11, 134-06	TW 1/10/23
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☐ Share Samples Y / N	
☐ Multiple Jars Y / N	
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Injection Date : 1/10/2023 4:40:07 PM Seq. Line : 24
Sample Name : CS4 STD Location : Vial 3
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\011023A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.421	BP	0.0214	60.18620	33.77775	0.00409
2	5.532	VV S	0.0361	2.70709e5	1.02255e5	18.37671
3	5.628	VV S	0.0496	3.98342e5	1.33767e5	27.04087
4	5.690	VV S	0.0426	1.33533e5	5.22753e4	9.06473
5	5.745	VV S	0.0690	1.57568e5	3.80741e4	10.69628
6	5.985	VV S	0.0500	1.32034e5	4.40027e4	8.96293
7	6.140	VV S	0.0497	8.33965e4	2.79654e4	5.66125
8	6.218	VV S	0.0661	1.03474e5	2.60769e4	7.02420
9	6.449	VB S	6.46e-3	31.36730	80.95958	0.00213
10	6.481	BP	0.0132	20.37583	19.20737	0.00138
11	6.560	PB	3.76e-3	4.52826	16.71346	0.00031
12	6.722	PB S	0.0645	1.93644e5	3.53576e4	13.14523
13	7.058	PP	2.73e-3	2.51149	13.74796	0.00017
14	7.108	BP	4.18e-3	6.59377	21.50872	0.00045
15	7.150	PP	3.03e-3	3.70290	16.39653	0.00025
16	7.181	BP	5.11e-3	6.43688	19.23071	0.00044
17	7.194	VV	5.57e-3	7.11942	18.17810	0.00048

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	7.201	VP	6.94e-3	11.85726	22.51980	0.00080
19	7.259	PB	7.01e-3	3.54180	6.65123	0.00024
20	7.336	PB	0.0000	3.21669	1.35458e-1	0.00022
21	7.378	PB	2.66e-3	1.77213	10.04074	0.00012
22	7.420	BP	4.71e-3	3.31404	10.65795	0.00022
23	7.446	BP	3.87e-3	3.18037	11.34503	0.00022
24	7.502	BP	0.0000	6.46398e-1	3.55019	4.388e-5
25	7.539	BP	6.52e-3	3.48247	7.10520	0.00024
26	7.600	PP	1.88e-3	1.64885	14.97418	0.00011
27	7.612	VV	6.47e-3	6.67334	16.66188	0.00045
28	7.664	VP	0.0287	227.25983	94.45261	0.01543
Totals :				1.47311e6	4.60212e5	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

```
Injection Date  : 1/10/2023 5:13:27 PM          Seq. Line :  27
Sample Name     : 23A0100 09                    Location : Vial 20
Acq. Operator   : TW                               Inj :   1
                                                Inj Volume : 1 µl
Sequence File   : C:\HPCHEM\2\SEQUENCE\011023A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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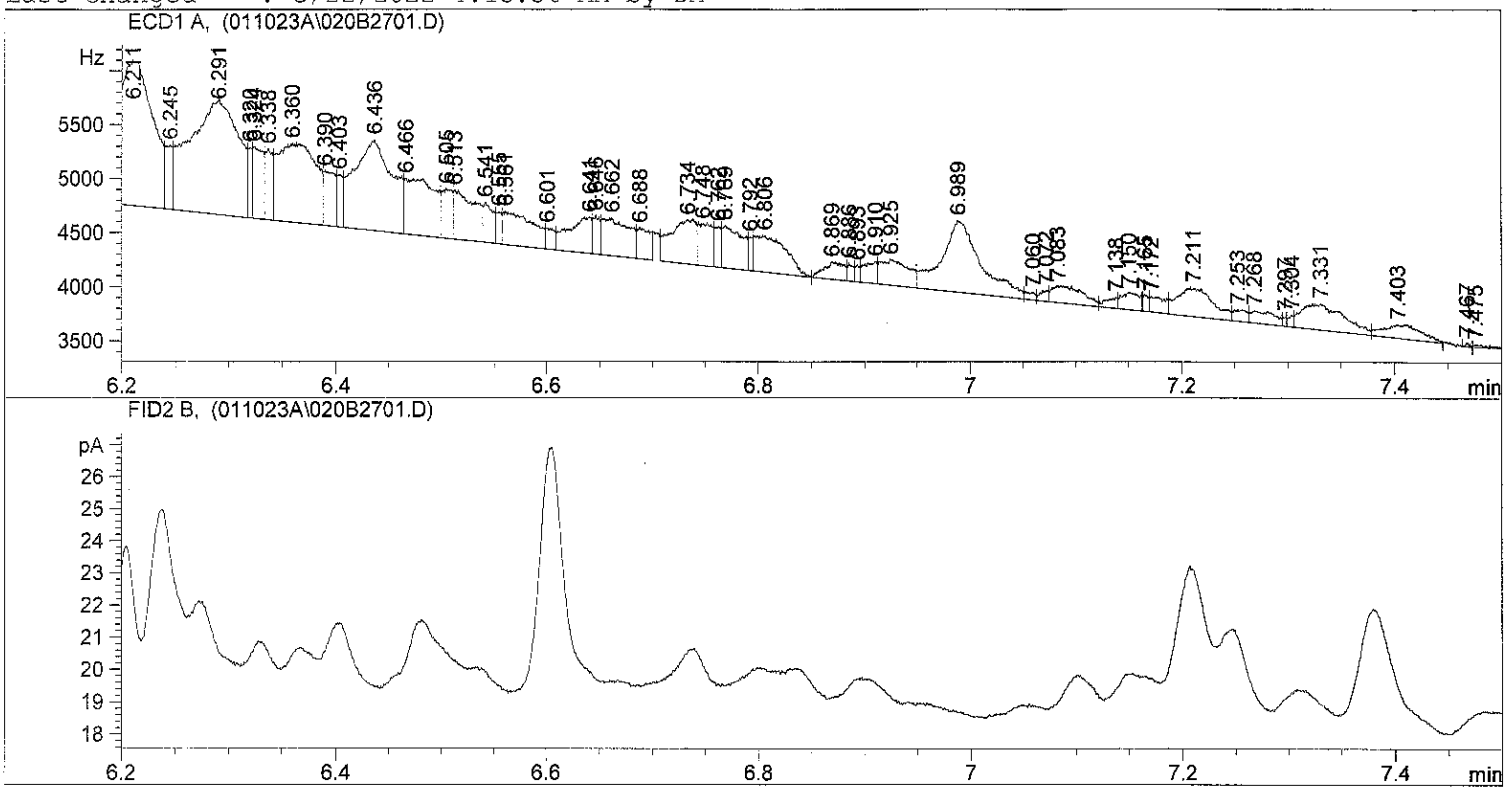


Area Percent Report

```
Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
```

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.252	BV	0.0167	681.04175	487.32443	0.88730
2	5.261	VV	2.56e-3	88.70521	478.44360	0.11557
3	5.267	VV	0.0146	521.08209	461.81567	0.67890
4	5.298	VV	2.53e-3	13.47287	81.40771	0.01755
5	5.308	VV	0.0158	196.70804	150.98076	0.25628
6	5.340	VP	0.0108	94.06686	107.72036	0.12256
7	5.384	VV	0.0135	598.53204	541.84515	0.77980
8	5.410	VV	0.0241	1571.28320	801.19409	2.04716
9	5.449	VV	0.0200	2329.92676	1530.59985	3.03557
10	5.478	VV	0.0200	1847.49304	1172.36353	2.40703
11	5.514	VV	0.0273	2312.78223	1034.80603	3.01323
12	5.563	VV	3.08e-3	67.54485	317.52121	0.08800
13	5.587	VV	0.0130	822.40424	809.80719	1.07148
14	5.592	VV	6.25e-3	307.23917	818.93884	0.40029
15	5.600	VV	0.0124	801.43048	793.49200	1.04415
16	5.632	VV	0.0165	1255.04175	967.85748	1.63514
17	5.647	VV	0.0214	1717.62439	970.91089	2.23783

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.696	VV	0.0320	4848.03955	1836.49878	6.31632
19	5.759	VV	0.0245	4297.96045	2133.15820	5.59964
20	5.797	VV	0.0161	1344.94214	1055.25891	1.75227
21	5.817	VV	0.0234	3069.57666	1596.43762	3.99923
22	5.873	VV	0.0295	4865.64355	1961.88428	6.33926
23	5.911	VV	5.25e-3	395.38229	992.95477	0.51513
24	5.940	VV	0.0322	4005.26855	1480.89417	5.21831
25	5.972	VV	4.45e-3	391.97562	1130.10999	0.51069
26	5.983	VV	0.0102	944.49078	1199.73108	1.23054
27	6.010	VV	0.0239	2866.95020	1459.42529	3.73524
28	6.047	VV	0.0319	4593.51611	1702.87634	5.98471
29	6.088	VV	0.0126	903.66907	895.89905	1.17736
30	6.113	VV	8.59e-3	556.07532	812.20221	0.72449
31	6.118	VV	3.87e-3	228.79079	816.56281	0.29808
32	6.131	VV	0.0214	1488.48242	875.47430	1.93929
33	6.168	VV	0.0118	760.10773	803.76306	0.99031
34	6.174	VV	5.42e-3	319.94012	808.19312	0.41684
35	6.211	VV	0.0329	3767.90894	1352.02966	4.90906
36	6.245	VV	6.10e-3	280.49030	595.37469	0.36544
37	6.291	VV	0.0380	3384.92773	1060.92749	4.41009
38	6.320	VV	3.61e-3	155.73657	649.38007	0.20290
39	6.324	VV	8.65e-3	444.36484	660.38025	0.57895
40	6.338	VV	6.18e-3	312.99323	654.38605	0.40779
41	6.360	VV	0.0292	1770.55566	728.37500	2.30679
42	6.390	VV	9.32e-3	374.02289	500.61328	0.48730
43	6.403	VV	5.44e-3	192.59837	483.85846	0.25093
44	6.436	VV	0.0298	2101.85596	839.43127	2.73843
45	6.466	VV	0.0232	994.48676	513.22430	1.29568
46	6.505	VV	8.52e-3	316.14075	454.26230	0.41189
47	6.513	VB	0.0170	635.41992	450.68619	0.82786
48	6.541	BV	8.13e-3	244.37936	368.99796	0.31839
49	6.555	VV	4.65e-3	97.87543	296.58463	0.12752
50	6.561	VV	0.0341	625.73700	305.55957	0.81525
51	6.601	VV	6.96e-3	109.39624	194.67686	0.14253
52	6.641	VV	0.0179	488.19360	333.76514	0.63605
53	6.646	VV	7.54e-3	159.21011	351.75204	0.20743
54	6.662	VV	0.0225	613.07050	348.54056	0.79875
55	6.688	VB	0.0144	243.13919	282.13303	0.31678
56	6.734	BV	0.0205	693.62860	405.77200	0.90370
57	6.748	VV	0.0116	355.22034	384.80527	0.46280
58	6.762	VV	6.47e-3	146.10582	376.22815	0.19036
59	6.769	VV	0.0159	510.58475	389.53198	0.66522
60	6.792	VV	3.92e-3	82.98141	310.75638	0.10811
61	6.806	VP	0.0247	698.00122	337.89227	0.90940
62	6.869	VV	0.0160	205.54623	155.98642	0.26780
63	6.886	VV	4.93e-3	62.72736	161.46371	0.08173
64	6.893	VV	3.95e-3	43.46125	151.39304	0.05662
65	6.910	VV	0.0105	173.21948	205.16260	0.22568
66	6.925	VV	0.0221	436.24203	235.02486	0.56836
67	6.989	VV	0.0307	1711.47437	658.81812	2.22981
68	7.060	VV	8.61e-3	43.16754	66.21706	0.05624
69	7.072	VV	7.23e-3	52.80255	99.04352	0.06879
70	7.083	VV	0.0248	318.34476	152.32964	0.41476
71	7.138	VV	8.96e-3	73.50501	102.59936	0.09577
72	7.150	VV	0.0148	183.70160	155.28217	0.23934
73	7.165	VV	4.71e-3	52.88215	150.18152	0.06890
74	7.172	VB	0.0122	139.58995	140.10622	0.18187
75	7.211	BV	0.0300	617.22235	260.95901	0.80415
76	7.253	VV	0.0112	97.13154	107.07098	0.12655
77	7.268	VV	0.0199	181.16748	109.40671	0.23604
78	7.297	VV	3.38e-3	18.65541	84.32295	0.02431
79	7.304	VV	4.28e-3	35.15025	111.36844	0.04580
80	7.331	VV	0.0328	665.65851	239.92424	0.86726
81	7.403	VP	0.0307	312.34064	122.83429	0.40694
82	7.467	PP	3.43e-3	8.96816	36.91663	0.01168

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.475	VB	0.0109	21.34477	24.20552	0.02781
84	7.520	PV	3.27e-3	5.67376	26.81939	0.00739
85	7.526	VP	4.01e-3	7.14111	24.45399	0.00930
86	7.611	PV	9.78e-3	82.02930	106.59660	0.10687
87	7.626	VV	0.0213	247.40669	138.30247	0.32234
88	7.657	VB	5.14e-3	17.45796	44.82317	0.02275
89	7.699	BB	8.16e-3	15.09860	23.94218	0.01967
90	7.720	BP	4.94e-3	9.17297	23.59593	0.01195
91	7.726	VB	7.23e-3	9.66963	16.51853	0.01260
Totals :				7.67542e4	5.06539e4	

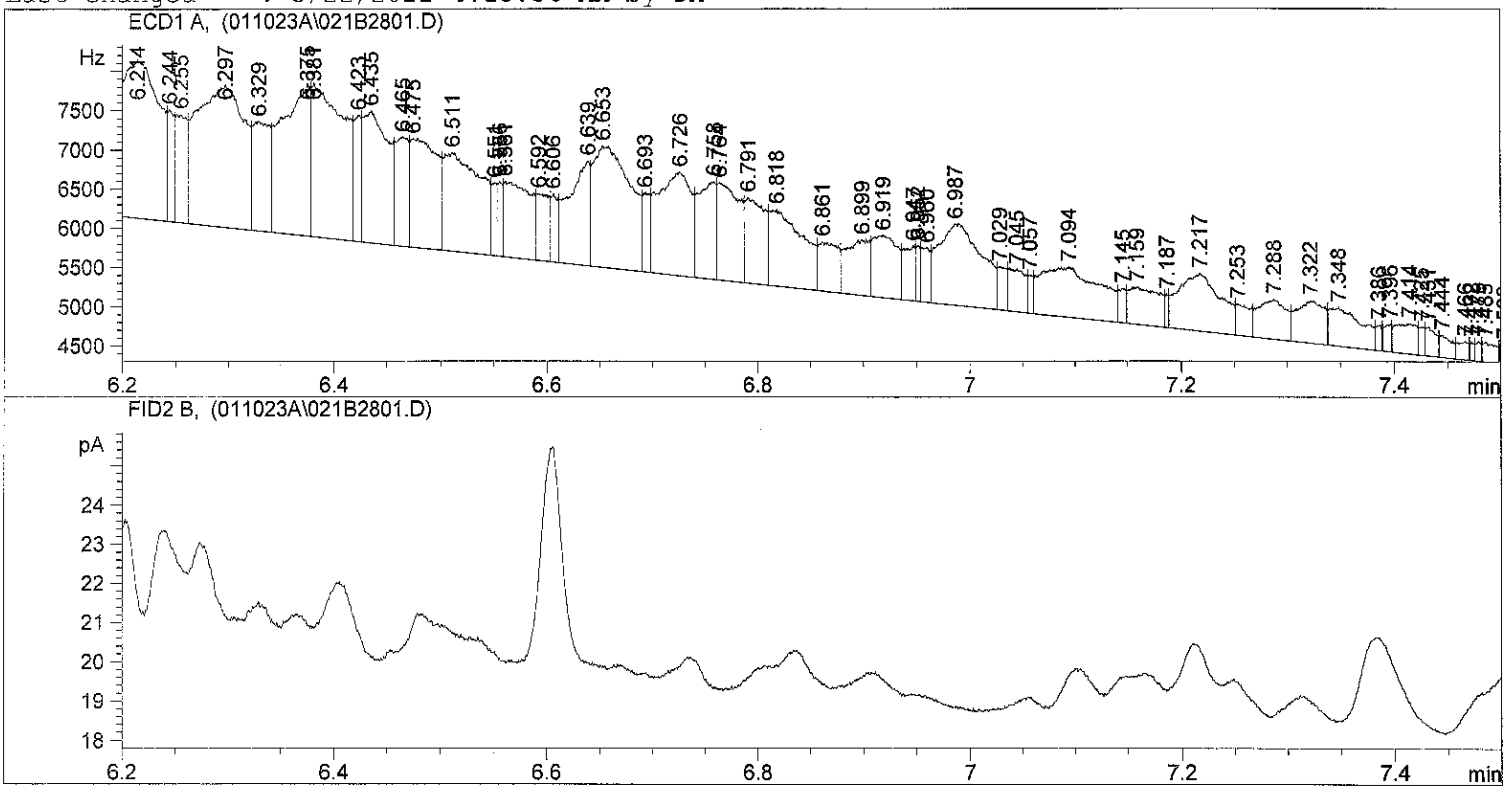
Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

Injection Date : 1/10/2023 5:24:27 PM Seq. Line : 28
Sample Name : 23A0100 21 Location : Vial 21
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\011023A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.238	BP	0.0222	1873.94849	1023.81146	1.16809
2	5.288	VV	3.95e-3	19.19676	63.13660	0.01197
3	5.296	VV	7.91e-3	86.04298	141.14536	0.05363
4	5.317	VP	9.59e-3	112.03368	152.12117	0.06983
5	5.345	VV	9.78e-3	114.70499	152.39954	0.07150
6	5.381	VV	0.0151	1232.81934	995.21521	0.76846
7	5.390	VV	4.82e-3	349.34677	964.95587	0.21776
8	5.400	VV	8.09e-3	693.33710	1079.49719	0.43218
9	5.408	VV	0.0131	1115.01050	1053.63757	0.69502
10	5.449	VV	0.0189	2422.72852	1525.24463	1.51017
11	5.481	VV	0.0189	2913.97070	1918.37378	1.81637
12	5.502	VV	3.13e-3	251.95189	1161.62146	0.15705
13	5.516	VV	0.0179	1959.67212	1352.76660	1.22153
14	5.539	VV	6.69e-3	329.30508	725.71710	0.20527
15	5.582	VV	0.0365	4752.43066	1545.66772	2.96235
16	5.629	VV	0.0314	5961.51416	2244.47461	3.71601
17	5.697	VV	0.0326	8780.02832	3201.89062	5.47288

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.758	VV	0.0281	5619.84277	2421.97974	3.50303
19	5.784	VV	6.49e-3	688.45410	1519.42773	0.42914
20	5.790	VV	8.60e-3	1000.09570	1495.74207	0.62339
21	5.821	VV	0.0274	5109.61768	2276.81567	3.18499
22	5.873	VV	0.0311	8019.85742	3044.55811	4.99904
23	5.905	VV	0.0130	1632.95251	2089.53662	1.01787
24	5.939	VV	0.0301	6268.51465	2477.22729	3.90737
25	5.988	VV	0.0216	4133.97754	2314.30933	2.57684
26	6.008	VV	0.0214	4316.89795	2421.58569	2.69086
27	6.039	VV	0.0300	5967.78271	2356.10742	3.71991
28	6.083	VV	9.44e-3	1305.86133	1722.46863	0.81399
29	6.087	VV	8.89e-3	922.69775	1729.13098	0.57515
30	6.100	VV	6.64e-3	876.61664	1813.30554	0.54642
31	6.113	VV	0.0316	5219.25293	1977.14124	3.25333
32	6.173	VV	0.0235	3096.48853	1636.68433	1.93014
33	6.187	VV	5.42e-3	637.15515	1607.51184	0.39716
34	6.214	VV	0.0313	5319.37500	2011.35535	3.31574
35	6.244	VV	6.06e-3	618.41577	1426.08020	0.38548
36	6.255	VV	9.48e-3	1048.75403	1377.87781	0.65372
37	6.297	VV	0.0366	5527.58789	1811.88660	3.44553
38	6.329	VV	0.0138	1552.09827	1392.34180	0.96747
39	6.375	VV	0.0222	3594.82666	1938.20715	2.24077
40	6.381	VV	0.0343	4014.51733	1951.26282	2.50238
41	6.423	VV	6.50e-3	756.05347	1604.36694	0.47127
42	6.435	VV	0.0203	2784.45972	1680.17590	1.73564
43	6.465	VV	0.0113	1198.83667	1387.90466	0.74727
44	6.475	VV	0.0207	2342.39624	1383.81445	1.46009
45	6.511	VV	0.0287	3026.01025	1257.35400	1.88621
46	6.551	VV	4.38e-3	300.25977	927.21338	0.18716
47	6.556	VV	4.91e-3	318.37289	949.10645	0.19845
48	6.561	VV	0.0205	1634.97510	960.47595	1.01913
49	6.592	VV	0.0104	688.93097	853.01038	0.42943
50	6.606	VV	6.00e-3	413.37646	861.76306	0.25767
51	6.639	VV	0.0169	1821.64490	1336.12585	1.13549
52	6.653	VV	0.0293	3805.98804	1545.25146	2.37240
53	6.693	VV	6.59e-3	496.98312	1001.11224	0.30979
54	6.726	VV	0.0260	2869.26880	1317.38000	1.78851
55	6.758	VV	0.0147	1448.13623	1251.60693	0.90267
56	6.764	VV	0.0169	1745.99573	1236.88794	1.08834
57	6.791	VV	0.0156	1396.86914	1088.06238	0.87071
58	6.818	VV	0.0272	2173.83618	975.48615	1.35502
59	6.861	VV	0.0157	775.09570	624.93512	0.48314
60	6.899	VV	0.0187	1077.43750	705.58179	0.67160
61	6.919	VV	0.0208	1282.38708	789.22302	0.79935
62	6.947	VV	9.19e-3	513.14740	696.68005	0.31986
63	6.952	VV	4.60e-3	232.76831	713.87085	0.14509
64	6.960	VV	7.16e-3	389.49902	692.25873	0.24279
65	6.987	VV	0.0343	2956.24951	1028.31250	1.84273
66	7.029	VB	7.33e-3	308.51691	551.51343	0.19231
67	7.045	BV	0.0136	600.00842	536.74084	0.37400
68	7.057	VV	4.63e-3	167.20189	483.55469	0.10422
69	7.094	VV	0.0455	2454.65234	634.93262	1.53006
70	7.145	VV	6.94e-3	222.59998	436.89816	0.13875
71	7.159	VV	0.0236	942.92187	473.32614	0.58775
72	7.187	VV	3.17e-3	100.52439	423.55707	0.06266
73	7.217	VV	0.0325	2001.69775	732.50909	1.24772
74	7.253	VV	0.0117	379.52219	397.50311	0.23657
75	7.288	VV	0.0213	906.55280	511.14642	0.56508
76	7.322	VV	0.0225	978.78406	541.30365	0.61011
77	7.348	VV	0.0260	1052.55322	494.45645	0.65609
78	7.386	VV	5.55e-3	118.98990	319.45078	0.07417
79	7.396	VV	6.77e-3	161.55260	350.98413	0.10070
80	7.414	VV	0.0171	532.12708	385.80386	0.33169
81	7.425	VV	4.51e-3	127.93536	363.13388	0.07975
82	7.431	VV	8.33e-3	244.62889	369.17621	0.15249

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.444	VV	0.0104	227.45105	276.14926	0.14178
84	7.466	VV	9.18e-3	170.74687	232.17390	0.10643
85	7.472	VV	3.89e-3	65.98145	234.24075	0.04113
86	7.479	VV	4.74e-3	89.73297	253.14749	0.05593
87	7.485	VB	0.0113	223.39510	248.71796	0.13925
88	7.503	BV	6.10e-3	105.84186	245.93547	0.06597
89	7.508	VV	0.0139	305.76898	267.43109	0.19060
90	7.530	VV	3.36e-3	52.63671	207.12512	0.03281
91	7.536	VP	0.0259	347.87799	223.62790	0.21684
92	7.627	VV	0.0431	1181.19812	324.59351	0.73628
93	7.696	VV	7.03e-3	47.87330	99.14868	0.02984
94	7.706	VV	7.64e-3	45.67104	99.63440	0.02847
95	7.722	VV	0.0212	216.90851	125.02407	0.13521
96	7.752	VV	3.60e-3	10.80337	45.02313	0.00673
97	7.759	VV	6.72e-3	35.78472	66.04220	0.02231
98	7.775	VV	7.83e-3	42.62664	91.62818	0.02657
99	7.779	VB	6.68e-3	48.25491	92.52290	0.03008

Totals : 1.60428e5 1.02120e5

Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

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Injection Date  : 1/10/2023 5:35:42 PM          Seq. Line :  29
Sample Name     : 23A0133 06                    Location : Vial 22
Acq. Operator   : TW                               Inj :   1
                                                Inj Volume : 1 µl

Sequence File   : C:\HPCHEM\2\SEQUENCE\011023A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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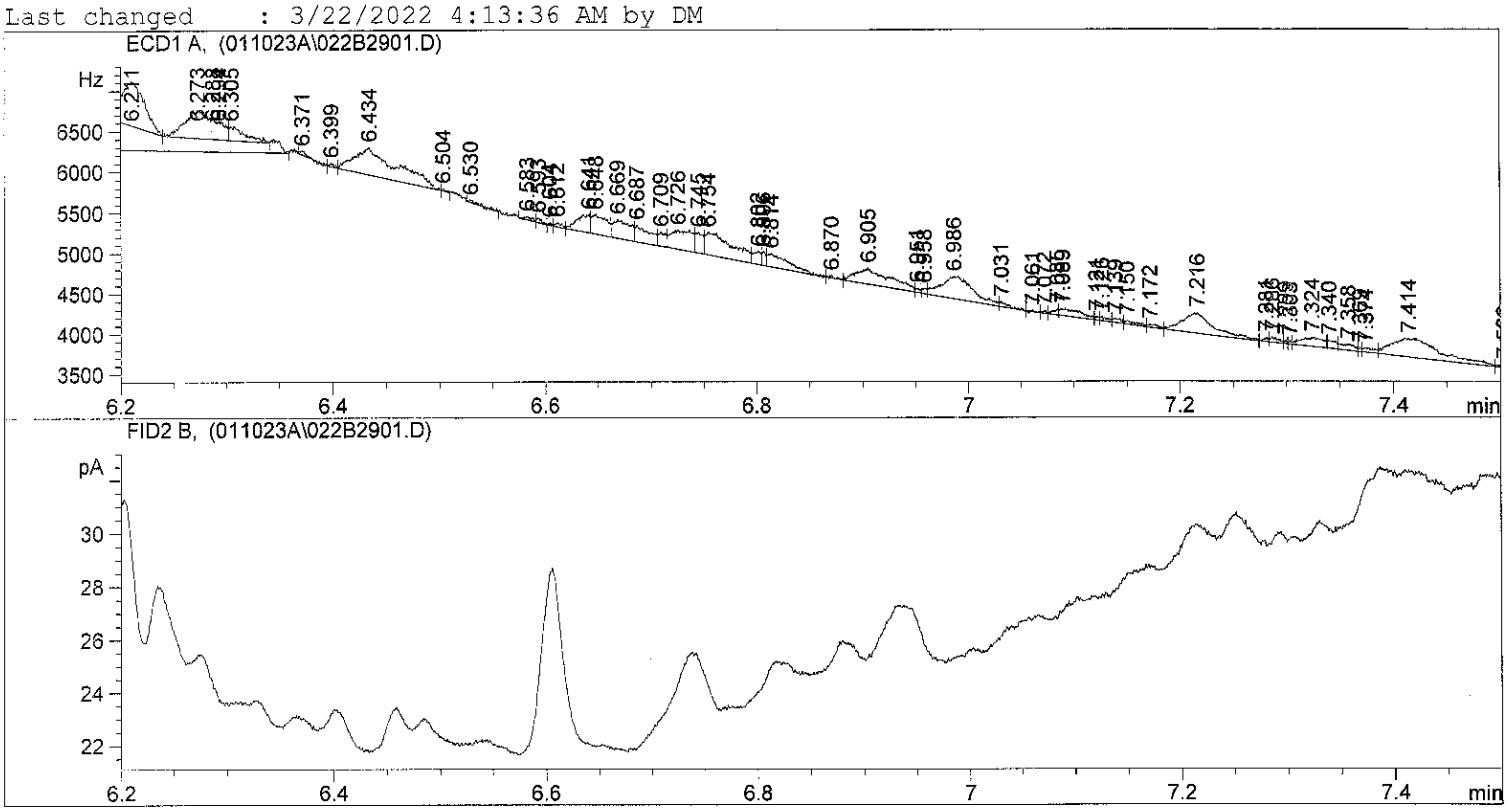

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
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Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.244	BV	0.0146	612.29938	568.81592	1.06309
2	5.255	VV	0.0150	635.57019	515.52716	1.10349
3	5.293	VV	0.0154	303.46655	238.82466	0.52688
4	5.326	VP	0.0165	1139.85547	895.18976	1.97904
5	5.383	VV	9.69e-3	591.63867	759.19122	1.02721
6	5.393	VV	0.0245	1551.59619	778.48651	2.69391
7	5.448	VV	0.0178	1338.01697	907.07227	2.32309
8	5.485	VV	0.0164	2023.24573	1496.30945	3.51280
9	5.516	VV	0.0188	1241.53259	803.53174	2.15557
10	5.594	VV	0.0257	1521.03027	724.02692	2.64084
11	5.634	VV	0.0170	919.46991	669.88330	1.59640
12	5.647	VV	5.86e-3	311.40720	665.01447	0.54067
13	5.652	VB	6.48e-3	335.54205	665.63159	0.58257
14	5.700	BV	0.0322	4075.17456	1555.57507	7.07540
15	5.729	VV	7.70e-3	507.87119	859.23499	0.88178
16	5.738	VV	4.77e-3	303.92957	850.64941	0.52769
17	5.761	VV	0.0238	2762.03174	1427.35840	4.79549

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.792	VV	9.72e-3	657.98810	823.71356	1.14241
19	5.819	VV	0.0231	2286.98438	1219.79089	3.97071
20	5.844	VV	5.17e-3	222.61830	717.10535	0.38651
21	5.849	VV	3.75e-3	198.91112	737.36340	0.34535
22	5.873	VV	0.0261	3366.83813	1562.38989	5.84557
23	5.905	VV	4.19e-3	242.08788	833.79419	0.42032
24	5.917	VV	9.35e-3	537.80713	853.31152	0.93375
25	5.955	VV S	0.0234	7517.47510	4524.56641	13.05198
26	6.062	VV S	0.0828	7769.44824	1564.17969	13.48946
27	6.112	VB S	0.0708	5877.33203	1384.21411	10.20434
28	6.149	BV T	5.48e-3	26.10163	62.44853	0.04532
29	6.162	VV T	0.0122	130.27094	132.97401	0.22618
30	6.178	VV T	0.0117	154.71031	160.03830	0.26861
31	6.211	VV T	0.0196	853.76392	548.02124	1.48232
32	6.273	PV T	0.0185	507.58777	342.93500	0.88128
33	6.288	PV T	4.82e-3	76.12974	263.38724	0.13218
34	6.294	PV T	9.59e-3	125.61470	218.28059	0.21809
35	6.305	PB T	0.0174	178.44576	170.44955	0.30982
36	6.371	BP	5.84e-3	15.04439	41.41626	0.02612
37	6.399	VV	4.43e-3	13.26947	38.40532	0.02304
38	6.434	VV	0.0324	921.47748	337.70844	1.59989
39	6.504	VP	3.18e-3	5.42450	24.55944	0.00942
40	6.530	PB	8.77e-3	15.77707	23.70165	0.02739
41	6.583	PV	7.14e-3	18.00468	35.36163	0.03126
42	6.593	VP	4.48e-3	17.41158	55.15138	0.03023
43	6.604	VV	2.74e-3	4.86604	29.20659	0.00845
44	6.612	VV	5.15e-3	20.06841	51.43213	0.03484
45	6.641	VV	0.0109	187.68631	221.22353	0.32586
46	6.648	VV	0.0131	235.79785	234.36105	0.40940
47	6.669	VV	0.0139	257.99216	225.67096	0.44793
48	6.687	VV	0.0115	191.66493	204.44031	0.33277
49	6.709	VV	6.32e-3	84.08810	171.37331	0.14600
50	6.726	VV	0.0170	330.53522	232.82910	0.57388
51	6.745	VV	6.22e-3	126.90698	254.32698	0.22034
52	6.754	VV	0.0228	522.90613	274.72330	0.90788
53	6.802	VV	6.22e-3	75.32269	156.40343	0.13078
54	6.806	VV	4.05e-3	46.71222	167.85699	0.08110
55	6.814	VB	0.0232	223.89308	160.99278	0.38873
56	6.870	BP	5.47e-3	8.77137	26.73923	0.01523
57	6.905	VV	0.0266	444.48401	199.53027	0.77172
58	6.951	VV	3.77e-3	14.21693	52.34454	0.02468
59	6.958	VV	4.55e-3	20.19215	62.75348	0.03506
60	6.986	VV	0.0251	576.63031	272.33908	1.00116
61	7.031	VP	7.07e-3	30.96366	59.52934	0.05376
62	7.061	BV	0.0000	5.67603e-1	14.11697	0.00099
63	7.072	VV	3.82e-3	6.64697	25.68062	0.01154
64	7.085	VV	6.08e-3	25.21995	72.10282	0.04379
65	7.089	VV	0.0174	121.47299	83.45010	0.21090
66	7.121	VV	4.37e-3	11.29449	39.09271	0.01961
67	7.126	VV	5.59e-3	23.50047	52.77926	0.04080
68	7.139	VV	6.61e-3	26.87504	52.14564	0.04666
69	7.150	VV	9.34e-3	34.80832	46.45424	0.06043
70	7.172	VP	0.0116	25.28228	36.28760	0.04390
71	7.216	VP	0.0237	497.23746	250.87393	0.86331
72	7.281	VV	3.99e-3	15.31032	49.71627	0.02658
73	7.286	VV	6.55e-3	32.71588	62.10408	0.05680
74	7.299	VV	2.32e-3	5.99487	40.72983	0.01041
75	7.303	VV	2.67e-3	6.30741	35.59186	0.01095
76	7.324	VV	0.0166	155.58310	111.90555	0.27013
77	7.340	VB	6.95e-3	54.51270	100.14571	0.09465
78	7.358	BV	0.0112	67.41943	74.20908	0.11705
79	7.369	VV	2.79e-3	8.43929	45.01439	0.01465
80	7.374	VV	9.22e-3	38.85703	53.81880	0.06746
81	7.414	VP	0.0371	723.65784	230.21101	1.25643
82	7.503	VV	8.39e-3	20.12090	31.76292	0.03493

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.518	VP	6.14e-3	12.07282	24.52885	0.02096
84	7.544	BV	1.58e-3	1.94280	23.06863	0.00337
85	7.580	VV	0.0234	239.70518	122.88408	0.41618
86	7.611	VV	2.86e-3	7.71628	36.61987	0.01340
87	7.625	VB	0.0172	101.58657	71.46624	0.17638
88	7.703	BP	6.73e-3	10.37789	25.71481	0.01802
89	7.733	PP	7.16e-3	7.29397	13.37346	0.01266
Totals :				5.75964e4	3.59395e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

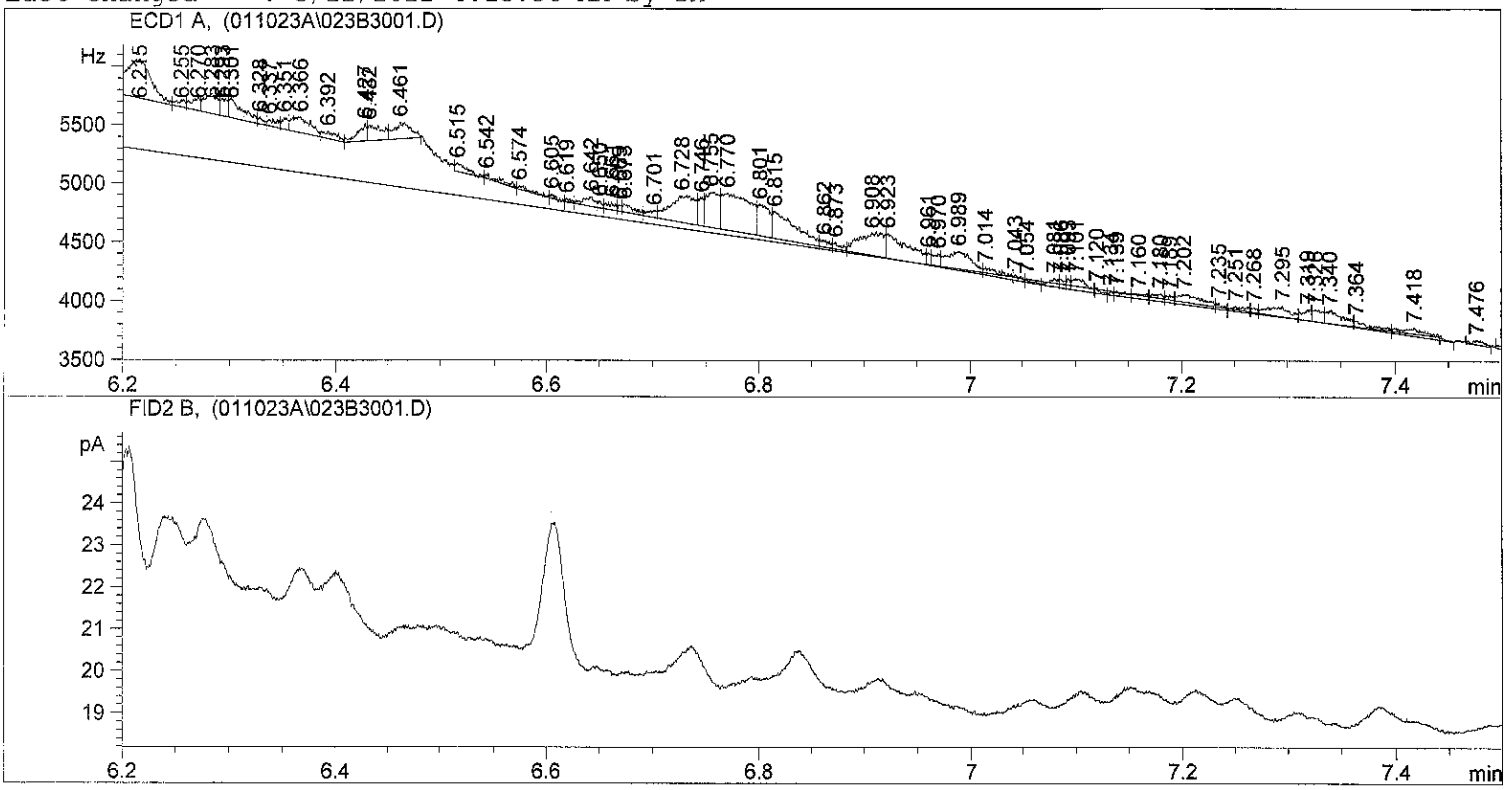
Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	5.318	BV	0.0345	56.86142	21.19361	55.58530
2	5.376	VP	0.0198	45.43437	31.91228	44.41470
Totals :				102.29579	53.10589	

Results obtained with enhanced integrator!

*** End of Report ***

Injection Date : 1/10/2023 5:46:42 PM Seq. Line : 30
Sample Name : 23A0133 07 Location : Vial 23
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\011023A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.237	BV	7.62e-3	60.52505	100.65115	0.09271
2	5.251	VP	0.0126	168.16995	169.49529	0.25760
3	5.281	VV	3.33e-3	22.43650	89.39955	0.03437
4	5.301	VP	0.0184	451.20325	295.46307	0.69115
5	5.342	VV	5.95e-3	61.26715	133.53162	0.09385
6	5.380	VV	0.0195	3175.86084	2052.61377	4.86477
7	5.413	VV	0.0166	893.29773	696.15533	1.36835
8	5.447	VV	0.0177	1303.15930	887.27344	1.99617
9	5.480	VV S	0.0284	9908.49805	4621.61572	15.17778
10	5.518	BB T	9.47e-3	324.17050	436.07257	0.49656
11	5.571	BV T	0.0120	187.46783	213.96573	0.28716
12	5.582	PV T	7.53e-3	122.56742	206.25702	0.18775
13	5.598	PV T	0.0145	256.46640	214.50966	0.39285
14	5.631	PV T	0.0123	260.73203	259.42282	0.39939
15	5.637	VV T	7.54e-3	145.62337	244.92928	0.22307
16	5.649	PV T	6.57e-3	76.42119	193.98842	0.11706
17	5.654	VV T	5.77e-3	67.02200	193.65630	0.10266

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.698	VB S	0.1300	3.12397e4	2843.70435	47.85280
19	5.729	BV T	2.76e-3	9.50861	51.32150	0.01457
20	5.738	PV T	7.30e-3	93.11758	167.19565	0.14264
21	5.756	VV T	0.0170	599.83875	426.23233	0.91883
22	5.789	PV T	3.77e-3	20.17670	89.15858	0.03091
23	5.793	PV T	5.58e-3	29.98103	89.47176	0.04592
24	5.816	PV T	0.0129	277.61765	264.06155	0.42525
25	5.833	PV T	7.73e-3	98.06387	211.37704	0.15021
26	5.845	PV T	5.03e-3	62.68344	190.79144	0.09602
27	5.876	PV T	0.0190	1738.89990	1124.37976	2.66364
28	5.908	PV T	0.0135	423.88358	394.32553	0.64930
29	5.956	PV T	0.0290	2308.87866	963.15247	3.53673
30	5.974	VV T	0.0217	811.88043	623.32831	1.24363
31	6.009	PV T	0.0222	1161.98499	622.56720	1.77992
32	6.039	PV T	5.08e-3	150.81564	392.76163	0.23102
33	6.048	PV T	0.0245	867.81512	442.17014	1.32931
34	6.090	PV T	0.0153	208.23770	226.44887	0.31898
35	6.109	PV T	0.0197	400.25873	244.37082	0.61311
36	6.137	PV T	8.71e-3	99.51347	190.38301	0.15243
37	6.149	PV T	7.71e-3	71.25487	153.98352	0.10915
38	6.156	PV T	3.53e-3	40.51991	161.58812	0.06207
39	6.162	PV T	0.0118	209.47050	218.34335	0.32087
40	6.179	PV T	5.58e-3	62.61734	187.14285	0.09592
41	6.184	PV T	8.58e-3	100.68195	195.48441	0.15422
42	6.215	PV T	0.0209	589.59149	338.22562	0.90313
43	6.255	PV T	7.00e-3	33.37911	60.87574	0.05113
44	6.270	PV T	7.66e-3	60.08153	112.00895	0.09203
45	6.283	PV T	0.0104	144.34174	172.48317	0.22110
46	6.293	PV T	7.07e-3	62.01329	146.15459	0.09499
47	6.301	PV T	0.0152	148.50743	162.37361	0.22748
48	6.328	PV T	5.76e-3	19.24261	55.66401	0.02948
49	6.337	PV T	0.0112	36.39331	53.97169	0.05575
50	6.351	PV T	4.99e-3	38.21723	97.05670	0.05854
51	6.366	PV T	0.0154	162.06024	130.91086	0.24824
52	6.392	PV T	0.0144	55.04098	63.83871	0.08431
53	6.427	PV T	7.44e-3	83.82493	142.89787	0.12840
54	6.432	PV T	0.0152	120.89467	132.72334	0.18519
55	6.461	PB T	0.0138	155.59860	141.32208	0.23835
56	6.515	BV T	0.0125	51.53232	68.97178	0.07894
57	6.542	PV T	0.0161	35.74825	37.05116	0.05476
58	6.574	PV T	0.0124	22.02710	29.53053	0.03374
59	6.605	PV T	5.05e-3	9.83228	32.45513	0.01506
60	6.619	PV T	5.09e-3	9.38065	30.73148	0.01437
61	6.642	PV T	9.42e-3	58.10738	80.54819	0.08901
62	6.650	PV T	4.12e-3	13.08819	52.93780	0.02005
63	6.661	PV T	6.66e-3	33.64548	62.70876	0.05154
64	6.669	PV T	3.33e-3	10.97520	54.94667	0.01681
65	6.673	PV T	0.0132	52.05566	65.73598	0.07974
66	6.701	PV T	7.50e-3	34.45409	58.29053	0.05278
67	6.728	PV T	0.0200	361.93759	226.83083	0.55441
68	6.746	PV T	5.02e-3	86.92395	240.51088	0.13315
69	6.755	PV T	0.0106	257.38458	299.85144	0.39426
70	6.770	PV T	0.0231	595.54828	316.91217	0.91226
71	6.801	PV T	0.0133	212.44676	265.92966	0.32542
72	6.815	PV T	0.0262	353.26987	225.07777	0.54114
73	6.862	PV T	9.73e-3	34.09356	58.40981	0.05222
74	6.873	PV T	6.38e-3	26.78282	54.07108	0.04103
75	6.908	PV T	0.0214	319.68945	183.28177	0.48970
76	6.923	PV T	0.0250	310.82541	207.08769	0.47612
77	6.961	PV T	3.71e-3	25.68607	102.86993	0.03935
78	6.970	PV T	7.50e-3	49.31721	109.60079	0.07554
79	6.989	PV T	0.0196	261.14056	159.92982	0.40001
80	7.014	PV T	0.0218	76.46458	58.53350	0.11713
81	7.043	PV T	6.73e-3	19.36163	47.98312	0.02966
82	7.054	PV T	7.46e-3	11.65792	26.03885	0.01786

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.081	PV T	7.66e-3	40.32930	68.60429	0.06178
84	7.086	PV T	5.43e-3	24.26955	74.50557	0.03718
85	7.093	PV T	3.53e-3	18.04250	85.26215	0.02764
86	7.101	PV T	0.0159	90.30009	94.92358	0.13832
87	7.120	PV T	5.65e-3	15.30370	45.14074	0.02344
88	7.134	PV T	3.10e-3	7.36799	34.37783	0.01129
89	7.139	PV T	8.98e-3	28.55143	39.76492	0.04373
90	7.160	PV T	0.0103	35.70971	43.84323	0.05470
91	7.180	PV T	9.16e-3	42.36913	62.11914	0.06490
92	7.189	PV T	5.70e-3	27.71349	60.98224	0.04245
93	7.202	PV T	0.0210	144.16217	83.11406	0.22083
94	7.235	PV T	6.63e-3	20.44642	51.40030	0.03132
95	7.251	PV T	0.0157	38.25452	40.73576	0.05860
96	7.268	PV T	6.17e-3	18.59734	50.26978	0.02849
97	7.295	PV T	0.0162	128.37013	94.88189	0.19664
98	7.319	PV T	7.36e-3	52.75975	91.01861	0.08082
99	7.326	PV T	8.89e-3	66.54156	95.98929	0.10193
100	7.340	PV T	0.0183	116.31078	105.76897	0.17816
101	7.364	PV T	0.0155	46.49176	49.95780	0.07122
102	7.418	PB T	0.0165	62.17491	46.07780	0.09524
103	7.476	PB	0.0107	29.33693	37.50960	0.04494
104	7.506	BV	7.80e-3	28.09713	44.29510	0.04304
105	7.515	VV	5.34e-3	20.27016	49.91647	0.03105
106	7.526	VV	0.0171	85.57520	59.66505	0.13108
107	7.552	VB	7.00e-3	31.00447	56.51242	0.04749
108	7.639	PV	0.0290	251.91705	103.53011	0.38589
109	7.661	VV	0.0129	60.00706	77.65726	0.09192
110	7.677	VB	0.0115	68.36611	73.16644	0.10472
111	7.700	BP	7.29e-3	28.60193	51.38385	0.04381
112	7.712	VP	5.41e-3	11.32471	27.49092	0.01735
113	7.753	PB	4.18e-3	4.40393	17.57430	0.00675
114	7.782	BV	6.39e-3	13.62052	27.46167	0.02086
115	7.790	VBA	5.90e-3	11.46302	32.40670	0.01756
Totals :				6.52829e4	2.84274e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

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Injection Date  : 1/10/2023 5:57:59 PM          Seq. Line :  31
Sample Name     : 23A0133 10                    Location : Vial 24
Acq. Operator   : TW                               Inj :  1
                                               Inj Volume : 1 µl

Sequence File   : C:\HPCHEM\2\SEQUENCE\011023A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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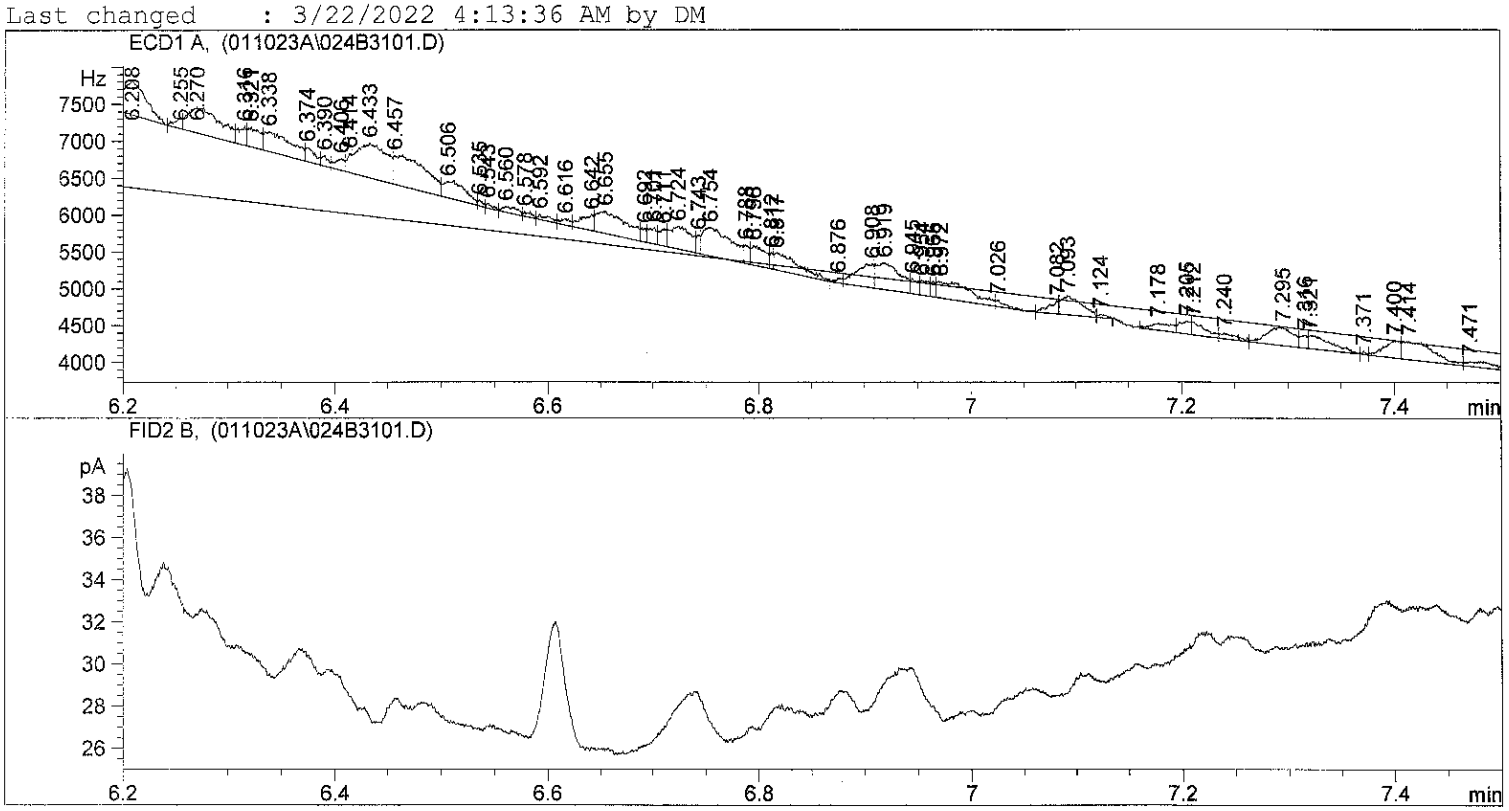

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
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Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.202	BV S	0.0000	8521.00391	658.11603	6.32272
2	5.260	PV T	0.0131	553.09137	563.10364	0.41040
3	5.287	PV T	0.0161	938.62018	698.34790	0.69647
4	5.326	PV T	0.0154	738.75049	606.99664	0.54816
5	5.344	PV T	4.64e-3	20.32547	65.06798	0.01508
6	5.384	PV S	0.0229	1.35290e4	8342.24121	10.03877
7	5.415	BV T	9.44e-3	286.98816	396.90286	0.21295
8	5.449	PV T	0.0102	299.39288	372.83328	0.22215
9	5.485	PV S	0.0198	3.08669e4	2.27877e4	22.90375
10	5.519	BV T	0.0121	779.57916	1004.12549	0.57846
11	5.575	PV T	0.0141	213.60008	183.93614	0.15849
12	5.598	PV T	0.0181	552.46857	381.41422	0.40994
13	5.632	PV T	6.28e-3	81.35230	167.11098	0.06036
14	5.656	PV T	0.0115	294.54755	315.21719	0.21856
15	5.702	PV S	0.0313	1.94262e4	8433.10742	14.41453
16	5.731	BV T	3.02e-3	8.12703	44.84336	0.00603
17	5.749	PV T	9.11e-3	124.90369	184.20203	0.09268

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.771	PV T	0.0147	320.09189	294.85684	0.23751
19	5.791	PV T	5.71e-3	44.59769	98.02155	0.03309
20	5.801	PV T	6.64e-3	22.95658	57.65438	0.01703
21	5.819	PV T	0.0148	344.64243	290.64978	0.25573
22	5.851	PV T	4.53e-3	28.91170	81.77005	0.02145
23	5.878	PV S	0.0304	7378.87451	3257.67676	5.47525
24	5.910	BV T	7.40e-3	47.08858	80.82181	0.03494
25	5.957	PBAS	0.0694	3.19162e4	5620.94189	23.68236
26	5.991	BV T	5.20e-3	14.86493	41.29556	0.01103
27	6.000	PV T	2.76e-3	8.81095	53.26691	0.00654
28	6.004	PB T	5.20e-3	35.60543	98.95611	0.02642
29	6.042	BV T	7.27e-3	176.70619	318.58081	0.13112
30	6.062	PV T	0.0179	1193.07214	806.79163	0.88528
31	6.110	PV T	0.0149	1000.64124	807.61993	0.74249
32	6.140	PV T	7.05e-3	73.81334	174.46703	0.05477
33	6.151	PV T	5.02e-3	71.84731	198.82561	0.05331
34	6.155	PV T	5.75e-3	78.99754	229.16792	0.05862
35	6.164	PV T	0.0134	300.61337	270.42603	0.22306
36	6.185	PV T	3.32e-3	46.10256	197.71739	0.03421
37	6.189	PV T	6.30e-3	73.10487	193.48703	0.05425
38	6.208	PV T	0.0191	706.23425	454.67929	0.52404
39	6.255	PV T	6.68e-3	70.53098	139.95470	0.05234
40	6.270	PV T	0.0272	768.65472	344.78879	0.57035
41	6.316	PV T	7.87e-3	135.74365	252.66788	0.10072
42	6.321	PV T	0.0104	212.29465	264.17834	0.15753
43	6.338	PV T	0.0305	494.61008	270.54477	0.36701
44	6.374	PV T	0.0106	122.26417	192.50021	0.09072
45	6.390	PV T	6.63e-3	56.55354	142.14203	0.04196
46	6.406	PV T	7.94e-3	94.97431	159.61732	0.07047
47	6.414	PV T	4.28e-3	76.95046	257.90262	0.05710
48	6.433	PV T	0.0231	916.80261	472.00058	0.68028
49	6.457	PV T	0.0373	878.75891	392.58896	0.65205
50	6.506	PV T	0.0189	340.29462	219.67250	0.25250
51	6.535	PV T	5.69e-3	25.74959	75.41034	0.01911
52	6.543	PV T	6.94e-3	27.53024	66.14136	0.02043
53	6.560	PV T	0.0121	81.83069	83.37642	0.06072
54	6.578	PV T	6.56e-3	33.93367	64.25134	0.02518
55	6.592	PV T	0.0120	50.09398	69.71783	0.03717
56	6.616	PV T	7.93e-3	49.63623	78.98442	0.03683
57	6.642	PV T	0.0101	171.32834	214.69916	0.12713
58	6.655	PV T	0.0245	612.23663	304.36151	0.45429
59	6.692	PV T	5.62e-3	62.12588	184.10376	0.04610
60	6.701	PV T	6.99e-3	121.38299	221.72023	0.09007
61	6.711	PV T	6.27e-3	110.12238	235.04979	0.08171
62	6.724	PV T	0.0164	421.14044	311.10791	0.31249
63	6.743	PV T	3.66e-3	55.28650	251.61234	0.04102
64	6.754	PV T	0.0239	733.81848	384.32339	0.54451
65	6.788	PV T	6.26e-3	93.66893	249.35707	0.06950
66	6.796	PV T	0.0113	244.50093	265.83487	0.18142
67	6.812	PV T	3.86e-3	50.57629	218.47319	0.03753
68	6.817	PV T	0.0287	387.95523	225.53362	0.28787
69	6.876	PV T	6.62e-3	26.37236	63.78611	0.01957
70	6.908	PV T	0.0154	354.46805	322.81238	0.26302
71	6.919	PV T	0.0196	577.97333	362.39014	0.42887
72	6.945	PV T	7.92e-3	95.66992	201.35149	0.07099
73	6.954	PV T	9.77e-3	111.85142	190.83725	0.08300
74	6.965	PV T	4.35e-3	53.61713	205.35318	0.03978
75	6.972	PV T	0.0288	530.50073	219.65729	0.39364
76	7.026	PV T	9.07e-3	48.94696	89.92014	0.03632
77	7.082	PV T	8.62e-3	120.38598	175.07814	0.08933
78	7.093	PV T	0.0171	360.18167	263.92862	0.26726
79	7.124	PB T	9.77e-3	25.27410	43.09675	0.01875
80	7.178	BV T	0.0173	141.60271	97.88611	0.10507
81	7.205	PV T	8.90e-3	124.43013	174.81778	0.09233
82	7.212	PV T	0.0148	155.00696	174.22107	0.11502

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.240	PV T	0.0180	80.12846	74.24090	0.05946
84	7.295	PV T	0.0199	413.85318	247.71562	0.30709
85	7.316	PV T	6.20e-3	81.54340	169.86420	0.06051
86	7.321	PV T	0.0254	275.33096	180.57054	0.20430
87	7.371	PV T	2.89e-3	9.50028	44.53003	0.00705
88	7.400	PV T	0.0127	249.61143	236.65576	0.18522
89	7.414	PV T	0.0243	501.25180	247.24228	0.37194
90	7.471	PV T	0.0235	133.30510	67.78533	0.09891
91	7.513	PV T	0.0150	106.10216	87.20834	0.07873
92	7.553	PV T	7.70e-3	19.76770	42.79890	0.01467
93	7.581	PV T	0.0177	233.20416	161.31445	0.17304
94	7.595	PV T	9.76e-3	81.17523	138.55910	0.06023
95	7.634	PV T	0.0282	636.59747	267.36435	0.47237
96	7.659	PV T	8.73e-3	78.74953	150.30055	0.05843
97	7.670	PV T	8.14e-3	74.15862	111.77367	0.05503
98	7.694	PV T	0.0140	128.56975	115.08860	0.09540
99	7.707	PV T	0.0244	183.13712	124.87239	0.13589
100	7.732	PV T	0.0179	125.06499	116.31034	0.09280
101	7.785	PV T	2.70e-3	3.98525	22.11845	0.00296
102	7.794	PBAT	4.68e-3	6.58284	22.05867	0.00488
Totals :				1.34768e5	7.06591e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	5.378	PB	0.0158	29.82101	27.54385	1.000e2
Totals :				29.82101	27.54385	

Results obtained with enhanced integrator!

*** End of Report ***

```
Injection Date  : 1/10/2023 6:08:59 PM          Seq. Line :  32
Sample Name     : 23A0133 11                    Location : Vial 25
Acq. Operator   : TW                               Inj :   1
                                              Inj Volume : 1 µl
Sequence File   : C:\HPCHEM\2\SEQUENCE\011023A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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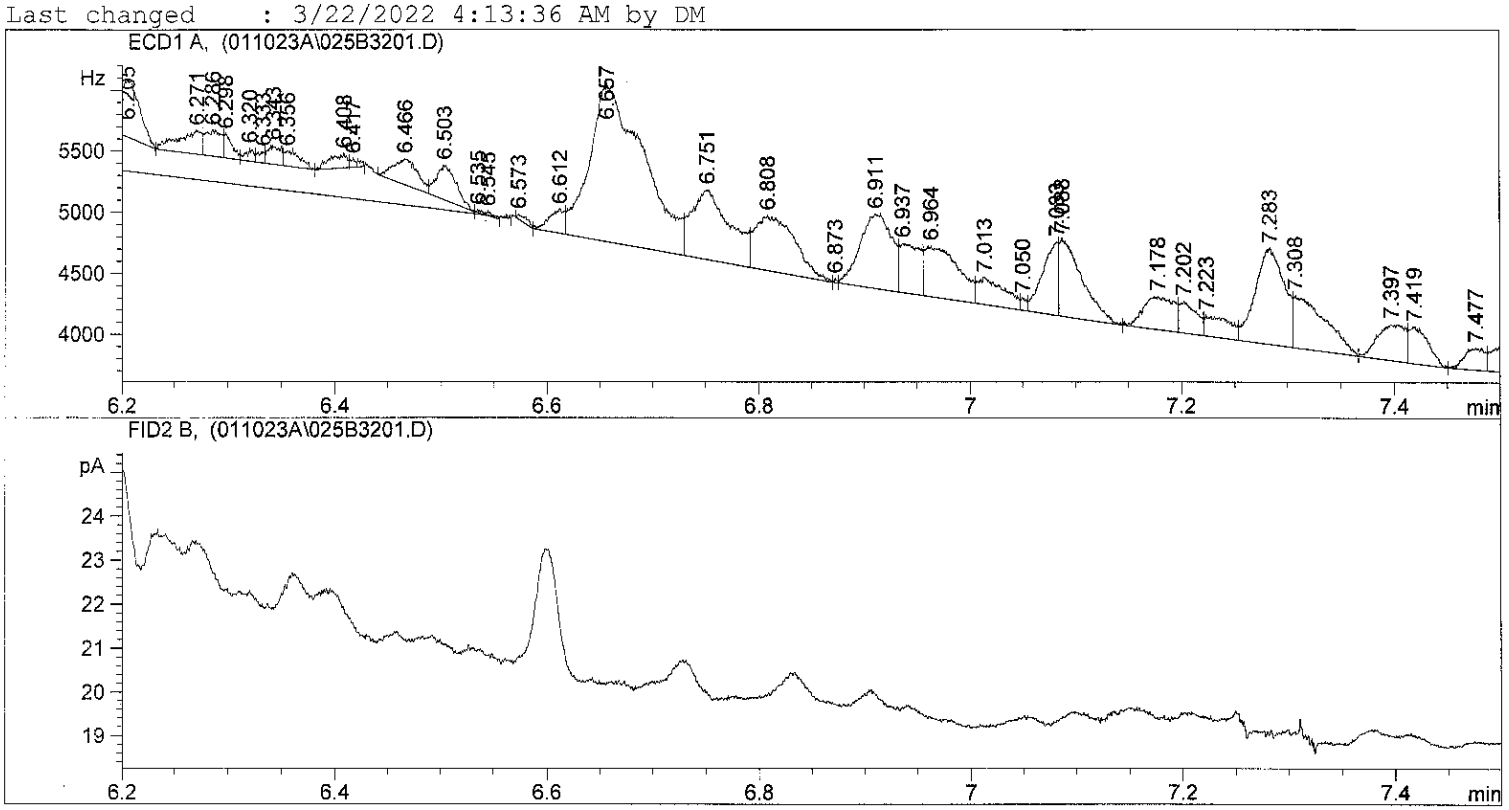

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
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Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.261	BV	0.0216	1336.92151	735.07190	1.47042
2	5.292	VV	3.09e-3	81.60104	382.37515	0.08975
3	5.307	VV	0.0213	900.52502	516.74805	0.99045
4	5.341	VV	0.0100	284.38058	367.71228	0.31278
5	5.379	VV	0.0198	2406.01392	1490.26331	2.64627
6	5.396	VV	7.68e-3	549.22144	904.82159	0.60406
7	5.437	VV	0.0248	6529.94238	3369.10937	7.18199
8	5.477	VV S	0.0218	9339.82715	5748.34619	10.27246
9	5.512	VV S	0.0711	7986.19434	1870.87317	8.78366
10	5.556	BV T	4.77e-3	20.73194	60.85885	0.02280
11	5.566	VV T	2.16e-3	4.77751	35.76314	0.00525
12	5.601	VV T	0.0244	1589.92358	785.61725	1.74869
13	5.695	VV T	0.0171	2124.98584	1617.96790	2.33718
14	5.727	VV T	3.29e-3	4.80031	24.32063	0.00528
15	5.756	VB S	0.0608	2.65285e4	5485.05322	29.17755
16	5.790	BV X	3.58e-3	13.39368	62.35421	0.01473
17	5.802	VV T	4.34e-3	18.45156	64.52848	0.02029

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.812	VV T	0.0136	229.03903	211.91388	0.25191
19	5.871	PV T	0.0188	1899.67676	1335.82825	2.08937
20	5.951	PV T	0.0242	1348.99597	673.56030	1.48370
21	6.004	VB T	0.0324	4154.62207	1522.84106	4.56949
22	6.087	BV T	4.60e-3	34.95192	101.95492	0.03844
23	6.105	PV T	0.0165	342.54099	248.18336	0.37675
24	6.122	PV T	0.0213	229.60019	179.93987	0.25253
25	6.157	PV T	0.0205	287.04810	167.94449	0.31571
26	6.205	PV T	0.0228	871.45923	454.69321	0.95848
27	6.271	PV T	0.0187	296.68707	191.67935	0.32631
28	6.286	PV T	0.0165	210.76595	213.16266	0.23181
29	6.298	PV T	9.50e-3	110.76598	194.30421	0.12183
30	6.320	PV T	6.20e-3	50.46003	101.45130	0.05550
31	6.333	PV T	6.28e-3	42.48829	93.80320	0.04673
32	6.343	PV T	0.0116	123.88230	151.04961	0.13625
33	6.356	PV T	0.0178	128.00243	119.69357	0.14078
34	6.408	PV T	0.0132	126.09591	114.88260	0.13869
35	6.417	PB T	9.75e-3	39.58123	67.64394	0.04353
36	6.466	BV T	0.0197	342.27368	211.51645	0.37645
37	6.503	PV T	0.0160	378.34201	282.96701	0.41612
38	6.535	PV T	6.07e-3	9.39928	21.02854	0.01034
39	6.545	PB T	7.38e-3	14.65515	33.09489	0.01612
40	6.573	BP	0.0105	32.39604	38.03336	0.03563
41	6.612	VV	0.0128	199.46332	193.60698	0.21938
42	6.657	VV	0.0418	4559.59326	1285.45935	5.01490
43	6.751	VV	0.0298	1437.36987	570.29089	1.58090
44	6.808	VP	0.0312	1181.11035	447.80786	1.29905
45	6.873	VV	2.70e-3	5.48909	30.43679	0.00604
46	6.911	VV	0.0251	1284.82935	607.31116	1.41313
47	6.937	VV	0.0160	538.36426	402.51291	0.59212
48	6.964	VV	0.0267	924.86255	413.64063	1.01722
49	7.013	VV	0.0229	404.32382	217.63084	0.44470
50	7.050	VV	5.41e-3	37.68169	96.83687	0.04144
51	7.083	VV	0.0132	615.35217	596.18799	0.67680
52	7.088	VP	0.0178	929.89337	637.48468	1.02275
53	7.178	VV	0.0239	540.55927	270.48981	0.59454
54	7.202	VV	0.0188	291.16306	258.79114	0.32024
55	7.223	VB	0.0284	281.53745	164.98097	0.30965
56	7.283	BV	0.0233	1503.37036	779.12512	1.65349
57	7.308	VV	0.0252	899.02551	425.84662	0.98880
58	7.397	VV	0.0217	531.66119	294.06073	0.58475
59	7.419	VP	0.0156	382.65991	300.93408	0.42087
60	7.477	VV	0.0181	238.64912	182.32680	0.26248
61	7.507	VV	0.0227	480.60263	251.89511	0.52859
62	7.545	VV	7.09e-3	24.74870	43.16238	0.02722
63	7.556	VV	3.79e-3	11.60878	46.28155	0.01277
64	7.563	VP	7.95e-3	28.58931	46.64909	0.03144
65	7.623	VV	0.0381	1874.20630	593.34808	2.06136
66	7.718	VV	0.0287	606.19086	250.29985	0.66672
67	7.754	VP	3.82e-3	5.89040	21.33632	0.00648
68	7.773	VV	5.79e-3	23.90085	51.73820	0.02629
69	7.779	VV	6.35e-3	25.17148	56.99943	0.02768
70	7.786	VB	6.70e-3	29.20069	55.82658	0.03212
Totals :				9.09210e4	3.98463e4	

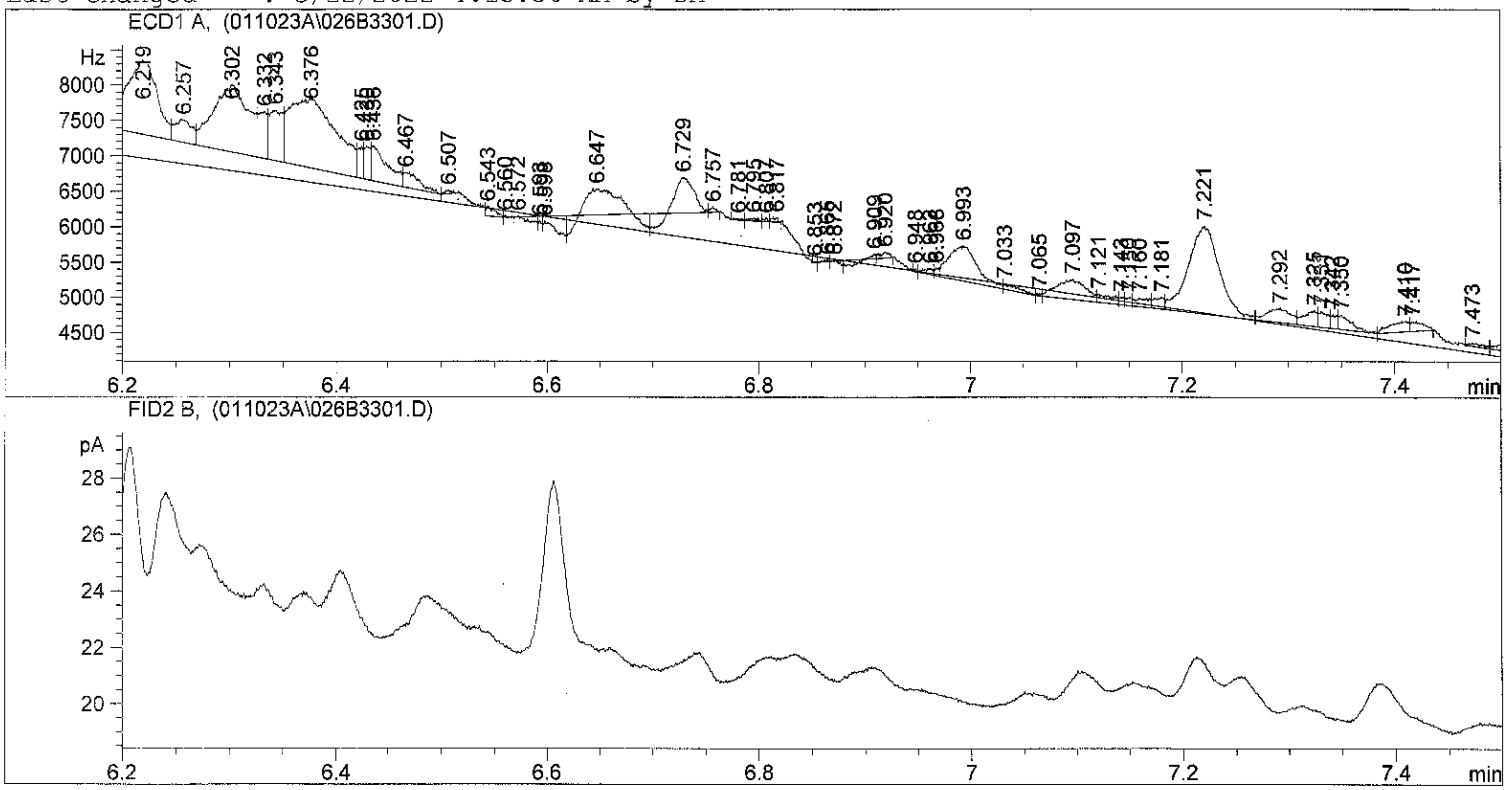
Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

Injection Date : 1/10/2023 6:19:42 PM Seq. Line : 33
Sample Name : 23A0134 06 Location : Vial 26
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\011023A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.228	BV S	0.0491	2.11592e4	5221.05371	20.25181
2	5.299	PV T	5.61e-3	22.68953	55.08806	0.02172
3	5.311	PV T	3.54e-3	34.17997	145.42409	0.03271
4	5.315	PP T	0.0000	107.57045	158.54823	0.10296
5	5.347	PV T	0.6227	195.08470	3.66114	0.18672
6	5.389	PV T	0.0150	1562.15076	1364.87842	1.49516
7	5.405	PV T	0.0148	1511.73706	1277.21448	1.44691
8	5.448	PV T	9.96e-3	388.31091	517.39789	0.37166
9	5.493	PV T	0.0170	1560.74744	1108.03320	1.49382
10	5.515	PV T	0.0000	197.78839	499.50079	0.18931
11	5.584	PV T	0.0000	515.08350	244.15511	0.49300
12	5.591	PV T	0.0118	195.71399	277.02902	0.18732
13	5.630	PB S	0.0965	3.60504e4	4478.57275	34.50445
14	5.693	BV T	0.0238	3960.67187	2026.60986	3.79083
15	5.730	PV T	0.0106	177.12770	279.52185	0.16953
16	5.762	PV T	0.0184	1733.78137	1175.85120	1.65943
17	5.827	PV T	0.0184	1162.02942	763.39630	1.11220

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.874	PV T	0.0210	3243.50952	1854.75403	3.10442
19	5.910	PV T	0.0106	452.20389	540.82452	0.43281
20	5.922	PV T	5.68e-3	170.77803	501.42413	0.16345
21	5.940	PV T	0.0185	1210.33154	778.27240	1.15843
22	5.959	PV T	0.0163	744.23950	760.66553	0.71232
23	5.983	PV T	9.49e-3	555.09937	781.64478	0.53130
24	5.989	PV T	9.50e-3	470.13446	825.02313	0.44997
25	6.009	PV T	9.59e-3	729.74518	946.68372	0.69845
26	6.015	PV T	4.95e-3	397.34436	1019.05621	0.38031
27	6.040	PV T	0.0285	4425.88916	1863.32056	4.23610
28	6.091	PV T	6.73e-3	88.30241	218.80661	0.08452
29	6.116	PV T	0.0191	1251.51318	804.72388	1.19784
30	6.147	PV T	0.0198	765.16028	470.96353	0.73235
31	6.219	PV T	0.0250	2216.65088	1061.67334	2.12159
32	6.257	PV T	0.0148	365.12134	317.99316	0.34946
33	6.302	PV T	0.0278	2122.85791	937.25909	2.03182
34	6.332	PV T	7.80e-3	374.77606	662.16516	0.35870
35	6.343	PV T	0.0112	651.03040	713.20227	0.62311
36	6.376	PV T	0.0367	2987.66748	977.15826	2.85955
37	6.425	PV T	6.37e-3	170.57213	446.47556	0.16326
38	6.430	PV T	5.99e-3	196.35744	459.37012	0.18794
39	6.436	PV T	0.0184	536.35419	485.96899	0.51335
40	6.467	PV T	0.0183	224.87691	204.49385	0.21523
41	6.507	PB T	5.89e-3	20.75228	49.53226	0.01986
42	6.543	BV T	9.90e-3	74.82203	125.90578	0.07161
43	6.560	PV T	2.30e-3	2.13750	15.49012	0.00205
44	6.572	PV T	0.0000	59.22992	13.22085	0.05669
45	6.593	PV T	5.80e-3	24.49053	70.32876	0.02344
46	6.598	PV T	0.0523	238.45232	76.02994	0.22823
47	6.647	PV T	0.0162	489.26041	365.06934	0.46828
48	6.729	PV T	0.0116	445.74557	499.40939	0.42663
49	6.757	PB T	5.04e-3	24.40188	67.06898	0.02336
50	6.781	BV T	5.56e-3	7.60649	22.78533	0.00728
51	6.795	PV T	8.29e-3	19.60178	39.42309	0.01876
52	6.807	PV T	3.63e-3	10.73905	41.30555	0.01028
53	6.817	PB T	5.14e-3	24.22234	62.21202	0.02318
54	6.853	BV T	1.48e-3	1.33630	15.06412	0.00128
55	6.865	PV T	3.53e-3	4.76449	23.86197	0.00456
56	6.872	PV T	0.0000	9.01915	15.21343	0.00863
57	6.909	PV T	0.0000	47.47112	60.68282	0.04544
58	6.920	PB T	8.00e-3	46.96777	76.10533	0.04495
59	6.948	BV T	2.54e-3	5.65908	37.06041	0.00542
60	6.962	PV T	7.40e-3	45.75134	80.84416	0.04379
61	6.968	PV T	3.81e-3	29.49934	107.19189	0.02823
62	6.993	PV T	0.0229	903.56525	493.79843	0.86482
63	7.033	PV T	0.0180	75.04240	69.29934	0.07182
64	7.065	PV T	3.41e-3	7.04340	34.39769	0.00674
65	7.097	PV T	0.0237	541.60626	281.24701	0.51838
66	7.121	PV T	0.0181	122.04520	112.63263	0.11681
67	7.143	PV T	4.69e-3	29.75797	105.68455	0.02848
68	7.150	PV T	4.91e-3	43.11105	116.78288	0.04126
69	7.160	PV T	0.0117	114.44446	124.50150	0.10954
70	7.181	PV T	9.16e-3	111.47330	163.32953	0.10669
71	7.221	PV T	0.0242	2520.43530	1246.53809	2.41235
72	7.292	PV T	0.0191	308.87128	197.15616	0.29563
73	7.325	PV T	0.0107	192.33154	222.70224	0.18408
74	7.331	PV T	9.82e-3	132.42430	224.69366	0.12675
75	7.342	PV T	6.91e-3	81.04735	195.45763	0.07757
76	7.350	PV T	0.0143	170.73369	199.48566	0.16341
77	7.410	PV T	0.0163	185.96838	140.20345	0.17799
78	7.417	PB T	0.0135	115.72649	142.99974	0.11076
79	7.473	BV T	0.0115	44.09354	46.23389	0.04220
80	7.519	PB T	0.0277	300.91327	134.44070	0.28801
81	7.629	BV	0.0161	440.41904	343.95349	0.42153
82	7.635	VV	9.06e-3	226.50308	336.14392	0.21679

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.647	VV	0.0124	287.66403	284.29523	0.27533
84	7.669	VB	0.0166	229.63559	171.25723	0.21979
85	7.707	BV	6.20e-3	18.31117	49.20847	0.01753
86	7.725	VP	0.0133	41.12469	39.64447	0.03936
87	7.778	VBA	0.0231	719.43970	386.94943	0.68859
Totals :				1.04480e5	4.49547e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

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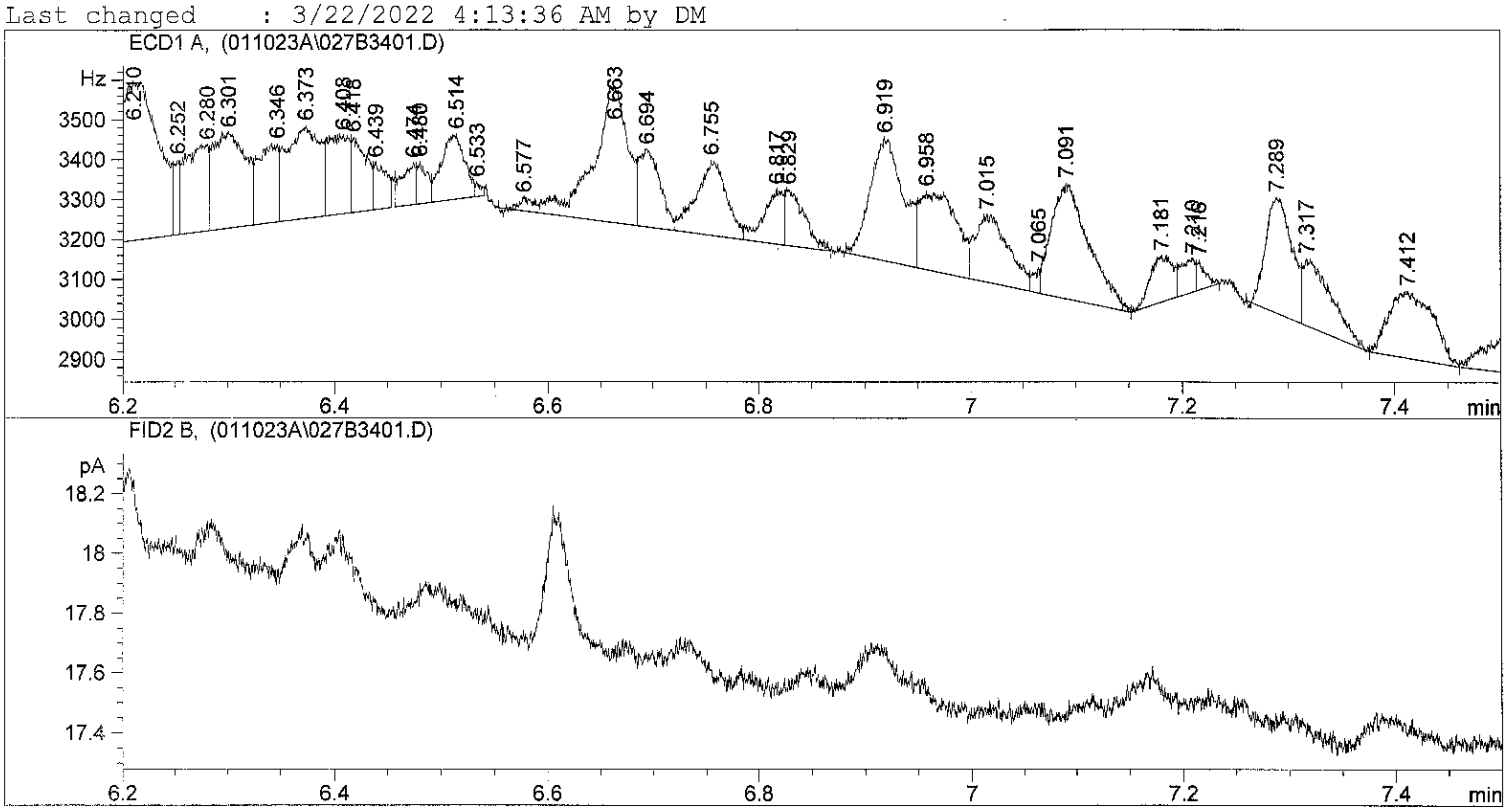
*** End of Report ***

Injection Date : 1/10/2023 6:31:52 PM Seq. Line : 34
Sample Name : 23A0134 14 Location : Vial 27
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\011023A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.229	BB	3.47e-3	3.07419	14.51647	0.00991
2	5.278	PV	0.0150	161.77228	131.00050	0.52125
3	5.282	VB	8.92e-3	68.90590	128.79027	0.22202
4	5.295	BV	8.00e-3	75.07994	121.72447	0.24192
5	5.333	VV	0.0288	294.23926	123.69019	0.94807
6	5.346	VV	4.44e-3	34.52481	110.52535	0.11124
7	5.383	VV	0.0265	627.03131	291.72308	2.02036
8	5.419	VV	0.0243	393.22125	198.95546	1.26700
9	5.485	VV	0.0293	1390.13293	576.35162	4.47915
10	5.517	VV	0.0235	605.03247	308.12732	1.94948
11	5.552	VV	0.0137	247.43813	223.28055	0.79727
12	5.602	VV	0.0301	648.08313	259.41418	2.08819
13	5.657	VV	0.0331	1407.92615	505.63867	4.53648
14	5.702	VV	0.0324	1514.04175	559.58801	4.87840
15	5.762	VV	0.0251	1811.06604	890.66693	5.83544
16	5.799	VV	8.89e-3	279.79590	393.74881	0.90153
17	5.808	VV	5.79e-3	188.32840	423.17780	0.60681

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.822	VV	0.0118	432.68564	452.29379	1.39416
19	5.828	VV	4.07e-3	121.77089	433.85043	0.39236
20	5.837	VV	6.96e-3	220.50105	431.31256	0.71048
21	5.852	VV	9.94e-3	382.41901	477.90097	1.23219
22	5.875	VV	0.0238	1078.23999	551.66187	3.47420
23	5.902	VV	9.97e-3	391.01505	497.51471	1.25989
24	5.906	VV	0.0123	491.44180	496.59726	1.58348
25	5.924	VV	5.23e-3	145.28998	420.38562	0.46814
26	5.957	VV	0.0221	889.88544	495.60803	2.86730
27	5.967	VV	0.0102	413.78207	504.46637	1.33325
28	5.977	VV	5.02e-3	149.91061	498.20679	0.48303
29	5.988	VV	9.17e-3	358.22107	524.53625	1.15422
30	5.994	VV	4.39e-3	169.35416	521.38983	0.54568
31	6.002	VV	6.50e-3	242.88931	515.15900	0.78261
32	6.012	VV	0.0147	653.23767	532.12512	2.10480
33	6.028	VB	8.29e-3	307.30798	491.72269	0.99018
34	6.041	BV	5.58e-3	214.91748	503.30139	0.69249
35	6.052	VV	0.0287	1184.98254	513.80450	3.81813
36	6.088	VV	3.65e-3	116.19648	417.04987	0.37440
37	6.093	VV	0.0126	433.06265	421.62866	1.39537
38	6.116	VV	7.12e-3	216.54976	387.46390	0.69775
39	6.137	VV	0.0275	946.08606	440.03351	3.04839
40	6.164	VV	0.0151	445.11194	391.56046	1.43420
41	6.180	VV	5.82e-3	150.10031	348.79605	0.48364
42	6.187	VV	3.46e-3	84.28869	343.45963	0.27159
43	6.210	VV	0.0328	1088.64807	399.84866	3.50774
44	6.252	VV	4.95e-3	69.81255	187.12798	0.22494
45	6.280	VV	0.0190	336.14246	215.18098	1.08309
46	6.301	VV	0.0259	511.20987	238.05656	1.64717
47	6.346	VV	0.0161	260.36612	195.39104	0.83893
48	6.373	VV	0.0258	499.14862	231.46349	1.60831
49	6.408	VV	0.0168	271.57849	195.60472	0.87505
50	6.428	VV	0.0124	188.57491	187.08542	0.60761
51	6.439	VB	0.0104	95.90443	116.92256	0.30901
52	6.474	BV	0.0116	98.68539	104.28423	0.31797
53	6.480	VB	7.91e-3	65.41029	104.39767	0.21076
54	6.514	BV	0.0191	247.67200	163.00961	0.79802
55	6.533	VB	4.81e-3	12.96668	35.89327	0.04178
56	6.577	PV	0.0108	28.45155	32.44989	0.09167
57	6.663	VV	0.0290	780.63763	339.54977	2.51529
58	6.694	VV	0.0171	270.02670	193.05754	0.87005
59	6.755	VV	0.0249	373.95773	186.97466	1.20493
60	6.817	VV	0.0159	173.95636	136.01123	0.56051
61	6.829	VP	0.0153	175.47621	139.41750	0.56540
62	6.919	BV	0.0256	663.36298	306.93195	2.13742
63	6.958	VV	0.0293	482.42606	194.65158	1.55443
64	7.015	VV	0.0262	372.59705	168.17921	1.20055
65	7.065	VV	5.69e-3	27.56389	63.22916	0.08881
66	7.091	VP	0.0304	710.91248	287.65945	2.29063
67	7.181	VV	0.0176	169.15604	114.97651	0.54504
68	7.210	VV	0.0124	82.82612	81.98586	0.26687
69	7.216	VB	7.20e-3	40.69283	71.95134	0.13112
70	7.289	PV	0.0210	503.09280	287.82770	1.62102
71	7.317	VP	0.0226	315.77863	165.74341	1.01747
72	7.412	VP	0.0341	476.03589	165.88821	1.53384
73	7.512	VV	0.0303	315.01624	123.86129	1.01501
74	7.548	VV	5.89e-3	13.14349	31.34298	0.04235
75	7.569	VV	8.82e-3	30.88825	43.84755	0.09953
76	7.574	VV	4.08e-3	12.31449	47.29460	0.03968
77	7.634	VV	0.0420	1020.03571	286.06885	3.28666
78	7.721	VP	0.0263	231.50536	106.62041	0.74593
79	7.786	VV	0.0116	25.56510	27.10668	0.08237
80	7.793	VP	3.55e-3	5.15719	20.37687	0.01662
Totals :				3.10356e4	2.28700e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

```
Injection Date  : 1/10/2023 7:05:35 PM          Seq. Line :  37
Sample Name     : CS4 STD                      Location : Vial 3
Acq. Operator   : TW                              Inj :   1
                                               Inj Volume : 1 µl

Sequence File   : C:\HPCHEM\2\SEQUENCE\011023A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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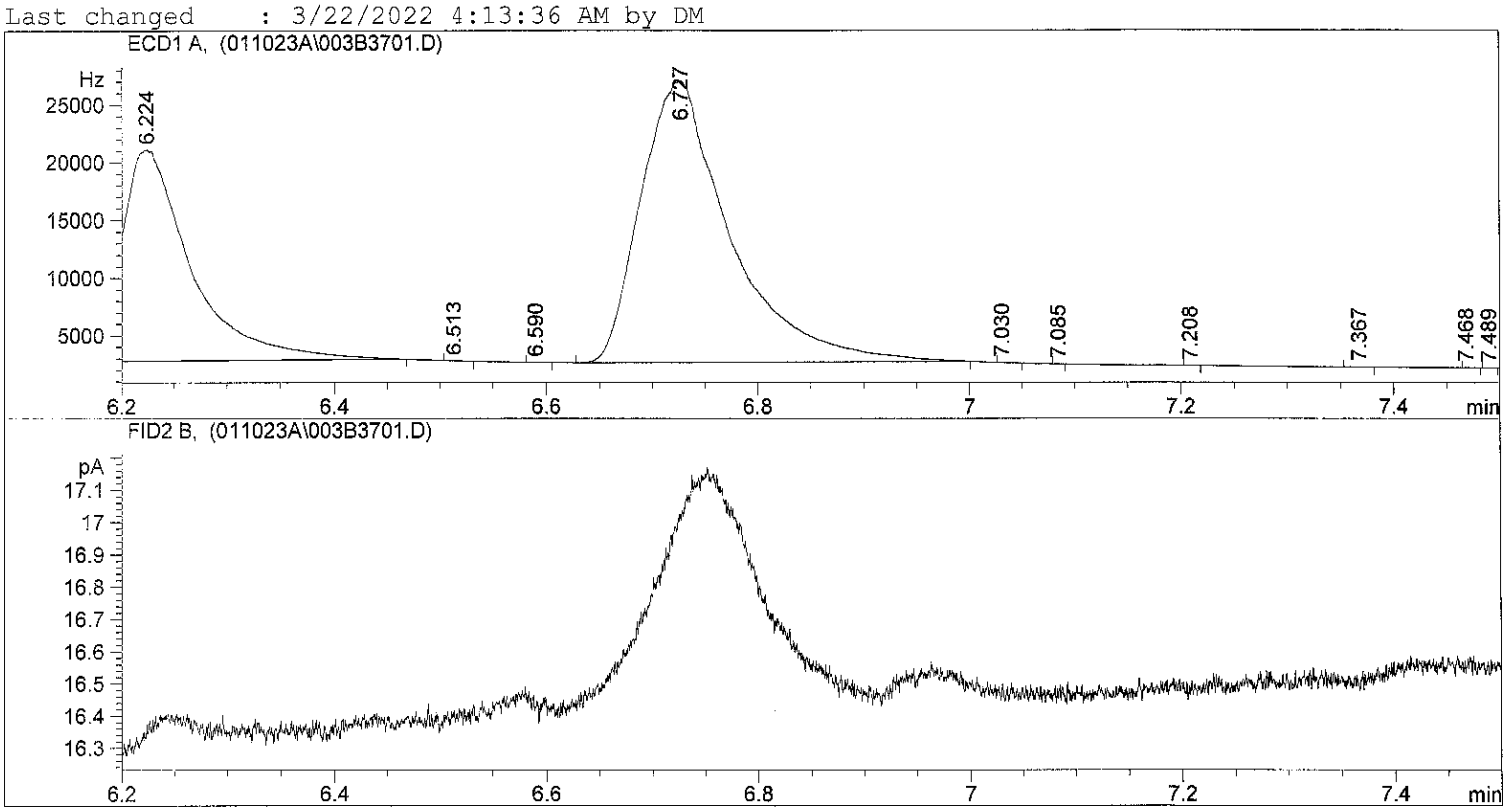

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
```

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.467	PP	0.0000	7.01997e-1	7.63667	5.633e-5
2	5.535	VV S	0.0377	2.37360e5	8.74061e4	19.04476
3	5.631	VV S	0.0521	3.46041e5	1.10596e5	27.76491
4	5.691	VV S	0.0455	1.20826e5	4.42671e4	9.69457
5	5.750	VV S	0.0724	1.37677e5	3.16967e4	11.04664
6	5.986	VV S	0.0542	1.10833e5	3.40515e4	8.89277
7	6.142	VV S	0.0528	6.68054e4	2.10905e4	5.36019
8	6.224	VB S	0.0762	8.37530e4	1.83260e4	6.71999
9	6.513	PP	0.0000	2.13323e-1	3.15643	1.712e-5
10	6.590	PP	9.04e-3	16.86399	24.46356	0.00135
11	6.727	PB S	0.0701	1.42830e5	2.44125e4	11.46009
12	7.030	PP	0.0108	13.49655	15.38340	0.00108
13	7.085	PB	4.16e-3	3.05957	12.26168	0.00025
14	7.208	PB	6.98e-3	5.75799	11.61666	0.00046
15	7.367	BP	8.46e-3	13.77203	19.92431	0.00111
16	7.468	PB	3.15e-3	2.79147	12.77946	0.00022
17	7.489	BP	3.95e-3	2.26348	9.60899	0.00018

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	7.538	PP	0.0000	8.74833e-1	4.55805	7.019e-5
19	7.619	PP	3.79e-3	2.38221	8.20597	0.00019
20	7.660	BB	0.0229	94.50393	48.89766	0.00758
21	7.694	BB	7.43e-3	12.95466	22.13354	0.00104
22	7.720	BB	0.0101	10.53837	12.97600	0.00085
23	7.755	BP	5.29e-3	5.50425	14.96309	0.00044
24	7.762	VV	2.10e-3	2.21606	15.19379	0.00018
25	7.769	VBA	0.0118	12.31639	12.87944	0.00099

Totals : 1.24633e6 3.72103e5

Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

```
Injection Date  : 1/16/2023 2:54:15 PM          Seq. Line :   3
Sample Name     : CS4 STANDARD                   Location : Vial 11
Acq. Operator   : DXP                               Inj :   1
                                                Inj Volume : 1 µl
Sequence File   : C:\HPCHEM\2\SEQUENCE\011623A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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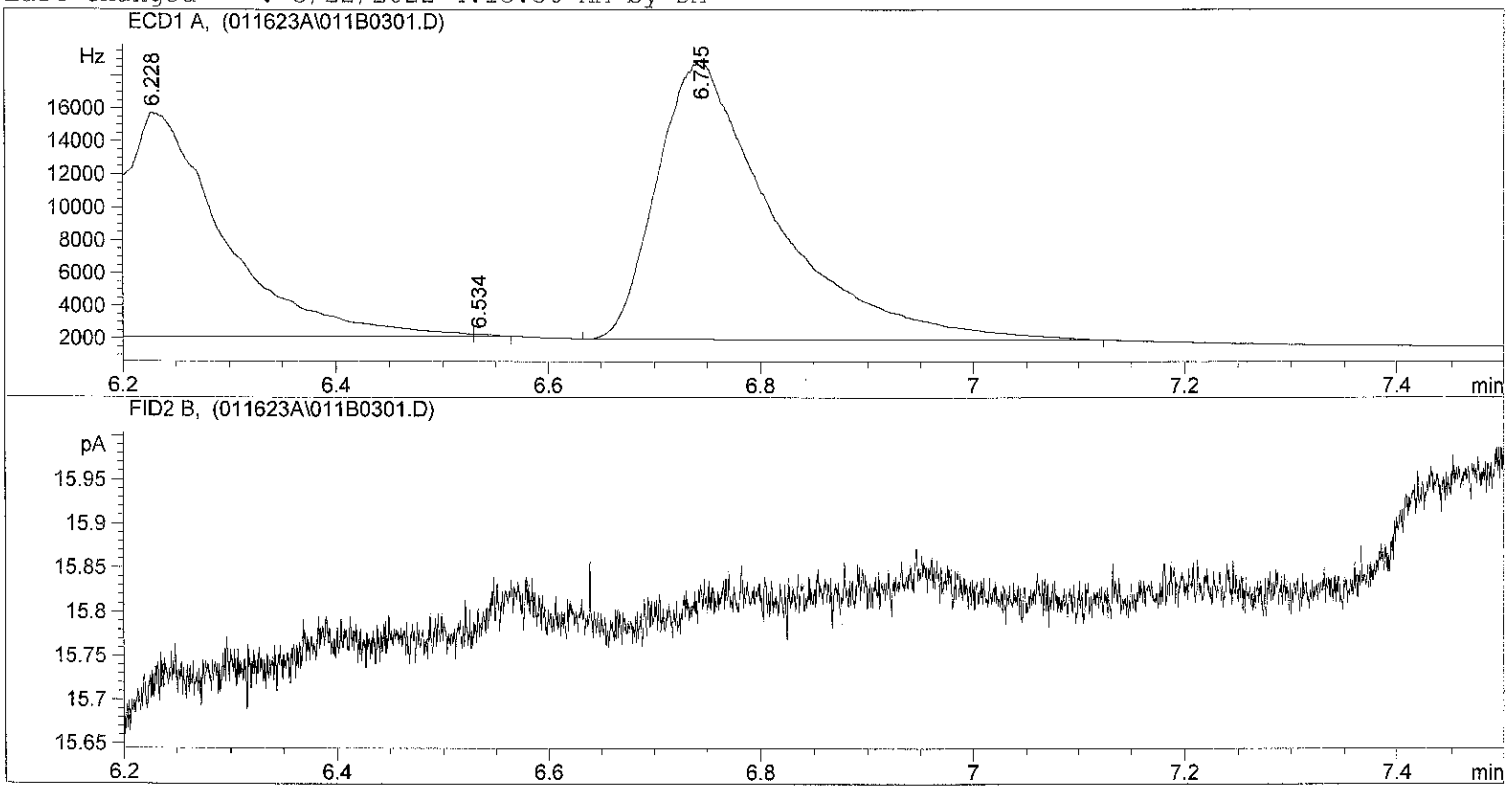

Area Percent Report

```
Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
```

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.540	BV S	0.0377	2.19817e5	7.47713e4	18.51561
2	5.635	VV S	0.0598	3.38457e5	9.44083e4	28.50886
3	5.695	VV S	0.0428	1.03991e5	4.04864e4	8.75936
4	5.746	VV S	0.0858	1.42898e5	2.77472e4	12.03659
5	5.994	VV S	0.0691	1.07870e5	2.60086e4	9.08605
6	6.150	VV S	0.0645	5.76439e4	1.48884e4	4.85545
7	6.228	VV S	0.1060	8.67672e4	1.36447e4	7.30855
8	6.534	VB S	0.0201	167.18159	138.40277	0.01408
9	6.745	PB S	0.0896	1.29574e5	1.70237e4	10.91424
10	7.533	BP	9.94e-3	7.73250	9.65665	0.00065
11	7.594	PP	1.80e-3	1.05785	10.28531	8.910e-5
12	7.613	PP	7.59e-3	5.46853	9.12779	0.00046
Totals :				1.18720e6	3.09146e5	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

==========

*** End of Report ***

```
Injection Date  : 1/16/2023 5:40:57 PM          Seq. Line :  18
Sample Name     : 23A0207 02                    Location : Vial 24
Acq. Operator   : DXP                               Inj :  1
                                               Inj Volume : 1 µl
Sequence File   : C:\HPCHEM\2\SEQUENCE\011623A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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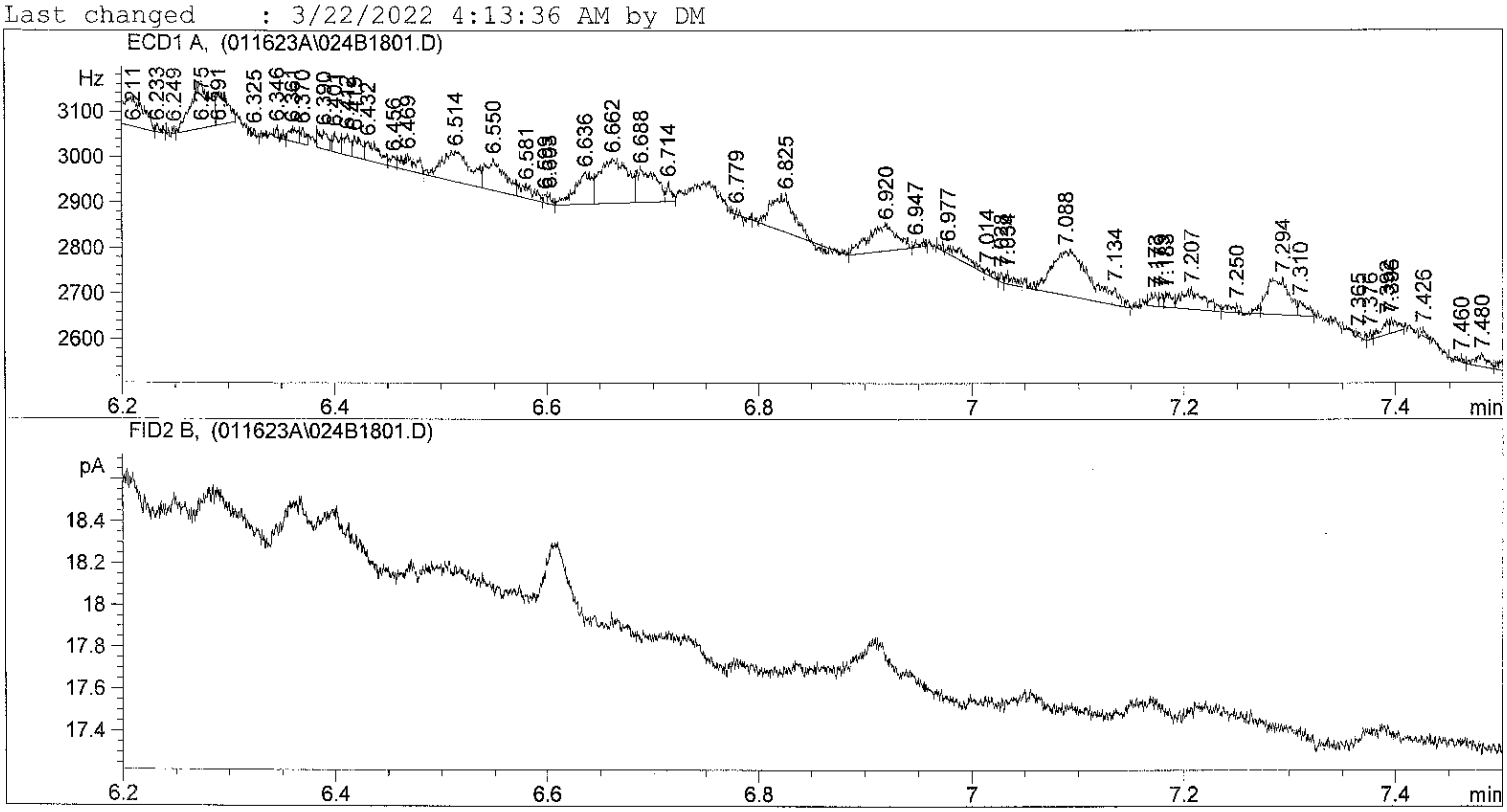

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
```

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.287	BV	0.0169	148.57916	108.97947	1.75113
2	5.297	VV	6.61e-3	35.16692	70.62211	0.41447
3	5.307	VB	5.98e-3	23.67327	53.32178	0.27901
4	5.380	BV	0.0251	667.89038	336.68658	7.87164
5	5.412	VB	0.0187	147.67381	95.27809	1.74046
6	5.480	BV	0.0186	1219.24622	858.36792	14.36982
7	5.515	VV	0.0201	246.75024	163.07648	2.90815
8	5.549	VV	8.14e-3	37.15849	60.73095	0.43794
9	5.610	VV	0.0269	191.18887	85.43890	2.25332
10	5.652	VV	0.0184	201.91083	132.08418	2.37968
11	5.656	VV	8.09e-3	91.08881	141.82895	1.07356
12	5.697	VV	0.0245	644.87006	315.28787	7.60032
13	5.732	VV	7.49e-3	75.60886	124.38763	0.89111
14	5.760	VV	0.0222	553.86725	307.24954	6.52778
15	5.828	VV	0.0282	350.88519	148.59013	4.13547
16	5.876	VV	0.0281	426.90771	180.89912	5.03146
17	5.897	VV	6.05e-3	66.23891	136.70319	0.78068

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.903	VV	3.13e-3	27.68118	127.67915	0.32625
19	5.907	VV	6.79e-3	61.95396	113.05527	0.73018
20	5.960	VV	0.0274	284.43573	124.01330	3.35231
21	5.971	VV	7.32e-3	60.96825	102.75842	0.71856
22	6.012	VV	0.0304	419.56992	167.40480	4.94498
23	6.039	VB	0.0111	63.60933	71.80996	0.74969
24	6.087	BP	3.19e-3	3.76095	20.07493	0.04433
25	6.112	BV	6.52e-3	16.91619	34.51904	0.19937
26	6.130	VV	0.0198	94.18166	56.53273	1.11001
27	6.175	VV	0.0182	69.22485	45.85841	0.81587
28	6.211	VP	0.0169	94.94120	67.02078	1.11896
29	6.233	VP	3.72e-3	4.51154	16.89083	0.05317
30	6.249	BP	2.35e-3	1.53439	13.25322	0.01808
31	6.275	VV	0.0156	128.51006	102.63912	1.51460
32	6.291	VB	9.36e-3	52.01651	69.29709	0.61306
33	6.325	PP	1.83e-3	1.40142	13.30448	0.01652
34	6.346	BV	3.12e-3	5.96623	27.63069	0.07032
35	6.361	VV	6.78e-3	16.75246	30.64992	0.19744
36	6.370	VB	4.32e-3	10.53328	33.04438	0.12414
37	6.390	BB	6.77e-3	22.27529	40.80514	0.26253
38	6.401	BB	5.08e-3	16.88225	43.99216	0.19897
39	6.412	BV	6.16e-3	20.80172	45.25386	0.24517
40	6.419	VV	6.36e-3	22.85696	46.28327	0.26939
41	6.432	VB	0.0111	36.39904	42.17062	0.42899
42	6.456	BV	5.81e-3	8.66752	21.91477	0.10215
43	6.469	VP	0.0108	30.86499	34.63340	0.36377
44	6.514	VV	0.0224	126.56197	67.24179	1.49164
45	6.550	VB	0.0153	86.43136	68.81509	1.01866
46	6.581	BV	0.0116	27.37184	28.58545	0.32260
47	6.599	VV	3.19e-3	3.67118	17.92261	0.04327
48	6.603	VP	3.14e-3	4.66193	21.42123	0.05494
49	6.636	VV	0.0136	77.61913	69.76479	0.91481
50	6.662	VV	0.0211	175.35164	99.00315	2.06666
51	6.688	VV	0.0157	92.35135	73.10036	1.08844
52	6.714	VV	4.32e-3	13.30046	41.66791	0.15676
53	6.779	PB	1.06e-3	4.73667e-1	11.95798	0.00558
54	6.825	BP	0.0194	113.41196	82.93789	1.33665
55	6.920	VP	0.0233	108.79445	55.95485	1.28223
56	6.947	VB	4.81e-3	5.25792	14.56025	0.06197
57	6.977	BV	0.0355	30.51836	14.31016	0.35968
58	7.014	VP	6.65e-3	6.47282	12.49198	0.07629
59	7.028	VP	2.90e-3	3.56943	19.87731	0.04207
60	7.034	VB	8.38e-3	12.68304	25.21926	0.14948
61	7.088	BV	0.0296	239.00577	96.86974	2.81688
62	7.134	VP	6.80e-3	19.88435	38.65346	0.23435
63	7.173	BV	5.79e-3	11.45944	26.78061	0.13506
64	7.179	VV	2.93e-3	5.70107	28.52108	0.06719
65	7.183	VB	5.64e-3	13.84358	30.80024	0.16316
66	7.207	BP	0.0170	64.47075	45.91431	0.75984
67	7.250	VB	0.0113	15.67978	18.03928	0.18480
68	7.294	BV	0.0165	109.54167	80.34286	1.29104
69	7.310	VB	7.35e-3	18.53575	32.03506	0.21846
70	7.365	PP	3.88e-3	2.21097	8.96678	0.02606
71	7.376	VV	3.23e-3	3.13274	16.35970	0.03692
72	7.392	VV	6.66e-3	14.51976	31.04320	0.17113
73	7.396	VB	5.66e-3	13.73673	31.67677	0.16190
74	7.426	BB	3.04e-3	3.74720	16.57687	0.04416
75	7.460	PP	4.48e-3	2.52333	12.91850	0.02974
76	7.480	VV	9.43e-3	20.90482	28.26265	0.24638
77	7.506	VV	8.26e-3	21.84679	33.28683	0.25748
78	7.517	VP	0.0123	35.27191	37.86517	0.41571
79	7.566	BP	3.53e-3	4.25648	15.85394	0.05017
80	7.588	BP	4.07e-3	2.96290	11.26443	0.03492
81	7.627	VB	0.0289	175.83839	76.81888	2.07240
82	7.683	BP	2.79e-3	2.06158	12.05888	0.02430

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.719	VB	0.0196	71.83527	46.99170	0.84664
84	7.784	PPA	0.0117	17.37662	18.18227	0.20480

Totals : 8484.77204 6352.93790

Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

```
Injection Date  : 1/16/2023 5:52:11 PM          Seq. Line :  19
Sample Name     : 23A0207 10                    Location : Vial 25
Acq. Operator   : DXP                              Inj :   1
                                                Inj Volume : 1 µl
Sequence File   : C:\HPCHEM\2\SEQUENCE\011623A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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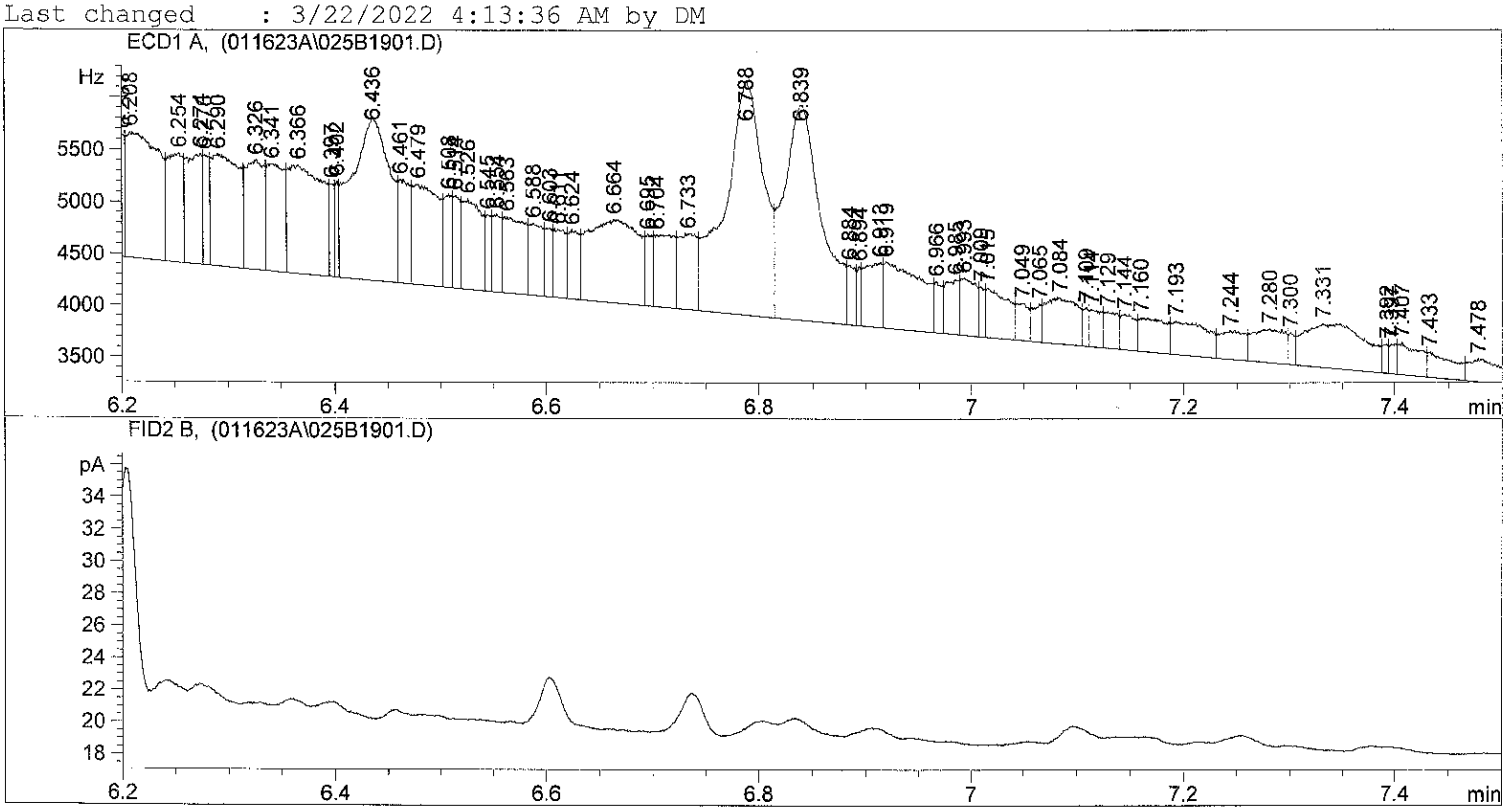

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
```

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.240	BV	0.0298	3124.94556	1276.02820	2.62268
2	5.299	VV	0.0107	433.90390	501.49243	0.36416
3	5.309	VV	0.0187	800.24469	532.43854	0.67162
4	5.345	VV	6.02e-3	116.31822	241.60114	0.09762
5	5.366	VV	0.0235	953.97540	485.78229	0.80065
6	5.411	VV	0.0167	811.08502	578.78162	0.68072
7	5.422	VV	8.65e-3	350.72742	521.11151	0.29436
8	5.434	VV	6.03e-3	232.59988	519.01862	0.19521
9	5.454	VV	0.0136	652.37775	603.25977	0.54752
10	5.480	VV	0.0210	2082.37231	1189.61145	1.74768
11	5.515	VV	0.0199	1472.43066	939.24121	1.23577
12	5.538	VV	3.89e-3	150.48964	534.26953	0.12630
13	5.542	VV	5.59e-3	174.36371	519.44659	0.14634
14	5.592	VV	0.0407	3780.44824	1095.53796	3.17283
15	5.637	VV	0.0300	3518.09229	1387.91272	2.95264
16	5.697	VV	0.0345	6225.64404	2209.57056	5.22502
17	5.743	VV	0.0107	1135.47034	1337.79761	0.95297

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.757	VV	0.0191	2158.31201	1364.52161	1.81141
19	5.780	VV	3.41e-3	265.15881	1102.60181	0.22254
20	5.786	VV	0.0105	884.53137	1139.41956	0.74236
21	5.797	VV	7.85e-3	700.25757	1096.89026	0.58771
22	5.827	VV	0.0267	2790.95337	1248.33032	2.34237
23	5.875	VV	0.0289	4895.79248	2090.26050	4.10891
24	5.939	VV	0.0472	8734.71289	2213.82080	7.33081
25	5.979	VV	7.93e-3	1080.57336	1767.94458	0.90690
26	5.989	VV	6.17e-3	849.98517	1780.59656	0.71337
27	6.004	VV	0.0235	3384.92603	1753.66211	2.84088
28	6.036	VV	0.0339	4415.26465	1595.73999	3.70562
29	6.081	VV	0.0127	1365.74414	1315.49304	1.14623
30	6.098	VV	8.31e-3	780.16467	1244.37183	0.65477
31	6.110	VV	6.63e-3	674.93512	1264.59839	0.56646
32	6.116	VV	3.13e-3	274.17633	1263.56982	0.23011
33	6.122	VV	0.0219	2318.41016	1271.72266	1.94578
34	6.153	VV	5.76e-3	484.59482	1139.08899	0.40671
35	6.167	VV	0.0106	1039.77075	1234.13220	0.87265
36	6.175	VV	7.18e-3	710.28510	1221.86597	0.59612
37	6.186	VV	0.0102	970.53094	1185.36670	0.81454
38	6.201	VV	5.28e-3	452.37845	1177.78003	0.37967
39	6.208	VV	0.0249	2536.26270	1206.83557	2.12862
40	6.254	VV	0.0135	1081.68469	1047.17017	0.90783
41	6.274	VV	0.0123	1073.14185	1067.70850	0.90066
42	6.278	VV	5.11e-3	427.00909	1056.67383	0.35838
43	6.290	VV	0.0222	1927.73474	1072.50549	1.61790
44	6.326	VV	0.0147	1268.17627	1051.13525	1.06435
45	6.341	VV	0.0142	1170.41089	1030.68542	0.98230
46	6.366	VV	0.0264	2317.35303	1046.08313	1.94489
47	6.397	VV	4.48e-3	267.03391	895.69092	0.22411
48	6.402	VV	3.36e-3	218.60709	922.50159	0.18347
49	6.436	VV	0.0299	3894.18262	1562.24341	3.26829
50	6.461	VV	9.56e-3	765.90961	997.48090	0.64281
51	6.479	VV	0.0213	1657.71851	972.36102	1.39128
52	6.508	VV	6.56e-3	473.56247	896.26038	0.39745
53	6.514	VV	6.17e-3	412.12473	895.68353	0.34589
54	6.526	VV	0.0156	1119.83777	871.48724	0.93985
55	6.545	VV	4.91e-3	260.04114	738.68872	0.21825
56	6.554	VV	0.0101	456.08865	752.74780	0.38278
57	6.563	VV	0.0169	1040.68005	737.84644	0.87342
58	6.588	VV	0.0107	613.94293	696.13257	0.51527
59	6.603	VV	6.21e-3	321.84119	669.81787	0.27011
60	6.611	VV	9.31e-3	490.97125	657.79291	0.41206
61	6.624	VV	9.06e-3	492.20026	663.37537	0.41309
62	6.664	VV	0.0387	2610.68799	804.50610	2.19108
63	6.695	VV	6.34e-3	327.35782	688.79724	0.27474
64	6.704	VV	0.0216	900.99927	695.61096	0.75618
65	6.733	VV	0.0149	909.89758	733.31262	0.76365
66	6.788	VV	0.0305	5684.32275	2247.14722	4.77070
67	6.839	VV	0.0297	4969.95215	2064.70947	4.17115
68	6.884	VV	9.15e-3	314.95895	573.48706	0.26434
69	6.894	VV	3.41e-3	137.75288	572.47601	0.11561
70	6.913	VV	0.0137	715.90375	629.55798	0.60084
71	6.919	VV	0.0300	1584.62634	638.12494	1.32994
72	6.966	VV	6.98e-3	260.76315	492.47516	0.21885
73	6.985	VV	0.0109	461.71375	524.70380	0.38750
74	6.993	VV	0.0135	579.95026	551.71039	0.48674
75	7.009	VV	5.25e-3	185.27823	485.48682	0.15550
76	7.015	VV	0.0183	707.21613	477.72296	0.59355
77	7.049	VV	0.0106	278.80869	359.95441	0.23400
78	7.065	VV	8.01e-3	224.63374	365.35010	0.18853
79	7.084	VV	0.0250	940.54132	450.22772	0.78937
80	7.109	VV	4.68e-3	131.48769	376.36807	0.11035
81	7.114	VV	9.54e-3	275.61652	359.68445	0.23132
82	7.129	VV	0.0109	299.71158	353.99985	0.25154

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.144	VV	0.0122	333.45117	339.99341	0.27986
84	7.160	VV	0.0295	570.58777	322.18216	0.47888
85	7.193	VV	0.0283	750.50092	321.31470	0.62988
86	7.244	VV	0.0194	437.54465	271.47699	0.36722
87	7.280	VV	0.0253	691.02081	326.23993	0.57996
88	7.300	VV	5.22e-3	121.40380	306.25595	0.10189
89	7.331	VV	0.0483	1739.46375	423.96033	1.45989
90	7.392	VV	6.13e-3	114.27633	281.92908	0.09591
91	7.397	VV	5.90e-3	129.67094	285.43649	0.10883
92	7.407	VV	0.0181	442.90817	309.00952	0.37172
93	7.433	VV	0.0196	395.26379	242.66505	0.33173
94	7.478	VV	0.0237	421.06589	218.76604	0.35339
95	7.512	VV	0.0177	279.23132	190.58142	0.23435
96	7.534	VV	9.01e-3	86.12434	159.39920	0.07228
97	7.544	VV	0.0143	182.44044	155.83250	0.15312
98	7.579	VP	4.15e-3	9.95726	32.76343	0.00836
99	7.626	VV	0.0277	304.98819	131.28871	0.25597
100	7.654	VB	0.0102	45.48045	64.86250	0.03817
101	7.680	BV	4.38e-3	5.79532	18.88080	0.00486
102	7.689	VB	4.06e-3	5.82994	22.20481	0.00489
103	7.730	BB	0.0131	19.73060	25.18986	0.01656
104	7.761	BP	2.49e-3	1.52296	16.27187	0.00128
105	7.770	VV	5.69e-3	11.81573	30.70541	0.00992
106	7.784	VPA	9.95e-3	14.92385	20.85231	0.01253

Totals : 1.19151e5 8.44171e4

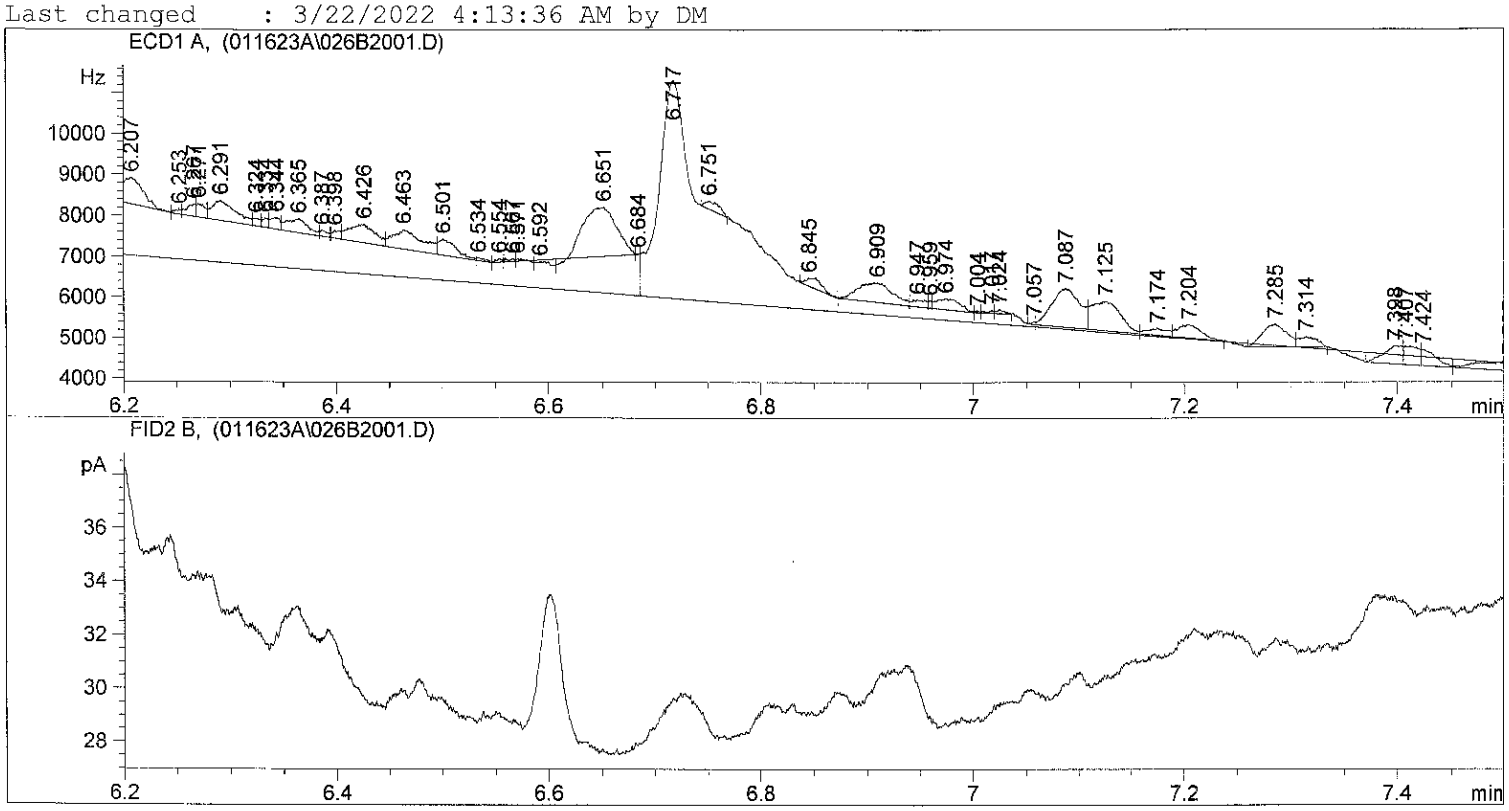
Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

Injection Date : 1/16/2023 6:03:10 PM Seq. Line : 20
Sample Name : 23A0207 17 Location : Vial 26
Acq. Operator : DXP Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\011623A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.283	BV S	0.0201	4791.64648	2863.42261	2.41147
2	5.323	VP S	0.0208	1093.65186	875.62787	0.55040
3	5.381	VV S	0.0265	6050.03613	2882.46167	3.04477
4	5.433	VV S	0.0317	5949.65430	3123.98535	2.99425
5	5.480	VV S	0.0460	2.27913e4	8265.79395	11.47009
6	5.563	BV T	0.0185	2658.97900	1756.61731	1.33817
7	5.590	VV T	0.0142	1110.63672	995.06311	0.55894
8	5.631	VV T	0.0109	621.02600	750.64685	0.31254
9	5.676	VV S	0.0331	2.04576e4	7782.18262	10.29560
10	5.757	VV S	0.0768	2.37658e4	5157.59424	11.96049
11	5.808	BV T	9.95e-3	547.39758	697.98163	0.27549
12	5.814	VV T	9.93e-3	374.74750	628.90198	0.18860
13	5.831	VV T	9.66e-3	323.79907	407.76776	0.16296
14	5.865	PV T	0.0142	725.62561	620.63318	0.36518
15	5.900	VV T	0.0153	991.88464	809.48987	0.49918
16	5.926	VV T	4.91e-3	28.13276	72.84813	0.01416
17	5.953	VV S	0.0202	1.17034e4	7854.75928	5.88992

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.977	VV S	0.0270	6024.15674	3712.59717	3.03175
19	6.005	VV S	0.2781	4.47492e4	2682.21021	22.52070
20	6.058	BV T	0.0172	1538.68372	1120.37439	0.77437
21	6.091	PV T	7.50e-3	309.68011	523.95251	0.15585
22	6.110	VV T	0.0168	1435.17529	1090.10193	0.72227
23	6.139	PV T	7.04e-3	158.99734	297.36417	0.08002
24	6.143	PV T	6.84e-3	101.73583	247.74300	0.05120
25	6.158	PV T	0.0183	232.48434	211.46112	0.11700
26	6.179	PV T	7.71e-3	49.90465	107.85330	0.02512
27	6.207	PV T	0.0189	981.26727	631.25079	0.49384
28	6.253	PV T	4.89e-3	42.53971	110.50652	0.02141
29	6.267	PV T	7.46e-3	173.22839	294.56366	0.08718
30	6.271	PV T	8.69e-3	169.85101	325.75488	0.08548
31	6.291	PV T	0.0190	745.33704	482.97571	0.37510
32	6.324	PV T	6.81e-3	91.56882	183.93329	0.04608
33	6.334	PV T	4.92e-3	81.49857	230.98293	0.04102
34	6.344	PV T	7.38e-3	169.45378	283.03998	0.08528
35	6.365	PV T	0.0164	464.29309	339.02612	0.23366
36	6.387	PV T	6.97e-3	76.18125	144.12776	0.03834
37	6.398	PV T	6.71e-3	97.66360	186.54813	0.04915
38	6.426	PV T	0.0208	764.53577	454.87976	0.38476
39	6.463	PV T	0.0232	920.99579	475.55286	0.46350
40	6.501	PV T	0.0143	463.50595	393.47641	0.23327
41	6.534	PV T	0.0101	40.38167	66.60812	0.02032
42	6.554	PV T	4.80e-3	33.14666	92.16893	0.01668
43	6.567	PV T	6.64e-3	32.00493	63.91315	0.01611
44	6.571	PV T	2.66e-3	9.49507	59.41621	0.00478
45	6.592	PV T	0.0320	103.47183	38.17243	0.05207
46	6.651	PV T	0.0258	2591.29736	1200.96155	1.30411
47	6.684	PV T	2.95e-3	4.42754	24.99069	0.00223
48	6.717	PBAS	0.0463	1.98507e4	5342.46338	9.99018
49	6.751	BB T	0.0129	199.72641	195.83043	0.10052
50	6.845	BV T	0.0147	240.70921	199.16229	0.12114
51	6.909	PV T	0.0283	1080.40515	480.12299	0.54373
52	6.947	PV T	0.0109	148.90408	168.88684	0.07494
53	6.959	PV T	3.74e-3	38.67131	172.23109	0.01946
54	6.974	PV T	0.0190	415.06137	268.28058	0.20889
55	7.004	PV T	4.51e-3	8.97585	28.23443	0.00452
56	7.017	PV T	5.41e-3	29.10902	70.54433	0.01465
57	7.024	PB T	6.44e-3	48.33448	96.60530	0.02433
58	7.057	BV T	3.20e-3	16.25640	73.07719	0.00818
59	7.087	PV T	0.0233	1775.49597	944.28571	0.89355
60	7.125	PV T	0.0234	1388.32556	724.22382	0.69870
61	7.174	PV T	0.0163	222.65869	167.68399	0.11206
62	7.204	PB T	0.0186	489.97067	324.66000	0.24659
63	7.285	BV T	0.0188	874.44409	560.65668	0.44008
64	7.314	PB T	0.0152	315.59641	256.18430	0.15883
65	7.398	BV T	0.0147	549.10461	446.63135	0.27635
66	7.407	PV T	0.0153	420.74533	459.76639	0.21175
67	7.424	PV T	0.0149	362.63794	405.31479	0.18250
68	7.505	PV T	0.0348	770.04779	266.02899	0.38754
69	7.553	PV T	0.0120	83.15952	90.49993	0.04185
70	7.569	PV T	7.79e-3	87.37181	138.00558	0.04397
71	7.575	PV T	8.58e-3	80.62099	156.58119	0.04057
72	7.627	PV T	0.0362	1836.33154	609.05054	0.92416
73	7.702	PV T	0.0136	231.73167	207.85164	0.11662
74	7.713	PV T	0.0230	448.45239	233.79054	0.22569
75	7.779	PBAT	0.0113	47.34584	52.41156	0.02383
Totals :				1.98702e5	7.47614e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

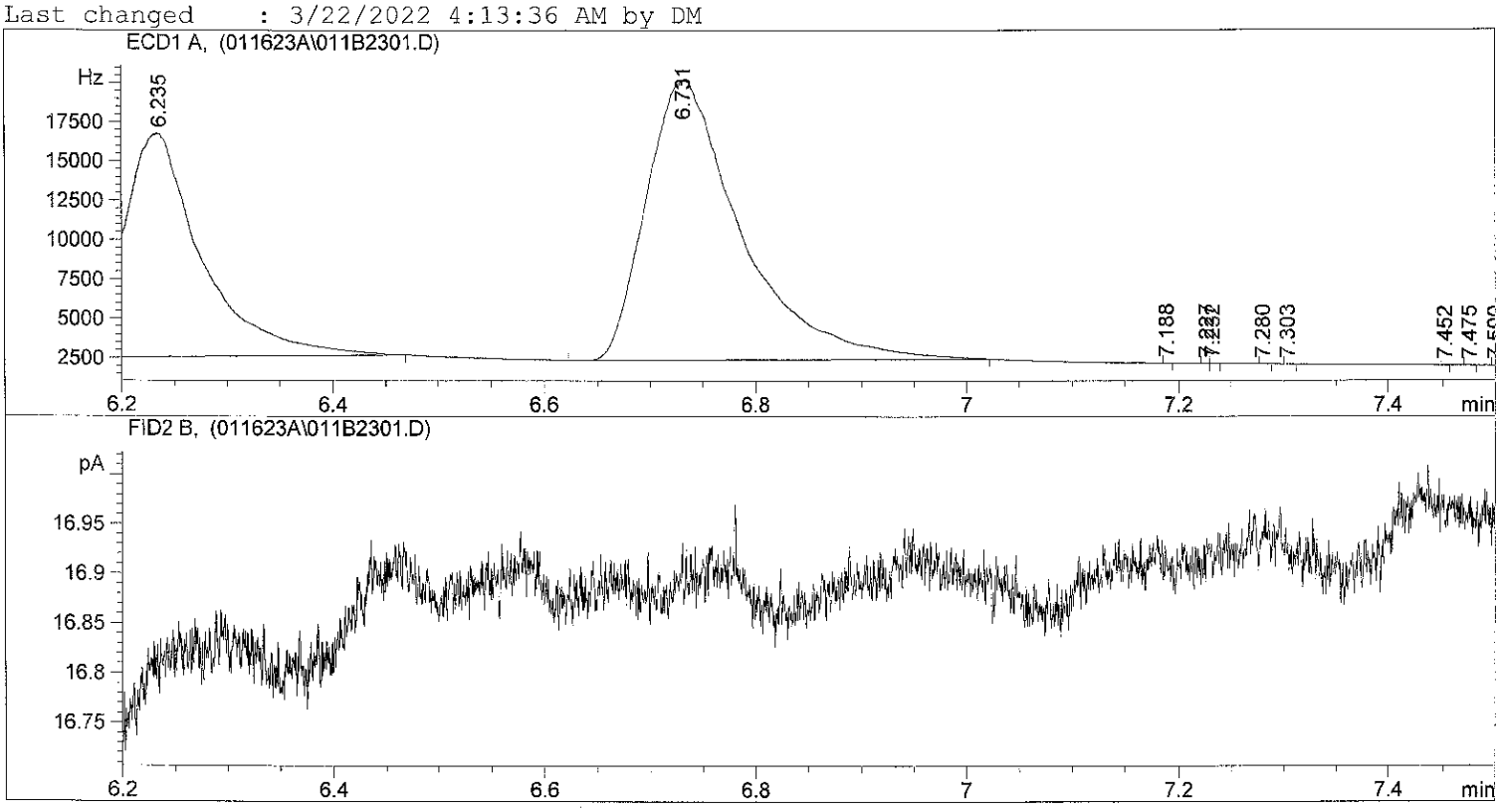
Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	5.373	PB	0.0168	26.49011	24.22663	1.000e2
Totals :				26.49011	24.22663	

Results obtained with enhanced integrator!

*** End of Report ***

Injection Date : 1/16/2023 6:35:45 PM Seq. Line : 23
Sample Name : CS4 STANDARD Location : Vial 11
Acq. Operator : DXP Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\011623A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.387	BP	3.76e-3	6.73550	23.38311	0.00061
2	5.426	PP	1.91e-3	5.61193	50.03798	0.00051
3	5.540	VV S	0.0375	2.19397e5	7.92904e4	19.96961
4	5.633	VV S	0.0515	3.17148e5	1.02691e5	28.86701
5	5.696	VV S	0.0467	1.10937e5	3.95519e4	10.09752
6	5.750	VV S	0.0708	1.20410e5	2.83515e4	10.95979
7	5.989	VV S	0.0591	9.51110e4	2.68172e4	8.65706
8	6.146	VV S	0.0571	5.54376e4	1.61712e4	5.04597
9	6.235	VB S	0.0811	6.91785e4	1.42134e4	6.29667
10	6.731	PB S	0.0740	1.10879e5	1.78229e4	10.09229
11	7.188	BP	2.09e-3	1.64488	12.89897	0.00015
12	7.227	BP	4.34e-3	4.60406	17.08595	0.00042
13	7.232	VP	4.83e-3	4.55880	13.19342	0.00041
14	7.280	PP	1.77e-3	8.96034e-1	8.90398	8.156e-5
15	7.303	BP	2.12e-3	1.75317	13.42507	0.00016
16	7.452	PP	2.95e-3	1.95807	8.95854	0.00018
17	7.475	PP	3.77e-3	2.89440	10.64370	0.00026

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	7.500	PP	3.29e-3	1.66892	7.22919	0.00015
19	7.543	PB	1.92e-3	9.27373e-1	8.21267	8.441e-5
20	7.572	BP	7.59e-3	5.66413	9.45509	0.00052
21	7.661	BP	0.0253	113.56325	53.72012	0.01034
22	7.727	PP	3.29e-3	2.20621	8.89274	0.00020

Totals : 1.09865e6 3.25155e5

Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Dioxin Extraction Laboratory – Glassware

Batch ID: BLA0261 Work Order: 23A0100, 23A0133, 23A0134, 23A0207 Extraction Parameter: Dioxin ARI Analyst TW

ARI Sample ID		300 mL Flat Bottom	Small Soxhlet	Large Soxhlet	250 mL Beaker	Funnel	Column	Florisil Column	Turbo Tube	Sep Funnel	Erlenmeyer Flask	Centrifuge Bottle	Turbo-Vap	Vortex Mixer	Heating Mantle
BLA0261	- BLK1	6	5		19	46	9	12	37				4	4	A1
	- BS1	40	15		17	38	15	67	20				4	4	A2
	- DUP1	32		71	239	60	198	139	3				4	4	A3
	- SRM1	70	64		23	16	41	7	17				4	4	A5
23A0100	- 09	18		23	39	61	185	150	32				4	4	A6
	- 21	49		25	31	5	43	166	25				4	4	B1
23A0133	- 06	4		67	138	59	2	136	82				4	4	B2
	- 07	38	11		49	11	36	16	31				4	4	B3
	- 10	79		28	50	25	31	29	35				4	4	B4
	- 11	67		35	43	24	45	49	57				4	4	B5
23A0134	- 06	60		3	33	18	35	2	85				4	4	B6
	- 14	39	70		41	37	38	61	42				4	4	C1
23A0207	- 02	17	25		3	27	11	70	10				4	4	C2
	- 10	53	26		13	65	16	71	24				4	4	C3
	- 17	43	23		25	3	14	60	23				4	4	C4
													4	4	
													4	4	
													4	4	
													4	4	
													4	4	
													4	4	
													4	4	
													4	4	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0236	Cleanup Type:	Sulfuric Acid
Cleanup Method:	EPA 3665 Sulfuric Acid Cleanup - uL	Analysis:	EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Reference	BLA0261-SRM1	23022306	01/25/2023	
LCS	BLA0261-BS1	23022401	01/25/2023	
Blank	BLA0261-BLK1	23022304	01/25/2023	
LDW23-SS1160	23A0134-06	23022316	01/25/2023	
LDW23-IT1194	23A0134-14	23022317	01/25/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0236

Matrix: Solid **Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 1/27/2023 10:22:01AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0100-09	C	LDW23-SS1226	C 01	20	20	1613B Dioxin	1/25/2023	TW	
23A0100-21	C	LDW23-SS1154	C 01	20	20	1613B Dioxin	1/25/2023	TW	
23A0133-06	B	LDW23-SC1241	B 01	20	20	1613B Dioxin	1/25/2023	TW	
23A0133-07	B	LDW23-IT1217	B 01	20	20	1613B Dioxin	1/25/2023	TW	
23A0133-10	B	LDW23-SC1215	B 01	20	20	1613B Dioxin	1/25/2023	TW	
23A0133-11	B	LDW23-SC1222	B 01	20	20	1613B Dioxin	1/25/2023	TW	
23A0134-06	B	LDW23-SS1160	B 01	20	20	1613B Dioxin	1/25/2023	TW	
23A0134-14	B	LDW23-IT1194	B 01	20	20	1613B Dioxin	1/25/2023	TW	
23A0207-02	B	LDW23-IT1089	B 01	20	20	1613B Dioxin	1/25/2023	TW	
23A0207-10	B	LDW23-IT1097	B 01	20	20	1613B Dioxin	1/25/2023	TW	
23A0207-17	B	LDW23-IT1209	B 01	20	20	1613B Dioxin	1/25/2023	TW	
BLA0261-BLK1	-	Blank	-	20	20	-	1/25/2023	TW	
BLA0261-BS1	-	LCS	-	20	20	-	1/25/2023	TW	
BLA0261-DUP1	-	Duplicate	-	20	20	-	1/25/2023	TW	
BLA0261-SRM1	-	Reference	-	20	20	-	1/25/2023	TW	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0237	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Reference	BLA0261-SRM1	23022306	01/26/2023	
LCS	BLA0261-BS1	23022401	01/26/2023	
Blank	BLA0261-BLK1	23022304	01/26/2023	
LDW23-SS1160	23A0134-06	23022316	01/26/2023	
LDW23-IT1194	23A0134-14	23022317	01/26/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0237

Matrix: Solid **Cleanup using: Organics - EPA 3660C Silica Gel Cleanup - uL** **Printed: 1/27/2023 10:23:03AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0100-09	C	LDW23-SS1226	C 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0100-21	C	LDW23-SS1154	C 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0133-06	B	LDW23-SC1241	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0133-07	B	LDW23-IT1217	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0133-10	B	LDW23-SC1215	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0133-11	B	LDW23-SC1222	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0134-06	B	LDW23-SS1160	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0134-14	B	LDW23-IT1194	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0207-02	B	LDW23-IT1089	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0207-10	B	LDW23-IT1097	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0207-17	B	LDW23-IT1209	B 01	20	20	1613B Dioxin	1/26/2023	TW	
BLA0261-BLK1	-	Blank	-	20	20	-	1/26/2023	TW	
BLA0261-BS1	-	LCS	-	20	20	-	1/26/2023	TW	
BLA0261-DUP1	-	Duplicate	-	20	20	-	1/26/2023	TW	
BLA0261-SRM1	-	Reference	-	20	20	-	1/26/2023	TW	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLA0238	Cleanup Type:	Florisil
Cleanup Method:	EPA 3620B Florisil Cleanup (uL)	Analysis:	EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Reference	BLA0261-SRM1	23022306	01/26/2023	
LCS	BLA0261-BS1	23022401	01/26/2023	
Blank	BLA0261-BLK1	23022304	01/26/2023	
LDW23-SS1160	23A0134-06	23022316	01/26/2023	
LDW23-IT1194	23A0134-14	23022317	01/26/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLA0238

Matrix: Solid **Cleanup using: Organics - EPA 3620B Florisil Cleanup (uL)** **Check Standard: CKK0015-FLO1** **Printed: 1/27/2023 10:23:47AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0100-09	C	LDW23-SS1226	C 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0100-21	C	LDW23-SS1154	C 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0133-06	B	LDW23-SC1241	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0133-07	B	LDW23-IT1217	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0133-10	B	LDW23-SC1215	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0133-11	B	LDW23-SC1222	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0134-06	B	LDW23-SS1160	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0134-14	B	LDW23-IT1194	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0207-02	B	LDW23-IT1089	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0207-10	B	LDW23-IT1097	B 01	20	20	1613B Dioxin	1/26/2023	TW	
23A0207-17	B	LDW23-IT1209	B 01	20	20	1613B Dioxin	1/26/2023	TW	
BLA0261-BLK1	-	Blank	-	20	20	-	1/26/2023	TW	
BLA0261-BS1	-	LCS	-	20	20	-	1/26/2023	TW	
BLA0261-DUP1	-	Duplicate	-	20	20	-	1/26/2023	TW	
BLA0261-SRM1	-	Reference	-	20	20	-	1/26/2023	TW	

Analytical Resources, LLC
Analytical Chemists and Consultants

Blank

Form 1
METHOD BLANK DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0261-BLK1	File ID:	23022304
Sampled:	N/A	Prepared:	01/24/23 13:10	Analyzed:	02/23/23 12:35
Solids Wt%:		Preparation:	EPA 1613	Initial/Final:	10 g / 20 uL
Result Basis:	Dry	Sequence:	SLB0345	Calibration:	GB00010
Batch:	BLA0261	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	2.534	0.655-0.886	0.056	1.00	0.0551	ng/kg	EMPC, J
1746-01-6	2,3,7,8-TCDD	1	0.000	0.655-0.886	0.048	1.00	ND	ng/kg	U
57117-41-6	1,2,3,7,8-PeCDF	1	0.000	1.318-1.783	0.067	1.00	ND	ng/kg	U
57117-31-4	2,3,4,7,8-PeCDF	1	0.000	1.318-1.783	0.064	1.00	ND	ng/kg	U
40321-76-4	1,2,3,7,8-PeCDD	1	0.000	1.318-1.783	0.090	1.00	ND	ng/kg	U
70648-26-9	1,2,3,4,7,8-HxCDF	1	1.151	1.054-1.426	0.037	1.00	0.0596	ng/kg	J
57117-44-9	1,2,3,6,7,8-HxCDF	1	0.000	1.054-1.426	0.033	1.00	ND	ng/kg	U
60851-34-5	2,3,4,6,7,8-HxCDF	1	0.000	1.054-1.426	0.037	1.00	ND	ng/kg	U
72918-21-9	1,2,3,7,8,9-HxCDF	1	1.077	1.054-1.426	0.047	1.00	0.0913	ng/kg	J
39227-28-6	1,2,3,4,7,8-HxCDD	1	0.000	1.054-1.426	0.047	1.00	ND	ng/kg	U
57653-85-7	1,2,3,6,7,8-HxCDD	1	0.000	1.054-1.426	0.047	1.00	ND	ng/kg	U
19408-74-3	1,2,3,7,8,9-HxCDD	1	1.301	1.054-1.426	0.048	1.00	0.0582	ng/kg	J
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	0.000	0.893-1.208	0.044	1.00	ND	ng/kg	U
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	0.000	0.893-1.208	0.066	1.00	ND	ng/kg	U
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.610	0.893-1.208	0.061	2.50	0.221	ng/kg	EMPC, J
39001-02-0	OCDF	1	0.000	0.757-1.024	0.132	2.50	ND	ng/kg	U
3268-87-9	OCDD	1	0.816	0.757-1.024	0.132	10.0	0.979	ng/kg	J

Homologue Groups

55722-27-5	Total TCDF	1	0.000			1.00	ND	ng/kg
41903-57-5	Total TCDD	1	0.000			1.00	ND	ng/kg
30402-15-4	Total PeCDF	1	0.000			1.00	ND	ng/kg
36088-22-9	Total PeCDD	1	0.000			1.00	ND	ng/kg
55684-94-1	Total HxCDF	1	0.000			1.00	0.151	ng/kg
34465-46-8	Total HxCDD	1	0.000			1.00	0.0582	ng/kg
38998-75-3	Total HpCDF	1	0.000			1.00	ND	ng/kg
37871-00-4	Total HpCDD	1	0.000			1.00	ND	ng/kg

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 0.029
Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 0.118

Blank

Form 2
METHOD BLANK DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0134
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0261-BLK1	File ID:	23022304
Sampled:	N/A	Prepared:	01/24/23 13:10	Analyzed:	02/23/23 12:35
Solids Wt%:	0.00	Preparation:	EPA 1613	Initial/Final:	10 g / 20 uL
Result Basis:	Dry	Sequence:	SLB0345	Calibration:	GB00010
Batch:	BLA0261	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF	1	0.769	0.655-0.886	0.09	101	24 - 169 %	
13C12-2,3,7,8-TCDD	1	0.759	0.655-0.886	0.12	135	25 - 164 %	
13C12-1,2,3,7,8-PeCDF	1	1.574	1.318-1.783	0.16	83.3	24 - 185 %	
13C12-2,3,4,7,8-PeCDF	1	1.554	1.318-1.783	0.17	85.6	21 - 178 %	
13C12-1,2,3,7,8-PeCDD	1	1.648	1.318-1.783	0.10	73.0	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF	1	0.506	0.434-0.587	0.24	121	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF	1	0.507	0.434-0.587	0.24	130	26 - 123 %	*
13C12-2,3,4,6,7,8-HxCDF	1	0.503	0.434-0.587	0.25	120	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF	1	0.503	0.434-0.587	0.28	107	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD	1	1.213	1.054-1.426	0.25	142	32 - 141 %	*
13C12-1,2,3,6,7,8-HxCDD	1	1.224	1.054-1.426	0.24	147	28 - 130 %	*
13C12-1,2,3,4,6,7,8-HpCDF	1	0.440	0.374-0.506	0.24	95.9	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF	1	0.449	0.374-0.506	0.27	96.7	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD	1	1.063	0.893-1.208	0.25	98.0	23 - 140 %	
13C12-OCDD	1	0.933	0.757-1.024	0.27	69.1	17 - 157 %	
37Cl4-2,3,7,8-TCDD	1	328.000		0.06	107	35 - 197 %	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:10:10 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: BLA0261-BLK1, Name: 23022304, Date: 23-Feb-2023, Time: 12:35:43, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	26.028	1.002	2.527e2	9.974e1	0.876	2.534	0.770	779	1106	3.24e3	1.78e3	4.2	1.6	YES	dd	db	0.028
12378-PeCDF					0.845		1.550	624	788								
23478-PeCDF					0.911		1.550	624	788								
123478-HxCDF	35.111	1.000	1.813e2	1.575e2	1.182	1.151	1.240	591	509	2.80e3	2.45e3	4.7	4.8	NO	bd	bb	0.030
234678-HxCDF					1.229		1.240	591	509								
123678-HxCDF					1.248		1.240	591	509								
123789-HxCDF	37.172	1.001	2.109e2	1.958e2	1.187	1.077	1.240	591	509	3.28e3	2.49e3	5.5	4.9	NO	bb	bb	0.046
1234678-HpCDF					1.204		1.050	508	576								
1234789-HpCDF					1.165		1.050	508	576								
OCDF					1.186		0.890	446	850								
2378-TCDD					1.236		0.770	1139	753								
12378-PeCDD					1.087		1.550	719	570								
123478-HxCDD					0.987		1.240	569	719								
123678-HxCDD					1.021		1.240	569	719								
123789-HxCDD	36.738	1.011	1.674e2	1.286e2	0.985	1.301	1.240	569	719	2.35e3	2.73e3	4.1	3.8	NO	bb	db	0.029
1234678-HpCDD	40.493	1.000	4.924e2	3.058e2	1.253	1.610	1.050	576	509	4.98e3	4.07e3	8.7	8.0	YES	bb	bd	0.110
OCDD	45.317	1.001	9.963e2	1.221e3	1.103	0.816	0.890	625	579	1.22e4	1.35e4	19.5	23.4	NO	bb	MM	0.490
13C-2378-TCDF	25.986	1.007	6.345e5	8.255e5	1.768	0.769	0.770	1891	1391	9.93e6	1.30e7	5251.4	9328.9	NO	bb	bb	100.508
13C-12378-PeCDF	30.153	1.169	6.390e5	4.060e5	1.527	1.574	1.550	3111	2266	9.20e6	5.82e6	2956.8	2569.0	NO	bd	bd	83.282
13C-23478-PeCDF	31.490	1.220	6.273e5	4.036e5	1.466	1.554	1.550	3111	2266	8.79e6	5.63e6	2825.4	2486.4	NO	bd	bb	85.576
13C-123478-HxCDF	35.111	0.956	3.235e5	6.388e5	1.054	0.506	0.510	2306	2921	5.01e6	9.80e6	2172.9	3356.9	NO	bd	bd	121.121
13C-123678-HxCDF	35.245	0.960	3.566e5	7.032e5	1.080	0.507	0.510	2306	2921	5.45e6	1.09e7	2364.5	3728.2	NO	db	db	130.152
13C-234678-HxCDF	36.103	0.983	3.067e5	6.098e5	1.014	0.503	0.510	2306	2921	4.86e6	9.67e6	2105.2	3309.4	NO	bb	bb	119.835
13C-123789-HxCDF	37.139	1.011	2.511e5	4.996e5	0.928	0.503	0.510	2306	2921	3.99e6	7.95e6	1729.8	2722.5	NO	bb	bb	107.285
13C-1234678-HpCDF	38.966	1.061	2.290e5	5.202e5	1.036	0.440	0.440	2462	2574	3.73e6	8.30e6	1513.4	3223.9	NO	bb	bb	95.898
13C-1234789-HpCDF	41.239	1.123	2.046e5	4.554e5	0.905	0.449	0.440	2462	2574	2.62e6	5.87e6	1062.8	2280.1	NO	bd	bd	96.716
13C-1234-TCDD	25.802	0.000	3.591e5	4.625e5	1.000	0.776	0.770	1830	1062	5.72e6	7.35e6	3124.7	6925.5	NO	bb	bb	100.000
13C-2378-TCDD	26.622	1.032	5.295e5	6.977e5	1.103	0.759	0.770	1830	1062	8.17e6	1.09e7	4464.1	10228.8	NO	bb	bb	135.430
13C-12378-PeCDD	31.747	1.230	3.413e5	2.071e5	0.914	1.648	1.550	894	1059	4.92e6	2.91e6	5507.8	2744.0	NO	bb	bb	73.020
13C-123478-HxCDD	36.225	0.986	5.457e5	4.498e5	0.933	1.213	1.240	2192	2580	9.04e6	7.42e6	4125.6	2876.1	NO	bd	bd	141.521
13C-123678-HxCDD	36.337	0.989	5.889e5	4.810e5	0.965	1.224	1.240	2192	2580	8.84e6	7.35e6	4035.6	2846.5	NO	db	db	147.089
13C-1234678-HpCDD	40.481	1.102	2.977e5	2.802e5	0.782	1.063	1.050	1895	2007	4.37e6	4.12e6	2307.2	2054.1	NO	bb	bb	98.020
13C-OCDD	45.289	1.233	3.965e5	4.249e5	0.788	0.933	0.890	1644	2744	4.79e6	5.18e6	2910.8	1886.5	NO	bb	bb	138.210
13C-123789-HxCDD	36.727	0.000	4.195e5	3.345e5	1.000	1.254	1.240	2192	2580	6.80e6	5.36e6	3101.6	2078.0	NO	bb	bb	100.000
37CL-2378-TCDD	26.650	1.033	4.340e5		1.233			1497		6.50e6		4344.7			bb		42.821

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:10:10 Pacific Standard Time

ID: BLA0261-BLK1, Name: 23022304, Date: 23-Feb-2023, Time: 12:35:43, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					1.064		0.770	779	1106								
1289-TCDF					0.858		0.770	779	1106								
13468-PECDF					1.013		1.550	627	904								
12389-PECDF					0.844		1.550	624	788								
123468-HXCDF					1.197		1.240	591	509								
1368-TCDD					1.084		0.770	1139	753								
1289-TCDD					0.975		0.770	1139	753								
12479-PECDD					1.837		1.550	719	570								
12389-PECDD					1.252		1.550	719	570								
124679-HXCDD					1.033		1.240	569	719								
1234679-HPCDD	39.445	0.974	2.223e2	1.065e2	1.286	2.089	1.050	576	509	4.28e3	1.75e3	7.4	3.4	YES	db	bb	0.044
Total-tetrafurans			0.000e0		0.933			779		0.00e0							
Total-penta1			0.000e0					627		0.00e0							
Total-pentafurans			0.000e0		0.866			624		0.00e0							
Total-hexafurans			3.923e2		1.208			591		6.08e3							0.075
Total-heptafurans			0.000e0		1.185			508		0.00e0							
Total-Furans			3.923e2		1.067			779		6.08e3							0.075
Total-tetradioxins			0.000e0		1.099			1139		0.00e0							
Total-pentadioxins			0.000e0		1.392			719		0.00e0							
Total-hexadioxins			1.674e2		1.007			569		2.35e3							0.029
Total-heptadioxins			0.000e0		1.269			576		0.00e0							
Total-Dioxins			1.164e3		1.165			1139		1.46e4							0.519
Total-TEQ			1.556e3					1139		2.06e4							0.594
FUNCTION1 PFK			8.985e7					473182		1.85e7							
FUNCTION2 PFK			2.188e7					303374		2.10e7							0.000
FUNCTION3 PFK			6.972e4					326888		2.73e6							0.000
FUNCTION4 PFK			3.101e5					246927		8.42e6							
FUNCTION5 PFK			8.823e6					168164		1.08e7							
FUNCTION1 HXCD...			1.135e3					640		1.11e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			3.361e2					1099		6.75e3							0.000
FUNCTION3 OCDPE			5.134e2					657		9.86e3							0.000
FUNCTION4 NCDPE			7.772e1					613		1.23e3							0.000
FUNCTION5 DCDPE			8.698e1					464		2.12e3							0.000

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: BLA0261-BLK1, Name: 23022304, Date: 23-Feb-2023, Time: 12:35:43, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	37.17	2.109e2	1.958e2	1.187	1.08	1.24	5.5	YES	NO	bb	bb	0.046
2	123478-HxCDF	35.11	1.813e2	1.575e2	1.182	1.15	1.24	4.7	YES	NO	bd	bb	0.030

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	37.17	2.109e2	1.958e2	1.187	1.08	1.24	5.5	YES	NO	bb	bb	0.046
2	123478-HxCDF	35.11	1.813e2	1.575e2	1.182	1.15	1.24	4.7	YES	NO	bd	bb	0.030

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.74	1.674e2	1.286e2	0.985	1.30	1.24	4.1	YES	NO	bb	db	0.029

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.74	1.674e2	1.286e2	0.985	1.30	1.24	4.1	YES	NO	bb	db	0.029
2	OCDD	45.32	9.963e2	1.221e3	1.103	0.82	0.89	19.5	YES	NO	bb	MM	0.490

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	37.17	2.109e2	1.958e2	1.187	1.08	1.24	5.5	YES	NO	bb	bb	0.046
2	123478-HxCDF	35.11	1.813e2	1.575e2	1.182	1.15	1.24	4.7	YES	NO	bd	bb	0.030
3	123789-HxCDD	36.74	1.674e2	1.286e2	0.985	1.30	1.24	4.1	YES	NO	bb	db	0.029
4	OCDD	45.32	9.963e2	1.221e3	1.103	0.82	0.89	19.5	YES	NO	bb	MM	0.490

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	28.13	2.702e5					3.2	YES		db		
2	FUNCTION1 PFK	26.88	1.305e7					15.6	YES		dd		
3	FUNCTION1 PFK	25.68	7.653e7					20.1	YES		bd		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	31.92	4.077e5					4.8	YES		bb		0.000
2	FUNCTION2 PFK	28.37	2.147e7					64.3	YES		bb		0.000

ID: BLA0261-BLK1, Name: 23022304, Date: 23-Feb-2023, Time: 12:35:43, Conditions: AUTOSPEC01, User: pk

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.15	7.233e3					1.2	NO		bb		0.000
2	FUNCTION3 PFK	35.90	1.054e4					1.3	NO		bb		0.000
3	FUNCTION3 PFK	35.72	2.581e3					0.7	NO		bb		0.000
4	FUNCTION3 PFK	35.09	3.036e4					1.7	NO		bb		0.000
5	FUNCTION3 PFK	34.35	2.022e3					0.6	NO		bb		0.000
6	FUNCTION3 PFK	34.29	6.449e3					1.0	NO		bb		0.000
7	FUNCTION3 PFK	33.19	2.387e3					0.7	NO		bb		0.000
8	FUNCTION3 PFK	33.15	8.147e3					1.3	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	39.14	1.304e3					0.5	NO		bb		
2	FUNCTION4 PFK	39.09	1.592e4					1.9	NO		bb		
3	FUNCTION4 PFK	38.87	1.272e3					0.5	NO		bb		
4	FUNCTION4 PFK	38.38	1.836e4					1.7	NO		bb		
5	FUNCTION4 PFK	38.15	8.765e3					1.4	NO		db		
6	FUNCTION4 PFK	38.12	2.112e4					3.3	YES		bd		
7	FUNCTION4 PFK	42.38	9.910e3					1.6	NO		bb		
8	FUNCTION4 PFK	42.29	1.735e3					0.6	NO		bb		
9	FUNCTION4 PFK	42.24	3.487e4					1.8	NO		bb		
10	FUNCTION4 PFK	42.01	4.943e3					0.9	NO		bb		
11	FUNCTION4 PFK	41.93	1.785e3					0.6	NO		bb		
12	FUNCTION4 PFK	41.89	4.935e3					0.9	NO		bb		
13	FUNCTION4 PFK	41.81	6.348e3					0.9	NO		bb		
14	FUNCTION4 PFK	41.61	1.278e4					1.6	NO		bb		
15	FUNCTION4 PFK	41.37	9.718e3					1.6	NO		db		
16	FUNCTION4 PFK	41.33	1.369e4					1.5	NO		bd		
17	FUNCTION4 PFK	40.90	5.227e4					2.3	NO		bb		
18	FUNCTION4 PFK	40.67	1.576e4					1.7	NO		bb		
19	FUNCTION4 PFK	40.58	4.789e3					0.8	NO		bb		
20	FUNCTION4 PFK	40.40	2.503e3					0.9	NO		bb		
21	FUNCTION4 PFK	40.12	6.875e3					0.9	NO		bb		
22	FUNCTION4 PFK	39.28	3.051e3					0.4	NO		bb		
23	FUNCTION4 PFK	42.94	2.824e4					2.8	NO		bb		
24	FUNCTION4 PFK	42.52	1.732e4					1.3	NO		db		
25	FUNCTION4 PFK	42.48	1.187e4					1.8	NO		bd		

ID: BLA0261-BLK1, Name: 23022304, Date: 23-Feb-2023, Time: 12:35:43, Conditions: AUTOSPEC01, User: pk

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	44.75	1.100e5					4.0	YES		db		
2	FUNCTION5 PFK	43.20	8.713e6					59.9	YES		bd		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	26.64	7.297e1					2.9	NO		bb		0.000
2	FUNCTION1 HXCD...	25.84	8.690e2					10.1	YES		db		0.000
3	FUNCTION1 HXCD...	25.63	1.935e2					4.2	YES		bd		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.75	1.376e2					1.8	NO		db		0.000
2	FUNCTION2 HPCD...	30.63	9.702e1					2.3	NO		bd		0.000
3	FUNCTION2 HPCD...	28.86	1.015e2					2.0	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.23	1.179e2					3.9	YES		bd		0.000
2	FUNCTION3 OCDPE	37.70	1.179e2					4.6	YES		bb		0.000
3	FUNCTION3 OCDPE	36.73	1.515e2					3.4	YES		bb		0.000
4	FUNCTION3 OCDPE	36.35	1.261e2					3.0	YES		db		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.51	7.772e1					2.0	NO		bb		0.000

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ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	43.25	8.698e1					4.6	YES		bb		0.000

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: BLA0261-BLK1, Name: 23022304, Date: 23-Feb-2023, Time: 12:35:43, Conditions: AUTOSPEC01, User: pk

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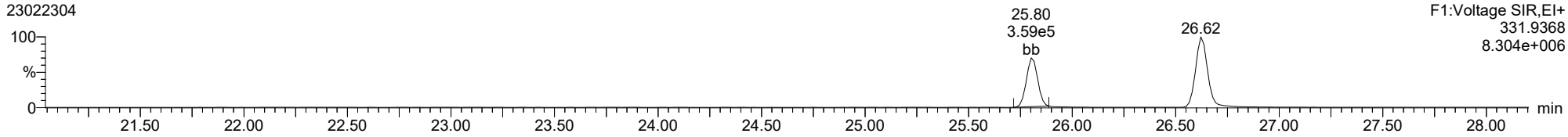

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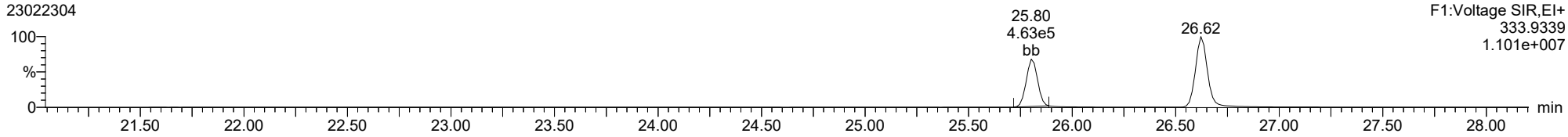

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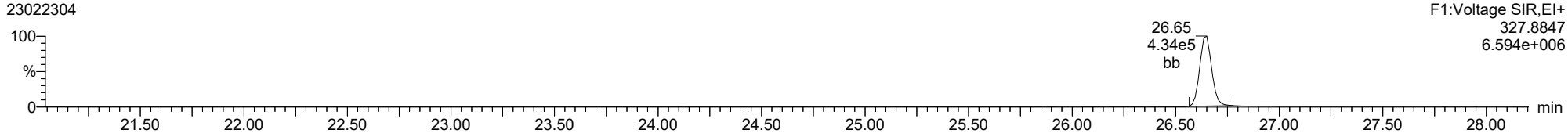

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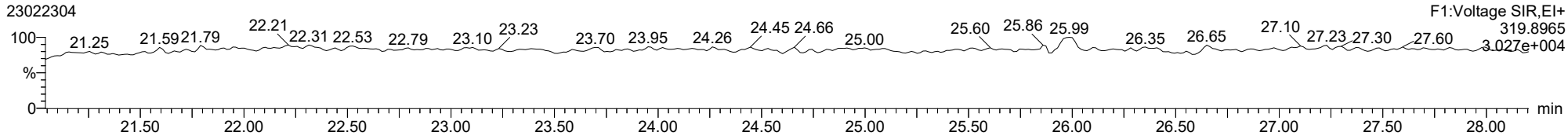

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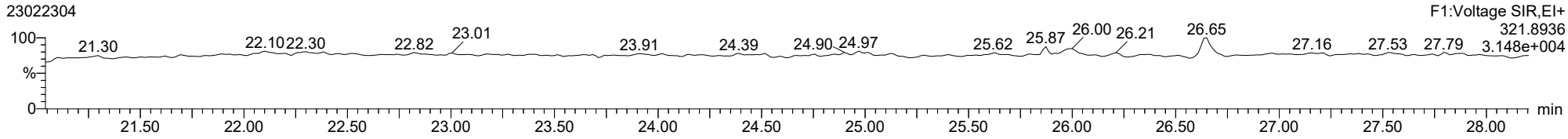

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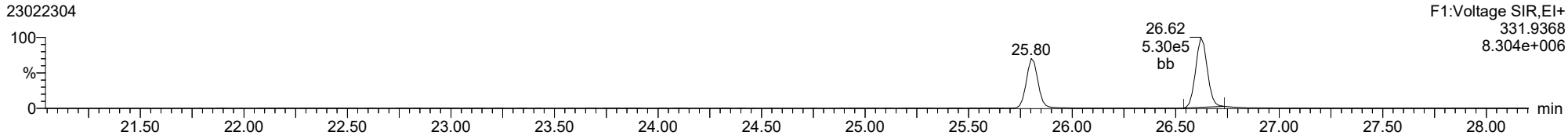

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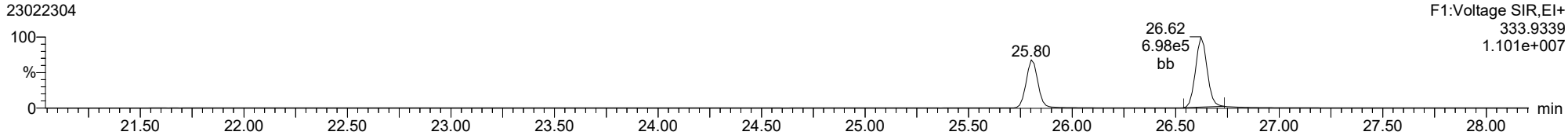
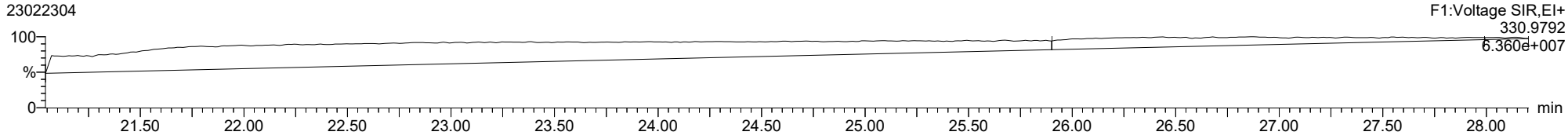


FUNCTION1 PFK



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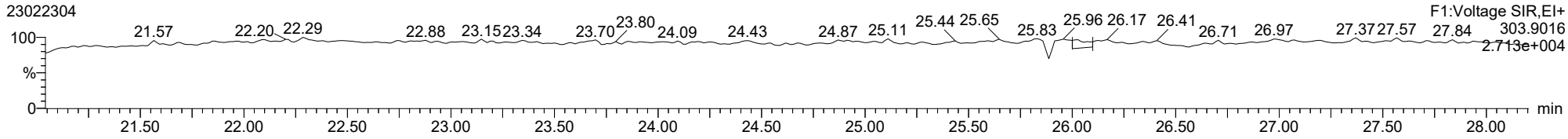

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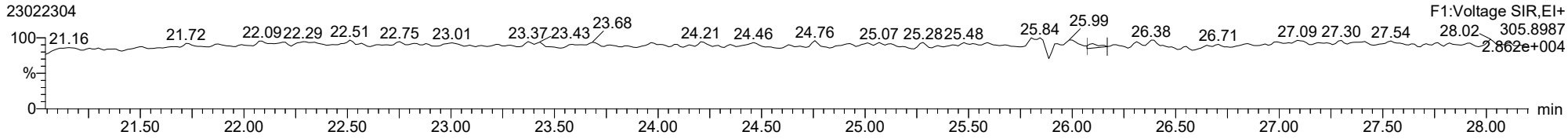

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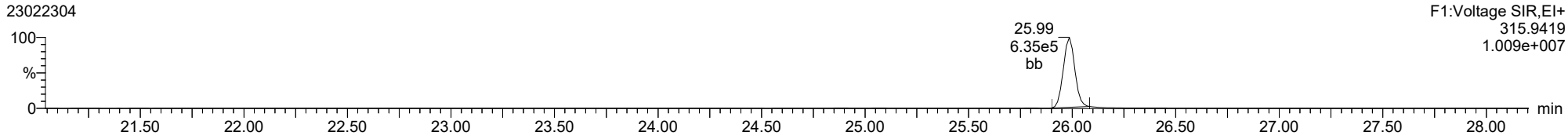

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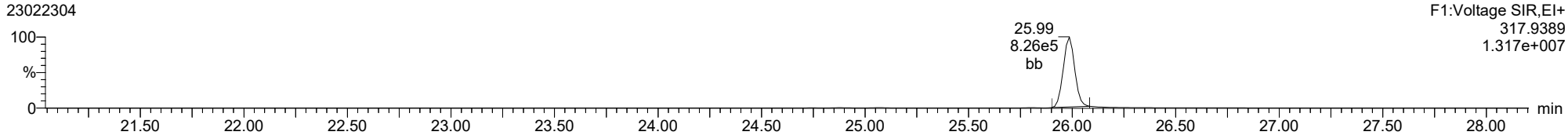

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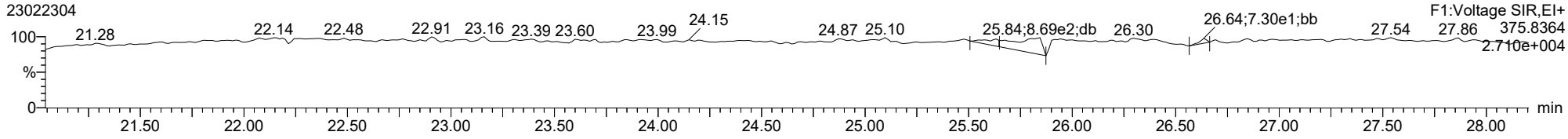

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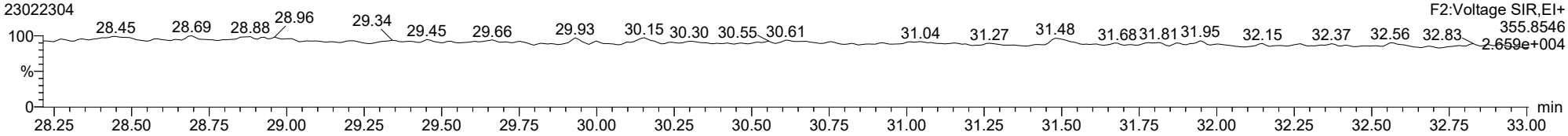
12378-PeCDD



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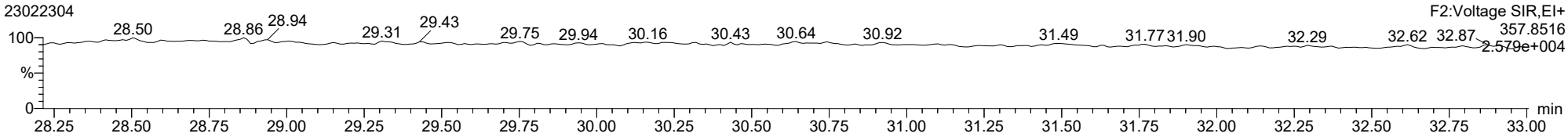

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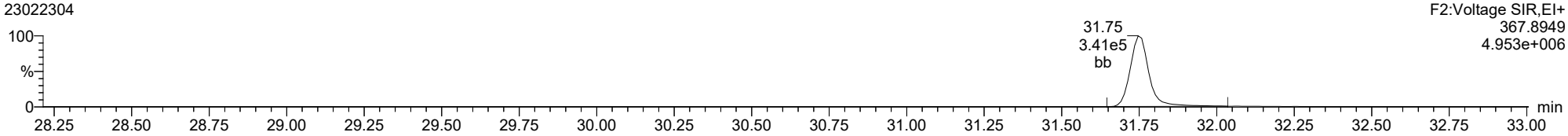

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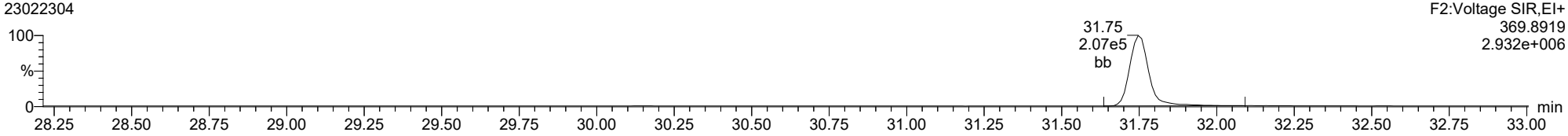
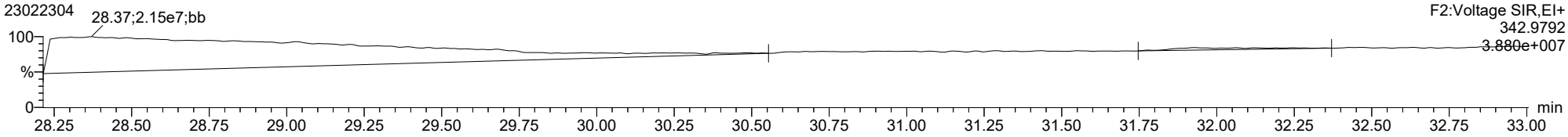


FUNCTION2 PFK



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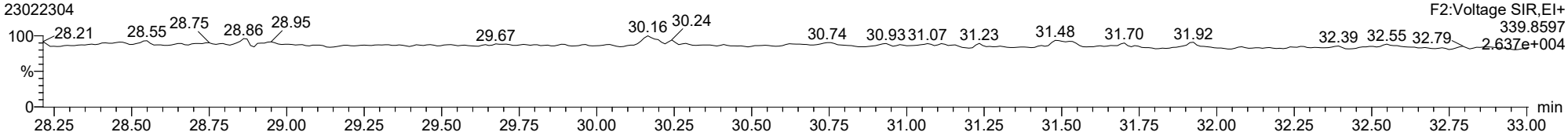
12378-PeCDF



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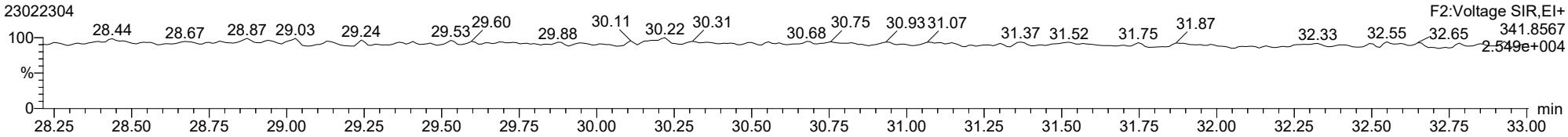

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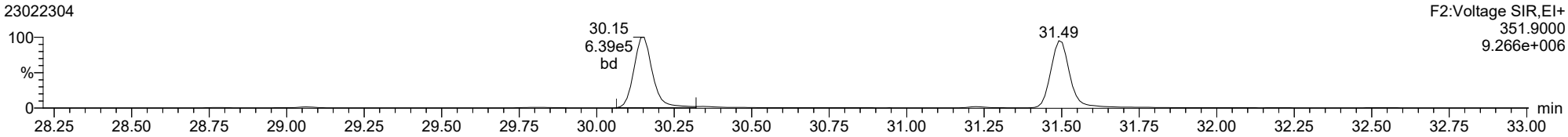

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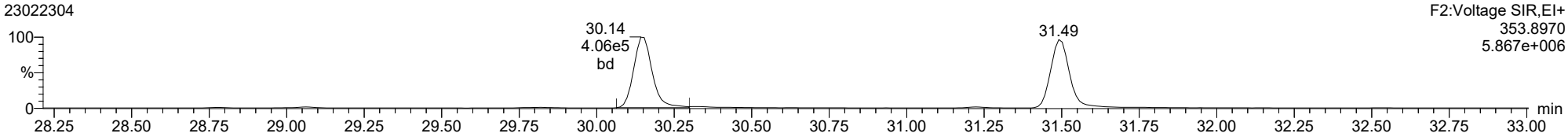
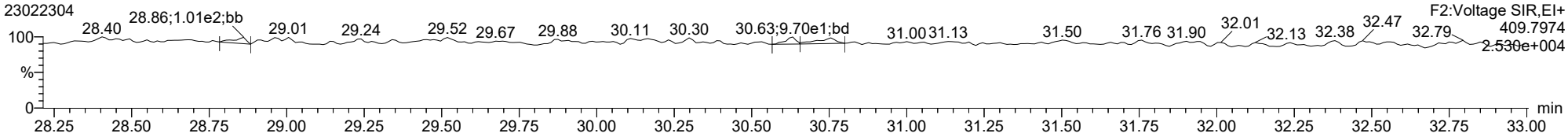


FUNCTION2 HPCDPE



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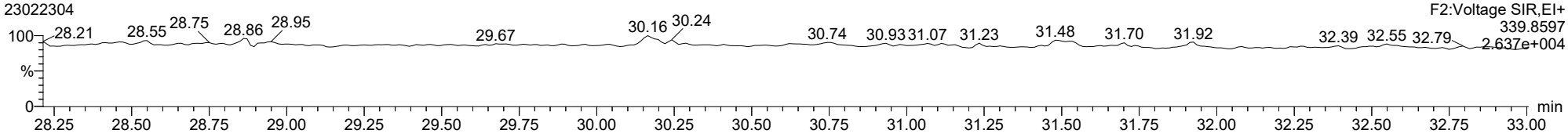
23478-PeCDF



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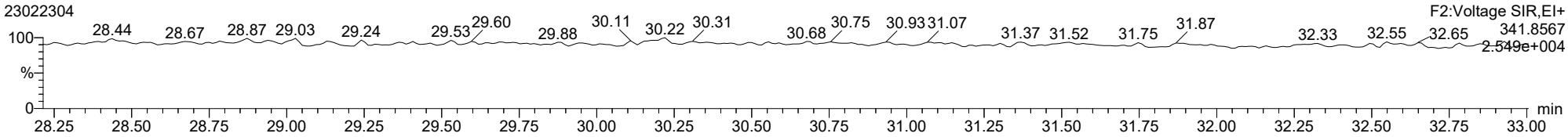

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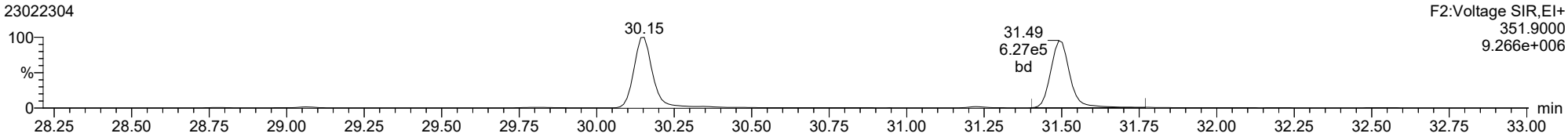

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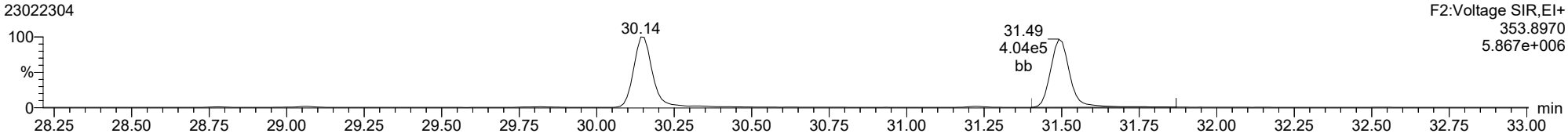

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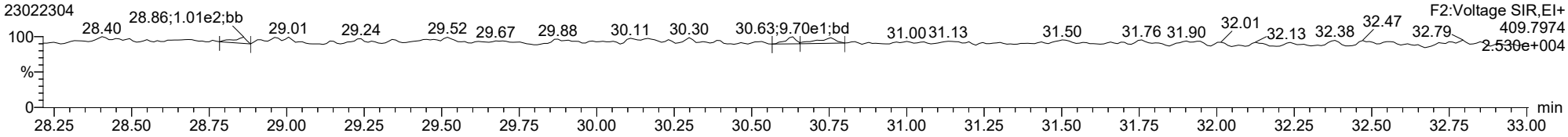

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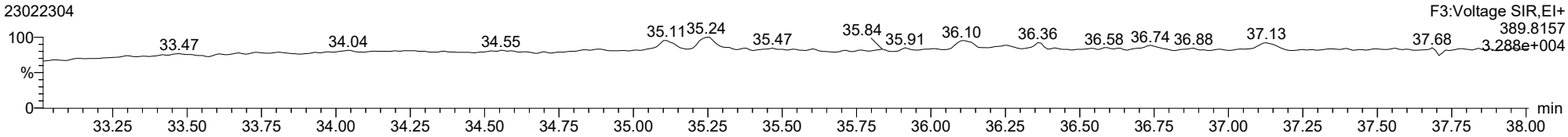

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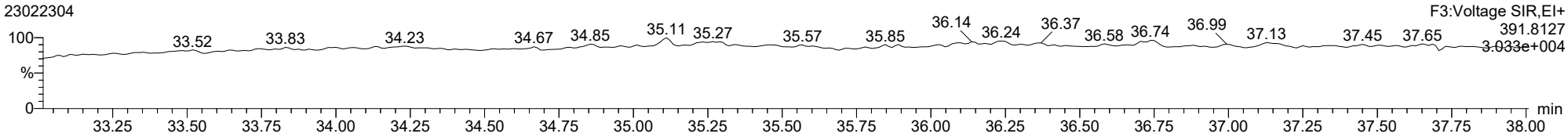

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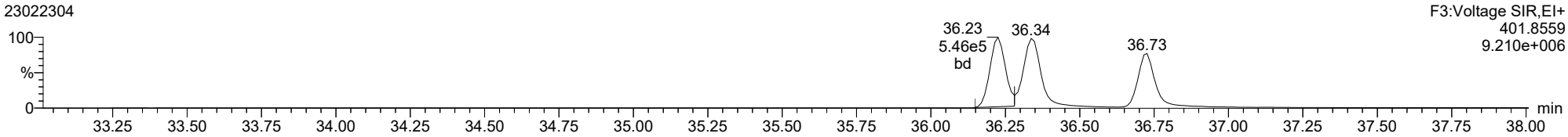

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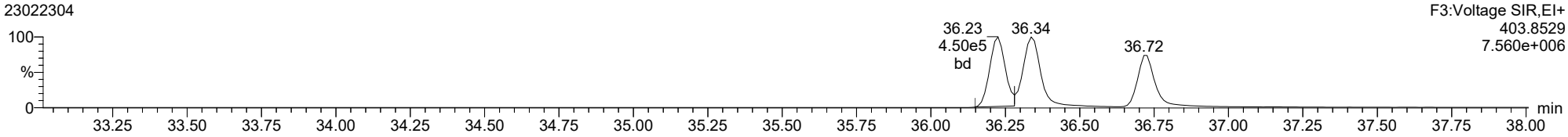

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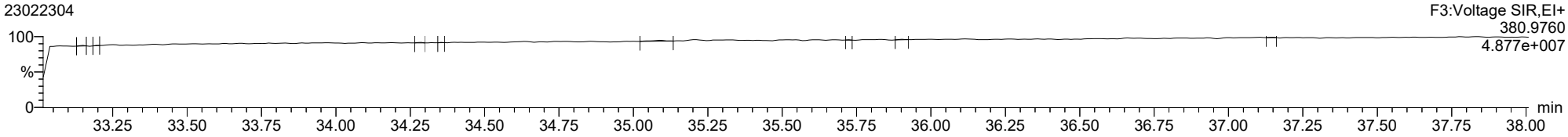

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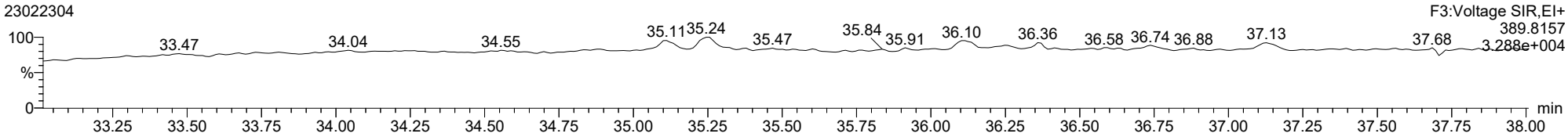

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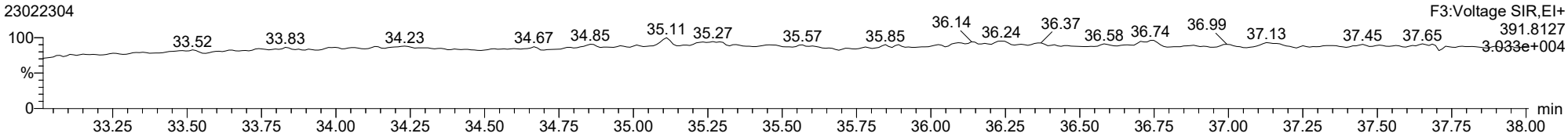

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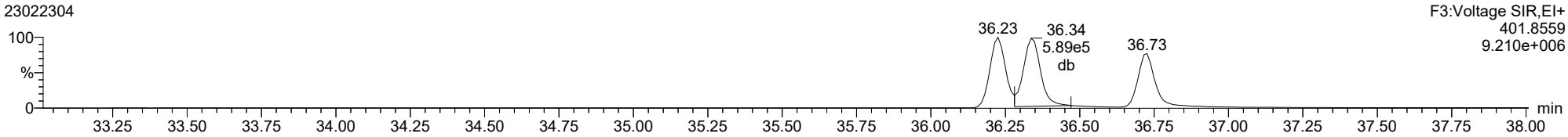

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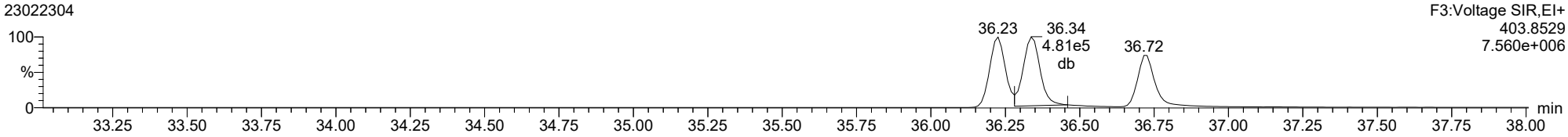

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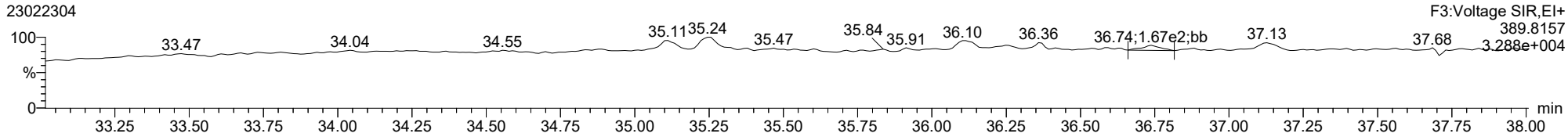

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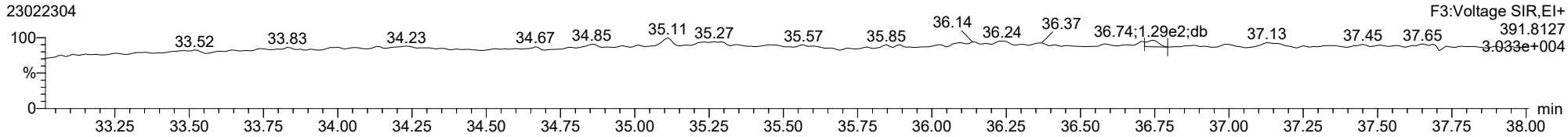

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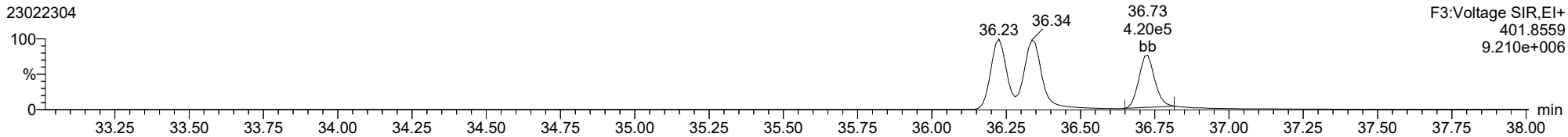

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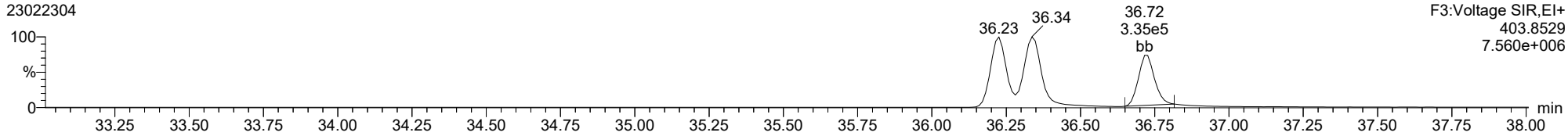

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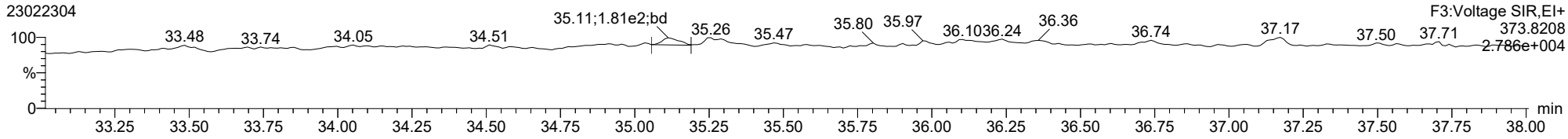

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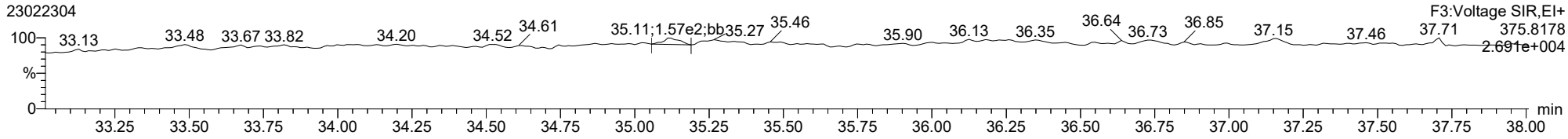

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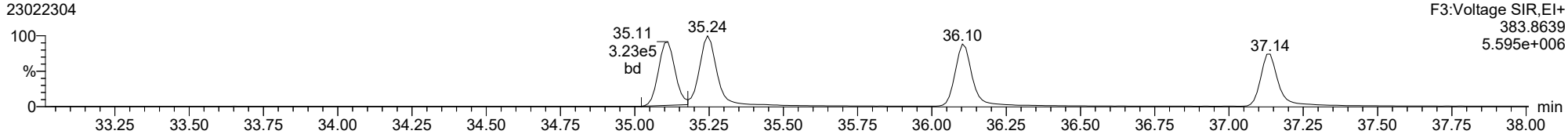

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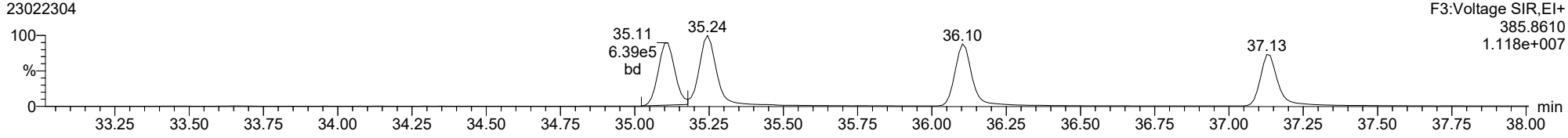

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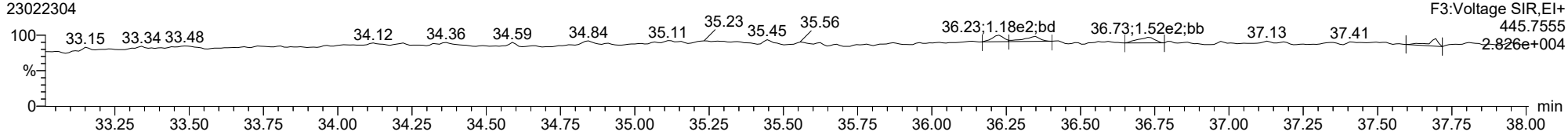

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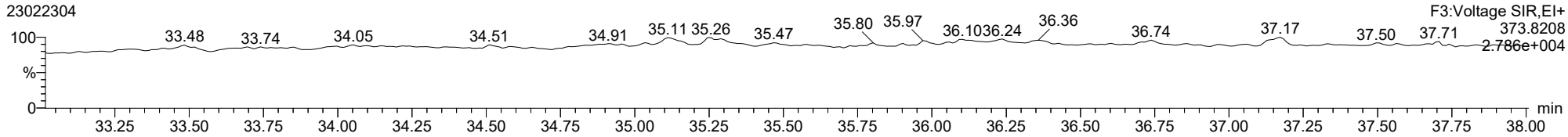

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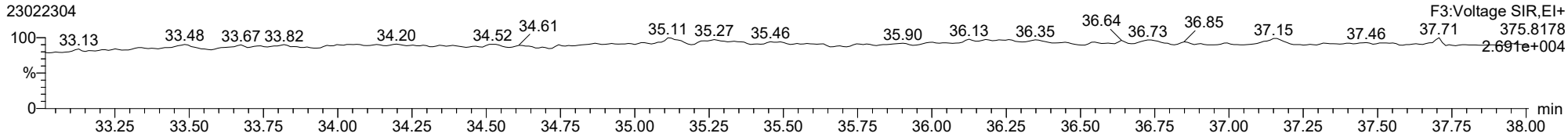

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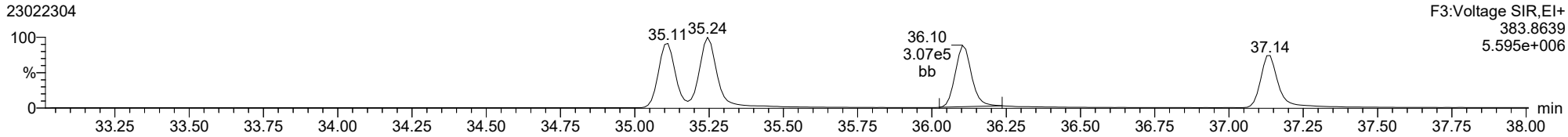

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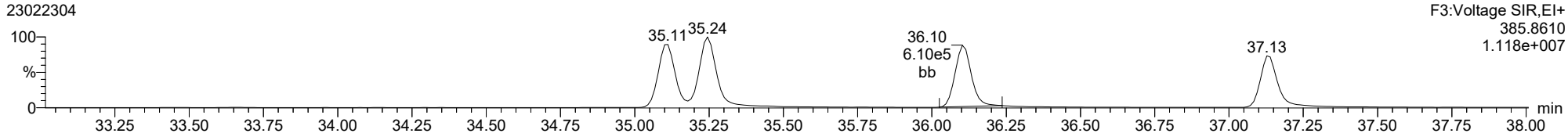

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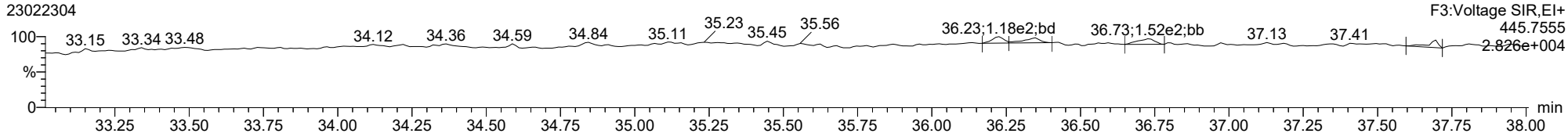

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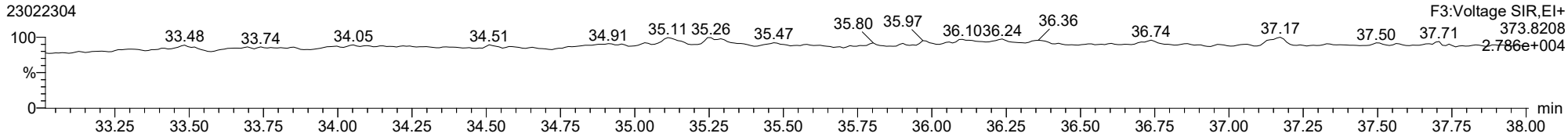

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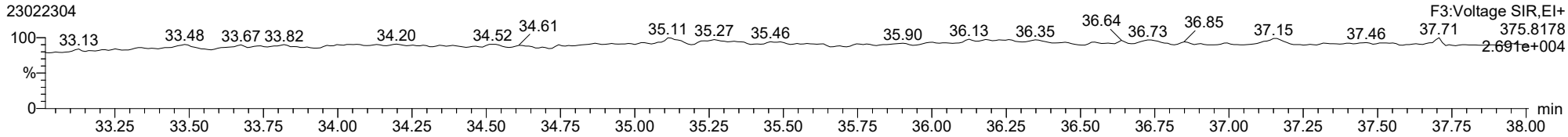

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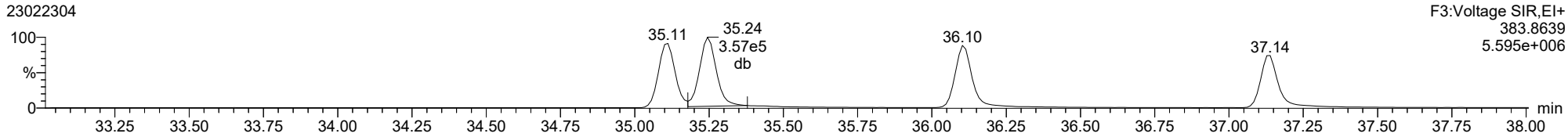

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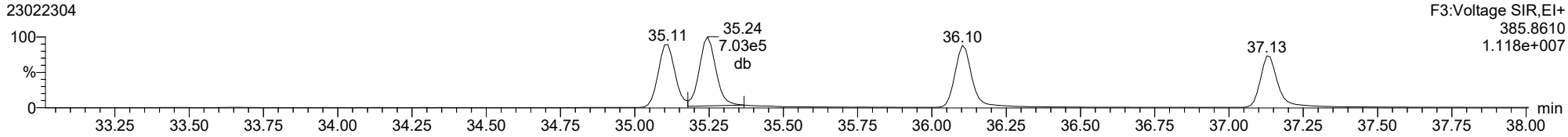

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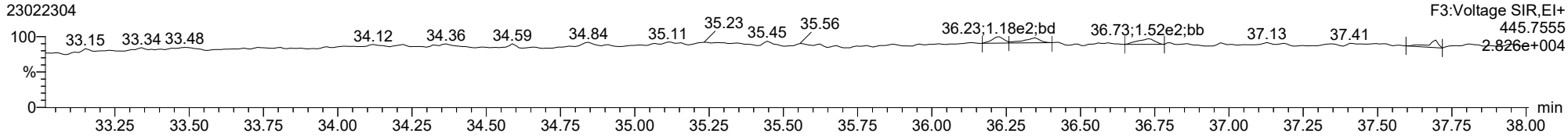

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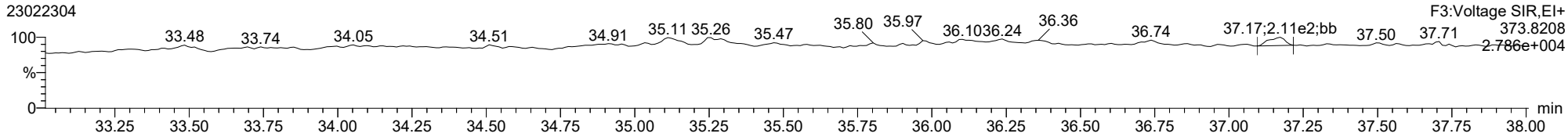

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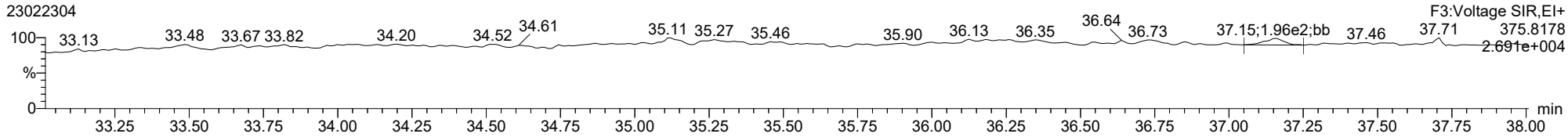

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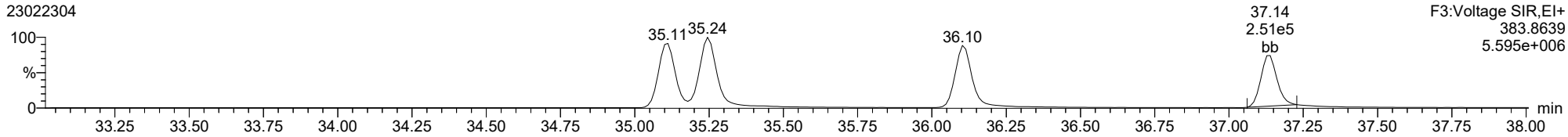

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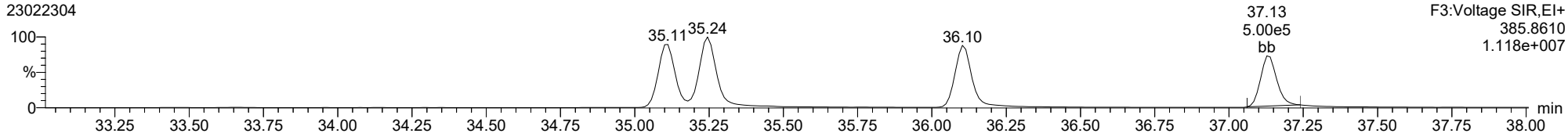

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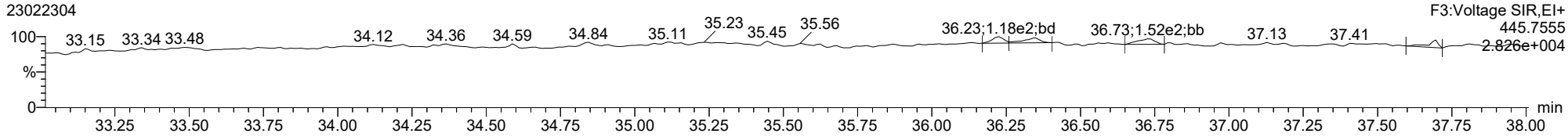

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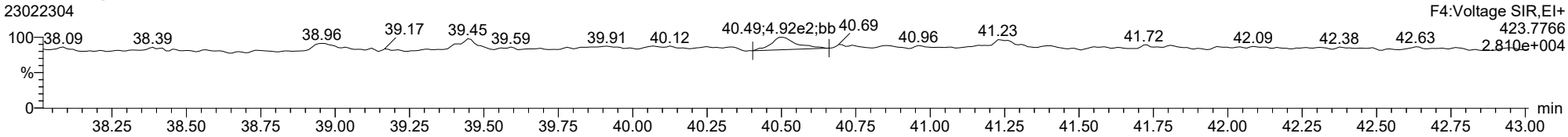

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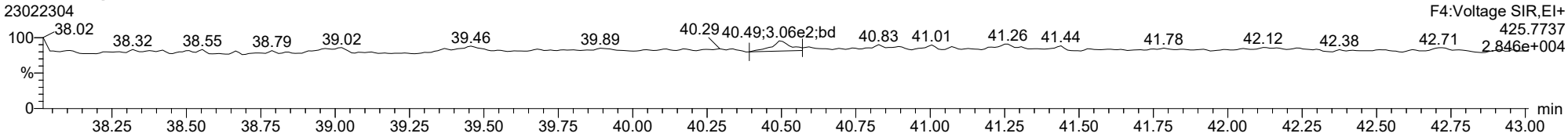

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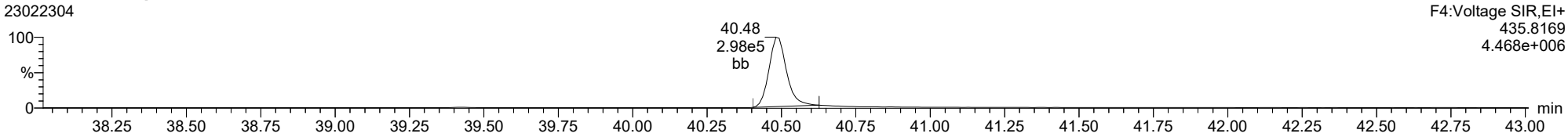

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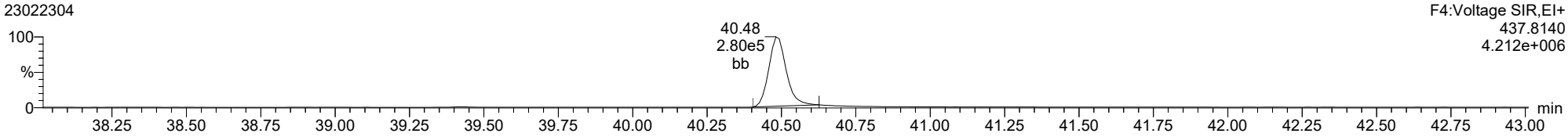

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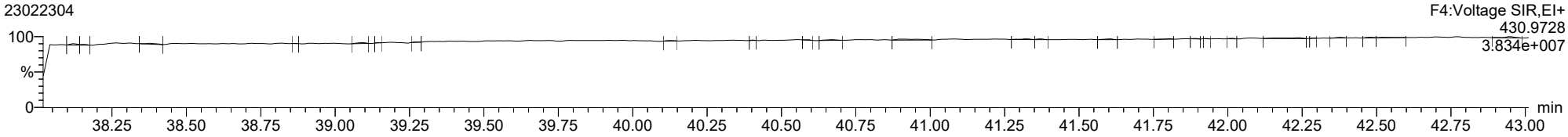

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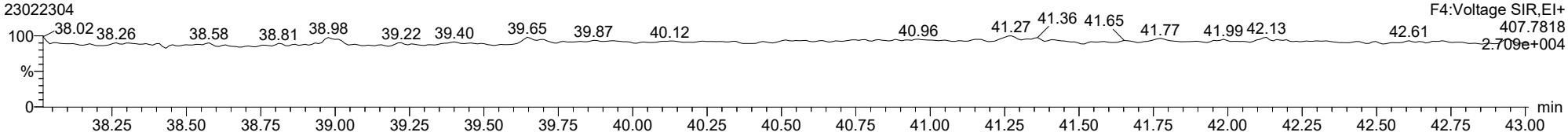

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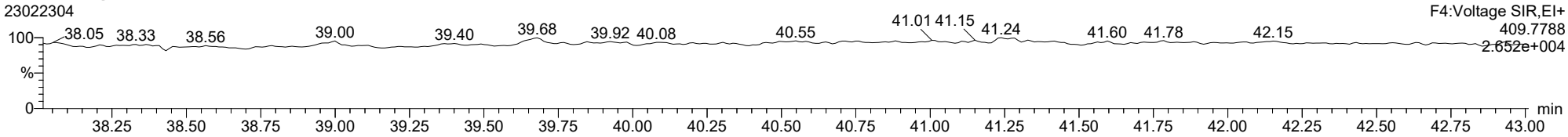

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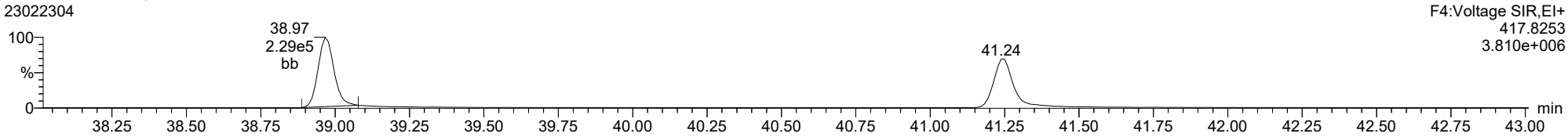

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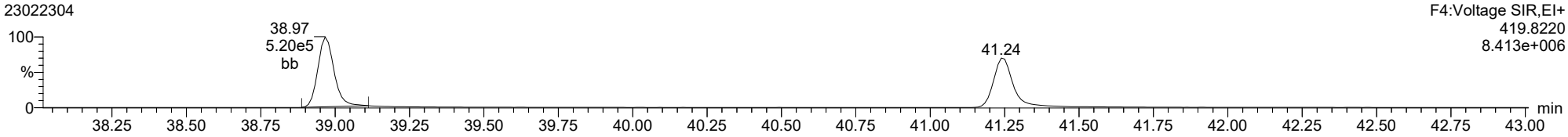

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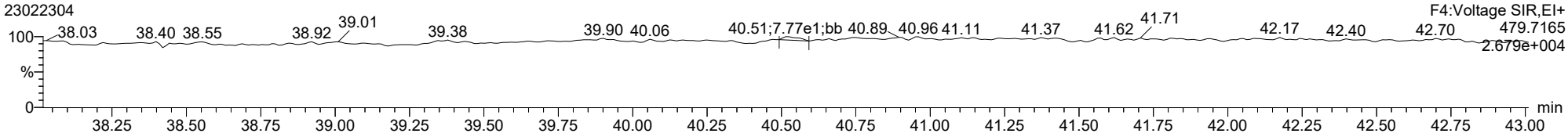

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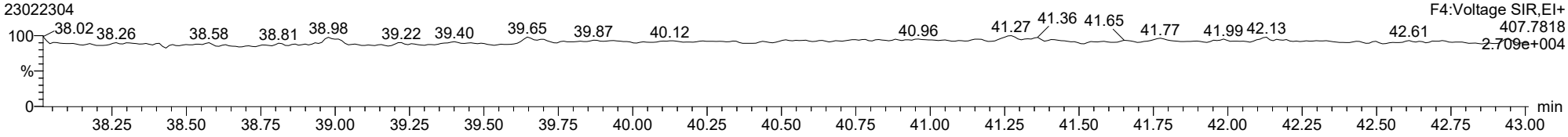

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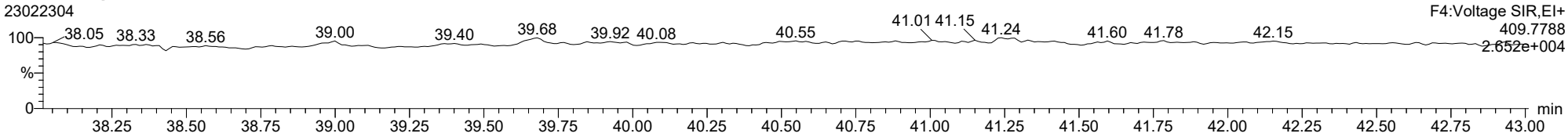

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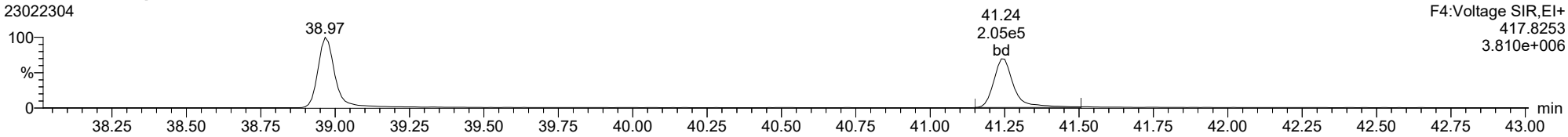

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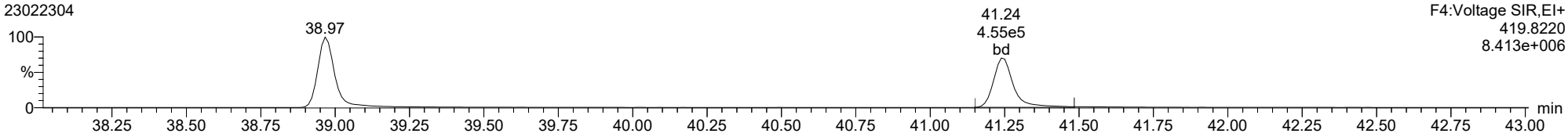
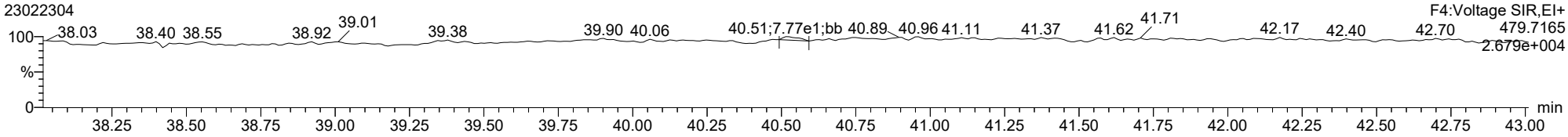
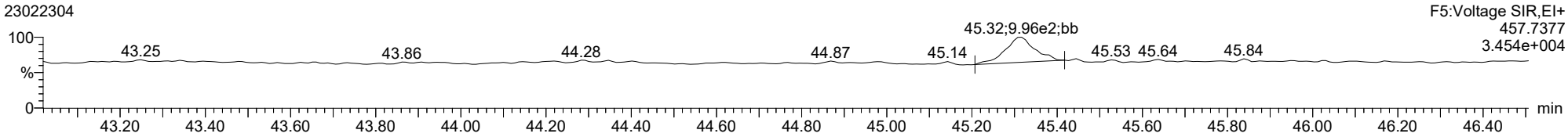


FUNCTION4 NCDPE

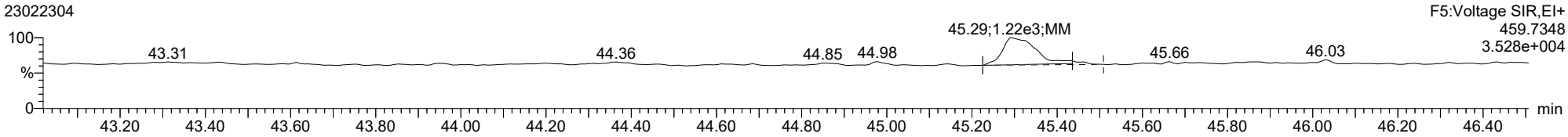


ID: BLA0261-BLK1, Name: 23022304, Date: 23-Feb-2023, Time: 12:35:43, Conditions: AUTOSPEC01, User: pk

OCDD



OCDD



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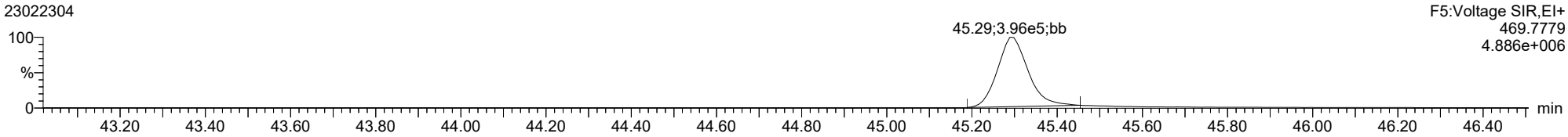

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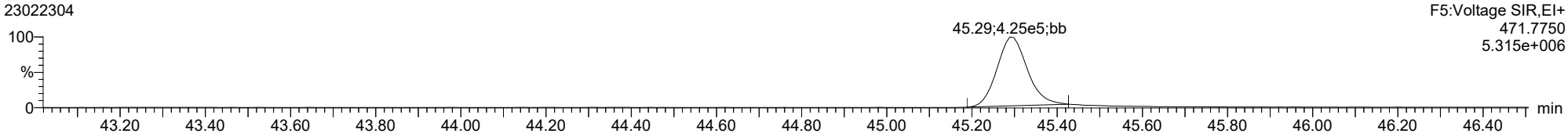
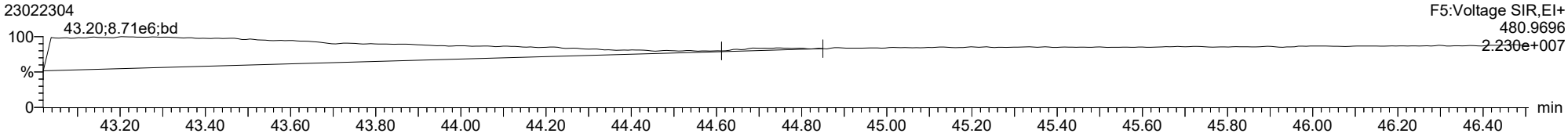


FUNCTION5 PFK



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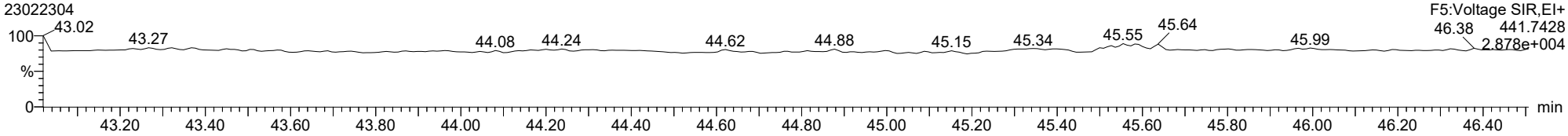
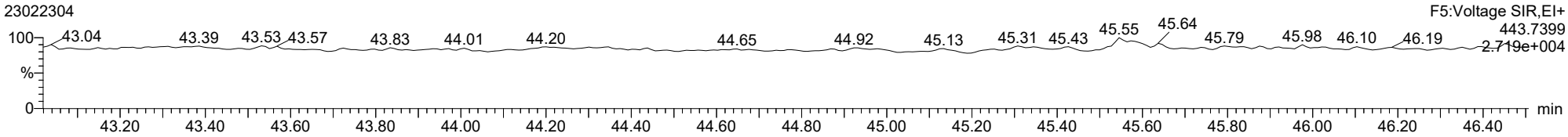
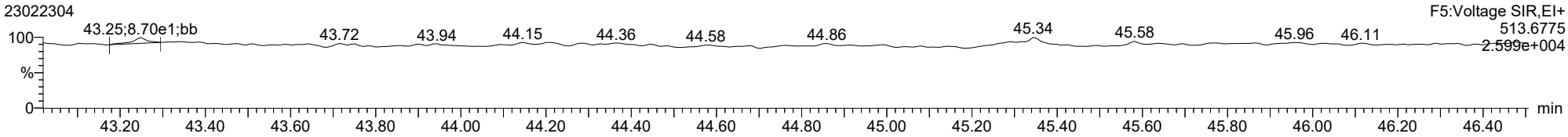
OCDF



OCDF

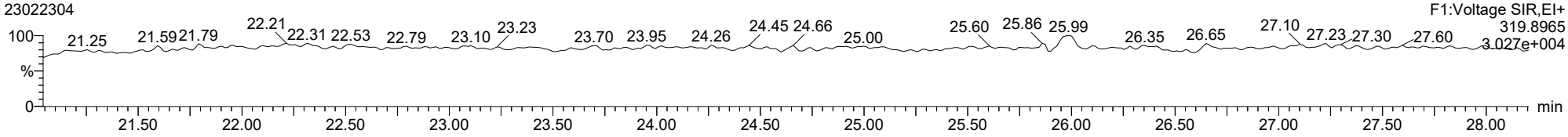


FUNCTION5 DCDPE

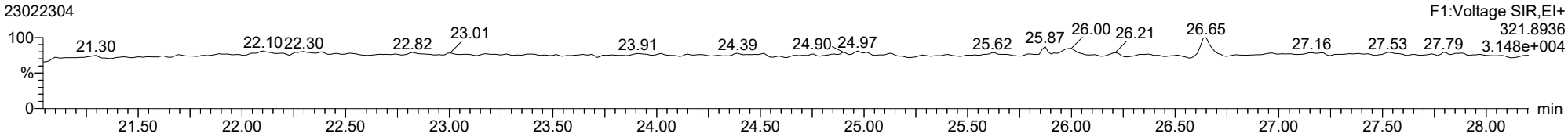


ID: BLA0261-BLK1, Name: 23022304, Date: 23-Feb-2023, Time: 12:35:43, Conditions: AUTOSPEC01, User: pk

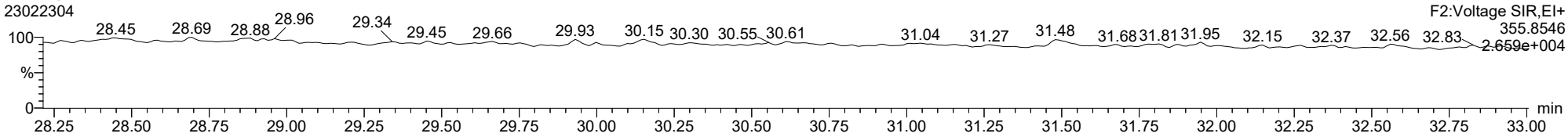
Total-tetradioxins



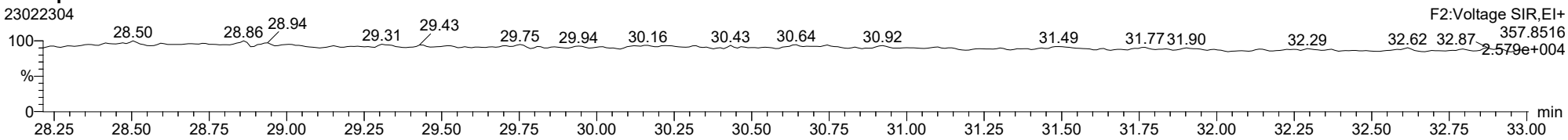
Total-tetradioxins



Total-pentadioxins

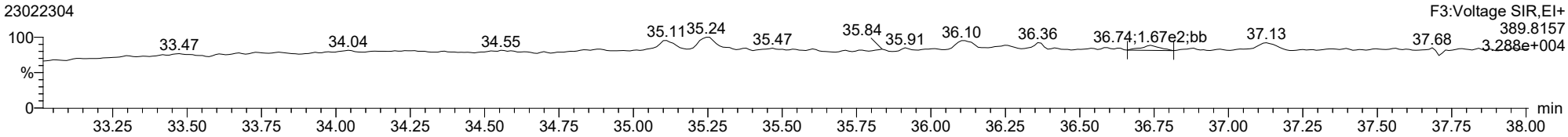


Total-pentadioxins

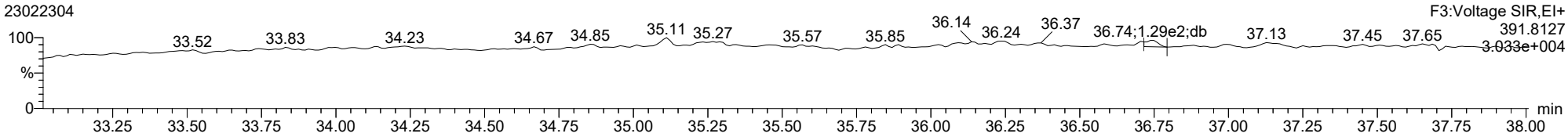


ID: BLA0261-BLK1, Name: 23022304, Date: 23-Feb-2023, Time: 12:35:43, Conditions: AUTOSPEC01, User: pk

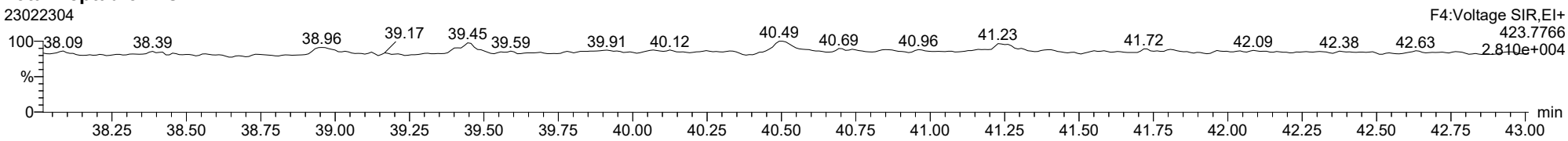
Total-hexadioxins



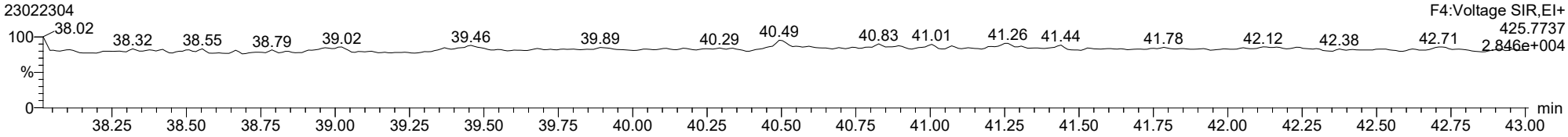
Total-hexadioxins



Total-heptadioxins



Total-heptadioxins



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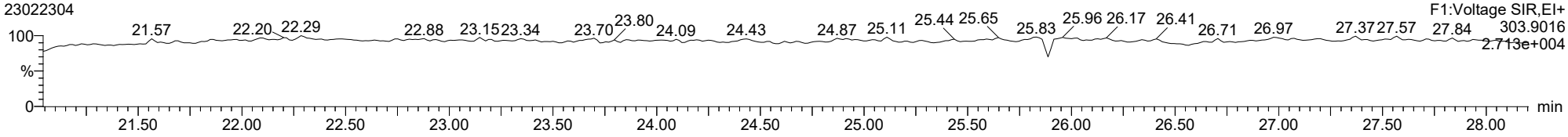
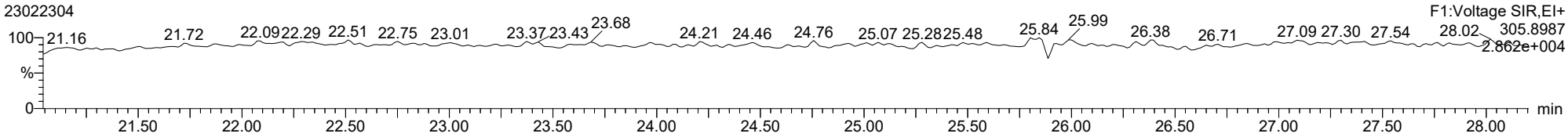
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:10:10 Pacific Standard Time

ID: BLA0261-BLK1, Name: 23022304, Date: 23-Feb-2023, Time: 12:35:43, Conditions: AUTOSPEC01, User: pk

Total-tetrafurans



Total-tetrafurans



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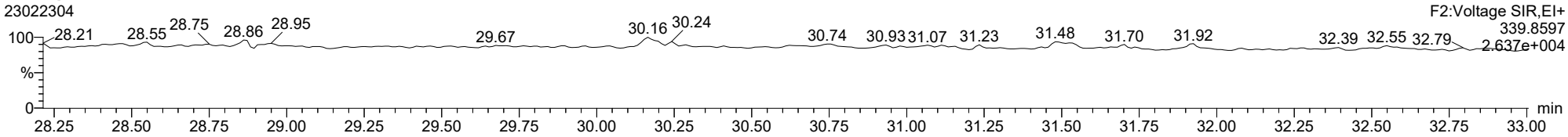
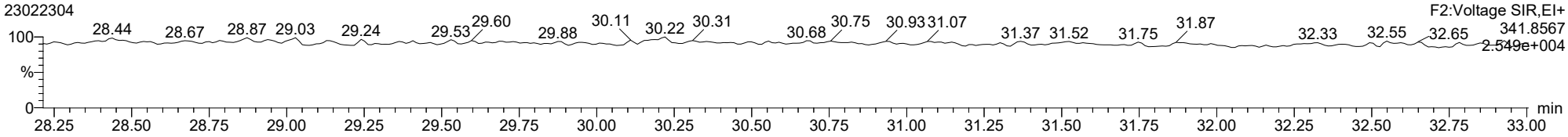


Total-pentafurans



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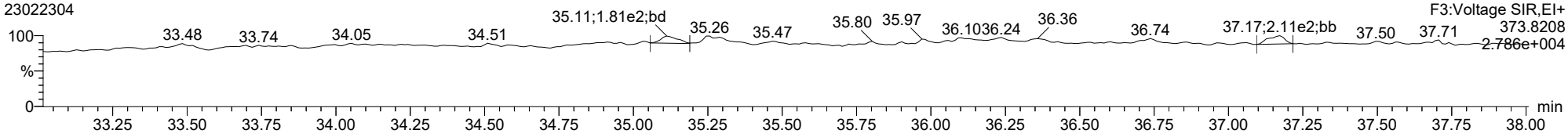
ID: BLA0261-BLK1, Name: 23022304, Date: 23-Feb-2023, Time: 12:35:43, Conditions: AUTOSPEC01, User: pk

Total-hexafurans



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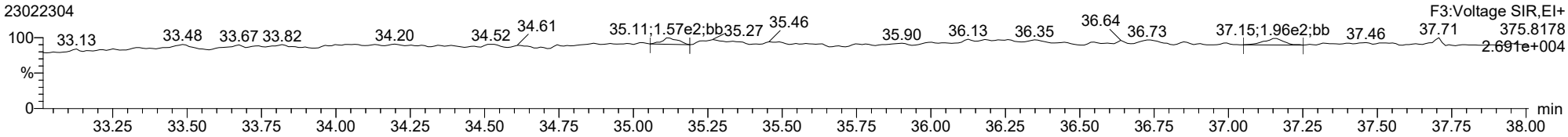

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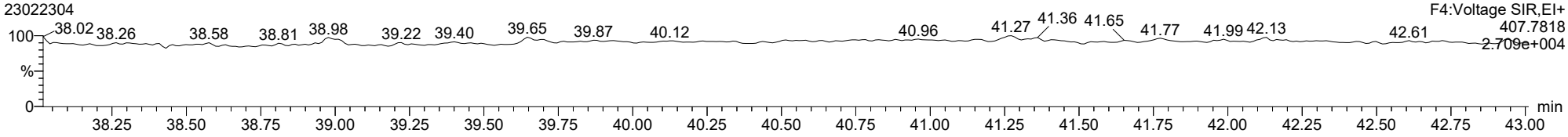
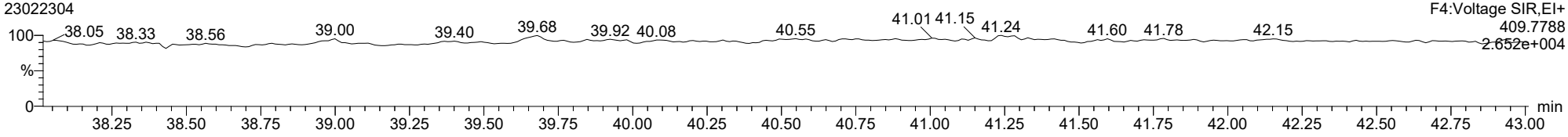


Total-heptafurans



LCS RECOVERY
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/24/23 10:33
Batch:	BLA0261	Laboratory ID:	BLA0261-BS1
Preparation:	EPA 1613	Sequence Name:	LCS
Initial/Final:	18.08 g / 20 uL		

COMPOUND	SPIKE ADDED (ng/kg wet)	LCS CONCENTRATION (ng/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
2,3,7,8-TCDF	11.1	10.4	B	93.8	75 - 158
2,3,7,8-TCDD	11.1	9.36		84.6	67 - 158
1,2,3,7,8-PeCDF	55.3	53.0		95.8	80 - 134
2,3,4,7,8-PeCDF	55.3	53.1		96.0	68 - 160
1,2,3,7,8-PeCDD	55.3	57.2		103	70 - 142
1,2,3,4,7,8-HxCDF	55.3	47.6	B	86.0	72 - 134
1,2,3,6,7,8-HxCDF	55.3	46.4	*	83.9 *	84 - 130
2,3,4,6,7,8-HxCDF	55.3	47.8		86.4	70 - 156
1,2,3,7,8,9-HxCDF	55.3	47.3	B	85.5	78 - 130
1,2,3,4,7,8-HxCDD	55.3	49.2		89.0	70 - 164
1,2,3,6,7,8-HxCDD	55.3	46.5		84.1	76 - 134
1,2,3,7,8,9-HxCDD	55.3	44.6	B	80.7	64 - 162
1,2,3,4,6,7,8-HpCDF	55.3	53.6		96.9	82 - 122
1,2,3,4,7,8,9-HpCDF	55.3	47.7		86.3	78 - 138
1,2,3,4,6,7,8-HpCDD	55.3	51.1	B	92.4	70 - 140
OCDF	111	86.9		78.6	63 - 170
OCDD	111	113	B	102	78 - 144

* Indicates values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230223IHBS.qld
Last Altered: Friday, February 24, 2023 15:04:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:05:19 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: BLA0261-BS1, Name: 23022401, Date: 24-Feb-2023, Time: 10:33:09, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.986	1.001	3.400e4	4.355e4	0.876	0.781	0.770	973	992	4.96e5	6.52e5	510.1	657.1	NO	bd	dd	9.375
12378-PeCDF	30.153	1.001	2.181e5	1.465e5	0.845	1.489	1.550	1763	1819	3.26e6	2.11e6	1851.2	1158.0	NO	bb	bd	47.922
23478-PeCDF	31.490	1.000	2.276e5	1.506e5	0.911	1.512	1.550	1763	1819	3.44e6	2.24e6	1949.2	1234.0	NO	bb	bb	47.988
123478-HxCDF	35.100	1.000	2.029e5	1.668e5	1.182	1.217	1.240	1576	1373	3.12e6	2.59e6	1978.6	1884.8	NO	bd	bd	42.987
234678-HxCDF	36.103	1.000	2.120e5	1.722e5	1.229	1.231	1.240	1576	1373	3.10e6	2.51e6	1968.2	1831.6	NO	bd	bd	43.203
123678-HxCDF	35.245	1.001	2.399e5	1.944e5	1.248	1.234	1.240	1576	1373	3.32e6	2.66e6	2107.6	1935.9	NO	dd	dd	41.949
123789-HxCDF	37.128	1.000	1.781e5	1.494e5	1.187	1.192	1.240	1576	1373	2.62e6	2.13e6	1661.1	1551.9	NO	bd	bd	42.753
1234678-HpCDF	38.966	1.000	1.790e5	1.793e5	1.204	0.998	1.050	1648	1731	2.77e6	2.67e6	1679.4	1543.3	NO	bd	bd	48.435
1234789-HpCDF	41.239	1.000	1.403e5	1.344e5	1.165	1.044	1.050	1648	1731	1.84e6	1.79e6	1115.7	1032.3	NO	bd	bb	43.131
OCDF	45.528	1.006	1.863e5	2.046e5	1.186	0.911	0.890	868	1912	2.08e6	2.29e6	2402.1	1195.8	NO	bd	bd	78.556
2378-TCDD	26.622	1.001	3.176e4	4.061e4	1.236	0.782	0.770	804	823	4.78e5	6.11e5	594.6	742.8	NO	bd	bd	8.459
12378-PeCDD	31.747	1.001	1.603e5	9.965e4	1.087	1.609	1.550	707	1191	2.44e6	1.54e6	3449.9	1294.6	NO	bb	bb	51.675
123478-HxCDD	36.214	1.000	1.799e5	1.487e5	0.987	1.209	1.240	1973	1435	2.78e6	2.34e6	1410.4	1630.5	NO	bd	bd	44.513
123678-HxCDD	36.337	1.001	2.052e5	1.707e5	1.021	1.203	1.240	1973	1435	3.03e6	2.46e6	1536.8	1717.1	NO	dd	db	42.068
123789-HxCDD	36.716	1.011	1.788e5	1.437e5	0.985	1.244	1.240	1973	1435	2.72e6	2.15e6	1381.0	1499.4	NO	bb	bb	40.325
1234678-HpCDD	40.481	1.000	1.402e5	1.411e5	1.253	0.994	1.050	1458	1730	2.05e6	1.95e6	1405.6	1127.6	NO	bb	bd	46.180
OCDD	45.290	1.000	2.185e5	2.531e5	1.103	0.863	0.890	2342	1624	2.42e6	2.81e6	1035.1	1728.9	NO	bd	bd	101.935
13C-2378-TCDF	25.972	1.007	4.079e5	5.364e5	1.768	0.760	0.770	1086	1029	6.10e6	7.93e6	5617.0	7704.5	NO	bb	bb	84.444
13C-12378-PeCDF	30.131	1.168	5.502e5	3.505e5	1.527	1.570	1.550	2130	5526	8.07e6	5.16e6	3789.0	933.0	NO	bd	bd	93.254
13C-23478-PeCDF	31.479	1.221	5.309e5	3.340e5	1.466	1.589	1.550	2130	5526	7.44e6	4.77e6	3493.0	862.5	NO	bb	bb	93.264
13C-123478-HxCDF	35.089	0.956	2.403e5	4.875e5	1.054	0.493	0.510	2965	2559	3.84e6	7.79e6	1293.8	3045.7	NO	bd	bd	108.338
13C-123678-HxCDF	35.223	0.960	2.757e5	5.539e5	1.080	0.498	0.510	2965	2559	3.99e6	8.17e6	1346.6	3192.1	NO	db	db	120.486
13C-234678-HxCDF	36.092	0.983	2.450e5	4.788e5	1.014	0.512	0.510	2965	2559	3.75e6	7.40e6	1264.3	2893.1	NO	bb	bb	111.921
13C-123789-HxCDF	37.117	1.011	2.163e5	4.293e5	0.928	0.504	0.510	2965	2559	3.39e6	6.73e6	1141.6	2631.2	NO	bb	bb	109.123
13C-1234678-HpCDF	38.955	1.061	1.903e5	4.241e5	1.036	0.449	0.440	2164	2327	3.04e6	6.71e6	1403.5	2884.1	NO	bb	bb	92.999
13C-1234789-HpCDF	41.228	1.123	1.679e5	3.788e5	0.905	0.443	0.440	2164	2327	2.10e6	4.74e6	971.8	2038.0	NO	bb	bd	94.758
13C-1234-TCDD	25.788	0.000	2.747e5	3.578e5	1.000	0.768	0.770	1268	851	4.42e6	5.69e6	3485.6	6688.0	NO	bb	bb	100.000
13C-2378-TCDD	26.608	1.032	3.012e5	3.908e5	1.103	0.771	0.770	1268	851	4.73e6	6.10e6	3727.4	7174.9	NO	bb	bb	99.193
13C-12378-PeCDD	31.725	1.230	2.937e5	1.693e5	0.914	1.735	1.550	1164	1230	4.05e6	2.37e6	3475.0	1923.7	NO	bb	bb	80.071
13C-123478-HxCDD	36.203	0.986	4.046e5	3.432e5	0.933	1.179	1.240	2164	1936	6.56e6	5.43e6	3033.1	2806.2	NO	bd	bd	125.729
13C-123678-HxCDD	36.314	0.989	4.668e5	4.085e5	0.965	1.143	1.240	2164	1936	6.98e6	5.70e6	3225.4	2943.1	NO	db	db	142.329
13C-1234678-HpCDD	40.470	1.103	2.530e5	2.334e5	0.782	1.084	1.050	1685	1365	3.54e6	3.33e6	2101.6	2435.8	NO	bb	bb	97.559
13C-OCDD	45.271	1.233	3.987e5	4.403e5	0.788	0.906	0.890	2071	2053	4.69e6	5.13e6	2265.1	2497.7	NO	bb	bb	166.955
13C-123789-HxCDD	36.704	0.000	3.470e5	2.905e5	1.000	1.194	1.240	2164	1936	5.51e6	4.59e6	2547.9	2372.1	NO	bb	bb	100.000
37CL-2378-TCDD	26.622	1.032	2.495e5		1.233			1118		3.75e6		3349.2			bb		31.985

Dataset: T:\Autospec\Processed Data Batch\230223IHBS.qld
Last Altered: Friday, February 24, 2023 15:04:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:05:19 Pacific Standard Time

ID: BLA0261-BS1, Name: 23022401, Date: 24-Feb-2023, Time: 10:33:09, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.469	0.865	3.150e2	3.857e2	1.064	0.817	0.770	973	992	4.67e3	5.93e3	4.8	6.0	NO	bb	bb	0.070
1289-TCDF	27.483	1.058	1.673e2	1.312e2	0.858	1.275	0.770	973	992	2.65e3	3.62e3	2.7	3.7	YES	bb	bb	0.037
13468-PECDF	27.342	0.907	2.284e3	1.590e3	1.013	1.437	1.550	551	718	2.59e4	1.96e4	47.1	27.3	NO	bb	bb	0.425
12389-PECDF	32.527	1.079	3.080e3	2.164e3	0.844	1.423	1.550	1763	1819	4.48e4	2.85e4	25.4	15.7	NO	bb	bd	0.690
123468-HXCDF	33.451	0.953	2.077e3	1.661e3	1.197	1.251	1.240	1576	1373	3.00e4	2.58e4	19.0	18.8	NO	bd	bb	0.429
1368-TCDD	23.740	0.892	2.649e2	2.386e2	1.084	1.110	0.770	804	823	3.62e3	3.69e3	4.5	4.5	YES	bb	bb	0.067
1289-TCDD					0.975		0.770	804	823								
12479-PECDD	29.006	0.914	1.806e3	8.510e2	1.837	2.123	1.550	707	1191	2.00e4	9.14e3	28.3	7.7	YES	bb	bb	0.312
12389-PECDD	32.137	1.013	1.418e3	8.009e2	1.252	1.771	1.550	707	1191	2.03e4	1.37e4	28.7	11.5	NO	bb	bb	0.383
124679-HXCDD	34.209	0.945	1.691e3	1.275e3	1.033	1.326	1.240	1973	1435	2.48e4	1.79e4	12.6	12.5	NO	bb	bb	0.384
1234679-HPCDD	39.423	0.974	7.538e3	7.019e3	1.286	1.074	1.050	1458	1730	1.10e5	1.01e5	75.2	58.5	NO	bb	bb	2.327
Total-tetrafurans			3.604e4		0.933			973		5.28e5							9.915
Total-penta1			2.284e3					551		2.59e4							0.425
Total-pentafurans			4.494e5		0.866			1763		6.76e6							96.723
Total-hexafurans			8.351e5		1.208			1576		1.22e7							171.320
Total-heptafurans			3.193e5		1.185			1648		4.61e6							91.565
Total-Furans			1.828e6		1.067			973		2.62e7							448.504
Total-tetradioxins			3.440e4		1.099			804		5.12e5							9.239
Total-pentadioxins			1.617e5		1.392			707		2.46e6							52.058
Total-hexadioxins			5.656e5		1.007			1973		8.56e6							127.290
Total-heptadioxins			1.478e5		1.269			1458		2.16e6							48.507
Total-Dioxins			1.128e6		1.165			804		1.61e7							339.028
Total-TEQ			2.956e6					804		4.23e7							787.532
FUNCTION1 PFK			5.290e7					267379		2.31e7							
FUNCTION2 PFK			1.054e5					121995		3.57e6							0.000
FUNCTION3 PFK			2.584e5					298195		8.18e6							0.000
FUNCTION4 PFK			7.994e6					199842		1.31e7							
FUNCTION5 PFK			3.348e4					130260		1.36e6							
FUNCTION1 HXCD...			1.639e2					417		2.72e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			3.008e2					786		4.68e3							0.000
FUNCTION3 OCDPE			5.773e2					700		1.60e4							0.000
FUNCTION4 NCDPE			2.107e3					783		2.66e4							0.000
FUNCTION5 DCDPE			0.000e0					528		0.00e0							

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.99	3.400e4	4.355e4	0.876	0.78	0.77	510.1	YES	NO	bd	dd	9.375
2	Total-tetrafurans	25.80	9.248e2	1.294e3	0.933	0.71	0.77	15.3	YES	NO	bb	bd	0.252
3	Total-tetrafurans	25.07	4.227e2	6.355e2	0.933	0.67	0.77	6.5	YES	NO	db	db	0.120
4	Total-tetrafurans	24.74	3.752e2	4.914e2	0.933	0.76	0.77	6.2	YES	NO	bd	bd	0.098
5	1368-TCDF	22.47	3.150e2	3.857e2	1.064	0.82	0.77	4.8	YES	NO	bb	bb	0.070

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.34	2.284e3	1.590e3	1.013	1.44	1.55	47.1	YES	NO	bb	bb	0.425

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.53	3.080e3	2.164e3	0.844	1.42	1.55	25.4	YES	NO	bb	bd	0.690
2	23478-PeCDF	31.49	2.276e5	1.506e5	0.911	1.51	1.55	1949.2	YES	NO	bb	bb	47.988
3	12378-PeCDF	30.15	2.181e5	1.465e5	0.845	1.49	1.55	1851.2	YES	NO	bb	bd	47.922
4	Total-pentafurans	29.77	5.740e2	3.641e2	0.866	1.58	1.55	5.7	YES	NO	bb	bb	0.123

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123468-HXCDF	33.45	2.077e3	1.661e3	1.197	1.25	1.24	19.0	YES	NO	bd	bb	0.429
2	123789-HxCDF	37.13	1.781e5	1.494e5	1.187	1.19	1.24	1661.1	YES	NO	bd	bd	42.753
3	234678-HxCDF	36.10	2.120e5	1.722e5	1.229	1.23	1.24	1968.2	YES	NO	bd	bd	43.203
4	123678-HxCDF	35.25	2.399e5	1.944e5	1.248	1.23	1.24	2107.6	YES	NO	dd	dd	41.949
5	123478-HxCDF	35.10	2.029e5	1.668e5	1.182	1.22	1.24	1978.6	YES	NO	bd	bd	42.987

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.97	1.790e5	1.793e5	1.204	1.00	1.05	1679.4	YES	NO	bd	bd	48.435
2	1234789-HpCDF	41.24	1.403e5	1.344e5	1.165	1.04	1.05	1115.7	YES	NO	bd	bb	43.131

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.99	3.400e4	4.355e4	0.876	0.78	0.77	510.1	YES	NO	bd	dd	9.375
2	Total-tetrafurans	25.80	9.248e2	1.294e3	0.933	0.71	0.77	15.3	YES	NO	bb	bd	0.252
3	Total-tetrafurans	25.07	4.227e2	6.355e2	0.933	0.67	0.77	6.5	YES	NO	db	db	0.120
4	Total-tetrafurans	24.74	3.752e2	4.914e2	0.933	0.76	0.77	6.2	YES	NO	bd	bd	0.098
5	1368-TCDF	22.47	3.150e2	3.857e2	1.064	0.82	0.77	4.8	YES	NO	bb	bb	0.070
6	12389-PECDF	32.53	3.080e3	2.164e3	0.844	1.42	1.55	25.4	YES	NO	bb	bd	0.690
7	23478-PeCDF	31.49	2.276e5	1.506e5	0.911	1.51	1.55	1949.2	YES	NO	bb	bb	47.988
8	12378-PeCDF	30.15	2.181e5	1.465e5	0.845	1.49	1.55	1851.2	YES	NO	bb	bd	47.922
9	Total-pentafurans	29.77	5.740e2	3.641e2	0.866	1.58	1.55	5.7	YES	NO	bb	bb	0.123
10	123468-HXCDF	33.45	2.077e3	1.661e3	1.197	1.25	1.24	19.0	YES	NO	bd	bb	0.429
11	123789-HxCDF	37.13	1.781e5	1.494e5	1.187	1.19	1.24	1661.1	YES	NO	bd	bd	42.753
12	234678-HxCDF	36.10	2.120e5	1.722e5	1.229	1.23	1.24	1968.2	YES	NO	bd	bd	43.203
13	123678-HxCDF	35.25	2.399e5	1.944e5	1.248	1.23	1.24	2107.6	YES	NO	dd	dd	41.949
14	123478-HxCDF	35.10	2.029e5	1.668e5	1.182	1.22	1.24	1978.6	YES	NO	bd	bd	42.987
15	1234678-HpCDF	38.97	1.790e5	1.793e5	1.204	1.00	1.05	1679.4	YES	NO	bd	bd	48.435
16	OCDF	45.53	1.863e5	2.046e5	1.186	0.91	0.89	2402.1	YES	NO	bd	bd	78.556
17	1234789-HpCDF	41.24	1.403e5	1.344e5	1.165	1.04	1.05	1115.7	YES	NO	bd	bb	43.131
18	13468-PECDF	27.34	2.284e3	1.590e3	1.013	1.44	1.55	47.1	YES	NO	bb	bb	0.425

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	26.75	1.550e3	1.976e3	1.099	0.78	0.77	26.5	YES	NO	db	db	0.464
2	2378-TCDD	26.62	3.176e4	4.061e4	1.236	0.78	0.77	594.6	YES	NO	bd	bd	8.459
3	Total-tetradioxins	26.24	1.095e3	1.308e3	1.099	0.84	0.77	15.2	YES	NO	bb	bb	0.316

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	32.14	1.418e3	8.009e2	1.252	1.77	1.55	28.7	YES	NO	bb	bb	0.383
2	12378-PeCDD	31.75	1.603e5	9.965e4	1.087	1.61	1.55	3449.9	YES	NO	bb	bb	51.675

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HXCDD	34.21	1.691e3	1.275e3	1.033	1.33	1.24	12.6	YES	NO	bb	bb	0.384
2	123789-HxCDD	36.72	1.788e5	1.437e5	0.985	1.24	1.24	1381.0	YES	NO	bb	bb	40.325
3	123678-HxCDD	36.34	2.052e5	1.707e5	1.021	1.20	1.24	1536.8	YES	NO	dd	db	42.068
4	123478-HxCDD	36.21	1.799e5	1.487e5	0.987	1.21	1.24	1410.4	YES	NO	bd	bd	44.513

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.48	1.402e5	1.411e5	1.253	0.99	1.05	1405.6	YES	NO	bb	bd	46.180
2	1234679-HPCDD	39.42	7.538e3	7.019e3	1.286	1.07	1.05	75.2	YES	NO	bb	bb	2.327

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	26.75	1.550e3	1.976e3	1.099	0.78	0.77	26.5	YES	NO	db	db	0.464
2	2378-TCDD	26.62	3.176e4	4.061e4	1.236	0.78	0.77	594.6	YES	NO	bd	bd	8.459
3	Total-tetradioxins	26.24	1.095e3	1.308e3	1.099	0.84	0.77	15.2	YES	NO	bb	bb	0.316
4	124679-HXCDD	34.21	1.691e3	1.275e3	1.033	1.33	1.24	12.6	YES	NO	bb	bb	0.384
5	12389-PECDD	32.14	1.418e3	8.009e2	1.252	1.77	1.55	28.7	YES	NO	bb	bb	0.383
6	12378-PeCDD	31.75	1.603e5	9.965e4	1.087	1.61	1.55	3449.9	YES	NO	bb	bb	51.675
7	123789-HxCDD	36.72	1.788e5	1.437e5	0.985	1.24	1.24	1381.0	YES	NO	bb	bb	40.325
8	123678-HxCDD	36.34	2.052e5	1.707e5	1.021	1.20	1.24	1536.8	YES	NO	dd	db	42.068
9	123478-HxCDD	36.21	1.799e5	1.487e5	0.987	1.21	1.24	1410.4	YES	NO	bd	bd	44.513
10	1234678-HpCDD	40.48	1.402e5	1.411e5	1.253	0.99	1.05	1405.6	YES	NO	bb	bd	46.180
11	1234679-HPCDD	39.42	7.538e3	7.019e3	1.286	1.07	1.05	75.2	YES	NO	bb	bb	2.327
12	OCDD	45.29	2.185e5	2.531e5	1.103	0.86	0.89	1035.1	YES	NO	bd	bd	101.935

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.99	3.400e4	4.355e4	0.876	0.78	0.77	510.1	YES	NO	bd	dd	9.375
2	Total-tetrafurans	25.80	9.248e2	1.294e3	0.933	0.71	0.77	15.3	YES	NO	bb	bd	0.252
3	Total-tetrafurans	25.07	4.227e2	6.355e2	0.933	0.67	0.77	6.5	YES	NO	db	db	0.120
4	Total-tetrafurans	24.74	3.752e2	4.914e2	0.933	0.76	0.77	6.2	YES	NO	bd	bd	0.098
5	1368-TCDF	22.47	3.150e2	3.857e2	1.064	0.82	0.77	4.8	YES	NO	bb	bb	0.070
6	12389-PECDF	32.53	3.080e3	2.164e3	0.844	1.42	1.55	25.4	YES	NO	bb	bd	0.690
7	23478-PeCDF	31.49	2.276e5	1.506e5	0.911	1.51	1.55	1949.2	YES	NO	bb	bb	47.988
8	12378-PeCDF	30.15	2.181e5	1.465e5	0.845	1.49	1.55	1851.2	YES	NO	bb	bd	47.922
9	Total-pentafurans	29.77	5.740e2	3.641e2	0.866	1.58	1.55	5.7	YES	NO	bb	bb	0.123
10	123468-HXCDF	33.45	2.077e3	1.661e3	1.197	1.25	1.24	19.0	YES	NO	bd	bb	0.429
11	123789-HxCDF	37.13	1.781e5	1.494e5	1.187	1.19	1.24	1661.1	YES	NO	bd	bd	42.753
12	234678-HxCDF	36.10	2.120e5	1.722e5	1.229	1.23	1.24	1968.2	YES	NO	bd	bd	43.203
13	123678-HxCDF	35.25	2.399e5	1.944e5	1.248	1.23	1.24	2107.6	YES	NO	dd	dd	41.949
14	123478-HxCDF	35.10	2.029e5	1.668e5	1.182	1.22	1.24	1978.6	YES	NO	bd	bd	42.987
15	1234678-HpCDF	38.97	1.790e5	1.793e5	1.204	1.00	1.05	1679.4	YES	NO	bd	bd	48.435
16	OCDF	45.53	1.863e5	2.046e5	1.186	0.91	0.89	2402.1	YES	NO	bd	bd	78.556
17	1234789-HpCDF	41.24	1.403e5	1.344e5	1.165	1.04	1.05	1115.7	YES	NO	bd	bb	43.131
18	13468-PECDF	27.34	2.284e3	1.590e3	1.013	1.44	1.55	47.1	YES	NO	bb	bb	0.425
19	Total-tetradioxins	26.75	1.550e3	1.976e3	1.099	0.78	0.77	26.5	YES	NO	db	db	0.464
20	2378-TCDD	26.62	3.176e4	4.061e4	1.236	0.78	0.77	594.6	YES	NO	bd	bd	8.459
21	Total-tetradioxins	26.24	1.095e3	1.308e3	1.099	0.84	0.77	15.2	YES	NO	bb	bb	0.316
22	124679-HXCDD	34.21	1.691e3	1.275e3	1.033	1.33	1.24	12.6	YES	NO	bb	bb	0.384
23	12389-PECDD	32.14	1.418e3	8.009e2	1.252	1.77	1.55	28.7	YES	NO	bb	bb	0.383
24	12378-PeCDD	31.75	1.603e5	9.965e4	1.087	1.61	1.55	3449.9	YES	NO	bb	bb	51.675
25	123789-HxCDD	36.72	1.788e5	1.437e5	0.985	1.24	1.24	1381.0	YES	NO	bb	bb	40.325
26	123678-HxCDD	36.34	2.052e5	1.707e5	1.021	1.20	1.24	1536.8	YES	NO	dd	db	42.068
27	123478-HxCDD	36.21	1.799e5	1.487e5	0.987	1.21	1.24	1410.4	YES	NO	bd	bd	44.513
28	1234678-HpCDD	40.48	1.402e5	1.411e5	1.253	0.99	1.05	1405.6	YES	NO	bb	bd	46.180
29	1234679-HPCDD	39.42	7.538e3	7.019e3	1.286	1.07	1.05	75.2	YES	NO	bb	bb	2.327
30	OCDD	45.29	2.185e5	2.531e5	1.103	0.86	0.89	1035.1	YES	NO	bd	bd	101.935

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	25.52	2.089e7					31.8	YES		db		
2	FUNCTION1 PFK	21.32	3.201e7					54.5	YES		bd		

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.88	3.453e3					1.2	NO		bb		0.000
2	FUNCTION2 PFK	28.84	2.664e3					0.9	NO		bb		0.000
3	FUNCTION2 PFK	28.40	2.132e3					0.8	NO		bb		0.000
4	FUNCTION2 PFK	28.27	2.537e3					1.1	NO		bb		0.000
5	FUNCTION2 PFK	31.80	1.156e3					0.6	NO		bd		0.000
6	FUNCTION2 PFK	31.76	2.457e3					0.8	NO		bb		0.000
7	FUNCTION2 PFK	31.27	5.747e3					1.4	NO		bb		0.000
8	FUNCTION2 PFK	30.89	6.468e3					1.6	NO		bb		0.000
9	FUNCTION2 PFK	30.81	2.168e3					0.8	NO		bb		0.000
10	FUNCTION2 PFK	30.43	7.800e3					1.4	NO		db		0.000
11	FUNCTION2 PFK	30.35	7.234e3					1.6	NO		bd		0.000
12	FUNCTION2 PFK	29.84	4.582e3					1.2	NO		db		0.000
13	FUNCTION2 PFK	29.81	1.093e3					0.6	NO		bd		0.000
14	FUNCTION2 PFK	29.71	4.583e3					1.3	NO		db		0.000
15	FUNCTION2 PFK	29.67	3.394e3					1.2	NO		bd		0.000
16	FUNCTION2 PFK	29.63	6.024e2					0.4	NO		bb		0.000
17	FUNCTION2 PFK	29.56	3.126e3					0.8	NO		bb		0.000
18	FUNCTION2 PFK	29.27	2.192e3					0.8	NO		bb		0.000
19	FUNCTION2 PFK	29.18	7.018e3					1.4	NO		bb		0.000
20	FUNCTION2 PFK	28.96	4.651e3					1.2	NO		bb		0.000
21	FUNCTION2 PFK	32.94	6.480e2					0.5	NO		bb		0.000
22	FUNCTION2 PFK	32.72	7.948e2					0.5	NO		bb		0.000
23	FUNCTION2 PFK	32.59	2.063e3					0.8	NO		db		0.000
24	FUNCTION2 PFK	32.54	6.761e3					1.3	NO		bd		0.000
25	FUNCTION2 PFK	32.34	5.413e3					1.4	NO		db		0.000
26	FUNCTION2 PFK	32.27	7.088e3					1.4	NO		bd		0.000
27	FUNCTION2 PFK	31.91	2.787e3					1.0	NO		bb		0.000
28	FUNCTION2 PFK	31.84	4.770e3					1.1	NO		db		0.000

ID: BLA0261-BS1, Name: 23022401, Date: 24-Feb-2023, Time: 10:33:09, Conditions: AUTOSPEC01, User: pk

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.74	5.173e3					0.7	NO		db		0.000
2	FUNCTION3 PFK	33.70	1.599e4					1.3	NO		bd		0.000
3	FUNCTION3 PFK	33.28	1.160e4					1.3	NO		bb		0.000
4	FUNCTION3 PFK	33.22	6.639e3					1.1	NO		bb		0.000
5	FUNCTION3 PFK	33.18	1.832e3					0.5	NO		db		0.000
6	FUNCTION3 PFK	33.12	1.060e4					1.2	NO		dd		0.000
7	FUNCTION3 PFK	33.08	1.046e4					1.2	NO		bd		0.000
8	FUNCTION3 PFK	37.38	5.375e3					0.8	NO		bb		0.000
9	FUNCTION3 PFK	37.12	8.851e3					1.4	NO		bb		0.000
10	FUNCTION3 PFK	36.85	5.951e3					0.8	NO		bb		0.000
11	FUNCTION3 PFK	36.54	2.451e3					0.5	NO		bb		0.000
12	FUNCTION3 PFK	36.26	1.660e4					1.7	NO		bb		0.000
13	FUNCTION3 PFK	35.42	6.974e3					0.9	NO		bb		0.000
14	FUNCTION3 PFK	35.27	5.983e3					0.8	NO		bb		0.000
15	FUNCTION3 PFK	35.22	5.450e3					0.7	NO		db		0.000
16	FUNCTION3 PFK	35.18	9.041e3					1.1	NO		bd		0.000
17	FUNCTION3 PFK	35.12	7.176e3					1.0	NO		bb		0.000
18	FUNCTION3 PFK	34.98	1.696e3					0.5	NO		bb		0.000
19	FUNCTION3 PFK	34.93	3.042e3					0.5	NO		bb		0.000
20	FUNCTION3 PFK	34.52	1.528e4					1.5	NO		db		0.000
21	FUNCTION3 PFK	34.47	4.164e4					1.7	NO		bd		0.000
22	FUNCTION3 PFK	34.38	6.283e3					0.7	NO		bb		0.000
23	FUNCTION3 PFK	34.30	1.861e4					1.7	NO		bb		0.000
24	FUNCTION3 PFK	37.87	1.327e4					1.8	NO		db		0.000
25	FUNCTION3 PFK	37.84	6.074e3					1.0	NO		bd		0.000
26	FUNCTION3 PFK	37.64	1.632e4					1.4	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	39.02	6.487e6					22.0	YES		db		
2	FUNCTION4 PFK	38.11	1.507e6					43.4	YES		bd		

ID: BLA0261-BS1, Name: 23022401, Date: 24-Feb-2023, Time: 10:33:09, Conditions: AUTOSPEC01, User: pk

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	46.35	8.388e3					1.8	NO		bb		
2	FUNCTION5 PFK	44.80	3.819e3					1.4	NO		bb		
3	FUNCTION5 PFK	44.62	5.855e2					0.5	NO		bb		
4	FUNCTION5 PFK	44.49	6.111e2					0.5	NO		bb		
5	FUNCTION5 PFK	44.06	9.205e3					2.1	NO		bb		
6	FUNCTION5 PFK	43.84	4.303e3					1.3	NO		bb		
7	FUNCTION5 PFK	43.63	1.813e3					0.8	NO		bb		
8	FUNCTION5 PFK	43.47	4.159e3					1.5	NO		bb		
9	FUNCTION5 PFK	43.15	5.974e2					0.5	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.72	7.222e1					2.8	NO		bb		0.000
2	FUNCTION1 HXCD...	21.08	9.166e1					3.7	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.67	9.233e1					1.9	NO		bb		0.000
2	FUNCTION2 HPCD...	31.81	9.840e1					2.0	NO		bb		0.000
3	FUNCTION2 HPCD...	28.50	1.101e2					2.1	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	37.90	1.596e2					9.3	YES		bb		0.000
2	FUNCTION3 OCDPE	37.54	1.167e2					2.0	NO		bb		0.000
3	FUNCTION3 OCDPE	37.14	1.111e2					5.3	YES		bb		0.000
4	FUNCTION3 OCDPE	33.59	1.088e2					1.6	NO		bb		0.000
5	FUNCTION3 OCDPE	33.13	8.116e1					4.6	YES		bb		0.000

ID: BLA0261-BS1, Name: 23022401, Date: 24-Feb-2023, Time: 10:33:09, Conditions: AUTOSPEC01, User: pk

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	38.41	2.150e2					5.7	YES		db		0.000
2	FUNCTION4 NCDPE	38.18	3.742e2					1.2	NO		bd		0.000
3	FUNCTION4 NCDPE	41.75	8.586e1					1.6	NO		bb		0.000
4	FUNCTION4 NCDPE	41.44	8.211e1					4.2	YES		db		0.000
5	FUNCTION4 NCDPE	41.43	2.356e2					4.5	YES		dd		0.000
6	FUNCTION4 NCDPE	41.31	1.836e2					2.6	NO		bd		0.000
7	FUNCTION4 NCDPE	38.79	9.675e1					2.5	NO		db		0.000
8	FUNCTION4 NCDPE	38.75	8.022e1					2.5	NO		dd		0.000
9	FUNCTION4 NCDPE	38.59	5.490e2					5.0	YES		dd		0.000
10	FUNCTION4 NCDPE	38.49	2.044e2					4.2	YES		bd		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
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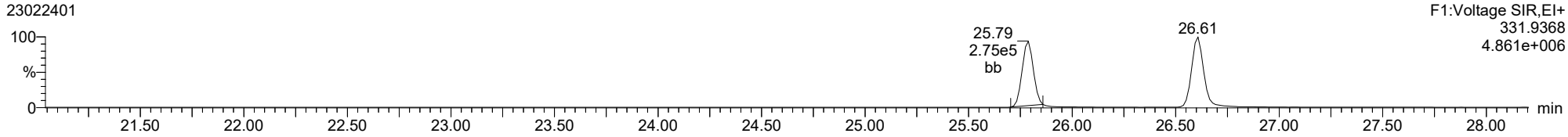

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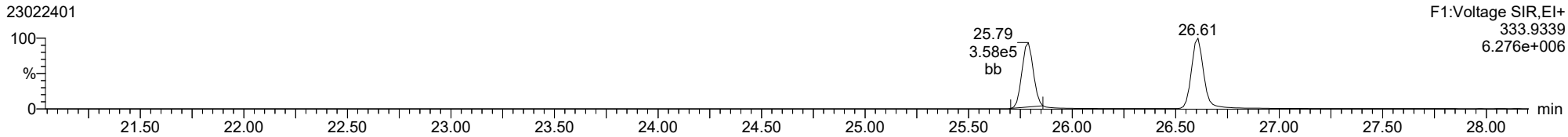

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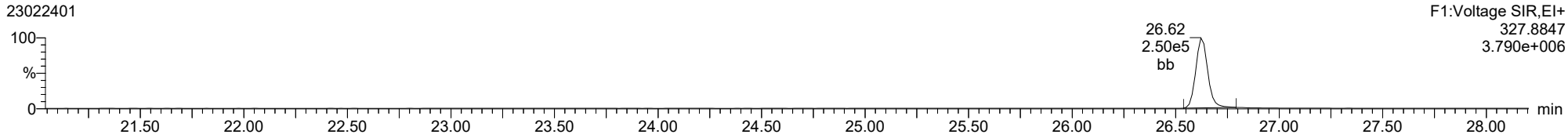

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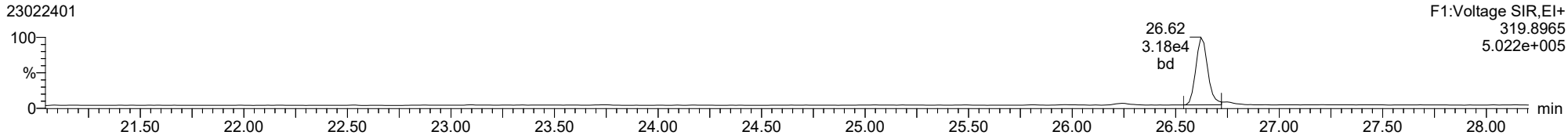

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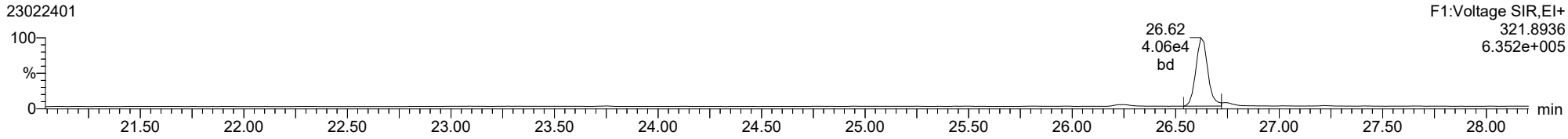

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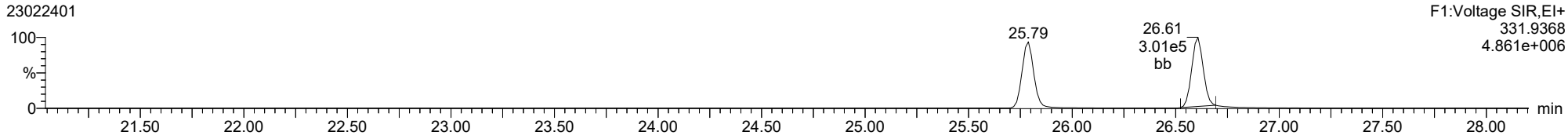

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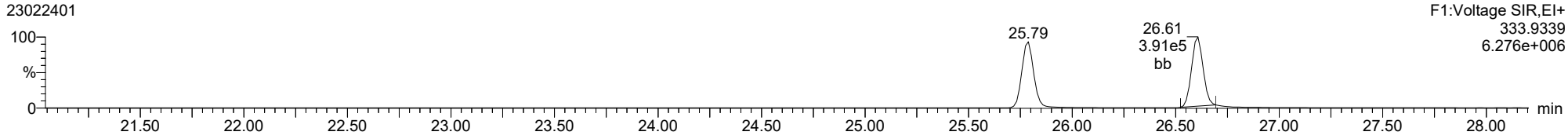

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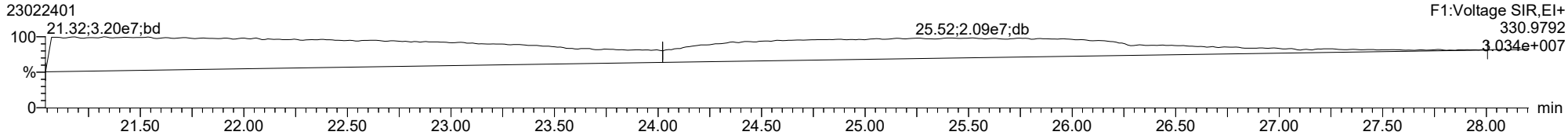

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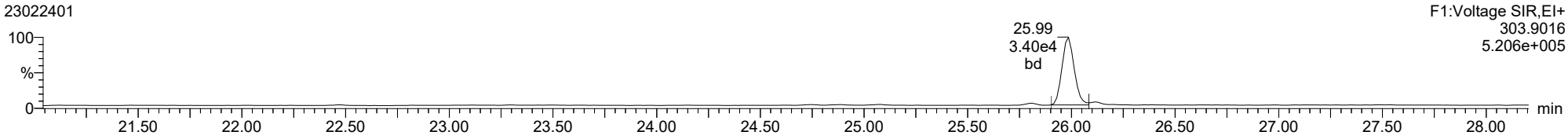

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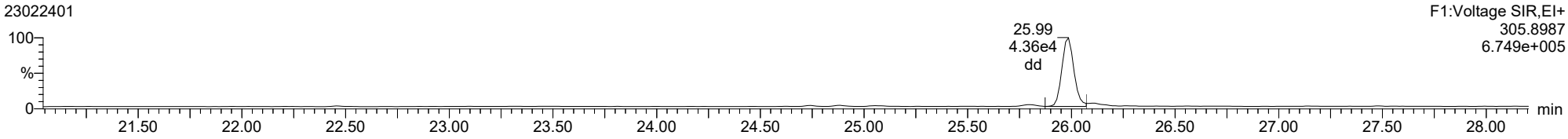

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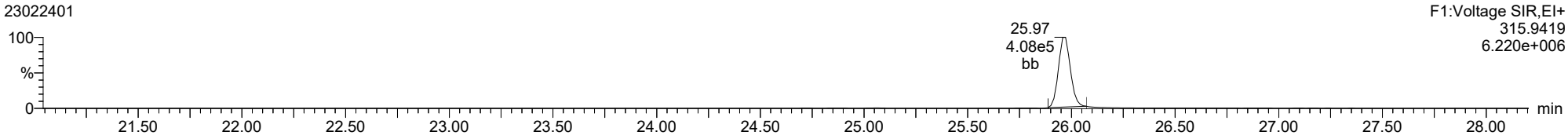

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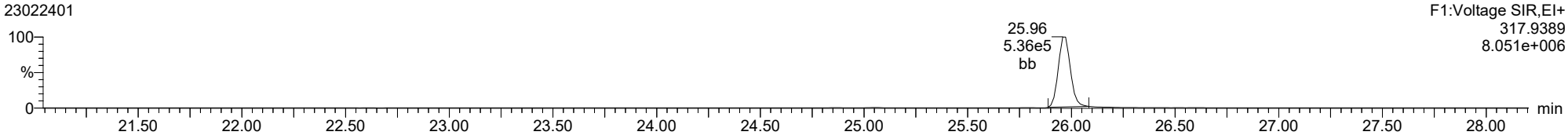

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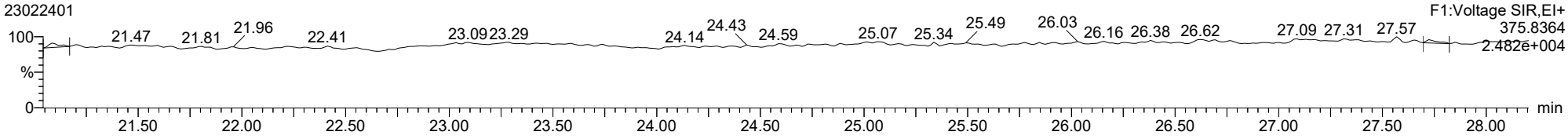

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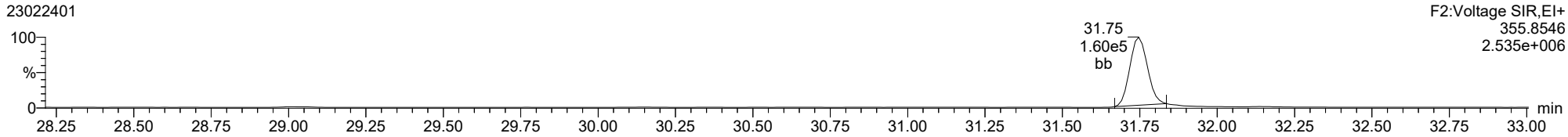

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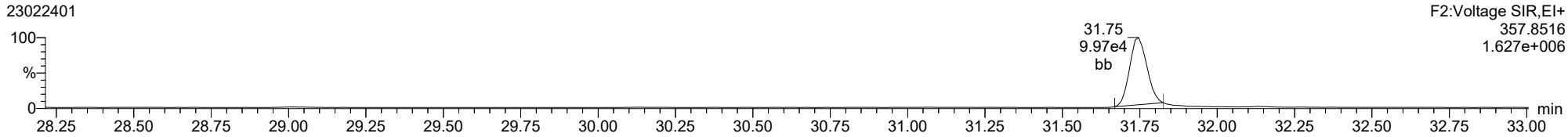

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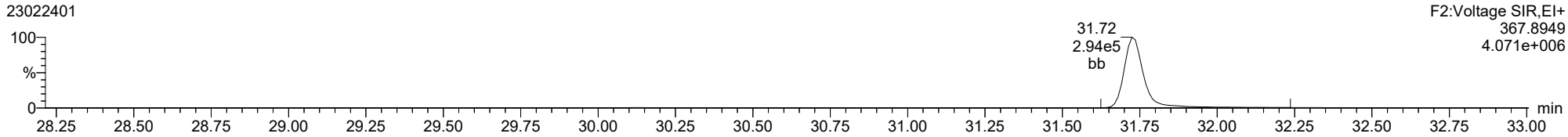

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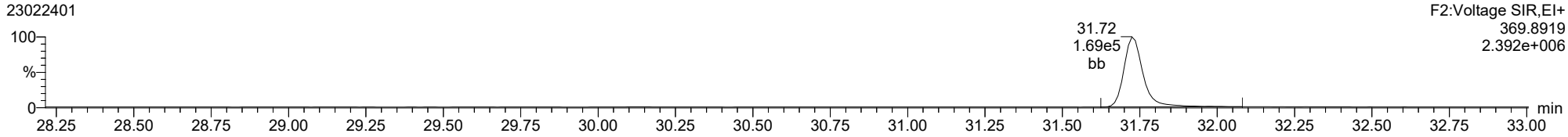

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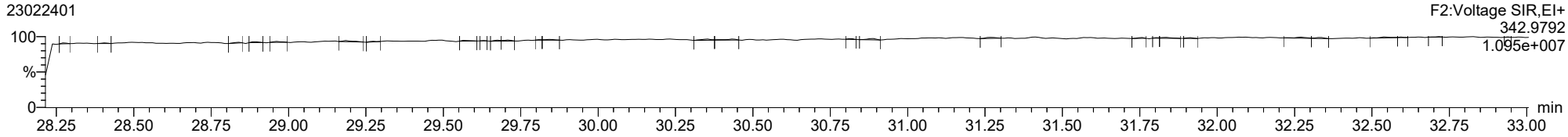

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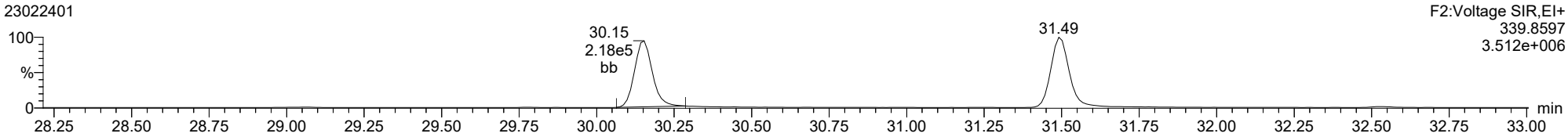

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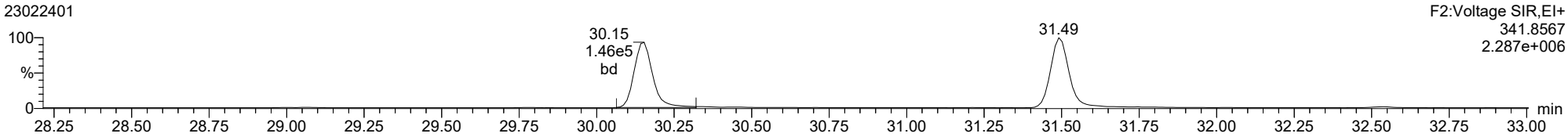

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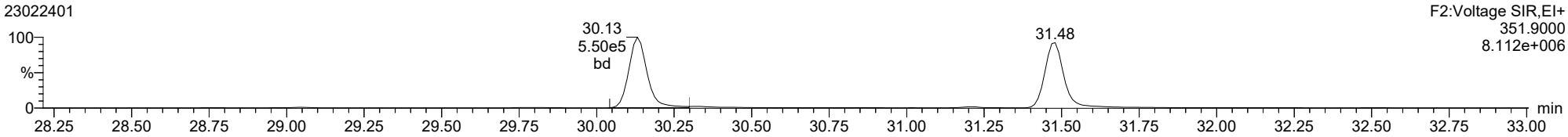

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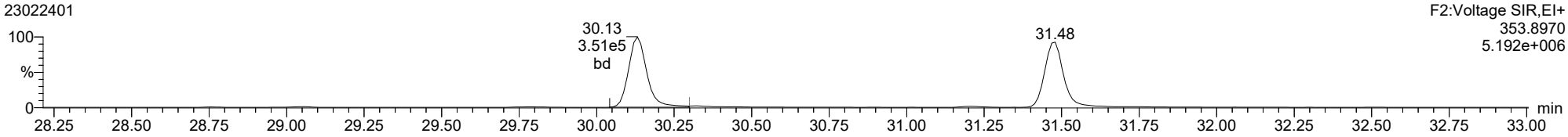

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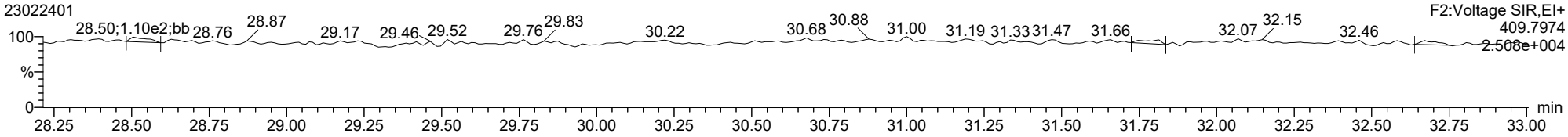

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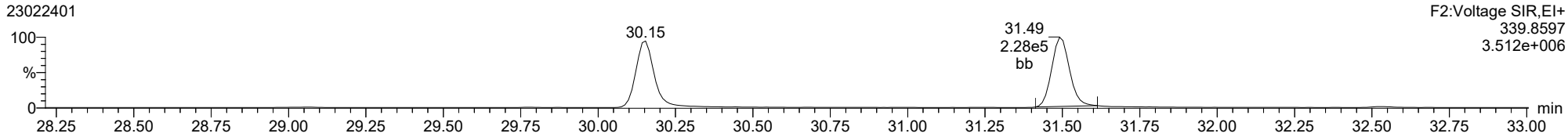

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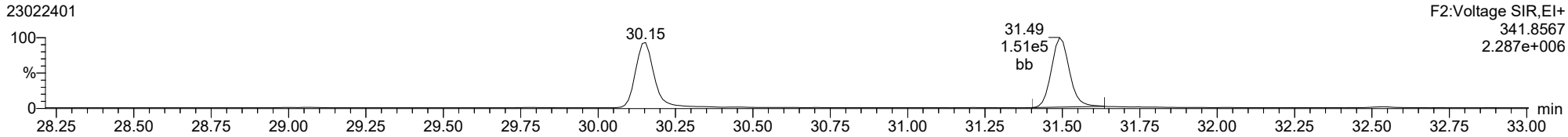

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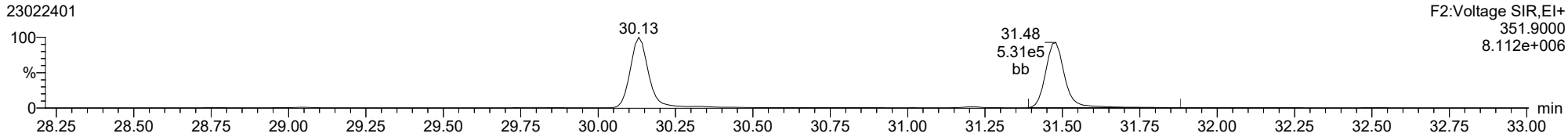

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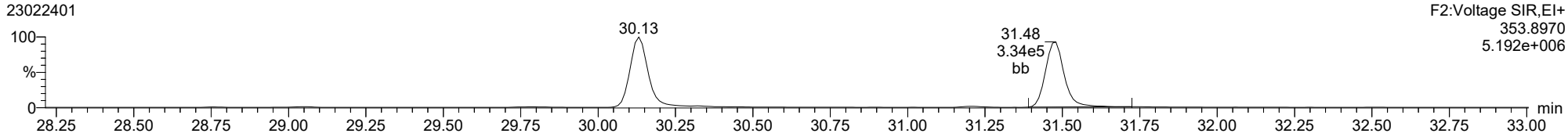

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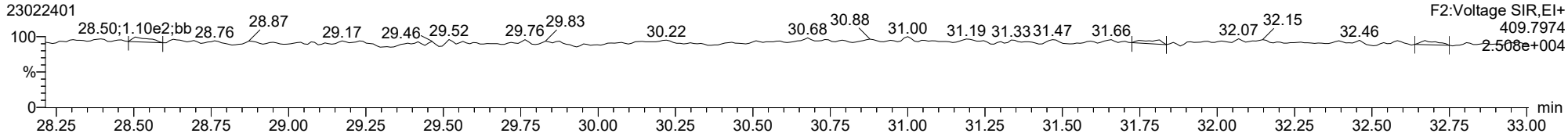

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ID: BLA0261-BS1, Name: 23022401, Date: 24-Feb-2023, Time: 10:33:09, Conditions: AUTOSPEC01, User: pk

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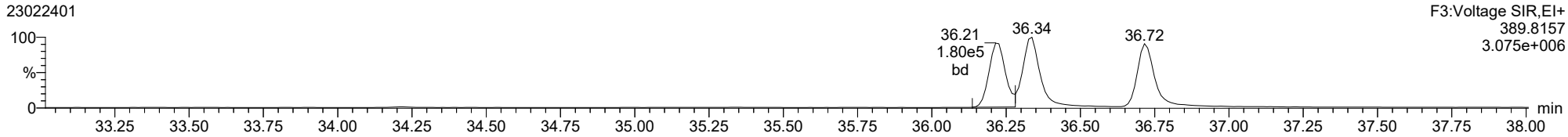

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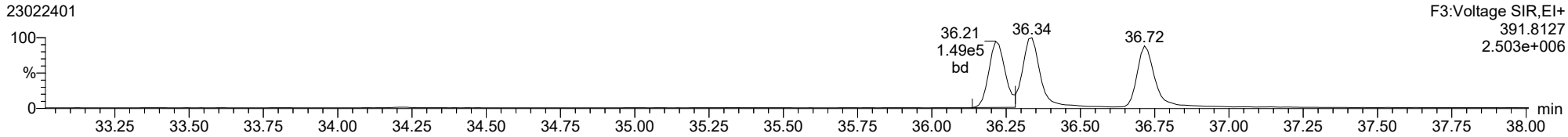

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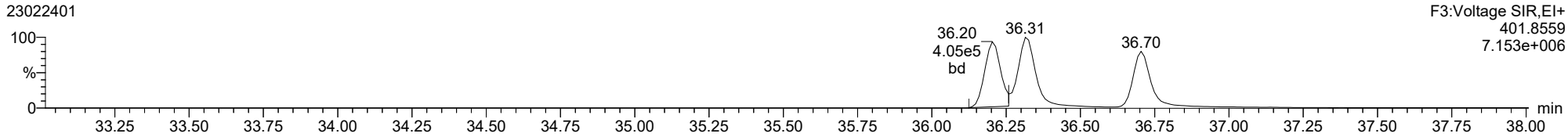

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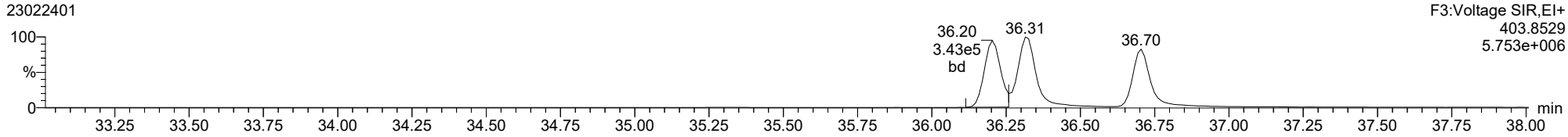

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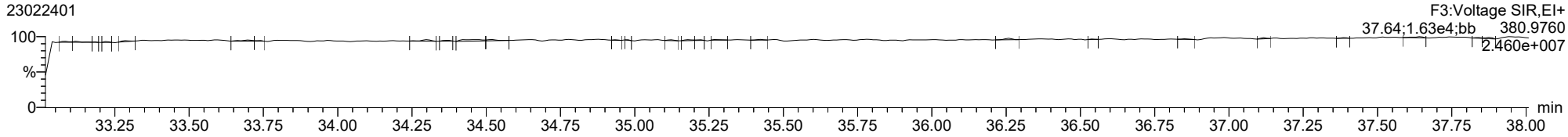

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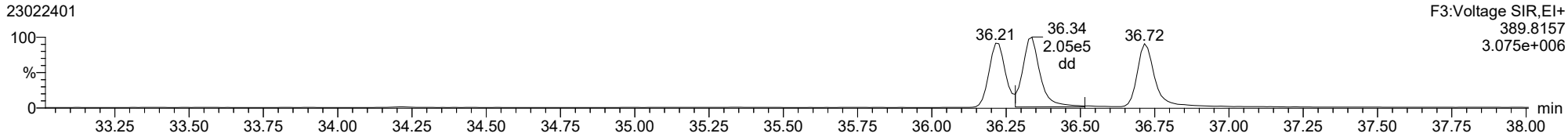

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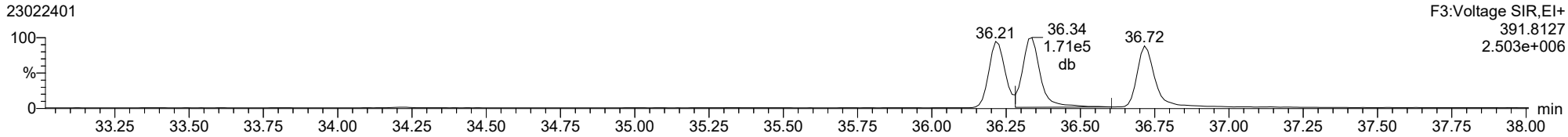

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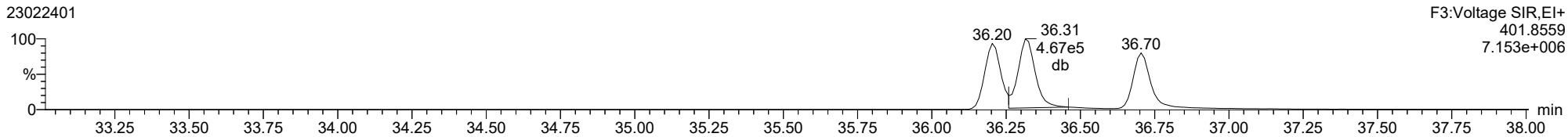

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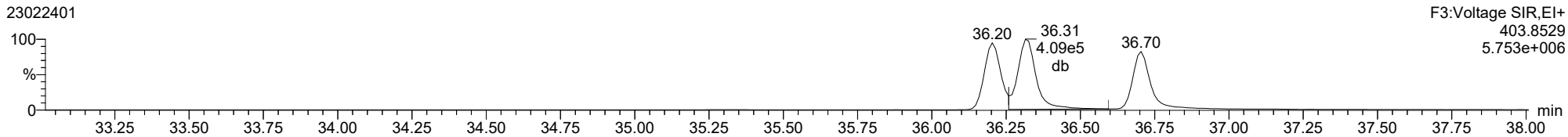

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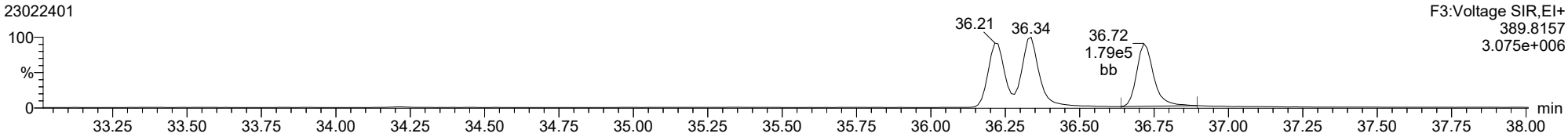

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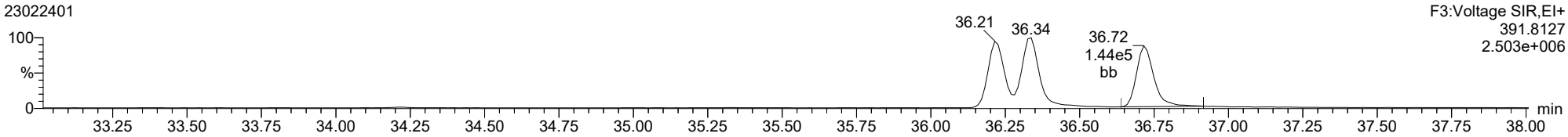

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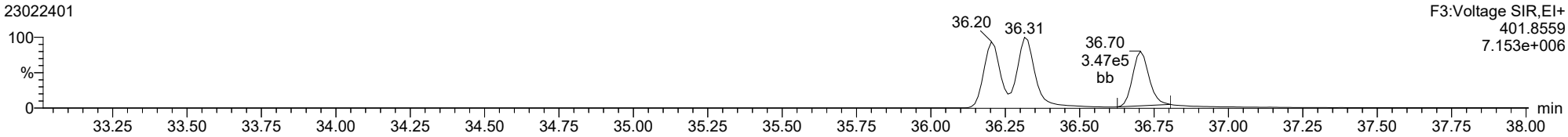

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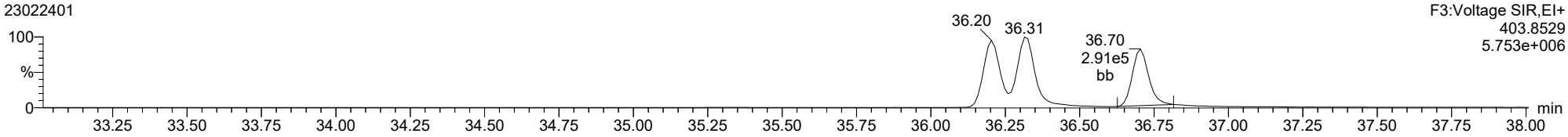

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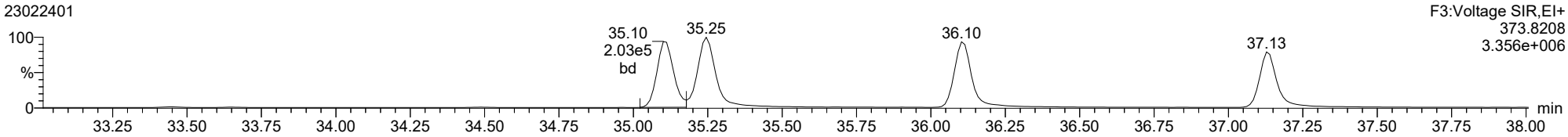

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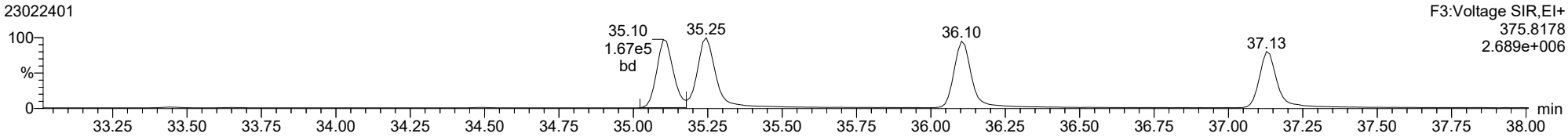

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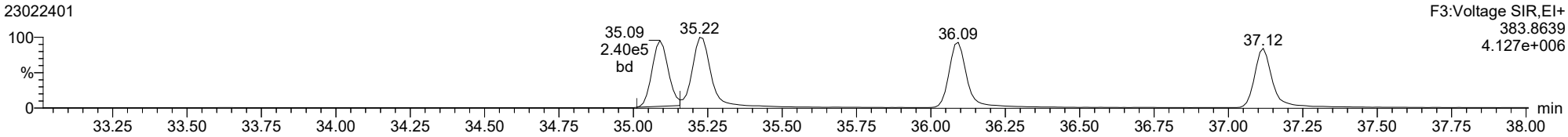

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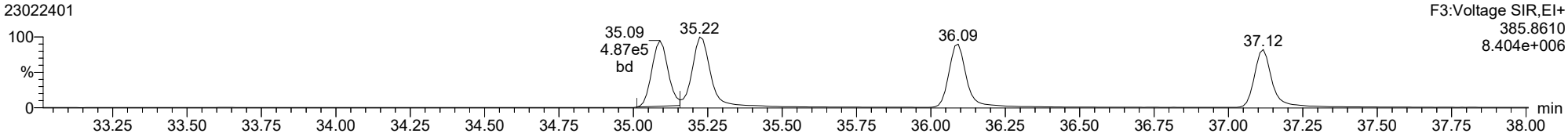

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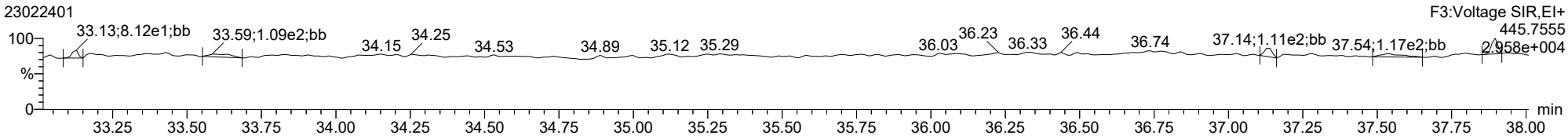

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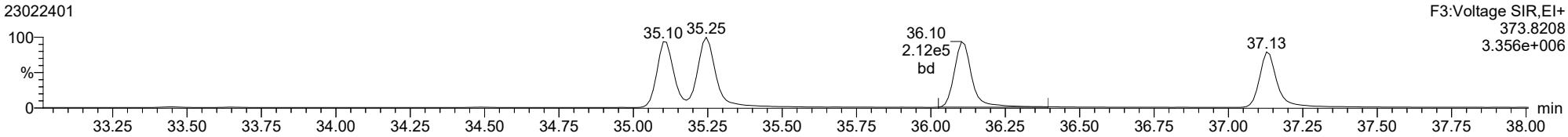

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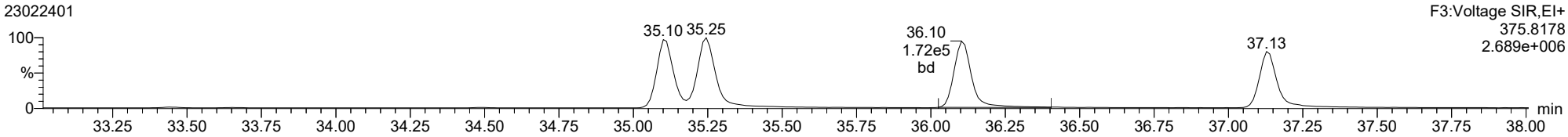

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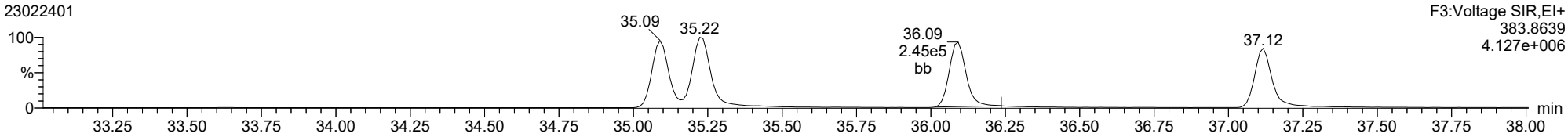

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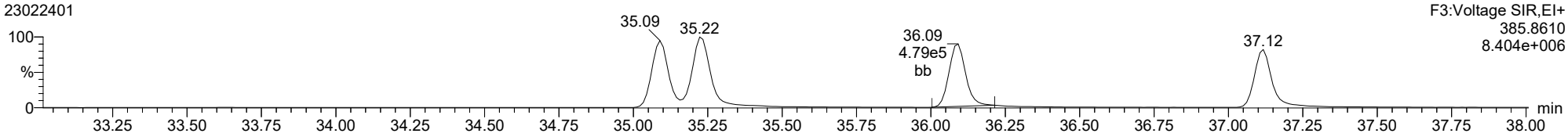

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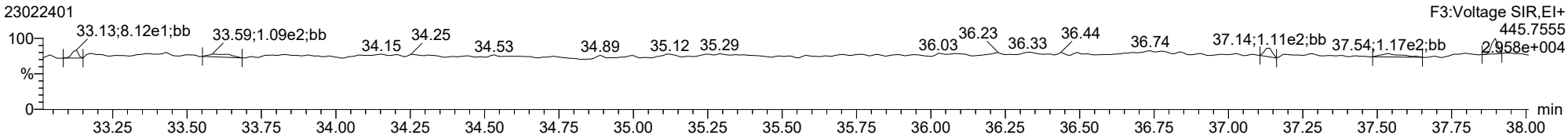

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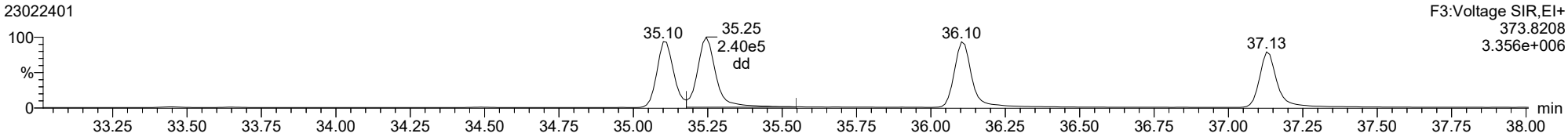

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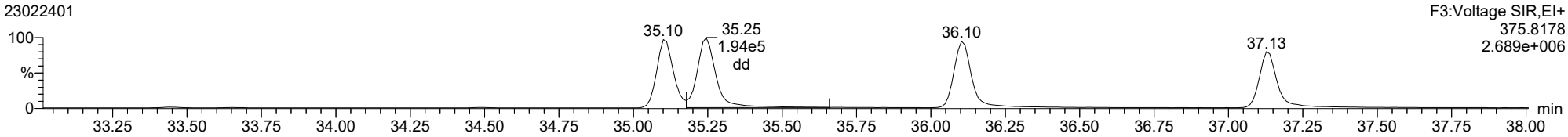

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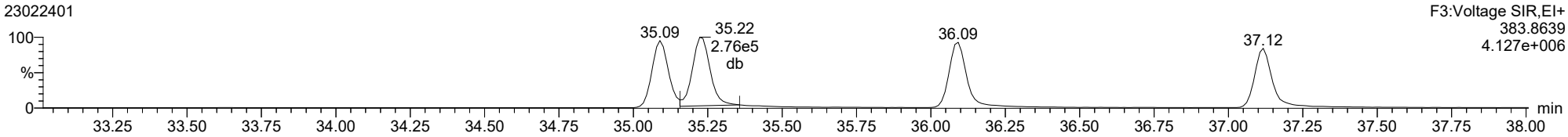

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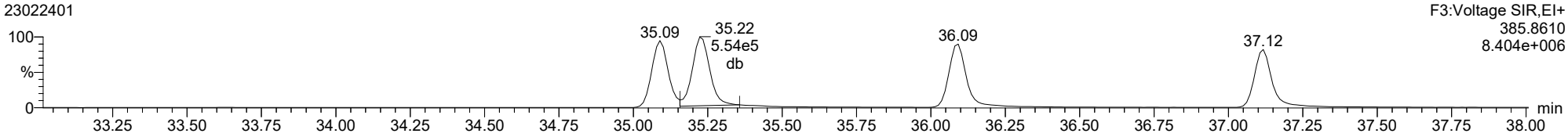

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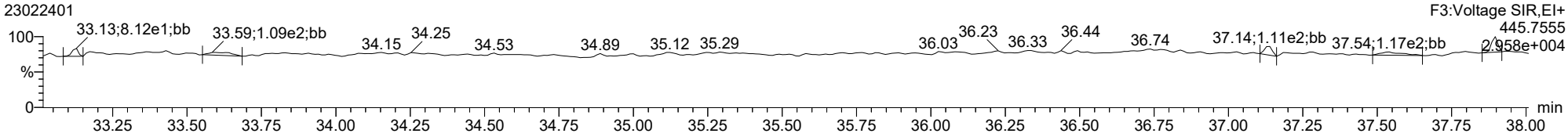

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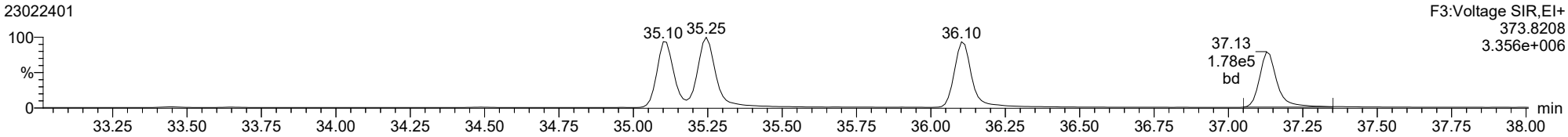

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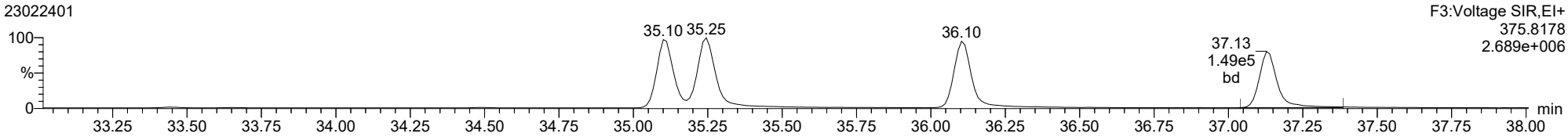

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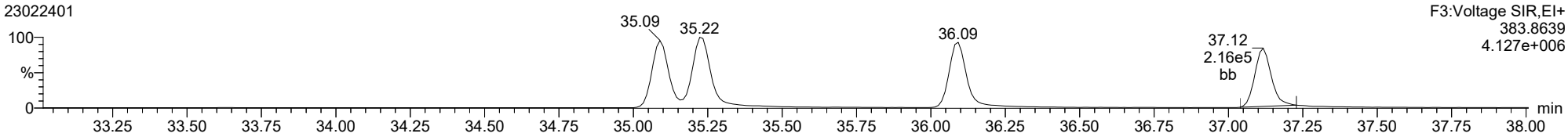

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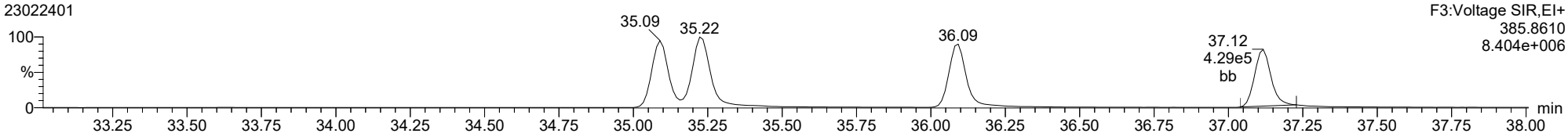

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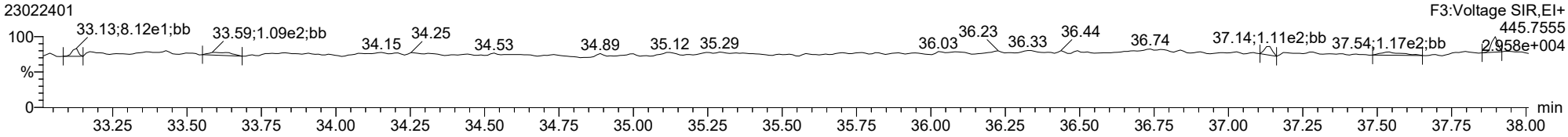

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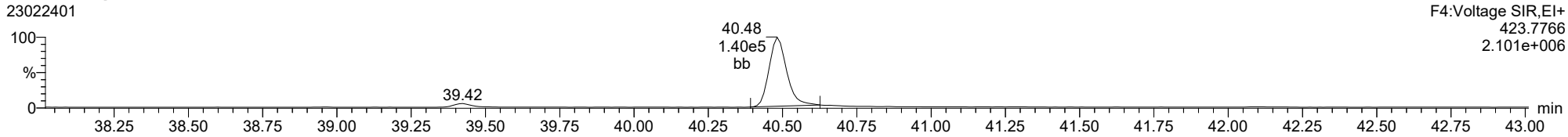

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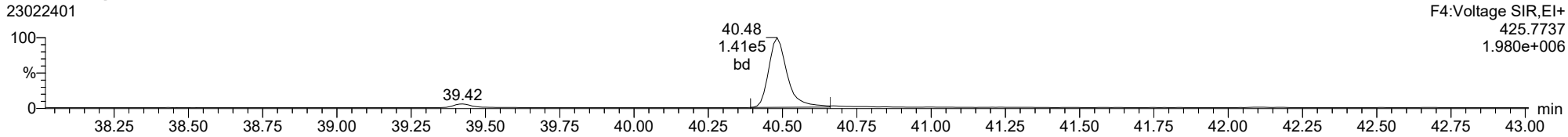

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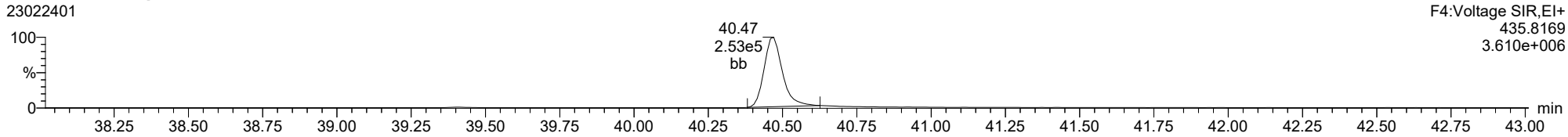

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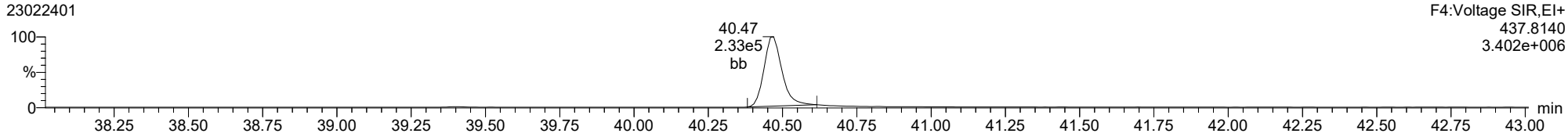

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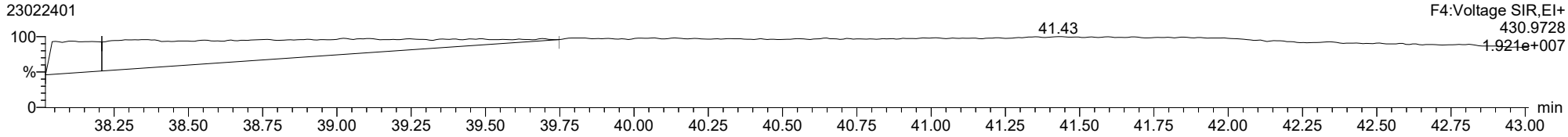

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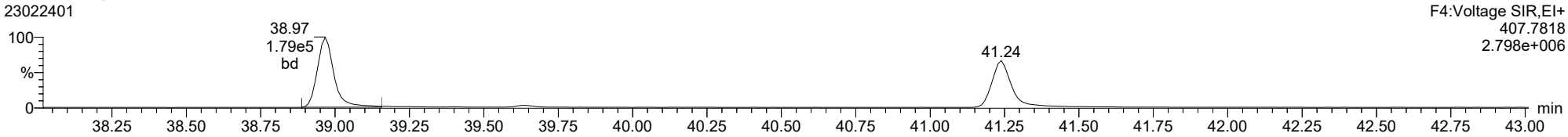

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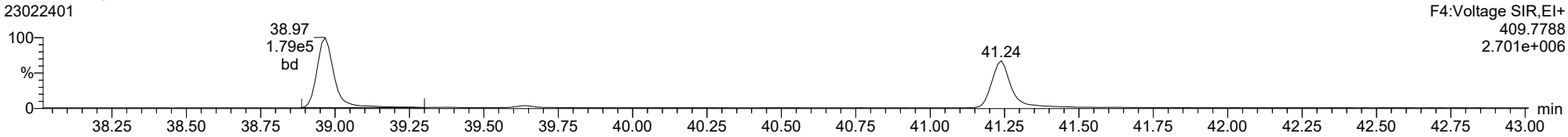

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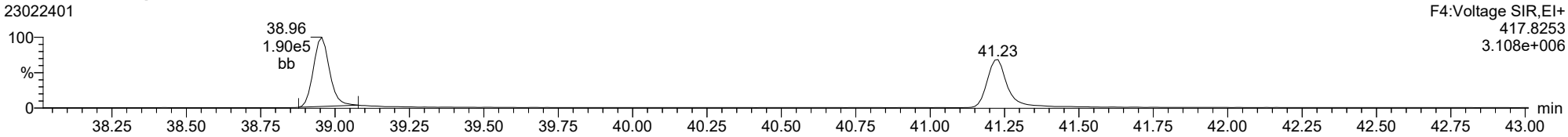

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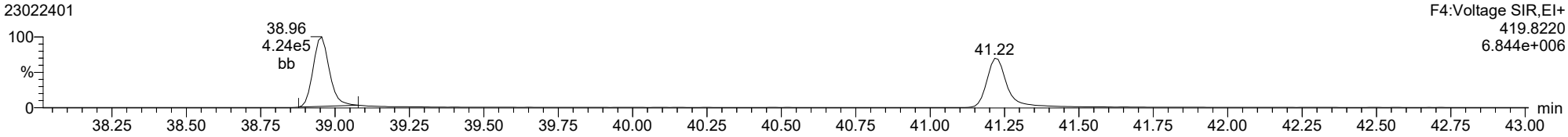

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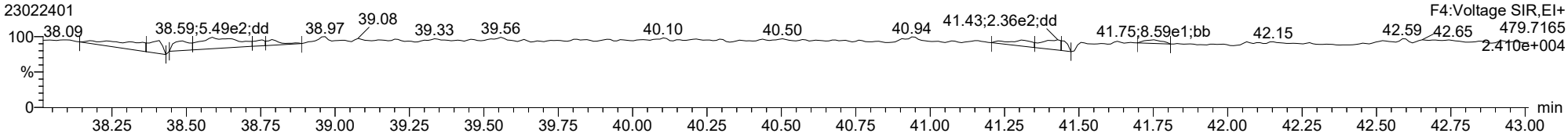

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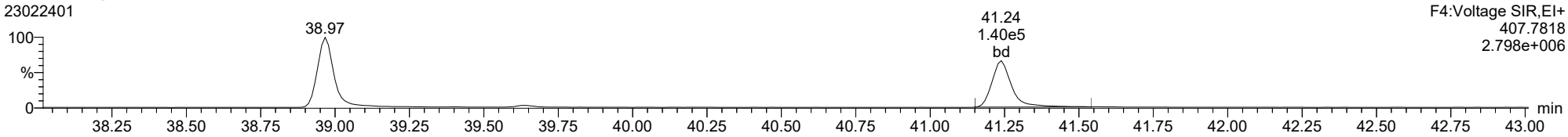

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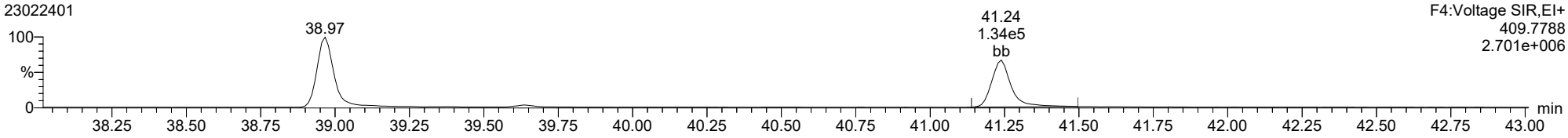

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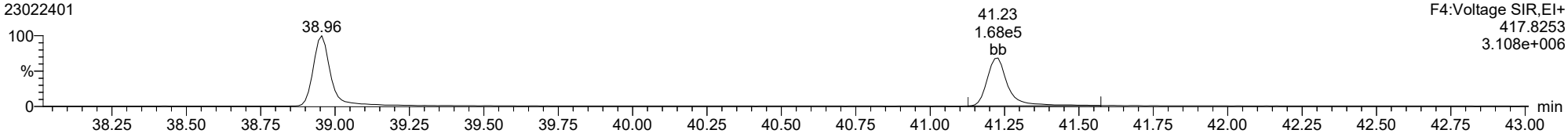

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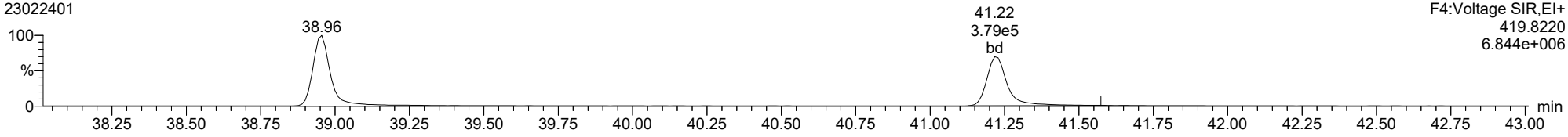

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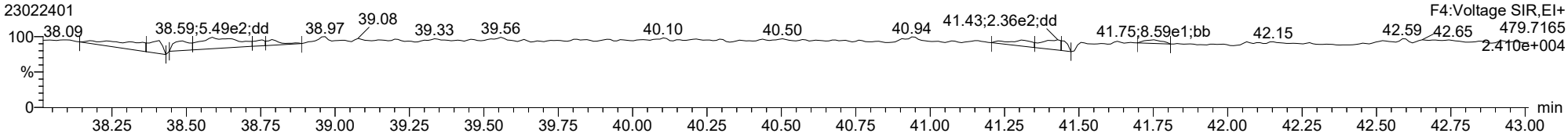

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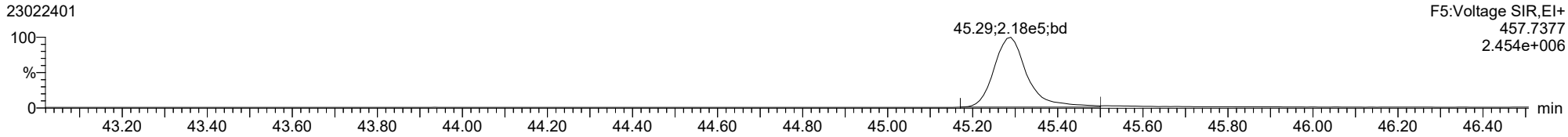
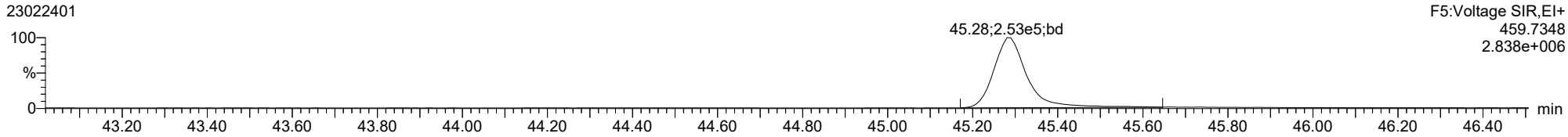
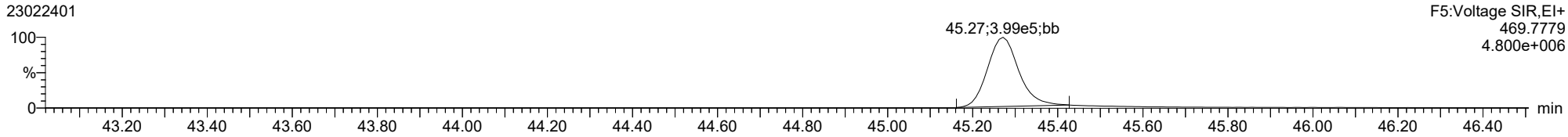
OCDD



OCDD



13C-OCDD



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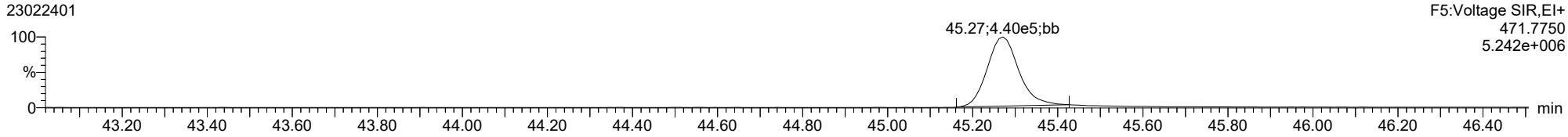
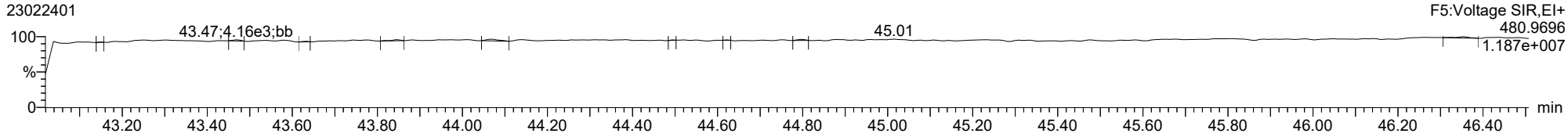


FUNCTION5 PFK



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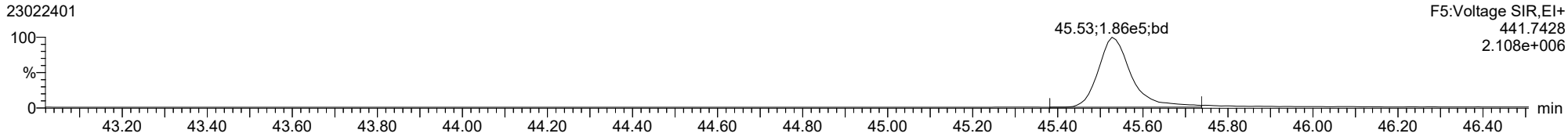
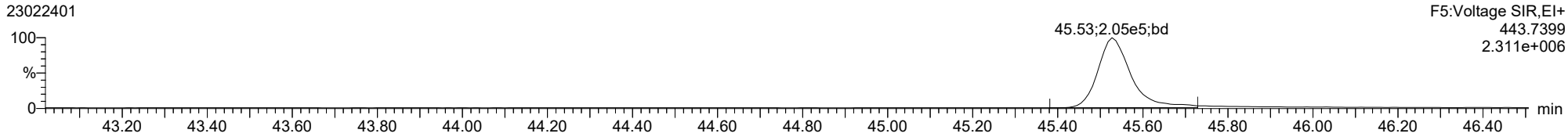
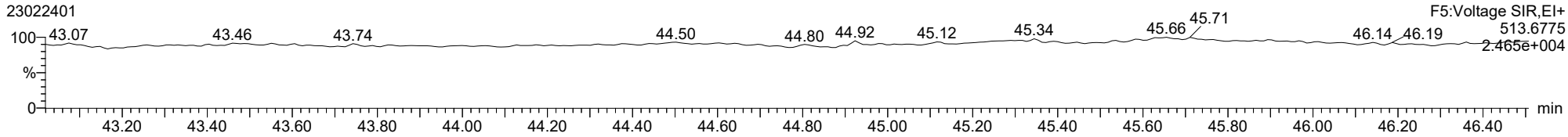
OCDF



OCDF

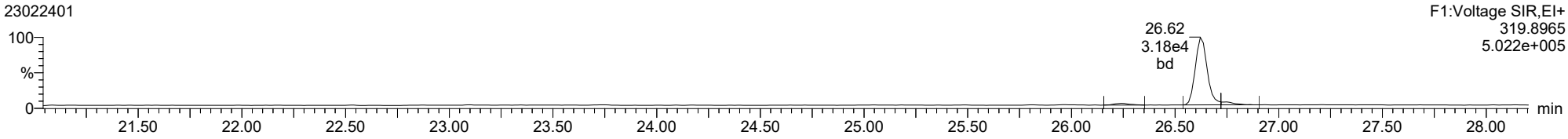


FUNCTION5 DCDPE

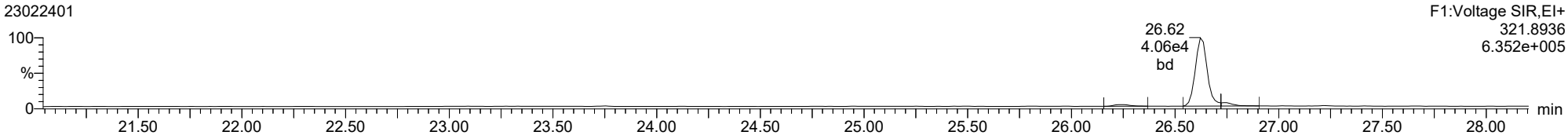


ID: BLA0261-BS1, Name: 23022401, Date: 24-Feb-2023, Time: 10:33:09, Conditions: AUTOSPEC01, User: pk

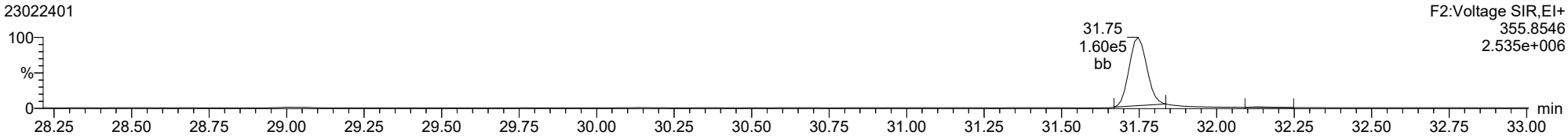
Total-tetradioxins



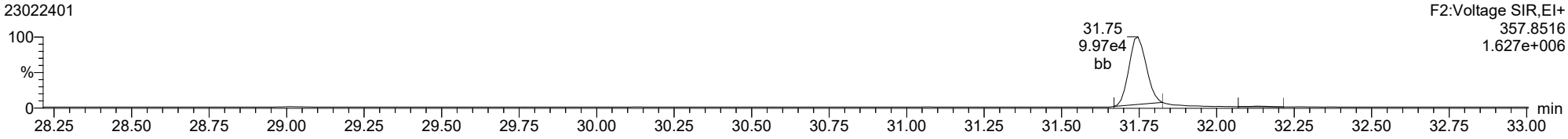
Total-tetradioxins



Total-pentadioxins



Total-pentadioxins



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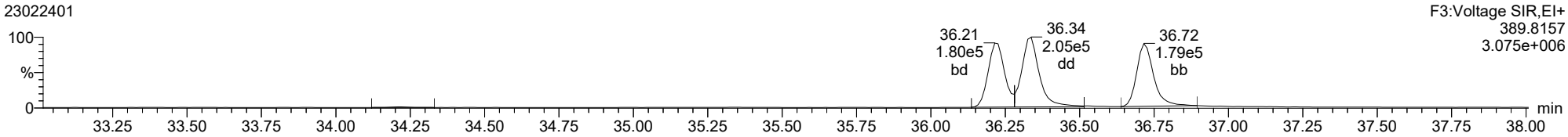
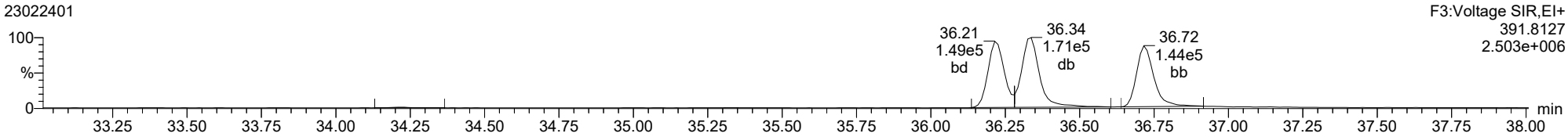
Total-hexadioxins



Total-hexadioxins



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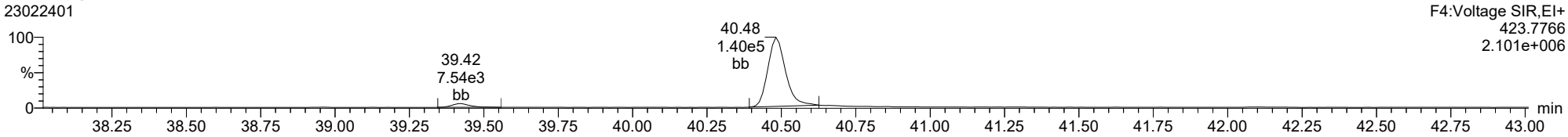
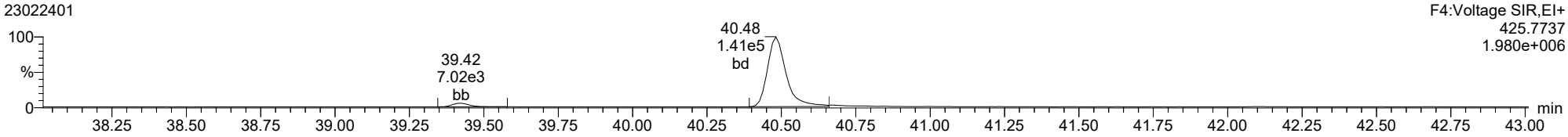


Total-heptadioxins



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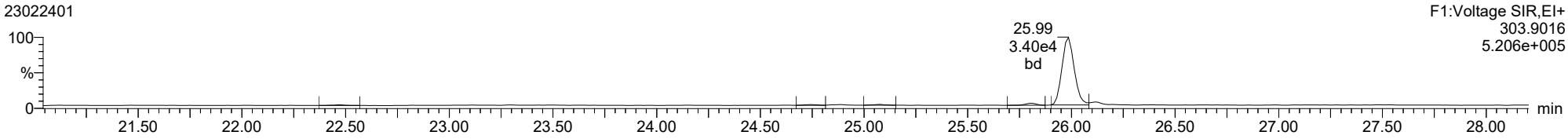
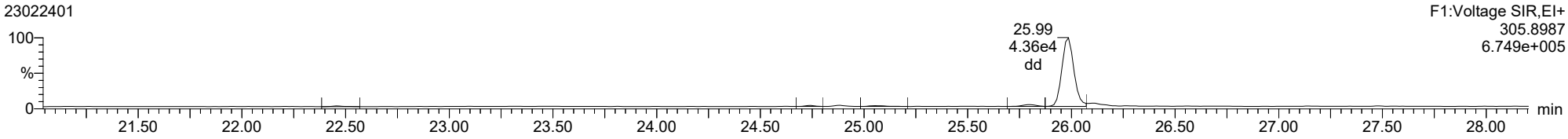
Printed: Friday, February 24, 2023 15:05:19 Pacific Standard Time

ID: BLA0261-BS1, Name: 23022401, Date: 24-Feb-2023, Time: 10:33:09, Conditions: AUTOSPEC01, User: pk

Total-tetrafurans



Total-tetrafurans



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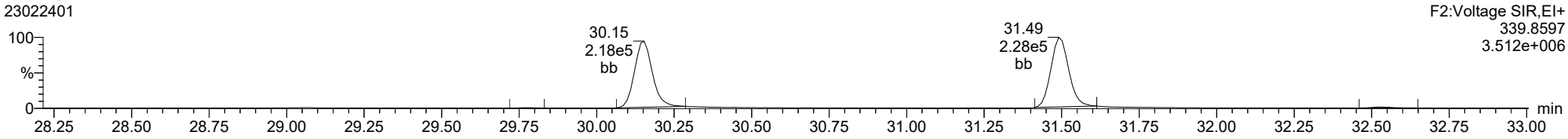
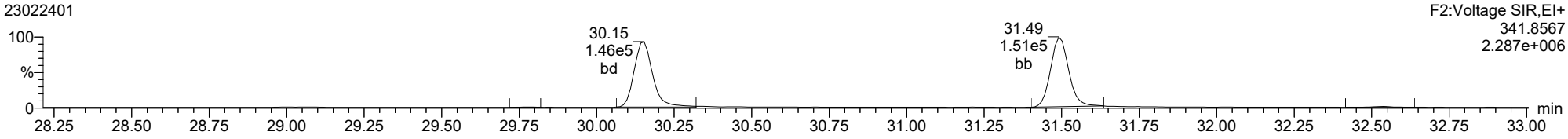
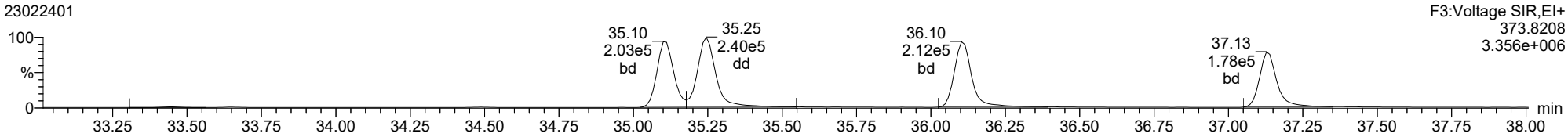


Total-pentafurans

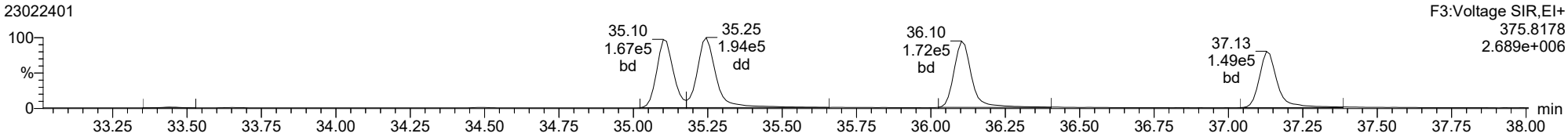


ID: BLA0261-BS1, Name: 23022401, Date: 24-Feb-2023, Time: 10:33:09, Conditions: AUTOSPEC01, User: pk

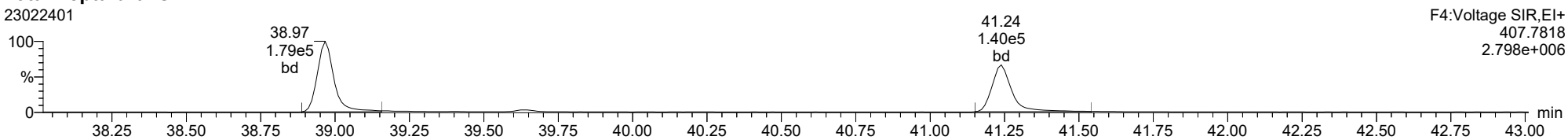
Total-hexafurans



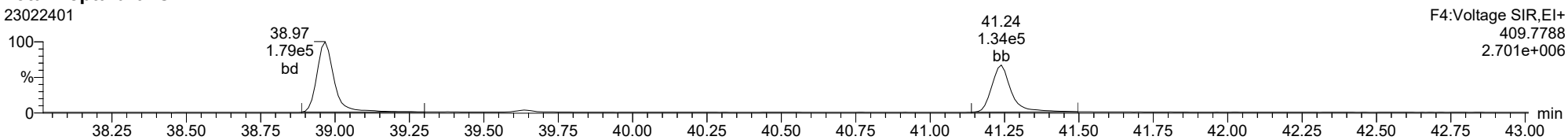
Total-hexafurans



Total-heptafurans



Total-heptafurans



Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0261-SRM1
Batch: BLA0261
Initial/Final: 10.04 g / 20 uL
Preparation: EPA 1613
Analyzed: 02/23/2023 14:14
Standard ID: K011479
Expires: 06/11/2023
Standard Lot#: PSRM0171
Description: Puget Sound reference-SRM

ANALYTE	TRUE (ng/kg wet)	FOUND (ng/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
2,3,7,8-TCDF	1.1100	0.771	0.148	0.996	J, B	69.5	50 - 150
2,3,7,8-TCDD	1.0500	0.707	0.149	0.996	J	67.3	50 - 150
1,2,3,7,8-PeCDF	1.2300	0.911	0.239	0.996	J	74.1	50 - 150
2,3,4,7,8-PeCDF	1.0700	0.732	0.219	0.996	EMPC, J	68.4	50 - 150
1,2,3,7,8-PeCDD	1.0800	1.06	0.169	0.996		98.5	50 - 150
1,2,3,4,7,8-HxCDF	3.0200	2.21	0.279	0.996	B	73.2	50 - 150
1,2,3,6,7,8-HxCDF	1.0900	0.783	0.199	0.996	J	71.8	50 - 150
2,3,4,6,7,8-HxCDF	1.8300	1.47	0.169	0.996		80.1	50 - 150
1,2,3,7,8,9-HxCDF	0.51100	0.543	0.189	0.996	J, B	106	50 - 150
1,2,3,4,7,8-HxCDD	1.5900	1.11	0.169	0.996		69.8	50 - 150
1,2,3,6,7,8-HxCDD	3.8800	2.73	0.179	0.996		70.3	50 - 150
1,2,3,7,8,9-HxCDD	3.0400	2.08	0.219	0.996	B	68.4	50 - 150
1,2,3,4,6,7,8-HpCDF	18.700	17.3	0.209	0.996		92.5	50 - 150
1,2,3,4,7,8,9-HpCDF	1.6300	1.16	0.239	0.996		71.3	50 - 150
1,2,3,4,6,7,8-HpCDD	90.600	79.5	0.558	2.49	B	87.8	50 - 150
OCDF	58.400	46.9	1.10	2.49		80.4	50 - 150
OCDD	811.00	746	4.58	9.96	B	92.0	50 - 150

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:10:37 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: BLA0261-SRM1, Name: 23022306, Date: 23-Feb-2023, Time: 14:14:35, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.986	1.000	1.490e3	2.065e3	0.876	0.721	0.770	2093	1354	2.18e4	3.10e4	10.4	22.9	NO	bd	dd	0.387
12378-PeCDF	30.165	1.001	2.707e3	1.831e3	0.845	1.478	1.550	2123	1895	3.98e4	2.71e4	18.7	14.3	NO	bb	bb	0.457
23478-PeCDF	31.513	1.001	2.644e3	1.319e3	0.911	2.004	1.550	2123	1895	3.70e4	2.39e4	17.4	12.6	YES	db	db	0.367
123478-HxCDF	35.123	1.001	7.421e3	5.888e3	1.182	1.260	1.240	1627	1194	1.13e5	9.40e4	69.5	78.8	NO	bd	dd	1.109
234678-HxCDF	36.114	1.000	4.864e3	3.968e3	1.229	1.226	1.240	1627	1194	5.85e4	4.65e4	35.9	39.0	NO	bb	bb	0.736
123678-HxCDF	35.256	1.001	2.952e3	2.478e3	1.248	1.191	1.240	1627	1194	4.11e4	3.23e4	25.2	27.0	NO	db	db	0.393
123789-HxCDF	37.117	1.000	1.769e3	1.416e3	1.187	1.249	1.240	1627	1194	2.56e4	1.72e4	15.7	14.4	NO	bb	bb	0.273
1234678-HpCDF	38.977	1.000	4.071e4	3.883e4	1.204	1.048	1.050	1731	1088	6.34e5	6.32e5	366.3	580.7	NO	bd	bd	8.680
1234789-HpCDF	41.261	1.000	2.355e3	2.143e3	1.165	1.099	1.050	1731	1088	3.69e4	3.34e4	21.3	30.7	NO	bb	bb	0.584
OCDF	45.555	1.006	7.644e4	8.880e4	1.186	0.861	0.890	1036	1654	8.76e5	9.84e5	846.1	595.0	NO	bd	bd	23.559
2378-TCDD	26.636	1.000	1.501e3	2.257e3	1.236	0.665	0.770	1306	909	2.16e4	3.72e4	16.5	40.9	NO	bd	bd	0.355
12378-PeCDD	31.747	1.000	2.205e3	1.575e3	1.087	1.400	1.550	1312	1071	2.70e4	1.95e4	20.6	18.2	NO	bb	bb	0.534
123478-HxCDD	36.237	1.000	3.070e3	2.414e3	0.987	1.272	1.240	1401	1631	5.59e4	4.15e4	39.9	25.5	NO	bd	bd	0.557
123678-HxCDD	36.359	1.001	8.648e3	7.042e3	1.021	1.228	1.240	1401	1631	1.37e5	1.12e5	97.7	68.7	NO	dd	dd	1.369
123789-HxCDD	36.738	1.011	6.151e3	4.756e3	0.985	1.293	1.240	1401	1631	1.01e5	8.07e4	72.0	49.5	NO	bd	bb	1.044
1234678-HpCDD	40.504	1.001	1.413e5	1.338e5	1.253	1.056	1.050	2820	2410	2.05e6	1.94e6	726.7	803.8	NO	bb	bb	39.934
OCDD	45.307	1.000	1.173e6	1.268e6	1.103	0.926	0.890	2573	3359	1.35e7	1.50e7	5232.3	4461.0	NO	bd	bb	374.389
13C-2378-TCDF	25.972	1.007	4.580e5	5.900e5	1.768	0.776	0.770	1680	1435	6.93e6	9.05e6	4123.1	6307.9	NO	bb	bb	85.579
13C-12378-PeCDF	30.142	1.168	7.145e5	4.607e5	1.527	1.551	1.550	2070	2113	1.03e7	6.70e6	4961.1	3171.3	NO	bd	bd	111.105
13C-23478-PeCDF	31.490	1.220	7.208e5	4.631e5	1.466	1.556	1.550	2070	2113	1.04e7	6.66e6	5029.2	3150.5	NO	bd	bd	116.572
13C-123478-HxCDF	35.100	0.956	3.404e5	6.750e5	1.054	0.504	0.510	2458	1812	5.27e6	1.05e7	2144.5	5804.1	NO	bd	bd	95.925
13C-123678-HxCDF	35.234	0.959	3.655e5	7.419e5	1.080	0.493	0.510	2458	1812	5.49e6	1.09e7	2231.6	6041.5	NO	db	db	102.070
13C-234678-HxCDF	36.103	0.983	3.336e5	6.435e5	1.014	0.518	0.510	2458	1812	5.22e6	1.01e7	2123.7	5546.8	NO	bb	bb	95.889
13C-123789-HxCDF	37.128	1.011	3.333e5	6.507e5	0.928	0.512	0.510	2458	1812	5.56e6	1.09e7	2263.9	6023.3	NO	bb	bb	105.563
13C-1234678-HpCDF	38.966	1.061	2.334e5	5.276e5	1.036	0.442	0.440	1680	2928	3.92e6	8.72e6	2335.0	2976.9	NO	bb	bb	73.118
13C-1234789-HpCDF	41.239	1.123	2.067e5	4.544e5	0.905	0.455	0.440	1680	2928	2.75e6	6.14e6	1639.3	2098.0	NO	bb	bb	72.721
13C-1234-TCDD	25.802	0.000	2.999e5	3.927e5	1.000	0.764	0.770	1699	3120	4.89e6	6.37e6	2878.0	2042.9	NO	bb	bb	100.000
13C-2378-TCDD	26.622	1.032	3.745e5	4.819e5	1.103	0.777	0.770	1699	3120	5.68e6	7.34e6	3341.1	2353.6	NO	bb	bb	112.107
13C-12378-PeCDD	31.747	1.230	4.031e5	2.484e5	0.914	1.623	1.550	878	851	5.52e6	3.39e6	6283.8	3983.9	NO	bb	bb	102.902
13C-123478-HxCDD	36.225	0.986	5.505e5	4.471e5	0.933	1.231	1.240	1963	1478	9.19e6	7.44e6	4680.6	5035.2	NO	bd	bd	106.441
13C-123678-HxCDD	36.337	0.989	6.187e5	5.038e5	0.965	1.228	1.240	1963	1478	9.17e6	7.60e6	4672.0	5141.8	NO	db	db	115.829
13C-1234678-HpCDD	40.481	1.102	2.864e5	2.635e5	0.782	1.087	1.050	1317	1343	4.22e6	3.94e6	3204.1	2935.1	NO	bb	bb	70.002
13C-OCDD	45.289	1.233	5.699e5	6.126e5	0.788	0.930	0.890	1142	2138	6.80e6	7.48e6	5957.0	3496.9	NO	bb	bb	149.333
13C-123789-HxCDD	36.727	0.000	5.514e5	4.532e5	1.000	1.217	1.240	1963	1478	9.26e6	7.44e6	4714.5	5036.2	NO	bb	bb	100.000
37CL-2378-TCDD	26.636	1.032	3.205e5		1.233			1103		4.82e6		4367.4			bb		37.513

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:10:37 Pacific Standard Time

ID: BLA0261-SRM1, Name: 23022306, Date: 23-Feb-2023, Time: 14:14:35, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.483	0.866	1.259e3	8.238e2	1.064	1.528	0.770	2093	1354	1.23e4	9.94e3	5.9	7.3	YES	bd	bd	0.187
1289-TCDF					0.858		0.770	2093	1354								
13468-PECDF					1.013		1.550	2347	750								
12389-PECDF					0.844		1.550	2123	1895								
123468-HXCDF	33.463	0.953	6.750e3	5.122e3	1.197	1.318	1.240	1627	1194	1.01e5	7.95e4	62.3	66.6	NO	bd	bb	0.977
1368-TCDD	23.754	0.892	1.536e3	2.057e3	1.084	0.747	0.770	1306	909	2.38e4	3.14e4	18.3	34.5	NO	bb	bb	0.387
1289-TCDD					0.975		0.770	1306	909								
12479-PECDD	29.062	0.915	3.327e3	2.164e3	1.837	1.538	1.550	1312	1071	3.36e4	2.36e4	25.6	22.0	NO	bb	bb	0.459
12389-PECDD					1.252		1.550	1312	1071								
124679-HXCDD	34.231	0.945	2.247e4	1.756e4	1.033	1.280	1.240	1401	1631	3.51e5	2.73e5	250.4	167.4	NO	bb	bb	3.885
1234679-HPCDD	39.434	0.974	2.236e5	2.006e5	1.286	1.115	1.050	2820	2410	3.37e6	3.15e6	1193.9	1305.9	NO	bd	bb	59.987
Total-tetrafurans			1.280e4		0.933			2093		1.92e5							3.128
Total-penta1			1.558e4					2347		2.21e5							2.460
Total-pentafurans			1.679e4		0.866			2123		2.47e5							2.704
Total-hexafurans			7.747e4		1.208			1627		1.14e6							11.365
Total-heptafurans			1.151e5		1.185			1731		1.76e6							26.272
Total-Furans			3.143e5		1.067			2093		4.44e6							69.531
Total-tetradioxins			4.588e3		1.099			1306		6.85e4							1.130
Total-pentadioxins			1.093e4		1.392			1312		1.37e5							2.000
Total-hexadioxins			7.391e4		1.007			1401		1.05e6							12.562
Total-heptadioxins			3.649e5		1.269			2820		5.42e6							99.921
Total-Dioxins			1.628e6		1.165			1306		2.01e7							490.003
Total-TEQ			1.942e6					1306		2.46e7							559.534
FUNCTION1 PFK			6.838e7					464327		6.47e7							
FUNCTION2 PFK			1.538e6					357943		5.72e6							0.000
FUNCTION3 PFK			3.739e6					407640		1.55e7							0.000
FUNCTION4 PFK			1.797e7					268547		1.59e7							
FUNCTION5 PFK			0.000e0					158110		0.00e0							
FUNCTION1 HXCD...			8.340e3					1780		9.06e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			3.830e2					799		9.72e3							0.000
FUNCTION3 OCDPE			0.000e0					622		0.00e0							
FUNCTION4 NCDPE			1.835e4					811		2.96e5							0.000
FUNCTION5 DCDPE			0.000e0					621		0.00e0							

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	27.61	6.306e2	7.524e2	0.933	0.84	0.77	4.9	YES	NO	bb	bb	0.141
2	Total-tetrafurans	26.21	1.302e3	1.823e3	0.933	0.71	0.77	7.7	YES	NO	db	db	0.320
3	Total-tetrafurans	26.13	1.116e3	1.581e3	0.933	0.71	0.77	8.2	YES	NO	dd	dd	0.276
4	2378-TCDF	25.99	1.490e3	2.065e3	0.876	0.72	0.77	10.4	YES	NO	bd	dd	0.387
5	Total-tetrafurans	25.80	6.956e2	9.698e2	0.933	0.72	0.77	5.6	YES	NO	db	dd	0.170
6	Total-tetrafurans	25.31	5.781e2	7.095e2	0.933	0.81	0.77	3.5	YES	NO	bb	db	0.132
7	Total-tetrafurans	25.08	2.256e3	3.073e3	0.933	0.73	0.77	17.2	YES	NO	bb	dd	0.545
8	Total-tetrafurans	24.88	1.248e3	1.883e3	0.933	0.66	0.77	9.2	YES	NO	db	dd	0.320
9	Total-tetrafurans	24.74	3.481e3	4.694e3	0.933	0.74	0.77	25.0	YES	NO	dd	dd	0.836

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-penta1	27.41	1.558e4	1.093e4		1.42	1.55	94.3	YES	NO	bd	bd	2.460

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	28.73	2.124e3	1.248e3	0.866	1.70	1.55	13.0	YES	NO	dd	dd	0.330
2	Total-pentafurans	28.44	1.100e3	7.083e2	0.866	1.55	1.55	8.4	YES	NO	bb	bb	0.177
3	Total-pentafurans	31.36	1.602e3	1.199e3	0.866	1.34	1.55	12.5	YES	NO	dd	dd	0.274
4	12378-PeCDF	30.16	2.707e3	1.831e3	0.845	1.48	1.55	18.7	YES	NO	bb	bb	0.457
5	Total-pentafurans	29.10	6.068e3	3.824e3	0.866	1.59	1.55	40.6	YES	NO	db	db	0.968
6	Total-pentafurans	29.02	3.187e3	1.903e3	0.866	1.68	1.55	23.1	YES	NO	dd	dd	0.498

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HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	37.12	1.769e3	1.416e3	1.187	1.25	1.24	15.7	YES	NO	bb	bb	0.273
2	234678-HxCDF	36.11	4.864e3	3.968e3	1.229	1.23	1.24	35.9	YES	NO	bb	bb	0.736
3	123678-HxCDF	35.26	2.952e3	2.478e3	1.248	1.19	1.24	25.2	YES	NO	db	db	0.393
4	123478-HxCDF	35.12	7.421e3	5.888e3	1.182	1.26	1.24	69.5	YES	NO	bd	dd	1.109
5	Total-hexafurans	34.97	1.026e3	8.770e2	1.208	1.17	1.24	10.0	YES	NO	bb	bd	0.154
6	Total-hexafurans	34.50	3.000e4	2.423e4	1.208	1.24	1.24	282.4	YES	NO	bb	bb	4.395
7	Total-hexafurans	33.67	2.268e4	1.839e4	1.208	1.23	1.24	199.1	YES	NO	db	bb	3.329
8	123468-HXCDF	33.46	6.750e3	5.122e3	1.197	1.32	1.24	62.3	YES	NO	bd	bb	0.977

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.98	4.071e4	3.883e4	1.204	1.05	1.05	366.3	YES	NO	bd	bd	8.680
2	1234789-HpCDF	41.26	2.355e3	2.143e3	1.165	1.10	1.05	21.3	YES	NO	bb	bb	0.584
3	Total-heptafurans	39.96	2.381e2	2.392e2	1.185	1.00	1.05	3.1	YES	NO	db	db	0.057
4	Total-heptafurans	39.65	7.177e4	7.103e4	1.185	1.01	1.05	628.7	YES	NO	bd	bd	16.952

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-Furans	21.59	1.946e2	2.729e2	1.067	0.71	0.77	1.5	NO	NO	db	bb	0.042
2	Total-tetrafurans	27.61	6.306e2	7.524e2	0.933	0.84	0.77	4.9	YES	NO	bb	bb	0.141
3	Total-tetrafurans	26.21	1.302e3	1.823e3	0.933	0.71	0.77	7.7	YES	NO	db	db	0.320
4	Total-tetrafurans	26.13	1.116e3	1.581e3	0.933	0.71	0.77	8.2	YES	NO	dd	dd	0.276
5	2378-TCDF	25.99	1.490e3	2.065e3	0.876	0.72	0.77	10.4	YES	NO	bd	dd	0.387
6	Total-tetrafurans	25.80	6.956e2	9.698e2	0.933	0.72	0.77	5.6	YES	NO	db	dd	0.170
7	Total-tetrafurans	25.31	5.781e2	7.095e2	0.933	0.81	0.77	3.5	YES	NO	bb	db	0.132
8	Total-tetrafurans	25.08	2.256e3	3.073e3	0.933	0.73	0.77	17.2	YES	NO	bb	dd	0.545
9	Total-tetrafurans	24.88	1.248e3	1.883e3	0.933	0.66	0.77	9.2	YES	NO	db	dd	0.320
10	Total-tetrafurans	24.74	3.481e3	4.694e3	0.933	0.74	0.77	25.0	YES	NO	dd	dd	0.836
11	Total-pentafurans	28.73	2.124e3	1.248e3	0.866	1.70	1.55	13.0	YES	NO	dd	dd	0.330
12	Total-pentafurans	28.44	1.100e3	7.083e2	0.866	1.55	1.55	8.4	YES	NO	bb	bb	0.177
13	Total-pentafurans	31.36	1.602e3	1.199e3	0.866	1.34	1.55	12.5	YES	NO	dd	dd	0.274
14	12378-PeCDF	30.16	2.707e3	1.831e3	0.845	1.48	1.55	18.7	YES	NO	bb	bb	0.457
15	Total-pentafurans	29.10	6.068e3	3.824e3	0.866	1.59	1.55	40.6	YES	NO	db	db	0.968
16	Total-pentafurans	29.02	3.187e3	1.903e3	0.866	1.68	1.55	23.1	YES	NO	dd	dd	0.498
17	123789-HxCDF	37.12	1.769e3	1.416e3	1.187	1.25	1.24	15.7	YES	NO	bb	bb	0.273
18	234678-HxCDF	36.11	4.864e3	3.968e3	1.229	1.23	1.24	35.9	YES	NO	bb	bb	0.736
19	123678-HxCDF	35.26	2.952e3	2.478e3	1.248	1.19	1.24	25.2	YES	NO	db	db	0.393
20	123478-HxCDF	35.12	7.421e3	5.888e3	1.182	1.26	1.24	69.5	YES	NO	bd	dd	1.109
21	Total-hexafurans	34.97	1.026e3	8.770e2	1.208	1.17	1.24	10.0	YES	NO	bb	bd	0.154
22	Total-hexafurans	34.50	3.000e4	2.423e4	1.208	1.24	1.24	282.4	YES	NO	bb	bb	4.395
23	Total-hexafurans	33.67	2.268e4	1.839e4	1.208	1.23	1.24	199.1	YES	NO	db	bb	3.329
24	123468-HXCDF	33.46	6.750e3	5.122e3	1.197	1.32	1.24	62.3	YES	NO	bd	bb	0.977
25	1234678-HpCDF	38.98	4.071e4	3.883e4	1.204	1.05	1.05	366.3	YES	NO	bd	bd	8.680
26	1234789-HpCDF	41.26	2.355e3	2.143e3	1.165	1.10	1.05	21.3	YES	NO	bb	bb	0.584
27	Total-heptafurans	39.96	2.381e2	2.392e2	1.185	1.00	1.05	3.1	YES	NO	db	db	0.057
28	Total-heptafurans	39.65	7.177e4	7.103e4	1.185	1.01	1.05	628.7	YES	NO	bd	bd	16.952
29	OCDF	45.55	7.644e4	8.880e4	1.186	0.86	0.89	846.1	YES	NO	bd	bd	23.559
30	Total-penta1	27.41	1.558e4	1.093e4		1.42	1.55	94.3	YES	NO	bd	bd	2.460

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TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.64	1.501e3	2.257e3	1.236	0.67	0.77	16.5	YES	NO	bd	bd	0.355
2	Total-tetradioxins	26.25	5.008e2	5.759e2	1.099	0.87	0.77	4.7	YES	NO	db	bd	0.114
3	Total-tetradioxins	24.97	2.859e2	4.170e2	1.099	0.69	0.77	3.5	YES	NO	bb	bb	0.075
4	Total-tetradioxins	24.02	7.640e2	1.108e3	1.099	0.69	0.77	9.5	YES	NO	bb	bd	0.199
5	1368-TCDD	23.75	1.536e3	2.057e3	1.084	0.75	0.77	18.3	YES	NO	bb	bb	0.387

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12479-PECDD	29.06	3.327e3	2.164e3	1.837	1.54	1.55	25.6	YES	NO	bb	bb	0.459
2	12378-PeCDD	31.75	2.205e3	1.575e3	1.087	1.40	1.55	20.6	YES	NO	bb	bb	0.534
3	Total-pentadioxins	30.68	1.313e3	9.597e2	1.392	1.37	1.55	12.5	YES	NO	db	db	0.251
4	Total-pentadioxins	30.50	1.134e3	8.247e2	1.392	1.37	1.55	13.0	YES	NO	dd	dd	0.216
5	Total-pentadioxins	30.38	1.960e3	1.274e3	1.392	1.54	1.55	21.2	YES	NO	bd	bd	0.357
6	Total-pentadioxins	29.54	9.906e2	6.870e2	1.392	1.44	1.55	11.5	YES	NO	bb	bb	0.185

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123478-HxCDD	36.24	3.070e3	2.414e3	0.987	1.27	1.24	39.9	YES	NO	bd	bd	0.557
2	Total-hexadioxins	35.46	3.052e3	2.219e3	1.007	1.38	1.24	34.2	YES	NO	dd	db	0.494
3	Total-hexadioxins	35.36	2.525e4	2.051e4	1.007	1.23	1.24	191.1	YES	NO	bd	bd	4.289
4	Total-hexadioxins	35.00	3.989e3	3.436e3	1.007	1.16	1.24	46.6	YES	NO	bb	bb	0.696
5	124679-HXCDD	34.23	2.247e4	1.756e4	1.033	1.28	1.24	250.4	YES	NO	bb	bb	3.885
6	123789-HxCDD	36.74	6.151e3	4.756e3	0.985	1.29	1.24	72.0	YES	NO	bd	bb	1.044
7	Total-hexadioxins	36.52	1.278e3	1.160e3	1.007	1.10	1.24	16.9	YES	NO	db	db	0.228
8	123678-HxCDD	36.36	8.648e3	7.042e3	1.021	1.23	1.24	97.7	YES	NO	dd	dd	1.369

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.50	1.413e5	1.338e5	1.253	1.06	1.05	726.7	YES	NO	bb	bb	39.934
2	1234679-HPCDD	39.43	2.236e5	2.006e5	1.286	1.11	1.05	1193.9	YES	NO	bd	bb	59.987

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.64	1.501e3	2.257e3	1.236	0.67	0.77	16.5	YES	NO	bd	bd	0.355
2	Total-tetradioxins	26.25	5.008e2	5.759e2	1.099	0.87	0.77	4.7	YES	NO	db	bd	0.114
3	Total-tetradioxins	24.97	2.859e2	4.170e2	1.099	0.69	0.77	3.5	YES	NO	bb	bb	0.075
4	Total-tetradioxins	24.02	7.640e2	1.108e3	1.099	0.69	0.77	9.5	YES	NO	bb	bd	0.199
5	1368-TCDD	23.75	1.536e3	2.057e3	1.084	0.75	0.77	18.3	YES	NO	bb	bb	0.387
6	12479-PECDD	29.06	3.327e3	2.164e3	1.837	1.54	1.55	25.6	YES	NO	bb	bb	0.459
7	12378-PeCDD	31.75	2.205e3	1.575e3	1.087	1.40	1.55	20.6	YES	NO	bb	bb	0.534
8	Total-pentadioxins	30.68	1.313e3	9.597e2	1.392	1.37	1.55	12.5	YES	NO	db	db	0.251
9	Total-pentadioxins	30.50	1.134e3	8.247e2	1.392	1.37	1.55	13.0	YES	NO	dd	dd	0.216
10	Total-pentadioxins	30.38	1.960e3	1.274e3	1.392	1.54	1.55	21.2	YES	NO	bd	bd	0.357
11	Total-pentadioxins	29.54	9.906e2	6.870e2	1.392	1.44	1.55	11.5	YES	NO	bb	bb	0.185
12	123478-HxCDD	36.24	3.070e3	2.414e3	0.987	1.27	1.24	39.9	YES	NO	bd	bd	0.557
13	Total-hexadioxins	35.46	3.052e3	2.219e3	1.007	1.38	1.24	34.2	YES	NO	dd	db	0.494
14	Total-hexadioxins	35.36	2.525e4	2.051e4	1.007	1.23	1.24	191.1	YES	NO	bd	bd	4.289
15	Total-hexadioxins	35.00	3.989e3	3.436e3	1.007	1.16	1.24	46.6	YES	NO	bb	bb	0.696
16	124679-HXCDD	34.23	2.247e4	1.756e4	1.033	1.28	1.24	250.4	YES	NO	bb	bb	3.885
17	123789-HxCDD	36.74	6.151e3	4.756e3	0.985	1.29	1.24	72.0	YES	NO	bd	bb	1.044
18	Total-hexadioxins	36.52	1.278e3	1.160e3	1.007	1.10	1.24	16.9	YES	NO	db	db	0.228
19	123678-HxCDD	36.36	8.648e3	7.042e3	1.021	1.23	1.24	97.7	YES	NO	dd	dd	1.369
20	1234678-HpCDD	40.50	1.413e5	1.338e5	1.253	1.06	1.05	726.7	YES	NO	bb	bb	39.934
21	1234679-HPCDD	39.43	2.236e5	2.006e5	1.286	1.11	1.05	1193.9	YES	NO	bd	bb	59.987
22	OCDD	45.31	1.173e6	1.268e6	1.103	0.93	0.89	5232.3	YES	NO	bd	bb	374.389

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-Furans	21.59	1.946e2	2.729e2	1.067	0.71	0.77	1.5	NO	NO	db	bb	0.042
2	Total-tetrafurans	27.61	6.306e2	7.524e2	0.933	0.84	0.77	4.9	YES	NO	bb	bb	0.141
3	Total-tetrafurans	26.21	1.302e3	1.823e3	0.933	0.71	0.77	7.7	YES	NO	db	db	0.320
4	Total-tetrafurans	26.13	1.116e3	1.581e3	0.933	0.71	0.77	8.2	YES	NO	dd	dd	0.276
5	2378-TCDF	25.99	1.490e3	2.065e3	0.876	0.72	0.77	10.4	YES	NO	bd	dd	0.387
6	Total-tetrafurans	25.80	6.956e2	9.698e2	0.933	0.72	0.77	5.6	YES	NO	db	dd	0.170
7	Total-tetrafurans	25.31	5.781e2	7.095e2	0.933	0.81	0.77	3.5	YES	NO	bb	db	0.132
8	Total-tetrafurans	25.08	2.256e3	3.073e3	0.933	0.73	0.77	17.2	YES	NO	bb	dd	0.545
9	Total-tetrafurans	24.88	1.248e3	1.883e3	0.933	0.66	0.77	9.2	YES	NO	db	dd	0.320
10	Total-tetrafurans	24.74	3.481e3	4.694e3	0.933	0.74	0.77	25.0	YES	NO	dd	dd	0.836
11	Total-pentafurans	28.73	2.124e3	1.248e3	0.866	1.70	1.55	13.0	YES	NO	dd	dd	0.330
12	Total-pentafurans	28.44	1.100e3	7.083e2	0.866	1.55	1.55	8.4	YES	NO	bb	bb	0.177
13	Total-pentafurans	31.36	1.602e3	1.199e3	0.866	1.34	1.55	12.5	YES	NO	dd	dd	0.274
14	12378-PeCDF	30.16	2.707e3	1.831e3	0.845	1.48	1.55	18.7	YES	NO	bb	bb	0.457
15	Total-pentafurans	29.10	6.068e3	3.824e3	0.866	1.59	1.55	40.6	YES	NO	db	db	0.968
16	Total-pentafurans	29.02	3.187e3	1.903e3	0.866	1.68	1.55	23.1	YES	NO	dd	dd	0.498
17	123789-HxCDF	37.12	1.769e3	1.416e3	1.187	1.25	1.24	15.7	YES	NO	bb	bb	0.273
18	234678-HxCDF	36.11	4.864e3	3.968e3	1.229	1.23	1.24	35.9	YES	NO	bb	bb	0.736
19	123678-HxCDF	35.26	2.952e3	2.478e3	1.248	1.19	1.24	25.2	YES	NO	db	db	0.393
20	123478-HxCDF	35.12	7.421e3	5.888e3	1.182	1.26	1.24	69.5	YES	NO	bd	dd	1.109
21	Total-hexafurans	34.97	1.026e3	8.770e2	1.208	1.17	1.24	10.0	YES	NO	bb	bd	0.154
22	Total-hexafurans	34.50	3.000e4	2.423e4	1.208	1.24	1.24	282.4	YES	NO	bb	bb	4.395
23	Total-hexafurans	33.67	2.268e4	1.839e4	1.208	1.23	1.24	199.1	YES	NO	db	bb	3.329
24	123468-HXCDF	33.46	6.750e3	5.122e3	1.197	1.32	1.24	62.3	YES	NO	bd	bb	0.977
25	1234678-HpCDF	38.98	4.071e4	3.883e4	1.204	1.05	1.05	366.3	YES	NO	bd	bd	8.680
26	1234789-HpCDF	41.26	2.355e3	2.143e3	1.165	1.10	1.05	21.3	YES	NO	bb	bb	0.584
27	Total-heptafurans	39.96	2.381e2	2.392e2	1.185	1.00	1.05	3.1	YES	NO	db	db	0.057
28	Total-heptafurans	39.65	7.177e4	7.103e4	1.185	1.01	1.05	628.7	YES	NO	bd	bd	16.952
29	OCDF	45.55	7.644e4	8.880e4	1.186	0.86	0.89	846.1	YES	NO	bd	bd	23.559
30	Total-penta1	27.41	1.558e4	1.093e4		1.42	1.55	94.3	YES	NO	bd	bd	2.460
31	2378-TCDD	26.64	1.501e3	2.257e3	1.236	0.67	0.77	16.5	YES	NO	bd	bd	0.355
32	Total-tetradioxins	26.25	5.008e2	5.759e2	1.099	0.87	0.77	4.7	YES	NO	db	bd	0.114
33	Total-tetradioxins	24.97	2.859e2	4.170e2	1.099	0.69	0.77	3.5	YES	NO	bb	bb	0.075
34	Total-tetradioxins	24.02	7.640e2	1.108e3	1.099	0.69	0.77	9.5	YES	NO	bb	bd	0.199
35	1368-TCDD	23.75	1.536e3	2.057e3	1.084	0.75	0.77	18.3	YES	NO	bb	bb	0.387
36	12479-PECDD	29.06	3.327e3	2.164e3	1.837	1.54	1.55	25.6	YES	NO	bb	bb	0.459
37	12378-PeCDD	31.75	2.205e3	1.575e3	1.087	1.40	1.55	20.6	YES	NO	bb	bb	0.534

ID: BLA0261-SRM1, Name: 23022306, Date: 23-Feb-2023, Time: 14:14:35, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-pentadioxins	30.68	1.313e3	9.597e2	1.392	1.37	1.55	12.5	YES	NO	db	db	0.251
39	Total-pentadioxins	30.50	1.134e3	8.247e2	1.392	1.37	1.55	13.0	YES	NO	dd	dd	0.216
40	Total-pentadioxins	30.38	1.960e3	1.274e3	1.392	1.54	1.55	21.2	YES	NO	bd	bd	0.357
41	Total-pentadioxins	29.54	9.906e2	6.870e2	1.392	1.44	1.55	11.5	YES	NO	bb	bb	0.185
42	123478-HxCDD	36.24	3.070e3	2.414e3	0.987	1.27	1.24	39.9	YES	NO	bd	bd	0.557
43	Total-hexadioxins	35.46	3.052e3	2.219e3	1.007	1.38	1.24	34.2	YES	NO	dd	db	0.494
44	Total-hexadioxins	35.36	2.525e4	2.051e4	1.007	1.23	1.24	191.1	YES	NO	bd	bd	4.289
45	Total-hexadioxins	35.00	3.989e3	3.436e3	1.007	1.16	1.24	46.6	YES	NO	bb	bb	0.696
46	124679-HXCDD	34.23	2.247e4	1.756e4	1.033	1.28	1.24	250.4	YES	NO	bb	bb	3.885
47	123789-HxCDD	36.74	6.151e3	4.756e3	0.985	1.29	1.24	72.0	YES	NO	bd	bb	1.044
48	Total-hexadioxins	36.52	1.278e3	1.160e3	1.007	1.10	1.24	16.9	YES	NO	db	db	0.228
49	123678-HxCDD	36.36	8.648e3	7.042e3	1.021	1.23	1.24	97.7	YES	NO	dd	dd	1.369
50	1234678-HpCDD	40.50	1.413e5	1.338e5	1.253	1.06	1.05	726.7	YES	NO	bb	bb	39.934
51	1234679-HPCDD	39.43	2.236e5	2.006e5	1.286	1.11	1.05	1193.9	YES	NO	bd	bb	59.987
52	OCDD	45.31	1.173e6	1.268e6	1.103	0.93	0.89	5232.3	YES	NO	bd	bb	374.389

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	28.13	3.105e5					2.6	NO		bb		
2	FUNCTION1 PFK	27.48	3.340e6					8.4	YES		bb		
3	FUNCTION1 PFK	23.92	1.084e7					30.4	YES		db		
4	FUNCTION1 PFK	23.39	1.424e7					41.0	YES		dd		
5	FUNCTION1 PFK	21.31	3.965e7					57.1	YES		bd		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	29.77	3.768e5					3.7	YES		bb		0.000
2	FUNCTION2 PFK	29.43	1.161e6					12.2	YES		bb		0.000

ID: BLA0261-SRM1, Name: 23022306, Date: 23-Feb-2023, Time: 14:14:35, Conditions: AUTOSPEC01, User: pk

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.70	3.007e4					2.6	NO		bb		0.000
2	FUNCTION3 PFK	37.56	3.366e5					7.4	YES		db		0.000
3	FUNCTION3 PFK	37.46	1.225e5					7.2	YES		bd		0.000
4	FUNCTION3 PFK	37.31	5.733e5					2.9	NO		bb		0.000
5	FUNCTION3 PFK	36.77	2.343e6					11.6	YES		bb		0.000
6	FUNCTION3 PFK	36.04	3.296e5					5.2	YES		bb		0.000
7	FUNCTION3 PFK	33.15	4.206e3					0.9	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.44	1.797e7					59.1	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	23.02	5.172e2					6.9	YES		db		0.000
2	FUNCTION1 HXCD...	22.96	2.351e3					6.6	YES		dd		0.000
3	FUNCTION1 HXCD...	22.61	8.690e1					1.3	NO		bd		0.000
4	FUNCTION1 HXCD...	22.40	7.817e1					1.1	NO		bb		0.000
5	FUNCTION1 HXCD...	22.13	1.367e2					1.5	NO		bb		0.000
6	FUNCTION1 HXCD...	27.75	1.083e2					1.0	NO		bb		0.000
7	FUNCTION1 HXCD...	26.37	1.187e2					1.2	NO		bb		0.000
8	FUNCTION1 HXCD...	26.16	2.548e3					22.5	YES		bb		0.000
9	FUNCTION1 HXCD...	25.08	7.774e1					1.0	NO		bb		0.000
10	FUNCTION1 HXCD...	23.99	2.007e2					1.9	NO		bb		0.000
11	FUNCTION1 HXCD...	23.51	1.225e2					1.6	NO		db		0.000
12	FUNCTION1 HXCD...	23.46	2.764e2					1.7	NO		dd		0.000
13	FUNCTION1 HXCD...	23.33	1.718e3					2.6	NO		bd		0.000

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ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.67	1.012e2					1.8	NO		bb		0.000
2	FUNCTION2 HPCD...	32.43	1.279e2					5.2	YES		bb		0.000
3	FUNCTION2 HPCD...	29.77	7.146e1					2.7	NO		bb		0.000
4	FUNCTION2 HPCD...	29.37	8.240e1					2.4	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	38.63	1.792e4					354.2	YES		bd		0.000
2	FUNCTION4 NCDPE	38.73	4.339e2					11.3	YES		db		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:10:37 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
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ID: BLA0261-SRM1, Name: 23022306, Date: 23-Feb-2023, Time: 14:14:35, Conditions: AUTOSPEC01, User: pk

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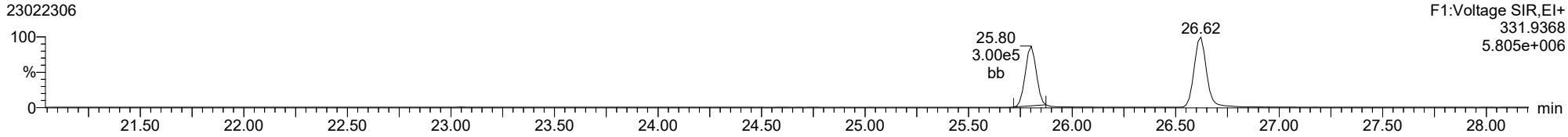

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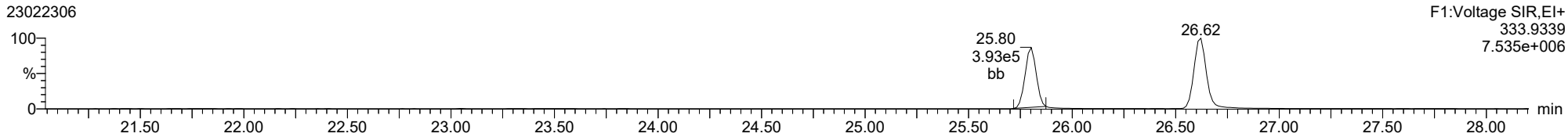

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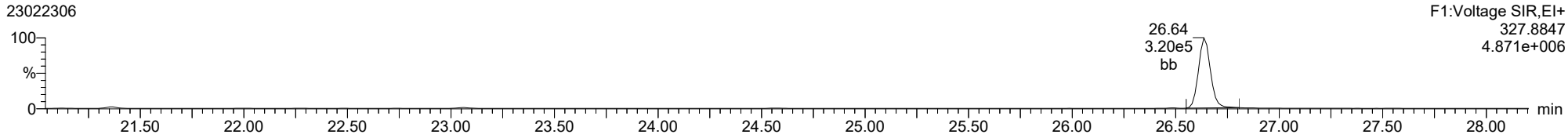

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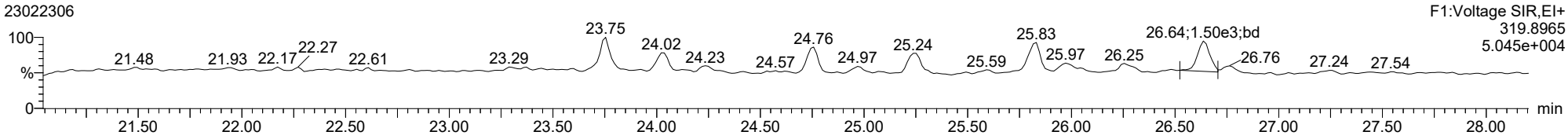

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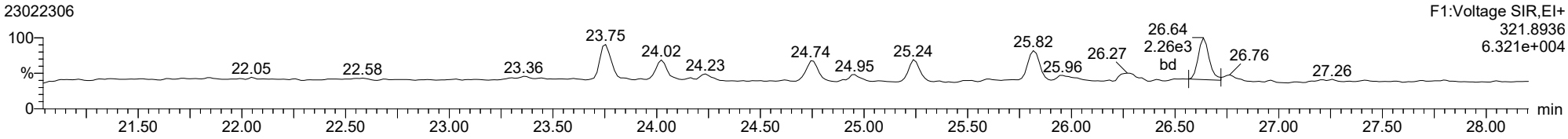

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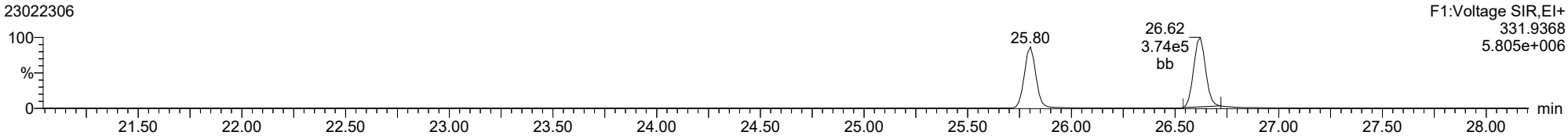

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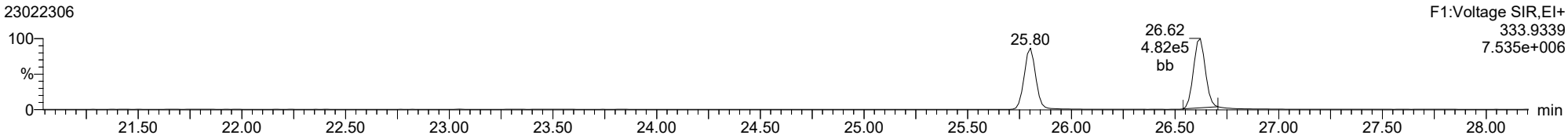

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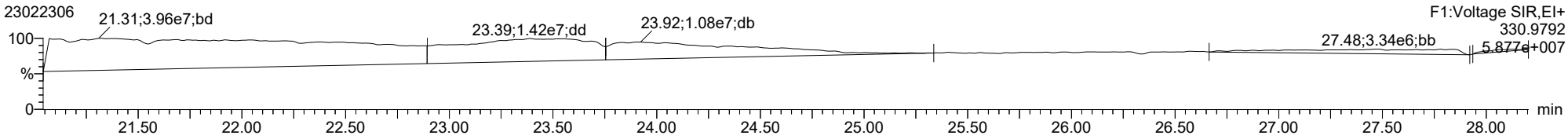

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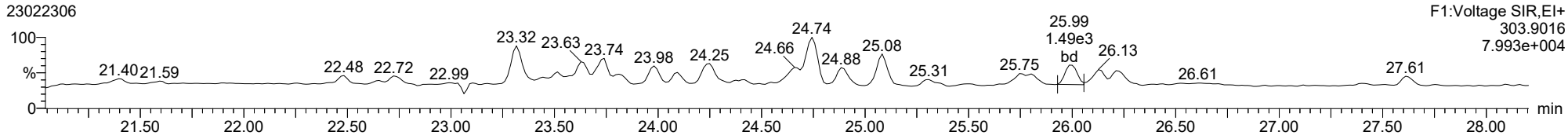

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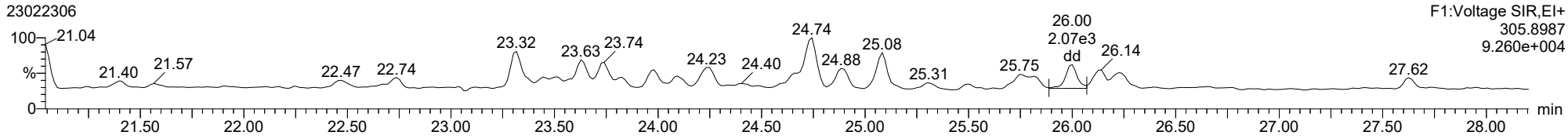

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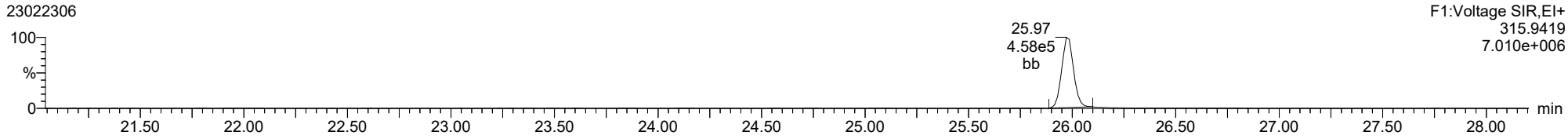

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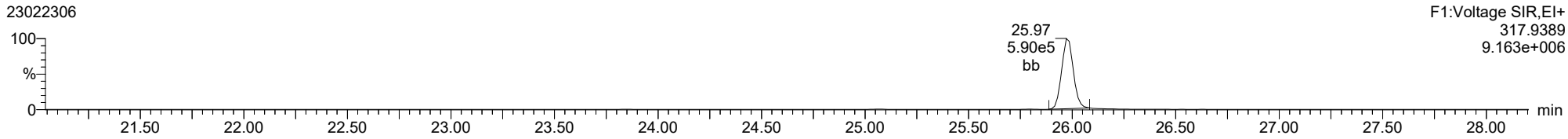

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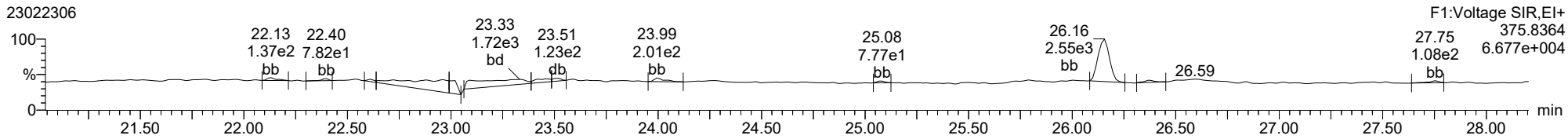

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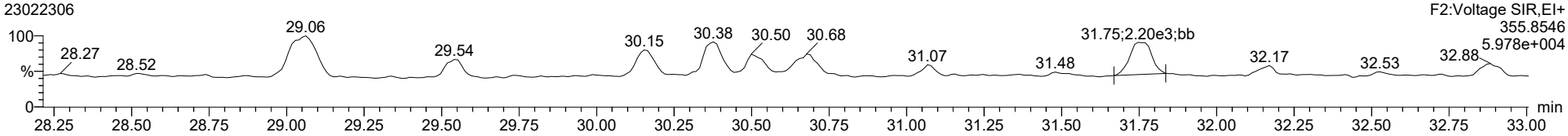
12378-PeCDD



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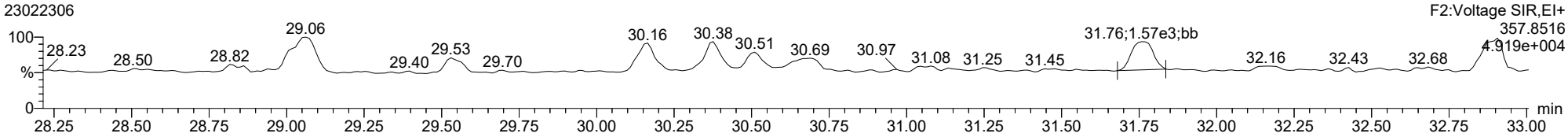

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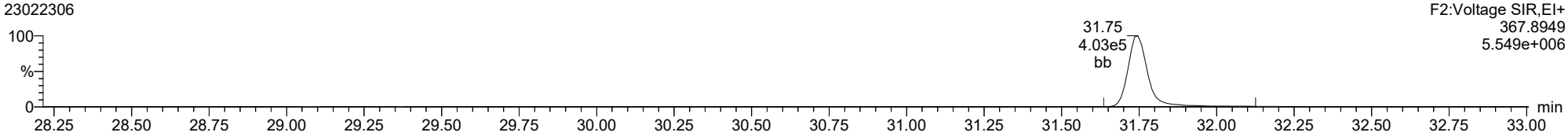

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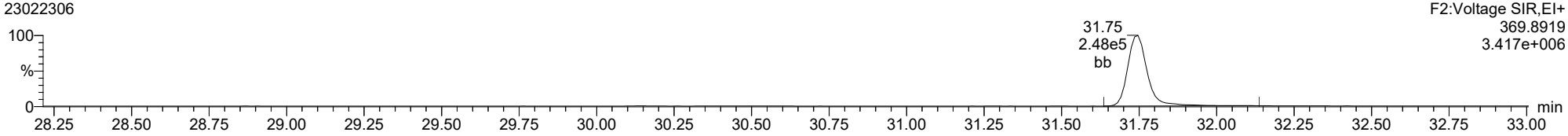
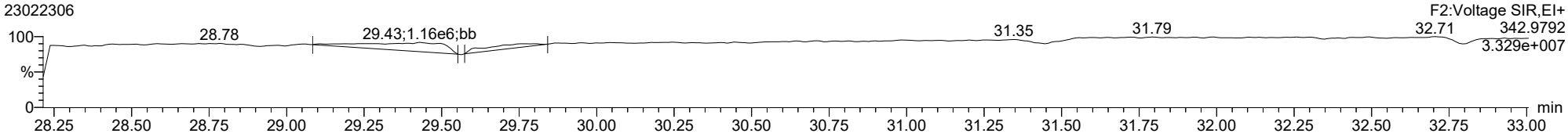


FUNCTION2 PFK



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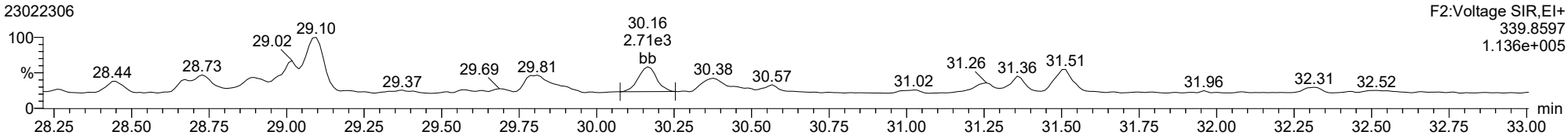
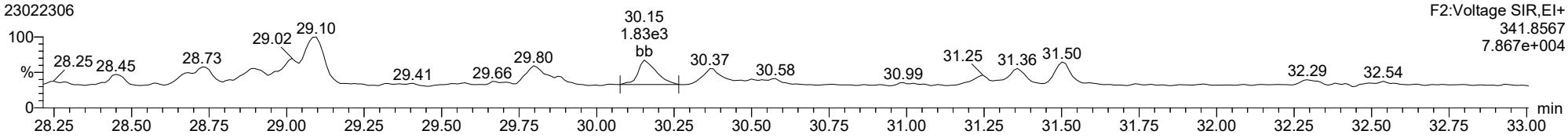
12378-PeCDF



12378-PeCDF



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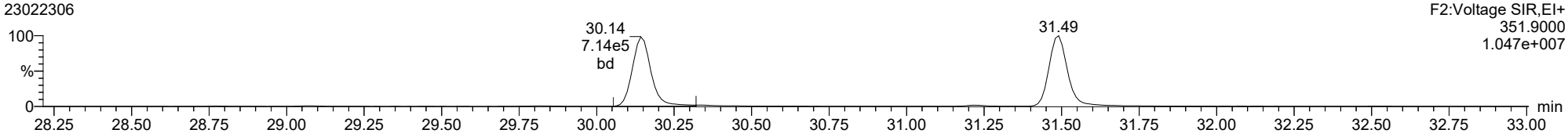

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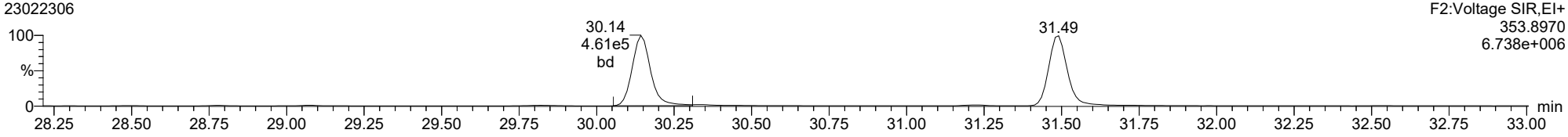

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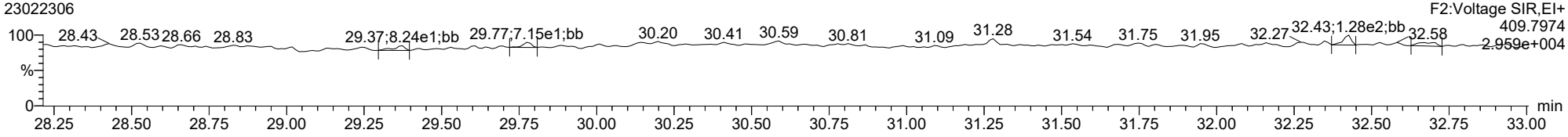

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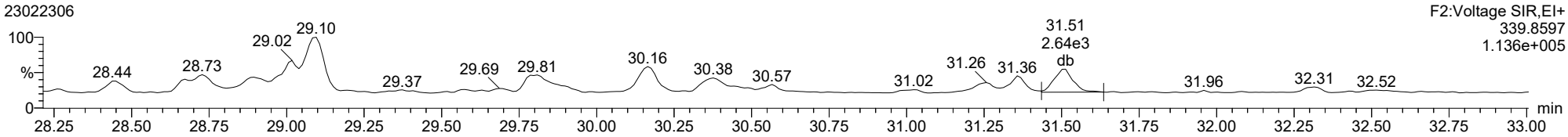

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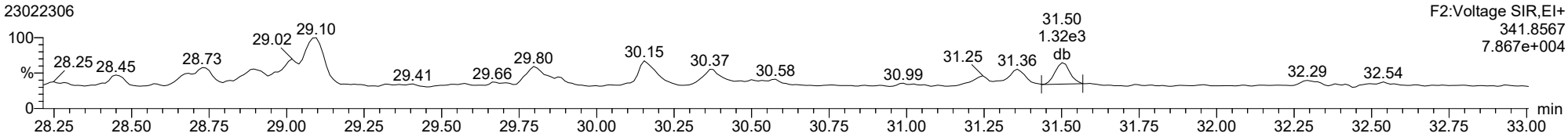

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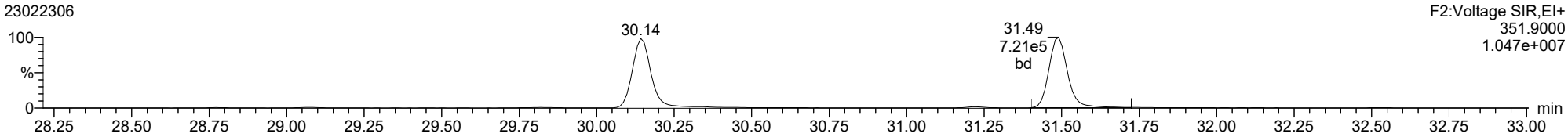

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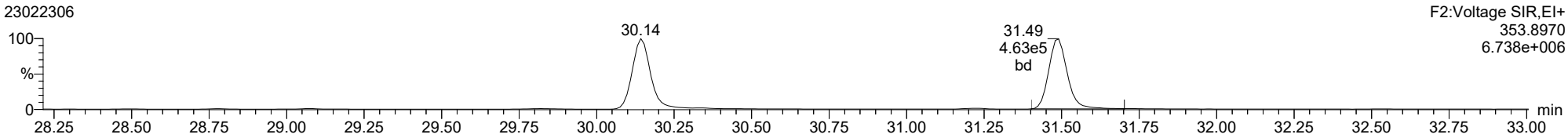

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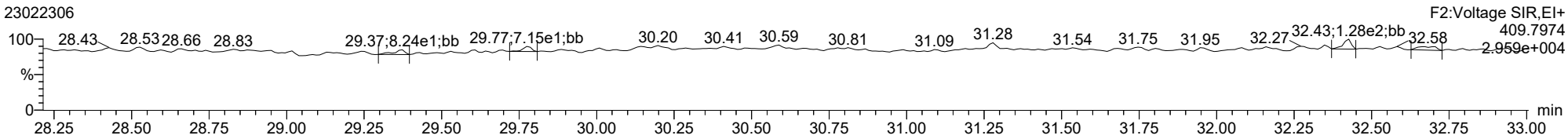

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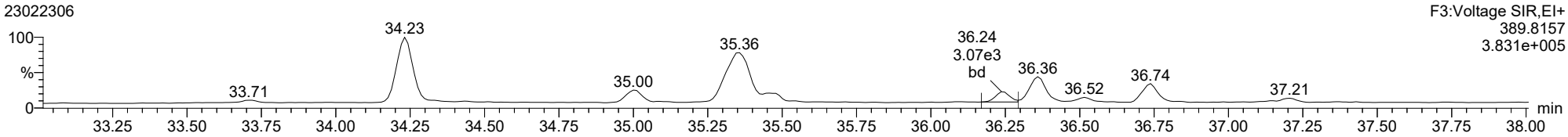

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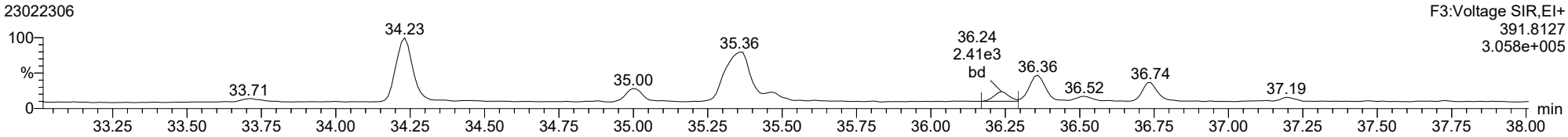

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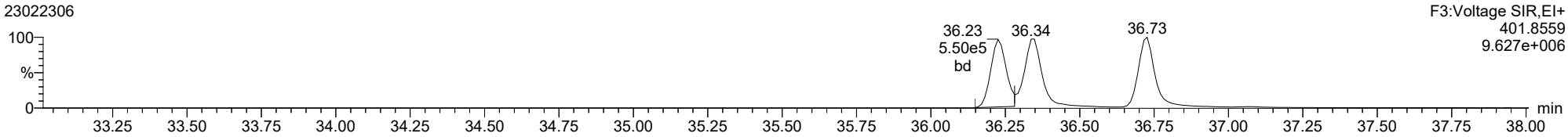

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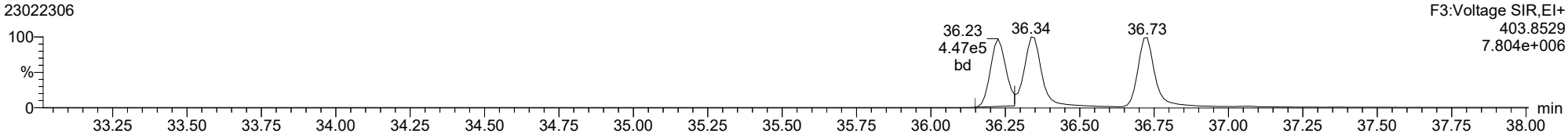

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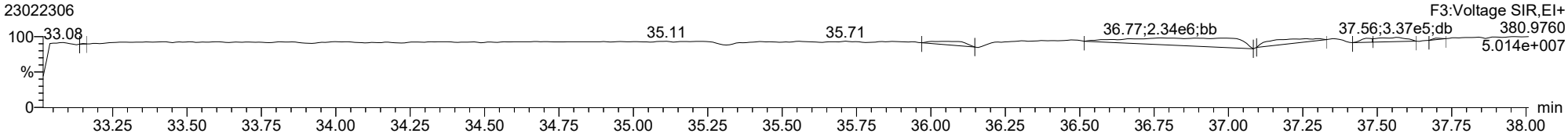

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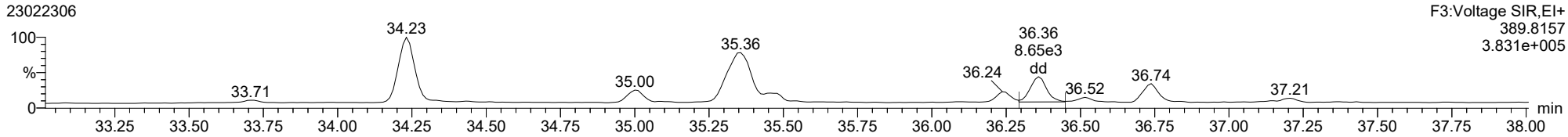

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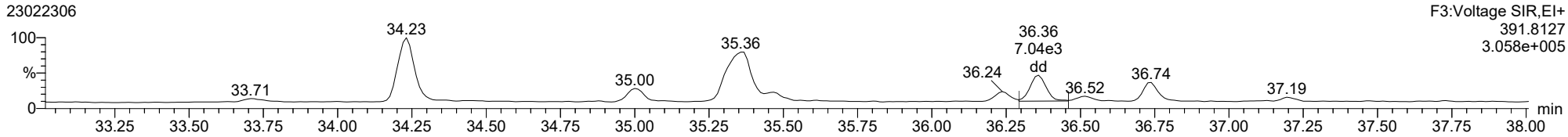

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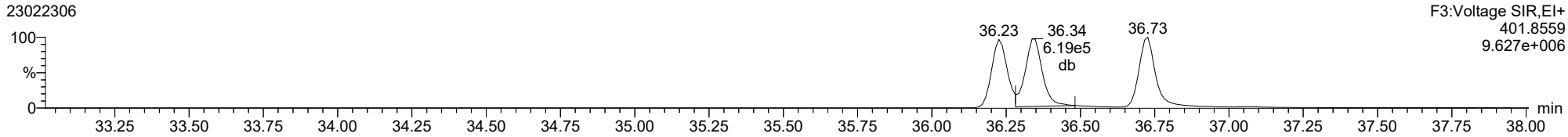

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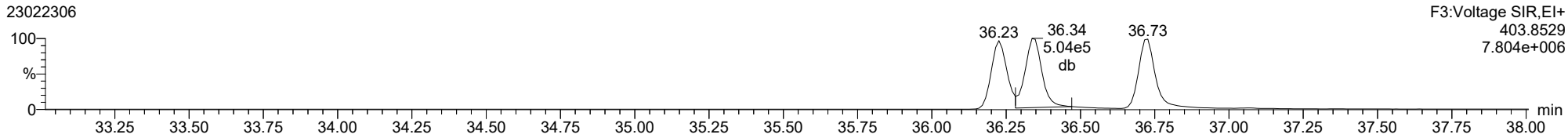

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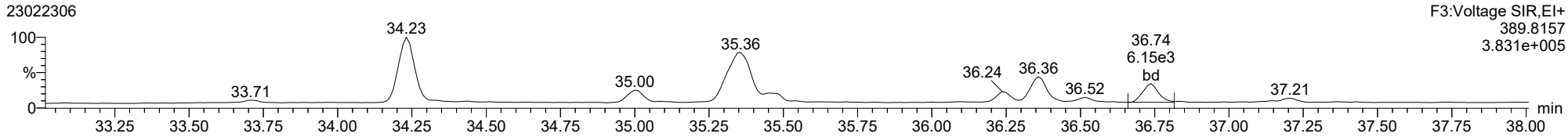

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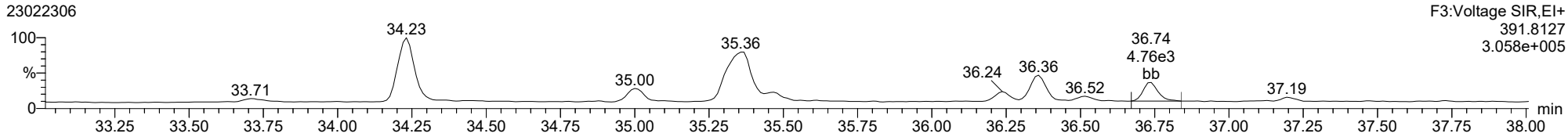

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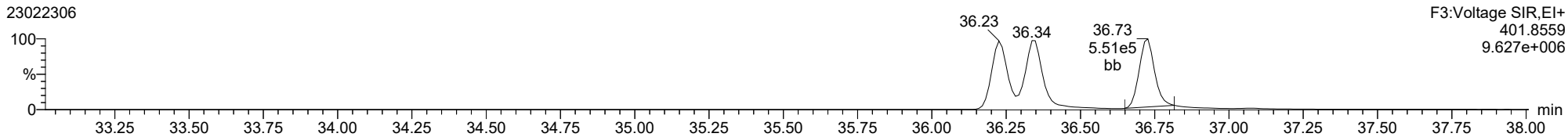

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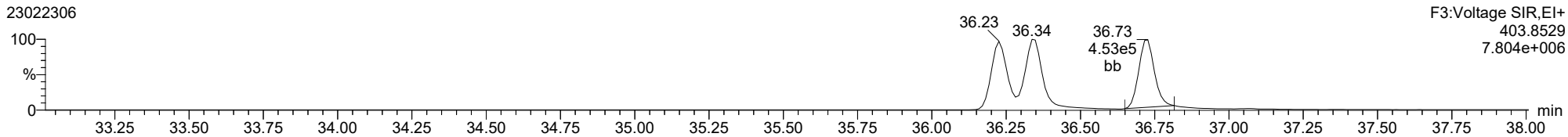

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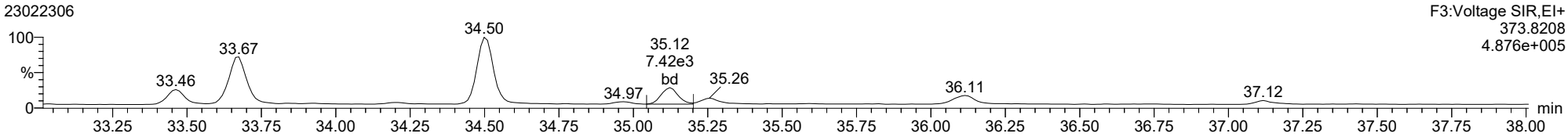

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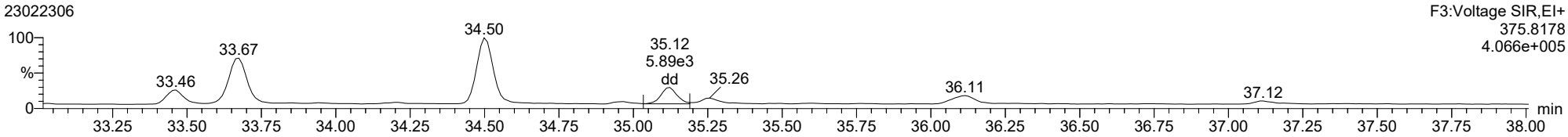

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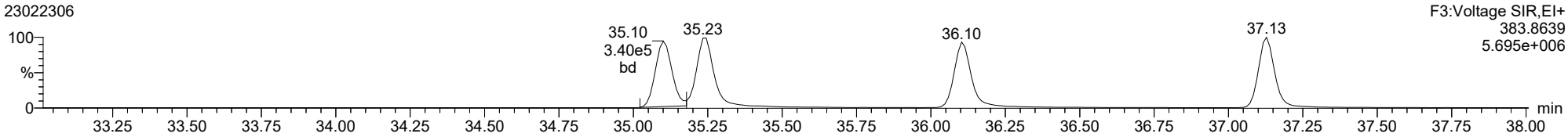

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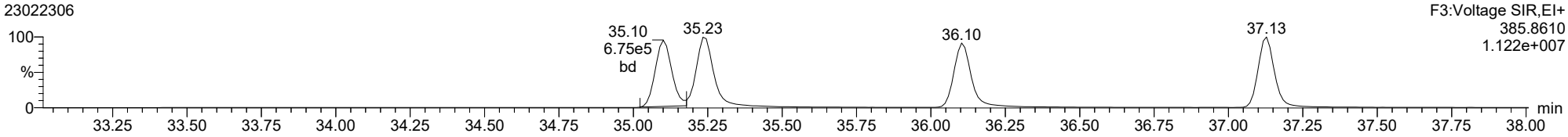

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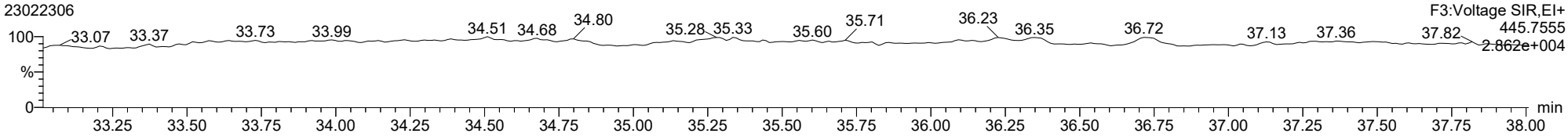

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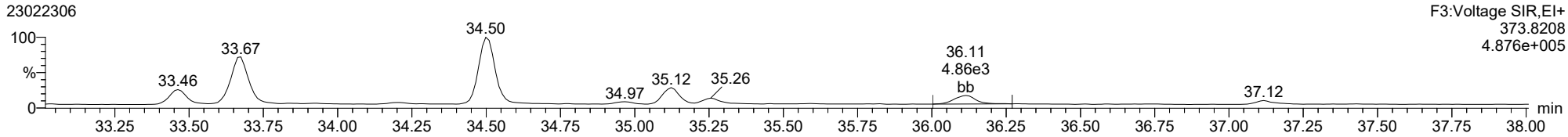

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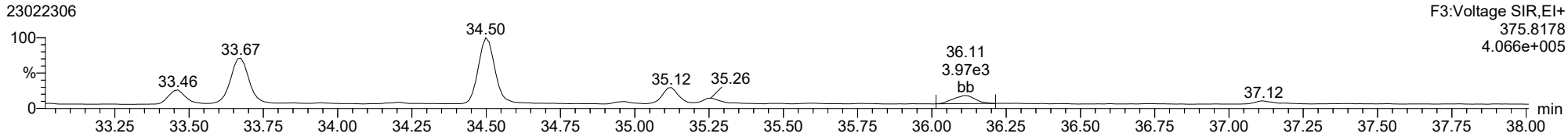

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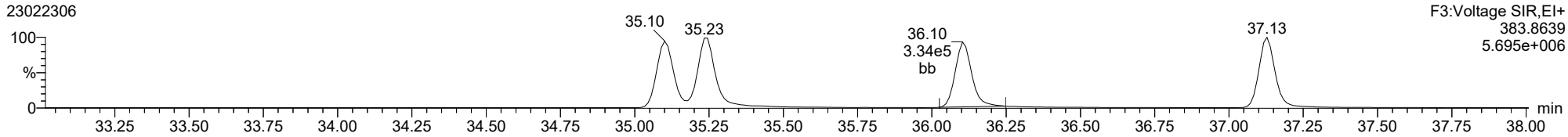

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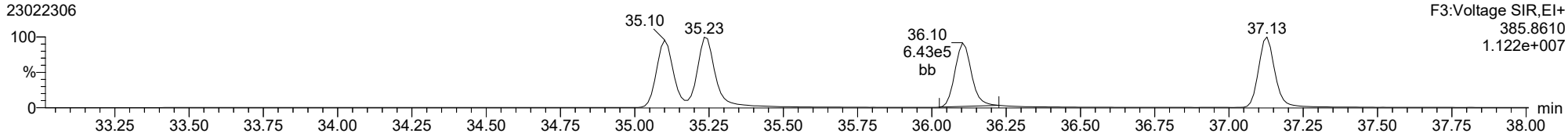

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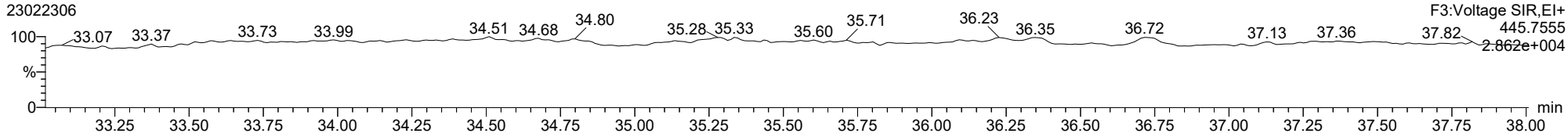

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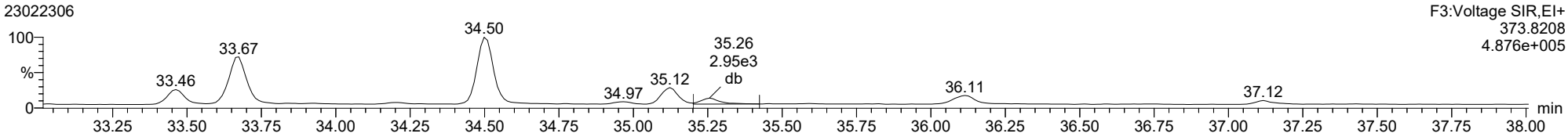

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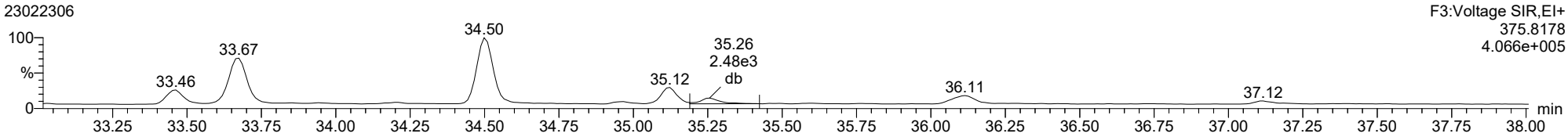

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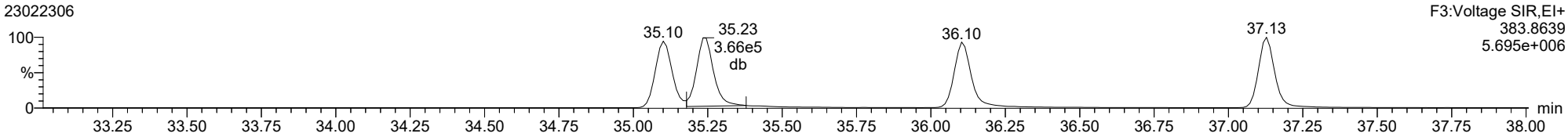

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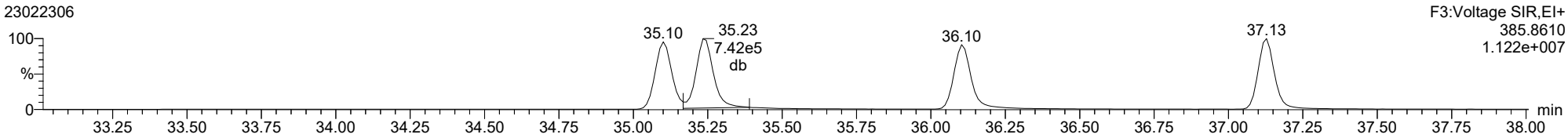

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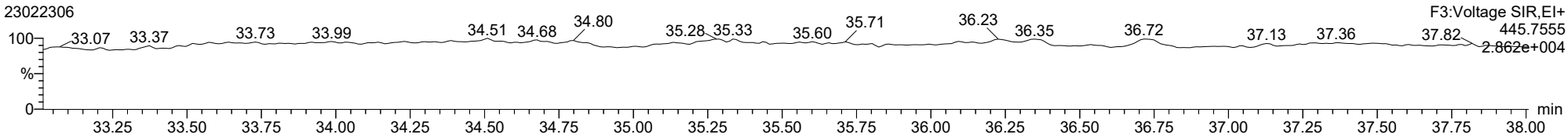

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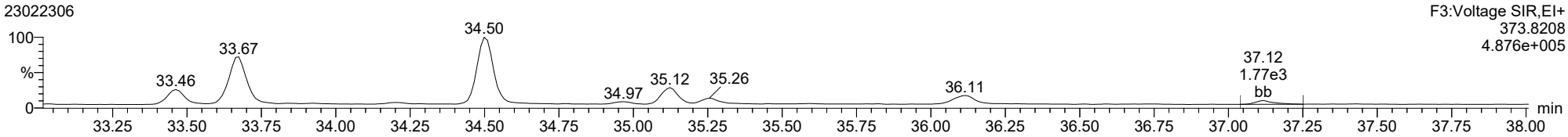

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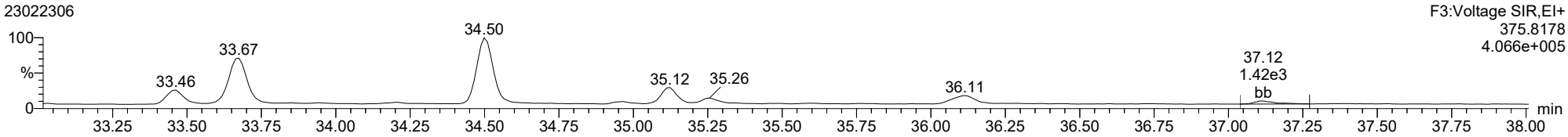

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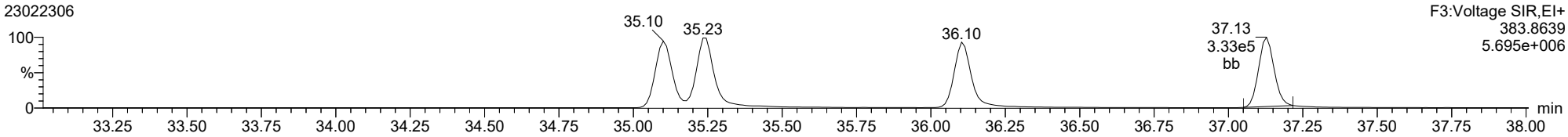

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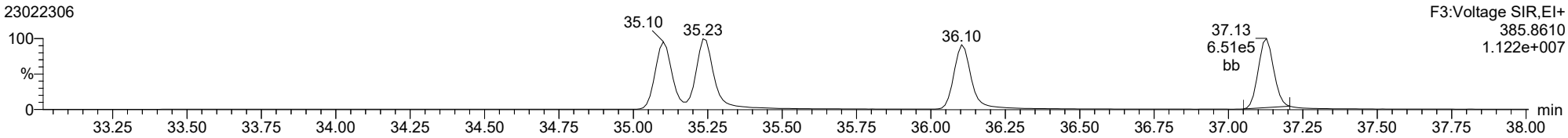

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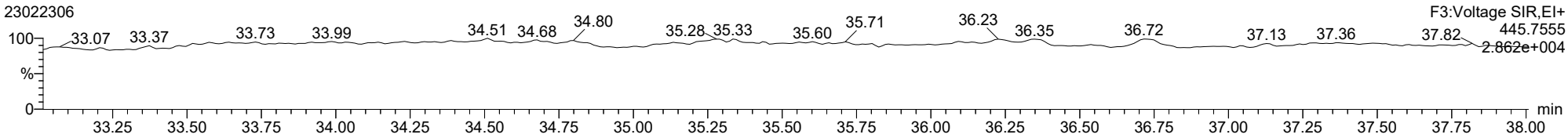

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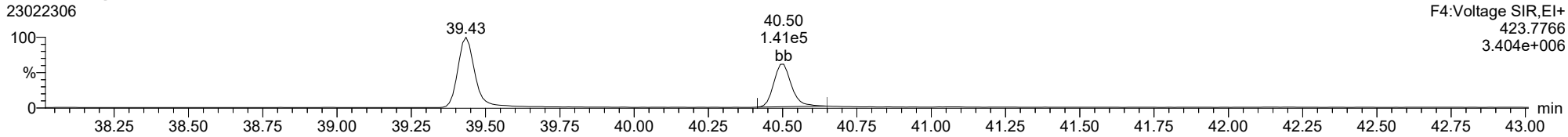

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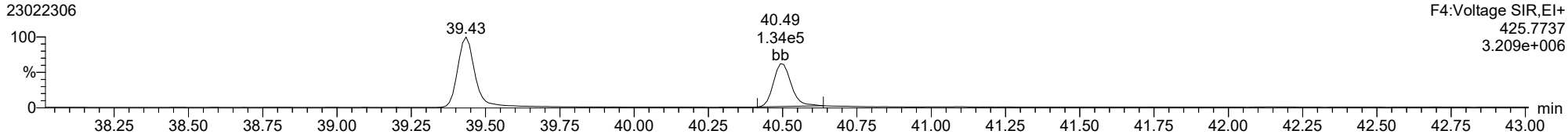

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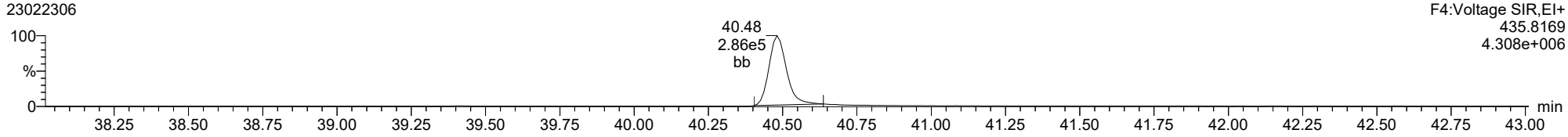

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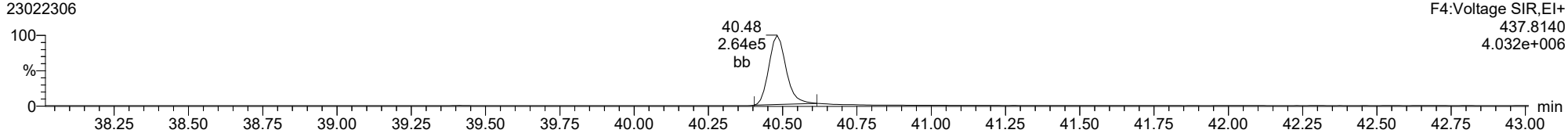

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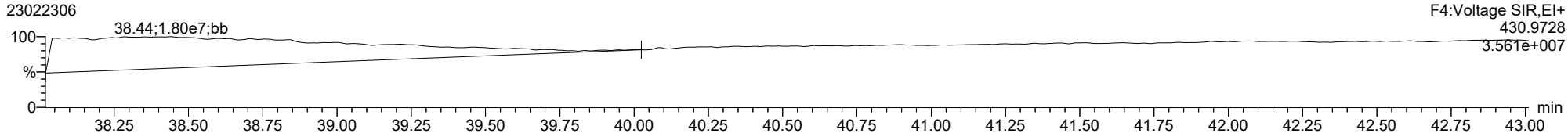

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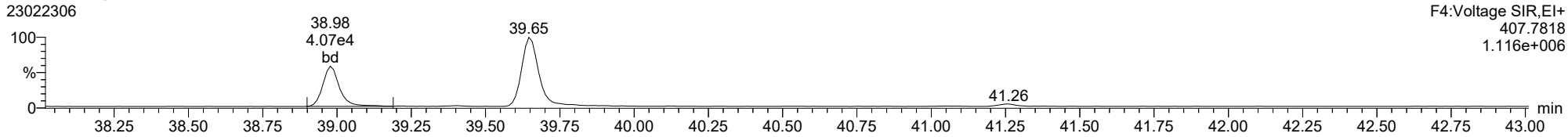
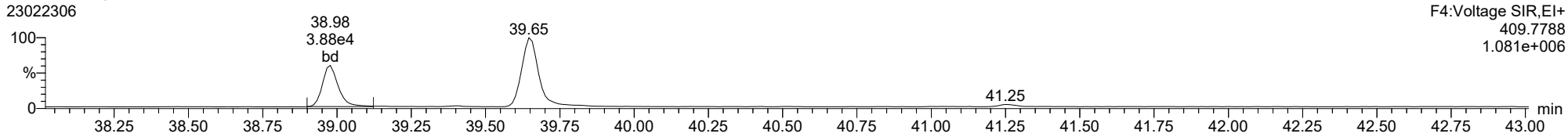
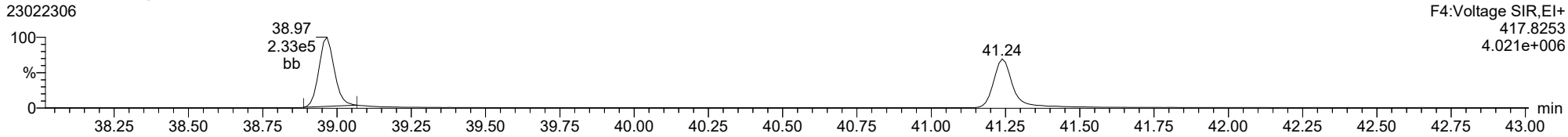


1234678-HpCDF



13C-1234678-HpCDF



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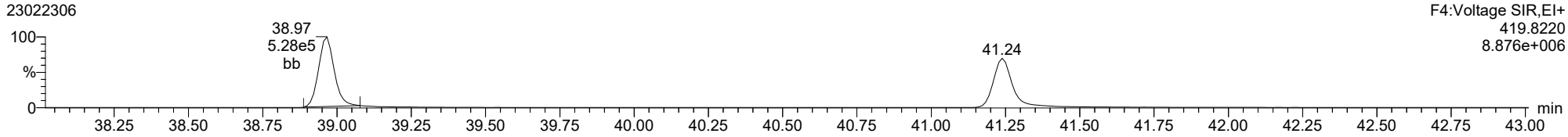
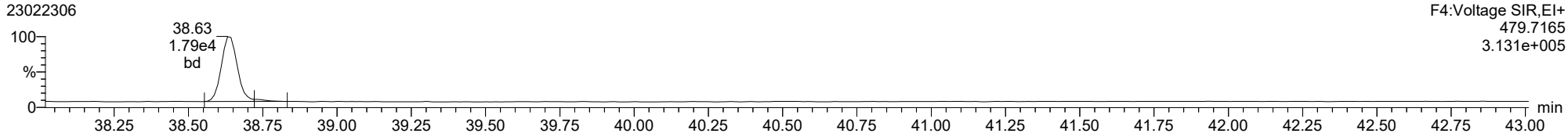
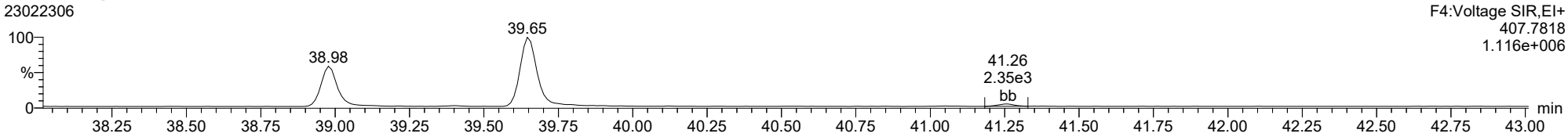


FUNCTION4 NCDPE



ID: BLA0261-SRM1, Name: 23022306, Date: 23-Feb-2023, Time: 14:14:35, Conditions: AUTOSPEC01, User: pk

1234789-HpCDF



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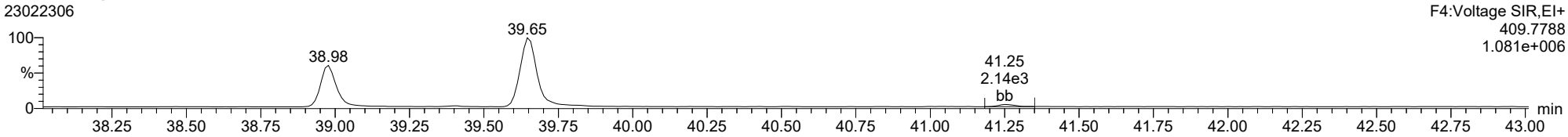

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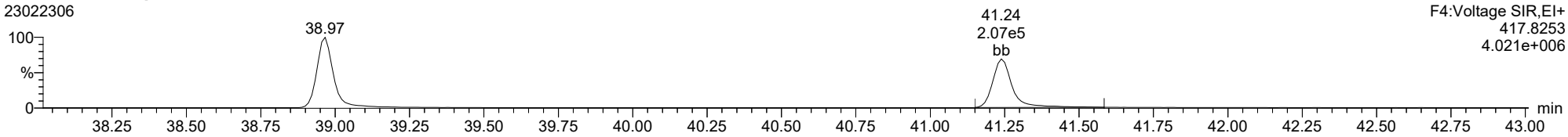

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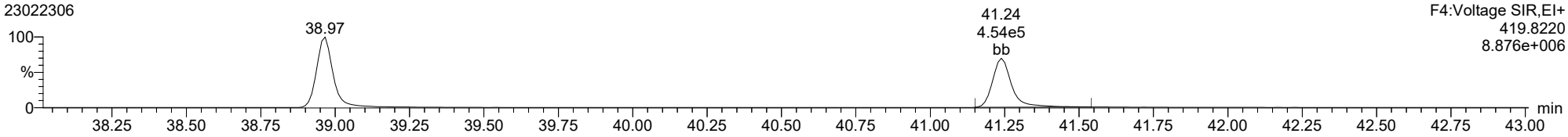
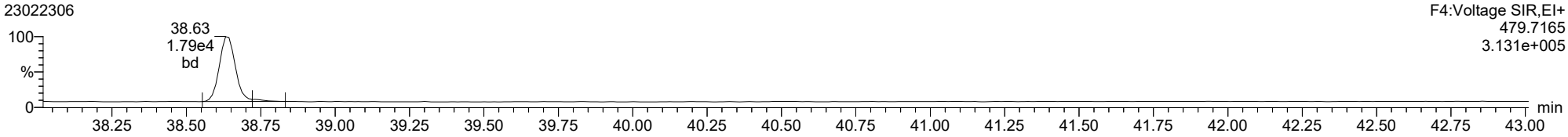
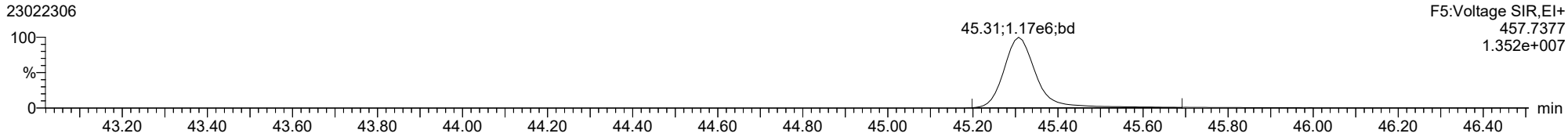


FUNCTION4 NCDPE

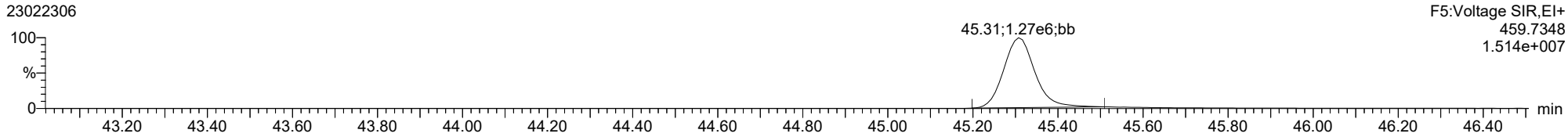


ID: BLA0261-SRM1, Name: 23022306, Date: 23-Feb-2023, Time: 14:14:35, Conditions: AUTOSPEC01, User: pk

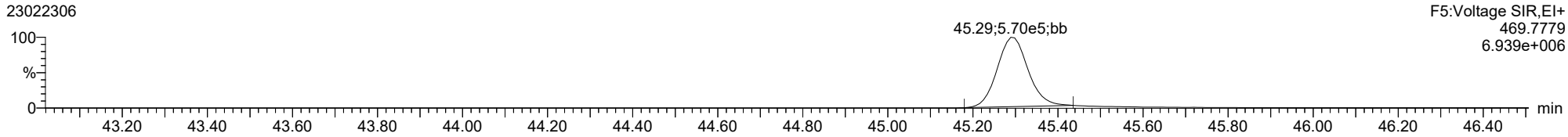
OCDD



OCDD



13C-OCDD



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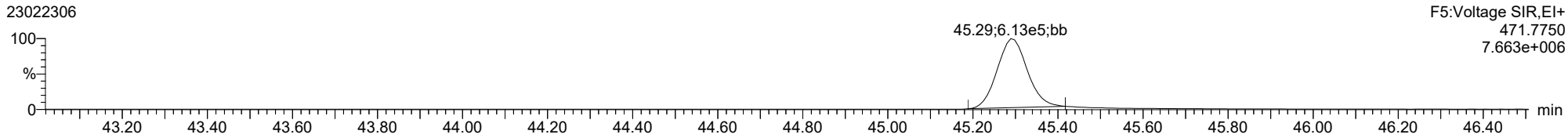
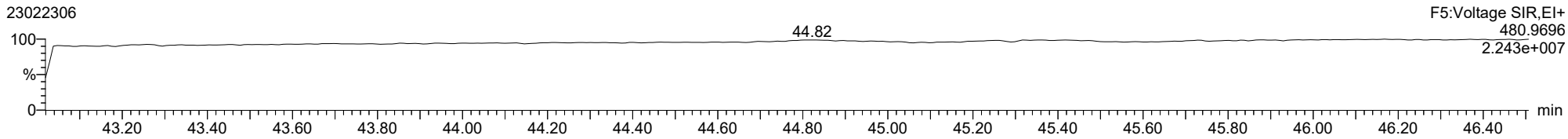


FUNCTION5 PFK



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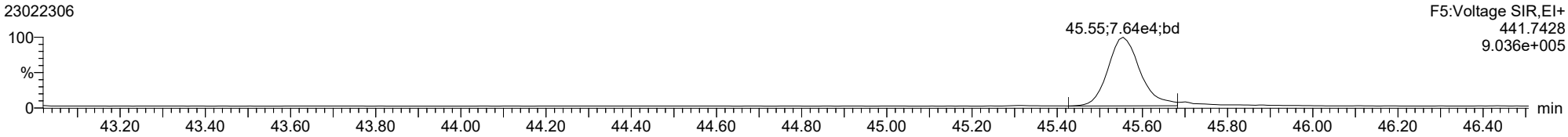
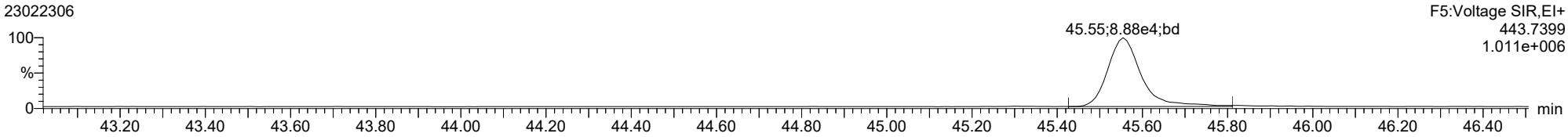
Printed: Friday, February 24, 2023 15:10:37 Pacific Standard Time

ID: BLA0261-SRM1, Name: 23022306, Date: 23-Feb-2023, Time: 14:14:35, Conditions: AUTOSPEC01, User: pk

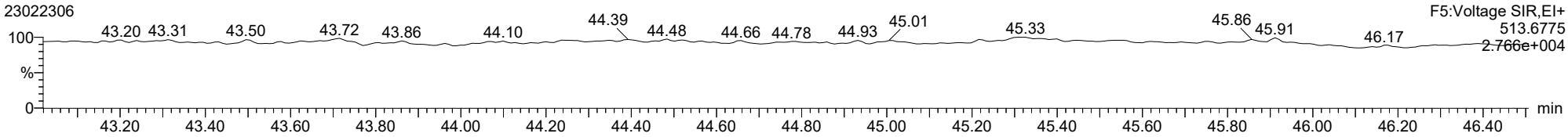
OCDF



OCDF

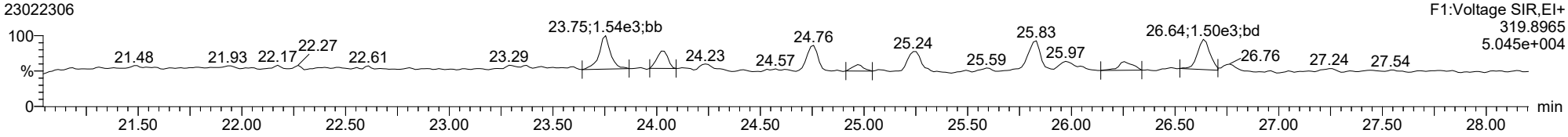


FUNCTION5 DCDPE

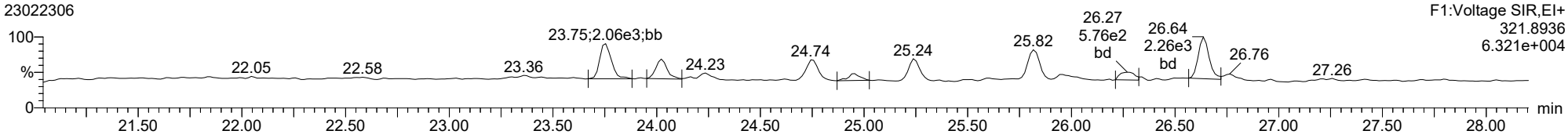


ID: BLA0261-SRM1, Name: 23022306, Date: 23-Feb-2023, Time: 14:14:35, Conditions: AUTOSPEC01, User: pk

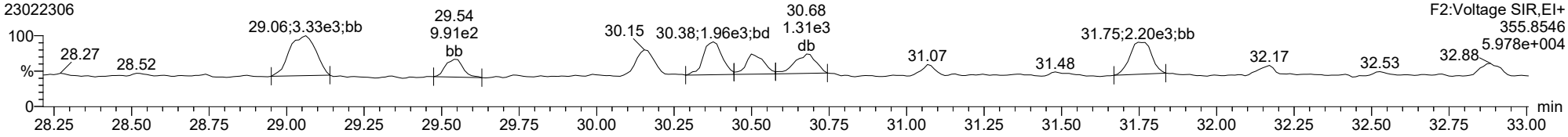
Total-tetradioxins



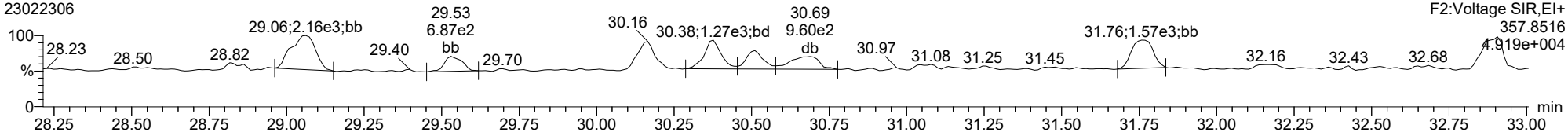
Total-tetradioxins



Total-pentadioxins

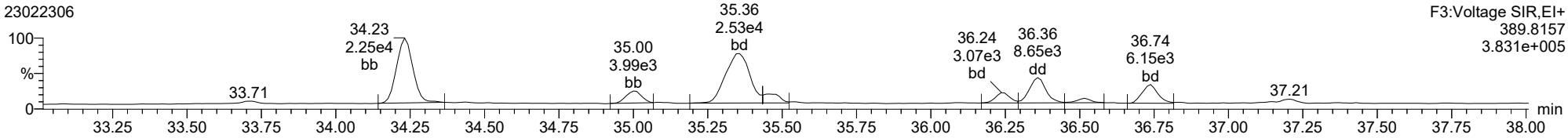


Total-pentadioxins

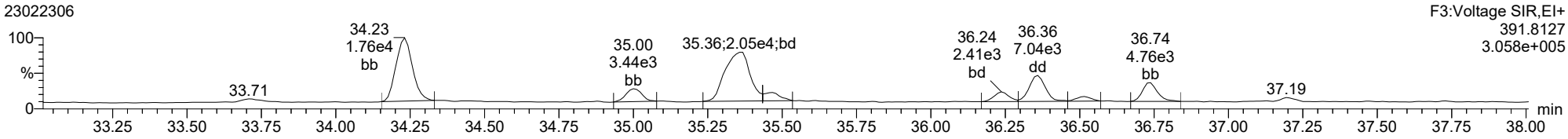


ID: BLA0261-SRM1, Name: 23022306, Date: 23-Feb-2023, Time: 14:14:35, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins



Total-hexadioxins



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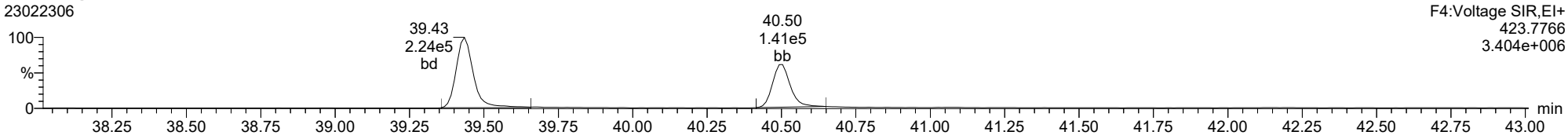
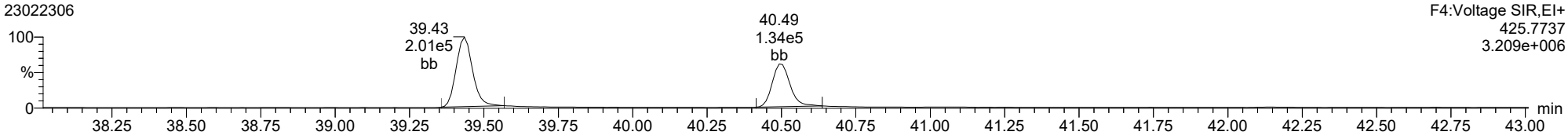
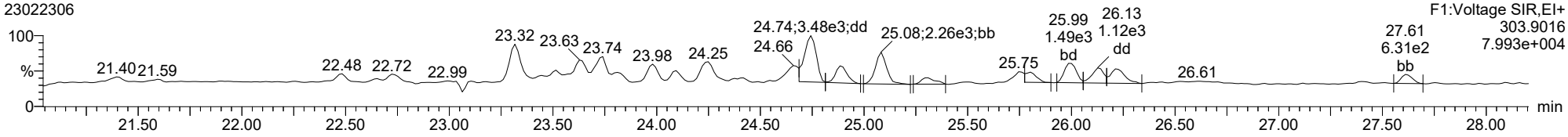


Total-heptadioxins

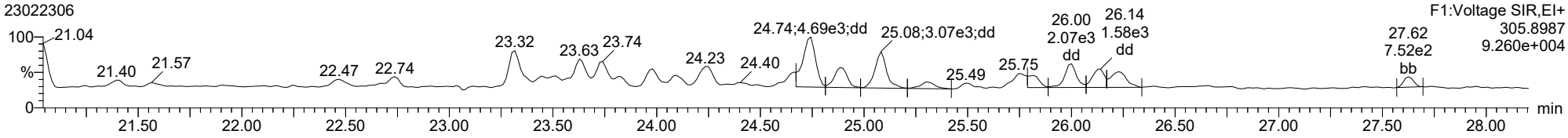


ID: BLA0261-SRM1, Name: 23022306, Date: 23-Feb-2023, Time: 14:14:35, Conditions: AUTOSPEC01, User: pk

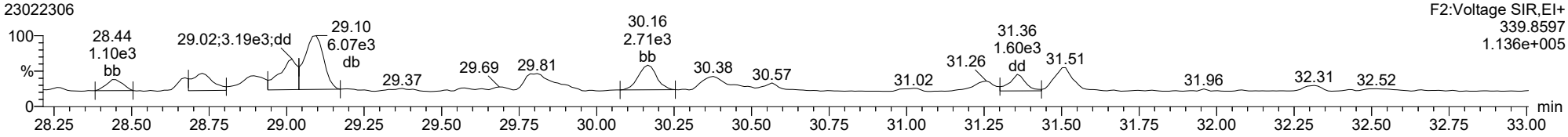
Total-tetrafurans



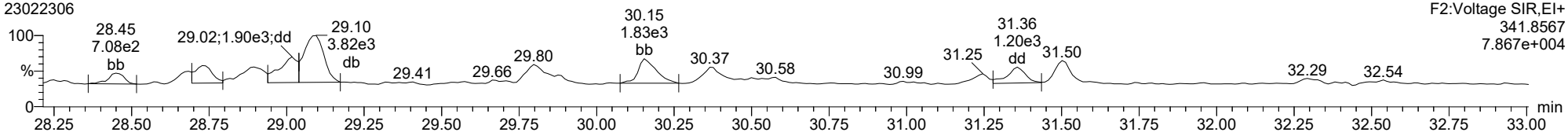
Total-tetrafurans



Total-pentafurans

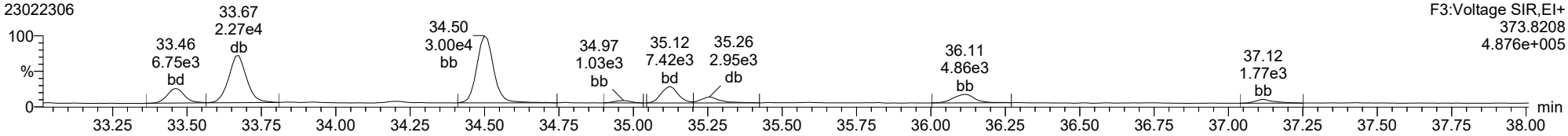


Total-pentafurans

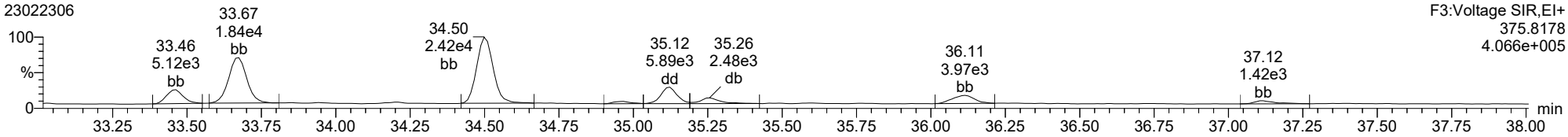


ID: BLA0261-SRM1, Name: 23022306, Date: 23-Feb-2023, Time: 14:14:35, Conditions: AUTOSPEC01, User: pk

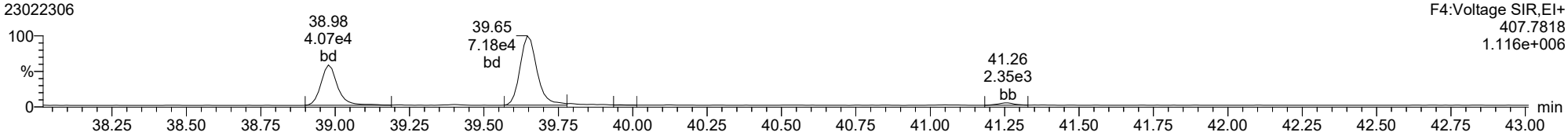
Total-hexafurans



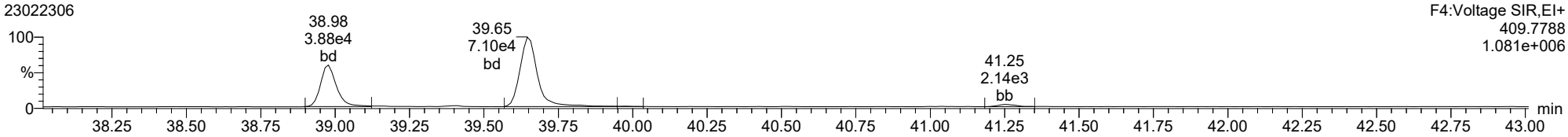
Total-hexafurans



Total-heptafurans



Total-heptafurans



INITIAL CALIBRATION DATA

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00010	Instrument:	AUTOSPEC01
Calibration Date:	02/01/2023	Column (1):	RTX-Dioxin2

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,3,7,8-TCDF			0.5	0.877532	2	0.8642547	10	0.9061172	40	0.8618622	200	0.870536
2,3,7,8-TCDD			0.5	1.33035	2	1.248621	10	1.137397	40	1.237049	200	1.228383
1,2,3,7,8-PeCDF	0.5	0.8845981	2.5	0.8294231	10	0.8519399	50	0.8286668	200	0.8328816	1000	0.8404146
2,3,4,7,8-PeCDF	0.5	0.9010853	2.5	0.8749834	10	0.9503804	50	0.9063511	200	0.9081631	1000	0.9261047
1,2,3,7,8-PeCDD	0.5	1.076975	2.5	1.101718	10	1.081557	50	1.083093	200	1.079692	1000	1.097073
1,2,3,4,7,8-HxCDF	0.5	1.197722	2.5	1.179021	10	1.141778	50	1.167137	200	1.188102	1000	1.216357
1,2,3,6,7,8-HxCDF	0.5	1.253033	2.5	1.219645	10	1.232591	50	1.230384	200	1.272527	1000	1.280106
2,3,4,6,7,8-HxCDF	0.5	1.220454	2.5	1.190231	10	1.230824	50	1.241416	200	1.24972	1000	1.240458
1,2,3,7,8,9-HxCDF	0.5	1.289076	2.5	1.125812	10	1.1524	50	1.182788	200	1.184457	1000	1.18469
1,2,3,4,7,8-HxCDD	0.5	0.980203	2.5	0.9572147	10	0.9836815	50	0.9739271	200	1.007401	1000	1.019376
1,2,3,6,7,8-HxCDD	0.5	1.134416	2.5	1.030295	10	0.9857061	50	1.001378	200	0.9828882	1000	0.9896475
1,2,3,7,8,9-HxCDD	0.5	1.002595	2.5	0.9852727	10	0.9574018	50	0.9845218	200	0.9780696	1000	1.005007
1,2,3,4,6,7,8-HpCDF	0.5	1.324418	2.5	1.241402	10	1.191769	50	1.137863	200	1.167606	1000	1.161655
1,2,3,4,7,8,9-HpCDF	0.5	1.241104	2.5	1.123881	10	1.176079	50	1.125517	200	1.167259	1000	1.157988
1,2,3,4,6,7,8-HpCDD	0.5	1.539399	2.5	1.221931	10	1.205401	50	1.160679	200	1.191041	1000	1.196962
OCDF	1	1.504532	5	1.206799	20	1.118843	100	1.047747	400	1.115678	2000	1.123986
OCDD			5	1.311834	20	1.098771	100	1.020503	400	1.035617	2000	1.04661
13C12-2,3,7,8-TCDF	100	1.794277	100	1.759625	100	1.739873	100	1.673566	100	1.790703	100	1.850313
13C12-2,3,7,8-TCDD	100	1.096674	100	1.073836	100	1.076512	100	1.133427	100	1.068055	100	1.169179
13C12-1,2,3,7,8-PeCDF	100	1.498324	100	1.483018	100	1.508724	100	1.460163	100	1.478051	100	1.734472
13C12-2,3,4,7,8-PeCDF	100	1.43808	100	1.438214	100	1.422382	100	1.41533	100	1.419969	100	1.663731
13C12-1,2,3,7,8-PeCDD	100	0.8950759	100	0.9011154	100	0.8899914	100	0.8624621	100	0.887379	100	1.048887
13C12-1,2,3,4,7,8-HxCDF	100	1.054544	100	1.077759	100	1.075116	100	1.061315	100	1.049772	100	1.003461
13C12-1,2,3,6,7,8-HxCDF	100	1.068197	100	1.101907	100	1.090557	100	1.088609	100	1.088766	100	1.041682
13C12-2,3,4,6,7,8-HxCDF	100	0.9969267	100	1.031453	100	1.020521	100	1.007653	100	1.020588	100	1.008816
13C12-1,2,3,7,8,9-HxCDF	100	0.9015813	100	0.9303539	100	0.9398705	100	0.9240461	100	0.9405347	100	0.9312132
13C12-1,2,3,4,7,8-HxCDD	100	0.9319648	100	0.9598064	100	0.9330427	100	0.9375516	100	0.9212584	100	0.9139779
13C12-1,2,3,6,7,8-HxCDD	100	0.9536719	100	0.9762285	100	0.9776812	100	0.9576787	100	0.9642386	100	0.9582641

INITIAL CALIBRATION DATA

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00010	Instrument:	AUTOSPEC01
Calibration Date:	02/01/2023	Column (1):	RTX-Dioxin2

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
13C12-1,2,3,4,6,7,8-HpCDF	100	1.009495	100	1.017629	100	1.046802	100	1.034238	100	1.053933	100	1.054435
13C12-1,2,3,4,7,8,9-HpCDF	100	0.8702856	100	0.8813287	100	0.9193412	100	0.9336903	100	0.9100344	100	0.9149429
13C12-1,2,3,4,6,7,8-HpCDD	100	0.7540434	100	0.7706109	100	0.7896711	100	0.7862201	100	0.7996856	100	0.7916329
13C12-OCDD	200	0.7447514	200	0.7401513	200	0.7909367	200	0.7980945	200	0.8130205	200	0.8424516
37Cl4-2,3,7,8-TCDD	0.1	1.457715	0.5	1.244154	2	1.209026	10	1.112721	40	1.137195	200	1.239891
13C12-1,2,3,4-TCDD	100	1	100	1	100	1	100	1	100	1	100	1
13C12-1,2,3,7,8,9-HxCDD	100	1	100	1	100	1	100	1	100	1	100	1

INITIAL CALIBRATION DATA

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00010	Instrument:	AUTOSPEC01
Calibration Date:	02/01/2023	Column (1):	RTX-Dioxin2

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
2,3,7,8-TCDF	0.8760604	2.0			RSD ()	
2,3,7,8-TCDD	1.23636	5.6			RSD ()	
1,2,3,7,8-PeCDF	0.844654	2.5			RSD ()	
2,3,4,7,8-PeCDF	0.911178	2.8			RSD ()	
1,2,3,7,8-PeCDD	1.086685	0.9			RSD ()	
1,2,3,4,7,8-HxCDF	1.181686	2.2			RSD ()	
1,2,3,6,7,8-HxCDF	1.248048	2.0			RSD ()	
2,3,4,6,7,8-HxCDF	1.22885	1.7			RSD ()	
1,2,3,7,8,9-HxCDF	1.186537	4.7			RSD ()	
1,2,3,4,7,8-HxCDD	0.9869672	2.3			RSD ()	
1,2,3,6,7,8-HxCDD	1.020722	5.7			RSD ()	
1,2,3,7,8,9-HxCDD	0.985478	1.8			RSD ()	
1,2,3,4,6,7,8-HpCDF	1.204119	5.7			RSD ()	
1,2,3,4,7,8,9-HpCDF	1.165305	3.7			RSD ()	
1,2,3,4,6,7,8-HpCDD	1.252569	11.3			RSD ()	
OCDF	1.186264	13.8			RSD ()	
OCDD	1.102667	10.9			RSD ()	
13C12-2,3,7,8-TCDF	1.768059	3.4			RSD ()	
13C12-2,3,7,8-TCDD	1.102947	3.7			RSD ()	
13C12-1,2,3,7,8-PeCDF	1.527125	6.7			RSD ()	
13C12-2,3,4,7,8-PeCDF	1.466284	6.6			RSD ()	
13C12-1,2,3,7,8-PeCDD	0.9141518	7.4			RSD ()	
13C12-1,2,3,4,7,8-HxCDF	1.053661	2.6			RSD ()	
13C12-1,2,3,6,7,8-HxCDF	1.079953	2.0			RSD ()	
13C12-2,3,4,6,7,8-HxCDF	1.014326	1.2			RSD ()	
13C12-1,2,3,7,8,9-HxCDF	0.9279333	1.5			RSD ()	
13C12-1,2,3,4,7,8-HxCDD	0.9329336	1.7			RSD ()	
13C12-1,2,3,6,7,8-HxCDD	0.9646272	1.1			RSD ()	
13C12-1,2,3,4,6,7,8-HpCDF	1.036089	1.8			RSD ()	
13C12-1,2,3,4,7,8,9-HpCDF	0.9049372	2.7			RSD ()	
13C12-1,2,3,4,6,7,8-HpCDD	0.7819773	2.1			RSD ()	

INITIAL CALIBRATION DATA

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00010	Instrument:	AUTOSPEC01
Calibration Date:	02/01/2023	Column (1):	RTX-Dioxin2

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
13C12-OCDD	0.7882343	5.0			RSD ()	
37Cl4-2,3,7,8-TCDD	1.23345	9.9			RSD ()	
13C12-1,2,3,4-TCDD	1	0.0			RSD ()	
13C12-1,2,3,7,8,9-HxCDD	1	0.0			RSD ()	

ANALYSIS SEQUENCE

SLB0026

Instrument: AUTOSPEC01 HRGCMS Column ID: K11292
Calibration ID: GB00010 Tune File: JAN3023
EM Voltage: 350 Resolution check times : 11:48, 22:06

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLB0026-ICV1	CS3R1	QC		1	K009821		02/01/2023 10:37	23020102	PK	
SLB0026-RES1	ISCR1	QC		2	K003933		02/01/2023 13:02	23020103	PK	
SLB0026-CAL1	CSLCR	QC		3	I005460		02/01/2023 14:39	23020104	PK	
SLB0026-CAL2	CS1CR	QC		4	I005456		02/01/2023 15:28	23020105	PK	
SLB0026-CAL3	CS2CR	QC		5	I005457		02/01/2023 17:07	23020106	PK	
SLB0026-CAL4	CS3CR	QC		6	K009821		02/01/2023 17:56	23020107	PK	
SLB0026-CAL5	CS4CR	QC		7	I005458		02/01/2023 18:45	23020108	PK	
SLB0026-CAL6	CS5CR	QC		8	I005459		02/01/2023 19:34	23020109	PK	
SLB0026-SCV1	ICVCR	QC		9	H008219		02/01/2023 20:23	23020110	PK	
SLB0026-CCV1	CS3R2	QC		10	K009821		02/01/2023 21:12	23020111	PK	
SLB0026-RES2	ISCR2	QC		11	K003933		02/01/2023 22:06	23020112	PK	

Dataset: T:\Autospec\Processed Data Batch\230201ICIH.qld
Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
Printed: Friday, February 03, 2023 10:36:13 Pacific Standard Time 2/3/23 pk

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Calibrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23020104, Compound:TF, RT:25.882	1
Peak deleted	Sample:23020104, Compound:TD, RT:26.532	1
Peak deleted	Sample:23020104, Compound:OD, RT:45.120	1
Peak deleted	Sample:23020109, Compound:TF, RT:27.273	6
Peak deleted	Sample:23020109, Compound:TF, RT:27.379	6
Peak deleted	Sample:23020108, Compound:PP, RT:27.107	5
Peak deleted	Sample:23020106, Compound:PF, RT:32.432	3
Peak deleted	Sample:23020108, Compound:HF, RT:33.335	5
Peak deleted	Sample:23020109, Compound:HF, RT:33.335	6
Peak deleted	Sample:23020108, Compound:TD, RT:27.122	5
Peak deleted	Sample:23020108, Compound:TD, RT:27.061	5
Peak deleted	Sample:23020109, Compound:TD, RT:27.107	6
Peak deleted	Sample:23020109, Compound:TD, RT:27.167	6
Peak deleted	Sample:23020104, Compound:HPD, RT:39.318	1
Peak deleted	Sample:23020105, Compound:HPD, RT:39.318	2
Peak deleted	Sample:23020106, Compound:HPD, RT:39.329	3
Peak deleted	Sample:23020108, Compound:HPD, RT:39.296	5
Peak deleted	Sample:23020109, Compound:HPD, RT:39.307	6
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230201ICIH.qld'	

Dataset: T:\Autospec\Processed Data Batch\230201IHOP.qld
Last Altered: Friday, February 03, 2023 11:20:37 Pacific Standard Time
Printed: Friday, February 03, 2023 11:21:40 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: CS3R1, Name: 23020102, Date: 01-Feb-2023, Time: 10:37:16, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.897	1.001	1.633e4	2.121e4	0.876	0.770	0.770	844	1016	2.38e5	3.19e5	282.5	314.0	NO	bb	bb	8.996
12378-PeCDF	30.050	1.001	1.109e5	7.631e4	0.845	1.453	1.550	1249	1693	1.63e6	1.11e6	1307.7	657.1	NO	bb	bd	45.474
23478-PeCDF	31.387	1.001	1.159e5	7.903e4	0.911	1.467	1.550	1249	1693	1.77e6	1.19e6	1420.2	702.0	NO	bd	bd	46.006
123478-HxCDF	34.997	1.000	1.295e5	1.045e5	1.182	1.240	1.240	1714	1368	2.02e6	1.66e6	1181.4	1216.7	NO	bd	bd	43.803
234678-HxCDF	35.988	1.000	1.343e5	1.093e5	1.229	1.229	1.240	1714	1368	2.03e6	1.64e6	1185.6	1198.5	NO	bd	bb	45.575
123678-HxCDF	35.131	1.000	1.458e5	1.151e5	1.248	1.266	1.240	1714	1368	2.05e6	1.65e6	1195.7	1205.2	NO	db	dd	44.655
123789-HxCDF	37.025	1.001	1.158e5	9.218e4	1.187	1.257	1.240	1714	1368	1.74e6	1.39e6	1013.6	1013.7	NO	bb	bb	44.499
1234678-HpCDF	38.852	1.000	1.090e5	1.104e5	1.204	0.988	1.050	1381	2036	1.81e6	1.80e6	1312.8	883.5	NO	bb	bd	45.091
1234789-HpCDF	41.113	1.001	9.861e4	9.166e4	1.165	1.076	1.050	1381	2036	1.37e6	1.36e6	990.9	669.9	NO	bd	bb	47.733
OCDF	45.368	1.006	1.600e5	1.827e5	1.186	0.875	0.890	1512	1583	1.89e6	2.17e6	1249.6	1369.4	NO	bd	bd	86.348
2378-TCDD	26.532	1.001	1.602e4	2.106e4	1.236	0.761	0.770	1110	975	2.31e5	3.09e5	207.8	317.0	NO	bb	bd	7.999
12378-PeCDD	31.643	1.001	9.866e4	5.958e4	1.087	1.656	1.550	1646	1001	1.48e6	9.13e5	896.9	912.1	NO	bd	bb	49.739
123478-HxCDD	36.111	1.000	1.092e5	8.877e4	0.987	1.230	1.240	1547	1532	1.85e6	1.48e6	1198.0	965.8	NO	bd	bd	44.758
123678-HxCDD	36.234	1.001	1.208e5	9.232e4	1.021	1.308	1.240	1547	1532	1.90e6	1.47e6	1225.9	960.4	NO	db	db	43.840
123789-HxCDD	36.612	1.011	1.096e5	9.138e4	0.985	1.199	1.240	1547	1532	1.82e6	1.52e6	1178.1	989.3	NO	bb	bb	44.134
1234678-HpCDD	40.367	1.001	9.142e4	8.634e4	1.253	1.059	1.050	1287	1635	1.36e6	1.30e6	1055.7	793.5	NO	bd	bb	44.175
OCDD	45.130	1.000	1.558e5	1.797e5	1.103	0.867	0.890	1087	1881	1.97e6	2.25e6	1808.2	1195.6	NO	bb	bb	90.946
13C-2378-TCDF	25.867	1.006	2.092e5	2.671e5	1.768	0.783	0.770	1473	1226	3.13e6	4.02e6	2126.4	3281.6	NO	bb	bb	81.841
13C-12378-PeCDF	30.028	1.168	2.959e5	1.916e5	1.527	1.544	1.550	2999	2197	4.50e6	2.95e6	1498.8	1341.1	NO	bb	bb	96.965
13C-23478-PeCDF	31.365	1.220	2.816e5	1.834e5	1.466	1.535	1.550	2999	2197	4.34e6	2.84e6	1446.0	1290.5	NO	bb	bb	96.345
13C-123478-HxCDF	34.986	0.956	1.509e5	3.011e5	1.054	0.501	0.510	1539	2587	2.37e6	4.78e6	1539.0	1847.3	NO	bd	bd	88.697
13C-123678-HxCDF	35.119	0.960	1.595e5	3.087e5	1.080	0.517	0.510	1539	2587	2.51e6	4.86e6	1632.0	1878.9	NO	db	db	89.641
13C-234678-HxCDF	35.977	0.983	1.463e5	2.887e5	1.014	0.507	0.510	1539	2587	2.39e6	4.73e6	1553.6	1829.5	NO	bb	bb	88.660
13C-123789-HxCDF	37.002	1.011	1.315e5	2.625e5	0.928	0.501	0.510	1539	2587	2.16e6	4.40e6	1402.9	1699.3	NO	bb	bb	87.781
13C-1234678-HpCDF	38.841	1.062	1.240e5	2.800e5	1.036	0.443	0.440	1596	2193	2.11e6	4.68e6	1322.3	2133.9	NO	bb	bb	80.624
13C-1234789-HpCDF	41.091	1.123	1.084e5	2.336e5	0.905	0.464	0.440	1596	2193	1.58e6	3.44e6	991.3	1568.5	NO	bb	bb	78.158
13C-1234-TCDD	25.700	0.000	1.445e5	1.847e5	1.000	0.782	0.770	1667	873	2.18e6	2.81e6	1307.2	3212.9	NO	bb	bb	100.000
13C-2378-TCDD	26.517	1.032	1.635e5	2.114e5	1.103	0.774	0.770	1667	873	2.52e6	3.27e6	1513.3	3746.2	NO	bb	bb	103.258
13C-12378-PeCDD	31.621	1.230	1.783e5	1.145e5	0.914	1.557	1.550	940	1014	2.71e6	1.73e6	2879.6	1709.2	NO	bb	bb	97.286
13C-123478-HxCDD	36.100	0.987	2.492e5	1.989e5	0.933	1.253	1.240	1846	1567	4.13e6	3.30e6	2236.6	2103.6	NO	bd	bd	99.308
13C-123678-HxCDD	36.211	0.990	2.631e5	2.131e5	0.965	1.234	1.240	1846	1567	4.22e6	3.43e6	2285.9	2187.7	NO	db	db	102.074
13C-1234678-HpCDD	40.345	1.103	1.659e5	1.554e5	0.782	1.067	1.050	1641	1171	2.51e6	2.40e6	1529.6	2051.4	NO	bb	bb	84.947
13C-OCDD	45.111	1.233	3.174e5	3.517e5	0.788	0.903	0.890	3114	1814	4.07e6	4.46e6	1307.4	2459.0	NO	bb	bb	175.516
13C-123789-HxCDD	36.590	0.000	2.678e5	2.158e5	1.000	1.241	1.240	1846	1567	4.30e6	3.43e6	2331.6	2186.8	NO	bb	bb	100.000
37CL-2378-TCDD	26.532	1.032	3.482e4		1.233			850		5.25e5		617.9			bb		8.577

Dataset: T:\Autospec\Processed Data Batch\230201IHOP.qld
Last Altered: Friday, February 03, 2023 11:20:37 Pacific Standard Time
Printed: Friday, February 03, 2023 11:21:40 Pacific Standard Time

ID: CS3R1, Name: 23020102, Date: 01-Feb-2023, Time: 10:37:16, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.389	0.866	1.928e4	2.641e4	1.064	0.730	0.770	844	1016	3.12e5	4.35e5	369.4	427.9	NO	bb	bb	9.011
1289-TCDF	27.394	1.059	1.506e4	2.111e4	0.858	0.713	0.770	844	1016	2.15e5	3.01e5	254.4	296.4	NO	db	dd	8.854
13468-PECDF	27.243	0.907	1.732e5	1.184e5	1.013	1.464	1.550	906	933	2.67e6	1.81e6	2951.1	1944.9	NO	bb	bb	59.051
12389-PECDF	32.423	1.080	1.096e5	7.394e4	0.844	1.482	1.550	1249	1693	1.63e6	1.06e6	1301.6	627.3	NO	bb	bd	44.621
123468-HXCDF	33.337	0.953	1.333e5	1.071e5	1.197	1.245	1.240	1714	1368	1.94e6	1.63e6	1132.0	1192.1	NO	bb	bd	44.431
1368-TCDD	23.674	0.893	1.559e4	1.973e4	1.084	0.790	0.770	1110	975	2.48e5	3.06e5	223.8	314.1	NO	bb	bb	8.690
1289-TCDD	27.137	1.023	1.343e4	1.711e4	0.975	0.785	0.770	1110	975	2.02e5	2.57e5	181.6	263.1	NO	bb	bd	8.354
12479-PECDD	28.925	0.915	1.617e5	1.030e5	1.837	1.569	1.550	1646	1001	1.58e6	1.01e6	962.4	1010.4	NO	bb	bb	49.217
12389-PECDD	32.033	1.013	1.065e5	6.755e4	1.252	1.576	1.550	1646	1001	1.60e6	1.04e6	973.2	1039.9	NO	bb	bb	47.467
124679-HXCDD	34.117	0.945	1.151e5	9.437e4	1.033	1.219	1.240	1547	1532	1.82e6	1.49e6	1174.2	973.0	NO	bb	bb	45.255
1234679-HPCDD	39.309	0.974	9.857e4	9.267e4	1.286	1.064	1.050	1287	1635	1.62e6	1.55e6	1257.2	945.5	NO	bb	bb	46.288
Total-tetrafurans			5.067e4		0.933			844		7.65e5							26.861
Total-penta1			1.732e5					906		2.67e6							59.051
Total-pentafurans			3.556e5		0.866			1249		5.33e6							143.542
Total-hexafurans			6.587e5		1.208			1714		9.78e6							222.964
Total-heptafurans			2.076e5		1.185			1381		3.18e6							92.824
Total-Furans			1.606e6		1.067			844		2.36e7							631.589
Total-tetradioxins			7.564e4		1.099			1110		1.04e6							41.916
Total-pentadioxins			3.670e5		1.392			1646		4.67e6							146.491
Total-hexadioxins			4.546e5		1.007			1547		7.39e6							177.988
Total-heptadioxins			1.900e5		1.269			1287		2.98e6							90.463
Total-Dioxins			1.243e6		1.165			1110		1.80e7							547.804
Total-TEQ			2.849e6					1110		4.17e7							1179.393
FUNCTION1 PFK			6.977e5					215892		1.30e7							
FUNCTION2 PFK			7.329e6					149595		7.20e7							0.000
FUNCTION3 PFK			1.409e7					224809		7.00e7							0.000
FUNCTION4 PFK			7.505e3					156562		3.03e5							
FUNCTION5 PFK			1.269e4					142532		5.28e5							
FUNCTION1 HXCD...			3.884e2					838		8.06e3							0.000
FUNCTION1 HPCD...			3.094e2					854		6.24e3							0.000
FUNCTION2 HPCD...			4.137e2					755		7.38e3							0.000
FUNCTION3 OCDPE			2.422e2					659		4.44e3							0.000
FUNCTION4 NCDPE			2.399e2					738		4.58e3							0.000
FUNCTION5 DCDPE			0.000e0					686		0.00e0							

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: CS3R1, Name: 23020102, Date: 01-Feb-2023, Time: 10:37:16, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.39	1.506e4	2.111e4	0.858	0.71	0.77	254.4	YES	NO	db	dd	8.854
2	2378-TCDF	25.90	1.633e4	2.121e4	0.876	0.77	0.77	282.5	YES	NO	bb	bb	8.996
3	1368-TCDF	22.39	1.928e4	2.641e4	1.064	0.73	0.77	369.4	YES	NO	bb	bb	9.011

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.24	1.732e5	1.184e5	1.013	1.46	1.55	2951.1	YES	NO	bb	bb	59.051

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.42	1.096e5	7.394e4	0.844	1.48	1.55	1301.6	YES	NO	bb	bd	44.621
2	23478-PeCDF	31.39	1.159e5	7.903e4	0.911	1.47	1.55	1420.2	YES	NO	bd	bd	46.006
3	12378-PeCDF	30.05	1.109e5	7.631e4	0.845	1.45	1.55	1307.7	YES	NO	bb	bd	45.474
4	Total-pentafurans	28.90	1.918e4	1.152e4	0.866	1.67	1.55	232.8	YES	NO	bb	bb	7.440

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	234678-HxCDF	35.99	1.343e5	1.093e5	1.229	1.23	1.24	1185.6	YES	NO	bd	bb	45.575
2	123678-HxCDF	35.13	1.458e5	1.151e5	1.248	1.27	1.24	1195.7	YES	NO	db	dd	44.655
3	123478-HxCDF	35.00	1.295e5	1.045e5	1.182	1.24	1.24	1181.4	YES	NO	bd	bd	43.803
4	123468-HXCDF	33.34	1.333e5	1.071e5	1.197	1.24	1.24	1132.0	YES	NO	bb	bd	44.431
5	123789-HxCDF	37.02	1.158e5	9.218e4	1.187	1.26	1.24	1013.6	YES	NO	bb	bb	44.499

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.11	9.861e4	9.166e4	1.165	1.08	1.05	990.9	YES	NO	bd	bb	47.733
2	1234678-HpCDF	38.85	1.090e5	1.104e5	1.204	0.99	1.05	1312.8	YES	NO	bb	bd	45.091

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.39	1.506e4	2.111e4	0.858	0.71	0.77	254.4	YES	NO	db	dd	8.854
2	2378-TCDF	25.90	1.633e4	2.121e4	0.876	0.77	0.77	282.5	YES	NO	bb	bb	8.996
3	1368-TCDF	22.39	1.928e4	2.641e4	1.064	0.73	0.77	369.4	YES	NO	bb	bb	9.011
4	12389-PECDF	32.42	1.096e5	7.394e4	0.844	1.48	1.55	1301.6	YES	NO	bb	bd	44.621
5	23478-PeCDF	31.39	1.159e5	7.903e4	0.911	1.47	1.55	1420.2	YES	NO	bd	bd	46.006
6	12378-PeCDF	30.05	1.109e5	7.631e4	0.845	1.45	1.55	1307.7	YES	NO	bb	bd	45.474
7	Total-pentafurans	28.90	1.918e4	1.152e4	0.866	1.67	1.55	232.8	YES	NO	bb	bb	7.440
8	234678-HxCDF	35.99	1.343e5	1.093e5	1.229	1.23	1.24	1185.6	YES	NO	bd	bb	45.575
9	123678-HxCDF	35.13	1.458e5	1.151e5	1.248	1.27	1.24	1195.7	YES	NO	db	dd	44.655
10	123478-HxCDF	35.00	1.295e5	1.045e5	1.182	1.24	1.24	1181.4	YES	NO	bd	bd	43.803
11	123468-HXCDF	33.34	1.333e5	1.071e5	1.197	1.24	1.24	1132.0	YES	NO	bb	bd	44.431
12	123789-HxCDF	37.02	1.158e5	9.218e4	1.187	1.26	1.24	1013.6	YES	NO	bb	bb	44.499
13	1234789-HpCDF	41.11	9.861e4	9.166e4	1.165	1.08	1.05	990.9	YES	NO	bd	bb	47.733
14	1234678-HpCDF	38.85	1.090e5	1.104e5	1.204	0.99	1.05	1312.8	YES	NO	bb	bd	45.091
15	OCDF	45.37	1.600e5	1.827e5	1.186	0.88	0.89	1249.6	YES	NO	bd	bd	86.348
16	13468-PECDF	27.24	1.732e5	1.184e5	1.013	1.46	1.55	2951.1	YES	NO	bb	bb	59.051

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.67	1.559e4	1.973e4	1.084	0.79	0.77	223.8	YES	NO	bb	bb	8.690
2	1289-TCDD	27.14	1.343e4	1.711e4	0.975	0.79	0.77	181.6	YES	NO	bb	bd	8.354
3	2378-TCDD	26.53	1.602e4	2.106e4	1.236	0.76	0.77	207.8	YES	NO	bb	bd	7.999
4	Total-tetradioxins	26.21	2.312e4	2.981e4	1.099	0.78	0.77	216.6	YES	NO	bb	bb	12.852
5	Total-tetradioxins	25.73	7.468e3	9.090e3	1.099	0.82	0.77	105.7	YES	NO	bb	bb	4.020

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	32.03	1.065e5	6.755e4	1.252	1.58	1.55	973.2	YES	NO	bb	bb	47.467
2	Total-pentadioxins	31.87	1.652e2	1.080e2	1.392	1.53	1.55	3.2	YES	NO	db	bb	0.067
3	12378-PeCDD	31.64	9.866e4	5.958e4	1.087	1.66	1.55	896.9	YES	NO	bd	bb	49.739
4	12479-PECDD	28.92	1.617e5	1.030e5	1.837	1.57	1.55	962.4	YES	NO	bb	bb	49.217

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.61	1.096e5	9.138e4	0.985	1.20	1.24	1178.1	YES	NO	bb	bb	44.134
2	123678-HxCDD	36.23	1.208e5	9.232e4	1.021	1.31	1.24	1225.9	YES	NO	db	db	43.840
3	123478-HxCDD	36.11	1.092e5	8.877e4	0.987	1.23	1.24	1198.0	YES	NO	bd	bd	44.758
4	124679-HXCDD	34.12	1.151e5	9.437e4	1.033	1.22	1.24	1174.2	YES	NO	bb	bb	45.255

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.37	9.142e4	8.634e4	1.253	1.06	1.05	1055.7	YES	NO	bd	bb	44.175
2	1234679-HPCDD	39.31	9.857e4	9.267e4	1.286	1.06	1.05	1257.2	YES	NO	bb	bb	46.288

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.67	1.559e4	1.973e4	1.084	0.79	0.77	223.8	YES	NO	bb	bb	8.690
2	1289-TCDD	27.14	1.343e4	1.711e4	0.975	0.79	0.77	181.6	YES	NO	bb	bd	8.354
3	2378-TCDD	26.53	1.602e4	2.106e4	1.236	0.76	0.77	207.8	YES	NO	bb	bd	7.999
4	Total-tetradioxins	26.21	2.312e4	2.981e4	1.099	0.78	0.77	216.6	YES	NO	bb	bb	12.852
5	Total-tetradioxins	25.73	7.468e3	9.090e3	1.099	0.82	0.77	105.7	YES	NO	bb	bb	4.020
6	12389-PECDD	32.03	1.065e5	6.755e4	1.252	1.58	1.55	973.2	YES	NO	bb	bb	47.467
7	Total-pentadioxins	31.87	1.652e2	1.080e2	1.392	1.53	1.55	3.2	YES	NO	db	bb	0.067
8	12378-PeCDD	31.64	9.866e4	5.958e4	1.087	1.66	1.55	896.9	YES	NO	bd	bb	49.739
9	12479-PECDD	28.92	1.617e5	1.030e5	1.837	1.57	1.55	962.4	YES	NO	bb	bb	49.217
10	123789-HxCDD	36.61	1.096e5	9.138e4	0.985	1.20	1.24	1178.1	YES	NO	bb	bb	44.134
11	123678-HxCDD	36.23	1.208e5	9.232e4	1.021	1.31	1.24	1225.9	YES	NO	db	db	43.840
12	123478-HxCDD	36.11	1.092e5	8.877e4	0.987	1.23	1.24	1198.0	YES	NO	bd	bd	44.758
13	124679-HXCDD	34.12	1.151e5	9.437e4	1.033	1.22	1.24	1174.2	YES	NO	bb	bb	45.255
14	1234678-HpCDD	40.37	9.142e4	8.634e4	1.253	1.06	1.05	1055.7	YES	NO	bd	bb	44.175
15	1234679-HPCDD	39.31	9.857e4	9.267e4	1.286	1.06	1.05	1257.2	YES	NO	bb	bb	46.288
16	OCDD	45.13	1.558e5	1.797e5	1.103	0.87	0.89	1808.2	YES	NO	bb	bb	90.946

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.39	1.506e4	2.111e4	0.858	0.71	0.77	254.4	YES	NO	db	dd	8.854
2	2378-TCDF	25.90	1.633e4	2.121e4	0.876	0.77	0.77	282.5	YES	NO	bb	bb	8.996
3	1368-TCDF	22.39	1.928e4	2.641e4	1.064	0.73	0.77	369.4	YES	NO	bb	bb	9.011
4	12389-PECDF	32.42	1.096e5	7.394e4	0.844	1.48	1.55	1301.6	YES	NO	bb	bd	44.621
5	23478-PeCDF	31.39	1.159e5	7.903e4	0.911	1.47	1.55	1420.2	YES	NO	bd	bd	46.006
6	12378-PeCDF	30.05	1.109e5	7.631e4	0.845	1.45	1.55	1307.7	YES	NO	bb	bd	45.474
7	Total-pentafurans	28.90	1.918e4	1.152e4	0.866	1.67	1.55	232.8	YES	NO	bb	bb	7.440
8	234678-HxCDF	35.99	1.343e5	1.093e5	1.229	1.23	1.24	1185.6	YES	NO	bd	bb	45.575
9	123678-HxCDF	35.13	1.458e5	1.151e5	1.248	1.27	1.24	1195.7	YES	NO	db	dd	44.655
10	123478-HxCDF	35.00	1.295e5	1.045e5	1.182	1.24	1.24	1181.4	YES	NO	bd	bd	43.803
11	123468-HXCDF	33.34	1.333e5	1.071e5	1.197	1.24	1.24	1132.0	YES	NO	bb	bd	44.431
12	123789-HxCDF	37.02	1.158e5	9.218e4	1.187	1.26	1.24	1013.6	YES	NO	bb	bb	44.499
13	1234789-HpCDF	41.11	9.861e4	9.166e4	1.165	1.08	1.05	990.9	YES	NO	bd	bb	47.733
14	1234678-HpCDF	38.85	1.090e5	1.104e5	1.204	0.99	1.05	1312.8	YES	NO	bb	bd	45.091
15	OCDF	45.37	1.600e5	1.827e5	1.186	0.88	0.89	1249.6	YES	NO	bd	bd	86.348
16	13468-PECDF	27.24	1.732e5	1.184e5	1.013	1.46	1.55	2951.1	YES	NO	bb	bb	59.051
17	1368-TCDD	23.67	1.559e4	1.973e4	1.084	0.79	0.77	223.8	YES	NO	bb	bb	8.690
18	1289-TCDD	27.14	1.343e4	1.711e4	0.975	0.79	0.77	181.6	YES	NO	bb	bd	8.354
19	2378-TCDD	26.53	1.602e4	2.106e4	1.236	0.76	0.77	207.8	YES	NO	bb	bd	7.999
20	Total-tetradioxins	26.21	2.312e4	2.981e4	1.099	0.78	0.77	216.6	YES	NO	bb	bb	12.852
21	Total-tetradioxins	25.73	7.468e3	9.090e3	1.099	0.82	0.77	105.7	YES	NO	bb	bb	4.020
22	12389-PECDD	32.03	1.065e5	6.755e4	1.252	1.58	1.55	973.2	YES	NO	bb	bb	47.467
23	Total-pentadioxins	31.87	1.652e2	1.080e2	1.392	1.53	1.55	3.2	YES	NO	db	bb	0.067
24	12378-PeCDD	31.64	9.866e4	5.958e4	1.087	1.66	1.55	896.9	YES	NO	bd	bb	49.739
25	12479-PECDD	28.92	1.617e5	1.030e5	1.837	1.57	1.55	962.4	YES	NO	bb	bb	49.217
26	123789-HxCDD	36.61	1.096e5	9.138e4	0.985	1.20	1.24	1178.1	YES	NO	bb	bb	44.134
27	123678-HxCDD	36.23	1.208e5	9.232e4	1.021	1.31	1.24	1225.9	YES	NO	db	db	43.840
28	123478-HxCDD	36.11	1.092e5	8.877e4	0.987	1.23	1.24	1198.0	YES	NO	bd	bd	44.758
29	124679-HXCDD	34.12	1.151e5	9.437e4	1.033	1.22	1.24	1174.2	YES	NO	bb	bb	45.255
30	1234678-HpCDD	40.37	9.142e4	8.634e4	1.253	1.06	1.05	1055.7	YES	NO	bd	bb	44.175
31	1234679-HPCDD	39.31	9.857e4	9.267e4	1.286	1.06	1.05	1257.2	YES	NO	bb	bb	46.288
32	OCDD	45.13	1.558e5	1.797e5	1.103	0.87	0.89	1808.2	YES	NO	bb	bb	90.946

Dataset: T:\Autospec\Processed Data Batch\230201IHOP.qld
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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	21.12	9.025e3					1.5	NO		bb		
2	FUNCTION1 PFK	23.39	1.564e4					1.7	NO		db		
3	FUNCTION1 PFK	23.33	1.699e4					1.8	NO		dd		
4	FUNCTION1 PFK	23.21	3.674e4					1.8	NO		dd		
5	FUNCTION1 PFK	23.15	1.668e4					1.7	NO		bd		
6	FUNCTION1 PFK	23.07	1.606e4					2.1	NO		bb		
7	FUNCTION1 PFK	22.69	6.506e3					1.1	NO		db		
8	FUNCTION1 PFK	22.57	5.324e4					2.0	NO		bd		
9	FUNCTION1 PFK	22.46	2.047e3					0.6	NO		bb		
10	FUNCTION1 PFK	22.18	2.854e4					1.8	NO		bb		
11	FUNCTION1 PFK	22.00	2.061e4					1.1	NO		bb		
12	FUNCTION1 PFK	21.88	1.276e3					0.4	NO		bb		
13	FUNCTION1 PFK	21.48	1.972e3					0.6	NO		bb		
14	FUNCTION1 PFK	21.36	4.333e4					3.4	YES		db		
15	FUNCTION1 PFK	21.33	3.930e4					3.3	YES		dd		
16	FUNCTION1 PFK	21.25	3.950e4					3.7	YES		dd		
17	FUNCTION1 PFK	21.22	1.839e4					1.7	NO		bd		
18	FUNCTION1 PFK	26.44	2.008e3					0.6	NO		bb		
19	FUNCTION1 PFK	26.37	1.096e4					1.2	NO		bb		
20	FUNCTION1 PFK	26.06	5.687e3					0.8	NO		bb		
21	FUNCTION1 PFK	25.85	4.606e4					2.0	NO		bb		
22	FUNCTION1 PFK	25.67	1.822e4					1.6	NO		db		
23	FUNCTION1 PFK	25.59	5.429e3					0.7	NO		bd		
24	FUNCTION1 PFK	25.41	3.678e3					0.7	NO		bb		
25	FUNCTION1 PFK	25.35	1.804e3					0.6	NO		bb		
26	FUNCTION1 PFK	24.69	1.276e4					1.4	NO		bb		
27	FUNCTION1 PFK	24.46	1.415e3					0.4	NO		bb		
28	FUNCTION1 PFK	24.23	1.486e4					1.4	NO		db		
29	FUNCTION1 PFK	24.16	3.220e4					2.1	NO		dd		
30	FUNCTION1 PFK	24.07	1.916e4					1.5	NO		bd		
31	FUNCTION1 PFK	23.86	1.041e4					1.2	NO		bb		
32	FUNCTION1 PFK	23.75	2.252e4					1.8	NO		bb		
33	FUNCTION1 PFK	23.46	2.488e3					0.5	NO		bb		
34	FUNCTION1 PFK	28.21	1.683e4					1.3	NO		bb		
35	FUNCTION1 PFK	28.13	1.846e4					1.2	NO		db		
36	FUNCTION1 PFK	27.97	3.589e4					1.9	NO		bd		
37	FUNCTION1 PFK	27.85	3.272e3					0.6	NO		bb		

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION1 PFK	27.55	1.459e3					0.4	NO		bb		
39	FUNCTION1 PFK	27.48	1.620e3					0.5	NO		bb		
40	FUNCTION1 PFK	27.36	8.182e3					1.0	NO		bb		
41	FUNCTION1 PFK	27.27	3.811e3					0.8	NO		db		
42	FUNCTION1 PFK	27.24	6.329e3					0.8	NO		bd		
43	FUNCTION1 PFK	27.03	6.469e3					1.1	NO		db		
44	FUNCTION1 PFK	26.99	1.869e4					1.7	NO		bd		
45	FUNCTION1 PFK	26.88	1.188e3					0.4	NO		bb		

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.61	1.089e6					38.3	YES		dd		0.000
2	FUNCTION2 PFK	28.42	5.461e5					42.0	YES		dd		0.000
3	FUNCTION2 PFK	28.36	4.208e5					43.0	YES		bd		0.000
4	FUNCTION2 PFK	30.22	3.292e4					7.2	YES		dd		0.000
5	FUNCTION2 PFK	30.16	1.231e5					8.8	YES		dd		0.000
6	FUNCTION2 PFK	30.05	1.117e5					10.9	YES		dd		0.000
7	FUNCTION2 PFK	29.99	9.120e4					11.4	YES		dd		0.000
8	FUNCTION2 PFK	29.94	2.092e5					12.7	YES		dd		0.000
9	FUNCTION2 PFK	29.76	2.907e5					15.9	YES		dd		0.000
10	FUNCTION2 PFK	29.69	1.383e5					17.3	YES		dd		0.000
11	FUNCTION2 PFK	29.58	3.090e5					19.5	YES		dd		0.000
12	FUNCTION2 PFK	29.52	2.750e5					21.8	YES		dd		0.000
13	FUNCTION2 PFK	29.39	4.070e5					23.3	YES		dd		0.000
14	FUNCTION2 PFK	29.28	4.078e5					25.5	YES		dd		0.000
15	FUNCTION2 PFK	29.18	3.023e5					27.3	YES		dd		0.000
16	FUNCTION2 PFK	29.14	2.357e5					29.1	YES		dd		0.000
17	FUNCTION2 PFK	28.99	6.311e5					30.4	YES		dd		0.000
18	FUNCTION2 PFK	28.92	2.637e5					32.6	YES		dd		0.000
19	FUNCTION2 PFK	28.71	1.202e6					36.5	YES		dd		0.000
20	FUNCTION2 PFK	32.81	9.753e3					1.3	NO		bb		0.000
21	FUNCTION2 PFK	32.42	4.488e3					1.0	NO		db		0.000
22	FUNCTION2 PFK	32.38	3.779e3					1.0	NO		bd		0.000
23	FUNCTION2 PFK	31.96	1.738e4					2.2	NO		bb		0.000
24	FUNCTION2 PFK	31.88	6.239e3					1.5	NO		db		0.000
25	FUNCTION2 PFK	31.82	6.444e3					1.4	NO		bd		0.000
26	FUNCTION2 PFK	31.71	6.215e3					1.3	NO		db		0.000
27	FUNCTION2 PFK	31.68	5.289e3					1.0	NO		bd		0.000
28	FUNCTION2 PFK	31.61	3.799e3					1.0	NO		bb		0.000
29	FUNCTION2 PFK	31.29	5.305e3					1.2	NO		bb		0.000
30	FUNCTION2 PFK	31.23	7.886e3					2.2	NO		bb		0.000
31	FUNCTION2 PFK	30.99	1.453e4					1.9	NO		bb		0.000
32	FUNCTION2 PFK	30.82	9.920e3					1.5	NO		bb		0.000
33	FUNCTION2 PFK	30.75	8.792e3					1.2	NO		bb		0.000
34	FUNCTION2 PFK	30.57	3.072e3					0.9	NO		bb		0.000
35	FUNCTION2 PFK	30.26	1.206e5					6.2	YES		db		0.000
36	FUNCTION2 PFK	32.91	8.369e3					1.2	NO		bb		0.000

ID: CS3R1, Name: 23020102, Date: 01-Feb-2023, Time: 10:37:16, Conditions: AUTOSPEC01, User: pk

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	36.94	1.363e3					0.5	NO		bb		0.000
2	FUNCTION3 PFK	36.89	2.597e3					0.7	NO		bb		0.000
3	FUNCTION3 PFK	36.63	5.216e4					2.1	NO		bb		0.000
4	FUNCTION3 PFK	35.98	3.727e4					3.2	YES		bb		0.000
5	FUNCTION3 PFK	35.89	8.881e3					1.2	NO		bb		0.000
6	FUNCTION3 PFK	35.60	1.234e3					0.5	NO		bb		0.000
7	FUNCTION3 PFK	34.97	3.658e3					1.5	NO		bb		0.000
8	FUNCTION3 PFK	34.76	1.198e4					1.2	NO		bb		0.000
9	FUNCTION3 PFK	34.41	7.167e5					12.6	YES		db		0.000
10	FUNCTION3 PFK	34.27	1.814e5					18.8	YES		dd		0.000
11	FUNCTION3 PFK	33.46	8.929e6					56.3	YES		dd		0.000
12	FUNCTION3 PFK	33.26	1.470e6					65.1	YES		dd		0.000
13	FUNCTION3 PFK	33.14	1.013e6					69.2	YES		dd		0.000
14	FUNCTION3 PFK	33.07	1.616e6					73.1	YES		bd		0.000
15	FUNCTION3 PFK	37.87	2.660e3					0.7	NO		bb		0.000
16	FUNCTION3 PFK	37.70	1.990e4					1.9	NO		bb		0.000
17	FUNCTION3 PFK	37.50	4.098e3					0.8	NO		bb		0.000
18	FUNCTION3 PFK	37.39	4.630e3					0.7	NO		bb		0.000
19	FUNCTION3 PFK	37.31	1.274e4					1.3	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	42.07	7.505e3					1.9	NO		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.80	5.683e3					1.8	NO		bb		
2	FUNCTION5 PFK	43.45	7.005e3					1.9	NO		bb		

ID: CS3R1, Name: 23020102, Date: 01-Feb-2023, Time: 10:37:16, Conditions: AUTOSPEC01, User: pk

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	28.15	7.677e1					2.2	NO		bb		0.000
2	FUNCTION1 HXCD...	27.41	8.186e1					1.7	NO		bb		0.000
3	FUNCTION1 HXCD...	26.21	8.899e1					2.8	NO		bb		0.000
4	FUNCTION1 HXCD...	24.48	1.408e2					2.9	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HPCD...	25.28	8.635e1					2.2	NO		bb		0.000
2	FUNCTION1 HPCD...	24.58	7.600e1					1.7	NO		bb		0.000
3	FUNCTION1 HPCD...	22.57	1.471e2					3.3	YES		bb		0.000

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.97	1.041e2					2.4	NO		bb		0.000
2	FUNCTION2 HPCD...	31.62	1.168e2					2.5	NO		bb		0.000
3	FUNCTION2 HPCD...	31.26	1.928e2					4.9	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.10	7.435e1					2.4	NO		bb		0.000
2	FUNCTION3 OCDPE	35.85	7.444e1					2.1	NO		bb		0.000
3	FUNCTION3 OCDPE	35.30	9.337e1					2.3	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	42.04	7.794e1					1.9	NO		bb		0.000
2	FUNCTION4 NCDPE	41.07	7.754e1					1.8	NO		bb		0.000
3	FUNCTION4 NCDPE	39.75	8.441e1					2.5	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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ID: CS3R1, Name: 23020102, Date: 01-Feb-2023, Time: 10:37:16, Conditions: AUTOSPEC01, User: pk

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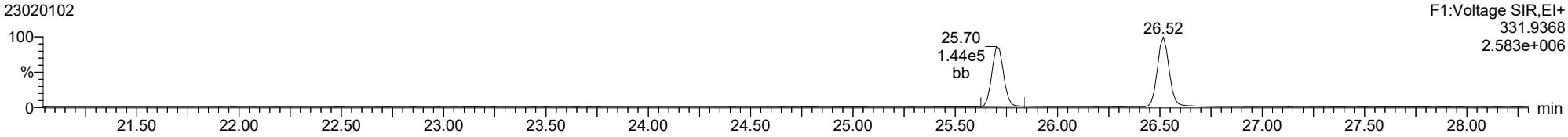

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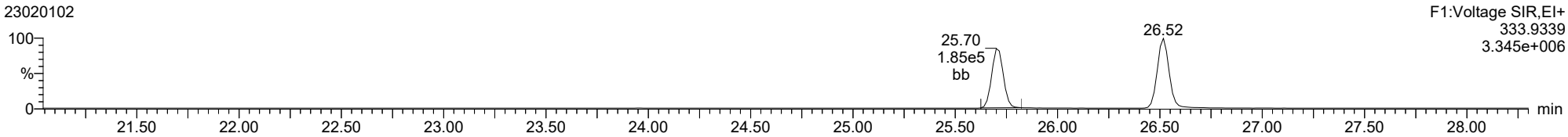

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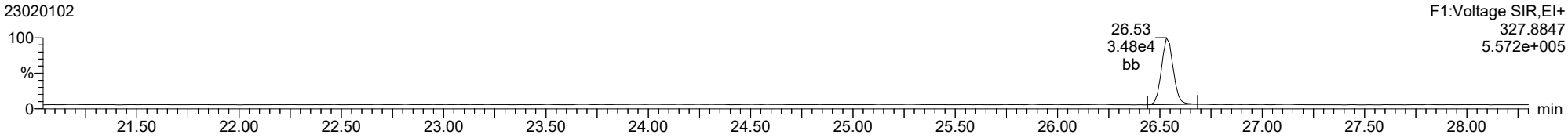

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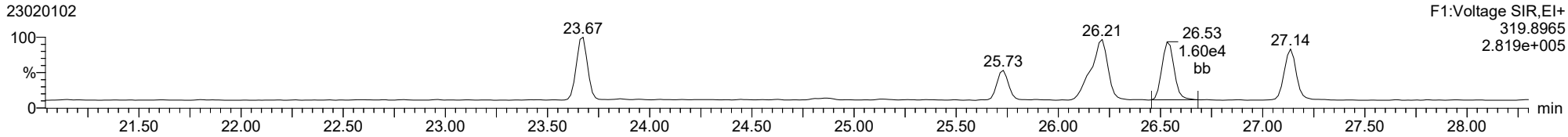

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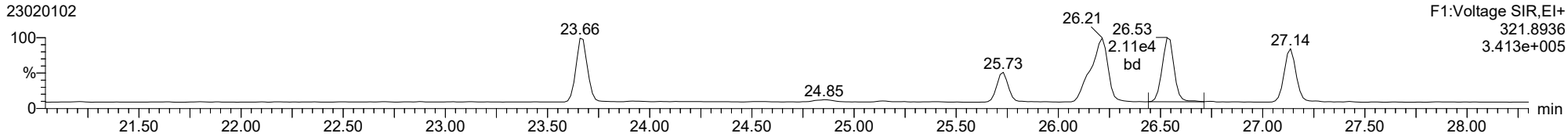

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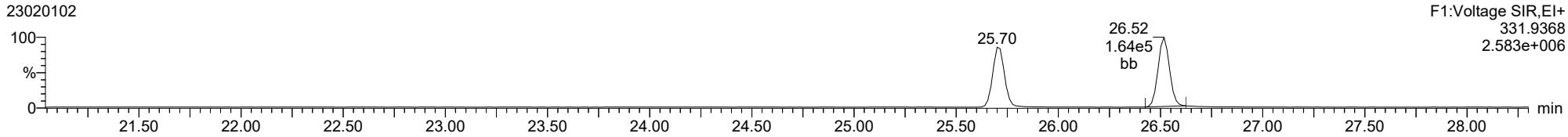

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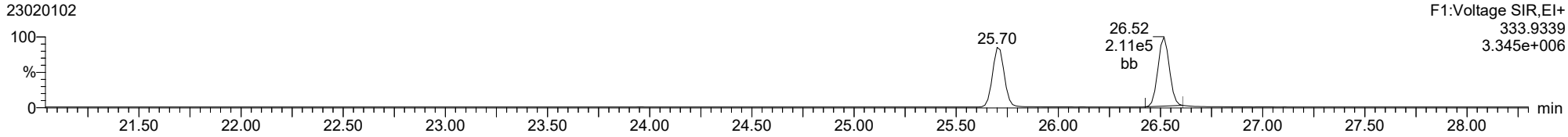

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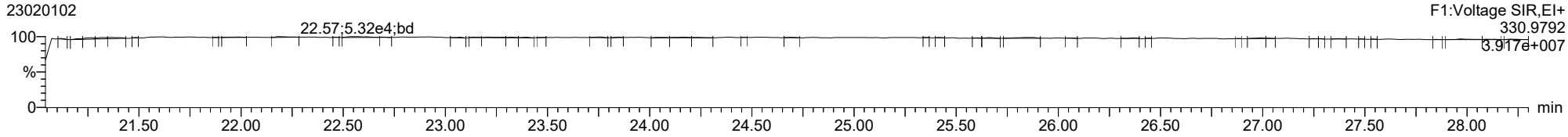

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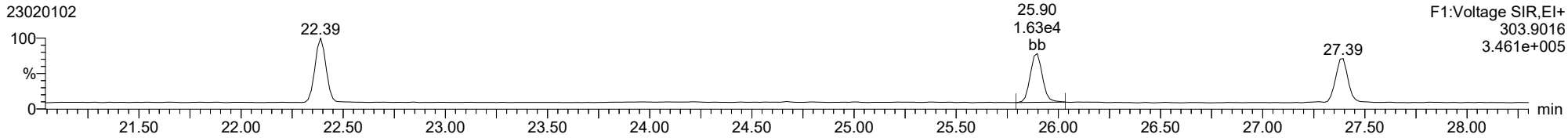

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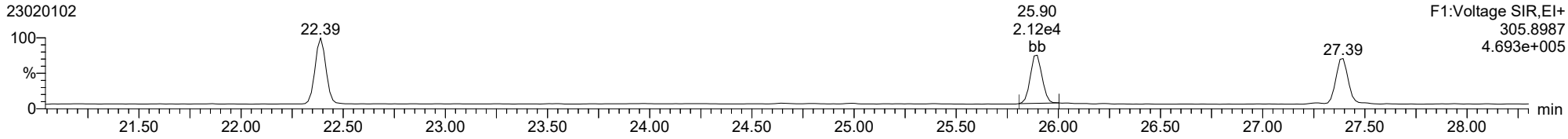

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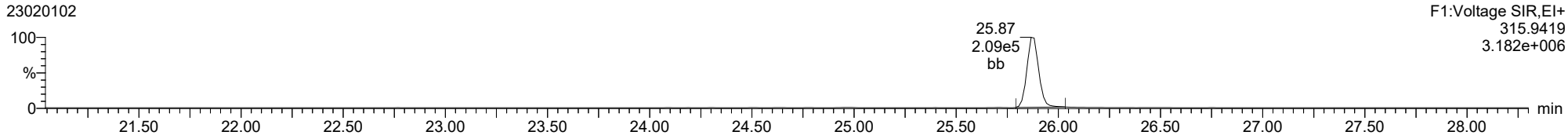

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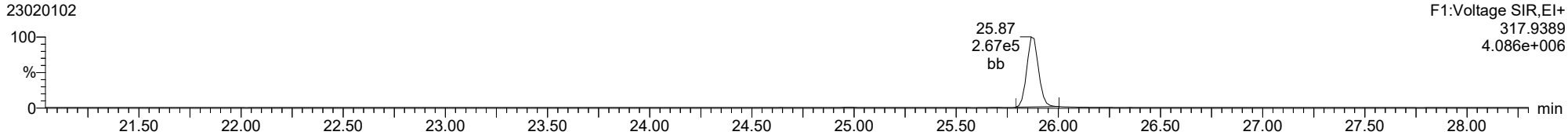
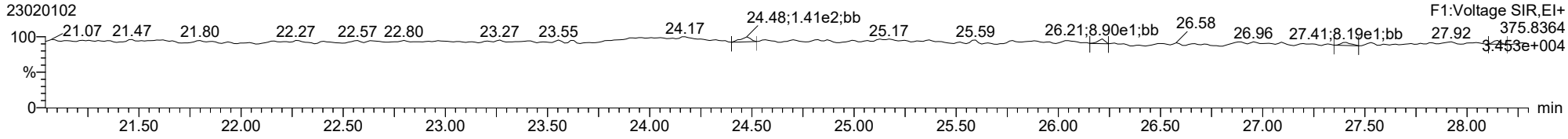


FUNCTION1 HXCDPE



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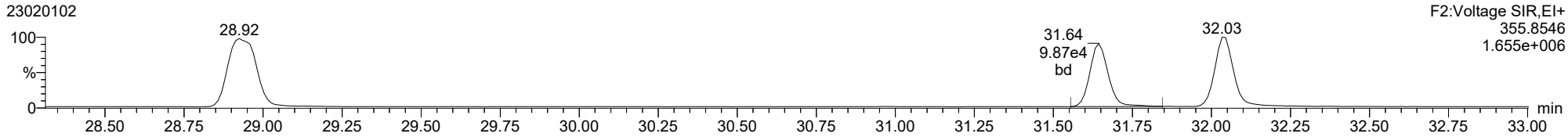

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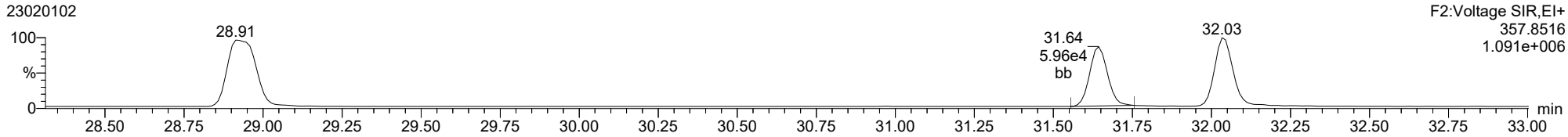

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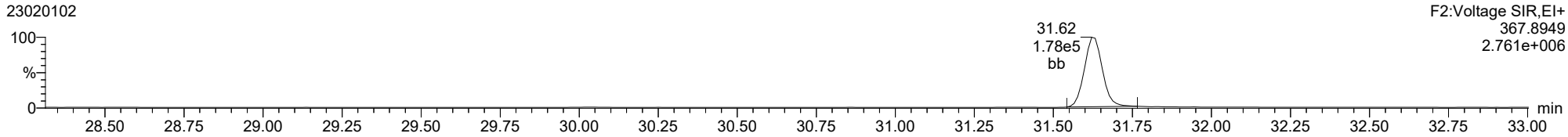

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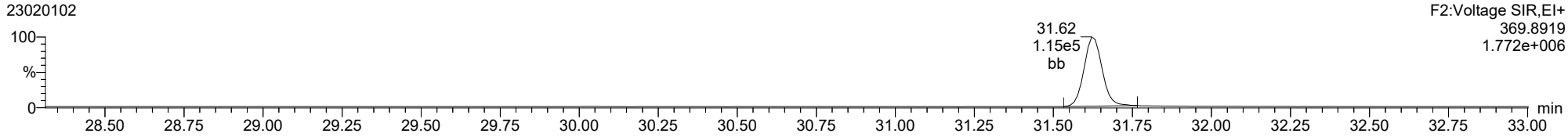

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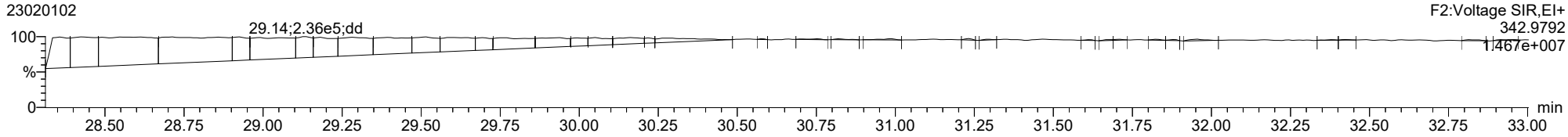

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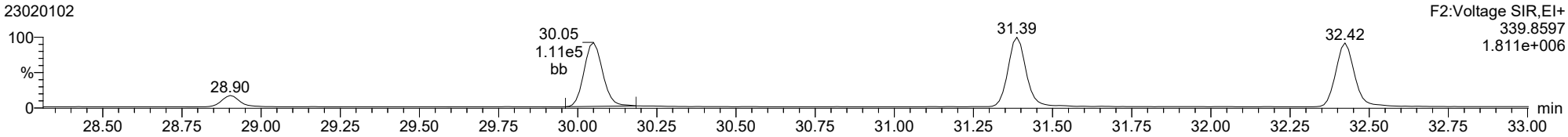

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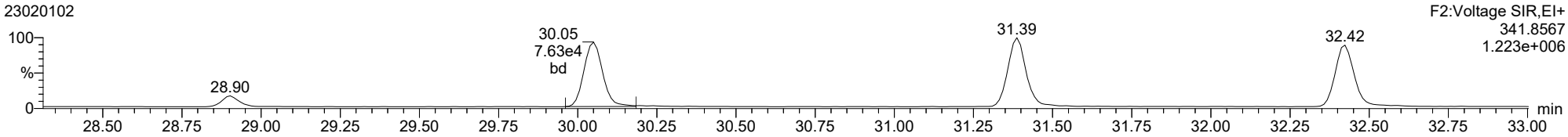

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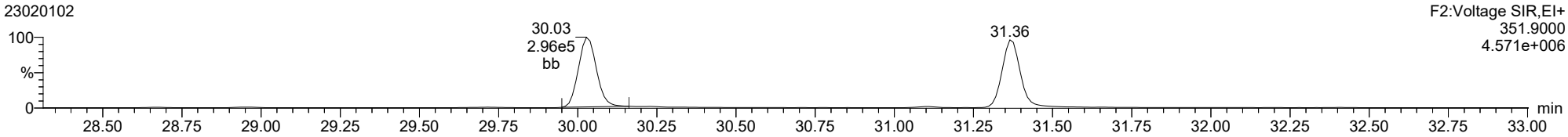

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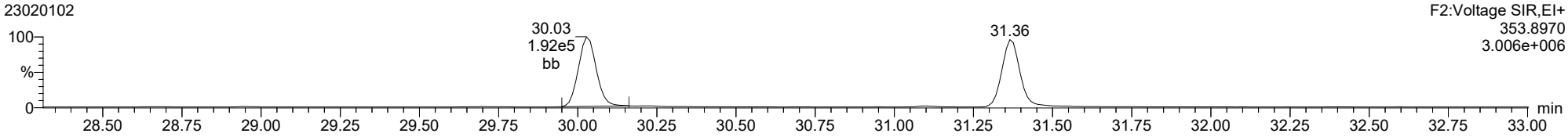

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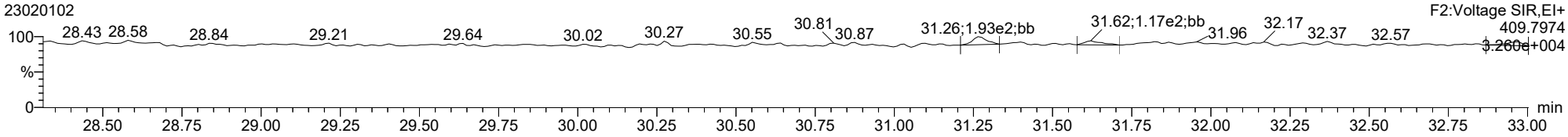

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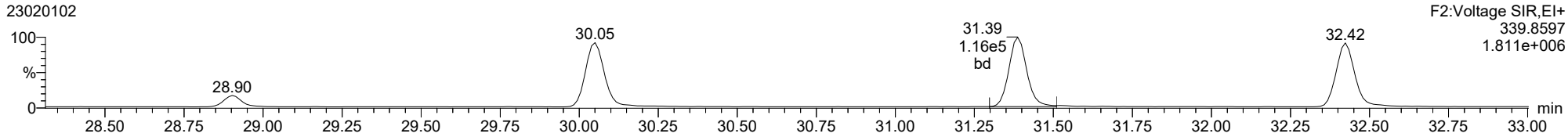

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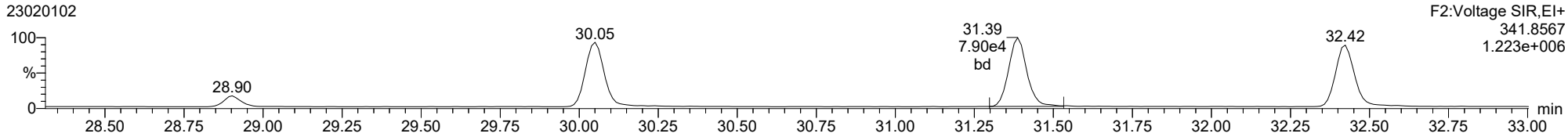

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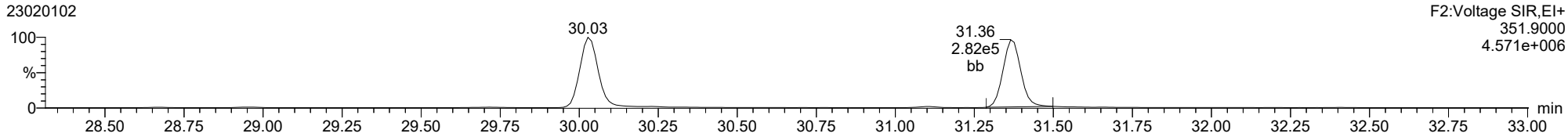

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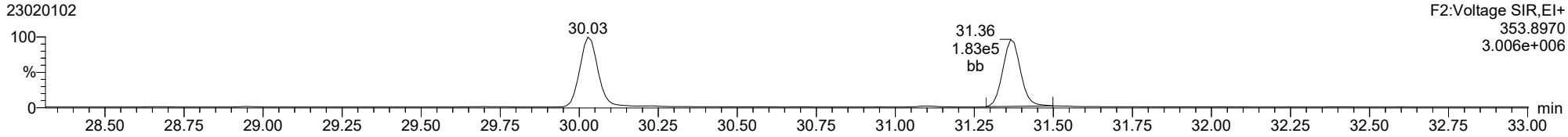

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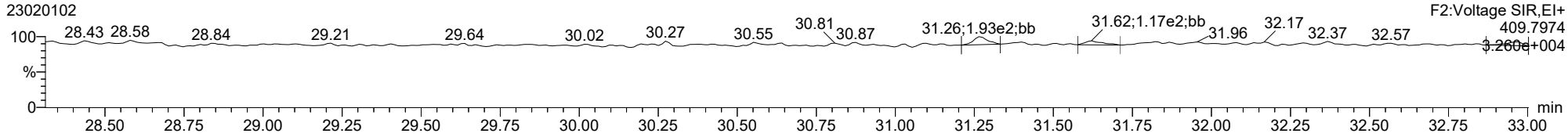

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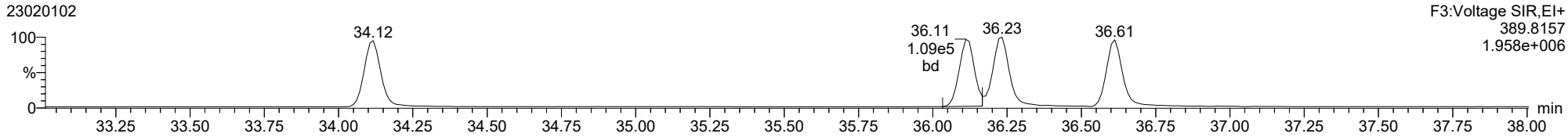
123478-HxCDD



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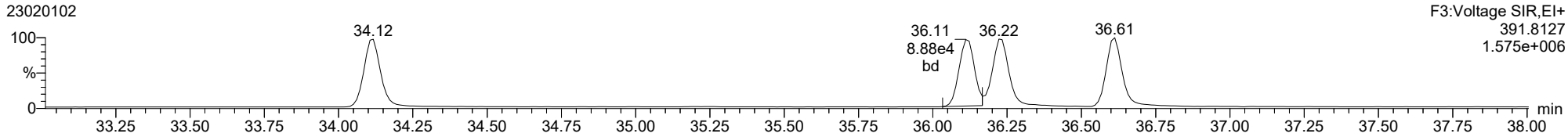

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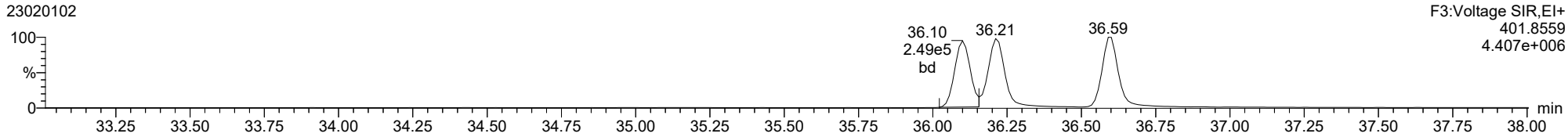

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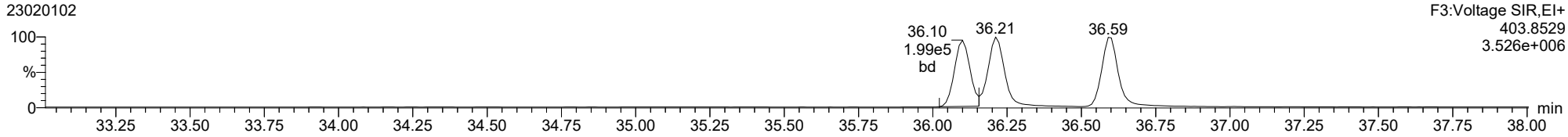

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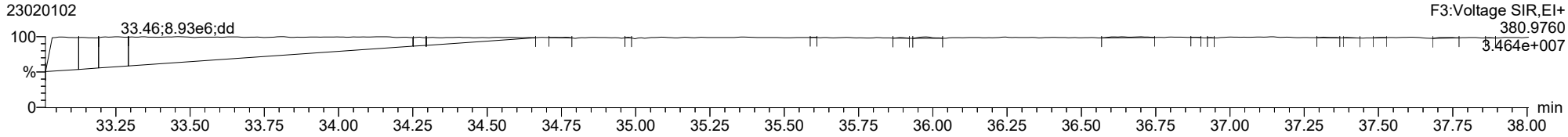

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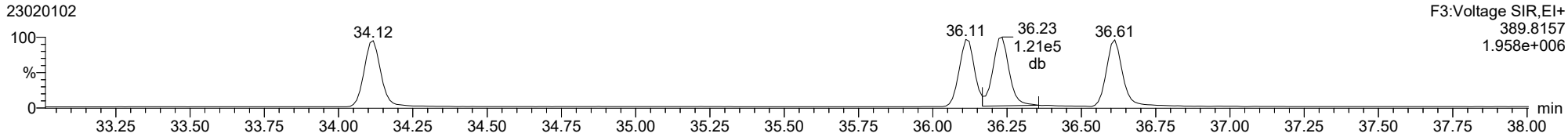

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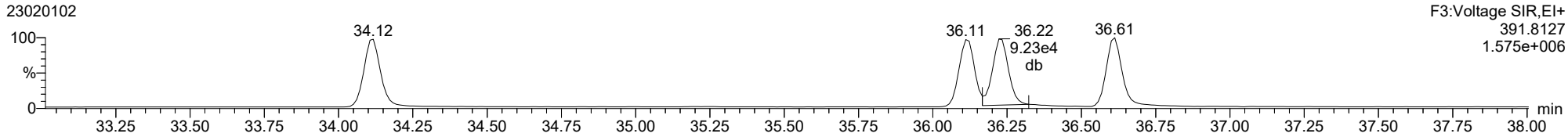

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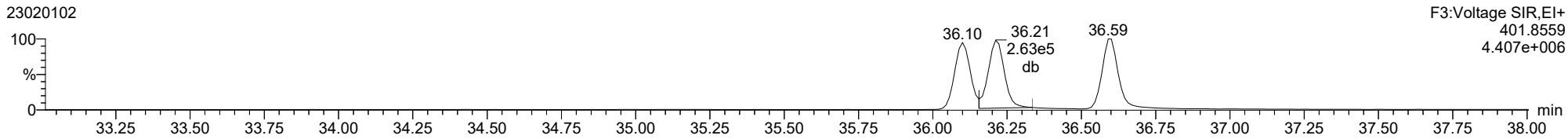

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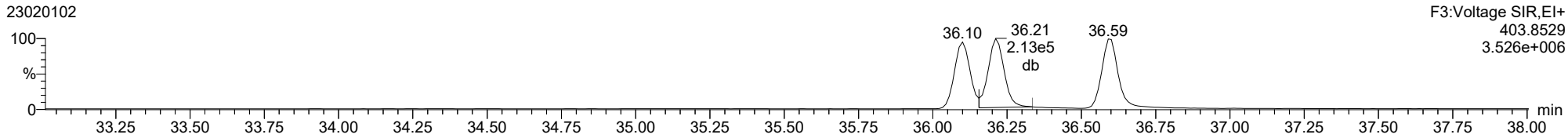

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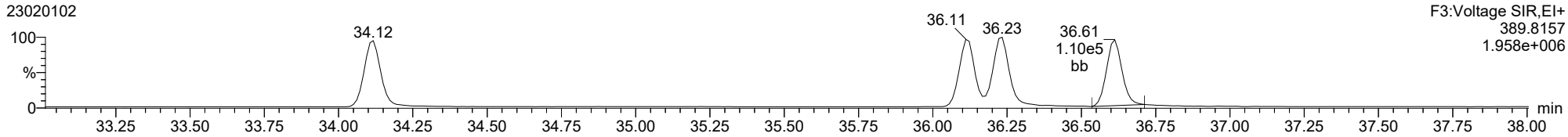

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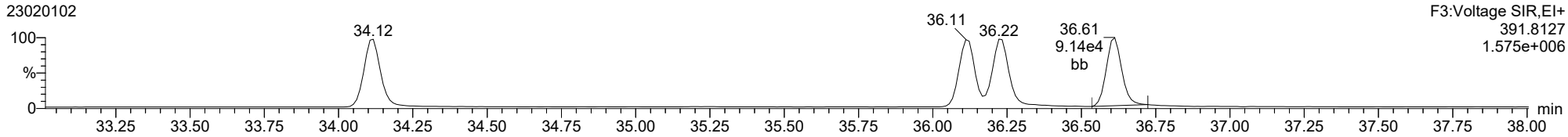

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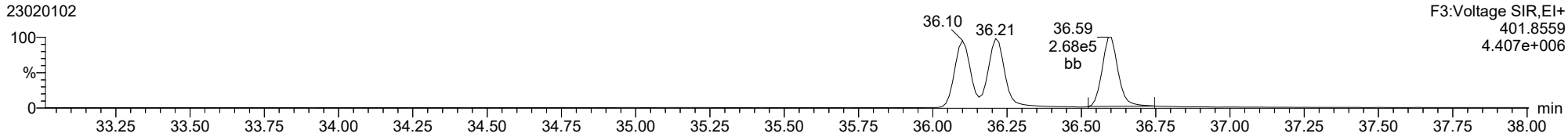

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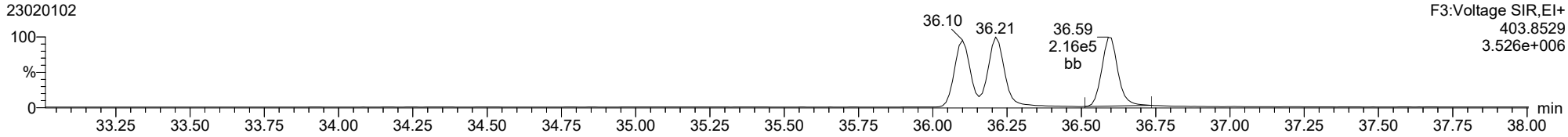

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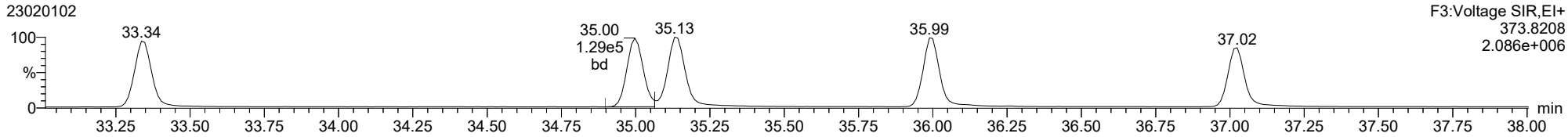

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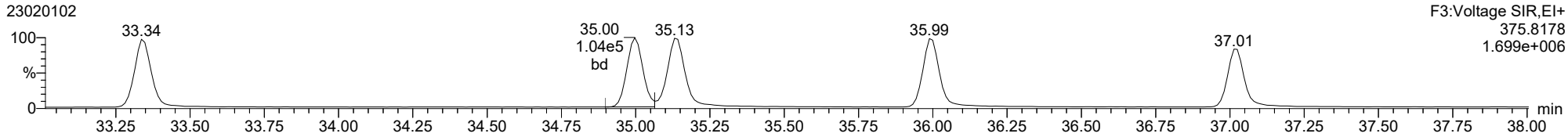

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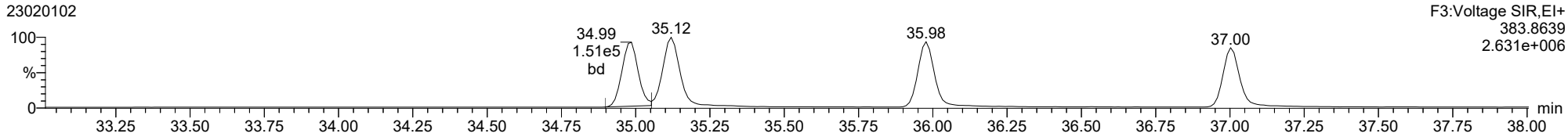

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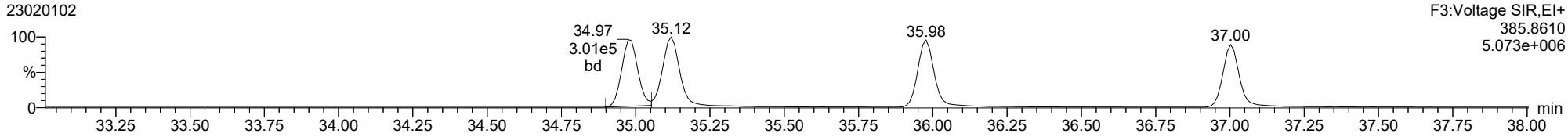

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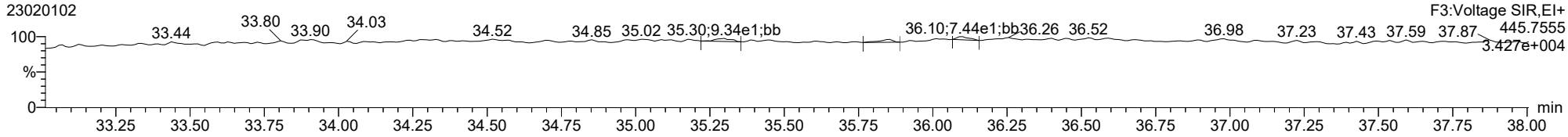

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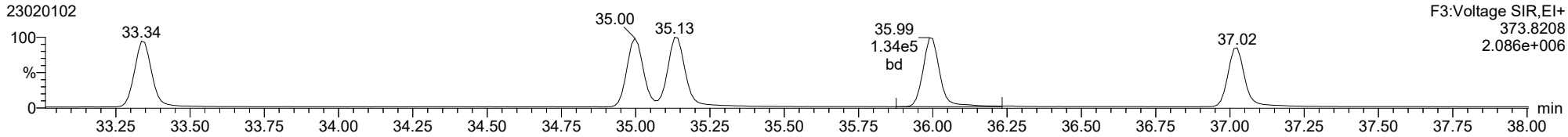

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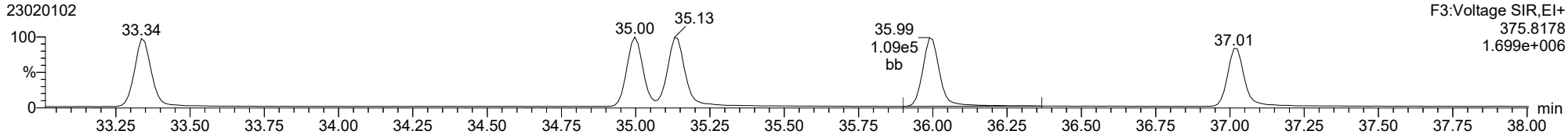

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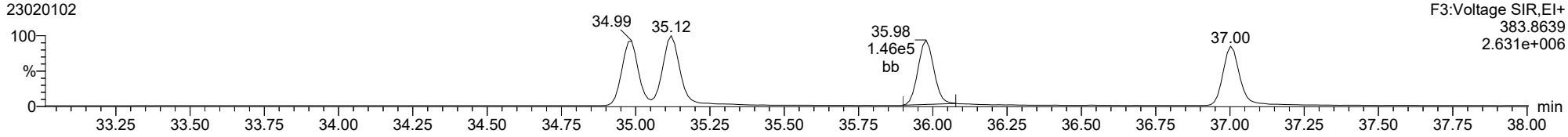

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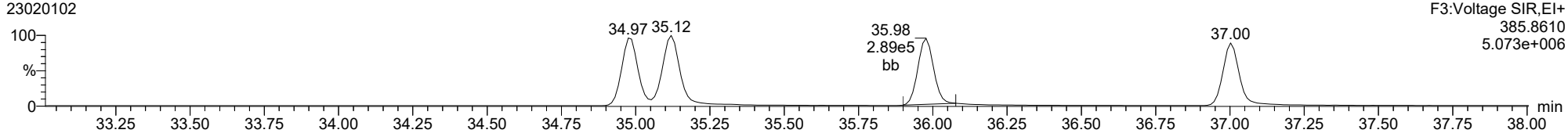

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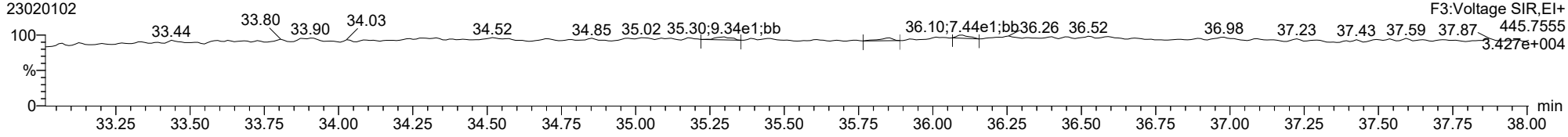

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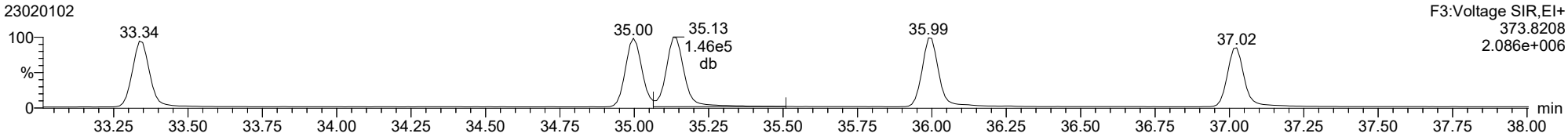

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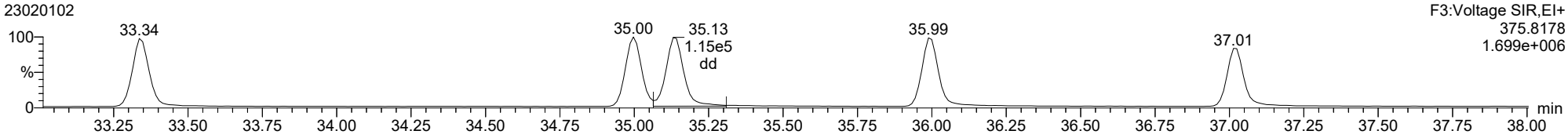

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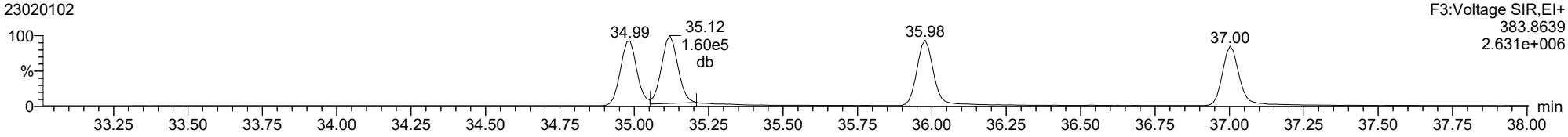

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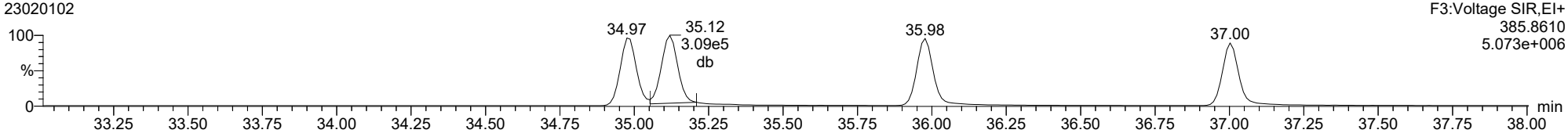

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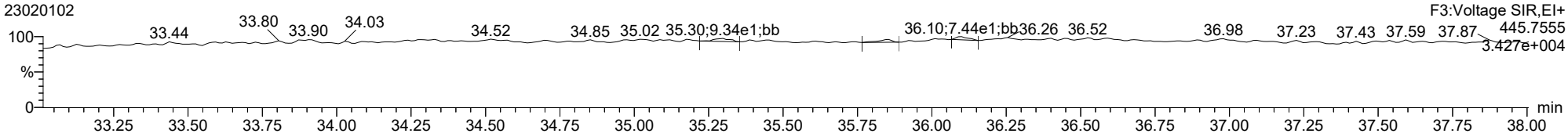

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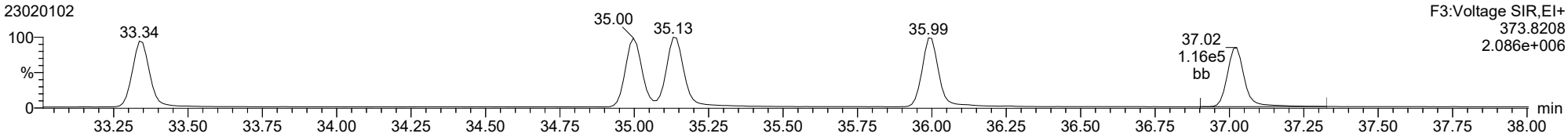

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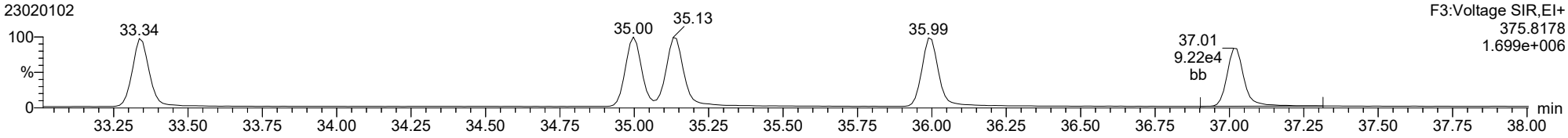

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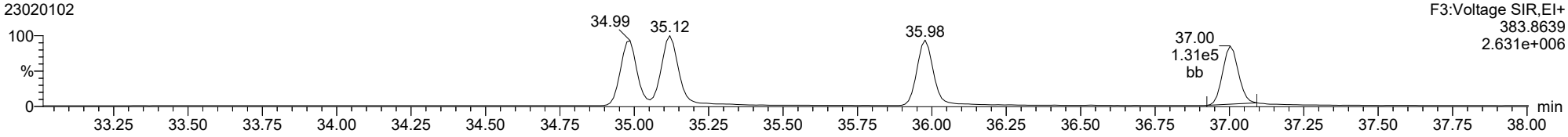

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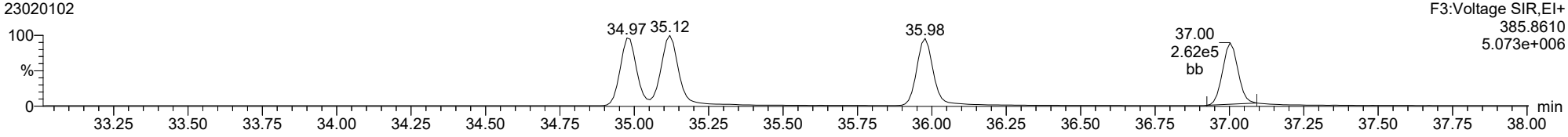

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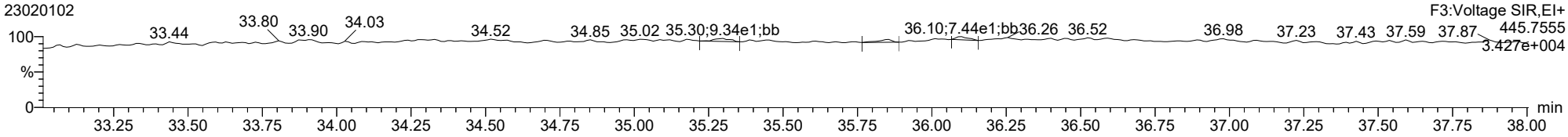

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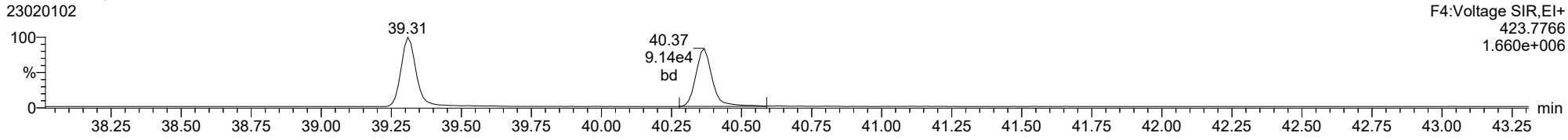

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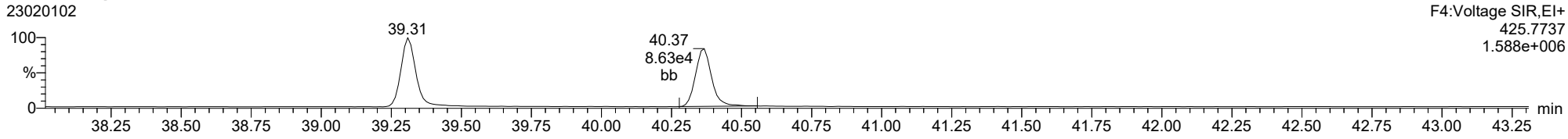

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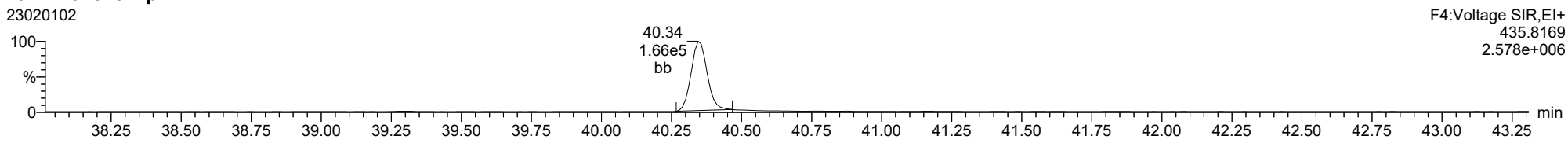

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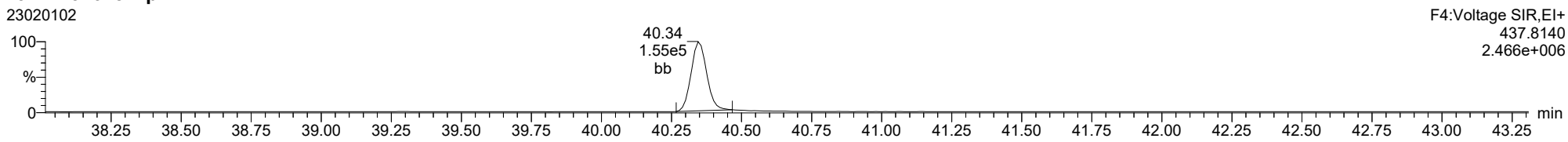

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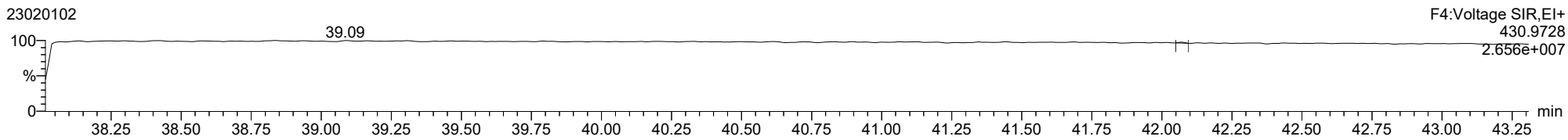

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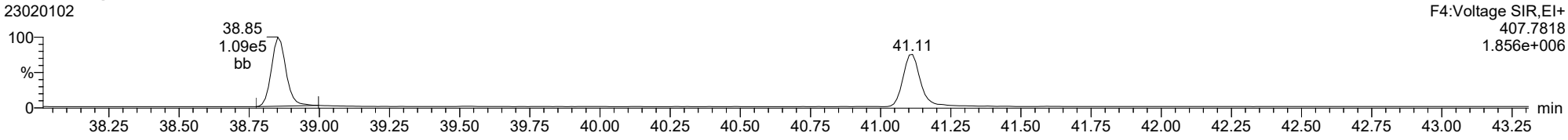

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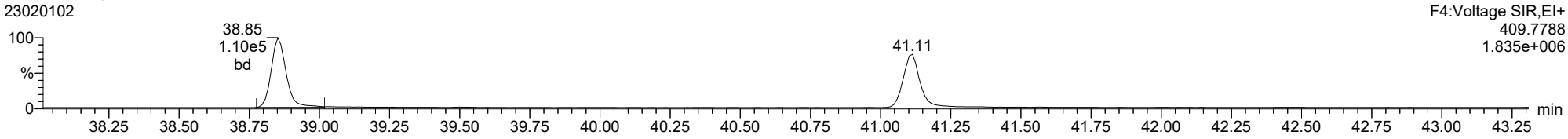

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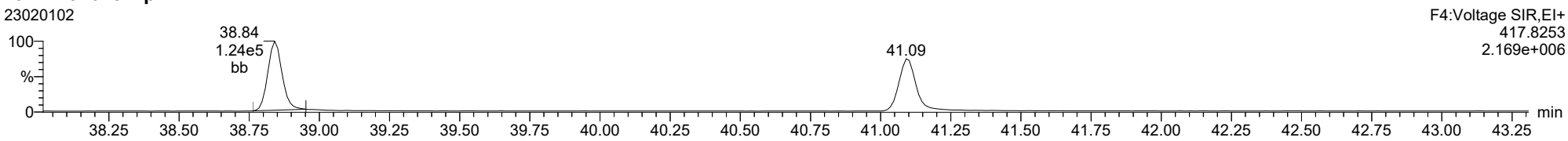

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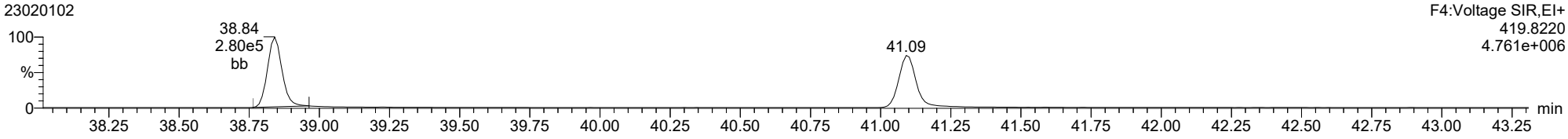

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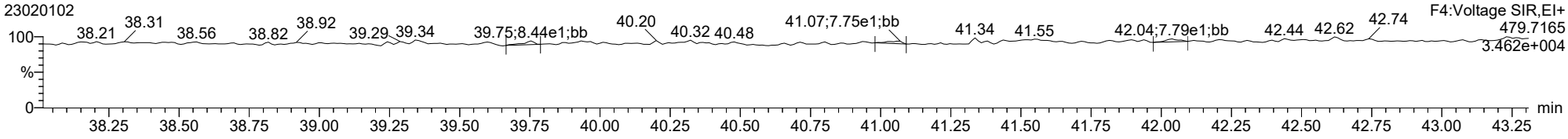

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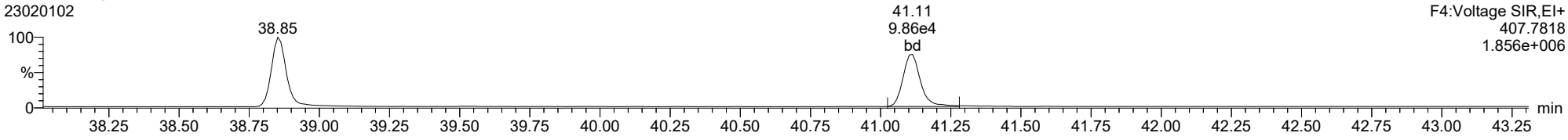

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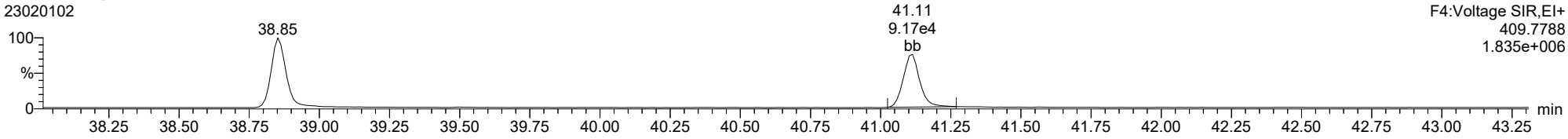

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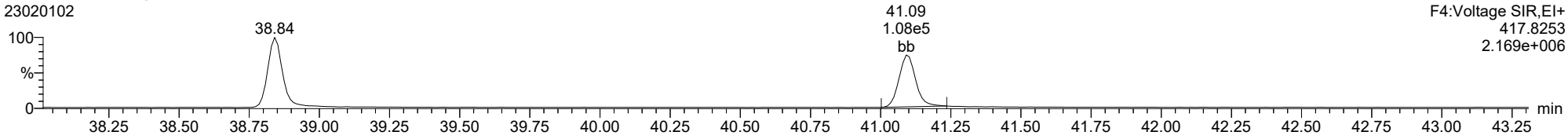

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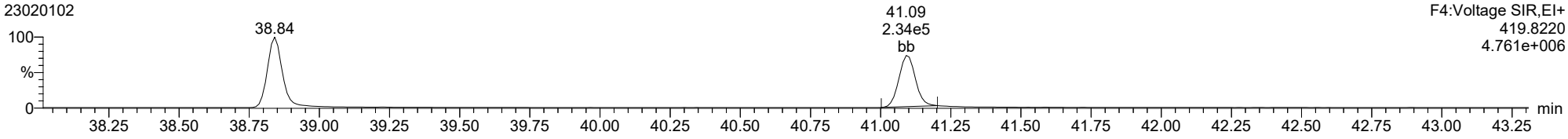

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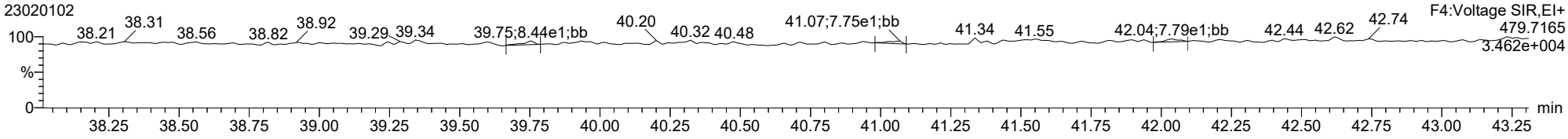

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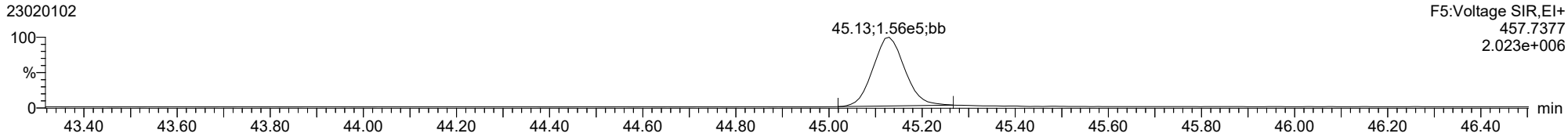

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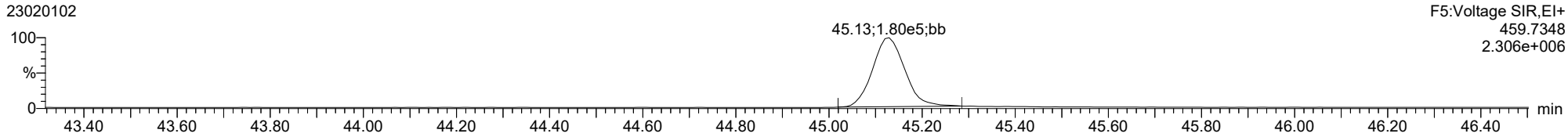

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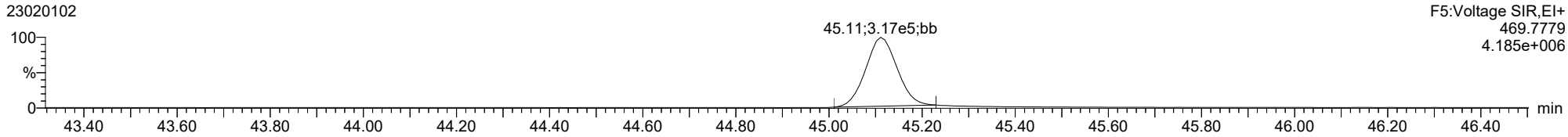

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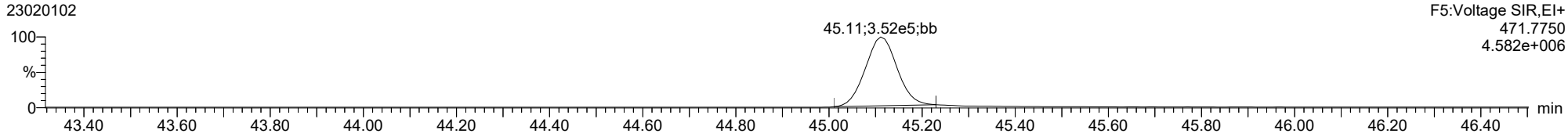

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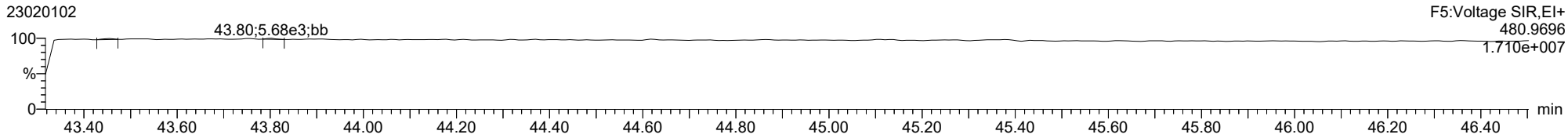

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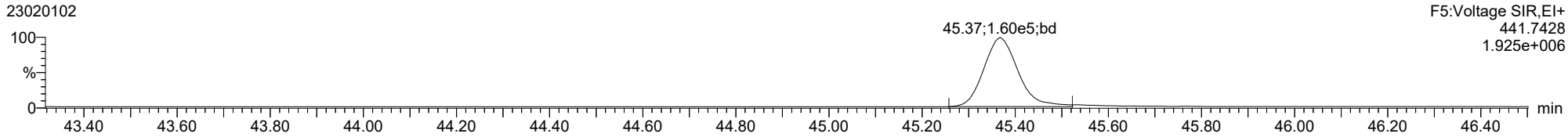

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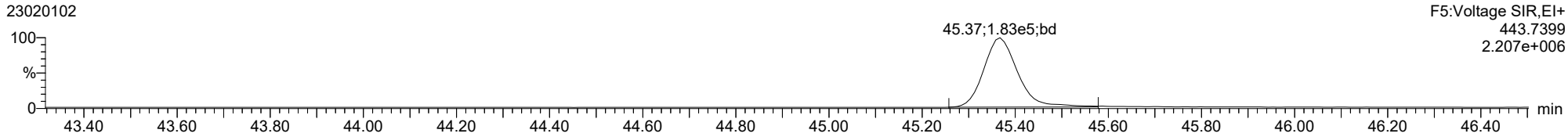

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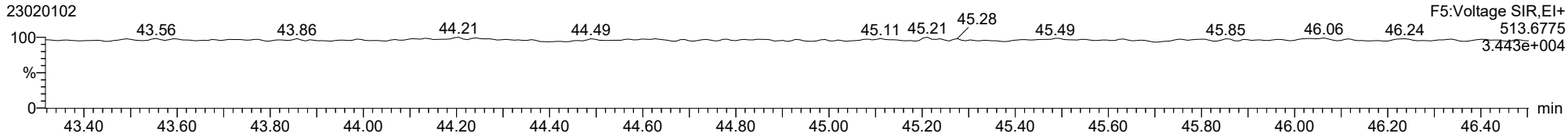

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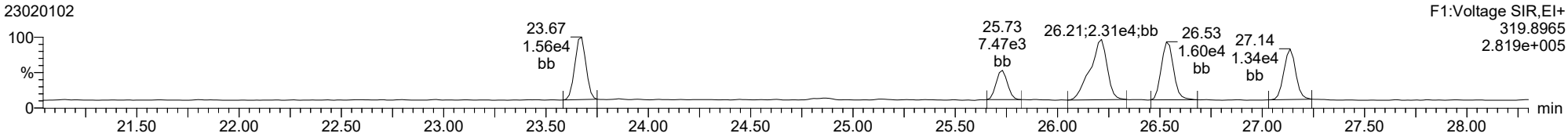
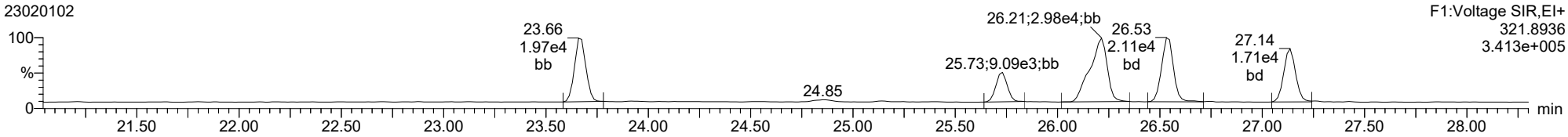
Total-tetradioxins



Total-tetradioxins



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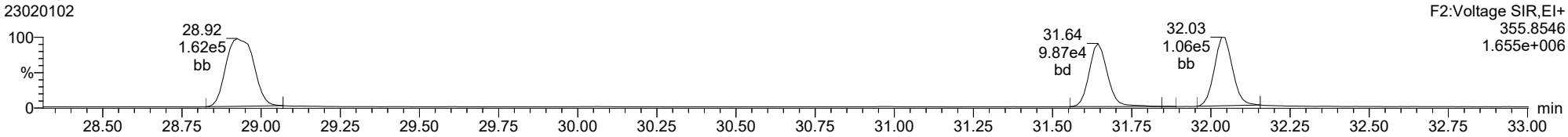

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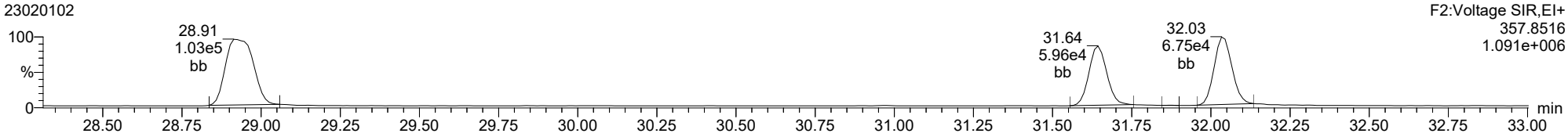

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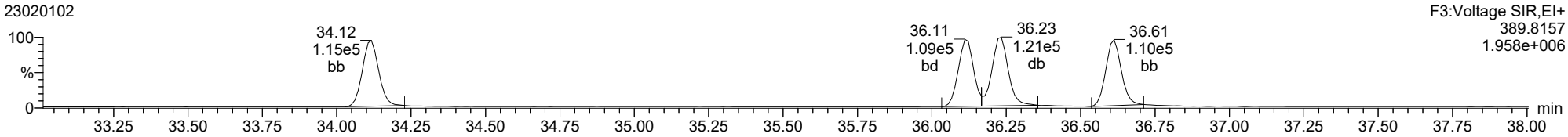

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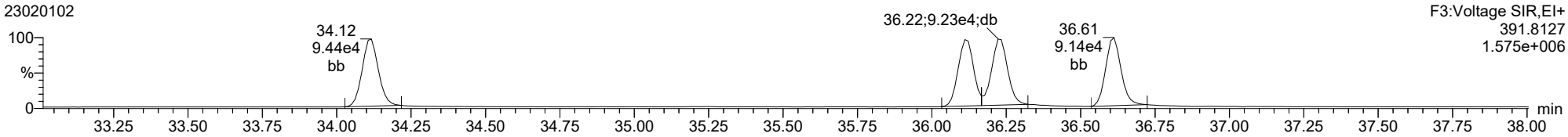

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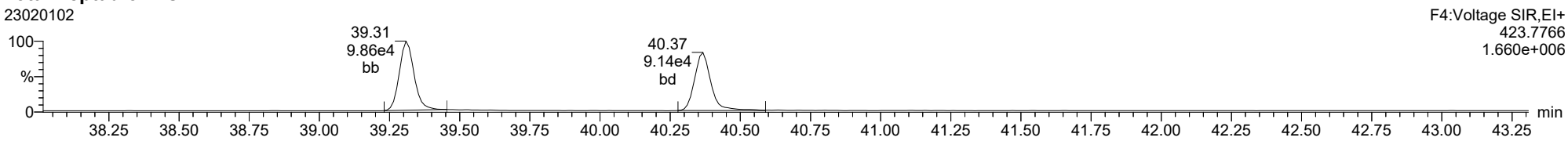

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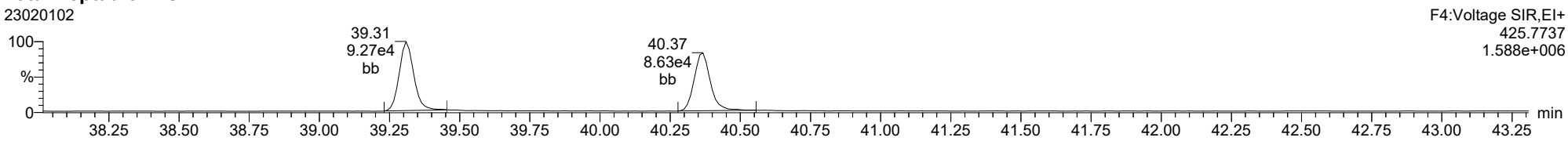

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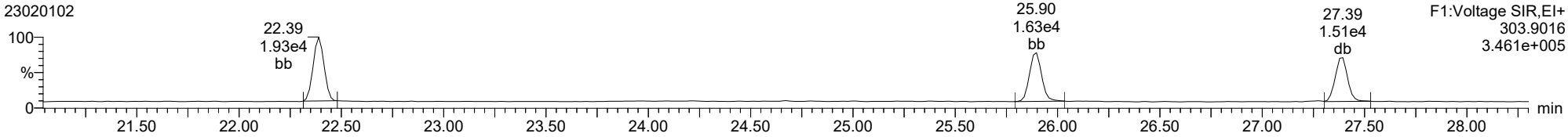

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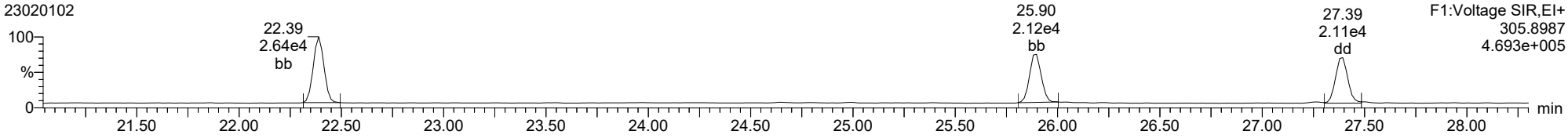

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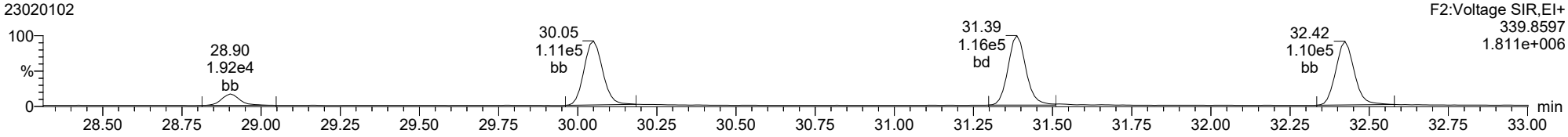

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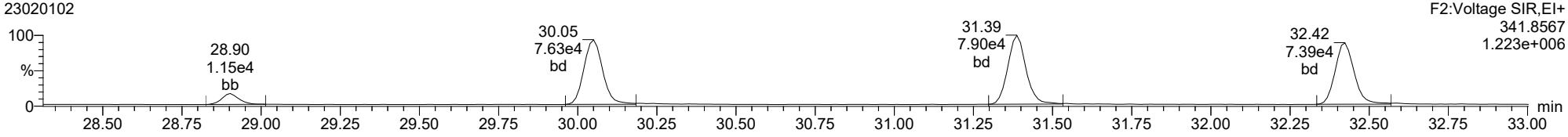

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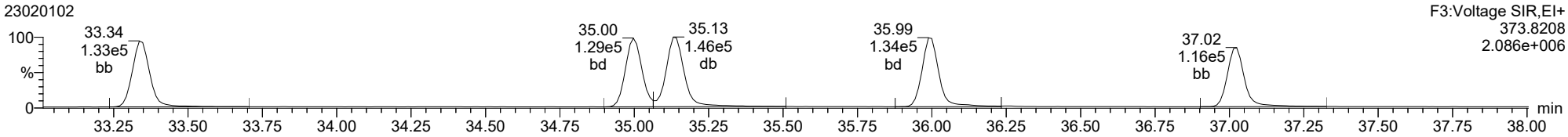

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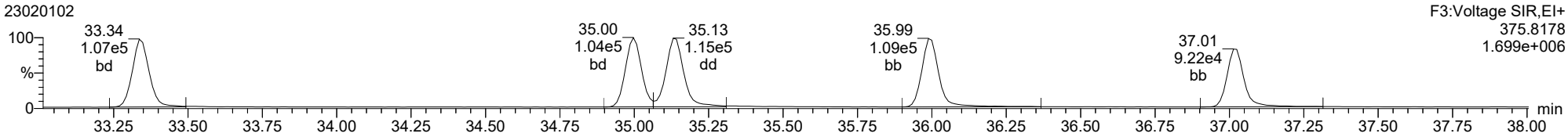

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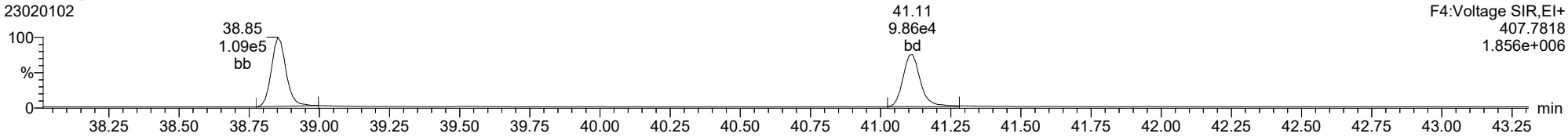

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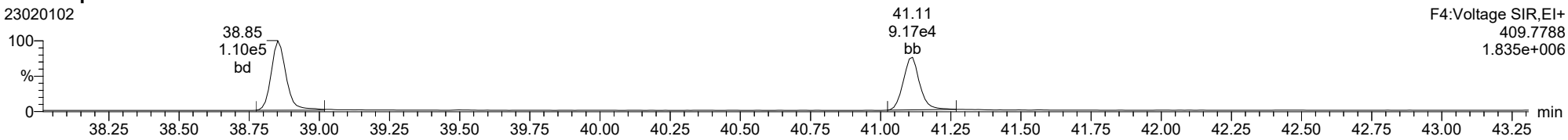

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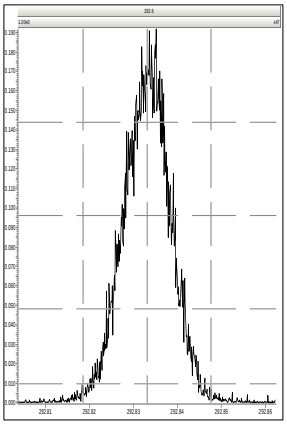

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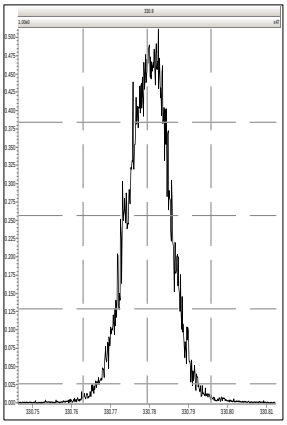

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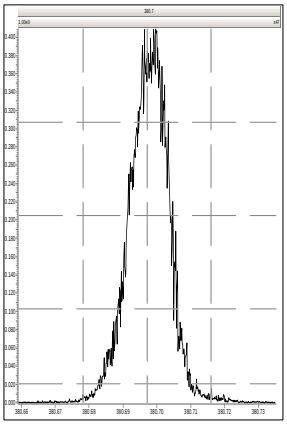

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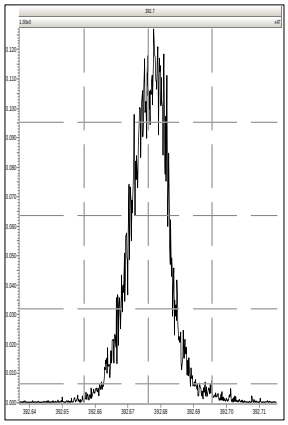

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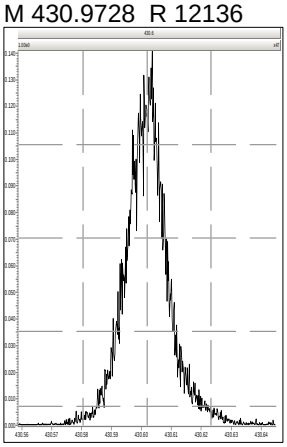

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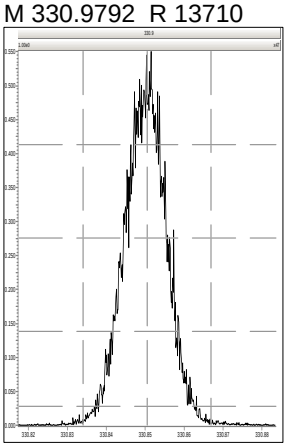

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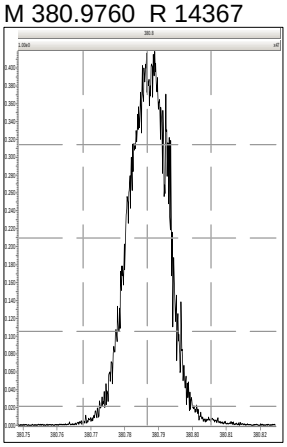

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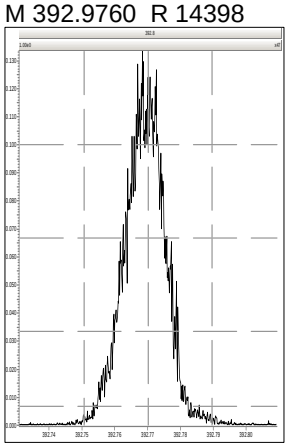

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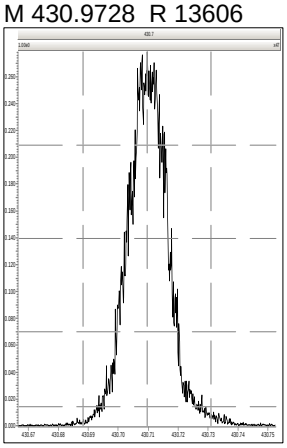

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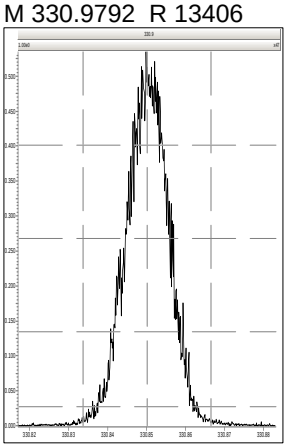

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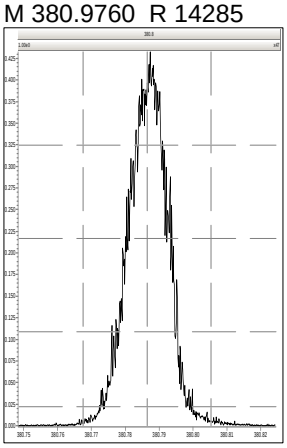

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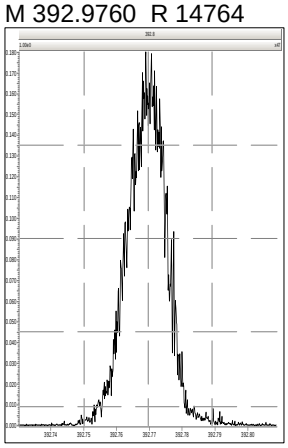

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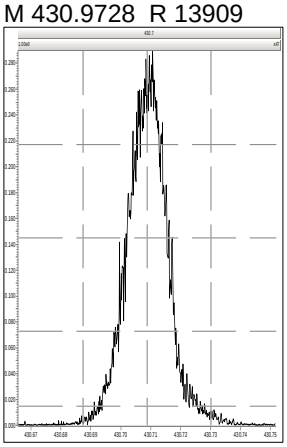

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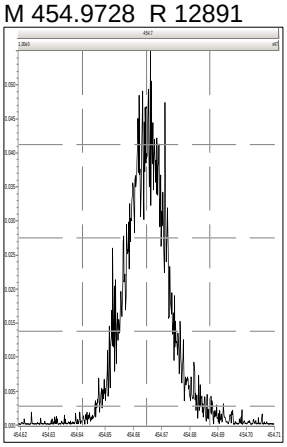
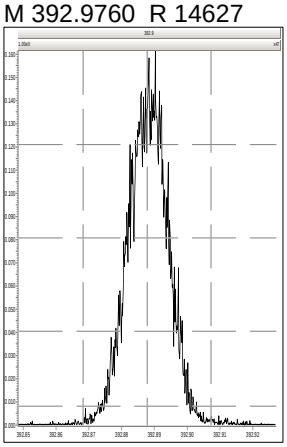


M 392.9760 R 14627



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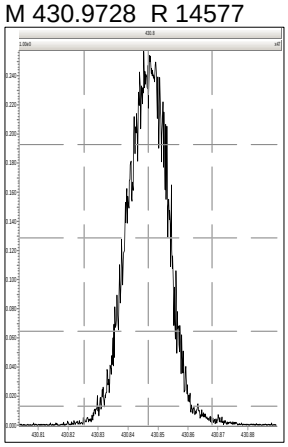

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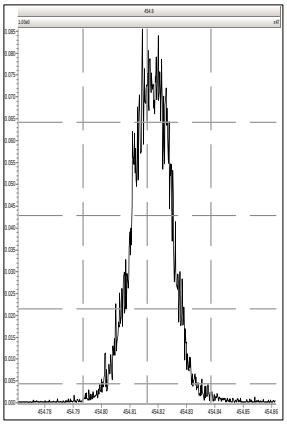

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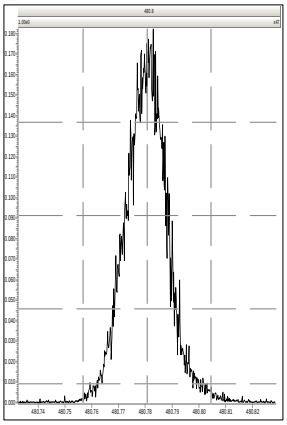
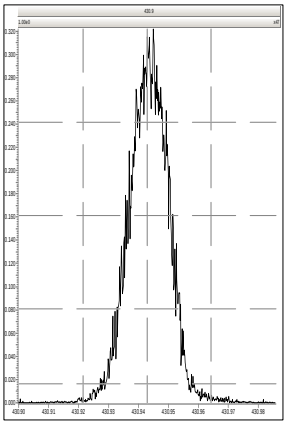


M 430.9728 R 15291



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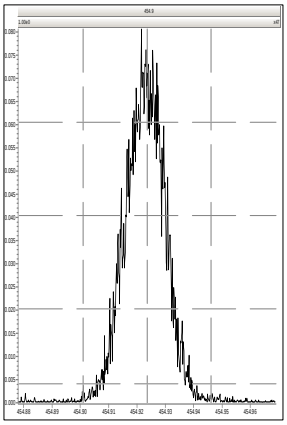

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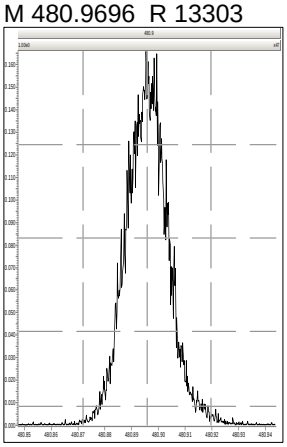

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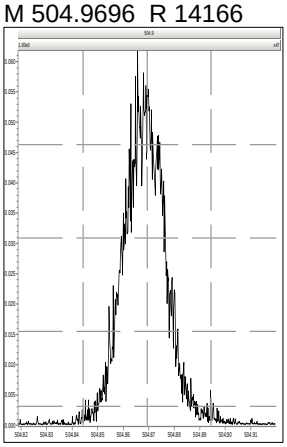

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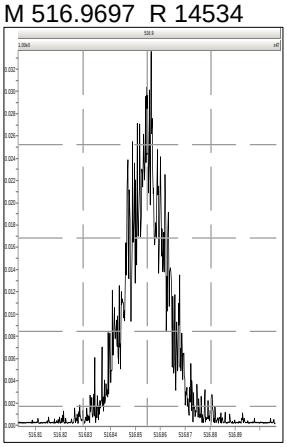

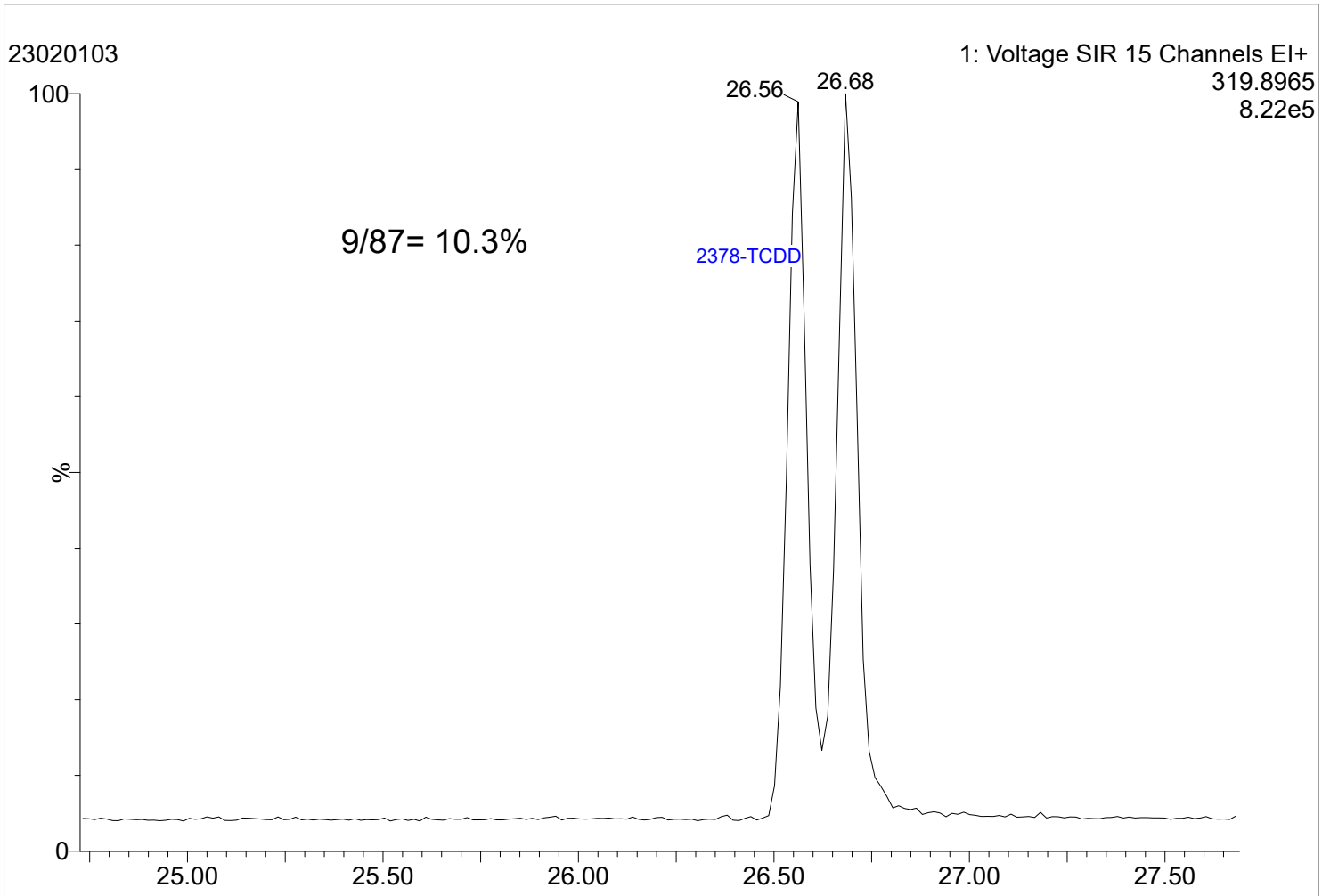
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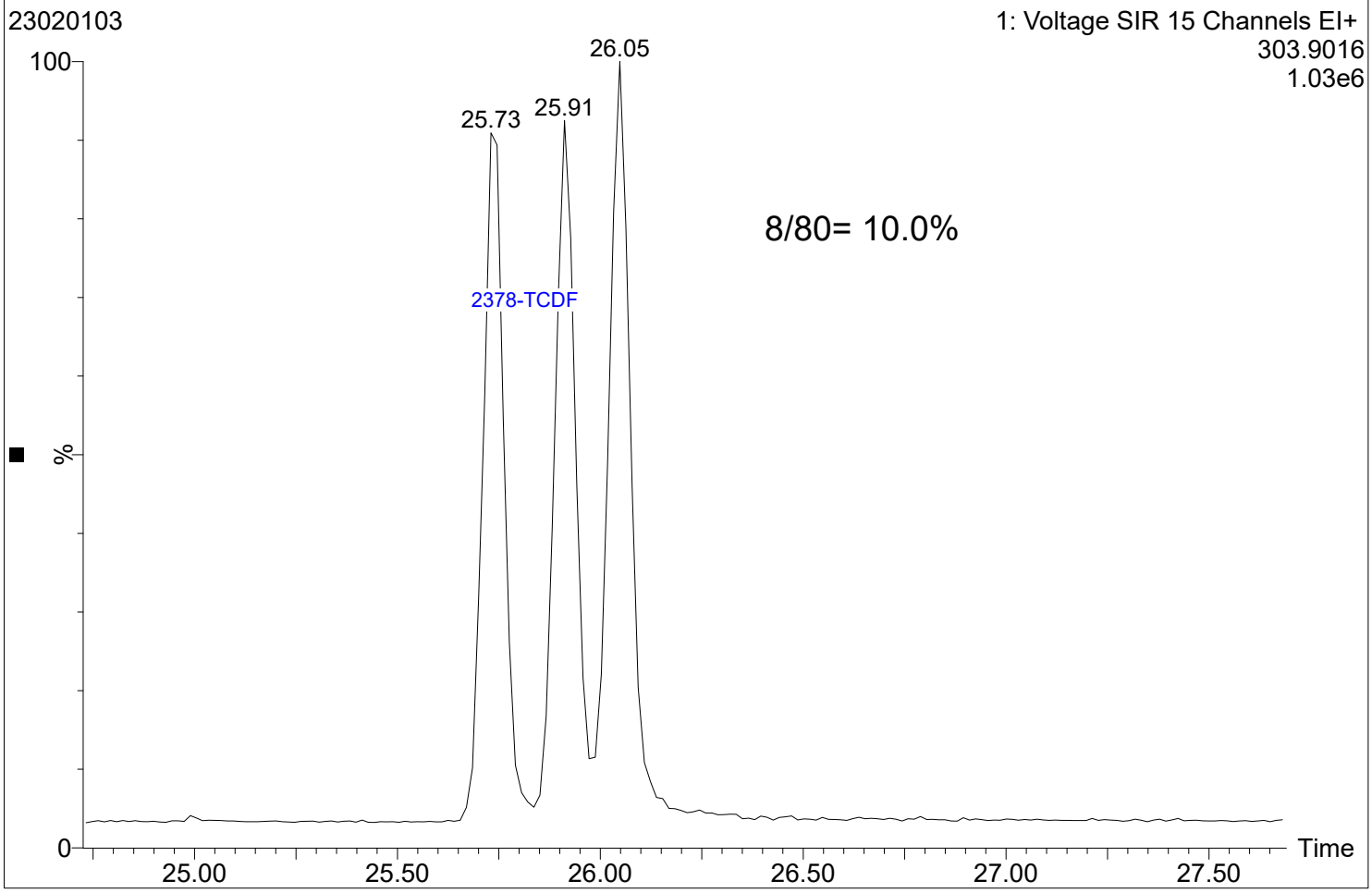
1: Voltage SIR 15 Channels EI+
319.8965
8.22e5
100
26.56
26.68
9/87= 10.3%
2378-TCDD
%
0
25.00
25.50
26.00
26.50
27.00
27.50


23020103
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1.03e6
100
26.05
25.73
25.91
8/80= 10.0%
2378-TCDF
%
0
Time
25.00
25.50
26.00
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Dataset: T:\Autospec\Processed Data Batch\230201ICIH.qld
Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
Printed: Friday, February 03, 2023 10:36:56 Pacific Standard Time

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ID: CSLCR, Name: 23020104, Date: 01-Feb-2023, Time: 14:39:51, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF					0.876		0.770	1080	1324								
12378-PeCDF	30.038	1.000	4.271e3	3.157e3	0.845	1.353	1.550	952	1114	6.59e4	5.26e4	69.3	47.2	NO	bb	bd	0.524
23478-PeCDF	31.374	1.000	4.511e3	2.751e3	0.911	1.640	1.550	952	1114	6.73e4	4.18e4	70.7	37.5	NO	bb	bb	0.494
123478-HxCDF	34.995	1.001	4.104e3	3.031e3	1.182	1.354	1.240	1010	1011	5.83e4	4.33e4	57.7	42.8	NO	bd	bd	0.507
234678-HxCDF	35.987	1.000	3.766e3	3.106e3	1.229	1.212	1.240	1010	1011	5.67e4	5.22e4	56.2	51.6	NO	bb	bb	0.497
123678-HxCDF	35.129	1.000	4.222e3	3.339e3	1.248	1.264	1.240	1010	1011	6.34e4	4.53e4	62.8	44.8	NO	db	db	0.502
123789-HxCDF	37.012	1.000	3.644e3	2.921e3	1.187	1.248	1.240	1010	1011	5.58e4	4.74e4	55.3	46.9	NO	bb	bb	0.543
1234678-HpCDF	38.850	1.000	3.896e3	3.656e3	1.204	1.066	1.050	999	874	7.14e4	6.60e4	71.5	75.5	NO	bb	bb	0.550
1234789-HpCDF	41.101	1.000	3.001e3	3.100e3	1.165	0.968	1.050	999	874	4.75e4	4.72e4	47.6	54.0	NO	bb	bb	0.533
OCDF	45.376	1.006	5.786e3	6.873e3	1.186	0.842	0.890	933	1403	7.23e4	8.24e4	77.5	58.8	NO	bb	bd	1.268
2378-TCDD					1.236		0.770	1059	950								
12378-PeCDD	31.642	1.001	3.215e3	2.188e3	1.087	1.469	1.550	1079	785	5.52e4	3.24e4	51.2	41.3	NO	bd	bb	0.496
123478-HxCDD	36.109	1.000	2.827e3	2.333e3	0.987	1.212	1.240	1001	800	4.34e4	4.15e4	43.4	51.9	NO	dd	bd	0.497
123678-HxCDD	36.221	1.000	3.387e3	2.724e3	1.021	1.243	1.240	1001	800	5.33e4	4.23e4	53.3	52.9	NO	db	db	0.556
123789-HxCDD	36.611	1.011	2.961e3	2.378e3	0.985	1.245	1.240	1001	800	5.48e4	3.89e4	54.8	48.6	NO	bb	bb	0.509
1234678-HpCDD	40.354	1.000	3.173e3	3.384e3	1.253	0.938	1.050	1384	648	4.91e4	5.67e4	35.5	87.6	NO	bb	bb	0.614
OCDD					1.103		0.890	865	2890								
13C-2378-TCDF	25.867	1.007	8.880e5	1.123e6	1.768	0.791	0.770	2432	2065	1.34e7	1.70e7	5499.3	8229.7	NO	bb	bb	101.483
13C-12378-PeCDF	30.026	1.168	1.020e6	6.593e5	1.527	1.547	1.550	4351	2458	1.57e7	1.01e7	3618.6	4108.9	NO	bb	bb	98.114
13C-23478-PeCDF	31.363	1.220	9.713e5	6.405e5	1.466	1.516	1.550	4351	2458	1.47e7	9.63e6	3385.5	3917.5	NO	bb	bb	98.077
13C-123478-HxCDF	34.973	0.956	3.987e5	7.926e5	1.054	0.503	0.510	2002	3102	6.44e6	1.29e7	3217.2	4143.2	NO	bd	bd	100.084
13C-123678-HxCDF	35.118	0.960	4.078e5	7.990e5	1.080	0.510	0.510	2002	3102	6.70e6	1.31e7	3346.6	4215.9	NO	db	db	98.911
13C-234678-HxCDF	35.976	0.983	3.811e5	7.451e5	1.014	0.512	0.510	2002	3102	6.35e6	1.23e7	3171.4	3951.0	NO	bb	bb	98.285
13C-123789-HxCDF	37.001	1.011	3.510e5	6.676e5	0.928	0.526	0.510	2002	3102	5.85e6	1.13e7	2920.8	3645.7	NO	bb	bb	97.160
13C-1234678-HpCDF	38.839	1.061	3.505e5	7.899e5	1.036	0.444	0.440	2536	4120	5.96e6	1.33e7	2351.6	3236.3	NO	bb	bb	97.433
13C-1234789-HpCDF	41.090	1.123	3.059e5	6.773e5	0.905	0.452	0.440	2536	4120	4.61e6	1.03e7	1815.9	2503.7	NO	bb	bb	96.171
13C-1234-TCDD	25.700	0.000	4.959e5	6.249e5	1.000	0.794	0.770	2405	1251	7.82e6	9.77e6	3252.7	7808.7	NO	bb	bb	100.000
13C-2378-TCDD	26.517	1.032	5.458e5	6.834e5	1.103	0.799	0.770	2405	1251	8.30e6	1.04e7	3451.4	8324.3	NO	bb	bb	99.431
13C-12378-PeCDD	31.619	1.230	6.125e5	3.907e5	0.914	1.568	1.550	1178	1168	9.36e6	5.78e6	7947.4	4944.2	NO	bb	bd	97.913
13C-123478-HxCDD	36.098	0.987	5.901e5	4.628e5	0.933	1.275	1.240	2011	1749	9.65e6	7.66e6	4801.0	4381.0	NO	bd	bd	99.896
13C-123678-HxCDD	36.209	0.990	6.061e5	4.713e5	0.965	1.286	1.240	2011	1749	9.81e6	7.59e6	4881.2	4342.3	NO	db	db	98.864
13C-1234678-HpCDD	40.343	1.103	4.400e5	4.119e5	0.782	1.068	1.050	2377	2314	6.98e6	6.54e6	2937.2	2824.0	NO	bb	bb	96.428
13C-OCDD	45.102	1.233	8.036e5	8.792e5	0.788	0.914	0.890	2320	2081	1.01e7	1.12e7	4365.2	5363.3	NO	bb	bb	188.967
13C-123789-HxCDD	36.588	0.000	6.276e5	5.021e5	1.000	1.250	1.240	2011	1749	1.01e7	8.07e6	5029.1	4612.9	NO	bb	bb	100.000
37CL-2378-TCDD	26.532	1.032	1.634e3		1.233			1257		2.25e4		17.9			bb		0.118

Dataset: T:\Autospec\Processed Data Batch\230201ICIH.qld
Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
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ID: CSLCR, Name: 23020104, Date: 01-Feb-2023, Time: 14:39:51, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					1.064		0.770	1080	1324								
1289-TCDF					0.858		0.770	1080	1324								
13468-PECDF					1.013		1.550	869	1005								
12389-PECDF					0.844		1.550	952	1114								
123468-HXCDF					1.197		1.240	1010	1011								
1368-TCDD					1.084		0.770	1059	950								
1289-TCDD					0.975		0.770	1059	950								
12479-PECDD					1.837		1.550	1079	785								
12389-PECDD					1.252		1.550	1079	785								
124679-HXCDD					1.033		1.240	1001	800								
1234679-HPCDD					1.286		1.050	1384	648								
Total-tetrafurans			0.000e0		0.933			1080		0.00e0							
Total-penta1			0.000e0					869		0.00e0							
Total-pentafurans			8.782e3		0.866			952		1.33e5							1.018
Total-hexafurans			1.574e4		1.208			1010		2.34e5							2.049
Total-heptafurans			6.897e3		1.185			999		1.19e5							1.082
Total-Furans			3.720e4		1.067			1080		5.59e5							5.417
Total-tetradioxins			0.000e0		1.099			1059		0.00e0							
Total-pentadioxins			3.215e3		1.392			1079		5.52e4							0.496
Total-hexadioxins			9.529e3		1.007			1001		1.58e5							1.624
Total-heptadioxins			3.173e3		1.269			1384		4.91e4							0.614
Total-Dioxins			1.601e4		1.165			1059		2.65e5							2.750
Total-TEQ			5.321e4					1059		8.24e5							8.168
FUNCTION1 PFK			3.664e5					577038		8.77e6							
FUNCTION2 PFK			5.803e5					248887		1.44e7							0.000
FUNCTION3 PFK			1.568e5					462057		5.36e6							0.000
FUNCTION4 PFK			0.000e0					300538		0.00e0							
FUNCTION5 PFK			6.700e4					200836		2.35e6							
FUNCTION1 HXCD...			8.333e2					859		1.29e4							0.000
FUNCTION1 HPCD...			1.557e3					919		1.93e4							0.000
FUNCTION2 HPCD...			7.646e2					998		1.65e4							0.000
FUNCTION3 OCDPE			1.789e3					773		2.75e4							0.000
FUNCTION4 NCDPE			1.690e2					924		5.87e3							0.000
FUNCTION5 DCDPE			8.847e1					800		2.49e3							0.000

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: 03 Feb 2023 10:33:40

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.37	4.511e3	2.751e3	0.911	1.64	1.55	70.7	YES	NO	bb	bb	0.494
2	12378-PeCDF	30.04	4.271e3	3.157e3	0.845	1.35	1.55	69.3	YES	NO	bb	bd	0.524

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	37.01	3.644e3	2.921e3	1.187	1.25	1.24	55.3	YES	NO	bb	bb	0.543
2	234678-HxCDF	35.99	3.766e3	3.106e3	1.229	1.21	1.24	56.2	YES	NO	bb	bb	0.497
3	123678-HxCDF	35.13	4.222e3	3.339e3	1.248	1.26	1.24	62.8	YES	NO	db	db	0.502
4	123478-HxCDF	35.00	4.104e3	3.031e3	1.182	1.35	1.24	57.7	YES	NO	bd	bd	0.507

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.10	3.001e3	3.100e3	1.165	0.97	1.05	47.6	YES	NO	bb	bb	0.533
2	1234678-HpCDF	38.85	3.896e3	3.656e3	1.204	1.07	1.05	71.5	YES	NO	bb	bb	0.550

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.37	4.511e3	2.751e3	0.911	1.64	1.55	70.7	YES	NO	bb	bb	0.494
2	12378-PeCDF	30.04	4.271e3	3.157e3	0.845	1.35	1.55	69.3	YES	NO	bb	bd	0.524
3	123789-HxCDF	37.01	3.644e3	2.921e3	1.187	1.25	1.24	55.3	YES	NO	bb	bb	0.543
4	234678-HxCDF	35.99	3.766e3	3.106e3	1.229	1.21	1.24	56.2	YES	NO	bb	bb	0.497
5	123678-HxCDF	35.13	4.222e3	3.339e3	1.248	1.26	1.24	62.8	YES	NO	db	db	0.502
6	123478-HxCDF	35.00	4.104e3	3.031e3	1.182	1.35	1.24	57.7	YES	NO	bd	bd	0.507
7	1234789-HpCDF	41.10	3.001e3	3.100e3	1.165	0.97	1.05	47.6	YES	NO	bb	bb	0.533
8	1234678-HpCDF	38.85	3.896e3	3.656e3	1.204	1.07	1.05	71.5	YES	NO	bb	bb	0.550
9	OCDF	45.38	5.786e3	6.873e3	1.186	0.84	0.89	77.5	YES	NO	bb	bd	1.268

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.64	3.215e3	2.188e3	1.087	1.47	1.55	51.2	YES	NO	bd	bb	0.496

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.61	2.961e3	2.378e3	0.985	1.24	1.24	54.8	YES	NO	bb	bb	0.509
2	123678-HxCDD	36.22	3.387e3	2.724e3	1.021	1.24	1.24	53.3	YES	NO	db	db	0.556
3	123478-HxCDD	36.11	2.827e3	2.333e3	0.987	1.21	1.24	43.4	YES	NO	dd	bd	0.497
4	Total-hexadioxins	35.12	3.540e2	3.166e2	1.007	1.12	1.24	6.7	YES	NO	db	bb	0.063

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.35	3.173e3	3.384e3	1.253	0.94	1.05	35.5	YES	NO	bb	bb	0.614

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-Dioxins	22.28	9.641e1	1.412e2	1.165	0.68	0.77	2.5	NO	NO	bd	bb	0.017
2	12378-PeCDD	31.64	3.215e3	2.188e3	1.087	1.47	1.55	51.2	YES	NO	bd	bb	0.496
3	123789-HxCDD	36.61	2.961e3	2.378e3	0.985	1.24	1.24	54.8	YES	NO	bb	bb	0.509
4	123678-HxCDD	36.22	3.387e3	2.724e3	1.021	1.24	1.24	53.3	YES	NO	db	db	0.556
5	123478-HxCDD	36.11	2.827e3	2.333e3	0.987	1.21	1.24	43.4	YES	NO	dd	bd	0.497
6	Total-hexadioxins	35.12	3.540e2	3.166e2	1.007	1.12	1.24	6.7	YES	NO	db	bb	0.063
7	1234678-HpCDD	40.35	3.173e3	3.384e3	1.253	0.94	1.05	35.5	YES	NO	bb	bb	0.614

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.37	4.511e3	2.751e3	0.911	1.64	1.55	70.7	YES	NO	bb	bb	0.494
2	12378-PeCDF	30.04	4.271e3	3.157e3	0.845	1.35	1.55	69.3	YES	NO	bb	bd	0.524
3	123789-HxCDF	37.01	3.644e3	2.921e3	1.187	1.25	1.24	55.3	YES	NO	bb	bb	0.543
4	234678-HxCDF	35.99	3.766e3	3.106e3	1.229	1.21	1.24	56.2	YES	NO	bb	bb	0.497
5	123678-HxCDF	35.13	4.222e3	3.339e3	1.248	1.26	1.24	62.8	YES	NO	db	db	0.502
6	123478-HxCDF	35.00	4.104e3	3.031e3	1.182	1.35	1.24	57.7	YES	NO	bd	bd	0.507
7	1234789-HpCDF	41.10	3.001e3	3.100e3	1.165	0.97	1.05	47.6	YES	NO	bb	bb	0.533
8	1234678-HpCDF	38.85	3.896e3	3.656e3	1.204	1.07	1.05	71.5	YES	NO	bb	bb	0.550
9	OCDF	45.38	5.786e3	6.873e3	1.186	0.84	0.89	77.5	YES	NO	bb	bd	1.268
10	Total-Dioxins	22.28	9.641e1	1.412e2	1.165	0.68	0.77	2.5	NO	NO	bd	bb	0.017
11	12378-PeCDD	31.64	3.215e3	2.188e3	1.087	1.47	1.55	51.2	YES	NO	bd	bb	0.496
12	123789-HxCDD	36.61	2.961e3	2.378e3	0.985	1.24	1.24	54.8	YES	NO	bb	bb	0.509
13	123678-HxCDD	36.22	3.387e3	2.724e3	1.021	1.24	1.24	53.3	YES	NO	db	db	0.556
14	123478-HxCDD	36.11	2.827e3	2.333e3	0.987	1.21	1.24	43.4	YES	NO	dd	bd	0.497
15	Total-hexadioxins	35.12	3.540e2	3.166e2	1.007	1.12	1.24	6.7	YES	NO	db	bb	0.063
16	1234678-HpCDD	40.35	3.173e3	3.384e3	1.253	0.94	1.05	35.5	YES	NO	bb	bb	0.614

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ID: CSLCR, Name: 23020104, Date: 01-Feb-2023, Time: 14:39:51, Conditions: AUTOSPEC01, User: pk

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	27.58	8.439e4					1.7	NO		bb		
2	FUNCTION1 PFK	27.45	2.771e4					1.5	NO		bb		
3	FUNCTION1 PFK	27.17	2.484e4					1.4	NO		bb		
4	FUNCTION1 PFK	26.40	1.936e4					1.3	NO		bb		
5	FUNCTION1 PFK	26.11	4.980e4					1.6	NO		bb		
6	FUNCTION1 PFK	25.62	1.288e4					0.9	NO		bb		
7	FUNCTION1 PFK	23.40	2.240e4					0.8	NO		bb		
8	FUNCTION1 PFK	22.69	1.568e4					1.0	NO		bb		
9	FUNCTION1 PFK	22.18	2.261e4					1.3	NO		bb		
10	FUNCTION1 PFK	22.10	4.769e4					1.5	NO		bb		
11	FUNCTION1 PFK	21.98	1.078e4					0.8	NO		bb		
12	FUNCTION1 PFK	21.92	2.828e4					1.5	NO		bb		

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	29.52	1.267e4					1.4	NO		dd		0.000
2	FUNCTION2 PFK	29.46	2.595e4					2.1	NO		bd		0.000
3	FUNCTION2 PFK	29.36	9.698e3					1.3	NO		db		0.000
4	FUNCTION2 PFK	29.26	3.530e4					1.9	NO		dd		0.000
5	FUNCTION2 PFK	29.20	3.010e4					2.1	NO		dd		0.000
6	FUNCTION2 PFK	29.12	1.008e4					1.1	NO		dd		0.000
7	FUNCTION2 PFK	29.07	1.252e4					1.4	NO		bd		0.000
8	FUNCTION2 PFK	29.00	5.699e3					0.9	NO		db		0.000
9	FUNCTION2 PFK	28.97	2.160e4					1.6	NO		dd		0.000
10	FUNCTION2 PFK	28.81	1.772e4					0.9	NO		bd		0.000
11	FUNCTION2 PFK	28.71	1.302e4					0.8	NO		bb		0.000
12	FUNCTION2 PFK	28.64	1.871e3					0.4	NO		bb		0.000
13	FUNCTION2 PFK	28.51	4.178e3					0.8	NO		bb		0.000
14	FUNCTION2 PFK	28.42	7.027e3					0.8	NO		bb		0.000
15	FUNCTION2 PFK	28.34	4.550e3					0.9	NO		bb		0.000
16	FUNCTION2 PFK	31.02	8.571e3					1.3	NO		dd		0.000
17	FUNCTION2 PFK	30.97	2.370e4					2.0	NO		dd		0.000
18	FUNCTION2 PFK	30.86	2.515e4					1.6	NO		dd		0.000
19	FUNCTION2 PFK	30.83	6.842e3					1.2	NO		bd		0.000
20	FUNCTION2 PFK	30.75	1.931e4					1.6	NO		bb		0.000
21	FUNCTION2 PFK	30.62	1.066e4					1.2	NO		db		0.000
22	FUNCTION2 PFK	30.58	5.541e3					1.0	NO		bd		0.000
23	FUNCTION2 PFK	30.53	9.069e3					1.2	NO		bb		0.000
24	FUNCTION2 PFK	30.44	1.277e4					1.2	NO		db		0.000
25	FUNCTION2 PFK	30.39	1.436e4					1.3	NO		bd		0.000
26	FUNCTION2 PFK	30.19	7.186e3					0.8	NO		bb		0.000
27	FUNCTION2 PFK	30.03	1.599e4					1.2	NO		bb		0.000
28	FUNCTION2 PFK	29.91	1.518e3					0.4	NO		bb		0.000
29	FUNCTION2 PFK	29.80	6.143e3					0.8	NO		bb		0.000
30	FUNCTION2 PFK	29.65	1.120e4					1.0	NO		db		0.000
31	FUNCTION2 PFK	29.56	1.510e4					1.6	NO		dd		0.000
32	FUNCTION2 PFK	32.43	5.171e3					1.0	NO		db		0.000
33	FUNCTION2 PFK	32.40	8.945e3					1.4	NO		bd		0.000
34	FUNCTION2 PFK	32.33	8.546e3					0.8	NO		db		0.000
35	FUNCTION2 PFK	32.28	1.923e3					0.6	NO		bd		0.000
36	FUNCTION2 PFK	32.23	9.966e3					1.3	NO		db		0.000
37	FUNCTION2 PFK	32.18	8.875e3					1.2	NO		bd		0.000

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION2 PFK	32.09	1.451e4					1.2	NO		db		0.000
39	FUNCTION2 PFK	32.04	5.136e3					0.8	NO		dd		0.000
40	FUNCTION2 PFK	32.01	7.259e3					1.1	NO		bd		0.000
41	FUNCTION2 PFK	31.94	6.720e3					0.8	NO		bb		0.000
42	FUNCTION2 PFK	31.74	5.803e3					0.8	NO		bb		0.000
43	FUNCTION2 PFK	31.61	6.954e3					1.2	NO		db		0.000
44	FUNCTION2 PFK	31.59	1.111e4					1.2	NO		bd		0.000
45	FUNCTION2 PFK	31.45	7.843e2					0.3	NO		bb		0.000
46	FUNCTION2 PFK	31.41	1.192e4					1.2	NO		bb		0.000
47	FUNCTION2 PFK	31.07	1.965e3					0.4	NO		db		0.000
48	FUNCTION2 PFK	32.80	6.019e3					1.1	NO		db		0.000
49	FUNCTION2 PFK	32.77	9.084e3					1.2	NO		bd		0.000
50	FUNCTION2 PFK	32.64	3.494e4					1.5	NO		db		0.000
51	FUNCTION2 PFK	32.60	5.286e3					0.9	NO		dd		0.000
52	FUNCTION2 PFK	32.53	4.308e3					0.5	NO		bd		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	36.14	4.336e3					0.7	NO		db		0.000
2	FUNCTION3 PFK	36.11	5.755e3					0.7	NO		bd		0.000
3	FUNCTION3 PFK	36.06	7.687e3					0.9	NO		bb		0.000
4	FUNCTION3 PFK	36.02	1.796e4					1.6	NO		bb		0.000
5	FUNCTION3 PFK	35.81	1.736e4					1.2	NO		bb		0.000
6	FUNCTION3 PFK	35.69	5.338e4					1.7	NO		bb		0.000
7	FUNCTION3 PFK	35.20	3.054e3					0.6	NO		bb		0.000
8	FUNCTION3 PFK	34.12	1.673e4					1.2	NO		bb		0.000
9	FUNCTION3 PFK	33.89	1.577e4					1.4	NO		bb		0.000
10	FUNCTION3 PFK	33.50	1.199e4					1.1	NO		bb		0.000
11	FUNCTION3 PFK	36.41	2.803e3					0.5	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	46.30	6.353e3					1.3	NO		bb		
2	FUNCTION5 PFK	45.94	1.054e4					1.7	NO		bb		
3	FUNCTION5 PFK	45.79	1.187e3					0.6	NO		bb		
4	FUNCTION5 PFK	45.60	4.997e3					1.0	NO		bb		
5	FUNCTION5 PFK	45.34	9.354e3					1.4	NO		db		
6	FUNCTION5 PFK	45.31	2.478e3					1.0	NO		bd		
7	FUNCTION5 PFK	45.26	5.509e3					1.0	NO		bb		
8	FUNCTION5 PFK	43.99	1.588e4					1.1	NO		bb		
9	FUNCTION5 PFK	43.56	6.413e3					1.4	NO		db		
10	FUNCTION5 PFK	43.53	4.291e3					1.1	NO		bd		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	22.28	8.501e1					1.7	NO		bb		0.000
2	FUNCTION1 HXCD...	21.98	1.104e2					2.3	NO		bb		0.000
3	FUNCTION1 HXCD...	26.53	2.072e2					2.6	NO		bb		0.000
4	FUNCTION1 HXCD...	26.29	8.524e1					1.7	NO		bb		0.000
5	FUNCTION1 HXCD...	25.91	1.063e2					2.1	NO		db		0.000
6	FUNCTION1 HXCD...	25.87	8.437e1					1.9	NO		bd		0.000
7	FUNCTION1 HXCD...	25.00	7.918e1					1.2	NO		bb		0.000
8	FUNCTION1 HXCD...	24.64	7.557e1					1.6	NO		bb		0.000

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ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HPCD...	26.37	8.294e1					2.3	NO		dd		0.000
2	FUNCTION1 HPCD...	26.31	7.445e1					1.6	NO		bd		0.000
3	FUNCTION1 HPCD...	25.85	3.079e2					2.6	NO		db		0.000
4	FUNCTION1 HPCD...	25.72	1.912e2					2.1	NO		bd		0.000
5	FUNCTION1 HPCD...	25.35	9.102e1					2.4	NO		bb		0.000
6	FUNCTION1 HPCD...	24.26	7.312e1					0.4	NO		bb		0.000
7	FUNCTION1 HPCD...	23.34	2.139e2					1.8	NO		bb		0.000
8	FUNCTION1 HPCD...	22.66	8.267e1					0.8	NO		bb		0.000
9	FUNCTION1 HPCD...	21.38	7.618e1					1.4	NO		bb		0.000
10	FUNCTION1 HPCD...	27.98	9.946e1					3.1	YES		bb		0.000
11	FUNCTION1 HPCD...	26.99	8.404e1					1.1	NO		bb		0.000
12	FUNCTION1 HPCD...	26.52	1.802e2					1.5	NO		db		0.000

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.64	1.571e2					2.9	NO		bb		0.000
2	FUNCTION2 HPCD...	31.35	7.515e1					1.4	NO		bb		0.000
3	FUNCTION2 HPCD...	30.72	8.443e1					1.4	NO		bb		0.000
4	FUNCTION2 HPCD...	30.46	1.124e2					2.4	NO		bb		0.000
5	FUNCTION2 HPCD...	30.06	1.840e2					5.0	YES		bb		0.000
6	FUNCTION2 HPCD...	28.49	7.182e1					1.7	NO		bb		0.000
7	FUNCTION2 HPCD...	28.27	7.966e1					1.8	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	35.88	1.145e2					2.3	NO		bd		0.000
2	FUNCTION3 OCDPE	35.18	2.003e2					3.4	YES		bb		0.000
3	FUNCTION3 OCDPE	34.09	1.081e2					2.7	NO		db		0.000
4	FUNCTION3 OCDPE	34.04	7.302e1					3.0	YES		bd		0.000
5	FUNCTION3 OCDPE	37.75	1.221e2					3.1	YES		bb		0.000
6	FUNCTION3 OCDPE	36.64	1.574e2					3.5	YES		db		0.000
7	FUNCTION3 OCDPE	36.60	2.003e2					4.2	YES		bd		0.000
8	FUNCTION3 OCDPE	36.20	2.806e2					4.2	YES		db		0.000
9	FUNCTION3 OCDPE	36.12	3.227e2					5.3	YES		dd		0.000
10	FUNCTION3 OCDPE	35.99	2.101e2					3.8	YES		dd		0.000

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ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.48	9.634e1					2.9	NO		bb		0.000
2	FUNCTION4 NCDPE	38.52	7.264e1					3.4	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.32	8.847e1					3.1	YES		bb		0.000

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Printed: Friday, February 03, 2023 10:36:56 Pacific Standard Time

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ID: CSLCR, Name: 23020104, Date: 01-Feb-2023, Time: 14:39:51, Conditions: AUTOSPEC01, User: pk

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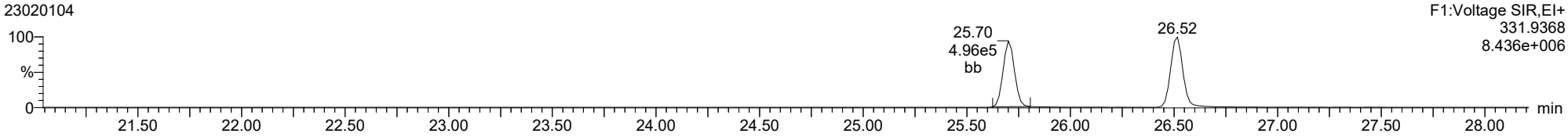

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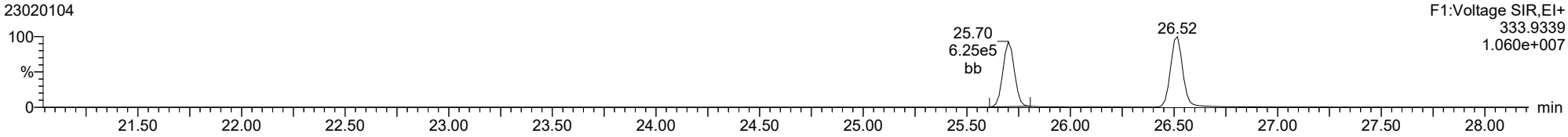

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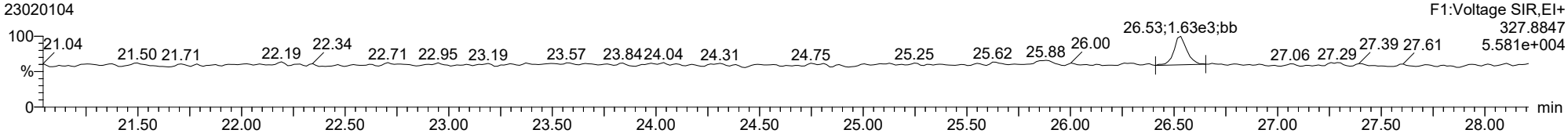

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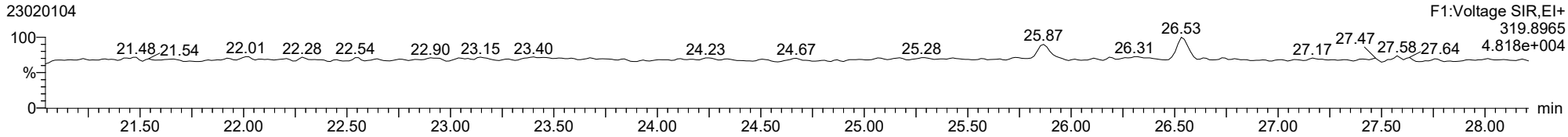

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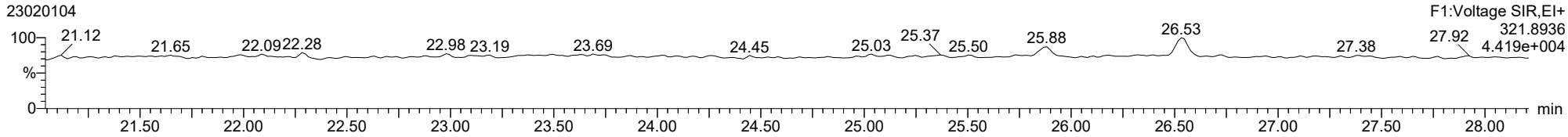

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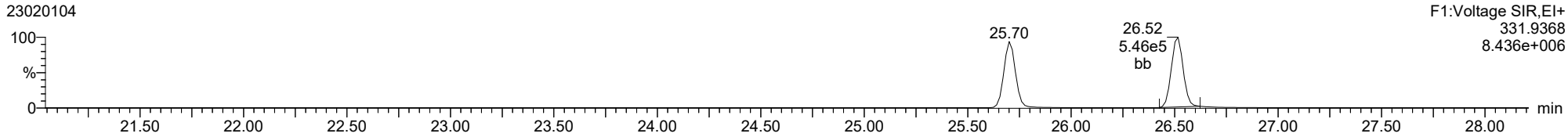

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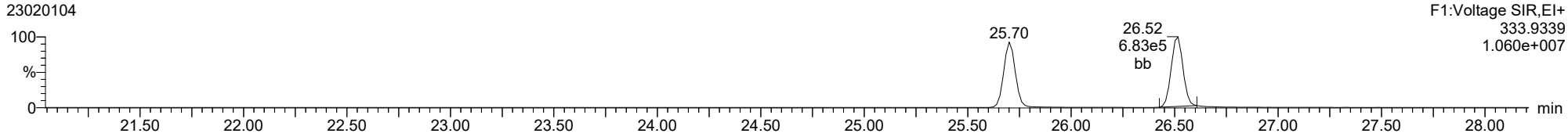

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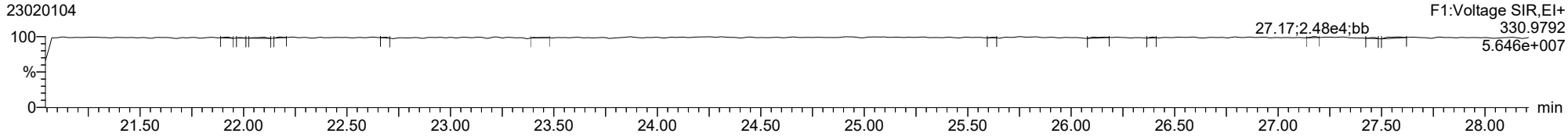

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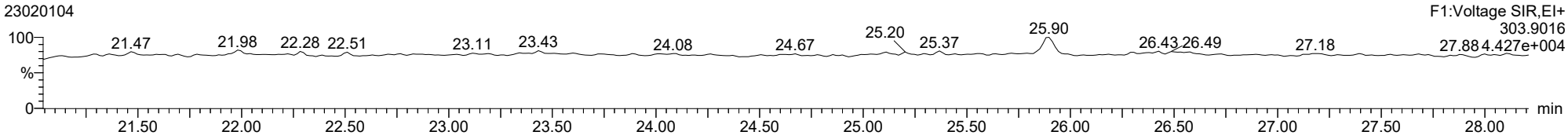

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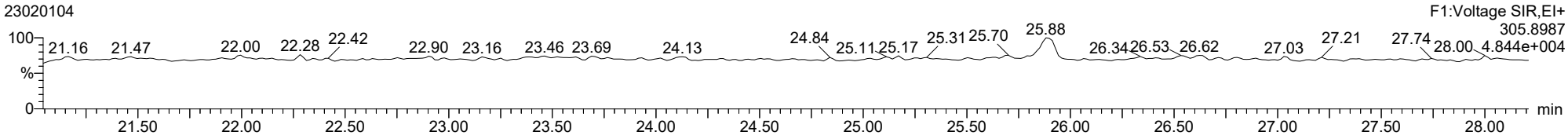

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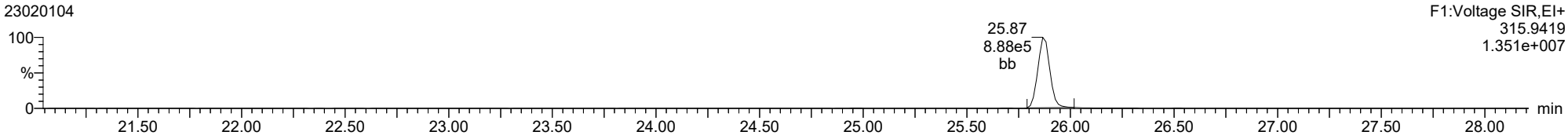

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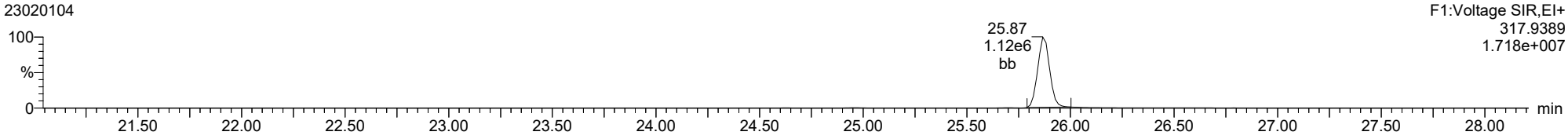

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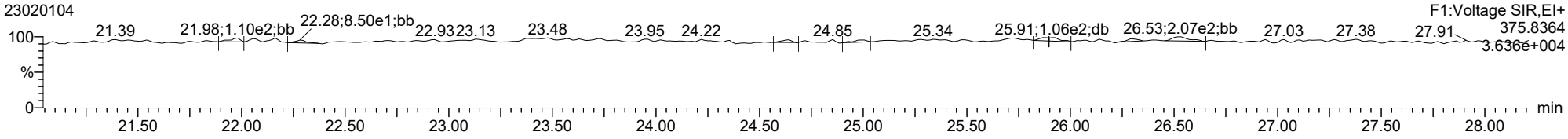

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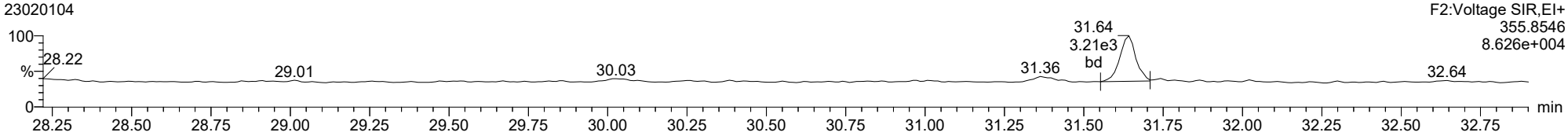

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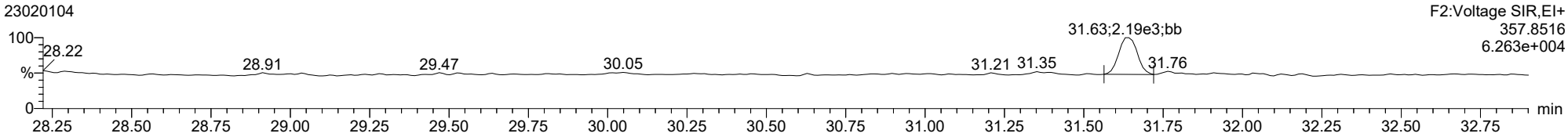

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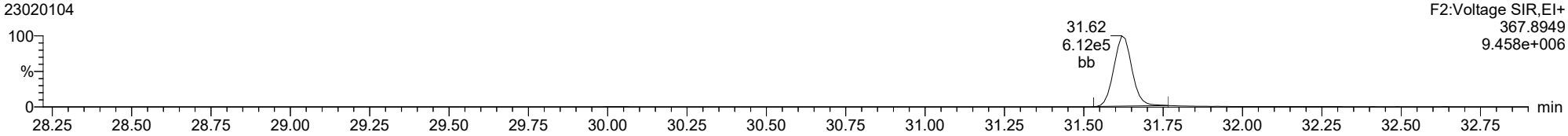

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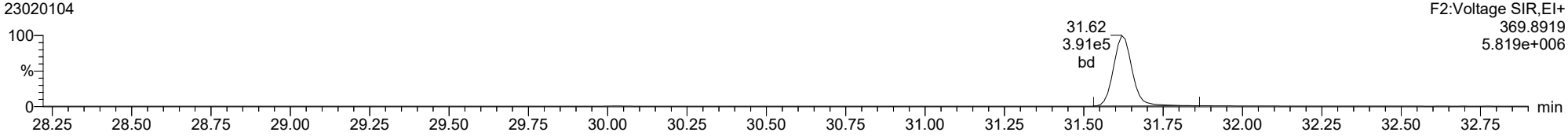

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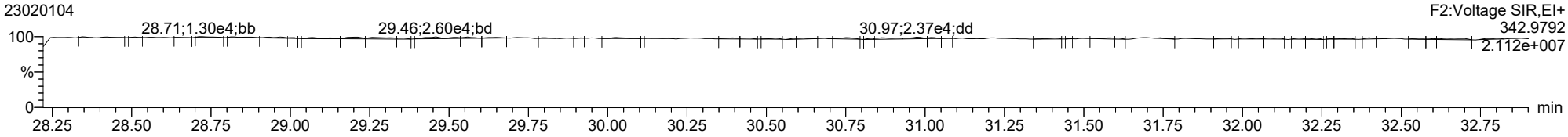

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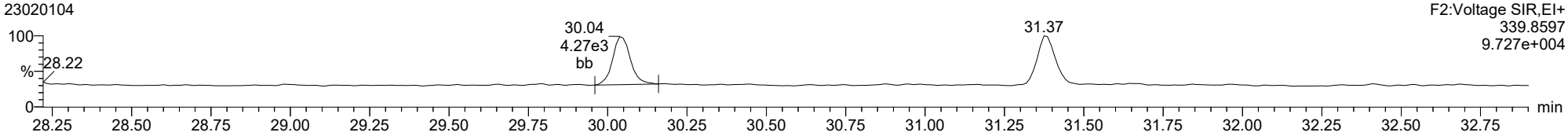

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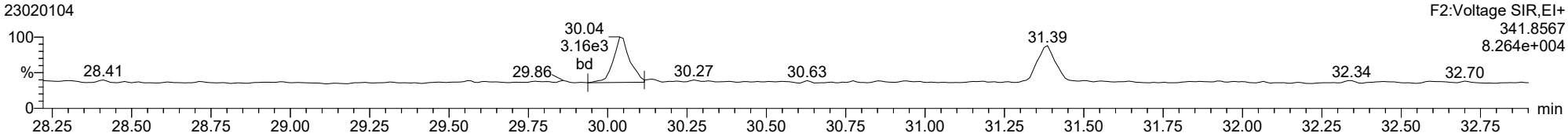

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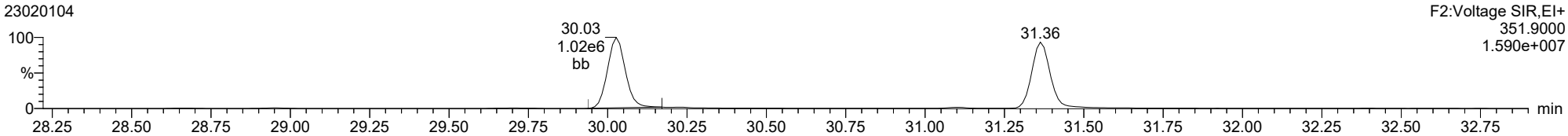

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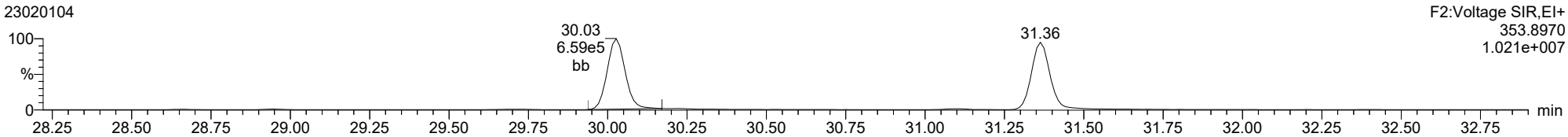

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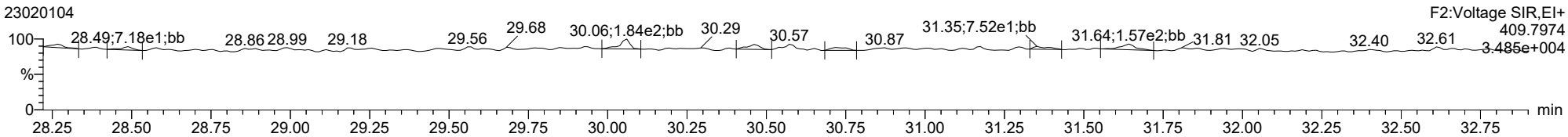

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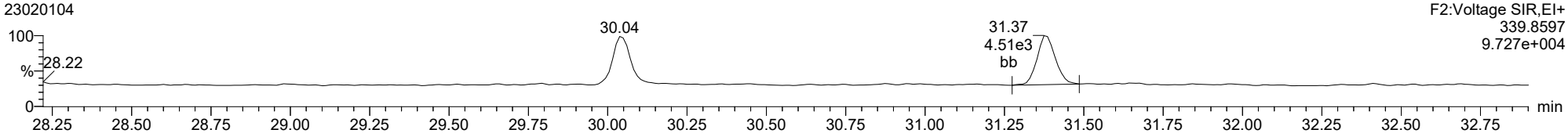

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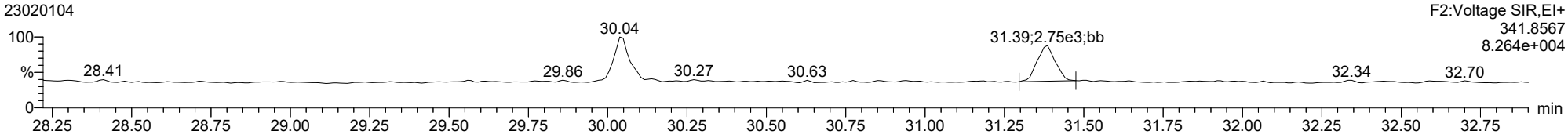

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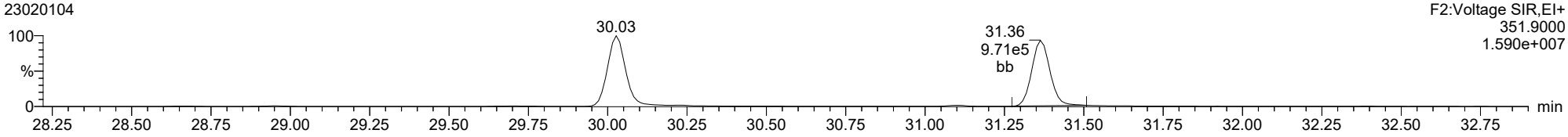

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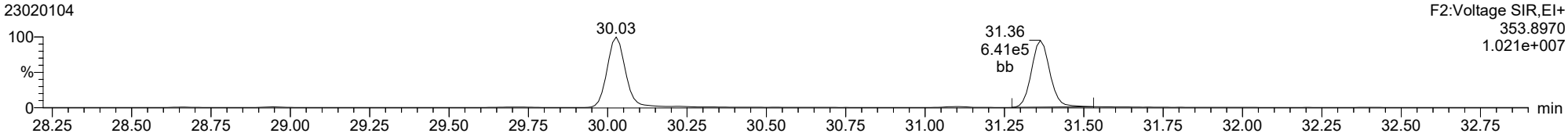

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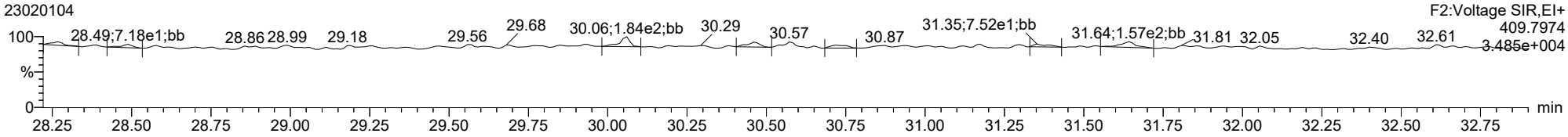

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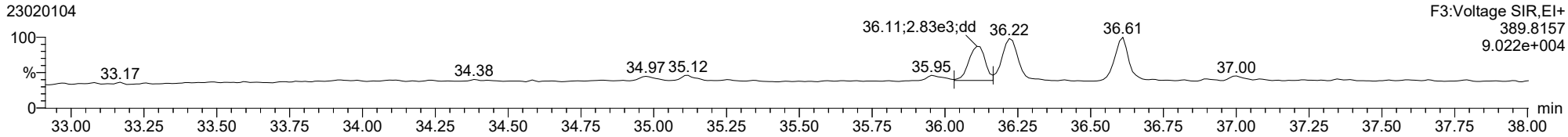
123478-HxCDD



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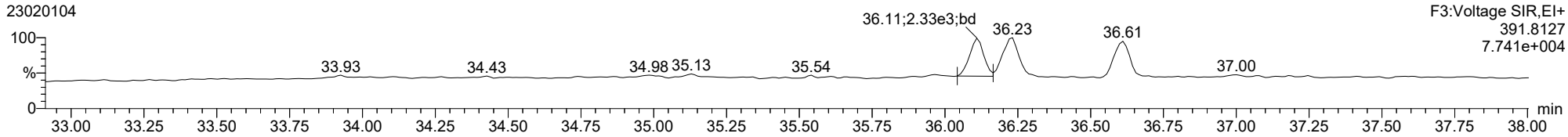

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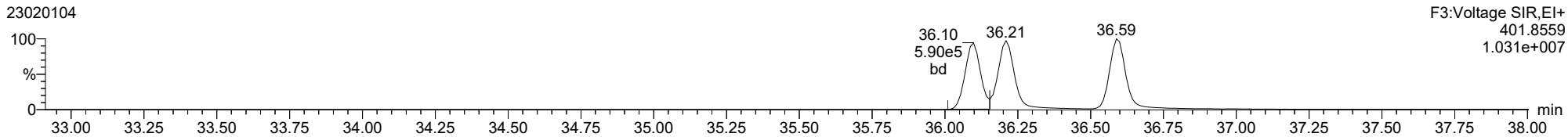

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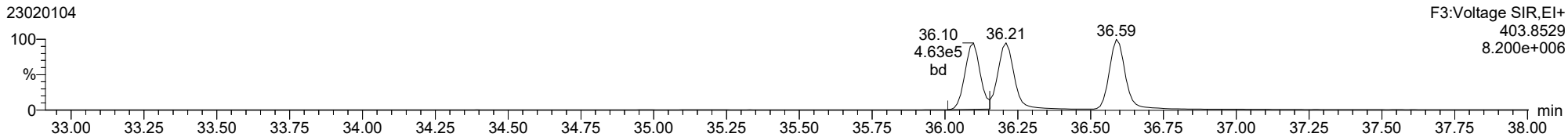

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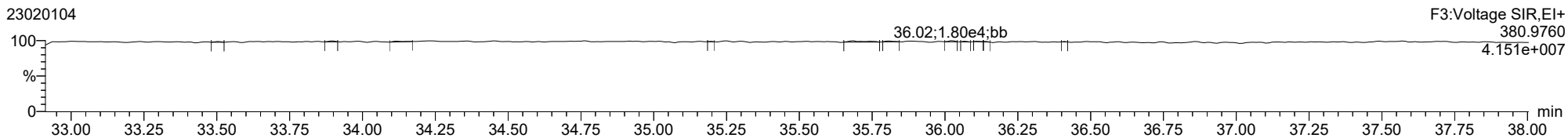

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ID: CSLCR, Name: 23020104, Date: 01-Feb-2023, Time: 14:39:51, Conditions: AUTOSPEC01, User: pk

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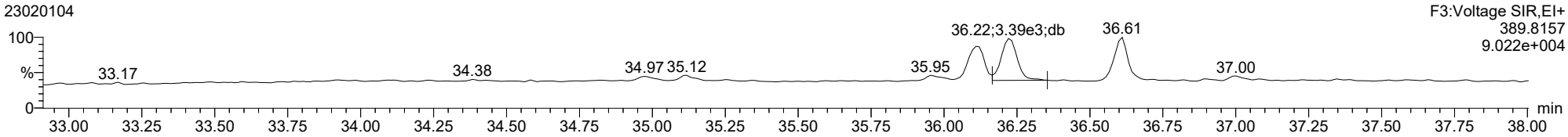

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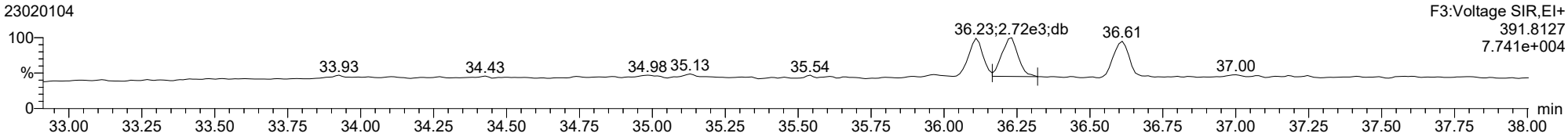

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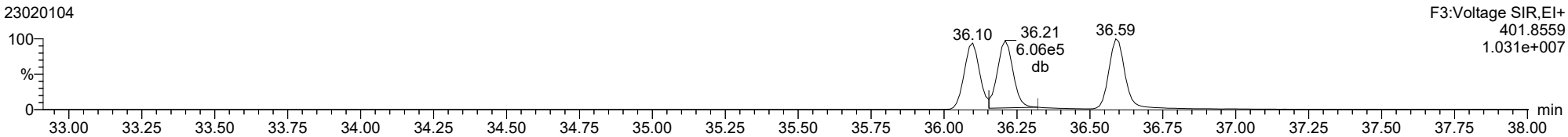

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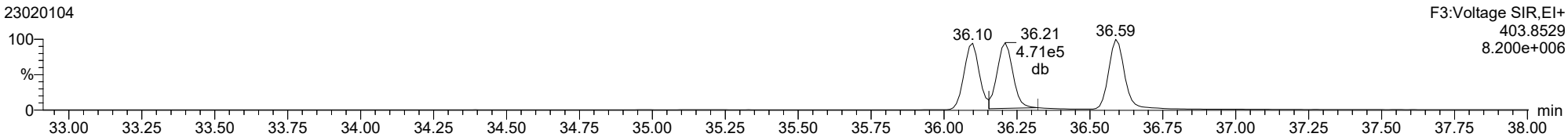

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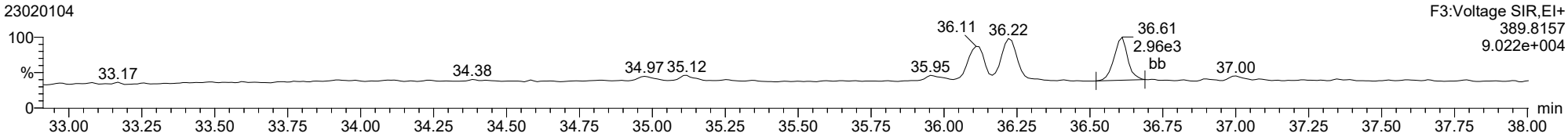

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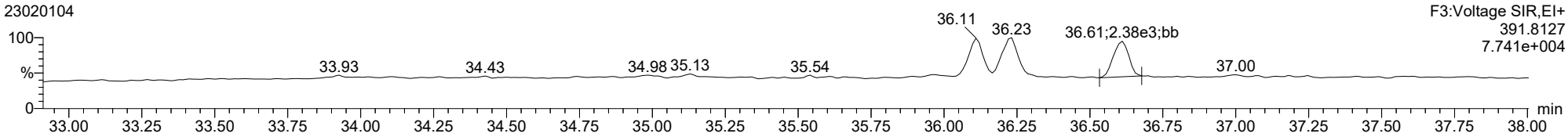

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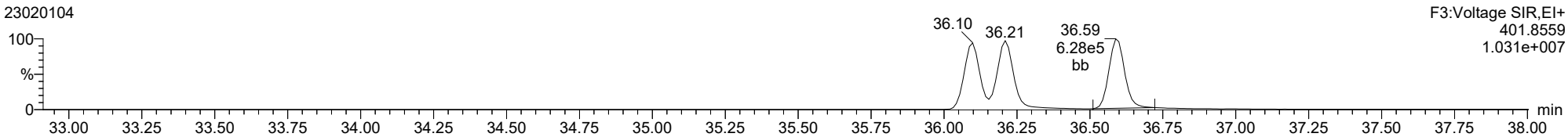

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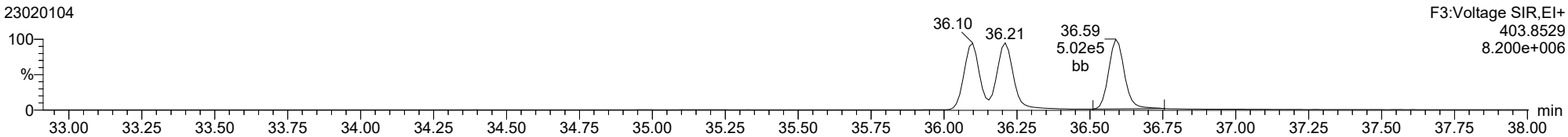

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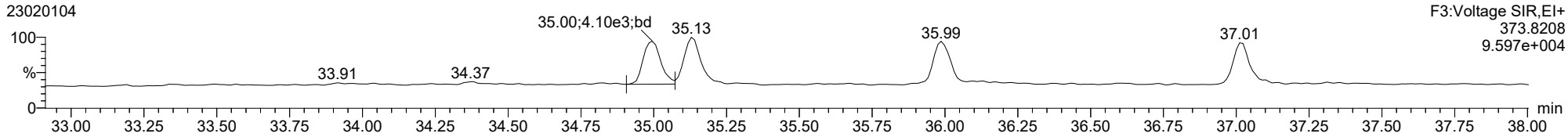

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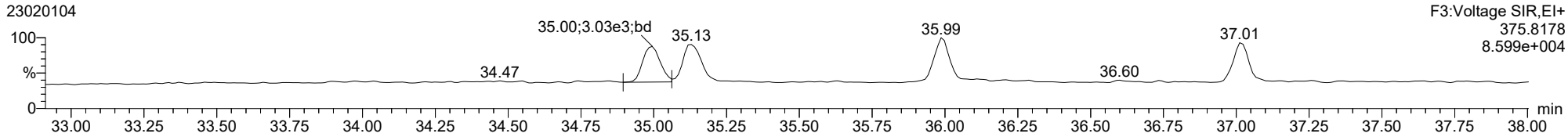

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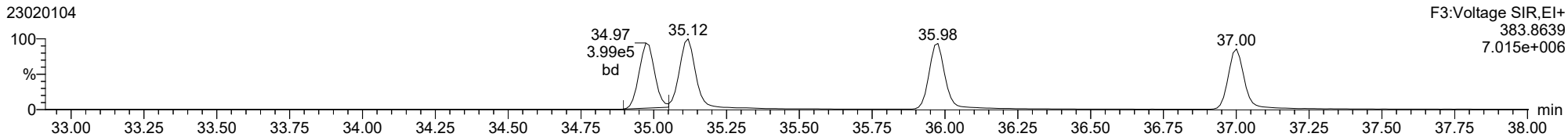

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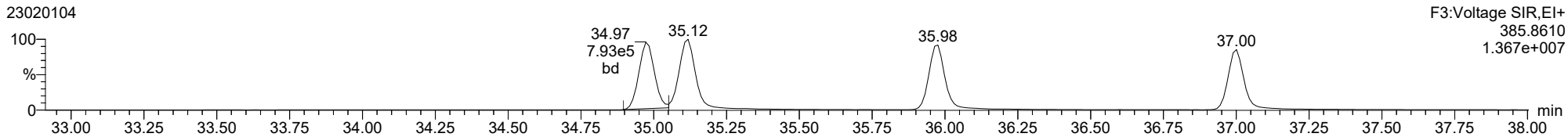

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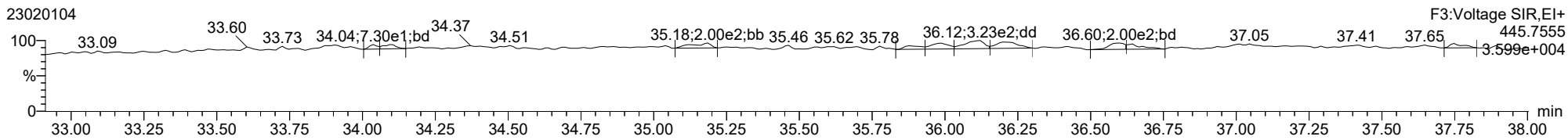

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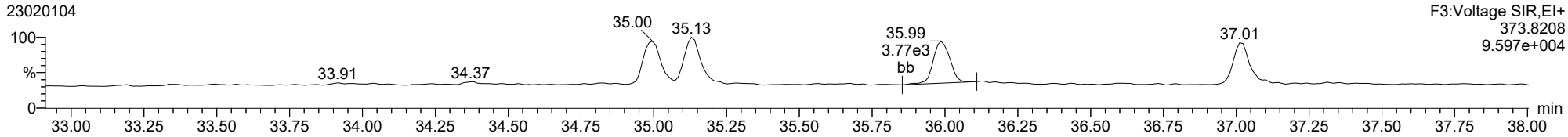

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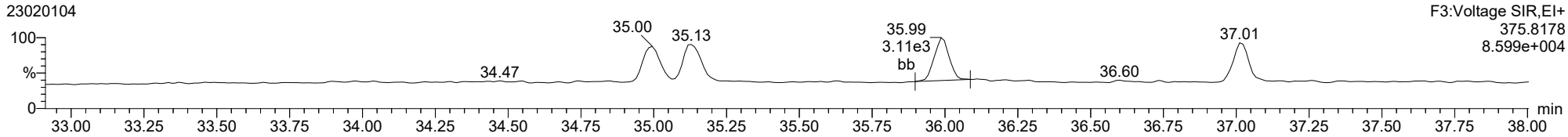

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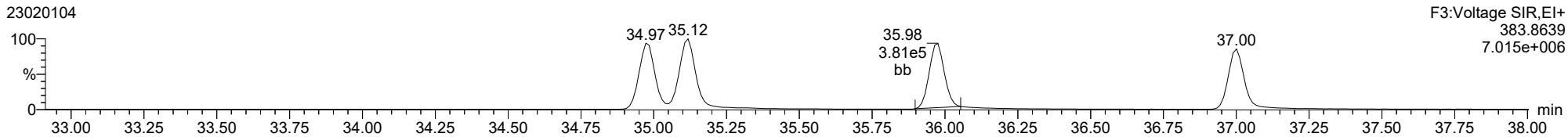

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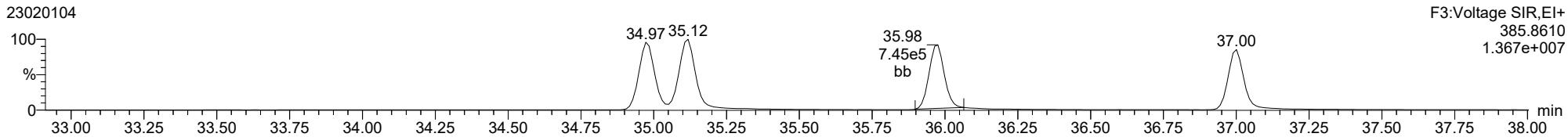

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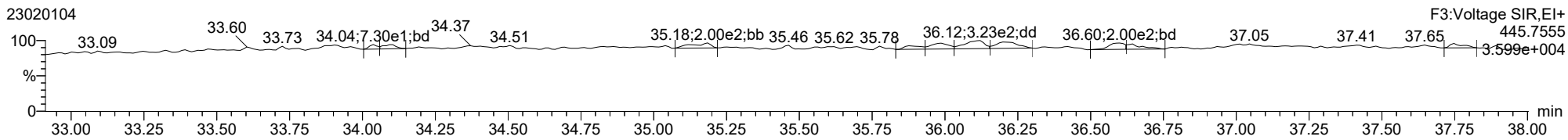

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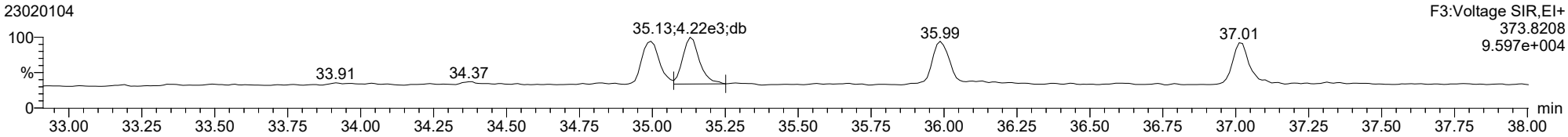

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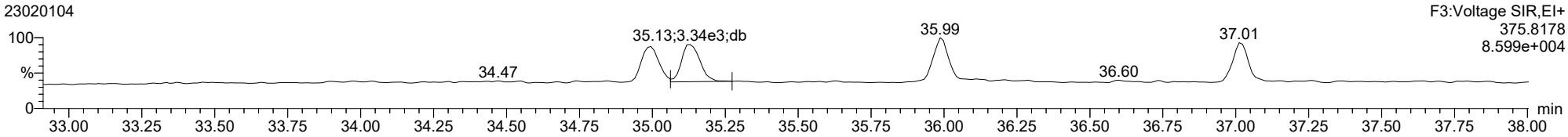

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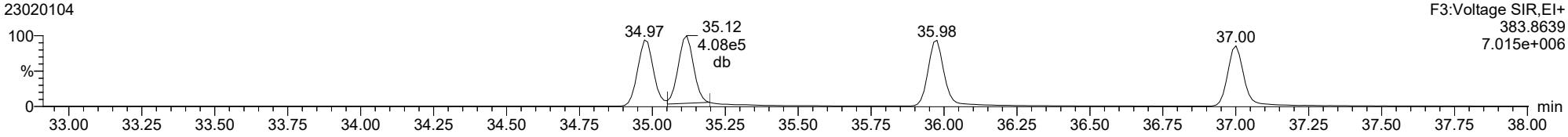

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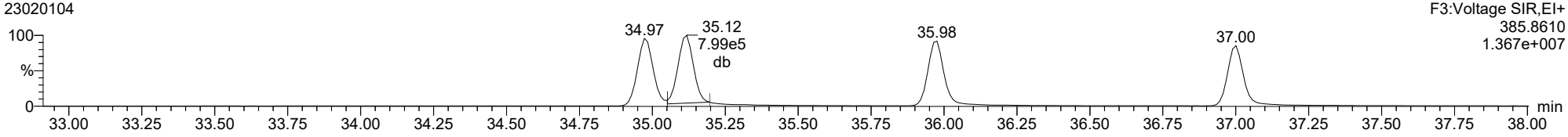

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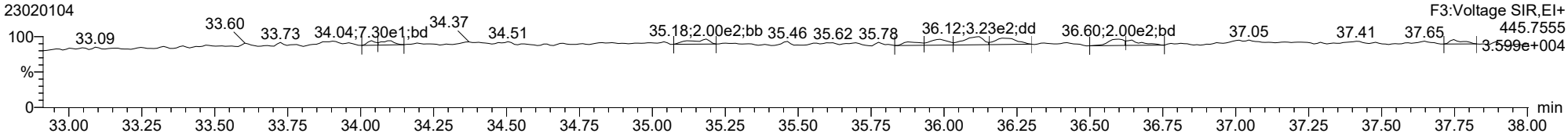

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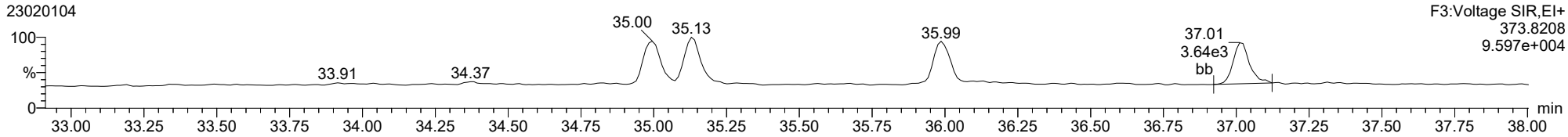

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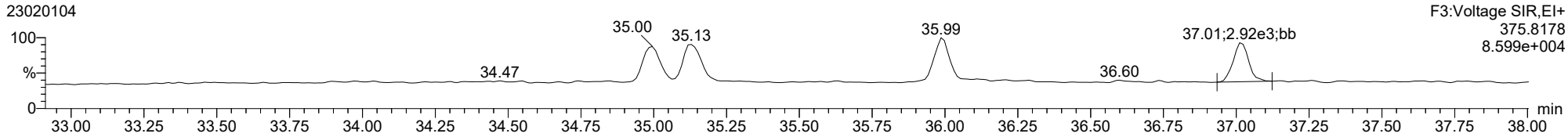

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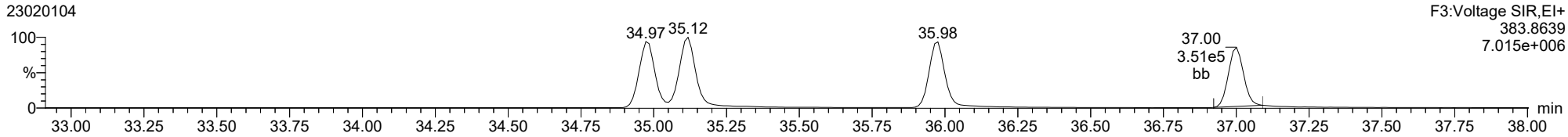

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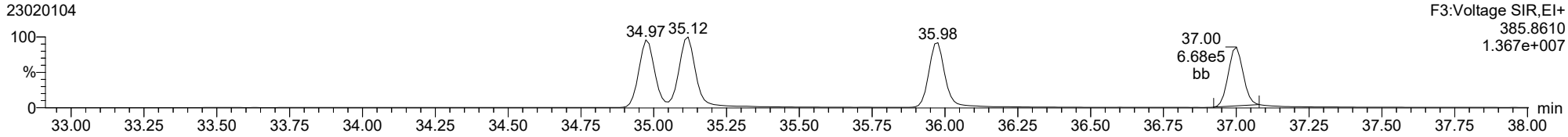

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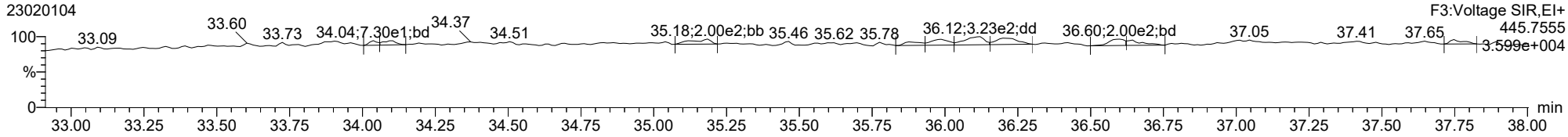

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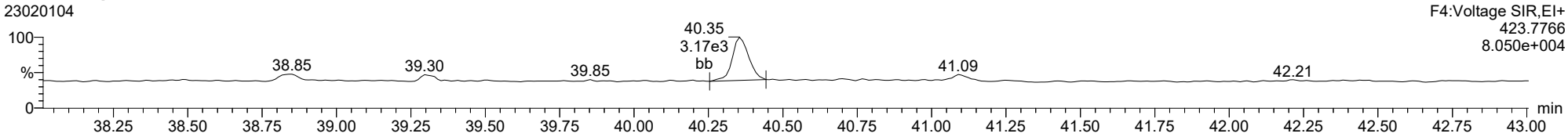

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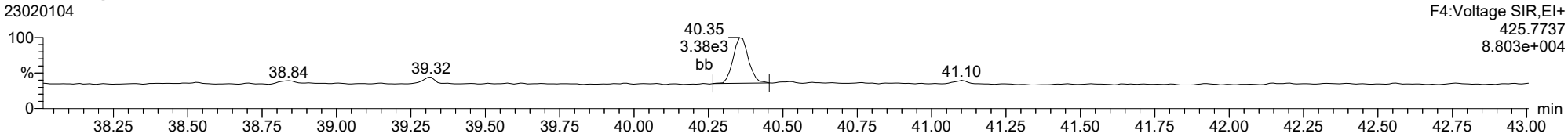

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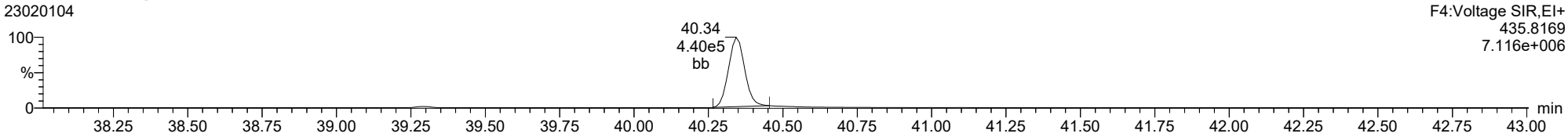

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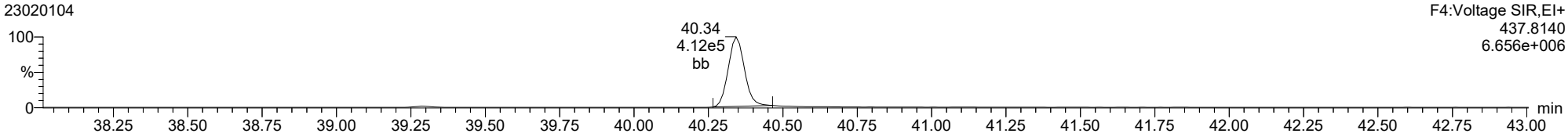

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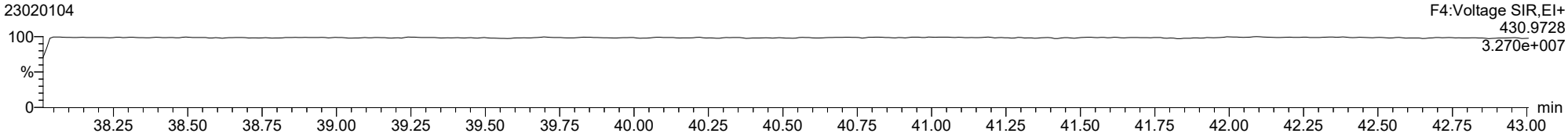

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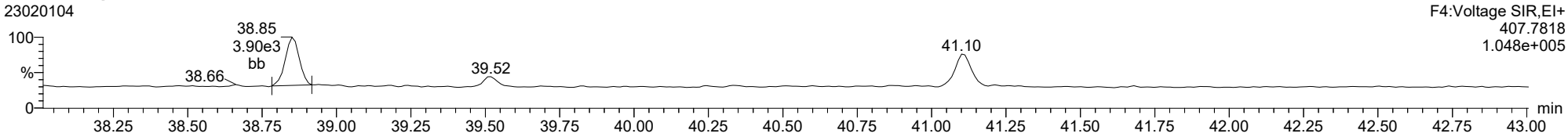

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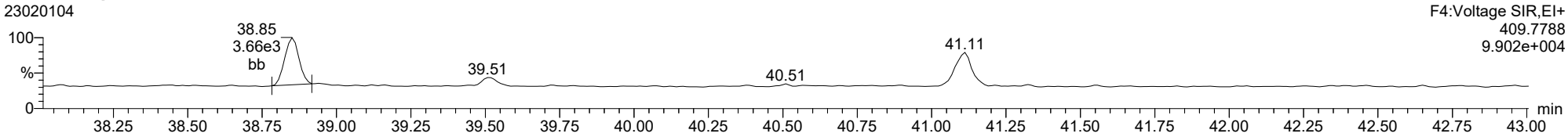

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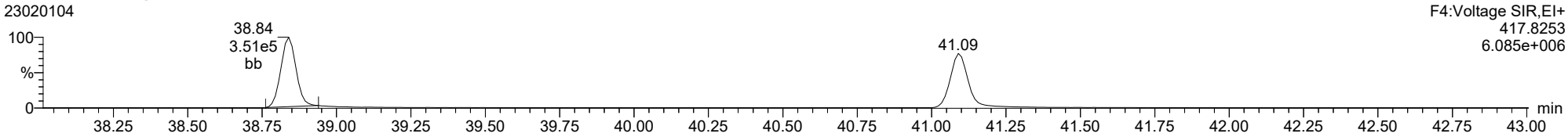

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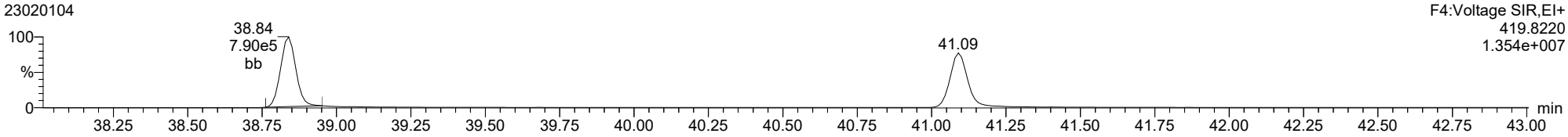

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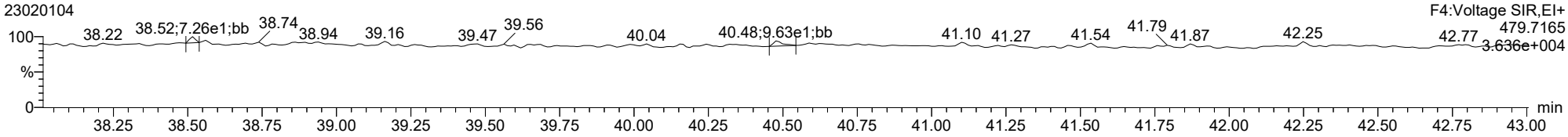

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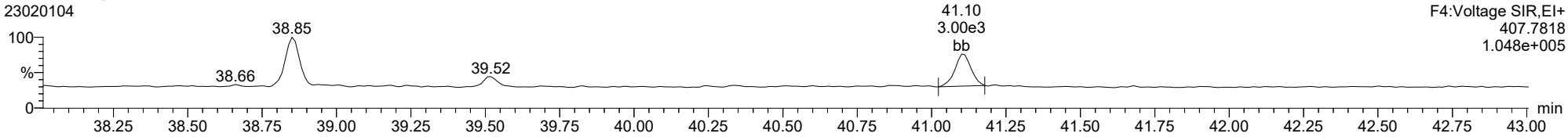

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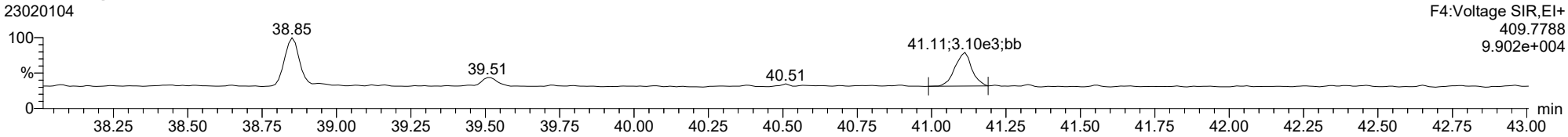

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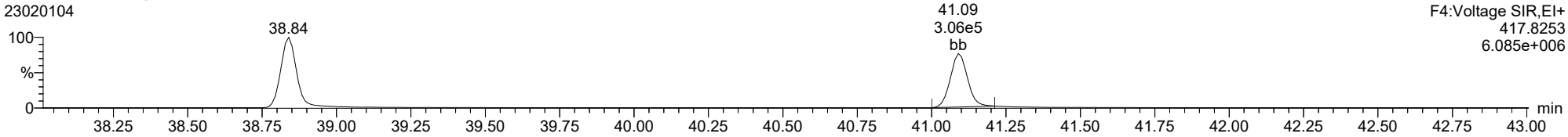

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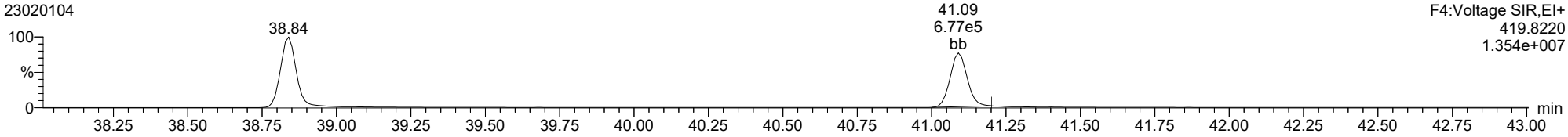

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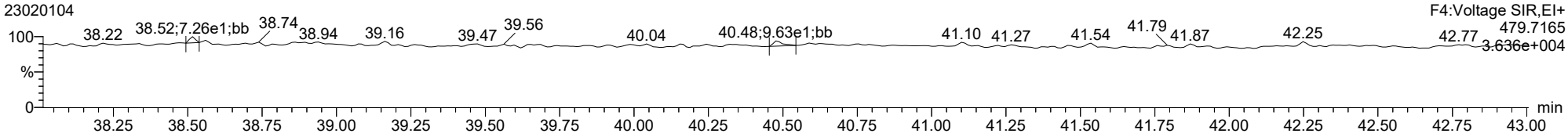

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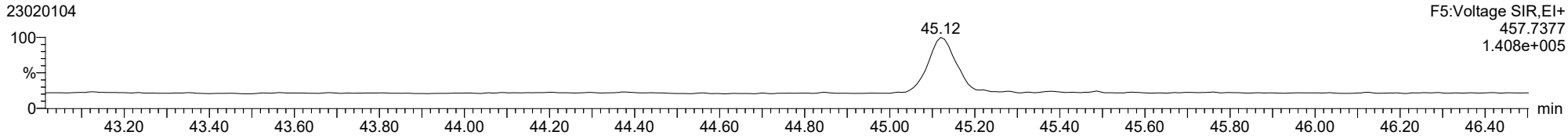

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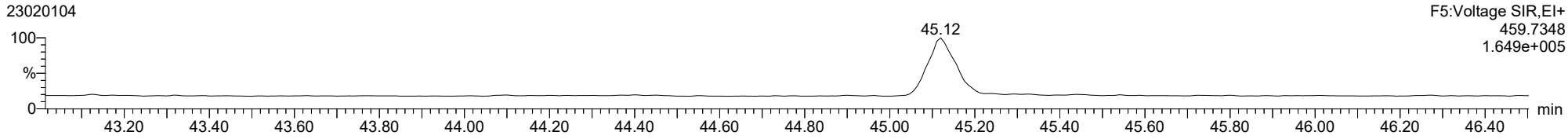

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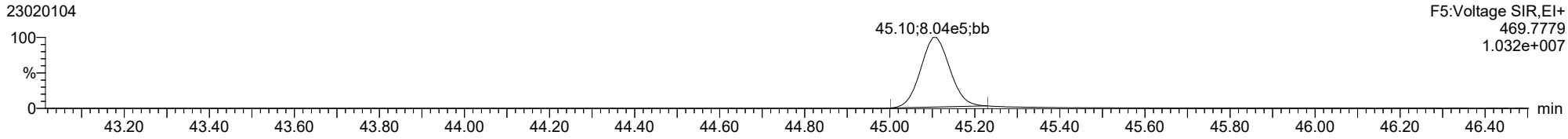
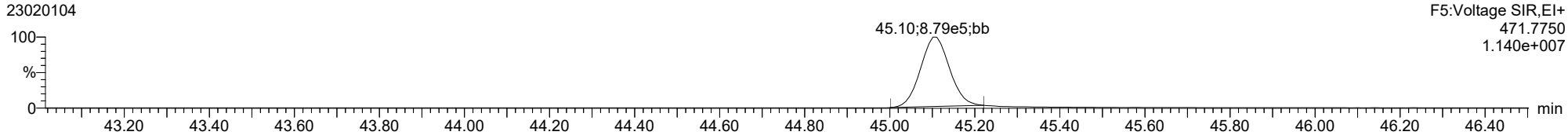
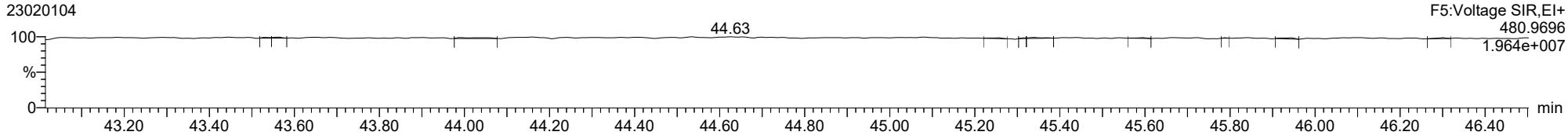


13C-OCDD

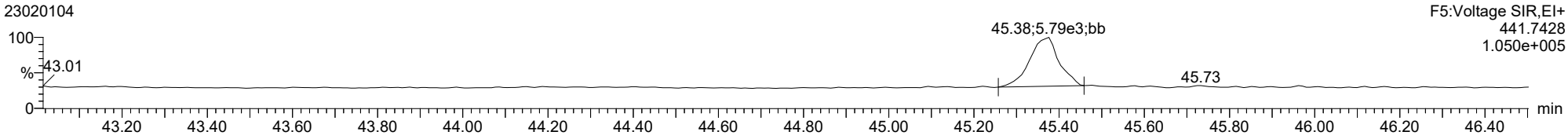


FUNCTION5 PFK

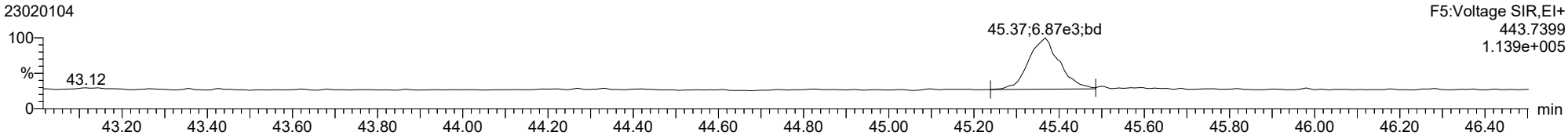


ID: CSLCR, Name: 23020104, Date: 01-Feb-2023, Time: 14:39:51, Conditions: AUTOSPEC01, User: pk

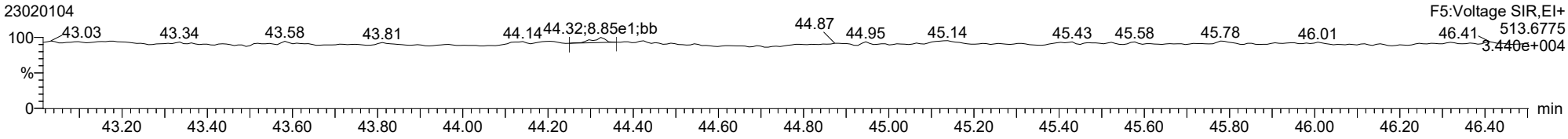
OCDF



OCDF



FUNCTION5 DCDPE



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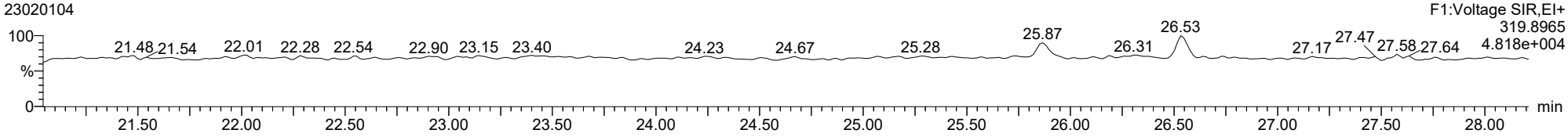
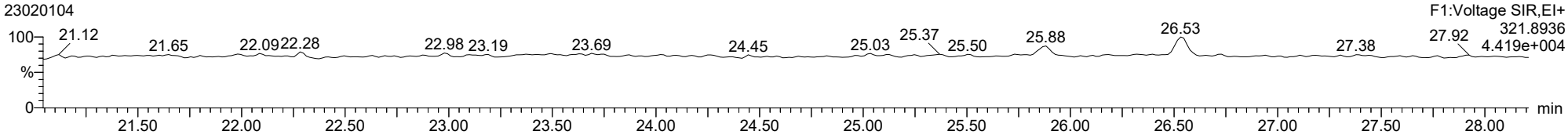
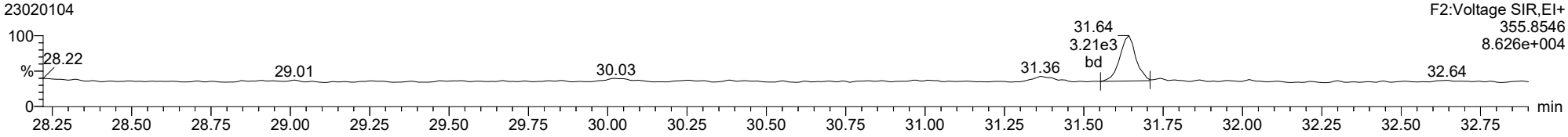
Total-tetradioxins



Total-tetradioxins



Total-pentadioxins



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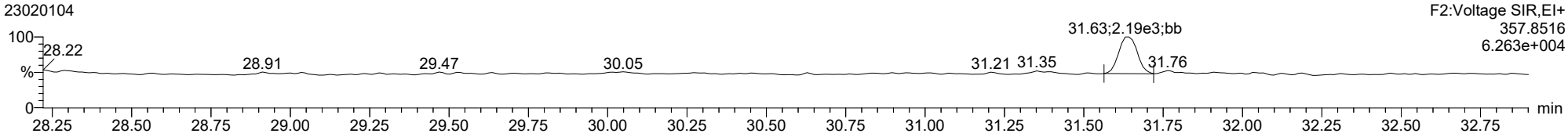

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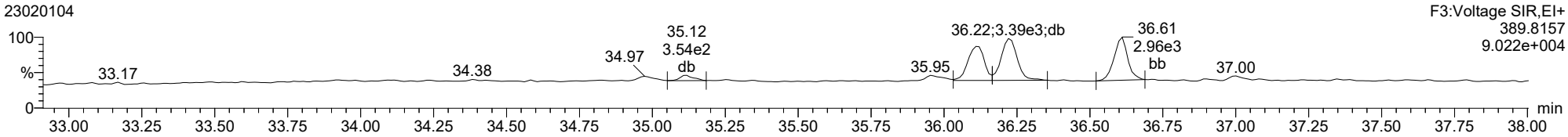
Total-hexadioxins



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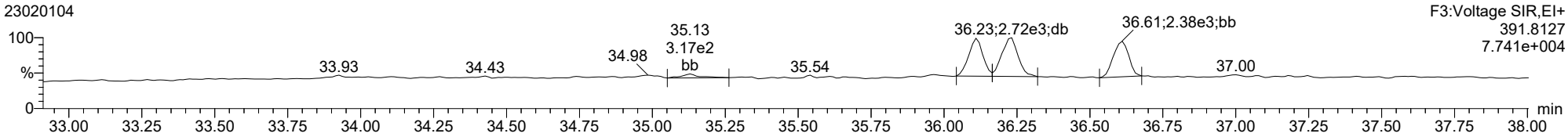

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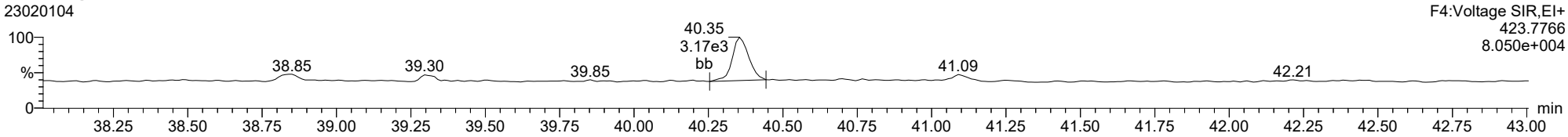

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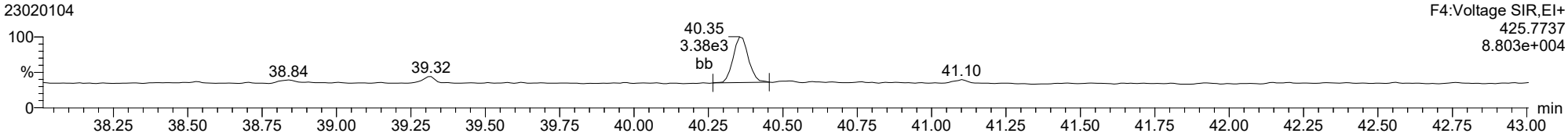
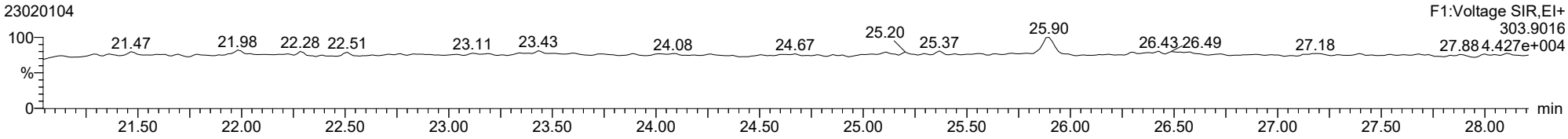
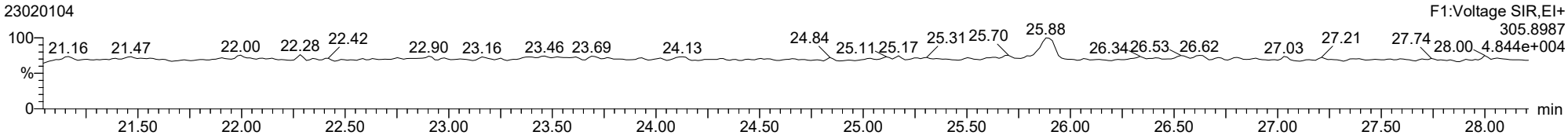


ID: CSLCR, Name: 23020104, Date: 01-Feb-2023, Time: 14:39:51, Conditions: AUTOSPEC01, User: pk

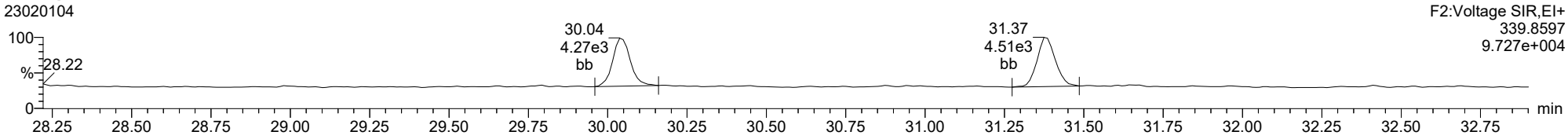
Total-tetrafurans



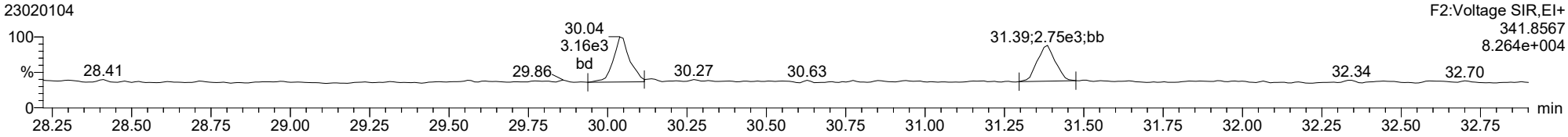
Total-tetrafurans



Total-pentafurans



Total-pentafurans



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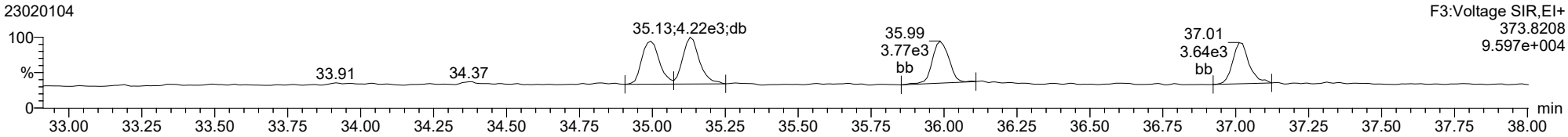
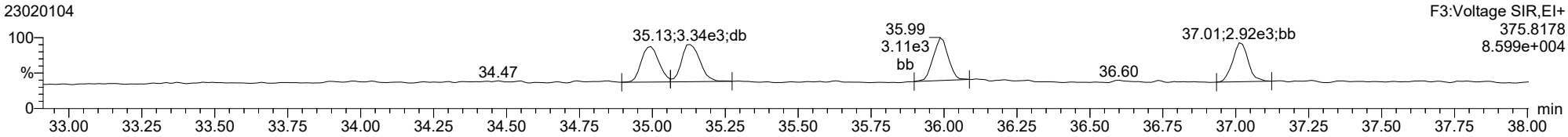
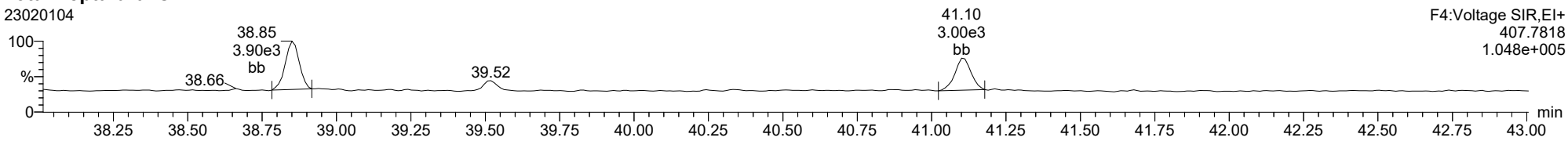
Total-hexafurans



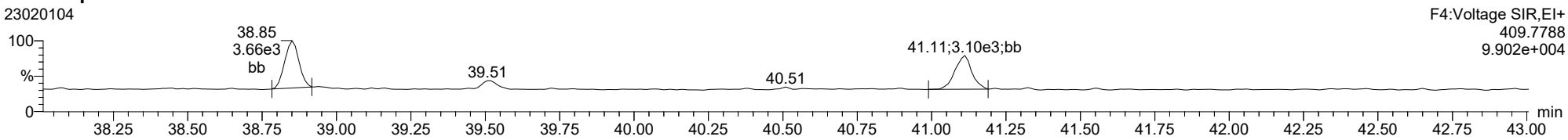
Total-hexafurans



Total-heptafurans



Total-heptafurans



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Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
Printed: Friday, February 03, 2023 10:37:09 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: 03 Feb 2023 10:33:40

ID: CS1CR, Name: 23020105, Date: 01-Feb-2023, Time: 15:28:53, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.897	1.001	3.165e3	3.812e3	0.876	0.830	0.770	851	1202	5.14e4	5.60e4	60.4	46.6	NO	db	bb	0.501
12378-PeCDF	30.048	1.000	1.657e4	1.122e4	0.845	1.477	1.550	1016	1248	2.51e5	1.73e5	247.1	138.5	NO	bb	bb	2.455
23478-PeCDF	31.385	1.000	1.669e4	1.174e4	0.911	1.422	1.550	1016	1248	2.63e5	1.81e5	259.2	145.3	NO	bb	bd	2.401
123478-HxCDF	35.006	1.001	1.544e4	1.249e4	1.182	1.236	1.240	890	1056	2.44e5	1.98e5	274.0	187.0	NO	bd	bd	2.494
234678-HxCDF	35.998	1.001	1.543e4	1.155e4	1.229	1.336	1.240	890	1056	2.60e5	1.91e5	292.0	180.6	NO	bd	bb	2.421
123678-HxCDF	35.140	1.001	1.636e4	1.318e4	1.248	1.241	1.240	890	1056	2.60e5	2.03e5	291.7	192.2	NO	dd	db	2.443
123789-HxCDF	37.023	1.000	1.293e4	1.008e4	1.187	1.282	1.240	890	1056	2.13e5	1.63e5	239.4	154.3	NO	bd	bb	2.372
1234678-HpCDF	38.861	1.000	1.439e4	1.337e4	1.204	1.077	1.050	1098	1117	2.42e5	2.23e5	220.8	199.9	NO	bb	bd	2.577
1234789-HpCDF	41.112	1.000	1.117e4	1.059e4	1.165	1.055	1.050	1098	1117	1.62e5	1.56e5	147.3	139.5	NO	bb	bb	2.411
OCDF	45.367	1.006	1.860e4	2.066e4	1.186	0.900	0.890	1237	861	2.12e5	2.52e5	171.2	292.2	NO	bb	bb	5.087
2378-TCDD	26.547	1.001	2.836e3	3.619e3	1.236	0.784	0.770	1261	742	4.26e4	5.78e4	33.8	77.9	NO	bb	bb	0.538
12378-PeCDD	31.642	1.000	1.354e4	8.892e3	1.087	1.522	1.550	1167	972	2.08e5	1.36e5	178.2	140.0	NO	bd	bd	2.535
123478-HxCDD	36.120	1.001	1.109e4	9.100e3	0.987	1.219	1.240	1079	803	1.88e5	1.54e5	174.2	191.5	NO	bd	bd	2.425
123678-HxCDD	36.232	1.000	1.193e4	1.017e4	1.021	1.173	1.240	1079	803	2.08e5	1.71e5	192.4	213.0	NO	db	dd	2.523
123789-HxCDD	36.611	1.011	1.141e4	9.550e3	0.985	1.195	1.240	1079	803	1.90e5	1.59e5	175.6	197.5	NO	bb	bd	2.499
1234678-HpCDD	40.365	1.000	1.047e4	1.022e4	1.253	1.025	1.050	924	912	1.67e5	1.57e5	180.8	172.2	NO	bb	bb	2.439
OCDD	45.129	1.000	2.025e4	2.243e4	1.103	0.903	0.890	770	1015	2.54e5	2.74e5	329.8	270.4	NO	bb	bb	5.948
13C-2378-TCDF	25.882	1.007	6.992e5	8.909e5	1.768	0.785	0.770	1890	1690	1.07e7	1.37e7	5679.3	8103.6	NO	bb	bb	99.523
13C-12378-PeCDF	30.037	1.168	8.127e5	5.274e5	1.527	1.541	1.550	2822	3217	1.25e7	8.12e6	4447.1	2523.6	NO	bb	bb	97.112
13C-23478-PeCDF	31.374	1.220	7.914e5	5.082e5	1.466	1.557	1.550	2822	3217	1.22e7	7.90e6	4335.0	2456.5	NO	bb	bb	98.086
13C-123478-HxCDF	34.984	0.956	3.203e5	6.270e5	1.054	0.511	0.510	2242	2569	5.23e6	1.03e7	2333.1	3994.8	NO	bd	bd	102.287
13C-123678-HxCDF	35.118	0.960	3.331e5	6.354e5	1.080	0.524	0.510	2242	2569	5.30e6	1.04e7	2362.3	4050.9	NO	db	db	102.033
13C-234678-HxCDF	35.975	0.983	3.012e5	6.055e5	1.014	0.497	0.510	2242	2569	5.04e6	1.01e7	2247.8	3935.5	NO	bb	bb	101.688
13C-123789-HxCDF	37.012	1.011	2.780e5	5.398e5	0.928	0.515	0.510	2242	2569	4.60e6	8.89e6	2053.4	3459.1	NO	bb	bb	100.261
13C-1234678-HpCDF	38.850	1.061	2.750e5	6.195e5	1.036	0.444	0.440	2698	3387	4.63e6	1.03e7	1714.9	3048.9	NO	bb	bb	98.218
13C-1234789-HpCDF	41.100	1.123	2.400e5	5.347e5	0.905	0.449	0.440	2698	3387	3.64e6	7.83e6	1350.8	2311.2	NO	bb	bb	97.391
13C-1234-TCDD	25.715	0.000	4.030e5	5.006e5	1.000	0.805	0.770	2070	1290	6.17e6	7.63e6	2981.3	5910.4	NO	bb	bb	100.000
13C-2378-TCDD	26.517	1.031	4.334e5	5.370e5	1.103	0.807	0.770	2070	1290	6.64e6	8.43e6	3208.6	6536.2	NO	bb	bb	97.361
13C-12378-PeCDD	31.630	1.230	5.002e5	3.141e5	0.914	1.593	1.550	1571	1429	7.70e6	4.72e6	4905.0	3303.0	NO	bb	bd	98.574
13C-123478-HxCDD	36.098	0.986	4.774e5	3.663e5	0.933	1.303	1.240	2711	2219	7.76e6	6.04e6	2862.5	2723.9	NO	bd	bd	102.880
13C-123678-HxCDD	36.221	0.990	4.780e5	3.801e5	0.965	1.258	1.240	2711	2219	7.94e6	6.30e6	2926.7	2837.8	NO	db	db	101.203
13C-1234678-HpCDD	40.354	1.103	3.494e5	3.280e5	0.782	1.065	1.050	1617	1571	5.50e6	5.16e6	3401.2	3284.5	NO	bb	bb	98.546
13C-OCDD	45.111	1.233	6.222e5	6.790e5	0.788	0.916	0.890	1719	2376	7.89e6	8.58e6	4588.0	3611.7	NO	bb	bb	187.800
13C-123789-HxCDD	36.599	0.000	4.932e5	3.858e5	1.000	1.278	1.240	2711	2219	8.15e6	6.30e6	3006.5	2840.6	NO	bb	bb	100.000
37CL-2378-TCDD	26.547	1.032	5.621e3		1.233			1648		8.22e4		49.9			bb		0.504

Dataset: T:\Autospec\Processed Data Batch\230201ICIH.qld
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Printed: Friday, February 03, 2023 10:37:09 Pacific Standard Time

ID: CS1CR, Name: 23020105, Date: 01-Feb-2023, Time: 15:28:53, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					1.064		0.770	851	1202								
1289-TCDF					0.858		0.770	851	1202								
13468-PECDF					1.013		1.550	923	968								
12389-PECDF					0.844		1.550	1016	1248								
123468-HXCDF					1.197		1.240	890	1056								
1368-TCDD					1.084		0.770	1261	742								
1289-TCDD					0.975		0.770	1261	742								
12479-PECDD					1.837		1.550	1167	972								
12389-PECDD					1.252		1.550	1167	972								
124679-HXCDD					1.033		1.240	1079	803								
1234679-HPCDD					1.286		1.050	924	912								
Total-tetrafurans			3.165e3		0.933			851		5.14e4							0.501
Total-penta1			0.000e0					923		0.00e0							
Total-pentafurans			3.326e4		0.866			1016		5.14e5							4.856
Total-hexafurans			6.015e4		1.208			890		9.76e5							9.731
Total-heptafurans			2.643e4		1.185			1098		4.18e5							5.166
Total-Furans			1.416e5		1.067			851		2.17e6							25.340
Total-tetradioxins			2.907e3		1.099			1261		4.45e4							0.554
Total-pentadioxins			1.372e4		1.392			1167		2.12e5							2.561
Total-hexadioxins			3.443e4		1.007			1079		5.85e5							7.448
Total-heptadioxins			1.047e4		1.269			924		1.67e5							2.439
Total-Dioxins			8.178e4		1.165			1261		1.26e6							18.950
Total-TEQ			2.234e5					1261		3.43e6							44.290
FUNCTION1 PFK			2.400e7					626106		1.90e8							
FUNCTION2 PFK			0.000e0					236572		0.00e0							
FUNCTION3 PFK			4.302e5					501624		1.34e7							0.000
FUNCTION4 PFK			4.347e5					324457		1.19e7							
FUNCTION5 PFK			8.590e4					209539		3.93e6							
FUNCTION1 HXCD...			1.828e3					784		2.65e4							0.000
FUNCTION1 HPCD...			8.634e2					852		1.29e4							0.000
FUNCTION2 HPCD...			2.922e2					978		5.26e3							0.000
FUNCTION3 OCDPE			8.271e2					835		1.40e4							0.000
FUNCTION4 NCDPE			1.900e2					822		4.03e3							0.000
FUNCTION5 DCDPE			0.000e0					732		0.00e0							

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: 03 Feb 2023 10:33:40

ID: CS1CR, Name: 23020105, Date: 01-Feb-2023, Time: 15:28:53, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.90	3.165e3	3.812e3	0.876	0.83	0.77	60.4	YES	NO	db	bb	0.501

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.39	1.669e4	1.174e4	0.911	1.42	1.55	259.2	YES	NO	bb	bd	2.401
2	12378-PeCDF	30.05	1.657e4	1.122e4	0.845	1.48	1.55	247.1	YES	NO	bb	bb	2.455

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	37.02	1.293e4	1.008e4	1.187	1.28	1.24	239.4	YES	NO	bd	bb	2.372
2	234678-HxCDF	36.00	1.543e4	1.155e4	1.229	1.34	1.24	292.0	YES	NO	bd	bb	2.421
3	123678-HxCDF	35.14	1.636e4	1.318e4	1.248	1.24	1.24	291.7	YES	NO	dd	db	2.443
4	123478-HxCDF	35.01	1.544e4	1.249e4	1.182	1.24	1.24	274.0	YES	NO	bd	bd	2.494

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.11	1.117e4	1.059e4	1.165	1.05	1.05	147.3	YES	NO	bb	bb	2.411
2	Total-heptafurans	39.52	8.567e2	9.013e2	1.185	0.95	1.05	12.7	YES	NO	bb	bb	0.178
3	1234678-HpCDF	38.86	1.439e4	1.337e4	1.204	1.08	1.05	220.8	YES	NO	bb	bd	2.577

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.90	3.165e3	3.812e3	0.876	0.83	0.77	60.4	YES	NO	db	bb	0.501
2	23478-PeCDF	31.39	1.669e4	1.174e4	0.911	1.42	1.55	259.2	YES	NO	bb	bd	2.401
3	12378-PeCDF	30.05	1.657e4	1.122e4	0.845	1.48	1.55	247.1	YES	NO	bb	bb	2.455
4	123789-HxCDF	37.02	1.293e4	1.008e4	1.187	1.28	1.24	239.4	YES	NO	bd	bb	2.372
5	234678-HxCDF	36.00	1.543e4	1.155e4	1.229	1.34	1.24	292.0	YES	NO	bd	bb	2.421
6	123678-HxCDF	35.14	1.636e4	1.318e4	1.248	1.24	1.24	291.7	YES	NO	dd	db	2.443
7	123478-HxCDF	35.01	1.544e4	1.249e4	1.182	1.24	1.24	274.0	YES	NO	bd	bd	2.494
8	1234789-HpCDF	41.11	1.117e4	1.059e4	1.165	1.05	1.05	147.3	YES	NO	bb	bb	2.411
9	Total-heptafurans	39.52	8.567e2	9.013e2	1.185	0.95	1.05	12.7	YES	NO	bb	bb	0.178
10	1234678-HpCDF	38.86	1.439e4	1.337e4	1.204	1.08	1.05	220.8	YES	NO	bb	bd	2.577
11	OCDF	45.37	1.860e4	2.066e4	1.186	0.90	0.89	171.2	YES	NO	bb	bb	5.087

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	24.26	7.113e1	9.739e1	1.099	0.73	0.77	1.5	NO	NO	bb	bb	0.016
2	2378-TCDD	26.55	2.836e3	3.619e3	1.236	0.78	0.77	33.8	YES	NO	bb	bb	0.538

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentadioxins	31.80	1.875e2	1.127e2	1.392	1.66	1.55	3.4	YES	NO	db	db	0.026
2	12378-PeCDD	31.64	1.354e4	8.892e3	1.087	1.52	1.55	178.2	YES	NO	bd	bd	2.535

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.61	1.141e4	9.550e3	0.985	1.19	1.24	175.6	YES	NO	bb	bd	2.499
2	123678-HxCDD	36.23	1.193e4	1.017e4	1.021	1.17	1.24	192.4	YES	NO	db	dd	2.523
3	123478-HxCDD	36.12	1.109e4	9.100e3	0.987	1.22	1.24	174.2	YES	NO	bd	bd	2.425

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.37	1.047e4	1.022e4	1.253	1.02	1.05	180.8	YES	NO	bb	bb	2.439

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	24.26	7.113e1	9.739e1	1.099	0.73	0.77	1.5	NO	NO	bb	bb	0.016
2	2378-TCDD	26.55	2.836e3	3.619e3	1.236	0.78	0.77	33.8	YES	NO	bb	bb	0.538
3	Total-pentadioxins	31.80	1.875e2	1.127e2	1.392	1.66	1.55	3.4	YES	NO	db	db	0.026
4	12378-PeCDD	31.64	1.354e4	8.892e3	1.087	1.52	1.55	178.2	YES	NO	bd	bd	2.535
5	123789-HxCDD	36.61	1.141e4	9.550e3	0.985	1.19	1.24	175.6	YES	NO	bb	bd	2.499
6	123678-HxCDD	36.23	1.193e4	1.017e4	1.021	1.17	1.24	192.4	YES	NO	db	dd	2.523
7	123478-HxCDD	36.12	1.109e4	9.100e3	0.987	1.22	1.24	174.2	YES	NO	bd	bd	2.425
8	1234678-HpCDD	40.37	1.047e4	1.022e4	1.253	1.02	1.05	180.8	YES	NO	bb	bb	2.439
9	OCDD	45.13	2.025e4	2.243e4	1.103	0.90	0.89	329.8	YES	NO	bb	bb	5.948

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.90	3.165e3	3.812e3	0.876	0.83	0.77	60.4	YES	NO	db	bb	0.501
2	23478-PeCDF	31.39	1.669e4	1.174e4	0.911	1.42	1.55	259.2	YES	NO	bb	bd	2.401
3	12378-PeCDF	30.05	1.657e4	1.122e4	0.845	1.48	1.55	247.1	YES	NO	bb	bb	2.455
4	123789-HxCDF	37.02	1.293e4	1.008e4	1.187	1.28	1.24	239.4	YES	NO	bd	bb	2.372
5	234678-HxCDF	36.00	1.543e4	1.155e4	1.229	1.34	1.24	292.0	YES	NO	bd	bb	2.421
6	123678-HxCDF	35.14	1.636e4	1.318e4	1.248	1.24	1.24	291.7	YES	NO	dd	db	2.443
7	123478-HxCDF	35.01	1.544e4	1.249e4	1.182	1.24	1.24	274.0	YES	NO	bd	bd	2.494
8	1234789-HpCDF	41.11	1.117e4	1.059e4	1.165	1.05	1.05	147.3	YES	NO	bb	bb	2.411
9	Total-heptafurans	39.52	8.567e2	9.013e2	1.185	0.95	1.05	12.7	YES	NO	bb	bb	0.178
10	1234678-HpCDF	38.86	1.439e4	1.337e4	1.204	1.08	1.05	220.8	YES	NO	bb	bd	2.577
11	OCDF	45.37	1.860e4	2.066e4	1.186	0.90	0.89	171.2	YES	NO	bb	bb	5.087
12	Total-tetradioxins	24.26	7.113e1	9.739e1	1.099	0.73	0.77	1.5	NO	NO	bb	bb	0.016
13	2378-TCDD	26.55	2.836e3	3.619e3	1.236	0.78	0.77	33.8	YES	NO	bb	bb	0.538
14	Total-pentadioxins	31.80	1.875e2	1.127e2	1.392	1.66	1.55	3.4	YES	NO	db	db	0.026
15	12378-PeCDD	31.64	1.354e4	8.892e3	1.087	1.52	1.55	178.2	YES	NO	bd	bd	2.535
16	123789-HxCDD	36.61	1.141e4	9.550e3	0.985	1.19	1.24	175.6	YES	NO	bb	bd	2.499
17	123678-HxCDD	36.23	1.193e4	1.017e4	1.021	1.17	1.24	192.4	YES	NO	db	dd	2.523
18	123478-HxCDD	36.12	1.109e4	9.100e3	0.987	1.22	1.24	174.2	YES	NO	bd	bd	2.425
19	1234678-HpCDD	40.37	1.047e4	1.022e4	1.253	1.02	1.05	180.8	YES	NO	bb	bb	2.439
20	OCDD	45.13	2.025e4	2.243e4	1.103	0.90	0.89	329.8	YES	NO	bb	bb	5.948

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.24	1.348e6					15.3	YES		dd		
2	FUNCTION1 PFK	22.18	4.644e5					16.9	YES		dd		
3	FUNCTION1 PFK	22.16	1.313e6					16.6	YES		dd		
4	FUNCTION1 PFK	21.98	1.487e6					20.5	YES		dd		
5	FUNCTION1 PFK	21.88	1.450e6					22.1	YES		dd		
6	FUNCTION1 PFK	21.72	1.801e6					24.8	YES		dd		
7	FUNCTION1 PFK	21.60	1.955e6					26.8	YES		dd		
8	FUNCTION1 PFK	21.39	6.532e6					30.5	YES		dd		
9	FUNCTION1 PFK	21.12	3.552e6					35.4	YES		bd		
10	FUNCTION1 PFK	24.35	3.975e3					0.4	NO		bb		
11	FUNCTION1 PFK	24.08	2.445e4					0.9	NO		bb		
12	FUNCTION1 PFK	23.89	1.855e4					1.0	NO		bb		
13	FUNCTION1 PFK	23.81	2.526e4					1.3	NO		bb		
14	FUNCTION1 PFK	23.73	2.606e4					1.2	NO		db		
15	FUNCTION1 PFK	23.63	3.953e4					0.9	NO		bd		
16	FUNCTION1 PFK	23.40	1.725e4					0.8	NO		db		
17	FUNCTION1 PFK	23.36	2.281e4					0.8	NO		bd		
18	FUNCTION1 PFK	23.28	4.142e4					1.3	NO		bb		
19	FUNCTION1 PFK	23.08	3.989e4					1.2	NO		db		
20	FUNCTION1 PFK	23.01	5.719e4					2.6	NO		dd		
21	FUNCTION1 PFK	22.78	6.498e5					6.6	YES		dd		
22	FUNCTION1 PFK	22.62	7.070e5					9.1	YES		dd		
23	FUNCTION1 PFK	22.51	7.554e5					10.8	YES		dd		
24	FUNCTION1 PFK	22.43	4.428e5					12.6	YES		dd		
25	FUNCTION1 PFK	22.39	4.834e5					13.1	YES		dd		
26	FUNCTION1 PFK	26.44	1.834e4					0.9	NO		bb		
27	FUNCTION1 PFK	26.31	1.630e4					0.8	NO		db		
28	FUNCTION1 PFK	26.24	2.476e4					1.0	NO		bd		
29	FUNCTION1 PFK	26.17	2.817e4					1.0	NO		bb		
30	FUNCTION1 PFK	26.03	3.473e4					1.3	NO		db		
31	FUNCTION1 PFK	25.97	2.971e4					1.1	NO		dd		
32	FUNCTION1 PFK	25.90	2.965e4					1.4	NO		bd		
33	FUNCTION1 PFK	25.84	6.319e3					0.7	NO		bb		
34	FUNCTION1 PFK	25.76	2.805e4					1.0	NO		db		
35	FUNCTION1 PFK	25.69	1.550e4					0.7	NO		bd		
36	FUNCTION1 PFK	25.43	1.865e4					0.8	NO		bb		
37	FUNCTION1 PFK	25.29	2.496e4					1.2	NO		bb		

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION1 PFK	25.16	1.218e4					0.7	NO		bb		
39	FUNCTION1 PFK	24.90	4.251e4					1.2	NO		bb		
40	FUNCTION1 PFK	24.82	9.911e3					0.6	NO		bb		
41	FUNCTION1 PFK	24.70	1.084e4					0.7	NO		bb		
42	FUNCTION1 PFK	28.13	1.191e4					0.5	NO		bb		
43	FUNCTION1 PFK	28.06	1.157e4					0.7	NO		bb		
44	FUNCTION1 PFK	27.94	2.880e4					1.2	NO		bb		
45	FUNCTION1 PFK	27.73	2.725e4					1.2	NO		db		
46	FUNCTION1 PFK	27.65	2.104e4					0.9	NO		bd		
47	FUNCTION1 PFK	27.53	9.466e3					0.5	NO		bb		
48	FUNCTION1 PFK	27.45	2.859e4					0.9	NO		db		
49	FUNCTION1 PFK	27.32	3.854e4					1.1	NO		bd		
50	FUNCTION1 PFK	27.18	2.011e4					0.9	NO		db		
51	FUNCTION1 PFK	27.11	5.101e4					1.6	NO		dd		
52	FUNCTION1 PFK	27.05	7.101e4					1.7	NO		dd		
53	FUNCTION1 PFK	26.97	2.738e4					1.1	NO		bd		
54	FUNCTION1 PFK	26.85	5.698e3					0.5	NO		bb		
55	FUNCTION1 PFK	26.79	9.173e3					0.6	NO		bb		
56	FUNCTION1 PFK	26.65	1.932e4					1.0	NO		bb		
57	FUNCTION1 PFK	26.50	1.249e4					0.8	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	35.28	1.720e4					1.2	NO		bb		0.000
2	FUNCTION3 PFK	35.17	3.494e4					1.4	NO		bb		0.000
3	FUNCTION3 PFK	35.02	1.498e4					0.7	NO		bb		0.000
4	FUNCTION3 PFK	34.97	2.068e4					1.6	NO		db		0.000
5	FUNCTION3 PFK	34.92	3.898e4					1.7	NO		bd		0.000
6	FUNCTION3 PFK	34.84	3.344e4					2.0	NO		db		0.000
7	FUNCTION3 PFK	34.79	4.044e4					2.0	NO		bd		0.000
8	FUNCTION3 PFK	34.56	1.848e4					1.0	NO		bb		0.000
9	FUNCTION3 PFK	34.43	3.131e3					0.6	NO		bb		0.000
10	FUNCTION3 PFK	33.97	1.059e4					1.1	NO		bb		0.000
11	FUNCTION3 PFK	33.91	7.198e3					0.6	NO		bb		0.000
12	FUNCTION3 PFK	33.77	2.029e4					1.1	NO		bb		0.000
13	FUNCTION3 PFK	33.51	2.578e4					1.1	NO		bb		0.000
14	FUNCTION3 PFK	33.23	2.194e3					0.4	NO		bb		0.000
15	FUNCTION3 PFK	37.66	2.055e4					1.5	NO		db		0.000
16	FUNCTION3 PFK	37.61	1.552e4					1.3	NO		bd		0.000
17	FUNCTION3 PFK	37.55	2.721e4					1.4	NO		bb		0.000
18	FUNCTION3 PFK	37.30	3.274e4					1.5	NO		bb		0.000
19	FUNCTION3 PFK	36.81	9.296e3					0.9	NO		bb		0.000
20	FUNCTION3 PFK	36.47	5.665e3					0.6	NO		bb		0.000
21	FUNCTION3 PFK	36.37	1.213e4					0.9	NO		bb		0.000
22	FUNCTION3 PFK	35.99	5.368e3					0.6	NO		bb		0.000
23	FUNCTION3 PFK	35.72	2.308e3					0.4	NO		bb		0.000
24	FUNCTION3 PFK	35.61	2.395e3					0.4	NO		bb		0.000
25	FUNCTION3 PFK	35.56	8.733e3					0.7	NO		bb		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.48	1.749e3					0.5	NO		bb		
2	FUNCTION4 PFK	38.35	9.022e3					0.9	NO		bb		
3	FUNCTION4 PFK	38.24	3.875e3					0.6	NO		bb		
4	FUNCTION4 PFK	38.13	2.737e4					1.8	NO		bb		
5	FUNCTION4 PFK	41.33	1.294e4					1.5	NO		bd		
6	FUNCTION4 PFK	41.23	4.010e4					1.6	NO		db		
7	FUNCTION4 PFK	41.09	3.801e4					1.9	NO		bd		
8	FUNCTION4 PFK	40.99	2.136e4					1.8	NO		bb		
9	FUNCTION4 PFK	40.59	8.289e3					0.7	NO		bb		
10	FUNCTION4 PFK	40.23	3.985e3					0.6	NO		bb		
11	FUNCTION4 PFK	39.88	1.184e3					0.3	NO		bb		
12	FUNCTION4 PFK	39.83	1.945e3					0.5	NO		bb		
13	FUNCTION4 PFK	39.52	8.163e3					1.0	NO		bb		
14	FUNCTION4 PFK	39.21	1.232e3					0.3	NO		bb		
15	FUNCTION4 PFK	39.07	1.853e4					1.3	NO		db		
16	FUNCTION4 PFK	38.94	5.337e4					2.0	NO		dd		
17	FUNCTION4 PFK	38.87	1.627e4					1.6	NO		dd		
18	FUNCTION4 PFK	38.84	1.863e4					1.8	NO		bd		
19	FUNCTION4 PFK	38.69	3.030e4					2.1	NO		bb		
20	FUNCTION4 PFK	38.54	2.688e3					0.5	NO		bb		
21	FUNCTION4 PFK	42.75	7.635e3					1.1	NO		bb		
22	FUNCTION4 PFK	42.65	3.824e3					0.5	NO		db		
23	FUNCTION4 PFK	42.62	3.380e3					0.6	NO		bd		
24	FUNCTION4 PFK	42.55	8.483e3					1.1	NO		bb		
25	FUNCTION4 PFK	42.45	5.962e3					0.8	NO		db		
26	FUNCTION4 PFK	42.40	5.418e3					0.7	NO		bd		
27	FUNCTION4 PFK	42.27	7.694e3					0.9	NO		bb		
28	FUNCTION4 PFK	42.10	9.463e3					1.2	NO		db		
29	FUNCTION4 PFK	42.05	1.039e4					1.1	NO		bd		
30	FUNCTION4 PFK	41.81	3.060e3					0.9	NO		bb		
31	FUNCTION4 PFK	41.77	4.237e3					0.7	NO		bb		
32	FUNCTION4 PFK	41.71	3.440e3					0.6	NO		bb		
33	FUNCTION4 PFK	41.67	1.592e3					0.4	NO		bb		
34	FUNCTION4 PFK	41.57	2.688e4					1.3	NO		bb		
35	FUNCTION4 PFK	41.37	1.425e4					1.5	NO		db		

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	46.31	4.706e3					1.2	NO		bb		
2	FUNCTION5 PFK	46.25	4.425e3					1.1	NO		bb		
3	FUNCTION5 PFK	46.16	2.646e3					0.9	NO		bb		
4	FUNCTION5 PFK	46.03	5.117e3					1.5	NO		db		
5	FUNCTION5 PFK	46.01	6.487e3					1.4	NO		bd		
6	FUNCTION5 PFK	45.67	8.229e3					1.3	NO		bb		
7	FUNCTION5 PFK	45.46	1.002e3					0.5	NO		bb		
8	FUNCTION5 PFK	45.18	2.741e3					0.8	NO		db		
9	FUNCTION5 PFK	45.15	2.119e3					0.7	NO		bd		
10	FUNCTION5 PFK	44.83	3.811e3					1.2	NO		bb		
11	FUNCTION5 PFK	44.20	1.148e4					1.5	NO		bb		
12	FUNCTION5 PFK	44.06	5.518e3					1.3	NO		bb		
13	FUNCTION5 PFK	44.02	1.106e3					0.6	NO		bb		
14	FUNCTION5 PFK	43.71	1.195e4					1.8	NO		bb		
15	FUNCTION5 PFK	43.46	1.476e3					0.8	NO		bb		
16	FUNCTION5 PFK	43.39	1.169e4					1.4	NO		bb		
17	FUNCTION5 PFK	46.43	1.400e3					0.7	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.97	1.637e2					3.3	YES		bb		0.000
2	FUNCTION1 HXCD...	27.23	1.144e2					2.0	NO		bb		0.000
3	FUNCTION1 HXCD...	26.82	1.144e2					2.2	NO		bb		0.000
4	FUNCTION1 HXCD...	25.91	1.100e2					2.2	NO		bb		0.000
5	FUNCTION1 HXCD...	25.23	1.805e2					5.5	YES		bb		0.000
6	FUNCTION1 HXCD...	24.26	1.341e2					2.3	NO		bb		0.000
7	FUNCTION1 HXCD...	24.08	1.268e2					1.9	NO		bb		0.000
8	FUNCTION1 HXCD...	23.43	1.602e2					2.4	NO		bb		0.000
9	FUNCTION1 HXCD...	22.78	1.018e2					1.8	NO		bb		0.000
10	FUNCTION1 HXCD...	22.39	1.626e2					2.8	NO		bb		0.000
11	FUNCTION1 HXCD...	22.06	1.129e2					2.5	NO		bb		0.000
12	FUNCTION1 HXCD...	21.53	1.052e2					1.2	NO		db		0.000
13	FUNCTION1 HXCD...	21.36	9.992e1					1.3	NO		bd		0.000
14	FUNCTION1 HXCD...	21.16	1.410e2					2.5	NO		bb		0.000

ID: CS1CR, Name: 23020105, Date: 01-Feb-2023, Time: 15:28:53, Conditions: AUTOSPEC01, User: pk

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HPCD...	28.16	7.208e1					2.1	NO		bb		0.000
2	FUNCTION1 HPCD...	27.42	1.038e2					2.0	NO		db		0.000
3	FUNCTION1 HPCD...	27.27	1.034e2					2.2	NO		bd		0.000
4	FUNCTION1 HPCD...	25.70	1.308e2					1.7	NO		bb		0.000
5	FUNCTION1 HPCD...	24.05	1.613e2					1.7	NO		bb		0.000
6	FUNCTION1 HPCD...	22.59	1.423e2					2.0	NO		bb		0.000
7	FUNCTION1 HPCD...	22.39	1.496e2					3.4	YES		bb		0.000

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.14	1.080e2					1.8	NO		db		0.000
2	FUNCTION2 HPCD...	30.05	1.026e2					1.8	NO		bd		0.000
3	FUNCTION2 HPCD...	28.74	8.165e1					1.9	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.11	9.641e1					2.4	NO		db		0.000
2	FUNCTION3 OCDPE	36.03	1.029e2					1.5	NO		bd		0.000
3	FUNCTION3 OCDPE	34.77	8.096e1					1.2	NO		bb		0.000
4	FUNCTION3 OCDPE	37.01	1.018e2					2.8	NO		bb		0.000
5	FUNCTION3 OCDPE	36.73	1.470e2					3.1	YES		bb		0.000
6	FUNCTION3 OCDPE	36.60	1.766e2					3.1	YES		bb		0.000
7	FUNCTION3 OCDPE	36.22	1.214e2					2.7	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.34	9.946e1					2.4	NO		bb		0.000
2	FUNCTION4 NCDPE	39.96	9.057e1					2.5	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
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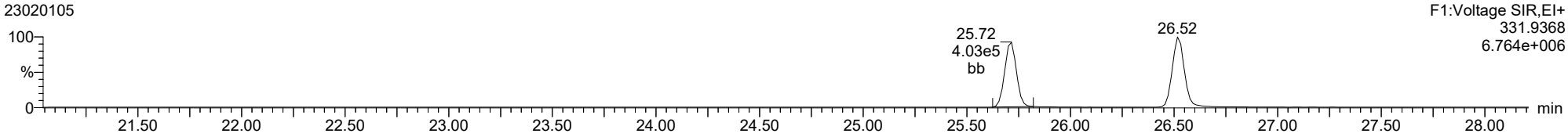

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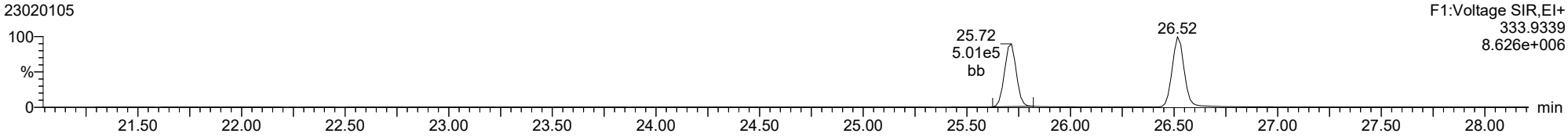

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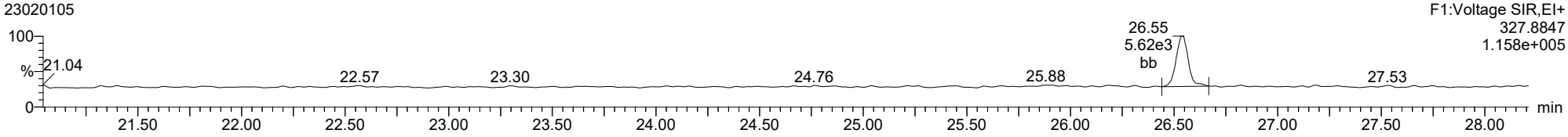

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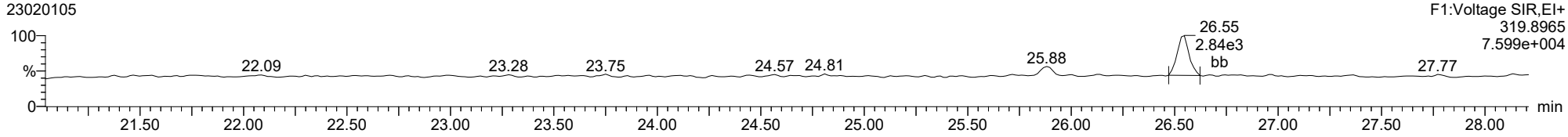

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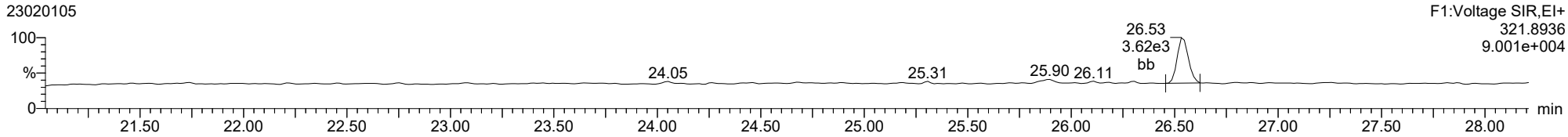

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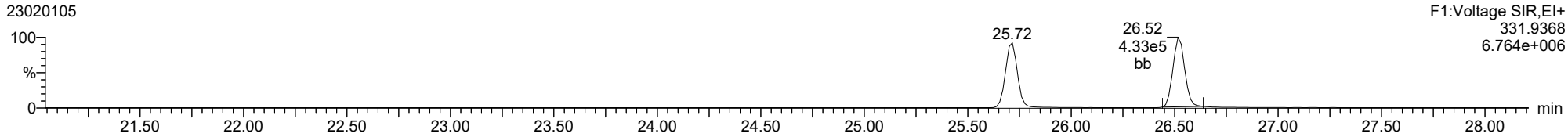

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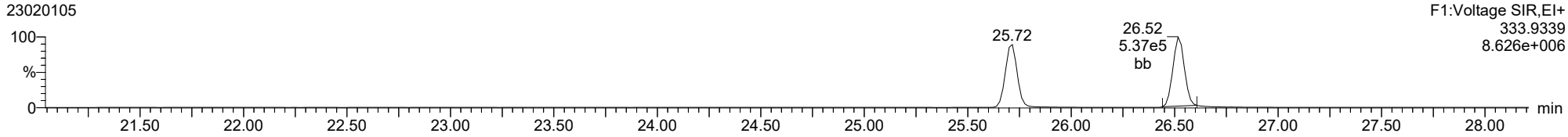

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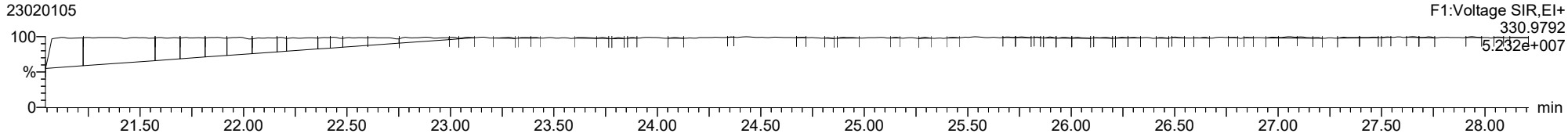

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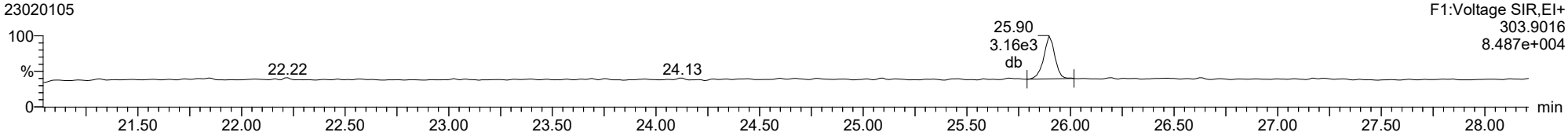

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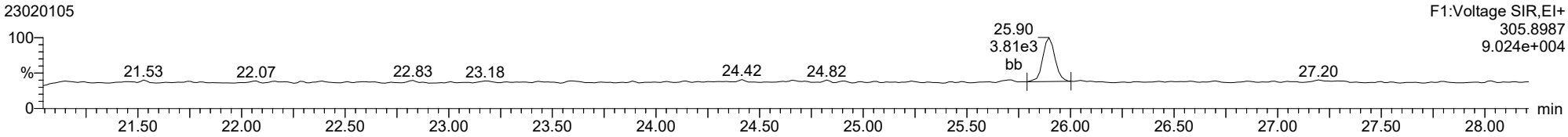

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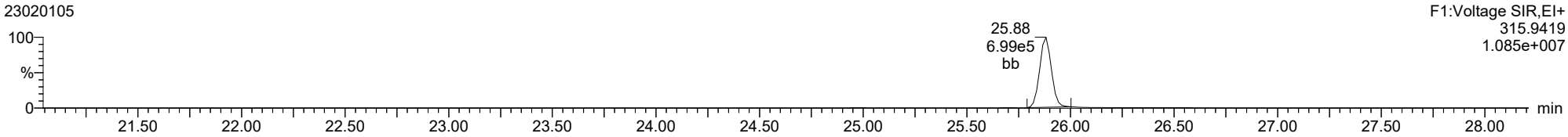

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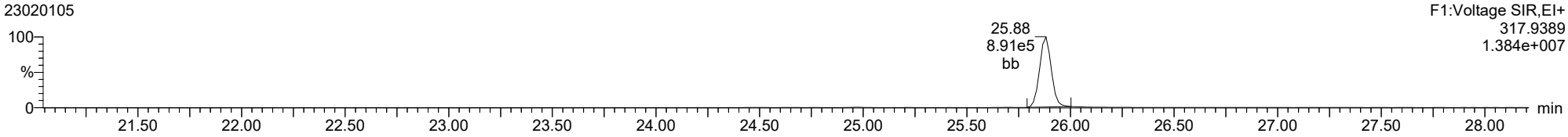

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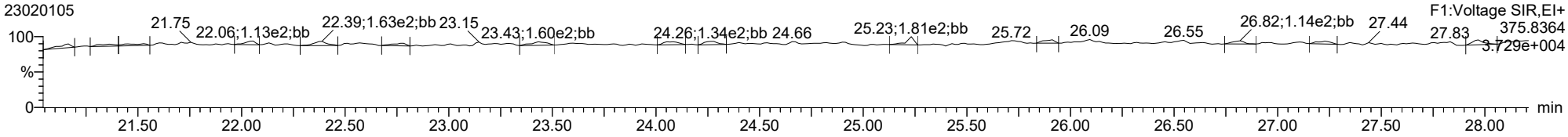

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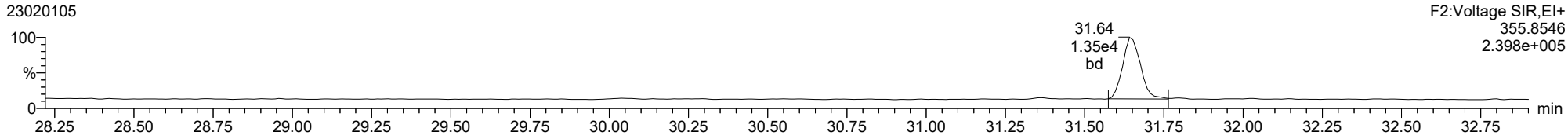

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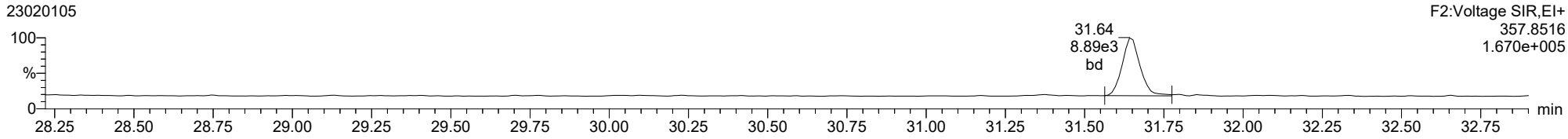

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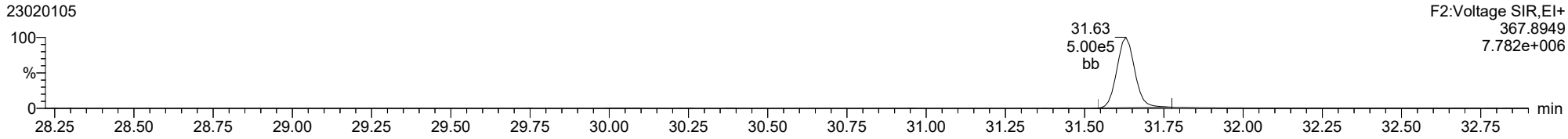

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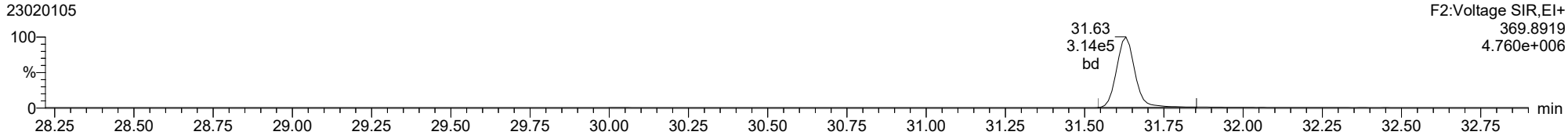

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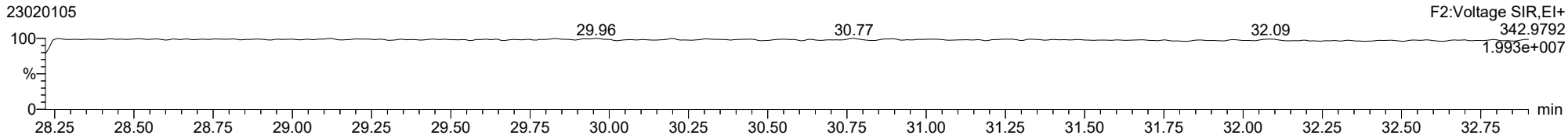

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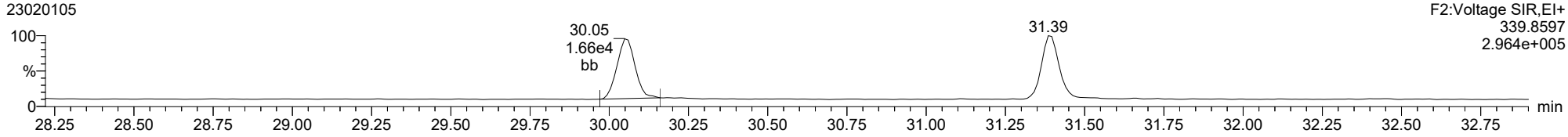

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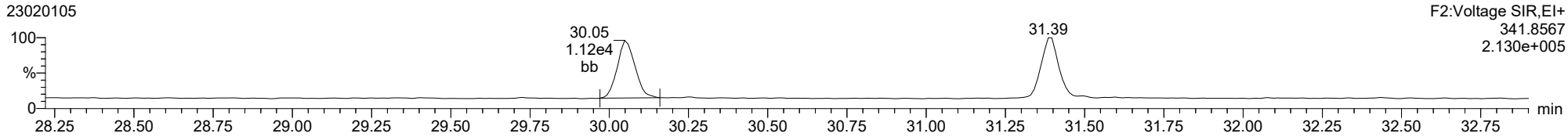

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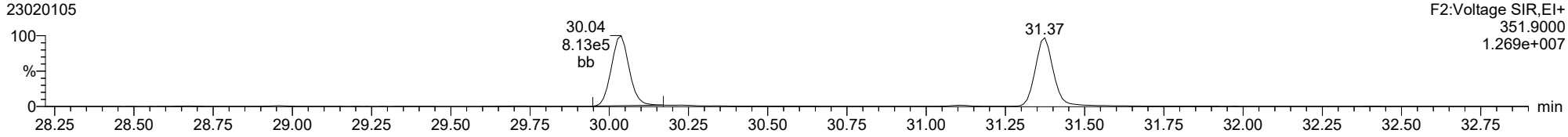

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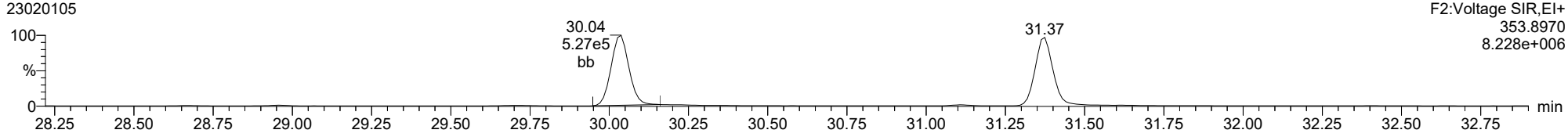

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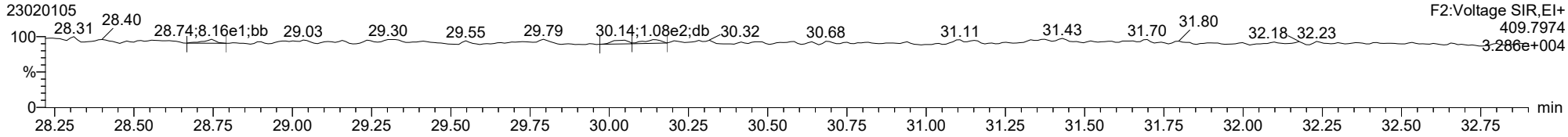

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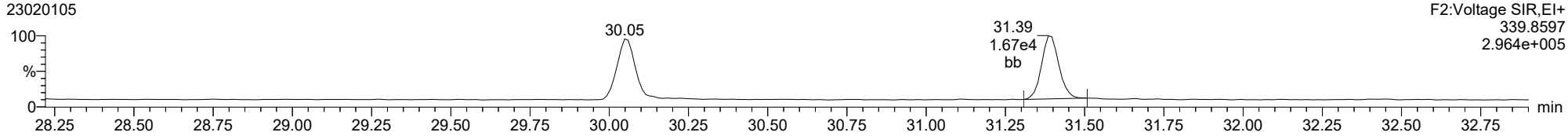

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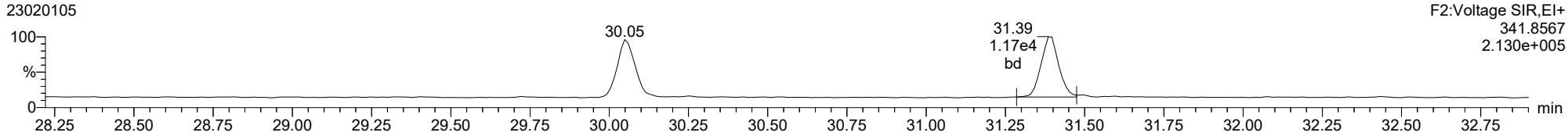

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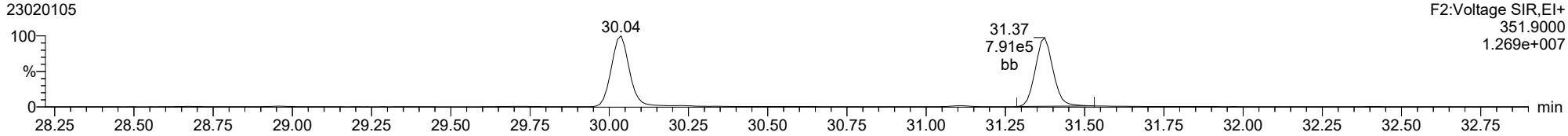

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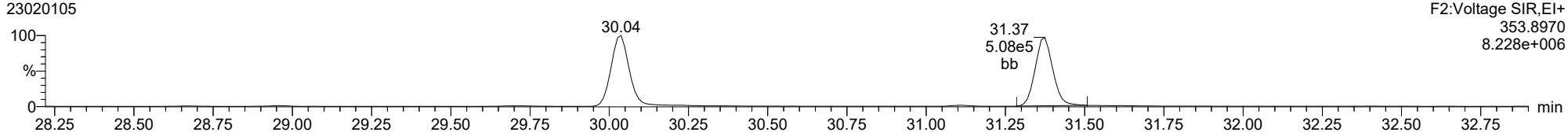

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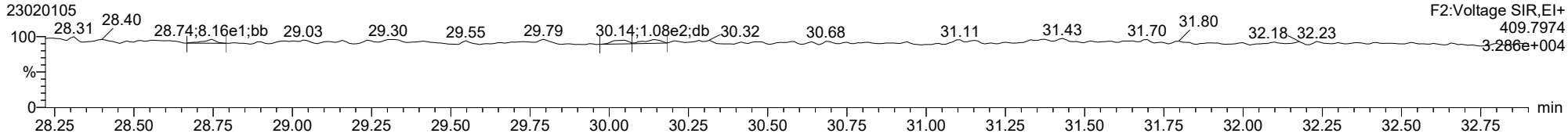

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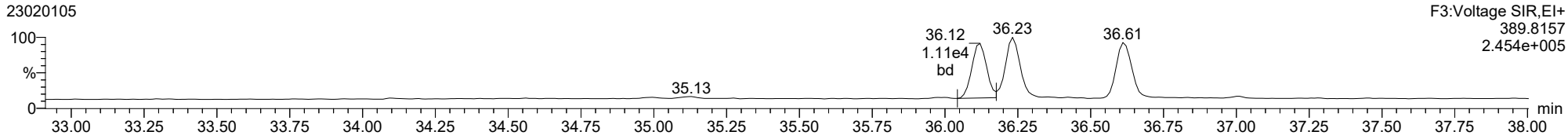
123478-HxCDD



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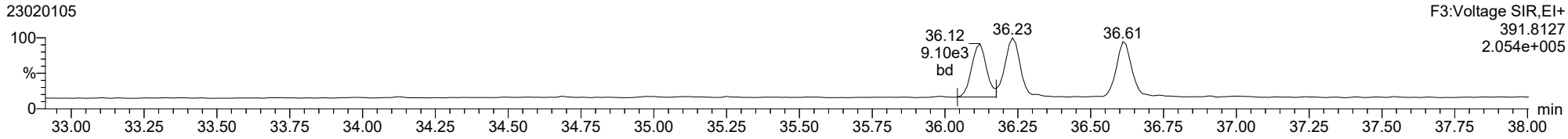

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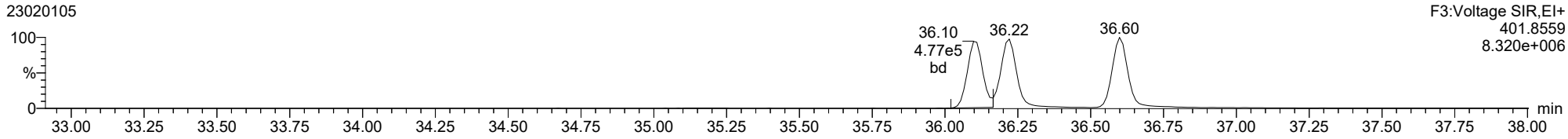

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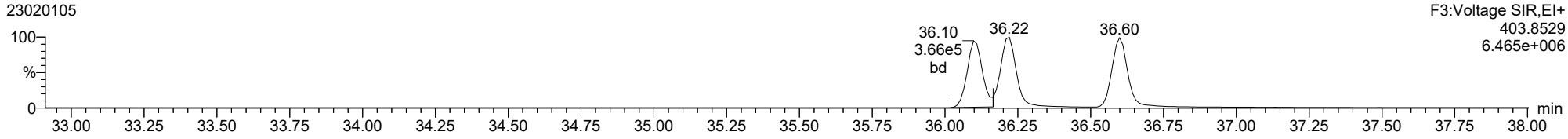

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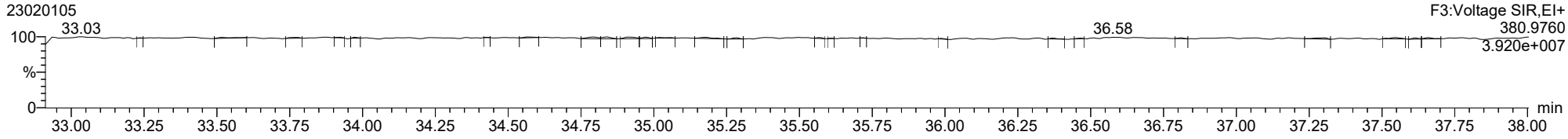

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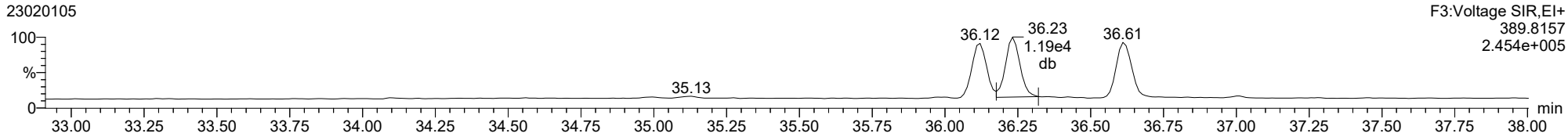

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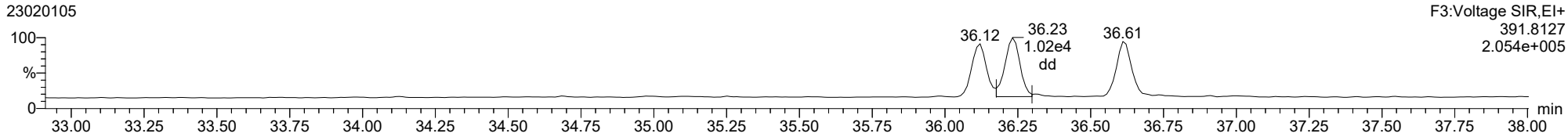

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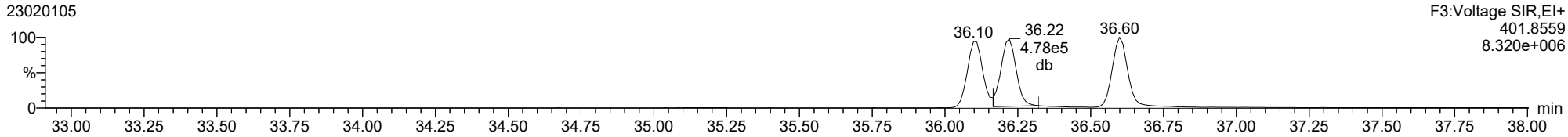

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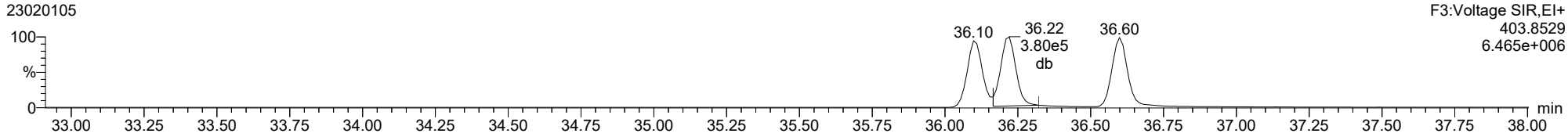

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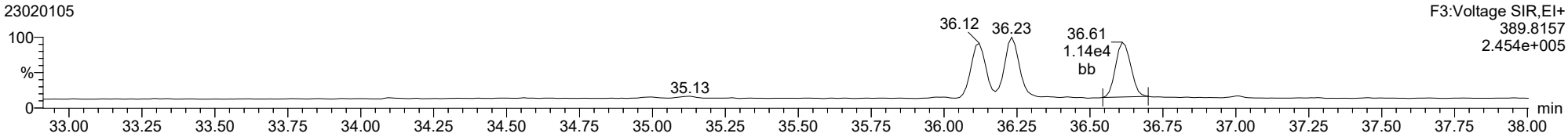

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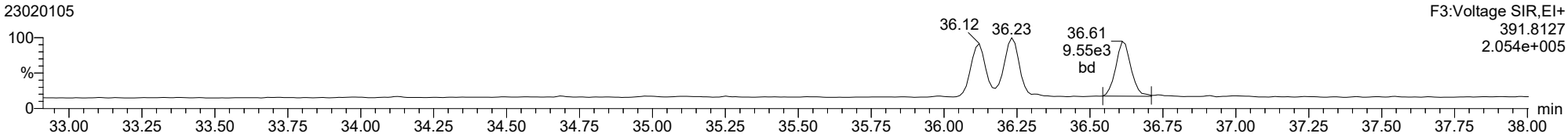

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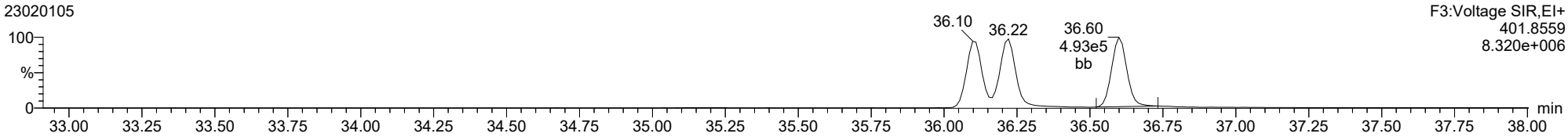

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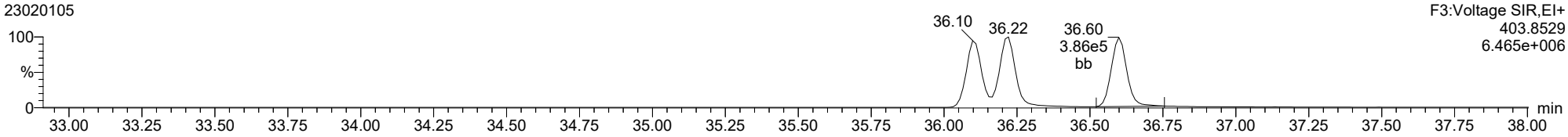

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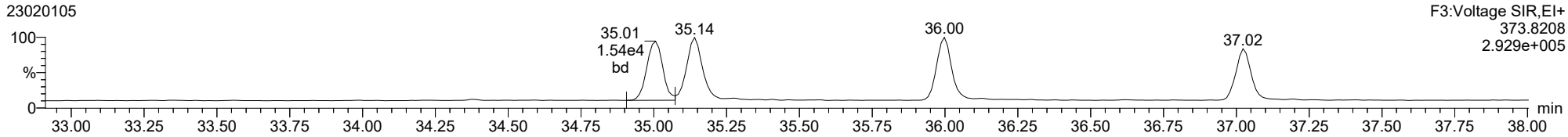

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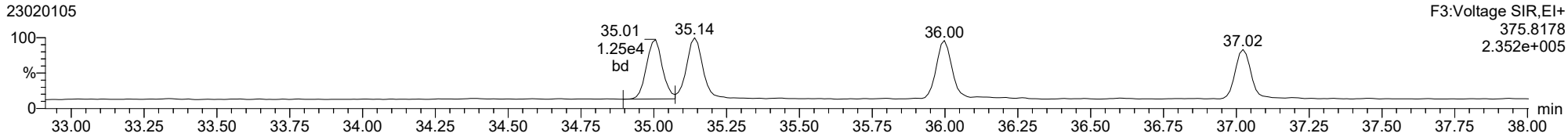

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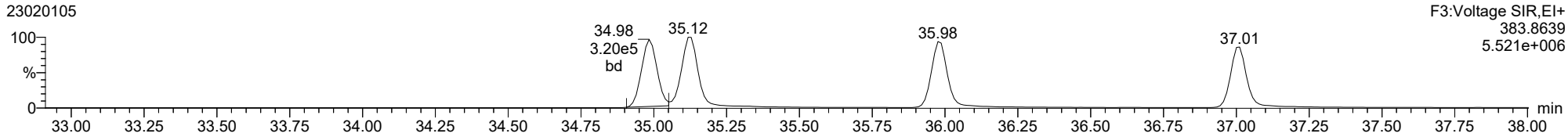

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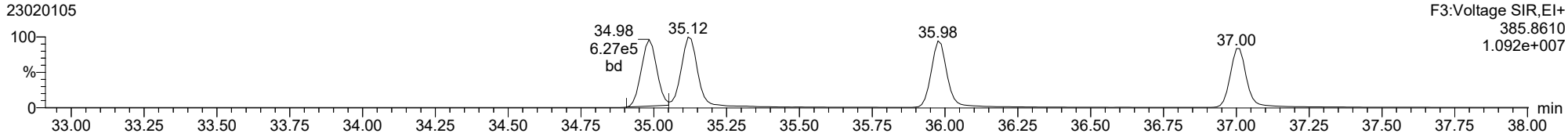

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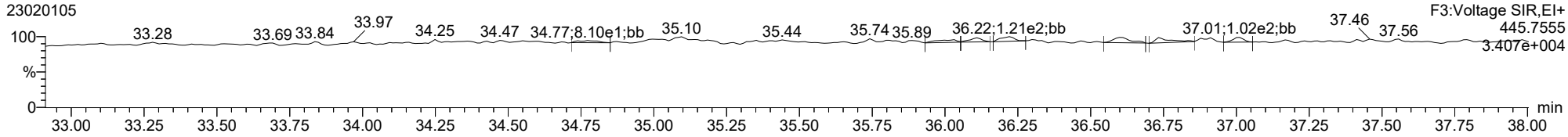

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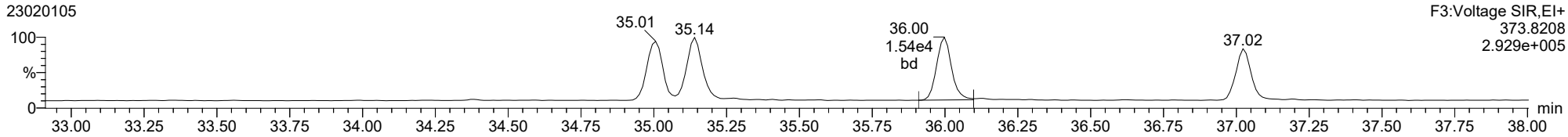

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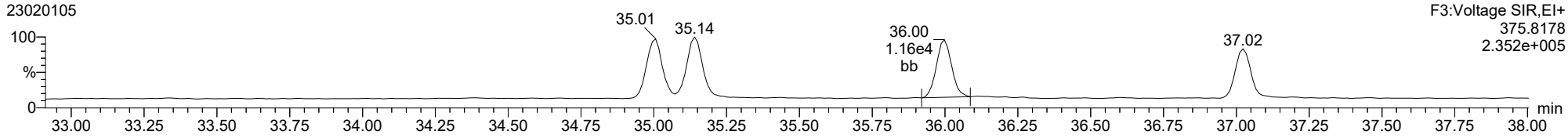

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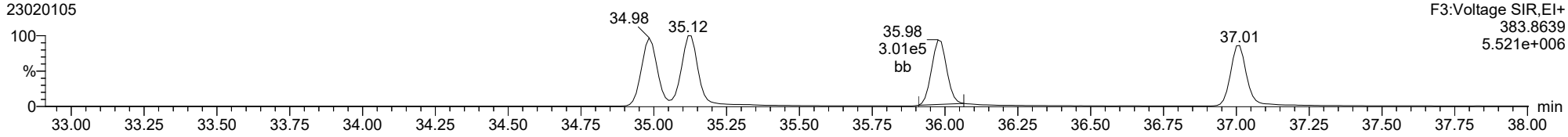

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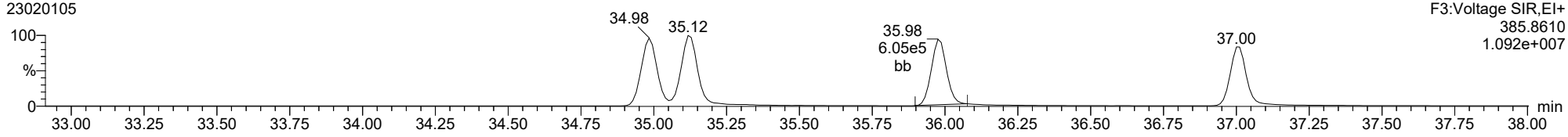

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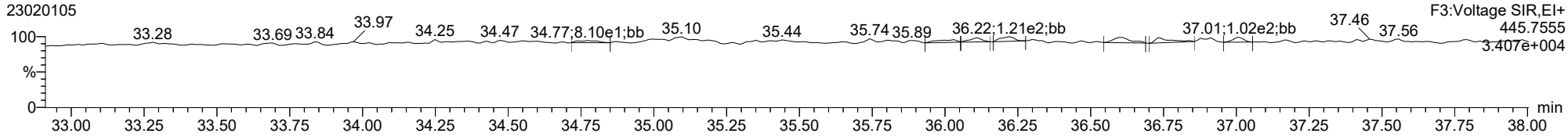

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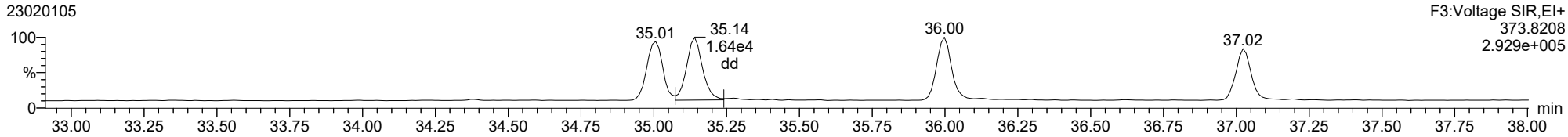

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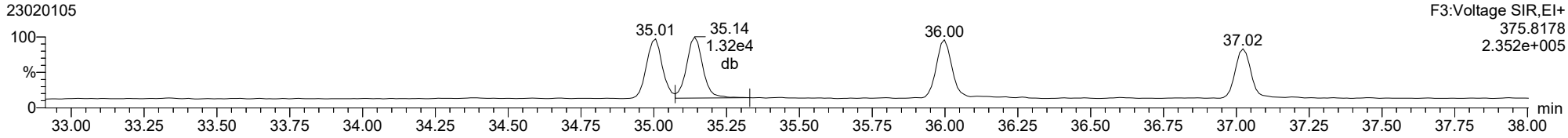

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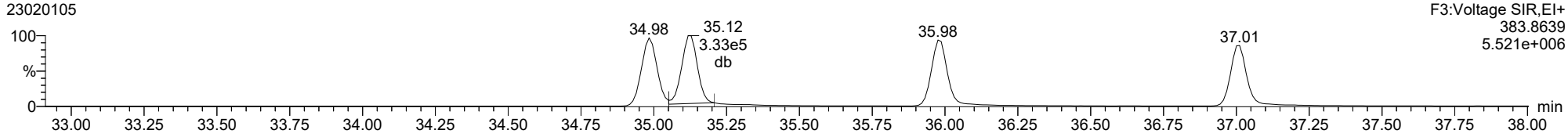

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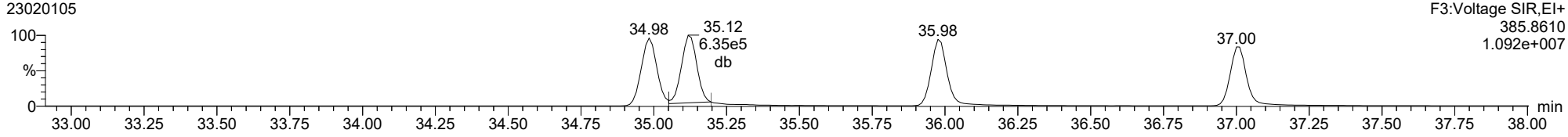

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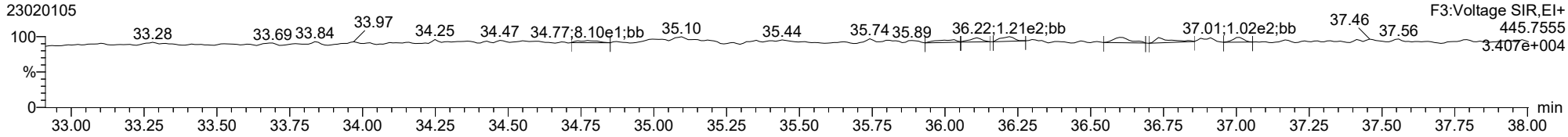

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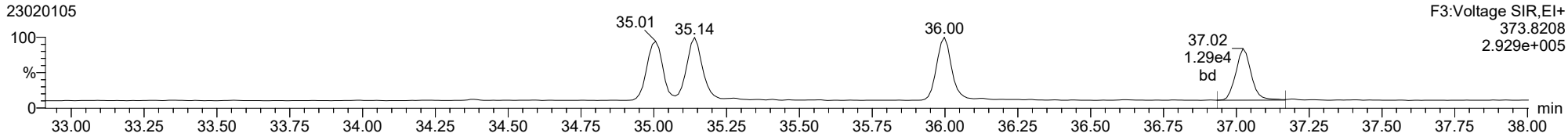

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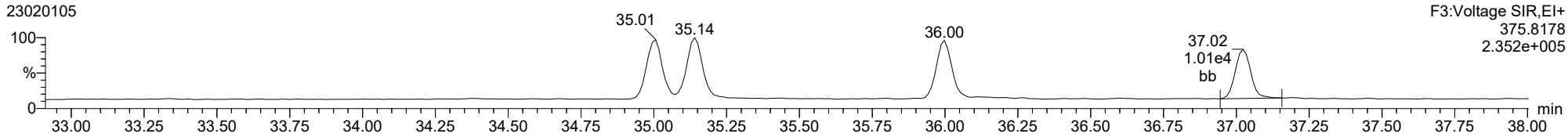

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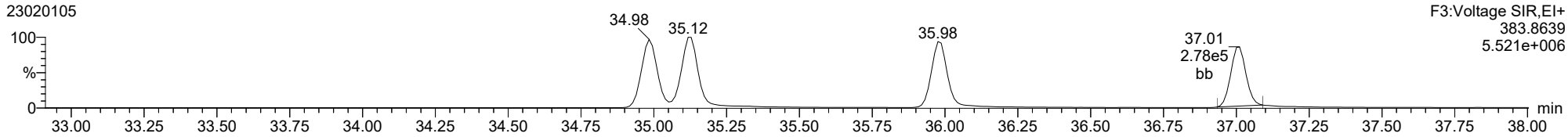

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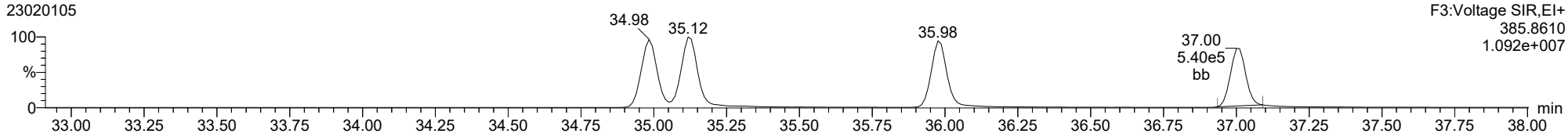

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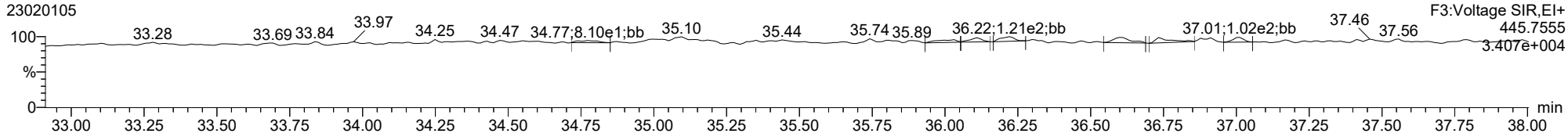

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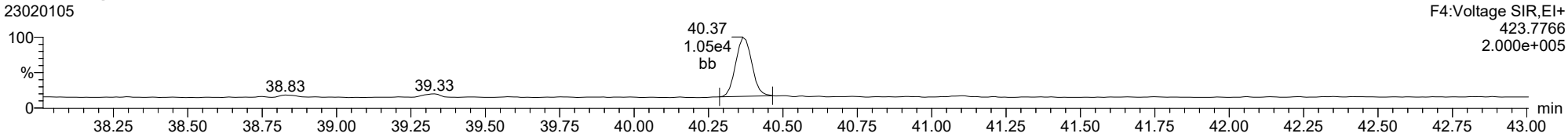

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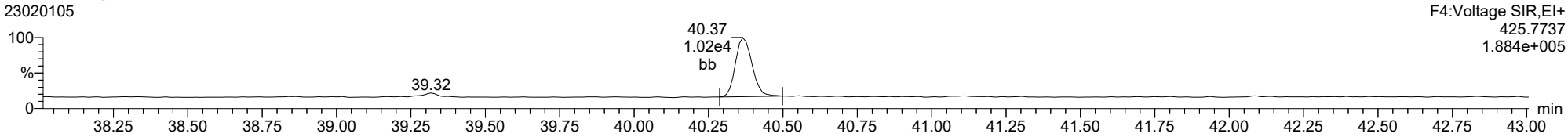

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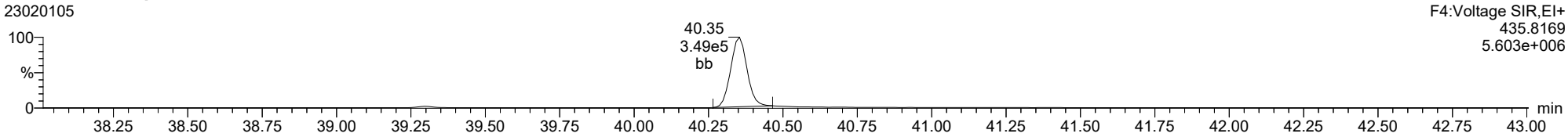

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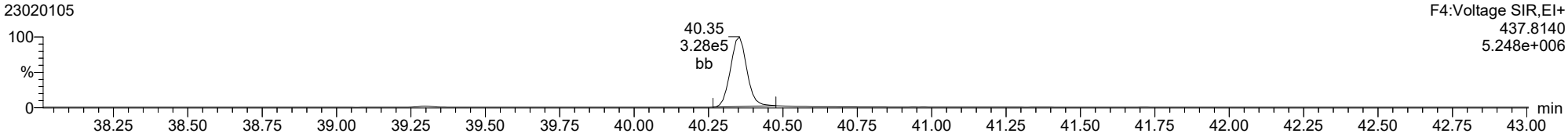

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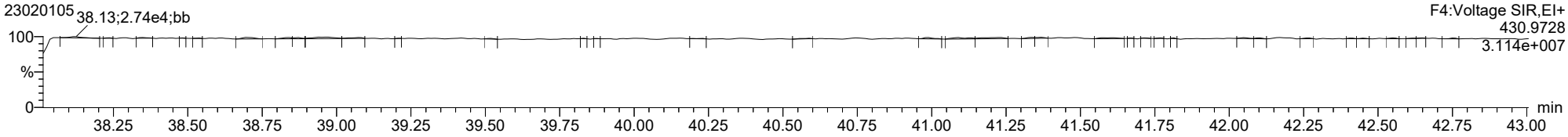

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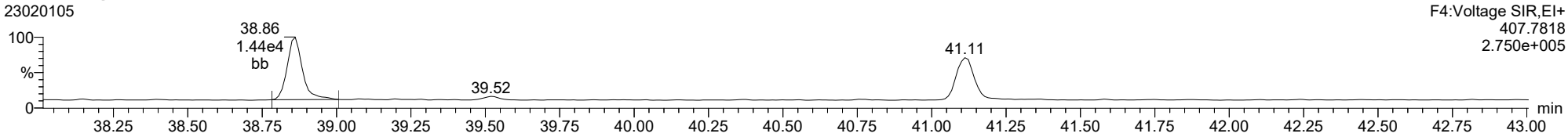

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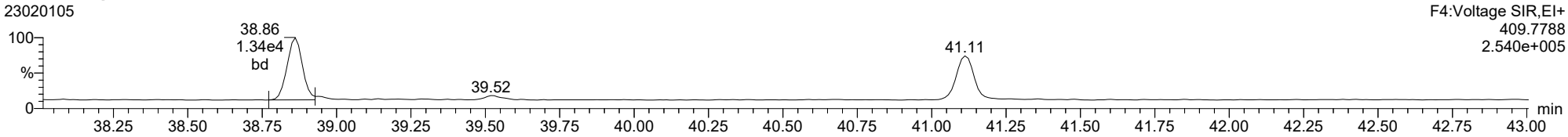

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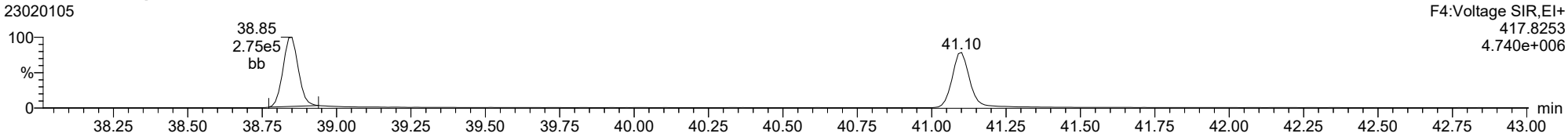

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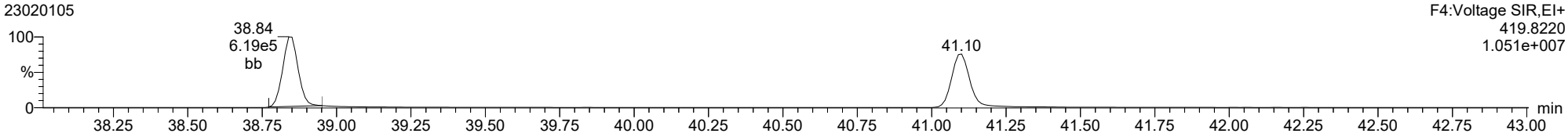

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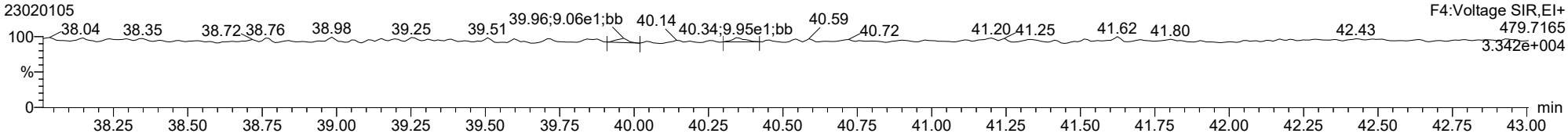

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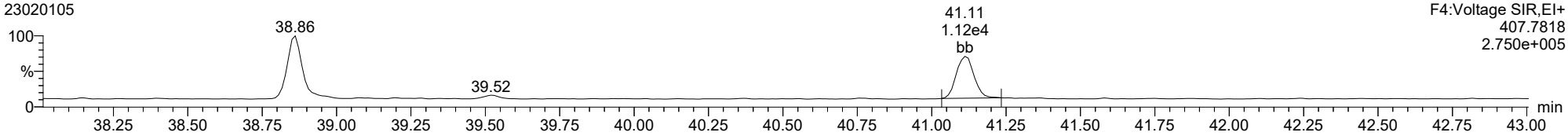

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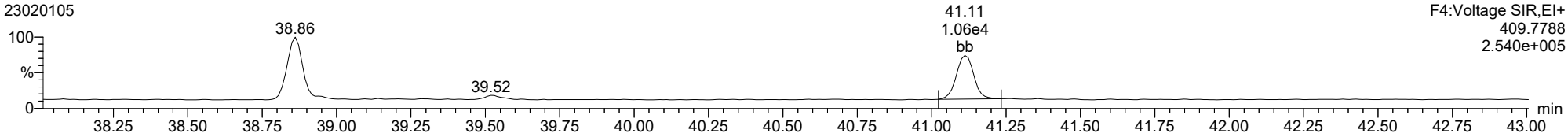

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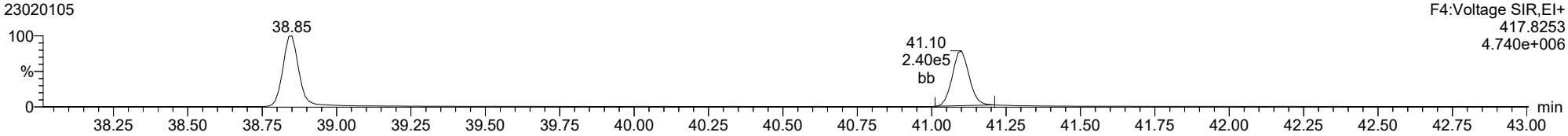

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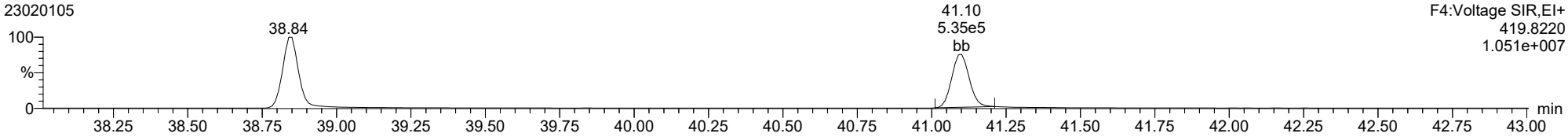

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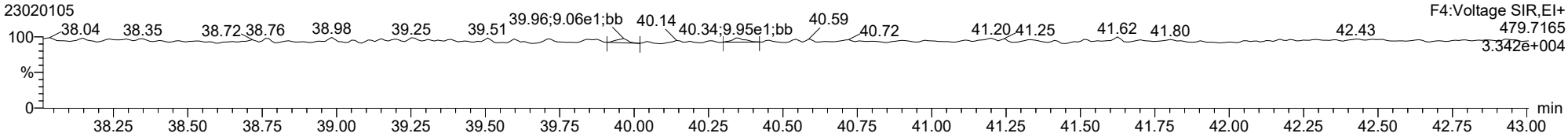

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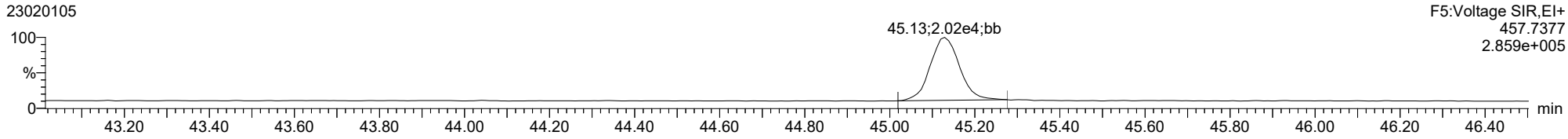

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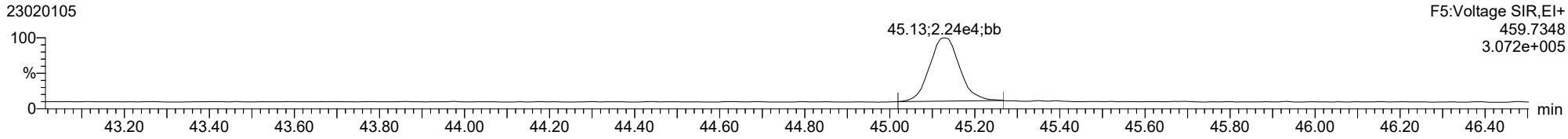

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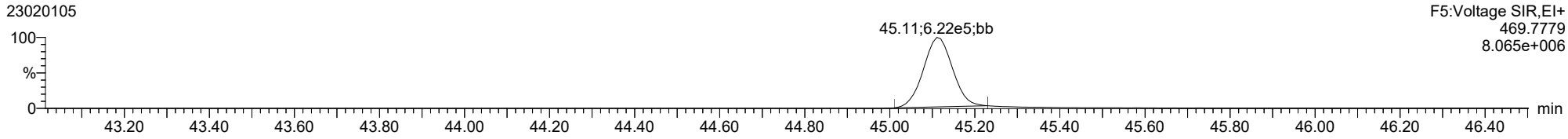

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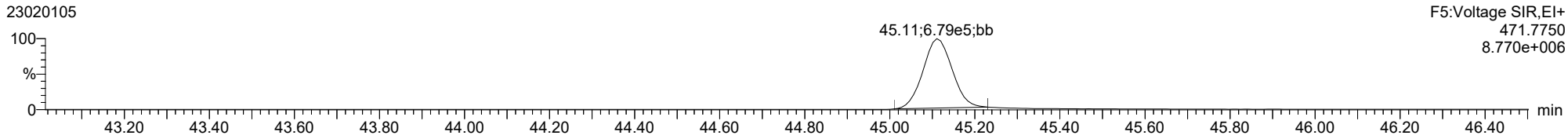
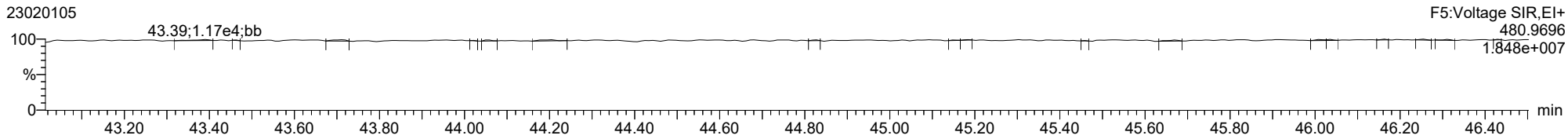


FUNCTION5 PFK



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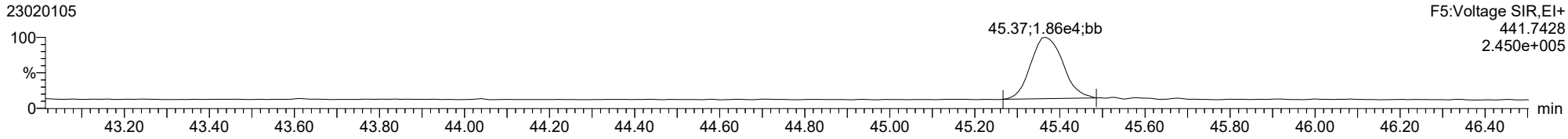
OCDF



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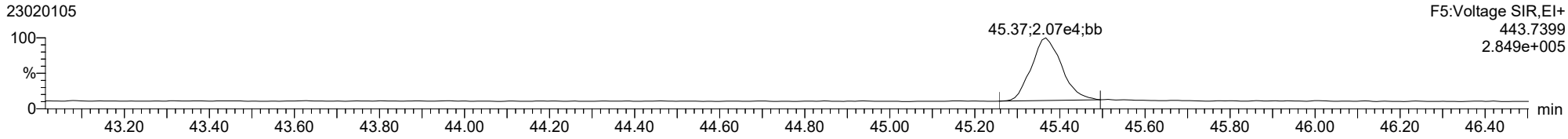
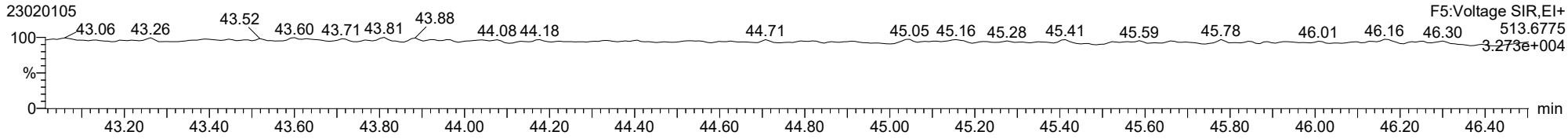


FUNCTION5 DCDPE



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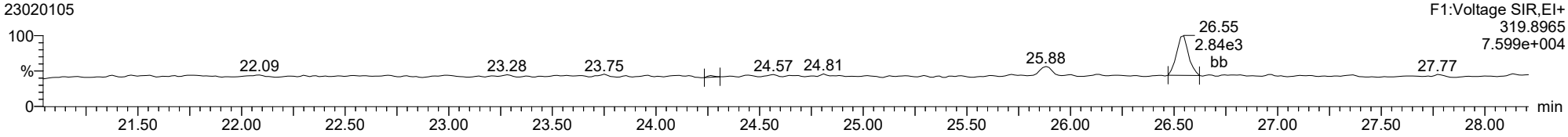
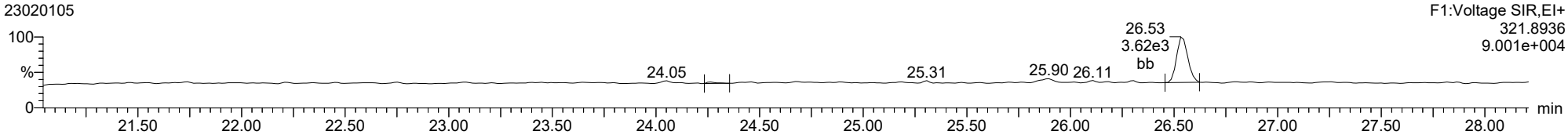
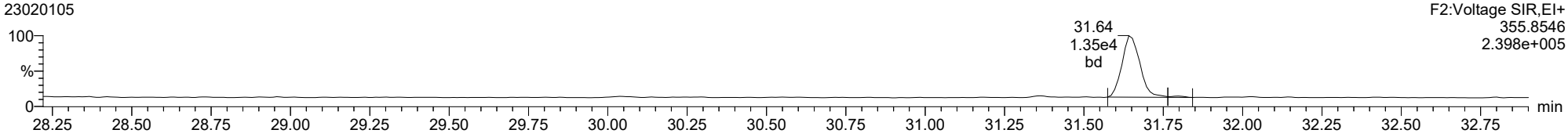
Total-tetradioxins



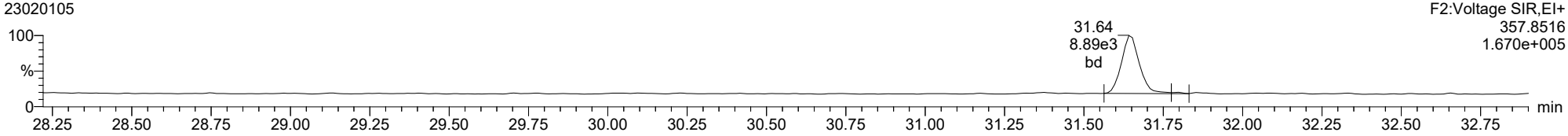
Total-tetradioxins



Total-pentadioxins



Total-pentadioxins



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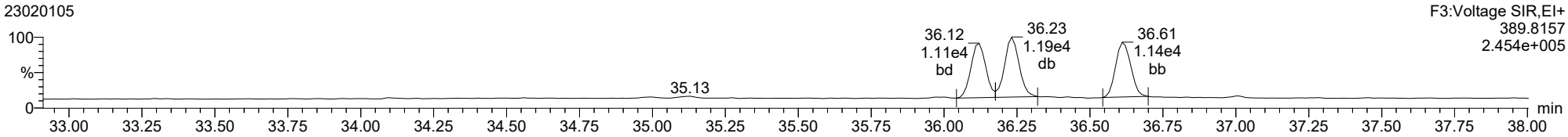
Total-hexadioxins



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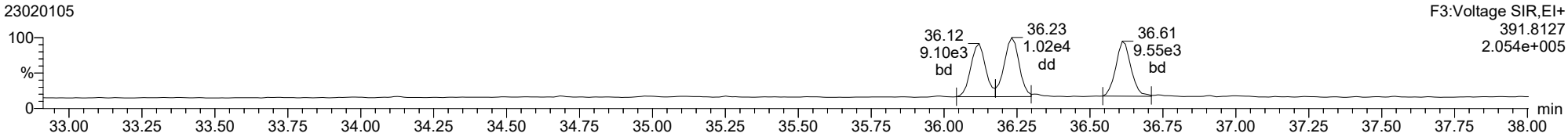

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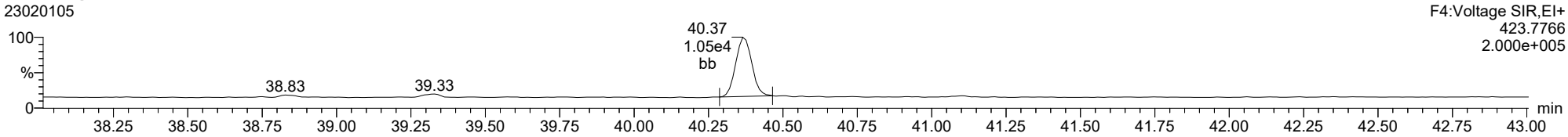

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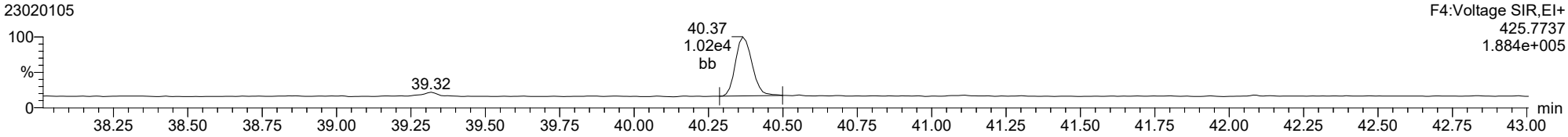
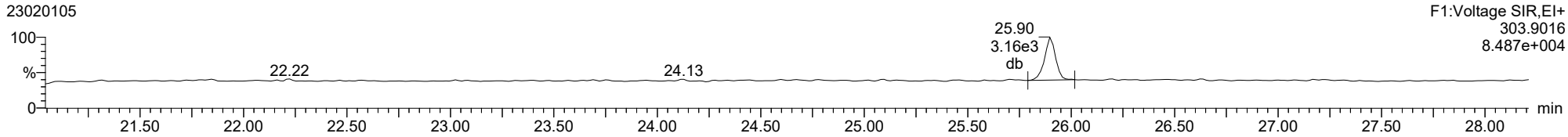
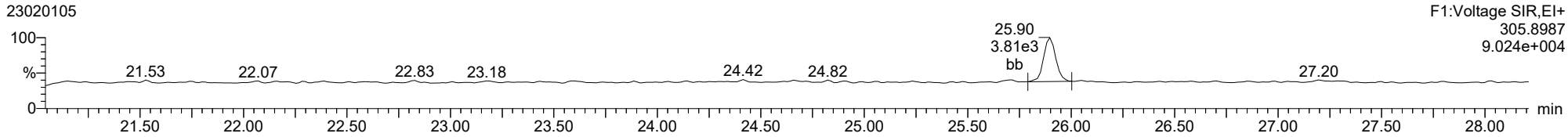


ID: CS1CR, Name: 23020105, Date: 01-Feb-2023, Time: 15:28:53, Conditions: AUTOSPEC01, User: pk

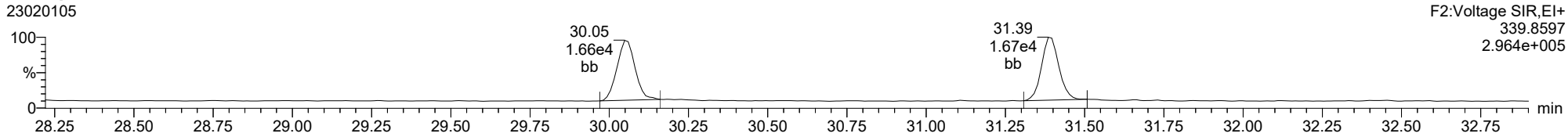
Total-tetrafurans



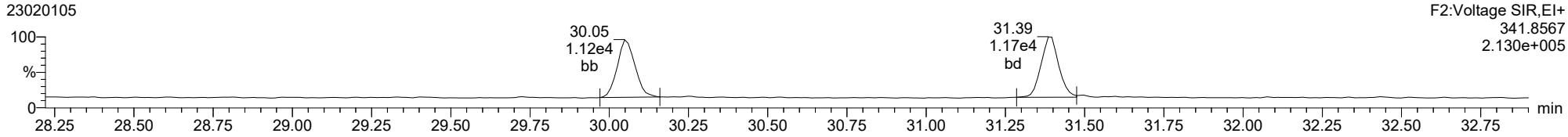
Total-tetrafurans



Total-pentafurans



Total-pentafurans



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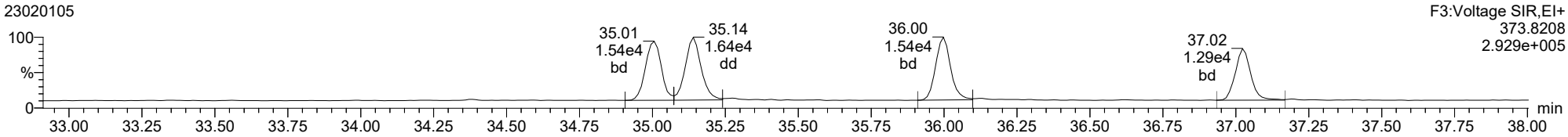
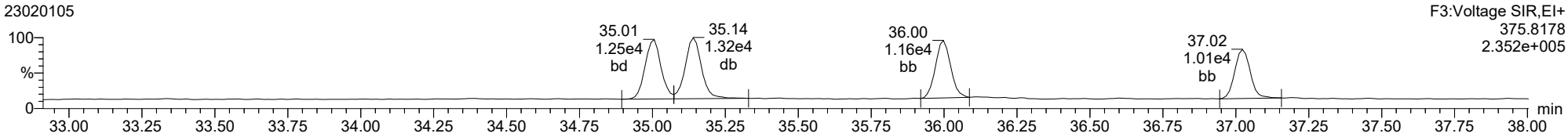
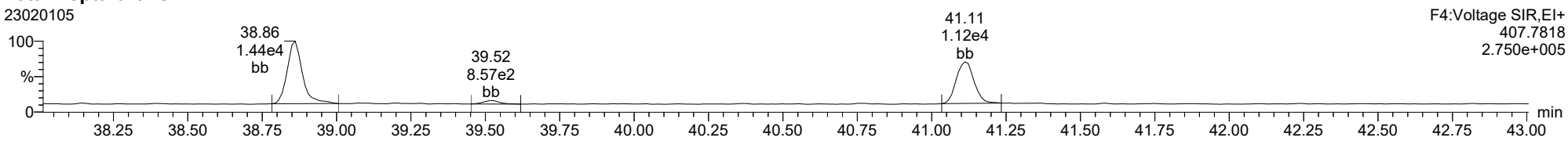
Total-hexafurans



Total-hexafurans



Total-heptafurans



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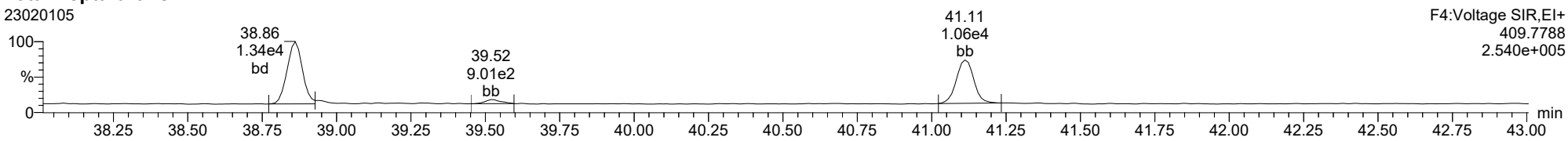

Dataset: T:\Autospec\Processed Data Batch\230201ICIH.qld
Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
Printed: Friday, February 03, 2023 10:37:25 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: 03 Feb 2023 10:33:40

ID: CS2CR, Name: 23020106, Date: 01-Feb-2023, Time: 17:07:07, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.897	1.001	1.375e4	1.851e4	0.876	0.743	0.770	838	1562	2.10e5	2.76e5	250.5	176.4	NO	bb	bb	1.973
12378-PeCDF	30.059	1.001	8.384e4	5.404e4	0.845	1.551	1.550	1494	1842	1.30e6	8.45e5	870.6	458.6	NO	bd	bd	10.086
23478-PeCDF	31.396	1.001	8.811e4	5.691e4	0.911	1.548	1.550	1494	1842	1.31e6	8.58e5	880.0	466.0	NO	dd	bd	10.430
123478-HxCDF	35.006	1.001	7.445e4	5.785e4	1.182	1.287	1.240	1528	1565	1.21e6	9.52e5	791.3	608.7	NO	bd	bd	9.662
234678-HxCDF	35.998	1.000	7.554e4	5.984e4	1.229	1.262	1.240	1528	1565	1.18e6	9.11e5	774.2	582.4	NO	bd	bd	10.016
123678-HxCDF	35.140	1.000	8.156e4	6.332e4	1.248	1.288	1.240	1528	1565	1.23e6	9.70e5	801.6	619.6	NO	dd	dd	9.876
123789-HxCDF	37.023	1.000	6.616e4	5.058e4	1.187	1.308	1.240	1528	1565	1.05e6	8.18e5	687.4	522.6	NO	bd	bd	9.712
1234678-HpCDF	38.861	1.000	6.989e4	6.457e4	1.204	1.082	1.050	1538	1410	1.20e6	1.09e6	782.0	769.9	NO	bd	bb	9.897
1234789-HpCDF	41.111	1.000	5.916e4	5.737e4	1.165	1.031	1.050	1538	1410	8.45e5	8.21e5	549.5	582.6	NO	bd	bd	10.092
OCDF	45.376	1.006	9.214e4	9.862e4	1.186	0.934	0.890	1525	1454	1.11e6	1.20e6	727.4	823.3	NO	bd	bb	18.863
2378-TCDD	26.547	1.001	1.298e4	1.586e4	1.236	0.818	0.770	817	918	1.95e5	2.41e5	239.3	262.4	NO	bb	bb	2.020
12378-PeCDD	31.653	1.001	6.323e4	4.003e4	1.087	1.579	1.550	957	1113	9.67e5	6.22e5	1010.9	558.7	NO	bb	bb	9.953
123478-HxCDD	36.120	1.000	5.350e4	4.542e4	0.987	1.178	1.240	1419	1111	9.15e5	7.70e5	644.4	692.8	NO	bd	bd	9.967
123678-HxCDD	36.232	1.000	5.670e4	4.717e4	1.021	1.202	1.240	1419	1111	9.21e5	7.75e5	649.0	697.0	NO	db	db	9.657
123789-HxCDD	36.621	1.011	5.462e4	4.396e4	0.985	1.243	1.240	1419	1111	9.23e5	7.40e5	650.4	666.2	NO	bb	bb	9.715
1234678-HpCDD	40.376	1.001	5.329e4	4.930e4	1.253	1.081	1.050	939	1025	8.27e5	7.64e5	880.9	744.9	NO	bd	bb	9.623
OCDD	45.129	1.000	8.911e4	9.822e4	1.103	0.907	0.890	1078	1353	1.09e6	1.23e6	1009.3	912.1	NO	bd	bb	19.929
13C-2378-TCDF	25.882	1.007	8.175e5	1.049e6	1.768	0.779	0.770	2768	1604	1.28e7	1.62e7	4615.3	10118.2	NO	bb	bb	98.406
13C-12378-PeCDF	30.037	1.168	9.651e5	6.534e5	1.527	1.477	1.550	2685	2564	1.52e7	9.92e6	5664.2	3868.0	NO	bb	bd	98.795
13C-23478-PeCDF	31.374	1.220	9.289e5	5.970e5	1.466	1.556	1.550	2685	2564	1.42e7	9.15e6	5285.2	3567.7	NO	bb	bb	97.006
13C-123478-HxCDF	34.984	0.956	3.919e5	7.668e5	1.054	0.511	0.510	2280	2951	6.27e6	1.23e7	2748.9	4152.3	NO	bd	bd	102.036
13C-123678-HxCDF	35.129	0.960	3.972e5	7.782e5	1.080	0.510	0.510	2280	2951	6.52e6	1.27e7	2858.6	4308.7	NO	db	db	100.982
13C-234678-HxCDF	35.987	0.983	3.723e5	7.276e5	1.014	0.512	0.510	2280	2951	6.20e6	1.20e7	2719.4	4079.1	NO	bb	bb	100.611
13C-123789-HxCDF	37.012	1.011	3.411e5	6.719e5	0.928	0.508	0.510	2280	2951	5.87e6	1.14e7	2576.5	3878.0	NO	bb	bb	101.286
13C-1234678-HpCDF	38.850	1.061	3.519e5	7.764e5	1.036	0.453	0.440	2948	3056	6.15e6	1.36e7	2085.9	4456.3	NO	bb	bb	101.034
13C-1234789-HpCDF	41.100	1.123	3.071e5	6.837e5	0.905	0.449	0.440	2948	3056	4.66e6	1.03e7	1581.8	3383.9	NO	bb	bb	101.592
13C-1234-TCDD	25.715	0.000	4.761e5	5.966e5	1.000	0.798	0.770	1722	1260	7.44e6	9.39e6	4318.3	7453.5	NO	bb	bb	100.000
13C-2378-TCDD	26.517	1.031	5.086e5	6.462e5	1.103	0.787	0.770	1722	1260	7.59e6	9.61e6	4407.4	7623.5	NO	bb	bb	97.603
13C-12378-PeCDD	31.631	1.230	5.873e5	3.674e5	0.914	1.599	1.550	1804	1493	9.15e6	5.75e6	5075.5	3848.9	NO	bb	bb	97.357
13C-123478-HxCDD	36.109	0.987	5.695e5	4.361e5	0.933	1.306	1.240	2351	1925	9.66e6	7.35e6	4110.6	3818.4	NO	bd	bd	100.012
13C-123678-HxCDD	36.221	0.990	5.923e5	4.615e5	0.965	1.283	1.240	2351	1925	9.93e6	7.73e6	4224.3	4014.3	NO	db	db	101.353
13C-1234678-HpCDD	40.354	1.103	4.427e5	4.084e5	0.782	1.084	1.050	2415	1836	6.98e6	6.52e6	2888.8	3549.1	NO	bb	bb	100.984
13C-OCDD	45.110	1.232	8.153e5	8.896e5	0.788	0.916	0.890	2586	2058	1.02e7	1.13e7	3959.4	5482.6	NO	bb	bb	200.686
13C-123789-HxCDD	36.599	0.000	5.962e5	4.816e5	1.000	1.238	1.240	2351	1925	9.93e6	8.01e6	4225.3	4157.6	NO	bb	bb	100.000
37CL-2378-TCDD	26.547	1.032	2.594e4		1.233			1770		3.86e5		217.9			bb		1.960

Dataset: T:\Autospec\Processed Data Batch\230201ICIH.qld
Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
Printed: Friday, February 03, 2023 10:37:25 Pacific Standard Time

ID: CS2CR, Name: 23020106, Date: 01-Feb-2023, Time: 17:07:07, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					1.064		0.770	838	1562								
1289-TCDF					0.858		0.770	838	1562								
13468-PECDF					1.013		1.550	818	1180								
12389-PECDF					0.844		1.550	1494	1842								
123468-HXCDF					1.197		1.240	1528	1565								
1368-TCDD					1.084		0.770	817	918								
1289-TCDD					0.975		0.770	817	918								
12479-PECDD					1.837		1.550	957	1113								
12389-PECDD					1.252		1.550	957	1113								
124679-HXCDD					1.033		1.240	1419	1111								
1234679-HPCDD					1.286		1.050	939	1025								
Total-tetrafurans			1.375e4		0.933			838		2.10e5							1.973
Total-penta1			0.000e0					818		0.00e0							
Total-pentafurans			1.724e5		0.866			1494		2.63e6							20.570
Total-hexafurans			2.977e5		1.208			1528		4.67e6							39.267
Total-heptafurans			1.291e5		1.185			1538		2.05e6							19.990
Total-Furans			7.051e5		1.067			838		1.07e7							100.663
Total-tetradioxins			1.298e4		1.099			817		1.95e5							2.020
Total-pentadioxins			6.323e4		1.392			957		9.67e5							9.953
Total-hexadioxins			1.650e5		1.007			1419		2.76e6							29.363
Total-heptadioxins			5.329e4		1.269			939		8.27e5							9.623
Total-Dioxins			3.836e5		1.165			817		5.84e6							70.888
Total-TEQ			1.089e6					817		1.65e7							171.552
FUNCTION1 PFK			0.000e0					575758		0.00e0							
FUNCTION2 PFK			0.000e0					203146		0.00e0							
FUNCTION3 PFK			1.946e5					441294		6.25e6							0.000
FUNCTION4 PFK			6.766e5					326212		1.14e7							
FUNCTION5 PFK			7.829e4					177933		3.00e6							
FUNCTION1 HXCD...			6.944e2					716		1.19e4							0.000
FUNCTION1 HPCD...			4.187e2					801		7.47e3							0.000
FUNCTION2 HPCD...			7.244e2					1047		1.53e4							0.000
FUNCTION3 OCDPE			2.025e2					783		3.00e3							0.000
FUNCTION4 NCDPE			5.677e2					836		9.38e3							0.000
FUNCTION5 DCDPE			1.012e2					822		1.66e3							0.000

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: 03 Feb 2023 10:33:40

ID: CS2CR, Name: 23020106, Date: 01-Feb-2023, Time: 17:07:07, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.90	1.375e4	1.851e4	0.876	0.74	0.77	250.5	YES	NO	bb	bb	1.973

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.40	8.811e4	5.691e4	0.911	1.55	1.55	880.0	YES	NO	dd	bd	10.430
2	Total-pentafurans	30.25	4.556e2	2.766e2	0.866	1.65	1.55	7.1	YES	NO	dd	db	0.054
3	12378-PeCDF	30.06	8.384e4	5.404e4	0.845	1.55	1.55	870.6	YES	NO	bd	bd	10.086

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	234678-HxCDF	36.00	7.554e4	5.984e4	1.229	1.26	1.24	774.2	YES	NO	bd	bd	10.016
2	123678-HxCDF	35.14	8.156e4	6.332e4	1.248	1.29	1.24	801.6	YES	NO	dd	dd	9.876
3	123478-HxCDF	35.01	7.445e4	5.785e4	1.182	1.29	1.24	791.3	YES	NO	bd	bd	9.662
4	123789-HxCDF	37.02	6.616e4	5.058e4	1.187	1.31	1.24	687.4	YES	NO	bd	bd	9.712

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.11	5.916e4	5.737e4	1.165	1.03	1.05	549.5	YES	NO	bd	bd	10.092
2	1234678-HpCDF	38.86	6.989e4	6.457e4	1.204	1.08	1.05	782.0	YES	NO	bd	bb	9.897

ID: CS2CR, Name: 23020106, Date: 01-Feb-2023, Time: 17:07:07, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.90	1.375e4	1.851e4	0.876	0.74	0.77	250.5	YES	NO	bb	bb	1.973
2	23478-PeCDF	31.40	8.811e4	5.691e4	0.911	1.55	1.55	880.0	YES	NO	dd	bd	10.430
3	Total-pentafurans	30.25	4.556e2	2.766e2	0.866	1.65	1.55	7.1	YES	NO	dd	db	0.054
4	12378-PeCDF	30.06	8.384e4	5.404e4	0.845	1.55	1.55	870.6	YES	NO	bd	bd	10.086
5	234678-HxCDF	36.00	7.554e4	5.984e4	1.229	1.26	1.24	774.2	YES	NO	bd	bd	10.016
6	123678-HxCDF	35.14	8.156e4	6.332e4	1.248	1.29	1.24	801.6	YES	NO	dd	dd	9.876
7	123478-HxCDF	35.01	7.445e4	5.785e4	1.182	1.29	1.24	791.3	YES	NO	bd	bd	9.662
8	123789-HxCDF	37.02	6.616e4	5.058e4	1.187	1.31	1.24	687.4	YES	NO	bd	bd	9.712
9	1234789-HpCDF	41.11	5.916e4	5.737e4	1.165	1.03	1.05	549.5	YES	NO	bd	bd	10.092
10	1234678-HpCDF	38.86	6.989e4	6.457e4	1.204	1.08	1.05	782.0	YES	NO	bd	bb	9.897
11	OCDF	45.38	9.214e4	9.862e4	1.186	0.93	0.89	727.4	YES	NO	bd	bb	18.863

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.55	1.298e4	1.586e4	1.236	0.82	0.77	239.3	YES	NO	bb	bb	2.020

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.65	6.323e4	4.003e4	1.087	1.58	1.55	1010.9	YES	NO	bb	bb	9.953

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexadioxins	36.88	1.448e2	1.055e2	1.007	1.37	1.24	2.8	NO	NO	bb	bb	0.024
2	123789-HxCDD	36.62	5.462e4	4.396e4	0.985	1.24	1.24	650.4	YES	NO	bb	bb	9.715
3	123678-HxCDD	36.23	5.670e4	4.717e4	1.021	1.20	1.24	649.0	YES	NO	db	db	9.657
4	123478-HxCDD	36.12	5.350e4	4.542e4	0.987	1.18	1.24	644.4	YES	NO	bd	bd	9.967

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.38	5.329e4	4.930e4	1.253	1.08	1.05	880.9	YES	NO	bd	bb	9.623

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.65	6.323e4	4.003e4	1.087	1.58	1.55	1010.9	YES	NO	bb	bb	9.953
2	2378-TCDD	26.55	1.298e4	1.586e4	1.236	0.82	0.77	239.3	YES	NO	bb	bb	2.020
3	Total-hexadioxins	36.88	1.448e2	1.055e2	1.007	1.37	1.24	2.8	NO	NO	bb	bb	0.024
4	123789-HxCDD	36.62	5.462e4	4.396e4	0.985	1.24	1.24	650.4	YES	NO	bb	bb	9.715
5	123678-HxCDD	36.23	5.670e4	4.717e4	1.021	1.20	1.24	649.0	YES	NO	db	db	9.657
6	123478-HxCDD	36.12	5.350e4	4.542e4	0.987	1.18	1.24	644.4	YES	NO	bd	bd	9.967
7	1234678-HpCDD	40.38	5.329e4	4.930e4	1.253	1.08	1.05	880.9	YES	NO	bd	bb	9.623
8	OCDD	45.13	8.911e4	9.822e4	1.103	0.91	0.89	1009.3	YES	NO	bd	bb	19.929

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.90	1.375e4	1.851e4	0.876	0.74	0.77	250.5	YES	NO	bb	bb	1.973
2	23478-PeCDF	31.40	8.811e4	5.691e4	0.911	1.55	1.55	880.0	YES	NO	dd	bd	10.430
3	Total-pentafurans	30.25	4.556e2	2.766e2	0.866	1.65	1.55	7.1	YES	NO	dd	db	0.054
4	12378-PeCDF	30.06	8.384e4	5.404e4	0.845	1.55	1.55	870.6	YES	NO	bd	bd	10.086
5	234678-HxCDF	36.00	7.554e4	5.984e4	1.229	1.26	1.24	774.2	YES	NO	bd	bd	10.016
6	123678-HxCDF	35.14	8.156e4	6.332e4	1.248	1.29	1.24	801.6	YES	NO	dd	dd	9.876
7	123478-HxCDF	35.01	7.445e4	5.785e4	1.182	1.29	1.24	791.3	YES	NO	bd	bd	9.662
8	123789-HxCDF	37.02	6.616e4	5.058e4	1.187	1.31	1.24	687.4	YES	NO	bd	bd	9.712
9	1234789-HpCDF	41.11	5.916e4	5.737e4	1.165	1.03	1.05	549.5	YES	NO	bd	bd	10.092
10	1234678-HpCDF	38.86	6.989e4	6.457e4	1.204	1.08	1.05	782.0	YES	NO	bd	bb	9.897
11	OCDF	45.38	9.214e4	9.862e4	1.186	0.93	0.89	727.4	YES	NO	bd	bb	18.863
12	12378-PeCDD	31.65	6.323e4	4.003e4	1.087	1.58	1.55	1010.9	YES	NO	bb	bb	9.953
13	2378-TCDD	26.55	1.298e4	1.586e4	1.236	0.82	0.77	239.3	YES	NO	bb	bb	2.020
14	Total-hexadioxins	36.88	1.448e2	1.055e2	1.007	1.37	1.24	2.8	NO	NO	bb	bb	0.024
15	123789-HxCDD	36.62	5.462e4	4.396e4	0.985	1.24	1.24	650.4	YES	NO	bb	bb	9.715
16	123678-HxCDD	36.23	5.670e4	4.717e4	1.021	1.20	1.24	649.0	YES	NO	db	db	9.657
17	123478-HxCDD	36.12	5.350e4	4.542e4	0.987	1.18	1.24	644.4	YES	NO	bd	bd	9.967
18	1234678-HpCDD	40.38	5.329e4	4.930e4	1.253	1.08	1.05	880.9	YES	NO	bd	bb	9.623
19	OCDD	45.13	8.911e4	9.822e4	1.103	0.91	0.89	1009.3	YES	NO	bd	bb	19.929

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.84	3.684e4					1.4	NO		bb		0.000
2	FUNCTION3 PFK	37.56	3.248e4					1.4	NO		bb		0.000
3	FUNCTION3 PFK	37.40	1.502e4					1.5	NO		bb		0.000
4	FUNCTION3 PFK	36.84	6.471e3					0.8	NO		bb		0.000
5	FUNCTION3 PFK	36.52	9.443e3					0.9	NO		bb		0.000
6	FUNCTION3 PFK	36.37	4.140e3					0.7	NO		db		0.000
7	FUNCTION3 PFK	36.33	1.297e4					1.2	NO		bd		0.000
8	FUNCTION3 PFK	36.13	6.608e3					0.8	NO		bb		0.000
9	FUNCTION3 PFK	35.98	2.009e4					1.5	NO		bb		0.000
10	FUNCTION3 PFK	35.88	2.554e3					0.5	NO		bb		0.000
11	FUNCTION3 PFK	34.30	1.671e4					1.6	NO		bb		0.000
12	FUNCTION3 PFK	34.23	8.316e3					0.4	NO		bb		0.000
13	FUNCTION3 PFK	33.98	2.293e4					1.5	NO		bb		0.000

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Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
Printed: Friday, February 03, 2023 10:37:25 Pacific Standard Time

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.23	5.785e4					4.4	YES		dd		
2	FUNCTION4 PFK	38.15	1.010e5					5.4	YES		dd		
3	FUNCTION4 PFK	38.09	1.883e5					5.6	YES		bd		
4	FUNCTION4 PFK	42.87	1.204e4					1.0	NO		bb		
5	FUNCTION4 PFK	42.31	2.496e4					1.3	NO		bb		
6	FUNCTION4 PFK	41.49	1.586e4					1.0	NO		bb		
7	FUNCTION4 PFK	41.10	1.494e4					1.1	NO		bb		
8	FUNCTION4 PFK	40.87	1.555e4					1.4	NO		bb		
9	FUNCTION4 PFK	40.79	1.700e4					1.3	NO		bb		
10	FUNCTION4 PFK	40.65	5.082e3					0.8	NO		bb		
11	FUNCTION4 PFK	40.61	1.525e3					0.4	NO		bb		
12	FUNCTION4 PFK	40.14	1.620e4					1.6	NO		bb		
13	FUNCTION4 PFK	39.90	9.157e3					1.0	NO		bb		
14	FUNCTION4 PFK	39.83	9.091e3					1.1	NO		bb		
15	FUNCTION4 PFK	39.77	4.172e3					0.6	NO		bb		
16	FUNCTION4 PFK	39.63	1.903e3					0.5	NO		bb		
17	FUNCTION4 PFK	39.46	1.766e4					0.8	NO		bb		
18	FUNCTION4 PFK	38.45	3.531e4					1.7	NO		db		
19	FUNCTION4 PFK	38.27	1.290e5					3.8	YES		dd		

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	46.27	9.001e2					0.6	NO		bb		
2	FUNCTION5 PFK	46.15	5.202e3					1.0	NO		bb		
3	FUNCTION5 PFK	45.97	3.660e3					1.2	NO		bb		
4	FUNCTION5 PFK	45.51	1.153e4					2.2	NO		bb		
5	FUNCTION5 PFK	45.41	4.532e3					1.3	NO		db		
6	FUNCTION5 PFK	45.38	1.706e3					0.8	NO		bd		
7	FUNCTION5 PFK	45.15	2.865e3					1.0	NO		bb		
8	FUNCTION5 PFK	44.80	1.877e3					0.7	NO		bb		
9	FUNCTION5 PFK	44.65	3.851e3					1.1	NO		bb		
10	FUNCTION5 PFK	44.56	1.141e4					1.8	NO		bb		
11	FUNCTION5 PFK	44.31	2.169e4					1.9	NO		bb		
12	FUNCTION5 PFK	43.92	8.765e2					0.5	NO		bb		
13	FUNCTION5 PFK	43.88	8.623e2					0.5	NO		db		
14	FUNCTION5 PFK	43.86	1.005e3					0.6	NO		bd		
15	FUNCTION5 PFK	43.82	4.471e3					1.0	NO		bb		
16	FUNCTION5 PFK	46.36	1.842e3					0.7	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.26	9.013e1					2.4	NO		bb		0.000
2	FUNCTION1 HXCD...	26.52	1.374e2					3.3	YES		bb		0.000
3	FUNCTION1 HXCD...	26.35	1.141e2					2.2	NO		bb		0.000
4	FUNCTION1 HXCD...	25.31	7.923e1					2.3	NO		bb		0.000
5	FUNCTION1 HXCD...	24.07	1.307e2					3.2	YES		bb		0.000
6	FUNCTION1 HXCD...	22.72	1.428e2					3.3	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HPCD...	26.58	7.978e1					2.2	NO		db		0.000
2	FUNCTION1 HPCD...	26.53	1.102e2					2.3	NO		bd		0.000
3	FUNCTION1 HPCD...	24.69	7.048e1					1.7	NO		bb		0.000
4	FUNCTION1 HPCD...	24.48	8.580e1					1.5	NO		bb		0.000
5	FUNCTION1 HPCD...	21.38	7.239e1					1.7	NO		bb		0.000

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ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	28.37	7.170e1					2.5	NO		bb		0.000
2	FUNCTION2 HPCD...	31.76	2.583e2					2.7	NO		db		0.000
3	FUNCTION2 HPCD...	31.64	1.965e2					4.2	YES		bd		0.000
4	FUNCTION2 HPCD...	31.30	1.054e2					1.6	NO		bb		0.000
5	FUNCTION2 HPCD...	29.60	9.241e1					3.7	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.22	9.361e1					1.8	NO		bb		0.000
2	FUNCTION3 OCDPE	33.01	1.089e2					2.0	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.21	1.123e2					2.3	NO		db		0.000
2	FUNCTION4 NCDPE	41.16	1.047e2					2.3	NO		bd		0.000
3	FUNCTION4 NCDPE	41.00	7.125e1					1.9	NO		bb		0.000
4	FUNCTION4 NCDPE	38.88	9.103e1					1.9	NO		bb		0.000
5	FUNCTION4 NCDPE	38.50	1.884e2					2.9	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.32	1.012e2					2.0	NO		bb		0.000

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Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
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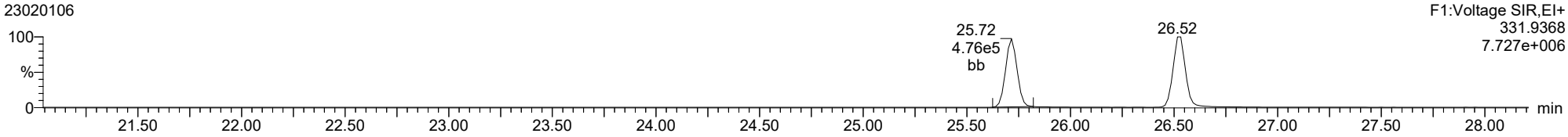
13C-1234-TCDD



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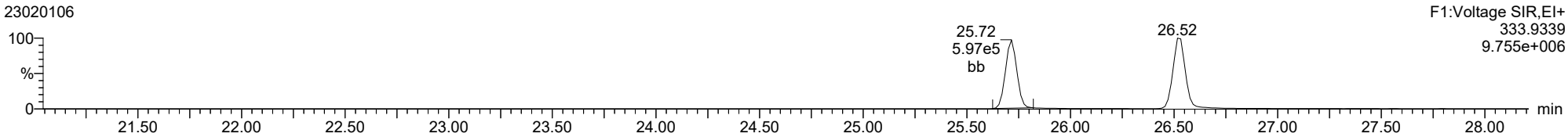

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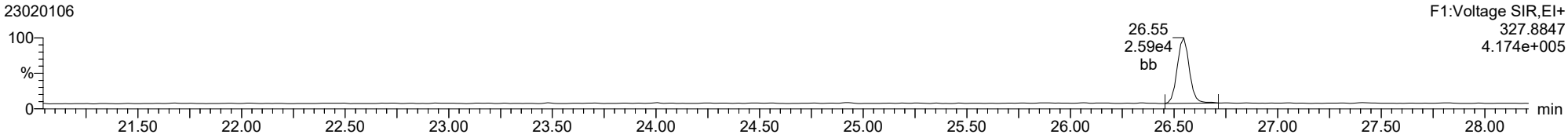

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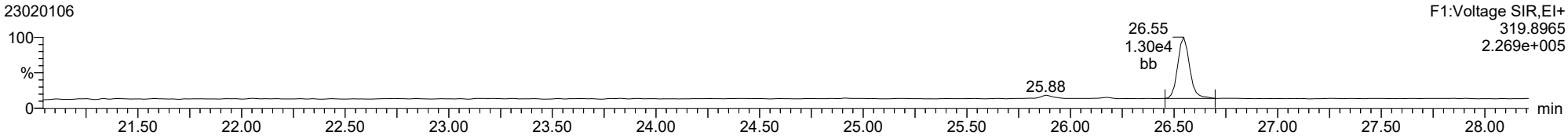

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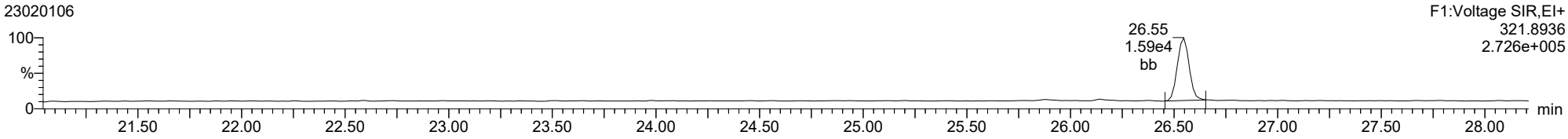

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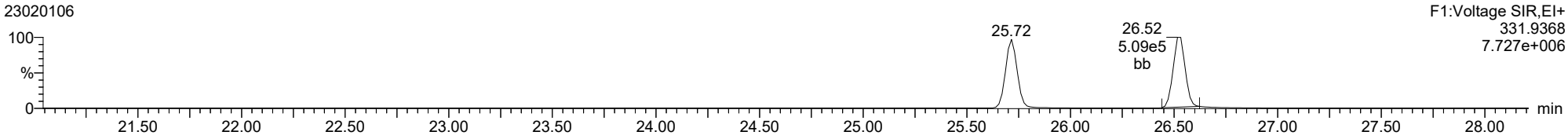

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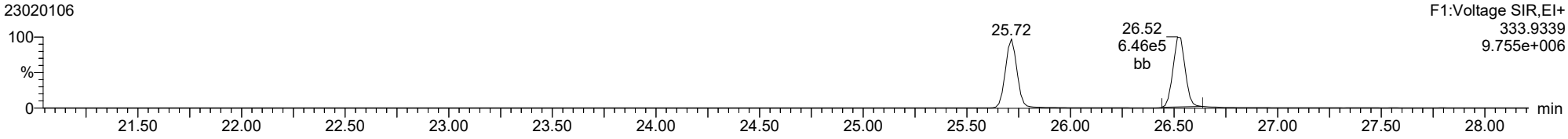

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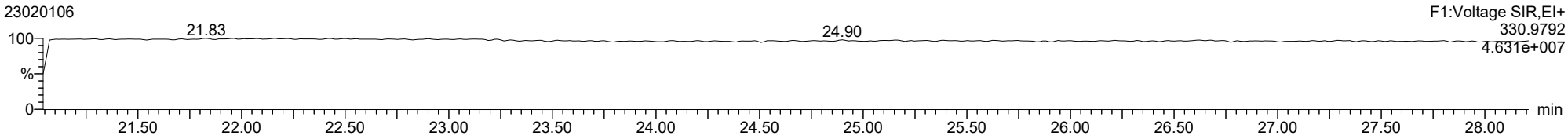

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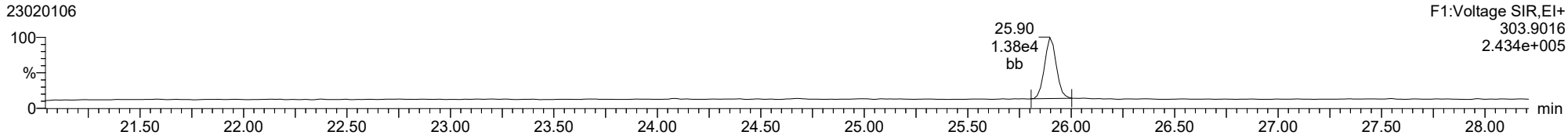

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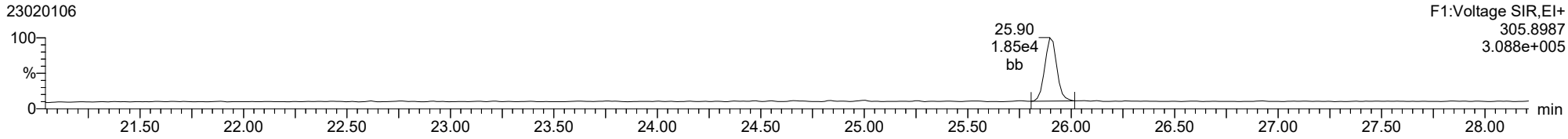

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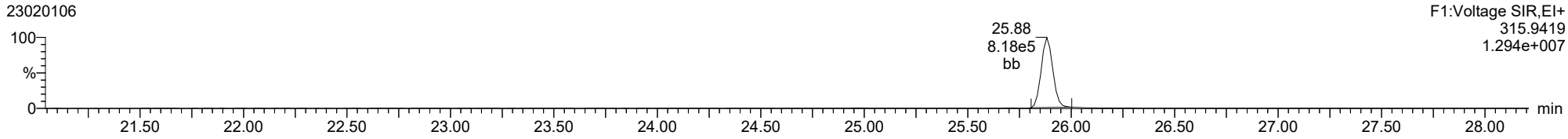

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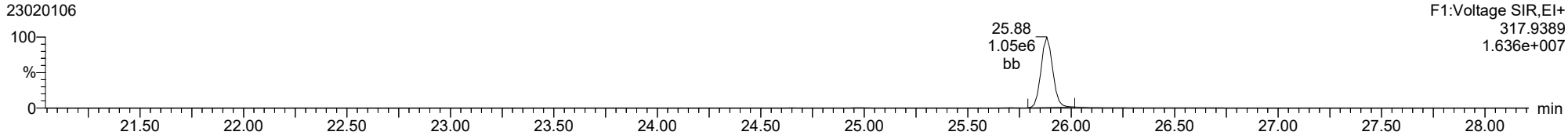

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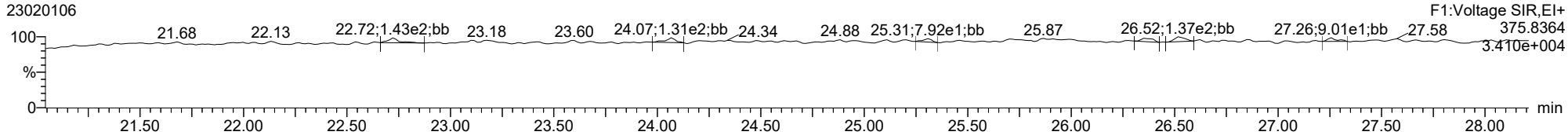

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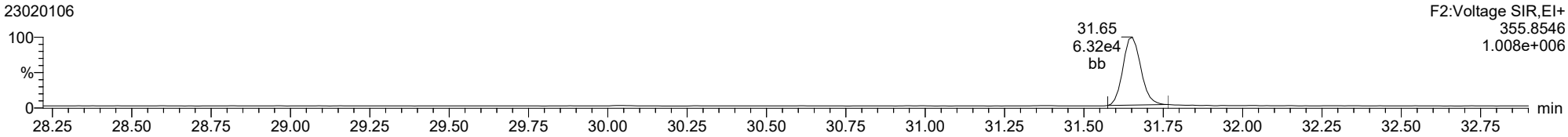

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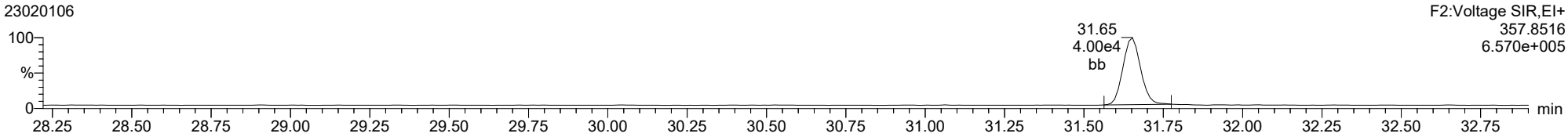

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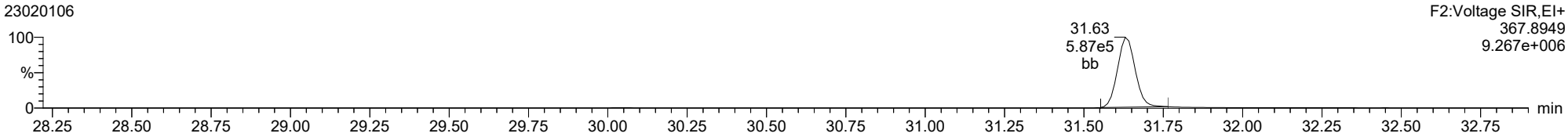

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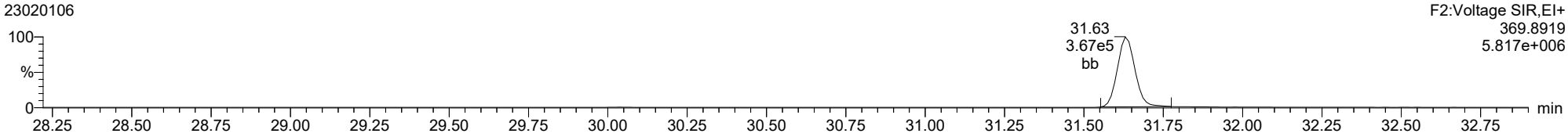

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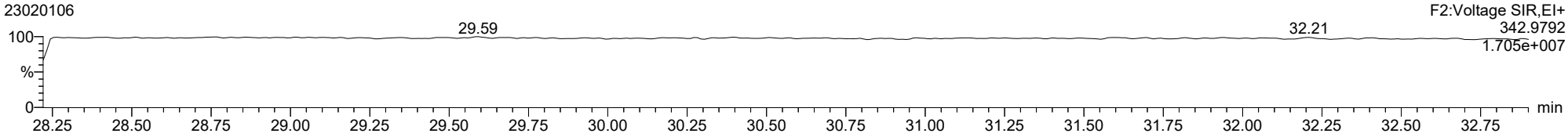

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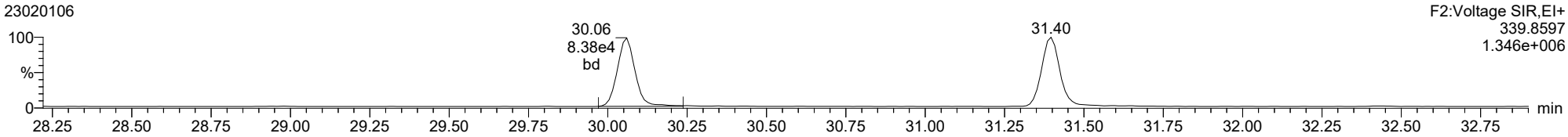

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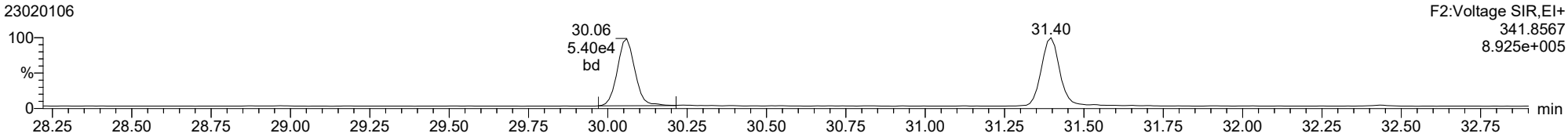

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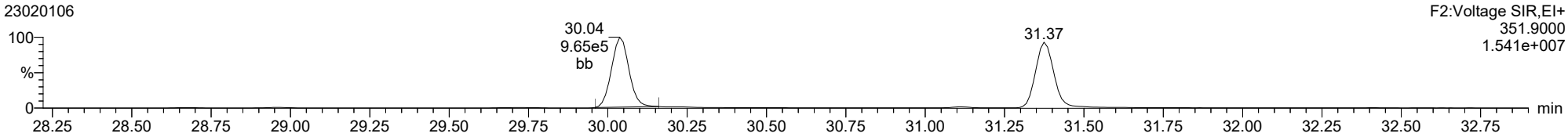

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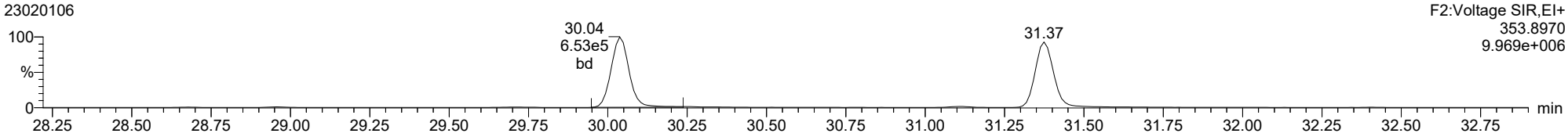

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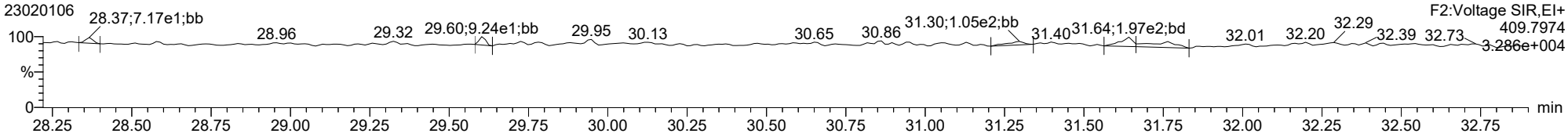

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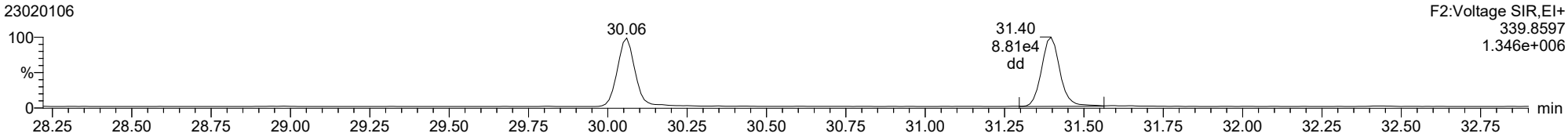

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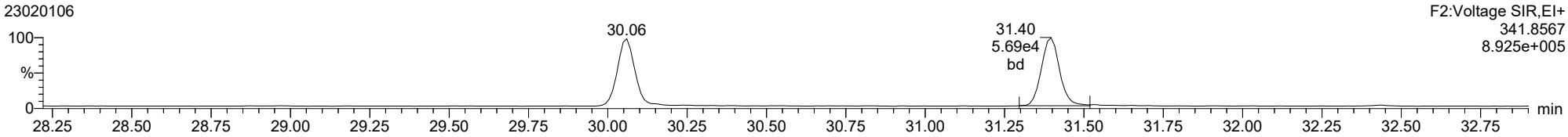

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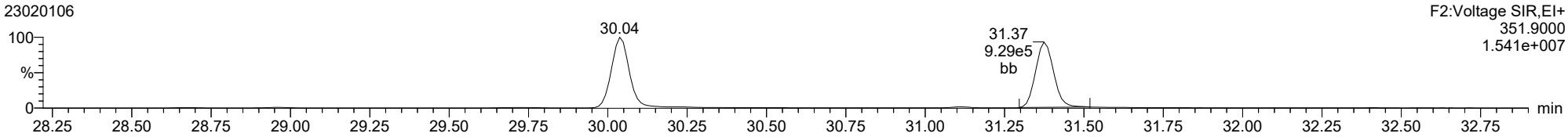

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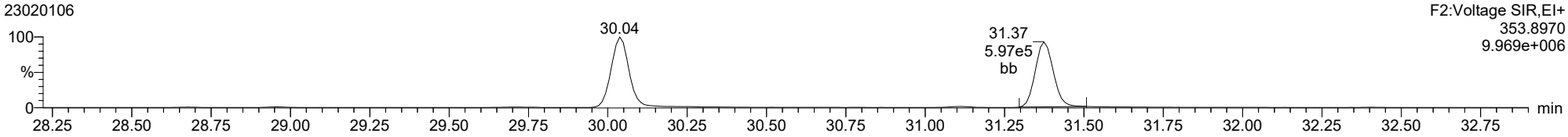

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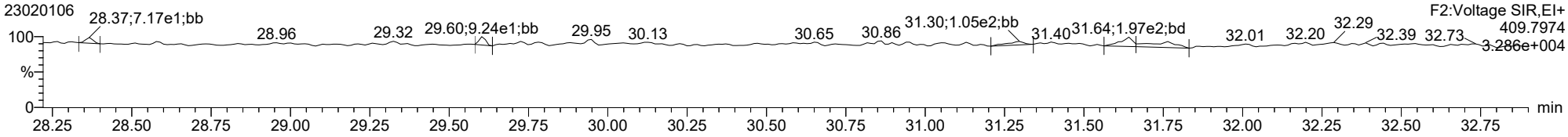

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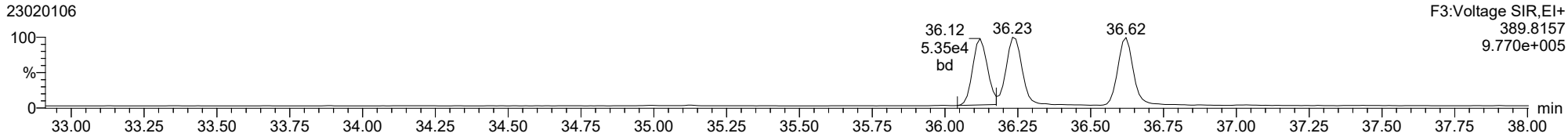

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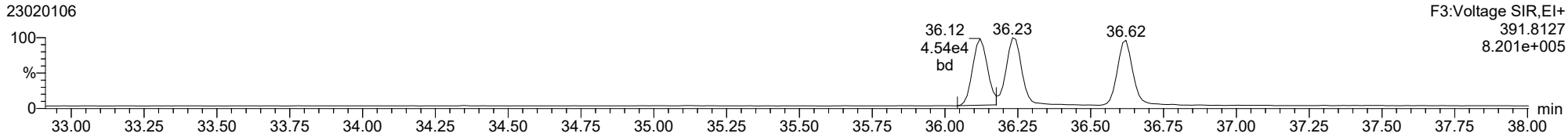

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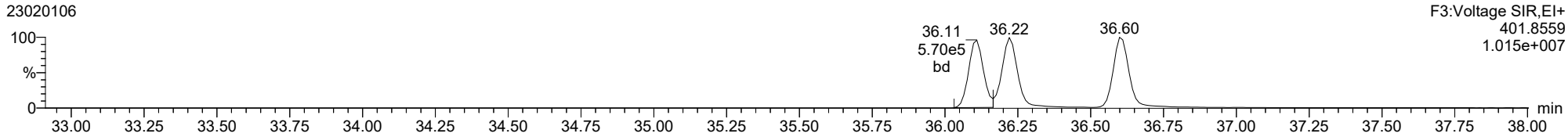

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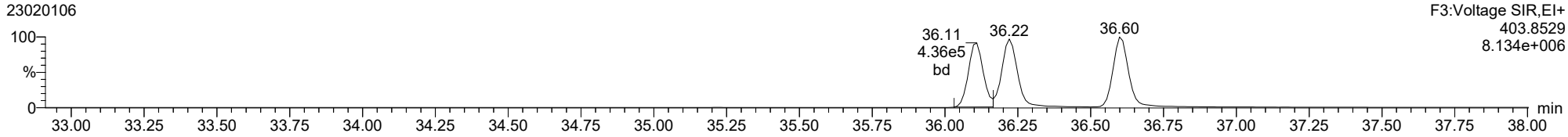

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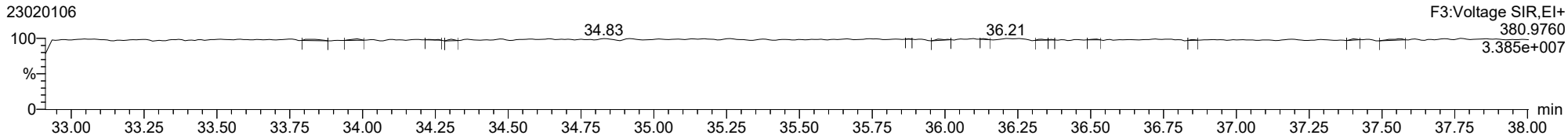

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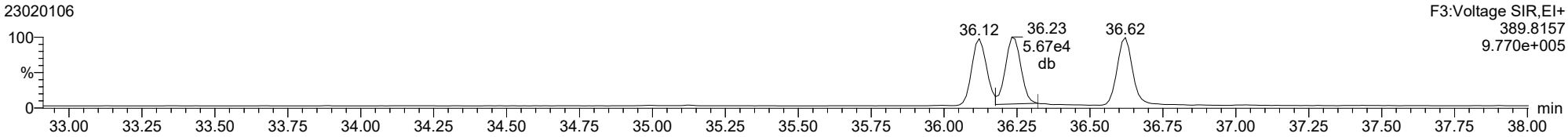

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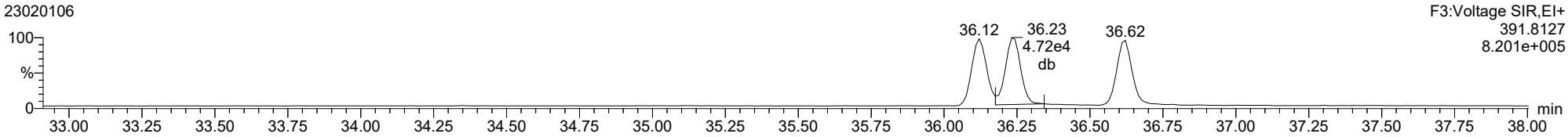

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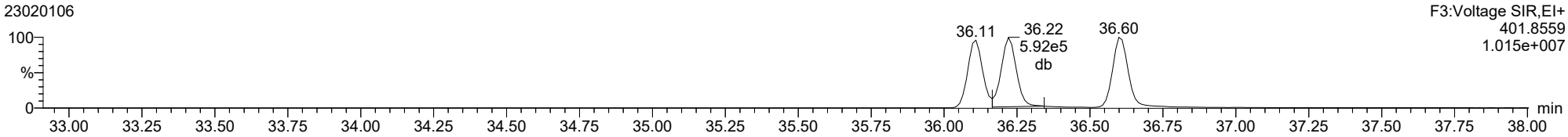

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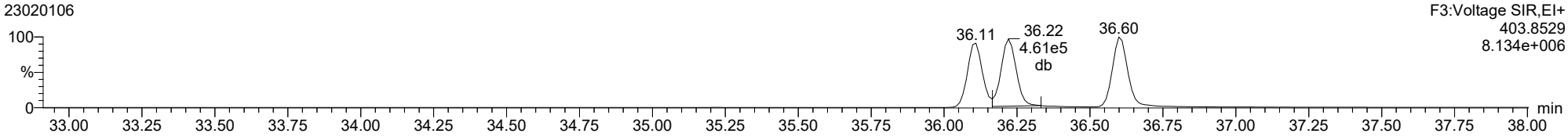

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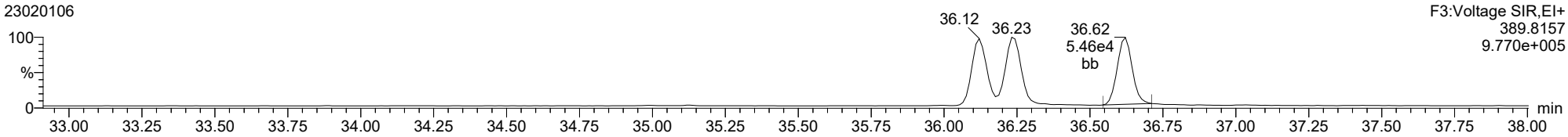

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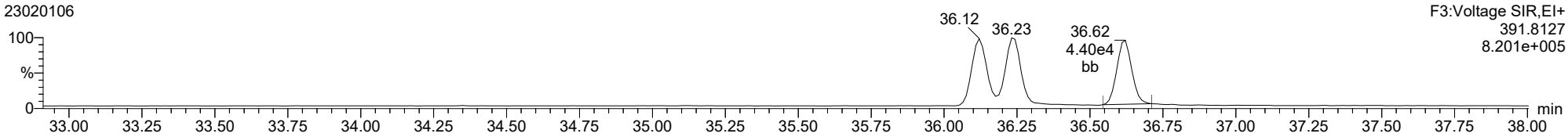

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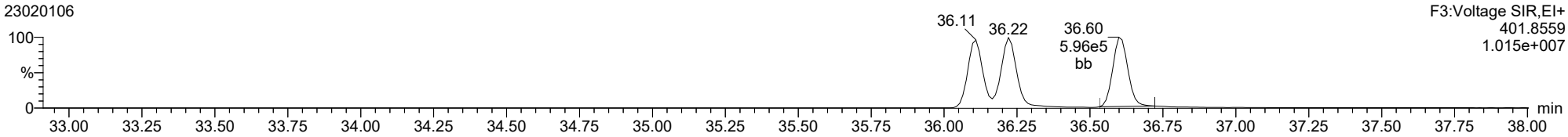

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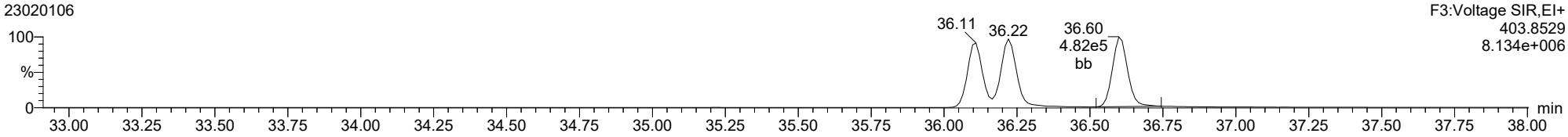

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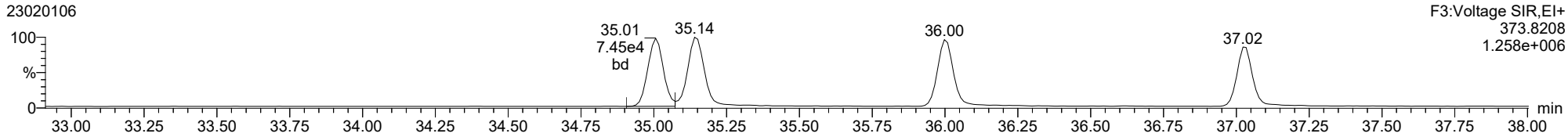

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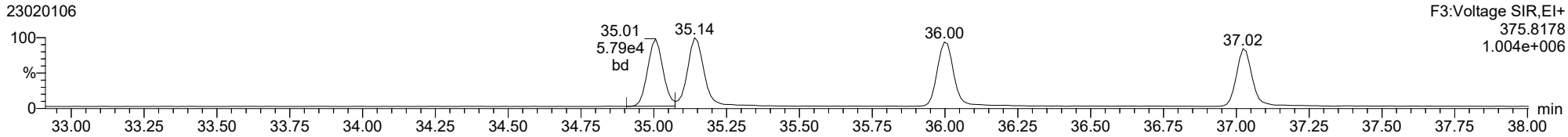

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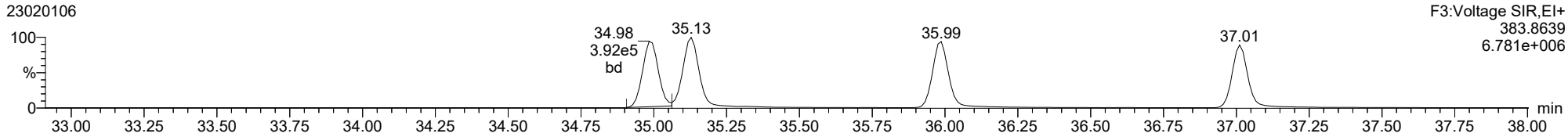

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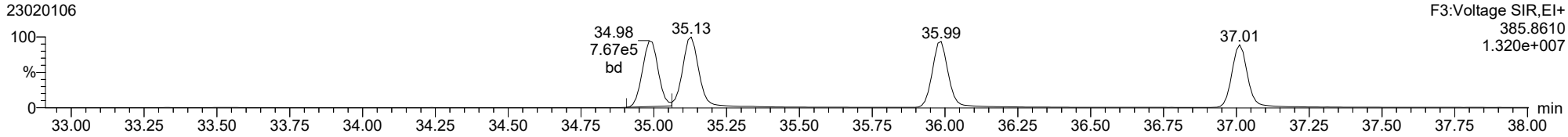

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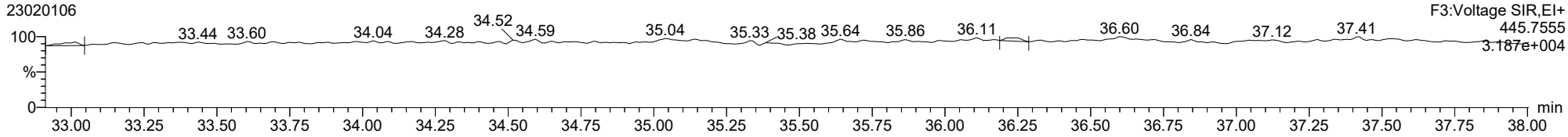

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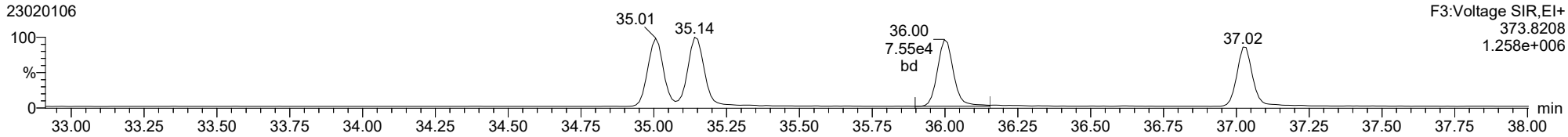

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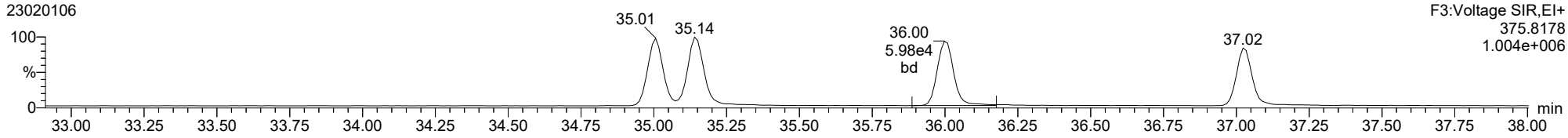

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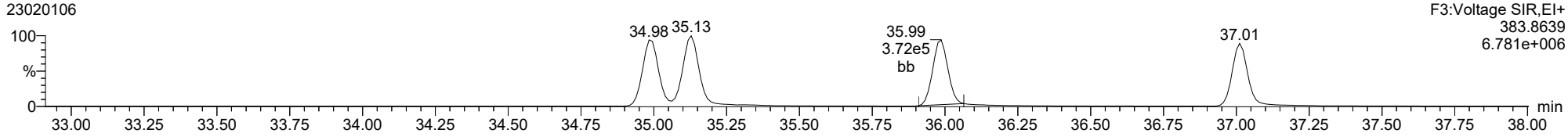

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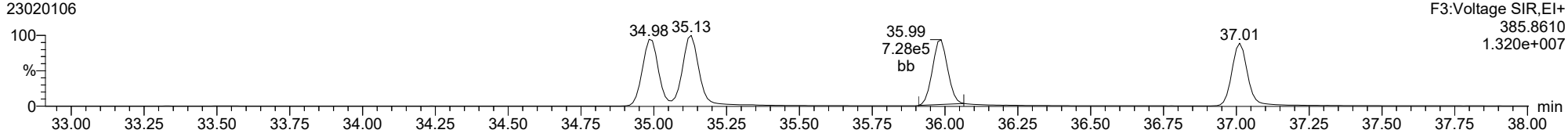

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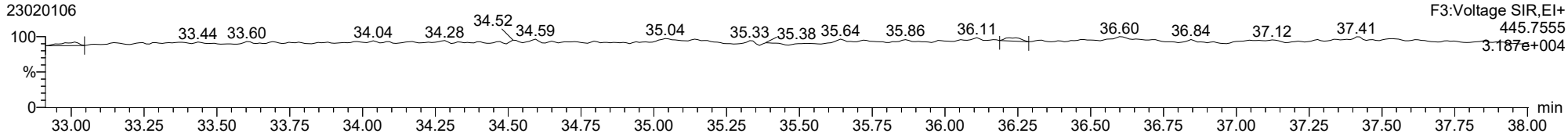

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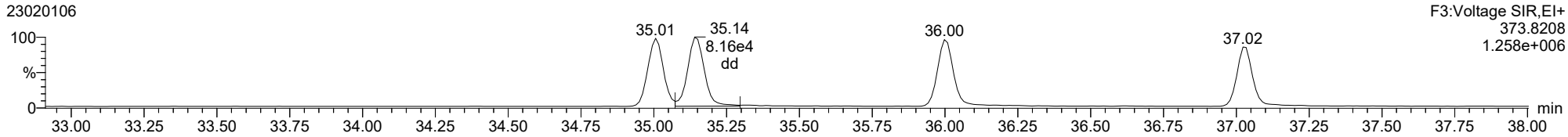

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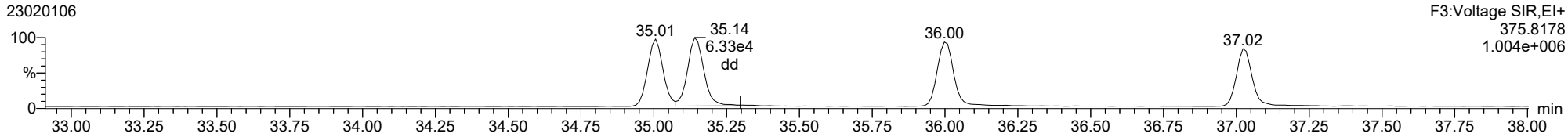

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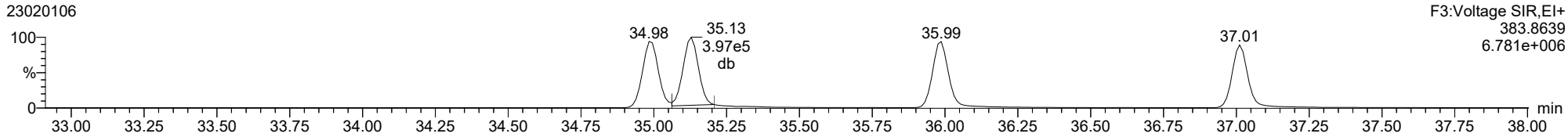

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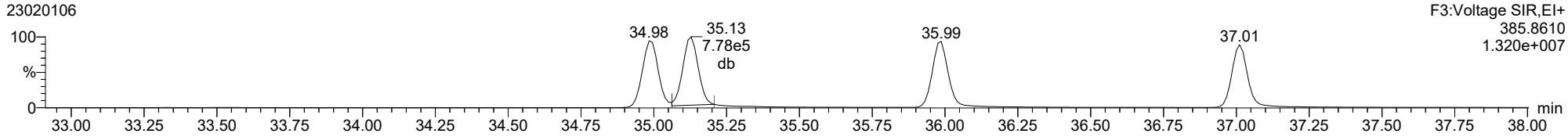

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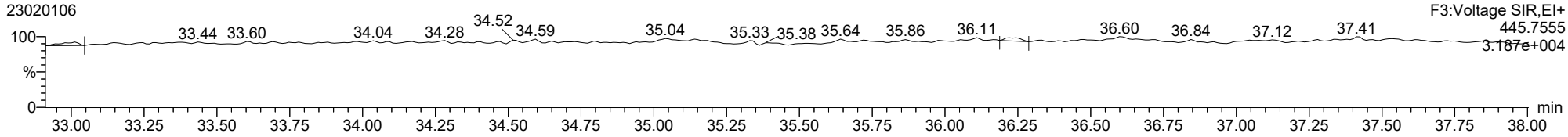

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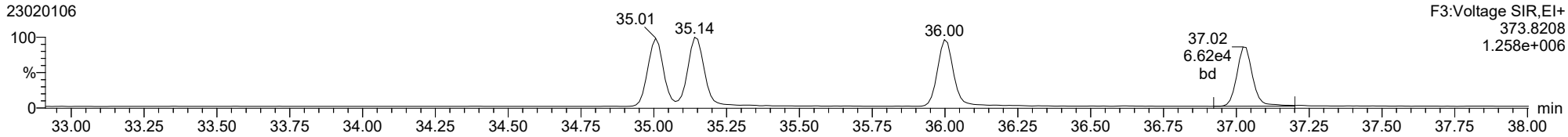

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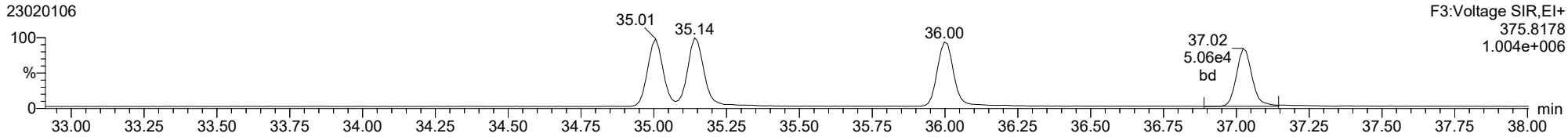

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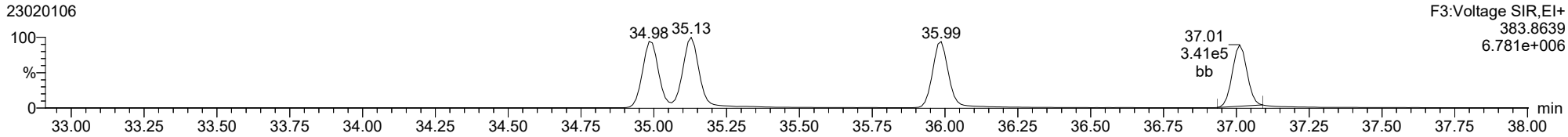

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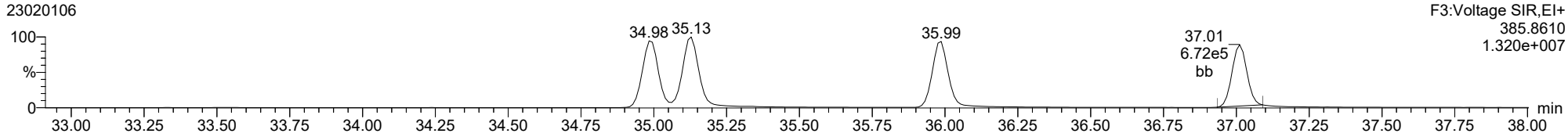

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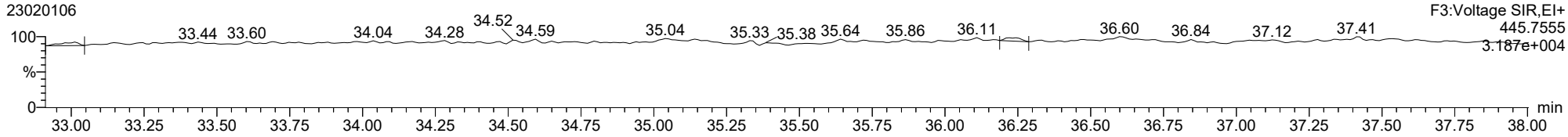

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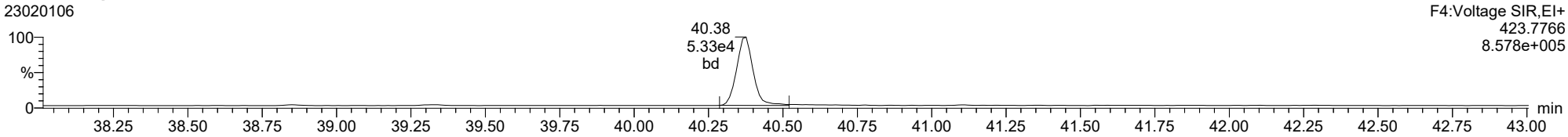

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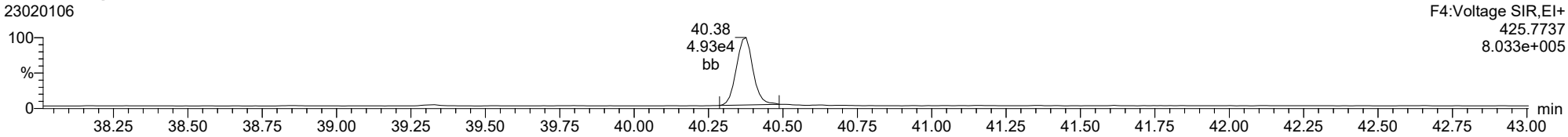

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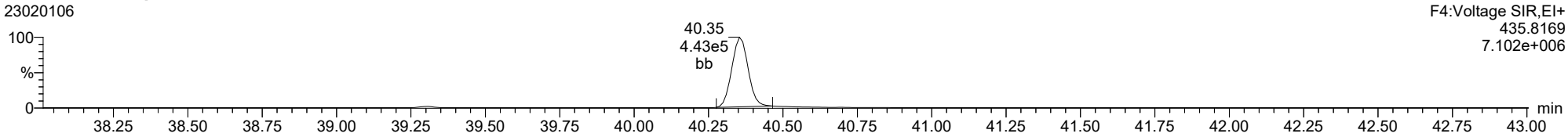

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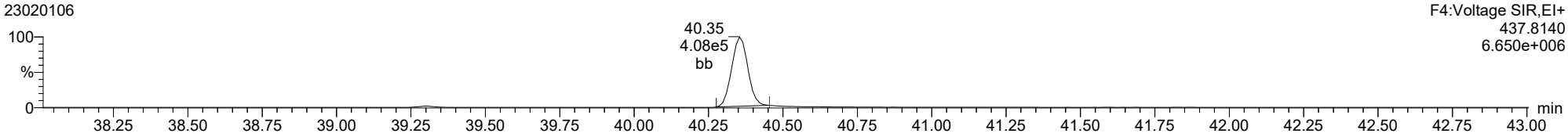
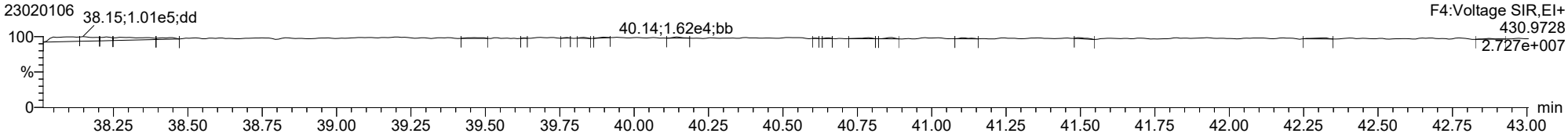


FUNCTION4 PFK



ID: CS2CR, Name: 23020106, Date: 01-Feb-2023, Time: 17:07:07, Conditions: AUTOSPEC01, User: pk

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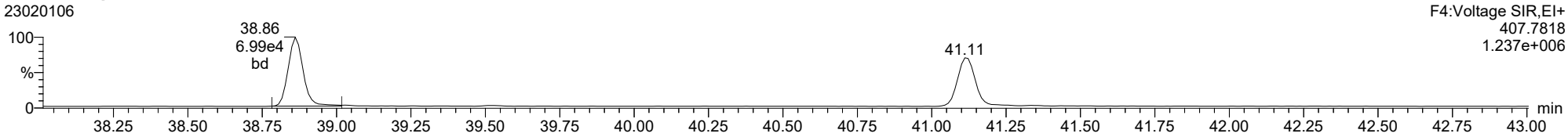

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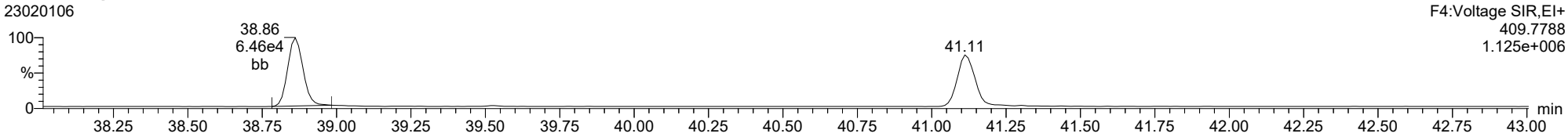

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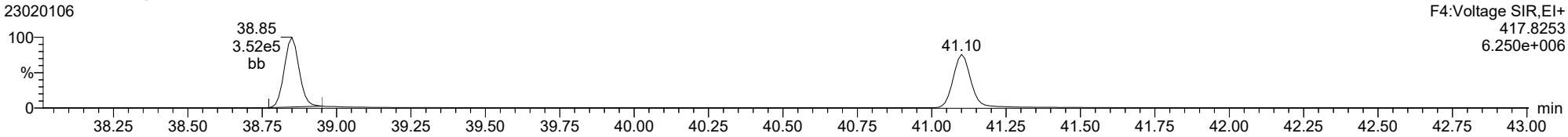

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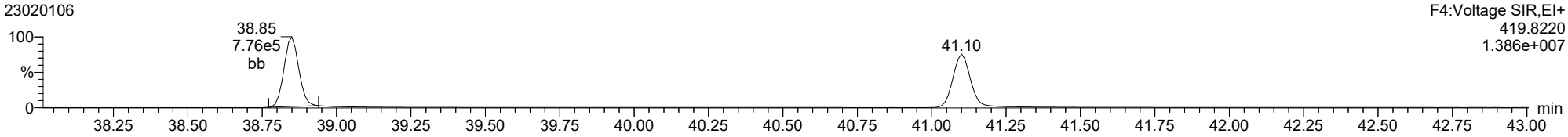
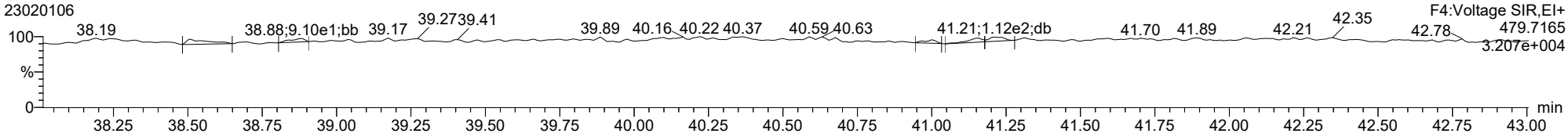


FUNCTION4 NCDPE



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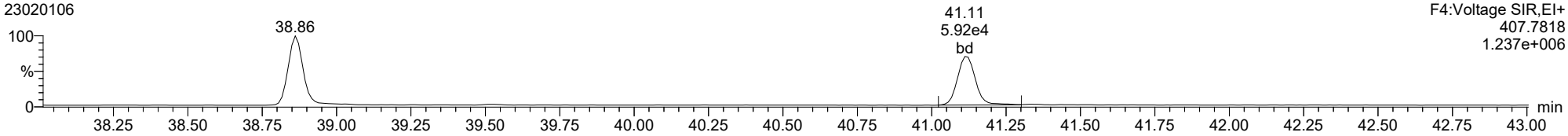

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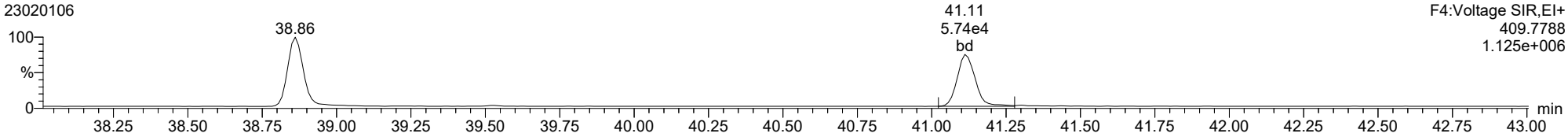

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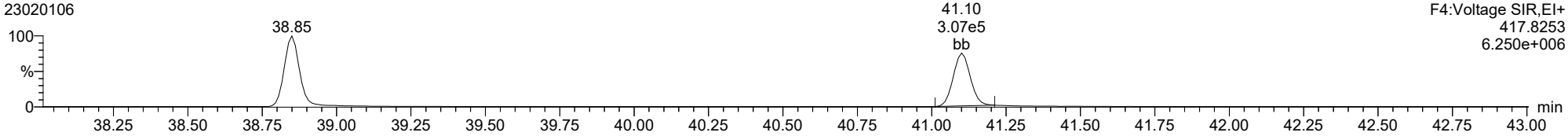

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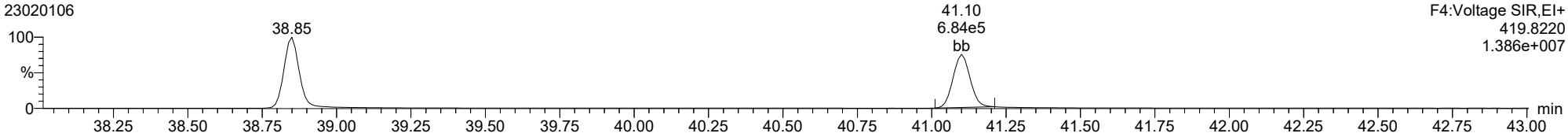
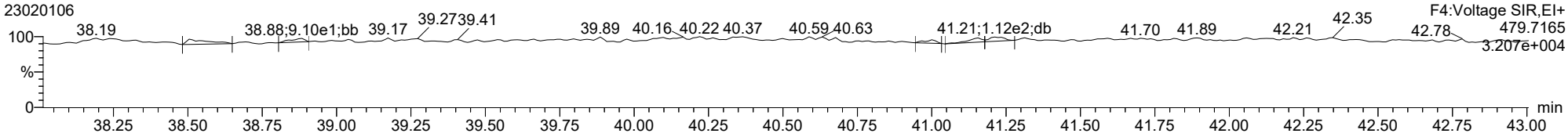


FUNCTION4 NCDPE



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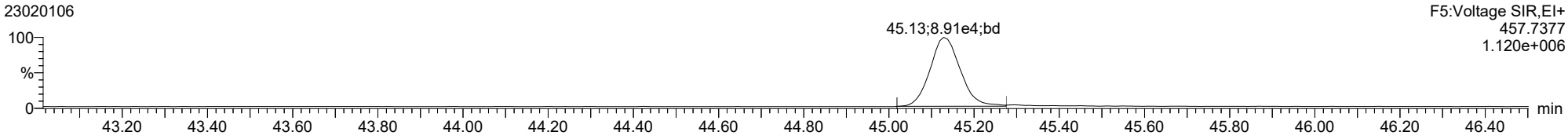
OCDD



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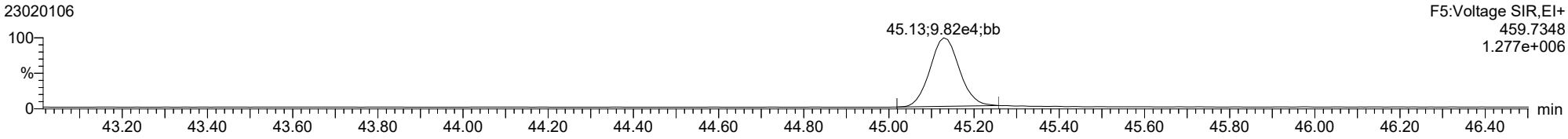

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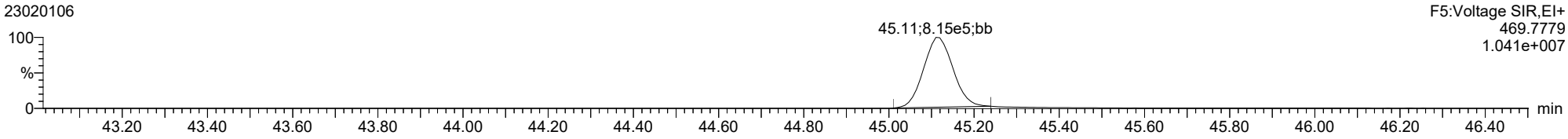

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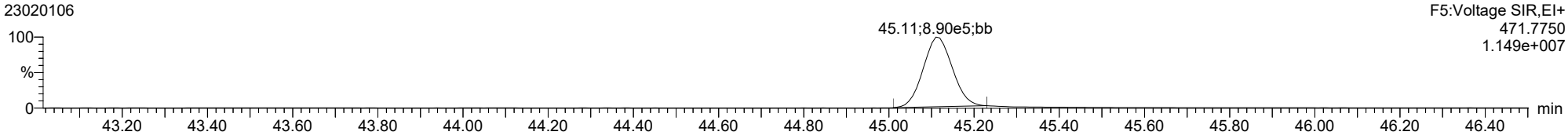
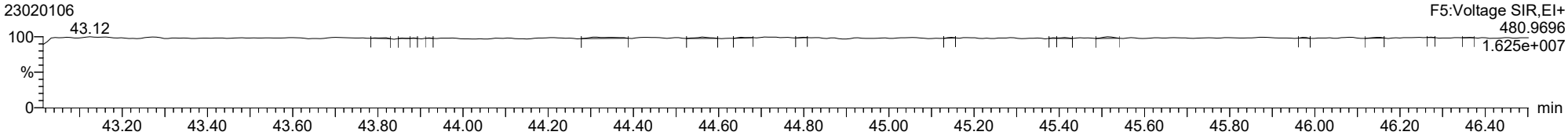


FUNCTION5 PFK



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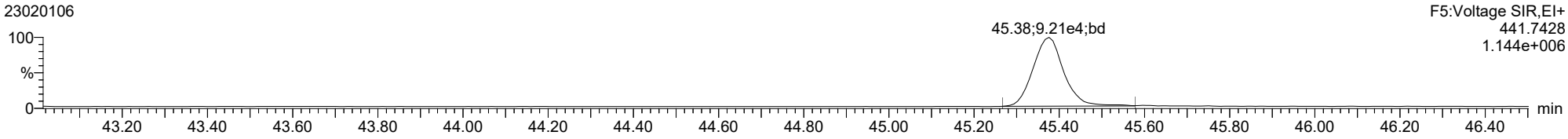

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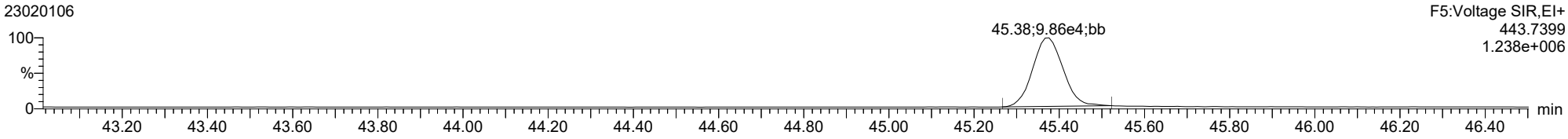

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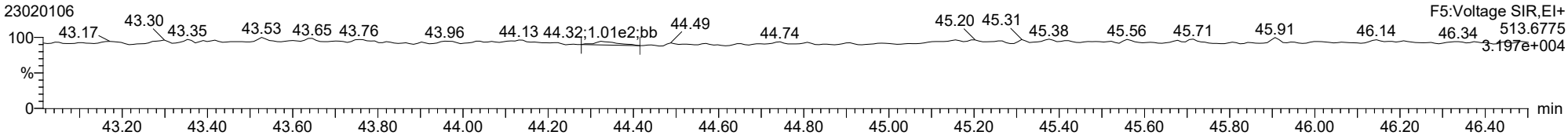
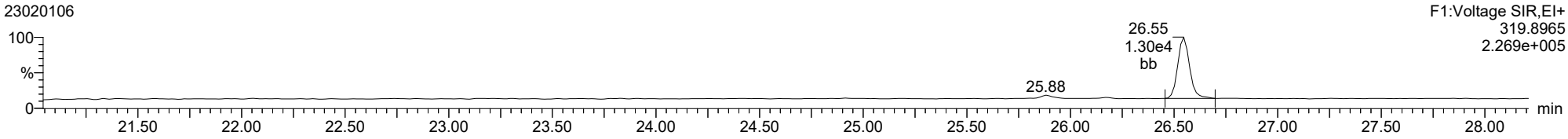
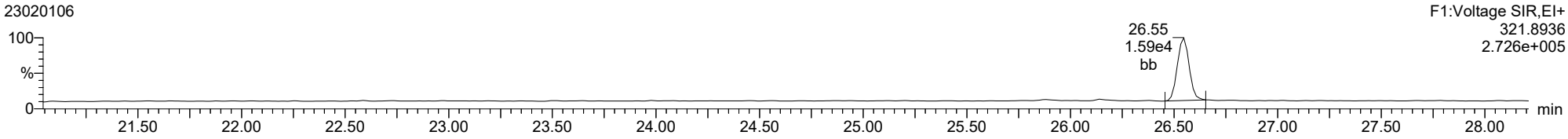


ID: CS2CR, Name: 23020106, Date: 01-Feb-2023, Time: 17:07:07, Conditions: AUTOSPEC01, User: pk

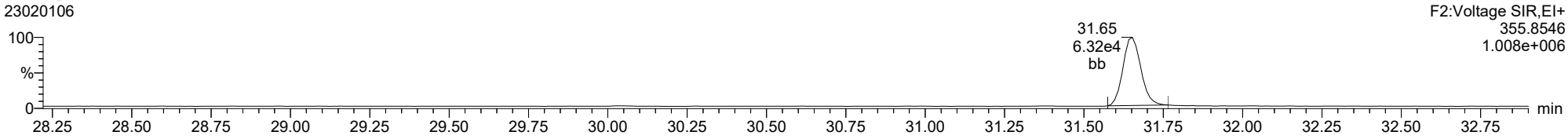
Total-tetradioxins



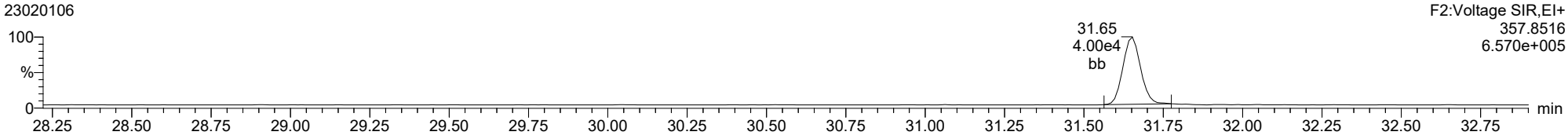
Total-tetradioxins



Total-pentadioxins



Total-pentadioxins



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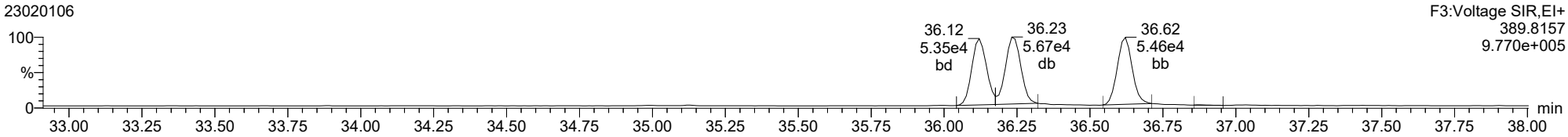
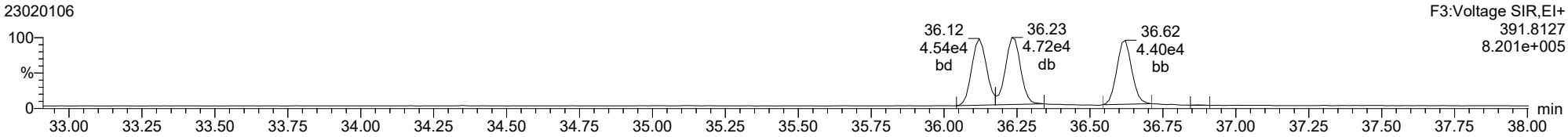
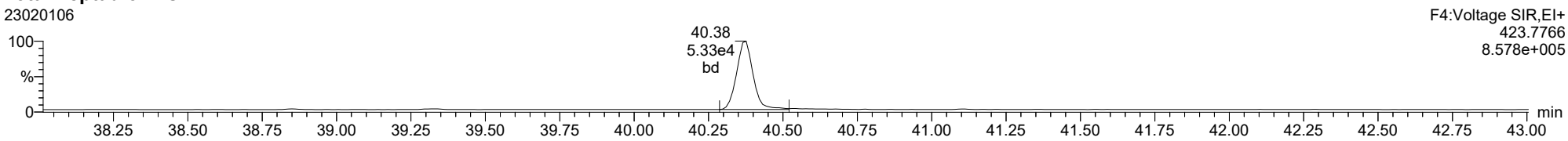
Total-hexadioxins



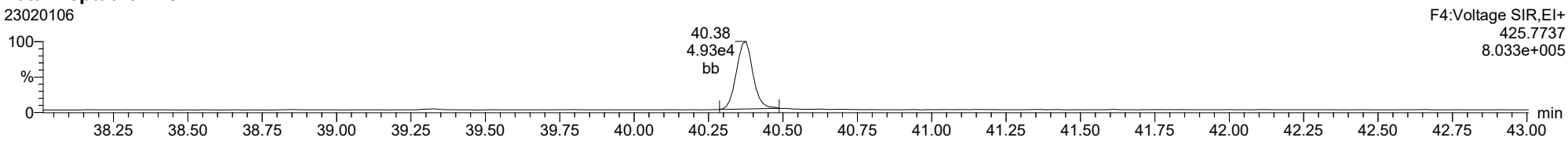
Total-hexadioxins



Total-heptadioxins



Total-heptadioxins



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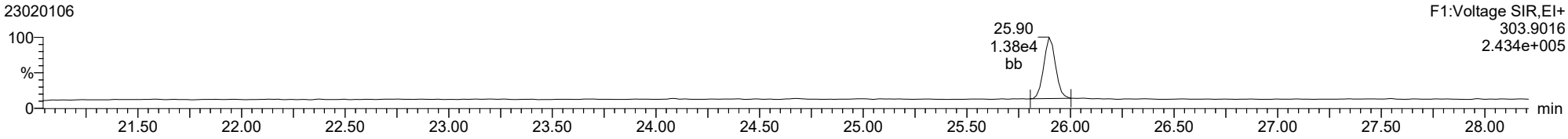
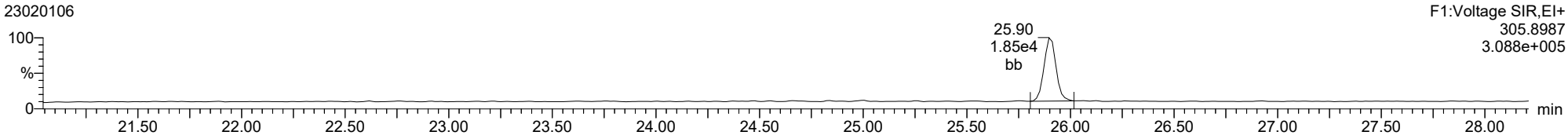
Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
Printed: Friday, February 03, 2023 10:37:25 Pacific Standard Time

ID: CS2CR, Name: 23020106, Date: 01-Feb-2023, Time: 17:07:07, Conditions: AUTOSPEC01, User: pk

Total-tetrafurans



Total-tetrafurans



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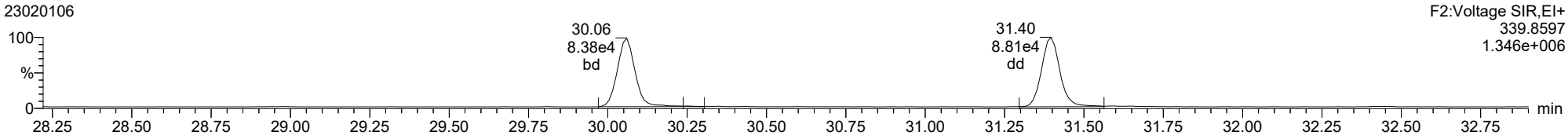
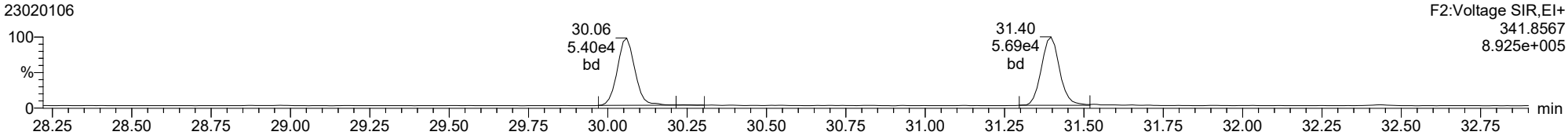


Total-pentafurans



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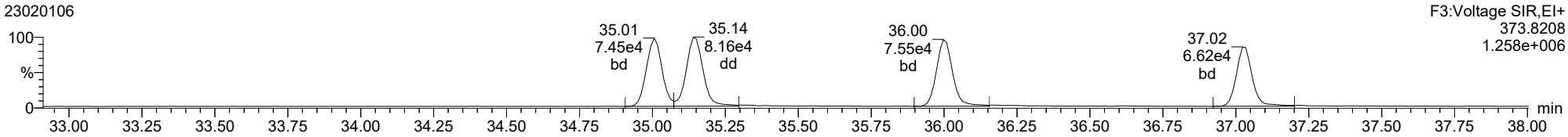
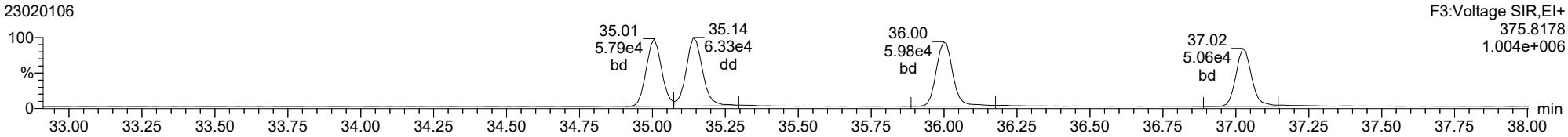
ID: CS2CR, Name: 23020106, Date: 01-Feb-2023, Time: 17:07:07, Conditions: AUTOSPEC01, User: pk

Total-hexafurans



Total-hexafurans



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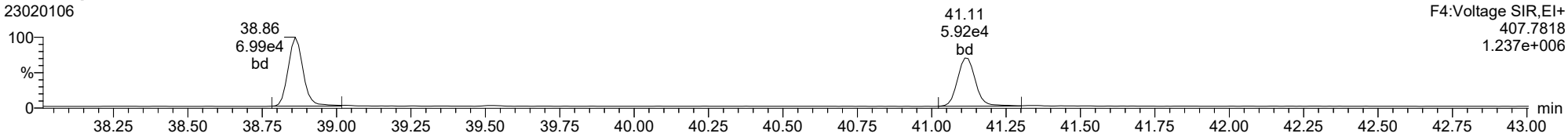
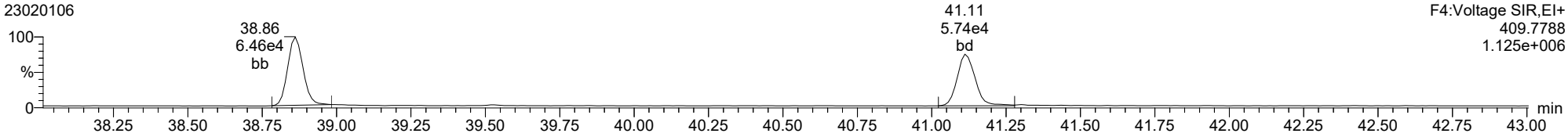


Total-heptafurans



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Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: 03 Feb 2023 10:33:40

ID: CS3CR, Name: 23020107, Date: 01-Feb-2023, Time: 17:56:19, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.882	1.001	6.453e4	8.749e4	0.876	0.738	0.770	1099	2026	9.86e5	1.33e6	897.2	656.5	NO	bb	bb	10.343
12378-PeCDF	30.048	1.001	3.683e5	2.382e5	0.845	1.546	1.550	3190	2595	5.70e6	3.69e6	1785.6	1421.3	NO	bb	bb	49.054
23478-PeCDF	31.385	1.001	3.878e5	2.552e5	0.911	1.520	1.550	3190	2595	5.98e6	3.95e6	1875.0	1521.7	NO	bb	bb	49.735
123478-HxCDF	34.995	1.001	3.439e5	2.707e5	1.182	1.271	1.240	3530	2719	5.57e6	4.47e6	1578.6	1645.2	NO	bd	bd	49.384
234678-HxCDF	35.987	1.000	3.473e5	2.734e5	1.229	1.270	1.240	3530	2719	5.49e6	4.36e6	1554.3	1603.8	NO	bd	bd	50.511
123678-HxCDF	35.129	1.000	3.705e5	2.941e5	1.248	1.260	1.240	3530	2719	5.50e6	4.37e6	1557.7	1606.9	NO	db	db	49.292
123789-HxCDF	37.012	1.000	3.044e5	2.379e5	1.187	1.279	1.240	3530	2719	4.78e6	3.76e6	1354.6	1383.4	NO	bb	bd	49.842
1234678-HpCDF	38.850	1.000	2.941e5	2.898e5	1.204	1.015	1.050	2499	2461	4.94e6	4.87e6	1976.6	1980.3	NO	bb	bb	47.249
1234789-HpCDF	41.100	1.000	2.575e5	2.639e5	1.165	0.976	1.050	2499	2461	3.86e6	3.76e6	1546.5	1528.6	NO	bb	bb	48.293
OCDF	45.357	1.006	3.904e5	4.394e5	1.186	0.889	0.890	2361	1464	4.77e6	5.34e6	2021.3	3646.6	NO	bb	bb	88.323
2378-TCDD	26.532	1.001	5.783e4	7.140e4	1.236	0.810	0.770	1261	1356	8.71e5	1.09e6	690.6	804.6	NO	bb	bb	9.200
12378-PeCDD	31.642	1.001	2.871e5	1.811e5	1.087	1.585	1.550	1935	1700	4.52e6	2.88e6	2335.1	1692.4	NO	bb	bb	49.835
123478-HxCDD	36.109	1.000	2.492e5	2.039e5	0.987	1.222	1.240	2775	1957	4.32e6	3.49e6	1555.2	1781.3	NO	bd	bd	49.339
123678-HxCDD	36.221	1.000	2.605e5	2.153e5	1.021	1.210	1.240	2775	1957	4.30e6	3.56e6	1550.9	1817.2	NO	db	db	49.052
123789-HxCDD	36.611	1.011	2.521e5	2.108e5	0.985	1.196	1.240	2775	1957	4.16e6	3.46e6	1500.2	1770.2	NO	bb	bb	49.951
1234678-HpCDD	40.354	1.000	2.309e5	2.219e5	1.253	1.041	1.050	2551	2394	3.57e6	3.40e6	1399.4	1422.4	NO	bb	bb	46.332
OCDD	45.119	1.000	3.877e5	4.205e5	1.103	0.922	0.890	2154	2574	4.65e6	5.24e6	2156.8	2035.9	NO	bd	bb	92.549
13C-2378-TCDF	25.867	1.007	7.414e5	9.363e5	1.768	0.792	0.770	2053	1619	1.15e7	1.43e7	5585.3	8856.7	NO	bb	bb	94.656
13C-12378-PeCDF	30.026	1.168	8.877e5	5.760e5	1.527	1.541	1.550	2967	1853	1.38e7	8.94e6	4662.3	4827.2	NO	bb	bb	95.615
13C-23478-PeCDF	31.363	1.220	8.562e5	5.626e5	1.466	1.522	1.550	2967	1853	1.33e7	8.64e6	4491.7	4663.8	NO	bb	bb	96.525
13C-123478-HxCDF	34.973	0.956	3.562e5	6.970e5	1.054	0.511	0.510	1992	2758	5.88e6	1.16e7	2952.0	4191.7	NO	bd	bd	100.726
13C-123678-HxCDF	35.118	0.960	3.647e5	7.156e5	1.080	0.510	0.510	1992	2758	5.88e6	1.14e7	2953.9	4143.1	NO	db	db	100.801
13C-234678-HxCDF	35.975	0.983	3.384e5	6.615e5	1.014	0.512	0.510	1992	2758	5.68e6	1.10e7	2849.9	4002.3	NO	bb	bb	99.342
13C-123789-HxCDF	37.000	1.011	3.154e5	6.016e5	0.928	0.524	0.510	1992	2758	5.40e6	1.05e7	2709.2	3801.7	NO	bb	bb	99.581
13C-1234678-HpCDF	38.839	1.061	3.227e5	7.036e5	1.036	0.459	0.440	2621	3052	5.41e6	1.21e7	2065.5	3959.7	NO	bb	bb	99.821
13C-1234789-HpCDF	41.089	1.123	2.972e5	6.294e5	0.905	0.472	0.440	2621	3052	4.32e6	9.59e6	1649.5	3143.4	NO	bd	bb	103.177
13C-1234-TCDD	25.700	0.000	4.469e5	5.555e5	1.000	0.804	0.770	2398	1542	7.04e6	8.78e6	2935.5	5692.9	NO	bb	bb	100.000
13C-2378-TCDD	26.517	1.032	4.991e5	6.371e5	1.103	0.783	0.770	2398	1542	7.48e6	9.58e6	3119.3	6212.6	NO	bb	bb	102.763
13C-12378-PeCDD	31.619	1.230	5.354e5	3.292e5	0.914	1.626	1.550	1302	1293	8.28e6	5.07e6	6359.2	3923.9	NO	bb	bb	94.346
13C-123478-HxCDD	36.098	0.987	5.251e5	4.053e5	0.933	1.296	1.240	1973	3288	8.80e6	6.71e6	4459.6	2041.7	NO	bd	bd	100.495
13C-123678-HxCDD	36.209	0.990	5.354e5	4.149e5	0.965	1.291	1.240	1973	3288	8.89e6	6.90e6	4507.2	2100.1	NO	db	db	99.280
13C-1234678-HpCDD	40.343	1.103	4.018e5	3.784e5	0.782	1.062	1.050	1997	2297	6.40e6	6.01e6	3207.1	2617.9	NO	bb	bb	100.543
13C-OCDD	45.101	1.233	7.578e5	8.262e5	0.788	0.917	0.890	2644	3522	9.52e6	1.02e7	3599.3	2906.4	NO	bb	bb	202.502
13C-123789-HxCDD	36.588	0.000	5.534e5	4.389e5	1.000	1.261	1.240	1973	3288	9.19e6	7.27e6	4657.5	2210.2	NO	bb	bb	100.000
37CL-2378-TCDD	26.532	1.032	1.115e5		1.233			1579		1.70e6		1075.4			bb		9.021

Dataset: T:\Autospec\Processed Data Batch\230201ICIH.qld
Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
Printed: Friday, February 03, 2023 10:37:38 Pacific Standard Time

ID: CS3CR, Name: 23020107, Date: 01-Feb-2023, Time: 17:56:19, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.389	0.866	7.831e4	1.003e5	1.064	0.781	0.770	1099	2026	1.24e6	1.58e6	1124.6	780.3	NO	bb	bb	10.000
1289-TCDF	27.378	1.058	6.314e4	8.075e4	0.858	0.782	0.770	1099	2026	9.07e5	1.18e6	825.1	582.8	NO	db	db	10.000
13468-PECDF	27.243	0.907	4.504e5	2.910e5	1.013	1.548	1.550	1001	928	7.08e6	4.58e6	7076.3	4935.5	NO	bb	bb	50.000
12389-PECDF	32.422	1.080	3.693e5	2.481e5	0.844	1.488	1.550	3190	2595	5.63e6	3.73e6	1765.9	1435.6	NO	bb	bb	50.000
123468-HXCDF	33.335	0.953	3.538e5	2.768e5	1.197	1.278	1.240	3530	2719	5.41e6	4.18e6	1531.9	1537.1	NO	bb	bd	50.000
1368-TCDD	23.659	0.892	5.365e4	6.956e4	1.084	0.771	0.770	1261	1356	8.58e5	1.11e6	680.3	820.3	NO	bb	bb	10.000
1289-TCDD	27.122	1.023	4.896e4	6.184e4	0.975	0.792	0.770	1261	1356	7.39e5	9.25e5	586.4	682.2	NO	bb	bb	10.000
12479-PECDD	28.912	0.914	4.860e5	3.082e5	1.837	1.577	1.550	1935	1700	4.68e6	2.92e6	2418.8	1714.3	NO	bb	bb	50.000
12389-PECDD	32.032	1.013	3.312e5	2.102e5	1.252	1.576	1.550	1935	1700	5.26e6	3.30e6	2720.3	1940.3	NO	bb	bb	50.000
124679-HXCDD	34.104	0.945	2.650e5	2.155e5	1.033	1.230	1.240	2775	1957	4.22e6	3.42e6	1521.7	1748.3	NO	bb	bb	50.000
1234679-HPCDD	39.307	0.974	2.579e5	2.438e5	1.286	1.058	1.050	2551	2394	4.26e6	3.98e6	1669.1	1662.1	NO	bb	bb	50.000
Total-tetrafurans			2.076e5		0.933			1099		3.16e6							30.586
Total-penta1			4.504e5					1001		7.08e6							50.000
Total-pentafurans			1.187e6		0.866			3190		1.83e7							156.881
Total-hexafurans			1.720e6		1.208			3530		2.67e7							249.030
Total-heptafurans			5.536e5		1.185			2499		8.83e6							95.864
Total-Furans			4.509e6		1.067			1099		6.89e7							670.685
Total-tetradioxins			2.732e5		1.099			1261		3.78e6							49.490
Total-pentadioxins			1.106e6		1.392			1935		1.45e7							150.052
Total-hexadioxins			1.027e6		1.007			2775		1.70e7							198.343
Total-heptadioxins			4.888e5		1.269			2551		7.83e6							96.332
Total-Dioxins			3.282e6		1.165			1261		4.77e7							586.766
Total-TEQ			7.791e6					1261		1.17e8							1257.451
FUNCTION1 PFK			2.071e7					567379		2.38e8							
FUNCTION2 PFK			0.000e0					180306		0.00e0							
FUNCTION3 PFK			2.786e4					420708		9.12e5							0.000
FUNCTION4 PFK			7.534e5					257681		1.24e7							
FUNCTION5 PFK			1.239e5					175535		5.02e6							
FUNCTION1 HXCD...			1.237e3					791		2.01e4							0.000
FUNCTION1 HPCD...			1.368e3					947		2.24e4							0.000
FUNCTION2 HPCD...			4.817e2					887		9.10e3							0.000
FUNCTION3 OCDPE			4.485e2					809		9.17e3							0.000
FUNCTION4 NCDPE			3.809e2					922		7.31e3							0.000
FUNCTION5 DCDPE			0.000e0					753		0.00e0							

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: 03 Feb 2023 10:33:40

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.38	6.314e4	8.075e4	0.858	0.78	0.77	825.1	YES	NO	db	db	10.000
2	Total-tetrafurans	27.24	1.177e3	1.490e3	0.933	0.79	0.77	17.2	YES	NO	bd	bd	0.170
3	2378-TCDF	25.88	6.453e4	8.749e4	0.876	0.74	0.77	897.2	YES	NO	bb	bb	10.343
4	Total-tetrafurans	24.81	4.913e2	6.353e2	0.933	0.77	0.77	7.1	YES	NO	dd	db	0.072
5	1368-TCDF	22.39	7.831e4	1.003e5	1.064	0.78	0.77	1124.6	YES	NO	bb	bb	10.000

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.24	4.504e5	2.910e5	1.013	1.55	1.55	7076.3	YES	NO	bb	bb	50.000

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.42	3.693e5	2.481e5	0.844	1.49	1.55	1765.9	YES	NO	bb	bb	50.000
2	23478-PeCDF	31.39	3.878e5	2.552e5	0.911	1.52	1.55	1875.0	YES	NO	bb	bb	49.735
3	12378-PeCDF	30.05	3.683e5	2.382e5	0.845	1.55	1.55	1785.6	YES	NO	bb	bb	49.054
4	Total-pentafurans	28.90	6.175e4	3.932e4	0.866	1.57	1.55	301.5	YES	NO	bb	bb	8.093

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDF	35.13	3.705e5	2.941e5	1.248	1.26	1.24	1557.7	YES	NO	db	db	49.292
2	123478-HxCDF	34.99	3.439e5	2.707e5	1.182	1.27	1.24	1578.6	YES	NO	bd	bd	49.384
3	123468-HXCDF	33.34	3.538e5	2.768e5	1.197	1.28	1.24	1531.9	YES	NO	bb	bd	50.000
4	123789-HxCDF	37.01	3.044e5	2.379e5	1.187	1.28	1.24	1354.6	YES	NO	bb	bd	49.842
5	234678-HxCDF	35.99	3.473e5	2.734e5	1.229	1.27	1.24	1554.3	YES	NO	bd	bd	50.511

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.10	2.575e5	2.639e5	1.165	0.98	1.05	1546.5	YES	NO	bb	bb	48.293
2	Total-heptafurans	39.51	1.970e3	1.765e3	1.185	1.12	1.05	11.2	YES	NO	bb	bb	0.323
3	1234678-HpCDF	38.85	2.941e5	2.898e5	1.204	1.01	1.05	1976.6	YES	NO	bb	bb	47.249

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.38	6.314e4	8.075e4	0.858	0.78	0.77	825.1	YES	NO	db	db	10.000
2	Total-tetrafurans	27.24	1.177e3	1.490e3	0.933	0.79	0.77	17.2	YES	NO	bd	bd	0.170
3	2378-TCDF	25.88	6.453e4	8.749e4	0.876	0.74	0.77	897.2	YES	NO	bb	bb	10.343
4	Total-tetrafurans	24.81	4.913e2	6.353e2	0.933	0.77	0.77	7.1	YES	NO	dd	db	0.072
5	1368-TCDF	22.39	7.831e4	1.003e5	1.064	0.78	0.77	1124.6	YES	NO	bb	bb	10.000
6	12389-PECDF	32.42	3.693e5	2.481e5	0.844	1.49	1.55	1765.9	YES	NO	bb	bb	50.000
7	23478-PeCDF	31.39	3.878e5	2.552e5	0.911	1.52	1.55	1875.0	YES	NO	bb	bb	49.735
8	12378-PeCDF	30.05	3.683e5	2.382e5	0.845	1.55	1.55	1785.6	YES	NO	bb	bb	49.054
9	Total-pentafurans	28.90	6.175e4	3.932e4	0.866	1.57	1.55	301.5	YES	NO	bb	bb	8.093
10	123678-HxCDF	35.13	3.705e5	2.941e5	1.248	1.26	1.24	1557.7	YES	NO	db	db	49.292
11	123478-HxCDF	34.99	3.439e5	2.707e5	1.182	1.27	1.24	1578.6	YES	NO	bd	bd	49.384
12	123468-HXCDF	33.34	3.538e5	2.768e5	1.197	1.28	1.24	1531.9	YES	NO	bb	bd	50.000
13	123789-HxCDF	37.01	3.044e5	2.379e5	1.187	1.28	1.24	1354.6	YES	NO	bb	bd	49.842
14	234678-HxCDF	35.99	3.473e5	2.734e5	1.229	1.27	1.24	1554.3	YES	NO	bd	bd	50.511
15	1234789-HpCDF	41.10	2.575e5	2.639e5	1.165	0.98	1.05	1546.5	YES	NO	bb	bb	48.293
16	Total-heptafurans	39.51	1.970e3	1.765e3	1.185	1.12	1.05	11.2	YES	NO	bb	bb	0.323
17	1234678-HpCDF	38.85	2.941e5	2.898e5	1.204	1.01	1.05	1976.6	YES	NO	bb	bb	47.249
18	OCDF	45.36	3.904e5	4.394e5	1.186	0.89	0.89	2021.3	YES	NO	bb	bb	88.323
19	13468-PECDF	27.24	4.504e5	2.910e5	1.013	1.55	1.55	7076.3	YES	NO	bb	bb	50.000

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	27.12	4.896e4	6.184e4	0.975	0.79	0.77	586.4	YES	NO	bb	bb	10.000
2	2378-TCDD	26.53	5.783e4	7.140e4	1.236	0.81	0.77	690.6	YES	NO	bb	bb	9.200
3	Total-tetradioxins	26.20	8.471e4	1.070e5	1.099	0.79	0.77	703.2	YES	NO	bb	bb	15.362
4	Total-tetradioxins	25.72	2.731e4	3.262e4	1.099	0.84	0.77	331.8	YES	NO	bd	bb	4.800
5	Total-tetradioxins	25.14	7.197e2	8.821e2	1.099	0.82	0.77	7.0	YES	NO	bb	bb	0.128
6	1368-TCDD	23.66	5.365e4	6.956e4	1.084	0.77	0.77	680.3	YES	NO	bb	bb	10.000

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PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	32.03	3.312e5	2.102e5	1.252	1.58	1.55	2720.3	YES	NO	bb	bb	50.000
2	12378-PeCDD	31.64	2.871e5	1.811e5	1.087	1.59	1.55	2335.1	YES	NO	bb	bb	49.835
3	Total-pentadioxins	30.97	1.319e3	9.625e2	1.392	1.37	1.55	9.7	YES	NO	bb	bb	0.190
4	Total-pentadioxins	29.24	2.122e2	1.231e2	1.392	1.72	1.55	2.9	NO	NO	bb	bb	0.028
5	12479-PECDD	28.91	4.860e5	3.082e5	1.837	1.58	1.55	2418.8	YES	NO	bb	bb	50.000

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HXCDD	34.10	2.650e5	2.155e5	1.033	1.23	1.24	1521.7	YES	NO	bb	bb	50.000
2	123789-HxCDD	36.61	2.521e5	2.108e5	0.985	1.20	1.24	1500.2	YES	NO	bb	bb	49.951
3	123678-HxCDD	36.22	2.605e5	2.153e5	1.021	1.21	1.24	1550.9	YES	NO	db	db	49.052
4	123478-HxCDD	36.11	2.492e5	2.039e5	0.987	1.22	1.24	1555.2	YES	NO	bd	bd	49.339

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.35	2.309e5	2.219e5	1.253	1.04	1.05	1399.4	YES	NO	bb	bb	46.332
2	1234679-HPCDD	39.31	2.579e5	2.438e5	1.286	1.06	1.05	1669.1	YES	NO	bb	bb	50.000

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	27.12	4.896e4	6.184e4	0.975	0.79	0.77	586.4	YES	NO	bb	bb	10.000
2	2378-TCDD	26.53	5.783e4	7.140e4	1.236	0.81	0.77	690.6	YES	NO	bb	bb	9.200
3	Total-tetradioxins	26.20	8.471e4	1.070e5	1.099	0.79	0.77	703.2	YES	NO	bb	bb	15.362
4	Total-tetradioxins	25.72	2.731e4	3.262e4	1.099	0.84	0.77	331.8	YES	NO	bd	bb	4.800
5	Total-tetradioxins	25.14	7.197e2	8.821e2	1.099	0.82	0.77	7.0	YES	NO	bb	bb	0.128
6	1368-TCDD	23.66	5.365e4	6.956e4	1.084	0.77	0.77	680.3	YES	NO	bb	bb	10.000
7	12389-PECDD	32.03	3.312e5	2.102e5	1.252	1.58	1.55	2720.3	YES	NO	bb	bb	50.000
8	12378-PeCDD	31.64	2.871e5	1.811e5	1.087	1.59	1.55	2335.1	YES	NO	bb	bb	49.835
9	Total-pentadioxins	30.97	1.319e3	9.625e2	1.392	1.37	1.55	9.7	YES	NO	bb	bb	0.190
10	Total-pentadioxins	29.24	2.122e2	1.231e2	1.392	1.72	1.55	2.9	NO	NO	bb	bb	0.028
11	12479-PECDD	28.91	4.860e5	3.082e5	1.837	1.58	1.55	2418.8	YES	NO	bb	bb	50.000
12	124679-HXCDD	34.10	2.650e5	2.155e5	1.033	1.23	1.24	1521.7	YES	NO	bb	bb	50.000
13	123789-HxCDD	36.61	2.521e5	2.108e5	0.985	1.20	1.24	1500.2	YES	NO	bb	bb	49.951
14	123678-HxCDD	36.22	2.605e5	2.153e5	1.021	1.21	1.24	1550.9	YES	NO	db	db	49.052
15	123478-HxCDD	36.11	2.492e5	2.039e5	0.987	1.22	1.24	1555.2	YES	NO	bd	bd	49.339
16	1234678-HpCDD	40.35	2.309e5	2.219e5	1.253	1.04	1.05	1399.4	YES	NO	bb	bb	46.332
17	1234679-HPCDD	39.31	2.579e5	2.438e5	1.286	1.06	1.05	1669.1	YES	NO	bb	bb	50.000
18	OCDD	45.12	3.877e5	4.205e5	1.103	0.92	0.89	2156.8	YES	NO	bd	bb	92.549

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.38	6.314e4	8.075e4	0.858	0.78	0.77	825.1	YES	NO	db	db	10.000
2	Total-tetrafurans	27.24	1.177e3	1.490e3	0.933	0.79	0.77	17.2	YES	NO	bd	bd	0.170
3	2378-TCDF	25.88	6.453e4	8.749e4	0.876	0.74	0.77	897.2	YES	NO	bb	bb	10.343
4	Total-tetrafurans	24.81	4.913e2	6.353e2	0.933	0.77	0.77	7.1	YES	NO	dd	db	0.072
5	1368-TCDF	22.39	7.831e4	1.003e5	1.064	0.78	0.77	1124.6	YES	NO	bb	bb	10.000
6	12389-PECDF	32.42	3.693e5	2.481e5	0.844	1.49	1.55	1765.9	YES	NO	bb	bb	50.000
7	23478-PeCDF	31.39	3.878e5	2.552e5	0.911	1.52	1.55	1875.0	YES	NO	bb	bb	49.735
8	12378-PeCDF	30.05	3.683e5	2.382e5	0.845	1.55	1.55	1785.6	YES	NO	bb	bb	49.054
9	Total-pentafurans	28.90	6.175e4	3.932e4	0.866	1.57	1.55	301.5	YES	NO	bb	bb	8.093
10	123678-HxCDF	35.13	3.705e5	2.941e5	1.248	1.26	1.24	1557.7	YES	NO	db	db	49.292
11	123478-HxCDF	34.99	3.439e5	2.707e5	1.182	1.27	1.24	1578.6	YES	NO	bd	bd	49.384
12	123468-HXCDF	33.34	3.538e5	2.768e5	1.197	1.28	1.24	1531.9	YES	NO	bb	bd	50.000
13	123789-HxCDF	37.01	3.044e5	2.379e5	1.187	1.28	1.24	1354.6	YES	NO	bb	bd	49.842
14	234678-HxCDF	35.99	3.473e5	2.734e5	1.229	1.27	1.24	1554.3	YES	NO	bd	bd	50.511
15	1234789-HpCDF	41.10	2.575e5	2.639e5	1.165	0.98	1.05	1546.5	YES	NO	bb	bb	48.293
16	Total-heptafurans	39.51	1.970e3	1.765e3	1.185	1.12	1.05	11.2	YES	NO	bb	bb	0.323
17	1234678-HpCDF	38.85	2.941e5	2.898e5	1.204	1.01	1.05	1976.6	YES	NO	bb	bb	47.249
18	OCDF	45.36	3.904e5	4.394e5	1.186	0.89	0.89	2021.3	YES	NO	bb	bb	88.323
19	13468-PECDF	27.24	4.504e5	2.910e5	1.013	1.55	1.55	7076.3	YES	NO	bb	bb	50.000
20	1289-TCDD	27.12	4.896e4	6.184e4	0.975	0.79	0.77	586.4	YES	NO	bb	bb	10.000
21	2378-TCDD	26.53	5.783e4	7.140e4	1.236	0.81	0.77	690.6	YES	NO	bb	bb	9.200
22	Total-tetradioxins	26.20	8.471e4	1.070e5	1.099	0.79	0.77	703.2	YES	NO	bb	bb	15.362
23	Total-tetradioxins	25.72	2.731e4	3.262e4	1.099	0.84	0.77	331.8	YES	NO	bd	bb	4.800
24	Total-tetradioxins	25.14	7.197e2	8.821e2	1.099	0.82	0.77	7.0	YES	NO	bb	bb	0.128
25	1368-TCDD	23.66	5.365e4	6.956e4	1.084	0.77	0.77	680.3	YES	NO	bb	bb	10.000
26	12389-PECDD	32.03	3.312e5	2.102e5	1.252	1.58	1.55	2720.3	YES	NO	bb	bb	50.000
27	12378-PeCDD	31.64	2.871e5	1.811e5	1.087	1.59	1.55	2335.1	YES	NO	bb	bb	49.835
28	Total-pentadioxins	30.97	1.319e3	9.625e2	1.392	1.37	1.55	9.7	YES	NO	bb	bb	0.190
29	Total-pentadioxins	29.24	2.122e2	1.231e2	1.392	1.72	1.55	2.9	NO	NO	bb	bb	0.028
30	12479-PECDD	28.91	4.860e5	3.082e5	1.837	1.58	1.55	2418.8	YES	NO	bb	bb	50.000
31	124679-HXCDD	34.10	2.650e5	2.155e5	1.033	1.23	1.24	1521.7	YES	NO	bb	bb	50.000
32	123789-HxCDD	36.61	2.521e5	2.108e5	0.985	1.20	1.24	1500.2	YES	NO	bb	bb	49.951
33	123678-HxCDD	36.22	2.605e5	2.153e5	1.021	1.21	1.24	1550.9	YES	NO	db	db	49.052
34	123478-HxCDD	36.11	2.492e5	2.039e5	0.987	1.22	1.24	1555.2	YES	NO	bd	bd	49.339
35	1234678-HpCDD	40.35	2.309e5	2.219e5	1.253	1.04	1.05	1399.4	YES	NO	bb	bb	46.332
36	1234679-HPCDD	39.31	2.579e5	2.438e5	1.286	1.06	1.05	1669.1	YES	NO	bb	bb	50.000
37	OCDD	45.12	3.877e5	4.205e5	1.103	0.92	0.89	2156.8	YES	NO	bd	bb	92.549

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	21.91	6.852e5					20.8	YES		dd		
2	FUNCTION1 PFK	21.84	1.096e6					22.0	YES		dd		
3	FUNCTION1 PFK	21.77	5.746e5					22.9	YES		dd		
4	FUNCTION1 PFK	21.71	1.001e6					23.9	YES		dd		
5	FUNCTION1 PFK	21.59	1.735e6					26.6	YES		dd		
6	FUNCTION1 PFK	21.47	1.869e6					28.4	YES		dd		
7	FUNCTION1 PFK	21.35	2.030e6					30.8	YES		dd		
8	FUNCTION1 PFK	21.25	1.366e6					32.7	YES		dd		
9	FUNCTION1 PFK	21.13	3.514e6					34.9	YES		bd		
10	FUNCTION1 PFK	23.42	1.745e4					0.9	NO		db		
11	FUNCTION1 PFK	23.36	2.629e4					1.1	NO		dd		
12	FUNCTION1 PFK	23.30	5.605e4					1.4	NO		bd		
13	FUNCTION1 PFK	23.16	2.732e4					0.9	NO		bb		
14	FUNCTION1 PFK	22.89	1.080e5					3.0	YES		db		
15	FUNCTION1 PFK	22.81	1.442e5					3.9	YES		dd		
16	FUNCTION1 PFK	22.75	1.516e5					4.8	YES		dd		
17	FUNCTION1 PFK	22.69	1.790e5					5.6	YES		dd		
18	FUNCTION1 PFK	22.56	6.347e5					8.4	YES		dd		
19	FUNCTION1 PFK	22.42	5.662e5					10.5	YES		dd		
20	FUNCTION1 PFK	22.36	4.892e5					12.2	YES		dd		
21	FUNCTION1 PFK	22.30	4.241e5					12.7	YES		dd		
22	FUNCTION1 PFK	22.18	1.005e6					15.7	YES		dd		
23	FUNCTION1 PFK	22.10	6.911e5					16.7	YES		dd		
24	FUNCTION1 PFK	22.04	6.019e5					18.1	YES		dd		
25	FUNCTION1 PFK	21.98	6.245e5					18.6	YES		dd		
26	FUNCTION1 PFK	25.17	1.799e4					0.9	NO		bb		
27	FUNCTION1 PFK	25.05	6.677e4					1.7	NO		bb		
28	FUNCTION1 PFK	24.97	5.669e3					0.4	NO		db		
29	FUNCTION1 PFK	24.93	2.665e4					1.1	NO		bd		
30	FUNCTION1 PFK	24.79	9.106e3					0.5	NO		bb		
31	FUNCTION1 PFK	24.70	2.803e4					1.0	NO		bb		
32	FUNCTION1 PFK	24.60	2.266e4					1.1	NO		bb		
33	FUNCTION1 PFK	24.51	2.481e3					0.3	NO		bb		
34	FUNCTION1 PFK	24.26	2.953e3					0.3	NO		bb		
35	FUNCTION1 PFK	24.07	3.464e4					0.9	NO		db		
36	FUNCTION1 PFK	23.95	2.818e4					0.8	NO		bd		
37	FUNCTION1 PFK	23.86	1.761e4					1.0	NO		bb		

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION1 PFK	23.80	2.745e4					1.4	NO		db		
39	FUNCTION1 PFK	23.75	2.279e4					1.2	NO		bd		
40	FUNCTION1 PFK	23.57	1.177e3					0.1	NO		bb		
41	FUNCTION1 PFK	23.51	3.339e4					1.1	NO		bb		
42	FUNCTION1 PFK	26.92	1.624e4					0.8	NO		bd		
43	FUNCTION1 PFK	26.85	6.743e4					2.0	NO		db		
44	FUNCTION1 PFK	26.77	3.605e4					1.4	NO		dd		
45	FUNCTION1 PFK	26.71	5.041e4					1.7	NO		dd		
46	FUNCTION1 PFK	26.64	3.066e4					1.2	NO		dd		
47	FUNCTION1 PFK	26.58	3.222e4					1.5	NO		bd		
48	FUNCTION1 PFK	26.50	4.287e4					1.3	NO		bb		
49	FUNCTION1 PFK	26.32	9.896e3					0.6	NO		bb		
50	FUNCTION1 PFK	26.26	3.724e4					1.5	NO		bb		
51	FUNCTION1 PFK	26.18	3.323e3					0.4	NO		bb		
52	FUNCTION1 PFK	26.05	1.864e4					1.0	NO		bb		
53	FUNCTION1 PFK	25.91	1.114e4					0.6	NO		bb		
54	FUNCTION1 PFK	25.79	1.895e4					1.1	NO		db		
55	FUNCTION1 PFK	25.72	1.527e4					0.8	NO		bd		
56	FUNCTION1 PFK	25.56	6.069e4					1.2	NO		bb		
57	FUNCTION1 PFK	25.32	2.043e4					0.8	NO		bb		
58	FUNCTION1 PFK	28.10	6.905e3					0.5	NO		bb		
59	FUNCTION1 PFK	28.04	4.818e3					0.4	NO		bb		
60	FUNCTION1 PFK	27.71	1.514e4					0.8	NO		bb		
61	FUNCTION1 PFK	27.65	3.709e4					1.3	NO		db		
62	FUNCTION1 PFK	27.59	2.458e4					1.3	NO		dd		
63	FUNCTION1 PFK	27.53	4.906e4					1.8	NO		bd		
64	FUNCTION1 PFK	27.44	2.074e4					1.1	NO		db		
65	FUNCTION1 PFK	27.38	2.487e4					1.2	NO		dd		
66	FUNCTION1 PFK	27.24	6.345e4					1.2	NO		bd		
67	FUNCTION1 PFK	26.99	2.492e4					1.1	NO		db		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	34.79	2.481e4					1.5	NO		bb		0.000
2	FUNCTION3 PFK	33.58	3.048e3					0.6	NO		bb		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.11	2.881e5					5.9	YES		bd		
2	FUNCTION4 PFK	40.30	1.799e3					0.6	NO		bb		
3	FUNCTION4 PFK	40.24	8.794e3					0.9	NO		bb		
4	FUNCTION4 PFK	39.76	2.592e4					1.9	NO		bb		
5	FUNCTION4 PFK	39.53	1.727e3					0.6	NO		bb		
6	FUNCTION4 PFK	39.42	8.213e3					1.1	NO		db		
7	FUNCTION4 PFK	39.37	5.168e3					0.8	NO		bd		
8	FUNCTION4 PFK	39.28	3.722e4					2.1	NO		bb		
9	FUNCTION4 PFK	39.18	4.002e3					0.6	NO		bb		
10	FUNCTION4 PFK	39.14	3.342e3					0.8	NO		bb		
11	FUNCTION4 PFK	38.74	2.110e3					0.5	NO		bb		
12	FUNCTION4 PFK	38.66	1.735e4					1.0	NO		bb		
13	FUNCTION4 PFK	38.54	3.610e3					0.6	NO		db		
14	FUNCTION4 PFK	38.50	2.411e3					0.6	NO		bd		
15	FUNCTION4 PFK	38.43	2.873e4					2.5	NO		db		
16	FUNCTION4 PFK	38.38	2.222e4					2.3	NO		dd		
17	FUNCTION4 PFK	38.32	4.040e4					3.1	YES		dd		
18	FUNCTION4 PFK	42.54	1.660e3					0.6	NO		bb		
19	FUNCTION4 PFK	42.49	5.115e3					0.7	NO		db		
20	FUNCTION4 PFK	42.43	1.342e4					1.1	NO		dd		
21	FUNCTION4 PFK	42.39	8.107e3					1.2	NO		dd		
22	FUNCTION4 PFK	42.35	1.540e4					1.7	NO		bd		
23	FUNCTION4 PFK	42.28	2.692e4					2.0	NO		bb		
24	FUNCTION4 PFK	41.95	3.858e3					0.8	NO		bb		
25	FUNCTION4 PFK	41.80	3.979e4					2.0	NO		db		
26	FUNCTION4 PFK	41.65	1.699e4					1.5	NO		bd		
27	FUNCTION4 PFK	41.55	1.804e4					1.5	NO		db		
28	FUNCTION4 PFK	41.49	1.585e4					1.6	NO		dd		
29	FUNCTION4 PFK	41.42	1.775e4					1.4	NO		dd		
30	FUNCTION4 PFK	41.29	3.051e4					1.6	NO		bd		
31	FUNCTION4 PFK	41.07	3.910e3					0.8	NO		bb		
32	FUNCTION4 PFK	40.83	2.327e4					1.7	NO		bb		
33	FUNCTION4 PFK	40.44	5.321e3					0.8	NO		bb		
34	FUNCTION4 PFK	42.75	1.970e3					0.4	NO		bb		
35	FUNCTION4 PFK	42.66	4.393e3					0.6	NO		bb		

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	44.93	2.684e3					0.8	NO		bb		
2	FUNCTION5 PFK	44.87	6.256e3					1.5	NO		bb		
3	FUNCTION5 PFK	44.78	1.077e4					1.6	NO		bb		
4	FUNCTION5 PFK	44.72	7.200e2					0.5	NO		bb		
5	FUNCTION5 PFK	44.65	1.235e3					0.8	NO		bb		
6	FUNCTION5 PFK	44.28	7.736e2					0.5	NO		bb		
7	FUNCTION5 PFK	44.24	1.418e3					0.7	NO		db		
8	FUNCTION5 PFK	44.21	4.442e3					1.2	NO		bd		
9	FUNCTION5 PFK	44.18	5.811e3					0.9	NO		bb		
10	FUNCTION5 PFK	43.82	5.499e3					1.3	NO		bb		
11	FUNCTION5 PFK	43.56	1.617e4					1.7	NO		bb		
12	FUNCTION5 PFK	43.36	1.625e3					0.7	NO		bb		
13	FUNCTION5 PFK	43.23	2.679e3					0.9	NO		bb		
14	FUNCTION5 PFK	46.45	4.419e3					1.2	NO		bb		
15	FUNCTION5 PFK	46.36	5.978e3					1.0	NO		bb		
16	FUNCTION5 PFK	46.26	2.259e3					0.8	NO		bb		
17	FUNCTION5 PFK	46.07	3.509e3					1.0	NO		bb		
18	FUNCTION5 PFK	45.84	4.173e3					1.3	NO		bb		
19	FUNCTION5 PFK	45.76	6.984e2					0.4	NO		bb		
20	FUNCTION5 PFK	45.72	1.077e3					0.7	NO		bb		
21	FUNCTION5 PFK	45.60	7.851e2					0.5	NO		bb		
22	FUNCTION5 PFK	45.54	4.517e3					1.2	NO		db		
23	FUNCTION5 PFK	45.49	1.078e4					1.5	NO		dd		
24	FUNCTION5 PFK	45.41	6.756e3					1.7	NO		dd		
25	FUNCTION5 PFK	45.38	1.279e4					2.2	NO		bd		
26	FUNCTION5 PFK	45.28	8.503e2					0.4	NO		bb		
27	FUNCTION5 PFK	45.04	4.420e3					1.2	NO		bb		
28	FUNCTION5 PFK	44.98	7.643e2					0.5	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.82	2.306e2					4.0	YES		db		0.000
2	FUNCTION1 HXCD...	27.74	8.055e1					1.8	NO		bd		0.000
3	FUNCTION1 HXCD...	27.59	1.178e2					2.5	NO		bb		0.000
4	FUNCTION1 HXCD...	27.21	1.030e2					1.7	NO		bb		0.000
5	FUNCTION1 HXCD...	27.02	8.155e1					1.5	NO		db		0.000
6	FUNCTION1 HXCD...	26.85	8.440e1					2.6	NO		bd		0.000
7	FUNCTION1 HXCD...	26.52	1.203e2					2.7	NO		bb		0.000
8	FUNCTION1 HXCD...	25.93	1.681e2					3.0	YES		bb		0.000
9	FUNCTION1 HXCD...	24.22	7.069e1					2.3	NO		bb		0.000
10	FUNCTION1 HXCD...	23.52	8.011e1					1.5	NO		bb		0.000
11	FUNCTION1 HXCD...	21.12	9.981e1					1.8	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HPCD...	23.48	8.076e1					2.6	NO		bb		0.000
2	FUNCTION1 HPCD...	21.66	8.657e1					2.4	NO		bb		0.000
3	FUNCTION1 HPCD...	21.27	8.855e1					2.3	NO		db		0.000
4	FUNCTION1 HPCD...	21.16	2.367e2					2.7	NO		bd		0.000
5	FUNCTION1 HPCD...	27.79	1.270e2					2.7	NO		bb		0.000
6	FUNCTION1 HPCD...	26.52	1.210e2					2.0	NO		bb		0.000
7	FUNCTION1 HPCD...	25.97	9.169e1					1.5	NO		db		0.000
8	FUNCTION1 HPCD...	25.88	1.471e2					2.3	NO		dd		0.000
9	FUNCTION1 HPCD...	25.73	1.363e2					1.9	NO		bd		0.000
10	FUNCTION1 HPCD...	24.82	1.792e2					1.5	NO		db		0.000
11	FUNCTION1 HPCD...	24.63	7.297e1					1.7	NO		bd		0.000

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.64	8.233e1					2.0	NO		bb		0.000
2	FUNCTION2 HPCD...	31.26	3.994e2					8.3	YES		bb		0.000

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ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.42	1.052e2					1.7	NO		bb		0.000
2	FUNCTION3 OCDPE	36.19	9.953e1					2.2	NO		bb		0.000
3	FUNCTION3 OCDPE	34.50	7.262e1					2.2	NO		bb		0.000
4	FUNCTION3 OCDPE	33.58	9.379e1					1.9	NO		bb		0.000
5	FUNCTION3 OCDPE	33.20	7.737e1					3.3	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	42.82	9.720e1					2.9	NO		bb		0.000
2	FUNCTION4 NCDPE	42.34	7.165e1					2.1	NO		bb		0.000
3	FUNCTION4 NCDPE	40.58	7.068e1					1.3	NO		bb		0.000
4	FUNCTION4 NCDPE	40.40	1.414e2					1.7	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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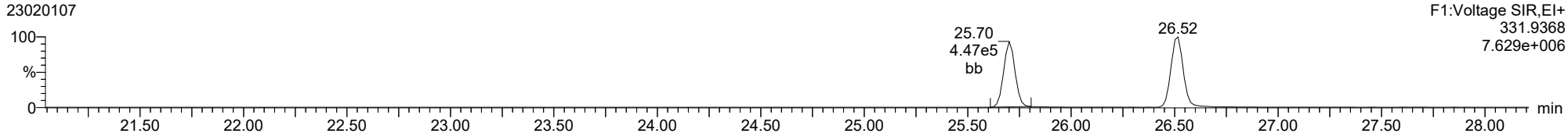
Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: 03 Feb 2023 10:33:40

ID: CS3CR, Name: 23020107, Date: 01-Feb-2023, Time: 17:56:19, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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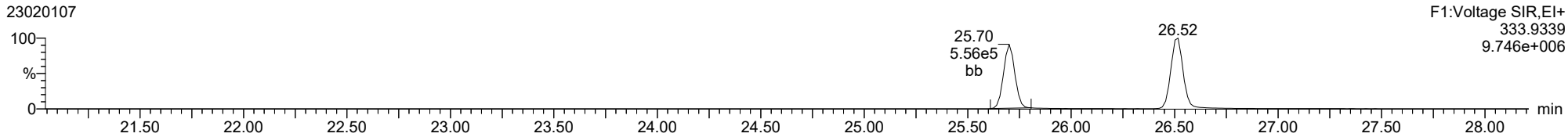
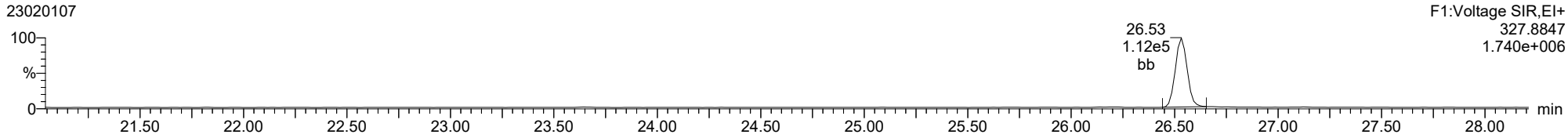


37CL-2378-TCDD



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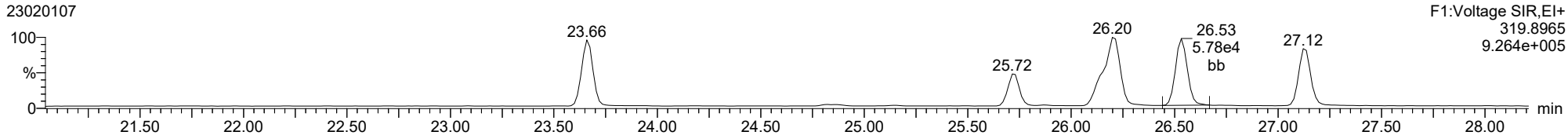

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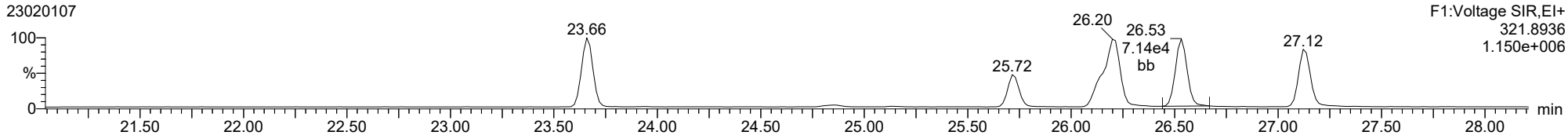

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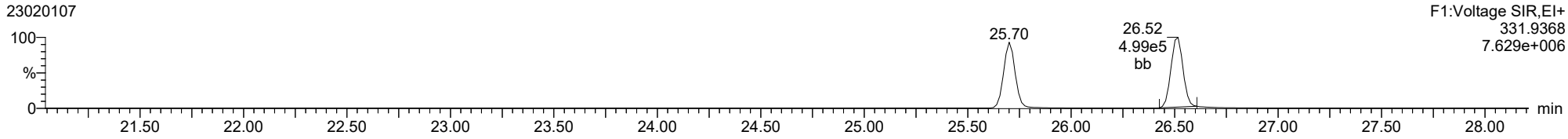

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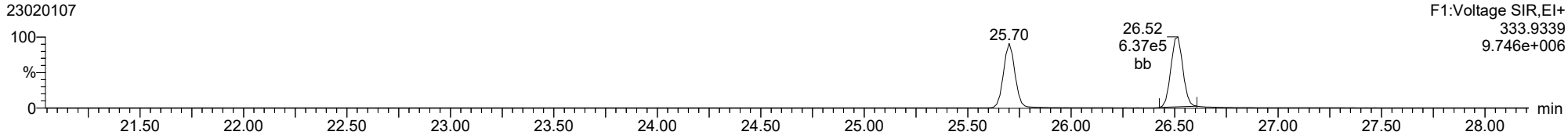

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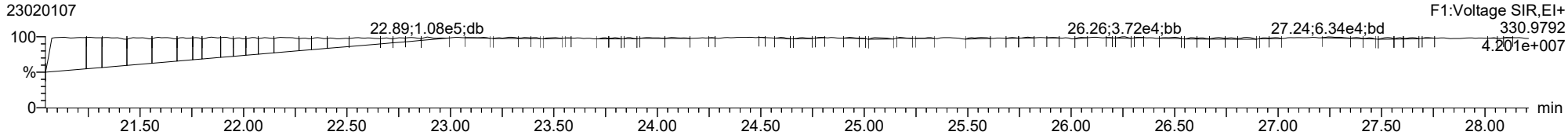

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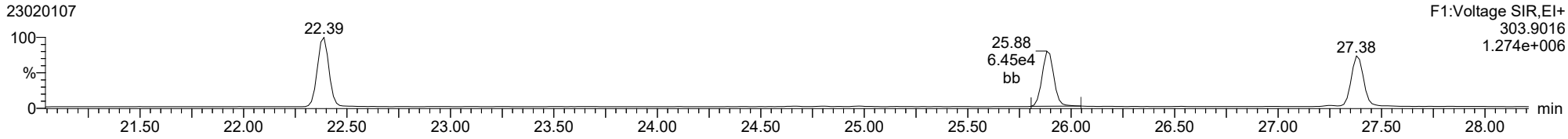

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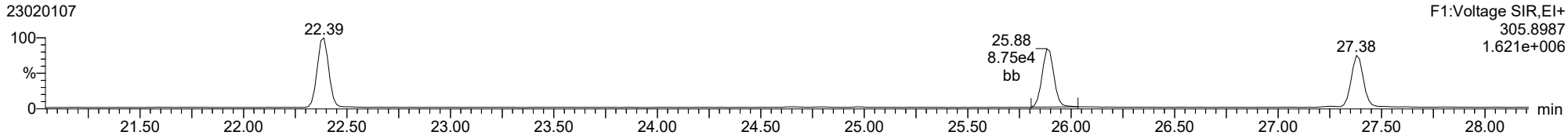

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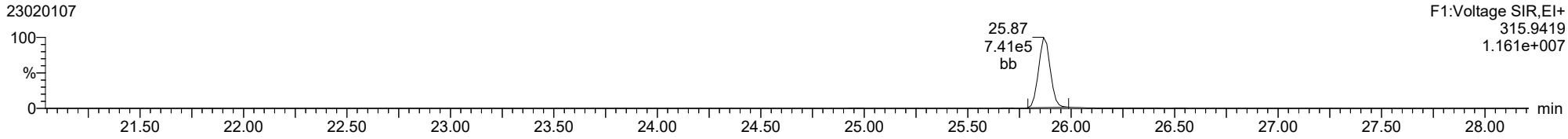

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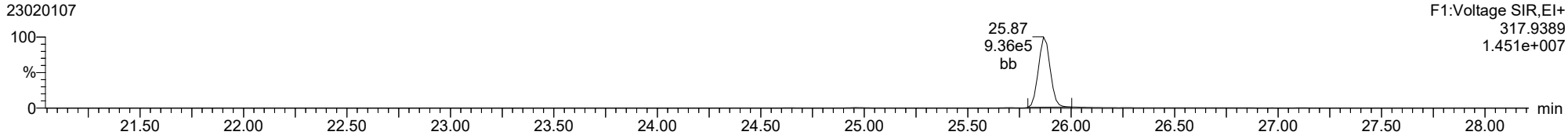

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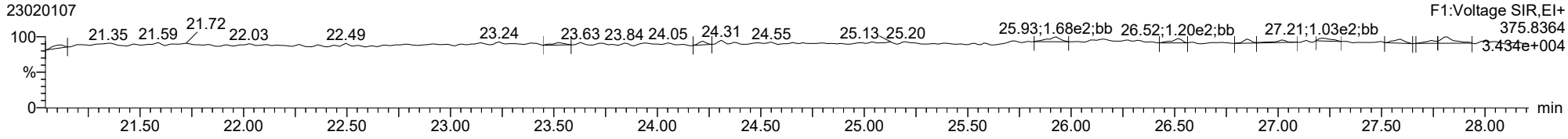

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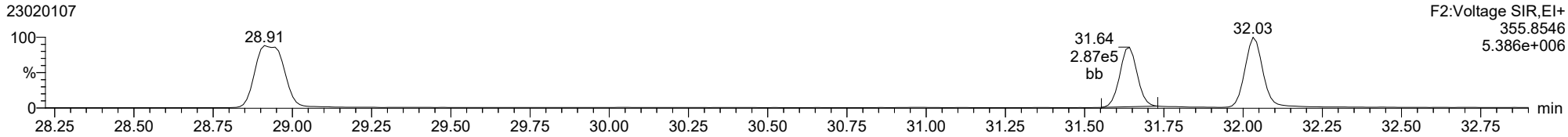
12378-PeCDD



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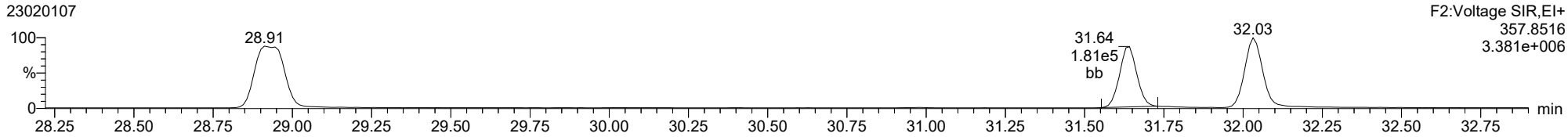

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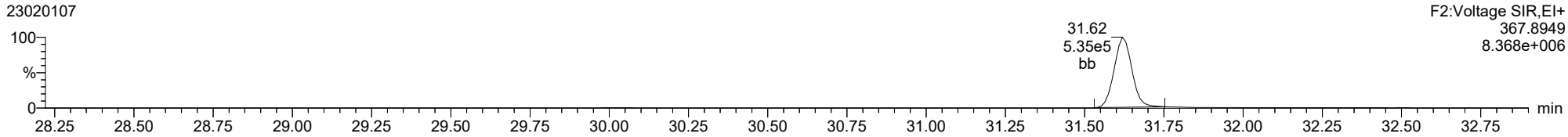

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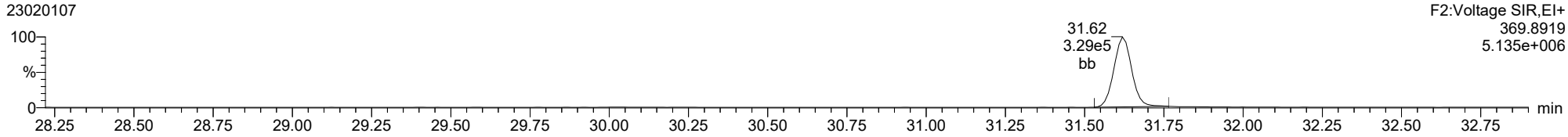

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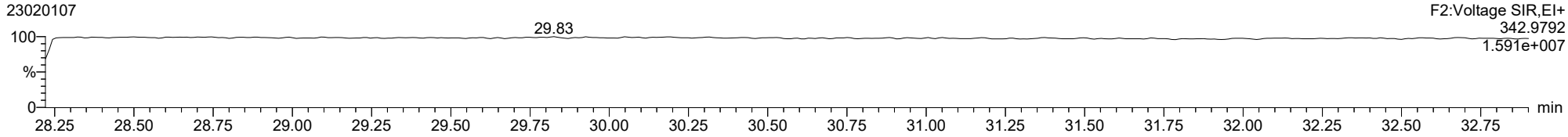

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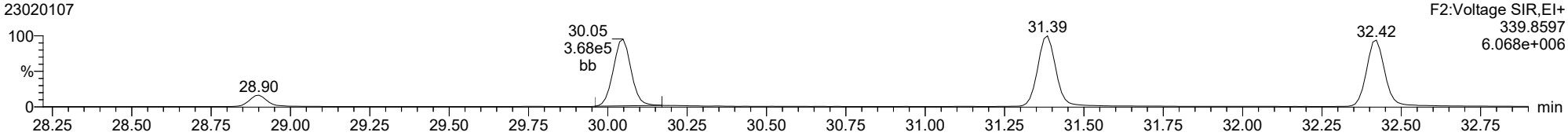

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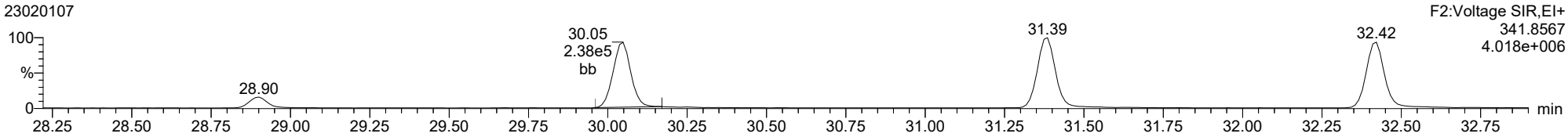

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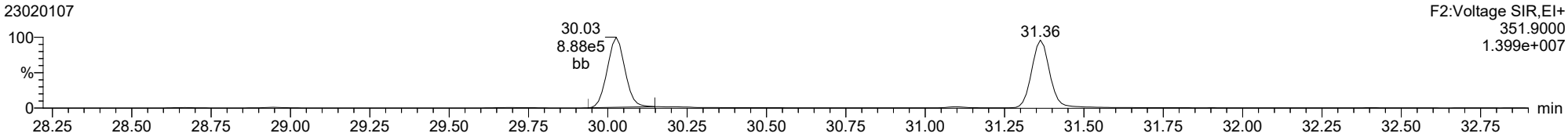

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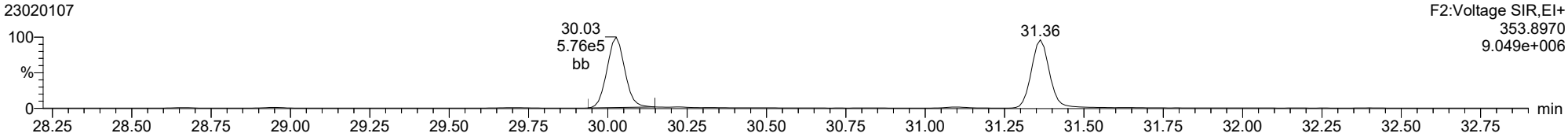

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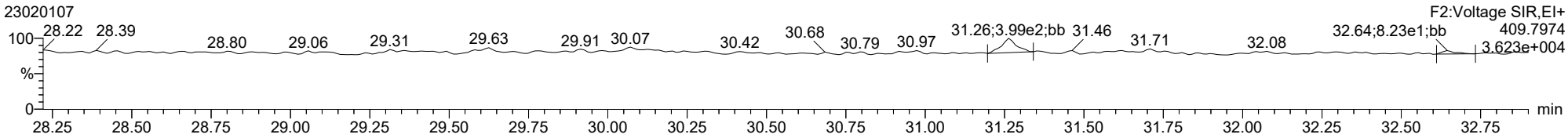

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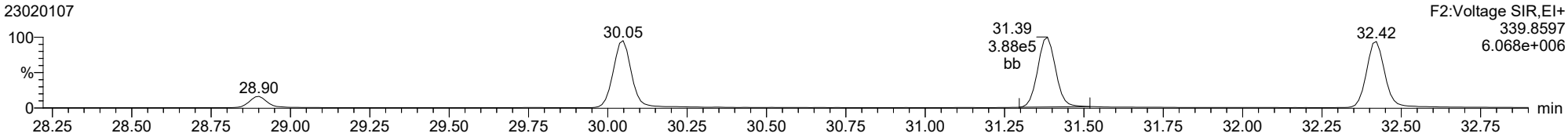

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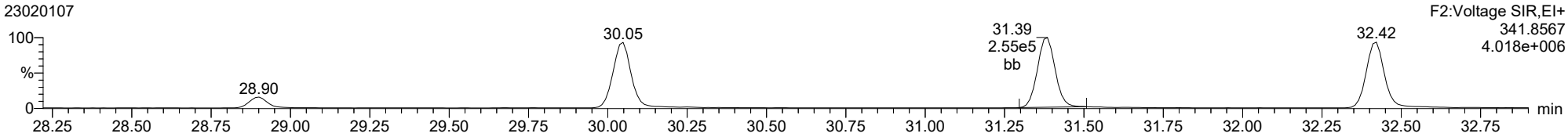

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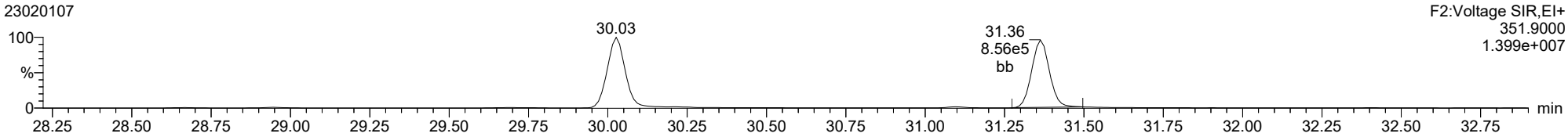

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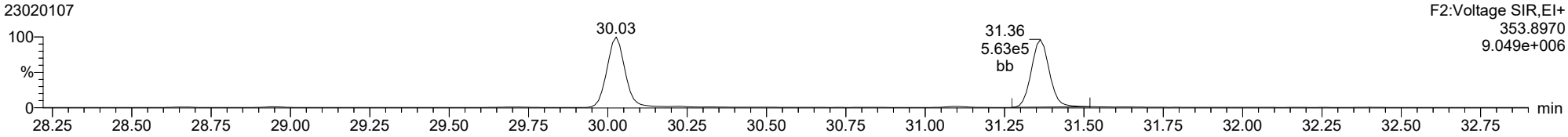

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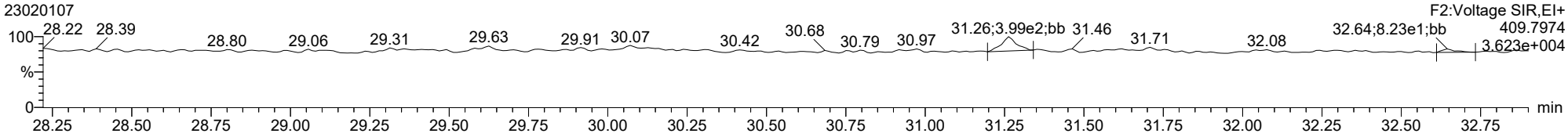

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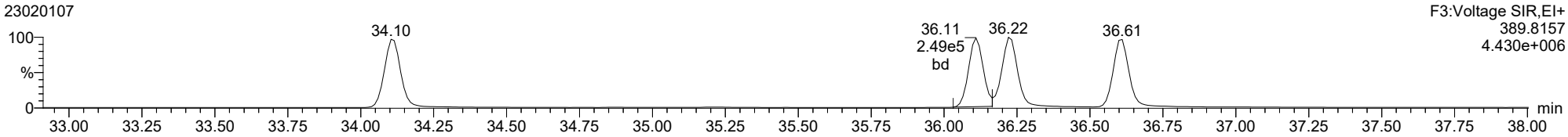

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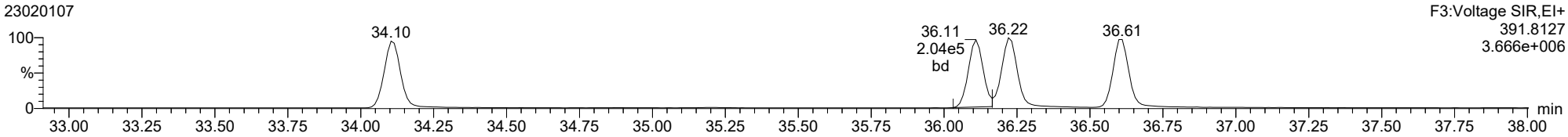

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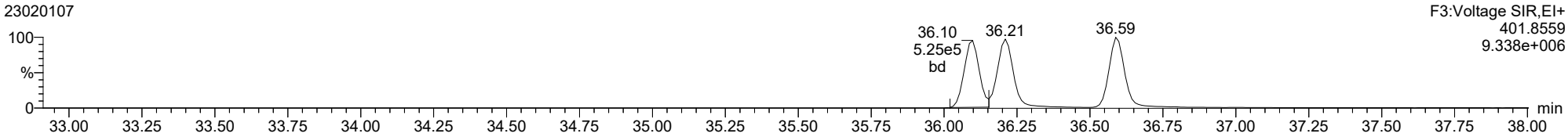

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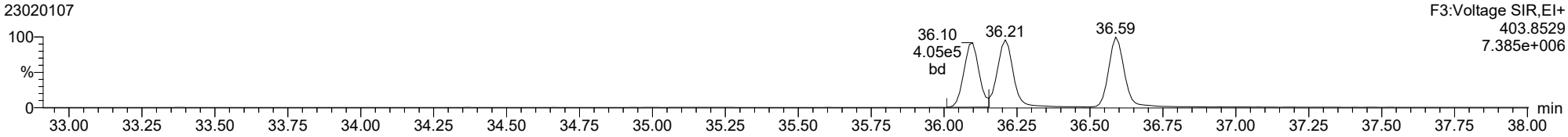

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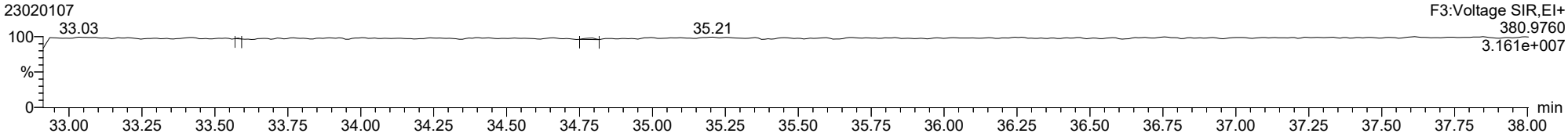

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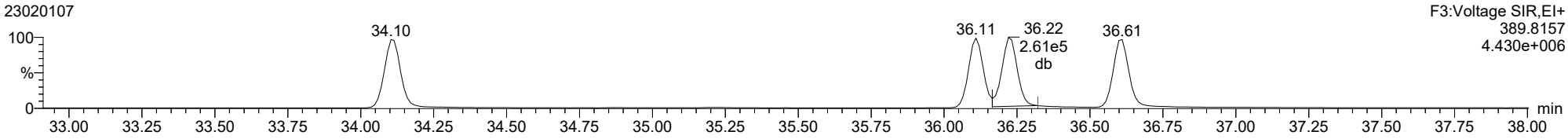

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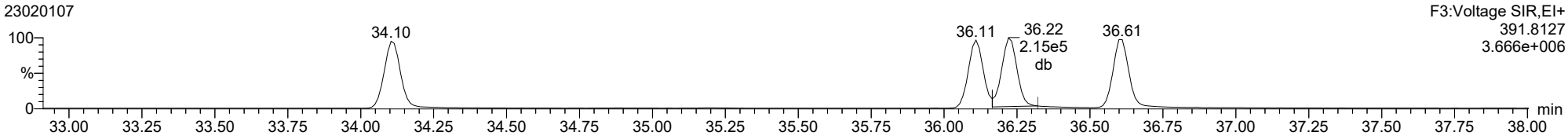

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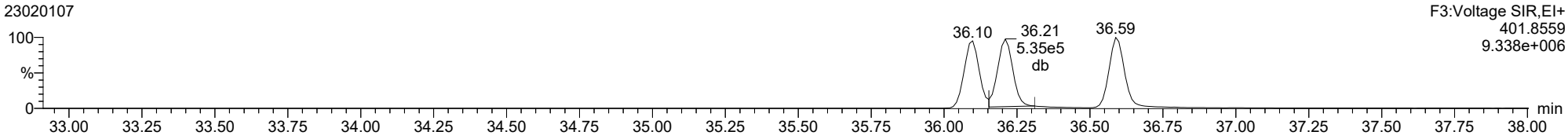

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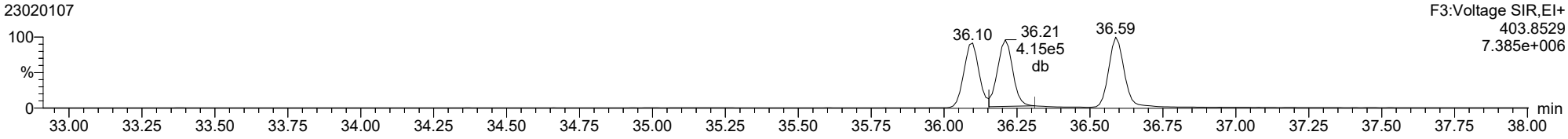

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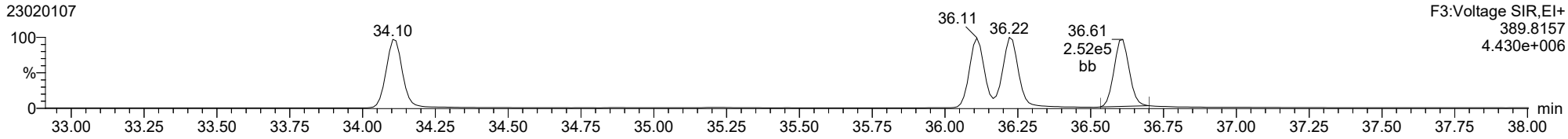

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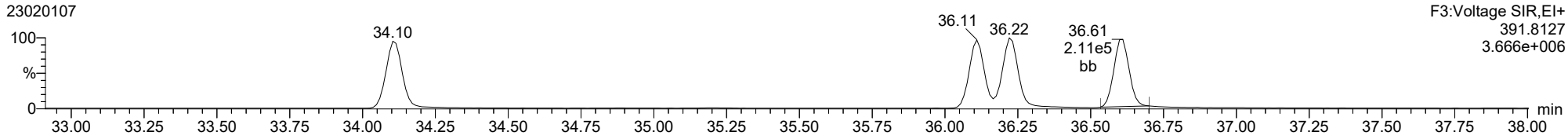

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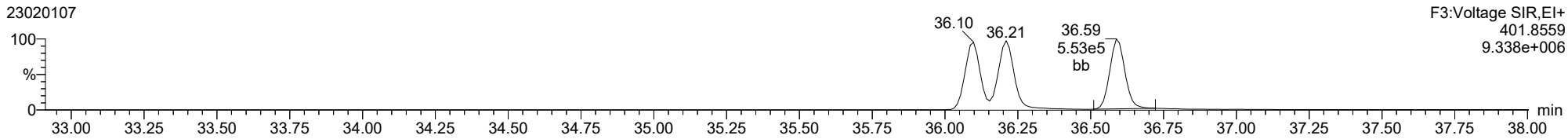

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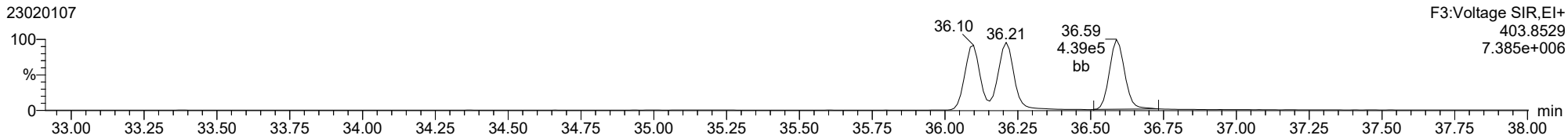

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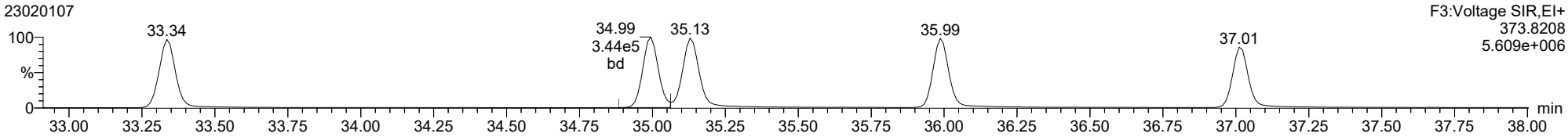

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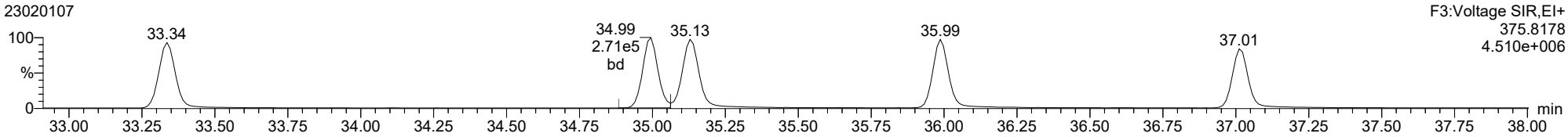

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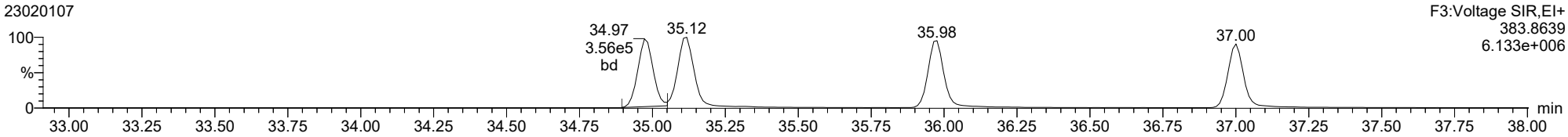

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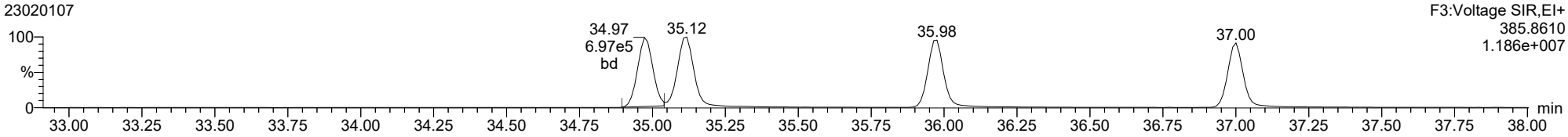
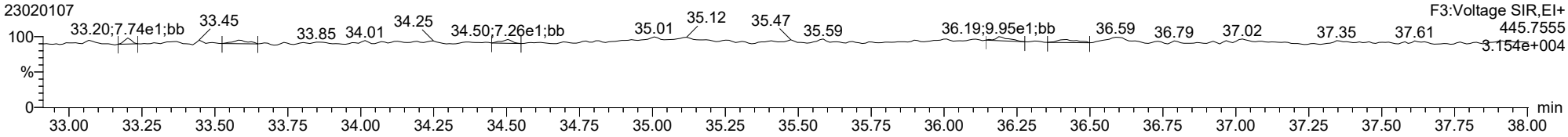


FUNCTION3 OCDPE



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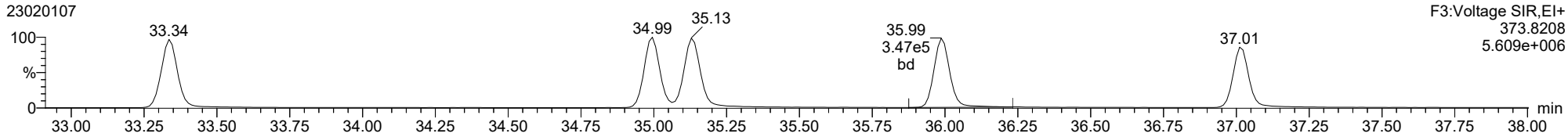
234678-HxCDF



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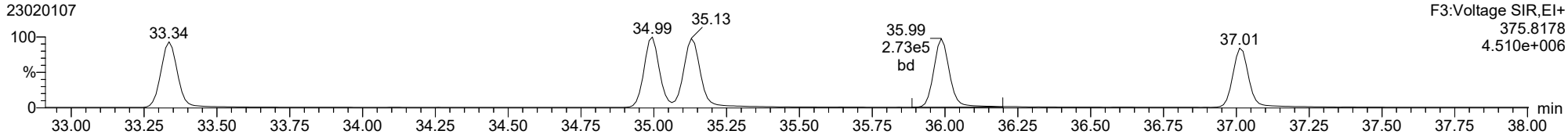

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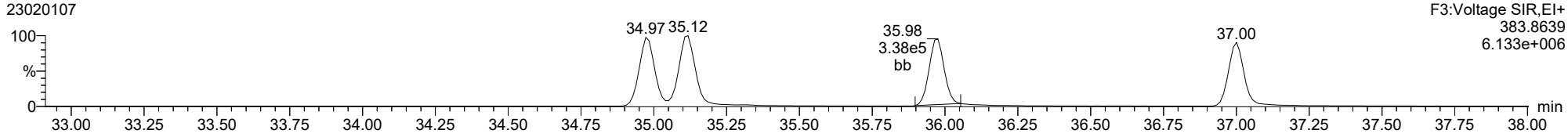

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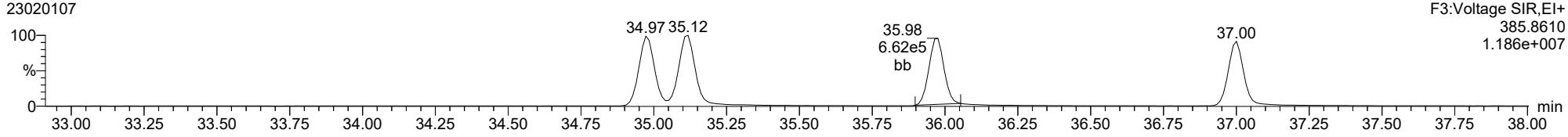

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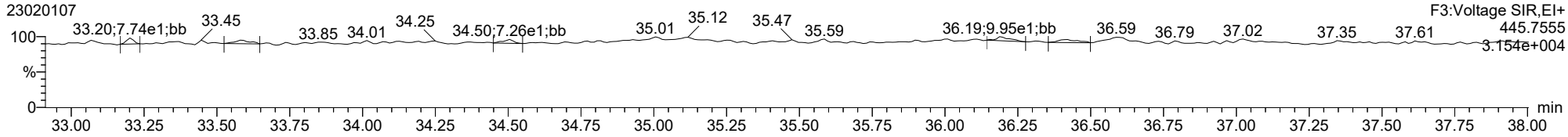

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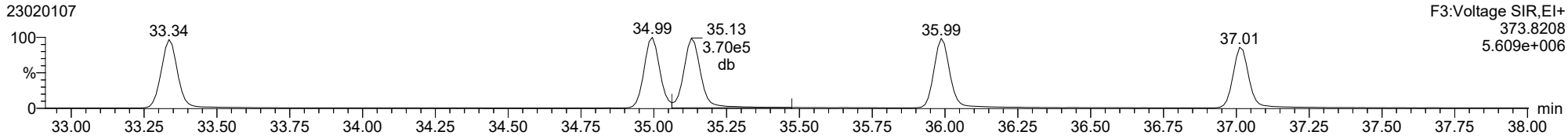

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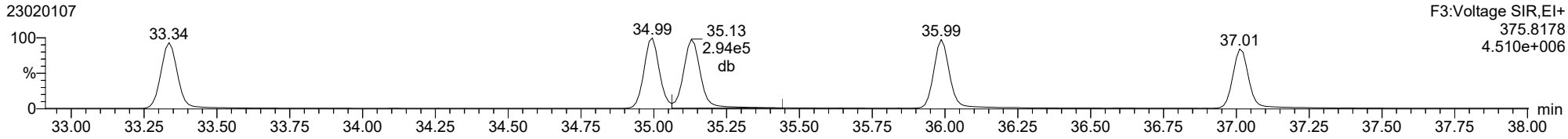

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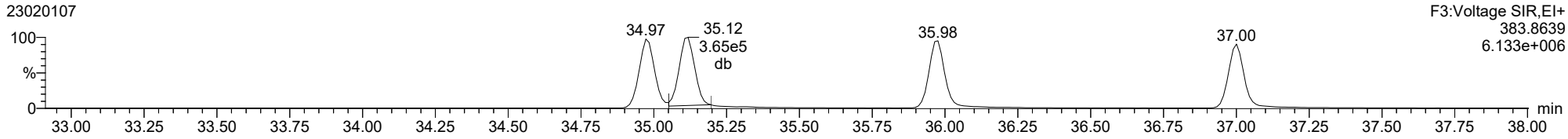

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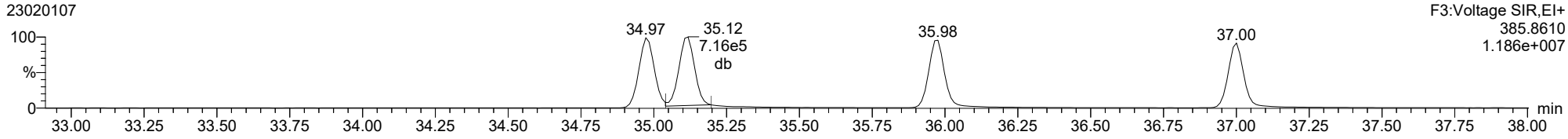

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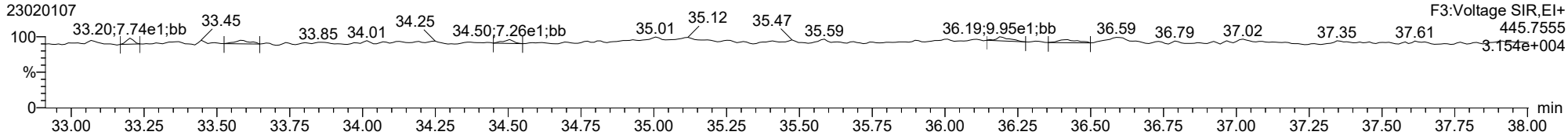

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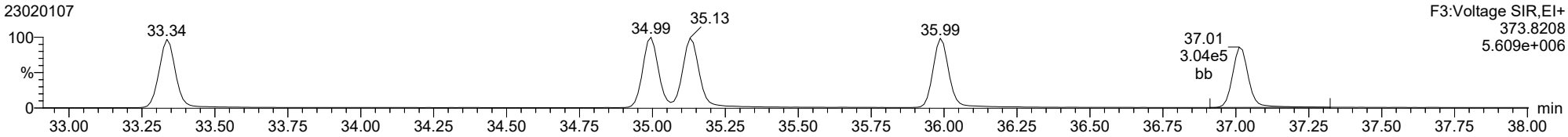

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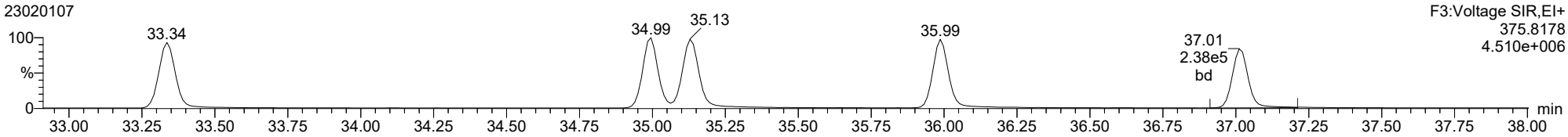

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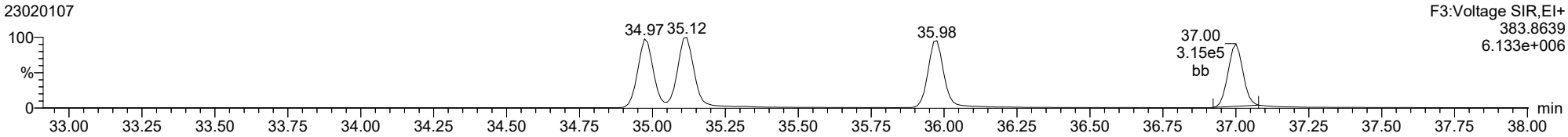

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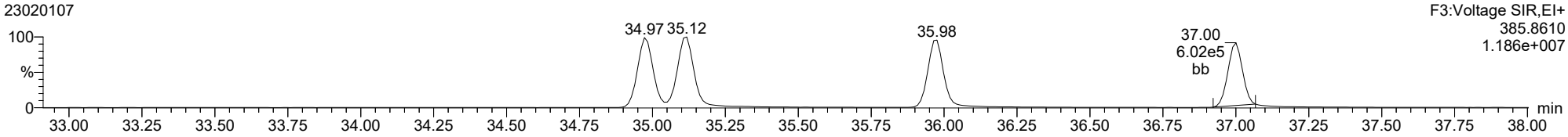

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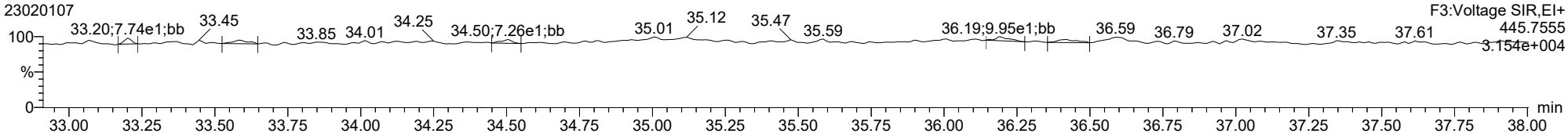

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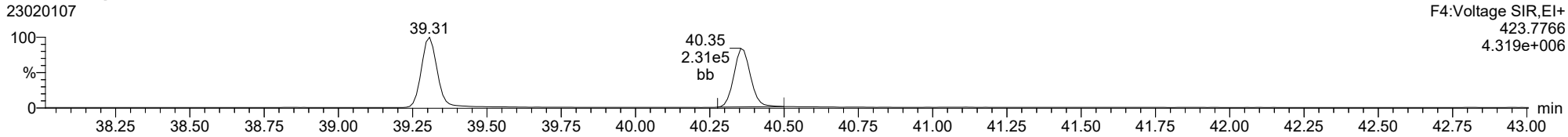

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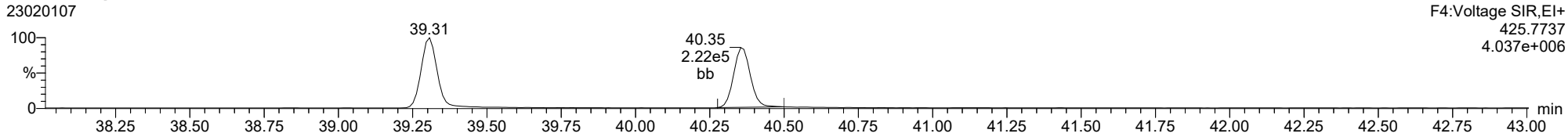

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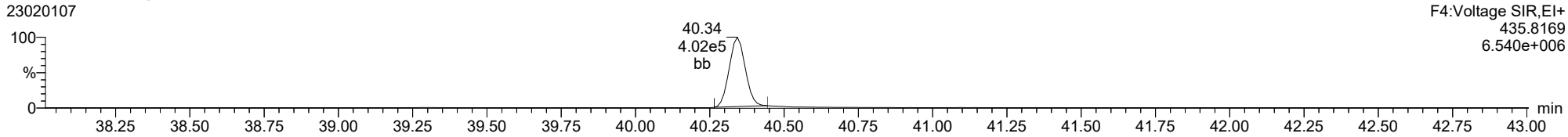

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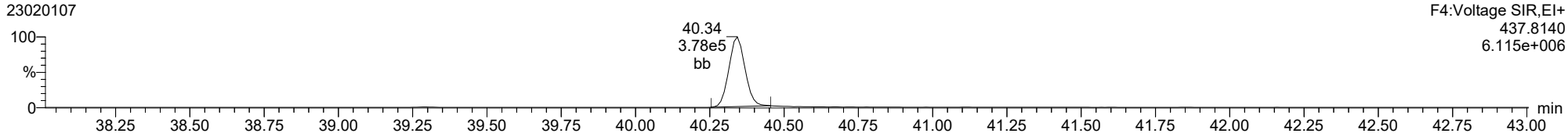
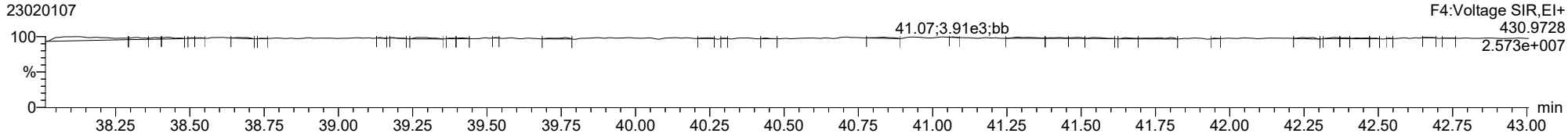


FUNCTION4 PFK



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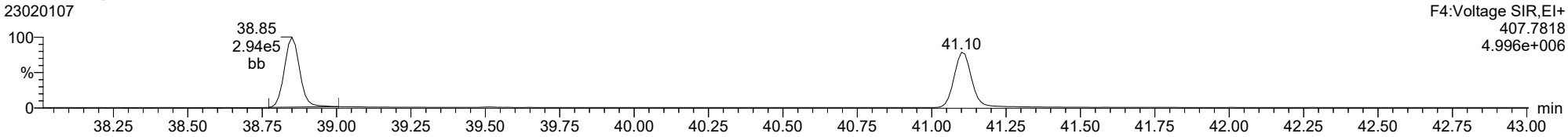

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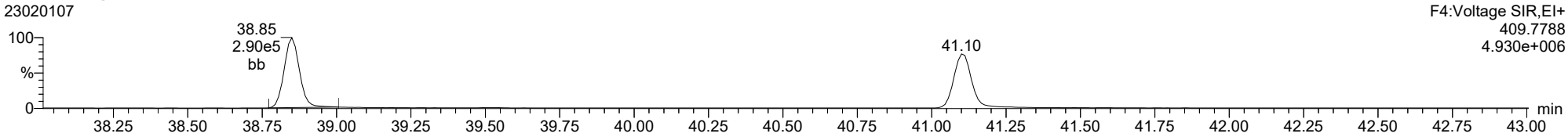

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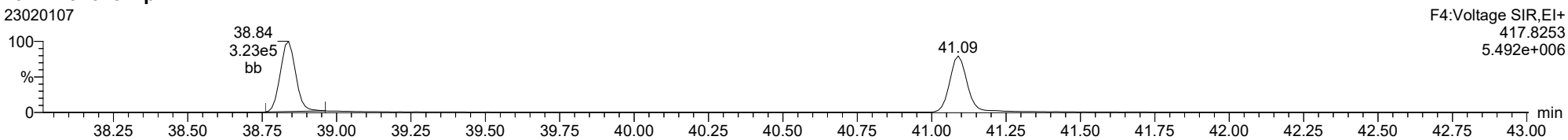

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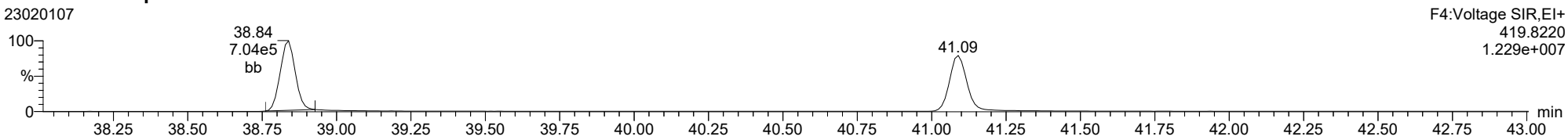
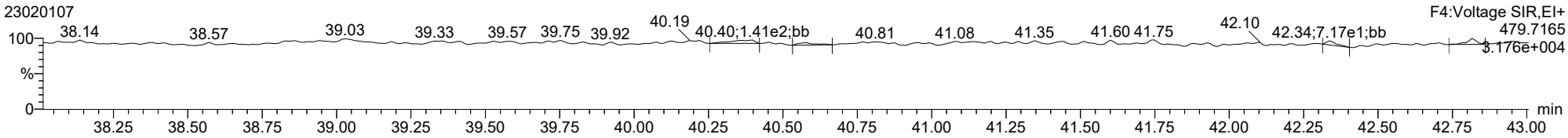


FUNCTION4 NCDPE



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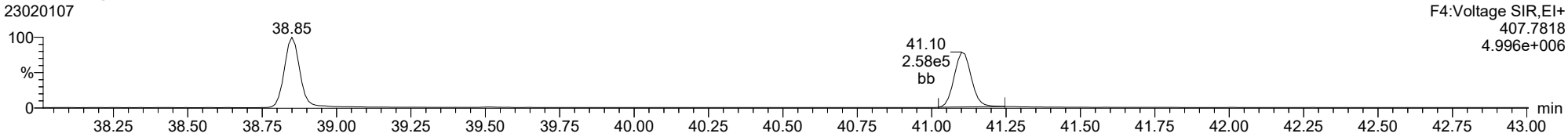

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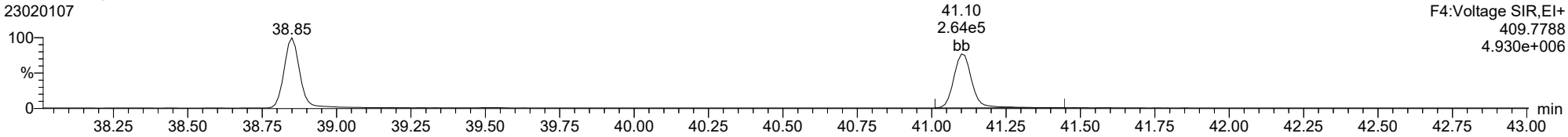

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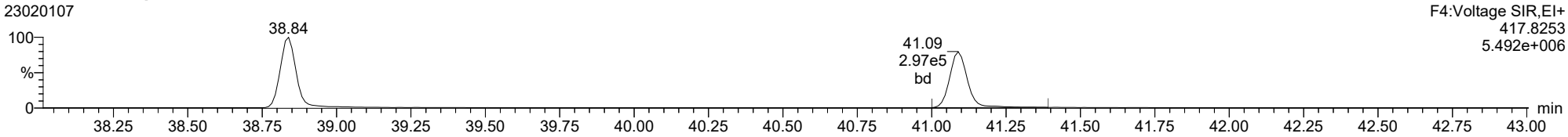

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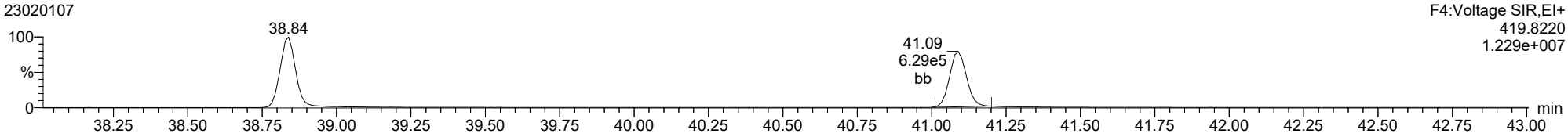

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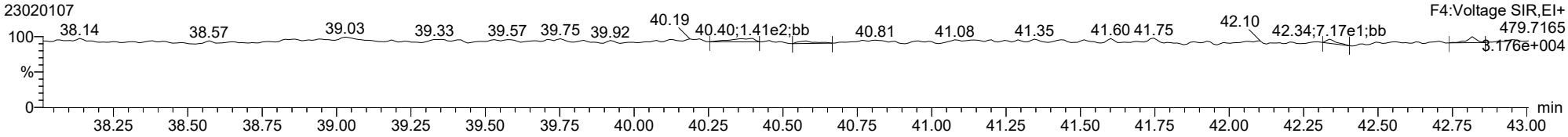

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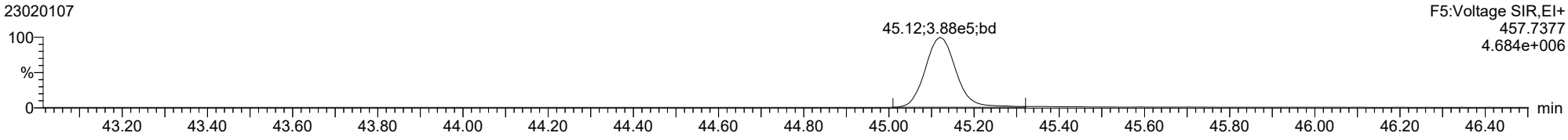
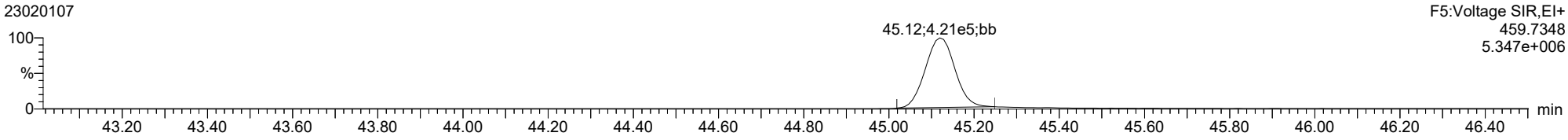


OCDD



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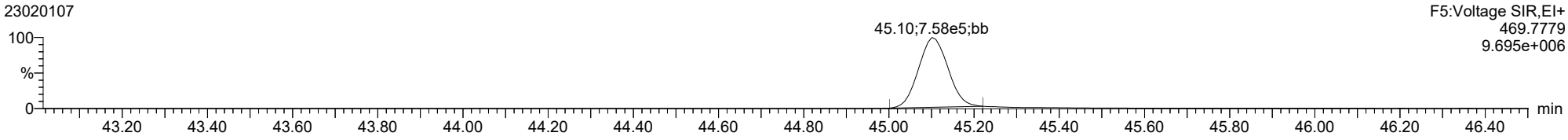

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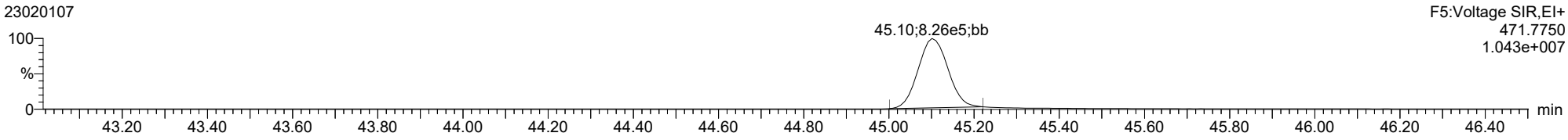
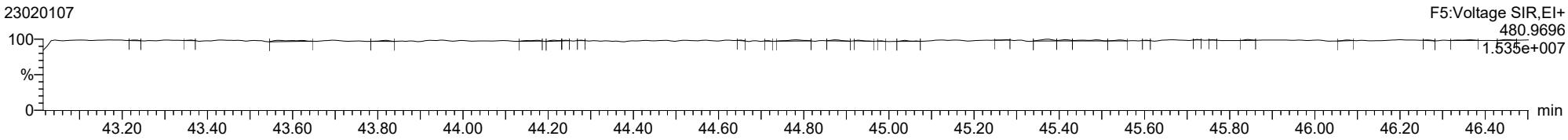


FUNCTION5 PFK



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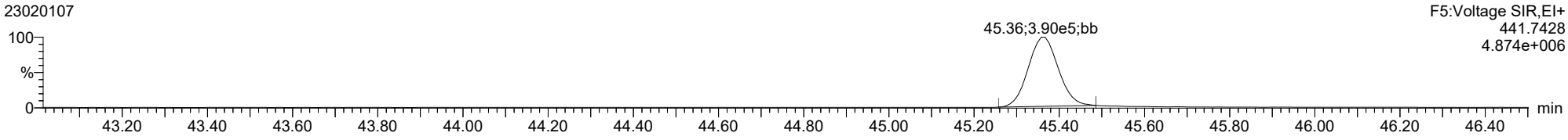

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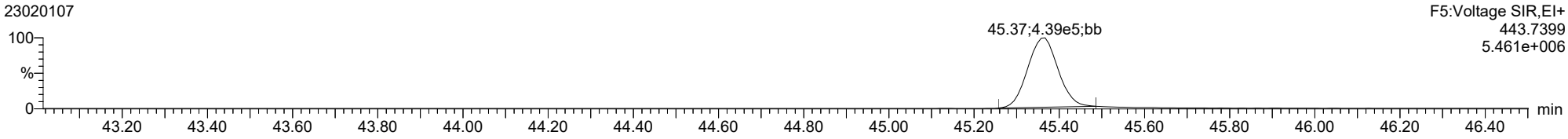
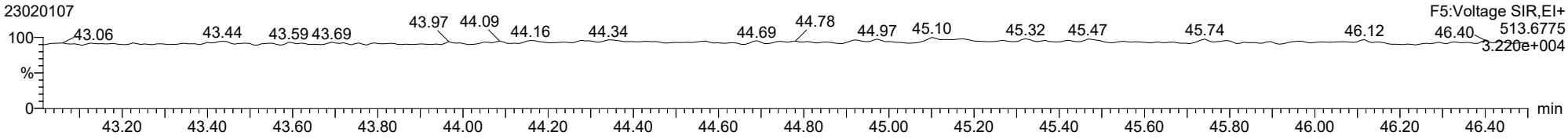


FUNCTION5 DCDPE



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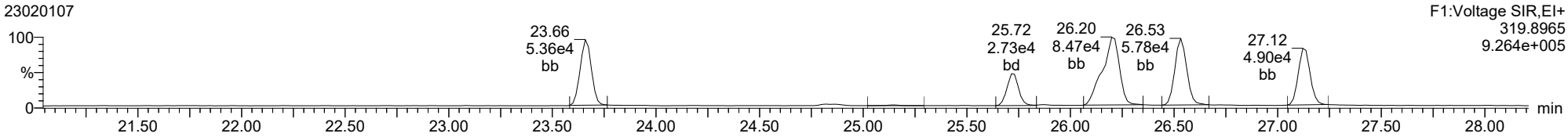
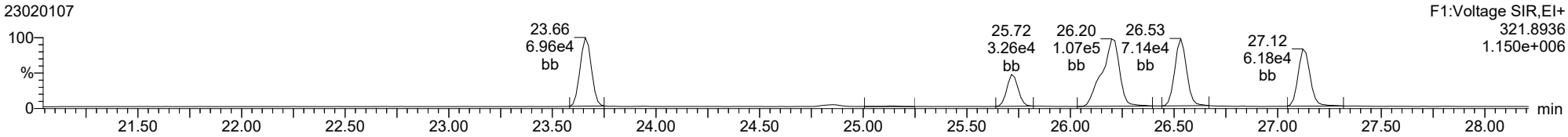
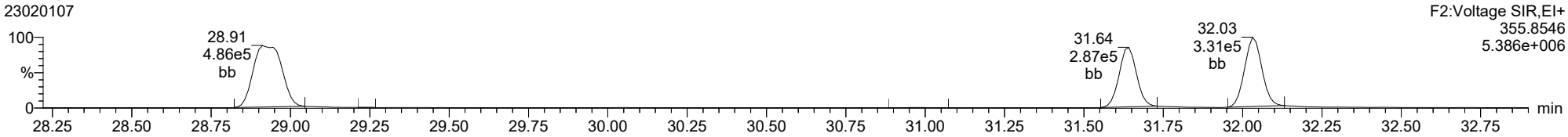
Total-tetradioxins



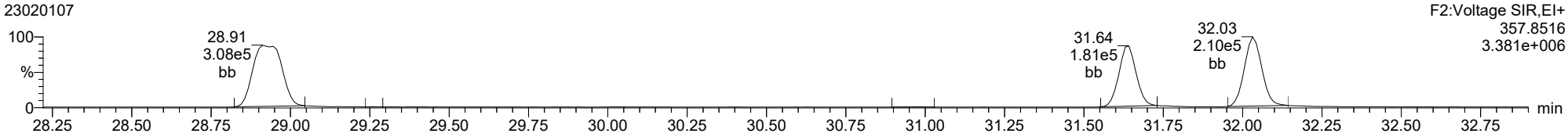
Total-tetradioxins



Total-pentadioxins



Total-pentadioxins



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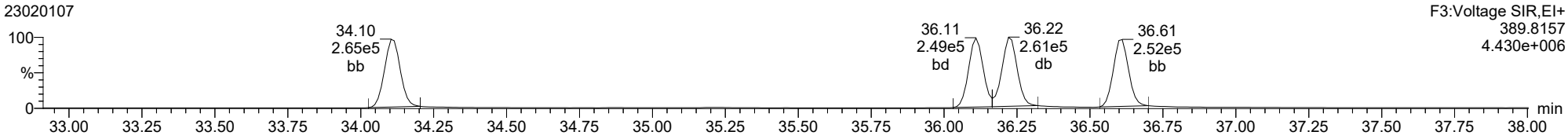
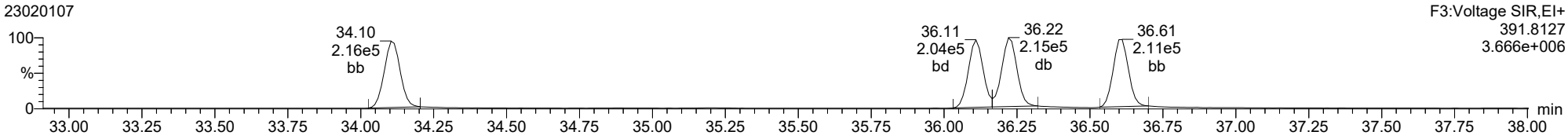
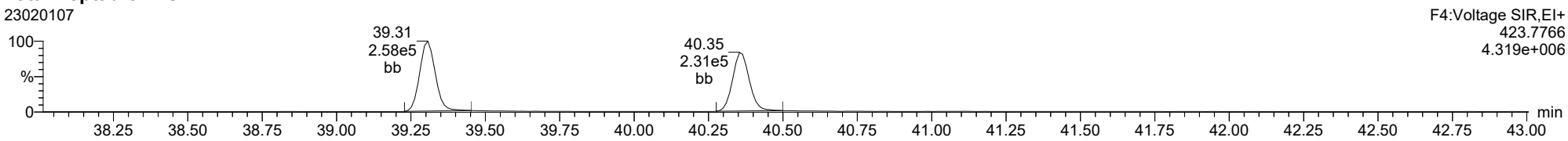
Total-hexadioxins



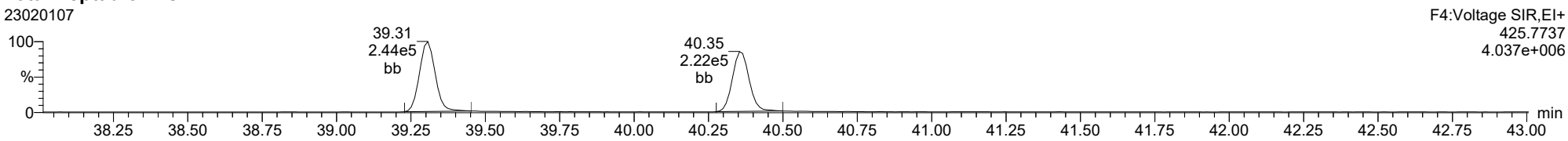
Total-hexadioxins



Total-heptadioxins



Total-heptadioxins



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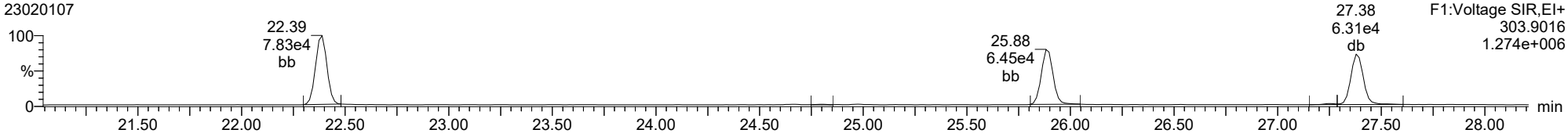
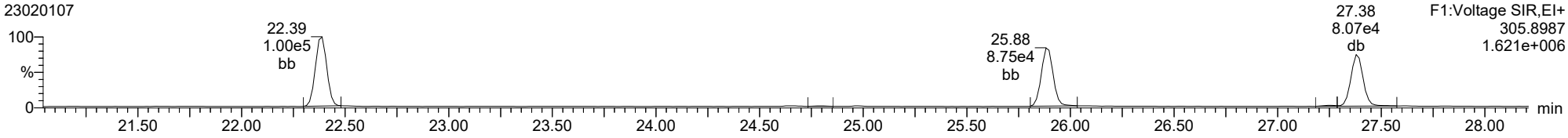
Total-tetrafurans



Total-tetrafurans



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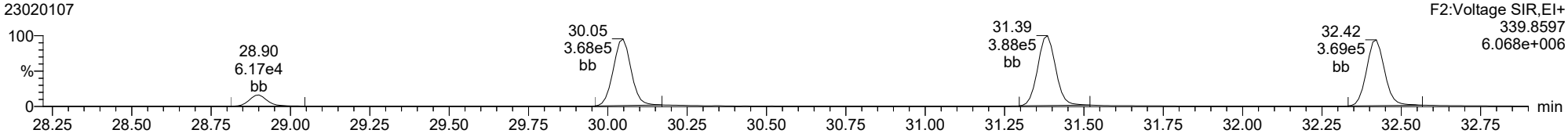
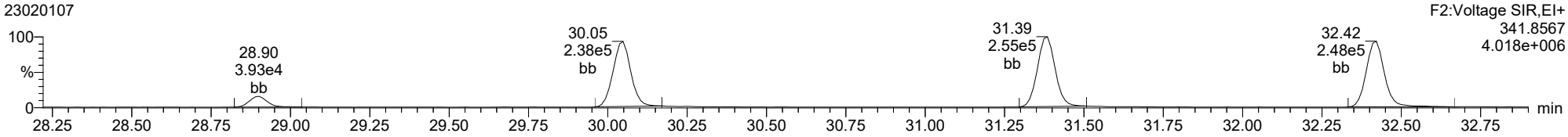


Total-pentafurans



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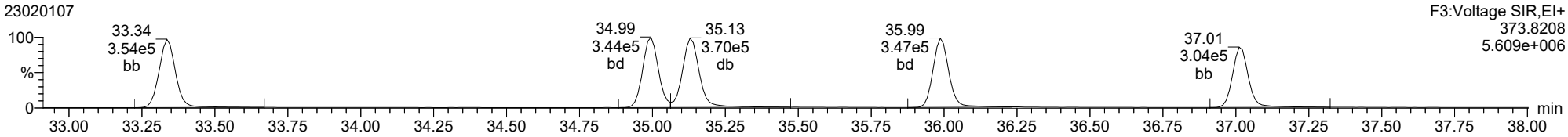
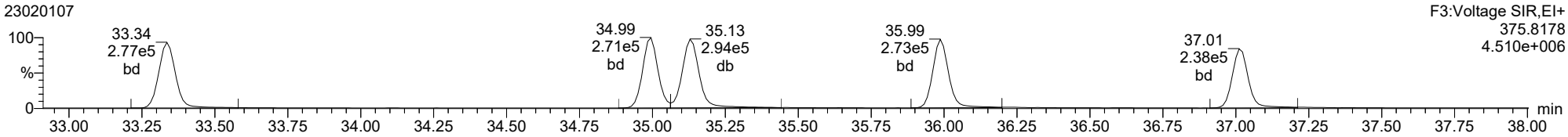
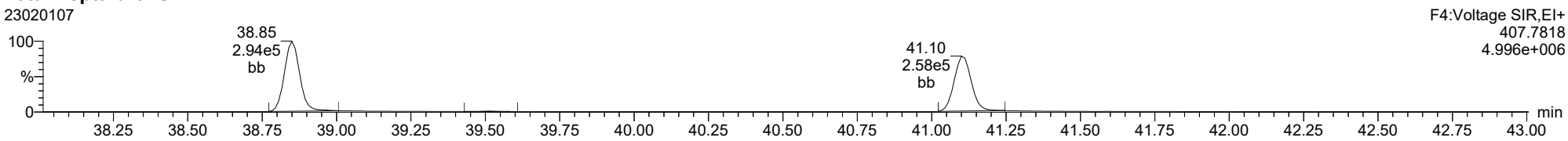
Total-hexafurans



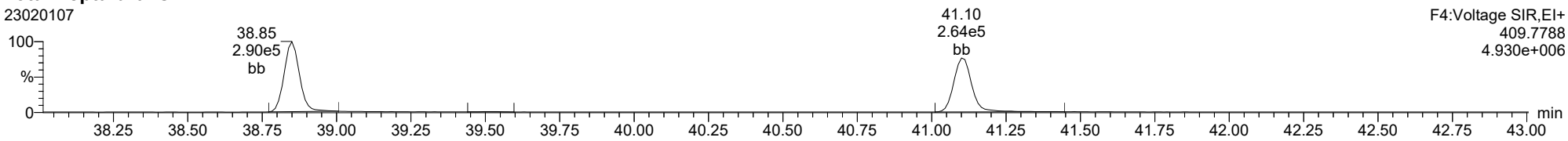
Total-hexafurans



Total-heptafurans



Total-heptafurans



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Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
Printed: Friday, February 03, 2023 10:37:53 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: 03 Feb 2023 10:33:40

ID: CS4CR, Name: 23020108, Date: 01-Feb-2023, Time: 18:45:20, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.882	1.001	3.837e5	5.095e5	0.876	0.753	0.770	3306	1852	5.94e6	7.78e6	1796.5	4201.3	NO	bb	bb	39.352
12378-PeCDF	30.037	1.000	2.144e6	1.419e6	0.845	1.511	1.550	3774	3458	3.38e7	2.23e7	8947.1	6442.4	NO	bb	bb	197.212
23478-PeCDF	31.374	1.000	2.253e6	1.479e6	0.911	1.523	1.550	3774	3458	3.50e7	2.30e7	9263.9	6657.7	NO	bb	bb	199.338
123478-HxCDF	34.984	1.000	2.037e6	1.599e6	1.182	1.274	1.240	4016	3299	3.25e7	2.54e7	8086.7	7697.9	NO	dd	dd	201.086
234678-HxCDF	35.987	1.001	2.093e6	1.626e6	1.229	1.288	1.240	4016	3299	3.22e7	2.54e7	8018.2	7699.6	NO	dd	bd	203.397
123678-HxCDF	35.129	1.001	2.269e6	1.771e6	1.248	1.281	1.240	4016	3299	3.41e7	2.66e7	8495.8	8063.9	NO	dd	dd	203.923
123789-HxCDF	37.012	1.001	1.817e6	1.431e6	1.187	1.269	1.240	4016	3299	2.86e7	2.23e7	7125.7	6768.1	NO	dd	bd	199.649
1234678-HpCDF	38.839	1.000	1.816e6	1.772e6	1.204	1.025	1.050	5173	5540	3.02e7	2.97e7	5847.4	5361.2	NO	bb	bb	193.935
1234789-HpCDF	41.100	1.000	1.575e6	1.522e6	1.165	1.034	1.050	5173	5540	2.37e7	2.31e7	4579.3	4164.7	NO	bb	bb	200.336
OCDF	45.357	1.006	2.485e6	2.804e6	1.186	0.886	0.890	4624	3331	3.05e7	3.43e7	6601.2	10303.1	NO	bb	bb	376.199
2378-TCDD	26.532	1.001	3.417e5	4.230e5	1.236	0.808	0.770	1943	1502	5.26e6	6.49e6	2709.1	4323.6	NO	bb	bb	40.022
12378-PeCDD	31.631	1.000	1.695e6	1.077e6	1.087	1.574	1.550	2803	1572	2.73e7	1.72e7	9745.0	10948.2	NO	bb	bb	198.713
123478-HxCDD	36.109	1.001	1.491e6	1.215e6	0.987	1.227	1.240	2230	3671	2.51e7	2.05e7	11249.2	5579.6	NO	bd	bd	204.141
123678-HxCDD	36.221	1.000	1.525e6	1.238e6	1.021	1.232	1.240	2230	3671	2.55e7	2.09e7	11440.8	5702.6	NO	db	db	192.587
123789-HxCDD	36.599	1.011	1.475e6	1.213e6	0.985	1.216	1.240	2230	3671	2.48e7	2.06e7	11134.5	5610.2	NO	bb	bb	198.496
1234678-HpCDD	40.354	1.001	1.416e6	1.361e6	1.253	1.040	1.050	2506	3274	2.22e7	2.13e7	8870.2	6512.5	NO	bb	bb	190.176
OCDD	45.120	1.000	2.302e6	2.608e6	1.103	0.883	0.890	2646	4665	2.90e7	3.29e7	10978.0	7047.3	NO	bb	bb	375.677
13C-2378-TCDF	25.867	1.007	1.141e6	1.450e6	1.768	0.786	0.770	2983	2394	1.77e7	2.25e7	5940.4	9386.6	NO	bb	bb	101.281
13C-12378-PeCDF	30.026	1.168	1.284e6	8.547e5	1.527	1.502	1.550	4680	2502	1.96e7	1.27e7	4184.1	5065.1	NO	bb	bd	96.786
13C-23478-PeCDF	31.363	1.220	1.245e6	8.091e5	1.466	1.539	1.550	4680	2502	1.90e7	1.23e7	4051.1	4925.5	NO	bb	bb	96.841
13C-123478-HxCDF	34.973	0.956	5.210e5	1.009e6	1.054	0.516	0.510	2637	3506	8.67e6	1.67e7	3288.9	4772.6	NO	bd	bd	99.631
13C-123678-HxCDF	35.107	0.960	5.527e5	1.035e6	1.080	0.534	0.510	2637	3506	9.01e6	1.71e7	3417.9	4869.2	NO	db	db	100.816
13C-234678-HxCDF	35.965	0.983	5.043e5	9.836e5	1.014	0.513	0.510	2637	3506	8.34e6	1.63e7	3164.3	4660.4	NO	bb	bb	100.617
13C-123789-HxCDF	36.989	1.011	4.610e5	9.102e5	0.928	0.507	0.510	2637	3506	7.75e6	1.54e7	2939.3	4390.8	NO	bb	bb	101.358
13C-1234678-HpCDF	38.828	1.061	4.731e5	1.063e6	1.036	0.445	0.440	3133	3783	8.09e6	1.82e7	2583.3	4811.1	NO	bb	bb	101.722
13C-1234789-HpCDF	41.089	1.123	4.094e5	9.173e5	0.905	0.446	0.440	3133	3783	6.17e6	1.38e7	1971.0	3639.0	NO	bb	bb	100.563
13C-1234-TCDD	25.700	0.000	6.435e5	8.034e5	1.000	0.801	0.770	2264	5824	1.00e7	1.24e7	4417.3	2128.2	NO	bb	bb	100.000
13C-2378-TCDD	26.502	1.031	6.869e5	8.584e5	1.103	0.800	0.770	2264	5824	1.05e7	1.31e7	4634.7	2257.9	NO	bb	bb	96.836
13C-12378-PeCDD	31.619	1.230	7.945e5	4.894e5	0.914	1.623	1.550	1351	1735	1.23e7	7.56e6	9139.9	4356.9	NO	bb	bb	97.071
13C-123478-HxCDD	36.087	0.986	7.592e5	5.838e5	0.933	1.300	1.240	2349	1779	1.29e7	9.89e6	5485.2	5561.8	NO	bd	bd	98.749
13C-123678-HxCDD	36.210	0.990	7.891e5	6.166e5	0.965	1.280	1.240	2349	1779	1.26e7	9.87e6	5351.9	5549.2	NO	db	db	99.960
13C-1234678-HpCDD	40.332	1.102	6.034e5	5.625e5	0.782	1.073	1.050	2813	2017	9.31e6	8.69e6	3310.2	4307.9	NO	bb	bb	102.265
13C-OCDD	45.101	1.233	1.130e6	1.241e6	0.788	0.911	0.890	2295	1626	1.42e7	1.55e7	6172.7	9561.2	NO	bb	bb	206.289
13C-123789-HxCDD	36.588	0.000	8.190e5	6.388e5	1.000	1.282	1.240	2349	1779	1.32e7	1.04e7	5620.6	5858.2	NO	bb	bb	100.000
37CL-2378-TCDD	26.532	1.032	6.581e5		1.233			1941		1.01e7		5210.0			bb		36.879

Dataset: T:\Autospec\Processed Data Batch\230201ICIH.qld
Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
Printed: Friday, February 03, 2023 10:37:53 Pacific Standard Time

ID: CS4CR, Name: 23020108, Date: 01-Feb-2023, Time: 18:45:20, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					1.064		0.770	3306	1852								
1289-TCDF					0.858		0.770	3306	1852								
13468-PECDF					1.013		1.550	3731	5783								
12389-PECDF					0.844		1.550	3774	3458								
123468-HXCDF					1.197		1.240	4016	3299								
1368-TCDD					1.084		0.770	1943	1502								
1289-TCDD					0.975		0.770	1943	1502								
12479-PECDD					1.837		1.550	2803	1572								
12389-PECDD					1.252		1.550	2803	1572								
124679-HXCDD					1.033		1.240	2230	3671								
1234679-HPCDD					1.286		1.050	2506	3274								
Total-tetrafurans			3.913e5		0.933			3306		6.07e6							40.082
Total-penta1			0.000e0					3731		0.00e0							
Total-pentafurans			4.421e6		0.866			3774		6.91e7							398.784
Total-hexafurans			8.218e6		1.208			4016		1.27e8							808.248
Total-heptafurans			3.395e6		1.185			5173		5.40e7							394.809
Total-Furans			1.891e7		1.067			3306		2.87e8							2018.122
Total-tetradioxins			3.511e5		1.099			1943		5.38e6							41.245
Total-pentadioxins			1.697e6		1.392			2803		2.73e7							198.842
Total-hexadioxins			4.491e6		1.007			2230		7.54e7							595.224
Total-heptadioxins			1.416e6		1.269			2506		2.22e7							190.176
Total-Dioxins			1.026e7		1.165			1943		1.59e8							1401.163
Total-TEQ			2.917e7					1943		4.47e8							3419.285
FUNCTION1 PFK			4.404e5					580120		1.21e7							
FUNCTION2 PFK			1.273e5					196333		3.80e6							0.000
FUNCTION3 PFK			0.000e0					408061		0.00e0							
FUNCTION4 PFK			2.183e5					275800		6.18e6							
FUNCTION5 PFK			0.000e0					154157		0.00e0							
FUNCTION1 HXCD...			1.662e4					8726		3.10e5							0.000
FUNCTION1 HPCD...			1.579e4					6150		2.65e5							0.000
FUNCTION2 HPCD...			2.593e3					848		4.54e4							0.000
FUNCTION3 OCDPE			1.183e3					745		1.55e4							0.000
FUNCTION4 NCDPE			4.176e2					872		5.06e3							0.000
FUNCTION5 DCDPE			3.248e2					814		4.90e3							0.000

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: 03 Feb 2023 10:33:40

ID: CS4CR, Name: 23020108, Date: 01-Feb-2023, Time: 18:45:20, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.88	3.837e5	5.095e5	0.876	0.75	0.77	1796.5	YES	NO	bb	bb	39.352
2	Total-tetrafurans	24.97	2.571e3	3.313e3	0.933	0.78	0.77	11.3	YES	NO	bb	bb	0.243
3	Total-tetrafurans	24.64	3.935e3	5.312e3	0.933	0.74	0.77	18.1	YES	NO	bd	dd	0.383
4	Total-tetrafurans	24.51	1.158e3	1.353e3	0.933	0.86	0.77	9.5	YES	NO	db	dd	0.104

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	31.62	2.192e3	1.347e3	0.866	1.63	1.55	9.8	YES	NO	bb	bd	0.195
2	23478-PeCDF	31.37	2.253e6	1.479e6	0.911	1.52	1.55	9263.9	YES	NO	bb	bb	199.338
3	Total-pentafurans	31.11	2.570e3	1.840e3	0.866	1.40	1.55	11.2	YES	NO	bb	bb	0.243
4	12378-PeCDF	30.04	2.144e6	1.419e6	0.845	1.51	1.55	8947.1	YES	NO	bb	bb	197.212
5	Total-pentafurans	29.67	1.564e3	9.796e2	0.866	1.60	1.55	6.5	YES	NO	bd	bd	0.140
6	Total-pentafurans	32.41	1.819e4	1.189e4	0.866	1.53	1.55	66.2	YES	NO	bb	bb	1.656

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	234678-HxCDF	35.99	2.093e6	1.626e6	1.229	1.29	1.24	8018.2	YES	NO	dd	bd	203.397
2	123678-HxCDF	35.13	2.269e6	1.771e6	1.248	1.28	1.24	8495.8	YES	NO	dd	dd	203.923
3	123478-HxCDF	34.98	2.037e6	1.599e6	1.182	1.27	1.24	8086.7	YES	NO	dd	dd	201.086
4	Total-hexafurans	33.52	1.932e3	1.561e3	1.208	1.24	1.24	6.5	YES	NO	bb	bb	0.193
5	123789-HxCDF	37.01	1.817e6	1.431e6	1.187	1.27	1.24	7125.7	YES	NO	dd	bd	199.649

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.10	1.575e6	1.522e6	1.165	1.03	1.05	4579.3	YES	NO	bb	bb	200.336
2	Total-heptafurans	39.51	4.373e3	4.751e3	1.185	0.92	1.05	13.2	YES	NO	bb	bb	0.538
3	1234678-HpCDF	38.84	1.816e6	1.772e6	1.204	1.02	1.05	5847.4	YES	NO	bb	bb	193.935

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.88	3.837e5	5.095e5	0.876	0.75	0.77	1796.5	YES	NO	bb	bb	39.352
2	Total-tetrafurans	24.97	2.571e3	3.313e3	0.933	0.78	0.77	11.3	YES	NO	bb	bb	0.243
3	Total-tetrafurans	24.64	3.935e3	5.312e3	0.933	0.74	0.77	18.1	YES	NO	bd	dd	0.383
4	Total-tetrafurans	24.51	1.158e3	1.353e3	0.933	0.86	0.77	9.5	YES	NO	db	dd	0.104
5	Total-pentafurans	31.62	2.192e3	1.347e3	0.866	1.63	1.55	9.8	YES	NO	bb	bd	0.195
6	23478-PeCDF	31.37	2.253e6	1.479e6	0.911	1.52	1.55	9263.9	YES	NO	bb	bb	199.338
7	Total-pentafurans	31.11	2.570e3	1.840e3	0.866	1.40	1.55	11.2	YES	NO	bb	bb	0.243
8	12378-PeCDF	30.04	2.144e6	1.419e6	0.845	1.51	1.55	8947.1	YES	NO	bb	bb	197.212
9	Total-pentafurans	29.67	1.564e3	9.796e2	0.866	1.60	1.55	6.5	YES	NO	bd	bd	0.140
10	Total-pentafurans	32.41	1.819e4	1.189e4	0.866	1.53	1.55	66.2	YES	NO	bb	bb	1.656
11	234678-HxCDF	35.99	2.093e6	1.626e6	1.229	1.29	1.24	8018.2	YES	NO	dd	bd	203.397
12	123678-HxCDF	35.13	2.269e6	1.771e6	1.248	1.28	1.24	8495.8	YES	NO	dd	dd	203.923
13	123478-HxCDF	34.98	2.037e6	1.599e6	1.182	1.27	1.24	8086.7	YES	NO	dd	dd	201.086
14	Total-hexafurans	33.52	1.932e3	1.561e3	1.208	1.24	1.24	6.5	YES	NO	bb	bb	0.193
15	123789-HxCDF	37.01	1.817e6	1.431e6	1.187	1.27	1.24	7125.7	YES	NO	dd	bd	199.649
16	1234789-HpCDF	41.10	1.575e6	1.522e6	1.165	1.03	1.05	4579.3	YES	NO	bb	bb	200.336
17	Total-heptafurans	39.51	4.373e3	4.751e3	1.185	0.92	1.05	13.2	YES	NO	bb	bb	0.538
18	1234678-HpCDF	38.84	1.816e6	1.772e6	1.204	1.02	1.05	5847.4	YES	NO	bb	bb	193.935
19	OCDF	45.36	2.485e6	2.804e6	1.186	0.89	0.89	6601.2	YES	NO	bb	bb	376.199

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.53	3.417e5	4.230e5	1.236	0.81	0.77	2709.1	YES	NO	bb	bb	40.022
2	Total-tetradioxins	26.14	8.070e3	9.722e3	1.099	0.83	0.77	49.8	YES	NO	bb	bb	1.048
3	Total-tetradioxins	25.38	3.531e2	4.421e2	1.099	0.80	0.77	2.4	NO	NO	bb	bb	0.047
4	Total-tetradioxins	26.96	1.013e3	1.157e3	1.099	0.88	0.77	7.2	YES	NO	bd	bd	0.128

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.63	1.695e6	1.077e6	1.087	1.57	1.55	9745.0	YES	NO	bb	bb	198.713
2	Total-pentadioxins	30.04	1.464e3	8.371e2	1.392	1.75	1.55	8.8	YES	NO	bb	bb	0.129

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.60	1.475e6	1.213e6	0.985	1.22	1.24	11134.5	YES	NO	bb	bb	198.496
2	123678-HxCDD	36.22	1.525e6	1.238e6	1.021	1.23	1.24	11440.8	YES	NO	db	db	192.587
3	123478-HxCDD	36.11	1.491e6	1.215e6	0.987	1.23	1.24	11249.2	YES	NO	bd	bd	204.141

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.35	1.416e6	1.361e6	1.253	1.04	1.05	8870.2	YES	NO	bb	bb	190.176

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.53	3.417e5	4.230e5	1.236	0.81	0.77	2709.1	YES	NO	bb	bb	40.022
2	Total-tetradioxins	26.14	8.070e3	9.722e3	1.099	0.83	0.77	49.8	YES	NO	bb	bb	1.048
3	Total-tetradioxins	25.38	3.531e2	4.421e2	1.099	0.80	0.77	2.4	NO	NO	bb	bb	0.047
4	Total-tetradioxins	26.96	1.013e3	1.157e3	1.099	0.88	0.77	7.2	YES	NO	bd	bd	0.128
5	12378-PeCDD	31.63	1.695e6	1.077e6	1.087	1.57	1.55	9745.0	YES	NO	bb	bb	198.713
6	Total-pentadioxins	30.04	1.464e3	8.371e2	1.392	1.75	1.55	8.8	YES	NO	bb	bb	0.129
7	123789-HxCDD	36.60	1.475e6	1.213e6	0.985	1.22	1.24	11134.5	YES	NO	bb	bb	198.496
8	123678-HxCDD	36.22	1.525e6	1.238e6	1.021	1.23	1.24	11440.8	YES	NO	db	db	192.587
9	123478-HxCDD	36.11	1.491e6	1.215e6	0.987	1.23	1.24	11249.2	YES	NO	bd	bd	204.141
10	1234678-HpCDD	40.35	1.416e6	1.361e6	1.253	1.04	1.05	8870.2	YES	NO	bb	bb	190.176
11	OCDD	45.12	2.302e6	2.608e6	1.103	0.88	0.89	10978.0	YES	NO	bb	bb	375.677

ID: CS4CR, Name: 23020108, Date: 01-Feb-2023, Time: 18:45:20, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.88	3.837e5	5.095e5	0.876	0.75	0.77	1796.5	YES	NO	bb	bb	39.352
2	Total-tetrafurans	24.97	2.571e3	3.313e3	0.933	0.78	0.77	11.3	YES	NO	bb	bb	0.243
3	Total-tetrafurans	24.64	3.935e3	5.312e3	0.933	0.74	0.77	18.1	YES	NO	bd	dd	0.383
4	Total-tetrafurans	24.51	1.158e3	1.353e3	0.933	0.86	0.77	9.5	YES	NO	db	dd	0.104
5	Total-pentafurans	31.62	2.192e3	1.347e3	0.866	1.63	1.55	9.8	YES	NO	bb	bd	0.195
6	23478-PeCDF	31.37	2.253e6	1.479e6	0.911	1.52	1.55	9263.9	YES	NO	bb	bb	199.338
7	Total-pentafurans	31.11	2.570e3	1.840e3	0.866	1.40	1.55	11.2	YES	NO	bb	bb	0.243
8	12378-PeCDF	30.04	2.144e6	1.419e6	0.845	1.51	1.55	8947.1	YES	NO	bb	bb	197.212
9	Total-pentafurans	29.67	1.564e3	9.796e2	0.866	1.60	1.55	6.5	YES	NO	bd	bd	0.140
10	Total-pentafurans	32.41	1.819e4	1.189e4	0.866	1.53	1.55	66.2	YES	NO	bb	bb	1.656
11	234678-HxCDF	35.99	2.093e6	1.626e6	1.229	1.29	1.24	8018.2	YES	NO	dd	bd	203.397
12	123678-HxCDF	35.13	2.269e6	1.771e6	1.248	1.28	1.24	8495.8	YES	NO	dd	dd	203.923
13	123478-HxCDF	34.98	2.037e6	1.599e6	1.182	1.27	1.24	8086.7	YES	NO	dd	dd	201.086
14	Total-hexafurans	33.52	1.932e3	1.561e3	1.208	1.24	1.24	6.5	YES	NO	bb	bb	0.193
15	123789-HxCDF	37.01	1.817e6	1.431e6	1.187	1.27	1.24	7125.7	YES	NO	dd	bd	199.649
16	1234789-HpCDF	41.10	1.575e6	1.522e6	1.165	1.03	1.05	4579.3	YES	NO	bb	bb	200.336
17	Total-heptafurans	39.51	4.373e3	4.751e3	1.185	0.92	1.05	13.2	YES	NO	bb	bb	0.538
18	1234678-HpCDF	38.84	1.816e6	1.772e6	1.204	1.02	1.05	5847.4	YES	NO	bb	bb	193.935
19	OCDF	45.36	2.485e6	2.804e6	1.186	0.89	0.89	6601.2	YES	NO	bb	bb	376.199
20	2378-TCDD	26.53	3.417e5	4.230e5	1.236	0.81	0.77	2709.1	YES	NO	bb	bb	40.022
21	Total-tetradioxins	26.14	8.070e3	9.722e3	1.099	0.83	0.77	49.8	YES	NO	bb	bb	1.048
22	Total-tetradioxins	25.38	3.531e2	4.421e2	1.099	0.80	0.77	2.4	NO	NO	bb	bb	0.047
23	Total-tetradioxins	26.96	1.013e3	1.157e3	1.099	0.88	0.77	7.2	YES	NO	bd	bd	0.128
24	12378-PeCDD	31.63	1.695e6	1.077e6	1.087	1.57	1.55	9745.0	YES	NO	bb	bb	198.713
25	Total-pentadioxins	30.04	1.464e3	8.371e2	1.392	1.75	1.55	8.8	YES	NO	bb	bb	0.129
26	123789-HxCDD	36.60	1.475e6	1.213e6	0.985	1.22	1.24	11134.5	YES	NO	bb	bb	198.496
27	123678-HxCDD	36.22	1.525e6	1.238e6	1.021	1.23	1.24	11440.8	YES	NO	db	db	192.587
28	123478-HxCDD	36.11	1.491e6	1.215e6	0.987	1.23	1.24	11249.2	YES	NO	bd	bd	204.141
29	1234678-HpCDD	40.35	1.416e6	1.361e6	1.253	1.04	1.05	8870.2	YES	NO	bb	bb	190.176
30	OCDD	45.12	2.302e6	2.608e6	1.103	0.88	0.89	10978.0	YES	NO	bb	bb	375.677

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Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
Printed: Friday, February 03, 2023 10:37:53 Pacific Standard Time

ID: CS4CR, Name: 23020108, Date: 01-Feb-2023, Time: 18:45:20, Conditions: AUTOSPEC01, User: pk

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	24.96	2.020e4					1.1	NO		bb		
2	FUNCTION1 PFK	24.40	2.455e4					1.2	NO		bb		
3	FUNCTION1 PFK	23.70	1.570e4					0.9	NO		bb		
4	FUNCTION1 PFK	22.21	1.520e4					0.8	NO		bb		
5	FUNCTION1 PFK	21.98	2.815e4					1.2	NO		bb		
6	FUNCTION1 PFK	21.62	2.203e4					0.8	NO		bb		
7	FUNCTION1 PFK	21.38	1.821e4					1.0	NO		bb		
8	FUNCTION1 PFK	28.09	4.216e4					1.7	NO		bb		
9	FUNCTION1 PFK	27.48	1.001e4					0.6	NO		bb		
10	FUNCTION1 PFK	27.36	2.341e4					1.3	NO		bb		
11	FUNCTION1 PFK	27.09	4.217e3					0.5	NO		bb		
12	FUNCTION1 PFK	26.77	7.075e3					0.7	NO		bb		
13	FUNCTION1 PFK	26.65	1.537e4					1.0	NO		bb		
14	FUNCTION1 PFK	26.53	2.228e4					1.3	NO		bb		
15	FUNCTION1 PFK	26.06	1.292e4					0.8	NO		bb		
16	FUNCTION1 PFK	25.75	9.216e3					0.7	NO		bb		
17	FUNCTION1 PFK	25.69	2.942e4					1.5	NO		bb		
18	FUNCTION1 PFK	25.47	3.380e4					1.3	NO		bb		
19	FUNCTION1 PFK	25.35	5.518e4					1.2	NO		db		
20	FUNCTION1 PFK	25.23	3.130e4					1.5	NO		bd		

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.88	2.296e4					1.8	NO		bb		0.000
2	FUNCTION2 PFK	28.30	1.717e4					1.6	NO		bb		0.000
3	FUNCTION2 PFK	32.49	5.254e3					1.3	NO		bb		0.000
4	FUNCTION2 PFK	32.37	7.309e3					1.1	NO		bb		0.000
5	FUNCTION2 PFK	32.29	1.359e3					0.6	NO		bb		0.000
6	FUNCTION2 PFK	32.17	6.182e3					1.2	NO		bb		0.000
7	FUNCTION2 PFK	31.90	1.405e4					1.8	NO		bb		0.000
8	FUNCTION2 PFK	31.55	3.011e3					0.9	NO		bb		0.000
9	FUNCTION2 PFK	31.41	1.210e4					1.2	NO		bb		0.000
10	FUNCTION2 PFK	30.57	3.830e3					0.9	NO		bb		0.000
11	FUNCTION2 PFK	30.45	4.598e3					1.0	NO		bb		0.000
12	FUNCTION2 PFK	29.87	5.333e3					1.1	NO		bb		0.000
13	FUNCTION2 PFK	29.60	5.195e3					1.1	NO		db		0.000
14	FUNCTION2 PFK	29.56	5.154e3					1.1	NO		bd		0.000
15	FUNCTION2 PFK	29.50	7.364e3					1.4	NO		bb		0.000
16	FUNCTION2 PFK	29.17	6.453e3					1.3	NO		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.21	5.273e3					0.9	NO		bb		
2	FUNCTION4 PFK	40.14	5.827e3					1.0	NO		bb		
3	FUNCTION4 PFK	40.00	4.667e3					0.8	NO		bb		
4	FUNCTION4 PFK	39.82	1.112e3					0.4	NO		bb		
5	FUNCTION4 PFK	39.74	4.984e3					0.8	NO		bb		
6	FUNCTION4 PFK	39.65	3.641e4					1.9	NO		db		
7	FUNCTION4 PFK	39.60	1.243e4					1.6	NO		bd		
8	FUNCTION4 PFK	39.21	6.478e3					1.0	NO		bb		
9	FUNCTION4 PFK	38.98	1.375e3					0.4	NO		bb		
10	FUNCTION4 PFK	38.83	5.023e3					0.8	NO		bb		
11	FUNCTION4 PFK	38.78	4.916e3					0.9	NO		bb		
12	FUNCTION4 PFK	38.68	8.802e3					1.2	NO		bb		
13	FUNCTION4 PFK	38.54	1.096e4					1.2	NO		bb		
14	FUNCTION4 PFK	38.35	1.188e4					1.5	NO		db		
15	FUNCTION4 PFK	38.32	9.581e3					1.3	NO		bd		
16	FUNCTION4 PFK	38.09	5.192e4					1.9	NO		bb		
17	FUNCTION4 PFK	42.95	1.120e3					0.4	NO		bb		
18	FUNCTION4 PFK	42.68	3.847e3					0.6	NO		bb		
19	FUNCTION4 PFK	42.38	1.500e4					1.7	NO		bb		
20	FUNCTION4 PFK	41.06	1.232e4					1.2	NO		bb		
21	FUNCTION4 PFK	40.81	4.336e3					0.7	NO		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	26.09	1.365e2					0.3	NO		bb		0.000
2	FUNCTION1 HXCD...	25.88	7.559e1					0.2	NO		bb		0.000
3	FUNCTION1 HXCD...	25.69	1.535e2					0.2	NO		bb		0.000
4	FUNCTION1 HXCD...	25.38	9.009e1					0.2	NO		bb		0.000
5	FUNCTION1 HXCD...	24.76	1.387e2					0.2	NO		bb		0.000
6	FUNCTION1 HXCD...	24.49	2.087e3					4.8	YES		db		0.000
7	FUNCTION1 HXCD...	24.42	1.113e3					3.5	YES		bd		0.000
8	FUNCTION1 HXCD...	24.07	1.214e2					0.2	NO		bb		0.000
9	FUNCTION1 HXCD...	22.93	9.005e1					0.3	NO		bb		0.000
10	FUNCTION1 HXCD...	28.03	7.580e1					0.2	NO		bb		0.000
11	FUNCTION1 HXCD...	27.80	7.466e1					0.2	NO		bb		0.000
12	FUNCTION1 HXCD...	27.64	9.719e1					0.2	NO		bb		0.000
13	FUNCTION1 HXCD...	27.11	4.735e3					11.6	YES		db		0.000
14	FUNCTION1 HXCD...	27.06	1.264e3					2.6	NO		dd		0.000
15	FUNCTION1 HXCD...	26.99	2.557e3					3.1	YES		dd		0.000
16	FUNCTION1 HXCD...	26.82	1.150e3					2.1	NO		dd		0.000
17	FUNCTION1 HXCD...	26.76	1.090e3					2.6	NO		dd		0.000
18	FUNCTION1 HXCD...	26.68	5.202e2					1.1	NO		dd		0.000
19	FUNCTION1 HXCD...	26.59	4.632e2					0.7	NO		dd		0.000
20	FUNCTION1 HXCD...	26.50	3.837e2					0.7	NO		dd		0.000
21	FUNCTION1 HXCD...	26.44	7.925e1					0.2	NO		bd		0.000
22	FUNCTION1 HXCD...	26.26	1.202e2					0.3	NO		bb		0.000

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ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HPCD...	21.53	8.754e1					0.3	NO		dd		0.000
2	FUNCTION1 HPCD...	21.39	1.338e2					0.2	NO		bd		0.000
3	FUNCTION1 HPCD...	27.06	1.227e3					3.5	YES		dd		0.000
4	FUNCTION1 HPCD...	26.96	2.312e3					4.3	YES		dd		0.000
5	FUNCTION1 HPCD...	26.83	1.175e3					2.8	NO		dd		0.000
6	FUNCTION1 HPCD...	26.76	1.583e3					4.1	YES		dd		0.000
7	FUNCTION1 HPCD...	26.67	5.135e2					1.6	NO		dd		0.000
8	FUNCTION1 HPCD...	26.58	6.861e2					1.1	NO		dd		0.000
9	FUNCTION1 HPCD...	26.50	1.748e2					0.8	NO		dd		0.000
10	FUNCTION1 HPCD...	26.44	2.373e2					0.4	NO		dd		0.000
11	FUNCTION1 HPCD...	26.26	1.300e2					0.4	NO		bd		0.000
12	FUNCTION1 HPCD...	25.91	1.988e2					0.2	NO		bb		0.000
13	FUNCTION1 HPCD...	25.72	1.012e2					0.3	NO		bb		0.000
14	FUNCTION1 HPCD...	25.53	1.466e2					0.3	NO		db		0.000
15	FUNCTION1 HPCD...	25.32	1.918e2					0.4	NO		bd		0.000
16	FUNCTION1 HPCD...	24.51	2.090e3					6.7	YES		db		0.000
17	FUNCTION1 HPCD...	24.42	8.854e2					3.8	YES		bd		0.000
18	FUNCTION1 HPCD...	21.60	9.175e1					0.3	NO		db		0.000
19	FUNCTION1 HPCD...	27.77	9.425e1					0.4	NO		bb		0.000
20	FUNCTION1 HPCD...	27.65	7.376e1					0.3	NO		db		0.000
21	FUNCTION1 HPCD...	27.53	1.152e2					0.4	NO		bd		0.000
22	FUNCTION1 HPCD...	27.12	3.540e3					10.6	YES		db		0.000

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.63	1.971e2					4.5	YES		bb		0.000
2	FUNCTION2 HPCD...	31.26	2.238e3					45.1	YES		bb		0.000
3	FUNCTION2 HPCD...	29.60	1.581e2					4.1	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.60	5.924e2					8.6	YES		bb		0.000
2	FUNCTION3 OCDPE	36.21	3.178e2					6.7	YES		db		0.000
3	FUNCTION3 OCDPE	36.10	2.730e2					5.6	YES		bd		0.000

ID: CS4CR, Name: 23020108, Date: 01-Feb-2023, Time: 18:45:20, Conditions: AUTOSPEC01, User: pk

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.40	3.196e2					3.7	YES		bb		0.000
2	FUNCTION4 NCDPE	38.52	9.797e1					2.1	NO		bb		0.000

ETHERS6

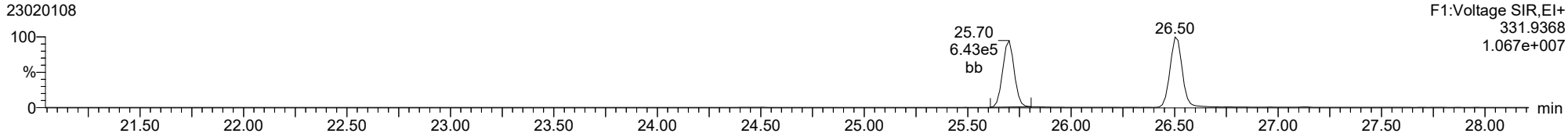
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	45.14	3.248e2					6.0	YES		bb		0.000

Dataset: T:\Autospec\Processed Data Batch\230201ICIH.qld
Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
Printed: Friday, February 03, 2023 10:37:53 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: 03 Feb 2023 10:33:40

ID: CS4CR, Name: 23020108, Date: 01-Feb-2023, Time: 18:45:20, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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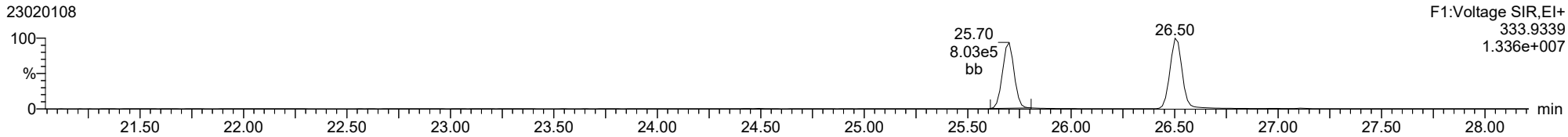

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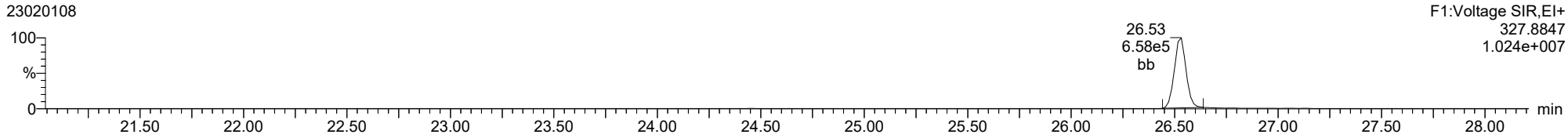

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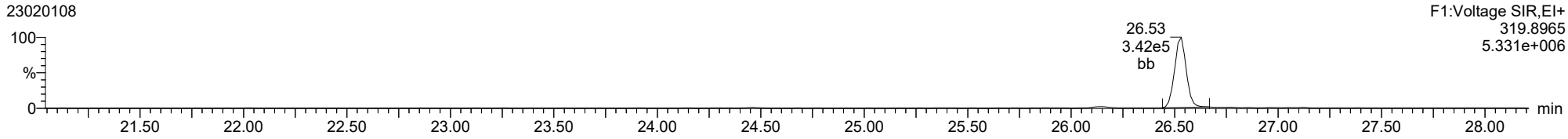
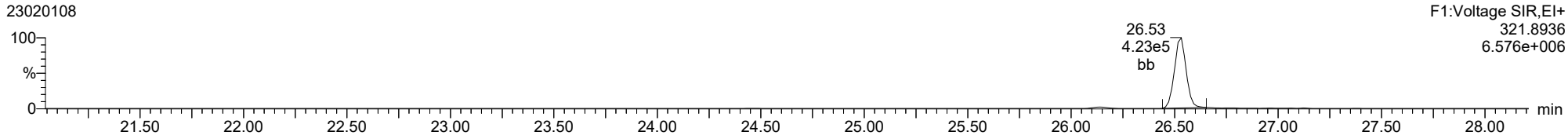
2378-TCDD



2378-TCDD



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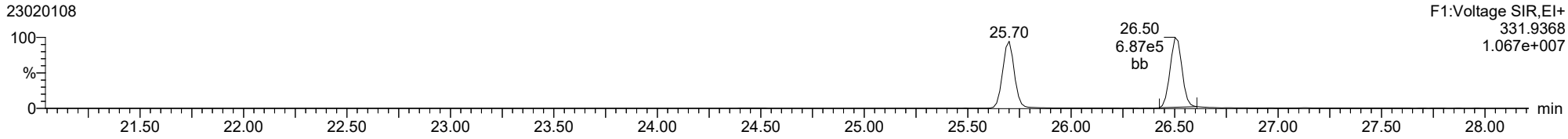

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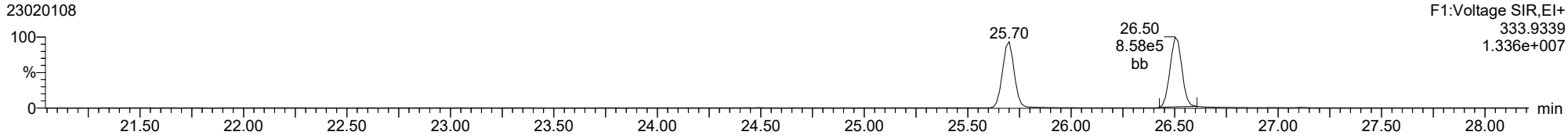
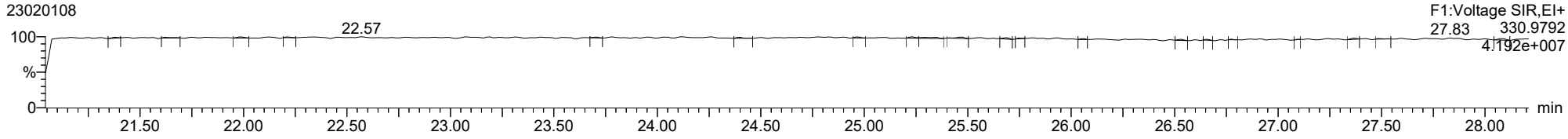


FUNCTION1 PFK



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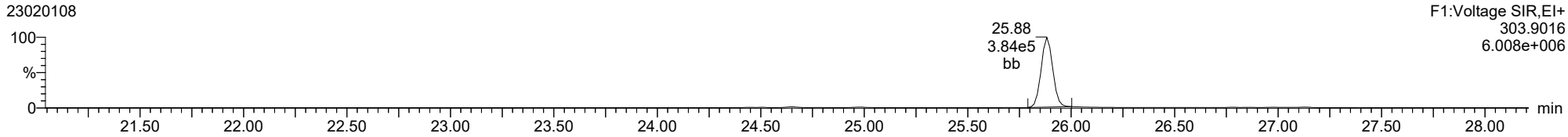
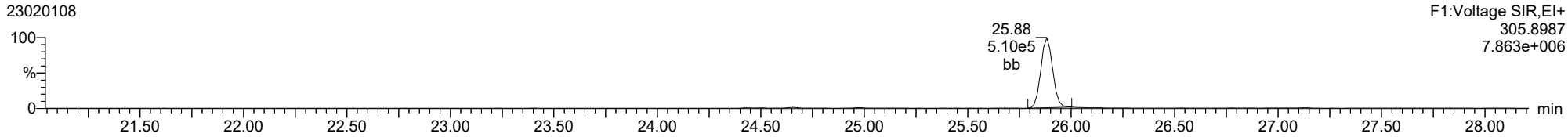
2378-TCDF



2378-TCDF



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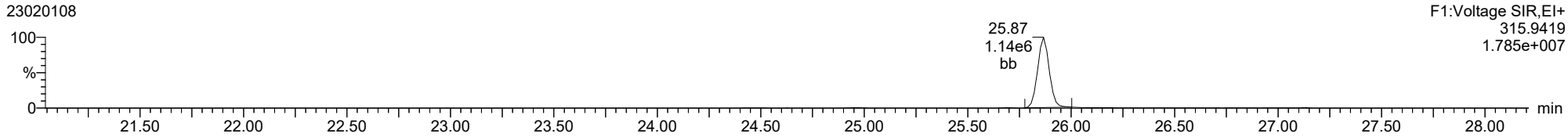

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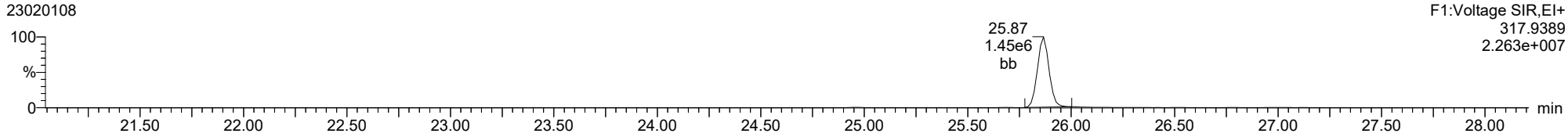

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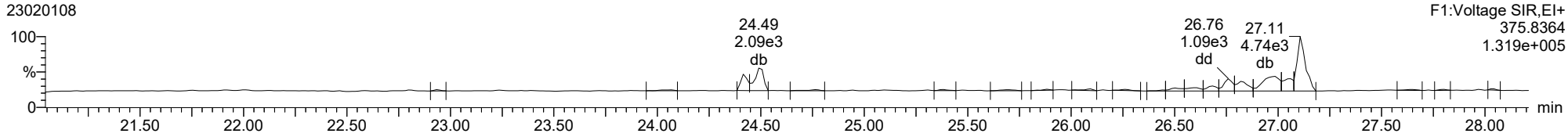

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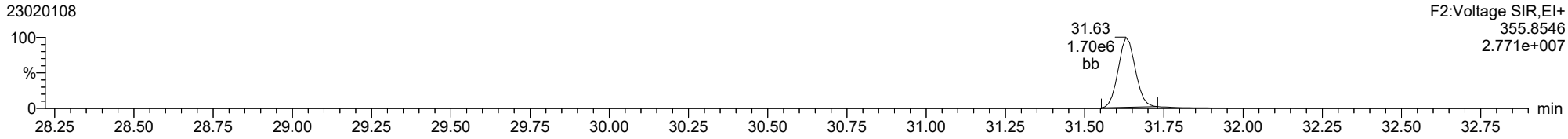
12378-PeCDD



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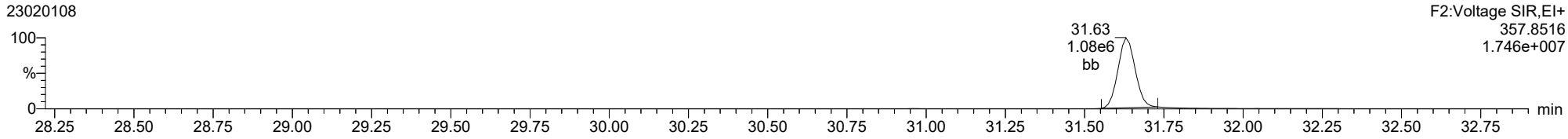

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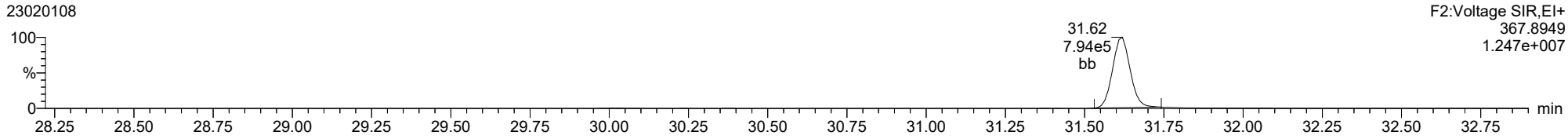

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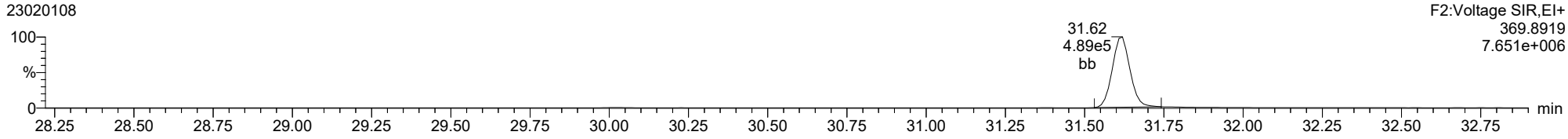

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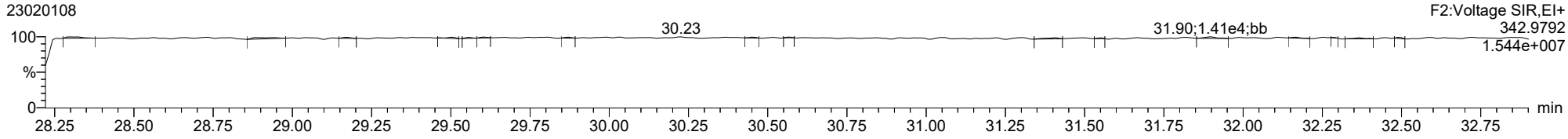

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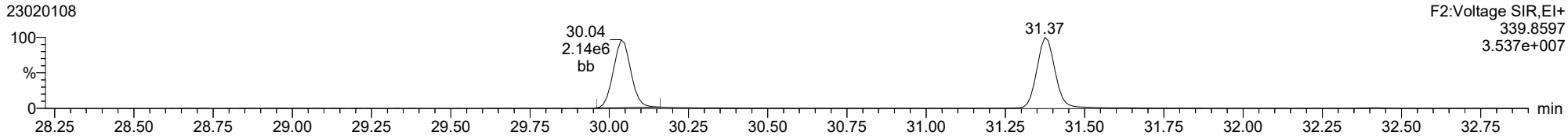

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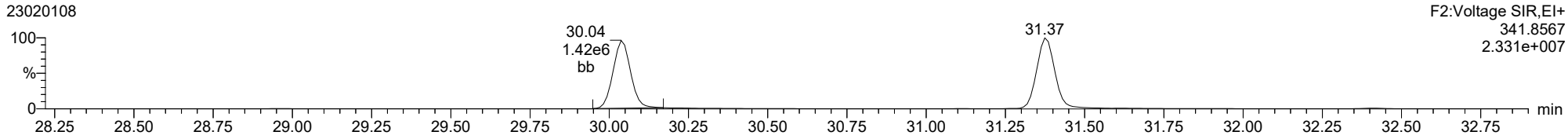

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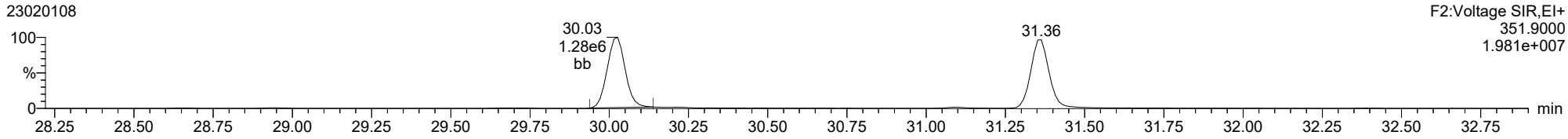

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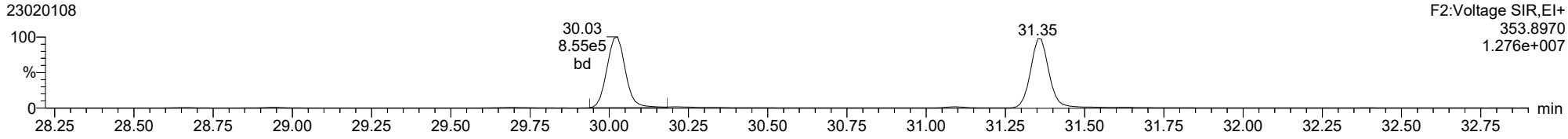
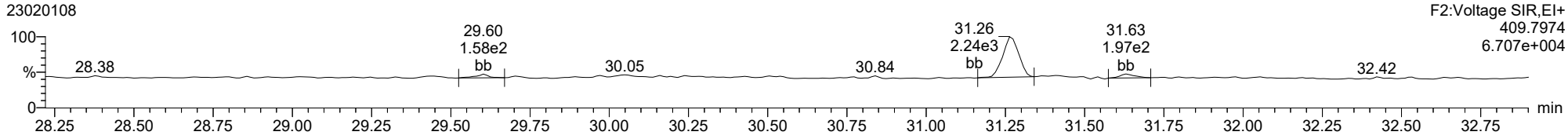


FUNCTION2 HPCDPE



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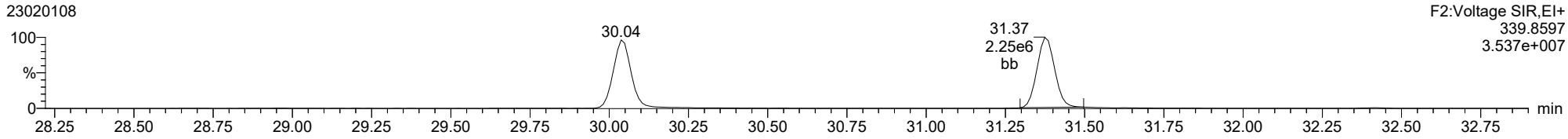

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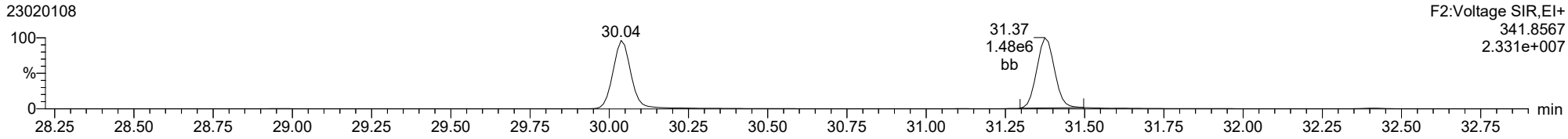

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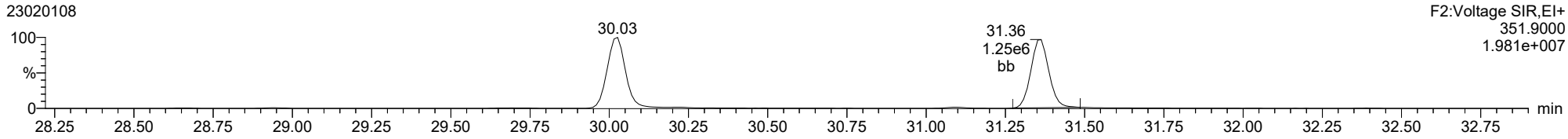

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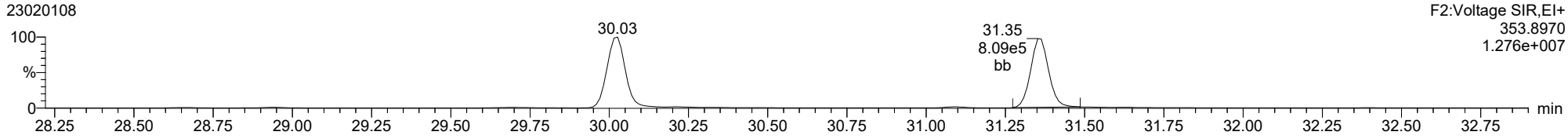

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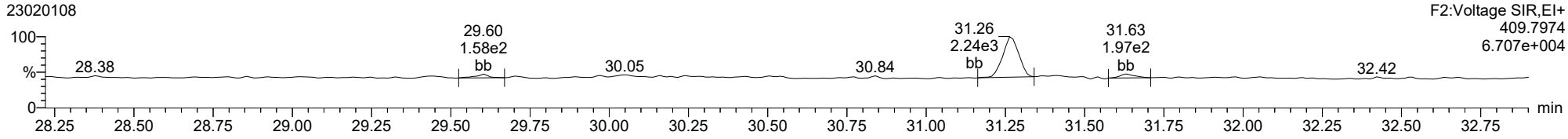

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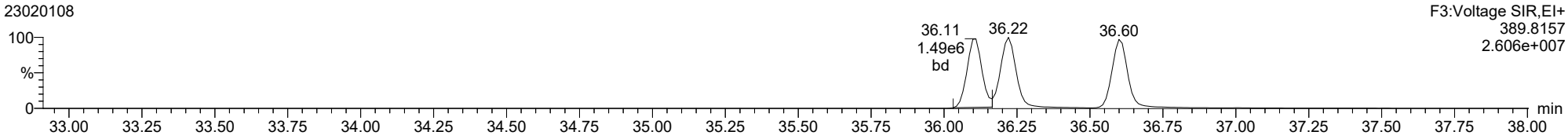
123478-HxCDD



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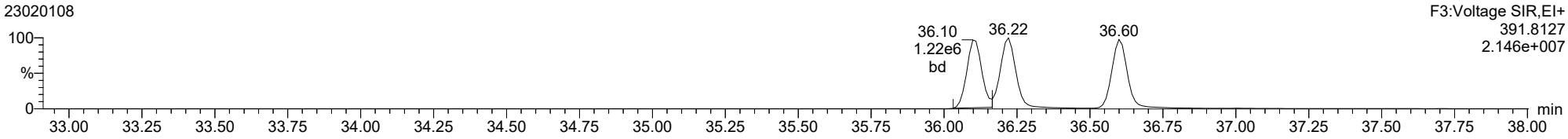

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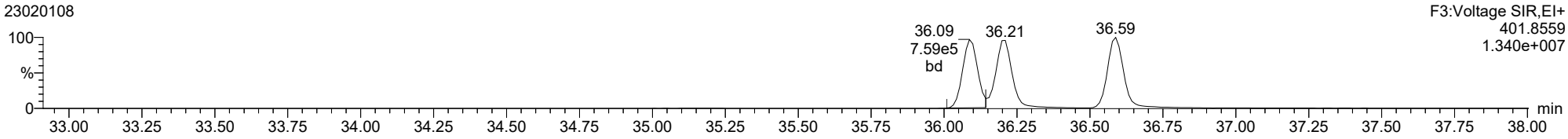

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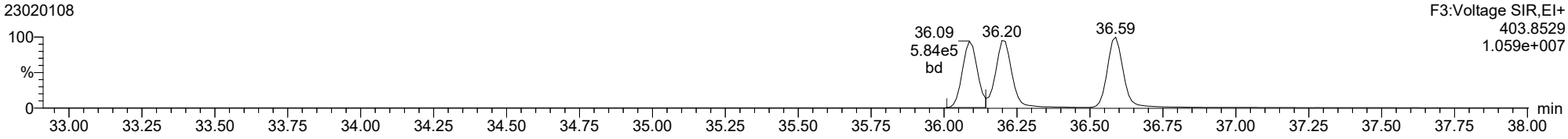

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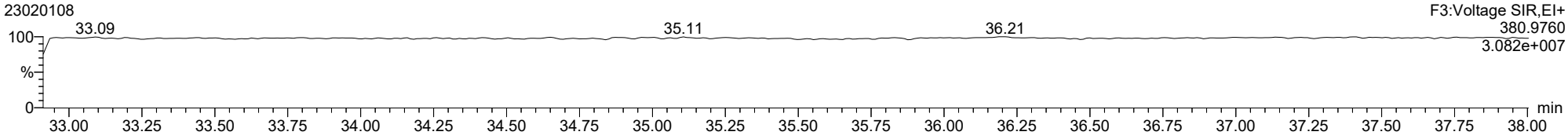

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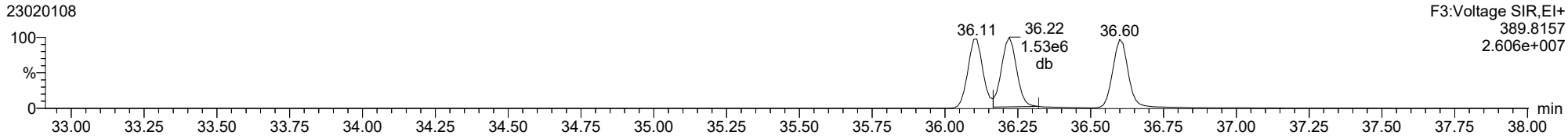

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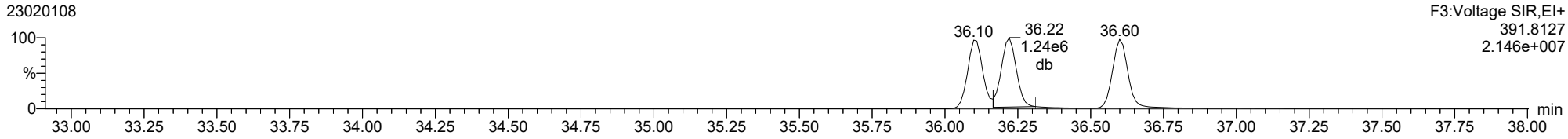

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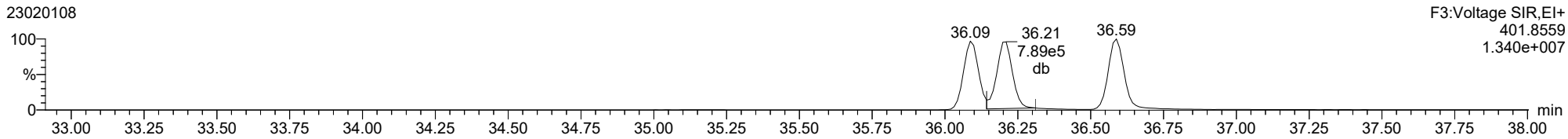

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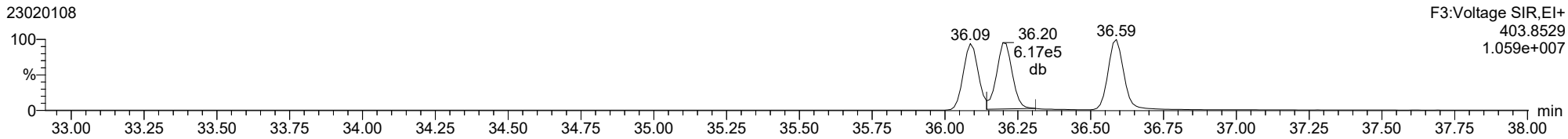

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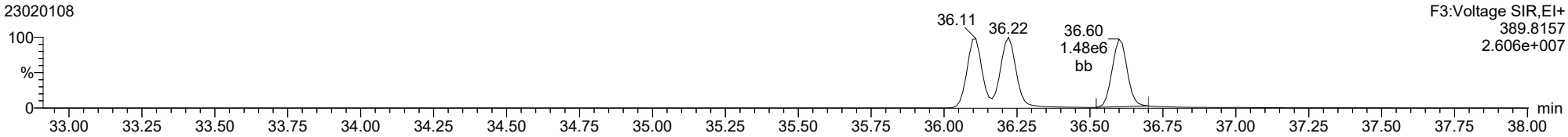

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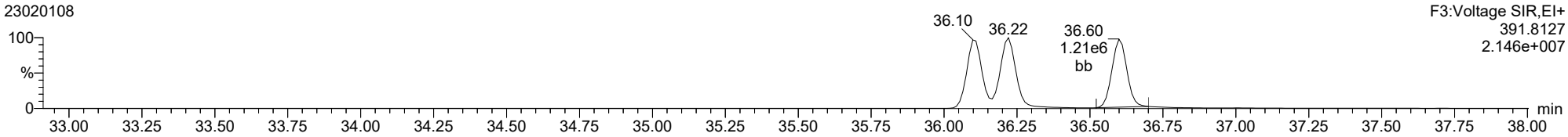

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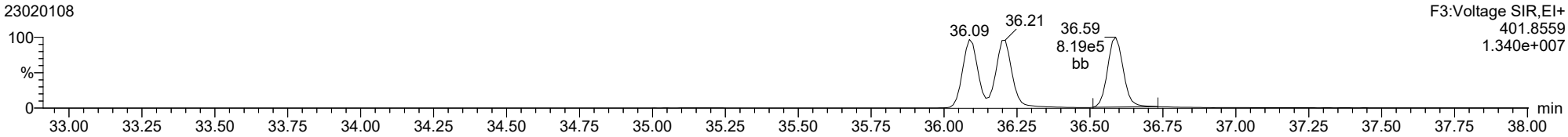

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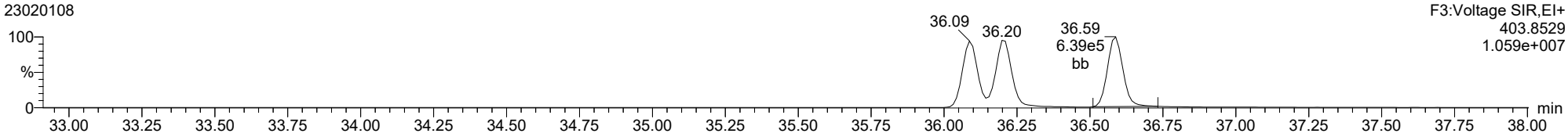

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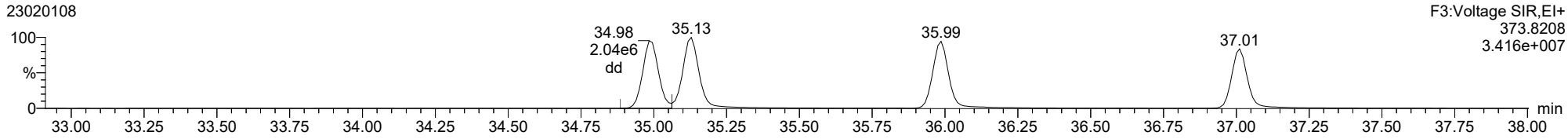

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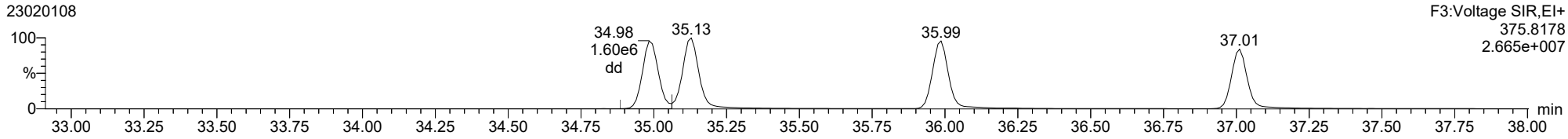

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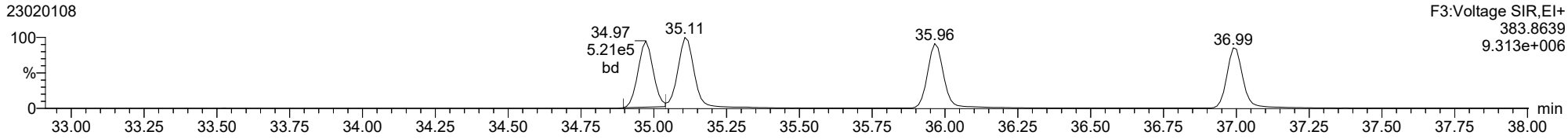

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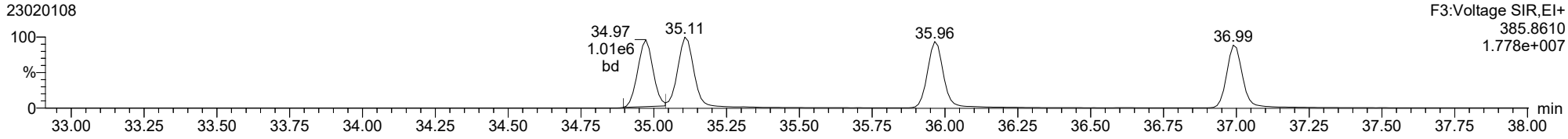

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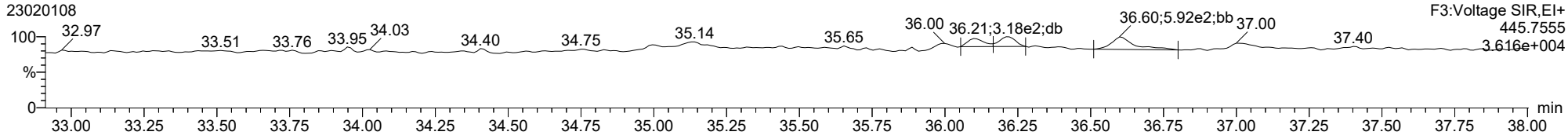

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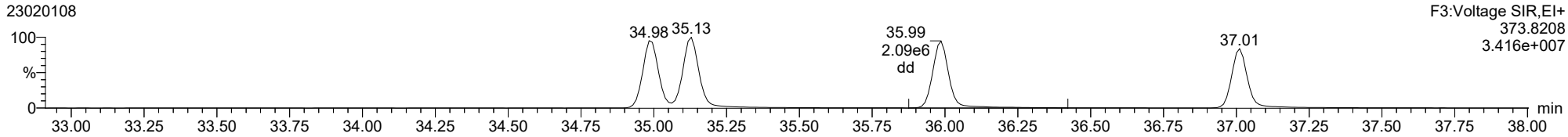

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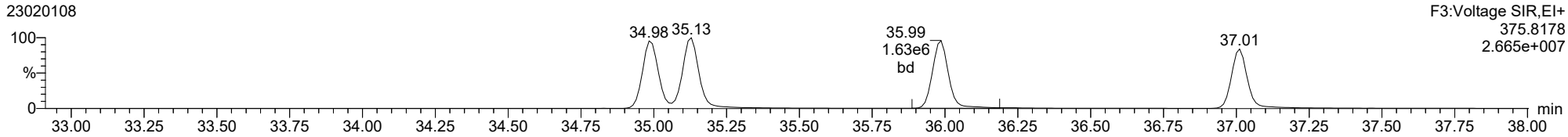

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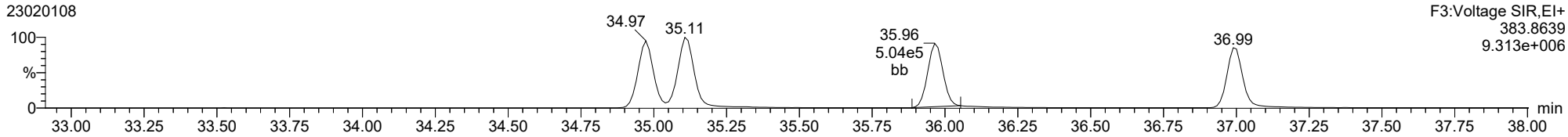

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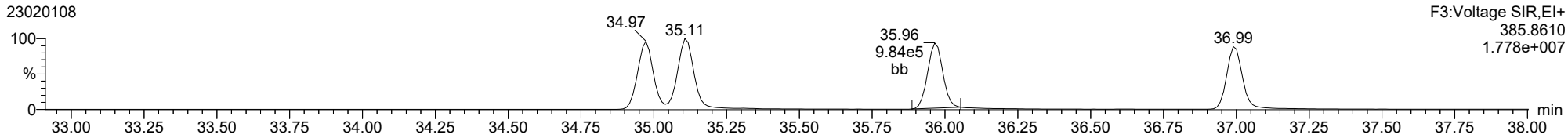
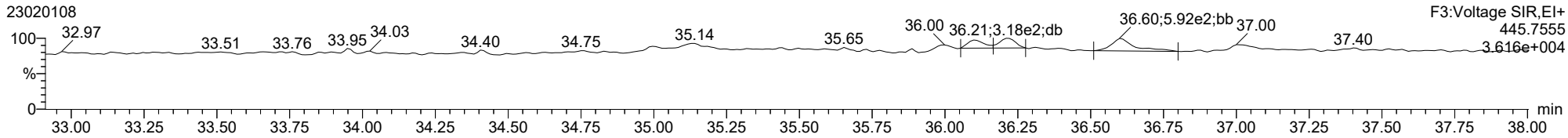


FUNCTION3 OCDPE



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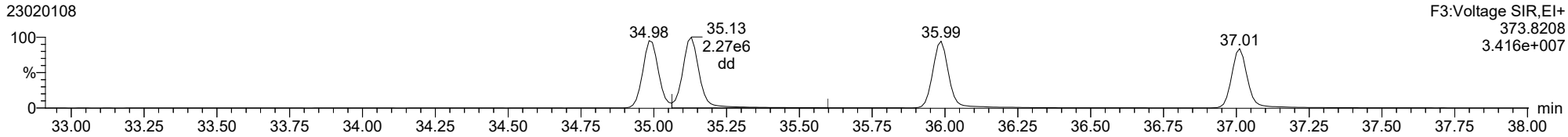

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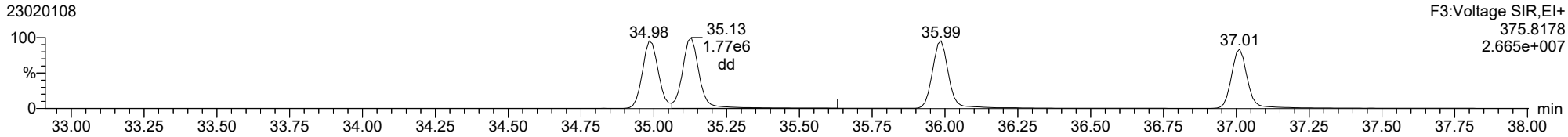

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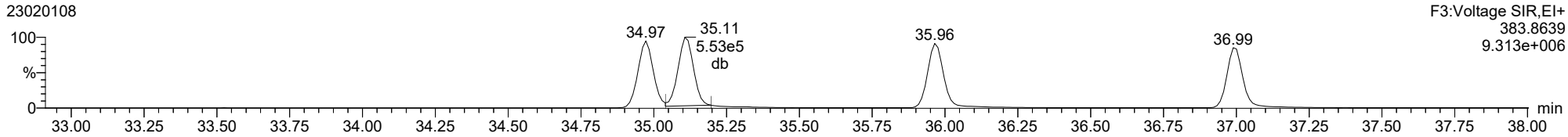

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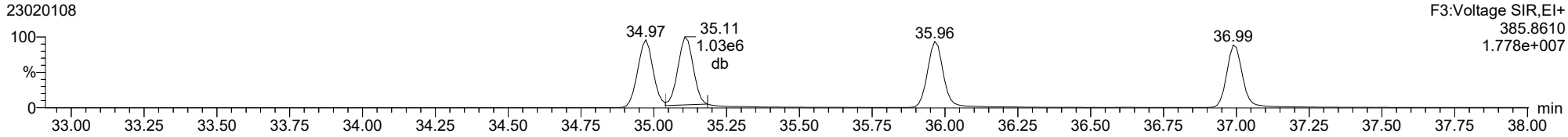
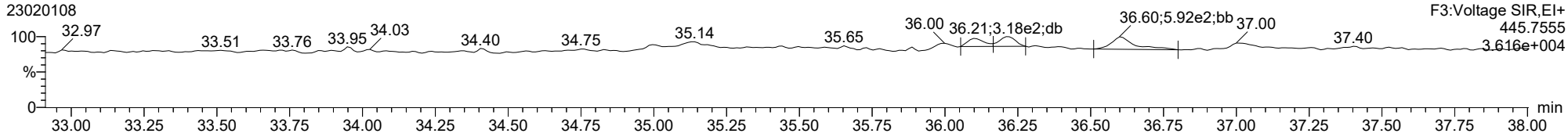


FUNCTION3 OCDPE



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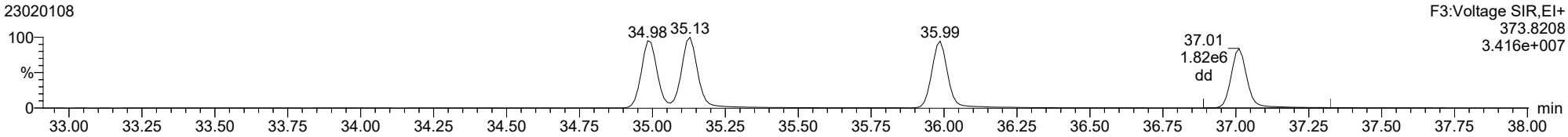

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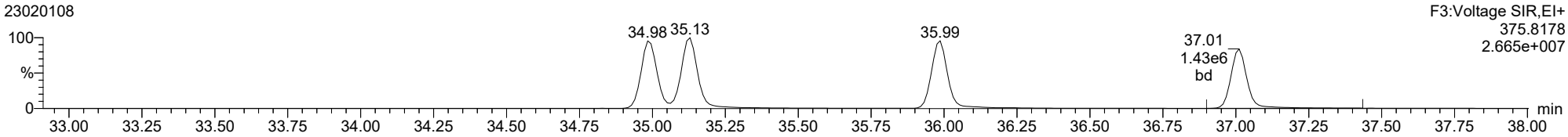

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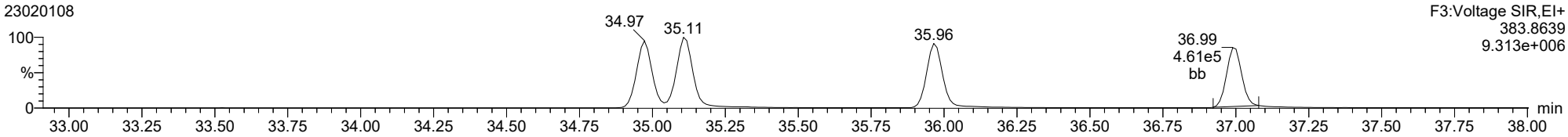

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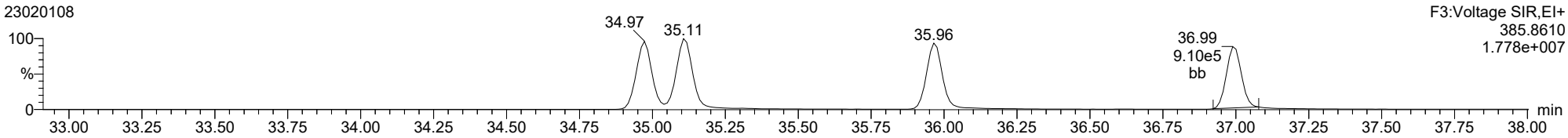

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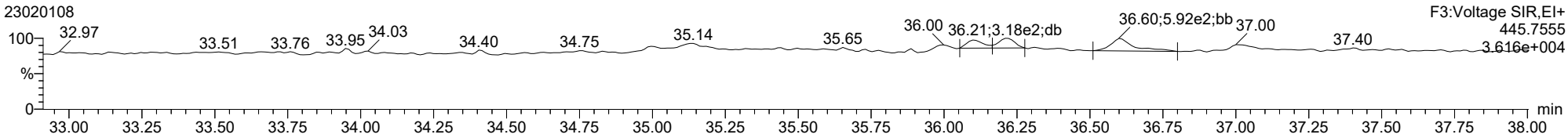

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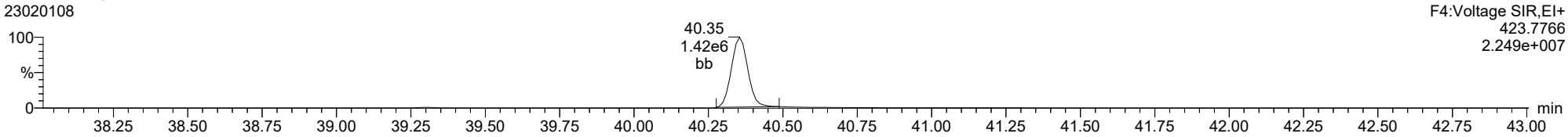

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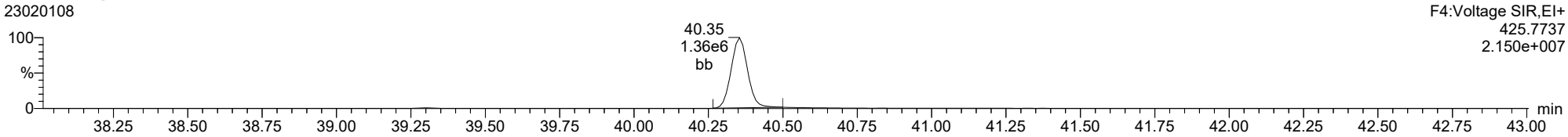

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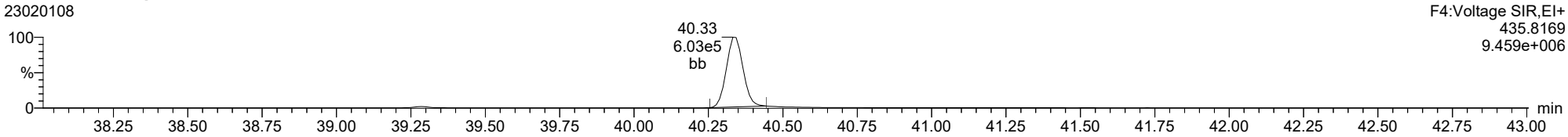

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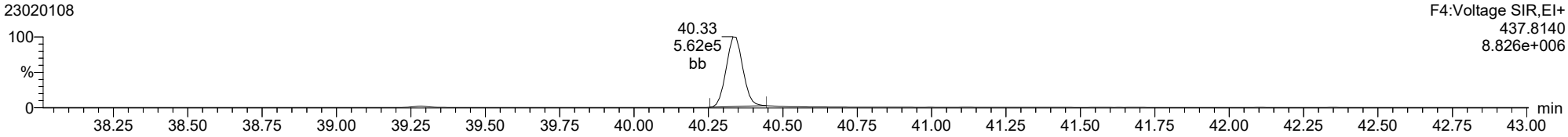
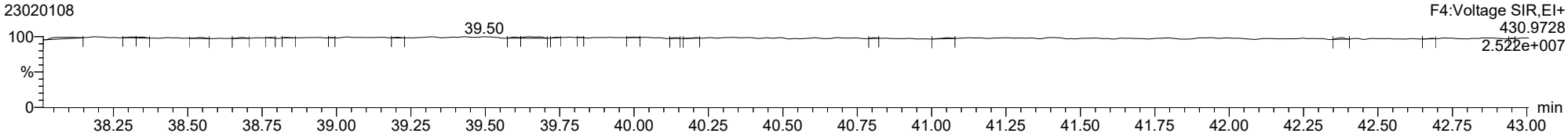


FUNCTION4 PFK



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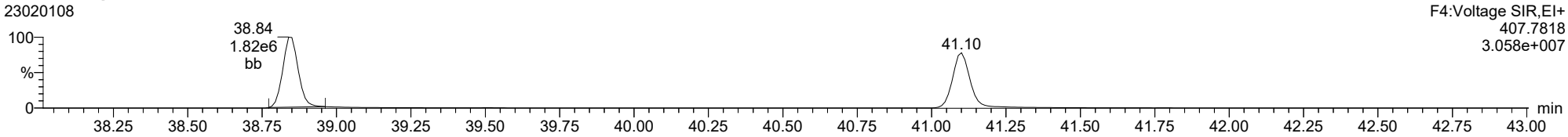

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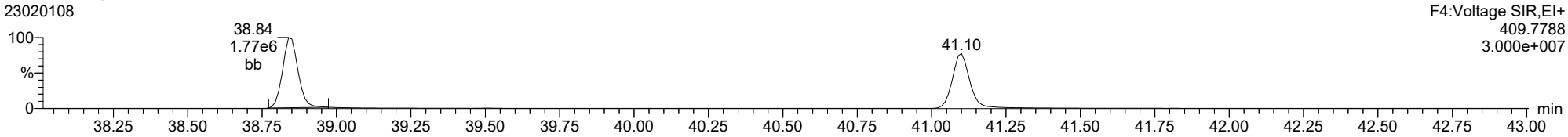

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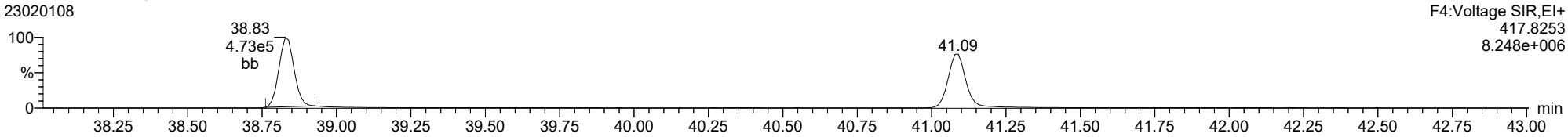

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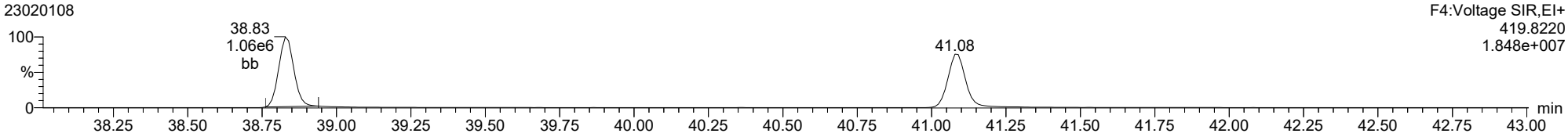

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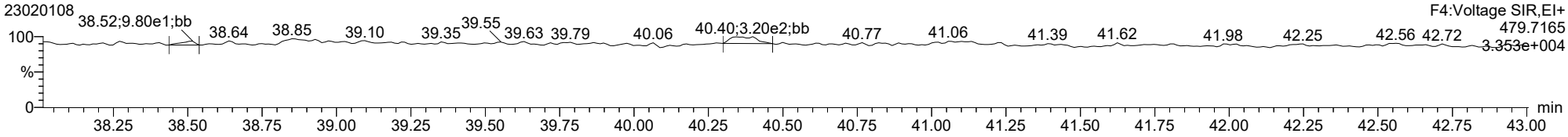

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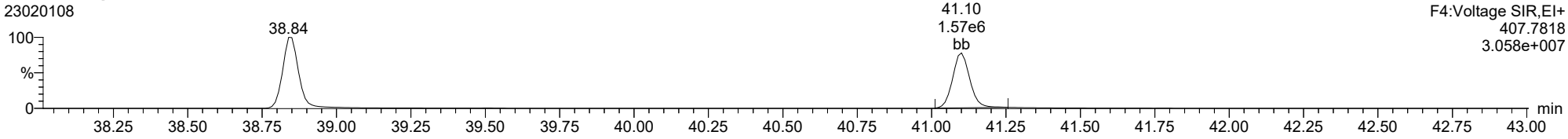

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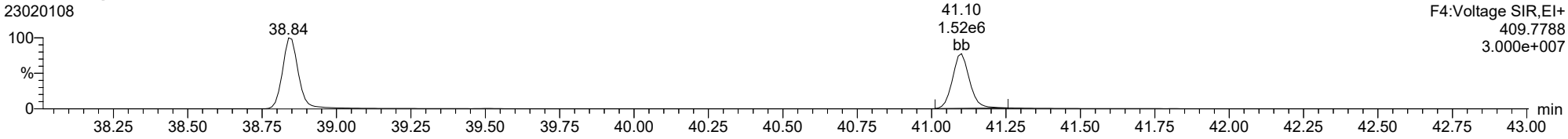

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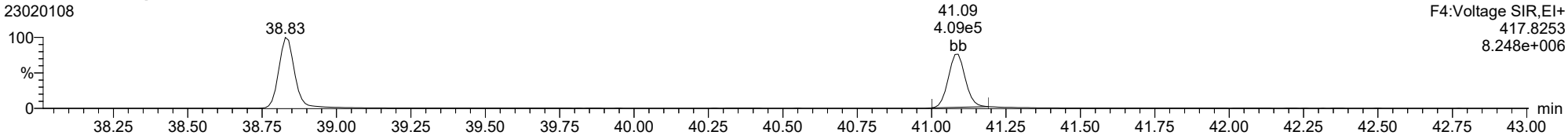

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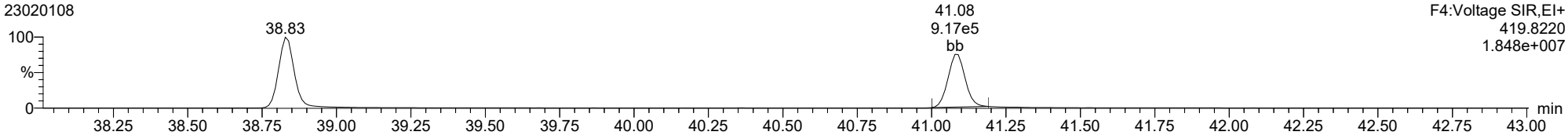
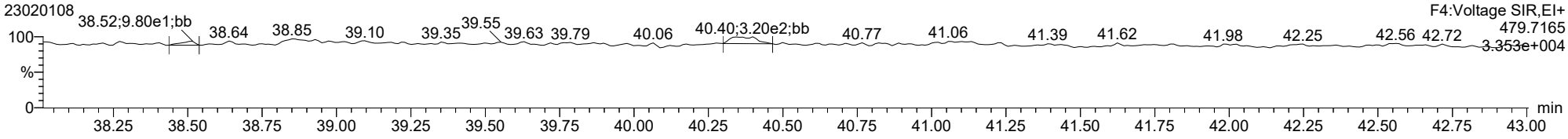


FUNCTION4 NCDPE



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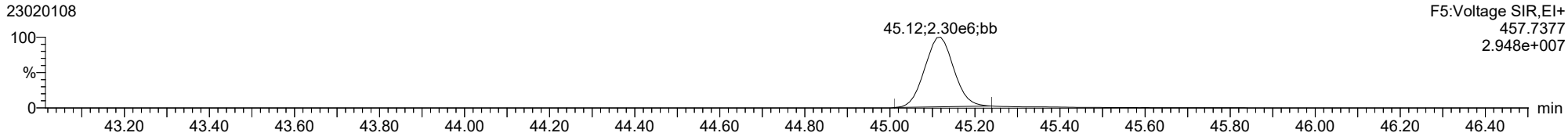

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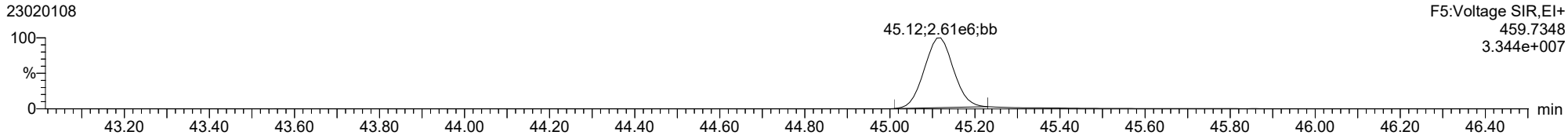

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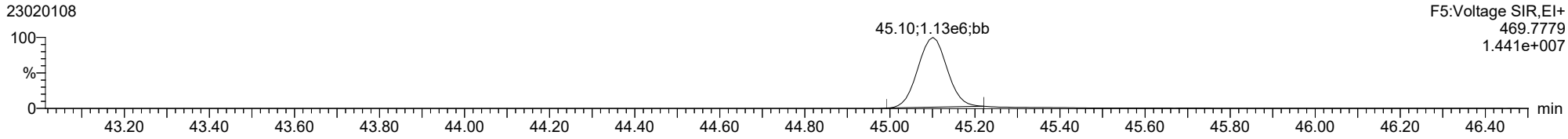

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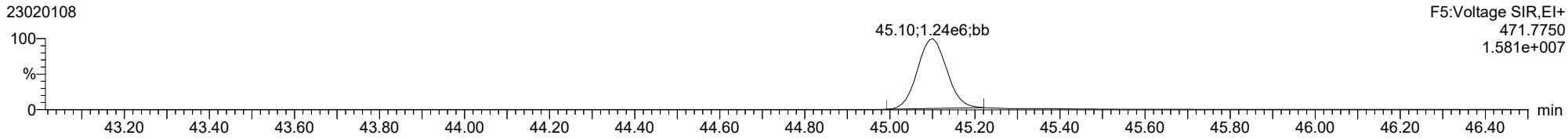

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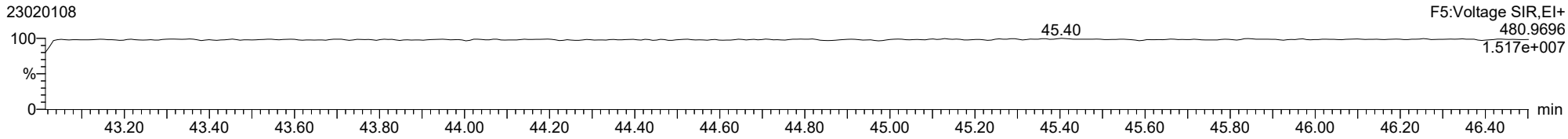

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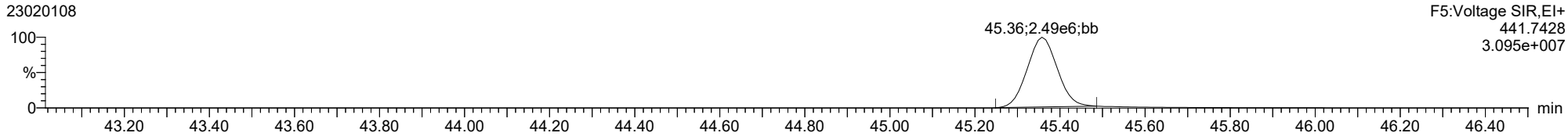
Printed: Friday, February 03, 2023 10:37:53 Pacific Standard Time

ID: CS4CR, Name: 23020108, Date: 01-Feb-2023, Time: 18:45:20, Conditions: AUTOSPEC01, User: pk

OCDF



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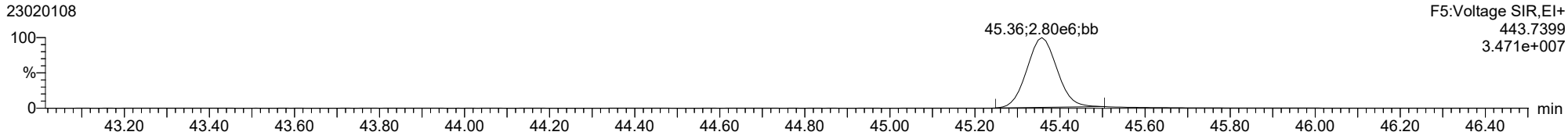
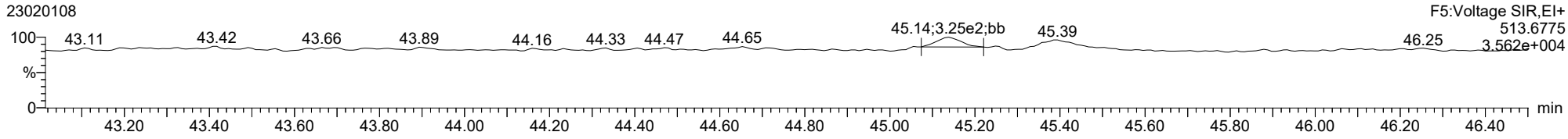


FUNCTION5 DCDPE



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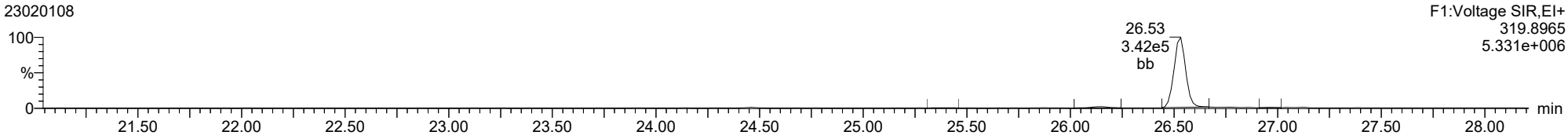
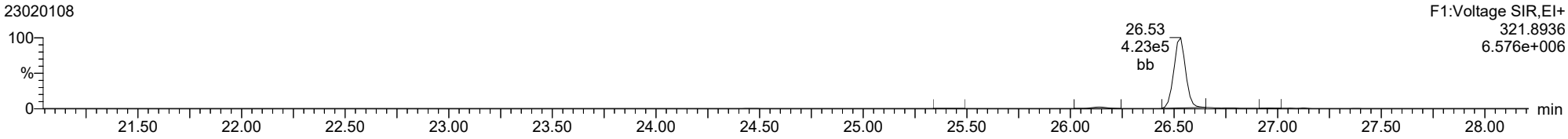
Total-tetradioxins



Total-tetradioxins



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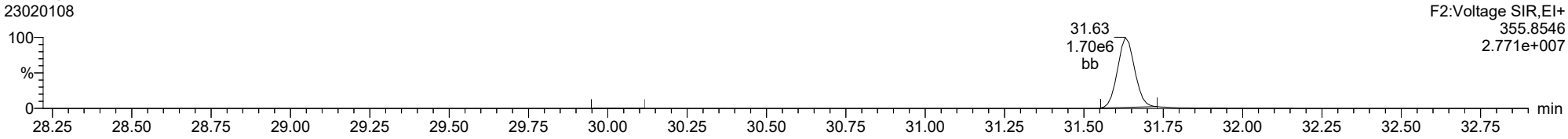

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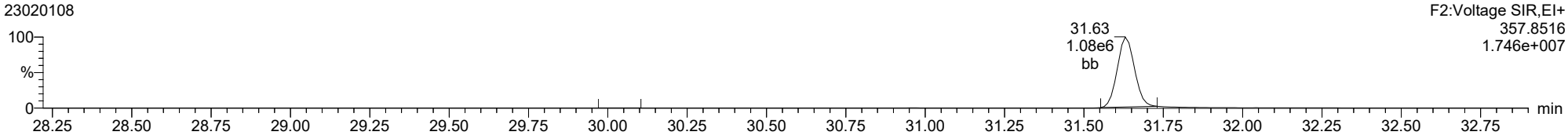

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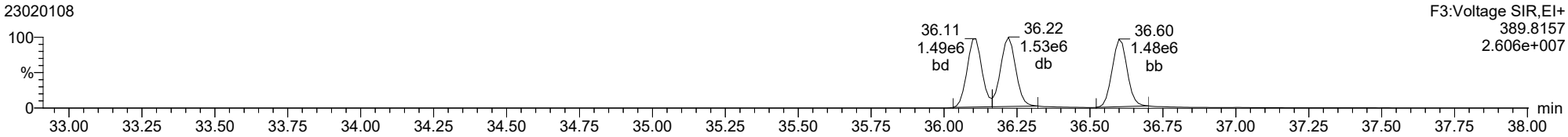
Total-hexadioxins



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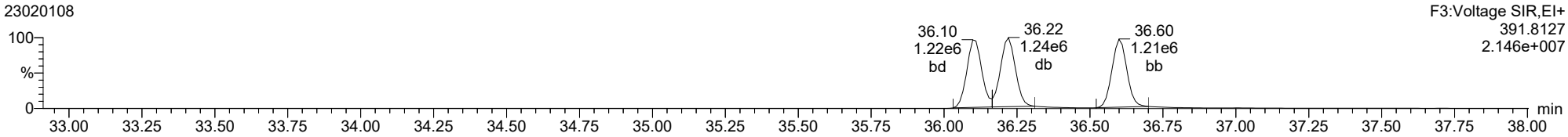

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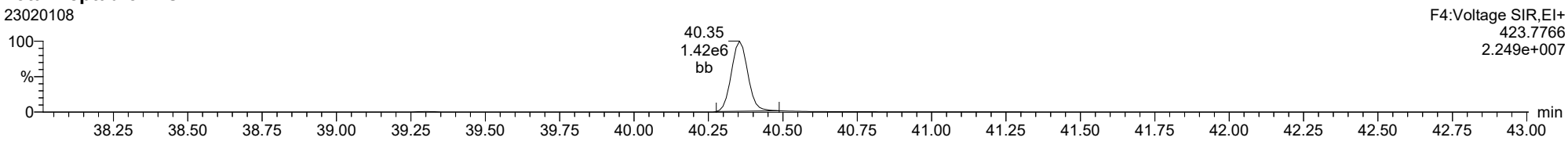

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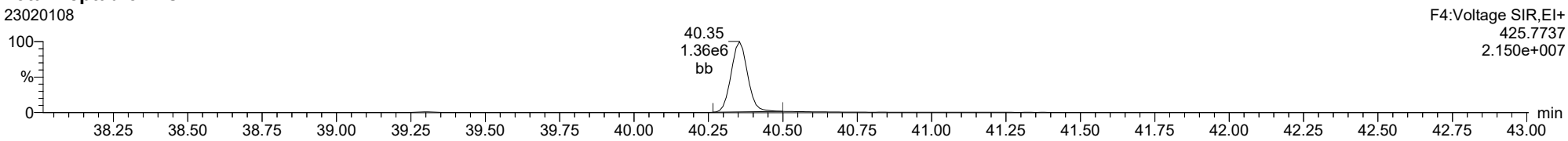

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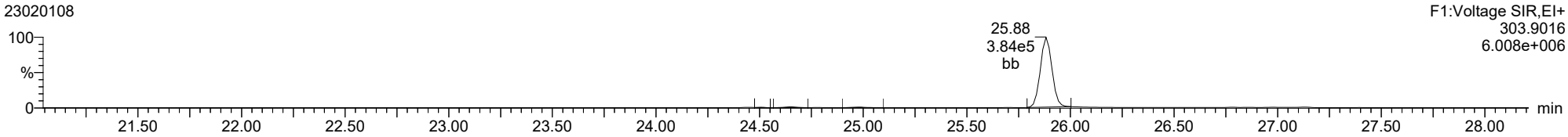
Total-tetrafurans



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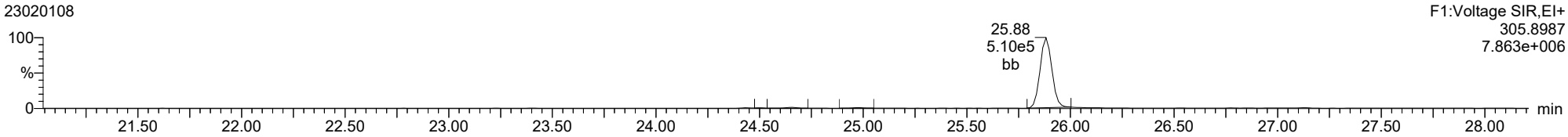

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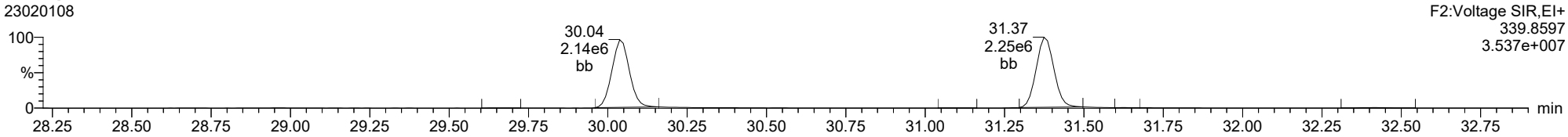

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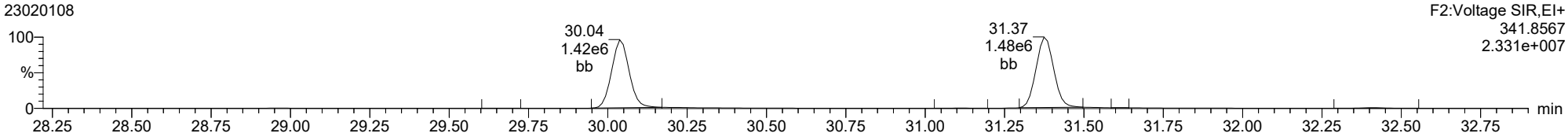

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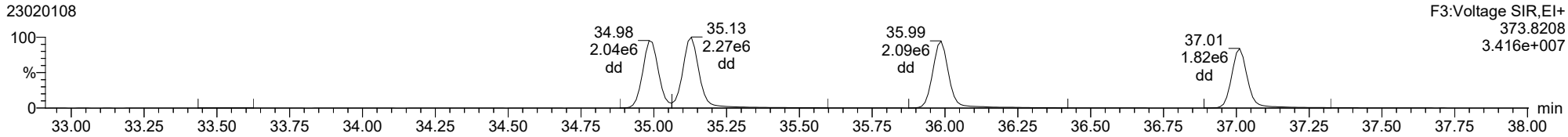
Total-hexafurans



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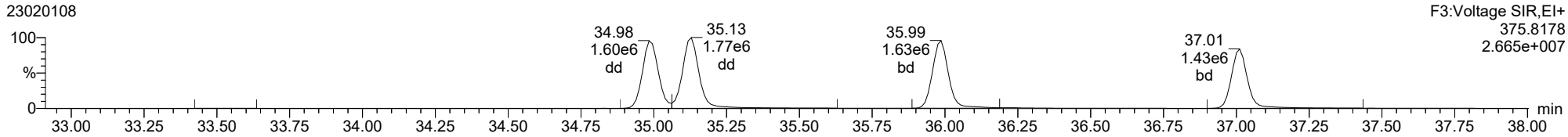
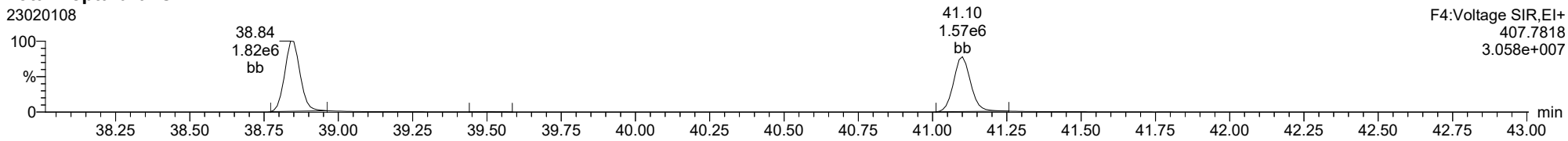
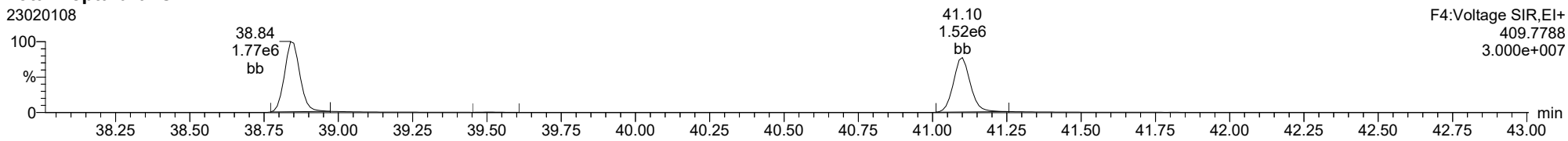


Total-heptafurans



Total-heptafurans



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Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: 03 Feb 2023 10:33:40

ID: CS5CR, Name: 23020109, Date: 01-Feb-2023, Time: 19:34:25, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.897	1.001	1.902e6	2.502e6	0.876	0.760	0.770	2083	2633	2.83e7	3.68e7	13592.2	13978.0	NO	bb	bb	198.739
12378-PeCDF	30.049	1.000	1.205e7	7.874e6	0.845	1.531	1.550	7373	5488	1.93e8	1.26e8	26224.5	23031.6	NO	bb	bb	994.981
23478-PeCDF	31.386	1.000	1.269e7	8.370e6	0.911	1.517	1.550	7373	5488	2.06e8	1.36e8	27965.2	24705.2	NO	bb	bb	1016.382
123478-HxCDF	34.995	1.000	1.141e7	8.950e6	1.182	1.275	1.240	3920	5169	1.84e8	1.47e8	46993.0	28370.7	NO	dd	dd	1029.340
234678-HxCDF	35.998	1.001	1.171e7	9.171e6	1.229	1.276	1.240	3920	5169	1.90e8	1.49e8	48596.8	28890.8	NO	dd	dd	1009.446
123678-HxCDF	35.140	1.001	1.235e7	9.894e6	1.248	1.248	1.240	3920	5169	1.94e8	1.54e8	49388.8	29696.3	NO	dd	dd	1025.687
123789-HxCDF	37.023	1.001	1.031e7	8.091e6	1.187	1.275	1.240	3920	5169	1.66e8	1.30e8	42476.6	25233.9	NO	bd	bd	998.443
1234678-HpCDF	38.850	1.000	1.032e7	1.012e7	1.204	1.019	1.050	8904	8155	1.75e8	1.74e8	19676.2	21311.7	NO	bb	bb	964.735
1234789-HpCDF	41.112	1.000	8.967e6	8.709e6	1.165	1.030	1.050	8904	8155	1.36e8	1.32e8	15298.2	16219.3	NO	bb	bb	993.722
OCDF	45.375	1.006	1.493e7	1.667e7	1.186	0.896	0.890	4510	4269	1.90e8	2.12e8	42161.0	49693.7	NO	bb	bb	1895.001
2378-TCDD	26.532	1.001	1.752e6	2.174e6	1.236	0.806	0.770	1459	2196	2.70e7	3.36e7	18498.5	15304.9	NO	bb	bb	198.710
12378-PeCDD	31.642	1.000	9.606e6	6.125e6	1.087	1.568	1.550	3423	1668	1.56e8	9.91e7	45448.5	59405.3	NO	bb	bb	1009.559
123478-HxCDD	36.120	1.001	8.528e6	7.016e6	0.987	1.215	1.240	3213	2854	1.40e8	1.15e8	43594.1	40358.9	NO	bd	bd	1032.837
123678-HxCDD	36.232	1.000	8.754e6	7.068e6	1.021	1.239	1.240	3213	2854	1.51e8	1.23e8	47081.5	43211.8	NO	db	db	969.556
123789-HxCDD	36.611	1.011	8.604e6	7.092e6	0.985	1.213	1.240	3213	2854	1.49e8	1.23e8	46396.6	43264.5	NO	bb	bb	1019.817
1234678-HpCDD	40.365	1.001	8.084e6	7.725e6	1.253	1.046	1.050	4704	6048	1.30e8	1.24e8	27631.4	20454.3	NO	bb	bb	955.606
OCDD	45.138	1.000	1.379e7	1.563e7	1.103	0.882	0.890	4246	3833	1.77e8	2.00e8	41633.2	52271.8	NO	bb	bb	1898.324
13C-2378-TCDF	25.867	1.007	1.117e6	1.412e6	1.768	0.791	0.770	2137	1536	1.68e7	2.15e7	7867.7	13974.0	NO	bb	bb	104.652
13C-12378-PeCDF	30.037	1.169	1.439e6	9.319e5	1.527	1.544	1.550	3190	2679	2.23e7	1.46e7	6993.2	5456.9	NO	bb	bb	113.578
13C-23478-PeCDF	31.375	1.221	1.384e6	8.910e5	1.466	1.553	1.550	3190	2679	2.11e7	1.37e7	6621.6	5099.2	NO	bb	bb	113.466
13C-123478-HxCDF	34.984	0.956	5.247e5	1.149e6	1.054	0.456	0.510	2046	3816	8.96e6	1.85e7	4377.9	4858.6	NO	bb	bd	95.236
13C-123678-HxCDF	35.118	0.960	5.447e5	1.193e6	1.080	0.456	0.510	2046	3816	9.54e6	1.96e7	4663.8	5131.1	NO	bb	db	96.456
13C-234678-HxCDF	35.976	0.983	5.724e5	1.111e6	1.014	0.515	0.510	2046	3816	9.48e6	1.86e7	4633.3	4871.3	NO	bb	bb	99.457
13C-123789-HxCDF	37.001	1.011	5.244e5	1.029e6	0.928	0.510	0.510	2046	3816	8.87e6	1.74e7	4335.4	4558.1	NO	bb	bb	100.353
13C-1234678-HpCDF	38.839	1.061	5.492e5	1.210e6	1.036	0.454	0.440	2607	3522	9.31e6	2.08e7	3570.6	5900.4	NO	bb	bb	101.771
13C-1234789-HpCDF	41.100	1.123	4.687e5	1.058e6	0.905	0.443	0.440	2607	3522	6.97e6	1.56e7	2673.2	4442.5	NO	bb	bb	101.106
13C-1234-TCDD	25.700	0.000	6.087e5	7.585e5	1.000	0.803	0.770	1970	1516	9.39e6	1.18e7	4765.4	7760.6	NO	bb	bb	100.000
13C-2378-TCDD	26.517	1.032	7.055e5	8.929e5	1.103	0.790	0.770	1970	1516	1.10e7	1.38e7	5597.9	9134.2	NO	bb	bb	106.005
13C-12378-PeCDD	31.631	1.231	8.888e5	5.452e5	0.914	1.630	1.550	1596	1437	1.37e7	8.34e6	8557.4	5803.5	NO	bb	bb	114.739
13C-123478-HxCDD	36.098	0.986	8.648e5	6.600e5	0.933	1.310	1.240	2021	1546	1.43e7	1.10e7	7083.3	7089.6	NO	bd	bd	97.968
13C-123678-HxCDD	36.221	0.990	8.909e5	7.079e5	0.965	1.258	1.240	2021	1546	1.49e7	1.18e7	7371.3	7606.4	NO	db	db	99.340
13C-1234678-HpCDD	40.343	1.102	6.795e5	6.413e5	0.782	1.059	1.050	2204	1955	1.08e7	1.02e7	4901.5	5191.4	NO	bb	bb	101.235
13C-OCDD	45.119	1.233	1.338e6	1.473e6	0.788	0.908	0.890	3227	1633	1.70e7	1.87e7	5253.8	11468.7	NO	bb	bb	213.757
13C-123789-HxCDD	36.600	0.000	9.379e5	7.305e5	1.000	1.284	1.240	2021	1546	1.55e7	1.24e7	7683.2	7996.3	NO	bb	bb	100.000
37CL-2378-TCDD	26.532	1.032	3.390e6		1.233			2288		5.24e7		22881.9			bb		201.044

Dataset: T:\Autospec\Processed Data Batch\230201ICIH.qld
Last Altered: Friday, February 03, 2023 10:33:40 Pacific Standard Time
Printed: Friday, February 03, 2023 10:38:07 Pacific Standard Time

ID: CS5CR, Name: 23020109, Date: 01-Feb-2023, Time: 19:34:25, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					1.064		0.770	2083	2633								
1289-TCDF					0.858		0.770	2083	2633								
13468-PECDF					1.013		1.550	1030	1210								
12389-PECDF					0.844		1.550	7373	5488								
123468-HXCDF					1.197		1.240	3920	5169								
1368-TCDD					1.084		0.770	1459	2196								
1289-TCDD					0.975		0.770	1459	2196								
12479-PECDD					1.837		1.550	3423	1668								
12389-PECDD					1.252		1.550	3423	1668								
124679-HXCDD					1.033		1.240	3213	2854								
1234679-HPCDD					1.286		1.050	4704	6048								
Total-tetrafurans			1.936e6		0.933			2083		2.88e7							202.080
Total-penta1			0.000e0					1030		0.00e0							
Total-pentafurans			2.494e7		0.866			7373		4.02e8							2027.255
Total-hexafurans			4.602e7		1.208			3920		7.37e8							4083.100
Total-heptafurans			1.932e7		1.185			8904		3.12e8							1962.233
Total-Furans			1.071e8		1.067			2083		1.67e9							10169.669
Total-tetradioxins			1.793e6		1.099			1459		2.75e7							203.813
Total-pentadioxins			9.627e6		1.392			3423		1.56e8							1011.307
Total-hexadioxins			2.592e7		1.007			3213		4.41e8							3025.757
Total-heptadioxins			8.084e6		1.269			4704		1.30e8							955.606
Total-Dioxins			5.921e7		1.165			1459		9.31e8							7094.807
Total-TEQ			1.664e8					1459		2.60e9							17264.476
FUNCTION1 PFK			2.029e7					574211		2.20e8							
FUNCTION2 PFK			0.000e0					188547		0.00e0							
FUNCTION3 PFK			1.011e6					450058		2.54e7							0.000
FUNCTION4 PFK			3.839e5					271819		2.65e6							
FUNCTION5 PFK			1.416e4					194883		8.19e5							
FUNCTION1 HXCD...			1.885e3					653		2.55e4							0.000
FUNCTION1 HPCD...			1.625e3					761		2.22e4							0.000
FUNCTION2 HPCD...			1.554e4					835		2.29e5							0.000
FUNCTION3 OCDPE			7.873e3					764		8.87e4							0.000
FUNCTION4 NCDPE			2.525e3					778		3.44e4							0.000
FUNCTION5 DCDPE			4.222e3					726		3.75e4							0.000

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: 03 Feb 2023 10:33:40

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	26.53	2.226e3	3.396e3	0.933	0.66	0.77	11.6	YES	NO	bb	bd	0.238
2	2378-TCDF	25.90	1.902e6	2.502e6	0.876	0.76	0.77	13592.2	YES	NO	bb	bb	198.739
3	Total-tetrafurans	25.72	1.842e3	2.753e3	0.933	0.67	0.77	10.6	YES	NO	bb	bb	0.195
4	Total-tetrafurans	24.97	1.224e4	1.625e4	0.933	0.75	0.77	91.6	YES	NO	db	dd	1.208
5	Total-tetrafurans	24.66	1.707e4	2.304e4	0.933	0.74	0.77	124.7	YES	NO	bd	dd	1.700

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	28.97	3.816e4	2.465e4	0.866	1.55	1.55	67.9	YES	NO	bb	bb	3.121
2	Total-pentafurans	28.68	1.252e3	7.687e2	0.866	1.63	1.55	2.7	NO	NO	bb	bb	0.100
3	Total-pentafurans	31.64	2.450e4	1.763e4	0.866	1.39	1.55	52.8	YES	NO	bb	bb	2.093
4	23478-PeCDF	31.39	1.269e7	8.370e6	0.911	1.52	1.55	27965.2	YES	NO	bb	bb	1016.3...
5	Total-pentafurans	31.12	1.334e4	8.233e3	0.866	1.62	1.55	28.5	YES	NO	bb	bb	1.072
6	Total-pentafurans	30.35	1.243e4	7.715e3	0.866	1.61	1.55	30.7	YES	NO	bb	bb	1.001
7	12378-PeCDF	30.05	1.205e7	7.874e6	0.845	1.53	1.55	26224.5	YES	NO	bb	bb	994.981
8	Total-pentafurans	29.76	8.085e3	5.894e3	0.866	1.37	1.55	15.9	YES	NO	db	db	0.695
9	Total-pentafurans	29.68	6.865e3	3.988e3	0.866	1.72	1.55	14.4	YES	NO	bd	bd	0.539
10	Total-pentafurans	32.42	8.774e4	5.860e4	0.866	1.50	1.55	183.2	YES	NO	bb	bd	7.271

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HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123478-HxCDF	35.00	1.141e7	8.950e6	1.182	1.28	1.24	46993.0	YES	NO	dd	dd	1029.3...
2	Total-hexafurans	34.84	1.696e4	1.325e4	1.208	1.28	1.24	72.5	YES	NO	bd	bd	1.504
3	Total-hexafurans	33.55	9.817e3	7.389e3	1.208	1.33	1.24	34.0	YES	NO	dd	db	0.857
4	123789-HxCDF	37.02	1.031e7	8.091e6	1.187	1.27	1.24	42476.6	YES	NO	bd	bd	998.443
5	Total-hexafurans	36.62	3.175e4	2.702e4	1.208	1.17	1.24	85.2	YES	NO	dd	db	2.926
6	Total-hexafurans	36.53	6.162e3	4.947e3	1.208	1.25	1.24	37.3	YES	NO	dd	dd	0.553
7	Total-hexafurans	36.23	1.664e5	1.218e5	1.208	1.37	1.24	331.3	YES	NO	dd	dd	14.345
8	234678-HxCDF	36.00	1.171e7	9.171e6	1.229	1.28	1.24	48596.8	YES	NO	dd	dd	1009.4...
9	123678-HxCDF	35.14	1.235e7	9.894e6	1.248	1.25	1.24	49388.8	YES	NO	dd	dd	1025.6...

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.11	8.967e6	8.709e6	1.165	1.03	1.05	15298.2	YES	NO	bb	bb	993.722
2	Total-heptafurans	40.38	1.043e4	1.014e4	1.185	1.03	1.05	14.2	YES	NO	bb	bb	1.057
3	Total-heptafurans	39.52	2.112e4	2.199e4	1.185	0.96	1.05	42.5	YES	NO	bb	bb	2.215
4	Total-heptafurans	39.26	5.058e3	4.749e3	1.185	1.07	1.05	11.5	YES	NO	bb	bb	0.504
5	1234678-HpCDF	38.85	1.032e7	1.012e7	1.204	1.02	1.05	19676.2	YES	NO	bb	bb	964.735

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	26.53	2.226e3	3.396e3	0.933	0.66	0.77	11.6	YES	NO	bb	bd	0.238
2	2378-TCDF	25.90	1.902e6	2.502e6	0.876	0.76	0.77	13592.2	YES	NO	bb	bb	198.739
3	Total-tetrafurans	25.72	1.842e3	2.753e3	0.933	0.67	0.77	10.6	YES	NO	bb	bb	0.195
4	Total-tetrafurans	24.97	1.224e4	1.625e4	0.933	0.75	0.77	91.6	YES	NO	db	dd	1.208
5	Total-tetrafurans	24.66	1.707e4	2.304e4	0.933	0.74	0.77	124.7	YES	NO	bd	dd	1.700
6	Total-pentafurans	28.97	3.816e4	2.465e4	0.866	1.55	1.55	67.9	YES	NO	bb	bb	3.121
7	Total-pentafurans	28.68	1.252e3	7.687e2	0.866	1.63	1.55	2.7	NO	NO	bb	bb	0.100
8	Total-pentafurans	31.64	2.450e4	1.763e4	0.866	1.39	1.55	52.8	YES	NO	bb	bb	2.093
9	23478-PeCDF	31.39	1.269e7	8.370e6	0.911	1.52	1.55	27965.2	YES	NO	bb	bb	1016.3...
10	Total-pentafurans	31.12	1.334e4	8.233e3	0.866	1.62	1.55	28.5	YES	NO	bb	bb	1.072
11	Total-pentafurans	30.35	1.243e4	7.715e3	0.866	1.61	1.55	30.7	YES	NO	bb	bb	1.001
12	12378-PeCDF	30.05	1.205e7	7.874e6	0.845	1.53	1.55	26224.5	YES	NO	bb	bb	994.981
13	Total-pentafurans	29.76	8.085e3	5.894e3	0.866	1.37	1.55	15.9	YES	NO	db	db	0.695
14	Total-pentafurans	29.68	6.865e3	3.988e3	0.866	1.72	1.55	14.4	YES	NO	bd	bd	0.539
15	Total-pentafurans	32.42	8.774e4	5.860e4	0.866	1.50	1.55	183.2	YES	NO	bb	bd	7.271
16	123478-HxCDF	35.00	1.141e7	8.950e6	1.182	1.28	1.24	46993.0	YES	NO	dd	dd	1029.3...
17	Total-hexafurans	34.84	1.696e4	1.325e4	1.208	1.28	1.24	72.5	YES	NO	bd	bd	1.504
18	Total-hexafurans	33.55	9.817e3	7.389e3	1.208	1.33	1.24	34.0	YES	NO	dd	db	0.857
19	123789-HxCDF	37.02	1.031e7	8.091e6	1.187	1.27	1.24	42476.6	YES	NO	bd	bd	998.443
20	Total-hexafurans	36.62	3.175e4	2.702e4	1.208	1.17	1.24	85.2	YES	NO	dd	db	2.926
21	Total-hexafurans	36.53	6.162e3	4.947e3	1.208	1.25	1.24	37.3	YES	NO	dd	dd	0.553
22	Total-hexafurans	36.23	1.664e5	1.218e5	1.208	1.37	1.24	331.3	YES	NO	dd	dd	14.345
23	234678-HxCDF	36.00	1.171e7	9.171e6	1.229	1.28	1.24	48596.8	YES	NO	dd	dd	1009.4...
24	123678-HxCDF	35.14	1.235e7	9.894e6	1.248	1.25	1.24	49388.8	YES	NO	dd	dd	1025.6...
25	1234789-HpCDF	41.11	8.967e6	8.709e6	1.165	1.03	1.05	15298.2	YES	NO	bb	bb	993.722
26	Total-heptafurans	40.38	1.043e4	1.014e4	1.185	1.03	1.05	14.2	YES	NO	bb	bb	1.057
27	Total-heptafurans	39.52	2.112e4	2.199e4	1.185	0.96	1.05	42.5	YES	NO	bb	bb	2.215
28	Total-heptafurans	39.26	5.058e3	4.749e3	1.185	1.07	1.05	11.5	YES	NO	bb	bb	0.504
29	1234678-HpCDF	38.85	1.032e7	1.012e7	1.204	1.02	1.05	19676.2	YES	NO	bb	bb	964.735
30	OCDF	45.38	1.493e7	1.667e7	1.186	0.90	0.89	42161.0	YES	NO	bb	bb	1895.0...

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.53	1.752e6	2.174e6	1.236	0.81	0.77	18498.5	YES	NO	bb	bb	198.710
2	Total-tetradioxins	26.15	3.848e4	4.731e4	1.099	0.81	0.77	307.2	YES	NO	bb	bb	4.885
3	Total-tetradioxins	25.40	1.655e3	2.163e3	1.099	0.76	0.77	18.7	YES	NO	bb	bb	0.217

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PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.64	9.606e6	6.125e6	1.087	1.57	1.55	45448.5	YES	NO	bb	bb	1009.5...
2	Total-pentadioxins	30.97	1.150e4	6.979e3	1.392	1.65	1.55	51.3	YES	NO	bb	bd	0.925
3	Total-pentadioxins	30.41	1.660e3	1.100e3	1.392	1.51	1.55	6.6	YES	NO	db	db	0.138
4	Total-pentadioxins	30.05	7.800e3	5.854e3	1.392	1.33	1.55	33.3	YES	NO	bd	bd	0.684

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexadioxins	34.88	8.900e2	7.985e2	1.007	1.11	1.24	4.5	YES	NO	bd	bd	0.107
2	Total-hexadioxins	37.15	6.920e2	5.023e2	1.007	1.38	1.24	4.7	YES	NO	db	bb	0.076
3	Total-hexadioxins	37.02	2.963e4	2.325e4	1.007	1.27	1.24	128.2	YES	NO	bd	bb	3.364
4	123789-HxCDD	36.61	8.604e6	7.092e6	0.985	1.21	1.24	46396.6	YES	NO	bb	bb	1019.8...
5	123678-HxCDD	36.23	8.754e6	7.068e6	1.021	1.24	1.24	47081.5	YES	NO	db	db	969.556
6	123478-HxCDD	36.12	8.528e6	7.016e6	0.987	1.22	1.24	43594.1	YES	NO	bd	bd	1032.8...

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.37	8.084e6	7.725e6	1.253	1.05	1.05	27631.4	YES	NO	bb	bb	955.606

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.53	1.752e6	2.174e6	1.236	0.81	0.77	18498.5	YES	NO	bb	bb	198.710
2	Total-tetradioxins	26.15	3.848e4	4.731e4	1.099	0.81	0.77	307.2	YES	NO	bb	bb	4.885
3	Total-tetradioxins	25.40	1.655e3	2.163e3	1.099	0.76	0.77	18.7	YES	NO	bb	bb	0.217
4	12378-PeCDD	31.64	9.606e6	6.125e6	1.087	1.57	1.55	45448.5	YES	NO	bb	bb	1009.5...
5	Total-pentadioxins	30.97	1.150e4	6.979e3	1.392	1.65	1.55	51.3	YES	NO	bb	bd	0.925
6	Total-pentadioxins	30.41	1.660e3	1.100e3	1.392	1.51	1.55	6.6	YES	NO	db	db	0.138
7	Total-pentadioxins	30.05	7.800e3	5.854e3	1.392	1.33	1.55	33.3	YES	NO	bd	bd	0.684
8	Total-hexadioxins	34.88	8.900e2	7.985e2	1.007	1.11	1.24	4.5	YES	NO	bd	bd	0.107
9	Total-hexadioxins	37.15	6.920e2	5.023e2	1.007	1.38	1.24	4.7	YES	NO	db	bb	0.076
10	Total-hexadioxins	37.02	2.963e4	2.325e4	1.007	1.27	1.24	128.2	YES	NO	bd	bb	3.364
11	123789-HxCDD	36.61	8.604e6	7.092e6	0.985	1.21	1.24	46396.6	YES	NO	bb	bb	1019.8...
12	123678-HxCDD	36.23	8.754e6	7.068e6	1.021	1.24	1.24	47081.5	YES	NO	db	db	969.556
13	123478-HxCDD	36.12	8.528e6	7.016e6	0.987	1.22	1.24	43594.1	YES	NO	bd	bd	1032.8...
14	1234678-HpCDD	40.37	8.084e6	7.725e6	1.253	1.05	1.05	27631.4	YES	NO	bb	bb	955.606
15	OCDD	45.14	1.379e7	1.563e7	1.103	0.88	0.89	41633.2	YES	NO	bb	bb	1898.3...

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	26.53	2.226e3	3.396e3	0.933	0.66	0.77	11.6	YES	NO	bb	bd	0.238
2	2378-TCDF	25.90	1.902e6	2.502e6	0.876	0.76	0.77	13592.2	YES	NO	bb	bb	198.739
3	Total-tetrafurans	25.72	1.842e3	2.753e3	0.933	0.67	0.77	10.6	YES	NO	bb	bb	0.195
4	Total-tetrafurans	24.97	1.224e4	1.625e4	0.933	0.75	0.77	91.6	YES	NO	db	dd	1.208
5	Total-tetrafurans	24.66	1.707e4	2.304e4	0.933	0.74	0.77	124.7	YES	NO	bd	dd	1.700
6	Total-pentafurans	28.97	3.816e4	2.465e4	0.866	1.55	1.55	67.9	YES	NO	bb	bb	3.121
7	Total-pentafurans	28.68	1.252e3	7.687e2	0.866	1.63	1.55	2.7	NO	NO	bb	bb	0.100
8	Total-pentafurans	31.64	2.450e4	1.763e4	0.866	1.39	1.55	52.8	YES	NO	bb	bb	2.093
9	23478-PeCDF	31.39	1.269e7	8.370e6	0.911	1.52	1.55	27965.2	YES	NO	bb	bb	1016.3...
10	Total-pentafurans	31.12	1.334e4	8.233e3	0.866	1.62	1.55	28.5	YES	NO	bb	bb	1.072
11	Total-pentafurans	30.35	1.243e4	7.715e3	0.866	1.61	1.55	30.7	YES	NO	bb	bb	1.001
12	12378-PeCDF	30.05	1.205e7	7.874e6	0.845	1.53	1.55	26224.5	YES	NO	bb	bb	994.981
13	Total-pentafurans	29.76	8.085e3	5.894e3	0.866	1.37	1.55	15.9	YES	NO	db	db	0.695
14	Total-pentafurans	29.68	6.865e3	3.988e3	0.866	1.72	1.55	14.4	YES	NO	bd	bd	0.539
15	Total-pentafurans	32.42	8.774e4	5.860e4	0.866	1.50	1.55	183.2	YES	NO	bb	bd	7.271
16	123478-HxCDF	35.00	1.141e7	8.950e6	1.182	1.28	1.24	46993.0	YES	NO	dd	dd	1029.3...
17	Total-hexafurans	34.84	1.696e4	1.325e4	1.208	1.28	1.24	72.5	YES	NO	bd	bd	1.504
18	Total-hexafurans	33.55	9.817e3	7.389e3	1.208	1.33	1.24	34.0	YES	NO	dd	db	0.857
19	123789-HxCDF	37.02	1.031e7	8.091e6	1.187	1.27	1.24	42476.6	YES	NO	bd	bd	998.443
20	Total-hexafurans	36.62	3.175e4	2.702e4	1.208	1.17	1.24	85.2	YES	NO	dd	db	2.926
21	Total-hexafurans	36.53	6.162e3	4.947e3	1.208	1.25	1.24	37.3	YES	NO	dd	dd	0.553
22	Total-hexafurans	36.23	1.664e5	1.218e5	1.208	1.37	1.24	331.3	YES	NO	dd	dd	14.345
23	234678-HxCDF	36.00	1.171e7	9.171e6	1.229	1.28	1.24	48596.8	YES	NO	dd	dd	1009.4...
24	123678-HxCDF	35.14	1.235e7	9.894e6	1.248	1.25	1.24	49388.8	YES	NO	dd	dd	1025.6...
25	1234789-HpCDF	41.11	8.967e6	8.709e6	1.165	1.03	1.05	15298.2	YES	NO	bb	bb	993.722
26	Total-heptafurans	40.38	1.043e4	1.014e4	1.185	1.03	1.05	14.2	YES	NO	bb	bb	1.057
27	Total-heptafurans	39.52	2.112e4	2.199e4	1.185	0.96	1.05	42.5	YES	NO	bb	bb	2.215
28	Total-heptafurans	39.26	5.058e3	4.749e3	1.185	1.07	1.05	11.5	YES	NO	bb	bb	0.504
29	1234678-HpCDF	38.85	1.032e7	1.012e7	1.204	1.02	1.05	19676.2	YES	NO	bb	bb	964.735
30	OCDF	45.38	1.493e7	1.667e7	1.186	0.90	0.89	42161.0	YES	NO	bb	bb	1895.0...
31	2378-TCDD	26.53	1.752e6	2.174e6	1.236	0.81	0.77	18498.5	YES	NO	bb	bb	198.710
32	Total-tetradioxins	26.15	3.848e4	4.731e4	1.099	0.81	0.77	307.2	YES	NO	bb	bb	4.885
33	Total-tetradioxins	25.40	1.655e3	2.163e3	1.099	0.76	0.77	18.7	YES	NO	bb	bb	0.217
34	12378-PeCDD	31.64	9.606e6	6.125e6	1.087	1.57	1.55	45448.5	YES	NO	bb	bb	1009.5...
35	Total-pentadioxins	30.97	1.150e4	6.979e3	1.392	1.65	1.55	51.3	YES	NO	bb	bd	0.925
36	Total-pentadioxins	30.41	1.660e3	1.100e3	1.392	1.51	1.55	6.6	YES	NO	db	db	0.138
37	Total-pentadioxins	30.05	7.800e3	5.854e3	1.392	1.33	1.55	33.3	YES	NO	bd	bd	0.684

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-hexadioxins	34.88	8.900e2	7.985e2	1.007	1.11	1.24	4.5	YES	NO	bd	bd	0.107
39	Total-hexadioxins	37.15	6.920e2	5.023e2	1.007	1.38	1.24	4.7	YES	NO	db	bb	0.076
40	Total-hexadioxins	37.02	2.963e4	2.325e4	1.007	1.27	1.24	128.2	YES	NO	bd	bb	3.364
41	123789-HxCDD	36.61	8.604e6	7.092e6	0.985	1.21	1.24	46396.6	YES	NO	bb	bb	1019.8...
42	123678-HxCDD	36.23	8.754e6	7.068e6	1.021	1.24	1.24	47081.5	YES	NO	db	db	969.556
43	123478-HxCDD	36.12	8.528e6	7.016e6	0.987	1.22	1.24	43594.1	YES	NO	bd	bd	1032.8...
44	1234678-HpCDD	40.37	8.084e6	7.725e6	1.253	1.05	1.05	27631.4	YES	NO	bb	bb	955.606
45	OCDD	45.14	1.379e7	1.563e7	1.103	0.88	0.89	41633.2	YES	NO	bb	bb	1898.3...

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	21.86	8.873e5					21.2	YES		dd		
2	FUNCTION1 PFK	21.80	7.665e5					22.5	YES		dd		
3	FUNCTION1 PFK	21.74	1.019e6					23.9	YES		dd		
4	FUNCTION1 PFK	21.59	1.959e6					26.2	YES		dd		
5	FUNCTION1 PFK	21.53	6.962e5					27.3	YES		dd		
6	FUNCTION1 PFK	21.47	1.211e6					28.6	YES		dd		
7	FUNCTION1 PFK	21.41	1.009e6					29.4	YES		dd		
8	FUNCTION1 PFK	21.13	5.872e6					34.2	YES		bd		
9	FUNCTION1 PFK	23.67	5.720e3					0.4	NO		bb		
10	FUNCTION1 PFK	23.28	9.896e3					0.7	NO		bb		
11	FUNCTION1 PFK	23.24	1.090e4					0.7	NO		bb		
12	FUNCTION1 PFK	23.16	1.031e4					0.6	NO		bb		
13	FUNCTION1 PFK	22.96	3.707e4					1.5	NO		db		
14	FUNCTION1 PFK	22.84	1.630e5					3.4	YES		dd		
15	FUNCTION1 PFK	22.72	3.257e5					5.8	YES		dd		
16	FUNCTION1 PFK	22.59	5.378e5					8.3	YES		dd		
17	FUNCTION1 PFK	22.53	8.039e5					8.9	YES		dd		
18	FUNCTION1 PFK	22.37	3.709e5					11.1	YES		dd		
19	FUNCTION1 PFK	22.31	5.024e5					12.0	YES		dd		
20	FUNCTION1 PFK	22.18	9.225e5					14.7	YES		dd		
21	FUNCTION1 PFK	22.12	3.970e5					15.8	YES		dd		
22	FUNCTION1 PFK	22.07	7.082e5					16.9	YES		dd		
23	FUNCTION1 PFK	22.00	6.094e5					18.0	YES		dd		
24	FUNCTION1 PFK	21.94	6.575e5					19.5	YES		dd		
25	FUNCTION1 PFK	26.06	4.194e4					1.5	NO		bb		
26	FUNCTION1 PFK	25.69	3.568e4					1.2	NO		bb		
27	FUNCTION1 PFK	25.56	8.323e3					0.5	NO		bb		
28	FUNCTION1 PFK	25.49	1.374e4					0.7	NO		bb		
29	FUNCTION1 PFK	25.10	2.036e4					1.0	NO		db		
30	FUNCTION1 PFK	25.02	2.247e4					1.0	NO		bd		
31	FUNCTION1 PFK	24.96	3.286e4					1.5	NO		db		
32	FUNCTION1 PFK	24.90	1.152e4					0.7	NO		bd		
33	FUNCTION1 PFK	24.84	1.639e4					1.0	NO		bb		
34	FUNCTION1 PFK	24.78	2.451e4					1.1	NO		db		
35	FUNCTION1 PFK	24.72	2.714e4					1.2	NO		bd		
36	FUNCTION1 PFK	24.55	3.918e3					0.5	NO		bb		
37	FUNCTION1 PFK	24.37	3.551e4					1.1	NO		bb		

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION1 PFK	24.01	2.091e4					0.9	NO		bb		
39	FUNCTION1 PFK	23.87	1.925e4					0.9	NO		db		
40	FUNCTION1 PFK	23.80	1.436e4					0.7	NO		bd		
41	FUNCTION1 PFK	27.74	4.148e4					1.2	NO		bb		
42	FUNCTION1 PFK	27.61	1.687e4					0.9	NO		bb		
43	FUNCTION1 PFK	27.36	2.823e4					1.3	NO		bb		
44	FUNCTION1 PFK	27.23	1.221e4					0.7	NO		bb		
45	FUNCTION1 PFK	27.11	2.196e4					0.8	NO		bb		
46	FUNCTION1 PFK	27.03	4.103e4					1.6	NO		db		
47	FUNCTION1 PFK	26.97	5.610e4					1.7	NO		dd		
48	FUNCTION1 PFK	26.86	5.847e4					1.3	NO		dd		
49	FUNCTION1 PFK	26.79	3.039e4					1.0	NO		bd		
50	FUNCTION1 PFK	26.68	1.065e4					0.6	NO		db		
51	FUNCTION1 PFK	26.64	8.185e3					0.7	NO		bd		
52	FUNCTION1 PFK	26.52	5.718e4					1.5	NO		bb		
53	FUNCTION1 PFK	26.40	1.679e4					0.7	NO		bb		
54	FUNCTION1 PFK	26.32	9.414e3					0.6	NO		bb		
55	FUNCTION1 PFK	26.18	2.178e4					1.0	NO		db		
56	FUNCTION1 PFK	26.14	1.887e4					1.1	NO		bd		
57	FUNCTION1 PFK	27.98	3.090e3					0.4	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	34.39	1.483e4					1.1	NO		db		0.000
2	FUNCTION3 PFK	34.35	2.582e4					1.3	NO		bd		0.000
3	FUNCTION3 PFK	34.26	2.395e4					1.1	NO		bb		0.000
4	FUNCTION3 PFK	34.15	1.551e4					1.0	NO		db		0.000
5	FUNCTION3 PFK	34.09	2.978e3					0.4	NO		bd		0.000
6	FUNCTION3 PFK	33.87	2.703e4					1.3	NO		db		0.000
7	FUNCTION3 PFK	33.76	2.846e4					1.4	NO		dd		0.000
8	FUNCTION3 PFK	33.70	9.928e3					0.9	NO		bd		0.000
9	FUNCTION3 PFK	33.66	2.430e3					0.5	NO		bb		0.000
10	FUNCTION3 PFK	33.47	5.051e4					0.9	NO		db		0.000
11	FUNCTION3 PFK	33.37	2.100e4					1.4	NO		bd		0.000
12	FUNCTION3 PFK	33.17	1.358e4					1.0	NO		db		0.000
13	FUNCTION3 PFK	33.13	8.975e3					0.9	NO		bd		0.000
14	FUNCTION3 PFK	35.80	8.372e3					0.8	NO		bb		0.000
15	FUNCTION3 PFK	35.71	2.156e4					1.3	NO		db		0.000
16	FUNCTION3 PFK	35.67	2.235e4					1.3	NO		bd		0.000
17	FUNCTION3 PFK	35.59	9.805e3					0.8	NO		bb		0.000
18	FUNCTION3 PFK	35.53	4.290e3					0.5	NO		bb		0.000
19	FUNCTION3 PFK	35.33	9.302e3					1.0	NO		db		0.000
20	FUNCTION3 PFK	35.30	1.165e4					1.0	NO		bd		0.000
21	FUNCTION3 PFK	35.25	5.126e3					0.7	NO		bb		0.000
22	FUNCTION3 PFK	35.14	1.556e4					0.8	NO		bb		0.000
23	FUNCTION3 PFK	35.10	5.550e3					0.6	NO		bb		0.000
24	FUNCTION3 PFK	35.06	1.779e3					0.4	NO		bb		0.000
25	FUNCTION3 PFK	34.91	4.171e3					0.5	NO		bb		0.000
26	FUNCTION3 PFK	34.86	1.499e4					1.4	NO		bb		0.000
27	FUNCTION3 PFK	34.81	6.634e3					0.6	NO		bb		0.000
28	FUNCTION3 PFK	34.58	1.500e4					1.1	NO		bb		0.000
29	FUNCTION3 PFK	34.53	1.395e3					0.3	NO		bb		0.000
30	FUNCTION3 PFK	37.08	1.137e4					1.0	NO		dd		0.000
31	FUNCTION3 PFK	36.99	7.110e4					2.2	NO		bd		0.000
32	FUNCTION3 PFK	36.92	2.314e3					0.5	NO		bb		0.000
33	FUNCTION3 PFK	36.88	7.392e3					0.6	NO		db		0.000
34	FUNCTION3 PFK	36.81	7.817e3					0.4	NO		bd		0.000
35	FUNCTION3 PFK	36.77	1.226e4					0.8	NO		bb		0.000
36	FUNCTION3 PFK	36.61	7.220e4					1.7	NO		bb		0.000
37	FUNCTION3 PFK	36.40	2.247e4					1.6	NO		bb		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION3 PFK	36.31	3.432e4					1.8	NO		db		0.000
39	FUNCTION3 PFK	36.24	7.551e4					2.3	NO		dd		0.000
40	FUNCTION3 PFK	36.14	2.231e4					1.5	NO		dd		0.000
41	FUNCTION3 PFK	36.11	4.985e4					2.3	NO		dd		0.000
42	FUNCTION3 PFK	36.04	1.685e4					1.5	NO		dd		0.000
43	FUNCTION3 PFK	36.00	8.077e4					2.9	NO		dd		0.000
44	FUNCTION3 PFK	35.92	1.428e4					1.1	NO		dd		0.000
45	FUNCTION3 PFK	35.89	1.321e4					0.9	NO		bd		0.000
46	FUNCTION3 PFK	37.91	1.145e4					1.0	NO		bb		0.000
47	FUNCTION3 PFK	37.83	2.759e4					1.3	NO		bb		0.000
48	FUNCTION3 PFK	37.75	1.842e3					0.4	NO		bb		0.000
49	FUNCTION3 PFK	37.67	1.331e3					0.3	NO		bb		0.000
50	FUNCTION3 PFK	37.58	1.178e4					0.7	NO		bb		0.000
51	FUNCTION3 PFK	37.52	1.786e3					0.4	NO		bb		0.000
52	FUNCTION3 PFK	37.38	1.181e4					0.8	NO		bb		0.000
53	FUNCTION3 PFK	37.32	2.852e3					0.5	NO		db		0.000
54	FUNCTION3 PFK	37.29	1.067e4					0.9	NO		bd		0.000
55	FUNCTION3 PFK	37.12	1.332e4					1.1	NO		db		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.07	3.839e5					9.7	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	44.91	3.198e3					0.9	NO		bb		
2	FUNCTION5 PFK	44.44	5.621e3					1.1	NO		bb		
3	FUNCTION5 PFK	43.72	1.296e3					0.7	NO		bb		
4	FUNCTION5 PFK	46.00	2.951e3					0.9	NO		bb		
5	FUNCTION5 PFK	45.63	1.092e3					0.6	NO		bb		

ID: CS5CR, Name: 23020109, Date: 01-Feb-2023, Time: 19:34:25, Conditions: AUTOSPEC01, User: pk

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.32	1.271e2					3.2	YES		db		0.000
2	FUNCTION1 HXCD...	27.27	1.266e2					3.9	YES		bd		0.000
3	FUNCTION1 HXCD...	26.97	8.256e1					1.6	NO		bb		0.000
4	FUNCTION1 HXCD...	26.55	4.280e2					6.1	YES		bb		0.000
5	FUNCTION1 HXCD...	26.02	1.029e2					2.7	NO		db		0.000
6	FUNCTION1 HXCD...	25.90	2.502e2					4.4	YES		dd		0.000
7	FUNCTION1 HXCD...	25.72	2.101e2					3.6	YES		bd		0.000
8	FUNCTION1 HXCD...	23.72	8.529e1					3.0	YES		bb		0.000
9	FUNCTION1 HXCD...	22.99	9.923e1					2.5	NO		bb		0.000
10	FUNCTION1 HXCD...	22.00	7.560e1					1.7	NO		db		0.000
11	FUNCTION1 HXCD...	21.89	1.928e2					3.3	YES		bd		0.000
12	FUNCTION1 HXCD...	21.10	1.048e2					3.0	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HPCD...	26.67	7.036e1					1.9	NO		db		0.000
2	FUNCTION1 HPCD...	26.53	4.357e2					5.6	YES		bd		0.000
3	FUNCTION1 HPCD...	25.91	1.719e2					2.5	NO		bb		0.000
4	FUNCTION1 HPCD...	25.70	1.553e2					2.9	NO		bb		0.000
5	FUNCTION1 HPCD...	24.63	1.444e2					3.1	YES		bb		0.000
6	FUNCTION1 HPCD...	24.20	7.285e1					2.2	NO		bb		0.000
7	FUNCTION1 HPCD...	23.45	7.383e1					2.1	NO		bb		0.000
8	FUNCTION1 HPCD...	23.34	1.346e2					1.9	NO		bb		0.000
9	FUNCTION1 HPCD...	22.31	1.729e2					2.3	NO		bb		0.000
10	FUNCTION1 HPCD...	22.01	7.908e1					1.1	NO		bb		0.000
11	FUNCTION1 HPCD...	21.22	1.137e2					3.5	YES		bb		0.000

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.40	9.562e2					13.4	YES		dd		0.000
2	FUNCTION2 HPCD...	31.27	1.162e4					218.9	YES		bd		0.000
3	FUNCTION2 HPCD...	30.07	9.742e2					11.5	YES		bb		0.000
4	FUNCTION2 HPCD...	28.81	1.484e2					3.1	YES		bb		0.000
5	FUNCTION2 HPCD...	32.66	5.798e2					8.9	YES		bb		0.000
6	FUNCTION2 HPCD...	31.65	1.260e3					18.3	YES		db		0.000

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ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	37.03	6.482e2					9.9	YES		bb		0.000
2	FUNCTION3 OCDPE	36.61	1.390e3					18.8	YES		bb		0.000
3	FUNCTION3 OCDPE	36.23	1.589e3					24.2	YES		db		0.000
4	FUNCTION3 OCDPE	36.12	1.347e3					19.9	YES		dd		0.000
5	FUNCTION3 OCDPE	36.01	6.921e2					11.8	YES		bd		0.000
6	FUNCTION3 OCDPE	35.14	1.254e3					15.1	YES		db		0.000
7	FUNCTION3 OCDPE	35.01	7.695e2					12.4	YES		bd		0.000
8	FUNCTION3 OCDPE	33.86	1.826e2					4.0	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.12	8.339e2					10.8	YES		bb		0.000
2	FUNCTION4 NCDPE	40.38	7.844e2					14.4	YES		bb		0.000
3	FUNCTION4 NCDPE	39.21	1.191e2					4.5	YES		bb		0.000
4	FUNCTION4 NCDPE	38.86	6.704e2					11.4	YES		bb		0.000
5	FUNCTION4 NCDPE	41.43	1.172e2					3.2	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	45.38	2.060e3					22.7	YES		db		0.000
2	FUNCTION5 DCDPE	45.15	2.089e3					25.1	YES		bd		0.000
3	FUNCTION5 DCDPE	44.92	7.340e1					3.7	YES		bb		0.000

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ID: CS5CR, Name: 23020109, Date: 01-Feb-2023, Time: 19:34:25, Conditions: AUTOSPEC01, User: pk

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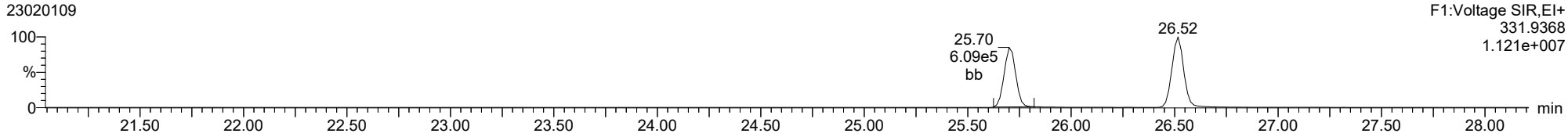

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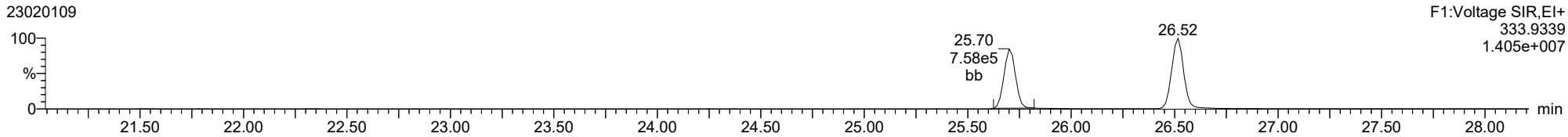

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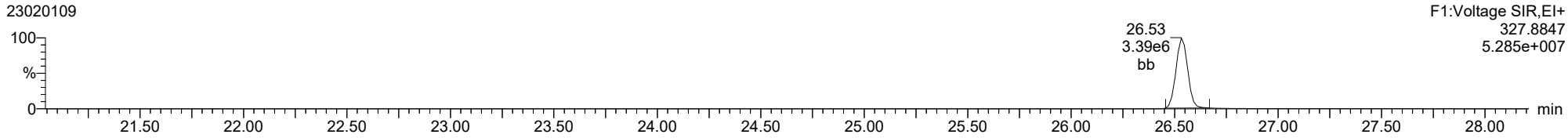

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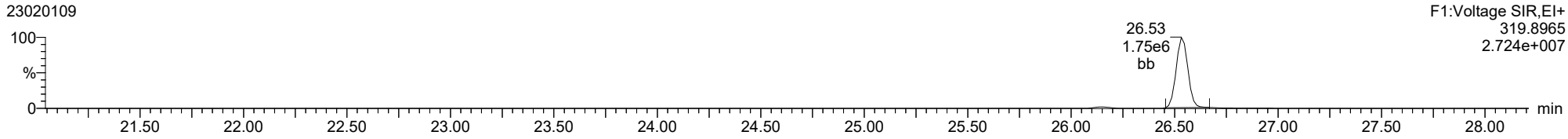

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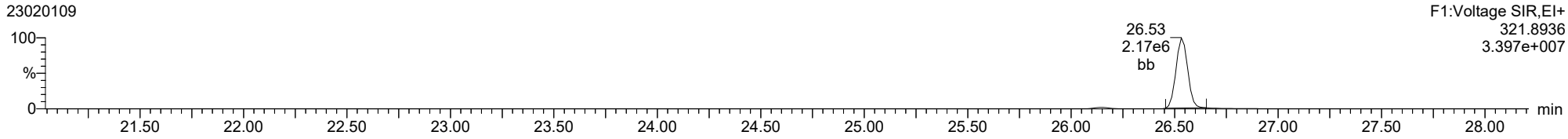

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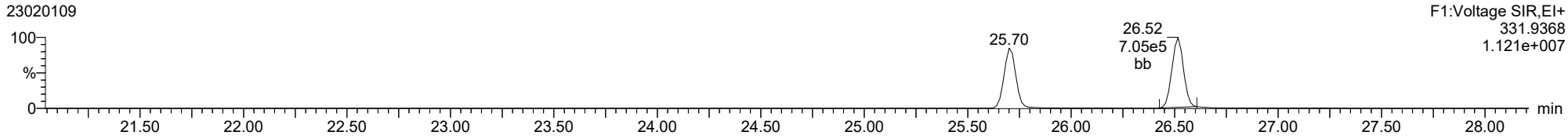

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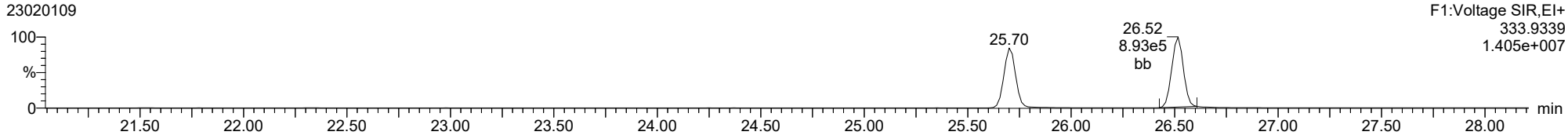

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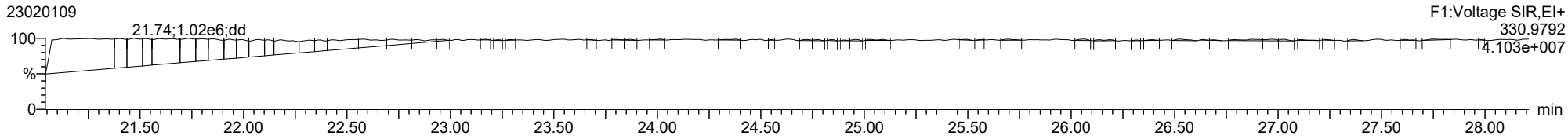

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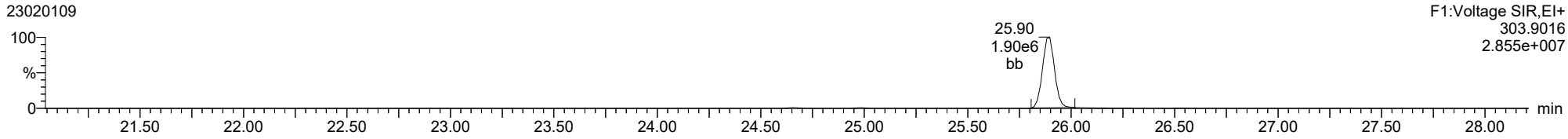

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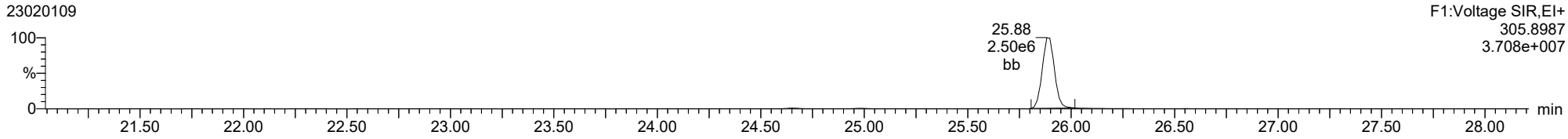

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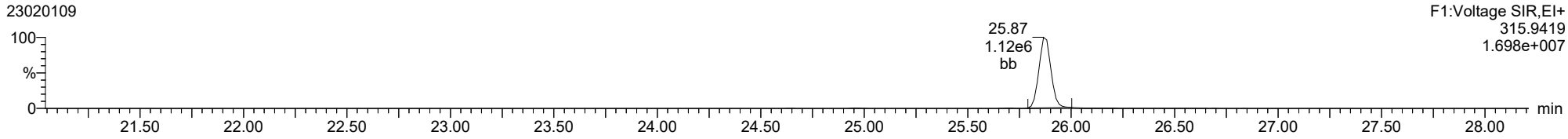

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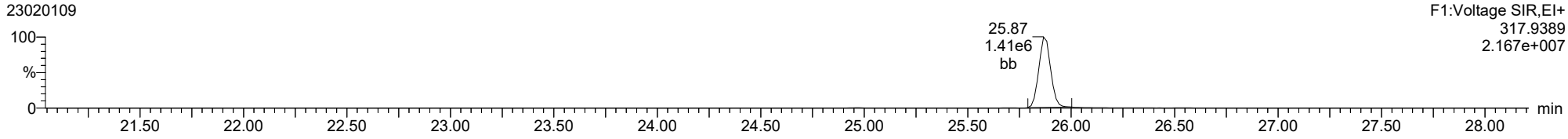

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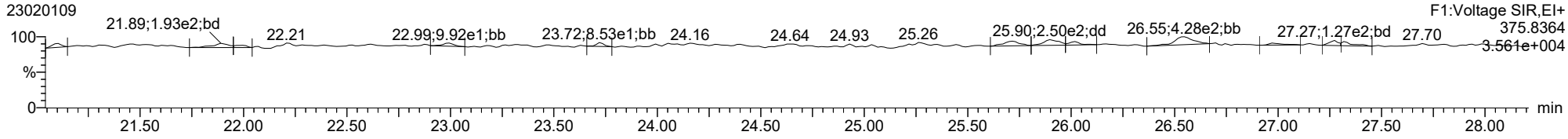

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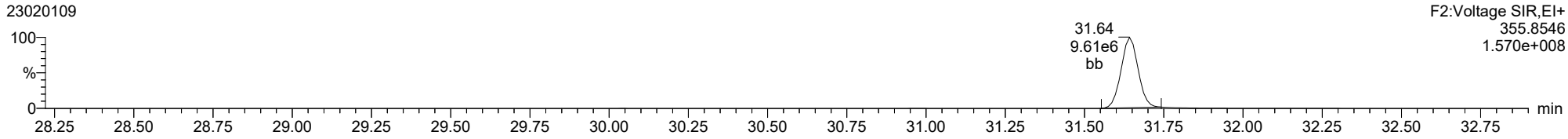

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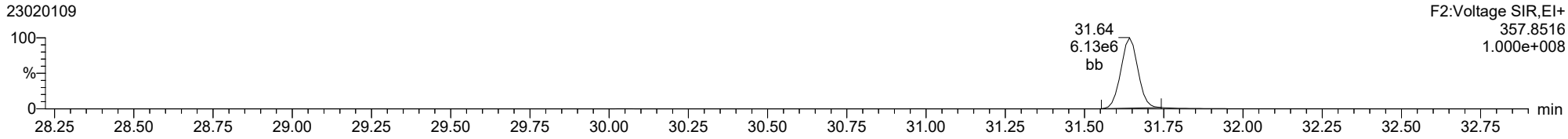

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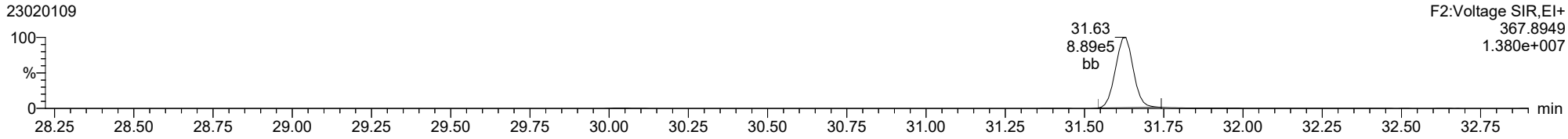

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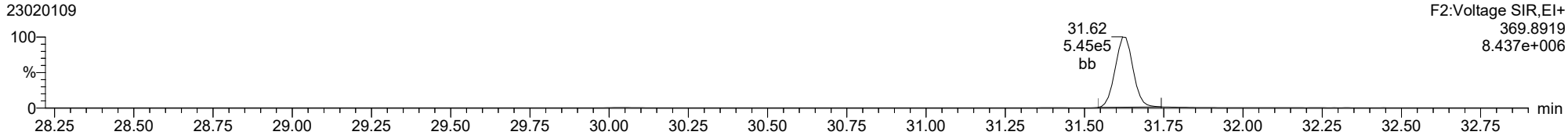

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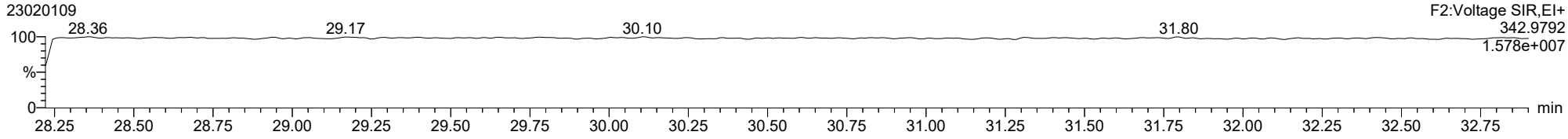

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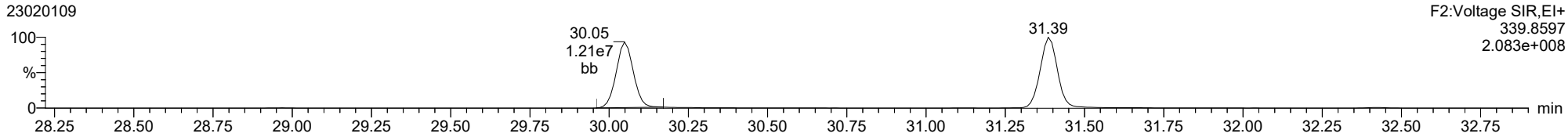

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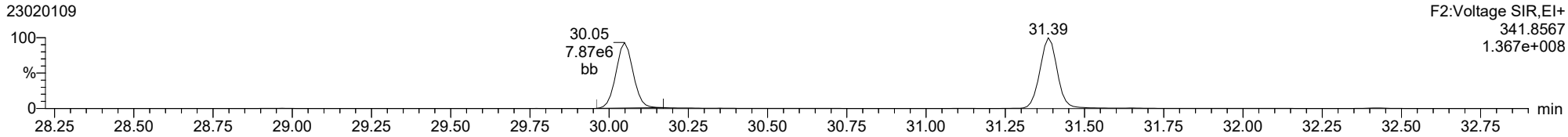

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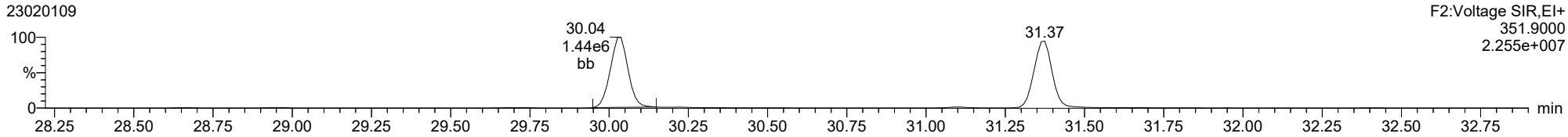

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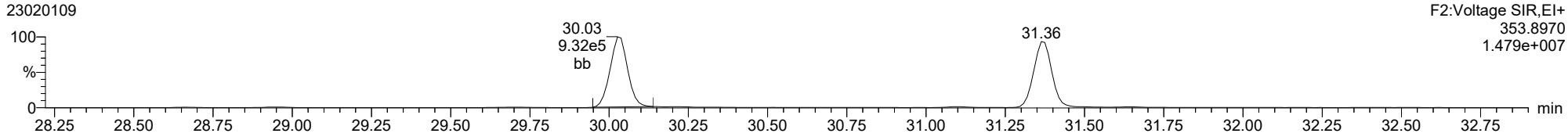

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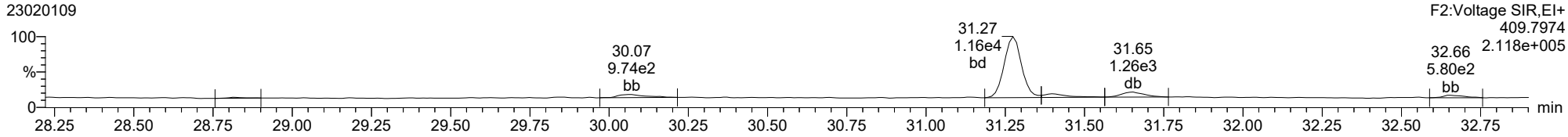

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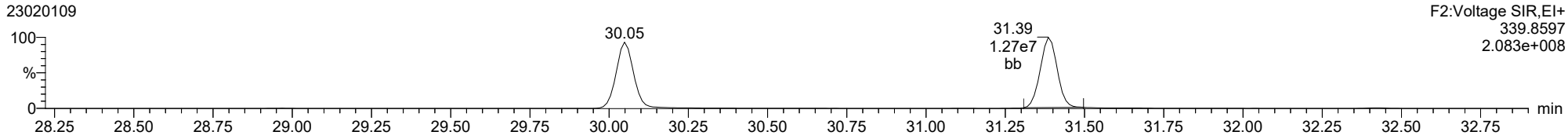

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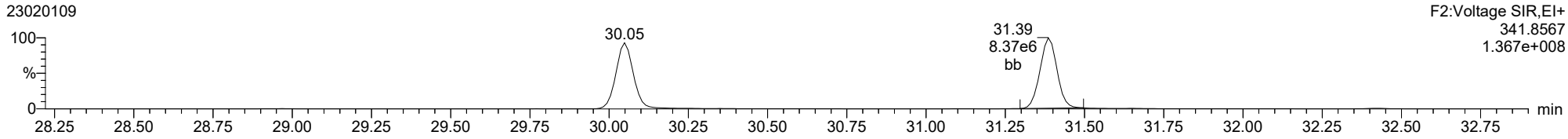

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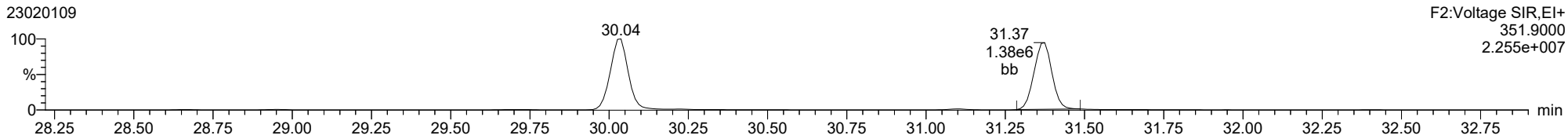

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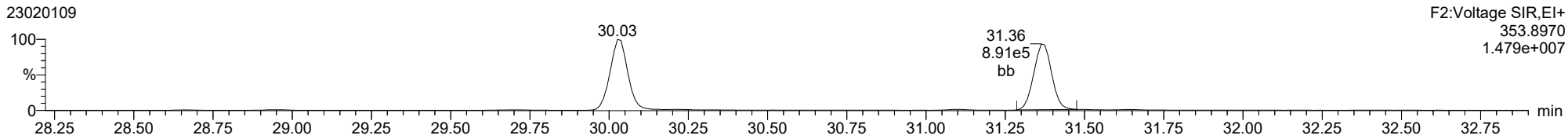

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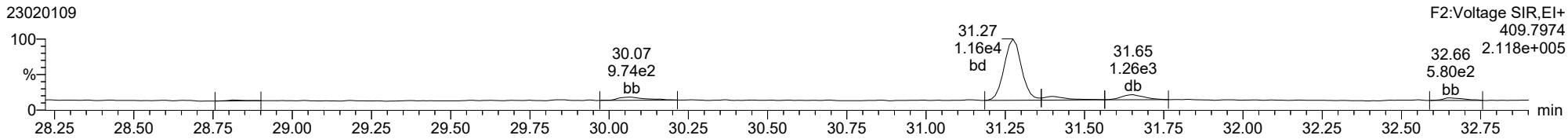

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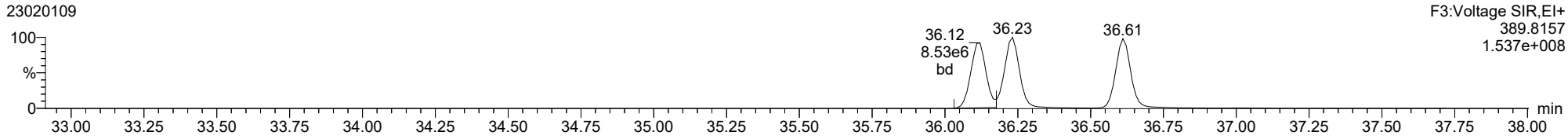

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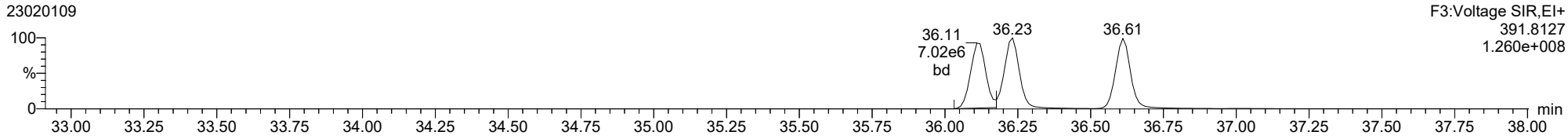

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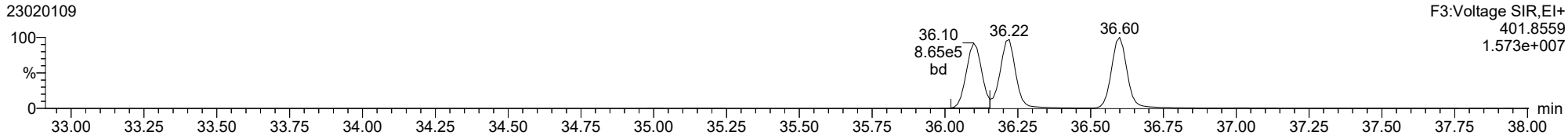

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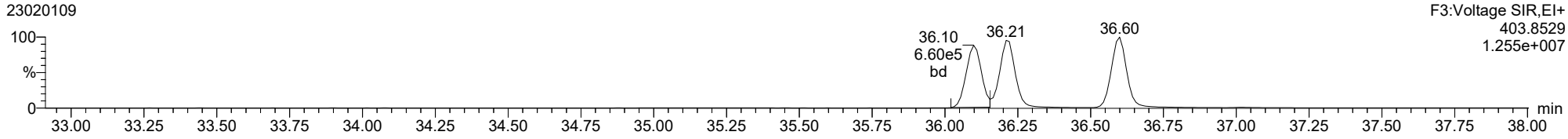

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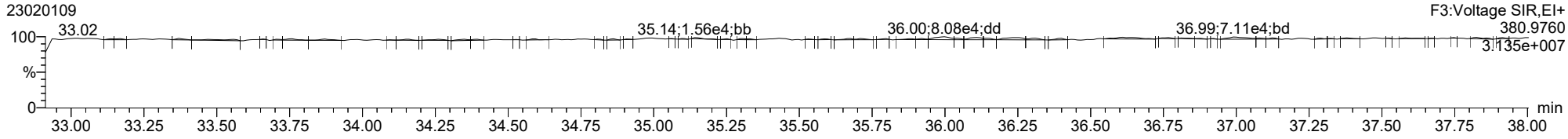

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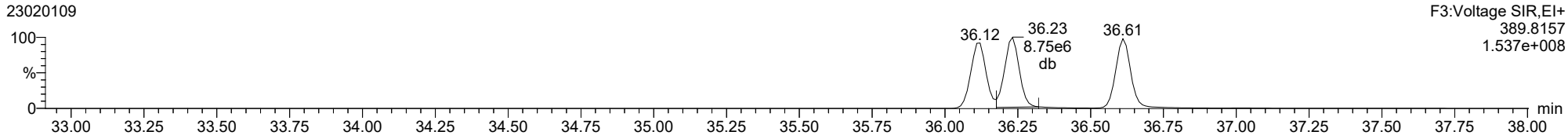

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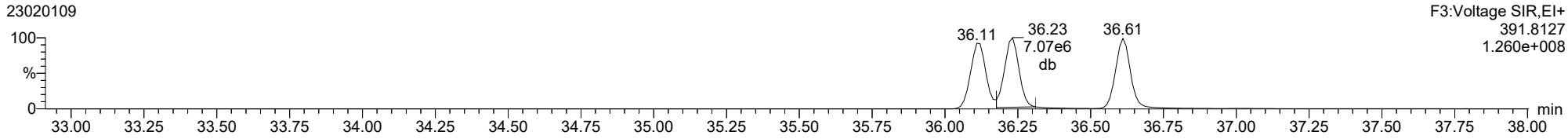

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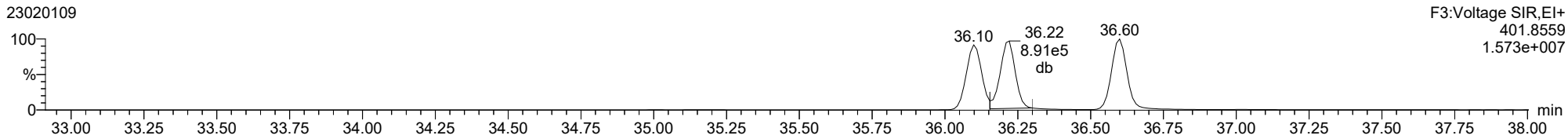

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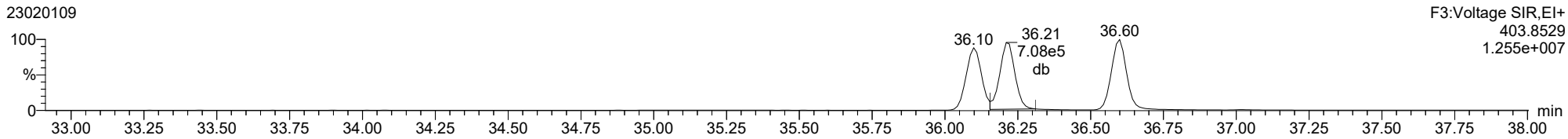

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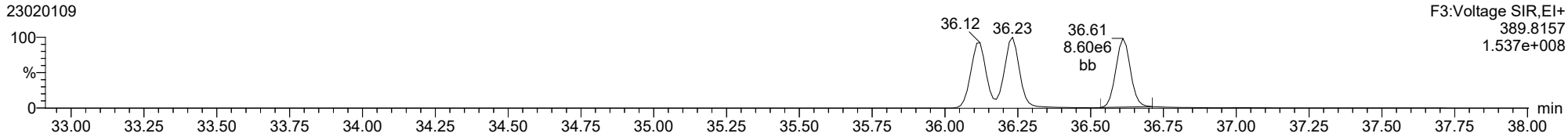

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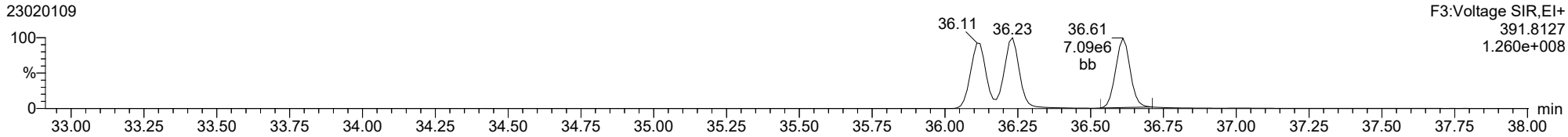

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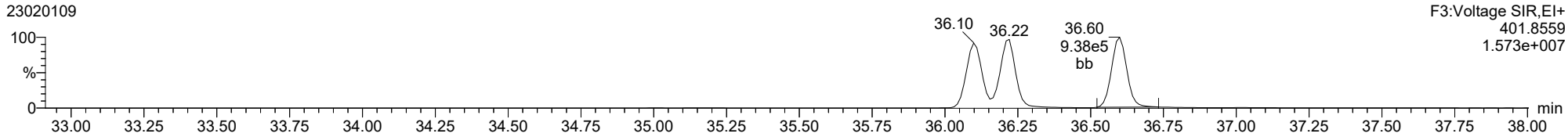

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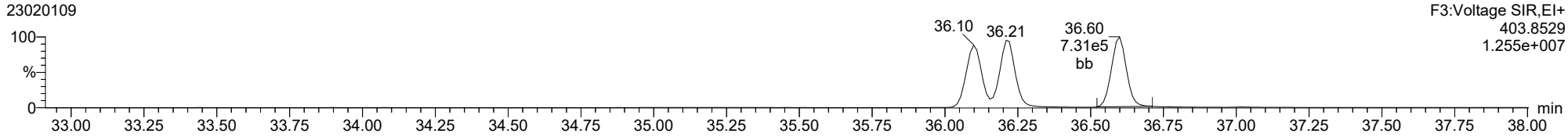

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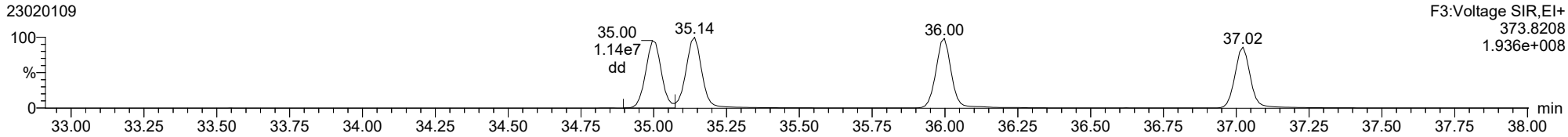

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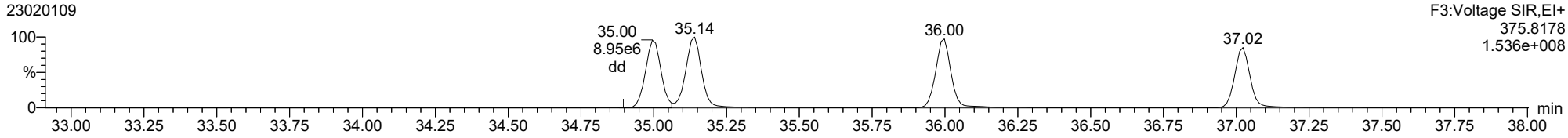

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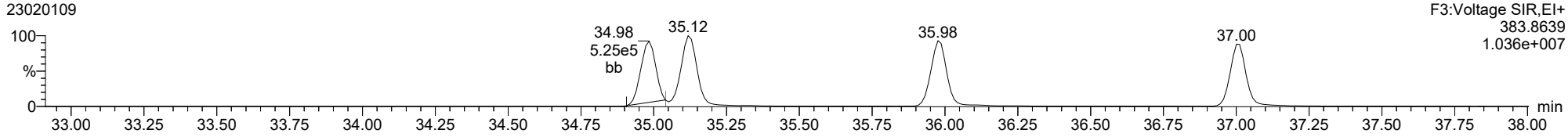

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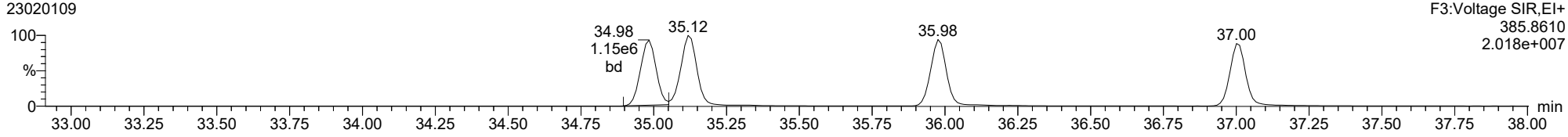

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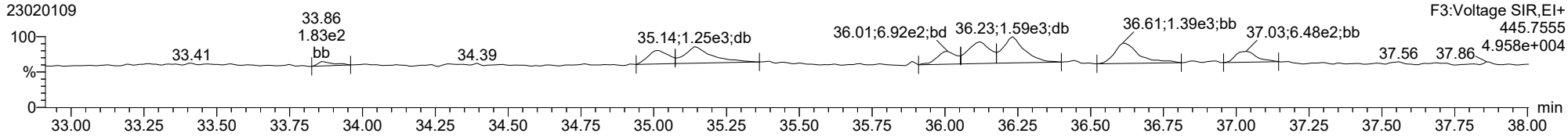

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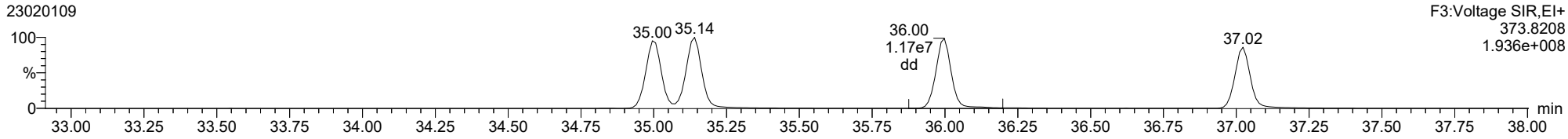

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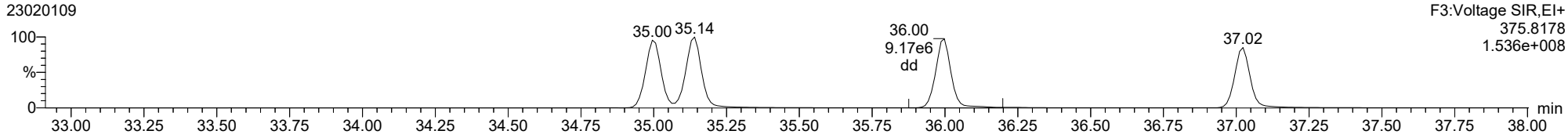

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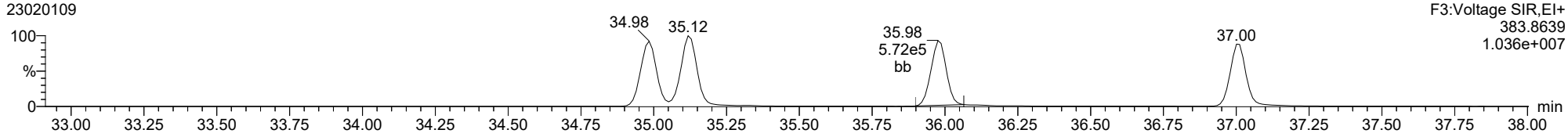

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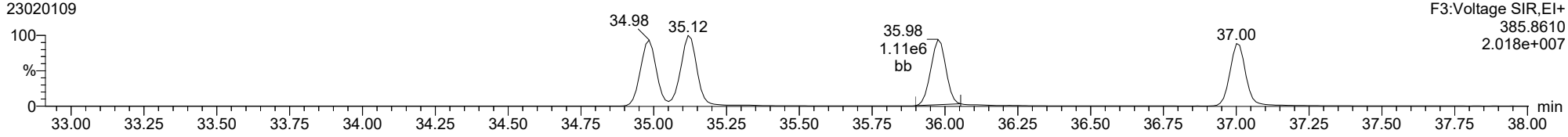

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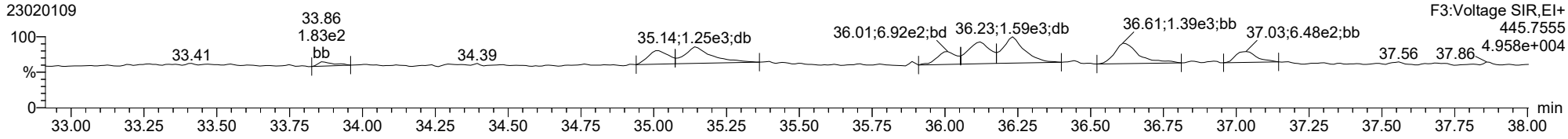

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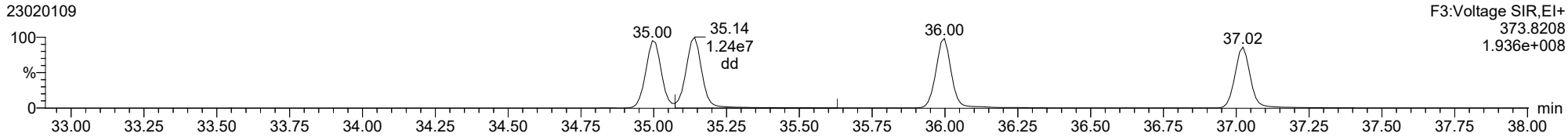

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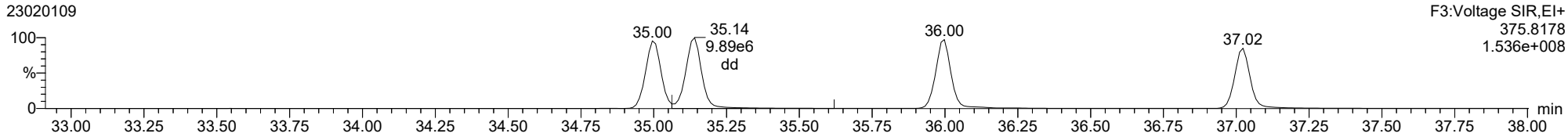

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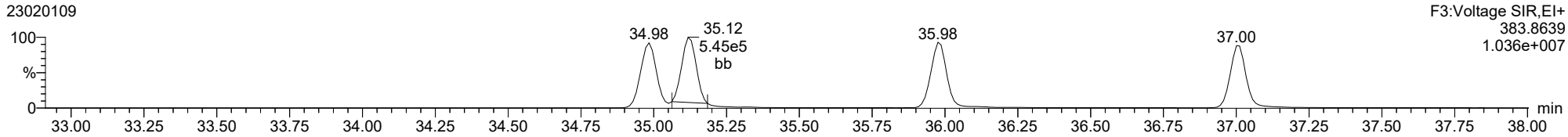

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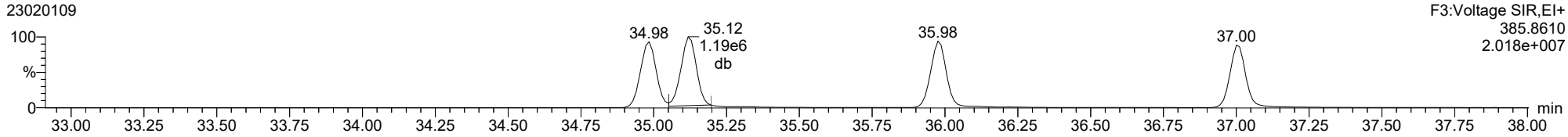

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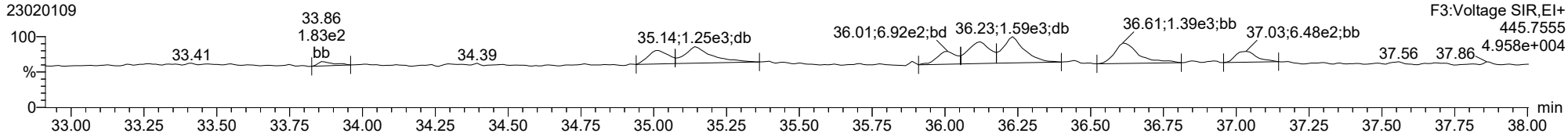

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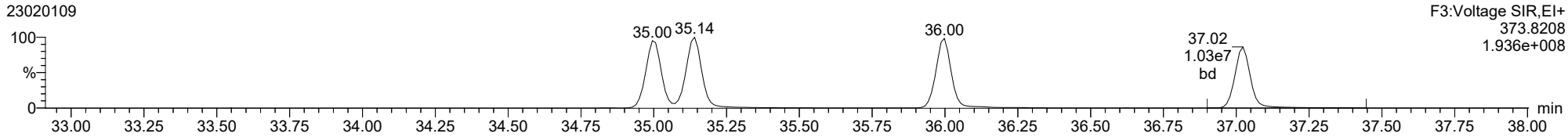

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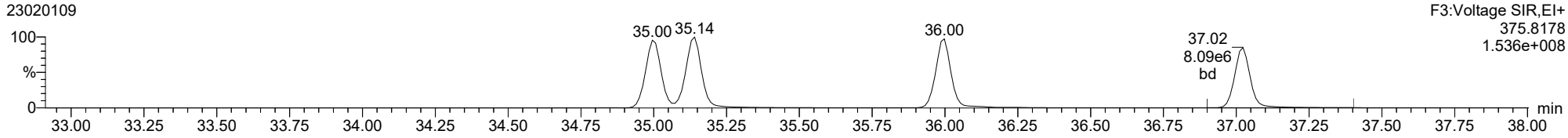

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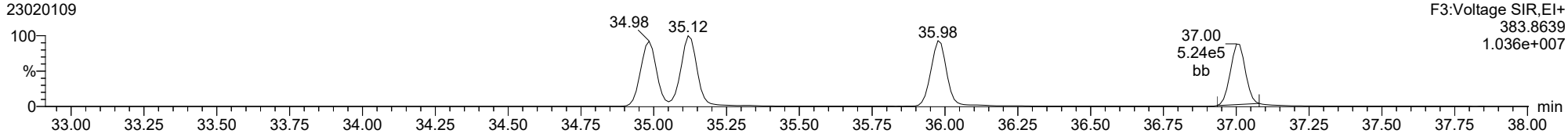

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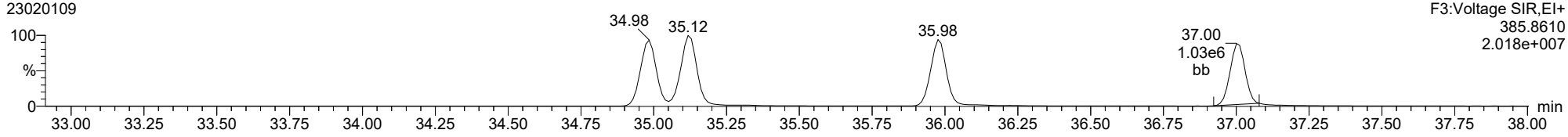

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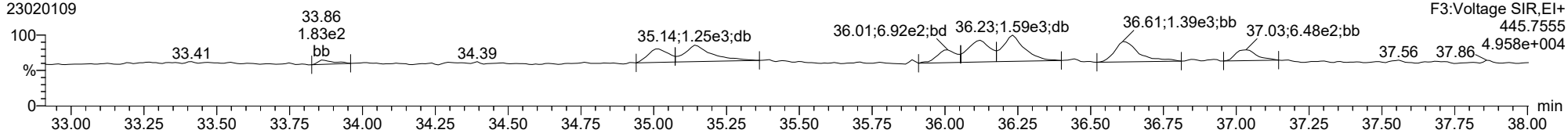

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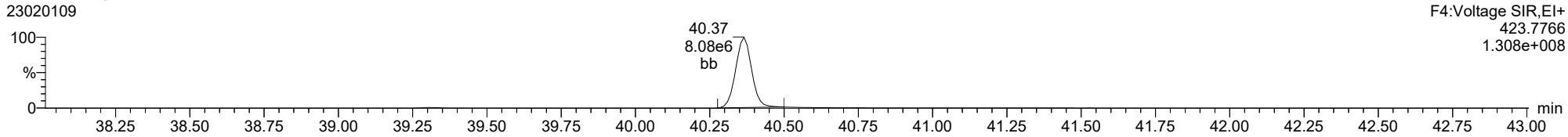

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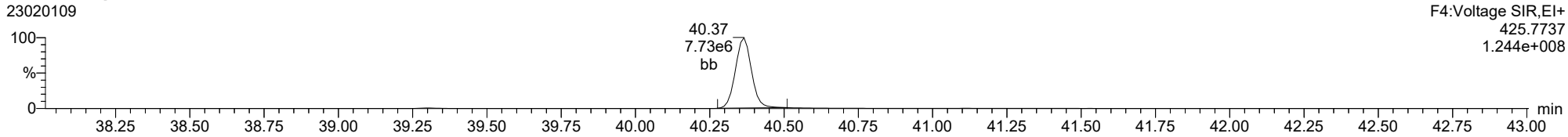

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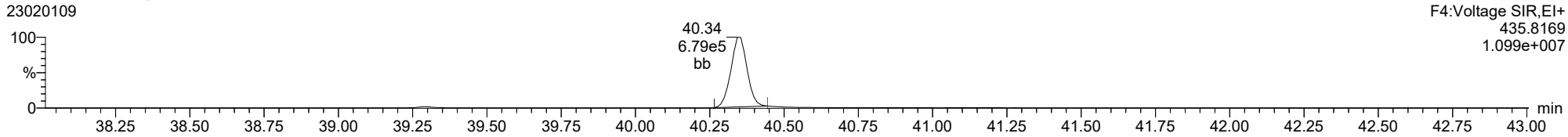

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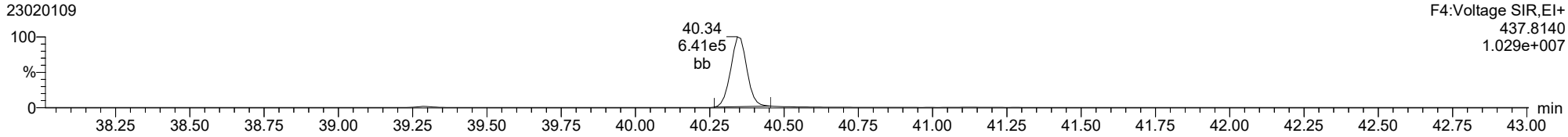
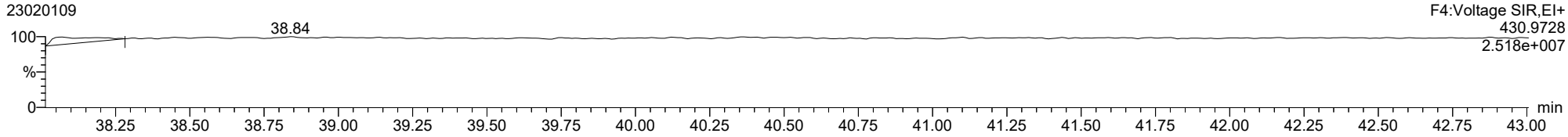


FUNCTION4 PFK



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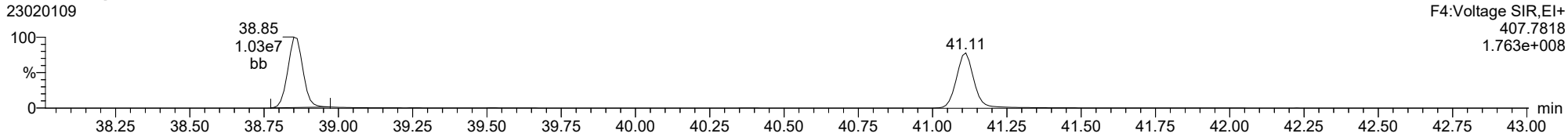

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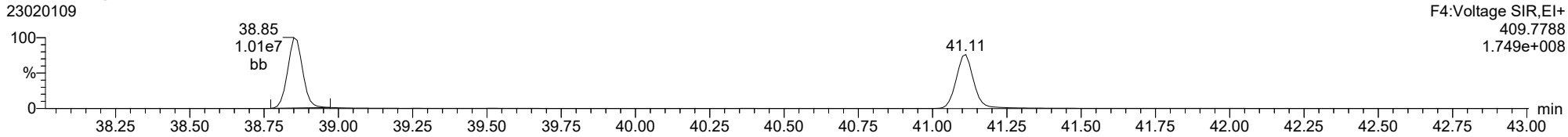

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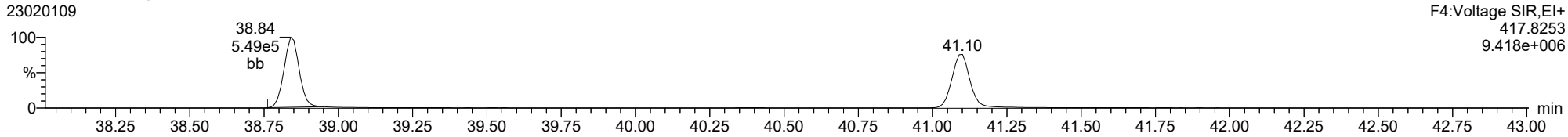

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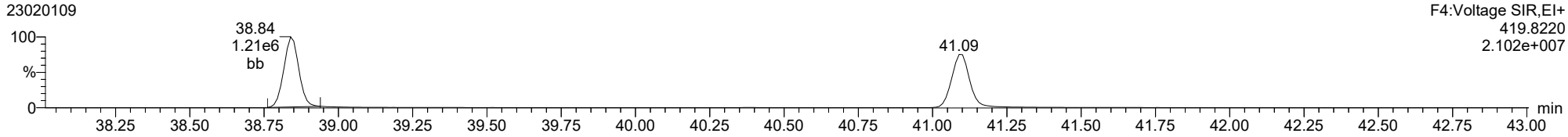
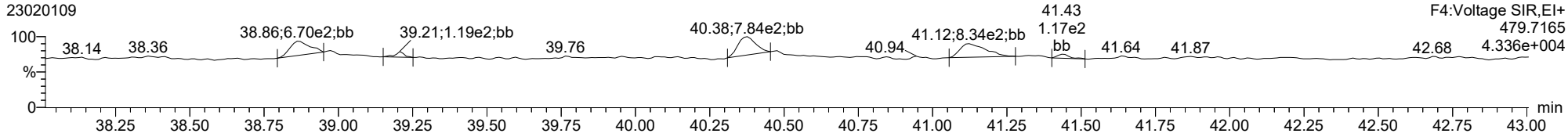


FUNCTION4 NCDPE



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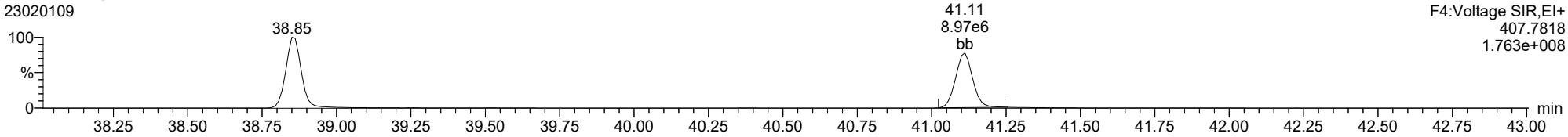

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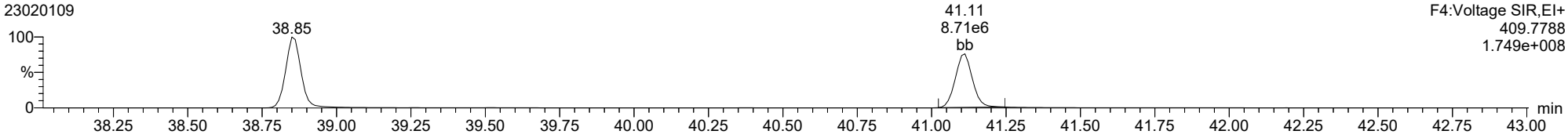

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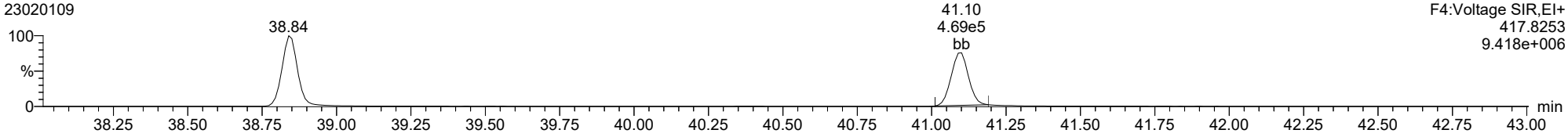

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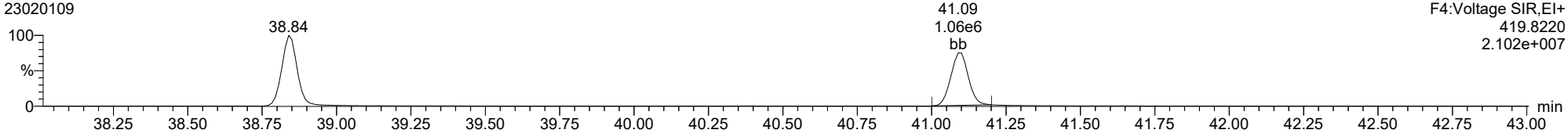

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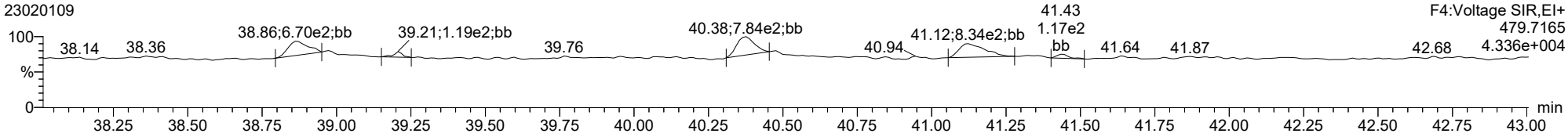

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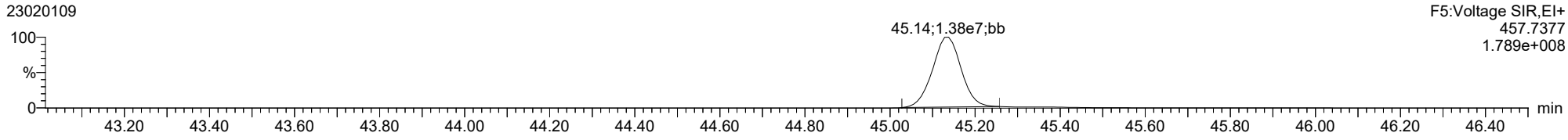

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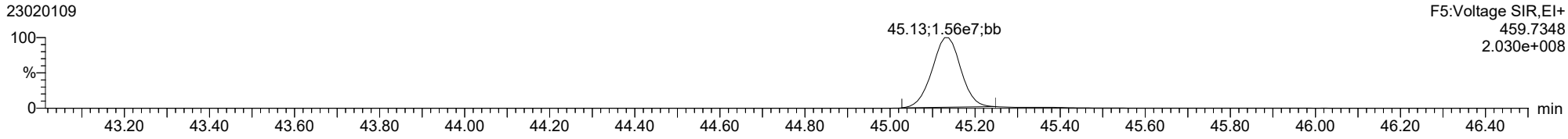

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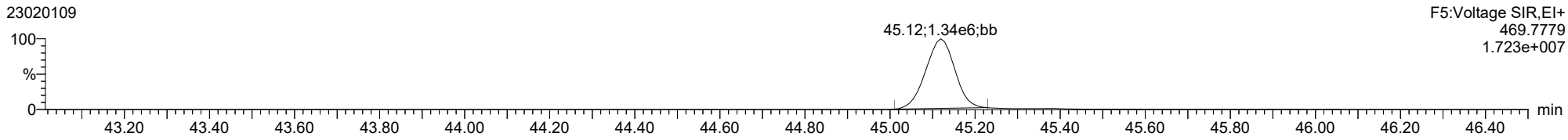

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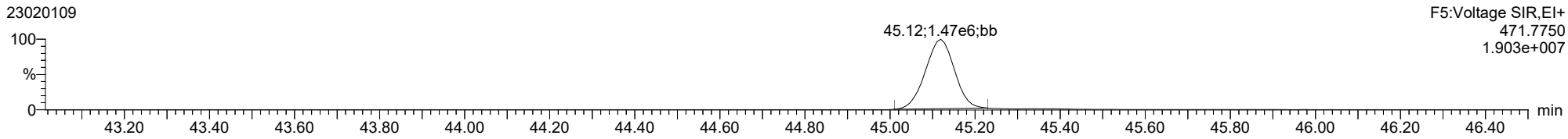
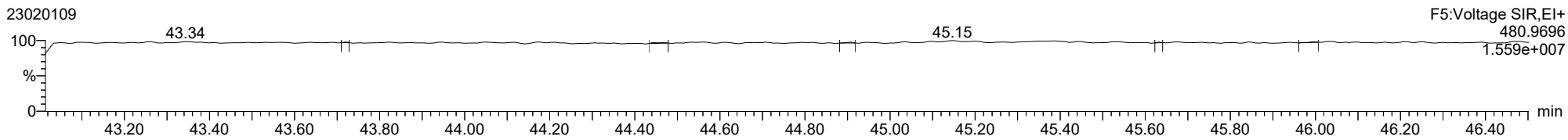


FUNCTION5 PFK



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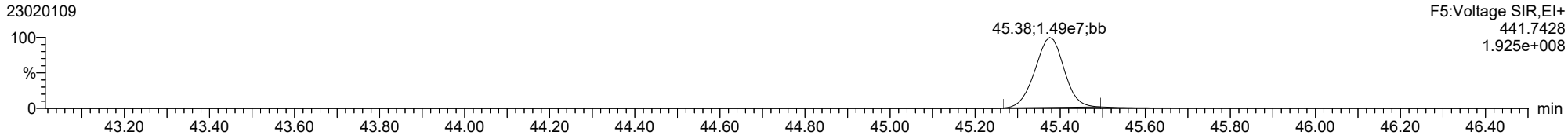

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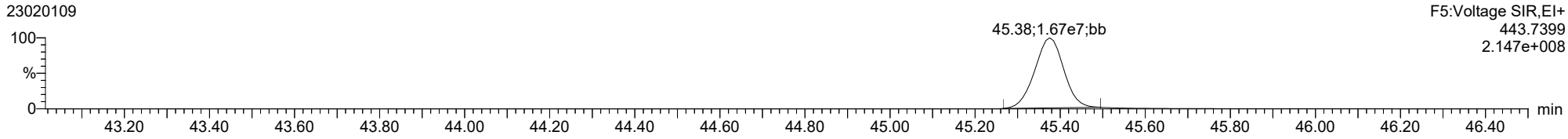
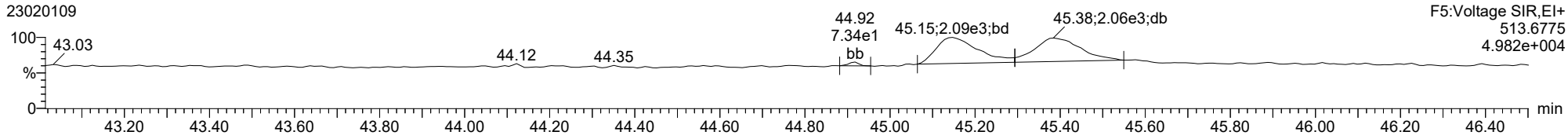
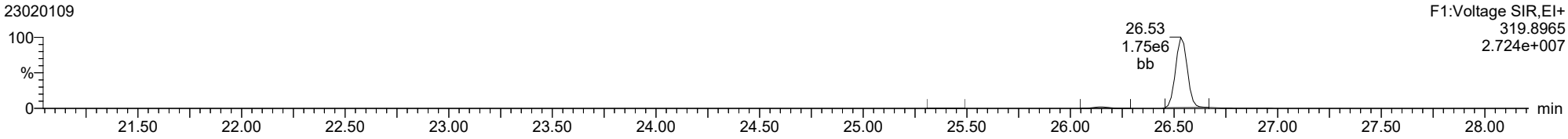


FUNCTION5 DCDPE



ID: CS5CR, Name: 23020109, Date: 01-Feb-2023, Time: 19:34:25, Conditions: AUTOSPEC01, User: pk

Total-tetradioxins



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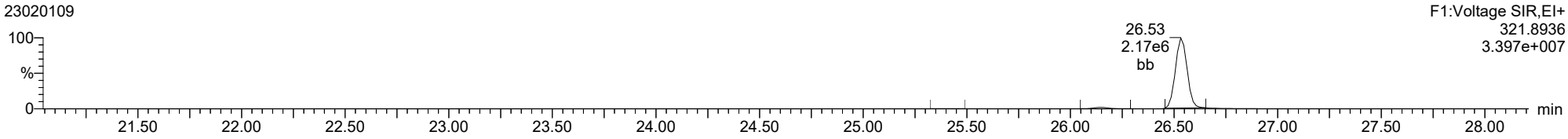

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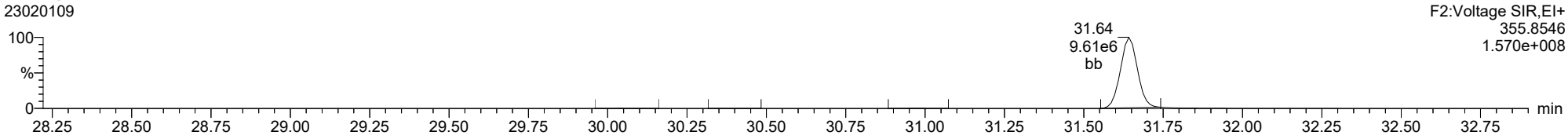

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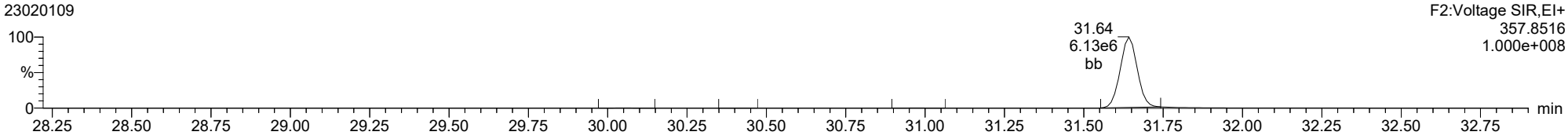

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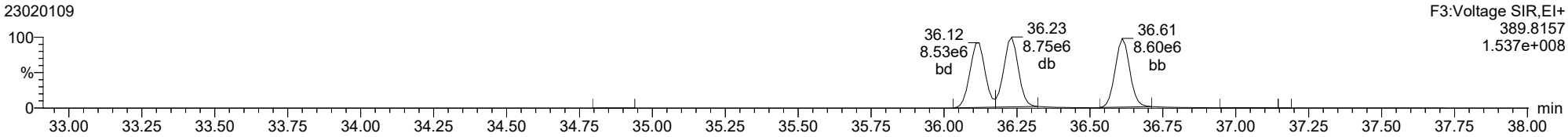
Total-hexadioxins



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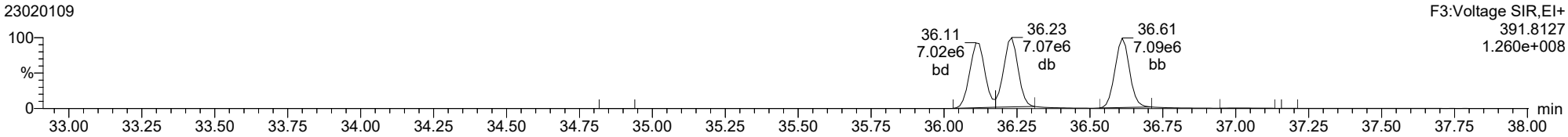

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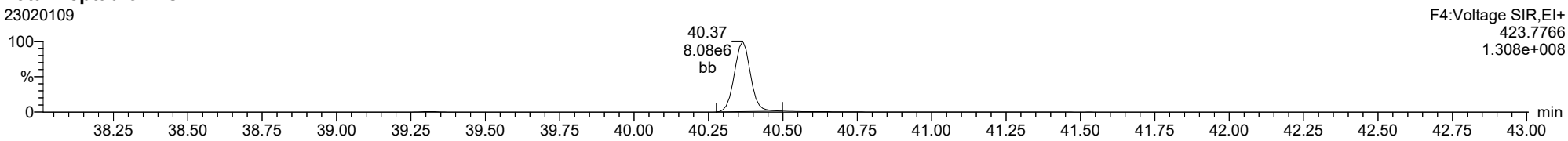

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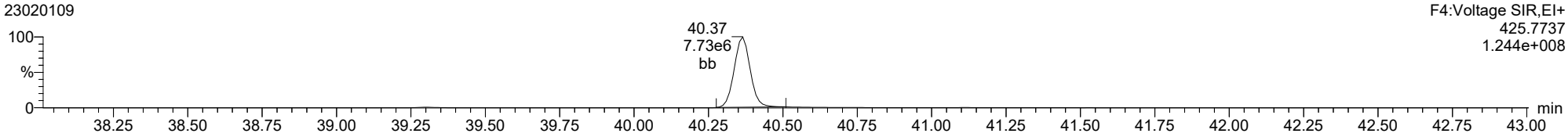

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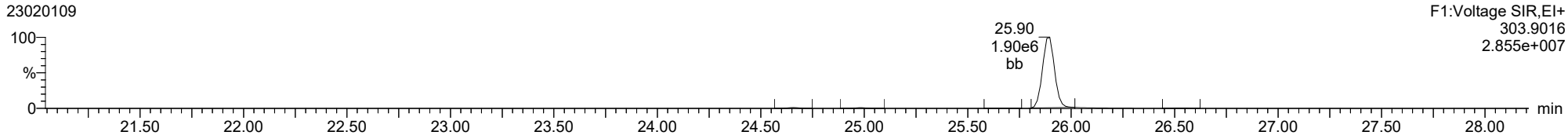
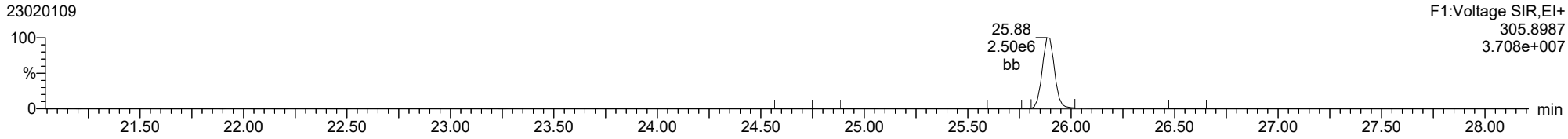
Total-tetrafurans



Total-tetrafurans



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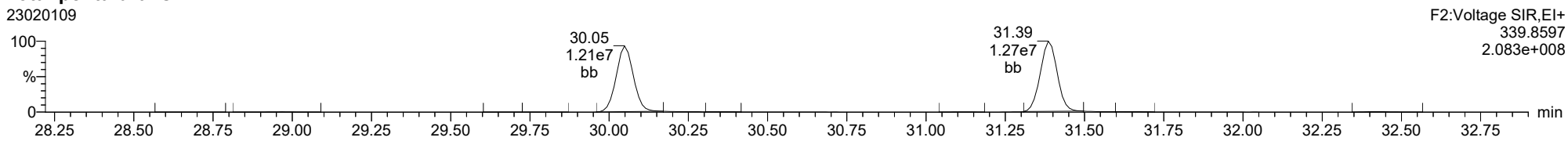

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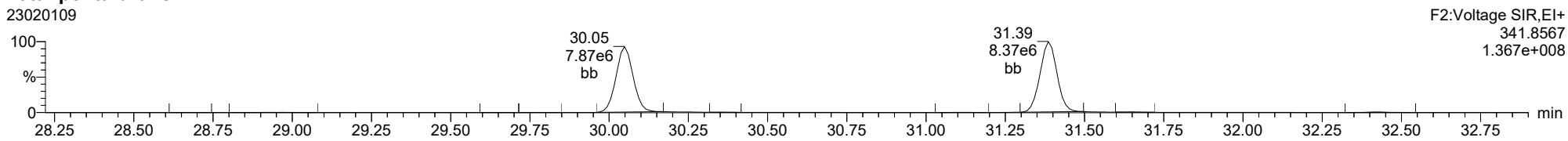

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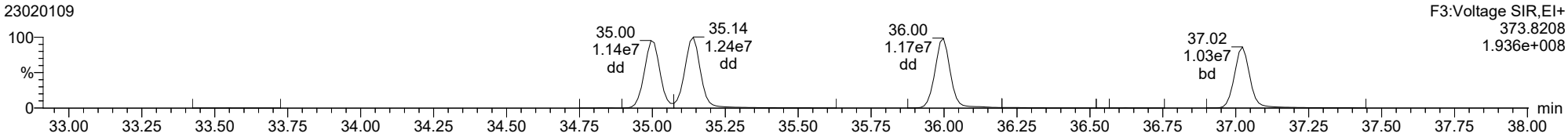
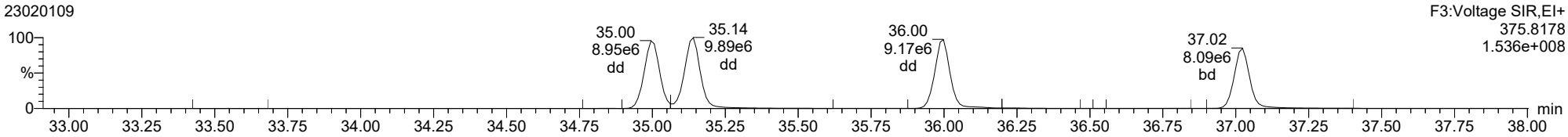
Total-hexafurans



Total-hexafurans



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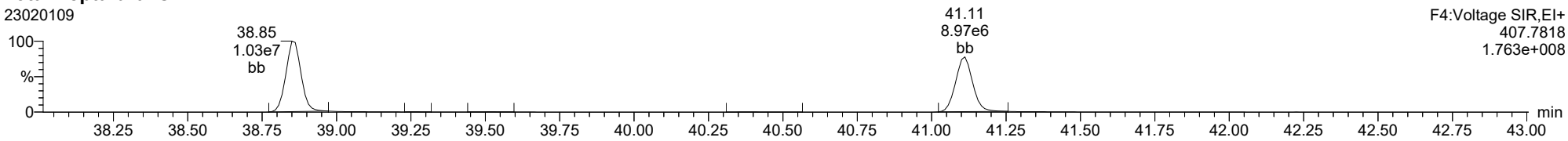

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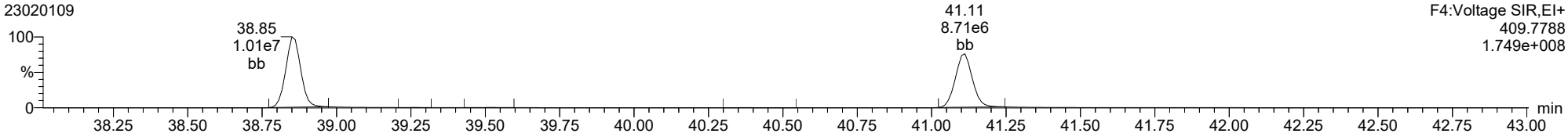

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Last Altered: Friday, February 03, 2023 11:22:32 Pacific Standard Time
Printed: Friday, February 03, 2023 11:23:11 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: ICVCR, Name: 23020110, Date: 01-Feb-2023, Time: 20:23:25, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.882	1.001	7.583e4	1.018e5	0.876	0.744	0.770	1312	1705	1.17e6	1.55e6	895.7	911.1	NO	bb	bb	9.802
12378-PeCDF	30.037	1.000	4.347e5	2.900e5	0.845	1.499	1.550	3463	2713	6.78e6	4.53e6	1956.5	1669.5	NO	bb	bb	49.435
23478-PeCDF	31.374	1.000	4.582e5	2.969e5	0.911	1.543	1.550	3463	2713	6.90e6	4.53e6	1992.7	1668.4	NO	bb	bb	50.720
123478-HxCDF	34.984	1.000	3.962e5	3.152e5	1.182	1.257	1.240	2904	2208	6.26e6	4.98e6	2155.7	2257.5	NO	bd	bd	50.838
234678-HxCDF	35.987	1.001	4.056e5	3.185e5	1.229	1.273	1.240	2904	2208	6.27e6	4.93e6	2160.6	2231.5	NO	bb	bd	51.528
123678-HxCDF	35.129	1.001	4.284e5	3.437e5	1.248	1.247	1.240	2904	2208	6.50e6	5.14e6	2238.5	2329.7	NO	dd	db	51.066
123789-HxCDF	37.012	1.001	3.438e5	2.711e5	1.187	1.268	1.240	2904	2208	5.39e6	4.21e6	1855.6	1906.8	NO	bb	bb	49.890
1234678-HpCDF	38.850	1.001	3.527e5	3.436e5	1.204	1.027	1.050	3342	3138	5.81e6	5.69e6	1739.4	1813.0	NO	bb	bb	48.984
1234789-HpCDF	41.101	1.000	3.197e5	3.013e5	1.165	1.061	1.050	3342	3138	4.62e6	4.44e6	1383.4	1415.4	NO	bd	bb	51.470
OCDF	45.357	1.006	4.733e5	5.396e5	1.186	0.877	0.890	2772	1582	5.77e6	6.54e6	2082.4	4133.4	NO	bb	bb	92.994
2378-TCDD	26.532	1.001	6.792e4	8.768e4	1.236	0.775	0.770	1380	1753	1.03e6	1.34e6	749.1	761.7	NO	bb	bb	10.105
12378-PeCDD	31.631	1.000	3.290e5	2.096e5	1.087	1.569	1.550	3204	3195	5.14e6	3.30e6	1603.9	1031.8	NO	bb	bb	48.876
123478-HxCDD	36.109	1.001	2.890e5	2.319e5	0.987	1.246	1.240	2459	2022	4.84e6	3.91e6	1968.4	1935.9	NO	bd	bd	50.975
123678-HxCDD	36.221	1.000	2.990e5	2.445e5	1.021	1.223	1.240	2459	2022	4.88e6	4.06e6	1984.4	2008.5	NO	db	db	48.307
123789-HxCDD	36.599	1.011	2.845e5	2.378e5	0.985	1.196	1.240	2459	2022	4.82e6	3.99e6	1960.3	1972.8	NO	bb	bb	49.580
1234678-HpCDD	40.354	1.001	2.858e5	2.609e5	1.253	1.095	1.050	2240	2747	4.24e6	3.98e6	1890.7	1447.3	NO	bd	bb	48.846
OCDD	45.111	1.000	4.553e5	5.144e5	1.103	0.885	0.890	2050	2803	5.81e6	6.65e6	2832.1	2371.2	NO	bb	bb	95.778
13C-2378-TCDF	25.867	1.006	9.159e5	1.153e6	1.768	0.794	0.770	2721	1646	1.40e7	1.78e7	5149.2	10794.2	NO	bb	bb	100.832
13C-12378-PeCDF	30.026	1.168	1.059e6	6.764e5	1.527	1.566	1.550	3804	2727	1.61e7	1.02e7	4228.7	3742.1	NO	bb	bb	97.924
13C-23478-PeCDF	31.363	1.220	9.914e5	6.424e5	1.466	1.543	1.550	3804	2727	1.49e7	9.56e6	3917.8	3506.2	NO	bb	bb	96.003
13C-123478-HxCDF	34.973	0.956	4.014e5	7.827e5	1.054	0.513	0.510	2311	3449	6.56e6	1.28e7	2840.4	3698.0	NO	bd	bd	98.968
13C-123678-HxCDF	35.106	0.960	4.085e5	8.030e5	1.080	0.509	0.510	2311	3449	6.64e6	1.32e7	2872.8	3823.9	NO	db	db	98.793
13C-234678-HxCDF	35.964	0.983	3.869e5	7.566e5	1.014	0.511	0.510	2311	3449	6.49e6	1.28e7	2809.7	3704.0	NO	bb	bb	99.278
13C-123789-HxCDF	36.989	1.011	3.535e5	6.852e5	0.928	0.516	0.510	2311	3449	5.90e6	1.14e7	2552.6	3318.4	NO	bb	bb	98.576
13C-1234678-HpCDF	38.828	1.061	3.652e5	8.153e5	1.036	0.448	0.440	3274	4191	6.12e6	1.38e7	1868.5	3294.0	NO	bb	bb	100.340
13C-1234789-HpCDF	41.090	1.123	3.190e5	7.164e5	0.905	0.445	0.440	3274	4191	4.81e6	1.07e7	1468.7	2563.9	NO	bb	bb	100.753
13C-1234-TCDD	25.700	0.000	5.137e5	6.469e5	1.000	0.794	0.770	2221	1552	7.96e6	9.97e6	3583.6	6423.2	NO	bb	bb	100.000
13C-2378-TCDD	26.501	1.031	5.549e5	6.905e5	1.103	0.804	0.770	2221	1552	8.40e6	1.04e7	3781.7	6727.2	NO	bb	bb	97.290
13C-12378-PeCDD	31.619	1.230	6.261e5	3.880e5	0.914	1.614	1.550	1580	2177	9.40e6	5.80e6	5947.9	2663.3	NO	bb	bb	95.581
13C-123478-HxCDD	36.087	0.986	5.808e5	4.547e5	0.933	1.277	1.240	2129	1763	9.84e6	7.81e6	4624.5	4431.4	NO	bd	bd	97.737
13C-123678-HxCDD	36.209	0.990	6.262e5	4.760e5	0.965	1.315	1.240	2129	1763	9.80e6	7.57e6	4603.5	4292.7	NO	db	db	100.625
13C-1234678-HpCDD	40.332	1.102	4.634e5	4.302e5	0.782	1.077	1.050	2527	2271	7.13e6	6.69e6	2821.9	2945.0	NO	bb	bb	100.628
13C-OCDD	45.101	1.233	8.768e5	9.596e5	0.788	0.914	0.890	3549	1603	1.12e7	1.23e7	3153.1	7665.3	NO	bb	bb	205.165
13C-123789-HxCDD	36.588	0.000	6.499e5	4.857e5	1.000	1.338	1.240	2129	1763	1.03e7	7.92e6	4860.1	4494.5	NO	bb	bb	100.000
37CL-2378-TCDD	26.532	1.032	1.279e5		1.233			1385		1.91e6		1382.5			bb		8.937

Dataset: T:\Autospec\Processed Data Batch\230201ICVIH.qld
Last Altered: Friday, February 03, 2023 11:22:32 Pacific Standard Time
Printed: Friday, February 03, 2023 11:23:11 Pacific Standard Time

ID: ICVCR, Name: 23020110, Date: 01-Feb-2023, Time: 20:23:25, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.389	0.866	9.960e4	1.319e5	1.064	0.755	0.770	1312	1705	1.56e6	2.09e6	1186.8	1226.5	NO	bb	bb	10.509
1289-TCDF	27.378	1.058	7.533e4	1.022e5	0.858	0.737	0.770	1312	1705	1.14e6	1.52e6	867.5	889.5	NO	db	db	10.006
13468-PECDF	27.242	0.907	5.475e5	3.540e5	1.013	1.547	1.550	880	1149	8.31e6	5.37e6	9441.4	4673.6	NO	bb	bb	51.279
12389-PECDF					0.844		1.550	3463	2713								
123468-HXCDF	33.335	0.953	4.175e5	3.320e5	1.197	1.258	1.240	2904	2208	6.11e6	4.84e6	2104.7	2190.3	NO	bb	bb	52.862
1368-TCDD	23.659	0.893	6.883e4	8.714e4	1.084	0.790	0.770	1380	1753	1.12e6	1.44e6	811.7	819.2	NO	bb	bb	11.549
1289-TCDD	27.122	1.023	6.029e4	7.860e4	0.975	0.767	0.770	1380	1753	8.98e5	1.15e6	650.5	656.0	NO	bb	bd	11.436
12479-PECDD	28.912	0.914	6.082e5	3.865e5	1.837	1.574	1.550	3204	3195	5.92e6	3.73e6	1847.3	1168.6	NO	bb	bb	53.387
12389-PECDD	32.032	1.013	4.002e5	2.572e5	1.252	1.556	1.550	3204	3195	6.11e6	3.89e6	1906.1	1217.0	NO	bb	bb	51.760
124679-HXCDD	34.104	0.945	3.073e5	2.529e5	1.033	1.215	1.240	2459	2022	4.88e6	4.09e6	1984.3	2022.2	NO	bb	bb	52.384
1234679-HPCDD	39.296	0.974	2.978e5	2.984e5	1.286	0.998	1.050	2240	2747	4.86e6	4.77e6	2169.4	1735.2	NO	bb	bd	51.878
Total-tetrafurans			2.515e5		0.933			1312		3.88e6							30.410
Total-penta1			5.475e5					880		8.31e6							51.279
Total-pentafurans			1.407e6		0.866			3463		2.14e7							158.406
Total-hexafurans			1.992e6		1.208			2904		3.05e7							256.184
Total-heptafurans			6.724e5		1.185			3342		1.04e7							100.453
Total-Furans			5.343e6		1.067			1312		8.03e7							689.726
Total-tetradioxins			3.350e5		1.099			1380		4.69e6							55.818
Total-pentadioxins			1.337e6		1.392			3204		1.72e7							154.023
Total-hexadioxins			1.180e6		1.007			2459		1.94e7							201.246
Total-heptadioxins			5.836e5		1.269			2240		9.09e6							100.724
Total-Dioxins			3.891e6		1.165			1380		5.62e7							607.589
Total-TEQ			9.234e6					1380		1.36e8							1297.316
FUNCTION1 PFK			2.960e5					590383		7.93e6							
FUNCTION2 PFK			3.847e5					195923		1.00e7							0.000
FUNCTION3 PFK			3.926e5					364545		1.22e7							0.000
FUNCTION4 PFK			4.778e5					303163		3.90e6							
FUNCTION5 PFK			9.338e4					197261		3.25e6							
FUNCTION1 HXCD...			9.172e2					783		1.34e4							0.000
FUNCTION1 HPCD...			1.484e3					913		2.30e4							0.000
FUNCTION2 HPCD...			4.855e2					894		8.19e3							0.000
FUNCTION3 OCDPE			1.383e2					795		2.59e3							0.000
FUNCTION4 NCDPE			2.530e2					911		5.27e3							0.000
FUNCTION5 DCDPE			7.207e1					795		1.85e3							0.000

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: ICVCR, Name: 23020110, Date: 01-Feb-2023, Time: 20:23:25, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.38	7.533e4	1.022e5	0.858	0.74	0.77	867.5	YES	NO	db	db	10.006
2	2378-TCDF	25.88	7.583e4	1.018e5	0.876	0.74	0.77	895.7	YES	NO	bb	bb	9.802
3	Total-tetrafurans	24.79	7.370e2	1.079e3	0.933	0.68	0.77	8.4	YES	NO	db	dd	0.094
4	1368-TCDF	22.39	9.960e4	1.319e5	1.064	0.76	0.77	1186.8	YES	NO	bb	bb	10.509

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.24	5.475e5	3.540e5	1.013	1.55	1.55	9441.4	YES	NO	bb	bb	51.279

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	32.41	4.363e5	2.872e5	0.866	1.52	1.55	1891.7	YES	NO	bb	bb	49.558
2	23478-PeCDF	31.37	4.582e5	2.969e5	0.911	1.54	1.55	1992.7	YES	NO	bb	bb	50.720
3	12378-PeCDF	30.04	4.347e5	2.900e5	0.845	1.50	1.55	1956.5	YES	NO	bb	bb	49.435
4	Total-pentafurans	28.89	7.749e4	4.941e4	0.866	1.57	1.55	335.4	YES	NO	bb	bb	8.693

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	37.01	3.438e5	2.711e5	1.187	1.27	1.24	1855.6	YES	NO	bb	bb	49.890
2	234678-HxCDF	35.99	4.056e5	3.185e5	1.229	1.27	1.24	2160.6	YES	NO	bb	bd	51.528
3	123678-HxCDF	35.13	4.284e5	3.437e5	1.248	1.25	1.24	2238.5	YES	NO	dd	db	51.066
4	123478-HxCDF	34.98	3.962e5	3.152e5	1.182	1.26	1.24	2155.7	YES	NO	bd	bd	50.838
5	123468-HXCDF	33.34	4.175e5	3.320e5	1.197	1.26	1.24	2104.7	YES	NO	bb	bb	52.862

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.85	3.527e5	3.436e5	1.204	1.03	1.05	1739.4	YES	NO	bb	bb	48.984
2	1234789-HpCDF	41.10	3.197e5	3.013e5	1.165	1.06	1.05	1383.4	YES	NO	bd	bb	51.470

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.38	7.533e4	1.022e5	0.858	0.74	0.77	867.5	YES	NO	db	db	10.006
2	2378-TCDF	25.88	7.583e4	1.018e5	0.876	0.74	0.77	895.7	YES	NO	bb	bb	9.802
3	Total-tetrafurans	24.79	7.370e2	1.079e3	0.933	0.68	0.77	8.4	YES	NO	db	dd	0.094
4	1368-TCDF	22.39	9.960e4	1.319e5	1.064	0.76	0.77	1186.8	YES	NO	bb	bb	10.509
5	Total-pentafurans	32.41	4.363e5	2.872e5	0.866	1.52	1.55	1891.7	YES	NO	bb	bb	49.558
6	23478-PeCDF	31.37	4.582e5	2.969e5	0.911	1.54	1.55	1992.7	YES	NO	bb	bb	50.720
7	12378-PeCDF	30.04	4.347e5	2.900e5	0.845	1.50	1.55	1956.5	YES	NO	bb	bb	49.435
8	Total-pentafurans	28.89	7.749e4	4.941e4	0.866	1.57	1.55	335.4	YES	NO	bb	bb	8.693
9	123789-HxCDF	37.01	3.438e5	2.711e5	1.187	1.27	1.24	1855.6	YES	NO	bb	bb	49.890
10	234678-HxCDF	35.99	4.056e5	3.185e5	1.229	1.27	1.24	2160.6	YES	NO	bb	bd	51.528
11	123678-HxCDF	35.13	4.284e5	3.437e5	1.248	1.25	1.24	2238.5	YES	NO	dd	db	51.066
12	123478-HxCDF	34.98	3.962e5	3.152e5	1.182	1.26	1.24	2155.7	YES	NO	bd	bd	50.838
13	123468-HXCDF	33.34	4.175e5	3.320e5	1.197	1.26	1.24	2104.7	YES	NO	bb	bb	52.862
14	1234678-HpCDF	38.85	3.527e5	3.436e5	1.204	1.03	1.05	1739.4	YES	NO	bb	bb	48.984
15	1234789-HpCDF	41.10	3.197e5	3.013e5	1.165	1.06	1.05	1383.4	YES	NO	bd	bb	51.470
16	OCDF	45.36	4.733e5	5.396e5	1.186	0.88	0.89	2082.4	YES	NO	bb	bb	92.994
17	13468-PECDF	27.24	5.475e5	3.540e5	1.013	1.55	1.55	9441.4	YES	NO	bb	bb	51.279

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.66	6.883e4	8.714e4	1.084	0.79	0.77	811.7	YES	NO	bb	bb	11.549
2	1289-TCDD	27.12	6.029e4	7.860e4	0.975	0.77	0.77	650.5	YES	NO	bb	bd	11.436
3	2378-TCDD	26.53	6.792e4	8.768e4	1.236	0.77	0.77	749.1	YES	NO	bb	bb	10.105
4	Total-tetradioxins	26.20	1.038e5	1.301e5	1.099	0.80	0.77	805.2	YES	NO	bb	bb	17.096
5	Total-tetradioxins	25.72	3.415e4	4.291e4	1.099	0.80	0.77	378.9	YES	NO	bd	bd	5.632

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	32.03	4.002e5	2.572e5	1.252	1.56	1.55	1906.1	YES	NO	bb	bb	51.760
2	12378-PeCDD	31.63	3.290e5	2.096e5	1.087	1.57	1.55	1603.9	YES	NO	bb	bb	48.876
3	12479-PECDD	28.91	6.082e5	3.865e5	1.837	1.57	1.55	1847.3	YES	NO	bb	bb	53.387

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.60	2.845e5	2.378e5	0.985	1.20	1.24	1960.3	YES	NO	bb	bb	49.580
2	123678-HxCDD	36.22	2.990e5	2.445e5	1.021	1.22	1.24	1984.4	YES	NO	db	db	48.307
3	123478-HxCDD	36.11	2.890e5	2.319e5	0.987	1.25	1.24	1968.4	YES	NO	bd	bd	50.975
4	124679-HXCDD	34.10	3.073e5	2.529e5	1.033	1.22	1.24	1984.3	YES	NO	bb	bb	52.384

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.35	2.858e5	2.609e5	1.253	1.10	1.05	1890.7	YES	NO	bd	bb	48.846
2	1234679-HPCDD	39.30	2.978e5	2.984e5	1.286	1.00	1.05	2169.4	YES	NO	bb	bd	51.878

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.66	6.883e4	8.714e4	1.084	0.79	0.77	811.7	YES	NO	bb	bb	11.549
2	1289-TCDD	27.12	6.029e4	7.860e4	0.975	0.77	0.77	650.5	YES	NO	bb	bd	11.436
3	2378-TCDD	26.53	6.792e4	8.768e4	1.236	0.77	0.77	749.1	YES	NO	bb	bb	10.105
4	Total-tetradioxins	26.20	1.038e5	1.301e5	1.099	0.80	0.77	805.2	YES	NO	bb	bb	17.096
5	Total-tetradioxins	25.72	3.415e4	4.291e4	1.099	0.80	0.77	378.9	YES	NO	bd	bd	5.632
6	12389-PECDD	32.03	4.002e5	2.572e5	1.252	1.56	1.55	1906.1	YES	NO	bb	bb	51.760
7	12378-PeCDD	31.63	3.290e5	2.096e5	1.087	1.57	1.55	1603.9	YES	NO	bb	bb	48.876
8	12479-PECDD	28.91	6.082e5	3.865e5	1.837	1.57	1.55	1847.3	YES	NO	bb	bb	53.387
9	123789-HxCDD	36.60	2.845e5	2.378e5	0.985	1.20	1.24	1960.3	YES	NO	bb	bb	49.580
10	123678-HxCDD	36.22	2.990e5	2.445e5	1.021	1.22	1.24	1984.4	YES	NO	db	db	48.307
11	123478-HxCDD	36.11	2.890e5	2.319e5	0.987	1.25	1.24	1968.4	YES	NO	bd	bd	50.975
12	124679-HXCDD	34.10	3.073e5	2.529e5	1.033	1.22	1.24	1984.3	YES	NO	bb	bb	52.384
13	1234678-HpCDD	40.35	2.858e5	2.609e5	1.253	1.10	1.05	1890.7	YES	NO	bd	bb	48.846
14	1234679-HPCDD	39.30	2.978e5	2.984e5	1.286	1.00	1.05	2169.4	YES	NO	bb	bd	51.878
15	OCDD	45.11	4.553e5	5.144e5	1.103	0.89	0.89	2832.1	YES	NO	bb	bb	95.778

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.38	7.533e4	1.022e5	0.858	0.74	0.77	867.5	YES	NO	db	db	10.006
2	2378-TCDF	25.88	7.583e4	1.018e5	0.876	0.74	0.77	895.7	YES	NO	bb	bb	9.802
3	Total-tetrafurans	24.79	7.370e2	1.079e3	0.933	0.68	0.77	8.4	YES	NO	db	dd	0.094
4	1368-TCDF	22.39	9.960e4	1.319e5	1.064	0.76	0.77	1186.8	YES	NO	bb	bb	10.509
5	Total-pentafurans	32.41	4.363e5	2.872e5	0.866	1.52	1.55	1891.7	YES	NO	bb	bb	49.558
6	23478-PeCDF	31.37	4.582e5	2.969e5	0.911	1.54	1.55	1992.7	YES	NO	bb	bb	50.720
7	12378-PeCDF	30.04	4.347e5	2.900e5	0.845	1.50	1.55	1956.5	YES	NO	bb	bb	49.435
8	Total-pentafurans	28.89	7.749e4	4.941e4	0.866	1.57	1.55	335.4	YES	NO	bb	bb	8.693
9	123789-HxCDF	37.01	3.438e5	2.711e5	1.187	1.27	1.24	1855.6	YES	NO	bb	bb	49.890
10	234678-HxCDF	35.99	4.056e5	3.185e5	1.229	1.27	1.24	2160.6	YES	NO	bb	bd	51.528
11	123678-HxCDF	35.13	4.284e5	3.437e5	1.248	1.25	1.24	2238.5	YES	NO	dd	db	51.066
12	123478-HxCDF	34.98	3.962e5	3.152e5	1.182	1.26	1.24	2155.7	YES	NO	bd	bd	50.838
13	123468-HXCDF	33.34	4.175e5	3.320e5	1.197	1.26	1.24	2104.7	YES	NO	bb	bb	52.862
14	1234678-HpCDF	38.85	3.527e5	3.436e5	1.204	1.03	1.05	1739.4	YES	NO	bb	bb	48.984
15	1234789-HpCDF	41.10	3.197e5	3.013e5	1.165	1.06	1.05	1383.4	YES	NO	bd	bb	51.470
16	OCDF	45.36	4.733e5	5.396e5	1.186	0.88	0.89	2082.4	YES	NO	bb	bb	92.994
17	13468-PECDF	27.24	5.475e5	3.540e5	1.013	1.55	1.55	9441.4	YES	NO	bb	bb	51.279
18	1368-TCDD	23.66	6.883e4	8.714e4	1.084	0.79	0.77	811.7	YES	NO	bb	bb	11.549
19	1289-TCDD	27.12	6.029e4	7.860e4	0.975	0.77	0.77	650.5	YES	NO	bb	bd	11.436
20	2378-TCDD	26.53	6.792e4	8.768e4	1.236	0.77	0.77	749.1	YES	NO	bb	bb	10.105
21	Total-tetradioxins	26.20	1.038e5	1.301e5	1.099	0.80	0.77	805.2	YES	NO	bb	bb	17.096
22	Total-tetradioxins	25.72	3.415e4	4.291e4	1.099	0.80	0.77	378.9	YES	NO	bd	bd	5.632
23	12389-PECDD	32.03	4.002e5	2.572e5	1.252	1.56	1.55	1906.1	YES	NO	bb	bb	51.760
24	12378-PeCDD	31.63	3.290e5	2.096e5	1.087	1.57	1.55	1603.9	YES	NO	bb	bb	48.876
25	12479-PECDD	28.91	6.082e5	3.865e5	1.837	1.57	1.55	1847.3	YES	NO	bb	bb	53.387
26	123789-HxCDD	36.60	2.845e5	2.378e5	0.985	1.20	1.24	1960.3	YES	NO	bb	bb	49.580
27	123678-HxCDD	36.22	2.990e5	2.445e5	1.021	1.22	1.24	1984.4	YES	NO	db	db	48.307
28	123478-HxCDD	36.11	2.890e5	2.319e5	0.987	1.25	1.24	1968.4	YES	NO	bd	bd	50.975
29	124679-HXCDD	34.10	3.073e5	2.529e5	1.033	1.22	1.24	1984.3	YES	NO	bb	bb	52.384
30	1234678-HpCDD	40.35	2.858e5	2.609e5	1.253	1.10	1.05	1890.7	YES	NO	bd	bb	48.846
31	1234679-HPCDD	39.30	2.978e5	2.984e5	1.286	1.00	1.05	2169.4	YES	NO	bb	bd	51.878
32	OCDD	45.11	4.553e5	5.144e5	1.103	0.89	0.89	2832.1	YES	NO	bb	bb	95.778

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	27.86	1.802e4					0.8	NO		bb		
2	FUNCTION1 PFK	27.44	9.566e3					0.7	NO		bb		
3	FUNCTION1 PFK	27.12	3.959e3					0.4	NO		bb		
4	FUNCTION1 PFK	26.97	4.648e4					1.4	NO		bb		
5	FUNCTION1 PFK	26.85	1.177e4					0.8	NO		bb		
6	FUNCTION1 PFK	26.26	3.797e3					0.4	NO		bb		
7	FUNCTION1 PFK	25.26	1.715e4					0.9	NO		bb		
8	FUNCTION1 PFK	24.10	5.099e4					1.3	NO		bb		
9	FUNCTION1 PFK	22.39	1.400e4					0.8	NO		bb		
10	FUNCTION1 PFK	22.18	2.255e4					1.2	NO		bb		
11	FUNCTION1 PFK	21.91	1.341e4					0.9	NO		bb		
12	FUNCTION1 PFK	21.72	1.562e4					0.9	NO		bb		
13	FUNCTION1 PFK	21.54	1.217e4					0.8	NO		bb		
14	FUNCTION1 PFK	21.48	3.458e4					0.9	NO		bb		
15	FUNCTION1 PFK	28.06	2.191e4					1.2	NO		bb		

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.07	6.452e3					0.9	NO		bd		0.000
2	FUNCTION2 PFK	29.81	1.293e4					1.6	NO		db		0.000
3	FUNCTION2 PFK	29.78	4.561e3					1.1	NO		bd		0.000
4	FUNCTION2 PFK	29.68	5.711e3					1.0	NO		db		0.000
5	FUNCTION2 PFK	29.64	1.700e4					1.8	NO		bd		0.000
6	FUNCTION2 PFK	29.47	2.480e4					1.9	NO		db		0.000
7	FUNCTION2 PFK	29.36	1.696e4					1.9	NO		bd		0.000
8	FUNCTION2 PFK	29.29	2.861e3					0.7	NO		bb		0.000
9	FUNCTION2 PFK	29.16	1.091e4					1.2	NO		bb		0.000
10	FUNCTION2 PFK	28.90	2.320e3					0.6	NO		bb		0.000
11	FUNCTION2 PFK	28.80	2.770e3					0.8	NO		bb		0.000
12	FUNCTION2 PFK	28.54	5.899e3					1.2	NO		db		0.000
13	FUNCTION2 PFK	28.50	1.397e4					2.0	NO		bd		0.000
14	FUNCTION2 PFK	28.32	1.175e3					0.5	NO		bb		0.000
15	FUNCTION2 PFK	31.69	3.508e3					0.9	NO		bb		0.000
16	FUNCTION2 PFK	31.63	1.016e4					1.4	NO		bb		0.000
17	FUNCTION2 PFK	31.53	8.675e3					0.8	NO		bb		0.000
18	FUNCTION2 PFK	31.49	1.869e3					0.7	NO		bb		0.000
19	FUNCTION2 PFK	31.40	1.095e4					1.3	NO		bb		0.000
20	FUNCTION2 PFK	31.20	1.018e4					1.4	NO		db		0.000
21	FUNCTION2 PFK	31.14	9.902e3					1.4	NO		bd		0.000
22	FUNCTION2 PFK	31.04	2.521e3					0.6	NO		bb		0.000
23	FUNCTION2 PFK	30.92	4.486e3					1.1	NO		db		0.000
24	FUNCTION2 PFK	30.88	6.090e3					1.2	NO		bd		0.000
25	FUNCTION2 PFK	30.81	3.856e3					0.6	NO		bb		0.000
26	FUNCTION2 PFK	30.76	7.571e3					1.5	NO		db		0.000
27	FUNCTION2 PFK	30.72	1.009e4					1.3	NO		bd		0.000
28	FUNCTION2 PFK	30.37	7.200e3					1.1	NO		db		0.000
29	FUNCTION2 PFK	30.32	1.863e4					2.0	NO		bd		0.000
30	FUNCTION2 PFK	30.12	8.431e3					1.5	NO		db		0.000
31	FUNCTION2 PFK	32.82	1.531e4					1.7	NO		bb		0.000
32	FUNCTION2 PFK	32.76	2.617e4					2.0	NO		db		0.000
33	FUNCTION2 PFK	32.66	9.185e3					1.4	NO		dd		0.000
34	FUNCTION2 PFK	32.61	2.742e4					2.3	NO		dd		0.000
35	FUNCTION2 PFK	32.51	2.015e4					1.8	NO		dd		0.000
36	FUNCTION2 PFK	32.38	1.541e4					2.0	NO		bd		0.000
37	FUNCTION2 PFK	32.27	1.620e3					0.7	NO		bb		0.000

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION2 PFK	32.22	6.522e3					1.4	NO		bb		0.000
39	FUNCTION2 PFK	31.96	8.002e3					1.0	NO		bb		0.000
40	FUNCTION2 PFK	31.73	2.461e3					0.8	NO		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	34.03	4.935e3					0.7	NO		bb		0.000
2	FUNCTION3 PFK	33.76	5.855e3					0.9	NO		bb		0.000
3	FUNCTION3 PFK	33.65	2.046e4					1.3	NO		bb		0.000
4	FUNCTION3 PFK	33.29	1.061e4					1.2	NO		bb		0.000
5	FUNCTION3 PFK	33.10	1.235e4					0.9	NO		bb		0.000
6	FUNCTION3 PFK	36.89	5.964e3					0.8	NO		bb		0.000
7	FUNCTION3 PFK	36.67	1.246e4					1.3	NO		db		0.000
8	FUNCTION3 PFK	36.59	3.645e4					2.5	NO		bd		0.000
9	FUNCTION3 PFK	36.47	1.165e4					0.9	NO		bb		0.000
10	FUNCTION3 PFK	36.40	4.348e3					0.7	NO		bb		0.000
11	FUNCTION3 PFK	36.32	3.325e4					1.9	NO		bb		0.000
12	FUNCTION3 PFK	36.24	1.791e4					1.4	NO		db		0.000
13	FUNCTION3 PFK	36.19	2.043e4					1.6	NO		bd		0.000
14	FUNCTION3 PFK	35.34	7.839e3					0.9	NO		bb		0.000
15	FUNCTION3 PFK	35.04	1.130e4					1.2	NO		bb		0.000
16	FUNCTION3 PFK	34.98	1.757e4					1.3	NO		bb		0.000
17	FUNCTION3 PFK	34.66	3.150e4					2.1	NO		db		0.000
18	FUNCTION3 PFK	34.63	2.204e4					2.2	NO		bd		0.000
19	FUNCTION3 PFK	34.51	2.015e4					1.6	NO		db		0.000
20	FUNCTION3 PFK	34.43	2.373e4					2.0	NO		dd		0.000
21	FUNCTION3 PFK	34.39	1.491e4					1.8	NO		bd		0.000
22	FUNCTION3 PFK	37.97	9.526e3					1.1	NO		bb		0.000
23	FUNCTION3 PFK	37.61	4.551e3					0.8	NO		bb		0.000
24	FUNCTION3 PFK	37.03	2.911e4					1.8	NO		db		0.000
25	FUNCTION3 PFK	36.98	3.696e3					0.6	NO		bd		0.000

ID: ICVCR, Name: 23020110, Date: 01-Feb-2023, Time: 20:23:25, Conditions: AUTOSPEC01, User: pk

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	42.71	9.457e3					0.9	NO		bb		
2	FUNCTION4 PFK	42.55	1.416e3					0.4	NO		bb		
3	FUNCTION4 PFK	42.33	2.050e4					1.4	NO		bb		
4	FUNCTION4 PFK	40.90	3.965e3					0.7	NO		bb		
5	FUNCTION4 PFK	40.40	4.095e3					0.7	NO		bb		
6	FUNCTION4 PFK	40.20	2.031e3					0.6	NO		bb		
7	FUNCTION4 PFK	39.89	7.818e3					1.2	NO		bb		
8	FUNCTION4 PFK	39.30	3.577e3					0.7	NO		db		
9	FUNCTION4 PFK	39.23	1.513e4					1.5	NO		bd		
10	FUNCTION4 PFK	38.50	5.085e3					0.8	NO		bb		
11	FUNCTION4 PFK	38.22	4.047e5					4.0	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	46.44	6.785e3					1.5	NO		db		
2	FUNCTION5 PFK	46.41	4.268e3					1.1	NO		bd		
3	FUNCTION5 PFK	46.32	3.211e3					0.9	NO		bb		
4	FUNCTION5 PFK	46.25	5.782e3					1.5	NO		bb		
5	FUNCTION5 PFK	46.21	2.148e3					0.5	NO		bb		
6	FUNCTION5 PFK	45.92	1.180e4					1.5	NO		bb		
7	FUNCTION5 PFK	45.78	2.503e3					0.9	NO		bb		
8	FUNCTION5 PFK	45.72	1.015e3					0.6	NO		bb		
9	FUNCTION5 PFK	45.60	1.955e3					0.7	NO		bb		
10	FUNCTION5 PFK	45.57	1.104e3					0.6	NO		bb		
11	FUNCTION5 PFK	45.45	1.042e4					1.3	NO		bb		
12	FUNCTION5 PFK	44.52	3.296e3					0.9	NO		bb		
13	FUNCTION5 PFK	44.38	2.843e4					2.4	NO		bb		
14	FUNCTION5 PFK	44.01	6.535e3					1.0	NO		bb		
15	FUNCTION5 PFK	43.51	4.124e3					1.1	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.80	1.077e2					3.2	YES		bb		0.000
2	FUNCTION1 HXCD...	27.23	8.014e1					1.9	NO		bb		0.000
3	FUNCTION1 HXCD...	25.90	4.015e2					4.7	YES		db		0.000
4	FUNCTION1 HXCD...	25.72	1.078e2					2.6	NO		bd		0.000
5	FUNCTION1 HXCD...	22.96	9.275e1					1.5	NO		bb		0.000
6	FUNCTION1 HXCD...	21.89	1.274e2					3.2	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HPCD...	24.78	7.643e1					1.2	NO		bb		0.000
2	FUNCTION1 HPCD...	24.10	1.351e2					2.2	NO		db		0.000
3	FUNCTION1 HPCD...	23.90	1.347e2					2.0	NO		dd		0.000
4	FUNCTION1 HPCD...	23.73	7.182e1					1.5	NO		dd		0.000
5	FUNCTION1 HPCD...	23.60	1.453e2					1.7	NO		bd		0.000
6	FUNCTION1 HPCD...	22.30	7.288e1					1.3	NO		bb		0.000
7	FUNCTION1 HPCD...	21.72	1.050e2					2.3	NO		db		0.000
8	FUNCTION1 HPCD...	21.65	1.092e2					1.7	NO		bd		0.000
9	FUNCTION1 HPCD...	27.77	1.087e2					2.2	NO		db		0.000
10	FUNCTION1 HPCD...	27.64	1.853e2					2.8	NO		bd		0.000
11	FUNCTION1 HPCD...	26.97	7.971e1					1.8	NO		db		0.000
12	FUNCTION1 HPCD...	26.89	8.957e1					2.2	NO		bd		0.000
13	FUNCTION1 HPCD...	25.88	1.706e2					2.4	NO		bb		0.000

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.25	4.855e2					9.2	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	34.13	1.383e2					3.3	YES		bb		0.000

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ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.71	9.570e1					1.7	NO		bb		0.000
2	FUNCTION4 NCDPE	40.15	8.625e1					2.5	NO		bb		0.000
3	FUNCTION4 NCDPE	39.82	7.102e1					1.6	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	45.11	7.207e1					2.3	NO		bb		0.000

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Printed: Friday, February 03, 2023 11:23:11 Pacific Standard Time

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ID: ICVCR, Name: 23020110, Date: 01-Feb-2023, Time: 20:23:25, Conditions: AUTOSPEC01, User: pk

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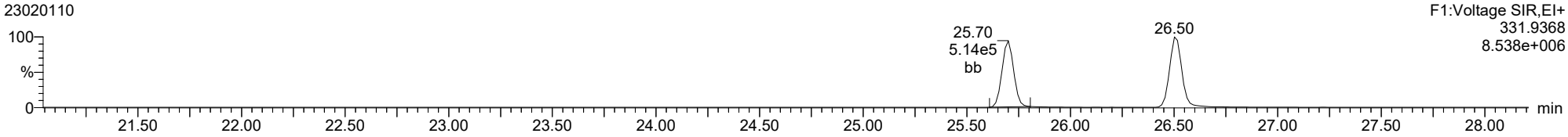

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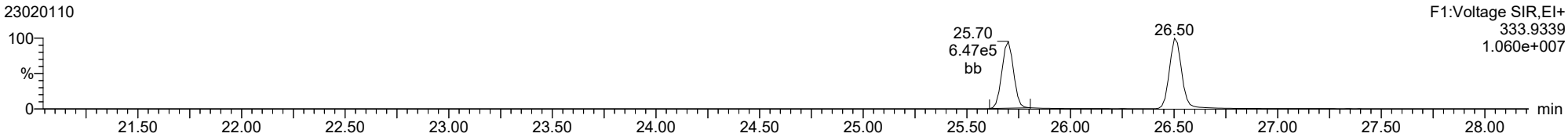

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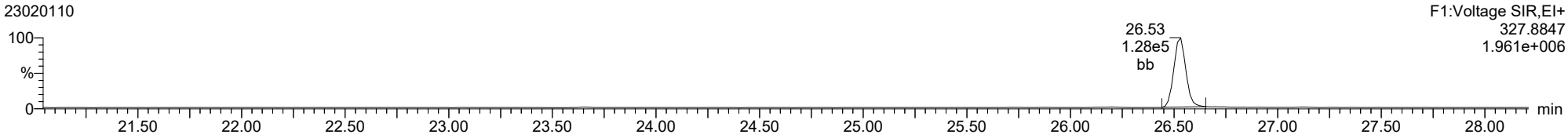

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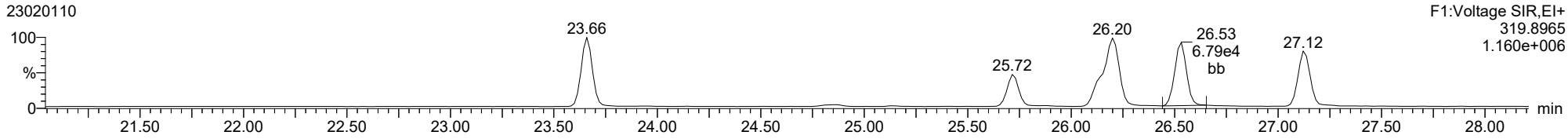

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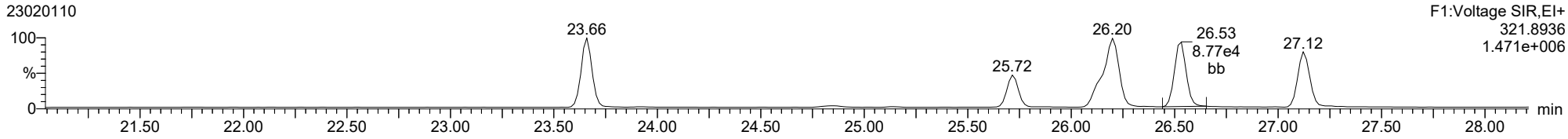

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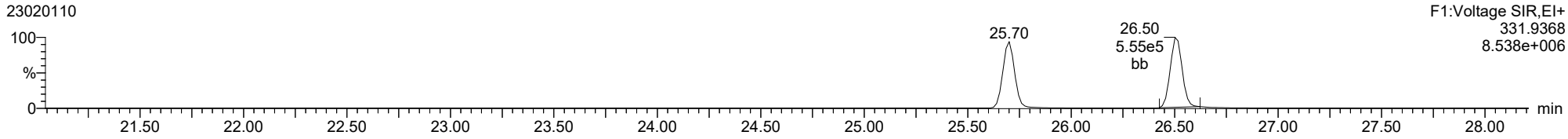

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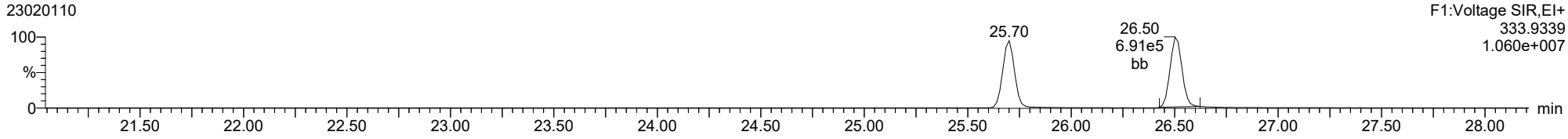

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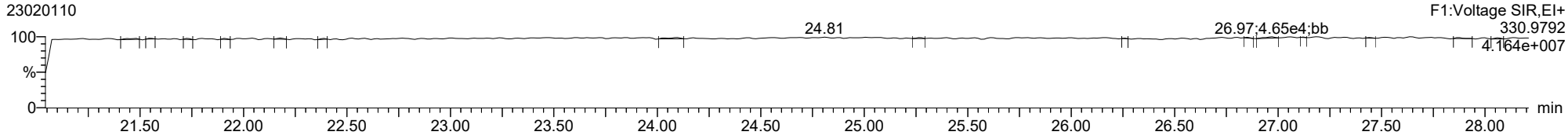

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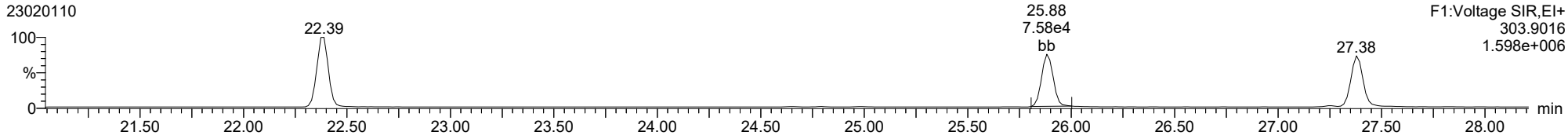

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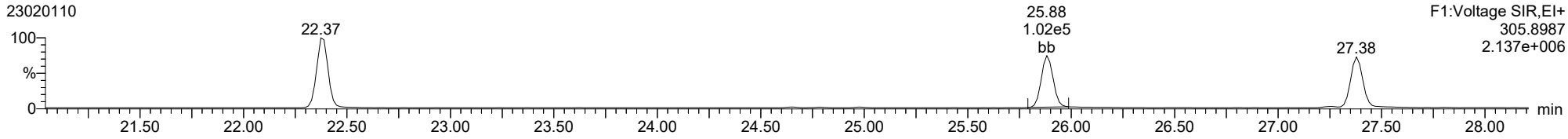

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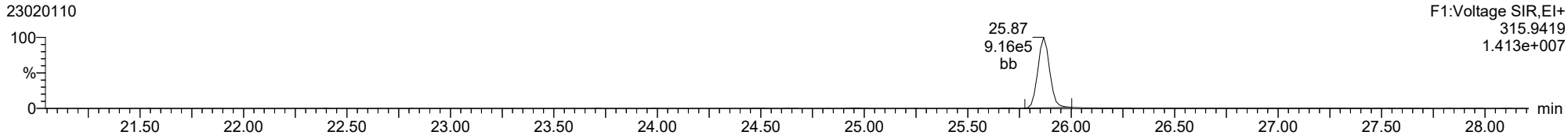

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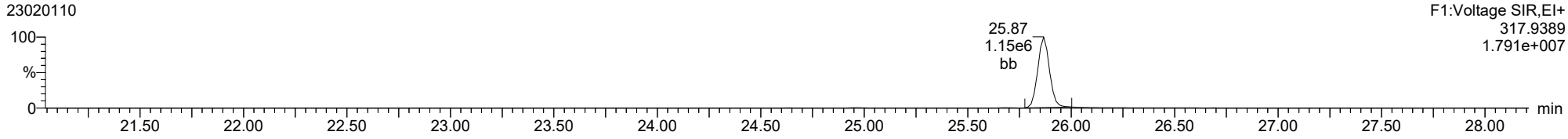

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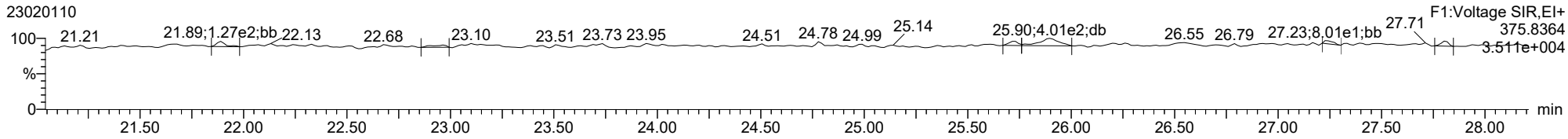

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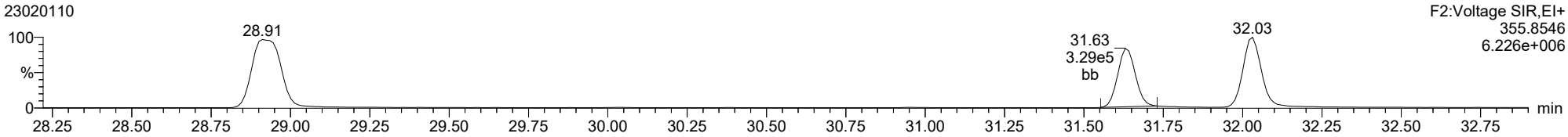

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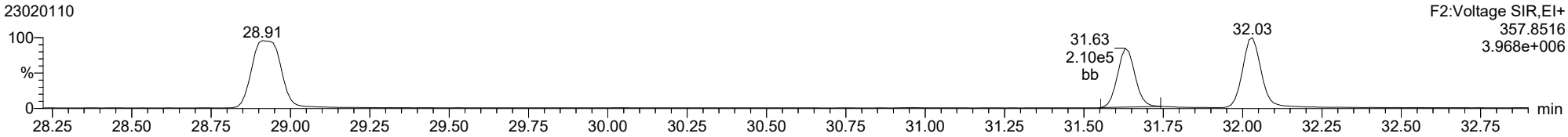

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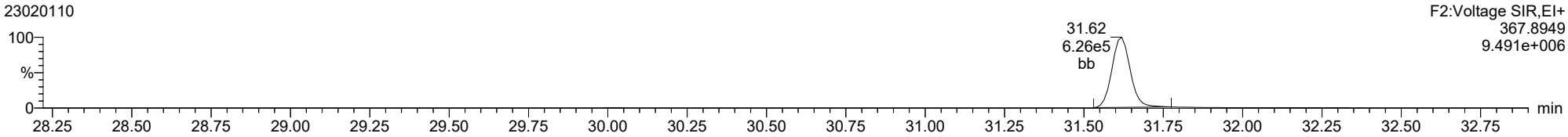

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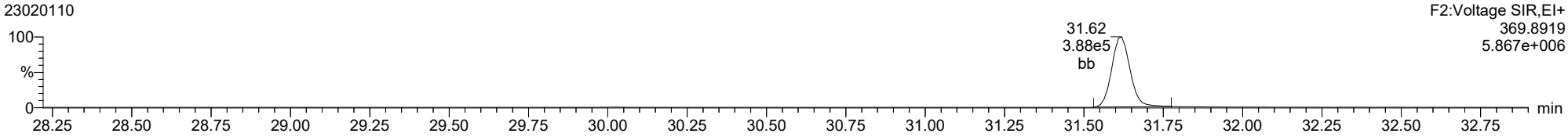

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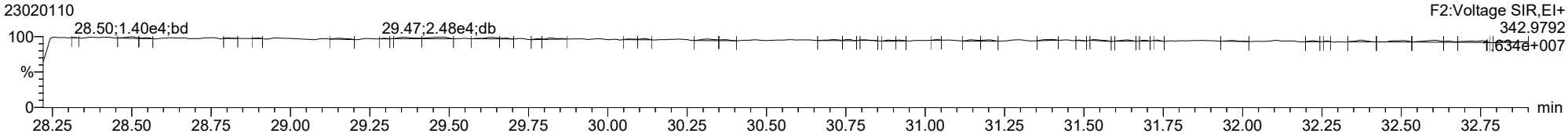

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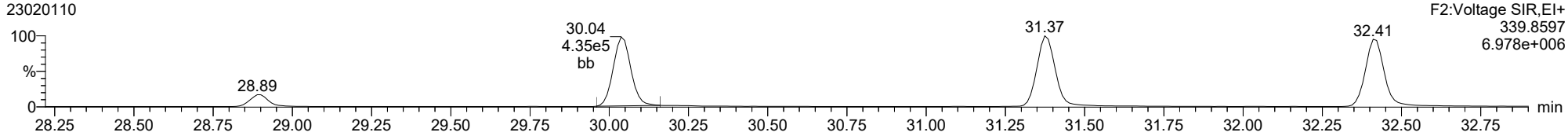

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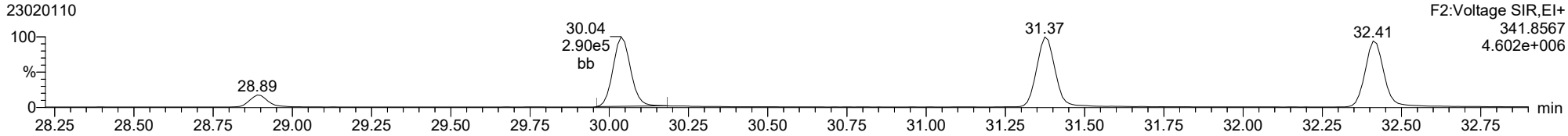

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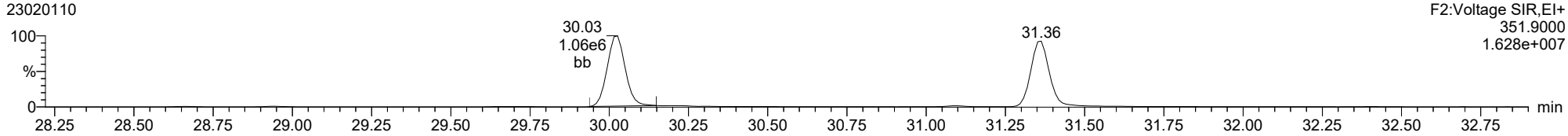

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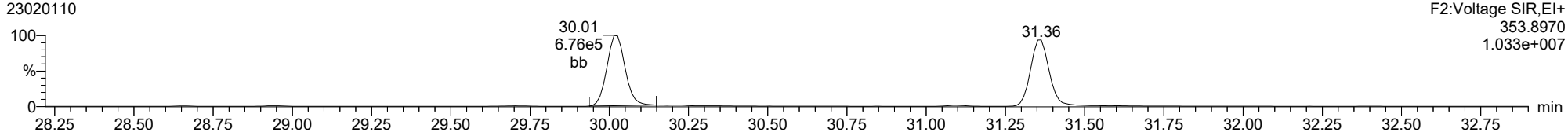
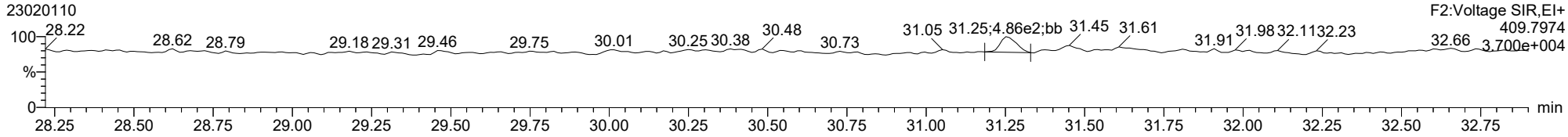


FUNCTION2 HPCDPE



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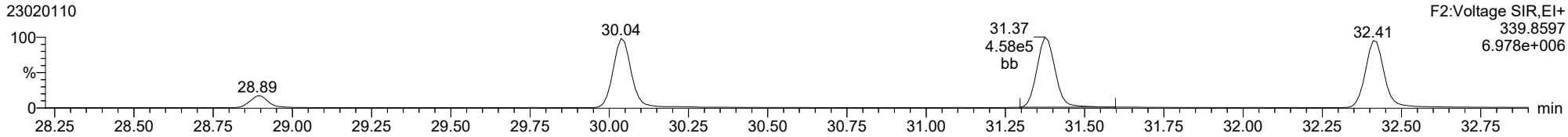
23478-PeCDF



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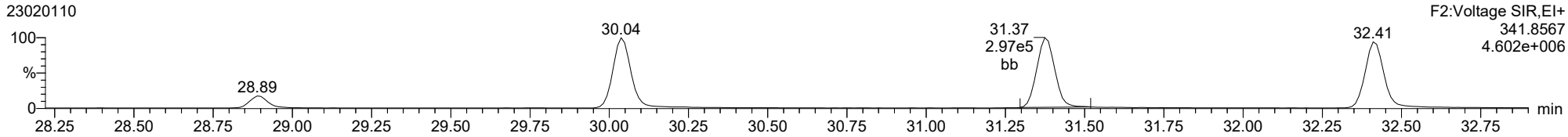

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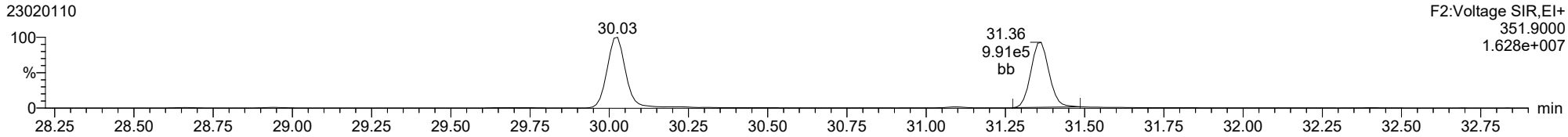

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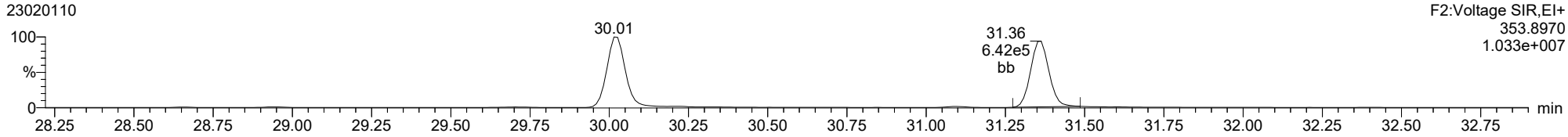

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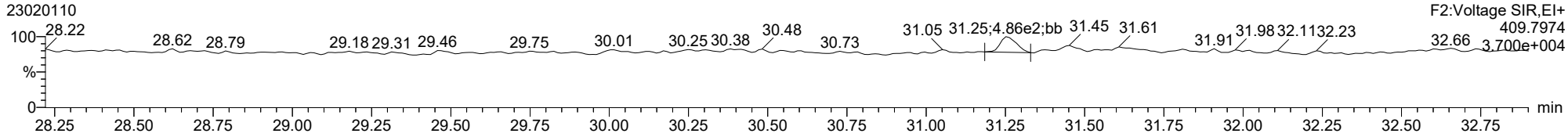

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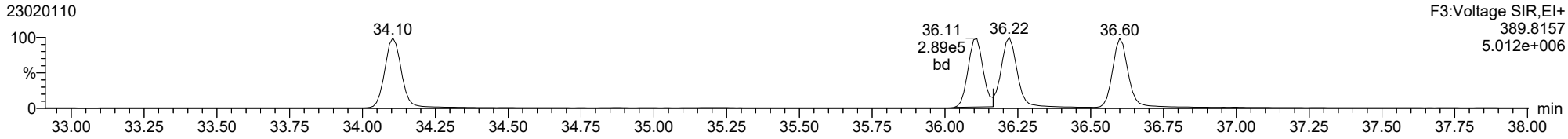
123478-HxCDD



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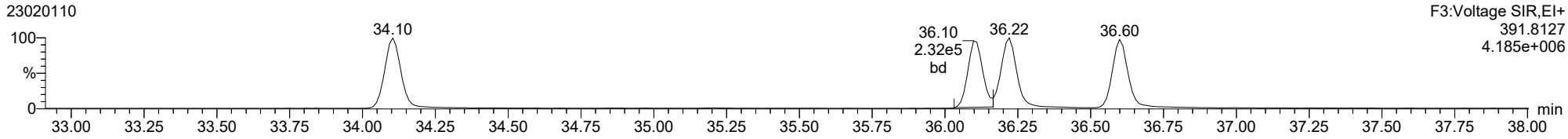

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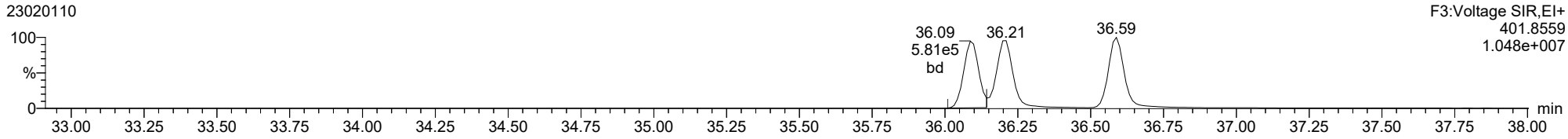

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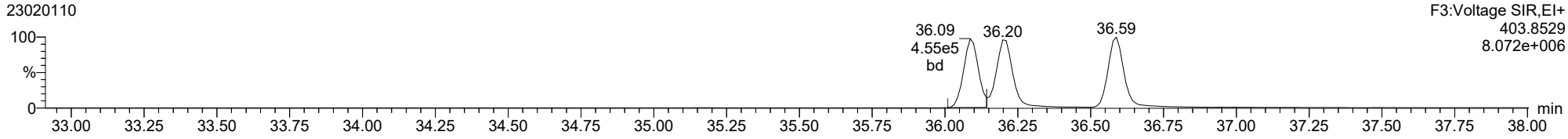
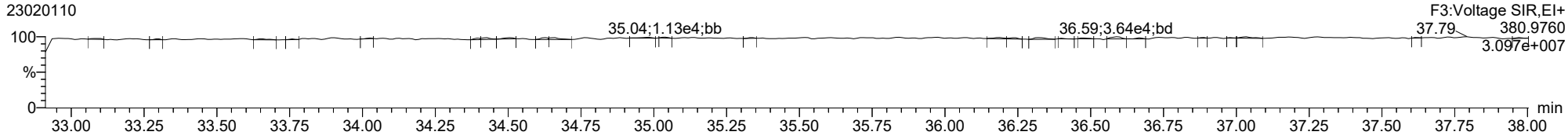


FUNCTION3 PFK



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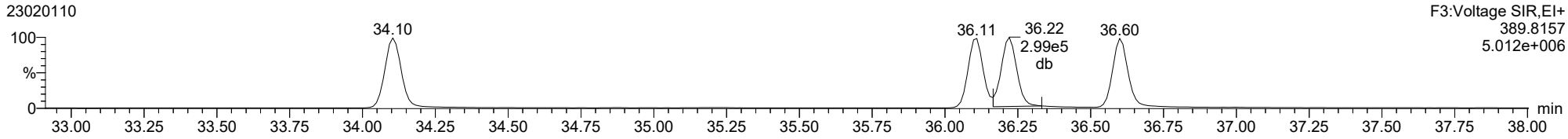

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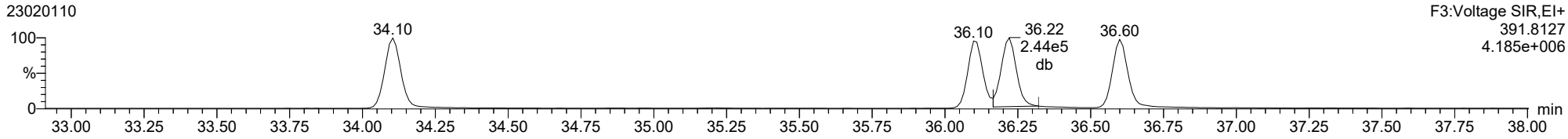

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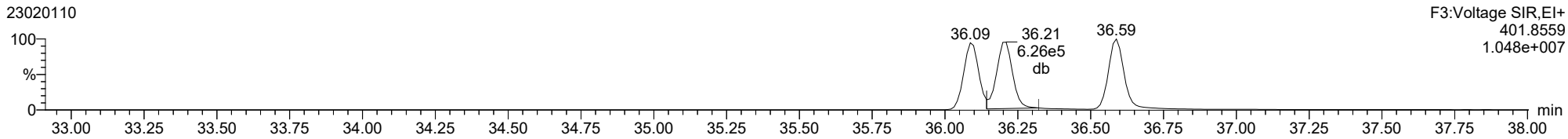

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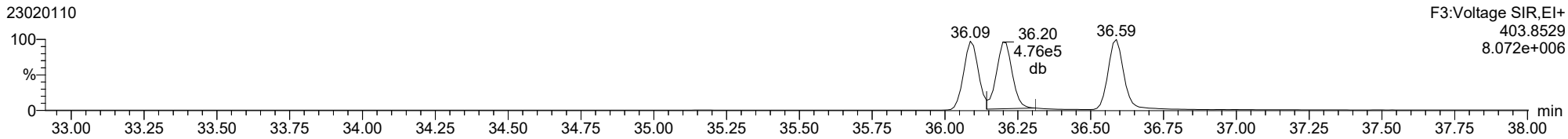

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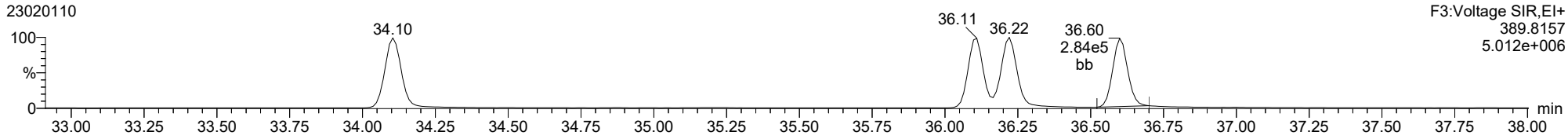

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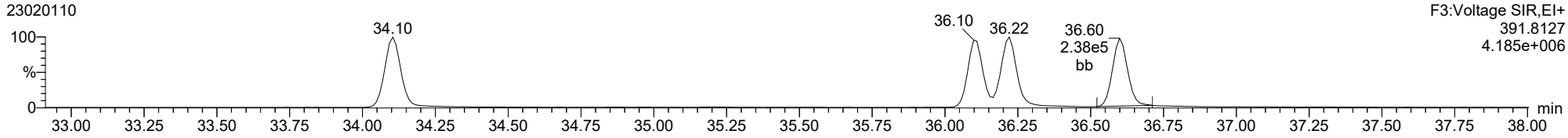

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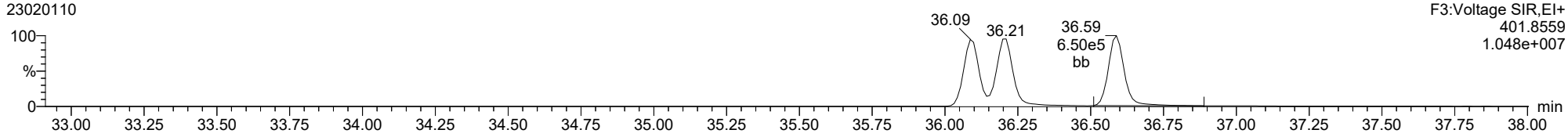

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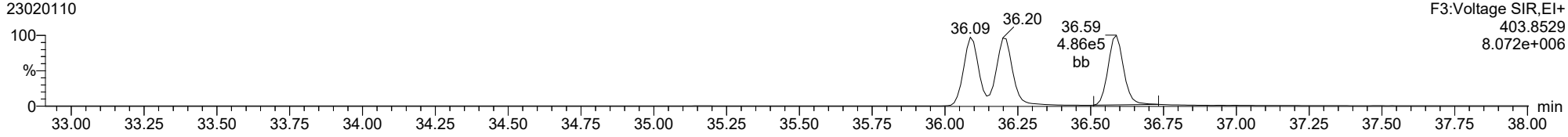

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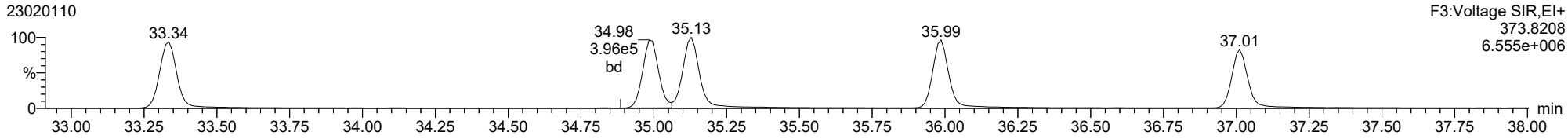

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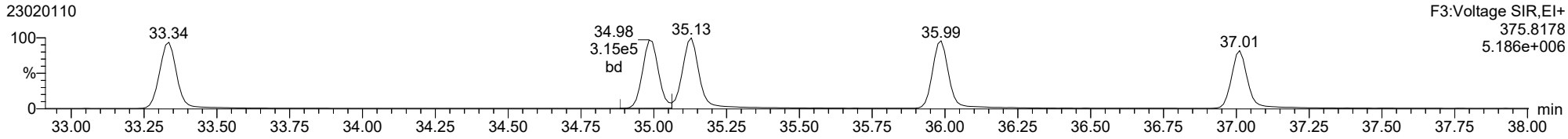

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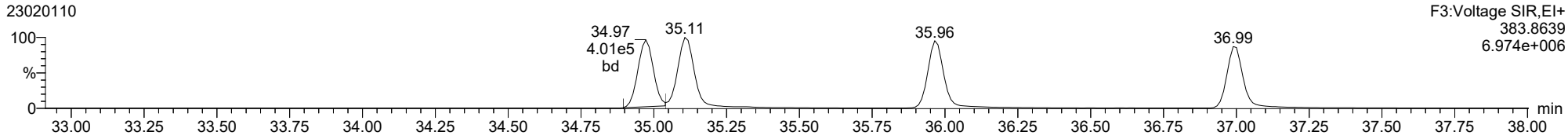

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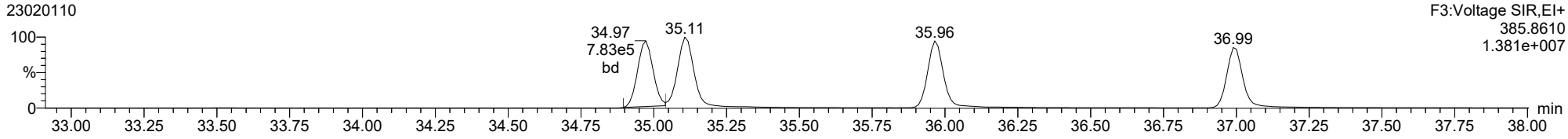

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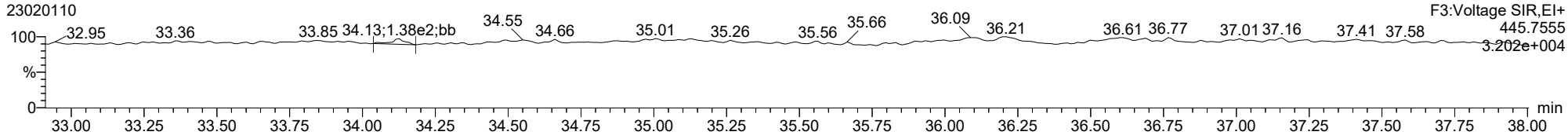

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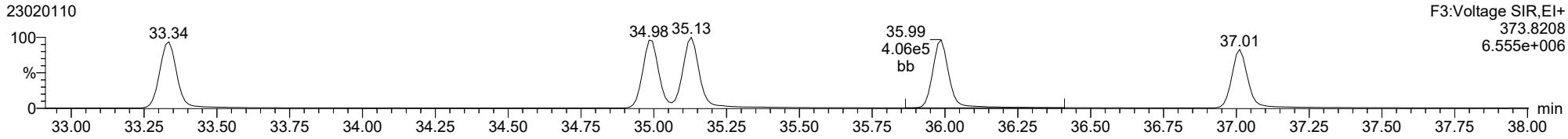

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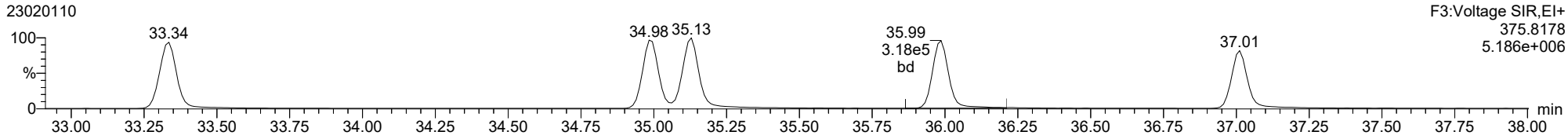

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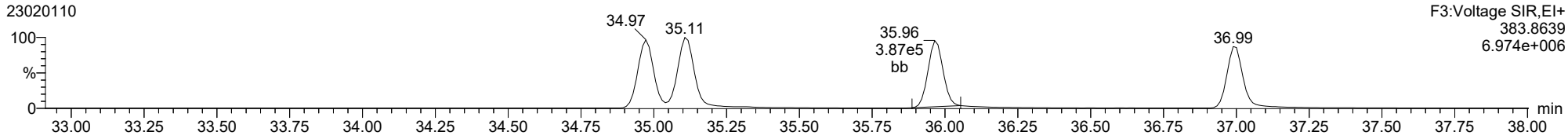

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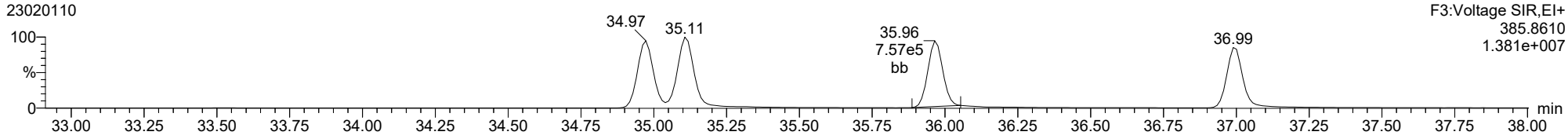

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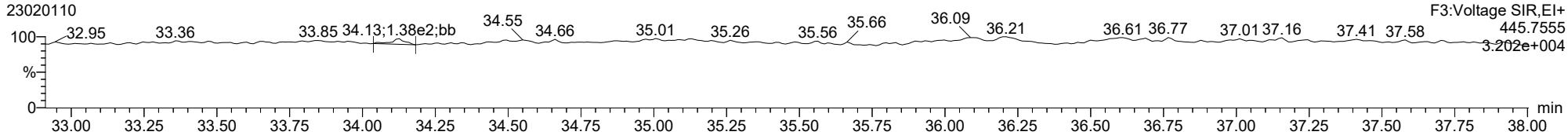

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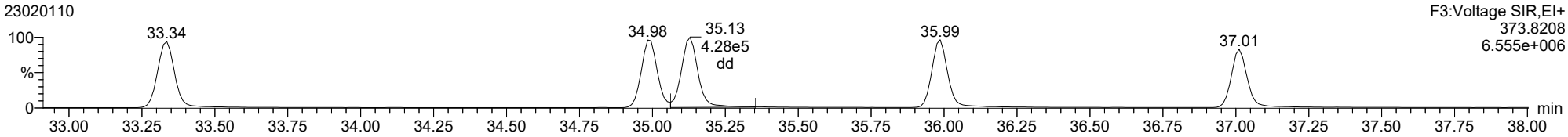

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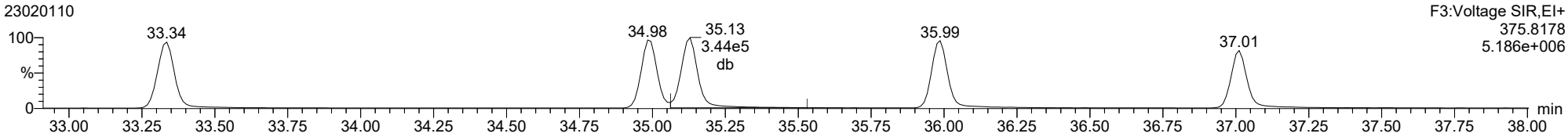

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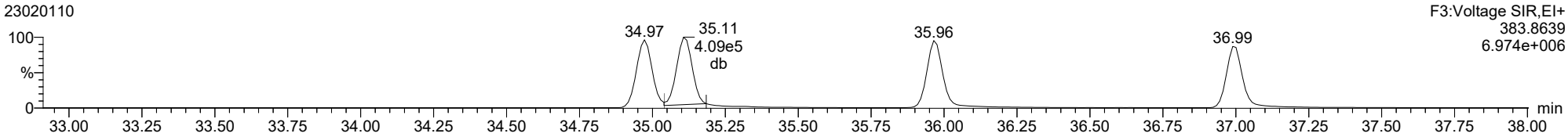

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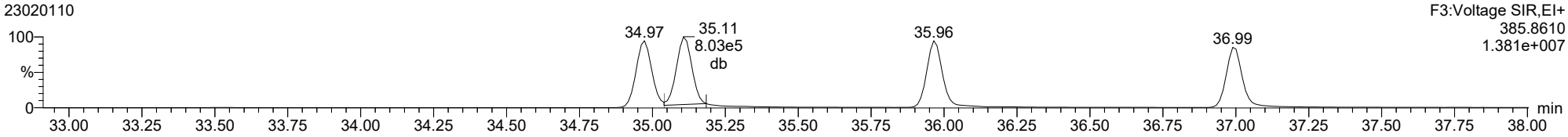

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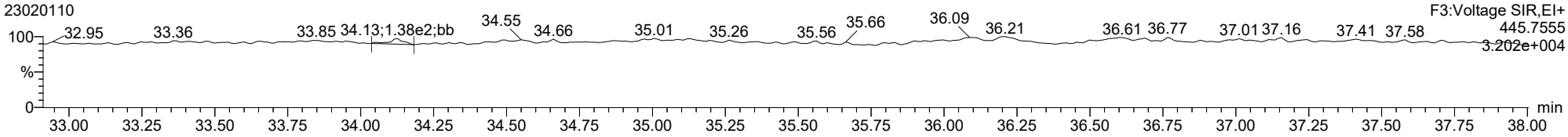

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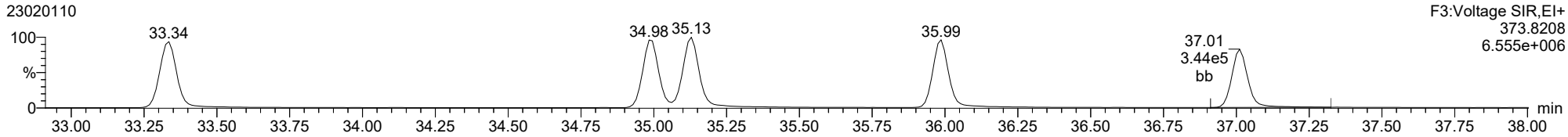

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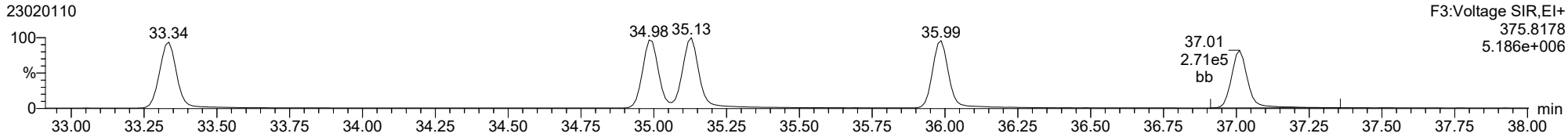

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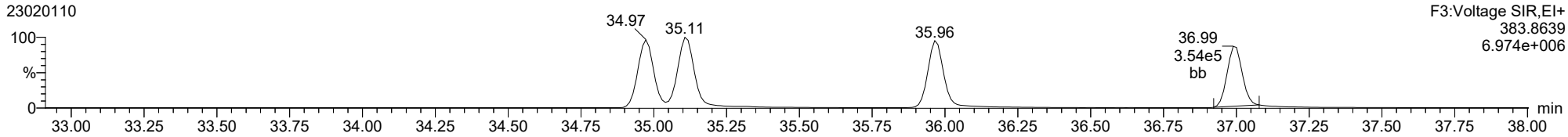

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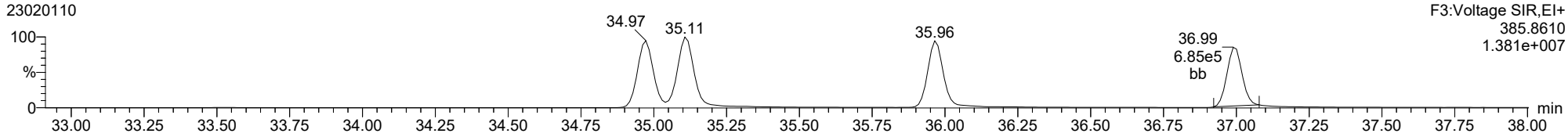

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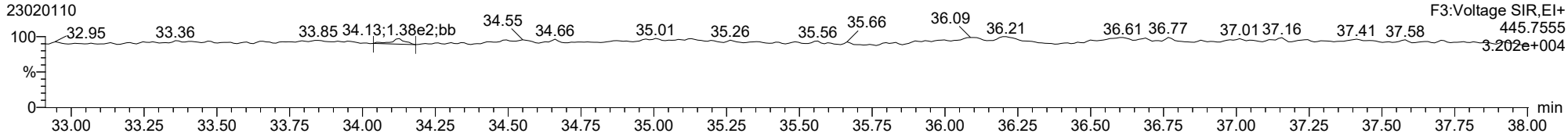

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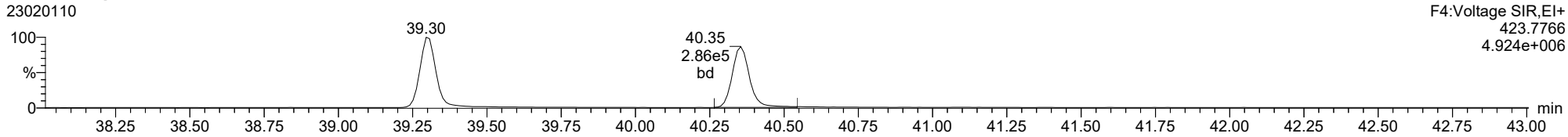

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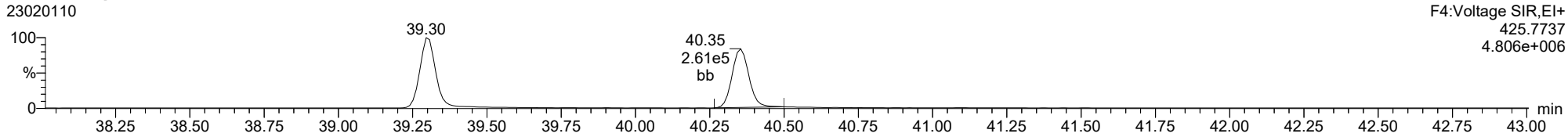

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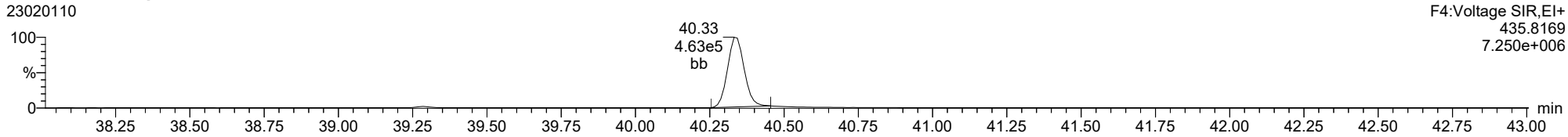

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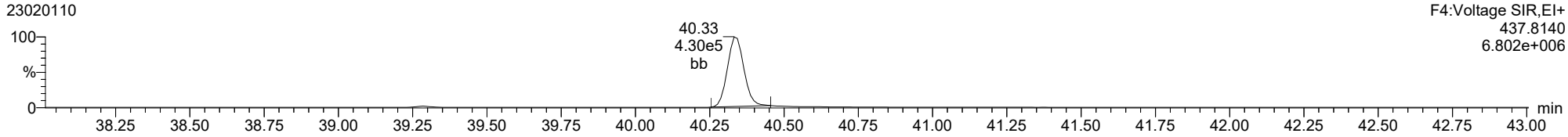

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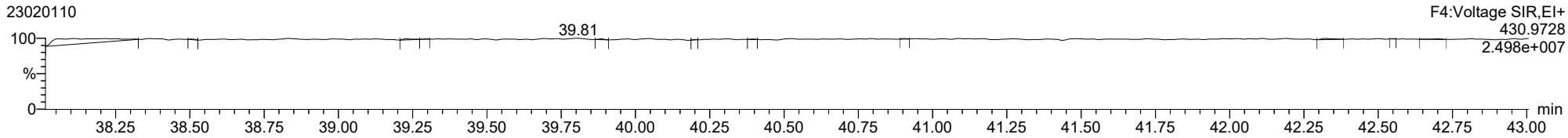

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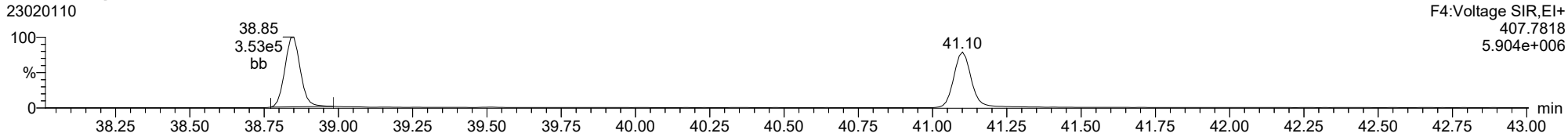

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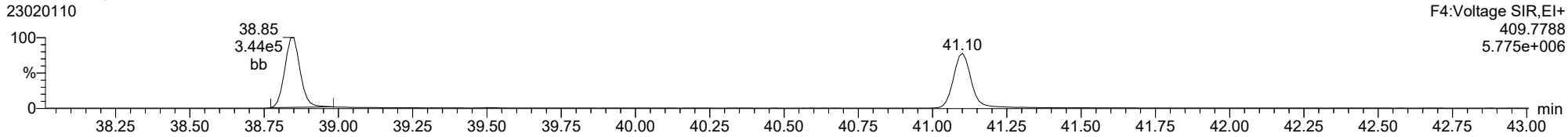

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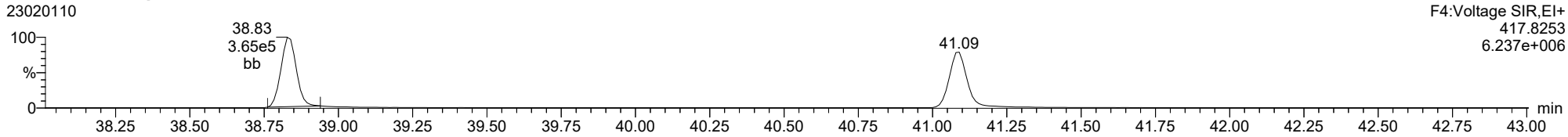

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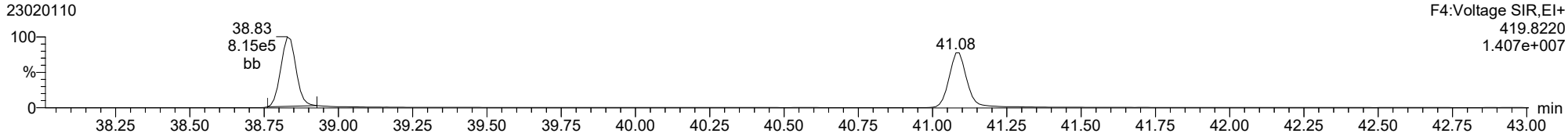

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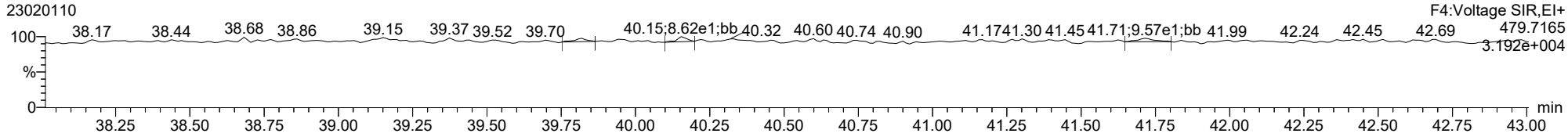

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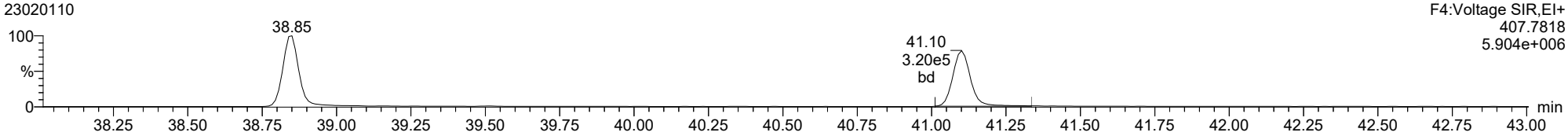

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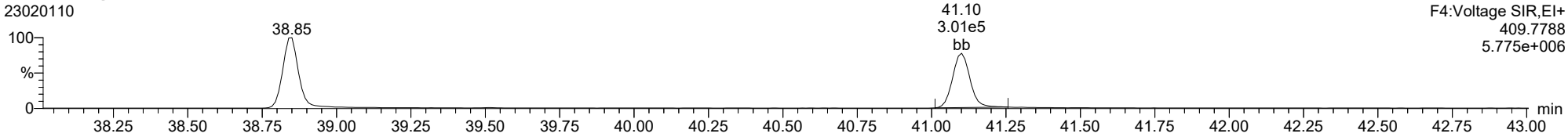

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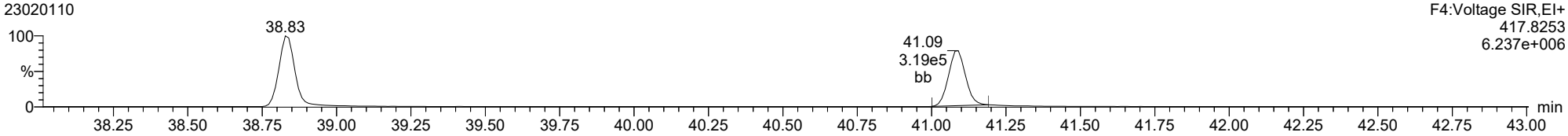

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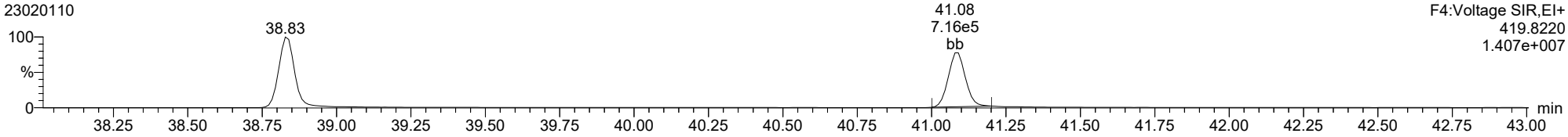

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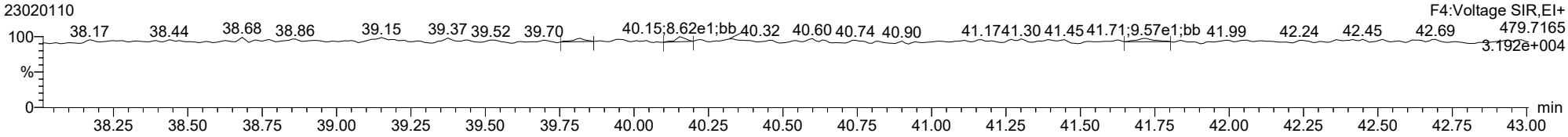

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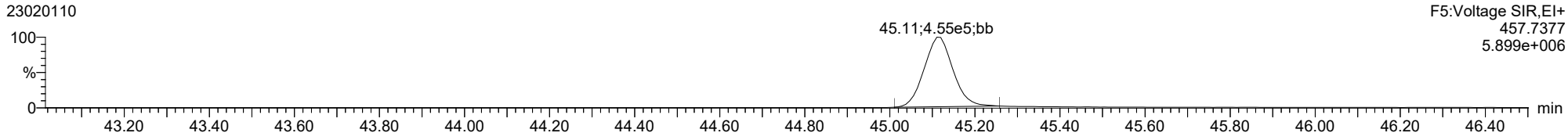

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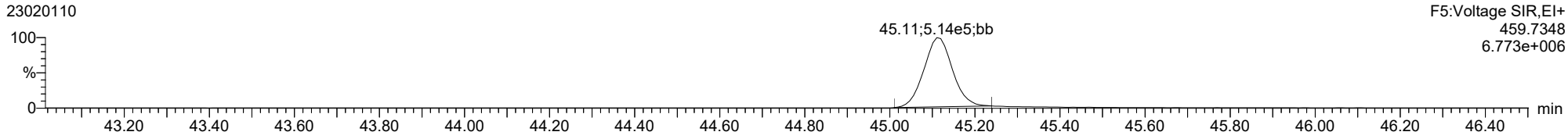

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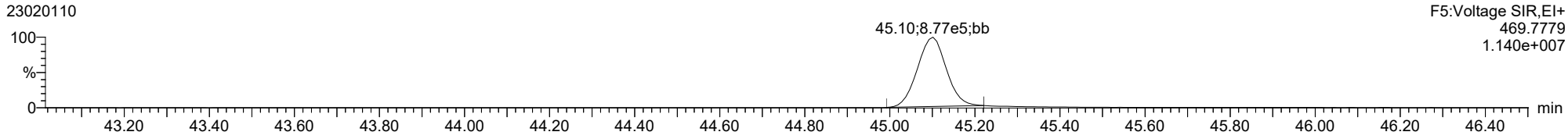

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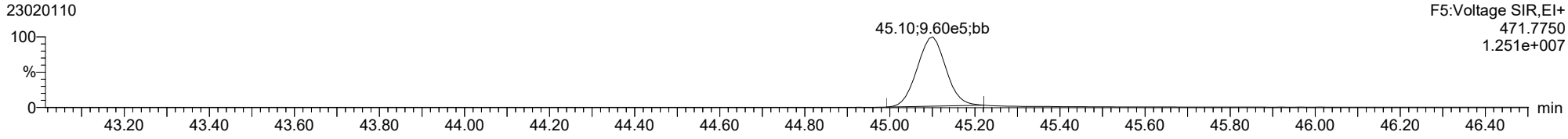
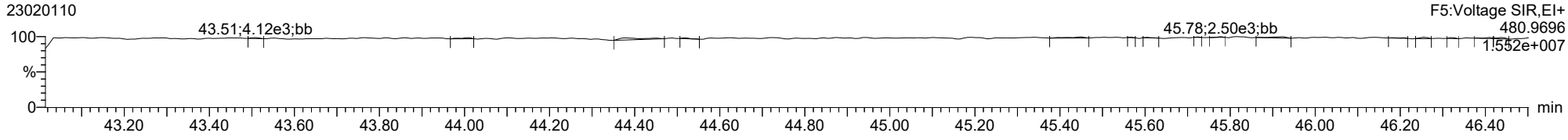


FUNCTION5 PFK



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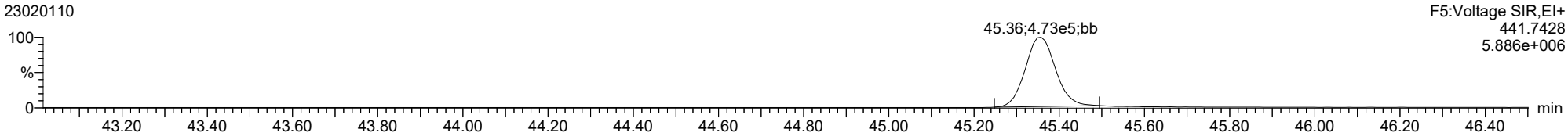
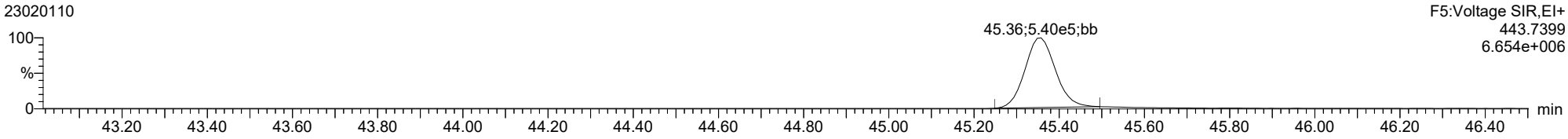
OCDF



OCDF



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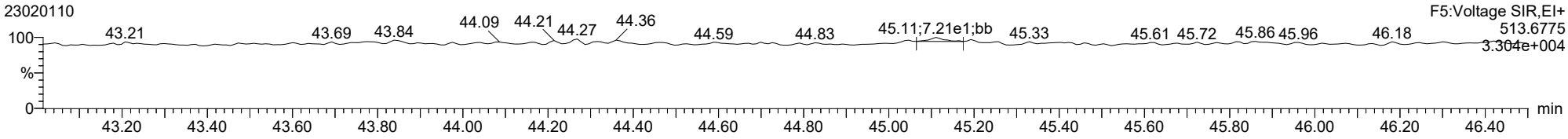

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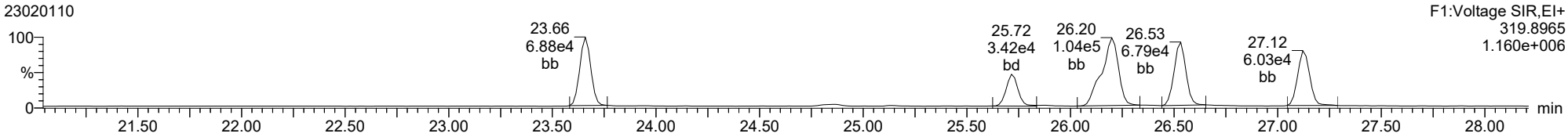
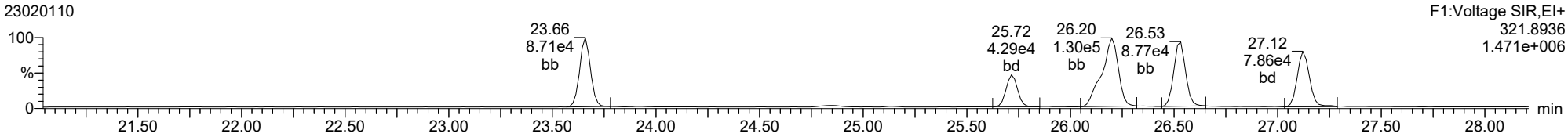
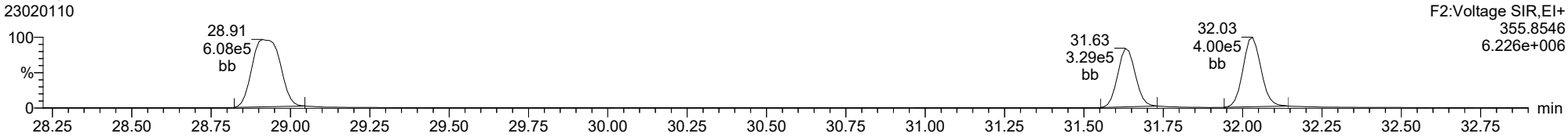
Total-tetradioxins



Total-tetradioxins



Total-pentadioxins



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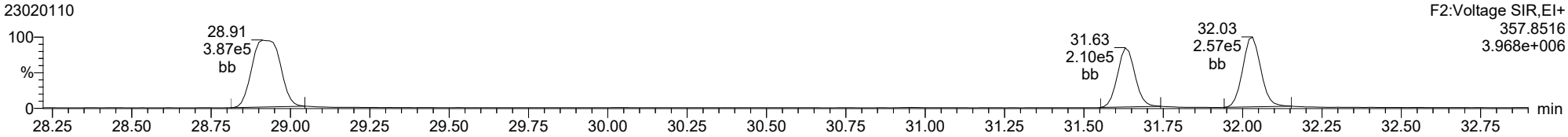

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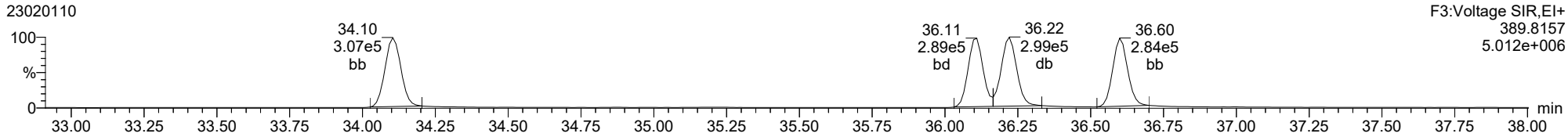
Total-hexadioxins



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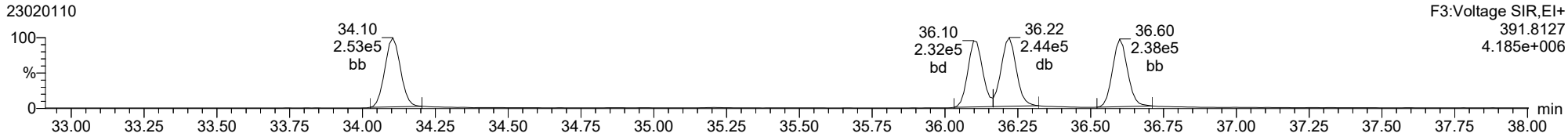

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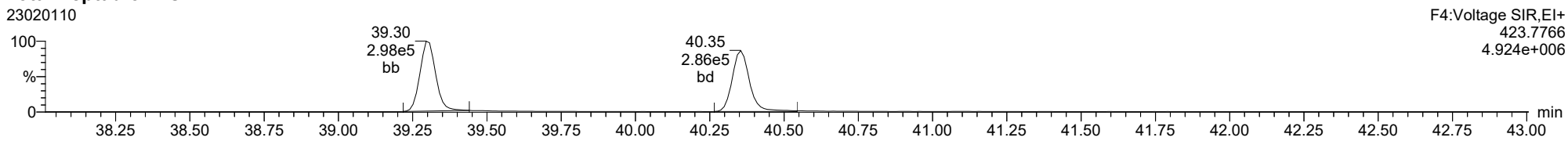
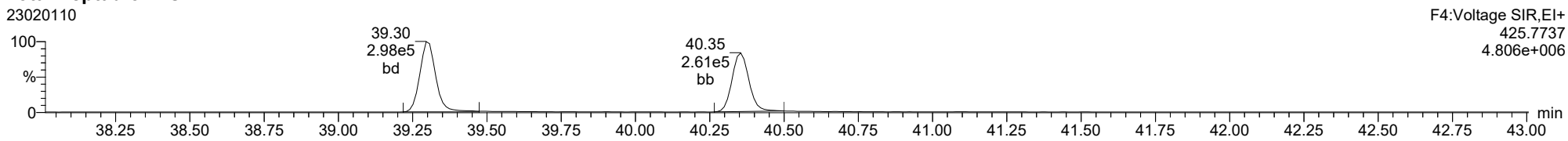


Total-heptadioxins



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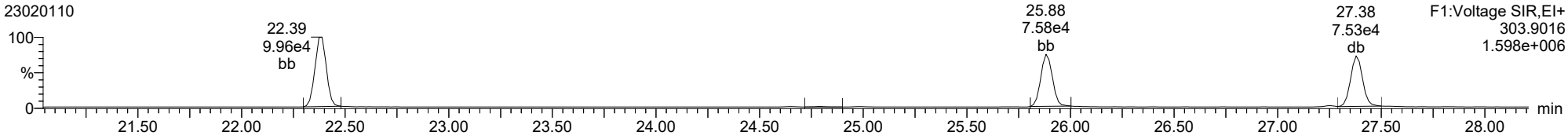
Total-tetrafurans



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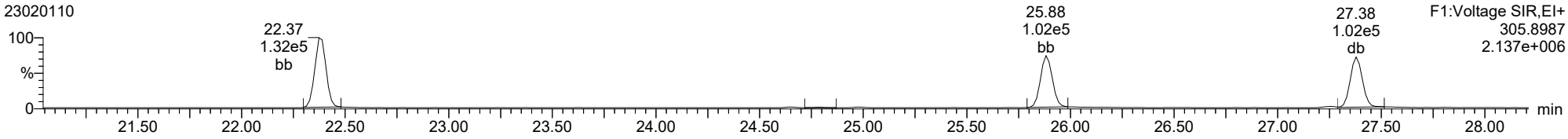

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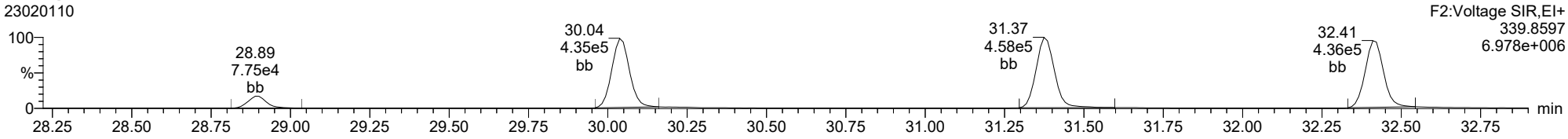

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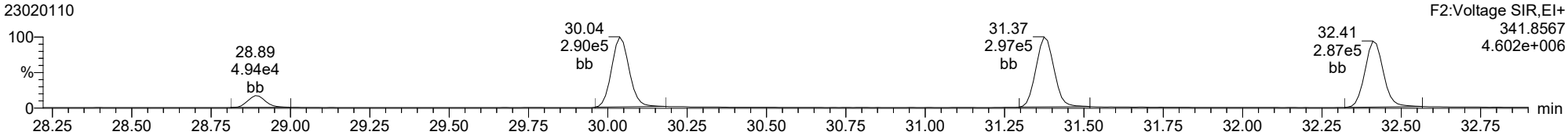

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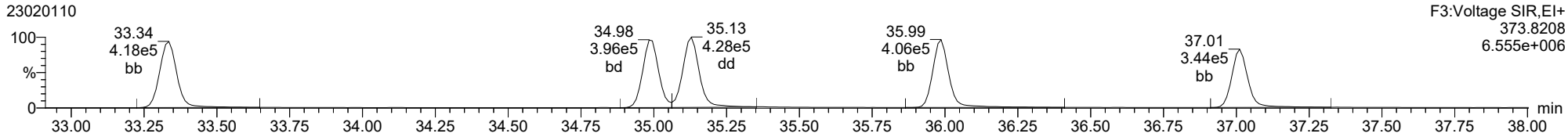
Total-hexafurans



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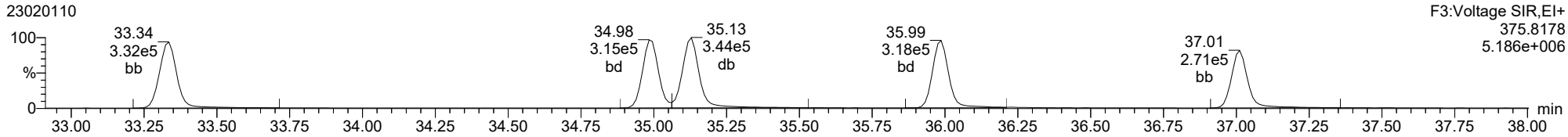

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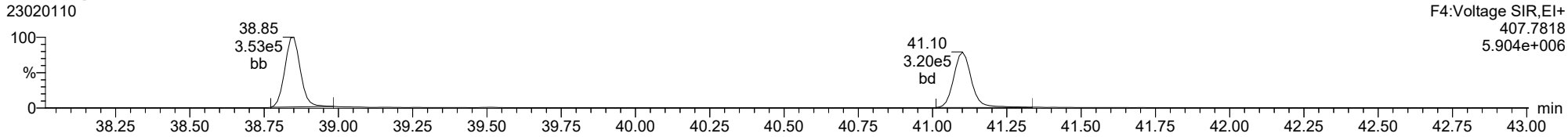

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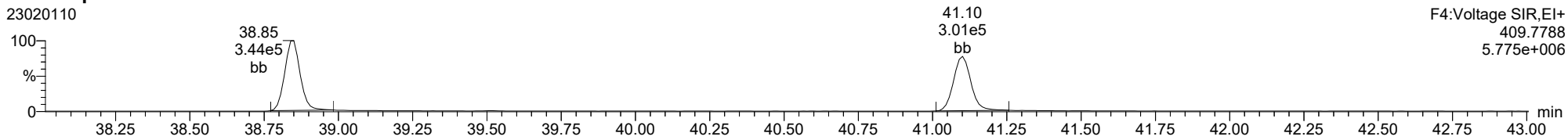

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Last Altered: Friday, February 03, 2023 11:22:32 Pacific Standard Time
Printed: Friday, February 03, 2023 11:23:25 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: CS3R2, Name: 23020111, Date: 01-Feb-2023, Time: 21:12:31, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.882	1.001	6.336e4	8.393e4	0.876	0.755	0.770	1070	1746	9.70e5	1.26e6	906.6	721.7	NO	bb	bb	10.162
12378-PeCDF	30.048	1.001	3.709e5	2.488e5	0.845	1.491	1.550	3113	3215	5.69e6	3.70e6	1826.3	1149.4	NO	bb	bd	50.020
23478-PeCDF	31.385	1.001	3.851e5	2.639e5	0.911	1.459	1.550	3113	3215	5.96e6	3.97e6	1913.7	1234.6	NO	bb	bd	50.684
123478-HxCDF	34.995	1.001	3.366e5	2.649e5	1.182	1.270	1.240	2488	2037	5.32e6	4.21e6	2136.8	2067.1	NO	bd	bd	49.625
234678-HxCDF	35.986	1.000	3.507e5	2.736e5	1.229	1.282	1.240	2488	2037	5.45e6	4.23e6	2188.7	2078.3	NO	bb	bd	52.648
123678-HxCDF	35.129	1.000	3.745e5	2.918e5	1.248	1.283	1.240	2488	2037	5.41e6	4.26e6	2174.2	2090.5	NO	dd	dd	50.908
123789-HxCDF	37.012	1.000	2.970e5	2.380e5	1.187	1.248	1.240	2488	2037	4.75e6	3.76e6	1910.9	1845.7	NO	bd	bb	50.440
1234678-HpCDF	38.850	1.000	2.932e5	2.919e5	1.204	1.004	1.050	3100	2795	4.79e6	4.70e6	1544.8	1680.6	NO	bb	bd	48.294
1234789-HpCDF	41.100	1.000	2.671e5	2.524e5	1.165	1.058	1.050	3100	2795	3.96e6	3.73e6	1278.4	1333.4	NO	bb	bb	49.677
OCDF	45.358	1.006	3.958e5	4.645e5	1.186	0.852	0.890	1455	4440	4.72e6	5.37e6	3247.1	1209.2	NO	bb	bd	90.445
2378-TCDD	26.532	1.001	5.892e4	7.101e4	1.236	0.830	0.770	1225	1339	8.91e5	1.09e6	727.0	817.8	NO	dd	bb	9.397
12378-PeCDD	31.642	1.001	2.888e5	1.854e5	1.087	1.558	1.550	2693	2242	4.44e6	2.82e6	1647.5	1257.1	NO	bb	bb	51.126
123478-HxCDD	36.109	1.000	2.420e5	2.004e5	0.987	1.207	1.240	3333	2112	4.15e6	3.36e6	1245.4	1591.3	NO	bd	bd	50.303
123678-HxCDD	36.221	1.000	2.536e5	2.261e5	1.021	1.122	1.240	3333	2112	4.16e6	3.48e6	1248.0	1648.2	NO	db	db	51.010
123789-HxCDD	36.611	1.011	2.491e5	2.029e5	0.985	1.228	1.240	3333	2112	4.05e6	3.32e6	1216.5	1574.2	NO	bb	bb	50.610
1234678-HpCDD	40.354	1.000	2.244e5	2.131e5	1.253	1.053	1.050	2651	2455	3.41e6	3.28e6	1286.0	1334.6	NO	bb	bb	45.500
OCDD	45.120	1.000	3.894e5	4.309e5	1.103	0.904	0.890	2219	2267	4.59e6	5.31e6	2068.3	2340.4	NO	bd	bb	92.775
13C-2378-TCDF	25.867	1.006	7.314e5	9.230e5	1.768	0.792	0.770	2216	1949	1.12e7	1.43e7	5056.1	7338.5	NO	bb	bb	95.256
13C-12378-PeCDF	30.026	1.168	8.745e5	5.922e5	1.527	1.477	1.550	3934	3547	1.37e7	8.95e6	3469.6	2522.0	NO	bb	bd	97.769
13C-23478-PeCDF	31.363	1.220	8.488e5	5.566e5	1.466	1.525	1.550	3934	3547	1.32e7	8.62e6	3344.9	2430.1	NO	bb	bb	97.572
13C-123478-HxCDF	34.973	0.956	3.485e5	6.773e5	1.054	0.515	0.510	2953	4567	5.67e6	1.10e7	1918.4	2413.6	NO	bd	bd	101.894
13C-123678-HxCDF	35.118	0.960	3.543e5	6.945e5	1.080	0.510	0.510	2953	4567	5.60e6	1.10e7	1895.3	2409.2	NO	db	db	101.648
13C-234678-HxCDF	35.975	0.983	3.286e5	6.364e5	1.014	0.516	0.510	2953	4567	5.48e6	1.04e7	1855.6	2267.5	NO	bb	bb	99.572
13C-123789-HxCDF	37.000	1.011	3.031e5	5.907e5	0.928	0.513	0.510	2953	4567	5.28e6	1.02e7	1789.2	2235.2	NO	bb	bb	100.817
13C-1234678-HpCDF	38.839	1.062	3.130e5	6.930e5	1.036	0.452	0.440	2151	4289	5.21e6	1.16e7	2423.7	2703.6	NO	bb	bb	101.637
13C-1234789-HpCDF	41.089	1.123	2.806e5	6.168e5	0.905	0.455	0.440	2151	4289	4.21e6	9.25e6	1954.9	2156.4	NO	bb	bb	103.794
13C-1234-TCDD	25.700	0.000	4.358e5	5.465e5	1.000	0.797	0.770	2468	2151	6.80e6	8.50e6	2756.9	3953.0	NO	bb	bb	100.000
13C-2378-TCDD	26.517	1.032	4.953e5	6.230e5	1.103	0.795	0.770	2468	2151	7.43e6	9.28e6	3010.2	4316.3	NO	bb	bb	103.212
13C-12378-PeCDD	31.619	1.230	5.254e5	3.282e5	0.914	1.601	1.550	1809	1341	8.04e6	5.00e6	4443.5	3732.3	NO	bb	bb	95.052
13C-123478-HxCDD	36.098	0.987	5.053e5	3.859e5	0.933	1.309	1.240	2226	2294	8.20e6	6.16e6	3683.0	2686.4	NO	bd	bd	99.984
13C-123678-HxCDD	36.209	0.990	5.186e5	4.029e5	0.965	1.287	1.240	2226	2294	8.41e6	6.65e6	3779.0	2898.5	NO	db	db	99.982
13C-1234678-HpCDD	40.343	1.103	3.959e5	3.716e5	0.782	1.065	1.050	2537	2687	6.19e6	5.69e6	2441.5	2116.3	NO	bb	bb	102.734
13C-OCDD	45.101	1.233	7.625e5	8.412e5	0.788	0.906	0.890	3243	2707	9.59e6	1.05e7	2957.5	3872.2	NO	bb	bb	212.953
13C-123789-HxCDD	36.588	0.000	5.441e5	4.113e5	1.000	1.323	1.240	2226	2294	8.88e6	6.75e6	3989.4	2943.5	NO	bb	bb	100.000
37CL-2378-TCDD	26.532	1.032	1.096e5		1.233			1635		1.65e6		1009.4			bb		9.045

Dataset: T:\Autospec\Processed Data Batch\230201ICVIH.qld
Last Altered: Friday, February 03, 2023 11:22:32 Pacific Standard Time
Printed: Friday, February 03, 2023 11:23:25 Pacific Standard Time

ID: CS3R2, Name: 23020111, Date: 01-Feb-2023, Time: 21:12:31, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.389	0.866	7.606e4	1.001e5	1.064	0.760	0.770	1070	1746	1.19e6	1.52e6	1110.3	869.1	NO	bb	bb	10.001
1289-TCDF	27.378	1.058	6.304e4	8.031e4	0.858	0.785	0.770	1070	1746	9.18e5	1.16e6	858.3	662.3	NO	dd	db	10.103
13468-PECDF	27.242	0.907	4.375e5	2.852e5	1.013	1.534	1.550	920	1180	6.83e6	4.45e6	7421.7	3771.3	NO	bb	bb	48.645
12389-PECDF	32.421	1.080	3.692e5	2.469e5	0.844	1.495	1.550	3113	3215	5.48e6	3.56e6	1760.8	1106.5	NO	bb	bd	49.793
123468-HXCDF	33.335	0.953	3.502e5	2.713e5	1.197	1.291	1.240	2488	2037	5.19e6	4.08e6	2086.3	2002.8	NO	bb	bd	50.610
1368-TCDD	23.659	0.892	5.296e4	6.607e4	1.084	0.802	0.770	1225	1339	8.46e5	1.08e6	690.5	804.7	NO	bb	bb	9.816
1289-TCDD	27.121	1.023	4.842e4	6.049e4	0.975	0.800	0.770	1225	1339	7.05e5	8.85e5	575.4	661.1	NO	bb	bb	9.987
12479-PECDD	28.912	0.914	4.728e5	3.089e5	1.837	1.530	1.550	2693	2242	4.61e6	3.01e6	1713.2	1342.4	NO	bb	bb	49.845
12389-PECDD	32.032	1.013	3.302e5	2.107e5	1.252	1.567	1.550	2693	2242	5.03e6	3.18e6	1869.4	1418.4	NO	bb	bb	50.596
124679-HXCDD	34.104	0.945	2.577e5	2.083e5	1.033	1.237	1.240	3333	2112	4.11e6	3.36e6	1234.1	1592.7	NO	bb	bb	50.624
1234679-HPCDD	39.307	0.974	2.468e5	2.463e5	1.286	1.002	1.050	2651	2455	3.99e6	3.89e6	1503.1	1583.0	NO	bb	bd	49.957
Total-tetrafurans			2.030e5		0.933			1070		3.09e6							30.345
Total-penta1			4.375e5					920		6.83e6							48.645
Total-pentafurans			1.184e6		0.866			3113		1.80e7							158.351
Total-hexafurans			1.709e6		1.208			2488		2.61e7							254.231
Total-heptafurans			5.602e5		1.185			3100		8.75e6							97.972
Total-Furans			4.489e6		1.067			1070		6.75e7							679.989
Total-tetradioxins			2.729e5		1.099			1225		3.70e6							49.674
Total-pentadioxins			1.093e6		1.392			2693		1.41e7							151.752
Total-hexadioxins			1.003e6		1.007			3333		1.65e7							202.708
Total-heptadioxins			4.712e5		1.269			2651		7.39e6							95.457
Total-Dioxins			3.230e6		1.165			1225		4.63e7							592.366
Total-TEQ			7.719e6					1225		1.14e8							1272.355
FUNCTION1 PFK			5.445e5					518107		1.64e7							
FUNCTION2 PFK			0.000e0					179627		0.00e0							
FUNCTION3 PFK			0.000e0					451502		0.00e0							
FUNCTION4 PFK			1.511e5					331096		1.60e6							
FUNCTION5 PFK			9.048e3					184760		4.73e5							
FUNCTION1 HXCD...			1.131e3					606		1.62e4							0.000
FUNCTION1 HPCD...			5.247e2					900		8.84e3							0.000
FUNCTION2 HPCD...			8.476e2					1136		1.98e4							0.000
FUNCTION3 OCDPE			4.428e2					714		7.64e3							0.000
FUNCTION4 NCDPE			0.000e0					982		0.00e0							
FUNCTION5 DCDPE			0.000e0					815		0.00e0							

Method: T:\Autospec\Methods\Dioxin230131IH.mdb 03 Feb 2023 10:31:33
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.38	6.304e4	8.031e4	0.858	0.79	0.77	858.3	YES	NO	dd	db	10.103
2	2378-TCDF	25.88	6.336e4	8.393e4	0.876	0.75	0.77	906.6	YES	NO	bb	bb	10.162
3	Total-tetrafurans	24.97	5.535e2	6.624e2	0.933	0.84	0.77	8.4	YES	NO	bb	bb	0.079
4	1368-TCDF	22.39	7.606e4	1.001e5	1.064	0.76	0.77	1110.3	YES	NO	bb	bb	10.001

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.24	4.375e5	2.852e5	1.013	1.53	1.55	7421.7	YES	NO	bb	bb	48.645

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	28.90	5.868e4	3.904e4	0.866	1.50	1.55	293.6	YES	NO	bb	bb	7.853
2	12389-PECDF	32.42	3.692e5	2.469e5	0.844	1.50	1.55	1760.8	YES	NO	bb	bd	49.793
3	23478-PeCDF	31.39	3.851e5	2.639e5	0.911	1.46	1.55	1913.7	YES	NO	bb	bd	50.684
4	12378-PeCDF	30.05	3.709e5	2.488e5	0.845	1.49	1.55	1826.3	YES	NO	bb	bd	50.020

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	37.01	2.970e5	2.380e5	1.187	1.25	1.24	1910.9	YES	NO	bd	bb	50.440
2	234678-HxCDF	35.99	3.507e5	2.736e5	1.229	1.28	1.24	2188.7	YES	NO	bb	bd	52.648
3	123678-HxCDF	35.13	3.745e5	2.918e5	1.248	1.28	1.24	2174.2	YES	NO	dd	dd	50.908
4	123478-HxCDF	34.99	3.366e5	2.649e5	1.182	1.27	1.24	2136.8	YES	NO	bd	bd	49.625
5	123468-HXCDF	33.33	3.502e5	2.713e5	1.197	1.29	1.24	2086.3	YES	NO	bb	bd	50.610

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.85	2.932e5	2.919e5	1.204	1.00	1.05	1544.8	YES	NO	bb	bd	48.294
2	1234789-HpCDF	41.10	2.671e5	2.524e5	1.165	1.06	1.05	1278.4	YES	NO	bb	bb	49.677

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.38	6.304e4	8.031e4	0.858	0.79	0.77	858.3	YES	NO	dd	db	10.103
2	2378-TCDF	25.88	6.336e4	8.393e4	0.876	0.75	0.77	906.6	YES	NO	bb	bb	10.162
3	Total-tetrafurans	24.97	5.535e2	6.624e2	0.933	0.84	0.77	8.4	YES	NO	bb	bb	0.079
4	1368-TCDF	22.39	7.606e4	1.001e5	1.064	0.76	0.77	1110.3	YES	NO	bb	bb	10.001
5	Total-pentafurans	28.90	5.868e4	3.904e4	0.866	1.50	1.55	293.6	YES	NO	bb	bb	7.853
6	12389-PECDF	32.42	3.692e5	2.469e5	0.844	1.50	1.55	1760.8	YES	NO	bb	bd	49.793
7	23478-PeCDF	31.39	3.851e5	2.639e5	0.911	1.46	1.55	1913.7	YES	NO	bb	bd	50.684
8	12378-PeCDF	30.05	3.709e5	2.488e5	0.845	1.49	1.55	1826.3	YES	NO	bb	bd	50.020
9	123789-HxCDF	37.01	2.970e5	2.380e5	1.187	1.25	1.24	1910.9	YES	NO	bd	bb	50.440
10	234678-HxCDF	35.99	3.507e5	2.736e5	1.229	1.28	1.24	2188.7	YES	NO	bb	bd	52.648
11	123678-HxCDF	35.13	3.745e5	2.918e5	1.248	1.28	1.24	2174.2	YES	NO	dd	dd	50.908
12	123478-HxCDF	34.99	3.366e5	2.649e5	1.182	1.27	1.24	2136.8	YES	NO	bd	bd	49.625
13	123468-HXCDF	33.33	3.502e5	2.713e5	1.197	1.29	1.24	2086.3	YES	NO	bb	bd	50.610
14	1234678-HpCDF	38.85	2.932e5	2.919e5	1.204	1.00	1.05	1544.8	YES	NO	bb	bd	48.294
15	1234789-HpCDF	41.10	2.671e5	2.524e5	1.165	1.06	1.05	1278.4	YES	NO	bb	bb	49.677
16	OCDF	45.36	3.958e5	4.645e5	1.186	0.85	0.89	3247.1	YES	NO	bb	bd	90.445
17	13468-PECDF	27.24	4.375e5	2.852e5	1.013	1.53	1.55	7421.7	YES	NO	bb	bb	48.645

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.53	5.892e4	7.101e4	1.236	0.83	0.77	727.0	YES	NO	dd	bb	9.397
2	Total-tetradioxins	26.21	8.373e4	1.038e5	1.099	0.81	0.77	673.5	YES	NO	bd	bb	15.262
3	Total-tetradioxins	25.72	2.649e4	3.214e4	1.099	0.82	0.77	333.6	YES	NO	bb	bb	4.772
4	Total-tetradioxins	24.85	2.420e3	2.985e3	1.099	0.81	0.77	19.9	YES	NO	bb	bb	0.440
5	1368-TCDD	23.66	5.296e4	6.607e4	1.084	0.80	0.77	690.5	YES	NO	bb	bb	9.816
6	1289-TCDD	27.12	4.842e4	6.049e4	0.975	0.80	0.77	575.4	YES	NO	bb	bb	9.987

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12479-PECDD	28.91	4.728e5	3.089e5	1.837	1.53	1.55	1713.2	YES	NO	bb	bb	49.845
2	12389-PECDD	32.03	3.302e5	2.107e5	1.252	1.57	1.55	1869.4	YES	NO	bb	bb	50.596
3	12378-PeCDD	31.64	2.888e5	1.854e5	1.087	1.56	1.55	1647.5	YES	NO	bb	bb	51.126
4	Total-pentadioxins	30.97	1.315e3	8.851e2	1.392	1.49	1.55	7.1	YES	NO	bb	bb	0.185

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.61	2.491e5	2.029e5	0.985	1.23	1.24	1216.5	YES	NO	bb	bb	50.610
2	123678-HxCDD	36.22	2.536e5	2.261e5	1.021	1.12	1.24	1248.0	YES	NO	db	db	51.010
3	123478-HxCDD	36.11	2.420e5	2.004e5	0.987	1.21	1.24	1245.4	YES	NO	bd	bd	50.303
4	Total-hexadioxins	34.86	7.769e2	6.946e2	1.007	1.12	1.24	3.9	YES	NO	bd	bb	0.161
5	124679-HXCDD	34.10	2.577e5	2.083e5	1.033	1.24	1.24	1234.1	YES	NO	bb	bb	50.624

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234679-HPCDD	39.31	2.468e5	2.463e5	1.286	1.00	1.05	1503.1	YES	NO	bb	bd	49.957
2	1234678-HpCDD	40.35	2.244e5	2.131e5	1.253	1.05	1.05	1286.0	YES	NO	bb	bb	45.500

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.53	5.892e4	7.101e4	1.236	0.83	0.77	727.0	YES	NO	dd	bb	9.397
2	Total-tetradioxins	26.21	8.373e4	1.038e5	1.099	0.81	0.77	673.5	YES	NO	bd	bb	15.262
3	Total-tetradioxins	25.72	2.649e4	3.214e4	1.099	0.82	0.77	333.6	YES	NO	bb	bb	4.772
4	Total-tetradioxins	24.85	2.420e3	2.985e3	1.099	0.81	0.77	19.9	YES	NO	bb	bb	0.440
5	1368-TCDD	23.66	5.296e4	6.607e4	1.084	0.80	0.77	690.5	YES	NO	bb	bb	9.816
6	12479-PECDD	28.91	4.728e5	3.089e5	1.837	1.53	1.55	1713.2	YES	NO	bb	bb	49.845
7	1289-TCDD	27.12	4.842e4	6.049e4	0.975	0.80	0.77	575.4	YES	NO	bb	bb	9.987
8	12389-PECDD	32.03	3.302e5	2.107e5	1.252	1.57	1.55	1869.4	YES	NO	bb	bb	50.596
9	12378-PeCDD	31.64	2.888e5	1.854e5	1.087	1.56	1.55	1647.5	YES	NO	bb	bb	51.126
10	Total-pentadioxins	30.97	1.315e3	8.851e2	1.392	1.49	1.55	7.1	YES	NO	bb	bb	0.185
11	123789-HxCDD	36.61	2.491e5	2.029e5	0.985	1.23	1.24	1216.5	YES	NO	bb	bb	50.610
12	123678-HxCDD	36.22	2.536e5	2.261e5	1.021	1.12	1.24	1248.0	YES	NO	db	db	51.010
13	123478-HxCDD	36.11	2.420e5	2.004e5	0.987	1.21	1.24	1245.4	YES	NO	bd	bd	50.303
14	Total-hexadioxins	34.86	7.769e2	6.946e2	1.007	1.12	1.24	3.9	YES	NO	bd	bb	0.161
15	124679-HXCDD	34.10	2.577e5	2.083e5	1.033	1.24	1.24	1234.1	YES	NO	bb	bb	50.624
16	1234679-HPCDD	39.31	2.468e5	2.463e5	1.286	1.00	1.05	1503.1	YES	NO	bb	bd	49.957
17	1234678-HpCDD	40.35	2.244e5	2.131e5	1.253	1.05	1.05	1286.0	YES	NO	bb	bb	45.500
18	OCDD	45.12	3.894e5	4.309e5	1.103	0.90	0.89	2068.3	YES	NO	bd	bb	92.775

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.38	6.304e4	8.031e4	0.858	0.79	0.77	858.3	YES	NO	dd	db	10.103
2	2378-TCDF	25.88	6.336e4	8.393e4	0.876	0.75	0.77	906.6	YES	NO	bb	bb	10.162
3	Total-tetrafurans	24.97	5.535e2	6.624e2	0.933	0.84	0.77	8.4	YES	NO	bb	bb	0.079
4	1368-TCDF	22.39	7.606e4	1.001e5	1.064	0.76	0.77	1110.3	YES	NO	bb	bb	10.001
5	Total-pentafurans	28.90	5.868e4	3.904e4	0.866	1.50	1.55	293.6	YES	NO	bb	bb	7.853
6	12389-PECDF	32.42	3.692e5	2.469e5	0.844	1.50	1.55	1760.8	YES	NO	bb	bd	49.793
7	23478-PeCDF	31.39	3.851e5	2.639e5	0.911	1.46	1.55	1913.7	YES	NO	bb	bd	50.684
8	12378-PeCDF	30.05	3.709e5	2.488e5	0.845	1.49	1.55	1826.3	YES	NO	bb	bd	50.020
9	123789-HxCDF	37.01	2.970e5	2.380e5	1.187	1.25	1.24	1910.9	YES	NO	bd	bb	50.440
10	234678-HxCDF	35.99	3.507e5	2.736e5	1.229	1.28	1.24	2188.7	YES	NO	bb	bd	52.648
11	123678-HxCDF	35.13	3.745e5	2.918e5	1.248	1.28	1.24	2174.2	YES	NO	dd	dd	50.908
12	123478-HxCDF	34.99	3.366e5	2.649e5	1.182	1.27	1.24	2136.8	YES	NO	bd	bd	49.625
13	123468-HXCDF	33.33	3.502e5	2.713e5	1.197	1.29	1.24	2086.3	YES	NO	bb	bd	50.610
14	1234678-HpCDF	38.85	2.932e5	2.919e5	1.204	1.00	1.05	1544.8	YES	NO	bb	bd	48.294
15	1234789-HpCDF	41.10	2.671e5	2.524e5	1.165	1.06	1.05	1278.4	YES	NO	bb	bb	49.677
16	OCDF	45.36	3.958e5	4.645e5	1.186	0.85	0.89	3247.1	YES	NO	bb	bd	90.445
17	13468-PECDF	27.24	4.375e5	2.852e5	1.013	1.53	1.55	7421.7	YES	NO	bb	bb	48.645
18	2378-TCDD	26.53	5.892e4	7.101e4	1.236	0.83	0.77	727.0	YES	NO	dd	bb	9.397
19	Total-tetradioxins	26.21	8.373e4	1.038e5	1.099	0.81	0.77	673.5	YES	NO	bd	bb	15.262
20	Total-tetradioxins	25.72	2.649e4	3.214e4	1.099	0.82	0.77	333.6	YES	NO	bb	bb	4.772
21	Total-tetradioxins	24.85	2.420e3	2.985e3	1.099	0.81	0.77	19.9	YES	NO	bb	bb	0.440
22	1368-TCDD	23.66	5.296e4	6.607e4	1.084	0.80	0.77	690.5	YES	NO	bb	bb	9.816
23	12479-PECDD	28.91	4.728e5	3.089e5	1.837	1.53	1.55	1713.2	YES	NO	bb	bb	49.845
24	1289-TCDD	27.12	4.842e4	6.049e4	0.975	0.80	0.77	575.4	YES	NO	bb	bb	9.987
25	12389-PECDD	32.03	3.302e5	2.107e5	1.252	1.57	1.55	1869.4	YES	NO	bb	bb	50.596
26	12378-PeCDD	31.64	2.888e5	1.854e5	1.087	1.56	1.55	1647.5	YES	NO	bb	bb	51.126
27	Total-pentadioxins	30.97	1.315e3	8.851e2	1.392	1.49	1.55	7.1	YES	NO	bb	bb	0.185
28	123789-HxCDD	36.61	2.491e5	2.029e5	0.985	1.23	1.24	1216.5	YES	NO	bb	bb	50.610
29	123678-HxCDD	36.22	2.536e5	2.261e5	1.021	1.12	1.24	1248.0	YES	NO	db	db	51.010
30	123478-HxCDD	36.11	2.420e5	2.004e5	0.987	1.21	1.24	1245.4	YES	NO	bd	bd	50.303
31	Total-hexadioxins	34.86	7.769e2	6.946e2	1.007	1.12	1.24	3.9	YES	NO	bd	bb	0.161
32	124679-HXCDD	34.10	2.577e5	2.083e5	1.033	1.24	1.24	1234.1	YES	NO	bb	bb	50.624
33	1234679-HPCDD	39.31	2.468e5	2.463e5	1.286	1.00	1.05	1503.1	YES	NO	bb	bd	49.957
34	1234678-HpCDD	40.35	2.244e5	2.131e5	1.253	1.05	1.05	1286.0	YES	NO	bb	bb	45.500
35	OCDD	45.12	3.894e5	4.309e5	1.103	0.90	0.89	2068.3	YES	NO	bd	bb	92.775

Dataset: T:\Autospec\Processed Data Batch\230201ICVIH.qld
Last Altered: Friday, February 03, 2023 11:22:32 Pacific Standard Time
Printed: Friday, February 03, 2023 11:23:25 Pacific Standard Time

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	23.43	3.727e4					1.3	NO		bb		
2	FUNCTION1 PFK	23.18	1.916e4					1.1	NO		bb		
3	FUNCTION1 PFK	22.75	3.142e3					0.4	NO		bb		
4	FUNCTION1 PFK	22.69	1.169e4					0.7	NO		bb		
5	FUNCTION1 PFK	22.63	7.039e3					0.6	NO		bb		
6	FUNCTION1 PFK	22.57	1.283e4					0.8	NO		db		
7	FUNCTION1 PFK	22.51	2.158e4					1.2	NO		bd		
8	FUNCTION1 PFK	22.36	1.134e4					0.8	NO		bb		
9	FUNCTION1 PFK	22.22	4.269e4					1.3	NO		bb		
10	FUNCTION1 PFK	22.10	3.052e4					1.6	NO		bb		
11	FUNCTION1 PFK	21.62	2.765e4					1.4	NO		bb		
12	FUNCTION1 PFK	21.54	1.965e4					1.2	NO		bb		
13	FUNCTION1 PFK	21.48	1.090e4					0.8	NO		bb		
14	FUNCTION1 PFK	21.29	3.708e4					1.3	NO		bb		
15	FUNCTION1 PFK	26.79	7.221e3					0.6	NO		bb		
16	FUNCTION1 PFK	26.49	8.249e3					0.4	NO		bb		
17	FUNCTION1 PFK	26.41	9.337e3					0.7	NO		db		
18	FUNCTION1 PFK	26.35	9.113e3					0.6	NO		bd		
19	FUNCTION1 PFK	26.15	5.974e3					0.5	NO		bb		
20	FUNCTION1 PFK	26.09	1.716e4					0.9	NO		bb		
21	FUNCTION1 PFK	25.96	1.452e4					1.0	NO		bb		
22	FUNCTION1 PFK	25.59	3.325e3					0.4	NO		bb		
23	FUNCTION1 PFK	25.34	4.402e3					0.6	NO		bb		
24	FUNCTION1 PFK	24.87	9.404e3					0.7	NO		bb		
25	FUNCTION1 PFK	24.75	2.747e4					1.4	NO		bb		
26	FUNCTION1 PFK	24.35	3.959e3					0.5	NO		bb		
27	FUNCTION1 PFK	24.04	7.708e3					0.6	NO		bb		
28	FUNCTION1 PFK	23.69	6.646e3					0.9	NO		bb		
29	FUNCTION1 PFK	23.63	5.706e3					0.6	NO		db		
30	FUNCTION1 PFK	23.57	2.430e4					1.1	NO		bd		
31	FUNCTION1 PFK	28.10	1.253e4					0.8	NO		bb		
32	FUNCTION1 PFK	28.03	8.849e3					0.7	NO		bb		
33	FUNCTION1 PFK	27.95	1.020e4					0.7	NO		bb		
34	FUNCTION1 PFK	27.88	1.726e4					1.1	NO		bb		
35	FUNCTION1 PFK	27.76	3.581e3					0.5	NO		bb		
36	FUNCTION1 PFK	27.41	1.709e4					1.1	NO		bb		
37	FUNCTION1 PFK	27.26	1.794e4					1.0	NO		bb		

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.07	1.511e5					4.8	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	44.55	2.727e3					1.0	NO		bb		
2	FUNCTION5 PFK	43.63	6.321e3					1.6	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	21.22	7.029e1					2.0	NO		bb		0.000
2	FUNCTION1 HXCD...	27.79	7.872e1					1.6	NO		bb		0.000
3	FUNCTION1 HXCD...	27.44	8.510e1					1.7	NO		bb		0.000
4	FUNCTION1 HXCD...	27.24	1.425e2					4.1	YES		bb		0.000
5	FUNCTION1 HXCD...	26.86	9.476e1					2.1	NO		bb		0.000
6	FUNCTION1 HXCD...	26.52	1.068e2					2.9	NO		bb		0.000
7	FUNCTION1 HXCD...	24.76	1.755e2					3.8	YES		db		0.000
8	FUNCTION1 HXCD...	24.66	1.713e2					3.1	YES		bd		0.000
9	FUNCTION1 HXCD...	22.65	7.687e1					2.7	NO		bb		0.000
10	FUNCTION1 HXCD...	21.59	1.290e2					2.9	NO		bb		0.000

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ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HPCD...	28.01	1.182e2					1.3	NO		bb		0.000
2	FUNCTION1 HPCD...	26.91	1.043e2					2.5	NO		bb		0.000
3	FUNCTION1 HPCD...	26.31	8.865e1					2.0	NO		bb		0.000
4	FUNCTION1 HPCD...	24.76	1.293e2					2.4	NO		bb		0.000
5	FUNCTION1 HPCD...	22.60	8.433e1					1.6	NO		bb		0.000

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.44	1.012e2					2.5	NO		bb		0.000
2	FUNCTION2 HPCD...	31.41	1.119e2					1.8	NO		db		0.000
3	FUNCTION2 HPCD...	31.27	2.407e2					5.1	YES		bd		0.000
4	FUNCTION2 HPCD...	30.62	8.382e1					2.0	NO		db		0.000
5	FUNCTION2 HPCD...	30.52	8.939e1					1.4	NO		bd		0.000
6	FUNCTION2 HPCD...	28.80	1.157e2					1.7	NO		bb		0.000
7	FUNCTION2 HPCD...	28.49	1.048e2					3.0	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	35.99	8.499e1					2.5	NO		bb		0.000
2	FUNCTION3 OCDPE	34.37	1.004e2					2.7	NO		bb		0.000
3	FUNCTION3 OCDPE	33.49	7.795e1					2.6	NO		bb		0.000
4	FUNCTION3 OCDPE	33.13	1.794e2					2.9	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
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ID: CS3R2, Name: 23020111, Date: 01-Feb-2023, Time: 21:12:31, Conditions: AUTOSPEC01, User: pk

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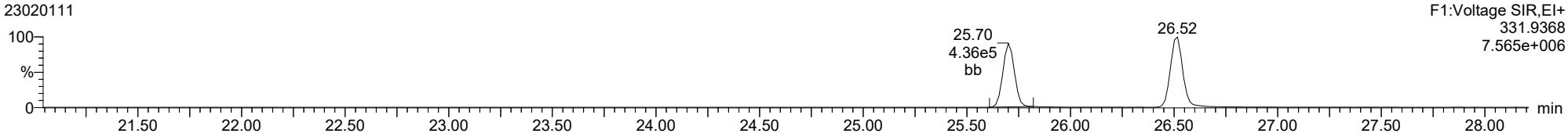

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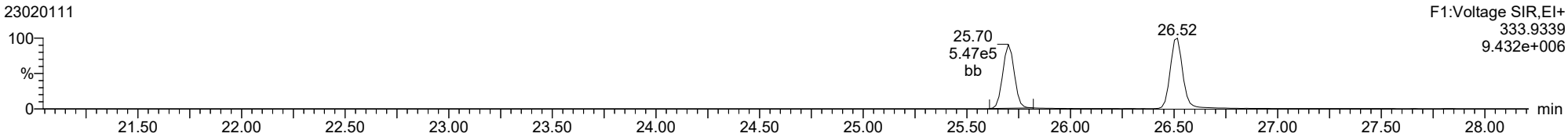

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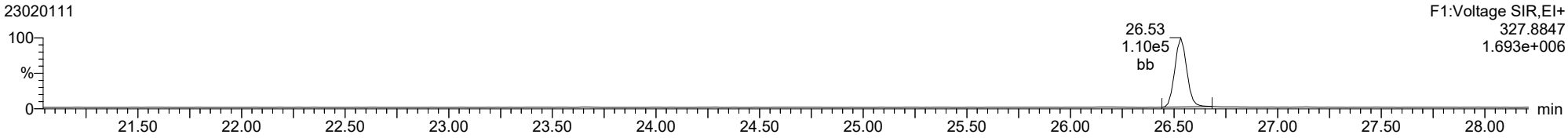

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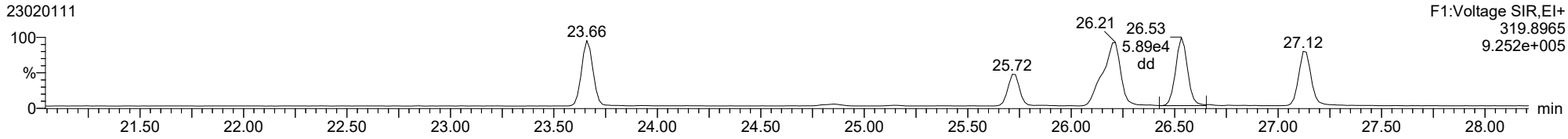

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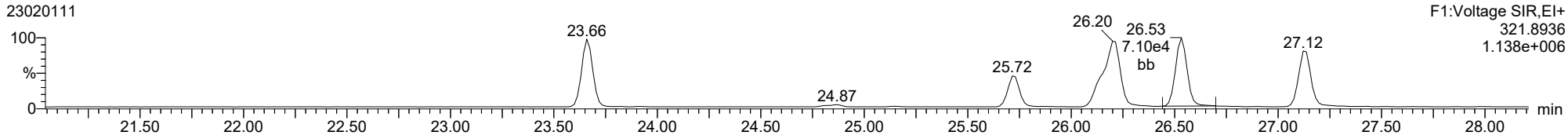

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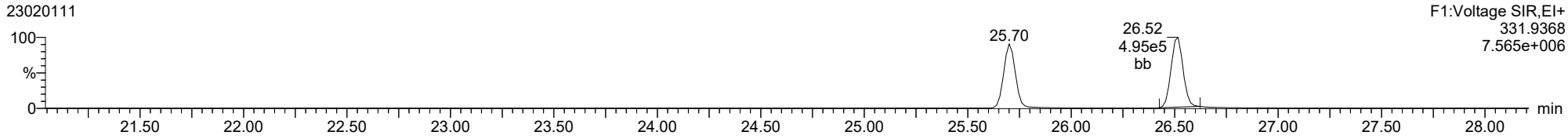

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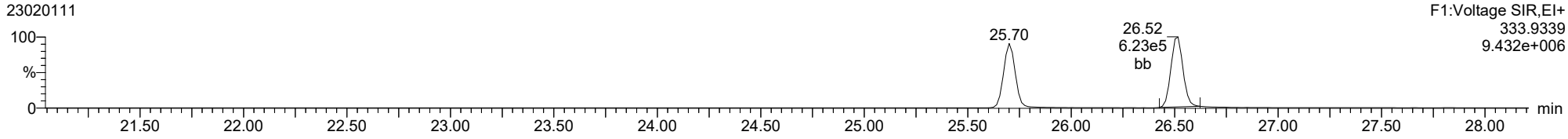

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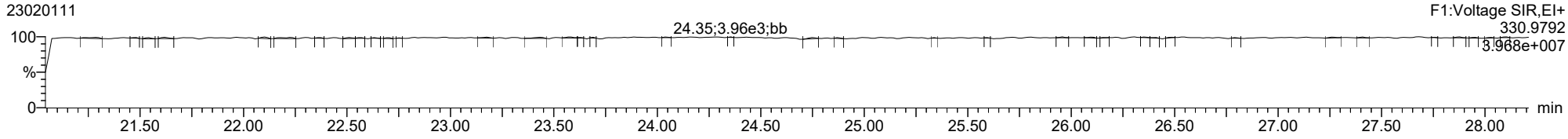

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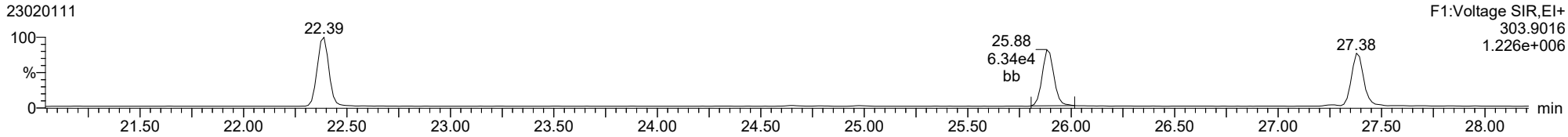

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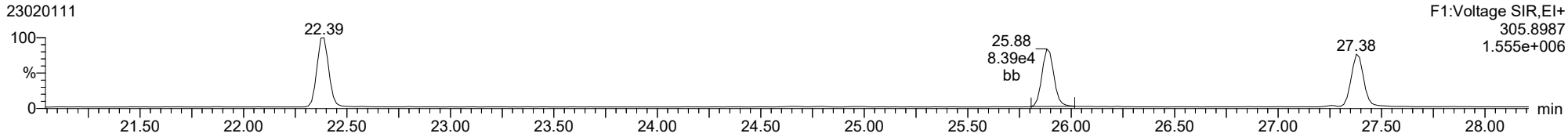

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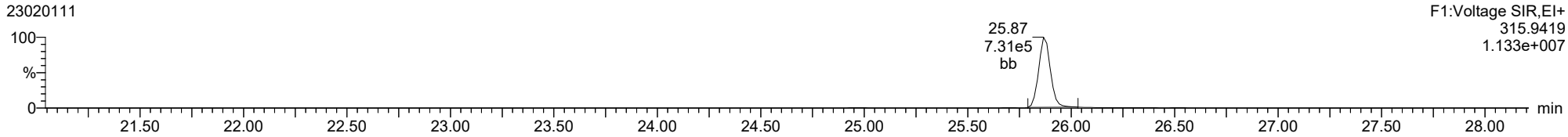

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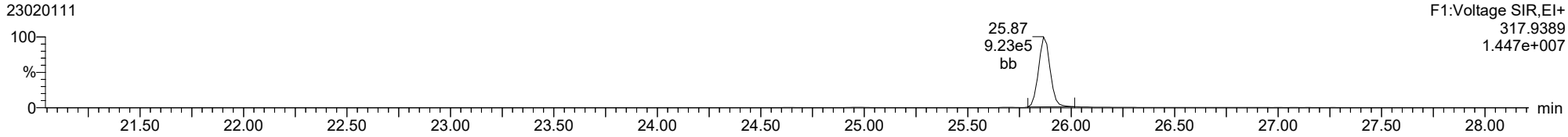

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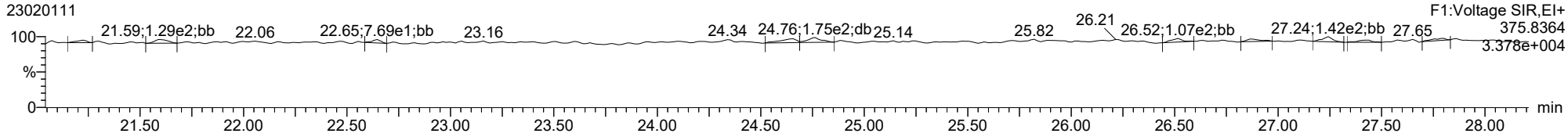

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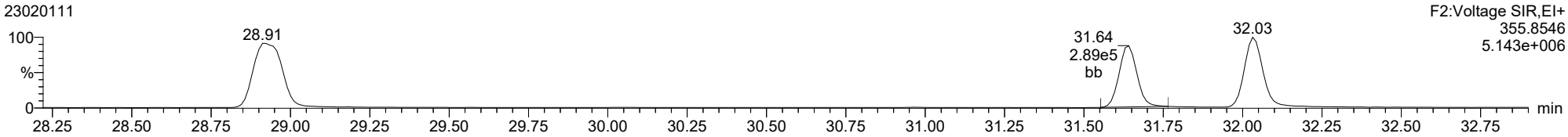

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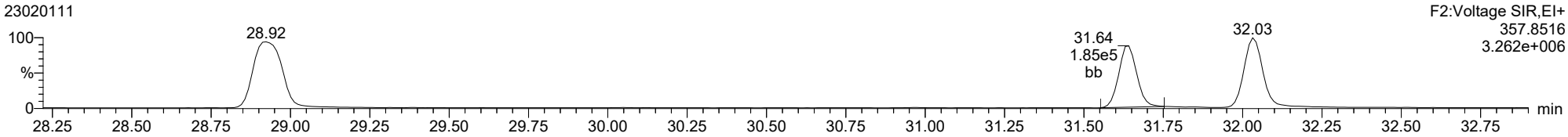

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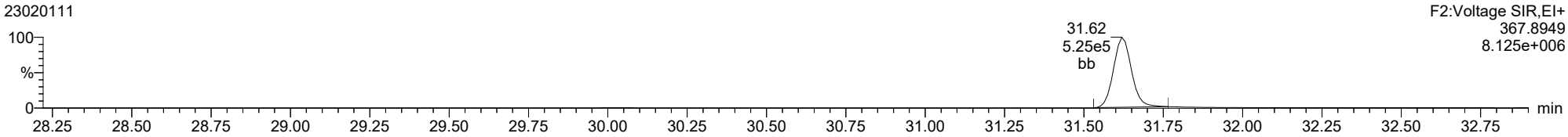

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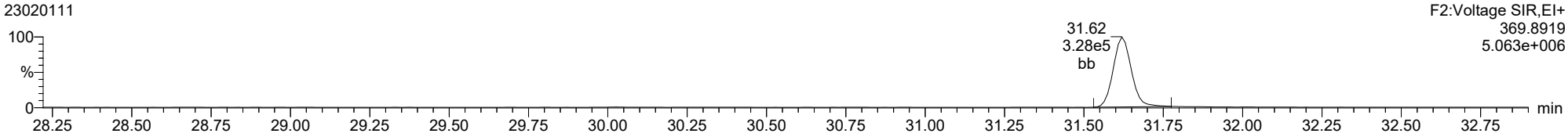

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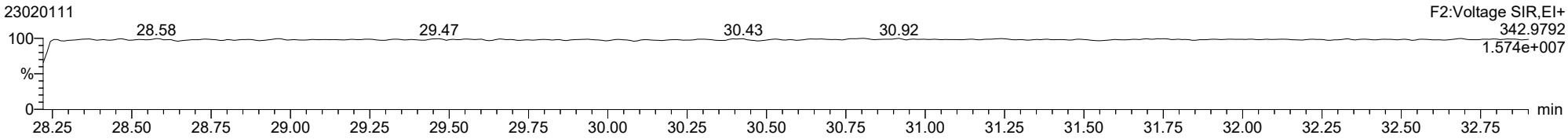

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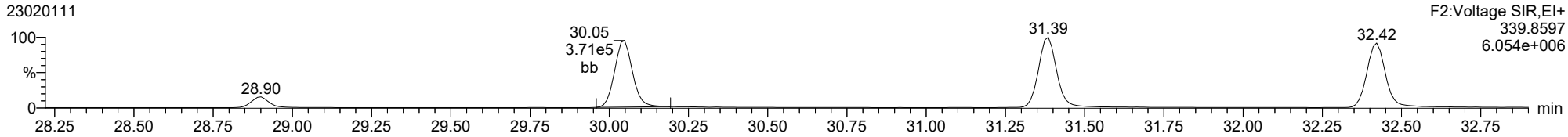

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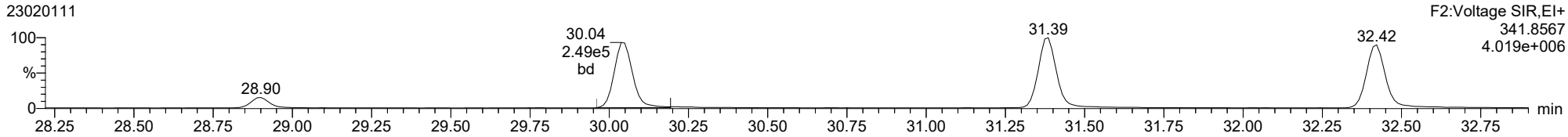

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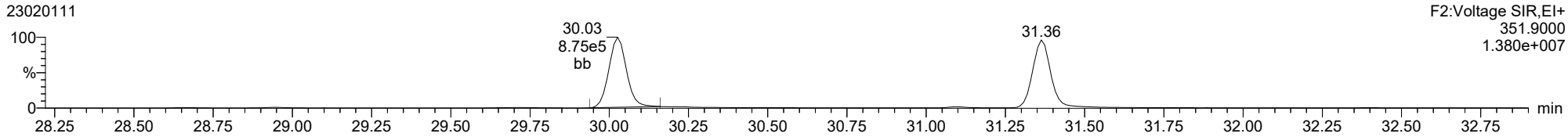

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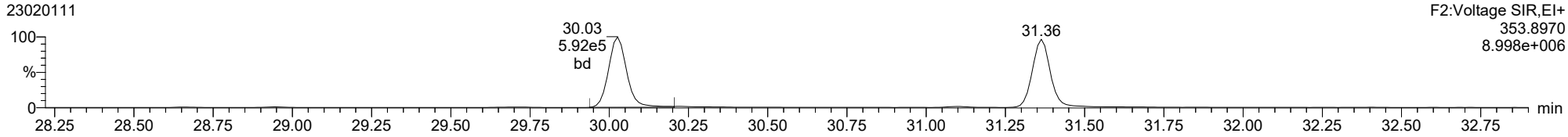

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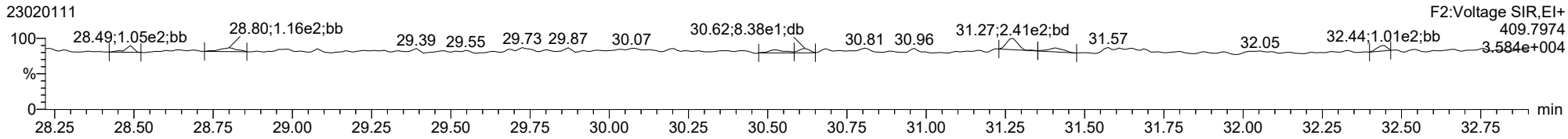

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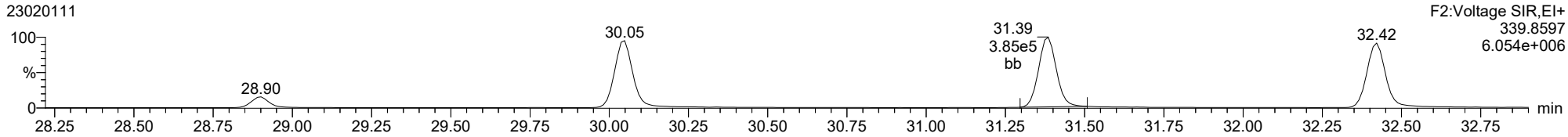

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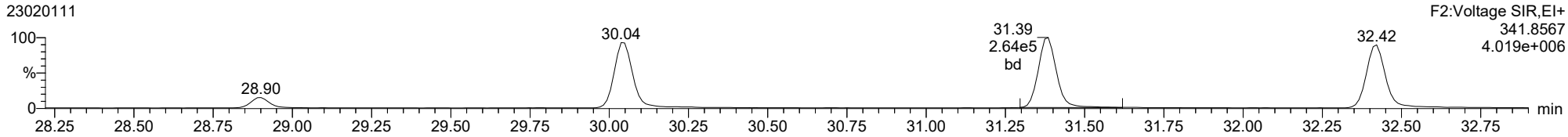

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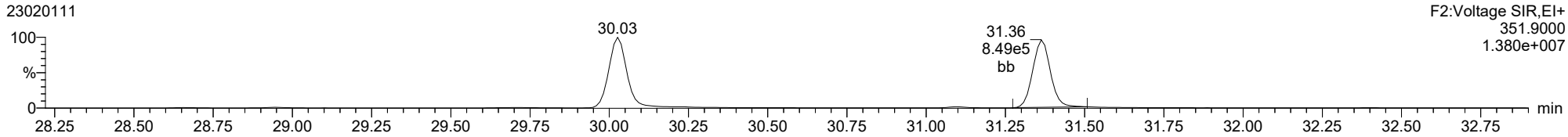

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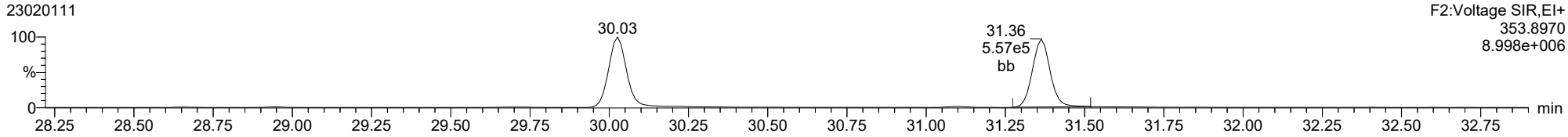

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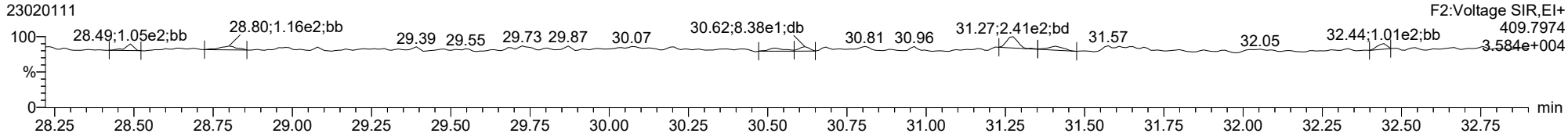

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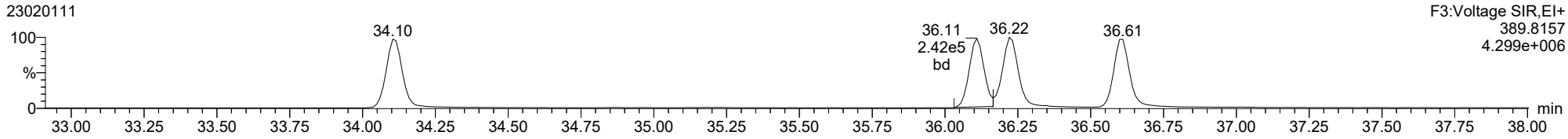

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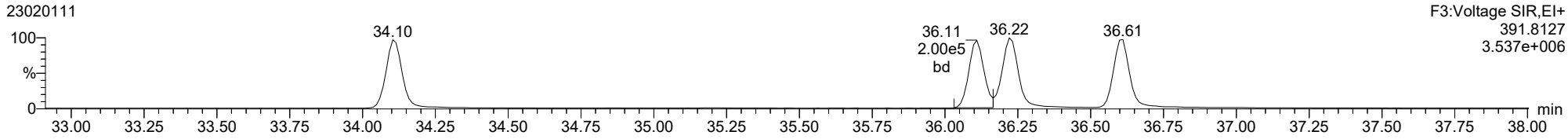

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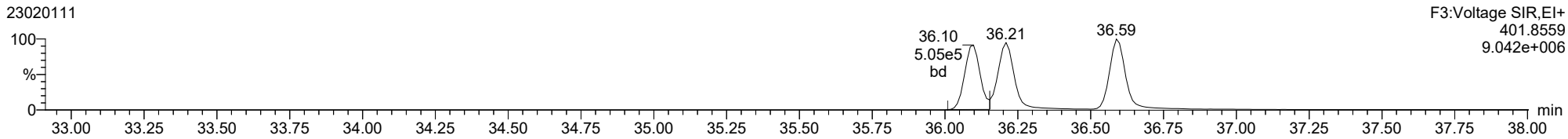

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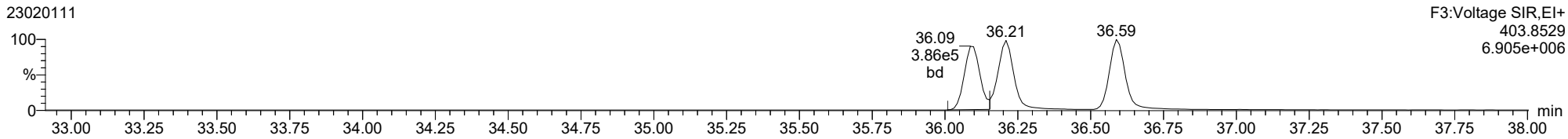

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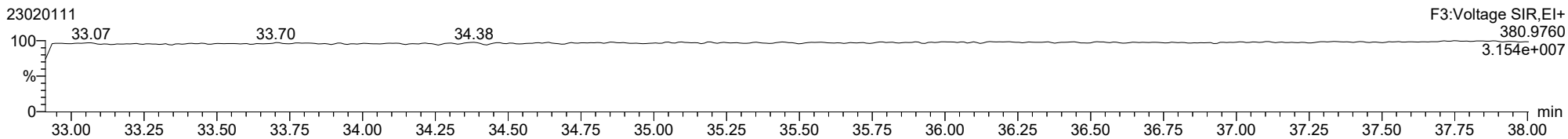

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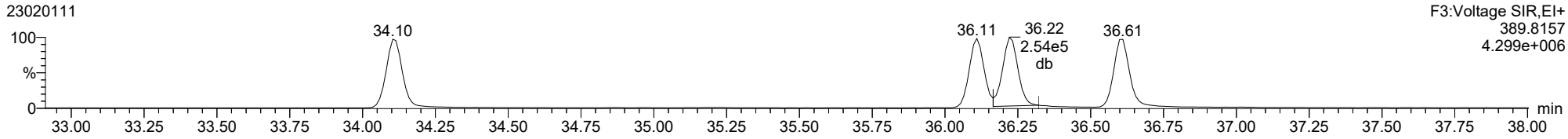

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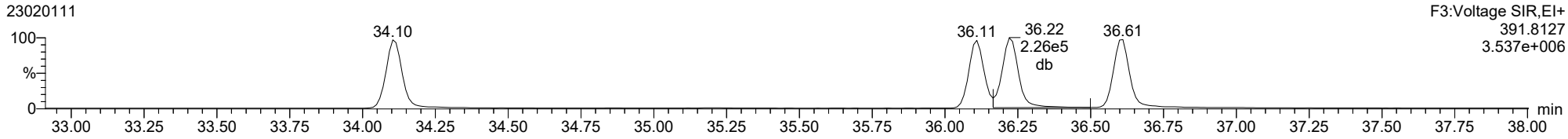

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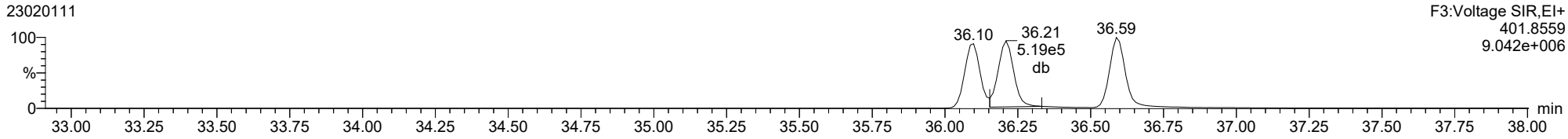

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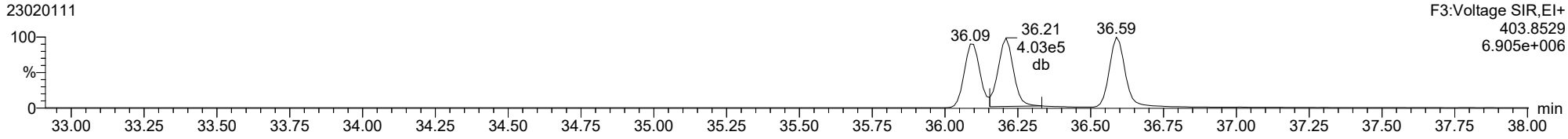

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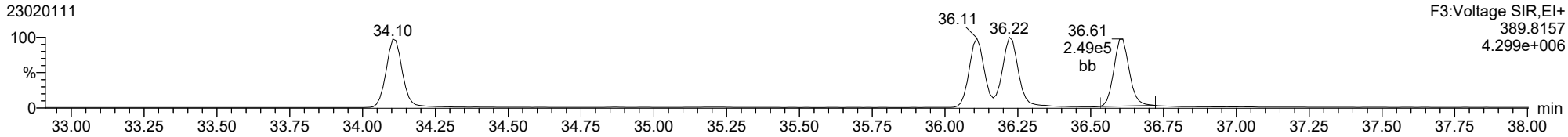

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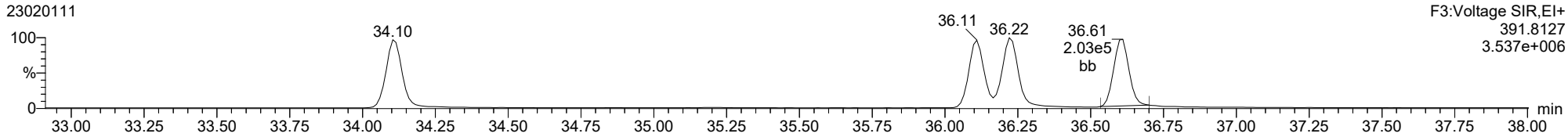

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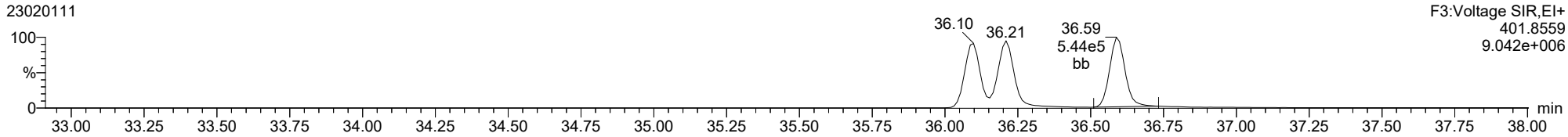

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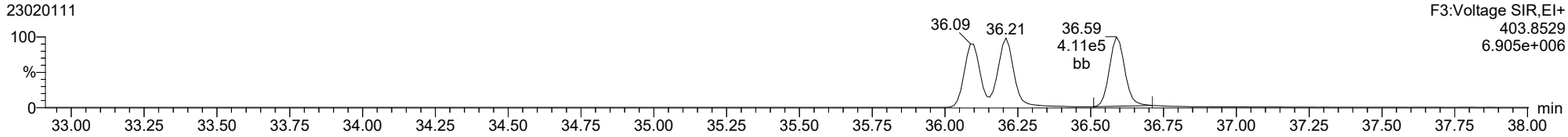

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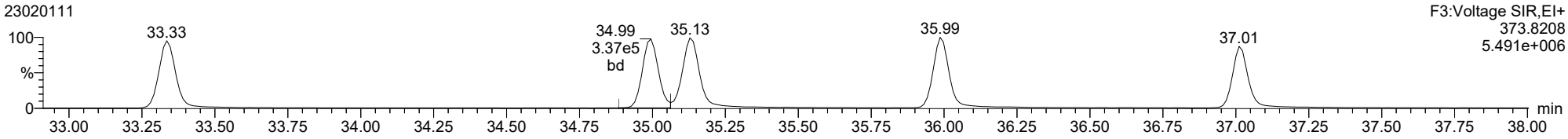

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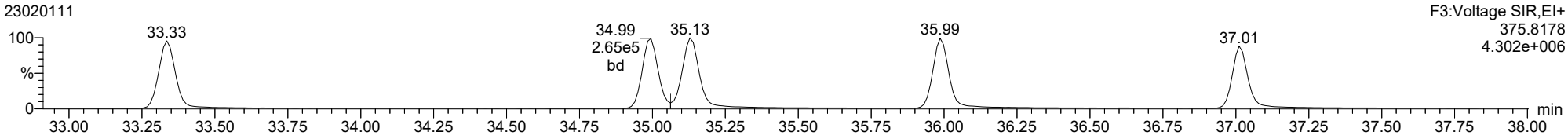

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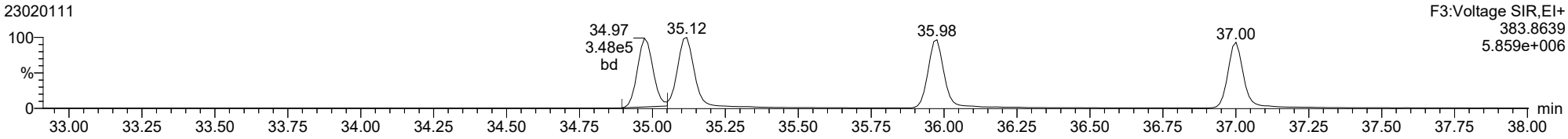

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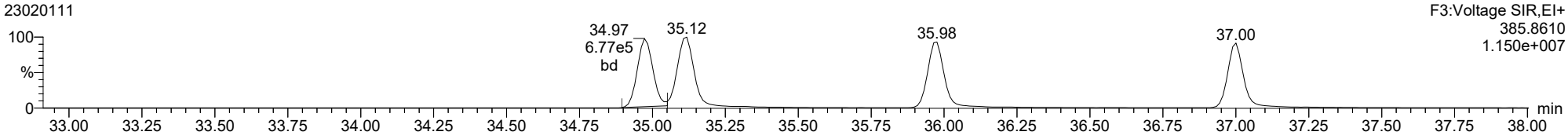

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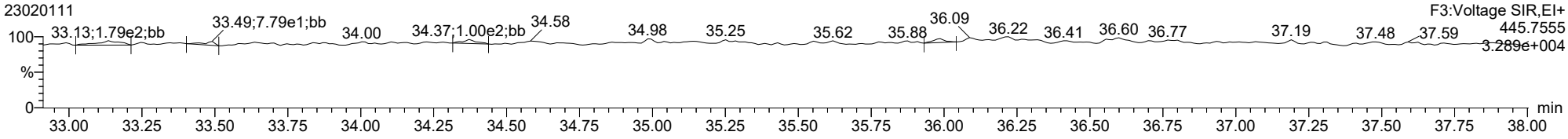

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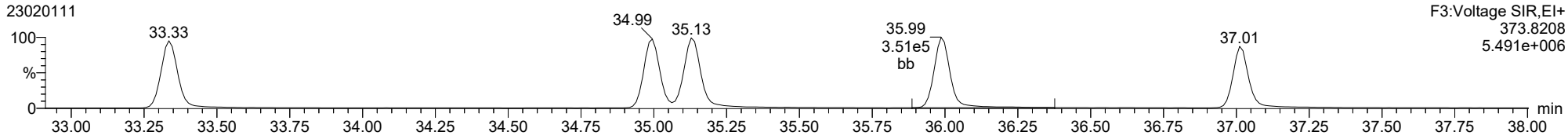

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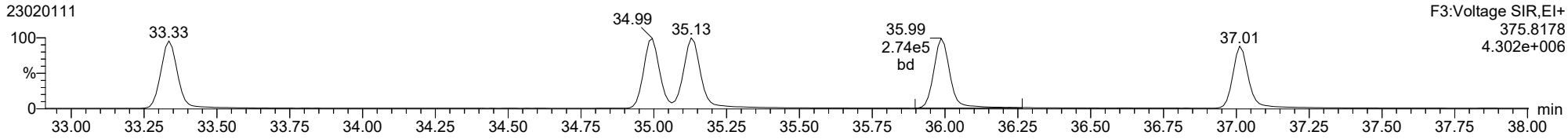

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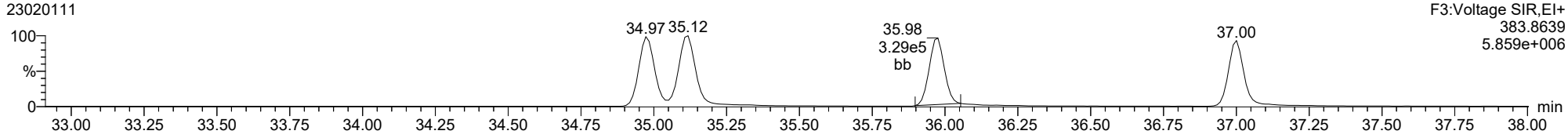

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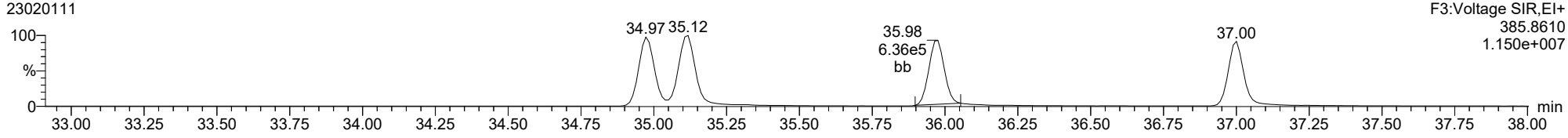

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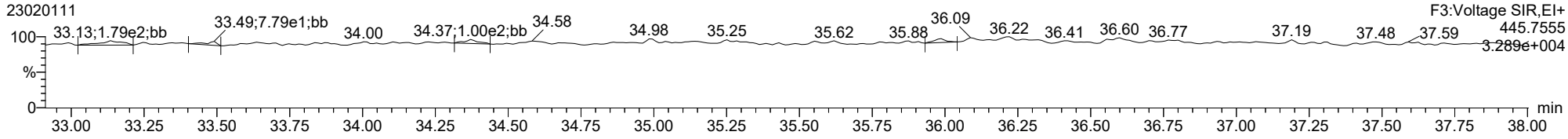

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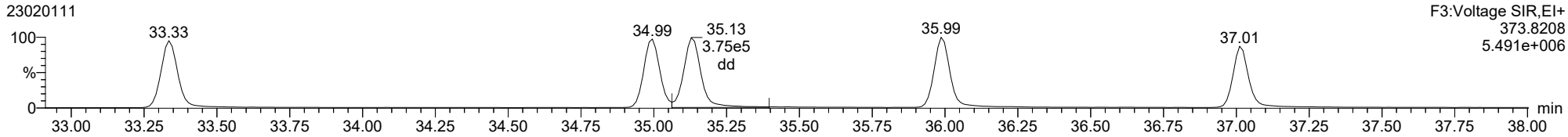

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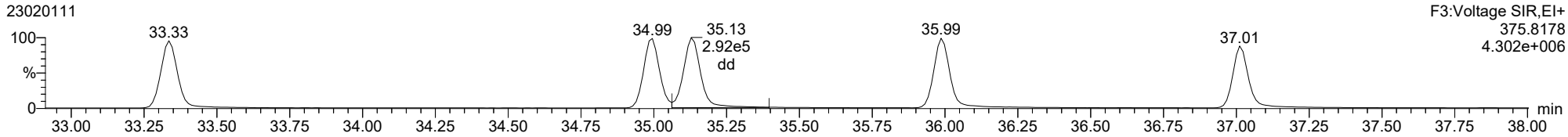

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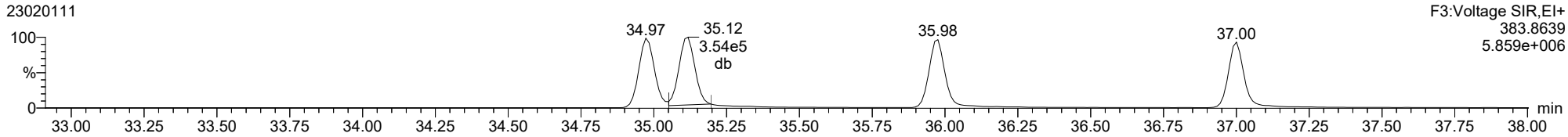

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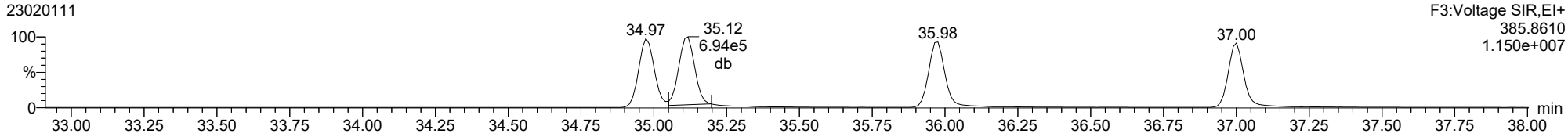

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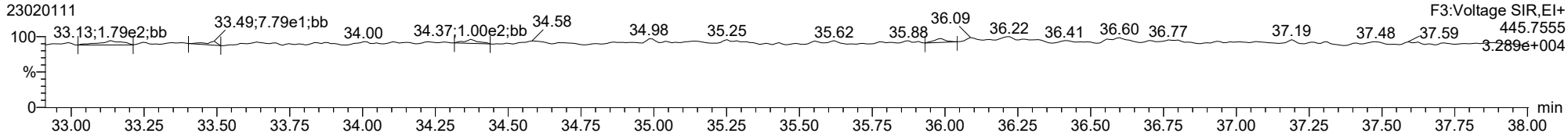

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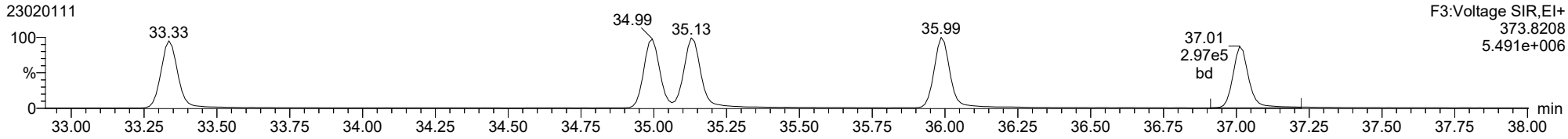

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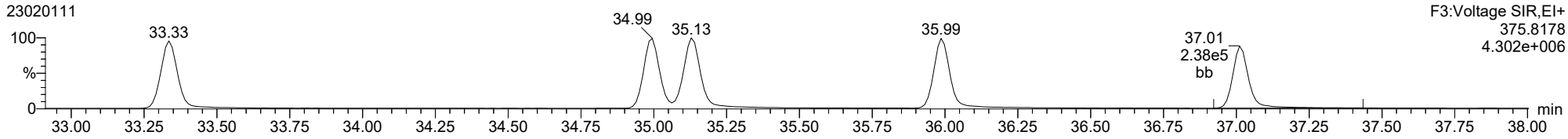

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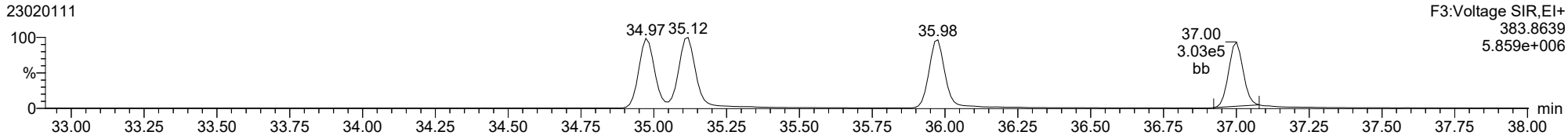

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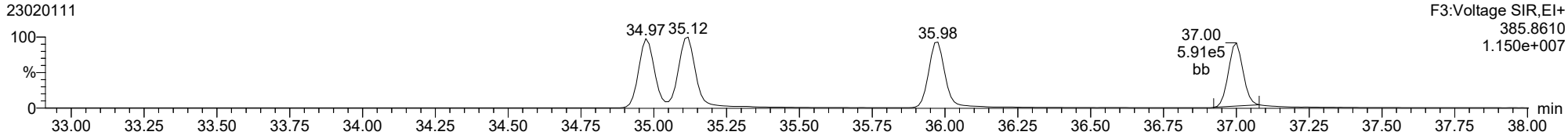
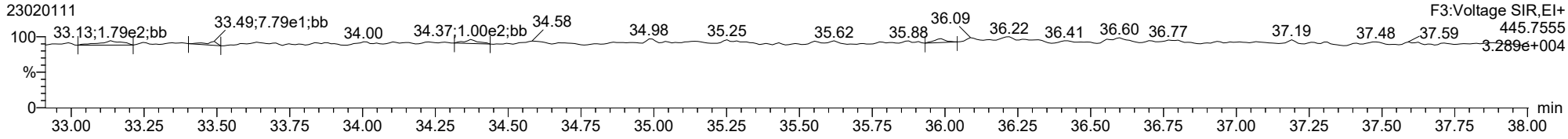


FUNCTION3 OCDPE



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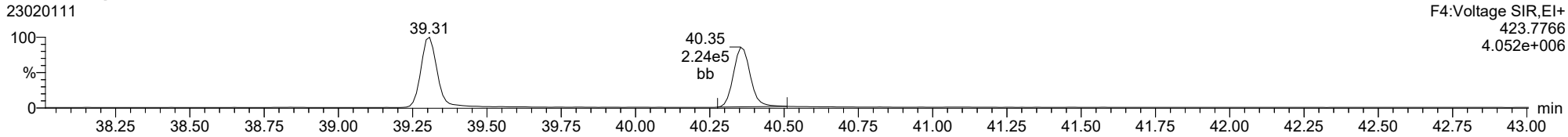

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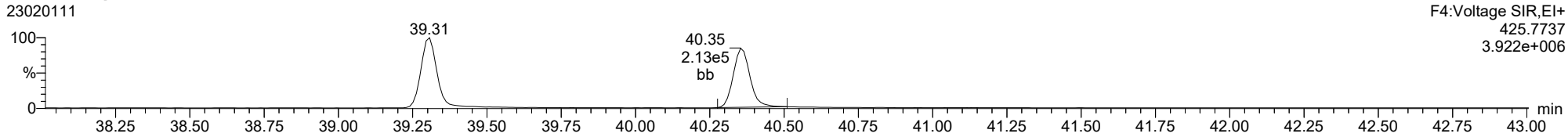

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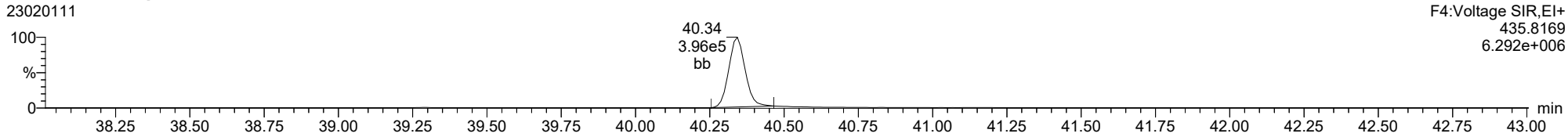

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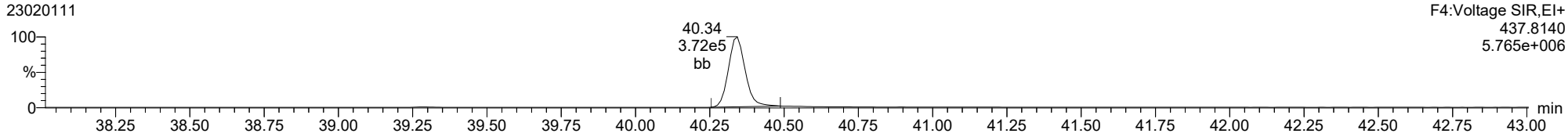

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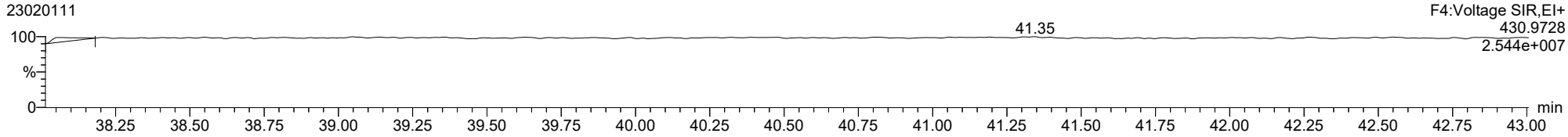

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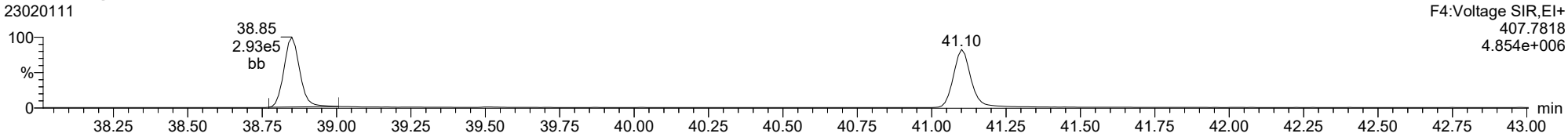

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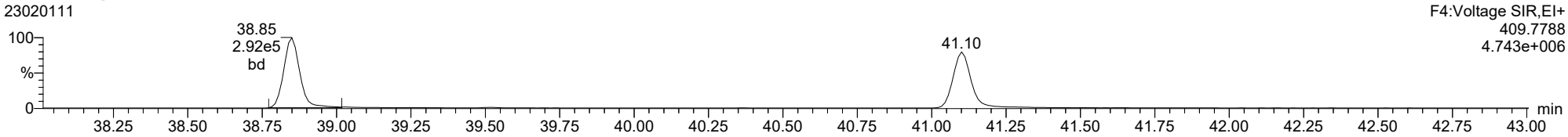

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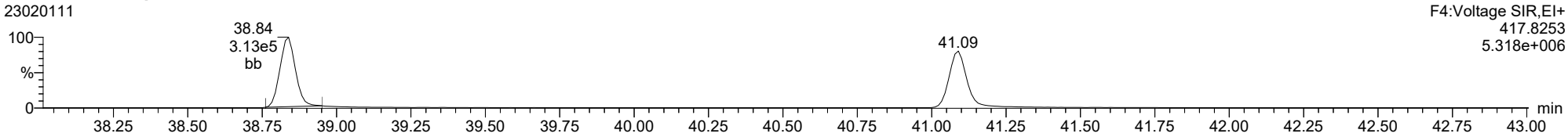

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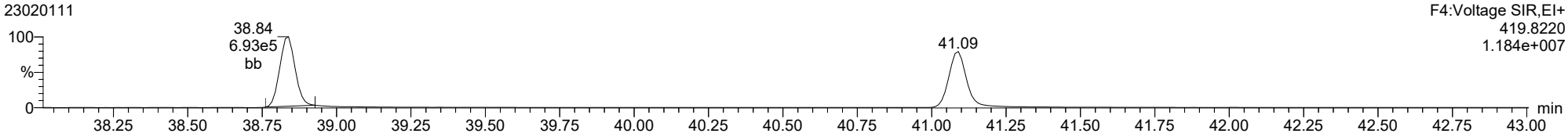
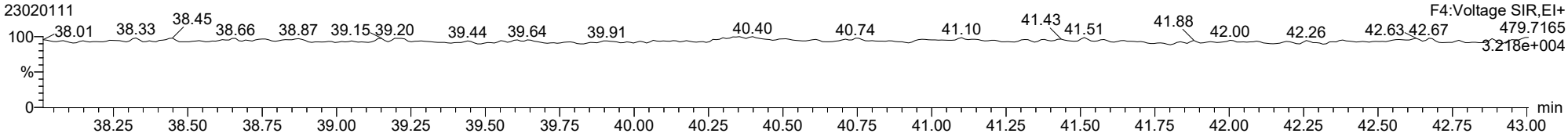


FUNCTION4 NCDPE



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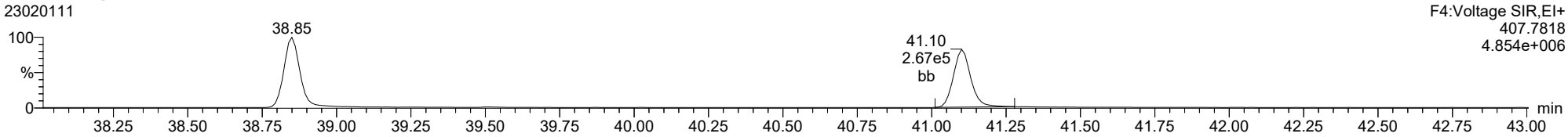

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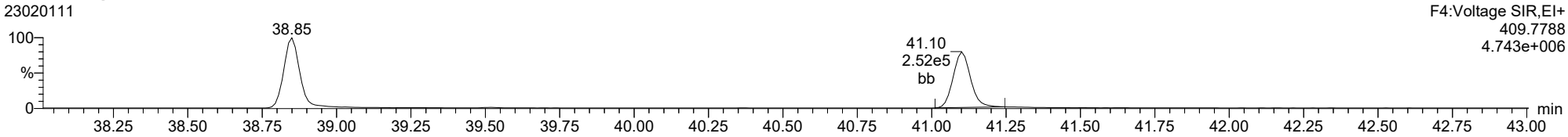

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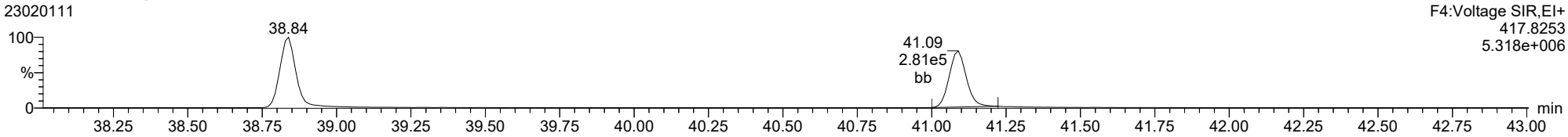

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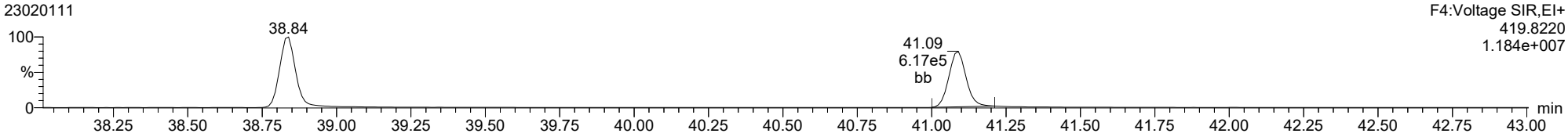

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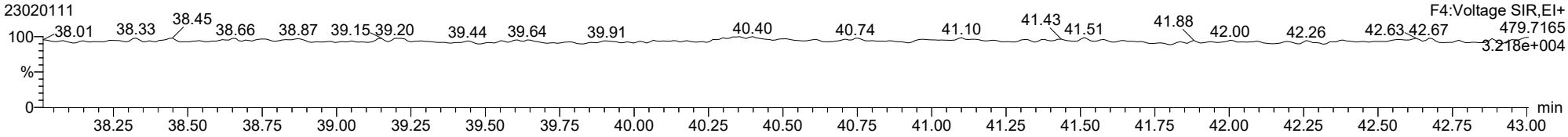

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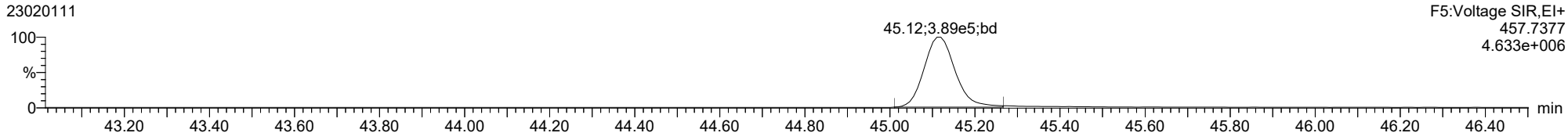

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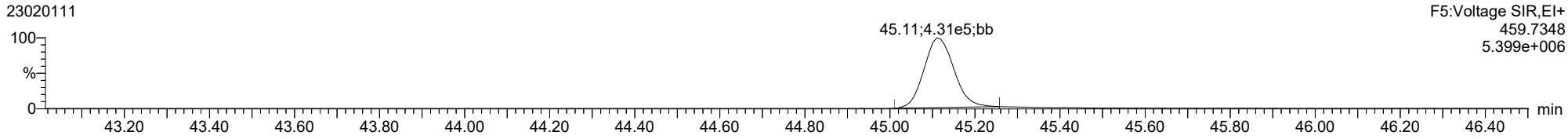

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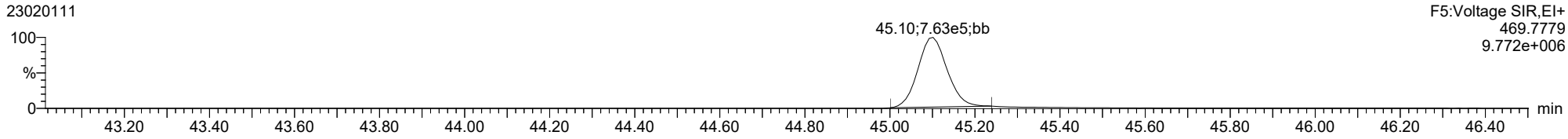

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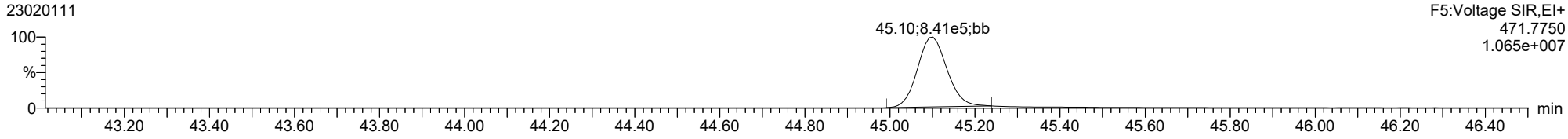
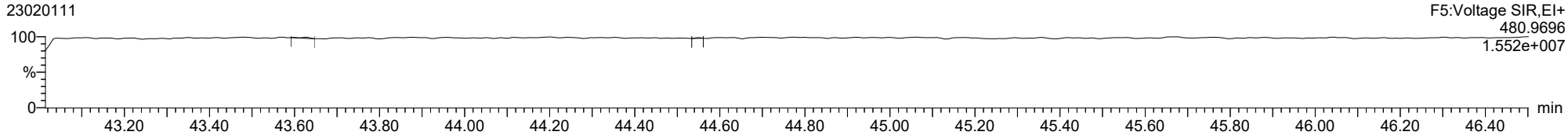


FUNCTION5 PFK



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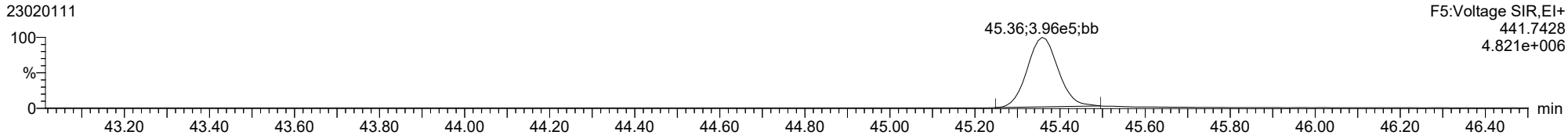

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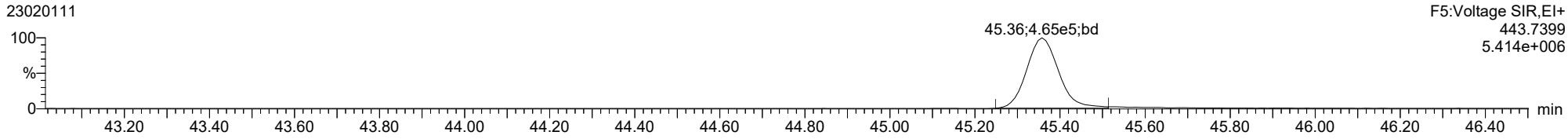
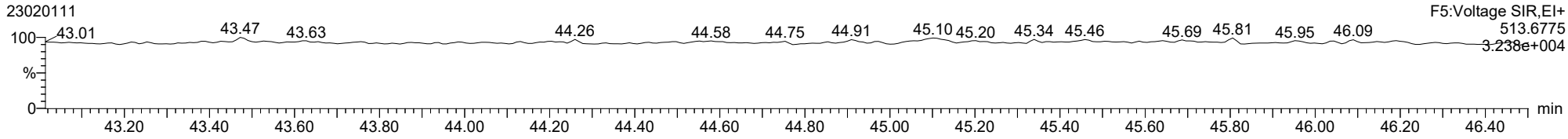


FUNCTION5 DCDPE



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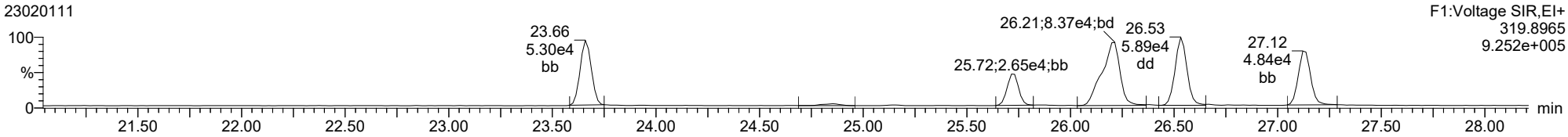
Total-tetradioxins



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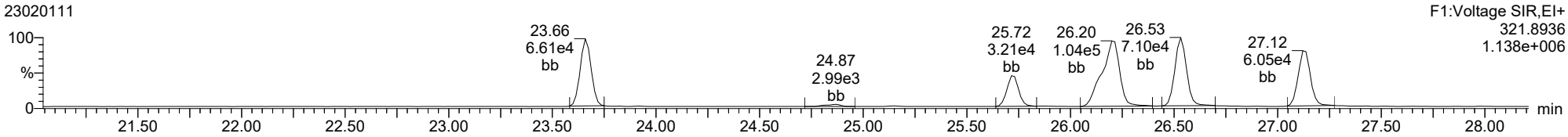
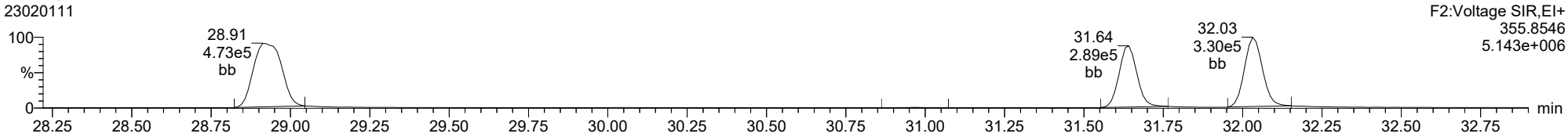
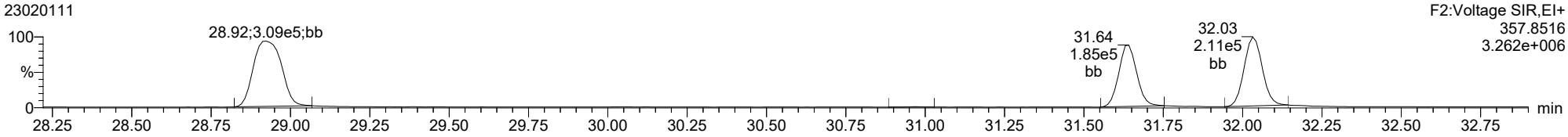


Total-pentadioxins



Total-pentadioxins



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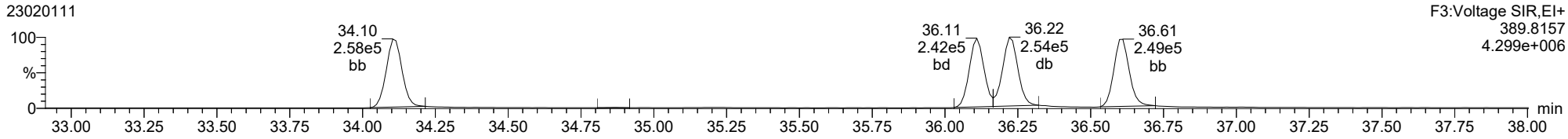
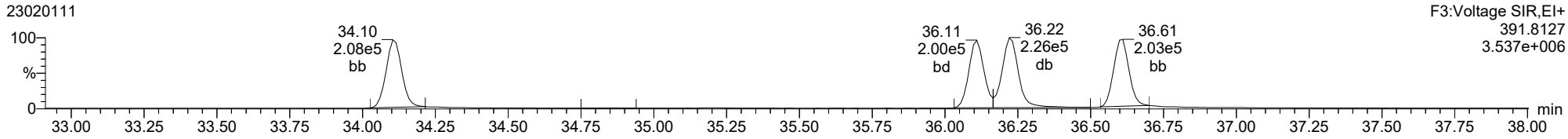
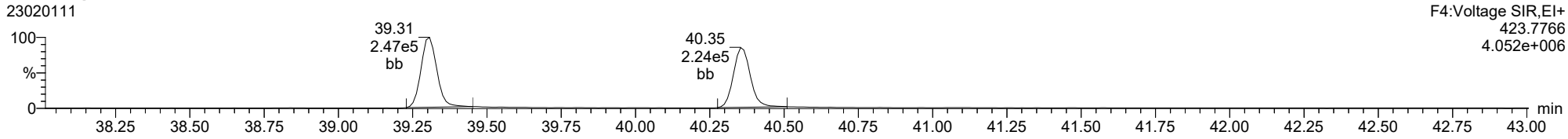
Total-hexadioxins



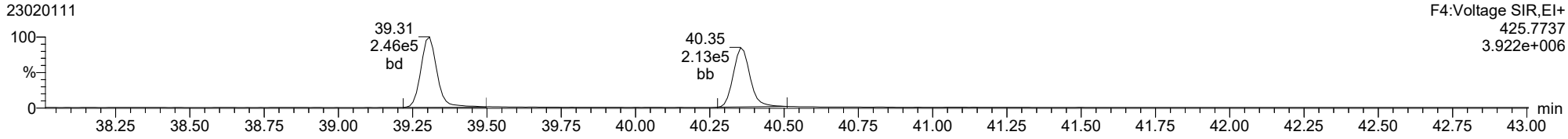
Total-hexadioxins



Total-heptadioxins

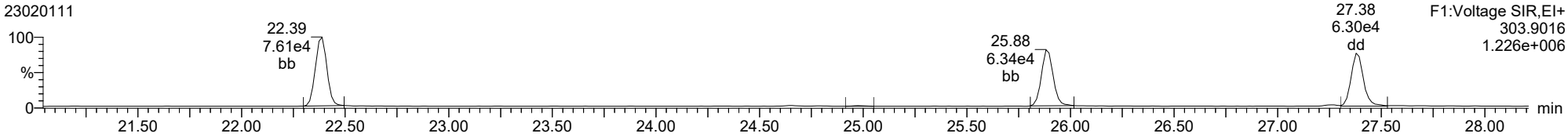


Total-heptadioxins

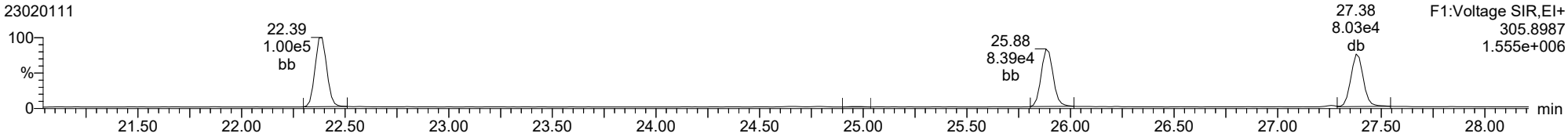


ID: CS3R2, Name: 23020111, Date: 01-Feb-2023, Time: 21:12:31, Conditions: AUTOSPEC01, User: pk

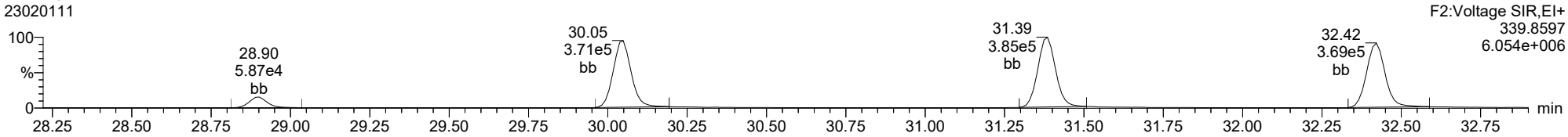
Total-tetrafurans



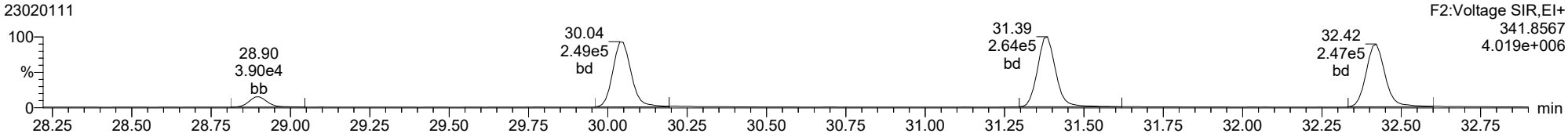
Total-tetrafurans



Total-pentafurans

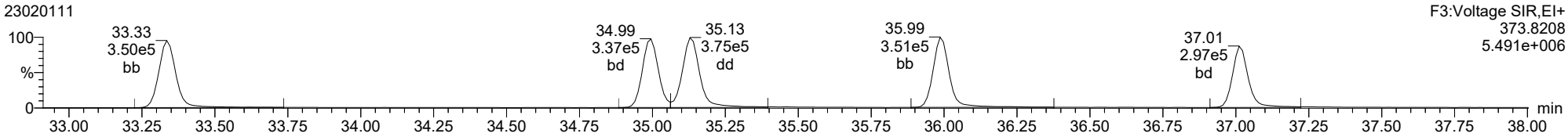


Total-pentafurans

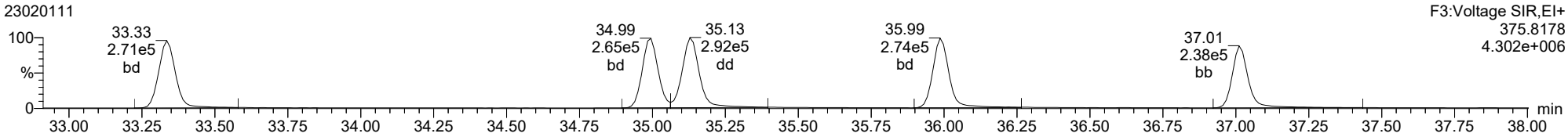


ID: CS3R2, Name: 23020111, Date: 01-Feb-2023, Time: 21:12:31, Conditions: AUTOSPEC01, User: pk

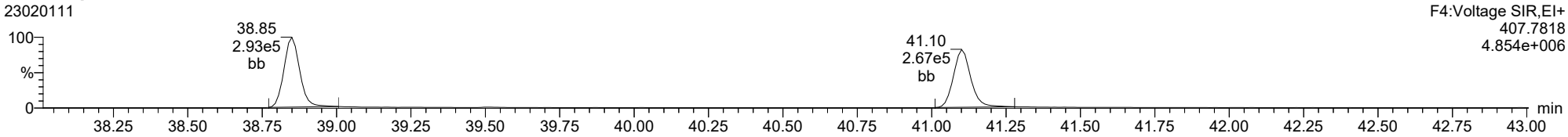
Total-hexafurans



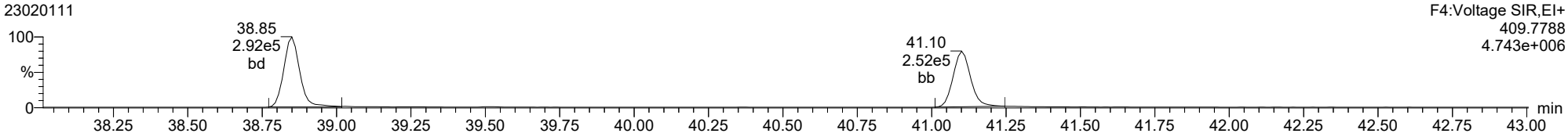
Total-hexafurans



Total-heptafurans

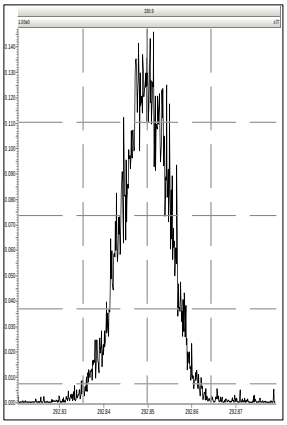


Total-heptafurans

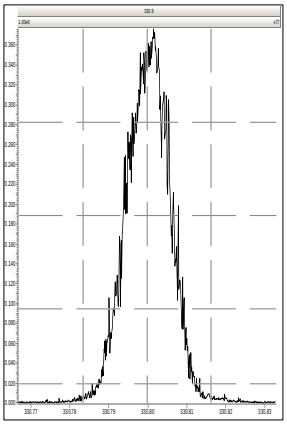


Printed: Wednesday, February 01, 2023 22:06:17 Pacific Standard Time

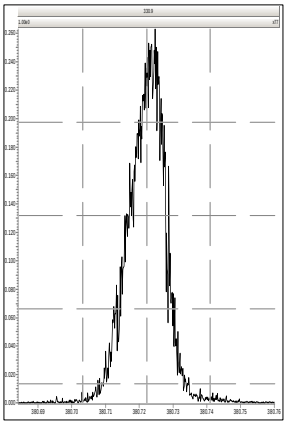
M 292.9824 R 12286



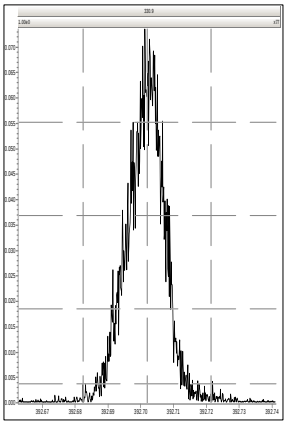
M 330.9792 R 13297



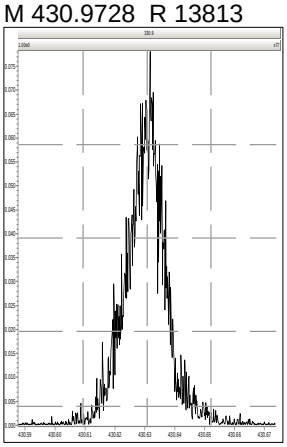
M 380.9760 R 15928



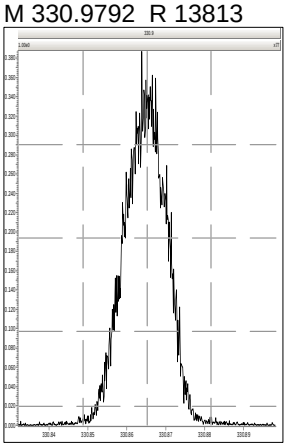
M 392.9760 R 16091



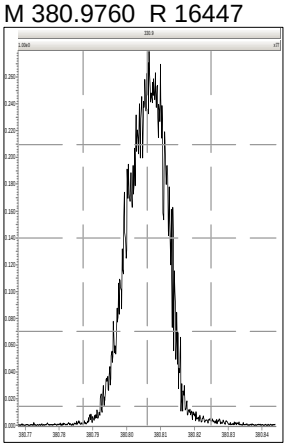
M 430.9728 R 13813



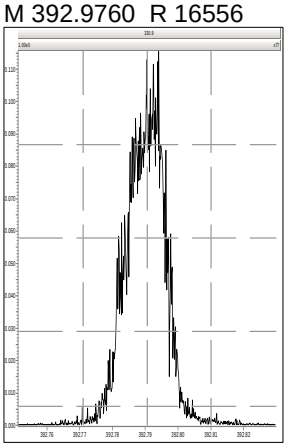
M 330.9792 R 13813



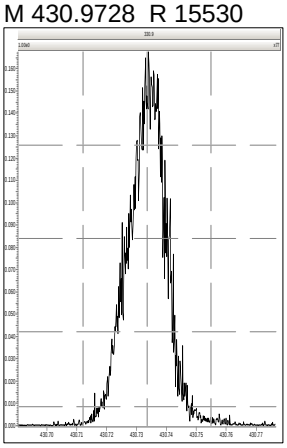
M 380.9760 R 16447



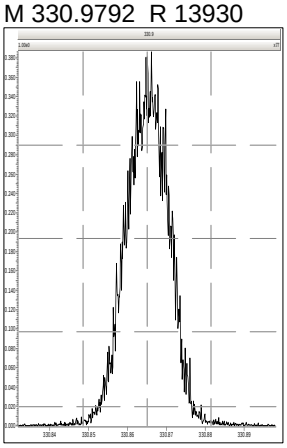
M 392.9760 R 16556



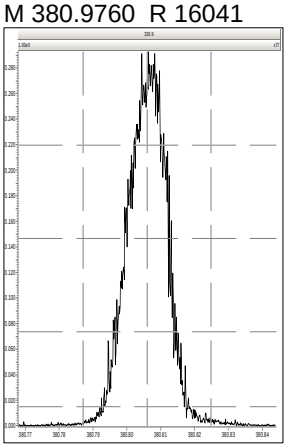
M 430.9728 R 15530



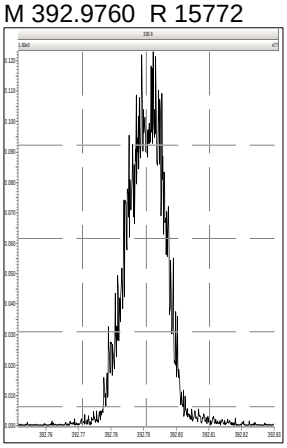
M 330.9792 R 13930



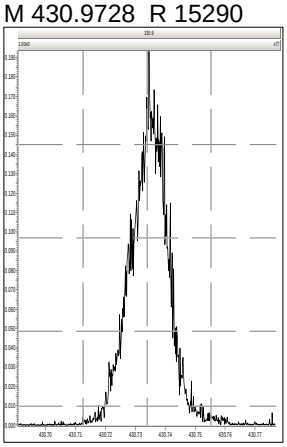
M 380.9760 R 16041



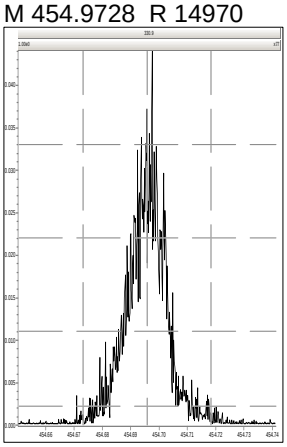
M 392.9760 R 15772



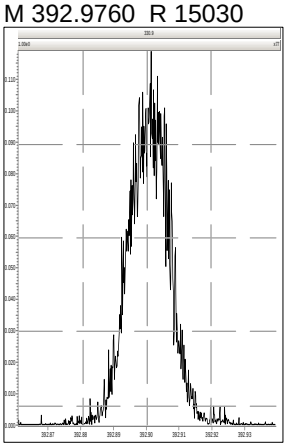
M 430.9728 R 15290



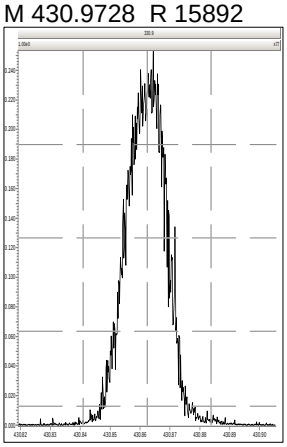
M 454.9728 R 14970



M 392.9760 R 15030

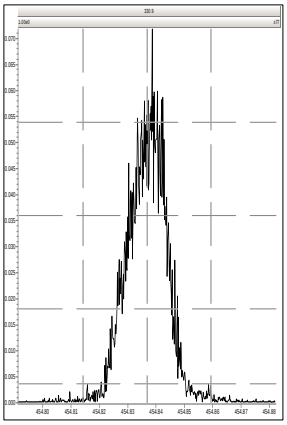


M 430.9728 R 15892

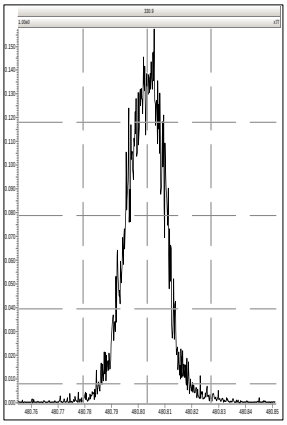


Printed: Wednesday, February 01, 2023 22:06:17 Pacific Standard Time

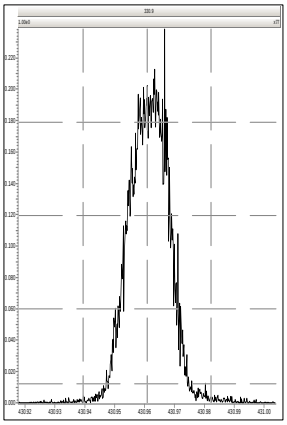
M 454.9728 R 15556



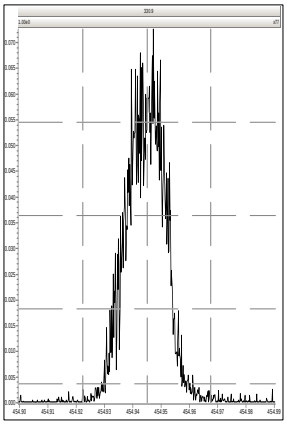
M 480.9696 R 15064



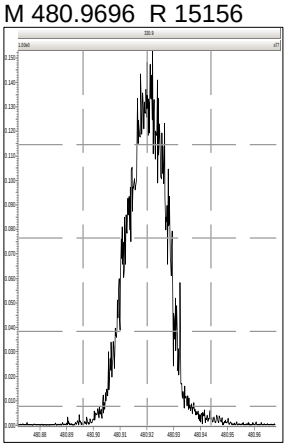
M 430.9728 R 15337



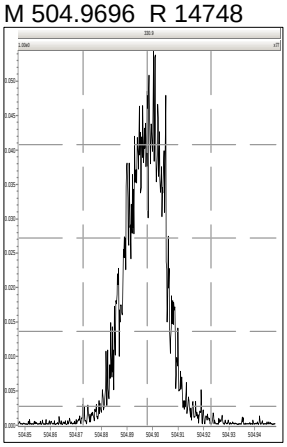
M 454.9728 R 16464



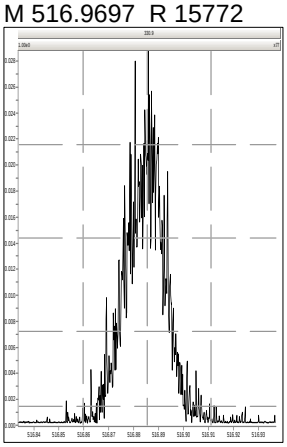
M 480.9696 R 15156

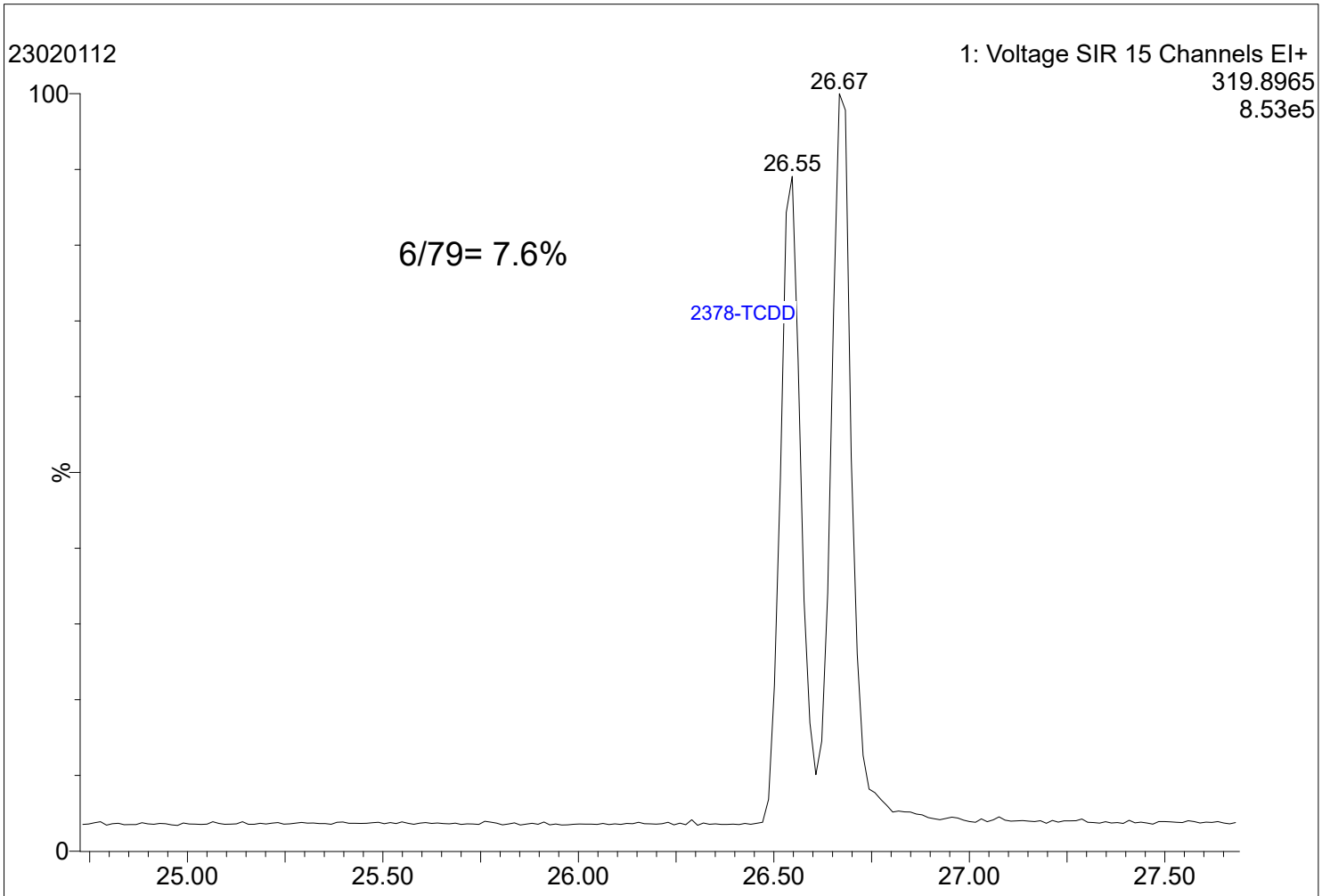


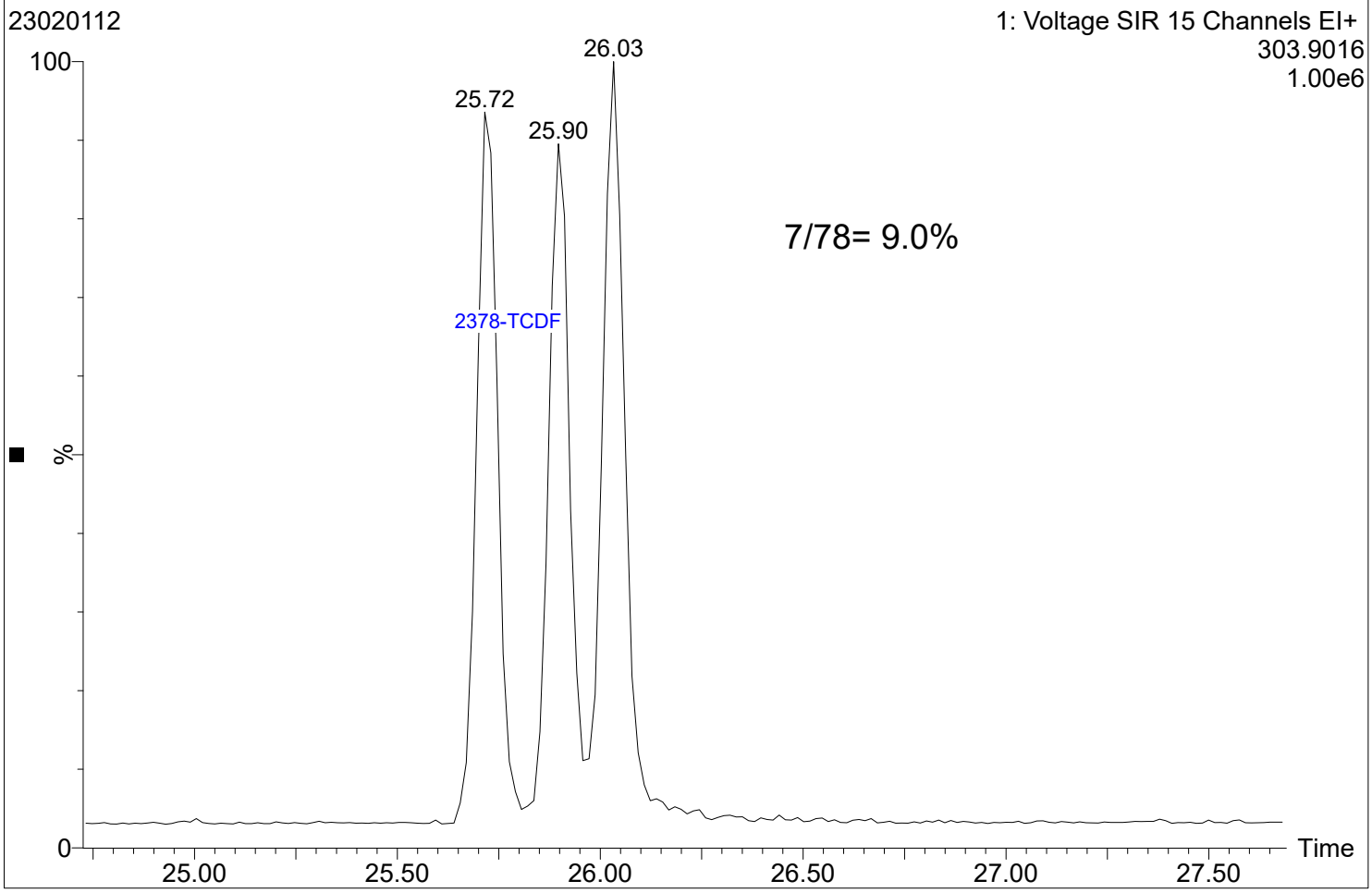
M 504.9696 R 14748



M 516.9697 R 15772




23020112
1: Voltage SIR 15 Channels EI+
319.8965
8.53e5
100
26.67
26.55
6/79= 7.6%
2378-TCDD
%
0
25.00
25.50
26.00
26.50
27.00
27.50


23020112
1: Voltage SIR 15 Channels EI+
303.9016
1.00e6
100
26.03
25.72
25.90
7/78= 9.0%
2378-TCDF
%
0
Time
25.00
25.50
26.00
26.50
27.00
27.50

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00010
Laboratory ID: SLB0026-SCV1
Sequence: SLB0026
Sequence Name: ICVCR
Standard ID: H008219

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
2,3,7,8-TCDF	10.000	9.80	-2.0	
2,3,7,8-TCDD	10.000	10.1	1.0	
1,2,3,7,8-PeCDF	50.000	49.4	-1.1	
2,3,4,7,8-PeCDF	50.000	50.7	1.4	
1,2,3,7,8-PeCDD	50.000	48.9	-2.2	
1,2,3,4,7,8-HxCDF	50.000	50.8	1.7	
1,2,3,6,7,8-HxCDF	50.000	51.1	2.1	
2,3,4,6,7,8-HxCDF	50.000	51.5	3.1	
1,2,3,7,8,9-HxCDF	50.000	49.9	-0.2	
1,2,3,4,7,8-HxCDD	50.000	51.0	2.0	
1,2,3,6,7,8-HxCDD	50.000	48.3	-3.4	
1,2,3,7,8,9-HxCDD	50.000	49.6	-0.8	
1,2,3,4,6,7,8-HpCDF	50.000	49.0	-2.0	
1,2,3,4,7,8,9-HpCDF	50.000	51.5	2.9	
1,2,3,4,6,7,8-HpCDD	50.000	48.8	-2.3	
OCDF	100.00	93.0	-7.0	
OCDD	100.00	95.8	-4.2	
13C12-2,3,7,8-TCDF	100.00	101	0.8	
13C12-2,3,7,8-TCDD	100.00	97.3	-2.7	
13C12-1,2,3,7,8-PeCDF	100.00	97.9	-2.1	
13C12-2,3,4,7,8-PeCDF	100.00	96.0	-4.0	
13C12-1,2,3,7,8-PeCDD	100.00	95.6	-4.4	
13C12-1,2,3,4,7,8-HxCDF	100.00	99.0	-1.0	
13C12-1,2,3,6,7,8-HxCDF	100.00	98.8	-1.2	
13C12-2,3,4,6,7,8-HxCDF	100.00	99.3	-0.7	
13C12-1,2,3,7,8,9-HxCDF	100.00	98.6	-1.4	
13C12-1,2,3,4,7,8-HxCDD	100.00	97.7	-2.3	
13C12-1,2,3,6,7,8-HxCDD	100.00	101	0.6	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	100	0.3	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	101	0.8	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	101	0.6	
13C12-OCDD	200.00	205	2.6	
37Cl4-2,3,7,8-TCDD	10.000	8.94	-10.6	

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 1613B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Calibration: GB00010
Sequence: SLB0026

SDG: 23A0134
Project: AOC5 MR Phase 1
Laboratory ID: SLB0026-SCV1
Sequence Name: ICVCR
Standard ID: H008219

* Indicates values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00010
Laboratory ID: SLB0026-SCV1
Sequence: SLB0026
Standard ID: H008219

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
OCDF	100.00	93.0	-7.0	
OCDD	100.00	95.8	-4.2	
13C12-2,3,7,8-TCDF	100.00	101	0.8	
13C12-2,3,7,8-TCDD	100.00	97.3	-2.7	
13C12-1,2,3,7,8-PeCDF	100.00	97.9	-2.1	
13C12-2,3,4,7,8-PeCDF	100.00	96.0	-4.0	
13C12-1,2,3,7,8-PeCDD	100.00	95.6	-4.4	
13C12-1,2,3,4,7,8-HxCDF	100.00	99.0	-1.0	
13C12-1,2,3,6,7,8-HxCDF	100.00	98.8	-1.2	
13C12-2,3,4,6,7,8-HxCDF	100.00	99.3	-0.7	
13C12-1,2,3,7,8,9-HxCDF	100.00	98.6	-1.4	
13C12-1,2,3,4,7,8-HxCDD	100.00	97.7	-2.3	
13C12-1,2,3,6,7,8-HxCDD	100.00	101	0.6	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	100	0.3	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	101	0.8	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	101	0.6	
13C12-OCDD	200.00	205	2.6	
37Cl4-2,3,7,8-TCDD	10.000	8.94	-10.6	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GB00010
Lab File ID:	23020102	Calibration Date:	02/01/2023
Sequence:	SLB0026	Injection Date:	02/01/23
Lab Sample ID:	SLB0026-ICV1	Injection Time:	10:37
Sequence Name:	CS3R1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
2,3,7,8-TCDF	A	10.000	9.00	0.8760604	0.7881394		-10.0	+/-16	
2,3,7,8-TCDD	A	10.000	8.00	1.2363600	0.9890074		-20.0	+/-22	
1,2,3,7,8-PeCDF	A	50.000	45.5	0.8446540	0.7681961		-9.1	+/-18	
2,3,4,7,8-PeCDF	A	50.000	46.0	0.9111780	0.8383961		-8.0	+/-18	
1,2,3,7,8-PeCDD	A	50.000	49.7	1.0866850	1.0810230		-0.5	+/-22	
1,2,3,4,7,8-HxCDF	A	50.000	43.8	1.1816860	1.0352320		-12.4	+/-10	*
1,2,3,6,7,8-HxCDF	A	50.000	44.7	1.2480480	1.1146430		-10.7	+/-12	
2,3,4,6,7,8-HxCDF	A	50.000	45.6	1.2288500	1.1200940		-8.9	+/-12	
1,2,3,7,8,9-HxCDF	A	50.000	44.5	1.1865370	1.0560050		-11.0	+/-10	*
1,2,3,4,7,8-HxCDD	A	50.000	44.8	0.9869672	0.8835021		-10.5	+/-22	
1,2,3,6,7,8-HxCDD	A	50.000	43.8	1.0207220	0.8949701		-12.3	+/-22	
1,2,3,7,8,9-HxCDD	A	50.000	44.1	0.9854780	0.8698650		-11.7	+/-18	
1,2,3,4,6,7,8-HpCDF	A	50.000	45.1	1.2041190	1.0859080		-9.8	+/-10	
1,2,3,4,7,8,9-HpCDF	A	50.000	47.7	1.1653050	1.1124610		-4.5	+/-14	
1,2,3,4,6,7,8-HpCDD	A	50.000	44.2	1.2525690	1.1066520		-11.6	+/-14	
OCDF	A	100.00	86.3	1.1862640	1.0243110		-13.7	+/-37	
OCDD	A	100.00	90.9	1.1026670	1.0028370		-9.1	+/-21	
13C12-2,3,7,8-TCDF	A	100.00	81.8	1.7680590	1.4469997		-18.2	+/-29	
13C12-2,3,7,8-TCDD	A	100.00	103	1.1029470	1.1388769		3.3	+/-18	
13C12-1,2,3,7,8-PeCDF	A	100.00	97.0	1.5271250	1.4807739		-3.0	+/-24	
13C12-2,3,4,7,8-PeCDF	A	100.00	96.3	1.4662840	1.4126920		-3.7	+/-23	
13C12-1,2,3,7,8-PeCDD	A	100.00	97.3	0.9141518	0.8893426		-2.7	+/-38	
13C12-1,2,3,4,7,8-HxCDF	A	100.00	88.7	1.0536610	0.9345708		-11.3	+/-24	
13C12-1,2,3,6,7,8-HxCDF	A	100.00	89.6	1.0799530	0.9680754		-10.4	+/-30	
13C12-2,3,4,6,7,8-HxCDF	A	100.00	88.7	1.0143260	0.8993069		-11.3	+/-27	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	87.8	0.9279333	0.8145455		-12.2	+/-26	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	99.3	0.9329336	0.9264810		-0.7	+/-15	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	102	0.9646272	0.9846310		2.1	+/-15	
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	80.6	1.0360890	0.8353360		-19.4	+/-22	
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	78.2	0.9049372	0.7072834		-21.8	+/-23	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GB00010
Lab File ID:	23020102	Calibration Date:	02/01/2023
Sequence:	SLB0026	Injection Date:	02/01/23
Lab Sample ID:	SLB0026-ICV1	Injection Time:	10:37
Sequence Name:	CS3R1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	84.9	0.7819773	0.6642647		-15.1	+/-28
13C12-OCDD	A	200.00	176	0.7882343	0.6917393		-12.2	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	8.58	1.2334500	1.0578858		-14.2	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GB00010
Lab File ID:	23022302	Calibration Date:	02/01/2023
Sequence:	SLB0345	Injection Date:	02/23/23
Lab Sample ID:	SLB0345-ICV1	Injection Time:	10:49
Sequence Name:	CS3V1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
2,3,7,8-TCDF	A	10.000	9.94	0.8760604	0.8710791		-0.6	+/-16	
2,3,7,8-TCDD	A	10.000	8.91	1.2363600	1.1014280		-10.9	+/-22	
1,2,3,7,8-PeCDF	A	50.000	49.1	0.8446540	0.8298602		-1.8	+/-18	
2,3,4,7,8-PeCDF	A	50.000	50.0	0.9111780	0.9119257		0.08	+/-18	
1,2,3,7,8-PeCDD	A	50.000	52.2	1.0866850	1.1338300		4.3	+/-22	
1,2,3,4,7,8-HxCDF	A	50.000	45.9	1.1816860	1.0839590		-8.3	+/-10	
1,2,3,6,7,8-HxCDF	A	50.000	44.5	1.2480480	1.1115030		-10.9	+/-12	
2,3,4,6,7,8-HxCDF	A	50.000	44.9	1.2288500	1.1036700		-10.2	+/-12	
1,2,3,7,8,9-HxCDF	A	50.000	46.1	1.1865370	1.0937280		-7.8	+/-10	
1,2,3,4,7,8-HxCDD	A	50.000	46.3	0.9869672	0.9135761		-7.4	+/-22	
1,2,3,6,7,8-HxCDD	A	50.000	44.7	1.0207220	0.9127573		-10.6	+/-22	
1,2,3,7,8,9-HxCDD	A	50.000	45.3	0.9854780	0.8931803		-9.4	+/-18	
1,2,3,4,6,7,8-HpCDF	A	50.000	49.5	1.2041190	1.1917490		-1.0	+/-10	
1,2,3,4,7,8,9-HpCDF	A	50.000	48.1	1.1653050	1.1204430		-3.8	+/-14	
1,2,3,4,6,7,8-HpCDD	A	50.000	44.8	1.2525690	1.1228770		-10.4	+/-14	
OCDF	A	100.00	88.9	1.1862640	1.0551250		-11.1	+/-37	
OCDD	A	100.00	98.6	1.1026670	1.0876320		-1.4	+/-21	
13C12-2,3,7,8-TCDF	A	100.00	86.1	1.7680590	1.5222670		-13.9	+/-29	
13C12-2,3,7,8-TCDD	A	100.00	97.7	1.1029470	1.0779528		-2.3	+/-18	
13C12-1,2,3,7,8-PeCDF	A	100.00	81.5	1.5271250	1.2439282		-18.5	+/-24	
13C12-2,3,4,7,8-PeCDF	A	100.00	86.2	1.4662840	1.2644457		-13.8	+/-23	
13C12-1,2,3,7,8-PeCDD	A	100.00	77.8	0.9141518	0.7111381		-22.2	+/-38	
13C12-1,2,3,4,7,8-HxCDF	A	100.00	93.7	1.0536610	0.9872913		-6.3	+/-24	
13C12-1,2,3,6,7,8-HxCDF	A	100.00	103	1.0799530	1.1125471		3.0	+/-30	
13C12-2,3,4,6,7,8-HxCDF	A	100.00	98.2	1.0143260	0.9963427		-1.8	+/-27	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	86.6	0.9279333	0.8039159		-13.4	+/-26	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	109	0.9329336	1.0205916		9.4	+/-15	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	119	0.9646272	1.1482316		19.0	+/-15	*
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	80.7	1.0360890	0.8356636		-19.3	+/-22	
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	75.8	0.9049372	0.6863893		-24.2	+/-23	*

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GB00010
Lab File ID:	23022302	Calibration Date:	02/01/2023
Sequence:	SLB0345	Injection Date:	02/23/23
Lab Sample ID:	SLB0345-ICV1	Injection Time:	10:49
Sequence Name:	CS3V1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	79.3	0.7819773	0.6200338		-20.7	+/-28
13C12-OCDD	A	200.00	129	0.7882343	0.5073239		-35.6	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	8.39	1.2334500	1.0344777		-16.1	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:09:38 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: CS3V1, Name: 23022302, Date: 23-Feb-2023, Time: 10:49:54, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	26.000	1.000	5.096e4	6.610e4	0.876	0.771	0.770	821	1402	7.40e5	9.48e5	900.6	676.3	NO	bd	bb	9.943
12378-PeCDF	30.176	1.001	2.790e5	1.766e5	0.845	1.580	1.550	2218	1980	4.16e6	2.60e6	1877.1	1311.6	NO	bb	bb	49.124
23478-PeCDF	31.524	1.001	3.112e5	1.977e5	0.911	1.574	1.550	2218	1980	4.68e6	2.97e6	2108.3	1497.3	NO	bb	bb	50.041
123478-HxCDF	35.122	1.000	2.818e5	2.274e5	1.182	1.239	1.240	1989	1821	4.43e6	3.56e6	2225.4	1954.0	NO	bd	bd	45.865
234678-HxCDF	36.125	1.001	2.834e5	2.398e5	1.229	1.182	1.240	1989	1821	4.30e6	3.53e6	2160.4	1936.2	NO	bd	bb	44.907
123678-HxCDF	35.267	1.001	3.238e5	2.646e5	1.248	1.224	1.240	1989	1821	4.48e6	3.62e6	2253.9	1989.2	NO	dd	dd	44.530
123789-HxCDF	37.150	1.000	2.324e5	1.860e5	1.187	1.249	1.240	1989	1821	3.33e6	2.69e6	1675.7	1478.6	NO	bd	bd	46.089
1234678-HpCDF	38.988	1.001	2.410e5	2.329e5	1.204	1.035	1.050	2746	1908	3.59e6	3.50e6	1307.1	1836.5	NO	bd	bd	49.486
1234789-HpCDF	41.261	1.000	1.867e5	1.793e5	1.165	1.041	1.050	2746	1908	2.41e6	2.32e6	877.1	1217.8	NO	bd	bd	48.075
OCDF	45.563	1.006	2.403e5	2.691e5	1.186	0.893	0.890	1156	1285	2.57e6	2.82e6	2224.2	2195.9	NO	bd	bd	88.945
2378-TCDD	26.650	1.000	4.585e4	5.896e4	1.236	0.778	0.770	1257	1023	6.77e5	8.61e5	539.0	842.0	NO	bd	bb	8.909
12378-PeCDD	31.769	1.000	2.216e5	1.343e5	1.087	1.649	1.550	1815	1331	3.51e6	2.16e6	1933.4	1621.8	NO	bb	bb	52.169
123478-HxCDD	36.236	1.000	2.461e5	1.976e5	0.987	1.246	1.240	2750	1748	3.86e6	3.12e6	1403.4	1787.9	NO	bd	bd	46.282
123678-HxCDD	36.359	1.001	2.742e5	2.245e5	1.021	1.221	1.240	2750	1748	3.96e6	3.21e6	1439.7	1837.5	NO	dd	dd	44.711
123789-HxCDD	36.738	1.011	2.506e5	2.103e5	0.985	1.192	1.240	2750	1748	3.81e6	3.20e6	1386.8	1831.0	NO	bd	bd	45.317
1234678-HpCDD	40.504	1.000	1.702e5	1.611e5	1.253	1.056	1.050	2023	1994	2.58e6	2.42e6	1277.0	1211.9	NO	bb	bb	44.823
OCDD	45.316	1.000	2.436e5	2.815e5	1.103	0.865	0.890	1448	1602	2.70e6	3.08e6	1863.8	1923.2	NO	bd	bd	98.636
13C-2378-TCDF	25.986	1.007	5.885e5	7.554e5	1.768	0.779	0.770	1541	1472	8.81e6	1.13e7	5714.2	7695.9	NO	bb	bb	86.098
13C-12378-PeCDF	30.153	1.168	6.677e5	4.304e5	1.527	1.551	1.550	3165	1900	9.39e6	6.09e6	2968.0	3202.2	NO	bd	bd	81.456
13C-23478-PeCDF	31.501	1.220	6.855e5	4.308e5	1.466	1.591	1.550	3165	1900	9.74e6	6.20e6	3076.3	3261.4	NO	bb	bb	86.235
13C-123478-HxCDF	35.111	0.956	3.166e5	6.230e5	1.054	0.508	0.510	2579	1903	5.15e6	1.01e7	1995.2	5329.3	NO	bd	bd	93.701
13C-123678-HxCDF	35.245	0.960	3.554e5	7.034e5	1.080	0.505	0.510	2579	1903	5.32e6	1.04e7	2061.6	5481.5	NO	db	db	103.018
13C-234678-HxCDF	36.103	0.983	3.355e5	6.127e5	1.014	0.548	0.510	2579	1903	4.84e6	9.72e6	1875.9	5108.0	NO	bb	bb	98.227
13C-123789-HxCDF	37.139	1.011	2.533e5	5.118e5	0.928	0.495	0.510	2579	1903	3.95e6	7.89e6	1530.1	4146.2	NO	bb	bb	86.635
13C-1234678-HpCDF	38.966	1.061	2.492e5	5.461e5	1.036	0.456	0.440	1814	2302	3.94e6	8.81e6	2171.8	3824.6	NO	bb	bb	80.656
13C-1234789-HpCDF	41.250	1.123	2.014e5	4.518e5	0.905	0.446	0.440	1814	2302	2.56e6	5.76e6	1412.0	2500.0	NO	bb	bb	75.849
13C-1234-TCDD	25.816	0.000	3.873e5	4.955e5	1.000	0.782	0.770	1580	1077	6.22e6	7.90e6	3935.4	7336.8	NO	bb	bb	100.000
13C-2378-TCDD	26.636	1.032	4.118e5	5.398e5	1.103	0.763	0.770	1580	1077	6.13e6	7.99e6	3880.6	7420.6	NO	bb	bb	97.734
13C-12378-PeCDD	31.758	1.230	3.843e5	2.435e5	0.914	1.578	1.550	1355	906	5.35e6	3.39e6	3949.5	3739.8	NO	bb	bb	77.792
13C-123478-HxCDD	36.225	0.986	5.426e5	4.287e5	0.933	1.265	1.240	2021	2615	8.90e6	7.06e6	4402.8	2697.6	NO	bd	bd	109.396
13C-123678-HxCDD	36.337	0.989	6.019e5	4.909e5	0.965	1.226	1.240	2021	2615	9.17e6	7.53e6	4534.6	2878.6	NO	db	db	119.034
13C-1234678-HpCDD	40.492	1.102	3.078e5	2.823e5	0.782	1.090	1.050	1427	1415	4.47e6	4.13e6	3132.8	2921.6	NO	bb	bb	79.290
13C-OCDD	45.298	1.233	4.579e5	5.077e5	0.788	0.902	0.890	1770	1465	5.37e6	5.98e6	3032.4	4082.5	NO	bb	bb	128.724
13C-123789-HxCDD	36.727	0.000	5.261e5	4.256e5	1.000	1.236	1.240	2021	2615	8.58e6	7.03e6	4242.6	2686.5	NO	bb	bb	100.000
37CL-2378-TCDD	26.650	1.032	9.132e4		1.233			1585		1.35e6		849.6			bb		8.387

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:09:38 Pacific Standard Time

ID: CS3V1, Name: 23022302, Date: 23-Feb-2023, Time: 10:49:54, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.483	0.865	5.967e4	7.753e4	1.064	0.770	0.770	821	1402	9.12e5	1.22e6	1110.8	868.4	NO	bb	bd	9.591
1289-TCDF	27.511	1.059	3.665e4	4.918e4	0.858	0.745	0.770	821	1402	5.11e5	6.83e5	621.6	486.8	NO	dd	dd	7.447
13468-PECDF	27.356	0.907	3.814e5	2.575e5	1.013	1.481	1.550	725	1035	5.89e6	4.03e6	8127.0	3893.1	NO	bb	bb	57.439
12389-PECDF	32.560	1.080	3.056e5	1.850e5	0.844	1.652	1.550	2218	1980	4.16e6	2.68e6	1876.2	1351.5	NO	bd	bb	52.952
123468-HXCDF	33.473	0.953	2.906e5	2.358e5	1.197	1.232	1.240	1989	1821	4.18e6	3.36e6	2100.3	1845.0	NO	bd	bb	46.796
1368-TCDD	23.768	0.892	4.574e4	5.748e4	1.084	0.796	0.770	1257	1023	7.26e5	9.04e5	577.5	883.9	NO	bb	bd	10.002
1289-TCDD	27.243	1.023	3.430e4	4.182e4	0.975	0.820	0.770	1257	1023	4.76e5	5.75e5	378.6	562.3	NO	bb	bd	8.203
12479-PECDD	29.039	0.914	3.314e5	2.120e5	1.837	1.563	1.550	1815	1331	3.30e6	2.07e6	1817.5	1554.0	NO	bb	bb	47.115
12389-PECDD	32.170	1.013	2.530e5	1.547e5	1.252	1.635	1.550	1815	1331	3.84e6	2.37e6	2116.5	1784.5	NO	bb	bb	51.863
124679-HXCDD	34.242	0.945	2.593e5	2.138e5	1.033	1.213	1.240	2750	1748	3.90e6	3.34e6	1417.4	1912.8	NO	bb	bb	47.159
1234679-HPCDD	39.434	0.974	1.938e5	1.988e5	1.286	0.975	1.050	2023	1994	2.92e6	2.84e6	1445.3	1424.4	NO	bb	bd	51.735
Total-tetrafurans			1.490e5		0.933			821		2.19e6							27.311
Total-penta1			3.814e5					725		5.89e6							57.439
Total-pentafurans			9.393e5		0.866			2218		1.36e7							159.601
Total-hexafurans			1.412e6		1.208			1989		2.07e7							228.187
Total-heptafurans			4.289e5		1.185			2746		6.01e6							97.828
Total-Furans			3.551e6		1.067			821		5.10e7							659.311
Total-tetradioxins			2.199e5		1.099			1257		2.98e6							47.244
Total-pentadioxins			8.067e5		1.392			1815		1.07e7							151.288
Total-hexadioxins			1.030e6		1.007			2750		1.55e7							183.470
Total-heptadioxins			3.640e5		1.269			2023		5.51e6							96.558
Total-Dioxins			2.664e6		1.165			1257		3.74e7							577.196
Total-TEQ			6.215e6					1257		8.84e7							1236.507
FUNCTION1 PFK			1.020e8					456801		3.28e7							
FUNCTION2 PFK			1.157e5					357493		4.11e6							0.000
FUNCTION3 PFK			4.934e3					448560		4.42e5							0.000
FUNCTION4 PFK			5.621e7					272625		2.42e7							
FUNCTION5 PFK			9.510e3					163795		4.83e5							
FUNCTION1 HXCD...			8.321e1					570		1.71e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			2.854e2					1047		5.03e3							0.000
FUNCTION3 OCDPE			6.774e2					500		1.12e4							0.000
FUNCTION4 NCDPE			5.523e2					693		7.20e3							0.000
FUNCTION5 DCDPE			8.340e1					626		1.71e3							0.000

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.51	3.665e4	4.918e4	0.858	0.75	0.77	621.6	YES	NO	dd	dd	7.447
2	Total-tetrafurans	27.37	8.285e2	1.184e3	0.933	0.70	0.77	15.4	YES	NO	bd	bd	0.161
3	2378-TCDF	26.00	5.096e4	6.610e4	0.876	0.77	0.77	900.6	YES	NO	bd	bb	9.943
4	Total-tetrafurans	24.90	3.797e2	4.729e2	0.933	0.80	0.77	5.7	YES	NO	db	db	0.068
5	Total-tetrafurans	24.76	5.084e2	7.685e2	0.933	0.66	0.77	10.8	YES	NO	bd	bd	0.102
6	1368-TCDF	22.48	5.967e4	7.753e4	1.064	0.77	0.77	1110.8	YES	NO	bb	bd	9.591

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.36	3.814e5	2.575e5	1.013	1.48	1.55	8127.0	YES	NO	bb	bb	57.439

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.52	3.112e5	1.977e5	0.911	1.57	1.55	2108.3	YES	NO	bb	bb	50.041
2	12378-PeCDF	30.18	2.790e5	1.766e5	0.845	1.58	1.55	1877.1	YES	NO	bb	bb	49.124
3	Total-pentafurans	29.03	4.342e4	2.837e4	0.866	1.53	1.55	280.0	YES	NO	bb	bb	7.483
4	12389-PECDF	32.56	3.056e5	1.850e5	0.844	1.65	1.55	1876.2	YES	NO	bd	bb	52.952

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	234678-HxCDF	36.13	2.834e5	2.398e5	1.229	1.18	1.24	2160.4	YES	NO	bd	bb	44.907
2	123678-HxCDF	35.27	3.238e5	2.646e5	1.248	1.22	1.24	2253.9	YES	NO	dd	dd	44.530
3	123478-HxCDF	35.12	2.818e5	2.274e5	1.182	1.24	1.24	2225.4	YES	NO	bd	bd	45.865
4	123468-HXCDF	33.47	2.906e5	2.358e5	1.197	1.23	1.24	2100.3	YES	NO	bd	bb	46.796
5	123789-HxCDF	37.15	2.324e5	1.860e5	1.187	1.25	1.24	1675.7	YES	NO	bd	bd	46.089

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.26	1.867e5	1.793e5	1.165	1.04	1.05	877.1	YES	NO	bd	bd	48.075
2	Total-heptafurans	39.66	1.239e3	1.050e3	1.185	1.18	1.05	6.1	YES	NO	bb	bb	0.267
3	1234678-HpCDF	38.99	2.410e5	2.329e5	1.204	1.03	1.05	1307.1	YES	NO	bd	bd	49.486

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.51	3.665e4	4.918e4	0.858	0.75	0.77	621.6	YES	NO	dd	dd	7.447
2	Total-tetrafurans	27.37	8.285e2	1.184e3	0.933	0.70	0.77	15.4	YES	NO	bd	bd	0.161
3	2378-TCDF	26.00	5.096e4	6.610e4	0.876	0.77	0.77	900.6	YES	NO	bd	bb	9.943
4	Total-tetrafurans	24.90	3.797e2	4.729e2	0.933	0.80	0.77	5.7	YES	NO	db	db	0.068
5	Total-tetrafurans	24.76	5.084e2	7.685e2	0.933	0.66	0.77	10.8	YES	NO	bd	bd	0.102
6	1368-TCDF	22.48	5.967e4	7.753e4	1.064	0.77	0.77	1110.8	YES	NO	bb	bd	9.591
7	23478-PeCDF	31.52	3.112e5	1.977e5	0.911	1.57	1.55	2108.3	YES	NO	bb	bb	50.041
8	12378-PeCDF	30.18	2.790e5	1.766e5	0.845	1.58	1.55	1877.1	YES	NO	bb	bb	49.124
9	Total-pentafurans	29.03	4.342e4	2.837e4	0.866	1.53	1.55	280.0	YES	NO	bb	bb	7.483
10	12389-PECDF	32.56	3.056e5	1.850e5	0.844	1.65	1.55	1876.2	YES	NO	bd	bb	52.952
11	234678-HxCDF	36.13	2.834e5	2.398e5	1.229	1.18	1.24	2160.4	YES	NO	bd	bb	44.907
12	123678-HxCDF	35.27	3.238e5	2.646e5	1.248	1.22	1.24	2253.9	YES	NO	dd	dd	44.530
13	123478-HxCDF	35.12	2.818e5	2.274e5	1.182	1.24	1.24	2225.4	YES	NO	bd	bd	45.865
14	123468-HXCDF	33.47	2.906e5	2.358e5	1.197	1.23	1.24	2100.3	YES	NO	bd	bb	46.796
15	123789-HxCDF	37.15	2.324e5	1.860e5	1.187	1.25	1.24	1675.7	YES	NO	bd	bd	46.089
16	1234789-HpCDF	41.26	1.867e5	1.793e5	1.165	1.04	1.05	877.1	YES	NO	bd	bd	48.075
17	Total-heptafurans	39.66	1.239e3	1.050e3	1.185	1.18	1.05	6.1	YES	NO	bb	bb	0.267
18	1234678-HpCDF	38.99	2.410e5	2.329e5	1.204	1.03	1.05	1307.1	YES	NO	bd	bd	49.486
19	OCDF	45.56	2.403e5	2.691e5	1.186	0.89	0.89	2224.2	YES	NO	bd	bd	88.945
20	13468-PECDF	27.36	3.814e5	2.575e5	1.013	1.48	1.55	8127.0	YES	NO	bb	bb	57.439

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.83	2.339e4	2.841e4	1.099	0.82	0.77	288.8	YES	NO	bd	bd	4.955
2	1368-TCDD	23.77	4.574e4	5.748e4	1.084	0.80	0.77	577.5	YES	NO	bb	bd	10.002
3	1289-TCDD	27.24	3.430e4	4.182e4	0.975	0.82	0.77	378.6	YES	NO	bb	bd	8.203
4	2378-TCDD	26.65	4.585e4	5.896e4	1.236	0.78	0.77	539.0	YES	NO	bd	bb	8.909
5	Total-tetradioxins	26.33	7.058e4	8.808e4	1.099	0.80	0.77	590.8	YES	NO	bb	bb	15.175

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	32.17	2.530e5	1.547e5	1.252	1.64	1.55	2116.5	YES	NO	bb	bb	51.863
2	12378-PeCDD	31.77	2.216e5	1.343e5	1.087	1.65	1.55	1933.4	YES	NO	bb	bb	52.169
3	Total-pentadioxins	30.15	7.111e2	5.152e2	1.392	1.38	1.55	5.8	YES	NO	bb	bb	0.140
4	12479-PECDD	29.04	3.314e5	2.120e5	1.837	1.56	1.55	1817.5	YES	NO	bb	bb	47.115

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HXCDD	34.24	2.593e5	2.138e5	1.033	1.21	1.24	1417.4	YES	NO	bb	bb	47.159
2	123789-HxCDD	36.74	2.506e5	2.103e5	0.985	1.19	1.24	1386.8	YES	NO	bd	bd	45.317
3	123678-HxCDD	36.36	2.742e5	2.245e5	1.021	1.22	1.24	1439.7	YES	NO	dd	dd	44.711
4	123478-HxCDD	36.24	2.461e5	1.976e5	0.987	1.25	1.24	1403.4	YES	NO	bd	bd	46.282

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234679-HPCDD	39.43	1.938e5	1.988e5	1.286	0.97	1.05	1445.3	YES	NO	bb	bd	51.735
2	1234678-HpCDD	40.50	1.702e5	1.611e5	1.253	1.06	1.05	1277.0	YES	NO	bb	bb	44.823

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.83	2.339e4	2.841e4	1.099	0.82	0.77	288.8	YES	NO	bd	bd	4.955
2	1368-TCDD	23.77	4.574e4	5.748e4	1.084	0.80	0.77	577.5	YES	NO	bb	bd	10.002
3	1289-TCDD	27.24	3.430e4	4.182e4	0.975	0.82	0.77	378.6	YES	NO	bb	bd	8.203
4	2378-TCDD	26.65	4.585e4	5.896e4	1.236	0.78	0.77	539.0	YES	NO	bd	bb	8.909
5	Total-tetradioxins	26.33	7.058e4	8.808e4	1.099	0.80	0.77	590.8	YES	NO	bb	bb	15.175
6	12389-PECDD	32.17	2.530e5	1.547e5	1.252	1.64	1.55	2116.5	YES	NO	bb	bb	51.863
7	12378-PeCDD	31.77	2.216e5	1.343e5	1.087	1.65	1.55	1933.4	YES	NO	bb	bb	52.169
8	Total-pentadioxins	30.15	7.111e2	5.152e2	1.392	1.38	1.55	5.8	YES	NO	bb	bb	0.140
9	12479-PECDD	29.04	3.314e5	2.120e5	1.837	1.56	1.55	1817.5	YES	NO	bb	bb	47.115
10	124679-HXCDD	34.24	2.593e5	2.138e5	1.033	1.21	1.24	1417.4	YES	NO	bb	bb	47.159
11	123789-HxCDD	36.74	2.506e5	2.103e5	0.985	1.19	1.24	1386.8	YES	NO	bd	bd	45.317
12	123678-HxCDD	36.36	2.742e5	2.245e5	1.021	1.22	1.24	1439.7	YES	NO	dd	dd	44.711
13	123478-HxCDD	36.24	2.461e5	1.976e5	0.987	1.25	1.24	1403.4	YES	NO	bd	bd	46.282
14	1234679-HPCDD	39.43	1.938e5	1.988e5	1.286	0.97	1.05	1445.3	YES	NO	bb	bd	51.735
15	1234678-HpCDD	40.50	1.702e5	1.611e5	1.253	1.06	1.05	1277.0	YES	NO	bb	bb	44.823
16	OCDD	45.32	2.436e5	2.815e5	1.103	0.87	0.89	1863.8	YES	NO	bd	bd	98.636

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.51	3.665e4	4.918e4	0.858	0.75	0.77	621.6	YES	NO	dd	dd	7.447
2	Total-tetrafurans	27.37	8.285e2	1.184e3	0.933	0.70	0.77	15.4	YES	NO	bd	bd	0.161
3	2378-TCDF	26.00	5.096e4	6.610e4	0.876	0.77	0.77	900.6	YES	NO	bd	bb	9.943
4	Total-tetrafurans	24.90	3.797e2	4.729e2	0.933	0.80	0.77	5.7	YES	NO	db	db	0.068
5	Total-tetrafurans	24.76	5.084e2	7.685e2	0.933	0.66	0.77	10.8	YES	NO	bd	bd	0.102
6	1368-TCDF	22.48	5.967e4	7.753e4	1.064	0.77	0.77	1110.8	YES	NO	bb	bd	9.591
7	23478-PeCDF	31.52	3.112e5	1.977e5	0.911	1.57	1.55	2108.3	YES	NO	bb	bb	50.041
8	12378-PeCDF	30.18	2.790e5	1.766e5	0.845	1.58	1.55	1877.1	YES	NO	bb	bb	49.124
9	Total-pentafurans	29.03	4.342e4	2.837e4	0.866	1.53	1.55	280.0	YES	NO	bb	bb	7.483
10	12389-PECDF	32.56	3.056e5	1.850e5	0.844	1.65	1.55	1876.2	YES	NO	bd	bb	52.952
11	234678-HxCDF	36.13	2.834e5	2.398e5	1.229	1.18	1.24	2160.4	YES	NO	bd	bb	44.907
12	123678-HxCDF	35.27	3.238e5	2.646e5	1.248	1.22	1.24	2253.9	YES	NO	dd	dd	44.530
13	123478-HxCDF	35.12	2.818e5	2.274e5	1.182	1.24	1.24	2225.4	YES	NO	bd	bd	45.865
14	123468-HXCDF	33.47	2.906e5	2.358e5	1.197	1.23	1.24	2100.3	YES	NO	bd	bb	46.796
15	123789-HxCDF	37.15	2.324e5	1.860e5	1.187	1.25	1.24	1675.7	YES	NO	bd	bd	46.089
16	1234789-HpCDF	41.26	1.867e5	1.793e5	1.165	1.04	1.05	877.1	YES	NO	bd	bd	48.075
17	Total-heptafurans	39.66	1.239e3	1.050e3	1.185	1.18	1.05	6.1	YES	NO	bb	bb	0.267
18	1234678-HpCDF	38.99	2.410e5	2.329e5	1.204	1.03	1.05	1307.1	YES	NO	bd	bd	49.486
19	OCDF	45.56	2.403e5	2.691e5	1.186	0.89	0.89	2224.2	YES	NO	bd	bd	88.945
20	13468-PECDF	27.36	3.814e5	2.575e5	1.013	1.48	1.55	8127.0	YES	NO	bb	bb	57.439
21	Total-tetradioxins	25.83	2.339e4	2.841e4	1.099	0.82	0.77	288.8	YES	NO	bd	bd	4.955
22	1368-TCDD	23.77	4.574e4	5.748e4	1.084	0.80	0.77	577.5	YES	NO	bb	bd	10.002
23	1289-TCDD	27.24	3.430e4	4.182e4	0.975	0.82	0.77	378.6	YES	NO	bb	bd	8.203
24	2378-TCDD	26.65	4.585e4	5.896e4	1.236	0.78	0.77	539.0	YES	NO	bd	bb	8.909
25	Total-tetradioxins	26.33	7.058e4	8.808e4	1.099	0.80	0.77	590.8	YES	NO	bb	bb	15.175
26	12389-PECDD	32.17	2.530e5	1.547e5	1.252	1.64	1.55	2116.5	YES	NO	bb	bb	51.863
27	12378-PeCDD	31.77	2.216e5	1.343e5	1.087	1.65	1.55	1933.4	YES	NO	bb	bb	52.169
28	Total-pentadioxins	30.15	7.111e2	5.152e2	1.392	1.38	1.55	5.8	YES	NO	bb	bb	0.140
29	12479-PECDD	29.04	3.314e5	2.120e5	1.837	1.56	1.55	1817.5	YES	NO	bb	bb	47.115
30	124679-HXCDD	34.24	2.593e5	2.138e5	1.033	1.21	1.24	1417.4	YES	NO	bb	bb	47.159
31	123789-HxCDD	36.74	2.506e5	2.103e5	0.985	1.19	1.24	1386.8	YES	NO	bd	bd	45.317
32	123678-HxCDD	36.36	2.742e5	2.245e5	1.021	1.22	1.24	1439.7	YES	NO	dd	dd	44.711
33	123478-HxCDD	36.24	2.461e5	1.976e5	0.987	1.25	1.24	1403.4	YES	NO	bd	bd	46.282
34	1234679-HPCDD	39.43	1.938e5	1.988e5	1.286	0.97	1.05	1445.3	YES	NO	bb	bd	51.735
35	1234678-HpCDD	40.50	1.702e5	1.611e5	1.253	1.06	1.05	1277.0	YES	NO	bb	bb	44.823
36	OCDD	45.32	2.436e5	2.815e5	1.103	0.87	0.89	1863.8	YES	NO	bd	bd	98.636

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	26.28	1.128e7					34.1	YES		db		
2	FUNCTION1 PFK	25.70	9.072e7					37.7	YES		bd		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	31.26	1.086e4					1.0	NO		bb		0.000
2	FUNCTION2 PFK	31.20	2.033e3					0.5	NO		bb		0.000
3	FUNCTION2 PFK	30.26	2.041e3					0.5	NO		bb		0.000
4	FUNCTION2 PFK	29.01	6.523e3					0.9	NO		bb		0.000
5	FUNCTION2 PFK	28.38	1.608e4					1.9	NO		db		0.000
6	FUNCTION2 PFK	28.36	1.704e4					1.9	NO		bd		0.000
7	FUNCTION2 PFK	28.32	1.436e4					1.4	NO		bb		0.000
8	FUNCTION2 PFK	32.84	2.212e4					1.5	NO		bb		0.000
9	FUNCTION2 PFK	32.15	1.947e4					1.0	NO		bb		0.000
10	FUNCTION2 PFK	31.85	5.153e3					0.8	NO		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	34.40	4.934e3					1.0	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	41.27	6.337e6					40.1	YES		db		
2	FUNCTION4 PFK	40.82	4.988e7					48.6	YES		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.20	3.336e3					0.9	NO		bb		
2	FUNCTION5 PFK	43.08	6.174e3					2.0	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	26.90	8.321e1					3.0	YES		bb		0.000

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ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.39	2.854e2					4.8	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	37.93	1.453e2					3.9	YES		bb		0.000
2	FUNCTION3 OCDPE	37.55	8.088e1					4.0	YES		bb		0.000
3	FUNCTION3 OCDPE	37.13	1.355e2					3.2	YES		bb		0.000
4	FUNCTION3 OCDPE	36.73	1.840e2					5.7	YES		bb		0.000
5	FUNCTION3 OCDPE	36.23	1.317e2					5.6	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	42.11	8.045e1					1.9	NO		bb		0.000
2	FUNCTION4 NCDPE	41.90	1.341e2					1.9	NO		bb		0.000
3	FUNCTION4 NCDPE	40.54	1.361e2					2.8	NO		bb		0.000
4	FUNCTION4 NCDPE	39.47	1.174e2					1.9	NO		bb		0.000
5	FUNCTION4 NCDPE	38.99	8.424e1					1.9	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	43.12	8.340e1					2.7	NO		bb		0.000

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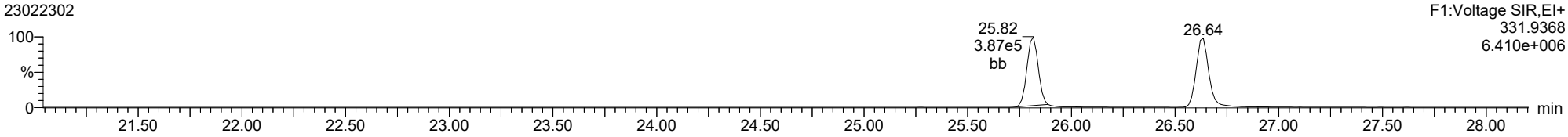
13C-1234-TCDD



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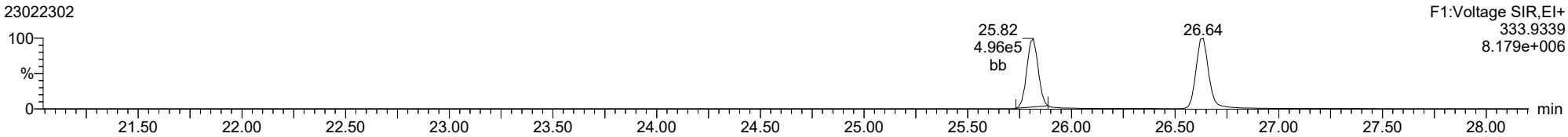

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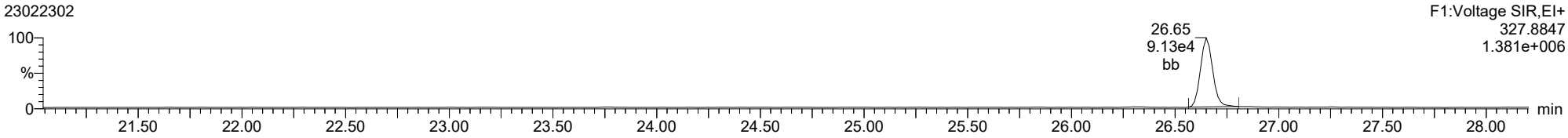

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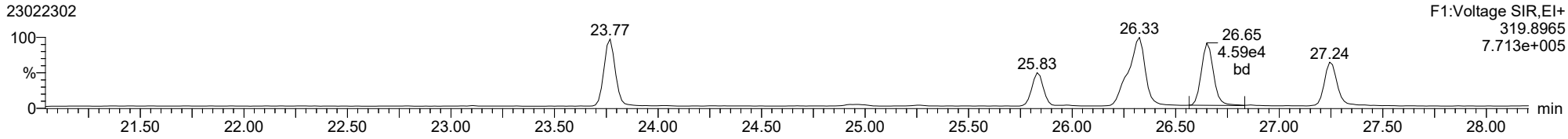

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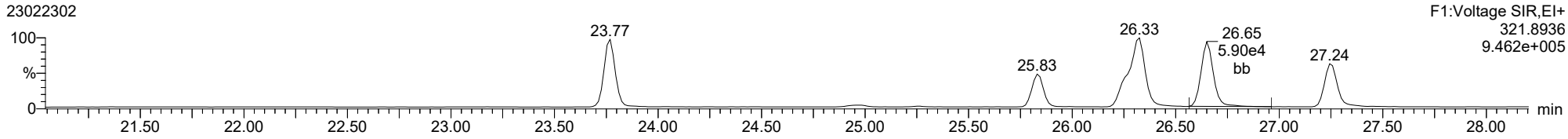

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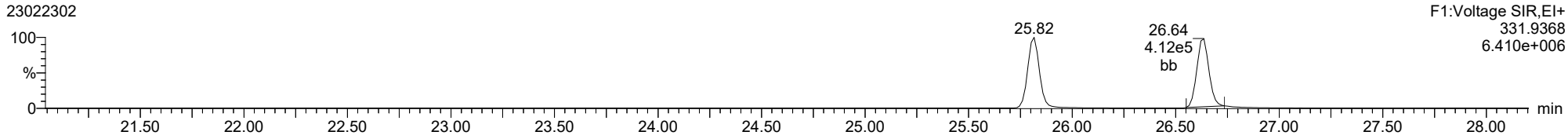

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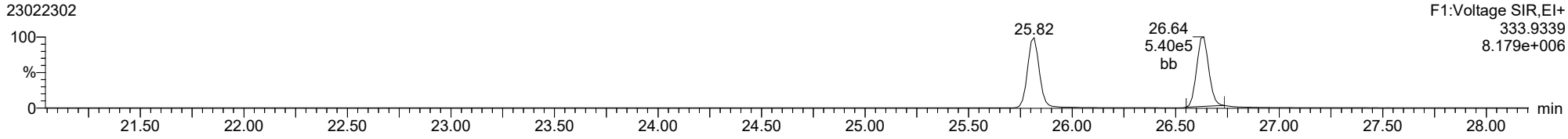

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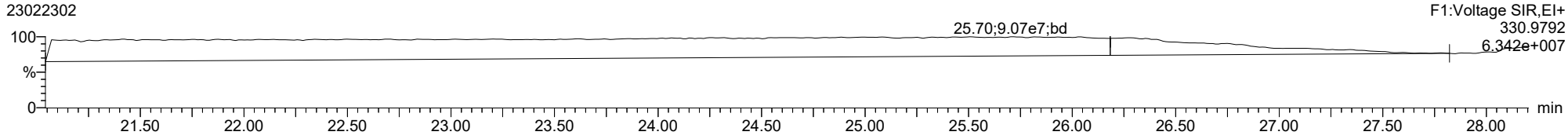

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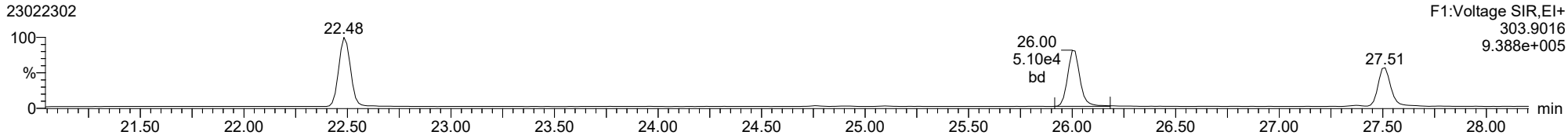

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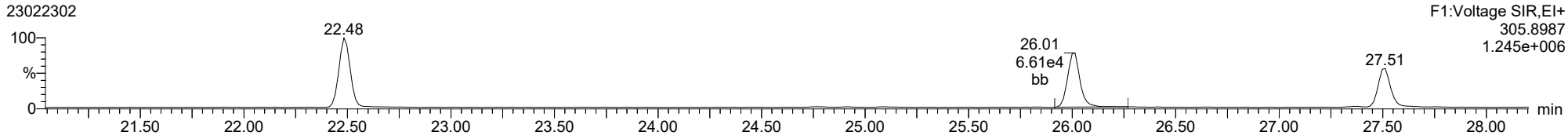

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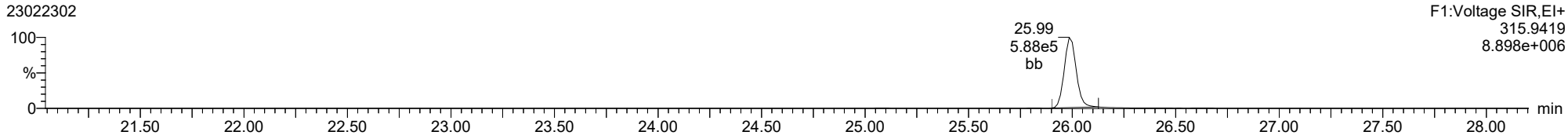

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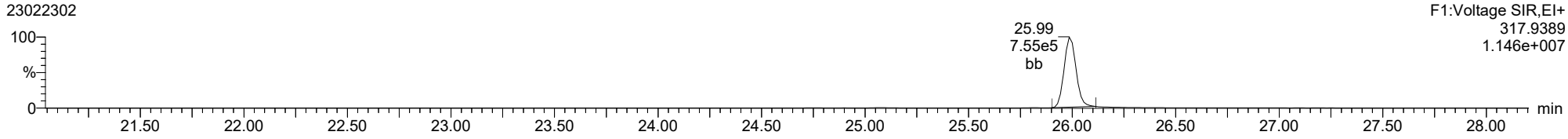

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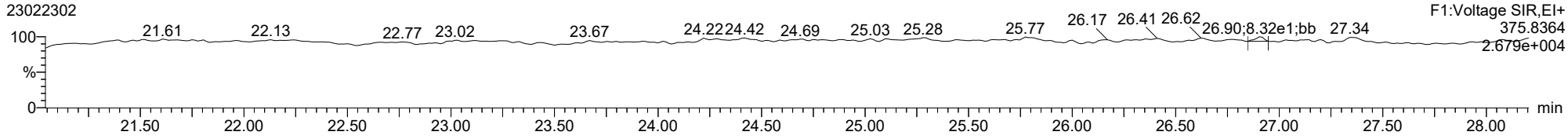

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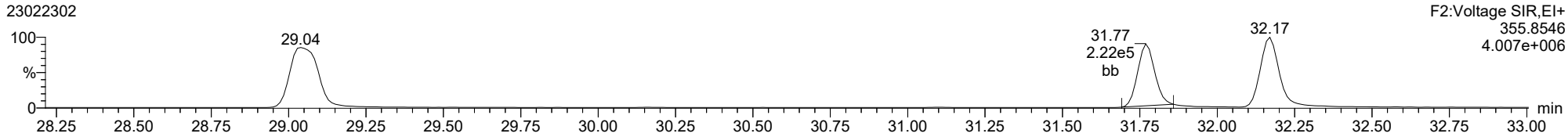

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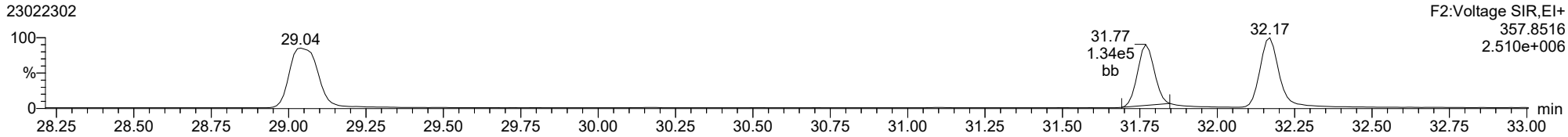

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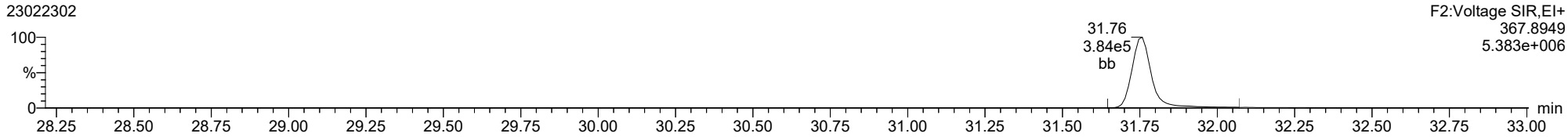

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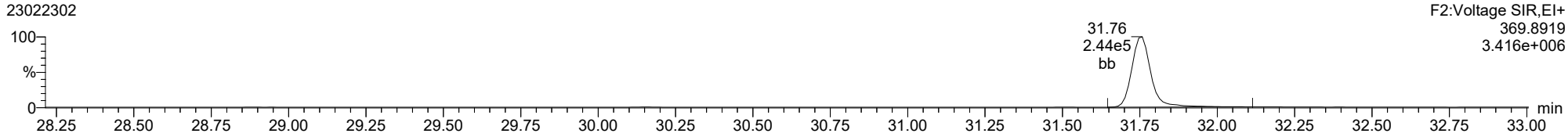

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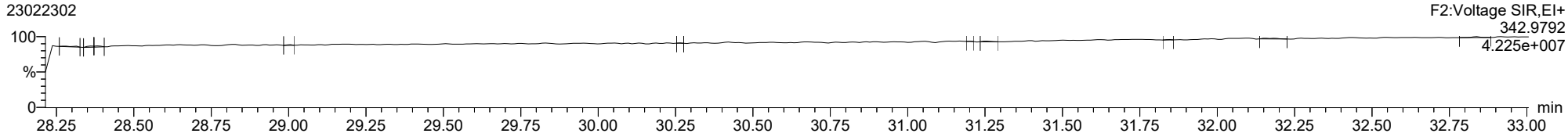

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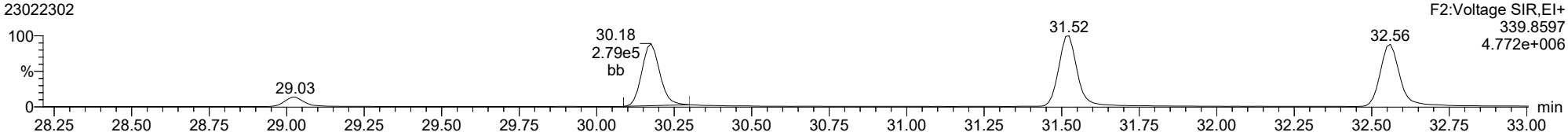

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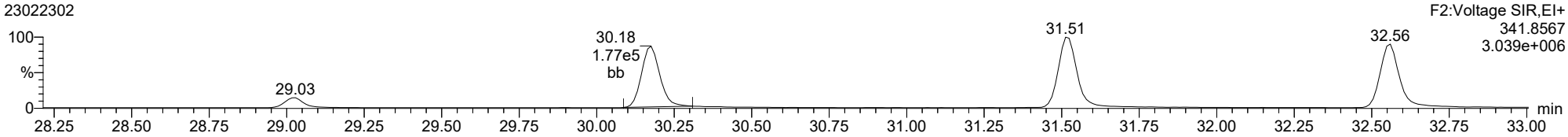

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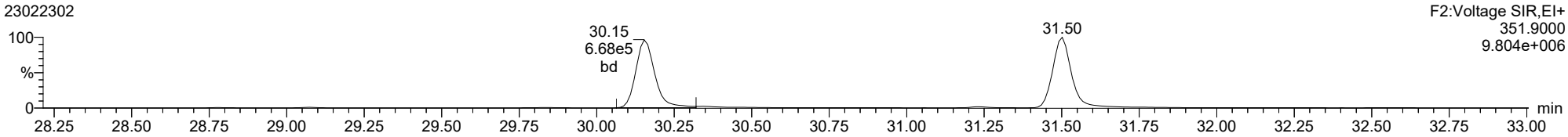

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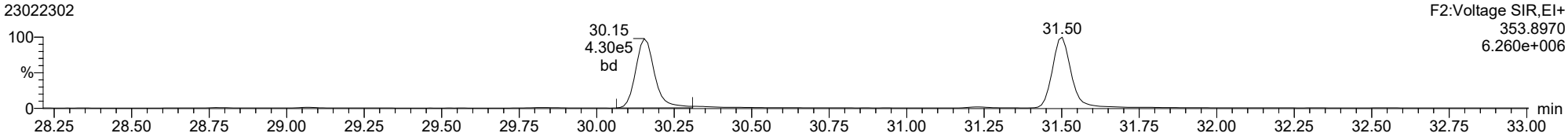
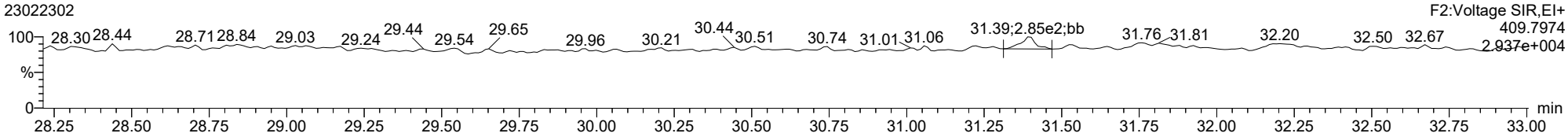


FUNCTION2 HPCDPE



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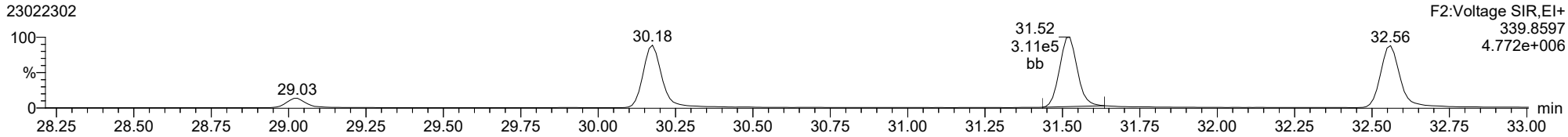

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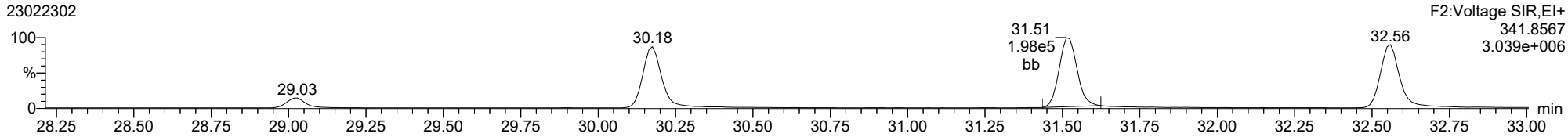

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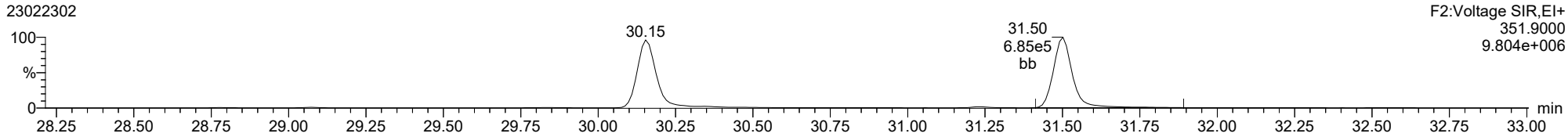

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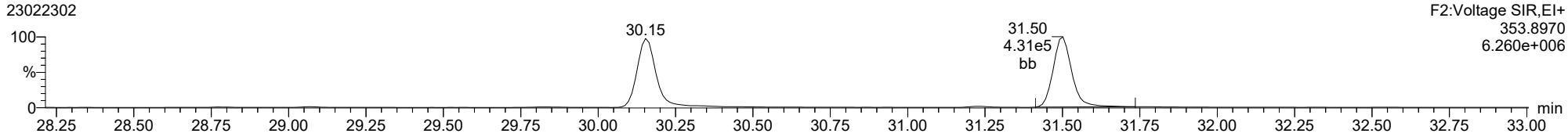

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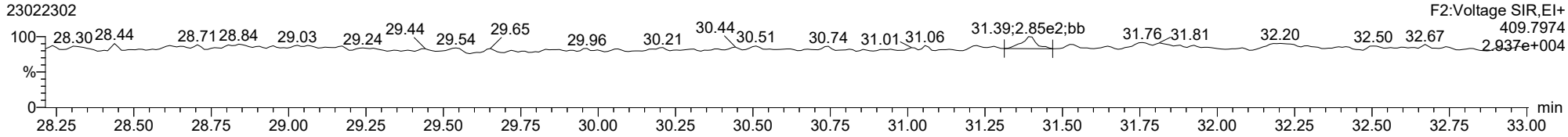

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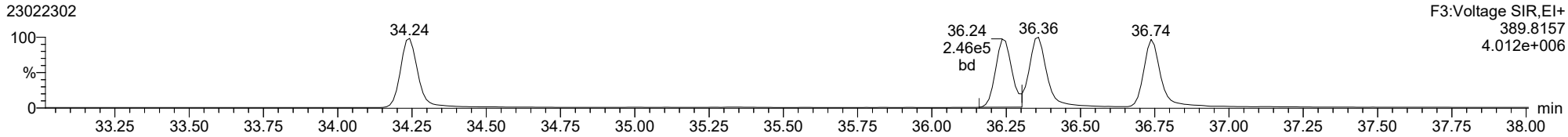

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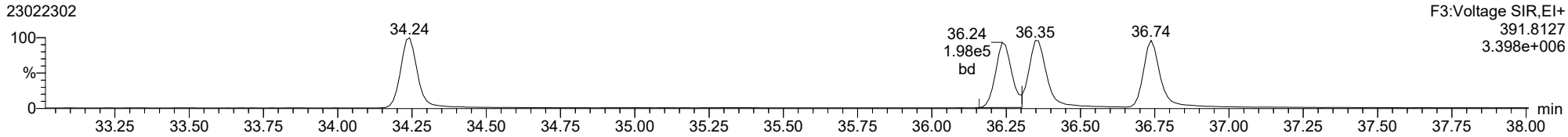

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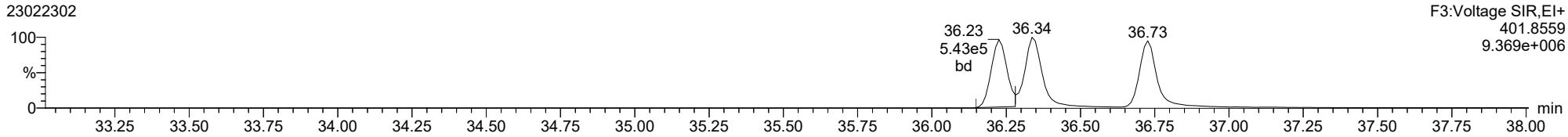

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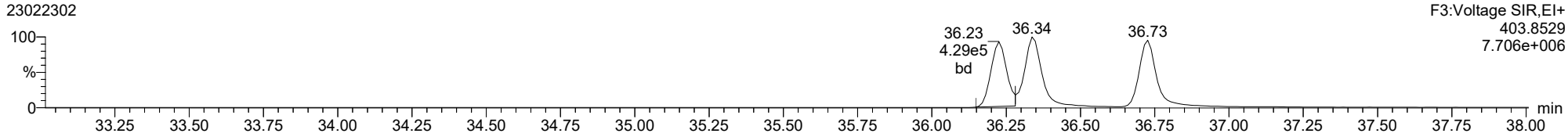

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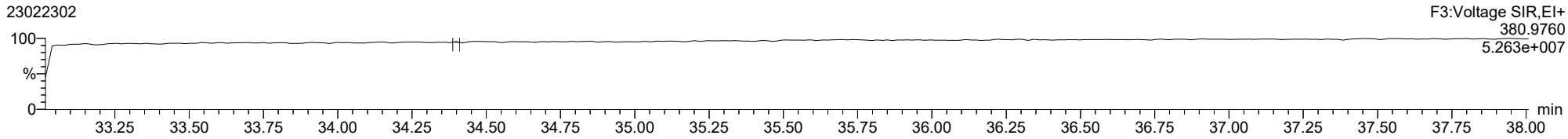

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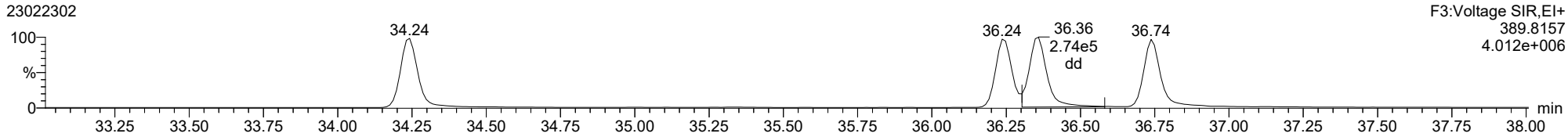

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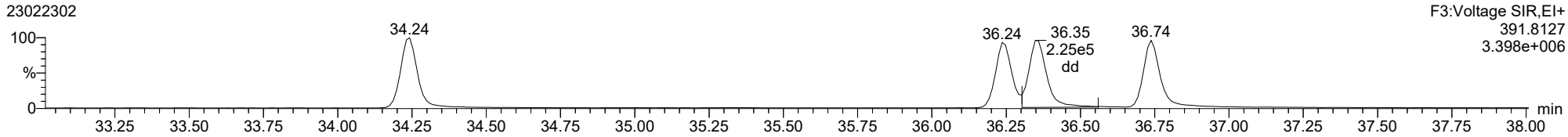

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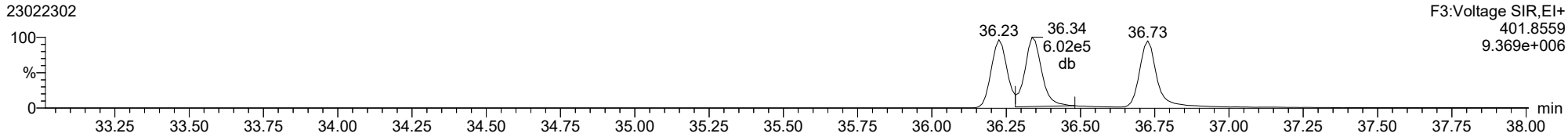

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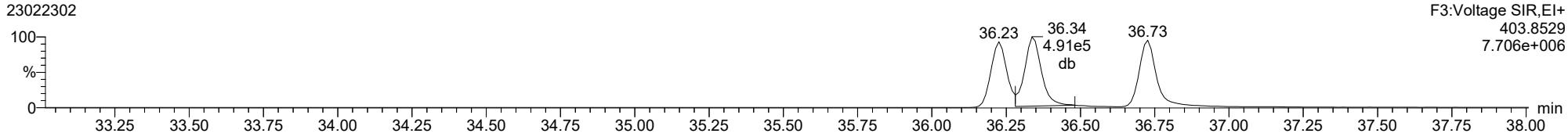

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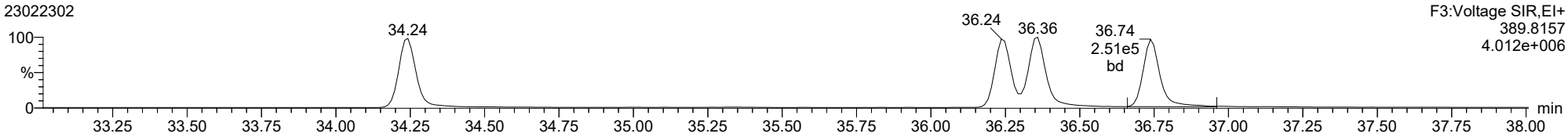

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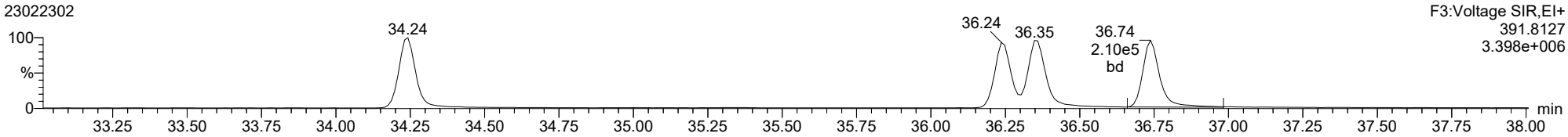

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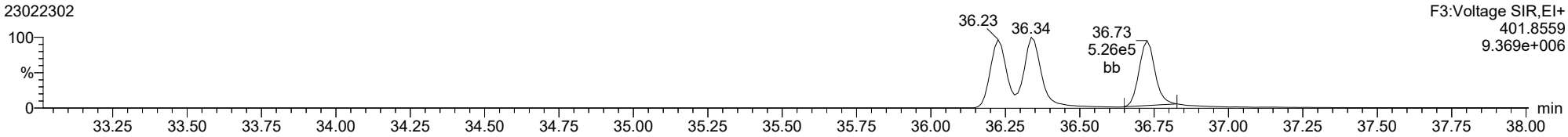

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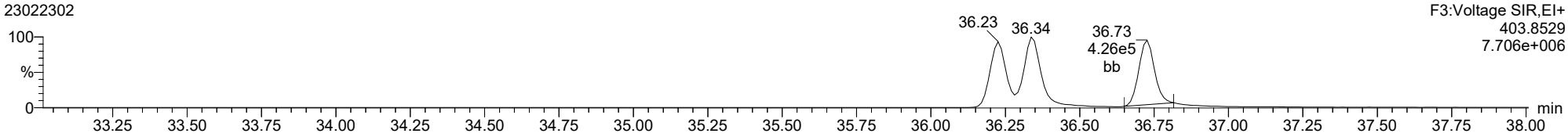

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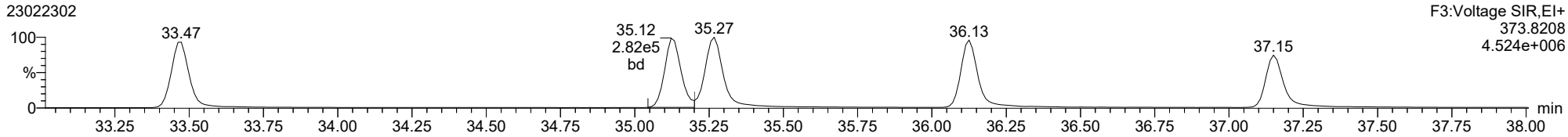

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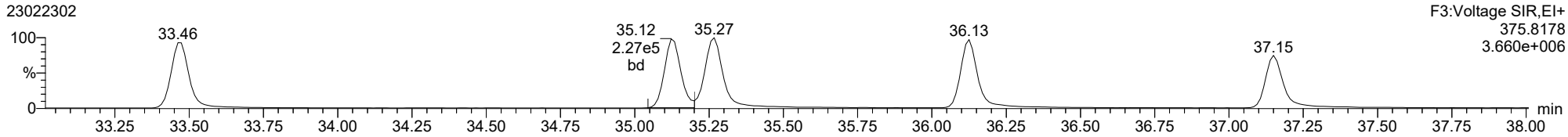

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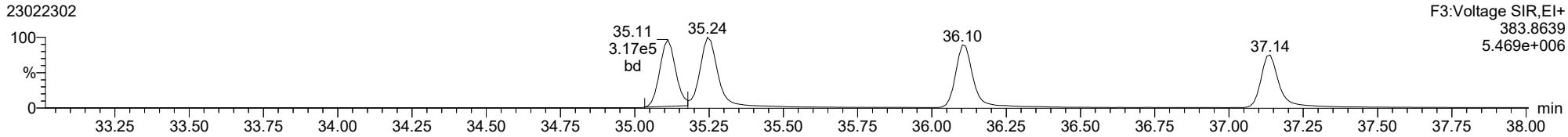

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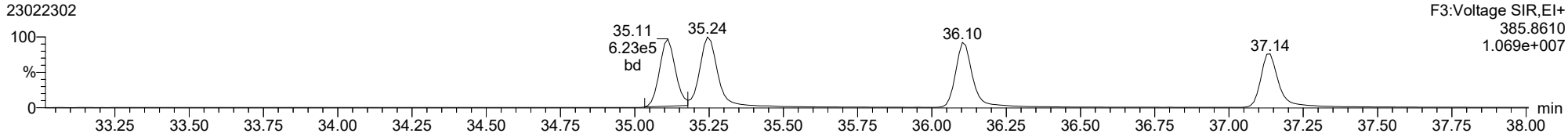

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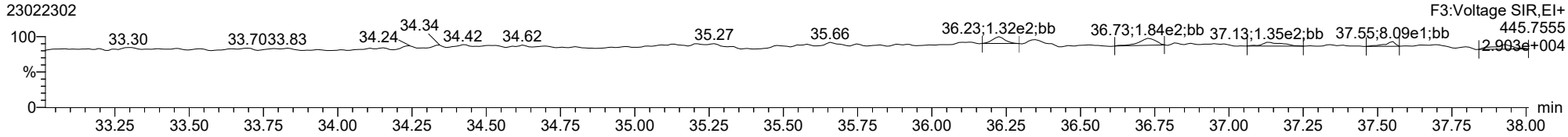

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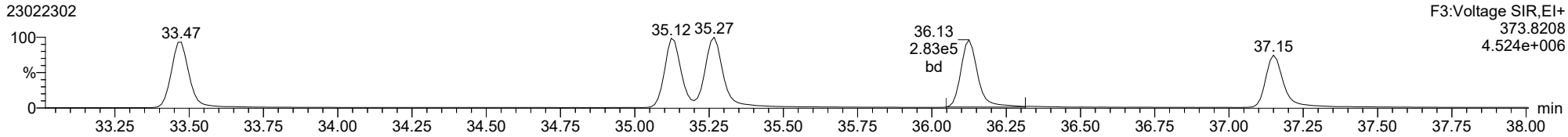

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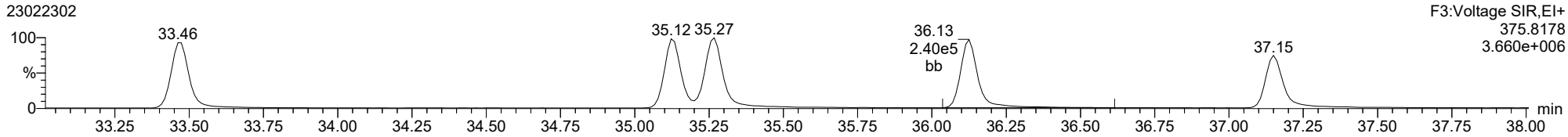

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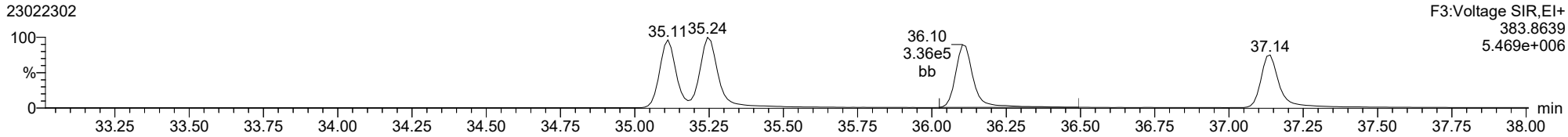

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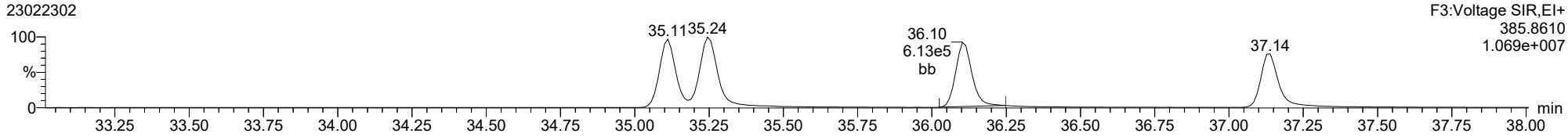

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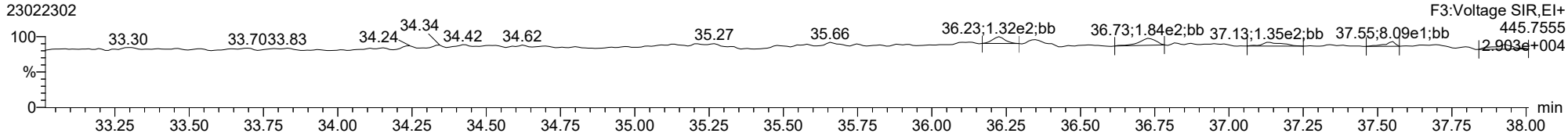

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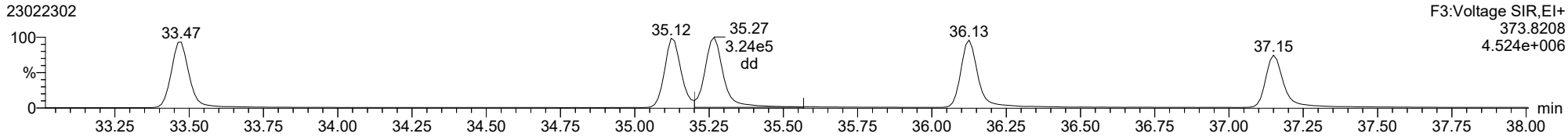

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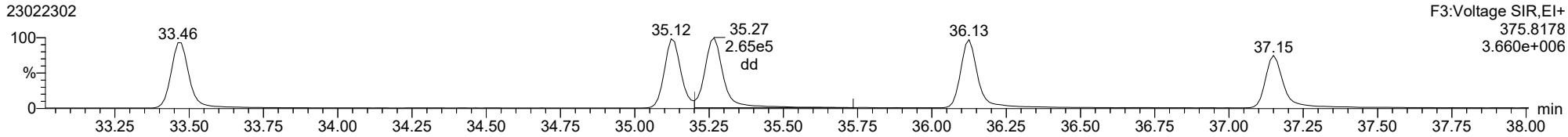

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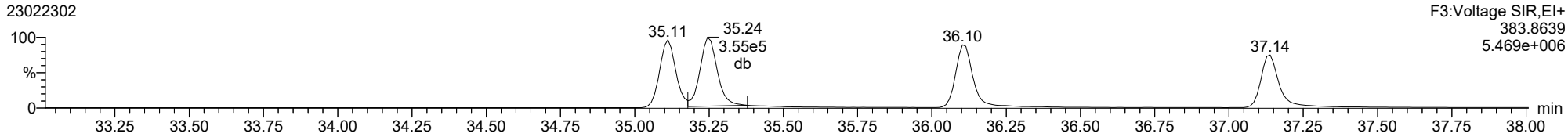

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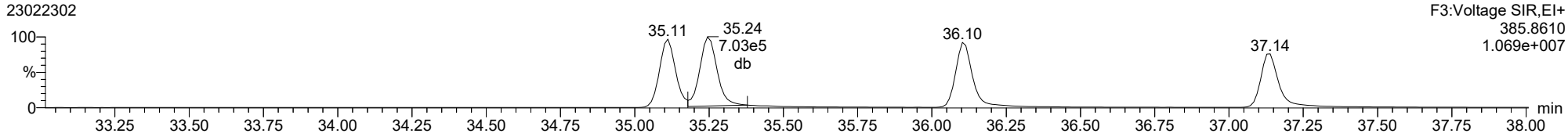

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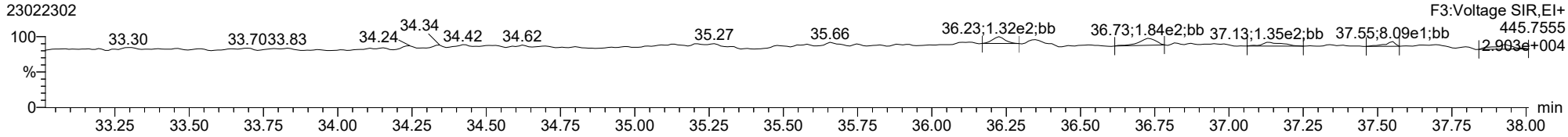

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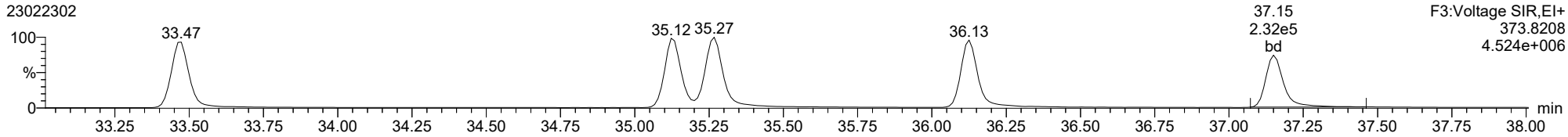

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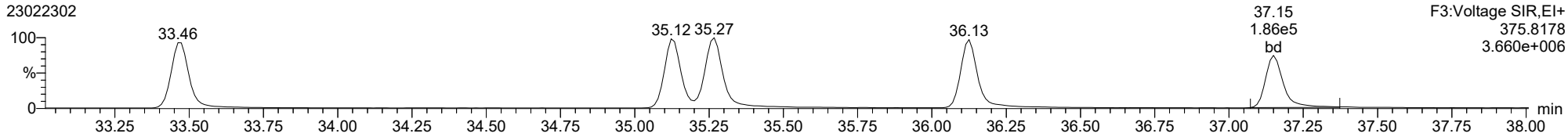

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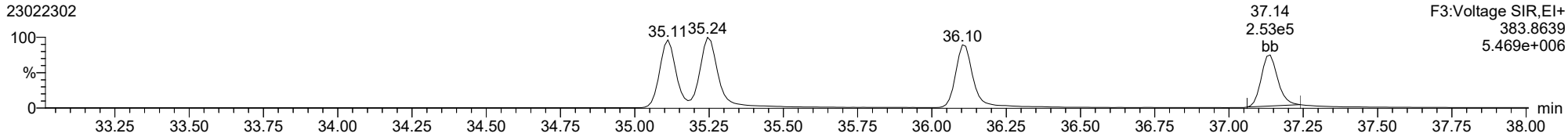

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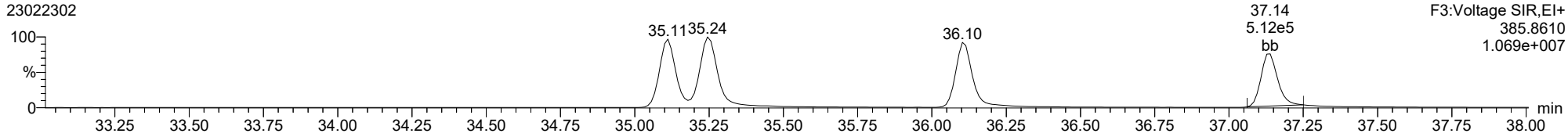

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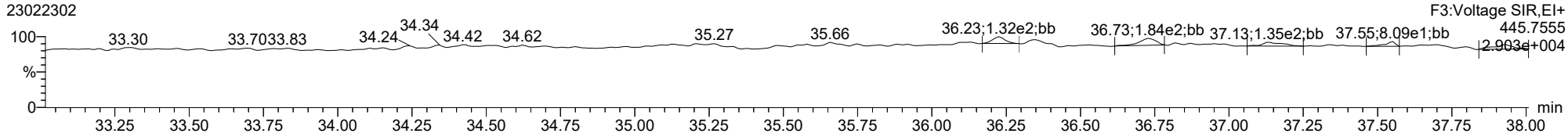

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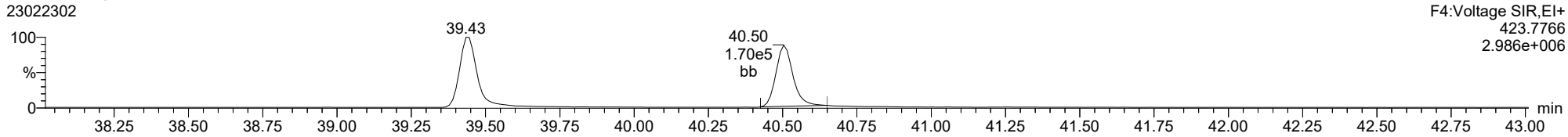

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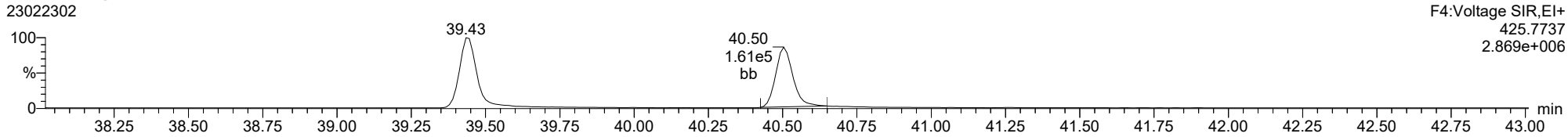

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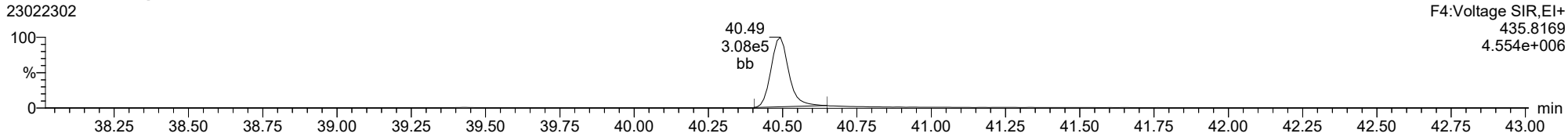

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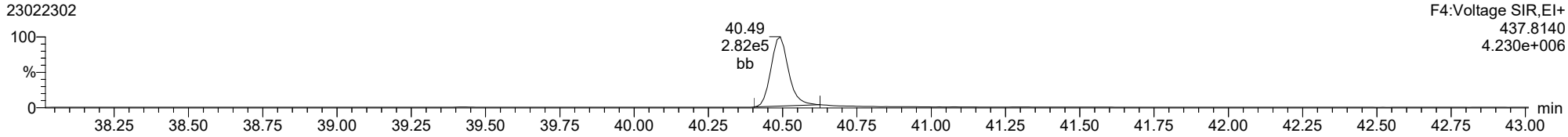

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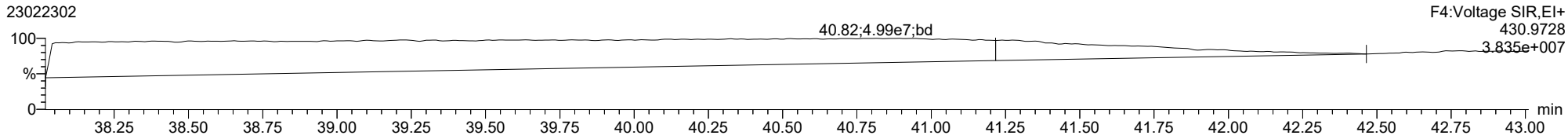

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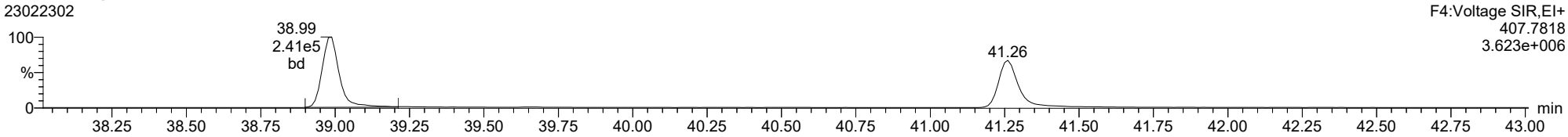

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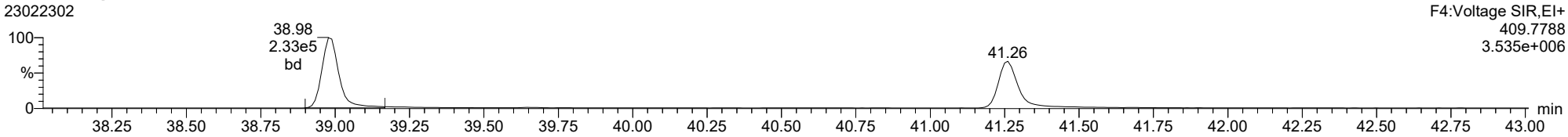

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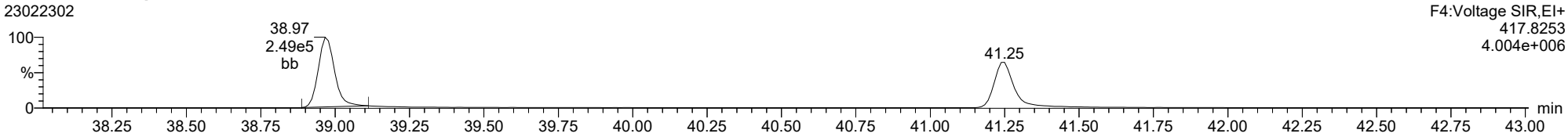

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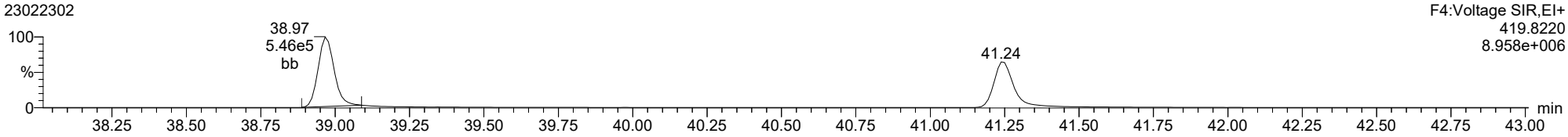

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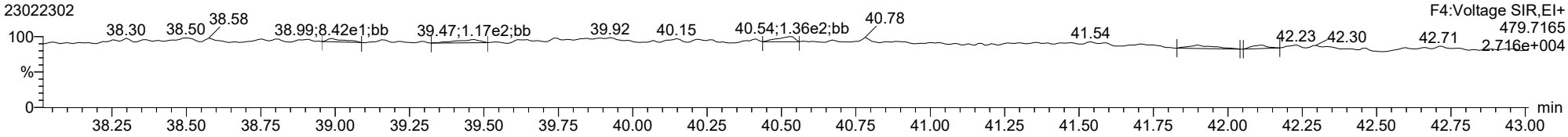

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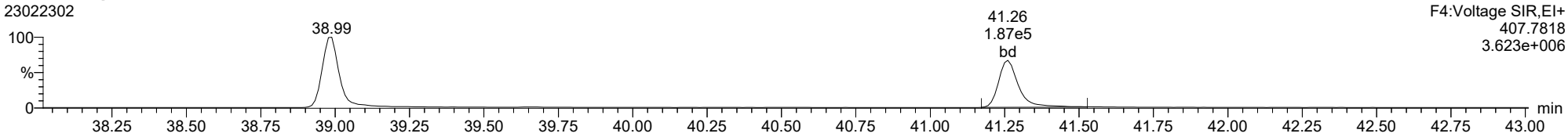

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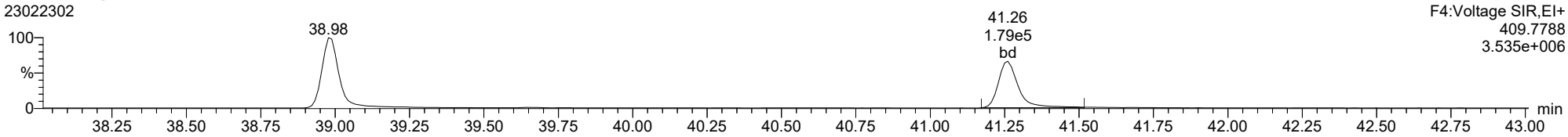

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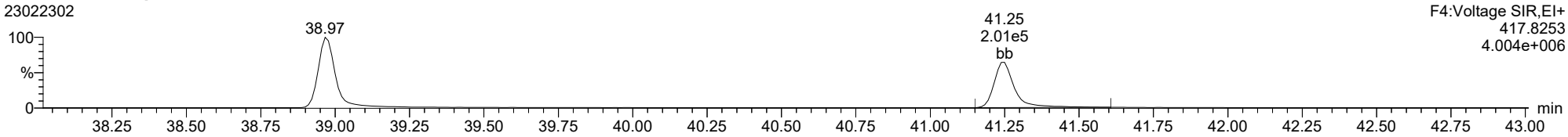

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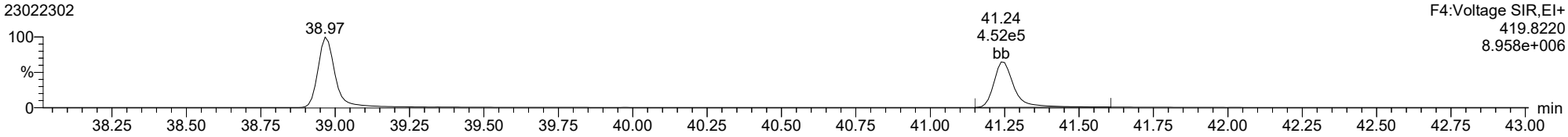

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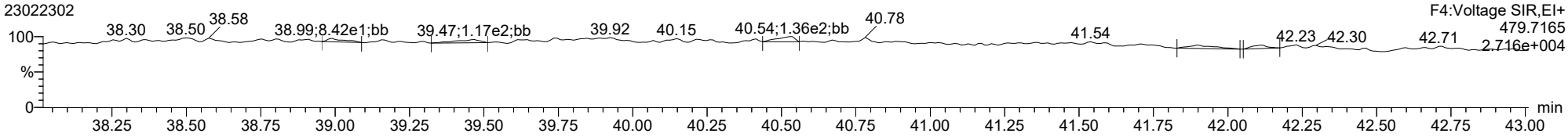

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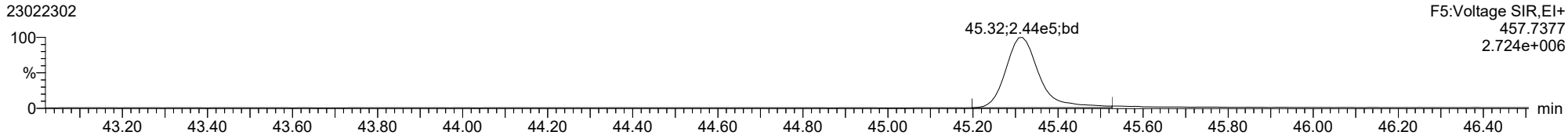

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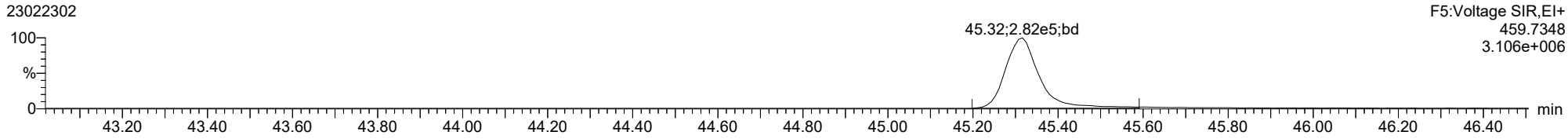

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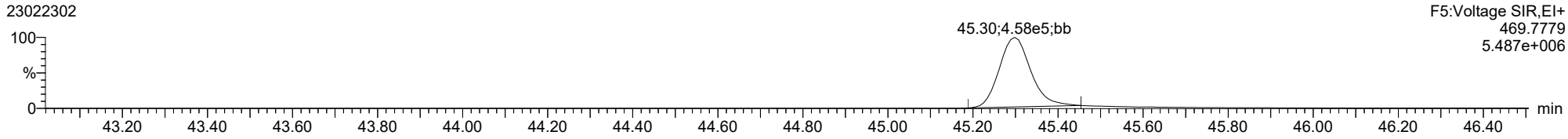

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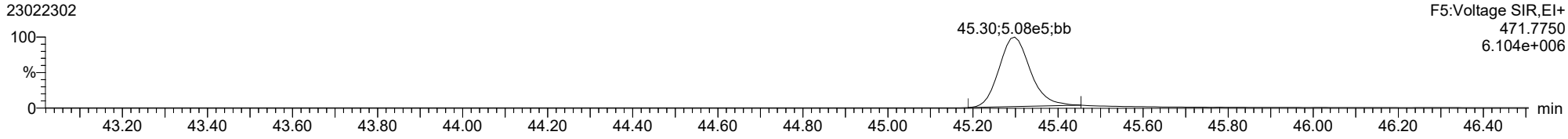
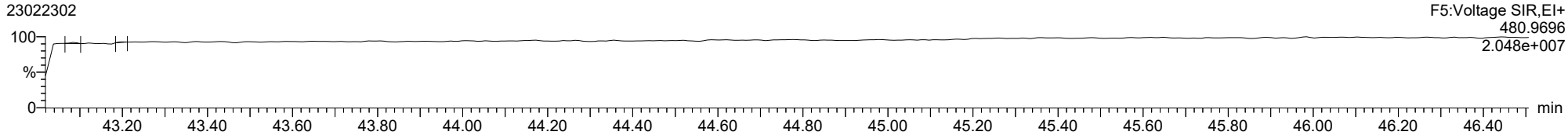


FUNCTION5 PFK



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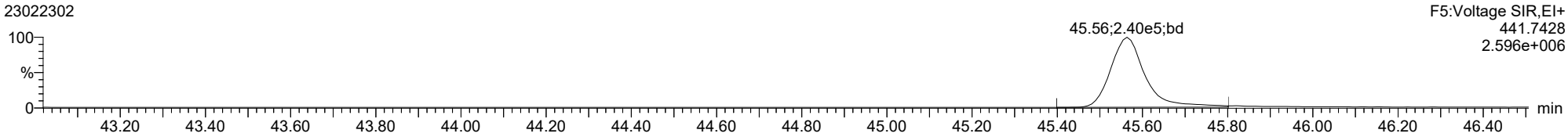

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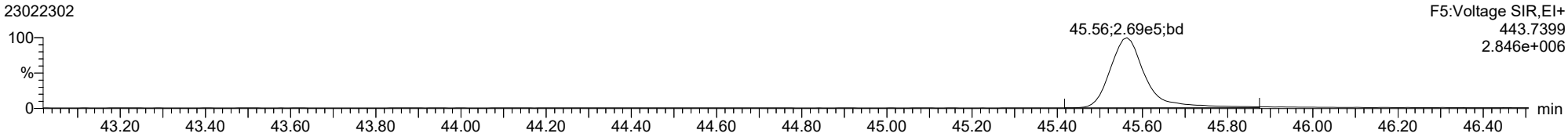

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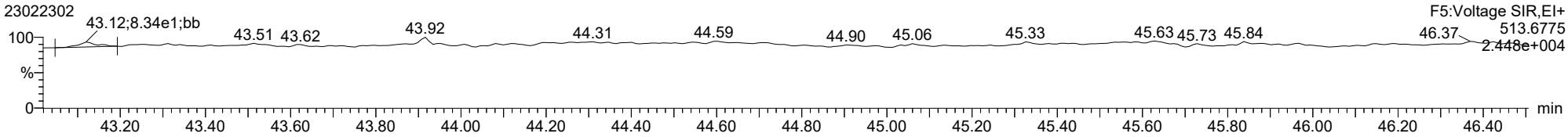

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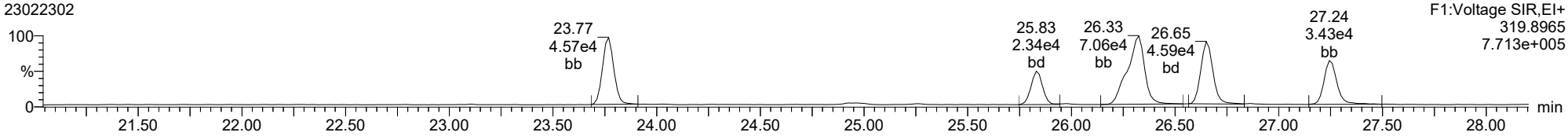
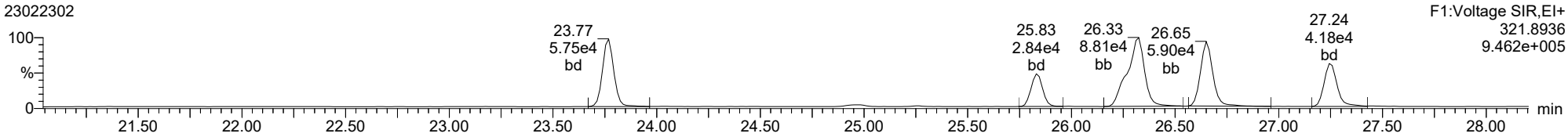
Total-tetradioxins



Total-tetradioxins



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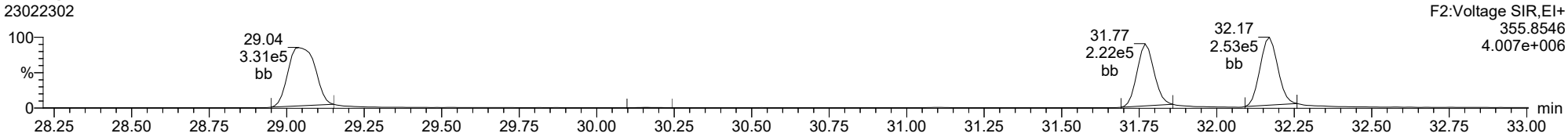
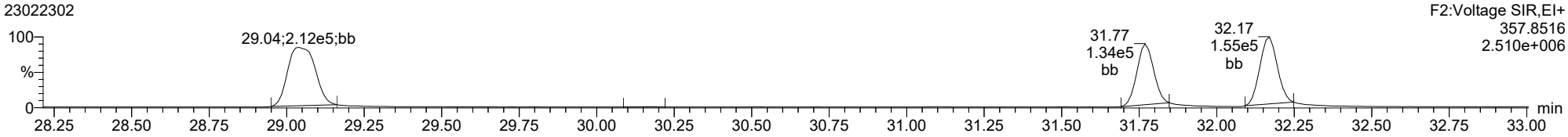


Total-pentadioxins



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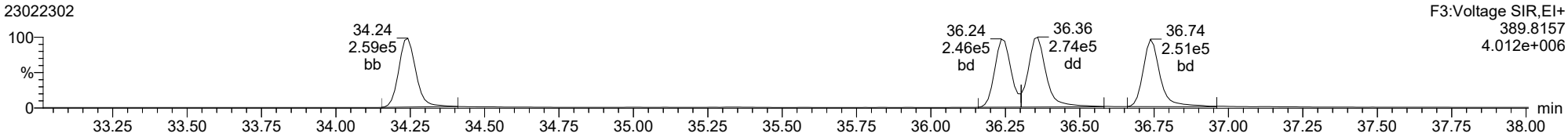
Total-hexadioxins



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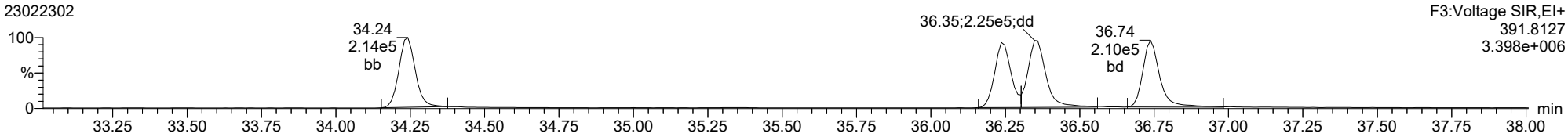
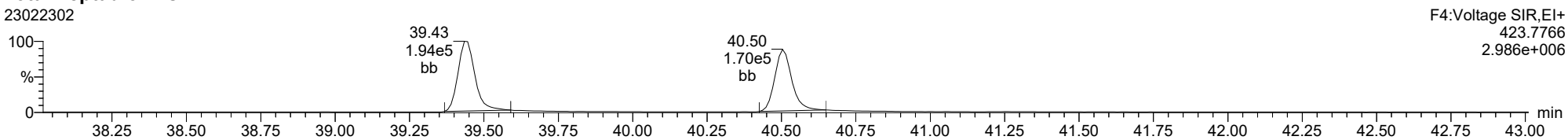
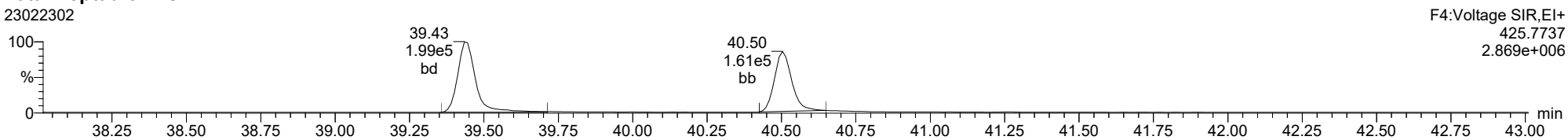


Total-heptadioxins



Total-heptadioxins



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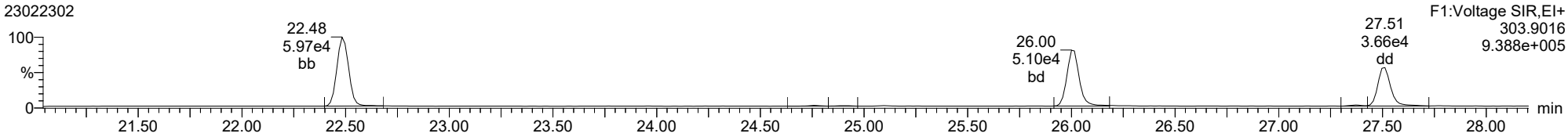
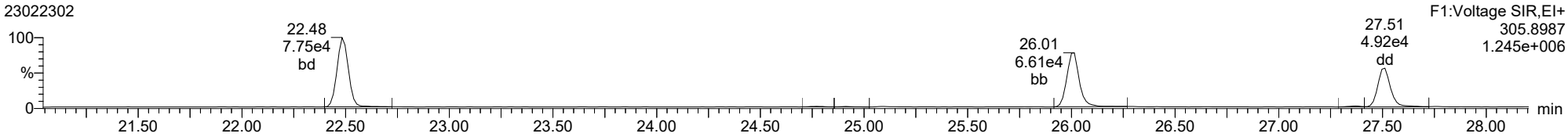
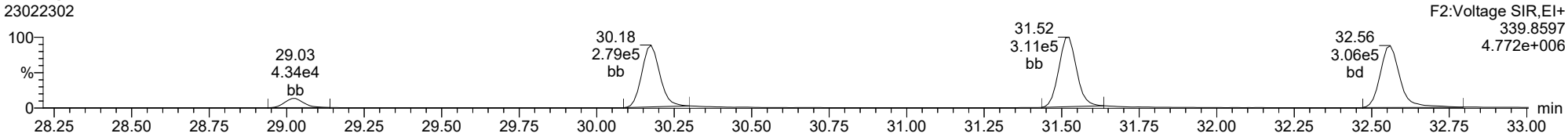
Total-tetrafurans



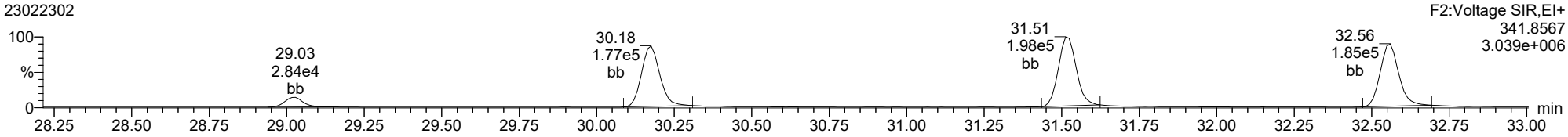
Total-tetrafurans



Total-pentafurans

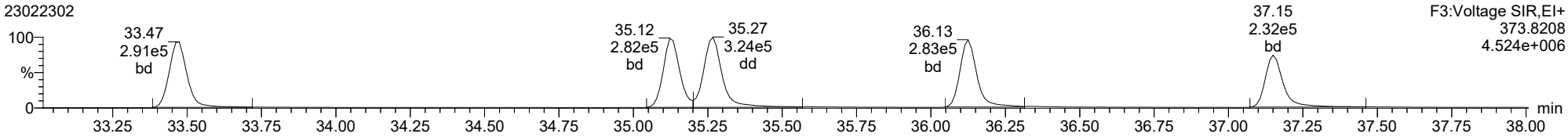


Total-pentafurans

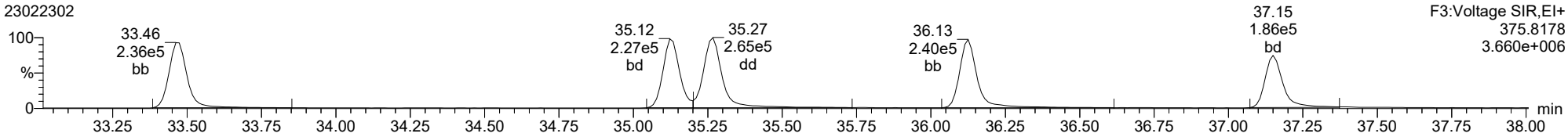


ID: CS3V1, Name: 23022302, Date: 23-Feb-2023, Time: 10:49:54, Conditions: AUTOSPEC01, User: pk

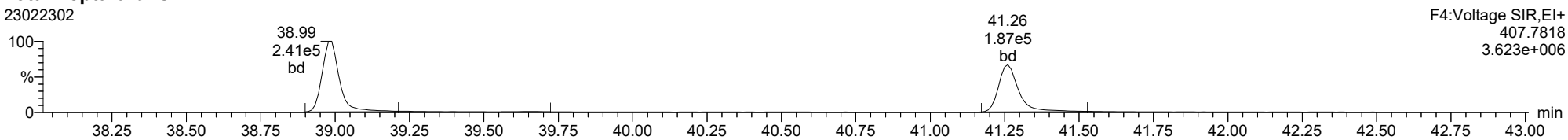
Total-hexafurans



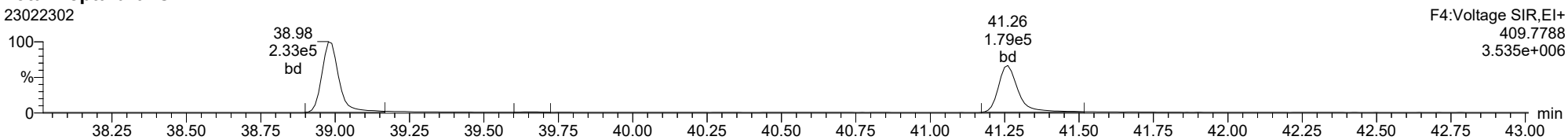
Total-hexafurans



Total-heptafurans



Total-heptafurans



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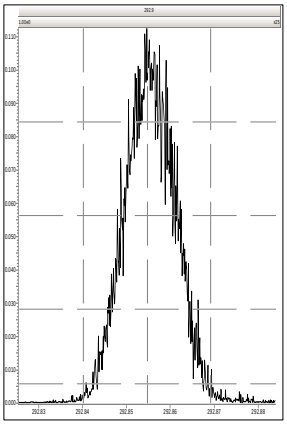
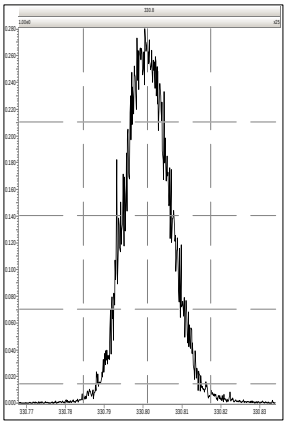
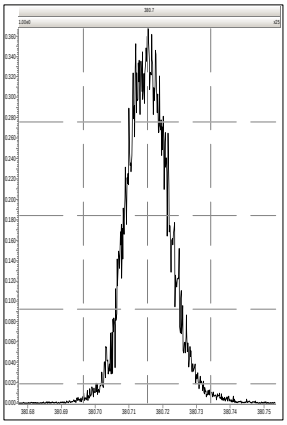
M 292.9824 R 11938



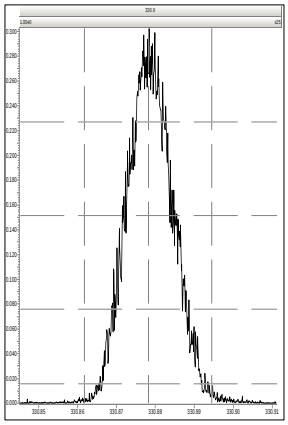
M 330.9792 R 12953



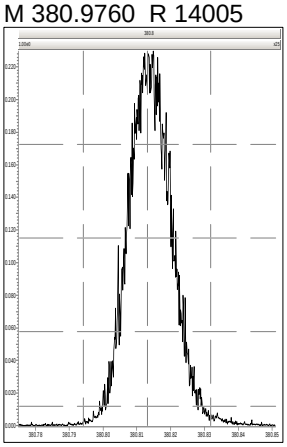
M 380.9760 R 13199



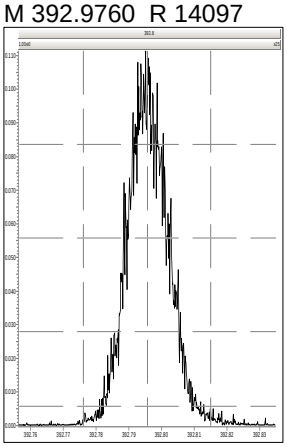
M 330.9792 R 12535



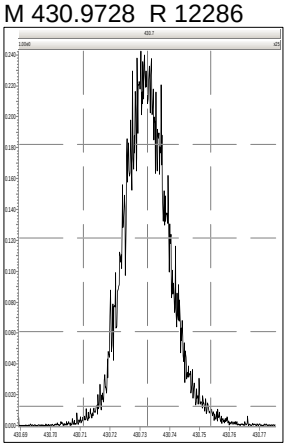
M 380.9760 R 14005



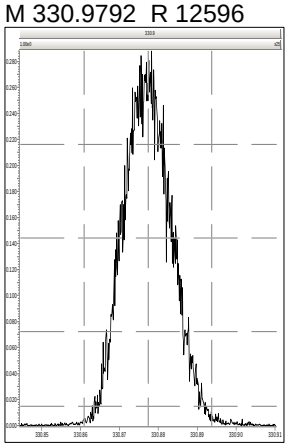
M 392.9760 R 14097



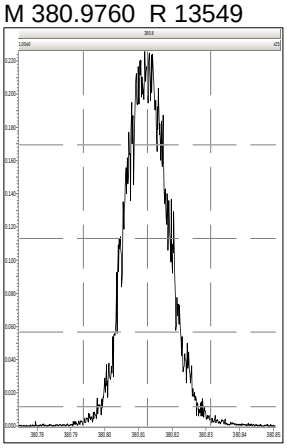
M 430.9728 R 12286



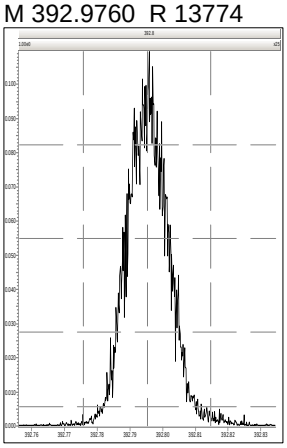
M 330.9792 R 12596



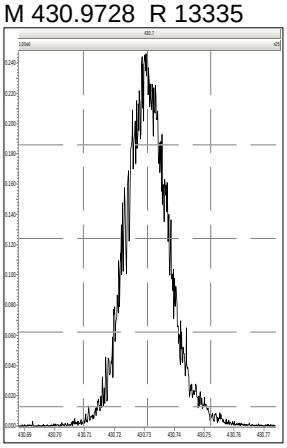
M 380.9760 R 13549



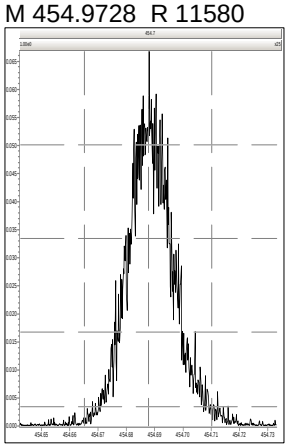
M 392.9760 R 13774



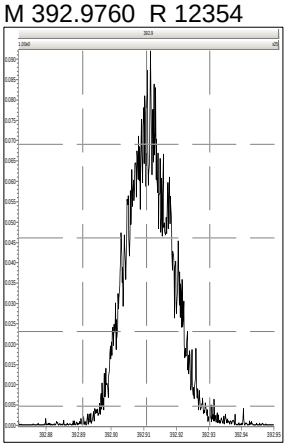
M 430.9728 R 13335



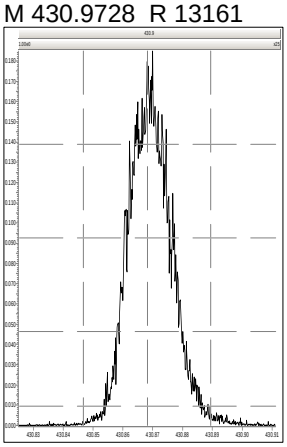
M 454.9728 R 11580



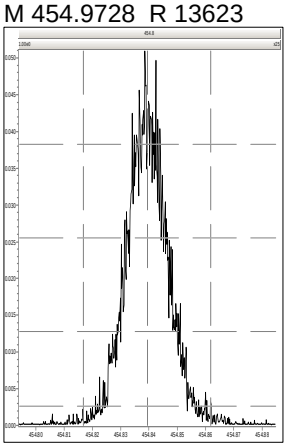
M 392.9760 R 12354



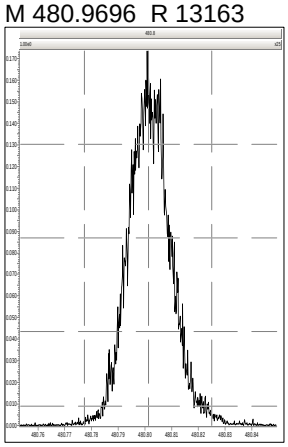
M 430.9728 R 13161



M 454.9728 R 13623



M 480.9696 R 13163



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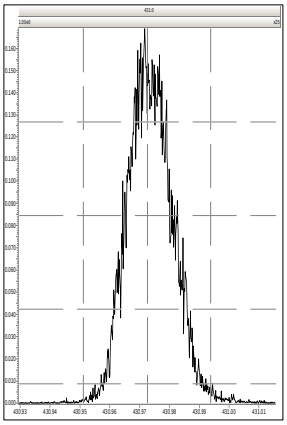
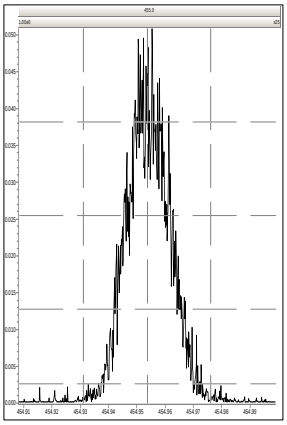
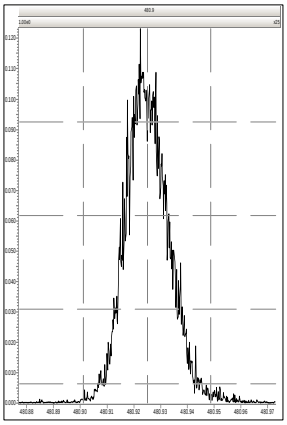
M 430.9728 R 12857



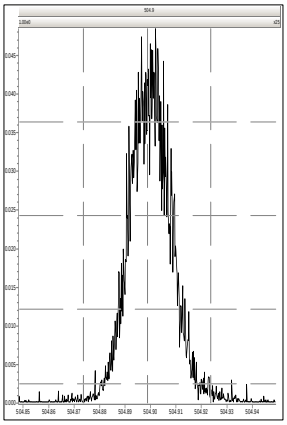
M 454.9728 R 14205



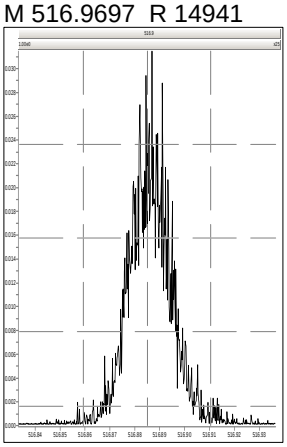
M 480.9696 R 13715

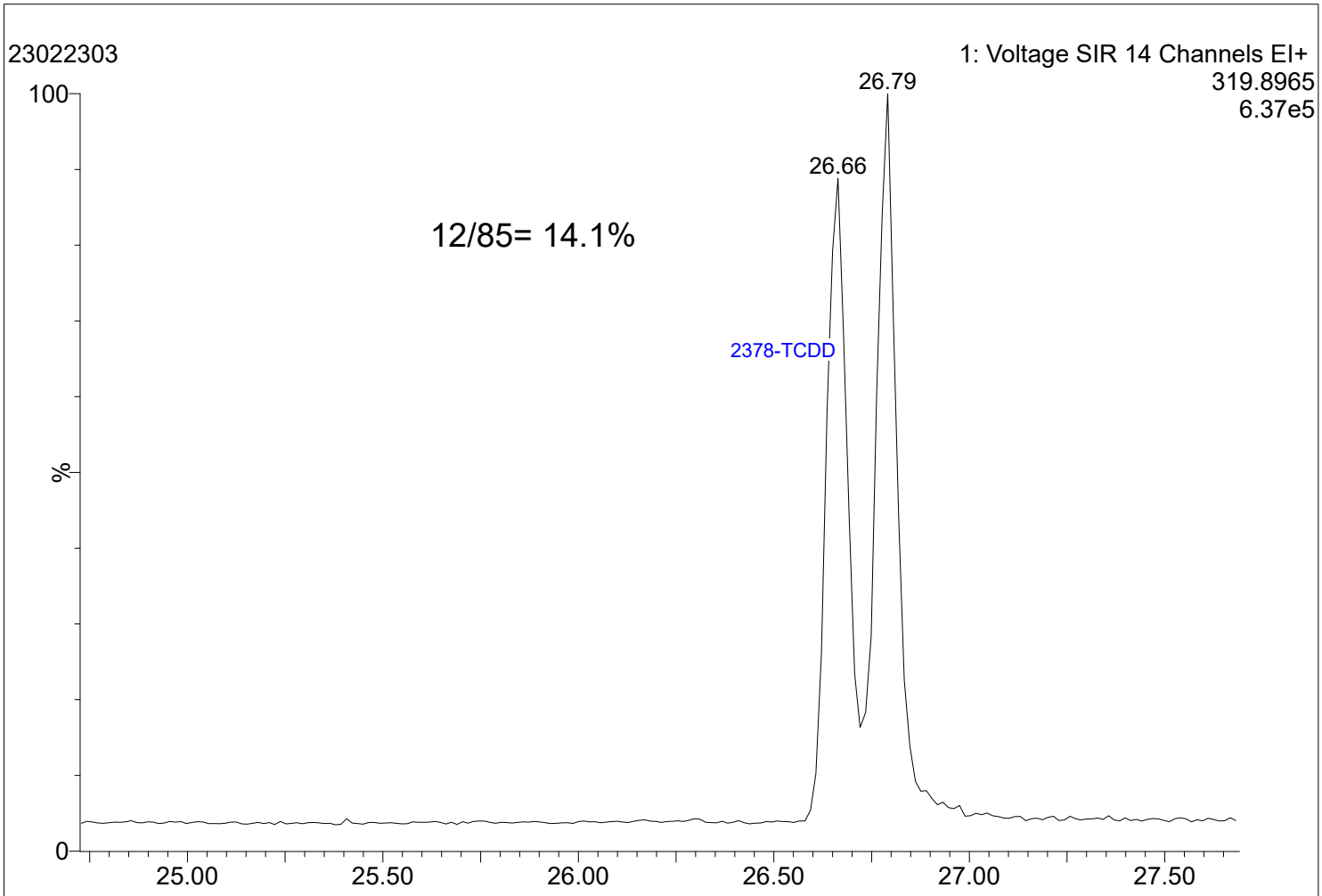


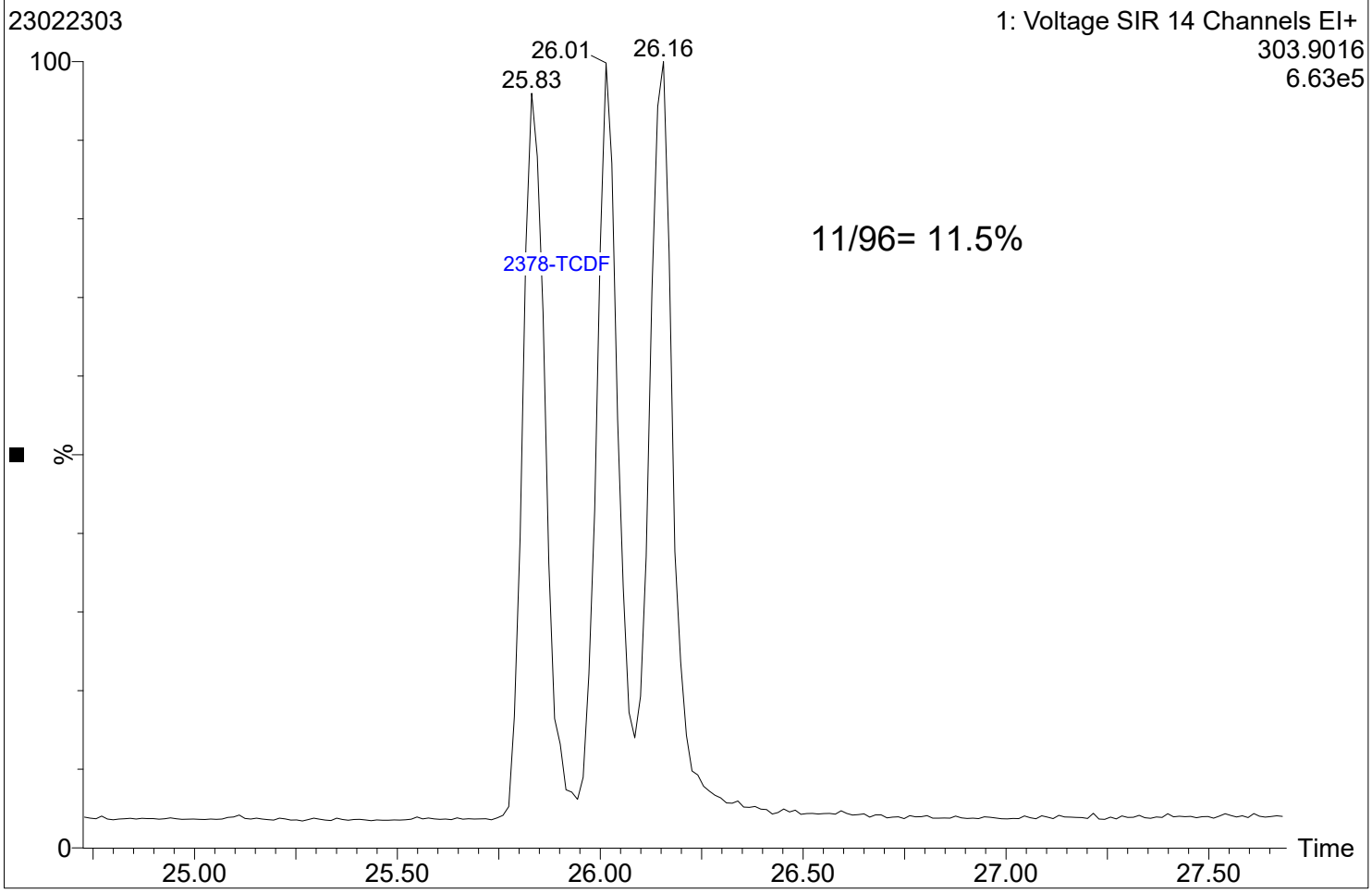
M 504.9696 R 13054



M 516.9697 R 14941




23022303
1: Voltage SIR 14 Channels EI+
319.8965
6.37e5
100
26.79
26.66
12/85= 14.1%
2378-TCDD
%
0
25.00
25.50
26.00
26.50
27.00
27.50


23022303
1: Voltage SIR 14 Channels EI+
303.9016
6.63e5
100
26.01
26.16
25.83
11/96= 11.5%
2378-TCDF
%
0
Time
25.00
25.50
26.00
26.50
27.00
27.50

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GB00010
Lab File ID:	23020111	Calibration Date:	02/01/2023
Sequence:	SLB0026	Injection Date:	02/01/23
Lab Sample ID:	SLB0026-CCV1	Injection Time:	21:12
Sequence Name:	CS3R2		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
2,3,7,8-TCDF	A	10.000	10.2	0.8760604	0.8902585		1.6	+/-16
2,3,7,8-TCDD	A	10.000	9.40	1.2363600	1.1618360		-6.0	+/-22
1,2,3,7,8-PeCDF	A	50.000	50.0	0.8446540	0.8449929		0.04	+/-18
2,3,4,7,8-PeCDF	A	50.000	50.7	0.9111780	0.9236419		1.4	+/-18
1,2,3,7,8-PeCDD	A	50.000	51.1	1.0866850	1.1111520		2.3	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	49.6	1.1816860	1.1728360		-0.7	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	50.9	1.2480480	1.2707090		1.8	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	52.6	1.2288500	1.2939400		5.3	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	50.4	1.1865370	1.1969780		0.9	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	50.3	0.9869672	0.9929396		0.6	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	51.0	1.0207220	1.0413320		2.0	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	50.6	0.9854780	0.9974984		1.2	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	48.3	1.2041190	1.1630460		-3.4	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	49.7	1.1653050	1.1577820		-0.6	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	45.5	1.2525690	1.1398400		-9.0	+/-14
OCDF	A	100.00	90.4	1.1862640	1.0729150		-9.6	+/-37
OCDD	A	100.00	92.8	1.1026670	1.0229970		-7.2	+/-21
13C12-2,3,7,8-TCDF	A	100.00	95.3	1.7680590	1.6841852		-4.7	+/-29
13C12-2,3,7,8-TCDD	A	100.00	103	1.1029470	1.1383762		3.2	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	97.8	1.5271250	1.4930478		-2.2	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	97.6	1.4662840	1.4306770		-2.4	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	95.1	0.9141518	0.8689207		-4.9	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	102	1.0536610	1.0736203		1.9	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	102	1.0799530	1.0977524		1.6	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	99.6	1.0143260	1.0099883		-0.4	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	101	0.9279333	0.9355105		0.8	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	100	0.9329336	0.9327825		-0.02	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	100	0.9646272	0.9644574		-0.02	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	102	1.0360890	1.0530458		1.6	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	104	0.9049372	0.9392673		3.8	+/-23
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	103	0.7819773	0.8033582		2.7	+/-28
13C12-OCDD	A	200.00	213	0.7882343	0.8392826		6.5	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	9.04	1.2334500	1.1156124		-9.6	

* Values outside of QC limits

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GB00010
Lab File ID:	23020110	Calibration Date:	02/01/2023
Sequence:	SLB0026	Injection Date:	02/01/23
Lab Sample ID:	SLB0026-SCV1	Injection Time:	20:23
Sequence Name:	ICVCR		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
2,3,7,8-TCDF	A	10.000	9.80	0.8760604	0.8586768		-2.0	
2,3,7,8-TCDD	A	10.000	10.1	1.2363600	1.2492920		1.0	
1,2,3,7,8-PeCDF	A	50.000	49.4	0.8446540	0.8351133		-1.1	
2,3,4,7,8-PeCDF	A	50.000	50.7	0.9111780	0.9242915		1.4	
1,2,3,7,8-PeCDD	A	50.000	48.9	1.0866850	1.0622540		-2.2	
1,2,3,4,7,8-HxCDF	A	50.000	50.8	1.1816860	1.2014960		1.7	
1,2,3,6,7,8-HxCDF	A	50.000	51.1	1.2480480	1.2746570		2.1	
2,3,4,6,7,8-HxCDF	A	50.000	51.5	1.2288500	1.2663990		3.1	
1,2,3,7,8,9-HxCDF	A	50.000	49.9	1.1865370	1.1839220		-0.2	
1,2,3,4,7,8-HxCDD	A	50.000	51.0	0.9869672	1.0062160		2.0	
1,2,3,6,7,8-HxCDD	A	50.000	48.3	1.0207220	0.9861518		-3.4	
1,2,3,7,8,9-HxCDD	A	50.000	49.6	0.9854780	10444.61		-0.8	
1,2,3,4,6,7,8-HpCDF	A	50.000	49.0	1.2041190	1.1796410		-2.0	
1,2,3,4,7,8,9-HpCDF	A	50.000	51.5	1.1653050	1.1995620		2.9	
1,2,3,4,6,7,8-HpCDD	A	50.000	48.8	1.2525690	1.2236480		-2.3	
OCDF	A	100.00	93.0	1.1862640	1.1031570		-7.0	
OCDD	A	100.00	95.8	1.1026670	1.0561160		-4.2	
13C12-2,3,7,8-TCDF	A	100.00	101	1.7680590	1.7827674		0.8	
13C12-2,3,7,8-TCDD	A	100.00	97.3	1.1029470	1.0730574		-2.7	
13C12-1,2,3,7,8-PeCDF	A	100.00	97.9	1.5271250	1.4954172		-2.1	
13C12-2,3,4,7,8-PeCDF	A	100.00	96.0	1.4662840	1.4076825		-4.0	
13C12-1,2,3,7,8-PeCDD	A	100.00	95.6	0.9141518	0.8737537		-4.4	
13C12-1,2,3,4,7,8-HxCDF	A	100.00	99.0	1.0536610	1.0427881		-1.0	
13C12-1,2,3,6,7,8-HxCDF	A	100.00	98.8	1.0799530	1.0669191		-1.2	
13C12-2,3,4,6,7,8-HxCDF	A	100.00	99.3	1.0143260	1.0069993		-0.7	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	98.6	0.9279333	0.9147189		-1.4	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	97.7	0.9329336	0.9118251		-2.3	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	101	0.9646272	0.9706530		0.6	
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	100	1.0360890	1.0396134		0.3	
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	101	0.9049372	0.9117511		0.8	
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	101	0.7819773	0.7868918		0.6	
13C12-OCDD	A	200.00	205	0.7882343	0.8085897		2.6	
37Cl4-2,3,7,8-TCDD	A	10.000	8.94	1.2334500	1.1023697		-10.6	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GB00010
Lab File ID:	23022312	Calibration Date:	02/01/2023
Sequence:	SLB0345	Injection Date:	02/23/23
Lab Sample ID:	SLB0345-CCV1	Injection Time:	19:11
Sequence Name:	CS3V4		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
2,3,7,8-TCDF	A	10.000	9.68	0.8760604	0.8478234		-3.2	+/-16	
2,3,7,8-TCDD	A	10.000	8.69	1.2363600	1.0738920		-13.1	+/-22	
1,2,3,7,8-PeCDF	A	50.000	50.2	0.8446540	0.8474479		0.3	+/-18	
2,3,4,7,8-PeCDF	A	50.000	51.0	0.9111780	0.9295542		2.0	+/-18	
1,2,3,7,8-PeCDD	A	50.000	56.9	1.0866850	1.2357730		13.7	+/-22	
1,2,3,4,7,8-HxCDF	A	50.000	46.1	1.1816860	1.0902010		-7.7	+/-10	
1,2,3,6,7,8-HxCDF	A	50.000	44.2	1.2480480	1.1026150		-11.7	+/-12	
2,3,4,6,7,8-HxCDF	A	50.000	45.7	1.2288500	1.1233860		-8.6	+/-12	
1,2,3,7,8,9-HxCDF	A	50.000	46.5	1.1865370	1.1043270		-6.9	+/-10	
1,2,3,4,7,8-HxCDD	A	50.000	48.1	0.9869672	0.9503983		-3.7	+/-22	
1,2,3,6,7,8-HxCDD	A	50.000	46.5	1.0207220	0.9493121		-7.0	+/-22	
1,2,3,7,8,9-HxCDD	A	50.000	47.7	0.9854780	0.9398482		-4.6	+/-18	
1,2,3,4,6,7,8-HpCDF	A	50.000	47.7	1.2041190	1.1498960		-4.5	+/-10	
1,2,3,4,7,8,9-HpCDF	A	50.000	47.1	1.1653050	1.0971080		-5.9	+/-14	
1,2,3,4,6,7,8-HpCDD	A	50.000	44.9	1.2525690	1.1247070		-10.2	+/-14	
OCDF	A	100.00	82.9	1.1862640	0.9833408		-17.1	+/-37	
OCDD	A	100.00	96.4	1.1026670	1.0626510		-3.6	+/-21	
13C12-2,3,7,8-TCDF	A	100.00	82.6	1.7680590	1.4609158		-17.4	+/-29	
13C12-2,3,7,8-TCDD	A	100.00	102	1.1029470	1.1211812		1.7	+/-18	
13C12-1,2,3,7,8-PeCDF	A	100.00	74.0	1.5271250	1.1307157		-26.0	+/-24	*
13C12-2,3,4,7,8-PeCDF	A	100.00	76.9	1.4662840	1.1269041		-23.1	+/-23	*
13C12-1,2,3,7,8-PeCDD	A	100.00	65.3	0.9141518	0.5969997		-34.7	+/-38	
13C12-1,2,3,4,7,8-HxCDF	A	100.00	94.5	1.0536610	0.9960034		-5.5	+/-24	
13C12-1,2,3,6,7,8-HxCDF	A	100.00	98.1	1.0799530	1.0591562		-1.9	+/-30	
13C12-2,3,4,6,7,8-HxCDF	A	100.00	97.8	1.0143260	0.9918777		-2.2	+/-27	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	90.0	0.9279333	0.8349472		-10.0	+/-26	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	104	0.9329336	0.9684278		3.8	+/-15	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	109	0.9646272	1.0474637		8.6	+/-15	
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	82.5	1.0360890	0.8551825		-17.5	+/-22	
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	81.2	0.9049372	0.7345442		-18.8	+/-23	
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	83.7	0.7819773	0.6545189		-16.3	+/-28	
13C12-OCDD	A	200.00	114	0.7882343	0.4493649		-43.0	+/-52	
37Cl4-2,3,7,8-TCDD	A	10.000	8.82	1.2334500	1.0874118		-11.8		

* Values outside of QC limits

* Values outside of QC limits

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:12:04 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: CS3V4, Name: 23022312, Date: 23-Feb-2023, Time: 19:11:19, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.986	1.001	5.786e4	7.447e4	0.876	0.777	0.770	926	1155	8.37e5	1.09e6	904.5	943.7	NO	bd	bd	9.678
12378-PeCDF	30.142	1.000	3.118e5	2.000e5	0.845	1.559	1.550	1733	1558	4.66e6	3.04e6	2691.8	1953.5	NO	bb	bb	50.165
23478-PeCDF	31.490	1.000	3.399e5	2.196e5	0.911	1.548	1.550	1733	1558	5.20e6	3.44e6	3000.2	2204.4	NO	bb	bb	51.008
123478-HxCDF	35.100	1.000	3.191e5	2.577e5	1.182	1.238	1.240	1940	2280	4.96e6	4.03e6	2557.3	1766.1	NO	bd	bd	46.129
234678-HxCDF	36.103	1.000	3.283e5	2.636e5	1.229	1.245	1.240	1940	2280	5.11e6	4.15e6	2633.5	1821.2	NO	bd	bd	45.709
123678-HxCDF	35.245	1.001	3.420e5	2.783e5	1.248	1.229	1.240	1940	2280	5.20e6	4.17e6	2678.6	1831.0	NO	dd	dd	44.174
123789-HxCDF	37.128	1.000	2.727e5	2.171e5	1.187	1.257	1.240	1940	2280	4.07e6	3.27e6	2099.5	1432.7	NO	bb	bd	46.536
1234678-HpCDF	38.966	1.000	2.671e5	2.552e5	1.204	1.047	1.050	1822	1789	4.23e6	4.16e6	2320.6	2328.5	NO	bb	bb	47.748
1234789-HpCDF	41.239	1.000	2.186e5	2.095e5	1.165	1.043	1.050	1822	1789	3.03e6	2.98e6	1663.9	1663.6	NO	bb	bd	47.074
OCDF	45.536	1.006	2.222e5	2.472e5	1.186	0.899	0.890	1133	1249	2.47e6	2.75e6	2182.4	2203.3	NO	bd	bd	82.894
2378-TCDD	26.622	1.000	5.667e4	7.196e4	1.236	0.788	0.770	896	925	8.48e5	1.08e6	946.0	1168.0	NO	bd	bb	8.686
12378-PeCDD	31.747	1.000	2.432e5	1.509e5	1.087	1.611	1.550	1479	1815	3.89e6	2.40e6	2628.6	1321.8	NO	bb	bb	56.860
123478-HxCDD	36.225	1.001	2.684e5	2.205e5	0.987	1.217	1.240	2170	1775	4.31e6	3.49e6	1986.7	1965.1	NO	bd	bd	48.147
123678-HxCDD	36.336	1.001	2.870e5	2.412e5	1.021	1.189	1.240	2170	1775	4.74e6	3.78e6	2185.0	2128.6	NO	db	db	46.502
123789-HxCDD	36.715	1.011	2.735e5	2.297e5	0.985	1.191	1.240	2170	1775	4.35e6	3.67e6	2006.1	2068.9	NO	bb	bd	47.685
1234678-HpCDD	40.481	1.000	2.012e5	1.898e5	1.253	1.060	1.050	1857	1722	3.08e6	2.91e6	1659.0	1690.3	NO	bb	bb	44.896
OCDD	45.289	1.000	2.295e5	2.778e5	1.103	0.826	0.890	1297	1580	2.69e6	3.16e6	2076.9	1998.5	NO	bb	bd	96.371
13C-2378-TCDF	25.958	1.007	6.748e5	8.859e5	1.768	0.762	0.770	1458	1044	1.03e7	1.35e7	7094.3	12917.3	NO	bb	bb	82.628
13C-12378-PeCDF	30.131	1.168	7.362e5	4.717e5	1.527	1.561	1.550	2243	2092	1.09e7	6.96e6	4845.7	3329.2	NO	bd	bd	74.042
13C-23478-PeCDF	31.479	1.221	7.317e5	4.722e5	1.466	1.549	1.550	2243	2092	1.10e7	7.01e6	4901.7	3353.0	NO	bb	bb	76.854
13C-123478-HxCDF	35.089	0.956	3.561e5	7.021e5	1.054	0.507	0.510	1487	1440	5.76e6	1.13e7	3875.9	7828.6	NO	bd	bd	94.528
13C-123678-HxCDF	35.222	0.960	3.809e5	7.443e5	1.080	0.512	0.510	1487	1440	5.92e6	1.16e7	3985.2	8074.4	NO	db	db	98.074
13C-234678-HxCDF	36.091	0.983	3.533e5	7.004e5	1.014	0.504	0.510	1487	1440	5.73e6	1.12e7	3856.4	7783.1	NO	bb	bb	97.787
13C-123789-HxCDF	37.117	1.011	3.009e5	5.861e5	0.928	0.513	0.510	1487	1440	4.97e6	9.58e6	3340.4	6653.4	NO	bb	bb	89.979
13C-1234678-HpCDF	38.955	1.061	2.821e5	6.264e5	1.036	0.450	0.440	2337	2208	4.70e6	1.04e7	2008.8	4707.3	NO	bb	bb	82.540
13C-1234789-HpCDF	41.228	1.123	2.404e5	5.399e5	0.905	0.445	0.440	2337	2208	3.35e6	7.45e6	1431.6	3372.9	NO	bd	bb	81.171
13C-1234-TCDD	25.788	0.000	4.683e5	6.001e5	1.000	0.780	0.770	1615	891	7.54e6	9.66e6	4666.9	10840.8	NO	bb	bb	100.000
13C-2378-TCDD	26.608	1.032	5.202e5	6.776e5	1.103	0.768	0.770	1615	891	7.92e6	1.02e7	4903.0	11492.4	NO	bb	bb	101.653
13C-12378-PeCDD	31.735	1.231	4.012e5	2.366e5	0.914	1.696	1.550	740	953	5.86e6	3.57e6	7923.3	3749.0	NO	bd	bd	65.306
13C-123478-HxCDD	36.203	0.986	5.690e5	4.599e5	0.933	1.237	1.240	2113	1973	9.26e6	7.60e6	4384.4	3854.9	NO	bd	bd	103.805
13C-123678-HxCDD	36.314	0.989	6.152e5	4.976e5	0.965	1.236	1.240	2113	1973	9.82e6	7.94e6	4649.6	4025.3	NO	db	db	108.587
13C-1234678-HpCDD	40.470	1.103	3.599e5	3.355e5	0.782	1.073	1.050	1366	1367	5.34e6	4.97e6	3904.8	3634.6	NO	bb	bb	83.700
13C-OCDD	45.271	1.233	4.537e5	5.011e5	0.788	0.905	0.890	1300	1582	5.48e6	6.05e6	4218.2	3821.9	NO	bb	bb	114.018
13C-123789-HxCDD	36.704	0.000	5.902e5	4.722e5	1.000	1.250	1.240	2113	1973	1.00e7	7.86e6	4737.9	3986.0	NO	bb	bb	100.000
37CL-2378-TCDD	26.622	1.032	1.162e5		1.233			1550		1.75e6		1132.0			bb		8.816

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:12:04 Pacific Standard Time

ID: CS3V4, Name: 23022312, Date: 23-Feb-2023, Time: 19:11:19, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.455	0.865	6.460e4	8.492e4	1.064	0.761	0.770	926	1155	1.06e6	1.35e6	1142.5	1165.0	NO	bb	bd	9.000
1289-TCDF	27.483	1.059	4.491e4	5.945e4	0.858	0.755	0.770	926	1155	6.61e5	8.64e5	713.6	748.2	NO	dd	dd	7.797
13468-PECDF	27.328	0.907	4.681e5	3.124e5	1.013	1.498	1.550	774	937	7.37e6	4.94e6	9521.8	5276.8	NO	bb	bb	63.786
12389-PECDF	32.537	1.080	3.283e5	2.140e5	0.844	1.534	1.550	1733	1558	4.88e6	3.16e6	2818.2	2030.5	NO	bb	bb	53.213
123468-HXCDF	33.440	0.953	3.235e5	2.608e5	1.197	1.241	1.240	1940	2280	4.84e6	3.94e6	2497.1	1728.8	NO	bb	bb	46.116
1368-TCDD	23.740	0.892	5.449e4	7.052e4	1.084	0.773	0.770	896	925	8.81e5	1.13e6	983.1	1223.9	NO	bd	bd	9.625
1289-TCDD	27.229	1.023	4.375e4	5.687e4	0.975	0.769	0.770	896	925	6.31e5	8.09e5	703.8	874.1	NO	bd	bb	8.615
12479-PECDD	29.006	0.914	3.740e5	2.382e5	1.837	1.570	1.550	1479	1815	3.76e6	2.41e6	2539.2	1326.1	NO	bb	bb	52.242
12389-PECDD	32.136	1.013	2.801e5	1.757e5	1.252	1.594	1.550	1479	1815	4.34e6	2.74e6	2933.4	1511.1	NO	bb	bb	57.067
124679-HXCDD	34.220	0.945	2.856e5	2.287e5	1.033	1.249	1.240	2170	1775	4.61e6	3.64e6	2124.4	2048.1	NO	bb	bb	48.394
1234679-HPCDD	39.423	0.974	2.317e5	2.277e5	1.286	1.018	1.050	1857	1722	3.79e6	3.56e6	2042.1	2068.1	NO	bb	bd	51.372
Total-tetrafurans			1.690e5		0.933			926		2.58e6							26.721
Total-penta1			4.681e5					774		7.37e6							63.786
Total-pentafurans			1.029e6		0.866			1733		1.55e7							162.210
Total-hexafurans			1.586e6		1.208			1940		2.42e7							228.663
Total-heptafurans			4.857e5		1.185			1822		7.26e6							94.822
Total-Furans			3.960e6		1.067			926		5.94e7							659.098
Total-tetradioxins			2.681e5		1.099			896		3.70e6							46.610
Total-pentadioxins			8.972e5		1.392			1479		1.20e7							166.169
Total-hexadioxins			1.115e6		1.007			2170		1.80e7							190.728
Total-heptadioxins			4.330e5		1.269			1857		6.87e6							96.268
Total-Dioxins			2.942e6		1.165			896		4.33e7							596.147
Total-TEQ			6.902e6					896		1.03e8							1255.244
FUNCTION1 PFK			1.198e8					366741		3.18e7							
FUNCTION2 PFK			0.000e0					234171		0.00e0							
FUNCTION3 PFK			0.000e0					333302		0.00e0							
FUNCTION4 PFK			1.087e7					273300		6.48e7							
FUNCTION5 PFK			4.978e6					148167		8.37e6							
FUNCTION1 HXCD...			7.245e2					599		1.04e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			6.086e2					1040		1.13e4							0.000
FUNCTION3 OCDPE			0.000e0					572		0.00e0							
FUNCTION4 NCDPE			3.524e2					719		4.49e3							0.000
FUNCTION5 DCDPE			0.000e0					471		0.00e0							

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: CS3V4, Name: 23022312, Date: 23-Feb-2023, Time: 19:11:19, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.48	4.491e4	5.945e4	0.858	0.76	0.77	713.6	YES	NO	dd	dd	7.797
2	Total-tetrafurans	27.34	1.676e3	1.921e3	0.933	0.87	0.77	28.7	YES	NO	bd	bd	0.247
3	2378-TCDF	25.99	5.786e4	7.447e4	0.876	0.78	0.77	904.5	YES	NO	bd	bd	9.678
4	1368-TCDF	22.45	6.460e4	8.492e4	1.064	0.76	0.77	1142.5	YES	NO	bb	bd	9.000

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.33	4.681e5	3.124e5	1.013	1.50	1.55	9521.8	YES	NO	bb	bb	63.786

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	28.99	4.877e4	3.196e4	0.866	1.53	1.55	431.6	YES	NO	bb	bb	7.726
2	12389-PECDF	32.54	3.283e5	2.140e5	0.844	1.53	1.55	2818.2	YES	NO	bb	bb	53.213
3	23478-PeCDF	31.49	3.399e5	2.196e5	0.911	1.55	1.55	3000.2	YES	NO	bb	bb	51.008
4	12378-PeCDF	30.14	3.118e5	2.000e5	0.845	1.56	1.55	2691.8	YES	NO	bb	bb	50.165
5	Total-pentafurans	29.87	6.243e2	3.922e2	0.866	1.59	1.55	5.7	YES	NO	db	bb	0.097

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDF	35.24	3.420e5	2.783e5	1.248	1.23	1.24	2678.6	YES	NO	dd	dd	44.174
2	123478-HxCDF	35.10	3.191e5	2.577e5	1.182	1.24	1.24	2557.3	YES	NO	bd	bd	46.129
3	123468-HXCDF	33.44	3.235e5	2.608e5	1.197	1.24	1.24	2497.1	YES	NO	bb	bb	46.116
4	123789-HxCDF	37.13	2.727e5	2.171e5	1.187	1.26	1.24	2099.5	YES	NO	bb	bd	46.536
5	234678-HxCDF	36.10	3.283e5	2.636e5	1.229	1.25	1.24	2633.5	YES	NO	bd	bd	45.709

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.24	2.186e5	2.095e5	1.165	1.04	1.05	1663.9	YES	NO	bb	bd	47.074
2	1234678-HpCDF	38.97	2.671e5	2.552e5	1.204	1.05	1.05	2320.6	YES	NO	bb	bb	47.748

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.48	4.491e4	5.945e4	0.858	0.76	0.77	713.6	YES	NO	dd	dd	7.797
2	Total-tetrafurans	27.34	1.676e3	1.921e3	0.933	0.87	0.77	28.7	YES	NO	bd	bd	0.247
3	2378-TCDF	25.99	5.786e4	7.447e4	0.876	0.78	0.77	904.5	YES	NO	bd	bd	9.678
4	1368-TCDF	22.45	6.460e4	8.492e4	1.064	0.76	0.77	1142.5	YES	NO	bb	bd	9.000
5	Total-pentafurans	28.99	4.877e4	3.196e4	0.866	1.53	1.55	431.6	YES	NO	bb	bb	7.726
6	12389-PECDF	32.54	3.283e5	2.140e5	0.844	1.53	1.55	2818.2	YES	NO	bb	bb	53.213
7	23478-PeCDF	31.49	3.399e5	2.196e5	0.911	1.55	1.55	3000.2	YES	NO	bb	bb	51.008
8	12378-PeCDF	30.14	3.118e5	2.000e5	0.845	1.56	1.55	2691.8	YES	NO	bb	bb	50.165
9	Total-pentafurans	29.87	6.243e2	3.922e2	0.866	1.59	1.55	5.7	YES	NO	db	bb	0.097
10	123678-HxCDF	35.24	3.420e5	2.783e5	1.248	1.23	1.24	2678.6	YES	NO	dd	dd	44.174
11	123478-HxCDF	35.10	3.191e5	2.577e5	1.182	1.24	1.24	2557.3	YES	NO	bd	bd	46.129
12	123468-HXCDF	33.44	3.235e5	2.608e5	1.197	1.24	1.24	2497.1	YES	NO	bb	bb	46.116
13	123789-HxCDF	37.13	2.727e5	2.171e5	1.187	1.26	1.24	2099.5	YES	NO	bb	bd	46.536
14	234678-HxCDF	36.10	3.283e5	2.636e5	1.229	1.25	1.24	2633.5	YES	NO	bd	bd	45.709
15	1234789-HpCDF	41.24	2.186e5	2.095e5	1.165	1.04	1.05	1663.9	YES	NO	bb	bd	47.074
16	1234678-HpCDF	38.97	2.671e5	2.552e5	1.204	1.05	1.05	2320.6	YES	NO	bb	bb	47.748
17	OCDF	45.54	2.222e5	2.472e5	1.186	0.90	0.89	2182.4	YES	NO	bd	bd	82.894
18	13468-PECDF	27.33	4.681e5	3.124e5	1.013	1.50	1.55	9521.8	YES	NO	bb	bb	63.786

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.80	2.690e4	3.468e4	1.099	0.78	0.77	465.0	YES	NO	bd	bd	4.680
2	Total-tetradioxins	25.22	7.046e2	8.143e2	1.099	0.87	0.77	12.1	YES	NO	bb	db	0.115
3	Total-tetradioxins	24.01	3.004e2	4.154e2	1.099	0.72	0.77	5.9	YES	NO	db	db	0.054
4	1368-TCDD	23.74	5.449e4	7.052e4	1.084	0.77	0.77	983.1	YES	NO	bd	bd	9.625
5	1289-TCDD	27.23	4.375e4	5.687e4	0.975	0.77	0.77	703.8	YES	NO	bd	bb	8.615
6	2378-TCDD	26.62	5.667e4	7.196e4	1.236	0.79	0.77	946.0	YES	NO	bd	bb	8.686
7	Total-tetradioxins	26.30	8.525e4	1.100e5	1.099	0.78	0.77	1016.8	YES	NO	bb	bb	14.835

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	32.14	2.801e5	1.757e5	1.252	1.59	1.55	2933.4	YES	NO	bb	bb	57.067
2	12378-PeCDD	31.75	2.432e5	1.509e5	1.087	1.61	1.55	2628.6	YES	NO	bb	bb	56.860
3	12479-PECDD	29.01	3.740e5	2.382e5	1.837	1.57	1.55	2539.2	YES	NO	bb	bb	52.242

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.72	2.735e5	2.297e5	0.985	1.19	1.24	2006.1	YES	NO	bb	bd	47.685
2	123678-HxCDD	36.34	2.870e5	2.412e5	1.021	1.19	1.24	2185.0	YES	NO	db	db	46.502
3	123478-HxCDD	36.23	2.684e5	2.205e5	0.987	1.22	1.24	1986.7	YES	NO	bd	bd	48.147
4	124679-HXCDD	34.22	2.856e5	2.287e5	1.033	1.25	1.24	2124.4	YES	NO	bb	bb	48.394

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.48	2.012e5	1.898e5	1.253	1.06	1.05	1659.0	YES	NO	bb	bb	44.896
2	1234679-HPCDD	39.42	2.317e5	2.277e5	1.286	1.02	1.05	2042.1	YES	NO	bb	bd	51.372

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.80	2.690e4	3.468e4	1.099	0.78	0.77	465.0	YES	NO	bd	bd	4.680
2	Total-tetradioxins	25.22	7.046e2	8.143e2	1.099	0.87	0.77	12.1	YES	NO	bb	db	0.115
3	Total-tetradioxins	24.01	3.004e2	4.154e2	1.099	0.72	0.77	5.9	YES	NO	db	db	0.054
4	1368-TCDD	23.74	5.449e4	7.052e4	1.084	0.77	0.77	983.1	YES	NO	bd	bd	9.625
5	1289-TCDD	27.23	4.375e4	5.687e4	0.975	0.77	0.77	703.8	YES	NO	bd	bb	8.615
6	2378-TCDD	26.62	5.667e4	7.196e4	1.236	0.79	0.77	946.0	YES	NO	bd	bb	8.686
7	Total-tetradioxins	26.30	8.525e4	1.100e5	1.099	0.78	0.77	1016.8	YES	NO	bb	bb	14.835
8	12389-PECDD	32.14	2.801e5	1.757e5	1.252	1.59	1.55	2933.4	YES	NO	bb	bb	57.067
9	12378-PeCDD	31.75	2.432e5	1.509e5	1.087	1.61	1.55	2628.6	YES	NO	bb	bb	56.860
10	12479-PECDD	29.01	3.740e5	2.382e5	1.837	1.57	1.55	2539.2	YES	NO	bb	bb	52.242
11	123789-HxCDD	36.72	2.735e5	2.297e5	0.985	1.19	1.24	2006.1	YES	NO	bb	bd	47.685
12	123678-HxCDD	36.34	2.870e5	2.412e5	1.021	1.19	1.24	2185.0	YES	NO	db	db	46.502
13	123478-HxCDD	36.23	2.684e5	2.205e5	0.987	1.22	1.24	1986.7	YES	NO	bd	bd	48.147
14	124679-HXCDD	34.22	2.856e5	2.287e5	1.033	1.25	1.24	2124.4	YES	NO	bb	bb	48.394
15	1234678-HpCDD	40.48	2.012e5	1.898e5	1.253	1.06	1.05	1659.0	YES	NO	bb	bb	44.896
16	1234679-HPCDD	39.42	2.317e5	2.277e5	1.286	1.02	1.05	2042.1	YES	NO	bb	bd	51.372
17	OCDD	45.29	2.295e5	2.778e5	1.103	0.83	0.89	2076.9	YES	NO	bb	bd	96.371

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.48	4.491e4	5.945e4	0.858	0.76	0.77	713.6	YES	NO	dd	dd	7.797
2	Total-tetrafurans	27.34	1.676e3	1.921e3	0.933	0.87	0.77	28.7	YES	NO	bd	bd	0.247
3	2378-TCDF	25.99	5.786e4	7.447e4	0.876	0.78	0.77	904.5	YES	NO	bd	bd	9.678
4	1368-TCDF	22.45	6.460e4	8.492e4	1.064	0.76	0.77	1142.5	YES	NO	bb	bd	9.000
5	Total-pentafurans	28.99	4.877e4	3.196e4	0.866	1.53	1.55	431.6	YES	NO	bb	bb	7.726
6	12389-PECDF	32.54	3.283e5	2.140e5	0.844	1.53	1.55	2818.2	YES	NO	bb	bb	53.213
7	23478-PeCDF	31.49	3.399e5	2.196e5	0.911	1.55	1.55	3000.2	YES	NO	bb	bb	51.008
8	12378-PeCDF	30.14	3.118e5	2.000e5	0.845	1.56	1.55	2691.8	YES	NO	bb	bb	50.165
9	Total-pentafurans	29.87	6.243e2	3.922e2	0.866	1.59	1.55	5.7	YES	NO	db	bb	0.097
10	123678-HxCDF	35.24	3.420e5	2.783e5	1.248	1.23	1.24	2678.6	YES	NO	dd	dd	44.174
11	123478-HxCDF	35.10	3.191e5	2.577e5	1.182	1.24	1.24	2557.3	YES	NO	bd	bd	46.129
12	123468-HXCDF	33.44	3.235e5	2.608e5	1.197	1.24	1.24	2497.1	YES	NO	bb	bb	46.116
13	123789-HxCDF	37.13	2.727e5	2.171e5	1.187	1.26	1.24	2099.5	YES	NO	bb	bd	46.536
14	234678-HxCDF	36.10	3.283e5	2.636e5	1.229	1.25	1.24	2633.5	YES	NO	bd	bd	45.709
15	1234789-HpCDF	41.24	2.186e5	2.095e5	1.165	1.04	1.05	1663.9	YES	NO	bb	bd	47.074
16	1234678-HpCDF	38.97	2.671e5	2.552e5	1.204	1.05	1.05	2320.6	YES	NO	bb	bb	47.748
17	OCDF	45.54	2.222e5	2.472e5	1.186	0.90	0.89	2182.4	YES	NO	bd	bd	82.894
18	13468-PECDF	27.33	4.681e5	3.124e5	1.013	1.50	1.55	9521.8	YES	NO	bb	bb	63.786
19	Total-tetradioxins	25.80	2.690e4	3.468e4	1.099	0.78	0.77	465.0	YES	NO	bd	bd	4.680
20	Total-tetradioxins	25.22	7.046e2	8.143e2	1.099	0.87	0.77	12.1	YES	NO	bb	db	0.115
21	Total-tetradioxins	24.01	3.004e2	4.154e2	1.099	0.72	0.77	5.9	YES	NO	db	db	0.054
22	1368-TCDD	23.74	5.449e4	7.052e4	1.084	0.77	0.77	983.1	YES	NO	bd	bd	9.625
23	1289-TCDD	27.23	4.375e4	5.687e4	0.975	0.77	0.77	703.8	YES	NO	bd	bb	8.615
24	2378-TCDD	26.62	5.667e4	7.196e4	1.236	0.79	0.77	946.0	YES	NO	bd	bb	8.686
25	Total-tetradioxins	26.30	8.525e4	1.100e5	1.099	0.78	0.77	1016.8	YES	NO	bb	bb	14.835
26	12389-PECDD	32.14	2.801e5	1.757e5	1.252	1.59	1.55	2933.4	YES	NO	bb	bb	57.067
27	12378-PeCDD	31.75	2.432e5	1.509e5	1.087	1.61	1.55	2628.6	YES	NO	bb	bb	56.860
28	12479-PECDD	29.01	3.740e5	2.382e5	1.837	1.57	1.55	2539.2	YES	NO	bb	bb	52.242
29	123789-HxCDD	36.72	2.735e5	2.297e5	0.985	1.19	1.24	2006.1	YES	NO	bb	bd	47.685
30	123678-HxCDD	36.34	2.870e5	2.412e5	1.021	1.19	1.24	2185.0	YES	NO	db	db	46.502
31	123478-HxCDD	36.23	2.684e5	2.205e5	0.987	1.22	1.24	1986.7	YES	NO	bd	bd	48.147
32	124679-HXCDD	34.22	2.856e5	2.287e5	1.033	1.25	1.24	2124.4	YES	NO	bb	bb	48.394
33	1234678-HpCDD	40.48	2.012e5	1.898e5	1.253	1.06	1.05	1659.0	YES	NO	bb	bb	44.896
34	1234679-HPCDD	39.42	2.317e5	2.277e5	1.286	1.02	1.05	2042.1	YES	NO	bb	bd	51.372
35	OCDD	45.29	2.295e5	2.778e5	1.103	0.83	0.89	2076.9	YES	NO	bb	bd	96.371

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	26.31	1.440e7					42.8	YES		db		
2	FUNCTION1 PFK	26.25	1.054e8					43.9	YES		bd		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	41.48	3.923e4					1.9	NO		bb		
2	FUNCTION4 PFK	41.38	2.976e4					1.7	NO		bb		
3	FUNCTION4 PFK	40.63	1.760e3					0.6	NO		bb		
4	FUNCTION4 PFK	40.58	1.246e4					1.0	NO		bb		
5	FUNCTION4 PFK	39.28	2.007e5					7.5	YES		db		
6	FUNCTION4 PFK	39.06	1.573e6					16.4	YES		dd		
7	FUNCTION4 PFK	38.83	8.436e5					25.2	YES		dd		
8	FUNCTION4 PFK	38.73	5.560e6					29.2	YES		dd		
9	FUNCTION4 PFK	38.20	4.418e5					48.9	YES		dd		
10	FUNCTION4 PFK	38.13	1.053e6					50.8	YES		dd		
11	FUNCTION4 PFK	38.07	1.113e6					53.0	YES		bd		
12	FUNCTION4 PFK	41.73	5.639e3					0.9	NO		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.13	4.978e6					56.5	YES		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.34	2.198e2					4.4	YES		bb		0.000
2	FUNCTION1 HXCD...	26.42	7.682e1					2.5	NO		bb		0.000
3	FUNCTION1 HXCD...	25.80	1.117e2					2.9	NO		bb		0.000
4	FUNCTION1 HXCD...	24.66	1.639e2					2.9	NO		bb		0.000
5	FUNCTION1 HXCD...	22.60	7.192e1					2.9	NO		db		0.000
6	FUNCTION1 HXCD...	22.50	8.043e1					1.8	NO		bd		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.45	7.793e1					1.7	NO		bb		0.000
2	FUNCTION2 HPCD...	32.17	8.383e1					1.0	NO		bb		0.000
3	FUNCTION2 HPCD...	31.37	2.641e2					3.8	YES		db		0.000
4	FUNCTION2 HPCD...	31.22	8.237e1					1.5	NO		bd		0.000
5	FUNCTION2 HPCD...	30.15	1.004e2					2.9	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	42.55	1.730e2					3.1	YES		db		0.000
2	FUNCTION4 NCDPE	42.32	1.794e2					3.1	YES		bd		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

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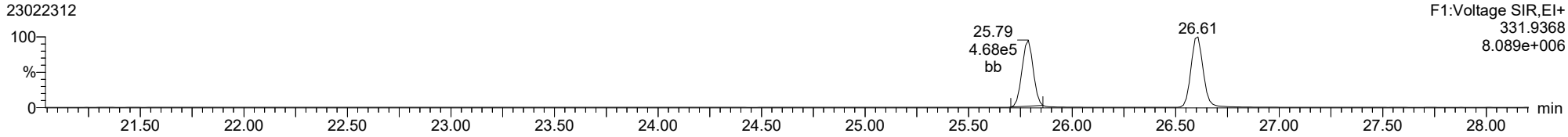
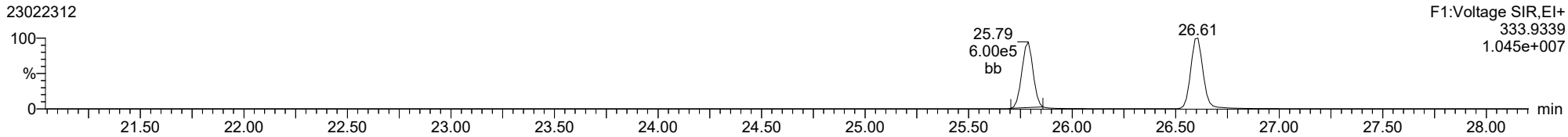
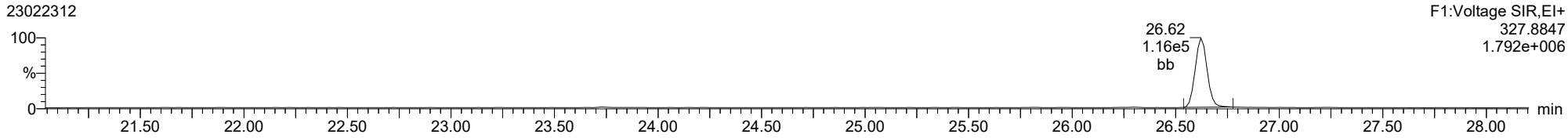
13C-1234-TCDD



13C-1234-TCDD



37CL-2378-TCDD



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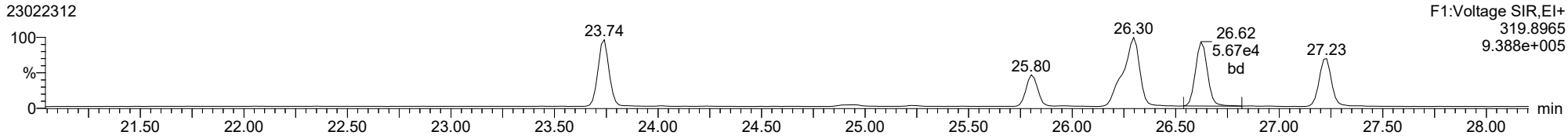
2378-TCDD



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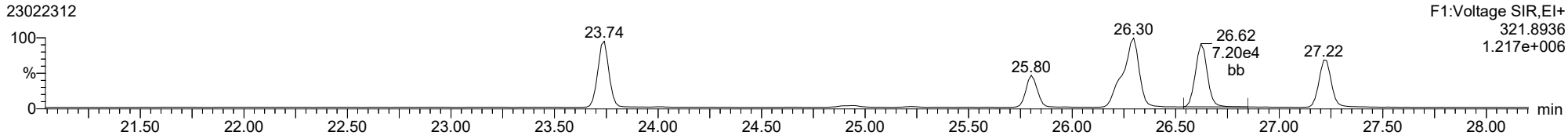

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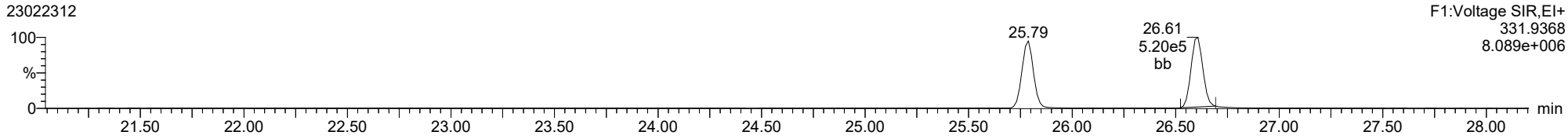

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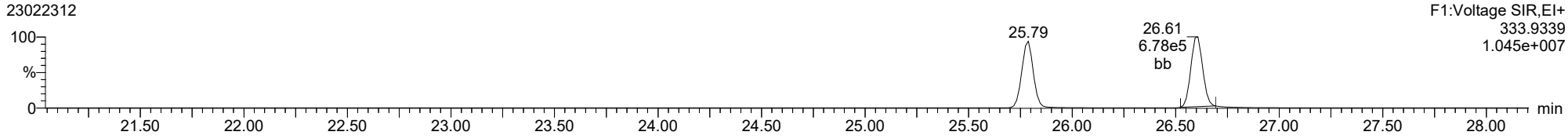

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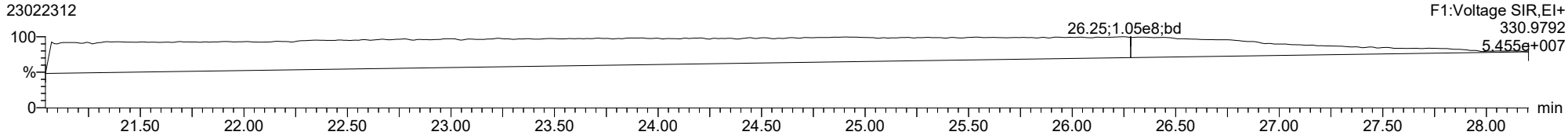

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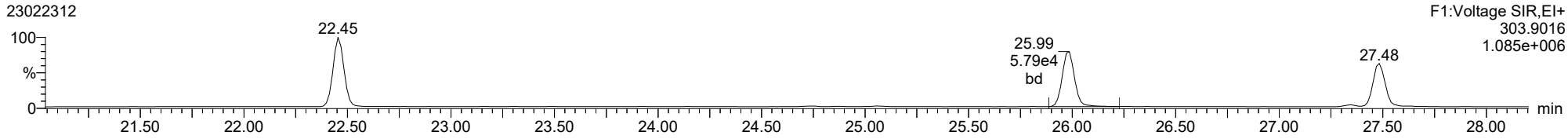

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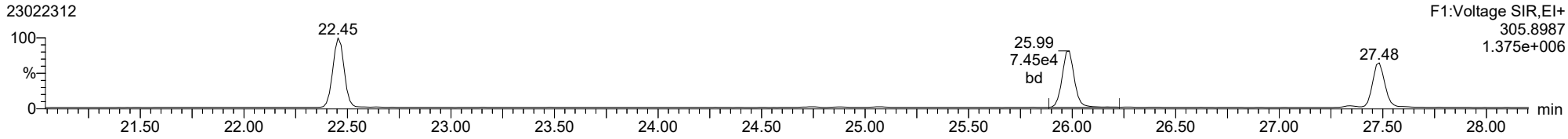

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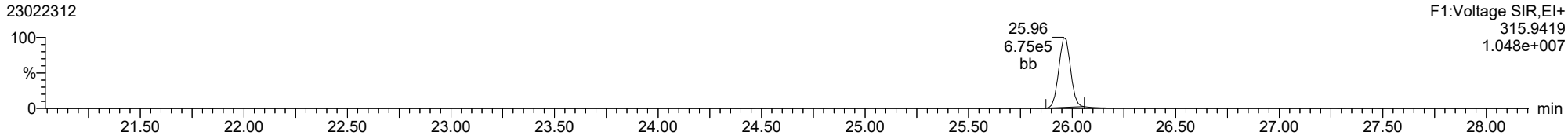

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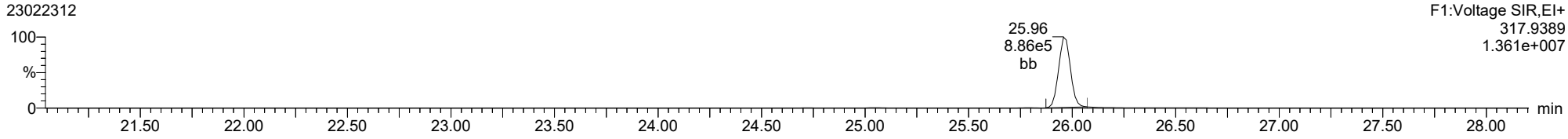

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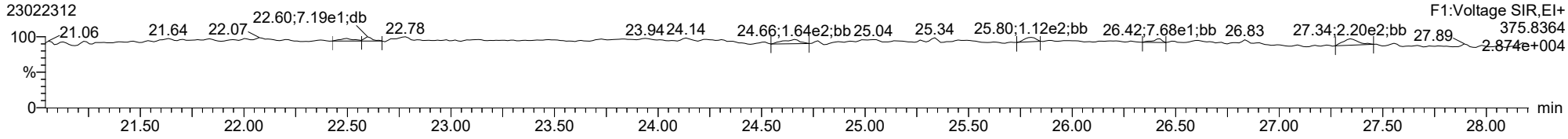

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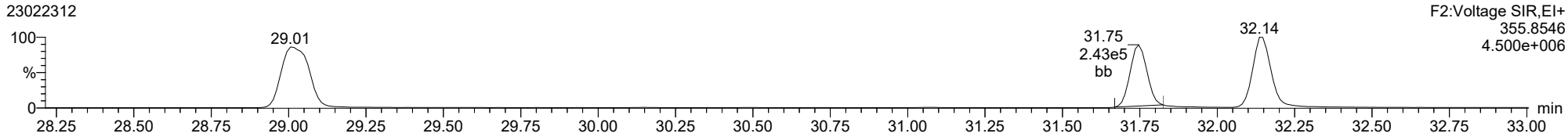

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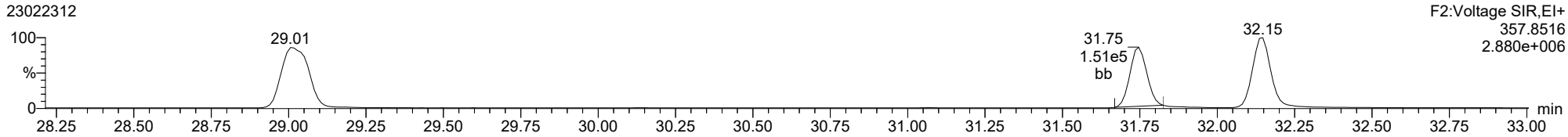

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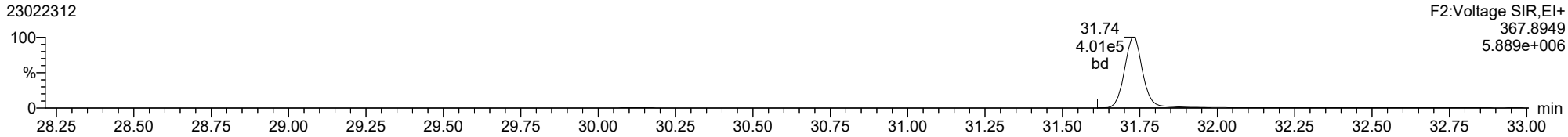

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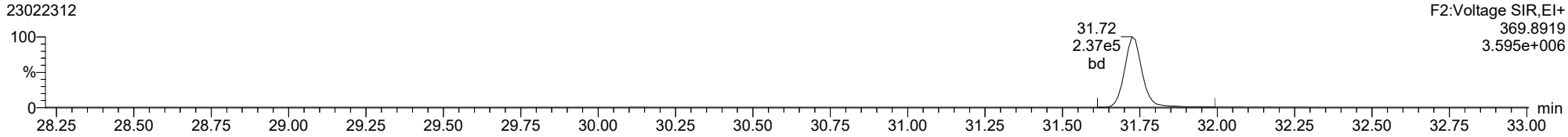

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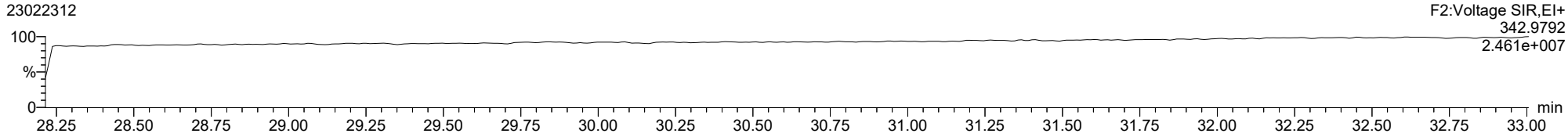

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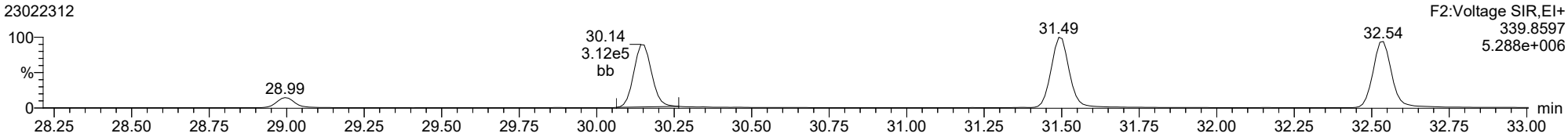

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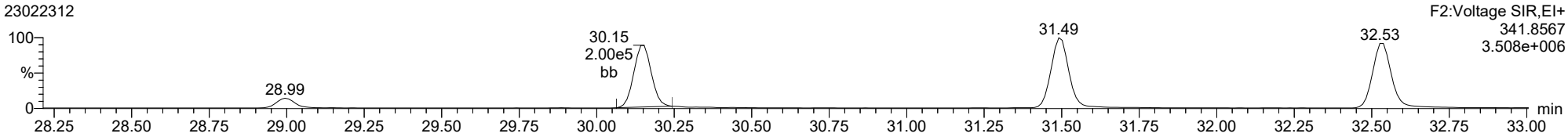

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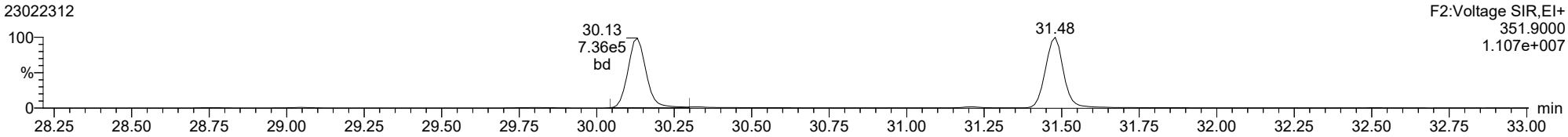

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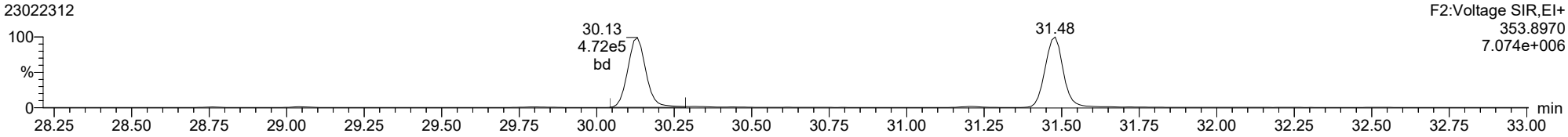
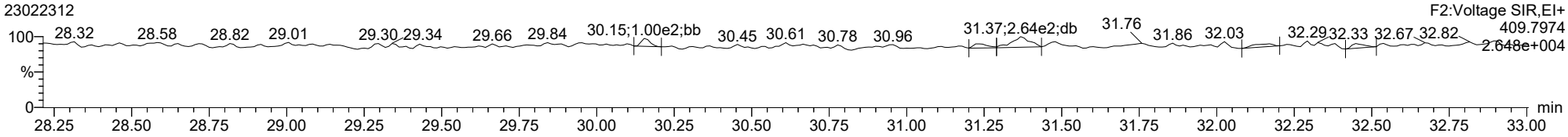


FUNCTION2 HPCDPE



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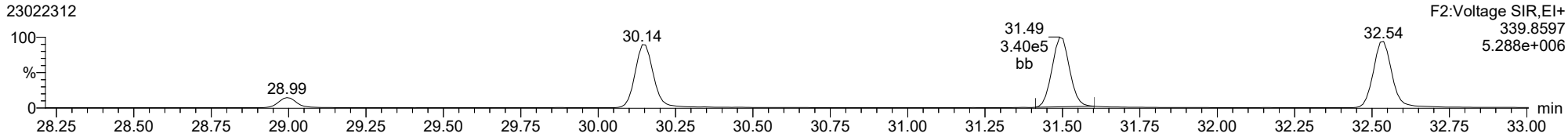

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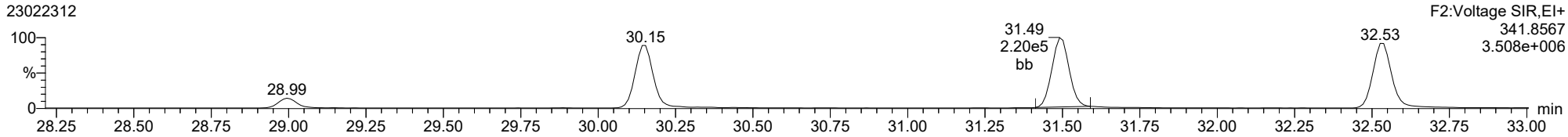

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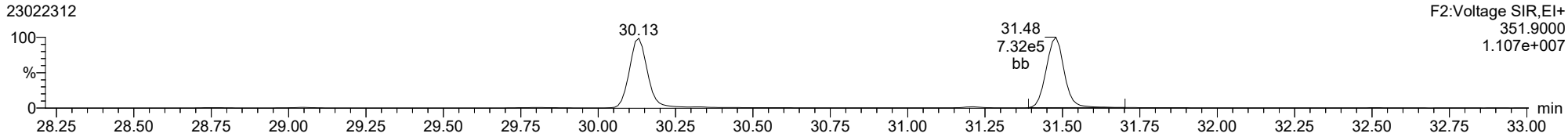

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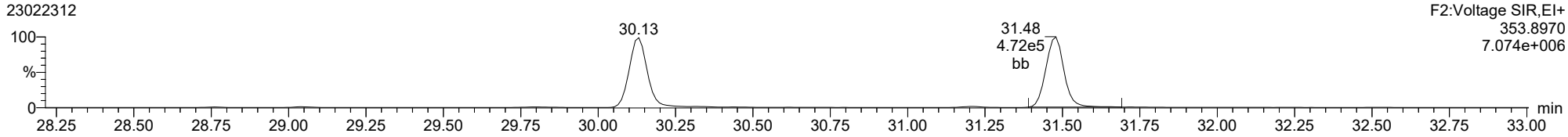

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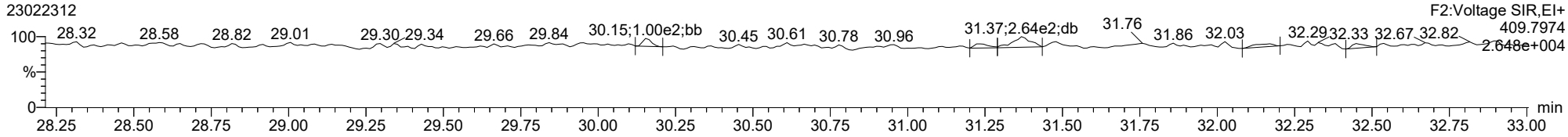

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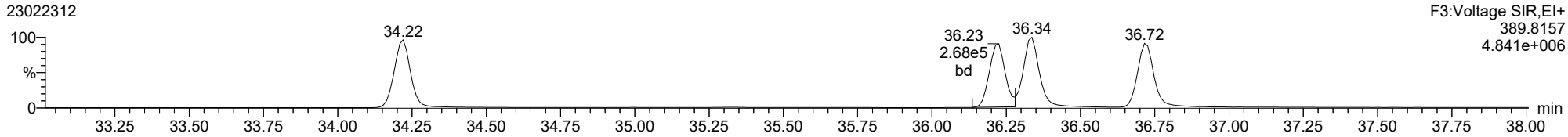

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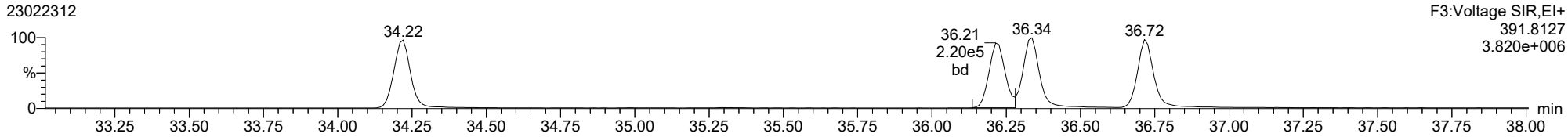

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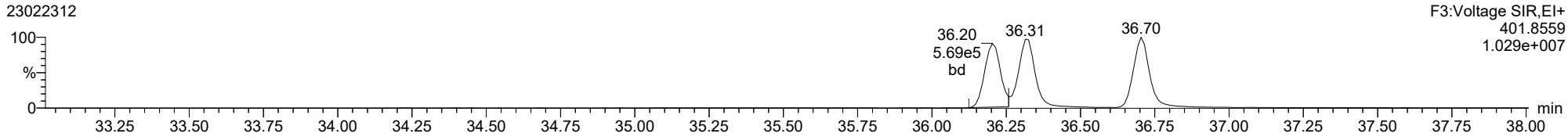

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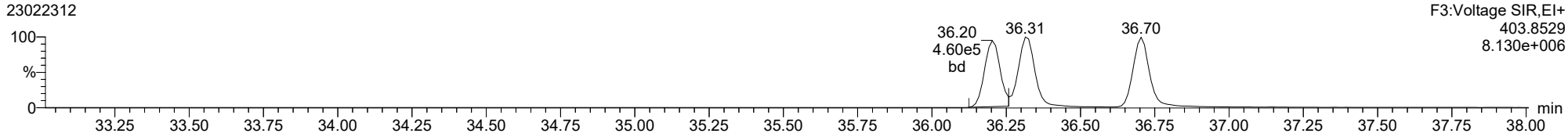

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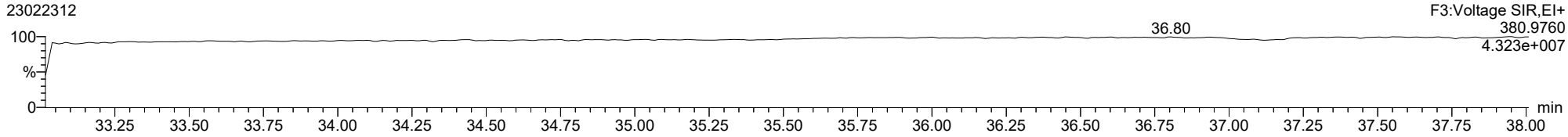

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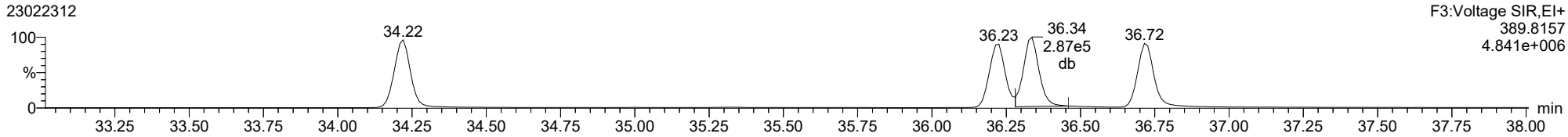

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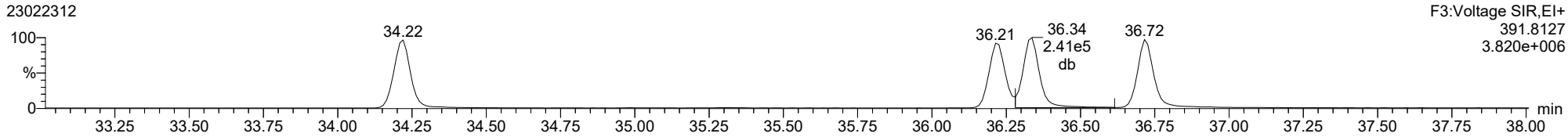

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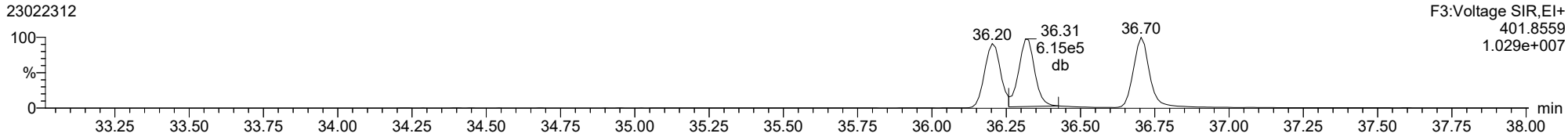

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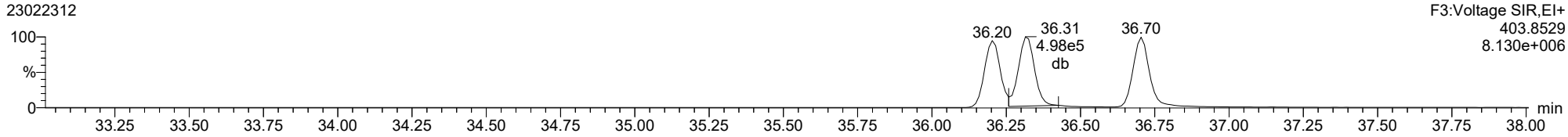

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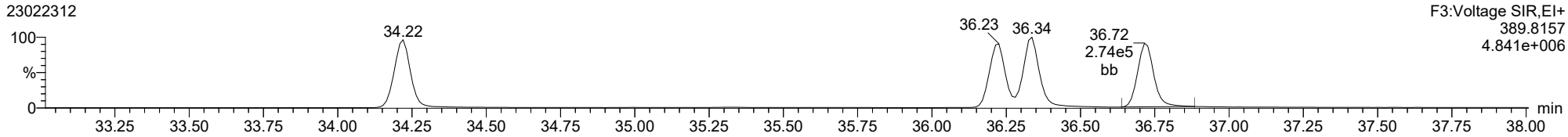

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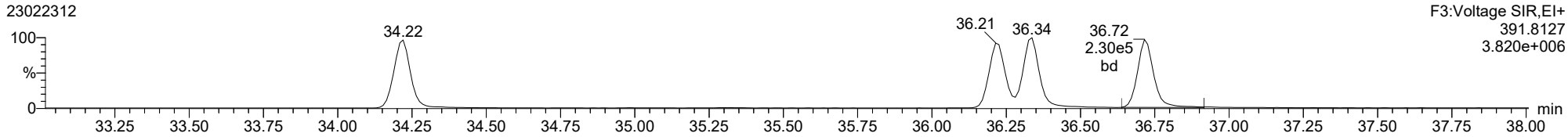

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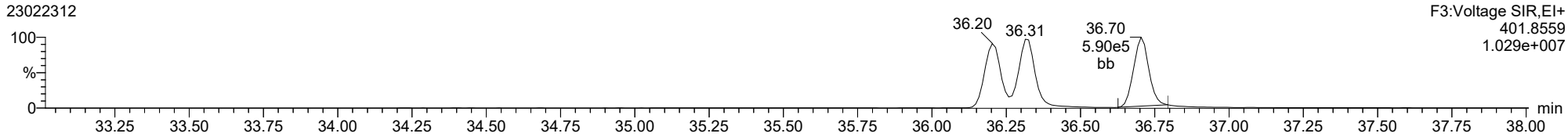

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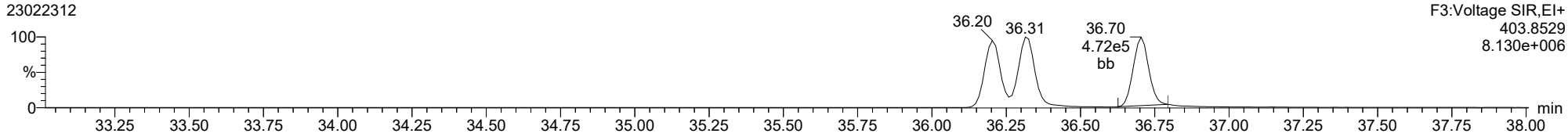

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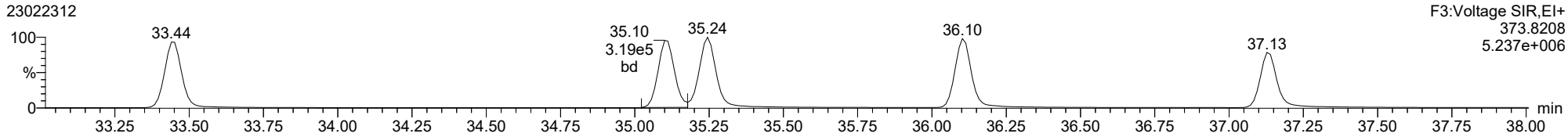

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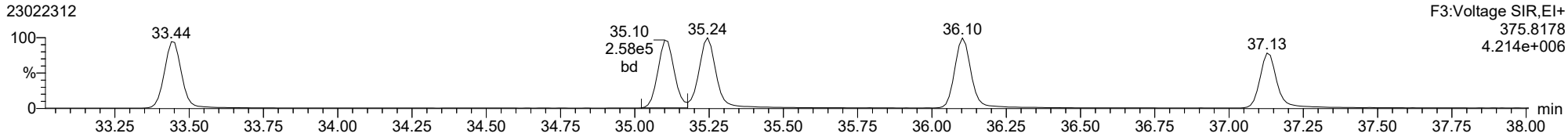

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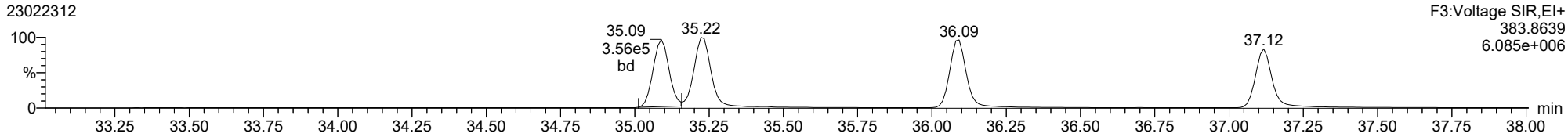

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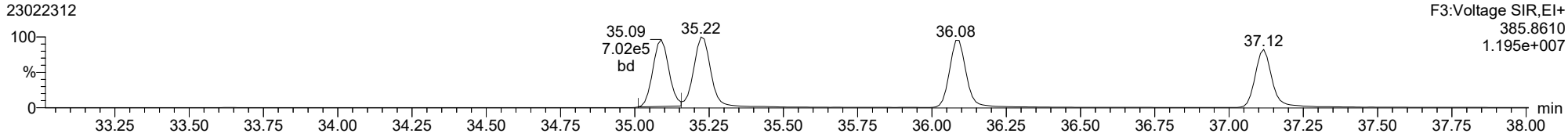
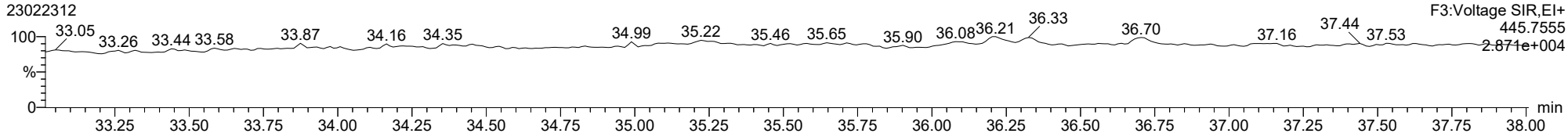


FUNCTION3 OCDPE



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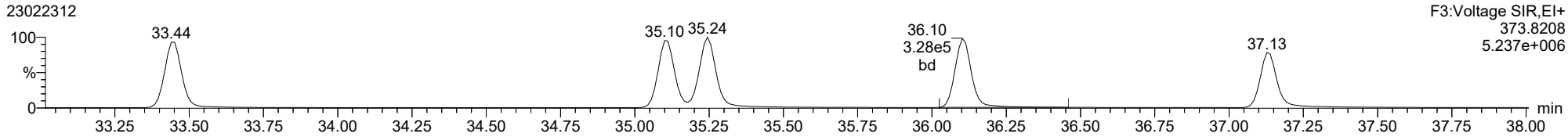

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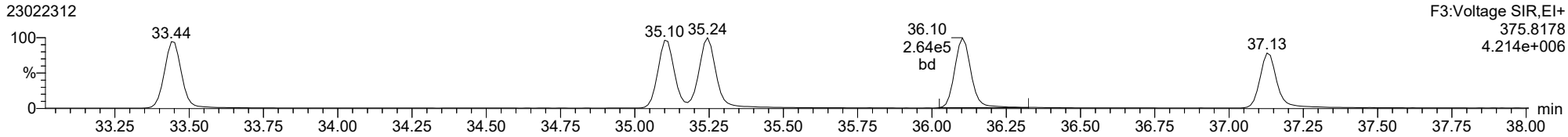

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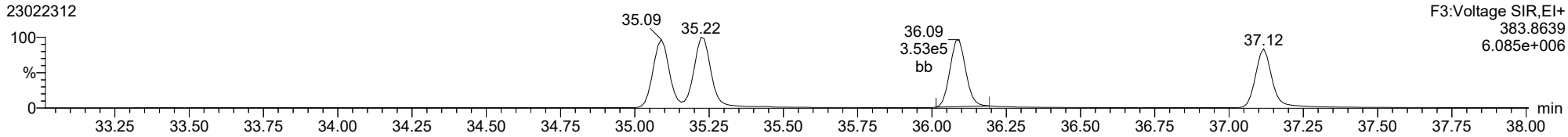

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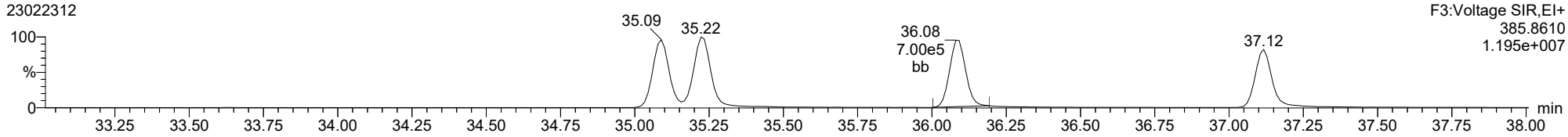
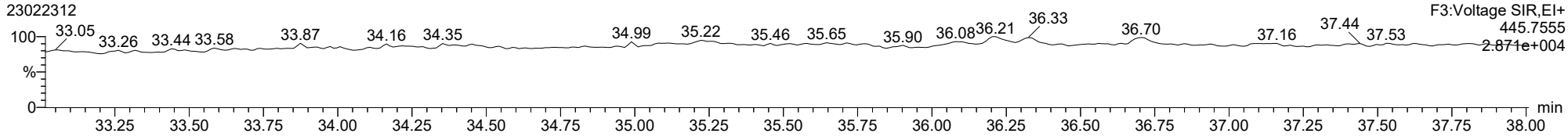


FUNCTION3 OCDPE



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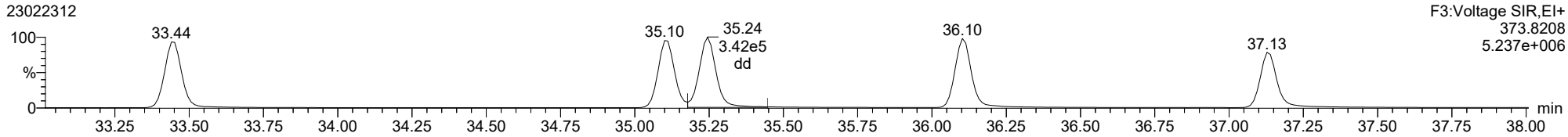

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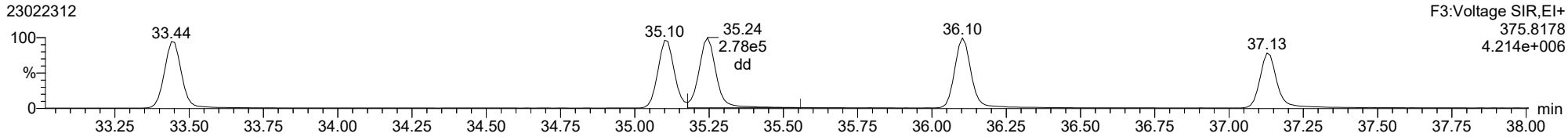

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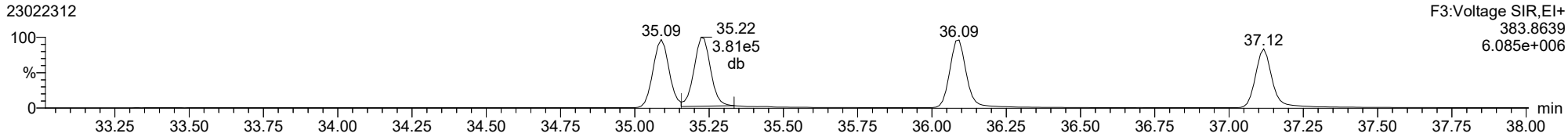

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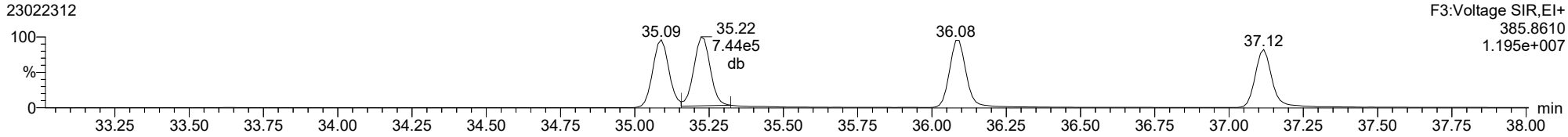

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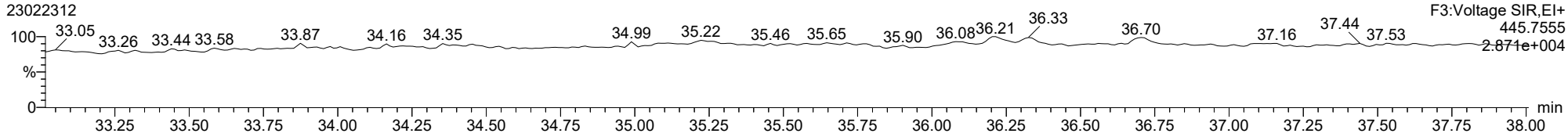

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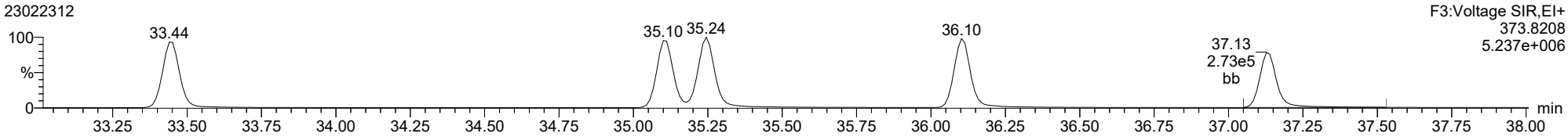

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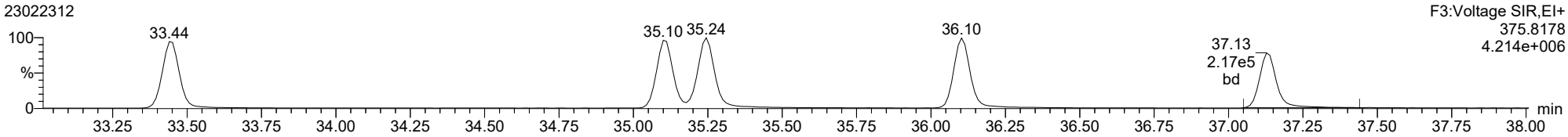

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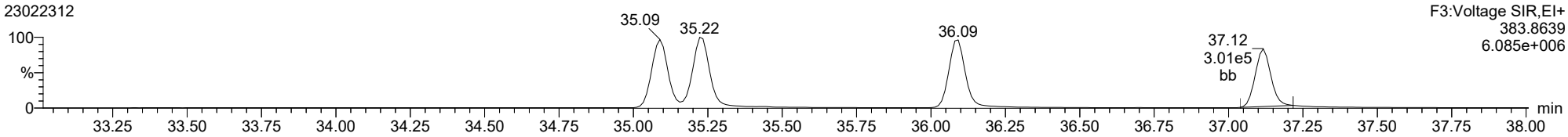

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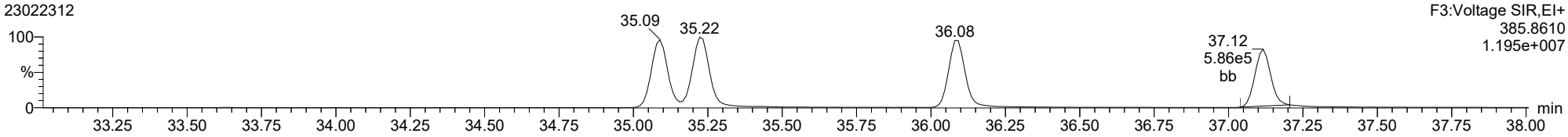
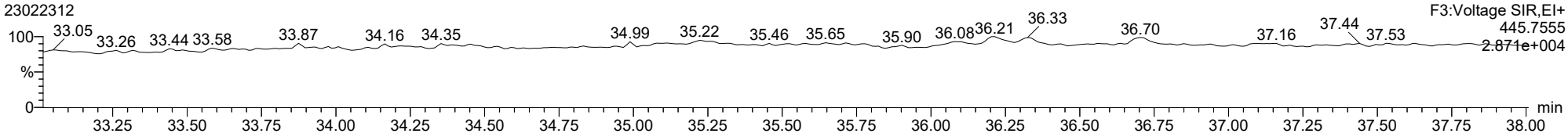


FUNCTION3 OCDPE



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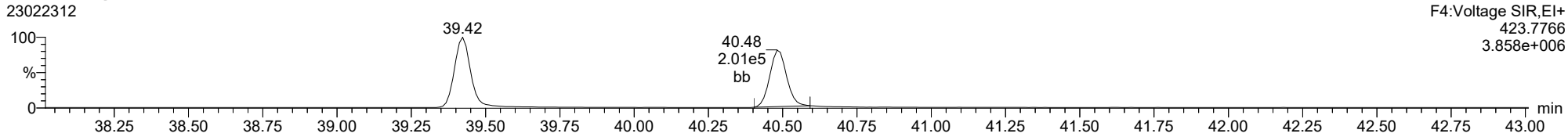

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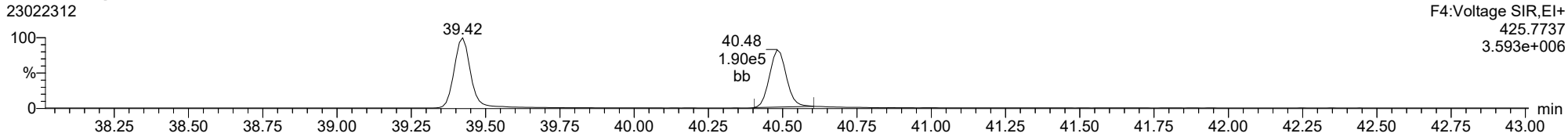

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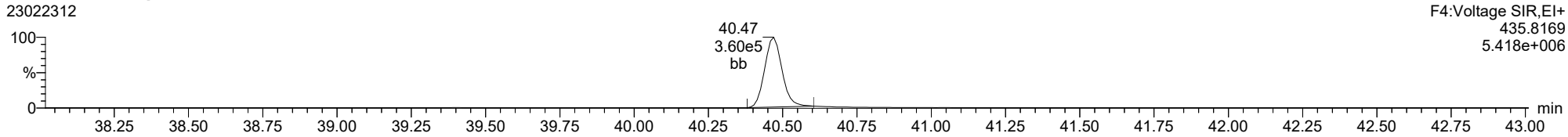

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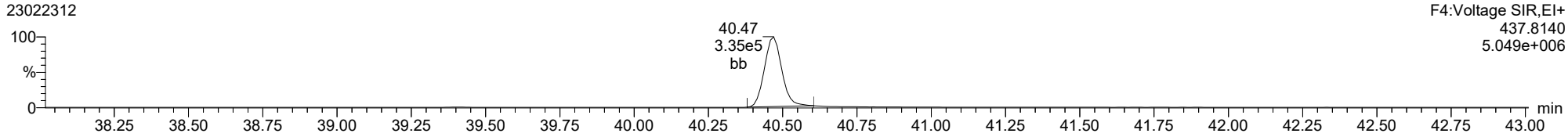
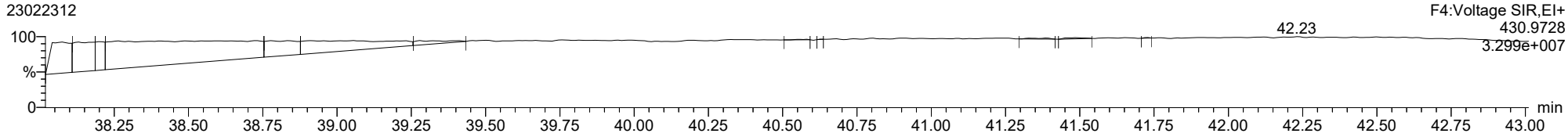


FUNCTION4 PFK



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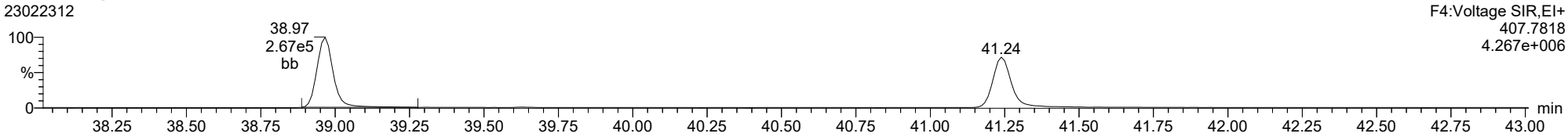

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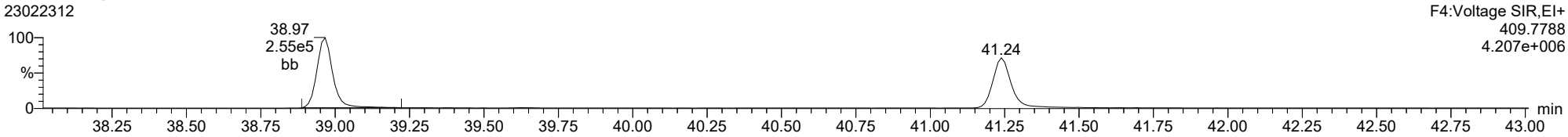

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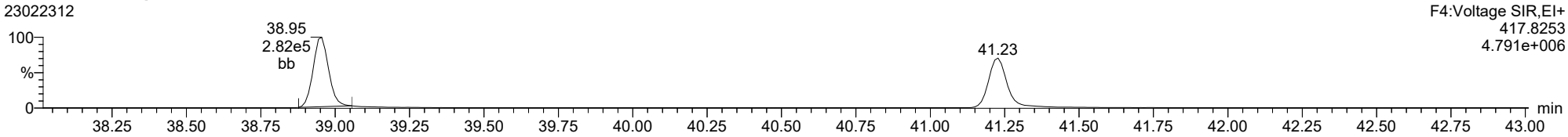

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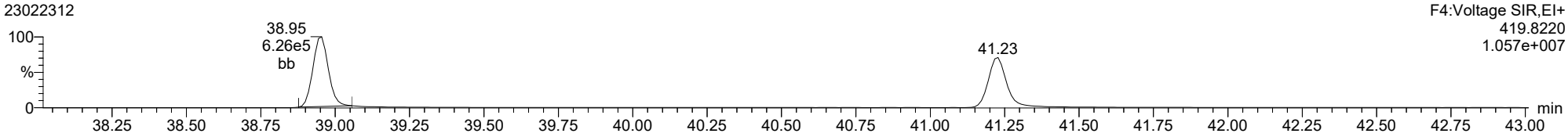
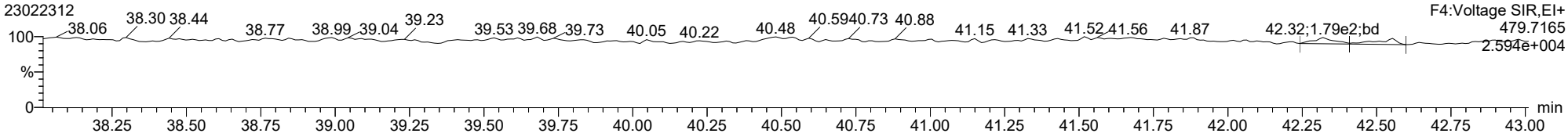


FUNCTION4 NCDPE



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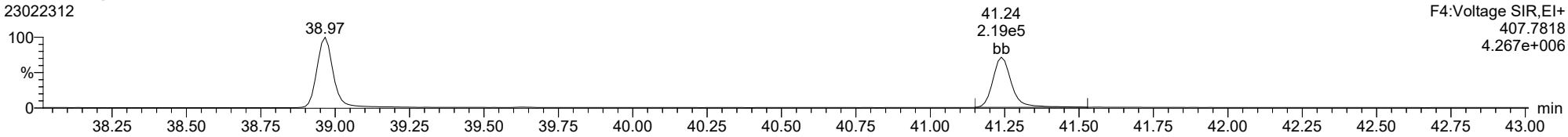

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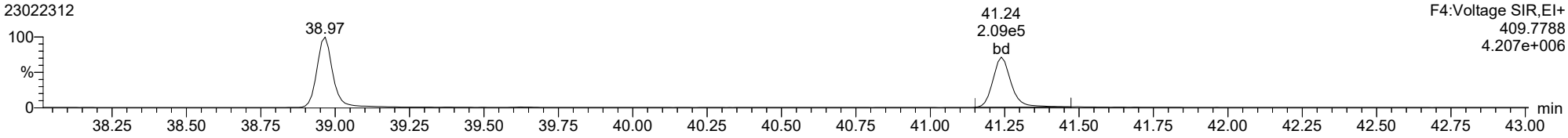

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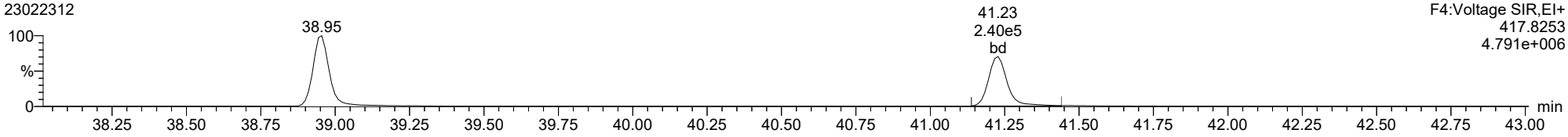

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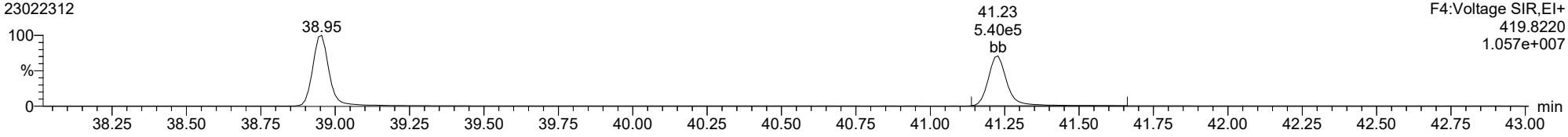

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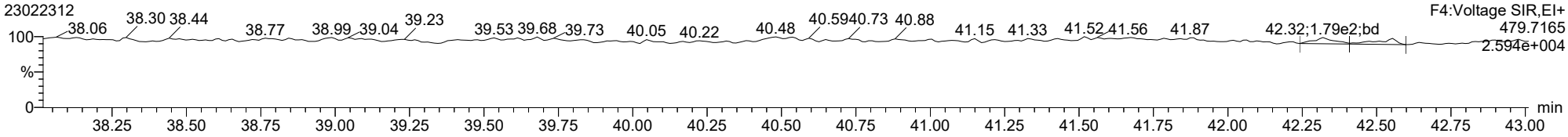

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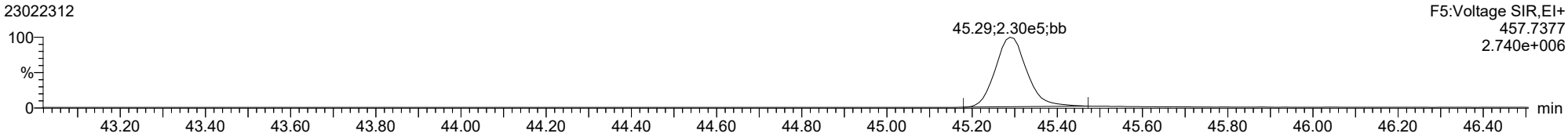
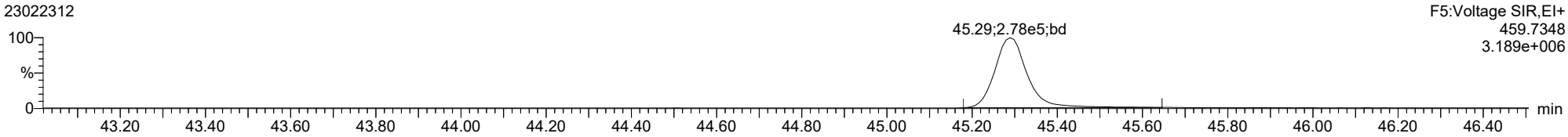
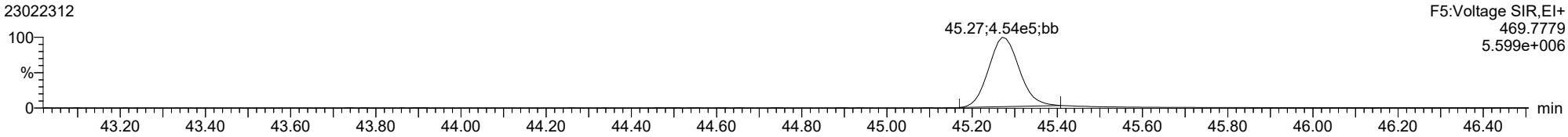


OCDD



13C-OCDD



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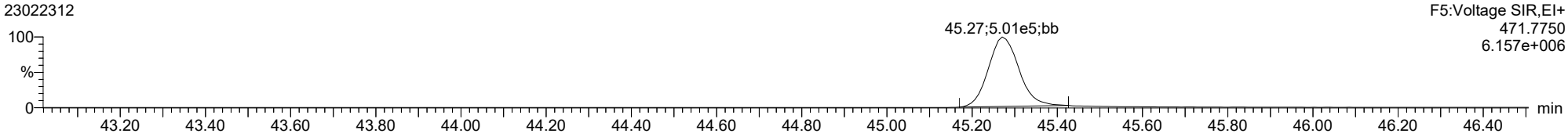
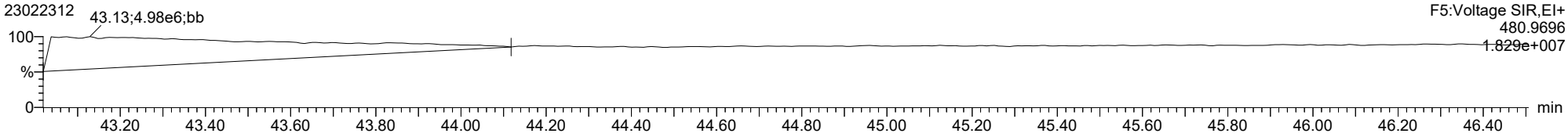


FUNCTION5 PFK



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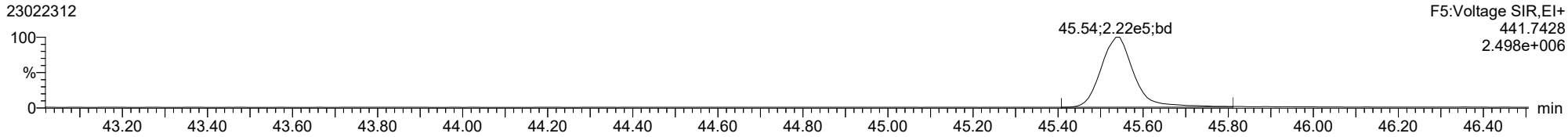

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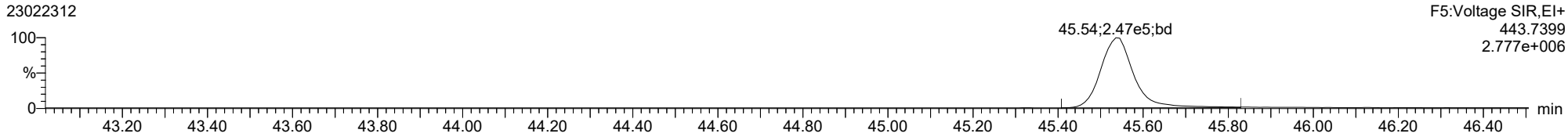
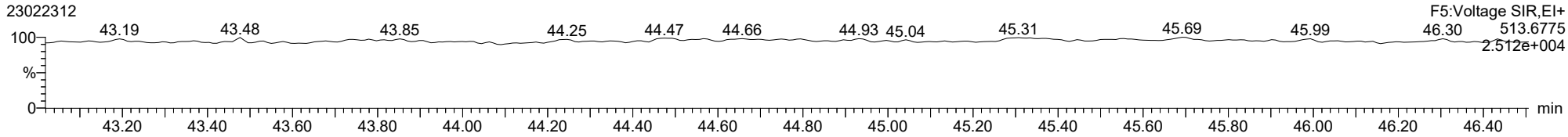


FUNCTION5 DCDPE



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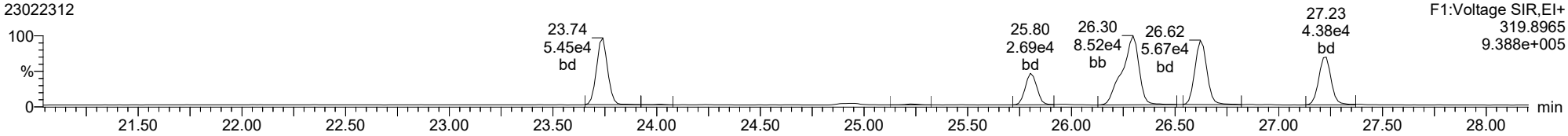
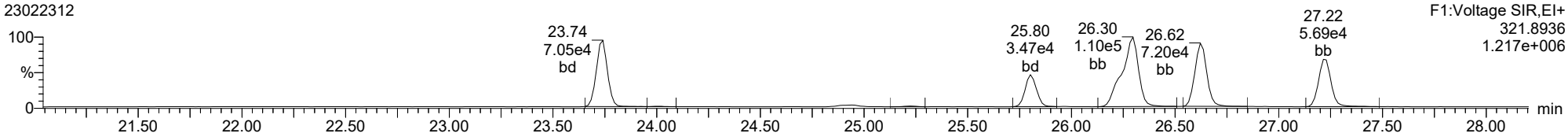
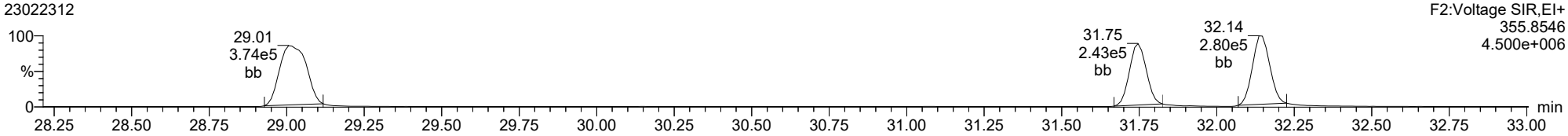
Total-tetradioxins



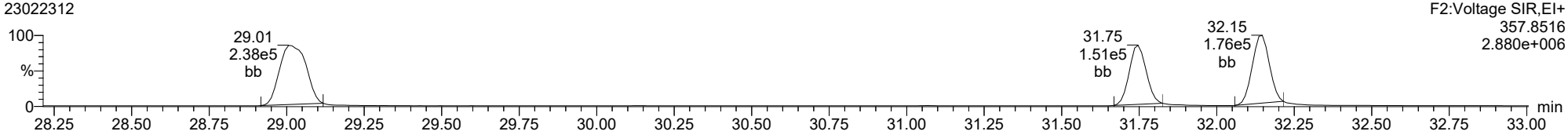
Total-tetradioxins



Total-pentadioxins



Total-pentadioxins



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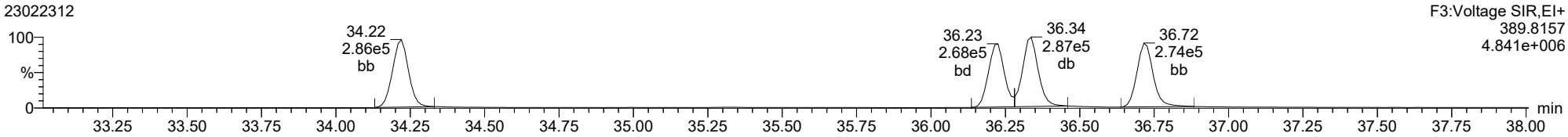
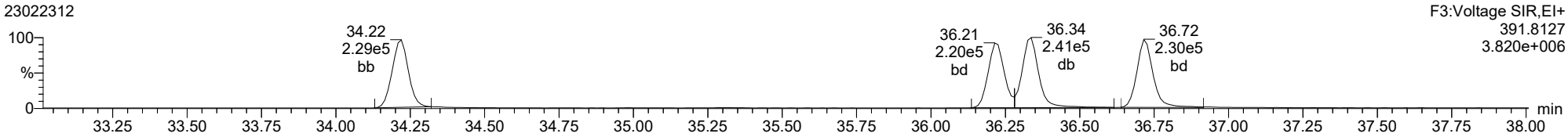
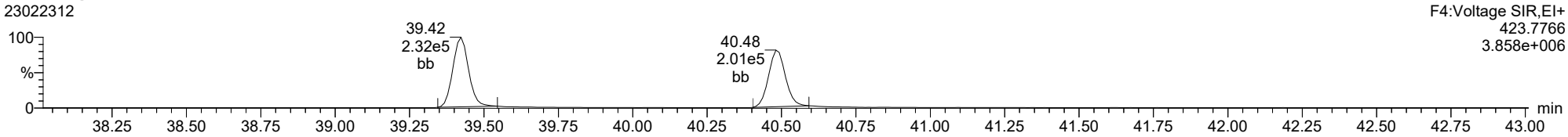
Total-hexadioxins



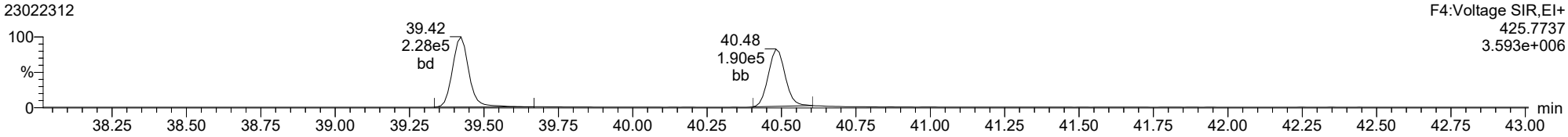
Total-hexadioxins



Total-heptadioxins



Total-heptadioxins



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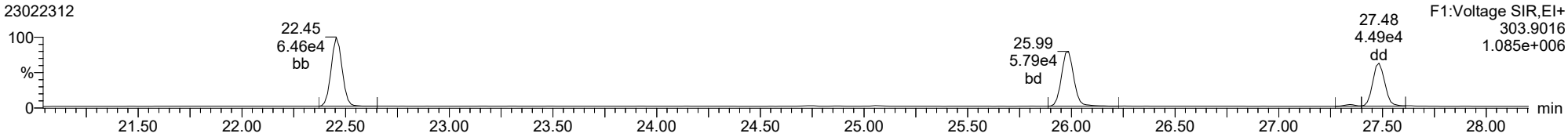
Total-tetrafurans



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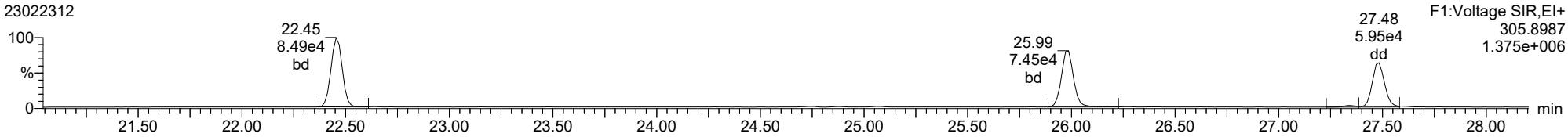

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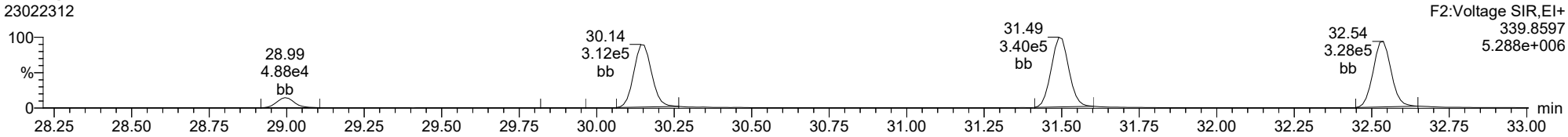
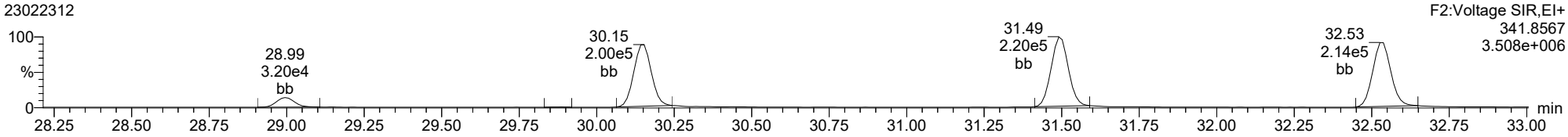


Total-pentafurans



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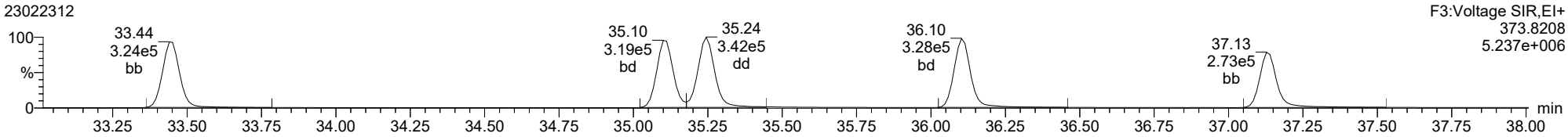
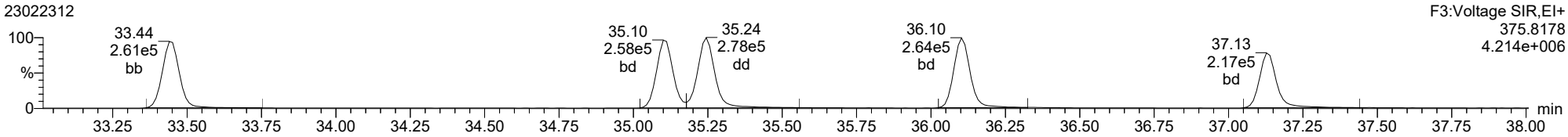
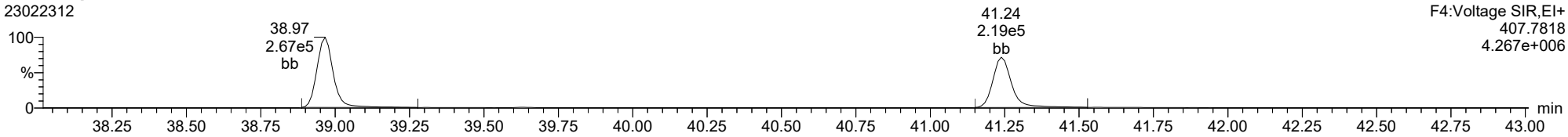
Total-hexafurans



Total-hexafurans



Total-heptafurans



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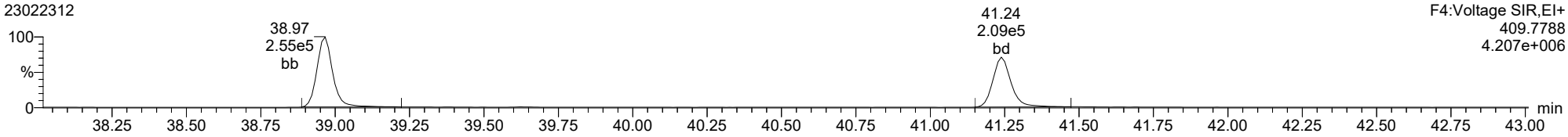

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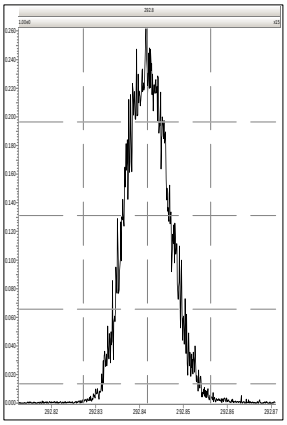
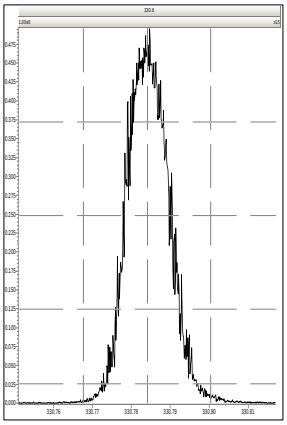
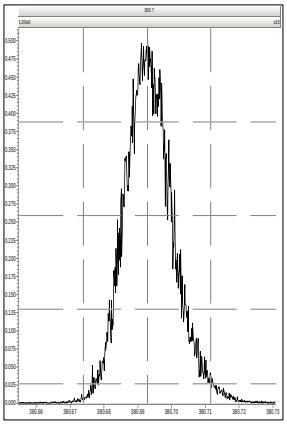
M 292.9824 R 13335



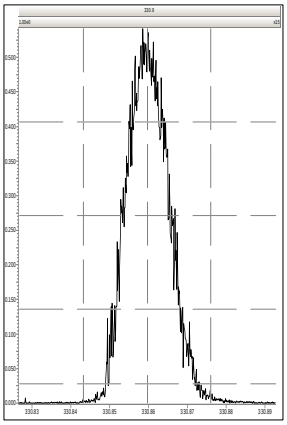
M 330.9792 R 14244



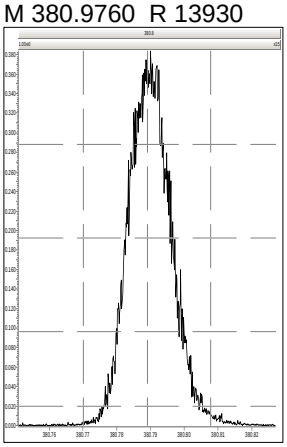
M 380.9760 R 11086



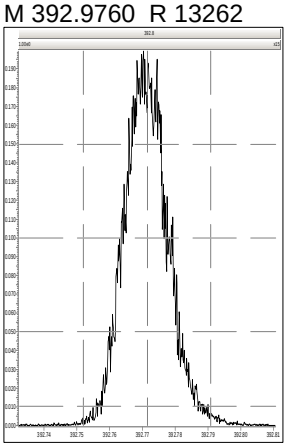
M 330.9792 R 14084



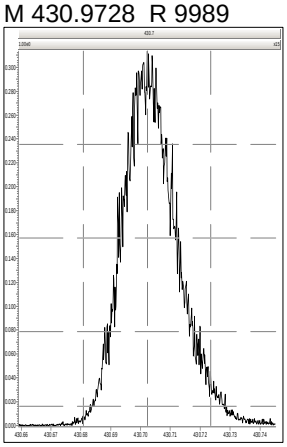
M 380.9760 R 13930



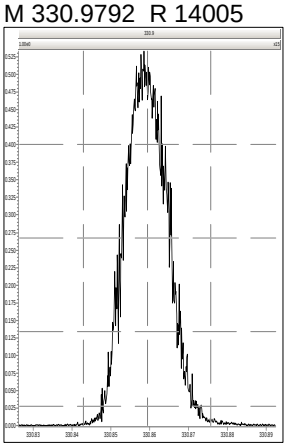
M 392.9760 R 13262



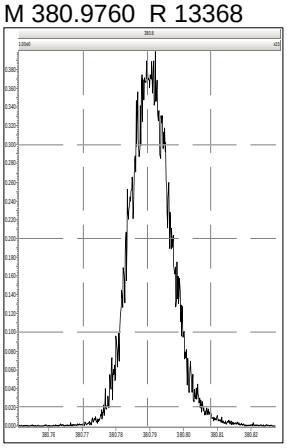
M 430.9728 R 9989



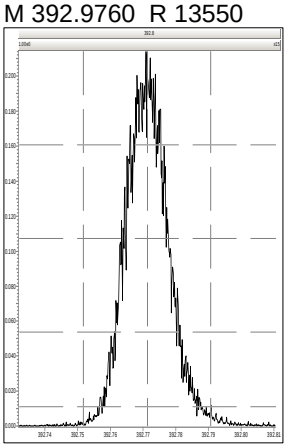
M 330.9792 R 14005



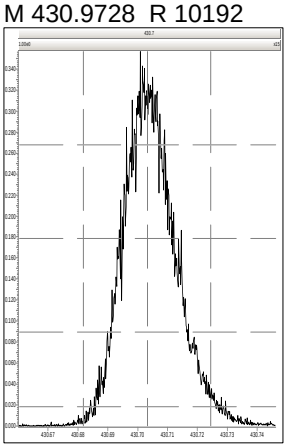
M 380.9760 R 13368



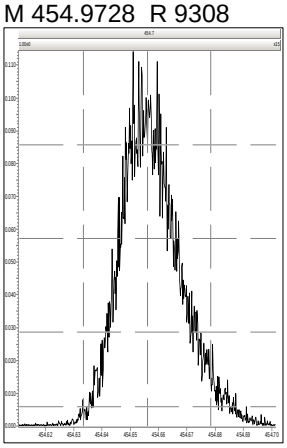
M 392.9760 R 13550



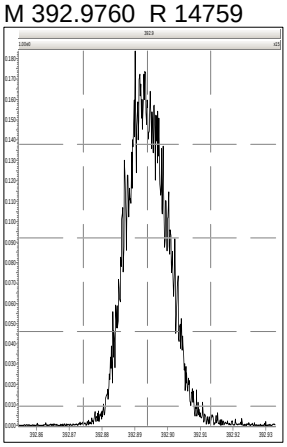
M 430.9728 R 10192



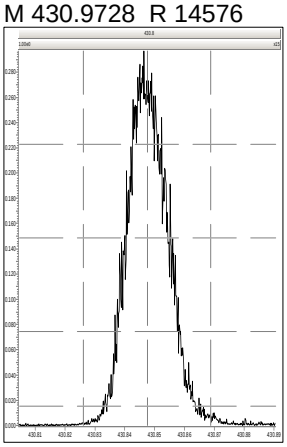
M 454.9728 R 9308



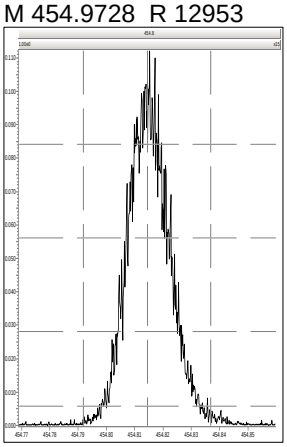
M 392.9760 R 14759



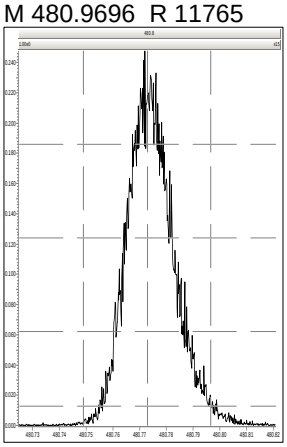
M 430.9728 R 14576



M 454.9728 R 12953



M 480.9696 R 11765



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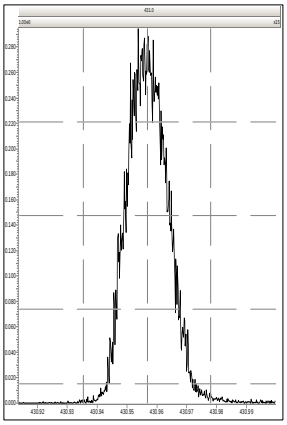
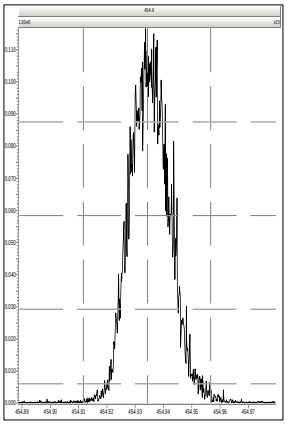
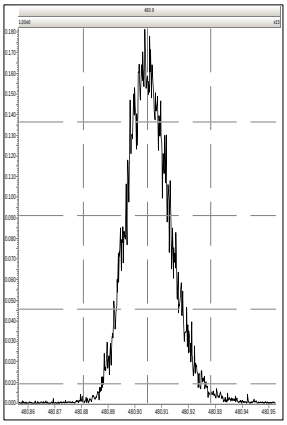
M 430.9728 R 14797



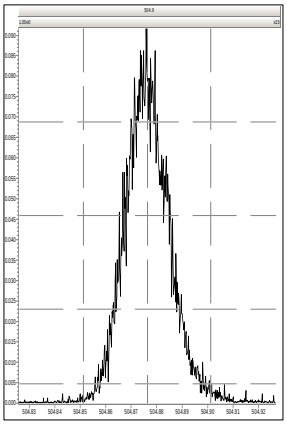
M 454.9728 R 14800



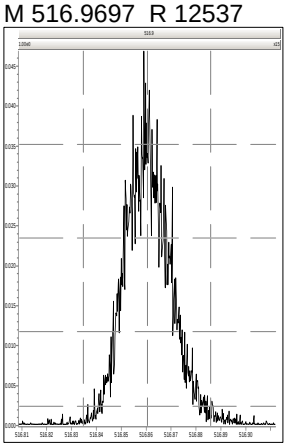
M 480.9696 R 13130

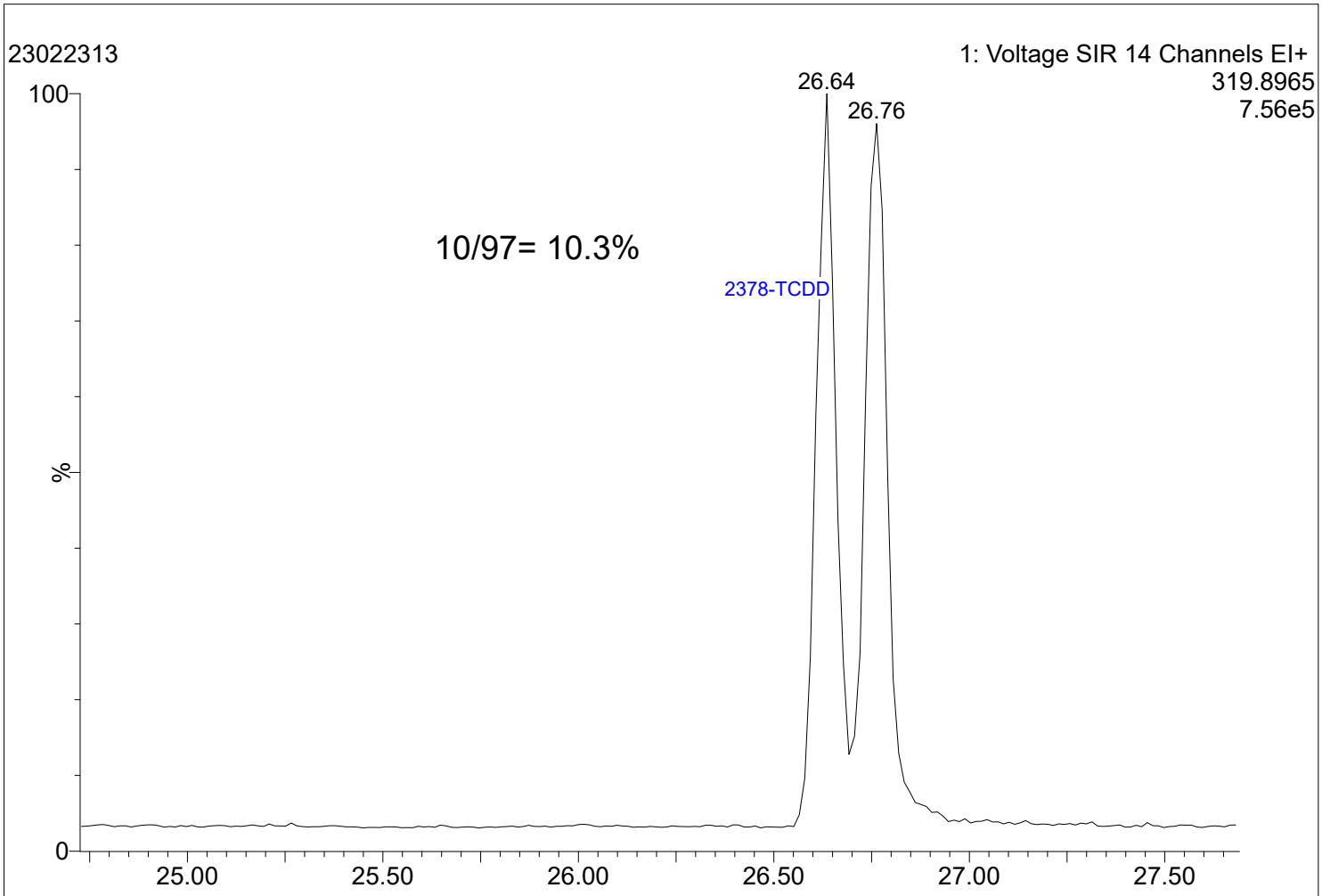


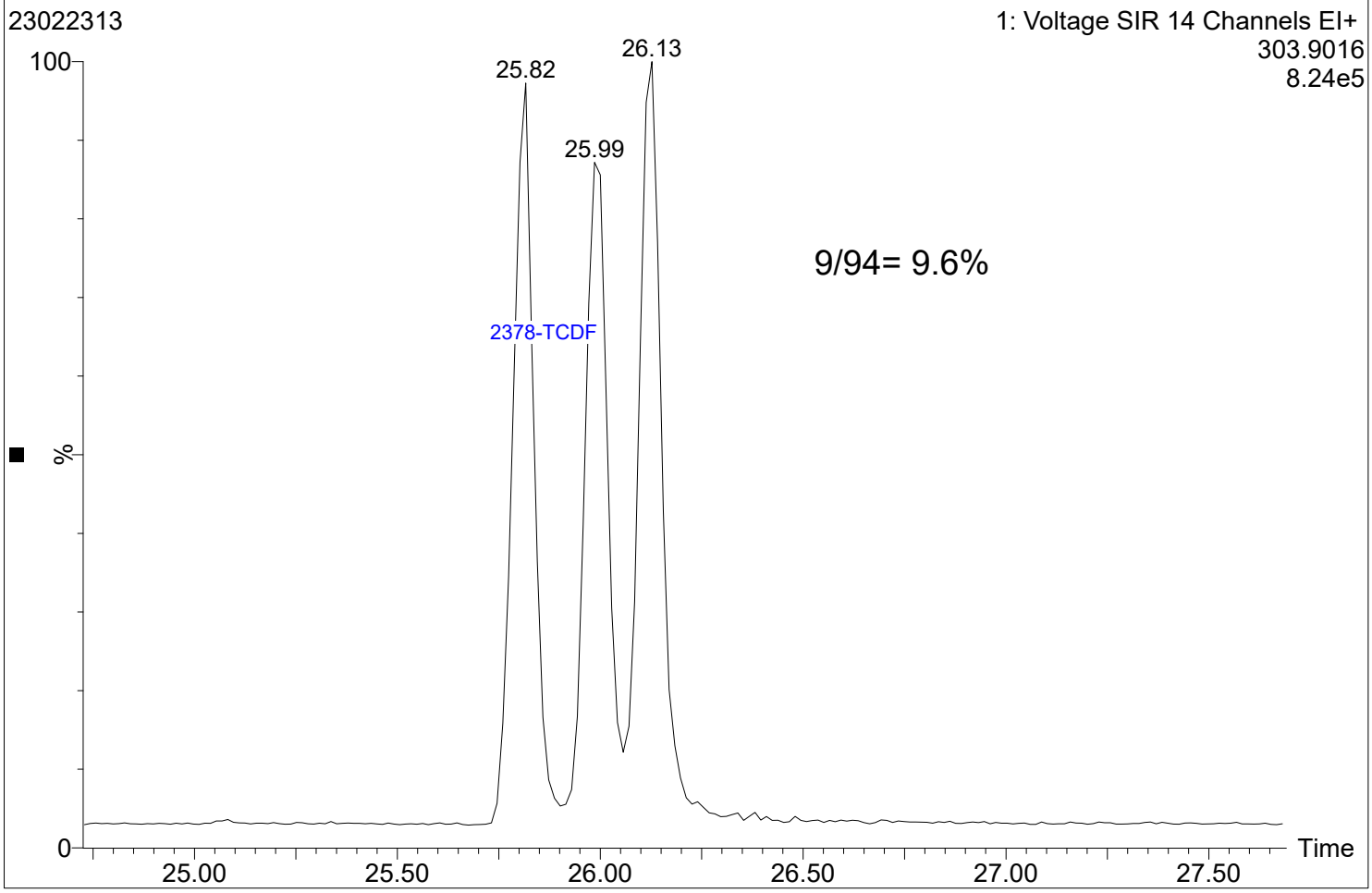
M 504.9696 R 12570



M 516.9697 R 12537




23022313
1: Voltage SIR 14 Channels EI+
319.8965
7.56e5
26.64
26.76
10/97= 10.3%
2378-TCDD
100
%
0
25.00
25.50
26.00
26.50
27.00
27.50


23022313
1: Voltage SIR 14 Channels EI+
303.9016
8.24e5
25.82
25.99
26.13
9/94= 9.6%
2378-TCDF
100
%
0
Time
25.00
25.50
26.00
26.50
27.00
27.50

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GB00010
Lab File ID:	23022321A	Calibration Date:	02/01/2023
Sequence:	SLB0345	Injection Date:	02/24/23
Lab Sample ID:	SLB0345-CCV2	Injection Time:	02:43
Sequence Name:	CS3V5		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
2,3,7,8-TCDF	A	10.000	9.24	0.8760604	0.8091039		-7.6	+/-16	
2,3,7,8-TCDD	A	10.000	8.38	1.2363600	1.0358980		-16.2	+/-22	
1,2,3,7,8-PeCDF	A	50.000	50.9	0.8446540	0.8601509		1.8	+/-18	
2,3,4,7,8-PeCDF	A	50.000	51.5	0.9111780	0.9380720		3.0	+/-18	
1,2,3,7,8-PeCDD	A	50.000	62.0	1.0866850	1.3467870		23.9	+/-22	
1,2,3,4,7,8-HxCDF	A	50.000	45.1	1.1816860	1.0653080		-9.8	+/-10	
1,2,3,6,7,8-HxCDF	A	50.000	42.9	1.2480480	1.0698460		-14.3	+/-12	*
2,3,4,6,7,8-HxCDF	A	50.000	44.3	1.2288500	1.0888570		-11.4	+/-12	
1,2,3,7,8,9-HxCDF	A	50.000	45.5	1.1865370	1.0789550		-9.1	+/-10	
1,2,3,4,7,8-HxCDD	A	50.000	47.0	0.9869672	0.9271368		-6.1	+/-22	
1,2,3,6,7,8-HxCDD	A	50.000	48.0	1.0207220	0.9797215		-4.0	+/-22	
1,2,3,7,8,9-HxCDD	A	50.000	49.0	0.9854780	0.9649724		-2.1	+/-18	
1,2,3,4,6,7,8-HpCDF	A	50.000	47.2	1.2041190	1.1366090		-5.6	+/-10	
1,2,3,4,7,8,9-HpCDF	A	50.000	45.6	1.1653050	1.0625080		-8.8	+/-14	
1,2,3,4,6,7,8-HpCDD	A	50.000	48.8	1.2525690	1.2233040		-2.3	+/-14	
OCDF	A	100.00	71.3	1.1862640	0.8452952		-28.7	+/-37	
OCDD	A	100.00	125	1.1026670	1.3780580		25.0	+/-21	
13C12-2,3,7,8-TCDF	A	100.00	81.2	1.7680590	1.4358260		-18.8	+/-29	
13C12-2,3,7,8-TCDD	A	100.00	110	1.1029470	1.2154117		10.2	+/-18	
13C12-1,2,3,7,8-PeCDF	A	100.00	73.6	1.5271250	1.1245532		-26.4	+/-24	*
13C12-2,3,4,7,8-PeCDF	A	100.00	73.8	1.4662840	1.0819503		-26.2	+/-23	*
13C12-1,2,3,7,8-PeCDD	A	100.00	57.3	0.9141518	0.5234609		-42.7	+/-38	*
13C12-1,2,3,4,7,8-HxCDF	A	100.00	97.6	1.0536610	1.0281616		-2.4	+/-24	
13C12-1,2,3,6,7,8-HxCDF	A	100.00	99.0	1.0799530	1.0693713		-1.0	+/-30	
13C12-2,3,4,6,7,8-HxCDF	A	100.00	97.8	1.0143260	0.9923079		-2.2	+/-27	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	97.7	0.9279333	0.9066590		-2.3	+/-26	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	104	0.9329336	0.9665548		3.6	+/-15	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	106	0.9646272	1.0196339		5.7	+/-15	
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	89.3	1.0360890	0.9253654		-10.7	+/-22	
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	91.7	0.9049372	0.8298028		-8.3	+/-23	
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	93.5	0.7819773	0.7314846		-6.5	+/-28	
13C12-OCDD	A	200.00	146	0.7882343	0.5739002		-27.2	+/-52	
37Cl4-2,3,7,8-TCDD	A	10.000	9.43	1.2334500	1.1629976		-5.7		

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:13:02 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

ID: CS3V5, Name: 23022321, Date: 24-Feb-2023, Time: 02:43:06, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.972	1.000	5.957e4	8.413e4	0.876	0.708	0.770	792	1020	9.44e5	1.34e6	1192.5	1311.2	NO	bb	bb	9.236
12378-PeCDF	30.142	1.001	3.621e5	2.361e5	0.845	1.534	1.550	1751	1549	5.70e6	3.69e6	3257.3	2382.0	NO	bb	bb	50.917
23478-PeCDF	31.490	1.001	3.785e5	2.492e5	0.911	1.518	1.550	1751	1549	5.86e6	3.86e6	3348.2	2495.4	NO	bb	bb	51.476
123478-HxCDF	35.100	1.000	3.705e5	3.032e5	1.182	1.222	1.240	2317	2033	5.89e6	4.83e6	2544.2	2373.6	NO	MM	MM	45.076
234678-HxCDF	36.103	1.001	3.684e5	2.962e5	1.229	1.244	1.240	2317	2033	5.88e6	4.74e6	2536.3	2333.9	NO	bd	bd	44.304
123678-HxCDF	35.234	1.000	3.859e5	3.178e5	1.248	1.214	1.240	2317	2033	5.84e6	4.75e6	2520.3	2334.3	NO	dd	dd	42.861
123789-HxCDF	37.128	1.000	3.339e5	2.678e5	1.187	1.247	1.240	2317	2033	5.15e6	4.15e6	2223.4	2041.4	NO	MM	MM	45.467
1234678-HpCDF	38.966	1.000	3.295e5	3.174e5	1.204	1.038	1.050	1349	1718	5.37e6	5.19e6	3977.8	3022.8	NO	bd	bd	47.197
1234789-HpCDF	41.239	1.000	2.735e5	2.688e5	1.165	1.017	1.050	1349	1718	3.79e6	3.68e6	2808.7	2143.5	NO	bd	bd	45.589
OCDF	45.536	1.006	2.815e5	3.153e5	1.186	0.893	0.890	1296	1410	3.15e6	3.48e6	2430.3	2468.0	NO	bd	bd	71.257
2378-TCDD	26.622	1.001	6.857e4	8.717e4	1.236	0.787	0.770	733	767	1.04e6	1.32e6	1418.5	1720.9	NO	bb	bb	8.379
12378-PeCDD	31.747	1.001	2.681e5	1.679e5	1.087	1.597	1.550	2368	1264	4.22e6	2.70e6	1781.6	2135.1	NO	bb	bb	61.968
123478-HxCDD	36.214	1.000	3.071e5	2.442e5	0.987	1.258	1.240	1209	2018	5.15e6	4.07e6	4259.2	2016.6	NO	bd	bd	46.969
123678-HxCDD	36.337	1.001	3.473e5	2.671e5	1.021	1.300	1.240	1209	2018	5.44e6	4.38e6	4498.6	2171.9	NO	db	db	47.992
123789-HxCDD	36.715	1.011	3.270e5	2.625e5	0.985	1.246	1.240	1209	2018	5.38e6	4.29e6	4448.5	2128.3	NO	bb	bb	48.960
1234678-HpCDD	40.481	1.000	2.810e5	2.694e5	1.253	1.043	1.050	2032	1965	4.41e6	4.17e6	2172.9	2121.2	NO	bb	bb	48.832
OCDD	45.289	1.000	4.598e5	5.132e5	1.103	0.896	0.890	1629	2365	5.33e6	5.99e6	3269.6	2532.5	NO	bd	bb	124.975
13C-2378-TCDF	25.958	1.007	7.641e5	1.012e6	1.768	0.755	0.770	1186	1005	1.24e7	1.63e7	10456.0	16171.9	NO	bb	bb	81.209
13C-12378-PeCDF	30.120	1.169	8.432e5	5.478e5	1.527	1.539	1.550	2108	2750	1.28e7	8.23e6	6054.4	2991.4	NO	bd	bd	73.639
13C-23478-PeCDF	31.468	1.221	8.177e5	5.206e5	1.466	1.571	1.550	2108	2750	1.25e7	8.00e6	5927.6	2909.6	NO	bb	bb	73.789
13C-123478-HxCDF	35.089	0.956	4.239e5	8.410e5	1.054	0.504	0.510	1840	2172	6.66e6	1.32e7	3617.0	6084.1	NO	bd	bd	97.580
13C-123678-HxCDF	35.223	0.960	4.428e5	8.728e5	1.080	0.507	0.510	1840	2172	7.23e6	1.43e7	3931.5	6603.2	NO	db	db	99.020
13C-234678-HxCDF	36.081	0.983	4.146e5	8.061e5	1.014	0.514	0.510	1840	2172	6.71e6	1.30e7	3648.5	5989.1	NO	bb	bb	97.829
13C-123789-HxCDF	37.117	1.011	3.708e5	7.446e5	0.928	0.498	0.510	1840	2172	6.08e6	1.21e7	3302.4	5547.1	NO	bb	bb	97.707
13C-1234678-HpCDF	38.955	1.061	3.538e5	7.846e5	1.036	0.451	0.440	1640	2190	5.90e6	1.30e7	3599.3	5945.1	NO	bb	bb	89.313
13C-1234789-HpCDF	41.216	1.123	3.164e5	7.044e5	0.905	0.449	0.440	1640	2190	4.38e6	9.76e6	2669.7	4455.2	NO	bd	bd	91.697
13C-1234-TCDD	25.774	0.000	5.396e5	6.973e5	1.000	0.774	0.770	1741	946	8.89e6	1.15e7	5107.8	12119.9	NO	bb	bb	100.000
13C-2378-TCDD	26.594	1.032	6.551e5	8.483e5	1.103	0.772	0.770	1741	946	1.04e7	1.34e7	5948.8	14191.3	NO	bb	bb	110.197
13C-12378-PeCDD	31.724	1.231	4.031e5	2.444e5	0.914	1.649	1.550	791	846	5.74e6	3.54e6	7254.8	4180.6	NO	bb	bb	57.262
13C-123478-HxCDD	36.203	0.986	6.597e5	5.294e5	0.933	1.246	1.240	2290	1746	1.08e7	8.69e6	4705.7	4979.5	NO	bd	bd	103.604
13C-123678-HxCDD	36.314	0.989	6.892e5	5.652e5	0.965	1.219	1.240	2290	1746	1.15e7	9.22e6	5022.4	5282.2	NO	db	db	105.702
13C-1234678-HpCDD	40.470	1.103	4.680e5	4.318e5	0.782	1.084	1.050	1509	1406	7.06e6	6.47e6	4680.2	4603.1	NO	bb	bb	93.543
13C-OCDD	45.271	1.233	6.752e5	7.369e5	0.788	0.916	0.890	1570	1174	8.12e6	8.87e6	5172.5	7553.4	NO	bb	bb	145.617
13C-123789-HxCDD	36.704	0.000	6.841e5	5.461e5	1.000	1.253	1.240	2290	1746	1.15e7	9.24e6	5035.7	5294.5	NO	bb	bb	100.000
37CL-2378-TCDD	26.622	1.033	1.439e5		1.233			1433		2.22e6		1549.3			bb		9.429

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:13:02 Pacific Standard Time

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Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.455	0.865	6.529e4	8.606e4	1.064	0.759	0.770	792	1020	1.10e6	1.41e6	1389.2	1381.7	NO	bb	bb	8.005
1289-TCDF	27.469	1.058	5.846e4	7.730e4	0.858	0.756	0.770	792	1020	8.40e5	1.11e6	1060.4	1090.5	NO	db	dd	8.913
13468-PECDF	27.328	0.907	6.207e5	4.139e5	1.013	1.500	1.550	743	931	9.98e6	6.64e6	13422.4	7127.5	NO	bb	bb	73.426
12389-PECDF	32.527	1.080	3.688e5	2.395e5	0.844	1.540	1.550	1751	1549	5.54e6	3.58e6	3163.9	2313.0	NO	bb	bb	51.827
123468-HXCDF	33.440	0.953	3.518e5	2.840e5	1.197	1.239	1.240	2317	2033	5.51e6	4.44e6	2377.8	2185.8	NO	bd	bd	41.986
1368-TCDD	23.726	0.892	5.272e4	6.918e4	1.084	0.762	0.770	733	767	8.51e5	1.12e6	1161.1	1462.0	NO	bb	bd	7.477
1289-TCDD	27.215	1.023	5.957e4	7.659e4	0.975	0.778	0.770	733	767	8.95e5	1.18e6	1220.9	1536.1	NO	bb	bd	9.287
12479-PECDD	29.006	0.914	4.949e5	3.008e5	1.837	1.645	1.550	2368	1264	4.99e6	3.12e6	2107.4	2466.2	NO	bb	bb	66.888
12389-PECDD	32.137	1.013	3.126e5	1.975e5	1.252	1.583	1.550	2368	1264	5.07e6	3.23e6	2140.2	2552.0	NO	bb	bb	62.904
124679-HXCDD	34.209	0.945	3.138e5	2.551e5	1.033	1.230	1.240	1209	2018	4.96e6	4.09e6	4104.6	2026.7	NO	bb	bb	46.325
1234679-HPCDD	39.423	0.974	3.189e5	3.022e5	1.286	1.055	1.050	2032	1965	5.11e6	4.80e6	2515.1	2444.5	NO	bb	bb	53.671
Total-tetrafurans			1.869e5		0.933			792		2.94e6							26.631
Total-penta1			6.207e5					743		9.98e6							73.426
Total-pentafurans			1.174e6		0.866			1751		1.81e7							163.337
Total-hexafurans			1.812e6		1.208			2317		2.83e7							219.918
Total-heptafurans			6.099e5		1.185			1349		9.27e6							93.889
Total-Furans			4.686e6		1.067			792		7.17e7							648.458
Total-tetradioxins			3.151e5		1.099			733		4.37e6							43.699
Total-pentadioxins			1.076e6		1.392			2368		1.43e7							191.760
Total-hexadioxins			1.295e6		1.007			1209		2.09e7							190.245
Total-heptadioxins			6.000e5		1.269			2032		9.53e6							102.517
Total-Dioxins			3.746e6		1.165			733		5.44e7							653.196
Total-TEQ			8.431e6					733		1.26e8							1301.655
FUNCTION1 PFK			2.918e7					478238		1.79e7							
FUNCTION2 PFK			6.817e6					200812		7.73e6							0.000
FUNCTION3 PFK			8.758e3					318213		4.68e5							0.000
FUNCTION4 PFK			8.948e6					265973		6.94e7							
FUNCTION5 PFK			1.488e7					126485		1.67e7							
FUNCTION1 HXCD...			1.050e3					449		1.35e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			3.885e2					785		9.31e3							0.000
FUNCTION3 OCDPE			2.597e2					761		4.85e3							0.000
FUNCTION4 NCDPE			1.357e2					895		2.94e3							0.000
FUNCTION5 DCDPE			0.000e0					610		0.00e0							

Method: T:\Autospec\Methods\Dioxin230223.mdb 24 Feb 2023 10:11:53
Calibration: T:\Autospec\Curves\230201ICIH.cdb 03 Feb 2023 10:33:40

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.47	5.846e4	7.730e4	0.858	0.76	0.77	1060.4	YES	NO	db	dd	8.913
2	Total-tetrafurans	27.34	2.896e3	3.555e3	0.933	0.81	0.77	57.0	YES	NO	bd	dd	0.389
3	2378-TCDF	25.97	5.957e4	8.413e4	0.876	0.71	0.77	1192.5	YES	NO	bb	bb	9.236
4	Total-tetrafurans	25.82	9.770e1	1.478e2	0.933	0.66	0.77	3.5	NO	NO	bb	bb	0.015
5	Total-tetrafurans	24.87	5.424e2	6.653e2	0.933	0.82	0.77	7.5	YES	NO	dd	db	0.073
6	1368-TCDF	22.45	6.529e4	8.606e4	1.064	0.76	0.77	1389.2	YES	NO	bb	bb	8.005

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.33	6.207e5	4.139e5	1.013	1.50	1.55	13422.4	YES	NO	bb	bb	73.426

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDF	30.14	3.621e5	2.361e5	0.845	1.53	1.55	3257.3	YES	NO	bb	bb	50.917
2	Total-pentafurans	28.99	6.496e4	4.285e4	0.866	1.52	1.55	564.7	YES	NO	bb	bb	9.117
3	12389-PECDF	32.53	3.688e5	2.395e5	0.844	1.54	1.55	3163.9	YES	NO	bb	bb	51.827
4	23478-PeCDF	31.49	3.785e5	2.492e5	0.911	1.52	1.55	3348.2	YES	NO	bb	bb	51.476

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	234678-HxCDF	36.10	3.684e5	2.962e5	1.229	1.24	1.24	2536.3	YES	NO	bd	bd	44.304
2	123678-HxCDF	35.23	3.859e5	3.178e5	1.248	1.21	1.24	2520.3	YES	NO	dd	dd	42.861
3	123478-HxCDF	35.10	3.705e5	3.032e5	1.182	1.22	1.24	2544.2	YES	NO	MM	MM	45.076
4	Total-hexafurans	34.49	1.750e3	1.594e3	1.208	1.10	1.24	11.3	YES	NO	bb	bb	0.225
5	123468-HXCDF	33.44	3.518e5	2.840e5	1.197	1.24	1.24	2377.8	YES	NO	bd	bd	41.986
6	123789-HxCDF	37.13	3.339e5	2.678e5	1.187	1.25	1.24	2223.4	YES	NO	MM	MM	45.467

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HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.24	2.735e5	2.688e5	1.165	1.02	1.05	2808.7	YES	NO	bd	bd	45.589
2	Total-heptafurans	39.63	6.865e3	7.241e3	1.185	0.95	1.05	83.0	YES	NO	bb	bb	1.103
3	1234678-HpCDF	38.97	3.295e5	3.174e5	1.204	1.04	1.05	3977.8	YES	NO	bd	bd	47.197

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.47	5.846e4	7.730e4	0.858	0.76	0.77	1060.4	YES	NO	db	dd	8.913
2	Total-tetrafurans	27.34	2.896e3	3.555e3	0.933	0.81	0.77	57.0	YES	NO	bd	dd	0.389
3	2378-TCDF	25.97	5.957e4	8.413e4	0.876	0.71	0.77	1192.5	YES	NO	bb	bb	9.236
4	Total-tetrafurans	25.82	9.770e1	1.478e2	0.933	0.66	0.77	3.5	NO	NO	bb	bb	0.015
5	Total-tetrafurans	24.87	5.424e2	6.653e2	0.933	0.82	0.77	7.5	YES	NO	dd	db	0.073
6	1368-TCDF	22.45	6.529e4	8.606e4	1.064	0.76	0.77	1389.2	YES	NO	bb	bb	8.005
7	12378-PeCDF	30.14	3.621e5	2.361e5	0.845	1.53	1.55	3257.3	YES	NO	bb	bb	50.917
8	Total-pentafurans	28.99	6.496e4	4.285e4	0.866	1.52	1.55	564.7	YES	NO	bb	bb	9.117
9	12389-PECDF	32.53	3.688e5	2.395e5	0.844	1.54	1.55	3163.9	YES	NO	bb	bb	51.827
10	23478-PeCDF	31.49	3.785e5	2.492e5	0.911	1.52	1.55	3348.2	YES	NO	bb	bb	51.476
11	234678-HxCDF	36.10	3.684e5	2.962e5	1.229	1.24	1.24	2536.3	YES	NO	bd	bd	44.304
12	123678-HxCDF	35.23	3.859e5	3.178e5	1.248	1.21	1.24	2520.3	YES	NO	dd	dd	42.861
13	123478-HxCDF	35.10	3.705e5	3.032e5	1.182	1.22	1.24	2544.2	YES	NO	MM	MM	45.076
14	Total-hexafurans	34.49	1.750e3	1.594e3	1.208	1.10	1.24	11.3	YES	NO	bb	bb	0.225
15	123468-HXCDF	33.44	3.518e5	2.840e5	1.197	1.24	1.24	2377.8	YES	NO	bd	bd	41.986
16	123789-HxCDF	37.13	3.339e5	2.678e5	1.187	1.25	1.24	2223.4	YES	NO	MM	MM	45.467
17	1234789-HpCDF	41.24	2.735e5	2.688e5	1.165	1.02	1.05	2808.7	YES	NO	bd	bd	45.589
18	Total-heptafurans	39.63	6.865e3	7.241e3	1.185	0.95	1.05	83.0	YES	NO	bb	bb	1.103
19	1234678-HpCDF	38.97	3.295e5	3.174e5	1.204	1.04	1.05	3977.8	YES	NO	bd	bd	47.197
20	OCDF	45.54	2.815e5	3.153e5	1.186	0.89	0.89	2430.3	YES	NO	bd	bd	71.257
21	13468-PECDF	27.33	6.207e5	4.139e5	1.013	1.50	1.55	13422.4	YES	NO	bb	bb	73.426

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TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	27.22	5.957e4	7.659e4	0.975	0.78	0.77	1220.9	YES	NO	bb	bd	9.287
2	2378-TCDD	26.62	6.857e4	8.717e4	1.236	0.79	0.77	1418.5	YES	NO	bb	bb	8.379
3	Total-tetradioxins	26.28	9.961e4	1.278e5	1.099	0.78	0.77	1437.2	YES	NO	bb	bd	13.768
4	Total-tetradioxins	25.80	3.077e4	3.971e4	1.099	0.77	0.77	669.2	YES	NO	bd	bb	4.267
5	Total-tetradioxins	25.22	8.756e2	1.093e3	1.099	0.80	0.77	17.2	YES	NO	bb	bb	0.119
6	Total-tetradioxins	24.94	2.677e3	3.360e3	1.099	0.80	0.77	34.9	YES	NO	bb	bb	0.366
7	Total-tetradioxins	23.99	2.760e2	3.136e2	1.099	0.88	0.77	6.0	YES	NO	bb	db	0.036
8	1368-TCDD	23.73	5.272e4	6.918e4	1.084	0.76	0.77	1161.1	YES	NO	bb	bd	7.477

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	32.14	3.126e5	1.975e5	1.252	1.58	1.55	2140.2	YES	NO	bb	bb	62.904
2	12378-PeCDD	31.75	2.681e5	1.679e5	1.087	1.60	1.55	1781.6	YES	NO	bb	bb	61.968
3	12479-PECDD	29.01	4.949e5	3.008e5	1.837	1.65	1.55	2107.4	YES	NO	bb	bb	66.888

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDD	36.34	3.473e5	2.671e5	1.021	1.30	1.24	4498.6	YES	NO	db	db	47.992
2	123478-HxCDD	36.21	3.071e5	2.442e5	0.987	1.26	1.24	4259.2	YES	NO	bd	bd	46.969
3	124679-HXCDD	34.21	3.138e5	2.551e5	1.033	1.23	1.24	4104.6	YES	NO	bb	bb	46.325
4	123789-HxCDD	36.72	3.270e5	2.625e5	0.985	1.25	1.24	4448.5	YES	NO	bb	bb	48.960

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.48	2.810e5	2.694e5	1.253	1.04	1.05	2172.9	YES	NO	bb	bb	48.832
2	Total-heptadioxins	40.02	8.158e1	8.418e1	1.269	0.97	1.05	1.7	NO	NO	bb	bb	0.015
3	1234679-HPCDD	39.42	3.189e5	3.022e5	1.286	1.06	1.05	2515.1	YES	NO	bb	bb	53.671

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	27.22	5.957e4	7.659e4	0.975	0.78	0.77	1220.9	YES	NO	bb	bd	9.287
2	2378-TCDD	26.62	6.857e4	8.717e4	1.236	0.79	0.77	1418.5	YES	NO	bb	bb	8.379
3	Total-tetradioxins	26.28	9.961e4	1.278e5	1.099	0.78	0.77	1437.2	YES	NO	bb	bd	13.768
4	Total-tetradioxins	25.80	3.077e4	3.971e4	1.099	0.77	0.77	669.2	YES	NO	bd	bb	4.267
5	Total-tetradioxins	25.22	8.756e2	1.093e3	1.099	0.80	0.77	17.2	YES	NO	bb	bb	0.119
6	Total-tetradioxins	24.94	2.677e3	3.360e3	1.099	0.80	0.77	34.9	YES	NO	bb	bb	0.366
7	Total-tetradioxins	23.99	2.760e2	3.136e2	1.099	0.88	0.77	6.0	YES	NO	bb	db	0.036
8	1368-TCDD	23.73	5.272e4	6.918e4	1.084	0.76	0.77	1161.1	YES	NO	bb	bd	7.477
9	12389-PECDD	32.14	3.126e5	1.975e5	1.252	1.58	1.55	2140.2	YES	NO	bb	bb	62.904
10	12378-PeCDD	31.75	2.681e5	1.679e5	1.087	1.60	1.55	1781.6	YES	NO	bb	bb	61.968
11	12479-PECDD	29.01	4.949e5	3.008e5	1.837	1.65	1.55	2107.4	YES	NO	bb	bb	66.888
12	123678-HxCDD	36.34	3.473e5	2.671e5	1.021	1.30	1.24	4498.6	YES	NO	db	db	47.992
13	123478-HxCDD	36.21	3.071e5	2.442e5	0.987	1.26	1.24	4259.2	YES	NO	bd	bd	46.969
14	124679-HXCDD	34.21	3.138e5	2.551e5	1.033	1.23	1.24	4104.6	YES	NO	bb	bb	46.325
15	123789-HxCDD	36.72	3.270e5	2.625e5	0.985	1.25	1.24	4448.5	YES	NO	bb	bb	48.960
16	1234678-HpCDD	40.48	2.810e5	2.694e5	1.253	1.04	1.05	2172.9	YES	NO	bb	bb	48.832
17	Total-heptadioxins	40.02	8.158e1	8.418e1	1.269	0.97	1.05	1.7	NO	NO	bb	bb	0.015
18	1234679-HPCDD	39.42	3.189e5	3.022e5	1.286	1.06	1.05	2515.1	YES	NO	bb	bb	53.671
19	OCDD	45.29	4.598e5	5.132e5	1.103	0.90	0.89	3269.6	YES	NO	bd	bb	124.975

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.47	5.846e4	7.730e4	0.858	0.76	0.77	1060.4	YES	NO	db	dd	8.913
2	Total-tetrafurans	27.34	2.896e3	3.555e3	0.933	0.81	0.77	57.0	YES	NO	bd	dd	0.389
3	2378-TCDF	25.97	5.957e4	8.413e4	0.876	0.71	0.77	1192.5	YES	NO	bb	bb	9.236
4	Total-tetrafurans	25.82	9.770e1	1.478e2	0.933	0.66	0.77	3.5	NO	NO	bb	bb	0.015
5	Total-tetrafurans	24.87	5.424e2	6.653e2	0.933	0.82	0.77	7.5	YES	NO	dd	db	0.073
6	1368-TCDF	22.45	6.529e4	8.606e4	1.064	0.76	0.77	1389.2	YES	NO	bb	bb	8.005
7	12378-PeCDF	30.14	3.621e5	2.361e5	0.845	1.53	1.55	3257.3	YES	NO	bb	bb	50.917
8	Total-pentafurans	28.99	6.496e4	4.285e4	0.866	1.52	1.55	564.7	YES	NO	bb	bb	9.117
9	12389-PECDF	32.53	3.688e5	2.395e5	0.844	1.54	1.55	3163.9	YES	NO	bb	bb	51.827
10	23478-PeCDF	31.49	3.785e5	2.492e5	0.911	1.52	1.55	3348.2	YES	NO	bb	bb	51.476
11	234678-HxCDF	36.10	3.684e5	2.962e5	1.229	1.24	1.24	2536.3	YES	NO	bd	bd	44.304
12	123678-HxCDF	35.23	3.859e5	3.178e5	1.248	1.21	1.24	2520.3	YES	NO	dd	dd	42.861
13	123478-HxCDF	35.10	3.705e5	3.032e5	1.182	1.22	1.24	2544.2	YES	NO	MM	MM	45.076
14	Total-hexafurans	34.49	1.750e3	1.594e3	1.208	1.10	1.24	11.3	YES	NO	bb	bb	0.225
15	123468-HXCDF	33.44	3.518e5	2.840e5	1.197	1.24	1.24	2377.8	YES	NO	bd	bd	41.986
16	123789-HxCDF	37.13	3.339e5	2.678e5	1.187	1.25	1.24	2223.4	YES	NO	MM	MM	45.467
17	1234789-HpCDF	41.24	2.735e5	2.688e5	1.165	1.02	1.05	2808.7	YES	NO	bd	bd	45.589
18	Total-heptafurans	39.63	6.865e3	7.241e3	1.185	0.95	1.05	83.0	YES	NO	bb	bb	1.103
19	1234678-HpCDF	38.97	3.295e5	3.174e5	1.204	1.04	1.05	3977.8	YES	NO	bd	bd	47.197
20	OCDF	45.54	2.815e5	3.153e5	1.186	0.89	0.89	2430.3	YES	NO	bd	bd	71.257
21	13468-PECDF	27.33	6.207e5	4.139e5	1.013	1.50	1.55	13422.4	YES	NO	bb	bb	73.426
22	1289-TCDD	27.22	5.957e4	7.659e4	0.975	0.78	0.77	1220.9	YES	NO	bb	bd	9.287
23	2378-TCDD	26.62	6.857e4	8.717e4	1.236	0.79	0.77	1418.5	YES	NO	bb	bb	8.379
24	Total-tetradioxins	26.28	9.961e4	1.278e5	1.099	0.78	0.77	1437.2	YES	NO	bb	bd	13.768
25	Total-tetradioxins	25.80	3.077e4	3.971e4	1.099	0.77	0.77	669.2	YES	NO	bd	bb	4.267
26	Total-tetradioxins	25.22	8.756e2	1.093e3	1.099	0.80	0.77	17.2	YES	NO	bb	bb	0.119
27	Total-tetradioxins	24.94	2.677e3	3.360e3	1.099	0.80	0.77	34.9	YES	NO	bb	bb	0.366
28	Total-tetradioxins	23.99	2.760e2	3.136e2	1.099	0.88	0.77	6.0	YES	NO	bb	db	0.036
29	1368-TCDD	23.73	5.272e4	6.918e4	1.084	0.76	0.77	1161.1	YES	NO	bb	bd	7.477
30	12389-PECDD	32.14	3.126e5	1.975e5	1.252	1.58	1.55	2140.2	YES	NO	bb	bb	62.904
31	12378-PeCDD	31.75	2.681e5	1.679e5	1.087	1.60	1.55	1781.6	YES	NO	bb	bb	61.968
32	12479-PECDD	29.01	4.949e5	3.008e5	1.837	1.65	1.55	2107.4	YES	NO	bb	bb	66.888
33	123678-HxCDD	36.34	3.473e5	2.671e5	1.021	1.30	1.24	4498.6	YES	NO	db	db	47.992
34	123478-HxCDD	36.21	3.071e5	2.442e5	0.987	1.26	1.24	4259.2	YES	NO	bd	bd	46.969
35	124679-HXCDD	34.21	3.138e5	2.551e5	1.033	1.23	1.24	4104.6	YES	NO	bb	bb	46.325
36	123789-HxCDD	36.72	3.270e5	2.625e5	0.985	1.25	1.24	4448.5	YES	NO	bb	bb	48.960
37	1234678-HpCDD	40.48	2.810e5	2.694e5	1.253	1.04	1.05	2172.9	YES	NO	bb	bb	48.832

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-heptadioxins	40.02	8.158e1	8.418e1	1.269	0.97	1.05	1.7	NO	NO	bb	bb	0.015
39	1234679-HPCDD	39.42	3.189e5	3.022e5	1.286	1.06	1.05	2515.1	YES	NO	bb	bb	53.671
40	OCDD	45.29	4.598e5	5.132e5	1.103	0.90	0.89	3269.6	YES	NO	bd	bb	124.975

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	21.32	2.918e7					37.4	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.47	6.817e6					38.5	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	36.88	8.758e3					1.5	NO		bb		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.13	1.011e6					44.2	YES		dd		
2	FUNCTION4 PFK	38.09	9.260e5					45.2	YES		bd		
3	FUNCTION4 PFK	40.92	7.061e3					1.1	NO		db		
4	FUNCTION4 PFK	40.85	7.079e3					1.0	NO		bd		
5	FUNCTION4 PFK	40.76	1.152e4					1.2	NO		db		
6	FUNCTION4 PFK	40.68	1.188e4					1.4	NO		bd		
7	FUNCTION4 PFK	40.15	1.611e4					1.5	NO		bb		
8	FUNCTION4 PFK	40.07	1.228e4					1.0	NO		bb		
9	FUNCTION4 PFK	39.89	1.317e4					1.2	NO		bb		
10	FUNCTION4 PFK	39.51	1.382e4					1.2	NO		bb		
11	FUNCTION4 PFK	39.38	4.839e4					2.0	NO		db		
12	FUNCTION4 PFK	39.22	1.784e5					7.5	YES		dd		
13	FUNCTION4 PFK	39.12	2.647e5					11.9	YES		dd		
14	FUNCTION4 PFK	39.08	4.361e5					12.4	YES		dd		
15	FUNCTION4 PFK	38.90	4.504e5					18.5	YES		dd		
16	FUNCTION4 PFK	38.78	3.116e6					23.0	YES		dd		
17	FUNCTION4 PFK	38.33	1.763e6					38.4	YES		dd		
18	FUNCTION4 PFK	38.23	6.025e5					41.3	YES		dd		
19	FUNCTION4 PFK	42.59	8.351e3					1.4	NO		bb		
20	FUNCTION4 PFK	42.23	1.053e4					1.1	NO		bb		
21	FUNCTION4 PFK	42.17	1.036e3					0.4	NO		bb		
22	FUNCTION4 PFK	42.04	6.956e3					1.1	NO		bb		
23	FUNCTION4 PFK	41.99	1.302e4					1.2	NO		bb		
24	FUNCTION4 PFK	41.77	1.334e4					1.3	NO		bb		
25	FUNCTION4 PFK	40.99	5.604e3					0.8	NO		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.21	1.508e6					25.2	YES		db		
2	FUNCTION5 PFK	44.35	4.374e6					51.3	YES		dd		
3	FUNCTION5 PFK	44.03	8.999e6					55.8	YES		bd		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.83	8.826e1					2.6	NO		bd		0.000
2	FUNCTION1 HXCD...	25.24	8.189e1					2.1	NO		bb		0.000
3	FUNCTION1 HXCD...	23.84	8.058e1					2.1	NO		bb		0.000
4	FUNCTION1 HXCD...	22.96	1.045e2					2.7	NO		bb		0.000
5	FUNCTION1 HXCD...	27.86	1.099e2					6.0	YES		bb		0.000
6	FUNCTION1 HXCD...	27.33	9.820e1					3.0	YES		bb		0.000
7	FUNCTION1 HXCD...	26.61	2.116e2					4.7	YES		bb		0.000
8	FUNCTION1 HXCD...	26.10	1.017e2					2.3	NO		db		0.000
9	FUNCTION1 HXCD...	25.97	1.734e2					4.7	YES		dd		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.36	1.300e2					4.9	YES		bb		0.000
2	FUNCTION2 HPCD...	31.25	1.022e2					2.7	NO		bb		0.000
3	FUNCTION2 HPCD...	30.55	7.554e1					2.8	NO		bb		0.000
4	FUNCTION2 HPCD...	29.46	8.081e1					1.5	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.11	8.310e1					2.2	NO		bb		0.000
2	FUNCTION3 OCDPE	34.38	8.182e1					3.0	YES		bb		0.000
3	FUNCTION3 OCDPE	33.66	9.479e1					1.1	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	38.62	1.357e2					3.3	YES		bb		0.000

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Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:13:02 Pacific Standard Time

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ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
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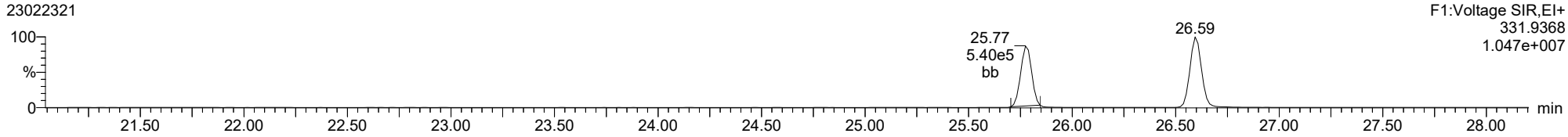
ID: CS3V5, Name: 23022321, Date: 24-Feb-2023, Time: 02:43:06, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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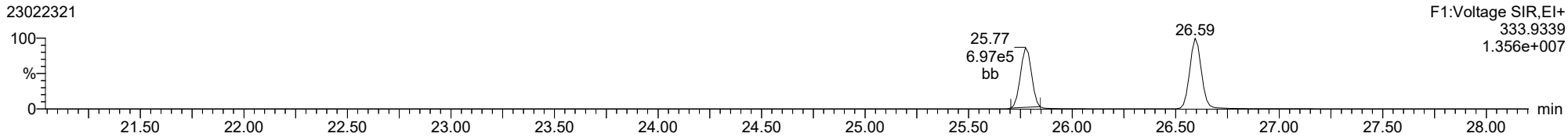
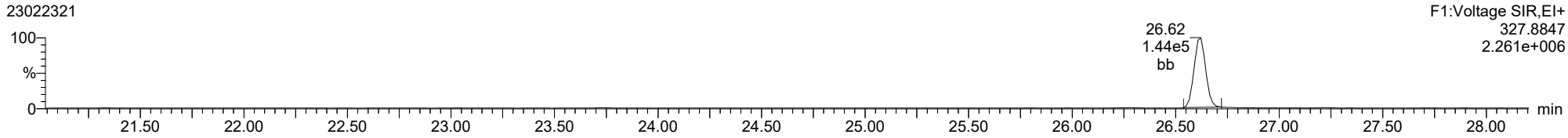


37CL-2378-TCDD



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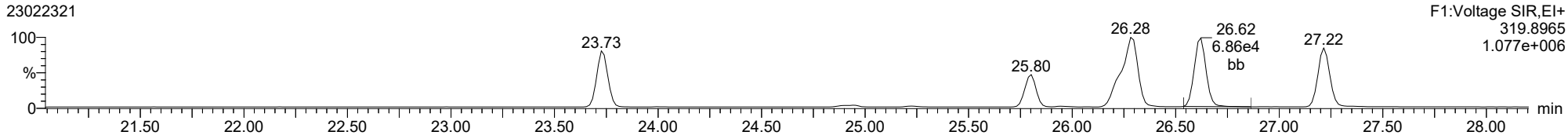
2378-TCDD



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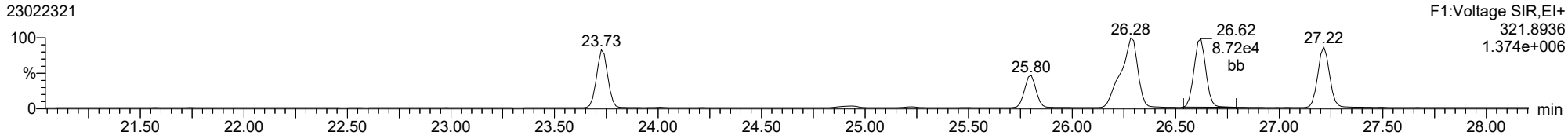

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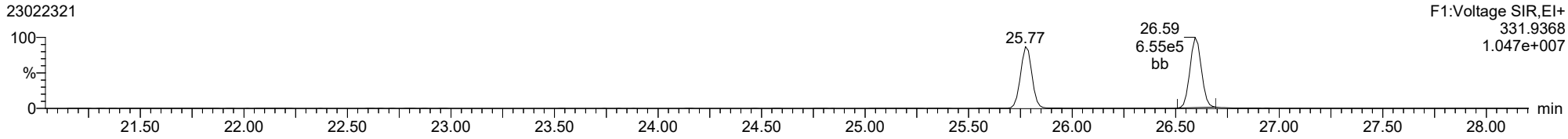

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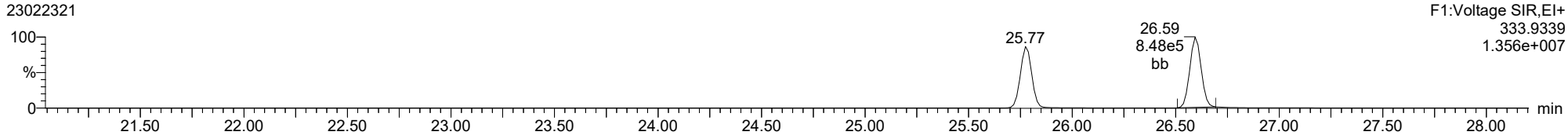

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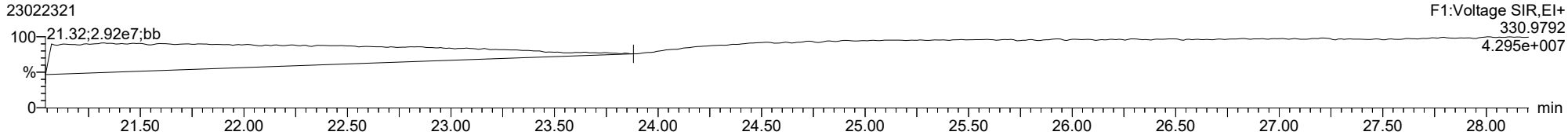

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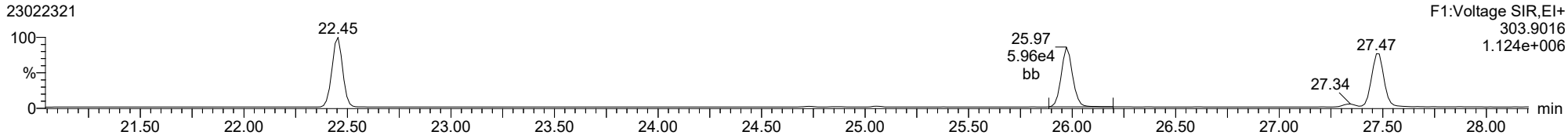
2378-TCDF



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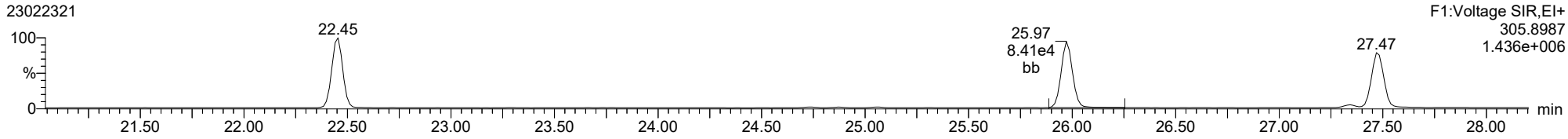

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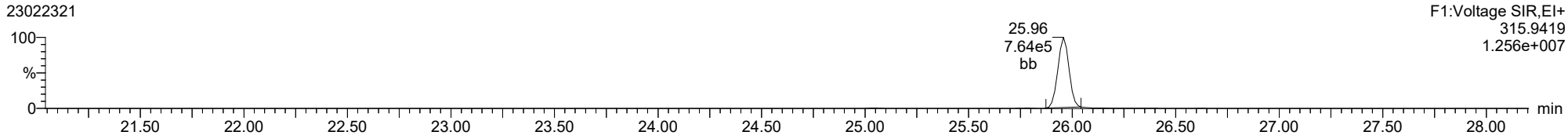

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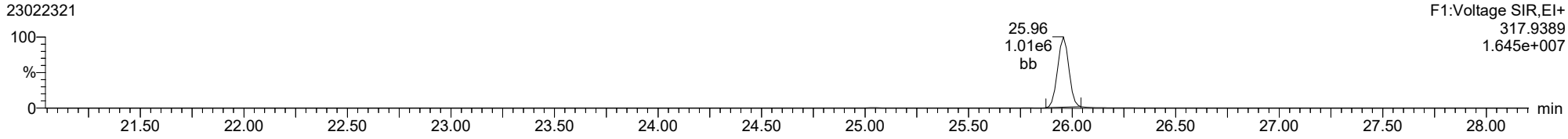

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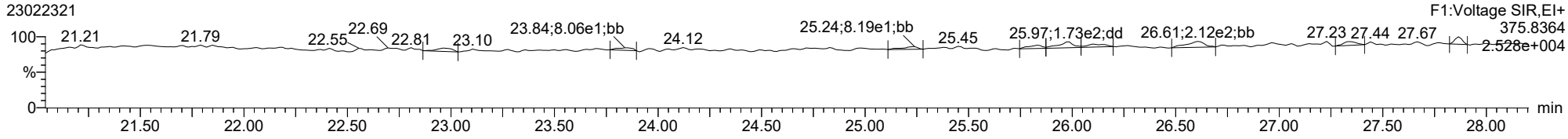

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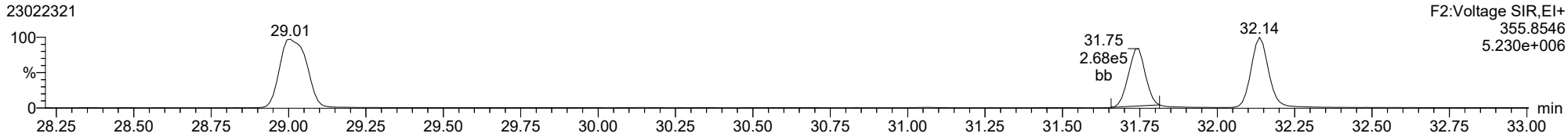
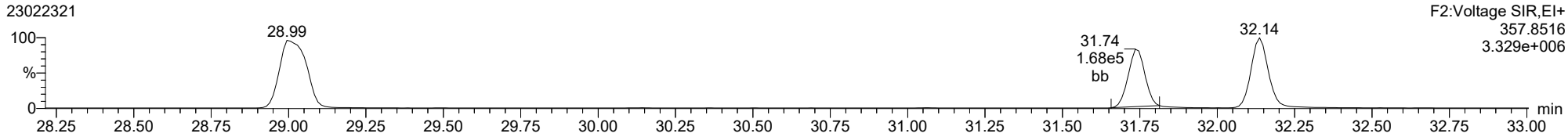
12378-PeCDD



12378-PeCDD



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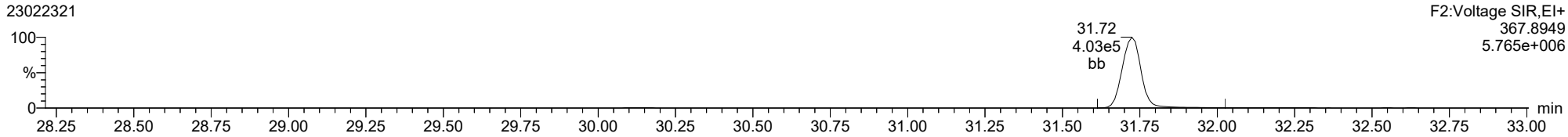

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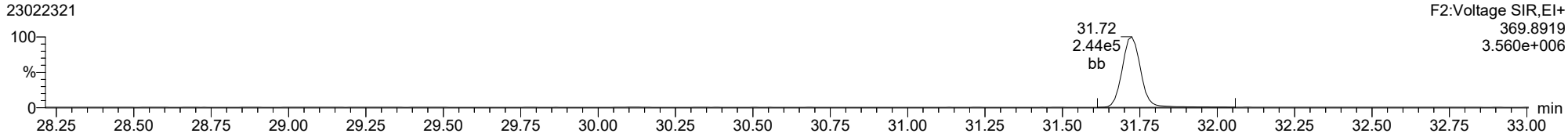

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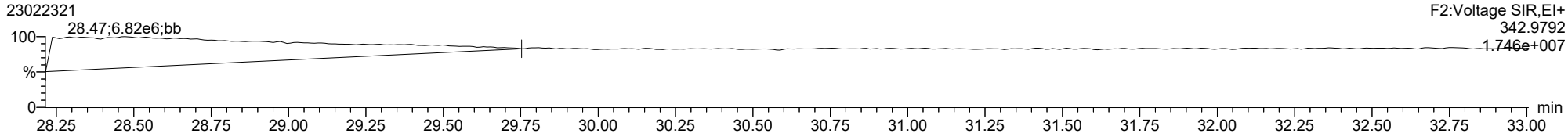

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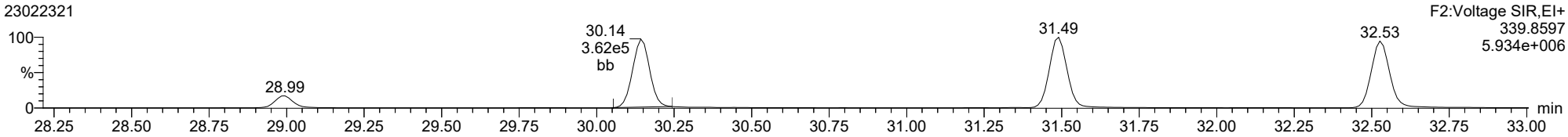
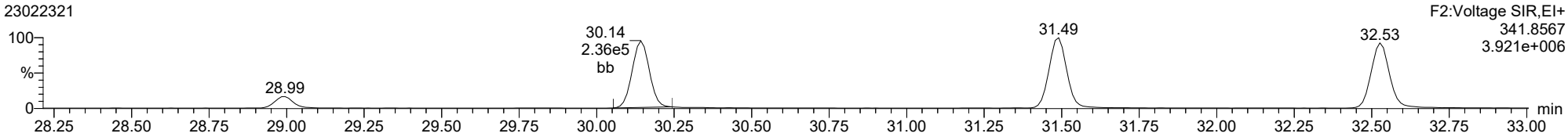
12378-PeCDF



12378-PeCDF



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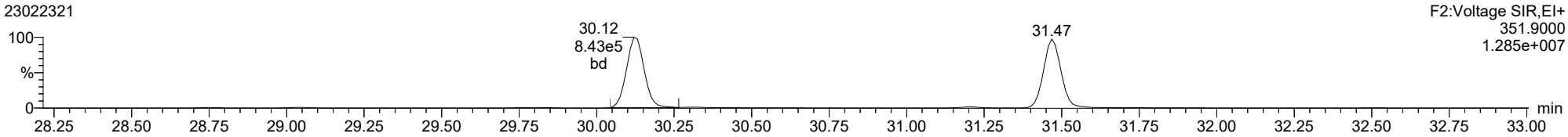

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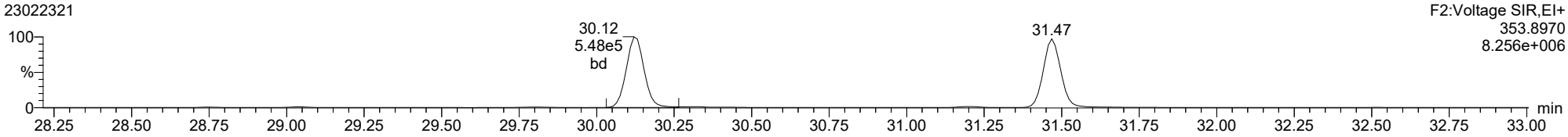

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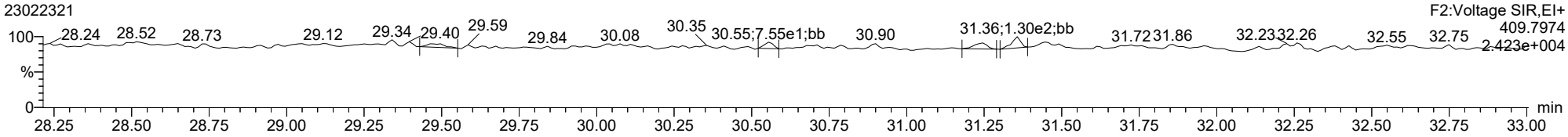

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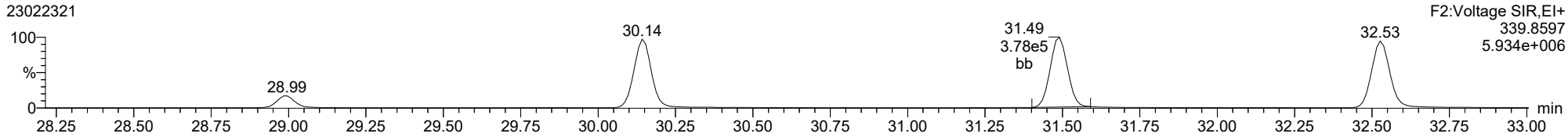
23478-PeCDF



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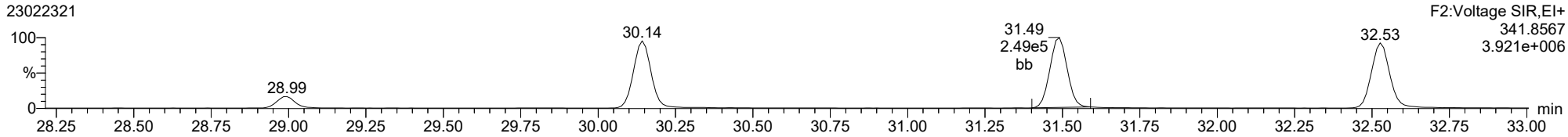

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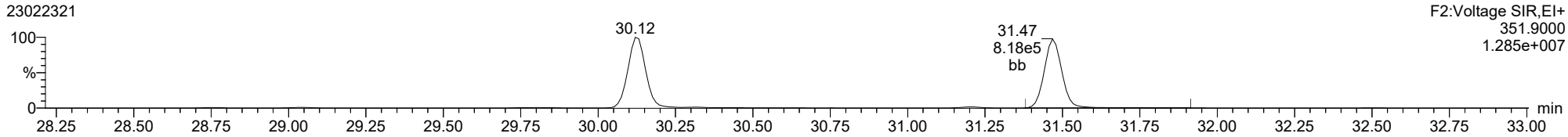

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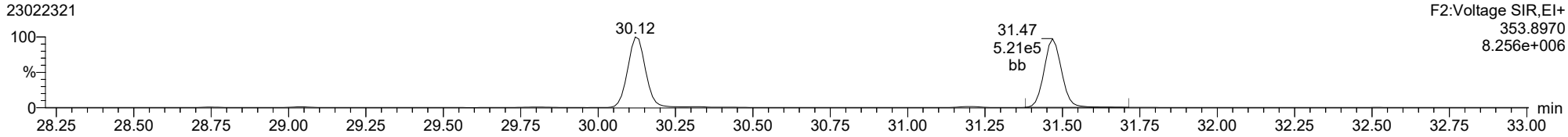

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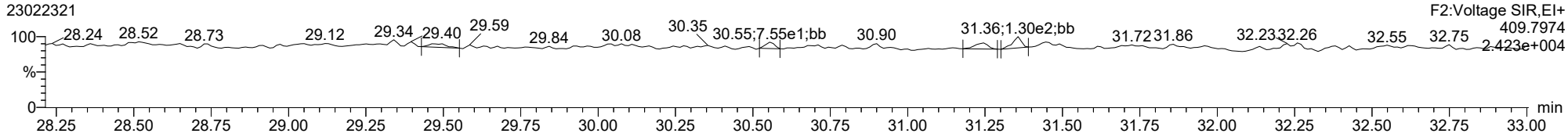

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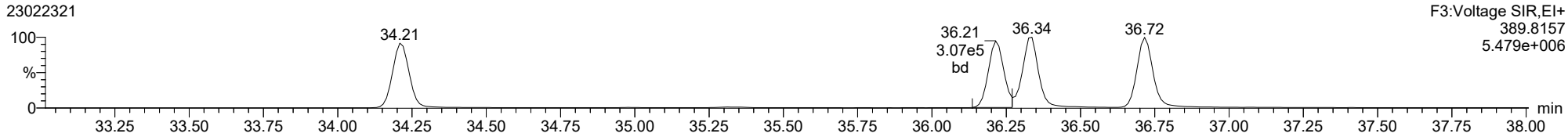

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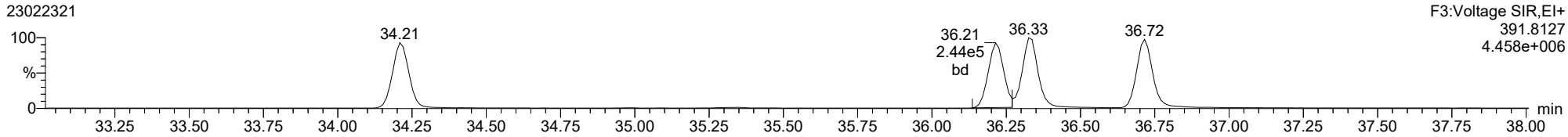

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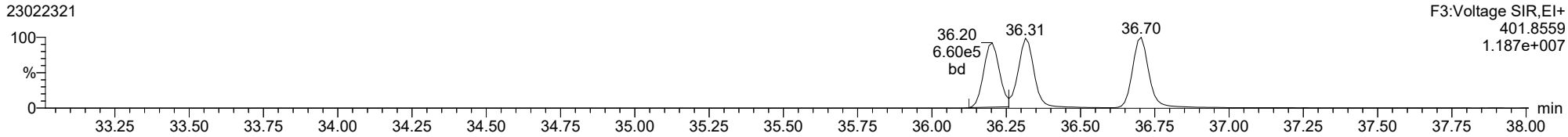

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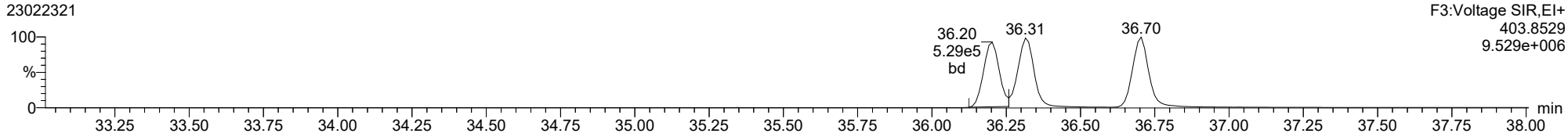

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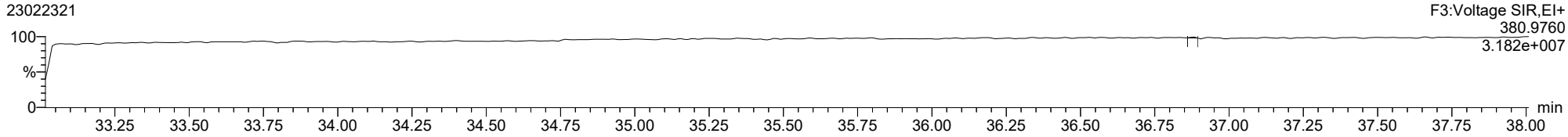

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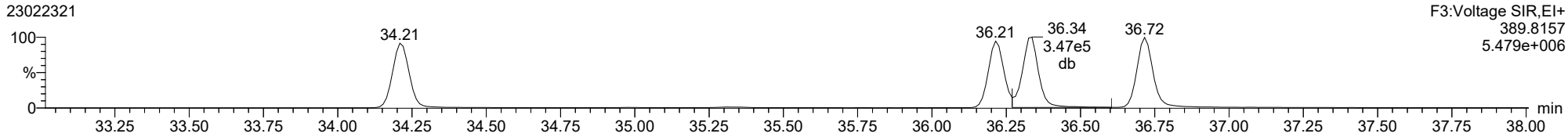

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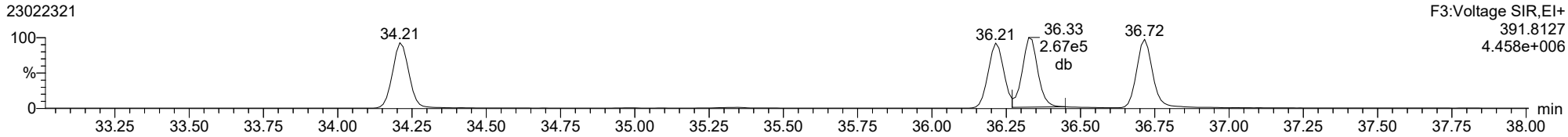

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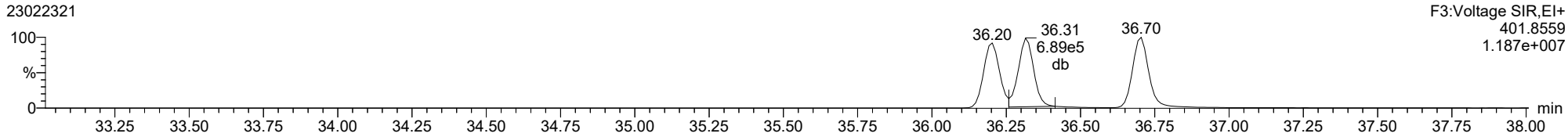

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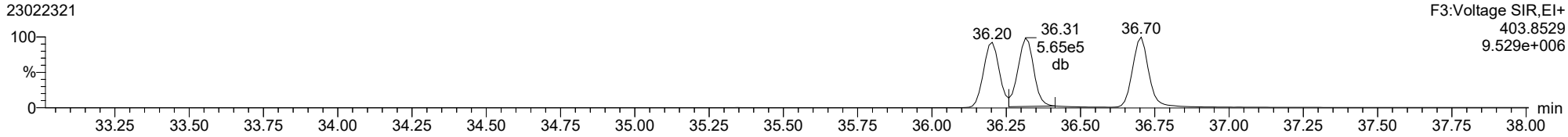

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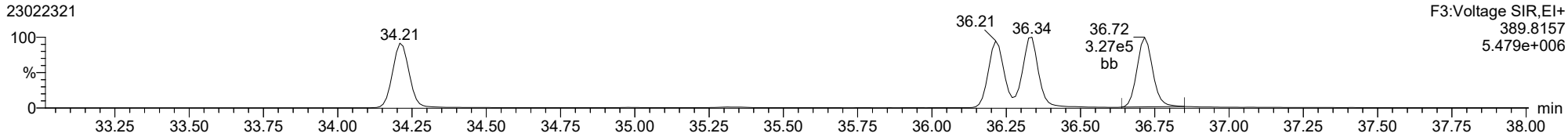

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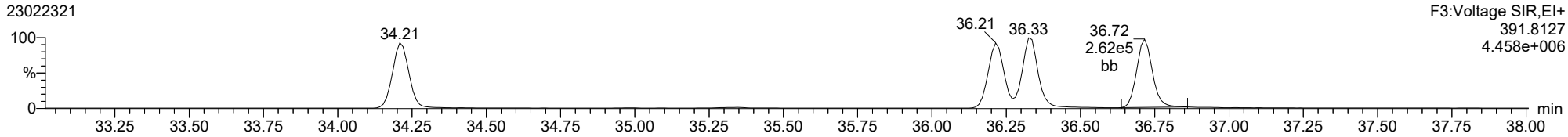

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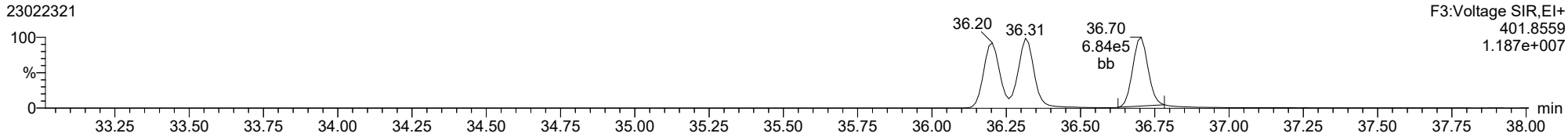

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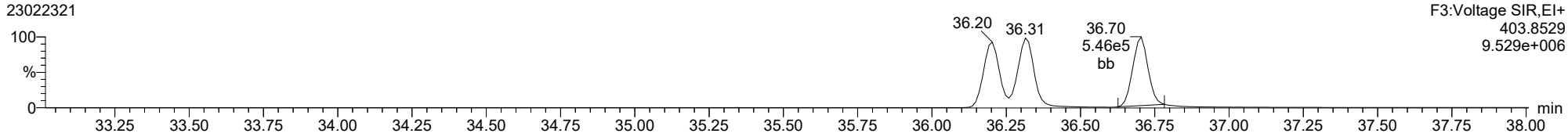

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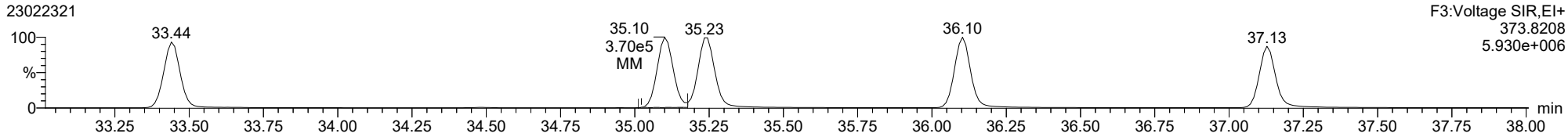

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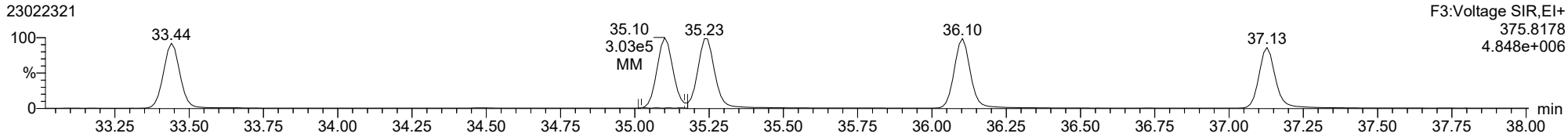

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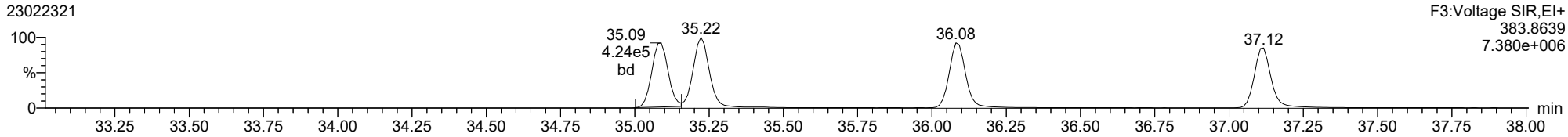

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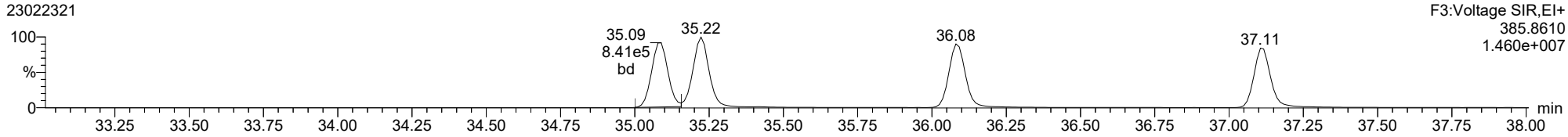

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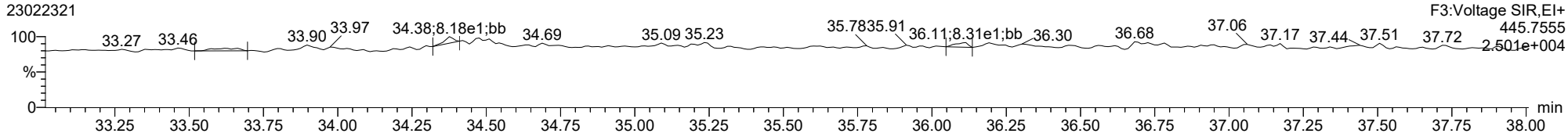

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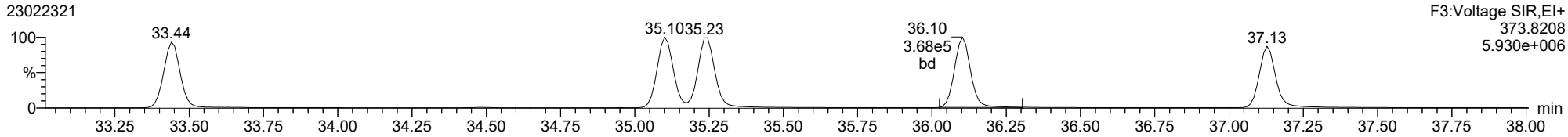

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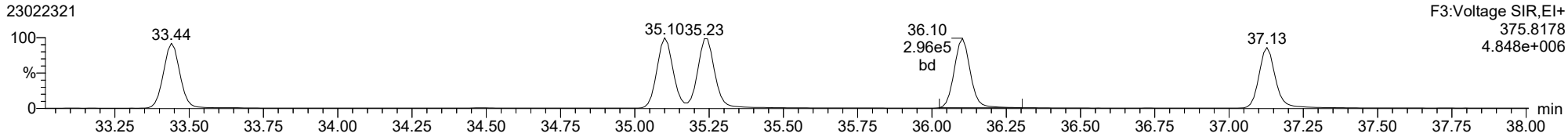

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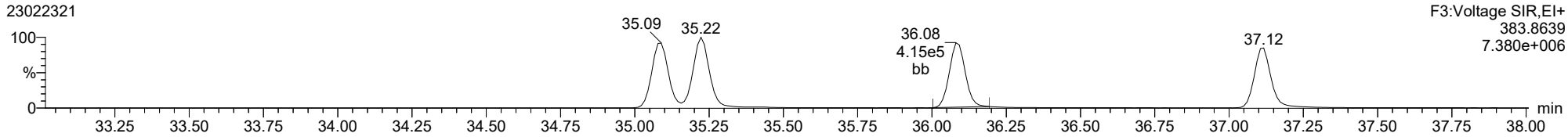

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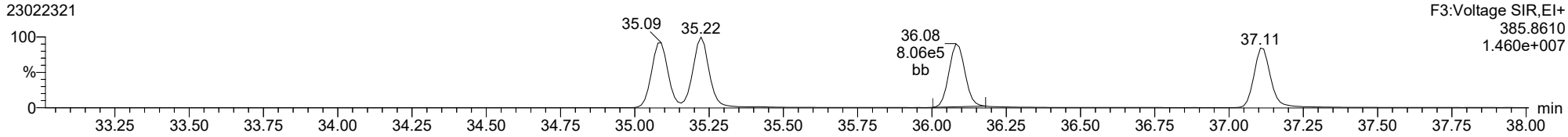

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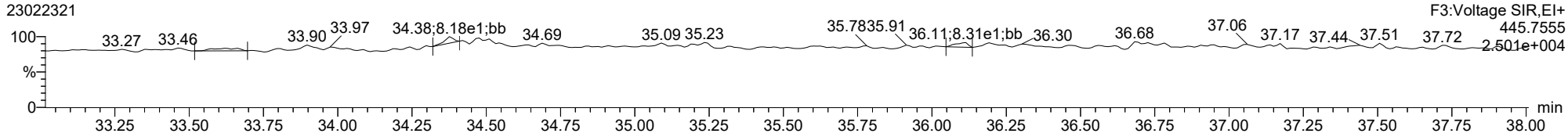

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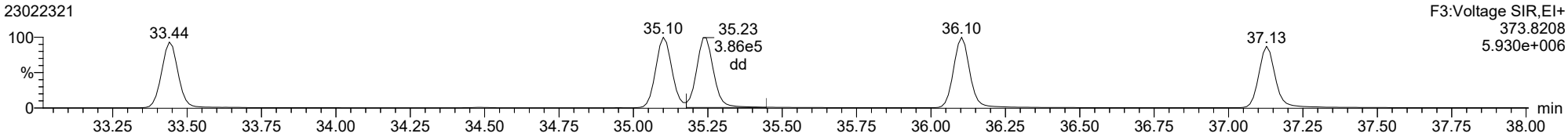

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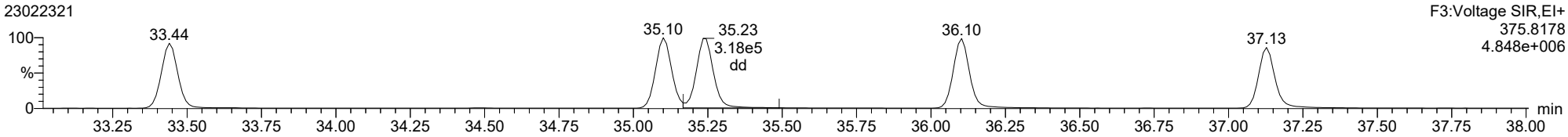

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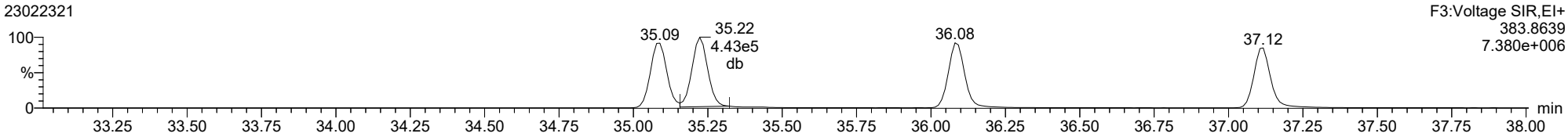

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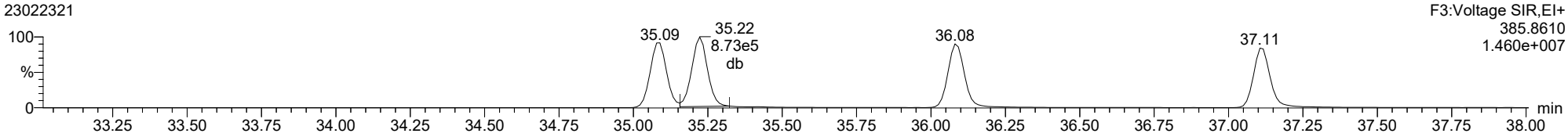

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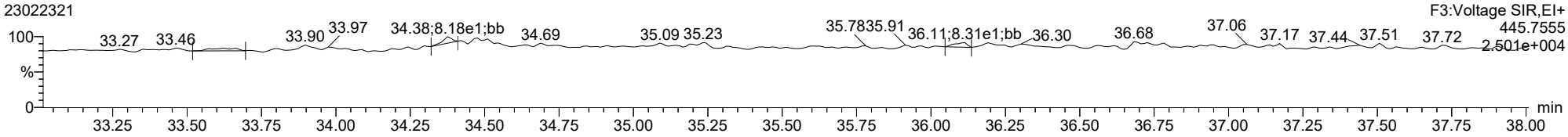

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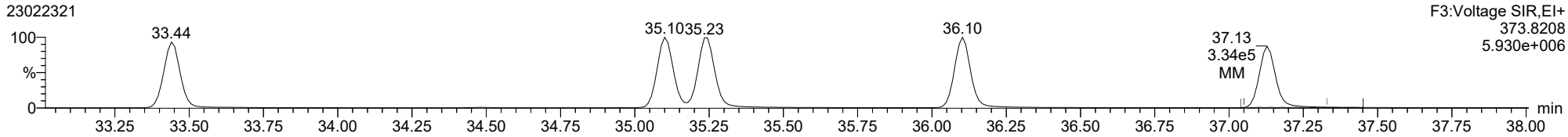

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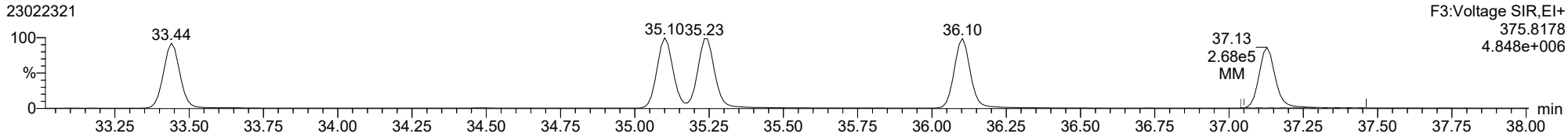

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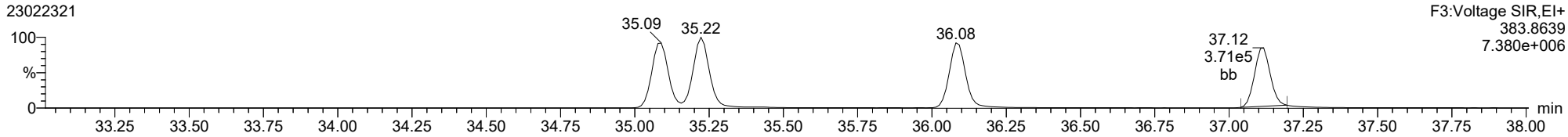

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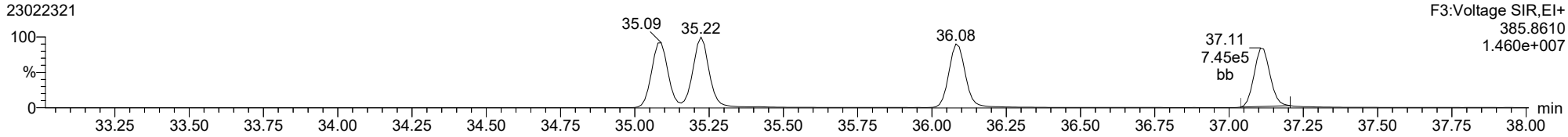

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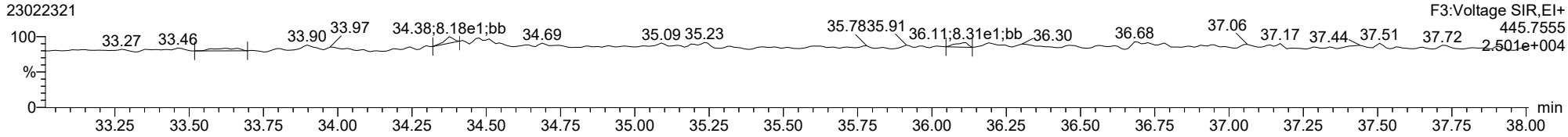

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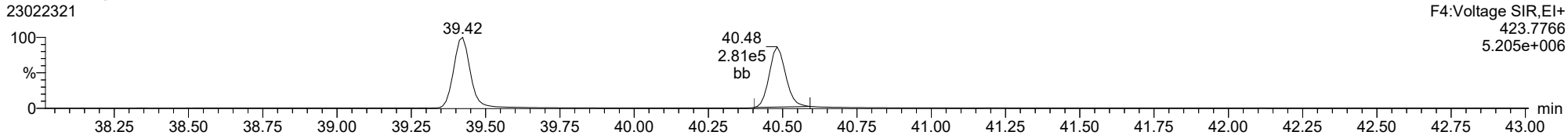

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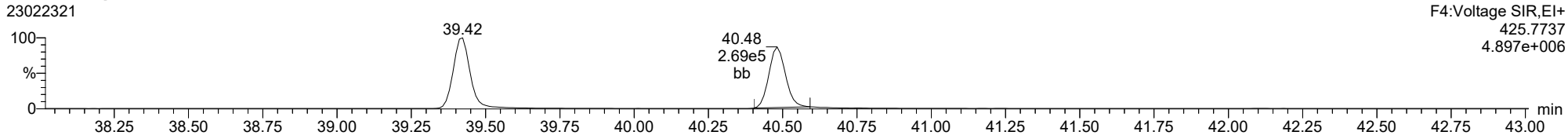

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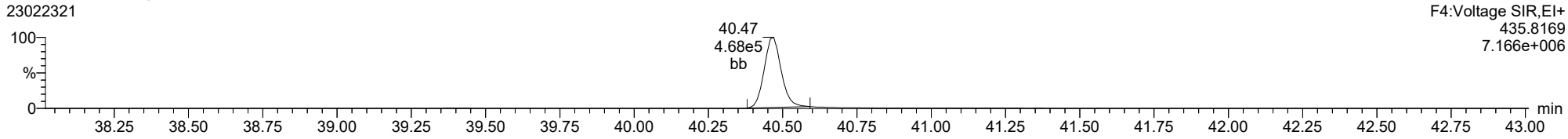

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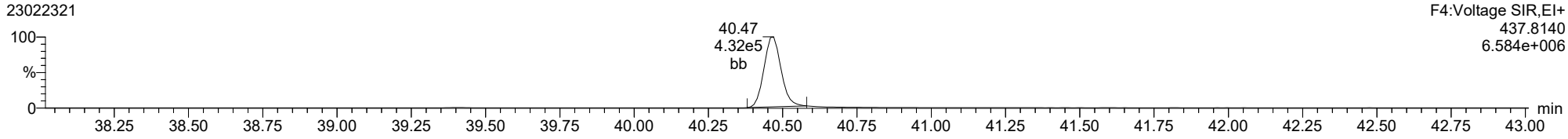

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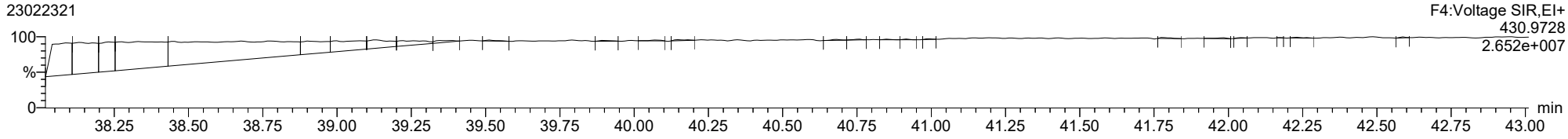

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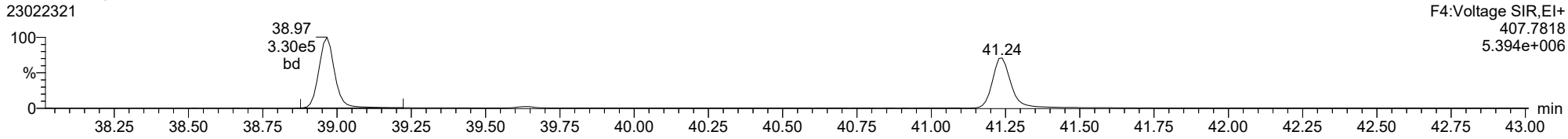

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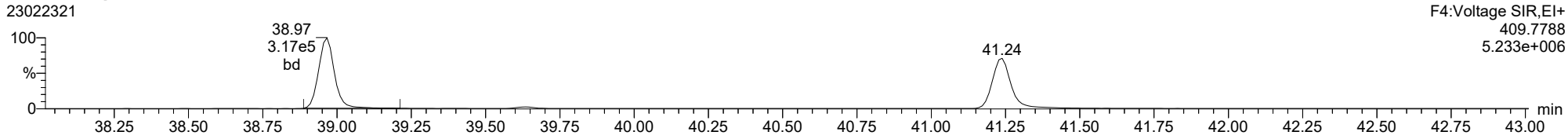

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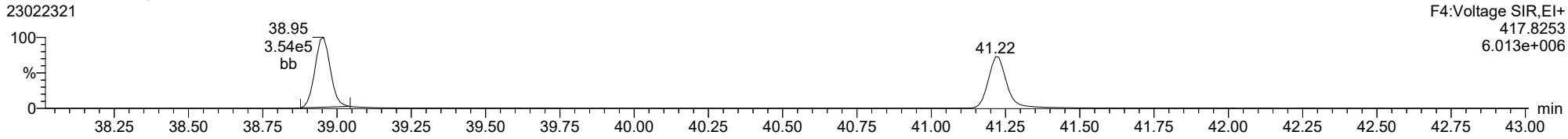

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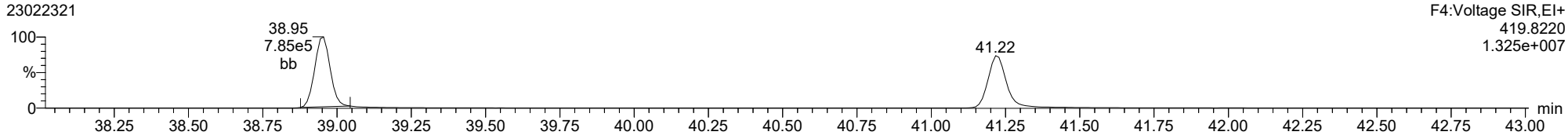
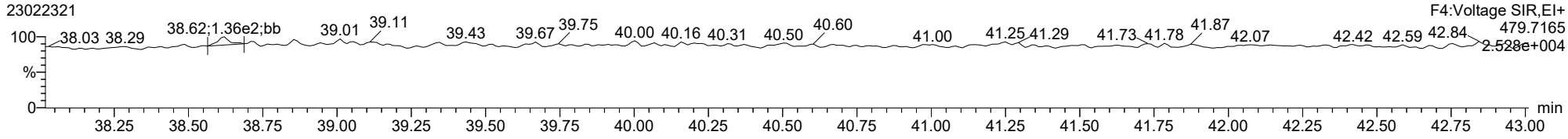


FUNCTION4 NCDPE



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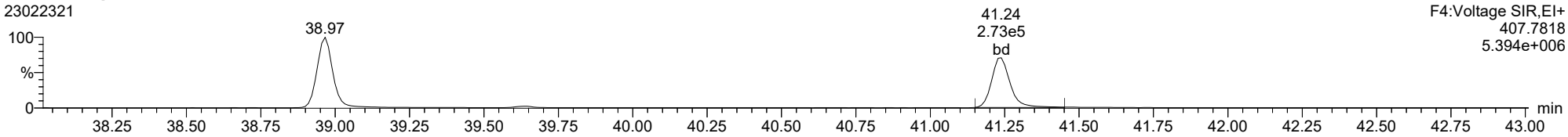
1234789-HpCDF



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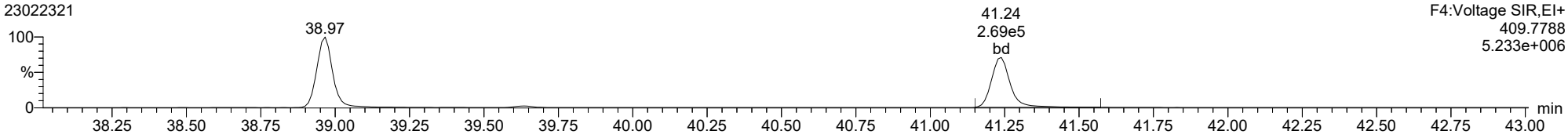

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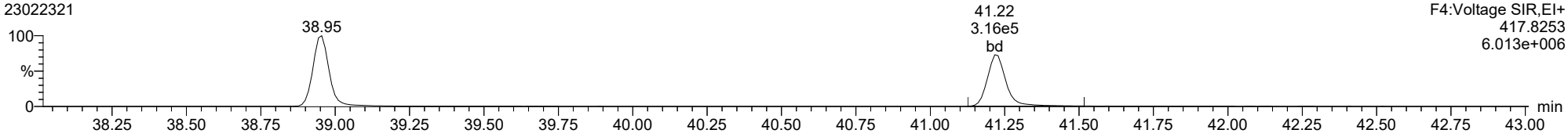

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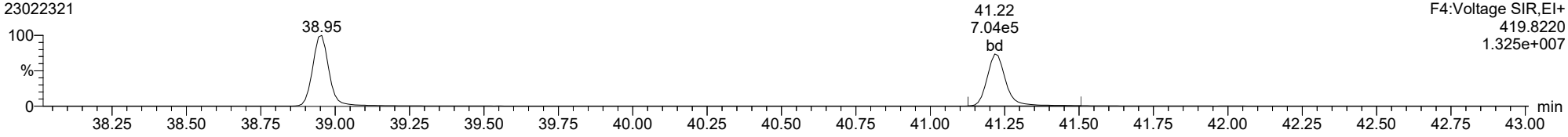
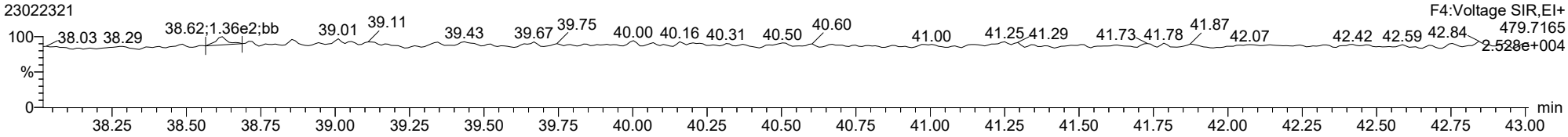


FUNCTION4 NCDPE



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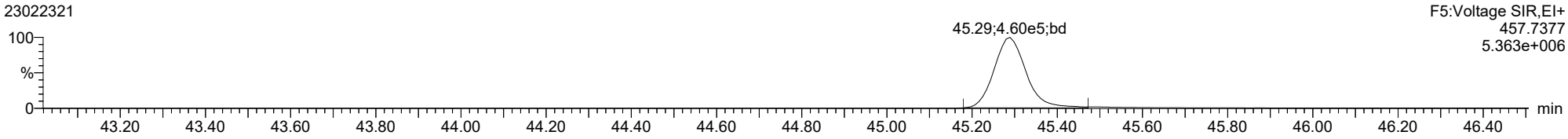

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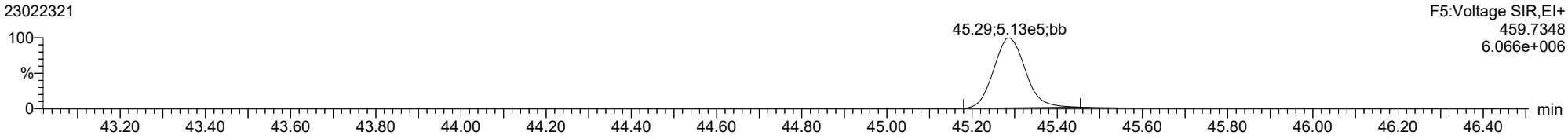

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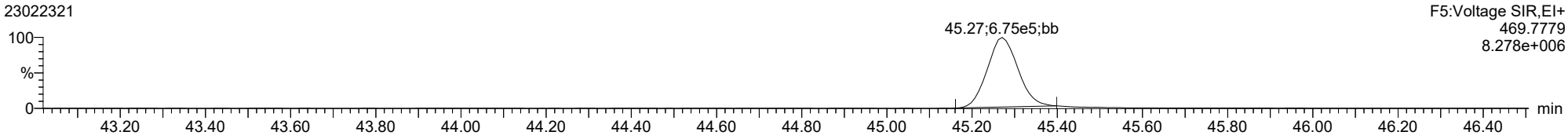

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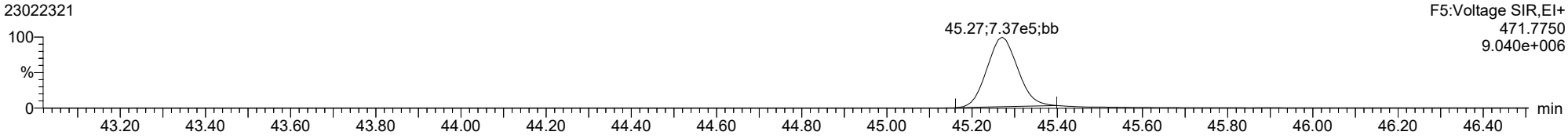

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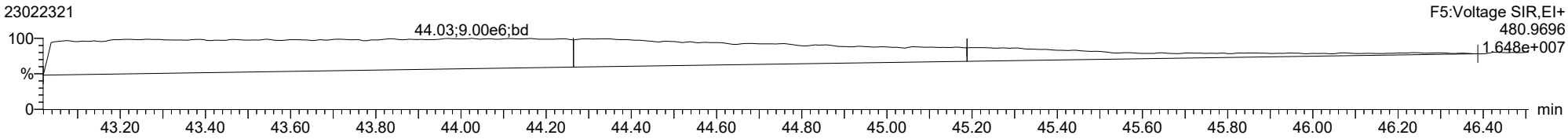

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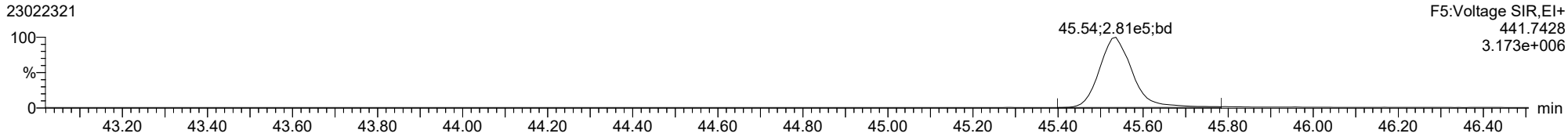

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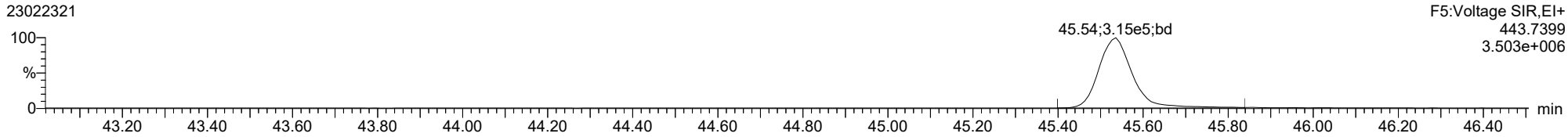
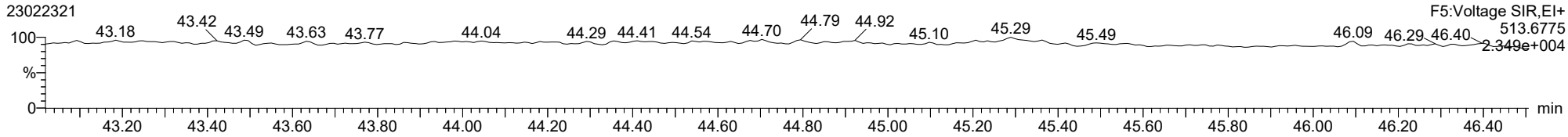


FUNCTION5 DCDPE



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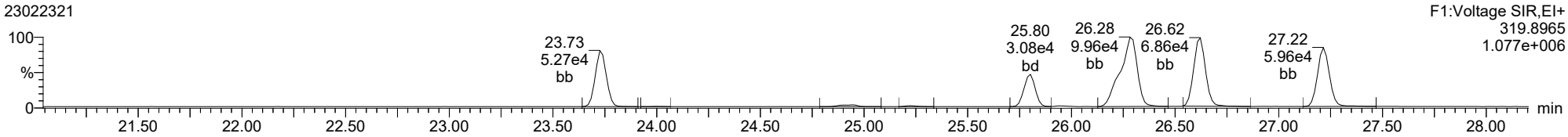
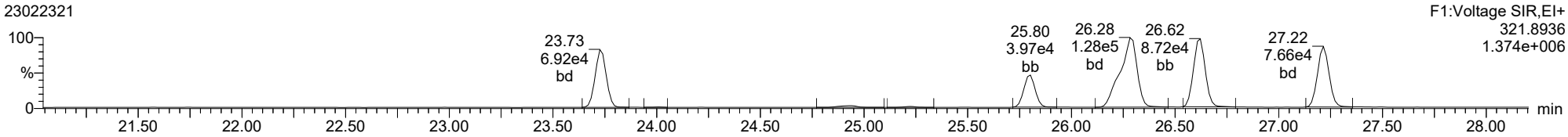


Total-tetradioxins



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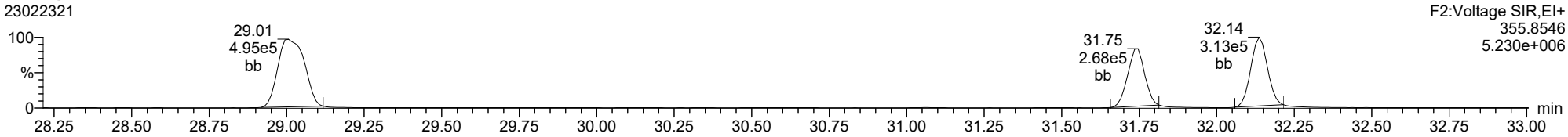

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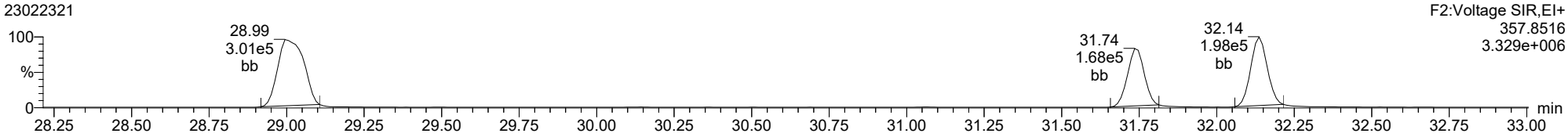

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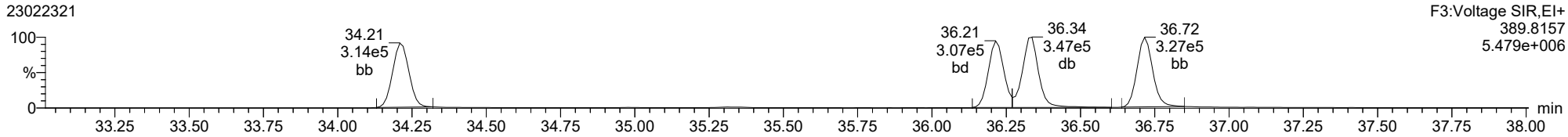

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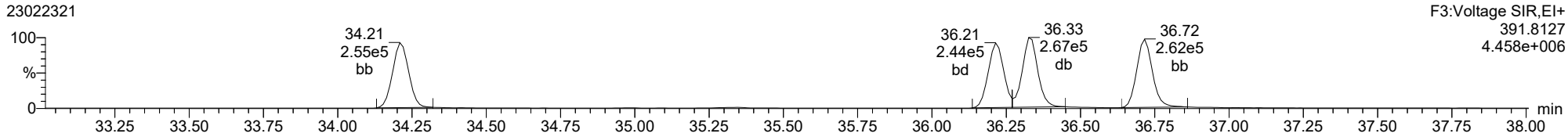

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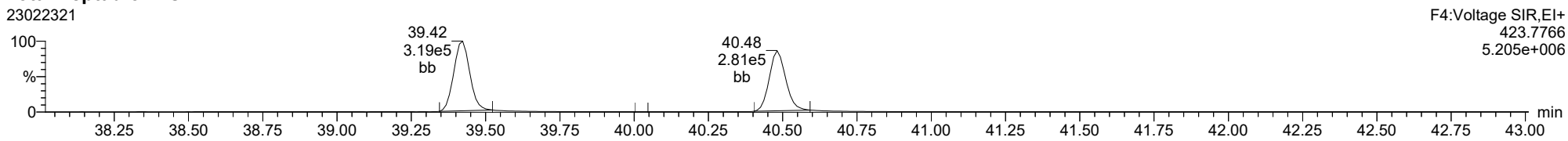

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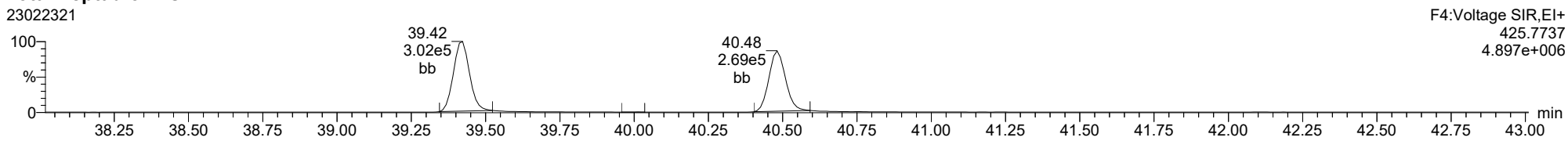

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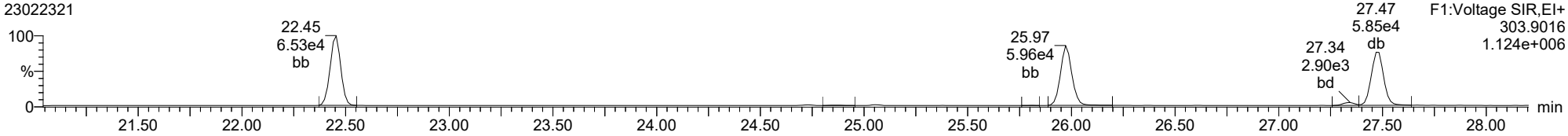

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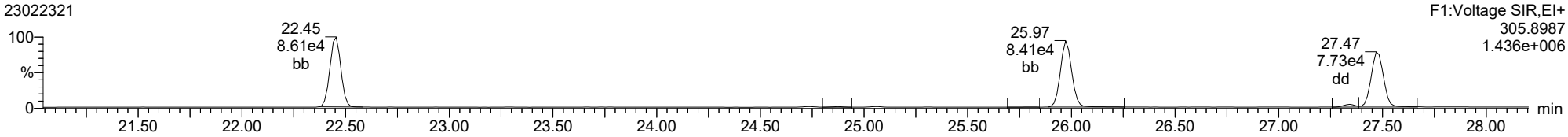

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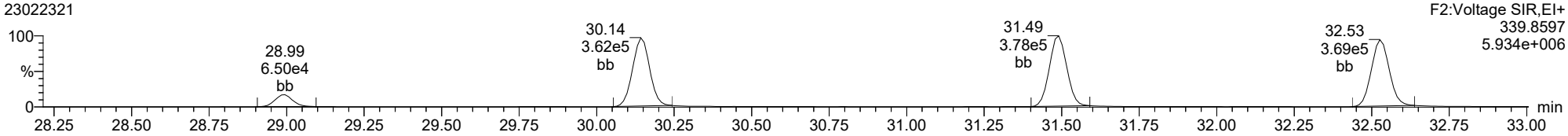

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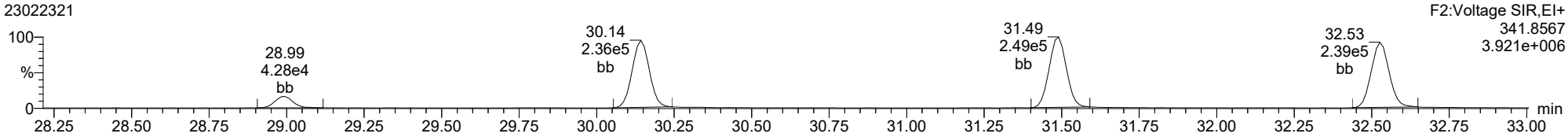

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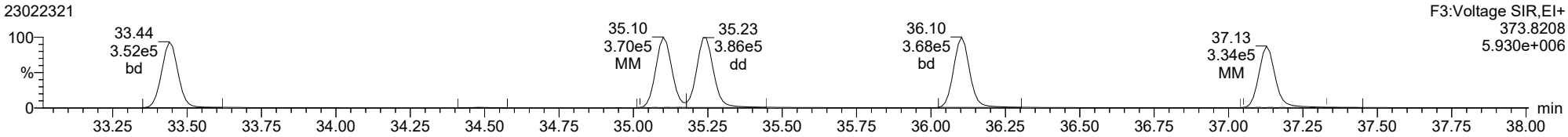

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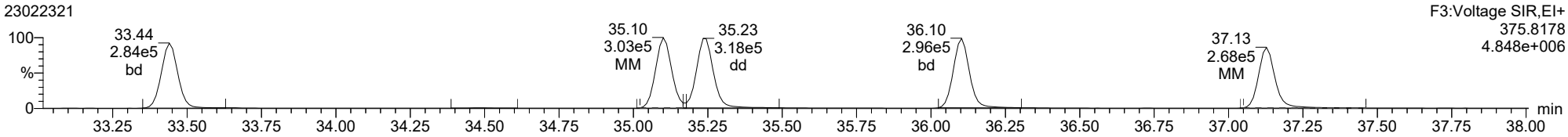

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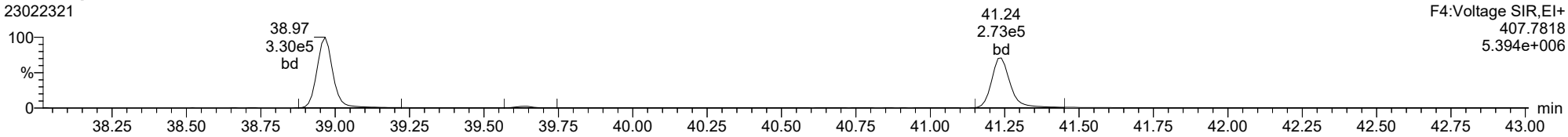

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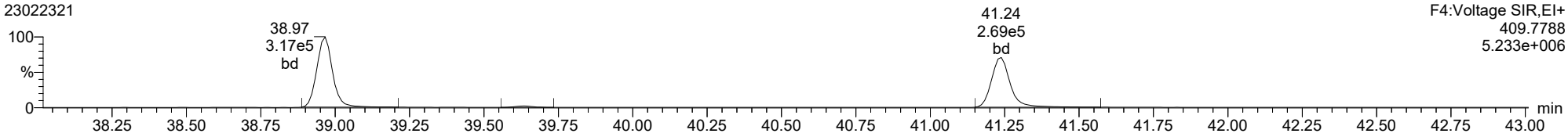

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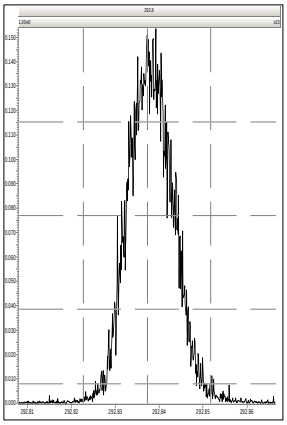

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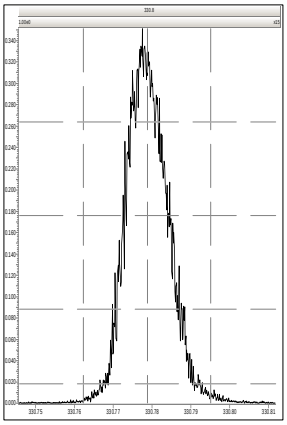

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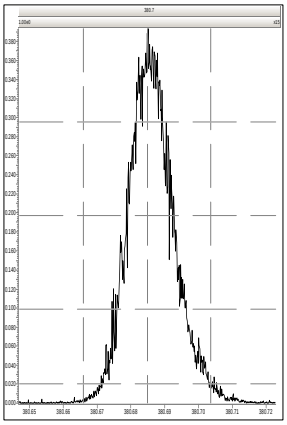

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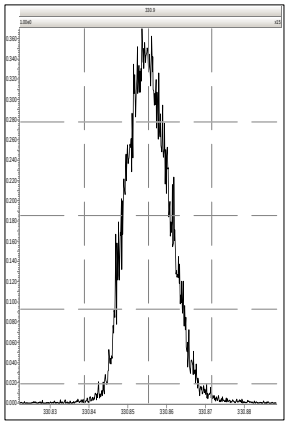

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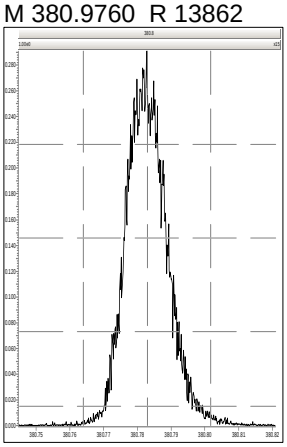

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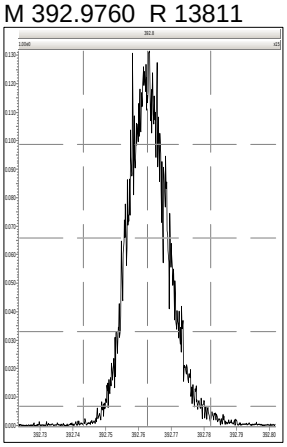

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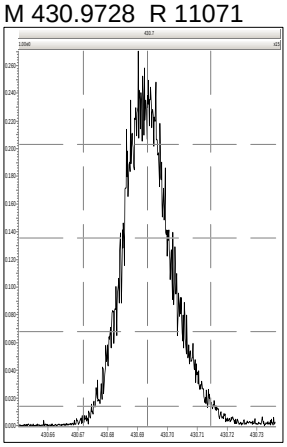

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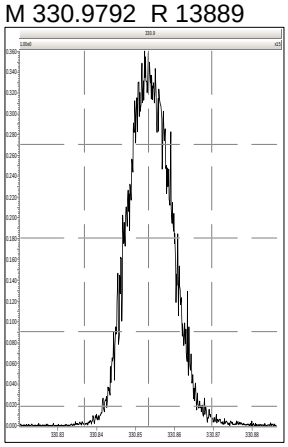

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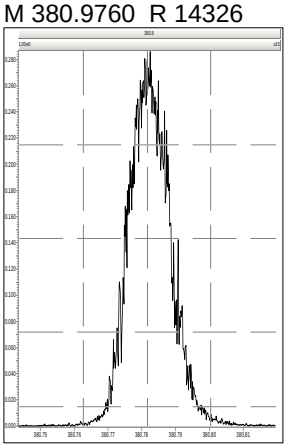

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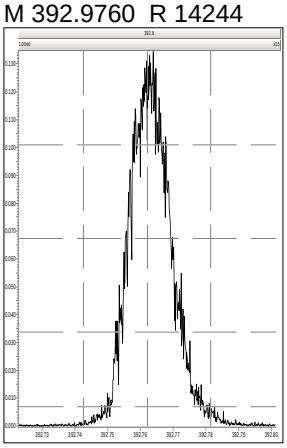

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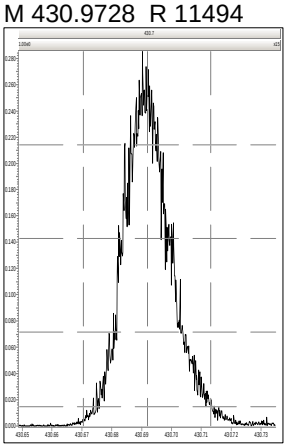

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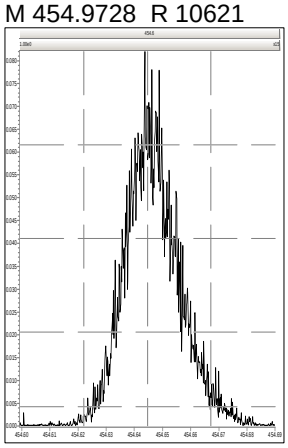

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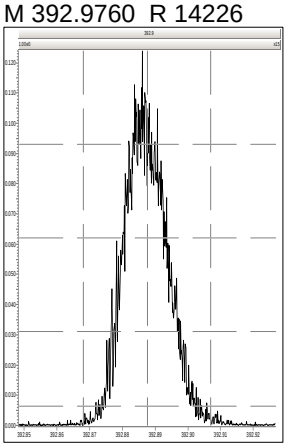

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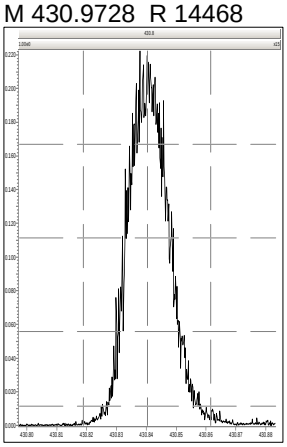
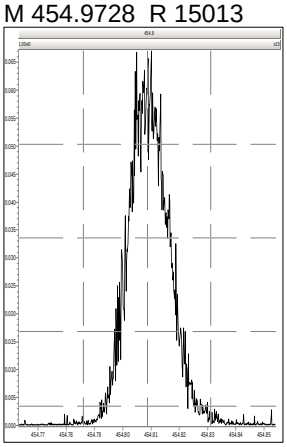


M 454.9728 R 15013



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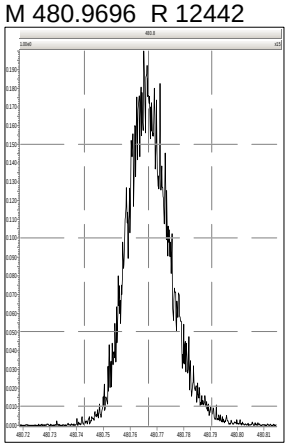

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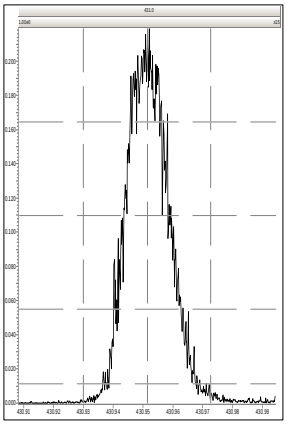

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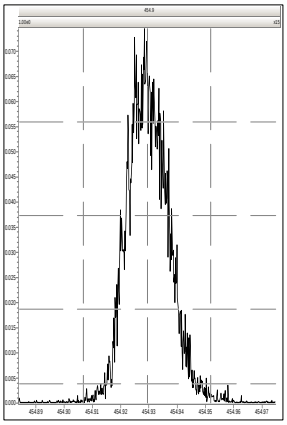
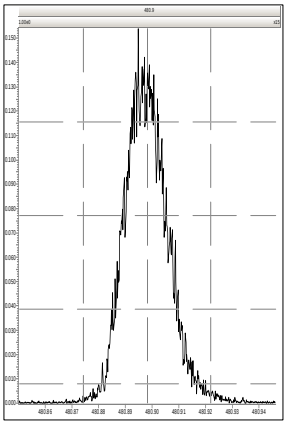
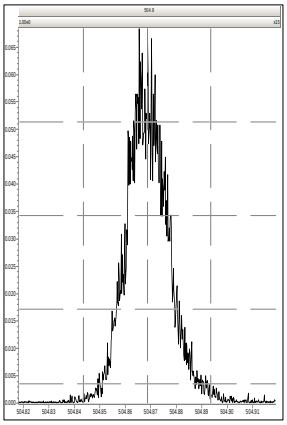


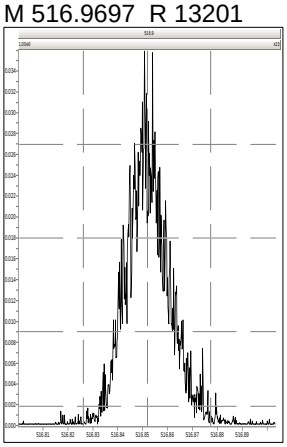
M 480.9696 R 14005

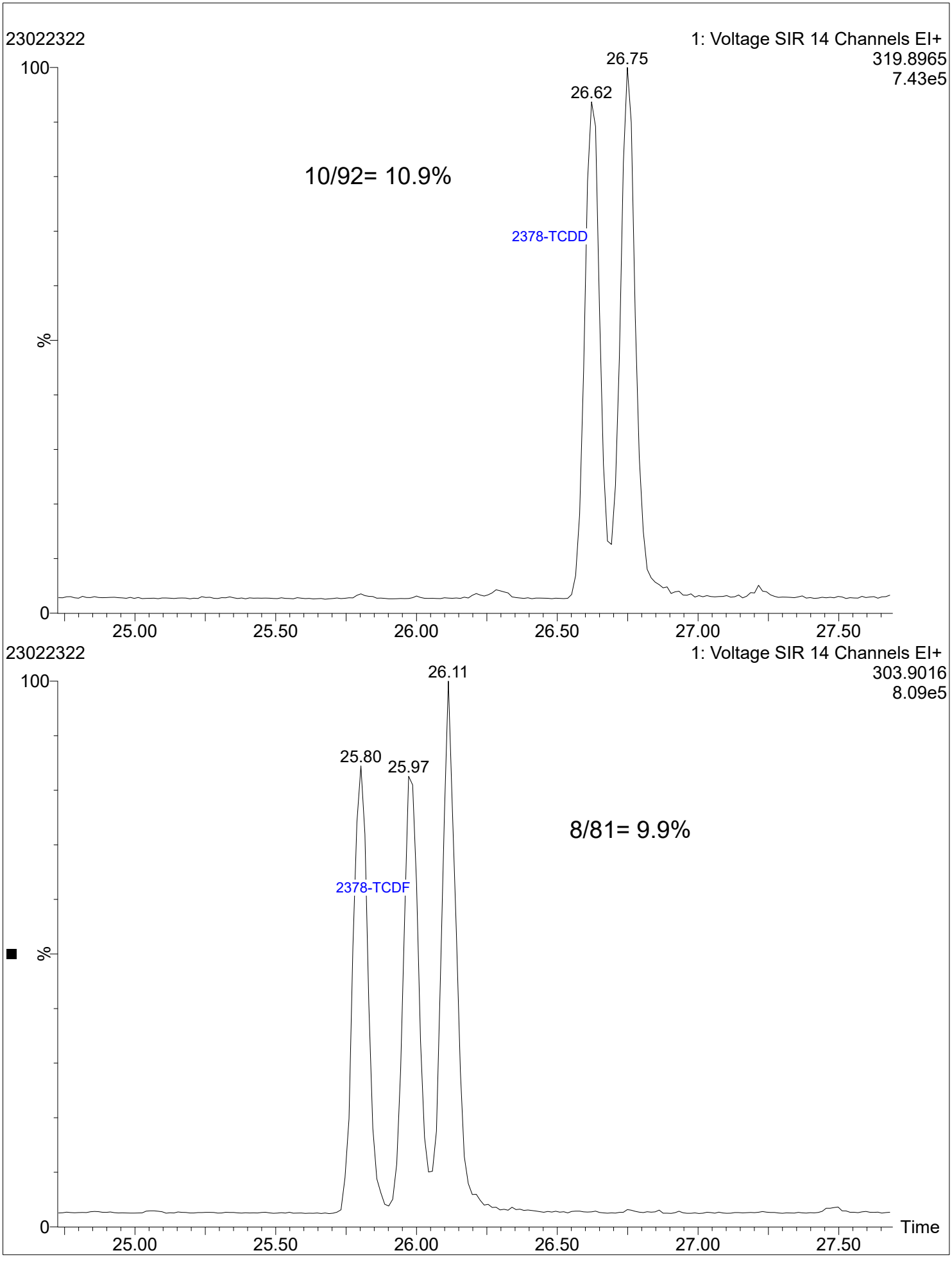


M 504.9696 R 13125



M 516.9697 R 13201




23022322
1: Voltage SIR 14 Channels EI+
319.8965
7.43e5
100
26.75
26.62
10/92= 10.9%
2378-TCDD
%
0
25.00
25.50
26.00
26.50
27.00
27.50
23022322
1: Voltage SIR 14 Channels EI+
303.9016
8.09e5
100
26.11
25.80
25.97
8/81= 9.9%
2378-TCDF
%
0
Time
25.00
25.50
26.00
26.50
27.00
27.50

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC SDG: 23A0134

Instrument .ID: AUTOSPEC01 Lab File ID: 23020103

Date Analyzed: 02/01/23 Time Analyzed: 13:02

Lab Sample ID: SLB0026-RES1 Sequence: SLB0026

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 10.3

3467-TCDF/2378-TCDF: 10

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLB0026-ICV1	CS3R1	23020102	02/01/2023	10:37
SLB0026-RES1	ISCR1	23020103	02/01/2023	13:02
SLB0026-CAL1	CSLCR	23020104	02/01/2023	14:39
SLB0026-CAL2	CS1CR	23020105	02/01/2023	15:28
SLB0026-CAL3	CS2CR	23020106	02/01/2023	17:07
SLB0026-CAL4	CS3CR	23020107	02/01/2023	17:56
SLB0026-CAL5	CS4CR	23020108	02/01/2023	18:45
SLB0026-CAL6	CS5CR	23020109	02/01/2023	19:34
SLB0026-SCV1	ICVCR	23020110	02/01/2023	20:23
SLB0026-CCV1	CS3R2	23020111	02/01/2023	21:12
SLB0026-RES2	ISCR2	23020112	02/01/2023	22:06

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC SDG: 23A0134

Instrument .ID: AUTOSPEC01 Lab File ID: 23020112

Date Analyzed: 02/01/23 Time Analyzed: 22:06

Lab Sample ID: SLB0026-RES2 Sequence: SLB0026

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 7.6

3467-TCDF/2378-TCDF: 9

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLB0026-ICV1	CS3R1	23020102	02/01/2023	10:37
SLB0026-RES1	ISCR1	23020103	02/01/2023	13:02
SLB0026-CAL1	CSLCR	23020104	02/01/2023	14:39
SLB0026-CAL2	CS1CR	23020105	02/01/2023	15:28
SLB0026-CAL3	CS2CR	23020106	02/01/2023	17:07
SLB0026-CAL4	CS3CR	23020107	02/01/2023	17:56
SLB0026-CAL5	CS4CR	23020108	02/01/2023	18:45
SLB0026-CAL6	CS5CR	23020109	02/01/2023	19:34
SLB0026-SCV1	ICVCR	23020110	02/01/2023	20:23
SLB0026-CCV1	CS3R2	23020111	02/01/2023	21:12
SLB0026-RES2	ISCR2	23020112	02/01/2023	22:06

Analytical Resources, LLC
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CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC SDG: 23A0134

Instrument .ID: AUTOSPEC01 Lab File ID: 23022303

Date Analyzed: 02/23/23 Time Analyzed: 11:47

Lab Sample ID: SLB0345-RES1 Sequence: SLB0345

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 14.1

3467-TCDF/2378-TCDF: 11.5

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLB0345-ICV1	CS3V1	23022302	02/23/2023	10:49
SLB0345-RES1	ISCV1	23022303	02/23/2023	11:47
BLA0261-BLK1	Blank	23022304	02/23/2023	12:35
BLA0261-SRM1	Reference	23022306	02/23/2023	14:14
SLB0345-CCV1	CS3V4	23022312	02/23/2023	19:11
SLB0345-RES2	ISCV4	23022313	02/23/2023	20:04
23A0134-06	LDW23-SS1160	23022316	02/23/2023	22:35
23A0134-14	LDW23-IT1194	23022317	02/23/2023	23:25
SLB0345-CCV2	CS3V5	23022321A	02/24/2023	02:43
SLB0345-RES3	ISCV5	23022322	02/24/2023	03:36
BLA0261-BS1	LCS	23022401	02/24/2023	10:33

Analytical Resources, LLC
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CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC
SDG: 23A0134
Instrument .ID: AUTOSPEC01
Lab File ID: 23022313
Date Analyzed: 02/23/23
Time Analyzed: 20:04
Lab Sample ID: SLB0345-RES2
Sequence: SLB0345

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 10.3

3467-TCDF/2378-TCDF: 9.6

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLB0345-ICV1	CS3V1	23022302	02/23/2023	10:49
SLB0345-RES1	ISCV1	23022303	02/23/2023	11:47
BLA0261-BLK1	Blank	23022304	02/23/2023	12:35
BLA0261-SRM1	Reference	23022306	02/23/2023	14:14
SLB0345-CCV1	CS3V4	23022312	02/23/2023	19:11
SLB0345-RES2	ISCV4	23022313	02/23/2023	20:04
23A0134-06	LDW23-SS1160	23022316	02/23/2023	22:35
23A0134-14	LDW23-IT1194	23022317	02/23/2023	23:25
SLB0345-CCV2	CS3V5	23022321A	02/24/2023	02:43
SLB0345-RES3	ISCV5	23022322	02/24/2023	03:36
BLA0261-BS1	LCS	23022401	02/24/2023	10:33

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC
SDG: 23A0134
Instrument .ID: AUTOSPEC01
Lab File ID: 23022322
Date Analyzed: 02/24/23
Time Analyzed: 03:36
Lab Sample ID: SLB0345-RES3
Sequence: SLB0345

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 10.9

3467-TCDF/2378-TCDF: 9.9

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLB0345-ICV1	CS3V1	23022302	02/23/2023	10:49
SLB0345-RES1	ISCV1	23022303	02/23/2023	11:47
BLA0261-BLK1	Blank	23022304	02/23/2023	12:35
BLA0261-SRM1	Reference	23022306	02/23/2023	14:14
SLB0345-CCV1	CS3V4	23022312	02/23/2023	19:11
SLB0345-RES2	ISCV4	23022313	02/23/2023	20:04
23A0134-06	LDW23-SS1160	23022316	02/23/2023	22:35
23A0134-14	LDW23-IT1194	23022317	02/23/2023	23:25
SLB0345-CCV2	CS3V5	23022321A	02/24/2023	02:43
SLB0345-RES3	ISCV5	23022322	02/24/2023	03:36
BLA0261-BS1	LCS	23022401	02/24/2023	10:33

Analytical Resources, LLC
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ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0026	Instrument:	AUTOSPEC01
		Calibration:	GB00010

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CS3R1	SLB0026-ICV1	23020102	NA	02/01/23 10:37
ISCR1	SLB0026-RES1	23020103	NA	02/01/23 13:02
CSLCR	SLB0026-CAL1	23020104	NA	02/01/23 14:39
CS1CR	SLB0026-CAL2	23020105	NA	02/01/23 15:28
CS2CR	SLB0026-CAL3	23020106	NA	02/01/23 17:07
CS3CR	SLB0026-CAL4	23020107	NA	02/01/23 17:56
CS4CR	SLB0026-CAL5	23020108	NA	02/01/23 18:45
CS5CR	SLB0026-CAL6	23020109	NA	02/01/23 19:34
ICVCR	SLB0026-SCV1	23020110	NA	02/01/23 20:23
CS3R2	SLB0026-CCV1	23020111	NA	02/01/23 21:12
ISCR2	SLB0026-RES2	23020112	NA	02/01/23 22:06

Analytical Resources, LLC
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ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0345	Instrument:	AUTOSPEC01
		Calibration:	GB00010

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CS3V1	SLB0345-ICV1	23022302	NA	02/23/23 10:49
ISCV1	SLB0345-RES1	23022303	NA	02/23/23 11:47
Blank	BLA0261-BLK1	23022304	Solid	02/23/23 12:35
Reference	BLA0261-SRM1	23022306	Solid	02/23/23 14:14
CS3V4	SLB0345-CCV1	23022312	NA	02/23/23 19:11
ISCV4	SLB0345-RES2	23022313	NA	02/23/23 20:04
LDW23-SS1160	23A0134-06	23022316	Solid	02/23/23 22:35
LDW23-IT1194	23A0134-14	23022317	Solid	02/23/23 23:25
CS3V5	SLB0345-CCV2	23022321A	NA	02/24/23 02:43
ISCV5	SLB0345-RES3	23022322	NA	02/24/23 03:36
LCS	BLA0261-BS1	23022401	Solid	02/24/23 10:33

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Printed: 2/24/2023 3:57:35PM

ANALYSIS SEQUENCE

SLB0345

Instrument: AUTOSPEC01 HRGCMS Column ID: K11291
Calibration ID: GB00010 Tune File: FEB0923_1-5
EM Voltage: 350 Resolution check times : 09:43, 20:04, 03:36

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLB0345-ICV1	CS3V1	QC		1	K009821		02/23/2023 10:49	23022302	PK	
SLB0345-RES1	ISCV1	QC		2	K003933		02/23/2023 11:47	23022303	PK	
BLA0261-BLK1	Blank	QC		3		K011414	02/23/2023 12:35	23022304	PK	
BLA0261-BS1	LCS	QC		4		K011414	02/24/2023 10:33	23022401	PK	
BLA0261-SRM1	Reference	QC		5		K011414	02/23/2023 14:14	23022306	PK	
BLA0261-DUP1	Duplicate	QC		6		K011414	02/23/2023 15:04	23022307	PK	
23A0100-09	LDW23-SS1226	1613B Dioxin	C 01	7		K011414	02/23/2023 15:53	23022308	PK	
23A0100-21	LDW23-SS1154	1613B Dioxin	C 01	8		K011414	02/23/2023 16:42	23022309	PK	
23A0133-06	LDW23-SC1241	1613B Dioxin	B 01	9		K011414	02/23/2023 17:32	23022310	PK	
23A0133-07	LDW23-IT1217	1613B Dioxin	B 01	10		K011414	02/23/2023 18:21	23022311	PK	
SLB0345-CCV1	CS3V4	QC		11	K009821		02/23/2023 19:11	23022312	PK	
SLB0345-RES2	ISCV4	QC		12	K003933		02/23/2023 20:04	23022313	PK	
23A0133-10	LDW23-SC1215	1613B Dioxin	B 01	13		K011414	02/23/2023 20:56	23022314	PK	
23A0133-11	LDW23-SC1222	1613B Dioxin	B 01	14		K011414	02/23/2023 21:46	23022315	PK	
23A0134-06	LDW23-SS1160	1613B Dioxin	B 01	15		K011414	02/23/2023 22:35	23022316	PK	
23A0134-14	LDW23-IT1194	1613B Dioxin	B 01	16		K011414	02/23/2023 23:25	23022317	PK	
23A0207-02	LDW23-IT1089	1613B Dioxin	B 01	17		K011414	02/24/2023 00:14	23022318	PK	
23A0207-10	LDW23-IT1097	1613B Dioxin	B 01	18		K011414	02/24/2023 01:04	23022319	PK	
23A0207-17	LDW23-IT1209	1613B Dioxin	B 01	19		K011414	02/24/2023 01:53	23022320	PK	
SLB0345-CCV2	CS3V5	QC		20	K009821		02/24/2023 02:43	23022321A	PK	
SLB0345-RES3	ISCV5	QC		21	K003933		02/24/2023 03:36	23022322	PK	

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:08:59 Pacific Standard Time 2/24/23 pk

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23022322, Compound:13C-123789-HxCDD, RT:36.704	21
Peak deleted	Sample:23022322, Compound:13C-1234-TCDD, RT:25.788	21
Peak deleted	Sample:23022313, Compound:13C-1234-TCDD, RT:25.802	12
Peak deleted	Sample:23022313, Compound:13C-123789-HxCDD, RT:36.704	12
Peak deleted	Sample:23022303, Compound:13C-123789-HxCDD, RT:36.749	2
Pre modification peak	Sample:23022321, Compound:HF, RT:37.128	20
Peak modified	Sample:23022321, Compound:HF, RT:37.128	20
Pre modification peak	Sample:23022321, Compound:HF, RT:37.128	20
Peak modified	Sample:23022321, Compound:HF, RT:37.128	20
Peak modified	Sample:23022321, Compound:HF, RT:37.128	20
Pre modification peak	Sample:23022321, Compound:HF, RT:35.100	20
Peak modified	Sample:23022321, Compound:HF, RT:35.100	20
Peak modified	Sample:23022321, Compound:HF, RT:35.100	20
Peak modified	Sample:23022321, Compound:HF, RT:35.100	20
Peak modified	Sample:23022321, Compound:HF, RT:35.100	20
Pre modification peak	Sample:23022321, Compound:HF, RT:35.100	20
Peak modified	Sample:23022321, Compound:HF, RT:35.100	20
Peak deleted	Sample:23022304, Compound:TD, RT:26.650	3
Pre modification peak	Sample:23022304, Compound:OD, RT:45.289	3
Peak modified	Sample:23022304, Compound:OD, RT:45.289	3
Pre modification peak	Sample:23022309, Compound:PF, RT:31.524	8
Peak modified	Sample:23022309, Compound:PF, RT:31.524	8
Pre modification peak	Sample:23022309, Compound:PF, RT:31.524	8
Peak modified	Sample:23022309, Compound:PF, RT:31.524	8
Peak added	Sample:23022310, Compound:HF, RT:36.125	9
Peak added	Sample:23022310, Compound:HF, RT:36.103	9
Pre modification peak	Sample:23022311, Compound:PF, RT:31.513	10
Peak modified	Sample:23022311, Compound:PF, RT:31.513	10
Pre modification peak	Sample:23022316, Compound:HF, RT:36.136	15
Peak modified	Sample:23022316, Compound:HF, RT:36.136	15
Pre modification peak	Sample:23022316, Compound:HPF, RT:41.250	15
Peak modified	Sample:23022316, Compound:HPF, RT:41.250	15
Pre modification peak	Sample:23022316, Compound:HPF, RT:41.250	15
Peak modified	Sample:23022316, Compound:HPF, RT:41.250	15
Pre modification peak	Sample:23022317, Compound:TF, RT:25.972	16
Peak modified	Sample:23022317, Compound:TF, RT:25.972	16
Pre modification peak	Sample:23022317, Compound:HF, RT:37.094	16
Peak modified	Sample:23022317, Compound:HF, RT:37.094	16
Pre modification peak	Sample:23022317, Compound:HF, RT:37.105	16
Peak modified	Sample:23022317, Compound:HF, RT:37.105	16
Pre modification peak	Sample:23022319, Compound:HPF, RT:41.261	18
Peak modified	Sample:23022319, Compound:HPF, RT:41.261	18
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230223IH.qld'	
Peak deleted	Sample:23022304, Compound:TF, RT:25.986	3
Peak deleted	Sample:23022306, Compound:HD, RT:37.195	5
Peak deleted	Sample:23022307, Compound:HF, RT:37.228	6
Peak deleted	Sample:23022308, Compound:PF, RT:29.596	7
Peak deleted	Sample:23022308, Compound:PF, RT:28.738	7
Peak deleted	Sample:23022308, Compound:PD, RT:31.479	7
Peak added	Sample:23022308, Compound:PD, RT:29.095	7
Peak added	Sample:23022308, Compound:PD, RT:29.378	7

Dataset: T:\Autospec\Processed Data Batch\230223IH.qld
Last Altered: Friday, February 24, 2023 14:40:25 Pacific Standard Time
Printed: Friday, February 24, 2023 15:08:59 Pacific Standard Time

Event	Details	Sample ID
Peak deleted	Sample:23022308, Compound:HPD, RT:39.634	7
Pre modification peak	Sample:23022309, Compound:13C-123478-HxCDF, RT:35.133	8
Peak modified	Sample:23022309, Compound:13C-123478-HxCDF, RT:35.133	8
Peak deleted	Sample:23022309, Compound:PP, RT:28.119	8
Peak deleted	Sample:23022309, Compound:HD, RT:34.008	8
Peak deleted	Sample:23022309, Compound:HPD, RT:40.837	8
Peak deleted	Sample:23022310, Compound:HD, RT:37.206	9
Pre modification peak	Sample:23022311, Compound:PF, RT:29.095	10
Peak modified	Sample:23022311, Compound:PF, RT:29.095	10
Pre modification peak	Sample:23022311, Compound:PF, RT:29.095	10
Peak modified	Sample:23022311, Compound:PF, RT:29.095	10
Peak deleted	Sample:23022311, Compound:HD, RT:35.680	10
Peak deleted	Sample:23022311, Compound:HPD, RT:40.838	10
Peak deleted	Sample:23022315, Compound:TF, RT:24.503	14
Peak added	Sample:23022315, Compound:PD, RT:29.061	14
Peak added	Sample:23022315, Compound:PD, RT:29.073	14
Peak deleted	Sample:23022315, Compound:HPD, RT:40.826	14
Peak deleted	Sample:23022316, Compound:HF, RT:37.194	15
Peak added	Sample:23022316, Compound:HF, RT:37.117	15
Peak added	Sample:23022316, Compound:HF, RT:37.117	15
Peak deleted	Sample:23022316, Compound:HD, RT:37.194	15
Peak deleted	Sample:23022317, Compound:PF, RT:28.883	16
Peak deleted	Sample:23022317, Compound:TD, RT:26.735	16
Pre modification peak	Sample:23022319, Compound:PF, RT:29.084	18
Peak modified	Sample:23022319, Compound:PF, RT:29.084	18
Pre modification peak	Sample:23022319, Compound:PF, RT:29.084	18
Peak modified	Sample:23022319, Compound:PF, RT:29.084	18
Peak added	Sample:23022319, Compound:PD, RT:29.062	18
Peak added	Sample:23022319, Compound:PD, RT:29.051	18
Peak deleted	Sample:23022319, Compound:HD, RT:37.194	18
Peak added	Sample:23022320, Compound:PF, RT:29.251	19
Peak added	Sample:23022320, Compound:PF, RT:29.251	19
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230223IH.qld'	

Analytical Resources, LLC
Analytical Chemists and Consultants

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0026	Instrument:	AUTOSPEC01
Sample ID:	SLB0026-ICV1	Calibration:	GB00010
File ID:	23020102	Analyzed:	02/01/23 10:37

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	81.8	71 - 129	25.8667	25.87167	-0.0050	N/A	
13C12-2,3,7,8-TCDD	100.00	103	82 - 118	26.5168	26.51423	0.0026	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	97.0	76 - 124	30.0278	30.03173	-0.0039	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	96.3	77 - 123	31.3648	31.36872	-0.0039	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	97.3	62 - 138	31.621	31.62498	-0.0040	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	88.7	76 - 124	34.9858	34.9784	0.0074	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	89.6	70 - 130	35.1195	35.11773	0.0018	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	88.7	73 - 127	35.9773	35.97562	0.0017	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	87.8	74 - 126	37.0023	37.00233	0.0000	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	99.3	85 - 115	36.0998	36.09812	0.0017	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	102	85 - 115	36.2113	36.21508	-0.0038	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	80.6	78 - 122	38.8407	38.84072	0.0000	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	78.2	77 - 123	41.0912	41.09488	-0.0037	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	84.9	72 - 128	40.3447	40.3447	0.0000	N/A	
13C12-OCDD	200.00	87.8	48 - 152	45.1112	45.10738	0.0038	N/A	
37Cl4-2,3,7,8-TCDD	10.000	85.8	0 - 200	26.5318	26.53683	-0.0050	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0026	Instrument:	AUTOSPEC01
Sample ID:	SLB0026-SCV1	Calibration:	GB00010
File ID:	23020110	Analyzed:	02/01/23 20:23

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	101	0 - 200	25.8667	25.87167	-0.0050	N/A	
13C12-2,3,7,8-TCDD	100.00	97.3	0 - 200	26.5015	26.51423	-0.0127	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	97.9	0 - 200	30.0262	30.03173	-0.0055	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	96.0	0 - 200	31.3632	31.36872	-0.0055	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	95.6	0 - 200	31.6193	31.62498	-0.0057	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	99.0	0 - 200	34.9728	34.9784	-0.0056	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	98.8	0 - 200	35.1065	35.11773	-0.0112	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	99.3	0 - 200	35.9643	35.97562	-0.0113	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	98.6	0 - 200	36.9893	37.00233	-0.0130	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	97.7	0 - 200	36.0868	36.09812	-0.0113	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	101	0 - 200	36.2095	36.21508	-0.0056	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	100	0 - 200	38.8278	38.84072	-0.0129	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	101	0 - 200	41.0895	41.09488	-0.0054	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	101	0 - 200	40.3318	40.3447	-0.0129	N/A	
13C12-OCDD	200.00	103	0 - 200	45.1013	45.10738	-0.0061	N/A	
37Cl4-2,3,7,8-TCDD	10.000	89.4	0 - 200	26.5318	26.53683	-0.0050	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0026	Instrument:	AUTOSPEC01
Sample ID:	SLB0026-CCV1	Calibration:	GB00010
File ID:	23020111	Analyzed:	02/01/23 21:12

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	95.3	71 - 129	25.8665	25.87167	-0.0052	N/A	
13C12-2,3,7,8-TCDD	100.00	103	82 - 118	26.5167	26.51423	0.0025	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	97.8	76 - 124	30.026	30.03173	-0.0057	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	97.6	77 - 123	31.363	31.36872	-0.0057	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	95.1	62 - 138	31.6193	31.62498	-0.0057	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	102	76 - 124	34.9727	34.9784	-0.0057	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	102	70 - 130	35.1175	35.11773	-0.0002	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	99.6	73 - 127	35.9753	35.97562	-0.0003	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	101	74 - 126	37.0005	37.00233	-0.0018	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	100	85 - 115	36.098	36.09812	-0.0001	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	100	85 - 115	36.2093	36.21508	-0.0058	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	102	78 - 122	38.8387	38.84072	-0.0020	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	104	77 - 123	41.0893	41.09488	-0.0056	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	103	72 - 128	40.3428	40.3447	-0.0019	N/A	
13C12-OCDD	200.00	106	48 - 152	45.1013	45.10738	-0.0061	N/A	
37Cl4-2,3,7,8-TCDD	10.000	90.4	0 - 200	26.5317	26.53683	-0.0051	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0345	Instrument:	AUTOSPEC01
Sample ID:	SLB0345-ICV1	Calibration:	GB00010
File ID:	23022302	Analyzed:	02/23/23 10:49

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	86.1	71 - 129	25.986	25.87167	0.1143	N/A	
13C12-2,3,7,8-TCDD	100.00	97.7	82 - 118	26.6358	26.51423	0.1216	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	81.5	76 - 124	30.1535	30.03173	0.1218	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	86.2	77 - 123	31.5015	31.36872	0.1328	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	77.8	62 - 138	31.7578	31.62498	0.1328	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	93.7	76 - 124	35.1112	34.9784	0.1328	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	103	70 - 130	35.245	35.11773	0.1273	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	98.2	73 - 127	36.1028	35.97562	0.1272	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	86.6	74 - 126	37.1388	37.00233	0.1365	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	109	85 - 115	36.2253	36.09812	0.1272	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	119	85 - 115	36.3367	36.21508	0.1216	N/A	*
13C12-1,2,3,4,6,7,8-HpCDF	100.00	80.7	78 - 122	38.966	38.84072	0.1253	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	75.8	77 - 123	41.2498	41.09488	0.1549	N/A	*
13C12-1,2,3,4,6,7,8-HpCDD	100.00	79.3	72 - 128	40.4923	40.3447	0.1476	N/A	
13C12-OCDD	200.00	64.4	48 - 152	45.298	45.10738	0.1906	N/A	
37Cl4-2,3,7,8-TCDD	10.000	83.9	0 - 200	26.6498	26.53683	0.1130	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0345	Instrument:	AUTOSPEC01
Sample ID:	BLA0261-BLK1	Calibration:	GB00010
File ID:	23022304	Analyzed:	02/23/23 12:35

Surrogate Compound	Spike Level ng/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	200.00	101	24 - 169	25.9862	25.87167	0.1145	N/A	
13C12-2,3,7,8-TCDD	200.00	135	25 - 164	26.6217	26.51423	0.1075	N/A	
13C12-1,2,3,7,8-PeCDF	200.00	83.3	24 - 185	30.1535	30.03173	0.1218	N/A	
13C12-2,3,4,7,8-PeCDF	200.00	85.6	21 - 178	31.4905	31.36872	0.1218	N/A	
13C12-1,2,3,7,8-PeCDD	200.00	73.0	25 - 181	31.7467	31.62498	0.1217	N/A	
13C12-1,2,3,4,7,8-HxCDF	200.00	121	26 - 152	35.1113	34.9784	0.1329	N/A	
13C12-1,2,3,6,7,8-HxCDF	200.00	130	26 - 123	35.245	35.11773	0.1273	N/A	*
13C12-2,3,4,6,7,8-HxCDF	200.00	120	28 - 136	36.1028	35.97562	0.1272	N/A	
13C12-1,2,3,7,8,9-HxCDF	200.00	107	29 - 147	37.1388	37.00233	0.1365	N/A	
13C12-1,2,3,4,7,8-HxCDD	200.00	142	32 - 141	36.2253	36.09812	0.1272	N/A	*
13C12-1,2,3,6,7,8-HxCDD	200.00	147	28 - 130	36.3367	36.21508	0.1216	N/A	*
13C12-1,2,3,4,6,7,8-HpCDF	200.00	95.9	28 - 143	38.9662	38.84072	0.1255	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	200.00	96.7	26 - 138	41.239	41.09488	0.1441	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	200.00	98.0	23 - 140	40.4813	40.3447	0.1366	N/A	
13C12-OCDD	400.00	69.1	17 - 157	45.2892	45.10738	0.1818	N/A	
37Cl4-2,3,7,8-TCDD	80.000	107	35 - 197	26.65	26.53683	0.1132	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0345	Instrument:	AUTOSPEC01
Sample ID:	BLA0261-SRM1	Calibration:	GB00010
File ID:	23022306	Analyzed:	02/23/23 14:14

Surrogate Compound	Spike Level ng/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	199.20	85.6	24 - 169	25.972	25.87167	0.1003	N/A	
13C12-2,3,7,8-TCDD	199.20	112	25 - 164	26.6218	26.51423	0.1076	N/A	
13C12-1,2,3,7,8-PeCDF	199.20	111	24 - 185	30.1425	30.03173	0.1108	N/A	
13C12-2,3,4,7,8-PeCDF	199.20	117	21 - 178	31.4905	31.36872	0.1218	N/A	
13C12-1,2,3,7,8-PeCDD	199.20	103	25 - 181	31.7468	31.62498	0.1218	N/A	
13C12-1,2,3,4,7,8-HxCDF	199.20	95.9	26 - 152	35.1003	34.9784	0.1219	N/A	
13C12-1,2,3,6,7,8-HxCDF	199.20	102	26 - 123	35.234	35.11773	0.1163	N/A	
13C12-2,3,4,6,7,8-HxCDF	199.20	95.9	28 - 136	36.103	35.97562	0.1274	N/A	
13C12-1,2,3,7,8,9-HxCDF	199.20	106	29 - 147	37.1278	37.00233	0.1255	N/A	
13C12-1,2,3,4,7,8-HxCDD	199.20	106	32 - 141	36.2255	36.09812	0.1274	N/A	
13C12-1,2,3,6,7,8-HxCDD	199.20	116	28 - 130	36.3368	36.21508	0.1217	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	199.20	73.1	28 - 143	38.9662	38.84072	0.1255	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	199.20	72.7	26 - 138	41.2388	41.09488	0.1439	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	199.20	70.0	23 - 140	40.4812	40.3447	0.1365	N/A	
13C12-OCDD	398.41	74.7	17 - 157	45.2892	45.10738	0.1818	N/A	
37Cl4-2,3,7,8-TCDD	79.681	93.8	35 - 197	26.636	26.53683	0.0992	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0345	Instrument:	AUTOSPEC01
Sample ID:	SLB0345-CCV1	Calibration:	GB00010
File ID:	23022312	Analyzed:	02/23/23 19:11

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	82.6	71 - 129	25.958	25.87167	0.0863	N/A	
13C12-2,3,7,8-TCDD	100.00	102	82 - 118	26.6077	26.51423	0.0935	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	74.0	76 - 124	30.131	30.03173	0.0993	N/A	*
13C12-2,3,4,7,8-PeCDF	100.00	76.9	77 - 123	31.4792	31.36872	0.1105	N/A	*
13C12-1,2,3,7,8-PeCDD	100.00	65.3	62 - 138	31.7353	31.62498	0.1103	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	94.5	76 - 124	35.0888	34.9784	0.1104	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	98.1	70 - 130	35.2225	35.11773	0.1048	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	97.8	73 - 127	36.0915	35.97562	0.1159	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	90.0	74 - 126	37.1165	37.00233	0.1142	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	104	85 - 115	36.2028	36.09812	0.1047	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	109	85 - 115	36.3142	36.21508	0.0991	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	82.5	78 - 122	38.9548	38.84072	0.1141	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	81.2	77 - 123	41.2277	41.09488	0.1328	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	83.7	72 - 128	40.4698	40.3447	0.1251	N/A	
13C12-OCDD	200.00	57.0	48 - 152	45.2705	45.10738	0.1631	N/A	
37Cl4-2,3,7,8-TCDD	10.000	88.2	0 - 200	26.6218	26.53683	0.0850	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0345	Instrument:	AUTOSPEC01
Sample ID:	23A0134-06	Calibration:	GB00010
File ID:	23022316	Analyzed:	02/23/23 22:35

Surrogate Compound	Spike Level ng/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	200.01	85.1	24 - 169	25.986	25.87167	0.1143	N/A	
13C12-2,3,7,8-TCDD	200.01	110	25 - 164	26.6217	26.51423	0.1075	N/A	
13C12-1,2,3,7,8-PeCDF	200.01	73.8	24 - 185	30.1422	30.03173	0.1105	N/A	
13C12-2,3,4,7,8-PeCDF	200.01	74.3	21 - 178	31.4902	31.36872	0.1215	N/A	
13C12-1,2,3,7,8-PeCDD	200.01	58.6	25 - 181	31.7465	31.62498	0.1215	N/A	
13C12-1,2,3,4,7,8-HxCDF	200.01	103	26 - 152	35.1112	34.9784	0.1328	N/A	
13C12-1,2,3,6,7,8-HxCDF	200.01	107	26 - 123	35.2448	35.11773	0.1271	N/A	
13C12-2,3,4,6,7,8-HxCDF	200.01	100	28 - 136	36.125	35.97562	0.1494	N/A	
13C12-1,2,3,7,8,9-HxCDF	200.01	85.4	29 - 147	37.1277	37.00233	0.1254	N/A	
13C12-1,2,3,4,7,8-HxCDD	200.01	107	32 - 141	36.2475	36.09812	0.1494	N/A	
13C12-1,2,3,6,7,8-HxCDD	200.01	111	28 - 130	36.3588	36.21508	0.1437	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	200.01	86.6	28 - 143	38.966	38.84072	0.1253	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	200.01	89.7	26 - 138	41.2387	41.09488	0.1438	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	200.01	89.8	23 - 140	40.481	40.3447	0.1363	N/A	
13C12-OCDD	400.01	63.5	17 - 157	45.298	45.10738	0.1906	N/A	
37Cl4-2,3,7,8-TCDD	80.003	89.5	35 - 197	26.6358	26.53683	0.0990	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0345	Instrument:	AUTOSPEC01
Sample ID:	23A0134-14	Calibration:	GB00010
File ID:	23022317	Analyzed:	02/23/23 23:25

Surrogate Compound	Spike Level ng/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	199.61	85.2	24 - 169	25.9577	25.87167	0.0860	N/A	
13C12-2,3,7,8-TCDD	199.61	114	25 - 164	26.5933	26.51423	0.0791	N/A	
13C12-1,2,3,7,8-PeCDF	199.61	107	24 - 185	30.131	30.03173	0.0993	N/A	
13C12-2,3,4,7,8-PeCDF	199.61	104	21 - 178	31.4678	31.36872	0.0991	N/A	
13C12-1,2,3,7,8-PeCDD	199.61	84.8	25 - 181	31.7242	31.62498	0.0992	N/A	
13C12-1,2,3,4,7,8-HxCDF	199.61	105	26 - 152	35.0887	34.9784	0.1103	N/A	
13C12-1,2,3,6,7,8-HxCDF	199.61	111	26 - 123	35.2223	35.11773	0.1046	N/A	
13C12-2,3,4,6,7,8-HxCDF	199.61	105	28 - 136	36.0913	35.97562	0.1157	N/A	
13C12-1,2,3,7,8,9-HxCDF	199.61	101	29 - 147	37.1163	37.00233	0.1140	N/A	
13C12-1,2,3,4,7,8-HxCDD	199.61	113	32 - 141	36.2028	36.09812	0.1047	N/A	
13C12-1,2,3,6,7,8-HxCDD	199.61	119	28 - 130	36.3253	36.21508	0.1102	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	199.61	90.1	28 - 143	38.9545	38.84072	0.1138	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	199.61	79.4	26 - 138	41.2162	41.09488	0.1213	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	199.61	95.8	23 - 140	40.4697	40.3447	0.1250	N/A	
13C12-OCDD	399.21	76.2	17 - 157	45.2702	45.10738	0.1628	N/A	
37Cl4-2,3,7,8-TCDD	79.843	88.8	35 - 197	26.6215	26.53683	0.0847	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0345	Instrument:	AUTOSPEC01
Sample ID:	SLB0345-CCV2	Calibration:	GB00010
File ID:	23022321A	Analyzed:	02/24/23 02:43

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	81.2	71 - 129	25.9578	25.87167	0.0861	N/A	
13C12-2,3,7,8-TCDD	100.00	110	82 - 118	26.5935	26.51423	0.0793	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	73.6	76 - 124	30.12	30.03173	0.0883	N/A	*
13C12-2,3,4,7,8-PeCDF	100.00	73.8	77 - 123	31.468	31.36872	0.0993	N/A	*
13C12-1,2,3,7,8-PeCDD	100.00	57.3	62 - 138	31.7243	31.62498	0.0993	N/A	*
13C12-1,2,3,4,7,8-HxCDF	100.00	97.6	76 - 124	35.089	34.9784	0.1106	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	99.0	70 - 130	35.2227	35.11773	0.1050	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	97.8	73 - 127	36.0805	35.97562	0.1049	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	97.7	74 - 126	37.1165	37.00233	0.1142	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	104	85 - 115	36.203	36.09812	0.1049	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	106	85 - 115	36.3145	36.21508	0.0994	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	89.3	78 - 122	38.9548	38.84072	0.1141	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	91.7	77 - 123	41.2163	41.09488	0.1214	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	93.5	72 - 128	40.4698	40.3447	0.1251	N/A	
13C12-OCDD	200.00	72.8	48 - 152	45.2707	45.10738	0.1633	N/A	
37Cl4-2,3,7,8-TCDD	10.000	94.3	0 - 200	26.6217	26.53683	0.0849	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0345	Instrument:	AUTOSPEC01
Sample ID:	BLA0261-BS1	Calibration:	GB00010
File ID:	23022401	Analyzed:	02/24/23 10:33

Surrogate Compound	Spike Level ng/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	110.62	84.4	24 - 169	25.972	25.87167	0.1003	N/A	
13C12-2,3,7,8-TCDD	110.62	99.2	25 - 164	26.6077	26.51423	0.0935	N/A	
13C12-1,2,3,7,8-PeCDF	110.62	93.3	24 - 185	30.1312	30.03173	0.0995	N/A	
13C12-2,3,4,7,8-PeCDF	110.62	93.3	21 - 178	31.4793	31.36872	0.1106	N/A	
13C12-1,2,3,7,8-PeCDD	110.62	80.1	25 - 181	31.7245	31.62498	0.0995	N/A	
13C12-1,2,3,4,7,8-HxCDF	110.62	108	26 - 152	35.0892	34.9784	0.1108	N/A	
13C12-1,2,3,6,7,8-HxCDF	110.62	120	26 - 123	35.2228	35.11773	0.1051	N/A	
13C12-2,3,4,6,7,8-HxCDF	110.62	112	28 - 136	36.0918	35.97562	0.1162	N/A	
13C12-1,2,3,7,8,9-HxCDF	110.62	109	29 - 147	37.1168	37.00233	0.1145	N/A	
13C12-1,2,3,4,7,8-HxCDD	110.62	126	32 - 141	36.2032	36.09812	0.1051	N/A	
13C12-1,2,3,6,7,8-HxCDD	110.62	142	28 - 130	36.3145	36.21508	0.0994	N/A	*
13C12-1,2,3,4,6,7,8-HpCDF	110.62	93.0	28 - 143	38.9552	38.84072	0.1145	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	110.62	94.8	26 - 138	41.228	41.09488	0.1331	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	110.62	97.6	23 - 140	40.4703	40.3447	0.1256	N/A	
13C12-OCDD	221.24	83.5	17 - 157	45.2713	45.10738	0.1639	N/A	
37Cl4-2,3,7,8-TCDD	44.248	80.0	35 - 197	26.6218	26.53683	0.0850	N/A	

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1160 23A0134-06	01/06/23 11:41	01/06/23 17:26	01/24/23 13:10	18	365	02/23/23 22:35	30	365	
LDW23-IT1194 23A0134-14	01/06/23 14:41	01/06/23 17:26	01/24/23 13:10	17	365	02/23/23 23:25	30	365	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: AUTOSPEC01

Analyte	MDL	RL	Units
2,3,7,8-TCDF	0.058	1.00	ng/kg
2,3,7,8-TCDD	0.150	1.00	ng/kg
1,2,3,7,8-PeCDF	0.240	1.00	ng/kg
2,3,4,7,8-PeCDF	0.220	1.00	ng/kg
1,2,3,7,8-PeCDD	0.170	1.00	ng/kg
1,2,3,4,7,8-HxCDF	0.280	1.00	ng/kg
1,2,3,6,7,8-HxCDF	0.200	1.00	ng/kg
2,3,4,6,7,8-HxCDF	0.170	1.00	ng/kg
1,2,3,7,8,9-HxCDF	0.190	1.00	ng/kg
1,2,3,4,7,8-HxCDD	0.170	1.00	ng/kg
1,2,3,6,7,8-HxCDD	0.180	1.00	ng/kg
1,2,3,7,8,9-HxCDD	0.220	1.00	ng/kg
1,2,3,4,6,7,8-HpCDF	0.210	1.00	ng/kg
1,2,3,4,7,8,9-HpCDF	0.240	1.00	ng/kg
1,2,3,4,6,7,8-HpCDD	0.560	2.50	ng/kg
OCDF	1.10	2.50	ng/kg
OCDD	4.60	10.0	ng/kg
Total TCDF		1.00	ng/kg
Total TCDD		1.00	ng/kg
Total PeCDF		1.00	ng/kg
Total PeCDD		1.00	ng/kg
Total HxCDF		1.00	ng/kg
Total HxCDD		1.00	ng/kg
Total HpCDF		1.00	ng/kg
Total HpCDD		1.00	ng/kg

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

CS3WT

Calibration and Verification Solution (EPA-1613CS3) combined with Window Defining and 2,3,7,8-TCDD Resolution Testing Congeners

PRODUCT CODE:	CS3WT
LOT NUMBER:	CS3WT0918
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/24/2018
LAST TESTED: (mm/dd/yyyy)	10/29/2018
EXPIRY DATE: (mm/dd/yyyy)	10/29/2025
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

CS3WT is a solution/mixture of native and $^{13}C_{12}$-labelled chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

CS3WT was designed and prepared to be used as a HRMS calibration standard according to U.S. EPA Method 1613B.

It is to be used for calibration verification in place of EPA-1613CS3 (Lot: 13CS30918). It also contains the PCDD and PCDF window defining congeners for a DB-5 (or equivalent) capillary column as well as the TCDD isomers required to test and confirm the resolution of 2,3,7,8-TCDD.

The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%. The individual native 2,3,7,8-substituted PCDD and PCDF congeners all have chemical purities of >98%; the other congeners (window defining and resolution testing) should only be considered semi-quantitative.

This current lot of CS3WT is to be used with the 1613 calibration solutions having the following lot numbers:

PRODUCT CODE	LOT NUMBER
EPA-1613CS1	13CS10918
EPA-1613CS2	13CS20918
EPA-1613CS3	13CS30918
EPA-1613CS4	13CS40918
EPA-1613CS5	13CS50918
EPA-1613CSL	13CSL0918
EPA-1613CS0.5	13CS0.50918

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.
- Only the 2,3,7,8-substituted PCDDs and PCDFs should be used for quantitation. The other congeners (window defining and 2378-TCDD resolution testing) should be considered semi-quantitative (within ±20% of their design value). Impurities have been identified where possible.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **CS3WT; Components and Concentrations (ng/ml, in nonane/4.5% toluene)**

QUANTITATIVE ANALYTES (ng/ml, ±5%)	
Native PCDDs & PCDFs:	
2,3,7,8-TCDD	10
2,3,7,8-TCDF	10
1,2,3,7,8-PeCDD	50
1,2,3,7,8-PeCDF	50
2,3,4,7,8-PeCDF	50
1,2,3,4,7,8-HxCDD	50
1,2,3,6,7,8-HxCDD	50
1,2,3,7,8,9-HxCDD	50
1,2,3,4,7,8-HxCDF	50
1,2,3,6,7,8-HxCDF	50
1,2,3,7,8,9-HxCDF	50
2,3,4,6,7,8-HxCDF	50
1,2,3,4,6,7,8-HpCDD *(WD)*	50
1,2,3,4,6,7,8-HpCDF *(WD)*	50
1,2,3,4,7,8,9-HpCDF *(WD)*	50
OCDD	100
OCDF	100
Labelled PCDDs & PCDFs:	
$^{13}C_{12}$-2,3,7,8-TCDD	100
$^{13}C_{12}$-2,3,7,8-TCDF	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100
$^{13}C_{12}$-OCDD	200
Cleanup Standard:	
$^{37}Cl_4$-2,3,7,8-TCDD	10
Internal Standards:	
$^{13}C_{12}$-1,2,3,4-TCDD	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100

SEMI-QUANTITATIVE ANALYTES (ng/ml, ±20%)	
Window Definers:*	
1,3,6,8-TCDD	10
1,2,8,9-TCDD	10
1,3,6,8-TCDF	10
1,2,8,9-TCDF	10
1,2,4,6,8/1,2,4,7,9-PeCDD	50
1,2,3,8,9-PeCDD	50
1,3,4,6,8-PeCDF	50
1,2,3,8,9-PeCDF	50
1,2,4,6,7,9-HxCDD	50
1,2,3,4,6,8-HxCDF	50
1,2,3,4,6,7,9-HpCDD	50
2378-TCDD Resolution Testing Isomers:	
1,2,3,4-TCDD	5
1,2,3,7/1,2,3,8-TCDD	5
1,2,3,9-TCDD	10

WD – Window Definer

** 1,2,3,4,6,7-HxCDD (last eluting HxCDD) not included; coelutes with 1,2,3,7,8,9-HxCDD. Use 1,2,3,4,6,7,9-HpCDD to set window.*

** 1,2,3,4,8,9-HxCDF (last eluting HxCDF) not included; can interfere with 1,2,3,7,8,9-HxCDF. Use 1,2,3,4,6,7,8-HpCDF to set window.*

Certified By: _____ **Date:** 10/30/2018
(mm/dd/yyyy)

B.G. Chittim, General Manager

Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

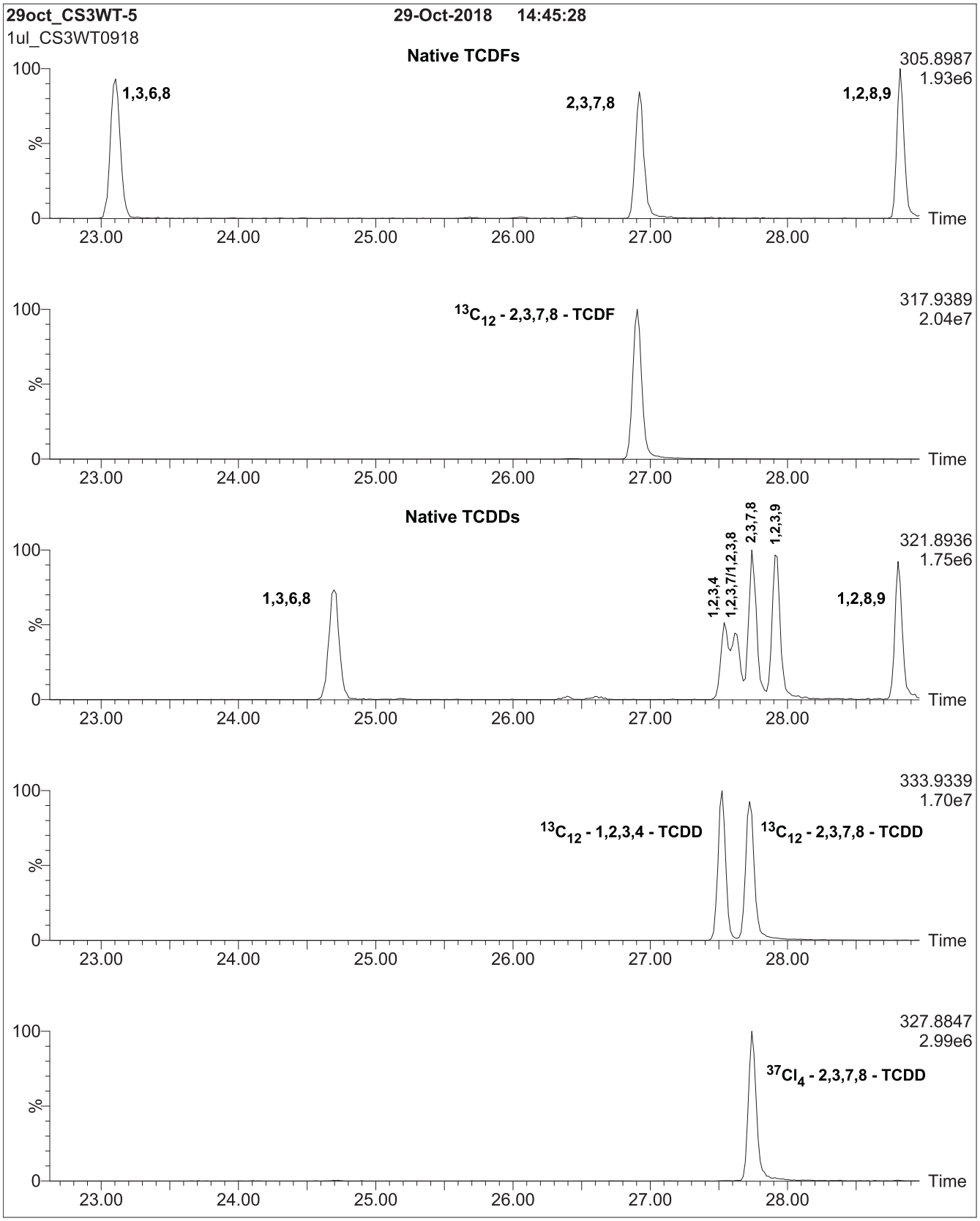


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

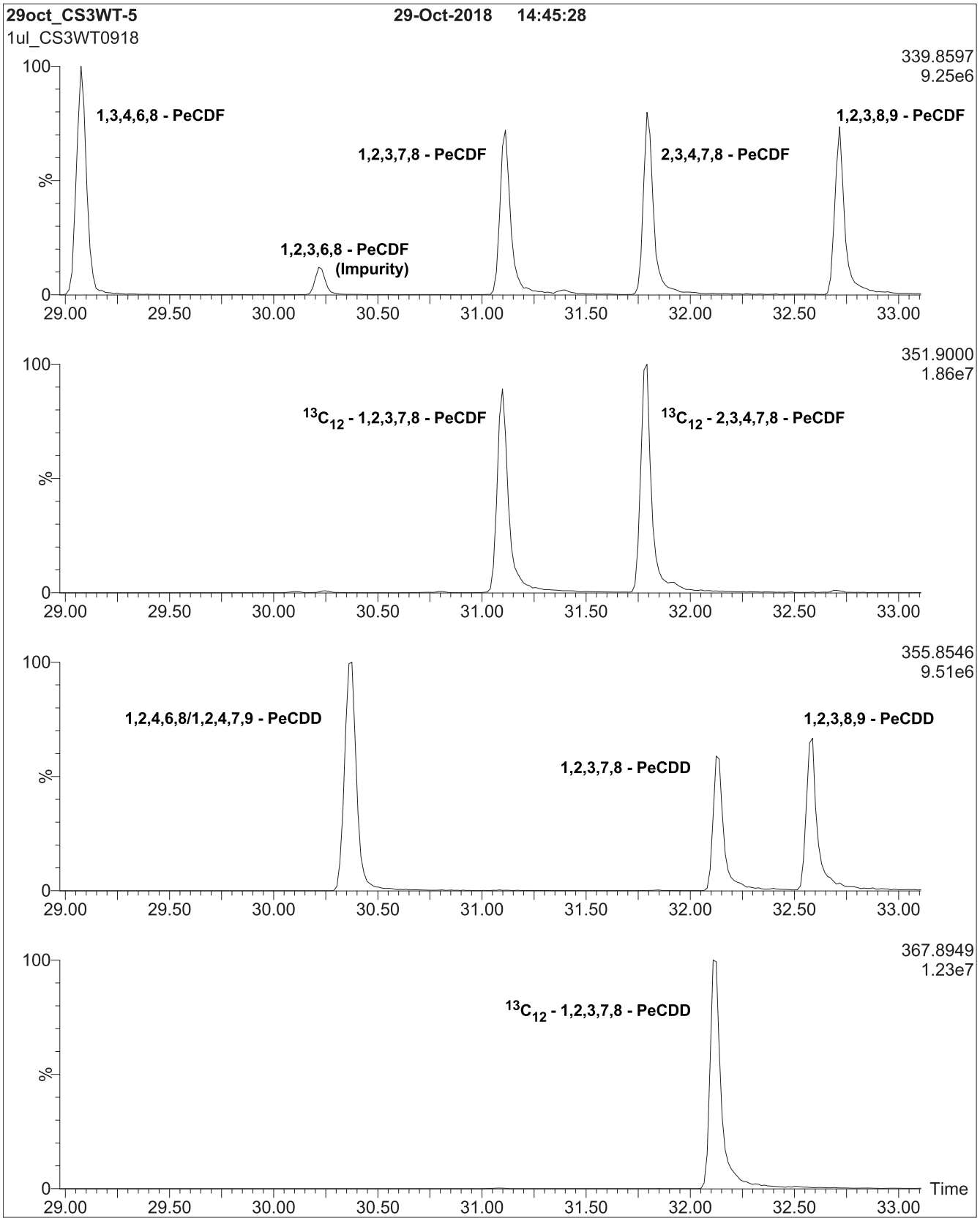


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

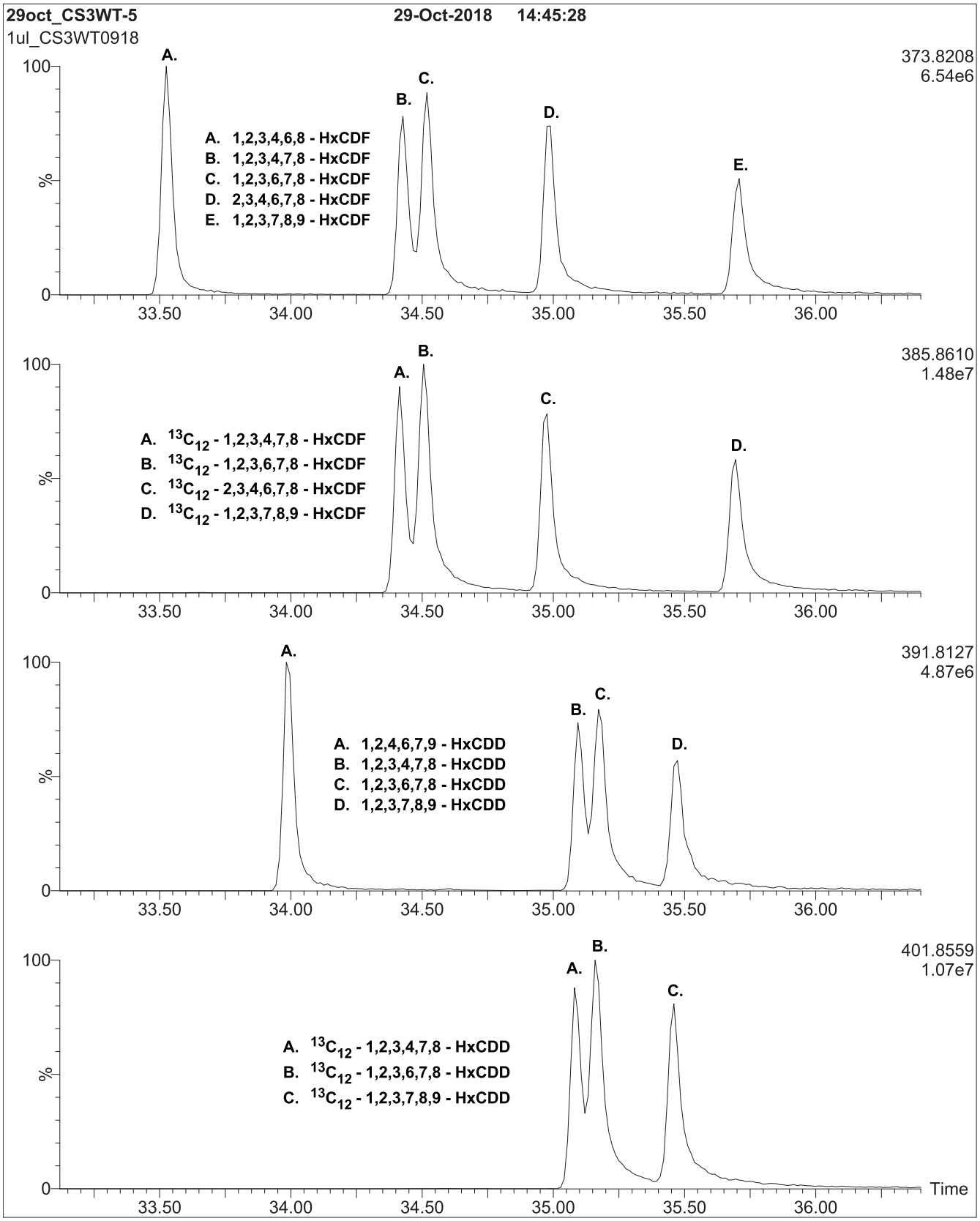


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

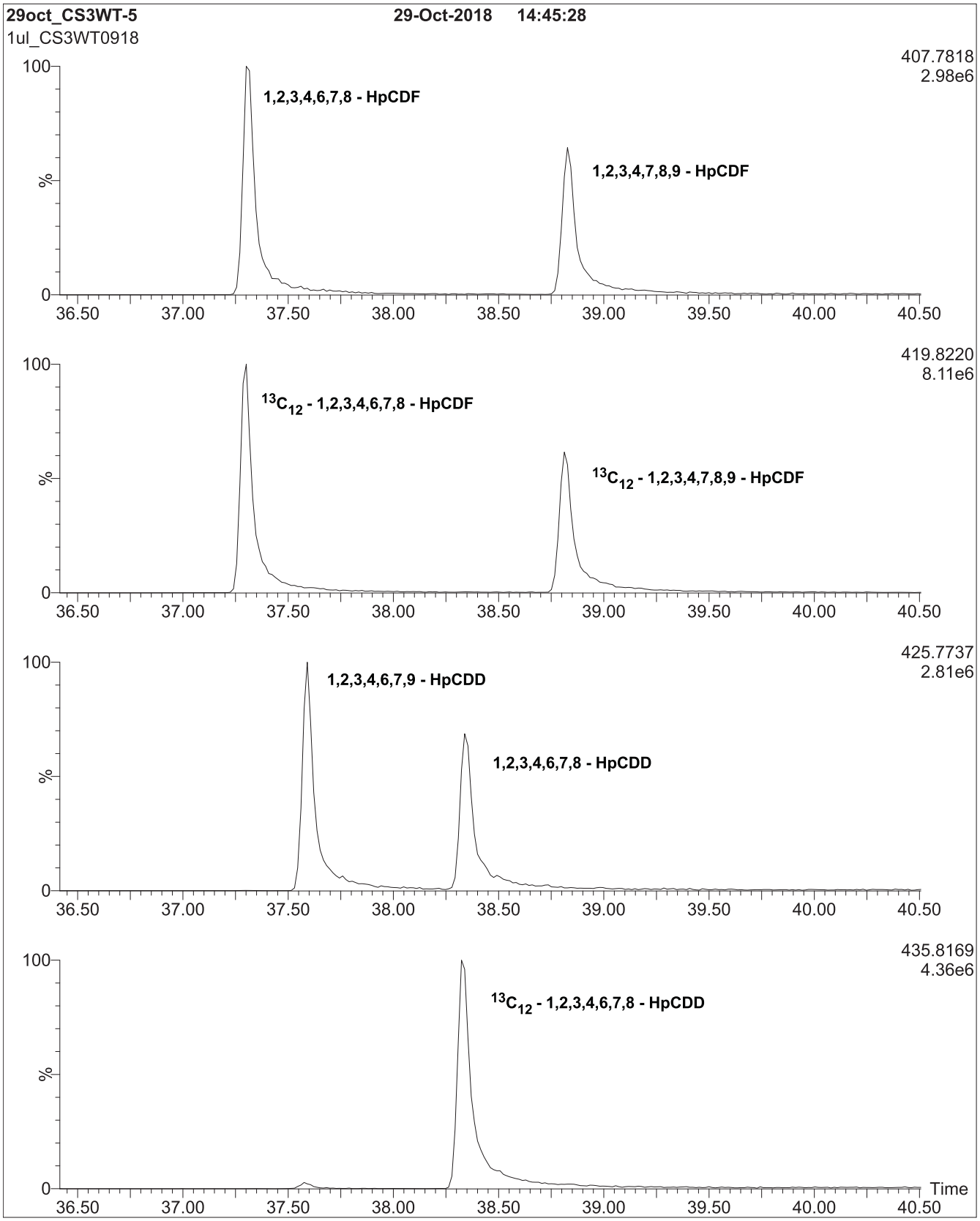
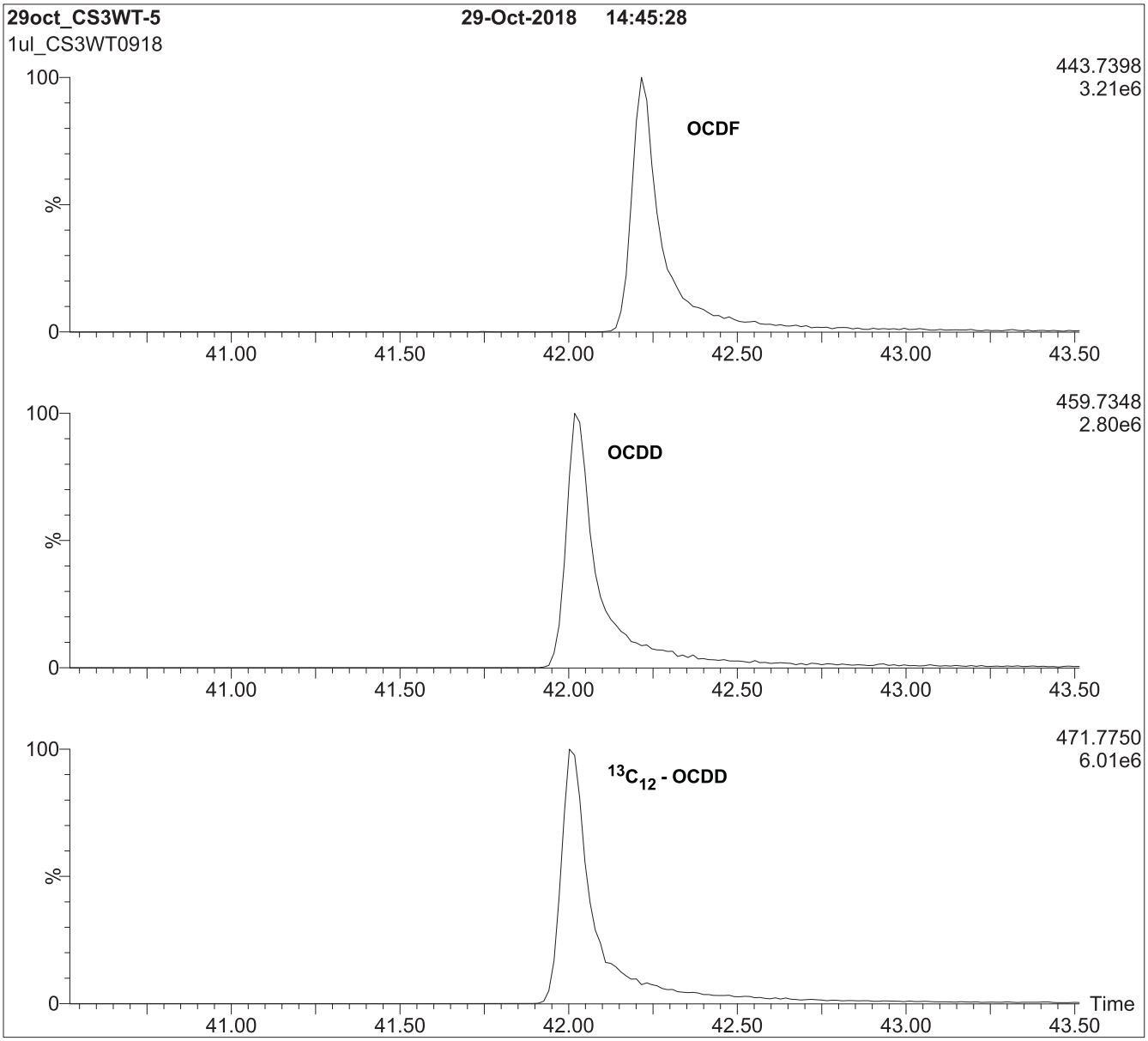


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow: Constant at 1 ml/min
Injector: 280 °C (Splitless Injection)
Ionization: EI+
Detector: 280 °C
SIR at 10,000 mass resolving power

Oven: 150 °C (1 min)
12 °C/min to 200 °C
3 °C/min to 235 °C
235 °C (8 min)
8 °C/min to 310 °C
310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005456
1613 CS1 CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

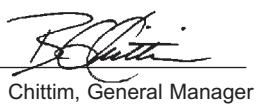
CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By:  **Date:** 10/25/2019
(mm/dd/yyyy)

B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

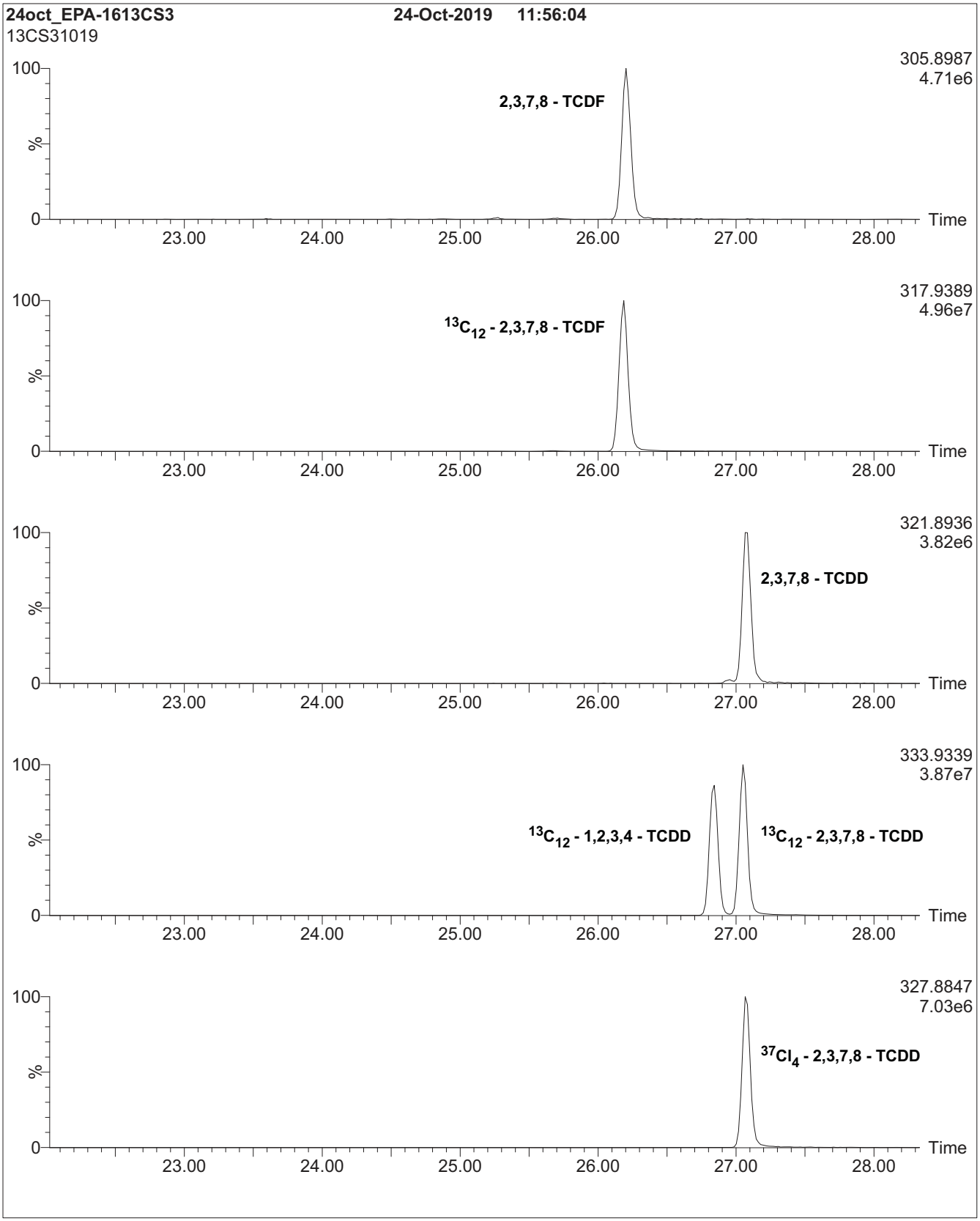


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

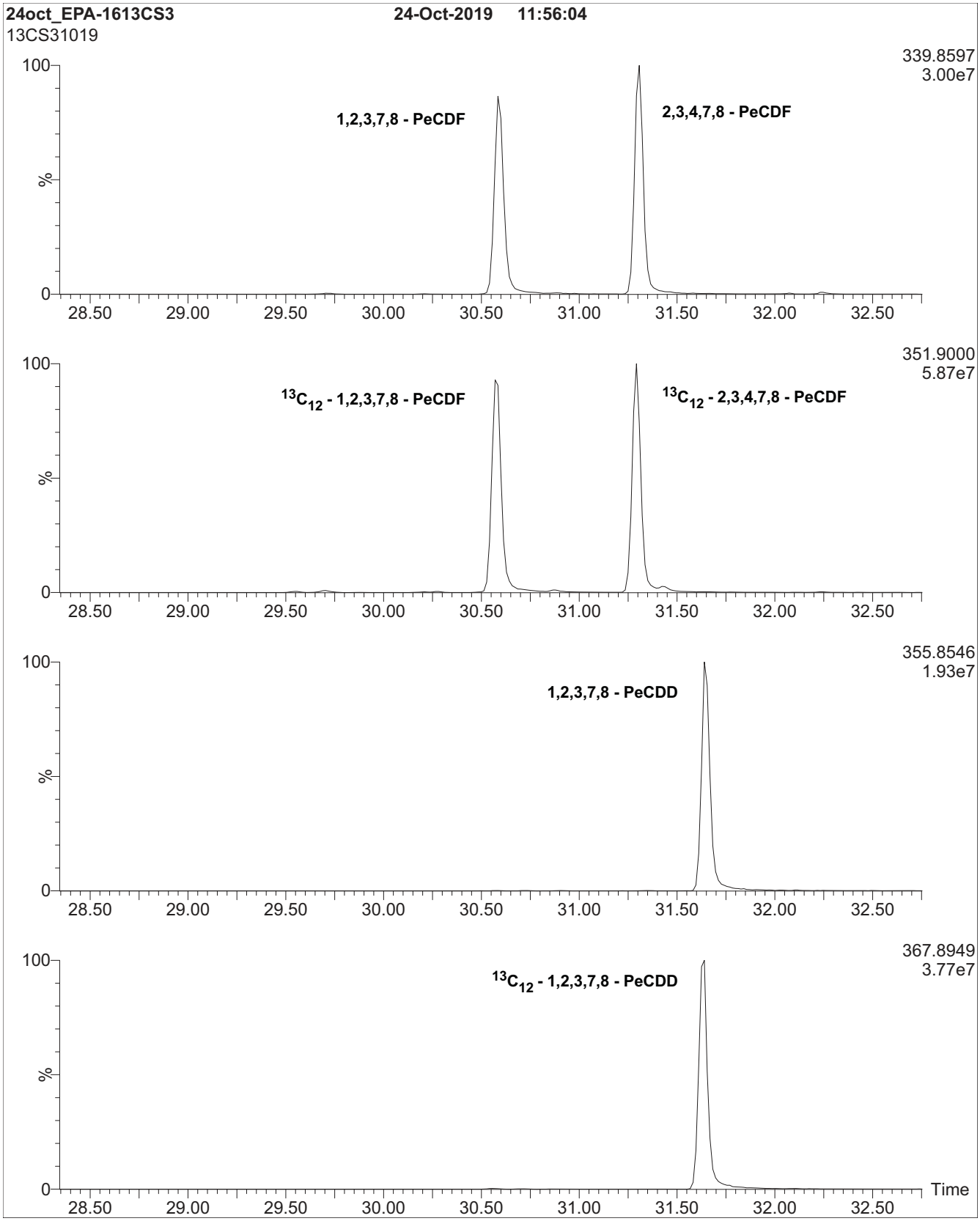


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

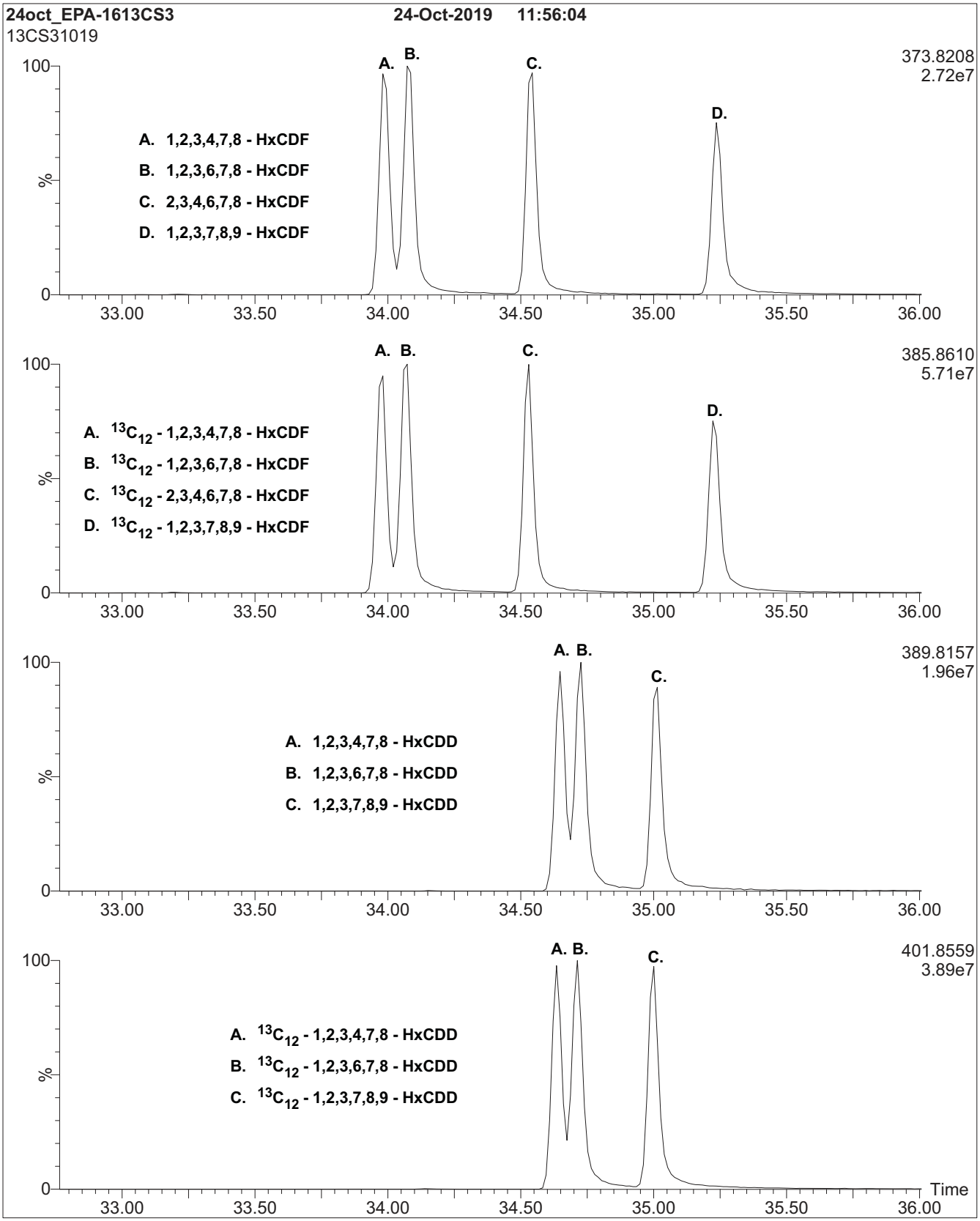


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

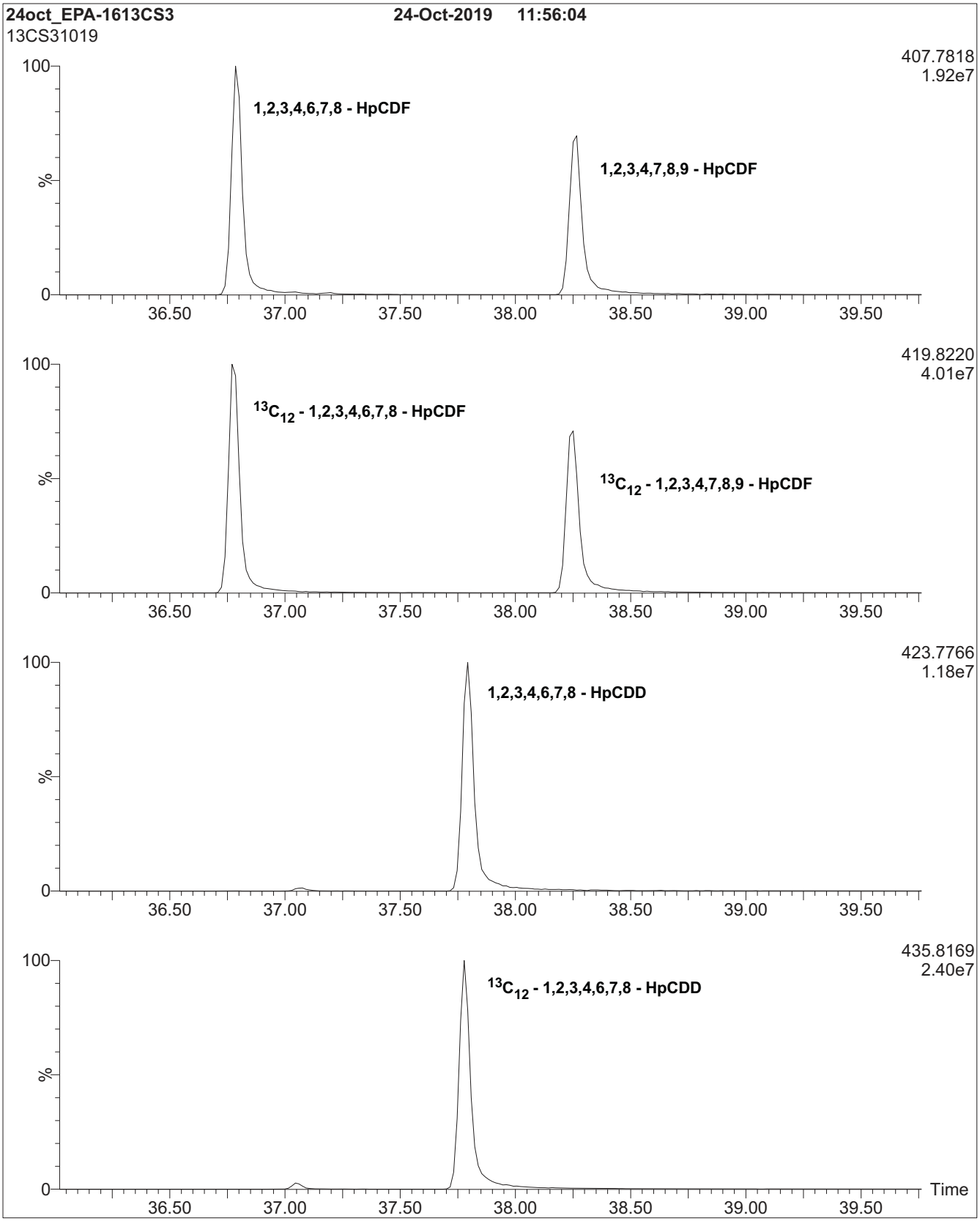
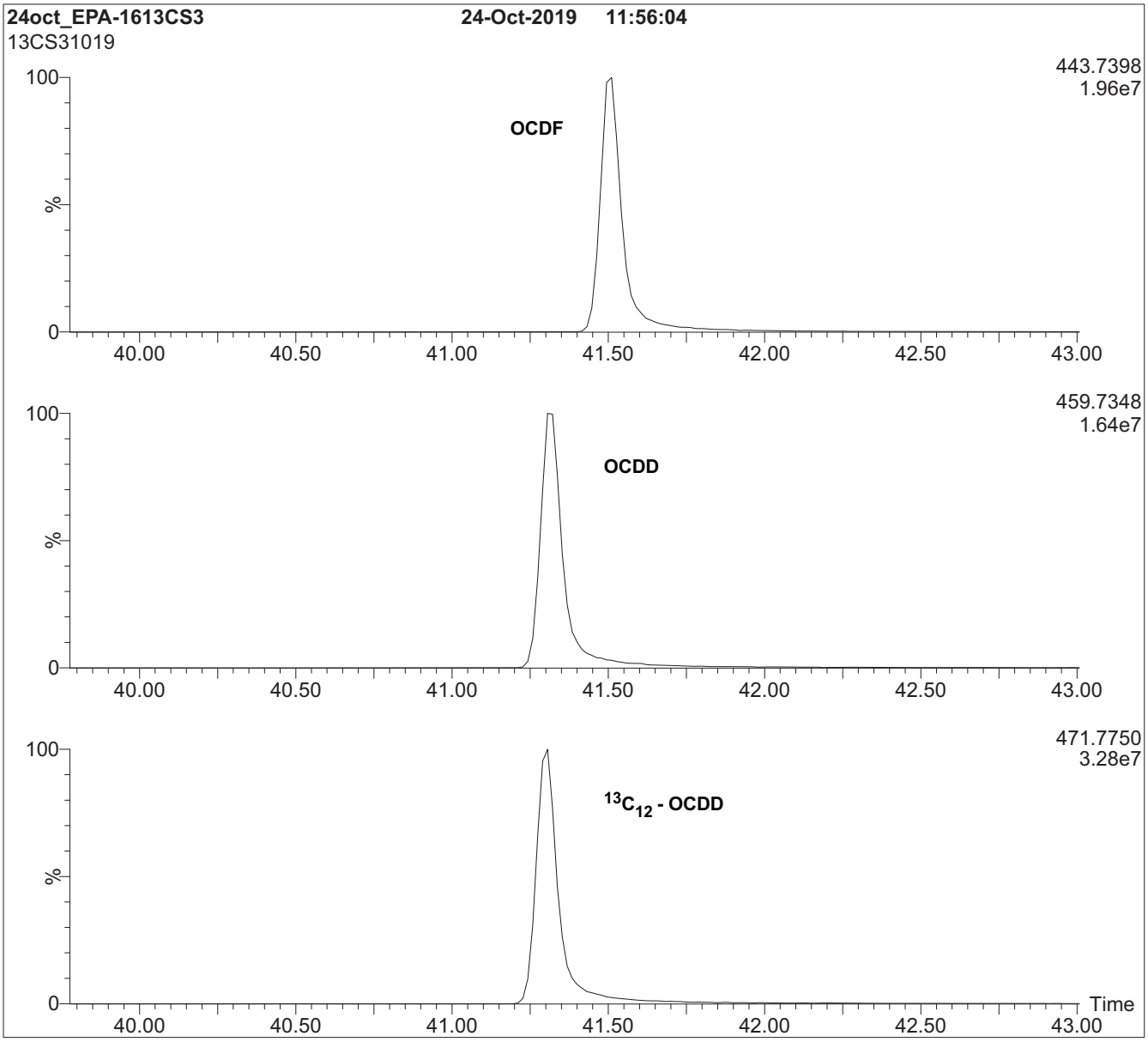


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005457
1613 CS2 CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By: _____ **Date:** 10/25/2019
(mm/dd/yyyy)
B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

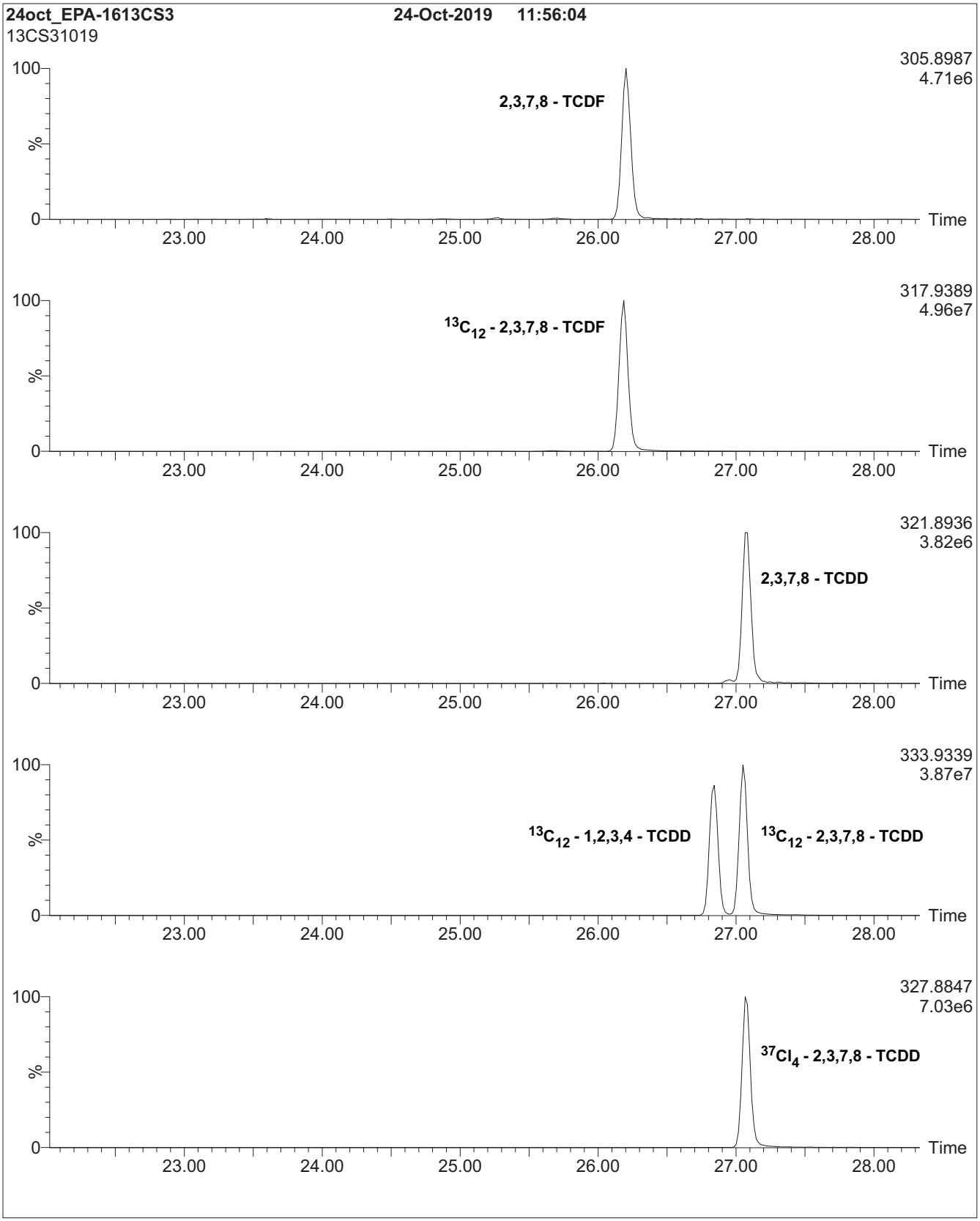


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

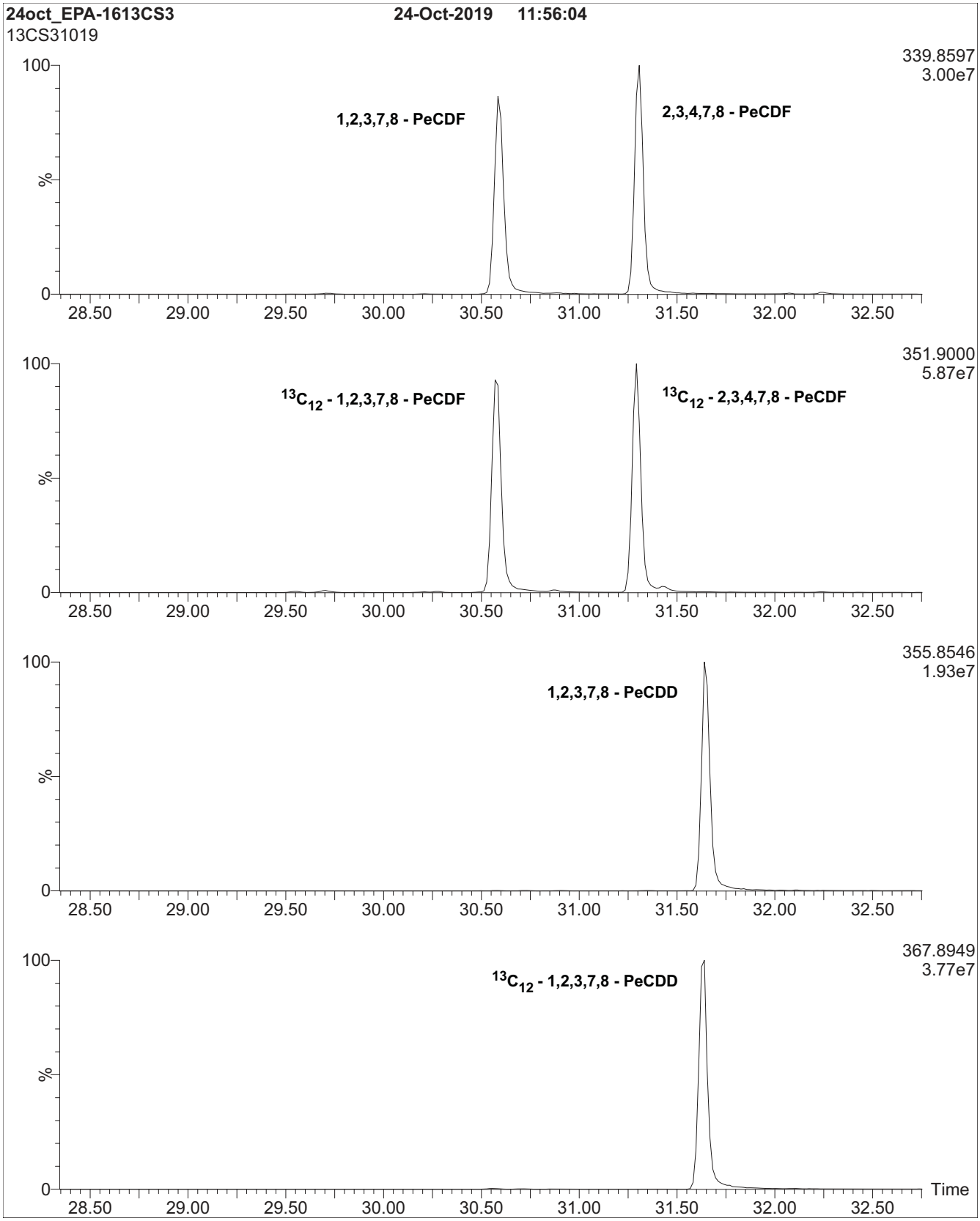


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

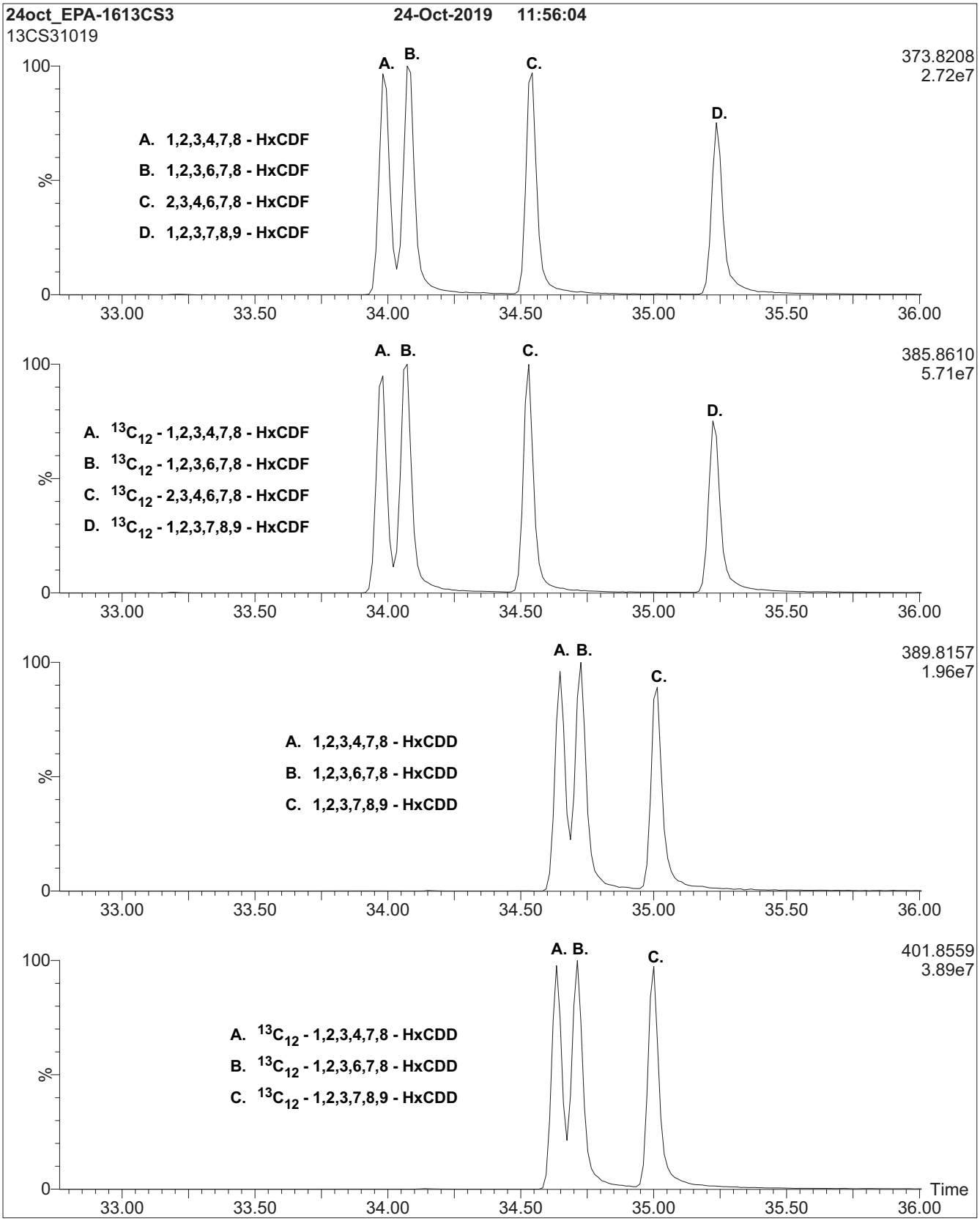


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

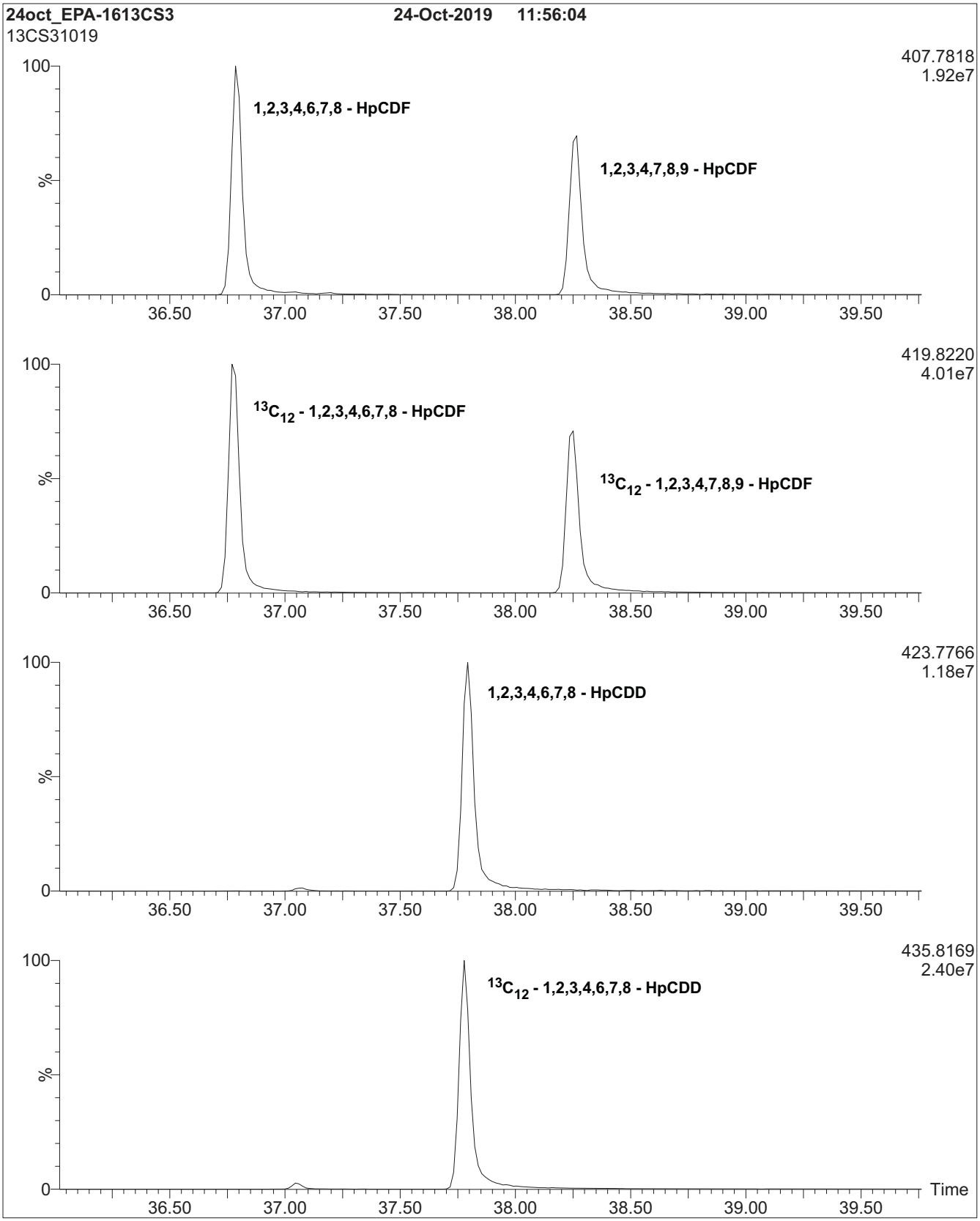
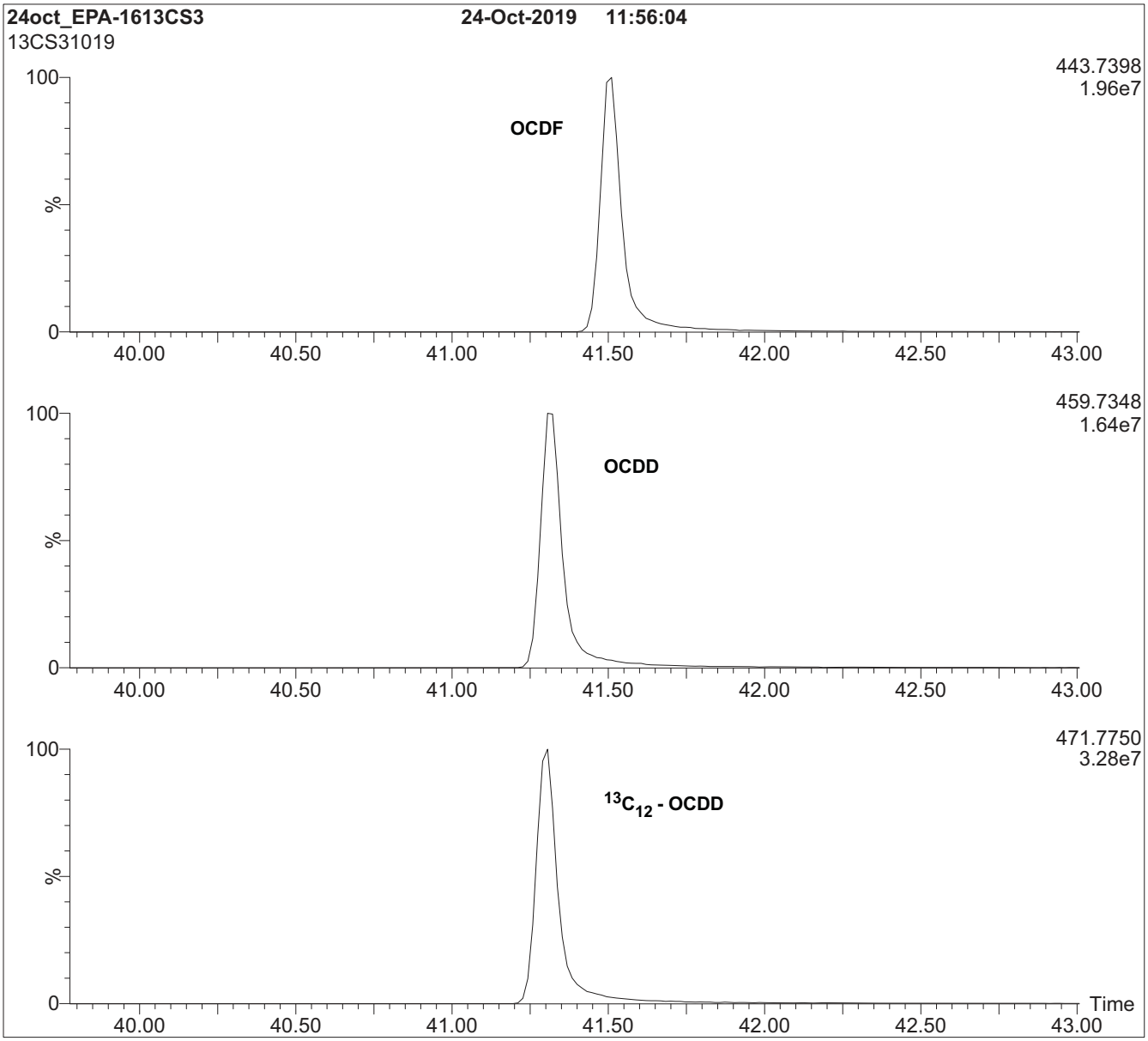


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow: Constant at 1 ml/min
Injector: 280 °C (Splitless Injection)
Ionization: EI+
Detector: 280 °C
SIR at 10,000 mass resolving power

Oven: 150 °C (1 min)
12 °C/min to 200 °C
3 °C/min to 235 °C
235 °C (8 min)
8 °C/min to 310 °C
310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005458
1613 CS4 CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

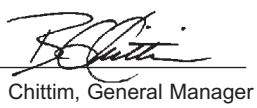
CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By:  **Date:** 10/25/2019
(mm/dd/yyyy)

B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

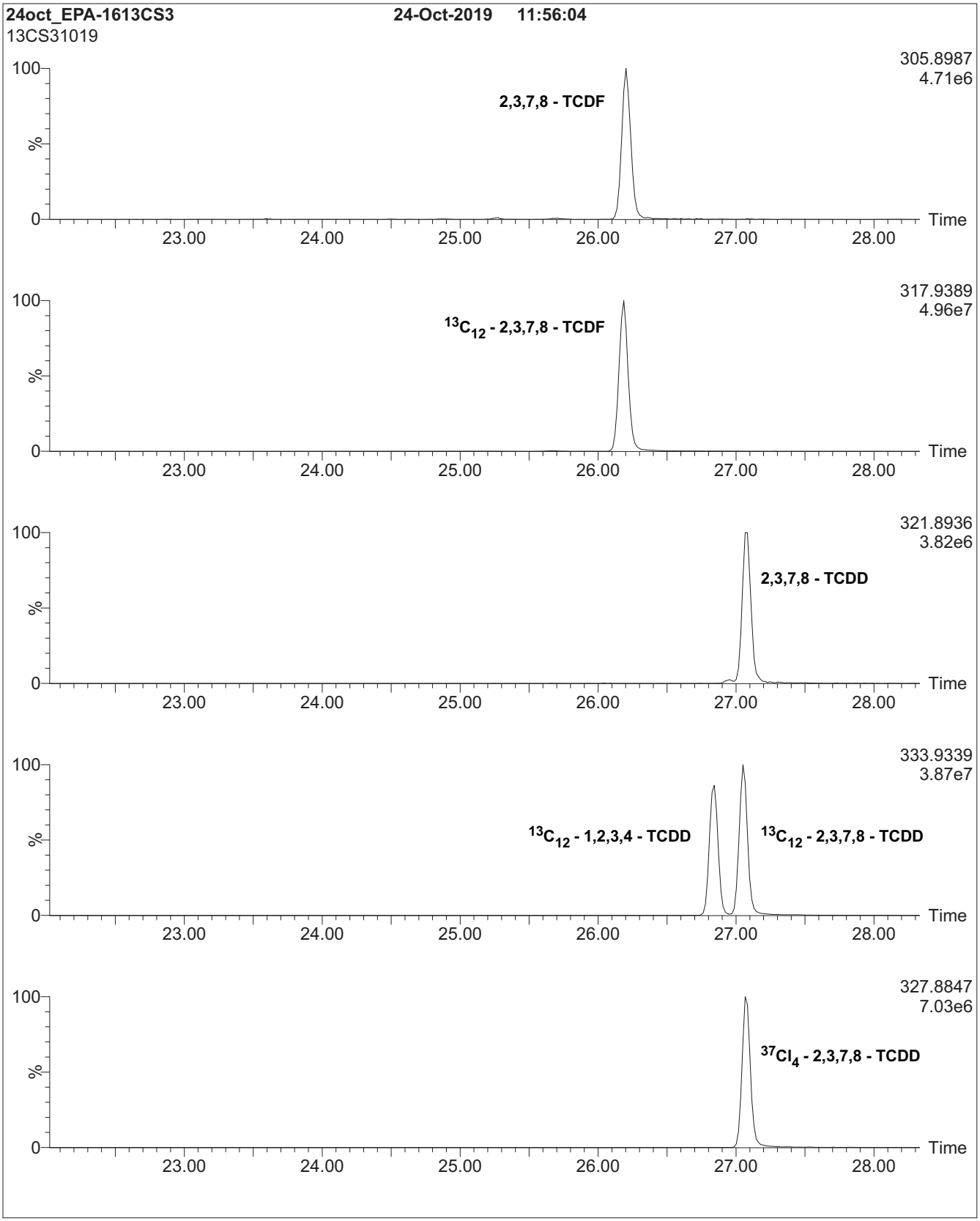


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

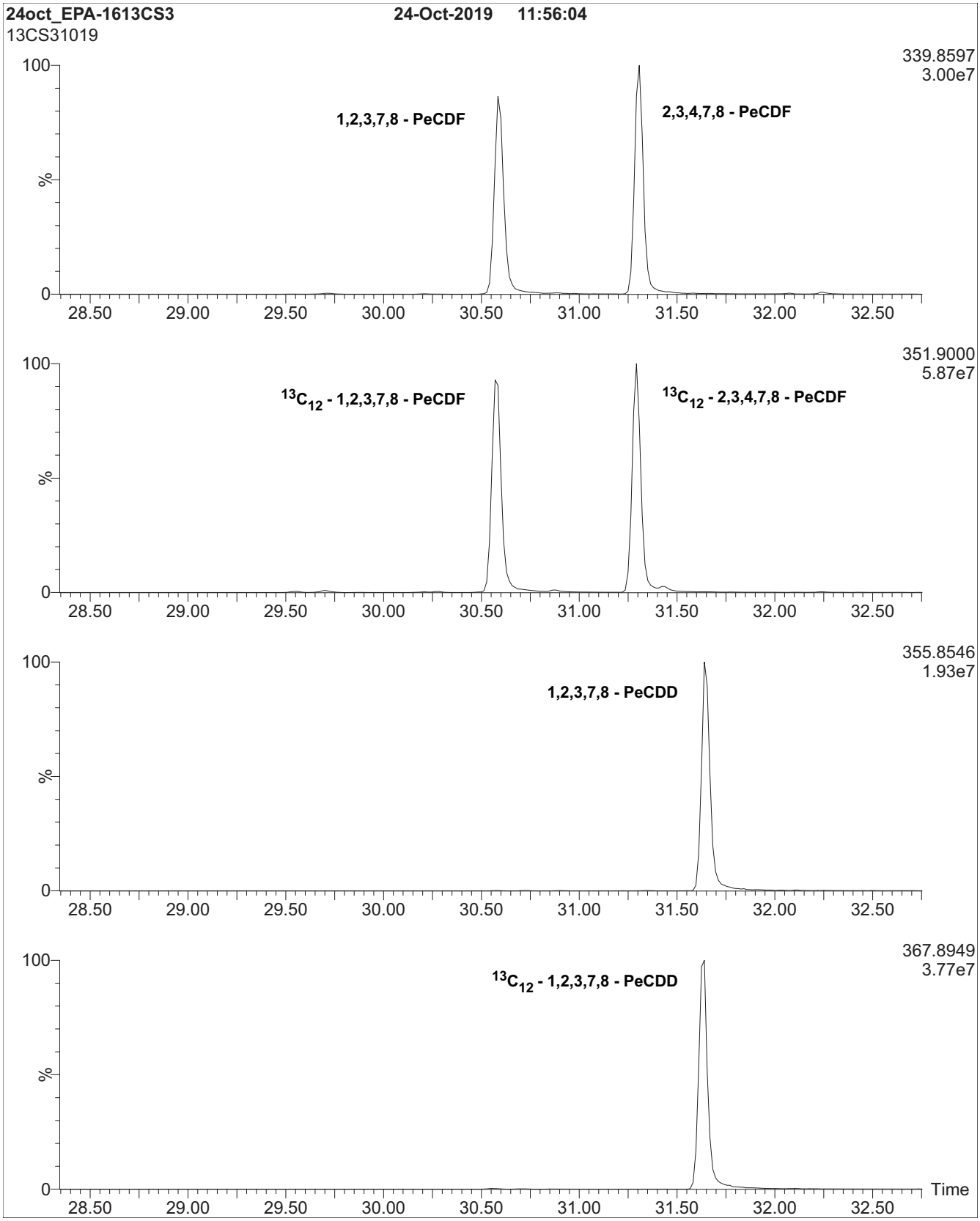


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

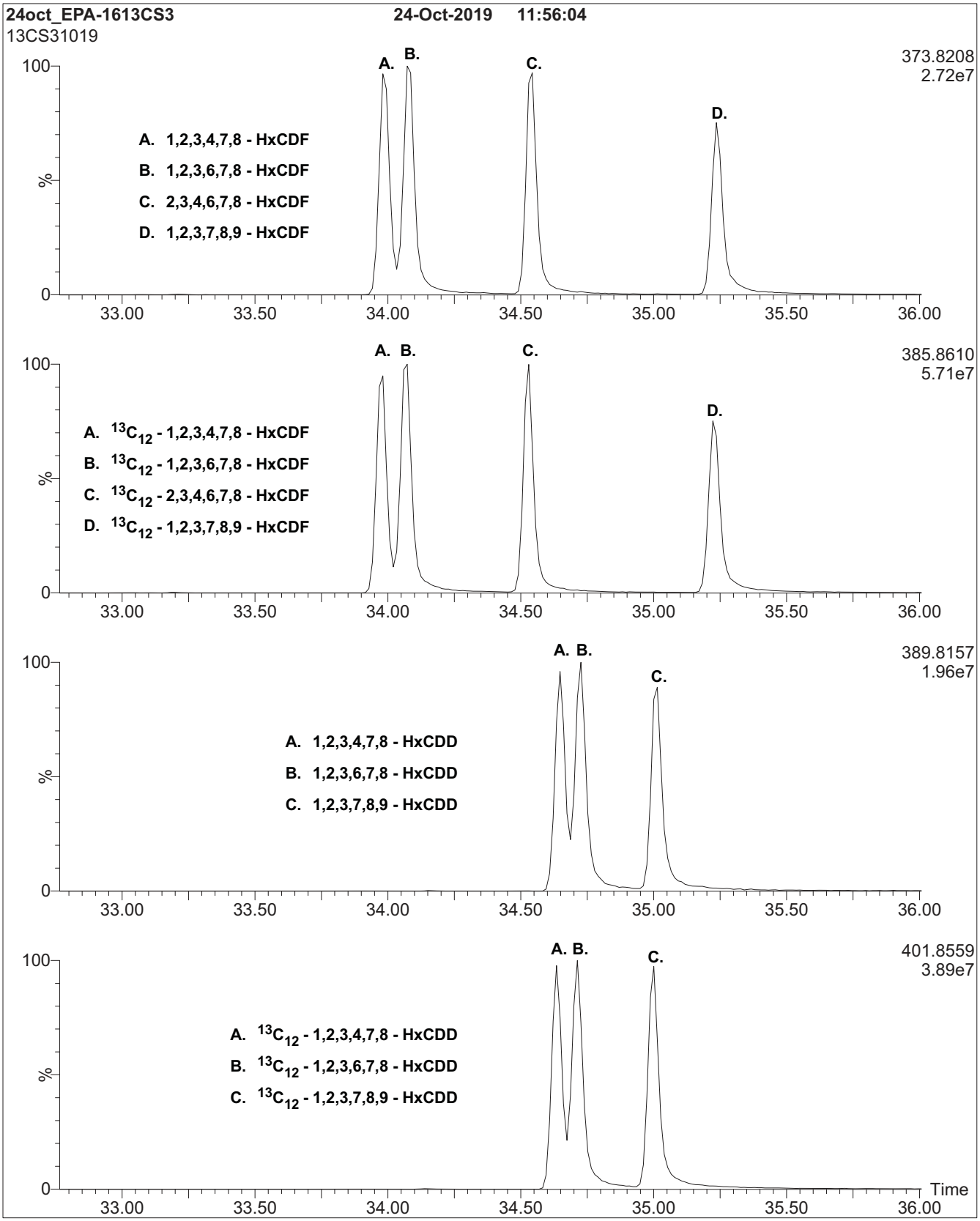


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

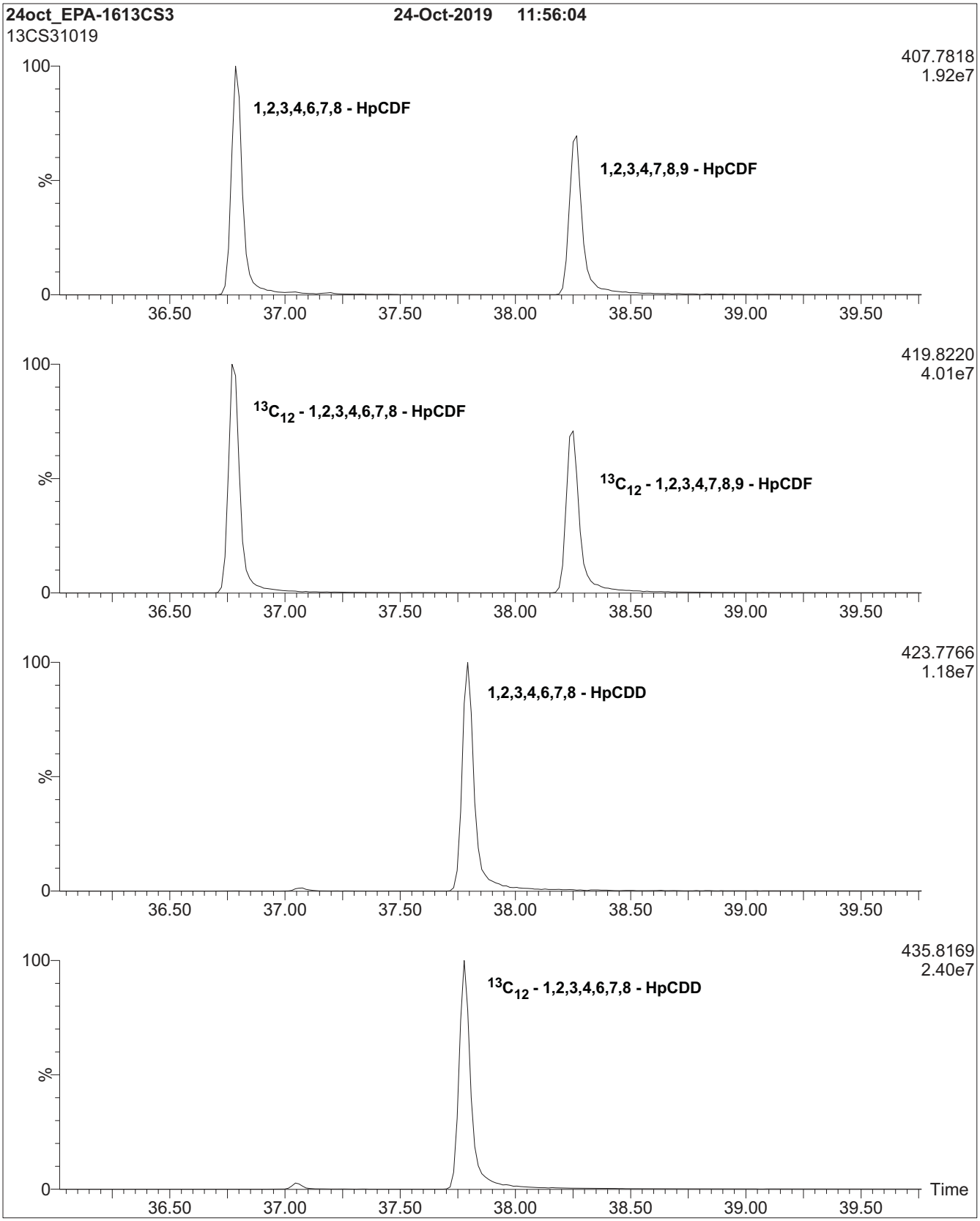
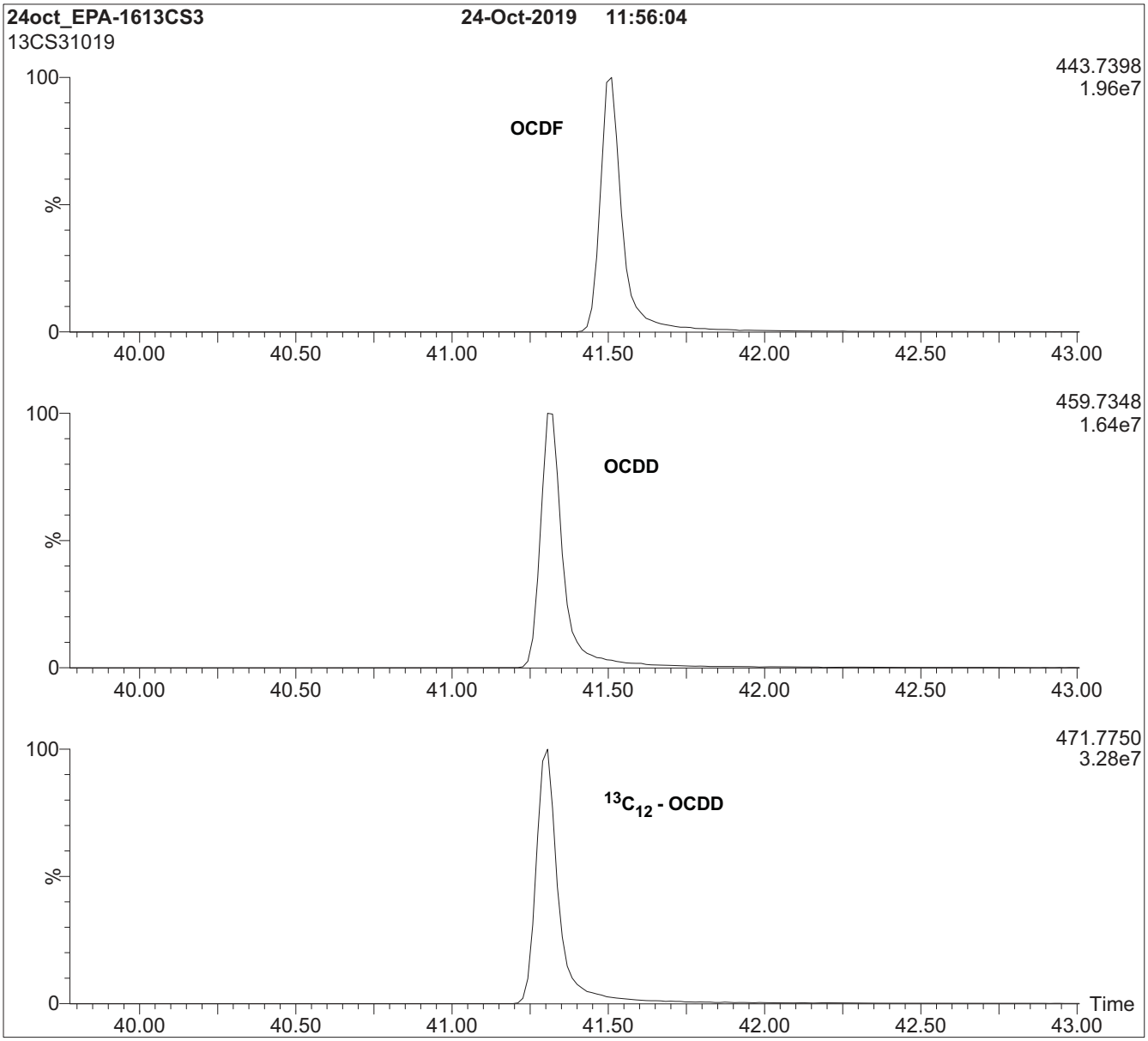


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005459
1613 CS5 CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By: _____ **Date:** 10/25/2019
(mm/dd/yyyy)
B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

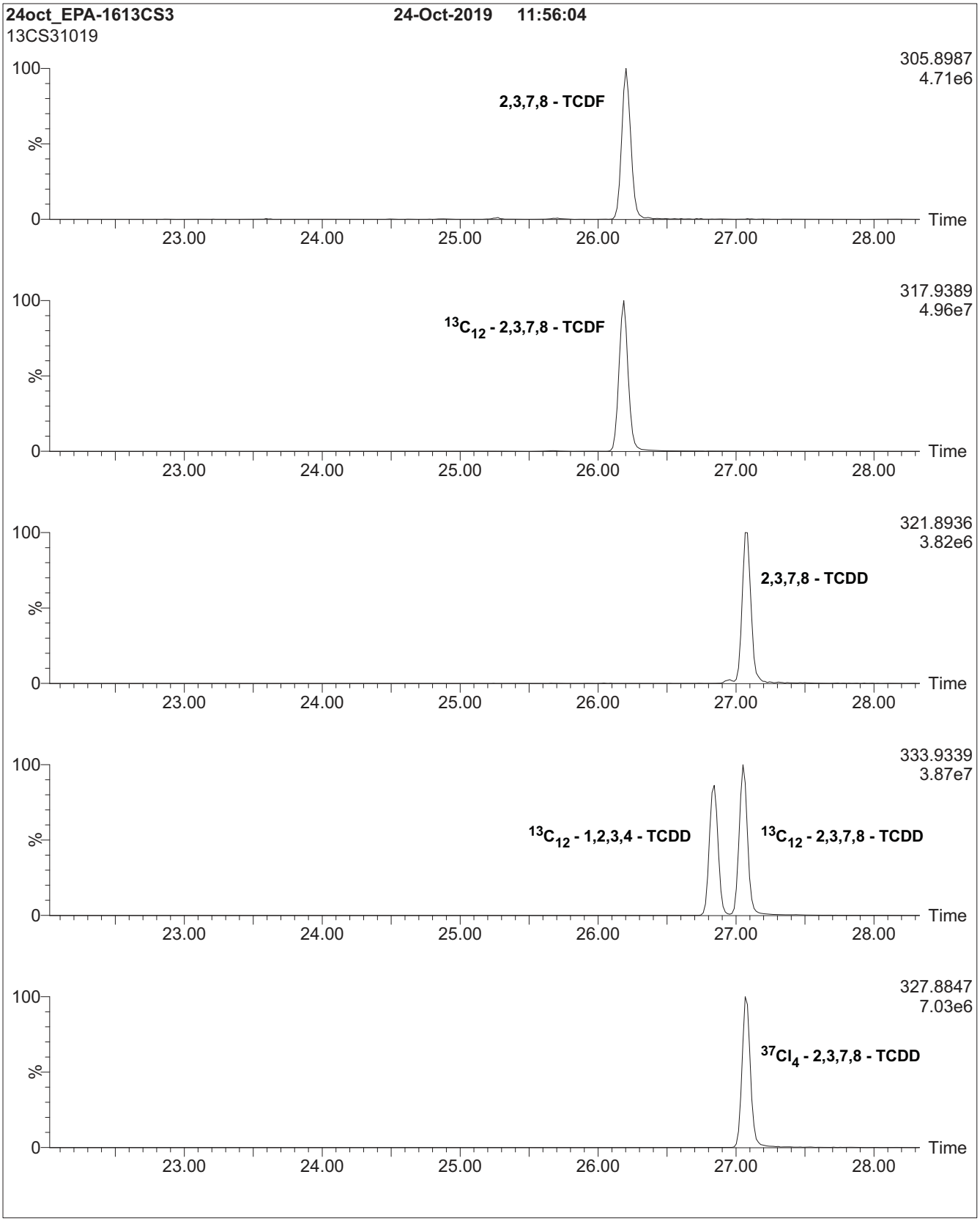


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

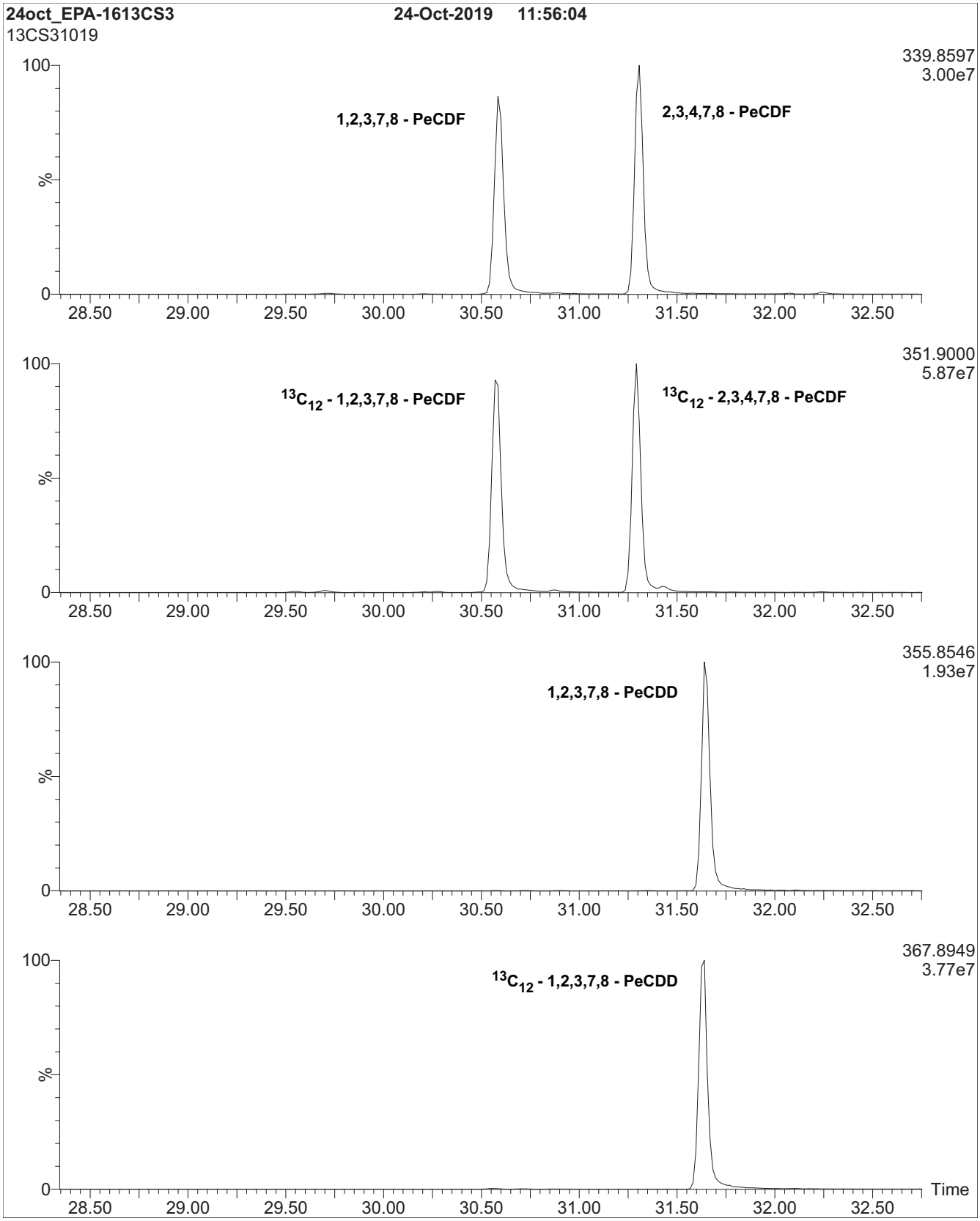


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

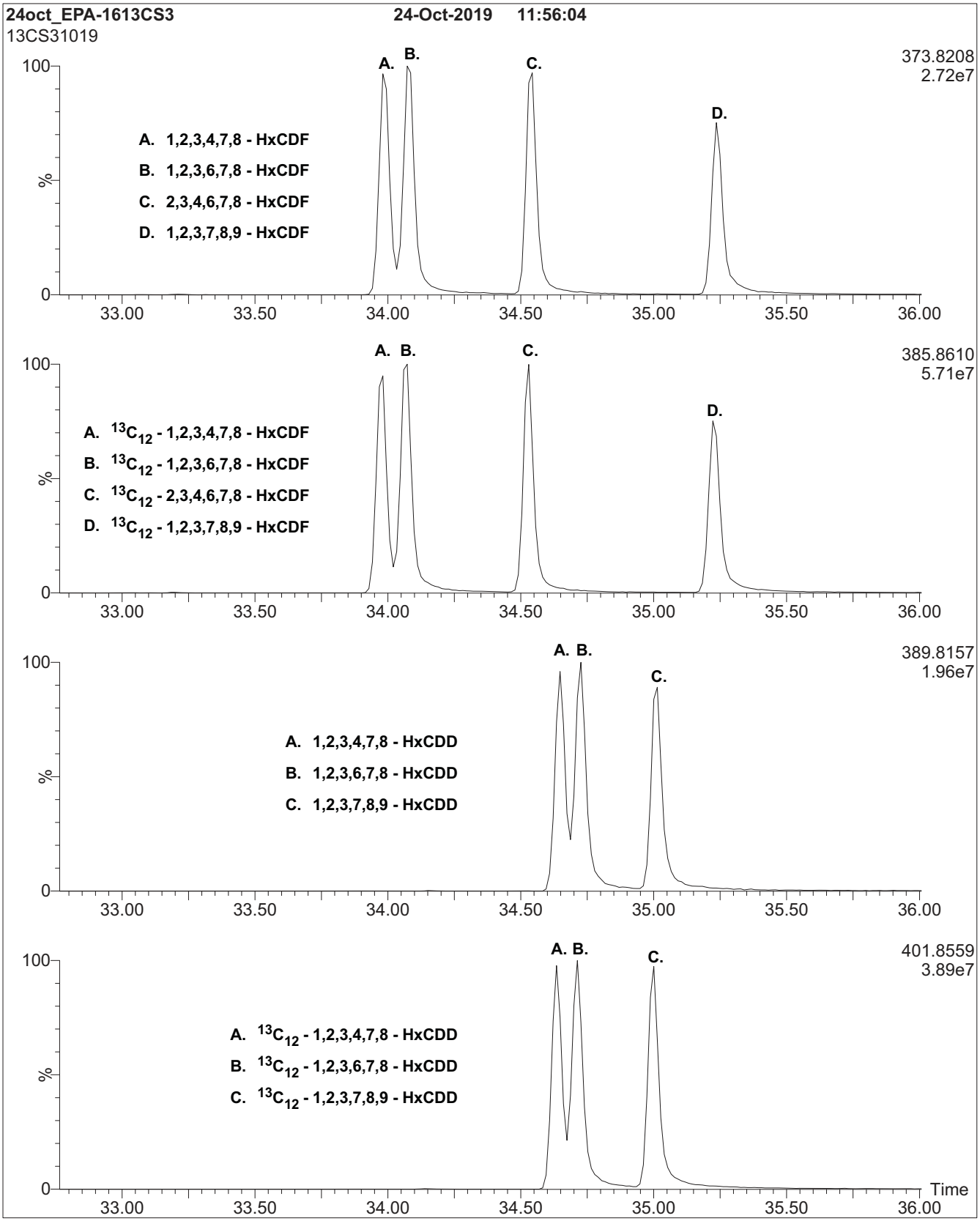


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

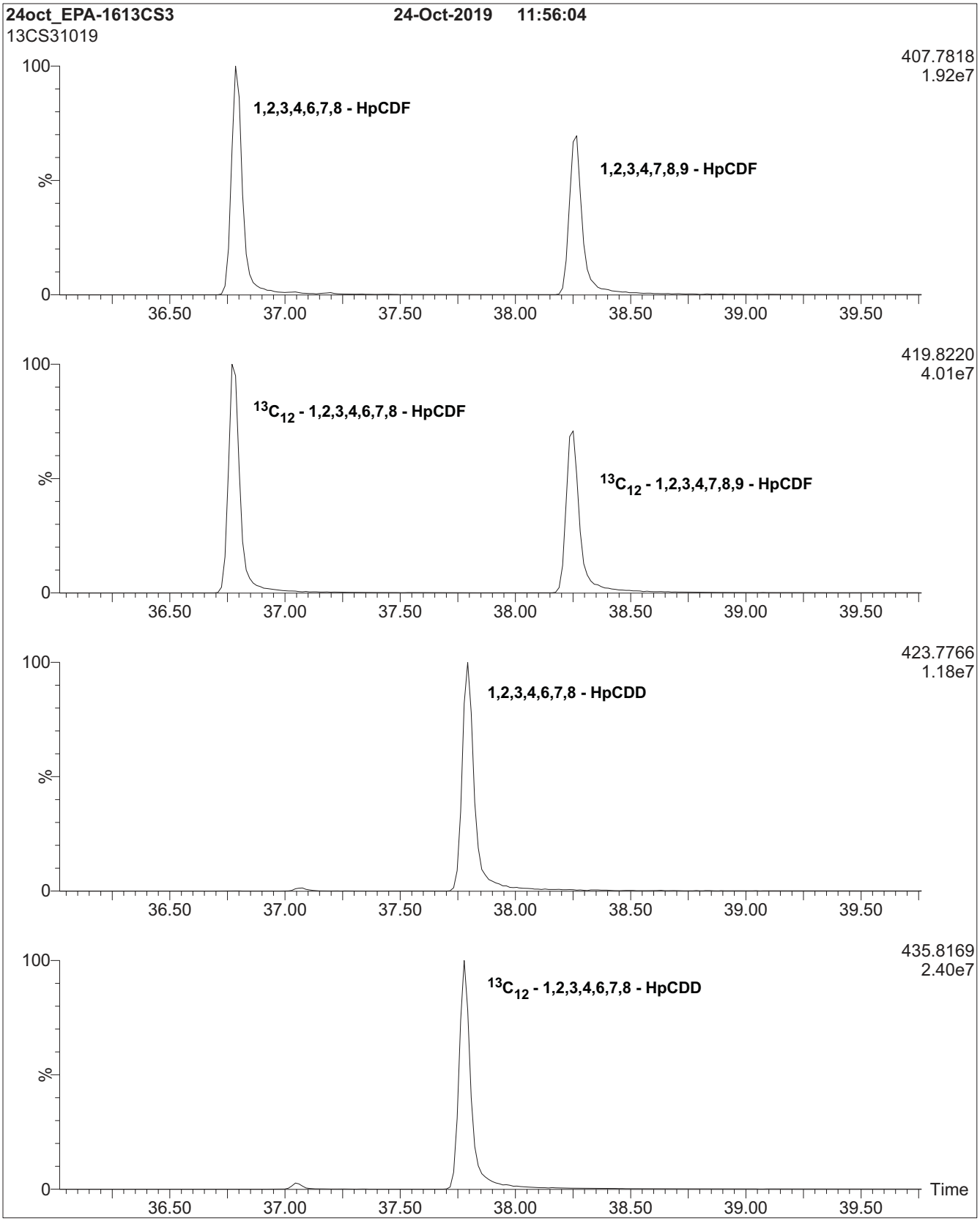
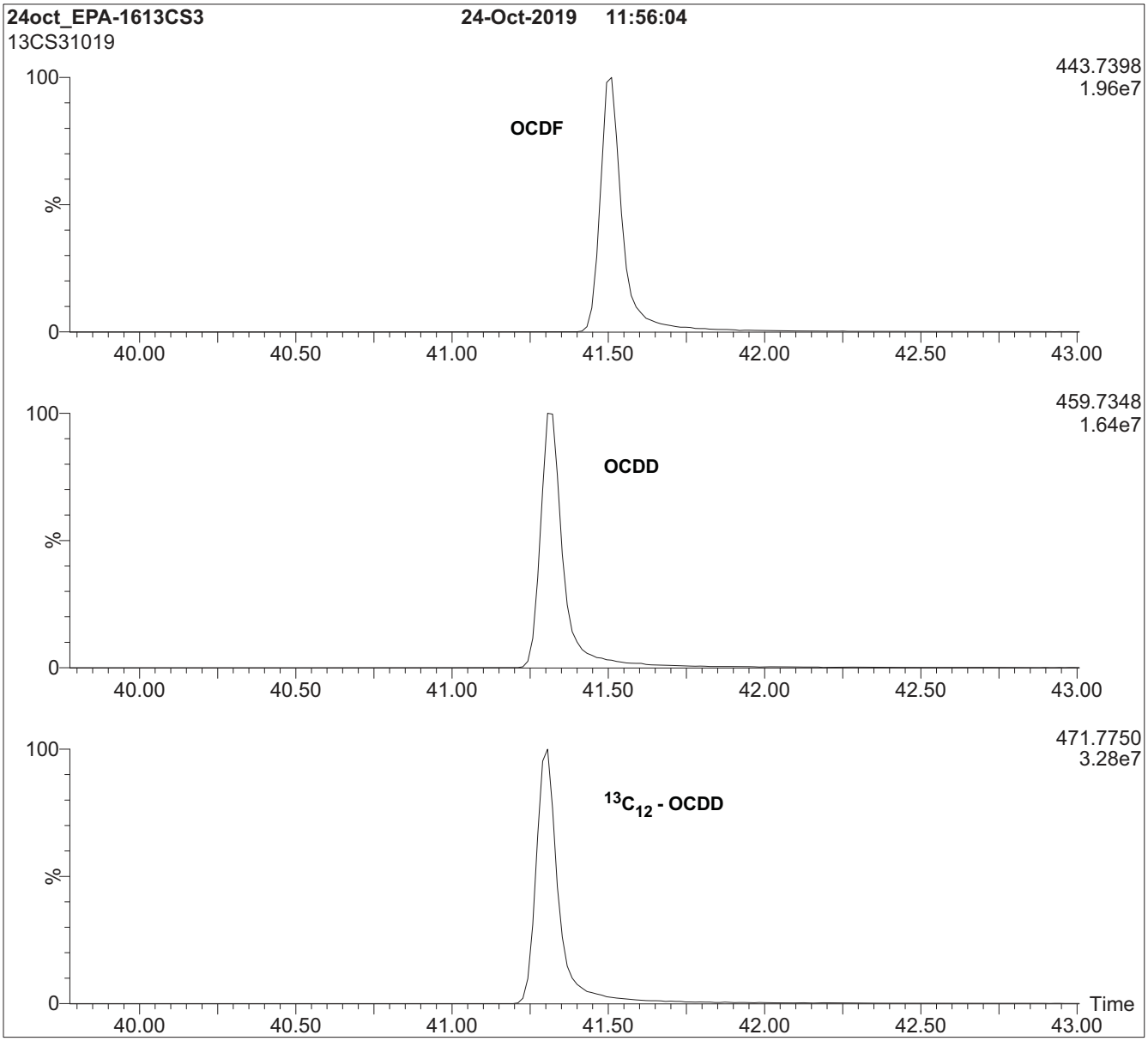


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005460
1613 CSL CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

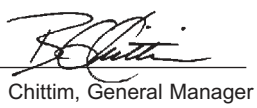
CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By:  **Date:** 10/25/2019
(mm/dd/yyyy)

B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

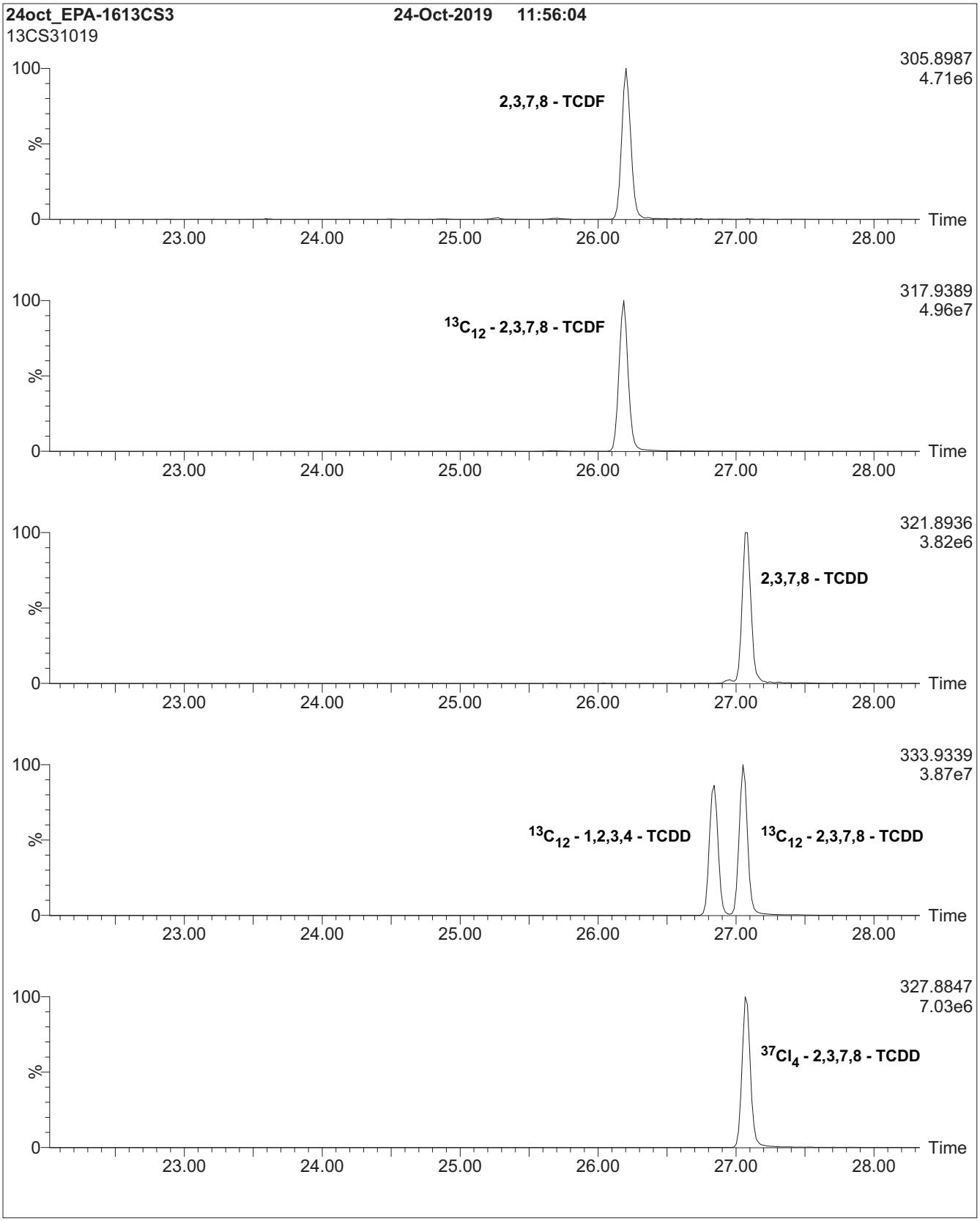


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

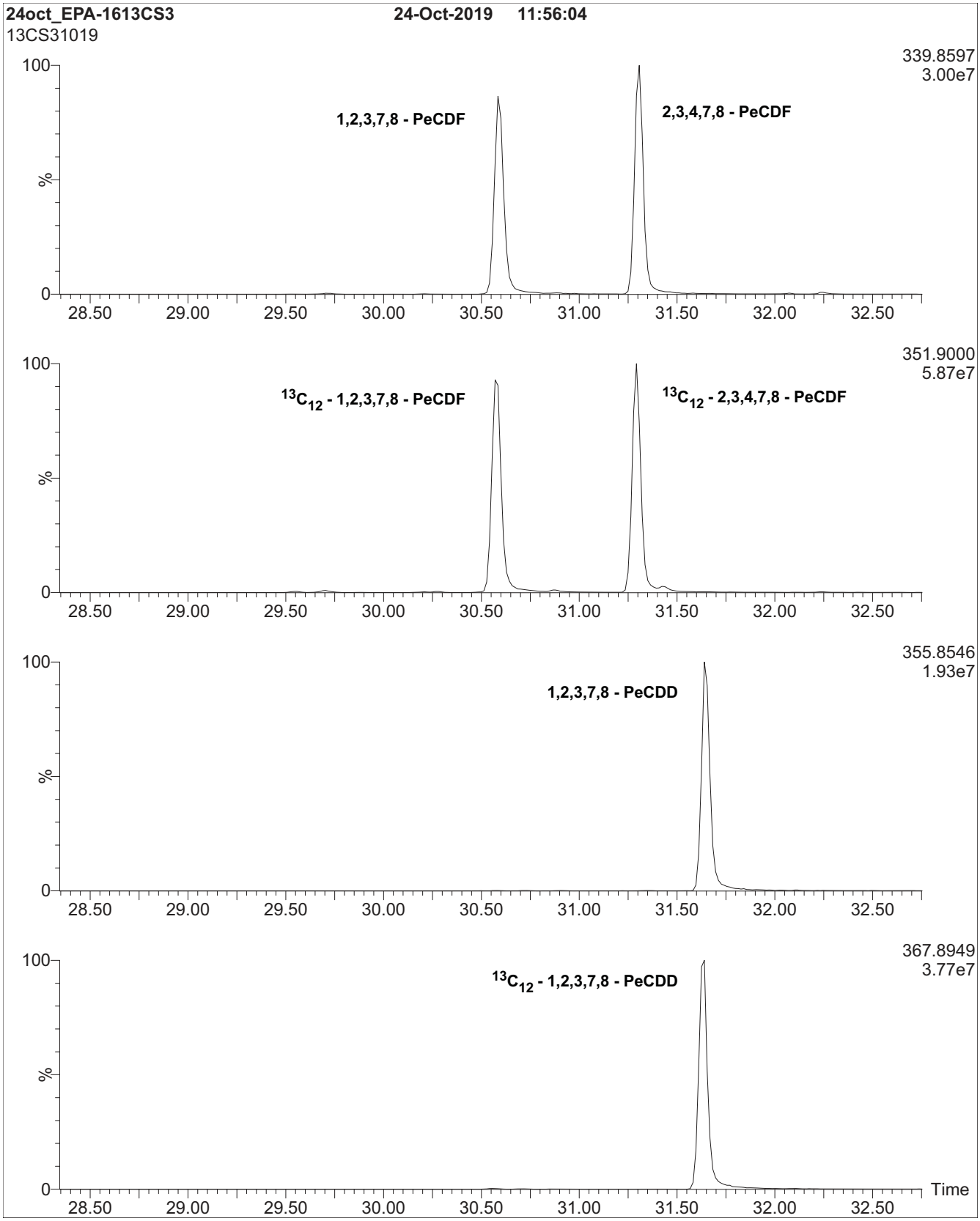


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

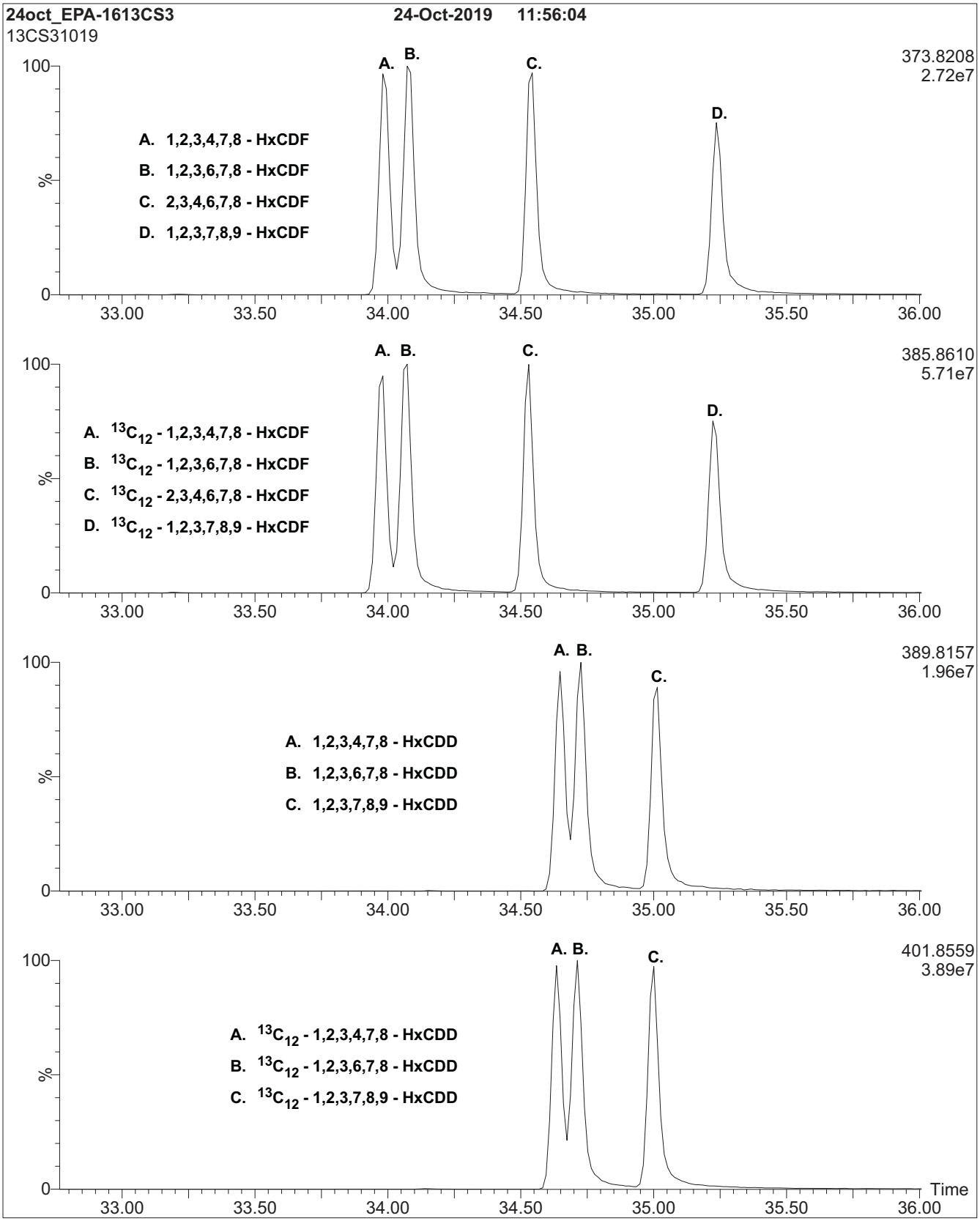


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

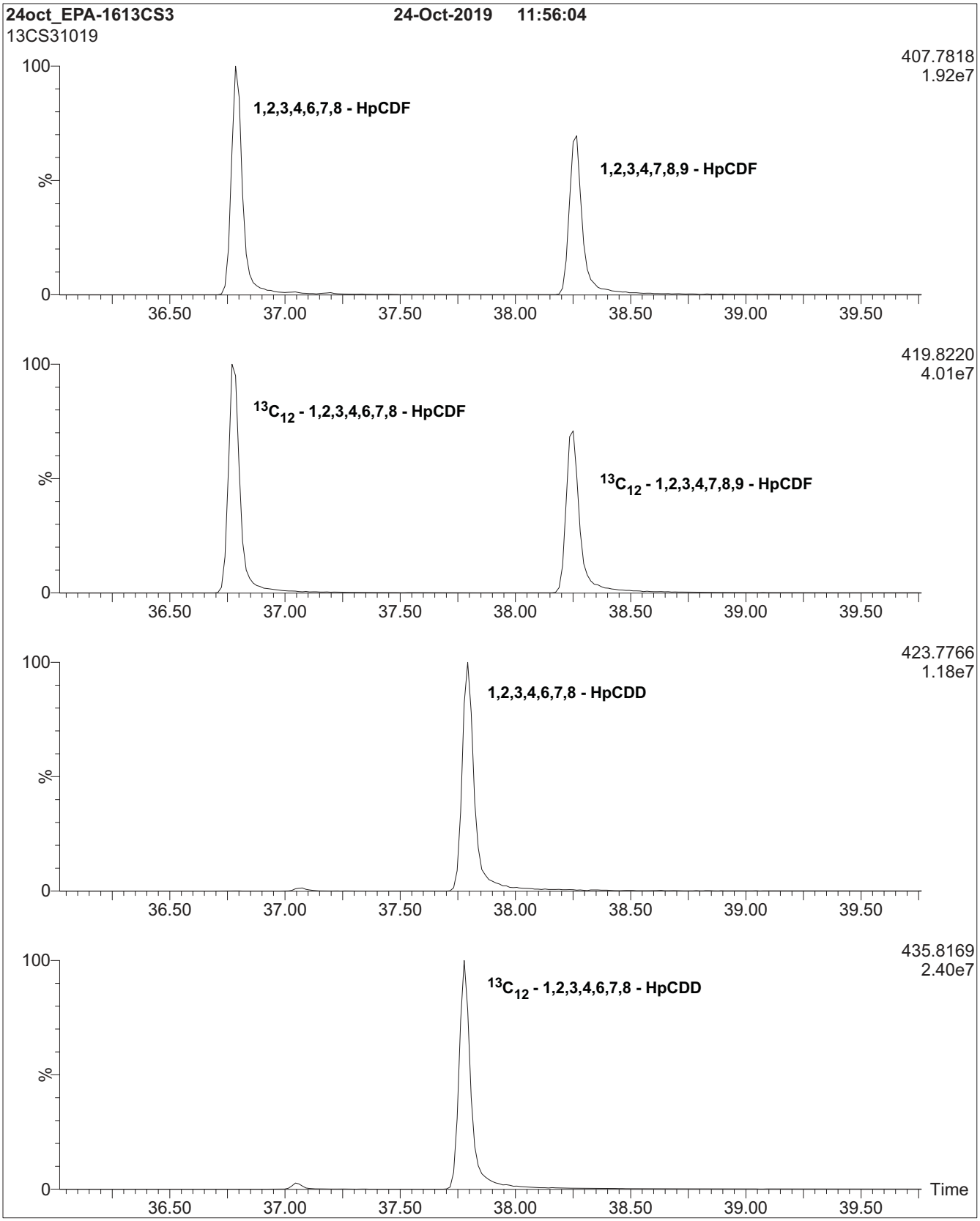
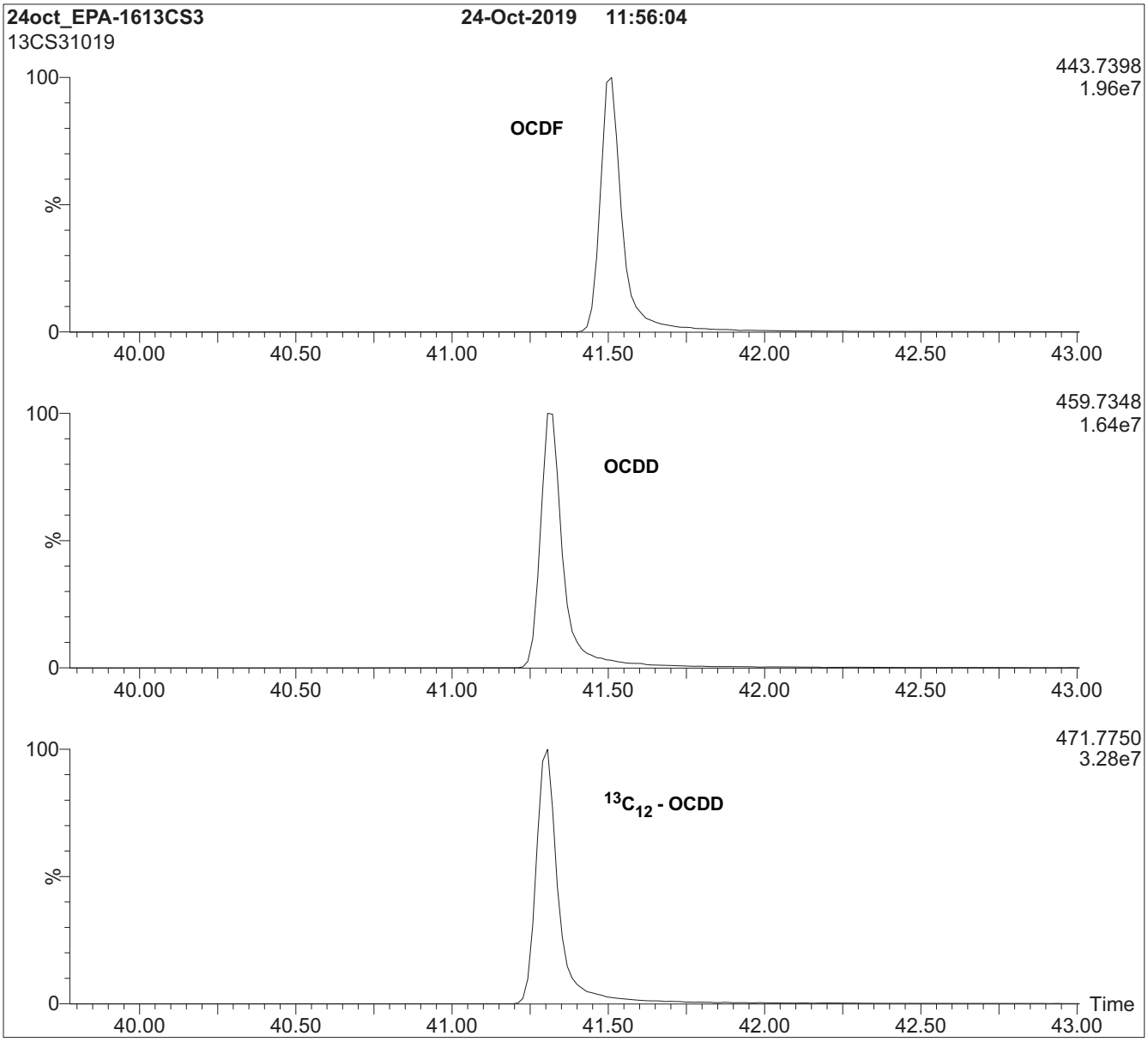


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

EPA-1613PAR

U.S. EPA Method 1613 Native PCDD/PCDF Precision and Recovery Stock Solution

PRODUCT CODE:	EPA-1613PAR
LOT NUMBER:	13PAR1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/25/2021
LAST TESTED: (mm/dd/yyyy)	11/03/2021
EXPIRY DATE: (mm/dd/yyyy)	11/03/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

J013397
Recd. JR
12/20/21

DESCRIPTION:

EPA-1613PAR is a solution/mixture of all the 2,3,7,8-substituted polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613PAR was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual PCDDs and PCDFs all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

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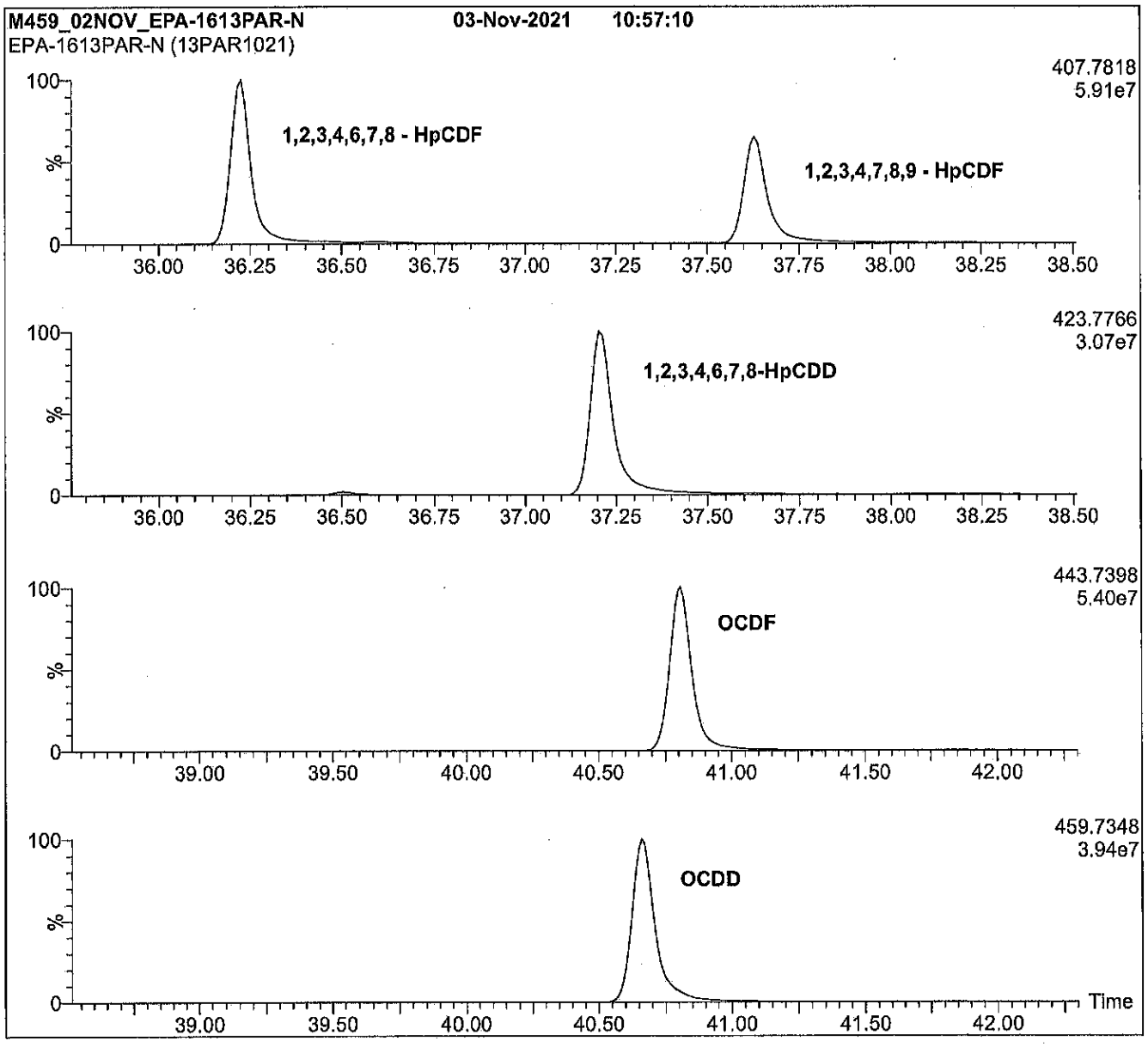
Table A: **EPA-1613PAR; Components and Concentrations (ng/mL, ± 5% in nonane/2.4% toluene)**

Compound	Acronym	CAS #	Concentration (ng/mL)
PCDDs:			
2,3,7,8-Tetrachlorodibenzo-*p*-dioxin	2,3,7,8-TCDD	1746-01-6	40.0
1,2,3,7,8-Pentachlorodibenzo-*p*-dioxin	1,2,3,7,8-PeCDD	40321-76-4	200
1,2,3,4,7,8-Hexachlorodibenzo-*p*-dioxin	1,2,3,4,7,8-HxCDD	39227-28-6	200
1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin	1,2,3,6,7,8-HxCDD	57653-85-7	200
1,2,3,7,8,9-Hexachlorodibenzo-*p*-dioxin	1,2,3,7,8,9-HxCDD	19408-74-3	200
1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin	1,2,3,4,6,7,8-HpCDD	35822-46-9	200
Octachlorodibenzo-*p*-dioxin	OCDD	3268-87-9	400
PCDFs:			
2,3,7,8-Tetrachlorodibenzofuran	2,3,7,8-TCDF	51207-31-9	40.0
1,2,3,7,8-Pentachlorodibenzofuran	1,2,3,7,8-PeCDF	57117-41-6	200
2,3,4,7,8-Pentachlorodibenzofuran	2,3,4,7,8-PeCDF	57117-31-4	200
1,2,3,4,7,8-Hexachlorodibenzofuran	1,2,3,4,7,8-HxCDF	70648-26-9	200
1,2,3,6,7,8-Hexachlorodibenzofuran	1,2,3,6,7,8-HxCDF	57117-44-9	200
1,2,3,7,8,9-Hexachlorodibenzofuran	1,2,3,7,8,9-HxCDF	72918-21-9	200
2,3,4,6,7,8-Hexachlorodibenzofuran	2,3,4,6,7,8-HxCDF	60851-34-5	200
1,2,3,4,6,7,8-Heptachlorodibenzofuran	1,2,3,4,6,7,8-HpCDF	67562-39-4	200
1,2,3,4,7,8,9-Heptachlorodibenzofuran	1,2,3,4,7,8,9-HpCDF	55673-89-7	200
Octachlorodibenzofuran	OCDF	39001-02-0	400

Certified By: _____ **Date:** 11/05/2021
(mm/dd/yyyy)
B.G. Chittim, General Manager

Figure 1: **EPA-1613PAR; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

EPA-1613PAR

U.S. EPA Method 1613 Native PCDD/PCDF
Precision and Recovery Stock Solution

PRODUCT CODE:	EPA-1613PAR
LOT NUMBER:	13PAR1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/25/2021
LAST TESTED: (mm/dd/yyyy)	11/03/2021
EXPIRY DATE: (mm/dd/yyyy)	11/03/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

J013397
Read. JR
12/20/21

DESCRIPTION:

EPA-1613PAR is a solution/mixture of all the 2,3,7,8-substituted polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613PAR was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual PCDDs and PCDFs all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

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Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, ...x_n$ on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613PAR; Components and Concentrations (ng/mL, ± 5% in nonane/2.4% toluene)**

Compound	Acronym	CAS #	Concentration (ng/mL)
PCDDs:			
2,3,7,8-Tetrachlorodibenzo-*p*-dioxin	2,3,7,8-TCDD	1746-01-6	40.0
1,2,3,7,8-Pentachlorodibenzo-*p*-dioxin	1,2,3,7,8-PeCDD	40321-76-4	200
1,2,3,4,7,8-Hexachlorodibenzo-*p*-dioxin	1,2,3,4,7,8-HxCDD	39227-28-6	200
1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin	1,2,3,6,7,8-HxCDD	57653-85-7	200
1,2,3,7,8,9-Hexachlorodibenzo-*p*-dioxin	1,2,3,7,8,9-HxCDD	19408-74-3	200
1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin	1,2,3,4,6,7,8-HpCDD	35822-46-9	200
Octachlorodibenzo-*p*-dioxin	OCDD	3268-87-9	400
PCDFs:			
2,3,7,8-Tetrachlorodibenzofuran	2,3,7,8-TCDF	51207-31-9	40.0
1,2,3,7,8-Pentachlorodibenzofuran	1,2,3,7,8-PeCDF	57117-41-6	200
2,3,4,7,8-Pentachlorodibenzofuran	2,3,4,7,8-PeCDF	57117-31-4	200
1,2,3,4,7,8-Hexachlorodibenzofuran	1,2,3,4,7,8-HxCDF	70648-26-9	200
1,2,3,6,7,8-Hexachlorodibenzofuran	1,2,3,6,7,8-HxCDF	57117-44-9	200
1,2,3,7,8,9-Hexachlorodibenzofuran	1,2,3,7,8,9-HxCDF	72918-21-9	200
2,3,4,6,7,8-Hexachlorodibenzofuran	2,3,4,6,7,8-HxCDF	60851-34-5	200
1,2,3,4,6,7,8-Heptachlorodibenzofuran	1,2,3,4,6,7,8-HpCDF	67562-39-4	200
1,2,3,4,7,8,9-Heptachlorodibenzofuran	1,2,3,4,7,8,9-HpCDF	55673-89-7	200
Octachlorodibenzofuran	OCDF	39001-02-0	400

Certified By: _____ **Date:** 11/05/2021
(mm/dd/yyyy)
B.G. Chittim, General Manager

Figure 1: **EPA-1613PAR; HRGC/HRMS Data (60 m DB-5 Column)**

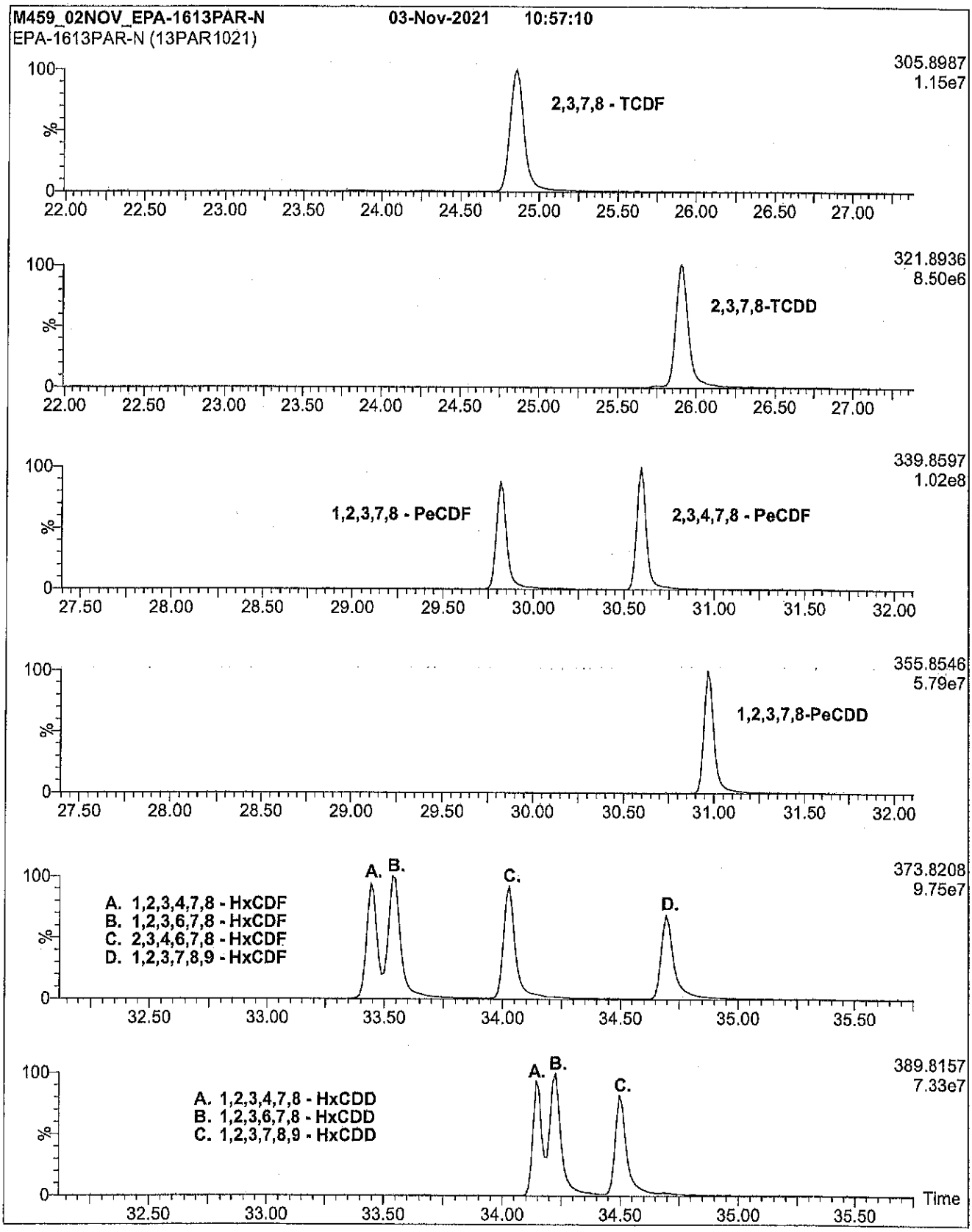
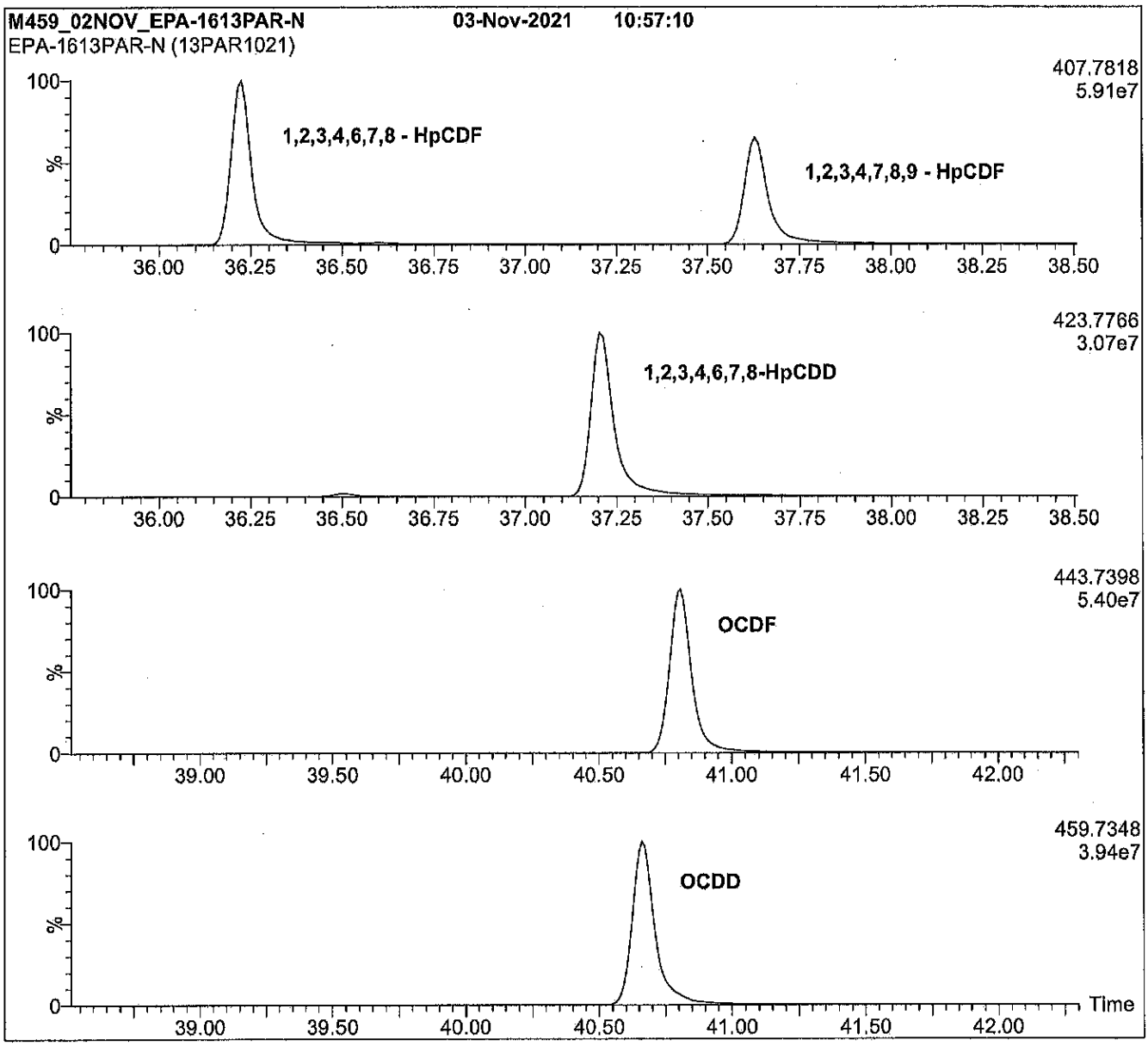


Figure 1: **EPA-1613PAR; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CSS

U.S. EPA Method 1613 Cleanup Standard Spiking Solution

PRODUCT CODE:	EPA-1613CSS
LOT NUMBER:	13CSS1021
SOLVENT(S):	Nonane
DATE PREPARED: (mm/dd/yyyy)	10/29/2021
LAST TESTED: (mm/dd/yyyy)	10/31/2021
EXPIRY DATE: (mm/dd/yyyy)	10/31/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION: K003104

EPA-1613CSS contains 2,3,7,8-($^{37}Cl_4$)tetrachlorodibenzo-*p*-dioxin at the concentration given in Table A.

EPA-1613CSS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

2,3,7,8-($^{37}Cl_4$)Tetrachlorodibenzo-*p*-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

Table A: **EPA-1613CSS; Components and Concentrations (ng/mL, ± 5% in nonane)**

Compound	Acronym	CAS #	Concentration (ng/mL)
2,3,7,8-($^{37}Cl_4$)Tetrachlorodibenzo-*p*-dioxin	$^{37}Cl_4$-2,3,7,8-TCDD	85508-50-5	40.0

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Certified By: _____ **Date:** 11/05/2021 (mm/dd/yyyy)
B.G. Chittim, General Manager

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
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INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

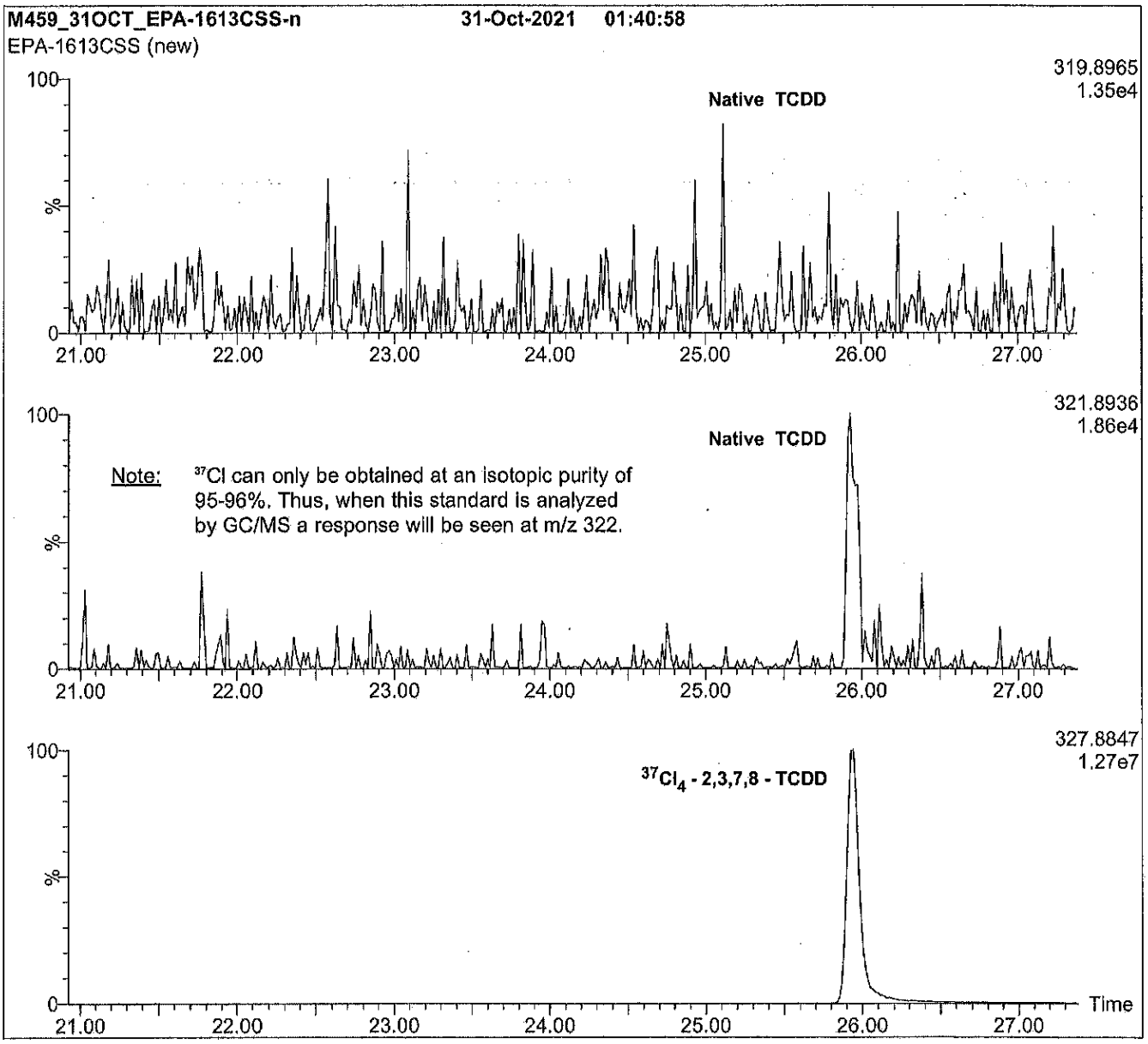
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **EPA-1613CSS; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613LCS

U.S. EPA Method 1613
Labelled Compound Stock Solution

PRODUCT CODE:	EPA-1613LCS
LOT NUMBER:	13LCS1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/29/2021
LAST TESTED: (mm/dd/yyyy)	10/31/2021
EXPIRY DATE: (mm/dd/yyyy)	10/31/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION: K3105

EPA-1613LCS is a solution/mixture of mass-labelled ($^{13}C_{12}$) polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613LCS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

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Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613LCS; Components and Concentrations (ng/mL, ± 5% in nonane/3.2% toluene)**

Compound	Acronym	CAS #	Concentration (ng/mL)
Mass-Labelled PCDDs:			
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-2,3,7,8-TCDD	76523-40-5	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,7,8-PeCDD	109719-79-1	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	109719-80-4	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	109719-81-5	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	109719-83-7	100
Octachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-OCDD	114423-97-1	200
Mass-Labelled PCDFs:			
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,7,8-TCDF	89059-46-1	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,7,8-PeCDF	109719-77-9	100
2,3,4,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,4,7,8-PeCDF	116843-02-8	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	114423-98-2	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	116843-03-9	100
1,2,3,7,8,9-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	116843-04-0	100
2,3,4,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	116843-05-1	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	109719-84-8	100
1,2,3,4,7,8,9-Heptachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	109719-94-0	100

Certified By: _____ **Date:** 11/05/2021
(mm/dd/yyyy)
B.G. Chittim, General Manager

Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

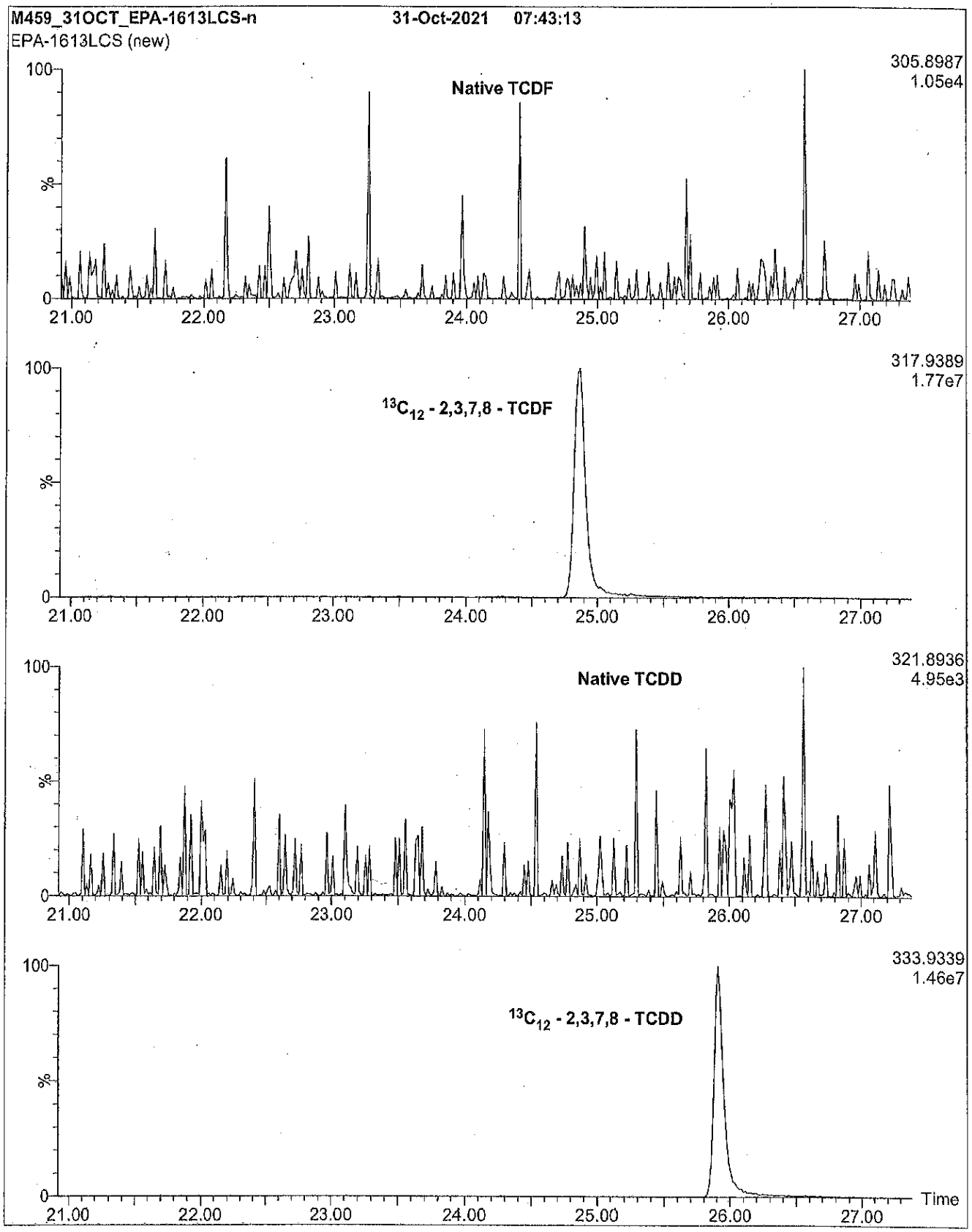


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

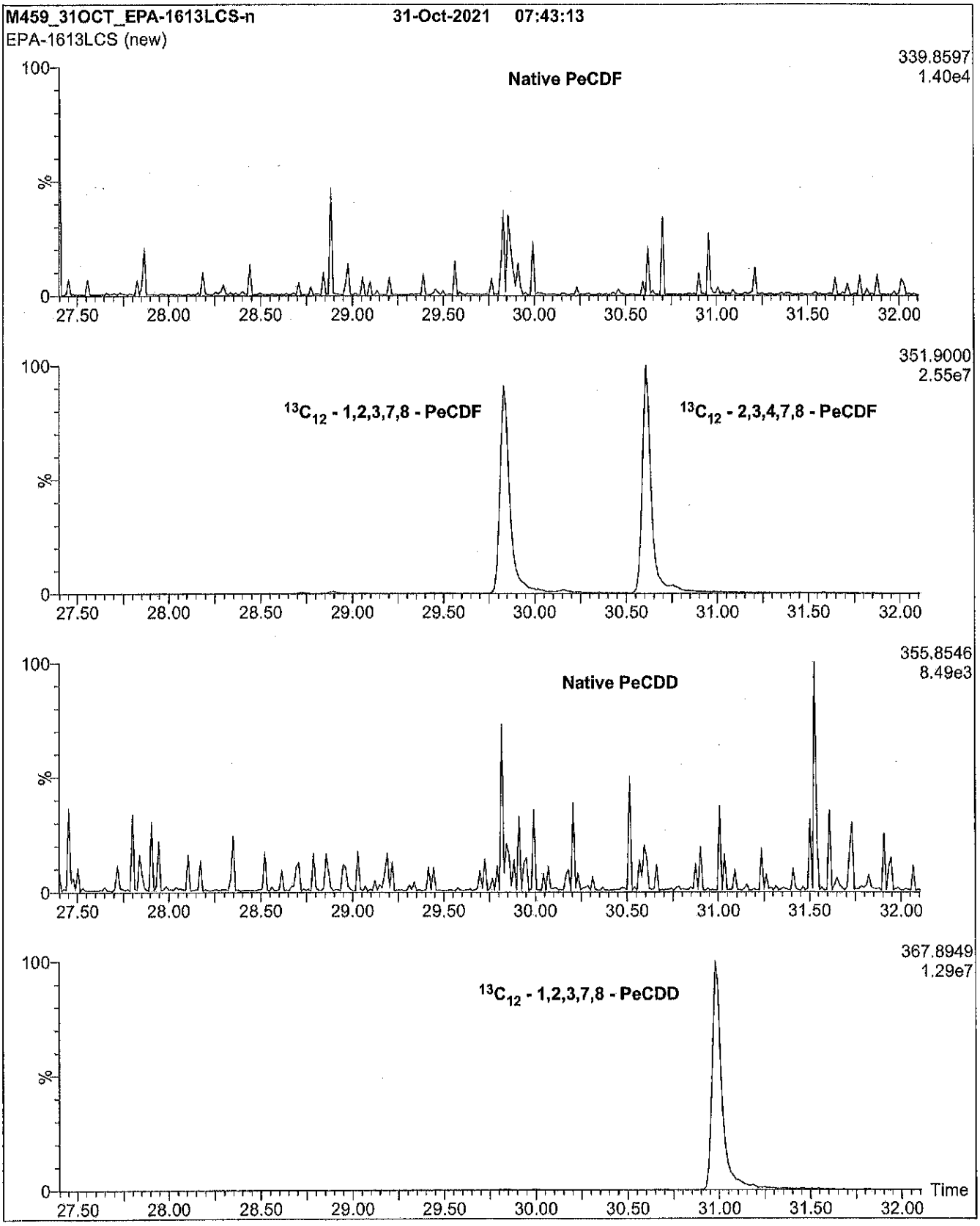


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

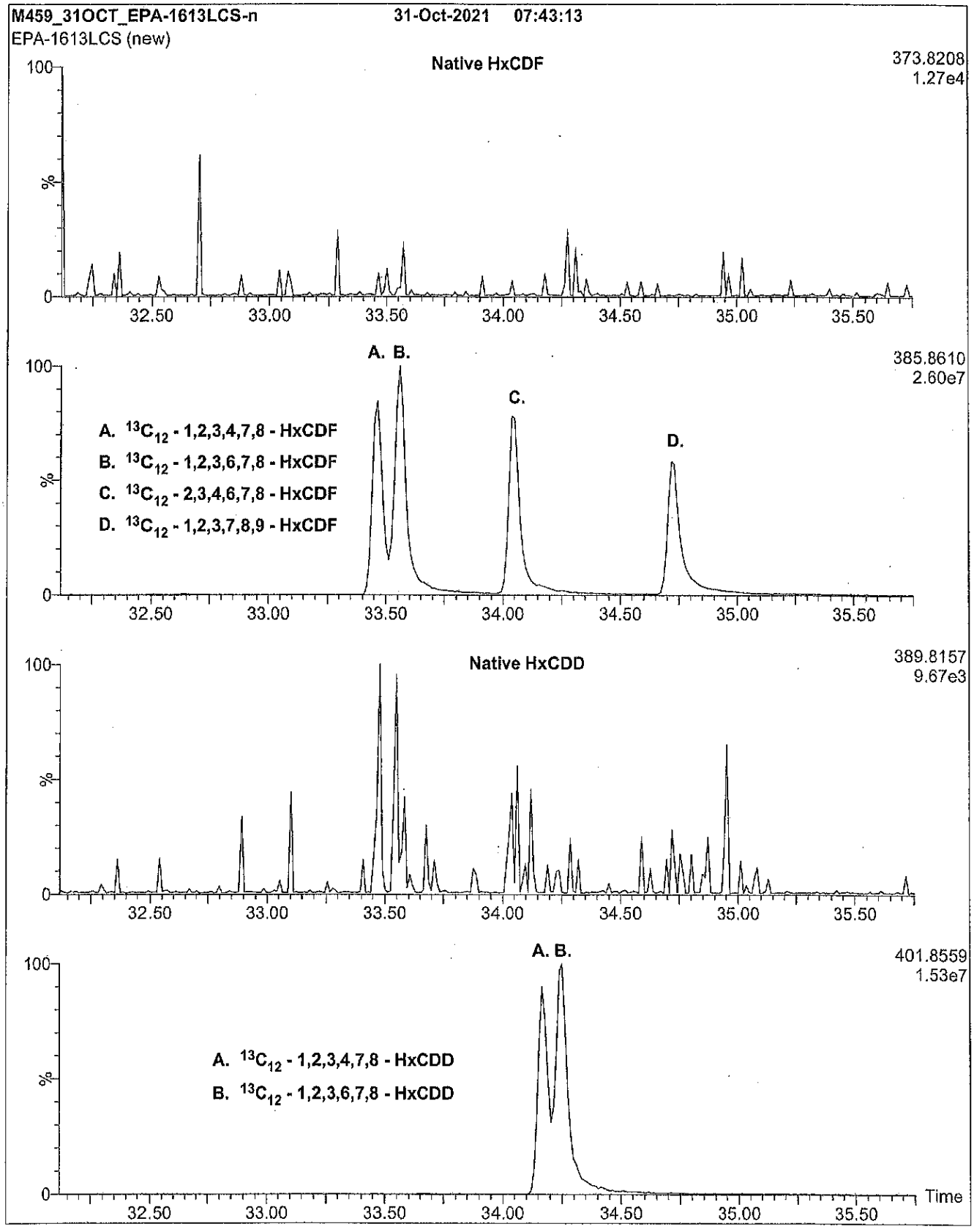


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

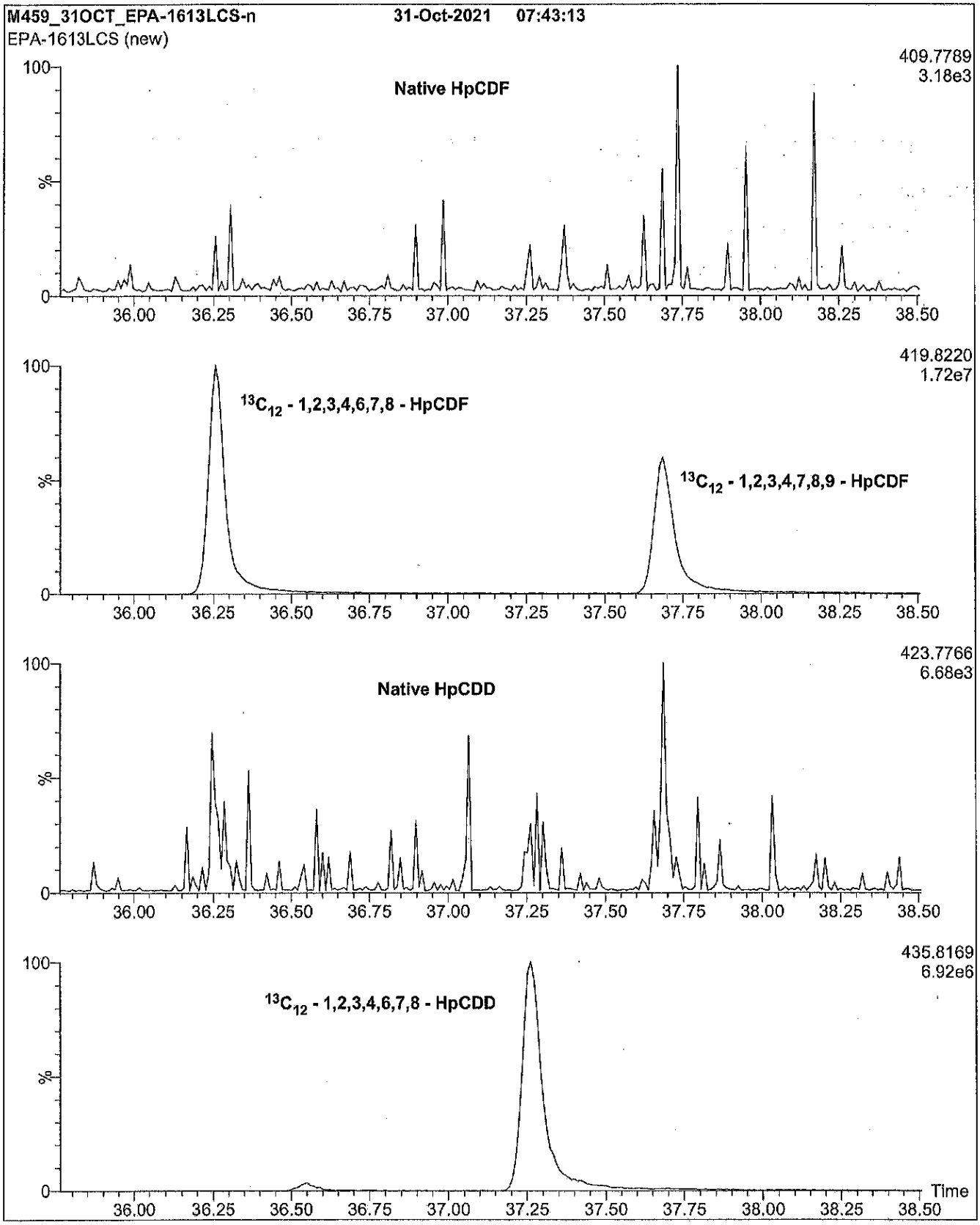
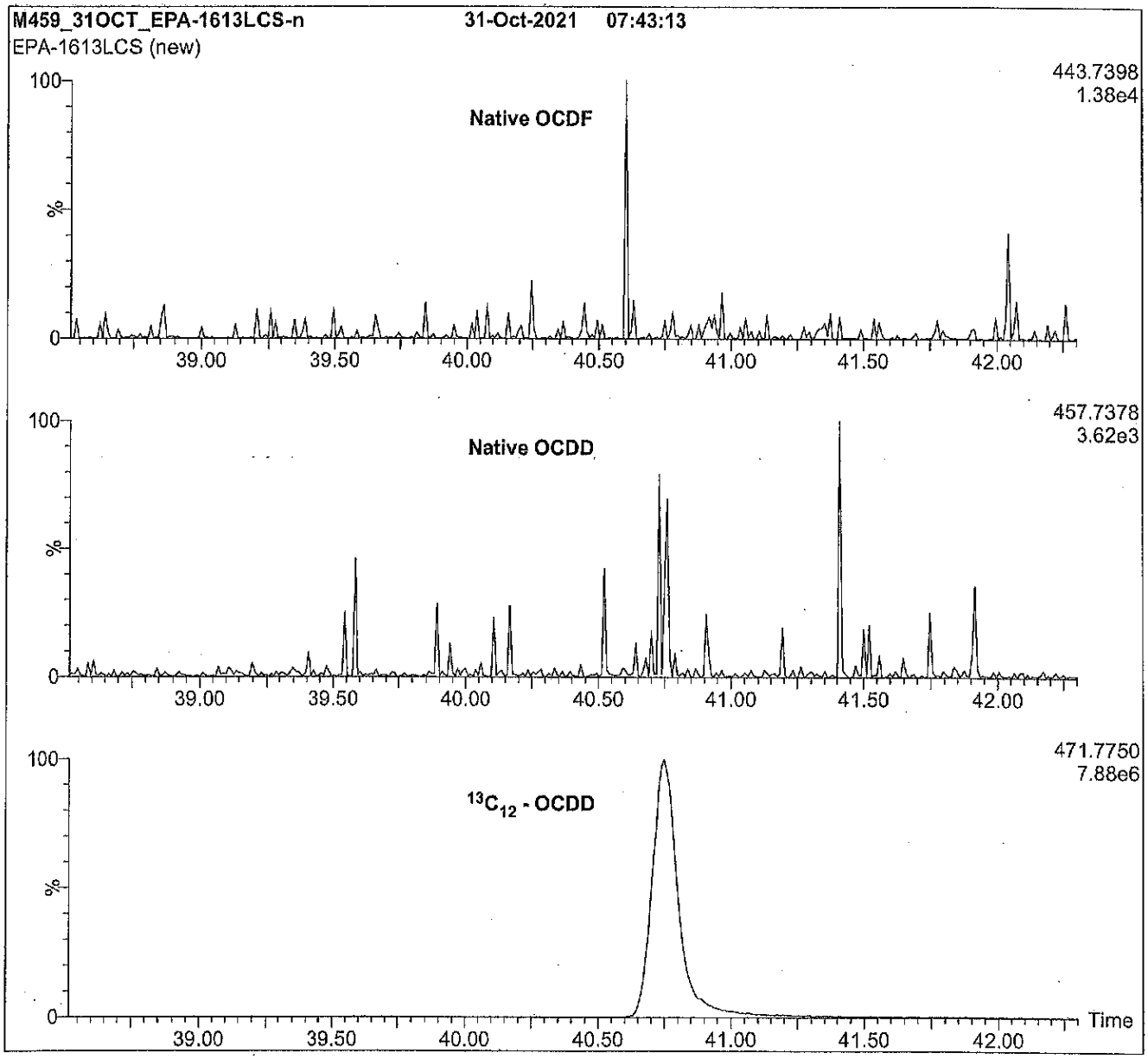


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

K9821

CS3WT

Calibration and Verification Solution (EPA-1613CS3) combined with Window Defining and 2,3,7,8-TCDD Resolution Testing Congeners

PRODUCT CODE:	CS3WT
LOT NUMBER:	CS3WT1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	11/01/2021
LAST TESTED: (mm/dd/yyyy)	11/02/2021
EXPIRY DATE: (mm/dd/yyyy)	11/02/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

CS3WT is a solution/mixture of native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$) polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Tables A and B.

CS3WT is an HRGC/HRMS calibration solution that was designed and prepared to be used according to U.S. EPA Method 1613, Revision B, in place of EPA-1613CS3 (lot: 13CS31021). Additionally, it contains the PCDD and PCDF isomers required to set retention time windows as well as test and establish isomer specificity for 2,3,7,8-TCDD on a DB-5 (or equivalent) capillary column.

The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-($^{37}Cl_4$)tetrachlorodibenzo-*p*-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%. The individual native 2,3,7,8-substituted PCDD and PCDF congeners all have chemical purities of >98%; the other congeners (window defining and resolution testing) should only be considered semi-quantitative.

This current lot of CS3WT is to be used with the 1613 calibration solutions having the following lot numbers:

PRODUCT CODE	LOT NUMBER
EPA-1613CS1	13CS11021
EPA-1613CS2	13CS21021
EPA-1613CS3	13CS31021
EPA-1613CS4	13CS41021
EPA-1613CS5	13CS51021
EPA-1613CSL	13CSL1021
EPA-1613CS0.5	13CS0.51021

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Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Form#:13, Issued 2004-11-10
Revision#:9, Revised 2020-12-23

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) has been assigned to the quantitative components in this product. A maximum combined percent relative uncertainty of ±20% has been assigned to the semi-quantitative components in this product.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **CS3WT; Quantitative Components and Concentrations (ng/mL, ± 5%, in nonane/4.5% toluene)**

Compound		Acronym	CAS #	Concentration (ng/mL)
Native PCDDs:	**Designation[a]**			
2,3,7,8-Tetrachlorodibenzo-*p*-dioxin		2,3,7,8-TCDD	1746-01-6	10.0
1,2,3,7,8-Pentachlorodibenzo-*p*-dioxin		1,2,3,7,8-PeCDD	40321-76-4	50.0
1,2,3,4,7,8-Hexachlorodibenzo-*p*-dioxin		1,2,3,4,7,8-HxCDD	39227-28-6	50.0
1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin		1,2,3,6,7,8-HxCDD	57653-85-7	50.0
1,2,3,7,8,9-Hexachlorodibenzo-*p*-dioxin	Last HxCDD[b]	1,2,3,7,8,9-HxCDD	19408-74-3	50.0
1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin	Last HpCDD	1,2,3,4,6,7,8-HpCDD	35822-46-9	50.0
Octachlorodibenzo-*p*-dioxin		OCDD	3268-87-9	100
Native PCDFs:	**Designation[a]**			
2,3,7,8-Tetrachlorodibenzofuran		2,3,7,8-TCDF	51207-31-9	10.0
1,2,3,7,8-Pentachlorodibenzofuran		1,2,3,7,8-PeCDF	57117-41-6	50.0
2,3,4,7,8-Pentachlorodibenzofuran		2,3,4,7,8-PeCDF	57117-31-4	50.0
1,2,3,4,7,8-Hexachlorodibenzofuran		1,2,3,4,7,8-HxCDF	70648-26-9	50.0
1,2,3,6,7,8-Hexachlorodibenzofuran		1,2,3,6,7,8-HxCDF	57117-44-9	50.0
1,2,3,7,8,9-Hexachlorodibenzofuran		1,2,3,7,8,9-HxCDF	72918-21-9	50.0
2,3,4,6,7,8-Hexachlorodibenzofuran		2,3,4,6,7,8-HxCDF	60851-34-5	50.0
1,2,3,4,6,7,8-Heptachlorodibenzofuran	First HpCDF[c]	1,2,3,4,6,7,8-HpCDF	67562-39-4	50.0
1,2,3,4,7,8,9-Heptachlorodibenzofuran	Last HpCDF	1,2,3,4,7,8,9-HpCDF	55673-89-7	50.0
Octachlorodibenzofuran		OCDF	39001-02-0	100
Mass-Labelled PCDDs:				
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-2,3,7,8-TCDD	76523-40-5	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,7,8-PeCDD	109719-79-1	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	109719-80-4	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	109719-81-5	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	109719-83-7	100
Octachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-OCDD	114423-97-1	200
Mass-Labelled PCDFs:				
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-2,3,7,8-TCDF	89059-46-1	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,7,8-PeCDF	109719-77-9	100
2,3,4,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-2,3,4,7,8-PeCDF	116843-02-8	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	114423-98-2	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	116843-03-9	100
1,2,3,7,8,9-Hexachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	116843-04-0	100
2,3,4,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	116843-05-1	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	109719-84-8	100
1,2,3,4,7,8,9-Heptachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	109719-94-0	100
Cleanup Standard:				
2,3,7,8-($^{37}Cl_4$)Tetrachlorodibenzo-*p*-dioxin		$^{37}Cl_4$-2,3,7,8-TCDD	85508-50-5	10.0
Internal Standards:				
1,2,3,4-Tetrachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,4-TCDD	114423-99-3	100
1,2,3,7,8,9-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	109719-82-6	100

[a] First/Last eluting isomer for the specified homologue group (see Table B for additional Window Definers).
[b, c] – see Table B for footnote.

Table B: **CS3WT; Semi-Quantitative Components and Concentrations (ng/mL, ± 20%, in nonane/4.5% toluene)**

Compound		Acronym	CAS #	Concentration (ng/mL)
PCDD Window Definers:	**Designation[a]**			
1,3,6,8-Tetrachlorodibenzo-*p*-dioxin	First TCDD	1,3,6,8-TCDD	33423-92-6	10.0
1,2,8,9-Tetrachlorodibenzo-*p*-dioxin	Last TCDD	1,2,8,9-TCDD	62470-54-6	10.0
1,2,4,6,8-/1,2,4,7,9-Pentachlorodibenzo-*p*-dioxin	First PeCDD	1,2,4,6,8-PeCDD 1,2,4,7,9-PeCDD	71998-76-0 82291-37-0	50.0[d]
1,2,3,8,9-Pentachlorodibenzo-*p*-dioxin	Last PeCDD	1,2,3,8,9-PeCDD	71925-18-3	50.0
1,2,4,6,7,9-Hexachlorodibenzo-*p*-dioxin	First HxCDD	1,2,4,6,7,9-HxCDD	39227-62-8	50.0
1,2,3,4,6,7,9-Heptachlorodibenzo-*p*-dioxin	First HpCDD	1,2,3,4,6,7,9-HpCDD	58200-70-7	50.0
PCDF Window Definers:	**Designation[a]**			
1,3,6,8-Tetrachlorodibenzofuran	First TCDF	1,3,6,8-TCDF	71998-72-6	10.0
1,2,8,9-Tetrachlorodibenzofuran	Last TCDF	1,2,8,9-TCDF	70648-22-5	10.0
1,3,4,6,8-Pentachlorodibenzofuran	First PeCDF	1,3,4,6,8-PeCDF	83704-55-6	50.0
1,2,3,8,9-Pentachlorodibenzofuran	Last PeCDF	1,2,3,8,9-PeCDF	83704-54-5	50.0
1,2,3,4,6,8-Hexachlorodibenzofuran	First HxCDF	1,2,3,4,6,8-HxCDF	69698-60-8	50.0
2,3,7,8-TCDD Resolution Testing Isomers:				
1,2,3,4-Tetrachlorodibenzo-*p*-dioxin		1,2,3,4-TCDD	30746-58-8	5.00
1,2,3,7-/1,2,3,8-Tetrachlorodibenzo-*p*-dioxin		1,2,3,7-TCDD 1,2,3,8-TCDD	67028-18-6 53555-02-5	5.00[d]
1,2,3,9-Tetrachlorodibenzo-*p*-dioxin		1,2,3,9-TCDD	71669-26-6	10.0

[a] First/Last eluting isomer for the specified homologue group (see Table A for additional Window Definers).

[b] 1,2,3,4,6,7-HxCDD (last eluting HxCDD) not included; coelutes with 1,2,3,7,8,9-HxCDD on a 60 m DB-5 column. Use 1,2,3,7,8,9-HxCDD (see Table A) and 1,2,3,4,6,7,9-HpCDD to approximate the end of the HxCDD window.

[c] 1,2,3,4,8,9-HxCDF (last eluting HxCDF) not included; can interfere with 1,2,3,7,8,9-HxCDF on a 60 m DB-5 column. Use 1,2,3,4,6,7,8-HpCDF (see Table A) to approximate the end of the HxCDF window.

[d] Total concentration of isomers.

Certified By:  **Date:** 11/05/2021 (mm/dd/yyyy)

B.G. Chittim, General Manager

Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

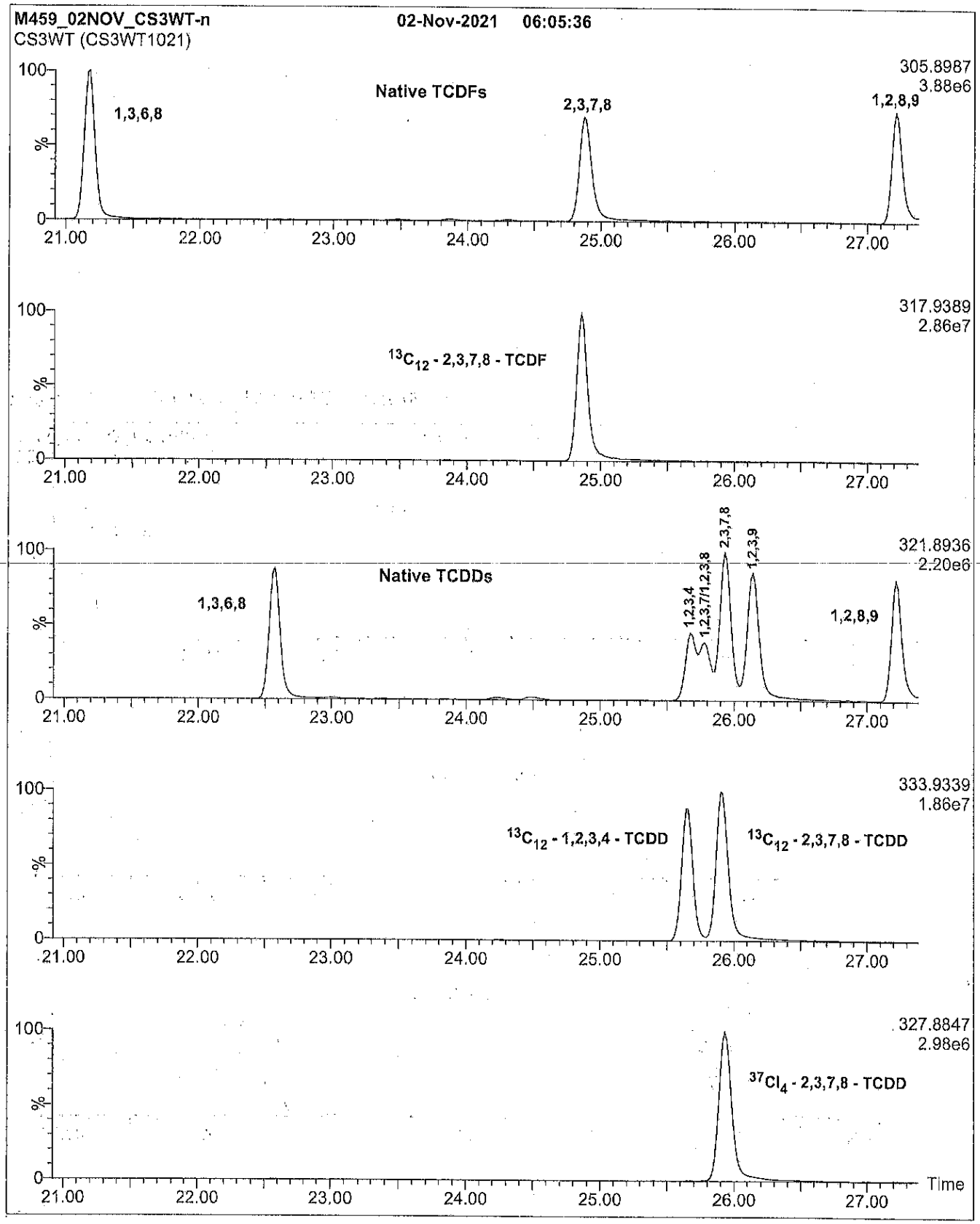


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

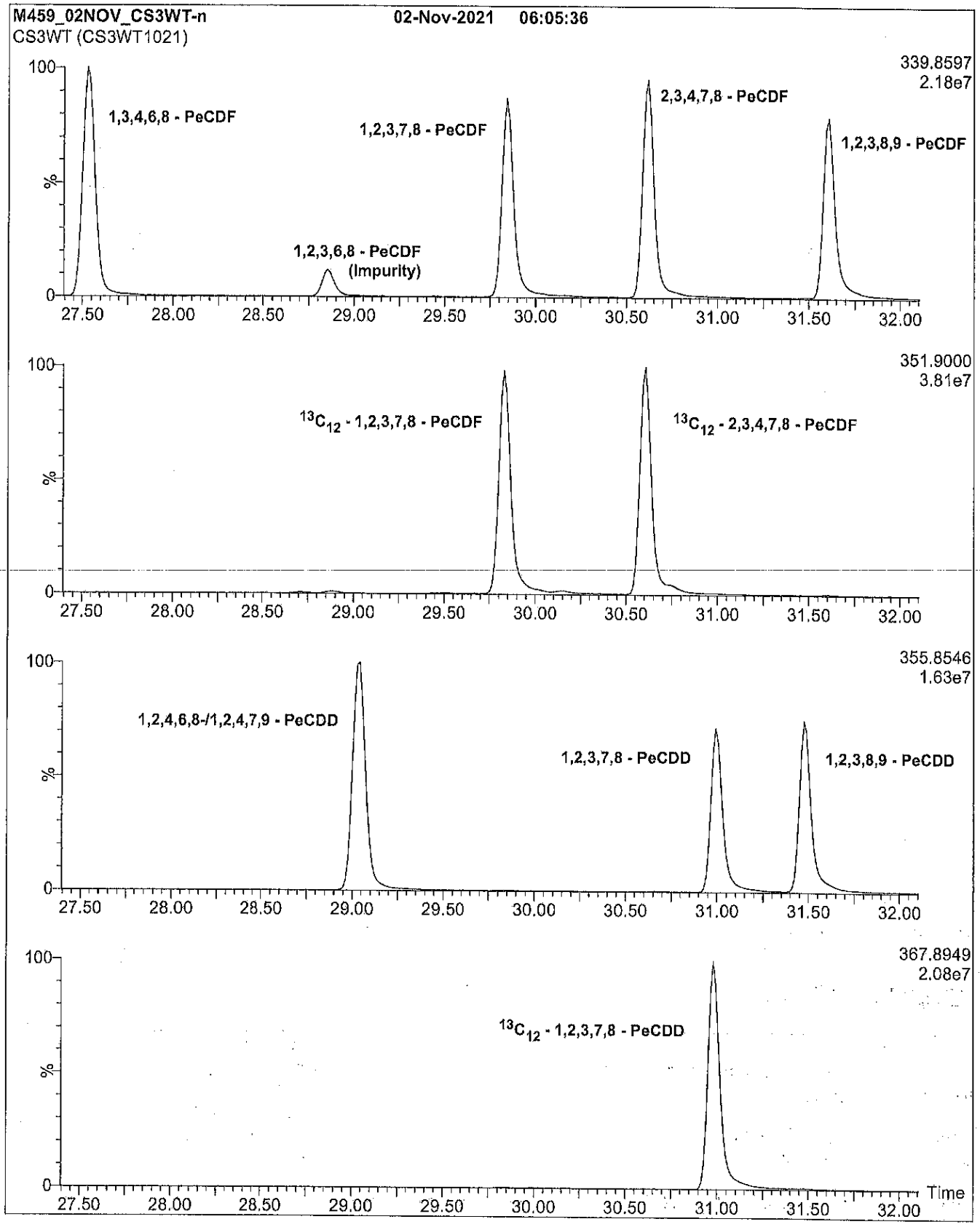


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

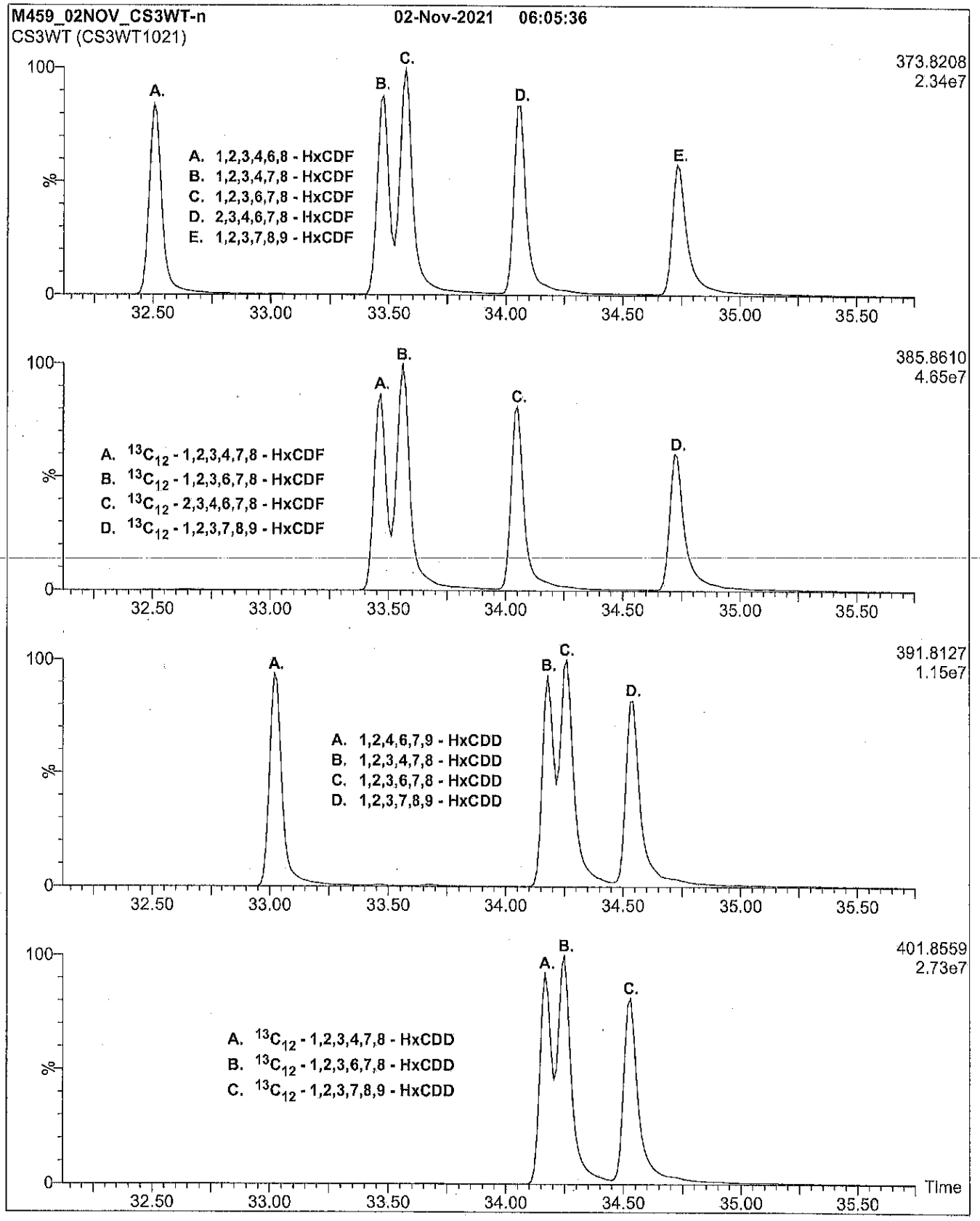


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

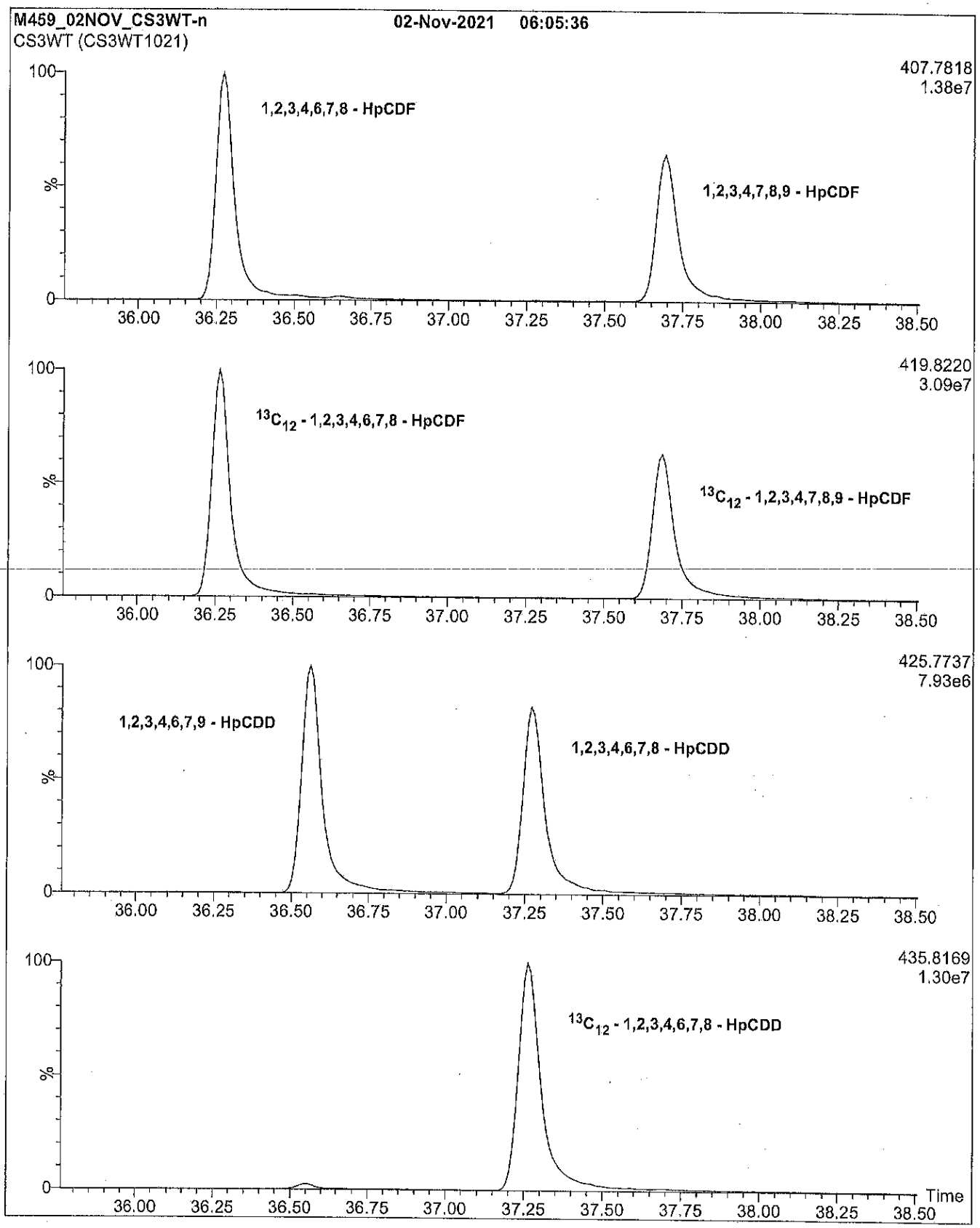
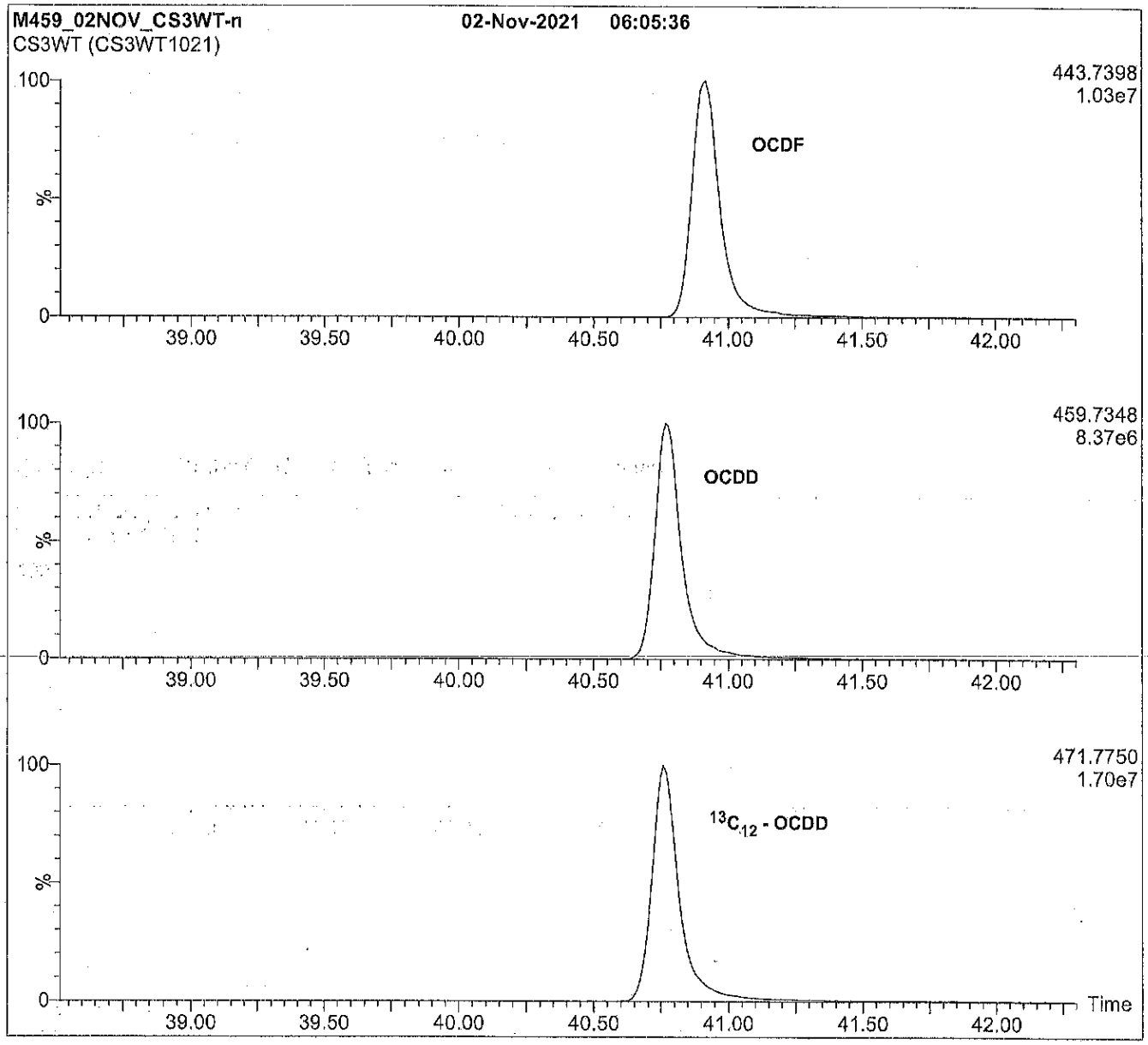


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613LCS

U.S. EPA Method 1613
Labelled Compound Stock Solution

PRODUCT CODE:	EPA-1613LCS
LOT NUMBER:	13LCS1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/29/2021
LAST TESTED: (mm/dd/yyyy)	10/31/2021
EXPIRY DATE: (mm/dd/yyyy)	10/31/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

K 9985 JK Reed 10/27/22

DESCRIPTION:

EPA-1613LCS is a solution/mixture of mass-labelled ($^{13}C_{12}$) polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613LCS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots, x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613LCS; Components and Concentrations (ng/mL, ± 5% in nonane/3.2% toluene)**

Compound	Acronym	CAS #	Concentration (ng/mL)
Mass-Labelled PCDDs:			
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-2,3,7,8-TCDD	76523-40-5	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,7,8-PeCDD	109719-79-1	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	109719-80-4	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	109719-81-5	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	109719-83-7	100
Octachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-OCDD	114423-97-1	200
Mass-Labelled PCDFs:			
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,7,8-TCDF	89059-46-1	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,7,8-PeCDF	109719-77-9	100
2,3,4,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,4,7,8-PeCDF	116843-02-8	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	114423-98-2	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	116843-03-9	100
1,2,3,7,8,9-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	116843-04-0	100
2,3,4,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	116843-05-1	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	109719-84-8	100
1,2,3,4,7,8,9-Heptachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	109719-94-0	100

Certified By: _____ **Date:** 11/05/2021
(mm/dd/yyyy)

B.G. Chittim, General Manager

Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)

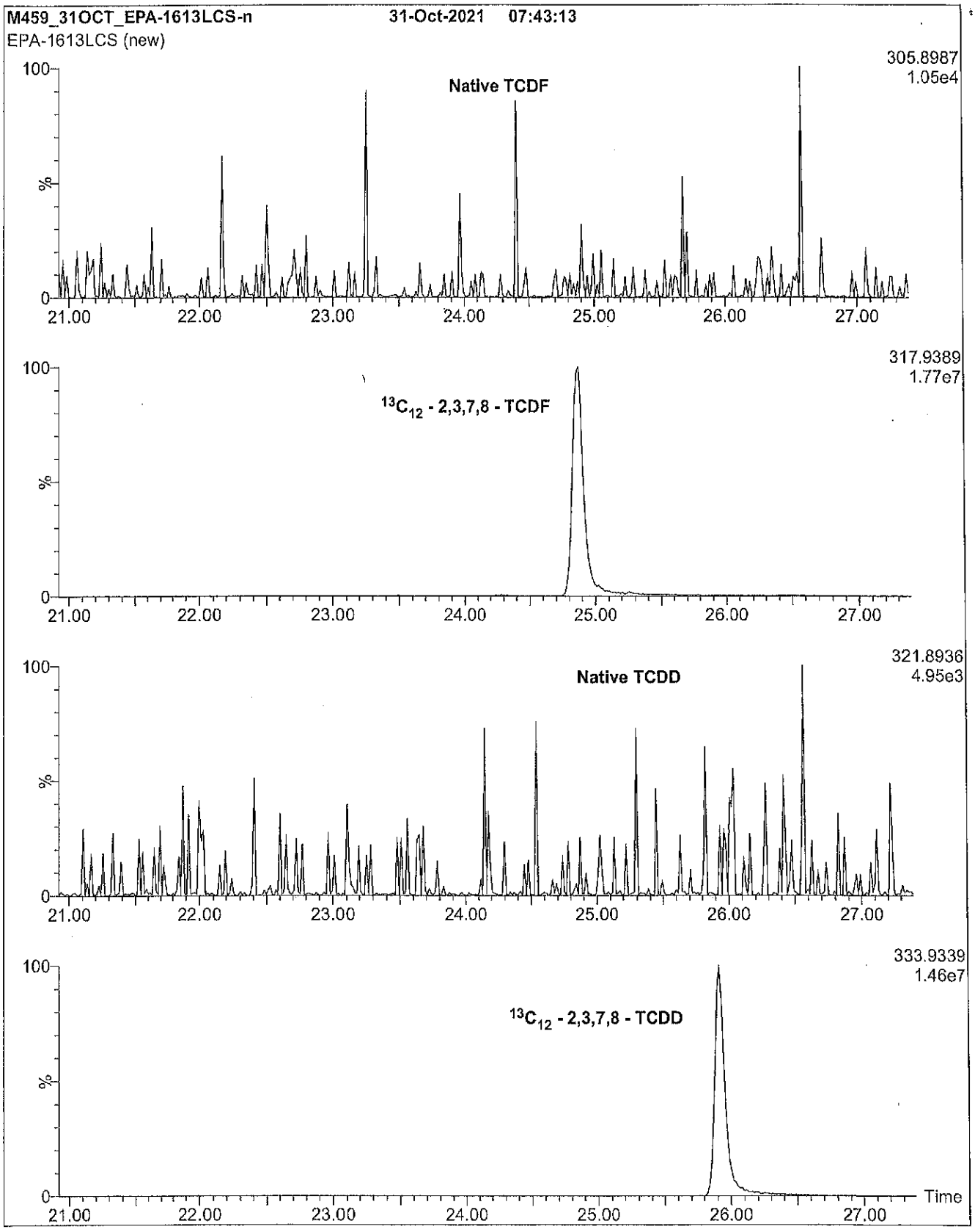


Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)

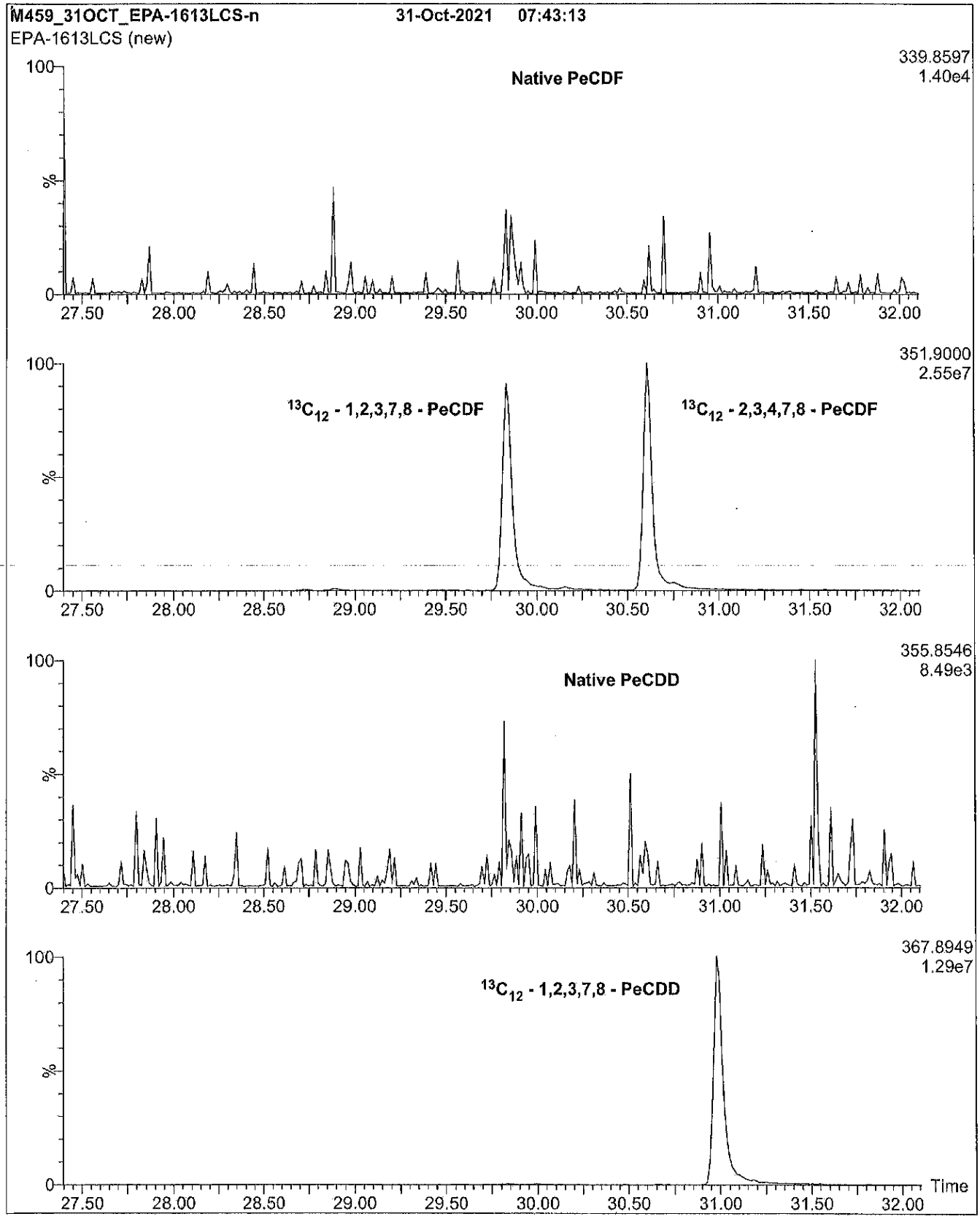


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

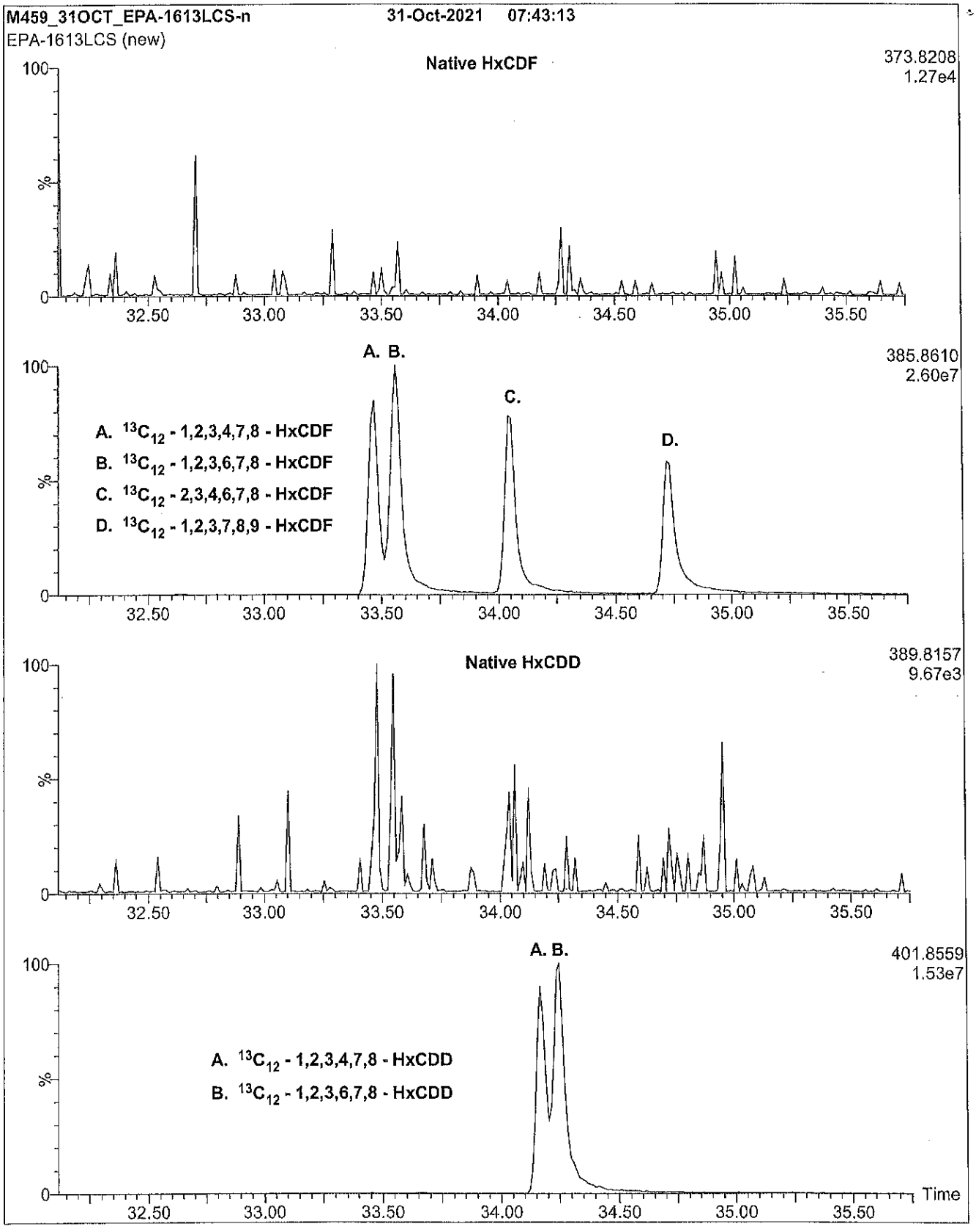


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

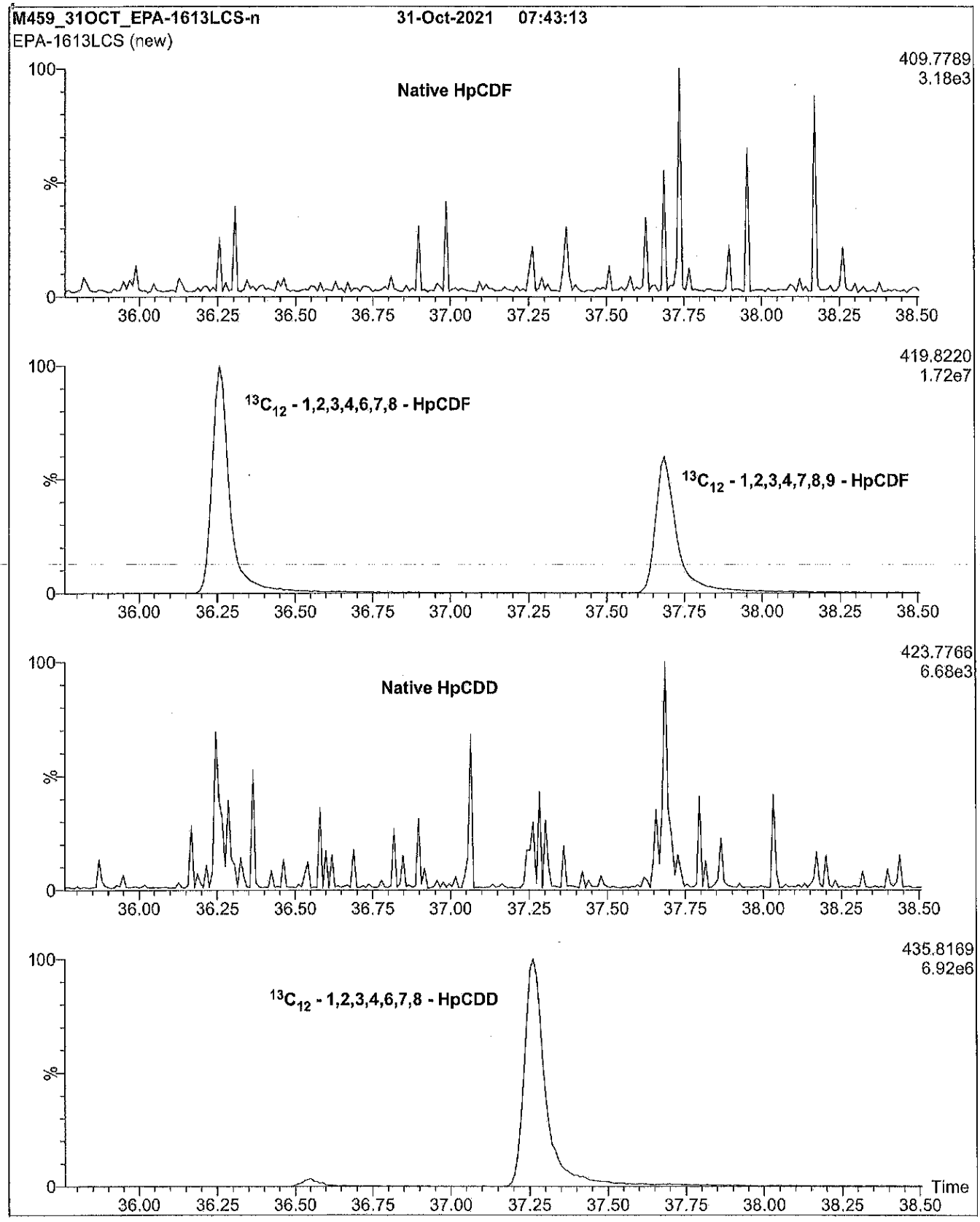
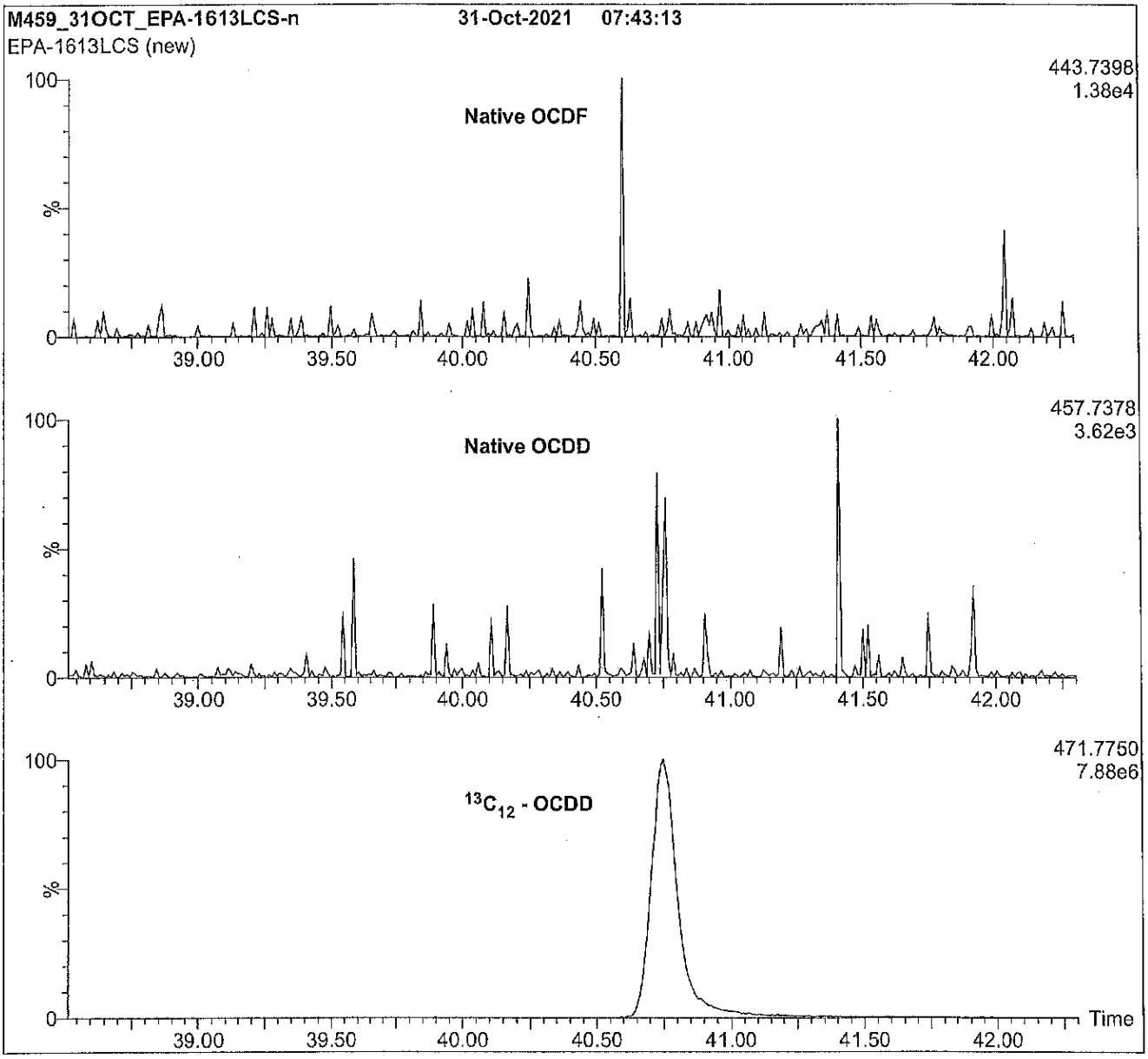


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 15570

Order Number: CB014985

Date Shipped: 12/12/2022

AirBill No(s): 519204142631

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712

To: SUE DUNNIHOO
ANALYTICAL RESOURCES INC.
4611 S. 134TH PLACE SUITE 100
TUKWILA WA 98168
250-695-6207

Sample ID	Sigma ID	Qty	Description/Remarks	→ Catalogue Number
KO1147 PSRM0168	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
KO1147 PSRM0169	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
KO1147 PSRM0171	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM

12/12/2022

PUGET SOUND SRM FOR DUWAMISH AOC4 PROJECT.

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	12/12/2022 (1400)	P Hilly	12/12/22 11:15
Custody Seal(s): Present/Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Report No. 00, 9/11/2014

SMP Version 3.3

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SS1205

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-01 B	SDG:	23A0134
Sampled:	01/06/23 08:28	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-063
% Solids:	59.97	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 18:49
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.05 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	7.87	20	0.06	0.32	
7440-43-9	Cadmium	0.20	20	0.05	0.16	
7440-50-8	Copper	38.6	20	0.28	0.79	
7440-66-6	Zinc	82.4	20	4.6	9.5	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SS1188

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-02 B	SDG:	23A0134
Sampled:	01/06/23 09:36	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-064
% Solids:	50.63	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 18:54
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.071 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	14.4	20	0.07	0.37	
7440-43-9	Cadmium	0.25	20	0.06	0.18	
7440-50-8	Copper	50.2	20	0.32	0.92	
7440-66-6	Zinc	104	20	5.4	11.1	

Analytical Resources, LLC
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Total Metals

LDW23-SS1179

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-03 B	SDG:	23A0134
Sampled:	01/06/23 09:52	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-065
% Solids:	50.30	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 18:58
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.032 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	11.0	20	0.07	0.39	
7440-43-9	Cadmium	0.32	20	0.06	0.19	
7440-50-8	Copper	48.9	20	0.34	0.96	
7440-66-6	Zinc	117	20	5.6	11.6	

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Total Metals

LDW23-SS1242

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-04 B	SDG:	23A0134
Sampled:	01/06/23 11:04	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-066
% Solids:	49.56	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 19:03
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.008 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	8.73	20	0.08	0.40	
7440-43-9	Cadmium	0.30	20	0.06	0.20	
7440-50-8	Copper	47.2	20	0.35	1.00	
7440-66-6	Zinc	100	20	5.8	12.0	

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Total Metals

LDW23-SS1173

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-05 B	SDG:	23A0134
Sampled:	01/06/23 11:22	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-067
% Solids:	47.11	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 19:07
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.023 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	11.5	20	0.08	0.42	
7440-43-9	Cadmium	0.32	20	0.06	0.21	
7440-50-8	Copper	45.7	20	0.36	1.04	
7440-66-6	Zinc	92.9	20	6.1	12.5	

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Total Metals

LDW23-SS1160

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-06 A	SDG:	23A0134
Sampled:	01/06/23 11:41	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-068
% Solids:	39.29	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 19:11
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.02 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	16.9	20	0.09	0.50	
7440-43-9	Cadmium	0.36	20	0.07	0.25	
7440-50-8	Copper	68.2	20	0.43	1.25	
7440-66-6	Zinc	202	20	7.3	15.0	

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Total Metals

LDW23-SS1152

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-07 B	SDG:	23A0134
Sampled:	01/06/23 12:29	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-069
% Solids:	45.31	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 19:16
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.066 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	14.9	20	0.08	0.41	
7440-43-9	Cadmium	0.35	20	0.06	0.21	
7440-50-8	Copper	56.0	20	0.36	1.04	
7440-66-6	Zinc	113	20	6.0	12.4	

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Total Metals

LDW23-SS1131

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-08 B	SDG:	23A0134
Sampled:	01/06/23 12:43	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-070
% Solids:	58.42	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 19:20
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.063 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	10.1	20	0.06	0.32	
7440-43-9	Cadmium	0.28	20	0.05	0.16	
7440-50-8	Copper	39.8	20	0.28	0.81	
7440-66-6	Zinc	88.5	20	4.7	9.7	

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Total Metals

LDW23-SS1129

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-09 B	SDG:	23A0134
Sampled:	01/06/23 12:57	Prepared:	03/29/23 13:50	File ID:	XDT_m2230330-080
% Solids:	47.82	Preparation:	SWN EPA 3050B	Analyzed:	03/30/23 21:52
Batch:	BLC0692	Sequence:	SLC0521	Initial/Final:	1.049 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00002

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	12.0	20	0.08	0.40	
7440-43-9	Cadmium	0.34	20	0.06	0.20	
7440-50-8	Copper	51.5	20	0.35	1.00	
7440-66-6	Zinc	101	20	5.8	12.0	

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Total Metals

LDW23-SS1124

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-10 B	SDG:	23A0134
Sampled:	01/06/23 13:15	Prepared:	03/29/23 13:50	File ID:	XDT_m2230330-081
% Solids:	55.37	Preparation:	SWN EPA 3050B	Analyzed:	03/30/23 21:57
Batch:	BLC0692	Sequence:	SLC0521	Initial/Final:	1.032 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00002

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	8.21	20	0.07	0.35	
7440-43-9	Cadmium	0.22	20	0.05	0.18	
7440-50-8	Copper	36.2	20	0.30	0.88	
7440-66-6	Zinc	77.4	20	5.1	10.5	

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Total Metals

LDW23-SS1123

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-11 B	SDG:	23A0134
Sampled:	01/06/23 13:29	Prepared:	03/29/23 13:50	File ID:	XDT_m2230330-082
% Solids:	54.10	Preparation:	SWN EPA 3050B	Analyzed:	03/30/23 22:01
Batch:	BLC0692	Sequence:	SLC0521	Initial/Final:	1.056 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00002

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	10.6	20	0.07	0.35	
7440-43-9	Cadmium	0.32	20	0.05	0.18	
7440-50-8	Copper	54.2	20	0.30	0.88	
7440-66-6	Zinc	101	20	5.1	10.5	

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Total Metals

LDW23-SS1116

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-12 B	SDG:	23A0134
Sampled:	01/06/23 13:44	Prepared:	03/29/23 13:50	File ID:	XDT_m2230330-083
% Solids:	59.12	Preparation:	SWN EPA 3050B	Analyzed:	03/30/23 22:06
Batch:	BLC0692	Sequence:	SLC0521	Initial/Final:	1.062 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00002

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	7.11	20	0.06	0.32	
7440-43-9	Cadmium	0.22	20	0.05	0.16	
7440-50-8	Copper	27.4	20	0.28	0.80	
7440-66-6	Zinc	69.6	20	4.7	9.6	

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Total Metals

LDW23-IT1210

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-13 B	SDG:	23A0134
Sampled:	01/06/23 14:12	Prepared:	03/29/23 13:50	File ID:	XDT_m2230330-084
% Solids:	57.00	Preparation:	SWN EPA 3050B	Analyzed:	03/30/23 22:11
Batch:	BLC0692	Sequence:	SLC0521	Initial/Final:	1.069 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00002

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	11.1	20	0.06	0.33	
7440-43-9	Cadmium	0.89	20	0.05	0.16	
7440-50-8	Copper	48.8	20	0.29	0.82	
7440-66-6	Zinc	117	20	4.8	9.8	

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Total Metals

LDW23-IT1194

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-14 A	SDG:	23A0134
Sampled:	01/06/23 14:41	Prepared:	03/29/23 13:50	File ID:	XDT_m2230330-086
% Solids:	71.19	Preparation:	SWN EPA 3050B	Analyzed:	03/30/23 22:21
Batch:	BLC0692	Sequence:	SLC0521	Initial/Final:	1.017 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00002

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	4.87	20	0.05	0.28	

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INORGANIC ANALYSIS DATA SHEET
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Total Metals

LDW23-SC1249

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-15 B	SDG:	23A0134
Sampled:	01/06/23 13:46	Prepared:	03/29/23 13:50	File ID:	XDT_m2230330-085
% Solids:	53.23	Preparation:	SWN EPA 3050B	Analyzed:	03/30/23 22:16
Batch:	BLC0692	Sequence:	SLC0521	Initial/Final:	1.068 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00002

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	7.67	20	0.07	0.35	
7440-43-9	Cadmium	0.27	20	0.05	0.18	
7440-50-8	Copper	41.7	20	0.31	0.88	
7440-66-6	Zinc	84.0	20	5.1	10.6	

PREPARATION BATCH SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Batch: BLC0692 Batch Matrix: Solid Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1129	23A0134-09	XDT_m2230330-080	03/29/23 13:50	
LDW23-SS1124	23A0134-10	XDT_m2230330-081	03/29/23 13:50	
LDW23-SS1123	23A0134-11	XDT_m2230330-082	03/29/23 13:50	
LDW23-SS1116	23A0134-12	XDT_m2230330-083	03/29/23 13:50	
LDW23-IT1210	23A0134-13	XDT_m2230330-084	03/29/23 13:50	
LDW23-IT1194	23A0134-14	XDT_m2230330-086	03/29/23 13:50	
LDW23-SC1249	23A0134-15	XDT_m2230330-085	03/29/23 13:50	
Blank	BLC0692-BLK1	XDT_m2230330-054	03/29/23 13:50	
LCS	BLC0692-BS1	XDT_m2230330-055	03/29/23 13:50	

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Digestion Log

Analyst: ML Date: 3/29/23 Time: 1050-1624 Balance ID: 10

Matrix: Soil Block ID: 3 Block Temp: 94C Thermometer: 20-4

ARI Sample ID	Btl #	pH<2	Prep Code: SWN Initial Wt (g) Vol (mL)	Prep Code: SWN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
23A0099-01	D		1.085	50			
-02	↓		1.002	↓			
-03	↓		1.017				
-04	B		1.034				
-05	↓		1.061				
-06	D		1.006				
-07	|		1.074				
-08	|		1.060				
-09	|		1.006				
-10	|		1.075				
-11	↓		1.052				
-12	B		1.021				
-13	D		1.043				
23A0134-09	B		1.049				
-10	|		1.032				
-11	|		1.056				
-12	|		1.062				
-13	↓		1.069				
-14	A		1.017				
-15	B		1.068				
BCC692-blk1	—		—				
-bs1	—		① —				
-dup1	—		~~1.003~~				23A0099-06
-MS1	—		1.003				↓
-MSD1	—		1.004	↓			
—	—		—	—	—	—	—

Chemical/Reagent ID: ① 1.004

HNO_3: L2678 1:1 HNO_3: L23116 HCl: — H_2O_2: K11056

Tube Lot#: 22010117 Boiling Chip Lot#: — (DoD Only)

PREPARATION BATCH SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLC0703 Batch Matrix: Solid
Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1205	23A0134-01	XDT_m2230401-063	03/27/23 13:52	
LDW23-SS1188	23A0134-02	XDT_m2230401-064	03/27/23 13:52	
LDW23-SS1179	23A0134-03	XDT_m2230401-065	03/27/23 13:52	
LDW23-SS1242	23A0134-04	XDT_m2230401-066	03/27/23 13:52	
LDW23-SS1173	23A0134-05	XDT_m2230401-067	03/27/23 13:52	
LDW23-SS1160	23A0134-06	XDT_m2230401-068	03/27/23 13:52	
LDW23-SS1152	23A0134-07	XDT_m2230401-069	03/27/23 13:52	
LDW23-SS1131	23A0134-08	XDT_m2230401-070	03/27/23 13:52	
Blank	BLC0703-BLK1	XDT_m2230331-068	03/27/23 13:52	
LCS	BLC0703-BS1	XDT_m2230331-069	03/27/23 13:52	

Form I

METHOD BLANK DATA SHEET

EPA 6020B UCT-KED

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0134

Client: Anchor QEA, LLC | Project: AOC5 MR Phase 1

Batch: BLC0692 | Laboratory ID: BLC0692-BLK1 | Prepared: 03/29/23 13:50

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 03/30/23 19:36

Sequence: SLC0521 | Calibration: GD00002 | Instrument: ICPMS2

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic-75a	ND	20	0.04	0.20	U
7440-43-9	Cadmium-111	ND	20	0.03	0.10	U
7440-50-8	Copper-63	ND	20	0.17	0.50	U
7440-66-6	Zinc-66	ND	20	2.9	6.0	U

Form I

METHOD BLANK DATA SHEET

EPA 6020B UCT-KED

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0134

Client: Anchor QEA, LLC | Project: AOC5 MR Phase 1

Batch: BLC0703 | Laboratory ID: BLC0703-BLK1 | Prepared: 03/27/23 13:52

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 03/31/23 21:20

Sequence: SLD0005 | Calibration: GD00005 | Instrument: ICPMS2

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic-75a	ND	20	0.04	0.20	U
7440-43-9	Cadmium-111	ND	20	0.03	0.10	U
7440-50-8	Copper-63	ND	20	0.17	0.50	U
7440-66-6	Zinc-66	ND	20	2.9	6.0	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020B UCT-KED

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/30/23 19:40
Batch:	BLC0692	Laboratory ID:	BLC0692-BS1
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Arsenic-75a	25.0	25.3		101	80 - 120
Cadmium-111	25.0	24.7		99.0	80 - 120
Copper-63	25.0	26.1		104	80 - 120
Zinc-66	80.0	80.9		101	80 - 120

* Indicates values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 6020B UCT-KED

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/31/23 21:25
Batch:	BLC0703	Laboratory ID:	BLC0703-BS1
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Arsenic-75a	25.0	24.2		96.7	80 - 120
Cadmium-111	25.0	25.2		101	80 - 120
Copper-63	25.0	24.5		97.9	80 - 120
Zinc-66	80.0	75.7		94.6	80 - 120

* Indicates values outside of QC limits

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00002	Instrument:	ICPMS2
Calibration Date:	03/31/2023 14:26		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Silver-107	0	0	0.2	13495	10	13333.1	20	13279.3	50	12779.38	100	12844.15
Chromium-52	0	0	0.5	41812	10	17833.4	20	16942.25	50	16557.54	100	16246.32
Chromium-53	0	0	0.5	2390	10	1944.5	20	1916	50	1875.16	100	1861.67
Lead-208	0	0	0.1	41360	10	39882.2	20	39283.4	50	38700.18	100	39938.81

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS2
Calibration: GD00002
Calibration Date: 3/31/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Silver-107	10955.16	49.1	0.9999		0.998	
Chromium-52	18231.92	73.5	1.0000		0.998	
Chromium-53	1664.555	50.4	1.0000		0.998	
Lead-208	33194.1	49.1	0.9998		0.998	

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00002
Instrument: ICPMS2
Calibration Date: 03/31/2023 14:26

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Arsenic-75a	0	0	0.2	230	10	213.1	20	207.95	50	200.3	100	199.28
Cadmium-111	0	0	0.1	260	10	254.6	20	255.25	50	250.9	100	241.93
Cadmium-114	0	0	0.1	740	10	625.8	20	628.15	50	601.88	100	582
Copper-63	0	0	0.5	3202	10	3021.5	20	2965.95	50	2920.86	100	2848.95
Copper-65	0	0	0.5	1562	10	1523.4	20	1490.05	50	1418.88	100	1406.45
Zinc-66	0	0	6	427.8333	10	438.3	20	436.75	50	409.56	100	405.73
Zinc-67	0	0	6	66.5	10	72.9	20	73.1	50	68.78	100	64.64

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Instrument: ICPMS2
Calibration: GD00002
Calibration Date: 3/31/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Arsenic-75a	175.105	49.4	0.9999		0.998	
Cadmium-111	210.4467	49.1	0.9996		0.998	
Cadmium-114	529.6383	50.1	0.9996		0.998	
Copper-63	2493.21	49.2	0.9998		0.998	
Copper-65	1233.463	49.2	0.9998		0.998	
Zinc-66	353.0289	49.1	0.9998		0.998	
Zinc-67	57.65333	49.3	0.9986		0.998	

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/30/23 **Analyst:** MS **Sequence:** SLCØ521 **Cal:** CDØØØØ2

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CAL1	L3363		
		-CAL2	L3295		
		-CAL3	L3296		
		-CAL4	L3297		
		-CAL5	L3364		
		-CAL6	L3298		
		-IBL1	—		
		-ICV1	LØ243		
		-ICB1	L3363		
		-CCV1	L3364		
		-CCB1	L3363		
		-CRL1	L3295		
		-IFA1	L3416		V^{-1}, Cr^{53}↑
		-IFB1	L2744		V^{-1}↑
		-HCV1	L2745		
		-HCV2	L2746		
		-IBL2	—		(S6↑)
		-IBL3+4			
		-CCV2			
		-CCB2			
		BLCØ81Ø-BLK1	REN		
		-BS1			
		BLCØ8Ø9-BLK1			
		-BS1			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/30/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23C0589-01	REN	2	Sc↑/Ag, Cr↑ Ag, Al, Cr NR
		SEQ-IBL5			(Cr↑ + noisy)
		↓ -IBL6			
		23C0589-02	REN	2	
		23C0667-01	↓	↓	Cr53 noisy · isotopes agree
		SEQ-IBL7			
		↓ -CCV3			
		↓ -CCB3			
	✓	23C0667-01RE1	REN	5	
		23C0589-01RE1	↓	50	Cr↑ Ag, Al only
		SEQ-IBL8			
		23C0589-01RE2	REN	500	Cr only
		23C0386-04	↓		Sc↑ No Al, Cr, V
		BLC0809-DUP1	↓		↓ ↓
		↓ -MS1	↓		↓ ↓
		↓ -MSD1	↓		↓ ↓
		SEQ-IBL9			
		↓ -CCV4			
		↓ -CCB4			
	✓	↓ -CAL1			Ba, Co, Mo Removed
		↓ -CCV5			
		↓ -CCB5			
		BLC0692-BLK1	SWN	20	
		↓ -BS1	↓	↓	

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/30/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23AΦΦ99-Φ2	SWN	20	Sc↑ No Cr
		-Φ3	↓	↓	↓
		-Φ6	↓	↓	↓
		BLCΦ692-DUP1	↓	↓	↓
		-MS1	↓	↓	/Ag%RL ↓
		-MSD1	↓	↓	↓
		-PS1	↓	↓	Comb K7409 ↓ ↓
		SEQ-IBLA			
		-CCV6			
		-CCB6			
		23AΦΦ99-Φ4	SWN	20	Sc↑ No Cr
		-Φ5	↓	↓	↓ ↓
		-Φ7	↓	↓	↓
		-Φ8	↓	↓	↓
		-Φ9	↓	↓	↓
		-1Φ	↓	↓	↓
		-11	↓	↓	↓
		-12	↓	↓	↓
		-13	↓	↓	↓
		-Φ1	↓	↓	↓ Not Needed
		SEQ-CCV7			
		-CCB7			
		BLCΦ818-BCK1	REN		
		-BS1	↓		

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/30/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23AΦ134-Φ9	SWN	20	
		-1Φ			Sc↑ No Cr
		-11			↓ ↓
		-12			
		-13			Sc↑ No Cr
		-15			↓ ↓
		-14			
		SEQ-IBLB			
		-CCV8			Resl. noisy - % R+ Analytes OK
		-CCB8			
		BLCΦ819-BLK1	REN		
		-BS1			
		23CΦ585-Φ1		2	No Cd
		-Φ2			↓
		-Φ3			
	✓	23CΦ386-Φ4RE1			Sc↑
	↓	BLCΦ8Φ9-DUP2			↓
		-MS2			
		-MSD2			
		SEQ-IBLC			
		-CCV9			In↑ noisy / Cd↑
		-CCB9			
		23CΦ272-22	REN		Sc↑ - Not Needed Ag only
		BLCΦ716-DUP4	↓		↓ ↓ ↓

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/30/23 **Analyst:** MS **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLCΦ716-MS4	REN		Sc↑ - Not Needed; Ag only
		↓ -MSD4	↓		↓ ↓ ↓
		SEQ-IBLD			
		23CΦ664-Φ1	REN	2	No Cd
		-Φ2	↓	↓	↓
		-Φ3	↓	↓	↓
		↓ -Φ4	↓	↓	↓
		SEQ-IBLE			
		-CCVA			
		-CCBA			
	✓	-CAL1			
		-CCVB			
		↓ -CCBB			
		23CΦ387-Φ2	REN	2	Al, As, Cd, Cr, Co, Ni Se, V, Zn only
		SEQ-IBLF			(V⁻¹, Cr⁵³↑)
		23CΦ258-Φ4RE1	REN		Sb only
		-Φ3RE1	↓		↓
		-Φ2RE1	↓		↓
		↓ -Φ1RE1	↓		↓
		BLCΦ810-DUP1			
		-MS1	↓		↓
		↓ -MSD1	↓		↓
		SEQ-IBLG			
		↓ -CCVC			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/30/23 **Analyst:** MS **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCBC			
		23CΦ419-Φ1	REN		Zn? No Zn
		23CΦ416-Φ4	↑	2	Al, Cr, V only
		↓ -Φ2		5	↓
		23CΦ387-Φ3		↓	
		↑ -Φ8		↓	
		-Φ5		20	
		-Φ6		↓	
		-Φ4		100	
		↓ -Φ9	↓	2	↓
		SEQ-IBLH			
		↓ -CCV1			
		↓ -CCB1			
		23CΦ386-Φ2	REN	5	
		↓ -Φ3	↓	↓	
385→365		23CΦ3(6)5-Φ9		2	As only
		23CΦ380-Φ5		↓	As, Se only
		↓ -Φ3		5	Se only
		↓ -Φ1		↓	Cr only
		BLCΦ775-DUP2			↓
		↓ -MS2		↓	
		↓ -MSD2	↓		↓
		SEQ-IBL1			
		↓ -CCVE			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/30/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted. MB 3/30/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCBE			
		23CΦ420-Φ1	REN		
		23CΦ4Φ1-Φ1	↓	2	Ni Gl sl. noisy- Dotages agree
		23CΦ41Φ-Φ1	↓	↓	No Cd
		↓ -Φ2	↓	↓	↓
		23CΦ431-Φ1	↓	↓	↓
		23CΦ439-31	↓		BLC818 QC source / As sl. noisy- Value matches DUP
818→819		BLCΦ818-DUP1	↓		
↓		↓ 9-MS1	↓		
		BLCΦ818-MSO1	↓		
		SEQ-IBLJ			
		-CCVF			In-1 noisy/Cd↑
		-CCBF			
	✓	-CAL1			
		-CCVG			
		↓ -CCBG			
		23CΦ4Φ2-Φ1	REN	2	
		23CΦ439-Φ1	↓		
		↓ -Φ2	↓		
		-Φ3	↓		
		-Φ4	↓		
		↓ -1Φ	↓		BLC819 QC source
819→818		BLCΦ818-DUP1	↓		
↓		↓ -MS1	↓		

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/30/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLCΦ819-MSD1	REN		
		SEQ-IBLK			
		-CCVH			
		-CCBH			
		23CΦ439-Φ5	REN		
		-Φ6			Sc, Ge, In^{-1}, In↓ Pb only
		-Φ7			
		-Φ8			Sc↑ No V
	✓	-Φ9			Sc, Ge, In^{-1}, In, Tb↓
		-11			
		-12			
		-14			
		-15			
		SEQ-IBLL			(Ni62, Se↑)
		-CCVI			In^{-1} noisy - Not Needed
		-CCBI			Ni62↑ - Not Needed
		23CΦ439-13	REN	20	
		-16			
		-17			
		-18			
		-19			
		-2Φ			
		-21			
		-22			Sc↑ No V

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/30/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23CΦ439-23	REN		Sc̃ No V
		SEQ-IBLM			
		↓ -CCVJ			
		↓ -CCBJ			
		23CΦ439-24	REN		Sc̃ No V
		-25			↓ ↓
		-26			
		-27			
		-28			
		-29		2	
		-3Φ		↓	
		-32		↓	
		-33			
		SEQ-IBLN			
		↓ -CCVK			
		↓ -CCBK			
	✓	23CΦ64Φ-Φ1	REN	100	Re-run @ 10x
	↓	-Φ2	↓	↓	↓
		-Φ3			
		-Φ4			
		-Φ5			
	↓	-Φ6	↓	↓	↓
		SEQ-IBLO			
		↓ -CCVL			
		↓ -CCBL			

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Thursday, March 30, 2023 13:31:08
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5544
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	6285.8	6285.783	44.411	0.7	Standard
	In	114.9	57293.1	57293.063	451.366	0.8	Standard
	U	238.1	49380.1	49380.142	668.954	1.4	Standard
⌈	CeO	155.9	1034.5	0.019	0.001	5.6	Standard
| >	Ce	139.9	55814.4	55814.422	139.818	0.3	Standard
⌊	Ce++	70.0	1559.8	0.028	0.001	2.7	Standard
	Bkgd	220.0	0.2	0.167	0.118	70.7	Standard

Current Conditions File Data

Current Value	Description
1.04	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1600.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.04	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/30/2023 1:31:04 PM
End Time: 3/30/2023 1:39:04 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 6285.78
Obtained Intensity (In 115): 57293.06
Obtained Intensity (U 238): 49380.14
Obtained Intensity (Bkgd 220): 0.17
Obtained Formula (Ce++ 70 / Ce 140): 0.028 (=1559.75 / 55814.42)
Obtained Formula (CeO 156 / Ce 140): 0.019 (=1034.50 / 55814.42)
Obtained RSD (Be 9): 0.0071
Obtained RSD (In 115): 0.0079
Obtained RSD (U 238): 0.0135

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.86 mm	0.11 mm	62218.19

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 1.04
Obtained Intensity (In 115): 57431.21
Obtained Formula (CeO 156 / Ce 140): 0.0192 (=1042.04 / 54140.40)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.714)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.703)
Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.705)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.695)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.963; Intercept = -11.55

KED Mode QID - Optimum value(s): Correlation Coefficient = 1.000; Intercept = -12.71

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/30/2023 1:31:04 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 1
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 6285.78
		Obtained Intensity (In 115): 57293.06
		Obtained Intensity (U 238): 49380.14
		Obtained Intensity (Bkgd 220): 0.17
		Obtained Formula (Ce++ 70 / Ce 140): 0.028 (=1559.75 / 55814.42)
		Obtained Formula (CeO 156 / Ce 140): 0.019 (=1034.50 / 55814.42)
		Obtained RSD (Be 9): 0.0071
		Obtained RSD (In 115): 0.0079
		Obtained RSD (U 238): 0.0135

[Passed] Optimum value(s): N/A

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	0.86 mm	0.11 mm	62218.19

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 1.02/1.06/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 57431.21
		Obtained Formula (CeO 156 / Ce 140): 0.0192 (=1042.04 / 54140.40)
[Passed] Optimum value(s): 1.04

Mass Calibration and Resolution
	Optimization Settings:
		Method: Tuning.mth.
		MassCal File: Default.tun
		Iterations: 6
		Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
		Peak height (%) for Res. Opt.: 10

	Optimization Results:
	Initial Try
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.714)
		Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.703)
		Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.705)
		Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.695)
[Passed] Optimum value(s): N/A

QID STD/DRC
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 0.963; Intercept = -11.55

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-12	30757.1
Mg	24	41	-12	33366.9
In	115	41	-10.5	62544.6
Ce	140	41	-8	58230.4
Pb	208	41	-7	28965.3
U	238	41	-7	51934.2

KED Mode QID
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 1.000; Intercept = -12.71

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-12.5	21792.6
Mg	24	41	-12	19457.2
In	115	41	-9.5	41793
Ce	140	41	-8.5	50481
Pb	208	41	-6.5	24529
U	238	41	-6.5	39787.3

End Time: 3/30/2023 1:39:04 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/30/2023 1:41:58 PM
End Time: 3/30/2023 1:43:05 PM

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.994; Intercept = -11.75

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/30/2023 1:41:58 PM

QID STD/DRC
Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 0.994; Intercept = -11.75

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-12	32384.7
Mg	24	41	-12	32476.9
In	115	41	-9.5	62066.5
Ce	140	41	-8	57808.7
Pb	208	41	-7	30380.3
U	238	41	-7	52355.8

End Time: 3/30/2023 1:43:05 PM

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Thursday, March 30, 2023 13:43:13
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5553
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	7036.3	7036.267	177.377	2.5	Standard
	In	114.9	60894.3	60894.261	852.161	1.4	Standard
	U	238.1	52720.7	52720.709	496.361	0.9	Standard
⌈	CeO	155.9	1091.4	0.019	0.001	2.9	Standard
| >	Ce	139.9	58123.3	58123.338	332.238	0.6	Standard
⌊	Ce++	70.0	1752.7	0.030	0.001	3.3	Standard
	Bkgd	220.0	0.2	0.167	0.118	70.7	Standard

Current Conditions File Data

Current Value	Description
1.04	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1600.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.04	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/30/2023 1:43:12 PM
End Time: 3/30/2023 1:45:18 PM

STD Performance Check - [Failed]
Obtained Intensity (Be 9): 7036.27
Obtained Intensity (In 115): 60894.26
Obtained Intensity (U 238): 52720.71
Obtained Intensity (Bkgd 220): 0.17
Obtained Formula (Ce++ 70 / Ce 140): 0.030 (=1752.71 / 58123.34) - <Target not achieved>
Obtained Formula (CeO 156 / Ce 140): 0.019 (=1091.44 / 58123.34)
Obtained RSD (Be 9): 0.0252
Obtained RSD (In 115): 0.0140
Obtained RSD (U 238): 0.0094

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/30/2023 1:43:12 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 1
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 7036.27
		Obtained Intensity (In 115): 60894.26
		Obtained Intensity (U 238): 52720.71
		Obtained Intensity (Bkgd 220): 0.17
		Obtained Formula (Ce++ 70 / Ce 140): 0.030 (=1752.71 / 58123.34) - <Target not achieved>
		Obtained Formula (CeO 156 / Ce 140): 0.019 (=1091.44 / 58123.34)
		Obtained RSD (Be 9): 0.0252
		Obtained RSD (In 115): 0.0140
		Obtained RSD (U 238): 0.0094

		[Failed]
[Failed]

End Time: 3/30/2023 1:45:18 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/30/2023 1:45:55 PM
End Time: 3/30/2023 1:48:01 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 6411.51
Obtained Intensity (In 115): 58114.64
Obtained Intensity (U 238): 51047.18
Obtained Intensity (Bkgd 220): 0.13
Obtained Formula (Ce++ 70 / Ce 140): 0.029 (=1604.69 / 56075.05)
Obtained Formula (CeO 156 / Ce 140): 0.017 (=946.03 / 56075.05)
Obtained RSD (Be 9): 0.0104
Obtained RSD (In 115): 0.0067
Obtained RSD (U 238): 0.0072

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/30/2023 1:45:55 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 1
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 6411.51
		Obtained Intensity (In 115): 58114.64
		Obtained Intensity (U 238): 51047.18
		Obtained Intensity (Bkgd 220): 0.13
		Obtained Formula (Ce++ 70 / Ce 140): 0.029 (=1604.69 / 56075.05)
		Obtained Formula (CeO 156 / Ce 140): 0.017 (=946.03 / 56075.05)
		Obtained RSD (Be 9): 0.0104
		Obtained RSD (In 115): 0.0067
		Obtained RSD (U 238): 0.0072

[Passed] Optimum value(s): N/A

End Time: 3/30/2023 1:48:01 PM

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Thursday, March 30, 2023 13:45:57
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5554
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	6411.5	6411.505	66.467	1.0	Standard
	In	114.9	58114.6	58114.637	391.191	0.7	Standard
	U	238.1	51047.2	51047.178	366.909	0.7	Standard
⌈	CeO	155.9	946.0	0.017	0.000	1.4	Standard
| >	Ce	139.9	56075.1	56075.050	642.479	1.1	Standard
⌊	Ce++	70.0	1604.7	0.029	0.000	1.2	Standard
	Bkgd	220.0	0.1	0.133	0.139	104.6	Standard

Current Conditions File Data

Current Value	Description
1.03	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1600.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.04	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

NEB FLOW MANUALLY LOWERED.
MB 3/30/23

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 14:26:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				22058	2	Standard
	Cl	**37**		ug/L				4410530	2	Standard
>	**Sc**	**45**		ug/L				489672	1	Standard
	Al	**27**		ug/L				2882	0	Standard
	V	**51**		ug/L				4412	0	Standard
	V-1	**51**		ug/L				652	4	Standard
	Cr	**52**		ug/L				13091	0	Standard
	Cr	**53**		ug/L				276	2	Standard
>	**Ge**	**72**		ug/L				29553	2	KED
	Co	**59**		ug/L				17	19	KED
	Ni	**60**		ug/L				18	33	KED
	Ni	**62**		ug/L				11	33	KED
	Cu	**63**		ug/L				56	7	KED
	Cu	**65**		ug/L				22	8	KED
	Zn	**66**		ug/L				31	15	KED
	Zn	**67**		ug/L				3	50	KED
	As	**75**		ug/L				6	51	KED
	Se	**78**		ug/L				16	11	KED
	Y	**89**		ug/L				274214	1	Standard
	Kr	**83**		ug/L				66	21	Standard
>	**In-1**	**115**		ug/L				8664	0	KED
	Mo	**98**		ug/L				6	96	KED
	Cd	**111**		ug/L				4	35	KED
	Cd	**114**		ug/L				3	90	KED
>	**In**	**115**		ug/L				389194	3	Standard
	Ag	**107**		ug/L				27	28	Standard
	Sb	**121**		ug/L				83	13	Standard
	Sb	**123**		ug/L				61	12	Standard
	Ba	**135**		ug/L				55	31	Standard
	Ba	**137**		ug/L				99	8	Standard
>	**Tb**	**159**		ug/L				603535	1	Standard
	Tl	**205**		ug/L				773	2	Standard
	Pb	**208**		ug/L				707	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 14:31:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	25222	1	Standard
	Cl	**37**		ug/L			4410530	4409733	1	Standard
⌈>	**Sc**	**45**		ug/L			489672	492961	1	Standard
|	**Al**	**27**	**20.000**	ug/L	0.289	1	2882	435141	1	Standard
|	**V**	**51**	**0.200**	ug/L	0.017	8	4412	8066	2	Standard
|	**V-1**	**51**	**0.200**	ug/L	0.010	4	652	4417	2	Standard
|	**Cr**	**52**	**0.500**	ug/L	0.055	10	13091	20906	2	Standard
⌊	**Cr**	**53**	**0.500**	ug/L	0.033	6	276	1195	3	Standard
⌈>	**Ge**	**72**		ug/L			29553	30116	2	KED
|	**Co**	**59**	**0.200**	ug/L	0.017	8	17	754	6	KED
|	**Ni**	**60**	**0.500**	ug/L	0.054	10	18	505	8	KED
|	**Ni**	**62**	**0.500**	ug/L	0.121	24	11	93	20	KED
|	**Cu**	**63**	**0.500**	ug/L	0.007	1	56	1601	3	KED
|	**Cu**	**65**	**0.500**	ug/L	0.040	8	22	781	6	KED
|	**Zn**	**66**	**6.000**	ug/L	0.157	2	31	2567	2	KED
|	**Zn**	**67**	**6.000**	ug/L	0.640	10	3	399	10	KED
|	**As**	**75**	**0.200**	ug/L	0.030	15	6	46	11	KED
⌊	**Se**	**78**	**0.500**	ug/L	0.241	48	16	27	19	KED
	Y	**89**		ug/L			274214	280634	1	Standard
	Kr	**83**		ug/L			66	55	15	Standard
⌈>	**In-1**	**115**		ug/L			8664	8680	2	KED
|	**Mo**	**98**	**0.200**	ug/L	0.042	21	6	174	18	KED
|	**Cd**	**111**	**0.100**	ug/L	0.018	17	4	26	12	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.012	12	3	74	13	KED
⌈>	**In**	**115**		ug/L			389194	385718	0	Standard
|	**Ag**	**107**	**0.200**	ug/L	0.005	2	27	2699	2	Standard
|	**Sb**	**121**	**0.200**	ug/L	0.010	5	83	2014	5	Standard
|	**Sb**	**123**	**0.200**	ug/L	0.005	2	61	1560	1	Standard
|	**Ba**	**135**	**0.500**	ug/L	0.011	2	55	1614	2	Standard
⌊	**Ba**	**137**	**0.500**	ug/L	0.010	1	99	2858	2	Standard
⌈>	**Tb**	**159**		ug/L			603535	615143	2	Standard
|	**Tl**	**205**	**0.200**	ug/L	0.010	5	773	6570	1	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.002	1	707	4136	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 14:36:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	30556	0	Standard
	Cl	**37**		ug/L			4410530	4496783	1	Standard
⌈>	**Sc**	**45**		ug/L			489672	500512	1	Standard
|	**Al**	**27**	**999.999**	ug/L	4.061	0	2882	21873459	1	Standard
|	**V**	**51**	**10.000**	ug/L	0.174	1	4412	199586	0	Standard
|	**V-1**	**51**	**10.000**	ug/L	0.110	1	652	197378	0	Standard
|	**Cr**	**52**	**10.001**	ug/L	0.307	3	13091	178334	2	Standard
⌊	**Cr**	**53**	**10.001**	ug/L	0.069	0	276	19445	1	Standard
⌈>	**Ge**	**72**		ug/L			29553	30970	1	KED
|	**Co**	**59**	**10.000**	ug/L	0.087	0	17	35876	1	KED
|	**Ni**	**60**	**10.001**	ug/L	0.156	1	18	10255	1	KED
|	**Ni**	**62**	**9.999**	ug/L	0.184	1	11	1633	2	KED
|	**Cu**	**63**	**9.999**	ug/L	0.190	1	56	30215	1	KED
|	**Cu**	**65**	**9.999**	ug/L	0.194	1	22	15234	0	KED
|	**Zn**	**66**	**10.002**	ug/L	0.287	2	31	4383	3	KED
|	**Zn**	**67**	**10.179**	ug/L	0.713	7	3	729	5	KED
|	**As**	**75**	**10.000**	ug/L	0.253	2	6	2131	0	KED
⌊	**Se**	**78**	**10.000**	ug/L	0.285	2	16	249	1	KED
	Y	**89**		ug/L			274214	284275	1	Standard
	Kr	**83**		ug/L			66	58	10	Standard
⌈>	**In-1**	**115**		ug/L			8664	8911	0	KED
|	**Mo**	**98**	**10.000**	ug/L	0.302	3	6	9427	2	KED
|	**Cd**	**111**	**10.000**	ug/L	0.268	2	4	2546	2	KED
⌊	**Cd**	**114**	**10.000**	ug/L	0.154	1	3	6258	0	KED
⌈>	**In**	**115**		ug/L			389194	398384	0	Standard
|	**Ag**	**107**	**10.000**	ug/L	0.067	0	27	133331	0	Standard
|	**Sb**	**121**	**10.000**	ug/L	0.015	0	83	103863	0	Standard
|	**Sb**	**123**	**10.000**	ug/L	0.037	0	61	78986	0	Standard
|	**Ba**	**135**	**10.001**	ug/L	0.085	0	55	33403	0	Standard
⌊	**Ba**	**137**	**10.000**	ug/L	0.071	0	99	57070	0	Standard
⌈>	**Tb**	**159**		ug/L			603535	633121	1	Standard
|	**Tl**	**205**	**10.000**	ug/L	0.232	2	773	299873	0	Standard
⌊	**Pb**	**208**	**10.000**	ug/L	0.252	2	707	398822	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 14:41:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	29939	1	Standard
	Cl	**37**		ug/L			4410530	4416908	1	Standard
⌈>	**Sc**	**45**		ug/L			489672	502375	2	Standard
|	**Al**	**27**	**1994.602**	ug/L	22.101	1	2882	43317480	1	Standard
|	**V**	**51**	**19.896**	ug/L	0.484	2	4412	386085	1	Standard
|	**V-1**	**51**	**19.904**	ug/L	0.431	2	652	386181	1	Standard
|	**Cr**	**52**	**19.931**	ug/L	0.636	3	13091	338845	1	Standard
⌊	**Cr**	**53**	**19.956**	ug/L	0.448	2	276	38320	1	Standard
⌈>	**Ge**	**72**		ug/L			29553	30747	2	KED
|	**Co**	**59**	**19.970**	ug/L	0.425	2	17	70661	0	KED
|	**Ni**	**60**	**20.013**	ug/L	0.224	1	18	20407	2	KED
|	**Ni**	**62**	**20.156**	ug/L	0.520	2	11	3359	0	KED
|	**Cu**	**63**	**19.958**	ug/L	0.437	2	56	59319	2	KED
|	**Cu**	**65**	**19.943**	ug/L	0.247	1	22	29801	1	KED
|	**Zn**	**66**	**20.040**	ug/L	0.362	1	31	8735	1	KED
|	**Zn**	**67**	**20.150**	ug/L	0.951	4	3	1462	3	KED
|	**As**	**75**	**19.937**	ug/L	0.691	3	6	4159	2	KED
⌊	**Se**	**78**	**20.332**	ug/L	0.139	0	16	518	3	KED
	Y	**89**		ug/L			274214	284538	0	Standard
	Kr	**83**		ug/L			66	48	14	Standard
⌈>	**In-1**	**115**		ug/L			8664	8815	2	KED
|	**Mo**	**98**	**20.025**	ug/L	0.472	2	6	18759	0	KED
|	**Cd**	**111**	**20.055**	ug/L	0.380	1	4	5105	3	KED
⌊	**Cd**	**114**	**20.060**	ug/L	0.348	1	3	12563	0	KED
⌈>	**In**	**115**		ug/L			389194	391031	1	Standard
|	**Ag**	**107**	**20.060**	ug/L	0.637	3	27	265586	1	Standard
|	**Sb**	**121**	**20.081**	ug/L	0.327	1	83	207990	0	Standard
|	**Sb**	**123**	**20.049**	ug/L	0.438	2	61	156875	1	Standard
|	**Ba**	**135**	**20.068**	ug/L	0.437	2	55	66623	0	Standard
⌊	**Ba**	**137**	**20.098**	ug/L	0.461	2	99	114714	1	Standard
⌈>	**Tb**	**159**		ug/L			603535	643744	1	Standard
|	**Tl**	**205**	**19.941**	ug/L	0.269	1	773	600146	1	Standard
⌊	**Pb**	**208**	**19.875**	ug/L	0.458	2	707	785668	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 14:46:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	22067	2	Standard
	Cl	**37**		ug/L			4410530	4529873	2	Standard
⌈>	**Sc**	**45**		ug/L			489672	501363	2	Standard
|	**Al**	**27**	**4997.110**	ug/L	60.217	1	2882	107979012	1	Standard
|	**V**	**51**	**50.078**	ug/L	1.546	3	4412	970274	0	Standard
|	**V-1**	**51**	**50.035**	ug/L	1.628	3	652	970924	1	Standard
|	**Cr**	**52**	**49.997**	ug/L	1.336	2	13091	827877	1	Standard
⌊	**Cr**	**53**	**49.856**	ug/L	1.077	2	276	93758	0	Standard
⌈>	**Ge**	**72**		ug/L			29553	30582	1	KED
|	**Co**	**59**	**49.817**	ug/L	0.846	1	17	172196	0	KED
|	**Ni**	**60**	**49.902**	ug/L	1.340	2	18	50085	1	KED
|	**Ni**	**62**	**49.919**	ug/L	0.562	1	11	8194	1	KED
|	**Cu**	**63**	**49.906**	ug/L	1.767	3	56	146043	2	KED
|	**Cu**	**65**	**49.610**	ug/L	0.618	1	22	70944	0	KED
|	**Zn**	**66**	**49.507**	ug/L	1.187	2	31	20478	1	KED
|	**Zn**	**67**	**49.577**	ug/L	0.976	1	3	3439	3	KED
|	**As**	**75**	**49.709**	ug/L	1.560	3	6	10015	1	KED
⌊	**Se**	**78**	**49.805**	ug/L	1.876	3	16	1215	2	KED
	Y	**89**		ug/L			274214	284826	3	Standard
	Kr	**83**		ug/L			66	62	3	Standard
⌈>	**In-1**	**115**		ug/L			8664	8882	2	KED
|	**Mo**	**98**	**49.607**	ug/L	1.416	2	6	45038	0	KED
|	**Cd**	**111**	**49.824**	ug/L	1.379	2	4	12545	0	KED
⌊	**Cd**	**114**	**49.604**	ug/L	1.766	3	3	30094	1	KED
⌈>	**In**	**115**		ug/L			389194	397323	0	Standard
|	**Ag**	**107**	**49.562**	ug/L	1.009	2	27	638969	2	Standard
|	**Sb**	**121**	**49.665**	ug/L	0.166	0	83	505717	0	Standard
|	**Sb**	**123**	**49.648**	ug/L	0.509	1	61	381265	0	Standard
|	**Ba**	**135**	**49.736**	ug/L	0.892	1	55	163408	1	Standard
⌊	**Ba**	**137**	**49.728**	ug/L	0.592	1	99	280690	1	Standard
⌈>	**Tb**	**159**		ug/L			603535	634860	2	Standard
|	**Tl**	**205**	**49.950**	ug/L	1.009	2	773	1473539	1	Standard
⌊	**Pb**	**208**	**49.947**	ug/L	1.550	3	707	1935009	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 14:53:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	28553	1	Standard
	Cl	**37**		ug/L			4410530	4512635	1	Standard
⌈>	**Sc**	**45**		ug/L			489672	490174	1	Standard
|	**Al**	**27**	**10028.656**	ug/L	87.371	0	2882	213937507	0	Standard
|	**V**	**51**	**100.274**	ug/L	0.900	0	4412	1913372	0	Standard
|	**V-1**	**51**	**100.290**	ug/L	1.343	1	652	1921454	0	Standard
|	**Cr**	**52**	**100.265**	ug/L	1.625	1	13091	1624632	0	Standard
⌊	**Cr**	**53**	**100.319**	ug/L	2.748	2	276	186167	1	Standard
⌈>	**Ge**	**72**		ug/L			29553	29710	1	KED
|	**Co**	**59**	**100.477**	ug/L	1.859	1	17	342885	2	KED
|	**Ni**	**60**	**100.232**	ug/L	0.584	0	18	98496	0	KED
|	**Ni**	**62**	**99.306**	ug/L	0.627	0	11	15467	0	KED
|	**Cu**	**63**	**100.044**	ug/L	1.833	1	56	284895	2	KED
|	**Cu**	**65**	**100.288**	ug/L	2.726	2	22	140645	1	KED
|	**Zn**	**66**	**100.237**	ug/L	0.876	0	31	40573	1	KED
|	**Zn**	**67**	**99.036**	ug/L	1.320	1	3	6464	1	KED
|	**As**	**75**	**100.416**	ug/L	2.169	2	6	19928	1	KED
⌊	**Se**	**78**	**99.406**	ug/L	1.175	1	16	2295	0	KED
	Y	**89**		ug/L			274214	281855	2	Standard
	Kr	**83**		ug/L			66	64	32	Standard
⌈>	**In-1**	**115**		ug/L			8664	8448	0	KED
|	**Mo**	**98**	**101.503**	ug/L	2.523	2	6	92304	1	KED
|	**Cd**	**111**	**100.227**	ug/L	0.795	0	4	24193	0	KED
⌊	**Cd**	**114**	**100.186**	ug/L	1.843	1	3	58200	1	KED
⌈>	**In**	**115**		ug/L			389194	387631	0	Standard
|	**Ag**	**107**	**100.480**	ug/L	2.415	2	27	1284415	3	Standard
|	**Sb**	**121**	**100.145**	ug/L	1.265	1	83	999510	0	Standard
|	**Sb**	**123**	**100.448**	ug/L	1.356	1	61	763932	1	Standard
|	**Ba**	**135**	**100.098**	ug/L	1.057	1	55	321876	1	Standard
⌊	**Ba**	**137**	**100.662**	ug/L	1.750	1	99	566737	2	Standard
⌈>	**Tb**	**159**		ug/L			603535	643940	2	Standard
|	**Tl**	**205**	**100.681**	ug/L	3.409	3	773	3081059	1	Standard
⌊	**Pb**	**208**	**100.377**	ug/L	3.353	3	707	3993881	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 15:01:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	25646	2	Standard
	Cl	**37**		ug/L			4410530	4405591	1	Standard
⌈>	**Sc**	**45**		ug/L			489672	478364	0	Standard
|	**Al**	**27**	**0.060**	ug/L	0.004	6	2882	4070	1	Standard
|	**V**	**51**	**0.008**	ug/L	0.006	69	4412	4465	1	Standard
|	**V-1**	**51**	**-0.006**	ug/L	0.001	9	652	532	1	Standard
|	**Cr**	**52**	**0.024**	ug/L	0.016	65	13091	13161	1	Standard
⌊	**Cr**	**53**	**-0.023**	ug/L	0.003	15	276	229	3	Standard
⌈>	**Ge**	**72**		ug/L			29553	29617	2	KED
|	**Co**	**59**	**0.008**	ug/L	0.004	47	17	45	29	KED
|	**Ni**	**60**	**-0.003**	ug/L	0.004	169	18	15	24	KED
|	**Ni**	**62**	**0.040**	ug/L	0.060	150	11	17	54	KED
|	**Cu**	**63**	**0.003**	ug/L	0.006	164	56	66	25	KED
|	**Cu**	**65**	**0.005**	ug/L	0.008	175	22	29	37	KED
|	**Zn**	**66**	**0.083**	ug/L	0.043	51	31	64	26	KED
|	**Zn**	**67**	**0.029**	ug/L	0.028	96	3	5	33	KED
|	**As**	**75**	**0.009**	ug/L	0.012	130	6	8	26	KED
⌊	**Se**	**78**	**0.050**	ug/L	0.165	328	16	17	19	KED
	Y	**89**		ug/L			274214	274130	0	Standard
	Kr	**83**		ug/L			66	56	27	Standard
⌈>	**In-1**	**115**		ug/L			8664	8607	2	KED
|	**Mo**	**98**	**0.017**	ug/L	0.007	38	6	22	29	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.002	90	4	3	15	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.003	100	3	1	104	KED
⌈>	**In**	**115**		ug/L			389194	390783	1	Standard
|	**Ag**	**107**	**0.006**	ug/L	0.002	28	27	102	19	Standard
|	**Sb**	**121**	**0.217**	ug/L	0.006	2	83	2271	2	Standard
|	**Sb**	**123**	**0.231**	ug/L	0.014	6	61	1834	5	Standard
|	**Ba**	**135**	**0.003**	ug/L	0.004	121	55	65	18	Standard
⌊	**Ba**	**137**	**0.003**	ug/L	0.003	105	99	118	16	Standard
⌈>	**Tb**	**159**		ug/L			603535	613191	0	Standard
|	**Tl**	**205**	**0.005**	ug/L	0.003	55	773	942	9	Standard
⌊	**Pb**	**208**	**-0.014**	ug/L	0.001	7	707	203	19	Standard

Sample Information

Sample Date/Time: Thursday, March 30, 2023 14:53:39
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED
Mass Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Al	27	**1.0000**	0.044	20.00	1000	2000	5000	10000
V	51	**1.0000**	0.039	0.20	10	20	50	100
V-1	51	**1.0000**	0.039	0.20	10	20	50	100
Cr	52	**1.0000**	0.033	0.50	10	20	50	100
Cr	53	**1.0000**	0.004	0.50	10	20	50	100
Ge	72							
Co	59	**1.0000**	0.115	0.20	10	20	50	100
Ni	60	**1.0000**	0.033	0.50	10	20	50	100
Ni	62	**0.9999**	0.005	0.50	10	20	50	100
Cu	63	**1.0000**	0.096	0.50	10	20	50	100
Cu	65	**1.0000**	0.047	0.50	10	20	50	100
Zn	66	**0.9999**	0.014	6.00	10	20	50	100
Zn	67	**0.9998**	0.002	6.00	10	20	50	100
As	75	**1.0000**	0.007	0.20	10	20	50	100
Se	78	**0.9999**	0.001	0.50	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Mo	98	**0.9996**	0.108	0.20	10	20	50	100
Cd	111	**1.0000**	0.029	0.10	10	20	50	100
Cd	114	**1.0000**	0.069	0.10	10	20	50	100
In	115							
Ag	107	**0.9999**	0.033	0.20	10	20	50	100
Sb	121	**1.0000**	0.026	0.20	10	20	50	100
Sb	123	**0.9999**	0.020	0.20	10	20	50	100
Ba	135	**1.0000**	0.008	0.50	10	20	50	100
Ba	137	**0.9999**	0.015	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9999**	0.048	0.20	10	20	50	100
Pb	208	**1.0000**	0.062	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 15:09:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	27873	1	Standard
	Cl	**37**		ug/L			4410530	4493660	0	Standard
⌈>	**Sc**	**45**		ug/L			489672	522787	0	Standard
|	**Al**	**27**	**5047.887**	ug/L	117.381	2	2882	114843224	1	Standard
|	**V**	**51**	**49.577**	ug/L	1.166	2	4412	1011282	1	Standard
|	**V-1**	**51**	**49.646**	ug/L	0.863	1	652	1014821	1	Standard
|	**Cr**	**52**	**49.313**	ug/L	0.994	2	13091	859312	1	Standard
⌊	**Cr**	**53**	**49.544**	ug/L	0.515	1	276	98234	1	Standard
⌈>	**Ge**	**72**		ug/L			29553	30763	1	KED
|	**Co**	**59**	**50.604**	ug/L	0.423	0	17	178805	0	KED
|	**Ni**	**60**	**50.915**	ug/L	0.595	1	18	51813	0	KED
|	**Ni**	**62**	**52.753**	ug/L	0.713	1	11	8514	2	KED
|	**Cu**	**63**	**51.180**	ug/L	2.108	4	56	150872	2	KED
|	**Cu**	**65**	**51.567**	ug/L	0.376	0	22	74900	0	KED
|	**Zn**	**66**	**49.755**	ug/L	0.469	0	31	20871	2	KED
|	**Zn**	**67**	**49.198**	ug/L	0.442	0	3	3327	1	KED
|	**As**	**75**	**47.873**	ug/L	0.351	0	6	9841	0	KED
⌊	**Se**	**78**	**76.822**	ug/L	1.524	1	16	1840	0	KED
	Y	**89**		ug/L			274214	301244	1	Standard
	Kr	**83**		ug/L			66	50	4	Standard
⌈>	**In-1**	**115**		ug/L			8664	8820	1	KED
|	**Mo**	**98**	**49.315**	ug/L	0.318	0	6	46824	0	KED
|	**Cd**	**111**	**49.618**	ug/L	1.560	3	4	12503	1	KED
⌊	**Cd**	**114**	**50.797**	ug/L	0.680	1	3	30811	1	KED
⌈>	**In**	**115**		ug/L			389194	398480	1	Standard
|	**Ag**	**107**	**52.262**	ug/L	1.183	2	27	686792	3	Standard
|	**Sb**	**121**	**51.250**	ug/L	0.672	1	83	525901	1	Standard
|	**Sb**	**123**	**50.945**	ug/L	0.996	1	61	398263	0	Standard
|	**Ba**	**135**	**51.942**	ug/L	1.179	2	55	171690	1	Standard
⌊	**Ba**	**137**	**51.436**	ug/L	1.036	2	99	297683	1	Standard
⌈>	**Tb**	**159**		ug/L			603535	648361	1	Standard
|	**Tl**	**205**	**50.746**	ug/L	1.164	2	773	1564447	0	Standard
⌊	**Pb**	**208**	**50.819**	ug/L	1.590	3	707	2036639	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 15:17:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	22255	1	Standard
	Cl	**37**		ug/L			4410530	4436001	1	Standard
⎡>	**Sc**	**45**		ug/L			489672	485079	2	Standard
⎢	**Al**	**27**	**0.028**	ug/L	0.009	30	2882	3444	3	Standard
⎢	**V**	**51**	**-0.002**	ug/L	0.003	140	4412	4329	0	Standard
⎢	**V-1**	**51**	**-0.007**	ug/L	0.002	24	652	511	8	Standard
⎢	**Cr**	**52**	**-0.006**	ug/L	0.007	127	13091	12878	1	Standard
⎣	**Cr**	**53**	**-0.022**	ug/L	0.010	43	276	234	9	Standard
⎡>	**Ge**	**72**		ug/L			29553	29885	1	KED
⎢	**Co**	**59**	**0.005**	ug/L	0.001	27	17	35	12	KED
⎢	**Ni**	**60**	**0.002**	ug/L	0.008	327	18	20	36	KED
⎢	**Ni**	**62**	**0.020**	ug/L	0.036	183	11	14	37	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.004	351	56	53	22	KED
⎢	**Cu**	**65**	**0.003**	ug/L	0.009	256	22	27	43	KED
⎢	**Zn**	**66**	**0.008**	ug/L	0.006	68	31	34	8	KED
⎢	**Zn**	**67**	**0.009**	ug/L	0.015	174	3	4	24	KED
⎢	**As**	**75**	**0.004**	ug/L	0.002	40	6	7	3	KED
⎣	**Se**	**78**	**0.089**	ug/L	0.082	92	16	18	10	KED
	Y	**89**		ug/L			274214	281170	2	Standard
	Kr	**83**		ug/L			66	50	37	Standard
⎡>	**In-1**	**115**		ug/L			8664	8556	1	KED
⎢	**Mo**	**98**	**0.006**	ug/L	0.004	68	6	11	33	KED
⎢	**Cd**	**111**	**-0.006**	ug/L	0.004	69	4	2	43	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.007	845	3	4	97	KED
⎡>	**In**	**115**		ug/L			389194	389312	1	Standard
⎢	**Ag**	**107**	**0.003**	ug/L	0.001	26	27	69	15	Standard
⎢	**Sb**	**121**	**0.034**	ug/L	0.003	9	83	426	6	Standard
⎢	**Sb**	**123**	**0.038**	ug/L	0.004	11	61	349	9	Standard
⎢	**Ba**	**135**	**0.002**	ug/L	0.001	68	55	61	6	Standard
⎣	**Ba**	**137**	**0.003**	ug/L	0.001	42	99	116	7	Standard
⎡>	**Tb**	**159**		ug/L			603535	615154	1	Standard
⎢	**Tl**	**205**	**0.002**	ug/L	0.001	55	773	838	4	Standard
⎣	**Pb**	**208**	**0.008**	ug/L	0.001	10	707	1041	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 15:25:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	22236	1	Standard
	Cl	**37**		ug/L			4410530	4606233	2	Standard
⌈>	**Sc**	**45**		ug/L			489672	501806	2	Standard
|	**Al**	**27**	**4918.937**	ug/L	199.880	4	2882	107381564	2	Standard
|	**V**	**51**	**48.767**	ug/L	2.028	4	4412	954605	3	Standard
|	**V-1**	**51**	**48.981**	ug/L	1.935	3	652	960680	2	Standard
|	**Cr**	**52**	**48.388**	ug/L	1.605	3	13091	809435	2	Standard
⌊	**Cr**	**53**	**49.102**	ug/L	1.570	3	276	93408	1	Standard
⌈>	**Ge**	**72**		ug/L			29553	30125	1	KED
|	**Co**	**59**	**50.168**	ug/L	0.868	1	17	173574	1	KED
|	**Ni**	**60**	**50.339**	ug/L	1.397	2	18	50155	1	KED
|	**Ni**	**62**	**50.424**	ug/L	1.318	2	11	7971	3	KED
|	**Cu**	**63**	**50.567**	ug/L	0.788	1	56	146001	0	KED
|	**Cu**	**65**	**50.138**	ug/L	0.918	1	22	71308	1	KED
|	**Zn**	**66**	**50.731**	ug/L	0.575	1	31	20834	1	KED
|	**Zn**	**67**	**52.477**	ug/L	0.859	1	3	3475	3	KED
|	**As**	**75**	**50.749**	ug/L	1.076	2	6	10215	1	KED
⌊	**Se**	**78**	**50.890**	ug/L	1.552	3	16	1199	1	KED
	Y	**89**		ug/L			274214	287159	0	Standard
	Kr	**83**		ug/L			66	65	9	Standard
⌈>	**In-1**	**115**		ug/L			8664	8667	2	KED
|	**Mo**	**98**	**49.978**	ug/L	1.701	3	6	46610	1	KED
|	**Cd**	**111**	**50.954**	ug/L	1.172	2	4	12616	0	KED
⌊	**Cd**	**114**	**50.706**	ug/L	1.174	2	3	30212	0	KED
⌈>	**In**	**115**		ug/L			389194	393169	0	Standard
|	**Ag**	**107**	**49.670**	ug/L	0.597	1	27	643948	1	Standard
|	**Sb**	**121**	**49.681**	ug/L	0.544	1	83	503025	1	Standard
|	**Sb**	**123**	**50.159**	ug/L	0.150	0	61	386956	0	Standard
|	**Ba**	**135**	**50.344**	ug/L	0.741	1	55	164230	2	Standard
⌊	**Ba**	**137**	**49.550**	ug/L	0.923	1	99	283007	2	Standard
⌈>	**Tb**	**159**		ug/L			603535	648912	2	Standard
|	**Tl**	**205**	**48.374**	ug/L	1.300	2	773	1492381	1	Standard
⌊	**Pb**	**208**	**48.519**	ug/L	1.425	2	707	1945839	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 15:32:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	21562	1	Standard
	Cl	**37**		ug/L			4410530	4519967	1	Standard
⌈>	**Sc**	**45**		ug/L			489672	477898	0	Standard
|	**Al**	**27**	**0.028**	ug/L	0.013	44	2882	3400	7	Standard
|	**V**	**51**	**-0.000**	ug/L	0.006	38333	4412	4305	1	Standard
|	**V-1**	**51**	**-0.008**	ug/L	0.001	12	652	481	3	Standard
|	**Cr**	**52**	**0.008**	ug/L	0.023	296	13091	12897	2	Standard
⌊	**Cr**	**53**	**-0.020**	ug/L	0.005	25	276	234	3	Standard
⌈>	**Ge**	**72**		ug/L			29553	30141	1	KED
|	**Co**	**59**	**0.035**	ug/L	0.052	148	17	140	131	KED
|	**Ni**	**60**	**0.041**	ug/L	0.051	124	18	60	86	KED
|	**Ni**	**62**	**0.034**	ug/L	0.051	147	11	17	48	KED
|	**Cu**	**63**	**0.026**	ug/L	0.046	177	56	133	101	KED
|	**Cu**	**65**	**0.036**	ug/L	0.050	136	22	75	95	KED
|	**Zn**	**66**	**0.016**	ug/L	0.057	346	31	38	62	KED
|	**Zn**	**67**	**0.114**	ug/L	0.047	41	3	11	28	KED
|	**As**	**75**	**0.018**	ug/L	0.042	233	6	10	85	KED
⌊	**Se**	**78**	**0.088**	ug/L	0.046	52	16	18	7	KED
	Y	**89**		ug/L			274214	273663	1	Standard
	Kr	**83**		ug/L			66	48	25	Standard
⌈>	**In-1**	**115**		ug/L			8664	8677	2	KED
|	**Mo**	**98**	**0.007**	ug/L	0.008	116	6	12	61	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.009	5849	4	4	58	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.006	537	3	3	126	KED
⌈>	**In**	**115**		ug/L			389194	388101	2	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.001	24	27	66	15	Standard
|	**Sb**	**121**	**0.143**	ug/L	0.009	5	83	1515	2	Standard
|	**Sb**	**123**	**0.148**	ug/L	0.009	5	61	1187	4	Standard
|	**Ba**	**135**	**0.003**	ug/L	0.002	93	55	63	9	Standard
⌊	**Ba**	**137**	**0.002**	ug/L	0.003	199	99	107	15	Standard
⌈>	**Tb**	**159**		ug/L			603535	614185	3	Standard
|	**Tl**	**205**	**0.003**	ug/L	0.000	15	773	867	4	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.002	23	707	1000	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 15:38:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	25406	2	Standard
	Cl	**37**		ug/L			4410530	4496692	1	Standard
⌈>	**Sc**	**45**		ug/L			489672	477108	1	Standard
|	**Al**	**27**	**20.576**	ug/L	0.871	4	2882	429947	3	Standard
|	**V**	**51**	**0.203**	ug/L	0.021	10	4412	8053	3	Standard
|	**V-1**	**51**	**0.187**	ug/L	0.010	5	652	4121	4	Standard
|	**Cr**	**52**	**0.532**	ug/L	0.027	5	13091	21067	0	Standard
⌊	**Cr**	**53**	**0.473**	ug/L	0.013	2	276	1123	3	Standard
⌈>	**Ge**	**72**		ug/L			29553	30185	0	KED
|	**Co**	**59**	**0.212**	ug/L	0.007	3	17	751	3	KED
|	**Ni**	**60**	**0.511**	ug/L	0.038	7	18	528	7	KED
|	**Ni**	**62**	**0.464**	ug/L	0.078	16	11	85	14	KED
|	**Cu**	**63**	**0.561**	ug/L	0.038	6	56	1680	6	KED
|	**Cu**	**65**	**0.554**	ug/L	0.019	3	22	812	3	KED
|	**Zn**	**66**	**6.303**	ug/L	0.045	0	31	2621	0	KED
|	**Zn**	**67**	**6.110**	ug/L	0.091	1	3	408	1	KED
|	**As**	**75**	**0.198**	ug/L	0.018	8	6	46	7	KED
⌊	**Se**	**78**	**0.592**	ug/L	0.062	10	16	30	4	KED
	Y	**89**		ug/L			274214	273742	2	Standard
	Kr	**83**		ug/L			66	55	8	Standard
⌈>	**In-1**	**115**		ug/L			8664	8771	1	KED
|	**Mo**	**98**	**0.178**	ug/L	0.003	1	6	174	2	KED
|	**Cd**	**111**	**0.081**	ug/L	0.021	26	4	24	22	KED
⌊	**Cd**	**114**	**0.078**	ug/L	0.012	15	3	50	15	KED
⌈>	**In**	**115**		ug/L			389194	383409	2	Standard
|	**Ag**	**107**	**0.210**	ug/L	0.011	5	27	2680	2	Standard
|	**Sb**	**121**	**0.242**	ug/L	0.012	4	83	2468	2	Standard
|	**Sb**	**123**	**0.244**	ug/L	0.005	1	61	1892	1	Standard
|	**Ba**	**135**	**0.521**	ug/L	0.036	6	55	1710	4	Standard
⌊	**Ba**	**137**	**0.513**	ug/L	0.017	3	99	2953	3	Standard
⌈>	**Tb**	**159**		ug/L			603535	620710	1	Standard
|	**Tl**	**205**	**0.202**	ug/L	0.006	3	773	6760	2	Standard
⌊	**Pb**	**208**	**0.099**	ug/L	0.006	6	707	4512	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 15:44:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			22058	99910	0	Standard
	Cl	37		ug/L			4410530	10093223	2	Standard
>	Sc	45		ug/L			489672	531312	0	Standard
	Al	27	19223.070	ug/L	372.585	1	2882	444465067	1	Standard
	V	51	0.055	ug/L	0.024	43	4412	5922	7	Standard
	V-1	51	0.965	ug/L	0.008	0	652	20736	0	Standard
	Cr	52	0.781	ug/L	0.051	6	13091	27812	2	Standard
	Cr	53	3.773	ug/L	0.044	1	276	7880	1	Standard
>	Ge	72		ug/L			29553	28922	0	KED
	Co	59	0.032	ug/L	0.005	15	17	124	12	KED
	Ni	60	0.091	ug/L	0.007	8	18	105	7	KED
	Ni	62	0.203	ug/L	0.124	61	11	41	44	KED
	Cu	63	0.060	ug/L	0.009	15	56	221	10	KED
	Cu	65	0.074	ug/L	0.011	14	22	123	12	KED
	Zn	66	0.272	ug/L	0.051	18	31	137	15	KED
	Zn	67	0.331	ug/L	0.002	0	3	24	0	KED
	As	75	0.040	ug/L	0.004	9	6	13	5	KED
	Se	78	0.137	ug/L	0.014	10	16	19	1	KED
	Y	89		ug/L			274214	290791	1	Standard
	Kr	83		ug/L			66	86	28	Standard
>	In-1	115		ug/L			8664	8383	0	KED
	Mo	98	394.316	ug/L	6.169	1	6	355859	1	KED
	Cd	111	0.052	ug/L	0.024	45	4	16	34	KED
	Cd	114	0.041	ug/L	0.004	9	3	26	7	KED
>	In	115		ug/L			389194	390526	0	Standard
	Ag	107	0.007	ug/L	0.002	24	27	112	17	Standard
	Sb	121	0.078	ug/L	0.002	2	83	866	3	Standard
	Sb	123	0.076	ug/L	0.001	1	61	646	1	Standard
	Ba	135	0.111	ug/L	0.014	12	55	416	11	Standard
	Ba	137	0.109	ug/L	0.008	6	99	716	5	Standard
>	Tb	159		ug/L			603535	646233	3	Standard
	Tl	205	0.010	ug/L	0.002	22	773	1136	3	Standard
	Pb	208	0.015	ug/L	0.002	10	707	1354	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 15:48:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	100078	2	Standard
	Cl	**37**		ug/L			4410530	10088806	0	Standard
>	**Sc**	**45**		ug/L			489672	536763	0	Standard
	Al	**27**	**19421.799**	ug/L	304.742	1	2882	453687636	1	Standard
	V	**51**	**-0.084**	ug/L	0.088	105	4412	3080	59	Standard
	V-1	**51**	**1.024**	ug/L	0.005	0	652	22184	0	Standard
	Cr	**52**	**19.924**	ug/L	0.107	0	13091	365056	0	Standard
	Cr	**53**	**23.185**	ug/L	0.224	0	276	47360	1	Standard
>	**Ge**	**72**		ug/L			29553	27821	1	KED
	Co	**59**	**20.427**	ug/L	0.466	2	17	65307	3	KED
	Ni	**60**	**20.115**	ug/L	0.544	2	18	18522	2	KED
	Ni	**62**	**20.662**	ug/L	0.707	3	11	3021	2	KED
	Cu	**63**	**20.095**	ug/L	0.261	1	56	53623	1	KED
	Cu	**65**	**20.114**	ug/L	0.593	2	22	26428	1	KED
	Zn	**66**	**19.329**	ug/L	0.577	2	31	7347	1	KED
	Zn	**67**	**17.796**	ug/L	0.336	1	3	1090	2	KED
	As	**75**	**19.393**	ug/L	0.178	0	6	3609	0	KED
	Se	**78**	**0.104**	ug/L	0.100	96	16	17	12	KED
	Y	**89**		ug/L			274214	292458	0	Standard
	Kr	**83**		ug/L			66	63	3	Standard
>	**In-1**	**115**		ug/L			8664	8193	2	KED
	Mo	**98**	**392.505**	ug/L	11.035	2	6	346030	1	KED
	Cd	**111**	**19.078**	ug/L	0.302	1	4	4468	2	KED
	Cd	**114**	**19.162**	ug/L	0.575	2	3	10794	0	KED
>	**In**	**115**		ug/L			389194	389281	0	Standard
	Ag	**107**	**18.376**	ug/L	0.165	0	27	235903	1	Standard
	Sb	**121**	**0.051**	ug/L	0.003	6	83	594	5	Standard
	Sb	**123**	**0.050**	ug/L	0.003	5	61	445	5	Standard
	Ba	**135**	**0.192**	ug/L	0.003	1	55	675	0	Standard
	Ba	**137**	**0.178**	ug/L	0.004	2	99	1104	1	Standard
>	**Tb**	**159**		ug/L			603535	644126	1	Standard
	Tl	**205**	**0.017**	ug/L	0.002	13	773	1338	3	Standard
	Pb	**208**	**0.072**	ug/L	0.002	2	707	3602	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 15:53:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	29164	3	Standard
	Cl	**37**		ug/L			4410530	4554886	1	Standard
⌈>	**Sc**	**45**		ug/L			489672	508633	1	Standard
|	**Al**	**27**	**19156.595**	ug/L	223.971	1	2882	424055269	1	Standard
|	**V**	**51**	**203.460**	ug/L	1.761	0	4412	4023814	1	Standard
|	**V-1**	**51**	**202.411**	ug/L	1.772	0	652	4023375	0	Standard
|	**Cr**	**52**	**198.006**	ug/L	4.218	2	13091	3315747	1	Standard
⌊	**Cr**	**53**	**194.647**	ug/L	4.838	2	276	374539	0	Standard
⌈>	**Ge**	**72**		ug/L			29553	26671	1	KED
|	**Co**	**59**	**201.843**	ug/L	4.398	2	17	618267	2	KED
|	**Ni**	**60**	**199.025**	ug/L	4.084	2	18	175566	2	KED
|	**Ni**	**62**	**208.358**	ug/L	4.272	2	11	29116	0	KED
|	**Cu**	**63**	**197.360**	ug/L	3.200	1	56	504352	0	KED
|	**Cu**	**65**	**197.338**	ug/L	4.285	2	22	248444	2	KED
|	**Zn**	**66**	**196.882**	ug/L	2.259	1	31	71503	1	KED
|	**Zn**	**67**	**197.167**	ug/L	6.671	3	3	11554	4	KED
|	**As**	**75**	**201.207**	ug/L	0.624	0	6	35844	1	KED
⌊	**Se**	**78**	**193.243**	ug/L	1.689	0	16	3991	2	KED
	Y	**89**		ug/L			274214	279371	1	Standard
	Kr	**83**		ug/L			66	71	21	Standard
⌈>	**In-1**	**115**		ug/L			8664	7847	1	KED
|	**Mo**	**98**	**200.750**	ug/L	3.448	1	6	169541	0	KED
|	**Cd**	**111**	**192.370**	ug/L	3.662	1	4	43117	0	KED
⌊	**Cd**	**114**	**195.630**	ug/L	0.857	0	3	105552	1	KED
⌈>	**In**	**115**		ug/L			389194	375880	1	Standard
|	**Ag**	**107**	**202.704**	ug/L	2.395	1	27	2512271	1	Standard
|	**Sb**	**121**	**198.609**	ug/L	1.782	0	83	1922106	0	Standard
|	**Sb**	**123**	**197.373**	ug/L	2.566	1	61	1455535	1	Standard
|	**Ba**	**135**	**198.046**	ug/L	3.320	1	55	617407	1	Standard
⌊	**Ba**	**137**	**197.130**	ug/L	1.842	0	99	1076104	1	Standard
⌈>	**Tb**	**159**		ug/L			603535	635915	1	Standard
|	**Tl**	**205**	**195.298**	ug/L	3.644	1	773	5903855	1	Standard
⌊	**Pb**	**208**	**192.556**	ug/L	3.843	1	707	7568176	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 15:58:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	28951	3	Standard
	Cl	**37**		ug/L			4410530	4532016	1	Standard
⌈>	**Sc**	**45**		ug/L			489672	481887	1	Standard
|	**Al**	**27**	**30233.769**	ug/L	768.565	2	2882	633895857	1	Standard
|	**V**	**51**	**317.506**	ug/L	7.963	2	4412	5945086	0	Standard
|	**V-1**	**51**	**314.902**	ug/L	7.469	2	652	5928573	0	Standard
|	**Cr**	**52**	**306.059**	ug/L	6.636	2	13091	4848151	0	Standard
⌊	**Cr**	**53**	**297.680**	ug/L	5.393	1	276	542560	0	Standard
⌈>	**Ge**	**72**		ug/L			29553	26567	0	KED
|	**Co**	**59**	**305.474**	ug/L	3.210	1	17	932122	0	KED
|	**Ni**	**60**	**293.541**	ug/L	7.763	2	18	257925	2	KED
|	**Ni**	**62**	**304.271**	ug/L	2.672	0	11	42360	1	KED
|	**Cu**	**63**	**291.069**	ug/L	1.458	0	56	741039	0	KED
|	**Cu**	**65**	**294.159**	ug/L	5.141	1	22	368899	1	KED
|	**Zn**	**66**	**279.261**	ug/L	1.500	0	31	101026	0	KED
|	**Zn**	**67**	**286.742**	ug/L	4.205	1	3	16731	1	KED
|	**As**	**75**	**296.215**	ug/L	0.476	0	6	52564	0	KED
⌊	**Se**	**78**	**284.271**	ug/L	3.414	1	16	5842	1	KED
	Y	**89**		ug/L			274214	277459	0	Standard
	Kr	**83**		ug/L			66	76	1	Standard
⌈>	**In-1**	**115**		ug/L			8664	7735	1	KED
|	**Mo**	**98**	**308.140**	ug/L	8.462	2	6	256496	1	KED
|	**Cd**	**111**	**287.885**	ug/L	7.769	2	4	63598	1	KED
⌊	**Cd**	**114**	**288.482**	ug/L	1.028	0	3	153428	1	KED
⌈>	**In**	**115**		ug/L			389194	366009	1	Standard
|	**Ag**	**107**	**300.681**	ug/L	11.510	3	27	3627664	2	Standard
|	**Sb**	**121**	**312.457**	ug/L	3.424	1	83	2944334	0	Standard
|	**Sb**	**123**	**312.005**	ug/L	6.033	1	61	2240045	0	Standard
|	**Ba**	**135**	**302.802**	ug/L	4.969	1	55	919108	0	Standard
⌊	**Ba**	**137**	**301.722**	ug/L	7.260	2	99	1603382	1	Standard
⌈>	**Tb**	**159**		ug/L			603535	628081	1	Standard
|	**Tl**	**205**	**290.612**	ug/L	9.410	3	773	8675061	1	Standard
⌊	**Pb**	**208**	**292.464**	ug/L	7.222	2	707	11352391	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 16:06:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	26486	2	Standard
	Cl	**37**		ug/L			4410530	4491987	2	Standard
>	**Sc**	**45**		ug/L			489672	472883	1	Standard
	Al	**27**	**0.170**	ug/L	0.019	11	2882	6288	6	Standard
	V	**51**	**0.007**	ug/L	0.004	51	4412	4391	3	Standard
	V-1	**51**	**0.007**	ug/L	0.001	22	652	753	2	Standard
	Cr	**52**	**0.036**	ug/L	0.014	38	13091	13196	3	Standard
	Cr	**53**	**0.034**	ug/L	0.001	3	276	327	1	Standard
>	**Ge**	**72**		ug/L			29553	28636	0	KED
	Co	**59**	**0.014**	ug/L	0.002	13	17	64	9	KED
	Ni	**60**	**0.007**	ug/L	0.004	60	18	24	16	KED
	Ni	**62**	**0.015**	ug/L	0.013	87	11	13	14	KED
	Cu	**63**	**0.011**	ug/L	0.005	48	56	85	17	KED
	Cu	**65**	**0.009**	ug/L	0.003	32	22	34	11	KED
	Zn	**66**	**0.045**	ug/L	0.008	18	31	47	6	KED
	Zn	**67**	**0.164**	ug/L	0.077	46	3	13	34	KED
	As	**75**	**0.013**	ug/L	0.012	93	6	8	25	KED
	Se	**78**	**0.055**	ug/L	0.158	284	16	17	19	KED
	Y	**89**		ug/L			274214	270941	2	Standard
	Kr	**83**		ug/L			66	61	8	Standard
>	**In-1**	**115**		ug/L			8664	8369	2	KED
	Mo	**98**	**0.041**	ug/L	0.010	23	6	43	21	KED
	Cd	**111**	**-0.005**	ug/L	0.004	80	4	2	33	KED
	Cd	**114**	**0.001**	ug/L	0.005	411	3	4	67	KED
>	**In**	**115**		ug/L			389194	374653	1	Standard
	Ag	**107**	**0.009**	ug/L	0.002	22	27	137	19	Standard
	Sb	**121**	**0.561**	ug/L	0.020	3	83	5491	3	Standard
	Sb	**123**	**0.565**	ug/L	0.013	2	61	4214	0	Standard
	Ba	**135**	**0.004**	ug/L	0.003	71	55	64	13	Standard
	Ba	**137**	**0.013**	ug/L	0.004	30	99	168	12	Standard
>	**Tb**	**159**		ug/L			603535	595187	1	Standard
	Tl	**205**	**0.035**	ug/L	0.004	12	773	1758	5	Standard
	Pb	**208**	**-0.012**	ug/L	0.001	5	707	261	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 16:13:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	26149	3	Standard
	Cl	**37**		ug/L			4410530	4491817	2	Standard
⌈>	**Sc**	**45**		ug/L			489672	490803	0	Standard
|	**Al**	**27**	**0.126**	ug/L	0.005	3	2882	5588	1	Standard
|	**V**	**51**	**0.008**	ug/L	0.003	37	4412	4566	1	Standard
|	**V-1**	**51**	**-0.001**	ug/L	0.001	70	652	634	3	Standard
|	**Cr**	**52**	**0.024**	ug/L	0.009	37	13091	13500	1	Standard
⌊	**Cr**	**53**	**-0.005**	ug/L	0.011	222	276	268	8	Standard
⌈>	**Ge**	**72**		ug/L			29553	28288	1	KED
|	**Co**	**59**	**0.009**	ug/L	0.004	38	17	46	24	KED
|	**Ni**	**60**	**0.003**	ug/L	0.004	143	18	20	19	KED
|	**Ni**	**62**	**0.003**	ug/L	0.012	376	11	11	16	KED
|	**Cu**	**63**	**0.007**	ug/L	0.002	36	56	71	8	KED
|	**Cu**	**65**	**0.009**	ug/L	0.009	105	22	33	36	KED
|	**Zn**	**66**	**0.041**	ug/L	0.021	50	31	45	18	KED
|	**Zn**	**67**	**-0.008**	ug/L	0.035	451	3	3	69	KED
|	**As**	**75**	**-0.001**	ug/L	0.003	283	6	5	9	KED
⌊	**Se**	**78**	**0.107**	ug/L	0.124	115	16	18	15	KED
	Y	**89**		ug/L			274214	275417	1	Standard
	Kr	**83**		ug/L			66	52	11	Standard
⌈>	**In-1**	**115**		ug/L			8664	8290	3	KED
|	**Mo**	**98**	**0.009**	ug/L	0.003	38	6	13	21	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.008	187	4	2	66	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.004	1265	3	3	55	KED
⌈>	**In**	**115**		ug/L			389194	383783	0	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.001	19	27	83	13	Standard
|	**Sb**	**121**	**0.150**	ug/L	0.007	4	83	1567	4	Standard
|	**Sb**	**123**	**0.149**	ug/L	0.014	9	61	1184	8	Standard
|	**Ba**	**135**	**0.006**	ug/L	0.004	65	55	72	16	Standard
⌊	**Ba**	**137**	**0.008**	ug/L	0.004	42	99	143	13	Standard
⌈>	**Tb**	**159**		ug/L			603535	612419	2	Standard
|	**Tl**	**205**	**0.014**	ug/L	0.003	18	773	1190	3	Standard
⌊	**Pb**	**208**	**-0.013**	ug/L	0.000	1	707	219	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 16:20:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	25328	2	Standard
	Cl	**37**		ug/L			4410530	4466072	1	Standard
⌈>	**Sc**	**45**		ug/L			489672	481083	1	Standard
|	**Al**	**27**	**0.041**	ug/L	0.022	54	2882	3695	11	Standard
|	**V**	**51**	**0.005**	ug/L	0.005	104	4412	4425	2	Standard
|	**V-1**	**51**	**-0.005**	ug/L	0.000	7	652	552	2	Standard
|	**Cr**	**52**	**0.020**	ug/L	0.021	103	13091	13183	2	Standard
⌊	**Cr**	**53**	**-0.011**	ug/L	0.006	51	276	251	3	Standard
⌈>	**Ge**	**72**		ug/L			29553	28067	2	KED
|	**Co**	**59**	**0.008**	ug/L	0.005	60	17	41	34	KED
|	**Ni**	**60**	**-0.003**	ug/L	0.009	358	18	15	57	KED
|	**Ni**	**62**	**-0.000**	ug/L	0.006	1303	11	10	10	KED
|	**Cu**	**63**	**0.008**	ug/L	0.002	19	56	75	6	KED
|	**Cu**	**65**	**0.009**	ug/L	0.001	12	22	33	3	KED
|	**Zn**	**66**	**0.068**	ug/L	0.042	62	31	55	27	KED
|	**Zn**	**67**	**0.085**	ug/L	0.125	147	3	8	86	KED
|	**As**	**75**	**-0.003**	ug/L	0.008	289	6	5	27	KED
⌊	**Se**	**78**	**0.016**	ug/L	0.142	873	16	15	20	KED
	Y	**89**		ug/L			274214	272309	1	Standard
	Kr	**83**		ug/L			66	48	9	Standard
⌈>	**In-1**	**115**		ug/L			8664	8336	0	KED
|	**Mo**	**98**	**0.003**	ug/L	0.005	142	6	8	46	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.005	63	4	2	49	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.009	128	3	7	67	KED
⌈>	**In**	**115**		ug/L			389194	378705	1	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.001	23	27	70	14	Standard
|	**Sb**	**121**	**0.082**	ug/L	0.003	3	83	883	1	Standard
|	**Sb**	**123**	**0.084**	ug/L	0.003	4	61	687	2	Standard
|	**Ba**	**135**	**0.004**	ug/L	0.002	47	55	65	7	Standard
⌊	**Ba**	**137**	**0.004**	ug/L	0.002	55	99	118	9	Standard
⌈>	**Tb**	**159**		ug/L			603535	608626	0	Standard
|	**Tl**	**205**	**0.005**	ug/L	0.001	23	773	938	3	Standard
⌊	**Pb**	**208**	**-0.014**	ug/L	0.000	2	707	180	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 16:25:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	23085	3	Standard
	Cl	**37**		ug/L			4410530	4589479	2	Standard
⌈>	**Sc**	**45**		ug/L			489672	489649	0	Standard
|	**Al**	**27**	**5074.148**	ug/L	96.110	1	2882	108140995	2	Standard
|	**V**	**51**	**49.994**	ug/L	0.416	0	4412	955170	0	Standard
|	**V-1**	**51**	**50.004**	ug/L	0.404	0	652	957371	0	Standard
|	**Cr**	**52**	**49.651**	ug/L	0.738	1	13091	810304	1	Standard
⌊	**Cr**	**53**	**49.689**	ug/L	0.767	1	276	92268	1	Standard
⌈>	**Ge**	**72**		ug/L			29553	28696	2	KED
|	**Co**	**59**	**50.765**	ug/L	1.191	2	17	167275	0	KED
|	**Ni**	**60**	**50.883**	ug/L	1.315	2	18	48292	1	KED
|	**Ni**	**62**	**52.735**	ug/L	1.637	3	11	7935	1	KED
|	**Cu**	**63**	**50.695**	ug/L	1.130	2	56	139407	0	KED
|	**Cu**	**65**	**51.604**	ug/L	1.319	2	22	69909	2	KED
|	**Zn**	**66**	**52.551**	ug/L	0.946	1	31	20559	2	KED
|	**Zn**	**67**	**52.287**	ug/L	1.862	3	3	3296	1	KED
|	**As**	**75**	**50.826**	ug/L	0.937	1	6	9744	0	KED
⌊	**Se**	**78**	**52.416**	ug/L	1.311	2	16	1176	2	KED
	Y	**89**		ug/L			274214	282980	1	Standard
	Kr	**83**		ug/L			66	64	14	Standard
⌈>	**In-1**	**115**		ug/L			8664	8275	1	KED
|	**Mo**	**98**	**49.870**	ug/L	1.139	2	6	44420	1	KED
|	**Cd**	**111**	**50.139**	ug/L	0.583	1	4	11855	0	KED
⌊	**Cd**	**114**	**51.529**	ug/L	0.910	1	3	29318	0	KED
⌈>	**In**	**115**		ug/L			389194	378378	1	Standard
|	**Ag**	**107**	**50.779**	ug/L	0.351	0	27	633507	0	Standard
|	**Sb**	**121**	**50.731**	ug/L	0.160	0	83	494309	1	Standard
|	**Sb**	**123**	**51.269**	ug/L	0.023	0	61	380639	1	Standard
|	**Ba**	**135**	**50.890**	ug/L	0.660	1	55	159744	1	Standard
⌊	**Ba**	**137**	**50.758**	ug/L	0.657	1	99	278963	1	Standard
⌈>	**Tb**	**159**		ug/L			603535	626136	2	Standard
|	**Tl**	**205**	**49.009**	ug/L	1.315	2	773	1459018	0	Standard
⌊	**Pb**	**208**	**49.575**	ug/L	1.566	3	707	1918578	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 16:33:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	22795	1	Standard
	Cl	**37**		ug/L			4410530	4492235	0	Standard
⌈>	**Sc**	**45**		ug/L			489672	475447	2	Standard
|	**Al**	**27**	**0.032**	ug/L	0.001	3	2882	3455	2	Standard
|	**V**	**51**	**0.001**	ug/L	0.007	1496	4412	4292	2	Standard
|	**V-1**	**51**	**-0.008**	ug/L	0.001	9	652	480	1	Standard
|	**Cr**	**52**	**0.012**	ug/L	0.026	222	13091	12890	1	Standard
⌊	**Cr**	**53**	**-0.017**	ug/L	0.008	46	276	237	4	Standard
⌈>	**Ge**	**72**		ug/L			29553	28239	0	KED
|	**Co**	**59**	**0.011**	ug/L	0.002	14	17	50	9	KED
|	**Ni**	**60**	**0.013**	ug/L	0.014	102	18	29	41	KED
|	**Ni**	**62**	**-0.005**	ug/L	0.019	363	11	10	28	KED
|	**Cu**	**63**	**0.003**	ug/L	0.007	260	56	61	31	KED
|	**Cu**	**65**	**0.007**	ug/L	0.004	57	22	31	18	KED
|	**Zn**	**66**	**0.000**	ug/L	0.002	778	31	29	3	KED
|	**Zn**	**67**	**0.065**	ug/L	0.093	144	3	7	75	KED
|	**As**	**75**	**0.006**	ug/L	0.012	203	6	7	30	KED
⌊	**Se**	**78**	**0.137**	ug/L	0.160	117	16	18	19	KED
	Y	**89**		ug/L			274214	269434	2	Standard
	Kr	**83**		ug/L			66	48	29	Standard
⌈>	**In-1**	**115**		ug/L			8664	8335	2	KED
|	**Mo**	**98**	**0.014**	ug/L	0.004	27	6	18	16	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.007	154	4	2	57	KED
⌊	**Cd**	**114**	**0.006**	ug/L	0.004	61	3	6	31	KED
⌈>	**In**	**115**		ug/L			389194	378845	1	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.001	15	27	73	8	Standard
|	**Sb**	**121**	**0.180**	ug/L	0.009	4	83	1831	3	Standard
|	**Sb**	**123**	**0.176**	ug/L	0.011	6	61	1369	4	Standard
|	**Ba**	**135**	**0.009**	ug/L	0.002	28	55	80	8	Standard
⌊	**Ba**	**137**	**0.003**	ug/L	0.002	51	99	113	6	Standard
⌈>	**Tb**	**159**		ug/L			603535	598350	3	Standard
|	**Tl**	**205**	**0.005**	ug/L	0.001	23	773	900	4	Standard
⌊	**Pb**	**208**	**0.012**	ug/L	0.003	20	707	1156	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0810-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 16:39:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			22058	30993	1	Standard
	Cl	37		ug/L			4410530	4458819	1	Standard
>	Sc	45		ug/L			489672	483631	0	Standard
	Al	27	0.856	ug/L	0.010	1	2882	20866	0	Standard
	V	51	0.010	ug/L	0.007	70	4412	4542	3	Standard
	V-1	51	-0.007	ug/L	0.002	23	652	505	5	Standard
	Cr	52	0.080	ug/L	0.024	29	13091	14200	3	Standard
	Cr	53	0.022	ug/L	0.007	30	276	313	2	Standard
>	Ge	72		ug/L			29553	28417	2	KED
	Co	59	0.004	ug/L	0.001	31	17	31	14	KED
	Ni	60	-0.009	ug/L	0.005	62	18	9	52	KED
	Ni	62	0.003	ug/L	0.025	902	11	11	33	KED
	Cu	63	0.102	ug/L	0.011	10	56	332	6	KED
	Cu	65	0.110	ug/L	0.021	18	22	168	14	KED
	Zn	66	0.079	ug/L	0.025	31	31	60	14	KED
	Zn	67	0.105	ug/L	0.048	46	3	10	28	KED
	As	75	-0.007	ug/L	0.006	84	6	4	26	KED
	Se	78	-0.047	ug/L	0.186	392	16	14	30	KED
	Y	89		ug/L			274214	272624	2	Standard
	Kr	83		ug/L			66	47	12	Standard
>	In-1	115		ug/L			8664	8432	3	KED
	Mo	98	0.013	ug/L	0.009	70	6	17	44	KED
	Cd	111	0.002	ug/L	0.010	522	4	4	53	KED
	Cd	114	0.002	ug/L	0.002	93	3	4	25	KED
>	In	115		ug/L			389194	383223	2	Standard
	Ag	107	0.003	ug/L	0.001	49	27	59	24	Standard
	Sb	121	0.079	ug/L	0.006	8	83	865	5	Standard
	Sb	123	0.080	ug/L	0.009	11	61	663	7	Standard
	Ba	135	0.021	ug/L	0.006	27	55	121	17	Standard
	Ba	137	0.021	ug/L	0.005	25	99	213	16	Standard
>	Tb	159		ug/L			603535	594895	2	Standard
	Tl	205	0.009	ug/L	0.002	26	773	1004	4	Standard
	Pb	208	-0.015	ug/L	0.001	4	707	158	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0810-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 16:44:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			22058	31677	1	Standard
	Cl	37		ug/L			4410530	4474998	1	Standard
>	Sc	45		ug/L			489672	484267	2	Standard
	Al	27	2.372	ug/L	0.030	1	2882	52841	0	Standard
	V	51	25.043	ug/L	0.416	1	4412	475293	0	Standard
	V-1	51	25.226	ug/L	0.429	1	652	477916	1	Standard
	Cr	52	24.859	ug/L	0.824	3	13091	407544	1	Standard
	Cr	53	25.468	ug/L	0.792	3	276	46891	1	Standard
>	Ge	72		ug/L			29553	28757	0	KED
	Co	59	25.570	ug/L	0.391	1	17	84474	1	KED
	Ni	60	25.652	ug/L	0.603	2	18	24412	2	KED
	Ni	62	26.200	ug/L	0.666	2	11	3958	2	KED
	Cu	63	26.639	ug/L	0.906	3	56	73463	3	KED
	Cu	65	26.341	ug/L	0.388	1	22	35777	1	KED
	Zn	66	86.297	ug/L	0.351	0	31	33813	0	KED
	Zn	67	84.035	ug/L	1.923	2	3	5310	2	KED
	As	75	25.398	ug/L	0.239	0	6	4884	1	KED
	Se	78	82.153	ug/L	0.557	0	16	1838	0	KED
	Y	89		ug/L			274214	268013	3	Standard
	Kr	83		ug/L			66	59	9	Standard
>	In-1	115		ug/L			8664	8414	1	KED
	Mo	98	24.930	ug/L	0.381	1	6	22581	0	KED
	Cd	111	26.068	ug/L	0.425	1	4	6268	0	KED
	Cd	114	25.957	ug/L	0.507	1	3	15018	1	KED
>	In	115		ug/L			389194	383288	2	Standard
	Ag	107	25.955	ug/L	0.824	3	27	327856	0	Standard
	Sb	121	26.121	ug/L	0.520	1	83	257763	0	Standard
	Sb	123	26.040	ug/L	0.630	2	61	195808	2	Standard
	Ba	135	25.298	ug/L	0.477	1	55	80444	0	Standard
	Ba	137	25.040	ug/L	0.848	3	99	139373	0	Standard
>	Tb	159		ug/L			603535	604363	2	Standard
	Tl	205	25.944	ug/L	0.992	3	773	745634	1	Standard
	Pb	208	26.085	ug/L	0.917	3	707	974548	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0809-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 16:49:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			22058	31230	3	Standard
	Cl	37		ug/L			4410530	4388445	2	Standard
>	Sc	45		ug/L			489672	480337	1	Standard
	Al	27	0.856	ug/L	0.027	3	2882	20727	1	Standard
	V	51	0.014	ug/L	0.007	48	4412	4591	1	Standard
	V-1	51	-0.007	ug/L	0.001	15	652	507	2	Standard
	Cr	52	0.155	ug/L	0.020	12	13091	15277	0	Standard
	Cr	53	0.082	ug/L	0.003	3	276	420	2	Standard
>	Ge	72		ug/L			29553	28781	1	KED
	Co	59	0.004	ug/L	0.003	74	17	29	32	KED
	Ni	60	-0.003	ug/L	0.007	244	18	15	43	KED
	Ni	62	-0.002	ug/L	0.038	1540	11	10	53	KED
	Cu	63	0.026	ug/L	0.008	29	56	126	16	KED
	Cu	65	0.036	ug/L	0.009	24	22	71	16	KED
	Zn	66	0.041	ug/L	0.027	66	31	46	23	KED
	Zn	67	0.062	ug/L	0.053	85	3	7	43	KED
	As	75	-0.007	ug/L	0.004	56	6	4	14	KED
	Se	78	0.041	ug/L	0.127	308	16	16	16	KED
	Y	89		ug/L			274214	277552	1	Standard
	Kr	83		ug/L			66	44	30	Standard
>	In-1	115		ug/L			8664	8523	1	KED
	Mo	98	0.007	ug/L	0.003	50	6	11	24	KED
	Cd	111	-0.006	ug/L	0.006	96	4	2	57	KED
	Cd	114	0.007	ug/L	0.002	21	3	8	12	KED
>	In	115		ug/L			389194	382635	0	Standard
	Ag	107	0.004	ug/L	0.001	38	27	74	23	Standard
	Sb	121	0.034	ug/L	0.003	9	83	415	6	Standard
	Sb	123	0.036	ug/L	0.004	12	61	331	8	Standard
	Ba	135	0.019	ug/L	0.006	29	55	116	15	Standard
	Ba	137	0.015	ug/L	0.002	15	99	180	7	Standard
>	Tb	159		ug/L			603535	610595	1	Standard
	Tl	205	0.003	ug/L	0.003	93	773	873	8	Standard
	Pb	208	-0.015	ug/L	0.000	2	707	155	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0809-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 16:54:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			22058	33423	1	Standard
	Cl	37		ug/L			4410530	4510571	1	Standard
>	Sc	45		ug/L			489672	502586	0	Standard
	Al	27	4992.545	ug/L	105.169	2	2882	109203718	1	Standard
	V	51	24.656	ug/L	0.106	0	4412	485837	0	Standard
	V-1	51	24.711	ug/L	0.101	0	652	485971	0	Standard
	Cr	52	24.423	ug/L	0.269	1	13091	415966	0	Standard
	Cr	53	24.607	ug/L	0.360	1	276	47046	1	Standard
>	Ge	72		ug/L			29553	29259	1	KED
	Co	59	25.168	ug/L	0.507	2	17	84590	2	KED
	Ni	60	25.034	ug/L	0.069	0	18	24240	1	KED
	Ni	62	26.401	ug/L	0.680	2	11	4057	1	KED
	Cu	63	25.312	ug/L	0.628	2	56	71007	1	KED
	Cu	65	25.264	ug/L	0.887	3	22	34902	2	KED
	Zn	66	81.086	ug/L	1.974	2	31	32321	1	KED
	Zn	67	79.166	ug/L	2.463	3	3	5091	4	KED
	As	75	25.045	ug/L	0.692	2	6	4898	1	KED
	Se	78	79.236	ug/L	2.555	3	16	1805	3	KED
	Y	89		ug/L			274214	285862	0	Standard
	Kr	83		ug/L			66	61	12	Standard
>	In-1	115		ug/L			8664	8328	0	KED
	Mo	98	25.432	ug/L	0.939	3	6	22800	2	KED
	Cd	111	25.680	ug/L	0.143	0	4	6113	0	KED
	Cd	114	26.183	ug/L	0.291	1	3	14996	0	KED
>	In	115		ug/L			389194	388950	2	Standard
	Ag	107	24.879	ug/L	0.345	1	27	319023	1	Standard
	Sb	121	25.571	ug/L	0.749	2	83	256054	1	Standard
	Sb	123	25.970	ug/L	0.840	3	61	198131	0	Standard
	Ba	135	25.360	ug/L	0.667	2	55	81835	1	Standard
	Ba	137	25.135	ug/L	0.607	2	99	142009	0	Standard
>	Tb	159		ug/L			603535	640721	1	Standard
	Tl	205	24.376	ug/L	0.629	2	773	743030	0	Standard
	Pb	208	24.544	ug/L	0.603	2	707	972526	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0589-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, March 30, 2023 16:59:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22058	28301	5	Standard
Cl	37		ug/L			4410530	4217782	2	Standard
> Sc	45		ug/L			489672	2847394	2	Standard
Al	27	186.923	ug/L	4.531	2	2882	23175818	2	Standard
V	51	-21.428	ug/L	21.671	101	4412	-2308443	102	Standard
V-1	51	0.671	ug/L	0.022	3	652	78462	2	Standard
Cr	52	3696.117	ug/L	8.265	0	13091	345195704	2	Standard
Cr	53	3694.938	ug/L	79.148	2	276	39770436	0	Standard
> Ge	72		ug/L			29553	23360	1	KED
Co	59	3.354	ug/L	0.038	1	17	9013	0	KED
Ni	60	26.402	ug/L	0.961	3	18	20408	3	KED
Ni	62	27.082	ug/L	0.562	2	11	3322	1	KED
Cu	63	38.690	ug/L	0.158	0	56	86646	0	KED
Cu	65	39.218	ug/L	0.370	0	22	43260	0	KED
Zn	66	64.063	ug/L	2.187	3	31	20396	3	KED
Zn	67	58.357	ug/L	0.446	0	3	2996	0	KED
As	75	0.051	ug/L	0.007	13	6	13	9	KED
Se	78	0.227	ug/L	0.021	9	16	17	2	KED
Y	89		ug/L			274214	271253	7	Standard
Kr	83		ug/L			66	182	20	Standard
> In-1	115		ug/L			8664	7047	1	KED
Mo	98	1.289	ug/L	0.071	5	6	982	4	KED
Cd	111	3.227	ug/L	0.102	3	4	653	2	KED
Cd	114	0.289	ug/L	0.028	9	3	143	8	KED
> In	115		ug/L			389194	329892	8	Standard
Ag	107	334.344	ug/L	25.754	7	27	3619995	1	Standard
Sb	121	0.098	ug/L	0.009	8	83	901	3	Standard
Sb	123	0.511	ug/L	0.011	2	61	3359	9	Standard
Ba	135	0.036	ug/L	0.005	14	55	144	11	Standard
Ba	137	0.024	ug/L	0.004	15	99	198	1	Standard
> Tb	159		ug/L			603535	485157	5	Standard
Tl	205	-0.003	ug/L	0.001	40	773	557	2	Standard
Pb	208	-0.008	ug/L	0.000	3	707	327	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 17:10:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	26367	1	Standard
	Cl	**37**		ug/L			4410530	4495437	2	Standard
>	**Sc**	**45**		ug/L			489672	490184	0	Standard
	Al	**27**	**7.934**	ug/L	13.735	173	2882	171739	170	Standard
	V	**51**	**-0.027**	ug/L	0.038	141	4412	3904	18	Standard
	V-1	**51**	**0.070**	ug/L	0.142	203	652	1987	136	Standard
	Cr	**52**	**4.384**	ug/L	7.477	170	13091	83401	143	Standard
	Cr	**53**	**4.616**	ug/L	7.921	171	276	8811	166	Standard
>	**Ge**	**72**		ug/L			29553	28503	1	KED
	Co	**59**	**0.003**	ug/L	0.003	117	17	25	41	KED
	Ni	**60**	**-0.007**	ug/L	0.004	58	18	11	33	KED
	Ni	**62**	**-0.010**	ug/L	0.022	223	11	9	34	KED
	Cu	**63**	**0.001**	ug/L	0.004	380	56	57	21	KED
	Cu	**65**	**0.002**	ug/L	0.006	322	22	24	35	KED
	Zn	**66**	**0.004**	ug/L	0.003	62	31	31	3	KED
	Zn	**67**	**0.023**	ug/L	0.064	280	3	5	78	KED
	As	**75**	**0.001**	ug/L	0.006	532	6	6	18	KED
	Se	**78**	**-0.016**	ug/L	0.141	873	16	15	21	KED
	Y	**89**		ug/L			274214	274325	3	Standard
	Kr	**83**		ug/L			66	57	5	Standard
>	**In-1**	**115**		ug/L			8664	8107	0	KED
	Mo	**98**	**0.004**	ug/L	0.002	63	6	9	23	KED
	Cd	**111**	**-0.008**	ug/L	0.004	47	4	1	50	KED
	Cd	**114**	**0.003**	ug/L	0.002	73	3	4	22	KED
>	**In**	**115**		ug/L			389194	377829	3	Standard
	Ag	**107**	**0.089**	ug/L	0.137	154	27	1167	151	Standard
	Sb	**121**	**0.105**	ug/L	0.097	92	83	1118	88	Standard
	Sb	**123**	**0.108**	ug/L	0.101	93	61	877	89	Standard
	Ba	**135**	**0.044**	ug/L	0.089	200	55	197	145	Standard
	Ba	**137**	**0.038**	ug/L	0.075	197	99	312	136	Standard
>	**Tb**	**159**		ug/L			603535	603277	2	Standard
	Tl	**205**	**0.046**	ug/L	0.076	164	773	2119	105	Standard
	Pb	**208**	**0.030**	ug/L	0.079	264	707	1855	162	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 17:15:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	26484	0	Standard
	Cl	**37**		ug/L			4410530	4488001	0	Standard
⎡>	**Sc**	**45**		ug/L			489672	491614	0	Standard
⎢	**Al**	**27**	**-0.027**	ug/L	0.003	9	2882	2313	1	Standard
⎢	**V**	**51**	**-0.005**	ug/L	0.008	147	4412	4330	3	Standard
⎢	**V-1**	**51**	**-0.012**	ug/L	0.001	7	652	422	4	Standard
⎢	**Cr**	**52**	**0.024**	ug/L	0.027	109	13091	13532	3	Standard
⎣	**Cr**	**53**	**0.001**	ug/L	0.003	368	276	279	2	Standard
⎡>	**Ge**	**72**		ug/L			29553	28269	2	KED
⎢	**Co**	**59**	**0.003**	ug/L	0.003	100	17	26	36	KED
⎢	**Ni**	**60**	**-0.011**	ug/L	0.006	52	18	7	66	KED
⎢	**Ni**	**62**	**-0.001**	ug/L	0.016	2302	11	10	20	KED
⎢	**Cu**	**63**	**-0.003**	ug/L	0.004	139	56	46	24	KED
⎢	**Cu**	**65**	**0.001**	ug/L	0.002	307	22	22	14	KED
⎢	**Zn**	**66**	**-0.026**	ug/L	0.020	78	31	19	39	KED
⎢	**Zn**	**67**	**0.043**	ug/L	0.034	78	3	6	34	KED
⎢	**As**	**75**	**0.002**	ug/L	0.011	443	6	6	29	KED
⎣	**Se**	**78**	**-0.004**	ug/L	0.117	3105	16	15	18	KED
	Y	**89**		ug/L			274214	277691	2	Standard
	Kr	**83**		ug/L			66	58	15	Standard
⎡>	**In-1**	**115**		ug/L			8664	8200	0	KED
⎢	**Mo**	**98**	**-0.003**	ug/L	0.002	93	6	3	61	KED
⎢	**Cd**	**111**	**-0.009**	ug/L	0.004	47	4	1	50	KED
⎣	**Cd**	**114**	**-0.002**	ug/L	0.002	104	3	2	42	KED
⎡>	**In**	**115**		ug/L			389194	381518	1	Standard
⎢	**Ag**	**107**	**0.002**	ug/L	0.001	46	27	55	25	Standard
⎢	**Sb**	**121**	**0.008**	ug/L	0.002	21	83	160	11	Standard
⎢	**Sb**	**123**	**0.011**	ug/L	0.001	10	61	143	6	Standard
⎢	**Ba**	**135**	**-0.007**	ug/L	0.002	21	55	30	16	Standard
⎣	**Ba**	**137**	**-0.008**	ug/L	0.002	25	99	53	22	Standard
⎡>	**Tb**	**159**		ug/L			603535	599062	2	Standard
⎢	**Tl**	**205**	**-0.001**	ug/L	0.002	389	773	751	6	Standard
⎣	**Pb**	**208**	**-0.016**	ug/L	0.000	2	707	97	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0589-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, March 30, 2023 17:23:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			22058	30134	1	Standard
	Cl	37		ug/L			4410530	4406035	1	Standard
>	Sc	45		ug/L			489672	509758	0	Standard
	Al	27	5.162	ug/L	0.018	0	2882	117522	0	Standard
	V	51	-0.442	ug/L	0.223	50	4412	-4159	105	Standard
	V-1	51	0.008	ug/L	0.001	15	652	843	2	Standard
	Cr	52	35.085	ug/L	0.288	0	13091	600135	0	Standard
	Cr	53	35.865	ug/L	0.996	2	276	69415	2	Standard
>	Ge	72		ug/L			29553	28621	0	KED
	Co	59	0.004	ug/L	0.001	26	17	28	11	KED
	Ni	60	0.859	ug/L	0.060	7	18	830	6	KED
	Ni	62	0.802	ug/L	0.178	22	11	131	20	KED
	Cu	63	2.187	ug/L	0.053	2	56	6052	1	KED
	Cu	65	2.253	ug/L	0.054	2	22	3065	2	KED
	Zn	66	48.212	ug/L	0.163	0	31	18814	0	KED
	Zn	67	45.312	ug/L	1.720	3	3	2851	3	KED
	As	75	0.005	ug/L	0.018	345	6	7	48	KED
	Se	78	0.010	ug/L	0.060	621	16	16	7	KED
	Y	89		ug/L			274214	288917	0	Standard
	Kr	83		ug/L			66	52	26	Standard
>	In-1	115		ug/L			8664	8507	4	KED
	Mo	98	0.001	ug/L	0.001	118	6	6	16	KED
	Cd	111	0.006	ug/L	0.016	245	4	5	72	KED
	Cd	114	0.001	ug/L	0.005	541	3	4	65	KED
>	In	115		ug/L			389194	391020	3	Standard
	Ag	107	0.371	ug/L	0.031	8	27	4800	5	Standard
	Sb	121	0.014	ug/L	0.003	18	83	222	8	Standard
	Sb	123	0.013	ug/L	0.001	5	61	162	6	Standard
	Ba	135	0.241	ug/L	0.011	4	55	837	4	Standard
	Ba	137	0.228	ug/L	0.004	1	99	1395	4	Standard
>	Tb	159		ug/L			603535	618856	2	Standard
	Tl	205	0.001	ug/L	0.002	115	773	833	6	Standard
	Pb	208	0.058	ug/L	0.006	9	707	2928	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0667-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, March 30, 2023 17:30:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			22058	29797	1	Standard
	Cl	37		ug/L			4410530	4593504	1	Standard
>	Sc	45		ug/L			489672	518762	1	Standard
	Al	27	673.163	ug/L	7.978	1	2882	15202402	2	Standard
	V	51	1.548	ug/L	0.224	14	4412	35822	11	Standard
	V-1	51	1.689	ug/L	0.007	0	652	34921	1	Standard
	Cr	52	2.200	ug/L	0.120	5	13091	51276	2	Standard
	Cr	53	2.652	ug/L	0.606	22	276	5506	23	Standard
>	Ge	72		ug/L			29553	30049	0	KED
	Co	59	0.714	ug/L	0.009	1	17	2480	1	KED
	Ni	60	5.056	ug/L	0.089	1	18	5042	2	KED
	Ni	62	5.351	ug/L	0.143	2	11	853	2	KED
	Cu	63	12.054	ug/L	0.186	1	56	34764	1	KED
	Cu	65	12.059	ug/L	0.063	0	22	17127	0	KED
	Zn	66	25.173	ug/L	0.901	3	31	10330	3	KED
	Zn	67	24.431	ug/L	0.445	1	3	1615	1	KED
	As	75	0.041	ug/L	0.011	28	6	14	16	KED
	Se	78	0.159	ug/L	0.068	42	16	20	8	KED
	Y	89		ug/L			274214	295910	0	Standard
	Kr	83		ug/L			66	57	10	Standard
>	In-1	115		ug/L			8664	8524	1	KED
	Mo	98	0.353	ug/L	0.040	11	6	329	11	KED
	Cd	111	-0.001	ug/L	0.014	1286	4	3	90	KED
	Cd	114	0.000	ug/L	0.001	551	3	3	23	KED
>	In	115		ug/L			389194	397598	1	Standard
	Ag	107	0.006	ug/L	0.001	19	27	113	15	Standard
	Sb	121	0.044	ug/L	0.002	5	83	533	3	Standard
	Sb	123	0.046	ug/L	0.002	3	61	419	2	Standard
	Ba	135	5.708	ug/L	0.062	1	55	18880	1	Standard
	Ba	137	5.479	ug/L	0.068	1	99	31729	0	Standard
>	Tb	159		ug/L			603535	626902	1	Standard
	Tl	205	0.003	ug/L	0.003	116	773	880	10	Standard
	Pb	208	0.957	ug/L	0.017	1	707	37817	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 17:42:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	25320	0	Standard
	Cl	**37**		ug/L			4410530	4475129	2	Standard
⌈>	**Sc**	**45**		ug/L			489672	484750	0	Standard
|	**Al**	**27**	**-0.019**	ug/L	0.002	12	2882	2451	1	Standard
|	**V**	**51**	**0.000**	ug/L	0.001	323	4412	4375	1	Standard
|	**V-1**	**51**	**-0.013**	ug/L	0.001	10	652	397	5	Standard
|	**Cr**	**52**	**0.020**	ug/L	0.008	37	13091	13285	1	Standard
⌊	**Cr**	**53**	**-0.025**	ug/L	0.012	47	276	228	8	Standard
⌈>	**Ge**	**72**		ug/L			29553	28202	1	KED
|	**Co**	**59**	**0.000**	ug/L	0.001	1917	17	16	17	KED
|	**Ni**	**60**	**-0.005**	ug/L	0.007	157	18	13	51	KED
|	**Ni**	**62**	**-0.014**	ug/L	0.014	105	11	8	24	KED
|	**Cu**	**63**	**-0.006**	ug/L	0.001	14	56	36	5	KED
|	**Cu**	**65**	**0.004**	ug/L	0.001	34	22	26	7	KED
|	**Zn**	**66**	**-0.026**	ug/L	0.010	37	31	19	20	KED
|	**Zn**	**67**	**0.034**	ug/L	0.032	93	3	5	33	KED
|	**As**	**75**	**-0.001**	ug/L	0.006	596	6	5	20	KED
⌊	**Se**	**78**	**0.029**	ug/L	0.199	692	16	16	26	KED
	Y	**89**		ug/L			274214	268512	2	Standard
	Kr	**83**		ug/L			66	55	8	Standard
⌈>	**In-1**	**115**		ug/L			8664	7992	4	KED
|	**Mo**	**98**	**-0.004**	ug/L	0.002	40	6	2	55	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.005	116	4	2	33	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.003	100	3	1	102	KED
⌈>	**In**	**115**		ug/L			389194	378186	2	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.000	12	27	55	5	Standard
|	**Sb**	**121**	**0.014**	ug/L	0.002	15	83	217	9	Standard
|	**Sb**	**123**	**0.015**	ug/L	0.001	8	61	170	5	Standard
|	**Ba**	**135**	**-0.006**	ug/L	0.001	12	55	33	8	Standard
⌊	**Ba**	**137**	**-0.006**	ug/L	0.002	42	99	64	19	Standard
⌈>	**Tb**	**159**		ug/L			603535	594719	1	Standard
|	**Tl**	**205**	**0.000**	ug/L	0.001	776	773	765	4	Standard
⌊	**Pb**	**208**	**-0.014**	ug/L	0.001	3	707	166	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 17:48:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	23533	1	Standard
	Cl	**37**		ug/L			4410530	4560806	0	Standard
⌈>	**Sc**	**45**		ug/L			489672	491249	2	Standard
|	**Al**	**27**	**5014.603**	ug/L	114.984	2	2882	107169209	0	Standard
|	**V**	**51**	**51.356**	ug/L	0.396	0	4412	984294	2	Standard
|	**V-1**	**51**	**51.315**	ug/L	0.409	0	652	985634	2	Standard
|	**Cr**	**52**	**50.110**	ug/L	0.992	1	13091	820098	0	Standard
⌊	**Cr**	**53**	**49.999**	ug/L	1.429	2	276	93099	0	Standard
⌈>	**Ge**	**72**		ug/L			29553	29157	0	KED
|	**Co**	**59**	**50.137**	ug/L	0.175	0	17	167923	1	KED
|	**Ni**	**60**	**49.219**	ug/L	1.374	2	18	47471	2	KED
|	**Ni**	**62**	**51.457**	ug/L	1.127	2	11	7870	1	KED
|	**Cu**	**63**	**49.962**	ug/L	1.199	2	56	139630	1	KED
|	**Cu**	**65**	**50.364**	ug/L	1.253	2	22	69329	1	KED
|	**Zn**	**66**	**50.655**	ug/L	0.439	0	31	20137	1	KED
|	**Zn**	**67**	**52.117**	ug/L	3.031	5	3	3340	5	KED
|	**As**	**75**	**49.957**	ug/L	0.505	1	6	9734	1	KED
⌊	**Se**	**78**	**50.443**	ug/L	1.529	3	16	1150	2	KED
	Y	**89**		ug/L			274214	277412	5	Standard
	Kr	**83**		ug/L			66	58	22	Standard
⌈>	**In-1**	**115**		ug/L			8664	8506	4	KED
|	**Mo**	**98**	**48.474**	ug/L	3.412	7	6	44294	2	KED
|	**Cd**	**111**	**49.053**	ug/L	2.215	4	4	11908	1	KED
⌊	**Cd**	**114**	**49.998**	ug/L	2.220	4	3	29206	0	KED
⌈>	**In**	**115**		ug/L			389194	372293	3	Standard
|	**Ag**	**107**	**50.562**	ug/L	2.200	4	27	620004	0	Standard
|	**Sb**	**121**	**51.769**	ug/L	2.241	4	83	495780	0	Standard
|	**Sb**	**123**	**51.952**	ug/L	2.378	4	61	379078	1	Standard
|	**Ba**	**135**	**51.731**	ug/L	1.529	2	55	159661	0	Standard
⌊	**Ba**	**137**	**51.997**	ug/L	1.966	3	99	280920	0	Standard
⌈>	**Tb**	**159**		ug/L			603535	614199	3	Standard
|	**Tl**	**205**	**51.064**	ug/L	1.948	3	773	1490457	1	Standard
⌊	**Pb**	**208**	**51.383**	ug/L	1.315	2	707	1950270	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 17:56:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	23260	3	Standard
	Cl	**37**		ug/L			4410530	4498796	2	Standard
⌈>	**Sc**	**45**		ug/L			489672	476074	2	Standard
|	**Al**	**27**	**0.046**	ug/L	0.009	20	2882	3763	4	Standard
|	**V**	**51**	**-0.001**	ug/L	0.011	1215	4412	4272	3	Standard
|	**V-1**	**51**	**-0.014**	ug/L	0.001	8	652	381	3	Standard
|	**Cr**	**52**	**0.030**	ug/L	0.023	76	13091	13195	2	Standard
⌊	**Cr**	**53**	**-0.013**	ug/L	0.009	70	276	246	7	Standard
⌈>	**Ge**	**72**		ug/L			29553	28261	3	KED
|	**Co**	**59**	**0.005**	ug/L	0.003	52	17	33	23	KED
|	**Ni**	**60**	**0.006**	ug/L	0.004	70	18	22	16	KED
|	**Ni**	**62**	**-0.018**	ug/L	0.018	100	11	8	35	KED
|	**Cu**	**63**	**-0.000**	ug/L	0.003	32695	56	53	14	KED
|	**Cu**	**65**	**0.007**	ug/L	0.006	91	22	30	22	KED
|	**Zn**	**66**	**-0.011**	ug/L	0.007	62	31	25	8	KED
|	**Zn**	**67**	**0.024**	ug/L	0.047	199	3	5	57	KED
|	**As**	**75**	**0.007**	ug/L	0.019	284	6	7	48	KED
⌊	**Se**	**78**	**0.133**	ug/L	0.097	72	16	18	14	KED
	Y	**89**		ug/L			274214	268406	0	Standard
	Kr	**83**		ug/L			66	53	37	Standard
⌈>	**In-1**	**115**		ug/L			8664	8312	2	KED
|	**Mo**	**98**	**0.008**	ug/L	0.002	23	6	12	14	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.006	98	4	2	57	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.004	188	3	2	92	KED
⌈>	**In**	**115**		ug/L			389194	374956	0	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.002	66	27	62	37	Standard
|	**Sb**	**121**	**0.130**	ug/L	0.006	4	83	1334	4	Standard
|	**Sb**	**123**	**0.135**	ug/L	0.012	8	61	1049	8	Standard
|	**Ba**	**135**	**0.001**	ug/L	0.004	339	55	57	23	Standard
⌊	**Ba**	**137**	**-0.003**	ug/L	0.003	97	99	78	20	Standard
⌈>	**Tb**	**159**		ug/L			603535	591500	2	Standard
|	**Tl**	**205**	**0.000**	ug/L	0.001	243	773	767	4	Standard
⌊	**Pb**	**208**	**0.019**	ug/L	0.002	8	707	1380	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0667-01RE1
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, March 30, 2023 18:01:50

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	26620	0	Standard
	Cl	**37**		ug/L			4410530	4503840	1	Standard
>	**Sc**	**45**		ug/L			489672	493267	2	Standard
	Al	**27**	**313.407**	ug/L	6.845	2	2882	6731675	3	Standard
	V	**51**	**0.678**	ug/L	0.235	34	4412	17392	24	Standard
	V-1	**51**	**0.770**	ug/L	0.022	2	652	15502	1	Standard
	Cr	**52**	**1.076**	ug/L	0.099	9	13091	30564	2	Standard
	Cr	**53**	**1.372**	ug/L	0.685	49	276	2849	46	Standard
>	**Ge**	**72**		ug/L			29553	29129	1	KED
	Co	**59**	**0.347**	ug/L	0.014	4	17	1177	5	KED
	Ni	**60**	**2.320**	ug/L	0.121	5	18	2251	3	KED
	Ni	**62**	**2.823**	ug/L	0.523	18	11	441	16	KED
	Cu	**63**	**5.670**	ug/L	0.146	2	56	15886	4	KED
	Cu	**65**	**5.586**	ug/L	0.192	3	22	7701	2	KED
	Zn	**66**	**12.116**	ug/L	0.414	3	31	4833	1	KED
	Zn	**67**	**12.188**	ug/L	0.295	2	3	783	3	KED
	As	**75**	**0.022**	ug/L	0.012	52	6	10	22	KED
	Se	**78**	**0.150**	ug/L	0.128	85	16	19	16	KED
	Y	**89**		ug/L			274214	285900	3	Standard
	Kr	**83**		ug/L			66	41	17	Standard
>	**In-1**	**115**		ug/L			8664	8277	2	KED
	Mo	**98**	**0.169**	ug/L	0.018	10	6	156	11	KED
	Cd	**111**	**0.001**	ug/L	0.005	588	4	4	26	KED
	Cd	**114**	**0.002**	ug/L	0.004	221	3	4	51	KED
>	**In**	**115**		ug/L			389194	386852	4	Standard
	Ag	**107**	**0.003**	ug/L	0.001	15	27	71	5	Standard
	Sb	**121**	**0.048**	ug/L	0.005	9	83	554	4	Standard
	Sb	**123**	**0.054**	ug/L	0.008	14	61	471	9	Standard
	Ba	**135**	**2.633**	ug/L	0.090	3	55	8494	1	Standard
	Ba	**137**	**2.617**	ug/L	0.103	3	99	14782	1	Standard
>	**Tb**	**159**		ug/L			603535	616543	2	Standard
	Tl	**205**	**0.003**	ug/L	0.001	22	773	876	3	Standard
	Pb	**208**	**0.435**	ug/L	0.013	2	707	17280	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0589-01RE1
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, March 30, 2023 18:08:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			22058	25349	1	Standard
	Cl	37		ug/L			4410530	4482251	0	Standard
>	Sc	45		ug/L			489672	579689	1	Standard
	Al	27	40.873	ug/L	0.679	1	2882	1034477	0	Standard
	V	51	-5.059	ug/L	2.652	52	4412	-108360	53	Standard
	V-1	51	0.138	ug/L	0.002	1	652	3901	0	Standard
	Cr	52	816.001	ug/L	5.243	0	13091	15527000	0	Standard
	Cr	53	816.785	ug/L	13.457	1	276	1790452	1	Standard
>	Ge	72		ug/L			29553	28308	6	KED
	Co	59	0.125	ug/L	0.015	12	17	420	10	KED
	Ni	60	1.119	ug/L	0.062	5	18	1062	0	KED
	Ni	62	1.056	ug/L	0.059	5	11	167	9	KED
	Cu	63	1.708	ug/L	0.121	7	56	4676	4	KED
	Cu	65	1.708	ug/L	0.109	6	22	2297	1	KED
	Zn	66	3.441	ug/L	0.270	7	31	1352	4	KED
	Zn	67	3.475	ug/L	0.552	15	3	218	10	KED
	As	75	-0.004	ug/L	0.007	167	6	5	27	KED
	Se	78	-0.011	ug/L	0.163	1544	16	15	28	KED
	Y	89		ug/L			274214	279700	0	Standard
	Kr	83		ug/L			66	72	11	Standard
>	In-1	115		ug/L			8664	8377	2	KED
	Mo	98	0.050	ug/L	0.012	23	6	50	19	KED
	Cd	111	0.121	ug/L	0.026	21	4	33	20	KED
	Cd	114	0.005	ug/L	0.004	79	3	6	35	KED
>	In	115		ug/L			389194	384965	1	Standard
	Ag	107	10.967	ug/L	0.238	2	27	139218	1	Standard
	Sb	121	0.023	ug/L	0.003	11	83	307	8	Standard
	Sb	123	0.038	ug/L	0.008	21	61	348	18	Standard
	Ba	135	0.041	ug/L	0.007	16	55	185	11	Standard
	Ba	137	0.043	ug/L	0.006	12	99	339	8	Standard
>	Tb	159		ug/L			603535	626744	1	Standard
	Tl	205	-0.003	ug/L	0.000	11	773	721	1	Standard
	Pb	208	-0.006	ug/L	0.001	11	707	492	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 18:15:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	26074	0	Standard
	Cl	**37**		ug/L			4410530	4464269	1	Standard
⌈>	**Sc**	**45**		ug/L			489672	474618	1	Standard
|	**Al**	**27**	**-0.027**	ug/L	0.005	17	2882	2234	4	Standard
|	**V**	**51**	**-0.001**	ug/L	0.005	477	4412	4257	1	Standard
|	**V-1**	**51**	**-0.015**	ug/L	0.002	13	652	362	9	Standard
|	**Cr**	**52**	**0.022**	ug/L	0.016	72	13091	13032	1	Standard
⌊	**Cr**	**53**	**-0.023**	ug/L	0.003	13	276	226	2	Standard
⌈>	**Ge**	**72**		ug/L			29553	27710	1	KED
|	**Co**	**59**	**0.002**	ug/L	0.002	81	17	22	21	KED
|	**Ni**	**60**	**-0.006**	ug/L	0.004	55	18	11	28	KED
|	**Ni**	**62**	**-0.022**	ug/L	0.034	158	11	7	66	KED
|	**Cu**	**63**	**-0.000**	ug/L	0.003	2500	56	52	15	KED
|	**Cu**	**65**	**0.000**	ug/L	0.005	6345	22	21	30	KED
|	**Zn**	**66**	**0.013**	ug/L	0.020	153	31	34	24	KED
|	**Zn**	**67**	**0.024**	ug/L	0.047	191	3	5	57	KED
|	**As**	**75**	**-0.012**	ug/L	0.008	69	6	3	37	KED
⌊	**Se**	**78**	**-0.032**	ug/L	0.074	231	16	14	11	KED
	Y	**89**		ug/L			274214	270469	2	Standard
	Kr	**83**		ug/L			66	53	11	Standard
⌈>	**In-1**	**115**		ug/L			8664	8222	2	KED
|	**Mo**	**98**	**-0.001**	ug/L	0.003	333	6	4	61	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.004	96	4	2	33	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.004	196	3	2	92	KED
⌈>	**In**	**115**		ug/L			389194	372659	2	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.001	29	27	59	14	Standard
|	**Sb**	**121**	**0.010**	ug/L	0.003	33	83	177	18	Standard
|	**Sb**	**123**	**0.012**	ug/L	0.003	21	61	150	12	Standard
|	**Ba**	**135**	**-0.006**	ug/L	0.002	28	55	35	16	Standard
⌊	**Ba**	**137**	**-0.005**	ug/L	0.000	8	99	66	6	Standard
⌈>	**Tb**	**159**		ug/L			603535	587160	2	Standard
|	**Tl**	**205**	**-0.001**	ug/L	0.000	91	773	737	2	Standard
⌊	**Pb**	**208**	**-0.016**	ug/L	0.001	3	707	99	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0589-01RE2
Sample Dil Factor: 500
Comments:
Sample Date/Time: Thursday, March 30, 2023 18:22:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	25187	1	Standard
	Cl	**37**		ug/L			4410530	4484407	1	Standard
⌈>	**Sc**	**45**		ug/L			489672	488961	1	Standard
|	**Al**	**27**	**5.081**	ug/L	0.103	2	2882	111027	2	Standard
|	**V**	**51**	**-1.188**	ug/L	0.219	18	4412	-18161	23	Standard
|	**V-1**	**51**	**0.005**	ug/L	0.003	59	652	740	6	Standard
|	**Cr**	**52**	**92.169**	ug/L	2.396	2	13091	1490663	1	Standard
⌊	**Cr**	**53**	**94.246**	ug/L	2.329	2	276	174489	1	Standard
⌈>	**Ge**	**72**		ug/L			29553	29028	1	KED
|	**Co**	**59**	**0.016**	ug/L	0.001	9	17	71	8	KED
|	**Ni**	**60**	**0.119**	ug/L	0.011	8	18	132	7	KED
|	**Ni**	**62**	**0.060**	ug/L	0.056	94	11	20	42	KED
|	**Cu**	**63**	**0.210**	ug/L	0.006	2	56	638	3	KED
|	**Cu**	**65**	**0.220**	ug/L	0.024	10	22	323	10	KED
|	**Zn**	**66**	**0.801**	ug/L	0.027	3	31	347	3	KED
|	**Zn**	**67**	**0.580**	ug/L	0.120	20	3	40	17	KED
|	**As**	**75**	**0.001**	ug/L	0.008	563	6	6	23	KED
⌊	**Se**	**78**	**-0.157**	ug/L	0.040	25	16	12	8	KED
	Y	**89**		ug/L			274214	278604	1	Standard
	Kr	**83**		ug/L			66	52	7	Standard
⌈>	**In-1**	**115**		ug/L			8664	8591	0	KED
|	**Mo**	**98**	**0.005**	ug/L	0.003	52	6	10	22	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.004	76	4	2	33	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.003	2219	3	3	55	KED
⌈>	**In**	**115**		ug/L			389194	386835	1	Standard
|	**Ag**	**107**	**1.052**	ug/L	0.096	9	27	13440	8	Standard
|	**Sb**	**121**	**0.004**	ug/L	0.001	25	83	125	10	Standard
|	**Sb**	**123**	**0.007**	ug/L	0.003	42	61	115	18	Standard
|	**Ba**	**135**	**0.036**	ug/L	0.006	16	55	171	12	Standard
⌊	**Ba**	**137**	**0.041**	ug/L	0.004	9	99	328	8	Standard
⌈>	**Tb**	**159**		ug/L			603535	605568	2	Standard
|	**Tl**	**205**	**-0.000**	ug/L	0.003	898	773	766	7	Standard
⌊	**Pb**	**208**	**-0.005**	ug/L	0.002	30	707	504	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0386-04
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 18:30:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22058	50407	1	Standard
Cl	37		ug/L			4410530	5669219	2	Standard
> Sc	45		ug/L			489672	641586	0	Standard
Al	27	11.604	ug/L	0.213	1	2882	327801	1	Standard
V	51	2.160	ug/L	0.043	2	4412	59604	1	Standard
V-1	51	2.276	ug/L	0.031	1	652	57918	1	Standard
Cr	52	0.725	ug/L	0.038	5	13091	32415	2	Standard
Cr	53	1.138	ug/L	0.010	0	276	3123	1	Standard
> Ge	72		ug/L			29553	25431	0	KED
Co	59	0.669	ug/L	0.008	1	17	1970	1	KED
Ni	60	0.990	ug/L	0.057	5	18	848	5	KED
Ni	62	1.165	ug/L	0.094	8	11	165	7	KED
Cu	63	3.381	ug/L	0.070	2	56	8286	2	KED
Cu	65	3.453	ug/L	0.073	2	22	4164	1	KED
Zn	66	13.021	ug/L	0.431	3	31	4534	3	KED
Zn	67	12.834	ug/L	0.213	1	3	720	1	KED
As	75	3.523	ug/L	0.130	3	6	603	3	KED
Se	78	0.357	ug/L	0.276	77	16	21	25	KED
Y	89		ug/L			274214	281735	2	Standard
Kr	83		ug/L			66	65	17	Standard
> In-1	115		ug/L			8664	7495	1	KED
Mo	98	1.979	ug/L	0.030	1	6	1601	2	KED
Cd	111	0.001	ug/L	0.015	1493	4	3	86	KED
Cd	114	-0.002	ug/L	0.009	501	3	2	186	KED
> In	115		ug/L			389194	340573	1	Standard
Ag	107	0.021	ug/L	0.003	13	27	264	11	Standard
Sb	121	0.124	ug/L	0.005	4	83	1156	4	Standard
Sb	123	0.121	ug/L	0.008	6	61	862	4	Standard
Ba	135	9.096	ug/L	0.199	2	55	25738	1	Standard
Ba	137	9.115	ug/L	0.168	1	99	45156	0	Standard
> Tb	159		ug/L			603535	592778	3	Standard
Tl	205	-0.001	ug/L	0.001	96	773	736	2	Standard
Pb	208	0.102	ug/L	0.004	4	707	4418	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0809-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 18:37:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			22058	50297	0	Standard
	Cl	37		ug/L			4410530	5611534	0	Standard
>	Sc	45		ug/L			489672	624292	1	Standard
	Al	27	11.600	ug/L	0.099	0	2882	318866	1	Standard
	V	51	2.200	ug/L	0.063	2	4412	58952	1	Standard
	V-1	51	2.311	ug/L	0.052	2	652	57190	0	Standard
	Cr	52	0.763	ug/L	0.021	2	13091	32302	1	Standard
	Cr	53	1.158	ug/L	0.020	1	276	3086	2	Standard
>	Ge	72		ug/L			29553	25449	1	KED
	Co	59	0.678	ug/L	0.027	3	17	1995	3	KED
	Ni	60	1.037	ug/L	0.118	11	18	887	9	KED
	Ni	62	1.030	ug/L	0.137	13	11	147	13	KED
	Cu	63	2.889	ug/L	0.130	4	56	7091	2	KED
	Cu	65	2.952	ug/L	0.095	3	22	3566	3	KED
	Zn	66	13.075	ug/L	0.276	2	31	4555	0	KED
	Zn	67	12.396	ug/L	1.128	9	3	695	8	KED
	As	75	3.462	ug/L	0.051	1	6	593	2	KED
	Se	78	0.303	ug/L	0.262	86	16	19	23	KED
	Y	89		ug/L			274214	280039	2	Standard
	Kr	83		ug/L			66	62	14	Standard
>	In-1	115		ug/L			8664	7462	0	KED
	Mo	98	1.992	ug/L	0.116	5	6	1605	6	KED
	Cd	111	-0.005	ug/L	0.007	141	4	2	57	KED
	Cd	114	0.008	ug/L	0.004	46	3	7	25	KED
>	In	115		ug/L			389194	342533	1	Standard
	Ag	107	0.009	ug/L	0.000	3	27	127	3	Standard
	Sb	121	0.117	ug/L	0.002	1	83	1106	2	Standard
	Sb	123	0.110	ug/L	0.007	6	61	791	6	Standard
	Ba	135	9.177	ug/L	0.038	0	55	26120	1	Standard
	Ba	137	9.050	ug/L	0.147	1	99	45095	1	Standard
>	Tb	159		ug/L			603535	591073	3	Standard
	Tl	205	-0.000	ug/L	0.000	94	773	747	1	Standard
	Pb	208	0.086	ug/L	0.002	2	707	3843	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0809-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 18:42:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22058	50334	1	Standard
Cl	37		ug/L			4410530	5628588	1	Standard
> Sc	45		ug/L			489672	618062	0	Standard
Al	27	3478.078	ug/L	38.030	1	2882	93560640	0	Standard
V	51	20.630	ug/L	0.404	1	4412	500832	2	Standard
V-1	51	20.746	ug/L	0.361	1	652	501883	2	Standard
Cr	52	18.706	ug/L	0.103	0	13091	395669	0	Standard
Cr	53	19.127	ug/L	0.401	2	276	45046	1	Standard
> Ge	72		ug/L			29553	25426	1	KED
Co	59	26.471	ug/L	0.654	2	17	77301	1	KED
Ni	60	25.725	ug/L	0.656	2	18	21641	1	KED
Ni	62	26.824	ug/L	0.638	2	11	3582	0	KED
Cu	63	26.681	ug/L	0.625	2	56	65038	0	KED
Cu	65	26.638	ug/L	1.119	4	22	31978	2	KED
Zn	66	81.448	ug/L	0.972	1	31	28217	1	KED
Zn	67	77.364	ug/L	1.251	1	3	4322	1	KED
As	75	27.773	ug/L	0.722	2	6	4720	1	KED
Se	78	74.462	ug/L	1.948	2	16	1474	1	KED
Y	89		ug/L			274214	281680	2	Standard
Kr	83		ug/L			66	85	24	Standard
> In-1	115		ug/L			8664	7464	1	KED
Mo	98	27.885	ug/L	0.432	1	6	22411	2	KED
Cd	111	22.745	ug/L	0.305	1	4	4853	0	KED
Cd	114	23.444	ug/L	0.426	1	3	12033	0	KED
> In	115		ug/L			389194	331959	1	Standard
Ag	107	23.560	ug/L	0.580	2	27	257844	1	Standard
Sb	121	24.959	ug/L	0.856	3	83	213335	2	Standard
Sb	123	25.083	ug/L	0.760	3	61	163361	1	Standard
Ba	135	35.367	ug/L	1.219	3	55	97387	2	Standard
Ba	137	35.626	ug/L	0.865	2	99	171773	1	Standard
> Tb	159		ug/L			603535	588993	2	Standard
Tl	205	22.667	ug/L	0.552	2	773	635233	1	Standard
Pb	208	22.840	ug/L	0.675	2	707	831857	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0809-MSD1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 18:48:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			22058	49402	1	Standard
	Cl	37		ug/L			4410530	5544296	0	Standard
>	Sc	45		ug/L			489672	624270	2	Standard
	Al	27	3501.161	ug/L	158.106	4	2882	95046107	1	Standard
	V	51	20.781	ug/L	0.114	0	4412	509460	2	Standard
	V-1	51	20.977	ug/L	0.127	0	652	512488	2	Standard
	Cr	52	18.627	ug/L	0.359	1	13091	397884	1	Standard
	Cr	53	19.316	ug/L	0.398	2	276	45929	0	Standard
>	Ge	72		ug/L			29553	25711	1	KED
	Co	59	26.091	ug/L	0.346	1	17	77056	1	KED
	Ni	60	25.815	ug/L	0.831	3	18	21959	1	KED
	Ni	62	26.686	ug/L	0.309	1	11	3604	1	KED
	Cu	63	26.839	ug/L	0.211	0	56	66169	1	KED
	Cu	65	26.592	ug/L	0.497	1	22	32287	0	KED
	Zn	66	81.691	ug/L	0.962	1	31	28618	1	KED
	Zn	67	78.170	ug/L	3.966	5	3	4414	3	KED
	As	75	27.662	ug/L	0.791	2	6	4754	1	KED
	Se	78	73.718	ug/L	2.224	3	16	1476	1	KED
	Y	89		ug/L			274214	277922	1	Standard
	Kr	83		ug/L			66	76	2	Standard
>	In-1	115		ug/L			8664	7487	1	KED
	Mo	98	28.207	ug/L	0.604	2	6	22736	1	KED
	Cd	111	22.940	ug/L	0.910	3	4	4908	2	KED
	Cd	114	23.662	ug/L	0.706	2	3	12182	1	KED
>	In	115		ug/L			389194	334909	2	Standard
	Ag	107	23.631	ug/L	0.460	1	27	260925	1	Standard
	Sb	121	25.163	ug/L	0.576	2	83	216989	0	Standard
	Sb	123	25.665	ug/L	0.591	2	61	168632	0	Standard
	Ba	135	35.872	ug/L	1.301	3	55	99642	1	Standard
	Ba	137	36.282	ug/L	0.625	1	99	176496	1	Standard
>	Tb	159		ug/L			603535	593315	0	Standard
	Tl	205	23.051	ug/L	0.054	0	773	650880	0	Standard
	Pb	208	23.088	ug/L	0.250	1	707	847364	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL9
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 18:54:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	25347	3	Standard
	Cl	**37**		ug/L			4410530	4398991	2	Standard
⎡>	**Sc**	**45**		ug/L			489672	463092	2	Standard
⎢	**Al**	**27**	**0.018**	ug/L	0.001	4	2882	3091	3	Standard
⎢	**V**	**51**	**0.002**	ug/L	0.005	302	4412	4204	0	Standard
⎢	**V-1**	**51**	**-0.005**	ug/L	0.001	15	652	521	4	Standard
⎢	**Cr**	**52**	**0.014**	ug/L	0.018	131	13091	12583	1	Standard
⎣	**Cr**	**53**	**-0.010**	ug/L	0.007	73	276	244	6	Standard
⎡>	**Ge**	**72**		ug/L			29553	28591	1	KED
⎢	**Co**	**59**	**0.001**	ug/L	0.001	139	17	19	17	KED
⎢	**Ni**	**60**	**-0.011**	ug/L	0.007	66	18	7	90	KED
⎢	**Ni**	**62**	**0.019**	ug/L	0.028	147	11	13	31	KED
⎢	**Cu**	**63**	**0.000**	ug/L	0.003	1163	56	55	11	KED
⎢	**Cu**	**65**	**0.005**	ug/L	0.001	12	22	29	3	KED
⎢	**Zn**	**66**	**-0.002**	ug/L	0.008	331	31	29	9	KED
⎢	**Zn**	**67**	**0.012**	ug/L	0.046	387	3	4	65	KED
⎢	**As**	**75**	**0.001**	ug/L	0.011	904	6	6	30	KED
⎣	**Se**	**78**	**0.003**	ug/L	0.094	3207	16	15	13	KED
	Y	**89**		ug/L			274214	263023	2	Standard
	Kr	**83**		ug/L			66	55	9	Standard
⎡>	**In-1**	**115**		ug/L			8664	8187	2	KED
⎢	**Mo**	**98**	**0.006**	ug/L	0.003	46	6	10	19	KED
⎢	**Cd**	**111**	**-0.011**	ug/L	0.002	19	4	1	43	KED
⎣	**Cd**	**114**	**-0.004**	ug/L	0.002	46	3	1	86	KED
⎡>	**In**	**115**		ug/L			389194	372451	1	Standard
⎢	**Ag**	**107**	**0.002**	ug/L	0.000	23	27	48	11	Standard
⎢	**Sb**	**121**	**0.004**	ug/L	0.002	45	83	122	14	Standard
⎢	**Sb**	**123**	**0.004**	ug/L	0.004	92	61	86	29	Standard
⎢	**Ba**	**135**	**-0.009**	ug/L	0.001	15	55	26	15	Standard
⎣	**Ba**	**137**	**-0.007**	ug/L	0.001	18	99	54	13	Standard
⎡>	**Tb**	**159**		ug/L			603535	589762	2	Standard
⎢	**Tl**	**205**	**0.002**	ug/L	0.001	70	773	809	6	Standard
⎣	**Pb**	**208**	**-0.012**	ug/L	0.001	8	707	242	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 19:01:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	23557	0	Standard
	Cl	**37**		ug/L			4410530	4412216	0	Standard
⌈>	**Sc**	**45**		ug/L			489672	468334	1	Standard
|	**Al**	**27**	**5072.300**	ug/L	76.735	1	2882	103398857	2	Standard
|	**V**	**51**	**51.668**	ug/L	0.318	0	4412	944051	0	Standard
|	**V-1**	**51**	**51.564**	ug/L	0.619	1	652	944244	0	Standard
|	**Cr**	**52**	**50.995**	ug/L	0.146	0	13091	795739	1	Standard
⌊	**Cr**	**53**	**50.667**	ug/L	0.985	1	276	89980	1	Standard
⌈>	**Ge**	**72**		ug/L			29553	28611	1	KED
|	**Co**	**59**	**51.133**	ug/L	0.370	0	17	168042	0	KED
|	**Ni**	**60**	**51.004**	ug/L	1.793	3	18	48263	2	KED
|	**Ni**	**62**	**51.730**	ug/L	2.217	4	11	7762	3	KED
|	**Cu**	**63**	**50.765**	ug/L	0.512	1	56	139221	0	KED
|	**Cu**	**65**	**51.317**	ug/L	1.143	2	22	69319	1	KED
|	**Zn**	**66**	**51.124**	ug/L	1.243	2	31	19939	1	KED
|	**Zn**	**67**	**51.497**	ug/L	1.554	3	3	3238	1	KED
|	**As**	**75**	**51.133**	ug/L	0.544	1	6	9776	0	KED
⌊	**Se**	**78**	**51.470**	ug/L	0.951	1	16	1152	0	KED
	Y	**89**		ug/L			274214	268687	1	Standard
	Kr	**83**		ug/L			66	50	22	Standard
⌈>	**In-1**	**115**		ug/L			8664	8211	2	KED
|	**Mo**	**98**	**50.386**	ug/L	1.867	3	6	44510	0	KED
|	**Cd**	**111**	**51.070**	ug/L	1.865	3	4	11977	2	KED
⌊	**Cd**	**114**	**51.500**	ug/L	0.862	1	3	29075	2	KED
⌈>	**In**	**115**		ug/L			389194	373954	1	Standard
|	**Ag**	**107**	**50.395**	ug/L	1.694	3	27	621136	1	Standard
|	**Sb**	**121**	**50.487**	ug/L	0.966	1	83	486063	0	Standard
|	**Sb**	**123**	**50.474**	ug/L	1.590	3	61	370219	1	Standard
|	**Ba**	**135**	**50.350**	ug/L	0.887	1	55	156182	1	Standard
⌊	**Ba**	**137**	**50.014**	ug/L	1.205	2	99	271596	1	Standard
⌈>	**Tb**	**159**		ug/L			603535	610691	0	Standard
|	**Tl**	**205**	**49.136**	ug/L	1.035	2	773	1427134	1	Standard
⌊	**Pb**	**208**	**49.667**	ug/L	0.531	1	707	1875517	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 19:09:40
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			22058	23411	2	Standard
	Cl	**37**		ug/L			4410530	4359524	0	Standard
>	**Sc**	**45**		ug/L			489672	460998	2	Standard
	Al	**27**	**0.059**	ug/L	0.010	17	2882	3898	3	Standard
	V	**51**	**-0.000**	ug/L	0.006	2217	4412	4149	3	Standard
	V-1	**51**	**-0.014**	ug/L	0.001	7	652	370	3	Standard
	Cr	**52**	**0.009**	ug/L	0.026	281	13091	12458	2	Standard
	Cr	**53**	**-0.035**	ug/L	0.018	51	276	199	13	Standard
>	**Ge**	**72**		ug/L			29553	27881	1	KED
	Co	**59**	**0.001**	ug/L	0.001	120	17	19	17	KED
	Ni	**60**	**0.013**	ug/L	0.015	118	18	29	48	KED
	Ni	**62**	**-0.000**	ug/L	0.019	35763	11	10	26	KED
	Cu	**63**	**0.002**	ug/L	0.004	230	56	58	19	KED
	Cu	**65**	**0.004**	ug/L	0.006	135	22	27	28	KED
	Zn	**66**	**0.016**	ug/L	0.019	112	31	35	18	KED
	Zn	**67**	**0.024**	ug/L	0.019	76	3	5	21	KED
	As	**75**	**-0.001**	ug/L	0.007	1096	6	5	20	KED
	Se	**78**	**0.093**	ug/L	0.101	109	16	17	11	KED
	Y	**89**		ug/L			274214	266086	1	Standard
	Kr	**83**		ug/L			66	52	14	Standard
>	**In-1**	**115**		ug/L			8664	8180	0	KED
	Mo	**98**	**0.009**	ug/L	0.010	109	6	13	62	KED
	Cd	**111**	**-0.002**	ug/L	0.002	143	4	3	15	KED
	Cd	**114**	**-0.002**	ug/L	0.004	193	3	2	88	KED
>	**In**	**115**		ug/L			389194	376472	0	Standard
	Ag	**107**	**0.003**	ug/L	0.000	11	27	62	6	Standard
	Sb	**121**	**0.126**	ug/L	0.003	2	83	1299	2	Standard
	Sb	**123**	**0.125**	ug/L	0.002	1	61	983	1	Standard
	Ba	**135**	**-0.003**	ug/L	0.001	54	55	45	9	Standard
	Ba	**137**	**-0.001**	ug/L	0.004	344	99	89	24	Standard
>	**Tb**	**159**		ug/L			603535	597039	1	Standard
	Tl	**205**	**0.002**	ug/L	0.001	52	773	818	2	Standard
	Pb	**208**	**0.021**	ug/L	0.003	14	707	1470	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 19:18:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				21586	2	Standard
	Cl	**37**		ug/L				4386158	0	Standard
⎡>	**Sc**	**45**		ug/L				445918	3	Standard
⎢	**Al**	**27**		ug/L				2877	0	Standard
⎢	**V**	**51**		ug/L				4130	4	Standard
⎢	**V-1**	**51**		ug/L				351	11	Standard
⎢	**Cr**	**52**		ug/L				12311	4	Standard
⎣	**Cr**	**53**		ug/L				182	6	Standard
⎡>	**Ge**	**72**		ug/L				27896	1	KED
⎢	**Ni**	**60**		ug/L				6	15	KED
⎢	**Ni**	**62**		ug/L				12	50	KED
⎢	**Cu**	**63**		ug/L				41	19	KED
⎢	**Cu**	**65**		ug/L				17	22	KED
⎢	**Zn**	**66**		ug/L				31	23	KED
⎢	**Zn**	**67**		ug/L				5	88	KED
⎢	**As**	**75**		ug/L				6	7	KED
⎣	**Se**	**78**		ug/L				15	19	KED
	Y	**89**		ug/L				256256	5	Standard
	Kr	**83**		ug/L				59	14	Standard
⎡>	**In-1**	**115**		ug/L				8098	0	KED
⎢	**Cd**	**111**		ug/L				3	78	KED
⎣	**Cd**	**114**		ug/L				2	41	KED
⎡>	**In**	**115**		ug/L				361922	2	Standard
⎢	**Ag**	**107**		ug/L				55	7	Standard
⎢	**Sb**	**121**		ug/L				424	5	Standard
⎣	**Sb**	**123**		ug/L				321	12	Standard
⎡>	**Tb**	**159**		ug/L				585557	2	Standard
⎢	**Tl**	**205**		ug/L				737	7	Standard
⎣	**Pb**	**208**		ug/L				627	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 19:23:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	21880	3	Standard
	Cl	**37**		ug/L			4386158	4388876	2	Standard
⎡>	**Sc**	**45**		ug/L			445918	470247	1	Standard
⎢	**Al**	**27**	**4960.521**	ug/L	119.755	2	2877	101512277	2	Standard
⎢	**V**	**51**	**48.887**	ug/L	1.047	2	4130	897048	0	Standard
⎢	**V-1**	**51**	**49.043**	ug/L	1.158	2	351	901349	0	Standard
⎢	**Cr**	**52**	**48.757**	ug/L	0.977	2	12311	764717	0	Standard
⎣	**Cr**	**53**	**49.278**	ug/L	1.393	2	182	87788	1	Standard
⎡>	**Ge**	**72**		ug/L			27896	28626	3	KED
⎢	**Ni**	**60**	**49.640**	ug/L	2.064	4	6	46965	2	KED
⎢	**Ni**	**62**	**50.352**	ug/L	2.248	4	12	7556	1	KED
⎢	**Cu**	**63**	**49.418**	ug/L	1.555	3	41	135510	0	KED
⎢	**Cu**	**65**	**50.300**	ug/L	1.201	2	17	67952	1	KED
⎢	**Zn**	**66**	**50.416**	ug/L	2.338	4	31	19661	2	KED
⎢	**Zn**	**67**	**50.748**	ug/L	3.532	6	5	3192	4	KED
⎢	**As**	**75**	**50.433**	ug/L	1.959	3	6	9640	0	KED
⎣	**Se**	**78**	**51.190**	ug/L	1.423	2	15	1145	1	KED
	Y	**89**		ug/L			256256	270465	1	Standard
	Kr	**83**		ug/L			59	55	3	Standard
⎡>	**In-1**	**115**		ug/L			8098	7998	2	KED
⎢	**Cd**	**111**	**51.737**	ug/L	1.949	3	3	11819	1	KED
⎣	**Cd**	**114**	**51.947**	ug/L	1.643	3	2	28559	0	KED
⎡>	**In**	**115**		ug/L			361922	372359	1	Standard
⎢	**Ag**	**107**	**50.633**	ug/L	0.502	0	55	621645	0	Standard
⎢	**Sb**	**121**	**50.138**	ug/L	0.743	1	424	481059	0	Standard
⎣	**Sb**	**123**	**49.874**	ug/L	0.867	1	321	364616	1	Standard
⎡>	**Tb**	**159**		ug/L			585557	612186	2	Standard
⎢	**Tl**	**205**	**48.909**	ug/L	2.006	4	737	1423222	2	Standard
⎣	**Pb**	**208**	**49.698**	ug/L	1.457	2	627	1880307	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 19:30:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	21945	2	Standard
	Cl	**37**		ug/L			4386158	4362843	1	Standard
⎡>	**Sc**	**45**		ug/L			445918	454101	1	Standard
⎢	**Al**	**27**	**0.015**	ug/L	0.007	44	2877	3223	5	Standard
⎢	**V**	**51**	**-0.005**	ug/L	0.003	58	4130	4119	2	Standard
⎢	**V-1**	**51**	**-0.001**	ug/L	0.000	13	351	332	2	Standard
⎢	**Cr**	**52**	**-0.019**	ug/L	0.005	24	12311	12255	1	Standard
⎣	**Cr**	**53**	**-0.007**	ug/L	0.009	123	182	173	7	Standard
⎡>	**Ge**	**72**		ug/L			27896	28540	1	KED
⎢	**Ni**	**60**	**0.012**	ug/L	0.005	44	6	18	26	KED
⎢	**Ni**	**62**	**0.040**	ug/L	0.043	107	12	18	36	KED
⎢	**Cu**	**63**	**0.006**	ug/L	0.005	80	41	60	22	KED
⎢	**Cu**	**65**	**0.003**	ug/L	0.008	260	17	22	47	KED
⎢	**Zn**	**66**	**-0.003**	ug/L	0.001	27	31	30	0	KED
⎢	**Zn**	**67**	**-0.023**	ug/L	0.045	200	5	4	65	KED
⎢	**As**	**75**	**0.003**	ug/L	0.009	363	6	6	26	KED
⎣	**Se**	**78**	**-0.009**	ug/L	0.134	1517	15	15	18	KED
	Y	**89**		ug/L			256256	260713	1	Standard
	Kr	**83**		ug/L			59	48	12	Standard
⎡>	**In-1**	**115**		ug/L			8098	8145	1	KED
⎢	**Cd**	**111**	**-0.008**	ug/L	0.006	76	3	1	91	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.003	304	2	1	108	KED
⎡>	**In**	**115**		ug/L			361922	376408	2	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.001	362	55	60	15	Standard
⎢	**Sb**	**121**	**0.087**	ug/L	0.002	1	424	1280	2	Standard
⎣	**Sb**	**123**	**0.093**	ug/L	0.003	3	321	1018	4	Standard
⎡>	**Tb**	**159**		ug/L			585557	589414	2	Standard
⎢	**Tl**	**205**	**0.002**	ug/L	0.002	103	737	803	7	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.000	18	627	716	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0692-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 19:36:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	28316	1	Standard
	Cl	37		ug/L			4386158	4370436	0	Standard
>	Sc	45		ug/L			445918	453590	0	Standard
	Al	27	0.461	ug/L	0.016	3	2877	12029	2	Standard
	V	51	0.001	ug/L	0.005	491	4130	4218	2	Standard
	V-1	51	-0.001	ug/L	0.001	148	351	343	5	Standard
	Cr	52	0.007	ug/L	0.006	83	12311	12634	1	Standard
	Cr	53	0.002	ug/L	0.007	455	182	188	5	Standard
>	Ge	72		ug/L			27896	28905	0	KED
	Ni	60	0.004	ug/L	0.010	236	6	11	86	KED
	Ni	62	-0.007	ug/L	0.022	321	12	11	28	KED
	Cu	63	0.032	ug/L	0.008	24	41	131	15	KED
	Cu	65	0.045	ug/L	0.007	15	17	80	11	KED
	Zn	66	0.389	ug/L	0.066	16	31	185	13	KED
	Zn	67	0.416	ug/L	0.180	43	5	32	35	KED
	As	75	0.006	ug/L	0.009	138	6	7	22	KED
	Se	78	0.039	ug/L	0.202	511	15	16	28	KED
	Y	89		ug/L			256256	262015	1	Standard
	Kr	83		ug/L			59	52	16	Standard
>	In-1	115		ug/L			8098	8451	1	KED
	Cd	111	-0.001	ug/L	0.010	1394	3	3	68	KED
	Cd	114	0.000	ug/L	0.004	820	2	2	78	KED
>	In	115		ug/L			361922	374841	0	Standard
	Ag	107	-0.000	ug/L	0.000	7203	55	57	6	Standard
	Sb	121	0.004	ug/L	0.004	101	424	480	8	Standard
	Sb	123	0.001	ug/L	0.002	238	321	340	4	Standard
>	Tb	159		ug/L			585557	595782	0	Standard
	Tl	205	0.002	ug/L	0.002	80	737	820	6	Standard
	Pb	208	0.039	ug/L	0.003	6	627	2067	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0692-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 19:40:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	27292	3	Standard
	Cl	37		ug/L			4386158	4388275	0	Standard
>	Sc	45		ug/L			445918	467288	1	Standard
	Al	27	0.434	ug/L	0.028	6	2877	11837	5	Standard
	V	51	25.858	ug/L	0.571	2	4130	473572	1	Standard
	V-1	51	25.844	ug/L	0.599	2	351	472217	1	Standard
	Cr	52	25.945	ug/L	0.613	2	12311	410395	1	Standard
	Cr	53	25.896	ug/L	0.328	1	182	45941	0	Standard
>	Ge	72		ug/L			27896	28563	1	KED
	Ni	60	25.912	ug/L	0.572	2	6	24480	1	KED
	Ni	62	26.624	ug/L	0.788	2	12	3995	1	KED
	Cu	63	26.120	ug/L	0.391	1	41	71537	2	KED
	Cu	65	26.239	ug/L	0.720	2	17	35389	1	KED
	Zn	66	80.855	ug/L	1.858	2	31	31466	1	KED
	Zn	67	77.374	ug/L	1.568	2	5	4858	1	KED
	As	75	25.265	ug/L	0.281	1	6	4825	0	KED
	Se	78	76.035	ug/L	2.869	3	15	1690	2	KED
	Y	89		ug/L			256256	266374	0	Standard
	Kr	83		ug/L			59	54	17	Standard
>	In-1	115		ug/L			8098	8516	3	KED
	Cd	111	24.744	ug/L	0.685	2	3	6019	1	KED
	Cd	114	24.233	ug/L	0.764	3	2	14183	2	KED
>	In	115		ug/L			361922	373834	0	Standard
	Ag	107	26.523	ug/L	0.313	1	55	326996	1	Standard
	Sb	121	26.431	ug/L	0.403	1	424	254829	0	Standard
	Sb	123	26.416	ug/L	0.606	2	321	194046	1	Standard
>	Tb	159		ug/L			585557	615755	0	Standard
	Tl	205	25.696	ug/L	0.423	1	737	752910	1	Standard
	Pb	208	25.718	ug/L	0.364	1	627	979496	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 19:45:40
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	36591	1	Standard
	Cl	37		ug/L			4386158	4350768	0	Standard
>	Sc	45		ug/L			445918	574087	1	Standard
	Al	27	10016.185	ug/L	115.784	1	2877	250262979	1	Standard
	V	51	29.364	ug/L	0.837	2	4130	659952	2	Standard
	V-1	51	29.345	ug/L	0.774	2	351	658666	1	Standard
	Cr	52	12.828	ug/L	0.121	0	12311	257342	0	Standard
	Cr	53	13.098	ug/L	0.250	1	182	28668	2	Standard
>	Ge	72		ug/L			27896	29030	0	KED
	Ni	60	11.771	ug/L	0.251	2	6	11307	2	KED
	Ni	62	12.521	ug/L	0.488	3	12	1916	2	KED
	Cu	63	27.790	ug/L	1.089	3	41	77335	3	KED
	Cu	65	28.582	ug/L	0.372	1	17	39187	2	KED
	Zn	66	60.033	ug/L	1.257	2	31	23755	1	KED
	Zn	67	59.518	ug/L	0.814	1	5	3799	0	KED
	As	75	4.585	ug/L	0.039	0	6	895	1	KED
	Se	78	0.682	ug/L	0.183	26	15	30	13	KED
	Y	89		ug/L			256256	481432	1	Standard
	Kr	83		ug/L			59	79	10	Standard
>	In-1	115		ug/L			8098	8341	1	KED
	Cd	111	0.165	ug/L	0.016	9	3	42	10	KED
	Cd	114	0.161	ug/L	0.010	5	2	94	6	KED
>	In	115		ug/L			361922	380689	1	Standard
	Ag	107	0.123	ug/L	0.010	8	55	1608	8	Standard
	Sb	121	-0.004	ug/L	0.001	14	424	410	2	Standard
	Sb	123	0.000	ug/L	0.005	1353	321	340	9	Standard
>	Tb	159		ug/L			585557	643142	0	Standard
	Tl	205	0.055	ug/L	0.002	3	737	2491	2	Standard
	Pb	208	11.581	ug/L	0.123	1	627	461071	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 19:50:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	38131	5	Standard
	Cl	37		ug/L			4386158	4358975	0	Standard
>	Sc	45		ug/L			445918	577843	2	Standard
	Al	27	10509.545	ug/L	317.152	3	2877	264196386	0	Standard
	V	51	30.929	ug/L	1.213	3	4130	699140	1	Standard
	V-1	51	30.876	ug/L	1.231	3	351	697252	1	Standard
	Cr	52	13.342	ug/L	0.359	2	12311	268716	1	Standard
	Cr	53	13.518	ug/L	0.343	2	182	29761	0	Standard
>	Ge	72		ug/L			27896	28901	1	KED
	Ni	60	13.260	ug/L	0.609	4	6	12676	3	KED
	Ni	62	14.162	ug/L	0.491	3	12	2156	2	KED
	Cu	63	26.287	ug/L	0.399	1	41	72850	2	KED
	Cu	65	26.981	ug/L	0.537	1	17	36823	1	KED
	Zn	66	63.835	ug/L	1.505	2	31	25142	1	KED
	Zn	67	63.421	ug/L	1.450	2	5	4031	2	KED
	As	75	7.235	ug/L	0.195	2	6	1402	1	KED
	Se	78	1.008	ug/L	0.145	14	15	38	9	KED
	Y	89		ug/L			256256	481574	1	Standard
	Kr	83		ug/L			59	64	7	Standard
>	In-1	115		ug/L			8098	8146	4	KED
	Cd	111	0.166	ug/L	0.040	23	3	41	18	KED
	Cd	114	0.142	ug/L	0.013	9	2	82	12	KED
>	In	115		ug/L			361922	375365	2	Standard
	Ag	107	0.114	ug/L	0.004	3	55	1473	1	Standard
	Sb	121	0.071	ug/L	0.005	6	424	1123	4	Standard
	Sb	123	0.068	ug/L	0.005	7	321	832	2	Standard
>	Tb	159		ug/L			585557	639482	2	Standard
	Tl	205	0.063	ug/L	0.005	7	737	2717	2	Standard
	Pb	208	13.787	ug/L	0.412	2	627	545353	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 19:55:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	37620	1	Standard
Cl	37		ug/L			4386158	4342378	0	Standard
> Sc	45		ug/L			445918	571474	1	Standard
Al	27	10622.557	ug/L	294.401	2	2877	264271794	4	Standard
V	51	32.061	ug/L	0.425	1	4130	716900	1	Standard
V-1	51	32.023	ug/L	0.428	1	351	715555	1	Standard
Cr	52	14.277	ug/L	0.218	1	12311	283318	1	Standard
Cr	53	14.509	ug/L	0.210	1	182	31584	1	Standard
> Ge	72		ug/L			27896	28495	1	KED
Ni	60	13.252	ug/L	0.214	1	6	12494	1	KED
Ni	62	13.774	ug/L	0.886	6	12	2067	5	KED
Cu	63	29.638	ug/L	0.128	0	41	80972	1	KED
Cu	65	30.095	ug/L	0.685	2	17	40493	1	KED
Zn	66	61.637	ug/L	1.626	2	31	23938	2	KED
Zn	67	60.675	ug/L	1.761	2	5	3801	1	KED
As	75	6.454	ug/L	0.153	2	6	1234	2	KED
Se	78	0.864	ug/L	0.109	12	15	34	6	KED
Y	89		ug/L			256256	480409	2	Standard
Kr	83		ug/L			59	79	18	Standard
> In-1	115		ug/L			8098	8152	0	KED
Cd	111	0.159	ug/L	0.045	28	3	40	25	KED
Cd	114	0.158	ug/L	0.016	10	2	90	10	KED
> In	115		ug/L			361922	375464	2	Standard
Ag	107	0.130	ug/L	0.006	4	55	1662	3	Standard
Sb	121	-0.010	ug/L	0.006	55	424	339	14	Standard
Sb	123	-0.010	ug/L	0.002	24	321	259	8	Standard
> Tb	159		ug/L			585557	644714	1	Standard
Tl	205	0.058	ug/L	0.001	1	737	2601	1	Standard
Pb	208	12.798	ug/L	0.253	1	627	510585	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0692-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 20:00:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	41444	2	Standard
Cl	37		ug/L			4386158	4306962	0	Standard
> Sc	45		ug/L			445918	587145	0	Standard
Al	27	10964.821	ug/L	189.313	1	2877	280188634	1	Standard
V	51	32.451	ug/L	0.142	0	4130	745468	0	Standard
V-1	51	32.325	ug/L	0.140	0	351	742104	0	Standard
Cr	52	15.098	ug/L	0.207	1	12311	306950	2	Standard
Cr	53	15.030	ug/L	0.110	0	182	33609	1	Standard
> Ge	72		ug/L			27896	28536	1	KED
Ni	60	14.280	ug/L	0.473	3	6	13479	2	KED
Ni	62	15.032	ug/L	0.474	3	12	2259	4	KED
Cu	63	32.739	ug/L	0.333	1	41	89558	1	KED
Cu	65	33.128	ug/L	1.073	3	17	44626	1	KED
Zn	66	67.362	ug/L	1.389	2	31	26196	1	KED
Zn	67	66.505	ug/L	2.953	4	5	4171	2	KED
As	75	6.552	ug/L	0.058	0	6	1254	0	KED
Se	78	0.746	ug/L	0.145	19	15	31	10	KED
Y	89		ug/L			256256	494391	1	Standard
Kr	83		ug/L			59	69	12	Standard
> In-1	115		ug/L			8098	7975	1	KED
Cd	111	0.189	ug/L	0.024	12	3	46	10	KED
Cd	114	0.172	ug/L	0.031	18	2	96	17	KED
> In	115		ug/L			361922	380856	2	Standard
Ag	107	0.125	ug/L	0.007	5	55	1628	2	Standard
Sb	121	-0.024	ug/L	0.002	6	424	206	10	Standard
Sb	123	-0.026	ug/L	0.001	2	321	144	2	Standard
> Tb	159		ug/L			585557	651385	1	Standard
Tl	205	0.058	ug/L	0.000	0	737	2630	0	Standard
Pb	208	14.223	ug/L	0.246	1	627	573260	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0692-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 20:04:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	34619	2	Standard
	Cl	37		ug/L			4386158	4359132	1	Standard
>	Sc	45		ug/L			445918	575150	1	Standard
	Al	27	10186.630	ug/L	228.968	2	2877	254917485	0	Standard
	V	51	50.644	ug/L	0.210	0	4130	1136625	1	Standard
	V-1	51	50.702	ug/L	0.394	0	351	1139873	1	Standard
	Cr	52	39.602	ug/L	0.141	0	12311	762803	1	Standard
	Cr	53	40.012	ug/L	0.762	1	182	87235	1	Standard
>	Ge	72		ug/L			27896	28482	2	KED
	Ni	60	36.512	ug/L	0.699	1	6	34390	0	KED
	Ni	62	37.334	ug/L	1.844	4	12	5579	3	KED
	Cu	63	52.822	ug/L	1.145	2	41	144169	0	KED
	Cu	65	53.561	ug/L	0.985	1	17	72028	2	KED
	Zn	66	142.518	ug/L	3.630	2	31	55273	0	KED
	Zn	67	137.108	ug/L	3.951	2	5	8580	3	KED
	As	75	28.567	ug/L	0.601	2	6	5438	0	KED
	Se	78	71.301	ug/L	2.991	4	15	1581	2	KED
	Y	89		ug/L			256256	474078	3	Standard
	Kr	83		ug/L			59	91	10	Standard
>	In-1	115		ug/L			8098	8260	1	KED
	Cd	111	23.473	ug/L	0.757	3	3	5541	2	KED
	Cd	114	23.395	ug/L	0.641	2	2	13288	1	KED
>	In	115		ug/L			361922	379639	2	Standard
	Ag	107	16.927	ug/L	0.733	4	55	211808	2	Standard
	Sb	121	0.585	ug/L	0.013	2	424	6160	1	Standard
	Sb	123	0.607	ug/L	0.025	4	321	4853	2	Standard
>	Tb	159		ug/L			585557	645835	3	Standard
	Tl	205	23.093	ug/L	0.543	2	737	709454	0	Standard
	Pb	208	38.722	ug/L	1.508	3	627	1545272	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0692-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 20:09:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	36339	1	Standard
Cl	37		ug/L			4386158	4444574	1	Standard
> Sc	45		ug/L			445918	600210	0	Standard
Al	27	10709.406	ug/L	306.939	2	2877	279736418	2	Standard
V	51	52.992	ug/L	1.205	2	4130	1240816	1	Standard
V-1	51	53.063	ug/L	1.477	2	351	1244862	2	Standard
Cr	52	36.613	ug/L	0.439	1	12311	737278	1	Standard
Cr	53	37.173	ug/L	0.677	1	182	84606	1	Standard
> Ge	72		ug/L			27896	28171	0	KED
Ni	60	39.565	ug/L	0.495	1	6	36869	1	KED
Ni	62	41.762	ug/L	0.743	1	12	6175	2	KED
Cu	63	57.261	ug/L	0.964	1	41	154606	1	KED
Cu	65	57.437	ug/L	0.811	1	17	76392	0	KED
Zn	66	145.601	ug/L	2.821	1	31	55865	1	KED
Zn	67	139.335	ug/L	2.227	1	5	8625	1	KED
As	75	31.296	ug/L	0.336	1	6	5894	0	KED
Se	78	78.605	ug/L	1.150	1	15	1723	1	KED
Y	89		ug/L			256256	496222	0	Standard
Kr	83		ug/L			59	94	11	Standard
> In-1	115		ug/L			8098	8064	0	KED
Cd	111	25.528	ug/L	0.060	0	3	5884	0	KED
Cd	114	26.089	ug/L	0.296	1	2	14467	0	KED
> In	115		ug/L			361922	388307	0	Standard
Ag	107	17.307	ug/L	0.191	1	55	221646	1	Standard
Sb	121	0.628	ug/L	0.012	1	424	6730	1	Standard
Sb	123	0.631	ug/L	0.015	2	321	5151	2	Standard
> Tb	159		ug/L			585557	653394	1	Standard
Tl	205	24.497	ug/L	0.423	1	737	761567	0	Standard
Pb	208	37.849	ug/L	0.774	2	627	1529014	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0692-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 20:14:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	41916	2	Standard
Cl	37		ug/L			4386158	4324984	0	Standard
> Sc	45		ug/L			445918	585424	2	Standard
Al	27	10295.533	ug/L	398.927	3	2877	262177657	2	Standard
V	51	53.406	ug/L	1.086	2	4130	1219370	0	Standard
V-1	51	53.572	ug/L	1.012	1	351	1225599	0	Standard
Cr	52	35.643	ug/L	0.770	2	12311	700208	0	Standard
Cr	53	36.544	ug/L	0.502	1	182	81115	1	Standard
> Ge	72		ug/L			27896	27993	2	KED
Ni	60	39.646	ug/L	1.665	4	6	36687	2	KED
Ni	62	41.754	ug/L	0.805	1	12	6134	1	KED
Cu	63	57.126	ug/L	2.240	3	41	153200	2	KED
Cu	65	57.964	ug/L	1.367	2	17	76583	0	KED
Zn	66	144.973	ug/L	3.005	2	31	55260	0	KED
Zn	67	140.440	ug/L	1.051	0	5	8638	1	KED
As	75	32.559	ug/L	0.568	1	6	6091	0	KED
Se	78	78.745	ug/L	2.476	3	15	1715	1	KED
Y	89		ug/L			256256	487177	1	Standard
Kr	83		ug/L			59	86	7	Standard
> In-1	115		ug/L			8098	7927	1	KED
Cd	111	26.679	ug/L	0.932	3	3	6043	1	KED
Cd	114	26.432	ug/L	0.907	3	2	14404	1	KED
> In	115		ug/L			361922	382176	1	Standard
Ag	107	26.319	ug/L	0.328	1	55	331734	2	Standard
Sb	121	-0.015	ug/L	0.006	43	424	302	22	Standard
Sb	123	-0.011	ug/L	0.010	88	321	256	30	Standard
> Tb	159		ug/L			585557	647767	2	Standard
Tl	205	25.012	ug/L	0.778	3	737	770678	1	Standard
Pb	208	38.314	ug/L	1.235	3	627	1533999	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLA
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 20:21:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	23435	2	Standard
	Cl	**37**		ug/L			4386158	4219507	1	Standard
⎡>	**Sc**	**45**		ug/L			445918	445458	1	Standard
⎢	**Al**	**27**	**0.114**	ug/L	0.013	11	2877	5088	4	Standard
⎢	**V**	**51**	**0.003**	ug/L	0.010	311	4130	4179	2	Standard
⎢	**V-1**	**51**	**-0.003**	ug/L	0.001	34	351	291	7	Standard
⎢	**Cr**	**52**	**0.008**	ug/L	0.029	351	12311	12414	1	Standard
⎣	**Cr**	**53**	**-0.014**	ug/L	0.004	32	182	159	6	Standard
⎡>	**Ge**	**72**		ug/L			27896	27396	0	KED
⎢	**Ni**	**60**	**0.011**	ug/L	0.015	143	6	16	83	KED
⎢	**Ni**	**62**	**-0.034**	ug/L	0.038	111	12	6	78	KED
⎢	**Cu**	**63**	**0.011**	ug/L	0.023	220	41	68	88	KED
⎢	**Cu**	**65**	**0.016**	ug/L	0.023	140	17	38	75	KED
⎢	**Zn**	**66**	**0.025**	ug/L	0.041	159	31	40	37	KED
⎢	**Zn**	**67**	**-0.030**	ug/L	0.032	107	5	3	50	KED
⎢	**As**	**75**	**0.004**	ug/L	0.011	260	6	6	28	KED
⎣	**Se**	**78**	**0.096**	ug/L	0.132	137	15	16	16	KED
	Y	**89**		ug/L			256256	259030	0	Standard
	Kr	**83**		ug/L			59	47	12	Standard
⎡>	**In-1**	**115**		ug/L			8098	7720	1	KED
⎢	**Cd**	**111**	**0.001**	ug/L	0.014	1548	3	3	83	KED
⎣	**Cd**	**114**	**0.005**	ug/L	0.005	110	2	4	59	KED
⎡>	**In**	**115**		ug/L			361922	360245	1	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.001	135	55	47	24	Standard
⎢	**Sb**	**121**	**-0.036**	ug/L	0.001	4	424	88	14	Standard
⎣	**Sb**	**123**	**-0.037**	ug/L	0.002	4	321	56	22	Standard
⎡>	**Tb**	**159**		ug/L			585557	583966	2	Standard
⎢	**Tl**	**205**	**0.008**	ug/L	0.001	16	737	952	2	Standard
⎣	**Pb**	**208**	**-0.009**	ug/L	0.001	12	627	302	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 20:25:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	22931	1	Standard
	Cl	**37**		ug/L			4386158	4319024	1	Standard
⌈>	**Sc**	**45**		ug/L			445918	456722	3	Standard
|	**Al**	**27**	**5082.094**	ug/L	19.509	0	2877	101020979	3	Standard
|	**V**	**51**	**50.435**	ug/L	1.128	2	4130	898661	2	Standard
|	**V-1**	**51**	**50.495**	ug/L	1.165	2	351	901339	3	Standard
|	**Cr**	**52**	**50.285**	ug/L	0.838	1	12311	765534	2	Standard
⌊	**Cr**	**53**	**50.487**	ug/L	0.912	1	182	87361	3	Standard
⌈>	**Ge**	**72**		ug/L			27896	27678	1	KED
|	**Ni**	**60**	**50.179**	ug/L	1.546	3	6	45925	1	KED
|	**Ni**	**62**	**51.516**	ug/L	1.741	3	12	7480	2	KED
|	**Cu**	**63**	**50.188**	ug/L	1.088	2	41	133126	0	KED
|	**Cu**	**65**	**50.996**	ug/L	1.497	2	17	66627	1	KED
|	**Zn**	**66**	**50.286**	ug/L	0.974	1	31	18976	1	KED
|	**Zn**	**67**	**51.112**	ug/L	1.680	3	5	3112	3	KED
|	**As**	**75**	**50.962**	ug/L	1.214	2	6	9424	1	KED
⌊	**Se**	**78**	**52.305**	ug/L	2.266	4	15	1131	2	KED
	Y	**89**		ug/L			256256	264988	2	Standard
	Kr	**83**		ug/L			59	58	19	Standard
⌈>	**In-1**	**115**		ug/L			8098	8260	0	KED
|	**Cd**	**111**	**48.851**	ug/L	0.157	0	3	11531	0	KED
⌊	**Cd**	**114**	**49.213**	ug/L	0.699	1	2	27954	1	KED
⌈>	**In**	**115**		ug/L			361922	362690	1	Standard
|	**Ag**	**107**	**50.155**	ug/L	0.378	0	55	599812	1	Standard
|	**Sb**	**121**	**51.007**	ug/L	1.446	2	424	476691	2	Standard
⌊	**Sb**	**123**	**50.582**	ug/L	0.574	1	321	360215	1	Standard
⌈>	**Tb**	**159**		ug/L			585557	603384	1	Standard
|	**Tl**	**205**	**49.058**	ug/L	1.751	3	737	1407750	3	Standard
⌊	**Pb**	**208**	**49.985**	ug/L	2.244	4	627	1864722	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 20:33:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	22943	2	Standard
	Cl	**37**		ug/L			4386158	4189580	1	Standard
⌈>	**Sc**	**45**		ug/L			445918	444831	0	Standard
|	**Al**	**27**	**0.045**	ug/L	0.007	15	2877	3744	3	Standard
|	**V**	**51**	**0.001**	ug/L	0.005	704	4130	4132	1	Standard
|	**V-1**	**51**	**-0.005**	ug/L	0.001	25	351	266	7	Standard
|	**Cr**	**52**	**-0.005**	ug/L	0.018	381	12311	12212	1	Standard
⌊	**Cr**	**53**	**-0.023**	ug/L	0.006	27	182	143	7	Standard
⌈>	**Ge**	**72**		ug/L			27896	27500	1	KED
|	**Ni**	**60**	**0.010**	ug/L	0.001	13	6	15	6	KED
|	**Ni**	**62**	**0.032**	ug/L	0.039	120	12	16	33	KED
|	**Cu**	**63**	**0.004**	ug/L	0.007	189	41	50	34	KED
|	**Cu**	**65**	**0.009**	ug/L	0.009	95	17	29	40	KED
|	**Zn**	**66**	**0.005**	ug/L	0.029	611	31	32	32	KED
|	**Zn**	**67**	**-0.051**	ug/L	0.018	35	5	2	43	KED
|	**As**	**75**	**-0.009**	ug/L	0.007	74	6	4	26	KED
⌊	**Se**	**78**	**0.204**	ug/L	0.091	44	15	19	11	KED
	Y	**89**		ug/L			256256	259066	1	Standard
	Kr	**83**		ug/L			59	52	21	Standard
⌈>	**In-1**	**115**		ug/L			8098	8000	4	KED
|	**Cd**	**111**	**-0.008**	ug/L	0.005	55	3	1	69	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.000	14	2	3	1	KED
⌈>	**In**	**115**		ug/L			361922	362614	1	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.000	33	55	64	2	Standard
|	**Sb**	**121**	**0.076**	ug/L	0.007	8	424	1135	5	Standard
⌊	**Sb**	**123**	**0.085**	ug/L	0.000	0	321	928	1	Standard
⌈>	**Tb**	**159**		ug/L			585557	585014	1	Standard
|	**Tl**	**205**	**0.006**	ug/L	0.000	5	737	897	1	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.001	29	627	803	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 20:39:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	38486	1	Standard
	Cl	37		ug/L			4386158	4283922	2	Standard
>	Sc	45		ug/L			445918	576887	1	Standard
	Al	27	10254.363	ug/L	123.572	1	2877	257437289	0	Standard
	V	51	30.706	ug/L	0.693	2	4130	693248	1	Standard
	V-1	51	30.663	ug/L	0.606	1	351	691581	1	Standard
	Cr	52	17.526	ug/L	0.478	2	12311	347415	1	Standard
	Cr	53	17.647	ug/L	0.310	1	182	38725	0	Standard
>	Ge	72		ug/L			27896	28054	1	KED
	Ni	60	14.803	ug/L	0.497	3	6	13735	1	KED
	Ni	62	15.215	ug/L	0.761	5	12	2247	3	KED
	Cu	63	27.055	ug/L	0.280	1	41	72765	0	KED
	Cu	65	27.128	ug/L	0.780	2	17	35932	1	KED
	Zn	66	60.174	ug/L	0.923	1	31	23014	2	KED
	Zn	67	58.929	ug/L	0.589	0	5	3636	2	KED
	As	75	5.041	ug/L	0.124	2	6	950	4	KED
	Se	78	0.863	ug/L	0.255	29	15	33	17	KED
	Y	89		ug/L			256256	469115	3	Standard
	Kr	83		ug/L			59	80	24	Standard
>	In-1	115		ug/L			8098	8052	2	KED
	Cd	111	0.152	ug/L	0.032	21	3	38	20	KED
	Cd	114	0.160	ug/L	0.033	20	2	90	18	KED
>	In	115		ug/L			361922	373995	0	Standard
	Ag	107	0.114	ug/L	0.003	3	55	1464	2	Standard
	Sb	121	-0.001	ug/L	0.001	153	424	429	3	Standard
	Sb	123	0.005	ug/L	0.008	165	321	368	16	Standard
>	Tb	159		ug/L			585557	631970	1	Standard
	Tl	205	0.060	ug/L	0.002	2	737	2603	0	Standard
	Pb	208	13.245	ug/L	0.225	1	627	517982	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 20:44:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	36417	2	Standard
Cl	37		ug/L			4386158	4297579	1	Standard
> Sc	45		ug/L			445918	557497	1	Standard
Al	27	9140.073	ug/L	208.581	2	2877	221756687	2	Standard
V	51	27.815	ug/L	0.678	2	4130	607312	1	Standard
V-1	51	27.803	ug/L	0.727	2	351	605970	1	Standard
Cr	52	14.898	ug/L	0.235	1	12311	287716	0	Standard
Cr	53	15.116	ug/L	0.364	2	182	32082	0	Standard
> Ge	72		ug/L			27896	28554	0	KED
Ni	60	13.307	ug/L	0.060	0	6	12573	0	KED
Ni	62	13.981	ug/L	0.351	2	12	2103	2	KED
Cu	63	27.937	ug/L	0.158	0	41	76482	0	KED
Cu	65	28.446	ug/L	0.219	0	17	38359	0	KED
Zn	66	67.188	ug/L	1.361	2	31	26147	1	KED
Zn	67	64.396	ug/L	0.944	1	5	4043	1	KED
As	75	5.905	ug/L	0.085	1	6	1132	1	KED
Se	78	0.670	ug/L	0.078	11	15	30	5	KED
Y	89		ug/L			256256	449194	0	Standard
Kr	83		ug/L			59	62	14	Standard
> In-1	115		ug/L			8098	8097	0	KED
Cd	111	0.147	ug/L	0.009	6	3	37	5	KED
Cd	114	0.157	ug/L	0.041	26	2	89	25	KED
> In	115		ug/L			361922	380131	2	Standard
Ag	107	0.103	ug/L	0.000	0	55	1348	2	Standard
Sb	121	-0.001	ug/L	0.004	472	424	438	7	Standard
Sb	123	0.003	ug/L	0.001	33	321	363	3	Standard
> Tb	159		ug/L			585557	631125	3	Standard
Tl	205	0.051	ug/L	0.003	5	737	2330	0	Standard
Pb	208	15.022	ug/L	0.481	3	627	586284	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 20:48:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	41066	2	Standard
Cl	37		ug/L			4386158	4394548	1	Standard
> Sc	45		ug/L			445918	587953	2	Standard
Al	27	11353.663	ug/L	250.461	2	2877	290421098	0	Standard
V	51	31.918	ug/L	0.561	1	4130	734133	1	Standard
V-1	51	31.895	ug/L	0.602	1	351	733039	0	Standard
Cr	52	14.586	ug/L	0.378	2	12311	297347	0	Standard
Cr	53	14.857	ug/L	0.508	3	182	33250	0	Standard
> Ge	72		ug/L			27896	27846	1	KED
Ni	60	14.118	ug/L	0.065	0	6	13008	0	KED
Ni	62	14.744	ug/L	0.355	2	12	2163	3	KED
Cu	63	31.387	ug/L	1.105	3	41	83793	3	KED
Cu	65	31.777	ug/L	0.244	0	17	41784	0	KED
Zn	66	65.449	ug/L	0.489	0	31	24841	1	KED
Zn	67	66.113	ug/L	2.412	3	5	4047	2	KED
As	75	6.217	ug/L	0.175	2	6	1162	2	KED
Se	78	0.850	ug/L	0.078	9	15	33	5	KED
Y	89		ug/L			256256	503444	2	Standard
Kr	83		ug/L			59	83	15	Standard
> In-1	115		ug/L			8098	8041	1	KED
Cd	111	0.170	ug/L	0.040	23	3	42	21	KED
Cd	114	0.175	ug/L	0.024	13	2	99	14	KED
> In	115		ug/L			361922	377416	2	Standard
Ag	107	0.134	ug/L	0.007	4	55	1724	6	Standard
Sb	121	-0.016	ug/L	0.005	28	424	290	15	Standard
Sb	123	-0.015	ug/L	0.004	28	321	224	16	Standard
> Tb	159		ug/L			585557	641176	1	Standard
Tl	205	0.059	ug/L	0.001	1	737	2621	1	Standard
Pb	208	14.298	ug/L	0.353	2	627	567272	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 20:53:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	37538	1	Standard
Cl	37		ug/L			4386158	4276238	0	Standard
> Sc	45		ug/L			445918	580458	0	Standard
Al	27	11431.564	ug/L	343.321	3	2877	288805111	3	Standard
V	51	31.708	ug/L	0.702	2	4130	720177	1	Standard
V-1	51	31.664	ug/L	0.754	2	351	718597	1	Standard
Cr	52	13.858	ug/L	0.334	2	12311	279770	1	Standard
Cr	53	14.067	ug/L	0.378	2	182	31108	2	Standard
> Ge	72		ug/L			27896	27818	0	KED
Ni	60	13.506	ug/L	0.313	2	6	12431	1	KED
Ni	62	14.404	ug/L	0.944	6	12	2111	7	KED
Cu	63	29.183	ug/L	0.464	1	41	77829	1	KED
Cu	65	29.526	ug/L	0.316	1	17	38787	0	KED
Zn	66	68.140	ug/L	1.134	1	31	25835	1	KED
Zn	67	67.687	ug/L	2.758	4	5	4140	3	KED
As	75	5.636	ug/L	0.163	2	6	1053	2	KED
Se	78	0.772	ug/L	0.309	39	15	31	21	KED
Y	89		ug/L			256256	491307	1	Standard
Kr	83		ug/L			59	73	7	Standard
> In-1	115		ug/L			8098	7793	1	KED
Cd	111	0.187	ug/L	0.027	14	3	45	14	KED
Cd	114	0.173	ug/L	0.028	16	2	95	16	KED
> In	115		ug/L			361922	370826	1	Standard
Ag	107	0.122	ug/L	0.002	2	55	1543	2	Standard
Sb	121	-0.024	ug/L	0.002	10	424	206	11	Standard
Sb	123	-0.021	ug/L	0.001	5	321	174	5	Standard
> Tb	159		ug/L			585557	635829	1	Standard
Tl	205	0.060	ug/L	0.003	5	737	2617	3	Standard
Pb	208	11.970	ug/L	0.336	2	627	470974	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 20:58:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	40863	2	Standard
Cl	37		ug/L			4386158	4378748	1	Standard
> Sc	45		ug/L			445918	572503	0	Standard
Al	27	10520.434	ug/L	244.218	2	2877	262104898	1	Standard
V	51	30.291	ug/L	0.546	1	4130	678819	1	Standard
V-1	51	30.239	ug/L	0.531	1	351	676890	1	Standard
Cr	52	13.465	ug/L	0.100	0	12311	268595	0	Standard
Cr	53	13.628	ug/L	0.148	1	182	29734	0	Standard
> Ge	72		ug/L			27896	27898	1	KED
Ni	60	12.357	ug/L	0.162	1	6	11407	1	KED
Ni	62	13.074	ug/L	0.648	4	12	1922	4	KED
Cu	63	29.474	ug/L	0.840	2	41	78813	1	KED
Cu	65	29.692	ug/L	0.559	1	17	39113	1	KED
Zn	66	62.706	ug/L	0.434	0	31	23847	1	KED
Zn	67	62.400	ug/L	2.653	4	5	3827	3	KED
As	75	6.508	ug/L	0.103	1	6	1218	2	KED
Se	78	0.707	ug/L	0.020	2	15	30	0	KED
Y	89		ug/L			256256	475058	1	Standard
Kr	83		ug/L			59	81	29	Standard
> In-1	115		ug/L			8098	7910	1	KED
Cd	111	0.217	ug/L	0.025	11	3	52	9	KED
Cd	114	0.184	ug/L	0.022	12	2	102	13	KED
> In	115		ug/L			361922	374872	1	Standard
Ag	107	0.133	ug/L	0.010	7	55	1699	5	Standard
Sb	121	-0.014	ug/L	0.001	10	424	304	4	Standard
Sb	123	-0.015	ug/L	0.003	20	321	221	9	Standard
> Tb	159		ug/L			585557	630840	0	Standard
Tl	205	0.061	ug/L	0.003	4	737	2613	2	Standard
Pb	208	14.017	ug/L	0.221	1	627	547207	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 21:03:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	41555	0	Standard
	Cl	37		ug/L			4386158	4368241	0	Standard
>	Sc	45		ug/L			445918	581926	0	Standard
	Al	27	9714.822	ug/L	101.771	1	2877	246056525	1	Standard
	V	51	30.873	ug/L	0.500	1	4130	703161	1	Standard
	V-1	51	30.830	ug/L	0.567	1	351	701486	1	Standard
	Cr	52	17.446	ug/L	0.331	1	12311	348986	1	Standard
	Cr	53	17.571	ug/L	0.238	1	182	38899	0	Standard
>	Ge	72		ug/L			27896	27792	1	KED
	Ni	60	15.774	ug/L	0.492	3	6	14507	4	KED
	Ni	62	16.783	ug/L	0.500	2	12	2455	2	KED
	Cu	63	48.571	ug/L	0.934	1	41	129381	1	KED
	Cu	65	49.021	ug/L	0.786	1	17	64320	0	KED
	Zn	66	150.915	ug/L	1.937	1	31	57133	2	KED
	Zn	67	146.373	ug/L	3.388	2	5	8937	1	KED
	As	75	7.088	ug/L	0.178	2	6	1321	3	KED
	Se	78	0.969	ug/L	0.165	17	15	35	10	KED
	Y	89		ug/L			256256	474028	0	Standard
	Kr	83		ug/L			59	95	11	Standard
>	In-1	115		ug/L			8098	8041	0	KED
	Cd	111	0.328	ug/L	0.043	13	3	78	12	KED
	Cd	114	0.313	ug/L	0.012	3	2	175	3	KED
>	In	115		ug/L			361922	370677	1	Standard
	Ag	107	0.221	ug/L	0.004	1	55	2763	2	Standard
	Sb	121	-0.003	ug/L	0.001	21	424	408	2	Standard
	Sb	123	-0.001	ug/L	0.004	322	321	321	6	Standard
>	Tb	159		ug/L			585557	634154	1	Standard
	Tl	205	0.058	ug/L	0.002	3	737	2543	0	Standard
	Pb	208	38.554	ug/L	1.122	2	627	1511453	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 21:08:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	42474	0	Standard
Cl	37		ug/L			4386158	4291515	0	Standard
> Sc	45		ug/L			445918	572463	1	Standard
Al	27	9241.209	ug/L	79.758	0	2877	230233422	1	Standard
V	51	28.810	ug/L	0.392	1	4130	645845	1	Standard
V-1	51	28.833	ug/L	0.285	0	351	645424	1	Standard
Cr	52	16.778	ug/L	0.246	1	12311	330733	0	Standard
Cr	53	17.094	ug/L	0.160	0	182	37238	2	Standard
> Ge	72		ug/L			27896	27419	2	KED
Ni	60	14.467	ug/L	0.785	5	6	13114	3	KED
Ni	62	15.804	ug/L	0.525	3	12	2281	2	KED
Cu	63	57.976	ug/L	1.518	2	41	152306	0	KED
Cu	65	58.429	ug/L	3.001	5	17	75581	2	KED
Zn	66	157.710	ug/L	2.694	1	31	58883	0	KED
Zn	67	153.525	ug/L	1.907	1	5	9248	1	KED
As	75	6.695	ug/L	0.094	1	6	1231	0	KED
Se	78	0.702	ug/L	0.177	25	15	29	11	KED
Y	89		ug/L			256256	456003	2	Standard
Kr	83		ug/L			59	85	18	Standard
> In-1	115		ug/L			8098	7805	2	KED
Cd	111	0.365	ug/L	0.010	2	3	84	1	KED
Cd	114	0.358	ug/L	0.030	8	2	194	6	KED
> In	115		ug/L			361922	377750	1	Standard
Ag	107	0.313	ug/L	0.018	5	55	3960	5	Standard
Sb	121	-0.009	ug/L	0.003	27	424	352	7	Standard
Sb	123	-0.011	ug/L	0.005	44	321	253	13	Standard
> Tb	159		ug/L			585557	635759	1	Standard
Tl	205	0.050	ug/L	0.001	1	737	2310	1	Standard
Pb	208	54.095	ug/L	1.302	2	627	2126123	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-12
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 21:13:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	39080	3	Standard
Cl	37		ug/L			4386158	4330681	0	Standard
> Sc	45		ug/L			445918	587125	0	Standard
Al	27	10939.296	ug/L	79.747	0	2877	279531783	1	Standard
V	51	30.335	ug/L	0.428	1	4130	697156	0	Standard
V-1	51	30.251	ug/L	0.452	1	351	694432	0	Standard
Cr	52	13.833	ug/L	0.144	1	12311	282546	0	Standard
Cr	53	13.882	ug/L	0.236	1	182	31056	1	Standard
> Ge	72		ug/L			27896	27162	0	KED
Ni	60	13.287	ug/L	0.125	0	6	11941	0	KED
Ni	62	13.947	ug/L	0.105	0	12	1996	1	KED
Cu	63	23.218	ug/L	0.185	0	41	60469	0	KED
Cu	65	23.251	ug/L	0.051	0	17	29828	1	KED
Zn	66	59.647	ug/L	1.219	2	31	22083	1	KED
Zn	67	58.895	ug/L	1.854	3	5	3517	2	KED
As	75	5.124	ug/L	0.230	4	6	935	4	KED
Se	78	0.864	ug/L	0.153	17	15	32	10	KED
Y	89		ug/L			256256	485375	1	Standard
Kr	83		ug/L			59	78	26	Standard
> In-1	115		ug/L			8098	7838	1	KED
Cd	111	0.142	ug/L	0.049	34	3	35	31	KED
Cd	114	0.158	ug/L	0.017	10	2	87	9	KED
> In	115		ug/L			361922	377069	2	Standard
Ag	107	0.120	ug/L	0.009	7	55	1543	4	Standard
Sb	121	-0.028	ug/L	0.002	7	424	173	9	Standard
Sb	123	-0.027	ug/L	0.003	11	321	131	16	Standard
> Tb	159		ug/L			585557	634728	1	Standard
Tl	205	0.055	ug/L	0.003	5	737	2447	2	Standard
Pb	208	12.259	ug/L	0.140	1	627	481591	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 21:17:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	38267	1	Standard
Cl	37		ug/L			4386158	4365052	1	Standard
> Sc	45		ug/L			445918	588626	1	Standard
Al	27	10675.660	ug/L	198.688	1	2877	273545854	3	Standard
V	51	30.872	ug/L	0.385	1	4130	711173	0	Standard
V-1	51	30.829	ug/L	0.376	1	351	709473	0	Standard
Cr	52	13.560	ug/L	0.278	2	12311	277944	0	Standard
Cr	53	13.761	ug/L	0.252	1	182	30864	0	Standard
> Ge	72		ug/L			27896	27189	1	KED
Ni	60	12.978	ug/L	0.121	0	6	11675	0	KED
Ni	62	13.289	ug/L	0.638	4	12	1903	3	KED
Cu	63	28.728	ug/L	0.612	2	41	74866	0	KED
Cu	65	28.857	ug/L	0.172	0	17	37049	1	KED
Zn	66	56.369	ug/L	1.172	2	31	20892	2	KED
Zn	67	55.227	ug/L	2.200	3	5	3304	5	KED
As	75	5.619	ug/L	0.112	1	6	1026	0	KED
Se	78	1.059	ug/L	0.231	21	15	36	14	KED
Y	89		ug/L			256256	490691	3	Standard
Kr	83		ug/L			59	86	9	Standard
> In-1	115		ug/L			8098	7685	1	KED
Cd	111	0.213	ug/L	0.035	16	3	50	17	KED
Cd	114	0.211	ug/L	0.038	17	2	113	15	KED
> In	115		ug/L			361922	376141	2	Standard
Ag	107	0.149	ug/L	0.007	4	55	1903	4	Standard
Sb	121	-0.032	ug/L	0.003	10	424	133	22	Standard
Sb	123	-0.029	ug/L	0.002	7	321	123	13	Standard
> Tb	159		ug/L			585557	637295	1	Standard
Tl	205	0.061	ug/L	0.003	4	737	2661	3	Standard
Pb	208	14.523	ug/L	0.258	1	627	572695	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 21:22:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	46591	0	Standard
Cl	37		ug/L			4386158	4374657	3	Standard
> Sc	45		ug/L			445918	567315	1	Standard
Al	27	**9154.327**	ug/L	149.731	1	2877	226004155	0	Standard
V	51	**30.245**	ug/L	0.254	0	4130	671706	1	Standard
V-1	51	**30.193**	ug/L	0.226	0	351	669796	1	Standard
Cr	52	**14.664**	ug/L	0.165	1	12311	288465	1	Standard
Cr	53	**14.803**	ug/L	0.085	0	182	31985	0	Standard
> Ge	72		ug/L			27896	27526	1	KED
Ni	60	**12.440**	ug/L	0.105	0	6	11330	1	KED
Ni	62	**12.968**	ug/L	0.248	1	12	1882	2	KED
Cu	63	**35.548**	ug/L	0.398	1	41	93800	1	KED
Cu	65	**35.690**	ug/L	0.469	1	17	46383	0	KED
Zn	66	**402.569**	ug/L	8.032	1	31	150847	0	KED
Zn	67	**374.524**	ug/L	7.514	2	5	22643	2	KED
As	75	**5.992**	ug/L	0.191	3	6	1107	1	KED
Se	78	**0.795**	ug/L	0.265	33	15	31	17	KED
Y	89		ug/L			256256	495897	1	Standard
Kr	83		ug/L			59	90	10	Standard
> In-1	115		ug/L			8098	7945	0	KED
Cd	111	**0.304**	ug/L	0.032	10	3	72	10	KED
Cd	114	**0.304**	ug/L	0.035	11	2	168	12	KED
> In	115		ug/L			361922	384435	0	Standard
Ag	107	**0.286**	ug/L	0.012	4	55	3684	3	Standard
Sb	121	**0.000**	ug/L	0.003	943	424	454	7	Standard
Sb	123	**0.046**	ug/L	0.072	158	321	687	79	Standard
> Tb	159		ug/L			585557	636673	1	Standard
Tl	205	**0.054**	ug/L	0.003	4	737	2430	4	Standard
Pb	208	**32.464**	ug/L	0.590	1	627	1278059	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 21:30:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	22888	5	Standard
	Cl	**37**		ug/L			4386158	4251433	0	Standard
⌈>	**Sc**	**45**		ug/L			445918	469857	1	Standard
|	**Al**	**27**	**4897.484**	ug/L	21.525	0	2877	100147772	1	Standard
|	**V**	**51**	**50.381**	ug/L	0.733	1	4130	923806	2	Standard
|	**V-1**	**51**	**50.741**	ug/L	0.667	1	351	931996	2	Standard
|	**Cr**	**52**	**49.208**	ug/L	1.210	2	12311	770978	0	Standard
⌊	**Cr**	**53**	**50.421**	ug/L	1.548	3	182	89739	1	Standard
⌈>	**Ge**	**72**		ug/L			27896	26443	0	KED
|	**Ni**	**60**	**50.824**	ug/L	0.872	1	6	44450	1	KED
|	**Ni**	**62**	**52.526**	ug/L	1.261	2	12	7286	1	KED
|	**Cu**	**63**	**50.061**	ug/L	0.839	1	41	126879	1	KED
|	**Cu**	**65**	**51.702**	ug/L	0.971	1	17	64553	2	KED
|	**Zn**	**66**	**51.136**	ug/L	0.187	0	31	18437	0	KED
|	**Zn**	**67**	**51.780**	ug/L	0.902	1	5	3012	2	KED
|	**As**	**75**	**50.501**	ug/L	0.161	0	6	8924	1	KED
⌊	**Se**	**78**	**51.535**	ug/L	0.334	0	15	1065	0	KED
	Y	**89**		ug/L			256256	265623	0	Standard
	Kr	**83**		ug/L			59	51	37	Standard
⌈>	**In-1**	**115**		ug/L			8098	7659	1	KED
|	**Cd**	**111**	**49.680**	ug/L	0.682	1	3	10872	1	KED
⌊	**Cd**	**114**	**50.802**	ug/L	0.339	0	2	26753	1	KED
⌈>	**In**	**115**		ug/L			361922	369353	0	Standard
|	**Ag**	**107**	**49.184**	ug/L	2.276	4	55	598974	4	Standard
|	**Sb**	**121**	**49.585**	ug/L	1.204	2	424	471936	2	Standard
⌊	**Sb**	**123**	**50.570**	ug/L	1.030	2	321	366737	1	Standard
⌈>	**Tb**	**159**		ug/L			585557	599332	2	Standard
|	**Tl**	**205**	**50.589**	ug/L	1.370	2	737	1441578	1	Standard
⌊	**Pb**	**208**	**50.787**	ug/L	1.586	3	627	1881107	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 21:37:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	23121	2	Standard
	Cl	**37**		ug/L			4386158	4178053	0	Standard
⎡>	**Sc**	**45**		ug/L			445918	444505	2	Standard
⎢	**Al**	**27**	**0.055**	ug/L	0.006	10	2877	3928	5	Standard
⎢	**V**	**51**	**0.003**	ug/L	0.002	79	4130	4162	1	Standard
⎢	**V-1**	**51**	**-0.006**	ug/L	0.001	16	351	252	4	Standard
⎢	**Cr**	**52**	**0.002**	ug/L	0.017	788	12311	12301	1	Standard
⎣	**Cr**	**53**	**-0.025**	ug/L	0.013	49	182	139	12	Standard
⎡>	**Ge**	**72**		ug/L			27896	26345	0	KED
⎢	**Ni**	**60**	**0.007**	ug/L	0.002	34	6	12	17	KED
⎢	**Ni**	**62**	**-0.064**	ug/L	0.008	12	12	2	43	KED
⎢	**Cu**	**63**	**0.009**	ug/L	0.007	76	41	62	27	KED
⎢	**Cu**	**65**	**0.009**	ug/L	0.003	29	17	28	11	KED
⎢	**Zn**	**66**	**0.053**	ug/L	0.052	98	31	48	38	KED
⎢	**Zn**	**67**	**0.072**	ug/L	0.034	47	5	9	20	KED
⎢	**As**	**75**	**-0.004**	ug/L	0.002	34	6	5	5	KED
⎣	**Se**	**78**	**0.121**	ug/L	0.146	120	15	16	18	KED
	Y	**89**		ug/L			256256	252161	1	Standard
	Kr	**83**		ug/L			59	46	13	Standard
⎡>	**In-1**	**115**		ug/L			8098	7527	1	KED
⎢	**Cd**	**111**	**-0.000**	ug/L	0.010	4257	3	3	69	KED
⎣	**Cd**	**114**	**0.004**	ug/L	0.006	149	2	4	69	KED
⎡>	**In**	**115**		ug/L			361922	364077	1	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.000	61	55	60	6	Standard
⎢	**Sb**	**121**	**0.081**	ug/L	0.010	12	424	1183	6	Standard
⎣	**Sb**	**123**	**0.080**	ug/L	0.001	0	321	898	1	Standard
⎡>	**Tb**	**159**		ug/L			585557	572674	2	Standard
⎢	**Tl**	**205**	**0.001**	ug/L	0.002	142	737	754	7	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.001	70	627	683	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0818-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 21:42:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	30521	3	Standard
	Cl	37		ug/L			4386158	4268109	0	Standard
⌈>	Sc	45		ug/L			445918	462138	0	Standard
|	Al	27	0.715	ug/L	0.013	1	2877	17359	2	Standard
|	V	51	0.003	ug/L	0.007	233	4130	4336	2	Standard
|	V-1	51	-0.004	ug/L	0.001	19	351	300	3	Standard
|	Cr	52	0.021	ug/L	0.019	91	12311	13071	2	Standard
⌊	Cr	53	-0.002	ug/L	0.006	343	182	186	6	Standard
⌈>	Ge	72		ug/L			27896	27328	1	KED
|	Ni	60	0.001	ug/L	0.003	423	6	7	43	KED
|	Ni	62	-0.007	ug/L	0.026	356	12	10	36	KED
|	Cu	63	0.017	ug/L	0.006	37	41	84	20	KED
|	Cu	65	0.017	ug/L	0.003	14	17	40	9	KED
|	Zn	66	0.036	ug/L	0.019	52	31	43	15	KED
|	Zn	67	0.087	ug/L	0.098	113	5	10	53	KED
|	As	75	0.002	ug/L	0.008	344	6	6	23	KED
⌊	Se	78	0.015	ug/L	0.036	245	15	15	6	KED
	Y	89		ug/L			256256	261538	0	Standard
	Kr	83		ug/L			59	40	20	Standard
⌈>	In-1	115		ug/L			8098	7507	2	KED
|	Cd	111	-0.000	ug/L	0.007	3387	3	3	45	KED
⌊	Cd	114	0.002	ug/L	0.002	119	2	3	34	KED
⌈>	In	115		ug/L			361922	370820	2	Standard
|	Ag	107	-0.000	ug/L	0.000	52	55	51	3	Standard
|	Sb	121	0.006	ug/L	0.004	64	424	494	5	Standard
⌊	Sb	123	0.003	ug/L	0.002	46	321	354	3	Standard
⌈>	Tb	159		ug/L			585557	585538	1	Standard
|	Tl	205	0.003	ug/L	0.001	46	737	808	2	Standard
⌊	Pb	208	-0.012	ug/L	0.000	3	627	180	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0818-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 21:47:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	30301	1	Standard
	Cl	37		ug/L			4386158	4155471	0	Standard
>	Sc	45		ug/L			445918	451559	0	Standard
	Al	27	0.895	ug/L	0.018	1	2877	20510	2	Standard
	V	51	25.238	ug/L	0.274	1	4130	446816	0	Standard
	V-1	51	25.386	ug/L	0.293	1	351	448287	0	Standard
	Cr	52	25.395	ug/L	0.257	1	12311	388530	1	Standard
	Cr	53	25.881	ug/L	0.168	0	182	44374	0	Standard
>	Ge	72		ug/L			27896	27012	3	KED
	Ni	60	25.391	ug/L	1.095	4	6	22667	1	KED
	Ni	62	26.888	ug/L	0.698	2	12	3814	0	KED
	Cu	63	25.672	ug/L	0.840	3	41	66443	0	KED
	Cu	65	25.824	ug/L	0.149	0	17	32946	3	KED
	Zn	66	84.048	ug/L	1.901	2	31	30922	1	KED
	Zn	67	80.142	ug/L	1.393	1	5	4757	1	KED
	As	75	24.998	ug/L	0.634	2	6	4513	1	KED
	Se	78	81.045	ug/L	2.989	3	15	1702	1	KED
	Y	89		ug/L			256256	263776	1	Standard
	Kr	83		ug/L			59	53	10	Standard
>	In-1	115		ug/L			8098	7572	4	KED
	Cd	111	25.937	ug/L	1.352	5	3	5606	1	KED
	Cd	114	25.757	ug/L	1.227	4	2	13396	1	KED
>	In	115		ug/L			361922	369844	2	Standard
	Ag	107	25.223	ug/L	0.857	3	55	307483	1	Standard
	Sb	121	25.515	ug/L	0.522	2	424	243326	1	Standard
	Sb	123	26.010	ug/L	0.491	1	321	188994	0	Standard
>	Tb	159		ug/L			585557	585977	1	Standard
	Tl	205	25.869	ug/L	0.953	3	737	721030	2	Standard
	Pb	208	25.959	ug/L	0.702	2	627	940607	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 21:52:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	40247	1	Standard
	Cl	37		ug/L			4386158	4321089	1	Standard
>	Sc	45		ug/L			445918	548547	1	Standard
	Al	27	8309.488	ug/L	93.172	1	2877	198381722	1	Standard
	V	51	25.020	ug/L	0.578	2	4130	538068	1	Standard
	V-1	51	25.081	ug/L	0.590	2	351	537950	1	Standard
	Cr	52	11.671	ug/L	0.138	1	12311	225074	0	Standard
	Cr	53	12.139	ug/L	0.453	3	182	25395	2	Standard
>	Ge	72		ug/L			27896	27183	2	KED
	Ni	60	10.328	ug/L	0.306	2	6	9287	1	KED
	Ni	62	10.680	ug/L	0.361	3	12	1532	4	KED
	Cu	63	25.828	ug/L	0.316	1	41	67305	1	KED
	Cu	65	26.540	ug/L	0.257	0	17	34067	1	KED
	Zn	66	50.650	ug/L	1.664	3	31	18764	1	KED
	Zn	67	49.897	ug/L	2.308	4	5	2983	4	KED
	As	75	6.037	ug/L	0.129	2	6	1101	0	KED
	Se	78	0.757	ug/L	0.073	9	15	30	2	KED
	Y	89		ug/L			256256	429576	0	Standard
	Kr	83		ug/L			59	62	5	Standard
>	In-1	115		ug/L			8098	7778	4	KED
	Cd	111	0.170	ug/L	0.035	20	3	40	15	KED
	Cd	114	0.161	ug/L	0.021	12	2	88	14	KED
>	In	115		ug/L			361922	370929	0	Standard
	Ag	107	0.108	ug/L	0.002	2	55	1383	1	Standard
	Sb	121	-0.006	ug/L	0.001	15	424	379	2	Standard
	Sb	123	-0.008	ug/L	0.004	50	321	274	9	Standard
>	Tb	159		ug/L			585557	627114	2	Standard
	Tl	205	0.050	ug/L	0.004	8	737	2270	5	Standard
	Pb	208	11.792	ug/L	0.343	2	627	457600	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 21:57:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	38905	2	Standard
Cl	37		ug/L			4386158	4274421	0	Standard
> Sc	45		ug/L			445918	562616	1	Standard
Al	27	9024.822	ug/L	98.317	1	2877	220976917	1	Standard
V	51	27.026	ug/L	0.235	0	4130	595758	0	Standard
V-1	51	26.999	ug/L	0.201	0	351	593991	0	Standard
Cr	52	11.452	ug/L	0.358	3	12311	226796	2	Standard
Cr	53	11.674	ug/L	0.222	1	182	25062	0	Standard
> Ge	72		ug/L			27896	26759	0	KED
Ni	60	11.504	ug/L	0.232	2	6	10186	1	KED
Ni	62	12.229	ug/L	0.302	2	12	1725	2	KED
Cu	63	20.686	ug/L	0.366	1	41	53084	2	KED
Cu	65	20.970	ug/L	0.239	1	17	26503	0	KED
Zn	66	44.246	ug/L	0.313	0	31	16147	0	KED
Zn	67	44.582	ug/L	1.514	3	5	2625	3	KED
As	75	4.689	ug/L	0.091	1	6	843	1	KED
Se	78	0.595	ug/L	0.049	8	15	26	3	KED
Y	89		ug/L			256256	453959	1	Standard
Kr	83		ug/L			59	62	3	Standard
> In-1	115		ug/L			8098	7831	3	KED
Cd	111	0.127	ug/L	0.047	37	3	32	35	KED
Cd	114	0.124	ug/L	0.009	7	2	69	4	KED
> In	115		ug/L			361922	375286	2	Standard
Ag	107	0.085	ug/L	0.004	4	55	1114	2	Standard
Sb	121	-0.014	ug/L	0.001	10	424	302	6	Standard
Sb	123	-0.013	ug/L	0.005	36	321	235	13	Standard
> Tb	159		ug/L			585557	630405	1	Standard
Tl	205	0.053	ug/L	0.002	4	737	2370	3	Standard
Pb	208	7.955	ug/L	0.202	2	627	310545	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 22:01:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	41445	0	Standard
	Cl	37		ug/L			4386158	4264986	1	Standard
>	Sc	45		ug/L			445918	560235	1	Standard
	Al	27	9461.897	ug/L	128.375	1	2877	230682315	0	Standard
	V	51	28.121	ug/L	0.722	2	4130	616985	1	Standard
	V-1	51	28.104	ug/L	0.758	2	351	615579	1	Standard
	Cr	52	12.968	ug/L	0.185	1	12311	253713	1	Standard
	Cr	53	13.215	ug/L	0.180	1	182	28219	0	Standard
>	Ge	72		ug/L			27896	26437	1	KED
	Ni	60	12.152	ug/L	0.342	2	6	10631	3	KED
	Ni	62	12.893	ug/L	0.492	3	12	1796	3	KED
	Cu	63	30.989	ug/L	0.447	1	41	78543	1	KED
	Cu	65	31.248	ug/L	0.759	2	17	39010	2	KED
	Zn	66	57.554	ug/L	0.809	1	31	20742	1	KED
	Zn	67	57.735	ug/L	1.457	2	5	3357	3	KED
	As	75	6.032	ug/L	0.171	2	6	1070	2	KED
	Se	78	0.639	ug/L	0.204	31	15	27	16	KED
	Y	89		ug/L			256256	452364	1	Standard
	Kr	83		ug/L			59	85	11	Standard
>	In-1	115		ug/L			8098	7658	1	KED
	Cd	111	0.181	ug/L	0.031	17	3	42	16	KED
	Cd	114	0.191	ug/L	0.047	24	2	102	23	KED
>	In	115		ug/L			361922	368528	1	Standard
	Ag	107	0.148	ug/L	0.007	4	55	1860	6	Standard
	Sb	121	-0.021	ug/L	0.003	13	424	229	11	Standard
	Sb	123	-0.019	ug/L	0.002	9	321	189	5	Standard
>	Tb	159		ug/L			585557	622986	0	Standard
	Tl	205	0.060	ug/L	0.003	5	737	2558	3	Standard
	Pb	208	13.280	ug/L	0.220	1	627	512044	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-12
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 22:06:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	38676	1	Standard
	Cl	37		ug/L			4386158	4322461	0	Standard
>	Sc	45		ug/L			445918	554327	0	Standard
	Al	27	8054.467	ug/L	204.576	2	2877	194330755	2	Standard
	V	51	25.782	ug/L	0.166	0	4130	560218	0	Standard
	V-1	51	25.745	ug/L	0.097	0	351	558094	0	Standard
	Cr	52	10.384	ug/L	0.135	1	12311	204063	0	Standard
	Cr	53	10.569	ug/L	0.135	1	182	22379	1	Standard
>	Ge	72		ug/L			27896	27681	0	KED
	Ni	60	9.866	ug/L	0.225	2	6	9037	1	KED
	Ni	62	10.183	ug/L	0.454	4	12	1488	3	KED
	Cu	63	17.209	ug/L	0.102	0	41	45686	0	KED
	Cu	65	17.158	ug/L	0.277	1	17	22434	1	KED
	Zn	66	43.702	ug/L	0.395	0	31	16498	0	KED
	Zn	67	43.378	ug/L	1.177	2	5	2642	1	KED
	As	75	4.466	ug/L	0.191	4	6	831	3	KED
	Se	78	0.567	ug/L	0.135	23	15	27	11	KED
	Y	89		ug/L			256256	438744	1	Standard
	Kr	83		ug/L			59	74	21	Standard
>	In-1	115		ug/L			8098	7637	3	KED
	Cd	111	0.139	ug/L	0.010	7	3	33	9	KED
	Cd	114	0.141	ug/L	0.007	5	2	76	7	KED
>	In	115		ug/L			361922	373939	1	Standard
	Ag	107	0.074	ug/L	0.001	1	55	968	0	Standard
	Sb	121	-0.023	ug/L	0.004	15	424	218	15	Standard
	Sb	123	-0.023	ug/L	0.002	6	321	160	6	Standard
>	Tb	159		ug/L			585557	627849	2	Standard
	Tl	205	0.047	ug/L	0.002	3	737	2186	2	Standard
	Pb	208	6.610	ug/L	0.202	3	627	257056	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 22:11:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	37485	1	Standard
Cl	37		ug/L			4386158	4180563	2	Standard
> Sc	45		ug/L			445918	560503	5	Standard
Al	27	10367.021	ug/L	552.657	5	2877	252424298	0	Standard
V	51	31.284	ug/L	0.993	3	4130	685483	2	Standard
V-1	51	31.309	ug/L	1.040	3	351	685392	2	Standard
Cr	52	19.981	ug/L	0.609	3	12311	382360	2	Standard
Cr	53	20.292	ug/L	0.782	3	182	43177	1	Standard
> Ge	72		ug/L			27896	27034	0	KED
Ni	60	13.048	ug/L	0.265	2	6	11672	2	KED
Ni	62	13.265	ug/L	0.235	1	12	1890	1	KED
Cu	63	29.760	ug/L	0.441	1	41	77137	1	KED
Cu	65	30.224	ug/L	0.870	2	17	38582	2	KED
Zn	66	71.558	ug/L	0.972	1	31	26366	1	KED
Zn	67	70.425	ug/L	1.119	1	5	4186	1	KED
As	75	6.784	ug/L	0.066	0	6	1230	0	KED
Se	78	0.860	ug/L	0.245	28	15	32	15	KED
Y	89		ug/L			256256	460025	2	Standard
Kr	83		ug/L			59	81	28	Standard
> In-1	115		ug/L			8098	7654	0	KED
Cd	111	0.541	ug/L	0.038	7	3	121	6	KED
Cd	114	0.535	ug/L	0.074	13	2	283	12	KED
> In	115		ug/L			361922	363310	4	Standard
Ag	107	0.504	ug/L	0.025	4	55	6093	5	Standard
Sb	121	-0.020	ug/L	0.000	2	424	238	4	Standard
Sb	123	-0.020	ug/L	0.004	20	321	181	16	Standard
> Tb	159		ug/L			585557	613309	5	Standard
Tl	205	0.056	ug/L	0.004	7	737	2407	3	Standard
Pb	208	38.955	ug/L	2.340	6	627	1474047	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-15
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 22:16:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	40482	3	Standard
Cl	37		ug/L			4386158	4234693	1	Standard
> Sc	45		ug/L			445918	566394	1	Standard
Al	27	9128.926	ug/L	240.667	2	2877	224997939	1	Standard
V	51	27.193	ug/L	0.082	0	4130	603456	1	Standard
V-1	51	27.143	ug/L	0.114	0	351	601193	1	Standard
Cr	52	11.724	ug/L	0.261	2	12311	233361	1	Standard
Cr	53	11.869	ug/L	0.331	2	182	25646	1	Standard
> Ge	72		ug/L			27896	26749	1	KED
Ni	60	11.029	ug/L	0.063	0	6	9762	0	KED
Ni	62	11.497	ug/L	0.612	5	12	1622	5	KED
Cu	63	23.705	ug/L	0.401	1	41	60800	1	KED
Cu	65	23.841	ug/L	0.268	1	17	30118	0	KED
Zn	66	47.747	ug/L	0.377	0	31	17415	0	KED
Zn	67	45.817	ug/L	2.114	4	5	2696	3	KED
As	75	4.359	ug/L	0.036	0	6	784	0	KED
Se	78	0.566	ug/L	0.280	49	15	26	21	KED
Y	89		ug/L			256256	453825	2	Standard
Kr	83		ug/L			59	73	18	Standard
> In-1	115		ug/L			8098	7624	0	KED
Cd	111	0.151	ug/L	0.031	20	3	36	18	KED
Cd	114	0.120	ug/L	0.021	17	2	65	16	KED
> In	115		ug/L			361922	369323	2	Standard
Ag	107	0.108	ug/L	0.003	3	55	1370	1	Standard
Sb	121	-0.027	ug/L	0.003	12	424	176	16	Standard
Sb	123	-0.027	ug/L	0.003	9	321	130	16	Standard
> Tb	159		ug/L			585557	623554	1	Standard
Tl	205	0.056	ug/L	0.004	7	737	2431	3	Standard
Pb	208	9.837	ug/L	0.219	2	627	379711	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-14
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, March 30, 2023 22:21:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	35004	1	Standard
	Cl	**37**		ug/L			4386158	4302414	1	Standard
>	**Sc**	**45**		ug/L			445918	510917	1	Standard
	Al	**27**	**4981.809**	ug/L	111.095	2	2877	110754425	0	Standard
	V	**51**	**24.308**	ug/L	0.860	3	4130	486915	1	Standard
	V-1	**51**	**24.205**	ug/L	0.881	3	351	483462	2	Standard
	Cr	**52**	**7.636**	ug/L	0.150	1	12311	142016	0	Standard
	Cr	**53**	**7.629**	ug/L	0.281	3	182	14943	2	Standard
>	**Ge**	**72**		ug/L			27896	26862	1	KED
	Ni	**60**	**5.506**	ug/L	0.214	3	6	4896	2	KED
	Ni	**62**	**5.743**	ug/L	0.211	3	12	819	2	KED
	Cu	**63**	**8.229**	ug/L	0.100	1	41	21218	0	KED
	Cu	**65**	**8.415**	ug/L	0.109	1	17	10687	1	KED
	Zn	**66**	**24.132**	ug/L	0.666	2	31	8852	1	KED
	Zn	**67**	**24.600**	ug/L	0.970	3	5	1456	3	KED
	As	**75**	**3.524**	ug/L	0.032	0	6	638	0	KED
	Se	**78**	**0.393**	ug/L	0.197	50	15	22	19	KED
	Y	**89**		ug/L			256256	397015	2	Standard
	Kr	**83**		ug/L			59	62	5	Standard
>	**In-1**	**115**		ug/L			8098	7502	0	KED
	Cd	**111**	**0.025**	ug/L	0.009	35	3	8	22	KED
	Cd	**114**	**0.019**	ug/L	0.011	58	2	11	47	KED
>	**In**	**115**		ug/L			361922	368361	0	Standard
	Ag	**107**	**0.028**	ug/L	0.002	8	55	396	6	Standard
	Sb	**121**	**-0.024**	ug/L	0.000	1	424	201	1	Standard
	Sb	**123**	**-0.027**	ug/L	0.001	5	321	130	8	Standard
>	**Tb**	**159**		ug/L			585557	621185	1	Standard
	Tl	**205**	**0.016**	ug/L	0.002	15	737	1245	5	Standard
	Pb	**208**	**6.275**	ug/L	0.157	2	627	241554	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 22:25:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	24357	4	Standard
	Cl	**37**		ug/L			4386158	4217978	0	Standard
⎡>	**Sc**	**45**		ug/L			445918	448369	2	Standard
⎢	**Al**	**27**	**0.123**	ug/L	0.093	75	2877	5300	34	Standard
⎢	**V**	**51**	**-0.005**	ug/L	0.007	139	4130	4067	0	Standard
⎢	**V-1**	**51**	**-0.008**	ug/L	0.001	11	351	212	5	Standard
⎢	**Cr**	**52**	**-0.020**	ug/L	0.018	91	12311	12082	0	Standard
⎣	**Cr**	**53**	**-0.030**	ug/L	0.002	6	182	132	4	Standard
⎡>	**Ge**	**72**		ug/L			27896	25844	1	KED
⎢	**Ni**	**60**	**0.013**	ug/L	0.003	23	6	17	16	KED
⎢	**Ni**	**62**	**-0.008**	ug/L	0.029	382	12	10	39	KED
⎢	**Cu**	**63**	**-0.002**	ug/L	0.006	336	41	34	43	KED
⎢	**Cu**	**65**	**0.004**	ug/L	0.006	152	17	21	35	KED
⎢	**Zn**	**66**	**0.003**	ug/L	0.026	849	31	29	29	KED
⎢	**Zn**	**67**	**0.040**	ug/L	0.088	217	5	7	66	KED
⎢	**As**	**75**	**0.003**	ug/L	0.007	276	6	6	20	KED
⎣	**Se**	**78**	**0.024**	ug/L	0.156	659	15	14	21	KED
	Y	**89**		ug/L			256256	250950	1	Standard
	Kr	**83**		ug/L			59	52	22	Standard
⎡>	**In-1**	**115**		ug/L			8098	7426	2	KED
⎢	**Cd**	**111**	**0.006**	ug/L	0.011	190	3	4	53	KED
⎣	**Cd**	**114**	**-0.005**	ug/L	0.000	2	2	0	34	KED
⎡>	**In**	**115**		ug/L			361922	358354	1	Standard
⎢	**Ag**	**107**	**-0.003**	ug/L	0.000	2	55	24	4	Standard
⎢	**Sb**	**121**	**-0.039**	ug/L	0.001	2	424	57	14	Standard
⎣	**Sb**	**123**	**-0.038**	ug/L	0.000	0	321	52	1	Standard
⎡>	**Tb**	**159**		ug/L			585557	569911	2	Standard
⎢	**Tl**	**205**	**0.000**	ug/L	0.001	451	737	724	2	Standard
⎣	**Pb**	**208**	**-0.008**	ug/L	0.001	11	627	314	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 22:30:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	23710	2	Standard
	Cl	**37**		ug/L			4386158	4312111	1	Standard
⌈>	**Sc**	**45**		ug/L			445918	468405	1	Standard
|	**Al**	**27**	**4949.664**	ug/L	62.541	1	2877	100906898	1	Standard
|	**V**	**51**	**50.308**	ug/L	0.501	0	4130	919545	0	Standard
|	**V-1**	**51**	**50.550**	ug/L	0.644	1	351	925548	1	Standard
|	**Cr**	**52**	**49.406**	ug/L	0.558	1	12311	771786	0	Standard
⌊	**Cr**	**53**	**50.223**	ug/L	1.021	2	182	89131	1	Standard
⌈>	**Ge**	**72**		ug/L			27896	26098	6	KED
|	**Ni**	**60**	**51.034**	ug/L	2.227	4	6	43975	1	KED
|	**Ni**	**62**	**51.689**	ug/L	2.354	4	12	7065	2	KED
|	**Cu**	**63**	**51.532**	ug/L	3.032	5	41	128604	0	KED
|	**Cu**	**65**	**51.878**	ug/L	2.827	5	17	63786	0	KED
|	**Zn**	**66**	**51.144**	ug/L	2.259	4	31	18167	1	KED
|	**Zn**	**67**	**52.436**	ug/L	2.220	4	5	3005	1	KED
|	**As**	**75**	**51.083**	ug/L	2.291	4	6	8893	1	KED
⌊	**Se**	**78**	**49.242**	ug/L	1.256	2	15	1004	3	KED
	Y	**89**		ug/L			256256	264556	2	Standard
	Kr	**83**		ug/L			59	66	15	Standard
⌈>	**In-1**	**115**		ug/L			8098	7598	2	KED
|	**Cd**	**111**	**51.187**	ug/L	2.252	4	3	11106	1	KED
⌊	**Cd**	**114**	**51.108**	ug/L	1.920	3	2	26689	1	KED
⌈>	**In**	**115**		ug/L			361922	364145	1	Standard
|	**Ag**	**107**	**49.792**	ug/L	0.753	1	55	597867	1	Standard
|	**Sb**	**121**	**50.099**	ug/L	0.496	0	424	470098	0	Standard
⌊	**Sb**	**123**	**50.864**	ug/L	1.033	2	321	363618	0	Standard
⌈>	**Tb**	**159**		ug/L			585557	593381	1	Standard
|	**Tl**	**205**	**50.686**	ug/L	1.567	3	737	1429884	1	Standard
⌊	**Pb**	**208**	**51.184**	ug/L	1.502	2	627	1877253	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 22:38:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	22981	1	Standard
	Cl	**37**		ug/L			4386158	4194833	0	Standard
⎡>	**Sc**	**45**		ug/L			445918	450638	1	Standard
⎢	**Al**	**27**	**0.094**	ug/L	0.008	8	2877	4756	2	Standard
⎢	**V**	**51**	**-0.010**	ug/L	0.003	26	4130	4000	0	Standard
⎢	**V-1**	**51**	**-0.008**	ug/L	0.000	4	351	207	2	Standard
⎢	**Cr**	**52**	**-0.029**	ug/L	0.012	43	12311	12019	0	Standard
⎣	**Cr**	**53**	**-0.023**	ug/L	0.005	23	182	145	5	Standard
⎡>	**Ge**	**72**		ug/L			27896	26126	2	KED
⎢	**Ni**	**60**	**0.015**	ug/L	0.007	48	6	19	30	KED
⎢	**Ni**	**62**	**-0.004**	ug/L	0.033	800	12	10	44	KED
⎢	**Cu**	**63**	**0.010**	ug/L	0.004	38	41	64	14	KED
⎢	**Cu**	**65**	**0.014**	ug/L	0.004	27	17	33	11	KED
⎢	**Zn**	**66**	**0.050**	ug/L	0.014	27	31	46	12	KED
⎢	**Zn**	**67**	**0.115**	ug/L	0.151	131	5	12	72	KED
⎢	**As**	**75**	**-0.005**	ug/L	0.006	121	6	4	20	KED
⎣	**Se**	**78**	**0.080**	ug/L	0.093	117	15	15	9	KED
	Y	**89**		ug/L			256256	251555	1	Standard
	Kr	**83**		ug/L			59	52	7	Standard
⎡>	**In-1**	**115**		ug/L			8098	7301	0	KED
⎢	**Cd**	**111**	**-0.004**	ug/L	0.005	119	3	2	49	KED
⎣	**Cd**	**114**	**0.007**	ug/L	0.006	94	2	5	57	KED
⎡>	**In**	**115**		ug/L			361922	358208	1	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.000	19	55	63	3	Standard
⎢	**Sb**	**121**	**0.079**	ug/L	0.005	6	424	1153	3	Standard
⎣	**Sb**	**123**	**0.082**	ug/L	0.005	6	321	897	4	Standard
⎡>	**Tb**	**159**		ug/L			585557	564124	1	Standard
⎢	**Tl**	**205**	**0.001**	ug/L	0.001	140	737	737	4	Standard
⎣	**Pb**	**208**	**0.006**	ug/L	0.001	17	627	808	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0819-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 22:43:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	30308	1	Standard
	Cl	37		ug/L			4386158	4269795	1	Standard
>	Sc	45		ug/L			445918	457660	2	Standard
	Al	27	0.918	ug/L	0.008	0	2877	21231	1	Standard
	V	51	0.004	ug/L	0.002	45	4130	4307	1	Standard
	V-1	51	-0.005	ug/L	0.000	3	351	275	2	Standard
	Cr	52	0.021	ug/L	0.017	76	12311	12955	0	Standard
	Cr	53	-0.007	ug/L	0.010	138	182	174	8	Standard
>	Ge	72		ug/L			27896	26286	1	KED
	Ni	60	0.006	ug/L	0.002	37	6	12	18	KED
	Ni	62	-0.050	ug/L	0.008	15	12	4	24	KED
	Cu	63	0.006	ug/L	0.006	98	41	54	26	KED
	Cu	65	0.004	ug/L	0.002	48	17	21	10	KED
	Zn	66	0.037	ug/L	0.026	69	31	42	22	KED
	Zn	67	0.050	ug/L	0.115	231	5	8	81	KED
	As	75	-0.007	ug/L	0.009	126	6	4	33	KED
	Se	78	-0.122	ug/L	0.039	32	15	11	7	KED
	Y	89		ug/L			256256	256598	1	Standard
	Kr	83		ug/L			59	54	21	Standard
>	In-1	115		ug/L			8098	7473	1	KED
	Cd	111	-0.008	ug/L	0.005	67	3	1	69	KED
	Cd	114	-0.002	ug/L	0.002	111	2	1	110	KED
>	In	115		ug/L			361922	364216	0	Standard
	Ag	107	-0.001	ug/L	0.000	68	55	47	12	Standard
	Sb	121	-0.001	ug/L	0.001	182	424	420	2	Standard
	Sb	123	0.004	ug/L	0.001	28	321	351	2	Standard
>	Tb	159		ug/L			585557	575337	1	Standard
	Tl	205	0.002	ug/L	0.001	47	737	787	3	Standard
	Pb	208	-0.013	ug/L	0.000	1	627	140	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0819-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 22:47:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	32101	0	Standard
	Cl	37		ug/L			4386158	4238809	1	Standard
>	Sc	45		ug/L			445918	455727	2	Standard
	Al	27	0.935	ug/L	0.038	4	2877	21496	6	Standard
	V	51	25.539	ug/L	0.237	0	4130	456200	1	Standard
	V-1	51	25.582	ug/L	0.325	1	351	455828	1	Standard
	Cr	52	25.404	ug/L	0.744	2	12311	392133	2	Standard
	Cr	53	25.551	ug/L	0.913	3	182	44192	2	Standard
>	Ge	72		ug/L			27896	26045	1	KED
	Ni	60	26.393	ug/L	0.584	2	6	22734	0	KED
	Ni	62	26.794	ug/L	0.644	2	12	3666	1	KED
	Cu	63	27.318	ug/L	0.423	1	41	68208	0	KED
	Cu	65	28.001	ug/L	0.611	2	17	34434	0	KED
	Zn	66	87.638	ug/L	2.501	2	31	31097	2	KED
	Zn	67	83.389	ug/L	2.500	2	5	4773	1	KED
	As	75	26.461	ug/L	0.522	1	6	4607	0	KED
	Se	78	82.776	ug/L	1.239	1	15	1677	0	KED
	Y	89		ug/L			256256	259592	0	Standard
	Kr	83		ug/L			59	67	9	Standard
>	In-1	115		ug/L			8098	7229	0	KED
	Cd	111	27.608	ug/L	0.551	1	3	5704	1	KED
	Cd	114	27.554	ug/L	0.787	2	2	13697	2	KED
>	In	115		ug/L			361922	367371	1	Standard
	Ag	107	26.087	ug/L	1.131	4	55	315924	3	Standard
	Sb	121	26.176	ug/L	0.718	2	424	247975	1	Standard
	Sb	123	26.530	ug/L	0.473	1	321	191516	1	Standard
>	Tb	159		ug/L			585557	574172	3	Standard
	Tl	205	26.752	ug/L	0.883	3	737	730449	1	Standard
	Pb	208	27.039	ug/L	0.926	3	627	959566	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0585-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, March 30, 2023 22:53:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	36772	1	Standard
	Cl	37		ug/L			4386158	4247552	0	Standard
>	Sc	45		ug/L			445918	496625	1	Standard
	Al	27	159.501	ug/L	3.328	2	2877	3449848	0	Standard
	V	51	0.834	ug/L	0.072	8	4130	20694	8	Standard
	V-1	51	1.025	ug/L	0.014	1	351	20277	1	Standard
	Cr	52	13.266	ug/L	0.103	0	12311	229741	1	Standard
	Cr	53	13.650	ug/L	0.356	2	182	25827	0	Standard
>	Ge	72		ug/L			27896	24261	0	KED
	Ni	60	0.700	ug/L	0.029	4	6	567	4	KED
	Ni	62	0.822	ug/L	0.156	18	12	114	17	KED
	Cu	63	3.821	ug/L	0.080	2	41	8919	1	KED
	Cu	65	3.798	ug/L	0.113	2	17	4364	3	KED
	Zn	66	2.933	ug/L	0.056	1	31	995	1	KED
	Zn	67	2.445	ug/L	0.035	1	5	135	1	KED
	As	75	0.076	ug/L	0.018	23	6	17	17	KED
	Se	78	0.217	ug/L	0.213	98	15	17	23	KED
	Y	89		ug/L			256256	265228	0	Standard
	Kr	83		ug/L			59	60	19	Standard
>	In-1	115		ug/L			8098	6890	1	KED
	Cd	111	-0.010	ug/L	0.005	46	3	0	100	KED
	Cd	114	0.004	ug/L	0.008	185	2	4	92	KED
>	In	115		ug/L			361922	346301	1	Standard
	Ag	107	0.003	ug/L	0.001	53	55	83	17	Standard
	Sb	121	0.148	ug/L	0.004	2	424	1722	2	Standard
	Sb	123	0.150	ug/L	0.008	5	321	1327	4	Standard
>	Tb	159		ug/L			585557	562373	1	Standard
	Tl	205	0.007	ug/L	0.001	8	737	899	1	Standard
	Pb	208	1.235	ug/L	0.027	2	627	43532	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0585-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, March 30, 2023 22:57:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	38467	2	Standard
	Cl	37		ug/L			4386158	4206791	1	Standard
>	Sc	45		ug/L			445918	514158	1	Standard
	Al	27	173.366	ug/L	2.956	1	2877	3882997	2	Standard
	V	51	0.909	ug/L	0.039	4	4130	22920	4	Standard
	V-1	51	1.047	ug/L	0.002	0	351	21446	1	Standard
	Cr	52	12.134	ug/L	0.146	1	12311	218776	0	Standard
	Cr	53	12.367	ug/L	0.253	2	182	24250	0	Standard
>	Ge	72		ug/L			27896	23690	1	KED
	Ni	60	1.198	ug/L	0.081	6	6	944	6	KED
	Ni	62	1.297	ug/L	0.351	27	12	170	24	KED
	Cu	63	3.591	ug/L	0.020	0	41	8187	1	KED
	Cu	65	3.618	ug/L	0.126	3	17	4059	2	KED
	Zn	66	3.889	ug/L	0.210	5	31	1280	3	KED
	Zn	67	3.494	ug/L	0.116	3	5	186	4	KED
	As	75	0.069	ug/L	0.019	27	6	16	19	KED
	Se	78	0.248	ug/L	0.137	55	15	17	13	KED
	Y	89		ug/L			256256	268037	0	Standard
	Kr	83		ug/L			59	52	33	Standard
>	In-1	115		ug/L			8098	6682	1	KED
	Cd	111	-0.005	ug/L	0.000	3	3	1		KED
	Cd	114	0.021	ug/L	0.006	30	2	11	26	KED
>	In	115		ug/L			361922	344417	0	Standard
	Ag	107	-0.000	ug/L	0.001	118	55	48	12	Standard
	Sb	121	0.154	ug/L	0.006	4	424	1770	3	Standard
	Sb	123	0.149	ug/L	0.002	1	321	1311	0	Standard
>	Tb	159		ug/L			585557	560331	1	Standard
	Tl	205	0.001	ug/L	0.002	118	737	743	7	Standard
	Pb	208	0.018	ug/L	0.001	6	627	1227	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0585-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, March 30, 2023 23:03:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	35012	1	Standard
	Cl	37		ug/L			4386158	4190103	1	Standard
>	Sc	45		ug/L			445918	516140	0	Standard
	Al	27	186.473	ug/L	0.996	0	2877	4192135	0	Standard
	V	51	0.967	ug/L	0.036	3	4130	24164	2	Standard
	V-1	51	1.075	ug/L	0.015	1	351	22084	0	Standard
	Cr	52	7.603	ug/L	0.075	0	12311	142928	0	Standard
	Cr	53	7.826	ug/L	0.069	0	182	15485	1	Standard
>	Ge	72		ug/L			27896	22903	3	KED
	Ni	60	1.070	ug/L	0.029	2	6	815	4	KED
	Ni	62	1.157	ug/L	0.117	10	12	148	8	KED
	Cu	63	1.817	ug/L	0.064	3	41	4018	0	KED
	Cu	65	1.867	ug/L	0.152	8	17	2028	4	KED
	Zn	66	5.564	ug/L	0.050	0	31	1760	2	KED
	Zn	67	5.434	ug/L	0.619	11	5	278	14	KED
	As	75	0.071	ug/L	0.028	39	6	15	25	KED
	Se	78	0.257	ug/L	0.175	68	15	16	16	KED
	Y	89		ug/L			256256	271163	3	Standard
	Kr	83		ug/L			59	55	12	Standard
>	In-1	115		ug/L			8098	6670	0	KED
	Cd	111	0.003	ug/L	0.010	321	3	3	56	KED
	Cd	114	0.008	ug/L	0.008	100	2	5	62	KED
>	In	115		ug/L			361922	342311	1	Standard
	Ag	107	0.002	ug/L	0.001	23	55	79	8	Standard
	Sb	121	0.111	ug/L	0.006	5	424	1383	5	Standard
	Sb	123	0.113	ug/L	0.004	3	321	1063	3	Standard
>	Tb	159		ug/L			585557	559320	3	Standard
	Tl	205	0.002	ug/L	0.003	141	737	764	9	Standard
	Pb	208	0.026	ug/L	0.001	3	627	1506	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0386-04RE1

Sample Dil Factor: 2

DEL

Comments:

Sample Date/Time: Thursday, March 30, 2023 23:09:24

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	37749	1	Standard
Cl	37		ug/L			4386158	4827954	0	Standard
> Sc	45		ug/L			445918	567193	1	Standard
Al	27	7.226	ug/L	0.091	1	2877	182026	1	Standard
V	51	1.273	ug/L	0.024	1	4130	33286	0	Standard
V-1	51	1.361	ug/L	0.027	1	351	30596	0	Standard
Cr	52	0.349	ug/L	0.013	3	12311	22152	1	Standard
Cr	53	0.658	ug/L	0.026	4	182	1642	3	Standard
> Ge	72		ug/L			27896	23390	0	KED
Ni	60	0.524	ug/L	0.033	6	6	411	5	KED
Ni	62	0.493	ug/L	0.012	2	12	70	2	KED
Cu	63	1.945	ug/L	0.046	2	41	4394	1	KED
Cu	65	1.847	ug/L	0.039	2	17	2054	2	KED
Zn	66	7.839	ug/L	0.086	1	31	2522	0	KED
Zn	67	7.116	ug/L	0.431	6	5	370	5	KED
As	75	1.872	ug/L	0.066	3	6	297	2	KED
Se	78	0.241	ug/L	0.103	42	15	17	11	KED
Y	89		ug/L			256256	275332	0	Standard
Kr	83		ug/L			59	38	30	Standard
> In-1	115		ug/L			8098	6942	2	KED
Cd	111	0.002	ug/L	0.014	586	3	3	83	KED
Cd	114	0.009	ug/L	0.009	99	2	6	64	KED
> In	115		ug/L			361922	346466	0	Standard
Ag	107	-0.000	ug/L	0.001	5263	55	53	10	Standard
Sb	121	0.019	ug/L	0.001	3	424	578	1	Standard
Sb	123	0.021	ug/L	0.011	50	321	448	16	Standard
> Tb	159		ug/L			585557	573106	1	Standard
Tl	205	0.002	ug/L	0.002	121	737	776	6	Standard
Pb	208	0.053	ug/L	0.002	3	627	2483	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0809-DUP2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, March 30, 2023 23:14:07

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	36952	1	Standard
Cl	37		ug/L			4386158	4838318	1	Standard
> Sc	45		ug/L			445918	566095	1	Standard
Al	27	6.998	ug/L	0.119	1	2877	176037	0	Standard
V	51	1.225	ug/L	0.013	1	4130	32175	1	Standard
V-1	51	1.314	ug/L	0.013	0	351	29517	0	Standard
Cr	52	0.355	ug/L	0.021	5	12311	22222	1	Standard
Cr	53	0.668	ug/L	0.018	2	182	1661	0	Standard
> Ge	72		ug/L			27896	23917	1	KED
Ni	60	0.528	ug/L	0.030	5	6	423	3	KED
Ni	62	0.535	ug/L	0.111	20	12	77	18	KED
Cu	63	1.533	ug/L	0.035	2	41	3549	3	KED
Cu	65	1.562	ug/L	0.041	2	17	1777	2	KED
Zn	66	7.049	ug/L	0.298	4	31	2320	2	KED
Zn	67	7.248	ug/L	0.280	3	5	385	2	KED
As	75	1.799	ug/L	0.018	1	6	292	1	KED
Se	78	0.170	ug/L	0.050	29	15	16	5	KED
Y	89		ug/L			256256	271206	2	Standard
Kr	83		ug/L			59	53	9	Standard
> In-1	115		ug/L			8098	6829	2	KED
Cd	111	-0.007	ug/L	0.006	85	3	1	69	KED
Cd	114	0.001	ug/L	0.002	313	2	2	38	KED
> In	115		ug/L			361922	347513	1	Standard
Ag	107	-0.000	ug/L	0.000	258	55	51	9	Standard
Sb	121	0.018	ug/L	0.006	36	424	568	9	Standard
Sb	123	0.020	ug/L	0.002	10	321	442	2	Standard
> Tb	159		ug/L			585557	579697	1	Standard
Tl	205	0.002	ug/L	0.003	172	737	780	9	Standard
Pb	208	0.041	ug/L	0.002	3	627	2092	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0809-MS2
Sample Dil Factor: 2
Comments:
DEL
Sample Date/Time: Thursday, March 30, 2023 23:19:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	35970	3	Standard
	Cl	**37**		ug/L			4386158	4822348	2	Standard
⌈>	**Sc**	**45**		ug/L			445918	555053	1	Standard
|	**Al**	**27**	**2048.846**	ug/L	23.839	1	2877	49493814	0	Standard
|	**V**	**51**	**12.098**	ug/L	0.004	0	4130	265951	0	Standard
|	**V-1**	**51**	**12.198**	ug/L	0.106	0	351	264997	0	Standard
|	**Cr**	**52**	**11.012**	ug/L	0.193	1	12311	215748	1	Standard
⌊	**Cr**	**53**	**11.364**	ug/L	0.305	2	182	24074	1	Standard
⌈>	**Ge**	**72**		ug/L			27896	24492	0	KED
|	**Ni**	**60**	**12.906**	ug/L	0.362	2	6	10458	2	KED
|	**Ni**	**62**	**13.200**	ug/L	0.508	3	12	1704	3	KED
|	**Cu**	**63**	**13.702**	ug/L	0.180	1	41	32193	0	KED
|	**Cu**	**65**	**13.606**	ug/L	0.125	0	17	15746	1	KED
|	**Zn**	**66**	**44.633**	ug/L	0.311	0	31	14909	1	KED
|	**Zn**	**67**	**42.852**	ug/L	0.925	2	5	2310	2	KED
|	**As**	**75**	**14.065**	ug/L	0.126	0	6	2306	0	KED
⌊	**Se**	**78**	**37.294**	ug/L	1.067	2	15	718	3	KED
	Y	**89**		ug/L			256256	272656	1	Standard
	Kr	**83**		ug/L			59	52	21	Standard
⌈>	**In-1**	**115**		ug/L			8098	6899	1	KED
|	**Cd**	**111**	**12.576**	ug/L	0.209	1	3	2481	2	KED
⌊	**Cd**	**114**	**12.617**	ug/L	0.280	2	2	5985	0	KED
⌈>	**In**	**115**		ug/L			361922	348371	0	Standard
|	**Ag**	**107**	**11.915**	ug/L	0.299	2	55	136910	2	Standard
|	**Sb**	**121**	**12.942**	ug/L	0.253	1	424	116489	1	Standard
⌊	**Sb**	**123**	**12.662**	ug/L	0.120	0	321	86848	0	Standard
⌈>	**Tb**	**159**		ug/L			585557	579250	1	Standard
|	**Tl**	**205**	**12.449**	ug/L	0.402	3	737	343387	1	Standard
⌊	**Pb**	**208**	**12.622**	ug/L	0.254	2	627	452426	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0809-MSD2
Sample Dil Factor: 2
Comments:
DEL
Sample Date/Time: Thursday, March 30, 2023 23:25:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	35544	1	Standard
	Cl	**37**		ug/L			4386158	4877040	1	Standard
>	**Sc**	**45**		ug/L			445918	555419	1	Standard
	Al	**27**	**2029.078**	ug/L	47.645	2	2877	49040941	0	Standard
	V	**51**	**12.038**	ug/L	0.029	0	4130	264843	1	Standard
	V-1	**51**	**12.099**	ug/L	0.047	0	351	263026	1	Standard
	Cr	**52**	**11.042**	ug/L	0.238	2	12311	216422	1	Standard
	Cr	**53**	**11.261**	ug/L	0.216	1	182	23874	0	Standard
>	**Ge**	**72**		ug/L			27896	24807	1	KED
	Ni	**60**	**13.042**	ug/L	0.412	3	6	10701	1	KED
	Ni	**62**	**13.216**	ug/L	0.136	1	12	1728	2	KED
	Cu	**63**	**13.969**	ug/L	0.313	2	41	33233	0	KED
	Cu	**65**	**13.895**	ug/L	0.409	2	17	16282	1	KED
	Zn	**66**	**44.715**	ug/L	1.784	3	31	15121	2	KED
	Zn	**67**	**44.304**	ug/L	0.180	0	5	2418	1	KED
	As	**75**	**14.196**	ug/L	0.320	2	6	2356	1	KED
	Se	**78**	**39.858**	ug/L	0.615	1	15	776	2	KED
	Y	**89**		ug/L			256256	266860	0	Standard
	Kr	**83**		ug/L			59	57	20	Standard
>	**In-1**	**115**		ug/L			8098	6940	0	KED
	Cd	**111**	**12.569**	ug/L	0.206	1	3	2495	1	KED
	Cd	**114**	**12.538**	ug/L	0.271	2	2	5985	2	KED
>	**In**	**115**		ug/L			361922	348426	0	Standard
	Ag	**107**	**11.956**	ug/L	0.077	0	55	137412	1	Standard
	Sb	**121**	**12.818**	ug/L	0.055	0	424	115397	0	Standard
	Sb	**123**	**12.846**	ug/L	0.232	1	321	88114	1	Standard
>	**Tb**	**159**		ug/L			585557	574108	1	Standard
	Tl	**205**	**12.705**	ug/L	0.266	2	737	347403	0	Standard
	Pb	**208**	**12.668**	ug/L	0.093	0	627	450130	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLC
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 23:30:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	25281	1	Standard
	Cl	**37**		ug/L			4386158	4299238	0	Standard
⎡>	**Sc**	**45**		ug/L			445918	458535	1	Standard
⎢	**Al**	**27**	**0.011**	ug/L	0.003	31	2877	3179	0	Standard
⎢	**V**	**51**	**-0.002**	ug/L	0.002	111	4130	4213	1	Standard
⎢	**V-1**	**51**	**-0.000**	ug/L	0.000	98	351	353	4	Standard
⎢	**Cr**	**52**	**-0.021**	ug/L	0.008	38	12311	12345	1	Standard
⎣	**Cr**	**53**	**-0.016**	ug/L	0.010	63	182	160	12	Standard
⎡>	**Ge**	**72**		ug/L			27896	25204	0	KED
⎢	**Ni**	**60**	**0.002**	ug/L	0.005	225	6	8	53	KED
⎢	**Ni**	**62**	**-0.044**	ug/L	0.030	68	12	5	78	KED
⎢	**Cu**	**63**	**0.004**	ug/L	0.002	45	41	46	8	KED
⎢	**Cu**	**65**	**0.005**	ug/L	0.002	41	17	21	10	KED
⎢	**Zn**	**66**	**-0.030**	ug/L	0.022	74	31	17	43	KED
⎢	**Zn**	**67**	**0.010**	ug/L	0.060	597	5	5	57	KED
⎢	**As**	**75**	**0.004**	ug/L	0.006	156	6	6	15	KED
⎣	**Se**	**78**	**-0.062**	ug/L	0.098	158	15	12	15	KED
	Y	**89**		ug/L			256256	252632	1	Standard
	Kr	**83**		ug/L			59	35	8	Standard
⎡>	**In-1**	**115**		ug/L			8098	7248	1	KED
⎢	**Cd**	**111**	**-0.004**	ug/L	0.012	259	3	2	107	KED
⎣	**Cd**	**114**	**0.005**	ug/L	0.006	107	2	4	60	KED
⎡>	**In**	**115**		ug/L			361922	356816	1	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.000	34	55	42	11	Standard
⎢	**Sb**	**121**	**-0.037**	ug/L	0.000	0	424	80	2	Standard
⎣	**Sb**	**123**	**-0.033**	ug/L	0.000	1	321	84	2	Standard
⎡>	**Tb**	**159**		ug/L			585557	563805	2	Standard
⎢	**Tl**	**205**	**0.003**	ug/L	0.001	27	737	795	0	Standard
⎣	**Pb**	**208**	**-0.010**	ug/L	0.001	6	627	259	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 23:35:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	23795	1	Standard
	Cl	**37**		ug/L			4386158	4273402	2	Standard
>	**Sc**	**45**		ug/L			445918	489387	1	Standard
	Al	**27**	**4776.804**	ug/L	82.071	1	2877	101727582	0	Standard
	V	**51**	**48.499**	ug/L	0.411	0	4130	926460	2	Standard
	V-1	**51**	**48.575**	ug/L	0.095	0	351	929343	1	Standard
	Cr	**52**	**47.532**	ug/L	0.899	1	12311	776212	0	Standard
	Cr	**53**	**47.805**	ug/L	1.527	3	182	88634	1	Standard
>	**Ge**	**72**		ug/L			27896	25980	1	KED
	Ni	**60**	**50.387**	ug/L	0.847	1	6	43293	1	KED
	Ni	**62**	**51.954**	ug/L	2.597	4	12	7081	4	KED
	Cu	**63**	**50.490**	ug/L	0.723	1	41	125720	0	KED
	Cu	**65**	**52.300**	ug/L	1.526	2	17	64136	1	KED
	Zn	**66**	**50.892**	ug/L	1.700	3	31	18024	2	KED
	Zn	**67**	**53.228**	ug/L	1.700	3	5	3041	2	KED
	As	**75**	**50.906**	ug/L	0.974	1	6	8836	0	KED
	Se	**78**	**50.114**	ug/L	1.776	3	15	1018	2	KED
	Y	**89**		ug/L			256256	272907	0	Standard
	Kr	**83**		ug/L			59	58	19	Standard
>	**In-1**	**115**		ug/L			8098	7002	11	KED
	Cd	**111**	**54.736**	ug/L	5.681	10	3	10868	2	KED
	Cd	**114**	**56.114**	ug/L	5.698	10	2	26814	1	KED
>	**In**	**115**		ug/L			361922	368110	0	Standard
	Ag	**107**	**49.311**	ug/L	1.186	2	55	598609	2	Standard
	Sb	**121**	**49.787**	ug/L	0.492	0	424	472302	0	Standard
	Sb	**123**	**49.518**	ug/L	0.935	1	321	357917	1	Standard
>	**Tb**	**159**		ug/L			585557	594213	3	Standard
	Tl	**205**	**50.642**	ug/L	2.077	4	737	1429969	1	Standard
	Pb	**208**	**51.080**	ug/L	2.067	4	627	1875172	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 23:42:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	23749	1	Standard
	Cl	**37**		ug/L			4386158	4222735	0	Standard
⎡>	**Sc**	**45**		ug/L			445918	453308	3	Standard
⎢	**Al**	**27**	**0.134**	ug/L	0.092	68	2877	5538	29	Standard
⎢	**V**	**51**	**-0.000**	ug/L	0.009	2049	4130	4187	0	Standard
⎢	**V-1**	**51**	**-0.004**	ug/L	0.001	29	351	292	3	Standard
⎢	**Cr**	**52**	**-0.016**	ug/L	0.029	179	12311	12263	1	Standard
⎣	**Cr**	**53**	**-0.027**	ug/L	0.002	8	182	140	1	Standard
⎡>	**Ge**	**72**		ug/L			27896	25371	0	KED
⎢	**Ni**	**60**	**0.011**	ug/L	0.010	93	6	15	54	KED
⎢	**Ni**	**62**	**-0.001**	ug/L	0.009	689	12	10	10	KED
⎢	**Cu**	**63**	**0.011**	ug/L	0.003	30	41	64	13	KED
⎢	**Cu**	**65**	**0.015**	ug/L	0.002	10	17	34	5	KED
⎢	**Zn**	**66**	**0.106**	ug/L	0.070	66	31	64	36	KED
⎢	**Zn**	**67**	**0.020**	ug/L	0.098	484	5	6	86	KED
⎢	**As**	**75**	**-0.002**	ug/L	0.005	201	6	5	15	KED
⎣	**Se**	**78**	**0.053**	ug/L	0.098	185	15	14	13	KED
	Y	**89**		ug/L			256256	259259	2	Standard
	Kr	**83**		ug/L			59	48	6	Standard
⎡>	**In-1**	**115**		ug/L			8098	7328	1	KED
⎢	**Cd**	**111**	**-0.003**	ug/L	0.005	185	3	2	43	KED
⎣	**Cd**	**114**	**0.002**	ug/L	0.004	241	2	3	69	KED
⎡>	**In**	**115**		ug/L			361922	359661	1	Standard
⎢	**Ag**	**107**	**0.004**	ug/L	0.002	56	55	103	26	Standard
⎢	**Sb**	**121**	**0.080**	ug/L	0.002	2	424	1167	2	Standard
⎣	**Sb**	**123**	**0.083**	ug/L	0.008	9	321	905	7	Standard
⎡>	**Tb**	**159**		ug/L			585557	554208	1	Standard
⎢	**Tl**	**205**	**0.004**	ug/L	0.001	15	737	791	3	Standard
⎣	**Pb**	**208**	**0.005**	ug/L	0.001	16	627	762	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0272-22
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 23:47:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	35671	2	Standard
	Cl	37		ug/L			4386158	4055980	2	Standard
>	Sc	45		ug/L			445918	605987	1	Standard
	Al	27	69.136	ug/L	0.897	1	2877	1827375	2	Standard
	V	51	0.295	ug/L	0.012	4	4130	12561	1	Standard
	V-1	51	0.346	ug/L	0.005	1	351	8670	0	Standard
	Cr	52	0.055	ug/L	0.036	65	12311	17815	2	Standard
	Cr	53	0.227	ug/L	0.012	5	182	768	2	Standard
>	Ge	72		ug/L			27896	25498	2	KED
	Ni	60	0.603	ug/L	0.043	7	6	514	7	KED
	Ni	62	0.686	ug/L	0.079	11	12	102	12	KED
	Cu	63	5.630	ug/L	0.039	0	41	13794	1	KED
	Cu	65	5.738	ug/L	0.117	2	17	6922	2	KED
	Zn	66	7.095	ug/L	0.100	1	31	2491	1	KED
	Zn	67	8.636	ug/L	0.213	2	5	488	4	KED
	As	75	22.851	ug/L	0.189	0	6	3897	2	KED
	Se	78	0.019	ug/L	0.120	623	15	14	15	KED
	Y	89		ug/L			256256	276304	1	Standard
	Kr	83		ug/L			59	51	33	Standard
>	In-1	115		ug/L			8098	7614	2	KED
	Cd	111	0.027	ug/L	0.014	52	3	9	33	KED
	Cd	114	0.042	ug/L	0.006	13	2	24	13	KED
>	In	115		ug/L			361922	365250	0	Standard
	Ag	107	0.000	ug/L	0.001	154	55	62	14	Standard
	Sb	121	0.016	ug/L	0.000	2	424	575	0	Standard
	Sb	123	0.015	ug/L	0.004	26	321	432	6	Standard
>	Tb	159		ug/L			585557	589327	2	Standard
	Tl	205	0.004	ug/L	0.001	30	737	846	1	Standard
	Pb	208	0.348	ug/L	0.007	2	627	13316	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0716-DUP4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 23:52:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	36697	0	Standard
Cl	37		ug/L			4386158	4101746	1	Standard
> Sc	45		ug/L			445918	595357	0	Standard
Al	27	64.470	ug/L	2.347	3	2877	1673974	2	Standard
V	51	0.273	ug/L	0.007	2	4130	11820	0	Standard
V-1	51	0.327	ug/L	0.002	0	351	8085	1	Standard
Cr	52	0.031	ug/L	0.021	67	12311	17038	1	Standard
Cr	53	0.216	ug/L	0.006	2	182	730	2	Standard
> Ge	72		ug/L			27896	26263	2	KED
Ni	60	0.588	ug/L	0.061	10	6	517	10	KED
Ni	62	0.588	ug/L	0.076	13	12	92	9	KED
Cu	63	5.346	ug/L	0.198	3	41	13485	1	KED
Cu	65	5.400	ug/L	0.161	2	17	6709	2	KED
Zn	66	7.487	ug/L	0.224	2	31	2705	0	KED
Zn	67	8.915	ug/L	0.263	2	5	519	1	KED
As	75	22.018	ug/L	0.907	4	6	3866	3	KED
Se	78	0.009	ug/L	0.215	2386	15	14	28	KED
Y	89		ug/L			256256	270340	1	Standard
Kr	83		ug/L			59	57	23	Standard
> In-1	115		ug/L			8098	7494	2	KED
Cd	111	0.034	ug/L	0.028	83	3	10	56	KED
Cd	114	0.036	ug/L	0.017	46	2	20	40	KED
> In	115		ug/L			361922	362072	0	Standard
Ag	107	0.000	ug/L	0.001	453	55	59	24	Standard
Sb	121	-0.006	ug/L	0.002	40	424	368	6	Standard
Sb	123	-0.004	ug/L	0.002	53	321	291	5	Standard
> Tb	159		ug/L			585557	581281	1	Standard
Tl	205	0.003	ug/L	0.000	9	737	808	2	Standard
Pb	208	0.196	ug/L	0.007	3	627	7676	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0716-MS4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, March 30, 2023 23:57:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	36016	3	Standard
Cl	37		ug/L			4386158	4113560	2	Standard
> Sc	45		ug/L			445918	603737	1	Standard
Al	27	3917.641	ug/L	102.139	2	2877	102927758	2	Standard
V	51	20.201	ug/L	0.471	2	4130	479171	0	Standard
V-1	51	20.299	ug/L	0.463	2	351	479237	0	Standard
Cr	52	19.966	ug/L	0.656	3	12311	411835	1	Standard
Cr	53	20.293	ug/L	0.587	2	182	46558	1	Standard
> Ge	72		ug/L			27896	25848	1	KED
Ni	60	26.501	ug/L	0.165	0	6	22659	0	KED
Ni	62	26.718	ug/L	0.666	2	12	3628	1	KED
Cu	63	30.950	ug/L	0.858	2	41	76689	2	KED
Cu	65	31.057	ug/L	0.262	0	17	37910	1	KED
Zn	66	84.976	ug/L	1.918	2	31	29924	0	KED
Zn	67	81.893	ug/L	3.769	4	5	4652	3	KED
As	75	46.656	ug/L	0.542	1	6	8059	0	KED
Se	78	74.562	ug/L	0.735	0	15	1501	0	KED
Y	89		ug/L			256256	267882	2	Standard
Kr	83		ug/L			59	50	8	Standard
> In-1	115		ug/L			8098	7344	3	KED
Cd	111	24.807	ug/L	0.816	3	3	5204	1	KED
Cd	114	25.331	ug/L	0.644	2	2	12786	0	KED
> In	115		ug/L			361922	358637	0	Standard
Ag	107	24.808	ug/L	0.310	1	55	293406	1	Standard
Sb	121	25.630	ug/L	0.121	0	424	237085	0	Standard
Sb	123	25.459	ug/L	0.404	1	321	179441	1	Standard
> Tb	159		ug/L			585557	594217	2	Standard
Tl	205	25.303	ug/L	0.630	2	737	715231	0	Standard
Pb	208	25.814	ug/L	0.687	2	627	948404	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0716-MSD4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 00:02:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21586	36726	1	Standard
Cl	37		ug/L			4386158	4048988	0	Standard
Sc	45		ug/L			445918	598520	1	Standard
Al	27	3973.657	ug/L	22.723	0	2877	103511992	1	Standard
V	51	20.780	ug/L	0.373	1	4130	488596	1	Standard
V-1	51	20.834	ug/L	0.289	1	351	487734	1	Standard
Cr	52	20.189	ug/L	0.344	1	12311	412750	0	Standard
Cr	53	20.379	ug/L	0.121	0	182	46364	0	Standard
Ge	72		ug/L			27896	25601	0	KED
Ni	60	26.030	ug/L	0.349	1	6	22045	1	KED
Ni	62	26.332	ug/L	0.736	2	12	3542	2	KED
Cu	63	31.235	ug/L	0.228	0	41	76663	0	KED
Cu	65	30.946	ug/L	0.744	2	17	37413	2	KED
Zn	66	84.645	ug/L	1.893	2	31	29528	1	KED
Zn	67	86.358	ug/L	1.705	1	5	4860	2	KED
As	75	47.014	ug/L	0.212	0	6	8044	0	KED
Se	78	75.413	ug/L	1.800	2	15	1503	2	KED
Y	89		ug/L			256256	272928	3	Standard
Kr	83		ug/L			59	60	20	Standard
In-1	115		ug/L			8098	7431	0	KED
Cd	111	24.765	ug/L	1.019	4	3	5259	3	KED
Cd	114	25.075	ug/L	0.133	0	2	12814	0	KED
In	115		ug/L			361922	360973	0	Standard
Ag	107	24.678	ug/L	0.690	2	55	293739	2	Standard
Sb	121	25.261	ug/L	0.209	0	424	235203	1	Standard
Sb	123	25.091	ug/L	0.172	0	321	177998	0	Standard
Tb	159		ug/L			585557	583041	0	Standard
Tl	205	25.657	ug/L	0.040	0	737	711840	0	Standard
Pb	208	26.324	ug/L	0.181	0	627	949276	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLD
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 00:07:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	24179	1	Standard
	Cl	**37**		ug/L			4386158	4085606	1	Standard
⎡>	**Sc**	**45**		ug/L			445918	459902	1	Standard
⎢	**Al**	**27**	**0.060**	ug/L	0.017	28	2877	4174	7	Standard
⎢	**V**	**51**	**-0.014**	ug/L	0.007	53	4130	4011	2	Standard
⎢	**V-1**	**51**	**-0.002**	ug/L	0.000	19	351	335	2	Standard
⎢	**Cr**	**52**	**-0.054**	ug/L	0.021	39	12311	11881	1	Standard
⎣	**Cr**	**53**	**-0.012**	ug/L	0.015	120	182	166	15	Standard
⎡>	**Ge**	**72**		ug/L			27896	25370	1	KED
⎢	**Ni**	**60**	**0.004**	ug/L	0.007	180	6	9	60	KED
⎢	**Ni**	**62**	**-0.039**	ug/L	0.038	97	12	5	88	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.006	265	41	43	33	KED
⎢	**Cu**	**65**	**0.006**	ug/L	0.004	74	17	22	22	KED
⎢	**Zn**	**66**	**0.006**	ug/L	0.013	208	31	30	16	KED
⎢	**Zn**	**67**	**0.021**	ug/L	0.039	189	5	6	34	KED
⎢	**As**	**75**	**-0.001**	ug/L	0.004	263	6	5	13	KED
⎣	**Se**	**78**	**0.006**	ug/L	0.070	1096	15	13	8	KED
	Y	**89**		ug/L			256256	252664	2	Standard
	Kr	**83**		ug/L			59	47	12	Standard
⎡>	**In-1**	**115**		ug/L			8098	7166	0	KED
⎢	**Cd**	**111**	**-0.004**	ug/L	0.007	166	3	2	65	KED
⎣	**Cd**	**114**	**0.006**	ug/L	0.011	191	2	5	109	KED
⎡>	**In**	**115**		ug/L			361922	354054	1	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.001	142	55	66	24	Standard
⎢	**Sb**	**121**	**-0.026**	ug/L	0.003	12	424	174	15	Standard
⎣	**Sb**	**123**	**-0.019**	ug/L	0.000	1	321	182	2	Standard
⎡>	**Tb**	**159**		ug/L			585557	555690	3	Standard
⎢	**Tl**	**205**	**0.002**	ug/L	0.001	53	737	746	0	Standard
⎣	**Pb**	**208**	**-0.010**	ug/L	0.001	8	627	250	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0664-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 00:11:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	32941	1	Standard
	Cl	37		ug/L			4386158	4210163	0	Standard
>	Sc	45		ug/L			445918	506629	1	Standard
	Al	27	145.954	ug/L	4.239	2	2877	3220543	1	Standard
	V	51	0.720	ug/L	0.068	9	4130	18849	5	Standard
	V-1	51	0.891	ug/L	0.022	2	351	18032	0	Standard
	Cr	52	8.703	ug/L	0.242	2	12311	158540	0	Standard
	Cr	53	9.108	ug/L	0.093	1	182	17654	0	Standard
>	Ge	72		ug/L			27896	23758	1	KED
	Ni	60	0.918	ug/L	0.048	5	6	727	5	KED
	Ni	62	1.065	ug/L	0.041	3	12	142	4	KED
	Cu	63	1.867	ug/L	0.048	2	41	4286	1	KED
	Cu	65	1.843	ug/L	0.043	2	17	2082	3	KED
	Zn	66	4.553	ug/L	0.037	0	31	1499	0	KED
	Zn	67	4.373	ug/L	0.437	9	5	233	9	KED
	As	75	0.054	ug/L	0.025	46	6	13	29	KED
	Se	78	0.107	ug/L	0.174	162	15	14	20	KED
	Y	89		ug/L			256256	266273	0	Standard
	Kr	83		ug/L			59	51	18	Standard
>	In-1	115		ug/L			8098	6967	1	KED
	Cd	111	-0.001	ug/L	0.005	689	3	2	33	KED
	Cd	114	0.003	ug/L	0.004	131	2	3	54	KED
>	In	115		ug/L			361922	348419	1	Standard
	Ag	107	0.001	ug/L	0.001	97	55	64	15	Standard
	Sb	121	0.077	ug/L	0.004	4	424	1102	1	Standard
	Sb	123	0.083	ug/L	0.007	7	321	878	3	Standard
>	Tb	159		ug/L			585557	563379	3	Standard
	Tl	205	0.002	ug/L	0.001	67	737	763	2	Standard
	Pb	208	0.009	ug/L	0.002	22	627	926	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0664-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 00:16:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	34198	0	Standard
	Cl	37		ug/L			4386158	4221585	1	Standard
>	Sc	45		ug/L			445918	507532	1	Standard
	Al	27	134.704	ug/L	5.353	3	2877	2977622	2	Standard
	V	51	0.749	ug/L	0.048	6	4130	19451	3	Standard
	V-1	51	0.893	ug/L	0.025	2	351	18106	1	Standard
	Cr	52	8.017	ug/L	0.101	1	12311	147439	0	Standard
	Cr	53	8.349	ug/L	0.030	0	182	16230	1	Standard
>	Ge	72		ug/L			27896	23409	1	KED
	Ni	60	0.771	ug/L	0.043	5	6	602	4	KED
	Ni	62	0.735	ug/L	0.062	8	12	100	8	KED
	Cu	63	2.604	ug/L	0.045	1	41	5878	3	KED
	Cu	65	2.680	ug/L	0.100	3	17	2974	2	KED
	Zn	66	4.549	ug/L	0.105	2	31	1475	1	KED
	Zn	67	4.640	ug/L	0.601	12	5	243	11	KED
	As	75	0.043	ug/L	0.014	32	6	11	17	KED
	Se	78	-0.005	ug/L	0.175	3593	15	12	24	KED
	Y	89		ug/L			256256	265429	1	Standard
	Kr	83		ug/L			59	62	27	Standard
>	In-1	115		ug/L			8098	6830	2	KED
	Cd	111	-0.000	ug/L	0.009	2217	3	2	57	KED
	Cd	114	0.005	ug/L	0.007	138	2	4	69	KED
>	In	115		ug/L			361922	349367	1	Standard
	Ag	107	0.000	ug/L	0.001	346	55	57	22	Standard
	Sb	121	0.064	ug/L	0.004	6	424	986	4	Standard
	Sb	123	0.065	ug/L	0.008	11	321	759	7	Standard
>	Tb	159		ug/L			585557	558272	1	Standard
	Tl	205	0.003	ug/L	0.003	78	737	788	7	Standard
	Pb	208	0.005	ug/L	0.001	29	627	764	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0664-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 00:21:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	33598	0	Standard
	Cl	37		ug/L			4386158	4128994	1	Standard
>	Sc	45		ug/L			445918	508030	1	Standard
	Al	27	143.136	ug/L	0.495	0	2877	3167992	0	Standard
	V	51	0.811	ug/L	0.023	2	4130	20700	2	Standard
	V-1	51	0.906	ug/L	0.023	2	351	18379	1	Standard
	Cr	52	10.425	ug/L	0.049	0	12311	187712	1	Standard
	Cr	53	10.548	ug/L	0.029	0	182	20469	0	Standard
>	Ge	72		ug/L			27896	23145	1	KED
	Ni	60	0.557	ug/L	0.053	9	6	431	9	KED
	Ni	62	0.604	ug/L	0.126	20	12	83	17	KED
	Cu	63	2.620	ug/L	0.043	1	41	5844	2	KED
	Cu	65	2.651	ug/L	0.037	1	17	2910	2	KED
	Zn	66	4.719	ug/L	0.137	2	31	1512	2	KED
	Zn	67	4.530	ug/L	0.471	10	5	234	9	KED
	As	75	0.031	ug/L	0.013	40	6	10	20	KED
	Se	78	-0.050	ug/L	0.060	120	15	11	8	KED
	Y	89		ug/L			256256	266187	1	Standard
	Kr	83		ug/L			59	53	22	Standard
>	In-1	115		ug/L			8098	6748	0	KED
	Cd	111	-0.007	ug/L	0.003	41	3	1	34	KED
	Cd	114	0.003	ug/L	0.004	142	2	3	59	KED
>	In	115		ug/L			361922	340270	1	Standard
	Ag	107	-0.001	ug/L	0.001	100	55	45	14	Standard
	Sb	121	0.065	ug/L	0.007	11	424	970	7	Standard
	Sb	123	0.059	ug/L	0.008	12	321	698	6	Standard
>	Tb	159		ug/L			585557	550210	1	Standard
	Tl	205	0.004	ug/L	0.001	23	737	804	2	Standard
	Pb	208	0.003	ug/L	0.001	22	627	707	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0664-04
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 00:27:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21586	32796	3	Standard
	Cl	37		ug/L			4386158	4144075	1	Standard
>	Sc	45		ug/L			445918	509199	0	Standard
	Al	27	106.219	ug/L	2.087	1	2877	2357172	1	Standard
	V	51	0.720	ug/L	0.056	7	4130	18956	5	Standard
	V-1	51	0.734	ug/L	0.012	1	351	15001	1	Standard
	Cr	52	5.946	ug/L	0.022	0	12311	113348	0	Standard
	Cr	53	5.886	ug/L	0.165	2	182	11543	3	Standard
>	Ge	72		ug/L			27896	23150	0	KED
	Ni	60	0.367	ug/L	0.028	7	6	286	8	KED
	Ni	62	0.415	ug/L	0.053	12	12	60	9	KED
	Cu	63	1.937	ug/L	0.038	1	41	4330	2	KED
	Cu	65	1.979	ug/L	0.016	0	17	2177	1	KED
	Zn	66	2.533	ug/L	0.018	0	31	824	1	KED
	Zn	67	2.507	ug/L	0.346	13	5	132	12	KED
	As	75	0.050	ug/L	0.018	36	6	12	22	KED
	Se	78	-0.050	ug/L	0.028	56	15	11	4	KED
	Y	89		ug/L			256256	260798	1	Standard
	Kr	83		ug/L			59	50	13	Standard
>	In-1	115		ug/L			8098	6596	2	KED
	Cd	111	0.007	ug/L	0.008	111	3	4	35	KED
	Cd	114	0.002	ug/L	0.005	233	2	2	76	KED
>	In	115		ug/L			361922	339731	1	Standard
	Ag	107	-0.000	ug/L	0.001	286	55	46	33	Standard
	Sb	121	0.081	ug/L	0.008	9	424	1106	6	Standard
	Sb	123	0.079	ug/L	0.004	4	321	828	3	Standard
>	Tb	159		ug/L			585557	553001	1	Standard
	Tl	205	0.004	ug/L	0.002	41	737	794	4	Standard
	Pb	208	-0.000	ug/L	0.000	778	627	591	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLE
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 00:32:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	25238	2	Standard
	Cl	**37**		ug/L			4386158	4245762	2	Standard
⎡>	**Sc**	**45**		ug/L			445918	487297	0	Standard
⎢	**Al**	**27**	**-0.009**	ug/L	0.015	159	2877	2945	10	Standard
⎢	**V**	**51**	**0.003**	ug/L	0.008	237	4130	4576	2	Standard
⎢	**V-1**	**51**	**-0.003**	ug/L	0.001	22	351	333	3	Standard
⎢	**Cr**	**52**	**0.011**	ug/L	0.020	183	12311	13629	2	Standard
⎣	**Cr**	**53**	**-0.009**	ug/L	0.006	71	182	183	6	Standard
⎡>	**Ge**	**72**		ug/L			27896	23962	1	KED
⎢	**Ni**	**60**	**0.005**	ug/L	0.006	114	6	10	47	KED
⎢	**Ni**	**62**	**-0.037**	ug/L	0.026	68	12	5	57	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.007	356	41	40	40	KED
⎢	**Cu**	**65**	**0.002**	ug/L	0.009	584	17	17	61	KED
⎢	**Zn**	**66**	**-0.022**	ug/L	0.004	20	31	19	5	KED
⎢	**Zn**	**67**	**-0.033**	ug/L	0.043	132	5	3	69	KED
⎢	**As**	**75**	**-0.009**	ug/L	0.008	80	6	3	33	KED
⎣	**Se**	**78**	**0.084**	ug/L	0.139	165	15	14	17	KED
	Y	**89**		ug/L			256256	260351	2	Standard
	Kr	**83**		ug/L			59	46	6	Standard
⎡>	**In-1**	**115**		ug/L			8098	6969	1	KED
⎢	**Cd**	**111**	**0.004**	ug/L	0.008	203	3	3	43	KED
⎣	**Cd**	**114**	**0.002**	ug/L	0.002	108	2	3	34	KED
⎡>	**In**	**115**		ug/L			361922	366628	0	Standard
⎢	**Ag**	**107**	**-0.002**	ug/L	0.001	40	55	31	33	Standard
⎢	**Sb**	**121**	**-0.039**	ug/L	0.001	2	424	61	14	Standard
⎣	**Sb**	**123**	**-0.039**	ug/L	0.002	4	321	43	27	Standard
⎡>	**Tb**	**159**		ug/L			585557	557303	2	Standard
⎢	**Tl**	**205**	**0.003**	ug/L	0.001	38	737	787	7	Standard
⎣	**Pb**	**208**	**-0.013**	ug/L	0.001	5	627	136	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 00:37:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	24319	3	Standard
	Cl	**37**		ug/L			4386158	4240482	0	Standard
⎡>	**Sc**	**45**		ug/L			445918	497084	2	Standard
⎢	**Al**	**27**	**4945.609**	ug/L	174.836	3	2877	106947324	1	Standard
⎢	**V**	**51**	**48.938**	ug/L	1.435	2	4130	949090	1	Standard
⎢	**V-1**	**51**	**49.328**	ug/L	1.297	2	351	958221	1	Standard
⎢	**Cr**	**52**	**48.991**	ug/L	1.339	2	12311	812004	0	Standard
⎣	**Cr**	**53**	**50.278**	ug/L	0.995	1	182	94676	0	Standard
⎡>	**Ge**	**72**		ug/L			27896	25212	1	KED
⎢	**Ni**	**60**	**52.034**	ug/L	0.970	1	6	43383	0	KED
⎢	**Ni**	**62**	**53.981**	ug/L	2.881	5	12	7137	3	KED
⎢	**Cu**	**63**	**51.525**	ug/L	1.512	2	41	124483	1	KED
⎢	**Cu**	**65**	**52.356**	ug/L	0.093	0	17	62324	1	KED
⎢	**Zn**	**66**	**52.734**	ug/L	1.424	2	31	18122	1	KED
⎢	**Zn**	**67**	**53.317**	ug/L	1.952	3	5	2956	3	KED
⎢	**As**	**75**	**50.945**	ug/L	0.832	1	6	8582	0	KED
⎣	**Se**	**78**	**51.548**	ug/L	0.451	0	15	1016	0	KED
	Y	**89**		ug/L			256256	270073	0	Standard
	Kr	**83**		ug/L			59	60	10	Standard
⎡>	**In-1**	**115**		ug/L			8098	7250	1	KED
⎢	**Cd**	**111**	**52.598**	ug/L	1.050	1	3	10894	0	KED
⎣	**Cd**	**114**	**52.781**	ug/L	0.492	0	2	26312	1	KED
⎡>	**In**	**115**		ug/L			361922	365653	0	Standard
⎢	**Ag**	**107**	**50.010**	ug/L	0.788	1	55	603001	1	Standard
⎢	**Sb**	**121**	**50.439**	ug/L	0.589	1	424	475278	0	Standard
⎣	**Sb**	**123**	**50.885**	ug/L	0.208	0	321	365341	0	Standard
⎡>	**Tb**	**159**		ug/L			585557	582302	0	Standard
⎢	**Tl**	**205**	**53.140**	ug/L	0.873	1	737	1471683	1	Standard
⎣	**Pb**	**208**	**53.133**	ug/L	0.610	1	627	1913065	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 00:45:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21586	24757	1	Standard
	Cl	**37**		ug/L			4386158	4252061	0	Standard
⎡>	**Sc**	**45**		ug/L			445918	482016	1	Standard
⎢	**Al**	**27**	**0.067**	ug/L	0.007	11	2877	4520	4	Standard
⎢	**V**	**51**	**-0.017**	ug/L	0.004	22	4130	4141	2	Standard
⎢	**V-1**	**51**	**-0.005**	ug/L	0.000	8	351	277	1	Standard
⎢	**Cr**	**52**	**-0.061**	ug/L	0.016	26	12311	12352	2	Standard
⎣	**Cr**	**53**	**-0.021**	ug/L	0.004	18	182	160	5	Standard
⎡>	**Ge**	**72**		ug/L			27896	24742	4	KED
⎢	**Ni**	**60**	**0.008**	ug/L	0.009	107	6	12	52	KED
⎢	**Ni**	**62**	**0.010**	ug/L	0.028	283	12	12	32	KED
⎢	**Cu**	**63**	**0.006**	ug/L	0.004	65	41	52	14	KED
⎢	**Cu**	**65**	**0.018**	ug/L	0.001	7	17	36	2	KED
⎢	**Zn**	**66**	**0.086**	ug/L	0.036	41	31	56	21	KED
⎢	**Zn**	**67**	**0.068**	ug/L	0.083	121	5	8	53	KED
⎢	**As**	**75**	**-0.006**	ug/L	0.005	88	6	4	16	KED
⎣	**Se**	**78**	**0.111**	ug/L	0.118	105	15	15	18	KED
	Y	**89**		ug/L			256256	263894	0	Standard
	Kr	**83**		ug/L			59	43	4	Standard
⎡>	**In-1**	**115**		ug/L			8098	7102	1	KED
⎢	**Cd**	**111**	**-0.003**	ug/L	0.007	287	3	2	57	KED
⎣	**Cd**	**114**	**0.003**	ug/L	0.004	123	2	3	52	KED
⎡>	**In**	**115**		ug/L			361922	361118	0	Standard
⎢	**Ag**	**107**	**0.004**	ug/L	0.000	4	55	107	2	Standard
⎢	**Sb**	**121**	**0.081**	ug/L	0.004	5	424	1181	2	Standard
⎣	**Sb**	**123**	**0.081**	ug/L	0.004	5	321	897	3	Standard
⎡>	**Tb**	**159**		ug/L			585557	562369	2	Standard
⎢	**Tl**	**205**	**0.002**	ug/L	0.001	37	737	773	1	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.001	30	627	756	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 00:49:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				24196	3	Standard
	Cl	**37**		ug/L				4251172	1	Standard
>	**Sc**	**45**		ug/L				481901	1	Standard
	Al	**27**		ug/L				4245	1	Standard
	V	**51**		ug/L				4164	2	Standard
	V-1	**51**		ug/L				285	7	Standard
	Cr	**52**		ug/L				12454	1	Standard
	Cr	**53**		ug/L				166	2	Standard
>	**Ge**	**72**		ug/L				25548	0	KED
	Ni	**60**		ug/L				24	42	KED
	Ni	**62**		ug/L				12	43	KED
	Cu	**63**		ug/L				62	49	KED
	Cu	**65**		ug/L				31	9	KED
	Zn	**66**		ug/L				64	12	KED
	Zn	**67**		ug/L				4	89	KED
	As	**75**		ug/L				3	61	KED
	Se	**78**		ug/L				13	19	KED
	Y	**89**		ug/L				266308	4	Standard
	Kr	**83**		ug/L				48	5	Standard
>	**In-1**	**115**		ug/L				7333	3	KED
	Cd	**111**		ug/L				1	86	KED
	Cd	**114**		ug/L				0	227	KED
>	**In**	**115**		ug/L				364624	1	Standard
	Ag	**107**		ug/L				48	22	Standard
	Sb	**121**		ug/L				308	9	Standard
	Sb	**123**		ug/L				264	7	Standard
>	**Tb**	**159**		ug/L				557087	2	Standard
	Tl	**205**		ug/L				765	8	Standard
	Pb	**208**		ug/L				688	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 00:54:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	24885	1	Standard
	Cl	**37**		ug/L			4251172	4330891	0	Standard
⌈>	**Sc**	**45**		ug/L			481901	489648	0	Standard
|	**Al**	**27**	**4922.415**	ug/L	11.505	0	4245	104904021	0	Standard
|	**V**	**51**	**50.338**	ug/L	0.291	0	4164	961566	0	Standard
|	**V-1**	**51**	**50.552**	ug/L	0.379	0	285	967521	0	Standard
|	**Cr**	**52**	**49.198**	ug/L	0.842	1	12454	802664	2	Standard
⌊	**Cr**	**53**	**49.926**	ug/L	0.861	1	166	92605	1	Standard
⌈>	**Ge**	**72**		ug/L			25548	25682	2	KED
|	**Ni**	**60**	**51.158**	ug/L	2.231	4	24	43448	2	KED
|	**Ni**	**62**	**53.773**	ug/L	1.428	2	12	7246	2	KED
|	**Cu**	**63**	**51.388**	ug/L	0.843	1	62	126505	1	KED
|	**Cu**	**65**	**51.364**	ug/L	1.483	2	31	62273	1	KED
|	**Zn**	**66**	**52.844**	ug/L	1.505	2	64	18532	1	KED
|	**Zn**	**67**	**53.161**	ug/L	1.864	3	4	3002	4	KED
|	**As**	**75**	**50.923**	ug/L	1.028	2	3	8735	0	KED
⌊	**Se**	**78**	**50.587**	ug/L	2.494	4	13	1015	2	KED
	Y	**89**		ug/L			266308	279352	0	Standard
	Kr	**83**		ug/L			48	54	20	Standard
⌈>	**In-1**	**115**		ug/L			7333	7314	1	KED
|	**Cd**	**111**	**52.099**	ug/L	0.218	0	1	10887	1	KED
⌊	**Cd**	**114**	**53.750**	ug/L	0.180	0	0	27031	1	KED
⌈>	**In**	**115**		ug/L			364624	367021	0	Standard
|	**Ag**	**107**	**50.628**	ug/L	0.957	1	48	612697	1	Standard
|	**Sb**	**121**	**50.758**	ug/L	0.639	1	308	479937	0	Standard
⌊	**Sb**	**123**	**50.723**	ug/L	0.403	0	264	365476	0	Standard
⌈>	**Tb**	**159**		ug/L			557087	598126	1	Standard
|	**Tl**	**205**	**51.207**	ug/L	0.642	1	765	1456634	0	Standard
⌊	**Pb**	**208**	**51.394**	ug/L	1.189	2	688	1900402	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 01:02:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	24034	1	Standard
	Cl	**37**		ug/L			4251172	4267011	0	Standard
>	**Sc**	**45**		ug/L			481901	467113	0	Standard
	Al	**27**	**0.730**	ug/L	1.229	168	4245	18926	131	Standard
	V	**51**	**0.010**	ug/L	0.010	94	4164	4226	3	Standard
	V-1	**51**	**0.005**	ug/L	0.010	211	285	366	51	Standard
	Cr	**52**	**0.019**	ug/L	0.014	71	12454	12362	1	Standard
	Cr	**53**	**0.000**	ug/L	0.008	1896	166	162	7	Standard
>	**Ge**	**72**		ug/L			25548	25275	0	KED
	Ni	**60**	**-0.013**	ug/L	0.007	51	24	13	42	KED
	Ni	**62**	**-0.018**	ug/L	0.046	247	12	10	60	KED
	Cu	**63**	**0.006**	ug/L	0.003	45	62	75	7	KED
	Cu	**65**	**-0.004**	ug/L	0.004	103	31	26	18	KED
	Zn	**66**	**-0.020**	ug/L	0.048	242	64	56	28	KED
	Zn	**67**	**0.161**	ug/L	0.036	22	4	13	14	KED
	As	**75**	**0.005**	ug/L	0.014	289	3	4	53	KED
	Se	**78**	**-0.014**	ug/L	0.076	525	13	13	10	KED
	Y	**89**		ug/L			266308	259877	0	Standard
	Kr	**83**		ug/L			48	50	8	Standard
>	**In-1**	**115**		ug/L			7333	7281	2	KED
	Cd	**111**	**-0.003**	ug/L	0.007	227	1	1	114	KED
	Cd	**114**	**0.006**	ug/L	0.004	62	0	3	51	KED
>	**In**	**115**		ug/L			364624	362311	0	Standard
	Ag	**107**	**0.011**	ug/L	0.010	89	48	175	64	Standard
	Sb	**121**	**0.105**	ug/L	0.010	9	308	1289	7	Standard
	Sb	**123**	**0.098**	ug/L	0.006	6	264	959	4	Standard
>	**Tb**	**159**		ug/L			557087	554572	2	Standard
	Tl	**205**	**0.003**	ug/L	0.004	128	765	852	15	Standard
	Pb	**208**	**0.005**	ug/L	0.005	98	688	874	23	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0387-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 01:07:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24196	41464	0	Standard
	Cl	37		ug/L			4251172	31165551	1	Standard
>	Sc	45		ug/L			481901	457039	0	Standard
	Al	27	29.488	ug/L	0.327	1	4245	590577	1	Standard
	V	51	5.937	ug/L	0.063	1	4164	109333	0	Standard
	V-1	51	12.122	ug/L	0.120	0	285	216752	0	Standard
	Cr	52	1.866	ug/L	0.030	1	12454	39779	0	Standard
	Cr	53	22.388	ug/L	0.260	1	166	38847	0	Standard
>	Ge	72		ug/L			25548	18570	1	KED
	Ni	60	0.370	ug/L	0.051	13	24	245	11	KED
	Ni	62	0.845	ug/L	0.112	13	12	91	11	KED
	Cu	63	1.405	ug/L	0.097	6	62	2544	6	KED
	Cu	65	1.384	ug/L	0.044	3	31	1235	2	KED
	Zn	66	1.121	ug/L	0.095	8	64	330	7	KED
	Zn	67	1.526	ug/L	0.188	12	4	65	10	KED
	As	75	0.447	ug/L	0.021	4	3	58	4	KED
	Se	78	0.872	ug/L	0.173	19	13	22	12	KED
	Y	89		ug/L			266308	233922	1	Standard
	Kr	83		ug/L			48	452	6	Standard
>	In-1	115		ug/L			7333	5631	1	KED
	Cd	111	0.003	ug/L	0.010	375	1	1	86	KED
	Cd	114	0.006	ug/L	0.011	173	0	2	149	KED
>	In	115		ug/L			364624	283394	0	Standard
	Ag	107	0.013	ug/L	0.001	5	48	163	4	Standard
	Sb	121	0.052	ug/L	0.006	12	308	620	7	Standard
	Sb	123	0.045	ug/L	0.001	2	264	454	1	Standard
>	Tb	159		ug/L			557087	486670	2	Standard
	Tl	205	-0.006	ug/L	0.001	12	765	540	1	Standard
	Pb	208	0.038	ug/L	0.003	7	688	1745	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLF
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 01:12:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	24732	1	Standard
	Cl	**37**		ug/L			4251172	4400324	1	Standard
>	**Sc**	**45**		ug/L			481901	455851	0	Standard
	Al	**27**	**-0.067**	ug/L	0.002	2	4245	2679	1	Standard
	V	**51**	**0.018**	ug/L	0.014	78	4164	4248	5	Standard
	V-1	**51**	**0.277**	ug/L	0.005	1	285	5203	2	Standard
	Cr	**52**	**0.060**	ug/L	0.027	44	12454	12683	2	Standard
	Cr	**53**	**0.917**	ug/L	0.036	3	166	1738	3	Standard
>	**Ge**	**72**		ug/L			25548	26458	0	KED
	Ni	**60**	**-0.013**	ug/L	0.013	97	24	13	82	KED
	Ni	**62**	**0.152**	ug/L	0.102	67	12	34	41	KED
	Cu	**63**	**0.002**	ug/L	0.005	214	62	70	18	KED
	Cu	**65**	**0.009**	ug/L	0.006	63	31	43	16	KED
	Zn	**66**	**-0.103**	ug/L	0.028	27	64	29	35	KED
	Zn	**67**	**0.019**	ug/L	0.034	174	4	5	33	KED
	As	**75**	**0.014**	ug/L	0.013	97	3	6	38	KED
	Se	**78**	**-0.049**	ug/L	0.117	238	13	13	19	KED
	Y	**89**		ug/L			266308	259512	2	Standard
	Kr	**83**		ug/L			48	55	5	Standard
>	**In-1**	**115**		ug/L			7333	7718	3	KED
	Cd	**111**	**0.006**	ug/L	0.012	207	1	3	75	KED
	Cd	**114**	**0.001**	ug/L	0.004	385	0	1	211	KED
>	**In**	**115**		ug/L			364624	358603	0	Standard
	Ag	**107**	**-0.001**	ug/L	0.001	70	48	33	32	Standard
	Sb	**121**	**-0.005**	ug/L	0.002	37	308	255	6	Standard
	Sb	**123**	**-0.013**	ug/L	0.002	15	264	165	8	Standard
>	**Tb**	**159**		ug/L			557087	567491	1	Standard
	Tl	**205**	**0.000**	ug/L	0.004	2217	765	783	12	Standard
	Pb	**208**	**-0.013**	ug/L	0.000	3	688	245	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0258-04RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 01:17:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	35014	2	Standard
	Cl	**37**		ug/L			4251172	4671040	0	Standard
⌈>	**Sc**	**45**		ug/L			481901	521813	1	Standard
|	**Al**	**27**	**15.677**	ug/L	0.109	0	4245	360602	0	Standard
|	**V**	**51**	**0.356**	ug/L	0.006	1	4164	11732	1	Standard
|	**V-1**	**51**	**0.683**	ug/L	0.008	1	285	14236	0	Standard
|	**Cr**	**52**	**0.256**	ug/L	0.017	6	12454	17861	1	Standard
⌊	**Cr**	**53**	**1.338**	ug/L	0.039	2	166	2819	1	Standard
⌈>	**Ge**	**72**		ug/L			25548	26558	3	KED
|	**Ni**	**60**	**0.444**	ug/L	0.023	5	24	415	7	KED
|	**Ni**	**62**	**0.541**	ug/L	0.088	16	12	88	11	KED
|	**Cu**	**63**	**0.870**	ug/L	0.020	2	62	2278	4	KED
|	**Cu**	**65**	**0.940**	ug/L	0.037	3	31	1209	1	KED
|	**Zn**	**66**	**8.758**	ug/L	0.246	2	64	3232	2	KED
|	**Zn**	**67**	**8.391**	ug/L	0.560	6	4	493	3	KED
|	**As**	**75**	**0.092**	ug/L	0.029	31	3	20	25	KED
⌊	**Se**	**78**	**0.515**	ug/L	0.310	60	13	24	22	KED
	Y	**89**		ug/L			266308	269140	0	Standard
	Kr	**83**		ug/L			48	55	17	Standard
⌈>	**In-1**	**115**		ug/L			7333	7688	2	KED
|	**Cd**	**111**	**0.008**	ug/L	0.008	95	1	3	43	KED
⌊	**Cd**	**114**	**0.022**	ug/L	0.009	41	0	11	40	KED
⌈>	**In**	**115**		ug/L			364624	363709	1	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	721	48	48	9	Standard
|	**Sb**	**121**	**0.019**	ug/L	0.003	14	308	483	7	Standard
⌊	**Sb**	**123**	**0.016**	ug/L	0.001	6	264	380	3	Standard
⌈>	**Tb**	**159**		ug/L			557087	587771	2	Standard
|	**Tl**	**205**	**0.001**	ug/L	0.002	210	765	834	5	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.001	9	688	986	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0258-03RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 01:22:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	42120	1	Standard
	Cl	**37**		ug/L			4251172	4600665	0	Standard
⎡>	**Sc**	**45**		ug/L			481901	541267	0	Standard
⎢	**Al**	**27**	**21.453**	ug/L	0.329	1	4245	510148	1	Standard
⎢	**V**	**51**	**0.913**	ug/L	0.026	2	4164	23864	2	Standard
⎢	**V-1**	**51**	**1.125**	ug/L	0.016	1	285	24124	1	Standard
⎢	**Cr**	**52**	**0.274**	ug/L	0.029	10	12454	18849	2	Standard
⎣	**Cr**	**53**	**0.990**	ug/L	0.024	2	166	2213	2	Standard
⎡>	**Ge**	**72**		ug/L			25548	26362	2	KED
⎢	**Ni**	**60**	**0.278**	ug/L	0.022	7	24	267	4	KED
⎢	**Ni**	**62**	**0.290**	ug/L	0.076	26	12	53	21	KED
⎢	**Cu**	**63**	**1.139**	ug/L	0.002	0	62	2941	2	KED
⎢	**Cu**	**65**	**1.136**	ug/L	0.036	3	31	1445	2	KED
⎢	**Zn**	**66**	**0.840**	ug/L	0.091	10	64	367	9	KED
⎢	**Zn**	**67**	**1.082**	ug/L	0.090	8	4	67	9	KED
⎢	**As**	**75**	**0.112**	ug/L	0.015	13	3	23	9	KED
⎣	**Se**	**78**	**0.261**	ug/L	0.109	41	13	19	12	KED
	Y	**89**		ug/L			266308	275816	1	Standard
	Kr	**83**		ug/L			48	46	23	Standard
⎡>	**In-1**	**115**		ug/L			7333	7623	2	KED
⎢	**Cd**	**111**	**-0.000**	ug/L	0.004	1017	1	1	50	KED
⎣	**Cd**	**114**	**0.015**	ug/L	0.014	94	0	8	88	KED
⎡>	**In**	**115**		ug/L			364624	365084	2	Standard
⎢	**Ag**	**107**	**-0.000**	ug/L	0.001	228	48	45	14	Standard
⎢	**Sb**	**121**	**0.021**	ug/L	0.002	8	308	511	5	Standard
⎣	**Sb**	**123**	**0.016**	ug/L	0.004	23	264	381	4	Standard
⎡>	**Tb**	**159**		ug/L			557087	594715	2	Standard
⎢	**Tl**	**205**	**0.002**	ug/L	0.004	237	765	863	11	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.002	108	688	787	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0258-02RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 01:26:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	38661	2	Standard
	Cl	**37**		ug/L			4251172	4585140	2	Standard
>	**Sc**	**45**		ug/L			481901	531974	1	Standard
	Al	**27**	**19.521**	ug/L	0.314	1	4245	456596	0	Standard
	V	**51**	**1.049**	ug/L	0.019	1	4164	26277	0	Standard
	V-1	**51**	**1.259**	ug/L	0.021	1	285	26477	0	Standard
	Cr	**52**	**0.298**	ug/L	0.026	8	12454	18938	1	Standard
	Cr	**53**	**1.004**	ug/L	0.042	4	166	2204	3	Standard
>	**Ge**	**72**		ug/L			25548	26379	1	KED
	Ni	**60**	**0.170**	ug/L	0.009	5	24	173	3	KED
	Ni	**62**	**0.236**	ug/L	0.027	11	12	45	8	KED
	Cu	**63**	**0.654**	ug/L	0.019	2	62	1716	3	KED
	Cu	**65**	**0.632**	ug/L	0.021	3	31	819	3	KED
	Zn	**66**	**0.944**	ug/L	0.064	6	64	405	4	KED
	Zn	**67**	**1.280**	ug/L	0.312	24	4	78	22	KED
	As	**75**	**0.091**	ug/L	0.007	7	3	19	4	KED
	Se	**78**	**0.540**	ug/L	0.045	8	13	24	4	KED
	Y	**89**		ug/L			266308	273660	2	Standard
	Kr	**83**		ug/L			48	59	11	Standard
>	**In-1**	**115**		ug/L			7333	7500	1	KED
	Cd	**111**	**0.006**	ug/L	0.007	116	1	3	45	KED
	Cd	**114**	**0.007**	ug/L	0.006	80	0	4	69	KED
>	**In**	**115**		ug/L			364624	359886	0	Standard
	Ag	**107**	**-0.001**	ug/L	0.000	44	48	40	9	Standard
	Sb	**121**	**0.003**	ug/L	0.004	107	308	335	10	Standard
	Sb	**123**	**-0.002**	ug/L	0.004	198	264	248	9	Standard
>	**Tb**	**159**		ug/L			557087	588377	1	Standard
	Tl	**205**	**-0.002**	ug/L	0.001	34	765	755	2	Standard
	Pb	**208**	**-0.000**	ug/L	0.000	152	688	716	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0258-01RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 01:31:40
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	36093	2	Standard
	Cl	**37**		ug/L			4251172	4564021	0	Standard
⎡>	**Sc**	**45**		ug/L			481901	533169	0	Standard
⎢	**Al**	**27**	**21.097**	ug/L	1.244	5	4245	494231	5	Standard
⎢	**V**	**51**	**1.079**	ug/L	0.022	2	4164	26942	1	Standard
⎢	**V-1**	**51**	**1.285**	ug/L	0.014	1	285	27096	0	Standard
⎢	**Cr**	**52**	**0.231**	ug/L	0.012	5	12454	17825	1	Standard
⎣	**Cr**	**53**	**0.932**	ug/L	0.016	1	166	2063	1	Standard
⎡>	**Ge**	**72**		ug/L			25548	26487	1	KED
⎢	**Ni**	**60**	**0.196**	ug/L	0.034	17	24	197	15	KED
⎢	**Ni**	**62**	**0.285**	ug/L	0.047	16	12	52	13	KED
⎢	**Cu**	**63**	**0.688**	ug/L	0.018	2	62	1811	1	KED
⎢	**Cu**	**65**	**0.667**	ug/L	0.005	0	31	866	1	KED
⎢	**Zn**	**66**	**0.964**	ug/L	0.067	6	64	413	5	KED
⎢	**Zn**	**67**	**1.568**	ug/L	0.287	18	4	95	18	KED
⎢	**As**	**75**	**0.074**	ug/L	0.017	22	3	16	17	KED
⎣	**Se**	**78**	**0.325**	ug/L	0.222	68	13	20	20	KED
	Y	**89**		ug/L			266308	272570	0	Standard
	Kr	**83**		ug/L			48	53	11	Standard
⎡>	**In-1**	**115**		ug/L			7333	7545	2	KED
⎢	**Cd**	**111**	**0.001**	ug/L	0.002	195	1	2	24	KED
⎣	**Cd**	**114**	**0.010**	ug/L	0.011	111	0	5	102	KED
⎡>	**In**	**115**		ug/L			364624	364084	0	Standard
⎢	**Ag**	**107**	**0.003**	ug/L	0.008	239	48	86	105	Standard
⎢	**Sb**	**121**	**0.006**	ug/L	0.009	163	308	359	22	Standard
⎣	**Sb**	**123**	**0.001**	ug/L	0.010	1466	264	268	25	Standard
⎡>	**Tb**	**159**		ug/L			557087	586551	1	Standard
⎢	**Tl**	**205**	**0.003**	ug/L	0.003	87	765	892	10	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.006	264	688	808	28	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0810-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 01:36:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	36045	1	Standard
	Cl	**37**		ug/L			4251172	4571627	1	Standard
⌈>	**Sc**	**45**		ug/L			481901	546057	3	Standard
|	**Al**	**27**	**20.344**	ug/L	0.679	3	4245	487977	1	Standard
|	**V**	**51**	**1.132**	ug/L	0.033	2	4164	28717	0	Standard
|	**V-1**	**51**	**1.324**	ug/L	0.031	2	285	28553	0	Standard
|	**Cr**	**52**	**0.494**	ug/L	0.037	7	12454	22943	0	Standard
⌊	**Cr**	**53**	**1.139**	ug/L	0.030	2	166	2540	1	Standard
⌈>	**Ge**	**72**		ug/L			25548	26271	0	KED
|	**Ni**	**60**	**0.220**	ug/L	0.006	2	24	216	2	KED
|	**Ni**	**62**	**0.251**	ug/L	0.015	5	12	47	4	KED
|	**Cu**	**63**	**0.739**	ug/L	0.010	1	62	1923	1	KED
|	**Cu**	**65**	**0.753**	ug/L	0.024	3	31	966	3	KED
|	**Zn**	**66**	**1.144**	ug/L	0.053	4	64	474	4	KED
|	**Zn**	**67**	**1.604**	ug/L	0.094	5	4	97	5	KED
|	**As**	**75**	**0.085**	ug/L	0.024	28	3	18	23	KED
⌊	**Se**	**78**	**0.344**	ug/L	0.149	43	13	20	13	KED
	Y	**89**		ug/L			266308	279375	1	Standard
	Kr	**83**		ug/L			48	46	10	Standard
⌈>	**In-1**	**115**		ug/L			7333	7712	1	KED
|	**Cd**	**111**	**0.001**	ug/L	0.003	261	1	2	24	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.004	63	0	4	54	KED
⌈>	**In**	**115**		ug/L			364624	369164	0	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	81	48	42	13	Standard
|	**Sb**	**121**	**0.002**	ug/L	0.001	37	308	329	1	Standard
⌊	**Sb**	**123**	**-0.006**	ug/L	0.002	27	264	224	5	Standard
⌈>	**Tb**	**159**		ug/L			557087	590723	2	Standard
|	**Tl**	**205**	**-0.001**	ug/L	0.001	100	765	780	4	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.001	75	688	801	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0810-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 01:41:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	38423	2	Standard
	Cl	**37**		ug/L			4251172	4517026	2	Standard
⌈>	**Sc**	**45**		ug/L			481901	529051	5	Standard
|	**Al**	**27**	**21.292**	ug/L	1.649	7	4245	493486	1	Standard
|	**V**	**51**	**24.205**	ug/L	1.645	6	4164	500685	1	Standard
|	**V-1**	**51**	**24.559**	ug/L	1.613	6	285	506781	1	Standard
|	**Cr**	**52**	**22.906**	ug/L	1.373	5	12454	410184	0	Standard
⌊	**Cr**	**53**	**24.100**	ug/L	1.248	5	166	48300	0	Standard
⌈>	**Ge**	**72**		ug/L			25548	26232	0	KED
|	**Ni**	**60**	**25.789**	ug/L	0.662	2	24	22394	1	KED
|	**Ni**	**62**	**26.709**	ug/L	0.901	3	12	3683	2	KED
|	**Cu**	**63**	**26.326**	ug/L	0.196	0	62	66237	0	KED
|	**Cu**	**65**	**26.435**	ug/L	0.494	1	31	32761	1	KED
|	**Zn**	**66**	**79.937**	ug/L	0.951	1	64	28613	1	KED
|	**Zn**	**67**	**77.795**	ug/L	0.736	0	4	4485	0	KED
|	**As**	**75**	**25.258**	ug/L	0.162	0	3	4428	1	KED
⌊	**Se**	**78**	**78.202**	ug/L	1.109	1	13	1596	1	KED
	Y	**89**		ug/L			266308	261061	5	Standard
	Kr	**83**		ug/L			48	60	7	Standard
⌈>	**In-1**	**115**		ug/L			7333	7523	3	KED
|	**Cd**	**111**	**25.356**	ug/L	1.062	4	1	5446	1	KED
⌊	**Cd**	**114**	**25.458**	ug/L	0.944	3	0	13159	1	KED
⌈>	**In**	**115**		ug/L			364624	356924	4	Standard
|	**Ag**	**107**	**25.634**	ug/L	1.268	4	48	301246	0	Standard
|	**Sb**	**121**	**26.641**	ug/L	1.157	4	308	244797	1	Standard
⌊	**Sb**	**123**	**26.517**	ug/L	0.991	3	264	185716	1	Standard
⌈>	**Tb**	**159**		ug/L			557087	564497	5	Standard
|	**Tl**	**205**	**27.074**	ug/L	1.472	5	765	725897	0	Standard
⌊	**Pb**	**208**	**27.442**	ug/L	1.578	5	688	956259	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0810-MSD1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 01:46:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	37918	2	Standard
	Cl	**37**		ug/L			4251172	4527259	2	Standard
⌈>	**Sc**	**45**		ug/L			481901	545652	0	Standard
|	**Al**	**27**	**20.329**	ug/L	0.242	1	4245	487550	0	Standard
|	**V**	**51**	**23.127**	ug/L	0.183	0	4164	494838	0	Standard
|	**V-1**	**51**	**23.450**	ug/L	0.256	1	285	500289	0	Standard
|	**Cr**	**52**	**21.975**	ug/L	0.293	1	12454	407310	1	Standard
⌊	**Cr**	**53**	**23.065**	ug/L	0.563	2	166	47769	1	Standard
⌈>	**Ge**	**72**		ug/L			25548	26438	1	KED
|	**Ni**	**60**	**25.635**	ug/L	0.230	0	24	22437	0	KED
|	**Ni**	**62**	**25.973**	ug/L	1.040	4	12	3611	5	KED
|	**Cu**	**63**	**26.162**	ug/L	0.445	1	62	66334	0	KED
|	**Cu**	**65**	**26.775**	ug/L	0.690	2	31	33439	1	KED
|	**Zn**	**66**	**81.683**	ug/L	1.438	1	64	29460	0	KED
|	**Zn**	**67**	**76.810**	ug/L	1.455	1	4	4464	2	KED
|	**As**	**75**	**25.021**	ug/L	0.109	0	3	4421	1	KED
⌊	**Se**	**78**	**77.304**	ug/L	2.257	2	13	1590	2	KED
	Y	**89**		ug/L			266308	272498	2	Standard
	Kr	**83**		ug/L			48	52	2	Standard
⌈>	**In-1**	**115**		ug/L			7333	7628	2	KED
|	**Cd**	**111**	**24.996**	ug/L	0.490	1	1	5447	1	KED
⌊	**Cd**	**114**	**25.120**	ug/L	0.443	1	0	13173	1	KED
⌈>	**In**	**115**		ug/L			364624	368983	2	Standard
|	**Ag**	**107**	**24.432**	ug/L	0.264	1	48	297245	1	Standard
|	**Sb**	**121**	**25.605**	ug/L	0.495	1	308	243501	1	Standard
⌊	**Sb**	**123**	**25.593**	ug/L	0.952	3	264	185420	1	Standard
⌈>	**Tb**	**159**		ug/L			557087	595140	3	Standard
|	**Tl**	**205**	**25.780**	ug/L	1.158	4	765	729311	0	Standard
⌊	**Pb**	**208**	**25.968**	ug/L	1.349	5	688	954745	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLG
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 01:50:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	24274	3	Standard
	Cl	**37**		ug/L			4251172	4317574	0	Standard
⎡>	**Sc**	**45**		ug/L			481901	457497	2	Standard
⎢	**Al**	**27**	**-0.073**	ug/L	0.009	12	4245	2574	4	Standard
⎢	**V**	**51**	**0.011**	ug/L	0.008	67	4164	4150	1	Standard
⎢	**V-1**	**51**	**0.053**	ug/L	0.002	3	285	1214	0	Standard
⎢	**Cr**	**52**	**0.031**	ug/L	0.020	65	12454	12277	1	Standard
⎣	**Cr**	**53**	**0.167**	ug/L	0.001	0	166	448	2	Standard
⎡>	**Ge**	**72**		ug/L			25548	25582	2	KED
⎢	**Ni**	**60**	**-0.018**	ug/L	0.005	26	24	9	40	KED
⎢	**Ni**	**62**	**0.006**	ug/L	0.055	972	12	13	51	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.003	169	62	66	11	KED
⎢	**Cu**	**65**	**-0.012**	ug/L	0.003	23	31	17	19	KED
⎢	**Zn**	**66**	**-0.107**	ug/L	0.026	24	64	26	31	KED
⎢	**Zn**	**67**	**-0.000**	ug/L	0.018	5193	4	4	24	KED
⎢	**As**	**75**	**0.007**	ug/L	0.008	121	3	4	26	KED
⎣	**Se**	**78**	**0.008**	ug/L	0.155	1908	13	13	24	KED
	Y	**89**		ug/L			266308	257671	3	Standard
	Kr	**83**		ug/L			48	52	16	Standard
⎡>	**In-1**	**115**		ug/L			7333	7507	0	KED
⎢	**Cd**	**111**	**0.006**	ug/L	0.014	236	1	3	91	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.002	164	0	1	90	KED
⎡>	**In**	**115**		ug/L			364624	359329	0	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.001	80	48	61	17	Standard
⎢	**Sb**	**121**	**-0.019**	ug/L	0.001	6	308	130	9	Standard
⎣	**Sb**	**123**	**-0.020**	ug/L	0.004	17	264	120	20	Standard
⎡>	**Tb**	**159**		ug/L			557087	562611	1	Standard
⎢	**Tl**	**205**	**-0.002**	ug/L	0.000	13	765	723	0	Standard
⎣	**Pb**	**208**	**-0.011**	ug/L	0.001	9	688	314	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 01:55:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	24710	2	Standard
	Cl	**37**		ug/L			4251172	4331060	1	Standard
⌈>	**Sc**	**45**		ug/L			481901	475985	2	Standard
|	**Al**	**27**	**4845.041**	ug/L	202.108	4	4245	100297386	1	Standard
|	**V**	**51**	**49.543**	ug/L	2.637	5	4164	919188	2	Standard
|	**V-1**	**51**	**49.509**	ug/L	2.755	5	285	920255	3	Standard
|	**Cr**	**52**	**48.580**	ug/L	2.216	4	12454	770004	2	Standard
⌊	**Cr**	**53**	**48.487**	ug/L	2.432	5	166	87351	2	Standard
⌈>	**Ge**	**72**		ug/L			25548	26482	2	KED
|	**Ni**	**60**	**49.578**	ug/L	0.608	1	24	43439	2	KED
|	**Ni**	**62**	**52.442**	ug/L	2.638	5	12	7281	2	KED
|	**Cu**	**63**	**50.890**	ug/L	2.103	4	62	129110	1	KED
|	**Cu**	**65**	**50.439**	ug/L	1.093	2	31	63058	1	KED
|	**Zn**	**66**	**50.861**	ug/L	1.753	3	64	18390	0	KED
|	**Zn**	**67**	**50.324**	ug/L	2.633	5	4	2928	2	KED
|	**As**	**75**	**50.013**	ug/L	0.238	0	3	8848	2	KED
⌊	**Se**	**78**	**50.031**	ug/L	1.949	3	13	1035	1	KED
	Y	**89**		ug/L			266308	266885	4	Standard
	Kr	**83**		ug/L			48	62	8	Standard
⌈>	**In-1**	**115**		ug/L			7333	7412	0	KED
|	**Cd**	**111**	**51.019**	ug/L	0.572	1	1	10805	1	KED
⌊	**Cd**	**114**	**52.030**	ug/L	0.987	1	0	26514	1	KED
⌈>	**In**	**115**		ug/L			364624	365365	1	Standard
|	**Ag**	**107**	**49.221**	ug/L	1.265	2	48	592840	0	Standard
|	**Sb**	**121**	**50.190**	ug/L	1.884	3	308	472267	2	Standard
⌊	**Sb**	**123**	**50.315**	ug/L	1.652	3	264	360791	1	Standard
⌈>	**Tb**	**159**		ug/L			557087	587713	2	Standard
|	**Tl**	**205**	**50.941**	ug/L	1.652	3	765	1423184	0	Standard
⌊	**Pb**	**208**	**51.550**	ug/L	1.262	2	688	1872635	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 02:03:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	23594	2	Standard
	Cl	**37**		ug/L			4251172	4311157	0	Standard
⎡>	**Sc**	**45**		ug/L			481901	447704	2	Standard
⎢	**Al**	**27**	**0.013**	ug/L	0.012	92	4245	4197	3	Standard
⎢	**V**	**51**	**0.012**	ug/L	0.001	10	4164	4080	2	Standard
⎢	**V-1**	**51**	**0.030**	ug/L	0.001	1	285	790	1	Standard
⎢	**Cr**	**52**	**0.034**	ug/L	0.001	3	12454	12065	2	Standard
⎣	**Cr**	**53**	**0.092**	ug/L	0.004	4	166	311	0	Standard
⎡>	**Ge**	**72**		ug/L			25548	25505	1	KED
⎢	**Ni**	**60**	**-0.016**	ug/L	0.007	41	24	11	50	KED
⎢	**Ni**	**62**	**-0.005**	ug/L	0.017	360	12	12	18	KED
⎢	**Cu**	**63**	**0.004**	ug/L	0.006	129	62	73	19	KED
⎢	**Cu**	**65**	**0.003**	ug/L	0.004	129	31	34	13	KED
⎢	**Zn**	**66**	**-0.026**	ug/L	0.022	87	64	55	15	KED
⎢	**Zn**	**67**	**0.159**	ug/L	0.059	37	4	13	24	KED
⎢	**As**	**75**	**0.014**	ug/L	0.015	105	3	6	40	KED
⎣	**Se**	**78**	**-0.007**	ug/L	0.063	932	13	13	7	KED
	Y	**89**		ug/L			266308	251259	4	Standard
	Kr	**83**		ug/L			48	41	37	Standard
⎡>	**In-1**	**115**		ug/L			7333	7396	1	KED
⎢	**Cd**	**111**	**0.006**	ug/L	0.005	85	1	3	34	KED
⎣	**Cd**	**114**	**0.005**	ug/L	0.002	43	0	3	34	KED
⎡>	**In**	**115**		ug/L			364624	353710	2	Standard
⎢	**Ag**	**107**	**0.003**	ug/L	0.001	30	48	80	9	Standard
⎢	**Sb**	**121**	**0.091**	ug/L	0.009	9	308	1131	5	Standard
⎣	**Sb**	**123**	**0.089**	ug/L	0.011	12	264	870	5	Standard
⎡>	**Tb**	**159**		ug/L			557087	552216	2	Standard
⎢	**Tl**	**205**	**-0.001**	ug/L	0.003	382	765	739	6	Standard
⎣	**Pb**	**208**	**0.003**	ug/L	0.003	94	688	777	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0419-01
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 02:08:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24196	33435	0	Standard
	Cl	37		ug/L			4251172	4285974	1	Standard
>	Sc	45		ug/L			481901	477190	1	Standard
	Al	27	242.621	ug/L	8.893	3	4245	5041583	2	Standard
	V	51	0.626	ug/L	0.010	1	4164	15719	0	Standard
	V-1	51	0.651	ug/L	0.014	2	285	12415	1	Standard
	Cr	52	1.389	ug/L	0.078	5	12454	34060	2	Standard
	Cr	53	1.457	ug/L	0.080	5	166	2792	4	Standard
>	Ge	72		ug/L			25548	26720	1	KED
	Ni	60	2.464	ug/L	0.131	5	24	2202	4	KED
	Ni	62	2.396	ug/L	0.186	7	12	348	6	KED
	Cu	63	7.449	ug/L	0.261	3	62	19133	2	KED
	Cu	65	7.773	ug/L	0.120	1	31	9835	0	KED
	Zn	66	904.275	ug/L	15.767	1	64	328956	0	KED
	Zn	67	840.618	ug/L	26.892	3	4	49330	3	KED
	As	75	0.237	ug/L	0.056	23	3	46	21	KED
	Se	78	0.379	ug/L	0.337	89	13	21	31	KED
	Y	89		ug/L			266308	278889	2	Standard
	Kr	83		ug/L			48	46	46	Standard
>	In-1	115		ug/L			7333	7656	0	KED
	Cd	111	0.085	ug/L	0.015	17	1	20	16	KED
	Cd	114	0.111	ug/L	0.033	29	0	59	29	KED
>	In	115		ug/L			364624	370071	0	Standard
	Ag	107	0.014	ug/L	0.001	6	48	224	4	Standard
	Sb	121	0.283	ug/L	0.008	2	308	3007	1	Standard
	Sb	123	0.260	ug/L	0.016	6	264	2160	5	Standard
>	Tb	159		ug/L			557087	584828	2	Standard
	Tl	205	0.003	ug/L	0.003	84	765	893	8	Standard
	Pb	208	1.777	ug/L	0.045	2	688	64947	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0316-04
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 02:12:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24196	32575	2	Standard
	Cl	37		ug/L			4251172	6178593	0	Standard
>	Sc	45		ug/L			481901	551274	0	Standard
	Al	27	4.282	ug/L	0.157	3	4245	107563	2	Standard
	V	51	0.839	ug/L	0.038	4	4164	22723	2	Standard
	V-1	51	1.403	ug/L	0.035	2	285	30549	1	Standard
	Cr	52	0.198	ug/L	0.022	11	12454	17819	1	Standard
	Cr	53	2.075	ug/L	0.005	0	166	4516	0	Standard
>	Ge	72		ug/L			25548	24364	1	KED
	Ni	60	0.193	ug/L	0.020	10	24	179	10	KED
	Ni	62	0.153	ug/L	0.078	50	12	31	33	KED
	Cu	63	0.540	ug/L	0.024	4	62	1318	2	KED
	Cu	65	0.543	ug/L	0.059	10	31	655	11	KED
	Zn	66	0.597	ug/L	0.088	14	64	259	10	KED
	Zn	67	1.402	ug/L	0.155	11	4	79	12	KED
	As	75	0.508	ug/L	0.029	5	3	86	4	KED
	Se	78	0.051	ug/L	0.110	217	13	13	14	KED
	Y	89		ug/L			266308	268459	1	Standard
	Kr	83		ug/L			48	53	29	Standard
>	In-1	115		ug/L			7333	7029	3	KED
	Cd	111	0.005	ug/L	0.004	85	1	2	33	KED
	Cd	114	0.005	ug/L	0.002	44	0	2	37	KED
>	In	115		ug/L			364624	342070	0	Standard
	Ag	107	0.001	ug/L	0.001	107	48	57	20	Standard
	Sb	121	0.005	ug/L	0.002	53	308	330	6	Standard
	Sb	123	-0.002	ug/L	0.005	282	264	237	13	Standard
>	Tb	159		ug/L			557087	567667	1	Standard
	Tl	205	-0.003	ug/L	0.002	93	765	709	9	Standard
	Pb	208	-0.003	ug/L	0.001	32	688	585	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0316-02
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 02:17:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	29645	3	Standard
	Cl	**37**		ug/L			4251172	4230485	0	Standard
>	**Sc**	**45**		ug/L			481901	529796	0	Standard
	Al	**27**	**9.531**	ug/L	0.224	2	4245	224414	1	Standard
	V	**51**	**4.156**	ug/L	0.054	1	4164	90098	1	Standard
	V-1	**51**	**4.227**	ug/L	0.043	1	285	87815	1	Standard
	Cr	**52**	**0.797**	ug/L	0.037	4	12454	27540	1	Standard
	Cr	**53**	**1.098**	ug/L	0.033	2	166	2381	1	Standard
>	**Ge**	**72**		ug/L			25548	25364	1	KED
	Ni	**60**	**0.044**	ug/L	0.015	34	24	61	19	KED
	Ni	**62**	**0.148**	ug/L	0.063	42	12	32	26	KED
	Cu	**63**	**0.213**	ug/L	0.007	3	62	579	1	KED
	Cu	**65**	**0.210**	ug/L	0.033	15	31	281	13	KED
	Zn	**66**	**0.540**	ug/L	0.067	12	64	250	10	KED
	Zn	**67**	**1.118**	ug/L	0.215	19	4	66	17	KED
	As	**75**	**0.249**	ug/L	0.042	16	3	45	14	KED
	Se	**78**	**-0.091**	ug/L	0.125	136	13	11	20	KED
	Y	**89**		ug/L			266308	286831	0	Standard
	Kr	**83**		ug/L			48	47	13	Standard
>	**In-1**	**115**		ug/L			7333	7268	0	KED
	Cd	**111**	**0.005**	ug/L	0.012	261	1	2	88	KED
	Cd	**114**	**0.008**	ug/L	0.002	29	0	4	26	KED
>	**In**	**115**		ug/L			364624	360266	0	Standard
	Ag	**107**	**0.003**	ug/L	0.001	30	48	83	12	Standard
	Sb	**121**	**-0.013**	ug/L	0.003	22	308	186	13	Standard
	Sb	**123**	**-0.016**	ug/L	0.003	21	264	151	15	Standard
>	**Tb**	**159**		ug/L			557087	582278	1	Standard
	Tl	**205**	**-0.001**	ug/L	0.002	132	765	763	5	Standard
	Pb	**208**	**0.003**	ug/L	0.001	46	688	813	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0387-03
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 02:22:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	35571	2	Standard
	Cl	**37**		ug/L			4251172	14192774	2	Standard
>	**Sc**	**45**		ug/L			481901	536421	1	Standard
	Al	**27**	**22.266**	ug/L	0.704	3	4245	524410	2	Standard
	V	**51**	**18.534**	ug/L	0.542	2	4164	390665	1	Standard
	V-1	**51**	**22.044**	ug/L	0.583	2	285	462253	1	Standard
	Cr	**52**	**2.829**	ug/L	0.070	2	12454	63605	0	Standard
	Cr	**53**	**14.742**	ug/L	0.241	1	166	30081	0	Standard
>	**Ge**	**72**		ug/L			25548	22916	0	KED
	Ni	**60**	**0.343**	ug/L	0.035	10	24	281	9	KED
	Ni	**62**	**0.508**	ug/L	0.191	37	12	72	32	KED
	Cu	**63**	**1.763**	ug/L	0.008	0	62	3926	0	KED
	Cu	**65**	**1.756**	ug/L	0.027	1	31	1927	1	KED
	Zn	**66**	**0.349**	ug/L	0.034	9	64	166	6	KED
	Zn	**67**	**0.791**	ug/L	0.039	4	4	43	4	KED
	As	**75**	**0.351**	ug/L	0.021	5	3	56	5	KED
	Se	**78**	**0.329**	ug/L	0.046	13	13	17	4	KED
	Y	**89**		ug/L			266308	276288	2	Standard
	Kr	**83**		ug/L			48	83	4	Standard
>	**In-1**	**115**		ug/L			7333	6695	1	KED
	Cd	**111**	**0.008**	ug/L	0.003	38	1	3	17	KED
	Cd	**114**	**0.008**	ug/L	0.002	28	0	3	26	KED
>	**In**	**115**		ug/L			364624	323150	1	Standard
	Ag	**107**	**0.014**	ug/L	0.000	2	48	196	0	Standard
	Sb	**121**	**-0.005**	ug/L	0.005	91	308	231	15	Standard
	Sb	**123**	**-0.008**	ug/L	0.002	21	264	185	3	Standard
>	**Tb**	**159**		ug/L			557087	541487	2	Standard
	Tl	**205**	**-0.003**	ug/L	0.003	112	765	676	8	Standard
	Pb	**208**	**0.141**	ug/L	0.006	3	688	5376	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0387-08
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 02:27:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	36946	0	Standard
	Cl	**37**		ug/L			4251172	6079285	3	Standard
>	**Sc**	**45**		ug/L			481901	534936	1	Standard
	Al	**27**	**461.464**	ug/L	13.217	2	4245	10745792	1	Standard
	V	**51**	**8.565**	ug/L	0.031	0	4164	182585	1	Standard
	V-1	**51**	**9.308**	ug/L	0.056	0	285	194882	0	Standard
	Cr	**52**	**1.904**	ug/L	0.038	1	12454	47215	0	Standard
	Cr	**53**	**4.492**	ug/L	0.148	3	166	9268	1	Standard
>	**Ge**	**72**		ug/L			25548	25083	1	KED
	Ni	**60**	**0.458**	ug/L	0.022	4	24	404	5	KED
	Ni	**62**	**0.707**	ug/L	0.213	30	12	105	26	KED
	Cu	**63**	**2.110**	ug/L	0.031	1	62	5132	1	KED
	Cu	**65**	**2.145**	ug/L	0.020	0	31	2569	2	KED
	Zn	**66**	**2.995**	ug/L	0.147	4	64	1085	2	KED
	Zn	**67**	**3.966**	ug/L	0.348	8	4	222	9	KED
	As	**75**	**0.527**	ug/L	0.027	5	3	91	6	KED
	Se	**78**	**0.284**	ug/L	0.157	55	13	18	18	KED
	Y	**89**		ug/L			266308	337145	2	Standard
	Kr	**83**		ug/L			48	54	20	Standard
>	**In-1**	**115**		ug/L			7333	7173	0	KED
	Cd	**111**	**0.005**	ug/L	0.000	0	1	2	0	KED
	Cd	**114**	**0.029**	ug/L	0.014	47	0	14	45	KED
>	**In**	**115**		ug/L			364624	348568	0	Standard
	Ag	**107**	**0.018**	ug/L	0.003	18	48	248	14	Standard
	Sb	**121**	**0.006**	ug/L	0.005	83	308	352	13	Standard
	Sb	**123**	**0.002**	ug/L	0.002	100	264	269	6	Standard
>	**Tb**	**159**		ug/L			557087	581334	2	Standard
	Tl	**205**	**-0.001**	ug/L	0.001	93	765	765	6	Standard
	Pb	**208**	**0.266**	ug/L	0.007	2	688	10268	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0387-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, March 31, 2023 02:32:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24196	34295	1	Standard
	Cl	37		ug/L			4251172	6279234	1	Standard
>	Sc	45		ug/L			481901	588422	2	Standard
	Al	27	5.129	ug/L	0.024	0	4245	136538	1	Standard
	V	51	14.670	ug/L	0.189	1	4164	340337	1	Standard
	V-1	51	15.344	ug/L	0.159	1	285	353119	1	Standard
	Cr	52	1.958	ug/L	0.039	1	12454	52983	1	Standard
	Cr	53	4.437	ug/L	0.111	2	166	10074	2	Standard
>	Ge	72		ug/L			25548	25158	1	KED
	Ni	60	0.697	ug/L	0.023	3	24	604	2	KED
	Ni	62	0.716	ug/L	0.212	29	12	106	25	KED
	Cu	63	1.793	ug/L	0.036	2	62	4382	1	KED
	Cu	65	1.856	ug/L	0.038	2	31	2233	0	KED
	Zn	66	0.445	ug/L	0.079	17	64	215	13	KED
	Zn	67	0.598	ug/L	0.107	17	4	37	16	KED
	As	75	0.311	ug/L	0.024	7	3	55	7	KED
	Se	78	0.127	ug/L	0.165	129	13	15	20	KED
	Y	89		ug/L			266308	268024	1	Standard
	Kr	83		ug/L			48	53	6	Standard
>	In-1	115		ug/L			7333	7191	2	KED
	Cd	111	0.005	ug/L	0.010	195	1	2	66	KED
	Cd	114	0.009	ug/L	0.004	47	0	4	44	KED
>	In	115		ug/L			364624	348775	1	Standard
	Ag	107	0.006	ug/L	0.002	39	48	115	23	Standard
	Sb	121	-0.009	ug/L	0.003	33	308	218	10	Standard
	Sb	123	-0.013	ug/L	0.002	12	264	161	8	Standard
>	Tb	159		ug/L			557087	568379	2	Standard
	Tl	205	-0.002	ug/L	0.001	43	765	720	2	Standard
	Pb	208	0.110	ug/L	0.005	4	688	4569	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0387-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, March 31, 2023 02:36:52
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	34264	0	Standard
	Cl	**37**		ug/L			4251172	6213996	2	Standard
⌈>	**Sc**	**45**		ug/L			481901	576615	1	Standard
|	**Al**	**27**	**5.002**	ug/L	0.062	1	4245	130619	1	Standard
|	**V**	**51**	**14.519**	ug/L	0.415	2	4164	330069	1	Standard
|	**V-1**	**51**	**15.137**	ug/L	0.416	2	285	341327	1	Standard
|	**Cr**	**52**	**1.995**	ug/L	0.051	2	12454	52620	0	Standard
⌊	**Cr**	**53**	**4.287**	ug/L	0.063	1	166	9546	0	Standard
⌈>	**Ge**	**72**		ug/L			25548	25123	1	KED
|	**Ni**	**60**	**0.775**	ug/L	0.032	4	24	668	4	KED
|	**Ni**	**62**	**0.870**	ug/L	0.078	9	12	126	8	KED
|	**Cu**	**63**	**1.869**	ug/L	0.085	4	62	4559	3	KED
|	**Cu**	**65**	**1.864**	ug/L	0.027	1	31	2242	3	KED
|	**Zn**	**66**	**0.352**	ug/L	0.004	1	64	183	2	KED
|	**Zn**	**67**	**0.681**	ug/L	0.125	18	4	41	15	KED
|	**As**	**75**	**0.304**	ug/L	0.026	8	3	54	6	KED
⌊	**Se**	**78**	**0.084**	ug/L	0.088	104	13	14	13	KED
	Y	**89**		ug/L			266308	266943	1	Standard
	Kr	**83**		ug/L			48	49	13	Standard
⌈>	**In-1**	**115**		ug/L			7333	7058	2	KED
|	**Cd**	**111**	**0.010**	ug/L	0.009	86	1	3	43	KED
⌊	**Cd**	**114**	**0.010**	ug/L	0.008	76	0	5	71	KED
⌈>	**In**	**115**		ug/L			364624	346665	1	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.000	7	48	97	2	Standard
|	**Sb**	**121**	**-0.010**	ug/L	0.002	16	308	207	5	Standard
⌊	**Sb**	**123**	**-0.015**	ug/L	0.003	21	264	150	13	Standard
⌈>	**Tb**	**159**		ug/L			557087	567877	1	Standard
|	**Tl**	**205**	**-0.002**	ug/L	0.002	105	765	725	7	Standard
⌊	**Pb**	**208**	**0.107**	ug/L	0.002	2	688	4457	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0387-04
Sample Dil Factor: 100
Comments:
Sample Date/Time: Friday, March 31, 2023 02:41:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	33488	1	Standard
	Cl	**37**		ug/L			4251172	4271677	3	Standard
⎡>	**Sc**	**45**		ug/L			481901	527112	4	Standard
⎢	**Al**	**27**	**9.888**	ug/L	0.258	2	4245	231325	1	Standard
⎢	**V**	**51**	**10.727**	ug/L	0.664	6	4164	223792	2	Standard
⎢	**V-1**	**51**	**10.801**	ug/L	0.660	6	285	222412	2	Standard
⎢	**Cr**	**52**	**2.214**	ug/L	0.124	5	12454	51830	0	Standard
⎣	**Cr**	**53**	**2.629**	ug/L	0.120	4	166	5415	0	Standard
⎡>	**Ge**	**72**		ug/L			25548	26551	1	KED
⎢	**Ni**	**60**	**0.430**	ug/L	0.022	5	24	403	5	KED
⎢	**Ni**	**62**	**0.476**	ug/L	0.114	23	12	79	19	KED
⎢	**Cu**	**63**	**0.614**	ug/L	0.034	5	62	1625	4	KED
⎢	**Cu**	**65**	**0.614**	ug/L	0.041	6	31	801	5	KED
⎢	**Zn**	**66**	**0.544**	ug/L	0.076	13	64	262	9	KED
⎢	**Zn**	**67**	**0.770**	ug/L	0.058	7	4	49	7	KED
⎢	**As**	**75**	**0.198**	ug/L	0.023	11	3	38	11	KED
⎣	**Se**	**78**	**0.108**	ug/L	0.174	160	13	16	20	KED
	Y	**89**		ug/L			266308	269894	4	Standard
	Kr	**83**		ug/L			48	51	22	Standard
⎡>	**In-1**	**115**		ug/L			7333	7427	0	KED
⎢	**Cd**	**111**	**0.006**	ug/L	0.003	44	1	3	17	KED
⎣	**Cd**	**114**	**0.006**	ug/L	0.004	64	0	3	55	KED
⎡>	**In**	**115**		ug/L			364624	352048	6	Standard
⎢	**Ag**	**107**	**0.002**	ug/L	0.001	56	48	67	11	Standard
⎢	**Sb**	**121**	**-0.020**	ug/L	0.001	6	308	113	14	Standard
⎣	**Sb**	**123**	**-0.025**	ug/L	0.002	8	264	86	19	Standard
⎡>	**Tb**	**159**		ug/L			557087	559374	6	Standard
⎢	**Tl**	**205**	**-0.000**	ug/L	0.001	730	765	762	4	Standard
⎣	**Pb**	**208**	**0.020**	ug/L	0.003	17	688	1370	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0387-09
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 02:46:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	34842	1	Standard
	Cl	**37**		ug/L			4251172	12344340	2	Standard
⌈>	**Sc**	**45**		ug/L			481901	547674	0	Standard
|	**Al**	**27**	**18.815**	ug/L	0.114	0	4245	453290	1	Standard
|	**V**	**51**	**8.968**	ug/L	0.056	0	4164	195493	0	Standard
|	**V-1**	**51**	**10.562**	ug/L	0.101	0	285	226368	1	Standard
|	**Cr**	**52**	**1.124**	ug/L	0.011	0	12454	34333	1	Standard
⌊	**Cr**	**53**	**6.550**	ug/L	0.159	2	166	13753	2	Standard
⌈>	**Ge**	**72**		ug/L			25548	22583	3	KED
|	**Ni**	**60**	**0.064**	ug/L	0.017	26	24	69	18	KED
|	**Ni**	**62**	**0.233**	ug/L	0.035	15	12	38	10	KED
|	**Cu**	**63**	**0.241**	ug/L	0.025	10	62	577	9	KED
|	**Cu**	**65**	**0.231**	ug/L	0.009	3	31	274	6	KED
|	**Zn**	**66**	**0.529**	ug/L	0.065	12	64	219	7	KED
|	**Zn**	**67**	**1.505**	ug/L	0.146	9	4	78	12	KED
|	**As**	**75**	**0.126**	ug/L	0.023	18	3	22	16	KED
⌊	**Se**	**78**	**0.326**	ug/L	0.259	79	13	17	26	KED
	Y	**89**		ug/L			266308	260285	1	Standard
	Kr	**83**		ug/L			48	95	10	Standard
⌈>	**In-1**	**115**		ug/L			7333	6631	1	KED
|	**Cd**	**111**	**0.013**	ug/L	0.007	57	1	4	35	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.002	49	0	2	40	KED
⌈>	**In**	**115**		ug/L			364624	315559	0	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	52	48	66	18	Standard
|	**Sb**	**121**	**0.018**	ug/L	0.005	29	308	414	10	Standard
⌊	**Sb**	**123**	**0.020**	ug/L	0.003	15	264	355	6	Standard
⌈>	**Tb**	**159**		ug/L			557087	541571	1	Standard
|	**Tl**	**205**	**-0.005**	ug/L	0.002	48	765	613	8	Standard
⌊	**Pb**	**208**	**0.021**	ug/L	0.002	9	688	1370	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLH
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 02:51:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	25443	1	Standard
	Cl	**37**		ug/L			4251172	4288483	0	Standard
>	**Sc**	**45**		ug/L			481901	461172	1	Standard
	Al	**27**	**-0.066**	ug/L	0.009	13	4245	2734	5	Standard
	V	**51**	**0.013**	ug/L	0.008	57	4164	4225	1	Standard
	V-1	**51**	**0.128**	ug/L	0.005	3	285	2570	2	Standard
	Cr	**52**	**0.034**	ug/L	0.015	43	12454	12426	1	Standard
	Cr	**53**	**0.410**	ug/L	0.012	2	166	874	3	Standard
>	**Ge**	**72**		ug/L			25548	26228	2	KED
	Ni	**60**	**-0.017**	ug/L	0.006	36	24	10	50	KED
	Ni	**62**	**0.067**	ug/L	0.026	39	12	22	17	KED
	Cu	**63**	**-0.001**	ug/L	0.002	282	62	62	9	KED
	Cu	**65**	**-0.006**	ug/L	0.009	134	31	24	46	KED
	Zn	**66**	**-0.119**	ug/L	0.030	25	64	23	46	KED
	Zn	**67**	**0.043**	ug/L	0.053	123	4	6	41	KED
	As	**75**	**0.005**	ug/L	0.002	39	3	4	5	KED
	Se	**78**	**0.025**	ug/L	0.015	61	13	14	1	KED
	Y	**89**		ug/L			266308	252533	1	Standard
	Kr	**83**		ug/L			48	54	19	Standard
>	**In-1**	**115**		ug/L			7333	7586	0	KED
	Cd	**111**	**0.004**	ug/L	0.004	107	1	2	33	KED
	Cd	**114**	**0.006**	ug/L	0.010	165	0	3	142	KED
>	**In**	**115**		ug/L			364624	350481	2	Standard
	Ag	**107**	**-0.002**	ug/L	0.001	26	48	22	30	Standard
	Sb	**121**	**-0.027**	ug/L	0.001	5	308	52	26	Standard
	Sb	**123**	**-0.029**	ug/L	0.001	2	264	57	5	Standard
>	**Tb**	**159**		ug/L			557087	563178	3	Standard
	Tl	**205**	**0.002**	ug/L	0.000	13	765	819	3	Standard
	Pb	**208**	**-0.015**	ug/L	0.001	3	688	180	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 02:56:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	25120	1	Standard
	Cl	**37**		ug/L			4251172	4341228	2	Standard
⌈>	**Sc**	**45**		ug/L			481901	472297	2	Standard
|	**Al**	**27**	**4958.803**	ug/L	124.187	2	4245	101902594	1	Standard
|	**V**	**51**	**49.548**	ug/L	0.422	0	4164	912893	1	Standard
|	**V-1**	**51**	**49.800**	ug/L	0.587	1	285	919218	1	Standard
|	**Cr**	**52**	**50.088**	ug/L	0.736	1	12454	787821	0	Standard
⌊	**Cr**	**53**	**50.910**	ug/L	1.287	2	166	91046	0	Standard
⌈>	**Ge**	**72**		ug/L			25548	26792	1	KED
|	**Ni**	**60**	**49.496**	ug/L	1.176	2	24	43871	0	KED
|	**Ni**	**62**	**52.069**	ug/L	1.104	2	12	7320	1	KED
|	**Cu**	**63**	**50.026**	ug/L	0.173	0	62	128494	1	KED
|	**Cu**	**65**	**50.468**	ug/L	0.662	1	31	63850	0	KED
|	**Zn**	**66**	**49.791**	ug/L	1.515	3	64	18223	1	KED
|	**Zn**	**67**	**52.756**	ug/L	1.533	2	4	3107	1	KED
|	**As**	**75**	**50.109**	ug/L	0.847	1	3	8968	0	KED
⌊	**Se**	**78**	**49.592**	ug/L	0.958	1	13	1039	3	KED
	Y	**89**		ug/L			266308	271274	1	Standard
	Kr	**83**		ug/L			48	52	18	Standard
⌈>	**In-1**	**115**		ug/L			7333	7688	1	KED
|	**Cd**	**111**	**50.036**	ug/L	1.191	2	1	10988	1	KED
⌊	**Cd**	**114**	**50.673**	ug/L	0.844	1	0	26782	0	KED
⌈>	**In**	**115**		ug/L			364624	360187	1	Standard
|	**Ag**	**107**	**50.200**	ug/L	1.312	2	48	596101	1	Standard
|	**Sb**	**121**	**50.547**	ug/L	0.773	1	308	468995	0	Standard
⌊	**Sb**	**123**	**50.923**	ug/L	0.798	1	264	360033	0	Standard
⌈>	**Tb**	**159**		ug/L			557087	590441	2	Standard
|	**Tl**	**205**	**50.764**	ug/L	2.144	4	765	1424615	1	Standard
⌊	**Pb**	**208**	**51.427**	ug/L	1.587	3	688	1876617	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 03:03:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	24260	1	Standard
	Cl	**37**		ug/L			4251172	4291123	1	Standard
⌈>	**Sc**	**45**		ug/L			481901	453712	1	Standard
|	**Al**	**27**	**0.075**	ug/L	0.011	14	4245	5481	5	Standard
|	**V**	**51**	**0.010**	ug/L	0.015	154	4164	4088	4	Standard
|	**V-1**	**51**	**0.050**	ug/L	0.006	11	285	1146	6	Standard
|	**Cr**	**52**	**0.035**	ug/L	0.030	85	12454	12239	1	Standard
⌊	**Cr**	**53**	**0.166**	ug/L	0.010	5	166	442	3	Standard
⌈>	**Ge**	**72**		ug/L			25548	25809	0	KED
|	**Ni**	**60**	**-0.013**	ug/L	0.008	64	24	13	51	KED
|	**Ni**	**62**	**0.051**	ug/L	0.083	163	12	19	56	KED
|	**Cu**	**63**	**0.000**	ug/L	0.005	2192	62	63	20	KED
|	**Cu**	**65**	**0.001**	ug/L	0.004	339	31	33	16	KED
|	**Zn**	**66**	**-0.042**	ug/L	0.025	60	64	50	17	KED
|	**Zn**	**67**	**0.157**	ug/L	0.091	57	4	13	37	KED
|	**As**	**75**	**0.011**	ug/L	0.003	26	3	5	9	KED
⌊	**Se**	**78**	**0.217**	ug/L	0.127	58	13	17	14	KED
	Y	**89**		ug/L			266308	253802	2	Standard
	Kr	**83**		ug/L			48	50	20	Standard
⌈>	**In-1**	**115**		ug/L			7333	7386	1	KED
|	**Cd**	**111**	**0.010**	ug/L	0.007	62	1	4	35	KED
⌊	**Cd**	**114**	**0.006**	ug/L	0.004	62	0	3	55	KED
⌈>	**In**	**115**		ug/L			364624	349894	0	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.000	22	48	62	6	Standard
|	**Sb**	**121**	**0.097**	ug/L	0.008	8	308	1165	6	Standard
⌊	**Sb**	**123**	**0.093**	ug/L	0.007	7	264	892	5	Standard
⌈>	**Tb**	**159**		ug/L			557087	558816	1	Standard
|	**Tl**	**205**	**0.003**	ug/L	0.000	11	765	857	0	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.001	28	688	820	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0386-02
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 03:08:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24196	31794	1	Standard
	Cl	37		ug/L			4251172	4568504	0	Standard
>	Sc	45		ug/L			481901	506529	1	Standard
	Al	27	49.253	ug/L	1.450	2	4245	1090013	1	Standard
	V	51	9.989	ug/L	0.140	1	4164	200874	0	Standard
	V-1	51	10.157	ug/L	0.141	1	285	201328	0	Standard
	Cr	52	1.832	ug/L	0.031	1	12454	43524	0	Standard
	Cr	53	2.552	ug/L	0.037	1	166	5063	0	Standard
>	Ge	72		ug/L			25548	25868	2	KED
	Ni	60	0.128	ug/L	0.013	10	24	134	10	KED
	Ni	62	0.238	ug/L	0.030	12	12	45	8	KED
	Cu	63	0.793	ug/L	0.036	4	62	2028	2	KED
	Cu	65	0.783	ug/L	0.010	1	31	987	2	KED
	Zn	66	0.361	ug/L	0.082	22	64	191	13	KED
	Zn	67	1.140	ug/L	0.093	8	4	69	5	KED
	As	75	0.624	ug/L	0.053	8	3	111	9	KED
	Se	78	0.160	ug/L	0.218	136	13	16	23	KED
	Y	89		ug/L			266308	300385	0	Standard
	Kr	83		ug/L			48	53	26	Standard
>	In-1	115		ug/L			7333	7469	0	KED
	Cd	111	-0.003	ug/L	0.003	80	1	1	43	KED
	Cd	114	0.007	ug/L	0.002	32	0	4	28	KED
>	In	115		ug/L			364624	356808	2	Standard
	Ag	107	0.011	ug/L	0.001	5	48	175	2	Standard
	Sb	121	0.021	ug/L	0.003	13	308	492	7	Standard
	Sb	123	0.020	ug/L	0.004	20	264	399	5	Standard
>	Tb	159		ug/L			557087	576414	0	Standard
	Tl	205	0.002	ug/L	0.002	109	765	852	8	Standard
	Pb	208	0.049	ug/L	0.001	2	688	2448	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0386-03
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 03:13:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24196	32654	1	Standard
	Cl	37		ug/L			4251172	4636094	0	Standard
>	Sc	45		ug/L			481901	521691	1	Standard
	Al	27	55.234	ug/L	0.370	0	4245	1258686	1	Standard
	V	51	9.910	ug/L	0.030	0	4164	205313	1	Standard
	V-1	51	10.074	ug/L	0.046	0	285	205681	1	Standard
	Cr	52	1.834	ug/L	0.035	1	12454	44854	0	Standard
	Cr	53	2.537	ug/L	0.030	1	166	5186	2	Standard
>	Ge	72		ug/L			25548	25928	0	KED
	Ni	60	0.127	ug/L	0.010	7	24	133	6	KED
	Ni	62	0.213	ug/L	0.090	42	12	41	29	KED
	Cu	63	0.818	ug/L	0.008	1	62	2096	1	KED
	Cu	65	0.814	ug/L	0.070	8	31	1027	8	KED
	Zn	66	0.350	ug/L	0.031	8	64	188	5	KED
	Zn	67	1.469	ug/L	0.268	18	4	88	18	KED
	As	75	0.654	ug/L	0.053	8	3	116	7	KED
	Se	78	0.169	ug/L	0.127	75	13	17	15	KED
	Y	89		ug/L			266308	297516	0	Standard
	Kr	83		ug/L			48	46	22	Standard
>	In-1	115		ug/L			7333	7507	1	KED
	Cd	111	-0.002	ug/L	0.005	310	1	1	69	KED
	Cd	114	0.006	ug/L	0.005	86	0	3	73	KED
>	In	115		ug/L			364624	352638	1	Standard
	Ag	107	0.010	ug/L	0.001	10	48	166	7	Standard
	Sb	121	0.008	ug/L	0.003	31	308	370	5	Standard
	Sb	123	0.003	ug/L	0.003	101	264	278	7	Standard
>	Tb	159		ug/L			557087	584827	1	Standard
	Tl	205	-0.000	ug/L	0.001	466	765	800	0	Standard
	Pb	208	0.053	ug/L	0.003	5	688	2654	3	Standard

ICP-MS Quantitative Analysis - Summary Report

23C0365

Sample ID: ~~23C0385~~-09

Sample Dil Factor: 2

Comments:

Sample Date/Time: Friday, March 31, 2023 03:17:59

MB 3/30/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	32344	2	Standard
	Cl	**37**		ug/L			4251172	6246144	2	Standard
>	**Sc**	**45**		ug/L			481901	571196	1	Standard
	Al	**27**	**54.087**	ug/L	1.308	2	4245	1349189	0	Standard
	V	**51**	**12.527**	ug/L	0.347	2	4164	282764	1	Standard
	V-1	**51**	**12.865**	ug/L	0.352	2	285	287390	1	Standard
	Cr	**52**	**0.872**	ug/L	0.020	2	12454	31094	0	Standard
	Cr	**53**	**2.221**	ug/L	0.052	2	166	4992	0	Standard
>	**Ge**	**72**		ug/L			25548	24639	0	KED
	Ni	**60**	**2.528**	ug/L	0.014	0	24	2083	0	KED
	Ni	**62**	**2.375**	ug/L	0.317	13	12	318	12	KED
	Cu	**63**	**0.905**	ug/L	0.012	1	62	2195	1	KED
	Cu	**65**	**0.951**	ug/L	0.021	2	31	1136	2	KED
	Zn	**66**	**0.757**	ug/L	0.108	14	64	315	10	KED
	Zn	**67**	**3.641**	ug/L	0.220	6	4	201	5	KED
	As	**75**	**1.184**	ug/L	0.067	5	3	198	4	KED
	Se	**78**	**0.275**	ug/L	0.115	41	13	18	12	KED
	Y	**89**		ug/L			266308	264426	0	Standard
	Kr	**83**		ug/L			48	52	9	Standard
>	**In-1**	**115**		ug/L			7333	7152	1	KED
	Cd	**111**	**0.005**	ug/L	0.005	95	1	2	33	KED
	Cd	**114**	**0.007**	ug/L	0.006	82	0	3	73	KED
>	**In**	**115**		ug/L			364624	343546	0	Standard
	Ag	**107**	**0.000**	ug/L	0.002	503	48	49	35	Standard
	Sb	**121**	**0.001**	ug/L	0.001	46	308	303	1	Standard
	Sb	**123**	**0.001**	ug/L	0.003	245	264	257	7	Standard
>	**Tb**	**159**		ug/L			557087	569107	2	Standard
	Tl	**205**	**0.005**	ug/L	0.001	22	765	927	1	Standard
	Pb	**208**	**0.038**	ug/L	0.001	2	688	2032	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0380-05
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 03:22:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	43176	1	Standard
	Cl	**37**		ug/L			4251172	9034236	0	Standard
>	**Sc**	**45**		ug/L			481901	545163	1	Standard
	Al	**27**	**7.560**	ug/L	0.113	1	4245	184170	1	Standard
	V	**51**	**1.092**	ug/L	0.015	1	4164	27841	2	Standard
	V-1	**51**	**1.966**	ug/L	0.004	0	285	42199	1	Standard
	Cr	**52**	**0.533**	ug/L	0.023	4	12454	23620	1	Standard
	Cr	**53**	**3.431**	ug/L	0.045	1	166	7260	0	Standard
>	**Ge**	**72**		ug/L			25548	21489	0	KED
	Ni	**60**	**24.420**	ug/L	0.556	2	24	17373	1	KED
	Ni	**62**	**25.118**	ug/L	0.161	0	12	2838	0	KED
	Cu	**63**	**0.354**	ug/L	0.008	2	62	781	2	KED
	Cu	**65**	**0.341**	ug/L	0.009	2	31	372	3	KED
	Zn	**66**	**2.409**	ug/L	0.223	9	64	758	8	KED
	Zn	**67**	**3.875**	ug/L	0.328	8	4	186	9	KED
	As	**75**	**1.510**	ug/L	0.073	4	3	219	3	KED
	Se	**78**	**0.455**	ug/L	0.068	14	13	18	5	KED
	Y	**89**		ug/L			266308	251381	2	Standard
	Kr	**83**		ug/L			48	93	5	Standard
>	**In-1**	**115**		ug/L			7333	6318	2	KED
	Cd	**111**	**0.019**	ug/L	0.017	88	1	5	60	KED
	Cd	**114**	**0.000**	ug/L	0.005	1301	0	0	364	KED
>	**In**	**115**		ug/L			364624	312113	0	Standard
	Ag	**107**	**-0.001**	ug/L	0.001	100	48	33	26	Standard
	Sb	**121**	**0.027**	ug/L	0.007	24	308	482	12	Standard
	Sb	**123**	**0.019**	ug/L	0.003	13	264	344	3	Standard
>	**Tb**	**159**		ug/L			557087	534468	1	Standard
	Tl	**205**	**0.015**	ug/L	0.001	9	765	1105	2	Standard
	Pb	**208**	**-0.002**	ug/L	0.000	5	688	597	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0380-03
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 03:27:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	29435	0	Standard
	Cl	**37**		ug/L			4251172	4412164	1	Standard
⌈>	**Sc**	**45**		ug/L			481901	517466	0	Standard
|	**Al**	**27**	**1.221**	ug/L	0.032	2	4245	32051	1	Standard
|	**V**	**51**	**3.368**	ug/L	0.051	1	4164	72155	0	Standard
|	**V-1**	**51**	**3.459**	ug/L	0.040	1	285	70236	0	Standard
|	**Cr**	**52**	**0.372**	ug/L	0.036	9	12454	19683	2	Standard
⌊	**Cr**	**53**	**0.731**	ug/L	0.016	2	166	1610	2	Standard
⌈>	**Ge**	**72**		ug/L			25548	25013	0	KED
|	**Ni**	**60**	**0.164**	ug/L	0.041	25	24	160	22	KED
|	**Ni**	**62**	**0.288**	ug/L	0.036	12	12	50	9	KED
|	**Cu**	**63**	**0.143**	ug/L	0.004	2	62	403	1	KED
|	**Cu**	**65**	**0.144**	ug/L	0.022	15	31	200	13	KED
|	**Zn**	**66**	**0.666**	ug/L	0.034	5	64	289	4	KED
|	**Zn**	**67**	**2.278**	ug/L	0.171	7	4	129	7	KED
|	**As**	**75**	**0.160**	ug/L	0.036	22	3	30	20	KED
⌊	**Se**	**78**	**1.062**	ug/L	0.117	10	13	33	6	KED
	Y	**89**		ug/L			266308	268608	0	Standard
	Kr	**83**		ug/L			48	50	8	Standard
⌈>	**In-1**	**115**		ug/L			7333	7135	2	KED
|	**Cd**	**111**	**0.006**	ug/L	0.003	41	1	3	17	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.002	31	0	4	25	KED
⌈>	**In**	**115**		ug/L			364624	356242	0	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.001	36	48	29	22	Standard
|	**Sb**	**121**	**-0.017**	ug/L	0.004	26	308	148	26	Standard
⌊	**Sb**	**123**	**-0.021**	ug/L	0.002	10	264	113	13	Standard
⌈>	**Tb**	**159**		ug/L			557087	564306	1	Standard
|	**Tl**	**205**	**0.004**	ug/L	0.001	24	765	872	1	Standard
⌊	**Pb**	**208**	**-0.002**	ug/L	0.001	67	688	641	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0380-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 03:32:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	28264	2	Standard
	Cl	**37**		ug/L			4251172	4266070	1	Standard
⌈>	**Sc**	**45**		ug/L			481901	524067	1	Standard
|	**Al**	**27**	**1.056**	ug/L	0.015	1	4245	28698	0	Standard
|	**V**	**51**	**6.836**	ug/L	0.092	1	4164	143681	2	Standard
|	**V-1**	**51**	**6.891**	ug/L	0.095	1	285	141445	2	Standard
|	**Cr**	**52**	**0.121**	ug/L	0.019	15	12454	15613	0	Standard
⌊	**Cr**	**53**	**0.438**	ug/L	0.011	2	166	1049	1	Standard
⌈>	**Ge**	**72**		ug/L			25548	25668	0	KED
|	**Ni**	**60**	**0.132**	ug/L	0.002	1	24	136	0	KED
|	**Ni**	**62**	**0.165**	ug/L	0.077	46	12	34	30	KED
|	**Cu**	**63**	**0.148**	ug/L	0.016	10	62	427	8	KED
|	**Cu**	**65**	**0.139**	ug/L	0.010	7	31	199	6	KED
|	**Zn**	**66**	**0.330**	ug/L	0.039	11	64	179	6	KED
|	**Zn**	**67**	**0.540**	ug/L	0.147	27	4	34	24	KED
|	**As**	**75**	**0.278**	ug/L	0.024	8	3	51	7	KED
⌊	**Se**	**78**	**0.077**	ug/L	0.112	144	13	15	15	KED
	Y	**89**		ug/L			266308	267845	0	Standard
	Kr	**83**		ug/L			48	45	14	Standard
⌈>	**In-1**	**115**		ug/L			7333	7406	1	KED
|	**Cd**	**111**	**0.013**	ug/L	0.008	59	1	4	34	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.006	80	0	4	71	KED
⌈>	**In**	**115**		ug/L			364624	362307	1	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.001	37	48	24	39	Standard
|	**Sb**	**121**	**-0.020**	ug/L	0.002	8	308	119	12	Standard
⌊	**Sb**	**123**	**-0.024**	ug/L	0.003	12	264	94	22	Standard
⌈>	**Tb**	**159**		ug/L			557087	573186	2	Standard
|	**Tl**	**205**	**-0.000**	ug/L	0.001	229	765	778	1	Standard
⌊	**Pb**	**208**	**-0.003**	ug/L	0.001	43	688	614	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0775-DUP2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 03:37:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	28305	3	Standard
	Cl	**37**		ug/L			4251172	4274826	1	Standard
>	**Sc**	**45**		ug/L			481901	529156	1	Standard
	Al	**27**	**0.975**	ug/L	0.017	1	4245	27120	0	Standard
	V	**51**	**7.062**	ug/L	0.148	2	4164	149681	0	Standard
	V-1	**51**	**7.096**	ug/L	0.141	1	285	147005	0	Standard
	Cr	**52**	**0.117**	ug/L	0.029	24	12454	15703	1	Standard
	Cr	**53**	**0.368**	ug/L	0.012	3	166	918	1	Standard
>	**Ge**	**72**		ug/L			25548	25708	1	KED
	Ni	**60**	**0.139**	ug/L	0.016	11	24	142	8	KED
	Ni	**62**	**0.165**	ug/L	0.045	27	12	34	15	KED
	Cu	**63**	**0.145**	ug/L	0.008	5	62	419	3	KED
	Cu	**65**	**0.137**	ug/L	0.018	13	31	197	12	KED
	Zn	**66**	**0.262**	ug/L	0.022	8	64	156	4	KED
	Zn	**67**	**0.461**	ug/L	0.039	8	4	30	6	KED
	As	**75**	**0.319**	ug/L	0.026	8	3	58	6	KED
	Se	**78**	**0.247**	ug/L	0.103	41	13	18	9	KED
	Y	**89**		ug/L			266308	271747	1	Standard
	Kr	**83**		ug/L			48	40	19	Standard
>	**In-1**	**115**		ug/L			7333	7298	2	KED
	Cd	**111**	**0.003**	ug/L	0.005	170	1	2	43	KED
	Cd	**114**	**0.006**	ug/L	0.003	54	0	3	49	KED
>	**In**	**115**		ug/L			364624	365893	0	Standard
	Ag	**107**	**-0.001**	ug/L	0.000	30	48	33	14	Standard
	Sb	**121**	**-0.021**	ug/L	0.002	7	308	109	13	Standard
	Sb	**123**	**-0.026**	ug/L	0.001	5	264	80	11	Standard
>	**Tb**	**159**		ug/L			557087	575036	1	Standard
	Tl	**205**	**-0.001**	ug/L	0.001	129	765	765	2	Standard
	Pb	**208**	**-0.001**	ug/L	0.001	89	688	661	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0775-MS2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 03:41:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	28312	0	Standard
	Cl	**37**		ug/L			4251172	4198584	1	Standard
⌈>	**Sc**	**45**		ug/L			481901	514559	2	Standard
|	**Al**	**27**	**0.828**	ug/L	0.013	1	4245	23080	3	Standard
|	**V**	**51**	**11.801**	ug/L	0.288	2	4164	240194	1	Standard
|	**V-1**	**51**	**11.856**	ug/L	0.294	2	285	238595	1	Standard
|	**Cr**	**52**	**4.829**	ug/L	0.110	2	12454	94744	1	Standard
⌊	**Cr**	**53**	**5.152**	ug/L	0.219	4	166	10194	1	Standard
⌈>	**Ge**	**72**		ug/L			25548	25303	0	KED
|	**Ni**	**60**	**5.364**	ug/L	0.096	1	24	4513	1	KED
|	**Ni**	**62**	**5.754**	ug/L	0.311	5	12	775	5	KED
|	**Cu**	**63**	**5.505**	ug/L	0.071	1	62	13409	1	KED
|	**Cu**	**65**	**5.441**	ug/L	0.096	1	31	6529	1	KED
|	**Zn**	**66**	**17.529**	ug/L	0.102	0	64	6101	0	KED
|	**Zn**	**67**	**17.427**	ug/L	0.085	0	4	972	0	KED
|	**As**	**75**	**5.597**	ug/L	0.083	1	3	949	2	KED
⌊	**Se**	**78**	**16.371**	ug/L	1.539	9	13	332	8	KED
	Y	**89**		ug/L			266308	265612	4	Standard
	Kr	**83**		ug/L			48	52	28	Standard
⌈>	**In-1**	**115**		ug/L			7333	7440	3	KED
|	**Cd**	**111**	**5.347**	ug/L	0.226	4	1	1137	2	KED
⌊	**Cd**	**114**	**5.215**	ug/L	0.181	3	0	2666	1	KED
⌈>	**In**	**115**		ug/L			364624	359319	2	Standard
|	**Ag**	**107**	**5.101**	ug/L	0.065	1	48	60485	2	Standard
|	**Sb**	**121**	**5.177**	ug/L	0.068	1	308	48187	0	Standard
⌊	**Sb**	**123**	**5.218**	ug/L	0.022	0	264	37047	2	Standard
⌈>	**Tb**	**159**		ug/L			557087	561480	4	Standard
|	**Tl**	**205**	**5.461**	ug/L	0.248	4	765	146321	0	Standard
⌊	**Pb**	**208**	**5.550**	ug/L	0.263	4	688	193023	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0775-MSD2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 03:46:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	28456	0	Standard
	Cl	**37**		ug/L			4251172	4305407	0	Standard
⌈>	**Sc**	**45**		ug/L			481901	525318	1	Standard
|	**Al**	**27**	**1.431**	ug/L	0.050	3	4245	37328	2	Standard
|	**V**	**51**	**11.241**	ug/L	0.131	1	4164	233878	0	Standard
|	**V-1**	**51**	**11.312**	ug/L	0.116	1	285	232507	0	Standard
|	**Cr**	**52**	**4.601**	ug/L	0.066	1	12454	92832	0	Standard
⌊	**Cr**	**53**	**4.969**	ug/L	0.036	0	166	10051	1	Standard
⌈>	**Ge**	**72**		ug/L			25548	25395	1	KED
|	**Ni**	**60**	**5.338**	ug/L	0.085	1	24	4508	2	KED
|	**Ni**	**62**	**6.005**	ug/L	0.111	1	12	811	1	KED
|	**Cu**	**63**	**5.418**	ug/L	0.076	1	62	13244	0	KED
|	**Cu**	**65**	**5.427**	ug/L	0.048	0	31	6536	1	KED
|	**Zn**	**66**	**18.610**	ug/L	0.147	0	64	6497	1	KED
|	**Zn**	**67**	**18.147**	ug/L	1.038	5	4	1016	6	KED
|	**As**	**75**	**5.391**	ug/L	0.160	2	3	917	2	KED
⌊	**Se**	**78**	**16.666**	ug/L	0.590	3	13	339	2	KED
	Y	**89**		ug/L			266308	267003	1	Standard
	Kr	**83**		ug/L			48	45	12	Standard
⌈>	**In-1**	**115**		ug/L			7333	7259	2	KED
|	**Cd**	**111**	**5.158**	ug/L	0.230	4	1	1070	2	KED
⌊	**Cd**	**114**	**5.393**	ug/L	0.206	3	0	2690	2	KED
⌈>	**In**	**115**		ug/L			364624	367607	0	Standard
|	**Ag**	**107**	**4.950**	ug/L	0.034	0	48	60042	0	Standard
|	**Sb**	**121**	**5.074**	ug/L	0.028	0	308	48338	0	Standard
⌊	**Sb**	**123**	**5.103**	ug/L	0.100	1	264	37067	1	Standard
⌈>	**Tb**	**159**		ug/L			557087	568269	1	Standard
|	**Tl**	**205**	**5.335**	ug/L	0.087	1	765	144881	1	Standard
⌊	**Pb**	**208**	**5.420**	ug/L	0.063	1	688	191059	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 03:51:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	25416	1	Standard
	Cl	**37**		ug/L			4251172	4268958	2	Standard
⌈>	**Sc**	**45**		ug/L			481901	467718	0	Standard
|	**Al**	**27**	**-0.064**	ug/L	0.006	9	4245	2823	3	Standard
|	**V**	**51**	**0.004**	ug/L	0.001	30	4164	4121	1	Standard
|	**V-1**	**51**	**0.037**	ug/L	0.002	4	285	952	2	Standard
|	**Cr**	**52**	**0.015**	ug/L	0.007	47	12454	12318	0	Standard
⌊	**Cr**	**53**	**0.122**	ug/L	0.017	13	166	378	6	Standard
⌈>	**Ge**	**72**		ug/L			25548	25369	1	KED
|	**Ni**	**60**	**-0.021**	ug/L	0.008	40	24	6	103	KED
|	**Ni**	**62**	**-0.014**	ug/L	0.035	252	12	10	44	KED
|	**Cu**	**63**	**-0.011**	ug/L	0.002	16	62	34	11	KED
|	**Cu**	**65**	**-0.005**	ug/L	0.003	64	31	25	15	KED
|	**Zn**	**66**	**-0.117**	ug/L	0.036	30	64	23	53	KED
|	**Zn**	**67**	**0.000**	ug/L	0.019	4470	4	4	24	KED
|	**As**	**75**	**0.011**	ug/L	0.012	109	3	5	38	KED
⌊	**Se**	**78**	**0.119**	ug/L	0.151	126	13	15	20	KED
	Y	**89**		ug/L			266308	258721	1	Standard
	Kr	**83**		ug/L			48	46	31	Standard
⌈>	**In-1**	**115**		ug/L			7333	7258	0	KED
|	**Cd**	**111**	**0.003**	ug/L	0.012	363	1	2	94	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.004	157	0	1	113	KED
⌈>	**In**	**115**		ug/L			364624	349713	1	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	43	48	35	13	Standard
|	**Sb**	**121**	**-0.023**	ug/L	0.002	6	308	90	14	Standard
⌊	**Sb**	**123**	**-0.026**	ug/L	0.002	7	264	75	17	Standard
⌈>	**Tb**	**159**		ug/L			557087	550285	3	Standard
|	**Tl**	**205**	**0.001**	ug/L	0.001	98	765	786	4	Standard
⌊	**Pb**	**208**	**-0.013**	ug/L	0.001	5	688	252	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVE
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 03:56:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	25607	2	Standard
	Cl	**37**		ug/L			4251172	4405721	0	Standard
⌈>	**Sc**	**45**		ug/L			481901	493399	1	Standard
|	**Al**	**27**	**4958.040**	ug/L	26.904	0	4245	106471586	1	Standard
|	**V**	**51**	**49.616**	ug/L	0.195	0	4164	955059	1	Standard
|	**V-1**	**51**	**49.897**	ug/L	0.363	0	285	962281	1	Standard
|	**Cr**	**52**	**48.540**	ug/L	1.019	2	12454	797978	0	Standard
⌊	**Cr**	**53**	**49.490**	ug/L	1.284	2	166	92481	1	Standard
⌈>	**Ge**	**72**		ug/L			25548	25465	0	KED
|	**Ni**	**60**	**50.940**	ug/L	1.102	2	24	42922	2	KED
|	**Ni**	**62**	**53.089**	ug/L	0.982	1	12	7094	1	KED
|	**Cu**	**63**	**50.868**	ug/L	0.141	0	62	124185	0	KED
|	**Cu**	**65**	**52.135**	ug/L	0.842	1	31	62694	1	KED
|	**Zn**	**66**	**52.127**	ug/L	0.804	1	64	18134	1	KED
|	**Zn**	**67**	**52.686**	ug/L	0.347	0	4	2950	1	KED
|	**As**	**75**	**50.561**	ug/L	0.972	1	3	8602	1	KED
⌊	**Se**	**78**	**50.656**	ug/L	0.639	1	13	1008	2	KED
	Y	**89**		ug/L			266308	268074	1	Standard
	Kr	**83**		ug/L			48	55	5	Standard
⌈>	**In-1**	**115**		ug/L			7333	7210	3	KED
|	**Cd**	**111**	**51.919**	ug/L	1.785	3	1	10688	0	KED
⌊	**Cd**	**114**	**52.360**	ug/L	1.626	3	0	25943	1	KED
⌈>	**In**	**115**		ug/L			364624	361400	1	Standard
|	**Ag**	**107**	**49.313**	ug/L	1.068	2	48	587615	1	Standard
|	**Sb**	**121**	**50.327**	ug/L	0.796	1	308	468542	0	Standard
⌊	**Sb**	**123**	**50.826**	ug/L	0.989	1	264	360558	0	Standard
⌈>	**Tb**	**159**		ug/L			557087	575922	0	Standard
|	**Tl**	**205**	**52.556**	ug/L	1.137	2	765	1439530	1	Standard
⌊	**Pb**	**208**	**52.800**	ug/L	0.357	0	688	1880255	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBE
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 04:04:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	24567	1	Standard
	Cl	**37**		ug/L			4251172	4352676	1	Standard
⎡>	**Sc**	**45**		ug/L			481901	468141	2	Standard
⎢	**Al**	**27**	**0.027**	ug/L	0.005	20	4245	4666	2	Standard
⎢	**V**	**51**	**0.001**	ug/L	0.006	565	4164	4062	2	Standard
⎢	**V-1**	**51**	**0.019**	ug/L	0.002	8	285	630	2	Standard
⎢	**Cr**	**52**	**0.001**	ug/L	0.025	1724	12454	12114	0	Standard
⎣	**Cr**	**53**	**0.062**	ug/L	0.022	35	166	271	12	Standard
⎡>	**Ge**	**72**		ug/L			25548	24755	1	KED
⎢	**Ni**	**60**	**0.010**	ug/L	0.017	159	24	32	40	KED
⎢	**Ni**	**62**	**-0.002**	ug/L	0.018	1071	12	12	18	KED
⎢	**Cu**	**63**	**0.008**	ug/L	0.019	229	62	79	54	KED
⎢	**Cu**	**65**	**0.008**	ug/L	0.026	338	31	38	76	KED
⎢	**Zn**	**66**	**-0.069**	ug/L	0.035	50	64	38	30	KED
⎢	**Zn**	**67**	**0.026**	ug/L	0.034	131	4	5	33	KED
⎢	**As**	**75**	**0.021**	ug/L	0.027	126	3	6	61	KED
⎣	**Se**	**78**	**0.073**	ug/L	0.090	121	13	14	11	KED
	Y	**89**		ug/L			266308	258359	0	Standard
	Kr	**83**		ug/L			48	42	39	Standard
⎡>	**In-1**	**115**		ug/L			7333	7198	0	KED
⎢	**Cd**	**111**	**-0.006**	ug/L	0.003	44	1	0	86	KED
⎣	**Cd**	**114**	**0.008**	ug/L	0.006	72	0	4	65	KED
⎡>	**In**	**115**		ug/L			364624	353599	1	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.001	92	48	64	25	Standard
⎢	**Sb**	**121**	**0.091**	ug/L	0.001	0	308	1124	1	Standard
⎣	**Sb**	**123**	**0.088**	ug/L	0.007	7	264	866	6	Standard
⎡>	**Tb**	**159**		ug/L			557087	548712	1	Standard
⎢	**Tl**	**205**	**-0.001**	ug/L	0.002	204	765	734	6	Standard
⎣	**Pb**	**208**	**-0.013**	ug/L	0.000	3	688	231	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0420-01
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 04:08:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	50194	3	Standard
	Cl	**37**		ug/L			4251172	4301225	1	Standard
⌈>	**Sc**	**45**		ug/L			481901	550154	0	Standard
|	**Al**	**27**	**386.920**	ug/L	5.395	1	4245	9269384	1	Standard
|	**V**	**51**	**1.002**	ug/L	0.017	1	4164	26163	0	Standard
|	**V-1**	**51**	**1.064**	ug/L	0.018	1	285	23202	1	Standard
|	**Cr**	**52**	**0.839**	ug/L	0.019	2	12454	29347	1	Standard
⌊	**Cr**	**53**	**1.047**	ug/L	0.032	3	166	2369	3	Standard
⌈>	**Ge**	**72**		ug/L			25548	25769	2	KED
|	**Ni**	**60**	**5.301**	ug/L	0.031	0	24	4542	2	KED
|	**Ni**	**62**	**5.455**	ug/L	0.323	5	12	748	3	KED
|	**Cu**	**63**	**5.703**	ug/L	0.192	3	62	14139	1	KED
|	**Cu**	**65**	**5.600**	ug/L	0.053	0	31	6842	1	KED
|	**Zn**	**66**	**25.871**	ug/L	0.439	1	64	9138	0	KED
|	**Zn**	**67**	**26.993**	ug/L	1.417	5	4	1532	6	KED
|	**As**	**75**	**0.437**	ug/L	0.088	20	3	78	18	KED
⌊	**Se**	**78**	**0.017**	ug/L	0.104	617	13	14	17	KED
	Y	**89**		ug/L			266308	276013	0	Standard
	Kr	**83**		ug/L			48	48	15	Standard
⌈>	**In-1**	**115**		ug/L			7333	7289	1	KED
|	**Cd**	**111**	**0.028**	ug/L	0.009	34	1	7	25	KED
⌊	**Cd**	**114**	**0.019**	ug/L	0.006	30	0	9	28	KED
⌈>	**In**	**115**		ug/L			364624	366488	0	Standard
|	**Ag**	**107**	**0.027**	ug/L	0.002	8	48	379	7	Standard
|	**Sb**	**121**	**0.170**	ug/L	0.002	1	308	1914	0	Standard
⌊	**Sb**	**123**	**0.168**	ug/L	0.006	3	264	1471	3	Standard
⌈>	**Tb**	**159**		ug/L			557087	576217	1	Standard
|	**Tl**	**205**	**0.007**	ug/L	0.002	35	765	983	7	Standard
⌊	**Pb**	**208**	**0.321**	ug/L	0.002	0	688	12134	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0401-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 04:13:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24196	31929	2	Standard
	Cl	37		ug/L			4251172	4615407	1	Standard
>	Sc	45		ug/L			481901	498733	0	Standard
	Al	27	25.834	ug/L	0.780	3	4245	565192	3	Standard
	V	51	0.991	ug/L	0.012	1	4164	23499	1	Standard
	V-1	51	1.077	ug/L	0.008	0	285	21291	0	Standard
	Cr	52	0.747	ug/L	0.015	1	12454	25106	0	Standard
	Cr	53	1.038	ug/L	0.036	3	166	2130	2	Standard
>	Ge	72		ug/L			25548	24987	1	KED
	Ni	60	10.151	ug/L	0.066	0	24	8412	1	KED
	Ni	62	10.397	ug/L	0.993	9	12	1372	7	KED
	Cu	63	8.013	ug/L	0.088	1	62	19245	0	KED
	Cu	65	8.225	ug/L	0.076	0	31	9732	2	KED
	Zn	66	6.134	ug/L	0.164	2	64	2148	1	KED
	Zn	67	6.273	ug/L	0.238	3	4	348	4	KED
	As	75	0.910	ug/L	0.015	1	3	155	2	KED
	Se	78	0.286	ug/L	0.201	70	13	18	22	KED
	Y	89		ug/L			266308	268188	2	Standard
	Kr	83		ug/L			48	59	16	Standard
>	In-1	115		ug/L			7333	7145	1	KED
	Cd	111	0.020	ug/L	0.002	10	1	6	9	KED
	Cd	114	-0.016	ug/L	0.023	144	0	-7	154	KED
>	In	115		ug/L			364624	348813	0	Standard
	Ag	107	0.020	ug/L	0.000	0	48	278	0	Standard
	Sb	121	1.738	ug/L	0.024	1	308	15902	1	Standard
	Sb	123	1.743	ug/L	0.007	0	264	12180	0	Standard
>	Tb	159		ug/L			557087	565108	1	Standard
	Tl	205	-0.000	ug/L	0.002	417	765	766	7	Standard
	Pb	208	0.227	ug/L	0.006	2	688	8614	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0410-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 04:18:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24196	31533	2	Standard
	Cl	37		ug/L			4251172	4567040	1	Standard
>	Sc	45		ug/L			481901	511954	2	Standard
	Al	27	3.006	ug/L	0.052	1	4245	71491	2	Standard
	V	51	0.038	ug/L	0.006	14	4164	5171	2	Standard
	V-1	51	0.189	ug/L	0.006	3	285	4091	2	Standard
	Cr	52	0.432	ug/L	0.025	5	12454	20485	0	Standard
	Cr	53	0.926	ug/L	0.028	3	166	1969	0	Standard
>	Ge	72		ug/L			25548	25871	0	KED
	Ni	60	2.216	ug/L	0.043	1	24	1920	1	KED
	Ni	62	2.178	ug/L	0.241	11	12	307	9	KED
	Cu	63	6.724	ug/L	0.147	2	62	16732	3	KED
	Cu	65	6.597	ug/L	0.028	0	31	8088	1	KED
	Zn	66	12.126	ug/L	0.214	1	64	4335	1	KED
	Zn	67	11.653	ug/L	1.602	13	4	666	13	KED
	As	75	0.041	ug/L	0.005	12	3	10	9	KED
	Se	78	-0.010	ug/L	0.098	1020	13	13	14	KED
	Y	89		ug/L			266308	265928	3	Standard
	Kr	83		ug/L			48	37	25	Standard
>	In-1	115		ug/L			7333	7394	1	KED
	Cd	111	0.001	ug/L	0.007	485	1	2	65	KED
	Cd	114	0.012	ug/L	0.003	24	0	6	21	KED
>	In	115		ug/L			364624	362906	2	Standard
	Ag	107	-0.000	ug/L	0.001	732	48	47	18	Standard
	Sb	121	0.013	ug/L	0.000	2	308	431	2	Standard
	Sb	123	0.010	ug/L	0.004	38	264	333	6	Standard
>	Tb	159		ug/L			557087	572974	2	Standard
	Tl	205	0.001	ug/L	0.002	333	765	801	7	Standard
	Pb	208	0.026	ug/L	0.002	6	688	1640	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0410-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 04:23:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24196	31787	1	Standard
	Cl	37		ug/L			4251172	4656782	0	Standard
>	Sc	45		ug/L			481901	509142	1	Standard
	Al	27	4.038	ug/L	2.070	51	4245	93914	48	Standard
	V	51	0.060	ug/L	0.053	88	4164	5577	18	Standard
	V-1	51	0.216	ug/L	0.047	21	285	4606	20	Standard
	Cr	52	0.447	ug/L	0.039	8	12454	20611	2	Standard
	Cr	53	0.957	ug/L	0.023	2	166	2018	3	Standard
>	Ge	72		ug/L			25548	25378	2	KED
	Ni	60	2.211	ug/L	0.029	1	24	1880	1	KED
	Ni	62	2.272	ug/L	0.225	9	12	314	7	KED
	Cu	63	6.266	ug/L	0.172	2	62	15293	1	KED
	Cu	65	6.386	ug/L	0.186	2	31	7679	2	KED
	Zn	66	12.136	ug/L	0.182	1	64	4255	1	KED
	Zn	67	12.231	ug/L	0.557	4	4	685	3	KED
	As	75	0.054	ug/L	0.010	19	3	12	12	KED
	Se	78	0.046	ug/L	0.021	45	13	14	5	KED
	Y	89		ug/L			266308	268330	2	Standard
	Kr	83		ug/L			48	42	21	Standard
>	In-1	115		ug/L			7333	7397	1	KED
	Cd	111	0.010	ug/L	0.007	68	1	4	35	KED
	Cd	114	0.005	ug/L	0.004	69	0	3	58	KED
>	In	115		ug/L			364624	355840	0	Standard
	Ag	107	0.016	ug/L	0.026	163	48	238	131	Standard
	Sb	121	0.023	ug/L	0.027	116	308	515	49	Standard
	Sb	123	0.024	ug/L	0.027	111	264	426	44	Standard
>	Tb	159		ug/L			557087	576177	2	Standard
	Tl	205	0.011	ug/L	0.021	194	765	1082	52	Standard
	Pb	208	0.033	ug/L	0.017	50	688	1886	32	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0431-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 04:27:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24196	694112	0	Standard
	Cl	37		ug/L			4251172	4124995	3	Standard
>	Sc	45		ug/L			481901	498635	1	Standard
	Al	27	4.736	ug/L	0.108	2	4245	107152	1	Standard
	V	51	0.784	ug/L	0.003	0	4164	19495	1	Standard
	V-1	51	0.042	ug/L	0.001	2	285	1119	2	Standard
	Cr	52	3.608	ug/L	0.052	1	12454	71872	0	Standard
	Cr	53	1.099	ug/L	0.044	4	166	2244	2	Standard
>	Ge	72		ug/L			25548	22492	0	KED
	Ni	60	18.722	ug/L	0.589	3	24	13947	2	KED
	Ni	62	19.069	ug/L	0.540	2	12	2257	2	KED
	Cu	63	0.617	ug/L	0.016	2	62	1383	2	KED
	Cu	65	0.614	ug/L	0.026	4	31	679	4	KED
	Zn	66	15.281	ug/L	0.430	2	64	4735	2	KED
	Zn	67	14.907	ug/L	0.541	3	4	740	4	KED
	As	75	0.092	ug/L	0.006	6	3	16	4	KED
	Se	78	0.088	ug/L	0.068	77	13	13	9	KED
	Y	89		ug/L			266308	262259	3	Standard
	Kr	83		ug/L			48	74	0	Standard
>	In-1	115		ug/L			7333	6608	1	KED
	Cd	111	0.041	ug/L	0.028	66	1	9	55	KED
	Cd	114	0.026	ug/L	0.006	24	0	12	24	KED
>	In	115		ug/L			364624	335966	2	Standard
	Ag	107	-0.000	ug/L	0.001	177	48	41	16	Standard
	Sb	121	0.099	ug/L	0.011	11	308	1134	5	Standard
	Sb	123	0.094	ug/L	0.003	2	264	861	1	Standard
>	Tb	159		ug/L			557087	543866	1	Standard
	Tl	205	-0.003	ug/L	0.001	41	765	667	6	Standard
	Pb	208	0.048	ug/L	0.002	3	688	2283	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-31
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 04:32:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24196	51427	0	Standard
	Cl	37		ug/L			4251172	4119206	0	Standard
>	Sc	45		ug/L			481901	507090	1	Standard
	Al	27	30.574	ug/L	0.791	2	4245	679060	1	Standard
	V	51	0.825	ug/L	0.006	0	4164	20627	1	Standard
	V-1	51	0.847	ug/L	0.002	0	285	17078	1	Standard
	Cr	52	0.366	ug/L	0.017	4	12454	19181	0	Standard
	Cr	53	0.447	ug/L	0.014	3	166	1032	2	Standard
>	Ge	72		ug/L			25548	21676	1	KED
	Ni	60	0.588	ug/L	0.041	6	24	442	5	KED
	Ni	62	0.592	ug/L	0.175	29	12	78	26	KED
	Cu	63	2.696	ug/L	0.017	0	62	5652	1	KED
	Cu	65	2.599	ug/L	0.081	3	31	2685	3	KED
	Zn	66	1.646	ug/L	0.255	15	64	539	13	KED
	Zn	67	4.999	ug/L	0.544	10	4	241	11	KED
	As	75	3.490	ug/L	0.234	6	3	508	6	KED
	Se	78	0.285	ug/L	0.177	62	13	16	17	KED
	Y	89		ug/L			266308	258413	1	Standard
	Kr	83		ug/L			48	51	19	Standard
>	In-1	115		ug/L			7333	5273	21	KED
	Cd	111	0.012	ug/L	0.004	33	1	3	34	KED
	Cd	114	0.009	ug/L	0.014	166	0	4	148	KED
>	In	115		ug/L			364624	323765	0	Standard
	Ag	107	0.033	ug/L	0.002	6	48	400	5	Standard
	Sb	121	5.918	ug/L	0.103	1	308	49601	1	Standard
	Sb	123	5.922	ug/L	0.061	1	264	37851	0	Standard
>	Tb	159		ug/L			557087	529267	1	Standard
	Tl	205	0.012	ug/L	0.002	16	765	1029	3	Standard
	Pb	208	0.197	ug/L	0.004	1	688	7091	0	Standard

BLC0819

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~BLC0818~~-DUP1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 31, 2023 04:37:15 MB 3/30/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24196	36564	1	Standard
	Cl	37		ug/L			4251172	4275780	2	Standard
>	Sc	45		ug/L			481901	483984	1	Standard
	Al	27	0.980	ug/L	0.025	2	4245	24895	1	Standard
	V	51	0.014	ug/L	0.006	45	4164	4437	2	Standard
	V-1	51	0.013	ug/L	0.001	8	285	523	2	Standard
	Cr	52	0.156	ug/L	0.019	12	12454	14983	1	Standard
	Cr	53	0.150	ug/L	0.010	6	166	441	3	Standard
>	Ge	72		ug/L			25548	24397	1	KED
	Ni	60	-0.015	ug/L	0.002	13	24	11	16	KED
	Ni	62	-0.005	ug/L	0.031	618	12	11	33	KED
	Cu	63	0.041	ug/L	0.007	17	62	154	12	KED
	Cu	65	0.038	ug/L	0.013	34	31	73	20	KED
	Zn	66	0.067	ug/L	0.053	79	64	83	23	KED
	Zn	67	0.146	ug/L	0.022	14	4	12	9	KED
	As	75	0.013	ug/L	0.012	96	3	5	34	KED
	Se	78	-0.169	ug/L	0.070	41	13	9	15	KED
	Y	89		ug/L			266308	259449	2	Standard
	Kr	83		ug/L			48	38	21	Standard
>	In-1	115		ug/L			7333	7158	0	KED
	Cd	111	0.000	ug/L	0.005	2288	1	1	50	KED
	Cd	114	0.008	ug/L	0.004	56	0	4	50	KED
>	In	115		ug/L			364624	357662	2	Standard
	Ag	107	-0.001	ug/L	0.000	28	48	31	14	Standard
	Sb	121	-0.020	ug/L	0.001	4	308	117	5	Standard
	Sb	123	-0.025	ug/L	0.002	6	264	84	14	Standard
>	Tb	159		ug/L			557087	545243	2	Standard
	Tl	205	-0.000	ug/L	0.001	1332	765	746	4	Standard
	Pb	208	-0.013	ug/L	0.001	5	688	236	12	Standard

BLC0819

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~BLC0818~~ MS1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 31, 2023 04:42:28

MB 3/30/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	38128	2	Standard
	Cl	**37**		ug/L			4251172	4298337	0	Standard
>	**Sc**	**45**		ug/L			481901	489871	2	Standard
	Al	**27**	**4.019**	ug/L	0.145	3	4245	89947	1	Standard
	V	**51**	**24.794**	ug/L	0.841	3	4164	475721	0	Standard
	V-1	**51**	**24.710**	ug/L	0.895	3	285	473007	1	Standard
	Cr	**52**	**25.341**	ug/L	0.480	1	12454	419635	0	Standard
	Cr	**53**	**25.051**	ug/L	0.666	2	166	46550	0	Standard
>	**Ge**	**72**		ug/L			25548	24670	1	KED
	Ni	**60**	**26.348**	ug/L	0.540	2	24	21516	0	KED
	Ni	**62**	**26.698**	ug/L	0.483	1	12	3462	2	KED
	Cu	**63**	**26.771**	ug/L	0.570	2	62	63333	0	KED
	Cu	**65**	**26.765**	ug/L	0.550	2	31	31192	0	KED
	Zn	**66**	**83.457**	ug/L	2.139	2	64	28084	1	KED
	Zn	**67**	**77.762**	ug/L	1.983	2	4	4218	4	KED
	As	**75**	**24.592**	ug/L	0.306	1	3	4054	0	KED
	Se	**78**	**75.566**	ug/L	2.491	3	13	1451	1	KED
	Y	**89**		ug/L			266308	266290	1	Standard
	Kr	**83**		ug/L			48	33	18	Standard
>	**In-1**	**115**		ug/L			7333	6941	1	KED
	Cd	**111**	**26.392**	ug/L	0.460	1	1	5234	1	KED
	Cd	**114**	**26.715**	ug/L	0.259	0	0	12750	1	KED
>	**In**	**115**		ug/L			364624	364247	1	Standard
	Ag	**107**	**24.970**	ug/L	0.909	3	48	299837	2	Standard
	Sb	**121**	**25.487**	ug/L	0.660	2	308	239274	1	Standard
	Sb	**123**	**25.341**	ug/L	0.052	0	264	181348	1	Standard
>	**Tb**	**159**		ug/L			557087	556591	2	Standard
	Tl	**205**	**27.125**	ug/L	0.792	2	765	718082	0	Standard
	Pb	**208**	**27.697**	ug/L	0.707	2	688	953113	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0818-MSD1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 04:48:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24196	44348	2	Standard
	Cl	37		ug/L			4251172	4092546	0	Standard
>	Sc	45		ug/L			481901	496940	2	Standard
	Al	27	32.048	ug/L	0.465	1	4245	697365	1	Standard
	V	51	24.495	ug/L	0.166	0	4164	477135	3	Standard
	V-1	51	24.583	ug/L	0.189	0	285	477723	3	Standard
	Cr	52	22.760	ug/L	0.568	2	12454	383604	0	Standard
	Cr	53	23.086	ug/L	0.565	2	166	43535	0	Standard
>	Ge	72		ug/L			25548	21937	2	KED
	Ni	60	26.412	ug/L	0.845	3	24	19174	1	KED
	Ni	62	27.163	ug/L	0.298	1	12	3133	3	KED
	Cu	63	27.987	ug/L	0.141	0	62	58880	1	KED
	Cu	65	28.234	ug/L	0.600	2	31	29259	1	KED
	Zn	66	77.957	ug/L	1.626	2	64	23329	0	KED
	Zn	67	77.174	ug/L	3.611	4	4	3719	2	KED
	As	75	29.456	ug/L	0.571	1	3	4317	0	KED
	Se	78	78.512	ug/L	2.805	3	13	1340	1	KED
	Y	89		ug/L			266308	255730	1	Standard
	Kr	83		ug/L			48	44	13	Standard
>	In-1	115		ug/L			7333	6373	0	KED
	Cd	111	25.171	ug/L	0.528	2	1	4583	1	KED
	Cd	114	24.828	ug/L	0.937	3	0	10878	3	KED
>	In	115		ug/L			364624	322915	1	Standard
	Ag	107	23.440	ug/L	0.806	3	48	249550	2	Standard
	Sb	121	32.083	ug/L	0.396	1	308	267003	1	Standard
	Sb	123	32.121	ug/L	0.271	0	264	203710	0	Standard
>	Tb	159		ug/L			557087	528847	1	Standard
	Tl	205	25.967	ug/L	0.639	2	765	653334	0	Standard
	Pb	208	25.928	ug/L	0.748	2	688	847952	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLJ
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 04:53:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	26492	4	Standard
	Cl	**37**		ug/L			4251172	4319377	0	Standard
⎡>	**Sc**	**45**		ug/L			481901	466183	0	Standard
⎢	**Al**	**27**	**-0.040**	ug/L	0.006	14	4245	3288	2	Standard
⎢	**V**	**51**	**0.007**	ug/L	0.001	8	4164	4159	0	Standard
⎢	**V-1**	**51**	**0.009**	ug/L	0.001	11	285	436	3	Standard
⎢	**Cr**	**52**	**0.014**	ug/L	0.004	31	12454	12265	1	Standard
⎣	**Cr**	**53**	**0.019**	ug/L	0.001	7	166	195	1	Standard
⎡>	**Ge**	**72**		ug/L			25548	24577	0	KED
⎢	**Ni**	**60**	**-0.012**	ug/L	0.008	67	24	13	47	KED
⎢	**Ni**	**62**	**-0.021**	ug/L	0.015	72	12	9	20	KED
⎢	**Cu**	**63**	**-0.005**	ug/L	0.003	64	62	48	14	KED
⎢	**Cu**	**65**	**-0.009**	ug/L	0.012	138	31	19	72	KED
⎢	**Zn**	**66**	**-0.076**	ug/L	0.023	29	64	36	21	KED
⎢	**Zn**	**67**	**0.015**	ug/L	0.054	364	4	5	57	KED
⎢	**As**	**75**	**0.006**	ug/L	0.006	106	3	4	22	KED
⎣	**Se**	**78**	**0.070**	ug/L	0.239	341	13	14	31	KED
	Y	**89**		ug/L			266308	257787	3	Standard
	Kr	**83**		ug/L			48	45	2	Standard
⎡>	**In-1**	**115**		ug/L			7333	7142	1	KED
⎢	**Cd**	**111**	**0.000**	ug/L	0.005	2154	1	1	50	KED
⎣	**Cd**	**114**	**0.005**	ug/L	0.006	116	0	3	97	KED
⎡>	**In**	**115**		ug/L			364624	352120	1	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.001	122	48	56	20	Standard
⎢	**Sb**	**121**	**-0.011**	ug/L	0.001	13	308	193	5	Standard
⎣	**Sb**	**123**	**-0.018**	ug/L	0.004	19	264	129	17	Standard
⎡>	**Tb**	**159**		ug/L			557087	544732	2	Standard
⎢	**Tl**	**205**	**0.000**	ug/L	0.001	3201	765	748	2	Standard
⎣	**Pb**	**208**	**-0.014**	ug/L	0.001	3	688	205	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVF
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 04:58:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	25681	3	Standard
	Cl	**37**		ug/L			4251172	4296233	0	Standard
>	**Sc**	**45**		ug/L			481901	477906	0	Standard
	Al	**27**	**4888.240**	ug/L	52.953	1	4245	101678455	1	Standard
	V	**51**	**49.708**	ug/L	0.539	1	4164	926781	0	Standard
	V-1	**51**	**49.932**	ug/L	0.788	1	285	932714	1	Standard
	Cr	**52**	**49.441**	ug/L	1.034	2	12454	787155	1	Standard
	Cr	**53**	**50.185**	ug/L	0.684	1	166	90846	0	Standard
>	**Ge**	**72**		ug/L			25548	25194	0	KED
	Ni	**60**	**50.206**	ug/L	0.227	0	24	41856	1	KED
	Ni	**62**	**50.898**	ug/L	1.137	2	12	6729	1	KED
	Cu	**63**	**50.015**	ug/L	0.843	1	62	120795	0	KED
	Cu	**65**	**52.002**	ug/L	0.613	1	31	61875	1	KED
	Zn	**66**	**52.430**	ug/L	0.555	1	64	18044	0	KED
	Zn	**67**	**50.962**	ug/L	1.273	2	4	2823	2	KED
	As	**75**	**50.317**	ug/L	0.673	1	3	8469	1	KED
	Se	**78**	**49.515**	ug/L	1.313	2	13	975	1	KED
	Y	**89**		ug/L			266308	263151	2	Standard
	Kr	**83**		ug/L			48	59	11	Standard
>	**In-1**	**115**		ug/L			7333	6365	21	KED
	Cd	**111**	**58.878**	ug/L	14.549	24	1	10324	0	KED
	Cd	**114**	**60.179**	ug/L	15.529	25	0	25355	1	KED
>	**In**	**115**		ug/L			364624	356009	0	Standard
	Ag	**107**	**48.853**	ug/L	0.373	0	48	573502	0	Standard
	Sb	**121**	**49.917**	ug/L	0.072	0	308	457859	0	Standard
	Sb	**123**	**50.682**	ug/L	0.884	1	264	354235	1	Standard
>	**Tb**	**159**		ug/L			557087	572260	1	Standard
	Tl	**205**	**52.247**	ug/L	1.143	2	765	1421843	0	Standard
	Pb	**208**	**52.731**	ug/L	1.166	2	688	1865653	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBF
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 05:05:47
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24196	25424	4	Standard
	Cl	**37**		ug/L			4251172	4233255	0	Standard
⌈>	**Sc**	**45**		ug/L			481901	466962	2	Standard
|	**Al**	**27**	**0.039**	ug/L	0.010	26	4245	4916	6	Standard
|	**V**	**51**	**0.001**	ug/L	0.005	458	4164	4054	1	Standard
|	**V-1**	**51**	**0.007**	ug/L	0.001	16	285	400	3	Standard
|	**Cr**	**52**	**-0.010**	ug/L	0.012	125	12454	11914	0	Standard
⌊	**Cr**	**53**	**0.009**	ug/L	0.003	38	166	177	3	Standard
⌈>	**Ge**	**72**		ug/L			25548	24462	1	KED
|	**Ni**	**60**	**-0.003**	ug/L	0.011	312	24	20	41	KED
|	**Ni**	**62**	**-0.020**	ug/L	0.016	77	12	9	20	KED
|	**Cu**	**63**	**-0.005**	ug/L	0.008	165	62	48	40	KED
|	**Cu**	**65**	**-0.007**	ug/L	0.008	110	31	21	43	KED
|	**Zn**	**66**	**-0.098**	ug/L	0.026	26	64	28	29	KED
|	**Zn**	**67**	**0.027**	ug/L	0.037	133	4	5	33	KED
|	**As**	**75**	**0.011**	ug/L	0.008	72	3	5	24	KED
⌊	**Se**	**78**	**-0.129**	ug/L	0.115	89	13	10	21	KED
	Y	**89**		ug/L			266308	255285	1	Standard
	Kr	**83**		ug/L			48	49	35	Standard
⌈>	**In-1**	**115**		ug/L			7333	7037	1	KED
|	**Cd**	**111**	**0.000**	ug/L	0.005	1333	1	1	50	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.004	84	0	3	72	KED
⌈>	**In**	**115**		ug/L			364624	353383	0	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	115	48	56	18	Standard
|	**Sb**	**121**	**0.099**	ug/L	0.014	14	308	1199	10	Standard
⌊	**Sb**	**123**	**0.096**	ug/L	0.004	4	264	921	2	Standard
⌈>	**Tb**	**159**		ug/L			557087	545635	2	Standard
|	**Tl**	**205**	**0.000**	ug/L	0.002	2300	765	751	6	Standard
⌊	**Pb**	**208**	**-0.013**	ug/L	0.001	6	688	250	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 05:10:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				25996	2	Standard
	Cl	**37**		ug/L				4268423	0	Standard
>	**Sc**	**45**		ug/L				462048	1	Standard
	Al	**27**		ug/L				4676	3	Standard
	V	**51**		ug/L				4034	4	Standard
	V-1	**51**		ug/L				384	7	Standard
	Cr	**52**		ug/L				12068	2	Standard
	Cr	**53**		ug/L				196	5	Standard
>	**Ge**	**72**		ug/L				24872	0	KED
	Ni	**60**		ug/L				14	45	KED
	Ni	**62**		ug/L				11	16	KED
	Cu	**63**		ug/L				60	13	KED
	Cu	**65**		ug/L				29	27	KED
	Zn	**66**		ug/L				56	8	KED
	Zn	**67**		ug/L				8	12	KED
	As	**75**		ug/L				6	22	KED
	Se	**78**		ug/L				13	36	KED
	Y	**89**		ug/L				256805	1	Standard
	Kr	**83**		ug/L				41	16	Standard
>	**In-1**	**115**		ug/L				7220	2	KED
	Cd	**111**		ug/L				1	69	KED
	Cd	**114**		ug/L				3	33	KED
>	**In**	**115**		ug/L				351012	1	Standard
	Ag	**107**		ug/L				55	10	Standard
	Sb	**121**		ug/L				395	5	Standard
	Sb	**123**		ug/L				283	2	Standard
>	**Tb**	**159**		ug/L				541424	1	Standard
	Tl	**205**		ug/L				718	2	Standard
	Pb	**208**		ug/L				756	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVG
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 05:15:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	25525	3	Standard
	Cl	**37**		ug/L			4268423	4349487	1	Standard
⌈>	**Sc**	**45**		ug/L			462048	478844	1	Standard
|	**Al**	**27**	**4950.627**	ug/L	103.540	2	4676	103162531	1	Standard
|	**V**	**51**	**50.585**	ug/L	0.765	1	4034	944900	0	Standard
|	**V-1**	**51**	**50.569**	ug/L	0.719	1	384	946535	0	Standard
|	**Cr**	**52**	**49.777**	ug/L	0.899	1	12068	794064	0	Standard
⌊	**Cr**	**53**	**49.740**	ug/L	1.372	2	196	90252	2	Standard
⌈>	**Ge**	**72**		ug/L			24872	25440	0	KED
|	**Ni**	**60**	**51.772**	ug/L	1.102	2	14	43568	1	KED
|	**Ni**	**62**	**52.231**	ug/L	2.357	4	11	6971	3	KED
|	**Cu**	**63**	**50.955**	ug/L	1.239	2	60	124274	2	KED
|	**Cu**	**65**	**51.508**	ug/L	0.455	0	29	61884	1	KED
|	**Zn**	**66**	**52.173**	ug/L	0.718	1	56	18125	0	KED
|	**Zn**	**67**	**50.512**	ug/L	1.160	2	8	2830	1	KED
|	**As**	**75**	**50.345**	ug/L	0.649	1	6	8559	0	KED
⌊	**Se**	**78**	**51.355**	ug/L	1.219	2	13	1021	1	KED
	Y	**89**		ug/L			256805	271968	2	Standard
	Kr	**83**		ug/L			41	48	9	Standard
⌈>	**In-1**	**115**		ug/L			7220	7309	2	KED
|	**Cd**	**111**	**50.900**	ug/L	1.387	2	1	10625	0	KED
⌊	**Cd**	**114**	**51.850**	ug/L	1.462	2	3	26051	1	KED
⌈>	**In**	**115**		ug/L			351012	359739	0	Standard
|	**Ag**	**107**	**49.096**	ug/L	0.498	1	55	582434	1	Standard
|	**Sb**	**121**	**50.198**	ug/L	0.386	0	395	465336	0	Standard
⌊	**Sb**	**123**	**50.462**	ug/L	0.719	1	283	356398	0	Standard
⌈>	**Tb**	**159**		ug/L			541424	574075	0	Standard
|	**Tl**	**205**	**52.635**	ug/L	0.639	1	718	1437069	0	Standard
⌊	**Pb**	**208**	**52.823**	ug/L	1.136	2	756	1875072	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBG
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 05:23:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	25079	1	Standard
	Cl	**37**		ug/L			4268423	4257667	1	Standard
⌈>	**Sc**	**45**		ug/L			462048	466996	2	Standard
|	**Al**	**27**	**0.008**	ug/L	0.001	15	4676	4880	2	Standard
|	**V**	**51**	**-0.006**	ug/L	0.002	35	4034	3973	2	Standard
|	**V-1**	**51**	**-0.001**	ug/L	0.001	92	384	365	4	Standard
|	**Cr**	**52**	**-0.023**	ug/L	0.003	13	12068	11849	2	Standard
⌊	**Cr**	**53**	**-0.008**	ug/L	0.004	49	196	185	5	Standard
⌈>	**Ge**	**72**		ug/L			24872	25376	0	KED
|	**Ni**	**60**	**-0.004**	ug/L	0.006	140	14	11	44	KED
|	**Ni**	**62**	**0.018**	ug/L	0.085	481	11	13	79	KED
|	**Cu**	**63**	**0.001**	ug/L	0.006	521	60	64	20	KED
|	**Cu**	**65**	**-0.007**	ug/L	0.007	96	29	20	39	KED
|	**Zn**	**66**	**-0.080**	ug/L	0.018	22	56	29	20	KED
|	**Zn**	**67**	**-0.106**	ug/L	0.052	49	8	3	91	KED
|	**As**	**75**	**-0.009**	ug/L	0.014	152	6	4	47	KED
⌊	**Se**	**78**	**-0.047**	ug/L	0.076	162	13	12	10	KED
	Y	**89**		ug/L			256805	258950	1	Standard
	Kr	**83**		ug/L			41	34	30	Standard
⌈>	**In-1**	**115**		ug/L			7220	7073	1	KED
|	**Cd**	**111**	**0.011**	ug/L	0.012	109	1	3	66	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.006	4765	3	3	91	KED
⌈>	**In**	**115**		ug/L			351012	350937	1	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.001	304	55	49	34	Standard
|	**Sb**	**121**	**0.103**	ug/L	0.004	3	395	1330	2	Standard
⌊	**Sb**	**123**	**0.102**	ug/L	0.009	9	283	986	5	Standard
⌈>	**Tb**	**159**		ug/L			541424	539669	1	Standard
|	**Tl**	**205**	**0.003**	ug/L	0.001	38	718	781	2	Standard
⌊	**Pb**	**208**	**-0.016**	ug/L	0.000	1	756	217	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0402-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 05:27:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	34756	1	Standard
	Cl	37		ug/L			4268423	6054258	2	Standard
>	Sc	45		ug/L			462048	529846	1	Standard
	Al	27	12.424	ug/L	0.478	3	4676	291728	2	Standard
	V	51	2.256	ug/L	0.066	2	4034	51032	1	Standard
	V-1	51	2.737	ug/L	0.073	2	384	57097	0	Standard
	Cr	52	0.346	ug/L	0.015	4	12068	19841	0	Standard
	Cr	53	1.975	ug/L	0.059	2	196	4181	1	Standard
>	Ge	72		ug/L			24872	24248	1	KED
	Ni	60	3.570	ug/L	0.119	3	14	2876	3	KED
	Ni	62	3.926	ug/L	0.359	9	11	509	9	KED
	Cu	63	31.427	ug/L	0.400	1	60	73075	0	KED
	Cu	65	31.679	ug/L	0.777	2	29	36287	2	KED
	Zn	66	16.261	ug/L	0.303	1	56	5421	0	KED
	Zn	67	15.840	ug/L	0.339	2	8	852	2	KED
	As	75	3.846	ug/L	0.150	3	6	629	4	KED
	Se	78	0.780	ug/L	0.098	12	13	27	7	KED
	Y	89		ug/L			256805	259882	1	Standard
	Kr	83		ug/L			41	54	31	Standard
>	In-1	115		ug/L			7220	6837	1	KED
	Cd	111	0.054	ug/L	0.012	22	1	12	19	KED
	Cd	114	0.040	ug/L	0.017	41	3	21	36	KED
>	In	115		ug/L			351012	339559	1	Standard
	Ag	107	0.036	ug/L	0.004	11	55	460	9	Standard
	Sb	121	10.796	ug/L	0.205	1	395	94757	1	Standard
	Sb	123	10.732	ug/L	0.103	0	283	71761	0	Standard
>	Tb	159		ug/L			541424	547073	1	Standard
	Tl	205	0.003	ug/L	0.002	68	718	799	6	Standard
	Pb	208	2.537	ug/L	0.044	1	756	86539	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-01
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 05:32:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	34761	0	Standard
	Cl	37		ug/L			4268423	3959285	0	Standard
>	Sc	45		ug/L			462048	459597	0	Standard
	Al	27	36.950	ug/L	1.128	3	4676	743732	3	Standard
	V	51	1.637	ug/L	0.002	0	4034	33232	0	Standard
	V-1	51	1.704	ug/L	0.017	1	384	30991	0	Standard
	Cr	52	1.134	ug/L	0.023	2	12068	29095	1	Standard
	Cr	53	1.367	ug/L	0.030	2	196	2571	1	Standard
>	Ge	72		ug/L			24872	19734	2	KED
	Ni	60	0.592	ug/L	0.065	11	14	397	8	KED
	Ni	62	0.764	ug/L	0.166	21	11	88	21	KED
	Cu	63	2.059	ug/L	0.041	1	60	3940	0	KED
	Cu	65	2.093	ug/L	0.093	4	29	1972	4	KED
	Zn	66	0.393	ug/L	0.126	32	56	149	20	KED
	Zn	67	9.304	ug/L	0.117	1	8	410	1	KED
	As	75	3.388	ug/L	0.153	4	6	451	2	KED
	Se	78	0.808	ug/L	0.361	44	13	22	22	KED
	Y	89		ug/L			256805	236372	1	Standard
	Kr	83		ug/L			41	48	12	Standard
>	In-1	115		ug/L			7220	5860	0	KED
	Cd	111	0.062	ug/L	0.028	44	1	11	39	KED
	Cd	114	0.030	ug/L	0.010	34	3	14	27	KED
>	In	115		ug/L			351012	289101	0	Standard
	Ag	107	0.003	ug/L	0.002	58	55	73	21	Standard
	Sb	121	5.832	ug/L	0.040	0	395	43734	0	Standard
	Sb	123	5.940	ug/L	0.045	0	283	33922	0	Standard
>	Tb	159		ug/L			541424	493582	1	Standard
	Tl	205	0.019	ug/L	0.001	6	718	1100	2	Standard
	Pb	208	0.068	ug/L	0.001	1	756	2764	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-02
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 05:37:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	40145	1	Standard
	Cl	37		ug/L			4268423	4368985	1	Standard
>	Sc	45		ug/L			462048	529711	1	Standard
	Al	27	59.348	ug/L	1.064	1	4676	1373669	2	Standard
	V	51	0.935	ug/L	0.010	1	4034	23869	1	Standard
	V-1	51	0.971	ug/L	0.018	1	384	20531	2	Standard
	Cr	52	0.313	ug/L	0.029	9	12068	19269	2	Standard
	Cr	53	0.442	ug/L	0.015	3	196	1110	1	Standard
>	Ge	72		ug/L			24872	24436	1	KED
	Ni	60	0.760	ug/L	0.040	5	14	627	4	KED
	Ni	62	0.810	ug/L	0.065	8	11	114	8	KED
	Cu	63	1.568	ug/L	0.035	2	60	3730	2	KED
	Cu	65	1.497	ug/L	0.092	6	29	1756	7	KED
	Zn	66	0.828	ug/L	0.118	14	56	330	11	KED
	Zn	67	3.212	ug/L	0.358	11	8	180	9	KED
	As	75	1.271	ug/L	0.047	3	6	213	2	KED
	Se	78	0.180	ug/L	0.175	97	13	16	20	KED
	Y	89		ug/L			256805	266444	2	Standard
	Kr	83		ug/L			41	52	27	Standard
>	In-1	115		ug/L			7220	6967	0	KED
	Cd	111	0.029	ug/L	0.011	38	1	7	30	KED
	Cd	114	0.005	ug/L	0.004	74	3	5	34	KED
>	In	115		ug/L			351012	342748	0	Standard
	Ag	107	0.000	ug/L	0.001	361	55	57	20	Standard
	Sb	121	0.860	ug/L	0.024	2	395	7978	2	Standard
	Sb	123	0.862	ug/L	0.020	2	283	6074	1	Standard
>	Tb	159		ug/L			541424	559366	1	Standard
	Tl	205	0.004	ug/L	0.002	50	718	857	5	Standard
	Pb	208	0.053	ug/L	0.004	7	756	2622	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-03
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 05:42:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	32788	1	Standard
	Cl	37		ug/L			4268423	3834010	2	Standard
>	Sc	45		ug/L			462048	433956	1	Standard
	Al	27	20.845	ug/L	0.509	2	4676	398098	2	Standard
	V	51	0.801	ug/L	0.006	0	4034	17286	0	Standard
	V-1	51	0.882	ug/L	0.018	2	384	15320	0	Standard
	Cr	52	2.854	ug/L	0.038	1	12068	51944	0	Standard
	Cr	53	3.082	ug/L	0.075	2	196	5240	0	Standard
>	Ge	72		ug/L			24872	19298	0	KED
	Ni	60	0.708	ug/L	0.059	8	14	462	7	KED
	Ni	62	0.741	ug/L	0.131	17	11	83	16	KED
	Cu	63	1.757	ug/L	0.016	0	60	3295	1	KED
	Cu	65	1.807	ug/L	0.155	8	29	1669	8	KED
	Zn	66	0.377	ug/L	0.063	16	56	142	11	KED
	Zn	67	8.139	ug/L	0.463	5	8	351	5	KED
	As	75	1.868	ug/L	0.081	4	6	245	4	KED
	Se	78	0.928	ug/L	0.141	15	13	24	9	KED
	Y	89		ug/L			256805	230824	1	Standard
	Kr	83		ug/L			41	60	14	Standard
>	In-1	115		ug/L			7220	6025	1	KED
	Cd	111	0.044	ug/L	0.012	27	1	8	22	KED
	Cd	114	0.029	ug/L	0.003	9	3	14	7	KED
>	In	115		ug/L			351012	284198	1	Standard
	Ag	107	0.002	ug/L	0.000	18	55	60	5	Standard
	Sb	121	6.695	ug/L	0.082	1	395	49307	1	Standard
	Sb	123	6.790	ug/L	0.142	2	283	38076	1	Standard
>	Tb	159		ug/L			541424	487537	1	Standard
	Tl	205	0.024	ug/L	0.003	11	718	1214	6	Standard
	Pb	208	0.014	ug/L	0.002	10	756	1107	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-04
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 05:47:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	42088	0	Standard
	Cl	37		ug/L			4268423	4350624	0	Standard
>	Sc	45		ug/L			462048	522825	0	Standard
	Al	27	37.332	ug/L	0.515	1	4676	854770	1	Standard
	V	51	1.026	ug/L	0.026	2	4034	25400	1	Standard
	V-1	51	1.048	ug/L	0.024	2	384	21850	1	Standard
	Cr	52	0.487	ug/L	0.029	5	12068	22011	1	Standard
	Cr	53	0.572	ug/L	0.021	3	196	1352	2	Standard
>	Ge	72		ug/L			24872	24287	0	KED
	Ni	60	0.818	ug/L	0.055	6	14	671	7	KED
	Ni	62	0.811	ug/L	0.130	16	11	114	14	KED
	Cu	63	1.747	ug/L	0.027	1	60	4125	1	KED
	Cu	65	1.752	ug/L	0.060	3	29	2036	3	KED
	Zn	66	1.817	ug/L	0.119	6	56	655	5	KED
	Zn	67	3.777	ug/L	0.229	6	8	210	6	KED
	As	75	1.492	ug/L	0.021	1	6	248	1	KED
	Se	78	0.093	ug/L	0.049	52	13	14	6	KED
	Y	89		ug/L			256805	265572	0	Standard
	Kr	83		ug/L			41	43	28	Standard
>	In-1	115		ug/L			7220	6776	2	KED
	Cd	111	0.020	ug/L	0.012	58	1	5	40	KED
	Cd	114	0.014	ug/L	0.008	53	3	9	35	KED
>	In	115		ug/L			351012	336919	1	Standard
	Ag	107	-0.001	ug/L	0.001	223	55	46	31	Standard
	Sb	121	1.653	ug/L	0.017	1	395	14721	1	Standard
	Sb	123	1.649	ug/L	0.052	3	283	11167	1	Standard
>	Tb	159		ug/L			541424	554966	2	Standard
	Tl	205	0.004	ug/L	0.002	51	718	853	5	Standard
	Pb	208	0.041	ug/L	0.002	5	756	2184	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-10
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 05:51:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	32985	1	Standard
	Cl	37		ug/L			4268423	4353382	1	Standard
>	Sc	45		ug/L			462048	461196	6	Standard
	Al	27	0.875	ug/L	0.081	9	4676	22176	3	Standard
	V	51	0.030	ug/L	0.010	34	4034	4551	2	Standard
	V-1	51	0.005	ug/L	0.001	14	384	480	3	Standard
	Cr	52	0.168	ug/L	0.028	16	12068	14567	3	Standard
	Cr	53	0.085	ug/L	0.011	13	196	344	9	Standard
>	Ge	72		ug/L			24872	26035	2	KED
	Ni	60	-0.006	ug/L	0.005	79	14	10	43	KED
	Ni	62	0.038	ug/L	0.028	74	11	17	22	KED
	Cu	63	0.016	ug/L	0.006	37	60	102	13	KED
	Cu	65	0.014	ug/L	0.009	62	29	47	21	KED
	Zn	66	-0.004	ug/L	0.014	348	56	57	10	KED
	Zn	67	0.091	ug/L	0.119	130	8	14	49	KED
	As	75	-0.013	ug/L	0.009	64	6	4	33	KED
	Se	78	-0.053	ug/L	0.125	235	13	12	18	KED
	Y	89		ug/L			256805	256316	5	Standard
	Kr	83		ug/L			41	45	12	Standard
>	In-1	115		ug/L			7220	7417	1	KED
	Cd	111	0.004	ug/L	0.013	324	1	2	114	KED
	Cd	114	-0.008	ug/L	0.006	75	3	0	331	KED
>	In	115		ug/L			351012	353899	3	Standard
	Ag	107	-0.002	ug/L	0.000	11	55	29	9	Standard
	Sb	121	-0.029	ug/L	0.002	7	395	137	11	Standard
	Sb	123	-0.026	ug/L	0.003	10	283	106	14	Standard
>	Tb	159		ug/L			541424	546507	3	Standard
	Tl	205	-0.001	ug/L	0.001	214	718	710	0	Standard
	Pb	208	-0.019	ug/L	0.000	1	756	126	8	Standard

BLC0818

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~BLC0819~~-DUP1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 31, 2023 05:56:32

MB 3/30/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	45131	0	Standard
	Cl	37		ug/L			4268423	4165207	0	Standard
>	Sc	45		ug/L			462048	482412	1	Standard
	Al	27	31.495	ug/L	1.184	3	4676	665923	2	Standard
	V	51	0.833	ug/L	0.024	2	4034	19812	1	Standard
	V-1	51	0.843	ug/L	0.011	1	384	16284	0	Standard
	Cr	52	0.343	ug/L	0.029	8	12068	18024	1	Standard
	Cr	53	0.386	ug/L	0.018	4	196	908	4	Standard
>	Ge	72		ug/L			24872	22984	1	KED
	Ni	60	0.553	ug/L	0.022	3	14	434	4	KED
	Ni	62	0.650	ug/L	0.068	10	11	88	10	KED
	Cu	63	2.652	ug/L	0.062	2	60	5895	1	KED
	Cu	65	2.645	ug/L	0.099	3	29	2895	2	KED
	Zn	66	1.580	ug/L	0.094	5	56	546	5	KED
	Zn	67	5.285	ug/L	0.645	12	8	274	11	KED
	As	75	3.432	ug/L	0.088	2	6	532	2	KED
	Se	78	0.135	ug/L	0.025	18	13	14	4	KED
	Y	89		ug/L			256805	255242	1	Standard
	Kr	83		ug/L			41	44	4	Standard
>	In-1	115		ug/L			7220	6728	4	KED
	Cd	111	0.016	ug/L	0.020	125	1	4	81	KED
	Cd	114	0.015	ug/L	0.002	16	3	9	11	KED
>	In	115		ug/L			351012	324027	0	Standard
	Ag	107	0.002	ug/L	0.001	81	55	68	20	Standard
	Sb	121	5.865	ug/L	0.050	0	395	49293	0	Standard
	Sb	123	5.944	ug/L	0.113	1	283	38046	1	Standard
>	Tb	159		ug/L			541424	535961	0	Standard
	Tl	205	0.010	ug/L	0.002	14	718	977	4	Standard
	Pb	208	0.189	ug/L	0.003	1	756	7016	1	Standard

BLC0818

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~BLC0819~~ MS1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 31, 2023 06:01:45 MB 3/30/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	43451	1	Standard
	Cl	37		ug/L			4268423	4190508	0	Standard
>	Sc	45		ug/L			462048	482798	1	Standard
	Al	27	31.624	ug/L	0.623	1	4676	669307	1	Standard
	V	51	25.063	ug/L	0.368	1	4034	474154	0	Standard
	V-1	51	25.070	ug/L	0.389	1	384	473325	0	Standard
	Cr	52	23.491	ug/L	0.269	1	12068	384505	0	Standard
	Cr	53	23.544	ug/L	0.438	1	196	43183	1	Standard
>	Ge	72		ug/L			24872	23108	0	KED
	Ni	60	26.060	ug/L	0.184	0	14	19929	1	KED
	Ni	62	27.119	ug/L	0.722	2	11	3293	1	KED
	Cu	63	27.293	ug/L	0.334	1	60	60487	0	KED
	Cu	65	27.739	ug/L	0.554	1	29	30280	1	KED
	Zn	66	77.694	ug/L	1.364	1	56	24491	1	KED
	Zn	67	77.933	ug/L	0.484	0	8	3963	1	KED
	As	75	29.758	ug/L	0.448	1	6	4598	0	KED
	Se	78	78.729	ug/L	0.526	0	13	1416	1	KED
	Y	89		ug/L			256805	252279	1	Standard
	Kr	83		ug/L			41	50	5	Standard
>	In-1	115		ug/L			7220	6571	4	KED
	Cd	111	25.384	ug/L	1.378	5	1	4758	1	KED
	Cd	114	25.342	ug/L	1.326	5	3	11435	1	KED
>	In	115		ug/L			351012	324819	1	Standard
	Ag	107	23.694	ug/L	0.127	0	55	253809	1	Standard
	Sb	121	32.271	ug/L	0.212	0	395	270239	0	Standard
	Sb	123	32.359	ug/L	0.215	0	283	206462	1	Standard
>	Tb	159		ug/L			541424	537281	0	Standard
	Tl	205	25.408	ug/L	0.242	0	718	649629	0	Standard
	Pb	208	25.632	ug/L	0.309	1	756	851938	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0819-MSD1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 06:07:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	33221	0	Standard
	Cl	37		ug/L			4268423	4383479	0	Standard
>	Sc	45		ug/L			462048	470964	1	Standard
	Al	27	0.806	ug/L	0.016	2	4676	21285	1	Standard
	V	51	25.499	ug/L	0.674	2	4034	470405	0	Standard
	V-1	51	25.549	ug/L	0.583	2	384	470455	0	Standard
	Cr	52	25.219	ug/L	0.863	3	12068	401651	1	Standard
	Cr	53	25.390	ug/L	0.563	2	196	45402	0	Standard
>	Ge	72		ug/L			24872	26143	3	KED
	Ni	60	25.711	ug/L	0.767	2	14	22231	1	KED
	Ni	62	26.570	ug/L	0.480	1	11	3651	4	KED
	Cu	63	25.986	ug/L	1.207	4	60	65097	1	KED
	Cu	65	26.291	ug/L	0.735	2	29	32456	0	KED
	Zn	66	81.489	ug/L	1.409	1	56	29052	2	KED
	Zn	67	76.022	ug/L	0.511	0	8	4373	2	KED
	As	75	24.633	ug/L	0.703	2	6	4305	2	KED
	Se	78	76.858	ug/L	1.101	1	13	1564	2	KED
	Y	89		ug/L			256805	264730	1	Standard
	Kr	83		ug/L			41	48	9	Standard
>	In-1	115		ug/L			7220	7481	2	KED
	Cd	111	25.053	ug/L	0.240	0	1	5355	1	KED
	Cd	114	25.185	ug/L	0.786	3	3	12953	1	KED
>	In	115		ug/L			351012	364413	1	Standard
	Ag	107	25.363	ug/L	0.641	2	55	304727	1	Standard
	Sb	121	25.293	ug/L	0.567	2	395	237676	1	Standard
	Sb	123	24.926	ug/L	0.460	1	283	178461	0	Standard
>	Tb	159		ug/L			541424	563504	2	Standard
	Tl	205	26.946	ug/L	0.522	1	718	722356	0	Standard
	Pb	208	27.202	ug/L	0.661	2	756	947946	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLK
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 06:12:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	25705	2	Standard
	Cl	**37**		ug/L			4268423	4394927	0	Standard
⌈>	**Sc**	**45**		ug/L			462048	461038	1	Standard
|	**Al**	**27**	**-0.072**	ug/L	0.004	5	4676	3229	0	Standard
|	**V**	**51**	**0.005**	ug/L	0.006	110	4034	4120	2	Standard
|	**V-1**	**51**	**-0.005**	ug/L	0.001	20	384	302	6	Standard
|	**Cr**	**52**	**0.011**	ug/L	0.015	131	12068	12209	0	Standard
⌊	**Cr**	**53**	**-0.021**	ug/L	0.011	51	196	158	12	Standard
⌈>	**Ge**	**72**		ug/L			24872	25146	2	KED
|	**Ni**	**60**	**-0.008**	ug/L	0.006	69	14	8	58	KED
|	**Ni**	**62**	**0.019**	ug/L	0.032	171	11	13	28	KED
|	**Cu**	**63**	**-0.004**	ug/L	0.001	24	60	51	3	KED
|	**Cu**	**65**	**-0.006**	ug/L	0.006	105	29	22	33	KED
|	**Zn**	**66**	**-0.076**	ug/L	0.016	20	56	31	17	KED
|	**Zn**	**67**	**-0.060**	ug/L	0.033	55	8	5	33	KED
|	**As**	**75**	**-0.008**	ug/L	0.007	82	6	5	19	KED
⌊	**Se**	**78**	**0.020**	ug/L	0.085	434	13	13	12	KED
	Y	**89**		ug/L			256805	256645	1	Standard
	Kr	**83**		ug/L			41	48	15	Standard
⌈>	**In-1**	**115**		ug/L			7220	7406	1	KED
|	**Cd**	**111**	**0.004**	ug/L	0.014	317	1	2	114	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.012	311	3	4	117	KED
⌈>	**In**	**115**		ug/L			351012	351310	2	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.001	8824	55	55	15	Standard
|	**Sb**	**121**	**-0.026**	ug/L	0.003	10	395	163	14	Standard
⌊	**Sb**	**123**	**-0.023**	ug/L	0.002	8	283	127	9	Standard
⌈>	**Tb**	**159**		ug/L			541424	545919	2	Standard
|	**Tl**	**205**	**0.003**	ug/L	0.002	73	718	795	4	Standard
⌊	**Pb**	**208**	**-0.013**	ug/L	0.001	5	756	334	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVH
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 06:17:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	25804	3	Standard
	Cl	**37**		ug/L			4268423	4382289	1	Standard
⌈>	**Sc**	**45**		ug/L			462048	482987	1	Standard
|	**Al**	**27**	**5035.676**	ug/L	79.107	1	4676	105869966	2	Standard
|	**V**	**51**	**49.547**	ug/L	0.671	1	4034	933620	0	Standard
|	**V-1**	**51**	**49.691**	ug/L	0.771	1	384	938135	0	Standard
|	**Cr**	**52**	**49.259**	ug/L	0.684	1	12068	792754	0	Standard
⌊	**Cr**	**53**	**49.738**	ug/L	1.084	2	196	91025	1	Standard
⌈>	**Ge**	**72**		ug/L			24872	26413	1	KED
|	**Ni**	**60**	**50.750**	ug/L	1.038	2	14	44342	1	KED
|	**Ni**	**62**	**51.187**	ug/L	0.709	1	11	7094	0	KED
|	**Cu**	**63**	**50.260**	ug/L	0.997	1	60	127260	1	KED
|	**Cu**	**65**	**50.526**	ug/L	0.746	1	29	63019	0	KED
|	**Zn**	**66**	**51.457**	ug/L	1.002	1	56	18560	1	KED
|	**Zn**	**67**	**50.370**	ug/L	2.074	4	8	2930	3	KED
|	**As**	**75**	**50.151**	ug/L	0.512	1	6	8854	1	KED
⌊	**Se**	**78**	**50.001**	ug/L	1.716	3	13	1033	3	KED
	Y	**89**		ug/L			256805	272239	1	Standard
	Kr	**83**		ug/L			41	62	13	Standard
⌈>	**In-1**	**115**		ug/L			7220	7725	1	KED
|	**Cd**	**111**	**50.240**	ug/L	0.576	1	1	11088	0	KED
⌊	**Cd**	**114**	**50.382**	ug/L	0.304	0	3	26765	1	KED
⌈>	**In**	**115**		ug/L			351012	360753	1	Standard
|	**Ag**	**107**	**50.180**	ug/L	0.237	0	55	596947	1	Standard
|	**Sb**	**121**	**50.358**	ug/L	0.187	0	395	468164	1	Standard
⌊	**Sb**	**123**	**50.373**	ug/L	0.395	0	283	356784	0	Standard
⌈>	**Tb**	**159**		ug/L			541424	576975	2	Standard
|	**Tl**	**205**	**52.421**	ug/L	1.356	2	718	1437885	0	Standard
⌊	**Pb**	**208**	**52.696**	ug/L	1.265	2	756	1879371	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBH
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 06:25:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	25061	1	Standard
	Cl	**37**		ug/L			4268423	4366502	1	Standard
⎡>	**Sc**	**45**		ug/L			462048	464203	1	Standard
⎢	**Al**	**27**	**0.009**	ug/L	0.009	98	4676	4878	5	Standard
⎢	**V**	**51**	**-0.002**	ug/L	0.007	291	4034	4009	1	Standard
⎢	**V-1**	**51**	**-0.007**	ug/L	0.000	6	384	252	2	Standard
⎢	**Cr**	**52**	**-0.010**	ug/L	0.021	201	12068	11962	0	Standard
⎣	**Cr**	**53**	**-0.027**	ug/L	0.008	28	196	150	8	Standard
⎡>	**Ge**	**72**		ug/L			24872	25544	0	KED
⎢	**Ni**	**60**	**0.005**	ug/L	0.006	123	14	19	26	KED
⎢	**Ni**	**62**	**0.083**	ug/L	0.049	58	11	22	28	KED
⎢	**Cu**	**63**	**-0.003**	ug/L	0.001	32	60	54	5	KED
⎢	**Cu**	**65**	**-0.006**	ug/L	0.007	110	29	22	39	KED
⎢	**Zn**	**66**	**-0.081**	ug/L	0.023	27	56	29	26	KED
⎢	**Zn**	**67**	**-0.084**	ug/L	0.019	22	8	4	24	KED
⎢	**As**	**75**	**-0.005**	ug/L	0.006	116	6	5	16	KED
⎣	**Se**	**78**	**0.062**	ug/L	0.092	147	13	14	12	KED
	Y	**89**		ug/L			256805	258053	3	Standard
	Kr	**83**		ug/L			41	31	15	Standard
⎡>	**In-1**	**115**		ug/L			7220	7469	1	KED
⎢	**Cd**	**111**	**0.007**	ug/L	0.014	198	1	3	96	KED
⎣	**Cd**	**114**	**-0.005**	ug/L	0.002	43	3	0	236	KED
⎡>	**In**	**115**		ug/L			351012	357618	0	Standard
⎢	**Ag**	**107**	**0.002**	ug/L	0.000	18	55	79	4	Standard
⎢	**Sb**	**121**	**0.081**	ug/L	0.001	1	395	1153	1	Standard
⎣	**Sb**	**123**	**0.085**	ug/L	0.006	7	283	883	4	Standard
⎡>	**Tb**	**159**		ug/L			541424	550834	2	Standard
⎢	**Tl**	**205**	**0.002**	ug/L	0.003	124	718	786	6	Standard
⎣	**Pb**	**208**	**-0.015**	ug/L	0.000	2	756	259	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-05
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 06:29:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	41765	2	Standard
	Cl	37		ug/L			4268423	4339660	1	Standard
>	Sc	45		ug/L			462048	526552	2	Standard
	Al	27	43.754	ug/L	0.509	1	4676	1007968	2	Standard
	V	51	1.012	ug/L	0.020	1	4034	25298	2	Standard
	V-1	51	1.039	ug/L	0.021	1	384	21820	1	Standard
	Cr	52	0.495	ug/L	0.037	7	12068	22295	3	Standard
	Cr	53	0.595	ug/L	0.034	5	196	1407	3	Standard
>	Ge	72		ug/L			24872	23722	1	KED
	Ni	60	0.892	ug/L	0.021	2	14	713	1	KED
	Ni	62	0.974	ug/L	0.142	14	11	132	14	KED
	Cu	63	1.774	ug/L	0.030	1	60	4089	0	KED
	Cu	65	1.875	ug/L	0.110	5	29	2127	5	KED
	Zn	66	0.671	ug/L	0.144	21	56	270	16	KED
	Zn	67	2.969	ug/L	0.488	16	8	163	15	KED
	As	75	1.511	ug/L	0.074	4	6	245	5	KED
	Se	78	0.025	ug/L	0.082	333	13	13	12	KED
	Y	89		ug/L			256805	263014	1	Standard
	Kr	83		ug/L			41	42	18	Standard
>	In-1	115		ug/L			7220	6832	1	KED
	Cd	111	0.012	ug/L	0.005	39	1	3	25	KED
	Cd	114	0.015	ug/L	0.010	64	3	9	44	KED
>	In	115		ug/L			351012	340009	0	Standard
	Ag	107	0.002	ug/L	0.001	57	55	80	19	Standard
	Sb	121	1.670	ug/L	0.048	2	395	15004	2	Standard
	Sb	123	1.675	ug/L	0.023	1	283	11449	0	Standard
>	Tb	159		ug/L			541424	555420	2	Standard
	Tl	205	0.006	ug/L	0.001	12	718	888	2	Standard
	Pb	208	0.051	ug/L	0.002	4	756	2533	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-06
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 06:34:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25996	29202	2	Standard
Cl	37		ug/L			4268423	3194747	1	Standard
> Sc	45		ug/L			462048	308330	1	Standard
Al	27	35.227	ug/L	1.155	3	4676	475651	1	Standard
V	51	0.336	ug/L	0.020	6	4034	6712	1	Standard
V-1	51	0.321	ug/L	0.010	3	384	4119	1	Standard
Cr	52	0.344	ug/L	0.037	10	12068	11526	1	Standard
Cr	53	0.294	ug/L	0.005	1	196	473	2	Standard
> Ge	72		ug/L			24872	14381	1	KED
Ni	60	6.258	ug/L	0.109	1	14	2984	0	KED
Ni	62	5.955	ug/L	0.095	1	11	455	1	KED
Cu	63	2.176	ug/L	0.078	3	60	3033	2	KED
Cu	65	2.276	ug/L	0.144	6	29	1561	5	KED
Zn	66	3.406	ug/L	0.248	7	56	699	7	KED
Zn	67	22.027	ug/L	1.028	4	8	700	5	KED
As	75	5.068	ug/L	0.190	3	6	490	2	KED
Se	78	1.839	ug/L	0.317	17	13	28	12	KED
Y	89		ug/L			256805	174134	1	Standard
Kr	83		ug/L			41	248	10	Standard
> In-1	115		ug/L			7220	4580	3	KED
Cd	111	0.140	ug/L	0.024	16	1	19	15	KED
Cd	114	0.094	ug/L	0.016	17	3	31	12	KED
> In	115		ug/L			351012	206626	1	Standard
Ag	107	0.012	ug/L	0.001	7	55	111	6	Standard
Sb	121	2.248	ug/L	0.054	2	395	12192	1	Standard
Sb	123	2.254	ug/L	0.078	3	283	9299	2	Standard
> Tb	159		ug/L			541424	398526	1	Standard
Tl	205	0.393	ug/L	0.005	1	718	7980	0	Standard
Pb	208	93.769	ug/L	1.769	1	756	2309968	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-07
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 06:39:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	34941	1	Standard
	Cl	37		ug/L			4268423	4298023	0	Standard
>	Sc	45		ug/L			462048	571222	2	Standard
	Al	27	2.032	ug/L	0.013	0	4676	56283	2	Standard
	V	51	0.088	ug/L	0.012	14	4034	6927	2	Standard
	V-1	51	0.122	ug/L	0.004	3	384	3194	0	Standard
	Cr	52	0.038	ug/L	0.027	71	12068	15630	0	Standard
	Cr	53	0.153	ug/L	0.012	8	196	572	4	Standard
>	Ge	72		ug/L			24872	26143	2	KED
	Ni	60	0.089	ug/L	0.003	3	14	92	4	KED
	Ni	62	0.213	ug/L	0.056	26	11	41	19	KED
	Cu	63	0.097	ug/L	0.003	3	60	306	4	KED
	Cu	65	0.099	ug/L	0.015	15	29	152	13	KED
	Zn	66	0.189	ug/L	0.036	19	56	126	8	KED
	Zn	67	5.141	ug/L	0.460	8	8	304	6	KED
	As	75	5.248	ug/L	0.164	3	6	923	4	KED
	Se	78	0.247	ug/L	0.257	103	13	19	28	KED
	Y	89		ug/L			256805	262096	2	Standard
	Kr	83		ug/L			41	47	10	Standard
>	In-1	115		ug/L			7220	7447	2	KED
	Cd	111	0.016	ug/L	0.007	44	1	5	28	KED
	Cd	114	0.013	ug/L	0.008	59	3	9	39	KED
>	In	115		ug/L			351012	350306	1	Standard
	Ag	107	-0.001	ug/L	0.000	29	55	40	11	Standard
	Sb	121	-0.009	ug/L	0.004	45	395	316	12	Standard
	Sb	123	-0.008	ug/L	0.004	43	283	227	10	Standard
>	Tb	159		ug/L			541424	577934	2	Standard
	Tl	205	-0.002	ug/L	0.001	46	718	709	6	Standard
	Pb	208	-0.006	ug/L	0.000	7	756	605	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-08
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 06:44:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	33322	2	Standard
	Cl	37		ug/L			4268423	4287843	1	Standard
>	Sc	45		ug/L			462048	588010	0	Standard
	Al	27	1.697	ug/L	0.047	2	4676	49391	2	Standard
	V	51	-0.031	ug/L	0.005	17	4034	4430	3	Standard
	V-1	51	0.030	ug/L	0.001	3	384	1183	2	Standard
	Cr	52	-0.044	ug/L	0.017	38	12068	14514	2	Standard
	Cr	53	0.158	ug/L	0.024	15	196	601	8	Standard
>	Ge	72		ug/L			24872	26856	2	KED
	Ni	60	1.818	ug/L	0.100	5	14	1629	4	KED
	Ni	62	2.267	ug/L	0.057	2	11	331	4	KED
	Cu	63	0.259	ug/L	0.016	6	60	732	6	KED
	Cu	65	0.280	ug/L	0.038	13	29	386	11	KED
	Zn	66	4.686	ug/L	0.336	7	56	1772	5	KED
	Zn	67	4.806	ug/L	0.411	8	8	292	6	KED
	As	75	7.372	ug/L	0.203	2	6	1328	0	KED
	Se	78	-0.108	ug/L	0.114	105	13	12	21	KED
	Y	89		ug/L			256805	273228	1	Standard
	Kr	83		ug/L			41	52	18	Standard
>	In-1	115		ug/L			7220	7687	0	KED
	Cd	111	0.017	ug/L	0.009	52	1	5	36	KED
	Cd	114	0.011	ug/L	0.006	54	3	9	36	KED
>	In	115		ug/L			351012	354941	1	Standard
	Ag	107	-0.001	ug/L	0.001	55	55	41	19	Standard
	Sb	121	-0.017	ug/L	0.002	10	395	248	5	Standard
	Sb	123	-0.015	ug/L	0.005	30	283	182	16	Standard
>	Tb	159		ug/L			541424	580773	2	Standard
	Tl	205	-0.001	ug/L	0.002	130	718	736	4	Standard
	Pb	208	0.018	ug/L	0.001	4	756	1448	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-09
Sample Dil Factor:
Comments:
DEL
Sample Date/Time: Friday, March 31, 2023 06:49:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25996	40563	3	Standard
Cl	37		ug/L			4268423	2583751	1	Standard
> Sc	45		ug/L			462048	264637	0	Standard
Al	27	**4328.672**	ug/L	47.964	1	4676	49857060	0	Standard
V	51	**18.270**	ug/L	0.293	1	4034	190095	1	Standard
V-1	51	**18.280**	ug/L	0.290	1	384	189245	1	Standard
Cr	52	**0.442**	ug/L	0.005	1	12068	10751	0	Standard
Cr	53	**0.830**	ug/L	0.002	0	196	942	0	Standard
> Ge	72		ug/L			24872	11313	1	KED
Ni	60	**35.956**	ug/L	0.206	0	14	13458	0	KED
Ni	62	**36.692**	ug/L	1.419	3	11	2179	2	KED
Cu	63	**0.360**	ug/L	0.009	2	60	417	2	KED
Cu	65	**0.316**	ug/L	0.022	6	29	182	7	KED
Zn	66	**3.466**	ug/L	0.156	4	56	559	3	KED
Zn	67	**5.075**	ug/L	0.585	11	8	130	11	KED
As	75	**206.844**	ug/L	1.630	0	6	15629	0	KED
Se	78	**7.868**	ug/L	0.438	5	13	74	6	KED
Y	89		ug/L			256805	133723	0	Standard
Kr	83		ug/L			41	219	2	Standard
> In-1	115		ug/L			7220	3632	3	KED
Cd	111	**0.325**	ug/L	0.040	12	1	34	15	KED
Cd	114	**0.216**	ug/L	0.056	25	3	55	27	KED
> In	115		ug/L			351012	152793	1	Standard
Ag	107	**0.003**	ug/L	0.003	87	55	40	33	Standard
Sb	121	**125.474**	ug/L	1.100	0	395	493743	0	Standard
Sb	123	**126.204**	ug/L	1.160	0	283	378393	0	Standard
> Tb	159		ug/L			541424	310786	0	Standard
Tl	205	**-0.004**	ug/L	0.001	21	718	349	3	Standard
Pb	208	**1.978**	ug/L	0.016	0	756	38436	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-11
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 06:54:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	36900	3	Standard
	Cl	37		ug/L			4268423	3952751	0	Standard
>	Sc	45		ug/L			462048	419126	0	Standard
	Al	27	25.194	ug/L	3.582	14	4676	463743	13	Standard
	V	51	1.192	ug/L	0.031	2	4034	23062	1	Standard
	V-1	51	1.187	ug/L	0.030	2	384	19786	2	Standard
	Cr	52	0.484	ug/L	0.037	7	12068	17592	2	Standard
	Cr	53	0.481	ug/L	0.030	6	196	940	4	Standard
>	Ge	72		ug/L			24872	25129	1	KED
	Ni	60	0.840	ug/L	0.038	4	14	713	5	KED
	Ni	62	1.281	ug/L	0.121	9	11	180	10	KED
	Cu	63	3.427	ug/L	0.052	1	60	8312	1	KED
	Cu	65	3.381	ug/L	0.046	1	29	4039	0	KED
	Zn	66	0.522	ug/L	0.033	6	56	235	4	KED
	Zn	67	4.439	ug/L	0.100	2	8	253	2	KED
	As	75	2.421	ug/L	0.023	0	6	412	0	KED
	Se	78	1.213	ug/L	0.220	18	13	36	10	KED
	Y	89		ug/L			256805	238163	1	Standard
	Kr	83		ug/L			41	155	7	Standard
>	In-1	115		ug/L			7220	7327	0	KED
	Cd	111	0.024	ug/L	0.027	113	1	6	86	KED
	Cd	114	0.025	ug/L	0.010	38	3	15	31	KED
>	In	115		ug/L			351012	315407	1	Standard
	Ag	107	0.004	ug/L	0.001	27	55	94	11	Standard
	Sb	121	5.145	ug/L	0.164	3	395	42121	1	Standard
	Sb	123	5.168	ug/L	0.165	3	283	32222	1	Standard
>	Tb	159		ug/L			541424	565047	2	Standard
	Tl	205	0.021	ug/L	0.003	15	718	1313	6	Standard
	Pb	208	0.147	ug/L	0.016	11	756	5915	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-12
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 06:58:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	32118	0	Standard
	Cl	37		ug/L			4268423	4095721	2	Standard
>	Sc	45		ug/L			462048	494454	1	Standard
	Al	27	62.986	ug/L	1.140	1	4676	1360575	2	Standard
	V	51	0.727	ug/L	0.029	4	4034	18286	3	Standard
	V-1	51	0.762	ug/L	0.018	2	384	15133	1	Standard
	Cr	52	0.591	ug/L	0.048	8	12068	22501	3	Standard
	Cr	53	0.708	ug/L	0.030	4	196	1534	2	Standard
>	Ge	72		ug/L			24872	27231	0	KED
	Ni	60	0.302	ug/L	0.047	15	14	288	14	KED
	Ni	62	1.012	ug/L	0.075	7	11	156	6	KED
	Cu	63	0.252	ug/L	0.012	4	60	725	4	KED
	Cu	65	0.212	ug/L	0.025	11	29	304	11	KED
	Zn	66	1.729	ug/L	0.041	2	56	702	2	KED
	Zn	67	1.558	ug/L	0.125	8	8	102	6	KED
	As	75	0.541	ug/L	0.034	6	6	105	5	KED
	Se	78	1.036	ug/L	0.058	5	13	36	2	KED
	Y	89		ug/L			256805	261734	3	Standard
	Kr	83		ug/L			41	185	12	Standard
>	In-1	115		ug/L			7220	8065	0	KED
	Cd	111	0.010	ug/L	0.002	23	1	4	13	KED
	Cd	114	0.003	ug/L	0.006	200	3	5	65	KED
>	In	115		ug/L			351012	349540	1	Standard
	Ag	107	-0.001	ug/L	0.002	106	55	38	48	Standard
	Sb	121	0.053	ug/L	0.001	1	395	867	0	Standard
	Sb	123	0.054	ug/L	0.007	13	283	650	7	Standard
>	Tb	159		ug/L			541424	589478	0	Standard
	Tl	205	-0.003	ug/L	0.000	4	718	711	1	Standard
	Pb	208	0.046	ug/L	0.002	4	756	2514	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-14
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 07:03:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	32912	1	Standard
	Cl	37		ug/L			4268423	4168631	0	Standard
>	Sc	45		ug/L			462048	531089	1	Standard
	Al	27	1.620	ug/L	0.017	1	4676	42813	0	Standard
	V	51	-0.021	ug/L	0.013	59	4034	4199	5	Standard
	V-1	51	0.012	ug/L	0.002	18	384	701	7	Standard
	Cr	52	0.004	ug/L	0.028	722	12068	13937	2	Standard
	Cr	53	0.115	ug/L	0.012	10	196	456	5	Standard
>	Ge	72		ug/L			24872	26394	2	KED
	Ni	60	0.064	ug/L	0.011	16	14	71	14	KED
	Ni	62	1.020	ug/L	0.099	9	11	153	8	KED
	Cu	63	0.080	ug/L	0.004	4	60	267	6	KED
	Cu	65	0.072	ug/L	0.012	16	29	120	13	KED
	Zn	66	0.192	ug/L	0.067	35	56	128	18	KED
	Zn	67	7.835	ug/L	0.743	9	8	462	7	KED
	As	75	8.354	ug/L	0.277	3	6	1478	1	KED
	Se	78	1.507	ug/L	0.316	20	13	44	11	KED
	Y	89		ug/L			256805	256664	0	Standard
	Kr	83		ug/L			41	193	7	Standard
>	In-1	115		ug/L			7220	7916	1	KED
	Cd	111	0.008	ug/L	0.002	31	1	3	15	KED
	Cd	114	0.003	ug/L	0.011	428	3	4	124	KED
>	In	115		ug/L			351012	336510	1	Standard
	Ag	107	-0.001	ug/L	0.001	78	55	38	27	Standard
	Sb	121	-0.024	ug/L	0.005	21	395	173	23	Standard
	Sb	123	-0.023	ug/L	0.001	5	283	122	5	Standard
>	Tb	159		ug/L			541424	587135	0	Standard
	Tl	205	-0.004	ug/L	0.001	22	718	667	3	Standard
	Pb	208	-0.017	ug/L	0.001	5	756	213	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-15
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 07:10:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	33933	1	Standard
	Cl	37		ug/L			4268423	4215403	1	Standard
>	Sc	45		ug/L			462048	519674	1	Standard
	Al	27	14.353	ug/L	0.357	2	4676	329810	0	Standard
	V	51	0.445	ug/L	0.012	2	4034	13514	0	Standard
	V-1	51	0.458	ug/L	0.010	2	384	9738	1	Standard
	Cr	52	0.051	ug/L	0.013	26	12068	14438	0	Standard
	Cr	53	0.103	ug/L	0.007	6	196	423	1	Standard
>	Ge	72		ug/L			24872	26234	1	KED
	Ni	60	0.353	ug/L	0.010	2	14	321	1	KED
	Ni	62	1.299	ug/L	0.130	10	11	190	8	KED
	Cu	63	0.350	ug/L	0.027	7	60	944	6	KED
	Cu	65	0.349	ug/L	0.009	2	29	463	3	KED
	Zn	66	0.847	ug/L	0.039	4	56	361	2	KED
	Zn	67	5.193	ug/L	0.143	2	8	308	3	KED
	As	75	1.053	ug/L	0.013	1	6	191	0	KED
	Se	78	0.857	ug/L	0.065	7	13	31	3	KED
	Y	89		ug/L			256805	256325	1	Standard
	Kr	83		ug/L			41	170	1	Standard
>	In-1	115		ug/L			7220	7880	0	KED
	Cd	111	0.021	ug/L	0.021	104	1	6	75	KED
	Cd	114	0.021	ug/L	0.005	23	3	14	17	KED
>	In	115		ug/L			351012	344131	1	Standard
	Ag	107	-0.002	ug/L	0.000	20	55	27	21	Standard
	Sb	121	0.025	ug/L	0.005	19	395	608	5	Standard
	Sb	123	0.020	ug/L	0.001	4	283	412	1	Standard
>	Tb	159		ug/L			541424	586290	2	Standard
	Tl	205	-0.002	ug/L	0.002	78	718	711	5	Standard
	Pb	208	0.024	ug/L	0.002	9	756	1692	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLL
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 07:14:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	24118	1	Standard
	Cl	**37**		ug/L			4268423	4298703	1	Standard
>	**Sc**	**45**		ug/L			462048	415513	1	Standard
	Al	**27**	**0.019**	ug/L	0.134	723	4676	4515	51	Standard
	V	**51**	**0.027**	ug/L	0.004	16	4034	4057	3	Standard
	V-1	**51**	**-0.010**	ug/L	0.000	3	384	191	1	Standard
	Cr	**52**	**0.086**	ug/L	0.010	11	12068	12031	2	Standard
	Cr	**53**	**-0.034**	ug/L	0.006	18	196	123	6	Standard
>	**Ge**	**72**		ug/L			24872	26937	1	KED
	Ni	**60**	**-0.004**	ug/L	0.007	154	14	12	50	KED
	Ni	**62**	**0.812**	ug/L	0.043	5	11	126	4	KED
	Cu	**63**	**0.016**	ug/L	0.004	22	60	107	7	KED
	Cu	**65**	**-0.007**	ug/L	0.001	12	29	22	4	KED
	Zn	**66**	**-0.089**	ug/L	0.009	10	56	28	11	KED
	Zn	**67**	**-0.000**	ug/L	0.132	112897	8	9	80	KED
	As	**75**	**0.002**	ug/L	0.012	508	6	7	29	KED
	Se	**78**	**0.713**	ug/L	0.216	30	13	29	14	KED
	Y	**89**		ug/L			256805	249695	2	Standard
	Kr	**83**		ug/L			41	135	9	Standard
>	**In-1**	**115**		ug/L			7220	8019	3	KED
	Cd	**111**	**0.005**	ug/L	0.004	89	1	2	33	KED
	Cd	**114**	**0.001**	ug/L	0.000	46	3	3	1	KED
>	**In**	**115**		ug/L			351012	344395	1	Standard
	Ag	**107**	**-0.003**	ug/L	0.000	15	55	19	30	Standard
	Sb	**121**	**-0.034**	ug/L	0.001	2	395	89	9	Standard
	Sb	**123**	**-0.032**	ug/L	0.001	2	283	58	8	Standard
>	**Tb**	**159**		ug/L			541424	569791	2	Standard
	Tl	**205**	**-0.001**	ug/L	0.002	164	718	723	7	Standard
	Pb	**208**	**-0.020**	ug/L	0.001	2	756	92	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 07:19:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	24198	1	Standard
	Cl	**37**		ug/L			4268423	4278904	3	Standard
⌈>	**Sc**	**45**		ug/L			462048	438473	0	Standard
|	**Al**	**27**	**5260.942**	ug/L	19.059	0	4676	100398813	0	Standard
|	**V**	**51**	**51.468**	ug/L	0.980	1	4034	880334	1	Standard
|	**V-1**	**51**	**51.696**	ug/L	1.116	2	384	886105	2	Standard
|	**Cr**	**52**	**50.349**	ug/L	0.327	0	12068	735426	1	Standard
⌊	**Cr**	**53**	**51.124**	ug/L	0.290	0	196	84948	1	Standard
⌈>	**Ge**	**72**		ug/L			24872	27216	0	KED
|	**Ni**	**60**	**49.917**	ug/L	0.952	1	14	44943	1	KED
|	**Ni**	**62**	**52.428**	ug/L	1.210	2	11	7487	2	KED
|	**Cu**	**63**	**49.585**	ug/L	0.494	0	60	129383	1	KED
|	**Cu**	**65**	**50.337**	ug/L	0.505	1	29	64699	0	KED
|	**Zn**	**66**	**51.287**	ug/L	0.713	1	56	19064	1	KED
|	**Zn**	**67**	**51.788**	ug/L	2.188	4	8	3105	4	KED
|	**As**	**75**	**51.734**	ug/L	0.487	0	6	9410	1	KED
⌊	**Se**	**78**	**52.350**	ug/L	1.370	2	13	1114	2	KED
	Y	**89**		ug/L			256805	259716	2	Standard
	Kr	**83**		ug/L			41	151	2	Standard
⌈>	**In-1**	**115**		ug/L			7220	7479	14	KED
|	**Cd**	**111**	**53.756**	ug/L	8.523	15	1	11306	0	KED
⌊	**Cd**	**114**	**54.363**	ug/L	9.024	16	3	27499	0	KED
⌈>	**In**	**115**		ug/L			351012	349657	1	Standard
|	**Ag**	**107**	**52.379**	ug/L	0.856	1	55	603880	1	Standard
|	**Sb**	**121**	**50.919**	ug/L	0.231	0	395	458821	2	Standard
⌊	**Sb**	**123**	**49.966**	ug/L	0.226	0	283	343027	1	Standard
⌈>	**Tb**	**159**		ug/L			541424	588591	2	Standard
|	**Tl**	**205**	**48.926**	ug/L	1.295	2	718	1369178	1	Standard
⌊	**Pb**	**208**	**49.407**	ug/L	0.960	1	756	1797793	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 07:27:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	23681	2	Standard
	Cl	**37**		ug/L			4268423	4312529	1	Standard
⌈>	**Sc**	**45**		ug/L			462048	430199	1	Standard
|	**Al**	**27**	**0.014**	ug/L	0.005	35	4676	4622	0	Standard
|	**V**	**51**	**0.006**	ug/L	0.006	93	4034	3861	1	Standard
|	**V-1**	**51**	**-0.012**	ug/L	0.001	9	384	154	11	Standard
|	**Cr**	**52**	**0.015**	ug/L	0.018	117	12068	11451	0	Standard
⌊	**Cr**	**53**	**-0.046**	ug/L	0.005	11	196	108	7	Standard
⌈>	**Ge**	**72**		ug/L			24872	26844	0	KED
|	**Ni**	**60**	**0.018**	ug/L	0.012	66	14	31	33	KED
|	**Ni**	**62**	**0.630**	ug/L	0.058	9	11	100	8	KED
|	**Cu**	**63**	**0.011**	ug/L	0.006	53	60	94	16	KED
|	**Cu**	**65**	**0.000**	ug/L	0.001	581	29	31	3	KED
|	**Zn**	**66**	**-0.090**	ug/L	0.008	8	56	27	10	KED
|	**Zn**	**67**	**-0.055**	ug/L	0.050	90	8	6	45	KED
|	**As**	**75**	**-0.003**	ug/L	0.012	408	6	6	33	KED
⌊	**Se**	**78**	**0.371**	ug/L	0.029	7	13	22	3	KED
	Y	**89**		ug/L			256805	249393	2	Standard
	Kr	**83**		ug/L			41	123	13	Standard
⌈>	**In-1**	**115**		ug/L			7220	7890	0	KED
|	**Cd**	**111**	**0.011**	ug/L	0.006	59	1	4	35	KED
⌊	**Cd**	**114**	**0.006**	ug/L	0.009	139	3	6	71	KED
⌈>	**In**	**115**		ug/L			351012	353013	1	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.001	68	55	40	26	Standard
|	**Sb**	**121**	**0.086**	ug/L	0.009	10	395	1179	5	Standard
⌊	**Sb**	**123**	**0.083**	ug/L	0.009	10	283	856	7	Standard
⌈>	**Tb**	**159**		ug/L			541424	564931	1	Standard
|	**Tl**	**205**	**0.001**	ug/L	0.001	104	718	786	4	Standard
⌊	**Pb**	**208**	**-0.016**	ug/L	0.001	6	756	232	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, March 31, 2023 07:32:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	30362	0	Standard
	Cl	37		ug/L			4268423	4198558	0	Standard
>	Sc	45		ug/L			462048	451516	1	Standard
	Al	27	984.440	ug/L	4.826	0	4676	19349610	1	Standard
	V	51	15.843	ug/L	0.101	0	4034	281788	1	Standard
	V-1	51	15.775	ug/L	0.079	0	384	278710	1	Standard
	Cr	52	2.323	ug/L	0.071	3	12068	46188	3	Standard
	Cr	53	2.368	ug/L	0.016	0	196	4234	0	Standard
>	Ge	72		ug/L			24872	26830	0	KED
	Ni	60	3.908	ug/L	0.131	3	14	3482	3	KED
	Ni	62	4.565	ug/L	0.430	9	11	653	9	KED
	Cu	63	1.079	ug/L	0.053	4	60	2840	4	KED
	Cu	65	1.049	ug/L	0.010	0	29	1360	1	KED
	Zn	66	0.960	ug/L	0.045	4	56	411	3	KED
	Zn	67	1.755	ug/L	0.039	2	8	113	1	KED
	As	75	8.324	ug/L	0.215	2	6	1498	2	KED
	Se	78	0.740	ug/L	0.206	27	13	29	14	KED
	Y	89		ug/L			256805	305100	1	Standard
	Kr	83		ug/L			41	130	6	Standard
>	In-1	115		ug/L			7220	7824	2	KED
	Cd	111	0.014	ug/L	0.004	28	1	4	20	KED
	Cd	114	0.008	ug/L	0.008	99	3	7	58	KED
>	In	115		ug/L			351012	344743	0	Standard
	Ag	107	0.015	ug/L	0.001	7	55	228	5	Standard
	Sb	121	0.467	ug/L	0.014	2	395	4532	1	Standard
	Sb	123	0.464	ug/L	0.015	3	283	3414	3	Standard
>	Tb	159		ug/L			541424	580310	1	Standard
	Tl	205	0.002	ug/L	0.001	79	718	812	3	Standard
	Pb	208	0.554	ug/L	0.010	1	756	20679	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-16
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 07:36:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	35856	2	Standard
	Cl	37		ug/L			4268423	4317391	0	Standard
>	Sc	45		ug/L			462048	539262	0	Standard
	Al	27	14.120	ug/L	0.318	2	4676	336861	2	Standard
	V	51	0.440	ug/L	0.012	2	4034	13933	1	Standard
	V-1	51	0.456	ug/L	0.007	1	384	10057	1	Standard
	Cr	52	0.084	ug/L	0.010	12	12068	15568	1	Standard
	Cr	53	0.142	ug/L	0.008	5	196	519	2	Standard
>	Ge	72		ug/L			24872	26017	2	KED
	Ni	60	0.349	ug/L	0.022	6	14	315	4	KED
	Ni	62	0.812	ug/L	0.086	10	11	122	7	KED
	Cu	63	0.305	ug/L	0.015	4	60	823	6	KED
	Cu	65	0.294	ug/L	0.022	7	29	392	8	KED
	Zn	66	0.872	ug/L	0.071	8	56	367	5	KED
	Zn	67	5.084	ug/L	0.246	4	8	299	4	KED
	As	75	1.042	ug/L	0.049	4	6	187	5	KED
	Se	78	0.488	ug/L	0.068	14	13	23	7	KED
	Y	89		ug/L			256805	264460	1	Standard
	Kr	83		ug/L			41	101	20	Standard
>	In-1	115		ug/L			7220	7757	1	KED
	Cd	111	0.028	ug/L	0.007	25	1	7	18	KED
	Cd	114	0.007	ug/L	0.013	183	3	6	96	KED
>	In	115		ug/L			351012	341511	0	Standard
	Ag	107	-0.001	ug/L	0.001	85	55	43	20	Standard
	Sb	121	0.035	ug/L	0.003	9	395	691	3	Standard
	Sb	123	0.042	ug/L	0.004	9	283	557	4	Standard
>	Tb	159		ug/L			541424	583593	1	Standard
	Tl	205	-0.000	ug/L	0.001	180	718	762	4	Standard
	Pb	208	0.026	ug/L	0.001	5	756	1755	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-17
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 07:41:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	38714	1	Standard
	Cl	37		ug/L			4268423	4187633	1	Standard
>	Sc	45		ug/L			462048	544145	2	Standard
	Al	27	52.046	ug/L	3.208	6	4676	1237058	4	Standard
	V	51	0.557	ug/L	0.043	7	4034	16509	3	Standard
	V-1	51	0.580	ug/L	0.027	4	384	12769	2	Standard
	Cr	52	0.489	ug/L	0.046	9	12068	22936	1	Standard
	Cr	53	0.566	ug/L	0.007	1	196	1395	2	Standard
>	Ge	72		ug/L			24872	25928	0	KED
	Ni	60	1.053	ug/L	0.064	6	14	918	6	KED
	Ni	62	1.469	ug/L	0.135	9	11	211	8	KED
	Cu	63	1.285	ug/L	0.054	4	60	3254	3	KED
	Cu	65	1.330	ug/L	0.064	4	29	1658	4	KED
	Zn	66	5.599	ug/L	0.311	5	56	2035	5	KED
	Zn	67	12.573	ug/L	0.423	3	8	725	3	KED
	As	75	1.036	ug/L	0.125	12	6	186	11	KED
	Se	78	0.350	ug/L	0.160	45	13	20	15	KED
	Y	89		ug/L			256805	266375	3	Standard
	Kr	83		ug/L			41	103	11	Standard
>	In-1	115		ug/L			7220	7550	1	KED
	Cd	111	0.095	ug/L	0.013	13	1	22	13	KED
	Cd	114	0.081	ug/L	0.020	24	3	45	22	KED
>	In	115		ug/L			351012	340540	1	Standard
	Ag	107	0.005	ug/L	0.001	14	55	113	9	Standard
	Sb	121	0.505	ug/L	0.035	6	395	4807	5	Standard
	Sb	123	0.519	ug/L	0.017	3	283	3742	1	Standard
>	Tb	159		ug/L			541424	570495	0	Standard
	Tl	205	0.001	ug/L	0.001	148	718	777	3	Standard
	Pb	208	1.149	ug/L	0.009	0	756	41304	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-18
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 07:46:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	37090	1	Standard
	Cl	37		ug/L			4268423	4295056	0	Standard
>	Sc	45		ug/L			462048	520206	1	Standard
	Al	27	13.640	ug/L	0.288	2	4676	314025	1	Standard
	V	51	0.351	ug/L	0.016	4	4034	11627	1	Standard
	V-1	51	0.350	ug/L	0.004	1	384	7545	1	Standard
	Cr	52	0.311	ug/L	0.032	10	12068	18881	1	Standard
	Cr	53	0.308	ug/L	0.013	4	196	828	5	Standard
>	Ge	72		ug/L			24872	25165	0	KED
	Ni	60	0.343	ug/L	0.014	3	14	300	3	KED
	Ni	62	0.683	ug/L	0.088	12	11	101	11	KED
	Cu	63	1.408	ug/L	0.023	1	60	3456	1	KED
	Cu	65	1.438	ug/L	0.104	7	29	1737	6	KED
	Zn	66	4.147	ug/L	0.232	5	56	1477	4	KED
	Zn	67	13.282	ug/L	0.386	2	8	742	2	KED
	As	75	3.189	ug/L	0.058	1	6	542	2	KED
	Se	78	0.197	ug/L	0.128	65	13	17	13	KED
	Y	89		ug/L			256805	261251	2	Standard
	Kr	83		ug/L			41	103	5	Standard
>	In-1	115		ug/L			7220	7486	0	KED
	Cd	111	0.715	ug/L	0.012	1	1	154	1	KED
	Cd	114	0.687	ug/L	0.016	2	3	356	2	KED
>	In	115		ug/L			351012	332598	1	Standard
	Ag	107	0.001	ug/L	0.001	79	55	59	11	Standard
	Sb	121	0.364	ug/L	0.008	2	395	3489	2	Standard
	Sb	123	0.367	ug/L	0.006	1	283	2662	0	Standard
>	Tb	159		ug/L			541424	575241	1	Standard
	Tl	205	-0.003	ug/L	0.002	75	718	681	7	Standard
	Pb	208	0.097	ug/L	0.002	2	756	4252	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-19
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 07:51:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	39094	1	Standard
	Cl	37		ug/L			4268423	4333648	2	Standard
>	Sc	45		ug/L			462048	511343	2	Standard
	Al	27	10.633	ug/L	0.103	0	4676	241789	1	Standard
	V	51	1.544	ug/L	0.040	2	4034	35122	0	Standard
	V-1	51	1.543	ug/L	0.034	2	384	31253	1	Standard
	Cr	52	0.288	ug/L	0.044	15	12068	18184	3	Standard
	Cr	53	0.310	ug/L	0.019	5	196	817	5	Standard
>	Ge	72		ug/L			24872	25283	0	KED
	Ni	60	1.626	ug/L	0.056	3	14	1374	3	KED
	Ni	62	1.925	ug/L	0.097	5	11	266	5	KED
	Cu	63	0.479	ug/L	0.004	0	60	1222	0	KED
	Cu	65	0.452	ug/L	0.023	5	29	568	4	KED
	Zn	66	1.446	ug/L	0.138	9	56	554	8	KED
	Zn	67	5.349	ug/L	0.178	3	8	306	3	KED
	As	75	3.460	ug/L	0.008	0	6	590	0	KED
	Se	78	0.530	ug/L	0.038	7	13	23	2	KED
	Y	89		ug/L			256805	275371	1	Standard
	Kr	83		ug/L			41	102	10	Standard
>	In-1	115		ug/L			7220	7497	2	KED
	Cd	111	0.007	ug/L	0.007	96	1	3	45	KED
	Cd	114	0.009	ug/L	0.005	56	3	7	35	KED
>	In	115		ug/L			351012	328716	1	Standard
	Ag	107	0.001	ug/L	0.001	151	55	57	13	Standard
	Sb	121	0.816	ug/L	0.023	2	395	7278	2	Standard
	Sb	123	0.839	ug/L	0.019	2	283	5673	0	Standard
>	Tb	159		ug/L			541424	577554	0	Standard
	Tl	205	0.015	ug/L	0.001	8	718	1187	3	Standard
	Pb	208	-0.006	ug/L	0.001	10	756	600	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-20
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 07:56:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	36218	1	Standard
	Cl	37		ug/L			4268423	4283844	1	Standard
>	Sc	45		ug/L			462048	537481	0	Standard
	Al	27	1.972	ug/L	0.082	4	4676	51572	3	Standard
	V	51	1.128	ug/L	0.010	0	4034	28236	1	Standard
	V-1	51	1.140	ug/L	0.011	0	384	24387	1	Standard
	Cr	52	0.373	ug/L	0.006	1	12068	20612	0	Standard
	Cr	53	0.428	ug/L	0.009	2	196	1098	1	Standard
>	Ge	72		ug/L			24872	26101	1	KED
	Ni	60	0.807	ug/L	0.049	6	14	712	6	KED
	Ni	62	1.112	ug/L	0.208	18	11	163	16	KED
	Cu	63	0.533	ug/L	0.032	6	60	1395	5	KED
	Cu	65	0.507	ug/L	0.053	10	29	654	9	KED
	Zn	66	0.687	ug/L	0.066	9	56	303	7	KED
	Zn	67	1.067	ug/L	0.049	4	8	70	4	KED
	As	75	0.159	ug/L	0.037	23	6	34	18	KED
	Se	78	0.257	ug/L	0.147	57	13	19	16	KED
	Y	89		ug/L			256805	271472	2	Standard
	Kr	83		ug/L			41	85	13	Standard
>	In-1	115		ug/L			7220	7610	2	KED
	Cd	111	0.029	ug/L	0.006	21	1	7	18	KED
	Cd	114	0.012	ug/L	0.004	33	3	9	20	KED
>	In	115		ug/L			351012	337804	1	Standard
	Ag	107	-0.001	ug/L	0.000	31	55	39	12	Standard
	Sb	121	0.006	ug/L	0.003	50	395	431	4	Standard
	Sb	123	0.008	ug/L	0.003	37	283	323	5	Standard
>	Tb	159		ug/L			541424	574083	3	Standard
	Tl	205	-0.001	ug/L	0.001	39	718	726	4	Standard
	Pb	208	-0.012	ug/L	0.001	7	756	384	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-21
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 08:00:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	43419	2	Standard
	Cl	**37**		ug/L			4268423	4406100	2	Standard
>	**Sc**	**45**		ug/L			462048	494476	1	Standard
	Al	**27**	**86.432**	ug/L	0.940	1	4676	1865069	1	Standard
	V	**51**	**0.812**	ug/L	0.020	2	4034	19903	1	Standard
	V-1	**51**	**0.811**	ug/L	0.021	2	384	16078	1	Standard
	Cr	**52**	**0.803**	ug/L	0.031	3	12068	25932	1	Standard
	Cr	**53**	**0.801**	ug/L	0.035	4	196	1707	2	Standard
>	**Ge**	**72**		ug/L			24872	25131	0	KED
	Ni	**60**	**0.652**	ug/L	0.056	8	14	556	7	KED
	Ni	**62**	**0.979**	ug/L	0.225	22	11	140	20	KED
	Cu	**63**	**2.408**	ug/L	0.032	1	60	5860	1	KED
	Cu	**65**	**2.432**	ug/L	0.014	0	29	2914	1	KED
	Zn	**66**	**0.377**	ug/L	0.010	2	56	186	2	KED
	Zn	**67**	**0.609**	ug/L	0.127	20	8	42	15	KED
	As	**75**	**0.508**	ug/L	0.028	5	6	91	5	KED
	Se	**78**	**0.277**	ug/L	0.127	46	13	18	12	KED
	Y	**89**		ug/L			256805	260902	1	Standard
	Kr	**83**		ug/L			41	99	9	Standard
>	**In-1**	**115**		ug/L			7220	7301	2	KED
	Cd	**111**	**0.023**	ug/L	0.002	8	1	6	8	KED
	Cd	**114**	**0.014**	ug/L	0.008	59	3	10	38	KED
>	**In**	**115**		ug/L			351012	334083	0	Standard
	Ag	**107**	**0.000**	ug/L	0.001	624	55	54	23	Standard
	Sb	**121**	**0.119**	ug/L	0.004	3	395	1397	3	Standard
	Sb	**123**	**0.118**	ug/L	0.007	5	283	1041	3	Standard
>	**Tb**	**159**		ug/L			541424	562775	2	Standard
	Tl	**205**	**-0.000**	ug/L	0.002	2036	718	744	7	Standard
	Pb	**208**	**0.019**	ug/L	0.001	6	756	1459	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-22
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 08:06:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	37017	1	Standard
	Cl	37		ug/L			4268423	4436694	1	Standard
>	Sc	45		ug/L			462048	585189	2	Standard
	Al	27	2.529	ug/L	0.107	4	4676	70295	2	Standard
	V	51	0.011	ug/L	0.003	28	4034	5371	2	Standard
	V-1	51	0.083	ug/L	0.001	0	384	2391	2	Standard
	Cr	52	-0.001	ug/L	0.003	230	12068	15260	2	Standard
	Cr	53	0.236	ug/L	0.009	3	196	771	3	Standard
>	Ge	72		ug/L			24872	22600	4	KED
	Ni	60	1.172	ug/L	0.014	1	14	888	3	KED
	Ni	62	1.426	ug/L	0.179	12	11	179	12	KED
	Cu	63	0.113	ug/L	0.016	13	60	299	6	KED
	Cu	65	0.112	ug/L	0.014	12	29	145	8	KED
	Zn	66	0.537	ug/L	0.020	3	56	216	2	KED
	Zn	67	7.019	ug/L	0.540	7	8	355	2	KED
	As	75	5.451	ug/L	0.147	2	6	828	3	KED
	Se	78	0.275	ug/L	0.215	78	13	16	24	KED
	Y	89		ug/L			256805	265911	1	Standard
	Kr	83		ug/L			41	75	30	Standard
>	In-1	115		ug/L			7220	6958	1	KED
	Cd	111	-0.003	ug/L	0.005	166	1	0	100	KED
	Cd	114	-0.004	ug/L	0.002	63	3	1	111	KED
>	In	115		ug/L			351012	330129	1	Standard
	Ag	107	-0.001	ug/L	0.001	77	55	40	21	Standard
	Sb	121	-0.009	ug/L	0.001	8	395	295	3	Standard
	Sb	123	-0.007	ug/L	0.002	30	283	220	6	Standard
>	Tb	159		ug/L			541424	550473	1	Standard
	Tl	205	-0.000	ug/L	0.001	326	718	720	6	Standard
	Pb	208	0.019	ug/L	0.002	8	756	1428	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-23
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 08:12:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25996	37775	1	Standard
Cl	37		ug/L			4268423	4312503	1	Standard
> Sc	45		ug/L			462048	592894	0	Standard
Al	27	2.068	ug/L	0.043	2	4676	59370	1	Standard
V	51	0.009	ug/L	0.002	26	4034	5389	1	Standard
V-1	51	0.086	ug/L	0.002	1	384	2487	1	Standard
Cr	52	-0.049	ug/L	0.006	12	12068	14526	0	Standard
Cr	53	0.206	ug/L	0.005	2	196	713	1	Standard
> Ge	72		ug/L			24872	21105	1	KED
Ni	60	1.208	ug/L	0.034	2	14	855	3	KED
Ni	62	1.176	ug/L	0.097	8	11	139	6	KED
Cu	63	0.106	ug/L	0.002	1	60	266	0	KED
Cu	65	0.097	ug/L	0.011	11	29	121	9	KED
Zn	66	0.759	ug/L	0.009	1	56	266	1	KED
Zn	67	2.397	ug/L	0.305	12	8	118	12	KED
As	75	16.515	ug/L	0.061	0	6	2333	0	KED
Se	78	0.101	ug/L	0.178	175	13	13	22	KED
Y	89		ug/L			256805	261986	1	Standard
Kr	83		ug/L			41	74	2	Standard
> In-1	115		ug/L			7220	6434	0	KED
Cd	111	0.015	ug/L	0.006	39	1	4	26	KED
Cd	114	-0.003	ug/L	0.007	269	3	1	199	KED
> In	115		ug/L			351012	309449	0	Standard
Ag	107	-0.000	ug/L	0.001	177	55	43	19	Standard
Sb	121	-0.026	ug/L	0.003	11	395	138	16	Standard
Sb	123	-0.025	ug/L	0.001	4	283	99	6	Standard
> Tb	159		ug/L			541424	526989	1	Standard
Tl	205	0.006	ug/L	0.002	28	718	840	5	Standard
Pb	208	-0.008	ug/L	0.000	2	756	476	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLM
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 08:17:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	27184	1	Standard
	Cl	**37**		ug/L			4268423	4561277	2	Standard
⎡>	**Sc**	**45**		ug/L			462048	486086	0	Standard
⎢	**Al**	**27**	**-0.062**	ug/L	0.005	7	4676	3599	2	Standard
⎢	**V**	**51**	**0.008**	ug/L	0.004	55	4034	4394	1	Standard
⎢	**V-1**	**51**	**-0.010**	ug/L	0.000	4	384	219	4	Standard
⎢	**Cr**	**52**	**0.028**	ug/L	0.008	27	12068	13138	0	Standard
⎣	**Cr**	**53**	**-0.031**	ug/L	0.009	28	196	149	11	Standard
⎡>	**Ge**	**72**		ug/L			24872	24667	2	KED
⎢	**Ni**	**60**	**-0.001**	ug/L	0.007	1134	14	13	41	KED
⎢	**Ni**	**62**	**0.036**	ug/L	0.060	168	11	15	48	KED
⎢	**Cu**	**63**	**-0.005**	ug/L	0.003	67	60	48	17	KED
⎢	**Cu**	**65**	**-0.004**	ug/L	0.005	114	29	24	19	KED
⎢	**Zn**	**66**	**-0.076**	ug/L	0.007	8	56	30	6	KED
⎢	**Zn**	**67**	**-0.020**	ug/L	0.098	483	8	7	66	KED
⎢	**As**	**75**	**-0.005**	ug/L	0.005	100	6	5	13	KED
⎣	**Se**	**78**	**0.132**	ug/L	0.063	47	13	15	9	KED
	Y	**89**		ug/L			256805	263271	2	Standard
	Kr	**83**		ug/L			41	73	10	Standard
⎡>	**In-1**	**115**		ug/L			7220	7248	2	KED
⎢	**Cd**	**111**	**-0.000**	ug/L	0.007	16615	1	1	91	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.004	318	3	2	94	KED
⎡>	**In**	**115**		ug/L			351012	345070	0	Standard
⎢	**Ag**	**107**	**-0.002**	ug/L	0.000	20	55	26	21	Standard
⎢	**Sb**	**121**	**-0.038**	ug/L	0.002	4	395	50	27	Standard
⎣	**Sb**	**123**	**-0.035**	ug/L	0.000	1	283	44	7	Standard
⎡>	**Tb**	**159**		ug/L			541424	549127	1	Standard
⎢	**Tl**	**205**	**-0.001**	ug/L	0.001	49	718	699	0	Standard
⎣	**Pb**	**208**	**-0.019**	ug/L	0.001	5	756	130	28	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVJ
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 08:21:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	27405	3	Standard
	Cl	**37**		ug/L			4268423	4509264	1	Standard
>	**Sc**	**45**		ug/L			462048	501164	0	Standard
	Al	**27**	**5023.503**	ug/L	23.389	0	4676	109573466	0	Standard
	V	**51**	**49.347**	ug/L	0.815	1	4034	964873	1	Standard
	V-1	**51**	**49.391**	ug/L	0.619	1	384	967617	0	Standard
	Cr	**52**	**48.808**	ug/L	1.107	2	12068	815163	1	Standard
	Cr	**53**	**48.962**	ug/L	0.455	0	196	92990	0	Standard
>	**Ge**	**72**		ug/L			24872	25991	1	KED
	Ni	**60**	**50.226**	ug/L	0.961	1	14	43180	0	KED
	Ni	**62**	**51.330**	ug/L	0.783	1	11	7000	0	KED
	Cu	**63**	**49.562**	ug/L	0.584	1	60	123516	2	KED
	Cu	**65**	**50.888**	ug/L	0.878	1	29	62455	0	KED
	Zn	**66**	**51.642**	ug/L	1.181	2	56	18329	1	KED
	Zn	**67**	**51.859**	ug/L	2.838	5	8	2968	4	KED
	As	**75**	**49.579**	ug/L	0.469	0	6	8612	0	KED
	Se	**78**	**49.536**	ug/L	1.346	2	13	1007	2	KED
	Y	**89**		ug/L			256805	276506	2	Standard
	Kr	**83**		ug/L			41	79	9	Standard
>	**In-1**	**115**		ug/L			7220	7443	2	KED
	Cd	**111**	**51.522**	ug/L	1.373	2	1	10953	0	KED
	Cd	**114**	**52.735**	ug/L	0.324	0	3	26991	1	KED
>	**In**	**115**		ug/L			351012	354632	0	Standard
	Ag	**107**	**51.041**	ug/L	0.977	1	55	596910	2	Standard
	Sb	**121**	**50.082**	ug/L	0.318	0	395	457678	0	Standard
	Sb	**123**	**50.099**	ug/L	0.127	0	283	348838	0	Standard
>	**Tb**	**159**		ug/L			541424	578269	1	Standard
	Tl	**205**	**51.287**	ug/L	1.599	3	718	1410223	2	Standard
	Pb	**208**	**52.007**	ug/L	1.121	2	756	1859259	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBJ
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 08:29:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	26117	1	Standard
	Cl	**37**		ug/L			4268423	4425886	0	Standard
⎡>	**Sc**	**45**		ug/L			462048	477194	1	Standard
⎢	**Al**	**27**	**-0.010**	ug/L	0.005	48	4676	4614	1	Standard
⎢	**V**	**51**	**0.001**	ug/L	0.005	641	4034	4181	1	Standard
⎢	**V-1**	**51**	**-0.012**	ug/L	0.000	3	384	175	4	Standard
⎢	**Cr**	**52**	**-0.002**	ug/L	0.022	1161	12068	12433	2	Standard
⎣	**Cr**	**53**	**-0.044**	ug/L	0.004	9	196	123	4	Standard
⎡>	**Ge**	**72**		ug/L			24872	24968	0	KED
⎢	**Ni**	**60**	**0.001**	ug/L	0.007	504	14	15	38	KED
⎢	**Ni**	**62**	**-0.020**	ug/L	0.009	43	11	8	12	KED
⎢	**Cu**	**63**	**-0.000**	ug/L	0.002	438	60	60	6	KED
⎢	**Cu**	**65**	**-0.002**	ug/L	0.004	194	29	26	18	KED
⎢	**Zn**	**66**	**-0.062**	ug/L	0.013	21	56	35	12	KED
⎢	**Zn**	**67**	**-0.105**	ug/L	0.020	18	8	3	34	KED
⎢	**As**	**75**	**-0.015**	ug/L	0.010	67	6	3	45	KED
⎣	**Se**	**78**	**0.028**	ug/L	0.088	317	13	13	12	KED
	Y	**89**		ug/L			256805	266425	0	Standard
	Kr	**83**		ug/L			41	54	19	Standard
⎡>	**In-1**	**115**		ug/L			7220	7280	4	KED
⎢	**Cd**	**111**	**0.003**	ug/L	0.003	102	1	2	24	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.002	223	3	2	45	KED
⎡>	**In**	**115**		ug/L			351012	354806	1	Standard
⎢	**Ag**	**107**	**-0.000**	ug/L	0.000	72	55	51	6	Standard
⎢	**Sb**	**121**	**0.083**	ug/L	0.005	6	395	1154	4	Standard
⎣	**Sb**	**123**	**0.088**	ug/L	0.008	8	283	897	4	Standard
⎡>	**Tb**	**159**		ug/L			541424	553708	1	Standard
⎢	**Tl**	**205**	**-0.000**	ug/L	0.000	69	718	728	0	Standard
⎣	**Pb**	**208**	**-0.016**	ug/L	0.001	3	756	223	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-24
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 08:34:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	37536	0	Standard
	Cl	37		ug/L			4268423	4264672	1	Standard
>	Sc	45		ug/L			462048	600190	1	Standard
	Al	27	3.399	ug/L	0.033	0	4676	94874	2	Standard
	V	51	-0.003	ug/L	0.001	24	4034	5180	1	Standard
	V-1	51	0.029	ug/L	0.002	5	384	1176	1	Standard
	Cr	52	-0.075	ug/L	0.001	1	12068	14201	1	Standard
	Cr	53	0.030	ug/L	0.006	18	196	324	2	Standard
>	Ge	72		ug/L			24872	22943	0	KED
	Ni	60	0.304	ug/L	0.024	7	14	244	7	KED
	Ni	62	0.304	ug/L	0.108	35	11	46	26	KED
	Cu	63	0.125	ug/L	0.006	5	60	330	3	KED
	Cu	65	0.132	ug/L	0.014	10	29	169	8	KED
	Zn	66	0.679	ug/L	0.062	9	56	264	6	KED
	Zn	67	11.998	ug/L	0.056	0	8	612	1	KED
	As	75	4.560	ug/L	0.102	2	6	704	1	KED
	Se	78	0.149	ug/L	0.036	23	13	14	3	KED
	Y	89		ug/L			256805	264862	0	Standard
	Kr	83		ug/L			41	74	15	Standard
>	In-1	115		ug/L			7220	6825	2	KED
	Cd	111	0.009	ug/L	0.016	184	1	3	96	KED
	Cd	114	0.006	ug/L	0.004	67	3	5	34	KED
>	In	115		ug/L			351012	334527	1	Standard
	Ag	107	-0.002	ug/L	0.000	19	55	33	13	Standard
	Sb	121	0.017	ug/L	0.002	12	395	522	4	Standard
	Sb	123	0.019	ug/L	0.003	18	283	392	4	Standard
>	Tb	159		ug/L			541424	554242	2	Standard
	Tl	205	0.002	ug/L	0.001	71	718	781	6	Standard
	Pb	208	-0.002	ug/L	0.001	26	756	708	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-25
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 08:39:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	34586	1	Standard
	Cl	37		ug/L			4268423	4356819	1	Standard
>	Sc	45		ug/L			462048	582721	4	Standard
	Al	27	10.978	ug/L	0.452	4	4676	283961	0	Standard
	V	51	0.155	ug/L	0.009	5	4034	8581	2	Standard
	V-1	51	0.203	ug/L	0.005	2	384	5104	2	Standard
	Cr	52	0.010	ug/L	0.030	284	12068	15404	1	Standard
	Cr	53	0.173	ug/L	0.019	10	196	628	5	Standard
>	Ge	72		ug/L			24872	23202	1	KED
	Ni	60	2.625	ug/L	0.105	3	14	2026	2	KED
	Ni	62	2.607	ug/L	0.083	3	11	327	4	KED
	Cu	63	0.095	ug/L	0.007	7	60	267	4	KED
	Cu	65	0.111	ug/L	0.021	18	29	149	15	KED
	Zn	66	5.210	ug/L	0.145	2	56	1697	1	KED
	Zn	67	9.995	ug/L	0.243	2	8	517	1	KED
	As	75	5.077	ug/L	0.116	2	6	792	3	KED
	Se	78	-0.101	ug/L	0.184	181	13	10	31	KED
	Y	89		ug/L			256805	265836	0	Standard
	Kr	83		ug/L			41	68	2	Standard
>	In-1	115		ug/L			7220	7069	2	KED
	Cd	111	0.008	ug/L	0.007	89	1	3	45	KED
	Cd	114	0.000	ug/L	0.005	1502	3	3	71	KED
>	In	115		ug/L			351012	331953	2	Standard
	Ag	107	-0.002	ug/L	0.000	26	55	34	11	Standard
	Sb	121	-0.005	ug/L	0.002	30	395	331	5	Standard
	Sb	123	-0.005	ug/L	0.001	28	283	236	3	Standard
>	Tb	159		ug/L			541424	553660	0	Standard
	Tl	205	0.001	ug/L	0.001	159	718	752	3	Standard
	Pb	208	-0.010	ug/L	0.000	0	756	438	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-26
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 08:43:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	37350	3	Standard
	Cl	37		ug/L			4268423	4269351	0	Standard
>	Sc	45		ug/L			462048	494470	1	Standard
	Al	27	11.763	ug/L	0.055	0	4676	258125	1	Standard
	V	51	4.221	ug/L	0.136	3	4034	85353	1	Standard
	V-1	51	4.243	ug/L	0.141	3	384	82363	1	Standard
	Cr	52	0.895	ug/L	0.015	1	12068	27422	0	Standard
	Cr	53	1.034	ug/L	0.040	3	196	2142	2	Standard
>	Ge	72		ug/L			24872	21557	0	KED
	Ni	60	0.444	ug/L	0.019	4	14	329	4	KED
	Ni	62	0.571	ug/L	0.106	18	11	74	15	KED
	Cu	63	2.195	ug/L	0.043	1	60	4587	0	KED
	Cu	65	2.279	ug/L	0.132	5	29	2343	4	KED
	Zn	66	0.221	ug/L	0.052	23	56	113	13	KED
	Zn	67	9.787	ug/L	0.648	6	8	471	7	KED
	As	75	7.197	ug/L	0.221	3	6	1041	2	KED
	Se	78	0.420	ug/L	0.125	29	13	18	10	KED
	Y	89		ug/L			256805	250285	1	Standard
	Kr	83		ug/L			41	67	4	Standard
>	In-1	115		ug/L			7220	6452	0	KED
	Cd	111	0.020	ug/L	0.003	15	1	5	10	KED
	Cd	114	0.015	ug/L	0.008	52	3	9	37	KED
>	In	115		ug/L			351012	305992	0	Standard
	Ag	107	0.000	ug/L	0.001	6614	55	48	16	Standard
	Sb	121	4.708	ug/L	0.056	1	395	37434	1	Standard
	Sb	123	4.739	ug/L	0.066	1	283	28692	1	Standard
>	Tb	159		ug/L			541424	520995	1	Standard
	Tl	205	0.004	ug/L	0.004	86	718	797	10	Standard
	Pb	208	-0.006	ug/L	0.001	20	756	550	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-27
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 08:48:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	41838	0	Standard
	Cl	37		ug/L			4268423	4600509	0	Standard
>	Sc	45		ug/L			462048	516911	1	Standard
	Al	27	5.586	ug/L	0.204	3	4676	130869	2	Standard
	V	51	0.774	ug/L	0.017	2	4034	20046	1	Standard
	V-1	51	0.826	ug/L	0.016	1	384	17116	1	Standard
	Cr	52	0.412	ug/L	0.032	7	12068	20479	1	Standard
	Cr	53	0.592	ug/L	0.026	4	196	1377	2	Standard
>	Ge	72		ug/L			24872	23101	1	KED
	Ni	60	0.574	ug/L	0.067	11	14	452	12	KED
	Ni	62	0.562	ug/L	0.092	16	11	78	15	KED
	Cu	63	1.581	ug/L	0.010	0	60	3555	2	KED
	Cu	65	1.615	ug/L	0.069	4	29	1787	3	KED
	Zn	66	0.552	ug/L	0.047	8	56	226	5	KED
	Zn	67	3.768	ug/L	0.120	3	8	199	2	KED
	As	75	1.451	ug/L	0.134	9	6	229	7	KED
	Se	78	0.252	ug/L	0.324	128	13	16	32	KED
	Y	89		ug/L			256805	266792	0	Standard
	Kr	83		ug/L			41	51	29	Standard
>	In-1	115		ug/L			7220	6911	2	KED
	Cd	111	0.025	ug/L	0.016	63	1	6	45	KED
	Cd	114	0.005	ug/L	0.007	131	3	5	61	KED
>	In	115		ug/L			351012	326813	2	Standard
	Ag	107	0.001	ug/L	0.001	88	55	58	10	Standard
	Sb	121	1.513	ug/L	0.012	0	395	13094	2	Standard
	Sb	123	1.505	ug/L	0.024	1	283	9913	0	Standard
>	Tb	159		ug/L			541424	554174	2	Standard
	Tl	205	0.007	ug/L	0.002	23	718	932	3	Standard
	Pb	208	-0.010	ug/L	0.001	13	756	424	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-28
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 08:53:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	35914	0	Standard
	Cl	37		ug/L			4268423	4469222	1	Standard
>	Sc	45		ug/L			462048	490390	0	Standard
	Al	27	1.139	ug/L	0.045	3	4676	29274	3	Standard
	V	51	0.020	ug/L	0.004	18	4034	4671	1	Standard
	V-1	51	-0.005	ug/L	0.000	4	384	313	1	Standard
	Cr	52	0.178	ug/L	0.011	5	12068	15665	0	Standard
	Cr	53	0.091	ug/L	0.015	16	196	376	7	Standard
>	Ge	72		ug/L			24872	25575	0	KED
	Ni	60	-0.009	ug/L	0.006	68	14	7	66	KED
	Ni	62	0.017	ug/L	0.046	275	11	13	43	KED
	Cu	63	0.016	ug/L	0.006	39	60	100	14	KED
	Cu	65	0.020	ug/L	0.009	45	29	54	20	KED
	Zn	66	-0.036	ug/L	0.005	15	56	45	4	KED
	Zn	67	0.007	ug/L	0.148	2150	8	9	87	KED
	As	75	-0.016	ug/L	0.010	63	6	3	45	KED
	Se	78	-0.019	ug/L	0.233	1238	13	13	34	KED
	Y	89		ug/L			256805	264946	0	Standard
	Kr	83		ug/L			41	50	4	Standard
>	In-1	115		ug/L			7220	7343	1	KED
	Cd	111	0.001	ug/L	0.005	325	1	1	50	KED
	Cd	114	-0.000	ug/L	0.006	1884	3	2	102	KED
>	In	115		ug/L			351012	354875	1	Standard
	Ag	107	0.041	ug/L	0.004	10	55	533	7	Standard
	Sb	121	-0.029	ug/L	0.002	7	395	137	14	Standard
	Sb	123	-0.024	ug/L	0.002	6	283	116	8	Standard
>	Tb	159		ug/L			541424	564276	2	Standard
	Tl	205	-0.001	ug/L	0.001	133	718	730	3	Standard
	Pb	208	-0.018	ug/L	0.000	2	756	150	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-29
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 08:58:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	35789	0	Standard
	Cl	37		ug/L			4268423	4193631	0	Standard
>	Sc	45		ug/L			462048	466833	0	Standard
	Al	27	310.455	ug/L	7.514	2	4676	6311872	1	Standard
	V	51	1.998	ug/L	0.013	0	4034	40297	0	Standard
	V-1	51	2.020	ug/L	0.023	1	384	37231	1	Standard
	Cr	52	1.037	ug/L	0.019	1	12068	28067	0	Standard
	Cr	53	1.129	ug/L	0.030	2	196	2191	2	Standard
>	Ge	72		ug/L			24872	21846	0	KED
	Ni	60	1.891	ug/L	0.085	4	14	1378	3	KED
	Ni	62	2.099	ug/L	0.111	5	11	250	4	KED
	Cu	63	2.823	ug/L	0.028	0	60	5963	0	KED
	Cu	65	2.748	ug/L	0.052	1	29	2859	2	KED
	Zn	66	3.029	ug/L	0.014	0	56	950	0	KED
	Zn	67	4.495	ug/L	0.448	9	8	223	9	KED
	As	75	8.165	ug/L	0.112	1	6	1196	1	KED
	Se	78	0.462	ug/L	0.067	14	13	19	4	KED
	Y	89		ug/L			256805	253911	1	Standard
	Kr	83		ug/L			41	69	19	Standard
>	In-1	115		ug/L			7220	6567	2	KED
	Cd	111	0.036	ug/L	0.015	42	1	8	35	KED
	Cd	114	0.017	ug/L	0.017	97	3	10	71	KED
>	In	115		ug/L			351012	309442	1	Standard
	Ag	107	0.003	ug/L	0.002	65	55	82	25	Standard
	Sb	121	4.137	ug/L	0.109	2	395	33296	0	Standard
	Sb	123	4.146	ug/L	0.097	2	283	25414	1	Standard
>	Tb	159		ug/L			541424	527941	1	Standard
	Tl	205	0.155	ug/L	0.008	5	718	4599	3	Standard
	Pb	208	2.902	ug/L	0.031	1	756	95427	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-30
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 09:02:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	32552	1	Standard
	Cl	37		ug/L			4268423	4164070	1	Standard
>	Sc	45		ug/L			462048	467613	0	Standard
	Al	27	341.085	ug/L	2.607	0	4676	6946064	0	Standard
	V	51	2.179	ug/L	0.026	1	4034	43663	1	Standard
	V-1	51	2.190	ug/L	0.010	0	384	40410	1	Standard
	Cr	52	1.254	ug/L	0.013	0	12068	31450	1	Standard
	Cr	53	1.309	ug/L	0.047	3	196	2513	2	Standard
>	Ge	72		ug/L			24872	21810	1	KED
	Ni	60	1.977	ug/L	0.086	4	14	1438	4	KED
	Ni	62	2.427	ug/L	0.529	21	11	287	21	KED
	Cu	63	2.917	ug/L	0.059	2	60	6149	1	KED
	Cu	65	2.876	ug/L	0.043	1	29	2986	1	KED
	Zn	66	3.810	ug/L	0.214	5	56	1180	4	KED
	Zn	67	4.937	ug/L	0.529	10	8	244	11	KED
	As	75	8.501	ug/L	0.182	2	6	1243	1	KED
	Se	78	0.865	ug/L	0.057	6	13	26	2	KED
	Y	89		ug/L			256805	256628	0	Standard
	Kr	83		ug/L			41	102	21	Standard
>	In-1	115		ug/L			7220	6520	1	KED
	Cd	111	0.049	ug/L	0.010	20	1	10	18	KED
	Cd	114	0.019	ug/L	0.008	44	3	11	33	KED
>	In	115		ug/L			351012	310527	1	Standard
	Ag	107	0.004	ug/L	0.001	29	55	88	12	Standard
	Sb	121	4.383	ug/L	0.096	2	395	35389	1	Standard
	Sb	123	4.356	ug/L	0.108	2	283	26783	1	Standard
>	Tb	159		ug/L			541424	529544	0	Standard
	Tl	205	0.163	ug/L	0.002	1	718	4814	0	Standard
	Pb	208	3.221	ug/L	0.043	1	756	106153	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-32
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 09:08:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	43747	0	Standard
	Cl	37		ug/L			4268423	4267612	0	Standard
>	Sc	45		ug/L			462048	482266	0	Standard
	Al	27	209.729	ug/L	1.694	0	4676	4407034	1	Standard
	V	51	6.160	ug/L	0.020	0	4034	119593	0	Standard
	V-1	51	6.153	ug/L	0.008	0	384	116353	0	Standard
	Cr	52	2.020	ug/L	0.005	0	12068	44539	0	Standard
	Cr	53	2.079	ug/L	0.048	2	196	3997	2	Standard
>	Ge	72		ug/L			24872	22801	0	KED
	Ni	60	2.015	ug/L	0.095	4	14	1532	4	KED
	Ni	62	2.808	ug/L	0.100	3	11	346	4	KED
	Cu	63	5.809	ug/L	0.140	2	60	12746	1	KED
	Cu	65	5.830	ug/L	0.095	1	29	6301	1	KED
	Zn	66	1.624	ug/L	0.130	8	56	555	6	KED
	Zn	67	2.349	ug/L	0.181	7	8	125	6	KED
	As	75	4.251	ug/L	0.172	4	6	653	3	KED
	Se	78	0.828	ug/L	0.124	15	13	26	7	KED
	Y	89		ug/L			256805	277679	2	Standard
	Kr	83		ug/L			41	98	5	Standard
>	In-1	115		ug/L			7220	6728	1	KED
	Cd	111	0.037	ug/L	0.014	37	1	8	29	KED
	Cd	114	0.033	ug/L	0.018	54	3	18	46	KED
>	In	115		ug/L			351012	316949	1	Standard
	Ag	107	0.024	ug/L	0.002	9	55	298	6	Standard
	Sb	121	1.374	ug/L	0.022	1	395	11567	2	Standard
	Sb	123	1.349	ug/L	0.040	2	283	8643	1	Standard
>	Tb	159		ug/L			541424	537856	1	Standard
	Tl	205	0.034	ug/L	0.003	10	718	1570	4	Standard
	Pb	208	2.422	ug/L	0.072	2	756	81231	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-33
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 09:14:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25996	36104	1	Standard
	Cl	37		ug/L			4268423	3786584	1	Standard
>	Sc	45		ug/L			462048	402465	1	Standard
	Al	27	124.140	ug/L	2.787	2	4676	2178128	1	Standard
	V	51	3.055	ug/L	0.067	2	4034	51263	1	Standard
	V-1	51	3.024	ug/L	0.063	2	384	47886	1	Standard
	Cr	52	0.257	ug/L	0.017	6	12068	13898	0	Standard
	Cr	53	0.210	ug/L	0.007	3	196	490	1	Standard
>	Ge	72		ug/L			24872	17736	1	KED
	Ni	60	4.968	ug/L	0.292	5	14	2923	5	KED
	Ni	62	6.095	ug/L	0.276	4	11	574	5	KED
	Cu	63	2.453	ug/L	0.105	4	60	4209	2	KED
	Cu	65	2.472	ug/L	0.023	0	29	2090	2	KED
	Zn	66	4.723	ug/L	0.180	3	56	1180	3	KED
	Zn	67	20.420	ug/L	1.034	5	8	801	6	KED
	As	75	39.110	ug/L	0.846	2	6	4635	0	KED
	Se	78	1.328	ug/L	0.311	23	13	27	14	KED
	Y	89		ug/L			256805	220826	1	Standard
	Kr	83		ug/L			41	182	10	Standard
>	In-1	115		ug/L			7220	5556	3	KED
	Cd	111	0.158	ug/L	0.063	40	1	26	39	KED
	Cd	114	0.107	ug/L	0.005	4	3	43	0	KED
>	In	115		ug/L			351012	256355	2	Standard
	Ag	107	0.006	ug/L	0.001	19	55	90	9	Standard
	Sb	121	10.060	ug/L	0.112	1	395	66679	0	Standard
	Sb	123	9.990	ug/L	0.268	2	283	50432	0	Standard
>	Tb	159		ug/L			541424	468748	1	Standard
	Tl	205	-0.000	ug/L	0.001	277	718	612	3	Standard
	Pb	208	6.262	ug/L	0.137	2	756	182061	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLN
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 09:19:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	26266	1	Standard
	Cl	**37**		ug/L			4268423	4533571	1	Standard
⌈>	**Sc**	**45**		ug/L			462048	462273	1	Standard
|	**Al**	**27**	**-0.053**	ug/L	0.002	3	4676	3619	2	Standard
|	**V**	**51**	**0.006**	ug/L	0.007	114	4034	4147	2	Standard
|	**V-1**	**51**	**-0.016**	ug/L	0.001	6	384	101	14	Standard
|	**Cr**	**52**	**0.016**	ug/L	0.022	133	12068	12321	2	Standard
⌊	**Cr**	**53**	**-0.056**	ug/L	0.002	3	196	98	2	Standard
⌈>	**Ge**	**72**		ug/L			24872	25998	0	KED
|	**Ni**	**60**	**-0.004**	ug/L	0.006	134	14	11	44	KED
|	**Ni**	**62**	**0.350**	ug/L	0.073	20	11	59	17	KED
|	**Cu**	**63**	**0.001**	ug/L	0.003	225	60	66	10	KED
|	**Cu**	**65**	**-0.009**	ug/L	0.004	45	29	19	24	KED
|	**Zn**	**66**	**-0.063**	ug/L	0.030	48	56	36	28	KED
|	**Zn**	**67**	**-0.085**	ug/L	0.038	45	8	4	49	KED
|	**As**	**75**	**-0.002**	ug/L	0.011	703	6	6	30	KED
⌊	**Se**	**78**	**0.247**	ug/L	0.213	86	13	18	21	KED
	Y	**89**		ug/L			256805	252976	1	Standard
	Kr	**83**		ug/L			41	83	19	Standard
⌈>	**In-1**	**115**		ug/L			7220	7628	2	KED
|	**Cd**	**111**	**0.013**	ug/L	0.005	38	1	4	24	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.005	1935	3	3	91	KED
⌈>	**In**	**115**		ug/L			351012	342649	1	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.001	47	55	27	43	Standard
|	**Sb**	**121**	**-0.035**	ug/L	0.001	3	395	80	13	Standard
⌊	**Sb**	**123**	**-0.030**	ug/L	0.001	4	283	74	10	Standard
⌈>	**Tb**	**159**		ug/L			541424	544954	2	Standard
|	**Tl**	**205**	**-0.001**	ug/L	0.002	152	718	694	4	Standard
⌊	**Pb**	**208**	**-0.019**	ug/L	0.000	1	756	118	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVK
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 09:23:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	25414	1	Standard
	Cl	**37**		ug/L			4268423	4467314	1	Standard
⌈>	**Sc**	**45**		ug/L			462048	485938	1	Standard
|	**Al**	**27**	**5053.366**	ug/L	189.665	3	4676	106843350	2	Standard
|	**V**	**51**	**49.572**	ug/L	1.538	3	4034	939513	1	Standard
|	**V-1**	**51**	**49.750**	ug/L	1.510	3	384	944760	1	Standard
|	**Cr**	**52**	**49.085**	ug/L	1.534	3	12068	794598	1	Standard
⌊	**Cr**	**53**	**49.685**	ug/L	1.448	2	196	91467	1	Standard
⌈>	**Ge**	**72**		ug/L			24872	26416	0	KED
|	**Ni**	**60**	**49.658**	ug/L	0.611	1	14	43395	1	KED
|	**Ni**	**62**	**52.348**	ug/L	1.645	3	11	7257	3	KED
|	**Cu**	**63**	**50.696**	ug/L	0.522	1	60	128393	1	KED
|	**Cu**	**65**	**50.035**	ug/L	0.789	1	29	62419	1	KED
|	**Zn**	**66**	**52.273**	ug/L	1.359	2	56	18858	2	KED
|	**Zn**	**67**	**51.250**	ug/L	1.131	2	8	2982	2	KED
|	**As**	**75**	**49.705**	ug/L	1.548	3	6	8775	3	KED
⌊	**Se**	**78**	**51.072**	ug/L	1.959	3	13	1055	3	KED
	Y	**89**		ug/L			256805	270844	1	Standard
	Kr	**83**		ug/L			41	63	14	Standard
⌈>	**In-1**	**115**		ug/L			7220	7591	2	KED
|	**Cd**	**111**	**51.719**	ug/L	1.049	2	1	11214	0	KED
⌊	**Cd**	**114**	**51.998**	ug/L	0.949	1	3	27138	1	KED
⌈>	**In**	**115**		ug/L			351012	351701	0	Standard
|	**Ag**	**107**	**50.747**	ug/L	0.456	0	55	588530	1	Standard
|	**Sb**	**121**	**50.656**	ug/L	0.464	0	395	459099	1	Standard
⌊	**Sb**	**123**	**50.439**	ug/L	0.778	1	283	348274	0	Standard
⌈>	**Tb**	**159**		ug/L			541424	582756	1	Standard
|	**Tl**	**205**	**50.374**	ug/L	1.406	2	718	1395748	0	Standard
⌊	**Pb**	**208**	**51.283**	ug/L	1.267	2	756	1847529	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBK
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 09:31:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	26478	2	Standard
	Cl	**37**		ug/L			4268423	4510793	0	Standard
⎡>	**Sc**	**45**		ug/L			462048	472301	0	Standard
⎢	**Al**	**27**	**-0.006**	ug/L	0.008	126	4676	4657	3	Standard
⎢	**V**	**51**	**-0.003**	ug/L	0.002	58	4034	4069	1	Standard
⎢	**V-1**	**51**	**-0.017**	ug/L	0.000	1	384	82	6	Standard
⎢	**Cr**	**52**	**-0.019**	ug/L	0.001	7	12068	12042	0	Standard
⎣	**Cr**	**53**	**-0.064**	ug/L	0.004	6	196	85	7	Standard
⎡>	**Ge**	**72**		ug/L			24872	25536	0	KED
⎢	**Ni**	**60**	**0.013**	ug/L	0.012	95	14	26	40	KED
⎢	**Ni**	**62**	**0.145**	ug/L	0.054	37	11	31	23	KED
⎢	**Cu**	**63**	**0.005**	ug/L	0.004	97	60	73	14	KED
⎢	**Cu**	**65**	**0.004**	ug/L	0.007	194	29	34	24	KED
⎢	**Zn**	**66**	**-0.092**	ug/L	0.016	17	56	26	21	KED
⎢	**Zn**	**67**	**-0.050**	ug/L	0.039	78	8	6	34	KED
⎢	**As**	**75**	**-0.016**	ug/L	0.010	63	6	3	45	KED
⎣	**Se**	**78**	**0.081**	ug/L	0.106	131	13	15	13	KED
	Y	**89**		ug/L			256805	263223	0	Standard
	Kr	**83**		ug/L			41	51	16	Standard
⎡>	**In-1**	**115**		ug/L			7220	7500	0	KED
⎢	**Cd**	**111**	**0.010**	ug/L	0.009	87	1	3	50	KED
⎣	**Cd**	**114**	**-0.004**	ug/L	0.002	56	3	1	98	KED
⎡>	**In**	**115**		ug/L			351012	348449	1	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.000	38	55	62	6	Standard
⎢	**Sb**	**121**	**0.083**	ug/L	0.004	4	395	1140	1	Standard
⎣	**Sb**	**123**	**0.097**	ug/L	0.011	11	283	941	6	Standard
⎡>	**Tb**	**159**		ug/L			541424	558380	1	Standard
⎢	**Tl**	**205**	**-0.001**	ug/L	0.002	280	718	721	7	Standard
⎣	**Pb**	**208**	**-0.016**	ug/L	0.001	4	756	217	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-01
Sample Dil Factor: 100
Comments:
Sample Date/Time: Friday, March 31, 2023 09:36:15

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	75773	1	Standard
	Cl	**37**		ug/L			4268423	4474802	2	Standard
⌈>	**Sc**	**45**		ug/L			462048	481961	1	Standard
|	**Al**	**27**	**0.287**	ug/L	0.017	6	4676	10897	3	Standard
|	**V**	**51**	**0.043**	ug/L	0.006	13	4034	5010	2	Standard
|	**V-1**	**51**	**-0.016**	ug/L	0.000	1	384	100	5	Standard
|	**Cr**	**52**	**0.160**	ug/L	0.011	6	12068	15123	1	Standard
⌊	**Cr**	**53**	**-0.036**	ug/L	0.008	21	196	138	10	Standard
⌈>	**Ge**	**72**		ug/L			24872	26480	2	KED
|	**Ni**	**60**	**-0.004**	ug/L	0.003	83	14	12	24	KED
|	**Ni**	**62**	**0.124**	ug/L	0.109	87	11	29	49	KED
|	**Cu**	**63**	**0.027**	ug/L	0.013	46	60	133	25	KED
|	**Cu**	**65**	**0.028**	ug/L	0.006	22	29	65	10	KED
|	**Zn**	**66**	**0.112**	ug/L	0.046	41	56	100	14	KED
|	**Zn**	**67**	**0.056**	ug/L	0.054	95	8	12	22	KED
|	**As**	**75**	**-0.008**	ug/L	0.002	28	6	5	5	KED
⌊	**Se**	**78**	**0.047**	ug/L	0.123	263	13	15	14	KED
	Y	**89**		ug/L			256805	269475	0	Standard
	Kr	**83**		ug/L			41	53	18	Standard
⌈>	**In-1**	**115**		ug/L			7220	7843	1	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.006	1026	1	1	91	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.002	116	3	2	46	KED
⌈>	**In**	**115**		ug/L			351012	361111	1	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	10	55	41	4	Standard
|	**Sb**	**121**	**-0.003**	ug/L	0.004	114	395	375	7	Standard
⌊	**Sb**	**123**	**-0.002**	ug/L	0.001	25	283	276	0	Standard
⌈>	**Tb**	**159**		ug/L			541424	577204	2	Standard
|	**Tl**	**205**	**0.001**	ug/L	0.001	108	718	793	1	Standard
⌊	**Pb**	**208**	**-0.011**	ug/L	0.001	7	756	416	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-02
Sample Dil Factor: 100
Comments:
Sample Date/Time: Friday, March 31, 2023 09:40:58

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	30965	0	Standard
	Cl	**37**		ug/L			4268423	4442954	0	Standard
⌈>	**Sc**	**45**		ug/L			462048	471033	0	Standard
|	**Al**	**27**	**2.192**	ug/L	0.028	1	4676	49695	1	Standard
|	**V**	**51**	**0.004**	ug/L	0.012	265	4034	4192	4	Standard
|	**V-1**	**51**	**-0.016**	ug/L	0.000	0	384	106	1	Standard
|	**Cr**	**52**	**0.020**	ug/L	0.041	205	12068	12608	4	Standard
⌊	**Cr**	**53**	**-0.046**	ug/L	0.005	10	196	118	6	Standard
⌈>	**Ge**	**72**		ug/L			24872	26283	1	KED
|	**Ni**	**60**	**-0.000**	ug/L	0.003	1316	14	15	12	KED
|	**Ni**	**62**	**0.050**	ug/L	0.034	67	11	19	26	KED
|	**Cu**	**63**	**0.009**	ug/L	0.002	18	60	86	3	KED
|	**Cu**	**65**	**0.004**	ug/L	0.003	65	29	36	9	KED
|	**Zn**	**66**	**0.157**	ug/L	0.053	33	56	115	14	KED
|	**Zn**	**67**	**0.047**	ug/L	0.054	115	8	12	24	KED
|	**As**	**75**	**-0.011**	ug/L	0.008	68	6	4	26	KED
⌊	**Se**	**78**	**0.128**	ug/L	0.182	142	13	16	21	KED
	Y	**89**		ug/L			256805	266013	1	Standard
	Kr	**83**		ug/L			41	47	4	Standard
⌈>	**In-1**	**115**		ug/L			7220	7583	7	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.003	56	1	0	86	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.008	426	3	4	102	KED
⌈>	**In**	**115**		ug/L			351012	354879	1	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.001	39	55	34	24	Standard
|	**Sb**	**121**	**-0.018**	ug/L	0.003	18	395	234	12	Standard
⌊	**Sb**	**123**	**-0.017**	ug/L	0.002	11	283	169	8	Standard
⌈>	**Tb**	**159**		ug/L			541424	553523	2	Standard
|	**Tl**	**205**	**-0.000**	ug/L	0.001	1155	718	731	4	Standard
⌊	**Pb**	**208**	**-0.012**	ug/L	0.001	6	756	357	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-03
Sample Dil Factor: 100
Comments:

DEL

Sample Date/Time: Friday, March 31, 2023 09:45:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	86660	1	Standard
	Cl	**37**		ug/L			4268423	4400063	0	Standard
⌈>	**Sc**	**45**		ug/L			462048	474553	1	Standard
|	**Al**	**27**	**0.334**	ug/L	0.012	3	4676	11698	2	Standard
|	**V**	**51**	**0.063**	ug/L	0.009	14	4034	5302	1	Standard
|	**V-1**	**51**	**-0.015**	ug/L	0.000	1	384	113	4	Standard
|	**Cr**	**52**	**0.243**	ug/L	0.029	11	12068	16180	1	Standard
⌊	**Cr**	**53**	**-0.018**	ug/L	0.006	30	196	168	6	Standard
⌈>	**Ge**	**72**		ug/L			24872	26285	1	KED
|	**Ni**	**60**	**0.264**	ug/L	0.019	7	14	244	5	KED
|	**Ni**	**62**	**0.295**	ug/L	0.114	38	11	52	29	KED
|	**Cu**	**63**	**0.008**	ug/L	0.008	101	60	84	24	KED
|	**Cu**	**65**	**0.005**	ug/L	0.001	25	29	37	2	KED
|	**Zn**	**66**	**0.117**	ug/L	0.012	10	56	101	5	KED
|	**Zn**	**67**	**0.069**	ug/L	0.060	87	8	13	24	KED
|	**As**	**75**	**0.226**	ug/L	0.019	8	6	46	7	KED
⌊	**Se**	**78**	**0.125**	ug/L	0.070	56	13	16	10	KED
	Y	**89**		ug/L			256805	273416	1	Standard
	Kr	**83**		ug/L			41	49	16	Standard
⌈>	**In-1**	**115**		ug/L			7220	7584	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.004	130	1	0	100	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.002	57	3	1	94	KED
⌈>	**In**	**115**		ug/L			351012	363575	0	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.000	8	55	32	5	Standard
|	**Sb**	**121**	**-0.025**	ug/L	0.003	12	395	172	16	Standard
⌊	**Sb**	**123**	**-0.022**	ug/L	0.001	3	283	136	3	Standard
⌈>	**Tb**	**159**		ug/L			541424	573029	2	Standard
|	**Tl**	**205**	**-0.001**	ug/L	0.002	408	718	745	7	Standard
⌊	**Pb**	**208**	**-0.014**	ug/L	0.000	3	756	306	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-04
Sample Dil Factor: 100
Comments:
Sample Date/Time: Friday, March 31, 2023 09:50:25

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	71894	1	Standard
	Cl	**37**		ug/L			4268423	4352911	2	Standard
⌈>	**Sc**	**45**		ug/L			462048	490071	0	Standard
|	**Al**	**27**	**0.202**	ug/L	0.015	7	4676	9260	2	Standard
|	**V**	**51**	**0.034**	ug/L	0.010	28	4034	4929	4	Standard
|	**V-1**	**51**	**-0.015**	ug/L	0.001	6	384	126	13	Standard
|	**Cr**	**52**	**0.149**	ug/L	0.021	14	12068	15192	2	Standard
⌊	**Cr**	**53**	**-0.015**	ug/L	0.012	78	196	180	11	Standard
⌈>	**Ge**	**72**		ug/L			24872	26491	0	KED
|	**Ni**	**60**	**0.013**	ug/L	0.002	16	14	26	7	KED
|	**Ni**	**62**	**0.063**	ug/L	0.037	57	11	20	24	KED
|	**Cu**	**63**	**0.028**	ug/L	0.006	22	60	135	11	KED
|	**Cu**	**65**	**0.020**	ug/L	0.016	78	29	56	35	KED
|	**Zn**	**66**	**0.145**	ug/L	0.028	19	56	112	8	KED
|	**Zn**	**67**	**0.110**	ug/L	0.038	34	8	15	13	KED
|	**As**	**75**	**-0.010**	ug/L	0.006	59	6	5	19	KED
⌊	**Se**	**78**	**0.051**	ug/L	0.058	113	13	15	7	KED
	Y	**89**		ug/L			256805	274819	2	Standard
	Kr	**83**		ug/L			41	40	23	Standard
⌈>	**In-1**	**115**		ug/L			7220	7829	1	KED
|	**Cd**	**111**	**0.004**	ug/L	0.002	63	1	2	21	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.006	300	3	4	69	KED
⌈>	**In**	**115**		ug/L			351012	357669	1	Standard
|	**Ag**	**107**	**-0.003**	ug/L	0.000	5	55	26	8	Standard
|	**Sb**	**121**	**-0.029**	ug/L	0.002	5	395	139	9	Standard
⌊	**Sb**	**123**	**-0.026**	ug/L	0.000	1	283	105	1	Standard
⌈>	**Tb**	**159**		ug/L			541424	571452	1	Standard
|	**Tl**	**205**	**-0.003**	ug/L	0.001	51	718	690	3	Standard
⌊	**Pb**	**208**	**-0.015**	ug/L	0.000	2	756	274	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-05

Sample Dil Factor: 100

DEL

Comments:

Sample Date/Time: Friday, March 31, 2023 09:55:38

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	30958	3	Standard
	Cl	**37**		ug/L			4268423	4329087	1	Standard
⌈>	**Sc**	**45**		ug/L			462048	476571	0	Standard
|	**Al**	**27**	**0.292**	ug/L	0.004	1	4676	10880	0	Standard
|	**V**	**51**	**-0.002**	ug/L	0.003	141	4034	4128	1	Standard
|	**V-1**	**51**	**-0.016**	ug/L	0.001	5	384	92	17	Standard
|	**Cr**	**52**	**-0.007**	ug/L	0.006	78	12068	12332	1	Standard
⌊	**Cr**	**53**	**-0.055**	ug/L	0.004	6	196	102	6	Standard
⌈>	**Ge**	**72**		ug/L			24872	25755	1	KED
|	**Ni**	**60**	**0.000**	ug/L	0.002	1648	14	15	12	KED
|	**Ni**	**62**	**0.048**	ug/L	0.050	104	11	18	39	KED
|	**Cu**	**63**	**0.013**	ug/L	0.004	29	60	95	9	KED
|	**Cu**	**65**	**0.008**	ug/L	0.007	81	29	40	22	KED
|	**Zn**	**66**	**0.180**	ug/L	0.042	23	56	121	14	KED
|	**Zn**	**67**	**0.006**	ug/L	0.037	602	8	9	20	KED
|	**As**	**75**	**-0.005**	ug/L	0.004	86	6	5	14	KED
⌊	**Se**	**78**	**-0.021**	ug/L	0.097	449	13	13	12	KED
	Y	**89**		ug/L			256805	265074	0	Standard
	Kr	**83**		ug/L			41	33	11	Standard
⌈>	**In-1**	**115**		ug/L			7220	7563	1	KED
|	**Cd**	**111**	**0.004**	ug/L	0.010	246	1	2	86	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.006	594	3	3	89	KED
⌈>	**In**	**115**		ug/L			351012	350693	1	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.001	47	55	31	37	Standard
|	**Sb**	**121**	**-0.031**	ug/L	0.001	1	395	115	3	Standard
⌊	**Sb**	**123**	**-0.026**	ug/L	0.004	16	283	102	30	Standard
⌈>	**Tb**	**159**		ug/L			541424	556393	1	Standard
|	**Tl**	**205**	**0.001**	ug/L	0.003	491	718	754	9	Standard
⌊	**Pb**	**208**	**-0.015**	ug/L	0.001	8	756	273	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-06
Sample Dil Factor: 100
DEL
Comments:
Sample Date/Time: Friday, March 31, 2023 10:01:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	71007	2	Standard
	Cl	**37**		ug/L			4268423	4284981	1	Standard
⌈>	**Sc**	**45**		ug/L			462048	486268	0	Standard
|	**Al**	**27**	**0.257**	ug/L	0.003	1	4676	10352	0	Standard
|	**V**	**51**	**0.037**	ug/L	0.004	11	4034	4936	1	Standard
|	**V-1**	**51**	**-0.016**	ug/L	0.000	1	384	101	3	Standard
|	**Cr**	**52**	**0.143**	ug/L	0.012	8	12068	14984	1	Standard
⌊	**Cr**	**53**	**-0.033**	ug/L	0.002	4	196	146	2	Standard
⌈>	**Ge**	**72**		ug/L			24872	25991	1	KED
|	**Ni**	**60**	**0.003**	ug/L	0.001	36	14	17	6	KED
|	**Ni**	**62**	**0.010**	ug/L	0.041	414	11	13	42	KED
|	**Cu**	**63**	**0.003**	ug/L	0.005	143	60	72	18	KED
|	**Cu**	**65**	**0.003**	ug/L	0.008	331	29	33	31	KED
|	**Zn**	**66**	**0.110**	ug/L	0.070	63	56	97	24	KED
|	**Zn**	**67**	**0.127**	ug/L	0.135	106	8	16	46	KED
|	**As**	**75**	**0.029**	ug/L	0.016	55	6	11	22	KED
⌊	**Se**	**78**	**-0.048**	ug/L	0.105	220	13	13	17	KED
	Y	**89**		ug/L			256805	268026	0	Standard
	Kr	**83**		ug/L			41	43	31	Standard
⌈>	**In-1**	**115**		ug/L			7220	7624	3	KED
|	**Cd**	**111**	**0.007**	ug/L	0.002	33	1	3	17	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.000	4	3	1	6	KED
⌈>	**In**	**115**		ug/L			351012	359628	0	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.001	26	55	27	27	Standard
|	**Sb**	**121**	**-0.032**	ug/L	0.002	7	395	107	19	Standard
⌊	**Sb**	**123**	**-0.027**	ug/L	0.004	16	283	98	32	Standard
⌈>	**Tb**	**159**		ug/L			541424	567047	2	Standard
|	**Tl**	**205**	**-0.001**	ug/L	0.001	132	718	724	7	Standard
⌊	**Pb**	**208**	**-0.016**	ug/L	0.001	3	756	243	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLO
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 10:07:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	26007	0	Standard
	Cl	**37**		ug/L			4268423	4363288	0	Standard
⎡>	**Sc**	**45**		ug/L			462048	467561	0	Standard
⎢	**Al**	**27**	**-0.057**	ug/L	0.004	7	4676	3570	1	Standard
⎢	**V**	**51**	**-0.006**	ug/L	0.005	77	4034	3974	2	Standard
⎢	**V-1**	**51**	**-0.016**	ug/L	0.000	1	384	96	5	Standard
⎢	**Cr**	**52**	**-0.026**	ug/L	0.012	45	12068	11807	1	Standard
⎣	**Cr**	**53**	**-0.059**	ug/L	0.005	8	196	94	8	Standard
⎡>	**Ge**	**72**		ug/L			24872	24846	0	KED
⎢	**Ni**	**60**	**0.003**	ug/L	0.007	220	14	17	33	KED
⎢	**Ni**	**62**	**0.015**	ug/L	0.025	171	11	13	24	KED
⎢	**Cu**	**63**	**-0.003**	ug/L	0.001	48	60	53	5	KED
⎢	**Cu**	**65**	**-0.007**	ug/L	0.003	45	29	20	18	KED
⎢	**Zn**	**66**	**-0.077**	ug/L	0.020	26	56	30	21	KED
⎢	**Zn**	**67**	**-0.058**	ug/L	0.061	104	8	5	57	KED
⎢	**As**	**75**	**-0.006**	ug/L	0.004	62	6	5	10	KED
⎣	**Se**	**78**	**0.119**	ug/L	0.195	163	13	15	23	KED
	Y	**89**		ug/L			256805	260724	1	Standard
	Kr	**83**		ug/L			41	41	16	Standard
⎡>	**In-1**	**115**		ug/L			7220	7445	1	KED
⎢	**Cd**	**111**	**0.001**	ug/L	0.004	353	1	1	50	KED
⎣	**Cd**	**114**	**0.002**	ug/L	0.009	424	3	4	112	KED
⎡>	**In**	**115**		ug/L			351012	348816	0	Standard
⎢	**Ag**	**107**	**-0.003**	ug/L	0.000	16	55	20	28	Standard
⎢	**Sb**	**121**	**-0.034**	ug/L	0.001	3	395	83	13	Standard
⎣	**Sb**	**123**	**-0.033**	ug/L	0.002	5	283	59	22	Standard
⎡>	**Tb**	**159**		ug/L			541424	549771	1	Standard
⎢	**Tl**	**205**	**-0.002**	ug/L	0.001	63	718	683	3	Standard
⎣	**Pb**	**208**	**-0.019**	ug/L	0.001	3	756	111	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVL
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 10:11:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	26225	2	Standard
	Cl	**37**		ug/L			4268423	4436315	0	Standard
⌈>	**Sc**	**45**		ug/L			462048	481632	1	Standard
|	**Al**	**27**	**5057.587**	ug/L	93.906	1	4676	106008247	1	Standard
|	**V**	**51**	**49.233**	ug/L	1.096	2	4034	924974	0	Standard
|	**V-1**	**51**	**49.262**	ug/L	1.257	2	384	927273	0	Standard
|	**Cr**	**52**	**49.127**	ug/L	1.783	3	12068	788216	2	Standard
⌊	**Cr**	**53**	**49.224**	ug/L	2.334	4	196	89803	3	Standard
⌈>	**Ge**	**72**		ug/L			24872	26172	0	KED
|	**Ni**	**60**	**50.681**	ug/L	0.600	1	14	43879	0	KED
|	**Ni**	**62**	**51.822**	ug/L	0.710	1	11	7117	2	KED
|	**Cu**	**63**	**51.007**	ug/L	0.128	0	60	127987	0	KED
|	**Cu**	**65**	**50.910**	ug/L	0.966	1	29	62921	1	KED
|	**Zn**	**66**	**51.679**	ug/L	1.122	2	56	18472	2	KED
|	**Zn**	**67**	**52.695**	ug/L	1.737	3	8	3037	3	KED
|	**As**	**75**	**50.218**	ug/L	0.792	1	6	8784	1	KED
⌊	**Se**	**78**	**50.935**	ug/L	0.946	1	13	1042	1	KED
	Y	**89**		ug/L			256805	274384	1	Standard
	Kr	**83**		ug/L			41	50	13	Standard
⌈>	**In-1**	**115**		ug/L			7220	7632	1	KED
|	**Cd**	**111**	**51.331**	ug/L	0.592	1	1	11192	0	KED
⌊	**Cd**	**114**	**51.577**	ug/L	1.187	2	3	27070	2	KED
⌈>	**In**	**115**		ug/L			351012	351181	2	Standard
|	**Ag**	**107**	**50.940**	ug/L	2.268	4	55	589546	2	Standard
|	**Sb**	**121**	**50.577**	ug/L	1.969	3	395	457470	1	Standard
⌊	**Sb**	**123**	**50.443**	ug/L	1.783	3	283	347657	1	Standard
⌈>	**Tb**	**159**		ug/L			541424	579006	1	Standard
|	**Tl**	**205**	**50.424**	ug/L	1.872	3	718	1388170	2	Standard
⌊	**Pb**	**208**	**50.772**	ug/L	1.120	2	756	1817399	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBL
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 10:19:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	25622	3	Standard
	Cl	**37**		ug/L			4268423	4382930	0	Standard
⎡>	**Sc**	**45**		ug/L			462048	455694	0	Standard
⎢	**Al**	**27**	**0.005**	ug/L	0.000	5	4676	4715	0	Standard
⎢	**V**	**51**	**-0.005**	ug/L	0.004	70	4034	3883	1	Standard
⎢	**V-1**	**51**	**-0.017**	ug/L	0.001	3	384	78	12	Standard
⎢	**Cr**	**52**	**-0.017**	ug/L	0.014	83	12068	11651	1	Standard
⎣	**Cr**	**53**	**-0.054**	ug/L	0.004	7	196	100	6	Standard
⎡>	**Ge**	**72**		ug/L			24872	25270	1	KED
⎢	**Ni**	**60**	**0.009**	ug/L	0.006	65	14	22	21	KED
⎢	**Ni**	**62**	**-0.006**	ug/L	0.036	578	11	10	44	KED
⎢	**Cu**	**63**	**-0.003**	ug/L	0.006	189	60	53	26	KED
⎢	**Cu**	**65**	**-0.003**	ug/L	0.004	115	29	26	16	KED
⎢	**Zn**	**66**	**-0.075**	ug/L	0.027	35	56	31	30	KED
⎢	**Zn**	**67**	**-0.106**	ug/L	0.053	49	8	3	91	KED
⎢	**As**	**75**	**-0.009**	ug/L	0.013	148	6	4	44	KED
⎣	**Se**	**78**	**0.038**	ug/L	0.195	508	13	14	27	KED
	Y	**89**		ug/L			256805	255515	2	Standard
	Kr	**83**		ug/L			41	46	2	Standard
⎡>	**In-1**	**115**		ug/L			7220	7558	1	KED
⎢	**Cd**	**111**	**0.001**	ug/L	0.008	712	1	1	86	KED
⎣	**Cd**	**114**	**-0.004**	ug/L	0.002	56	3	1	102	KED
⎡>	**In**	**115**		ug/L			351012	346229	1	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.002	3280	55	55	41	Standard
⎢	**Sb**	**121**	**0.081**	ug/L	0.003	3	395	1110	1	Standard
⎣	**Sb**	**123**	**0.092**	ug/L	0.007	7	283	901	4	Standard
⎡>	**Tb**	**159**		ug/L			541424	554112	1	Standard
⎢	**Tl**	**205**	**-0.000**	ug/L	0.002	882	718	729	7	Standard
⎣	**Pb**	**208**	**-0.017**	ug/L	0.000	1	756	197	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 10:24:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	29710	0	Standard
	Cl	**37**		ug/L			4268423	4557944	1	Standard
⎡>	**Sc**	**45**		ug/L			462048	555013	1	Standard
⎢	**Al**	**27**	**-0.016**	ug/L	0.007	40	4676	5218	1	Standard
⎢	**V**	**51**	**-0.001**	ug/L	0.009	846	4034	4821	2	Standard
⎢	**V-1**	**51**	**-0.017**	ug/L	0.000	1	384	93	8	Standard
⎢	**Cr**	**52**	**-0.002**	ug/L	0.032	2070	12068	14462	2	Standard
⎣	**Cr**	**53**	**-0.054**	ug/L	0.007	12	196	122	11	Standard
⎡>	**Ge**	**72**		ug/L			24872	27128	1	KED
⎢	**Ni**	**60**	**0.008**	ug/L	0.008	99	14	22	30	KED
⎢	**Ni**	**62**	**0.015**	ug/L	0.041	262	11	14	37	KED
⎢	**Cu**	**63**	**0.000**	ug/L	0.002	4670	60	66	10	KED
⎢	**Cu**	**65**	**0.011**	ug/L	0.004	32	29	45	11	KED
⎢	**Zn**	**66**	**-0.033**	ug/L	0.016	47	56	49	11	KED
⎢	**Zn**	**67**	**-0.035**	ug/L	0.034	98	8	7	25	KED
⎢	**As**	**75**	**-0.014**	ug/L	0.010	73	6	4	40	KED
⎣	**Se**	**78**	**-0.042**	ug/L	0.113	267	13	13	17	KED
	Y	**89**		ug/L			256805	308667	1	Standard
	Kr	**83**		ug/L			41	36	18	Standard
⎡>	**In-1**	**115**		ug/L			7220	8347	2	KED
⎢	**Cd**	**111**	**0.004**	ug/L	0.007	161	1	2	57	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.005	581	3	2	96	KED
⎡>	**In**	**115**		ug/L			351012	385856	1	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.001	106	55	53	14	Standard
⎢	**Sb**	**121**	**0.027**	ug/L	0.004	14	395	698	6	Standard
⎣	**Sb**	**123**	**0.027**	ug/L	0.003	11	283	517	4	Standard
⎡>	**Tb**	**159**		ug/L			541424	616584	1	Standard
⎢	**Tl**	**205**	**0.002**	ug/L	0.001	90	718	864	4	Standard
⎣	**Pb**	**208**	**-0.010**	ug/L	0.001	9	756	474	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 10:29:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	29977	1	Standard
	Cl	**37**		ug/L			4268423	4574149	1	Standard
⎡>	**Sc**	**45**		ug/L			462048	535169	3	Standard
⎢	**Al**	**27**	**-0.009**	ug/L	0.010	110	4676	5189	1	Standard
⎢	**V**	**51**	**0.009**	ug/L	0.002	21	4034	4849	3	Standard
⎢	**V-1**	**51**	**-0.016**	ug/L	0.001	4	384	104	10	Standard
⎢	**Cr**	**52**	**0.029**	ug/L	0.006	20	12068	14489	3	Standard
⎣	**Cr**	**53**	**-0.053**	ug/L	0.004	7	196	119	3	Standard
⎡>	**Ge**	**72**		ug/L			24872	27613	1	KED
⎢	**Ni**	**60**	**0.008**	ug/L	0.005	64	14	23	18	KED
⎢	**Ni**	**62**	**0.004**	ug/L	0.001	26	11	13	0	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.001	78	60	71	5	KED
⎢	**Cu**	**65**	**0.009**	ug/L	0.008	89	29	43	24	KED
⎢	**Zn**	**66**	**-0.054**	ug/L	0.023	42	56	42	21	KED
⎢	**Zn**	**67**	**-0.016**	ug/L	0.064	389	8	8	44	KED
⎢	**As**	**75**	**-0.005**	ug/L	0.010	224	6	6	30	KED
⎣	**Se**	**78**	**-0.172**	ug/L	0.053	31	13	11	8	KED
	Y	**89**		ug/L			256805	300158	1	Standard
	Kr	**83**		ug/L			41	59	29	Standard
⎡>	**In-1**	**115**		ug/L			7220	8486	2	KED
⎢	**Cd**	**111**	**0.005**	ug/L	0.002	37	1	3	17	KED
⎣	**Cd**	**114**	**-0.004**	ug/L	0.002	45	3	0	118	KED
⎡>	**In**	**115**		ug/L			351012	375329	2	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.000	29	55	40	11	Standard
⎢	**Sb**	**121**	**-0.014**	ug/L	0.003	25	395	290	12	Standard
⎣	**Sb**	**123**	**-0.009**	ug/L	0.003	32	283	238	7	Standard
⎡>	**Tb**	**159**		ug/L			541424	594243	2	Standard
⎢	**Tl**	**205**	**-0.001**	ug/L	0.001	157	718	773	4	Standard
⎣	**Pb**	**208**	**-0.011**	ug/L	0.000	3	756	422	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 10:33:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	29563	1	Standard
	Cl	**37**		ug/L			4268423	4595843	0	Standard
⎡>	**Sc**	**45**		ug/L			462048	544007	1	Standard
⎢	**Al**	**27**	**-0.014**	ug/L	0.006	44	4676	5172	2	Standard
⎢	**V**	**51**	**0.005**	ug/L	0.004	77	4034	4848	1	Standard
⎢	**V-1**	**51**	**-0.017**	ug/L	0.001	3	384	96	13	Standard
⎢	**Cr**	**52**	**0.020**	ug/L	0.013	63	12068	14571	0	Standard
⎣	**Cr**	**53**	**-0.051**	ug/L	0.003	6	196	126	3	Standard
⎡>	**Ge**	**72**		ug/L			24872	27582	2	KED
⎢	**Ni**	**60**	**0.009**	ug/L	0.010	111	14	24	35	KED
⎢	**Ni**	**62**	**0.005**	ug/L	0.023	499	11	13	24	KED
⎢	**Cu**	**63**	**0.009**	ug/L	0.002	19	60	90	7	KED
⎢	**Cu**	**65**	**0.003**	ug/L	0.010	387	29	35	34	KED
⎢	**Zn**	**66**	**-0.045**	ug/L	0.009	19	56	45	7	KED
⎢	**Zn**	**67**	**0.016**	ug/L	0.070	422	8	10	36	KED
⎢	**As**	**75**	**-0.011**	ug/L	0.006	52	6	4	20	KED
⎣	**Se**	**78**	**0.117**	ug/L	0.145	123	13	17	18	KED
	Y	**89**		ug/L			256805	300011	2	Standard
	Kr	**83**		ug/L			41	36	9	Standard
⎡>	**In-1**	**115**		ug/L			7220	8227	1	KED
⎢	**Cd**	**111**	**0.002**	ug/L	0.006	348	1	2	65	KED
⎣	**Cd**	**114**	**-0.002**	ug/L	0.004	212	3	2	88	KED
⎡>	**In**	**115**		ug/L			351012	383429	1	Standard
⎢	**Ag**	**107**	**-0.002**	ug/L	0.000	8	55	32	5	Standard
⎢	**Sb**	**121**	**-0.021**	ug/L	0.002	8	395	222	6	Standard
⎣	**Sb**	**123**	**-0.023**	ug/L	0.001	3	283	138	5	Standard
⎡>	**Tb**	**159**		ug/L			541424	617080	1	Standard
⎢	**Tl**	**205**	**-0.002**	ug/L	0.001	62	718	768	2	Standard
⎣	**Pb**	**208**	**-0.012**	ug/L	0.001	4	756	401	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 10:38:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	26818	1	Standard
	Cl	**37**		ug/L			4268423	4295566	1	Standard
⎡>	**Sc**	**45**		ug/L			462048	432311	1	Standard
⎢	**Al**	**27**	**-0.177**	ug/L	0.001	0	4676	1038	1	Standard
⎢	**V**	**51**	**-0.006**	ug/L	0.005	84	4034	3670	1	Standard
⎢	**V-1**	**51**	**-0.017**	ug/L	0.001	3	384	78	13	Standard
⎢	**Cr**	**52**	**-0.029**	ug/L	0.018	62	12068	10877	1	Standard
⎣	**Cr**	**53**	**-0.063**	ug/L	0.001	1	196	80	2	Standard
⎡>	**Ge**	**72**		ug/L			24872	25675	1	KED
⎢	**Ni**	**60**	**-0.010**	ug/L	0.001	11	14	6	17	KED
⎢	**Ni**	**62**	**-0.022**	ug/L	0.007	34	11	8	12	KED
⎢	**Cu**	**63**	**-0.013**	ug/L	0.006	44	60	30	47	KED
⎢	**Cu**	**65**	**-0.012**	ug/L	0.005	44	29	15	43	KED
⎢	**Zn**	**66**	**-0.023**	ug/L	0.043	187	56	50	28	KED
⎢	**Zn**	**67**	**0.006**	ug/L	0.033	546	8	9	20	KED
⎢	**As**	**75**	**-0.010**	ug/L	0.006	58	6	4	20	KED
⎣	**Se**	**78**	**-0.110**	ug/L	0.065	59	13	11	12	KED
	Y	**89**		ug/L			256805	237963	3	Standard
	Kr	**83**		ug/L			41	55	27	Standard
⎡>	**In-1**	**115**		ug/L			7220	7302	2	KED
⎢	**Cd**	**111**	**0.015**	ug/L	0.004	27	1	4	20	KED
⎣	**Cd**	**114**	**0.006**	ug/L	0.006	91	3	6	47	KED
⎡>	**In**	**115**		ug/L			351012	325613	1	Standard
⎢	**Ag**	**107**	**-0.003**	ug/L	0.000	12	55	17	22	Standard
⎢	**Sb**	**121**	**-0.037**	ug/L	0.001	1	395	59	11	Standard
⎣	**Sb**	**123**	**-0.033**	ug/L	0.002	5	283	54	19	Standard
⎡>	**Tb**	**159**		ug/L			541424	522610	1	Standard
⎢	**Tl**	**205**	**-0.002**	ug/L	0.002	127	718	651	6	Standard
⎣	**Pb**	**208**	**-0.021**	ug/L	0.000	1	756	36	36	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 10:43:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	26204	2	Standard
	Cl	**37**		ug/L			4268423	4209993	1	Standard
⌈>	**Sc**	**45**		ug/L			462048	422543	2	Standard
|	**Al**	**27**	**-0.181**	ug/L	0.001	0	4676	953	3	Standard
|	**V**	**51**	**-0.001**	ug/L	0.003	324	4034	3675	1	Standard
|	**V-1**	**51**	**-0.015**	ug/L	0.001	3	384	96	8	Standard
|	**Cr**	**52**	**-0.017**	ug/L	0.009	54	12068	10800	1	Standard
⌊	**Cr**	**53**	**-0.065**	ug/L	0.004	5	196	75	8	Standard
⌈>	**Ge**	**72**		ug/L			24872	24848	2	KED
|	**Ni**	**60**	**-0.007**	ug/L	0.004	50	14	8	32	KED
|	**Ni**	**62**	**0.048**	ug/L	0.048	100	11	17	37	KED
|	**Cu**	**63**	**-0.011**	ug/L	0.003	23	60	34	19	KED
|	**Cu**	**65**	**-0.014**	ug/L	0.002	16	29	12	22	KED
|	**Zn**	**66**	**-0.041**	ug/L	0.047	115	56	42	36	KED
|	**Zn**	**67**	**0.047**	ug/L	0.039	82	8	11	16	KED
|	**As**	**75**	**-0.011**	ug/L	0.009	77	6	4	32	KED
⌊	**Se**	**78**	**0.037**	ug/L	0.229	624	13	14	29	KED
	Y	**89**		ug/L			256805	233430	3	Standard
	Kr	**83**		ug/L			41	50	20	Standard
⌈>	**In-1**	**115**		ug/L			7220	7154	1	KED
|	**Cd**	**111**	**0.002**	ug/L	0.009	562	1	1	100	KED
⌊	**Cd**	**114**	**-0.005**	ug/L	0.002	41	3	0	189	KED
⌈>	**In**	**115**		ug/L			351012	323955	3	Standard
|	**Ag**	**107**	**-0.003**	ug/L	0.000	2	55	22	0	Standard
|	**Sb**	**121**	**-0.038**	ug/L	0.000	0	395	47	4	Standard
⌊	**Sb**	**123**	**-0.034**	ug/L	0.003	7	283	43	36	Standard
⌈>	**Tb**	**159**		ug/L			541424	514542	2	Standard
|	**Tl**	**205**	**-0.000**	ug/L	0.001	347	718	673	4	Standard
⌊	**Pb**	**208**	**-0.021**	ug/L	0.000	0	756	35	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 10:48:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033023a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25996	26775	3	Standard
	Cl	**37**		ug/L			4268423	4288483	1	Standard
⌈>	**Sc**	**45**		ug/L			462048	434669	1	Standard
|	**Al**	**27**	**-0.181**	ug/L	0.003	1	4676	974	6	Standard
|	**V**	**51**	**-0.007**	ug/L	0.001	17	4034	3670	1	Standard
|	**V-1**	**51**	**-0.017**	ug/L	0.001	3	384	80	11	Standard
|	**Cr**	**52**	**-0.034**	ug/L	0.004	12	12068	10869	1	Standard
⌊	**Cr**	**53**	**-0.064**	ug/L	0.002	2	196	80	2	Standard
⌈>	**Ge**	**72**		ug/L			24872	25345	1	KED
|	**Ni**	**60**	**-0.004**	ug/L	0.002	57	14	11	16	KED
|	**Ni**	**62**	**-0.002**	ug/L	0.027	1445	11	11	33	KED
|	**Cu**	**63**	**-0.013**	ug/L	0.002	17	60	31	18	KED
|	**Cu**	**65**	**-0.008**	ug/L	0.003	37	29	19	20	KED
|	**Zn**	**66**	**-0.044**	ug/L	0.030	68	56	42	25	KED
|	**Zn**	**67**	**0.031**	ug/L	0.050	161	8	10	26	KED
|	**As**	**75**	**-0.008**	ug/L	0.011	133	6	5	37	KED
⌊	**Se**	**78**	**-0.013**	ug/L	0.071	568	13	13	9	KED
	Y	**89**		ug/L			256805	240003	0	Standard
	Kr	**83**		ug/L			41	64	15	Standard
⌈>	**In-1**	**115**		ug/L			7220	7179	0	KED
|	**Cd**	**111**	**0.019**	ug/L	0.021	112	1	5	79	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.008	3564	3	3	127	KED
⌈>	**In**	**115**		ug/L			351012	331141	1	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.001	24	55	26	22	Standard
|	**Sb**	**121**	**-0.039**	ug/L	0.001	2	395	41	19	Standard
⌊	**Sb**	**123**	**-0.034**	ug/L	0.001	2	283	45	14	Standard
⌈>	**Tb**	**159**		ug/L			541424	526571	0	Standard
|	**Tl**	**205**	**-0.002**	ug/L	0.002	100	718	651	7	Standard
⌊	**Pb**	**208**	**-0.021**	ug/L	0.000	1	756	38	32	Standard

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00005	Instrument:	ICPMS2
Calibration Date:	03/31/2023 15:18		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Chromium-52	0	0	0.5	57276	10	21001.9	20	19835.5	50	18336.74	100	18017.87
Chromium-53	0	0	0.5	2308	10	2210.8	20	2200.7	50	2128.36	100	2098.28
Lead-208	0	0	0.1	55570	10	54026.3	20	53451.75	50	52085.82	100	52367.07

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS2
Calibration: GD00005
Calibration Date: 3/31/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Chromium-52	22411.34	83.8	0.9999		0.998	
Chromium-53	1824.357	49.2	0.9999		0.998	
Lead-208	44583.49	49.1	1.0000		0.998	

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00005	Instrument:	ICPMS2
Calibration Date:	03/31/2023 15:18		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Arsenic-75a	0	0	0.2	170	10	155.1	20	152.05	50	144.82	100	142.17
Cadmium-111	0	0	0.1	170	10	184.7	20	185.05	50	175.96	100	171.01
Cadmium-114	0	0	0.1	470	10	473	20	453.95	50	431.88	100	426.74
Copper-63	0	0	0.5	2882	10	2804.6	20	2579.95	50	2520.5	100	2395.15
Copper-65	0	0	0.5	1480	10	1340.9	20	1314.65	50	1249.54	100	1187.64
Zinc-66	0	0	6	342	10	332.5	20	302.3	50	296.32	100	281.98
Zinc-67	0	0	6	50.33333	10	52.8	20	50.95	50	49.08	100	47.23

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Instrument: ICPMS2
Calibration: GD00005
Calibration Date: 3/31/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Arsenic-75a	127.3567	49.6	0.9998		0.998	
Cadmium-111	147.7867	49.2	0.9996		0.998	
Cadmium-114	375.9283	49.3	0.9998		0.998	
Copper-63	2197.033	49.7	0.9992		0.998	
Copper-65	1095.455	49.8	0.9991		0.998	
Zinc-66	259.1833	49.8	0.9993		0.998	
Zinc-67	41.73222	49.2	0.9995		0.998	

Analytical Resources, Incorporated
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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/31/23 **Analyst:** MS **Sequence:** SLDØØØ5 **Cal:** GDØØØØ5

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ - CAL1	L3363		
		-CAL2	L3295		
		-CAL3	L3296		Sesl. noisy-Nt, R-Values, QC OK
		-CAL4	L3297		
		-CAL5	L3364		
		-CAL6	L3298		
		-IBL1	—		
		-ICV1	LØ243		
		-ICB1	L3363		
	✓	-CAL1	—		
		-CCV1	L3364		
		-CCB1	L3363		
		-CRL1	L3295		
		-IFA1	L3416		V^{-1}, Cr^{53}↑
		-IFB1	L2744		V^{-1}↑
		-HCV1	L2745		
		-HCV2	L2746		Ba^{137}↑ - Ba<200
		-IBL2	—		(Sb↑)
		-IBL3+4	—		
		-CCV2			
		-CCB2			
		BLCØ848-BLK1	REN		No Ag
		↓ -BS1	↓		↓
		23CØ747-Ø1	↓	2	(BLC848 IQC source)

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/31/23 **Analyst:** MS **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23CΦ731-Φ1	REN	5	
		23CΦ386-Φ4	↓	↓	Al, Cr, V only
		BLCΦ8Φ9-DUP2	↓	↓	↓
		↓ -MS2	↓	↓	↓
		↓ -MSD2	↓	↓	↓
		23CΦ419-Φ1	↓	10	Zn only
		SEQ-IBL5			
		↓ -CCV3			Ag ↓
		-CCB3			
	✓	-CAL1			Al Removed
		-CCV4			
		↓ -CCB4			
		23AΦΦ99-Φ2	SWN	50	Cr only
		↓ -Φ3	↓	↓	↓
		-Φ4	↓	↓	↓
		-Φ5	↓	↓	↓
		-Φ7	↓	↓	↓
		-Φ8	↓	↓	↓
		-Φ9	↓	↓	↓
		-1Φ	↓	↓	↓
		-11	↓	↓	↓
		↓ -12	↓	↓	↓
		SEQ-CCV5			
		↓ -CCB5			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/31/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23AØØ99-13	SWN	50	Cr only
		↓ -Ø6	↓	↓	↓
		BLCØ692-DUP2			
		↓ -MS2			
		-MSD2			
		↓ -PS2			60 mL K7409
		23AØ134-1Ø			
		↓ -11			
		-13			
		↓ -15	↓	↓	↓
		SEQ-CCV6			Ag↓
		↓ -CCB6			
		BLCØ7Ø3-BLK1	SWN	20	No Ag
		↓ -BS1	↓	↓	↓
		23AØ133-Ø6		50	Cr only
		↓ -Ø7		↓	↓
		↓ -Ø3			
		BLCØ7Ø3-DUP1			
		↓ -MS1			
		-MSD1			
		↓ -PS1	↓	↓	60mL K7409 ↓
		SEQ-ICBL6			
		↓ -CCV7			Ag↓
		↓ -CCB7			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/31/23 **Analyst:** NB **Sequence:** ← **Cal:** ←

All corrections made by analyst unless otherwise noted. NB 3/31/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23CΦ431-Φ1	REN	2	Cd only
138 → 133		23AΦ138-Φ8	SWN	50	Cr only
↓	✓	3-Φ9 ↓	↓	↓	
		-1Φ			Cd, Cr only
		-11			Cr only
		-12			Cr, Pb only
		-13			As only
	✓	-14			
	✓	-15			
↓	✓	↓ -16	↓	↓	
		SEQ-CCV8			
		↓ -CCB8			
		23CΦ41Φ-Φ1	REN	2	Cd only
		↓ -Φ2	↓	↓	↓
	✓	23AΦ134-Φ1	SWN	50	
	↓	-Φ2 ↓	↓	↓	
		-Φ3			
		-Φ4			
		-Φ5			
		-Φ6			
		-Φ7			
	↓	↓ -Φ8	↓	↓	
		SEQ-CCV9			Ag ↓
		↓ -CCB9			

Analytical Resources, Incorporated
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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/31/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted. MB 3/31/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLCΦ848-DUP1	REN	2	(source: C747-1) No Ag
		↓ -MS1	↓	↓	↓ / Mn STL ↓
		B23CΦ585-Φ1			Cd only
		↓ -Φ2			↓
		↓ -Φ3			
		23CΦ664-Φ1			
		↓ -Φ2			
		↓ -Φ3			
		↓ -Φ4	↓	↓	↓
		SEQ-IBLA			
		↓ -CCVA			
		↓ -CCBA			
	√	↓ -CAL1			
		↓ -CCVB			Ag ↓
		↓ -CCBB			
		23CΦ439-Φ8	REN	2	V only
		↓ -22	↓	↓	↓
		↓ -23			
		↓ -24			
		↓ -25			↓
		↓ -Φ6		↓	Ge, In ↓ ↓
		↓ -Φ9		10	As, Sb, V only
		23CΦ454-Φ1			
		23CΦ457-Φ1	↓		

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 3/31/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-IBLC			
		-CCVC			Ni, Ag, Pb ↓
		-CCBC			
	✓	23CΦ64Φ-Φ1	REN	10	Re-run @ 2x
		-Φ2			
		-Φ3			
		-Φ4			
		-Φ5			
		-Φ6			
		23CΦ458-Φ1			No Pb
		23CΦ46Φ-Φ1			
		23CΦ477-Φ1			No Pb
		SEQ-IBLD			
		-CCVD			Ag ↓
		-CCBD			
		Rinse/DI			
			MB 3/31/23		

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Friday, March 31, 2023 14:26:19
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5570
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	1576.6	1576.554	23.107	1.5	Standard
	In	114.9	25061.6	25061.564	168.730	0.7	Standard
	U	238.1	24120.4	24120.413	124.224	0.5	Standard
⌈	CeO	155.9	232.4	0.009	0.000	3.8	Standard
| >	Ce	139.9	24822.1	24822.081	221.047	0.9	Standard
⌊	Ce++	70.0	302.2	0.012	0.000	2.7	Standard
	Bkgd	220.0	0.0	0.033	0.075	223.6	Standard

Current Conditions File Data

Current Value	Description
1.01	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1600.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.03	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Friday, March 31, 2023 14:34:18
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5576
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	6963.4	6963.363	67.605	1.0	Standard
	In	114.9	67437.0	67437.003	467.764	0.7	Standard
	U	238.1	63014.1	63014.143	408.334	0.6	Standard
⎡	CeO	155.9	1303.9	0.023	0.001	4.8	Standard
⎢>	Ce	139.9	55981.3	55981.274	280.686	0.5	Standard
⎣	Ce++	70.0	1636.8	0.029	0.001	2.0	Standard
	Bkgd	220.0	0.2	0.200	0.139	69.7	Standard

Current Conditions File Data

Current Value	Description
1.04	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1600.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.04	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/31/2023 2:26:16 PM
End Time: 3/31/2023 2:36:22 PM

STD Performance Check - [Failed]
Obtained Intensity (Be 9): 1576.55 - <Target not achieved>
Obtained Intensity (In 115): 25061.56 - <Target not achieved>
Obtained Intensity (U 238): 24120.41 - <Target not achieved>
Obtained Intensity (Bkgd 220): 0.03
Obtained Formula (Ce++ 70 / Ce 140): 0.012 (=302.20 / 24822.08)
Obtained Formula (CeO 156 / Ce 140): 0.009 (=232.40 / 24822.08)
Obtained RSD (Be 9): 0.0147
Obtained RSD (In 115): 0.0067
Obtained RSD (U 238): 0.0052

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.88 mm	0.55 mm	48373.76

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 1.04
Obtained Intensity (In 115): 64552.52
Obtained Formula (CeO 156 / Ce 140): 0.0206 (=1121.04 / 54408.41)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.688)
Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.681)
Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.703)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.694)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.999; Intercept = -13.46

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.997; Intercept = -15.53

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 6963.36
Obtained Intensity (In 115): 67437.00
Obtained Intensity (U 238): 63014.14
Obtained Intensity (Bkgd 220): 0.20
Obtained Formula (Ce++ 70 / Ce 140): 0.029 (=1636.83 / 55981.27)
Obtained Formula (CeO 156 / Ce 140): 0.023 (=1303.93 / 55981.27)
Obtained RSD (Be 9): 0.0097
Obtained RSD (In 115): 0.0069
Obtained RSD (U 238): 0.0065

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/31/2023 2:26:16 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 1
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 1576.55 - <Target not achieved>
		Obtained Intensity (In 115): 25061.56 - <Target not achieved>
		Obtained Intensity (U 238): 24120.41 - <Target not achieved>
		Obtained Intensity (Bkgd 220): 0.03
		Obtained Formula (Ce++ 70 / Ce 140): 0.012 (=302.20 / 24822.08)
		Obtained Formula (CeO 156 / Ce 140): 0.009 (=232.40 / 24822.08)
		Obtained RSD (Be 9): 0.0147
		Obtained RSD (In 115): 0.0067
		Obtained RSD (U 238): 0.0052

		[Failed]
[Failed]

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	0.88 mm	0.55 mm	48373.76

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 1.02/1.06/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 64552.52
		Obtained Formula (CeO 156 / Ce 140): 0.0206 (=1121.04 / 54408.41)
[Passed] Optimum value(s): 1.04

Mass Calibration and Resolution
	Optimization Settings:
		Method: Tuning.mth.
		MassCal File: Default.tun
		Iterations: 6
		Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
		Peak height (%) for Res. Opt.: 10

	Optimization Results:
	Initial Try
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.688)
		Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.681)
		Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.703)
		Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.694)
[Passed] Optimum value(s): N/A

QID STD/DRC
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 0.999; Intercept = -13.46

	Analyte	Mass	Points	DAC	MaxIntensity

	Li	7	41	-14	26580.7
	Mg	24	41	-14.5	35496
	In	115	41	-10.5	70750.8
	Ce	140	41	-9	58587.9
	Pb	208	41	-8	36354.2
	U	238	41	-8	63641.4

KED Mode QID
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 0.997; Intercept = -15.53

	Analyte	Mass	Points	DAC	MaxIntensity

	Li	7	41	-15.5	19721.6
	Mg	24	41	-15	23984.1
	In	115	41	-11.5	48116.9
	Ce	140	41	-9.5	47482.8
	Pb	208	41	-7	28251.9
	U	238	41	-7	48169.1

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000

```
            Intensity Criterion: In 115 > 40000
            Intensity Criterion: U 238 > 30000
            Intensity Criterion: Bkgd 220 <= 1
            Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
            Formula Criterion: CeO 156 / Ce 140 <= 0.025
            RSD Criterion: Be 9.0122 < 0.05
            RSD Criterion: In 114.904 < 0.05
            RSD Criterion: U 238.05 < 0.05

       Optimization Results:
       Initial Try
            Obtained Intensity (Be 9): 6963.36
            Obtained Intensity (In 115): 67437.00
            Obtained Intensity (U 238): 63014.14
            Obtained Intensity (Bkgd 220): 0.20
            Obtained Formula (Ce++ 70 / Ce 140): 0.029 (=1636.83 / 55981.27)
            Obtained Formula (CeO 156 / Ce 140): 0.023 (=1303.93 / 55981.27)
            Obtained RSD (Be 9): 0.0097
            Obtained RSD (In 115): 0.0069
            Obtained RSD (U 238): 0.0065

[Passed]  Optimum value(s): N/A

End Time: 3/31/2023 2:36:22 PM
```

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 15:18:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				24608	2	Standard
	Cl	**37**		ug/L				3241558	3	Standard
>	**Sc**	**45**		ug/L				482752	2	Standard
	Al	**27**		ug/L				2788	0	Standard
	V	**51**		ug/L				6501	3	Standard
	V-1	**51**		ug/L				136	1	Standard
	Cr	**52**		ug/L				19054	3	Standard
	Cr	**53**		ug/L				117	0	Standard
	Mn	**55**		ug/L				499	2	Standard
>	**Ge**	**72**		ug/L				18623	1	KED
	Ni	**60**		ug/L				7	43	KED
	Ni	**62**		ug/L				3	86	KED
	Cu	**63**		ug/L				46	10	KED
	Cu	**65**		ug/L				15	24	KED
	Zn	**66**		ug/L				17	12	KED
	Zn	**67**		ug/L				3	132	KED
	As	**75**		ug/L				3	48	KED
	Se	**78**		ug/L				9	44	KED
	Y	**89**		ug/L				296113	1	Standard
	Kr	**83**		ug/L				49	27	Standard
>	**In-1**	**115**		ug/L				5148	1	KED
	Cd	**111**		ug/L				1	124	KED
	Cd	**114**		ug/L				1	90	KED
>	**In**	**115**		ug/L				413576	0	Standard
	Ag	**107**		ug/L				42	22	Standard
	Sb	**121**		ug/L				240	6	Standard
	Sb	**123**		ug/L				162	10	Standard
	Ba	**135**		ug/L				15	33	Standard
	Ba	**137**		ug/L				13	15	Standard
>	**Tb**	**159**		ug/L				595528	1	Standard
	Pb	**208**		ug/L				128	20	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 15:23:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24608	27693	3	Standard
	Cl	**37**		ug/L			3241558	3083637	1	Standard
⎡>	**Sc**	**45**		ug/L			482752	477633	1	Standard
⎢	**Al**	**27**	**20.000**	ug/L	0.184	0	2788	501548	1	Standard
⎢	**V**	**51**	**0.200**	ug/L	0.013	6	6501	10865	1	Standard
⎢	**V-1**	**51**	**0.200**	ug/L	0.006	3	136	4355	1	Standard
⎢	**Cr**	**52**	**0.500**	ug/L	0.030	5	19054	28638	0	Standard
⎢	**Cr**	**53**	**0.500**	ug/L	0.011	2	117	1154	1	Standard
⎣	**Mn**	**55**	**0.500**	ug/L	0.018	3	499	13668	2	Standard
⎡>	**Ge**	**72**		ug/L			18623	17910	0	KED
⎢	**Ni**	**60**	**0.500**	ug/L	0.044	8	7	453	8	KED
⎢	**Ni**	**62**	**0.500**	ug/L	0.046	9	3	76	9	KED
⎢	**Cu**	**63**	**0.500**	ug/L	0.007	1	46	1441	1	KED
⎢	**Cu**	**65**	**0.500**	ug/L	0.019	3	15	740	3	KED
⎢	**Zn**	**66**	**6.000**	ug/L	0.126	2	17	2052	2	KED
⎢	**Zn**	**67**	**6.000**	ug/L	0.123	2	3	302	1	KED
⎢	**As**	**75**	**0.200**	ug/L	0.032	15	3	34	14	KED
⎣	**Se**	**78**	**0.500**	ug/L	0.218	43	9	16	18	KED
	Y	**89**		ug/L			296113	294688	1	Standard
	Kr	**83**		ug/L			49	59	19	Standard
⎡>	**In-1**	**115**		ug/L			5148	5084	1	KED
⎢	**Cd**	**111**	**0.100**	ug/L	0.033	33	1	17	28	KED
⎣	**Cd**	**114**	**0.100**	ug/L	0.013	12	1	47	11	KED
⎡>	**In**	**115**		ug/L			413576	408188	1	Standard
⎢	**Ag**	**107**	**0.200**	ug/L	0.000	0	42	3750	1	Standard
⎢	**Sb**	**121**	**0.200**	ug/L	0.003	1	240	2617	1	Standard
⎢	**Sb**	**123**	**0.200**	ug/L	0.006	3	162	1899	3	Standard
⎢	**Ba**	**135**	**0.500**	ug/L	0.013	2	15	1813	1	Standard
⎣	**Ba**	**137**	**0.500**	ug/L	0.013	2	13	2948	1	Standard
⎡>	**Tb**	**159**		ug/L			595528	603228	1	Standard
⎣	**Pb**	**208**	**0.100**	ug/L	0.004	3	128	5557	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 15:27:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24608	31596	5	Standard
	Cl	**37**		ug/L			3241558	3057605	1	Standard
⎡>	**Sc**	**45**		ug/L			482752	472393	2	Standard
⎢	**Al**	**27**	**999.993**	ug/L	24.787	2	2788	24217343	1	Standard
⎢	**V**	**51**	**10.000**	ug/L	0.255	2	6501	223372	0	Standard
⎢	**V-1**	**51**	**10.000**	ug/L	0.259	2	136	218296	0	Standard
⎢	**Cr**	**52**	**10.000**	ug/L	0.330	3	19054	210019	0	Standard
⎢	**Cr**	**53**	**10.002**	ug/L	0.333	3	117	22108	1	Standard
⎣	**Mn**	**55**	**10.001**	ug/L	0.284	2	499	270320	0	Standard
⎡>	**Ge**	**72**		ug/L			18623	17978	3	KED
⎢	**Ni**	**60**	**10.000**	ug/L	0.374	3	7	8981	1	KED
⎢	**Ni**	**62**	**10.000**	ug/L	0.832	8	3	1459	5	KED
⎢	**Cu**	**63**	**10.000**	ug/L	0.609	6	46	28046	3	KED
⎢	**Cu**	**65**	**9.998**	ug/L	0.267	2	15	13409	2	KED
⎢	**Zn**	**66**	**9.927**	ug/L	0.503	5	17	3325	2	KED
⎢	**Zn**	**67**	**10.134**	ug/L	0.554	5	3	528	3	KED
⎢	**As**	**75**	**10.000**	ug/L	0.076	0	3	1551	3	KED
⎣	**Se**	**78**	**10.003**	ug/L	0.992	9	9	175	6	KED
	Y	**89**		ug/L			296113	304632	0	Standard
	Kr	**83**		ug/L			49	46	20	Standard
⎡>	**In-1**	**115**		ug/L			5148	5216	4	KED
⎢	**Cd**	**111**	**10.000**	ug/L	0.702	7	1	1847	4	KED
⎣	**Cd**	**114**	**10.000**	ug/L	0.396	3	1	4730	1	KED
⎡>	**In**	**115**		ug/L			413576	421605	1	Standard
⎢	**Ag**	**107**	**10.000**	ug/L	0.138	1	42	189327	1	Standard
⎢	**Sb**	**121**	**10.000**	ug/L	0.209	2	240	127134	1	Standard
⎢	**Sb**	**123**	**10.000**	ug/L	0.056	0	162	97847	1	Standard
⎢	**Ba**	**135**	**9.999**	ug/L	0.141	1	15	35333	1	Standard
⎣	**Ba**	**137**	**10.000**	ug/L	0.069	0	13	61389	2	Standard
⎡>	**Tb**	**159**		ug/L			595528	630136	1	Standard
⎣	**Pb**	**208**	**10.000**	ug/L	0.125	1	128	540263	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 15:33:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24608	30965	2	Standard
	Cl	**37**		ug/L			3241558	3096824	1	Standard
⌈>	**Sc**	**45**		ug/L			482752	457876	2	Standard
|	**Al**	**27**	**2002.266**	ug/L	60.358	3	2788	47206424	1	Standard
|	**V**	**51**	**20.049**	ug/L	0.442	2	6501	432053	0	Standard
|	**V-1**	**51**	**20.060**	ug/L	0.504	2	136	429507	0	Standard
|	**Cr**	**52**	**20.079**	ug/L	0.082	0	19054	396710	1	Standard
|	**Cr**	**53**	**20.116**	ug/L	0.236	1	117	44014	0	Standard
⌊	**Mn**	**55**	**20.085**	ug/L	0.740	3	499	534814	1	Standard
⌈>	**Ge**	**72**		ug/L			18623	17559	0	KED
|	**Ni**	**60**	**19.942**	ug/L	0.257	1	7	17299	1	KED
|	**Ni**	**62**	**20.086**	ug/L	0.308	1	3	2913	1	KED
|	**Cu**	**63**	**19.755**	ug/L	0.768	3	46	51599	3	KED
|	**Cu**	**65**	**20.015**	ug/L	0.138	0	15	26293	0	KED
|	**Zn**	**66**	**19.600**	ug/L	1.067	5	17	6046	4	KED
|	**Zn**	**67**	**20.014**	ug/L	0.618	3	3	1019	2	KED
|	**As**	**75**	**20.018**	ug/L	0.418	2	3	3041	1	KED
⌊	**Se**	**78**	**19.944**	ug/L	0.746	3	9	330	2	KED
	Y	**89**		ug/L			296113	304127	1	Standard
	Kr	**83**		ug/L			49	57	11	Standard
⌈>	**In-1**	**115**		ug/L			5148	5124	1	KED
|	**Cd**	**111**	**20.074**	ug/L	0.484	2	1	3701	2	KED
⌊	**Cd**	**114**	**19.904**	ug/L	0.518	2	1	9079	0	KED
⌈>	**In**	**115**		ug/L			413576	413225	1	Standard
|	**Ag**	**107**	**20.042**	ug/L	0.408	2	42	374976	1	Standard
|	**Sb**	**121**	**20.037**	ug/L	0.093	0	240	251323	0	Standard
|	**Sb**	**123**	**19.958**	ug/L	0.276	1	162	189644	0	Standard
|	**Ba**	**135**	**20.090**	ug/L	0.538	2	15	70829	1	Standard
⌊	**Ba**	**137**	**20.032**	ug/L	0.289	1	13	121257	0	Standard
⌈>	**Tb**	**159**		ug/L			595528	638760	2	Standard
⌊	**Pb**	**208**	**19.904**	ug/L	0.604	3	128	1069035	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 15:38:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	**13**		ug/L			24608	23133	5	Standard
Cl	**37**		ug/L			3241558	3093870	4	Standard
Sc	**45**		ug/L			482752	458312	1	Standard
Al	**27**	**4986.930**	ug/L	144.093	2	2788	116181831	1	Standard
V	**51**	**49.839**	ug/L	0.586	1	6501	1049293	0	Standard
V-1	**51**	**49.894**	ug/L	0.741	1	136	1058098	0	Standard
Cr	**52**	**49.585**	ug/L	0.194	0	19054	916837	1	Standard
Cr	**53**	**49.771**	ug/L	0.560	1	117	106418	1	Standard
Mn	**55**	**49.678**	ug/L	0.523	1	499	1282565	0	Standard
Ge	**72**		ug/L			18623	17710	3	KED
Ni	**60**	**49.438**	ug/L	0.611	1	7	40941	2	KED
Ni	**62**	**49.474**	ug/L	2.741	5	3	6865	2	KED
Cu	**63**	**49.631**	ug/L	1.652	3	46	126025	3	KED
Cu	**65**	**49.507**	ug/L	1.134	2	15	62477	2	KED
Zn	**66**	**49.576**	ug/L	1.508	3	17	14816	3	KED
Zn	**67**	**49.618**	ug/L	2.482	5	3	2454	2	KED
As	**75**	**49.529**	ug/L	1.195	2	3	7241	1	KED
Se	**78**	**49.319**	ug/L	1.196	2	9	758	3	KED
Y	**89**		ug/L			296113	296256	1	Standard
Kr	**83**		ug/L			49	70	14	Standard
In-1	**115**		ug/L			5148	5000	2	KED
Cd	**111**	**49.813**	ug/L	0.540	1	1	8798	1	KED
Cd	**114**	**49.746**	ug/L	1.106	2	1	21594	0	KED
In	**115**		ug/L			413576	415692	1	Standard
Ag	**107**	**49.666**	ug/L	0.590	1	42	904521	0	Standard
Sb	**121**	**49.656**	ug/L	0.818	1	240	605318	0	Standard
Sb	**123**	**49.824**	ug/L	0.501	1	162	467826	1	Standard
Ba	**135**	**50.075**	ug/L	0.388	0	15	178943	0	Standard
Ba	**137**	**49.966**	ug/L	0.408	0	13	303225	0	Standard
Tb	**159**		ug/L			595528	656478	2	Standard
Pb	**208**	**49.504**	ug/L	0.704	1	128	2604291	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 15:45:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24608	26677	4	Standard
	Cl	**37**		ug/L			3241558	3069288	3	Standard
⌈>	**Sc**	**45**		ug/L			482752	444303	0	Standard
|	**Al**	**27**	**9951.850**	ug/L	45.715	0	2788	221258395	0	Standard
|	**V**	**51**	**101.258**	ug/L	1.962	1	6501	2150583	1	Standard
|	**V-1**	**51**	**101.229**	ug/L	1.668	1	136	2170055	1	Standard
|	**Cr**	**52**	**100.352**	ug/L	1.006	1	19054	1801787	1	Standard
|	**Cr**	**53**	**100.293**	ug/L	0.806	0	117	209828	0	Standard
⌊	**Mn**	**55**	**100.849**	ug/L	1.058	1	499	2597261	0	Standard
⌈>	**Ge**	**72**		ug/L			18623	16875	0	KED
|	**Ni**	**60**	**100.583**	ug/L	2.495	2	7	80952	2	KED
|	**Ni**	**62**	**99.776**	ug/L	0.944	0	3	13106	1	KED
|	**Cu**	**63**	**99.762**	ug/L	1.196	1	46	239515	1	KED
|	**Cu**	**65**	**99.708**	ug/L	2.770	2	15	118764	2	KED
|	**Zn**	**66**	**99.776**	ug/L	1.996	2	17	28198	2	KED
|	**Zn**	**67**	**100.041**	ug/L	2.090	2	3	4723	1	KED
|	**As**	**75**	**100.461**	ug/L	0.616	0	3	14217	0	KED
⌊	**Se**	**78**	**100.323**	ug/L	1.659	1	9	1476	1	KED
	Y	**89**		ug/L			296113	292417	1	Standard
	Kr	**83**		ug/L			49	80	2	Standard
⌈>	**In-1**	**115**		ug/L			5148	4983	1	KED
|	**Cd**	**111**	**99.330**	ug/L	0.748	0	1	17101	0	KED
⌊	**Cd**	**114**	**99.678**	ug/L	0.957	0	1	42674	0	KED
⌈>	**In**	**115**		ug/L			413576	409574	1	Standard
|	**Ag**	**107**	**99.206**	ug/L	3.270	3	42	1733989	2	Standard
|	**Sb**	**121**	**100.670**	ug/L	2.204	2	240	1236534	1	Standard
|	**Sb**	**123**	**100.489**	ug/L	0.873	0	162	944900	0	Standard
|	**Ba**	**135**	**101.021**	ug/L	1.543	1	15	368180	0	Standard
⌊	**Ba**	**137**	**100.721**	ug/L	0.139	0	13	617097	1	Standard
⌈>	**Tb**	**159**		ug/L			595528	675780	2	Standard
⌊	**Pb**	**208**	**99.224**	ug/L	2.812	2	128	5236707	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 15:52:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24608	26026	0	Standard
	Cl	**37**		ug/L			3241558	3040145	2	Standard
⌈>	**Sc**	**45**		ug/L			482752	448507	0	Standard
|	**Al**	**27**	**0.116**	ug/L	0.008	6	2788	5188	4	Standard
|	**V**	**51**	**0.036**	ug/L	0.007	20	6501	6804	1	Standard
|	**V-1**	**51**	**-0.000**	ug/L	0.000	1758	136	126	6	Standard
|	**Cr**	**52**	**0.123**	ug/L	0.019	15	19054	19918	1	Standard
|	**Cr**	**53**	**0.003**	ug/L	0.007	264	117	115	13	Standard
⌊	**Mn**	**55**	**0.003**	ug/L	0.001	33	499	530	3	Standard
⌈>	**Ge**	**72**		ug/L			18623	17247	4	KED
|	**Ni**	**60**	**-0.006**	ug/L	0.003	61	7	2	114	KED
|	**Ni**	**62**	**0.007**	ug/L	0.030	417	3	4	89	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	134	46	47	8	KED
|	**Cu**	**65**	**0.003**	ug/L	0.005	190	15	17	32	KED
|	**Zn**	**66**	**0.034**	ug/L	0.050	146	17	26	51	KED
|	**Zn**	**67**	**0.083**	ug/L	0.064	76	3	7	43	KED
|	**As**	**75**	**0.005**	ug/L	0.006	125	3	3	27	KED
⌊	**Se**	**78**	**0.020**	ug/L	0.058	293	9	9	5	KED
	Y	**89**		ug/L			296113	286798	0	Standard
	Kr	**83**		ug/L			49	44	9	Standard
⌈>	**In-1**	**115**		ug/L			5148	4852	1	KED
|	**Cd**	**111**	**0.006**	ug/L	0.011	188	1	2	78	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.000	3	1	1	1	KED
⌈>	**In**	**115**		ug/L			413576	424608	1	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.000	10	42	93	7	Standard
|	**Sb**	**121**	**0.187**	ug/L	0.012	6	240	2625	6	Standard
|	**Sb**	**123**	**0.199**	ug/L	0.005	2	162	2104	3	Standard
|	**Ba**	**135**	**0.005**	ug/L	0.001	28	15	34	15	Standard
⌊	**Ba**	**137**	**0.008**	ug/L	0.002	29	13	62	20	Standard
⌈>	**Tb**	**159**		ug/L			595528	632578	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	14	128	227	6	Standard

Sample Information

Sample Date/Time: Friday, March 31, 2023 15:45:19
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED
Mass Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Al	27	**1.0000**	0.050	20.00	1000	2000	5000	10000
V	51	**0.9997**	0.048	0.20	10	20	50	100
V-1	51	**0.9997**	0.048	0.20	10	20	50	100
Cr	52	**0.9999**	0.040	0.50	10	20	50	100
Cr	53	**1.0000**	0.005	0.50	10	20	50	100
Mn	55	**0.9999**	0.058	0.50	10	20	50	100
Ge	72							
Ni	60	**0.9999**	0.048	0.50	10	20	50	100
Ni	62	**0.9999**	0.008	0.50	10	20	50	100
Cu	63	**0.9999**	0.142	0.50	10	20	50	100
Cu	65	**0.9999**	0.071	0.50	10	20	50	100
Zn	66	**0.9999**	0.017	6.00	10	20	50	100
Zn	67	**1.0000**	0.003	6.00	10	20	50	100
As	75	**0.9999**	0.008	0.20	10	20	50	100
Se	78	**0.9999**	0.001	0.50	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Cd	111	**0.9999**	0.035	0.10	10	20	50	100
Cd	114	**1.0000**	0.086	0.10	10	20	50	100
In	115							
Ag	107	**0.9999**	0.043	0.20	10	20	50	100
Sb	121	**0.9999**	0.030	0.20	10	20	50	100
Sb	123	**1.0000**	0.023	0.20	10	20	50	100
Ba	135	**0.9998**	0.009	0.50	10	20	50	100
Ba	137	**0.9999**	0.015	0.50	10	20	50	100
Tb	159							
Pb	208	**0.9998**	0.078	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 16:00:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24608	26565	1	Standard
	Cl	**37**		ug/L			3241558	3031507	0	Standard
⌈>	**Sc**	**45**		ug/L			482752	469287	1	Standard
|	**Al**	**27**	**5051.848**	ug/L	112.583	2	2788	118648533	3	Standard
|	**V**	**51**	**48.681**	ug/L	0.640	1	6501	1095194	0	Standard
|	**V-1**	**51**	**48.315**	ug/L	1.050	2	136	1093798	0	Standard
|	**Cr**	**52**	**50.241**	ug/L	0.391	0	19054	961895	1	Standard
|	**Cr**	**53**	**48.979**	ug/L	1.683	3	117	108247	1	Standard
⌊	**Mn**	**55**	**49.680**	ug/L	1.308	2	499	1351262	1	Standard
⌈>	**Ge**	**72**		ug/L			18623	17692	3	KED
|	**Ni**	**60**	**50.903**	ug/L	2.439	4	7	42901	1	KED
|	**Ni**	**62**	**50.371**	ug/L	0.895	1	3	6941	5	KED
|	**Cu**	**63**	**50.427**	ug/L	1.635	3	46	126850	1	KED
|	**Cu**	**65**	**49.949**	ug/L	1.888	3	15	62338	2	KED
|	**Zn**	**66**	**49.620**	ug/L	2.680	5	17	14690	1	KED
|	**Zn**	**67**	**48.596**	ug/L	2.019	4	3	2407	6	KED
|	**As**	**75**	**47.050**	ug/L	0.974	2	3	6979	2	KED
⌊	**Se**	**78**	**77.360**	ug/L	4.501	5	9	1194	2	KED
	Y	**89**		ug/L			296113	303886	2	Standard
	Kr	**83**		ug/L			49	55	3	Standard
⌈>	**In-1**	**115**		ug/L			5148	5176	2	KED
|	**Cd**	**111**	**50.709**	ug/L	1.390	2	1	9066	0	KED
⌊	**Cd**	**114**	**49.734**	ug/L	1.138	2	1	22110	0	KED
⌈>	**In**	**115**		ug/L			413576	438377	1	Standard
|	**Ag**	**107**	**50.631**	ug/L	1.375	2	42	947196	1	Standard
|	**Sb**	**121**	**49.335**	ug/L	0.793	1	240	648702	0	Standard
|	**Sb**	**123**	**48.882**	ug/L	0.303	0	162	492074	1	Standard
|	**Ba**	**135**	**48.633**	ug/L	0.786	1	15	189714	0	Standard
⌊	**Ba**	**137**	**50.269**	ug/L	0.956	1	13	329593	0	Standard
⌈>	**Tb**	**159**		ug/L			595528	694725	0	Standard
⌊	**Pb**	**208**	**50.829**	ug/L	0.171	0	128	2758915	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 16:08:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24608	22627	1	Standard
	Cl	**37**		ug/L			3241558	2992458	2	Standard
⎡>	**Sc**	**45**		ug/L			482752	442469	2	Standard
⎢	**Al**	**27**	**-0.033**	ug/L	0.009	26	2788	1822	7	Standard
⎢	**V**	**51**	**0.030**	ug/L	0.016	54	6501	6587	2	Standard
⎢	**V-1**	**51**	**-0.000**	ug/L	0.000	80	136	117	2	Standard
⎢	**Cr**	**52**	**0.097**	ug/L	0.056	57	19054	19174	2	Standard
⎢	**Cr**	**53**	**-0.005**	ug/L	0.004	82	117	97	7	Standard
⎣	**Mn**	**55**	**0.006**	ug/L	0.002	31	499	600	5	Standard
⎡>	**Ge**	**72**		ug/L			18623	17662	3	KED
⎢	**Ni**	**60**	**-0.006**	ug/L	0.001	26	7	2	43	KED
⎢	**Ni**	**62**	**-0.008**	ug/L	0.007	94	3	2	43	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.004	264	46	40	22	KED
⎢	**Cu**	**65**	**-0.000**	ug/L	0.003	912	15	14	19	KED
⎢	**Zn**	**66**	**-0.006**	ug/L	0.005	93	17	15	12	KED
⎢	**Zn**	**67**	**0.004**	ug/L	0.003	72	3	3	0	KED
⎢	**As**	**75**	**0.005**	ug/L	0.004	74	3	3	12	KED
⎣	**Se**	**78**	**0.146**	ug/L	0.009	6	9	11	2	KED
	Y	**89**		ug/L			296113	284607	2	Standard
	Kr	**83**		ug/L			49	58	23	Standard
⎡>	**In-1**	**115**		ug/L			5148	5000	3	KED
⎢	**Cd**	**111**	**0.006**	ug/L	0.014	234	1	2	94	KED
⎣	**Cd**	**114**	**0.002**	ug/L	0.000	10	1	1	1	KED
⎡>	**In**	**115**		ug/L			413576	421545	0	Standard
⎢	**Ag**	**107**	**0.002**	ug/L	0.000	25	42	78	11	Standard
⎢	**Sb**	**121**	**0.026**	ug/L	0.003	11	240	580	7	Standard
⎢	**Sb**	**123**	**0.026**	ug/L	0.002	6	162	419	4	Standard
⎢	**Ba**	**135**	**-0.001**	ug/L	0.001	83	15	10	43	Standard
⎣	**Ba**	**137**	**0.000**	ug/L	0.001	261	13	17	44	Standard
⎡>	**Tb**	**159**		ug/L			595528	641908	2	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	2	128	184	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 16:15:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				24214	4	Standard
	Cl	**37**		ug/L				3004573	1	Standard
>	**Sc**	**45**		ug/L				451854	0	Standard
	Al	**27**		ug/L				1968	4	Standard
	V	**51**		ug/L				6603	0	Standard
	V-1	**51**		ug/L				121	5	Standard
	Cr	**52**		ug/L				19388	0	Standard
	Cr	**53**		ug/L				118	2	Standard
	Mn	**55**		ug/L				595	4	Standard
>	**Ge**	**72**		ug/L				17488	1	KED
	Ni	**60**		ug/L				3	50	KED
	Ni	**62**		ug/L				1	86	KED
	Cu	**63**		ug/L				27	56	KED
	Cu	**65**		ug/L				15	25	KED
	Zn	**66**		ug/L				24	19	KED
	Zn	**67**		ug/L				4	65	KED
	As	**75**		ug/L				3	45	KED
	Se	**78**		ug/L				8	36	KED
	Y	**89**		ug/L				293645	0	Standard
	Kr	**83**		ug/L				55	7	Standard
>	**In-1**	**115**		ug/L				4956	2	KED
	Cd	**111**		ug/L				0	173	KED
	Cd	**114**		ug/L				1	90	KED
>	**In**	**115**		ug/L				434608	1	Standard
	Ag	**107**		ug/L				50	28	Standard
	Sb	**121**		ug/L				313	16	Standard
	Sb	**123**		ug/L				239	4	Standard
	Ba	**135**		ug/L				10	10	Standard
	Ba	**137**		ug/L				18	41	Standard
>	**Tb**	**159**		ug/L				641967	1	Standard
	Pb	**208**		ug/L				168	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 16:20:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	23902	0	Standard
	Cl	**37**		ug/L			3004573	3118361	3	Standard
⌈>	**Sc**	**45**		ug/L			451854	437551	4	Standard
|	**Al**	**27**	**5052.903**	ug/L	179.349	3	1968	110520374	0	Standard
|	**V**	**51**	**48.611**	ug/L	2.618	5	6603	1018839	1	Standard
|	**V-1**	**51**	**48.777**	ug/L	2.225	4	121	1028570	1	Standard
|	**Cr**	**52**	**49.920**	ug/L	2.892	5	19388	891355	1	Standard
|	**Cr**	**53**	**50.411**	ug/L	1.561	3	118	103835	1	Standard
⌊	**Mn**	**55**	**50.490**	ug/L	2.105	4	595	1279469	1	Standard
⌈>	**Ge**	**72**		ug/L			17488	17329	2	KED
|	**Ni**	**60**	**50.312**	ug/L	2.432	4	3	41569	4	KED
|	**Ni**	**62**	**49.640**	ug/L	0.729	1	1	6693	0	KED
|	**Cu**	**63**	**49.632**	ug/L	0.770	1	27	122338	1	KED
|	**Cu**	**65**	**50.469**	ug/L	0.783	1	15	61742	2	KED
|	**Zn**	**66**	**51.501**	ug/L	1.777	3	24	14954	1	KED
|	**Zn**	**67**	**49.666**	ug/L	1.279	2	4	2409	0	KED
|	**As**	**75**	**50.554**	ug/L	1.145	2	3	7346	1	KED
⌊	**Se**	**78**	**50.909**	ug/L	2.997	5	8	773	6	KED
	Y	**89**		ug/L			293645	284178	6	Standard
	Kr	**83**		ug/L			55	48	19	Standard
⌈>	**In-1**	**115**		ug/L			4956	4956	1	KED
|	**Cd**	**111**	**51.654**	ug/L	0.580	1	0	8844	0	KED
⌊	**Cd**	**114**	**52.278**	ug/L	0.375	0	1	22262	1	KED
⌈>	**In**	**115**		ug/L			434608	410745	6	Standard
|	**Ag**	**107**	**51.041**	ug/L	2.372	4	50	892994	2	Standard
|	**Sb**	**121**	**51.237**	ug/L	2.279	4	313	630108	2	Standard
|	**Sb**	**123**	**50.757**	ug/L	3.707	7	239	477198	0	Standard
|	**Ba**	**135**	**50.529**	ug/L	2.626	5	10	184273	2	Standard
⌊	**Ba**	**137**	**50.847**	ug/L	2.370	4	18	311766	2	Standard
⌈>	**Tb**	**159**		ug/L			641967	658872	8	Standard
⌊	**Pb**	**208**	**52.181**	ug/L	4.094	7	168	2674541	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 16:29:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	23207	5	Standard
	Cl	**37**		ug/L			3004573	2959342	4	Standard
⎡>	**Sc**	**45**		ug/L			451854	449084	2	Standard
⎢	**Al**	**27**	**0.005**	ug/L	0.005	92	1968	2075	2	Standard
⎢	**V**	**51**	**0.009**	ug/L	0.008	89	6603	6745	0	Standard
⎢	**V-1**	**51**	**-0.000**	ug/L	0.000	82	121	113	7	Standard
⎢	**Cr**	**52**	**0.029**	ug/L	0.024	82	19388	19790	0	Standard
⎢	**Cr**	**53**	**-0.001**	ug/L	0.003	329	118	115	7	Standard
⎣	**Mn**	**55**	**-0.002**	ug/L	0.002	74	595	535	5	Standard
⎡>	**Ge**	**72**		ug/L			17488	17619	1	KED
⎢	**Ni**	**60**	**0.001**	ug/L	0.003	174	3	5	43	KED
⎢	**Ni**	**62**	**0.005**	ug/L	0.014	300	1	1	100	KED
⎢	**Cu**	**63**	**0.006**	ug/L	0.008	124	27	43	45	KED
⎢	**Cu**	**65**	**0.004**	ug/L	0.008	198	15	20	48	KED
⎢	**Zn**	**66**	**-0.005**	ug/L	0.023	478	24	22	28	KED
⎢	**Zn**	**67**	**-0.014**	ug/L	0.038	284	4	3	50	KED
⎢	**As**	**75**	**-0.000**	ug/L	0.006	2322	3	3	25	KED
⎣	**Se**	**78**	**0.072**	ug/L	0.139	193	8	9	19	KED
	Y	**89**		ug/L			293645	287341	1	Standard
	Kr	**83**		ug/L			55	44	32	Standard
⎡>	**In-1**	**115**		ug/L			4956	5034	3	KED
⎢	**Cd**	**111**	**0.005**	ug/L	0.006	116	0	1	86	KED
⎣	**Cd**	**114**	**0.000**	ug/L	0.003	3906	1	1	90	KED
⎡>	**In**	**115**		ug/L			434608	429049	1	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.001	72	50	66	17	Standard
⎢	**Sb**	**121**	**0.108**	ug/L	0.004	3	313	1692	1	Standard
⎢	**Sb**	**123**	**0.104**	ug/L	0.010	10	239	1254	6	Standard
⎢	**Ba**	**135**	**0.001**	ug/L	0.000	16	10	15	6	Standard
⎣	**Ba**	**137**	**-0.000**	ug/L	0.001	537	18	17	29	Standard
⎡>	**Tb**	**159**		ug/L			641967	649883	2	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	40	168	212	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 16:37:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	25748	2	Standard
	Cl	**37**		ug/L			3004573	2977089	0	Standard
⌈>	**Sc**	**45**		ug/L			451854	450917	0	Standard
|	**Al**	**27**	**21.414**	ug/L	0.213	0	1968	485119	0	Standard
|	**V**	**51**	**0.193**	ug/L	0.014	7	6603	10741	2	Standard
|	**V-1**	**51**	**0.193**	ug/L	0.002	0	121	4316	0	Standard
|	**Cr**	**52**	**0.521**	ug/L	0.018	3	19388	28750	1	Standard
|	**Cr**	**53**	**0.507**	ug/L	0.025	4	118	1194	4	Standard
⌊	**Mn**	**55**	**0.503**	ug/L	0.008	1	595	13734	1	Standard
⌈>	**Ge**	**72**		ug/L			17488	17854	0	KED
|	**Ni**	**60**	**0.515**	ug/L	0.026	4	3	442	5	KED
|	**Ni**	**62**	**0.557**	ug/L	0.084	15	1	78	14	KED
|	**Cu**	**63**	**0.518**	ug/L	0.065	12	27	1343	12	KED
|	**Cu**	**65**	**0.573**	ug/L	0.025	4	15	737	4	KED
|	**Zn**	**66**	**6.177**	ug/L	0.097	1	24	1870	1	KED
|	**Zn**	**67**	**5.734**	ug/L	0.531	9	4	290	9	KED
|	**As**	**75**	**0.196**	ug/L	0.034	17	3	33	15	KED
⌊	**Se**	**78**	**0.728**	ug/L	0.161	22	8	20	12	KED
	Y	**89**		ug/L			293645	286850	1	Standard
	Kr	**83**		ug/L			55	52	33	Standard
⌈>	**In-1**	**115**		ug/L			4956	4931	1	KED
|	**Cd**	**111**	**0.097**	ug/L	0.012	12	0	16	13	KED
⌊	**Cd**	**114**	**0.087**	ug/L	0.014	16	1	37	18	KED
⌈>	**In**	**115**		ug/L			434608	430067	0	Standard
|	**Ag**	**107**	**0.195**	ug/L	0.007	3	50	3636	3	Standard
|	**Sb**	**121**	**0.218**	ug/L	0.002	0	313	3117	0	Standard
|	**Sb**	**123**	**0.214**	ug/L	0.010	4	239	2346	3	Standard
|	**Ba**	**135**	**0.473**	ug/L	0.012	2	10	1819	2	Standard
⌊	**Ba**	**137**	**0.473**	ug/L	0.012	2	18	3063	2	Standard
⌈>	**Tb**	**159**		ug/L			641967	654000	2	Standard
⌊	**Pb**	**208**	**0.118**	ug/L	0.002	1	168	6203	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 16:41:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	94002	2	Standard
	Cl	**37**		ug/L			3004573	8922435	3	Standard
⌈>	**Sc**	**45**		ug/L			451854	464412	1	Standard
|	**Al**	**27**	**19486.152**	ug/L	931.575	4	1968	452714715	4	Standard
|	**V**	**51**	**0.074**	ug/L	0.019	25	6603	8428	5	Standard
|	**V-1**	**51**	**0.467**	ug/L	0.010	2	121	10597	2	Standard
|	**Cr**	**52**	**0.861**	ug/L	0.072	8	19388	35914	2	Standard
|	**Cr**	**53**	**2.120**	ug/L	0.113	5	118	4751	3	Standard
⌊	**Mn**	**55**	**0.075**	ug/L	0.002	3	595	2625	0	Standard
⌈>	**Ge**	**72**		ug/L			17488	17031	2	KED
|	**Ni**	**60**	**0.096**	ug/L	0.018	18	3	81	16	KED
|	**Ni**	**62**	**0.119**	ug/L	0.059	49	1	17	48	KED
|	**Cu**	**63**	**0.065**	ug/L	0.004	6	27	183	6	KED
|	**Cu**	**65**	**0.044**	ug/L	0.003	6	15	67	3	KED
|	**Zn**	**66**	**0.219**	ug/L	0.059	27	24	85	18	KED
|	**Zn**	**67**	**0.349**	ug/L	0.252	72	4	20	56	KED
|	**As**	**75**	**0.034**	ug/L	0.013	37	3	8	20	KED
⌊	**Se**	**78**	**0.122**	ug/L	0.118	96	8	10	18	KED
	Y	**89**		ug/L			293645	299175	1	Standard
	Kr	**83**		ug/L			55	98	2	Standard
⌈>	**In-1**	**115**		ug/L			4956	4930	0	KED
|	**Cd**	**111**	**0.071**	ug/L	0.029	40	0	12	39	KED
⌊	**Cd**	**114**	**0.045**	ug/L	0.007	15	1	20	15	KED
⌈>	**In**	**115**		ug/L			434608	417241	0	Standard
|	**Ag**	**107**	**0.006**	ug/L	0.001	17	50	149	11	Standard
|	**Sb**	**121**	**0.048**	ug/L	0.003	5	313	899	3	Standard
|	**Sb**	**123**	**0.050**	ug/L	0.005	11	239	706	7	Standard
|	**Ba**	**135**	**0.132**	ug/L	0.014	10	10	500	10	Standard
⌊	**Ba**	**137**	**0.122**	ug/L	0.006	4	18	778	4	Standard
⌈>	**Tb**	**159**		ug/L			641967	725875	0	Standard
⌊	**Pb**	**208**	**0.029**	ug/L	0.002	6	168	1807	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 16:46:52
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	95120	4	Standard
	Cl	**37**		ug/L			3004573	9100938	3	Standard
⌈>	**Sc**	**45**		ug/L			451854	461184	3	Standard
|	**Al**	**27**	**19792.543**	ug/L	1077.126	5	1968	456261487	2	Standard
|	**V**	**51**	**0.062**	ug/L	0.038	61	6603	8088	9	Standard
|	**V-1**	**51**	**0.518**	ug/L	0.012	2	121	11655	1	Standard
|	**Cr**	**52**	**20.826**	ug/L	0.382	1	19388	403996	1	Standard
|	**Cr**	**53**	**21.508**	ug/L	0.301	1	118	46792	1	Standard
⌊	**Mn**	**55**	**19.370**	ug/L	0.469	2	595	518133	1	Standard
⌈>	**Ge**	**72**		ug/L			17488	16875	2	KED
|	**Ni**	**60**	**19.939**	ug/L	0.580	2	3	16042	1	KED
|	**Ni**	**62**	**20.361**	ug/L	0.974	4	1	2677	7	KED
|	**Cu**	**63**	**19.201**	ug/L	0.517	2	27	46100	1	KED
|	**Cu**	**65**	**19.577**	ug/L	0.469	2	15	23325	2	KED
|	**Zn**	**66**	**18.679**	ug/L	0.128	0	24	5298	1	KED
|	**Zn**	**67**	**16.842**	ug/L	1.171	6	4	798	6	KED
|	**As**	**75**	**18.842**	ug/L	0.403	2	3	2668	1	KED
⌊	**Se**	**78**	**0.260**	ug/L	0.198	76	8	12	21	KED
	Y	**89**		ug/L			293645	301634	2	Standard
	Kr	**83**		ug/L			55	107	9	Standard
⌈>	**In-1**	**115**		ug/L			4956	4977	2	KED
|	**Cd**	**111**	**18.949**	ug/L	0.953	5	0	3256	2	KED
⌊	**Cd**	**114**	**18.962**	ug/L	0.282	1	1	8109	2	KED
⌈>	**In**	**115**		ug/L			434608	428044	1	Standard
|	**Ag**	**107**	**18.662**	ug/L	0.235	1	50	341034	2	Standard
|	**Sb**	**121**	**0.025**	ug/L	0.001	5	313	626	1	Standard
|	**Sb**	**123**	**0.027**	ug/L	0.003	13	239	498	7	Standard
|	**Ba**	**135**	**0.156**	ug/L	0.001	0	10	606	1	Standard
⌊	**Ba**	**137**	**0.148**	ug/L	0.002	1	18	967	1	Standard
⌈>	**Tb**	**159**		ug/L			641967	723128	1	Standard
⌊	**Pb**	**208**	**0.044**	ug/L	0.001	1	168	2655	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 16:51:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	25956	5	Standard
	Cl	**37**		ug/L			3004573	3237167	3	Standard
⌈>	**Sc**	**45**		ug/L			451854	447483	2	Standard
|	**Al**	**27**	**19056.566**	ug/L	1120.599	5	1968	426214814	2	Standard
|	**V**	**51**	**199.028**	ug/L	5.912	2	6603	4249694	0	Standard
|	**V-1**	**51**	**197.762**	ug/L	6.250	3	121	4267235	0	Standard
|	**Cr**	**52**	**196.938**	ug/L	3.516	1	19388	3544419	1	Standard
|	**Cr**	**53**	**192.869**	ug/L	4.511	2	118	406128	0	Standard
⌊	**Mn**	**55**	**195.611**	ug/L	3.553	1	595	5072694	2	Standard
⌈>	**Ge**	**72**		ug/L			17488	16940	2	KED
|	**Ni**	**60**	**187.650**	ug/L	9.663	5	3	151447	2	KED
|	**Ni**	**62**	**188.524**	ug/L	5.593	2	1	24839	0	KED
|	**Cu**	**63**	**186.579**	ug/L	0.904	0	27	449564	2	KED
|	**Cu**	**65**	**186.968**	ug/L	5.020	2	15	223486	2	KED
|	**Zn**	**66**	**181.607**	ug/L	2.868	1	24	51499	1	KED
|	**Zn**	**67**	**183.982**	ug/L	3.294	1	4	8715	1	KED
|	**As**	**75**	**194.161**	ug/L	5.840	3	3	27565	0	KED
⌊	**Se**	**78**	**191.228**	ug/L	5.087	2	8	2816	2	KED
	Y	**89**		ug/L			293645	294691	1	Standard
	Kr	**83**		ug/L			55	82	9	Standard
⌈>	**In-1**	**115**		ug/L			4956	4814	2	KED
|	**Cd**	**111**	**197.352**	ug/L	3.837	1	0	32815	0	KED
⌊	**Cd**	**114**	**195.420**	ug/L	4.301	2	1	80802	0	KED
⌈>	**In**	**115**		ug/L			434608	430317	0	Standard
|	**Ag**	**107**	**185.964**	ug/L	2.728	1	50	3415932	2	Standard
|	**Sb**	**121**	**199.957**	ug/L	2.147	1	313	2580641	1	Standard
|	**Sb**	**123**	**193.751**	ug/L	1.903	0	239	1914099	1	Standard
|	**Ba**	**135**	**198.938**	ug/L	2.891	1	10	761872	2	Standard
⌊	**Ba**	**137**	**205.368**	ug/L	1.950	0	18	1321913	0	Standard
⌈>	**Tb**	**159**		ug/L			641967	734029	2	Standard
⌊	**Pb**	**208**	**184.887**	ug/L	3.904	2	168	10598580	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 16:56:40
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	26613	3	Standard
	Cl	**37**		ug/L			3004573	3113408	0	Standard
⎡>	**Sc**	**45**		ug/L			451854	429747	1	Standard
⎢	**Al**	**27**	**28648.776**	ug/L	419.807	1	1968	616076019	1	Standard
⎢	**V**	**51**	**300.173**	ug/L	0.736	0	6603	6155593	0	Standard
⎢	**V-1**	**51**	**298.499**	ug/L	2.404	0	121	6188967	0	Standard
⎢	**Cr**	**52**	**300.370**	ug/L	4.727	1	19388	5184161	2	Standard
⎢	**Cr**	**53**	**294.875**	ug/L	7.737	2	118	596483	2	Standard
⎣	**Mn**	**55**	**297.475**	ug/L	6.477	2	595	7408390	0	Standard
⎡>	**Ge**	**72**		ug/L			17488	15887	1	KED
⎢	**Ni**	**60**	**288.084**	ug/L	7.762	2	3	218216	2	KED
⎢	**Ni**	**62**	**288.875**	ug/L	5.799	2	1	35706	0	KED
⎢	**Cu**	**63**	**281.419**	ug/L	5.404	1	27	635907	1	KED
⎢	**Cu**	**65**	**284.173**	ug/L	11.198	3	15	318532	2	KED
⎢	**Zn**	**66**	**284.432**	ug/L	8.193	2	24	75631	1	KED
⎢	**Zn**	**67**	**276.346**	ug/L	7.872	2	4	12278	3	KED
⎢	**As**	**75**	**303.151**	ug/L	6.116	2	3	40375	0	KED
⎣	**Se**	**78**	**295.492**	ug/L	9.000	3	8	4076	1	KED
	Y	**89**		ug/L			293645	278000	1	Standard
	Kr	**83**		ug/L			55	168	12	Standard
⎡>	**In-1**	**115**		ug/L			4956	4713	0	KED
⎢	**Cd**	**111**	**288.865**	ug/L	3.731	1	0	47030	1	KED
⎣	**Cd**	**114**	**287.758**	ug/L	1.110	0	1	116511	1	KED
⎡>	**In**	**115**		ug/L			434608	410849	0	Standard
⎢	**Ag**	**107**	**281.183**	ug/L	5.802	2	50	4931088	2	Standard
⎢	**Sb**	**121**	**302.860**	ug/L	2.324	0	313	3731604	0	Standard
⎢	**Sb**	**123**	**307.525**	ug/L	1.314	0	239	2900503	0	Standard
⎢	**Ba**	**135**	**314.588**	ug/L	6.553	2	10	1150174	1	Standard
⎣	**Ba**	**137**	**338.246**	ug/L	11.721	3	18	2078815	3	Standard
⎡>	**Tb**	**159**		ug/L			641967	727008	0	Standard
⎣	**Pb**	**208**	**269.934**	ug/L	1.925	0	168	15331587	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 17:04:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	26198	2	Standard
	Cl	**37**		ug/L			3004573	3151882	2	Standard
⎡>	**Sc**	**45**		ug/L			451854	445559	3	Standard
⎢	**Al**	**27**	**0.115**	ug/L	0.030	26	1968	4495	14	Standard
⎢	**V**	**51**	**0.014**	ug/L	0.010	69	6603	6799	1	Standard
⎢	**V-1**	**51**	**0.008**	ug/L	0.001	10	121	299	5	Standard
⎢	**Cr**	**52**	**0.047**	ug/L	0.029	61	19388	19949	0	Standard
⎢	**Cr**	**53**	**0.028**	ug/L	0.007	23	118	175	7	Standard
⎣	**Mn**	**55**	**0.016**	ug/L	0.002	13	595	995	7	Standard
⎡>	**Ge**	**72**		ug/L			17488	18013	2	KED
⎢	**Ni**	**60**	**0.004**	ug/L	0.004	86	3	7	43	KED
⎢	**Ni**	**62**	**0.004**	ug/L	0.023	562	1	1	173	KED
⎢	**Cu**	**63**	**0.007**	ug/L	0.003	44	27	45	16	KED
⎢	**Cu**	**65**	**0.008**	ug/L	0.001	16	15	26	4	KED
⎢	**Zn**	**66**	**-0.001**	ug/L	0.054	4760	24	24	68	KED
⎢	**Zn**	**67**	**-0.015**	ug/L	0.037	238	4	3	50	KED
⎢	**As**	**75**	**0.008**	ug/L	0.009	116	3	5	27	KED
⎣	**Se**	**78**	**0.054**	ug/L	0.115	213	8	9	16	KED
	Y	**89**		ug/L			293645	285294	2	Standard
	Kr	**83**		ug/L			55	57	14	Standard
⎡>	**In-1**	**115**		ug/L			4956	5134	2	KED
⎢	**Cd**	**111**	**0.016**	ug/L	0.003	17	0	3	17	KED
⎣	**Cd**	**114**	**0.006**	ug/L	0.007	131	1	3	89	KED
⎡>	**In**	**115**		ug/L			434608	446532	1	Standard
⎢	**Ag**	**107**	**0.006**	ug/L	0.001	21	50	172	13	Standard
⎢	**Sb**	**121**	**0.509**	ug/L	0.029	5	313	7133	6	Standard
⎢	**Sb**	**123**	**0.535**	ug/L	0.021	4	239	5727	3	Standard
⎢	**Ba**	**135**	**0.003**	ug/L	0.001	38	10	22	17	Standard
⎣	**Ba**	**137**	**0.004**	ug/L	0.002	38	18	48	23	Standard
⎡>	**Tb**	**159**		ug/L			641967	696780	3	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.001	35	168	266	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 17:11:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	26825	1	Standard
	Cl	**37**		ug/L			3004573	3161330	3	Standard
⌈>	**Sc**	**45**		ug/L			451854	456181	0	Standard
|	**Al**	**27**	**0.092**	ug/L	0.001	0	1968	4093	0	Standard
|	**V**	**51**	**0.015**	ug/L	0.001	9	6603	6996	1	Standard
|	**V-1**	**51**	**0.005**	ug/L	0.001	11	121	234	5	Standard
|	**Cr**	**52**	**0.055**	ug/L	0.008	14	19388	20582	1	Standard
|	**Cr**	**53**	**0.021**	ug/L	0.005	26	118	163	7	Standard
⌊	**Mn**	**55**	**0.011**	ug/L	0.001	6	595	883	2	Standard
⌈>	**Ge**	**72**		ug/L			17488	18612	3	KED
|	**Ni**	**60**	**0.004**	ug/L	0.004	94	3	7	43	KED
|	**Ni**	**62**	**0.008**	ug/L	0.007	86	1	2	43	KED
|	**Cu**	**63**	**0.007**	ug/L	0.004	55	27	48	24	KED
|	**Cu**	**65**	**0.004**	ug/L	0.002	52	15	21	10	KED
|	**Zn**	**66**	**-0.017**	ug/L	0.014	77	24	20	23	KED
|	**Zn**	**67**	**0.032**	ug/L	0.111	343	4	6	91	KED
|	**As**	**75**	**0.001**	ug/L	0.014	1751	3	4	46	KED
⌊	**Se**	**78**	**0.028**	ug/L	0.120	429	8	9	15	KED
	Y	**89**		ug/L			293645	296578	2	Standard
	Kr	**83**		ug/L			55	50	2	Standard
⌈>	**In-1**	**115**		ug/L			4956	5216	3	KED
|	**Cd**	**111**	**0.009**	ug/L	0.015	162	0	1	132	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.006	224	1	2	115	KED
⌈>	**In**	**115**		ug/L			434608	463886	1	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.001	21	50	121	11	Standard
|	**Sb**	**121**	**0.136**	ug/L	0.005	3	313	2222	4	Standard
|	**Sb**	**123**	**0.133**	ug/L	0.000	0	239	1675	0	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.001	48	10	17	16	Standard
⌊	**Ba**	**137**	**0.004**	ug/L	0.003	79	18	49	48	Standard
⌈>	**Tb**	**159**		ug/L			641967	714919	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.001	184	168	206	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 17:17:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	25317	4	Standard
	Cl	**37**		ug/L			3004573	3115616	3	Standard
⌈>	**Sc**	**45**		ug/L			451854	458988	0	Standard
|	**Al**	**27**	**0.151**	ug/L	0.005	3	1968	5459	1	Standard
|	**V**	**51**	**0.005**	ug/L	0.010	185	6603	6827	3	Standard
|	**V-1**	**51**	**0.003**	ug/L	0.000	10	121	186	3	Standard
|	**Cr**	**52**	**0.021**	ug/L	0.040	187	19388	20083	3	Standard
|	**Cr**	**53**	**0.012**	ug/L	0.006	46	118	145	8	Standard
⌊	**Mn**	**55**	**0.012**	ug/L	0.002	13	595	930	4	Standard
⌈>	**Ge**	**72**		ug/L			17488	18893	2	KED
|	**Ni**	**60**	**0.006**	ug/L	0.008	129	3	9	72	KED
|	**Ni**	**62**	**0.008**	ug/L	0.008	98	1	2	43	KED
|	**Cu**	**63**	**0.009**	ug/L	0.004	45	27	53	21	KED
|	**Cu**	**65**	**0.009**	ug/L	0.005	52	15	27	19	KED
|	**Zn**	**66**	**-0.000**	ug/L	0.040	15021	24	26	49	KED
|	**Zn**	**67**	**0.017**	ug/L	0.072	427	4	5	66	KED
|	**As**	**75**	**0.005**	ug/L	0.002	46	3	4	5	KED
⌊	**Se**	**78**	**0.036**	ug/L	0.175	489	8	9	26	KED
	Y	**89**		ug/L			293645	298883	1	Standard
	Kr	**83**		ug/L			55	55	20	Standard
⌈>	**In-1**	**115**		ug/L			4956	5302	2	KED
|	**Cd**	**111**	**0.005**	ug/L	0.003	56	0	1	43	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.002	914	1	1	94	KED
⌈>	**In**	**115**		ug/L			434608	461216	2	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	85	50	87	34	Standard
|	**Sb**	**121**	**0.062**	ug/L	0.007	11	313	1194	6	Standard
|	**Sb**	**123**	**0.067**	ug/L	0.012	17	239	965	11	Standard
|	**Ba**	**135**	**0.007**	ug/L	0.003	35	10	41	23	Standard
⌊	**Ba**	**137**	**0.008**	ug/L	0.002	24	18	71	16	Standard
⌈>	**Tb**	**159**		ug/L			641967	703205	3	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	78	168	211	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 17:22:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	25187	5	Standard
	Cl	**37**		ug/L			3004573	3278268	1	Standard
⎡>	**Sc**	**45**		ug/L			451854	464026	0	Standard
⎢	**Al**	**27**	**4855.134**	ug/L	79.021	1	1968	112735899	1	Standard
⎢	**V**	**51**	**46.963**	ug/L	1.119	2	6603	1045655	2	Standard
⎢	**V-1**	**51**	**46.729**	ug/L	0.992	2	121	1046336	2	Standard
⎢	**Cr**	**52**	**48.772**	ug/L	1.630	3	19388	925374	2	Standard
⎢	**Cr**	**53**	**47.935**	ug/L	2.138	4	118	104785	3	Standard
⎣	**Mn**	**55**	**48.888**	ug/L	1.031	2	595	1315250	1	Standard
⎡>	**Ge**	**72**		ug/L			17488	18866	1	KED
⎢	**Ni**	**60**	**46.847**	ug/L	0.871	1	3	42145	1	KED
⎢	**Ni**	**62**	**47.293**	ug/L	0.529	1	1	6944	1	KED
⎢	**Cu**	**63**	**47.141**	ug/L	0.199	0	27	126534	1	KED
⎢	**Cu**	**65**	**48.090**	ug/L	1.475	3	15	64032	1	KED
⎢	**Zn**	**66**	**48.087**	ug/L	1.143	2	24	15210	2	KED
⎢	**Zn**	**67**	**49.078**	ug/L	2.577	5	4	2593	5	KED
⎢	**As**	**75**	**48.910**	ug/L	0.400	0	3	7740	0	KED
⎣	**Se**	**78**	**49.603**	ug/L	0.665	1	8	820	2	KED
	Y	**89**		ug/L			293645	301061	1	Standard
	Kr	**83**		ug/L			55	62	22	Standard
⎡>	**In-1**	**115**		ug/L			4956	5210	2	KED
⎢	**Cd**	**111**	**50.769**	ug/L	0.960	1	0	9136	1	KED
⎣	**Cd**	**114**	**50.226**	ug/L	1.862	3	1	22472	2	KED
⎡>	**In**	**115**		ug/L			434608	459413	1	Standard
⎢	**Ag**	**107**	**46.854**	ug/L	0.773	1	50	918758	1	Standard
⎢	**Sb**	**121**	**48.465**	ug/L	1.063	2	313	667884	0	Standard
⎢	**Sb**	**123**	**48.575**	ug/L	0.106	0	239	512512	1	Standard
⎢	**Ba**	**135**	**48.509**	ug/L	0.655	1	10	198312	0	Standard
⎣	**Ba**	**137**	**50.168**	ug/L	0.900	1	18	344826	2	Standard
⎡>	**Tb**	**159**		ug/L			641967	734671	0	Standard
⎣	**Pb**	**208**	**47.957**	ug/L	1.073	2	168	2752516	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 17:30:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	23390	4	Standard
	Cl	**37**		ug/L			3004573	3129364	1	Standard
⎡>	**Sc**	**45**		ug/L			451854	451161	0	Standard
⎢	**Al**	**27**	**0.003**	ug/L	0.006	165	1968	2044	6	Standard
⎢	**V**	**51**	**0.006**	ug/L	0.008	140	6603	6717	2	Standard
⎢	**V-1**	**51**	**0.003**	ug/L	0.000	17	121	181	6	Standard
⎢	**Cr**	**52**	**0.022**	ug/L	0.037	168	19388	19757	3	Standard
⎢	**Cr**	**53**	**0.012**	ug/L	0.008	68	118	142	11	Standard
⎣	**Mn**	**55**	**0.009**	ug/L	0.001	7	595	838	2	Standard
⎡>	**Ge**	**72**		ug/L			17488	18716	1	KED
⎢	**Ni**	**60**	**0.001**	ug/L	0.005	426	3	5	86	KED
⎢	**Ni**	**62**	**0.004**	ug/L	0.022	627	1	1	173	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.005	222	27	35	39	KED
⎢	**Cu**	**65**	**-0.000**	ug/L	0.004	1240	15	15	36	KED
⎢	**Zn**	**66**	**-0.009**	ug/L	0.007	69	24	22	8	KED
⎢	**Zn**	**67**	**-0.018**	ug/L	0.073	412	4	3	100	KED
⎢	**As**	**75**	**0.003**	ug/L	0.010	292	3	4	33	KED
⎣	**Se**	**78**	**-0.086**	ug/L	0.042	48	8	7	7	KED
	Y	**89**		ug/L			293645	287635	0	Standard
	Kr	**83**		ug/L			55	55	3	Standard
⎡>	**In-1**	**115**		ug/L			4956	5157	0	KED
⎢	**Cd**	**111**	**0.005**	ug/L	0.008	155	0	1	114	KED
⎣	**Cd**	**114**	**0.003**	ug/L	0.007	240	1	2	119	KED
⎡>	**In**	**115**		ug/L			434608	456167	2	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.000	24	50	74	5	Standard
⎢	**Sb**	**121**	**0.146**	ug/L	0.012	8	313	2326	5	Standard
⎢	**Sb**	**123**	**0.148**	ug/L	0.005	3	239	1798	0	Standard
⎢	**Ba**	**135**	**0.001**	ug/L	0.002	131	10	16	40	Standard
⎣	**Ba**	**137**	**0.001**	ug/L	0.002	349	18	22	54	Standard
⎡>	**Tb**	**159**		ug/L			641967	705399	3	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.000	15	168	296	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0848-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 17:36:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24214	32317	2	Standard
	Cl	37		ug/L			3004573	3061617	1	Standard
>	Sc	45		ug/L			451854	466539	3	Standard
	Al	27	0.990	ug/L	0.036	3	1968	25127	1	Standard
	V	51	0.024	ug/L	0.006	27	6603	7338	2	Standard
	V-1	51	0.016	ug/L	0.001	7	121	479	8	Standard
	Cr	52	0.152	ug/L	0.025	16	19388	22853	1	Standard
	Cr	53	0.122	ug/L	0.005	3	118	388	3	Standard
	Mn	55	0.014	ug/L	0.000	2	595	1001	4	Standard
>	Ge	72		ug/L			17488	19065	2	KED
	Ni	60	0.088	ug/L	0.014	16	3	84	18	KED
	Ni	62	0.093	ug/L	0.046	49	1	15	45	KED
	Cu	63	0.054	ug/L	0.006	10	27	175	6	KED
	Cu	65	0.049	ug/L	0.003	6	15	82	2	KED
	Zn	66	0.284	ug/L	0.037	12	24	116	7	KED
	Zn	67	0.232	ug/L	0.133	57	4	17	40	KED
	As	75	-0.002	ug/L	0.008	358	3	3	33	KED
	Se	78	0.082	ug/L	0.320	392	8	10	51	KED
	Y	89		ug/L			293645	289041	1	Standard
	Kr	83		ug/L			55	48	25	Standard
>	In-1	115		ug/L			4956	5397	0	KED
	Cd	111	0.008	ug/L	0.014	161	0	1	132	KED
	Cd	114	0.006	ug/L	0.003	38	1	4	26	KED
>	In	115		ug/L			434608	466435	0	Standard
	Ag	107	0.001	ug/L	0.001	92	50	70	21	Standard
	Sb	121	0.048	ug/L	0.006	11	313	1014	7	Standard
	Sb	123	0.052	ug/L	0.002	3	239	814	2	Standard
	Ba	135	0.033	ug/L	0.002	6	10	146	6	Standard
	Ba	137	0.030	ug/L	0.003	10	18	229	9	Standard
>	Tb	159		ug/L			641967	708526	1	Standard
	Pb	208	0.003	ug/L	0.000	3	168	368	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0848-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 17:41:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24214	33189	3	Standard
	Cl	37		ug/L			3004573	3305856	2	Standard
>	Sc	45		ug/L			451854	469173	2	Standard
	Al	27	4690.853	ug/L	96.243	2	1968	110107979	1	Standard
	V	51	24.302	ug/L	0.252	1	6603	550370	2	Standard
	V-1	51	24.232	ug/L	0.101	0	121	548650	1	Standard
	Cr	52	25.421	ug/L	0.707	2	19388	497206	0	Standard
	Cr	53	25.147	ug/L	0.836	3	118	55634	2	Standard
	Mn	55	25.206	ug/L	0.878	3	595	685697	1	Standard
>	Ge	72		ug/L			17488	19168	0	KED
	Ni	60	23.783	ug/L	0.353	1	3	21744	2	KED
	Ni	62	25.158	ug/L	1.377	5	1	3752	4	KED
	Cu	63	24.077	ug/L	0.270	1	27	65669	0	KED
	Cu	65	24.448	ug/L	0.494	2	15	33092	2	KED
	Zn	66	79.768	ug/L	1.193	1	24	25619	2	KED
	Zn	67	74.736	ug/L	1.497	2	4	4009	1	KED
	As	75	25.225	ug/L	0.274	1	3	4058	1	KED
	Se	78	79.706	ug/L	1.892	2	8	1333	2	KED
	Y	89		ug/L			293645	302031	0	Standard
	Kr	83		ug/L			55	53	8	Standard
>	In-1	115		ug/L			4956	5346	2	KED
	Cd	111	25.884	ug/L	0.804	3	0	4777	1	KED
	Cd	114	25.684	ug/L	0.624	2	1	11791	0	KED
>	In	115		ug/L			434608	463891	1	Standard
	Ag	107	23.833	ug/L	0.559	2	50	471832	0	Standard
	Sb	121	25.281	ug/L	0.579	2	313	351918	0	Standard
	Sb	123	25.293	ug/L	0.039	0	239	269580	1	Standard
	Ba	135	24.907	ug/L	0.442	1	10	102824	1	Standard
	Ba	137	25.815	ug/L	0.427	1	18	179120	0	Standard
>	Tb	159		ug/L			641967	738885	2	Standard
	Pb	208	24.529	ug/L	0.524	2	168	1415719	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0747-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 17:46:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24214	34400	3	Standard
	Cl	37		ug/L			3004573	3796607	2	Standard
>	Sc	45		ug/L			451854	435367	1	Standard
	Al	27	70.566	ug/L	1.434	2	1968	1539104	1	Standard
	V	51	0.174	ug/L	0.002	1	6603	9965	1	Standard
	V-1	51	0.251	ug/L	0.005	2	121	5381	1	Standard
	Cr	52	0.357	ug/L	0.015	4	19388	24901	1	Standard
	Cr	53	0.602	ug/L	0.005	0	118	1347	1	Standard
	Mn	55	110.456	ug/L	2.628	2	595	2787166	1	Standard
>	Ge	72		ug/L			17488	17685	3	KED
	Ni	60	3.021	ug/L	0.086	2	3	2550	2	KED
	Ni	62	3.043	ug/L	0.155	5	1	419	2	KED
	Cu	63	2.522	ug/L	0.149	5	27	6363	2	KED
	Cu	65	2.474	ug/L	0.070	2	15	3101	0	KED
	Zn	66	26.283	ug/L	0.853	3	24	7800	2	KED
	Zn	67	25.761	ug/L	1.577	6	4	1276	3	KED
	As	75	0.761	ug/L	0.061	8	3	116	7	KED
	Se	78	0.174	ug/L	0.194	111	8	11	23	KED
	Y	89		ug/L			293645	289675	2	Standard
	Kr	83		ug/L			55	60	28	Standard
>	In-1	115		ug/L			4956	4948	1	KED
	Cd	111	0.106	ug/L	0.010	9	0	18	7	KED
	Cd	114	0.102	ug/L	0.028	27	1	44	27	KED
>	In	115		ug/L			434608	427113	1	Standard
	Ag	107	0.003	ug/L	0.001	32	50	97	17	Standard
	Sb	121	5.394	ug/L	0.135	2	313	69378	1	Standard
	Sb	123	5.457	ug/L	0.094	1	239	53727	1	Standard
	Ba	135	13.967	ug/L	0.453	3	10	53081	1	Standard
	Ba	137	14.565	ug/L	0.126	0	18	93076	2	Standard
>	Tb	159		ug/L			641967	708040	3	Standard
	Pb	208	0.104	ug/L	0.005	5	168	5943	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0731-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 17:52:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24214	134692	1	Standard
	Cl	37		ug/L			3004573	3195099	0	Standard
>	Sc	45		ug/L			451854	456980	1	Standard
	Al	27	1.072	ug/L	0.044	4	1968	26512	4	Standard
	V	51	0.140	ug/L	0.024	16	6603	9734	5	Standard
	V-1	51	0.039	ug/L	0.002	5	121	978	3	Standard
	Cr	52	3.205	ug/L	0.085	2	19388	78203	0	Standard
	Cr	53	2.752	ug/L	0.081	2	118	6037	1	Standard
	Mn	55	72.106	ug/L	0.990	1	595	1910236	1	Standard
>	Ge	72		ug/L			17488	18072	2	KED
	Ni	60	2.406	ug/L	0.020	0	3	2076	1	KED
	Ni	62	2.628	ug/L	0.108	4	1	370	3	KED
	Cu	63	0.435	ug/L	0.010	2	27	1146	1	KED
	Cu	65	0.442	ug/L	0.021	4	15	579	2	KED
	Zn	66	6.027	ug/L	0.275	4	24	1847	3	KED
	Zn	67	5.942	ug/L	0.116	1	4	304	2	KED
	As	75	0.054	ug/L	0.017	32	3	12	19	KED
	Se	78	0.069	ug/L	0.065	94	8	9	10	KED
	Y	89		ug/L			293645	295549	1	Standard
	Kr	83		ug/L			55	46	6	Standard
>	In-1	115		ug/L			4956	5040	1	KED
	Cd	111	0.048	ug/L	0.024	50	0	8	48	KED
	Cd	114	0.048	ug/L	0.003	6	1	21	5	KED
>	In	115		ug/L			434608	444013	3	Standard
	Ag	107	0.000	ug/L	0.001	958	50	53	41	Standard
	Sb	121	0.111	ug/L	0.010	8	313	1798	4	Standard
	Sb	123	0.116	ug/L	0.003	2	239	1424	2	Standard
	Ba	135	4.952	ug/L	0.067	1	10	19575	2	Standard
	Ba	137	4.969	ug/L	0.105	2	18	33004	1	Standard
>	Tb	159		ug/L			641967	729771	3	Standard
	Pb	208	0.042	ug/L	0.001	3	168	2584	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0386-04
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 17:57:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24214	30399	4	Standard
	Cl	37		ug/L			3004573	3411162	1	Standard
>	Sc	45		ug/L			451854	464986	1	Standard
	Al	27	3.727	ug/L	0.155	4	1968	88703	2	Standard
	V	51	0.551	ug/L	0.039	7	6603	18998	2	Standard
	V-1	51	0.579	ug/L	0.030	5	121	13114	3	Standard
	Cr	52	0.251	ug/L	0.043	17	19388	24610	1	Standard
	Cr	53	0.355	ug/L	0.025	6	118	899	6	Standard
	Mn	55	299.820	ug/L	6.979	2	595	8078221	0	Standard
>	Ge	72		ug/L			17488	17835	2	KED
	Ni	60	0.209	ug/L	0.029	13	3	181	15	KED
	Ni	62	0.244	ug/L	0.084	34	1	34	31	KED
	Cu	63	0.706	ug/L	0.008	1	27	1818	1	KED
	Cu	65	0.709	ug/L	0.017	2	15	908	4	KED
	Zn	66	3.185	ug/L	0.146	4	24	974	2	KED
	Zn	67	3.024	ug/L	0.492	16	4	154	13	KED
	As	75	0.706	ug/L	0.033	4	3	109	4	KED
	Se	78	0.175	ug/L	0.193	110	8	11	24	KED
	Y	89		ug/L			293645	295911	2	Standard
	Kr	83		ug/L			55	69	8	Standard
>	In-1	115		ug/L			4956	5012	2	KED
	Cd	111	0.024	ug/L	0.015	64	0	4	61	KED
	Cd	114	0.005	ug/L	0.014	275	1	3	178	KED
>	In	115		ug/L			434608	442901	1	Standard
	Ag	107	0.023	ug/L	0.000	0	50	488	1	Standard
	Sb	121	0.339	ug/L	0.011	3	313	4824	1	Standard
	Sb	123	0.339	ug/L	0.016	4	239	3690	2	Standard
	Ba	135	2.074	ug/L	0.041	1	10	8184	0	Standard
	Ba	137	2.131	ug/L	0.019	0	18	14133	1	Standard
>	Tb	159		ug/L			641967	738304	3	Standard
	Pb	208	0.111	ug/L	0.003	2	168	6608	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0809-DUP2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 18:05:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	30496	2	Standard
	Cl	**37**		ug/L			3004573	3498787	2	Standard
⌈>	**Sc**	**45**		ug/L			451854	480180	2	Standard
|	**Al**	**27**	**3.392**	ug/L	0.020	0	1968	83580	2	Standard
|	**V**	**51**	**0.555**	ug/L	0.029	5	6603	19717	0	Standard
|	**V-1**	**51**	**0.581**	ug/L	0.026	4	121	13583	2	Standard
|	**Cr**	**52**	**0.234**	ug/L	0.044	18	19388	25078	0	Standard
|	**Cr**	**53**	**0.331**	ug/L	0.029	8	118	872	4	Standard
⌊	**Mn**	**55**	**307.305**	ug/L	12.620	4	595	8549958	3	Standard
⌈>	**Ge**	**72**		ug/L			17488	18230	1	KED
|	**Ni**	**60**	**0.215**	ug/L	0.010	4	3	191	4	KED
|	**Ni**	**62**	**0.183**	ug/L	0.049	26	1	27	24	KED
|	**Cu**	**63**	**0.669**	ug/L	0.011	1	27	1762	1	KED
|	**Cu**	**65**	**0.693**	ug/L	0.024	3	15	907	3	KED
|	**Zn**	**66**	**2.925**	ug/L	0.061	2	24	917	1	KED
|	**Zn**	**67**	**3.238**	ug/L	0.385	11	4	169	10	KED
|	**As**	**75**	**0.703**	ug/L	0.040	5	3	111	6	KED
⌊	**Se**	**78**	**0.155**	ug/L	0.075	48	8	11	10	KED
	Y	**89**		ug/L			293645	297619	2	Standard
	Kr	**83**		ug/L			55	59	6	Standard
⌈>	**In-1**	**115**		ug/L			4956	5284	2	KED
|	**Cd**	**111**	**0.016**	ug/L	0.003	16	0	3	17	KED
⌊	**Cd**	**114**	**0.014**	ug/L	0.009	62	1	7	51	KED
⌈>	**In**	**115**		ug/L			434608	445639	1	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.000	60	50	58	8	Standard
|	**Sb**	**121**	**0.026**	ug/L	0.004	15	313	671	6	Standard
|	**Sb**	**123**	**0.025**	ug/L	0.003	13	239	502	5	Standard
|	**Ba**	**135**	**1.848**	ug/L	0.013	0	10	7340	1	Standard
⌊	**Ba**	**137**	**1.886**	ug/L	0.069	3	18	12587	2	Standard
⌈>	**Tb**	**159**		ug/L			641967	741387	2	Standard
⌊	**Pb**	**208**	**0.026**	ug/L	0.000	1	168	1692	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0809-MS2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 18:10:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	30438	3	Standard
	Cl	**37**		ug/L			3004573	3591391	1	Standard
⌈>	**Sc**	**45**		ug/L			451854	487415	2	Standard
|	**Al**	**27**	**902.382**	ug/L	23.579	2	1968	22005291	2	Standard
|	**V**	**51**	**5.171**	ug/L	0.122	2	6603	127236	1	Standard
|	**V-1**	**51**	**5.259**	ug/L	0.143	2	121	123759	0	Standard
|	**Cr**	**52**	**5.013**	ug/L	0.154	3	19388	118641	1	Standard
|	**Cr**	**53**	**5.308**	ug/L	0.252	4	118	12294	2	Standard
⌊	**Mn**	**55**	**309.112**	ug/L	6.017	1	595	8729833	0	Standard
⌈>	**Ge**	**72**		ug/L			17488	18389	2	KED
|	**Ni**	**60**	**5.075**	ug/L	0.077	1	3	4454	3	KED
|	**Ni**	**62**	**5.351**	ug/L	0.322	6	1	766	4	KED
|	**Cu**	**63**	**5.493**	ug/L	0.186	3	27	14389	1	KED
|	**Cu**	**65**	**5.685**	ug/L	0.315	5	15	7393	5	KED
|	**Zn**	**66**	**19.250**	ug/L	1.048	5	24	5944	2	KED
|	**Zn**	**67**	**17.823**	ug/L	1.054	5	4	920	3	KED
|	**As**	**75**	**6.000**	ug/L	0.279	4	3	928	2	KED
⌊	**Se**	**78**	**16.513**	ug/L	0.520	3	8	272	1	KED
	Y	**89**		ug/L			293645	300630	1	Standard
	Kr	**83**		ug/L			55	58	7	Standard
⌈>	**In-1**	**115**		ug/L			4956	5238	3	KED
|	**Cd**	**111**	**5.257**	ug/L	0.193	3	0	951	3	KED
⌊	**Cd**	**114**	**5.250**	ug/L	0.424	8	1	2362	7	KED
⌈>	**In**	**115**		ug/L			434608	453947	0	Standard
|	**Ag**	**107**	**4.606**	ug/L	0.055	1	50	89310	1	Standard
|	**Sb**	**121**	**5.182**	ug/L	0.080	1	313	70870	1	Standard
|	**Sb**	**123**	**5.211**	ug/L	0.006	0	239	54549	0	Standard
|	**Ba**	**135**	**7.135**	ug/L	0.056	0	10	28832	0	Standard
⌊	**Ba**	**137**	**7.269**	ug/L	0.067	0	18	49378	0	Standard
⌈>	**Tb**	**159**		ug/L			641967	755848	1	Standard
⌊	**Pb**	**208**	**4.807**	ug/L	0.113	2	168	283953	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0809-MSD2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, March 31, 2023 18:14:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24214	31230	2	Standard
	Cl	37		ug/L			3004573	3538189	3	Standard
>	Sc	45		ug/L			451854	484823	0	Standard
	Al	27	889.363	ug/L	21.412	2	1968	21577649	2	Standard
	V	51	5.263	ug/L	0.233	4	6603	128684	3	Standard
	V-1	51	5.261	ug/L	0.187	3	121	123170	2	Standard
	Cr	52	5.109	ug/L	0.268	5	19388	119884	3	Standard
	Cr	53	5.109	ug/L	0.171	3	118	11783	2	Standard
	Mn	55	305.098	ug/L	5.228	1	595	8572705	1	Standard
>	Ge	72		ug/L			17488	18573	2	KED
	Ni	60	5.011	ug/L	0.075	1	3	4443	4	KED
	Ni	62	5.365	ug/L	0.255	4	1	776	4	KED
	Cu	63	5.511	ug/L	0.135	2	27	14582	0	KED
	Cu	65	5.601	ug/L	0.047	0	15	7358	2	KED
	Zn	66	18.427	ug/L	0.513	2	24	5754	3	KED
	Zn	67	17.596	ug/L	0.378	2	4	918	1	KED
	As	75	6.001	ug/L	0.333	5	3	937	2	KED
	Se	78	16.285	ug/L	0.384	2	8	271	1	KED
	Y	89		ug/L			293645	298003	1	Standard
	Kr	83		ug/L			55	67	14	Standard
>	In-1	115		ug/L			4956	5325	2	KED
	Cd	111	5.221	ug/L	0.030	0	0	960	3	KED
	Cd	114	5.043	ug/L	0.149	2	1	2307	0	KED
>	In	115		ug/L			434608	464140	0	Standard
	Ag	107	4.523	ug/L	0.113	2	50	89653	2	Standard
	Sb	121	5.064	ug/L	0.084	1	313	70815	2	Standard
	Sb	123	5.031	ug/L	0.072	1	239	53853	1	Standard
	Ba	135	7.051	ug/L	0.210	2	10	29137	3	Standard
	Ba	137	7.150	ug/L	0.053	0	18	49658	1	Standard
>	Tb	159		ug/L			641967	750637	3	Standard
	Pb	208	4.782	ug/L	0.134	2	168	280474	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0419-01
Sample Dil Factor: 10
Comments:
Sample Date/Time: Friday, March 31, 2023 18:21:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	25616	2	Standard
	Cl	**37**		ug/L			3004573	3101306	1	Standard
⌈>	**Sc**	**45**		ug/L			451854	444382	2	Standard
|	**Al**	**27**	**25.597**	ug/L	0.192	0	1968	571053	1	Standard
|	**V**	**51**	**0.088**	ug/L	0.010	11	6603	8351	0	Standard
|	**V-1**	**51**	**0.070**	ug/L	0.001	1	121	1619	1	Standard
|	**Cr**	**52**	**0.222**	ug/L	0.025	11	19388	23005	0	Standard
|	**Cr**	**53**	**0.158**	ug/L	0.006	3	118	446	4	Standard
⌊	**Mn**	**55**	**6.412**	ug/L	0.105	1	595	165679	1	Standard
⌈>	**Ge**	**72**		ug/L			17488	19070	2	KED
|	**Ni**	**60**	**0.255**	ug/L	0.012	4	3	236	2	KED
|	**Ni**	**62**	**0.291**	ug/L	0.037	12	1	44	10	KED
|	**Cu**	**63**	**0.774**	ug/L	0.041	5	27	2126	3	KED
|	**Cu**	**65**	**0.786**	ug/L	0.040	5	15	1074	2	KED
|	**Zn**	**66**	**96.471**	ug/L	0.875	0	24	30819	2	KED
|	**Zn**	**67**	**86.866**	ug/L	2.724	3	4	4633	0	KED
|	**As**	**75**	**0.020**	ug/L	0.012	60	3	7	26	KED
⌊	**Se**	**78**	**0.166**	ug/L	0.253	152	8	12	33	KED
	Y	**89**		ug/L			293645	285892	5	Standard
	Kr	**83**		ug/L			55	48	8	Standard
⌈>	**In-1**	**115**		ug/L			4956	5588	1	KED
|	**Cd**	**111**	**0.020**	ug/L	0.013	64	0	4	58	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.007	62	1	6	49	KED
⌈>	**In**	**115**		ug/L			434608	457139	3	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.000	20	50	85	10	Standard
|	**Sb**	**121**	**0.023**	ug/L	0.003	12	313	638	2	Standard
|	**Sb**	**123**	**0.021**	ug/L	0.001	3	239	474	3	Standard
|	**Ba**	**135**	**0.945**	ug/L	0.057	6	10	3848	2	Standard
⌊	**Ba**	**137**	**0.999**	ug/L	0.035	3	18	6847	1	Standard
⌈>	**Tb**	**159**		ug/L			641967	712392	4	Standard
⌊	**Pb**	**208**	**0.189**	ug/L	0.009	4	168	10679	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 18:26:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	24862	6	Standard
	Cl	**37**		ug/L			3004573	3039688	0	Standard
⌈>	**Sc**	**45**		ug/L			451854	445941	2	Standard
|	**Al**	**27**	**0.137**	ug/L	0.010	7	1968	4996	1	Standard
|	**V**	**51**	**0.020**	ug/L	0.003	13	6603	6939	2	Standard
|	**V-1**	**51**	**0.002**	ug/L	0.000	15	121	157	1	Standard
|	**Cr**	**52**	**0.064**	ug/L	0.009	13	19388	20282	2	Standard
|	**Cr**	**53**	**0.003**	ug/L	0.009	279	118	122	13	Standard
⌊	**Mn**	**55**	**0.008**	ug/L	0.001	16	595	803	2	Standard
⌈>	**Ge**	**72**		ug/L			17488	19405	1	KED
|	**Ni**	**60**	**0.007**	ug/L	0.003	44	3	10	26	KED
|	**Ni**	**62**	**-0.005**	ug/L	0.007	137	1	0	173	KED
|	**Cu**	**63**	**0.005**	ug/L	0.003	56	27	43	18	KED
|	**Cu**	**65**	**0.005**	ug/L	0.004	70	15	24	22	KED
|	**Zn**	**66**	**0.017**	ug/L	0.006	36	24	32	5	KED
|	**Zn**	**67**	**0.014**	ug/L	0.033	237	4	5	33	KED
|	**As**	**75**	**0.007**	ug/L	0.019	262	3	5	56	KED
⌊	**Se**	**78**	**0.137**	ug/L	0.139	101	8	11	18	KED
	Y	**89**		ug/L			293645	285652	2	Standard
	Kr	**83**		ug/L			55	50	15	Standard
⌈>	**In-1**	**115**		ug/L			4956	5340	4	KED
|	**Cd**	**111**	**0.009**	ug/L	0.010	119	0	1	100	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	382	1	1	104	KED
⌈>	**In**	**115**		ug/L			434608	461973	1	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	69	50	40	25	Standard
|	**Sb**	**121**	**-0.013**	ug/L	0.000	3	313	157	4	Standard
|	**Sb**	**123**	**-0.011**	ug/L	0.002	14	239	133	13	Standard
|	**Ba**	**135**	**0.009**	ug/L	0.002	20	10	50	15	Standard
⌊	**Ba**	**137**	**0.010**	ug/L	0.002	17	18	85	13	Standard
⌈>	**Tb**	**159**		ug/L			641967	723026	2	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	51	168	216	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 18:31:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	25635	2	Standard
	Cl	**37**		ug/L			3004573	3284057	3	Standard
⌈>	**Sc**	**45**		ug/L			451854	461204	1	Standard
|	**Al**	**27**	**4630.971**	ug/L	111.369	2	1968	106862998	1	Standard
|	**V**	**51**	**47.383**	ug/L	0.110	0	6603	1048489	1	Standard
|	**V-1**	**51**	**47.321**	ug/L	0.316	0	121	1053151	1	Standard
|	**Cr**	**52**	**48.397**	ug/L	0.022	0	19388	912990	1	Standard
|	**Cr**	**53**	**48.154**	ug/L	0.887	1	118	104659	3	Standard
⌊	**Mn**	**55**	**49.103**	ug/L	0.597	1	595	1313092	1	Standard
⌈>	**Ge**	**72**		ug/L			17488	18937	2	KED
|	**Ni**	**60**	**45.922**	ug/L	1.586	3	3	41450	1	KED
|	**Ni**	**62**	**46.352**	ug/L	0.903	1	1	6830	1	KED
|	**Cu**	**63**	**47.579**	ug/L	0.793	1	27	128157	1	KED
|	**Cu**	**65**	**46.363**	ug/L	1.951	4	15	61955	3	KED
|	**Zn**	**66**	**47.417**	ug/L	1.959	4	24	15044	1	KED
|	**Zn**	**67**	**46.980**	ug/L	3.701	7	4	2489	6	KED
|	**As**	**75**	**49.480**	ug/L	1.255	2	3	7856	0	KED
⌊	**Se**	**78**	**50.013**	ug/L	1.771	3	8	830	2	KED
	Y	**89**		ug/L			293645	299601	2	Standard
	Kr	**83**		ug/L			55	51	22	Standard
⌈>	**In-1**	**115**		ug/L			4956	5391	0	KED
|	**Cd**	**111**	**49.434**	ug/L	1.373	2	0	9206	2	KED
⌊	**Cd**	**114**	**48.236**	ug/L	0.212	0	1	22341	0	KED
⌈>	**In**	**115**		ug/L			434608	466330	0	Standard
|	**Ag**	**107**	**44.897**	ug/L	0.554	1	50	893637	0	Standard
|	**Sb**	**121**	**47.591**	ug/L	0.750	1	313	665785	0	Standard
|	**Sb**	**123**	**48.526**	ug/L	0.630	1	239	519662	0	Standard
|	**Ba**	**135**	**49.089**	ug/L	1.510	3	10	203699	2	Standard
⌊	**Ba**	**137**	**50.596**	ug/L	1.267	2	18	352901	1	Standard
⌈>	**Tb**	**159**		ug/L			641967	753206	2	Standard
⌊	**Pb**	**208**	**46.607**	ug/L	1.131	2	168	2741653	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 18:42:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24214	24851	3	Standard
	Cl	**37**		ug/L			3004573	3109174	1	Standard
⌈>	**Sc**	**45**		ug/L			451854	458190	2	Standard
|	**Al**	**27**	**0.009**	ug/L	0.003	35	1968	2205	4	Standard
|	**V**	**51**	**0.009**	ug/L	0.015	161	6603	6895	2	Standard
|	**V-1**	**51**	**0.001**	ug/L	0.001	110	121	136	9	Standard
|	**Cr**	**52**	**0.030**	ug/L	0.045	148	19388	20198	1	Standard
|	**Cr**	**53**	**0.000**	ug/L	0.004	877	118	120	10	Standard
⌊	**Mn**	**55**	**0.005**	ug/L	0.000	7	595	741	3	Standard
⌈>	**Ge**	**72**		ug/L			17488	19410	0	KED
|	**Ni**	**60**	**0.008**	ug/L	0.002	25	3	11	16	KED
|	**Ni**	**62**	**0.012**	ug/L	0.015	125	1	3	69	KED
|	**Cu**	**63**	**0.005**	ug/L	0.004	82	27	44	26	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.003	92	15	12	31	KED
|	**Zn**	**66**	**-0.006**	ug/L	0.033	541	24	24	42	KED
|	**Zn**	**67**	**-0.009**	ug/L	0.080	868	4	4	98	KED
|	**As**	**75**	**0.009**	ug/L	0.013	146	3	5	38	KED
⌊	**Se**	**78**	**0.179**	ug/L	0.047	26	8	12	5	KED
	Y	**89**		ug/L			293645	291031	3	Standard
	Kr	**83**		ug/L			55	48	21	Standard
⌈>	**In-1**	**115**		ug/L			4956	5335	0	KED
|	**Cd**	**111**	**0.007**	ug/L	0.006	88	0	1	69	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.005	117	1	3	69	KED
⌈>	**In**	**115**		ug/L			434608	467432	2	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	80	50	76	21	Standard
|	**Sb**	**121**	**0.102**	ug/L	0.005	4	313	1762	4	Standard
|	**Sb**	**123**	**0.104**	ug/L	0.005	4	239	1371	2	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.001	76	10	19	31	Standard
⌊	**Ba**	**137**	**0.002**	ug/L	0.001	56	18	32	20	Standard
⌈>	**Tb**	**159**		ug/L			641967	722856	2	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	15	168	335	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 18:48:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				24249	4	Standard
	Cl	**37**		ug/L				3111826	2	Standard
⎡>	**Sc**	**45**		ug/L				446275	1	Standard
⎢	**V**	**51**		ug/L				6985	2	Standard
⎢	**V-1**	**51**		ug/L				122	5	Standard
⎢	**Cr**	**52**		ug/L				20379	2	Standard
⎢	**Cr**	**53**		ug/L				108	9	Standard
⎣	**Mn**	**55**		ug/L				701	4	Standard
⎡>	**Ge**	**72**		ug/L				19285	3	KED
⎢	**Ni**	**60**		ug/L				7	66	KED
⎢	**Ni**	**62**		ug/L				3	124	KED
⎢	**Cu**	**63**		ug/L				37	37	KED
⎢	**Cu**	**65**		ug/L				17	22	KED
⎢	**Zn**	**66**		ug/L				24	13	KED
⎢	**Zn**	**67**		ug/L				4	65	KED
⎢	**As**	**75**		ug/L				3	34	KED
⎣	**Se**	**78**		ug/L				9	2	KED
	Y	**89**		ug/L				287409	5	Standard
	Kr	**83**		ug/L				52	9	Standard
⎡>	**In-1**	**115**		ug/L				5508	2	KED
⎢	**Cd**	**111**		ug/L				4	35	KED
⎣	**Cd**	**114**		ug/L				1	90	KED
⎡>	**In**	**115**		ug/L				456477	2	Standard
⎢	**Ag**	**107**		ug/L				46	27	Standard
⎢	**Sb**	**121**		ug/L				466	4	Standard
⎢	**Sb**	**123**		ug/L				343	9	Standard
⎢	**Ba**	**135**		ug/L				10	36	Standard
⎣	**Ba**	**137**		ug/L				19	45	Standard
⎡>	**Tb**	**159**		ug/L				710909	1	Standard
⎣	**Pb**	**208**		ug/L				226	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 18:53:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	25411	5	Standard
	Cl	**37**		ug/L			3111826	3312455	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	467354	2	Standard
|	**V**	**51**	**46.622**	ug/L	1.747	3	6985	1045416	1	Standard
|	**V-1**	**51**	**46.569**	ug/L	1.658	3	122	1049644	1	Standard
|	**Cr**	**52**	**48.490**	ug/L	1.157	2	20379	927860	0	Standard
|	**Cr**	**53**	**48.243**	ug/L	0.896	1	108	106200	0	Standard
⌊	**Mn**	**55**	**47.982**	ug/L	1.496	3	701	1299887	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	19333	2	KED
|	**Ni**	**60**	**47.473**	ug/L	0.548	1	7	43776	3	KED
|	**Ni**	**62**	**45.993**	ug/L	1.819	3	3	6919	2	KED
|	**Cu**	**63**	**46.405**	ug/L	1.157	2	37	127615	2	KED
|	**Cu**	**65**	**48.010**	ug/L	1.333	2	17	65502	1	KED
|	**Zn**	**66**	**49.156**	ug/L	2.355	4	24	15921	3	KED
|	**Zn**	**67**	**48.143**	ug/L	2.033	4	4	2605	2	KED
|	**As**	**75**	**49.719**	ug/L	0.233	0	3	8062	1	KED
⌊	**Se**	**78**	**48.930**	ug/L	1.800	3	9	829	3	KED
	Y	**89**		ug/L			287409	296459	4	Standard
	Kr	**83**		ug/L			52	58	21	Standard
⌈>	**In-1**	**115**		ug/L			5508	5653	1	KED
|	**Cd**	**111**	**47.475**	ug/L	1.566	3	4	9272	1	KED
⌊	**Cd**	**114**	**47.594**	ug/L	1.893	3	1	23104	2	KED
⌈>	**In**	**115**		ug/L			456477	461542	0	Standard
|	**Ag**	**107**	**45.305**	ug/L	1.120	2	46	892560	2	Standard
|	**Sb**	**121**	**49.161**	ug/L	0.602	1	466	680880	1	Standard
|	**Sb**	**123**	**48.886**	ug/L	0.820	1	343	518274	1	Standard
|	**Ba**	**135**	**49.578**	ug/L	0.130	0	10	203644	0	Standard
⌊	**Ba**	**137**	**51.079**	ug/L	0.721	1	19	352660	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	754715	1	Standard
⌊	**Pb**	**208**	**46.552**	ug/L	1.253	2	226	2744385	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 19:01:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	23935	2	Standard
	Cl	**37**		ug/L			3111826	3165852	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	451223	2	Standard
|	**V**	**51**	**-0.015**	ug/L	0.014	91	6985	6725	2	Standard
|	**V-1**	**51**	**-0.000**	ug/L	0.001	650	122	120	16	Standard
|	**Cr**	**52**	**-0.051**	ug/L	0.049	96	20379	19673	2	Standard
|	**Cr**	**53**	**0.001**	ug/L	0.002	324	108	110	2	Standard
⌊	**Mn**	**55**	**-0.000**	ug/L	0.001	243	701	700	5	Standard
⌈>	**Ge**	**72**		ug/L			19285	19653	0	KED
|	**Ni**	**60**	**0.003**	ug/L	0.007	202	7	10	56	KED
|	**Ni**	**62**	**-0.000**	ug/L	0.014	3543	3	3	69	KED
|	**Cu**	**63**	**0.002**	ug/L	0.003	138	37	45	21	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.003	1175	17	17	22	KED
|	**Zn**	**66**	**0.012**	ug/L	0.009	72	24	29	9	KED
|	**Zn**	**67**	**0.010**	ug/L	0.072	724	4	5	78	KED
|	**As**	**75**	**0.013**	ug/L	0.003	22	3	5	8	KED
⌊	**Se**	**78**	**0.103**	ug/L	0.088	85	9	11	13	KED
	Y	**89**		ug/L			287409	282170	1	Standard
	Kr	**83**		ug/L			52	53	24	Standard
⌈>	**In-1**	**115**		ug/L			5508	5326	1	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.018	1588	4	3	90	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.002	22	1	6	17	KED
⌈>	**In**	**115**		ug/L			456477	467412	1	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	68	46	69	22	Standard
|	**Sb**	**121**	**0.108**	ug/L	0.009	8	466	1991	5	Standard
|	**Sb**	**123**	**0.104**	ug/L	0.004	3	343	1465	1	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.000	2	10	19	0	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	155	19	24	29	Standard
⌈>	**Tb**	**159**		ug/L			710909	714263	3	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	11	226	455	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-02
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 19:08:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	30720	2	Standard
	Cl	**37**		ug/L			3111826	3242016	5	Standard
⌈>	**Sc**	**45**		ug/L			446275	518344	1	Standard
|	**V**	**51**	**12.972**	ug/L	0.176	1	6985	328661	2	Standard
|	**V-1**	**51**	**13.003**	ug/L	0.143	1	122	325355	2	Standard
|	**Cr**	**52**	**5.961**	ug/L	0.096	1	20379	147295	0	Standard
|	**Cr**	**53**	**6.339**	ug/L	0.175	2	108	15587	1	Standard
⌊	**Mn**	**55**	**60.159**	ug/L	0.525	0	701	1808156	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	19512	1	KED
|	**Ni**	**60**	**4.882**	ug/L	0.079	1	7	4549	1	KED
|	**Ni**	**62**	**4.944**	ug/L	0.171	3	3	753	2	KED
|	**Cu**	**63**	**11.496**	ug/L	0.526	4	37	31932	3	KED
|	**Cu**	**65**	**11.337**	ug/L	0.205	1	17	15628	1	KED
|	**Zn**	**66**	**26.652**	ug/L	0.344	1	24	8729	1	KED
|	**Zn**	**67**	**26.302**	ug/L	0.476	1	4	1439	2	KED
|	**As**	**75**	**2.050**	ug/L	0.093	4	3	338	3	KED
⌊	**Se**	**78**	**0.674**	ug/L	0.178	26	9	21	15	KED
	Y	**89**		ug/L			287409	407503	1	Standard
	Kr	**83**		ug/L			52	73	22	Standard
⌈>	**In-1**	**115**		ug/L			5508	5461	2	KED
|	**Cd**	**111**	**0.076**	ug/L	0.013	17	4	18	10	KED
⌊	**Cd**	**114**	**0.072**	ug/L	0.024	33	1	35	34	KED
⌈>	**In**	**115**		ug/L			456477	473617	1	Standard
|	**Ag**	**107**	**0.050**	ug/L	0.002	3	46	1053	2	Standard
|	**Sb**	**121**	**0.024**	ug/L	0.006	25	466	819	9	Standard
|	**Sb**	**123**	**0.023**	ug/L	0.003	13	343	610	3	Standard
|	**Ba**	**135**	**14.430**	ug/L	0.235	1	10	60818	0	Standard
⌊	**Ba**	**137**	**14.621**	ug/L	0.200	1	19	103583	0	Standard
⌈>	**Tb**	**159**		ug/L			710909	772233	3	Standard
⌊	**Pb**	**208**	**4.926**	ug/L	0.245	4	226	297095	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-03
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 19:13:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	29680	2	Standard
	Cl	**37**		ug/L			3111826	3279026	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	513936	0	Standard
|	**V**	**51**	**13.082**	ug/L	0.290	2	6985	328534	1	Standard
|	**V-1**	**51**	**13.055**	ug/L	0.272	2	122	323856	1	Standard
|	**Cr**	**52**	**5.955**	ug/L	0.217	3	20379	145923	2	Standard
|	**Cr**	**53**	**6.147**	ug/L	0.251	4	108	14993	4	Standard
⌊	**Mn**	**55**	**70.662**	ug/L	1.087	1	701	2105400	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	18946	2	KED
|	**Ni**	**60**	**5.387**	ug/L	0.109	2	7	4875	3	KED
|	**Ni**	**62**	**5.585**	ug/L	0.432	7	3	827	9	KED
|	**Cu**	**63**	**11.203**	ug/L	0.119	1	37	30224	1	KED
|	**Cu**	**65**	**11.230**	ug/L	0.124	1	17	15032	1	KED
|	**Zn**	**66**	**28.557**	ug/L	0.923	3	24	9077	2	KED
|	**Zn**	**67**	**26.618**	ug/L	0.462	1	4	1414	1	KED
|	**As**	**75**	**3.240**	ug/L	0.070	2	3	517	0	KED
⌊	**Se**	**78**	**0.601**	ug/L	0.138	22	9	19	10	KED
	Y	**89**		ug/L			287409	410684	1	Standard
	Kr	**83**		ug/L			52	62	19	Standard
⌈>	**In-1**	**115**		ug/L			5508	5517	0	KED
|	**Cd**	**111**	**0.068**	ug/L	0.010	14	4	17	11	KED
⌊	**Cd**	**114**	**0.061**	ug/L	0.022	35	1	30	34	KED
⌈>	**In**	**115**		ug/L			456477	477762	0	Standard
|	**Ag**	**107**	**0.045**	ug/L	0.000	0	46	959	0	Standard
|	**Sb**	**121**	**0.031**	ug/L	0.003	9	466	935	3	Standard
|	**Sb**	**123**	**0.036**	ug/L	0.003	9	343	750	5	Standard
|	**Ba**	**135**	**14.409**	ug/L	0.043	0	10	61272	0	Standard
⌊	**Ba**	**137**	**14.701**	ug/L	0.153	1	19	105079	0	Standard
⌈>	**Tb**	**159**		ug/L			710909	767972	1	Standard
⌊	**Pb**	**208**	**5.739**	ug/L	0.038	0	226	344568	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-04
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 19:18:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	29839	0	Standard
	Cl	**37**		ug/L			3111826	3121589	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	510949	0	Standard
|	**V**	**51**	**13.363**	ug/L	0.304	2	6985	333499	2	Standard
|	**V-1**	**51**	**13.359**	ug/L	0.327	2	122	329503	2	Standard
|	**Cr**	**52**	**7.779**	ug/L	0.167	2	20379	182371	1	Standard
|	**Cr**	**53**	**7.987**	ug/L	0.171	2	108	19330	2	Standard
⌊	**Mn**	**55**	**62.415**	ug/L	1.001	1	701	1848989	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	19808	1	KED
|	**Ni**	**60**	**5.527**	ug/L	0.148	2	7	5226	1	KED
|	**Ni**	**62**	**5.696**	ug/L	0.408	7	3	880	5	KED
|	**Cu**	**63**	**10.104**	ug/L	0.257	2	37	28503	2	KED
|	**Cu**	**65**	**10.510**	ug/L	0.275	2	17	14714	3	KED
|	**Zn**	**66**	**23.673**	ug/L	0.422	1	24	7873	2	KED
|	**Zn**	**67**	**23.230**	ug/L	0.720	3	4	1290	2	KED
|	**As**	**75**	**2.167**	ug/L	0.117	5	3	363	5	KED
⌊	**Se**	**78**	**0.547**	ug/L	0.271	49	9	19	23	KED
	Y	**89**		ug/L			287409	394756	1	Standard
	Kr	**83**		ug/L			52	69	15	Standard
⌈>	**In-1**	**115**		ug/L			5508	5500	4	KED
|	**Cd**	**111**	**0.066**	ug/L	0.018	27	4	16	16	KED
⌊	**Cd**	**114**	**0.075**	ug/L	0.013	16	1	36	20	KED
⌈>	**In**	**115**		ug/L			456477	470220	1	Standard
|	**Ag**	**107**	**0.043**	ug/L	0.003	6	46	916	4	Standard
|	**Sb**	**121**	**-0.013**	ug/L	0.001	10	466	292	6	Standard
|	**Sb**	**123**	**-0.011**	ug/L	0.002	19	343	238	9	Standard
|	**Ba**	**135**	**14.669**	ug/L	0.248	1	10	61402	3	Standard
⌊	**Ba**	**137**	**14.655**	ug/L	0.053	0	19	103096	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	775327	1	Standard
⌊	**Pb**	**208**	**5.231**	ug/L	0.040	0	226	317106	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-05
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 19:23:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	29680	2	Standard
	Cl	**37**		ug/L			3111826	3174111	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	508088	1	Standard
|	**V**	**51**	**12.524**	ug/L	0.371	2	6985	311180	1	Standard
|	**V-1**	**51**	**12.500**	ug/L	0.369	2	122	306455	1	Standard
|	**Cr**	**52**	**6.902**	ug/L	0.117	1	20379	163508	1	Standard
|	**Cr**	**53**	**7.045**	ug/L	0.142	2	108	16965	1	Standard
⌊	**Mn**	**55**	**64.721**	ug/L	2.418	3	701	1906024	2	Standard
⌈>	**Ge**	**72**		ug/L			19285	20129	2	KED
|	**Ni**	**60**	**5.329**	ug/L	0.134	2	7	5120	2	KED
|	**Ni**	**62**	**5.741**	ug/L	0.224	3	3	902	3	KED
|	**Cu**	**63**	**11.590**	ug/L	0.544	4	37	33199	2	KED
|	**Cu**	**65**	**11.464**	ug/L	0.314	2	17	16298	1	KED
|	**Zn**	**66**	**28.087**	ug/L	0.900	3	24	9482	0	KED
|	**Zn**	**67**	**27.505**	ug/L	1.607	5	4	1551	5	KED
|	**As**	**75**	**2.525**	ug/L	0.183	7	3	429	4	KED
⌊	**Se**	**78**	**0.701**	ug/L	0.106	15	9	22	10	KED
	Y	**89**		ug/L			287409	395071	2	Standard
	Kr	**83**		ug/L			52	64	13	Standard
⌈>	**In-1**	**115**		ug/L			5508	5633	2	KED
|	**Cd**	**111**	**0.065**	ug/L	0.027	41	4	16	29	KED
⌊	**Cd**	**114**	**0.065**	ug/L	0.016	24	1	32	22	KED
⌈>	**In**	**115**		ug/L			456477	473297	1	Standard
|	**Ag**	**107**	**0.042**	ug/L	0.000	1	46	889	1	Standard
|	**Sb**	**121**	**-0.008**	ug/L	0.001	9	466	369	4	Standard
|	**Sb**	**123**	**-0.006**	ug/L	0.002	32	343	291	8	Standard
|	**Ba**	**135**	**14.664**	ug/L	0.172	1	10	61765	0	Standard
⌊	**Ba**	**137**	**15.306**	ug/L	0.424	2	19	108367	2	Standard
⌈>	**Tb**	**159**		ug/L			710909	772108	2	Standard
⌊	**Pb**	**208**	**6.315**	ug/L	0.089	1	226	381080	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-07
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 19:28:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	30408	4	Standard
	Cl	**37**		ug/L			3111826	3171994	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	520709	2	Standard
|	**V**	**51**	**14.340**	ug/L	0.472	3	6985	363916	1	Standard
|	**V-1**	**51**	**14.235**	ug/L	0.454	3	122	357589	1	Standard
|	**Cr**	**52**	**6.837**	ug/L	0.175	2	20379	166178	1	Standard
|	**Cr**	**53**	**6.788**	ug/L	0.164	2	108	16754	0	Standard
⌊	**Mn**	**55**	**68.578**	ug/L	2.999	4	701	2069049	2	Standard
⌈>	**Ge**	**72**		ug/L			19285	19443	1	KED
|	**Ni**	**60**	**5.588**	ug/L	0.133	2	7	5187	1	KED
|	**Ni**	**62**	**5.583**	ug/L	0.164	2	3	847	1	KED
|	**Cu**	**63**	**12.237**	ug/L	0.279	2	37	33887	4	KED
|	**Cu**	**65**	**12.300**	ug/L	0.189	1	17	16894	1	KED
|	**Zn**	**66**	**26.686**	ug/L	0.837	3	24	8707	2	KED
|	**Zn**	**67**	**25.499**	ug/L	0.443	1	4	1390	2	KED
|	**As**	**75**	**2.572**	ug/L	0.031	1	3	422	2	KED
⌊	**Se**	**78**	**0.590**	ug/L	0.176	29	9	19	14	KED
	Y	**89**		ug/L			287409	416688	1	Standard
	Kr	**83**		ug/L			52	80	16	Standard
⌈>	**In-1**	**115**		ug/L			5508	5592	2	KED
|	**Cd**	**111**	**0.070**	ug/L	0.005	7	4	17	8	KED
⌊	**Cd**	**114**	**0.067**	ug/L	0.046	68	1	34	68	KED
⌈>	**In**	**115**		ug/L			456477	482386	1	Standard
|	**Ag**	**107**	**0.054**	ug/L	0.003	4	46	1158	3	Standard
|	**Sb**	**121**	**-0.016**	ug/L	0.002	9	466	256	8	Standard
|	**Sb**	**123**	**-0.017**	ug/L	0.001	6	343	169	6	Standard
|	**Ba**	**135**	**17.380**	ug/L	0.317	1	10	74607	0	Standard
⌊	**Ba**	**137**	**17.658**	ug/L	0.442	2	19	127410	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	771877	0	Standard
⌊	**Pb**	**208**	**5.877**	ug/L	0.014	0	226	354628	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-08
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 19:33:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	30139	4	Standard
	Cl	**37**		ug/L			3111826	3189768	3	Standard
⌈>	**Sc**	**45**		ug/L			446275	522624	0	Standard
|	**V**	**51**	**14.069**	ug/L	0.180	1	6985	358667	0	Standard
|	**V-1**	**51**	**14.023**	ug/L	0.172	1	122	353738	0	Standard
|	**Cr**	**52**	**6.300**	ug/L	0.180	2	20379	155622	2	Standard
|	**Cr**	**53**	**6.457**	ug/L	0.097	1	108	16009	0	Standard
⌊	**Mn**	**55**	**65.704**	ug/L	1.402	2	701	1990787	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	19508	1	KED
|	**Ni**	**60**	**5.418**	ug/L	0.247	4	7	5045	3	KED
|	**Ni**	**62**	**5.316**	ug/L	0.432	8	3	810	8	KED
|	**Cu**	**63**	**11.666**	ug/L	0.426	3	37	32397	2	KED
|	**Cu**	**65**	**11.666**	ug/L	0.071	0	17	16080	1	KED
|	**Zn**	**66**	**27.643**	ug/L	0.691	2	24	9048	1	KED
|	**Zn**	**67**	**27.273**	ug/L	2.054	7	4	1491	7	KED
|	**As**	**75**	**2.408**	ug/L	0.112	4	3	397	3	KED
⌊	**Se**	**78**	**0.680**	ug/L	0.182	26	9	21	15	KED
	Y	**89**		ug/L			287409	424531	1	Standard
	Kr	**83**		ug/L			52	81	29	Standard
⌈>	**In-1**	**115**		ug/L			5508	5390	3	KED
|	**Cd**	**111**	**0.070**	ug/L	0.013	18	4	17	16	KED
⌊	**Cd**	**114**	**0.090**	ug/L	0.026	28	1	42	24	KED
⌈>	**In**	**115**		ug/L			456477	468793	0	Standard
|	**Ag**	**107**	**0.049**	ug/L	0.002	4	46	1031	5	Standard
|	**Sb**	**121**	**-0.020**	ug/L	0.003	14	466	196	20	Standard
|	**Sb**	**123**	**-0.019**	ug/L	0.001	6	343	152	8	Standard
|	**Ba**	**135**	**17.320**	ug/L	0.133	0	10	72269	1	Standard
⌊	**Ba**	**137**	**17.596**	ug/L	0.032	0	19	123412	0	Standard
⌈>	**Tb**	**159**		ug/L			710909	778555	2	Standard
⌊	**Pb**	**208**	**4.951**	ug/L	0.134	2	226	301239	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-09
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 19:38:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31076	1	Standard
	Cl	**37**		ug/L			3111826	3159906	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	522493	2	Standard
|	**V**	**51**	**12.859**	ug/L	0.111	0	6985	328440	1	Standard
|	**V-1**	**51**	**12.811**	ug/L	0.129	1	122	323058	1	Standard
|	**Cr**	**52**	**5.999**	ug/L	0.088	1	20379	149269	0	Standard
|	**Cr**	**53**	**6.110**	ug/L	0.150	2	108	15146	0	Standard
⌊	**Mn**	**55**	**59.294**	ug/L	0.666	1	701	1796640	3	Standard
⌈>	**Ge**	**72**		ug/L			19285	19805	0	KED
|	**Ni**	**60**	**4.902**	ug/L	0.205	4	7	4636	3	KED
|	**Ni**	**62**	**4.712**	ug/L	0.087	1	3	729	2	KED
|	**Cu**	**63**	**11.407**	ug/L	0.462	4	37	32179	4	KED
|	**Cu**	**65**	**11.867**	ug/L	0.199	1	17	16605	1	KED
|	**Zn**	**66**	**26.152**	ug/L	0.723	2	24	8695	3	KED
|	**Zn**	**67**	**24.616**	ug/L	0.438	1	4	1367	2	KED
|	**As**	**75**	**2.822**	ug/L	0.065	2	3	472	3	KED
⌊	**Se**	**78**	**0.734**	ug/L	0.192	26	9	22	13	KED
	Y	**89**		ug/L			287409	398175	0	Standard
	Kr	**83**		ug/L			52	73	15	Standard
⌈>	**In-1**	**115**		ug/L			5508	5469	1	KED
|	**Cd**	**111**	**0.074**	ug/L	0.039	52	4	18	42	KED
⌊	**Cd**	**114**	**0.079**	ug/L	0.018	22	1	38	21	KED
⌈>	**In**	**115**		ug/L			456477	479912	1	Standard
|	**Ag**	**107**	**0.056**	ug/L	0.009	16	46	1195	14	Standard
|	**Sb**	**121**	**-0.017**	ug/L	0.001	4	466	243	5	Standard
|	**Sb**	**123**	**-0.014**	ug/L	0.002	11	343	201	7	Standard
|	**Ba**	**135**	**15.517**	ug/L	0.538	3	10	66257	1	Standard
⌊	**Ba**	**137**	**15.697**	ug/L	0.460	2	19	112671	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	758780	1	Standard
⌊	**Pb**	**208**	**5.819**	ug/L	0.109	1	226	345124	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-10
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 19:42:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31474	3	Standard
	Cl	**37**		ug/L			3111826	3277601	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	510914	0	Standard
|	**V**	**51**	**13.462**	ug/L	0.163	1	6985	335855	0	Standard
|	**V-1**	**51**	**13.447**	ug/L	0.145	1	122	331618	0	Standard
|	**Cr**	**52**	**7.895**	ug/L	0.103	1	20379	184727	0	Standard
|	**Cr**	**53**	**8.066**	ug/L	0.048	0	108	19519	0	Standard
⌊	**Mn**	**55**	**65.439**	ug/L	0.754	1	701	1938451	0	Standard
⌈>	**Ge**	**72**		ug/L			19285	19517	0	KED
|	**Ni**	**60**	**6.248**	ug/L	0.163	2	7	5822	1	KED
|	**Ni**	**62**	**6.390**	ug/L	0.389	6	3	974	6	KED
|	**Cu**	**63**	**19.122**	ug/L	0.438	2	37	53118	1	KED
|	**Cu**	**65**	**19.652**	ug/L	0.537	2	17	27085	2	KED
|	**Zn**	**66**	**62.450**	ug/L	2.012	3	24	20421	2	KED
|	**Zn**	**67**	**59.360**	ug/L	1.096	1	4	3243	2	KED
|	**As**	**75**	**2.914**	ug/L	0.055	1	3	480	2	KED
⌊	**Se**	**78**	**0.658**	ug/L	0.182	27	9	20	15	KED
	Y	**89**		ug/L			287409	408507	0	Standard
	Kr	**83**		ug/L			52	85	7	Standard
⌈>	**In-1**	**115**		ug/L			5508	5412	2	KED
|	**Cd**	**111**	**0.137**	ug/L	0.046	33	4	29	28	KED
⌊	**Cd**	**114**	**0.122**	ug/L	0.041	34	1	57	34	KED
⌈>	**In**	**115**		ug/L			456477	467881	0	Standard
|	**Ag**	**107**	**0.084**	ug/L	0.001	1	46	1727	0	Standard
|	**Sb**	**121**	**-0.012**	ug/L	0.003	25	466	313	13	Standard
|	**Sb**	**123**	**-0.010**	ug/L	0.001	11	343	239	5	Standard
|	**Ba**	**135**	**20.917**	ug/L	0.196	0	10	87101	0	Standard
⌊	**Ba**	**137**	**21.212**	ug/L	0.338	1	19	148476	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	768310	2	Standard
⌊	**Pb**	**208**	**15.538**	ug/L	0.456	2	226	932420	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-11
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 19:47:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31832	0	Standard
	Cl	**37**		ug/L			3111826	3229966	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	525681	1	Standard
|	**V**	**51**	**13.041**	ug/L	0.152	1	6985	334980	0	Standard
|	**V-1**	**51**	**13.020**	ug/L	0.150	1	122	330332	0	Standard
|	**Cr**	**52**	**7.898**	ug/L	0.177	2	20379	190109	1	Standard
|	**Cr**	**53**	**8.032**	ug/L	0.144	1	108	19995	1	Standard
⌊	**Mn**	**55**	**60.730**	ug/L	1.269	2	701	1850797	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	19418	2	KED
|	**Ni**	**60**	**5.982**	ug/L	0.217	3	7	5542	0	KED
|	**Ni**	**62**	**6.208**	ug/L	0.324	5	3	940	2	KED
|	**Cu**	**63**	**24.040**	ug/L	0.916	3	37	66411	3	KED
|	**Cu**	**65**	**24.422**	ug/L	1.199	4	17	33456	2	KED
|	**Zn**	**66**	**68.949**	ug/L	2.330	3	24	22419	0	KED
|	**Zn**	**67**	**66.105**	ug/L	3.105	4	4	3590	2	KED
|	**As**	**75**	**3.003**	ug/L	0.257	8	3	491	6	KED
⌊	**Se**	**78**	**0.592**	ug/L	0.112	18	9	19	11	KED
	Y	**89**		ug/L			287409	400489	3	Standard
	Kr	**83**		ug/L			52	71	16	Standard
⌈>	**In-1**	**115**		ug/L			5508	5456	2	KED
|	**Cd**	**111**	**0.171**	ug/L	0.049	28	4	36	25	KED
⌊	**Cd**	**114**	**0.125**	ug/L	0.012	9	1	59	11	KED
⌈>	**In**	**115**		ug/L			456477	469573	0	Standard
|	**Ag**	**107**	**0.135**	ug/L	0.005	3	46	2748	3	Standard
|	**Sb**	**121**	**-0.015**	ug/L	0.001	7	466	266	5	Standard
|	**Sb**	**123**	**-0.013**	ug/L	0.002	14	343	214	9	Standard
|	**Ba**	**135**	**17.691**	ug/L	0.387	2	10	73935	1	Standard
⌊	**Ba**	**137**	**18.780**	ug/L	0.659	3	19	131928	3	Standard
⌈>	**Tb**	**159**		ug/L			710909	763822	1	Standard
⌊	**Pb**	**208**	**23.609**	ug/L	0.280	1	226	1408874	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-12
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 19:52:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	29632	4	Standard
	Cl	**37**		ug/L			3111826	3165904	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	513477	2	Standard
|	**V**	**51**	**13.501**	ug/L	0.384	2	6985	338376	1	Standard
|	**V-1**	**51**	**13.479**	ug/L	0.357	2	122	333940	1	Standard
|	**Cr**	**52**	**6.299**	ug/L	0.193	3	20379	152819	1	Standard
|	**Cr**	**53**	**6.508**	ug/L	0.191	2	108	15850	3	Standard
⌊	**Mn**	**55**	**59.203**	ug/L	1.717	2	701	1761820	0	Standard
⌈>	**Ge**	**72**		ug/L			19285	19841	1	KED
|	**Ni**	**60**	**5.537**	ug/L	0.068	1	7	5246	0	KED
|	**Ni**	**62**	**5.718**	ug/L	0.360	6	3	885	5	KED
|	**Cu**	**63**	**9.526**	ug/L	0.183	1	37	26918	1	KED
|	**Cu**	**65**	**9.591**	ug/L	0.291	3	17	13445	1	KED
|	**Zn**	**66**	**25.262**	ug/L	0.811	3	24	8413	3	KED
|	**Zn**	**67**	**24.341**	ug/L	0.311	1	4	1354	2	KED
|	**As**	**75**	**2.299**	ug/L	0.060	2	3	385	1	KED
⌊	**Se**	**78**	**0.543**	ug/L	0.251	46	9	19	22	KED
	Y	**89**		ug/L			287409	413091	1	Standard
	Kr	**83**		ug/L			52	75	12	Standard
⌈>	**In-1**	**115**		ug/L			5508	5641	2	KED
|	**Cd**	**111**	**0.056**	ug/L	0.025	43	4	15	32	KED
⌊	**Cd**	**114**	**0.048**	ug/L	0.017	34	1	24	32	KED
⌈>	**In**	**115**		ug/L			456477	475831	0	Standard
|	**Ag**	**107**	**0.047**	ug/L	0.005	10	46	1007	9	Standard
|	**Sb**	**121**	**-0.025**	ug/L	0.001	4	466	135	11	Standard
|	**Sb**	**123**	**-0.022**	ug/L	0.001	3	343	116	7	Standard
|	**Ba**	**135**	**16.826**	ug/L	0.403	2	10	71262	2	Standard
⌊	**Ba**	**137**	**17.156**	ug/L	0.276	1	19	122127	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	766550	2	Standard
⌊	**Pb**	**208**	**5.031**	ug/L	0.080	1	226	301433	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 19:58:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	25993	2	Standard
	Cl	**37**		ug/L			3111826	3312103	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	462035	1	Standard
|	**V**	**51**	**47.263**	ug/L	0.602	1	6985	1048142	0	Standard
|	**V-1**	**51**	**46.881**	ug/L	0.772	1	122	1045120	1	Standard
|	**Cr**	**52**	**49.123**	ug/L	0.876	1	20379	929181	0	Standard
|	**Cr**	**53**	**47.798**	ug/L	1.222	2	108	104031	1	Standard
⌊	**Mn**	**55**	**50.430**	ug/L	0.110	0	701	1351134	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	19664	1	KED
|	**Ni**	**60**	**45.322**	ug/L	0.626	1	7	42500	0	KED
|	**Ni**	**62**	**47.231**	ug/L	1.341	2	3	7229	2	KED
|	**Cu**	**63**	**46.985**	ug/L	1.607	3	37	131424	2	KED
|	**Cu**	**65**	**47.222**	ug/L	0.618	1	17	65551	1	KED
|	**Zn**	**66**	**47.697**	ug/L	2.147	4	24	15718	3	KED
|	**Zn**	**67**	**47.935**	ug/L	1.307	2	4	2639	2	KED
|	**As**	**75**	**49.116**	ug/L	0.823	1	3	8100	0	KED
⌊	**Se**	**78**	**50.427**	ug/L	1.085	2	9	869	3	KED
	Y	**89**		ug/L			287409	299262	1	Standard
	Kr	**83**		ug/L			52	50	7	Standard
⌈>	**In-1**	**115**		ug/L			5508	5397	3	KED
|	**Cd**	**111**	**50.146**	ug/L	0.929	1	4	9350	1	KED
⌊	**Cd**	**114**	**49.210**	ug/L	0.526	1	1	22818	3	KED
⌈>	**In**	**115**		ug/L			456477	461318	1	Standard
|	**Ag**	**107**	**46.161**	ug/L	0.527	1	46	908850	0	Standard
|	**Sb**	**121**	**48.379**	ug/L	0.688	1	466	669687	1	Standard
|	**Sb**	**123**	**48.583**	ug/L	0.820	1	343	514703	0	Standard
|	**Ba**	**135**	**50.044**	ug/L	1.112	2	10	205398	0	Standard
⌊	**Ba**	**137**	**51.226**	ug/L	1.622	3	19	353403	2	Standard
⌈>	**Tb**	**159**		ug/L			710909	754648	2	Standard
⌊	**Pb**	**208**	**46.594**	ug/L	0.974	2	226	2746254	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 20:08:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	25936	5	Standard
	Cl	**37**		ug/L			3111826	3221929	1	Standard
⎡>	**Sc**	**45**		ug/L			446275	448764	2	Standard
⎢	**V**	**51**	**0.004**	ug/L	0.012	296	6985	7107	2	Standard
⎢	**V-1**	**51**	**-0.001**	ug/L	0.001	34	122	91	13	Standard
⎢	**Cr**	**52**	**0.017**	ug/L	0.043	255	20379	20782	2	Standard
⎢	**Cr**	**53**	**-0.002**	ug/L	0.003	136	108	104	3	Standard
⎣	**Mn**	**55**	**-0.002**	ug/L	0.001	65	701	651	3	Standard
⎡>	**Ge**	**72**		ug/L			19285	19330	2	KED
⎢	**Ni**	**60**	**0.001**	ug/L	0.007	498	7	8	68	KED
⎢	**Ni**	**62**	**-0.004**	ug/L	0.020	485	3	2	114	KED
⎢	**Cu**	**63**	**-0.002**	ug/L	0.004	164	37	31	33	KED
⎢	**Cu**	**65**	**0.006**	ug/L	0.006	114	17	25	34	KED
⎢	**Zn**	**66**	**-0.004**	ug/L	0.026	674	24	23	33	KED
⎢	**Zn**	**67**	**0.058**	ug/L	0.032	55	4	7	25	KED
⎢	**As**	**75**	**0.014**	ug/L	0.002	17	3	5	8	KED
⎣	**Se**	**78**	**0.018**	ug/L	0.031	170	9	10	7	KED
	Y	**89**		ug/L			287409	279318	0	Standard
	Kr	**83**		ug/L			52	55	33	Standard
⎡>	**In-1**	**115**		ug/L			5508	5410	1	KED
⎢	**Cd**	**111**	**-0.003**	ug/L	0.011	351	4	3	56	KED
⎣	**Cd**	**114**	**0.003**	ug/L	0.006	254	1	2	127	KED
⎡>	**In**	**115**		ug/L			456477	457905	1	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.001	83	46	62	21	Standard
⎢	**Sb**	**121**	**0.071**	ug/L	0.003	4	466	1448	1	Standard
⎢	**Sb**	**123**	**0.071**	ug/L	0.005	7	343	1088	4	Standard
⎢	**Ba**	**135**	**0.001**	ug/L	0.001	81	10	15	24	Standard
⎣	**Ba**	**137**	**0.002**	ug/L	0.000	21	19	33	8	Standard
⎡>	**Tb**	**159**		ug/L			710909	700932	4	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.000	6	226	447	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-13
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 20:14:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31108	4	Standard
	Cl	**37**		ug/L			3111826	3200967	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	530457	2	Standard
|	**V**	**51**	**14.168**	ug/L	0.589	4	6985	366394	2	Standard
|	**V-1**	**51**	**14.135**	ug/L	0.571	4	122	361731	2	Standard
|	**Cr**	**52**	**6.275**	ug/L	0.199	3	20379	157361	0	Standard
|	**Cr**	**53**	**6.477**	ug/L	0.245	3	108	16290	1	Standard
⌊	**Mn**	**55**	**68.103**	ug/L	2.272	3	701	2093566	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	20033	3	KED
|	**Ni**	**60**	**5.496**	ug/L	0.189	3	7	5254	1	KED
|	**Ni**	**62**	**5.581**	ug/L	0.113	2	3	873	4	KED
|	**Cu**	**63**	**11.725**	ug/L	0.575	4	37	33416	1	KED
|	**Cu**	**65**	**11.730**	ug/L	0.487	4	17	16592	2	KED
|	**Zn**	**66**	**23.794**	ug/L	1.267	5	24	7996	3	KED
|	**Zn**	**67**	**23.804**	ug/L	0.586	2	4	1338	5	KED
|	**As**	**75**	**2.531**	ug/L	0.266	10	3	427	7	KED
⌊	**Se**	**78**	**0.613**	ug/L	0.160	26	9	20	10	KED
	Y	**89**		ug/L			287409	426097	1	Standard
	Kr	**83**		ug/L			52	75	8	Standard
⌈>	**In-1**	**115**		ug/L			5508	5672	1	KED
|	**Cd**	**111**	**0.092**	ug/L	0.006	6	4	22	6	KED
⌊	**Cd**	**114**	**0.090**	ug/L	0.006	6	1	45	5	KED
⌈>	**In**	**115**		ug/L			456477	476671	0	Standard
|	**Ag**	**107**	**0.064**	ug/L	0.004	5	46	1342	4	Standard
|	**Sb**	**121**	**0.001**	ug/L	0.001	170	466	495	3	Standard
|	**Sb**	**123**	**0.001**	ug/L	0.001	160	343	367	3	Standard
|	**Ba**	**135**	**18.366**	ug/L	0.353	1	10	77910	1	Standard
⌊	**Ba**	**137**	**18.794**	ug/L	0.265	1	19	134020	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	788231	1	Standard
⌊	**Pb**	**208**	**6.082**	ug/L	0.091	1	226	374714	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0099-06
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 20:19:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	30519	1	Standard
	Cl	**37**		ug/L			3111826	3148026	0	Standard
>	**Sc**	**45**		ug/L			446275	510761	0	Standard
	V	**51**	**13.814**	ug/L	0.217	1	6985	344314	1	Standard
	V-1	**51**	**13.763**	ug/L	0.176	1	122	339300	0	Standard
	Cr	**52**	**6.401**	ug/L	0.221	3	20379	154137	2	Standard
	Cr	**53**	**6.527**	ug/L	0.088	1	108	15814	1	Standard
	Mn	**55**	**64.733**	ug/L	0.488	0	701	1916981	0	Standard
>	**Ge**	**72**		ug/L			19285	19914	2	KED
	Ni	**60**	**5.351**	ug/L	0.149	2	7	5087	0	KED
	Ni	**62**	**5.268**	ug/L	0.135	2	3	819	3	KED
	Cu	**63**	**11.703**	ug/L	0.190	1	37	33180	0	KED
	Cu	**65**	**12.031**	ug/L	0.350	2	17	16920	1	KED
	Zn	**66**	**25.824**	ug/L	1.629	6	24	8627	5	KED
	Zn	**67**	**24.774**	ug/L	1.408	5	4	1382	3	KED
	As	**75**	**2.811**	ug/L	0.072	2	3	472	2	KED
	Se	**78**	**0.729**	ug/L	0.182	24	9	22	11	KED
	Y	**89**		ug/L			287409	402854	0	Standard
	Kr	**83**		ug/L			52	57	16	Standard
>	**In-1**	**115**		ug/L			5508	5407	3	KED
	Cd	**111**	**0.068**	ug/L	0.024	35	4	16	29	KED
	Cd	**114**	**0.080**	ug/L	0.008	10	1	38	9	KED
>	**In**	**115**		ug/L			456477	473821	1	Standard
	Ag	**107**	**0.049**	ug/L	0.001	1	46	1033	0	Standard
	Sb	**121**	**-0.010**	ug/L	0.000	4	466	343	2	Standard
	Sb	**123**	**-0.007**	ug/L	0.001	12	343	283	3	Standard
	Ba	**135**	**15.453**	ug/L	0.395	2	10	65169	2	Standard
	Ba	**137**	**15.701**	ug/L	0.232	1	19	111301	1	Standard
>	**Tb**	**159**		ug/L			710909	772688	1	Standard
	Pb	**208**	**5.238**	ug/L	0.095	1	226	316398	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0692-DUP2
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 20:24:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24249	30542	6	Standard
	Cl	37		ug/L			3111826	3263801	1	Standard
>	Sc	45		ug/L			446275	514666	1	Standard
	V	51	14.402	ug/L	0.237	1	6985	361379	1	Standard
	V-1	51	14.344	ug/L	0.209	1	122	356304	1	Standard
	Cr	52	6.861	ug/L	0.096	1	20379	164812	1	Standard
	Cr	53	6.968	ug/L	0.105	1	108	17000	0	Standard
	Mn	55	65.253	ug/L	0.334	0	701	1947125	0	Standard
>	Ge	72		ug/L			19285	19878	2	KED
	Ni	60	5.468	ug/L	0.030	0	7	5190	2	KED
	Ni	62	5.557	ug/L	0.247	4	3	862	4	KED
	Cu	63	12.660	ug/L	0.349	2	37	35831	3	KED
	Cu	65	12.809	ug/L	0.484	3	17	17981	2	KED
	Zn	66	27.219	ug/L	0.795	2	24	9077	0	KED
	Zn	67	25.430	ug/L	0.737	2	4	1417	3	KED
	As	75	2.694	ug/L	0.073	2	3	452	1	KED
	Se	78	0.564	ug/L	0.227	40	9	19	17	KED
	Y	89		ug/L			287409	404317	1	Standard
	Kr	83		ug/L			52	66	7	Standard
>	In-1	115		ug/L			5508	5645	1	KED
	Cd	111	0.060	ug/L	0.034	57	4	15	42	KED
	Cd	114	0.072	ug/L	0.019	27	1	35	25	KED
>	In	115		ug/L			456477	470583	0	Standard
	Ag	107	0.047	ug/L	0.001	2	46	991	2	Standard
	Sb	121	-0.018	ug/L	0.003	19	466	230	21	Standard
	Sb	123	-0.015	ug/L	0.001	7	343	195	6	Standard
	Ba	135	15.761	ug/L	0.422	2	10	66014	2	Standard
	Ba	137	16.116	ug/L	0.165	1	19	113463	1	Standard
>	Tb	159		ug/L			710909	756862	2	Standard
	Pb	208	5.980	ug/L	0.120	1	226	353757	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0692-MS2
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 20:29:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	29945	4	Standard
	Cl	**37**		ug/L			3111826	3187912	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	509353	1	Standard
|	**V**	**51**	**22.913**	ug/L	0.598	2	6985	564200	1	Standard
|	**V-1**	**51**	**22.856**	ug/L	0.557	2	122	561709	1	Standard
|	**Cr**	**52**	**18.918**	ug/L	0.391	2	20379	408770	0	Standard
|	**Cr**	**53**	**18.889**	ug/L	0.478	2	108	45394	1	Standard
⌊	**Mn**	**55**	**74.698**	ug/L	1.603	2	701	2205573	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	19668	1	KED
|	**Ni**	**60**	**15.140**	ug/L	0.253	1	7	14205	1	KED
|	**Ni**	**62**	**15.330**	ug/L	0.413	2	3	2348	0	KED
|	**Cu**	**63**	**22.576**	ug/L	0.748	3	37	63176	2	KED
|	**Cu**	**65**	**23.188**	ug/L	0.494	2	17	32203	2	KED
|	**Zn**	**66**	**62.353**	ug/L	2.115	3	24	20543	1	KED
|	**Zn**	**67**	**57.318**	ug/L	0.723	1	4	3155	0	KED
|	**As**	**75**	**12.526**	ug/L	0.113	0	3	2069	1	KED
⌊	**Se**	**78**	**32.379**	ug/L	0.172	0	9	562	2	KED
	Y	**89**		ug/L			287409	407864	3	Standard
	Kr	**83**		ug/L			52	67	9	Standard
⌈>	**In-1**	**115**		ug/L			5508	5498	1	KED
|	**Cd**	**111**	**10.262**	ug/L	0.240	2	4	1952	0	KED
⌊	**Cd**	**114**	**10.740**	ug/L	0.398	3	1	5072	2	KED
⌈>	**In**	**115**		ug/L			456477	471444	1	Standard
|	**Ag**	**107**	**6.853**	ug/L	0.072	1	46	137966	2	Standard
|	**Sb**	**121**	**0.253**	ug/L	0.002	0	466	4055	0	Standard
|	**Sb**	**123**	**0.267**	ug/L	0.004	1	343	3247	0	Standard
|	**Ba**	**135**	**26.967**	ug/L	0.260	0	10	113158	2	Standard
⌊	**Ba**	**137**	**27.521**	ug/L	0.212	0	19	194085	0	Standard
⌈>	**Tb**	**159**		ug/L			710909	766276	2	Standard
⌊	**Pb**	**208**	**16.711**	ug/L	0.350	2	226	1000274	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0692-MSD2
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 20:34:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	29501	3	Standard
	Cl	**37**		ug/L			3111826	3203463	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	517177	1	Standard
|	**V**	**51**	**23.103**	ug/L	0.231	1	6985	577654	1	Standard
|	**V-1**	**51**	**23.091**	ug/L	0.094	0	122	576334	1	Standard
|	**Cr**	**52**	**16.641**	ug/L	0.509	3	20379	367930	2	Standard
|	**Cr**	**53**	**16.855**	ug/L	0.068	0	108	41153	1	Standard
⌊	**Mn**	**55**	**72.949**	ug/L	0.686	0	701	2187179	0	Standard
⌈>	**Ge**	**72**		ug/L			19285	20042	1	KED
|	**Ni**	**60**	**14.952**	ug/L	0.188	1	7	14295	0	KED
|	**Ni**	**62**	**15.013**	ug/L	0.240	1	3	2344	2	KED
|	**Cu**	**63**	**21.439**	ug/L	0.433	2	37	61156	2	KED
|	**Cu**	**65**	**21.607**	ug/L	0.174	0	17	30584	2	KED
|	**Zn**	**66**	**56.448**	ug/L	2.289	4	24	18951	2	KED
|	**Zn**	**67**	**53.258**	ug/L	1.229	2	4	2988	1	KED
|	**As**	**75**	**12.286**	ug/L	0.429	3	3	2067	1	KED
⌊	**Se**	**78**	**32.054**	ug/L	0.275	0	9	566	1	KED
	Y	**89**		ug/L			287409	406784	0	Standard
	Kr	**83**		ug/L			52	68	8	Standard
⌈>	**In-1**	**115**		ug/L			5508	5587	1	KED
|	**Cd**	**111**	**10.275**	ug/L	0.319	3	4	1987	2	KED
⌊	**Cd**	**114**	**10.186**	ug/L	0.351	3	1	4888	2	KED
⌈>	**In**	**115**		ug/L			456477	471978	0	Standard
|	**Ag**	**107**	**6.854**	ug/L	0.265	3	46	138115	3	Standard
|	**Sb**	**121**	**0.296**	ug/L	0.007	2	466	4664	1	Standard
|	**Sb**	**123**	**0.289**	ug/L	0.002	0	343	3482	0	Standard
|	**Ba**	**135**	**26.220**	ug/L	0.336	1	10	110134	0	Standard
⌊	**Ba**	**137**	**26.487**	ug/L	0.631	2	19	187006	2	Standard
⌈>	**Tb**	**159**		ug/L			710909	766970	2	Standard
⌊	**Pb**	**208**	**15.356**	ug/L	0.313	2	226	920015	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0692-PS2
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 20:39:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31359	1	Standard
	Cl	**37**		ug/L			3111826	3252562	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	522018	2	Standard
|	**V**	**51**	**34.260**	ug/L	1.191	3	6985	860198	1	Standard
|	**V-1**	**51**	**34.373**	ug/L	1.209	3	122	865315	0	Standard
|	**Cr**	**52**	**27.762**	ug/L	0.426	1	20379	603603	1	Standard
|	**Cr**	**53**	**28.388**	ug/L	0.870	3	108	69843	2	Standard
⌊	**Mn**	**55**	**85.968**	ug/L	3.665	4	701	2599788	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	19564	3	KED
|	**Ni**	**60**	**30.099**	ug/L	0.873	2	7	28091	4	KED
|	**Ni**	**62**	**30.435**	ug/L	1.542	5	3	4633	3	KED
|	**Cu**	**63**	**36.581**	ug/L	1.141	3	37	101773	1	KED
|	**Cu**	**65**	**37.681**	ug/L	0.632	1	17	52050	3	KED
|	**Zn**	**66**	**105.248**	ug/L	1.349	1	24	34482	2	KED
|	**Zn**	**67**	**98.744**	ug/L	2.955	2	4	5402	0	KED
|	**As**	**75**	**27.466**	ug/L	0.818	2	3	4506	1	KED
⌊	**Se**	**78**	**80.994**	ug/L	3.634	4	9	1382	1	KED
	Y	**89**		ug/L			287409	400403	0	Standard
	Kr	**83**		ug/L			52	81	9	Standard
⌈>	**In-1**	**115**		ug/L			5508	5590	3	KED
|	**Cd**	**111**	**24.704**	ug/L	0.385	1	4	4774	2	KED
⌊	**Cd**	**114**	**24.285**	ug/L	0.482	1	1	11660	1	KED
⌈>	**In**	**115**		ug/L			456477	472089	1	Standard
|	**Ag**	**107**	**22.667**	ug/L	0.190	0	46	456742	1	Standard
|	**Sb**	**121**	**-0.016**	ug/L	0.002	11	466	253	8	Standard
|	**Sb**	**123**	**-0.015**	ug/L	0.003	21	343	196	17	Standard
|	**Ba**	**135**	**39.450**	ug/L	0.907	2	10	165698	0	Standard
⌊	**Ba**	**137**	**40.560**	ug/L	1.469	3	19	286310	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	749555	1	Standard
⌊	**Pb**	**208**	**29.017**	ug/L	0.320	1	226	1699329	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-10
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 20:44:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31698	1	Standard
	Cl	**37**		ug/L			3111826	3199360	3	Standard
⌈>	**Sc**	**45**		ug/L			446275	527685	3	Standard
|	**V**	**51**	**11.667**	ug/L	0.308	2	6985	301600	0	Standard
|	**V-1**	**51**	**11.631**	ug/L	0.259	2	122	296134	0	Standard
|	**Cr**	**52**	**5.188**	ug/L	0.295	5	20379	133533	2	Standard
|	**Cr**	**53**	**5.323**	ug/L	0.128	2	108	13341	0	Standard
⌊	**Mn**	**55**	**56.227**	ug/L	1.906	3	701	1719698	2	Standard
⌈>	**Ge**	**72**		ug/L			19285	20394	1	KED
|	**Ni**	**60**	**4.429**	ug/L	0.297	6	7	4312	5	KED
|	**Ni**	**62**	**4.724**	ug/L	0.156	3	3	753	3	KED
|	**Cu**	**63**	**7.965**	ug/L	0.262	3	37	23138	2	KED
|	**Cu**	**65**	**8.182**	ug/L	0.116	1	17	11793	0	KED
|	**Zn**	**66**	**17.998**	ug/L	0.905	5	24	6166	3	KED
|	**Zn**	**67**	**19.106**	ug/L	1.128	5	4	1093	4	KED
|	**As**	**75**	**2.023**	ug/L	0.074	3	3	349	3	KED
⌊	**Se**	**78**	**0.593**	ug/L	0.046	7	9	20	4	KED
	Y	**89**		ug/L			287409	396806	2	Standard
	Kr	**83**		ug/L			52	67	12	Standard
⌈>	**In-1**	**115**		ug/L			5508	5684	0	KED
|	**Cd**	**111**	**0.036**	ug/L	0.025	69	4	11	44	KED
⌊	**Cd**	**114**	**0.062**	ug/L	0.015	24	1	31	23	KED
⌈>	**In**	**115**		ug/L			456477	476933	1	Standard
|	**Ag**	**107**	**0.036**	ug/L	0.002	4	46	772	4	Standard
|	**Sb**	**121**	**-0.021**	ug/L	0.001	2	466	179	4	Standard
|	**Sb**	**123**	**-0.020**	ug/L	0.001	3	343	141	3	Standard
|	**Ba**	**135**	**13.183**	ug/L	0.261	1	10	55951	0	Standard
⌊	**Ba**	**137**	**13.487**	ug/L	0.173	1	19	96248	2	Standard
⌈>	**Tb**	**159**		ug/L			710909	761100	3	Standard
⌊	**Pb**	**208**	**3.407**	ug/L	0.105	3	226	202673	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-11
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 20:49:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	32597	2	Standard
	Cl	**37**		ug/L			3111826	3145021	3	Standard
⌈>	**Sc**	**45**		ug/L			446275	506349	0	Standard
|	**V**	**51**	**12.400**	ug/L	0.271	2	6985	307222	1	Standard
|	**V-1**	**51**	**12.331**	ug/L	0.232	1	122	301379	1	Standard
|	**Cr**	**52**	**5.914**	ug/L	0.085	1	20379	142952	0	Standard
|	**Cr**	**53**	**5.942**	ug/L	0.037	0	108	14284	1	Standard
⌊	**Mn**	**55**	**62.344**	ug/L	0.821	1	701	1830445	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	19110	4	KED
|	**Ni**	**60**	**5.034**	ug/L	0.278	5	7	4589	3	KED
|	**Ni**	**62**	**5.348**	ug/L	0.499	9	3	796	4	KED
|	**Cu**	**63**	**12.771**	ug/L	0.597	4	37	34704	1	KED
|	**Cu**	**65**	**12.574**	ug/L	0.898	7	17	16941	3	KED
|	**Zn**	**66**	**25.124**	ug/L	0.586	2	24	8055	2	KED
|	**Zn**	**67**	**23.942**	ug/L	2.109	8	4	1280	5	KED
|	**As**	**75**	**2.706**	ug/L	0.135	4	3	436	1	KED
⌊	**Se**	**78**	**0.722**	ug/L	0.187	25	9	21	9	KED
	Y	**89**		ug/L			287409	390971	1	Standard
	Kr	**83**		ug/L			52	69	15	Standard
⌈>	**In-1**	**115**		ug/L			5508	5710	1	KED
|	**Cd**	**111**	**0.057**	ug/L	0.017	30	4	15	23	KED
⌊	**Cd**	**114**	**0.093**	ug/L	0.018	19	1	46	17	KED
⌈>	**In**	**115**		ug/L			456477	467123	0	Standard
|	**Ag**	**107**	**0.057**	ug/L	0.003	4	46	1175	4	Standard
|	**Sb**	**121**	**-0.024**	ug/L	0.001	3	466	141	8	Standard
|	**Sb**	**123**	**-0.020**	ug/L	0.002	7	343	133	12	Standard
|	**Ba**	**135**	**14.772**	ug/L	0.387	2	10	61423	3	Standard
⌊	**Ba**	**137**	**15.125**	ug/L	0.185	1	19	105701	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	742709	2	Standard
⌊	**Pb**	**208**	**5.518**	ug/L	0.185	3	226	320221	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-13
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 20:53:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	29643	4	Standard
	Cl	**37**		ug/L			3111826	3214480	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	514268	2	Standard
|	**V**	**51**	**13.918**	ug/L	0.392	2	6985	349147	1	Standard
|	**V-1**	**51**	**13.946**	ug/L	0.382	2	122	346083	1	Standard
|	**Cr**	**52**	**9.212**	ug/L	0.253	2	20379	213005	1	Standard
|	**Cr**	**53**	**9.490**	ug/L	0.223	2	108	23089	1	Standard
⌊	**Mn**	**55**	**52.360**	ug/L	1.284	2	701	1561037	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	19670	2	KED
|	**Ni**	**60**	**5.143**	ug/L	0.325	6	7	4827	4	KED
|	**Ni**	**62**	**5.244**	ug/L	0.120	2	3	805	2	KED
|	**Cu**	**63**	**11.969**	ug/L	0.160	1	37	33519	1	KED
|	**Cu**	**65**	**12.069**	ug/L	0.122	1	17	16771	1	KED
|	**Zn**	**66**	**29.939**	ug/L	1.165	3	24	9876	2	KED
|	**Zn**	**67**	**28.167**	ug/L	0.492	1	4	1553	3	KED
|	**As**	**75**	**2.935**	ug/L	0.059	2	3	487	0	KED
⌊	**Se**	**78**	**0.694**	ug/L	0.283	40	9	21	24	KED
	Y	**89**		ug/L			287409	399189	3	Standard
	Kr	**83**		ug/L			52	80	8	Standard
⌈>	**In-1**	**115**		ug/L			5508	5660	1	KED
|	**Cd**	**111**	**0.214**	ug/L	0.027	12	4	46	11	KED
⌊	**Cd**	**114**	**0.221**	ug/L	0.017	7	1	108	7	KED
⌈>	**In**	**115**		ug/L			456477	472475	1	Standard
|	**Ag**	**107**	**0.196**	ug/L	0.006	3	46	3992	1	Standard
|	**Sb**	**121**	**-0.022**	ug/L	0.001	4	466	163	7	Standard
|	**Sb**	**123**	**-0.021**	ug/L	0.001	6	343	132	9	Standard
|	**Ba**	**135**	**18.160**	ug/L	0.148	0	10	76360	0	Standard
⌊	**Ba**	**137**	**18.511**	ug/L	0.235	1	19	130830	0	Standard
⌈>	**Tb**	**159**		ug/L			710909	758562	3	Standard
⌊	**Pb**	**208**	**16.146**	ug/L	0.508	3	226	956407	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-15
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 20:58:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31959	3	Standard
	Cl	**37**		ug/L			3111826	3197047	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	518007	1	Standard
|	**V**	**51**	**11.979**	ug/L	0.098	0	6985	303922	2	Standard
|	**V-1**	**51**	**11.931**	ug/L	0.067	0	122	298342	1	Standard
|	**Cr**	**52**	**5.414**	ug/L	0.222	4	20379	135909	4	Standard
|	**Cr**	**53**	**5.515**	ug/L	0.060	1	108	13573	2	Standard
⌊	**Mn**	**55**	**53.613**	ug/L	1.129	2	701	1610101	0	Standard
⌈>	**Ge**	**72**		ug/L			19285	19963	1	KED
|	**Ni**	**60**	**4.706**	ug/L	0.054	1	7	4487	0	KED
|	**Ni**	**62**	**4.643**	ug/L	0.038	0	3	724	1	KED
|	**Cu**	**63**	**10.093**	ug/L	0.398	3	37	28687	2	KED
|	**Cu**	**65**	**10.129**	ug/L	0.282	2	17	14285	1	KED
|	**Zn**	**66**	**20.635**	ug/L	0.622	3	24	6918	1	KED
|	**Zn**	**67**	**20.378**	ug/L	0.613	3	4	1141	1	KED
|	**As**	**75**	**1.994**	ug/L	0.099	4	3	337	5	KED
⌊	**Se**	**78**	**0.525**	ug/L	0.353	67	9	19	32	KED
	Y	**89**		ug/L			287409	404953	1	Standard
	Kr	**83**		ug/L			52	77	15	Standard
⌈>	**In-1**	**115**		ug/L			5508	5434	3	KED
|	**Cd**	**111**	**0.063**	ug/L	0.023	35	4	15	24	KED
⌊	**Cd**	**114**	**0.060**	ug/L	0.009	14	1	29	10	KED
⌈>	**In**	**115**		ug/L			456477	464220	1	Standard
|	**Ag**	**107**	**0.044**	ug/L	0.003	6	46	926	5	Standard
|	**Sb**	**121**	**-0.026**	ug/L	0.001	4	466	117	11	Standard
|	**Sb**	**123**	**-0.023**	ug/L	0.003	11	343	106	25	Standard
|	**Ba**	**135**	**12.131**	ug/L	0.104	0	10	50123	1	Standard
⌊	**Ba**	**137**	**12.214**	ug/L	0.212	1	19	84820	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	761792	4	Standard
⌊	**Pb**	**208**	**4.142**	ug/L	0.143	3	226	246516	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 21:04:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	26864	0	Standard
	Cl	**37**		ug/L			3111826	3232489	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	468841	0	Standard
|	**V**	**51**	**47.280**	ug/L	0.838	1	6985	1064132	2	Standard
|	**V-1**	**51**	**47.448**	ug/L	1.201	2	122	1073573	3	Standard
|	**Cr**	**52**	**47.844**	ug/L	1.075	2	20379	918963	2	Standard
|	**Cr**	**53**	**48.375**	ug/L	0.337	0	108	106861	1	Standard
⌊	**Mn**	**55**	**47.742**	ug/L	0.108	0	701	1298001	0	Standard
⌈>	**Ge**	**72**		ug/L			19285	19539	2	KED
|	**Ni**	**60**	**45.980**	ug/L	1.098	2	7	42842	3	KED
|	**Ni**	**62**	**47.846**	ug/L	2.966	6	3	7269	3	KED
|	**Cu**	**63**	**47.347**	ug/L	1.326	2	37	131567	1	KED
|	**Cu**	**65**	**47.174**	ug/L	1.309	2	17	65048	2	KED
|	**Zn**	**66**	**48.503**	ug/L	1.656	3	24	15878	1	KED
|	**Zn**	**67**	**49.045**	ug/L	3.843	7	4	2680	5	KED
|	**As**	**75**	**49.408**	ug/L	0.564	1	3	8096	2	KED
⌊	**Se**	**78**	**50.983**	ug/L	2.448	4	9	872	2	KED
	Y	**89**		ug/L			287409	292889	1	Standard
	Kr	**83**		ug/L			52	60	6	Standard
⌈>	**In-1**	**115**		ug/L			5508	5312	2	KED
|	**Cd**	**111**	**51.516**	ug/L	1.259	2	4	9454	1	KED
⌊	**Cd**	**114**	**50.609**	ug/L	1.141	2	1	23092	2	KED
⌈>	**In**	**115**		ug/L			456477	464555	0	Standard
|	**Ag**	**107**	**44.405**	ug/L	0.878	1	46	880621	2	Standard
|	**Sb**	**121**	**48.415**	ug/L	0.299	0	466	674915	0	Standard
|	**Sb**	**123**	**47.957**	ug/L	0.481	1	343	511722	0	Standard
|	**Ba**	**135**	**49.005**	ug/L	0.216	0	10	202604	0	Standard
⌊	**Ba**	**137**	**50.725**	ug/L	1.672	3	19	352448	2	Standard
⌈>	**Tb**	**159**		ug/L			710909	751619	3	Standard
⌊	**Pb**	**208**	**46.749**	ug/L	1.222	2	226	2743434	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 21:12:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	25532	4	Standard
	Cl	**37**		ug/L			3111826	3218675	2	Standard
⎡>	**Sc**	**45**		ug/L			446275	455407	2	Standard
⎢	**V**	**51**	**-0.000**	ug/L	0.008	20155	6985	7124	0	Standard
⎢	**V-1**	**51**	**-0.002**	ug/L	0.000	19	122	70	14	Standard
⎢	**Cr**	**52**	**0.008**	ug/L	0.028	331	20379	20943	0	Standard
⎢	**Cr**	**53**	**0.000**	ug/L	0.004	2623	108	110	7	Standard
⎣	**Mn**	**55**	**-0.002**	ug/L	0.001	47	701	654	2	Standard
⎡>	**Ge**	**72**		ug/L			19285	19207	2	KED
⎢	**Ni**	**60**	**0.001**	ug/L	0.003	227	7	8	32	KED
⎢	**Ni**	**62**	**0.009**	ug/L	0.008	87	3	4	24	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.004	299	37	33	31	KED
⎢	**Cu**	**65**	**0.002**	ug/L	0.002	101	17	20	10	KED
⎢	**Zn**	**66**	**0.030**	ug/L	0.019	63	24	34	20	KED
⎢	**Zn**	**67**	**0.013**	ug/L	0.044	340	4	5	43	KED
⎢	**As**	**75**	**0.006**	ug/L	0.010	157	3	4	32	KED
⎣	**Se**	**78**	**0.196**	ug/L	0.168	86	9	12	19	KED
	Y	**89**		ug/L			287409	288186	3	Standard
	Kr	**83**		ug/L			52	55	25	Standard
⎡>	**In-1**	**115**		ug/L			5508	5358	1	KED
⎢	**Cd**	**111**	**-0.003**	ug/L	0.008	289	4	3	41	KED
⎣	**Cd**	**114**	**0.006**	ug/L	0.004	76	1	3	52	KED
⎡>	**In**	**115**		ug/L			456477	471223	1	Standard
⎢	**Ag**	**107**	**0.002**	ug/L	0.001	44	46	78	17	Standard
⎢	**Sb**	**121**	**0.090**	ug/L	0.002	1	466	1746	0	Standard
⎢	**Sb**	**123**	**0.084**	ug/L	0.004	4	343	1257	1	Standard
⎢	**Ba**	**135**	**0.001**	ug/L	0.001	136	10	14	32	Standard
⎣	**Ba**	**137**	**0.001**	ug/L	0.001	92	19	26	23	Standard
⎡>	**Tb**	**159**		ug/L			710909	713387	1	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.001	21	226	424	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0703-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, March 31, 2023 21:20:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24249	30893	3	Standard
	Cl	37		ug/L			3111826	3247701	2	Standard
>	Sc	45		ug/L			446275	466460	1	Standard
	V	51	0.006	ug/L	0.011	192	6985	7431	3	Standard
	V-1	51	0.002	ug/L	0.006	303	122	174	80	Standard
	Cr	52	0.019	ug/L	0.021	110	20379	21662	1	Standard
	Cr	53	0.006	ug/L	0.001	17	108	126	2	Standard
	Mn	55	0.013	ug/L	0.024	186	701	1084	60	Standard
>	Ge	72		ug/L			19285	20709	1	KED
	Ni	60	-0.003	ug/L	0.003	90	7	5	57	KED
	Ni	62	-0.013	ug/L	0.007	51	3	1	86	KED
	Cu	63	0.007	ug/L	0.003	35	37	61	11	KED
	Cu	65	0.006	ug/L	0.006	112	17	27	32	KED
	Zn	66	0.046	ug/L	0.018	38	24	42	15	KED
	Zn	67	0.050	ug/L	0.068	136	4	7	50	KED
	As	75	0.005	ug/L	0.011	217	3	4	39	KED
	Se	78	0.163	ug/L	0.165	101	9	13	23	KED
	Y	89		ug/L			287409	300178	1	Standard
	Kr	83		ug/L			52	53	8	Standard
>	In-1	115		ug/L			5508	5595	2	KED
	Cd	111	-0.010	ug/L	0.008	74	4	2	65	KED
	Cd	114	0.005	ug/L	0.007	132	1	3	87	KED
>	In	115		ug/L			456477	477340	0	Standard
	Ag	107	0.002	ug/L	0.003	136	46	97	68	Standard
	Sb	121	0.013	ug/L	0.001	11	466	671	2	Standard
	Sb	123	0.016	ug/L	0.004	26	343	539	8	Standard
	Ba	135	0.324	ug/L	0.020	6	10	1386	5	Standard
	Ba	137	0.311	ug/L	0.009	2	19	2241	2	Standard
>	Tb	159		ug/L			710909	728089	2	Standard
	Pb	208	0.005	ug/L	0.006	139	226	494	75	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0703-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, March 31, 2023 21:25:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24249	29474	3	Standard
	Cl	37		ug/L			3111826	3310090	4	Standard
⌈>	Sc	45		ug/L			446275	470251	5	Standard
|	V	51	25.034	ug/L	0.838	3	6985	567901	2	Standard
|	V-1	51	24.923	ug/L	0.729	2	122	565020	2	Standard
|	Cr	52	26.952	ug/L	1.848	6	20379	527415	1	Standard
|	Cr	53	26.512	ug/L	1.466	5	108	58676	0	Standard
⌊	Mn	55	26.312	ug/L	1.566	5	701	716352	0	Standard
⌈>	Ge	72		ug/L			19285	20412	2	KED
|	Ni	60	23.777	ug/L	0.340	1	7	23146	1	KED
|	Ni	62	24.277	ug/L	0.504	2	3	3858	0	KED
|	Cu	63	24.484	ug/L	0.719	2	37	71093	0	KED
|	Cu	65	24.935	ug/L	1.240	4	17	35913	2	KED
|	Zn	66	75.683	ug/L	2.520	3	24	25874	2	KED
|	Zn	67	72.613	ug/L	1.447	1	4	4147	0	KED
|	As	75	24.165	ug/L	0.753	3	3	4137	1	KED
⌊	Se	78	76.884	ug/L	2.601	3	9	1370	2	KED
	Y	89		ug/L			287409	297731	2	Standard
	Kr	83		ug/L			52	55	15	Standard
⌈>	In-1	115		ug/L			5508	5724	1	KED
|	Cd	111	25.206	ug/L	1.099	4	4	4986	2	KED
⌊	Cd	114	25.010	ug/L	0.992	3	1	12295	2	KED
⌈>	In	115		ug/L			456477	473347	4	Standard
|	Ag	107	24.621	ug/L	1.051	4	46	496795	0	Standard
|	Sb	121	26.294	ug/L	1.260	4	466	373138	0	Standard
|	Sb	123	25.788	ug/L	1.098	4	343	280172	0	Standard
|	Ba	135	25.897	ug/L	1.117	4	10	108949	1	Standard
⌊	Ba	137	26.080	ug/L	0.842	3	19	184484	1	Standard
⌈>	Tb	159		ug/L			710909	726814	3	Standard
⌊	Pb	208	26.325	ug/L	0.710	2	226	1493966	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0133-06
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 21:30:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	29862	1	Standard
	Cl	**37**		ug/L			3111826	3113983	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	520811	1	Standard
|	**V**	**51**	**12.060**	ug/L	0.012	0	6985	307565	1	Standard
|	**V-1**	**51**	**12.061**	ug/L	0.048	0	122	303213	1	Standard
|	**Cr**	**52**	**5.321**	ug/L	0.179	3	20379	134655	2	Standard
|	**Cr**	**53**	**5.589**	ug/L	0.059	1	108	13824	0	Standard
⌊	**Mn**	**55**	**61.739**	ug/L	0.607	0	701	1864266	0	Standard
⌈>	**Ge**	**72**		ug/L			19285	20502	1	KED
|	**Ni**	**60**	**4.563**	ug/L	0.164	3	7	4467	1	KED
|	**Ni**	**62**	**4.463**	ug/L	0.261	5	3	714	4	KED
|	**Cu**	**63**	**9.426**	ug/L	0.168	1	37	27528	2	KED
|	**Cu**	**65**	**9.607**	ug/L	0.200	2	17	13917	1	KED
|	**Zn**	**66**	**19.555**	ug/L	0.574	2	24	6734	1	KED
|	**Zn**	**67**	**19.560**	ug/L	0.646	3	4	1125	3	KED
|	**As**	**75**	**2.240**	ug/L	0.152	6	3	388	5	KED
⌊	**Se**	**78**	**0.682**	ug/L	0.066	9	9	22	3	KED
	Y	**89**		ug/L			287409	402017	1	Standard
	Kr	**83**		ug/L			52	72	20	Standard
⌈>	**In-1**	**115**		ug/L			5508	5594	0	KED
|	**Cd**	**111**	**0.064**	ug/L	0.014	21	4	16	16	KED
⌊	**Cd**	**114**	**0.088**	ug/L	0.016	18	1	43	17	KED
⌈>	**In**	**115**		ug/L			456477	481479	1	Standard
|	**Ag**	**107**	**0.042**	ug/L	0.003	8	46	905	6	Standard
|	**Sb**	**121**	**-0.009**	ug/L	0.003	30	466	354	10	Standard
|	**Sb**	**123**	**-0.007**	ug/L	0.001	7	343	287	1	Standard
|	**Ba**	**135**	**14.371**	ug/L	0.044	0	10	61586	1	Standard
⌊	**Ba**	**137**	**14.737**	ug/L	0.204	1	19	106149	0	Standard
⌈>	**Tb**	**159**		ug/L			710909	768682	2	Standard
⌊	**Pb**	**208**	**3.928**	ug/L	0.059	1	226	236090	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0133-07
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 21:35:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	30768	2	Standard
	Cl	**37**		ug/L			3111826	3245531	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	523805	0	Standard
|	**V**	**51**	**15.032**	ug/L	0.315	2	6985	383540	1	Standard
|	**V-1**	**51**	**15.014**	ug/L	0.253	1	122	379578	1	Standard
|	**Cr**	**52**	**7.315**	ug/L	0.055	0	20379	177255	1	Standard
|	**Cr**	**53**	**7.559**	ug/L	0.144	1	108	18762	2	Standard
⌊	**Mn**	**55**	**58.946**	ug/L	0.135	0	701	1790281	0	Standard
⌈>	**Ge**	**72**		ug/L			19285	20433	1	KED
|	**Ni**	**60**	**4.863**	ug/L	0.110	2	7	4745	2	KED
|	**Ni**	**62**	**4.771**	ug/L	0.370	7	3	761	6	KED
|	**Cu**	**63**	**9.299**	ug/L	0.117	1	37	27063	0	KED
|	**Cu**	**65**	**9.162**	ug/L	0.269	2	17	13228	2	KED
|	**Zn**	**66**	**17.770**	ug/L	0.474	2	24	6102	2	KED
|	**Zn**	**67**	**17.770**	ug/L	1.208	6	4	1019	5	KED
|	**As**	**75**	**2.734**	ug/L	0.120	4	3	472	4	KED
⌊	**Se**	**78**	**0.555**	ug/L	0.332	59	9	20	28	KED
	Y	**89**		ug/L			287409	420074	2	Standard
	Kr	**83**		ug/L			52	75	24	Standard
⌈>	**In-1**	**115**		ug/L			5508	5720	0	KED
|	**Cd**	**111**	**0.078**	ug/L	0.022	28	4	19	22	KED
⌊	**Cd**	**114**	**0.083**	ug/L	0.015	17	1	41	17	KED
⌈>	**In**	**115**		ug/L			456477	475955	1	Standard
|	**Ag**	**107**	**0.058**	ug/L	0.005	9	46	1218	7	Standard
|	**Sb**	**121**	**-0.020**	ug/L	0.001	5	466	197	6	Standard
|	**Sb**	**123**	**-0.018**	ug/L	0.002	8	343	160	9	Standard
|	**Ba**	**135**	**15.811**	ug/L	0.133	0	10	66978	0	Standard
⌊	**Ba**	**137**	**16.314**	ug/L	0.046	0	19	116166	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	777750	1	Standard
⌊	**Pb**	**208**	**4.696**	ug/L	0.066	1	226	285575	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0133-03
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 21:40:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31506	3	Standard
	Cl	**37**		ug/L			3111826	3153947	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	514651	0	Standard
|	**V**	**51**	**13.438**	ug/L	0.306	2	6985	337727	1	Standard
|	**V-1**	**51**	**13.371**	ug/L	0.255	1	122	332132	1	Standard
|	**Cr**	**52**	**6.164**	ug/L	0.239	3	20379	150428	2	Standard
|	**Cr**	**53**	**6.228**	ug/L	0.063	1	108	15209	0	Standard
⌊	**Mn**	**55**	**65.600**	ug/L	0.859	1	701	1957371	0	Standard
⌈>	**Ge**	**72**		ug/L			19285	20441	1	KED
|	**Ni**	**60**	**4.857**	ug/L	0.121	2	7	4740	0	KED
|	**Ni**	**62**	**4.811**	ug/L	0.291	6	3	768	4	KED
|	**Cu**	**63**	**11.064**	ug/L	0.418	3	37	32198	2	KED
|	**Cu**	**65**	**10.930**	ug/L	0.120	1	17	15785	0	KED
|	**Zn**	**66**	**22.222**	ug/L	0.501	2	24	7626	0	KED
|	**Zn**	**67**	**20.587**	ug/L	0.791	3	4	1181	3	KED
|	**As**	**75**	**2.270**	ug/L	0.032	1	3	392	2	KED
⌊	**Se**	**78**	**0.544**	ug/L	0.201	36	9	19	16	KED
	Y	**89**		ug/L			287409	422455	2	Standard
	Kr	**83**		ug/L			52	77	27	Standard
⌈>	**In-1**	**115**		ug/L			5508	5635	0	KED
|	**Cd**	**111**	**0.057**	ug/L	0.001	1	4	15	0	KED
⌊	**Cd**	**114**	**0.079**	ug/L	0.012	15	1	39	15	KED
⌈>	**In**	**115**		ug/L			456477	484128	2	Standard
|	**Ag**	**107**	**0.052**	ug/L	0.000	0	46	1113	2	Standard
|	**Sb**	**121**	**-0.021**	ug/L	0.000	2	466	194	1	Standard
|	**Sb**	**123**	**-0.021**	ug/L	0.001	6	343	132	9	Standard
|	**Ba**	**135**	**14.104**	ug/L	0.293	2	10	60763	1	Standard
⌊	**Ba**	**137**	**14.323**	ug/L	0.386	2	19	103710	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	766056	2	Standard
⌊	**Pb**	**208**	**4.856**	ug/L	0.122	2	226	290709	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0703-DUP1
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 21:44:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			24249	30566	4	Standard
Cl	37		ug/L			3111826	3213683	3	Standard
> Sc	45		ug/L			446275	531061	0	Standard
V	51	12.262	ug/L	0.178	1	6985	318719	0	Standard
V-1	51	12.258	ug/L	0.199	1	122	314216	1	Standard
Cr	52	5.578	ug/L	0.152	2	20379	142782	1	Standard
Cr	53	5.828	ug/L	0.221	3	108	14694	3	Standard
Mn	55	61.092	ug/L	2.050	3	701	1881268	3	Standard
> Ge	72		ug/L			19285	20045	2	KED
Ni	60	5.106	ug/L	0.161	3	7	4885	0	KED
Ni	62	4.905	ug/L	0.167	3	3	768	3	KED
Cu	63	11.313	ug/L	0.339	2	37	32282	2	KED
Cu	65	11.215	ug/L	0.102	0	17	15881	1	KED
Zn	66	21.691	ug/L	0.402	1	24	7301	2	KED
Zn	67	21.082	ug/L	1.302	6	4	1184	3	KED
As	75	2.283	ug/L	0.061	2	3	387	5	KED
Se	78	0.707	ug/L	0.050	7	9	22	2	KED
Y	89		ug/L			287409	402940	1	Standard
Kr	83		ug/L			52	86	15	Standard
> In-1	115		ug/L			5508	5552	1	KED
Cd	111	0.069	ug/L	0.016	22	4	17	16	KED
Cd	114	0.059	ug/L	0.028	48	1	29	46	KED
> In	115		ug/L			456477	473564	1	Standard
Ag	107	0.049	ug/L	0.001	2	46	1037	1	Standard
Sb	121	-0.022	ug/L	0.000	1	466	166	2	Standard
Sb	123	-0.021	ug/L	0.001	5	343	130	8	Standard
Ba	135	13.255	ug/L	0.261	1	10	55879	3	Standard
Ba	137	13.687	ug/L	0.168	1	19	96985	2	Standard
> Tb	159		ug/L			710909	772347	3	Standard
Pb	208	4.319	ug/L	0.161	3	226	260619	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0703-MS1
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 21:49:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	30445	3	Standard
	Cl	**37**		ug/L			3111826	3234096	0	Standard
⌈>	**Sc**	**45**		ug/L			446275	524958	2	Standard
|	**V**	**51**	**22.173**	ug/L	0.653	2	6985	562860	0	Standard
|	**V-1**	**51**	**22.149**	ug/L	0.640	2	122	560897	0	Standard
|	**Cr**	**52**	**15.902**	ug/L	0.558	3	20379	357904	2	Standard
|	**Cr**	**53**	**16.069**	ug/L	0.381	2	108	39815	0	Standard
⌊	**Mn**	**55**	**74.076**	ug/L	0.794	1	701	2254543	2	Standard
⌈>	**Ge**	**72**		ug/L			19285	20258	2	KED
|	**Ni**	**60**	**14.503**	ug/L	0.738	5	7	14008	3	KED
|	**Ni**	**62**	**15.217**	ug/L	0.534	3	3	2402	3	KED
|	**Cu**	**63**	**20.405**	ug/L	0.450	2	37	58819	1	KED
|	**Cu**	**65**	**21.617**	ug/L	0.432	1	17	30917	0	KED
|	**Zn**	**66**	**54.235**	ug/L	2.803	5	24	18402	3	KED
|	**Zn**	**67**	**49.791**	ug/L	3.028	6	4	2823	4	KED
|	**As**	**75**	**12.085**	ug/L	0.504	4	3	2055	2	KED
⌊	**Se**	**78**	**31.332**	ug/L	1.515	4	9	560	2	KED
	Y	**89**		ug/L			287409	410520	2	Standard
	Kr	**83**		ug/L			52	69	26	Standard
⌈>	**In-1**	**115**		ug/L			5508	5682	4	KED
|	**Cd**	**111**	**10.771**	ug/L	0.635	5	4	2115	1	KED
⌊	**Cd**	**114**	**10.381**	ug/L	0.651	6	1	5061	3	KED
⌈>	**In**	**115**		ug/L			456477	472886	0	Standard
|	**Ag**	**107**	**4.337**	ug/L	0.113	2	46	87570	1	Standard
|	**Sb**	**121**	**0.158**	ug/L	0.008	4	466	2729	3	Standard
|	**Sb**	**123**	**0.164**	ug/L	0.004	2	343	2138	1	Standard
|	**Ba**	**135**	**25.596**	ug/L	0.429	1	10	107715	0	Standard
⌊	**Ba**	**137**	**26.003**	ug/L	0.105	0	19	183953	0	Standard
⌈>	**Tb**	**159**		ug/L			710909	770592	1	Standard
⌊	**Pb**	**208**	**15.040**	ug/L	0.271	1	226	905505	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0703-MSD1
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 21:54:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	30483	2	Standard
	Cl	**37**		ug/L			3111826	3171119	0	Standard
⌈>	**Sc**	**45**		ug/L			446275	516223	0	Standard
|	**V**	**51**	**20.939**	ug/L	0.026	0	6985	523349	0	Standard
|	**V-1**	**51**	**20.850**	ug/L	0.113	0	122	519433	0	Standard
|	**Cr**	**52**	**15.097**	ug/L	0.251	1	20379	335434	1	Standard
|	**Cr**	**53**	**15.034**	ug/L	0.213	1	108	36651	1	Standard
⌊	**Mn**	**55**	**70.742**	ug/L	0.651	0	701	2117274	0	Standard
⌈>	**Ge**	**72**		ug/L			19285	20339	1	KED
|	**Ni**	**60**	**14.495**	ug/L	0.402	2	7	14064	2	KED
|	**Ni**	**62**	**13.997**	ug/L	0.507	3	3	2219	4	KED
|	**Cu**	**63**	**20.592**	ug/L	1.091	5	37	59577	3	KED
|	**Cu**	**65**	**20.674**	ug/L	0.671	3	17	29685	1	KED
|	**Zn**	**66**	**52.405**	ug/L	1.139	2	24	17864	2	KED
|	**Zn**	**67**	**51.692**	ug/L	2.645	5	4	2942	3	KED
|	**As**	**75**	**11.875**	ug/L	0.427	3	3	2027	1	KED
⌊	**Se**	**78**	**31.997**	ug/L	0.870	2	9	574	1	KED
	Y	**89**		ug/L			287409	404959	0	Standard
	Kr	**83**		ug/L			52	77	12	Standard
⌈>	**In-1**	**115**		ug/L			5508	5747	2	KED
|	**Cd**	**111**	**10.042**	ug/L	0.378	3	4	1997	2	KED
⌊	**Cd**	**114**	**9.712**	ug/L	0.169	1	1	4797	3	KED
⌈>	**In**	**115**		ug/L			456477	483219	1	Standard
|	**Ag**	**107**	**4.810**	ug/L	0.220	4	46	99227	3	Standard
|	**Sb**	**121**	**0.162**	ug/L	0.009	5	466	2840	3	Standard
|	**Sb**	**123**	**0.161**	ug/L	0.006	3	343	2144	4	Standard
|	**Ba**	**135**	**22.771**	ug/L	0.712	3	10	97894	1	Standard
⌊	**Ba**	**137**	**23.232**	ug/L	0.410	1	19	167923	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	773683	3	Standard
⌊	**Pb**	**208**	**14.120**	ug/L	0.408	2	226	853132	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0703-PS1
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 21:59:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	32266	2	Standard
	Cl	**37**		ug/L			3111826	3240434	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	536883	2	Standard
|	**V**	**51**	**34.983**	ug/L	1.001	2	6985	903296	0	Standard
|	**V-1**	**51**	**35.059**	ug/L	0.939	2	122	907859	0	Standard
|	**Cr**	**52**	**28.399**	ug/L	1.187	4	20379	634181	1	Standard
|	**Cr**	**53**	**28.906**	ug/L	1.246	4	108	73121	2	Standard
⌊	**Mn**	**55**	**87.018**	ug/L	3.298	3	701	2706782	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	20314	0	KED
|	**Ni**	**60**	**28.611**	ug/L	0.622	2	7	27725	3	KED
|	**Ni**	**62**	**29.373**	ug/L	1.431	4	3	4645	4	KED
|	**Cu**	**63**	**34.377**	ug/L	1.188	3	37	99348	2	KED
|	**Cu**	**65**	**34.637**	ug/L	0.908	2	17	49685	3	KED
|	**Zn**	**66**	**96.298**	ug/L	2.229	2	24	32762	1	KED
|	**Zn**	**67**	**94.008**	ug/L	3.079	3	4	5342	2	KED
|	**As**	**75**	**26.423**	ug/L	0.148	0	3	4503	0	KED
⌊	**Se**	**78**	**78.464**	ug/L	0.338	0	9	1392	0	KED
	Y	**89**		ug/L			287409	423024	1	Standard
	Kr	**83**		ug/L			52	81	16	Standard
⌈>	**In-1**	**115**		ug/L			5508	5557	3	KED
|	**Cd**	**111**	**25.440**	ug/L	0.521	2	4	4885	1	KED
⌊	**Cd**	**114**	**24.974**	ug/L	0.861	3	1	11915	1	KED
⌈>	**In**	**115**		ug/L			456477	480030	0	Standard
|	**Ag**	**107**	**23.697**	ug/L	0.551	2	46	485622	2	Standard
|	**Sb**	**121**	**-0.025**	ug/L	0.002	6	466	133	17	Standard
|	**Sb**	**123**	**-0.020**	ug/L	0.001	3	343	142	5	Standard
|	**Ba**	**135**	**39.550**	ug/L	0.399	1	10	168962	1	Standard
⌊	**Ba**	**137**	**40.974**	ug/L	0.963	2	19	294251	2	Standard
⌈>	**Tb**	**159**		ug/L			710909	769154	2	Standard
⌊	**Pb**	**208**	**29.332**	ug/L	0.867	2	226	1761829	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 22:06:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	27979	2	Standard
	Cl	**37**		ug/L			3111826	3278229	4	Standard
⎡>	**Sc**	**45**		ug/L			446275	465048	1	Standard
⎢	**V**	**51**	**-0.013**	ug/L	0.012	91	6985	6986	4	Standard
⎢	**V-1**	**51**	**-0.002**	ug/L	0.000	17	122	81	10	Standard
⎢	**Cr**	**52**	**-0.037**	ug/L	0.036	95	20379	20550	4	Standard
⎢	**Cr**	**53**	**0.001**	ug/L	0.006	999	108	113	9	Standard
⎣	**Mn**	**55**	**-0.004**	ug/L	0.001	15	701	617	3	Standard
⎡>	**Ge**	**72**		ug/L			19285	20066	2	KED
⎢	**Ni**	**60**	**0.000**	ug/L	0.003	884	7	8	35	KED
⎢	**Ni**	**62**	**0.004**	ug/L	0.022	612	3	3	86	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.003	283	37	35	29	KED
⎢	**Cu**	**65**	**0.003**	ug/L	0.006	228	17	22	38	KED
⎢	**Zn**	**66**	**0.008**	ug/L	0.006	70	24	28	6	KED
⎢	**Zn**	**67**	**-0.015**	ug/L	0.033	219	4	3	50	KED
⎢	**As**	**75**	**0.000**	ug/L	0.004	8503	3	3	19	KED
⎣	**Se**	**78**	**0.092**	ug/L	0.088	95	9	11	14	KED
	Y	**89**		ug/L			287409	289743	2	Standard
	Kr	**83**		ug/L			52	56	1	Standard
⎡>	**In-1**	**115**		ug/L			5508	5503	1	KED
⎢	**Cd**	**111**	**-0.017**	ug/L	0.005	29	4	0	100	KED
⎣	**Cd**	**114**	**0.004**	ug/L	0.002	57	1	3	35	KED
⎡>	**In**	**115**		ug/L			456477	472332	2	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.000	82	46	59	15	Standard
⎢	**Sb**	**121**	**-0.028**	ug/L	0.001	1	466	85	7	Standard
⎢	**Sb**	**123**	**-0.025**	ug/L	0.000	0	343	80	3	Standard
⎢	**Ba**	**135**	**0.004**	ug/L	0.002	41	10	26	25	Standard
⎣	**Ba**	**137**	**0.001**	ug/L	0.001	43	19	29	16	Standard
⎡>	**Tb**	**159**		ug/L			710909	708860	2	Standard
⎣	**Pb**	**208**	**-0.001**	ug/L	0.000	51	226	192	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 22:11:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	26758	1	Standard
	Cl	**37**		ug/L			3111826	3267094	0	Standard
>	**Sc**	**45**		ug/L			446275	463536	1	Standard
	V	**51**	**47.244**	ug/L	1.179	2	6985	1050903	0	Standard
	V-1	**51**	**47.645**	ug/L	1.413	2	122	1065325	1	Standard
	Cr	**52**	**48.887**	ug/L	1.513	3	20379	927700	1	Standard
	Cr	**53**	**50.138**	ug/L	2.038	4	108	109442	2	Standard
	Mn	**55**	**49.671**	ug/L	1.372	2	701	1334894	2	Standard
>	**Ge**	**72**		ug/L			19285	19904	1	KED
	Ni	**60**	**45.571**	ug/L	0.933	2	7	43253	1	KED
	Ni	**62**	**46.644**	ug/L	0.429	0	3	7227	0	KED
	Cu	**63**	**46.835**	ug/L	0.011	0	37	132630	1	KED
	Cu	**65**	**47.723**	ug/L	0.592	1	17	67063	2	KED
	Zn	**66**	**47.269**	ug/L	0.805	1	24	15769	0	KED
	Zn	**67**	**48.007**	ug/L	0.945	1	4	2675	1	KED
	As	**75**	**49.366**	ug/L	0.888	1	3	8241	1	KED
	Se	**78**	**50.643**	ug/L	0.632	1	9	883	1	KED
	Y	**89**		ug/L			287409	297997	1	Standard
	Kr	**83**		ug/L			52	55	25	Standard
>	**In-1**	**115**		ug/L			5508	5571	3	KED
	Cd	**111**	**48.821**	ug/L	1.168	2	4	9396	2	KED
	Cd	**114**	**49.776**	ug/L	1.243	2	1	23811	1	KED
>	**In**	**115**		ug/L			456477	466456	0	Standard
	Ag	**107**	**44.550**	ug/L	0.303	0	46	887061	1	Standard
	Sb	**121**	**47.905**	ug/L	0.857	1	466	670534	1	Standard
	Sb	**123**	**48.430**	ug/L	0.275	0	343	518922	1	Standard
	Ba	**135**	**49.579**	ug/L	0.605	1	10	205818	1	Standard
	Ba	**137**	**50.816**	ug/L	0.424	0	19	354574	0	Standard
>	**Tb**	**159**		ug/L			710909	750068	1	Standard
	Pb	**208**	**47.434**	ug/L	1.211	2	226	2778987	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 22:20:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	25980	4	Standard
	Cl	**37**		ug/L			3111826	3253412	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	464726	0	Standard
|	**V**	**51**	**-0.005**	ug/L	0.010	210	6985	7171	2	Standard
|	**V-1**	**51**	**-0.002**	ug/L	0.001	27	122	83	14	Standard
|	**Cr**	**52**	**-0.009**	ug/L	0.033	355	20379	21046	2	Standard
|	**Cr**	**53**	**-0.000**	ug/L	0.003	769	108	111	5	Standard
⌊	**Mn**	**55**	**-0.002**	ug/L	0.000	17	701	670	2	Standard
⌈>	**Ge**	**72**		ug/L			19285	19765	3	KED
|	**Ni**	**60**	**0.010**	ug/L	0.008	81	7	17	44	KED
|	**Ni**	**62**	**0.012**	ug/L	0.031	253	3	5	94	KED
|	**Cu**	**63**	**0.007**	ug/L	0.011	151	37	59	53	KED
|	**Cu**	**65**	**0.006**	ug/L	0.007	131	17	26	40	KED
|	**Zn**	**66**	**0.049**	ug/L	0.037	74	24	41	31	KED
|	**Zn**	**67**	**0.112**	ug/L	0.069	61	4	10	36	KED
|	**As**	**75**	**0.010**	ug/L	0.015	157	3	5	50	KED
⌊	**Se**	**78**	**0.212**	ug/L	0.116	54	9	13	11	KED
	Y	**89**		ug/L			287409	296248	0	Standard
	Kr	**83**		ug/L			52	41	9	Standard
⌈>	**In-1**	**115**		ug/L			5508	5567	3	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.010	147	4	2	66	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.002	134	1	0	244	KED
⌈>	**In**	**115**		ug/L			456477	469345	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	41	46	78	17	Standard
|	**Sb**	**121**	**0.073**	ug/L	0.004	5	466	1499	3	Standard
|	**Sb**	**123**	**0.075**	ug/L	0.004	5	343	1159	3	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.002	90	10	19	39	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.002	120	19	29	39	Standard
⌈>	**Tb**	**159**		ug/L			710909	700284	2	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	5	226	472	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0431-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 22:31:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	726098	3	Standard
	Cl	**37**		ug/L			3111826	3512078	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	468637	0	Standard
|	**V**	**51**	**0.931**	ug/L	0.018	1	6985	28124	1	Standard
|	**V-1**	**51**	**0.030**	ug/L	0.002	5	122	806	5	Standard
|	**Cr**	**52**	**4.230**	ug/L	0.045	1	20379	100732	1	Standard
|	**Cr**	**53**	**1.149**	ug/L	0.040	3	108	2646	2	Standard
⌊	**Mn**	**55**	**31.921**	ug/L	0.192	0	701	867745	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	17208	1	KED
|	**Ni**	**60**	**18.223**	ug/L	0.328	1	7	14958	1	KED
|	**Ni**	**62**	**18.203**	ug/L	0.242	1	3	2440	0	KED
|	**Cu**	**63**	**0.599**	ug/L	0.033	5	37	1498	4	KED
|	**Cu**	**65**	**0.596**	ug/L	0.040	6	17	739	5	KED
|	**Zn**	**66**	**14.996**	ug/L	0.474	3	24	4340	2	KED
|	**Zn**	**67**	**14.340**	ug/L	0.394	2	4	693	3	KED
|	**As**	**75**	**0.069**	ug/L	0.011	16	3	13	11	KED
⌊	**Se**	**78**	**0.112**	ug/L	0.080	71	9	10	12	KED
	Y	**89**		ug/L			287409	293354	0	Standard
	Kr	**83**		ug/L			52	80	4	Standard
⌈>	**In-1**	**115**		ug/L			5508	4945	1	KED
|	**Cd**	**111**	**0.045**	ug/L	0.025	55	4	11	36	KED
⌊	**Cd**	**114**	**0.030**	ug/L	0.017	54	1	14	51	KED
⌈>	**In**	**115**		ug/L			456477	426186	1	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.000	71	46	52	11	Standard
|	**Sb**	**121**	**0.132**	ug/L	0.005	4	466	2125	1	Standard
|	**Sb**	**123**	**0.131**	ug/L	0.007	4	343	1606	2	Standard
|	**Ba**	**135**	**16.768**	ug/L	0.092	0	10	63606	1	Standard
⌊	**Ba**	**137**	**17.112**	ug/L	0.793	4	19	109054	3	Standard
⌈>	**Tb**	**159**		ug/L			710909	697383	2	Standard
⌊	**Pb**	**208**	**0.060**	ug/L	0.003	4	226	3504	3	Standard

23A0133

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~23A0138~~-08

Sample Dil Factor: 50

Comments:

Sample Date/Time: Friday, March 31, 2023 22:36:10

MB 3/31/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	37205	2	Standard
	Cl	**37**		ug/L			3111826	3316102	3	Standard
⌈>	**Sc**	**45**		ug/L			446275	518751	2	Standard
|	**V**	**51**	**14.541**	ug/L	0.188	1	6985	367640	0	Standard
|	**V-1**	**51**	**14.523**	ug/L	0.240	1	122	363553	0	Standard
|	**Cr**	**52**	**6.930**	ug/L	0.155	2	20379	167545	3	Standard
|	**Cr**	**53**	**7.170**	ug/L	0.163	2	108	17625	1	Standard
⌊	**Mn**	**55**	**66.724**	ug/L	2.894	4	701	2005616	2	Standard
⌈>	**Ge**	**72**		ug/L			19285	19656	2	KED
|	**Ni**	**60**	**5.812**	ug/L	0.254	4	7	5450	1	KED
|	**Ni**	**62**	**6.129**	ug/L	0.269	4	3	940	4	KED
|	**Cu**	**63**	**11.400**	ug/L	0.463	4	37	31887	1	KED
|	**Cu**	**65**	**11.828**	ug/L	0.311	2	17	16420	1	KED
|	**Zn**	**66**	**23.578**	ug/L	0.377	1	24	7779	1	KED
|	**Zn**	**67**	**23.590**	ug/L	1.375	5	4	1302	8	KED
|	**As**	**75**	**2.445**	ug/L	0.129	5	3	406	2	KED
⌊	**Se**	**78**	**0.685**	ug/L	0.090	13	9	21	4	KED
	Y	**89**		ug/L			287409	418848	1	Standard
	Kr	**83**		ug/L			52	80	6	Standard
⌈>	**In-1**	**115**		ug/L			5508	5478	3	KED
|	**Cd**	**111**	**0.069**	ug/L	0.024	34	4	17	24	KED
⌊	**Cd**	**114**	**0.101**	ug/L	0.034	33	1	48	31	KED
⌈>	**In**	**115**		ug/L			456477	476089	1	Standard
|	**Ag**	**107**	**0.060**	ug/L	0.000	0	46	1265	1	Standard
|	**Sb**	**121**	**-0.018**	ug/L	0.001	4	466	226	4	Standard
|	**Sb**	**123**	**-0.018**	ug/L	0.002	10	343	161	13	Standard
|	**Ba**	**135**	**15.872**	ug/L	0.220	1	10	67255	1	Standard
⌊	**Ba**	**137**	**16.250**	ug/L	0.219	1	19	115735	0	Standard
⌈>	**Tb**	**159**		ug/L			710909	761088	2	Standard
⌊	**Pb**	**208**	**6.138**	ug/L	0.081	1	226	365137	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0138-09
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 22:41:02

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	34132	2	Standard
	Cl	**37**		ug/L			3111826	3322610	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	515757	5	Standard
|	**V**	**51**	**13.389**	ug/L	0.715	5	6985	336588	1	Standard
|	**V-1**	**51**	**13.336**	ug/L	0.724	5	122	331315	1	Standard
|	**Cr**	**52**	**5.781**	ug/L	0.329	5	20379	142594	1	Standard
|	**Cr**	**53**	**5.906**	ug/L	0.364	6	108	14426	1	Standard
⌊	**Mn**	**55**	**61.693**	ug/L	2.549	4	701	1841959	2	Standard
⌈>	**Ge**	**72**		ug/L			19285	19436	3	KED
|	**Ni**	**60**	**4.742**	ug/L	0.054	1	7	4401	2	KED
|	**Ni**	**62**	**4.810**	ug/L	0.161	3	3	730	5	KED
|	**Cu**	**63**	**9.544**	ug/L	0.199	2	37	26414	2	KED
|	**Cu**	**65**	**9.550**	ug/L	0.411	4	17	13105	1	KED
|	**Zn**	**66**	**20.556**	ug/L	1.395	6	24	6701	3	KED
|	**Zn**	**67**	**20.184**	ug/L	1.533	7	4	1099	5	KED
|	**As**	**75**	**1.965**	ug/L	0.079	4	3	323	4	KED
⌊	**Se**	**78**	**0.421**	ug/L	0.313	74	9	16	30	KED
	Y	**89**		ug/L			287409	404265	4	Standard
	Kr	**83**		ug/L			52	80	15	Standard
⌈>	**In-1**	**115**		ug/L			5508	5578	2	KED
|	**Cd**	**111**	**0.034**	ug/L	0.029	85	4	10	53	KED
⌊	**Cd**	**114**	**0.054**	ug/L	0.019	34	1	27	34	KED
⌈>	**In**	**115**		ug/L			456477	467739	3	Standard
|	**Ag**	**107**	**0.040**	ug/L	0.002	5	46	852	3	Standard
|	**Sb**	**121**	**-0.022**	ug/L	0.001	3	466	170	7	Standard
|	**Sb**	**123**	**-0.021**	ug/L	0.002	8	343	128	17	Standard
|	**Ba**	**135**	**15.125**	ug/L	0.735	4	10	62907	1	Standard
⌊	**Ba**	**137**	**15.007**	ug/L	0.358	2	19	104968	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	757777	4	Standard
⌊	**Pb**	**208**	**4.134**	ug/L	0.109	2	226	244801	2	Standard

23A0133

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~23A0138~~ 10

Sample Dil Factor: 50

Comments:

Sample Date/Time: Friday, March 31, 2023 22:45:54

MB 3/31/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24249	32128	0	Standard
	Cl	37		ug/L			3111826	3314089	1	Standard
>	Sc	45		ug/L			446275	538047	1	Standard
	V	51	13.401	ug/L	0.099	0	6985	352132	0	Standard
	V-1	51	13.474	ug/L	0.179	1	122	349895	0	Standard
	Cr	52	11.302	ug/L	0.020	0	20379	267899	1	Standard
	Cr	53	11.622	ug/L	0.263	2	108	29557	1	Standard
	Mn	55	54.197	ug/L	2.614	4	701	1690571	4	Standard
>	Ge	72		ug/L			19285	20112	1	KED
	Ni	60	4.589	ug/L	0.242	5	7	4407	4	KED
	Ni	62	4.758	ug/L	0.195	4	3	747	3	KED
	Cu	63	11.217	ug/L	0.141	1	37	32123	0	KED
	Cu	65	11.072	ug/L	0.134	1	17	15733	1	KED
	Zn	66	28.302	ug/L	0.890	3	24	9550	2	KED
	Zn	67	25.500	ug/L	1.772	6	4	1438	6	KED
	As	75	5.761	ug/L	0.083	1	3	974	1	KED
	Se	78	0.808	ug/L	0.181	22	9	24	13	KED
	Y	89		ug/L			287409	432775	0	Standard
	Kr	83		ug/L			52	67	19	Standard
>	In-1	115		ug/L			5508	5453	2	KED
	Cd	111	0.489	ug/L	0.028	5	4	96	7	KED
	Cd	114	0.521	ug/L	0.065	12	1	245	14	KED
>	In	115		ug/L			456477	476335	1	Standard
	Ag	107	0.155	ug/L	0.006	4	46	3190	2	Standard
	Sb	121	-0.023	ug/L	0.000	1	466	160	2	Standard
	Sb	123	-0.021	ug/L	0.002	7	343	128	12	Standard
	Ba	135	16.945	ug/L	0.419	2	10	71829	1	Standard
	Ba	137	17.318	ug/L	0.514	2	19	123384	2	Standard
>	Tb	159		ug/L			710909	772376	2	Standard
	Pb	208	18.398	ug/L	0.396	2	226	1110082	0	Standard

23A0133

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~23A0138~~-11

Sample Dil Factor: 50

Comments:

Sample Date/Time: Friday, March 31, 2023 22:50:46

Number of Replicates: 3

MB 3/31/23

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	32255	2	Standard
	Cl	**37**		ug/L			3111826	3362247	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	547910	1	Standard
|	**V**	**51**	**15.118**	ug/L	0.081	0	6985	403470	1	Standard
|	**V-1**	**51**	**14.990**	ug/L	0.078	0	122	396427	1	Standard
|	**Cr**	**52**	**8.380**	ug/L	0.162	1	20379	208755	2	Standard
|	**Cr**	**53**	**8.222**	ug/L	0.158	1	108	21336	2	Standard
⌊	**Mn**	**55**	**64.712**	ug/L	1.192	1	701	2055446	0	Standard
⌈>	**Ge**	**72**		ug/L			19285	20012	1	KED
|	**Ni**	**60**	**5.142**	ug/L	0.162	3	7	4913	2	KED
|	**Ni**	**62**	**4.972**	ug/L	0.231	4	3	777	5	KED
|	**Cu**	**63**	**10.901**	ug/L	0.213	1	37	31063	0	KED
|	**Cu**	**65**	**10.898**	ug/L	0.321	2	17	15411	3	KED
|	**Zn**	**66**	**26.194**	ug/L	1.254	4	24	8795	3	KED
|	**Zn**	**67**	**26.222**	ug/L	1.185	4	4	1471	3	KED
|	**As**	**75**	**3.497**	ug/L	0.059	1	3	590	2	KED
⌊	**Se**	**78**	**0.616**	ug/L	0.120	19	9	20	9	KED
	Y	**89**		ug/L			287409	444130	2	Standard
	Kr	**83**		ug/L			52	74	14	Standard
⌈>	**In-1**	**115**		ug/L			5508	5625	2	KED
|	**Cd**	**111**	**0.163**	ug/L	0.016	9	4	35	5	KED
⌊	**Cd**	**114**	**0.201**	ug/L	0.023	11	1	98	11	KED
⌈>	**In**	**115**		ug/L			456477	482093	0	Standard
|	**Ag**	**107**	**0.210**	ug/L	0.003	1	46	4372	2	Standard
|	**Sb**	**121**	**-0.024**	ug/L	0.002	6	466	146	14	Standard
|	**Sb**	**123**	**-0.023**	ug/L	0.002	9	343	109	21	Standard
|	**Ba**	**135**	**21.430**	ug/L	0.393	1	10	91955	2	Standard
⌊	**Ba**	**137**	**21.908**	ug/L	0.273	1	19	158008	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	770967	1	Standard
⌊	**Pb**	**208**	**6.374**	ug/L	0.125	1	226	384083	0	Standard

23A0133

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~23A0138~~ 12

Sample Dil Factor: 50

Comments:

Sample Date/Time: Friday, March 31, 2023 22:55:38

MB 3/31/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31684	0	Standard
	Cl	**37**		ug/L			3111826	3354732	2	Standard
>	**Sc**	**45**		ug/L			446275	540489	3	Standard
	V	**51**	**13.443**	ug/L	0.668	4	6985	354419	1	Standard
	V-1	**51**	**13.424**	ug/L	0.668	4	122	349825	1	Standard
	Cr	**52**	**7.016**	ug/L	0.323	4	20379	176273	0	Standard
	Cr	**53**	**7.209**	ug/L	0.326	4	108	18450	1	Standard
	Mn	**55**	**66.762**	ug/L	3.259	4	701	2089927	1	Standard
>	**Ge**	**72**		ug/L			19285	19911	2	KED
	Ni	**60**	**4.940**	ug/L	0.411	8	7	4690	5	KED
	Ni	**62**	**4.890**	ug/L	0.270	5	3	760	4	KED
	Cu	**63**	**10.785**	ug/L	0.235	2	37	30571	1	KED
	Cu	**65**	**10.751**	ug/L	0.388	3	17	15115	0	KED
	Zn	**66**	**25.041**	ug/L	0.773	3	24	8366	1	KED
	Zn	**67**	**24.787**	ug/L	0.928	3	4	1383	2	KED
	As	**75**	**2.714**	ug/L	0.111	4	3	456	1	KED
	Se	**78**	**0.582**	ug/L	0.086	14	9	20	9	KED
	Y	**89**		ug/L			287409	432837	2	Standard
	Kr	**83**		ug/L			52	75	31	Standard
>	**In-1**	**115**		ug/L			5508	5568	1	KED
	Cd	**111**	**0.153**	ug/L	0.013	8	4	33	8	KED
	Cd	**114**	**0.168**	ug/L	0.027	16	1	81	18	KED
>	**In**	**115**		ug/L			456477	477912	2	Standard
	Ag	**107**	**0.088**	ug/L	0.009	9	46	1849	8	Standard
	Sb	**121**	**-0.024**	ug/L	0.002	7	466	146	18	Standard
	Sb	**123**	**-0.023**	ug/L	0.001	5	343	112	14	Standard
	Ba	**135**	**18.933**	ug/L	0.899	4	10	80473	2	Standard
	Ba	**137**	**18.813**	ug/L	0.777	4	19	134424	1	Standard
>	**Tb**	**159**		ug/L			710909	760500	1	Standard
	Pb	**208**	**4.840**	ug/L	0.067	1	226	287757	0	Standard

23A0133

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~23A0138~~-13

Sample Dil Factor: 50

Comments:

Sample Date/Time: Friday, March 31, 2023 23:00:30

MB 3/31/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	33031	2	Standard
	Cl	**37**		ug/L			3111826	3306823	3	Standard
⌈>	**Sc**	**45**		ug/L			446275	531518	3	Standard
|	**V**	**51**	**12.512**	ug/L	0.398	3	6985	325169	1	Standard
|	**V-1**	**51**	**12.487**	ug/L	0.349	2	122	320207	1	Standard
|	**Cr**	**52**	**5.668**	ug/L	0.186	3	20379	144746	0	Standard
|	**Cr**	**53**	**5.852**	ug/L	0.046	0	108	14769	3	Standard
⌊	**Mn**	**55**	**67.472**	ug/L	1.655	2	701	2078458	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	20371	2	KED
|	**Ni**	**60**	**4.513**	ug/L	0.142	3	7	4389	1	KED
|	**Ni**	**62**	**4.726**	ug/L	0.483	10	3	751	7	KED
|	**Cu**	**63**	**7.957**	ug/L	0.402	5	37	23073	2	KED
|	**Cu**	**65**	**8.026**	ug/L	0.376	4	17	11549	2	KED
|	**Zn**	**66**	**19.061**	ug/L	1.192	6	24	6517	3	KED
|	**Zn**	**67**	**19.156**	ug/L	1.089	5	4	1095	6	KED
|	**As**	**75**	**2.165**	ug/L	0.042	1	3	373	2	KED
⌊	**Se**	**78**	**0.633**	ug/L	0.096	15	9	21	10	KED
	Y	**89**		ug/L			287409	421413	1	Standard
	Kr	**83**		ug/L			52	66	17	Standard
⌈>	**In-1**	**115**		ug/L			5508	5608	1	KED
|	**Cd**	**111**	**0.045**	ug/L	0.016	34	4	13	23	KED
⌊	**Cd**	**114**	**0.056**	ug/L	0.014	24	1	28	22	KED
⌈>	**In**	**115**		ug/L			456477	474641	1	Standard
|	**Ag**	**107**	**0.034**	ug/L	0.003	7	46	739	7	Standard
|	**Sb**	**121**	**-0.025**	ug/L	0.001	2	466	132	7	Standard
|	**Sb**	**123**	**-0.024**	ug/L	0.002	7	343	99	20	Standard
|	**Ba**	**135**	**15.607**	ug/L	0.300	1	10	65923	1	Standard
⌊	**Ba**	**137**	**15.907**	ug/L	0.135	0	19	112954	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	780764	2	Standard
⌊	**Pb**	**208**	**7.793**	ug/L	0.251	3	226	475331	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0138-14
Sample Dil Factor: 50
DEL
Comments:
Sample Date/Time: Friday, March 31, 2023 23:05:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	35307	6	Standard
	Cl	**37**		ug/L			3111826	3375028	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	535089	1	Standard
|	**V**	**51**	**11.426**	ug/L	0.191	1	6985	299783	0	Standard
|	**V-1**	**51**	**11.385**	ug/L	0.181	1	122	294030	0	Standard
|	**Cr**	**52**	**5.442**	ug/L	0.145	2	20379	140922	1	Standard
|	**Cr**	**53**	**5.542**	ug/L	0.109	1	108	14084	1	Standard
⌊	**Mn**	**55**	**61.865**	ug/L	0.336	0	701	1919465	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	20058	0	KED
|	**Ni**	**60**	**5.026**	ug/L	0.135	2	7	4815	3	KED
|	**Ni**	**62**	**4.889**	ug/L	0.221	4	3	766	4	KED
|	**Cu**	**63**	**9.414**	ug/L	0.144	1	37	26895	1	KED
|	**Cu**	**65**	**9.753**	ug/L	0.310	3	17	13826	3	KED
|	**Zn**	**66**	**20.187**	ug/L	0.299	1	24	6802	1	KED
|	**Zn**	**67**	**19.416**	ug/L	0.948	4	4	1093	4	KED
|	**As**	**75**	**2.427**	ug/L	0.025	1	3	411	0	KED
⌊	**Se**	**78**	**0.532**	ug/L	0.206	38	9	19	18	KED
	Y	**89**		ug/L			287409	402859	0	Standard
	Kr	**83**		ug/L			52	88	24	Standard
⌈>	**In-1**	**115**		ug/L			5508	5716	0	KED
|	**Cd**	**111**	**0.070**	ug/L	0.017	24	4	18	18	KED
⌊	**Cd**	**114**	**0.046**	ug/L	0.008	17	1	23	17	KED
⌈>	**In**	**115**		ug/L			456477	478528	0	Standard
|	**Ag**	**107**	**0.038**	ug/L	0.002	5	46	816	5	Standard
|	**Sb**	**121**	**-0.027**	ug/L	0.001	4	466	98	15	Standard
|	**Sb**	**123**	**-0.026**	ug/L	0.000	1	343	77	5	Standard
|	**Ba**	**135**	**14.505**	ug/L	0.205	1	10	61778	0	Standard
⌊	**Ba**	**137**	**15.085**	ug/L	0.347	2	19	107986	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	766711	2	Standard
⌊	**Pb**	**208**	**3.805**	ug/L	0.089	2	226	228082	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0138-15
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 23:10:13

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	32793	5	Standard
	Cl	**37**		ug/L			3111826	3317016	5	Standard
>	**Sc**	**45**		ug/L			446275	523443	3	Standard
	V	**51**	**12.795**	ug/L	0.513	4	6985	327344	3	Standard
	V-1	**51**	**12.758**	ug/L	0.430	3	122	322231	3	Standard
	Cr	**52**	**6.134**	ug/L	0.237	3	20379	152331	2	Standard
	Cr	**53**	**6.274**	ug/L	0.126	2	108	15578	2	Standard
	Mn	**55**	**68.274**	ug/L	1.576	2	701	2071110	0	Standard
>	**Ge**	**72**		ug/L			19285	20341	2	KED
	Ni	**60**	**4.990**	ug/L	0.195	3	7	4846	3	KED
	Ni	**62**	**5.108**	ug/L	0.172	3	3	811	1	KED
	Cu	**63**	**9.640**	ug/L	0.319	3	37	27919	2	KED
	Cu	**65**	**9.869**	ug/L	0.370	3	17	14177	1	KED
	Zn	**66**	**21.434**	ug/L	1.228	5	24	7316	3	KED
	Zn	**67**	**21.753**	ug/L	1.780	8	4	1240	5	KED
	As	**75**	**2.342**	ug/L	0.099	4	3	403	3	KED
	Se	**78**	**0.544**	ug/L	0.121	22	9	19	10	KED
	Y	**89**		ug/L			287409	410142	2	Standard
	Kr	**83**		ug/L			52	75	22	Standard
>	**In-1**	**115**		ug/L			5508	5604	1	KED
	Cd	**111**	**0.054**	ug/L	0.015	28	4	14	19	KED
	Cd	**114**	**0.091**	ug/L	0.015	16	1	45	17	KED
>	**In**	**115**		ug/L			456477	464872	4	Standard
	Ag	**107**	**0.047**	ug/L	0.003	7	46	985	4	Standard
	Sb	**121**	**-0.026**	ug/L	0.001	2	466	112	5	Standard
	Sb	**123**	**-0.025**	ug/L	0.000	1	343	85	3	Standard
	Ba	**135**	**16.213**	ug/L	0.717	4	10	66997	0	Standard
	Ba	**137**	**16.620**	ug/L	0.667	4	19	115472	1	Standard
>	**Tb**	**159**		ug/L			710909	753799	3	Standard
	Pb	**208**	**4.473**	ug/L	0.132	2	226	263478	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0138-16
Sample Dil Factor: 50
Comments:

DEL

Sample Date/Time: Friday, March 31, 2023 23:15:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	32369	1	Standard
	Cl	**37**		ug/L			3111826	3277575	4	Standard
⌈>	**Sc**	**45**		ug/L			446275	525429	0	Standard
|	**V**	**51**	**12.041**	ug/L	0.090	0	6985	309837	1	Standard
|	**V-1**	**51**	**11.991**	ug/L	0.137	1	122	304140	1	Standard
|	**Cr**	**52**	**5.672**	ug/L	0.191	3	20379	143243	2	Standard
|	**Cr**	**53**	**5.757**	ug/L	0.004	0	108	14364	0	Standard
⌊	**Mn**	**55**	**67.546**	ug/L	2.202	3	701	2057853	3	Standard
⌈>	**Ge**	**72**		ug/L			19285	20639	2	KED
|	**Ni**	**60**	**4.701**	ug/L	0.133	2	7	4635	3	KED
|	**Ni**	**62**	**4.828**	ug/L	0.216	4	3	778	3	KED
|	**Cu**	**63**	**9.704**	ug/L	0.128	1	37	28522	1	KED
|	**Cu**	**65**	**10.018**	ug/L	0.425	4	17	14608	4	KED
|	**Zn**	**66**	**20.075**	ug/L	1.270	6	24	6954	4	KED
|	**Zn**	**67**	**19.556**	ug/L	1.391	7	4	1133	7	KED
|	**As**	**75**	**2.472**	ug/L	0.050	2	3	431	0	KED
⌊	**Se**	**78**	**0.564**	ug/L	0.069	12	9	20	3	KED
	Y	**89**		ug/L			287409	399773	2	Standard
	Kr	**83**		ug/L			52	59	14	Standard
⌈>	**In-1**	**115**		ug/L			5508	5626	3	KED
|	**Cd**	**111**	**0.047**	ug/L	0.024	50	4	13	31	KED
⌊	**Cd**	**114**	**0.055**	ug/L	0.010	18	1	27	16	KED
⌈>	**In**	**115**		ug/L			456477	477749	1	Standard
|	**Ag**	**107**	**0.042**	ug/L	0.001	2	46	908	2	Standard
|	**Sb**	**121**	**-0.026**	ug/L	0.000	1	466	115	5	Standard
|	**Sb**	**123**	**-0.024**	ug/L	0.002	7	343	92	21	Standard
|	**Ba**	**135**	**14.363**	ug/L	0.079	0	10	61073	0	Standard
⌊	**Ba**	**137**	**14.551**	ug/L	0.426	2	19	104002	3	Standard
⌈>	**Tb**	**159**		ug/L			710909	768100	2	Standard
⌊	**Pb**	**208**	**4.100**	ug/L	0.104	2	226	246152	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 23:21:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	27329	2	Standard
	Cl	**37**		ug/L			3111826	3424126	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	476241	1	Standard
|	**V**	**51**	**46.447**	ug/L	1.501	3	6985	1061674	2	Standard
|	**V-1**	**51**	**46.584**	ug/L	1.565	3	122	1070260	2	Standard
|	**Cr**	**52**	**47.607**	ug/L	0.892	1	20379	928885	0	Standard
|	**Cr**	**53**	**48.011**	ug/L	1.142	2	108	107709	1	Standard
⌊	**Mn**	**55**	**48.983**	ug/L	0.913	1	701	1352585	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	19584	0	KED
|	**Ni**	**60**	**48.210**	ug/L	0.717	1	7	45028	1	KED
|	**Ni**	**62**	**47.861**	ug/L	1.550	3	3	7296	2	KED
|	**Cu**	**63**	**47.607**	ug/L	0.427	0	37	132655	1	KED
|	**Cu**	**65**	**48.930**	ug/L	0.199	0	17	67649	0	KED
|	**Zn**	**66**	**49.419**	ug/L	0.671	1	24	16224	1	KED
|	**Zn**	**67**	**47.185**	ug/L	0.539	1	4	2588	1	KED
|	**As**	**75**	**50.044**	ug/L	0.696	1	3	8220	0	KED
⌊	**Se**	**78**	**51.598**	ug/L	1.493	2	9	885	2	KED
	Y	**89**		ug/L			287409	302684	0	Standard
	Kr	**83**		ug/L			52	56	15	Standard
⌈>	**In-1**	**115**		ug/L			5508	5624	1	KED
|	**Cd**	**111**	**49.841**	ug/L	0.234	0	4	9688	1	KED
⌊	**Cd**	**114**	**49.268**	ug/L	0.215	0	1	23806	1	KED
⌈>	**In**	**115**		ug/L			456477	466867	0	Standard
|	**Ag**	**107**	**45.396**	ug/L	0.603	1	46	904727	1	Standard
|	**Sb**	**121**	**47.588**	ug/L	1.148	2	466	666720	2	Standard
|	**Sb**	**123**	**47.260**	ug/L	0.726	1	343	506818	1	Standard
|	**Ba**	**135**	**48.074**	ug/L	0.310	0	10	199745	0	Standard
⌊	**Ba**	**137**	**49.293**	ug/L	0.950	1	19	344236	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	740952	1	Standard
⌊	**Pb**	**208**	**48.010**	ug/L	1.426	2	226	2778538	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, March 31, 2023 23:28:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	26508	2	Standard
	Cl	**37**		ug/L			3111826	3292121	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	467446	1	Standard
|	**V**	**51**	**-0.018**	ug/L	0.004	19	6985	6912	1	Standard
|	**V-1**	**51**	**-0.002**	ug/L	0.000	12	122	75	7	Standard
|	**Cr**	**52**	**-0.056**	ug/L	0.008	13	20379	20304	2	Standard
|	**Cr**	**53**	**-0.003**	ug/L	0.004	175	108	107	10	Standard
⌊	**Mn**	**55**	**0.004**	ug/L	0.001	32	701	849	2	Standard
⌈>	**Ge**	**72**		ug/L			19285	19293	1	KED
|	**Ni**	**60**	**-0.001**	ug/L	0.002	171	7	6	34	KED
|	**Ni**	**62**	**-0.017**	ug/L	0.007	42	3	0	173	KED
|	**Cu**	**63**	**0.001**	ug/L	0.004	497	37	39	23	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.004	270	17	15	34	KED
|	**Zn**	**66**	**-0.014**	ug/L	0.013	96	24	20	19	KED
|	**Zn**	**67**	**0.024**	ug/L	0.002	8	4	5	0	KED
|	**As**	**75**	**0.002**	ug/L	0.002	129	3	3	12	KED
⌊	**Se**	**78**	**0.219**	ug/L	0.180	81	9	13	21	KED
	Y	**89**		ug/L			287409	295783	0	Standard
	Kr	**83**		ug/L			52	48	13	Standard
⌈>	**In-1**	**115**		ug/L			5508	5407	2	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.003	67	4	3	17	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.004	278	1	1	104	KED
⌈>	**In**	**115**		ug/L			456477	470704	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.000	16	46	88	6	Standard
|	**Sb**	**121**	**0.085**	ug/L	0.009	10	466	1678	6	Standard
|	**Sb**	**123**	**0.087**	ug/L	0.002	2	343	1295	0	Standard
|	**Ba**	**135**	**0.001**	ug/L	0.001	206	10	13	41	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.000	109	19	22	13	Standard
⌈>	**Tb**	**159**		ug/L			710909	714899	3	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	11	226	281	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0410-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 23:33:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31463	2	Standard
	Cl	**37**		ug/L			3111826	3522141	2	Standard
⎡>	**Sc**	**45**		ug/L			446275	480059	1	Standard
⎢	**V**	**51**	**0.026**	ug/L	0.013	48	6985	8113	2	Standard
⎢	**V-1**	**51**	**0.226**	ug/L	0.006	2	122	5374	1	Standard
⎢	**Cr**	**52**	**0.442**	ug/L	0.019	4	20379	30412	0	Standard
⎢	**Cr**	**53**	**1.082**	ug/L	0.013	1	108	2560	2	Standard
⎣	**Mn**	**55**	**2.940**	ug/L	0.053	1	701	82559	1	Standard
⎡>	**Ge**	**72**		ug/L			19285	19807	1	KED
⎢	**Ni**	**60**	**2.134**	ug/L	0.074	3	7	2023	3	KED
⎢	**Ni**	**62**	**2.067**	ug/L	0.019	0	3	321	2	KED
⎢	**Cu**	**63**	**6.196**	ug/L	0.197	3	37	17488	1	KED
⎢	**Cu**	**65**	**6.440**	ug/L	0.185	2	17	9020	3	KED
⎢	**Zn**	**66**	**11.929**	ug/L	0.095	0	24	3979	1	KED
⎢	**Zn**	**67**	**11.038**	ug/L	0.836	7	4	615	5	KED
⎢	**As**	**75**	**0.048**	ug/L	0.009	18	3	11	14	KED
⎣	**Se**	**78**	**0.124**	ug/L	0.119	95	9	12	15	KED
	Y	**89**		ug/L			287409	305092	2	Standard
	Kr	**83**		ug/L			52	43	21	Standard
⎡>	**In-1**	**115**		ug/L			5508	5761	1	KED
⎢	**Cd**	**111**	**0.001**	ug/L	0.007	1137	4	4	32	KED
⎣	**Cd**	**114**	**0.005**	ug/L	0.006	133	1	3	86	KED
⎡>	**In**	**115**		ug/L			456477	469488	3	Standard
⎢	**Ag**	**107**	**0.002**	ug/L	0.001	69	46	80	31	Standard
⎢	**Sb**	**121**	**0.038**	ug/L	0.002	4	466	1009	5	Standard
⎢	**Sb**	**123**	**0.040**	ug/L	0.001	1	343	786	3	Standard
⎢	**Ba**	**135**	**1.964**	ug/L	0.070	3	10	8208	0	Standard
⎣	**Ba**	**137**	**1.996**	ug/L	0.040	2	19	14034	1	Standard
⎡>	**Tb**	**159**		ug/L			710909	725633	2	Standard
⎣	**Pb**	**208**	**0.040**	ug/L	0.000	0	226	2507	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0410-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, March 31, 2023 23:38:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31453	1	Standard
	Cl	**37**		ug/L			3111826	3556433	4	Standard
>	**Sc**	**45**		ug/L			446275	473948	2	Standard
	V	**51**	**0.028**	ug/L	0.003	12	6985	8046	2	Standard
	V-1	**51**	**0.237**	ug/L	0.004	1	122	5546	1	Standard
	Cr	**52**	**0.445**	ug/L	0.064	14	20379	30062	2	Standard
	Cr	**53**	**1.114**	ug/L	0.075	6	108	2597	4	Standard
	Mn	**55**	**2.842**	ug/L	0.104	3	701	78775	1	Standard
>	**Ge**	**72**		ug/L			19285	19446	4	KED
	Ni	**60**	**2.120**	ug/L	0.127	5	7	1969	0	KED
	Ni	**62**	**2.069**	ug/L	0.147	7	3	315	2	KED
	Cu	**63**	**5.995**	ug/L	0.405	6	37	16584	1	KED
	Cu	**65**	**6.003**	ug/L	0.336	5	17	8242	2	KED
	Zn	**66**	**11.755**	ug/L	0.482	4	24	3845	1	KED
	Zn	**67**	**10.532**	ug/L	0.811	7	4	577	10	KED
	As	**75**	**0.048**	ug/L	0.014	29	3	11	17	KED
	Se	**78**	**0.172**	ug/L	0.102	59	9	12	16	KED
	Y	**89**		ug/L			287409	294867	1	Standard
	Kr	**83**		ug/L			52	41	24	Standard
>	**In-1**	**115**		ug/L			5508	5562	2	KED
	Cd	**111**	**-0.002**	ug/L	0.004	232	4	3	25	KED
	Cd	**114**	**0.007**	ug/L	0.006	79	1	4	61	KED
>	**In**	**115**		ug/L			456477	478555	1	Standard
	Ag	**107**	**0.002**	ug/L	0.001	37	46	81	14	Standard
	Sb	**121**	**0.019**	ug/L	0.003	15	466	757	4	Standard
	Sb	**123**	**0.016**	ug/L	0.004	24	343	540	7	Standard
	Ba	**135**	**1.865**	ug/L	0.034	1	10	7952	0	Standard
	Ba	**137**	**1.960**	ug/L	0.113	5	19	14043	4	Standard
>	**Tb**	**159**		ug/L			710909	743550	1	Standard
	Pb	**208**	**0.033**	ug/L	0.001	3	226	2160	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-01
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 23:43:09

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31841	3	Standard
	Cl	**37**		ug/L			3111826	3171615	1	Standard
>	**Sc**	**45**		ug/L			446275	511436	3	Standard
	V	**51**	**13.007**	ug/L	0.311	2	6985	324969	0	Standard
	V-1	**51**	**12.972**	ug/L	0.296	2	122	320090	1	Standard
	Cr	**52**	**5.819**	ug/L	0.287	4	20379	142327	1	Standard
	Cr	**53**	**5.986**	ug/L	0.208	3	108	14522	1	Standard
	Mn	**55**	**60.056**	ug/L	1.969	3	701	1780405	3	Standard
>	**Ge**	**72**		ug/L			19285	20050	1	KED
	Ni	**60**	**4.778**	ug/L	0.114	2	7	4575	1	KED
	Ni	**62**	**4.854**	ug/L	0.377	7	3	760	7	KED
	Cu	**63**	**9.469**	ug/L	0.151	1	37	27038	0	KED
	Cu	**65**	**9.721**	ug/L	0.431	4	17	13769	3	KED
	Zn	**66**	**20.793**	ug/L	0.511	2	24	7001	1	KED
	Zn	**67**	**21.715**	ug/L	1.454	6	4	1222	7	KED
	As	**75**	**1.995**	ug/L	0.065	3	3	338	2	KED
	Se	**78**	**0.523**	ug/L	0.154	29	9	19	13	KED
	Y	**89**		ug/L			287409	402010	1	Standard
	Kr	**83**		ug/L			52	67	4	Standard
>	**In-1**	**115**		ug/L			5508	5610	1	KED
	Cd	**111**	**0.055**	ug/L	0.009	16	4	14	13	KED
	Cd	**114**	**0.061**	ug/L	0.003	5	1	30	3	KED
>	**In**	**115**		ug/L			456477	481289	1	Standard
	Ag	**107**	**0.041**	ug/L	0.002	5	46	889	6	Standard
	Sb	**121**	**-0.016**	ug/L	0.002	14	466	255	11	Standard
	Sb	**123**	**-0.016**	ug/L	0.001	8	343	190	7	Standard
	Ba	**135**	**11.747**	ug/L	0.130	1	10	50324	1	Standard
	Ba	**137**	**12.073**	ug/L	0.235	1	19	86927	1	Standard
>	**Tb**	**159**		ug/L			710909	764914	2	Standard
	Pb	**208**	**3.934**	ug/L	0.047	1	226	235310	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-02
Sample Dil Factor: 50
Comments: DEL
Sample Date/Time: Friday, March 31, 2023 23:48:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31545	3	Standard
	Cl	**37**		ug/L			3111826	3248145	0	Standard
⌈>	**Sc**	**45**		ug/L			446275	520184	0	Standard
|	**V**	**51**	**11.885**	ug/L	0.308	2	6985	302826	1	Standard
|	**V-1**	**51**	**11.852**	ug/L	0.308	2	122	297567	1	Standard
|	**Cr**	**52**	**5.721**	ug/L	0.193	3	20379	142811	1	Standard
|	**Cr**	**53**	**5.854**	ug/L	0.197	3	108	14455	2	Standard
⌊	**Mn**	**55**	**58.249**	ug/L	0.387	0	701	1756883	0	Standard
⌈>	**Ge**	**72**		ug/L			19285	19808	1	KED
|	**Ni**	**60**	**4.386**	ug/L	0.179	4	7	4148	2	KED
|	**Ni**	**62**	**4.528**	ug/L	0.301	6	3	700	6	KED
|	**Cu**	**63**	**10.379**	ug/L	0.120	1	37	29284	2	KED
|	**Cu**	**65**	**10.963**	ug/L	0.269	2	17	15340	0	KED
|	**Zn**	**66**	**23.118**	ug/L	0.491	2	24	7687	0	KED
|	**Zn**	**67**	**22.120**	ug/L	0.630	2	4	1229	4	KED
|	**As**	**75**	**3.131**	ug/L	0.088	2	3	523	1	KED
⌊	**Se**	**78**	**0.678**	ug/L	0.055	8	9	21	3	KED
	Y	**89**		ug/L			287409	394784	3	Standard
	Kr	**83**		ug/L			52	76	9	Standard
⌈>	**In-1**	**115**		ug/L			5508	5699	2	KED
|	**Cd**	**111**	**0.064**	ug/L	0.015	24	4	16	17	KED
⌊	**Cd**	**114**	**0.044**	ug/L	0.015	34	1	22	30	KED
⌈>	**In**	**115**		ug/L			456477	482178	0	Standard
|	**Ag**	**107**	**0.045**	ug/L	0.002	4	46	978	4	Standard
|	**Sb**	**121**	**-0.019**	ug/L	0.001	4	466	222	6	Standard
|	**Sb**	**123**	**-0.017**	ug/L	0.001	8	343	175	8	Standard
|	**Ba**	**135**	**14.775**	ug/L	0.099	0	10	63408	0	Standard
⌊	**Ba**	**137**	**14.950**	ug/L	0.309	2	19	107844	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	770585	2	Standard
⌊	**Pb**	**208**	**5.109**	ug/L	0.128	2	226	307715	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-03
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, March 31, 2023 23:52:52

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	30045	0	Standard
	Cl	**37**		ug/L			3111826	3237781	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	519796	1	Standard
|	**V**	**51**	**12.497**	ug/L	0.239	1	6985	317746	0	Standard
|	**V-1**	**51**	**12.420**	ug/L	0.176	1	122	311583	0	Standard
|	**Cr**	**52**	**5.773**	ug/L	0.222	3	20379	143772	1	Standard
|	**Cr**	**53**	**5.784**	ug/L	0.011	0	108	14275	1	Standard
⌊	**Mn**	**55**	**58.130**	ug/L	0.175	0	701	1751969	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	20633	2	KED
|	**Ni**	**60**	**4.446**	ug/L	0.142	3	7	4380	1	KED
|	**Ni**	**62**	**4.375**	ug/L	0.177	4	3	705	1	KED
|	**Cu**	**63**	**10.181**	ug/L	0.282	2	37	29906	0	KED
|	**Cu**	**65**	**10.224**	ug/L	0.068	0	17	14905	1	KED
|	**Zn**	**66**	**23.938**	ug/L	0.573	2	24	8293	3	KED
|	**Zn**	**67**	**23.225**	ug/L	1.079	4	4	1344	5	KED
|	**As**	**75**	**2.261**	ug/L	0.174	7	3	394	5	KED
⌊	**Se**	**78**	**0.604**	ug/L	0.227	37	9	21	21	KED
	Y	**89**		ug/L			287409	403674	1	Standard
	Kr	**83**		ug/L			52	64	12	Standard
⌈>	**In-1**	**115**		ug/L			5508	5611	1	KED
|	**Cd**	**111**	**0.065**	ug/L	0.010	15	4	16	11	KED
⌊	**Cd**	**114**	**0.087**	ug/L	0.010	11	1	43	9	KED
⌈>	**In**	**115**		ug/L			456477	483514	2	Standard
|	**Ag**	**107**	**0.044**	ug/L	0.003	6	46	961	3	Standard
|	**Sb**	**121**	**-0.018**	ug/L	0.001	6	466	237	6	Standard
|	**Sb**	**123**	**-0.018**	ug/L	0.001	8	343	165	8	Standard
|	**Ba**	**135**	**13.019**	ug/L	0.341	2	10	56007	0	Standard
⌊	**Ba**	**137**	**13.374**	ug/L	0.164	1	19	96733	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	759646	2	Standard
⌊	**Pb**	**208**	**4.609**	ug/L	0.103	2	226	273688	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-04
Sample Dil Factor: 50
DEL
Comments:
Sample Date/Time: Friday, March 31, 2023 23:57:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31685	4	Standard
	Cl	**37**		ug/L			3111826	3220858	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	521999	1	Standard
|	**V**	**51**	**12.541**	ug/L	0.250	1	6985	320177	0	Standard
|	**V-1**	**51**	**12.488**	ug/L	0.259	2	122	314589	0	Standard
|	**Cr**	**52**	**5.469**	ug/L	0.061	1	20379	138064	0	Standard
|	**Cr**	**53**	**5.572**	ug/L	0.110	1	108	13814	0	Standard
⌊	**Mn**	**55**	**57.559**	ug/L	0.670	1	701	1742358	2	Standard
⌈>	**Ge**	**72**		ug/L			19285	20277	2	KED
|	**Ni**	**60**	**4.849**	ug/L	0.215	4	7	4692	1	KED
|	**Ni**	**62**	**4.907**	ug/L	0.249	5	3	777	4	KED
|	**Cu**	**63**	**9.350**	ug/L	0.366	3	37	26993	3	KED
|	**Cu**	**65**	**9.521**	ug/L	0.508	5	17	13629	2	KED
|	**Zn**	**66**	**20.149**	ug/L	0.102	0	24	6864	3	KED
|	**Zn**	**67**	**20.430**	ug/L	0.736	3	4	1162	3	KED
|	**As**	**75**	**1.740**	ug/L	0.105	6	3	299	4	KED
⌊	**Se**	**78**	**0.651**	ug/L	0.089	13	9	21	10	KED
	Y	**89**		ug/L			287409	403069	1	Standard
	Kr	**83**		ug/L			52	64	12	Standard
⌈>	**In-1**	**115**		ug/L			5508	5604	0	KED
|	**Cd**	**111**	**0.046**	ug/L	0.016	35	4	13	23	KED
⌊	**Cd**	**114**	**0.074**	ug/L	0.029	39	1	36	39	KED
⌈>	**In**	**115**		ug/L			456477	464668	0	Standard
|	**Ag**	**107**	**0.048**	ug/L	0.002	4	46	1004	4	Standard
|	**Sb**	**121**	**-0.024**	ug/L	0.002	6	466	140	16	Standard
|	**Sb**	**123**	**-0.021**	ug/L	0.000	1	343	129	2	Standard
|	**Ba**	**135**	**13.392**	ug/L	0.317	2	10	55388	2	Standard
⌊	**Ba**	**137**	**13.751**	ug/L	0.256	1	19	95604	2	Standard
⌈>	**Tb**	**159**		ug/L			710909	763430	1	Standard
⌊	**Pb**	**208**	**3.954**	ug/L	0.072	1	226	236012	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-05
Sample Dil Factor: 50
DEL
Comments:
Sample Date/Time: Saturday, April 01, 2023 00:02:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31103	0	Standard
	Cl	**37**		ug/L			3111826	3173262	3	Standard
⌈>	**Sc**	**45**		ug/L			446275	492015	5	Standard
|	**V**	**51**	**10.304**	ug/L	0.434	4	6985	249039	1	Standard
|	**V-1**	**51**	**10.279**	ug/L	0.423	4	122	243805	1	Standard
|	**Cr**	**52**	**4.988**	ug/L	0.326	6	20379	120478	1	Standard
|	**Cr**	**53**	**5.115**	ug/L	0.296	5	108	11940	0	Standard
⌊	**Mn**	**55**	**54.509**	ug/L	1.887	3	701	1553309	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	20337	1	KED
|	**Ni**	**60**	**3.597**	ug/L	0.099	2	7	3495	2	KED
|	**Ni**	**62**	**3.667**	ug/L	0.209	5	3	584	7	KED
|	**Cu**	**63**	**8.544**	ug/L	0.126	1	37	24750	0	KED
|	**Cu**	**65**	**8.765**	ug/L	0.154	1	17	12597	1	KED
|	**Zn**	**66**	**18.083**	ug/L	0.361	1	24	6180	1	KED
|	**Zn**	**67**	**17.042**	ug/L	0.558	3	4	973	2	KED
|	**As**	**75**	**2.164**	ug/L	0.045	2	3	372	3	KED
⌊	**Se**	**78**	**0.494**	ug/L	0.154	31	9	18	13	KED
	Y	**89**		ug/L			287409	366830	3	Standard
	Kr	**83**		ug/L			52	67	15	Standard
⌈>	**In-1**	**115**		ug/L			5508	5667	2	KED
|	**Cd**	**111**	**0.063**	ug/L	0.029	45	4	16	31	KED
⌊	**Cd**	**114**	**0.045**	ug/L	0.010	21	1	23	23	KED
⌈>	**In**	**115**		ug/L			456477	455727	4	Standard
|	**Ag**	**107**	**0.039**	ug/L	0.004	8	46	812	4	Standard
|	**Sb**	**121**	**-0.024**	ug/L	0.002	8	466	135	18	Standard
|	**Sb**	**123**	**-0.022**	ug/L	0.003	14	343	113	23	Standard
|	**Ba**	**135**	**12.874**	ug/L	0.546	4	10	52159	0	Standard
⌊	**Ba**	**137**	**13.144**	ug/L	0.364	2	19	89553	1	Standard
⌈>	**Tb**	**159**		ug/L			710909	726429	6	Standard
⌊	**Pb**	**208**	**4.506**	ug/L	0.268	5	226	255336	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-06
Sample Dil Factor: 50
Comments:

DEL

Sample Date/Time: Saturday, April 01, 2023 00:07:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	31436	1	Standard
	Cl	**37**		ug/L			3111826	3173824	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	505682	0	Standard
|	**V**	**51**	**9.890**	ug/L	0.123	1	6985	246313	0	Standard
|	**V-1**	**51**	**9.898**	ug/L	0.114	1	122	241620	0	Standard
|	**Cr**	**52**	**5.288**	ug/L	0.040	0	20379	130100	1	Standard
|	**Cr**	**53**	**5.495**	ug/L	0.087	1	108	13200	2	Standard
⌊	**Mn**	**55**	**55.166**	ug/L	1.536	2	701	1617667	3	Standard
⌈>	**Ge**	**72**		ug/L			19285	20108	3	KED
|	**Ni**	**60**	**4.060**	ug/L	0.155	3	7	3897	1	KED
|	**Ni**	**62**	**4.144**	ug/L	0.141	3	3	652	6	KED
|	**Cu**	**63**	**10.795**	ug/L	0.167	1	37	30903	2	KED
|	**Cu**	**65**	**11.327**	ug/L	0.434	3	17	16078	0	KED
|	**Zn**	**66**	**33.641**	ug/L	2.162	6	24	11330	3	KED
|	**Zn**	**67**	**30.232**	ug/L	1.909	6	4	1701	2	KED
|	**As**	**75**	**2.809**	ug/L	0.169	6	3	476	3	KED
⌊	**Se**	**78**	**0.530**	ug/L	0.207	39	9	19	21	KED
	Y	**89**		ug/L			287409	374589	3	Standard
	Kr	**83**		ug/L			52	71	6	Standard
⌈>	**In-1**	**115**		ug/L			5508	5667	1	KED
|	**Cd**	**111**	**0.051**	ug/L	0.009	18	4	14	13	KED
⌊	**Cd**	**114**	**0.075**	ug/L	0.011	14	1	37	15	KED
⌈>	**In**	**115**		ug/L			456477	466921	1	Standard
|	**Ag**	**107**	**0.045**	ug/L	0.002	3	46	949	1	Standard
|	**Sb**	**121**	**-0.021**	ug/L	0.001	2	466	182	5	Standard
|	**Sb**	**123**	**-0.020**	ug/L	0.001	5	343	137	7	Standard
|	**Ba**	**135**	**13.944**	ug/L	0.274	1	10	57937	0	Standard
⌊	**Ba**	**137**	**14.637**	ug/L	0.420	2	19	102208	0	Standard
⌈>	**Tb**	**159**		ug/L			710909	749703	1	Standard
⌊	**Pb**	**208**	**6.758**	ug/L	0.076	1	226	396022	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-07
Sample Dil Factor: 50
DEL
Comments:
Sample Date/Time: Saturday, April 01, 2023 00:12:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	32934	4	Standard
	Cl	**37**		ug/L			3111826	3227823	3	Standard
>	**Sc**	**45**		ug/L			446275	518134	2	Standard
	V	**51**	**10.687**	ug/L	0.324	3	6985	271955	0	Standard
	V-1	**51**	**10.655**	ug/L	0.322	3	122	266389	0	Standard
	Cr	**52**	**5.259**	ug/L	0.099	1	20379	132672	0	Standard
	Cr	**53**	**5.368**	ug/L	0.110	2	108	13211	0	Standard
	Mn	**55**	**58.388**	ug/L	0.493	0	701	1754387	3	Standard
>	**Ge**	**72**		ug/L			19285	20005	2	KED
	Ni	**60**	**4.218**	ug/L	0.043	1	7	4031	1	KED
	Ni	**62**	**4.045**	ug/L	0.298	7	3	632	5	KED
	Cu	**63**	**10.481**	ug/L	0.343	3	37	29849	1	KED
	Cu	**65**	**10.680**	ug/L	0.111	1	17	15099	3	KED
	Zn	**66**	**21.749**	ug/L	0.849	3	24	7306	3	KED
	Zn	**67**	**21.126**	ug/L	1.710	8	4	1186	8	KED
	As	**75**	**2.936**	ug/L	0.104	3	3	496	5	KED
	Se	**78**	**0.813**	ug/L	0.092	11	9	24	4	KED
	Y	**89**		ug/L			287409	394572	0	Standard
	Kr	**83**		ug/L			52	54	21	Standard
>	**In-1**	**115**		ug/L			5508	5623	2	KED
	Cd	**111**	**0.057**	ug/L	0.012	20	4	15	12	KED
	Cd	**114**	**0.086**	ug/L	0.018	21	1	42	18	KED
>	**In**	**115**		ug/L			456477	471465	1	Standard
	Ag	**107**	**0.048**	ug/L	0.001	2	46	1020	3	Standard
	Sb	**121**	**-0.026**	ug/L	0.001	3	466	111	13	Standard
	Sb	**123**	**-0.023**	ug/L	0.000	1	343	103	4	Standard
	Ba	**135**	**14.067**	ug/L	0.440	3	10	59006	1	Standard
	Ba	**137**	**14.621**	ug/L	0.373	2	19	103102	0	Standard
>	**Tb**	**159**		ug/L			710909	762310	2	Standard
	Pb	**208**	**5.450**	ug/L	0.118	2	226	324692	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-08
Sample Dil Factor: 50
Comments:
Sample Date/Time: Saturday, April 01, 2023 00:17:12

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	32433	3	Standard
	Cl	**37**		ug/L			3111826	3209357	4	Standard
>	**Sc**	**45**		ug/L			446275	521181	0	Standard
	V	**51**	**11.333**	ug/L	0.080	0	6985	289720	0	Standard
	V-1	**51**	**11.268**	ug/L	0.099	0	122	283489	0	Standard
	Cr	**52**	**5.229**	ug/L	0.034	0	20379	132861	0	Standard
	Cr	**53**	**5.257**	ug/L	0.052	0	108	13020	0	Standard
	Mn	**55**	**59.157**	ug/L	0.805	1	701	1787745	1	Standard
>	**Ge**	**72**		ug/L			19285	20284	1	KED
	Ni	**60**	**4.534**	ug/L	0.104	2	7	4393	1	KED
	Ni	**62**	**4.339**	ug/L	0.359	8	3	688	8	KED
	Cu	**63**	**9.612**	ug/L	0.189	1	37	27770	1	KED
	Cu	**65**	**9.589**	ug/L	0.324	3	17	13742	2	KED
	Zn	**66**	**21.075**	ug/L	0.491	2	24	7179	1	KED
	Zn	**67**	**20.249**	ug/L	0.267	1	4	1153	2	KED
	As	**75**	**2.598**	ug/L	0.088	3	3	445	4	KED
	Se	**78**	**0.554**	ug/L	0.182	32	9	19	14	KED
	Y	**89**		ug/L			287409	398516	1	Standard
	Kr	**83**		ug/L			52	64	5	Standard
>	**In-1**	**115**		ug/L			5508	5716	1	KED
	Cd	**111**	**0.059**	ug/L	0.012	20	4	15	15	KED
	Cd	**114**	**0.062**	ug/L	0.012	19	1	31	17	KED
>	**In**	**115**		ug/L			456477	478210	1	Standard
	Ag	**107**	**0.038**	ug/L	0.002	5	46	821	3	Standard
	Sb	**121**	**-0.025**	ug/L	0.001	5	466	133	12	Standard
	Sb	**123**	**-0.024**	ug/L	0.002	8	343	99	19	Standard
	Ba	**135**	**14.239**	ug/L	0.374	2	10	60601	2	Standard
	Ba	**137**	**14.531**	ug/L	0.334	2	19	103965	2	Standard
>	**Tb**	**159**		ug/L			710909	768925	2	Standard
	Pb	**208**	**6.654**	ug/L	0.154	2	226	399850	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 00:23:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	27135	5	Standard
	Cl	**37**		ug/L			3111826	3330555	1	Standard
>	**Sc**	**45**		ug/L			446275	464082	3	Standard
	V	**51**	**47.113**	ug/L	0.618	1	6985	1049319	2	Standard
	V-1	**51**	**46.886**	ug/L	0.570	1	122	1049739	2	Standard
	Cr	**52**	**49.657**	ug/L	1.750	3	20379	942692	1	Standard
	Cr	**53**	**48.815**	ug/L	1.620	3	108	106658	0	Standard
	Mn	**55**	**49.116**	ug/L	1.225	2	701	1321096	1	Standard
>	**Ge**	**72**		ug/L			19285	19613	3	KED
	Ni	**60**	**46.296**	ug/L	1.460	3	7	43289	3	KED
	Ni	**62**	**47.652**	ug/L	1.767	3	3	7271	3	KED
	Cu	**63**	**47.266**	ug/L	0.379	0	37	131875	3	KED
	Cu	**65**	**47.215**	ug/L	0.882	1	17	65350	2	KED
	Zn	**66**	**47.567**	ug/L	1.545	3	24	15632	3	KED
	Zn	**67**	**48.193**	ug/L	0.925	1	4	2645	1	KED
	As	**75**	**48.651**	ug/L	1.596	3	3	7998	1	KED
	Se	**78**	**49.420**	ug/L	0.917	1	9	849	2	KED
	Y	**89**		ug/L			287409	297633	2	Standard
	Kr	**83**		ug/L			52	53	27	Standard
>	**In-1**	**115**		ug/L			5508	5477	0	KED
	Cd	**111**	**50.117**	ug/L	0.623	1	4	9487	1	KED
	Cd	**114**	**49.917**	ug/L	1.058	2	1	23491	2	KED
>	**In**	**115**		ug/L			456477	463445	1	Standard
	Ag	**107**	**44.308**	ug/L	0.428	0	46	876574	1	Standard
	Sb	**121**	**47.809**	ug/L	0.834	1	466	664815	0	Standard
	Sb	**123**	**48.277**	ug/L	1.416	2	343	513882	2	Standard
	Ba	**135**	**48.430**	ug/L	0.639	1	10	199730	0	Standard
	Ba	**137**	**49.998**	ug/L	1.480	2	19	346608	2	Standard
>	**Tb**	**159**		ug/L			710909	736517	2	Standard
	Pb	**208**	**47.032**	ug/L	0.672	1	226	2705972	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 00:30:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	25950	1	Standard
	Cl	**37**		ug/L			3111826	3163513	1	Standard
⌈>	**Sc**	**45**		ug/L			446275	455619	2	Standard
|	**V**	**51**	**-0.007**	ug/L	0.014	183	6985	6965	1	Standard
|	**V-1**	**51**	**-0.002**	ug/L	0.000	17	122	70	14	Standard
|	**Cr**	**52**	**-0.019**	ug/L	0.049	264	20379	20452	1	Standard
|	**Cr**	**53**	**-0.002**	ug/L	0.004	196	108	106	6	Standard
⌊	**Mn**	**55**	**0.002**	ug/L	0.000	6	701	774	2	Standard
⌈>	**Ge**	**72**		ug/L			19285	19310	2	KED
|	**Ni**	**60**	**-0.001**	ug/L	0.005	402	7	6	75	KED
|	**Ni**	**62**	**-0.004**	ug/L	0.019	439	3	2	114	KED
|	**Cu**	**63**	**0.001**	ug/L	0.001	82	37	40	7	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.005	147	17	13	51	KED
|	**Zn**	**66**	**-0.018**	ug/L	0.005	29	24	19	10	KED
|	**Zn**	**67**	**-0.012**	ug/L	0.034	275	4	3	50	KED
|	**As**	**75**	**0.010**	ug/L	0.001	11	3	5	5	KED
⌊	**Se**	**78**	**0.172**	ug/L	0.076	44	9	12	8	KED
	Y	**89**		ug/L			287409	282478	1	Standard
	Kr	**83**		ug/L			52	53	19	Standard
⌈>	**In-1**	**115**		ug/L			5508	5305	2	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.008	794	4	3	43	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.011	123	1	4	94	KED
⌈>	**In**	**115**		ug/L			456477	468220	1	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.000	46	46	67	15	Standard
|	**Sb**	**121**	**0.086**	ug/L	0.007	7	466	1688	4	Standard
|	**Sb**	**123**	**0.096**	ug/L	0.009	9	343	1378	5	Standard
|	**Ba**	**135**	**0.001**	ug/L	0.000	71	10	13	15	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.001	177	19	22	25	Standard
⌈>	**Tb**	**159**		ug/L			710909	705849	3	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	28	226	293	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0848-DUP1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 00:35:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			24249	37635	2	Standard
	Cl	37		ug/L			3111826	3915662	1	Standard
>	Sc	45		ug/L			446275	460096	0	Standard
	V	51	0.141	ug/L	0.013	9	6985	10285	2	Standard
	V-1	51	0.302	ug/L	0.009	3	122	6833	3	Standard
	Cr	52	0.269	ug/L	0.039	14	20379	25953	1	Standard
	Cr	53	0.793	ug/L	0.024	2	108	1828	1	Standard
	Mn	55	104.462	ug/L	1.558	1	701	2786120	1	Standard
>	Ge	72		ug/L			19285	19148	1	KED
	Ni	60	2.870	ug/L	0.141	4	7	2626	3	KED
	Ni	62	3.022	ug/L	0.289	9	3	453	9	KED
	Cu	63	2.330	ug/L	0.035	1	37	6383	1	KED
	Cu	65	2.339	ug/L	0.020	0	17	3178	2	KED
	Zn	66	25.391	ug/L	0.632	2	24	8161	2	KED
	Zn	67	23.710	ug/L	1.031	4	4	1273	2	KED
	As	75	0.780	ug/L	0.031	3	3	128	2	KED
	Se	78	0.166	ug/L	0.110	66	9	12	15	KED
	Y	89		ug/L			287409	283630	1	Standard
	Kr	83		ug/L			52	52	32	Standard
>	In-1	115		ug/L			5508	5400	1	KED
	Cd	111	0.075	ug/L	0.009	11	4	18	9	KED
	Cd	114	0.103	ug/L	0.024	23	1	48	21	KED
>	In	115		ug/L			456477	440611	0	Standard
	Ag	107	0.001	ug/L	0.001	50	46	63	15	Standard
	Sb	121	5.309	ug/L	0.081	1	466	70596	1	Standard
	Sb	123	5.289	ug/L	0.059	1	343	53823	0	Standard
	Ba	135	13.865	ug/L	0.231	1	10	54373	1	Standard
	Ba	137	13.975	ug/L	0.209	1	19	92129	1	Standard
>	Tb	159		ug/L			710909	715743	2	Standard
	Pb	208	0.095	ug/L	0.004	4	226	5538	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0848-MS1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 00:40:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte		Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C		13		ug/L			24249	33170	3	Standard
	Cl		37		ug/L			3111826	3832847	3	Standard
>	Sc		45		ug/L			446275	442252	2	Standard
	V		51	11.976	ug/L	0.220	1	6985	259329	1	Standard
	V-1		51	12.099	ug/L	0.280	2	122	258196	1	Standard
	Cr		52	12.450	ug/L	0.392	3	20379	240493	3	Standard
	Cr		53	12.834	ug/L	0.223	1	108	26813	1	Standard
	Mn	STL	55	116.756	ug/L	2.487	2	701	2992406	1	Standard
>	Ge		72		ug/L			19285	18093	1	KED
	Ni		60	14.851	ug/L	0.111	0	7	12819	0	KED
	Ni		62	15.326	ug/L	0.087	0	3	2160	1	KED
	Cu		63	13.815	ug/L	0.153	1	37	35585	0	KED
	Cu		65	14.250	ug/L	0.345	2	17	18210	1	KED
	Zn		66	63.798	ug/L	2.015	3	24	19338	1	KED
	Zn		67	60.439	ug/L	0.407	0	4	3061	0	KED
	As		75	13.959	ug/L	0.116	0	3	2120	0	KED
	Se		78	39.945	ug/L	0.848	2	9	635	1	KED
	Y		89		ug/L			287409	282421	0	Standard
	Kr		83		ug/L			52	60	29	Standard
>	In-1		115		ug/L			5508	5160	3	KED
	Cd		111	12.324	ug/L	0.236	1	4	2200	3	KED
	Cd		114	12.075	ug/L	0.605	5	1	5349	3	KED
>	In		115		ug/L			456477	431449	1	Standard
	Ag		107	11.125	ug/L	0.082	0	46	204917	1	Standard
	Sb		121	17.895	ug/L	0.654	3	466	231872	2	Standard
	Sb		123	18.231	ug/L	0.038	0	343	180886	1	Standard
	Ba		135	27.129	ug/L	0.578	2	10	104146	0	Standard
	Ba		137	27.930	ug/L	0.597	2	19	180242	1	Standard
>	Tb		159		ug/L			710909	723208	1	Standard
	Pb		208	11.459	ug/L	0.148	1	226	647599	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0585-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 00:47:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	36051	1	Standard
	Cl	**37**		ug/L			3111826	3161422	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	441712	2	Standard
|	**V**	**51**	**0.829**	ug/L	0.128	15	6985	24335	9	Standard
|	**V-1**	**51**	**1.019**	ug/L	0.021	2	122	21830	0	Standard
|	**Cr**	**52**	**13.610**	ug/L	0.515	3	20379	260595	1	Standard
|	**Cr**	**53**	**13.731**	ug/L	0.216	1	108	28646	1	Standard
⌊	**Mn**	**55**	**5.452**	ug/L	0.111	2	701	140224	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	17762	1	KED
|	**Ni**	**60**	**0.720**	ug/L	0.002	0	7	616	1	KED
|	**Ni**	**62**	**0.654**	ug/L	0.051	7	3	93	7	KED
|	**Cu**	**63**	**3.525**	ug/L	0.027	0	37	8939	1	KED
|	**Cu**	**65**	**3.601**	ug/L	0.068	1	17	4530	0	KED
|	**Zn**	**66**	**2.443**	ug/L	0.135	5	24	749	6	KED
|	**Zn**	**67**	**2.151**	ug/L	0.567	26	4	111	26	KED
|	**As**	**75**	**0.086**	ug/L	0.028	32	3	16	26	KED
⌊	**Se**	**78**	**0.317**	ug/L	0.171	53	9	13	20	KED
	Y	**89**		ug/L			287409	282282	0	Standard
	Kr	**83**		ug/L			52	53	19	Standard
⌈>	**In-1**	**115**		ug/L			5508	5028	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.008	487	4	3	41	KED
⌊	**Cd**	**114**	**0.026**	ug/L	0.010	36	1	12	32	KED
⌈>	**In**	**115**		ug/L			456477	423567	1	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	62	46	60	16	Standard
|	**Sb**	**121**	**0.152**	ug/L	0.005	3	466	2368	2	Standard
|	**Sb**	**123**	**0.157**	ug/L	0.002	1	343	1848	0	Standard
|	**Ba**	**135**	**1.065**	ug/L	0.022	2	10	4022	3	Standard
⌊	**Ba**	**137**	**1.069**	ug/L	0.029	2	19	6788	2	Standard
⌈>	**Tb**	**159**		ug/L			710909	721082	2	Standard
⌊	**Pb**	**208**	**0.017**	ug/L	0.001	6	226	1207	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0585-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 00:51:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	36379	4	Standard
	Cl	**37**		ug/L			3111826	3117969	1	Standard
>	**Sc**	**45**		ug/L			446275	452551	0	Standard
	V	**51**	**0.848**	ug/L	0.105	12	6985	25380	8	Standard
	V-1	**51**	**1.020**	ug/L	0.008	0	122	22394	0	Standard
	Cr	**52**	**11.991**	ug/L	0.307	2	20379	237803	2	Standard
	Cr	**53**	**12.116**	ug/L	0.044	0	108	25916	0	Standard
	Mn	**55**	**6.267**	ug/L	0.051	0	701	165080	0	Standard
>	**Ge**	**72**		ug/L			19285	17746	2	KED
	Ni	**60**	**1.030**	ug/L	0.031	3	7	878	3	KED
	Ni	**62**	**1.114**	ug/L	0.114	10	3	156	10	KED
	Cu	**63**	**3.256**	ug/L	0.189	5	37	8244	3	KED
	Cu	**65**	**3.229**	ug/L	0.119	3	17	4058	2	KED
	Zn	**66**	**3.493**	ug/L	0.226	6	24	1059	5	KED
	Zn	**67**	**3.123**	ug/L	0.582	18	4	158	16	KED
	As	**75**	**0.110**	ug/L	0.005	4	3	19	4	KED
	Se	**78**	**0.039**	ug/L	0.164	424	9	9	27	KED
	Y	**89**		ug/L			287409	288733	3	Standard
	Kr	**83**		ug/L			52	46	9	Standard
>	**In-1**	**115**		ug/L			5508	5059	0	KED
	Cd	**111**	**0.022**	ug/L	0.005	24	4	7	12	KED
	Cd	**114**	**0.016**	ug/L	0.009	58	1	7	49	KED
>	**In**	**115**		ug/L			456477	424118	1	Standard
	Ag	**107**	**0.001**	ug/L	0.001	129	46	54	27	Standard
	Sb	**121**	**0.158**	ug/L	0.006	3	466	2438	2	Standard
	Sb	**123**	**0.158**	ug/L	0.005	2	343	1857	0	Standard
	Ba	**135**	**1.095**	ug/L	0.024	2	10	4142	2	Standard
	Ba	**137**	**1.102**	ug/L	0.046	4	19	7006	2	Standard
>	**Tb**	**159**		ug/L			710909	725099	4	Standard
	Pb	**208**	**0.021**	ug/L	0.001	3	226	1401	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0585-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 00:57:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	33047	3	Standard
	Cl	**37**		ug/L			3111826	3123928	1	Standard
>	**Sc**	**45**		ug/L			446275	454789	3	Standard
	V	**51**	**0.944**	ug/L	0.050	5	6985	27580	5	Standard
	V-1	**51**	**1.063**	ug/L	0.023	2	122	23438	1	Standard
	Cr	**52**	**7.535**	ug/L	0.273	3	20379	157793	1	Standard
	Cr	**53**	**7.667**	ug/L	0.307	4	108	16506	0	Standard
	Mn	**55**	**6.715**	ug/L	0.187	2	701	177661	2	Standard
>	**Ge**	**72**		ug/L			19285	17419	2	KED
	Ni	**60**	**1.025**	ug/L	0.054	5	7	857	3	KED
	Ni	**62**	**1.098**	ug/L	0.061	5	3	151	7	KED
	Cu	**63**	**1.665**	ug/L	0.027	1	37	4157	1	KED
	Cu	**65**	**1.667**	ug/L	0.041	2	17	2066	4	KED
	Zn	**66**	**7.881**	ug/L	0.355	4	24	2318	2	KED
	Zn	**67**	**7.464**	ug/L	0.208	2	4	367	5	KED
	As	**75**	**0.084**	ug/L	0.028	33	3	15	29	KED
	Se	**78**	**0.212**	ug/L	0.136	64	9	11	18	KED
	Y	**89**		ug/L			287409	292358	3	Standard
	Kr	**83**		ug/L			52	57	21	Standard
>	**In-1**	**115**		ug/L			5508	4988	3	KED
	Cd	**111**	**0.006**	ug/L	0.012	194	4	4	40	KED
	Cd	**114**	**0.012**	ug/L	0.012	98	1	6	78	KED
>	**In**	**115**		ug/L			456477	427788	2	Standard
	Ag	**107**	**0.004**	ug/L	0.001	26	46	118	14	Standard
	Sb	**121**	**0.124**	ug/L	0.006	4	466	2023	1	Standard
	Sb	**123**	**0.117**	ug/L	0.008	7	343	1473	3	Standard
	Ba	**135**	**1.072**	ug/L	0.029	2	10	4091	3	Standard
	Ba	**137**	**1.079**	ug/L	0.015	1	19	6919	2	Standard
>	**Tb**	**159**		ug/L			710909	736148	2	Standard
	Pb	**208**	**0.036**	ug/L	0.001	2	226	2298	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0664-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 01:03:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	32661	2	Standard
	Cl	**37**		ug/L			3111826	3196145	1	Standard
>	**Sc**	**45**		ug/L			446275	458035	2	Standard
	V	**51**	**0.849**	ug/L	0.057	6	6985	25691	2	Standard
	V-1	**51**	**0.886**	ug/L	0.011	1	122	19697	0	Standard
	Cr	**52**	**9.536**	ug/L	0.326	3	20379	195616	1	Standard
	Cr	**53**	**9.315**	ug/L	0.209	2	108	20187	1	Standard
	Mn	**55**	**5.871**	ug/L	0.178	3	701	156557	3	Standard
>	**Ge**	**72**		ug/L			19285	18076	2	KED
	Ni	**60**	**0.860**	ug/L	0.019	2	7	747	2	KED
	Ni	**62**	**0.872**	ug/L	0.071	8	3	125	8	KED
	Cu	**63**	**1.758**	ug/L	0.052	2	37	4552	1	KED
	Cu	**65**	**1.797**	ug/L	0.039	2	17	2308	0	KED
	Zn	**66**	**4.371**	ug/L	0.153	3	24	1345	3	KED
	Zn	**67**	**3.916**	ug/L	0.201	5	4	201	2	KED
	As	**75**	**0.086**	ug/L	0.020	23	3	16	20	KED
	Se	**78**	**0.247**	ug/L	0.169	68	9	12	20	KED
	Y	**89**		ug/L			287409	288722	3	Standard
	Kr	**83**		ug/L			52	47	4	Standard
>	**In-1**	**115**		ug/L			5508	5247	1	KED
	Cd	**111**	**-0.004**	ug/L	0.008	184	4	3	45	KED
	Cd	**114**	**0.009**	ug/L	0.007	75	1	5	59	KED
>	**In**	**115**		ug/L			456477	441747	2	Standard
	Ag	**107**	**0.001**	ug/L	0.001	68	46	60	19	Standard
	Sb	**121**	**0.087**	ug/L	0.005	5	466	1600	3	Standard
	Sb	**123**	**0.087**	ug/L	0.004	4	343	1212	2	Standard
	Ba	**135**	**0.962**	ug/L	0.027	2	10	3792	2	Standard
	Ba	**137**	**0.983**	ug/L	0.039	3	19	6511	2	Standard
>	**Tb**	**159**		ug/L			710909	737661	4	Standard
	Pb	**208**	**0.015**	ug/L	0.001	4	226	1111	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0664-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 01:08:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	33009	4	Standard
	Cl	**37**		ug/L			3111826	3091466	2	Standard
>	**Sc**	**45**		ug/L			446275	454191	2	Standard
	V	**51**	**0.765**	ug/L	0.047	6	6985	23670	3	Standard
	V-1	**51**	**0.880**	ug/L	0.022	2	122	19397	1	Standard
	Cr	**52**	**8.248**	ug/L	0.353	4	20379	170548	1	Standard
	Cr	**53**	**8.329**	ug/L	0.263	3	108	17905	0	Standard
	Mn	**55**	**5.057**	ug/L	0.215	4	701	133759	2	Standard
>	**Ge**	**72**		ug/L			19285	18291	0	KED
	Ni	**60**	**0.624**	ug/L	0.022	3	7	551	2	KED
	Ni	**62**	**0.706**	ug/L	0.005	0	3	103	1	KED
	Cu	**63**	**2.347**	ug/L	0.011	0	37	6140	0	KED
	Cu	**65**	**2.336**	ug/L	0.044	1	17	3032	1	KED
	Zn	**66**	**4.132**	ug/L	0.149	3	24	1288	2	KED
	Zn	**67**	**4.179**	ug/L	0.679	16	4	217	15	KED
	As	**75**	**0.052**	ug/L	0.017	31	3	11	23	KED
	Se	**78**	**0.331**	ug/L	0.122	36	9	14	12	KED
	Y	**89**		ug/L			287409	290983	0	Standard
	Kr	**83**		ug/L			52	50	18	Standard
>	**In-1**	**115**		ug/L			5508	5184	1	KED
	Cd	**111**	**0.005**	ug/L	0.006	113	4	4	20	KED
	Cd	**114**	**0.004**	ug/L	0.005	115	1	2	73	KED
>	**In**	**115**		ug/L			456477	435098	0	Standard
	Ag	**107**	**0.001**	ug/L	0.001	73	46	59	19	Standard
	Sb	**121**	**0.070**	ug/L	0.004	5	466	1363	3	Standard
	Sb	**123**	**0.069**	ug/L	0.002	3	343	1014	1	Standard
	Ba	**135**	**0.900**	ug/L	0.036	3	10	3496	3	Standard
	Ba	**137**	**0.921**	ug/L	0.036	3	19	6012	3	Standard
>	**Tb**	**159**		ug/L			710909	740658	0	Standard
	Pb	**208**	**0.013**	ug/L	0.000	0	226	973	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0664-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 01:13:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	32782	1	Standard
	Cl	**37**		ug/L			3111826	3132684	1	Standard
>	**Sc**	**45**		ug/L			446275	451966	2	Standard
	V	**51**	**0.651**	ug/L	0.084	12	6985	21070	6	Standard
	V-1	**51**	**0.892**	ug/L	0.031	3	122	19565	1	Standard
	Cr	**52**	**10.457**	ug/L	0.524	5	20379	209612	2	Standard
	Cr	**53**	**10.863**	ug/L	0.328	3	108	23205	0	Standard
	Mn	**55**	**4.747**	ug/L	0.165	3	701	125011	2	Standard
>	**Ge**	**72**		ug/L			19285	17902	1	KED
	Ni	**60**	**0.504**	ug/L	0.029	5	7	437	4	KED
	Ni	**62**	**0.654**	ug/L	0.102	15	3	93	13	KED
	Cu	**63**	**2.556**	ug/L	0.041	1	37	6541	1	KED
	Cu	**65**	**2.562**	ug/L	0.096	3	17	3253	4	KED
	Zn	**66**	**4.229**	ug/L	0.227	5	24	1289	4	KED
	Zn	**67**	**4.197**	ug/L	0.372	8	4	213	7	KED
	As	**75**	**0.059**	ug/L	0.012	19	3	12	12	KED
	Se	**78**	**0.272**	ug/L	0.145	53	9	13	15	KED
	Y	**89**		ug/L			287409	287062	1	Standard
	Kr	**83**		ug/L			52	49	17	Standard
>	**In-1**	**115**		ug/L			5508	5181	3	KED
	Cd	**111**	**0.002**	ug/L	0.007	446	4	4	26	KED
	Cd	**114**	**0.003**	ug/L	0.005	175	1	2	88	KED
>	**In**	**115**		ug/L			456477	433721	1	Standard
	Ag	**107**	**0.000**	ug/L	0.001	259	46	49	29	Standard
	Sb	**121**	**0.070**	ug/L	0.002	2	466	1357	2	Standard
	Sb	**123**	**0.068**	ug/L	0.003	4	343	1005	4	Standard
	Ba	**135**	**0.864**	ug/L	0.012	1	10	3345	0	Standard
	Ba	**137**	**0.880**	ug/L	0.019	2	19	5730	2	Standard
>	**Tb**	**159**		ug/L			710909	739823	3	Standard
	Pb	**208**	**0.011**	ug/L	0.001	6	226	867	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0664-04
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 01:19:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	32029	4	Standard
	Cl	**37**		ug/L			3111826	3150588	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	466540	2	Standard
|	**V**	**51**	**0.695**	ug/L	0.053	7	6985	22744	3	Standard
|	**V-1**	**51**	**0.754**	ug/L	0.032	4	122	17093	2	Standard
|	**Cr**	**52**	**6.380**	ug/L	0.127	1	20379	140396	1	Standard
|	**Cr**	**53**	**6.351**	ug/L	0.072	1	108	14057	2	Standard
⌊	**Mn**	**55**	**5.046**	ug/L	0.190	3	701	137088	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	19167	0	KED
|	**Ni**	**60**	**0.331**	ug/L	0.018	5	7	310	5	KED
|	**Ni**	**62**	**0.426**	ug/L	0.068	15	3	66	14	KED
|	**Cu**	**63**	**1.908**	ug/L	0.083	4	37	5239	3	KED
|	**Cu**	**65**	**1.919**	ug/L	0.100	5	17	2612	4	KED
|	**Zn**	**66**	**2.337**	ug/L	0.172	7	24	774	7	KED
|	**Zn**	**67**	**2.204**	ug/L	0.198	8	4	122	8	KED
|	**As**	**75**	**0.056**	ug/L	0.007	11	3	12	7	KED
⌊	**Se**	**78**	**0.250**	ug/L	0.191	76	9	13	23	KED
	Y	**89**		ug/L			287409	291667	1	Standard
	Kr	**83**		ug/L			52	54	12	Standard
⌈>	**In-1**	**115**		ug/L			5508	5232	3	KED
|	**Cd**	**111**	**0.008**	ug/L	0.007	84	4	5	20	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.011	95	1	6	75	KED
⌈>	**In**	**115**		ug/L			456477	432846	1	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.001	738	46	42	27	Standard
|	**Sb**	**121**	**0.096**	ug/L	0.001	0	466	1682	1	Standard
|	**Sb**	**123**	**0.092**	ug/L	0.007	8	343	1236	6	Standard
|	**Ba**	**135**	**0.883**	ug/L	0.033	3	10	3411	2	Standard
⌊	**Ba**	**137**	**0.897**	ug/L	0.031	3	19	5822	3	Standard
⌈>	**Tb**	**159**		ug/L			710909	744632	2	Standard
⌊	**Pb**	**208**	**0.009**	ug/L	0.000	2	226	766	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLA
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 01:24:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	26664	3	Standard
	Cl	**37**		ug/L			3111826	3289141	0	Standard
⎡>	**Sc**	**45**		ug/L			446275	461789	1	Standard
⎢	**V**	**51**	**0.023**	ug/L	0.015	65	6985	7726	2	Standard
⎢	**V-1**	**51**	**-0.001**	ug/L	0.000	75	122	114	5	Standard
⎢	**Cr**	**52**	**0.099**	ug/L	0.047	47	20379	22912	2	Standard
⎢	**Cr**	**53**	**0.020**	ug/L	0.003	17	108	154	5	Standard
⎣	**Mn**	**55**	**0.000**	ug/L	0.001	768	701	729	2	Standard
⎡>	**Ge**	**72**		ug/L			19285	20223	0	KED
⎢	**Ni**	**60**	**0.004**	ug/L	0.006	167	7	11	50	KED
⎢	**Ni**	**62**	**0.027**	ug/L	0.032	117	3	7	66	KED
⎢	**Cu**	**63**	**0.007**	ug/L	0.003	40	37	59	14	KED
⎢	**Cu**	**65**	**0.008**	ug/L	0.001	8	17	29	3	KED
⎢	**Zn**	**66**	**0.008**	ug/L	0.011	139	24	28	13	KED
⎢	**Zn**	**67**	**-0.015**	ug/L	0.033	217	4	3	50	KED
⎢	**As**	**75**	**0.006**	ug/L	0.007	111	3	4	26	KED
⎣	**Se**	**78**	**0.070**	ug/L	0.058	82	9	11	9	KED
	Y	**89**		ug/L			287409	302079	1	Standard
	Kr	**83**		ug/L			52	53	19	Standard
⎡>	**In-1**	**115**		ug/L			5508	5835	2	KED
⎢	**Cd**	**111**	**-0.011**	ug/L	0.003	23	4	2	24	KED
⎣	**Cd**	**114**	**0.004**	ug/L	0.006	158	1	3	92	KED
⎡>	**In**	**115**		ug/L			456477	485208	1	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.001	87	46	34	36	Standard
⎢	**Sb**	**121**	**-0.030**	ug/L	0.000	1	466	62	9	Standard
⎢	**Sb**	**123**	**-0.028**	ug/L	0.001	2	343	51	17	Standard
⎢	**Ba**	**135**	**0.005**	ug/L	0.002	36	10	31	24	Standard
⎣	**Ba**	**137**	**0.003**	ug/L	0.002	52	19	43	28	Standard
⎡>	**Tb**	**159**		ug/L			710909	761123	3	Standard
⎣	**Pb**	**208**	**-0.000**	ug/L	0.000	112	226	226	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 01:29:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	26294	3	Standard
	Cl	**37**		ug/L			3111826	3150209	2	Standard
⌈>	**Sc**	**45**		ug/L			446275	470011	1	Standard
|	**V**	**51**	**46.361**	ug/L	0.628	1	6985	1046039	1	Standard
|	**V-1**	**51**	**46.695**	ug/L	0.643	1	122	1058894	0	Standard
|	**Cr**	**52**	**48.185**	ug/L	0.976	2	20379	927659	2	Standard
|	**Cr**	**53**	**49.206**	ug/L	1.372	2	108	108936	1	Standard
⌊	**Mn**	**55**	**49.804**	ug/L	0.830	1	701	1357331	1	Standard
⌈>	**Ge**	**72**		ug/L			19285	20117	1	KED
|	**Ni**	**60**	**45.729**	ug/L	0.662	1	7	43871	1	KED
|	**Ni**	**62**	**45.948**	ug/L	1.938	4	3	7197	5	KED
|	**Cu**	**63**	**46.942**	ug/L	0.597	1	37	134343	1	KED
|	**Cu**	**65**	**46.715**	ug/L	1.142	2	17	66326	1	KED
|	**Zn**	**66**	**46.801**	ug/L	0.897	1	24	15783	2	KED
|	**Zn**	**67**	**48.067**	ug/L	1.723	3	4	2706	1	KED
|	**As**	**75**	**49.176**	ug/L	1.875	3	3	8294	2	KED
⌊	**Se**	**78**	**50.432**	ug/L	1.459	2	9	889	1	KED
	Y	**89**		ug/L			287409	299541	0	Standard
	Kr	**83**		ug/L			52	52	20	Standard
⌈>	**In-1**	**115**		ug/L			5508	5636	3	KED
|	**Cd**	**111**	**50.242**	ug/L	1.343	2	4	9781	1	KED
⌊	**Cd**	**114**	**49.795**	ug/L	1.512	3	1	24097	1	KED
⌈>	**In**	**115**		ug/L			456477	468747	2	Standard
|	**Ag**	**107**	**46.429**	ug/L	0.321	0	46	928891	1	Standard
|	**Sb**	**121**	**49.070**	ug/L	1.509	3	466	689939	1	Standard
|	**Sb**	**123**	**48.920**	ug/L	0.683	1	343	526632	1	Standard
|	**Ba**	**135**	**50.229**	ug/L	1.490	2	10	209455	1	Standard
⌊	**Ba**	**137**	**50.563**	ug/L	1.066	2	19	354531	2	Standard
⌈>	**Tb**	**159**		ug/L			710909	771012	1	Standard
⌊	**Pb**	**208**	**46.612**	ug/L	0.224	0	226	2807837	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 01:37:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24249	25871	2	Standard
	Cl	**37**		ug/L			3111826	3112362	6	Standard
⎡>	**Sc**	**45**		ug/L			446275	462541	2	Standard
⎢	**V**	**51**	**-0.009**	ug/L	0.015	162	6985	7042	5	Standard
⎢	**V-1**	**51**	**-0.001**	ug/L	0.000	24	122	99	9	Standard
⎢	**Cr**	**52**	**-0.027**	ug/L	0.042	157	20379	20624	4	Standard
⎢	**Cr**	**53**	**-0.001**	ug/L	0.009	1111	108	110	15	Standard
⎣	**Mn**	**55**	**-0.005**	ug/L	0.001	26	701	586	3	Standard
⎡>	**Ge**	**72**		ug/L			19285	19690	1	KED
⎢	**Ni**	**60**	**0.007**	ug/L	0.005	79	7	13	34	KED
⎢	**Ni**	**62**	**0.020**	ug/L	0.031	153	3	6	75	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.007	262	37	45	39	KED
⎢	**Cu**	**65**	**-0.004**	ug/L	0.003	82	17	12	34	KED
⎢	**Zn**	**66**	**-0.019**	ug/L	0.044	238	24	19	75	KED
⎢	**Zn**	**67**	**-0.036**	ug/L	0.020	53	4	2	43	KED
⎢	**As**	**75**	**-0.000**	ug/L	0.005	1110	3	3	20	KED
⎣	**Se**	**78**	**-0.052**	ug/L	0.195	378	9	9	37	KED
	Y	**89**		ug/L			287409	289063	3	Standard
	Kr	**83**		ug/L			52	59	11	Standard
⎡>	**In-1**	**115**		ug/L			5508	5682	2	KED
⎢	**Cd**	**111**	**-0.009**	ug/L	0.003	29	4	2	21	KED
⎣	**Cd**	**114**	**0.003**	ug/L	0.002	93	1	2	46	KED
⎡>	**In**	**115**		ug/L			456477	477697	0	Standard
⎢	**Ag**	**107**	**0.002**	ug/L	0.000	20	46	79	8	Standard
⎢	**Sb**	**121**	**0.085**	ug/L	0.010	11	466	1711	8	Standard
⎢	**Sb**	**123**	**0.091**	ug/L	0.004	4	343	1354	2	Standard
⎢	**Ba**	**135**	**0.000**	ug/L	0.000	4	10	13	0	Standard
⎣	**Ba**	**137**	**0.000**	ug/L	0.001	175	19	22	22	Standard
⎡>	**Tb**	**159**		ug/L			710909	720348	1	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	29	226	292	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 01:41:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				25525	4	Standard
	Cl	**37**		ug/L				3079769	2	Standard
>	**Sc**	**45**		ug/L				458223	2	Standard
	V	**51**		ug/L				7096	1	Standard
	V-1	**51**		ug/L				97	7	Standard
	Cr	**52**		ug/L				20883	1	Standard
	Cr	**53**		ug/L				121	7	Standard
	Mn	**55**		ug/L				554	3	Standard
>	**Ge**	**72**		ug/L				19943	2	KED
	Ni	**60**		ug/L				6	17	KED
	Ni	**62**		ug/L				3	100	KED
	Cu	**63**		ug/L				20	14	KED
	Cu	**65**		ug/L				15	45	KED
	Zn	**66**		ug/L				20	32	KED
	Zn	**67**		ug/L				2	43	KED
	As	**75**		ug/L				3	51	KED
	Se	**78**		ug/L				14	9	KED
	Y	**89**		ug/L				295636	1	Standard
	Kr	**83**		ug/L				57	29	Standard
>	**In-1**	**115**		ug/L				5644	0	KED
	Cd	**111**		ug/L				2	94	KED
	Cd	**114**		ug/L				2	122	KED
>	**In**	**115**		ug/L				475542	1	Standard
	Ag	**107**		ug/L				40	22	Standard
	Sb	**121**		ug/L				496	5	Standard
	Sb	**123**		ug/L				393	11	Standard
	Ba	**135**		ug/L				15	69	Standard
	Ba	**137**		ug/L				15	18	Standard
>	**Tb**	**159**		ug/L				724709	1	Standard
	Pb	**208**		ug/L				266	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 01:46:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	25917	2	Standard
	Cl	**37**		ug/L			3079769	3217120	2	Standard
>	**Sc**	**45**		ug/L			458223	472712	2	Standard
	V	**51**	**46.473**	ug/L	0.361	0	7096	1054500	2	Standard
	V-1	**51**	**46.614**	ug/L	0.529	1	97	1063044	1	Standard
	Cr	**52**	**49.077**	ug/L	0.865	1	20883	949608	1	Standard
	Cr	**53**	**49.437**	ug/L	1.951	3	121	110038	1	Standard
	Mn	**55**	**49.482**	ug/L	1.452	2	554	1355688	1	Standard
>	**Ge**	**72**		ug/L			19943	20352	1	KED
	Ni	**60**	**45.511**	ug/L	1.007	2	6	44184	3	KED
	Ni	**62**	**46.591**	ug/L	1.789	3	3	7381	3	KED
	Cu	**63**	**46.018**	ug/L	1.036	2	20	133202	0	KED
	Cu	**65**	**46.635**	ug/L	1.677	3	15	67028	5	KED
	Zn	**66**	**47.913**	ug/L	1.646	3	20	16335	2	KED
	Zn	**67**	**48.331**	ug/L	1.598	3	2	2752	3	KED
	As	**75**	**48.861**	ug/L	1.027	2	3	8339	1	KED
	Se	**78**	**49.663**	ug/L	0.667	1	14	891	3	KED
	Y	**89**		ug/L			295636	303577	2	Standard
	Kr	**83**		ug/L			57	59	3	Standard
>	**In-1**	**115**		ug/L			5644	5679	4	KED
	Cd	**111**	**48.957**	ug/L	2.337	4	2	9594	0	KED
	Cd	**114**	**48.934**	ug/L	1.182	2	2	23860	2	KED
>	**In**	**115**		ug/L			475542	480432	0	Standard
	Ag	**107**	**44.514**	ug/L	0.678	1	40	912856	1	Standard
	Sb	**121**	**47.909**	ug/L	0.288	0	496	690706	0	Standard
	Sb	**123**	**47.360**	ug/L	0.699	1	393	522662	0	Standard
	Ba	**135**	**49.918**	ug/L	0.571	1	15	213424	0	Standard
	Ba	**137**	**49.676**	ug/L	1.563	3	15	357008	3	Standard
>	**Tb**	**159**		ug/L			724709	775950	2	Standard
	Pb	**208**	**46.055**	ug/L	0.575	1	266	2791667	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 01:54:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	25942	1	Standard
	Cl	**37**		ug/L			3079769	3102326	2	Standard
⌈>	**Sc**	**45**		ug/L			458223	457439	3	Standard
|	**V**	**51**	**-0.007**	ug/L	0.002	26	7096	6929	2	Standard
|	**V-1**	**51**	**-0.001**	ug/L	0.000	33	97	73	9	Standard
|	**Cr**	**52**	**-0.024**	ug/L	0.003	11	20883	20414	2	Standard
|	**Cr**	**53**	**-0.003**	ug/L	0.004	113	121	114	9	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.003	179	554	589	8	Standard
⌈>	**Ge**	**72**		ug/L			19943	20225	3	KED
|	**Ni**	**60**	**-0.004**	ug/L	0.001	28	6	2	43	KED
|	**Ni**	**62**	**0.007**	ug/L	0.031	410	3	5	94	KED
|	**Cu**	**63**	**0.008**	ug/L	0.002	22	20	44	13	KED
|	**Cu**	**65**	**0.002**	ug/L	0.001	25	15	18	5	KED
|	**Zn**	**66**	**-0.005**	ug/L	0.009	181	20	19	17	KED
|	**Zn**	**67**	**0.034**	ug/L	0.054	159	2	4	65	KED
|	**As**	**75**	**0.008**	ug/L	0.003	32	3	4	10	KED
⌊	**Se**	**78**	**-0.077**	ug/L	0.068	89	14	13	11	KED
	Y	**89**		ug/L			295636	295436	2	Standard
	Kr	**83**		ug/L			57	43	19	Standard
⌈>	**In-1**	**115**		ug/L			5644	5565	3	KED
|	**Cd**	**111**	**0.000**	ug/L	0.003	1426	2	2	21	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.006	139	2	4	66	KED
⌈>	**In**	**115**		ug/L			475542	475183	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	40	40	78	20	Standard
|	**Sb**	**121**	**0.098**	ug/L	0.001	1	496	1896	1	Standard
|	**Sb**	**123**	**0.094**	ug/L	0.007	7	393	1422	4	Standard
|	**Ba**	**135**	**-0.000**	ug/L	0.000	54	15	13	7	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	98	15	22	30	Standard
⌈>	**Tb**	**159**		ug/L			724709	725947	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	58	266	302	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-08
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 01:59:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	30543	0	Standard
	Cl	**37**		ug/L			3079769	2954128	2	Standard
>	**Sc**	**45**		ug/L			458223	500994	1	Standard
	V	**51**	**-0.014**	ug/L	0.015	110	7096	7423	4	Standard
	V-1	**51**	**0.020**	ug/L	0.001	7	97	577	5	Standard
	Cr	**52**	**0.004**	ug/L	0.043	1050	20883	22908	2	Standard
	Cr	**53**	**0.113**	ug/L	0.007	6	121	399	4	Standard
	Mn	**55**	**113.256**	ug/L	4.343	3	554	3288268	2	Standard
>	**Ge**	**72**		ug/L			19943	21020	0	KED
	Ni	**60**	**0.899**	ug/L	0.042	4	6	907	4	KED
	Ni	**62**	**0.856**	ug/L	0.067	7	3	144	7	KED
	Cu	**63**	**0.135**	ug/L	0.003	2	20	425	1	KED
	Cu	**65**	**0.147**	ug/L	0.017	11	15	233	11	KED
	Zn	**66**	**2.508**	ug/L	0.265	10	20	903	9	KED
	Zn	**67**	**2.506**	ug/L	0.473	18	2	149	18	KED
	As	**75**	**3.613**	ug/L	0.151	4	3	640	3	KED
	Se	**78**	**-0.192**	ug/L	0.027	14	14	11	4	KED
	Y	**89**		ug/L			295636	312403	3	Standard
	Kr	**83**		ug/L			57	55	18	Standard
>	**In-1**	**115**		ug/L			5644	5838	3	KED
	Cd	**111**	**0.004**	ug/L	0.010	230	2	3	56	KED
	Cd	**114**	**0.009**	ug/L	0.004	43	2	6	31	KED
>	**In**	**115**		ug/L			475542	483349	2	Standard
	Ag	**107**	**0.001**	ug/L	0.000	42	40	57	10	Standard
	Sb	**121**	**0.013**	ug/L	0.000	1	496	697	2	Standard
	Sb	**123**	**0.014**	ug/L	0.003	23	393	558	4	Standard
	Ba	**135**	**1.590**	ug/L	0.033	2	15	6851	1	Standard
	Ba	**137**	**1.582**	ug/L	0.008	0	15	11451	2	Standard
>	**Tb**	**159**		ug/L			724709	761259	4	Standard
	Pb	**208**	**0.015**	ug/L	0.000	2	266	1194	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-22
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 02:04:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25525	32187	1	Standard
	Cl	37		ug/L			3079769	3242565	2	Standard
>	Sc	45		ug/L			458223	489714	0	Standard
	V	51	-0.005	ug/L	0.012	220	7096	7461	4	Standard
	V-1	51	0.068	ug/L	0.001	0	97	1706	1	Standard
	Cr	52	-0.019	ug/L	0.044	227	20883	21941	3	Standard
	Cr	53	0.221	ug/L	0.022	9	121	639	7	Standard
	Mn	55	31.674	ug/L	0.361	1	554	899519	0	Standard
>	Ge	72		ug/L			19943	18625	0	KED
	Ni	60	0.563	ug/L	0.043	7	6	505	7	KED
	Ni	62	0.593	ug/L	0.065	10	3	89	10	KED
	Cu	63	0.072	ug/L	0.007	9	20	209	8	KED
	Cu	65	0.083	ug/L	0.011	13	15	123	11	KED
	Zn	66	1.033	ug/L	0.035	3	20	340	2	KED
	Zn	67	5.734	ug/L	0.134	2	2	300	1	KED
	As	75	2.841	ug/L	0.092	3	3	446	2	KED
	Se	78	-0.198	ug/L	0.081	40	14	10	12	KED
	Y	89		ug/L			295636	298179	3	Standard
	Kr	83		ug/L			57	53	32	Standard
>	In-1	115		ug/L			5644	5480	3	KED
	Cd	111	0.005	ug/L	0.007	136	2	3	41	KED
	Cd	114	0.005	ug/L	0.006	121	2	4	62	KED
>	In	115		ug/L			475542	434337	1	Standard
	Ag	107	0.001	ug/L	0.001	81	40	57	29	Standard
	Sb	121	0.004	ug/L	0.002	44	496	502	5	Standard
	Sb	123	0.006	ug/L	0.001	21	393	424	2	Standard
	Ba	135	61.572	ug/L	1.439	2	15	237958	1	Standard
	Ba	137	62.887	ug/L	1.064	1	15	408537	0	Standard
>	Tb	159		ug/L			724709	722497	2	Standard
	Pb	208	0.024	ug/L	0.000	0	266	1602	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-23
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 02:08:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	31569	4	Standard
	Cl	**37**		ug/L			3079769	3332241	1	Standard
⌈>	**Sc**	**45**		ug/L			458223	490856	0	Standard
|	**V**	**51**	**-0.001**	ug/L	0.014	2281	7096	7587	5	Standard
|	**V-1**	**51**	**0.063**	ug/L	0.001	2	97	1596	2	Standard
|	**Cr**	**52**	**-0.037**	ug/L	0.054	146	20883	21650	5	Standard
|	**Cr**	**53**	**0.173**	ug/L	0.008	4	121	530	4	Standard
⌊	**Mn**	**55**	**49.377**	ug/L	0.845	1	554	1405200	1	Standard
⌈>	**Ge**	**72**		ug/L			19943	17704	2	KED
|	**Ni**	**60**	**0.606**	ug/L	0.029	4	6	516	3	KED
|	**Ni**	**62**	**0.693**	ug/L	0.098	14	3	99	15	KED
|	**Cu**	**63**	**0.073**	ug/L	0.004	5	20	202	3	KED
|	**Cu**	**65**	**0.064**	ug/L	0.010	16	15	93	12	KED
|	**Zn**	**66**	**0.467**	ug/L	0.069	14	20	156	11	KED
|	**Zn**	**67**	**1.876**	ug/L	0.399	21	2	95	21	KED
|	**As**	**75**	**8.307**	ug/L	0.079	0	3	1236	2	KED
⌊	**Se**	**78**	**0.001**	ug/L	0.063	4356	14	12	8	KED
	Y	**89**		ug/L			295636	298601	2	Standard
	Kr	**83**		ug/L			57	59	6	Standard
⌈>	**In-1**	**115**		ug/L			5644	5106	1	KED
|	**Cd**	**111**	**0.005**	ug/L	0.008	163	2	3	45	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.007	1129	2	2	117	KED
⌈>	**In**	**115**		ug/L			475542	433547	0	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.000	82	40	48	19	Standard
|	**Sb**	**121**	**-0.012**	ug/L	0.002	18	496	293	9	Standard
|	**Sb**	**123**	**-0.011**	ug/L	0.001	11	393	247	4	Standard
|	**Ba**	**135**	**20.247**	ug/L	0.249	1	15	78131	1	Standard
⌊	**Ba**	**137**	**20.602**	ug/L	0.340	1	15	133626	1	Standard
⌈>	**Tb**	**159**		ug/L			724709	735623	2	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	11	266	478	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-24
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 02:13:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	32088	4	Standard
	Cl	**37**		ug/L			3079769	3140800	0	Standard
>	**Sc**	**45**		ug/L			458223	481845	0	Standard
	V	**51**	**-0.004**	ug/L	0.004	94	7096	7364	0	Standard
	V-1	**51**	**0.029**	ug/L	0.001	2	97	784	2	Standard
	Cr	**52**	**-0.051**	ug/L	0.012	24	20883	20971	0	Standard
	Cr	**53**	**0.061**	ug/L	0.010	15	121	265	8	Standard
	Mn	**55**	**16.837**	ug/L	0.275	1	554	470784	1	Standard
>	**Ge**	**72**		ug/L			19943	18580	5	KED
	Ni	**60**	**0.153**	ug/L	0.013	8	6	140	2	KED
	Ni	**62**	**0.155**	ug/L	0.013	8	3	26	11	KED
	Cu	**63**	**0.066**	ug/L	0.011	15	20	194	15	KED
	Cu	**65**	**0.087**	ug/L	0.009	10	15	128	4	KED
	Zn	**66**	**0.419**	ug/L	0.009	2	20	149	7	KED
	Zn	**67**	**10.203**	ug/L	0.146	1	2	532	7	KED
	As	**75**	**2.352**	ug/L	0.126	5	3	369	5	KED
	Se	**78**	**-0.257**	ug/L	0.103	40	14	9	20	KED
	Y	**89**		ug/L			295636	278933	2	Standard
	Kr	**83**		ug/L			57	62	3	Standard
>	**In-1**	**115**		ug/L			5644	5496	2	KED
	Cd	**111**	**0.010**	ug/L	0.015	145	2	4	65	KED
	Cd	**114**	**0.003**	ug/L	0.004	136	2	3	49	KED
>	**In**	**115**		ug/L			475542	443929	0	Standard
	Ag	**107**	**0.000**	ug/L	0.000	3100	40	38	13	Standard
	Sb	**121**	**-0.013**	ug/L	0.001	7	496	286	4	Standard
	Sb	**123**	**-0.013**	ug/L	0.005	36	393	233	21	Standard
	Ba	**135**	**105.875**	ug/L	1.043	0	15	418275	0	Standard
	Ba	**137**	**107.235**	ug/L	1.129	1	15	712114	1	Standard
>	**Tb**	**159**		ug/L			724709	734547	2	Standard
	Pb	**208**	**0.005**	ug/L	0.000	3	266	578	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-25
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 02:18:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	28935	4	Standard
	Cl	**37**		ug/L			3079769	3113957	1	Standard
>	**Sc**	**45**		ug/L			458223	465903	0	Standard
	V	**51**	**0.086**	ug/L	0.004	4	7096	9113	1	Standard
	V-1	**51**	**0.132**	ug/L	0.004	2	97	3067	3	Standard
	Cr	**52**	**0.008**	ug/L	0.012	149	20883	21377	0	Standard
	Cr	**53**	**0.164**	ug/L	0.007	4	121	482	3	Standard
	Mn	**55**	**194.917**	ug/L	3.647	1	554	5263234	1	Standard
>	**Ge**	**72**		ug/L			19943	19282	2	KED
	Ni	**60**	**1.200**	ug/L	0.024	2	6	1109	3	KED
	Ni	**62**	**1.042**	ug/L	0.030	2	3	160	3	KED
	Cu	**63**	**0.058**	ug/L	0.003	5	20	179	6	KED
	Cu	**65**	**0.075**	ug/L	0.005	6	15	117	7	KED
	Zn	**66**	**2.086**	ug/L	0.102	4	20	693	6	KED
	Zn	**67**	**5.939**	ug/L	0.501	8	2	322	8	KED
	As	**75**	**2.579**	ug/L	0.111	4	3	420	3	KED
	Se	**78**	**0.002**	ug/L	0.281	12611	14	13	30	KED
	Y	**89**		ug/L			295636	284205	2	Standard
	Kr	**83**		ug/L			57	71	19	Standard
>	**In-1**	**115**		ug/L			5644	5492	2	KED
	Cd	**111**	**0.000**	ug/L	0.005	1974	2	2	43	KED
	Cd	**114**	**0.001**	ug/L	0.006	475	2	2	97	KED
>	**In**	**115**		ug/L			475542	446438	2	Standard
	Ag	**107**	**-0.000**	ug/L	0.000	482	40	36	19	Standard
	Sb	**121**	**-0.019**	ug/L	0.001	7	496	205	7	Standard
	Sb	**123**	**-0.020**	ug/L	0.001	4	393	161	5	Standard
	Ba	**135**	**49.067**	ug/L	0.735	1	15	194913	1	Standard
	Ba	**137**	**49.740**	ug/L	1.654	3	15	332014	1	Standard
>	**Tb**	**159**		ug/L			724709	723145	2	Standard
	Pb	**208**	**0.006**	ug/L	0.000	4	266	577	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-06
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 02:23:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25525	24397	4	Standard
Cl	37		ug/L			3079769	2467819	1	Standard
> Sc	45		ug/L			458223	347380	1	Standard
V	51	0.144	ug/L	0.002	1	7096	7762	1	Standard
V-1	51	0.145	ug/L	0.004	2	97	2499	3	Standard
Cr	52	0.134	ug/L	0.021	15	20883	17697	0	Standard
Cr	53	0.138	ug/L	0.011	7	121	316	4	Standard
Mn	55	0.630	ug/L	0.023	3	554	13093	1	Standard
> Ge	72		ug/L			19943	12922	0	KED
Ni	60	2.763	ug/L	0.091	3	6	1706	3	KED
Ni	62	2.918	ug/L	0.392	13	3	295	13	KED
Cu	63	1.076	ug/L	0.063	5	20	1990	5	KED
Cu	65	1.088	ug/L	0.047	4	15	1001	4	KED
Zn	66	1.865	ug/L	0.086	4	20	416	4	KED
Zn	67	16.069	ug/L	2.589	16	2	582	16	KED
As	75	2.764	ug/L	0.027	0	3	301	1	KED
Se	78	1.284	ug/L	0.243	18	14	23	11	KED
Y	89		ug/L			295636	220487	2	Standard
Kr	83		ug/L			57	96	9	Standard
> In-1	115		ug/L			5644	4297	2	KED
Cd	111	0.068	ug/L	0.014	20	2	12	18	KED
Cd	114	0.038	ug/L	0.012	32	2	15	30	KED
> In	115		ug/L			475542	308391	0	Standard
Ag	107	0.003	ug/L	0.002	44	40	71	28	Standard
Sb	121	1.100	ug/L	0.024	2	496	10498	1	Standard
Sb	123	1.109	ug/L	0.002	0	393	8105	0	Standard
Ba	135	267.886	ug/L	1.745	0	15	735185	0	Standard
Ba	137	273.066	ug/L	1.492	0	15	1259689	0	Standard
> Tb	159		ug/L			724709	618738	0	Standard
Pb	208	37.790	ug/L	0.121	0	266	1826914	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-09
Sample Dil Factor: 10
Comments:
Sample Date/Time: Saturday, April 01, 2023 02:28:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25525	27062	4	Standard
	Cl	37		ug/L			3079769	2770789	1	Standard
>	Sc	45		ug/L			458223	399707	1	Standard
	V	51	2.048	ug/L	0.030	1	7096	45211	1	Standard
	V-1	51	2.026	ug/L	0.027	1	97	39148	1	Standard
	Cr	52	0.041	ug/L	0.014	33	20883	18873	0	Standard
	Cr	53	0.047	ug/L	0.008	16	121	193	6	Standard
	Mn	55	0.461	ug/L	0.011	2	554	11155	0	Standard
>	Ge	72		ug/L			19943	17045	2	KED
	Ni	60	3.494	ug/L	0.117	3	6	2844	2	KED
	Ni	62	3.644	ug/L	0.188	5	3	486	4	KED
	Cu	63	0.049	ug/L	0.007	14	20	135	14	KED
	Cu	65	0.038	ug/L	0.006	15	15	58	9	KED
	Zn	66	0.512	ug/L	0.069	13	20	163	11	KED
	Zn	67	0.713	ug/L	0.063	8	2	36	10	KED
	As	75	23.207	ug/L	0.374	1	3	3320	3	KED
	Se	78	0.841	ug/L	0.317	37	14	24	17	KED
	Y	89		ug/L			295636	252654	2	Standard
	Kr	83		ug/L			57	67	9	Standard
>	In-1	115		ug/L			5644	4966	1	KED
	Cd	111	0.031	ug/L	0.023	71	2	7	50	KED
	Cd	114	0.018	ug/L	0.007	36	2	9	30	KED
>	In	115		ug/L			475542	381875	0	Standard
	Ag	107	-0.000	ug/L	0.001	2950	40	32	26	Standard
	Sb	121	13.373	ug/L	0.293	2	496	153532	1	Standard
	Sb	123	13.541	ug/L	0.046	0	393	119011	0	Standard
	Ba	135	4.769	ug/L	0.083	1	15	16221	2	Standard
	Ba	137	4.927	ug/L	0.037	0	15	28157	1	Standard
>	Tb	159		ug/L			724709	679868	3	Standard
	Pb	208	0.213	ug/L	0.008	3	266	11566	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0454-01
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 02:34:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	38173	1	Standard
	Cl	**37**		ug/L			3079769	3003331	1	Standard
⌈>	**Sc**	**45**		ug/L			458223	479035	0	Standard
|	**V**	**51**	**0.863**	ug/L	0.031	3	7096	27130	3	Standard
|	**V-1**	**51**	**0.877**	ug/L	0.020	2	97	20381	2	Standard
|	**Cr**	**52**	**1.336**	ug/L	0.018	1	20883	47431	0	Standard
|	**Cr**	**53**	**1.364**	ug/L	0.069	5	121	3201	4	Standard
⌊	**Mn**	**55**	**9.755**	ug/L	0.066	0	554	271405	1	Standard
⌈>	**Ge**	**72**		ug/L			19943	20923	0	KED
|	**Ni**	**60**	**0.754**	ug/L	0.032	4	6	758	4	KED
|	**Ni**	**62**	**0.768**	ug/L	0.228	29	3	128	28	KED
|	**Cu**	**63**	**6.590**	ug/L	0.046	0	20	19633	0	KED
|	**Cu**	**65**	**6.779**	ug/L	0.067	0	15	10027	1	KED
|	**Zn**	**66**	**77.169**	ug/L	0.862	1	20	27043	0	KED
|	**Zn**	**67**	**70.692**	ug/L	2.576	3	2	4137	2	KED
|	**As**	**75**	**0.231**	ug/L	0.015	6	3	43	5	KED
⌊	**Se**	**78**	**-0.042**	ug/L	0.291	700	14	14	35	KED
	Y	**89**		ug/L			295636	298117	2	Standard
	Kr	**83**		ug/L			57	52	31	Standard
⌈>	**In-1**	**115**		ug/L			5644	6027	3	KED
|	**Cd**	**111**	**0.113**	ug/L	0.010	8	2	26	9	KED
⌊	**Cd**	**114**	**0.089**	ug/L	0.021	23	2	48	20	KED
⌈>	**In**	**115**		ug/L			475542	482011	0	Standard
|	**Ag**	**107**	**0.012**	ug/L	0.001	4	40	281	4	Standard
|	**Sb**	**121**	**0.802**	ug/L	0.012	1	496	12099	0	Standard
|	**Sb**	**123**	**0.811**	ug/L	0.037	4	393	9369	3	Standard
|	**Ba**	**135**	**14.133**	ug/L	0.389	2	15	60634	2	Standard
⌊	**Ba**	**137**	**14.292**	ug/L	0.230	1	15	103060	0	Standard
⌈>	**Tb**	**159**		ug/L			724709	772629	2	Standard
⌊	**Pb**	**208**	**1.415**	ug/L	0.030	2	266	85649	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0457-01
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 02:39:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	42257	2	Standard
	Cl	**37**		ug/L			3079769	3013917	1	Standard
>	**Sc**	**45**		ug/L			458223	474171	1	Standard
	V	**51**	**0.712**	ug/L	0.013	1	7096	23441	2	Standard
	V-1	**51**	**0.704**	ug/L	0.007	0	97	16208	1	Standard
	Cr	**52**	**0.436**	ug/L	0.027	6	20883	29882	2	Standard
	Cr	**53**	**0.420**	ug/L	0.020	4	121	1063	3	Standard
	Mn	**55**	**10.076**	ug/L	0.056	0	554	277453	1	Standard
>	**Ge**	**72**		ug/L			19943	20721	1	KED
	Ni	**60**	**0.666**	ug/L	0.041	6	6	664	4	KED
	Ni	**62**	**0.684**	ug/L	0.133	19	3	114	19	KED
	Cu	**63**	**7.878**	ug/L	0.089	1	20	23241	1	KED
	Cu	**65**	**7.923**	ug/L	0.309	3	15	11600	3	KED
	Zn	**66**	**67.319**	ug/L	2.239	3	20	23360	1	KED
	Zn	**67**	**60.193**	ug/L	2.202	3	2	3488	2	KED
	As	**75**	**0.336**	ug/L	0.013	3	3	61	2	KED
	Se	**78**	**-0.138**	ug/L	0.107	77	14	12	15	KED
	Y	**89**		ug/L			295636	304090	1	Standard
	Kr	**83**		ug/L			57	47	24	Standard
>	**In-1**	**115**		ug/L			5644	5957	2	KED
	Cd	**111**	**0.041**	ug/L	0.011	27	2	11	21	KED
	Cd	**114**	**0.036**	ug/L	0.018	49	2	20	45	KED
>	**In**	**115**		ug/L			475542	494464	2	Standard
	Ag	**107**	**0.004**	ug/L	0.001	18	40	118	13	Standard
	Sb	**121**	**0.503**	ug/L	0.009	1	496	7976	2	Standard
	Sb	**123**	**0.498**	ug/L	0.020	3	393	6061	3	Standard
	Ba	**135**	**5.196**	ug/L	0.087	1	15	22881	2	Standard
	Ba	**137**	**5.215**	ug/L	0.074	1	15	38580	1	Standard
>	**Tb**	**159**		ug/L			724709	779473	3	Standard
	Pb	**208**	**0.172**	ug/L	0.005	3	266	10735	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLC
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 02:44:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	25995	6	Standard
	Cl	**37**		ug/L			3079769	2997633	2	Standard
⎡>	**Sc**	**45**		ug/L			458223	447362	1	Standard
⎢	**V**	**51**	**0.007**	ug/L	0.004	54	7096	7071	1	Standard
⎢	**V-1**	**51**	**0.000**	ug/L	0.001	1732	97	96	24	Standard
⎢	**Cr**	**52**	**0.013**	ug/L	0.023	179	20883	20618	2	Standard
⎢	**Cr**	**53**	**-0.009**	ug/L	0.007	74	121	99	15	Standard
⎣	**Mn**	**55**	**0.023**	ug/L	0.016	67	554	1141	35	Standard
⎡>	**Ge**	**72**		ug/L			19943	20106	1	KED
⎢	**Ni**	**60**	**0.001**	ug/L	0.007	529	6	7	86	KED
⎢	**Ni**	**62**	**-0.008**	ug/L	0.014	165	3	2	86	KED
⎢	**Cu**	**63**	**0.011**	ug/L	0.002	19	20	50	13	KED
⎢	**Cu**	**65**	**0.004**	ug/L	0.002	49	15	20	10	KED
⎢	**Zn**	**66**	**0.039**	ug/L	0.004	9	20	33	3	KED
⎢	**Zn**	**67**	**0.022**	ug/L	0.001	3	2	3	0	KED
⎢	**As**	**75**	**0.001**	ug/L	0.002	208	3	3	7	KED
⎣	**Se**	**78**	**0.010**	ug/L	0.134	1320	14	14	15	KED
	Y	**89**		ug/L			295636	287613	2	Standard
	Kr	**83**		ug/L			57	57	40	Standard
⎡>	**In-1**	**115**		ug/L			5644	5733	2	KED
⎢	**Cd**	**111**	**0.001**	ug/L	0.005	351	2	2	33	KED
⎣	**Cd**	**114**	**0.000**	ug/L	0.002	3814	2	2	45	KED
⎡>	**In**	**115**		ug/L			475542	475038	2	Standard
⎢	**Ag**	**107**	**-0.000**	ug/L	0.000	51	40	36	2	Standard
⎢	**Sb**	**121**	**-0.029**	ug/L	0.002	5	496	85	26	Standard
⎢	**Sb**	**123**	**-0.030**	ug/L	0.002	7	393	67	37	Standard
⎢	**Ba**	**135**	**0.015**	ug/L	0.016	104	15	78	83	Standard
⎣	**Ba**	**137**	**0.015**	ug/L	0.017	112	15	121	97	Standard
⎡>	**Tb**	**159**		ug/L			724709	737258	0	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.002	217	266	320	33	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 02:49:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	25047	3	Standard
	Cl	**37**		ug/L			3079769	3123680	2	Standard
>	**Sc**	**45**		ug/L			458223	464608	0	Standard
	V	**51**	**46.541**	ug/L	1.802	3	7096	1037826	3	Standard
	V-1	**51**	**46.705**	ug/L	1.668	3	97	1046911	3	Standard
	Cr	**52**	**47.766**	ug/L	0.331	0	20883	909200	0	Standard
	Cr	**53**	**48.257**	ug/L	0.056	0	121	105645	0	Standard
	Mn	**55**	**49.649**	ug/L	0.943	1	554	1337332	1	Standard
>	**Ge**	**72**		ug/L			19943	20757	0	KED
	Ni	**60**	**43.863**	ug/L	1.241	2	6	43416	1	KED
	Ni	**62**	**45.407**	ug/L	0.773	1	3	7339	2	KED
	Cu	**63**	**45.794**	ug/L	1.060	2	20	135218	2	KED
	Cu	**65**	**45.089**	ug/L	0.271	0	15	66070	0	KED
	Zn	**66**	**47.592**	ug/L	1.087	2	20	16556	2	KED
	Zn	**67**	**46.214**	ug/L	2.337	5	2	2684	4	KED
	As	**75**	**48.203**	ug/L	0.371	0	3	8392	1	KED
	Se	**78**	**50.178**	ug/L	2.027	4	14	917	3	KED
	Y	**89**		ug/L			295636	301824	0	Standard
	Kr	**83**		ug/L			57	54	24	Standard
>	**In-1**	**115**		ug/L			5644	5893	1	KED
	Cd	**111**	**47.759**	ug/L	0.901	1	2	9724	1	KED
	Cd	**114**	**47.485**	ug/L	0.760	1	2	24037	0	KED
>	**In**	**115**		ug/L			475542	481305	1	Standard
	Ag	**107**	**43.083**	ug/L	0.573	1	40	885147	1	Standard
	Sb	**121**	**47.147**	ug/L	0.653	1	496	680936	1	Standard
	Sb	**123**	**47.074**	ug/L	0.474	1	393	520475	1	Standard
	Ba	**135**	**50.206**	ug/L	0.742	1	15	215042	1	Standard
	Ba	**137**	**50.736**	ug/L	1.268	2	15	365313	2	Standard
>	**Tb**	**159**		ug/L			724709	778520	3	Standard
	Pb	**208**	**44.139**	ug/L	1.125	2	266	2683598	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 02:57:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	24794	4	Standard
	Cl	**37**		ug/L			3079769	3041400	3	Standard
⎡>	**Sc**	**45**		ug/L			458223	446351	1	Standard
⎢	**V**	**51**	**0.004**	ug/L	0.010	256	7096	6993	1	Standard
⎢	**V-1**	**51**	**-0.001**	ug/L	0.001	50	97	73	15	Standard
⎢	**Cr**	**52**	**0.008**	ug/L	0.038	448	20883	20485	1	Standard
⎢	**Cr**	**53**	**-0.008**	ug/L	0.003	31	121	101	3	Standard
⎣	**Mn**	**55**	**0.005**	ug/L	0.000	5	554	674	2	Standard
⎡>	**Ge**	**72**		ug/L			19943	20583	3	KED
⎢	**Ni**	**60**	**-0.000**	ug/L	0.003	2273	6	6	45	KED
⎢	**Ni**	**62**	**0.019**	ug/L	0.013	67	3	6	31	KED
⎢	**Cu**	**63**	**0.006**	ug/L	0.003	46	20	38	22	KED
⎢	**Cu**	**65**	**0.001**	ug/L	0.005	348	15	17	40	KED
⎢	**Zn**	**66**	**-0.008**	ug/L	0.019	252	20	18	39	KED
⎢	**Zn**	**67**	**0.042**	ug/L	0.066	157	2	5	78	KED
⎢	**As**	**75**	**0.005**	ug/L	0.015	284	3	4	55	KED
⎣	**Se**	**78**	**-0.118**	ug/L	0.088	74	14	12	15	KED
	Y	**89**		ug/L			295636	286427	2	Standard
	Kr	**83**		ug/L			57	50	5	Standard
⎡>	**In-1**	**115**		ug/L			5644	5755	5	KED
⎢	**Cd**	**111**	**0.002**	ug/L	0.009	537	2	2	57	KED
⎣	**Cd**	**114**	**0.000**	ug/L	0.004	2382	2	2	86	KED
⎡>	**In**	**115**		ug/L			475542	468641	1	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.000	38	40	64	15	Standard
⎢	**Sb**	**121**	**0.087**	ug/L	0.001	1	496	1712	0	Standard
⎢	**Sb**	**123**	**0.087**	ug/L	0.005	6	393	1321	4	Standard
⎢	**Ba**	**135**	**-0.000**	ug/L	0.001	278	15	13	31	Standard
⎣	**Ba**	**137**	**0.002**	ug/L	0.001	46	15	28	20	Standard
⎡>	**Tb**	**159**		ug/L			724709	728908	2	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	30	266	304	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-01
Sample Dil Factor: 10
Comments:

DEL

Sample Date/Time: Saturday, April 01, 2023 03:02:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	517060	3	Standard
	Cl	**37**		ug/L			3079769	3041478	1	Standard
⎡>	**Sc**	**45**		ug/L			458223	477727	1	Standard
⎢	**V**	**51**	**0.655**	ug/L	0.042	6	7096	22307	2	Standard
⎢	**V-1**	**51**	**0.001**	ug/L	0.000	44	97	124	7	Standard
⎢	**Cr**	**52**	**2.529**	ug/L	0.143	5	20883	70082	2	Standard
⎢	**Cr**	**53**	**0.311**	ug/L	0.004	1	121	825	0	Standard
⎣	**Mn**	**55**	**0.032**	ug/L	0.002	5	554	1470	1	Standard
⎡>	**Ge**	**72**		ug/L			19943	21382	0	KED
⎢	**Ni**	**60**	**0.023**	ug/L	0.009	37	6	30	28	KED
⎢	**Ni**	**62**	**-0.002**	ug/L	0.020	1182	3	3	86	KED
⎢	**Cu**	**63**	**0.150**	ug/L	0.007	4	20	479	3	KED
⎢	**Cu**	**65**	**0.149**	ug/L	0.010	6	15	241	5	KED
⎢	**Zn**	**66**	**0.177**	ug/L	0.003	1	20	85	1	KED
⎢	**Zn**	**67**	**0.199**	ug/L	0.048	24	2	14	19	KED
⎢	**As**	**75**	**0.003**	ug/L	0.009	301	3	4	40	KED
⎣	**Se**	**78**	**-0.168**	ug/L	0.143	85	14	12	21	KED
	Y	**89**		ug/L			295636	303463	2	Standard
	Kr	**83**		ug/L			57	63	4	Standard
⎡>	**In-1**	**115**		ug/L			5644	6261	2	KED
⎢	**Cd**	**111**	**0.006**	ug/L	0.013	221	2	4	70	KED
⎣	**Cd**	**114**	**0.002**	ug/L	0.004	185	2	3	51	KED
⎡>	**In**	**115**		ug/L			475542	496232	0	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.001	149	40	51	25	Standard
⎢	**Sb**	**121**	**0.002**	ug/L	0.002	102	496	548	6	Standard
⎢	**Sb**	**123**	**0.002**	ug/L	0.002	91	393	438	5	Standard
⎢	**Ba**	**135**	**0.066**	ug/L	0.005	7	15	309	7	Standard
⎣	**Ba**	**137**	**0.073**	ug/L	0.003	4	15	561	3	Standard
⎡>	**Tb**	**159**		ug/L			724709	782293	2	Standard
⎣	**Pb**	**208**	**0.024**	ug/L	0.001	4	266	1740	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-02
Sample Dil Factor: 10
Comments: DEL
Sample Date/Time: Saturday, April 01, 2023 03:06:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	63424	2	Standard
	Cl	**37**		ug/L			3079769	3026489	2	Standard
⌈>	**Sc**	**45**		ug/L			458223	466228	2	Standard
|	**V**	**51**	**0.056**	ug/L	0.008	14	7096	8467	1	Standard
|	**V-1**	**51**	**0.001**	ug/L	0.001	66	97	119	13	Standard
|	**Cr**	**52**	**0.317**	ug/L	0.028	8	20883	27154	0	Standard
|	**Cr**	**53**	**0.125**	ug/L	0.007	5	121	399	3	Standard
⌊	**Mn**	**55**	**0.019**	ug/L	0.000	1	554	1088	2	Standard
⌈>	**Ge**	**72**		ug/L			19943	21382	0	KED
|	**Ni**	**60**	**0.050**	ug/L	0.008	16	6	57	13	KED
|	**Ni**	**62**	**0.048**	ug/L	0.039	82	3	12	55	KED
|	**Cu**	**63**	**0.026**	ug/L	0.009	33	20	102	27	KED
|	**Cu**	**65**	**0.021**	ug/L	0.005	25	15	48	16	KED
|	**Zn**	**66**	**0.101**	ug/L	0.022	22	20	57	13	KED
|	**Zn**	**67**	**0.061**	ug/L	0.019	30	2	6	17	KED
|	**As**	**75**	**0.012**	ug/L	0.003	21	3	5	8	KED
⌊	**Se**	**78**	**-0.077**	ug/L	0.098	126	14	14	11	KED
	Y	**89**		ug/L			295636	299497	1	Standard
	Kr	**83**		ug/L			57	50	15	Standard
⌈>	**In-1**	**115**		ug/L			5644	6013	1	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.006	103	2	1	69	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.004	1634	2	2	90	KED
⌈>	**In**	**115**		ug/L			475542	494490	0	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.000	201	40	45	15	Standard
|	**Sb**	**121**	**-0.011**	ug/L	0.001	9	496	350	4	Standard
|	**Sb**	**123**	**-0.012**	ug/L	0.002	14	393	277	6	Standard
|	**Ba**	**135**	**0.023**	ug/L	0.005	20	15	118	17	Standard
⌊	**Ba**	**137**	**0.023**	ug/L	0.001	3	15	186	4	Standard
⌈>	**Tb**	**159**		ug/L			724709	758021	2	Standard
⌊	**Pb**	**208**	**0.019**	ug/L	0.001	5	266	1379	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-03
Sample Dil Factor: 10
Comments:
Sample Date/Time: Saturday, April 01, 2023 03:11:37

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	695156	3	Standard
	Cl	**37**		ug/L			3079769	3137807	1	Standard
⌈>	**Sc**	**45**		ug/L			458223	489462	0	Standard
|	**V**	**51**	**0.874**	ug/L	0.028	3	7096	27980	2	Standard
|	**V-1**	**51**	**0.014**	ug/L	0.001	5	97	427	4	Standard
|	**Cr**	**52**	**3.376**	ug/L	0.089	2	20883	88439	2	Standard
|	**Cr**	**53**	**0.457**	ug/L	0.037	8	121	1182	7	Standard
⌊	**Mn**	**55**	**0.088**	ug/L	0.003	3	554	3097	3	Standard
⌈>	**Ge**	**72**		ug/L			19943	21823	0	KED
|	**Ni**	**60**	**0.104**	ug/L	0.020	18	6	115	17	KED
|	**Ni**	**62**	**0.110**	ug/L	0.030	27	3	22	22	KED
|	**Cu**	**63**	**0.057**	ug/L	0.010	17	20	198	15	KED
|	**Cu**	**65**	**0.053**	ug/L	0.010	18	15	99	15	KED
|	**Zn**	**66**	**0.203**	ug/L	0.031	15	20	96	11	KED
|	**Zn**	**67**	**0.194**	ug/L	0.177	91	2	14	74	KED
|	**As**	**75**	**2.226**	ug/L	0.054	2	3	410	2	KED
⌊	**Se**	**78**	**-0.231**	ug/L	0.118	51	14	11	19	KED
	Y	**89**		ug/L			295636	311620	2	Standard
	Kr	**83**		ug/L			57	122	8	Standard
⌈>	**In-1**	**115**		ug/L			5644	6157	1	KED
|	**Cd**	**111**	**0.035**	ug/L	0.016	45	2	10	32	KED
⌊	**Cd**	**114**	**0.021**	ug/L	0.008	39	2	13	31	KED
⌈>	**In**	**115**		ug/L			475542	515110	2	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.000	544	40	45	12	Standard
|	**Sb**	**121**	**0.017**	ug/L	0.003	16	496	794	5	Standard
|	**Sb**	**123**	**0.017**	ug/L	0.003	20	393	622	6	Standard
|	**Ba**	**135**	**0.047**	ug/L	0.008	16	15	233	17	Standard
⌊	**Ba**	**137**	**0.050**	ug/L	0.001	2	15	404	4	Standard
⌈>	**Tb**	**159**		ug/L			724709	790300	1	Standard
⌊	**Pb**	**208**	**0.026**	ug/L	0.002	7	266	1924	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-04
Sample Dil Factor: 10
DEL
Comments:
Sample Date/Time: Saturday, April 01, 2023 03:16:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	503850	2	Standard
	Cl	**37**		ug/L			3079769	3166715	2	Standard
⌈>	**Sc**	**45**		ug/L			458223	502105	3	Standard
|	**V**	**51**	**0.582**	ug/L	0.020	3	7096	21695	1	Standard
|	**V-1**	**51**	**0.003**	ug/L	0.001	31	97	185	14	Standard
|	**Cr**	**52**	**2.423**	ug/L	0.100	4	20883	71531	1	Standard
|	**Cr**	**53**	**0.454**	ug/L	0.029	6	121	1204	2	Standard
⌊	**Mn**	**55**	**0.023**	ug/L	0.001	3	554	1272	4	Standard
⌈>	**Ge**	**72**		ug/L			19943	22870	1	KED
|	**Ni**	**60**	**0.057**	ug/L	0.018	31	6	69	27	KED
|	**Ni**	**62**	**0.036**	ug/L	0.012	33	3	10	20	KED
|	**Cu**	**63**	**0.149**	ug/L	0.004	2	20	509	3	KED
|	**Cu**	**65**	**0.152**	ug/L	0.004	2	15	262	2	KED
|	**Zn**	**66**	**0.201**	ug/L	0.047	23	20	100	18	KED
|	**Zn**	**67**	**0.243**	ug/L	0.038	15	2	18	11	KED
|	**As**	**75**	**0.039**	ug/L	0.012	30	3	11	21	KED
⌊	**Se**	**78**	**-0.254**	ug/L	0.030	11	14	11	6	KED
	Y	**89**		ug/L			295636	319202	1	Standard
	Kr	**83**		ug/L			57	113	16	Standard
⌈>	**In-1**	**115**		ug/L			5644	6591	2	KED
|	**Cd**	**111**	**0.002**	ug/L	0.008	376	2	3	56	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.007	136	2	5	67	KED
⌈>	**In**	**115**		ug/L			475542	526557	3	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	64	40	35	13	Standard
|	**Sb**	**121**	**-0.021**	ug/L	0.002	10	496	211	14	Standard
|	**Sb**	**123**	**-0.022**	ug/L	0.001	5	393	164	6	Standard
|	**Ba**	**135**	**0.058**	ug/L	0.008	14	15	288	14	Standard
⌊	**Ba**	**137**	**0.067**	ug/L	0.005	6	15	546	5	Standard
⌈>	**Tb**	**159**		ug/L			724709	819493	2	Standard
⌊	**Pb**	**208**	**0.010**	ug/L	0.001	5	266	928	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-05
Sample Dil Factor: 10
Comments:
Sample Date/Time: Saturday, April 01, 2023 03:21:09

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	73293	2	Standard
	Cl	**37**		ug/L			3079769	3059853	1	Standard
⌈>	**Sc**	**45**		ug/L			458223	470306	0	Standard
|	**V**	**51**	**0.041**	ug/L	0.016	38	7096	8207	3	Standard
|	**V-1**	**51**	**0.001**	ug/L	0.001	55	97	132	13	Standard
|	**Cr**	**52**	**0.181**	ug/L	0.053	29	20883	24844	3	Standard
|	**Cr**	**53**	**0.045**	ug/L	0.003	5	121	225	2	Standard
⌊	**Mn**	**55**	**0.013**	ug/L	0.001	7	554	920	2	Standard
⌈>	**Ge**	**72**		ug/L			19943	21526	3	KED
|	**Ni**	**60**	**0.013**	ug/L	0.006	48	6	19	29	KED
|	**Ni**	**62**	**-0.009**	ug/L	0.017	183	3	2	114	KED
|	**Cu**	**63**	**0.041**	ug/L	0.004	10	20	146	7	KED
|	**Cu**	**65**	**0.035**	ug/L	0.005	13	15	69	9	KED
|	**Zn**	**66**	**0.126**	ug/L	0.042	33	20	67	23	KED
|	**Zn**	**67**	**0.152**	ug/L	0.149	98	2	12	77	KED
|	**As**	**75**	**-0.002**	ug/L	0.003	123	3	3	17	KED
⌊	**Se**	**78**	**-0.198**	ug/L	0.025	12	14	11	2	KED
	Y	**89**		ug/L			295636	307427	1	Standard
	Kr	**83**		ug/L			57	55	10	Standard
⌈>	**In-1**	**115**		ug/L			5644	6306	2	KED
|	**Cd**	**111**	**0.009**	ug/L	0.005	55	2	4	20	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.009	287	2	4	109	KED
⌈>	**In**	**115**		ug/L			475542	493017	1	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	102	40	34	22	Standard
|	**Sb**	**121**	**-0.025**	ug/L	0.001	2	496	149	6	Standard
|	**Sb**	**123**	**-0.025**	ug/L	0.002	6	393	123	16	Standard
|	**Ba**	**135**	**0.014**	ug/L	0.001	8	15	76	5	Standard
⌊	**Ba**	**137**	**0.017**	ug/L	0.002	8	15	144	5	Standard
⌈>	**Tb**	**159**		ug/L			724709	770178	1	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	9	266	589	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-06
Sample Dil Factor: 10
Comments:
Sample Date/Time: Saturday, April 01, 2023 03:26:25

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	460229	0	Standard
	Cl	**37**		ug/L			3079769	2989361	0	Standard
⌈>	**Sc**	**45**		ug/L			458223	472123	1	Standard
|	**V**	**51**	**0.526**	ug/L	0.010	1	7096	19144	0	Standard
|	**V-1**	**51**	**0.002**	ug/L	0.000	3	97	143	0	Standard
|	**Cr**	**52**	**2.097**	ug/L	0.040	1	20883	61128	0	Standard
|	**Cr**	**53**	**0.318**	ug/L	0.005	1	121	831	0	Standard
⌊	**Mn**	**55**	**0.030**	ug/L	0.001	4	554	1379	2	Standard
⌈>	**Ge**	**72**		ug/L			19943	20754	1	KED
|	**Ni**	**60**	**0.028**	ug/L	0.008	29	6	34	22	KED
|	**Ni**	**62**	**0.034**	ug/L	0.042	122	3	9	72	KED
|	**Cu**	**63**	**0.029**	ug/L	0.000	0	20	107	2	KED
|	**Cu**	**65**	**0.023**	ug/L	0.004	17	15	49	10	KED
|	**Zn**	**66**	**0.513**	ug/L	0.026	5	20	199	3	KED
|	**Zn**	**67**	**0.502**	ug/L	0.060	12	2	31	9	KED
|	**As**	**75**	**0.393**	ug/L	0.038	9	3	71	7	KED
⌊	**Se**	**78**	**-0.116**	ug/L	0.211	181	14	13	29	KED
	Y	**89**		ug/L			295636	299709	1	Standard
	Kr	**83**		ug/L			57	109	17	Standard
⌈>	**In-1**	**115**		ug/L			5644	5623	11	KED
|	**Cd**	**111**	**0.009**	ug/L	0.012	137	2	4	48	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.004	194	2	1	160	KED
⌈>	**In**	**115**		ug/L			475542	496345	1	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	59	40	37	7	Standard
|	**Sb**	**121**	**-0.014**	ug/L	0.002	13	496	309	7	Standard
|	**Sb**	**123**	**-0.014**	ug/L	0.002	16	393	251	10	Standard
|	**Ba**	**135**	**0.034**	ug/L	0.002	6	15	167	4	Standard
⌊	**Ba**	**137**	**0.038**	ug/L	0.005	14	15	295	12	Standard
⌈>	**Tb**	**159**		ug/L			724709	776317	2	Standard
⌊	**Pb**	**208**	**0.014**	ug/L	0.001	3	266	1118	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0458-01
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 03:32:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	35176	1	Standard
	Cl	**37**		ug/L			3079769	3370114	3	Standard
⌈>	**Sc**	**45**		ug/L			458223	488048	0	Standard
|	**V**	**51**	**1.215**	ug/L	0.018	1	7096	35830	0	Standard
|	**V-1**	**51**	**1.248**	ug/L	0.009	0	97	29485	0	Standard
|	**Cr**	**52**	**0.383**	ug/L	0.041	10	20883	29709	2	Standard
|	**Cr**	**53**	**0.522**	ug/L	0.012	2	121	1328	2	Standard
⌊	**Mn**	**55**	**956.587**	ug/L	10.625	1	554	27057040	0	Standard
⌈>	**Ge**	**72**		ug/L			19943	19468	2	KED
|	**Ni**	**60**	**1.349**	ug/L	0.078	5	6	1257	3	KED
|	**Ni**	**62**	**1.362**	ug/L	0.052	3	3	210	5	KED
|	**Cu**	**63**	**3.868**	ug/L	0.040	1	20	10732	2	KED
|	**Cu**	**65**	**3.915**	ug/L	0.042	1	15	5394	2	KED
|	**Zn**	**66**	**23.186**	ug/L	0.630	2	20	7572	2	KED
|	**Zn**	**67**	**22.117**	ug/L	1.751	7	2	1207	10	KED
|	**As**	**75**	**3.239**	ug/L	0.155	4	3	531	3	KED
⌊	**Se**	**78**	**0.062**	ug/L	0.235	381	14	15	27	KED
	Y	**89**		ug/L			295636	311124	2	Standard
	Kr	**83**		ug/L			57	67	15	Standard
⌈>	**In-1**	**115**		ug/L			5644	5667	2	KED
|	**Cd**	**111**	**0.019**	ug/L	0.006	30	2	6	17	KED
⌊	**Cd**	**114**	**0.032**	ug/L	0.007	21	2	17	17	KED
⌈>	**In**	**115**		ug/L			475542	461580	2	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.001	20	40	106	12	Standard
|	**Sb**	**121**	**0.380**	ug/L	0.012	3	496	5737	2	Standard
|	**Sb**	**123**	**0.362**	ug/L	0.007	1	393	4223	4	Standard
|	**Ba**	**135**	**11.516**	ug/L	0.303	2	15	47298	0	Standard
⌊	**Ba**	**137**	**11.611**	ug/L	0.456	3	15	80128	1	Standard
⌈>	**Tb**	**159**		ug/L			724709	779706	1	Standard
⌊	**Pb**	**208**	**0.066**	ug/L	0.003	4	266	4322	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0460-01
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 03:37:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	36943	5	Standard
	Cl	**37**		ug/L			3079769	2981467	2	Standard
>	**Sc**	**45**		ug/L			458223	459755	4	Standard
	V	**51**	**1.232**	ug/L	0.047	3	7096	34108	2	Standard
	V-1	**51**	**1.272**	ug/L	0.045	3	97	28288	2	Standard
	Cr	**52**	**0.695**	ug/L	0.085	12	20883	33701	0	Standard
	Cr	**53**	**0.846**	ug/L	0.075	8	121	1947	4	Standard
	Mn	**55**	**61.397**	ug/L	3.349	5	554	1634064	1	Standard
>	**Ge**	**72**		ug/L			19943	19443	2	KED
	Ni	**60**	**0.527**	ug/L	0.027	5	6	494	4	KED
	Ni	**62**	**0.628**	ug/L	0.128	20	3	98	17	KED
	Cu	**63**	**3.240**	ug/L	0.061	1	20	8981	3	KED
	Cu	**65**	**3.265**	ug/L	0.144	4	15	4492	2	KED
	Zn	**66**	**24.350**	ug/L	0.657	2	20	7941	2	KED
	Zn	**67**	**23.617**	ug/L	1.055	4	2	1287	6	KED
	As	**75**	**0.800**	ug/L	0.029	3	3	133	5	KED
	Se	**78**	**-0.052**	ug/L	0.235	456	14	13	28	KED
	Y	**89**		ug/L			295636	300017	0	Standard
	Kr	**83**		ug/L			57	53	9	Standard
>	**In-1**	**115**		ug/L			5644	5689	2	KED
	Cd	**111**	**0.013**	ug/L	0.007	55	2	5	28	KED
	Cd	**114**	**0.016**	ug/L	0.003	16	2	10	11	KED
>	**In**	**115**		ug/L			475542	466276	4	Standard
	Ag	**107**	**0.007**	ug/L	0.000	5	40	186	6	Standard
	Sb	**121**	**0.279**	ug/L	0.006	2	496	4386	3	Standard
	Sb	**123**	**0.272**	ug/L	0.006	2	393	3291	2	Standard
	Ba	**135**	**10.444**	ug/L	0.358	3	15	43310	2	Standard
	Ba	**137**	**10.650**	ug/L	0.464	4	15	74192	0	Standard
>	**Tb**	**159**		ug/L			724709	759241	5	Standard
	Pb	**208**	**0.420**	ug/L	0.021	5	266	25131	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0477-01
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 03:42:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	36169	2	Standard
	Cl	**37**		ug/L			3079769	3254784	2	Standard
>	**Sc**	**45**		ug/L			458223	480949	3	Standard
	V	**51**	**0.314**	ug/L	0.011	3	7096	14636	2	Standard
	V-1	**51**	**0.394**	ug/L	0.008	1	97	9243	1	Standard
	Cr	**52**	**0.159**	ug/L	0.026	16	20883	24959	1	Standard
	Cr	**53**	**0.428**	ug/L	0.032	7	121	1095	5	Standard
	Mn	**55**	**13.520**	ug/L	0.529	3	554	377140	1	Standard
>	**Ge**	**72**		ug/L			19943	19350	2	KED
	Ni	**60**	**1.165**	ug/L	0.041	3	6	1081	3	KED
	Ni	**62**	**1.168**	ug/L	0.063	5	3	179	7	KED
	Cu	**63**	**8.536**	ug/L	0.142	1	20	23506	1	KED
	Cu	**65**	**8.345**	ug/L	0.023	0	15	11410	2	KED
	Zn	**66**	**7.052**	ug/L	0.426	6	20	2301	4	KED
	Zn	**67**	**6.855**	ug/L	0.214	3	2	373	4	KED
	As	**75**	**1.597**	ug/L	0.080	5	3	262	3	KED
	Se	**78**	**-0.286**	ug/L	0.102	35	14	9	16	KED
	Y	**89**		ug/L			295636	292910	2	Standard
	Kr	**83**		ug/L			57	50	15	Standard
>	**In-1**	**115**		ug/L			5644	5483	4	KED
	Cd	**111**	**0.022**	ug/L	0.014	62	2	6	37	KED
	Cd	**114**	**0.018**	ug/L	0.007	39	2	11	35	KED
>	**In**	**115**		ug/L			475542	456929	1	Standard
	Ag	**107**	**0.002**	ug/L	0.000	11	40	74	6	Standard
	Sb	**121**	**0.084**	ug/L	0.002	2	496	1626	0	Standard
	Sb	**123**	**0.086**	ug/L	0.004	4	393	1276	3	Standard
	Ba	**135**	**3.317**	ug/L	0.083	2	15	13502	1	Standard
	Ba	**137**	**3.391**	ug/L	0.090	2	15	23187	1	Standard
>	**Tb**	**159**		ug/L			724709	752443	1	Standard
	Pb	**208**	**0.431**	ug/L	0.011	2	266	25591	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLD
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 03:47:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	24761	2	Standard
	Cl	**37**		ug/L			3079769	3048875	1	Standard
⌈>	**Sc**	**45**		ug/L			458223	435940	1	Standard
|	**V**	**51**	**0.002**	ug/L	0.008	351	7096	6795	1	Standard
|	**V-1**	**51**	**-0.000**	ug/L	0.001	272	97	88	13	Standard
|	**Cr**	**52**	**0.010**	ug/L	0.028	275	20883	20037	0	Standard
|	**Cr**	**53**	**0.002**	ug/L	0.008	436	121	119	13	Standard
⌊	**Mn**	**55**	**0.004**	ug/L	0.001	21	554	628	4	Standard
⌈>	**Ge**	**72**		ug/L			19943	19043	2	KED
|	**Ni**	**60**	**0.002**	ug/L	0.001	60	6	8	13	KED
|	**Ni**	**62**	**0.005**	ug/L	0.032	599	3	4	107	KED
|	**Cu**	**63**	**0.007**	ug/L	0.002	23	20	39	13	KED
|	**Cu**	**65**	**0.004**	ug/L	0.003	64	15	20	19	KED
|	**Zn**	**66**	**0.046**	ug/L	0.024	50	20	34	24	KED
|	**Zn**	**67**	**0.027**	ug/L	0.065	239	2	3	86	KED
|	**As**	**75**	**0.011**	ug/L	0.017	155	3	4	53	KED
⌊	**Se**	**78**	**-0.221**	ug/L	0.048	21	14	10	10	KED
	Y	**89**		ug/L			295636	283722	1	Standard
	Kr	**83**		ug/L			57	60	13	Standard
⌈>	**In-1**	**115**		ug/L			5644	5608	0	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.005	153	2	1	50	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.006	108	2	4	56	KED
⌈>	**In**	**115**		ug/L			475542	466982	0	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	77	40	32	17	Standard
|	**Sb**	**121**	**-0.030**	ug/L	0.001	1	496	67	11	Standard
|	**Sb**	**123**	**-0.031**	ug/L	0.001	4	393	56	24	Standard
|	**Ba**	**135**	**0.003**	ug/L	0.001	46	15	26	18	Standard
⌊	**Ba**	**137**	**0.004**	ug/L	0.001	29	15	46	20	Standard
⌈>	**Tb**	**159**		ug/L			724709	724420	2	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	54	266	227	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 03:52:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	24641	2	Standard
	Cl	**37**		ug/L			3079769	3211893	5	Standard
>	**Sc**	**45**		ug/L			458223	448560	2	Standard
	V	**51**	**46.249**	ug/L	0.913	1	7096	995685	2	Standard
	V-1	**51**	**45.996**	ug/L	0.443	0	97	995511	2	Standard
	Cr	**52**	**47.977**	ug/L	2.063	4	20883	880901	1	Standard
	Cr	**53**	**47.078**	ug/L	1.107	2	121	99486	2	Standard
	Mn	**55**	**48.940**	ug/L	1.209	2	554	1272264	0	Standard
>	**Ge**	**72**		ug/L			19943	18765	0	KED
	Ni	**60**	**46.609**	ug/L	0.468	1	6	41710	0	KED
	Ni	**62**	**47.627**	ug/L	3.316	6	3	6955	6	KED
	Cu	**63**	**46.778**	ug/L	1.547	3	20	124888	3	KED
	Cu	**65**	**47.140**	ug/L	0.450	0	15	62446	1	KED
	Zn	**66**	**50.347**	ug/L	0.939	1	20	15831	2	KED
	Zn	**67**	**47.287**	ug/L	0.747	1	2	2483	2	KED
	As	**75**	**50.546**	ug/L	0.162	0	3	7955	1	KED
	Se	**78**	**50.281**	ug/L	1.362	2	14	831	2	KED
	Y	**89**		ug/L			295636	292252	2	Standard
	Kr	**83**		ug/L			57	59	13	Standard
>	**In-1**	**115**		ug/L			5644	5682	2	KED
	Cd	**111**	**49.205**	ug/L	1.768	3	2	9655	1	KED
	Cd	**114**	**49.339**	ug/L	1.481	3	2	24077	2	KED
>	**In**	**115**		ug/L			475542	468216	2	Standard
	Ag	**107**	**43.290**	ug/L	0.926	2	40	864907	0	Standard
	Sb	**121**	**47.204**	ug/L	0.516	1	496	663246	2	Standard
	Sb	**123**	**47.627**	ug/L	0.965	2	393	512119	1	Standard
	Ba	**135**	**48.290**	ug/L	1.425	2	15	201129	0	Standard
	Ba	**137**	**49.070**	ug/L	0.828	1	15	343633	1	Standard
>	**Tb**	**159**		ug/L			724709	756527	1	Standard
	Pb	**208**	**47.044**	ug/L	0.944	2	266	2780093	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 03:59:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	24680	1	Standard
	Cl	**37**		ug/L			3079769	3278738	6	Standard
⎡>	**Sc**	**45**		ug/L			458223	426184	1	Standard
⎢	**V**	**51**	**-0.001**	ug/L	0.012	1946	7096	6588	4	Standard
⎢	**V-1**	**51**	**-0.001**	ug/L	0.001	51	97	66	17	Standard
⎢	**Cr**	**52**	**-0.002**	ug/L	0.040	2234	20883	19395	4	Standard
⎢	**Cr**	**53**	**-0.003**	ug/L	0.003	94	121	106	4	Standard
⎣	**Mn**	**55**	**0.001**	ug/L	0.001	77	554	533	2	Standard
⎡>	**Ge**	**72**		ug/L			19943	19016	2	KED
⎢	**Ni**	**60**	**0.010**	ug/L	0.019	182	6	15	108	KED
⎢	**Ni**	**62**	**0.019**	ug/L	0.031	163	3	6	69	KED
⎢	**Cu**	**63**	**0.027**	ug/L	0.041	147	20	92	116	KED
⎢	**Cu**	**65**	**0.035**	ug/L	0.053	153	15	60	115	KED
⎢	**Zn**	**66**	**0.028**	ug/L	0.071	257	20	27	78	KED
⎢	**Zn**	**67**	**0.063**	ug/L	0.064	102	2	5	57	KED
⎢	**As**	**75**	**0.018**	ug/L	0.018	102	3	6	47	KED
⎣	**Se**	**78**	**-0.152**	ug/L	0.118	77	14	11	15	KED
	Y	**89**		ug/L			295636	276655	1	Standard
	Kr	**83**		ug/L			57	44	25	Standard
⎡>	**In-1**	**115**		ug/L			5644	5599	2	KED
⎢	**Cd**	**111**	**-0.001**	ug/L	0.006	400	2	2	49	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.000	22	2	1	6	KED
⎡>	**In**	**115**		ug/L			475542	451977	0	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.000	82	40	50	18	Standard
⎢	**Sb**	**121**	**0.082**	ug/L	0.002	2	496	1589	1	Standard
⎢	**Sb**	**123**	**0.086**	ug/L	0.006	6	393	1266	4	Standard
⎢	**Ba**	**135**	**0.001**	ug/L	0.001	144	15	19	30	Standard
⎣	**Ba**	**137**	**0.003**	ug/L	0.001	32	15	33	18	Standard
⎡>	**Tb**	**159**		ug/L			724709	719598	2	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	58	266	311	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 04:04:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	30174	2	Standard
	Cl	**37**		ug/L			3079769	3392239	2	Standard
⎡>	**Sc**	**45**		ug/L			458223	540657	2	Standard
⎢	**V**	**51**	**0.004**	ug/L	0.016	399	7096	8468	3	Standard
⎢	**V-1**	**51**	**-0.001**	ug/L	0.000	7	97	80	2	Standard
⎢	**Cr**	**52**	**0.019**	ug/L	0.059	304	20883	25044	3	Standard
⎢	**Cr**	**53**	**0.002**	ug/L	0.007	385	121	147	9	Standard
⎣	**Mn**	**55**	**0.024**	ug/L	0.001	6	554	1414	2	Standard
⎡>	**Ge**	**72**		ug/L			19943	21233	1	KED
⎢	**Ni**	**60**	**0.003**	ug/L	0.002	69	6	9	20	KED
⎢	**Ni**	**62**	**0.010**	ug/L	0.020	198	3	5	57	KED
⎢	**Cu**	**63**	**0.013**	ug/L	0.005	40	20	61	28	KED
⎢	**Cu**	**65**	**0.008**	ug/L	0.003	40	15	27	17	KED
⎢	**Zn**	**66**	**-0.006**	ug/L	0.002	37	20	19	5	KED
⎢	**Zn**	**67**	**0.071**	ug/L	0.111	155	2	6	95	KED
⎢	**As**	**75**	**0.009**	ug/L	0.010	120	3	5	35	KED
⎣	**Se**	**78**	**-0.207**	ug/L	0.094	45	14	11	14	KED
	Y	**89**		ug/L			295636	343423	1	Standard
	Kr	**83**		ug/L			57	47	10	Standard
⎡>	**In-1**	**115**		ug/L			5644	6343	4	KED
⎢	**Cd**	**111**	**-0.003**	ug/L	0.007	271	2	2	65	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.002	317	2	2	43	KED
⎡>	**In**	**115**		ug/L			475542	532376	1	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.000	91	40	53	12	Standard
⎢	**Sb**	**121**	**0.028**	ug/L	0.001	3	496	1006	1	Standard
⎢	**Sb**	**123**	**0.031**	ug/L	0.004	12	393	823	5	Standard
⎢	**Ba**	**135**	**0.002**	ug/L	0.000	9	15	27	3	Standard
⎣	**Ba**	**137**	**0.005**	ug/L	0.001	11	15	53	8	Standard
⎡>	**Tb**	**159**		ug/L			724709	834052	1	Standard
⎣	**Pb**	**208**	**-0.002**	ug/L	0.000	6	266	206	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 04:09:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	30491	3	Standard
	Cl	**37**		ug/L			3079769	3561856	1	Standard
⎡>	**Sc**	**45**		ug/L			458223	545644	2	Standard
⎢	**V**	**51**	**0.002**	ug/L	0.006	267	7096	8508	0	Standard
⎢	**V-1**	**51**	**0.000**	ug/L	0.003	585	97	128	58	Standard
⎢	**Cr**	**52**	**0.011**	ug/L	0.035	318	20883	25094	0	Standard
⎢	**Cr**	**53**	**0.004**	ug/L	0.005	116	121	155	6	Standard
⎣	**Mn**	**55**	**0.028**	ug/L	0.007	23	554	1539	16	Standard
⎡>	**Ge**	**72**		ug/L			19943	21325	4	KED
⎢	**Ni**	**60**	**0.003**	ug/L	0.003	97	6	10	28	KED
⎢	**Ni**	**62**	**-0.017**	ug/L	0.007	40	3	1	86	KED
⎢	**Cu**	**63**	**0.011**	ug/L	0.004	38	20	53	18	KED
⎢	**Cu**	**65**	**0.009**	ug/L	0.003	36	15	29	16	KED
⎢	**Zn**	**66**	**0.014**	ug/L	0.008	58	20	26	12	KED
⎢	**Zn**	**67**	**0.059**	ug/L	0.078	130	2	6	75	KED
⎢	**As**	**75**	**-0.000**	ug/L	0.011	2300	3	3	56	KED
⎣	**Se**	**78**	**-0.226**	ug/L	0.101	44	14	11	16	KED
	Y	**89**		ug/L			295636	335353	2	Standard
	Kr	**83**		ug/L			57	62	24	Standard
⎡>	**In-1**	**115**		ug/L			5644	6346	1	KED
⎢	**Cd**	**111**	**-0.002**	ug/L	0.009	575	2	2	78	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.004	642	2	3	70	KED
⎡>	**In**	**115**		ug/L			475542	535354	2	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.002	220	40	63	61	Standard
⎢	**Sb**	**121**	**-0.006**	ug/L	0.003	53	496	455	10	Standard
⎢	**Sb**	**123**	**-0.010**	ug/L	0.002	23	393	323	7	Standard
⎢	**Ba**	**135**	**0.004**	ug/L	0.003	86	15	36	43	Standard
⎣	**Ba**	**137**	**0.006**	ug/L	0.003	56	15	62	39	Standard
⎡>	**Tb**	**159**		ug/L			724709	833337	2	Standard
⎣	**Pb**	**208**	**-0.000**	ug/L	0.002	1683	266	299	51	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 04:14:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	30548	4	Standard
	Cl	**37**		ug/L			3079769	3512326	2	Standard
⎡>	**Sc**	**45**		ug/L			458223	556410	1	Standard
⎢	**V**	**51**	**0.006**	ug/L	0.005	85	7096	8768	3	Standard
⎢	**V-1**	**51**	**-0.001**	ug/L	0.000	10	97	89	3	Standard
⎢	**Cr**	**52**	**0.026**	ug/L	0.021	81	20883	25943	3	Standard
⎢	**Cr**	**53**	**0.003**	ug/L	0.005	140	121	156	9	Standard
⎣	**Mn**	**55**	**0.024**	ug/L	0.001	2	554	1433	2	Standard
⎡>	**Ge**	**72**		ug/L			19943	21775	1	KED
⎢	**Ni**	**60**	**0.004**	ug/L	0.004	100	6	10	36	KED
⎢	**Ni**	**62**	**-0.013**	ug/L	0.011	83	3	1	100	KED
⎢	**Cu**	**63**	**0.013**	ug/L	0.005	36	20	62	24	KED
⎢	**Cu**	**65**	**0.008**	ug/L	0.001	7	15	29	3	KED
⎢	**Zn**	**66**	**0.002**	ug/L	0.027	1628	20	22	44	KED
⎢	**Zn**	**67**	**-0.004**	ug/L	0.018	448	2	2	43	KED
⎢	**As**	**75**	**0.010**	ug/L	0.004	46	3	5	13	KED
⎣	**Se**	**78**	**-0.281**	ug/L	0.078	27	14	10	13	KED
	Y	**89**		ug/L			295636	342904	3	Standard
	Kr	**83**		ug/L			57	50	15	Standard
⎡>	**In-1**	**115**		ug/L			5644	6433	0	KED
⎢	**Cd**	**111**	**-0.000**	ug/L	0.009	4435	2	2	66	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.004	594	2	3	71	KED
⎡>	**In**	**115**		ug/L			475542	539385	0	Standard
⎢	**Ag**	**107**	**-0.000**	ug/L	0.000	140	40	39	22	Standard
⎢	**Sb**	**121**	**-0.018**	ug/L	0.002	9	496	275	9	Standard
⎢	**Sb**	**123**	**-0.020**	ug/L	0.001	5	393	192	5	Standard
⎢	**Ba**	**135**	**0.003**	ug/L	0.002	57	15	31	24	Standard
⎣	**Ba**	**137**	**0.004**	ug/L	0.002	38	15	53	25	Standard
⎡>	**Tb**	**159**		ug/L			724709	843694	3	Standard
⎣	**Pb**	**208**	**-0.002**	ug/L	0.000	21	266	183	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 04:19:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	25195	0	Standard
	Cl	**37**		ug/L			3079769	2920672	1	Standard
⌈>	**Sc**	**45**		ug/L			458223	413853	1	Standard
|	**V**	**51**	**-0.021**	ug/L	0.007	35	7096	5995	2	Standard
|	**V-1**	**51**	**-0.001**	ug/L	0.000	1	97	65	0	Standard
|	**Cr**	**52**	**-0.079**	ug/L	0.021	27	20883	17558	1	Standard
|	**Cr**	**53**	**-0.011**	ug/L	0.005	41	121	87	10	Standard
⌊	**Mn**	**55**	**0.019**	ug/L	0.001	6	554	967	2	Standard
⌈>	**Ge**	**72**		ug/L			19943	18234	4	KED
|	**Ni**	**60**	**-0.004**	ug/L	0.001	36	6	2	43	KED
|	**Ni**	**62**	**-0.025**	ug/L	0.000	0	3	0		KED
|	**Cu**	**63**	**0.002**	ug/L	0.003	155	20	24	35	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.001	33	15	10	10	KED
|	**Zn**	**66**	**-0.013**	ug/L	0.017	138	20	14	32	KED
|	**Zn**	**67**	**0.004**	ug/L	0.043	1196	2	2	86	KED
|	**As**	**75**	**0.008**	ug/L	0.011	137	3	4	38	KED
⌊	**Se**	**78**	**-0.222**	ug/L	0.229	103	14	9	41	KED
	Y	**89**		ug/L			295636	268427	1	Standard
	Kr	**83**		ug/L			57	45	12	Standard
⌈>	**In-1**	**115**		ug/L			5644	5200	1	KED
|	**Cd**	**111**	**0.001**	ug/L	0.020	2082	2	2	141	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.002	66	2	0	180	KED
⌈>	**In**	**115**		ug/L			475542	437368	3	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	23	40	22	16	Standard
|	**Sb**	**121**	**-0.029**	ug/L	0.000	1	496	81	8	Standard
|	**Sb**	**123**	**-0.028**	ug/L	0.001	5	393	84	14	Standard
|	**Ba**	**135**	**-0.000**	ug/L	0.001	137	15	12	22	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	92	15	18	21	Standard
⌈>	**Tb**	**159**		ug/L			724709	693699	1	Standard
⌊	**Pb**	**208**	**-0.004**	ug/L	0.000	1	266	46	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 04:24:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	25630	7	Standard
	Cl	**37**		ug/L			3079769	2878500	3	Standard
⌈>	**Sc**	**45**		ug/L			458223	414454	2	Standard
|	**V**	**51**	**-0.013**	ug/L	0.012	86	7096	6151	2	Standard
|	**V-1**	**51**	**-0.002**	ug/L	0.001	40	97	56	23	Standard
|	**Cr**	**52**	**-0.054**	ug/L	0.036	67	20883	17989	2	Standard
|	**Cr**	**53**	**-0.014**	ug/L	0.002	12	121	83	6	Standard
⌊	**Mn**	**55**	**0.012**	ug/L	0.001	4	554	793	1	Standard
⌈>	**Ge**	**72**		ug/L			19943	18581	3	KED
|	**Ni**	**60**	**-0.002**	ug/L	0.004	176	6	3	100	KED
|	**Ni**	**62**	**-0.012**	ug/L	0.013	109	3	1	100	KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	73	20	26	18	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.005	1976	15	13	51	KED
|	**Zn**	**66**	**-0.032**	ug/L	0.018	54	20	8	61	KED
|	**Zn**	**67**	**-0.034**	ug/L	0.020	60	2	0	173	KED
|	**As**	**75**	**-0.001**	ug/L	0.004	671	3	3	24	KED
⌊	**Se**	**78**	**-0.068**	ug/L	0.133	196	14	12	19	KED
	Y	**89**		ug/L			295636	264299	0	Standard
	Kr	**83**		ug/L			57	48	14	Standard
⌈>	**In-1**	**115**		ug/L			5644	5233	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.009	350	2	1	86	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.007	1217	2	2	119	KED
⌈>	**In**	**115**		ug/L			475542	431537	0	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	50	40	27	17	Standard
|	**Sb**	**121**	**-0.031**	ug/L	0.000	1	496	54	8	Standard
|	**Sb**	**123**	**-0.032**	ug/L	0.000	1	393	44	9	Standard
|	**Ba**	**135**	**-0.001**	ug/L	0.001	70	15	10	28	Standard
⌊	**Ba**	**137**	**-0.001**	ug/L	0.001	69	15	9	34	Standard
⌈>	**Tb**	**159**		ug/L			724709	689187	3	Standard
⌊	**Pb**	**208**	**-0.004**	ug/L	0.000	3	266	44	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 04:29:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\033123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25525	25723	3	Standard
	Cl	**37**		ug/L			3079769	2921574	1	Standard
⎡>	**Sc**	**45**		ug/L			458223	401845	2	Standard
⎢	**V**	**51**	**-0.006**	ug/L	0.012	201	7096	6105	3	Standard
⎢	**V-1**	**51**	**-0.001**	ug/L	0.001	54	97	65	19	Standard
⎢	**Cr**	**52**	**-0.028**	ug/L	0.045	163	20883	17860	3	Standard
⎢	**Cr**	**53**	**-0.011**	ug/L	0.003	27	121	86	4	Standard
⎣	**Mn**	**55**	**0.010**	ug/L	0.002	21	554	724	8	Standard
⎡>	**Ge**	**72**		ug/L			19943	18171	2	KED
⎢	**Ni**	**60**	**-0.003**	ug/L	0.001	42	6	3	34	KED
⎢	**Ni**	**62**	**-0.007**	ug/L	0.021	307	3	2	114	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.005	475	20	20	56	KED
⎢	**Cu**	**65**	**-0.000**	ug/L	0.003	639	15	13	28	KED
⎢	**Zn**	**66**	**-0.032**	ug/L	0.017	54	20	8	61	KED
⎢	**Zn**	**67**	**-0.033**	ug/L	0.022	67	2	0	173	KED
⎢	**As**	**75**	**0.001**	ug/L	0.001	161	3	3	8	KED
⎣	**Se**	**78**	**0.031**	ug/L	0.217	692	14	13	25	KED
	Y	**89**		ug/L			295636	266087	2	Standard
	Kr	**83**		ug/L			57	42	9	Standard
⎡>	**In-1**	**115**		ug/L			5644	5202	0	KED
⎢	**Cd**	**111**	**0.013**	ug/L	0.014	104	2	4	52	KED
⎣	**Cd**	**114**	**0.002**	ug/L	0.002	114	2	3	34	KED
⎡>	**In**	**115**		ug/L			475542	428590	2	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.000	50	40	23	28	Standard
⎢	**Sb**	**121**	**-0.030**	ug/L	0.001	3	496	60	21	Standard
⎢	**Sb**	**123**	**-0.032**	ug/L	0.001	3	393	38	31	Standard
⎢	**Ba**	**135**	**-0.003**	ug/L	0.001	31	15	3	86	Standard
⎣	**Ba**	**137**	**-0.001**	ug/L	0.000	45	15	9	20	Standard
⎡>	**Tb**	**159**		ug/L			724709	683997	2	Standard
⎣	**Pb**	**208**	**-0.004**	ug/L	0.000	1	266	43	7	Standard

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00006	Instrument:	ICPMS2
Calibration Date:	04/01/2023 13:46		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Silver-107	0	0	0.2	15545	10	16021.2	20	15435.2	50	15147	100	15062.95
Chromium-52	0	0	0.5	52018	10	18650.8	20	17115.8	50	16170.64	100	16529.26
Chromium-53	0	0	0.5	2182	10	2014.4	20	1889	50	1857.72	100	1879.38
Lead-208	0	0	0.1	49760	10	47325.7	20	45978.15	50	44653.36	100	45610.68

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS2
Calibration: GD00006
Calibration Date: 4/1/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Silver-107	12868.56	49.1	1.0000		0.998	
Chromium-52	20080.75	85.2	0.9997		0.998	
Chromium-53	1637.083	49.6	0.9999		0.998	
Lead-208	38887.98	49.2	0.9999		0.998	

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00006
Instrument: ICPMS2
Calibration Date: 04/01/2023 13:46

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Arsenic-75a	0	0	0.2	175	10	170.2	20	172.9	50	161.76	100	165.66
Cadmium-111	0	0	0.1	220	10	240.4	20	234.25	50	220.14	100	219.86
Cadmium-114	0	0	0.1	550	10	572.9	20	573.35	50	543.96	100	541.32
Copper-63	0	0	0.5	2844	10	2745.4	20	2677.7	50	2468.02	100	2489.42
Copper-65	0	0	0.5	1346	10	1323.9	20	1318	50	1217.24	100	1253.75
Zinc-66	0	0	6	344.8333	10	342.8	20	329.65	50	311.76	100	310.89
Zinc-67	0	0	6	51	10	56.6	20	52.65	50	50.52	100	52.33

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

Instrument: ICPMS2

Calibration: GD00006

Calibration Date: 4/1/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Arsenic-75a	140.92	49.1	0.9997		0.998	
Cadmium-111	189.1083	49.2	0.9998		0.998	
Cadmium-114	463.5883	49.1	0.9999		0.998	
Copper-63	2204.09	49.4	0.9997		0.998	
Copper-65	1076.482	49.2	0.9996		0.998	
Zinc-66	273.3222	49.3	0.9999		0.998	
Zinc-67	43.85	49.2	0.9995		0.998	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 4/1/23 **Analyst:** MB **Sequence:** SL0ØØ41 **Cal:** GDØØØØ6

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CAL1	L3453		
		-CAL2	L3295		
		-CAL3	L3296		
		-CAL4	L3297		
		-CAL5	L3454		
		-CAL6	L3298		
		-IBL1	—		
		-ICV1	LØ243		
		-ICB1	L3453		
		-CCV1	L3454		
		-CCB1	L3453		
		-CRL1	L3295		
		-IFA1	L3416		Cr^{53}↑
		-IFB1	L2744		
		-HCV1	L2745		
		-HCV2	L2746		Zn^{67}↓ - Zn<200
		-IBL2	—		(S6↑)
		-IBL3	—		
		-CCV2			
		-CCB2			
		BLCØ7Ø3-BLK2	SWN	20	Ag only
		↓ -BS2	↓	↓	↓
		BLCØ848-BLK2	REN		
		↓ -BS2	↓		

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 4/1/23 **Analyst:** MS **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23C0747-01	REN	2	Ag only
		BLC0848-DUP2	↓	↓	↓
		↓ -MS2	↓	↓	↓
		23C0439-09	↓	10	Pb only
		↓ -06	↓	5	As, Sb only
		SEQ-IBL4			
		↓ -CCV3			
		↓ -CCB3			
		23A0133-06	SWN	20	Sc↑ No Cr
		↓ -07	↓	↓	↓ ↓
C133→ A0133		↓ -08	↓	↓	↓
↓		↓ -09	↓	↓	
↓		↓ -03	↓	↓	Sc↑ No Cr
		BLC0703-DUP2	↓	↓	↓
		↓ -MS2	↓	↓	Ag %R↓
		↓ -MSD2	↓	↓	↓
		↓ -PS2	↓	↓	Sc↑/60mL K7409 ↓
		SEQ-IBL5			
		↓ -CCV4			
		↓ -CCB4			
		23C0458-01	REN		Pb only
		23C0477-01	↓		↓
		23A0133-10	SWN	20	Sc↑/Cd noisy No Cd, Cr
		↓ -11	↓	↓	↓ No Cr

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: ~~4/4~~ 4/1/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted. MB 4/1/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23AΦ133-12	SWN	20	Sc, Tb no3y/In sl. no3y-%R+ analytes OK — No Cr, Pb
		-13			As sl no3y — No As
		-14			
		-15			
		-16			
		SEQ-IBL6			
		-CCV5			
		-CCB5			
		23AΦ134-Φ1	SWN	20	
		-Φ2			
		-Φ3			
		-Φ4			
		-Φ5			
		-Φ6			
		-Φ7			
		-Φ8			
		SEQ-IBL7			
		-CCV6			
		-CCB6			
		BLCΦ84Φ-BLK1	SWN	20	
		-BS1		↓	
		-SRL1		100	No Zn
		23CΦΦ42-Φ1		20	Sc↑ - Not Needed
		BLCΦ84Φ-DUP1		↓	↓ ↓ /Zn"↑ ↓

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 4/1/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLCΦ84Φ-MS1	SWN	20	Sc↑-Not Needed / Zn↑ No Zn
		-MSD1			/ Zn-noisy-%R & Value OK /
		-PS1			/ 60 mL K74061
		-SRM1		50	
		SEQ-IBL8			
		-CCV7			Qest. noisy-%R & Analytes OK
		-CCB7			
		23CΦΦ42-Φ2	SWN	20	Sc↑-Not Needed
		-Φ3			
		-Φ4			
		-Φ5			
		-Φ6			
		-Φ7			
		-Φ8			/ As noisy No As
		-Φ9			
		SEQ-IBL9			
		-CCV8			
		-CCB8			
		23CΦ64Φ-Φ1	REN	2	
		-Φ2			
		-Φ3			
		-Φ4			Sc↑-Not Needed
		-Φ5			
		-Φ6			

Analytical Resources, Incorporated
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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 4/1/23 **Analyst:** MB **Sequence:** ~~~~ **Cal:** ~~~~

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-IBLA			
		↓ -CCV9			PbT - Not Needed
		↓ -CCB9			
		Rinse/DI			
			MB 4/1/23		

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Saturday, April 01, 2023 12:58:34
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5577
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	3584.8	3584.850	81.340	2.3	Standard
	In	114.9	53151.5	-422391.024	343.526	0.1	Standard
	U	238.1	45670.7	45670.694	518.126	1.1	Standard
⌈	CeO	155.9	641.9	0.014	0.000	3.2	Standard
| >	Ce	139.9	46171.7	46171.697	371.163	0.8	Standard
⌊	Ce++	70.0	891.4	0.019	0.001	3.7	Standard
	Bkgd	220.0	0.6	0.600	0.346	57.6	Standard

Current Conditions File Data

Current Value	Description
1.04	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1600.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.04	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Saturday, April 01, 2023 13:06:29
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5584
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	4661.0	4660.961	121.755	2.6	Standard
	In	114.9	64923.1	64923.132	523.134	0.8	Standard
	U	238.1	54381.9	54381.914	285.164	0.5	Standard
⌈	CeO	155.9	951.2	0.015	0.001	5.1	Standard
| >	Ce	139.9	62108.9	62108.854	204.315	0.3	Standard
⌊	Ce++	70.0	1232.7	0.020	0.000	2.0	Standard
	Bkgd	220.0	0.2	0.233	0.149	63.9	Standard

Current Conditions File Data

Current Value	Description
1.04	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1600.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.04	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 4/1/2023 12:58:31 PM
End Time: 4/1/2023 1:08:33 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 3584.85
Obtained Intensity (In 115): 53151.50
Obtained Intensity (U 238): 45670.69
Obtained Intensity (Bkgd 220): 0.60
Obtained Formula (Ce++ 70 / Ce 140): 0.019 (=891.36 / 46171.70)
Obtained Formula (CeO 156 / Ce 140): 0.014 (=641.95 / 46171.70)
Obtained RSD (Be 9): 0.0227
Obtained RSD (In 115): 0.0008
Obtained RSD (U 238): 0.0113

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.70 mm	0.40 mm	58438.28

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 1.04
Obtained Intensity (In 115): 58559.78
Obtained Formula (CeO 156 / Ce 140): 0.0191 (=1002.04 / 52555.50)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.723)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.689)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.701)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.688)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 1.000; Intercept = -12.56

KED Mode QID - Optimum value(s): Correlation Coefficient = 1.000; Intercept = -15.11

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 4660.96
Obtained Intensity (In 115): 64923.13
Obtained Intensity (U 238): 54381.91
Obtained Intensity (Bkgd 220): 0.23
Obtained Formula (Ce++ 70 / Ce 140): 0.020 (=1232.72 / 62108.85)
Obtained Formula (CeO 156 / Ce 140): 0.015 (=951.23 / 62108.85)
Obtained RSD (Be 9): 0.0261
Obtained RSD (In 115): 0.0081
Obtained RSD (U 238): 0.0052

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 4/1/2023 12:58:31 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 1
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 3584.85
		Obtained Intensity (In 115): 53151.50
		Obtained Intensity (U 238): 45670.69
		Obtained Intensity (Bkgd 220): 0.60
		Obtained Formula (Ce++ 70 / Ce 140): 0.019 (=891.36 / 46171.70)
		Obtained Formula (CeO 156 / Ce 140): 0.014 (=641.95 / 46171.70)
		Obtained RSD (Be 9): 0.0227
		Obtained RSD (In 115): 0.0008
		Obtained RSD (U 238): 0.0113

[Passed] Optimum value(s): N/A

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	0.70 mm	0.40 mm	58438.28

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 1.02/1.06/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 58559.78
		Obtained Formula (CeO 156 / Ce 140): 0.0191 (=1002.04 / 52555.50)
[Passed] Optimum value(s): 1.04

Mass Calibration and Resolution
	Optimization Settings:
		Method: Tuning.mth.
		MassCal File: Default.tun
		Iterations: 6
		Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
		Peak height (%) for Res. Opt.: 10

	Optimization Results:
	Initial Try
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.675)
		Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.660) - <Target not achieved>
		Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.705)
		Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.694)
		[Failed]
	Retry 1
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.723)
		Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.689)
		Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.701)
		Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.688)
[Passed] Optimum value(s): N/A

QID STD/DRC
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 1.000; Intercept = -12.56

	Analyte	Mass	Points	DAC	MaxIntensity

		Li	7	41	-13	18992.6
		Mg	24	41	-13.5	26981.5
		In	115	41	-9	69291.6
		Ce	140	41	-8	63637.4
		Pb	208	41	-7	33415
		U	238	41	-7	56053.8

KED Mode QID
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 1.000; Intercept = -15.11

	Analyte	Mass	Points	DAC	MaxIntensity

		Li	7	41	-15	12265.3
		Mg	24	41	-14.5	18291.7
		In	115	41	-9.5	43253.4
		Ce	140	41	-8.5	48915.6
		Pb	208	41	-7	27370.2
		U	238	41	-6.5	45536.5

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 1
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 4660.96
		Obtained Intensity (In 115): 64923.13
		Obtained Intensity (U 238): 54381.91
		Obtained Intensity (Bkgd 220): 0.23
		Obtained Formula (Ce++ 70 / Ce 140): 0.020 (=1232.72 / 62108.85)
		Obtained Formula (CeO 156 / Ce 140): 0.015 (=951.23 / 62108.85)
		Obtained RSD (Be 9): 0.0261
		Obtained RSD (In 115): 0.0081
		Obtained RSD (U 238): 0.0052

[Passed] Optimum value(s): N/A

End Time: 4/1/2023 1:08:33 PM

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 13:46:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				18011	2	Standard
	Cl	**37**		ug/L				2981467	1	Standard
⎡>	**Sc**	**45**		ug/L				437323	2	Standard
⎢	**Cr**	**52**		ug/L				16930	1	Standard
⎣	**Cr**	**53**		ug/L				85	7	Standard
⎡>	**Ge**	**72**		ug/L				20645	1	KED
⎢	**Cu**	**63**		ug/L				40	21	KED
⎢	**Cu**	**65**		ug/L				22	17	KED
⎢	**Zn**	**66**		ug/L				23	16	KED
⎢	**Zn**	**67**		ug/L				4	49	KED
⎣	**As**	**75**		ug/L				3	58	KED
	Y	**89**		ug/L				288003	1	Standard
	Kr	**83**		ug/L				35	27	Standard
⎡>	**In-1**	**115**		ug/L				7190	1	KED
⎢	**Cd**	**111**		ug/L				1	69	KED
⎣	**Cd**	**114**		ug/L				3	33	KED
⎡>	**In**	**115**		ug/L				410858	0	Standard
⎢	**Ag**	**107**		ug/L				24	25	Standard
⎢	**Sb**	**121**		ug/L				140	21	Standard
⎣	**Sb**	**123**		ug/L				109	7	Standard
⎡>	**Tb**	**159**		ug/L				636863	1	Standard
⎣	**Pb**	**208**		ug/L				113	18	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 13:51:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	21338	4	Standard
	Cl	**37**		ug/L			2981467	2914922	1	Standard
⌈>	**Sc**	**45**		ug/L			437323	440587	3	Standard
|	**Cr**	**52**	**0.500**	ug/L	0.033	6	16930	26009	1	Standard
⌊	**Cr**	**53**	**0.500**	ug/L	0.016	3	85	1091	0	Standard
⌈>	**Ge**	**72**		ug/L			20645	22102	2	KED
|	**Cu**	**63**	**0.500**	ug/L	0.023	4	40	1422	3	KED
|	**Cu**	**65**	**0.500**	ug/L	0.015	3	22	673	4	KED
|	**Zn**	**66**	**6.000**	ug/L	0.259	4	23	2069	2	KED
|	**Zn**	**67**	**6.000**	ug/L	0.116	1	4	306	0	KED
⌊	**As**	**75**	**0.200**	ug/L	0.021	10	3	35	9	KED
	Y	**89**		ug/L			288003	287469	0	Standard
	Kr	**83**		ug/L			35	34	25	Standard
⌈>	**In-1**	**115**		ug/L			7190	7229	3	KED
|	**Cd**	**111**	**0.100**	ug/L	0.030	29	1	22	25	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.023	22	3	55	19	KED
⌈>	**In**	**115**		ug/L			410858	416348	0	Standard
|	**Ag**	**107**	**0.200**	ug/L	0.005	2	24	3109	2	Standard
|	**Sb**	**121**	**0.200**	ug/L	0.007	3	140	2334	2	Standard
⌊	**Sb**	**123**	**0.200**	ug/L	0.014	7	109	1799	6	Standard
⌈>	**Tb**	**159**		ug/L			636863	650061	1	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.001	1	113	4976	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 13:55:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	24993	2	Standard
	Cl	**37**		ug/L			2981467	2974175	1	Standard
⌈>	**Sc**	**45**		ug/L			437323	444999	1	Standard
|	**Cr**	**52**	**9.998**	ug/L	0.156	1	16930	186508	1	Standard
⌊	**Cr**	**53**	**10.000**	ug/L	0.056	0	85	20144	1	Standard
⌈>	**Ge**	**72**		ug/L			20645	22018	2	KED
|	**Cu**	**63**	**10.000**	ug/L	0.274	2	40	27454	1	KED
|	**Cu**	**65**	**10.001**	ug/L	0.197	1	22	13239	2	KED
|	**Zn**	**66**	**10.008**	ug/L	0.576	5	23	3428	3	KED
|	**Zn**	**67**	**10.291**	ug/L	0.334	3	4	566	5	KED
⌊	**As**	**75**	**10.000**	ug/L	0.054	0	3	1702	2	KED
	Y	**89**		ug/L			288003	299841	0	Standard
	Kr	**83**		ug/L			35	41	27	Standard
⌈>	**In-1**	**115**		ug/L			7190	7454	1	KED
|	**Cd**	**111**	**10.000**	ug/L	0.428	4	1	2404	4	KED
⌊	**Cd**	**114**	**10.000**	ug/L	0.278	2	3	5729	1	KED
⌈>	**In**	**115**		ug/L			410858	421364	0	Standard
|	**Ag**	**107**	**10.000**	ug/L	0.030	0	24	160212	1	Standard
|	**Sb**	**121**	**10.000**	ug/L	0.132	1	140	120907	1	Standard
⌊	**Sb**	**123**	**10.000**	ug/L	0.207	2	109	91674	2	Standard
⌈>	**Tb**	**159**		ug/L			636863	653872	1	Standard
⌊	**Pb**	**208**	**10.000**	ug/L	0.010	0	113	473257	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 14:00:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	24983	2	Standard
	Cl	**37**		ug/L			2981467	3005278	0	Standard
⌈>	**Sc**	**45**		ug/L			437323	420509	5	Standard
|	**Cr**	**52**	**20.082**	ug/L	1.074	5	16930	342316	1	Standard
⌊	**Cr**	**53**	**19.988**	ug/L	1.335	6	85	37780	1	Standard
⌈>	**Ge**	**72**		ug/L			20645	22544	2	KED
|	**Cu**	**63**	**19.806**	ug/L	0.728	3	40	53554	1	KED
|	**Cu**	**65**	**19.890**	ug/L	0.334	1	22	26360	1	KED
|	**Zn**	**66**	**19.695**	ug/L	0.203	1	23	6593	1	KED
|	**Zn**	**67**	**19.675**	ug/L	0.447	2	4	1053	1	KED
⌊	**As**	**75**	**19.975**	ug/L	0.568	2	3	3458	0	KED
	Y	**89**		ug/L			288003	276587	4	Standard
	Kr	**83**		ug/L			35	51	16	Standard
⌈>	**In-1**	**115**		ug/L			7190	7312	0	KED
|	**Cd**	**111**	**19.974**	ug/L	0.933	4	1	4685	4	KED
⌊	**Cd**	**114**	**20.080**	ug/L	0.668	3	3	11467	2	KED
⌈>	**In**	**115**		ug/L			410858	401840	3	Standard
|	**Ag**	**107**	**20.045**	ug/L	1.020	5	24	308704	2	Standard
|	**Sb**	**121**	**20.075**	ug/L	0.831	4	140	234659	1	Standard
⌊	**Sb**	**123**	**20.153**	ug/L	0.701	3	109	181504	1	Standard
⌈>	**Tb**	**159**		ug/L			636863	643738	2	Standard
⌊	**Pb**	**208**	**19.950**	ug/L	0.747	3	113	919563	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 14:05:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	17591	2	Standard
	Cl	**37**		ug/L			2981467	3110023	2	Standard
⌈>	**Sc**	**45**		ug/L			437323	443386	2	Standard
|	**Cr**	**52**	**49.311**	ug/L	0.290	0	16930	808532	1	Standard
⌊	**Cr**	**53**	**49.391**	ug/L	0.803	1	85	92886	1	Standard
⌈>	**Ge**	**72**		ug/L			20645	21424	1	KED
|	**Cu**	**63**	**49.659**	ug/L	1.644	3	40	123401	3	KED
|	**Cu**	**65**	**49.716**	ug/L	0.166	0	22	60862	0	KED
|	**Zn**	**66**	**49.841**	ug/L	1.483	2	23	15588	1	KED
|	**Zn**	**67**	**49.959**	ug/L	2.097	4	4	2526	5	KED
⌊	**As**	**75**	**49.860**	ug/L	0.785	1	3	8088	1	KED
	Y	**89**		ug/L			288003	287218	0	Standard
	Kr	**83**		ug/L			35	41	30	Standard
⌈>	**In-1**	**115**		ug/L			7190	7309	3	KED
|	**Cd**	**111**	**49.468**	ug/L	1.203	2	1	11007	0	KED
⌊	**Cd**	**114**	**49.598**	ug/L	1.433	2	3	27198	0	KED
⌈>	**In**	**115**		ug/L			410858	418428	0	Standard
|	**Ag**	**107**	**49.507**	ug/L	0.934	1	24	757350	1	Standard
|	**Sb**	**121**	**49.310**	ug/L	0.557	1	140	561747	0	Standard
⌊	**Sb**	**123**	**49.167**	ug/L	0.572	1	109	425802	1	Standard
⌈>	**Tb**	**159**		ug/L			636863	662765	2	Standard
⌊	**Pb**	**208**	**49.478**	ug/L	0.563	1	113	2232668	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 14:11:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	23625	2	Standard
	Cl	**37**		ug/L			2981467	3209697	0	Standard
⌈>	**Sc**	**45**		ug/L			437323	448064	1	Standard
|	**Cr**	**52**	**100.196**	ug/L	1.982	1	16930	1652926	1	Standard
⌊	**Cr**	**53**	**99.749**	ug/L	1.315	1	85	187938	1	Standard
⌈>	**Ge**	**72**		ug/L			20645	21879	1	KED
|	**Cu**	**63**	**99.560**	ug/L	1.592	1	40	248942	1	KED
|	**Cu**	**65**	**100.069**	ug/L	0.502	0	22	125375	1	KED
|	**Zn**	**66**	**99.379**	ug/L	1.476	1	23	31089	2	KED
|	**Zn**	**67**	**100.337**	ug/L	3.451	3	4	5233	3	KED
⌊	**As**	**75**	**100.011**	ug/L	2.934	2	3	16566	1	KED
	Y	**89**		ug/L			288003	287722	1	Standard
	Kr	**83**		ug/L			35	73	11	Standard
⌈>	**In-1**	**115**		ug/L			7190	7166	0	KED
|	**Cd**	**111**	**100.168**	ug/L	0.296	0	1	21986	0	KED
⌊	**Cd**	**114**	**100.145**	ug/L	1.951	1	3	54132	1	KED
⌈>	**In**	**115**		ug/L			410858	410897	0	Standard
|	**Ag**	**107**	**100.062**	ug/L	1.302	1	24	1506295	0	Standard
|	**Sb**	**121**	**100.650**	ug/L	0.192	0	140	1150755	0	Standard
⌊	**Sb**	**123**	**100.581**	ug/L	0.478	0	109	872143	0	Standard
⌈>	**Tb**	**159**		ug/L			636863	667244	1	Standard
⌊	**Pb**	**208**	**100.092**	ug/L	1.636	1	113	4561068	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 14:18:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	20732	2	Standard
	Cl	**37**		ug/L			2981467	3063603	1	Standard
⎡>	**Sc**	**45**		ug/L			437323	438228	0	Standard
⎢	**Cr**	**52**	**0.037**	ug/L	0.049	132	16930	17559	4	Standard
⎣	**Cr**	**53**	**0.023**	ug/L	0.043	184	85	128	61	Standard
⎡>	**Ge**	**72**		ug/L			20645	20934	8	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.003	117	40	46	9	KED
⎢	**Cu**	**65**	**0.002**	ug/L	0.005	303	22	24	30	KED
⎢	**Zn**	**66**	**0.018**	ug/L	0.007	38	23	29	15	KED
⎢	**Zn**	**67**	**-0.027**	ug/L	0.019	70	4	3	34	KED
⎣	**As**	**75**	**0.006**	ug/L	0.008	137	3	4	21	KED
	Y	**89**		ug/L			288003	282181	0	Standard
	Kr	**83**		ug/L			35	41	13	Standard
⎡>	**In-1**	**115**		ug/L			7190	7485	1	KED
⎢	**Cd**	**111**	**-0.000**	ug/L	0.002	930	1	1	34	KED
⎣	**Cd**	**114**	**-0.003**	ug/L	0.003	133	3	1	107	KED
⎡>	**In**	**115**		ug/L			410858	413717	0	Standard
⎢	**Ag**	**107**	**0.022**	ug/L	0.033	149	24	354	139	Standard
⎢	**Sb**	**121**	**0.196**	ug/L	0.042	21	140	2401	20	Standard
⎣	**Sb**	**123**	**0.203**	ug/L	0.048	23	109	1885	22	Standard
⎡>	**Tb**	**159**		ug/L			636863	648127	1	Standard
⎣	**Pb**	**208**	**0.024**	ug/L	0.040	164	113	1166	147	Standard

Sample Information

Sample Date/Time: Saturday, April 01, 2023 14:11:44
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED
Mass Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Cr	52	**0.9999**	0.036	0.50	10	20	50	100
Cr	53	**0.9999**	0.004	0.50	10	20	50	100
Ge	72							
Cu	63	**0.9999**	0.114	0.50	10	20	50	100
Cu	65	**1.0000**	0.057	0.50	10	20	50	100
Zn	66	**0.9999**	0.014	6.00	10	20	50	100
Zn	67	**1.0000**	0.002	6.00	10	20	50	100
As	75	**1.0000**	0.008	0.20	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Cd	111	**0.9999**	0.031	0.10	10	20	50	100
Cd	114	**1.0000**	0.075	0.10	10	20	50	100
In	115							
Ag	107	**0.9999**	0.037	0.20	10	20	50	100
Sb	121	**0.9998**	0.028	0.20	10	20	50	100
Sb	123	**0.9998**	0.021	0.20	10	20	50	100
Tb	159							
Pb	208	**0.9999**	0.068	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 14:26:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	23991	4	Standard
	Cl	**37**		ug/L			2981467	3176098	2	Standard
⎡>	**Sc**	**45**		ug/L			437323	463507	1	Standard
⎢	**Cr**	**52**	**48.905**	ug/L	0.142	0	16930	843839	1	Standard
⎣	**Cr**	**53**	**50.335**	ug/L	0.976	1	85	98172	3	Standard
⎡>	**Ge**	**72**		ug/L			20645	21880	0	KED
⎢	**Cu**	**63**	**51.801**	ug/L	1.102	2	40	129571	2	KED
⎢	**Cu**	**65**	**52.194**	ug/L	1.511	2	22	65405	2	KED
⎢	**Zn**	**66**	**49.025**	ug/L	2.252	4	23	15348	4	KED
⎢	**Zn**	**67**	**49.913**	ug/L	1.969	3	4	2605	3	KED
⎣	**As**	**75**	**47.270**	ug/L	0.686	1	3	7835	1	KED
	Y	**89**		ug/L			288003	300278	2	Standard
	Kr	**83**		ug/L			35	49	20	Standard
⎡>	**In-1**	**115**		ug/L			7190	7504	1	KED
⎢	**Cd**	**111**	**49.165**	ug/L	1.367	2	1	11298	1	KED
⎣	**Cd**	**114**	**49.032**	ug/L	0.524	1	3	27753	0	KED
⎡>	**In**	**115**		ug/L			410858	420211	0	Standard
⎢	**Ag**	**107**	**51.539**	ug/L	0.593	1	24	793484	1	Standard
⎢	**Sb**	**121**	**49.945**	ug/L	0.239	0	140	584045	0	Standard
⎣	**Sb**	**123**	**50.862**	ug/L	0.204	0	109	451090	0	Standard
⎡>	**Tb**	**159**		ug/L			636863	672904	0	Standard
⎣	**Pb**	**208**	**50.856**	ug/L	0.368	0	113	2337413	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 14:33:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	17950	3	Standard
	Cl	**37**		ug/L			2981467	3039492	3	Standard
⎡>	**Sc**	**45**		ug/L			437323	430821	1	Standard
⎢	**Cr**	**52**	**0.021**	ug/L	0.031	144	16930	17009	1	Standard
⎣	**Cr**	**53**	**0.001**	ug/L	0.008	636	85	86	19	Standard
⎡>	**Ge**	**72**		ug/L			20645	21139	1	KED
⎢	**Cu**	**63**	**0.000**	ug/L	0.001	740	40	41	4	KED
⎢	**Cu**	**65**	**0.004**	ug/L	0.007	184	22	27	31	KED
⎢	**Zn**	**66**	**0.009**	ug/L	0.013	153	23	26	14	KED
⎢	**Zn**	**67**	**0.010**	ug/L	0.057	558	4	5	57	KED
⎣	**As**	**75**	**0.001**	ug/L	0.012	844	3	3	48	KED
	Y	**89**		ug/L			288003	283165	1	Standard
	Kr	**83**		ug/L			35	48	21	Standard
⎡>	**In-1**	**115**		ug/L			7190	7146	1	KED
⎢	**Cd**	**111**	**0.003**	ug/L	0.009	304	1	2	89	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.004	326	3	3	52	KED
⎡>	**In**	**115**		ug/L			410858	412923	1	Standard
⎢	**Ag**	**107**	**0.002**	ug/L	0.000	15	24	53	7	Standard
⎢	**Sb**	**121**	**0.027**	ug/L	0.002	5	140	453	3	Standard
⎣	**Sb**	**123**	**0.024**	ug/L	0.001	3	109	319	1	Standard
⎡>	**Tb**	**159**		ug/L			636863	635585	1	Standard
⎣	**Pb**	**208**	**0.000**	ug/L	0.000	443	113	117	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 14:48:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	17780	2	Standard
	Cl	**37**		ug/L			2981467	3115329	4	Standard
⌈>	**Sc**	**45**		ug/L			437323	446187	2	Standard
|	**Cr**	**52**	**48.788**	ug/L	1.274	2	16930	810309	3	Standard
⌊	**Cr**	**53**	**50.313**	ug/L	1.015	2	85	94412	1	Standard
⌈>	**Ge**	**72**		ug/L			20645	21838	1	KED
|	**Cu**	**63**	**50.099**	ug/L	1.418	2	40	125058	2	KED
|	**Cu**	**65**	**51.318**	ug/L	0.672	1	22	64188	2	KED
|	**Zn**	**66**	**49.958**	ug/L	0.776	1	23	15609	1	KED
|	**Zn**	**67**	**48.220**	ug/L	0.957	1	4	2512	0	KED
⌊	**As**	**75**	**49.250**	ug/L	1.004	2	3	8146	1	KED
	Y	**89**		ug/L			288003	296777	1	Standard
	Kr	**83**		ug/L			35	42	30	Standard
⌈>	**In-1**	**115**		ug/L			7190	7341	2	KED
|	**Cd**	**111**	**49.951**	ug/L	0.556	1	1	11231	2	KED
⌊	**Cd**	**114**	**49.325**	ug/L	1.304	2	3	27305	1	KED
⌈>	**In**	**115**		ug/L			410858	418979	0	Standard
|	**Ag**	**107**	**47.638**	ug/L	0.657	1	24	731245	1	Standard
|	**Sb**	**121**	**48.617**	ug/L	0.916	1	140	566830	1	Standard
⌊	**Sb**	**123**	**48.737**	ug/L	0.064	0	109	430979	0	Standard
⌈>	**Tb**	**159**		ug/L			636863	663310	1	Standard
⌊	**Pb**	**208**	**49.251**	ug/L	1.271	2	113	2230737	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 14:55:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	17957	2	Standard
	Cl	**37**		ug/L			2981467	3039779	0	Standard
⌈>	**Sc**	**45**		ug/L			437323	428317	2	Standard
|	**Cr**	**52**	**0.007**	ug/L	0.005	73	16930	16689	1	Standard
⌊	**Cr**	**53**	**-0.004**	ug/L	0.002	59	85	76	4	Standard
⌈>	**Ge**	**72**		ug/L			20645	21784	2	KED
|	**Cu**	**63**	**-0.003**	ug/L	0.002	89	40	36	18	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.002	85	22	20	14	KED
|	**Zn**	**66**	**0.029**	ug/L	0.033	114	23	33	28	KED
|	**Zn**	**67**	**-0.018**	ug/L	0.061	342	4	3	86	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.004	310	3	3	19	KED
	Y	**89**		ug/L			288003	277506	2	Standard
	Kr	**83**		ug/L			35	42	14	Standard
⌈>	**In-1**	**115**		ug/L			7190	7411	3	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.007	226	1	0	173	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.005	1291	3	3	91	KED
⌈>	**In**	**115**		ug/L			410858	410932	0	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.001	43	24	69	28	Standard
|	**Sb**	**121**	**0.120**	ug/L	0.006	4	140	1514	4	Standard
⌊	**Sb**	**123**	**0.117**	ug/L	0.004	3	109	1123	1	Standard
⌈>	**Tb**	**159**		ug/L			636863	631742	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	60	113	171	20	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 15:01:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	21457	3	Standard
	Cl	**37**		ug/L			2981467	3079769	4	Standard
⌈>	**Sc**	**45**		ug/L			437323	444515	0	Standard
|	**Cr**	**52**	**0.532**	ug/L	0.076	14	16930	25824	4	Standard
⌊	**Cr**	**53**	**0.517**	ug/L	0.024	4	85	1051	3	Standard
⌈>	**Ge**	**72**		ug/L			20645	21866	3	KED
|	**Cu**	**63**	**0.531**	ug/L	0.036	6	40	1369	5	KED
|	**Cu**	**65**	**0.524**	ug/L	0.014	2	22	679	4	KED
|	**Zn**	**66**	**6.556**	ug/L	0.374	5	23	2075	8	KED
|	**Zn**	**67**	**6.229**	ug/L	0.419	6	4	328	5	KED
⌊	**As**	**75**	**0.179**	ug/L	0.027	15	3	33	12	KED
	Y	**89**		ug/L			288003	289727	2	Standard
	Kr	**83**		ug/L			35	48	12	Standard
⌈>	**In-1**	**115**		ug/L			7190	7439	0	KED
|	**Cd**	**111**	**0.101**	ug/L	0.004	4	1	24	3	KED
⌊	**Cd**	**114**	**0.111**	ug/L	0.014	12	3	65	11	KED
⌈>	**In**	**115**		ug/L			410858	416227	1	Standard
|	**Ag**	**107**	**0.211**	ug/L	0.002	0	24	3234	1	Standard
|	**Sb**	**121**	**0.231**	ug/L	0.004	1	140	2820	2	Standard
⌊	**Sb**	**123**	**0.236**	ug/L	0.002	0	109	2185	1	Standard
⌈>	**Tb**	**159**		ug/L			636863	648715	1	Standard
⌊	**Pb**	**208**	**0.119**	ug/L	0.004	3	113	5395	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 15:06:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	84559	5	Standard
	Cl	**37**		ug/L			2981467	8146696	1	Standard
⌈>	**Sc**	**45**		ug/L			437323	471895	1	Standard
|	**Cr**	**52**	**0.927**	ug/L	0.042	4	16930	34200	1	Standard
⌊	**Cr**	**53**	**4.238**	ug/L	0.076	1	85	8498	1	Standard
⌈>	**Ge**	**72**		ug/L			20645	21332	1	KED
|	**Cu**	**63**	**0.051**	ug/L	0.001	2	40	165	3	KED
|	**Cu**	**65**	**0.058**	ug/L	0.012	20	22	93	16	KED
|	**Zn**	**66**	**0.297**	ug/L	0.043	14	23	114	11	KED
|	**Zn**	**67**	**0.122**	ug/L	0.095	77	4	10	44	KED
⌊	**As**	**75**	**0.022**	ug/L	0.012	54	3	7	27	KED
	Y	**89**		ug/L			288003	292706	4	Standard
	Kr	**83**		ug/L			35	83	25	Standard
⌈>	**In-1**	**115**		ug/L			7190	7243	1	KED
|	**Cd**	**111**	**0.043**	ug/L	0.012	28	1	11	24	KED
⌊	**Cd**	**114**	**0.028**	ug/L	0.006	20	3	18	16	KED
⌈>	**In**	**115**		ug/L			410858	423077	2	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.000	10	24	93	8	Standard
|	**Sb**	**121**	**0.051**	ug/L	0.004	8	140	750	8	Standard
⌊	**Sb**	**123**	**0.050**	ug/L	0.003	6	109	558	3	Standard
⌈>	**Tb**	**159**		ug/L			636863	684601	2	Standard
⌊	**Pb**	**208**	**0.028**	ug/L	0.000	0	113	1411	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 15:10:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	82737	1	Standard
	Cl	**37**		ug/L			2981467	8461558	0	Standard
⌈>	**Sc**	**45**		ug/L			437323	469616	1	Standard
|	**Cr**	**52**	**20.214**	ug/L	0.250	1	16930	364018	1	Standard
⌊	**Cr**	**53**	**23.665**	ug/L	0.208	0	85	46800	1	Standard
⌈>	**Ge**	**72**		ug/L			20645	21816	1	KED
|	**Cu**	**63**	**19.990**	ug/L	0.652	3	40	49882	3	KED
|	**Cu**	**65**	**19.993**	ug/L	0.426	2	22	24991	0	KED
|	**Zn**	**66**	**18.313**	ug/L	0.272	1	23	5732	2	KED
|	**Zn**	**67**	**18.126**	ug/L	0.757	4	4	946	4	KED
⌊	**As**	**75**	**19.254**	ug/L	0.216	1	3	3184	0	KED
	Y	**89**		ug/L			288003	301456	1	Standard
	Kr	**83**		ug/L			35	85	3	Standard
⌈>	**In-1**	**115**		ug/L			7190	7454	2	KED
|	**Cd**	**111**	**19.185**	ug/L	0.643	3	1	4379	1	KED
⌊	**Cd**	**114**	**18.876**	ug/L	0.598	3	3	10611	1	KED
⌈>	**In**	**115**		ug/L			410858	417337	0	Standard
|	**Ag**	**107**	**18.981**	ug/L	0.204	1	24	290226	0	Standard
|	**Sb**	**121**	**0.040**	ug/L	0.005	11	140	604	9	Standard
⌊	**Sb**	**123**	**0.040**	ug/L	0.001	1	109	464	1	Standard
⌈>	**Tb**	**159**		ug/L			636863	688216	2	Standard
⌊	**Pb**	**208**	**0.045**	ug/L	0.003	6	113	2248	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 15:14:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	23137	1	Standard
	Cl	**37**		ug/L			2981467	3258926	1	Standard
⎡>	**Sc**	**45**		ug/L			437323	446865	0	Standard
⎢	**Cr**	**52**	**191.877**	ug/L	2.484	1	16930	3141556	1	Standard
⎣	**Cr**	**53**	**195.855**	ug/L	1.293	0	85	367971	1	Standard
⎡>	**Ge**	**72**		ug/L			20645	21068	0	KED
⎢	**Cu**	**63**	**193.985**	ug/L	2.697	1	40	467061	0	KED
⎢	**Cu**	**65**	**192.048**	ug/L	0.675	0	22	231682	1	KED
⎢	**Zn**	**66**	**185.770**	ug/L	3.824	2	23	55934	1	KED
⎢	**Zn**	**67**	**189.449**	ug/L	1.946	1	4	9511	0	KED
⎣	**As**	**75**	**195.267**	ug/L	2.038	1	3	31153	0	KED
	Y	**89**		ug/L			288003	291153	2	Standard
	Kr	**83**		ug/L			35	79	14	Standard
⎡>	**In-1**	**115**		ug/L			7190	7103	3	KED
⎢	**Cd**	**111**	**193.951**	ug/L	7.085	3	1	42160	1	KED
⎣	**Cd**	**114**	**192.741**	ug/L	7.675	3	3	103173	0	KED
⎡>	**In**	**115**		ug/L			410858	402088	1	Standard
⎢	**Ag**	**107**	**196.863**	ug/L	1.404	0	24	2900068	1	Standard
⎢	**Sb**	**121**	**200.869**	ug/L	5.113	2	140	2246861	1	Standard
⎣	**Sb**	**123**	**194.952**	ug/L	1.486	0	109	1654071	0	Standard
⎡>	**Tb**	**159**		ug/L			636863	658980	0	Standard
⎣	**Pb**	**208**	**189.931**	ug/L	0.519	0	113	8548909	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 15:19:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	23764	2	Standard
	Cl	**37**		ug/L			2981467	3094315	0	Standard
⌈>	**Sc**	**45**		ug/L			437323	431050	1	Standard
|	**Cr**	**52**	**297.107**	ug/L	5.828	1	16930	4681994	1	Standard
⌊	**Cr**	**53**	**297.746**	ug/L	5.817	1	85	539471	1	Standard
⌈>	**Ge**	**72**		ug/L			20645	20544	0	KED
|	**Cu**	**63**	**284.314**	ug/L	2.697	0	40	667495	0	KED
|	**Cu**	**65**	**287.240**	ug/L	4.503	1	22	337864	1	KED
|	**Zn**	**66**	**270.187**	ug/L	1.294	0	23	79323	1	KED
|	**Zn**	**67**	**267.741**	ug/L	10.777	4	4	13103	3	KED
⌊	**As**	**75**	**291.113**	ug/L	1.535	0	3	45287	0	KED
	Y	**89**		ug/L			288003	277327	0	Standard
	Kr	**83**		ug/L			35	119	19	Standard
⌈>	**In-1**	**115**		ug/L			7190	6929	2	KED
|	**Cd**	**111**	**288.187**	ug/L	5.508	1	1	61137	1	KED
⌊	**Cd**	**114**	**285.352**	ug/L	6.008	2	3	149082	0	KED
⌈>	**In**	**115**		ug/L			410858	392438	1	Standard
|	**Ag**	**107**	**293.605**	ug/L	2.854	0	24	4220966	0	Standard
|	**Sb**	**121**	**303.608**	ug/L	5.818	1	140	3314498	0	Standard
⌊	**Sb**	**123**	**302.060**	ug/L	3.740	1	109	2501037	0	Standard
⌈>	**Tb**	**159**		ug/L			636863	639090	1	Standard
⌊	**Pb**	**208**	**287.370**	ug/L	0.405	0	113	12544104	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 15:26:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19034	0	Standard
	Cl	**37**		ug/L			2981467	3177980	2	Standard
⌈>	**Sc**	**45**		ug/L			437323	435576	2	Standard
|	**Cr**	**52**	**0.042**	ug/L	0.017	41	16930	17525	1	Standard
⌊	**Cr**	**53**	**0.030**	ug/L	0.007	23	85	140	8	Standard
⌈>	**Ge**	**72**		ug/L			20645	20860	3	KED
|	**Cu**	**63**	**0.004**	ug/L	0.003	75	40	50	12	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.002	113	22	20	14	KED
|	**Zn**	**66**	**0.006**	ug/L	0.016	269	23	25	15	KED
|	**Zn**	**67**	**0.025**	ug/L	0.069	270	4	5	57	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.008	379	3	3	37	KED
	Y	**89**		ug/L			288003	285183	3	Standard
	Kr	**83**		ug/L			35	46	16	Standard
⌈>	**In-1**	**115**		ug/L			7190	7591	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.004	128	1	0	100	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	147	3	2	42	KED
⌈>	**In**	**115**		ug/L			410858	423684	1	Standard
|	**Ag**	**107**	**0.007**	ug/L	0.001	7	24	135	6	Standard
|	**Sb**	**121**	**0.467**	ug/L	0.019	4	140	5650	5	Standard
⌊	**Sb**	**123**	**0.459**	ug/L	0.020	4	109	4217	5	Standard
⌈>	**Tb**	**159**		ug/L			636863	671753	1	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	6	113	311	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 15:32:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19731	6	Standard
	Cl	**37**		ug/L			2981467	3072791	0	Standard
⌈>	**Sc**	**45**		ug/L			437323	429834	1	Standard
|	**Cr**	**52**	**0.081**	ug/L	0.017	21	16930	17900	0	Standard
⌊	**Cr**	**53**	**0.024**	ug/L	0.007	28	85	127	9	Standard
⌈>	**Ge**	**72**		ug/L			20645	21513	1	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.001	63	40	37	7	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.008	1136	22	22	40	KED
|	**Zn**	**66**	**0.007**	ug/L	0.017	231	23	26	18	KED
|	**Zn**	**67**	**-0.016**	ug/L	0.001	9	4	3	0	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.011	545	3	3	51	KED
	Y	**89**		ug/L			288003	276541	2	Standard
	Kr	**83**		ug/L			35	41	29	Standard
⌈>	**In-1**	**115**		ug/L			7190	7355	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.007	240	1	0	173	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.006	591	3	3	87	KED
⌈>	**In**	**115**		ug/L			410858	419345	2	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.001	18	24	77	9	Standard
|	**Sb**	**121**	**0.128**	ug/L	0.007	5	140	1635	2	Standard
⌊	**Sb**	**123**	**0.130**	ug/L	0.005	3	109	1265	2	Standard
⌈>	**Tb**	**159**		ug/L			636863	652606	1	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	11	113	285	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 15:39:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	18376	4	Standard
	Cl	**37**		ug/L			2981467	3202705	3	Standard
⎡>	**Sc**	**45**		ug/L			437323	443952	2	Standard
⎢	**Cr**	**52**	**49.321**	ug/L	0.584	1	16930	814855	1	Standard
⎣	**Cr**	**53**	**50.021**	ug/L	0.776	1	85	93423	2	Standard
⎡>	**Ge**	**72**		ug/L			20645	22352	2	KED
⎢	**Cu**	**63**	**50.053**	ug/L	1.146	2	40	127850	0	KED
⎢	**Cu**	**65**	**49.979**	ug/L	0.843	1	22	63965	0	KED
⎢	**Zn**	**66**	**49.812**	ug/L	1.277	2	23	15926	1	KED
⎢	**Zn**	**67**	**48.145**	ug/L	1.820	3	4	2566	1	KED
⎣	**As**	**75**	**48.744**	ug/L	1.286	2	3	8250	0	KED
	Y	**89**		ug/L			288003	294430	0	Standard
	Kr	**83**		ug/L			35	46	8	Standard
⎡>	**In-1**	**115**		ug/L			7190	7445	3	KED
⎢	**Cd**	**111**	**50.286**	ug/L	1.863	3	1	11456	0	KED
⎣	**Cd**	**114**	**49.581**	ug/L	1.367	2	3	27825	1	KED
⎡>	**In**	**115**		ug/L			410858	424339	1	Standard
⎢	**Ag**	**107**	**47.738**	ug/L	1.432	3	24	741893	1	Standard
⎢	**Sb**	**121**	**48.815**	ug/L	0.862	1	140	576332	0	Standard
⎣	**Sb**	**123**	**48.506**	ug/L	0.817	1	109	434336	0	Standard
⎡>	**Tb**	**159**		ug/L			636863	680451	1	Standard
⎣	**Pb**	**208**	**47.881**	ug/L	0.833	1	113	2225029	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 15:46:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	18438	5	Standard
	Cl	**37**		ug/L			2981467	3059905	1	Standard
⌈>	**Sc**	**45**		ug/L			437323	429501	0	Standard
|	**Cr**	**52**	**0.032**	ug/L	0.036	115	16930	17124	4	Standard
⌊	**Cr**	**53**	**0.016**	ug/L	0.005	31	85	113	8	Standard
⌈>	**Ge**	**72**		ug/L			20645	21658	0	KED
|	**Cu**	**63**	**0.007**	ug/L	0.002	23	40	60	6	KED
|	**Cu**	**65**	**-0.004**	ug/L	0.005	114	22	18	29	KED
|	**Zn**	**66**	**0.011**	ug/L	0.029	275	23	27	32	KED
|	**Zn**	**67**	**0.046**	ug/L	0.119	260	4	6	87	KED
⌊	**As**	**75**	**0.003**	ug/L	0.010	360	3	4	38	KED
	Y	**89**		ug/L			288003	275815	0	Standard
	Kr	**83**		ug/L			35	43	40	Standard
⌈>	**In-1**	**115**		ug/L			7190	7365	2	KED
|	**Cd**	**111**	**0.001**	ug/L	0.004	345	1	1	50	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.004	182	3	4	48	KED
⌈>	**In**	**115**		ug/L			410858	405611	1	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.000	4	24	67	4	Standard
|	**Sb**	**121**	**0.150**	ug/L	0.008	5	140	1826	6	Standard
⌊	**Sb**	**123**	**0.161**	ug/L	0.003	1	109	1489	3	Standard
⌈>	**Tb**	**159**		ug/L			636863	648576	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	61	113	153	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0703-BLK2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 15:50:52
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	22678	2	Standard
	Cl	**37**		ug/L			2981467	3092184	1	Standard
⌈>	**Sc**	**45**		ug/L			437323	444173	1	Standard
|	**Cr**	**52**	**0.028**	ug/L	0.013	47	16930	17645	1	Standard
⌊	**Cr**	**53**	**0.016**	ug/L	0.008	47	85	117	13	Standard
⌈>	**Ge**	**72**		ug/L			20645	22035	4	KED
|	**Cu**	**63**	**-0.005**	ug/L	0.002	47	40	31	18	KED
|	**Cu**	**65**	**0.001**	ug/L	0.006	646	22	24	27	KED
|	**Zn**	**66**	**0.010**	ug/L	0.045	426	23	28	50	KED
|	**Zn**	**67**	**0.032**	ug/L	0.060	189	4	6	45	KED
⌊	**As**	**75**	**0.006**	ug/L	0.013	219	3	4	45	KED
	Y	**89**		ug/L			288003	289167	0	Standard
	Kr	**83**		ug/L			35	50	15	Standard
⌈>	**In-1**	**115**		ug/L			7190	7330	1	KED
|	**Cd**	**111**	**0.006**	ug/L	0.004	77	1	2	33	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.003	136	3	1	108	KED
⌈>	**In**	**115**		ug/L			410858	425913	2	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	32	24	59	17	Standard
|	**Sb**	**121**	**0.055**	ug/L	0.004	6	140	792	3	Standard
⌊	**Sb**	**123**	**0.058**	ug/L	0.005	7	109	630	4	Standard
⌈>	**Tb**	**159**		ug/L			636863	668120	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	54	113	121	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0703-BS2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 15:55:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	20575	3	Standard
	Cl	**37**		ug/L			2981467	3024371	2	Standard
⌈>	**Sc**	**45**		ug/L			437323	440817	2	Standard
|	**Cr**	**52**	**26.211**	ug/L	1.100	4	16930	437833	2	Standard
⌊	**Cr**	**53**	**26.781**	ug/L	0.698	2	85	49691	0	Standard
⌈>	**Ge**	**72**		ug/L			20645	22615	1	KED
|	**Cu**	**63**	**26.023**	ug/L	0.952	3	40	67274	2	KED
|	**Cu**	**65**	**26.001**	ug/L	0.844	3	22	33679	1	KED
|	**Zn**	**66**	**80.610**	ug/L	1.429	1	23	26066	1	KED
|	**Zn**	**67**	**75.172**	ug/L	4.094	5	4	4052	4	KED
⌊	**As**	**75**	**24.706**	ug/L	0.585	2	3	4234	2	KED
	Y	**89**		ug/L			288003	294666	1	Standard
	Kr	**83**		ug/L			35	52	21	Standard
⌈>	**In-1**	**115**		ug/L			7190	7504	1	KED
|	**Cd**	**111**	**26.210**	ug/L	0.543	2	1	6024	1	KED
⌊	**Cd**	**114**	**26.351**	ug/L	0.418	1	3	14918	2	KED
⌈>	**In**	**115**		ug/L			410858	426394	1	Standard
|	**Ag**	**107**	**26.187**	ug/L	0.507	1	24	409019	0	Standard
|	**Sb**	**121**	**26.482**	ug/L	0.602	2	140	314224	0	Standard
⌊	**Sb**	**123**	**26.581**	ug/L	0.713	2	109	239203	1	Standard
⌈>	**Tb**	**159**		ug/L			636863	669444	1	Standard
⌊	**Pb**	**208**	**26.358**	ug/L	0.327	1	113	1205418	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0848-BLK2
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 15:59:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	27111	2	Standard
	Cl	**37**		ug/L			2981467	3046967	3	Standard
⌈>	**Sc**	**45**		ug/L			437323	438274	2	Standard
|	**Cr**	**52**	**0.160**	ug/L	0.061	37	16930	19513	2	Standard
⌊	**Cr**	**53**	**0.143**	ug/L	0.015	10	85	347	5	Standard
⌈>	**Ge**	**72**		ug/L			20645	21351	3	KED
|	**Cu**	**63**	**0.050**	ug/L	0.004	8	40	164	5	KED
|	**Cu**	**65**	**0.043**	ug/L	0.005	12	22	75	5	KED
|	**Zn**	**66**	**0.143**	ug/L	0.008	5	23	67	5	KED
|	**Zn**	**67**	**0.233**	ug/L	0.088	37	4	16	29	KED
⌊	**As**	**75**	**0.002**	ug/L	0.010	438	3	4	37	KED
	Y	**89**		ug/L			288003	284087	2	Standard
	Kr	**83**		ug/L			35	49	26	Standard
⌈>	**In-1**	**115**		ug/L			7190	7352	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.004	138	1	0	100	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.002	52	3	1	99	KED
⌈>	**In**	**115**		ug/L			410858	414950	1	Standard
|	**Ag**	**107**	**0.022**	ug/L	0.033	150	24	364	140	Standard
|	**Sb**	**121**	**0.045**	ug/L	0.013	28	140	662	23	Standard
⌊	**Sb**	**123**	**0.045**	ug/L	0.013	30	109	502	23	Standard
⌈>	**Tb**	**159**		ug/L			636863	649867	1	Standard
⌊	**Pb**	**208**	**0.012**	ug/L	0.011	91	113	649	74	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0848-BS2
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 16:04:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	28846	2	Standard
	Cl	**37**		ug/L			2981467	3154574	1	Standard
⌈>	**Sc**	**45**		ug/L			437323	439176	1	Standard
|	**Cr**	**52**	**25.268**	ug/L	0.252	0	16930	421307	1	Standard
⌊	**Cr**	**53**	**25.768**	ug/L	0.500	1	85	47644	0	Standard
⌈>	**Ge**	**72**		ug/L			20645	21382	1	KED
|	**Cu**	**63**	**25.976**	ug/L	0.256	0	40	63514	1	KED
|	**Cu**	**65**	**26.138**	ug/L	0.292	1	22	32020	1	KED
|	**Zn**	**66**	**83.714**	ug/L	2.727	3	23	25589	1	KED
|	**Zn**	**67**	**79.415**	ug/L	1.504	1	4	4048	1	KED
⌊	**As**	**75**	**25.840**	ug/L	0.815	3	3	4186	1	KED
	Y	**89**		ug/L			288003	290517	1	Standard
	Kr	**83**		ug/L			35	41	2	Standard
⌈>	**In-1**	**115**		ug/L			7190	7692	3	KED
|	**Cd**	**111**	**24.399**	ug/L	0.998	4	1	5744	1	KED
⌊	**Cd**	**114**	**24.244**	ug/L	0.992	4	3	14057	1	KED
⌈>	**In**	**115**		ug/L			410858	417719	1	Standard
|	**Ag**	**107**	**25.017**	ug/L	0.474	1	24	382828	0	Standard
|	**Sb**	**121**	**25.774**	ug/L	0.370	1	140	299649	0	Standard
⌊	**Sb**	**123**	**26.013**	ug/L	0.363	1	109	229371	0	Standard
⌈>	**Tb**	**159**		ug/L			636863	663226	0	Standard
⌊	**Pb**	**208**	**24.578**	ug/L	0.699	2	113	1113429	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0747-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 16:09:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	31786	3	Standard
	Cl	**37**		ug/L			2981467	3838296	2	Standard
⌈>	**Sc**	**45**		ug/L			437323	446079	1	Standard
|	**Cr**	**52**	**0.315**	ug/L	0.035	11	16930	22379	1	Standard
⌊	**Cr**	**53**	**0.868**	ug/L	0.027	3	85	1714	2	Standard
⌈>	**Ge**	**72**		ug/L			20645	21087	0	KED
|	**Cu**	**63**	**2.557**	ug/L	0.092	3	40	6203	4	KED
|	**Cu**	**65**	**2.586**	ug/L	0.041	1	22	3145	2	KED
|	**Zn**	**66**	**27.326**	ug/L	0.864	3	23	8255	2	KED
|	**Zn**	**67**	**25.508**	ug/L	0.389	1	4	1285	1	KED
⌊	**As**	**75**	**0.802**	ug/L	0.050	6	3	131	5	KED
	Y	**89**		ug/L			288003	284301	1	Standard
	Kr	**83**		ug/L			35	57	13	Standard
⌈>	**In-1**	**115**		ug/L			7190	7162	2	KED
|	**Cd**	**111**	**0.097**	ug/L	0.013	13	1	22	11	KED
⌊	**Cd**	**114**	**0.082**	ug/L	0.018	22	3	47	18	KED
⌈>	**In**	**115**		ug/L			410858	409226	0	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.001	26	24	68	17	Standard
|	**Sb**	**121**	**5.447**	ug/L	0.095	1	140	62150	1	Standard
⌊	**Sb**	**123**	**5.459**	ug/L	0.027	0	109	47249	0	Standard
⌈>	**Tb**	**159**		ug/L			636863	670581	1	Standard
⌊	**Pb**	**208**	**0.103**	ug/L	0.002	2	113	4856	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0848-DUP2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 16:14:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	31545	3	Standard
	Cl	**37**		ug/L			2981467	3808774	0	Standard
⌈>	**Sc**	**45**		ug/L			437323	436732	1	Standard
|	**Cr**	**52**	**0.289**	ug/L	0.032	11	16930	21505	2	Standard
⌊	**Cr**	**53**	**0.998**	ug/L	0.008	0	85	1917	2	Standard
⌈>	**Ge**	**72**		ug/L			20645	20952	1	KED
|	**Cu**	**63**	**2.498**	ug/L	0.053	2	40	6021	2	KED
|	**Cu**	**65**	**2.503**	ug/L	0.074	2	22	3025	3	KED
|	**Zn**	**66**	**26.564**	ug/L	0.158	0	23	7975	2	KED
|	**Zn**	**67**	**25.344**	ug/L	1.399	5	4	1268	3	KED
⌊	**As**	**75**	**0.763**	ug/L	0.051	6	3	124	5	KED
	Y	**89**		ug/L			288003	284089	2	Standard
	Kr	**83**		ug/L			35	53	12	Standard
⌈>	**In-1**	**115**		ug/L			7190	6977	1	KED
|	**Cd**	**111**	**0.101**	ug/L	0.028	27	1	23	24	KED
⌊	**Cd**	**114**	**0.074**	ug/L	0.017	23	3	41	22	KED
⌈>	**In**	**115**		ug/L			410858	403640	1	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.000	10	24	62	8	Standard
|	**Sb**	**121**	**5.534**	ug/L	0.178	3	140	62262	1	Standard
⌊	**Sb**	**123**	**5.541**	ug/L	0.051	0	109	47296	1	Standard
⌈>	**Tb**	**159**		ug/L			636863	658823	1	Standard
⌊	**Pb**	**208**	**0.098**	ug/L	0.003	2	113	4532	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0848-MS2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 16:18:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	28959	0	Standard
	Cl	**37**		ug/L			2981467	3807572	2	Standard
⌈>	**Sc**	**45**		ug/L			437323	432314	2	Standard
|	**Cr**	**52**	**12.625**	ug/L	0.255	2	16930	215572	2	Standard
⌊	**Cr**	**53**	**13.366**	ug/L	0.324	2	85	24363	1	Standard
⌈>	**Ge**	**72**		ug/L			20645	20711	0	KED
|	**Cu**	**63**	**15.069**	ug/L	0.394	2	40	35701	1	KED
|	**Cu**	**65**	**15.028**	ug/L	0.734	4	22	17837	4	KED
|	**Zn**	**66**	**65.344**	ug/L	1.208	1	23	19359	2	KED
|	**Zn**	**67**	**62.318**	ug/L	0.770	1	4	3079	2	KED
⌊	**As**	**75**	**14.100**	ug/L	0.392	2	3	2214	1	KED
	Y	**89**		ug/L			288003	287463	3	Standard
	Kr	**83**		ug/L			35	65	16	Standard
⌈>	**In-1**	**115**		ug/L			7190	7334	1	KED
|	**Cd**	**111**	**12.245**	ug/L	0.421	3	1	2751	2	KED
⌊	**Cd**	**114**	**12.250**	ug/L	0.333	2	3	6778	1	KED
⌈>	**In**	**115**		ug/L			410858	406857	1	Standard
|	**Ag**	**107**	**11.933**	ug/L	0.416	3	24	177874	3	Standard
|	**Sb**	**121**	**18.580**	ug/L	0.315	1	140	210431	1	Standard
⌊	**Sb**	**123**	**18.878**	ug/L	0.126	0	109	162167	0	Standard
⌈>	**Tb**	**159**		ug/L			636863	666073	0	Standard
⌊	**Pb**	**208**	**11.878**	ug/L	0.110	0	113	540513	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-09
Sample Dil Factor: 10
Comments:
Sample Date/Time: Saturday, April 01, 2023 16:23:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	21524	1	Standard
	Cl	**37**		ug/L			2981467	2915968	1	Standard
⌈>	**Sc**	**45**		ug/L			437323	401572	1	Standard
|	**Cr**	**52**	**0.018**	ug/L	0.034	195	16930	15797	1	Standard
⌊	**Cr**	**53**	**0.106**	ug/L	0.002	2	85	257	0	Standard
⌈>	**Ge**	**72**		ug/L			20645	19087	1	KED
|	**Cu**	**63**	**0.036**	ug/L	0.006	17	40	116	10	KED
|	**Cu**	**65**	**0.028**	ug/L	0.005	18	22	51	9	KED
|	**Zn**	**66**	**0.513**	ug/L	0.063	12	23	161	12	KED
|	**Zn**	**67**	**0.693**	ug/L	0.220	31	4	35	26	KED
⌊	**As**	**75**	**23.422**	ug/L	0.535	2	3	3387	1	KED
	Y	**89**		ug/L			288003	262980	1	Standard
	Kr	**83**		ug/L			35	59	11	Standard
⌈>	**In-1**	**115**		ug/L			7190	6546	2	KED
|	**Cd**	**111**	**0.015**	ug/L	0.012	82	1	4	53	KED
⌊	**Cd**	**114**	**0.010**	ug/L	0.010	95	3	7	59	KED
⌈>	**In**	**115**		ug/L			410858	374530	0	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	65	24	38	27	Standard
|	**Sb**	**121**	**13.555**	ug/L	0.173	1	140	141368	1	Standard
⌊	**Sb**	**123**	**13.731**	ug/L	0.013	0	109	108612	0	Standard
⌈>	**Tb**	**159**		ug/L			636863	627461	0	Standard
⌊	**Pb**	**208**	**0.222**	ug/L	0.003	1	113	9638	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0439-06
Sample Dil Factor: 5
Comments:
Sample Date/Time: Saturday, April 01, 2023 16:28:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	21854	2	Standard
	Cl	**37**		ug/L			2981467	3111095	0	Standard
⌈>	**Sc**	**45**		ug/L			437323	392727	1	Standard
|	**Cr**	**52**	**0.087**	ug/L	0.039	45	16930	16453	3	Standard
⌊	**Cr**	**53**	**0.076**	ug/L	0.008	10	85	202	6	Standard
⌈>	**Ge**	**72**		ug/L			20645	18888	2	KED
|	**Cu**	**63**	**0.462**	ug/L	0.010	2	40	1034	0	KED
|	**Cu**	**65**	**0.469**	ug/L	0.025	5	22	527	7	KED
|	**Zn**	**66**	**1.057**	ug/L	0.050	4	23	306	4	KED
|	**Zn**	**67**	**8.545**	ug/L	0.048	0	4	388	3	KED
⌊	**As**	**75**	**1.163**	ug/L	0.044	3	3	169	1	KED
	Y	**89**		ug/L			288003	258103	0	Standard
	Kr	**83**		ug/L			35	69	19	Standard
⌈>	**In-1**	**115**		ug/L			7190	6698	5	KED
|	**Cd**	**111**	**0.019**	ug/L	0.007	36	1	5	26	KED
⌊	**Cd**	**114**	**0.010**	ug/L	0.001	12	3	8	13	KED
⌈>	**In**	**115**		ug/L			410858	363792	2	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	52	24	50	28	Standard
|	**Sb**	**121**	**0.493**	ug/L	0.023	4	140	5106	2	Standard
⌊	**Sb**	**123**	**0.503**	ug/L	0.026	5	109	3954	3	Standard
⌈>	**Tb**	**159**		ug/L			636863	621856	1	Standard
⌊	**Pb**	**208**	**19.494**	ug/L	0.424	2	113	827910	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 16:35:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19494	4	Standard
	Cl	**37**		ug/L			2981467	3287821	1	Standard
⌈>	**Sc**	**45**		ug/L			437323	420803	0	Standard
|	**Cr**	**52**	**0.039**	ug/L	0.030	76	16930	16891	2	Standard
⌊	**Cr**	**53**	**0.012**	ug/L	0.018	152	85	102	31	Standard
⌈>	**Ge**	**72**		ug/L			20645	22625	0	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.005	226	40	39	30	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.007	259	22	20	41	KED
|	**Zn**	**66**	**-0.021**	ug/L	0.010	48	23	19	17	KED
|	**Zn**	**67**	**0.016**	ug/L	0.001	4	4	5	0	KED
⌊	**As**	**75**	**0.001**	ug/L	0.014	1797	3	4	59	KED
	Y	**89**		ug/L			288003	275385	2	Standard
	Kr	**83**		ug/L			35	48	6	Standard
⌈>	**In-1**	**115**		ug/L			7190	7740	2	KED
|	**Cd**	**111**	**0.002**	ug/L	0.008	391	1	2	89	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.009	1249	3	3	134	KED
⌈>	**In**	**115**		ug/L			410858	425441	2	Standard
|	**Ag**	**107**	**0.008**	ug/L	0.012	160	24	147	134	Standard
|	**Sb**	**121**	**0.022**	ug/L	0.019	86	140	413	58	Standard
⌊	**Sb**	**123**	**0.025**	ug/L	0.020	80	109	337	56	Standard
⌈>	**Tb**	**159**		ug/L			636863	675043	0	Standard
⌊	**Pb**	**208**	**0.015**	ug/L	0.026	173	113	813	147	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 16:40:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	18623	1	Standard
	Cl	**37**		ug/L			2981467	3223040	4	Standard
⌈>	**Sc**	**45**		ug/L			437323	435200	2	Standard
⎢	**Cr**	**52**	**49.757**	ug/L	1.155	2	16930	805588	0	Standard
⌊	**Cr**	**53**	**50.236**	ug/L	1.857	3	85	91933	1	Standard
⌈>	**Ge**	**72**		ug/L			20645	22505	2	KED
⎢	**Cu**	**63**	**49.177**	ug/L	2.281	4	40	126464	3	KED
⎢	**Cu**	**65**	**47.817**	ug/L	1.884	3	22	61596	1	KED
⎢	**Zn**	**66**	**48.964**	ug/L	2.287	4	23	15757	2	KED
⎢	**Zn**	**67**	**49.167**	ug/L	3.257	6	4	2638	4	KED
⌊	**As**	**75**	**49.967**	ug/L	1.984	3	3	8513	1	KED
	Y	**89**		ug/L			288003	286903	0	Standard
	Kr	**83**		ug/L			35	40	8	Standard
⌈>	**In-1**	**115**		ug/L			7190	7702	1	KED
⎢	**Cd**	**111**	**50.482**	ug/L	0.882	1	1	11907	1	KED
⌊	**Cd**	**114**	**49.992**	ug/L	1.245	2	3	29038	0	KED
⌈>	**In**	**115**		ug/L			410858	437099	0	Standard
⎢	**Ag**	**107**	**47.785**	ug/L	0.436	0	24	765272	1	Standard
⎢	**Sb**	**121**	**49.132**	ug/L	0.942	1	140	597618	1	Standard
⌊	**Sb**	**123**	**49.189**	ug/L	0.691	1	109	453811	2	Standard
⌈>	**Tb**	**159**		ug/L			636863	705441	0	Standard
⌊	**Pb**	**208**	**45.518**	ug/L	1.003	2	113	2193190	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 16:47:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	18457	3	Standard
	Cl	**37**		ug/L			2981467	3190081	1	Standard
⌈>	**Sc**	**45**		ug/L			437323	425660	2	Standard
|	**Cr**	**52**	**0.020**	ug/L	0.045	226	16930	16772	1	Standard
⌊	**Cr**	**53**	**-0.001**	ug/L	0.005	433	85	80	10	Standard
⌈>	**Ge**	**72**		ug/L			20645	22082	1	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	134	40	47	10	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.002	72	22	19	14	KED
|	**Zn**	**66**	**0.003**	ug/L	0.011	352	23	26	11	KED
|	**Zn**	**67**	**-0.006**	ug/L	0.041	685	4	4	49	KED
⌊	**As**	**75**	**0.002**	ug/L	0.008	369	3	4	33	KED
	Y	**89**		ug/L			288003	275877	1	Standard
	Kr	**83**		ug/L			35	50	26	Standard
⌈>	**In-1**	**115**		ug/L			7190	7741	1	KED
|	**Cd**	**111**	**0.047**	ug/L	0.083	177	1	12	154	KED
⌊	**Cd**	**114**	**0.034**	ug/L	0.060	177	3	22	151	KED
⌈>	**In**	**115**		ug/L			410858	443447	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.000	8	24	57	5	Standard
|	**Sb**	**121**	**0.110**	ug/L	0.006	5	140	1502	5	Standard
⌊	**Sb**	**123**	**0.108**	ug/L	0.001	0	109	1132	1	Standard
⌈>	**Tb**	**159**		ug/L			636863	678899	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	81	113	151	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0133-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 16:55:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	34564	4	Standard
	Cl	37		ug/L			2981467	3139362	1	Standard
>	Sc	45		ug/L			437323	552690	2	Standard
	Cr	52	12.739	ug/L	0.425	3	16930	277807	1	Standard
	Cr	53	12.989	ug/L	0.434	3	85	30270	2	Standard
>	Ge	72		ug/L			20645	22773	3	KED
	Cu	63	24.206	ug/L	0.253	1	40	63030	2	KED
	Cu	65	24.228	ug/L	0.621	2	22	31614	3	KED
	Zn	66	50.126	ug/L	1.536	3	23	16326	2	KED
	Zn	67	47.908	ug/L	0.422	0	4	2604	3	KED
	As	75	5.403	ug/L	0.166	3	3	935	2	KED
	Y	89		ug/L			288003	522018	0	Standard
	Kr	83		ug/L			35	87	4	Standard
>	In-1	115		ug/L			7190	7659	2	KED
	Cd	111	0.124	ug/L	0.024	19	1	30	18	KED
	Cd	114	0.161	ug/L	0.007	4	3	96	5	KED
>	In	115		ug/L			410858	434915	2	Standard
	Ag	107	0.105	ug/L	0.004	4	24	1704	4	Standard
	Sb	121	0.056	ug/L	0.003	5	140	826	7	Standard
	Sb	123	0.057	ug/L	0.004	6	109	639	2	Standard
>	Tb	159		ug/L			636863	718312	1	Standard
	Pb	208	9.749	ug/L	0.227	2	113	478369	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0133-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 17:00:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	32858	3	Standard
	Cl	37		ug/L			2981467	3101032	1	Standard
>	Sc	45		ug/L			437323	549241	1	Standard
	Cr	52	16.339	ug/L	0.044	0	16930	348229	1	Standard
	Cr	53	16.949	ug/L	0.192	1	85	39232	0	Standard
>	Ge	72		ug/L			20645	23358	2	KED
	Cu	63	22.514	ug/L	0.636	2	40	60118	1	KED
	Cu	65	22.524	ug/L	0.702	3	22	30133	1	KED
	Zn	66	43.718	ug/L	0.756	1	23	14615	2	KED
	Zn	67	42.909	ug/L	2.203	5	4	2391	4	KED
	As	75	6.490	ug/L	0.215	3	3	1151	1	KED
	Y	89		ug/L			288003	546044	2	Standard
	Kr	83		ug/L			35	86	7	Standard
>	In-1	115		ug/L			7190	7856	1	KED
	Cd	111	0.222	ug/L	0.029	13	1	55	14	KED
	Cd	114	0.214	ug/L	0.037	17	3	130	15	KED
>	In	115		ug/L			410858	431075	2	Standard
	Ag	107	0.140	ug/L	0.008	5	24	2237	3	Standard
	Sb	121	0.012	ug/L	0.001	10	140	296	3	Standard
	Sb	123	0.013	ug/L	0.002	16	109	231	8	Standard
>	Tb	159		ug/L			636863	718870	0	Standard
	Pb	208	11.137	ug/L	0.127	1	113	546981	1	Standard

23A0133

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~23C0133~~-08

Sample Dil Factor: 20

Comments:

Sample Date/Time: Saturday, April 01, 2023 17:04:47

MB 4/1/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	32468	1	Standard
	Cl	37		ug/L			2981467	3113787	3	Standard
>	Sc	45		ug/L			437323	553844	2	Standard
	Cr	52	15.136	ug/L	0.173	1	16930	326849	1	Standard
	Cr	53	15.450	ug/L	0.142	0	85	36075	2	Standard
>	Ge	72		ug/L			20645	22986	2	KED
	Cu	63	27.696	ug/L	0.384	1	40	72788	2	KED
	Cu	65	28.080	ug/L	0.212	0	22	36976	2	KED
	Zn	66	55.105	ug/L	1.668	3	23	18111	0	KED
	Zn	67	53.554	ug/L	0.940	1	4	2938	4	KED
	As	75	5.660	ug/L	0.127	2	3	988	2	KED
	Y	89		ug/L			288003	557587	1	Standard
	Kr	83		ug/L			35	114	6	Standard
>	In-1	115		ug/L			7190	7606	1	KED
	Cd	111	0.214	ug/L	0.024	11	1	51	10	KED
	Cd	114	0.172	ug/L	0.009	5	3	102	6	KED
>	In	115		ug/L			410858	439191	0	Standard
	Ag	107	0.148	ug/L	0.001	0	24	2407	1	Standard
	Sb	121	0.008	ug/L	0.001	18	140	251	6	Standard
	Sb	123	0.010	ug/L	0.004	42	109	207	18	Standard
>	Tb	159		ug/L			636863	711324	0	Standard
	Pb	208	13.944	ug/L	0.066	0	113	677581	0	Standard

23A0133

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~23C0133~~-09

Sample Dil Factor: 20

Comments:

Sample Date/Time: Saturday, April 01, 2023 17:09:13

MB 4/1/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	31886	2	Standard
	Cl	37		ug/L			2981467	3062532	4	Standard
>	Sc	45		ug/L			437323	533151	2	Standard
	Cr	52	12.594	ug/L	0.402	3	16930	265192	1	Standard
	Cr	53	12.888	ug/L	0.203	1	85	28981	1	Standard
>	Ge	72		ug/L			20645	22461	3	KED
	Cu	63	24.545	ug/L	0.491	2	40	63022	2	KED
	Cu	65	24.311	ug/L	0.703	2	22	31265	1	KED
	Zn	66	50.848	ug/L	1.731	3	23	16328	1	KED
	Zn	67	50.425	ug/L	2.260	4	4	2699	2	KED
	As	75	4.898	ug/L	0.018	0	3	837	4	KED
	Y	89		ug/L			288003	512423	1	Standard
	Kr	83		ug/L			35	91	9	Standard
>	In-1	115		ug/L			7190	7791	1	KED
	Cd	111	0.118	ug/L	0.016	13	1	29	12	KED
	Cd	114	0.125	ug/L	0.029	23	3	76	23	KED
>	In	115		ug/L			410858	440556	1	Standard
	Ag	107	0.091	ug/L	0.003	3	24	1494	2	Standard
	Sb	121	0.008	ug/L	0.003	32	140	252	12	Standard
	Sb	123	0.005	ug/L	0.003	64	109	164	17	Standard
>	Tb	159		ug/L			636863	704683	1	Standard
	Pb	208	9.135	ug/L	0.099	1	113	439801	1	Standard

23A0133

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~23C0133~~-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 17:13:38

MB 4/1/23

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	34253	3	Standard
	Cl	37		ug/L			2981467	3144589	1	Standard
>	Sc	45		ug/L			437323	547884	1	Standard
	Cr	52	13.510	ug/L	0.092	0	16930	290903	1	Standard
	Cr	53	13.714	ug/L	0.166	1	85	31686	0	Standard
>	Ge	72		ug/L			20645	22803	1	KED
	Cu	63	27.457	ug/L	0.374	1	40	71601	2	KED
	Cu	65	28.908	ug/L	0.547	1	22	37774	3	KED
	Zn	66	57.186	ug/L	0.396	0	23	18654	1	KED
	Zn	67	54.784	ug/L	2.894	5	4	2981	6	KED
	As	75	5.560	ug/L	0.145	2	3	964	3	KED
	Y	89		ug/L			288003	522041	1	Standard
	Kr	83		ug/L			35	104	6	Standard
>	In-1	115		ug/L			7190	7804	1	KED
	Cd	111	0.156	ug/L	0.048	30	1	39	29	KED
	Cd	114	0.150	ug/L	0.033	21	3	91	21	KED
>	In	115		ug/L			410858	438474	0	Standard
	Ag	107	0.134	ug/L	0.002	1	24	2178	1	Standard
	Sb	121	0.007	ug/L	0.002	30	140	233	10	Standard
	Sb	123	0.005	ug/L	0.001	23	109	164	5	Standard
>	Tb	159		ug/L			636863	714509	0	Standard
	Pb	208	11.393	ug/L	0.235	2	113	556069	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0703-DUP2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 17:18:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	34178	3	Standard
	Cl	37		ug/L			2981467	3062793	1	Standard
>	Sc	45		ug/L			437323	539874	1	Standard
	Cr	52	13.203	ug/L	0.320	2	16930	280564	1	Standard
	Cr	53	13.468	ug/L	0.424	3	85	30656	1	Standard
>	Ge	72		ug/L			20645	22894	2	KED
	Cu	63	28.044	ug/L	1.922	6	40	73346	4	KED
	Cu	65	28.672	ug/L	1.336	4	22	37590	3	KED
	Zn	66	52.859	ug/L	0.230	0	23	17313	1	KED
	Zn	67	53.355	ug/L	3.905	7	4	2912	6	KED
	As	75	5.563	ug/L	0.189	3	3	967	1	KED
	Y	89		ug/L			288003	524650	1	Standard
	Kr	83		ug/L			35	91	28	Standard
>	In-1	115		ug/L			7190	7679	1	KED
	Cd	111	0.200	ug/L	0.034	17	1	48	17	KED
	Cd	114	0.155	ug/L	0.004	2	3	92	2	KED
>	In	115		ug/L			410858	435513	1	Standard
	Ag	107	0.119	ug/L	0.003	2	24	1923	3	Standard
	Sb	121	0.005	ug/L	0.001	24	140	212	6	Standard
	Sb	123	0.006	ug/L	0.001	23	109	168	8	Standard
>	Tb	159		ug/L			636863	719726	1	Standard
	Pb	208	10.452	ug/L	0.213	2	113	513809	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0703-MS2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 17:22:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	32917	3	Standard
	Cl	37		ug/L			2981467	3072751	1	Standard
>	Sc	45		ug/L			437323	538646	0	Standard
	Cr	52	35.452	ug/L	0.897	2	16930	716536	1	Standard
	Cr	53	36.292	ug/L	0.460	1	85	82280	2	Standard
>	Ge	72		ug/L			20645	23229	2	KED
	Cu	63	52.265	ug/L	0.590	1	40	138768	1	KED
	Cu	65	52.745	ug/L	1.003	1	22	70157	1	KED
	Zn	66	130.322	ug/L	6.408	4	23	43251	3	KED
	Zn	67	123.756	ug/L	1.803	1	4	6851	1	KED
	As	75	28.834	ug/L	0.446	1	3	5074	0	KED
	Y	89		ug/L			288003	519216	4	Standard
	Kr	83		ug/L			35	82	9	Standard
>	In-1	115		ug/L			7190	7907	0	KED
	Cd	111	24.702	ug/L	0.349	1	1	5983	1	KED
	Cd	114	24.669	ug/L	0.099	0	3	14716	0	KED
>	In	115		ug/L			410858	431128	1	Standard
	Ag	107	10.949	ug/L	0.322	2	24	172908	1	Standard
	Sb	121	0.440	ug/L	0.001	0	140	5421	1	Standard
	Sb	123	0.435	ug/L	0.027	6	109	4072	4	Standard
>	Tb	159		ug/L			636863	711713	1	Standard
	Pb	208	34.112	ug/L	0.581	1	113	1658137	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0703-MSD2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 17:26:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	31160	2	Standard
	Cl	37		ug/L			2981467	3095112	3	Standard
>	Sc	45		ug/L			437323	531532	3	Standard
	Cr	52	33.799	ug/L	1.358	4	16930	674715	2	Standard
	Cr	53	34.261	ug/L	0.651	1	85	76635	2	Standard
>	Ge	72		ug/L			20645	22208	0	KED
	Cu	63	52.209	ug/L	0.805	1	40	132545	1	KED
	Cu	65	53.069	ug/L	1.324	2	22	67502	2	KED
	Zn	66	133.571	ug/L	1.094	0	23	42403	0	KED
	Zn	67	127.570	ug/L	0.940	0	4	6753	0	KED
	As	75	29.711	ug/L	0.391	1	3	5000	1	KED
	Y	89		ug/L			288003	493763	3	Standard
	Kr	83		ug/L			35	90	31	Standard
>	In-1	115		ug/L			7190	7737	1	KED
	Cd	111	25.049	ug/L	0.479	1	1	5936	1	KED
	Cd	114	24.214	ug/L	0.551	2	3	14132	0	KED
>	In	115		ug/L			410858	421262	4	Standard
	Ag	107	12.750	ug/L	0.440	3	24	196613	1	Standard
	Sb	121	0.483	ug/L	0.033	6	140	5796	2	Standard
	Sb	123	0.485	ug/L	0.021	4	109	4424	3	Standard
>	Tb	159		ug/L			636863	698295	2	Standard
	Pb	208	34.564	ug/L	1.266	3	113	1647467	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0703-PS2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 17:31:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	35168	6	Standard
	Cl	37		ug/L			2981467	3138931	2	Standard
>	Sc	45		ug/L			437323	548802	1	Standard
	Cr	52	33.534	ug/L	0.398	1	16930	691743	0	Standard
	Cr	53	33.591	ug/L	0.304	0	85	77595	1	Standard
>	Ge	72		ug/L			20645	22326	3	KED
	Cu	63	53.947	ug/L	0.651	1	40	137651	2	KED
	Cu	65	53.805	ug/L	0.844	1	22	68790	2	KED
	Zn	66	131.667	ug/L	5.639	4	23	41996	3	KED
	Zn	67	121.411	ug/L	7.165	5	4	6453	2	KED
	As	75	30.091	ug/L	0.798	2	3	5088	0	KED
	Y	89		ug/L			288003	517874	2	Standard
	Kr	83		ug/L			35	99	14	Standard
>	In-1	115		ug/L			7190	7823	1	KED
	Cd	111	24.221	ug/L	0.532	2	1	5804	2	KED
	Cd	114	23.824	ug/L	0.270	1	3	14062	1	KED
>	In	115		ug/L			410858	438442	1	Standard
	Ag	107	23.724	ug/L	0.580	2	24	381057	1	Standard
	Sb	121	0.004	ug/L	0.001	24	140	194	4	Standard
	Sb	123	0.004	ug/L	0.004	93	109	151	20	Standard
>	Tb	159		ug/L			636863	711398	1	Standard
	Pb	208	34.613	ug/L	0.154	0	113	1681879	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 17:35:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	20344	0	Standard
	Cl	**37**		ug/L			2981467	3012178	1	Standard
⎡>	**Sc**	**45**		ug/L			437323	423250	1	Standard
⎢	**Cr**	**52**	**0.005**	ug/L	0.014	317	16930	16455	1	Standard
⎣	**Cr**	**53**	**0.002**	ug/L	0.003	125	85	86	6	Standard
⎡>	**Ge**	**72**		ug/L			20645	22151	1	KED
⎢	**Cu**	**63**	**-0.002**	ug/L	0.004	271	40	39	27	KED
⎢	**Cu**	**65**	**-0.004**	ug/L	0.002	52	22	18	15	KED
⎢	**Zn**	**66**	**0.000**	ug/L	0.023	5783	23	25	30	KED
⎢	**Zn**	**67**	**-0.018**	ug/L	0.037	206	4	3	50	KED
⎣	**As**	**75**	**0.003**	ug/L	0.009	278	3	4	32	KED
	Y	**89**		ug/L			288003	274015	1	Standard
	Kr	**83**		ug/L			35	39	33	Standard
⎡>	**In-1**	**115**		ug/L			7190	7680	1	KED
⎢	**Cd**	**111**	**-0.005**	ug/L	0.002	51	1	0	86	KED
⎣	**Cd**	**114**	**-0.004**	ug/L	0.002	53	3	1	90	KED
⎡>	**In**	**115**		ug/L			410858	425577	1	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.001	83	24	46	38	Standard
⎢	**Sb**	**121**	**-0.007**	ug/L	0.001	11	140	56	16	Standard
⎣	**Sb**	**123**	**-0.006**	ug/L	0.001	19	109	59	18	Standard
⎡>	**Tb**	**159**		ug/L			636863	665361	1	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.001	102	113	158	27	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 17:40:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19190	2	Standard
	Cl	**37**		ug/L			2981467	3203476	2	Standard
⌈>	**Sc**	**45**		ug/L			437323	435532	0	Standard
|	**Cr**	**52**	**49.308**	ug/L	1.285	2	16930	799245	1	Standard
⌊	**Cr**	**53**	**49.546**	ug/L	0.077	0	85	90787	0	Standard
⌈>	**Ge**	**72**		ug/L			20645	22530	2	KED
|	**Cu**	**63**	**47.495**	ug/L	0.898	1	40	122306	1	KED
|	**Cu**	**65**	**49.822**	ug/L	1.140	2	22	64271	0	KED
|	**Zn**	**66**	**49.461**	ug/L	0.982	1	23	15941	0	KED
|	**Zn**	**67**	**51.038**	ug/L	0.627	1	4	2743	1	KED
⌊	**As**	**75**	**49.217**	ug/L	0.513	1	3	8399	1	KED
	Y	**89**		ug/L			288003	288063	3	Standard
	Kr	**83**		ug/L			35	50	29	Standard
⌈>	**In-1**	**115**		ug/L			7190	7954	1	KED
|	**Cd**	**111**	**47.929**	ug/L	0.268	0	1	11677	1	KED
⌊	**Cd**	**114**	**47.512**	ug/L	0.108	0	3	28509	1	KED
⌈>	**In**	**115**		ug/L			410858	433303	0	Standard
|	**Ag**	**107**	**45.531**	ug/L	0.919	2	24	722848	2	Standard
|	**Sb**	**121**	**47.575**	ug/L	0.744	1	140	573657	1	Standard
⌊	**Sb**	**123**	**48.760**	ug/L	0.373	0	109	445921	1	Standard
⌈>	**Tb**	**159**		ug/L			636863	691253	1	Standard
⌊	**Pb**	**208**	**45.940**	ug/L	0.203	0	113	2169127	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 17:47:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19071	1	Standard
	Cl	**37**		ug/L			2981467	3080579	1	Standard
⌈>	**Sc**	**45**		ug/L			437323	421262	2	Standard
|	**Cr**	**52**	**0.009**	ug/L	0.026	294	16930	16440	2	Standard
⌊	**Cr**	**53**	**0.004**	ug/L	0.002	60	85	89	6	Standard
⌈>	**Ge**	**72**		ug/L			20645	22147	3	KED
|	**Cu**	**63**	**-0.004**	ug/L	0.002	38	40	33	8	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.005	208	22	20	24	KED
|	**Zn**	**66**	**0.009**	ug/L	0.014	158	23	27	15	KED
|	**Zn**	**67**	**-0.055**	ug/L	0.035	62	4	1	100	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.008	931	3	3	37	KED
	Y	**89**		ug/L			288003	272115	0	Standard
	Kr	**83**		ug/L			35	38	31	Standard
⌈>	**In-1**	**115**		ug/L			7190	7536	3	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.002	40	1	0	173	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.003	127	3	1	105	KED
⌈>	**In**	**115**		ug/L			410858	426232	0	Standard
|	**Ag**	**107**	**0.005**	ug/L	0.005	101	24	102	76	Standard
|	**Sb**	**121**	**0.098**	ug/L	0.002	1	140	1307	1	Standard
⌊	**Sb**	**123**	**0.097**	ug/L	0.005	5	109	984	4	Standard
⌈>	**Tb**	**159**		ug/L			636863	658689	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.003	86	113	275	50	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0458-01
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 17:54:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	34069	4	Standard
	Cl	**37**		ug/L			2981467	3207083	5	Standard
⌈>	**Sc**	**45**		ug/L			437323	476331	0	Standard
|	**Cr**	**52**	**0.397**	ug/L	0.018	4	16930	25334	1	Standard
⌊	**Cr**	**53**	**0.475**	ug/L	0.013	2	85	1043	2	Standard
⌈>	**Ge**	**72**		ug/L			20645	21810	5	KED
|	**Cu**	**63**	**3.923**	ug/L	0.261	6	40	9797	1	KED
|	**Cu**	**65**	**4.057**	ug/L	0.333	8	22	5075	3	KED
|	**Zn**	**66**	**25.301**	ug/L	1.588	6	23	7889	0	KED
|	**Zn**	**67**	**23.846**	ug/L	1.519	6	4	1240	1	KED
⌊	**As**	**75**	**3.499**	ug/L	0.224	6	3	580	2	KED
	Y	**89**		ug/L			288003	305678	4	Standard
	Kr	**83**		ug/L			35	56	8	Standard
⌈>	**In-1**	**115**		ug/L			7190	7718	2	KED
|	**Cd**	**111**	**0.044**	ug/L	0.012	27	1	12	24	KED
⌊	**Cd**	**114**	**0.024**	ug/L	0.007	28	3	17	21	KED
⌈>	**In**	**115**		ug/L			410858	432946	1	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.000	9	24	90	6	Standard
|	**Sb**	**121**	**0.427**	ug/L	0.015	3	140	5288	3	Standard
⌊	**Sb**	**123**	**0.431**	ug/L	0.013	2	109	4055	2	Standard
⌈>	**Tb**	**159**		ug/L			636863	701493	0	Standard
⌊	**Pb**	**208**	**0.067**	ug/L	0.001	2	113	3313	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0477-01
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 17:58:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	31234	2	Standard
	Cl	**37**		ug/L			2981467	3089923	2	Standard
>	**Sc**	**45**		ug/L			437323	470888	3	Standard
	Cr	**52**	**0.183**	ug/L	0.066	36	16930	21346	3	Standard
	Cr	**53**	**0.420**	ug/L	0.021	4	85	922	2	Standard
>	**Ge**	**72**		ug/L			20645	21628	1	KED
	Cu	**63**	**8.958**	ug/L	0.226	2	40	22177	1	KED
	Cu	**65**	**9.159**	ug/L	0.205	2	22	11362	1	KED
	Zn	**66**	**7.200**	ug/L	0.310	4	23	2249	5	KED
	Zn	**67**	**6.802**	ug/L	0.274	4	4	354	2	KED
	As	**75**	**1.625**	ug/L	0.042	2	3	269	1	KED
	Y	**89**		ug/L			288003	285005	2	Standard
	Kr	**83**		ug/L			35	46	16	Standard
>	**In-1**	**115**		ug/L			7190	7709	1	KED
	Cd	**111**	**0.021**	ug/L	0.004	21	1	6	14	KED
	Cd	**114**	**0.007**	ug/L	0.012	165	3	7	91	KED
>	**In**	**115**		ug/L			410858	423154	1	Standard
	Ag	**107**	**0.002**	ug/L	0.000	7	24	56	5	Standard
	Sb	**121**	**0.130**	ug/L	0.005	3	140	1678	4	Standard
	Sb	**123**	**0.127**	ug/L	0.004	2	109	1243	3	Standard
>	**Tb**	**159**		ug/L			636863	691598	0	Standard
	Pb	**208**	**0.427**	ug/L	0.009	2	113	20299	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0133-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 18:02:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	33081	2	Standard
	Cl	37		ug/L			2981467	3122647	2	Standard
>	Sc	45		ug/L			437323	549319	1	Standard
	Cr	52	24.655	ug/L	0.391	1	16930	514657	0	Standard
	Cr	53	25.063	ug/L	0.363	1	85	57967	0	Standard
>	Ge	72		ug/L			20645	22332	1	KED
	Cu	63	27.687	ug/L	0.668	2	40	70708	3	KED
	Cu	65	28.576	ug/L	0.161	0	22	36558	1	KED
	Zn	66	68.051	ug/L	2.248	3	23	21736	3	KED
	Zn	67	64.737	ug/L	0.964	1	4	3448	2	KED
	As	75	14.280	ug/L	0.248	1	3	2418	0	KED
	Y	89		ug/L			288003	533018	4	Standard
	Kr	83		ug/L			35	101	7	Standard
>	In-1	115		ug/L			7190	7863	3	KED
	Cd	111	1.126	ug/L	0.137	12	1	272	10	KED
	Cd	114	1.141	ug/L	0.019	1	3	679	2	KED
>	In	115		ug/L			410858	435543	0	Standard
	Ag	107	0.383	ug/L	0.011	2	24	6144	3	Standard
	Sb	121	0.011	ug/L	0.003	23	140	286	11	Standard
	Sb	123	0.010	ug/L	0.002	15	109	211	6	Standard
>	Tb	159		ug/L			636863	717223	0	Standard
	Pb	208	40.266	ug/L	0.385	0	113	1972658	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0133-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 18:07:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	31596	3	Standard
	Cl	37		ug/L			2981467	3077025	3	Standard
>	Sc	45		ug/L			437323	572297	0	Standard
	Cr	52	17.135	ug/L	0.324	1	16930	379407	0	Standard
	Cr	53	18.004	ug/L	0.417	2	85	43417	1	Standard
>	Ge	72		ug/L			20645	22845	0	KED
	Cu	63	26.557	ug/L	0.197	0	40	69379	1	KED
	Cu	65	27.149	ug/L	0.031	0	22	35534	0	KED
	Zn	66	61.424	ug/L	1.632	2	23	20071	2	KED
	Zn	67	60.710	ug/L	1.744	2	4	3308	2	KED
	As	75	8.085	ug/L	0.119	1	3	1402	1	KED
	Y	89		ug/L			288003	584163	1	Standard
	Kr	83		ug/L			35	114	10	Standard
>	In-1	115		ug/L			7190	7723	3	KED
	Cd	111	0.424	ug/L	0.047	11	1	101	8	KED
	Cd	114	0.426	ug/L	0.027	6	3	250	3	KED
>	In	115		ug/L			410858	435087	1	Standard
	Ag	107	0.504	ug/L	0.012	2	24	8049	1	Standard
	Sb	121	0.008	ug/L	0.002	25	140	241	11	Standard
	Sb	123	0.006	ug/L	0.002	30	109	169	8	Standard
>	Tb	159		ug/L			636863	708101	0	Standard
	Pb	208	14.189	ug/L	0.089	0	113	686395	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0133-12
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 18:11:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	31137	1	Standard
	Cl	37		ug/L			2981467	3120269	5	Standard
>	Sc	45		ug/L			437323	536722	9	Standard
	Cr	52	16.631	ug/L	1.927	11	16930	343640	1	Standard
	Cr	53	16.660	ug/L	1.650	9	85	37456	1	Standard
>	Ge	72		ug/L			20645	22475	1	KED
	Cu	63	26.069	ug/L	0.640	2	40	66980	0	KED
	Cu	65	25.996	ug/L	0.789	3	22	33465	2	KED
	Zn	66	58.366	ug/L	0.411	0	23	18764	1	KED
	Zn	67	58.877	ug/L	2.642	4	4	3155	2	KED
	As	75	6.474	ug/L	0.064	0	3	1105	0	KED
	Y	89		ug/L			288003	544553	4	Standard
	Kr	83		ug/L			35	105	4	Standard
>	In-1	115		ug/L			7190	7874	1	KED
	Cd	111	0.374	ug/L	0.008	2	1	92	3	KED
	Cd	114	0.368	ug/L	0.050	13	3	221	11	KED
>	In	115		ug/L			410858	417551	7	Standard
	Ag	107	0.227	ug/L	0.020	8	24	3489	1	Standard
	Sb	121	0.010	ug/L	0.003	25	140	259	5	Standard
	Sb	123	0.009	ug/L	0.001	11	109	189	11	Standard
>	Tb	159		ug/L			636863	687894	8	Standard
	Pb	208	11.344	ug/L	0.789	6	113	531088	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0133-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 18:16:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	32820	2	Standard
	Cl	37		ug/L			2981467	3138905	2	Standard
>	Sc	45		ug/L			437323	540230	1	Standard
	Cr	52	12.129	ug/L	0.152	1	16930	259650	1	Standard
	Cr	53	12.744	ug/L	0.346	2	85	29034	1	Standard
>	Ge	72		ug/L			20645	22286	0	KED
	Cu	63	20.055	ug/L	0.553	2	40	51115	2	KED
	Cu	65	20.150	ug/L	0.435	2	22	25733	1	KED
	Zn	66	46.848	ug/L	1.171	2	23	14939	2	KED
	Zn	67	46.629	ug/L	2.123	4	4	2479	3	KED
	As	75	5.336	ug/L	0.359	6	3	904	6	KED
	Y	89		ug/L			288003	502981	1	Standard
	Kr	83		ug/L			35	71	22	Standard
>	In-1	115		ug/L			7190	7782	2	KED
	Cd	111	0.134	ug/L	0.011	8	1	33	5	KED
	Cd	114	0.107	ug/L	0.019	18	3	66	18	KED
>	In	115		ug/L			410858	436696	1	Standard
	Ag	107	0.079	ug/L	0.006	7	24	1292	8	Standard
	Sb	121	0.006	ug/L	0.001	9	140	222	3	Standard
	Sb	123	0.006	ug/L	0.001	10	109	170	4	Standard
>	Tb	159		ug/L			636863	702158	0	Standard
	Pb	208	17.587	ug/L	0.111	0	113	843539	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0133-14
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 18:20:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	37291	2	Standard
	Cl	37		ug/L			2981467	3182946	1	Standard
⌈>	Sc	45		ug/L			437323	542191	2	Standard
|	Cr	52	12.582	ug/L	0.080	0	16930	269539	2	Standard
⌊	Cr	53	12.786	ug/L	0.155	1	85	29240	1	Standard
⌈>	Ge	72		ug/L			20645	22434	3	KED
|	Cu	63	23.792	ug/L	1.457	6	40	60950	2	KED
|	Cu	65	23.373	ug/L	0.962	4	22	30014	0	KED
|	Zn	66	47.164	ug/L	1.938	4	23	15126	0	KED
|	Zn	67	47.791	ug/L	2.663	5	4	2555	1	KED
⌊	As	75	5.573	ug/L	0.062	1	3	950	2	KED
	Y	89		ug/L			288003	507623	0	Standard
	Kr	83		ug/L			35	75	6	Standard
⌈>	In-1	115		ug/L			7190	7750	3	KED
|	Cd	111	0.154	ug/L	0.018	11	1	38	10	KED
⌊	Cd	114	0.159	ug/L	0.038	23	3	96	20	KED
⌈>	In	115		ug/L			410858	439275	0	Standard
|	Ag	107	0.091	ug/L	0.004	4	24	1485	3	Standard
|	Sb	121	0.003	ug/L	0.001	52	140	181	9	Standard
⌊	Sb	123	0.003	ug/L	0.001	35	109	144	5	Standard
⌈>	Tb	159		ug/L			636863	710818	0	Standard
⌊	Pb	208	8.939	ug/L	0.172	1	113	434040	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0133-15
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 18:24:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	36917	2	Standard
	Cl	37		ug/L			2981467	3361280	12	Standard
>	Sc	45		ug/L			437323	530684	1	Standard
	Cr	52	13.911	ug/L	0.153	1	16930	289493	0	Standard
	Cr	53	13.979	ug/L	0.279	1	85	31281	1	Standard
>	Ge	72		ug/L			20645	22956	0	KED
	Cu	63	24.371	ug/L	0.093	0	40	63979	0	KED
	Cu	65	24.688	ug/L	0.762	3	22	32473	3	KED
	Zn	66	49.796	ug/L	1.001	2	23	16355	1	KED
	Zn	67	49.619	ug/L	0.309	0	4	2718	1	KED
	As	75	5.318	ug/L	0.054	1	3	928	0	KED
	Y	89		ug/L			288003	506239	3	Standard
	Kr	83		ug/L			35	171	73	Standard
>	In-1	115		ug/L			7190	7754	2	KED
	Cd	111	0.157	ug/L	0.021	13	1	39	13	KED
	Cd	114	0.160	ug/L	0.025	15	3	96	15	KED
>	In	115		ug/L			410858	420324	4	Standard
	Ag	107	0.121	ug/L	0.010	7	24	1879	3	Standard
	Sb	121	0.010	ug/L	0.012	117	140	258	48	Standard
	Sb	123	0.010	ug/L	0.011	109	109	201	44	Standard
>	Tb	159		ug/L			636863	693391	4	Standard
	Pb	208	10.172	ug/L	0.065	0	113	481765	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0133-16
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 18:29:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	32818	4	Standard
	Cl	37		ug/L			2981467	3125993	1	Standard
>	Sc	45		ug/L			437323	531801	0	Standard
	Cr	52	12.631	ug/L	0.146	1	16930	265343	1	Standard
	Cr	53	12.813	ug/L	0.234	1	85	28746	2	Standard
>	Ge	72		ug/L			20645	22410	1	KED
	Cu	63	23.923	ug/L	0.599	2	40	61302	2	KED
	Cu	65	23.419	ug/L	0.540	2	22	30066	1	KED
	Zn	66	48.622	ug/L	0.799	1	23	15590	0	KED
	Zn	67	47.337	ug/L	0.638	1	4	2531	1	KED
	As	75	5.722	ug/L	0.105	1	3	975	2	KED
	Y	89		ug/L			288003	495094	3	Standard
	Kr	83		ug/L			35	83	17	Standard
>	In-1	115		ug/L			7190	7866	3	KED
	Cd	111	0.132	ug/L	0.027	20	1	33	15	KED
	Cd	114	0.130	ug/L	0.012	9	3	80	12	KED
>	In	115		ug/L			410858	424882	1	Standard
	Ag	107	0.098	ug/L	0.006	6	24	1548	4	Standard
	Sb	121	0.005	ug/L	0.001	19	140	202	3	Standard
	Sb	123	0.006	ug/L	0.001	17	109	168	6	Standard
>	Tb	159		ug/L			636863	693817	1	Standard
	Pb	208	9.711	ug/L	0.143	1	113	460285	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 18:33:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	20929	4	Standard
	Cl	**37**		ug/L			2981467	2994680	1	Standard
⎡>	**Sc**	**45**		ug/L			437323	402604	3	Standard
⎢	**Cr**	**52**	**0.036**	ug/L	0.025	69	16930	16111	1	Standard
⎣	**Cr**	**53**	**0.015**	ug/L	0.001	7	85	103	1	Standard
⎡>	**Ge**	**72**		ug/L			20645	20956	3	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.001	178	40	39	12	KED
⎢	**Cu**	**65**	**-0.004**	ug/L	0.006	148	22	17	40	KED
⎢	**Zn**	**66**	**-0.016**	ug/L	0.023	141	23	19	36	KED
⎢	**Zn**	**67**	**-0.052**	ug/L	0.001	2	4	1		KED
⎣	**As**	**75**	**0.001**	ug/L	0.022	2041	3	3	86	KED
	Y	**89**		ug/L			288003	274230	4	Standard
	Kr	**83**		ug/L			35	43	9	Standard
⎡>	**In-1**	**115**		ug/L			7190	7303	1	KED
⎢	**Cd**	**111**	**0.003**	ug/L	0.014	482	1	2	137	KED
⎣	**Cd**	**114**	**-0.000**	ug/L	0.007	10526	3	3	127	KED
⎡>	**In**	**115**		ug/L			410858	416767	2	Standard
⎢	**Ag**	**107**	**-0.000**	ug/L	0.000	141	24	19	36	Standard
⎢	**Sb**	**121**	**-0.007**	ug/L	0.001	10	140	59	13	Standard
⎣	**Sb**	**123**	**-0.007**	ug/L	0.001	10	109	46	16	Standard
⎡>	**Tb**	**159**		ug/L			636863	637740	2	Standard
⎣	**Pb**	**208**	**-0.000**	ug/L	0.000	136	113	107	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 18:38:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19198	1	Standard
	Cl	**37**		ug/L			2981467	3197204	2	Standard
⌈>	**Sc**	**45**		ug/L			437323	432392	1	Standard
|	**Cr**	**52**	**48.690**	ug/L	1.313	2	16930	783731	2	Standard
⌊	**Cr**	**53**	**48.983**	ug/L	1.716	3	85	89085	2	Standard
⌈>	**Ge**	**72**		ug/L			20645	21083	1	KED
|	**Cu**	**63**	**49.323**	ug/L	1.701	3	40	118828	1	KED
|	**Cu**	**65**	**48.566**	ug/L	1.806	3	22	58626	2	KED
|	**Zn**	**66**	**49.751**	ug/L	1.580	3	23	15004	1	KED
|	**Zn**	**67**	**50.936**	ug/L	1.823	3	4	2561	1	KED
⌊	**As**	**75**	**50.403**	ug/L	2.309	4	3	8047	3	KED
	Y	**89**		ug/L			288003	279074	0	Standard
	Kr	**83**		ug/L			35	52	29	Standard
⌈>	**In-1**	**115**		ug/L			7190	7627	1	KED
|	**Cd**	**111**	**48.753**	ug/L	0.675	1	1	11388	1	KED
⌊	**Cd**	**114**	**47.753**	ug/L	0.947	1	3	27470	0	KED
⌈>	**In**	**115**		ug/L			410858	422974	2	Standard
|	**Ag**	**107**	**47.007**	ug/L	1.674	3	24	728028	1	Standard
|	**Sb**	**121**	**47.684**	ug/L	0.799	1	140	561173	1	Standard
⌊	**Sb**	**123**	**48.729**	ug/L	1.187	2	109	434916	2	Standard
⌈>	**Tb**	**159**		ug/L			636863	682051	1	Standard
⌊	**Pb**	**208**	**45.631**	ug/L	0.563	1	113	2125944	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 18:45:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	18726	2	Standard
	Cl	**37**		ug/L			2981467	2939413	3	Standard
⌈>	**Sc**	**45**		ug/L			437323	385128	5	Standard
|	**Cr**	**52**	**0.066**	ug/L	0.064	96	16930	15806	3	Standard
⌊	**Cr**	**53**	**0.012**	ug/L	0.003	26	85	95	10	Standard
⌈>	**Ge**	**72**		ug/L			20645	21085	1	KED
|	**Cu**	**63**	**-0.003**	ug/L	0.004	127	40	33	31	KED
|	**Cu**	**65**	**-0.004**	ug/L	0.004	92	22	17	26	KED
|	**Zn**	**66**	**-0.012**	ug/L	0.019	150	23	20	28	KED
|	**Zn**	**67**	**0.023**	ug/L	0.037	158	4	5	33	KED
⌊	**As**	**75**	**0.010**	ug/L	0.012	115	3	5	35	KED
	Y	**89**		ug/L			288003	256926	0	Standard
	Kr	**83**		ug/L			35	42	20	Standard
⌈>	**In-1**	**115**		ug/L			7190	7365	0	KED
|	**Cd**	**111**	**0.001**	ug/L	0.004	342	1	1	50	KED
⌊	**Cd**	**114**	**-0.006**	ug/L	0.000	0	3	0	43	KED
⌈>	**In**	**115**		ug/L			410858	400274	3	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	32	24	52	15	Standard
|	**Sb**	**121**	**0.093**	ug/L	0.007	7	140	1174	10	Standard
⌊	**Sb**	**123**	**0.099**	ug/L	0.004	4	109	939	2	Standard
⌈>	**Tb**	**159**		ug/L			636863	626694	4	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.001	191	113	123	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 18:49:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	34307	4	Standard
	Cl	37		ug/L			2981467	3036904	1	Standard
>	Sc	45		ug/L			437323	514994	1	Standard
	Cr	52	13.415	ug/L	0.060	0	16930	271654	1	Standard
	Cr	53	13.875	ug/L	0.111	0	85	30132	1	Standard
>	Ge	72		ug/L			20645	21636	3	KED
	Cu	63	24.334	ug/L	0.223	0	40	60199	2	KED
	Cu	65	24.172	ug/L	1.318	5	22	29934	3	KED
	Zn	66	51.914	ug/L	0.892	1	23	16066	2	KED
	Zn	67	50.710	ug/L	1.249	2	4	2616	1	KED
	As	75	4.958	ug/L	0.108	2	3	815	1	KED
	Y	89		ug/L			288003	498203	0	Standard
	Kr	83		ug/L			35	92	19	Standard
>	In-1	115		ug/L			7190	7661	1	KED
	Cd	111	0.127	ug/L	0.019	15	1	31	13	KED
	Cd	114	0.129	ug/L	0.036	28	3	77	25	KED
>	In	115		ug/L			410858	421538	0	Standard
	Ag	107	0.098	ug/L	0.003	3	24	1543	3	Standard
	Sb	121	0.034	ug/L	0.003	8	140	547	5	Standard
	Sb	123	0.033	ug/L	0.002	6	109	406	5	Standard
>	Tb	159		ug/L			636863	697298	1	Standard
	Pb	208	9.296	ug/L	0.197	2	113	442771	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 18:54:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	33416	1	Standard
	Cl	37		ug/L			2981467	3081834	3	Standard
>	Sc	45		ug/L			437323	513972	1	Standard
	Cr	52	13.235	ug/L	0.206	1	16930	267716	0	Standard
	Cr	53	13.489	ug/L	0.363	2	85	29237	2	Standard
>	Ge	72		ug/L			20645	22117	0	KED
	Cu	63	27.222	ug/L	0.148	0	40	68847	1	KED
	Cu	65	27.313	ug/L	0.156	0	22	34608	0	KED
	Zn	66	56.545	ug/L	0.901	1	23	17893	2	KED
	Zn	67	54.795	ug/L	1.719	3	4	2891	2	KED
	As	75	7.785	ug/L	0.052	0	3	1307	1	KED
	Y	89		ug/L			288003	475929	2	Standard
	Kr	83		ug/L			35	85	31	Standard
>	In-1	115		ug/L			7190	7653	1	KED
	Cd	111	0.136	ug/L	0.014	10	1	33	11	KED
	Cd	114	0.152	ug/L	0.001	0	3	90	1	KED
>	In	115		ug/L			410858	419856	0	Standard
	Ag	107	0.119	ug/L	0.003	2	24	1860	2	Standard
	Sb	121	0.021	ug/L	0.003	13	140	384	8	Standard
	Sb	123	0.021	ug/L	0.001	3	109	294	1	Standard
>	Tb	159		ug/L			636863	695835	1	Standard
	Pb	208	11.838	ug/L	0.204	1	113	562646	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 18:58:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	31670	2	Standard
	Cl	37		ug/L			2981467	2986290	3	Standard
⌈>	Sc	45		ug/L			437323	526385	2	Standard
|	Cr	52	12.619	ug/L	0.148	1	16930	262402	2	Standard
⌊	Cr	53	13.084	ug/L	0.338	2	85	29040	0	Standard
⌈>	Ge	72		ug/L			20645	21712	1	KED
|	Cu	63	25.407	ug/L	0.314	1	40	63083	1	KED
|	Cu	65	26.126	ug/L	0.201	0	22	32501	1	KED
|	Zn	66	60.672	ug/L	0.470	0	23	18843	0	KED
|	Zn	67	60.274	ug/L	1.142	1	4	3121	1	KED
⌊	As	75	5.717	ug/L	0.231	4	3	943	2	KED
	Y	89		ug/L			288003	502582	2	Standard
	Kr	83		ug/L			35	73	17	Standard
⌈>	In-1	115		ug/L			7190	7483	2	KED
|	Cd	111	0.164	ug/L	0.039	24	1	39	20	KED
⌊	Cd	114	0.175	ug/L	0.024	13	3	102	11	KED
⌈>	In	115		ug/L			410858	424503	2	Standard
|	Ag	107	0.104	ug/L	0.004	3	24	1648	2	Standard
|	Sb	121	0.015	ug/L	0.001	6	140	316	5	Standard
⌊	Sb	123	0.015	ug/L	0.002	13	109	250	8	Standard
⌈>	Tb	159		ug/L			636863	692557	0	Standard
⌊	Pb	208	10.699	ug/L	0.136	1	113	506218	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 19:03:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	32902	2	Standard
	Cl	37		ug/L			2981467	3031781	3	Standard
>	Sc	45		ug/L			437323	533400	1	Standard
	Cr	52	12.153	ug/L	0.406	3	16930	256776	1	Standard
	Cr	53	12.395	ug/L	0.369	2	85	27888	1	Standard
>	Ge	72		ug/L			20645	22036	1	KED
	Cu	63	23.574	ug/L	0.475	2	40	59399	1	KED
	Cu	65	24.032	ug/L	0.456	1	22	30343	2	KED
	Zn	66	50.065	ug/L	1.277	2	23	15787	3	KED
	Zn	67	47.294	ug/L	0.994	2	4	2487	2	KED
	As	75	4.359	ug/L	0.085	1	3	731	2	KED
	Y	89		ug/L			288003	503226	2	Standard
	Kr	83		ug/L			35	90	4	Standard
>	In-1	115		ug/L			7190	7631	1	KED
	Cd	111	0.150	ug/L	0.010	6	1	36	8	KED
	Cd	114	0.136	ug/L	0.033	23	3	82	24	KED
>	In	115		ug/L			410858	423483	1	Standard
	Ag	107	0.119	ug/L	0.005	4	24	1864	4	Standard
	Sb	121	0.010	ug/L	0.002	20	140	257	8	Standard
	Sb	123	0.007	ug/L	0.003	34	109	179	13	Standard
>	Tb	159		ug/L			636863	685951	0	Standard
	Pb	208	9.354	ug/L	0.135	1	113	438344	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 19:07:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	31932	2	Standard
	Cl	37		ug/L			2981467	2978592	1	Standard
>	Sc	45		ug/L			437323	498675	1	Standard
	Cr	52	10.959	ug/L	0.168	1	16930	218408	0	Standard
	Cr	53	11.418	ug/L	0.016	0	85	24030	1	Standard
>	Ge	72		ug/L			20645	22058	0	KED
	Cu	63	22.036	ug/L	0.644	2	40	55587	2	KED
	Cu	65	22.670	ug/L	0.309	1	22	28653	1	KED
	Zn	66	44.791	ug/L	0.353	0	23	14140	1	KED
	Zn	67	44.320	ug/L	1.426	3	4	2333	3	KED
	As	75	5.550	ug/L	0.027	0	3	930	0	KED
	Y	89		ug/L			288003	440879	2	Standard
	Kr	83		ug/L			35	78	20	Standard
>	In-1	115		ug/L			7190	7527	1	KED
	Cd	111	0.153	ug/L	0.010	6	1	36	5	KED
	Cd	114	0.162	ug/L	0.014	8	3	95	8	KED
>	In	115		ug/L			410858	415842	1	Standard
	Ag	107	0.104	ug/L	0.002	1	24	1608	0	Standard
	Sb	121	0.007	ug/L	0.003	39	140	225	13	Standard
	Sb	123	0.008	ug/L	0.003	34	109	177	11	Standard
>	Tb	159		ug/L			636863	686117	1	Standard
	Pb	208	10.110	ug/L	0.139	1	113	473835	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 19:11:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	32777	1	Standard
	Cl	37		ug/L			2981467	2963250	2	Standard
⌈>	Sc	45		ug/L			437323	504357	1	Standard
|	Cr	52	12.085	ug/L	0.163	1	16930	241622	2	Standard
⌊	Cr	53	12.118	ug/L	0.189	1	85	25784	0	Standard
⌈>	Ge	72		ug/L			20645	21582	1	KED
|	Cu	63	27.331	ug/L	0.097	0	40	67453	1	KED
|	Cu	65	28.602	ug/L	0.205	0	22	35363	1	KED
|	Zn	66	81.035	ug/L	1.241	1	23	25012	2	KED
|	Zn	67	75.825	ug/L	3.011	3	4	3902	4	KED
⌊	As	75	6.777	ug/L	0.117	1	3	1111	2	KED
	Y	89		ug/L			288003	448359	2	Standard
	Kr	83		ug/L			35	76	3	Standard
⌈>	In-1	115		ug/L			7190	7542	2	KED
|	Cd	111	0.144	ug/L	0.037	25	1	34	25	KED
⌊	Cd	114	0.158	ug/L	0.017	10	3	92	8	KED
⌈>	In	115		ug/L			410858	414498	0	Standard
|	Ag	107	0.112	ug/L	0.005	4	24	1720	3	Standard
|	Sb	121	0.018	ug/L	0.003	16	140	350	9	Standard
⌊	Sb	123	0.015	ug/L	0.002	11	109	238	6	Standard
⌈>	Tb	159		ug/L			636863	683735	0	Standard
⌊	Pb	208	15.788	ug/L	0.197	1	113	737415	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 19:16:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	35186	3	Standard
	Cl	37		ug/L			2981467	2936812	0	Standard
>	Sc	45		ug/L			437323	503630	1	Standard
	Cr	52	12.541	ug/L	0.340	2	16930	249581	1	Standard
	Cr	53	12.687	ug/L	0.159	1	85	26952	0	Standard
>	Ge	72		ug/L			20645	21984	0	KED
	Cu	63	27.027	ug/L	0.224	0	40	67945	1	KED
	Cu	65	26.939	ug/L	0.300	1	22	33929	0	KED
	Zn	66	54.473	ug/L	0.851	1	23	17132	0	KED
	Zn	67	51.659	ug/L	2.598	5	4	2709	4	KED
	As	75	7.204	ug/L	0.113	1	3	1203	2	KED
	Y	89		ug/L			288003	471709	0	Standard
	Kr	83		ug/L			35	69	5	Standard
>	In-1	115		ug/L			7190	7530	2	KED
	Cd	111	0.168	ug/L	0.024	14	1	40	12	KED
	Cd	114	0.204	ug/L	0.025	12	3	119	12	KED
>	In	115		ug/L			410858	413024	0	Standard
	Ag	107	0.130	ug/L	0.004	3	24	1986	2	Standard
	Sb	121	0.004	ug/L	0.000	8	140	185	2	Standard
	Sb	123	0.005	ug/L	0.001	29	109	149	7	Standard
>	Tb	159		ug/L			636863	686944	1	Standard
	Pb	208	12.927	ug/L	0.203	1	113	606541	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0134-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 19:20:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	34568	2	Standard
	Cl	37		ug/L			2981467	2960518	3	Standard
>	Sc	45		ug/L			437323	505770	0	Standard
	Cr	52	12.432	ug/L	0.147	1	16930	248683	1	Standard
	Cr	53	12.849	ug/L	0.091	0	85	27414	1	Standard
>	Ge	72		ug/L			20645	21875	1	KED
	Cu	63	24.725	ug/L	0.477	1	40	61838	0	KED
	Cu	65	24.680	ug/L	0.264	1	22	30936	2	KED
	Zn	66	54.950	ug/L	1.327	2	23	17193	0	KED
	Zn	67	52.150	ug/L	0.718	1	4	2722	2	KED
	As	75	6.295	ug/L	0.096	1	3	1046	2	KED
	Y	89		ug/L			288003	477586	1	Standard
	Kr	83		ug/L			35	80	22	Standard
>	In-1	115		ug/L			7190	7502	2	KED
	Cd	111	0.172	ug/L	0.009	5	1	41	7	KED
	Cd	114	0.160	ug/L	0.015	9	3	93	10	KED
>	In	115		ug/L			410858	418381	3	Standard
	Ag	107	0.092	ug/L	0.003	2	24	1441	0	Standard
	Sb	121	0.006	ug/L	0.001	16	140	213	5	Standard
	Sb	123	0.006	ug/L	0.001	23	109	162	10	Standard
>	Tb	159		ug/L			636863	684536	1	Standard
	Pb	208	16.045	ug/L	0.320	1	113	750136	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 19:25:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19165	4	Standard
	Cl	**37**		ug/L			2981467	2909263	1	Standard
⎡>	**Sc**	**45**		ug/L			437323	407178	1	Standard
⎢	**Cr**	**52**	**0.018**	ug/L	0.030	170	16930	16024	1	Standard
⎣	**Cr**	**53**	**0.014**	ug/L	0.006	46	85	102	9	Standard
⎡>	**Ge**	**72**		ug/L			20645	20676	1	KED
⎢	**Cu**	**63**	**-0.004**	ug/L	0.003	73	40	31	19	KED
⎢	**Cu**	**65**	**-0.003**	ug/L	0.009	331	22	19	52	KED
⎢	**Zn**	**66**	**-0.019**	ug/L	0.014	73	23	17	22	KED
⎢	**Zn**	**67**	**-0.026**	ug/L	0.022	83	4	3	34	KED
⎣	**As**	**75**	**0.005**	ug/L	0.017	326	3	4	59	KED
	Y	**89**		ug/L			288003	270639	2	Standard
	Kr	**83**		ug/L			35	39	13	Standard
⎡>	**In-1**	**115**		ug/L			7190	7246	1	KED
⎢	**Cd**	**111**	**-0.000**	ug/L	0.007	58004	1	1	91	KED
⎣	**Cd**	**114**	**-0.002**	ug/L	0.004	146	3	1	105	KED
⎡>	**In**	**115**		ug/L			410858	406021	1	Standard
⎢	**Ag**	**107**	**-0.000**	ug/L	0.000	142	24	21	13	Standard
⎢	**Sb**	**121**	**-0.006**	ug/L	0.001	23	140	67	24	Standard
⎣	**Sb**	**123**	**-0.008**	ug/L	0.000	5	109	44	8	Standard
⎡>	**Tb**	**159**		ug/L			636863	633754	1	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	38	113	139	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 19:29:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	18688	6	Standard
	Cl	**37**		ug/L			2981467	3039283	2	Standard
⌈>	**Sc**	**45**		ug/L			437323	417951	0	Standard
|	**Cr**	**52**	**49.538**	ug/L	0.756	1	16930	770490	0	Standard
⌊	**Cr**	**53**	**50.027**	ug/L	0.437	0	85	87965	1	Standard
⌈>	**Ge**	**72**		ug/L			20645	21546	2	KED
|	**Cu**	**63**	**47.405**	ug/L	1.247	2	40	116716	1	KED
|	**Cu**	**65**	**47.903**	ug/L	2.623	5	22	59058	2	KED
|	**Zn**	**66**	**49.556**	ug/L	3.981	8	23	15256	5	KED
|	**Zn**	**67**	**49.090**	ug/L	3.101	6	4	2521	4	KED
⌊	**As**	**75**	**48.709**	ug/L	2.242	4	3	7945	2	KED
	Y	**89**		ug/L			288003	279317	0	Standard
	Kr	**83**		ug/L			35	57	18	Standard
⌈>	**In-1**	**115**		ug/L			7190	7439	3	KED
|	**Cd**	**111**	**50.219**	ug/L	1.585	3	1	11436	1	KED
⌊	**Cd**	**114**	**49.433**	ug/L	1.923	3	3	27720	1	KED
⌈>	**In**	**115**		ug/L			410858	411415	1	Standard
|	**Ag**	**107**	**48.206**	ug/L	0.991	2	24	726750	3	Standard
|	**Sb**	**121**	**49.644**	ug/L	0.520	1	140	568331	0	Standard
⌊	**Sb**	**123**	**49.303**	ug/L	0.575	1	109	428068	0	Standard
⌈>	**Tb**	**159**		ug/L			636863	664240	1	Standard
⌊	**Pb**	**208**	**45.916**	ug/L	1.376	2	113	2082575	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 19:36:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	18569	4	Standard
	Cl	**37**		ug/L			2981467	2988616	1	Standard
⎡>	**Sc**	**45**		ug/L			437323	409744	1	Standard
⎢	**Cr**	**52**	**0.007**	ug/L	0.037	499	16930	15967	2	Standard
⎣	**Cr**	**53**	**0.003**	ug/L	0.008	283	85	84	14	Standard
⎡>	**Ge**	**72**		ug/L			20645	20897	1	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.004	384	40	43	24	KED
⎢	**Cu**	**65**	**-0.001**	ug/L	0.010	1434	22	21	50	KED
⎢	**Zn**	**66**	**-0.010**	ug/L	0.010	106	23	20	15	KED
⎢	**Zn**	**67**	**0.025**	ug/L	0.039	158	4	5	33	KED
⎣	**As**	**75**	**0.001**	ug/L	0.006	806	3	3	25	KED
	Y	**89**		ug/L			288003	266848	1	Standard
	Kr	**83**		ug/L			35	50	16	Standard
⎡>	**In-1**	**115**		ug/L			7190	7363	5	KED
⎢	**Cd**	**111**	**0.001**	ug/L	0.004	339	1	1	50	KED
⎣	**Cd**	**114**	**-0.000**	ug/L	0.002	1130	3	3	36	KED
⎡>	**In**	**115**		ug/L			410858	407458	0	Standard
⎢	**Ag**	**107**	**0.002**	ug/L	0.001	51	24	53	27	Standard
⎢	**Sb**	**121**	**0.092**	ug/L	0.005	4	140	1184	4	Standard
⎣	**Sb**	**123**	**0.094**	ug/L	0.002	2	109	919	2	Standard
⎡>	**Tb**	**159**		ug/L			636863	642899	1	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.002	146	113	160	40	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0840-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 19:41:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	21768	1	Standard
	Cl	37		ug/L			2981467	2981899	2	Standard
>	Sc	45		ug/L			437323	422703	1	Standard
	Cr	52	0.022	ug/L	0.018	80	16930	16708	3	Standard
	Cr	53	0.009	ug/L	0.001	16	85	98	3	Standard
>	Ge	72		ug/L			20645	21443	2	KED
	Cu	63	-0.004	ug/L	0.002	43	40	33	13	KED
	Cu	65	-0.002	ug/L	0.009	472	22	20	55	KED
	Zn	66	0.077	ug/L	0.037	47	23	48	26	KED
	Zn	67	0.121	ug/L	0.142	117	4	10	66	KED
	As	75	0.002	ug/L	0.007	310	3	4	24	KED
	Y	89		ug/L			288003	275785	1	Standard
	Kr	83		ug/L			35	52	21	Standard
>	In-1	115		ug/L			7190	7649	0	KED
	Cd	111	-0.005	ug/L	0.002	52	1	0	86	KED
	Cd	114	-0.005	ug/L	0.002	41	3	0	180	KED
>	In	115		ug/L			410858	418597	1	Standard
	Ag	107	0.001	ug/L	0.001	67	24	38	24	Standard
	Sb	121	0.025	ug/L	0.001	4	140	434	2	Standard
	Sb	123	0.025	ug/L	0.002	9	109	333	6	Standard
>	Tb	159		ug/L			636863	660382	0	Standard
	Pb	208	0.002	ug/L	0.000	25	113	205	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0840-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 19:45:40
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	20916	2	Standard
	Cl	37		ug/L			2981467	2958336	1	Standard
⌈>	Sc	45		ug/L			437323	424022	0	Standard
|	Cr	52	25.727	ug/L	0.213	0	16930	413884	0	Standard
⌊	Cr	53	26.078	ug/L	0.857	3	85	46561	3	Standard
⌈>	Ge	72		ug/L			20645	21768	1	KED
|	Cu	63	25.900	ug/L	0.668	2	40	64460	1	KED
|	Cu	65	25.765	ug/L	1.283	4	22	32121	3	KED
|	Zn	66	80.600	ug/L	2.307	2	23	25087	2	KED
|	Zn	67	77.362	ug/L	1.956	2	4	4015	1	KED
⌊	As	75	25.346	ug/L	0.153	0	3	4181	1	KED
	Y	89		ug/L			288003	278966	2	Standard
	Kr	83		ug/L			35	45	8	Standard
⌈>	In-1	115		ug/L			7190	7533	0	KED
|	Cd	111	25.862	ug/L	0.240	0	1	5968	0	KED
⌊	Cd	114	25.049	ug/L	0.435	1	3	14237	1	KED
⌈>	In	115		ug/L			410858	414840	1	Standard
|	Ag	107	26.331	ug/L	0.125	0	24	400191	1	Standard
|	Sb	121	0.015	ug/L	0.000	2	140	318	1	Standard
⌊	Sb	123	0.015	ug/L	0.002	10	109	238	6	Standard
⌈>	Tb	159		ug/L			636863	664921	1	Standard
⌊	Pb	208	24.856	ug/L	0.573	2	113	1128756	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0840-SRL1
Sample Dil Factor: 100
Comments:
Sample Date/Time: Saturday, April 01, 2023 19:50:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	21473	2	Standard
	Cl	**37**		ug/L			2981467	3016713	3	Standard
⌈>	**Sc**	**45**		ug/L			437323	460951	3	Standard
|	**Cr**	**52**	**4.470**	ug/L	0.184	4	16930	92840	1	Standard
⌊	**Cr**	**53**	**4.623**	ug/L	0.150	3	85	9040	1	Standard
⌈>	**Ge**	**72**		ug/L			20645	21719	1	KED
|	**Cu**	**63**	**8.287**	ug/L	0.307	3	40	20604	2	KED
|	**Cu**	**65**	**8.183**	ug/L	0.239	2	22	10196	1	KED
|	**Zn**	**66**	**34.871**	ug/L	1.453	4	23	10839	2	KED
|	**Zn**	**67**	**33.533**	ug/L	1.069	3	4	1739	2	KED
⌊	**As**	**75**	**0.673**	ug/L	0.030	4	3	114	5	KED
	Y	**89**		ug/L			288003	360304	2	Standard
	Kr	**83**		ug/L			35	57	31	Standard
⌈>	**In-1**	**115**		ug/L			7190	7547	1	KED
|	**Cd**	**111**	**0.070**	ug/L	0.011	15	1	17	15	KED
⌊	**Cd**	**114**	**0.062**	ug/L	0.017	27	3	38	25	KED
⌈>	**In**	**115**		ug/L			410858	418218	1	Standard
|	**Ag**	**107**	**0.066**	ug/L	0.004	6	24	1039	5	Standard
|	**Sb**	**121**	**0.002**	ug/L	0.001	25	140	168	2	Standard
⌊	**Sb**	**123**	**0.002**	ug/L	0.002	72	109	130	11	Standard
⌈>	**Tb**	**159**		ug/L			636863	681831	1	Standard
⌊	**Pb**	**208**	**7.258**	ug/L	0.053	0	113	338119	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0042-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 19:54:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	27133	2	Standard
	Cl	37		ug/L			2981467	2909995	2	Standard
>	Sc	45		ug/L			437323	610142	0	Standard
	Cr	52	17.187	ug/L	0.333	1	16930	405698	1	Standard
	Cr	53	17.300	ug/L	0.123	0	85	44486	0	Standard
>	Ge	72		ug/L			20645	21529	1	KED
	Cu	63	39.827	ug/L	0.987	2	40	98013	1	KED
	Cu	65	41.397	ug/L	1.578	3	22	51039	2	KED
	Zn	66	168.677	ug/L	6.410	3	23	51890	2	KED
	Zn	67	162.056	ug/L	3.346	2	4	8314	1	KED
	As	75	3.439	ug/L	0.156	4	3	564	3	KED
	Y	89		ug/L			288003	699853	2	Standard
	Kr	83		ug/L			35	154	22	Standard
>	In-1	115		ug/L			7190	7533	0	KED
	Cd	111	0.305	ug/L	0.067	22	1	72	21	KED
	Cd	114	0.308	ug/L	0.051	16	3	178	16	KED
>	In	115		ug/L			410858	410050	1	Standard
	Ag	107	0.332	ug/L	0.011	3	24	5010	3	Standard
	Sb	121	0.008	ug/L	0.002	24	140	227	9	Standard
	Sb	123	0.010	ug/L	0.002	16	109	195	6	Standard
>	Tb	159		ug/L			636863	682165	0	Standard
	Pb	208	35.814	ug/L	0.501	1	113	1668682	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0840-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 19:58:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	27295	1	Standard
	Cl	37		ug/L			2981467	2949449	1	Standard
>	Sc	45		ug/L			437323	610973	3	Standard
	Cr	52	18.594	ug/L	0.595	3	16930	437322	0	Standard
	Cr	53	19.465	ug/L	0.346	1	85	50107	3	Standard
>	Ge	72		ug/L			20645	21899	2	KED
	Cu	63	45.040	ug/L	1.828	4	40	112677	1	KED
	Cu	65	46.312	ug/L	0.933	2	22	58072	1	KED
	Zn	66	182.101	ug/L	6.341	3	23	56962	1	KED
	Zn	67	177.013	ug/L	5.914	3	4	9232	0	KED
	As	75	3.751	ug/L	0.179	4	3	625	2	KED
	Y	89		ug/L			288003	726413	2	Standard
	Kr	83		ug/L			35	126	8	Standard
>	In-1	115		ug/L			7190	7426	3	KED
	Cd	111	0.361	ug/L	0.020	5	1	83	7	KED
	Cd	114	0.347	ug/L	0.024	7	3	197	5	KED
>	In	115		ug/L			410858	420648	0	Standard
	Ag	107	0.340	ug/L	0.015	4	24	5260	4	Standard
	Sb	121	0.006	ug/L	0.002	29	140	217	9	Standard
	Sb	123	0.006	ug/L	0.002	30	109	163	8	Standard
>	Tb	159		ug/L			636863	697175	0	Standard
	Pb	208	37.427	ug/L	0.344	0	113	1782307	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0840-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 20:03:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	27179	3	Standard
	Cl	37		ug/L			2981467	2974711	2	Standard
>	Sc	45		ug/L			437323	610352	2	Standard
	Cr	52	37.205	ug/L	1.903	5	16930	850412	2	Standard
	Cr	53	38.665	ug/L	0.378	0	85	99300	1	Standard
>	Ge	72		ug/L			20645	21314	2	KED
	Cu	63	70.182	ug/L	3.163	4	40	170872	3	KED
	Cu	65	70.958	ug/L	1.343	1	22	86582	1	KED
	Zn	66	271.547	ug/L	7.897	2	23	82663	0	KED
	Zn	67	257.964	ug/L	4.099	1	4	13103	3	KED
	As	75	26.743	ug/L	0.991	3	3	4316	0	KED
	Y	89		ug/L			288003	718604	1	Standard
	Kr	83		ug/L			35	150	8	Standard
>	In-1	115		ug/L			7190	7396	2	KED
	Cd	111	25.689	ug/L	0.627	2	1	5818	1	KED
	Cd	114	25.376	ug/L	1.083	4	3	14153	3	KED
>	In	115		ug/L			410858	413614	0	Standard
	Ag	107	24.100	ug/L	0.508	2	24	365205	1	Standard
	Sb	121	0.006	ug/L	0.003	51	140	210	16	Standard
	Sb	123	0.008	ug/L	0.002	26	109	179	10	Standard
>	Tb	159		ug/L			636863	673982	1	Standard
	Pb	208	64.065	ug/L	0.628	0	113	2949011	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0840-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 20:07:47
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	26915	3	Standard
	Cl	37		ug/L			2981467	2958702	0	Standard
>	Sc	45		ug/L			437323	613972	1	Standard
	Cr	52	36.449	ug/L	0.878	2	16930	838929	0	Standard
	Cr	53	37.025	ug/L	0.399	1	85	95659	0	Standard
>	Ge	72		ug/L			20645	21690	3	KED
	Cu	63	70.535	ug/L	1.004	1	40	174842	2	KED
	Cu	65	70.376	ug/L	1.873	2	22	87435	5	KED
	Zn	66	257.238	ug/L	8.052	3	23	79689	2	KED
	Zn	67	244.995	ug/L	13.173	5	4	12647	2	KED
	As	75	26.368	ug/L	0.969	3	3	4330	0	KED
	Y	89		ug/L			288003	711082	0	Standard
	Kr	83		ug/L			35	146	10	Standard
>	In-1	115		ug/L			7190	7043	9	KED
	Cd	111	26.488	ug/L	2.686	10	1	5677	0	KED
	Cd	114	26.452	ug/L	2.725	10	3	13961	0	KED
>	In	115		ug/L			410858	405668	0	Standard
	Ag	107	24.057	ug/L	0.140	0	24	357555	0	Standard
	Sb	121	0.006	ug/L	0.001	26	140	201	9	Standard
	Sb	123	0.007	ug/L	0.002	26	109	172	9	Standard
>	Tb	159		ug/L			636863	670655	1	Standard
	Pb	208	60.777	ug/L	1.097	1	113	2783789	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0840-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 20:12:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	28811	0	Standard
	Cl	**37**		ug/L			2981467	2970098	0	Standard
>	**Sc**	**45**		ug/L			437323	603101	2	Standard
	Cr	**52**	**35.199**	ug/L	0.454	1	16930	796721	1	Standard
	Cr	**53**	**36.155**	ug/L	0.234	0	85	91777	2	Standard
>	**Ge**	**72**		ug/L			20645	21573	1	KED
	Cu	**63**	**65.227**	ug/L	2.360	3	40	160810	2	KED
	Cu	**65**	**65.792**	ug/L	1.822	2	22	81288	3	KED
	Zn	**66**	**239.417**	ug/L	3.473	1	23	73813	1	KED
	Zn	**67**	**229.403**	ug/L	4.150	1	4	11791	0	KED
	As	**75**	**28.160**	ug/L	0.170	0	3	4603	0	KED
	Y	**89**		ug/L			288003	705484	2	Standard
	Kr	**83**		ug/L			35	137	5	Standard
>	**In-1**	**115**		ug/L			7190	7419	0	KED
	Cd	**111**	**24.572**	ug/L	0.432	1	1	5584	1	KED
	Cd	**114**	**24.825**	ug/L	0.565	2	3	13894	1	KED
>	**In**	**115**		ug/L			410858	406890	1	Standard
	Ag	**107**	**25.269**	ug/L	0.443	1	24	376625	0	Standard
	Sb	**121**	**0.003**	ug/L	0.001	35	140	170	5	Standard
	Sb	**123**	**0.003**	ug/L	0.001	28	109	134	3	Standard
>	**Tb**	**159**		ug/L			636863	680743	0	Standard
	Pb	**208**	**58.749**	ug/L	0.383	0	113	2731618	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0840-SRM1
Sample Dil Factor: 50
Comments:
Sample Date/Time: Saturday, April 01, 2023 20:16:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	22134	1	Standard
	Cl	37		ug/L			2981467	2945607	5	Standard
⌈>	Sc	45		ug/L			437323	440421	0	Standard
|	Cr	52	48.003	ug/L	0.203	0	16930	787363	1	Standard
⌊	Cr	53	48.251	ug/L	0.513	1	85	89403	0	Standard
⌈>	Ge	72		ug/L			20645	22553	1	KED
|	Cu	63	46.712	ug/L	1.327	2	40	120401	1	KED
|	Cu	65	47.933	ug/L	1.210	2	22	61897	0	KED
|	Zn	66	64.574	ug/L	1.023	1	23	20829	1	KED
|	Zn	67	69.285	ug/L	2.118	3	4	3725	1	KED
⌊	As	75	29.426	ug/L	0.327	1	3	5028	1	KED
	Y	89		ug/L			288003	547740	1	Standard
	Kr	83		ug/L			35	71	13	Standard
⌈>	In-1	115		ug/L			7190	7493	1	KED
|	Cd	111	32.977	ug/L	0.476	1	1	7568	1	KED
⌊	Cd	114	32.211	ug/L	0.388	1	3	18209	2	KED
⌈>	In	115		ug/L			410858	417891	0	Standard
|	Ag	107	28.128	ug/L	0.659	2	24	430625	1	Standard
|	Sb	121	0.720	ug/L	0.007	0	140	8509	0	Standard
⌊	Sb	123	0.771	ug/L	0.071	9	109	6905	8	Standard
⌈>	Tb	159		ug/L			636863	682820	0	Standard
⌊	Pb	208	86.043	ug/L	1.068	1	113	4012958	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 20:21:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19576	2	Standard
	Cl	**37**		ug/L			2981467	2935048	0	Standard
⎡>	**Sc**	**45**		ug/L			437323	400164	1	Standard
⎢	**Cr**	**52**	**-0.017**	ug/L	0.002	9	16930	15249	1	Standard
⎣	**Cr**	**53**	**-0.003**	ug/L	0.004	165	85	73	10	Standard
⎡>	**Ge**	**72**		ug/L			20645	20775	2	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.003	394	40	38	19	KED
⎢	**Cu**	**65**	**-0.009**	ug/L	0.006	60	22	11	60	KED
⎢	**Zn**	**66**	**-0.026**	ug/L	0.019	71	23	15	34	KED
⎢	**Zn**	**67**	**-0.078**	ug/L	0.022	27	4	0	173	KED
⎣	**As**	**75**	**-0.003**	ug/L	0.007	205	3	3	34	KED
	Y	**89**		ug/L			288003	263347	1	Standard
	Kr	**83**		ug/L			35	49	20	Standard
⎡>	**In-1**	**115**		ug/L			7190	7265	1	KED
⎢	**Cd**	**111**	**-0.001**	ug/L	0.002	166	1	1	43	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.004	298	3	2	88	KED
⎡>	**In**	**115**		ug/L			410858	402736	1	Standard
⎢	**Ag**	**107**	**0.002**	ug/L	0.001	26	24	59	16	Standard
⎢	**Sb**	**121**	**-0.007**	ug/L	0.000	4	140	58	7	Standard
⎣	**Sb**	**123**	**-0.006**	ug/L	0.001	20	109	53	20	Standard
⎡>	**Tb**	**159**		ug/L			636863	627818	1	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.000	21	113	199	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 20:26:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	18926	2	Standard
	Cl	**37**		ug/L			2981467	3012714	2	Standard
⌈>	**Sc**	**45**		ug/L			437323	423380	0	Standard
|	**Cr**	**52**	**48.515**	ug/L	0.671	1	16930	764783	1	Standard
⌊	**Cr**	**53**	**48.802**	ug/L	0.735	1	85	86930	1	Standard
⌈>	**Ge**	**72**		ug/L			20645	20382	7	KED
|	**Cu**	**63**	**49.542**	ug/L	3.243	6	40	115050	1	KED
|	**Cu**	**65**	**50.679**	ug/L	3.830	7	22	58935	1	KED
|	**Zn**	**66**	**49.264**	ug/L	3.971	8	23	14309	1	KED
|	**Zn**	**67**	**49.952**	ug/L	3.395	6	4	2421	1	KED
⌊	**As**	**75**	**50.056**	ug/L	3.082	6	3	7704	1	KED
	Y	**89**		ug/L			288003	273716	1	Standard
	Kr	**83**		ug/L			35	41	35	Standard
⌈>	**In-1**	**115**		ug/L			7190	7633	0	KED
|	**Cd**	**111**	**47.986**	ug/L	0.586	1	1	11218	0	KED
⌊	**Cd**	**114**	**47.691**	ug/L	0.163	0	3	27461	1	KED
⌈>	**In**	**115**		ug/L			410858	404434	1	Standard
|	**Ag**	**107**	**48.184**	ug/L	2.337	4	24	713609	3	Standard
|	**Sb**	**121**	**49.181**	ug/L	1.682	3	140	553326	1	Standard
⌊	**Sb**	**123**	**49.374**	ug/L	1.082	2	109	421352	0	Standard
⌈>	**Tb**	**159**		ug/L			636863	658804	0	Standard
⌊	**Pb**	**208**	**46.292**	ug/L	0.418	0	113	2083210	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 20:33:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19063	2	Standard
	Cl	**37**		ug/L			2981467	2986512	0	Standard
⌈>	**Sc**	**45**		ug/L			437323	400009	0	Standard
|	**Cr**	**52**	**0.008**	ug/L	0.010	123	16930	15602	0	Standard
⌊	**Cr**	**53**	**0.002**	ug/L	0.005	246	85	81	10	Standard
⌈>	**Ge**	**72**		ug/L			20645	21103	2	KED
|	**Cu**	**63**	**0.000**	ug/L	0.003	2292	40	41	19	KED
|	**Cu**	**65**	**-0.010**	ug/L	0.008	83	22	10	97	KED
|	**Zn**	**66**	**-0.025**	ug/L	0.020	78	23	16	35	KED
|	**Zn**	**67**	**0.010**	ug/L	0.056	563	4	5	57	KED
⌊	**As**	**75**	**0.001**	ug/L	0.006	983	3	3	21	KED
	Y	**89**		ug/L			288003	268904	2	Standard
	Kr	**83**		ug/L			35	40	18	Standard
⌈>	**In-1**	**115**		ug/L			7190	7164	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.004	152	1	0	100	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.004	15698	3	3	69	KED
⌈>	**In**	**115**		ug/L			410858	406521	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	70	24	50	38	Standard
|	**Sb**	**121**	**0.097**	ug/L	0.010	9	140	1235	7	Standard
⌊	**Sb**	**123**	**0.090**	ug/L	0.002	1	109	882	1	Standard
⌈>	**Tb**	**159**		ug/L			636863	630291	2	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	37	113	153	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0042-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 20:38:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	27690	2	Standard
	Cl	37		ug/L			2981467	2890327	1	Standard
>	Sc	45		ug/L			437323	614237	2	Standard
	Cr	52	16.406	ug/L	0.439	2	16930	390780	0	Standard
	Cr	53	16.943	ug/L	0.315	1	85	43851	1	Standard
>	Ge	72		ug/L			20645	21478	1	KED
	Cu	63	42.244	ug/L	2.516	5	40	103678	4	KED
	Cu	65	43.338	ug/L	0.899	2	22	53311	1	KED
	Zn	66	139.651	ug/L	3.286	2	23	42869	1	KED
	Zn	67	134.717	ug/L	2.844	2	4	6896	1	KED
	As	75	3.666	ug/L	0.134	3	3	599	2	KED
	Y	89		ug/L			288003	732433	0	Standard
	Kr	83		ug/L			35	157	5	Standard
>	In-1	115		ug/L			7190	7438	1	KED
	Cd	111	0.304	ug/L	0.044	14	1	70	14	KED
	Cd	114	0.285	ug/L	0.028	9	3	162	8	KED
>	In	115		ug/L			410858	410959	1	Standard
	Ag	107	0.314	ug/L	0.002	0	24	4755	1	Standard
	Sb	121	0.029	ug/L	0.003	9	140	470	5	Standard
	Sb	123	0.029	ug/L	0.003	10	109	357	8	Standard
>	Tb	159		ug/L			636863	690943	2	Standard
	Pb	208	26.106	ug/L	0.822	3	113	1231500	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0042-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 20:42:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	25637	1	Standard
	Cl	37		ug/L			2981467	2864490	2	Standard
>	Sc	45		ug/L			437323	584577	1	Standard
	Cr	52	15.430	ug/L	0.539	3	16930	351187	2	Standard
	Cr	53	16.208	ug/L	0.489	3	85	39927	1	Standard
>	Ge	72		ug/L			20645	21354	1	KED
	Cu	63	24.184	ug/L	0.452	1	40	59050	1	KED
	Cu	65	24.107	ug/L	0.648	2	22	29488	1	KED
	Zn	66	46.865	ug/L	0.119	0	23	14321	1	KED
	Zn	67	53.652	ug/L	0.762	1	4	2733	1	KED
	As	75	2.802	ug/L	0.107	3	3	456	3	KED
	Y	89		ug/L			288003	678328	1	Standard
	Kr	83		ug/L			35	122	12	Standard
>	In-1	115		ug/L			7190	7322	1	KED
	Cd	111	0.068	ug/L	0.012	17	1	16	14	KED
	Cd	114	0.062	ug/L	0.008	12	3	37	13	KED
>	In	115		ug/L			410858	405323	1	Standard
	Ag	107	0.085	ug/L	0.002	2	24	1290	3	Standard
	Sb	121	0.009	ug/L	0.002	18	140	236	8	Standard
	Sb	123	0.010	ug/L	0.002	25	109	193	11	Standard
>	Tb	159		ug/L			636863	682102	0	Standard
	Pb	208	3.705	ug/L	0.024	0	113	172728	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0042-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 20:47:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	23955	4	Standard
	Cl	37		ug/L			2981467	2934656	0	Standard
>	Sc	45		ug/L			437323	579057	1	Standard
	Cr	52	15.075	ug/L	0.068	0	16930	340462	1	Standard
	Cr	53	15.460	ug/L	0.205	1	85	37736	1	Standard
>	Ge	72		ug/L			20645	21189	2	KED
	Cu	63	27.802	ug/L	0.451	1	40	67347	1	KED
	Cu	65	28.024	ug/L	0.422	1	22	34013	1	KED
	Zn	66	47.678	ug/L	0.817	1	23	14454	1	KED
	Zn	67	54.312	ug/L	1.898	3	4	2744	1	KED
	As	75	2.758	ug/L	0.154	5	3	445	3	KED
	Y	89		ug/L			288003	681434	1	Standard
	Kr	83		ug/L			35	116	8	Standard
>	In-1	115		ug/L			7190	7326	0	KED
	Cd	111	0.055	ug/L	0.027	49	1	13	43	KED
	Cd	114	0.078	ug/L	0.041	53	3	45	49	KED
>	In	115		ug/L			410858	403225	0	Standard
	Ag	107	0.074	ug/L	0.003	3	24	1115	2	Standard
	Sb	121	0.003	ug/L	0.001	23	140	176	5	Standard
	Sb	123	0.002	ug/L	0.003	149	109	123	18	Standard
>	Tb	159		ug/L			636863	671915	1	Standard
	Pb	208	3.639	ug/L	0.064	1	113	167106	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0042-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 20:51:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	26373	5	Standard
	Cl	37		ug/L			2981467	2951775	1	Standard
>	Sc	45		ug/L			437323	588436	1	Standard
	Cr	52	15.378	ug/L	0.179	1	16930	352461	1	Standard
	Cr	53	16.172	ug/L	0.094	0	85	40116	2	Standard
>	Ge	72		ug/L			20645	21637	0	KED
	Cu	63	26.065	ug/L	0.295	1	40	64488	0	KED
	Cu	65	25.725	ug/L	0.435	1	22	31892	2	KED
	Zn	66	47.194	ug/L	1.058	2	23	14611	1	KED
	Zn	67	52.899	ug/L	1.885	3	4	2731	3	KED
	As	75	2.879	ug/L	0.077	2	3	475	3	KED
	Y	89		ug/L			288003	699209	2	Standard
	Kr	83		ug/L			35	128	11	Standard
>	In-1	115		ug/L			7190	7302	0	KED
	Cd	111	0.079	ug/L	0.018	22	1	19	20	KED
	Cd	114	0.068	ug/L	0.012	18	3	40	16	KED
>	In	115		ug/L			410858	405402	1	Standard
	Ag	107	0.085	ug/L	0.002	2	24	1285	3	Standard
	Sb	121	-0.000	ug/L	0.001	13017	140	138	5	Standard
	Sb	123	-0.001	ug/L	0.002	233	109	102	12	Standard
>	Tb	159		ug/L			636863	673601	0	Standard
	Pb	208	3.830	ug/L	0.028	0	113	176351	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0042-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 20:55:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	26699	3	Standard
	Cl	37		ug/L			2981467	2801317	0	Standard
>	Sc	45		ug/L			437323	576470	1	Standard
	Cr	52	15.192	ug/L	0.223	1	16930	341383	0	Standard
	Cr	53	15.684	ug/L	0.074	0	85	38118	1	Standard
>	Ge	72		ug/L			20645	21411	2	KED
	Cu	63	22.930	ug/L	0.372	1	40	56136	0	KED
	Cu	65	22.762	ug/L	0.872	3	22	27911	1	KED
	Zn	66	43.992	ug/L	0.546	1	23	13482	3	KED
	Zn	67	51.235	ug/L	1.642	3	4	2616	1	KED
	As	75	2.665	ug/L	0.065	2	3	435	3	KED
	Y	89		ug/L			288003	668009	1	Standard
	Kr	83		ug/L			35	125	12	Standard
>	In-1	115		ug/L			7190	7399	1	KED
	Cd	111	0.081	ug/L	0.005	6	1	20	4	KED
	Cd	114	0.075	ug/L	0.011	15	3	45	15	KED
>	In	115		ug/L			410858	401915	1	Standard
	Ag	107	0.079	ug/L	0.000	0	24	1191	1	Standard
	Sb	121	-0.001	ug/L	0.003	452	140	130	21	Standard
	Sb	123	-0.003	ug/L	0.001	46	109	86	13	Standard
>	Tb	159		ug/L			636863	674181	0	Standard
	Pb	208	3.576	ug/L	0.035	0	113	164792	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0042-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 21:00:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	24077	6	Standard
	Cl	37		ug/L			2981467	2904519	0	Standard
>	Sc	45		ug/L			437323	600001	1	Standard
	Cr	52	15.718	ug/L	0.395	2	16930	366787	2	Standard
	Cr	53	16.356	ug/L	0.268	1	85	41357	0	Standard
>	Ge	72		ug/L			20645	21449	3	KED
	Cu	63	24.901	ug/L	0.393	1	40	61064	2	KED
	Cu	65	25.663	ug/L	0.656	2	22	31524	1	KED
	Zn	66	46.889	ug/L	0.880	1	23	14386	1	KED
	Zn	67	54.830	ug/L	1.998	3	4	2804	1	KED
	As	75	3.061	ug/L	0.039	1	3	500	2	KED
	Y	89		ug/L			288003	698681	2	Standard
	Kr	83		ug/L			35	133	14	Standard
>	In-1	115		ug/L			7190	7458	0	KED
	Cd	111	0.079	ug/L	0.014	17	1	19	15	KED
	Cd	114	0.071	ug/L	0.022	30	3	43	27	KED
>	In	115		ug/L			410858	402642	1	Standard
	Ag	107	0.089	ug/L	0.010	10	24	1331	9	Standard
	Sb	121	-0.002	ug/L	0.002	141	140	118	22	Standard
	Sb	123	-0.001	ug/L	0.002	282	109	100	20	Standard
>	Tb	159		ug/L			636863	677921	0	Standard
	Pb	208	3.809	ug/L	0.058	1	113	176465	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0042-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 21:04:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	24327	1	Standard
	Cl	37		ug/L			2981467	2839137	1	Standard
>	Sc	45		ug/L			437323	574628	0	Standard
	Cr	52	17.305	ug/L	0.276	1	16930	384531	0	Standard
	Cr	53	17.917	ug/L	0.125	0	85	43386	0	Standard
>	Ge	72		ug/L			20645	21157	1	KED
	Cu	63	37.615	ug/L	0.580	1	40	91004	3	KED
	Cu	65	37.789	ug/L	0.602	1	22	45790	1	KED
	Zn	66	60.203	ug/L	1.881	3	23	18218	2	KED
	Zn	67	66.521	ug/L	1.335	2	4	3357	2	KED
	As	75	3.075	ug/L	0.228	7	3	496	8	KED
	Y	89		ug/L			288003	659241	1	Standard
	Kr	83		ug/L			35	135	4	Standard
>	In-1	115		ug/L			7190	7348	2	KED
	Cd	111	0.107	ug/L	0.011	10	1	25	7	KED
	Cd	114	0.113	ug/L	0.025	22	3	65	20	KED
>	In	115		ug/L			410858	396707	2	Standard
	Ag	107	0.122	ug/L	0.005	4	24	1794	2	Standard
	Sb	121	0.000	ug/L	0.001	336	140	140	12	Standard
	Sb	123	-0.000	ug/L	0.002	674	109	103	13	Standard
>	Tb	159		ug/L			636863	672792	0	Standard
	Pb	208	6.568	ug/L	0.085	1	113	301898	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0042-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Saturday, April 01, 2023 21:09:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	23622	1	Standard
	Cl	37		ug/L			2981467	2876840	0	Standard
>	Sc	45		ug/L			437323	565291	1	Standard
	Cr	52	16.856	ug/L	0.227	1	16930	369033	0	Standard
	Cr	53	17.159	ug/L	0.131	0	85	40879	0	Standard
>	Ge	72		ug/L			20645	21725	0	KED
	Cu	63	23.471	ug/L	0.260	1	40	58314	1	KED
	Cu	65	23.867	ug/L	0.245	1	22	29708	1	KED
	Zn	66	49.304	ug/L	0.869	1	23	15328	2	KED
	Zn	67	54.823	ug/L	3.463	6	4	2840	5	KED
	As	75	2.736	ug/L	0.140	5	3	453	4	KED
	Y	89		ug/L			288003	639754	1	Standard
	Kr	83		ug/L			35	116	9	Standard
>	In-1	115		ug/L			7190	7516	2	KED
	Cd	111	0.063	ug/L	0.005	8	1	16	10	KED
	Cd	114	0.075	ug/L	0.018	23	3	45	24	KED
>	In	115		ug/L			410858	408853	0	Standard
	Ag	107	0.086	ug/L	0.003	3	24	1314	3	Standard
	Sb	121	-0.004	ug/L	0.001	31	140	92	15	Standard
	Sb	123	-0.004	ug/L	0.000	10	109	75	4	Standard
>	Tb	159		ug/L			636863	676019	0	Standard
	Pb	208	4.179	ug/L	0.035	0	113	193050	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL9
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 21:13:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19952	2	Standard
	Cl	**37**		ug/L			2981467	2797096	0	Standard
⌈>	**Sc**	**45**		ug/L			437323	390602	0	Standard
|	**Cr**	**52**	**-0.008**	ug/L	0.028	364	16930	15015	3	Standard
⌊	**Cr**	**53**	**0.026**	ug/L	0.022	83	85	119	30	Standard
⌈>	**Ge**	**72**		ug/L			20645	20984	1	KED
|	**Cu**	**63**	**-0.007**	ug/L	0.004	63	40	25	37	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.009	384	22	19	53	KED
|	**Zn**	**66**	**-0.031**	ug/L	0.026	85	23	14	52	KED
|	**Zn**	**67**	**-0.027**	ug/L	0.059	220	4	3	91	KED
⌊	**As**	**75**	**0.009**	ug/L	0.015	171	3	5	47	KED
	Y	**89**		ug/L			288003	262695	4	Standard
	Kr	**83**		ug/L			35	41	15	Standard
⌈>	**In-1**	**115**		ug/L			7190	7246	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.000	1	1	0		KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.004	113	3	1	180	KED
⌈>	**In**	**115**		ug/L			410858	400055	1	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.000	6	24	32	0	Standard
|	**Sb**	**121**	**-0.007**	ug/L	0.001	10	140	63	12	Standard
⌊	**Sb**	**123**	**-0.006**	ug/L	0.000	7	109	55	7	Standard
⌈>	**Tb**	**159**		ug/L			636863	624119	0	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.006	178	113	248	98	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 21:18:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19141	6	Standard
	Cl	**37**		ug/L			2981467	2977769	1	Standard
⌈>	**Sc**	**45**		ug/L			437323	405621	2	Standard
|	**Cr**	**52**	**48.846**	ug/L	0.263	0	16930	737626	2	Standard
⌊	**Cr**	**53**	**50.185**	ug/L	1.336	2	85	85608	0	Standard
⌈>	**Ge**	**72**		ug/L			20645	20998	2	KED
|	**Cu**	**63**	**48.660**	ug/L	0.326	0	40	116798	1	KED
|	**Cu**	**65**	**48.749**	ug/L	0.784	1	22	58622	1	KED
|	**Zn**	**66**	**48.626**	ug/L	1.788	3	23	14603	1	KED
|	**Zn**	**67**	**49.393**	ug/L	1.602	3	4	2474	2	KED
⌊	**As**	**75**	**48.797**	ug/L	1.573	3	3	7758	1	KED
	Y	**89**		ug/L			288003	270420	0	Standard
	Kr	**83**		ug/L			35	43	30	Standard
⌈>	**In-1**	**115**		ug/L			7190	7259	2	KED
|	**Cd**	**111**	**48.676**	ug/L	1.564	3	1	10817	1	KED
⌊	**Cd**	**114**	**47.796**	ug/L	0.499	1	3	26170	2	KED
⌈>	**In**	**115**		ug/L			410858	401418	2	Standard
|	**Ag**	**107**	**48.264**	ug/L	1.933	4	24	709384	1	Standard
|	**Sb**	**121**	**49.219**	ug/L	1.324	2	140	549609	0	Standard
⌊	**Sb**	**123**	**49.417**	ug/L	0.867	1	109	418566	0	Standard
⌈>	**Tb**	**159**		ug/L			636863	656337	2	Standard
⌊	**Pb**	**208**	**45.689**	ug/L	0.351	0	113	2048045	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 21:25:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19233	0	Standard
	Cl	**37**		ug/L			2981467	2903709	2	Standard
⌈>	**Sc**	**45**		ug/L			437323	387893	1	Standard
|	**Cr**	**52**	**0.015**	ug/L	0.018	116	16930	15230	0	Standard
⌊	**Cr**	**53**	**-0.003**	ug/L	0.004	144	85	71	9	Standard
⌈>	**Ge**	**72**		ug/L			20645	20932	1	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.003	217	40	37	20	KED
|	**Cu**	**65**	**0.003**	ug/L	0.008	230	22	26	35	KED
|	**Zn**	**66**	**-0.012**	ug/L	0.009	72	23	20	14	KED
|	**Zn**	**67**	**-0.027**	ug/L	0.021	79	4	3	34	KED
⌊	**As**	**75**	**0.001**	ug/L	0.003	431	3	3	12	KED
	Y	**89**		ug/L			288003	251780	2	Standard
	Kr	**83**		ug/L			35	50	28	Standard
⌈>	**In-1**	**115**		ug/L			7190	7343	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.005	314	1	1	86	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.002	2870	3	3	34	KED
⌈>	**In**	**115**		ug/L			410858	394551	2	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	42	24	47	22	Standard
|	**Sb**	**121**	**0.097**	ug/L	0.003	3	140	1195	1	Standard
⌊	**Sb**	**123**	**0.100**	ug/L	0.003	2	109	942	3	Standard
⌈>	**Tb**	**159**		ug/L			636863	625394	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	108	113	134	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 21:29:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	2715412	5	Standard
	Cl	**37**		ug/L			2981467	3120347	0	Standard
⌈>	**Sc**	**45**		ug/L			437323	465928	1	Standard
|	**Cr**	**52**	**12.355**	ug/L	0.305	2	16930	227804	3	Standard
⌊	**Cr**	**53**	**1.480**	ug/L	0.067	4	85	2987	3	Standard
⌈>	**Ge**	**72**		ug/L			20645	23529	0	KED
|	**Cu**	**63**	**0.727**	ug/L	0.031	4	40	2002	4	KED
|	**Cu**	**65**	**0.751**	ug/L	0.017	2	22	1037	2	KED
|	**Zn**	**66**	**0.887**	ug/L	0.035	3	23	325	3	KED
|	**Zn**	**67**	**0.771**	ug/L	0.169	21	4	48	19	KED
⌊	**As**	**75**	**0.010**	ug/L	0.012	124	3	5	36	KED
	Y	**89**		ug/L			288003	301653	0	Standard
	Kr	**83**		ug/L			35	44	4	Standard
⌈>	**In-1**	**115**		ug/L			7190	8261	1	KED
|	**Cd**	**111**	**0.002**	ug/L	0.008	490	1	2	89	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.003	97	3	5	34	KED
⌈>	**In**	**115**		ug/L			410858	445333	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	66	24	52	32	Standard
|	**Sb**	**121**	**0.030**	ug/L	0.004	14	140	518	9	Standard
⌊	**Sb**	**123**	**0.031**	ug/L	0.005	15	109	406	9	Standard
⌈>	**Tb**	**159**		ug/L			636863	709399	2	Standard
⌊	**Pb**	**208**	**0.136**	ug/L	0.006	4	113	6705	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 21:34:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	177617	4	Standard
	Cl	37		ug/L			2981467	2932878	0	Standard
>	Sc	45		ug/L			437323	421962	0	Standard
	Cr	52	1.465	ug/L	0.052	3	16930	38852	1	Standard
	Cr	53	0.723	ug/L	0.024	3	85	1364	2	Standard
>	Ge	72		ug/L			20645	21937	0	KED
	Cu	63	0.101	ug/L	0.009	8	40	295	7	KED
	Cu	65	0.102	ug/L	0.017	16	22	151	14	KED
	Zn	66	0.435	ug/L	0.087	20	23	161	17	KED
	Zn	67	0.347	ug/L	0.036	10	4	22	8	KED
	As	75	0.012	ug/L	0.006	50	3	5	16	KED
	Y	89		ug/L			288003	274809	3	Standard
	Kr	83		ug/L			35	38	24	Standard
>	In-1	115		ug/L			7190	7520	2	KED
	Cd	111	0.001	ug/L	0.011	903	1	1	132	KED
	Cd	114	-0.003	ug/L	0.000	4	3	1	1	KED
>	In	115		ug/L			410858	417949	1	Standard
	Ag	107	0.001	ug/L	0.000	39	24	40	14	Standard
	Sb	121	0.011	ug/L	0.001	7	140	267	2	Standard
	Sb	123	0.012	ug/L	0.002	14	109	219	5	Standard
>	Tb	159		ug/L			636863	661906	0	Standard
	Pb	208	0.104	ug/L	0.002	1	113	4804	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 21:38:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	3358257	3	Standard
	Cl	**37**		ug/L			2981467	3038146	2	Standard
⌈>	**Sc**	**45**		ug/L			437323	501826	2	Standard
|	**Cr**	**52**	**15.823**	ug/L	0.295	1	16930	308657	1	Standard
⌊	**Cr**	**53**	**2.217**	ug/L	0.035	1	85	4773	2	Standard
⌈>	**Ge**	**72**		ug/L			20645	23044	2	KED
|	**Cu**	**63**	**0.169**	ug/L	0.010	5	40	490	6	KED
|	**Cu**	**65**	**0.159**	ug/L	0.014	8	22	233	5	KED
|	**Zn**	**66**	**0.484**	ug/L	0.036	7	23	185	3	KED
|	**Zn**	**67**	**0.512**	ug/L	0.176	34	4	33	28	KED
⌊	**As**	**75**	**11.924**	ug/L	0.408	3	3	2084	3	KED
	Y	**89**		ug/L			288003	331858	2	Standard
	Kr	**83**		ug/L			35	786	4	Standard
⌈>	**In-1**	**115**		ug/L			7190	7692	1	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.002	52	1	0	86	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.003	118	3	1	122	KED
⌈>	**In**	**115**		ug/L			410858	427298	0	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	130	24	38	45	Standard
|	**Sb**	**121**	**0.169**	ug/L	0.009	5	140	2151	5	Standard
⌊	**Sb**	**123**	**0.171**	ug/L	0.007	4	109	1652	4	Standard
⌈>	**Tb**	**159**		ug/L			636863	664002	0	Standard
⌊	**Pb**	**208**	**0.088**	ug/L	0.002	2	113	4091	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-04
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 21:42:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			18011	2155163	14	Standard
	Cl	37		ug/L			2981467	3117564	3	Standard
>	Sc	45		ug/L			437323	558840	1	Standard
	Cr	52	11.020	ug/L	0.462	4	16930	245921	2	Standard
	Cr	53	2.125	ug/L	0.079	3	85	5097	1	Standard
>	Ge	72		ug/L			20645	21669	3	KED
	Cu	63	0.807	ug/L	0.020	2	40	2040	2	KED
	Cu	65	0.737	ug/L	0.054	7	22	937	7	KED
	Zn	66	0.503	ug/L	0.114	22	23	180	22	KED
	Zn	67	0.541	ug/L	0.212	39	4	32	31	KED
	As	75	0.187	ug/L	0.025	13	3	34	15	KED
	Y	89		ug/L			288003	350674	1	Standard
	Kr	83		ug/L			35	988	0	Standard
>	In-1	115		ug/L			7190	7464	1	KED
	Cd	111	-0.004	ug/L	0.002	54	1	0	86	KED
	Cd	114	-0.000	ug/L	0.005	1780	3	3	94	KED
>	In	115		ug/L			410858	430830	2	Standard
	Ag	107	0.001	ug/L	0.000	53	24	36	13	Standard
	Sb	121	0.005	ug/L	0.001	23	140	212	4	Standard
	Sb	123	0.005	ug/L	0.002	41	109	156	13	Standard
>	Tb	159		ug/L			636863	682656	0	Standard
	Pb	208	0.068	ug/L	0.002	2	113	3283	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-05
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 21:47:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	225070	3	Standard
	Cl	**37**		ug/L			2981467	2946352	4	Standard
⌈>	**Sc**	**45**		ug/L			437323	501331	2	Standard
|	**Cr**	**52**	**1.255**	ug/L	0.055	4	16930	42323	0	Standard
⌊	**Cr**	**53**	**0.294**	ug/L	0.014	4	85	716	2	Standard
⌈>	**Ge**	**72**		ug/L			20645	21519	0	KED
|	**Cu**	**63**	**0.152**	ug/L	0.016	10	40	416	9	KED
|	**Cu**	**65**	**0.160**	ug/L	0.007	4	22	219	3	KED
|	**Zn**	**66**	**0.583**	ug/L	0.071	12	23	203	10	KED
|	**Zn**	**67**	**0.640**	ug/L	0.077	11	4	37	10	KED
⌊	**As**	**75**	**0.007**	ug/L	0.022	323	3	4	73	KED
	Y	**89**		ug/L			288003	340984	1	Standard
	Kr	**83**		ug/L			35	74	13	Standard
⌈>	**In-1**	**115**		ug/L			7190	7060	1	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.003	59	1	0	86	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.008	721	3	2	182	KED
⌈>	**In**	**115**		ug/L			410858	411517	1	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	56	24	40	22	Standard
|	**Sb**	**121**	**0.002**	ug/L	0.001	37	140	165	4	Standard
⌊	**Sb**	**123**	**0.002**	ug/L	0.001	57	109	128	9	Standard
⌈>	**Tb**	**159**		ug/L			636863	642239	0	Standard
⌊	**Pb**	**208**	**0.047**	ug/L	0.001	1	113	2183	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0640-06
Sample Dil Factor: 2
Comments:
Sample Date/Time: Saturday, April 01, 2023 21:51:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	1853703	5	Standard
	Cl	**37**		ug/L			2981467	3070373	3	Standard
⌈>	**Sc**	**45**		ug/L			437323	527164	1	Standard
|	**Cr**	**52**	**10.338**	ug/L	0.063	0	16930	218967	1	Standard
⌊	**Cr**	**53**	**1.486**	ug/L	0.055	3	85	3395	2	Standard
⌈>	**Ge**	**72**		ug/L			20645	21836	1	KED
|	**Cu**	**63**	**0.142**	ug/L	0.017	11	40	396	9	KED
|	**Cu**	**65**	**0.123**	ug/L	0.006	4	22	177	3	KED
|	**Zn**	**66**	**2.028**	ug/L	0.141	6	23	657	5	KED
|	**Zn**	**67**	**1.802**	ug/L	0.052	2	4	98	2	KED
⌊	**As**	**75**	**2.247**	ug/L	0.092	4	3	375	4	KED
	Y	**89**		ug/L			288003	347276	2	Standard
	Kr	**83**		ug/L			35	1142	7	Standard
⌈>	**In-1**	**115**		ug/L			7190	7145	2	KED
|	**Cd**	**111**	**0.001**	ug/L	0.004	287	1	1	50	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.004	213	3	4	52	KED
⌈>	**In**	**115**		ug/L			410858	406523	1	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.001	110	24	31	25	Standard
|	**Sb**	**121**	**0.062**	ug/L	0.005	7	140	845	5	Standard
⌊	**Sb**	**123**	**0.067**	ug/L	0.003	4	109	683	2	Standard
⌈>	**Tb**	**159**		ug/L			636863	649169	1	Standard
⌊	**Pb**	**208**	**0.095**	ug/L	0.003	2	113	4334	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLA
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 21:56:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	20196	3	Standard
	Cl	**37**		ug/L			2981467	2678132	3	Standard
⌈>	**Sc**	**45**		ug/L			437323	445524	1	Standard
|	**Cr**	**52**	**-0.062**	ug/L	0.025	40	16930	16242	3	Standard
⌊	**Cr**	**53**	**0.006**	ug/L	0.011	169	85	98	19	Standard
⌈>	**Ge**	**72**		ug/L			20645	19419	2	KED
|	**Cu**	**63**	**-0.007**	ug/L	0.003	46	40	22	28	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.009	395	22	18	58	KED
|	**Zn**	**66**	**-0.041**	ug/L	0.011	27	23	10	26	KED
|	**Zn**	**67**	**-0.009**	ug/L	0.070	783	4	3	86	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.014	3005	3	3	62	KED
	Y	**89**		ug/L			288003	293084	1	Standard
	Kr	**83**		ug/L			35	78	14	Standard
⌈>	**In-1**	**115**		ug/L			7190	6286	0	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.003	73	1	0	86	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.002	53	3	0	188	KED
⌈>	**In**	**115**		ug/L			410858	354492	1	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.000	221	24	23	26	Standard
|	**Sb**	**121**	**-0.004**	ug/L	0.000	4	140	79	3	Standard
⌊	**Sb**	**123**	**-0.006**	ug/L	0.001	9	109	52	7	Standard
⌈>	**Tb**	**159**		ug/L			636863	551377	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	135	113	106	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 22:00:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	18206	2	Standard
	Cl	**37**		ug/L			2981467	3012976	3	Standard
⌈>	**Sc**	**45**		ug/L			437323	439831	1	Standard
|	**Cr**	**52**	**48.416**	ug/L	2.528	5	16930	792500	3	Standard
⌊	**Cr**	**53**	**49.139**	ug/L	2.012	4	85	90895	2	Standard
⌈>	**Ge**	**72**		ug/L			20645	18967	0	KED
|	**Cu**	**63**	**52.161**	ug/L	2.074	3	40	113102	4	KED
|	**Cu**	**65**	**51.747**	ug/L	0.527	1	22	56213	1	KED
|	**Zn**	**66**	**51.217**	ug/L	1.167	2	23	13900	2	KED
|	**Zn**	**67**	**50.738**	ug/L	1.667	3	4	2296	3	KED
⌊	**As**	**75**	**49.348**	ug/L	0.368	0	3	7090	1	KED
	Y	**89**		ug/L			288003	304611	1	Standard
	Kr	**83**		ug/L			35	42	5	Standard
⌈>	**In-1**	**115**		ug/L			7190	6338	0	KED
|	**Cd**	**111**	**50.692**	ug/L	0.519	1	1	9841	0	KED
⌊	**Cd**	**114**	**50.555**	ug/L	1.488	2	3	24175	3	KED
⌈>	**In**	**115**		ug/L			410858	357279	1	Standard
|	**Ag**	**107**	**52.369**	ug/L	0.767	1	24	685393	0	Standard
|	**Sb**	**121**	**49.898**	ug/L	0.749	1	140	496042	0	Standard
⌊	**Sb**	**123**	**50.086**	ug/L	0.511	1	109	377643	0	Standard
⌈>	**Tb**	**159**		ug/L			636863	584628	0	Standard
⌊	**Pb**	**208**	**57.514**	ug/L	1.012	1	113	2296712	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 22:07:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19162	1	Standard
	Cl	**37**		ug/L			2981467	2823063	2	Standard
⌈>	**Sc**	**45**		ug/L			437323	426870	1	Standard
|	**Cr**	**52**	**-0.025**	ug/L	0.021	83	16930	16130	2	Standard
⌊	**Cr**	**53**	**-0.001**	ug/L	0.008	1099	85	82	17	Standard
⌈>	**Ge**	**72**		ug/L			20645	19049	3	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.002	103	40	33	17	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.003	218	22	19	17	KED
|	**Zn**	**66**	**-0.017**	ug/L	0.010	62	23	17	19	KED
|	**Zn**	**67**	**0.090**	ug/L	0.058	64	4	8	35	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.005	1573	3	3	24	KED
	Y	**89**		ug/L			288003	298841	2	Standard
	Kr	**83**		ug/L			35	44	10	Standard
⌈>	**In-1**	**115**		ug/L			7190	6104	1	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.006	151	1	0	173	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.002	54	3	0	188	KED
⌈>	**In**	**115**		ug/L			410858	355096	2	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	102	24	36	41	Standard
|	**Sb**	**121**	**0.096**	ug/L	0.005	5	140	1067	6	Standard
⌊	**Sb**	**123**	**0.099**	ug/L	0.010	10	109	836	11	Standard
⌈>	**Tb**	**159**		ug/L			636863	562391	2	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	65	113	123	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 22:12:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	23781	4	Standard
	Cl	**37**		ug/L			2981467	3081168	1	Standard
⌈>	**Sc**	**45**		ug/L			437323	535712	3	Standard
|	**Cr**	**52**	**-0.029**	ug/L	0.018	62	16930	20158	2	Standard
⌊	**Cr**	**53**	**0.012**	ug/L	0.000	2	85	131	3	Standard
⌈>	**Ge**	**72**		ug/L			20645	21061	1	KED
|	**Cu**	**63**	**0.032**	ug/L	0.007	23	40	118	15	KED
|	**Cu**	**65**	**0.036**	ug/L	0.001	2	22	66	0	KED
|	**Zn**	**66**	**0.174**	ug/L	0.029	16	23	76	10	KED
|	**Zn**	**67**	**0.188**	ug/L	0.056	29	4	13	20	KED
⌊	**As**	**75**	**-0.008**	ug/L	0.005	60	3	2	34	KED
	Y	**89**		ug/L			288003	349453	0	Standard
	Kr	**83**		ug/L			35	49	10	Standard
⌈>	**In-1**	**115**		ug/L			7190	6895	0	KED
|	**Cd**	**111**	**0.002**	ug/L	0.009	498	1	1	100	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.002	125	3	2	44	KED
⌈>	**In**	**115**		ug/L			410858	402747	1	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.000	88	24	29	16	Standard
|	**Sb**	**121**	**0.052**	ug/L	0.003	6	140	720	5	Standard
⌊	**Sb**	**123**	**0.049**	ug/L	0.003	7	109	527	5	Standard
⌈>	**Tb**	**159**		ug/L			636863	630690	2	Standard
⌊	**Pb**	**208**	**0.012**	ug/L	0.001	10	113	620	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 22:16:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	22822	0	Standard
	Cl	**37**		ug/L			2981467	3040903	5	Standard
⌈>	**Sc**	**45**		ug/L			437323	504696	6	Standard
|	**Cr**	**52**	**-0.004**	ug/L	0.045	1236	16930	19438	2	Standard
⌊	**Cr**	**53**	**0.022**	ug/L	0.007	33	85	145	6	Standard
⌈>	**Ge**	**72**		ug/L			20645	20782	0	KED
|	**Cu**	**63**	**0.028**	ug/L	0.003	11	40	107	6	KED
|	**Cu**	**65**	**0.028**	ug/L	0.009	33	22	55	19	KED
|	**Zn**	**66**	**0.205**	ug/L	0.024	11	23	84	8	KED
|	**Zn**	**67**	**0.115**	ug/L	0.081	70	4	10	39	KED
⌊	**As**	**75**	**-0.012**	ug/L	0.007	56	3	1	62	KED
	Y	**89**		ug/L			288003	331124	4	Standard
	Kr	**83**		ug/L			35	56	33	Standard
⌈>	**In-1**	**115**		ug/L			7190	6715	4	KED
|	**Cd**	**111**	**0.003**	ug/L	0.010	300	1	2	98	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.000	14	3	1	4	KED
⌈>	**In**	**115**		ug/L			410858	382684	5	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	97	24	39	36	Standard
|	**Sb**	**121**	**0.019**	ug/L	0.004	22	140	329	14	Standard
⌊	**Sb**	**123**	**0.013**	ug/L	0.004	29	109	209	19	Standard
⌈>	**Tb**	**159**		ug/L			636863	612551	4	Standard
⌊	**Pb**	**208**	**0.012**	ug/L	0.001	11	113	605	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 22:21:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	23282	0	Standard
	Cl	**37**		ug/L			2981467	3095530	2	Standard
⎡>	**Sc**	**45**		ug/L			437323	509128	4	Standard
⎢	**Cr**	**52**	**0.005**	ug/L	0.036	693	16930	19789	1	Standard
⎣	**Cr**	**53**	**0.012**	ug/L	0.002	18	85	124	1	Standard
⎡>	**Ge**	**72**		ug/L			20645	20818	1	KED
⎢	**Cu**	**63**	**0.030**	ug/L	0.002	6	40	112	3	KED
⎢	**Cu**	**65**	**0.023**	ug/L	0.006	25	22	50	14	KED
⎢	**Zn**	**66**	**0.196**	ug/L	0.014	6	23	81	4	KED
⎢	**Zn**	**67**	**0.255**	ug/L	0.072	28	4	17	22	KED
⎣	**As**	**75**	**-0.008**	ug/L	0.011	128	3	2	72	KED
	Y	**89**		ug/L			288003	332079	2	Standard
	Kr	**83**		ug/L			35	43	7	Standard
⎡>	**In-1**	**115**		ug/L			7190	6741	1	KED
⎢	**Cd**	**111**	**-0.003**	ug/L	0.005	181	1	0	100	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.002	197	3	2	41	KED
⎡>	**In**	**115**		ug/L			410858	381072	1	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.000	235	24	24	23	Standard
⎢	**Sb**	**121**	**0.006**	ug/L	0.001	20	140	189	7	Standard
⎣	**Sb**	**123**	**0.005**	ug/L	0.001	17	109	140	5	Standard
⎡>	**Tb**	**159**		ug/L			636863	620562	0	Standard
⎣	**Pb**	**208**	**0.012**	ug/L	0.001	7	113	607	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 22:25:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19071	2	Standard
	Cl	**37**		ug/L			2981467	2716593	2	Standard
⌈>	**Sc**	**45**		ug/L			437323	404456	0	Standard
|	**Cr**	**52**	**-0.075**	ug/L	0.009	11	16930	14550	0	Standard
⌊	**Cr**	**53**	**-0.005**	ug/L	0.003	55	85	70	6	Standard
⌈>	**Ge**	**72**		ug/L			20645	18318	0	KED
|	**Cu**	**63**	**-0.007**	ug/L	0.003	45	40	20	32	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.008	315	22	17	48	KED
|	**Zn**	**66**	**-0.038**	ug/L	0.015	39	23	10	36	KED
|	**Zn**	**67**	**-0.090**	ug/L			4	0		KED
⌊	**As**	**75**	**-0.001**	ug/L	0.012	2322	3	3	52	KED
	Y	**89**		ug/L			288003	276937	0	Standard
	Kr	**83**		ug/L			35	40	10	Standard
⌈>	**In-1**	**115**		ug/L			7190	6015	0	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.009	425	1	0	173	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.002	79	3	1	86	KED
⌈>	**In**	**115**		ug/L			410858	343837	0	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.000	498	24	20	18	Standard
|	**Sb**	**121**	**-0.006**	ug/L	0.001	23	140	59	22	Standard
⌊	**Sb**	**123**	**-0.006**	ug/L	0.000	1	109	46	2	Standard
⌈>	**Tb**	**159**		ug/L			636863	532804	1	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	18	113	48	18	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 22:29:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19378	3	Standard
	Cl	**37**		ug/L			2981467	2661718	3	Standard
⌈>	**Sc**	**45**		ug/L			437323	405542	1	Standard
|	**Cr**	**52**	**-0.071**	ug/L	0.037	51	16930	14648	2	Standard
⌊	**Cr**	**53**	**-0.004**	ug/L	0.006	139	85	72	12	Standard
⌈>	**Ge**	**72**		ug/L			20645	18542	2	KED
|	**Cu**	**63**	**-0.003**	ug/L	0.001	44	40	31	7	KED
|	**Cu**	**65**	**-0.009**	ug/L	0.004	38	22	10	39	KED
|	**Zn**	**66**	**-0.041**	ug/L	0.008	18	23	10	21	KED
|	**Zn**	**67**	**0.013**	ug/L	0.178	1413	4	4	173	KED
⌊	**As**	**75**	**0.000**	ug/L	0.007	1608	3	3	28	KED
	Y	**89**		ug/L			288003	278222	3	Standard
	Kr	**83**		ug/L			35	48	5	Standard
⌈>	**In-1**	**115**		ug/L			7190	6038	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.005	241	1	0	100	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.004	244	3	1	101	KED
⌈>	**In**	**115**		ug/L			410858	336053	2	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	74	24	18	5	Standard
|	**Sb**	**121**	**-0.006**	ug/L	0.001	19	140	55	22	Standard
⌊	**Sb**	**123**	**-0.007**	ug/L	0.001	15	109	41	17	Standard
⌈>	**Tb**	**159**		ug/L			636863	525318	1	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	13	113	50	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Saturday, April 01, 2023 22:34:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\040123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			18011	19735	1	Standard
	Cl	**37**		ug/L			2981467	2661535	1	Standard
⌈>	**Sc**	**45**		ug/L			437323	407183	2	Standard
|	**Cr**	**52**	**-0.057**	ug/L	0.013	22	16930	14913	0	Standard
⌊	**Cr**	**53**	**-0.008**	ug/L	0.006	78	85	66	16	Standard
⌈>	**Ge**	**72**		ug/L			20645	18221	1	KED
|	**Cu**	**63**	**-0.007**	ug/L	0.007	105	40	21	66	KED
|	**Cu**	**65**	**-0.007**	ug/L	0.001	13	22	12	8	KED
|	**Zn**	**66**	**-0.053**	ug/L	0.019	35	23	6	68	KED
|	**Zn**	**67**	**-0.075**	ug/L	0.026	34	4	0	173	KED
⌊	**As**	**75**	**-0.009**	ug/L	0.009	99	3	1	66	KED
	Y	**89**		ug/L			288003	279185	1	Standard
	Kr	**83**		ug/L			35	53	15	Standard
⌈>	**In-1**	**115**		ug/L			7190	5874	2	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.005	299	1	0	100	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.005	373	3	3	69	KED
⌈>	**In**	**115**		ug/L			410858	335613	1	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.000	195	24	22	21	Standard
|	**Sb**	**121**	**-0.007**	ug/L	0.001	21	140	52	26	Standard
⌊	**Sb**	**123**	**-0.007**	ug/L	0.001	22	109	43	25	Standard
⌈>	**Tb**	**159**		ug/L			636863	529102	1	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	27	113	50	25	Standard

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Control Limt: +/- 10.00%
Sequence: SLC0521

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0521-ICV1	Arsenic-75a	50.000	47.9	95.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.8	99.5	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
SLC0521-CCV1	Arsenic-75a	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.5	105	ug/L	PA 6020B UCT-KE
SLC0521-CCV2	Arsenic-75a	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.6	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.3	105	ug/L	PA 6020B UCT-KE
SLC0521-CCV3	Arsenic-75a	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.1	98.1	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.1	104	ug/L	PA 6020B UCT-KE
SLC0521-CCV4	Arsenic-75a	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.1	102	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Control Limt: +/- 10.00%
Sequence: SLC0521

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0521-CCV4	Zinc-67	50.000	51.5	103	ug/L	PA 6020B UCT-KE
SLC0521-CCV5	Arsenic-75a	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.7	101	ug/L	PA 6020B UCT-KE
SLC0521-CCV6	Arsenic-75a	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.9	97.7	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.1	102	ug/L	PA 6020B UCT-KE
SLC0521-CCV7	Arsenic-75a	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.8	104	ug/L	PA 6020B UCT-KE
SLC0521-CCV8	Arsenic-75a	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.4	105	ug/L	PA 6020B UCT-KE
SLC0521-CCV9	Arsenic-75a	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	54.7	109	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	56.1	112	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.3	105	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Control Limt: +/- 10.00%
Sequence: SLC0521

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0521-CCV9	Zinc-66	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	53.2	106	ug/L	PA 6020B UCT-KE
SLC0521-CCVA	Arsenic-75a	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.6	105	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.8	106	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.4	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.7	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	53.3	107	ug/L	PA 6020B UCT-KE
SLC0521-CCVB	Arsenic-75a	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.1	104	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	53.8	108	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.8	106	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	53.2	106	ug/L	PA 6020B UCT-KE
SLC0521-CCVC	Arsenic-75a	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.3	101	ug/L	PA 6020B UCT-KE
SLC0521-CCVD	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.8	106	ug/L	PA 6020B UCT-KE
SLC0521-CCVE	Arsenic-75a	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.4	105	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.9	102	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Control Limt: +/- 10.00%
Sequence: SLC0521

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0521-CCVE	Copper-65	50.000	52.1	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.1	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.7	105	ug/L	PA 6020B UCT-KE
SLC0521-CCVF	Arsenic-75a	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	58.9	118	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	60.2	120	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.4	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.0	102	ug/L	PA 6020B UCT-KE
SLC0521-CCVG	Arsenic-75a	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.2	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.5	101	ug/L	PA 6020B UCT-KE
SLC0521-CCVH	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.4	101	ug/L	PA 6020B UCT-KE
SLC0521-CCVI	Arsenic-75a	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	53.8	108	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	54.4	109	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.8	104	ug/L	PA 6020B UCT-KE
SLC0521-CCVJ	Arsenic-75a	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.7	105	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Control Limt: +/- 10.00%
Sequence: SLC0521

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0521-CCVJ	Copper-63	50.000	49.6	99.1	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.9	104	ug/L	PA 6020B UCT-KE
SLC0521-CCVK	Arsenic-75a	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.3	103	ug/L	PA 6020B UCT-KE
SLC0521-CCVL	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.7	105	ug/L	PA 6020B UCT-KE

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Control Limt: +/- 10.00%

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00005
Sequence: SLD0005

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0005-ICV1	Arsenic-75a	50.000	47.1	94.1	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.7	99.5	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.9	99.9	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	48.6	97.2	ug/L	PA 6020B UCT-KE
SLD0005-CCV1	Arsenic-75a	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.6	99.3	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.7	99.3	ug/L	PA 6020B UCT-KE
SLD0005-CCV2	Arsenic-75a	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.1	94.3	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.1	96.2	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.1	96.2	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.1	98.2	ug/L	PA 6020B UCT-KE
SLD0005-CCV3	Arsenic-75a	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.4	98.9	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.2	96.5	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.6	95.2	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	46.4	92.7	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	47.4	94.8	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	47.0	94.0	ug/L	PA 6020B UCT-KE
SLD0005-CCV4	Arsenic-75a	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	47.5	95.0	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	47.6	95.2	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	46.4	92.8	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.0	96.0	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.2	98.3	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00005
Control Limt: +/- 10.00%
Sequence: SLD0005

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0005-CCV4	Zinc-67	50.000	48.1	96.3	ug/L	PA 6020B UCT-KE
SLD0005-CCV5	Arsenic-75a	50.000	49.1	98.2	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.0	94.0	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.2	94.4	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	47.7	95.4	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	47.9	95.9	ug/L	PA 6020B UCT-KE
SLD0005-CCV6	Arsenic-75a	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.3	94.7	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.2	94.3	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.5	97.0	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE
SLD0005-CCV7	Arsenic-75a	50.000	49.4	98.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.8	97.6	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	46.8	93.7	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.7	95.4	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	47.3	94.5	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	48.0	96.0	ug/L	PA 6020B UCT-KE
SLD0005-CCV8	Arsenic-75a	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.3	98.5	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.6	95.2	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.9	97.9	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	47.2	94.4	ug/L	PA 6020B UCT-KE
SLD0005-CCV9	Arsenic-75a	50.000	48.7	97.3	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.3	94.5	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.2	94.4	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00005
Control Limt: +/- 10.00%
Sequence: SLD0005

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0005-CCV9	Zinc-66	50.000	47.6	95.1	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	48.2	96.4	ug/L	PA 6020B UCT-KE
SLD0005-CCVA	Arsenic-75a	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	46.9	93.9	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	46.7	93.4	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	46.8	93.6	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	48.1	96.1	ug/L	PA 6020B UCT-KE
SLD0005-CCVB	Arsenic-75a	50.000	48.9	97.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.0	97.9	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.9	97.9	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	46.0	92.0	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	46.6	93.3	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	47.9	95.8	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	48.3	96.7	ug/L	PA 6020B UCT-KE
SLD0005-CCVC	Arsenic-75a	50.000	48.2	96.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	47.8	95.5	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	47.5	95.0	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	45.8	91.6	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	45.1	90.2	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	47.6	95.2	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	46.2	92.4	ug/L	PA 6020B UCT-KE
SLD0005-CCVD	Arsenic-75a	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.3	98.7	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	46.8	93.6	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.1	94.3	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	47.3	94.6	ug/L	PA 6020B UCT-KE

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00006
Control Limt: +/- 10.00%
Sequence: SLD0041

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0041-ICV1	Arsenic-75a	50.000	47.3	94.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.2	98.3	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.2	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
SLD0041-CCV1	Arsenic-75a	50.000	49.3	98.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.3	98.7	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	48.2	96.4	ug/L	PA 6020B UCT-KE
SLD0041-CCV2	Arsenic-75a	50.000	48.7	97.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	48.1	96.3	ug/L	PA 6020B UCT-KE
SLD0041-CCV3	Arsenic-75a	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.8	95.6	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.0	97.9	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.2	98.3	ug/L	PA 6020B UCT-KE
SLD0041-CCV4	Arsenic-75a	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	47.9	95.9	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	47.5	95.0	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.5	95.0	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.5	98.9	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00006
Control Limt: +/- 10.00%
Sequence: SLD0041

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0041-CCV4	Zinc-67	50.000	51.0	102	ug/L	PA 6020B UCT-KE
SLD0041-CCV5	Arsenic-75a	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.8	97.5	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	47.8	95.5	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.6	97.1	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.8	99.5	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.9	102	ug/L	PA 6020B UCT-KE
SLD0041-CCV6	Arsenic-75a	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.4	98.9	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	47.4	94.8	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.9	95.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.6	99.1	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.1	98.2	ug/L	PA 6020B UCT-KE
SLD0041-CCV7	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.0	96.0	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	47.7	95.4	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.5	99.1	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.3	98.5	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
SLD0041-CCV8	Arsenic-75a	50.000	48.8	97.6	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	47.8	95.6	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	48.7	97.3	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.7	97.5	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.6	97.3	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
SLD0041-CCV9	Arsenic-75a	50.000	49.3	98.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.2	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.7	103	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00006
Control Limt: +/- 10.00%
Sequence: SLD0041

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0041-CCV9	Zinc-66	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.7	101	ug/L	PA 6020B UCT-KE

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/30/23 15:01

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-IBL1	Arsenic-75a	0.00900	0.0373	0.200	ug/L	
SLC0521-IBL1	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLC0521-IBL1	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLC0521-IBL1	Copper-63	0.00300	0.173	0.500	ug/L	
SLC0521-IBL1	Copper-65	0.00500	0.35	0.500	ug/L	
SLC0521-IBL1	Zinc-66	0.0830	2.92	6.00	ug/L	
SLC0521-IBL1	Zinc-67	0.0290	0.94	6.00	ug/L	
SLC0521-ICB1	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLC0521-ICB1	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLC0521-ICB1	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0521-ICB1	Copper-63	-0.00100	0.173	0.500	ug/L	
SLC0521-ICB1	Copper-65	0.00300	0.35	0.500	ug/L	
SLC0521-ICB1	Zinc-66	0.0080	2.92	6.00	ug/L	
SLC0521-ICB1	Zinc-67	0.0090	0.94	6.00	ug/L	
SLC0521-CCB1	Arsenic-75a	0.0180	0.0373	0.200	ug/L	
SLC0521-CCB1	Cadmium-111	0.00	0.03	0.100	ug/L	
SLC0521-CCB1	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLC0521-CCB1	Copper-63	0.0260	0.173	0.500	ug/L	
SLC0521-CCB1	Copper-65	0.0360	0.35	0.500	ug/L	
SLC0521-CCB1	Zinc-66	0.0160	2.92	6.00	ug/L	
SLC0521-CCB1	Zinc-67	0.114	0.94	6.00	ug/L	
SLC0521-IBL2	Arsenic-75a	0.0130	0.0373	0.200	ug/L	
SLC0521-IBL2	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLC0521-IBL2	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0521-IBL2	Copper-63	0.0110	0.173	0.500	ug/L	
SLC0521-IBL2	Copper-65	0.00900	0.35	0.500	ug/L	
SLC0521-IBL2	Zinc-66	0.0450	2.92	6.00	ug/L	
SLC0521-IBL2	Zinc-67	0.164	0.94	6.00	ug/L	
SLC0521-IBL3	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLC0521-IBL3	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLC0521-IBL3	Cadmium-114	0.00	0.04	0.100	ug/L	
SLC0521-IBL3	Copper-63	0.00700	0.173	0.500	ug/L	
SLC0521-IBL3	Copper-65	0.00900	0.35	0.500	ug/L	
SLC0521-IBL3	Zinc-66	0.0410	2.92	6.00	ug/L	
SLC0521-IBL3	Zinc-67	-0.0080	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/30/23 16:20

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-IBL4	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLC0521-IBL4	Cadmium-111	-0.00700	0.03	0.100	ug/L	
SLC0521-IBL4	Cadmium-114	0.00700	0.04	0.100	ug/L	
SLC0521-IBL4	Copper-63	0.00800	0.173	0.500	ug/L	
SLC0521-IBL4	Copper-65	0.00900	0.35	0.500	ug/L	
SLC0521-IBL4	Zinc-66	0.0680	2.92	6.00	ug/L	
SLC0521-IBL4	Zinc-67	0.0850	0.94	6.00	ug/L	
SLC0521-CCB2	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLC0521-CCB2	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLC0521-CCB2	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLC0521-CCB2	Copper-63	0.00300	0.173	0.500	ug/L	
SLC0521-CCB2	Copper-65	0.00700	0.35	0.500	ug/L	
SLC0521-CCB2	Zinc-66	0.00	2.92	6.00	ug/L	
SLC0521-CCB2	Zinc-67	0.0650	0.94	6.00	ug/L	
SLC0521-IBL5	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLC0521-IBL5	Cadmium-111	-0.00800	0.03	0.100	ug/L	
SLC0521-IBL5	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLC0521-IBL5	Copper-63	0.00100	0.173	0.500	ug/L	
SLC0521-IBL5	Copper-65	0.00200	0.35	0.500	ug/L	
SLC0521-IBL5	Zinc-66	0.0040	2.92	6.00	ug/L	
SLC0521-IBL5	Zinc-67	0.0230	0.94	6.00	ug/L	
SLC0521-IBL6	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLC0521-IBL6	Cadmium-111	-0.00900	0.03	0.100	ug/L	
SLC0521-IBL6	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLC0521-IBL6	Copper-63	-0.00300	0.173	0.500	ug/L	
SLC0521-IBL6	Copper-65	0.00100	0.35	0.500	ug/L	
SLC0521-IBL6	Zinc-66	-0.0260	2.92	6.00	ug/L	
SLC0521-IBL6	Zinc-67	0.0430	0.94	6.00	ug/L	
SLC0521-IBL7	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLC0521-IBL7	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLC0521-IBL7	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLC0521-IBL7	Copper-63	-0.00600	0.173	0.500	ug/L	
SLC0521-IBL7	Copper-65	0.00400	0.35	0.500	ug/L	
SLC0521-IBL7	Zinc-66	-0.0260	2.92	6.00	ug/L	
SLC0521-IBL7	Zinc-67	0.0340	0.94	6.00	ug/L	
SLC0521-CCB3	Arsenic-75a	0.00700	0.0373	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/30/23 17:56

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-CCB3	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLC0521-CCB3	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLC0521-CCB3	Copper-63	0.00	0.173	0.500	ug/L	
SLC0521-CCB3	Copper-65	0.00700	0.35	0.500	ug/L	
SLC0521-CCB3	Zinc-66	-0.0110	2.92	6.00	ug/L	
SLC0521-CCB3	Zinc-67	0.0240	0.94	6.00	ug/L	
SLC0521-IBL8	Arsenic-75a	-0.0120	0.0373	0.200	ug/L	
SLC0521-IBL8	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLC0521-IBL8	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLC0521-IBL8	Copper-63	0.00	0.173	0.500	ug/L	
SLC0521-IBL8	Copper-65	0.00	0.35	0.500	ug/L	
SLC0521-IBL8	Zinc-66	0.0130	2.92	6.00	ug/L	
SLC0521-IBL8	Zinc-67	0.0240	0.94	6.00	ug/L	
SLC0521-IBL9	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLC0521-IBL9	Cadmium-111	-0.0110	0.03	0.100	ug/L	
SLC0521-IBL9	Cadmium-114	-0.00400	0.04	0.100	ug/L	
SLC0521-IBL9	Copper-63	0.00	0.173	0.500	ug/L	
SLC0521-IBL9	Copper-65	0.00500	0.35	0.500	ug/L	
SLC0521-IBL9	Zinc-66	-0.0020	2.92	6.00	ug/L	
SLC0521-IBL9	Zinc-67	0.0120	0.94	6.00	ug/L	
SLC0521-CCB4	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLC0521-CCB4	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLC0521-CCB4	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLC0521-CCB4	Copper-63	0.00200	0.173	0.500	ug/L	
SLC0521-CCB4	Copper-65	0.00400	0.35	0.500	ug/L	
SLC0521-CCB4	Zinc-66	0.0160	2.92	6.00	ug/L	
SLC0521-CCB4	Zinc-67	0.0240	0.94	6.00	ug/L	
SLC0521-CCB5	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLC0521-CCB5	Cadmium-111	-0.00800	0.03	0.100	ug/L	
SLC0521-CCB5	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLC0521-CCB5	Copper-63	0.00600	0.173	0.500	ug/L	
SLC0521-CCB5	Copper-65	0.00300	0.35	0.500	ug/L	
SLC0521-CCB5	Zinc-66	-0.0030	2.92	6.00	ug/L	
SLC0521-CCB5	Zinc-67	-0.0230	0.94	6.00	ug/L	
SLC0521-IBLA	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLC0521-IBLA	Cadmium-111	0.00100	0.03	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/30/23 20:21

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-IBLA	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLC0521-IBLA	Copper-63	0.0110	0.173	0.500	ug/L	
SLC0521-IBLA	Copper-65	0.0160	0.35	0.500	ug/L	
SLC0521-IBLA	Zinc-66	0.0250	2.92	6.00	ug/L	
SLC0521-IBLA	Zinc-67	-0.0300	0.94	6.00	ug/L	
SLC0521-CCB6	Arsenic-75a	-0.00900	0.0373	0.200	ug/L	
SLC0521-CCB6	Cadmium-111	-0.00800	0.03	0.100	ug/L	
SLC0521-CCB6	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0521-CCB6	Copper-63	0.00400	0.173	0.500	ug/L	
SLC0521-CCB6	Copper-65	0.00900	0.35	0.500	ug/L	
SLC0521-CCB6	Zinc-66	0.0050	2.92	6.00	ug/L	
SLC0521-CCB6	Zinc-67	-0.0510	0.94	6.00	ug/L	
SLC0521-CCB7	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLC0521-CCB7	Cadmium-111	0.00	0.03	0.100	ug/L	
SLC0521-CCB7	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLC0521-CCB7	Copper-63	0.00900	0.173	0.500	ug/L	
SLC0521-CCB7	Copper-65	0.00900	0.35	0.500	ug/L	
SLC0521-CCB7	Zinc-66	0.0530	2.92	6.00	ug/L	
SLC0521-CCB7	Zinc-67	0.0720	0.94	6.00	ug/L	
SLC0521-IBLB	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLC0521-IBLB	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLC0521-IBLB	Cadmium-114	-0.00500	0.04	0.100	ug/L	
SLC0521-IBLB	Copper-63	-0.00200	0.173	0.500	ug/L	
SLC0521-IBLB	Copper-65	0.00400	0.35	0.500	ug/L	
SLC0521-IBLB	Zinc-66	0.0030	2.92	6.00	ug/L	
SLC0521-IBLB	Zinc-67	0.0400	0.94	6.00	ug/L	
SLC0521-CCB8	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLC0521-CCB8	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLC0521-CCB8	Cadmium-114	0.00700	0.04	0.100	ug/L	
SLC0521-CCB8	Copper-63	0.0100	0.173	0.500	ug/L	
SLC0521-CCB8	Copper-65	0.0140	0.35	0.500	ug/L	
SLC0521-CCB8	Zinc-66	0.0500	2.92	6.00	ug/L	
SLC0521-CCB8	Zinc-67	0.115	0.94	6.00	ug/L	
SLC0521-IBLC	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLC0521-IBLC	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLC0521-IBLC	Cadmium-114	0.00500	0.04	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/30/23 23:30

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-IBLC	Copper-63	0.00400	0.173	0.500	ug/L	
SLC0521-IBLC	Copper-65	0.00500	0.35	0.500	ug/L	
SLC0521-IBLC	Zinc-66	-0.0300	2.92	6.00	ug/L	
SLC0521-IBLC	Zinc-67	0.0100	0.94	6.00	ug/L	
SLC0521-CCB9	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLC0521-CCB9	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLC0521-CCB9	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0521-CCB9	Copper-63	0.0110	0.173	0.500	ug/L	
SLC0521-CCB9	Copper-65	0.0150	0.35	0.500	ug/L	
SLC0521-CCB9	Zinc-66	0.106	2.92	6.00	ug/L	
SLC0521-CCB9	Zinc-67	0.0200	0.94	6.00	ug/L	
SLC0521-IBLD	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLC0521-IBLD	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLC0521-IBLD	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLC0521-IBLD	Copper-63	0.00200	0.173	0.500	ug/L	
SLC0521-IBLD	Copper-65	0.00600	0.35	0.500	ug/L	
SLC0521-IBLD	Zinc-66	0.0060	2.92	6.00	ug/L	
SLC0521-IBLD	Zinc-67	0.0210	0.94	6.00	ug/L	
SLC0521-IBLE	Arsenic-75a	-0.00900	0.0373	0.200	ug/L	
SLC0521-IBLE	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLC0521-IBLE	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0521-IBLE	Copper-63	0.00200	0.173	0.500	ug/L	
SLC0521-IBLE	Copper-65	0.00200	0.35	0.500	ug/L	
SLC0521-IBLE	Zinc-66	-0.0220	2.92	6.00	ug/L	
SLC0521-IBLE	Zinc-67	-0.0330	0.94	6.00	ug/L	
SLC0521-CCBA	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLC0521-CCBA	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLC0521-CCBA	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLC0521-CCBA	Copper-63	0.00600	0.173	0.500	ug/L	
SLC0521-CCBA	Copper-65	0.0180	0.35	0.500	ug/L	
SLC0521-CCBA	Zinc-66	0.0860	2.92	6.00	ug/L	
SLC0521-CCBA	Zinc-67	0.0680	0.94	6.00	ug/L	
SLC0521-CCBB	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLC0521-CCBB	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLC0521-CCBB	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLC0521-CCBB	Copper-63	0.00600	0.173	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/31/23 01:02

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-CCBB	Copper-65	-0.00400	0.35	0.500	ug/L	
SLC0521-CCBB	Zinc-66	-0.0200	2.92	6.00	ug/L	
SLC0521-CCBB	Zinc-67	0.161	0.94	6.00	ug/L	
SLC0521-IBLF	Arsenic-75a	0.0140	0.0373	0.200	ug/L	
SLC0521-IBLF	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLC0521-IBLF	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0521-IBLF	Copper-63	0.00200	0.173	0.500	ug/L	
SLC0521-IBLF	Copper-65	0.00900	0.35	0.500	ug/L	
SLC0521-IBLF	Zinc-66	-0.103	2.92	6.00	ug/L	
SLC0521-IBLF	Zinc-67	0.0190	0.94	6.00	ug/L	
SLC0521-IBLG	Arsenic-75a	0.00700	0.0373	0.200	ug/L	
SLC0521-IBLG	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLC0521-IBLG	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0521-IBLG	Copper-63	0.00100	0.173	0.500	ug/L	
SLC0521-IBLG	Copper-65	-0.0120	0.35	0.500	ug/L	
SLC0521-IBLG	Zinc-66	-0.107	2.92	6.00	ug/L	
SLC0521-IBLG	Zinc-67	0.00	0.94	6.00	ug/L	
SLC0521-CCBC	Arsenic-75a	0.0140	0.0373	0.200	ug/L	
SLC0521-CCBC	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLC0521-CCBC	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLC0521-CCBC	Copper-63	0.00400	0.173	0.500	ug/L	
SLC0521-CCBC	Copper-65	0.00300	0.35	0.500	ug/L	
SLC0521-CCBC	Zinc-66	-0.0260	2.92	6.00	ug/L	
SLC0521-CCBC	Zinc-67	0.159	0.94	6.00	ug/L	
SLC0521-IBLH	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLC0521-IBLH	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLC0521-IBLH	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLC0521-IBLH	Copper-63	-0.00100	0.173	0.500	ug/L	
SLC0521-IBLH	Copper-65	-0.00600	0.35	0.500	ug/L	
SLC0521-IBLH	Zinc-66	-0.119	2.92	6.00	ug/L	
SLC0521-IBLH	Zinc-67	0.0430	0.94	6.00	ug/L	
SLC0521-CCBD	Arsenic-75a	0.0110	0.0373	0.200	ug/L	
SLC0521-CCBD	Cadmium-111	0.0100	0.03	0.100	ug/L	
SLC0521-CCBD	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLC0521-CCBD	Copper-63	0.00	0.173	0.500	ug/L	
SLC0521-CCBD	Copper-65	0.00100	0.35	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/31/23 03:03

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-CCBD	Zinc-66	-0.0420	2.92	6.00	ug/L	
SLC0521-CCBD	Zinc-67	0.157	0.94	6.00	ug/L	
SLC0521-IBLI	Arsenic-75a	0.0110	0.0373	0.200	ug/L	
SLC0521-IBLI	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLC0521-IBLI	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLC0521-IBLI	Copper-63	-0.0110	0.173	0.500	ug/L	
SLC0521-IBLI	Copper-65	-0.00500	0.35	0.500	ug/L	
SLC0521-IBLI	Zinc-66	-0.117	2.92	6.00	ug/L	
SLC0521-IBLI	Zinc-67	0.00	0.94	6.00	ug/L	
SLC0521-CCBE	Arsenic-75a	0.0210	0.0373	0.200	ug/L	
SLC0521-CCBE	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLC0521-CCBE	Cadmium-114	0.00800	0.04	0.100	ug/L	
SLC0521-CCBE	Copper-63	0.00800	0.173	0.500	ug/L	
SLC0521-CCBE	Copper-65	0.00800	0.35	0.500	ug/L	
SLC0521-CCBE	Zinc-66	-0.0690	2.92	6.00	ug/L	
SLC0521-CCBE	Zinc-67	0.0260	0.94	6.00	ug/L	
SLC0521-IBLJ	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLC0521-IBLJ	Cadmium-111	0.00	0.03	0.100	ug/L	
SLC0521-IBLJ	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLC0521-IBLJ	Copper-63	-0.00500	0.173	0.500	ug/L	
SLC0521-IBLJ	Copper-65	-0.00900	0.35	0.500	ug/L	
SLC0521-IBLJ	Zinc-66	-0.0760	2.92	6.00	ug/L	
SLC0521-IBLJ	Zinc-67	0.0150	0.94	6.00	ug/L	
SLC0521-CCBF	Arsenic-75a	0.0110	0.0373	0.200	ug/L	
SLC0521-CCBF	Cadmium-111	0.00	0.03	0.100	ug/L	
SLC0521-CCBF	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLC0521-CCBF	Copper-63	-0.00500	0.173	0.500	ug/L	
SLC0521-CCBF	Copper-65	-0.00700	0.35	0.500	ug/L	
SLC0521-CCBF	Zinc-66	-0.0980	2.92	6.00	ug/L	
SLC0521-CCBF	Zinc-67	0.0270	0.94	6.00	ug/L	
SLC0521-CCBG	Arsenic-75a	-0.00900	0.0373	0.200	ug/L	
SLC0521-CCBG	Cadmium-111	0.0110	0.03	0.100	ug/L	
SLC0521-CCBG	Cadmium-114	0.00	0.04	0.100	ug/L	
SLC0521-CCBG	Copper-63	0.00100	0.173	0.500	ug/L	
SLC0521-CCBG	Copper-65	-0.00700	0.35	0.500	ug/L	
SLC0521-CCBG	Zinc-66	-0.0800	2.92	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/31/23 05:23

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-CCBG	Zinc-67	-0.106	0.94	6.00	ug/L	
SLC0521-IBLK	Arsenic-75a	-0.00800	0.0373	0.200	ug/L	
SLC0521-IBLK	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLC0521-IBLK	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLC0521-IBLK	Copper-63	-0.00400	0.173	0.500	ug/L	
SLC0521-IBLK	Copper-65	-0.00600	0.35	0.500	ug/L	
SLC0521-IBLK	Zinc-66	-0.0760	2.92	6.00	ug/L	
SLC0521-IBLK	Zinc-67	-0.0600	0.94	6.00	ug/L	
SLC0521-CCBH	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLC0521-CCBH	Cadmium-111	0.00700	0.03	0.100	ug/L	
SLC0521-CCBH	Cadmium-114	-0.00500	0.04	0.100	ug/L	
SLC0521-CCBH	Copper-63	-0.00300	0.173	0.500	ug/L	
SLC0521-CCBH	Copper-65	-0.00600	0.35	0.500	ug/L	
SLC0521-CCBH	Zinc-66	-0.0810	2.92	6.00	ug/L	
SLC0521-CCBH	Zinc-67	-0.0840	0.94	6.00	ug/L	
SLC0521-IBLL	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLC0521-IBLL	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLC0521-IBLL	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0521-IBLL	Copper-63	0.0160	0.173	0.500	ug/L	
SLC0521-IBLL	Copper-65	-0.00700	0.35	0.500	ug/L	
SLC0521-IBLL	Zinc-66	-0.0890	2.92	6.00	ug/L	
SLC0521-IBLL	Zinc-67	0.00	0.94	6.00	ug/L	
SLC0521-CCBI	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLC0521-CCBI	Cadmium-111	0.0110	0.03	0.100	ug/L	
SLC0521-CCBI	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLC0521-CCBI	Copper-63	0.0110	0.173	0.500	ug/L	
SLC0521-CCBI	Copper-65	0.00	0.35	0.500	ug/L	
SLC0521-CCBI	Zinc-66	-0.0900	2.92	6.00	ug/L	
SLC0521-CCBI	Zinc-67	-0.0550	0.94	6.00	ug/L	
SLC0521-IBLM	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLC0521-IBLM	Cadmium-111	0.00	0.03	0.100	ug/L	
SLC0521-IBLM	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLC0521-IBLM	Copper-63	-0.00500	0.173	0.500	ug/L	
SLC0521-IBLM	Copper-65	-0.00400	0.35	0.500	ug/L	
SLC0521-IBLM	Zinc-66	-0.0760	2.92	6.00	ug/L	
SLC0521-IBLM	Zinc-67	-0.0200	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/31/23 08:29

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-CCBJ	Arsenic-75a	-0.0150	0.0373	0.200	ug/L	
SLC0521-CCBJ	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLC0521-CCBJ	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLC0521-CCBJ	Copper-63	0.00	0.173	0.500	ug/L	
SLC0521-CCBJ	Copper-65	-0.00200	0.35	0.500	ug/L	
SLC0521-CCBJ	Zinc-66	-0.0620	2.92	6.00	ug/L	
SLC0521-CCBJ	Zinc-67	-0.105	0.94	6.00	ug/L	
SLC0521-IBLN	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLC0521-IBLN	Cadmium-111	0.0130	0.03	0.100	ug/L	
SLC0521-IBLN	Cadmium-114	0.00	0.04	0.100	ug/L	
SLC0521-IBLN	Copper-63	0.00100	0.173	0.500	ug/L	
SLC0521-IBLN	Copper-65	-0.00900	0.35	0.500	ug/L	
SLC0521-IBLN	Zinc-66	-0.0630	2.92	6.00	ug/L	
SLC0521-IBLN	Zinc-67	-0.0850	0.94	6.00	ug/L	
SLC0521-CCBK	Arsenic-75a	-0.0160	0.0373	0.200	ug/L	
SLC0521-CCBK	Cadmium-111	0.0100	0.03	0.100	ug/L	
SLC0521-CCBK	Cadmium-114	-0.00400	0.04	0.100	ug/L	
SLC0521-CCBK	Copper-63	0.00500	0.173	0.500	ug/L	
SLC0521-CCBK	Copper-65	0.00400	0.35	0.500	ug/L	
SLC0521-CCBK	Zinc-66	-0.0920	2.92	6.00	ug/L	
SLC0521-CCBK	Zinc-67	-0.0500	0.94	6.00	ug/L	
SLC0521-IBLO	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLC0521-IBLO	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLC0521-IBLO	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0521-IBLO	Copper-63	-0.00300	0.173	0.500	ug/L	
SLC0521-IBLO	Copper-65	-0.00700	0.35	0.500	ug/L	
SLC0521-IBLO	Zinc-66	-0.0770	2.92	6.00	ug/L	
SLC0521-IBLO	Zinc-67	-0.0580	0.94	6.00	ug/L	
SLC0521-CCBL	Arsenic-75a	-0.00900	0.0373	0.200	ug/L	
SLC0521-CCBL	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLC0521-CCBL	Cadmium-114	-0.00400	0.04	0.100	ug/L	
SLC0521-CCBL	Copper-63	-0.00300	0.173	0.500	ug/L	
SLC0521-CCBL	Copper-65	-0.00300	0.35	0.500	ug/L	
SLC0521-CCBL	Zinc-66	-0.0750	2.92	6.00	ug/L	
SLC0521-CCBL	Zinc-67	-0.106	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0005

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00005
Date Analyzed: 03/31/23 15:52

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0005-IBL1	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLD0005-IBL1	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLD0005-IBL1	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0005-IBL1	Copper-63	0.00200	0.173	0.500	ug/L	
SLD0005-IBL1	Copper-65	0.00300	0.35	0.500	ug/L	
SLD0005-IBL1	Zinc-66	0.0340	2.92	6.00	ug/L	
SLD0005-IBL1	Zinc-67	0.0830	0.94	6.00	ug/L	
SLD0005-ICB1	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLD0005-ICB1	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLD0005-ICB1	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0005-ICB1	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0005-ICB1	Copper-65	0.00	0.35	0.500	ug/L	
SLD0005-ICB1	Zinc-66	-0.0060	2.92	6.00	ug/L	
SLD0005-ICB1	Zinc-67	0.0040	0.94	6.00	ug/L	
SLD0005-CCB1	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLD0005-CCB1	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLD0005-CCB1	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0005-CCB1	Copper-63	0.00600	0.173	0.500	ug/L	
SLD0005-CCB1	Copper-65	0.00400	0.35	0.500	ug/L	
SLD0005-CCB1	Zinc-66	-0.0050	2.92	6.00	ug/L	
SLD0005-CCB1	Zinc-67	-0.0140	0.94	6.00	ug/L	
SLD0005-IBL2	Arsenic-75a	0.00800	0.0373	0.200	ug/L	
SLD0005-IBL2	Cadmium-111	0.0160	0.03	0.100	ug/L	
SLD0005-IBL2	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLD0005-IBL2	Copper-63	0.00700	0.173	0.500	ug/L	
SLD0005-IBL2	Copper-65	0.00800	0.35	0.500	ug/L	
SLD0005-IBL2	Zinc-66	-0.0010	2.92	6.00	ug/L	
SLD0005-IBL2	Zinc-67	-0.0150	0.94	6.00	ug/L	
SLD0005-IBL3	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLD0005-IBL3	Cadmium-111	0.00900	0.03	0.100	ug/L	
SLD0005-IBL3	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLD0005-IBL3	Copper-63	0.00700	0.173	0.500	ug/L	
SLD0005-IBL3	Copper-65	0.00400	0.35	0.500	ug/L	
SLD0005-IBL3	Zinc-66	-0.0170	2.92	6.00	ug/L	
SLD0005-IBL3	Zinc-67	0.0320	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0005

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00005
Date Analyzed: 03/31/23 17:17

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0005-IBL4	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLD0005-IBL4	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLD0005-IBL4	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0005-IBL4	Copper-63	0.00900	0.173	0.500	ug/L	
SLD0005-IBL4	Copper-65	0.00900	0.35	0.500	ug/L	
SLD0005-IBL4	Zinc-66	0.00	2.92	6.00	ug/L	
SLD0005-IBL4	Zinc-67	0.0170	0.94	6.00	ug/L	
SLD0005-CCB2	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLD0005-CCB2	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLD0005-CCB2	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLD0005-CCB2	Copper-63	0.00200	0.173	0.500	ug/L	
SLD0005-CCB2	Copper-65	0.00	0.35	0.500	ug/L	
SLD0005-CCB2	Zinc-66	-0.0090	2.92	6.00	ug/L	
SLD0005-CCB2	Zinc-67	-0.0180	0.94	6.00	ug/L	
SLD0005-IBL5	Arsenic-75a	0.00700	0.0373	0.200	ug/L	
SLD0005-IBL5	Cadmium-111	0.00900	0.03	0.100	ug/L	
SLD0005-IBL5	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLD0005-IBL5	Copper-63	0.00500	0.173	0.500	ug/L	
SLD0005-IBL5	Copper-65	0.00500	0.35	0.500	ug/L	
SLD0005-IBL5	Zinc-66	0.0170	2.92	6.00	ug/L	
SLD0005-IBL5	Zinc-67	0.0140	0.94	6.00	ug/L	
SLD0005-CCB3	Arsenic-75a	0.00900	0.0373	0.200	ug/L	
SLD0005-CCB3	Cadmium-111	0.00700	0.03	0.100	ug/L	
SLD0005-CCB3	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLD0005-CCB3	Copper-63	0.00500	0.173	0.500	ug/L	
SLD0005-CCB3	Copper-65	-0.00300	0.35	0.500	ug/L	
SLD0005-CCB3	Zinc-66	-0.0060	2.92	6.00	ug/L	
SLD0005-CCB3	Zinc-67	-0.0090	0.94	6.00	ug/L	
SLD0005-CCB4	Arsenic-75a	0.0130	0.0373	0.200	ug/L	
SLD0005-CCB4	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLD0005-CCB4	Cadmium-114	0.0110	0.04	0.100	ug/L	
SLD0005-CCB4	Copper-63	0.00200	0.173	0.500	ug/L	
SLD0005-CCB4	Copper-65	0.00	0.35	0.500	ug/L	
SLD0005-CCB4	Zinc-66	0.0120	2.92	6.00	ug/L	
SLD0005-CCB4	Zinc-67	0.0100	0.94	6.00	ug/L	
SLD0005-CCB5	Arsenic-75a	0.0140	0.0373	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0005

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00005
Date Analyzed: 03/31/23 20:08

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0005-CCB5	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLD0005-CCB5	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLD0005-CCB5	Copper-63	-0.00200	0.173	0.500	ug/L	
SLD0005-CCB5	Copper-65	0.00600	0.35	0.500	ug/L	
SLD0005-CCB5	Zinc-66	-0.0040	2.92	6.00	ug/L	
SLD0005-CCB5	Zinc-67	0.0580	0.94	6.00	ug/L	
SLD0005-CCB6	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLD0005-CCB6	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLD0005-CCB6	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLD0005-CCB6	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0005-CCB6	Copper-65	0.00200	0.35	0.500	ug/L	
SLD0005-CCB6	Zinc-66	0.0300	2.92	6.00	ug/L	
SLD0005-CCB6	Zinc-67	0.0130	0.94	6.00	ug/L	
SLD0005-IBL6	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLD0005-IBL6	Cadmium-111	-0.0170	0.03	0.100	ug/L	
SLD0005-IBL6	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLD0005-IBL6	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0005-IBL6	Copper-65	0.00300	0.35	0.500	ug/L	
SLD0005-IBL6	Zinc-66	0.0080	2.92	6.00	ug/L	
SLD0005-IBL6	Zinc-67	-0.0150	0.94	6.00	ug/L	
SLD0005-CCB7	Arsenic-75a	0.0100	0.0373	0.200	ug/L	
SLD0005-CCB7	Cadmium-111	-0.00700	0.03	0.100	ug/L	
SLD0005-CCB7	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLD0005-CCB7	Copper-63	0.00700	0.173	0.500	ug/L	
SLD0005-CCB7	Copper-65	0.00600	0.35	0.500	ug/L	
SLD0005-CCB7	Zinc-66	0.0490	2.92	6.00	ug/L	
SLD0005-CCB7	Zinc-67	0.112	0.94	6.00	ug/L	
SLD0005-CCB8	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLD0005-CCB8	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLD0005-CCB8	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0005-CCB8	Copper-63	0.00100	0.173	0.500	ug/L	
SLD0005-CCB8	Copper-65	-0.00100	0.35	0.500	ug/L	
SLD0005-CCB8	Zinc-66	-0.0140	2.92	6.00	ug/L	
SLD0005-CCB8	Zinc-67	0.0240	0.94	6.00	ug/L	
SLD0005-CCB9	Arsenic-75a	0.0100	0.0373	0.200	ug/L	
SLD0005-CCB9	Cadmium-111	-0.00100	0.03	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0005

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00005
Date Analyzed: 04/01/23 00:30

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0005-CCB9	Cadmium-114	0.00900	0.04	0.100	ug/L	
SLD0005-CCB9	Copper-63	0.00100	0.173	0.500	ug/L	
SLD0005-CCB9	Copper-65	-0.00300	0.35	0.500	ug/L	
SLD0005-CCB9	Zinc-66	-0.0180	2.92	6.00	ug/L	
SLD0005-CCB9	Zinc-67	-0.0120	0.94	6.00	ug/L	
SLD0005-IBLA	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLD0005-IBLA	Cadmium-111	-0.0110	0.03	0.100	ug/L	
SLD0005-IBLA	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLD0005-IBLA	Copper-63	0.00700	0.173	0.500	ug/L	
SLD0005-IBLA	Copper-65	0.00800	0.35	0.500	ug/L	
SLD0005-IBLA	Zinc-66	0.0080	2.92	6.00	ug/L	
SLD0005-IBLA	Zinc-67	-0.0150	0.94	6.00	ug/L	
SLD0005-CCBA	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLD0005-CCBA	Cadmium-111	-0.00900	0.03	0.100	ug/L	
SLD0005-CCBA	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLD0005-CCBA	Copper-63	0.00200	0.173	0.500	ug/L	
SLD0005-CCBA	Copper-65	-0.00400	0.35	0.500	ug/L	
SLD0005-CCBA	Zinc-66	-0.0190	2.92	6.00	ug/L	
SLD0005-CCBA	Zinc-67	-0.0360	0.94	6.00	ug/L	
SLD0005-CCBB	Arsenic-75a	0.00800	0.0373	0.200	ug/L	
SLD0005-CCBB	Cadmium-111	0.00	0.03	0.100	ug/L	
SLD0005-CCBB	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLD0005-CCBB	Copper-63	0.00800	0.173	0.500	ug/L	
SLD0005-CCBB	Copper-65	0.00200	0.35	0.500	ug/L	
SLD0005-CCBB	Zinc-66	-0.0050	2.92	6.00	ug/L	
SLD0005-CCBB	Zinc-67	0.0340	0.94	6.00	ug/L	
SLD0005-IBLC	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLD0005-IBLC	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLD0005-IBLC	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0005-IBLC	Copper-63	0.0110	0.173	0.500	ug/L	
SLD0005-IBLC	Copper-65	0.00400	0.35	0.500	ug/L	
SLD0005-IBLC	Zinc-66	0.0390	2.92	6.00	ug/L	
SLD0005-IBLC	Zinc-67	0.0220	0.94	6.00	ug/L	
SLD0005-CCBC	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLD0005-CCBC	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLD0005-CCBC	Cadmium-114	0.00	0.04	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0005

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00005
Date Analyzed: 04/01/23 02:57

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0005-CCBC	Copper-63	0.00600	0.173	0.500	ug/L	
SLD0005-CCBC	Copper-65	0.00100	0.35	0.500	ug/L	
SLD0005-CCBC	Zinc-66	-0.0080	2.92	6.00	ug/L	
SLD0005-CCBC	Zinc-67	0.0420	0.94	6.00	ug/L	
SLD0005-IBLD	Arsenic-75a	0.0110	0.0373	0.200	ug/L	
SLD0005-IBLD	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLD0005-IBLD	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLD0005-IBLD	Copper-63	0.00700	0.173	0.500	ug/L	
SLD0005-IBLD	Copper-65	0.00400	0.35	0.500	ug/L	
SLD0005-IBLD	Zinc-66	0.0460	2.92	6.00	ug/L	
SLD0005-IBLD	Zinc-67	0.0270	0.94	6.00	ug/L	
SLD0005-CCBD	Arsenic-75a	0.0180	0.0373	0.200	ug/L	
SLD0005-CCBD	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLD0005-CCBD	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLD0005-CCBD	Copper-63	0.0270	0.173	0.500	ug/L	
SLD0005-CCBD	Copper-65	0.0350	0.35	0.500	ug/L	
SLD0005-CCBD	Zinc-66	0.0280	2.92	6.00	ug/L	
SLD0005-CCBD	Zinc-67	0.0630	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0041

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00006
Date Analyzed: 04/01/23 14:18

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0041-IBL1	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLD0041-IBL1	Cadmium-111	0.00	0.03	0.100	ug/L	
SLD0041-IBL1	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLD0041-IBL1	Copper-63	0.00200	0.173	0.500	ug/L	
SLD0041-IBL1	Copper-65	0.00200	0.35	0.500	ug/L	
SLD0041-IBL1	Zinc-66	0.0180	2.92	6.00	ug/L	
SLD0041-IBL1	Zinc-67	-0.0270	0.94	6.00	ug/L	
SLD0041-ICB1	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLD0041-ICB1	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLD0041-ICB1	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLD0041-ICB1	Copper-63	0.00	0.173	0.500	ug/L	
SLD0041-ICB1	Copper-65	0.00400	0.35	0.500	ug/L	
SLD0041-ICB1	Zinc-66	0.0090	2.92	6.00	ug/L	
SLD0041-ICB1	Zinc-67	0.0100	0.94	6.00	ug/L	
SLD0041-CCB1	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLD0041-CCB1	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLD0041-CCB1	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0041-CCB1	Copper-63	-0.00300	0.173	0.500	ug/L	
SLD0041-CCB1	Copper-65	-0.00300	0.35	0.500	ug/L	
SLD0041-CCB1	Zinc-66	0.0290	2.92	6.00	ug/L	
SLD0041-CCB1	Zinc-67	-0.0180	0.94	6.00	ug/L	
SLD0041-IBL2	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLD0041-IBL2	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLD0041-IBL2	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLD0041-IBL2	Copper-63	0.00400	0.173	0.500	ug/L	
SLD0041-IBL2	Copper-65	-0.00200	0.35	0.500	ug/L	
SLD0041-IBL2	Zinc-66	0.0060	2.92	6.00	ug/L	
SLD0041-IBL2	Zinc-67	0.0250	0.94	6.00	ug/L	
SLD0041-IBL3	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLD0041-IBL3	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLD0041-IBL3	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLD0041-IBL3	Copper-63	-0.00200	0.173	0.500	ug/L	
SLD0041-IBL3	Copper-65	-0.00100	0.35	0.500	ug/L	
SLD0041-IBL3	Zinc-66	0.0070	2.92	6.00	ug/L	
SLD0041-IBL3	Zinc-67	-0.0160	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0041

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00006
Date Analyzed: 04/01/23 15:46

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0041-CCB2	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLD0041-CCB2	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLD0041-CCB2	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0041-CCB2	Copper-63	0.00700	0.173	0.500	ug/L	
SLD0041-CCB2	Copper-65	-0.00400	0.35	0.500	ug/L	
SLD0041-CCB2	Zinc-66	0.0110	2.92	6.00	ug/L	
SLD0041-CCB2	Zinc-67	0.0460	0.94	6.00	ug/L	
SLD0041-IBL4	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLD0041-IBL4	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLD0041-IBL4	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLD0041-IBL4	Copper-63	-0.00200	0.173	0.500	ug/L	
SLD0041-IBL4	Copper-65	-0.00300	0.35	0.500	ug/L	
SLD0041-IBL4	Zinc-66	-0.0210	2.92	6.00	ug/L	
SLD0041-IBL4	Zinc-67	0.0160	0.94	6.00	ug/L	
SLD0041-CCB3	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLD0041-CCB3	Cadmium-111	0.0470	0.03	0.100	ug/L	
SLD0041-CCB3	Cadmium-114	0.0340	0.04	0.100	ug/L	
SLD0041-CCB3	Copper-63	0.00200	0.173	0.500	ug/L	
SLD0041-CCB3	Copper-65	-0.00300	0.35	0.500	ug/L	
SLD0041-CCB3	Zinc-66	0.0030	2.92	6.00	ug/L	
SLD0041-CCB3	Zinc-67	-0.0060	0.94	6.00	ug/L	
SLD0041-IBL5	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLD0041-IBL5	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLD0041-IBL5	Cadmium-114	-0.00400	0.04	0.100	ug/L	
SLD0041-IBL5	Copper-63	-0.00200	0.173	0.500	ug/L	
SLD0041-IBL5	Copper-65	-0.00400	0.35	0.500	ug/L	
SLD0041-IBL5	Zinc-66	0.00	2.92	6.00	ug/L	
SLD0041-IBL5	Zinc-67	-0.0180	0.94	6.00	ug/L	
SLD0041-CCB4	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLD0041-CCB4	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLD0041-CCB4	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLD0041-CCB4	Copper-63	-0.00400	0.173	0.500	ug/L	
SLD0041-CCB4	Copper-65	-0.00200	0.35	0.500	ug/L	
SLD0041-CCB4	Zinc-66	0.0090	2.92	6.00	ug/L	
SLD0041-CCB4	Zinc-67	-0.0550	0.94	6.00	ug/L	
SLD0041-IBL6	Arsenic-75a	0.00100	0.0373	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0041

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00006
Date Analyzed: 04/01/23 18:33

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0041-IBL6	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLD0041-IBL6	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0041-IBL6	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0041-IBL6	Copper-65	-0.00400	0.35	0.500	ug/L	
SLD0041-IBL6	Zinc-66	-0.0160	2.92	6.00	ug/L	
SLD0041-IBL6	Zinc-67	-0.0520	0.94	6.00	ug/L	
SLD0041-CCB5	Arsenic-75a	0.0100	0.0373	0.200	ug/L	
SLD0041-CCB5	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLD0041-CCB5	Cadmium-114	-0.00600	0.04	0.100	ug/L	
SLD0041-CCB5	Copper-63	-0.00300	0.173	0.500	ug/L	
SLD0041-CCB5	Copper-65	-0.00400	0.35	0.500	ug/L	
SLD0041-CCB5	Zinc-66	-0.0120	2.92	6.00	ug/L	
SLD0041-CCB5	Zinc-67	0.0230	0.94	6.00	ug/L	
SLD0041-IBL7	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLD0041-IBL7	Cadmium-111	0.00	0.03	0.100	ug/L	
SLD0041-IBL7	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLD0041-IBL7	Copper-63	-0.00400	0.173	0.500	ug/L	
SLD0041-IBL7	Copper-65	-0.00300	0.35	0.500	ug/L	
SLD0041-IBL7	Zinc-66	-0.0190	2.92	6.00	ug/L	
SLD0041-IBL7	Zinc-67	-0.0260	0.94	6.00	ug/L	
SLD0041-CCB6	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLD0041-CCB6	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLD0041-CCB6	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0041-CCB6	Copper-63	0.00100	0.173	0.500	ug/L	
SLD0041-CCB6	Copper-65	-0.00100	0.35	0.500	ug/L	
SLD0041-CCB6	Zinc-66	-0.0100	2.92	6.00	ug/L	
SLD0041-CCB6	Zinc-67	0.0250	0.94	6.00	ug/L	
SLD0041-IBL8	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLD0041-IBL8	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLD0041-IBL8	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLD0041-IBL8	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0041-IBL8	Copper-65	-0.00900	0.35	0.500	ug/L	
SLD0041-IBL8	Zinc-66	-0.0260	2.92	6.00	ug/L	
SLD0041-IBL8	Zinc-67	-0.0780	0.94	6.00	ug/L	
SLD0041-CCB7	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLD0041-CCB7	Cadmium-111	-0.00300	0.03	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0041

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00006
Date Analyzed: 04/01/23 20:33

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0041-CCB7	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0041-CCB7	Copper-63	0.00	0.173	0.500	ug/L	
SLD0041-CCB7	Copper-65	-0.0100	0.35	0.500	ug/L	
SLD0041-CCB7	Zinc-66	-0.0250	2.92	6.00	ug/L	
SLD0041-CCB7	Zinc-67	0.0100	0.94	6.00	ug/L	
SLD0041-IBL9	Arsenic-75a	0.00900	0.0373	0.200	ug/L	
SLD0041-IBL9	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLD0041-IBL9	Cadmium-114	-0.00400	0.04	0.100	ug/L	
SLD0041-IBL9	Copper-63	-0.00700	0.173	0.500	ug/L	
SLD0041-IBL9	Copper-65	-0.00200	0.35	0.500	ug/L	
SLD0041-IBL9	Zinc-66	-0.0310	2.92	6.00	ug/L	
SLD0041-IBL9	Zinc-67	-0.0270	0.94	6.00	ug/L	
SLD0041-CCB8	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLD0041-CCB8	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLD0041-CCB8	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0041-CCB8	Copper-63	-0.00200	0.173	0.500	ug/L	
SLD0041-CCB8	Copper-65	0.00300	0.35	0.500	ug/L	
SLD0041-CCB8	Zinc-66	-0.0120	2.92	6.00	ug/L	
SLD0041-CCB8	Zinc-67	-0.0270	0.94	6.00	ug/L	
SLD0041-IBLA	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLD0041-IBLA	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLD0041-IBLA	Cadmium-114	-0.00400	0.04	0.100	ug/L	
SLD0041-IBLA	Copper-63	-0.00700	0.173	0.500	ug/L	
SLD0041-IBLA	Copper-65	-0.00200	0.35	0.500	ug/L	
SLD0041-IBLA	Zinc-66	-0.0410	2.92	6.00	ug/L	
SLD0041-IBLA	Zinc-67	-0.0090	0.94	6.00	ug/L	
SLD0041-CCB9	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLD0041-CCB9	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLD0041-CCB9	Cadmium-114	-0.00400	0.04	0.100	ug/L	
SLD0041-CCB9	Copper-63	-0.00200	0.173	0.500	ug/L	
SLD0041-CCB9	Copper-65	-0.00100	0.35	0.500	ug/L	
SLD0041-CCB9	Zinc-66	-0.0170	2.92	6.00	ug/L	
SLD0041-CCB9	Zinc-67	0.0900	0.94	6.00	ug/L	

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0521	Instrument:	ICPMS2
		Calibration:	GD00002

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLC0521-CAL1	XDT_m2230330-006	NA	03/30/23 14:26
CAL 1 - LOW CHECK	SLC0521-CAL2	XDT_m2230330-007	NA	03/30/23 14:31
CAL 2	SLC0521-CAL3	XDT_m2230330-008	NA	03/30/23 14:36
CAL 3	SLC0521-CAL4	XDT_m2230330-009	NA	03/30/23 14:41
CAL 4	SLC0521-CAL5	XDT_m2230330-010	NA	03/30/23 14:46
CAL 5	SLC0521-CAL6	XDT_m2230330-011	NA	03/30/23 14:53
RINSE	SLC0521-IBL1	XDT_m2230330-012	NA	03/30/23 15:01
Initial Cal Check	SLC0521-ICV1	XDT_m2230330-014	NA	03/30/23 15:09
Initial Cal Blank	SLC0521-ICB1	XDT_m2230330-015	NA	03/30/23 15:17
Calibration Check	SLC0521-CCV1	XDT_m2230330-016	NA	03/30/23 15:25
Calibration Blank	SLC0521-CCB1	XDT_m2230330-017	NA	03/30/23 15:32
Instrument RL Check	SLC0521-CRL1	XDT_m2230330-018	NA	03/30/23 15:38
Interference Check A	SLC0521-IFA1	XDT_m2230330-019	NA	03/30/23 15:44
Interference Check B	SLC0521-IFB1	XDT_m2230330-020	NA	03/30/23 15:48
LR200	SLC0521-HCV1	XDT_m2230330-021	NA	03/30/23 15:53
LR300	SLC0521-HCV2	XDT_m2230330-022	NA	03/30/23 15:58
Instrument Blank	SLC0521-IBL2	XDT_m2230330-023	NA	03/30/23 16:06
Instrument Blank	SLC0521-IBL3	XDT_m2230330-024	NA	03/30/23 16:13
Instrument Blank	SLC0521-IBL4	XDT_m2230330-025	NA	03/30/23 16:20
Calibration Check	SLC0521-CCV2	XDT_m2230330-026	NA	03/30/23 16:25
Calibration Blank	SLC0521-CCB2	XDT_m2230330-027	NA	03/30/23 16:33
Instrument Blank	SLC0521-IBL5	XDT_m2230330-033	NA	03/30/23 17:10
Instrument Blank	SLC0521-IBL6	XDT_m2230330-034	NA	03/30/23 17:15
Instrument Blank	SLC0521-IBL7	XDT_m2230330-037	NA	03/30/23 17:42
Calibration Check	SLC0521-CCV3	XDT_m2230330-038	NA	03/30/23 17:48
Calibration Blank	SLC0521-CCB3	XDT_m2230330-039	NA	03/30/23 17:56
Instrument Blank	SLC0521-IBL8	XDT_m2230330-042	NA	03/30/23 18:15
Instrument Blank	SLC0521-IBL9	XDT_m2230330-048	NA	03/30/23 18:54
Calibration Check	SLC0521-CCV4	XDT_m2230330-049	NA	03/30/23 19:01

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0521
SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: ICPMS2
Calibration: GD00002

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLC0521-CCB4	XDT_m2230330-050	NA	03/30/23 19:09
Calibration Check	SLC0521-CCV5	XDT_m2230330-052	NA	03/30/23 19:23
Calibration Blank	SLC0521-CCB5	XDT_m2230330-053	NA	03/30/23 19:30
Blank	BLC0692-BLK1	XDT_m2230330-054	Solid	03/30/23 19:36
LCS	BLC0692-BS1	XDT_m2230330-055	Solid	03/30/23 19:40
ZZZZZ	23A0099-02	XDT_m2230330-056	Solid	03/30/23 19:45
ZZZZZ	23A0099-02	XDT_m2230330-056	Solid	03/30/23 19:45
ZZZZZ	23A0099-02	XDT_m2230330-056	Solid	03/30/23 19:45
ZZZZZ	23A0099-02	XDT_m2230330-056	Solid	03/30/23 19:45
ZZZZZ	23A0099-03	XDT_m2230330-057	Solid	03/30/23 19:50
ZZZZZ	23A0099-03	XDT_m2230330-057	Solid	03/30/23 19:50
ZZZZZ	23A0099-03	XDT_m2230330-057	Solid	03/30/23 19:50
ZZZZZ	23A0099-03	XDT_m2230330-057	Solid	03/30/23 19:50
ZZZZZ	23A0099-06	XDT_m2230330-058	Solid	03/30/23 19:55
ZZZZZ	23A0099-06	XDT_m2230330-058	Solid	03/30/23 19:55
ZZZZZ	23A0099-06	XDT_m2230330-058	Solid	03/30/23 19:55
ZZZZZ	23A0099-06	XDT_m2230330-058	Solid	03/30/23 19:55
Instrument Blank	SLC0521-IBLA	XDT_m2230330-063	NA	03/30/23 20:21
Calibration Check	SLC0521-CCV6	XDT_m2230330-064	NA	03/30/23 20:25
Calibration Blank	SLC0521-CCB6	XDT_m2230330-065	NA	03/30/23 20:33
ZZZZZ	23A0099-04	XDT_m2230330-066	Solid	03/30/23 20:39
ZZZZZ	23A0099-04	XDT_m2230330-066	Solid	03/30/23 20:39
ZZZZZ	23A0099-04	XDT_m2230330-066	Solid	03/30/23 20:39
ZZZZZ	23A0099-04	XDT_m2230330-066	Solid	03/30/23 20:39
ZZZZZ	23A0099-05	XDT_m2230330-067	Solid	03/30/23 20:44
ZZZZZ	23A0099-05	XDT_m2230330-067	Solid	03/30/23 20:44
ZZZZZ	23A0099-05	XDT_m2230330-067	Solid	03/30/23 20:44
ZZZZZ	23A0099-05	XDT_m2230330-067	Solid	03/30/23 20:44
ZZZZZ	23A0099-07	XDT_m2230330-068	Solid	03/30/23 20:48

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0521
Instrument: ICPMS2
Calibration: GD00002

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0099-07	XDT_m2230330-068	Solid	03/30/23 20:48
ZZZZZ	23A0099-07	XDT_m2230330-068	Solid	03/30/23 20:48
ZZZZZ	23A0099-07	XDT_m2230330-068	Solid	03/30/23 20:48
ZZZZZ	23A0099-08	XDT_m2230330-069	Solid	03/30/23 20:53
ZZZZZ	23A0099-08	XDT_m2230330-069	Solid	03/30/23 20:53
ZZZZZ	23A0099-08	XDT_m2230330-069	Solid	03/30/23 20:53
ZZZZZ	23A0099-08	XDT_m2230330-069	Solid	03/30/23 20:53
ZZZZZ	23A0099-09	XDT_m2230330-070	Solid	03/30/23 20:58
ZZZZZ	23A0099-09	XDT_m2230330-070	Solid	03/30/23 20:58
ZZZZZ	23A0099-09	XDT_m2230330-070	Solid	03/30/23 20:58
ZZZZZ	23A0099-09	XDT_m2230330-070	Solid	03/30/23 20:58
ZZZZZ	23A0099-10	XDT_m2230330-071	Solid	03/30/23 21:03
ZZZZZ	23A0099-10	XDT_m2230330-071	Solid	03/30/23 21:03
ZZZZZ	23A0099-10	XDT_m2230330-071	Solid	03/30/23 21:03
ZZZZZ	23A0099-10	XDT_m2230330-071	Solid	03/30/23 21:03
ZZZZZ	23A0099-11	XDT_m2230330-072	Solid	03/30/23 21:08
ZZZZZ	23A0099-11	XDT_m2230330-072	Solid	03/30/23 21:08
ZZZZZ	23A0099-11	XDT_m2230330-072	Solid	03/30/23 21:08
ZZZZZ	23A0099-11	XDT_m2230330-072	Solid	03/30/23 21:08
ZZZZZ	23A0099-12	XDT_m2230330-073	Solid	03/30/23 21:13
ZZZZZ	23A0099-12	XDT_m2230330-073	Solid	03/30/23 21:13
ZZZZZ	23A0099-12	XDT_m2230330-073	Solid	03/30/23 21:13
ZZZZZ	23A0099-12	XDT_m2230330-073	Solid	03/30/23 21:13
ZZZZZ	23A0099-13	XDT_m2230330-074	Solid	03/30/23 21:17
ZZZZZ	23A0099-13	XDT_m2230330-074	Solid	03/30/23 21:17
ZZZZZ	23A0099-13	XDT_m2230330-074	Solid	03/30/23 21:17
ZZZZZ	23A0099-13	XDT_m2230330-074	Solid	03/30/23 21:17
ZZZZZ	23A0099-01	XDT_m2230330-075	Solid	03/30/23 21:22
Calibration Check	SLC0521-CCV7	XDT_m2230330-076	NA	03/30/23 21:30

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: ICPMS2
Calibration: GD00002

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLC0521-CCB7	XDT_m2230330-077	NA	03/30/23 21:37
LDW23-SS1129	23A0134-09	XDT_m2230330-080	Solid	03/30/23 21:52
LDW23-SS1129	23A0134-09	XDT_m2230330-080	Solid	03/30/23 21:52
LDW23-SS1129	23A0134-09	XDT_m2230330-080	Solid	03/30/23 21:52
LDW23-SS1129	23A0134-09	XDT_m2230330-080	Solid	03/30/23 21:52
LDW23-SS1124	23A0134-10	XDT_m2230330-081	Solid	03/30/23 21:57
LDW23-SS1124	23A0134-10	XDT_m2230330-081	Solid	03/30/23 21:57
LDW23-SS1124	23A0134-10	XDT_m2230330-081	Solid	03/30/23 21:57
LDW23-SS1124	23A0134-10	XDT_m2230330-081	Solid	03/30/23 21:57
LDW23-SS1123	23A0134-11	XDT_m2230330-082	Solid	03/30/23 22:01
LDW23-SS1123	23A0134-11	XDT_m2230330-082	Solid	03/30/23 22:01
LDW23-SS1123	23A0134-11	XDT_m2230330-082	Solid	03/30/23 22:01
LDW23-SS1123	23A0134-11	XDT_m2230330-082	Solid	03/30/23 22:01
LDW23-SS1116	23A0134-12	XDT_m2230330-083	Solid	03/30/23 22:06
LDW23-SS1116	23A0134-12	XDT_m2230330-083	Solid	03/30/23 22:06
LDW23-SS1116	23A0134-12	XDT_m2230330-083	Solid	03/30/23 22:06
LDW23-SS1116	23A0134-12	XDT_m2230330-083	Solid	03/30/23 22:06
LDW23-IT1210	23A0134-13	XDT_m2230330-084	Solid	03/30/23 22:11
LDW23-IT1210	23A0134-13	XDT_m2230330-084	Solid	03/30/23 22:11
LDW23-IT1210	23A0134-13	XDT_m2230330-084	Solid	03/30/23 22:11
LDW23-IT1210	23A0134-13	XDT_m2230330-084	Solid	03/30/23 22:11
LDW23-SC1249	23A0134-15	XDT_m2230330-085	Solid	03/30/23 22:16
LDW23-SC1249	23A0134-15	XDT_m2230330-085	Solid	03/30/23 22:16
LDW23-SC1249	23A0134-15	XDT_m2230330-085	Solid	03/30/23 22:16
LDW23-SC1249	23A0134-15	XDT_m2230330-085	Solid	03/30/23 22:16
LDW23-IT1194	23A0134-14	XDT_m2230330-086	Solid	03/30/23 22:21
Instrument Blank	SLC0521-IBLB	XDT_m2230330-087	NA	03/30/23 22:25
Calibration Check	SLC0521-CCV8	XDT_m2230330-088	NA	03/30/23 22:30
Calibration Blank	SLC0521-CCB8	XDT_m2230330-089	NA	03/30/23 22:38

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0521
Instrument: ICPMS2
Calibration: GD00002

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLC0521-IBLC	XDT_m2230330-099	NA	03/30/23 23:30
Calibration Check	SLC0521-CCV9	XDT_m2230330-100	NA	03/30/23 23:35
Calibration Blank	SLC0521-CCB9	XDT_m2230330-101	NA	03/30/23 23:42
Instrument Blank	SLC0521-IBLD	XDT_m2230330-106	NA	03/31/23 00:07
Instrument Blank	SLC0521-IBLE	XDT_m2230330-111	NA	03/31/23 00:32
Calibration Check	SLC0521-CCVA	XDT_m2230330-112	NA	03/31/23 00:37
Calibration Blank	SLC0521-CCBA	XDT_m2230330-113	NA	03/31/23 00:45
Calibration Check	SLC0521-CCVB	XDT_m2230330-115	NA	03/31/23 00:54
Calibration Blank	SLC0521-CCBB	XDT_m2230330-116	NA	03/31/23 01:02
Instrument Blank	SLC0521-IBLF	XDT_m2230330-118	NA	03/31/23 01:12
Instrument Blank	SLC0521-IBLG	XDT_m2230330-126	NA	03/31/23 01:50
Calibration Check	SLC0521-CCVC	XDT_m2230330-127	NA	03/31/23 01:55
Calibration Blank	SLC0521-CCBC	XDT_m2230330-128	NA	03/31/23 02:03
Instrument Blank	SLC0521-IBLH	XDT_m2230330-138	NA	03/31/23 02:51
Calibration Check	SLC0521-CCVD	XDT_m2230330-139	NA	03/31/23 02:56
Calibration Blank	SLC0521-CCBD	XDT_m2230330-140	NA	03/31/23 03:03
Instrument Blank	SLC0521-IBLI	XDT_m2230330-150	NA	03/31/23 03:51
Calibration Check	SLC0521-CCVE	XDT_m2230330-151	NA	03/31/23 03:56
Calibration Blank	SLC0521-CCBE	XDT_m2230330-152	NA	03/31/23 04:04
Instrument Blank	SLC0521-IBLJ	XDT_m2230330-162	NA	03/31/23 04:53
Calibration Check	SLC0521-CCVF	XDT_m2230330-163	NA	03/31/23 04:58
Calibration Blank	SLC0521-CCBF	XDT_m2230330-164	NA	03/31/23 05:05
Calibration Check	SLC0521-CCVG	XDT_m2230330-166	NA	03/31/23 05:15
Calibration Blank	SLC0521-CCBG	XDT_m2230330-167	NA	03/31/23 05:23
Instrument Blank	SLC0521-IBLK	XDT_m2230330-177	NA	03/31/23 06:12
Calibration Check	SLC0521-CCVH	XDT_m2230330-178	NA	03/31/23 06:17
Calibration Blank	SLC0521-CCBH	XDT_m2230330-179	NA	03/31/23 06:25
Instrument Blank	SLC0521-IBLL	XDT_m2230330-189	NA	03/31/23 07:14
Calibration Check	SLC0521-CCVI	XDT_m2230330-190	NA	03/31/23 07:19

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0521
Instrument: ICPMS2
Calibration: GD00002

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLC0521-CCBI	XDT_m2230330-191	NA	03/31/23 07:27
Instrument Blank	SLC0521-IBLM	XDT_m2230330-201	NA	03/31/23 08:17
Calibration Check	SLC0521-CCVJ	XDT_m2230330-202	NA	03/31/23 08:21
Calibration Blank	SLC0521-CCBJ	XDT_m2230330-203	NA	03/31/23 08:29
Instrument Blank	SLC0521-IBLN	XDT_m2230330-213	NA	03/31/23 09:19
Calibration Check	SLC0521-CCVK	XDT_m2230330-214	NA	03/31/23 09:23
Calibration Blank	SLC0521-CCBK	XDT_m2230330-215	NA	03/31/23 09:31
Instrument Blank	SLC0521-IBLO	XDT_m2230330-222	NA	03/31/23 10:07
Calibration Check	SLC0521-CCVL	XDT_m2230330-223	NA	03/31/23 10:11
Calibration Blank	SLC0521-CCBL	XDT_m2230330-224	NA	03/31/23 10:19

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLD0005	Instrument:	ICPMS2
		Calibration:	GD00005

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLD0005-CAL1	XDT_m2230331-006	NA	03/31/23 15:18
CAL 1 - LOW CHECK	SLD0005-CAL2	XDT_m2230331-007	NA	03/31/23 15:23
CAL 2	SLD0005-CAL3	XDT_m2230331-008	NA	03/31/23 15:27
CAL 3	SLD0005-CAL4	XDT_m2230331-009	NA	03/31/23 15:33
CAL 4	SLD0005-CAL5	XDT_m2230331-010	NA	03/31/23 15:38
CAL 5	SLD0005-CAL6	XDT_m2230331-011	NA	03/31/23 15:45
RINSE	SLD0005-IBL1	XDT_m2230331-012	NA	03/31/23 15:52
Initial Cal Check	SLD0005-ICV1	XDT_m2230331-014	NA	03/31/23 16:00
Initial Cal Blank	SLD0005-ICB1	XDT_m2230331-015	NA	03/31/23 16:08
Calibration Check	SLD0005-CCV1	XDT_m2230331-017	NA	03/31/23 16:20
Calibration Blank	SLD0005-CCB1	XDT_m2230331-018	NA	03/31/23 16:29
Instrument RL Check	SLD0005-CRL1	XDT_m2230331-019	NA	03/31/23 16:37
Interference Check A	SLD0005-IFA1	XDT_m2230331-020	NA	03/31/23 16:41
Interference Check B	SLD0005-IFB1	XDT_m2230331-021	NA	03/31/23 16:46
LR200	SLD0005-HCV1	XDT_m2230331-022	NA	03/31/23 16:51
LR300	SLD0005-HCV2	XDT_m2230331-023	NA	03/31/23 16:56
Instrument Blank	SLD0005-IBL2	XDT_m2230331-024	NA	03/31/23 17:04
Instrument Blank	SLD0005-IBL3	XDT_m2230331-025	NA	03/31/23 17:11
Instrument Blank	SLD0005-IBL4	XDT_m2230331-026	NA	03/31/23 17:17
Calibration Check	SLD0005-CCV2	XDT_m2230331-027	NA	03/31/23 17:22
Calibration Blank	SLD0005-CCB2	XDT_m2230331-028	NA	03/31/23 17:30
ZZZZZ	BLC0848-BLK1	XDT_m2230331-029	Water	03/31/23 17:36
ZZZZZ	BLC0848-BS1	XDT_m2230331-030	Water	03/31/23 17:41
ZZZZZ	23C0747-01	XDT_m2230331-031	Water	03/31/23 17:46
Instrument Blank	SLD0005-IBL5	XDT_m2230331-038	NA	03/31/23 18:26
Calibration Check	SLD0005-CCV3	XDT_m2230331-039	NA	03/31/23 18:31
Calibration Blank	SLD0005-CCB3	XDT_m2230331-040	NA	03/31/23 18:42
Calibration Check	SLD0005-CCV4	XDT_m2230331-042	NA	03/31/23 18:53
Calibration Blank	SLD0005-CCB4	XDT_m2230331-043	NA	03/31/23 19:01

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLD0005

SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: ICPMS2
Calibration: GD00005

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Check	SLD0005-CCV5	XDT_m2230331-054	NA	03/31/23 19:58
Calibration Blank	SLD0005-CCB5	XDT_m2230331-055	NA	03/31/23 20:08
Calibration Check	SLD0005-CCV6	XDT_m2230331-066	NA	03/31/23 21:04
Calibration Blank	SLD0005-CCB6	XDT_m2230331-067	NA	03/31/23 21:12
Blank	BLC0703-BLK1	XDT_m2230331-068	Solid	03/31/23 21:20
LCS	BLC0703-BS1	XDT_m2230331-069	Solid	03/31/23 21:25
Instrument Blank	SLD0005-IBL6	XDT_m2230331-077	NA	03/31/23 22:06
Calibration Check	SLD0005-CCV7	XDT_m2230331-078	NA	03/31/23 22:11
Calibration Blank	SLD0005-CCB7	XDT_m2230331-079	NA	03/31/23 22:20
ZZZZZ	23A0133-10	XDT_m2230331-083	Solid	03/31/23 22:45
ZZZZZ	23A0133-13	XDT_m2230331-086	Solid	03/31/23 23:00
Calibration Check	SLD0005-CCV8	XDT_m2230331-090	NA	03/31/23 23:21
Calibration Blank	SLD0005-CCB8	XDT_m2230331-091	NA	03/31/23 23:28
Calibration Check	SLD0005-CCV9	XDT_m2230331-102	NA	04/01/23 00:23
Calibration Blank	SLD0005-CCB9	XDT_m2230331-103	NA	04/01/23 00:30
ZZZZZ	BLC0848-DUP1	XDT_m2230331-104	Water	04/01/23 00:35
ZZZZZ	BLC0848-MS1	XDT_m2230331-105	Water	04/01/23 00:40
Instrument Blank	SLD0005-IBLA	XDT_m2230331-113	NA	04/01/23 01:24
Calibration Check	SLD0005-CCVA	XDT_m2230331-114	NA	04/01/23 01:29
Calibration Blank	SLD0005-CCBA	XDT_m2230331-115	NA	04/01/23 01:37
Calibration Check	SLD0005-CCVB	XDT_m2230331-117	NA	04/01/23 01:46
Calibration Blank	SLD0005-CCBB	XDT_m2230331-118	NA	04/01/23 01:54
Instrument Blank	SLD0005-IBLC	XDT_m2230331-128	NA	04/01/23 02:44
Calibration Check	SLD0005-CCVC	XDT_m2230331-129	NA	04/01/23 02:49
Calibration Blank	SLD0005-CCBC	XDT_m2230331-130	NA	04/01/23 02:57
Instrument Blank	SLD0005-IBLD	XDT_m2230331-140	NA	04/01/23 03:47
Calibration Check	SLD0005-CCVD	XDT_m2230331-141	NA	04/01/23 03:52
Calibration Blank	SLD0005-CCBD	XDT_m2230331-142	NA	04/01/23 03:59

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLD0041	Instrument:	ICPMS2
		Calibration:	GD00006

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLD0041-CAL1	XDT_m2230401-006	NA	04/01/23 13:46
CAL 1 - LOW CHECK	SLD0041-CAL2	XDT_m2230401-007	NA	04/01/23 13:51
CAL 2	SLD0041-CAL3	XDT_m2230401-008	NA	04/01/23 13:55
CAL 3	SLD0041-CAL4	XDT_m2230401-009	NA	04/01/23 14:00
CAL 4	SLD0041-CAL5	XDT_m2230401-010	NA	04/01/23 14:05
CAL 5	SLD0041-CAL6	XDT_m2230401-011	NA	04/01/23 14:11
RINSE	SLD0041-IBL1	XDT_m2230401-012	NA	04/01/23 14:18
Initial Cal Check	SLD0041-ICV1	XDT_m2230401-014	NA	04/01/23 14:26
Initial Cal Blank	SLD0041-ICB1	XDT_m2230401-015	NA	04/01/23 14:33
Calibration Check	SLD0041-CCV1	XDT_m2230401-016	NA	04/01/23 14:48
Calibration Blank	SLD0041-CCB1	XDT_m2230401-017	NA	04/01/23 14:55
Instrument RL Check	SLD0041-CRL1	XDT_m2230401-018	NA	04/01/23 15:01
Interference Check A	SLD0041-IFA1	XDT_m2230401-019	NA	04/01/23 15:06
Interference Check B	SLD0041-IFB1	XDT_m2230401-020	NA	04/01/23 15:10
LR200	SLD0041-HCV1	XDT_m2230401-021	NA	04/01/23 15:14
LR300	SLD0041-HCV2	XDT_m2230401-022	NA	04/01/23 15:19
Instrument Blank	SLD0041-IBL2	XDT_m2230401-023	NA	04/01/23 15:26
Instrument Blank	SLD0041-IBL3	XDT_m2230401-024	NA	04/01/23 15:32
Calibration Check	SLD0041-CCV2	XDT_m2230401-025	NA	04/01/23 15:39
Calibration Blank	SLD0041-CCB2	XDT_m2230401-026	NA	04/01/23 15:46
Instrument Blank	SLD0041-IBL4	XDT_m2230401-036	NA	04/01/23 16:35
Calibration Check	SLD0041-CCV3	XDT_m2230401-037	NA	04/01/23 16:40
Calibration Blank	SLD0041-CCB3	XDT_m2230401-038	NA	04/01/23 16:47
ZZZZZ	23A0133-06	XDT_m2230401-039	Solid	04/01/23 16:55
ZZZZZ	23A0133-06	XDT_m2230401-039	Solid	04/01/23 16:55
ZZZZZ	23A0133-06	XDT_m2230401-039	Solid	04/01/23 16:55
ZZZZZ	23A0133-06	XDT_m2230401-039	Solid	04/01/23 16:55
ZZZZZ	23A0133-07	XDT_m2230401-040	Solid	04/01/23 17:00
ZZZZZ	23A0133-07	XDT_m2230401-040	Solid	04/01/23 17:00

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0041
Instrument: ICPMS2
Calibration: GD00006

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0133-07	XDT_m2230401-040	Solid	04/01/23 17:00
ZZZZZ	23A0133-07	XDT_m2230401-040	Solid	04/01/23 17:00
ZZZZZ	23A0133-08	XDT_m2230401-041	Solid	04/01/23 17:04
ZZZZZ	23A0133-08	XDT_m2230401-041	Solid	04/01/23 17:04
ZZZZZ	23A0133-08	XDT_m2230401-041	Solid	04/01/23 17:04
ZZZZZ	23A0133-08	XDT_m2230401-041	Solid	04/01/23 17:04
ZZZZZ	23A0133-09	XDT_m2230401-042	Solid	04/01/23 17:09
ZZZZZ	23A0133-09	XDT_m2230401-042	Solid	04/01/23 17:09
ZZZZZ	23A0133-09	XDT_m2230401-042	Solid	04/01/23 17:09
ZZZZZ	23A0133-09	XDT_m2230401-042	Solid	04/01/23 17:09
ZZZZZ	23A0133-03	XDT_m2230401-043	Solid	04/01/23 17:13
ZZZZZ	23A0133-03	XDT_m2230401-043	Solid	04/01/23 17:13
ZZZZZ	23A0133-03	XDT_m2230401-043	Solid	04/01/23 17:13
ZZZZZ	23A0133-03	XDT_m2230401-043	Solid	04/01/23 17:13
Instrument Blank	SLD0041-IBL5	XDT_m2230401-048	NA	04/01/23 17:35
Calibration Check	SLD0041-CCV4	XDT_m2230401-049	NA	04/01/23 17:40
Calibration Blank	SLD0041-CCB4	XDT_m2230401-050	NA	04/01/23 17:47
ZZZZZ	23A0133-10	XDT_m2230401-053	Solid	04/01/23 18:02
ZZZZZ	23A0133-10	XDT_m2230401-053	Solid	04/01/23 18:02
ZZZZZ	23A0133-10	XDT_m2230401-053	Solid	04/01/23 18:02
ZZZZZ	23A0133-11	XDT_m2230401-054	Solid	04/01/23 18:07
ZZZZZ	23A0133-11	XDT_m2230401-054	Solid	04/01/23 18:07
ZZZZZ	23A0133-11	XDT_m2230401-054	Solid	04/01/23 18:07
ZZZZZ	23A0133-11	XDT_m2230401-054	Solid	04/01/23 18:07
ZZZZZ	23A0133-12	XDT_m2230401-055	Solid	04/01/23 18:11
ZZZZZ	23A0133-12	XDT_m2230401-055	Solid	04/01/23 18:11
ZZZZZ	23A0133-12	XDT_m2230401-055	Solid	04/01/23 18:11
ZZZZZ	23A0133-12	XDT_m2230401-055	Solid	04/01/23 18:11
ZZZZZ	23A0133-13	XDT_m2230401-056	Solid	04/01/23 18:16

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0041
Instrument: ICPMS2
Calibration: GD00006

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0133-13	XDT_m2230401-056	Solid	04/01/23 18:16
ZZZZZ	23A0133-13	XDT_m2230401-056	Solid	04/01/23 18:16
ZZZZZ	23A0133-14	XDT_m2230401-057	Solid	04/01/23 18:20
ZZZZZ	23A0133-14	XDT_m2230401-057	Solid	04/01/23 18:20
ZZZZZ	23A0133-14	XDT_m2230401-057	Solid	04/01/23 18:20
ZZZZZ	23A0133-14	XDT_m2230401-057	Solid	04/01/23 18:20
ZZZZZ	23A0133-15	XDT_m2230401-058	Solid	04/01/23 18:24
ZZZZZ	23A0133-15	XDT_m2230401-058	Solid	04/01/23 18:24
ZZZZZ	23A0133-15	XDT_m2230401-058	Solid	04/01/23 18:24
ZZZZZ	23A0133-15	XDT_m2230401-058	Solid	04/01/23 18:24
ZZZZZ	23A0133-16	XDT_m2230401-059	Solid	04/01/23 18:29
ZZZZZ	23A0133-16	XDT_m2230401-059	Solid	04/01/23 18:29
ZZZZZ	23A0133-16	XDT_m2230401-059	Solid	04/01/23 18:29
ZZZZZ	23A0133-16	XDT_m2230401-059	Solid	04/01/23 18:29
Instrument Blank	SLD0041-IBL6	XDT_m2230401-060	NA	04/01/23 18:33
Calibration Check	SLD0041-CCV5	XDT_m2230401-061	NA	04/01/23 18:38
Calibration Blank	SLD0041-CCB5	XDT_m2230401-062	NA	04/01/23 18:45
LDW23-SS1205	23A0134-01	XDT_m2230401-063	Solid	04/01/23 18:49
LDW23-SS1205	23A0134-01	XDT_m2230401-063	Solid	04/01/23 18:49
LDW23-SS1205	23A0134-01	XDT_m2230401-063	Solid	04/01/23 18:49
LDW23-SS1205	23A0134-01	XDT_m2230401-063	Solid	04/01/23 18:49
LDW23-SS1188	23A0134-02	XDT_m2230401-064	Solid	04/01/23 18:54
LDW23-SS1188	23A0134-02	XDT_m2230401-064	Solid	04/01/23 18:54
LDW23-SS1188	23A0134-02	XDT_m2230401-064	Solid	04/01/23 18:54
LDW23-SS1188	23A0134-02	XDT_m2230401-064	Solid	04/01/23 18:54
LDW23-SS1179	23A0134-03	XDT_m2230401-065	Solid	04/01/23 18:58
LDW23-SS1179	23A0134-03	XDT_m2230401-065	Solid	04/01/23 18:58
LDW23-SS1179	23A0134-03	XDT_m2230401-065	Solid	04/01/23 18:58
LDW23-SS1179	23A0134-03	XDT_m2230401-065	Solid	04/01/23 18:58

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0041
Instrument: ICPMS2
Calibration: GD00006

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SS1242	23A0134-04	XDT_m2230401-066	Solid	04/01/23 19:03
LDW23-SS1242	23A0134-04	XDT_m2230401-066	Solid	04/01/23 19:03
LDW23-SS1242	23A0134-04	XDT_m2230401-066	Solid	04/01/23 19:03
LDW23-SS1242	23A0134-04	XDT_m2230401-066	Solid	04/01/23 19:03
LDW23-SS1173	23A0134-05	XDT_m2230401-067	Solid	04/01/23 19:07
LDW23-SS1173	23A0134-05	XDT_m2230401-067	Solid	04/01/23 19:07
LDW23-SS1173	23A0134-05	XDT_m2230401-067	Solid	04/01/23 19:07
LDW23-SS1173	23A0134-05	XDT_m2230401-067	Solid	04/01/23 19:07
LDW23-SS1160	23A0134-06	XDT_m2230401-068	Solid	04/01/23 19:11
LDW23-SS1160	23A0134-06	XDT_m2230401-068	Solid	04/01/23 19:11
LDW23-SS1160	23A0134-06	XDT_m2230401-068	Solid	04/01/23 19:11
LDW23-SS1160	23A0134-06	XDT_m2230401-068	Solid	04/01/23 19:11
LDW23-SS1152	23A0134-07	XDT_m2230401-069	Solid	04/01/23 19:16
LDW23-SS1152	23A0134-07	XDT_m2230401-069	Solid	04/01/23 19:16
LDW23-SS1152	23A0134-07	XDT_m2230401-069	Solid	04/01/23 19:16
LDW23-SS1152	23A0134-07	XDT_m2230401-069	Solid	04/01/23 19:16
LDW23-SS1131	23A0134-08	XDT_m2230401-070	Solid	04/01/23 19:20
LDW23-SS1131	23A0134-08	XDT_m2230401-070	Solid	04/01/23 19:20
LDW23-SS1131	23A0134-08	XDT_m2230401-070	Solid	04/01/23 19:20
LDW23-SS1131	23A0134-08	XDT_m2230401-070	Solid	04/01/23 19:20
Instrument Blank	SLD0041-IBL7	XDT_m2230401-071	NA	04/01/23 19:25
Calibration Check	SLD0041-CCV6	XDT_m2230401-072	NA	04/01/23 19:29
Calibration Blank	SLD0041-CCB6	XDT_m2230401-073	NA	04/01/23 19:36
ZZZZZ	BLC0840-BLK1	XDT_m2230401-074	Solid	04/01/23 19:41
ZZZZZ	BLC0840-BS1	XDT_m2230401-075	Solid	04/01/23 19:45
ZZZZZ	BLC0840-SRL1	XDT_m2230401-076	Solid	04/01/23 19:50
ZZZZZ	23C0042-01	XDT_m2230401-077	Solid	04/01/23 19:54
ZZZZZ	23C0042-01	XDT_m2230401-077	Solid	04/01/23 19:54
ZZZZZ	23C0042-01	XDT_m2230401-077	Solid	04/01/23 19:54

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0041
Instrument: ICPMS2
Calibration: GD00006

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	BLC0840-DUP1	XDT_m2230401-078	Solid	04/01/23 19:58
ZZZZZ	BLC0840-MS1	XDT_m2230401-079	Solid	04/01/23 20:03
ZZZZZ	BLC0840-MSD1	XDT_m2230401-080	Solid	04/01/23 20:07
ZZZZZ	BLC0840-SRM1	XDT_m2230401-082	Solid	04/01/23 20:16
Instrument Blank	SLD0041-IBL8	XDT_m2230401-083	NA	04/01/23 20:21
Calibration Check	SLD0041-CCV7	XDT_m2230401-084	NA	04/01/23 20:26
Calibration Blank	SLD0041-CCB7	XDT_m2230401-085	NA	04/01/23 20:33
ZZZZZ	23C0042-02	XDT_m2230401-086	Solid	04/01/23 20:38
ZZZZZ	23C0042-02	XDT_m2230401-086	Solid	04/01/23 20:38
ZZZZZ	23C0042-02	XDT_m2230401-086	Solid	04/01/23 20:38
ZZZZZ	23C0042-02	XDT_m2230401-086	Solid	04/01/23 20:38
ZZZZZ	23C0042-03	XDT_m2230401-087	Solid	04/01/23 20:42
ZZZZZ	23C0042-03	XDT_m2230401-087	Solid	04/01/23 20:42
ZZZZZ	23C0042-03	XDT_m2230401-087	Solid	04/01/23 20:42
ZZZZZ	23C0042-03	XDT_m2230401-087	Solid	04/01/23 20:42
ZZZZZ	23C0042-04	XDT_m2230401-088	Solid	04/01/23 20:47
ZZZZZ	23C0042-04	XDT_m2230401-088	Solid	04/01/23 20:47
ZZZZZ	23C0042-04	XDT_m2230401-088	Solid	04/01/23 20:47
ZZZZZ	23C0042-04	XDT_m2230401-088	Solid	04/01/23 20:47
ZZZZZ	23C0042-05	XDT_m2230401-089	Solid	04/01/23 20:51
ZZZZZ	23C0042-05	XDT_m2230401-089	Solid	04/01/23 20:51
ZZZZZ	23C0042-05	XDT_m2230401-089	Solid	04/01/23 20:51
ZZZZZ	23C0042-05	XDT_m2230401-089	Solid	04/01/23 20:51
ZZZZZ	23C0042-06	XDT_m2230401-090	Solid	04/01/23 20:55
ZZZZZ	23C0042-06	XDT_m2230401-090	Solid	04/01/23 20:55
ZZZZZ	23C0042-06	XDT_m2230401-090	Solid	04/01/23 20:55
ZZZZZ	23C0042-06	XDT_m2230401-090	Solid	04/01/23 20:55
ZZZZZ	23C0042-07	XDT_m2230401-091	Solid	04/01/23 21:00
ZZZZZ	23C0042-07	XDT_m2230401-091	Solid	04/01/23 21:00

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0041
Instrument: ICPMS2
Calibration: GD00006

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23C0042-07	XDT_m2230401-091	Solid	04/01/23 21:00
ZZZZZ	23C0042-07	XDT_m2230401-091	Solid	04/01/23 21:00
ZZZZZ	23C0042-08	XDT_m2230401-092	Solid	04/01/23 21:04
ZZZZZ	23C0042-08	XDT_m2230401-092	Solid	04/01/23 21:04
ZZZZZ	23C0042-08	XDT_m2230401-092	Solid	04/01/23 21:04
ZZZZZ	23C0042-09	XDT_m2230401-093	Solid	04/01/23 21:09
ZZZZZ	23C0042-09	XDT_m2230401-093	Solid	04/01/23 21:09
ZZZZZ	23C0042-09	XDT_m2230401-093	Solid	04/01/23 21:09
ZZZZZ	23C0042-09	XDT_m2230401-093	Solid	04/01/23 21:09
Instrument Blank	SLD0041-IBL9	XDT_m2230401-094	NA	04/01/23 21:13
Calibration Check	SLD0041-CCV8	XDT_m2230401-095	NA	04/01/23 21:18
Calibration Blank	SLD0041-CCB8	XDT_m2230401-096	NA	04/01/23 21:25
Instrument Blank	SLD0041-IBLA	XDT_m2230401-103	NA	04/01/23 21:56
Calibration Check	SLD0041-CCV9	XDT_m2230401-104	NA	04/01/23 22:00
Calibration Blank	SLD0041-CCB9	XDT_m2230401-105	NA	04/01/23 22:07

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Sequence: SLC0521
Standard ID: L003416

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0521-IFA1	Arsenic-75a	0	0.0400		ug/L
	Cadmium-111	0	0.0520		ug/L
	Cadmium-114	0	0.0410		ug/L
	Copper-63	0	0.0600		ug/L
	Copper-65	0	0.0740		ug/L
	Zinc-66	0	0.2720		ug/L
	Zinc-67	0	0.3310		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Sequence: SLC0521
Standard ID: L003416

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0521-IFB1	Arsenic-75a	20.000	19.393	97.0	ug/L
	Cadmium-111	20.000	19.078	95.4	ug/L
	Cadmium-114	20.000	19.162	95.8	ug/L
	Copper-63	20.000	20.095	100	ug/L
	Copper-65	20.000	20.114	101	ug/L
	Zinc-66	20.000	19.329	96.6	ug/L
	Zinc-67	20.000	17.796	89.0	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00005
Sequence: SLD0005
Standard ID: L003416

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0005-IFA1	Arsenic-75a	0	0.0340		ug/L
	Cadmium-111	0	0.0710		ug/L
	Cadmium-114	0	0.0450		ug/L
	Copper-63	0	0.0650		ug/L
	Copper-65	0	0.0440		ug/L
	Zinc-66	0	0.2190		ug/L
	Zinc-67	0	0.3490		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00005
Sequence: SLD0005
Standard ID: L003416

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0005-IFB1	Arsenic-75a	20.000	18.842	94.2	ug/L
	Cadmium-111	20.000	18.949	94.7	ug/L
	Cadmium-114	20.000	18.962	94.8	ug/L
	Copper-63	20.000	19.201	96.0	ug/L
	Copper-65	20.000	19.577	97.9	ug/L
	Zinc-66	20.000	18.679	93.4	ug/L
	Zinc-67	20.000	16.842	84.2	ug/L

* Indicates %R outside of QC limits
NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00006
Sequence: SLD0041
Standard ID: L003416

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0041-IFA1	Arsenic-75a	0	0.0220		ug/L
	Cadmium-111	0	0.0430		ug/L
	Cadmium-114	0	0.0280		ug/L
	Copper-63	0	0.0510		ug/L
	Copper-65	0	0.0580		ug/L
	Zinc-66	0	0.2970		ug/L
	Zinc-67	0	0.1220		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00006
Sequence: SLD0041
Standard ID: L003416

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0041-IFB1	Arsenic-75a	20.000	19.254	96.3	ug/L
	Cadmium-111	20.000	19.185	95.9	ug/L
	Cadmium-114	20.000	18.876	94.4	ug/L
	Copper-63	20.000	19.990	100	ug/L
	Copper-65	20.000	19.993	100	ug/L
	Zinc-66	20.000	18.313	91.6	ug/L
	Zinc-67	20.000	18.126	90.6	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Sequence: SLC0521
Lab Sample ID: SLC0521-CRL1

Analyte	True	Found	%R	Units	QC Limts
Arsenic-75a	0.20000	0.198	99.0	ug/L	50 - 150
Cadmium-111	0.10000	0.0810	81.0	ug/L	50 - 150
Cadmium-114	0.10000	0.0780	78.0	ug/L	50 - 150
Copper-63	0.50000	0.561	112	ug/L	50 - 150
Copper-65	0.50000	0.554	111	ug/L	50 - 150
Zinc-66	6.0000	6.30	105	ug/L	50 - 150
Zinc-67	6.0000	6.11	102	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00005
Sequence: SLD0005
Lab Sample ID: SLD0005-CRL1

Analyte	True	Found	%R	Units	QC Limts
Arsenic-75a	0.20000	0.196	98.0	ug/L	50 - 150
Cadmium-111	0.10000	0.0970	97.0	ug/L	50 - 150
Cadmium-114	0.10000	0.0870	87.0	ug/L	50 - 150
Copper-63	0.50000	0.518	104	ug/L	50 - 150
Copper-65	0.50000	0.573	115	ug/L	50 - 150
Zinc-66	6.0000	6.18	103	ug/L	50 - 150
Zinc-67	6.0000	5.73	95.6	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00006
Sequence: SLD0041
Lab Sample ID: SLD0041-CRL1

Analyte	True	Found	%R	Units	QC Limts
Arsenic-75a	0.20000	0.179	89.5	ug/L	50 - 150
Cadmium-111	0.10000	0.101	101	ug/L	50 - 150
Cadmium-114	0.10000	0.111	111	ug/L	50 - 150
Copper-63	0.50000	0.531	106	ug/L	50 - 150
Copper-65	0.50000	0.524	105	ug/L	50 - 150
Zinc-66	6.0000	6.56	109	ug/L	50 - 150
Zinc-67	6.0000	6.23	104	ug/L	50 - 150

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00002
Laboratory ID: SLC0521-HCV1
Sequence: SLC0521
Standard ID: L002745

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	200.00	201	0.6	10.00
Cadmium-111	200.00	192	-3.8	10.00
Cadmium-114	200.00	196	-2.2	10.00
Copper-63	200.00	197	-1.3	10.00
Copper-65	200.00	197	-1.3	10.00
Zinc-66	200.00	197	-1.6	10.00
Zinc-67	200.00	197	-1.4	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00002
Laboratory ID: SLC0521-HCV2
Sequence: SLC0521
Standard ID: L002746

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	300.00	296	-1.3	10.00
Cadmium-111	300.00	288	-4.0	10.00
Cadmium-114	300.00	288	-3.8	10.00
Copper-63	300.00	291	-3.0	10.00
Copper-65	300.00	294	-1.9	10.00
Zinc-66	300.00	279	-6.9	10.00
Zinc-67	300.00	287	-4.4	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00005
Laboratory ID: SLD0005-HCV1
Sequence: SLD0005
Standard ID: L002745

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	200.00	194	-2.9	10.00
Cadmium-111	200.00	197	-1.3	10.00
Cadmium-114	200.00	195	-2.3	10.00
Copper-63	200.00	187	-6.7	10.00
Copper-65	200.00	187	-6.5	10.00
Zinc-66	200.00	182	-9.2	10.00
Zinc-67	200.00	184	-8.0	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00005
Laboratory ID: SLD0005-HCV2
Sequence: SLD0005
Standard ID: L002746

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	300.00	303	1.1	10.00
Cadmium-111	300.00	289	-3.7	10.00
Cadmium-114	300.00	288	-4.1	10.00
Copper-63	300.00	281	-6.2	10.00
Copper-65	300.00	284	-5.3	10.00
Zinc-66	300.00	284	-5.2	10.00
Zinc-67	300.00	276	-7.9	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00006
Laboratory ID: SLD0041-HCV1
Sequence: SLD0041
Standard ID: L002745

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	200.00	195	-2.4	10.00
Cadmium-111	200.00	194	-3.0	10.00
Cadmium-114	200.00	193	-3.6	10.00
Copper-63	200.00	194	-3.0	10.00
Copper-65	200.00	192	-4.0	10.00
Zinc-66	200.00	186	-7.1	10.00
Zinc-67	200.00	189	-5.3	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00006
Laboratory ID: SLD0041-HCV2
Sequence: SLD0041
Standard ID: L002746

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	300.00	291	-3.0	10.00
Cadmium-111	300.00	288	-3.9	10.00
Cadmium-114	300.00	285	-4.9	10.00
Copper-63	300.00	284	-5.2	10.00
Copper-65	300.00	287	-4.3	10.00
Zinc-66	300.00	270	-9.9	10.00
Zinc-67	300.00	268	-10.8	10.00

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1205 23A0134-01	01/06/23 08:28	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 18:49	85	180	
LDW23-SS1188 23A0134-02	01/06/23 09:36	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 18:54	85	180	
LDW23-SS1179 23A0134-03	01/06/23 09:52	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 18:58	85	180	
LDW23-SS1242 23A0134-04	01/06/23 11:04	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 19:03	85	180	
LDW23-SS1173 23A0134-05	01/06/23 11:22	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 19:07	85	180	
LDW23-SS1160 23A0134-06	01/06/23 11:41	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 19:11	85	180	
LDW23-SS1152 23A0134-07	01/06/23 12:29	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 19:16	85	180	
LDW23-SS1131 23A0134-08	01/06/23 12:43	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 19:20	85	180	
LDW23-SS1129 23A0134-09	01/06/23 12:57	01/06/23 17:26	03/29/23 13:50	82	180	03/30/23 21:52	83	180	
LDW23-SS1124 23A0134-10	01/06/23 13:15	01/06/23 17:26	03/29/23 13:50	82	180	03/30/23 21:57	83	180	
LDW23-SS1123 23A0134-11	01/06/23 13:29	01/06/23 17:26	03/29/23 13:50	82	180	03/30/23 22:01	83	180	
LDW23-SS1116 23A0134-12	01/06/23 13:44	01/06/23 17:26	03/29/23 13:50	82	180	03/30/23 22:06	83	180	
LDW23-IT1210 23A0134-13	01/06/23 14:12	01/06/23 17:26	03/29/23 13:50	81	180	03/30/23 22:11	83	180	
LDW23-IT1194 23A0134-14	01/06/23 14:41	01/06/23 17:26	03/29/23 13:50	81	180	03/30/23 22:21	83	180	
LDW23-SC1249 23A0134-15	01/06/23 13:46	01/06/23 17:26	03/29/23 13:50	82	180	03/30/23 22:16	83	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ICPMS2

Analyte	MDL	RL	Units
Arsenic-75a	0.04	0.20	mg/kg
Cadmium-111	0.03	0.10	mg/kg
Cadmium-114	0.04	0.10	mg/kg
Copper-63	0.17	0.50	mg/kg
Copper-65	0.35	0.50	mg/kg
Zinc-66	2.9	6.0	mg/kg
Zinc-67	0.9	6.0	mg/kg

INORGANIC VENTURES
300 Technology Drive
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inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCU10
Lot Number:	P2-CU682108
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Copper
Starting Material:	Cu Metal
Starting Material Lot#:	2095
Starting Material Purity:	99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9977 ± 50 µg/mL**
ICP Assay NIST SRM 3114 Lot Number: 121207

Assay Method #2 **10024 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10007 ± 46 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.007542	M	Eu	<	0.000942	O	Na		0.001434	M	Se	<	0.016971	M	Zn	<	0.005657
O	Al	<	0.000609	O	Fe		0.008700	M	Nb	<	0.000942	O	Si		0.003052	M	Zr	<	0.000942
M	As	<	0.010371	M	Ga	<	0.000942	M	Nd	<	0.000942	M	Sm	<	0.000942				
M	Au	<	0.001885	M	Gd	<	0.000942	M	Ni		0.003781	M	Sn	<	0.005657				
O	B		0.003663	M	Ge	<	0.005657	M	Os	<	0.000942	M	Sr	<	0.000942				
M	Ba		0.004253	M	Hf	<	0.000942	O	P	<	0.031668	M	Ta	<	0.000942				
M	Be	<	0.000942	O	Hg	<	0.007064	M	Pb		0.005789	M	Tb	<	0.000942				
M	Bi	<	0.000942	M	Ho	<	0.000942	M	Pd	<	0.000942	M	Te	<	0.004714				
O	Ca		0.002304	M	In	<	0.000942	M	Pr	<	0.000942	M	Th	<	0.000942				
M	Cd	<	0.000942	M	Ir	<	0.000942	M	Pt	<	0.000942	O	Ti	<	0.002801				
M	Ce	<	0.000942	O	K		0.000763	M	Rb	<	0.000942	M	Tl	<	0.000942				
M	Co		0.001890	M	La	<	0.000942	M	Re	<	0.000942	M	Tm	<	0.000942				
M	Cr	<	0.005657	O	Li	<	0.000243	i	Rh	<		M	U	<	0.000942				
M	Cs	<	0.000942	M	Lu	<	0.000942	M	Ru	<	0.039588	M	V	<	0.003771				
s	Cu	<		O	Mg		0.000320	O	S		0.007174	M	W	<	0.005657				
M	Dy	<	0.000942	O	Mn		0.000793	M	Sb	<	0.001885	M	Y	<	0.000942				
M	Er	<	0.000942	M	Mo	<	0.005657	M	Sc	<	0.000942	M	Yb	<	0.000942				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 $Cu(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

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Certificate of Analysis

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGPB10
Lot Number:	S2-PB713228
Matrix:	0.5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Lead
Starting Material:	Lead Nitrate
Starting Material Lot#:	2343
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL

Density: 1.015 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10024 ± 41 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 **10054 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	M	Na		0.001470	M	Se	<	0.009100	O	Zn		0.006155
O	Al		0.017098	O	Fe		0.002496	M	Nb	<	0.000310	O	Si		0.003761	O	Zr	<	0.001700
M	As	<	0.003100	M	Ga	<	0.000310	M	Nd	<	0.000310	M	Sm	<	0.000310				
M	Au	<	0.000910	M	Gd	<	0.000310	O	Ni		0.001709	M	Sn	<	0.001300				
O	B	<	0.005600	M	Ge	<	0.002200	M	Os	<	0.000310	O	Sr		0.000444				
O	Ba		0.007865	M	Hf	<	0.000310	O	P	<	0.038000	M	Ta	<	0.000310				
O	Be	<	0.000320	M	Hg	<	0.002200	s	Pb	<		M	Tb	<	0.000610				
M	Bi	<	0.028000	M	Ho	<	0.000310	M	Pd	<	0.000610	M	Te	<	0.000310				
O	Ca		0.019834	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.000310				
O	Cd	<	0.000630	M	Ir	<	0.000310	M	Pt	<	0.000910	O	Ti		0.005129				
M	Ce		0.004787	O	K		0.008207	M	Rb	<	0.006700	M	Tl	<	0.016000				
M	Co	<	0.000610	M	La	<	0.001900	M	Re	<	0.000310	M	Tm	<	0.000310				
O	Cr	<	0.001500	O	Li	<	0.000110	O	Rh	<	0.007700	M	U	<	0.000310				
M	Cs	<	0.006100	M	Lu	<	0.000310	M	Ru	<	0.001300	M	V	<	0.001600				
M	Cu	<	0.001600	O	Mg		0.003317	O	S	<	0.052000	M	W	<	0.000910				
M	Dy	<	0.000310	O	Mn	<	0.001600	O	Sb	<	0.015000	M	Y	<	0.000310				
M	Er	<	0.000310	M	Mo	<	0.000610	O	Sc	<	0.000630	M	Yb	<	0.000310				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 $Pb(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

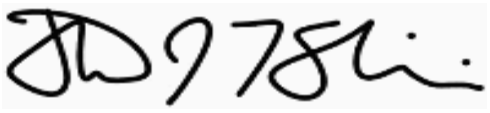
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGZN10
Lot Number:	S2-ZN711249
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Zinc
Starting Material:	Zinc Metal
Starting Material Lot#:	2349
Starting Material Purity:	99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9981 ± 56 µg/mL**
ICP Assay NIST SRM 3168a Lot Number: 120629

Assay Method #2 **9987 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10002 ± 32 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002000	M	Eu	<	0.000500	O	Na		0.008713	M	Se	<	0.048000	s	Zn	<	
O	Al	<	0.011000	O	Fe		0.015467	M	Nb	<	0.000500	O	Si		0.007842	M	Zr	<	0.000500
O	As	<	0.012000	M	Ga	<	0.004900	M	Nd	<	0.000500	M	Sm	<	0.000500				
M	Au	<	0.006500	M	Gd	<	0.000500	O	Ni		0.003049	M	Sn		0.002614				
O	B	<	0.019000	M	Ge	<	0.009100	M	Os	<	0.000500	M	Sr	<	0.000500				
M	Ba	<	0.000500	M	Hf	<	0.000500	O	P	<	0.059000	M	Ta	<	0.000500				
O	Be	<	0.000230	O	Hg	<	0.003800	M	Pb		0.016774	M	Tb	<	0.000500				
M	Bi	<	0.002400	M	Ho	<	0.000500	M	Pd	<	0.001000	M	Te	<	0.017000				
O	Ca		0.052283	M	In	<	0.003500	M	Pr	<	0.000500	M	Th	<	0.000500				
O	Cd		0.000588	M	Ir	<	0.001000	M	Pt	<	0.000500	M	Ti	<	0.002000				
M	Ce	<	0.000500	O	K		0.017209	M	Rb	<	0.002500	M	Tl	<	0.000500				
M	Co		0.000653	M	La	<	0.000500	M	Re	<	0.000500	M	Tm	<	0.000500				
O	Cr		0.001089	O	Li	<	0.000230	M	Rh	<	0.000500	M	U	<	0.000500				
M	Cs	<	0.000500	M	Lu	<	0.000500	M	Ru	<	0.005000	M	V	<	0.000500				
O	Cu		0.001938	O	Mg		0.000871	O	S	<	0.048000	M	W	<	0.001000				
M	Dy	<	0.000500	O	Mn		0.000172	M	Sb	<	0.004300	M	Y	<	0.000500				
M	Er	<	0.000500	M	Mo	<	0.001500	O	Sc	<	0.000900	M	Yb	<	0.000500				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

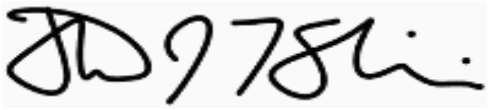
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE10
Lot Number:	S2-SE711004
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Selenium
Starting Material:	Se Metal
Starting Material Lot#:	1962
Starting Material Purity:	99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002242	M	Eu	<	0.000373	O	Na		0.013654	s	Se	<		O	Zn		0.002374
M	Al		0.004450	M	Fe		0.008478	O	Nb	<	0.002975	O	Si		0.006249	M	Zr	<	0.001868
O	As	<	0.022040	M	Ga	<	0.000373	M	Nd	<	0.000373	M	Sm	<	0.000373				
M	Au	<	0.000373	M	Gd	<	0.000373	O	Ni		0.001843	M	Sn		0.000847				
O	B	<	0.007714	M	Ge	<	0.002616	M	Os	<	0.000373	M	Sr	<	0.001121				
M	Ba	<	0.001495	M	Hf	<	0.000373	O	P	<	0.022040	M	Ta	<	0.000373				
M	Be	<	0.001495	M	Hg	<	0.002240	M	Pb		0.006358	M	Tb	<	0.006353				
M	Bi	<	0.000373	M	Ho	<	0.000373	M	Pd	<	0.000373	M	Te	<	0.012707				
O	Ca		0.006530	M	In	<	0.000373	M	Pr	<	0.001495	M	Th	<	0.002990				
M	Cd		0.001165	M	Ir	<	0.000373	M	Pt	<	0.000373	M	Ti	<	0.003363				
M	Ce	<	0.000373	O	K		0.001999	M	Rb	<	0.001868	M	Tl		0.008584				
M	Co	<	0.000373	M	La	<	0.001121	M	Re	<	0.000373	M	Tm	<	0.000373				
M	Cr		0.002861	O	Li		0.000062	M	Rh	<	0.000373	M	U	<	0.000373				
M	Cs	<	0.001121	M	Lu	<	0.000373	M	Ru	<	0.001493	M	V	<	0.000747				
M	Cu	<	0.000747	O	Mg		0.001156	O	S		0.024591	M	W	<	0.002242				
M	Dy	<	0.000373	M	Mn	<	0.000373	M	Sb	<	0.002242	M	Y	<	0.000373				
M	Er	<	0.000373	O	Mo	<	0.003195	M	Sc	<	0.001121	M	Yb	<	0.000373				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H_2SeO_3

Chemical Compatibility -Soluble in HCl, HNO_3,H_3PO_4, H_2SO_4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO_3or HNO_3 / HF); Organic Matrices (acid digestion with hot concentrated H_2SO_4 accompanied by the careful dropwise addition of H_2O_2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO10
Lot Number:	S2-MO706255
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	10 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL

Density: 1.011 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.008739	M	Se	<	0.008000	M	Zn		0.005942
M	Al		0.005592	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.001747				
M	Ba		0.016778	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.062920	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Ti	<	0.032000				
M	Ce	<	0.008300	M	K		1.293372	M	Rb		0.045442	M	Tl		0.012584				
M	Co		0.005942	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.005243	O	Li		0.000594	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.005243	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.022371	M	Mg		0.005592	i	S	<		M	W		0.873900				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.015031	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL10
Lot Number:	T2-TL714687
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Thallium
Starting Material:	TlNO3
Starting Material Lot#:	2118
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL

Density: 1.036 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL(

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000200	O	Na		0.002489	M	Se	<	0.011019	O	Zn		0.002298
O	Al	<	0.004184	O	Fe	<	0.002824	M	Nb	<	0.000200	O	Si		0.003760	M	Zr	<	0.000200
M	As	<	0.002003	M	Ga	<	0.000200	M	Nd	<	0.000200	M	Sm	<	0.000200				
O	Au	<	0.002824	M	Gd	<	0.000200	M	Ni		0.001724	M	Sn	<	0.000601				
O	B	<	0.004184	M	Ge	<	0.000801	M	Os	<	0.000198	O	Sr	<	0.000313				
M	Ba	<	0.000400	M	Hf	<	0.000200	O	P	<	0.010460	M	Ta	<	0.000200				
O	Be	<	0.000104	M	Hg	<	0.000794	M	Pb		0.000811	M	Tb	<	0.000200				
M	Bi	<	0.005209	M	Ho	<	0.000200	M	Pd	<	0.000400	M	Te	<	0.005008				
O	Ca		0.002436	M	In	<	0.000200	M	Pr	<	0.000200	M	Th	<	0.000200				
M	Cd		0.001318	M	Ir	<	0.000198	M	Pt	<	0.000801	O	Ti	<	0.001255				
M	Ce	<	0.000200	O	K		0.006175	M	Rb	<	0.000200	s	Tl	<					
M	Co	<	0.000601	M	La	<	0.000200	M	Re	<	0.000200	M	Tm	<	0.000200				
M	Cr	<	0.000801	O	Li	<	0.000177	M	Rh	<	0.000200	M	U	<	0.000200				
M	Cs	<	0.003606	M	Lu	<	0.000200	M	Ru	<	0.000397	M	V	<	0.002203				
M	Cu	<	0.001001	O	Mg		0.000529	O	S	<	0.015690	M	W	<	0.000601				
M	Dy	<	0.000200	M	Mn	<	0.000801	M	Sb	<	0.000400	M	Y	<	0.000200				
M	Er	<	0.000200	M	Mo	<	0.001202	O	Sc	<	0.000711	M	Yb	<	0.000200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+
Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Tl Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

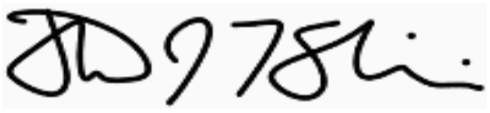
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCD10
Lot Number:	S2-CD710508
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cadmium
Starting Material:	Cd Metal
Starting Material Lot#:	1953
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10010 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 **10011 ± 30 µg/mL**
ICP Assay NIST SRM 3108 Lot Number: 130116

Assay Method #3 **10003 ± 30 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag	<	0.003200	O	Eu	<	0.002500	O	Na		0.005499	M	Se	<	0.005700	O	Zn	<	0.001100
O	Al		0.008903	O	Fe		0.000602	M	Nb	<	0.000400	O	Si		0.016758	O	Zr	<	0.002600
M	As	<	0.003600	M	Ga	<	0.001200	M	Nd	<	0.000800	M	Sm	<	0.000400				
M	Au	<	0.000810	M	Gd	<	0.000400	M	Ni	<	0.003600	M	Sn	<	0.003200				
O	B		0.004189	O	Ge	<	0.012000	M	Os	<	0.000810	O	Sr	<	0.000330				
M	Ba	<	0.002400	M	Hf	<	0.000400	O	P	<	0.022000	M	Ta	<	0.000800				
M	Be	<	0.000400	M	Hg	<	0.001700	M	Pb	<	0.002400	M	Tb	<	0.000400				
M	Bi	<	0.000400	M	Ho	<	0.000400	M	Pd	<	0.001200	M	Te	<	0.008000				
O	Ca		0.011259	O	In	<	0.013000	M	Pr	<	0.000400	M	Th	<	0.000400				
s	Cd	<		M	Ir	<	0.000410	M	Pt	<	0.000400	O	Ti		0.000602				
M	Ce	<	0.000400	O	K		0.005237	M	Rb	<	0.004400	M	Tl		0.000523				
M	Co	<	0.000400	M	La	<	0.000400	M	Re	<	0.000400	M	Tm	<	0.000400				
O	Cr	<	0.005100	O	Li	<	0.000054	M	Rh	<	0.000400	M	U	<	0.000400				
M	Cs	<	0.002400	M	Lu	<	0.000400	M	Ru	<	0.002500	M	V	<	0.002000				
O	Cu	<	0.004800	O	Mg		0.000288	O	S	<	0.022000	M	W	<	0.000400				
M	Dy	<	0.000400	O	Mn	<	0.000860	O	Sb	<	0.018000	M	Y	<	0.000400				
M	Er	<	0.000400	M	Mo	<	0.001600	O	Sc	<	0.000430	M	Yb	<	0.000400				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd2(OH) (aq)3+ and Cd(OH)(aq)

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 , and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO3 / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (soluble in HCl or HNO3); Ores (dissolve in HCl /HNO3 then take to fumes with H2SO4. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMN10
Lot Number:	S2-MN704240
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Manganese
Starting Material:	Mn Metal
Starting Material Lot#:	2275
Starting Material Purity:	99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9989 ± 69 µg/mL**
ICP Assay NIST SRM 3132 Lot Number: 050429

Assay Method #2 **10011 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10024 ± 47 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001500	M	Eu	<	0.000730	O	Na		0.176097	M	Se	<	0.006600	M	Zn		0.009925
O	Al		0.004322	M	Fe	<	0.650000	M	Nb	<	0.000730	O	Si		0.097654	M	Zr	<	0.000730
M	As	<	0.008000	M	Ga		0.004322	M	Nd	<	0.001500	M	Sm	<	0.000730				
M	Au	<	0.000730	M	Gd	<	0.000730	M	Ni		0.024013	M	Sn	<	0.002200				
M	B		0.068838	M	Ge	<	0.004400	M	Os	<	0.000730	O	Sr		0.000928				
M	Ba	<	0.001500	M	Hf	<	0.000730	i	P	<		M	Ta	<	0.000730				
M	Be	<	0.000730	M	Hg	<	0.002200	M	Pb		0.007364	M	Tb	<	0.000730				
M	Bi	<	0.003000	M	Ho	<	0.000730	M	Pd	<	0.000730	M	Te	<	0.019000				
O	Ca		0.062434	M	In	<	0.003000	M	Pr	<	0.000730	M	Th	<	0.000730				
M	Cd	<	0.001500	M	Ir	<	0.000730	M	Pt	<	0.000730	O	Ti	<	0.006500				
M	Ce	<	0.007300	O	K		0.006403	M	Rb	<	0.006600	M	Tl	<	0.000730				
O	Co		0.014728	M	La	<	0.003000	M	Re	<	0.000730	M	Tm	<	0.000730				
O	Cr		0.272151	O	Li		0.000416	M	Rh	<	0.003000	M	U	<	0.001500				
M	Cs	<	0.000730	M	Lu	<	0.000730	M	Ru	<	0.004400	M	V	<	0.000730				
O	Cu		0.007684	O	Mg		0.320177	i	S	<		M	W	<	0.004400				
M	Dy	<	0.001500	s	Mn	<		M	Sb	<	0.021000	O	Y		0.001360				
M	Er	<	0.001500	M	Mo		0.010245	O	Sc	<	0.004100	M	Yb	<	0.000730				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 $Mn(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO_3/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H_2SO_4 and heat to SO_3 fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16O,37Cl18O,40Ar15N,38Ar17O,36Ar18O1H ,38Ar16O1H,37Cl17O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB10
Lot Number:	R2-SB688559
Matrix:	3% (v/v) HNO3 3% (w/v) tartaric acid
Value / Analyte(s):	10 000 µg/mL ea: Antimony
Starting Material:	Antimony Metal
Starting Material Lot#:	1857
Starting Material Purity:	99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL

Density: 1.061 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10003 ± 41 µg/mL**
ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000300	O	Na		0.140000	M	Se	<	0.007300	O	Zn		0.005000
M	Al		0.003200	O	Fe		0.060000	M	Nb	<	0.000100	O	Si		0.150000	O	Zr	<	0.006300
M	As	<	0.004400	M	Ga	<	0.000400	M	Nd	<	0.000100	M	Sm	<	0.000100				
M	Au	<	0.000210	M	Gd	<	0.000100	O	Ni		0.004800	M	Sn	<	0.001800				
M	B	<	0.011000	M	Ge	<	0.000600	M	Os	<	0.000110	O	Sr		0.000750				
O	Ba	<	0.004900	M	Hf	<	0.000100	O	P		0.540000	M	Ta		0.003300				
M	Be	<	0.000400	M	Hg	<	0.000110	M	Pb	<	0.000400	M	Tb	<	0.000100				
M	Bi	<	0.000200	M	Ho	<	0.000100	M	Pd	<	0.000210	M	Te	<	0.000600				
O	Ca		0.110000	M	In	<	0.000100	M	Pr	<	0.001600	M	Th	<	0.000100				
M	Cd	<	0.000200	M	Ir	<	0.000110	M	Pt	<	0.000600	M	Ti	<	0.002800				
M	Ce		0.006500	O	K		0.020000	M	Rb	<	0.001000	M	Tl	<	0.000100				
M	Co	<	0.000200	O	La	<	0.016000	M	Re	<	0.000100	M	Tm	<	0.000100				
M	Cr		0.006900	O	Li	<	0.000430	M	Rh	<	0.000300	M	U	<	0.000100				
M	Cs	<	0.000200	M	Lu	<	0.000100	M	Ru	<	0.000310	M	V	<	0.000800				
M	Cu	<	0.000600	O	Mg		0.021000	n	S	<		M	W	<	0.000200				
M	Dy	<	0.000100	O	Mn		0.001900	s	Sb	<		M	Y	<	0.000100				
M	Er	<	0.000100	M	Mo	<	0.000500	O	Sc	<	0.002300	M	Yb	<	0.000100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAS10
Lot Number:	T2-AS718260
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Arsenic
Starting Material:	As Metal
Starting Material Lot#:	2208
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL

Density: 1.037 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10062 ± 46 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 **10055 ± 76 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.003200	M	Eu	< 0.000530	O	Na	0.032544	M	Se	< 0.006300	O	Zn	0.001952			
M	Al	0.007593	O	Fe	0.001475	O	Nb	< 0.012000	O	Si	0.238658	O	Zr	< 0.004100			
s	As	<	M	Ga	< 0.000530	M	Nd	< 0.000530	M	Sm	< 0.000530						
M	Au	< 0.003100	M	Gd	< 0.000530	M	Ni	< 0.002100	M	Sn	< 0.000530						
M	B	0.026035	M	Ge	< 0.001600	M	Os	< 0.000520	M	Sr	< 0.000530						
M	Ba	< 0.000530	M	Hf	< 0.000530	O	P	< 0.043000	M	Ta	< 0.000530						
O	Be	< 0.000360	M	Hg	< 0.001600	M	Pb	< 0.002100	M	Tb	< 0.000530						
M	Bi	< 0.000530	M	Ho	< 0.000530	M	Pd	< 0.001100	M	Te	< 0.004700						
O	Ca	0.004339	M	In	< 0.023000	M	Pr	< 0.005300	M	Th	< 0.000530						
M	Cd	< 0.001100	M	Ir	< 0.000520	M	Pt	< 0.000530	O	Ti	< 0.002300						
M	Ce	< 0.000530	O	K	0.002061	M	Rb	< 0.000530	M	Tl	< 0.000530						
M	Co	< 0.000530	M	La	< 0.001100	M	Re	< 0.000530	M	Tm	< 0.000530						
O	Cr	< 0.001800	O	Li	< 0.000120	M	Rh	< 0.000530	M	U	< 0.000530						
M	Cs	< 0.005300	M	Lu	< 0.000530	M	Ru	< 0.000520	M	V	< 0.002700						
M	Cu	< 0.001600	O	Mg	0.000154	O	S	0.028205	M	W	< 0.012000						
M	Dy	< 0.000530	O	Mn	0.000154	M	Sb	< 0.000530	M	Y	< 0.000530						
M	Er	< 0.000530	M	Mo	< 0.000530	O	Sc	< 0.001700	M	Yb	< 0.000530						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphic form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37Cl,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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CERTIFICATE OF ANALYSIS

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fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBA10
Lot Number:	R2-BA692576
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Barium
Starting Material:	Barium Nitrate
Starting Material Lot#:	1969
Starting Material Purity:	99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10018 ± 50 µg/mL**
ICP Assay NIST SRM 3104a Lot Number: 140909

Assay Method #2 **10023 ± 31 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #3 **10023 ± 30 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000410	O	Eu	<	0.005200	O	Na		0.004610	M	Se	<	0.003700	O	Zn		0.000658
M	Al	<	0.003100	O	Fe		0.015707	M	Nb	<	0.000210	O	Si		0.005573	M	Zr	<	0.001300
M	As	<	0.001300	M	Ga	<	0.000210	M	Nd	<	0.000210	O	Sm	<	0.021000				
M	Au	<	0.001300	M	Gd	<	0.000210	M	Ni	<	0.000810	M	Sn	<	0.000410				
O	B	<	0.005200	M	Ge	<	0.002500	M	Os	<	0.000410	O	Sr		0.003850				
s	Ba	<		M	Hf	<	0.000810	O	P	<	0.026000	M	Ta	<	0.000410				
O	Be	<	0.000320	M	Hg	<	0.000210	M	Pb	<	0.002300	M	Tb	<	0.000210				
M	Bi	<	0.000210	M	Ho	<	0.000210	M	Pd	<	0.000210	M	Te	<	0.001900				
O	Ca		0.007093	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	M	Ti	<	0.002100				
M	Ce	<	0.001300	O	K		0.035467	M	Rb	<	0.002100	M	Tl	<	0.000210				
M	Co	<	0.000410	O	La	<	0.005200	M	Re	<	0.000210	M	Tm	<	0.000410				
M	Cr	<	0.001700	O	Li	<	0.000630	M	Rh	<	0.000210	M	U	<	0.000210				
M	Cs	<	0.003300	M	Lu	<	0.001700	M	Ru	<	0.000210	O	V	<	0.005200				
M	Cu	<	0.001300	O	Mg		0.000861	O	S		0.268539	M	W	<	0.000410				
M	Dy	<	0.000210	M	Mn	<	0.000410	M	Sb	<	0.001300	O	Y	<	0.005200				
M	Er	<	0.001300	M	Mo	<	0.000410	M	Sc	<	0.000410	M	Yb	<	0.001300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 $Ba(H_2O)_6^{+2}$
Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO_3 / LDPE container.
Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO_3); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent $BaSO_4$ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBE10
Lot Number:	R2-BE692992
Matrix:	6% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Beryllium
Starting Material:	Beryllium Acetate
Starting Material Lot#:	2281
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL

Density: 1.128 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10042 ± 67 µg/mL**
ICP Assay NIST SRM 3105a Lot Number: 090514

Assay Method #2 **10025 ± 51 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001100	M	Eu	<	0.000270	O	Na		0.040962	M	Se	<	0.005000	M	Zn		0.013054
O	Al		0.016205	O	Fe		0.015754	M	Nb	<	0.000270	O	Si		0.024307	O	Zr	<	0.001900
M	As	<	0.002900	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270				
M	Au	<	0.000520	M	Gd	<	0.000270	M	Ni	<	0.003700	M	Sn	<	0.000790				
M	B	<	0.091000	M	Ge	<	0.000270	M	Os	<	0.000260	M	Sr		0.000630				
M	Ba		0.002700	M	Hf	<	0.000270	O	P	<	0.066000	M	Ta	<	0.000270				
s	Be	<		M	Hg	<	0.000520	M	Pb	<	0.000270	M	Tb	<	0.000270				
M	Bi	<	0.000530	M	Ho	<	0.000270	M	Pd	<	0.000520	M	Te	<	0.003700				
O	Ca		0.072022	M	In	<	0.000790	M	Pr	<	0.000270	M	Th	<	0.000270				
M	Cd	<	0.000790	M	Ir	<	0.000260	M	Pt	<	0.000270	O	Ti	<	0.000400				
M	Ce	<	0.000270	O	K		0.045014	M	Rb	<	0.000270	M	Tl	<	0.000790				
O	Co	<	0.003200	M	La	<	0.000270	M	Re	<	0.000270	M	Tm	<	0.000270				
O	Cr	<	0.001800	O	Li	<	0.000660	M	Rh	<	0.001100	M	U	<	0.000270				
M	Cs		0.001440	M	Lu	<	0.000270	M	Ru	<	0.000260	M	V	<	0.000790				
M	Cu	<	0.002100	O	Mg		0.016205	i	S	<		M	W	<	0.000530				
M	Dy	<	0.000270	M	Mn		0.001215	M	Sb	<	0.000270	M	Y	<	0.000270				
M	Er	<	0.000270	M	Mo	<	0.000530	O	Sc	<	0.000930	M	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 $Be(H_2O)_4^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, H_2SO_4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO_3 / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta l(is best dissolved in diluted H_2SO_4); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO4 fusion); Ores (H_2SO_4/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCO10
Lot Number:	R2-CO695285
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cobalt
Starting Material:	Co Metal
Starting Material Lot#:	2326
Starting Material Purity:	99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10031 ± 67 µg/mL**
ICP Assay NIST SRM 3113 Lot Number: 190630

Assay Method #2 **10019 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10000 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	0.014660	M	Eu	<	0.000590	O	Na	0.007534	M	Se	<	0.019000	M	Zn	0.003461	
M	Al	< 0.024000	M	Fe	0.050905	M	Nb	<	0.000590	O	Si	0.075340	M	Zr	<	0.001200	
i	As	<	M	Ga	<	0.000590	M	Nd	<	0.000590	M	Sm	<	0.000590			
M	Au	< 0.004100	M	Gd	<	0.000590	O	Ni	0.427608	M	Sn	<	0.001200				
M	B	< 0.031000	M	Ge	<	0.003000	M	Os	<	0.000590	O	Sr	<	0.000260			
M	Ba	< 0.000590	M	Hf	<	0.000590	n	P	<		M	Ta	<	0.001200			
O	Be	< 0.001300	M	Hg	<	0.001800	M	Pb	0.003257	M	Tb	<	0.000590				
M	Bi	< 0.003000	M	Ho	<	0.000590	M	Pd	<	0.000590	M	Te	<	0.005300			
O	Ca	0.010588	M	In	<	0.001200	M	Pr	<	0.000590	M	Th	<	0.000590			
M	Cd	< 0.004700	M	Ir	<	0.001200	M	Pt	<	0.002400	M	Ti	<	0.014000			
M	Ce	< 0.000590	O	K	0.008144	M	Rb	<	0.000590	M	Tl	0.002647					
s	Co	<	M	La	<	0.000590	M	Re	<	0.000590	M	Tm	<	0.000590			
M	Cr	< 0.021000	O	Li	<	0.000130	M	Rh	<	0.000590	M	U	<	0.000590			
M	Cs	< 0.002400	M	Lu	<	0.000590	M	Ru	<	0.007100	O	V	<	0.000880			
M	Cu	0.189369	O	Mg	0.001893	n	S	<		M	W	<	0.000590				
M	Dy	< 0.000590	M	Mn	<	0.001800	M	Sb	<	0.003600	M	Y	<	0.000590			
M	Er	< 0.000590	M	Mo	<	0.002400	O	Sc	<	0.001600	M	Yb	<	0.000590			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 $Co(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAG10
Lot Number:	S2-AG712977
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Silver
Starting Material:	Ag Shot
Starting Material Lot#:	2289
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10051 ± 52 µg/mL**
ICP Assay NIST SRM 3151 Lot Number: 160729

Assay Method #2 **10051 ± 19 µg/mL**
Volhard NIST SRM 999c Lot Number: 999c

Assay Method #3 **10049 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Ag	<		M	Eu	<	0.000260	O	Na		0.003811	M	Se	<	0.003900	O	Zn		0.048146
M	Al		0.002688	O	Fe		0.006419	M	Nb	<	0.000260	O	Si		0.005215	M	Zr	<	0.000260
M	As	<	0.001100	M	Ga	<	0.000260	M	Nd	<	0.000260	M	Sm	<	0.000260				
M	Au	<	0.000260	M	Gd	<	0.000260	O	Ni		0.001765	M	Sn		0.020060				
O	B	<	0.004300	M	Ge	<	0.002300	M	Os	<	0.001100	O	Sr	<	0.000110				
M	Ba	<	0.000520	M	Hf	<	0.000260	O	P	<	0.017000	M	Ta	<	0.000260				
O	Be	<	0.001100	M	Hg	<	0.000770	M	Pb	<	0.003600	M	Tb	<	0.000260				
M	Bi		0.004814	M	Ho	<	0.000260	M	Pd		0.044134	M	Te	<	0.009000				
O	Ca		0.005215	M	In		0.003691	M	Pr	<	0.000260	M	Th	<	0.000260				
M	Cd	<	0.000260	M	Ir	<	0.000520	M	Pt	<	0.001100	O	Ti	<	0.000440				
M	Ce	<	0.002100	O	K	<	0.008700	M	Rb	<	0.001100	M	Tl	<	0.004100				
O	Co	<	0.000330	M	La	<	0.000260	M	Re	<	0.000260	M	Tm	<	0.000260				
O	Cr	<	0.002500	O	Li	<	0.000110	M	Rh	<	0.000520	M	U	<	0.000260				
M	Cs	<	0.002600	M	Lu	<	0.000260	M	Ru	<	0.000260	M	V	<	0.000260				
O	Cu		0.357085	O	Mg		0.001203	O	S	<	0.017000	M	W	<	0.000260				
M	Dy	<	0.000260	O	Mn	<	0.000220	M	Sb	<	0.014000	M	Y	<	0.000260				
M	Er	<	0.000260	M	Mo	<	0.000260	O	Sc	<	0.000220	M	Yb	<	0.000260				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 $Ag(H_2O)_6^+$

Chemical Compatibility -Stable in HNO_3, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [$AgCl_{x1-x}$] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite , bromide, chloride, iodide, carbonate , chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Ag Containing Samples (Preparation and Solution) -Metal (Soluble in HNO_3); Oxides (Soluble in HNO_3); Ores (Digestion with conc. HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCR(3)10
Lot Number:	S2-CR709784
Matrix:	10% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Chromium
Starting Material:	Cr Metal
Starting Material Lot#:	2328
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL

Density: 1.072 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001700	M	Eu	<	0.003400	O	Na		0.090372	M	Se	<	0.012000	O	Zn	<	0.006100
M	Al		0.034916	O	Fe		0.246471	M	Nb	<	0.017000	n	Si	<		M	Zr	<	0.007800
M	As	<	0.028000	O	Ga	<	0.013000	M	Nd	<	0.013000	M	Sm	<	0.006900				
M	Au	<	0.001700	M	Gd	<	0.000560	M	Ni		0.016020	M	Sn		0.006983				
O	B	<	0.025000	O	Ge	<	0.014000	M	Os	<	0.000560	M	Sr		0.006367				
M	Ba	<	0.008900	M	Hf	<	0.000560	i	P	<		M	Ta	<	0.000560				
M	Be	<	0.013000	M	Hg	<	0.001700	M	Pb		0.010064	M	Tb	<	0.000560				
M	Bi	<	0.002300	M	Ho	<	0.000560	M	Pd	<	0.021000	M	Te	<	0.010000				
O	Ca		0.075995	M	In	<	0.000560	M	Pr	<	0.001700	M	Th	<	0.000560				
M	Cd	<	0.000560	M	Ir	<	0.000560	M	Pt	<	0.001200	O	Ti		0.013555				
M	Ce	<	0.001200	O	K		0.043132	i	Rb	<		M	Tl	<	0.000560				
M	Co	<	0.002600	M	La	<	0.001200	M	Re	<	0.001200	O	Tm	<	0.013000				
s	Cr	<		O	Li		0.000390	M	Rh	<	0.095000	M	U	<	0.000560				
M	Cs	<	0.007800	M	Lu	<	0.000560	M	Ru	<	0.087000	O	V		0.014993				
O	Cu		0.007599	O	Mg		0.000883	i	S	<		M	W	<	0.049000				
M	Dy	<	0.000560	M	Mn		0.008626	M	Sb	<	0.003400	M	Y	<	0.001700				
M	Er	<	0.019000	M	Mo	<	0.032000	M	Sc		0.003080	M	Yb	<	0.000560				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 $Cr(H_2O)_6^{3+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cr3 Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with $KHSO_4$ and extraction with hot KCl. The residue fused with Na_2CO_3 and $KClO_3$, 3:1. B. Fusion with $NaKSO_4$ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na_2O_2 or NaOH and KNO_3 or NaOH and Na_2O_2. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNI10
Lot Number:	P2-NI686384
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Nickel
Starting Material:	Ni Metal
Starting Material Lot#:	2277 and 2282
Starting Material Purity:	99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL

Density: 1.038 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9971 ± 54 µg/mL**
ICP Assay NIST SRM 3136 Lot Number: 120619

Assay Method #2 **9970 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **9993 ± 33 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.002606	M	Eu	<	0.001100	O	Na		0.004965	O	Se	<	0.067000	M	Zn		0.006578
M	Al	<	0.013000	O	Fe		0.018618	M	Nb	<	0.001100	O	Si		0.010923	M	Zr	<	0.001100
O	As	<	0.067000	M	Ga	<	0.001100	M	Nd	<	0.001100	M	Sm	<	0.001100				
M	Au	<	0.002100	M	Gd	<	0.001100	s	Ni	<		M	Sn	<	0.016000				
M	B	<	0.017000	M	Ge	<	0.004200	M	Os		0.002110	O	Sr	<	0.000940				
M	Ba	<	0.001100	M	Hf	<	0.001100	i	P	<		M	Ta	<	0.001100				
O	Be	<	0.000410	M	Hg		0.014895	M	Pb		0.006578	M	Tb	<	0.001100				
M	Bi	<	0.004200	M	Ho	<	0.001100	M	Pd	<	0.001100	M	Te	<	0.015000				
O	Ca		0.003351	M	In	<	0.001100	M	Pr	<	0.001100	M	Th	<	0.001100				
M	Cd		0.001365	M	Ir		0.004716	M	Pt	<	0.001100	M	Ti	<	0.004200				
M	Ce	<	0.001100	O	K		0.004716	M	Rb	<	0.001100	M	Tl	<	0.001100				
O	Co		0.017377	M	La	<	0.001100	M	Re		0.001737	M	Tm	<	0.001100				
O	Cr	<	0.006700	O	Li	<	0.000140	M	Rh	<	0.006300	M	U	<	0.001100				
M	Cs	<	0.007300	M	Lu	<	0.001100	M	Ru	<	0.019000	M	V	<	0.002100				
M	Cu		0.004096	O	Mg		0.000372	i	S	<		M	W	<	0.006300				
M	Dy	<	0.001100	O	Mn	<	0.001900	M	Sb		0.005833	O	Y	<	0.000540				
M	Er	<	0.001100	M	Mo	<	0.008400	M	Sc	<	0.002100	M	Yb	<	0.001100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H2O)62+

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGV10
Lot Number:	S2-V711005
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Vanadium
Starting Material:	Vanadium Pentoxide
Starting Material Lot#:	1782
Starting Material Purity:	99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL

Density: 1.104 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

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u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

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CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000110	M	Eu	<	0.000110	O	Na		0.120000	M	Se	<	0.009400	M	Zn		0.009400
O	Al		0.120000	O	Fe		0.460000	M	Nb	<	0.001300	O	Si		0.270000	M	Zr	<	0.002900
M	As	<	0.000210	M	Ga	<	0.009300	M	Nd	<	0.000610	M	Sm	<	0.000110				
M	Au	<	0.004700	M	Gd	<	0.000110	M	Ni		0.012000	M	Sn		0.003900				
M	B		0.051000	M	Ge	<	0.000410	M	Os	<	0.000110	O	Sr		0.007100				
M	Ba		0.003600	M	Hf	<	0.000110	O	P	<	0.034000	M	Ta	<	0.000110				
O	Be	<	0.000560	M	Hg	<	0.000410	M	Pb		0.001400	M	Tb	<	0.000110				
M	Bi	<	0.000210	M	Ho	<	0.000110	M	Pd	<	0.000410	M	Te	<	0.000110				
O	Ca		0.730000	M	In	<	0.000110	M	Pr	<	0.000110	M	Th	<	0.000210				
M	Cd	<	0.000610	M	Ir	<	0.000110	M	Pt	<	0.000110	M	Ti		0.017000				
M	Ce	<	0.000610	M	K		0.052000	M	Rb	<	0.000310	M	Tl	<	0.000110				
M	Co	<	0.001300	M	La	<	0.000410	M	Re		0.001700	M	Tm	<	0.000110				
O	Cr		0.170000	M	Li	<	0.000810	M	Rh	<	0.000110	M	U	<	0.000410				
M	Cs		0.005600	M	Lu	<	0.000110	M	Ru	<	0.000110	s	V	<					
M	Cu	<	0.001300	M	Mg		0.053000	i	S	<		M	W		0.002000				
M	Dy	<	0.000110	M	Mn		0.007900	M	Sb		0.078000	M	Y	<	0.000110				
M	Er	<	0.000110	M	Mo		0.094000	M	Sc	<	0.000410	M	Yb	<	0.000110				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 H2V10O284-

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4, HF, H3PO4 and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in Ni0 or Na2CO3 / KNO3); Oxides (V2O3 - use HCl, V2O4 - use HCl or HNO3, V2O5 - use concentrated acids); Ores (Na2CO3 / KNO3 in Pt0 caution - nitrates attack Pto followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V2O5 above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

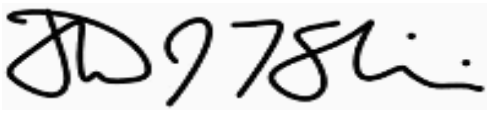
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Certificate of Analysis

Refine your results. Redefine your industry.

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Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAL10
Lot Number:	T2-AL716102
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Aluminum
Starting Material:	Aluminum Nitrate Nonahydrate
Starting Material Lot#:	2460
Starting Material Purity:	99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL

Density: 1.087 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10059 ± 40 µg/mL**
ICP Assay NIST SRM 3101a Lot Number: 140903

Assay Method #2 **10044 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10049 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002100	M	Eu	<	0.002100	O	Na		0.352819	M	Se	<	0.005200	M	Zn	0.006018
s	Al	<		O	Fe		0.074714	M	Nb	<	0.000520	O	Si		0.017848	O	Zr	0.004358
M	As		0.008716	O	Ga		0.112072	M	Nd	<	0.000520	M	Sm	<	0.000520			
M	Au	<	0.008400	M	Gd	<	0.001100	O	Ni	<	0.006000	M	Sn		0.000747			
O	B	<	0.014000	M	Ge	<	0.005200	M	Os	<	0.000650	O	Sr		0.000518			
O	Ba		0.012867	M	Hf	<	0.004100	n	P	<		M	Ta	<	0.000520			
O	Be	<	0.000270	M	Hg	<	0.002000	M	Pb		0.002282	M	Tb	<	0.000520			
M	Bi		0.001930	M	Ho	<	0.000520	M	Pd	<	0.000520	M	Te	<	0.001100			
O	Ca		0.076790	M	In	<	0.002100	M	Pr	<	0.000520	M	Th	<	0.000520			
M	Cd	<	0.000520	M	Ir	<	0.000650	M	Pt	<	0.000520	O	Ti		0.001930			
M	Ce	<	0.001100	O	K		0.043583	M	Rb	<	0.000520	M	Tl	<	0.000520			
O	Co	<	0.005400	M	La	<	0.002100	M	Re	<	0.000520	M	Tm	<	0.000520			
O	Cr		0.006018	O	Li		0.000112	M	Rh	<	0.000520	M	U	<	0.000520			
M	Cs		0.000643	M	Lu	<	0.000520	M	Ru	<	0.002000	M	V		0.001286			
O	Cu	<	0.008300	O	Mg		0.068488	i	S	<		M	W	<	0.009800			
M	Dy	<	0.002100	O	Mn		0.000913	M	Sb	<	0.003100	M	Y	<	0.001100			
M	Er	<	0.000520	M	Mo		0.005396	O	Sc	<	0.000950	M	Yb	<	0.000520			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H2O)6+3
Chemical Compatibility -Soluble in HCl, HNO3, v F and v 2SO4. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)4(H2O)21- species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); a- Al2O3 (Na2CO3 fusion in Pt0);
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

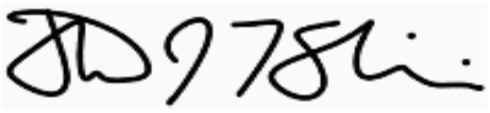
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGK10
Lot Number:	S2-K711973
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Potassium
Starting Material:	KNO3
Starting Material Lot#:	2313
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.024 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9987 ± 24 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **10004 ± 84 µg/mL**
ICP Assay NIST SRM 3141a Lot Number: 140813

Assay Method #3 **10007 ± 45 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001400	M	Eu	<	0.000660	O	Na		0.246220	M	Se	<	0.007900	O	Zn	0.018056
O	Al		0.001592	O	Fe		0.005909	M	Nb	<	0.000660	O	Si		0.011490	O	Zr	< 0.001600
M	As	<	0.005300	M	Ga	<	0.000660	M	Nd	<	0.000660	M	Sm	<	0.000660			
M	Au	<	0.002000	M	Gd	<	0.000660	O	Ni	<	0.004900	M	Sn	<	0.000660			
O	B	<	0.005600	M	Ge	<	0.002000	M	Os	<	0.003300	O	Sr		0.000055			
O	Ba	<	0.000860	M	Hf	<	0.000660	O	P	<	0.032000	M	Ta	<	0.000660			
O	Be	<	0.000082	M	Hg	<	0.002000	M	Pb	<	0.002300	M	Tb	<	0.000660			
M	Bi	<	0.006600	M	Ho	<	0.000660	M	Pd	<	0.000660	M	Te	<	0.017000			
O	Ca		0.031187	M	In	<	0.000660	M	Pr	<	0.000660	M	Th	<	0.000660			
O	Cd	<	0.000450	M	Ir	<	0.000660	M	Pt	<	0.002700	M	Ti	<	0.000660			
M	Ce	<	0.000660	s	K	<		M	Rb		0.476026	M	Tl	<	0.000660			
O	Co	<	0.000780	M	La	<	0.000660	M	Re	<	0.000660	M	Tm	<	0.000660			
O	Cr		0.000541	O	Li	<	0.000084	M	Rh	<	0.000660	M	U	<	0.000660			
M	Cs	<	0.000660	M	Lu	<	0.000660	M	Ru	<	0.000660	O	V	<	0.001100			
M	Cu	<	0.002700	O	Mg		0.006237	O	S		0.027905	M	W	<	0.000660			
M	Dy	<	0.000660	O	Mn		0.000476	M	Sb	<	0.000660	M	Y	<	0.000660			
M	Er	<	0.000660	M	Mo	<	0.000660	O	Sc	<	0.000340	O	Yb	<	0.000270			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)
Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Avoid use of HClO4 due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO4-.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

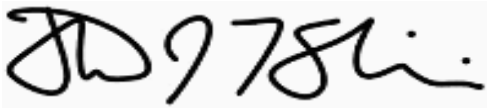
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMG10
Lot Number:	S2-MG704239
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Magnesium
Starting Material:	Magnesium Metal
Starting Material Lot#:	2168
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL

Density: 1.053 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10022 ± 62 µg/mL**
ICP Assay NIST SRM 3131a Lot Number: 140110

Assay Method #2 **10078 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10033 ± 26 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.002106	M	Eu	<	0.000910	O	Na		0.071075	O	Se	<	0.048000	O	Zn		0.003299
M	Al		0.003553	M	Fe		0.002538	M	Nb	<	0.000460	O	Si	<	0.032000	O	Zr	<	0.002700
M	As	<	0.001400	M	Ga	<	0.000460	M	Nd	<	0.000910	M	Sm	<	0.000460				
M	Au	<	0.001400	M	Gd	<	0.000460	O	Ni	<	0.001600	M	Sn	<	0.002300				
O	B		0.006853	M	Ge	<	0.001400	M	Os	<	0.000460	O	Sr		0.000279				
O	Ba		0.000964	M	Hf	<	0.000460	O	P		0.015230	M	Ta	<	0.000460				
O	Be	<	0.000120	M	Hg	<	0.000460	M	Pb	<	0.000460	M	Tb	<	0.000460				
M	Bi	<	0.000460	M	Ho	<	0.000460	M	Pd	<	0.003200	M	Te	<	0.007300				
O	Ca		0.053306	M	In	<	0.000460	M	Pr	<	0.000460	M	Th	<	0.000460				
O	Cd	<	0.000360	M	Ir	<	0.000460	M	Pt	<	0.001900	O	Ti	<	0.001700				
M	Ce	<	0.002300	M	K		0.048229	M	Rb		0.002411	M	Tl		0.003046				
M	Co	<	0.000910	M	La	<	0.002800	M	Re	<	0.000460	M	Tm	<	0.000460				
M	Cr	<	0.002300	O	Li		0.027922	M	Rh	<	0.000460	M	U	<	0.000460				
M	Cs		0.001040	M	Lu	<	0.000460	M	Ru	<	0.000460	M	V	<	0.000460				
O	Cu	<	0.003000	s	Mg	<		O	S	<	0.190000	M	W	<	0.000460				
M	Dy	<	0.000460	O	Mn		0.015230	M	Sb		0.020814	O	Y	<	0.000720				
M	Er	<	0.000460	M	Mo	<	0.000910	O	Sc	<	0.000480	M	Yb	<	0.000460				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 $Mg(H_2O)_6^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, and H_2SO_4 avoid HF, H_3PO_4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO_3 / LDPE container.

Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCA10
Lot Number:	T2-CA716103
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Calcium
Starting Material:	CaCO3
Starting Material Lot#:	2472
Starting Material Purity:	99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL

Density: 1.039 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10005 ± 45 µg/mL** ICP Assay NIST SRM 3109a Lot Number: 130213
Assay Method #2	**10005 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10005 ± 31 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001200	M	Eu	<	0.001200	O	Na		0.006112	M	Se	<	0.024000	M	Zn		0.005362
M	Al		0.065419	O	Fe		0.009115	M	Nb	<	0.001200	O	Si		0.139417	O	Zr	<	0.006700
O	As	<	0.013000	M	Ga	<	0.015000	M	Nd	<	0.020000	M	Sm	<	0.001200				
M	Au	<	0.017000	M	Gd	<	0.004800	O	Ni		0.000793	M	Sn	<	0.003600				
O	B		0.001179	M	Ge	<	0.003600	M	Os	<	0.001200	M	Sr		0.081505				
O	Ba		0.002788	M	Hf	<	0.001200	O	P	<	0.041000	M	Ta	<	0.001200				
O	Be	<	0.000410	M	Hg	<	0.004800	M	Pb		0.001608	M	Tb	<	0.001200				
M	Bi		0.001608	M	Ho	<	0.001200	M	Pd	<	0.001200	M	Te	<	0.003600				
s	Ca	<		M	In	<	0.001200	M	Pr		0.000257	M	Th	<	0.001200				
O	Cd	<	0.001300	M	Ir	<	0.001200	M	Pt	<	0.003600	O	Ti	<	0.001900				
M	Ce		0.001029	O	K		0.009759	M	Rb	<	0.001200	M	Tl	<	0.001200				
O	Co		0.000418	M	La		0.001823	M	Re	<	0.001200	M	Tm	<	0.001200				
O	Cr		0.003324	O	Li	<	0.007300	M	Rh	<	0.001200	M	U		0.002144				
M	Cs		0.007399	M	Lu		0.000128	M	Ru	<	0.001200	M	V		0.001286				
O	Cu	<	0.011000	M	Mg		1.286934	O	S		0.055767	O	W	<	0.024000				
M	Dy	<	0.002400	O	Mn		0.004611	M	Sb	<	0.009600	O	Y		0.000536				
M	Er	<	0.002400	M	Mo		0.003539	O	Sc	<	0.001400	M	Yb	<	0.001200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H2O)6+2
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H2SO4, vF, v3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Ca Containing Samples)Preparation and Solution) -Metal (best dissolved in diluted HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO2). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO3. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na2CO3 followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O212C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

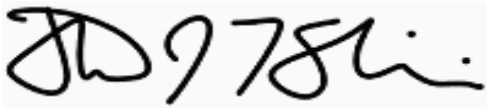
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNA10
Lot Number:	T2-NA717221
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Sodium
Starting Material:	Na2CO3
Starting Material Lot#:	2358 and 2453
Starting Material Purity:	99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL

Density: 1.033 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9974 ± 18 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **9977 ± 34 µg/mL**
ICP Assay NIST SRM 3152a Lot Number: 200413

Assay Method #3 **9987 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000930	M	Eu	<	0.000930	s	Na	<		M	Se	<	0.003800	O	Zn	0.000138
M	Al		0.004409	O	Fe		0.002393	M	Nb	<	0.000930	O	Si		0.056696	O	Zr	< 0.003200
O	As	<	0.023000	M	Ga	<	0.000930	M	Nd	<	0.000930	M	Sm	<	0.000930			
O	Au	<	0.004100	M	Gd	<	0.000930	O	Ni	<	0.003000	M	Sn	<	0.002800			
O	B		0.001385	M	Ge	<	0.004700	M	Os	<	0.000930	O	Sr		0.000251			
M	Ba		0.004031	M	Hf	<	0.000930	O	P		0.010205	M	Ta	<	0.000930			
O	Be	<	0.000130	M	Hg	<	0.000930	M	Pb	<	0.000930	M	Tb	<	0.000930			
M	Bi	<	0.000930	M	Ho	<	0.000930	M	Pd	<	0.000930	M	Te	<	0.001900			
O	Ca		0.176388	M	In	<	0.000930	M	Pr	<	0.000930	M	Th		0.000352			
O	Cd	<	0.000860	M	Ir	<	0.000930	M	Pt	<	0.000930	O	Ti		0.000592			
M	Ce	<	0.001900	O	K		0.302380	M	Rb	<	0.000930	M	Tl	<	0.000930			
O	Co	<	0.001800	O	La	<	0.002100	M	Re	<	0.000930	M	Tm	<	0.000930			
M	Cr	<	0.002800	O	Li		0.000031	M	Rh	<	0.000930	M	U	<	0.000930			
M	Cs	<	0.000930	M	Lu	<	0.000930	M	Ru	<	0.001900	O	V	<	0.001600			
O	Cu	<	0.003900	O	Mg		0.026458	O	S		0.040317	O	W	<	0.028000			
M	Dy	<	0.000930	O	Mn	<	0.000740	M	Sb	<	0.000930	O	Y	<	0.000860			
M	Er	<	0.000930	O	Mo	<	0.003600	O	Sc	<	0.000610	O	Yb	<	0.000250			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

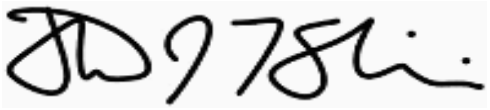
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGU1
Lot Number:	S2-U707914
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Uranium
Starting Material:	Uranyl Nitrate Hexahydrate
Starting Material Lot#:	P2-2322
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL

Density: 1.010 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000270	M	Eu	<	0.000270	M	Na	<	0.011000	M	Se	<	0.009300	M	Zn	0.002358
M	Al	<	0.011000	M	Fe		0.003222	M	Nb	<	0.000270	M	Si	<	0.160000	M	Zr	< 0.001100
M	As	<	0.002400	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270			
M	Au	<	0.000270	M	Gd	<	0.000270	M	Ni	<	0.020000	M	Sn	<	0.011000			
M	B	<	0.000270	M	Ge	<	0.000800	M	Os	<	0.001900	M	Sr	<	0.000270			
M	Ba	<	0.003800	M	Hf	<	0.000270	i	P	<		M	Ta	<	0.000270			
M	Be	<	0.000270	M	Hg	<	0.000540	M	Pb	<	0.002200	M	Tb	<	0.000270			
M	Bi	<	0.000270	M	Ho	<	0.000270	M	Pd	<	0.000540	M	Te	<	0.003800			
M	Ca	<	0.140000	M	In	<	0.000270	M	Pr	<	0.000270	M	Th		0.000129			
M	Cd	<	0.000270	M	Ir	<	0.000270	M	Pt	<	0.000270	M	Ti	<	0.002700			
M	Ce	<	0.000540	O	K	<	0.250000	M	Rb	<	0.000800	M	Tl	<	0.000270			
M	Co	<	0.000800	M	La		0.000117	M	Re	<	0.064000	M	Tm	<	0.000270			
M	Cr		0.000943	M	Li	<	0.003000	M	Rh	<	0.000270	s	U	<				
M	Cs		0.000106	M	Lu	<	0.000270	M	Ru	<	0.000540	M	V	<	0.000540			
M	Cu	<	0.001100	M	Mg	<	0.003000	i	S	<		M	W	<	0.000540			
M	Dy	<	0.000270	M	Mn	<	0.006900	M	Sb	<	0.000270	M	Y	<	0.000270			
M	Er	<	0.000270	M	Mo	<	0.006400	M	Sc	<	0.000540	M	Yb	<	0.000270			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO22+(uranyl)
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H3PO4. H2SO4 and HF matrices should not be a problem depending upon [U]. Although the UO22+ ion is distinctly basic, any U+4 will precipitate in basic media. UO22+salts are generally soluble in water and UO22+ is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF4 and UF6 are water soluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO3); Oxide (Soluble in HNO3); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO3. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H2SO4.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-2
Lot Number:	T2-MEB719895
Matrix:	3% (v/v) HNO3 tr. HF
Value / Analyte(s):	2.5 µg/mL ea: Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**2.499 ± 0.015 µg/mL**	**Molybdenum, Mo**	**2.500 ± 0.017 µg/mL**

Density: 1.014 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

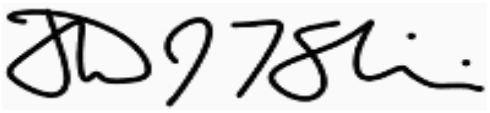
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-3
Lot Number:	T2-MEB719896
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	250 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,

4 µg/mL ea:
Selenium,

2.5 µg/mL ea:

Thorium,	Thallium,
Uranium,	Vanadium,
Zinc,	Manganese,
Cadmium,	Cobalt,
Chromium,	Copper,
Arsenic,	Barium,
Beryllium,	Nickel,
Lead,	Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

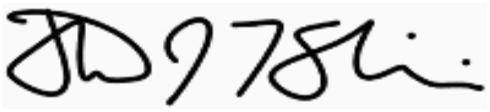
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Refine your results. Redefine your industry.

Certificate of Analysis

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Christiansburg, VA 24073 USA
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-6020ICS-0A10
Lot Number:	T2-MEB719898
Matrix:	1.4% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Chloride,
	200 µg/mL ea: Carbon,
	100 µg/mL ea: Calcium, Aluminum, Iron, Potassium, Magnesium, Sodium, Phosphorus, Sulfur,
	2 µg/mL ea: Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**100.0 ± 0.4 µg/mL**	**Calcium, Ca**	**100.0 ± 0.5 µg/mL**
Carbon, C	**200.1 ± 0.5 µg/mL**	**Chloride, Cl**	**1 000 ± 5 µg/mL**
Iron, Fe	**100.0 ± 0.5 µg/mL**	**Magnesium, Mg**	**100.0 ± 0.5 µg/mL**
Molybdenum, Mo	**2.001 ± 0.014 µg/mL**	**Phosphorus, P**	**100.0 ± 0.6 µg/mL**
Potassium, K	**100.0 ± 0.5 µg/mL**	**Sodium, Na**	**100.0 ± 0.5 µg/mL**
Sulfur, S	**100.0 ± 0.5 µg/mL**	**Titanium, Ti**	**2.001 ± 0.015 µg/mL**

Density: 1.009 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

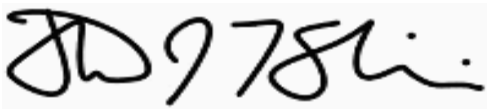
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SS1205

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-01 B	SDG:	23A0134
Sampled:	01/06/23 08:28	Prepared:	03/30/23 11:04	File ID:	SMM 03-30-23-081
% Solids:	59.97	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 15:37
Batch:	BLC0704	Sequence:	SLC0503	Initial/Final:	0.2 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.0952	1	0.00875	0.0417	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SS1188

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-02 B	SDG:	23A0134
Sampled:	01/06/23 09:36	Prepared:	03/30/23 11:04	File ID:	SMM 03-30-23-082
% Solids:	50.63	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 15:39
Batch:	BLC0704	Sequence:	SLC0503	Initial/Final:	0.2 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.0699	1	0.0104	0.0494	

Analytical Resources, LLC
Analytical Chemists and Consultants

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INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SS1179

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-03 B	SDG:	23A0134
Sampled:	01/06/23 09:52	Prepared:	03/30/23 11:04	File ID:	SMM 03-30-23-083
% Solids:	50.30	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 15:41
Batch:	BLC0704	Sequence:	SLC0503	Initial/Final:	0.2 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.105	1	0.0104	0.0497	

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INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SS1242

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-04 B	SDG:	23A0134
Sampled:	01/06/23 11:04	Prepared:	03/30/23 11:04	File ID:	SMM 03-30-23-084
% Solids:	49.56	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 15:44
Batch:	BLC0704	Sequence:	SLC0503	Initial/Final:	0.2 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.107	1	0.0106	0.0504	

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INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SS1173

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-05 B	SDG:	23A0134
Sampled:	01/06/23 11:22	Prepared:	03/30/23 11:04	File ID:	SMM 03-30-23-085
% Solids:	47.11	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 15:46
Batch:	BLC0704	Sequence:	SLC0503	Initial/Final:	0.2 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.241	1	0.0111	0.0531	

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EPA 7471B

Total Metals

LDW23-SS1160

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-06 A	SDG:	23A0134
Sampled:	01/06/23 11:41	Prepared:	03/30/23 11:04	File ID:	SMM 03-30-23-086
% Solids:	39.29	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 15:48
Batch:	BLC0704	Sequence:	SLC0503	Initial/Final:	0.2 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.112	1	0.0134	0.0636	

Analytical Resources, LLC
Analytical Chemists and Consultants

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Total Metals

LDW23-SS1152

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-07 B	SDG:	23A0134
Sampled:	01/06/23 12:29	Prepared:	03/30/23 11:04	File ID:	SMM 03-30-23-087
% Solids:	45.31	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 15:51
Batch:	BLC0704	Sequence:	SLC0503	Initial/Final:	0.2 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.109	1	0.0116	0.0552	

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EPA 7471B

Total Metals

LDW23-SS1131

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-08 B	SDG:	23A0134
Sampled:	01/06/23 12:43	Prepared:	03/30/23 11:04	File ID:	SMM 03-30-23-090
% Solids:	58.42	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 15:58
Batch:	BLC0704	Sequence:	SLC0503	Initial/Final:	0.2 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.0418	1	0.00899	0.0428	J

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INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SS1129

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-09 B	SDG:	23A0134
Sampled:	01/06/23 12:57	Prepared:	03/29/23 13:50	File ID:	SMM 03-30-23-049
% Solids:	47.75	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 14:22
Batch:	BLC0694	Sequence:	SLC0503	Initial/Final:	0.244 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.177	1	0.00901	0.0429	

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EPA 7471B

Total Metals

LDW23-SS1124

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-10 B	SDG:	23A0134
Sampled:	01/06/23 13:15	Prepared:	03/29/23 13:50	File ID:	SMM 03-30-23-050
% Solids:	57.34	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 14:24
Batch:	BLC0694	Sequence:	SLC0503	Initial/Final:	0.263 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.102	1	0.00696	0.0332	

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Total Metals

LDW23-SS1123

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-11 B	SDG:	23A0134
Sampled:	01/06/23 13:29	Prepared:	03/29/23 13:50	File ID:	SMM 03-30-23-051
% Solids:	53.41	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 14:27
Batch:	BLC0694	Sequence:	SLC0503	Initial/Final:	0.219 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.148	1	0.00898	0.0427	

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EPA 7471B

Total Metals

LDW23-SS1116

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-12 B	SDG:	23A0134
Sampled:	01/06/23 13:44	Prepared:	03/29/23 13:50	File ID:	SMM 03-30-23-054
% Solids:	59.77	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 14:34
Batch:	BLC0694	Sequence:	SLC0503	Initial/Final:	0.226 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.0458	1	0.00777	0.0370	

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INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-IT1210

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-13 B	SDG:	23A0134
Sampled:	01/06/23 14:12	Prepared:	03/29/23 13:50	File ID:	SMM 03-30-23-055
% Solids:	57.87	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 14:36
Batch:	BLC0694	Sequence:	SLC0503	Initial/Final:	0.224 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.139	1	0.00810	0.0386	

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INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SC1249

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-15 B	SDG:	23A0134
Sampled:	01/06/23 13:46	Prepared:	03/29/23 13:50	File ID:	SMM 03-30-23-056
% Solids:	56.73	Preparation:	SMM EPA 7471B	Analyzed:	03/30/23 14:38
Batch:	BLC0694	Sequence:	SLC0503	Initial/Final:	0.252 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GC00086

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.106	1	0.00734	0.0350	

PREPARATION BATCH SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLC0694 Batch Matrix: Solid
Preparation: SMM EPA 7471B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1129	23A0134-09	SMM 03-30-23-049	03/29/23 13:50	Store frozen; FROZEN VOLUME USED
LDW23-SS1124	23A0134-10	SMM 03-30-23-050	03/29/23 13:50	Store frozen; FROZEN VOLUME USED
LDW23-SS1123	23A0134-11	SMM 03-30-23-051	03/29/23 13:50	Store frozen; FROZEN VOLUME USED
LDW23-SS1116	23A0134-12	SMM 03-30-23-054	03/29/23 13:50	Store frozen; FROZEN VOLUME USED
LDW23-IT1210	23A0134-13	SMM 03-30-23-055	03/29/23 13:50	Store frozen; FROZEN VOLUME USED
LDW23-SC1249	23A0134-15	SMM 03-30-23-056	03/29/23 13:50	Store frozen; FROZEN VOLUME USED
Blank	BLC0694-BLK1	SMM 03-30-23-030	03/29/23 13:50	
LCS	BLC0694-BS1	SMM 03-30-23-031	03/29/23 13:50	

PREPARATION BATCH SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLC0704 Batch Matrix: Solid
Preparation: SMM EPA 7471B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1205	23A0134-01	SMM 03-30-23-081	03/30/23 11:04	Store frozen; FROZEN VOLUME USED
LDW23-SS1188	23A0134-02	SMM 03-30-23-082	03/30/23 11:04	Store frozen; FROZEN VOLUME USED
LDW23-SS1179	23A0134-03	SMM 03-30-23-083	03/30/23 11:04	Store frozen; FROZEN VOLUME USED
LDW23-SS1242	23A0134-04	SMM 03-30-23-084	03/30/23 11:04	Store frozen; FROZEN VOLUME USED
LDW23-SS1173	23A0134-05	SMM 03-30-23-085	03/30/23 11:04	Store frozen; FROZEN VOLUME USED
LDW23-SS1160	23A0134-06	SMM 03-30-23-086	03/30/23 11:04	Store frozen; FROZEN VOLUME USED
LDW23-SS1152	23A0134-07	SMM 03-30-23-087	03/30/23 11:04	Store frozen; FROZEN VOLUME USED
LDW23-SS1131	23A0134-08	SMM 03-30-23-090	03/30/23 11:04	Store frozen; FROZEN VOLUME USED
Blank	BLC0704-BLK1	SMM 03-30-23-066	03/30/23 11:04	
LCS	BLC0704-BS1	SMM 03-30-23-067	03/30/23 11:04	

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METHOD BLANK DATA SHEET

EPA 7471B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0134

Client: Anchor QEA, LLC | Project: AOC5 MR Phase 1

Batch: BLC0694 | Laboratory ID: BLC0694-BLK1 | Prepared: 03/29/23 13:50

Matrix: Solid | Preparation: SMM EPA 7471B | Analyzed: 03/30/23 13:38

Sequence: SLC0503 | Calibration: GC00086 | Instrument: HYDRA

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	ND	1	0.00525	0.0250	U

Form I

METHOD BLANK DATA SHEET

EPA 7471B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0134

Client: Anchor QEA, LLC | Project: AOC5 MR Phase 1

Batch: BLC0704 | Laboratory ID: BLC0704-BLK1 | Prepared: 03/30/23 11:04

Matrix: Solid | Preparation: SMM EPA 7471B | Analyzed: 03/30/23 15:02

Sequence: SLC0503 | Calibration: GC00086 | Instrument: HYDRA

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	ND	1	0.00525	0.0250	U

LCS / LCS DUPLICATE RECOVERY

EPA 7471B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/30/23 13:40
Batch:	BLC0694	Laboratory ID:	BLC0694-BS1
Preparation:	SMM EPA 7471B	Sequence Name:	LCS
Initial/Final:	0.2 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Mercury	0.500	0.467		93.3	80 - 120

* Indicates values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 7471B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/30/23 15:04
Batch:	BLC0704	Laboratory ID:	BLC0704-BS1
Preparation:	SMM EPA 7471B	Sequence Name:	LCS
Initial/Final:	0.2 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Mercury	0.500	0.432		86.4	80 - 120

* Indicates values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00086	Instrument:	HYDRA
Calibration Date:	03/30/2023 17:19		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Mercury	0	0	0.0001	1.661E+07	0.0005	8264000	0.001	7097000	0.002	6632000	0.005	6178000

INITIAL CALIBRATION DATA

EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00086	Instrument:	HYDRA
Calibration Date:	03/30/2023 17:19		

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Mercury	7463500	71.5	0.9999		0.99	

SMM 03-30-23

SLC0503 GC00086

Method: ARI 5 ppb (NO 0.05) Operator: Admin Date of Analysis: 30 Mar 2023 11:25:40

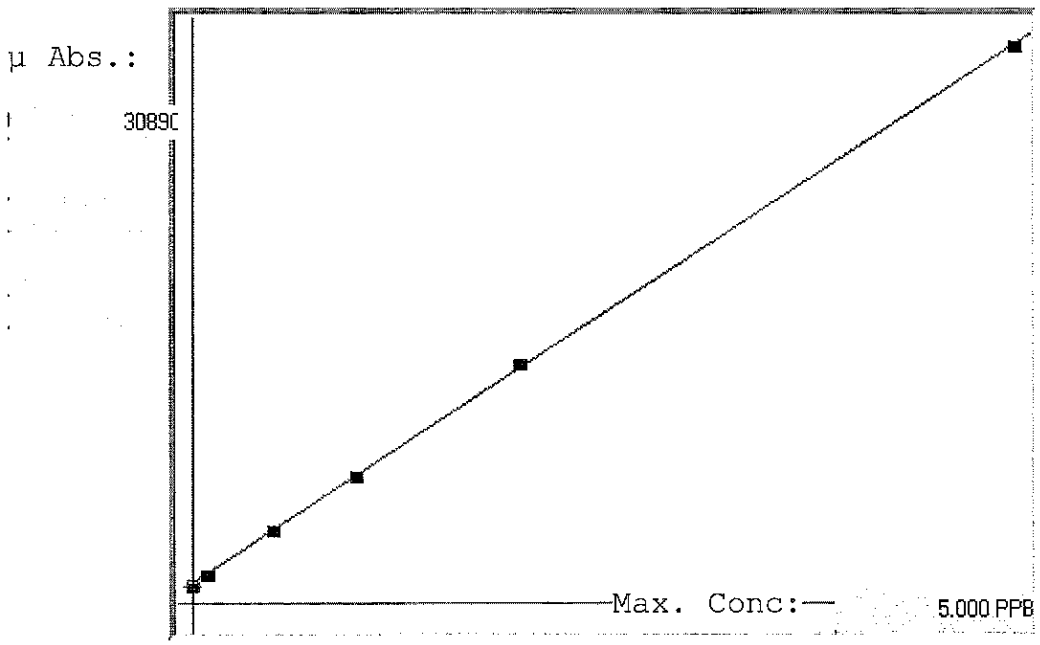
Sample ID	Mean	Units		Date	Method
SEQ-CAL1	1011	PPB		30 Mar 2023 11:27:21	ARI 5 ppb (NO 0.05)
SEQ-CAL2	1661	PPB		30 Mar 2023 11:29:43	ARI 5 ppb (NO 0.05)
SEQ-CAL3	4132	PPB		30 Mar 2023 11:32:05	ARI 5 ppb (NO 0.05)
SEQ-CAL4	7097	PPB		30 Mar 2023 11:34:25	ARI 5 ppb (NO 0.05)
SEQ-CAL5	13264	PPB		30 Mar 2023 11:36:46	ARI 5 ppb (NO 0.05)
SEQ-CAL6	30890	PPB		30 Mar 2023 11:39:06	ARI 5 ppb (NO 0.05)
SEQ-ICV	100.7% 4.0269	PPB	✓	30 Mar 2023 11:43:43	ARI 5 ppb (NO 0.05)
SEQ-ICB	-0.0322	PPB	✓	30 Mar 2023 11:46:02	ARI 5 ppb (NO 0.05)
SEQ-CRL	84.7% 0.0847	PPB	✓	30 Mar 2023 11:48:23	ARI 5 ppb (NO 0.05)
SEQ-CCV	98.1% 3.9226	PPB	✓	30 Mar 2023 11:50:45	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0330	PPB	✓	30 Mar 2023 11:53:03	ARI 5 ppb (NO 0.05)
SEQ-CCV	97.3% 3.8909	PPB	✓	30 Mar 2023 11:55:25	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0326	PPB	✓	30 Mar 2023 11:57:43	ARI 5 ppb (NO 0.05)
~~23C0571-01~~	~~-0.1868~~	~~PPB~~	no read	30 Mar 2023 12:00:06	ARI 5 ppb (NO 0.05)
BLC0669-BLK1	-0.0342	PPB		30 Mar 2023 12:00:17	ARI 5 ppb (NO 0.05)
BLC0669-BS1	1.8417	PPB	✓	30 Mar 2023 12:02:36	ARI 5 ppb (NO 0.05)
23C0571-01	-0.0046	PPB		30 Mar 2023 12:04:55	ARI 5 ppb (NO 0.05)
BLC0669-DUP1	0.0026	PPB		30 Mar 2023 12:07:14	ARI 5 ppb (NO 0.05)
BLC0669-MS1	0.9662	PPB	✓	30 Mar 2023 12:09:33	ARI 5 ppb (NO 0.05)
23C0392-01	0.0335	PPB		30 Mar 2023 12:11:52	ARI 5 ppb (NO 0.05)
23C0423-01	1.0680	PPB		30 Mar 2023 12:14:11	ARI 5 ppb (NO 0.05)
23C0491-01	0.1962	PPB		30 Mar 2023 12:16:31	ARI 5 ppb (NO 0.05)
23C0491-02	0.1484	PPB		30 Mar 2023 12:18:51	ARI 5 ppb (NO 0.05)
23C0570-01	0.1526	PPB		30 Mar 2023 12:21:11	ARI 5 ppb (NO 0.05)
SEQ-CCV	99.6% 3.9825	PPB	✓	30 Mar 2023 12:23:32	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0318	PPB	✓	30 Mar 2023 12:25:50	ARI 5 ppb (NO 0.05)
~~SEQ-CCV~~	~~(L)-4.7% -0.1868~~	~~PPB~~	seq bracket	30 Mar 2023 12:28:12	ARI 5 ppb (NO 0.05)
SEQ-CCV	97.7% 3.9062	PPB	✓	30 Mar 2023 13:33:34	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0388	PPB	✓	30 Mar 2023 13:35:53	ARI 5 ppb (NO 0.05)
BLC0694-BLK1	-0.0513	PPB		30 Mar 2023 13:38:15	ARI 5 ppb (NO 0.05)
BLC0694-BS1	1.8669	PPB	✓	30 Mar 2023 13:40:35	ARI 5 ppb (NO 0.05)
23A0099-06	0.2918	PPB		30 Mar 2023 13:42:56	ARI 5 ppb (NO 0.05)
BLC0694-DUP1	0.3980	PPB		30 Mar 2023 13:45:15	ARI 5 ppb (NO 0.05)
BLC0694-MS1	1.5187	PPB	✓	30 Mar 2023 13:47:33	ARI 5 ppb (NO 0.05)
BLC0694-MSD1	0.5101	PPB	X	30 Mar 2023 13:49:52	ARI 5 ppb (NO 0.05)
23A0099-02	0.4446	PPB		30 Mar 2023 13:52:11	ARI 5 ppb (NO 0.05)
23A0099-03	0.4311	PPB		30 Mar 2023 13:54:30	ARI 5 ppb (NO 0.05)
23A0099-04	0.3941	PPB		30 Mar 2023 13:56:49	ARI 5 ppb (NO 0.05)
23A0099-05	0.2521	PPB		30 Mar 2023 13:59:09	ARI 5 ppb (NO 0.05)
SEQ-CCV	97.9% 3.9171	PPB	✓	30 Mar 2023 14:01:29	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0380	PPB	✓	30 Mar 2023 14:03:47	ARI 5 ppb (NO 0.05)
23A0099-07	0.4374	PPB		30 Mar 2023 14:06:09	ARI 5 ppb (NO 0.05)
23A0099-08	0.4900	PPB		30 Mar 2023 14:08:29	ARI 5 ppb (NO 0.05)
23A0099-09	0.3499	PPB		30 Mar 2023 14:10:50	ARI 5 ppb (NO 0.05)
23A0099-10	0.7245	PPB		30 Mar 2023 14:13:11	ARI 5 ppb (NO 0.05)
23A0099-11	0.7259	PPB		30 Mar 2023 14:15:33	ARI 5 ppb (NO 0.05)
23A0099-12	0.2980	PPB		30 Mar 2023 14:17:51	ARI 5 ppb (NO 0.05)
23A0099-13	0.5322	PPB		30 Mar 2023 14:20:10	ARI 5 ppb (NO 0.05)
23A0134-09	0.4117	PPB		30 Mar 2023 14:22:30	ARI 5 ppb (NO 0.05)
23A0134-10	0.3084	PPB		30 Mar 2023 14:24:49	ARI 5 ppb (NO 0.05)
23A0134-11	0.3452	PPB		30 Mar 2023 14:27:08	ARI 5 ppb (NO 0.05)
SEQ-CCV	98.7% 3.9490	PPB	✓	30 Mar 2023 14:29:28	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0379	PPB	✓	30 Mar 2023 14:31:46	ARI 5 ppb (NO 0.05)
23A0134-12	0.1237	PPB		30 Mar 2023 14:34:08	ARI 5 ppb (NO 0.05)
23A0134-13	0.3595	PPB		30 Mar 2023 14:36:27	ARI 5 ppb (NO 0.05)
23A0134-15	0.3040	PPB		30 Mar 2023 14:38:47	ARI 5 ppb (NO 0.05)
BLC0694-PS1	1.5130	PPB	✓	30 Mar 2023 14:41:08	ARI 5 ppb (NO 0.05)
~~BLC0704-BLK1~~	~~-0.1139~~	~~PPB~~	del ↓	30 Mar 2023 14:43:28	ARI 5 ppb (NO 0.05)
~~BLC0704-BS1~~	~~1.5222~~	~~PPB~~		30 Mar 2023 14:45:49	ARI 5 ppb (NO 0.05)
23A0133-03	0.1542	PPB		30 Mar 2023 14:48:10	ARI 5 ppb (NO 0.05)
BLC0704-DUP1	0.3258	PPB		30 Mar 2023 14:50:29	ARI 5 ppb (NO 0.05)
BLC0704-MS1	1.3579	PPB	✓	30 Mar 2023 14:52:49	ARI 5 ppb (NO 0.05)
BLC0704-MSD1	1.3847	PPB	✓	30 Mar 2023 14:55:09	ARI 5 ppb (NO 0.05)
SEQ-CCV	100.1% 4.0028	PPB	✓	30 Mar 2023 14:57:28	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0408	PPB		30 Mar 2023 14:59:47	ARI 5 ppb (NO 0.05)
BLC0704-BLK1	-0.0649	PPB		30 Mar 2023 15:02:09	ARI 5 ppb (NO 0.05)
BLC0704-BS1	1.7283	PPB	✓	30 Mar 2023 15:04:29	ARI 5 ppb (NO 0.05)

SMM 03-30-23

Method: ARI 5 ppb (NO 0.05) Operator: Admin Date of Analysis: 30 Mar 2023 11:25:40

Sample ID	Mean	Units		Date	Method
23A0133-06	0.1515	PPB		30 Mar 2023 15:06:48	ARI 5 ppb (NO 0.05)
23A0133-07	0.2454	PPB		30 Mar 2023 15:09:08	ARI 5 ppb (NO 0.05)
23A0133-08	0.1814	PPB		30 Mar 2023 15:11:28	ARI 5 ppb (NO 0.05)
23A0133-09	0.1647	PPB		30 Mar 2023 15:13:48	ARI 5 ppb (NO 0.05)
23A0133-10	0.5400	PPB		30 Mar 2023 15:16:09	ARI 5 ppb (NO 0.05)
23A0133-11	0.7379	PPB		30 Mar 2023 15:18:29	ARI 5 ppb (NO 0.05)
23A0133-12	0.4233	PPB		30 Mar 2023 15:20:51	ARI 5 ppb (NO 0.05)
23A0133-13	0.1172	PPB		30 Mar 2023 15:23:10	ARI 5 ppb (NO 0.05)
SEQ-CCV	101.5% 4.0596	PPB	✓	30 Mar 2023 15:25:30	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0349	PPB	✓	30 Mar 2023 15:27:48	ARI 5 ppb (NO 0.05)
23A0133-14	0.0884	PPB		30 Mar 2023 15:30:11	ARI 5 ppb (NO 0.05)
23A0133-15	0.3175	PPB		30 Mar 2023 15:32:30	ARI 5 ppb (NO 0.05)
23A0133-16	0.1031	PPB		30 Mar 2023 15:34:50	ARI 5 ppb (NO 0.05)
23A0134-01	0.2284	PPB		30 Mar 2023 15:37:10	ARI 5 ppb (NO 0.05)
23A0134-02	0.1416	PPB		30 Mar 2023 15:39:30	ARI 5 ppb (NO 0.05)
23A0134-03	0.2122	PPB		30 Mar 2023 15:41:49	ARI 5 ppb (NO 0.05)
23A0134-04	0.2121	PPB		30 Mar 2023 15:44:09	ARI 5 ppb (NO 0.05)
23A0134-05	0.4545	PPB		30 Mar 2023 15:46:29	ARI 5 ppb (NO 0.05)
23A0134-06	0.1758	PPB		30 Mar 2023 15:48:49	ARI 5 ppb (NO 0.05)
23A0134-07	0.1970	PPB		30 Mar 2023 15:51:09	ARI 5 ppb (NO 0.05)
SEQ-CCV	99.8% 3.9909	PPB	✓	30 Mar 2023 15:53:31	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0352	PPB	✓	30 Mar 2023 15:55:49	ARI 5 ppb (NO 0.05)
23A0134-08	0.0977	PPB		30 Mar 2023 15:58:12	ARI 5 ppb (NO 0.05)
SEQ-CCV	100.4% 4.0145	PPB	✓	30 Mar 2023 16:00:31	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0355	PPB	✓	30 Mar 2023 16:02:50	ARI 5 ppb (NO 0.05)

ARI 5 ppb (NO 0.05)



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
SEQ-CAL1 - Blank	0.000	-0.017	-0.017	1011	14.306	993	1012	1028		
SEQ-CAL2 - 0.1 PPB	0.100	0.091	-0.009	1661	0.3 %	1667	1657	1660		
SEQ-CAL3 - 0.5 PPB	0.500	0.505	0.005	4132	0.8 %	4107	4112	4177		
SEQ-CAL4 - 1.0 PPB	1.000	1.002	0.002	7097	0.6 %	7052	7089	7150		
SEQ-CAL5 - 2.0 PPB	2.000	2.034	0.034	13263	0.9 %	13288	13105	13398		
SEQ-CAL6 - 5.0 PPB	5.000	4.985	-0.015	30889	0.6 %	30919	30659	31091		

Mercury Analysis Log

Analyst: ML
Instrument: HYDRA

Date: 03/30/23
Page: 1 of 4

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
SEQ -calL	SMM	1X		
-cal2				
-cal3				
-cal4				
-cal5				
-cal6				
-ICV			✓ 4.02	
-ICB			✓ -0.03	
-CRL			✓ 0.084	
-CCV			✓ 3.92	
-CCB			✓ -0.03	
-CCV			✓ 3.89	
-CCB			✓ -0.03	
23C0571 -01				weird detect; no read; del
BLC0669 -BIK1				
-BS1			✓ 1.841	92 %R
23C0571 -01				
BLC0669 -DUP1				NO RPD
-MS1			✓ 0.966	97 %R
23C0392 -01				
23C0423 -01				
23C0491 -01				
-02				
23C0570 -01				
SEQ -CCV			✓ 3.98	
-CCB			✓ -0.03	
-CCV			X	no read; sig break, del
-CCV			✓ 3.96	
-CCB			✓ -0.03	
BLC0694 -BIK1				

Chemical/Reagent ID:
10% $SnCl_2$: L3302

14% NH_2OH/NaCl: L3351

Standard ID:
Standard: _____

ICV/CCV: _____

Mercury Analysis Log

Analyst: — Date: —

Instrument: — Page: 2 of 4

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
↓ -BS1			✓ 1.866	93.3 %R
23A0099 -06				
BLC0694 -DUP1				RPD = 30.79
↓ -MS1			✓ 1.51	122.6 %R
↓ -MSD1			✗ 0.51	21 %R
23A0099 -02				
↓ -03				
↓ -04				
↓ -05				
SEQ -CCV			✓ 3.91	
↓ -CCB			✓ -0.03	
23A0099 -07				
↓ -08				
↓ -09				
↓ -10				
↓ -11				
↓ -12				
↓ -13				
23A0134 -09				
↓ -10				
↓ -11				
SEQ -CCV			✓ 3.94	
↓ -CCB			-0.03	
23A0134 -12				
↓ -13				
↓ -15				
BLC0694 -DS1			✓ 1.513	122.1 %R
BLC0704 -BLK1				below RL, rerun; DE1
↓ -BS1			✗ 1.522	76 %R ↓
23A0133 -03				

Chemical/Reagent ID:

10% $SnCl_2$: — 14% NH_2OH/NaCl: —

Standard ID:

Standard: — ICV/CCV: —

Mercury Analysis Log

Analyst: — Date: —

Instrument: — Page: 3 of 4

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
BLC0704 - DUP1				RPD = 71.5
↓ - MS1			✓ 1.357	120.3 %R
↓ - MSD1			✓ 1.384	123 %R
SEQ - CCV			✓ 4.00	
↓ - CCB			✓ -0.04	
BLC0704 - BIK1				
↓ - BS1			✓ 1.728	86.4 %R
23A0133 - 06				
↓ - 07				
- 08				
- 09				
- 10				
- 11				
- 12				
↓ - 13				
SEQ - CCV			✓ 4.05	
↓ - CCB			✓ -0.03	
23A0133 - 14				
↓ - 15				
↓ - 16				
23A0134 - 01				
↓ - 02				
- 03				
- 04				
- 05				
- 06				
↓ - 07				
SEQ - CCV			✓ 3.99	
↓ - CCB			✓ -0.03	
23A0134 - 08				

Chemical/Reagent ID:

10% $SnCl_2$: — 14% NH_2OH/NaCl: —

Standard ID:

Standard: — ICV/CCV: —

Mercury Analysis Log

Analyst: —

Instrument: —

Date: —

Page: 4 of 4

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
SEQ -CCV	↓	↓	✓ 4.01	
↓ -CCB			✓ -0.03	

KW 03/30/23

Chemical/Reagent ID:

10% $SnCl_2$: —

14% $NH_2OH/NaCl$: —

Standard ID:

Standard: —

ICV/CCV: —

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: HYDRA
Calibration: GC00086
Control Limt: +/- 20.00%
Sequence: SLC0503

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0503-ICV1	Mercury	0.0040000	0.00403	101	mg/L	EPA 7471B
SLC0503-CCV1	Mercury	0.0040000	0.00392	98.1	mg/L	EPA 7471B
SLC0503-CCV2	Mercury	0.0040000	0.00389	97.3	mg/L	EPA 7471B
SLC0503-CCV3	Mercury	0.0040000	0.00398	99.6	mg/L	EPA 7471B
SLC0503-CCV4	Mercury	0.0040000	0.00391	97.7	mg/L	EPA 7471B
SLC0503-CCV5	Mercury	0.0040000	0.00392	97.9	mg/L	EPA 7471B
SLC0503-CCV6	Mercury	0.0040000	0.00395	98.7	mg/L	EPA 7471B
SLC0503-CCV7	Mercury	0.0040000	0.00400	100	mg/L	EPA 7471B
SLC0503-CCV8	Mercury	0.0040000	0.00406	101	mg/L	EPA 7471B
SLC0503-CCV9	Mercury	0.0040000	0.00399	99.8	mg/L	EPA 7471B
SLC0503-CCVA	Mercury	0.0040000	0.00401	100	mg/L	EPA 7471B

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INSTRUMENT BLANKS
EPA 7471B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: HYDRA
Sequence: SLC0503

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GC00086
Date Analyzed: 03/30/23 11:46

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0503-ICB1	Mercury	-0.000032	0.000021	0.000100	mg/L	
SLC0503-CCB1	Mercury	-0.000033	0.000021	0.000100	mg/L	
SLC0503-CCB2	Mercury	-0.000033	0.000021	0.000100	mg/L	
SLC0503-CCB3	Mercury	-0.000032	0.000021	0.000100	mg/L	
SLC0503-CCB4	Mercury	-0.000039	0.000021	0.000100	mg/L	
SLC0503-CCB5	Mercury	-0.000038	0.000021	0.000100	mg/L	
SLC0503-CCB6	Mercury	-0.000038	0.000021	0.000100	mg/L	
SLC0503-CCB7	Mercury	-0.000041	0.000021	0.000100	mg/L	
SLC0503-CCB8	Mercury	-0.000035	0.000021	0.000100	mg/L	
SLC0503-CCB9	Mercury	-0.000035	0.000021	0.000100	mg/L	
SLC0503-CCBA	Mercury	-0.000036	0.000021	0.000100	mg/L	

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0503	Instrument:	HYDRA
		Calibration:	GC00086

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SLC0503-CAL1	SMM 03-30-23-001	NA	03/30/23 11:27
Cal Standard	SLC0503-CAL2	SMM 03-30-23-002	NA	03/30/23 11:29
Cal Standard	SLC0503-CAL3	SMM 03-30-23-003	NA	03/30/23 11:32
Cal Standard	SLC0503-CAL4	SMM 03-30-23-004	NA	03/30/23 11:34
Cal Standard	SLC0503-CAL5	SMM 03-30-23-005	NA	03/30/23 11:36
Cal Standard	SLC0503-CAL6	SMM 03-30-23-006	NA	03/30/23 11:39
Initial Cal Check	SLC0503-ICV1	SMM 03-30-23-007	NA	03/30/23 11:43
Initial Cal Blank	SLC0503-ICB1	SMM 03-30-23-008	NA	03/30/23 11:46
Instrument RL Check	SLC0503-CRL1	SMM 03-30-23-009	NA	03/30/23 11:48
Calibration Check	SLC0503-CCV1	SMM 03-30-23-010	NA	03/30/23 11:50
Calibration Blank	SLC0503-CCB1	SMM 03-30-23-011	NA	03/30/23 11:53
Calibration Check	SLC0503-CCV2	SMM 03-30-23-012	NA	03/30/23 11:55
Calibration Blank	SLC0503-CCB2	SMM 03-30-23-013	NA	03/30/23 11:57
Calibration Check	SLC0503-CCV3	SMM 03-30-23-025	NA	03/30/23 12:23
Calibration Blank	SLC0503-CCB3	SMM 03-30-23-026	NA	03/30/23 12:25
Calibration Check	SLC0503-CCV4	SMM 03-30-23-028	NA	03/30/23 13:33
Calibration Blank	SLC0503-CCB4	SMM 03-30-23-029	NA	03/30/23 13:35
Blank	BLC0694-BLK1	SMM 03-30-23-030	Solid	03/30/23 13:38
LCS	BLC0694-BS1	SMM 03-30-23-031	Solid	03/30/23 13:40
Calibration Check	SLC0503-CCV5	SMM 03-30-23-040	NA	03/30/23 14:01
Calibration Blank	SLC0503-CCB5	SMM 03-30-23-041	NA	03/30/23 14:03
LDW23-SS1129	23A0134-09	SMM 03-30-23-049	Solid	03/30/23 14:22
LDW23-SS1124	23A0134-10	SMM 03-30-23-050	Solid	03/30/23 14:24
LDW23-SS1123	23A0134-11	SMM 03-30-23-051	Solid	03/30/23 14:27
Calibration Check	SLC0503-CCV6	SMM 03-30-23-052	NA	03/30/23 14:29
Calibration Blank	SLC0503-CCB6	SMM 03-30-23-053	NA	03/30/23 14:31
LDW23-SS1116	23A0134-12	SMM 03-30-23-054	Solid	03/30/23 14:34
LDW23-IT1210	23A0134-13	SMM 03-30-23-055	Solid	03/30/23 14:36
LDW23-SC1249	23A0134-15	SMM 03-30-23-056	Solid	03/30/23 14:38

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0503

SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: HYDRA
Calibration: GC00086

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Check	SLC0503-CCV7	SMM 03-30-23-064	NA	03/30/23 14:57
Calibration Blank	SLC0503-CCB7	SMM 03-30-23-065	NA	03/30/23 14:59
Blank	BLC0704-BLK1	SMM 03-30-23-066	Solid	03/30/23 15:02
LCS	BLC0704-BS1	SMM 03-30-23-067	Solid	03/30/23 15:04
Calibration Check	SLC0503-CCV8	SMM 03-30-23-076	NA	03/30/23 15:25
Calibration Blank	SLC0503-CCB8	SMM 03-30-23-077	NA	03/30/23 15:27
LDW23-SS1205	23A0134-01	SMM 03-30-23-081	Solid	03/30/23 15:37
LDW23-SS1188	23A0134-02	SMM 03-30-23-082	Solid	03/30/23 15:39
LDW23-SS1179	23A0134-03	SMM 03-30-23-083	Solid	03/30/23 15:41
LDW23-SS1242	23A0134-04	SMM 03-30-23-084	Solid	03/30/23 15:44
LDW23-SS1173	23A0134-05	SMM 03-30-23-085	Solid	03/30/23 15:46
LDW23-SS1160	23A0134-06	SMM 03-30-23-086	Solid	03/30/23 15:48
LDW23-SS1152	23A0134-07	SMM 03-30-23-087	Solid	03/30/23 15:51
Calibration Check	SLC0503-CCV9	SMM 03-30-23-088	NA	03/30/23 15:53
Calibration Blank	SLC0503-CCB9	SMM 03-30-23-089	NA	03/30/23 15:55
LDW23-SS1131	23A0134-08	SMM 03-30-23-090	Solid	03/30/23 15:58
Calibration Check	SLC0503-CCVA	SMM 03-30-23-091	NA	03/30/23 16:00
Calibration Blank	SLC0503-CCBA	SMM 03-30-23-092	NA	03/30/23 16:02

DETECTION LEVEL STANDARD
EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: HYDRA
Calibration: GC00086
Sequence: SLC0503
Lab Sample ID: SLC0503-CRL1

Analyte	True	Found	%R	Units	QC Limts
Mercury	0.000100	0.000085	84.7	mg/L	70 - 130

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 7471B

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1205 23A0134-01	01/06/23 08:28	01/06/23 17:26	03/30/23 11:04	83	365	03/30/23 15:37	83	365	
LDW23-SS1188 23A0134-02	01/06/23 09:36	01/06/23 17:26	03/30/23 11:04	83	365	03/30/23 15:39	83	365	
LDW23-SS1179 23A0134-03	01/06/23 09:52	01/06/23 17:26	03/30/23 11:04	83	365	03/30/23 15:41	83	365	
LDW23-SS1242 23A0134-04	01/06/23 11:04	01/06/23 17:26	03/30/23 11:04	83	365	03/30/23 15:44	83	365	
LDW23-SS1173 23A0134-05	01/06/23 11:22	01/06/23 17:26	03/30/23 11:04	82	365	03/30/23 15:46	83	365	
LDW23-SS1160 23A0134-06	01/06/23 11:41	01/06/23 17:26	03/30/23 11:04	82	365	03/30/23 15:48	83	365	
LDW23-SS1152 23A0134-07	01/06/23 12:29	01/06/23 17:26	03/30/23 11:04	82	365	03/30/23 15:51	83	365	
LDW23-SS1131 23A0134-08	01/06/23 12:43	01/06/23 17:26	03/30/23 11:04	82	365	03/30/23 15:58	83	365	
LDW23-SS1129 23A0134-09	01/06/23 12:57	01/06/23 17:26	03/29/23 13:50	82	365	03/30/23 14:22	83	365	
LDW23-SS1124 23A0134-10	01/06/23 13:15	01/06/23 17:26	03/29/23 13:50	82	365	03/30/23 14:24	83	365	
LDW23-SS1123 23A0134-11	01/06/23 13:29	01/06/23 17:26	03/29/23 13:50	82	365	03/30/23 14:27	83	365	
LDW23-SS1116 23A0134-12	01/06/23 13:44	01/06/23 17:26	03/29/23 13:50	82	365	03/30/23 14:34	83	365	
LDW23-IT1210 23A0134-13	01/06/23 14:12	01/06/23 17:26	03/29/23 13:50	81	365	03/30/23 14:36	83	365	
LDW23-SC1249 23A0134-15	01/06/23 13:46	01/06/23 17:26	03/29/23 13:50	82	365	03/30/23 14:38	83	365	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: HYDRA

Analyte	MDL	RL	Units
Mercury	0.00525	0.0250	mg/kg

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Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGHG1
Lot Number:	S2-HG711246
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Mercury
Starting Material:	Hg Metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1000 ± 3 µg/mL

Density: 1.026 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **1004 ± 6 µg/mL**
ICP Assay NIST SRM 3133 Lot Number: 160921

Assay Method #2 **998 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **1001 ± 3 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000210	M	Eu	<	0.000210	O	Na		0.000626	M	Se	<	0.008100	M	Zn	<	0.000810
M	Al		0.000161	O	Fe	<	0.001600	M	Nb	<	0.000410	O	Si		0.000626	M	Zr	<	0.000410
M	As	<	0.002500	M	Ga	<	0.000210	M	Nd	<	0.000210	M	Sm	<	0.000210				
O	Au	<	0.001700	M	Gd	<	0.000210	O	Ni	<	0.001400	M	Sn	<	0.000410				
M	B	<	0.008500	M	Ge	<	0.000410	M	Os	<	0.003900	O	Sr	<	0.000110				
M	Ba	<	0.000210	M	Hf	<	0.000210	O	P	<	0.029000	M	Ta	<	0.000210				
O	Be	<	0.000110	s	Hg	<		M	Pb	<	0.000210	M	Tb	<	0.000210				
M	Bi	<	0.001100	M	Ho	<	0.000210	M	Pd	<	0.003500	M	Te	<	0.005700				
O	Ca		0.004754	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	O	Ti	<	0.000430				
M	Ce	<	0.000210	O	K		0.000731	M	Rb	<	0.000210	O	Tl	<	0.005400				
M	Co	<	0.000210	M	La	<	0.000210	M	Re	<	0.000210	M	Tm	<	0.000210				
O	Cr	<	0.003300	O	Li	<	0.000110	M	Rh	<	0.001100	M	U	<	0.000410				
M	Cs	<	0.000410	M	Lu	<	0.000210	M	Ru	<	0.000810	M	V	<	0.000210				
M	Cu	<	0.000810	O	Mg		0.000104	O	S	<	0.022000	M	W	<	0.001100				
M	Dy	<	0.000210	O	Mn	<	0.000430	M	Sb	<	0.000210	M	Y	<	0.000210				
M	Er	<	0.000210	M	Mo	<	0.000210	M	Sc	<	0.000210	M	Yb	<	0.000210				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+
Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 18, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 18, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-QCS-4
Lot Number:	R2-MEB695951
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	5 µg/mL ea: Mercury

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Mercury, Hg	**5.011 ± 0.023 µg/mL**		

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	061204
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The follow ing equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 20, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 20, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1205

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-01 D	SDG:	23A0134
Sampled:	01/06/23 08:28	Prepared:	01/13/23 13:46	File ID:	
% Solids:	59.97	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	59.97	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1188

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-02 D	SDG:	23A0134
Sampled:	01/06/23 09:36	Prepared:	01/13/23 13:46	File ID:	
% Solids:	50.63	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	50.63	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1179

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-03 D	SDG:	23A0134
Sampled:	01/06/23 09:52	Prepared:	01/13/23 13:46	File ID:	
% Solids:	50.30	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	50.30	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1242

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-04 D	SDG:	23A0134
Sampled:	01/06/23 11:04	Prepared:	01/13/23 13:46	File ID:	
% Solids:	49.56	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	49.56	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1173

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-05 D	SDG:	23A0134
Sampled:	01/06/23 11:22	Prepared:	01/13/23 13:46	File ID:	
% Solids:	47.11	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	47.11	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1160

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-06 D	SDG:	23A0134
Sampled:	01/06/23 11:41	Prepared:	01/13/23 13:46	File ID:	
% Solids:	39.29	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	39.29	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1152

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-07 D	SDG:	23A0134
Sampled:	01/06/23 12:29	Prepared:	01/13/23 13:46	File ID:	
% Solids:	45.31	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	45.31	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1131

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-08 D	SDG:	23A0134
Sampled:	01/06/23 12:43	Prepared:	01/13/23 13:46	File ID:	
% Solids:	58.42	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	58.42	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1129

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-09 D	SDG:	23A0134
Sampled:	01/06/23 12:57	Prepared:	01/13/23 13:46	File ID:	
% Solids:	47.82	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	47.82	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1124

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-10 D	SDG:	23A0134
Sampled:	01/06/23 13:15	Prepared:	01/13/23 13:46	File ID:	
% Solids:	55.37	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	55.37	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1123

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-11 D	SDG:	23A0134
Sampled:	01/06/23 13:29	Prepared:	01/13/23 13:46	File ID:	
% Solids:	54.10	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	54.10	1	0.04	0.04	

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Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
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LDW23-SS1116

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-12 D	SDG:	23A0134
Sampled:	01/06/23 13:44	Prepared:	01/13/23 13:46	File ID:	
% Solids:	59.12	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	59.12	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-IT1210

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-13 D	SDG:	23A0134
Sampled:	01/06/23 14:12	Prepared:	01/13/23 13:46	File ID:	
% Solids:	57.00	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	57.00	1	0.04	0.04	

Analytical Resources, LLC
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Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-IT1194

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-14 D	SDG:	23A0134
Sampled:	01/06/23 14:41	Prepared:	01/13/23 13:46	File ID:	
% Solids:	71.19	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	71.19	1	0.04	0.04	

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Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1249

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-15 D	SDG:	23A0134
Sampled:	01/06/23 13:46	Prepared:	01/13/23 13:46	File ID:	
% Solids:	53.23	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	53.23	1	0.04	0.04	

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Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1077

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-16 C	SDG:	23A0134
Sampled:	01/06/23 15:10	Prepared:	01/13/23 13:46	File ID:	
% Solids:	75.86	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 13:49
Batch:	BLA0343	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	75.86	1	0.04	0.04	

PREPARATION BATCH SUMMARY

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0343 Batch Matrix: Solid
Preparation: No Prep Wet Chem

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1205	23A0134-01		01/13/23 13:46	
LDW23-SS1188	23A0134-02		01/13/23 13:46	
LDW23-SS1179	23A0134-03		01/13/23 13:46	
LDW23-SS1242	23A0134-04		01/13/23 13:46	
LDW23-SS1173	23A0134-05		01/13/23 13:46	
LDW23-SS1160	23A0134-06		01/13/23 13:46	
LDW23-SS1152	23A0134-07		01/13/23 13:46	
LDW23-SS1131	23A0134-08		01/13/23 13:46	
LDW23-SS1129	23A0134-09		01/13/23 13:46	
LDW23-SS1124	23A0134-10		01/13/23 13:46	
LDW23-SS1123	23A0134-11		01/13/23 13:46	
LDW23-SS1116	23A0134-12		01/13/23 13:46	
LDW23-IT1210	23A0134-13		01/13/23 13:46	
LDW23-IT1194	23A0134-14		01/13/23 13:46	
LDW23-SC1249	23A0134-15		01/13/23 13:46	
LDW23-SC1077	23A0134-16		01/13/23 13:46	
Blank	BLA0343-BLK1		01/13/23 13:46	
LDW23-SS1205	BLA0343-DUP1		01/13/23 13:46	
LDW23-SS1205	BLA0343-DUP2		01/13/23 13:46	

TOTAL SOLIDS/VOLATILE SOLIDS (TS / TVS) BENCHSHEET for Solid samples

Method: PSEP 1986, SM2540, EPA 160.1

(dry at 104 (12-24 hr) then combust at 550 (30 min))

Batch:	BLA0343
Date:	1/13/2023 13:49
Analyst:	UW

Instrumentation

Drying Ovens:	12	**Analytical Balance:**	BAL2
Muffle Furnace:	2		

Batch drying time

record times as mm/dd/yy hh:mm

date/time in oven:	1/13/2023 15:00	
date/time out:	1/14/2023 14:14	
elapsed hrs =	23.2	OK

TS (%) calculated as:
Final dry wt (g) = (Dry Wt - Tare Wt)
TS = (Final Dry Wt)/ (grams Sample-Tare)

Oven Temps, °C	
Start Temp	103
Dry Cycle 1	105
Dry Cycle 2	
Dry Cycle 3	

TVS (mg/kg dry wt) calculated as:
Final ash wt (g) = (min ash wt - tare wt)
TVS (mg/kg) = [(Dry wt-Ash wt)/ (dry weight)] *1,000,000
if ash wt > dry wt, "Chk for Err"
if dry wt-ash wt < 0.001 g, "< (1/dry wt)*1,000,000

Balance Calibration Check

Record weights to 4 places

Cal Weight ID:	CV-02	CV-02	CV-02	CV-02	CV-02		CV-02	CV-02	CV-02	
Date & Time:	1/13/23 13:50	1/13/23 14:10	1/14/23 14:55							
Cal Wt (g): 10.0000	10.0000	10.0000	10.0000							
	Cal OK!	Cal OK!	Cal OK!							

Sample ID	Dish #	Tare Wt. (g)	Dish & Sample (g)	Dry Wt 104C (grams) 1	2	3	dry Wt (g)	TS (%)	Notes	ASH WT 550C (grams) 1	2	3	Ash Wt (g)	TVS (mg/kg)	(%)	Notes
BLA0343-BLK1	1	0.8390	0.0000	0.8389			-0.0001	0.01%								
23A0134-01	2	0.7897	7.1030	4.5759			3.7862	59.97%								
BLA0343-DUP1	3	0.8085	7.1651	4.6569			3.8484	60.54%	RPD=0.9							
BLA0343-DUP2	4	0.7932	7.2256	4.7714			3.9782	61.85%	RSD=1.6							
23A0134-02	5	0.7988	7.7836	4.3353			3.5365	50.63%								
23A0134-03	6	0.7860	9.4091	5.1236			4.3376	50.30%								
23A0134-04	7	0.7978	7.0356	3.8894			3.0916	49.56%								
23A0134-05	8	0.8181	9.5874	4.9492			4.1311	47.11%								
23A0134-06	9	0.8185	9.6498	4.2881			3.4696	39.29%								
23A0134-07	10	0.7796	9.3010	4.6410			3.8614	45.31%								
23A0134-08	11	0.8194	7.6037	4.7831			3.9637	58.42%								
23A0134-09	12	0.8199	9.6286	5.0326			4.2127	47.82%								
23A0134-10	13	0.8433	7.8349	4.7145			3.8712	55.37%								
23A0134-11	14	0.8435	7.4731	4.4298			3.5863	54.10%								
23A0134-12	15	0.7859	8.1953	5.1666			4.3807	59.12%								
23A0134-13	16	0.8398	8.5828	5.2530			4.4132	57.00%								
23A0134-14	17	0.8391	9.3143	6.8722			6.0331	71.19%								
23A0134-15	18	0.7896	7.6287	4.4301			3.6405	53.23%								
23A0134-16	19	0.8295	9.1434	7.1364			6.3069	75.86%								
23A0204-02	20	0.8393	6.4909	3.1466			2.3073	40.83%								
23A0204-03	21	0.7818	5.2393	3.0656			2.2838	51.23%								
23A0256-02	22	0.8359	6.2960	3.0134			2.1775	39.88%								
23A0256-03	23	0.7923	5.7965	3.0570			2.2647	45.26%								

NOTE: Do not enter data in blue shaded cells as they are calculated fields. Green shaded cells MAY be altered if a rewigh is called for.

TOTAL SOLIDS (TS) BENCHSHEET for Solid samples

Method: Total Solids, Metals Correction

dry at 104°C (12-24 hr)

Batch:	BLC0743
Date:	3/29/2023 17:00
Analyst:	AR

Instrumentation

Drying Oven: OVEN07

Analytical Balance: BAL10

Batch drying time

record times as mm/dd/yy hh:mm

date/time in oven: 3/29/2023 17:50

date/time out: 3/30/2023 12:47

elapsed hrs = 18.9 OK

Temp in: 107 °C

Temp out: 104 °C

TS (%) calculated as:
Final dry wt (g) = (Dry Wt - Tare Wt)
TS = (Final Dry Wt)/ (grams Sample-Tare)

Sample ID	Tare Weight (g)	Tare + Sample Weight (g)	Tare + Sample Dry Weight @ 104°C (g) 1	2	3	dry Wt (g)	TS (%)	Notes
23A0133-03	0.9780	10.0560	6.0690			5.0910	56.08%	
23A0133-06	0.9830	10.0700	5.2940			4.3110	47.44%	
23A0133-07	1.0090	10.0460	6.4780			5.4690	60.52%	
23A0133-08	0.9910	10.0640	6.4420			5.4510	60.08%	
23A0133-09	1.0060	10.0740	5.7260			4.7200	52.05%	
23A0133-11	1.0210	10.0490	6.0260			5.0050	55.44%	
23A0133-12	0.9940	10.0030	5.6480			4.6540	51.66%	
23A0133-13	1.0050	10.0870	6.5260			5.5210	60.79%	
23A0133-14	1.0340	10.0450	5.3050			4.2710	47.40%	
23A0133-15	0.9840	10.0250	5.7600			4.7760	52.83%	
23A0134-01	0.9930	10.0160	6.4530			5.4600	60.51%	
23A0134-02	0.9770	10.0530	5.5560			4.5790	50.45%	
23A0134-03	1.0000	10.0240	5.5430			4.5430	50.34%	
23A0134-04	0.9850	10.0210	5.4490			4.4640	49.40%	
23A0134-05	1.0010	10.0670	5.2540			4.2530	46.91%	
23A0134-06	0.9990	10.0870	4.7130			3.7140	40.87%	
23A0134-07	1.0110	10.0580	5.0870			4.0760	45.05%	
23A0134-08	1.0080	10.0740	6.1160			5.1080	56.34%	
23C0350-01	0.9860	10.0750	8.3420			7.3560	80.93%	
23C0350-03	0.9870	10.0580	8.2830			7.2960	80.43%	
23C0350-05	0.9930	10.0690	7.3230			6.3300	69.74%	
23C0350-07	0.9980	10.0170	8.7530			7.7550	85.99%	
23C0350-12	1.0020	10.0030	8.8100			7.8080	86.75%	
23C0350-14	1.0080	10.0860	8.6290			7.6210	83.95%	
23C0350-16	0.9970	10.0100	9.0050			8.0080	88.85%	
23C0350-19	1.0100	10.0020	8.3980			7.3880	82.16%	
23C0350-22	1.0230	10.0240	8.7650			7.7420	86.01%	
23C0350-24	1.0180	10.0490	9.1910			8.1730	90.50%	
23C0350-26	1.0150	10.0480	9.3880			8.3730	92.69%	
23C0350-28	1.0040	10.0450	8.5580			7.5540	83.55%	

NOTE: Do not enter data in blue shaded cells as they are calculated fields. Green shaded cells MAY be altered if a rewigh is called for.

TOTAL SOLIDS (TS) BENCHSHEET for Solid samples

Method: Total Solids, Metals Correction

dry at 104°C (12-24 hr)

Batch:	BLC0811
Date:	3/30/2023 16:33
Analyst:	AR

Instrumentation

Drying Oven:	OVEN07
Analytical Balance:	BAL10

Batch drying time

record times as mm/dd/yy hh:mm

date/time in oven:	3/30/2023 17:26	
date/time out:	3/31/2023 15:21	
elapsed hrs =	21.9	OK

Temp in: 106 °C

Temp out: 103 °C

TS (%) calculated as:
Final dry wt (g) = (Dry Wt - Tare Wt)
TS = (Final Dry Wt)/ (grams Sample-Tare)

Sample ID	Tare Weight (g)	Tare + Sample Weight (g)	Tare + Sample Dry Weight @ 104°C (g) 1	2	3	dry Wt (g)	TS (%)	Notes
23A0099-01	0.9870	10.0950	5.4820			4.4950	49.35%	
23A0099-02	0.9760	10.0200	5.4340			4.4580	49.29%	
23A0099-03	0.9950	10.0200	6.5040			5.5090	61.04%	
23A0099-04	1.0170	10.0600	5.9220			4.9050	54.24%	
23A0099-05	1.0200	10.0300	5.7750			4.7550	52.77%	
23A0099-06	1.0030	10.0900	6.3220			5.3190	58.53%	
23A0099-07	0.9980	10.0790	5.5470			4.5490	50.09%	
23A0099-08	0.9980	10.0140	5.8860			4.8880	54.21%	
23A0099-09	1.0090	10.0870	5.7540			4.7450	52.27%	
23A0099-10	1.0220	10.0500	5.2440			4.2220	46.77%	
23A0099-11	1.0080	10.0300	5.2860			4.2780	47.42%	
23A0099-12	1.0070	10.0940	6.7680			5.7610	63.40%	
23A0099-13	1.0170	10.0800	6.2170			5.2000	57.38%	
23A0133-10	0.9970	10.0060	5.8650			4.8680	54.03%	
23A0133-16	1.0100	10.0330	5.4880			4.4780	49.63%	
23A0134-09	1.0010	10.0670	5.3300			4.3290	47.75%	
23A0134-10	1.0260	10.0400	6.1950			5.1690	57.34%	
23A0134-11	1.0250	10.0960	5.8700			4.8450	53.41%	
23A0134-12	1.0220	10.0250	6.4030			5.3810	59.77%	
23A0134-13	1.0030	10.0440	6.2350			5.2320	57.87%	
23A0134-14	1.0090	10.0000	7.5230			6.5140	72.45%	
23A0134-15	0.9970	10.0030	6.1060			5.1090	56.73%	

Form I

METHOD BLANK DATA SHEET

SM 2540 G-97

TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0343
Laboratory ID: BLA0343-BLK1
Prepared: 01/13/23 13:46
Matrix: Solid
Preparation: No Prep Wet Chem
Analyzed: 01/13/23 13:49
Sequence:
Calibration:
Instrument: BAL2

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	ND	1	0.04	0.04	U

DUPLICATES

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0343-DUP1
Batch: BLA0343
Lab Source ID: 23A0134-01
Preparation: No Prep Wet Chem
Initial/Final: 5 g / 5 g
Source Sample Name: LDW23-SS1205
% Solids: 59.97

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Solids	20	59.97	60.54	0.946	

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

DUPLICATES

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0343-DUP2
Batch: BLA0343
Lab Source ID: 23A0134-01
Preparation: No Prep Wet Chem
Initial/Final: 5 g / 5 g
Source Sample Name: LDW23-SS1205
% Solids: 59.97

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Solids	20	59.97	61.85	3.08	

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

HOLDING TIME SUMMARY

Analysis: SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1205 23A0134-01	01/06/23 08:28	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
LDW23-SS1188 23A0134-02	01/06/23 09:36	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
LDW23-SS1179 23A0134-03	01/06/23 09:52	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
LDW23-SS1242 23A0134-04	01/06/23 11:04	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
LDW23-SS1173 23A0134-05	01/06/23 11:22	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
LDW23-SS1160 23A0134-06	01/06/23 11:41	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
LDW23-SS1152 23A0134-07	01/06/23 12:29	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
LDW23-SS1131 23A0134-08	01/06/23 12:43	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
LDW23-SS1129 23A0134-09	01/06/23 12:57	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
LDW23-SS1124 23A0134-10	01/06/23 13:15	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
LDW23-SS1123 23A0134-11	01/06/23 13:29	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
LDW23-SS1116 23A0134-12	01/06/23 13:44	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
LDW23-IT1210 23A0134-13	01/06/23 14:12	01/06/23 17:26	01/13/23 13:46	6	28	01/13/23 13:49	7	28	
LDW23-IT1194 23A0134-14	01/06/23 14:41	01/06/23 17:26	01/13/23 13:46	6	28	01/13/23 13:49	7	28	
LDW23-SC1249 23A0134-15	01/06/23 13:46	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
LDW23-SC1077 23A0134-16	01/06/23 15:10	01/06/23 17:26	01/13/23 13:46	6	28	01/13/23 13:49	7	28	
Duplicate BLA0343-DUP1	01/06/23 08:28	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	
Duplicate BLA0343-DUP2	01/06/23 08:28	01/06/23 17:26	01/13/23 13:46	7	28	01/13/23 13:49	7	28	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument:

Analyte	MDL	RL	Units
Total Solids	0.04	0.04	%

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Form I
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EPA 6020B

Total Metals

LDW23-SS1205

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-01 B	SDG:	23A0134
Sampled:	01/06/23 08:28	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-063
% Solids:	59.97	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 18:49
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.05 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	21.3	20	0.41	0.79	
7439-92-1	Lead	14.8	20	0.08	0.16	
7440-22-4	Silver	0.16	20	0.03	0.32	J

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Form I
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Total Metals

LDW23-SS1188

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-02 B	SDG:	23A0134
Sampled:	01/06/23 09:36	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-064
% Solids:	50.63	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 18:54
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.071 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	24.4	20	0.48	0.92	
7439-92-1	Lead	21.8	20	0.10	0.18	
7440-22-4	Silver	0.22	20	0.04	0.37	J

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Total Metals

LDW23-SS1179

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-03 B	SDG:	23A0134
Sampled:	01/06/23 09:52	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-065
% Solids:	50.30	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 18:58
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.032 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	24.3	20	0.50	0.96	
7439-92-1	Lead	20.6	20	0.10	0.19	
7440-22-4	Silver	0.20	20	0.04	0.39	J

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Form I
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Total Metals

LDW23-SS1242

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-04 B	SDG:	23A0134
Sampled:	01/06/23 11:04	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-066
% Solids:	49.56	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 19:03
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.008 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	24.3	20	0.52	1.00	
7439-92-1	Lead	18.7	20	0.10	0.20	
7440-22-4	Silver	0.24	20	0.04	0.40	J

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Total Metals

LDW23-SS1173

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-05 B	SDG:	23A0134
Sampled:	01/06/23 11:22	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-067
% Solids:	47.11	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 19:07
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.023 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	22.7	20	0.54	1.04	
7439-92-1	Lead	21.0	20	0.11	0.21	
7440-22-4	Silver	0.22	20	0.05	0.42	J

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Total Metals

LDW23-SS1160

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-06 A	SDG:	23A0134
Sampled:	01/06/23 11:41	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-068
% Solids:	39.29	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 19:11
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.02 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	30.2	20	0.65	1.25	
7439-92-1	Lead	39.4	20	0.13	0.25	
7440-22-4	Silver	0.28	20	0.05	0.50	J

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Total Metals

LDW23-SS1152

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-07 B	SDG:	23A0134
Sampled:	01/06/23 12:29	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-069
% Solids:	45.31	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 19:16
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.066 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	26.0	20	0.54	1.04	
7439-92-1	Lead	26.8	20	0.11	0.21	
7440-22-4	Silver	0.27	20	0.05	0.41	J

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EPA 6020B
Total Metals

LDW23-SS1131

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-08 B	SDG:	23A0134
Sampled:	01/06/23 12:43	Prepared:	03/27/23 13:52	File ID:	XDT_m2230401-070
% Solids:	58.42	Preparation:	SWN EPA 3050B	Analyzed:	04/01/23 19:20
Batch:	BLC0703	Sequence:	SLD0041	Initial/Final:	1.063 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00006

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	20.0	20	0.42	0.81	
7439-92-1	Lead	25.8	20	0.08	0.16	
7440-22-4	Silver	0.15	20	0.04	0.32	J

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EPA 6020B

Total Metals

LDW23-SS1129

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-09 B	SDG:	23A0134
Sampled:	01/06/23 12:57	Prepared:	03/29/23 13:50	File ID:	XDT_m2230330-080
% Solids:	47.82	Preparation:	SWN EPA 3050B	Analyzed:	03/30/23 21:52
Batch:	BLC0692	Sequence:	SLC0521	Initial/Final:	1.049 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00002

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	23.3	20	0.52	1.00	
7439-92-1	Lead	23.5	20	0.10	0.20	
7440-22-4	Silver	0.22	20	0.04	0.40	J

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Total Metals

LDW23-SS1124

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-10 B	SDG:	23A0134
Sampled:	01/06/23 13:15	Prepared:	03/29/23 13:50	File ID:	XDT_m2230330-081
% Solids:	55.37	Preparation:	SWN EPA 3050B	Analyzed:	03/30/23 21:57
Batch:	BLC0692	Sequence:	SLC0521	Initial/Final:	1.032 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00002

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	13.9	20	0.09	0.18	
7440-22-4	Silver	0.15	20	0.04	0.35	J

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Total Metals

LDW23-SS1124

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-10 B	SDG:	23A0134
Sampled:	01/06/23 13:15	Prepared:	03/29/23 13:50	File ID:	XDT_m2230331-062
% Solids:	55.37	Preparation:	SWN EPA 3050B	Analyzed:	03/31/23 20:44
Batch:	BLC0692	Sequence:	SLD0005	Initial/Final:	1.032 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00005

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	22.7	50	1.14	2.19	D

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Total Metals

LDW23-SS1123

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-11 B	SDG:	23A0134
Sampled:	01/06/23 13:29	Prepared:	03/29/23 13:50	File ID:	XDT_m2230330-082
% Solids:	54.10	Preparation:	SWN EPA 3050B	Analyzed:	03/30/23 22:01
Batch:	BLC0692	Sequence:	SLC0521	Initial/Final:	1.056 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00002

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	23.2	20	0.09	0.18	
7440-22-4	Silver	0.26	20	0.04	0.35	J

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EPA 6020B

Total Metals

LDW23-SS1123

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-11 B	SDG:	23A0134
Sampled:	01/06/23 13:29	Prepared:	03/29/23 13:50	File ID:	XDT_m2230331-063
% Solids:	54.10	Preparation:	SWN EPA 3050B	Analyzed:	03/31/23 20:49
Batch:	BLC0692	Sequence:	SLD0005	Initial/Final:	1.056 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00005

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	25.9	50	1.14	2.19	D

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INORGANIC ANALYSIS DATA SHEET
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Total Metals

LDW23-SS1116

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-12 B	SDG:	23A0134
Sampled:	01/06/23 13:44	Prepared:	03/29/23 13:50	File ID:	XDT_m2230330-083
% Solids:	59.12	Preparation:	SWN EPA 3050B	Analyzed:	03/30/23 22:06
Batch:	BLC0692	Sequence:	SLC0521	Initial/Final:	1.062 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00002

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	16.5	20	0.41	0.80	
7439-92-1	Lead	10.5	20	0.08	0.16	
7440-22-4	Silver	0.12	20	0.04	0.32	J

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INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-IT1210

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-13 B	SDG:	23A0134
Sampled:	01/06/23 14:12	Prepared:	03/29/23 13:50	File ID:	XDT_m2230330-084
% Solids:	57.00	Preparation:	SWN EPA 3050B	Analyzed:	03/30/23 22:11
Batch:	BLC0692	Sequence:	SLC0521	Initial/Final:	1.069 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00002

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	63.9	20	0.09	0.16	
7440-22-4	Silver	0.83	20	0.04	0.33	

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INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-IT1210

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-13 B	SDG:	23A0134
Sampled:	01/06/23 14:12	Prepared:	03/29/23 13:50	File ID:	XDT_m2230331-064
% Solids:	57.00	Preparation:	SWN EPA 3050B	Analyzed:	03/31/23 20:53
Batch:	BLC0692	Sequence:	SLD0005	Initial/Final:	1.069 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00005

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	37.8	50	1.07	2.05	D

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Total Metals

LDW23-SC1249

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-15 B	SDG:	23A0134
Sampled:	01/06/23 13:46	Prepared:	03/29/23 13:50	File ID:	XDT_m2230330-085
% Solids:	53.23	Preparation:	SWN EPA 3050B	Analyzed:	03/30/23 22:16
Batch:	BLC0692	Sequence:	SLC0521	Initial/Final:	1.068 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00002

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	17.3	20	0.09	0.18	
7440-22-4	Silver	0.19	20	0.04	0.35	J

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INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1249

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-15 B	SDG:	23A0134
Sampled:	01/06/23 13:46	Prepared:	03/29/23 13:50	File ID:	XDT_m2230331-065
% Solids:	53.23	Preparation:	SWN EPA 3050B	Analyzed:	03/31/23 20:58
Batch:	BLC0692	Sequence:	SLD0005	Initial/Final:	1.068 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00005

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	23.8	50	1.14	2.20	D

PREPARATION BATCH SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Batch: BLC0692 Batch Matrix: Solid Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1129	23A0134-09	XDT_m2230330-080	03/29/23 13:50	
LDW23-SS1124	23A0134-10	XDT_m2230331-062	03/29/23 13:50	
LDW23-SS1124	23A0134-10	XDT_m2230330-081	03/29/23 13:50	
LDW23-SS1123	23A0134-11	XDT_m2230331-063	03/29/23 13:50	
LDW23-SS1123	23A0134-11	XDT_m2230330-082	03/29/23 13:50	
LDW23-SS1116	23A0134-12	XDT_m2230330-083	03/29/23 13:50	
LDW23-IT1210	23A0134-13	XDT_m2230331-064	03/29/23 13:50	
LDW23-IT1210	23A0134-13	XDT_m2230330-084	03/29/23 13:50	
LDW23-SC1249	23A0134-15	XDT_m2230331-065	03/29/23 13:50	
LDW23-SC1249	23A0134-15	XDT_m2230330-085	03/29/23 13:50	
Blank	BLC0692-BLK1	XDT_m2230330-054	03/29/23 13:50	
LCS	BLC0692-BS1	XDT_m2230330-055	03/29/23 13:50	

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Digestion Log

Analyst: ML Date: 3/29/23 Time: 1050-1624 Balance ID: 10

Matrix: Soil Block ID: 3 Block Temp: 94C Thermometer: 20-4

ARI Sample ID	Btl #	pH<2	Prep Code: SWN Initial Wt (g) Vol (mL)	Prep Code: SWN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
23A0099-01	D		1.085	50			
-02	↓		1.002	↓			
-03	↓		1.017				
-04	B		1.034				
-05	↓		1.061				
-06	D		1.006				
-07	|		1.074				
-08	|		1.060				
-09	|		1.006				
-10	|		1.075				
-11	↓		1.052				
-12	B		1.021				
-13	D		1.043				
23A0134-09	B		1.049				
-10	|		1.032				
-11	|		1.056				
-12	|		1.062				
-13	↓		1.069				
-14	A		1.017				
-15	B		1.068				
BCC692-blk1	—		—				
-bs1	—		① —				
-bsd1	—		~~1.003~~				23A0099-06
-MS1	—		1.003				↓
-MSD1	—		1.004	↓			
—	—		—	—	—	—	—

Chemical/Reagent ID: ① 1.004

HNO_3: L2678 1:1 HNO_3: L23116 HCl: — H_2O_2: K11056

Tube Lot#: 22010117 Boiling Chip Lot#: — (DoD Only)

5061F
Version 007

11/8/22

PREPARATION BATCH SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLC0703 Batch Matrix: Solid
Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1205	23A0134-01	XDT_m2230401-063	03/27/23 13:52	
LDW23-SS1188	23A0134-02	XDT_m2230401-064	03/27/23 13:52	
LDW23-SS1179	23A0134-03	XDT_m2230401-065	03/27/23 13:52	
LDW23-SS1242	23A0134-04	XDT_m2230401-066	03/27/23 13:52	
LDW23-SS1173	23A0134-05	XDT_m2230401-067	03/27/23 13:52	
LDW23-SS1160	23A0134-06	XDT_m2230401-068	03/27/23 13:52	
LDW23-SS1152	23A0134-07	XDT_m2230401-069	03/27/23 13:52	
LDW23-SS1131	23A0134-08	XDT_m2230401-070	03/27/23 13:52	
Blank	BLC0703-BLK1	XDT_m2230331-068	03/27/23 13:52	
Blank	BLC0703-BLK2	XDT_m2230401-027	03/27/23 13:52	Added 4/3/2023 by MCB
LCS	BLC0703-BS1	XDT_m2230331-069	03/27/23 13:52	
LCS	BLC0703-BS2	XDT_m2230401-028	03/27/23 13:52	Added 4/3/2023 by MCB

Form I

METHOD BLANK DATA SHEET

EPA 6020B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0134

Client: Anchor QEA, LLC | Project: AOC5 MR Phase 1

Batch: BLC0692 | Laboratory ID: BLC0692-BLK1 | Prepared: 03/29/23 13:50

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 03/30/23 19:36

Sequence: SLC0521 | Calibration: GD00002 | Instrument: ICPMS2

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium-52	ND	20	0.26	0.50	U
7439-92-1	Lead-208	ND	20	0.05	0.10	U
7440-22-4	Silver-107	ND	20	0.02	0.20	U

Form I

METHOD BLANK DATA SHEET

EPA 6020B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0134

Client: Anchor QEA, LLC | Project: AOC5 MR Phase 1

Batch: BLC0703 | Laboratory ID: BLC0703-BLK1 | Prepared: 03/27/23 13:52

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 03/31/23 21:20

Sequence: SLD0005 | Calibration: GD00005 | Instrument: ICPMS2

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium-52	ND	20	0.26	0.50	U
7439-92-1	Lead-208	ND	20	0.05	0.10	U

Form I

METHOD BLANK DATA SHEET

EPA 6020B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0134

Client: Anchor QEA, LLC | Project: AOC5 MR Phase 1

Batch: BLC0703 | Laboratory ID: BLC0703-BLK2 | Prepared: 03/27/23 13:52

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 04/01/23 15:50

Sequence: SLD0041 | Calibration: GD00006 | Instrument: ICPMS2

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-22-4	Silver-107	ND	20	0.02	0.20	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/30/23 19:40
Batch:	BLC0692	Laboratory ID:	BLC0692-BS1
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Chromium-52	25.0	25.9		104	80 - 120
Lead-208	25.0	25.7		103	80 - 120
Silver-107	25.0	26.5		106	80 - 120

* Indicates values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/31/23 21:25
Batch:	BLC0703	Laboratory ID:	BLC0703-BS1
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Chromium-52	25.0	27.0		108	80 - 120
Lead-208	25.0	26.3		105	80 - 120

* Indicates values outside of QC limits

* Indicates values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	04/01/23 15:55
Batch:	BLC0703	Laboratory ID:	BLC0703-BS2
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Silver-107	25.0	26.2		105	80 - 120

* Indicates values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Control Limt: +/- 10.00%
Sequence: SLC0521

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0521-ICV1	Chromium-52	50.000	49.3	98.6	ug/L	EPA 6020B
	Chromium-53	50.000	49.5	99.1	ug/L	EPA 6020B
	Lead-208	50.000	50.8	102	ug/L	EPA 6020B
	Silver-107	50.000	52.3	105	ug/L	EPA 6020B
SLC0521-CCV1	Chromium-52	50.000	48.4	96.8	ug/L	EPA 6020B
	Chromium-53	50.000	49.1	98.2	ug/L	EPA 6020B
	Lead-208	50.000	48.5	97.0	ug/L	EPA 6020B
	Silver-107	50.000	49.7	99.3	ug/L	EPA 6020B
SLC0521-CCV2	Chromium-52	50.000	49.7	99.3	ug/L	EPA 6020B
	Chromium-53	50.000	49.7	99.4	ug/L	EPA 6020B
	Lead-208	50.000	49.6	99.2	ug/L	EPA 6020B
	Silver-107	50.000	50.8	102	ug/L	EPA 6020B
SLC0521-CCV3	Chromium-52	50.000	50.1	100	ug/L	EPA 6020B
	Chromium-53	50.000	50.0	100	ug/L	EPA 6020B
	Lead-208	50.000	51.4	103	ug/L	EPA 6020B
	Silver-107	50.000	50.6	101	ug/L	EPA 6020B
SLC0521-CCV4	Chromium-52	50.000	51.0	102	ug/L	EPA 6020B
	Chromium-53	50.000	50.7	101	ug/L	EPA 6020B
	Lead-208	50.000	49.7	99.3	ug/L	EPA 6020B
	Silver-107	50.000	50.4	101	ug/L	EPA 6020B
SLC0521-CCV5	Chromium-52	50.000	48.8	97.5	ug/L	EPA 6020B
	Chromium-53	50.000	49.3	98.6	ug/L	EPA 6020B
	Lead-208	50.000	49.7	99.4	ug/L	EPA 6020B
	Silver-107	50.000	50.6	101	ug/L	EPA 6020B
SLC0521-CCV6	Chromium-52	50.000	50.3	101	ug/L	EPA 6020B
	Chromium-53	50.000	50.5	101	ug/L	EPA 6020B
	Lead-208	50.000	50.0	100	ug/L	EPA 6020B
	Silver-107	50.000	50.2	100	ug/L	EPA 6020B
SLC0521-CCV7	Chromium-52	50.000	49.2	98.4	ug/L	EPA 6020B
	Chromium-53	50.000	50.4	101	ug/L	EPA 6020B
	Lead-208	50.000	50.8	102	ug/L	EPA 6020B
	Silver-107	50.000	49.2	98.4	ug/L	EPA 6020B
SLC0521-CCV8	Chromium-52	50.000	49.4	98.8	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Control Limt: +/- 10.00%
Sequence: SLC0521

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0521-CCV8	Lead-208	50.000	51.2	102	ug/L	EPA 6020B
	Silver-107	50.000	49.8	99.6	ug/L	EPA 6020B
SLC0521-CCV9	Chromium-52	50.000	47.5	95.1	ug/L	EPA 6020B
	Chromium-53	50.000	47.8	95.6	ug/L	EPA 6020B
	Lead-208	50.000	51.1	102	ug/L	EPA 6020B
	Silver-107	50.000	49.3	98.6	ug/L	EPA 6020B
SLC0521-CCVA	Chromium-52	50.000	49.0	98.0	ug/L	EPA 6020B
	Chromium-53	50.000	50.3	101	ug/L	EPA 6020B
	Lead-208	50.000	53.1	106	ug/L	EPA 6020B
	Silver-107	50.000	50.0	100	ug/L	EPA 6020B
SLC0521-CCVB	Chromium-52	50.000	49.2	98.4	ug/L	EPA 6020B
	Chromium-53	50.000	49.9	99.9	ug/L	EPA 6020B
	Lead-208	50.000	51.4	103	ug/L	EPA 6020B
	Silver-107	50.000	50.6	101	ug/L	EPA 6020B
SLC0521-CCVC	Chromium-52	50.000	48.6	97.2	ug/L	EPA 6020B
	Chromium-53	50.000	48.5	97.0	ug/L	EPA 6020B
	Lead-208	50.000	51.6	103	ug/L	EPA 6020B
	Silver-107	50.000	49.2	98.4	ug/L	EPA 6020B
SLC0521-CCVD	Chromium-52	50.000	50.1	100	ug/L	EPA 6020B
	Chromium-53	50.000	50.9	102	ug/L	EPA 6020B
	Lead-208	50.000	51.4	103	ug/L	EPA 6020B
	Silver-107	50.000	50.2	100	ug/L	EPA 6020B
SLC0521-CCVE	Chromium-52	50.000	48.5	97.1	ug/L	EPA 6020B
	Chromium-53	50.000	49.5	99.0	ug/L	EPA 6020B
	Lead-208	50.000	52.8	106	ug/L	EPA 6020B
	Silver-107	50.000	49.3	98.6	ug/L	EPA 6020B
SLC0521-CCVF	Chromium-52	50.000	49.4	98.9	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B
	Lead-208	50.000	52.7	105	ug/L	EPA 6020B
	Silver-107	50.000	48.9	97.7	ug/L	EPA 6020B
SLC0521-CCVG	Chromium-52	50.000	49.8	99.6	ug/L	EPA 6020B
	Chromium-53	50.000	49.7	99.5	ug/L	EPA 6020B
	Lead-208	50.000	52.8	106	ug/L	EPA 6020B
	Silver-107	50.000	49.1	98.2	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Control Limt: +/- 10.00%
Sequence: SLC0521

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0521-CCVH	Chromium-52	50.000	49.3	98.5	ug/L	EPA 6020B
	Chromium-53	50.000	49.7	99.5	ug/L	EPA 6020B
	Lead-208	50.000	52.7	105	ug/L	EPA 6020B
	Silver-107	50.000	50.2	100	ug/L	EPA 6020B
SLC0521-CCVI	Chromium-52	50.000	50.3	101	ug/L	EPA 6020B
	Chromium-53	50.000	51.1	102	ug/L	EPA 6020B
	Lead-208	50.000	49.4	98.8	ug/L	EPA 6020B
	Silver-107	50.000	52.4	105	ug/L	EPA 6020B
SLC0521-CCVJ	Chromium-52	50.000	48.8	97.6	ug/L	EPA 6020B
	Chromium-53	50.000	49.0	97.9	ug/L	EPA 6020B
	Lead-208	50.000	52.0	104	ug/L	EPA 6020B
	Silver-107	50.000	51.0	102	ug/L	EPA 6020B
SLC0521-CCVK	Chromium-52	50.000	49.1	98.2	ug/L	EPA 6020B
	Chromium-53	50.000	49.7	99.4	ug/L	EPA 6020B
	Lead-208	50.000	51.3	103	ug/L	EPA 6020B
	Silver-107	50.000	50.7	101	ug/L	EPA 6020B
SLC0521-CCVL	Chromium-52	50.000	49.1	98.3	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.4	ug/L	EPA 6020B
	Lead-208	50.000	50.8	102	ug/L	EPA 6020B
	Silver-107	50.000	50.9	102	ug/L	EPA 6020B

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00005
Control Limt: +/- 10.00%
Sequence: SLD0005

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0005-ICV1	Chromium-52	50.000	50.2	100	ug/L	EPA 6020B
	Chromium-53	50.000	49.0	98.0	ug/L	EPA 6020B
	Lead-208	50.000	50.8	102	ug/L	EPA 6020B
SLD0005-CCV1	Chromium-52	50.000	49.9	99.8	ug/L	EPA 6020B
	Chromium-53	50.000	50.4	101	ug/L	EPA 6020B
	Lead-208	50.000	52.2	104	ug/L	EPA 6020B
SLD0005-CCV2	Chromium-52	50.000	48.8	97.5	ug/L	EPA 6020B
	Chromium-53	50.000	47.9	95.9	ug/L	EPA 6020B
	Lead-208	50.000	48.0	95.9	ug/L	EPA 6020B
SLD0005-CCV3	Chromium-52	50.000	48.4	96.8	ug/L	EPA 6020B
	Chromium-53	50.000	48.2	96.3	ug/L	EPA 6020B
	Lead-208	50.000	46.6	93.2	ug/L	EPA 6020B
SLD0005-CCV4	Chromium-52	50.000	48.5	97.0	ug/L	EPA 6020B
	Chromium-53	50.000	48.2	96.5	ug/L	EPA 6020B
	Lead-208	50.000	46.6	93.1	ug/L	EPA 6020B
SLD0005-CCV5	Chromium-52	50.000	49.1	98.2	ug/L	EPA 6020B
	Chromium-53	50.000	47.8	95.6	ug/L	EPA 6020B
	Lead-208	50.000	46.6	93.2	ug/L	EPA 6020B
SLD0005-CCV6	Chromium-52	50.000	47.8	95.7	ug/L	EPA 6020B
	Chromium-53	50.000	48.4	96.8	ug/L	EPA 6020B
	Lead-208	50.000	46.7	93.5	ug/L	EPA 6020B
SLD0005-CCV7	Chromium-52	50.000	48.9	97.8	ug/L	EPA 6020B
	Chromium-53	50.000	50.1	100	ug/L	EPA 6020B
	Lead-208	50.000	47.4	94.9	ug/L	EPA 6020B
SLD0005-CCV8	Chromium-52	50.000	47.6	95.2	ug/L	EPA 6020B
	Chromium-53	50.000	48.0	96.0	ug/L	EPA 6020B
	Lead-208	50.000	48.0	96.0	ug/L	EPA 6020B
SLD0005-CCV9	Chromium-52	50.000	49.7	99.3	ug/L	EPA 6020B
	Chromium-53	50.000	48.8	97.6	ug/L	EPA 6020B
	Lead-208	50.000	47.0	94.1	ug/L	EPA 6020B
SLD0005-CCVA	Chromium-52	50.000	48.2	96.4	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.4	ug/L	EPA 6020B
	Lead-208	50.000	46.6	93.2	ug/L	EPA 6020B
SLD0005-CCVB	Chromium-52	50.000	49.1	98.2	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00005
Control Limt: +/- 10.00%
Sequence: SLD0005

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0005-CCVB	Chromium-53	50.000	49.4	98.9	ug/L	EPA 6020B
	Lead-208	50.000	46.1	92.1	ug/L	EPA 6020B
SLD0005-CCVC	Chromium-52	50.000	47.8	95.5	ug/L	EPA 6020B
	Chromium-53	50.000	48.3	96.5	ug/L	EPA 6020B
	Lead-208	50.000	44.1	88.3	ug/L	EPA 6020B
SLD0005-CCVD	Chromium-52	50.000	48.0	96.0	ug/L	EPA 6020B
	Chromium-53	50.000	47.1	94.2	ug/L	EPA 6020B
	Lead-208	50.000	47.0	94.1	ug/L	EPA 6020B

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00006
Control Limt: +/- 10.00%
Sequence: SLD0041

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0041-ICV1	Chromium-52	50.000	48.9	97.8	ug/L	EPA 6020B
	Chromium-53	50.000	50.3	101	ug/L	EPA 6020B
	Lead-208	50.000	50.9	102	ug/L	EPA 6020B
	Silver-107	50.000	51.5	103	ug/L	EPA 6020B
SLD0041-CCV1	Chromium-52	50.000	48.8	97.6	ug/L	EPA 6020B
	Chromium-53	50.000	50.3	101	ug/L	EPA 6020B
	Lead-208	50.000	49.3	98.5	ug/L	EPA 6020B
	Silver-107	50.000	47.6	95.3	ug/L	EPA 6020B
SLD0041-CCV2	Chromium-52	50.000	49.3	98.6	ug/L	EPA 6020B
	Chromium-53	50.000	50.0	100	ug/L	EPA 6020B
	Lead-208	50.000	47.9	95.8	ug/L	EPA 6020B
	Silver-107	50.000	47.7	95.5	ug/L	EPA 6020B
SLD0041-CCV3	Chromium-52	50.000	49.8	99.5	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B
	Lead-208	50.000	45.5	91.0	ug/L	EPA 6020B
	Silver-107	50.000	47.8	95.6	ug/L	EPA 6020B
SLD0041-CCV4	Chromium-52	50.000	49.3	98.6	ug/L	EPA 6020B
	Chromium-53	50.000	49.5	99.1	ug/L	EPA 6020B
	Lead-208	50.000	45.9	91.9	ug/L	EPA 6020B
	Silver-107	50.000	45.5	91.1	ug/L	EPA 6020B
SLD0041-CCV5	Chromium-52	50.000	48.7	97.4	ug/L	EPA 6020B
	Chromium-53	50.000	49.0	98.0	ug/L	EPA 6020B
	Lead-208	50.000	45.6	91.3	ug/L	EPA 6020B
	Silver-107	50.000	47.0	94.0	ug/L	EPA 6020B
SLD0041-CCV6	Chromium-52	50.000	49.5	99.1	ug/L	EPA 6020B
	Chromium-53	50.000	50.0	100	ug/L	EPA 6020B
	Lead-208	50.000	45.9	91.8	ug/L	EPA 6020B
	Silver-107	50.000	48.2	96.4	ug/L	EPA 6020B
SLD0041-CCV7	Chromium-52	50.000	48.5	97.0	ug/L	EPA 6020B
	Chromium-53	50.000	48.8	97.6	ug/L	EPA 6020B
	Lead-208	50.000	46.3	92.6	ug/L	EPA 6020B
	Silver-107	50.000	48.2	96.4	ug/L	EPA 6020B
SLD0041-CCV8	Chromium-52	50.000	48.8	97.7	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00006
Control Limt: +/- 10.00%
Sequence: SLD0041

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0041-CCV8	Lead-208	50.000	45.7	91.4	ug/L	EPA 6020B
	Silver-107	50.000	48.3	96.5	ug/L	EPA 6020B
SLD0041-CCV9	Chromium-52	50.000	48.4	96.8	ug/L	EPA 6020B
	Chromium-53	50.000	49.1	98.3	ug/L	EPA 6020B
	Lead-208	50.000	57.5	115	ug/L	EPA 6020B
	Silver-107	50.000	52.4	105	ug/L	EPA 6020B

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/30/23 15:01

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-IBL1	Chromium-52	0.0240	0.26	0.500	ug/L	
SLC0521-IBL1	Chromium-53	-0.0230	0.239	0.500	ug/L	
SLC0521-IBL1	Lead-208	-0.0140	0.0513	0.100	ug/L	
SLC0521-IBL1	Silver-107	0.00600	0.022	0.200	ug/L	
SLC0521-ICB1	Chromium-52	-0.00600	0.26	0.500	ug/L	
SLC0521-ICB1	Chromium-53	-0.0220	0.239	0.500	ug/L	
SLC0521-ICB1	Lead-208	0.00800	0.0513	0.100	ug/L	
SLC0521-ICB1	Silver-107	0.00300	0.022	0.200	ug/L	
SLC0521-CCB1	Chromium-52	0.00800	0.26	0.500	ug/L	
SLC0521-CCB1	Chromium-53	-0.0200	0.239	0.500	ug/L	
SLC0521-CCB1	Lead-208	0.00700	0.0513	0.100	ug/L	
SLC0521-CCB1	Silver-107	0.00300	0.022	0.200	ug/L	
SLC0521-IBL2	Chromium-52	0.0360	0.26	0.500	ug/L	
SLC0521-IBL2	Chromium-53	0.0340	0.239	0.500	ug/L	
SLC0521-IBL2	Lead-208	-0.0120	0.0513	0.100	ug/L	
SLC0521-IBL2	Silver-107	0.00900	0.022	0.200	ug/L	
SLC0521-IBL3	Chromium-52	0.0240	0.26	0.500	ug/L	
SLC0521-IBL3	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLC0521-IBL3	Lead-208	-0.0130	0.0513	0.100	ug/L	
SLC0521-IBL3	Silver-107	0.00400	0.022	0.200	ug/L	
SLC0521-IBL4	Chromium-52	0.0200	0.26	0.500	ug/L	
SLC0521-IBL4	Chromium-53	-0.0110	0.239	0.500	ug/L	
SLC0521-IBL4	Lead-208	-0.0140	0.0513	0.100	ug/L	
SLC0521-IBL4	Silver-107	0.00300	0.022	0.200	ug/L	
SLC0521-CCB2	Chromium-52	0.0120	0.26	0.500	ug/L	
SLC0521-CCB2	Chromium-53	-0.0170	0.239	0.500	ug/L	
SLC0521-CCB2	Lead-208	0.0120	0.0513	0.100	ug/L	
SLC0521-CCB2	Silver-107	0.00400	0.022	0.200	ug/L	
SLC0521-IBL5	Chromium-52	4.38	0.26	0.500	ug/L	
SLC0521-IBL5	Chromium-53	4.62	0.239	0.500	ug/L	
SLC0521-IBL5	Lead-208	0.0300	0.0513	0.100	ug/L	
SLC0521-IBL5	Silver-107	0.0890	0.022	0.200	ug/L	
SLC0521-IBL6	Chromium-52	0.0240	0.26	0.500	ug/L	
SLC0521-IBL6	Chromium-53	0.00100	0.239	0.500	ug/L	
SLC0521-IBL6	Lead-208	-0.0160	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/30/23 17:15

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-IBL6	Silver-107	0.00200	0.022	0.200	ug/L	
SLC0521-IBL7	Chromium-52	0.0200	0.26	0.500	ug/L	
SLC0521-IBL7	Chromium-53	-0.0250	0.239	0.500	ug/L	
SLC0521-IBL7	Lead-208	-0.0140	0.0513	0.100	ug/L	
SLC0521-IBL7	Silver-107	0.00200	0.022	0.200	ug/L	
SLC0521-CCB3	Chromium-52	0.0300	0.26	0.500	ug/L	
SLC0521-CCB3	Chromium-53	-0.0130	0.239	0.500	ug/L	
SLC0521-CCB3	Lead-208	0.0190	0.0513	0.100	ug/L	
SLC0521-CCB3	Silver-107	0.00300	0.022	0.200	ug/L	
SLC0521-IBL8	Chromium-52	0.0220	0.26	0.500	ug/L	
SLC0521-IBL8	Chromium-53	-0.0230	0.239	0.500	ug/L	
SLC0521-IBL8	Lead-208	-0.0160	0.0513	0.100	ug/L	
SLC0521-IBL8	Silver-107	0.00300	0.022	0.200	ug/L	
SLC0521-IBL9	Chromium-52	0.0140	0.26	0.500	ug/L	
SLC0521-IBL9	Chromium-53	-0.0100	0.239	0.500	ug/L	
SLC0521-IBL9	Lead-208	-0.0120	0.0513	0.100	ug/L	
SLC0521-IBL9	Silver-107	0.00200	0.022	0.200	ug/L	
SLC0521-CCB4	Chromium-52	0.00900	0.26	0.500	ug/L	
SLC0521-CCB4	Chromium-53	-0.0350	0.239	0.500	ug/L	
SLC0521-CCB4	Lead-208	0.0210	0.0513	0.100	ug/L	
SLC0521-CCB4	Silver-107	0.00300	0.022	0.200	ug/L	
SLC0521-CCB5	Chromium-52	-0.0190	0.26	0.500	ug/L	
SLC0521-CCB5	Chromium-53	-0.00700	0.239	0.500	ug/L	
SLC0521-CCB5	Lead-208	0.00200	0.0513	0.100	ug/L	
SLC0521-CCB5	Silver-107	0.00	0.022	0.200	ug/L	
SLC0521-IBLA	Chromium-52	0.00800	0.26	0.500	ug/L	
SLC0521-IBLA	Chromium-53	-0.0140	0.239	0.500	ug/L	
SLC0521-IBLA	Lead-208	-0.00900	0.0513	0.100	ug/L	
SLC0521-IBLA	Silver-107	-0.00100	0.022	0.200	ug/L	
SLC0521-CCB6	Chromium-52	-0.00500	0.26	0.500	ug/L	
SLC0521-CCB6	Chromium-53	-0.0230	0.239	0.500	ug/L	
SLC0521-CCB6	Lead-208	0.00500	0.0513	0.100	ug/L	
SLC0521-CCB6	Silver-107	0.00100	0.022	0.200	ug/L	
SLC0521-CCB7	Chromium-52	0.00200	0.26	0.500	ug/L	
SLC0521-CCB7	Chromium-53	-0.0250	0.239	0.500	ug/L	
SLC0521-CCB7	Lead-208	0.00200	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/30/23 21:37

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-CCB7	Silver-107	0.00	0.022	0.200	ug/L	
SLC0521-IBLB	Chromium-52	-0.0200	0.26	0.500	ug/L	
SLC0521-IBLB	Chromium-53	-0.0300	0.239	0.500	ug/L	
SLC0521-IBLB	Lead-208	-0.00800	0.0513	0.100	ug/L	
SLC0521-IBLB	Silver-107	-0.00300	0.022	0.200	ug/L	
SLC0521-CCB8	Chromium-52	-0.0290	0.26	0.500	ug/L	
SLC0521-CCB8	Chromium-53	-0.0230	0.239	0.500	ug/L	
SLC0521-CCB8	Lead-208	0.00600	0.0513	0.100	ug/L	
SLC0521-CCB8	Silver-107	0.00100	0.022	0.200	ug/L	
SLC0521-IBLC	Chromium-52	-0.0210	0.26	0.500	ug/L	
SLC0521-IBLC	Chromium-53	-0.0160	0.239	0.500	ug/L	
SLC0521-IBLC	Lead-208	-0.0100	0.0513	0.100	ug/L	
SLC0521-IBLC	Silver-107	-0.00100	0.022	0.200	ug/L	
SLC0521-CCB9	Chromium-52	-0.0160	0.26	0.500	ug/L	
SLC0521-CCB9	Chromium-53	-0.0270	0.239	0.500	ug/L	
SLC0521-CCB9	Lead-208	0.00500	0.0513	0.100	ug/L	
SLC0521-CCB9	Silver-107	0.00400	0.022	0.200	ug/L	
SLC0521-IBLD	Chromium-52	-0.0540	0.26	0.500	ug/L	
SLC0521-IBLD	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLC0521-IBLD	Lead-208	-0.0100	0.0513	0.100	ug/L	
SLC0521-IBLD	Silver-107	0.00100	0.022	0.200	ug/L	
SLC0521-IBLE	Chromium-52	0.0110	0.26	0.500	ug/L	
SLC0521-IBLE	Chromium-53	-0.00900	0.239	0.500	ug/L	
SLC0521-IBLE	Lead-208	-0.0130	0.0513	0.100	ug/L	
SLC0521-IBLE	Silver-107	-0.00200	0.022	0.200	ug/L	
SLC0521-CCBA	Chromium-52	-0.0610	0.26	0.500	ug/L	
SLC0521-CCBA	Chromium-53	-0.0210	0.239	0.500	ug/L	
SLC0521-CCBA	Lead-208	0.00400	0.0513	0.100	ug/L	
SLC0521-CCBA	Silver-107	0.00400	0.022	0.200	ug/L	
SLC0521-CCBB	Chromium-52	0.0190	0.26	0.500	ug/L	
SLC0521-CCBB	Chromium-53	0.00	0.239	0.500	ug/L	
SLC0521-CCBB	Lead-208	0.00500	0.0513	0.100	ug/L	
SLC0521-CCBB	Silver-107	0.0110	0.022	0.200	ug/L	
SLC0521-IBLF	Chromium-52	0.0600	0.26	0.500	ug/L	
SLC0521-IBLF	Chromium-53	0.917	0.239	0.500	ug/L	
SLC0521-IBLF	Lead-208	-0.0130	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/31/23 01:12

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-IBLF	Silver-107	-0.00100	0.022	0.200	ug/L	
SLC0521-IBLG	Chromium-52	0.0310	0.26	0.500	ug/L	
SLC0521-IBLG	Chromium-53	0.167	0.239	0.500	ug/L	
SLC0521-IBLG	Lead-208	-0.0110	0.0513	0.100	ug/L	
SLC0521-IBLG	Silver-107	0.00100	0.022	0.200	ug/L	
SLC0521-CCBC	Chromium-52	0.0340	0.26	0.500	ug/L	
SLC0521-CCBC	Chromium-53	0.0920	0.239	0.500	ug/L	
SLC0521-CCBC	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0521-CCBC	Silver-107	0.00300	0.022	0.200	ug/L	
SLC0521-IBLH	Chromium-52	0.0340	0.26	0.500	ug/L	
SLC0521-IBLH	Chromium-53	0.410	0.239	0.500	ug/L	
SLC0521-IBLH	Lead-208	-0.0150	0.0513	0.100	ug/L	
SLC0521-IBLH	Silver-107	-0.00200	0.022	0.200	ug/L	
SLC0521-CCBD	Chromium-52	0.0350	0.26	0.500	ug/L	
SLC0521-CCBD	Chromium-53	0.166	0.239	0.500	ug/L	
SLC0521-CCBD	Lead-208	0.00400	0.0513	0.100	ug/L	
SLC0521-CCBD	Silver-107	0.00100	0.022	0.200	ug/L	
SLC0521-IBLI	Chromium-52	0.0150	0.26	0.500	ug/L	
SLC0521-IBLI	Chromium-53	0.122	0.239	0.500	ug/L	
SLC0521-IBLI	Lead-208	-0.0130	0.0513	0.100	ug/L	
SLC0521-IBLI	Silver-107	-0.00100	0.022	0.200	ug/L	
SLC0521-CCBE	Chromium-52	0.00100	0.26	0.500	ug/L	
SLC0521-CCBE	Chromium-53	0.0620	0.239	0.500	ug/L	
SLC0521-CCBE	Lead-208	-0.0130	0.0513	0.100	ug/L	
SLC0521-CCBE	Silver-107	0.00100	0.022	0.200	ug/L	
SLC0521-IBLJ	Chromium-52	0.0140	0.26	0.500	ug/L	
SLC0521-IBLJ	Chromium-53	0.0190	0.239	0.500	ug/L	
SLC0521-IBLJ	Lead-208	-0.0140	0.0513	0.100	ug/L	
SLC0521-IBLJ	Silver-107	0.00100	0.022	0.200	ug/L	
SLC0521-CCBF	Chromium-52	-0.0100	0.26	0.500	ug/L	
SLC0521-CCBF	Chromium-53	0.00900	0.239	0.500	ug/L	
SLC0521-CCBF	Lead-208	-0.0130	0.0513	0.100	ug/L	
SLC0521-CCBF	Silver-107	0.00100	0.022	0.200	ug/L	
SLC0521-CCBG	Chromium-52	-0.0230	0.26	0.500	ug/L	
SLC0521-CCBG	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLC0521-CCBG	Lead-208	-0.0160	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/31/23 05:23

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-CCBG	Silver-107	0.00	0.022	0.200	ug/L	
SLC0521-IBLK	Chromium-52	0.0110	0.26	0.500	ug/L	
SLC0521-IBLK	Chromium-53	-0.0210	0.239	0.500	ug/L	
SLC0521-IBLK	Lead-208	-0.0130	0.0513	0.100	ug/L	
SLC0521-IBLK	Silver-107	0.00	0.022	0.200	ug/L	
SLC0521-CCBH	Chromium-52	-0.0100	0.26	0.500	ug/L	
SLC0521-CCBH	Chromium-53	-0.0270	0.239	0.500	ug/L	
SLC0521-CCBH	Lead-208	-0.0150	0.0513	0.100	ug/L	
SLC0521-CCBH	Silver-107	0.00200	0.022	0.200	ug/L	
SLC0521-IBLL	Chromium-52	0.0860	0.26	0.500	ug/L	
SLC0521-IBLL	Chromium-53	-0.0340	0.239	0.500	ug/L	
SLC0521-IBLL	Lead-208	-0.0200	0.0513	0.100	ug/L	
SLC0521-IBLL	Silver-107	-0.00300	0.022	0.200	ug/L	
SLC0521-CCBI	Chromium-52	0.0150	0.26	0.500	ug/L	
SLC0521-CCBI	Chromium-53	-0.0460	0.239	0.500	ug/L	
SLC0521-CCBI	Lead-208	-0.0160	0.0513	0.100	ug/L	
SLC0521-CCBI	Silver-107	-0.00100	0.022	0.200	ug/L	
SLC0521-IBLM	Chromium-52	0.0280	0.26	0.500	ug/L	
SLC0521-IBLM	Chromium-53	-0.0310	0.239	0.500	ug/L	
SLC0521-IBLM	Lead-208	-0.0190	0.0513	0.100	ug/L	
SLC0521-IBLM	Silver-107	-0.00200	0.022	0.200	ug/L	
SLC0521-CCBJ	Chromium-52	-0.00200	0.26	0.500	ug/L	
SLC0521-CCBJ	Chromium-53	-0.0440	0.239	0.500	ug/L	
SLC0521-CCBJ	Lead-208	-0.0160	0.0513	0.100	ug/L	
SLC0521-CCBJ	Silver-107	0.00	0.022	0.200	ug/L	
SLC0521-IBLN	Chromium-52	0.0160	0.26	0.500	ug/L	
SLC0521-IBLN	Chromium-53	-0.0560	0.239	0.500	ug/L	
SLC0521-IBLN	Lead-208	-0.0190	0.0513	0.100	ug/L	
SLC0521-IBLN	Silver-107	-0.00200	0.022	0.200	ug/L	
SLC0521-CCBK	Chromium-52	-0.0190	0.26	0.500	ug/L	
SLC0521-CCBK	Chromium-53	-0.0640	0.239	0.500	ug/L	
SLC0521-CCBK	Lead-208	-0.0160	0.0513	0.100	ug/L	
SLC0521-CCBK	Silver-107	0.00100	0.022	0.200	ug/L	
SLC0521-IBLO	Chromium-52	-0.0260	0.26	0.500	ug/L	
SLC0521-IBLO	Chromium-53	-0.0590	0.239	0.500	ug/L	
SLC0521-IBLO	Lead-208	-0.0190	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00002
Date Analyzed: 03/31/23 10:07

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0521-IBLO	Silver-107	-0.00300	0.022	0.200	ug/L	
SLC0521-CCBL	Chromium-52	-0.0170	0.26	0.500	ug/L	
SLC0521-CCBL	Chromium-53	-0.0540	0.239	0.500	ug/L	
SLC0521-CCBL	Lead-208	-0.0170	0.0513	0.100	ug/L	
SLC0521-CCBL	Silver-107	0.00	0.022	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0005

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00005
Date Analyzed: 03/31/23 15:52

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0005-IBL1	Chromium-52	0.123	0.26	0.500	ug/L	
SLD0005-IBL1	Chromium-53	0.00300	0.239	0.500	ug/L	
SLD0005-IBL1	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0005-ICB1	Chromium-52	0.0970	0.26	0.500	ug/L	
SLD0005-ICB1	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLD0005-ICB1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0005-CCB1	Chromium-52	0.0290	0.26	0.500	ug/L	
SLD0005-CCB1	Chromium-53	-0.00100	0.239	0.500	ug/L	
SLD0005-CCB1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0005-IBL2	Chromium-52	0.0470	0.26	0.500	ug/L	
SLD0005-IBL2	Chromium-53	0.0280	0.239	0.500	ug/L	
SLD0005-IBL2	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0005-IBL3	Chromium-52	0.0550	0.26	0.500	ug/L	
SLD0005-IBL3	Chromium-53	0.0210	0.239	0.500	ug/L	
SLD0005-IBL3	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0005-IBL4	Chromium-52	0.0210	0.26	0.500	ug/L	
SLD0005-IBL4	Chromium-53	0.0120	0.239	0.500	ug/L	
SLD0005-IBL4	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0005-CCB2	Chromium-52	0.0220	0.26	0.500	ug/L	
SLD0005-CCB2	Chromium-53	0.0120	0.239	0.500	ug/L	
SLD0005-CCB2	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0005-IBL5	Chromium-52	0.0640	0.26	0.500	ug/L	
SLD0005-IBL5	Chromium-53	0.00300	0.239	0.500	ug/L	
SLD0005-IBL5	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0005-CCB3	Chromium-52	0.0300	0.26	0.500	ug/L	
SLD0005-CCB3	Chromium-53	0.00	0.239	0.500	ug/L	
SLD0005-CCB3	Lead-208	0.00300	0.0513	0.100	ug/L	
SLD0005-CCB4	Chromium-52	-0.0510	0.26	0.500	ug/L	
SLD0005-CCB4	Chromium-53	0.00100	0.239	0.500	ug/L	
SLD0005-CCB4	Lead-208	0.00400	0.0513	0.100	ug/L	
SLD0005-CCB5	Chromium-52	0.0170	0.26	0.500	ug/L	
SLD0005-CCB5	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLD0005-CCB5	Lead-208	0.00400	0.0513	0.100	ug/L	
SLD0005-CCB6	Chromium-52	0.00800	0.26	0.500	ug/L	
SLD0005-CCB6	Chromium-53	0.00	0.239	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0005

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00005
Date Analyzed: 03/31/23 21:12

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0005-CCB6	Lead-208	0.00400	0.0513	0.100	ug/L	
SLD0005-IBL6	Chromium-52	-0.0370	0.26	0.500	ug/L	
SLD0005-IBL6	Chromium-53	0.00100	0.239	0.500	ug/L	
SLD0005-IBL6	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLD0005-CCB7	Chromium-52	-0.00900	0.26	0.500	ug/L	
SLD0005-CCB7	Chromium-53	0.00	0.239	0.500	ug/L	
SLD0005-CCB7	Lead-208	0.00500	0.0513	0.100	ug/L	
SLD0005-CCB8	Chromium-52	-0.0560	0.26	0.500	ug/L	
SLD0005-CCB8	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLD0005-CCB8	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0005-CCB9	Chromium-52	-0.0190	0.26	0.500	ug/L	
SLD0005-CCB9	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLD0005-CCB9	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0005-IBLA	Chromium-52	0.0990	0.26	0.500	ug/L	
SLD0005-IBLA	Chromium-53	0.0200	0.239	0.500	ug/L	
SLD0005-IBLA	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0005-CCBA	Chromium-52	-0.0270	0.26	0.500	ug/L	
SLD0005-CCBA	Chromium-53	-0.00100	0.239	0.500	ug/L	
SLD0005-CCBA	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0005-CCBB	Chromium-52	-0.0240	0.26	0.500	ug/L	
SLD0005-CCBB	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLD0005-CCBB	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0005-IBLC	Chromium-52	0.0130	0.26	0.500	ug/L	
SLD0005-IBLC	Chromium-53	-0.00900	0.239	0.500	ug/L	
SLD0005-IBLC	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0005-CCBC	Chromium-52	0.00800	0.26	0.500	ug/L	
SLD0005-CCBC	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLD0005-CCBC	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0005-IBLD	Chromium-52	0.0100	0.26	0.500	ug/L	
SLD0005-IBLD	Chromium-53	0.00200	0.239	0.500	ug/L	
SLD0005-IBLD	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLD0005-CCBD	Chromium-52	-0.00200	0.26	0.500	ug/L	
SLD0005-CCBD	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLD0005-CCBD	Lead-208	0.00100	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0041

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00006
Date Analyzed: 04/01/23 14:18

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0041-IBL1	Chromium-52	0.0370	0.26	0.500	ug/L	
SLD0041-IBL1	Chromium-53	0.0230	0.239	0.500	ug/L	
SLD0041-IBL1	Lead-208	0.0240	0.0513	0.100	ug/L	
SLD0041-IBL1	Silver-107	0.0220	0.022	0.200	ug/L	
SLD0041-ICB1	Chromium-52	0.0210	0.26	0.500	ug/L	
SLD0041-ICB1	Chromium-53	0.00100	0.239	0.500	ug/L	
SLD0041-ICB1	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0041-ICB1	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0041-CCB1	Chromium-52	0.00700	0.26	0.500	ug/L	
SLD0041-CCB1	Chromium-53	-0.00400	0.239	0.500	ug/L	
SLD0041-CCB1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0041-CCB1	Silver-107	0.00300	0.022	0.200	ug/L	
SLD0041-IBL2	Chromium-52	0.0420	0.26	0.500	ug/L	
SLD0041-IBL2	Chromium-53	0.0300	0.239	0.500	ug/L	
SLD0041-IBL2	Lead-208	0.00400	0.0513	0.100	ug/L	
SLD0041-IBL2	Silver-107	0.00700	0.022	0.200	ug/L	
SLD0041-IBL3	Chromium-52	0.0810	0.26	0.500	ug/L	
SLD0041-IBL3	Chromium-53	0.0240	0.239	0.500	ug/L	
SLD0041-IBL3	Lead-208	0.00400	0.0513	0.100	ug/L	
SLD0041-IBL3	Silver-107	0.00300	0.022	0.200	ug/L	
SLD0041-CCB2	Chromium-52	0.0320	0.26	0.500	ug/L	
SLD0041-CCB2	Chromium-53	0.0160	0.239	0.500	ug/L	
SLD0041-CCB2	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0041-CCB2	Silver-107	0.00300	0.022	0.200	ug/L	
SLD0041-IBL4	Chromium-52	0.0390	0.26	0.500	ug/L	
SLD0041-IBL4	Chromium-53	0.0120	0.239	0.500	ug/L	
SLD0041-IBL4	Lead-208	0.0150	0.0513	0.100	ug/L	
SLD0041-IBL4	Silver-107	0.00800	0.022	0.200	ug/L	
SLD0041-CCB3	Chromium-52	0.0200	0.26	0.500	ug/L	
SLD0041-CCB3	Chromium-53	-0.00100	0.239	0.500	ug/L	
SLD0041-CCB3	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0041-CCB3	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0041-IBL5	Chromium-52	0.00500	0.26	0.500	ug/L	
SLD0041-IBL5	Chromium-53	0.00200	0.239	0.500	ug/L	
SLD0041-IBL5	Lead-208	0.00100	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0041

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00006
Date Analyzed: 04/01/23 17:35

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0041-IBL5	Silver-107	0.00100	0.022	0.200	ug/L	
SLD0041-CCB4	Chromium-52	0.00900	0.26	0.500	ug/L	
SLD0041-CCB4	Chromium-53	0.00400	0.239	0.500	ug/L	
SLD0041-CCB4	Lead-208	0.00300	0.0513	0.100	ug/L	
SLD0041-CCB4	Silver-107	0.00500	0.022	0.200	ug/L	
SLD0041-IBL6	Chromium-52	0.0360	0.26	0.500	ug/L	
SLD0041-IBL6	Chromium-53	0.0150	0.239	0.500	ug/L	
SLD0041-IBL6	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0041-IBL6	Silver-107	0.00	0.022	0.200	ug/L	
SLD0041-CCB5	Chromium-52	0.0660	0.26	0.500	ug/L	
SLD0041-CCB5	Chromium-53	0.0120	0.239	0.500	ug/L	
SLD0041-CCB5	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0041-CCB5	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0041-IBL7	Chromium-52	0.0180	0.26	0.500	ug/L	
SLD0041-IBL7	Chromium-53	0.0140	0.239	0.500	ug/L	
SLD0041-IBL7	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0041-IBL7	Silver-107	0.00	0.022	0.200	ug/L	
SLD0041-CCB6	Chromium-52	0.00700	0.26	0.500	ug/L	
SLD0041-CCB6	Chromium-53	0.00300	0.239	0.500	ug/L	
SLD0041-CCB6	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0041-CCB6	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0041-IBL8	Chromium-52	-0.0170	0.26	0.500	ug/L	
SLD0041-IBL8	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLD0041-IBL8	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0041-IBL8	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0041-CCB7	Chromium-52	0.00800	0.26	0.500	ug/L	
SLD0041-CCB7	Chromium-53	0.00200	0.239	0.500	ug/L	
SLD0041-CCB7	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0041-CCB7	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0041-IBL9	Chromium-52	-0.00800	0.26	0.500	ug/L	
SLD0041-IBL9	Chromium-53	0.0260	0.239	0.500	ug/L	
SLD0041-IBL9	Lead-208	0.00300	0.0513	0.100	ug/L	
SLD0041-IBL9	Silver-107	0.00100	0.022	0.200	ug/L	
SLD0041-CCB8	Chromium-52	0.0150	0.26	0.500	ug/L	
SLD0041-CCB8	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLD0041-CCB8	Lead-208	0.00100	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0041

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: GD00006
Date Analyzed: 04/01/23 21:25

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0041-CCB8	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0041-IBLA	Chromium-52	-0.0620	0.26	0.500	ug/L	
SLD0041-IBLA	Chromium-53	0.00600	0.239	0.500	ug/L	
SLD0041-IBLA	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0041-IBLA	Silver-107	0.00	0.022	0.200	ug/L	
SLD0041-CCB9	Chromium-52	-0.0250	0.26	0.500	ug/L	
SLD0041-CCB9	Chromium-53	-0.00100	0.239	0.500	ug/L	
SLD0041-CCB9	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0041-CCB9	Silver-107	0.00100	0.022	0.200	ug/L	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0521	Instrument:	ICPMS2
		Calibration:	GD00002

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLC0521-CAL1	XDT_m2230330-006	NA	03/30/23 14:26
CAL 1 - LOW CHECK	SLC0521-CAL2	XDT_m2230330-007	NA	03/30/23 14:31
CAL 2	SLC0521-CAL3	XDT_m2230330-008	NA	03/30/23 14:36
CAL 3	SLC0521-CAL4	XDT_m2230330-009	NA	03/30/23 14:41
CAL 4	SLC0521-CAL5	XDT_m2230330-010	NA	03/30/23 14:46
CAL 5	SLC0521-CAL6	XDT_m2230330-011	NA	03/30/23 14:53
RINSE	SLC0521-IBL1	XDT_m2230330-012	NA	03/30/23 15:01
Initial Cal Check	SLC0521-ICV1	XDT_m2230330-014	NA	03/30/23 15:09
Initial Cal Blank	SLC0521-ICB1	XDT_m2230330-015	NA	03/30/23 15:17
Calibration Check	SLC0521-CCV1	XDT_m2230330-016	NA	03/30/23 15:25
Calibration Blank	SLC0521-CCB1	XDT_m2230330-017	NA	03/30/23 15:32
Instrument RL Check	SLC0521-CRL1	XDT_m2230330-018	NA	03/30/23 15:38
Interference Check A	SLC0521-IFA1	XDT_m2230330-019	NA	03/30/23 15:44
Interference Check B	SLC0521-IFB1	XDT_m2230330-020	NA	03/30/23 15:48
LR200	SLC0521-HCV1	XDT_m2230330-021	NA	03/30/23 15:53
LR300	SLC0521-HCV2	XDT_m2230330-022	NA	03/30/23 15:58
Instrument Blank	SLC0521-IBL2	XDT_m2230330-023	NA	03/30/23 16:06
Instrument Blank	SLC0521-IBL3	XDT_m2230330-024	NA	03/30/23 16:13
Instrument Blank	SLC0521-IBL4	XDT_m2230330-025	NA	03/30/23 16:20
Calibration Check	SLC0521-CCV2	XDT_m2230330-026	NA	03/30/23 16:25
Calibration Blank	SLC0521-CCB2	XDT_m2230330-027	NA	03/30/23 16:33
Instrument Blank	SLC0521-IBL5	XDT_m2230330-033	NA	03/30/23 17:10
Instrument Blank	SLC0521-IBL6	XDT_m2230330-034	NA	03/30/23 17:15
Instrument Blank	SLC0521-IBL7	XDT_m2230330-037	NA	03/30/23 17:42
Calibration Check	SLC0521-CCV3	XDT_m2230330-038	NA	03/30/23 17:48
Calibration Blank	SLC0521-CCB3	XDT_m2230330-039	NA	03/30/23 17:56
Instrument Blank	SLC0521-IBL8	XDT_m2230330-042	NA	03/30/23 18:15
Instrument Blank	SLC0521-IBL9	XDT_m2230330-048	NA	03/30/23 18:54
Calibration Check	SLC0521-CCV4	XDT_m2230330-049	NA	03/30/23 19:01

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: ICPMS2
Calibration: GD00002

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLC0521-CCB4	XDT_m2230330-050	NA	03/30/23 19:09
Calibration Check	SLC0521-CCV5	XDT_m2230330-052	NA	03/30/23 19:23
Calibration Blank	SLC0521-CCB5	XDT_m2230330-053	NA	03/30/23 19:30
Blank	BLC0692-BLK1	XDT_m2230330-054	Solid	03/30/23 19:36
LCS	BLC0692-BS1	XDT_m2230330-055	Solid	03/30/23 19:40
ZZZZZ	23A0099-02	XDT_m2230330-056	Solid	03/30/23 19:45
ZZZZZ	23A0099-02	XDT_m2230330-056	Solid	03/30/23 19:45
ZZZZZ	23A0099-03	XDT_m2230330-057	Solid	03/30/23 19:50
ZZZZZ	23A0099-03	XDT_m2230330-057	Solid	03/30/23 19:50
ZZZZZ	23A0099-06	XDT_m2230330-058	Solid	03/30/23 19:55
ZZZZZ	23A0099-06	XDT_m2230330-058	Solid	03/30/23 19:55
Instrument Blank	SLC0521-IBLA	XDT_m2230330-063	NA	03/30/23 20:21
Calibration Check	SLC0521-CCV6	XDT_m2230330-064	NA	03/30/23 20:25
Calibration Blank	SLC0521-CCB6	XDT_m2230330-065	NA	03/30/23 20:33
ZZZZZ	23A0099-04	XDT_m2230330-066	Solid	03/30/23 20:39
ZZZZZ	23A0099-04	XDT_m2230330-066	Solid	03/30/23 20:39
ZZZZZ	23A0099-05	XDT_m2230330-067	Solid	03/30/23 20:44
ZZZZZ	23A0099-05	XDT_m2230330-067	Solid	03/30/23 20:44
ZZZZZ	23A0099-07	XDT_m2230330-068	Solid	03/30/23 20:48
ZZZZZ	23A0099-07	XDT_m2230330-068	Solid	03/30/23 20:48
ZZZZZ	23A0099-08	XDT_m2230330-069	Solid	03/30/23 20:53
ZZZZZ	23A0099-08	XDT_m2230330-069	Solid	03/30/23 20:53
ZZZZZ	23A0099-09	XDT_m2230330-070	Solid	03/30/23 20:58
ZZZZZ	23A0099-09	XDT_m2230330-070	Solid	03/30/23 20:58
ZZZZZ	23A0099-10	XDT_m2230330-071	Solid	03/30/23 21:03
ZZZZZ	23A0099-10	XDT_m2230330-071	Solid	03/30/23 21:03
ZZZZZ	23A0099-11	XDT_m2230330-072	Solid	03/30/23 21:08
ZZZZZ	23A0099-11	XDT_m2230330-072	Solid	03/30/23 21:08
ZZZZZ	23A0099-12	XDT_m2230330-073	Solid	03/30/23 21:13

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0521
Instrument: ICPMS2
Calibration: GD00002

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0099-12	XDT_m2230330-073	Solid	03/30/23 21:13
ZZZZZ	23A0099-13	XDT_m2230330-074	Solid	03/30/23 21:17
ZZZZZ	23A0099-13	XDT_m2230330-074	Solid	03/30/23 21:17
Calibration Check	SLC0521-CCV7	XDT_m2230330-076	NA	03/30/23 21:30
Calibration Blank	SLC0521-CCB7	XDT_m2230330-077	NA	03/30/23 21:37
LDW23-SS1129	23A0134-09	XDT_m2230330-080	Solid	03/30/23 21:52
LDW23-SS1129	23A0134-09	XDT_m2230330-080	Solid	03/30/23 21:52
LDW23-SS1129	23A0134-09	XDT_m2230330-080	Solid	03/30/23 21:52
LDW23-SS1124	23A0134-10	XDT_m2230330-081	Solid	03/30/23 21:57
LDW23-SS1124	23A0134-10	XDT_m2230330-081	Solid	03/30/23 21:57
LDW23-SS1123	23A0134-11	XDT_m2230330-082	Solid	03/30/23 22:01
LDW23-SS1123	23A0134-11	XDT_m2230330-082	Solid	03/30/23 22:01
LDW23-SS1116	23A0134-12	XDT_m2230330-083	Solid	03/30/23 22:06
LDW23-SS1116	23A0134-12	XDT_m2230330-083	Solid	03/30/23 22:06
LDW23-SS1116	23A0134-12	XDT_m2230330-083	Solid	03/30/23 22:06
LDW23-IT1210	23A0134-13	XDT_m2230330-084	Solid	03/30/23 22:11
LDW23-IT1210	23A0134-13	XDT_m2230330-084	Solid	03/30/23 22:11
LDW23-SC1249	23A0134-15	XDT_m2230330-085	Solid	03/30/23 22:16
LDW23-SC1249	23A0134-15	XDT_m2230330-085	Solid	03/30/23 22:16
Instrument Blank	SLC0521-IBLB	XDT_m2230330-087	NA	03/30/23 22:25
Calibration Check	SLC0521-CCV8	XDT_m2230330-088	NA	03/30/23 22:30
Calibration Blank	SLC0521-CCB8	XDT_m2230330-089	NA	03/30/23 22:38
Instrument Blank	SLC0521-IBLC	XDT_m2230330-099	NA	03/30/23 23:30
Calibration Check	SLC0521-CCV9	XDT_m2230330-100	NA	03/30/23 23:35
Calibration Blank	SLC0521-CCB9	XDT_m2230330-101	NA	03/30/23 23:42
Instrument Blank	SLC0521-IBLD	XDT_m2230330-106	NA	03/31/23 00:07
Instrument Blank	SLC0521-IBLE	XDT_m2230330-111	NA	03/31/23 00:32
Calibration Check	SLC0521-CCVA	XDT_m2230330-112	NA	03/31/23 00:37
Calibration Blank	SLC0521-CCBA	XDT_m2230330-113	NA	03/31/23 00:45

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0521
Instrument: ICPMS2
Calibration: GD00002

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Check	SLC0521-CCVB	XDT_m2230330-115	NA	03/31/23 00:54
Calibration Blank	SLC0521-CCBB	XDT_m2230330-116	NA	03/31/23 01:02
Instrument Blank	SLC0521-IBLF	XDT_m2230330-118	NA	03/31/23 01:12
ZZZZZ	23C0258-04RE1	XDT_m2230330-119	Water	03/31/23 01:17
ZZZZZ	23C0258-03RE1	XDT_m2230330-120	Water	03/31/23 01:22
ZZZZZ	23C0258-02RE1	XDT_m2230330-121	Water	03/31/23 01:26
ZZZZZ	23C0258-01RE1	XDT_m2230330-122	Water	03/31/23 01:31
Instrument Blank	SLC0521-IBLG	XDT_m2230330-126	NA	03/31/23 01:50
Calibration Check	SLC0521-CCVC	XDT_m2230330-127	NA	03/31/23 01:55
Calibration Blank	SLC0521-CCBC	XDT_m2230330-128	NA	03/31/23 02:03
Instrument Blank	SLC0521-IBLH	XDT_m2230330-138	NA	03/31/23 02:51
Calibration Check	SLC0521-CCVD	XDT_m2230330-139	NA	03/31/23 02:56
Calibration Blank	SLC0521-CCBD	XDT_m2230330-140	NA	03/31/23 03:03
Instrument Blank	SLC0521-IBLI	XDT_m2230330-150	NA	03/31/23 03:51
Calibration Check	SLC0521-CCVE	XDT_m2230330-151	NA	03/31/23 03:56
Calibration Blank	SLC0521-CCBE	XDT_m2230330-152	NA	03/31/23 04:04
Instrument Blank	SLC0521-IBLJ	XDT_m2230330-162	NA	03/31/23 04:53
Calibration Check	SLC0521-CCVF	XDT_m2230330-163	NA	03/31/23 04:58
Calibration Blank	SLC0521-CCBF	XDT_m2230330-164	NA	03/31/23 05:05
Calibration Check	SLC0521-CCVG	XDT_m2230330-166	NA	03/31/23 05:15
Calibration Blank	SLC0521-CCBG	XDT_m2230330-167	NA	03/31/23 05:23
Instrument Blank	SLC0521-IBLK	XDT_m2230330-177	NA	03/31/23 06:12
Calibration Check	SLC0521-CCVH	XDT_m2230330-178	NA	03/31/23 06:17
Calibration Blank	SLC0521-CCBH	XDT_m2230330-179	NA	03/31/23 06:25
Instrument Blank	SLC0521-IBLL	XDT_m2230330-189	NA	03/31/23 07:14
Calibration Check	SLC0521-CCVI	XDT_m2230330-190	NA	03/31/23 07:19
Calibration Blank	SLC0521-CCBI	XDT_m2230330-191	NA	03/31/23 07:27
Instrument Blank	SLC0521-IBLM	XDT_m2230330-201	NA	03/31/23 08:17
Calibration Check	SLC0521-CCVJ	XDT_m2230330-202	NA	03/31/23 08:21

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0521

SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: ICPMS2
Calibration: GD00002

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLC0521-CCBJ	XDT_m2230330-203	NA	03/31/23 08:29
Instrument Blank	SLC0521-IBLN	XDT_m2230330-213	NA	03/31/23 09:19
Calibration Check	SLC0521-CCVK	XDT_m2230330-214	NA	03/31/23 09:23
Calibration Blank	SLC0521-CCBK	XDT_m2230330-215	NA	03/31/23 09:31
Instrument Blank	SLC0521-IBLO	XDT_m2230330-222	NA	03/31/23 10:07
Calibration Check	SLC0521-CCVL	XDT_m2230330-223	NA	03/31/23 10:11
Calibration Blank	SLC0521-CCBL	XDT_m2230330-224	NA	03/31/23 10:19

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLD0005	Instrument:	ICPMS2
		Calibration:	GD00005

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLD0005-CAL1	XDT_m2230331-006	NA	03/31/23 15:18
CAL 1 - LOW CHECK	SLD0005-CAL2	XDT_m2230331-007	NA	03/31/23 15:23
CAL 2	SLD0005-CAL3	XDT_m2230331-008	NA	03/31/23 15:27
CAL 3	SLD0005-CAL4	XDT_m2230331-009	NA	03/31/23 15:33
CAL 4	SLD0005-CAL5	XDT_m2230331-010	NA	03/31/23 15:38
CAL 5	SLD0005-CAL6	XDT_m2230331-011	NA	03/31/23 15:45
RINSE	SLD0005-IBL1	XDT_m2230331-012	NA	03/31/23 15:52
Initial Cal Check	SLD0005-ICV1	XDT_m2230331-014	NA	03/31/23 16:00
Initial Cal Blank	SLD0005-ICB1	XDT_m2230331-015	NA	03/31/23 16:08
Calibration Check	SLD0005-CCV1	XDT_m2230331-017	NA	03/31/23 16:20
Calibration Blank	SLD0005-CCB1	XDT_m2230331-018	NA	03/31/23 16:29
Instrument RL Check	SLD0005-CRL1	XDT_m2230331-019	NA	03/31/23 16:37
Interference Check A	SLD0005-IFA1	XDT_m2230331-020	NA	03/31/23 16:41
Interference Check B	SLD0005-IFB1	XDT_m2230331-021	NA	03/31/23 16:46
LR200	SLD0005-HCV1	XDT_m2230331-022	NA	03/31/23 16:51
LR300	SLD0005-HCV2	XDT_m2230331-023	NA	03/31/23 16:56
Instrument Blank	SLD0005-IBL2	XDT_m2230331-024	NA	03/31/23 17:04
Instrument Blank	SLD0005-IBL3	XDT_m2230331-025	NA	03/31/23 17:11
Instrument Blank	SLD0005-IBL4	XDT_m2230331-026	NA	03/31/23 17:17
Calibration Check	SLD0005-CCV2	XDT_m2230331-027	NA	03/31/23 17:22
Calibration Blank	SLD0005-CCB2	XDT_m2230331-028	NA	03/31/23 17:30
ZZZZZ	BLC0848-BLK1	XDT_m2230331-029	Water	03/31/23 17:36
ZZZZZ	BLC0848-BS1	XDT_m2230331-030	Water	03/31/23 17:41
ZZZZZ	23C0747-01	XDT_m2230331-031	Water	03/31/23 17:46
ZZZZZ	23C0747-01	XDT_m2230331-031	Water	03/31/23 17:46
Instrument Blank	SLD0005-IBL5	XDT_m2230331-038	NA	03/31/23 18:26
Calibration Check	SLD0005-CCV3	XDT_m2230331-039	NA	03/31/23 18:31
Calibration Blank	SLD0005-CCB3	XDT_m2230331-040	NA	03/31/23 18:42
Calibration Check	SLD0005-CCV4	XDT_m2230331-042	NA	03/31/23 18:53

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLD0005

SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: ICPMS2
Calibration: GD00005

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLD0005-CCB4	XDT_m2230331-043	NA	03/31/23 19:01
ZZZZZ	23A0099-02	XDT_m2230331-044	Solid	03/31/23 19:08
ZZZZZ	23A0099-03	XDT_m2230331-045	Solid	03/31/23 19:13
ZZZZZ	23A0099-04	XDT_m2230331-046	Solid	03/31/23 19:18
ZZZZZ	23A0099-05	XDT_m2230331-047	Solid	03/31/23 19:23
ZZZZZ	23A0099-07	XDT_m2230331-048	Solid	03/31/23 19:28
ZZZZZ	23A0099-08	XDT_m2230331-049	Solid	03/31/23 19:33
ZZZZZ	23A0099-09	XDT_m2230331-050	Solid	03/31/23 19:38
ZZZZZ	23A0099-10	XDT_m2230331-051	Solid	03/31/23 19:42
ZZZZZ	23A0099-11	XDT_m2230331-052	Solid	03/31/23 19:47
ZZZZZ	23A0099-12	XDT_m2230331-053	Solid	03/31/23 19:52
Calibration Check	SLD0005-CCV5	XDT_m2230331-054	NA	03/31/23 19:58
Calibration Blank	SLD0005-CCB5	XDT_m2230331-055	NA	03/31/23 20:08
ZZZZZ	23A0099-13	XDT_m2230331-056	Solid	03/31/23 20:14
ZZZZZ	23A0099-06	XDT_m2230331-057	Solid	03/31/23 20:19
LDW23-SS1124	23A0134-10	XDT_m2230331-062	Solid	03/31/23 20:44
LDW23-SS1123	23A0134-11	XDT_m2230331-063	Solid	03/31/23 20:49
LDW23-IT1210	23A0134-13	XDT_m2230331-064	Solid	03/31/23 20:53
LDW23-SC1249	23A0134-15	XDT_m2230331-065	Solid	03/31/23 20:58
Calibration Check	SLD0005-CCV6	XDT_m2230331-066	NA	03/31/23 21:04
Calibration Blank	SLD0005-CCB6	XDT_m2230331-067	NA	03/31/23 21:12
Blank	BLC0703-BLK1	XDT_m2230331-068	Solid	03/31/23 21:20
LCS	BLC0703-BS1	XDT_m2230331-069	Solid	03/31/23 21:25
ZZZZZ	23A0133-06	XDT_m2230331-070	Solid	03/31/23 21:30
ZZZZZ	23A0133-07	XDT_m2230331-071	Solid	03/31/23 21:35
ZZZZZ	23A0133-03	XDT_m2230331-072	Solid	03/31/23 21:40
Instrument Blank	SLD0005-IBL6	XDT_m2230331-077	NA	03/31/23 22:06
Calibration Check	SLD0005-CCV7	XDT_m2230331-078	NA	03/31/23 22:11
Calibration Blank	SLD0005-CCB7	XDT_m2230331-079	NA	03/31/23 22:20

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLD0005

SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: ICPMS2
Calibration: GD00005

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0133-08	XDT_m2230331-081	Solid	03/31/23 22:36
ZZZZZ	23A0133-10	XDT_m2230331-083	Solid	03/31/23 22:45
ZZZZZ	23A0133-11	XDT_m2230331-084	Solid	03/31/23 22:50
ZZZZZ	23A0133-12	XDT_m2230331-085	Solid	03/31/23 22:55
ZZZZZ	23A0133-12	XDT_m2230331-085	Solid	03/31/23 22:55
Calibration Check	SLD0005-CCV8	XDT_m2230331-090	NA	03/31/23 23:21
Calibration Blank	SLD0005-CCB8	XDT_m2230331-091	NA	03/31/23 23:28
Calibration Check	SLD0005-CCV9	XDT_m2230331-102	NA	04/01/23 00:23
Calibration Blank	SLD0005-CCB9	XDT_m2230331-103	NA	04/01/23 00:30
ZZZZZ	BLC0848-DUP1	XDT_m2230331-104	Water	04/01/23 00:35
ZZZZZ	BLC0848-MS1	XDT_m2230331-105	Water	04/01/23 00:40
Instrument Blank	SLD0005-IBLA	XDT_m2230331-113	NA	04/01/23 01:24
Calibration Check	SLD0005-CCVA	XDT_m2230331-114	NA	04/01/23 01:29
Calibration Blank	SLD0005-CCBA	XDT_m2230331-115	NA	04/01/23 01:37
Calibration Check	SLD0005-CCVB	XDT_m2230331-117	NA	04/01/23 01:46
Calibration Blank	SLD0005-CCBB	XDT_m2230331-118	NA	04/01/23 01:54
Instrument Blank	SLD0005-IBLC	XDT_m2230331-128	NA	04/01/23 02:44
Calibration Check	SLD0005-CCVC	XDT_m2230331-129	NA	04/01/23 02:49
Calibration Blank	SLD0005-CCBC	XDT_m2230331-130	NA	04/01/23 02:57
Instrument Blank	SLD0005-IBLD	XDT_m2230331-140	NA	04/01/23 03:47
Calibration Check	SLD0005-CCVD	XDT_m2230331-141	NA	04/01/23 03:52
Calibration Blank	SLD0005-CCBD	XDT_m2230331-142	NA	04/01/23 03:59

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLD0041	Instrument:	ICPMS2
		Calibration:	GD00006

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLD0041-CAL1	XDT_m2230401-006	NA	04/01/23 13:46
CAL 1 - LOW CHECK	SLD0041-CAL2	XDT_m2230401-007	NA	04/01/23 13:51
CAL 2	SLD0041-CAL3	XDT_m2230401-008	NA	04/01/23 13:55
CAL 3	SLD0041-CAL4	XDT_m2230401-009	NA	04/01/23 14:00
CAL 4	SLD0041-CAL5	XDT_m2230401-010	NA	04/01/23 14:05
CAL 5	SLD0041-CAL6	XDT_m2230401-011	NA	04/01/23 14:11
RINSE	SLD0041-IBL1	XDT_m2230401-012	NA	04/01/23 14:18
Initial Cal Check	SLD0041-ICV1	XDT_m2230401-014	NA	04/01/23 14:26
Initial Cal Blank	SLD0041-ICB1	XDT_m2230401-015	NA	04/01/23 14:33
Calibration Check	SLD0041-CCV1	XDT_m2230401-016	NA	04/01/23 14:48
Calibration Blank	SLD0041-CCB1	XDT_m2230401-017	NA	04/01/23 14:55
Instrument RL Check	SLD0041-CRL1	XDT_m2230401-018	NA	04/01/23 15:01
Interference Check A	SLD0041-IFA1	XDT_m2230401-019	NA	04/01/23 15:06
Interference Check B	SLD0041-IFB1	XDT_m2230401-020	NA	04/01/23 15:10
LR200	SLD0041-HCV1	XDT_m2230401-021	NA	04/01/23 15:14
LR300	SLD0041-HCV2	XDT_m2230401-022	NA	04/01/23 15:19
Instrument Blank	SLD0041-IBL2	XDT_m2230401-023	NA	04/01/23 15:26
Instrument Blank	SLD0041-IBL3	XDT_m2230401-024	NA	04/01/23 15:32
Calibration Check	SLD0041-CCV2	XDT_m2230401-025	NA	04/01/23 15:39
Calibration Blank	SLD0041-CCB2	XDT_m2230401-026	NA	04/01/23 15:46
Blank	BLC0703-BLK2	XDT_m2230401-027	Solid	04/01/23 15:50
LCS	BLC0703-BS2	XDT_m2230401-028	Solid	04/01/23 15:55
Instrument Blank	SLD0041-IBL4	XDT_m2230401-036	NA	04/01/23 16:35
Calibration Check	SLD0041-CCV3	XDT_m2230401-037	NA	04/01/23 16:40
Calibration Blank	SLD0041-CCB3	XDT_m2230401-038	NA	04/01/23 16:47
ZZZZZ	23A0133-06	XDT_m2230401-039	Solid	04/01/23 16:55
ZZZZZ	23A0133-06	XDT_m2230401-039	Solid	04/01/23 16:55
ZZZZZ	23A0133-07	XDT_m2230401-040	Solid	04/01/23 17:00
ZZZZZ	23A0133-07	XDT_m2230401-040	Solid	04/01/23 17:00

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0041
Instrument: ICPMS2
Calibration: GD00006

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0133-08	XDT_m2230401-041	Solid	04/01/23 17:04
ZZZZZ	23A0133-08	XDT_m2230401-041	Solid	04/01/23 17:04
ZZZZZ	23A0133-09	XDT_m2230401-042	Solid	04/01/23 17:09
ZZZZZ	23A0133-09	XDT_m2230401-042	Solid	04/01/23 17:09
ZZZZZ	23A0133-09	XDT_m2230401-042	Solid	04/01/23 17:09
ZZZZZ	23A0133-03	XDT_m2230401-043	Solid	04/01/23 17:13
ZZZZZ	23A0133-03	XDT_m2230401-043	Solid	04/01/23 17:13
Instrument Blank	SLD0041-IBL5	XDT_m2230401-048	NA	04/01/23 17:35
Calibration Check	SLD0041-CCV4	XDT_m2230401-049	NA	04/01/23 17:40
Calibration Blank	SLD0041-CCB4	XDT_m2230401-050	NA	04/01/23 17:47
ZZZZZ	23A0133-10	XDT_m2230401-053	Solid	04/01/23 18:02
ZZZZZ	23A0133-10	XDT_m2230401-053	Solid	04/01/23 18:02
ZZZZZ	23A0133-11	XDT_m2230401-054	Solid	04/01/23 18:07
ZZZZZ	23A0133-11	XDT_m2230401-054	Solid	04/01/23 18:07
ZZZZZ	23A0133-12	XDT_m2230401-055	Solid	04/01/23 18:11
ZZZZZ	23A0133-13	XDT_m2230401-056	Solid	04/01/23 18:16
ZZZZZ	23A0133-13	XDT_m2230401-056	Solid	04/01/23 18:16
ZZZZZ	23A0133-13	XDT_m2230401-056	Solid	04/01/23 18:16
ZZZZZ	23A0133-14	XDT_m2230401-057	Solid	04/01/23 18:20
ZZZZZ	23A0133-14	XDT_m2230401-057	Solid	04/01/23 18:20
ZZZZZ	23A0133-14	XDT_m2230401-057	Solid	04/01/23 18:20
ZZZZZ	23A0133-15	XDT_m2230401-058	Solid	04/01/23 18:24
ZZZZZ	23A0133-15	XDT_m2230401-058	Solid	04/01/23 18:24
ZZZZZ	23A0133-15	XDT_m2230401-058	Solid	04/01/23 18:24
ZZZZZ	23A0133-16	XDT_m2230401-059	Solid	04/01/23 18:29
ZZZZZ	23A0133-16	XDT_m2230401-059	Solid	04/01/23 18:29
ZZZZZ	23A0133-16	XDT_m2230401-059	Solid	04/01/23 18:29
Instrument Blank	SLD0041-IBL6	XDT_m2230401-060	NA	04/01/23 18:33
Calibration Check	SLD0041-CCV5	XDT_m2230401-061	NA	04/01/23 18:38

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0041
Instrument: ICPMS2
Calibration: GD00006

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLD0041-CCB5	XDT_m2230401-062	NA	04/01/23 18:45
LDW23-SS1205	23A0134-01	XDT_m2230401-063	Solid	04/01/23 18:49
LDW23-SS1205	23A0134-01	XDT_m2230401-063	Solid	04/01/23 18:49
LDW23-SS1205	23A0134-01	XDT_m2230401-063	Solid	04/01/23 18:49
LDW23-SS1188	23A0134-02	XDT_m2230401-064	Solid	04/01/23 18:54
LDW23-SS1188	23A0134-02	XDT_m2230401-064	Solid	04/01/23 18:54
LDW23-SS1188	23A0134-02	XDT_m2230401-064	Solid	04/01/23 18:54
LDW23-SS1179	23A0134-03	XDT_m2230401-065	Solid	04/01/23 18:58
LDW23-SS1179	23A0134-03	XDT_m2230401-065	Solid	04/01/23 18:58
LDW23-SS1179	23A0134-03	XDT_m2230401-065	Solid	04/01/23 18:58
LDW23-SS1242	23A0134-04	XDT_m2230401-066	Solid	04/01/23 19:03
LDW23-SS1242	23A0134-04	XDT_m2230401-066	Solid	04/01/23 19:03
LDW23-SS1242	23A0134-04	XDT_m2230401-066	Solid	04/01/23 19:03
LDW23-SS1173	23A0134-05	XDT_m2230401-067	Solid	04/01/23 19:07
LDW23-SS1173	23A0134-05	XDT_m2230401-067	Solid	04/01/23 19:07
LDW23-SS1173	23A0134-05	XDT_m2230401-067	Solid	04/01/23 19:07
LDW23-SS1160	23A0134-06	XDT_m2230401-068	Solid	04/01/23 19:11
LDW23-SS1160	23A0134-06	XDT_m2230401-068	Solid	04/01/23 19:11
LDW23-SS1160	23A0134-06	XDT_m2230401-068	Solid	04/01/23 19:11
LDW23-SS1152	23A0134-07	XDT_m2230401-069	Solid	04/01/23 19:16
LDW23-SS1152	23A0134-07	XDT_m2230401-069	Solid	04/01/23 19:16
LDW23-SS1152	23A0134-07	XDT_m2230401-069	Solid	04/01/23 19:16
LDW23-SS1131	23A0134-08	XDT_m2230401-070	Solid	04/01/23 19:20
LDW23-SS1131	23A0134-08	XDT_m2230401-070	Solid	04/01/23 19:20
LDW23-SS1131	23A0134-08	XDT_m2230401-070	Solid	04/01/23 19:20
Instrument Blank	SLD0041-IBL7	XDT_m2230401-071	NA	04/01/23 19:25
Calibration Check	SLD0041-CCV6	XDT_m2230401-072	NA	04/01/23 19:29
Calibration Blank	SLD0041-CCB6	XDT_m2230401-073	NA	04/01/23 19:36
ZZZZZ	BLC0840-BLK1	XDT_m2230401-074	Solid	04/01/23 19:41

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLD0041

SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: ICPMS2
Calibration: GD00006

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	BLC0840-BS1	XDT_m2230401-075	Solid	04/01/23 19:45
ZZZZZ	BLC0840-SRL1	XDT_m2230401-076	Solid	04/01/23 19:50
ZZZZZ	23C0042-01	XDT_m2230401-077	Solid	04/01/23 19:54
ZZZZZ	BLC0840-DUP1	XDT_m2230401-078	Solid	04/01/23 19:58
ZZZZZ	BLC0840-MS1	XDT_m2230401-079	Solid	04/01/23 20:03
ZZZZZ	BLC0840-MSD1	XDT_m2230401-080	Solid	04/01/23 20:07
ZZZZZ	BLC0840-SRM1	XDT_m2230401-082	Solid	04/01/23 20:16
Instrument Blank	SLD0041-IBL8	XDT_m2230401-083	NA	04/01/23 20:21
Calibration Check	SLD0041-CCV7	XDT_m2230401-084	NA	04/01/23 20:26
Calibration Blank	SLD0041-CCB7	XDT_m2230401-085	NA	04/01/23 20:33
ZZZZZ	23C0042-02	XDT_m2230401-086	Solid	04/01/23 20:38
ZZZZZ	23C0042-03	XDT_m2230401-087	Solid	04/01/23 20:42
ZZZZZ	23C0042-04	XDT_m2230401-088	Solid	04/01/23 20:47
ZZZZZ	23C0042-05	XDT_m2230401-089	Solid	04/01/23 20:51
ZZZZZ	23C0042-06	XDT_m2230401-090	Solid	04/01/23 20:55
ZZZZZ	23C0042-07	XDT_m2230401-091	Solid	04/01/23 21:00
ZZZZZ	23C0042-08	XDT_m2230401-092	Solid	04/01/23 21:04
ZZZZZ	23C0042-09	XDT_m2230401-093	Solid	04/01/23 21:09
Instrument Blank	SLD0041-IBL9	XDT_m2230401-094	NA	04/01/23 21:13
Calibration Check	SLD0041-CCV8	XDT_m2230401-095	NA	04/01/23 21:18
Calibration Blank	SLD0041-CCB8	XDT_m2230401-096	NA	04/01/23 21:25
Instrument Blank	SLD0041-IBLA	XDT_m2230401-103	NA	04/01/23 21:56
Calibration Check	SLD0041-CCV9	XDT_m2230401-104	NA	04/01/23 22:00
Calibration Blank	SLD0041-CCB9	XDT_m2230401-105	NA	04/01/23 22:07

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Sequence: SLC0521
Standard ID: L003416

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0521-IFA1	Chromium-52	0	0.7810		ug/L
	Chromium-53	0	3.7730		ug/L
	Lead-208	0	0.0150		ug/L
	Silver-107	0	0.0070		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Sequence: SLC0521
Standard ID: L003416

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0521-IFB1	Chromium-52	20.000	19.924	99.6	ug/L
	Chromium-53	20.000	23.185	116	ug/L
	Lead-208	0	0.0720		ug/L
	Silver-107	20.000	18.376	91.9	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00005
Sequence: SLD0005
Standard ID: L003416

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0005-IFA1	Chromium-52	0	0.8610		ug/L
	Chromium-53	0	2.1200		ug/L
	Lead-208	0	0.0290		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00005
Sequence: SLD0005
Standard ID: L003416

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0005-IFB1	Chromium-52	20.000	20.826	104	ug/L
	Chromium-53	20.000	21.508	108	ug/L
	Lead-208	0	0.0440		ug/L

* Indicates %R outside of QC limits
NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00006
Sequence: SLD0041
Standard ID: L003416

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0041-IFA1	Chromium-52	0	0.9270		ug/L
	Chromium-53	0	4.2380		ug/L
	Lead-208	0	0.0280		ug/L
	Silver-107	0	0.0040		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00006
Sequence: SLD0041
Standard ID: L003416

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0041-IFB1	Chromium-52	20.000	20.214	101	ug/L
	Chromium-53	20.000	23.665	118	ug/L
	Lead-208	0	0.0450		ug/L
	Silver-107	20.000	18.981	94.9	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00002
Sequence: SLC0521
Lab Sample ID: SLC0521-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.532	106	ug/L	50 - 150
Chromium-53	0.50000	0.473	94.6	ug/L	50 - 150
Lead-208	0.10000	0.0990	99.0	ug/L	50 - 150
Silver-107	0.20000	0.210	105	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00005
Sequence: SLD0005
Lab Sample ID: SLD0005-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.521	104	ug/L	50 - 150
Chromium-53	0.50000	0.507	101	ug/L	50 - 150
Lead-208	0.10000	0.118	118	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00006
Sequence: SLD0041
Lab Sample ID: SLD0041-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.532	106	ug/L	50 - 150
Chromium-53	0.50000	0.517	103	ug/L	50 - 150
Lead-208	0.10000	0.119	119	ug/L	50 - 150
Silver-107	0.20000	0.211	106	ug/L	50 - 150

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00002
Laboratory ID: SLC0521-HCV1
Sequence: SLC0521
Standard ID: L002745

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	198	-1.0	10.00
Chromium-53	200.00	195	-2.7	10.00
Lead-208	200.00	193	-3.7	10.00
Silver-107	200.00	203	1.4	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00002
Laboratory ID: SLC0521-HCV2
Sequence: SLC0521
Standard ID: L002746

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	306	2.0	10.00
Chromium-53	300.00	298	-0.8	10.00
Lead-208	300.00	292	-2.5	10.00
Silver-107	300.00	301	0.2	10.00

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00005
Laboratory ID: SLD0005-HCV1
Sequence: SLD0005
Standard ID: L002745

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	197	-1.5	10.00
Chromium-53	200.00	193	-3.6	10.00
Lead-208	200.00	185	-7.6	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00005
Laboratory ID: SLD0005-HCV2
Sequence: SLD0005
Standard ID: L002746

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	300	0.1	10.00
Chromium-53	300.00	295	-1.7	10.00
Lead-208	300.00	270	-10.0	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00006
Laboratory ID: SLD0041-HCV1
Sequence: SLD0041
Standard ID: L002745

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	192	-4.1	10.00
Chromium-53	200.00	196	-2.1	10.00
Lead-208	200.00	190	-5.0	10.00
Silver-107	200.00	197	-1.6	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00006
Laboratory ID: SLD0041-HCV2
Sequence: SLD0041
Standard ID: L002746

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	297	-1.0	10.00
Chromium-53	300.00	298	-0.8	10.00
Lead-208	300.00	287	-4.2	10.00
Silver-107	300.00	294	-2.1	10.00

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 6020B

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1205 23A0134-01	01/06/23 08:28	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 18:49	85	180	
LDW23-SS1188 23A0134-02	01/06/23 09:36	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 18:54	85	180	
LDW23-SS1179 23A0134-03	01/06/23 09:52	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 18:58	85	180	
LDW23-SS1242 23A0134-04	01/06/23 11:04	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 19:03	85	180	
LDW23-SS1173 23A0134-05	01/06/23 11:22	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 19:07	85	180	
LDW23-SS1160 23A0134-06	01/06/23 11:41	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 19:11	85	180	
LDW23-SS1152 23A0134-07	01/06/23 12:29	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 19:16	85	180	
LDW23-SS1131 23A0134-08	01/06/23 12:43	01/06/23 17:26	03/27/23 13:52	80	180	04/01/23 19:20	85	180	
LDW23-SS1129 23A0134-09	01/06/23 12:57	01/06/23 17:26	03/29/23 13:50	82	180	03/30/23 21:52	83	180	
LDW23-SS1124 23A0134-10	01/06/23 13:15	01/06/23 17:26	03/29/23 13:50	82	180	03/31/23 20:44	84	180	
LDW23-SS1124 23A0134-10	01/06/23 13:15	01/06/23 17:26	03/29/23 13:50	82	180	03/30/23 21:57	83	180	
LDW23-SS1123 23A0134-11	01/06/23 13:29	01/06/23 17:26	03/29/23 13:50	82	180	03/30/23 22:01	83	180	
LDW23-SS1123 23A0134-11	01/06/23 13:29	01/06/23 17:26	03/29/23 13:50	82	180	03/31/23 20:49	84	180	
LDW23-SS1116 23A0134-12	01/06/23 13:44	01/06/23 17:26	03/29/23 13:50	82	180	03/30/23 22:06	83	180	
LDW23-IT1210 23A0134-13	01/06/23 14:12	01/06/23 17:26	03/29/23 13:50	81	180	03/31/23 20:53	84	180	
LDW23-IT1210 23A0134-13	01/06/23 14:12	01/06/23 17:26	03/29/23 13:50	81	180	03/30/23 22:11	83	180	
LDW23-SC1249 23A0134-15	01/06/23 13:46	01/06/23 17:26	03/29/23 13:50	82	180	03/30/23 22:16	83	180	
LDW23-SC1249 23A0134-15	01/06/23 13:46	01/06/23 17:26	03/29/23 13:50	82	180	03/31/23 20:58	84	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ICPMS2

Analyte	MDL	RL	Units
Chromium-52	0.26	0.50	mg/kg
Chromium-53	0.24	0.50	mg/kg
Lead-208	0.05	0.10	mg/kg
Silver-107	0.02	0.20	mg/kg

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCU10
Lot Number:	P2-CU682108
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Copper
Starting Material:	Cu Metal
Starting Material Lot#:	2095
Starting Material Purity:	99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9977 ± 50 µg/mL**
ICP Assay NIST SRM 3114 Lot Number: 121207

Assay Method #2 **10024 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10007 ± 46 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.007542	M	Eu	<	0.000942	O	Na		0.001434	M	Se	<	0.016971	M	Zn	<	0.005657
O	Al	<	0.000609	O	Fe		0.008700	M	Nb	<	0.000942	O	Si		0.003052	M	Zr	<	0.000942
M	As	<	0.010371	M	Ga	<	0.000942	M	Nd	<	0.000942	M	Sm	<	0.000942				
M	Au	<	0.001885	M	Gd	<	0.000942	M	Ni		0.003781	M	Sn	<	0.005657				
O	B		0.003663	M	Ge	<	0.005657	M	Os	<	0.000942	M	Sr	<	0.000942				
M	Ba		0.004253	M	Hf	<	0.000942	O	P	<	0.031668	M	Ta	<	0.000942				
M	Be	<	0.000942	O	Hg	<	0.007064	M	Pb		0.005789	M	Tb	<	0.000942				
M	Bi	<	0.000942	M	Ho	<	0.000942	M	Pd	<	0.000942	M	Te	<	0.004714				
O	Ca		0.002304	M	In	<	0.000942	M	Pr	<	0.000942	M	Th	<	0.000942				
M	Cd	<	0.000942	M	Ir	<	0.000942	M	Pt	<	0.000942	O	Ti	<	0.002801				
M	Ce	<	0.000942	O	K		0.000763	M	Rb	<	0.000942	M	Tl	<	0.000942				
M	Co		0.001890	M	La	<	0.000942	M	Re	<	0.000942	M	Tm	<	0.000942				
M	Cr	<	0.005657	O	Li	<	0.000243	i	Rh	<		M	U	<	0.000942				
M	Cs	<	0.000942	M	Lu	<	0.000942	M	Ru	<	0.039588	M	V	<	0.003771				
s	Cu	<		O	Mg		0.000320	O	S		0.007174	M	W	<	0.005657				
M	Dy	<	0.000942	O	Mn		0.000793	M	Sb	<	0.001885	M	Y	<	0.000942				
M	Er	<	0.000942	M	Mo	<	0.005657	M	Sc	<	0.000942	M	Yb	<	0.000942				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 $Cu(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGPB10
Lot Number:	S2-PB713228
Matrix:	0.5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Lead
Starting Material:	Lead Nitrate
Starting Material Lot#:	2343
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL

Density: 1.015 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10024 ± 41 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 **10054 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	M	Na		0.001470	M	Se	<	0.009100	O	Zn		0.006155
O	Al		0.017098	O	Fe		0.002496	M	Nb	<	0.000310	O	Si		0.003761	O	Zr	<	0.001700
M	As	<	0.003100	M	Ga	<	0.000310	M	Nd	<	0.000310	M	Sm	<	0.000310				
M	Au	<	0.000910	M	Gd	<	0.000310	O	Ni		0.001709	M	Sn	<	0.001300				
O	B	<	0.005600	M	Ge	<	0.002200	M	Os	<	0.000310	O	Sr		0.000444				
O	Ba		0.007865	M	Hf	<	0.000310	O	P	<	0.038000	M	Ta	<	0.000310				
O	Be	<	0.000320	M	Hg	<	0.002200	s	Pb	<		M	Tb	<	0.000610				
M	Bi	<	0.028000	M	Ho	<	0.000310	M	Pd	<	0.000610	M	Te	<	0.000310				
O	Ca		0.019834	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.000310				
O	Cd	<	0.000630	M	Ir	<	0.000310	M	Pt	<	0.000910	O	Ti		0.005129				
M	Ce		0.004787	O	K		0.008207	M	Rb	<	0.006700	M	Tl	<	0.016000				
M	Co	<	0.000610	M	La	<	0.001900	M	Re	<	0.000310	M	Tm	<	0.000310				
O	Cr	<	0.001500	O	Li	<	0.000110	O	Rh	<	0.007700	M	U	<	0.000310				
M	Cs	<	0.006100	M	Lu	<	0.000310	M	Ru	<	0.001300	M	V	<	0.001600				
M	Cu	<	0.001600	O	Mg		0.003317	O	S	<	0.052000	M	W	<	0.000910				
M	Dy	<	0.000310	O	Mn	<	0.001600	O	Sb	<	0.015000	M	Y	<	0.000310				
M	Er	<	0.000310	M	Mo	<	0.000610	O	Sc	<	0.000630	M	Yb	<	0.000310				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 $Pb(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

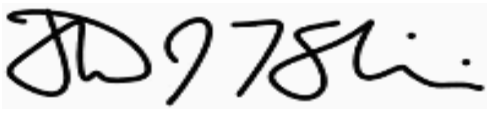
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGZN10
Lot Number:	S2-ZN711249
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Zinc
Starting Material:	Zinc Metal
Starting Material Lot#:	2349
Starting Material Purity:	99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9981 ± 56 µg/mL**
ICP Assay NIST SRM 3168a Lot Number: 120629

Assay Method #2 **9987 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10002 ± 32 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002000	M	Eu	<	0.000500	O	Na		0.008713	M	Se	<	0.048000	s	Zn	<	
O	Al	<	0.011000	O	Fe		0.015467	M	Nb	<	0.000500	O	Si		0.007842	M	Zr	<	0.000500
O	As	<	0.012000	M	Ga	<	0.004900	M	Nd	<	0.000500	M	Sm	<	0.000500				
M	Au	<	0.006500	M	Gd	<	0.000500	O	Ni		0.003049	M	Sn		0.002614				
O	B	<	0.019000	M	Ge	<	0.009100	M	Os	<	0.000500	M	Sr	<	0.000500				
M	Ba	<	0.000500	M	Hf	<	0.000500	O	P	<	0.059000	M	Ta	<	0.000500				
O	Be	<	0.000230	O	Hg	<	0.003800	M	Pb		0.016774	M	Tb	<	0.000500				
M	Bi	<	0.002400	M	Ho	<	0.000500	M	Pd	<	0.001000	M	Te	<	0.017000				
O	Ca		0.052283	M	In	<	0.003500	M	Pr	<	0.000500	M	Th	<	0.000500				
O	Cd		0.000588	M	Ir	<	0.001000	M	Pt	<	0.000500	M	Ti	<	0.002000				
M	Ce	<	0.000500	O	K		0.017209	M	Rb	<	0.002500	M	Tl	<	0.000500				
M	Co		0.000653	M	La	<	0.000500	M	Re	<	0.000500	M	Tm	<	0.000500				
O	Cr		0.001089	O	Li	<	0.000230	M	Rh	<	0.000500	M	U	<	0.000500				
M	Cs	<	0.000500	M	Lu	<	0.000500	M	Ru	<	0.005000	M	V	<	0.000500				
O	Cu		0.001938	O	Mg		0.000871	O	S	<	0.048000	M	W	<	0.001000				
M	Dy	<	0.000500	O	Mn		0.000172	M	Sb	<	0.004300	M	Y	<	0.000500				
M	Er	<	0.000500	M	Mo	<	0.001500	O	Sc	<	0.000900	M	Yb	<	0.000500				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

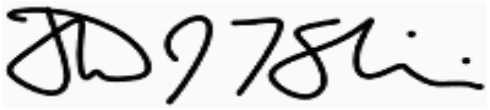
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE10
Lot Number:	S2-SE711004
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Selenium
Starting Material:	Se Metal
Starting Material Lot#:	1962
Starting Material Purity:	99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002242	M	Eu	<	0.000373	O	Na		0.013654	s	Se	<		O	Zn		0.002374
M	Al		0.004450	M	Fe		0.008478	O	Nb	<	0.002975	O	Si		0.006249	M	Zr	<	0.001868
O	As	<	0.022040	M	Ga	<	0.000373	M	Nd	<	0.000373	M	Sm	<	0.000373				
M	Au	<	0.000373	M	Gd	<	0.000373	O	Ni		0.001843	M	Sn		0.000847				
O	B	<	0.007714	M	Ge	<	0.002616	M	Os	<	0.000373	M	Sr	<	0.001121				
M	Ba	<	0.001495	M	Hf	<	0.000373	O	P	<	0.022040	M	Ta	<	0.000373				
M	Be	<	0.001495	M	Hg	<	0.002240	M	Pb		0.006358	M	Tb	<	0.006353				
M	Bi	<	0.000373	M	Ho	<	0.000373	M	Pd	<	0.000373	M	Te	<	0.012707				
O	Ca		0.006530	M	In	<	0.000373	M	Pr	<	0.001495	M	Th	<	0.002990				
M	Cd		0.001165	M	Ir	<	0.000373	M	Pt	<	0.000373	M	Ti	<	0.003363				
M	Ce	<	0.000373	O	K		0.001999	M	Rb	<	0.001868	M	Tl		0.008584				
M	Co	<	0.000373	M	La	<	0.001121	M	Re	<	0.000373	M	Tm	<	0.000373				
M	Cr		0.002861	O	Li		0.000062	M	Rh	<	0.000373	M	U	<	0.000373				
M	Cs	<	0.001121	M	Lu	<	0.000373	M	Ru	<	0.001493	M	V	<	0.000747				
M	Cu	<	0.000747	O	Mg		0.001156	O	S		0.024591	M	W	<	0.002242				
M	Dy	<	0.000373	M	Mn	<	0.000373	M	Sb	<	0.002242	M	Y	<	0.000373				
M	Er	<	0.000373	O	Mo	<	0.003195	M	Sc	<	0.001121	M	Yb	<	0.000373				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H_2SeO_3

Chemical Compatibility -Soluble in HCl, HNO_3,H_3PO_4, H_2SO_4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO_3or HNO_3 / HF); Organic Matrices (acid digestion with hot concentrated H_2SO_4 accompanied by the careful dropwise addition of H_2O_2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO10
Lot Number:	S2-MO706255
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	10 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL

Density: 1.011 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.008739	M	Se	<	0.008000	M	Zn		0.005942
M	Al		0.005592	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.001747				
M	Ba		0.016778	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.062920	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Ti	<	0.032000				
M	Ce	<	0.008300	M	K		1.293372	M	Rb		0.045442	M	Tl		0.012584				
M	Co		0.005942	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.005243	O	Li		0.000594	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.005243	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.022371	M	Mg		0.005592	i	S	<		M	W		0.873900				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.015031	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL10
Lot Number:	T2-TL714687
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Thallium
Starting Material:	TlNO3
Starting Material Lot#:	2118
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL

Density: 1.036 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL(

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000200	O	Na		0.002489	M	Se	<	0.011019	O	Zn		0.002298
O	Al	<	0.004184	O	Fe	<	0.002824	M	Nb	<	0.000200	O	Si		0.003760	M	Zr	<	0.000200
M	As	<	0.002003	M	Ga	<	0.000200	M	Nd	<	0.000200	M	Sm	<	0.000200				
O	Au	<	0.002824	M	Gd	<	0.000200	M	Ni		0.001724	M	Sn	<	0.000601				
O	B	<	0.004184	M	Ge	<	0.000801	M	Os	<	0.000198	O	Sr	<	0.000313				
M	Ba	<	0.000400	M	Hf	<	0.000200	O	P	<	0.010460	M	Ta	<	0.000200				
O	Be	<	0.000104	M	Hg	<	0.000794	M	Pb		0.000811	M	Tb	<	0.000200				
M	Bi	<	0.005209	M	Ho	<	0.000200	M	Pd	<	0.000400	M	Te	<	0.005008				
O	Ca		0.002436	M	In	<	0.000200	M	Pr	<	0.000200	M	Th	<	0.000200				
M	Cd		0.001318	M	Ir	<	0.000198	M	Pt	<	0.000801	O	Ti	<	0.001255				
M	Ce	<	0.000200	O	K		0.006175	M	Rb	<	0.000200	s	Tl	<					
M	Co	<	0.000601	M	La	<	0.000200	M	Re	<	0.000200	M	Tm	<	0.000200				
M	Cr	<	0.000801	O	Li	<	0.000177	M	Rh	<	0.000200	M	U	<	0.000200				
M	Cs	<	0.003606	M	Lu	<	0.000200	M	Ru	<	0.000397	M	V	<	0.002203				
M	Cu	<	0.001001	O	Mg		0.000529	O	S	<	0.015690	M	W	<	0.000601				
M	Dy	<	0.000200	M	Mn	<	0.000801	M	Sb	<	0.000400	M	Y	<	0.000200				
M	Er	<	0.000200	M	Mo	<	0.001202	O	Sc	<	0.000711	M	Yb	<	0.000200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+
Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Tl Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

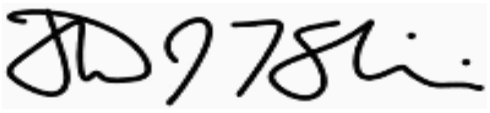
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCD10
Lot Number:	S2-CD710508
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cadmium
Starting Material:	Cd Metal
Starting Material Lot#:	1953
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10010 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 **10011 ± 30 µg/mL**
ICP Assay NIST SRM 3108 Lot Number: 130116

Assay Method #3 **10003 ± 30 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag	<	0.003200	O	Eu	<	0.002500	O	Na		0.005499	M	Se	<	0.005700	O	Zn	<	0.001100
O	Al		0.008903	O	Fe		0.000602	M	Nb	<	0.000400	O	Si		0.016758	O	Zr	<	0.002600
M	As	<	0.003600	M	Ga	<	0.001200	M	Nd	<	0.000800	M	Sm	<	0.000400				
M	Au	<	0.000810	M	Gd	<	0.000400	M	Ni	<	0.003600	M	Sn	<	0.003200				
O	B		0.004189	O	Ge	<	0.012000	M	Os	<	0.000810	O	Sr	<	0.000330				
M	Ba	<	0.002400	M	Hf	<	0.000400	O	P	<	0.022000	M	Ta	<	0.000800				
M	Be	<	0.000400	M	Hg	<	0.001700	M	Pb	<	0.002400	M	Tb	<	0.000400				
M	Bi	<	0.000400	M	Ho	<	0.000400	M	Pd	<	0.001200	M	Te	<	0.008000				
O	Ca		0.011259	O	In	<	0.013000	M	Pr	<	0.000400	M	Th	<	0.000400				
s	Cd	<		M	Ir	<	0.000410	M	Pt	<	0.000400	O	Ti		0.000602				
M	Ce	<	0.000400	O	K		0.005237	M	Rb	<	0.004400	M	Tl		0.000523				
M	Co	<	0.000400	M	La	<	0.000400	M	Re	<	0.000400	M	Tm	<	0.000400				
O	Cr	<	0.005100	O	Li	<	0.000054	M	Rh	<	0.000400	M	U	<	0.000400				
M	Cs	<	0.002400	M	Lu	<	0.000400	M	Ru	<	0.002500	M	V	<	0.002000				
O	Cu	<	0.004800	O	Mg		0.000288	O	S	<	0.022000	M	W	<	0.000400				
M	Dy	<	0.000400	O	Mn	<	0.000860	O	Sb	<	0.018000	M	Y	<	0.000400				
M	Er	<	0.000400	M	Mo	<	0.001600	O	Sc	<	0.000430	M	Yb	<	0.000400				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd2(OH) (aq)3+ and Cd(OH)(aq)

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 , and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO3 / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (soluble in HCl or HNO3); Ores (dissolve in HCl /HNO3 then take to fumes with H2SO4. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMN10
Lot Number:	S2-MN704240
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Manganese
Starting Material:	Mn Metal
Starting Material Lot#:	2275
Starting Material Purity:	99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9989 ± 69 µg/mL**
ICP Assay NIST SRM 3132 Lot Number: 050429

Assay Method #2 **10011 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10024 ± 47 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001500	M	Eu	<	0.000730	O	Na		0.176097	M	Se	<	0.006600	M	Zn		0.009925
O	Al		0.004322	M	Fe	<	0.650000	M	Nb	<	0.000730	O	Si		0.097654	M	Zr	<	0.000730
M	As	<	0.008000	M	Ga		0.004322	M	Nd	<	0.001500	M	Sm	<	0.000730				
M	Au	<	0.000730	M	Gd	<	0.000730	M	Ni		0.024013	M	Sn	<	0.002200				
M	B		0.068838	M	Ge	<	0.004400	M	Os	<	0.000730	O	Sr		0.000928				
M	Ba	<	0.001500	M	Hf	<	0.000730	i	P	<		M	Ta	<	0.000730				
M	Be	<	0.000730	M	Hg	<	0.002200	M	Pb		0.007364	M	Tb	<	0.000730				
M	Bi	<	0.003000	M	Ho	<	0.000730	M	Pd	<	0.000730	M	Te	<	0.019000				
O	Ca		0.062434	M	In	<	0.003000	M	Pr	<	0.000730	M	Th	<	0.000730				
M	Cd	<	0.001500	M	Ir	<	0.000730	M	Pt	<	0.000730	O	Ti	<	0.006500				
M	Ce	<	0.007300	O	K		0.006403	M	Rb	<	0.006600	M	Tl	<	0.000730				
O	Co		0.014728	M	La	<	0.003000	M	Re	<	0.000730	M	Tm	<	0.000730				
O	Cr		0.272151	O	Li		0.000416	M	Rh	<	0.003000	M	U	<	0.001500				
M	Cs	<	0.000730	M	Lu	<	0.000730	M	Ru	<	0.004400	M	V	<	0.000730				
O	Cu		0.007684	O	Mg		0.320177	i	S	<		M	W	<	0.004400				
M	Dy	<	0.001500	s	Mn	<		M	Sb	<	0.021000	O	Y		0.001360				
M	Er	<	0.001500	M	Mo		0.010245	O	Sc	<	0.004100	M	Yb	<	0.000730				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 $Mn(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO_3/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H_2SO_4 and heat to SO_3 fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16O,37Cl18O,40Ar15N,38Ar17O,36Ar18O1H ,38Ar16O1H,37Cl17O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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CERTIFICATE OF ANALYSIS

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB10
Lot Number:	R2-SB688559
Matrix:	3% (v/v) HNO3 3% (w/v) tartaric acid
Value / Analyte(s):	10 000 µg/mL ea: Antimony
Starting Material:	Antimony Metal
Starting Material Lot#:	1857
Starting Material Purity:	99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL

Density: 1.061 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10003 ± 41 µg/mL**
ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000300	O	Na		0.140000	M	Se	<	0.007300	O	Zn	0.005000
M	Al		0.003200	O	Fe		0.060000	M	Nb	<	0.000100	O	Si		0.150000	O	Zr	< 0.006300
M	As	<	0.004400	M	Ga	<	0.000400	M	Nd	<	0.000100	M	Sm	<	0.000100			
M	Au	<	0.000210	M	Gd	<	0.000100	O	Ni		0.004800	M	Sn	<	0.001800			
M	B	<	0.011000	M	Ge	<	0.000600	M	Os	<	0.000110	O	Sr		0.000750			
O	Ba	<	0.004900	M	Hf	<	0.000100	O	P		0.540000	M	Ta		0.003300			
M	Be	<	0.000400	M	Hg	<	0.000110	M	Pb	<	0.000400	M	Tb	<	0.000100			
M	Bi	<	0.000200	M	Ho	<	0.000100	M	Pd	<	0.000210	M	Te	<	0.000600			
O	Ca		0.110000	M	In	<	0.000100	M	Pr	<	0.001600	M	Th	<	0.000100			
M	Cd	<	0.000200	M	Ir	<	0.000110	M	Pt	<	0.000600	M	Ti	<	0.002800			
M	Ce		0.006500	O	K		0.020000	M	Rb	<	0.001000	M	Tl	<	0.000100			
M	Co	<	0.000200	O	La	<	0.016000	M	Re	<	0.000100	M	Tm	<	0.000100			
M	Cr		0.006900	O	Li	<	0.000430	M	Rh	<	0.000300	M	U	<	0.000100			
M	Cs	<	0.000200	M	Lu	<	0.000100	M	Ru	<	0.000310	M	V	<	0.000800			
M	Cu	<	0.000600	O	Mg		0.021000	n	S	<		M	W	<	0.000200			
M	Dy	<	0.000100	O	Mn		0.001900	s	Sb	<		M	Y	<	0.000100			
M	Er	<	0.000100	M	Mo	<	0.000500	O	Sc	<	0.002300	M	Yb	<	0.000100			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAS10
Lot Number:	T2-AS718260
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Arsenic
Starting Material:	As Metal
Starting Material Lot#:	2208
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL

Density: 1.037 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10062 ± 46 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 **10055 ± 76 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.003200	M	Eu	< 0.000530	O	Na	0.032544	M	Se	< 0.006300	O	Zn	0.001952			
M	Al	0.007593	O	Fe	0.001475	O	Nb	< 0.012000	O	Si	0.238658	O	Zr	< 0.004100			
s	As	<	M	Ga	< 0.000530	M	Nd	< 0.000530	M	Sm	< 0.000530						
M	Au	< 0.003100	M	Gd	< 0.000530	M	Ni	< 0.002100	M	Sn	< 0.000530						
M	B	0.026035	M	Ge	< 0.001600	M	Os	< 0.000520	M	Sr	< 0.000530						
M	Ba	< 0.000530	M	Hf	< 0.000530	O	P	< 0.043000	M	Ta	< 0.000530						
O	Be	< 0.000360	M	Hg	< 0.001600	M	Pb	< 0.002100	M	Tb	< 0.000530						
M	Bi	< 0.000530	M	Ho	< 0.000530	M	Pd	< 0.001100	M	Te	< 0.004700						
O	Ca	0.004339	M	In	< 0.023000	M	Pr	< 0.005300	M	Th	< 0.000530						
M	Cd	< 0.001100	M	Ir	< 0.000520	M	Pt	< 0.000530	O	Ti	< 0.002300						
M	Ce	< 0.000530	O	K	0.002061	M	Rb	< 0.000530	M	Tl	< 0.000530						
M	Co	< 0.000530	M	La	< 0.001100	M	Re	< 0.000530	M	Tm	< 0.000530						
O	Cr	< 0.001800	O	Li	< 0.000120	M	Rh	< 0.000530	M	U	< 0.000530						
M	Cs	< 0.005300	M	Lu	< 0.000530	M	Ru	< 0.000520	M	V	< 0.002700						
M	Cu	< 0.001600	O	Mg	0.000154	O	S	0.028205	M	W	< 0.012000						
M	Dy	< 0.000530	O	Mn	0.000154	M	Sb	< 0.000530	M	Y	< 0.000530						
M	Er	< 0.000530	M	Mo	< 0.000530	O	Sc	< 0.001700	M	Yb	< 0.000530						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphic form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37Cl,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBA10
Lot Number:	R2-BA692576
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Barium
Starting Material:	Barium Nitrate
Starting Material Lot#:	1969
Starting Material Purity:	99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10018 ± 50 µg/mL**
ICP Assay NIST SRM 3104a Lot Number: 140909

Assay Method #2 **10023 ± 31 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #3 **10023 ± 30 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000410	O	Eu	<	0.005200	O	Na		0.004610	M	Se	<	0.003700	O	Zn		0.000658
M	Al	<	0.003100	O	Fe		0.015707	M	Nb	<	0.000210	O	Si		0.005573	M	Zr	<	0.001300
M	As	<	0.001300	M	Ga	<	0.000210	M	Nd	<	0.000210	O	Sm	<	0.021000				
M	Au	<	0.001300	M	Gd	<	0.000210	M	Ni	<	0.000810	M	Sn	<	0.000410				
O	B	<	0.005200	M	Ge	<	0.002500	M	Os	<	0.000410	O	Sr		0.003850				
s	Ba	<		M	Hf	<	0.000810	O	P	<	0.026000	M	Ta	<	0.000410				
O	Be	<	0.000320	M	Hg	<	0.000210	M	Pb	<	0.002300	M	Tb	<	0.000210				
M	Bi	<	0.000210	M	Ho	<	0.000210	M	Pd	<	0.000210	M	Te	<	0.001900				
O	Ca		0.007093	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	M	Ti	<	0.002100				
M	Ce	<	0.001300	O	K		0.035467	M	Rb	<	0.002100	M	Tl	<	0.000210				
M	Co	<	0.000410	O	La	<	0.005200	M	Re	<	0.000210	M	Tm	<	0.000410				
M	Cr	<	0.001700	O	Li	<	0.000630	M	Rh	<	0.000210	M	U	<	0.000210				
M	Cs	<	0.003300	M	Lu	<	0.001700	M	Ru	<	0.000210	O	V	<	0.005200				
M	Cu	<	0.001300	O	Mg		0.000861	O	S		0.268539	M	W	<	0.000410				
M	Dy	<	0.000210	M	Mn	<	0.000410	M	Sb	<	0.001300	O	Y	<	0.005200				
M	Er	<	0.001300	M	Mo	<	0.000410	M	Sc	<	0.000410	M	Yb	<	0.001300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 $Ba(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO_3 / LDPE container.

Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO_3); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent $BaSO_4$ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBE10
Lot Number:	R2-BE692992
Matrix:	6% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Beryllium
Starting Material:	Beryllium Acetate
Starting Material Lot#:	2281
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL

Density: 1.128 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10042 ± 67 µg/mL**
ICP Assay NIST SRM 3105a Lot Number: 090514

Assay Method #2 **10025 ± 51 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001100	M	Eu	<	0.000270	O	Na		0.040962	M	Se	<	0.005000	M	Zn		0.013054
O	Al		0.016205	O	Fe		0.015754	M	Nb	<	0.000270	O	Si		0.024307	O	Zr	<	0.001900
M	As	<	0.002900	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270				
M	Au	<	0.000520	M	Gd	<	0.000270	M	Ni	<	0.003700	M	Sn	<	0.000790				
M	B	<	0.091000	M	Ge	<	0.000270	M	Os	<	0.000260	M	Sr		0.000630				
M	Ba		0.002700	M	Hf	<	0.000270	O	P	<	0.066000	M	Ta	<	0.000270				
s	Be	<		M	Hg	<	0.000520	M	Pb	<	0.000270	M	Tb	<	0.000270				
M	Bi	<	0.000530	M	Ho	<	0.000270	M	Pd	<	0.000520	M	Te	<	0.003700				
O	Ca		0.072022	M	In	<	0.000790	M	Pr	<	0.000270	M	Th	<	0.000270				
M	Cd	<	0.000790	M	Ir	<	0.000260	M	Pt	<	0.000270	O	Ti	<	0.000400				
M	Ce	<	0.000270	O	K		0.045014	M	Rb	<	0.000270	M	Tl	<	0.000790				
O	Co	<	0.003200	M	La	<	0.000270	M	Re	<	0.000270	M	Tm	<	0.000270				
O	Cr	<	0.001800	O	Li	<	0.000660	M	Rh	<	0.001100	M	U	<	0.000270				
M	Cs		0.001440	M	Lu	<	0.000270	M	Ru	<	0.000260	M	V	<	0.000790				
M	Cu	<	0.002100	O	Mg		0.016205	i	S	<		M	W	<	0.000530				
M	Dy	<	0.000270	M	Mn		0.001215	M	Sb	<	0.000270	M	Y	<	0.000270				
M	Er	<	0.000270	M	Mo	<	0.000530	O	Sc	<	0.000930	M	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 $Be(H_2O)_4^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, H_2SO_4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO_3 / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta l(is best dissolved in diluted H_2SO_4); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO4 fusion); Ores (H_2SO_4/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCO10
Lot Number:	R2-CO695285
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cobalt
Starting Material:	Co Metal
Starting Material Lot#:	2326
Starting Material Purity:	99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10031 ± 67 µg/mL**
ICP Assay NIST SRM 3113 Lot Number: 190630

Assay Method #2 **10019 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10000 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	0.014660	M	Eu	<	0.000590	O	Na	0.007534	M	Se	<	0.019000	M	Zn	0.003461	
M	Al	< 0.024000	M	Fe	0.050905	M	Nb	<	0.000590	O	Si	0.075340	M	Zr	<	0.001200	
i	As	<	M	Ga	<	0.000590	M	Nd	<	0.000590	M	Sm	<	0.000590			
M	Au	< 0.004100	M	Gd	<	0.000590	O	Ni	0.427608	M	Sn	<	0.001200				
M	B	< 0.031000	M	Ge	<	0.003000	M	Os	<	0.000590	O	Sr	<	0.000260			
M	Ba	< 0.000590	M	Hf	<	0.000590	n	P	<		M	Ta	<	0.001200			
O	Be	< 0.001300	M	Hg	<	0.001800	M	Pb	0.003257	M	Tb	<	0.000590				
M	Bi	< 0.003000	M	Ho	<	0.000590	M	Pd	<	0.000590	M	Te	<	0.005300			
O	Ca	0.010588	M	In	<	0.001200	M	Pr	<	0.000590	M	Th	<	0.000590			
M	Cd	< 0.004700	M	Ir	<	0.001200	M	Pt	<	0.002400	M	Ti	<	0.014000			
M	Ce	< 0.000590	O	K	0.008144	M	Rb	<	0.000590	M	Tl	0.002647					
s	Co	<	M	La	<	0.000590	M	Re	<	0.000590	M	Tm	<	0.000590			
M	Cr	< 0.021000	O	Li	<	0.000130	M	Rh	<	0.000590	M	U	<	0.000590			
M	Cs	< 0.002400	M	Lu	<	0.000590	M	Ru	<	0.007100	O	V	<	0.000880			
M	Cu	0.189369	O	Mg	0.001893	n	S	<		M	W	<	0.000590				
M	Dy	< 0.000590	M	Mn	<	0.001800	M	Sb	<	0.003600	M	Y	<	0.000590			
M	Er	< 0.000590	M	Mo	<	0.002400	O	Sc	<	0.001600	M	Yb	<	0.000590			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 $Co(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAG10
Lot Number:	S2-AG712977
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Silver
Starting Material:	Ag Shot
Starting Material Lot#:	2289
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10051 ± 52 µg/mL**
ICP Assay NIST SRM 3151 Lot Number: 160729

Assay Method #2 **10051 ± 19 µg/mL**
Volhard NIST SRM 999c Lot Number: 999c

Assay Method #3 **10049 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Ag	<		M	Eu	<	0.000260	O	Na		0.003811	M	Se	<	0.003900	O	Zn		0.048146
M	Al		0.002688	O	Fe		0.006419	M	Nb	<	0.000260	O	Si		0.005215	M	Zr	<	0.000260
M	As	<	0.001100	M	Ga	<	0.000260	M	Nd	<	0.000260	M	Sm	<	0.000260				
M	Au	<	0.000260	M	Gd	<	0.000260	O	Ni		0.001765	M	Sn		0.020060				
O	B	<	0.004300	M	Ge	<	0.002300	M	Os	<	0.001100	O	Sr	<	0.000110				
M	Ba	<	0.000520	M	Hf	<	0.000260	O	P	<	0.017000	M	Ta	<	0.000260				
O	Be	<	0.001100	M	Hg	<	0.000770	M	Pb	<	0.003600	M	Tb	<	0.000260				
M	Bi		0.004814	M	Ho	<	0.000260	M	Pd		0.044134	M	Te	<	0.009000				
O	Ca		0.005215	M	In		0.003691	M	Pr	<	0.000260	M	Th	<	0.000260				
M	Cd	<	0.000260	M	Ir	<	0.000520	M	Pt	<	0.001100	O	Ti	<	0.000440				
M	Ce	<	0.002100	O	K	<	0.008700	M	Rb	<	0.001100	M	Tl	<	0.004100				
O	Co	<	0.000330	M	La	<	0.000260	M	Re	<	0.000260	M	Tm	<	0.000260				
O	Cr	<	0.002500	O	Li	<	0.000110	M	Rh	<	0.000520	M	U	<	0.000260				
M	Cs	<	0.002600	M	Lu	<	0.000260	M	Ru	<	0.000260	M	V	<	0.000260				
O	Cu		0.357085	O	Mg		0.001203	O	S	<	0.017000	M	W	<	0.000260				
M	Dy	<	0.000260	O	Mn	<	0.000220	M	Sb	<	0.014000	M	Y	<	0.000260				
M	Er	<	0.000260	M	Mo	<	0.000260	O	Sc	<	0.000220	M	Yb	<	0.000260				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 $Ag(H_2O)_6^+$

Chemical Compatibility -Stable in HNO_3, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [$AgCl_{x1-x}$] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite , bromide, chloride, iodide, carbonate , chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Ag Containing Samples (Preparation and Solution) -Metal (Soluble in HNO_3); Oxides (Soluble in HNO_3); Ores (Digestion with conc. HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCR(3)10
Lot Number:	S2-CR709784
Matrix:	10% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Chromium
Starting Material:	Cr Metal
Starting Material Lot#:	2328
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL

Density: 1.072 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001700	M	Eu	<	0.003400	O	Na		0.090372	M	Se	<	0.012000	O	Zn	<	0.006100
M	Al		0.034916	O	Fe		0.246471	M	Nb	<	0.017000	n	Si	<		M	Zr	<	0.007800
M	As	<	0.028000	O	Ga	<	0.013000	M	Nd	<	0.013000	M	Sm	<	0.006900				
M	Au	<	0.001700	M	Gd	<	0.000560	M	Ni		0.016020	M	Sn		0.006983				
O	B	<	0.025000	O	Ge	<	0.014000	M	Os	<	0.000560	M	Sr		0.006367				
M	Ba	<	0.008900	M	Hf	<	0.000560	i	P	<		M	Ta	<	0.000560				
M	Be	<	0.013000	M	Hg	<	0.001700	M	Pb		0.010064	M	Tb	<	0.000560				
M	Bi	<	0.002300	M	Ho	<	0.000560	M	Pd	<	0.021000	M	Te	<	0.010000				
O	Ca		0.075995	M	In	<	0.000560	M	Pr	<	0.001700	M	Th	<	0.000560				
M	Cd	<	0.000560	M	Ir	<	0.000560	M	Pt	<	0.001200	O	Ti		0.013555				
M	Ce	<	0.001200	O	K		0.043132	i	Rb	<		M	Tl	<	0.000560				
M	Co	<	0.002600	M	La	<	0.001200	M	Re	<	0.001200	O	Tm	<	0.013000				
s	Cr	<		O	Li		0.000390	M	Rh	<	0.095000	M	U	<	0.000560				
M	Cs	<	0.007800	M	Lu	<	0.000560	M	Ru	<	0.087000	O	V		0.014993				
O	Cu		0.007599	O	Mg		0.000883	i	S	<		M	W	<	0.049000				
M	Dy	<	0.000560	M	Mn		0.008626	M	Sb	<	0.003400	M	Y	<	0.001700				
M	Er	<	0.019000	M	Mo	<	0.032000	M	Sc		0.003080	M	Yb	<	0.000560				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 $Cr(H_2O)_6^{3+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cr3 Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with $KHSO_4$ and extraction with hot KCl. The residue fused with Na_2CO_3 and $KClO_3$, 3:1. B. Fusion with $NaKSO_4$ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na_2O_2 or NaOH and KNO_3 or NaOH and Na_2O_2. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNI10
Lot Number:	P2-NI686384
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Nickel
Starting Material:	Ni Metal
Starting Material Lot#:	2277 and 2282
Starting Material Purity:	99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL

Density: 1.038 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9971 ± 54 µg/mL**
ICP Assay NIST SRM 3136 Lot Number: 120619

Assay Method #2 **9970 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **9993 ± 33 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.002606	M	Eu	<	0.001100	O	Na		0.004965	O	Se	<	0.067000	M	Zn		0.006578
M	Al	<	0.013000	O	Fe		0.018618	M	Nb	<	0.001100	O	Si		0.010923	M	Zr	<	0.001100
O	As	<	0.067000	M	Ga	<	0.001100	M	Nd	<	0.001100	M	Sm	<	0.001100				
M	Au	<	0.002100	M	Gd	<	0.001100	s	Ni	<		M	Sn	<	0.016000				
M	B	<	0.017000	M	Ge	<	0.004200	M	Os		0.002110	O	Sr	<	0.000940				
M	Ba	<	0.001100	M	Hf	<	0.001100	i	P	<		M	Ta	<	0.001100				
O	Be	<	0.000410	M	Hg		0.014895	M	Pb		0.006578	M	Tb	<	0.001100				
M	Bi	<	0.004200	M	Ho	<	0.001100	M	Pd	<	0.001100	M	Te	<	0.015000				
O	Ca		0.003351	M	In	<	0.001100	M	Pr	<	0.001100	M	Th	<	0.001100				
M	Cd		0.001365	M	Ir		0.004716	M	Pt	<	0.001100	M	Ti	<	0.004200				
M	Ce	<	0.001100	O	K		0.004716	M	Rb	<	0.001100	M	Tl	<	0.001100				
O	Co		0.017377	M	La	<	0.001100	M	Re		0.001737	M	Tm	<	0.001100				
O	Cr	<	0.006700	O	Li	<	0.000140	M	Rh	<	0.006300	M	U	<	0.001100				
M	Cs	<	0.007300	M	Lu	<	0.001100	M	Ru	<	0.019000	M	V	<	0.002100				
M	Cu		0.004096	O	Mg		0.000372	i	S	<		M	W	<	0.006300				
M	Dy	<	0.001100	O	Mn	<	0.001900	M	Sb		0.005833	O	Y	<	0.000540				
M	Er	<	0.001100	M	Mo	<	0.008400	M	Sc	<	0.002100	M	Yb	<	0.001100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H2O)62+

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGV10
Lot Number:	S2-V711005
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Vanadium
Starting Material:	Vanadium Pentoxide
Starting Material Lot#:	1782
Starting Material Purity:	99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL

Density: 1.104 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000110	M	Eu	<	0.000110	O	Na		0.120000	M	Se	<	0.009400	M	Zn	0.009400
O	Al		0.120000	O	Fe		0.460000	M	Nb	<	0.001300	O	Si		0.270000	M	Zr	< 0.002900
M	As	<	0.000210	M	Ga	<	0.009300	M	Nd	<	0.000610	M	Sm	<	0.000110			
M	Au	<	0.004700	M	Gd	<	0.000110	M	Ni		0.012000	M	Sn		0.003900			
M	B		0.051000	M	Ge	<	0.000410	M	Os	<	0.000110	O	Sr		0.007100			
M	Ba		0.003600	M	Hf	<	0.000110	O	P	<	0.034000	M	Ta	<	0.000110			
O	Be	<	0.000560	M	Hg	<	0.000410	M	Pb		0.001400	M	Tb	<	0.000110			
M	Bi	<	0.000210	M	Ho	<	0.000110	M	Pd	<	0.000410	M	Te	<	0.000110			
O	Ca		0.730000	M	In	<	0.000110	M	Pr	<	0.000110	M	Th	<	0.000210			
M	Cd	<	0.000610	M	Ir	<	0.000110	M	Pt	<	0.000110	M	Ti		0.017000			
M	Ce	<	0.000610	M	K		0.052000	M	Rb	<	0.000310	M	Tl	<	0.000110			
M	Co	<	0.001300	M	La	<	0.000410	M	Re		0.001700	M	Tm	<	0.000110			
O	Cr		0.170000	M	Li	<	0.000810	M	Rh	<	0.000110	M	U	<	0.000410			
M	Cs		0.005600	M	Lu	<	0.000110	M	Ru	<	0.000110	s	V	<				
M	Cu	<	0.001300	M	Mg		0.053000	i	S	<		M	W		0.002000			
M	Dy	<	0.000110	M	Mn		0.007900	M	Sb		0.078000	M	Y	<	0.000110			
M	Er	<	0.000110	M	Mo		0.094000	M	Sc	<	0.000410	M	Yb	<	0.000110			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 H2V10O284-

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4, HF, H3PO4 and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in Ni0 or Na2CO3 / KNO3); Oxides (V2O3 - use HCl, V2O4 - use HCl or HNO3, V2O5 - use concentrated acids); Ores (Na2CO3 / KNO3 in Pt0 caution - nitrates attack Pto followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V2O5 above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

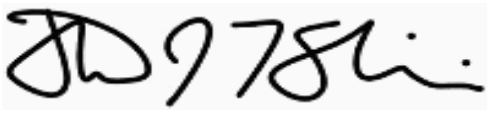
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAL10
Lot Number:	T2-AL716102
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Aluminum
Starting Material:	Aluminum Nitrate Nonahydrate
Starting Material Lot#:	2460
Starting Material Purity:	99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL

Density: 1.087 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10059 ± 40 µg/mL**
ICP Assay NIST SRM 3101a Lot Number: 140903

Assay Method #2 **10044 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10049 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002100	M	Eu	<	0.002100	O	Na		0.352819	M	Se	<	0.005200	M	Zn	0.006018
s	Al	<		O	Fe		0.074714	M	Nb	<	0.000520	O	Si		0.017848	O	Zr	0.004358
M	As		0.008716	O	Ga		0.112072	M	Nd	<	0.000520	M	Sm	<	0.000520			
M	Au	<	0.008400	M	Gd	<	0.001100	O	Ni	<	0.006000	M	Sn		0.000747			
O	B	<	0.014000	M	Ge	<	0.005200	M	Os	<	0.000650	O	Sr		0.000518			
O	Ba		0.012867	M	Hf	<	0.004100	n	P	<		M	Ta	<	0.000520			
O	Be	<	0.000270	M	Hg	<	0.002000	M	Pb		0.002282	M	Tb	<	0.000520			
M	Bi		0.001930	M	Ho	<	0.000520	M	Pd	<	0.000520	M	Te	<	0.001100			
O	Ca		0.076790	M	In	<	0.002100	M	Pr	<	0.000520	M	Th	<	0.000520			
M	Cd	<	0.000520	M	Ir	<	0.000650	M	Pt	<	0.000520	O	Ti		0.001930			
M	Ce	<	0.001100	O	K		0.043583	M	Rb	<	0.000520	M	Tl	<	0.000520			
O	Co	<	0.005400	M	La	<	0.002100	M	Re	<	0.000520	M	Tm	<	0.000520			
O	Cr		0.006018	O	Li		0.000112	M	Rh	<	0.000520	M	U	<	0.000520			
M	Cs		0.000643	M	Lu	<	0.000520	M	Ru	<	0.002000	M	V		0.001286			
O	Cu	<	0.008300	O	Mg		0.068488	i	S	<		M	W	<	0.009800			
M	Dy	<	0.002100	O	Mn		0.000913	M	Sb	<	0.003100	M	Y	<	0.001100			
M	Er	<	0.000520	M	Mo		0.005396	O	Sc	<	0.000950	M	Yb	<	0.000520			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H2O)6+3
Chemical Compatibility -Soluble in HCl, HNO3, v F and v 2SO4. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)4(H2O)21- species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); a- Al2O3 (Na2CO3 fusion in Pt0);
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

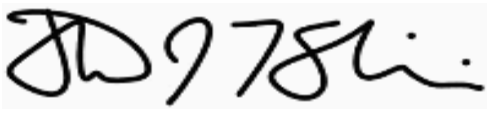
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGK10
Lot Number:	S2-K711973
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Potassium
Starting Material:	KNO3
Starting Material Lot#:	2313
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.024 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9987 ± 24 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **10004 ± 84 µg/mL**
ICP Assay NIST SRM 3141a Lot Number: 140813

Assay Method #3 **10007 ± 45 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001400	M	Eu	<	0.000660	O	Na		0.246220	M	Se	<	0.007900	O	Zn		0.018056
O	Al		0.001592	O	Fe		0.005909	M	Nb	<	0.000660	O	Si		0.011490	O	Zr	<	0.001600
M	As	<	0.005300	M	Ga	<	0.000660	M	Nd	<	0.000660	M	Sm	<	0.000660				
M	Au	<	0.002000	M	Gd	<	0.000660	O	Ni	<	0.004900	M	Sn	<	0.000660				
O	B	<	0.005600	M	Ge	<	0.002000	M	Os	<	0.003300	O	Sr		0.000055				
O	Ba	<	0.000860	M	Hf	<	0.000660	O	P	<	0.032000	M	Ta	<	0.000660				
O	Be	<	0.000082	M	Hg	<	0.002000	M	Pb	<	0.002300	M	Tb	<	0.000660				
M	Bi	<	0.006600	M	Ho	<	0.000660	M	Pd	<	0.000660	M	Te	<	0.017000				
O	Ca		0.031187	M	In	<	0.000660	M	Pr	<	0.000660	M	Th	<	0.000660				
O	Cd	<	0.000450	M	Ir	<	0.000660	M	Pt	<	0.002700	M	Ti	<	0.000660				
M	Ce	<	0.000660	s	K	<		M	Rb		0.476026	M	Tl	<	0.000660				
O	Co	<	0.000780	M	La	<	0.000660	M	Re	<	0.000660	M	Tm	<	0.000660				
O	Cr		0.000541	O	Li	<	0.000084	M	Rh	<	0.000660	M	U	<	0.000660				
M	Cs	<	0.000660	M	Lu	<	0.000660	M	Ru	<	0.000660	O	V	<	0.001100				
M	Cu	<	0.002700	O	Mg		0.006237	O	S		0.027905	M	W	<	0.000660				
M	Dy	<	0.000660	O	Mn		0.000476	M	Sb	<	0.000660	M	Y	<	0.000660				
M	Er	<	0.000660	M	Mo	<	0.000660	O	Sc	<	0.000340	O	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)
Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Avoid use of HClO4 due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO4-.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

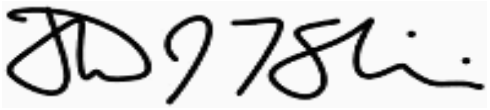
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Certificate of Analysis

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Christiansburg, VA 24073 USA
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMG10
Lot Number:	S2-MG704239
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Magnesium
Starting Material:	Magnesium Metal
Starting Material Lot#:	2168
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL

Density: 1.053 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10022 ± 62 µg/mL**
ICP Assay NIST SRM 3131a Lot Number: 140110

Assay Method #2 **10078 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10033 ± 26 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.002106	M	Eu	<	0.000910	O	Na		0.071075	O	Se	<	0.048000	O	Zn		0.003299
M	Al		0.003553	M	Fe		0.002538	M	Nb	<	0.000460	O	Si	<	0.032000	O	Zr	<	0.002700
M	As	<	0.001400	M	Ga	<	0.000460	M	Nd	<	0.000910	M	Sm	<	0.000460				
M	Au	<	0.001400	M	Gd	<	0.000460	O	Ni	<	0.001600	M	Sn	<	0.002300				
O	B		0.006853	M	Ge	<	0.001400	M	Os	<	0.000460	O	Sr		0.000279				
O	Ba		0.000964	M	Hf	<	0.000460	O	P		0.015230	M	Ta	<	0.000460				
O	Be	<	0.000120	M	Hg	<	0.000460	M	Pb	<	0.000460	M	Tb	<	0.000460				
M	Bi	<	0.000460	M	Ho	<	0.000460	M	Pd	<	0.003200	M	Te	<	0.007300				
O	Ca		0.053306	M	In	<	0.000460	M	Pr	<	0.000460	M	Th	<	0.000460				
O	Cd	<	0.000360	M	Ir	<	0.000460	M	Pt	<	0.001900	O	Ti	<	0.001700				
M	Ce	<	0.002300	M	K		0.048229	M	Rb		0.002411	M	Tl		0.003046				
M	Co	<	0.000910	M	La	<	0.002800	M	Re	<	0.000460	M	Tm	<	0.000460				
M	Cr	<	0.002300	O	Li		0.027922	M	Rh	<	0.000460	M	U	<	0.000460				
M	Cs		0.001040	M	Lu	<	0.000460	M	Ru	<	0.000460	M	V	<	0.000460				
O	Cu	<	0.003000	s	Mg	<		O	S	<	0.190000	M	W	<	0.000460				
M	Dy	<	0.000460	O	Mn		0.015230	M	Sb		0.020814	O	Y	<	0.000720				
M	Er	<	0.000460	M	Mo	<	0.000910	O	Sc	<	0.000480	M	Yb	<	0.000460				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 Mg(H2O)6+2
Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4 avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO3); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCA10
Lot Number:	T2-CA716103
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Calcium
Starting Material:	CaCO3
Starting Material Lot#:	2472
Starting Material Purity:	99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL

Density: 1.039 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10005 ± 45 µg/mL**
ICP Assay NIST SRM 3109a Lot Number: 130213

Assay Method #2 **10005 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10005 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001200	M	Eu	<	0.001200	O	Na		0.006112	M	Se	<	0.024000	M	Zn		0.005362
M	Al		0.065419	O	Fe		0.009115	M	Nb	<	0.001200	O	Si		0.139417	O	Zr	<	0.006700
O	As	<	0.013000	M	Ga	<	0.015000	M	Nd	<	0.020000	M	Sm	<	0.001200				
M	Au	<	0.017000	M	Gd	<	0.004800	O	Ni		0.000793	M	Sn	<	0.003600				
O	B		0.001179	M	Ge	<	0.003600	M	Os	<	0.001200	M	Sr		0.081505				
O	Ba		0.002788	M	Hf	<	0.001200	O	P	<	0.041000	M	Ta	<	0.001200				
O	Be	<	0.000410	M	Hg	<	0.004800	M	Pb		0.001608	M	Tb	<	0.001200				
M	Bi		0.001608	M	Ho	<	0.001200	M	Pd	<	0.001200	M	Te	<	0.003600				
s	Ca	<		M	In	<	0.001200	M	Pr		0.000257	M	Th	<	0.001200				
O	Cd	<	0.001300	M	Ir	<	0.001200	M	Pt	<	0.003600	O	Ti	<	0.001900				
M	Ce		0.001029	O	K		0.009759	M	Rb	<	0.001200	M	Tl	<	0.001200				
O	Co		0.000418	M	La		0.001823	M	Re	<	0.001200	M	Tm	<	0.001200				
O	Cr		0.003324	O	Li	<	0.007300	M	Rh	<	0.001200	M	U		0.002144				
M	Cs		0.007399	M	Lu		0.000128	M	Ru	<	0.001200	M	V		0.001286				
O	Cu	<	0.011000	M	Mg		1.286934	O	S		0.055767	O	W	<	0.024000				
M	Dy	<	0.002400	O	Mn		0.004611	M	Sb	<	0.009600	O	Y		0.000536				
M	Er	<	0.002400	M	Mo		0.003539	O	Sc	<	0.001400	M	Yb	<	0.001200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H2O)6+2
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H2SO4, vF, v3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Ca Containing Samples)Preparation and Solution) -Metal (best dissolved in diluted HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO2). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO3. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na2CO3 followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O212C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

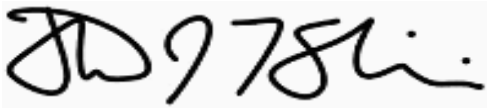
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNA10
Lot Number:	T2-NA717221
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Sodium
Starting Material:	Na2CO3
Starting Material Lot#:	2358 and 2453
Starting Material Purity:	99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL

Density: 1.033 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9974 ± 18 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **9977 ± 34 µg/mL**
ICP Assay NIST SRM 3152a Lot Number: 200413

Assay Method #3 **9987 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.000930	M	Eu	< 0.000930	s	Na	<		M	Se	< 0.003800	O	Zn		0.000138	
M	Al	0.004409	O	Fe	0.002393	M	Nb	< 0.000930		O	Si	0.056696	O	Zr	<	0.003200	
O	As	< 0.023000	M	Ga	< 0.000930	M	Nd	< 0.000930		M	Sm	< 0.000930					
O	Au	< 0.004100	M	Gd	< 0.000930	O	Ni	< 0.003000		M	Sn	< 0.002800					
O	B	0.001385	M	Ge	< 0.004700	M	Os	< 0.000930		O	Sr	0.000251					
M	Ba	0.004031	M	Hf	< 0.000930	O	P	0.010205		M	Ta	< 0.000930					
O	Be	< 0.000130	M	Hg	< 0.000930	M	Pb	< 0.000930		M	Tb	< 0.000930					
M	Bi	< 0.000930	M	Ho	< 0.000930	M	Pd	< 0.000930		M	Te	< 0.001900					
O	Ca	0.176388	M	In	< 0.000930	M	Pr	< 0.000930		M	Th	0.000352					
O	Cd	< 0.000860	M	Ir	< 0.000930	M	Pt	< 0.000930		O	Ti	0.000592					
M	Ce	< 0.001900	O	K	0.302380	M	Rb	< 0.000930		M	Tl	< 0.000930					
O	Co	< 0.001800	O	La	< 0.002100	M	Re	< 0.000930		M	Tm	< 0.000930					
M	Cr	< 0.002800	O	Li	0.000031	M	Rh	< 0.000930		M	U	< 0.000930					
M	Cs	< 0.000930	M	Lu	< 0.000930	M	Ru	< 0.001900		O	V	< 0.001600					
O	Cu	< 0.003900	O	Mg	0.026458	O	S	0.040317		O	W	< 0.028000					
M	Dy	< 0.000930	O	Mn	< 0.000740	M	Sb	< 0.000930		O	Y	< 0.000860					
M	Er	< 0.000930	O	Mo	< 0.003600	O	Sc	< 0.000610		O	Yb	< 0.000250					

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

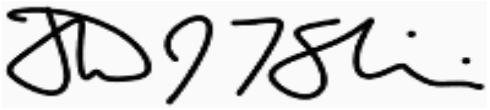
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGU1
Lot Number:	S2-U707914
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Uranium
Starting Material:	Uranyl Nitrate Hexahydrate
Starting Material Lot#:	P2-2322
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL

Density: 1.010 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000270	M	Eu	<	0.000270	M	Na	<	0.011000	M	Se	<	0.009300	M	Zn	0.002358
M	Al	<	0.011000	M	Fe		0.003222	M	Nb	<	0.000270	M	Si	<	0.160000	M	Zr	< 0.001100
M	As	<	0.002400	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270			
M	Au	<	0.000270	M	Gd	<	0.000270	M	Ni	<	0.020000	M	Sn	<	0.011000			
M	B	<	0.000270	M	Ge	<	0.000800	M	Os	<	0.001900	M	Sr	<	0.000270			
M	Ba	<	0.003800	M	Hf	<	0.000270	i	P	<		M	Ta	<	0.000270			
M	Be	<	0.000270	M	Hg	<	0.000540	M	Pb	<	0.002200	M	Tb	<	0.000270			
M	Bi	<	0.000270	M	Ho	<	0.000270	M	Pd	<	0.000540	M	Te	<	0.003800			
M	Ca	<	0.140000	M	In	<	0.000270	M	Pr	<	0.000270	M	Th		0.000129			
M	Cd	<	0.000270	M	Ir	<	0.000270	M	Pt	<	0.000270	M	Ti	<	0.002700			
M	Ce	<	0.000540	O	K	<	0.250000	M	Rb	<	0.000800	M	Tl	<	0.000270			
M	Co	<	0.000800	M	La		0.000117	M	Re	<	0.064000	M	Tm	<	0.000270			
M	Cr		0.000943	M	Li	<	0.003000	M	Rh	<	0.000270	s	U	<				
M	Cs		0.000106	M	Lu	<	0.000270	M	Ru	<	0.000540	M	V	<	0.000540			
M	Cu	<	0.001100	M	Mg	<	0.003000	i	S	<		M	W	<	0.000540			
M	Dy	<	0.000270	M	Mn	<	0.006900	M	Sb	<	0.000270	M	Y	<	0.000270			
M	Er	<	0.000270	M	Mo	<	0.006400	M	Sc	<	0.000540	M	Yb	<	0.000270			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO_2^{2+}(uranyl)
Chemical Compatibility - Soluble in HCl and HNO_3. Avoid H_3PO_4. H_2SO_4 and HF matrices should not be a problem depending upon [U]. Although the UO_2^{2+} ion is distinctly basic, any U^{+4} will precipitate in basic media. UO_2^{2+}salts are generally soluble in water and UO_2^{2+} is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF_4 and UF_6 are water soluble.
Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.
U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO_3); Oxide (Soluble in HNO_3); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO_3. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H_2SO_4.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-2
Lot Number:	T2-MEB719895
Matrix:	3% (v/v) HNO3 tr. HF
Value / Analyte(s):	2.5 µg/mL ea: Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**2.499 ± 0.015 µg/mL**	**Molybdenum, Mo**	**2.500 ± 0.017 µg/mL**

Density: 1.014 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

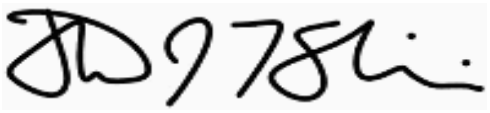
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-3
Lot Number:	T2-MEB719896
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	250 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,

4 µg/mL ea:
Selenium,

2.5 µg/mL ea:

Thorium,	Thallium,
Uranium,	Vanadium,
Zinc,	Manganese,
Cadmium,	Cobalt,
Chromium,	Copper,
Arsenic,	Barium,
Beryllium,	Nickel,
Lead,	Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

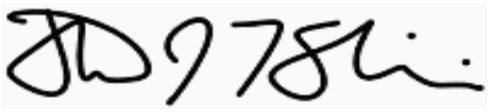
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-6020ICS-0A10
Lot Number:	T2-MEB719898
Matrix:	1.4% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Chloride,
	200 µg/mL ea: Carbon,
	100 µg/mL ea: Calcium, Aluminum, Iron, Potassium, Magnesium, Sodium, Phosphorus, Sulfur,
	2 µg/mL ea: Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**100.0 ± 0.4 µg/mL**	**Calcium, Ca**	**100.0 ± 0.5 µg/mL**
Carbon, C	**200.1 ± 0.5 µg/mL**	**Chloride, Cl**	**1 000 ± 5 µg/mL**
Iron, Fe	**100.0 ± 0.5 µg/mL**	**Magnesium, Mg**	**100.0 ± 0.5 µg/mL**
Molybdenum, Mo	**2.001 ± 0.014 µg/mL**	**Phosphorus, P**	**100.0 ± 0.6 µg/mL**
Potassium, K	**100.0 ± 0.5 µg/mL**	**Sodium, Na**	**100.0 ± 0.5 µg/mL**
Sulfur, S	**100.0 ± 0.5 µg/mL**	**Titanium, Ti**	**2.001 ± 0.015 µg/mL**

Density: 1.009 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

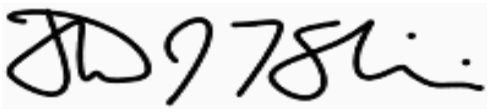
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1205

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-01 D	SDG:	23A0134
Sampled:	01/06/23 08:28	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-133
% Solids:	59.97	Preparation:	Plumb 1981	Analyzed:	01/14/23 15:52
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.5112 g Wet / 0.5112 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.39	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1188

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-02 D	SDG:	23A0134
Sampled:	01/06/23 09:36	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-165
% Solids:	50.63	Preparation:	Plumb 1981	Analyzed:	01/14/23 18:24
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.508 g Wet / 0.508 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.81	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1179

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-03 D	SDG:	23A0134
Sampled:	01/06/23 09:52	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-173
% Solids:	50.30	Preparation:	Plumb 1981	Analyzed:	01/14/23 18:54
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.5201 g Wet / 0.5201 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.04	1	0.02	0.02	

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1242

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-04 D	SDG:	23A0134
Sampled:	01/06/23 11:04	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-178
% Solids:	49.56	Preparation:	Plumb 1981	Analyzed:	01/14/23 19:25
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.539 g Wet / 0.539 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.32	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1173

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-05 D	SDG:	23A0134
Sampled:	01/06/23 11:22	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-185
% Solids:	47.11	Preparation:	Plumb 1981	Analyzed:	01/14/23 19:55
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.5591 g Wet / 0.5591 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.90	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1160

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-06 D	SDG:	23A0134
Sampled:	01/06/23 11:41	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-190
% Solids:	39.29	Preparation:	Plumb 1981	Analyzed:	01/14/23 20:26
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.5413 g Wet / 0.5413 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.99	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1152

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-07 D	SDG:	23A0134
Sampled:	01/06/23 12:29	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-197
% Solids:	45.31	Preparation:	Plumb 1981	Analyzed:	01/14/23 20:57
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.5177 g Wet / 0.5177 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.21	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1131

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-08 D	SDG:	23A0134
Sampled:	01/06/23 12:43	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-202
% Solids:	58.42	Preparation:	Plumb 1981	Analyzed:	01/14/23 21:27
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.5506 g Wet / 0.5506 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.66	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1129

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-09 D	SDG:	23A0134
Sampled:	01/06/23 12:57	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-209
% Solids:	47.82	Preparation:	Plumb 1981	Analyzed:	01/14/23 21:58
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.518 g Wet / 0.518 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.00	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1124

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-10 D	SDG:	23A0134
Sampled:	01/06/23 13:15	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-229
% Solids:	55.37	Preparation:	Plumb 1981	Analyzed:	01/14/23 23:29
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.5333 g Wet / 0.5333 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.61	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1123

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-11 D	SDG:	23A0134
Sampled:	01/06/23 13:29	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-236
% Solids:	54.10	Preparation:	Plumb 1981	Analyzed:	01/15/23 00:00
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.5377 g Wet / 0.5377 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.12	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1116

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-12 D	SDG:	23A0134
Sampled:	01/06/23 13:44	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-242
% Solids:	59.12	Preparation:	Plumb 1981	Analyzed:	01/15/23 00:30
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.5685 g Wet / 0.5685 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.89	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-IT1210

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-13 D	SDG:	23A0134
Sampled:	01/06/23 14:12	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-249
% Solids:	57.00	Preparation:	Plumb 1981	Analyzed:	01/15/23 01:01
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.5309 g Wet / 0.5309 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.95	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-IT1194

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-14 D	SDG:	23A0134
Sampled:	01/06/23 14:41	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-255
% Solids:	71.19	Preparation:	Plumb 1981	Analyzed:	01/15/23 01:31
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.5912 g Wet / 0.5912 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	0.34	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1249

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-15 D	SDG:	23A0134
Sampled:	01/06/23 13:46	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-259
% Solids:	53.23	Preparation:	Plumb 1981	Analyzed:	01/15/23 02:02
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.5815 g Wet / 0.5815 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.98	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1077

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0134-16 C	SDG:	23A0134
Sampled:	01/06/23 15:10	Prepared:	01/12/23 11:45	File ID:	CubeData_01162023@0718-266
% Solids:	75.86	Preparation:	Plumb 1981	Analyzed:	01/15/23 02:32
Batch:	BLA0255	Sequence:	SLA0114	Initial/Final:	0.5573 g Wet / 0.5573 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	0.30	1	0.02	0.02	

PREPARATION BATCH SUMMARY

EPA 9060A m

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Batch: BLA0255 Batch Matrix: Solid Preparation: Plumb 1981

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1205	23A0134-01	eData_01162023@0718-	01/12/23 11:45	
LDW23-SS1188	23A0134-02	eData_01162023@0718-	01/12/23 11:45	
LDW23-SS1179	23A0134-03	eData_01162023@0718-	01/12/23 11:45	
LDW23-SS1242	23A0134-04	eData_01162023@0718-	01/12/23 11:45	
LDW23-SS1173	23A0134-05	eData_01162023@0718-	01/12/23 11:45	
LDW23-SS1160	23A0134-06	eData_01162023@0718-	01/12/23 11:45	
LDW23-SS1152	23A0134-07	eData_01162023@0718-	01/12/23 11:45	
LDW23-SS1131	23A0134-08	eData_01162023@0718-	01/12/23 11:45	
LDW23-SS1129	23A0134-09	eData_01162023@0718-	01/12/23 11:45	
LDW23-SS1124	23A0134-10	eData_01162023@0718-	01/12/23 11:45	
LDW23-SS1123	23A0134-11	eData_01162023@0718-	01/12/23 11:45	
LDW23-SS1116	23A0134-12	eData_01162023@0718-	01/12/23 11:45	
LDW23-IT1210	23A0134-13	eData_01162023@0718-	01/12/23 11:45	
LDW23-IT1194	23A0134-14	eData_01162023@0718-	01/12/23 11:45	
LDW23-SC1249	23A0134-15	eData_01162023@0718-	01/12/23 11:45	
LDW23-SC1077	23A0134-16	eData_01162023@0718-	01/12/23 11:45	
Blank	BLA0255-BLK1	eData_01162023@0718-	01/12/23 11:45	
LCS	BLA0255-BS1	eData_01162023@0718-	01/12/23 11:45	
LDW23-SS1205	BLA0255-DUP1	eData_01162023@0718-	01/12/23 11:45	
MRL Check	BLA0255-MRL1	eData_01162023@0718-	01/12/23 11:45	
LDW23-SS1205	BLA0255-MS1	eData_01162023@0718-	01/12/23 11:45	
Reference	BLA0255-SRM1	eData_01162023@0718-	01/12/23 11:45	

Form I

METHOD BLANK DATA SHEET

EPA 9060A m

TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0134

Client: Anchor QEA, LLC | Project: AOC5 MR Phase 1

Batch: BLA0255 | Laboratory ID: BLA0255-BLK1 | Prepared: 01/12/23 11:45

Matrix: Solid | Preparation: Plumb 1981 | Analyzed: 01/14/23 14:20

Sequence: SLA0114 | Calibration: FD00070 | Instrument: TOC Cube

CAS NO.	Analyte	Concentration (% wet)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	ND	1	0.02	0.02	U

LCS / LCS DUPLICATE RECOVERY

EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	01/14/23 14:51
Batch:	BLA0255	Laboratory ID:	BLA0255-BS1
Preparation:	Plumb 1981	Sequence Name:	LCS
Initial/Final:	0.0216 g / 0.0216 g		

COMPOUND	SPIKE ADDED (% wet)	LCS CONCENTRATION (% wet)	Q	LCS % REC. #	QC LIMITS REC.
Total Organic Carbon	44.4	45.4		102	80 - 120

* Indicates values outside of QC limits

DUPLICATES

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0255-DUP1
Batch: BLA0255
Lab Source ID: 23A0134-01
Preparation: Plumb 1981
Initial/Final: 0.5018 g / 0.5018 g
Source Sample Name: LDW23-SS1205
% Solids: 59.97

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Organic Carbon	20	1.39	1.27	9.00	

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

MS / MS DUPLICATE RECOVERY
EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	01/14/23 17:54
Batch:	BLA0255	Laboratory ID:	BLA0255-MS1
Preparation:	Plumb 1981	Sequence Name:	Matrix Spike
Initial/Final:	0.5137 g / 0.5137 g	Source Sample:	LDW23-SS1205

COMPOUND	SPIKE ADDED (% dry)	SAMPLE CONCENTRATION (% dry)	Q	MS CONCENTRATION (% dry)	Q	MS % REC. #	QC LIMITS REC.
Total Organic Carbon	1.23	1.39		2.62		100	75 - 125

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SKD0371
Instrument: TOC Cube
Calibration: FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SKD0371-CAL1	CubeData_04272022@1136-001	NA	04/26/22 12:30
Cal Standard	SKD0371-CAL2	CubeData_04272022@1136-002	NA	04/26/22 13:00
Cal Standard	SKD0371-CAL3	CubeData_04272022@1136-003	NA	04/26/22 13:30
Cal Standard	SKD0371-CAL4	CubeData_04272022@1136-004	NA	04/26/22 14:00
Cal Standard	SKD0371-CAL5	CubeData_04272022@1136-005	NA	04/26/22 14:30
Cal Standard	SKD0371-CAL6	CubeData_04272022@1136-006	NA	04/26/22 15:00
Cal Standard	SKD0371-CAL7	CubeData_04272022@1136-007	NA	04/26/22 15:30
Cal Standard	SKD0371-CAL8	CubeData_04272022@1136-008	NA	04/26/22 16:00
Cal Standard	SKD0371-CAL9	CubeData_04272022@1136-009	NA	04/26/22 16:30
Cal Standard	SKD0371-CALA	CubeData_04272022@1136-010	NA	04/26/22 17:00
Cal Standard	SKD0371-CALB	CubeData_04272022@1136-011	NA	04/26/22 17:30
Cal Standard	SKD0371-CALC	CubeData_04272022@1136-012	NA	04/26/22 18:00
Cal Standard	SKD0371-CALD	CubeData_04272022@1136-013	NA	04/26/22 18:30
Cal Standard	SKD0371-CALE	CubeData_04272022@1136-014	NA	04/26/22 19:00
Cal Standard	SKD0371-CALF	CubeData_04272022@1136-015	NA	04/26/22 19:31
Cal Standard	SKD0371-CALG	CubeData_04272022@1136-016	NA	04/26/22 20:01
Cal Standard	SKD0371-CALH	CubeData_04272022@1136-017	NA	04/26/22 20:31
Cal Standard	SKD0371-CALI	CubeData_04272022@1136-018	NA	04/26/22 21:01
Cal Standard	SKD0371-CALJ	CubeData_04272022@1136-019	NA	04/26/22 21:31
Cal Standard	SKD0371-CALK	CubeData_04272022@1136-020	NA	04/26/22 22:01
Initial Cal Check	SKD0371-ICV1	CubeData_04272022@1136-027	NA	04/27/22 02:03
Initial Cal Blank	SKD0371-ICB1	CubeData_04272022@1136-028	NA	04/27/22 02:33
Cal Standard	SKD0371-CALL	CubeData_04272022@1136-021	NA	04/27/22 11:08
Cal Standard	SKD0371-CALM	CubeData_04272022@1136-022	NA	04/27/22 11:08
Cal Standard	SKD0371-CALN	CubeData_04272022@1136-023	NA	04/27/22 11:09
Cal Standard	SKD0371-CALO	CubeData_04272022@1136-024	NA	04/27/22 11:09

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0114	Instrument:	TOC Cube
		Calibration:	FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLA0114-ICV1	CubeData_01162023@0718-019	NA	01/12/23 09:29
Initial Cal Blank	SLA0114-ICB1	CubeData_01162023@0718-027	NA	01/12/23 10:00
Calibration Check	SLA0114-CCV1	CubeData_01162023@0718-092	NA	01/12/23 15:34
Calibration Blank	SLA0114-CCB1	CubeData_01162023@0718-099	NA	01/12/23 16:04
Calibration Check	SLA0114-CCV2	CubeData_01162023@0718-172	NA	01/12/23 21:40
Calibration Blank	SLA0114-CCB2	CubeData_01162023@0718-179	NA	01/12/23 22:11
Calibration Check	SLA0114-CCV3	CubeData_01162023@0718-248	NA	01/13/23 03:47
Calibration Blank	SLA0114-CCB3	CubeData_01162023@0718-254	NA	01/13/23 04:18
Calibration Check	SLA0114-CCV4	CubeData_01162023@0718-286	NA	01/13/23 09:54
Calibration Blank	SLA0114-CCB4	CubeData_01162023@0718-287	NA	01/13/23 10:24
Calibration Check	SLA0114-CCV5	CubeData_01162023@0718-298	NA	01/13/23 16:00
Calibration Blank	SLA0114-CCB5	CubeData_01162023@0718-299	NA	01/13/23 16:30
Calibration Check	SLA0114-CCV6	CubeData_01162023@0718-310	NA	01/13/23 22:06
Calibration Blank	SLA0114-CCB6	CubeData_01162023@0718-311	NA	01/13/23 22:37
Calibration Check	SLA0114-CCV7	CubeData_01162023@0718-322	NA	01/14/23 04:13
Calibration Blank	SLA0114-CCB7	CubeData_01162023@0718-323	NA	01/14/23 04:44
Calibration Check	SLA0114-CCV8	CubeData_01162023@0718-061	NA	01/14/23 10:18
Calibration Blank	SLA0114-CCB8	CubeData_01162023@0718-068	NA	01/14/23 10:48
MRL Check	BLA0255-MRL1	CubeData_01162023@0718-105	Solid	01/14/23 13:50
Blank	BLA0255-BLK1	CubeData_01162023@0718-112	Solid	01/14/23 14:20
LCS	BLA0255-BS1	CubeData_01162023@0718-118	Solid	01/14/23 14:51
Reference	BLA0255-SRM1	CubeData_01162023@0718-126	Solid	01/14/23 15:21
LDW23-SS1205	23A0134-01	CubeData_01162023@0718-133	Solid	01/14/23 15:52
Calibration Check	SLA0114-CCV9	CubeData_01162023@0718-138	NA	01/14/23 16:22
Calibration Blank	SLA0114-CCB9	CubeData_01162023@0718-145	NA	01/14/23 16:53
LDW23-SS1205	BLA0255-DUP1	CubeData_01162023@0718-151	Solid	01/14/23 17:23
LDW23-SS1205	BLA0255-MS1	CubeData_01162023@0718-159	Solid	01/14/23 17:54
LDW23-SS1188	23A0134-02	CubeData_01162023@0718-165	Solid	01/14/23 18:24
LDW23-SS1179	23A0134-03	CubeData_01162023@0718-173	Solid	01/14/23 18:54

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

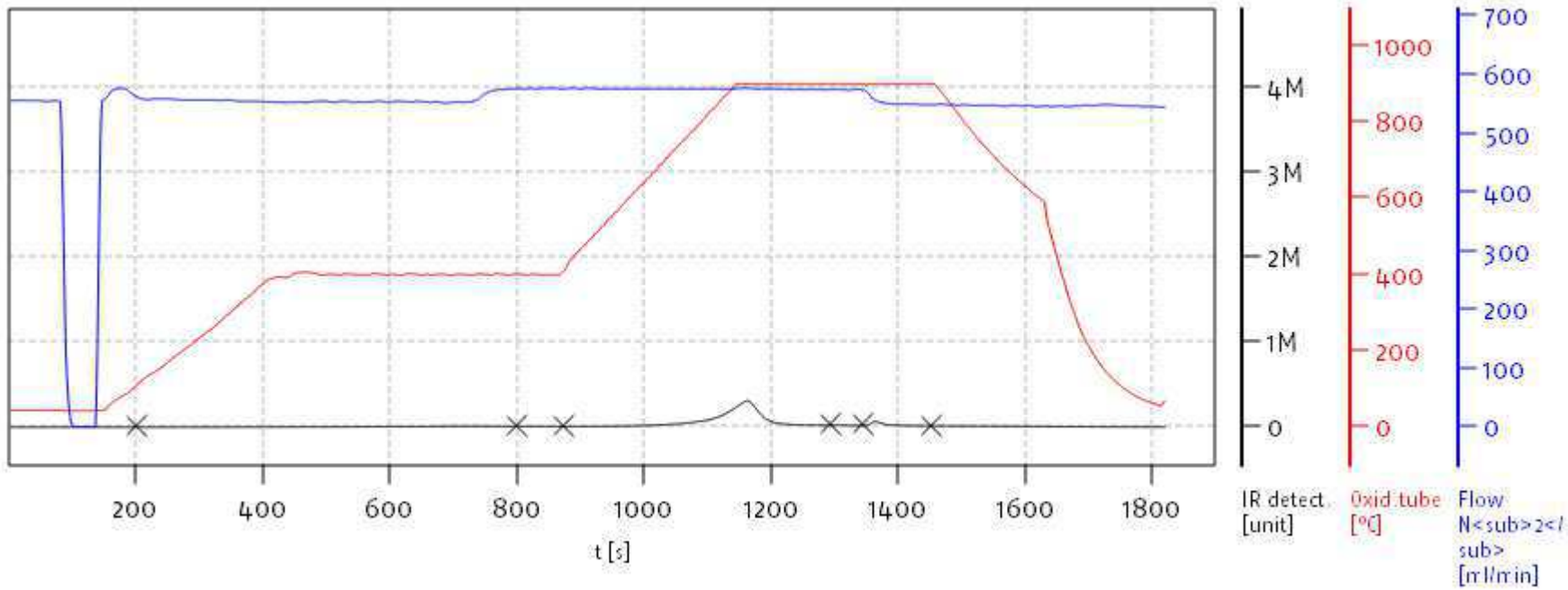
Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLA0114

SDG: 23A0134
Project: AOC5 MR Phase 1
Instrument: TOC Cube
Calibration: FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SS1242	23A0134-04	CubeData_01162023@0718-178	Solid	01/14/23 19:25
LDW23-SS1173	23A0134-05	CubeData_01162023@0718-185	Solid	01/14/23 19:55
LDW23-SS1160	23A0134-06	CubeData_01162023@0718-190	Solid	01/14/23 20:26
LDW23-SS1152	23A0134-07	CubeData_01162023@0718-197	Solid	01/14/23 20:57
LDW23-SS1131	23A0134-08	CubeData_01162023@0718-202	Solid	01/14/23 21:27
LDW23-SS1129	23A0134-09	CubeData_01162023@0718-209	Solid	01/14/23 21:58
Calibration Check	SLA0114-CCVA	CubeData_01162023@0718-217	NA	01/14/23 22:28
Calibration Blank	SLA0114-CCBA	CubeData_01162023@0718-223	NA	01/14/23 22:59
LDW23-SS1124	23A0134-10	CubeData_01162023@0718-229	Solid	01/14/23 23:29
LDW23-SS1123	23A0134-11	CubeData_01162023@0718-236	Solid	01/15/23 00:00
LDW23-SS1116	23A0134-12	CubeData_01162023@0718-242	Solid	01/15/23 00:30
LDW23-IT1210	23A0134-13	CubeData_01162023@0718-249	Solid	01/15/23 01:01
LDW23-IT1194	23A0134-14	CubeData_01162023@0718-255	Solid	01/15/23 01:31
LDW23-SC1249	23A0134-15	CubeData_01162023@0718-259	Solid	01/15/23 02:02
LDW23-SC1077	23A0134-16	CubeData_01162023@0718-266	Solid	01/15/23 02:32
Calibration Check	SLA0114-CCVB	CubeData_01162023@0718-273	NA	01/15/23 03:02
Calibration Blank	SLA0114-CCBB	CubeData_01162023@0718-279	NA	01/15/23 03:33

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
1	1	BLANK	1.00		CARBON	1/ 12/2023 7:58 AM	bl	0.000	100 863	0.000	0.000	107 224	990 942	0.000	0.000	1.0000	1.0000



Name:

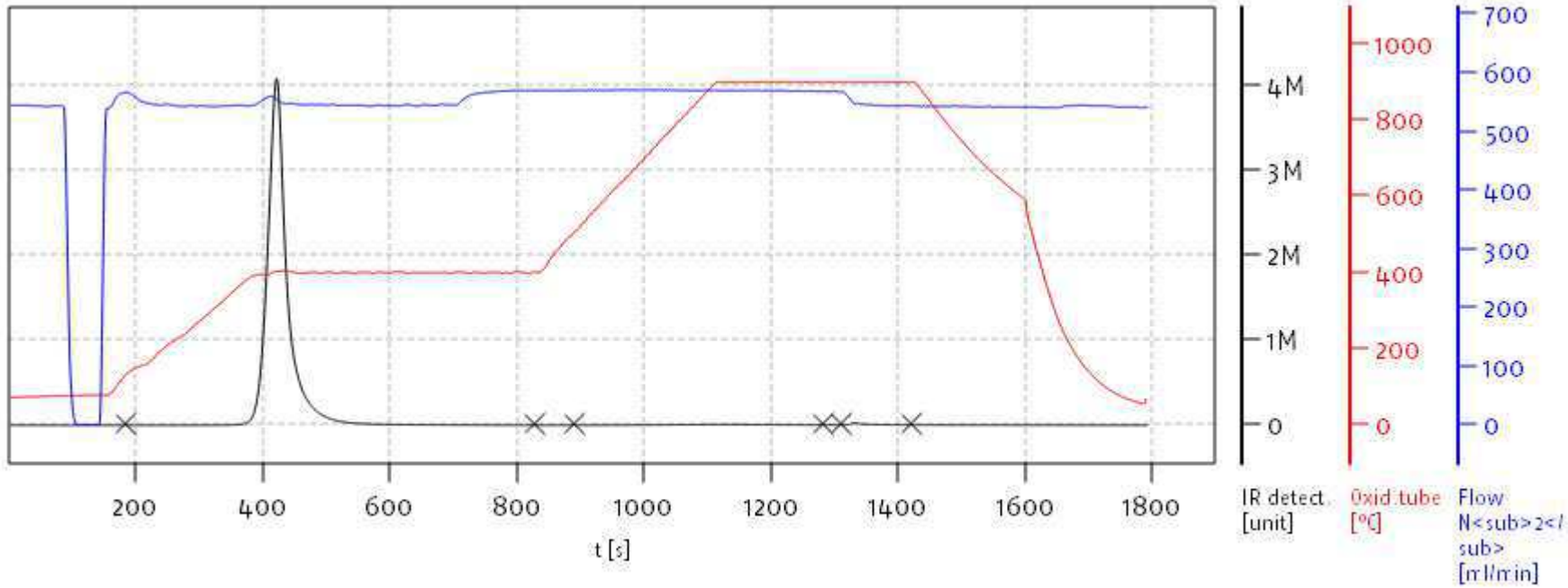
Access: soliTOC superuser

Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
2	2	Dfactor	18.70		CARBON	1/12/2023 8:29 AM	bl	44.505	5 453 525	44.792	0.060	33 724	61 146	44.446	0.287	0.9893	1.0000



Name:

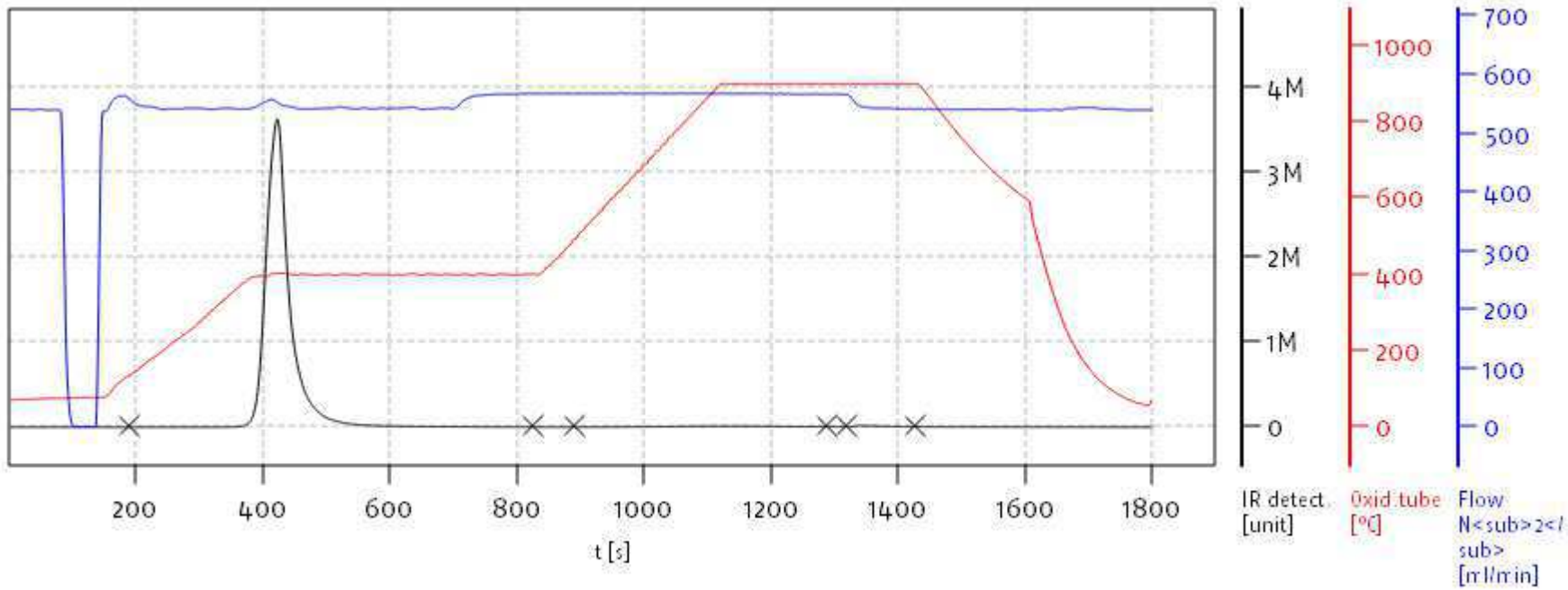
Access: soliTOC superuser

Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
3	3	Dfactor	20.00		CARBON	1/12/2023 8:59 AM	bl	44.533	5 795 880	45.074	0.088	37 846	96 392	44.446	0.541	0.9953	1.0000



Name:

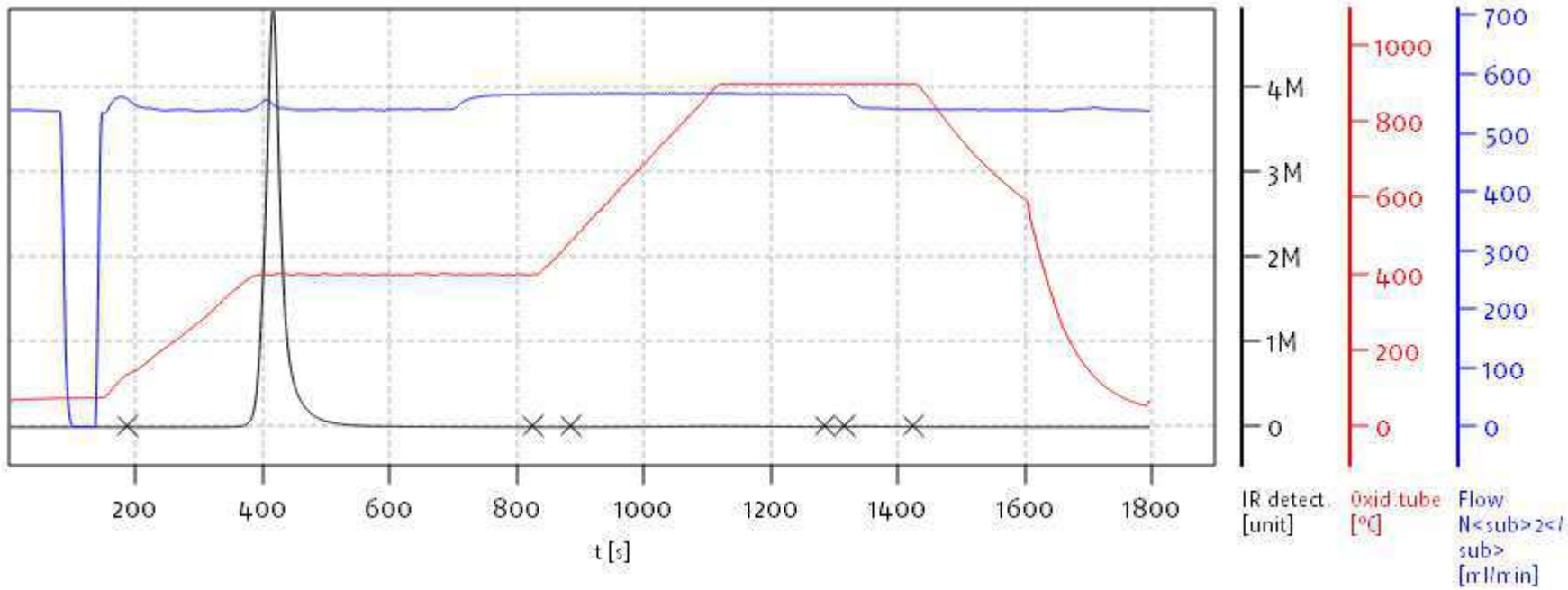
Access: soliTOC superuser

Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
4	4	SLA0114-ICV1	19.00		CARBON	1/12/2023 9:29 AM	bl	46.106	5 729 283	46.552	0.000	22 900	81 328	46.106	0.446	0.9923	1.0000



Name:

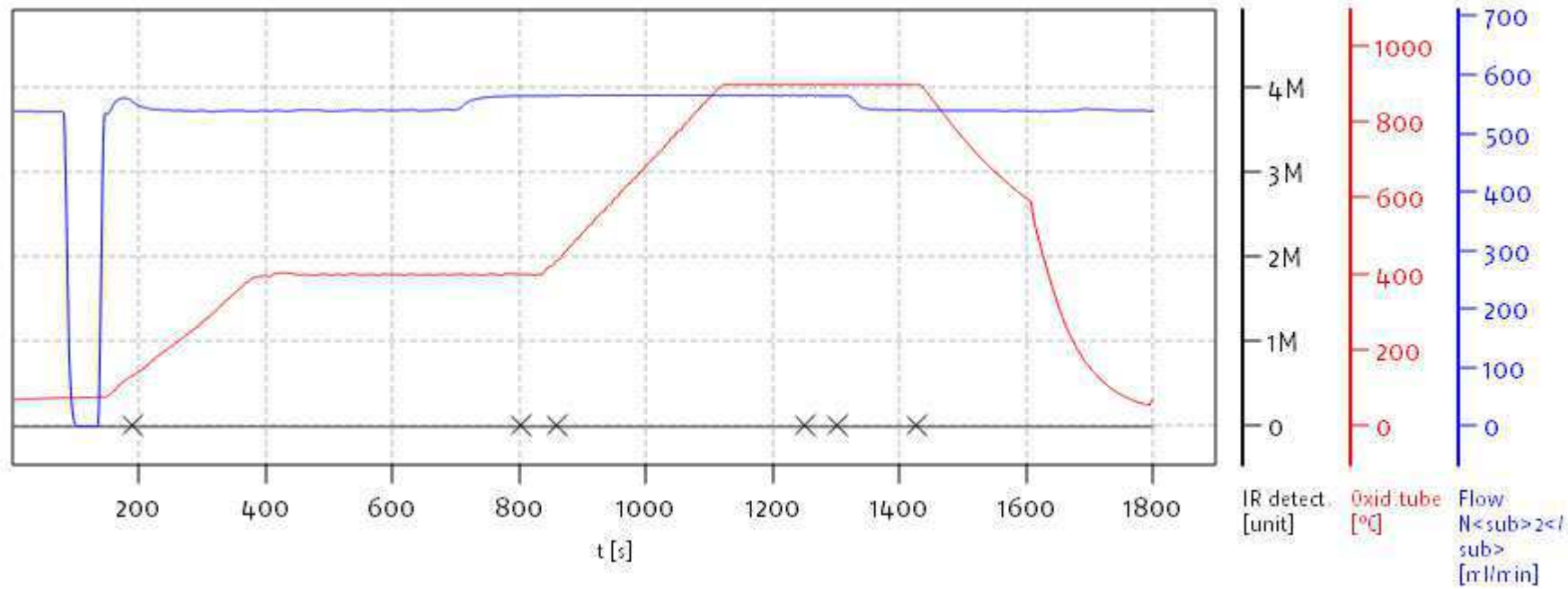
Access: soliTOC superuser

Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
5	5	SLA0114-ICB1	512.60		CARBON	1/12/2023 10:00 AM	bl,C3u,C2u	0.000	6 433	0.000	0.000	704	853	0.000	0.000	0.9923	1.0000



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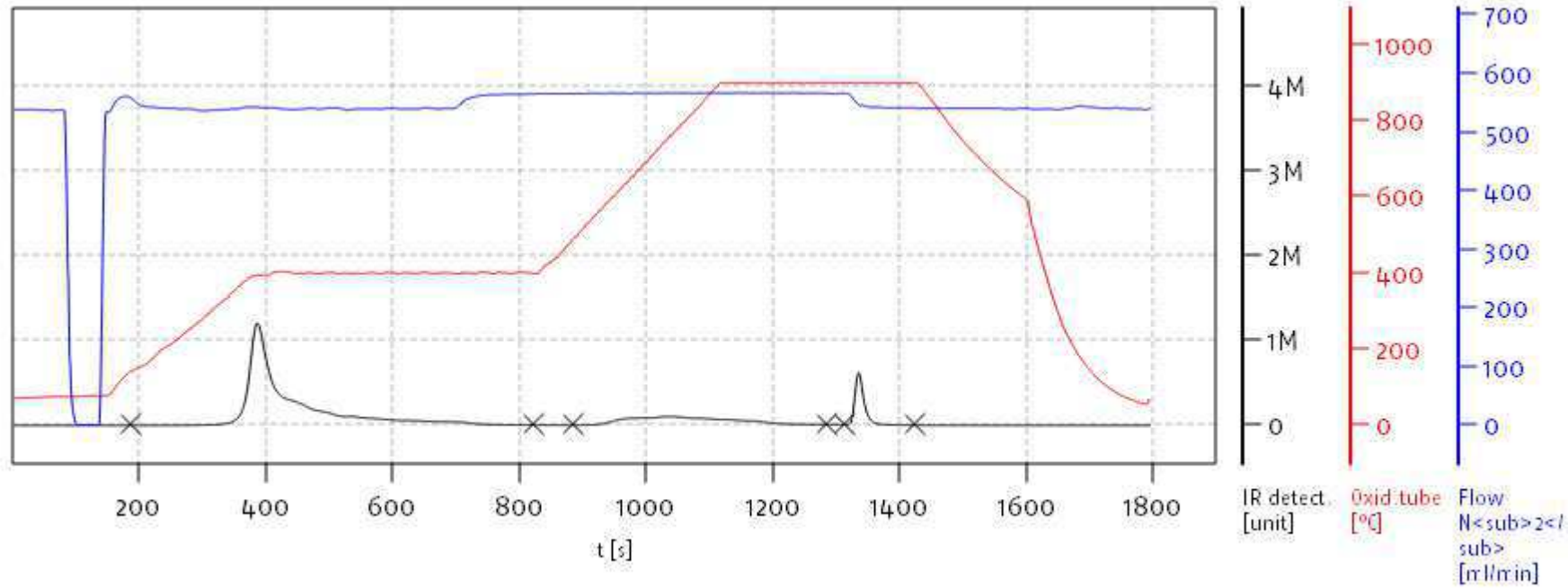
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
6	6	BLA0159-DUP2	543.70		CARBON	1/12/2023 10:30 AM	bl	0.932	2 947 860	1.150	0.107	400 972	791 348	0.825	0.218	0.9923	1.0000



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Serial No: 0300.181017
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Soli TOC Cube, Carbon
Balance: BAL3
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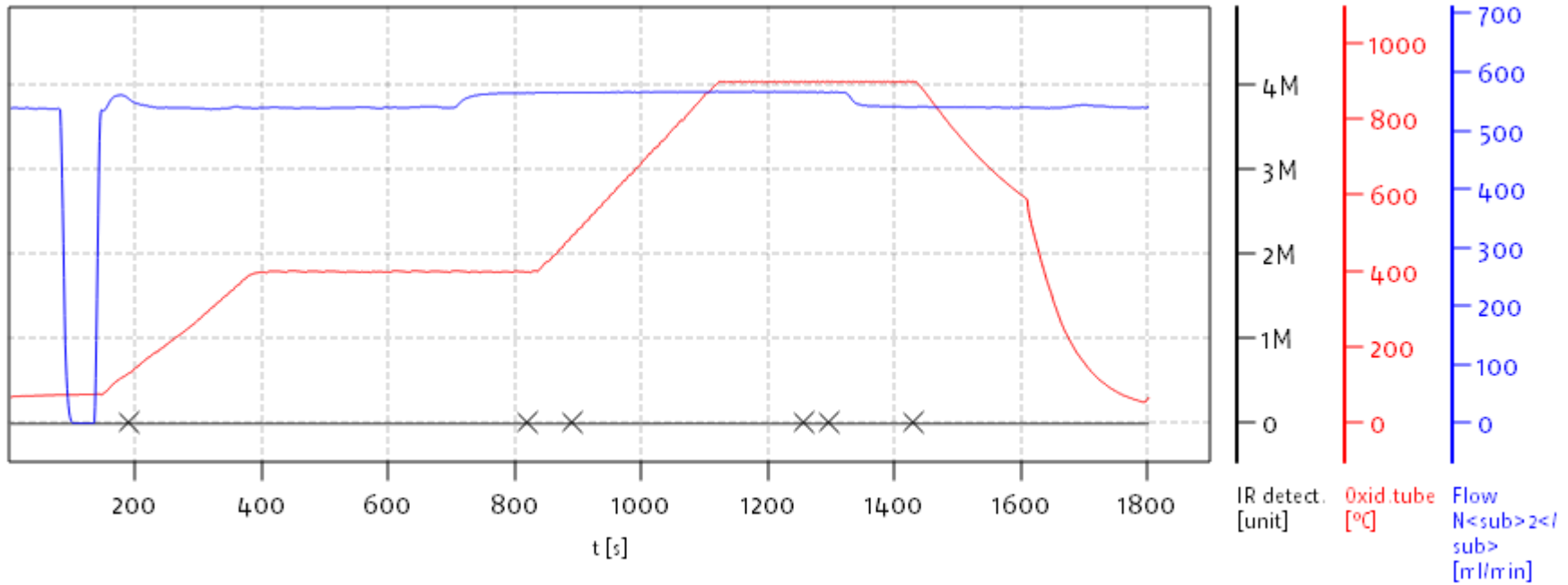
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
7	7	BLA0241-BLK1	508.50		CARBON	1/12/2023 11:00 AM	bl,C2u	0.000	4 400	0.000	0.000	503	5 418	0.000	0.000	0.9923	1.0000



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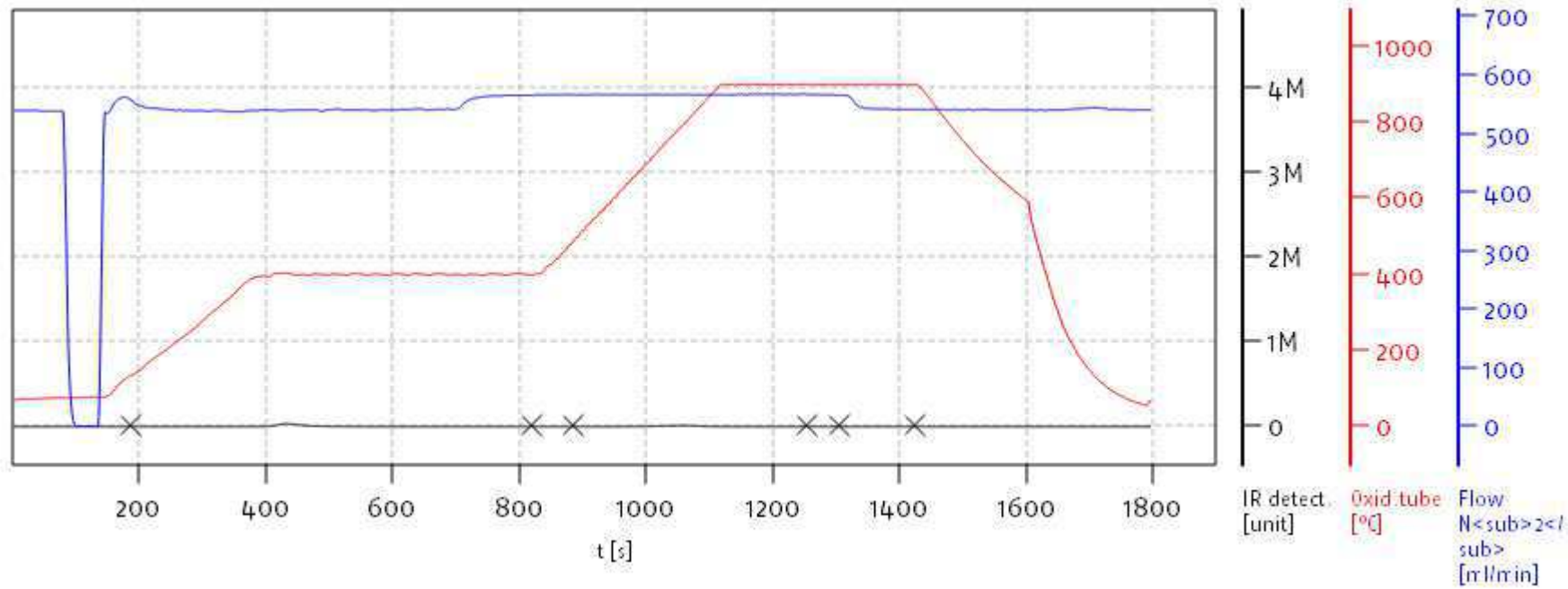
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
8	8	BLA0241-MRL1	506.30		CARBON	1/12/2023 11:31 AM	bl,C2u	0.011	62 656	0.013	0.000	541	34 112	0.011	0.002	0.9923	1.0000



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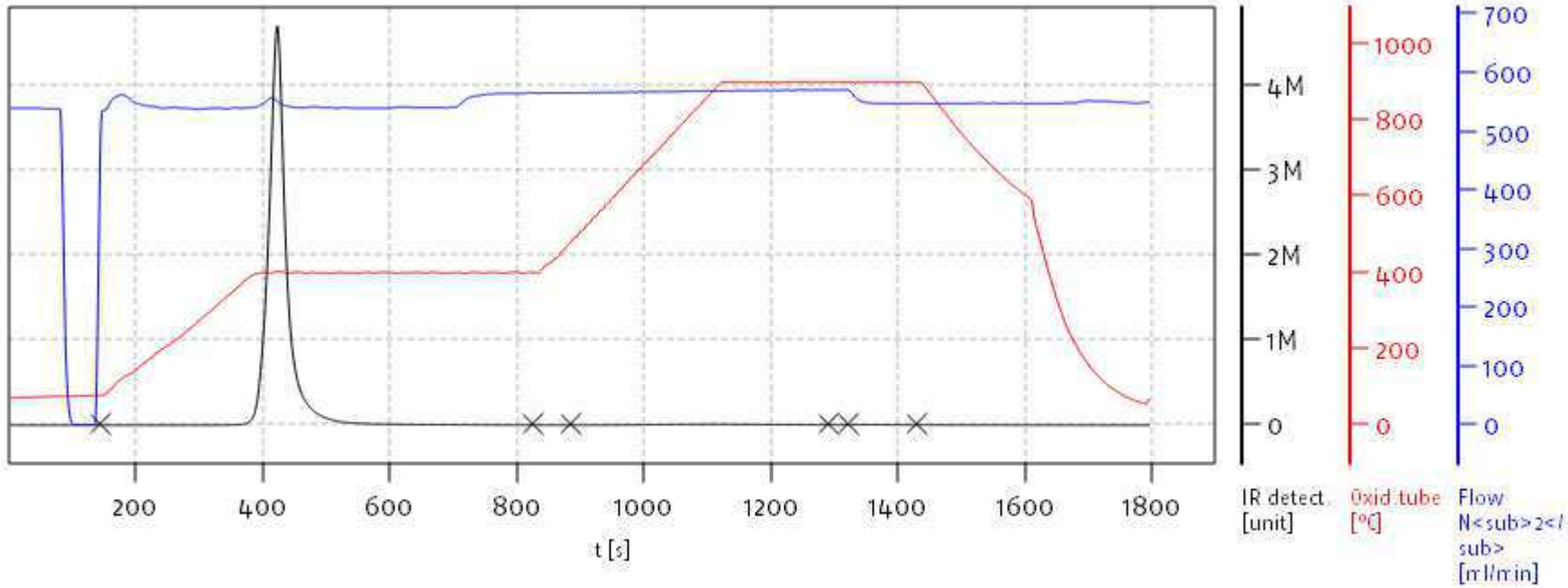
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
9	9	BLA0241-BS1	19.10		CARBON	1/12/2023 12:01 PM	bl	46.071	5 754 952	46.564	0.000	18 701	87 432	46.071	0.494	0.9923	1.0000



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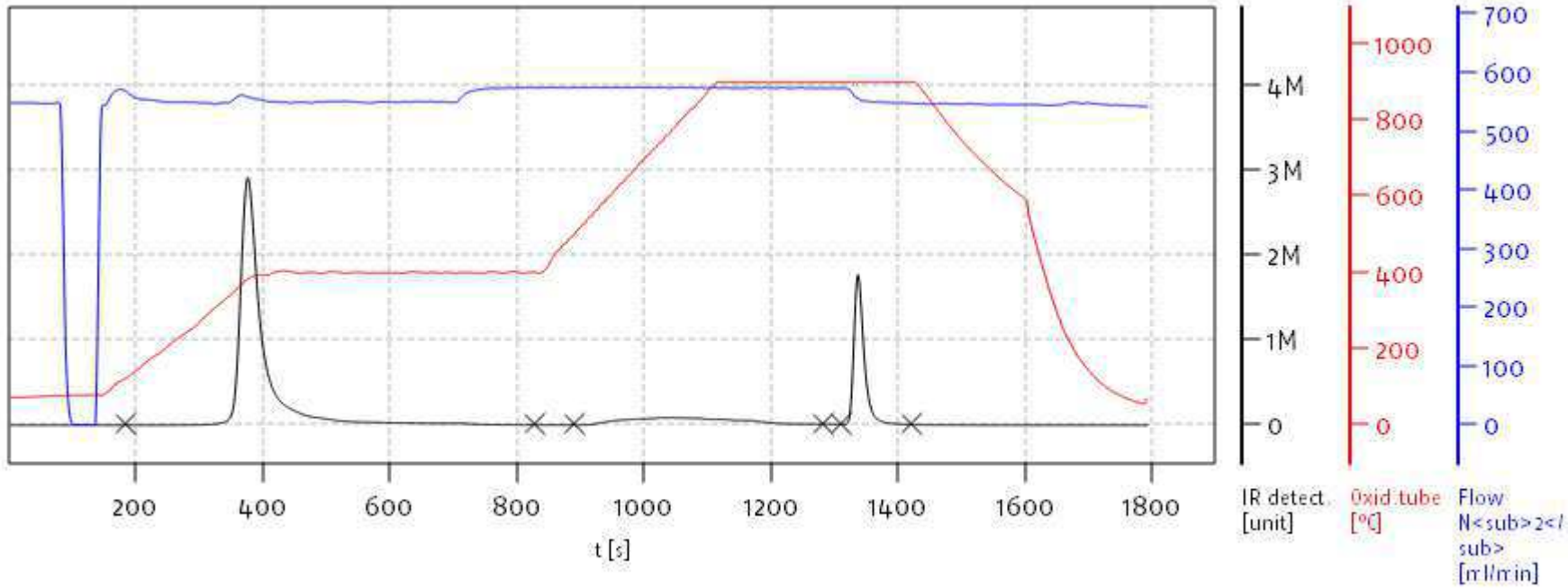
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
10	10	BLA0241-SRM1	286.30		CARBON	1/12/2023 12:31 PM	bl	2.985	4 353 035	3.362	0.664	1 253 876	723 650	2.321	0.377	0.9923	1.0000



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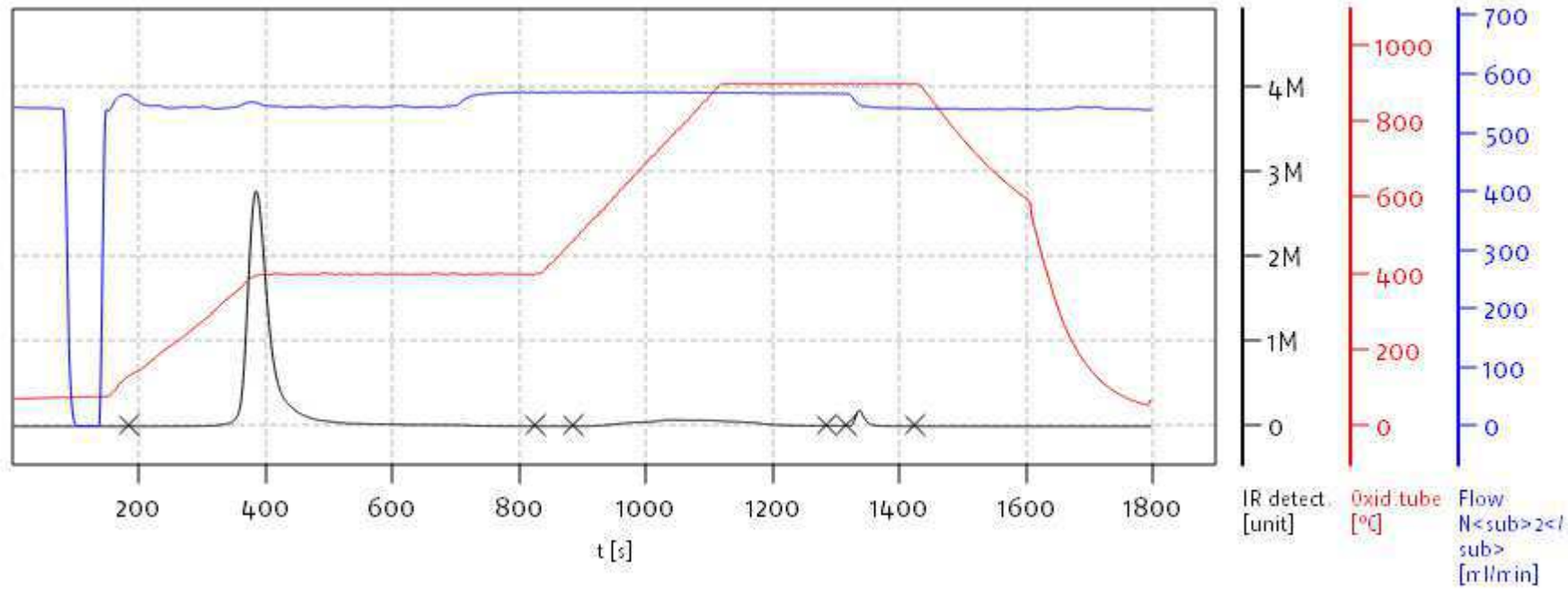
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
11	11	23A0133-01	504.20		CARBON	1/12/2023 1:02 PM	bl	1.355	4 374 193	1.524	0.031	126 469	575 235	1.325	0.168	0.9923	1.0000



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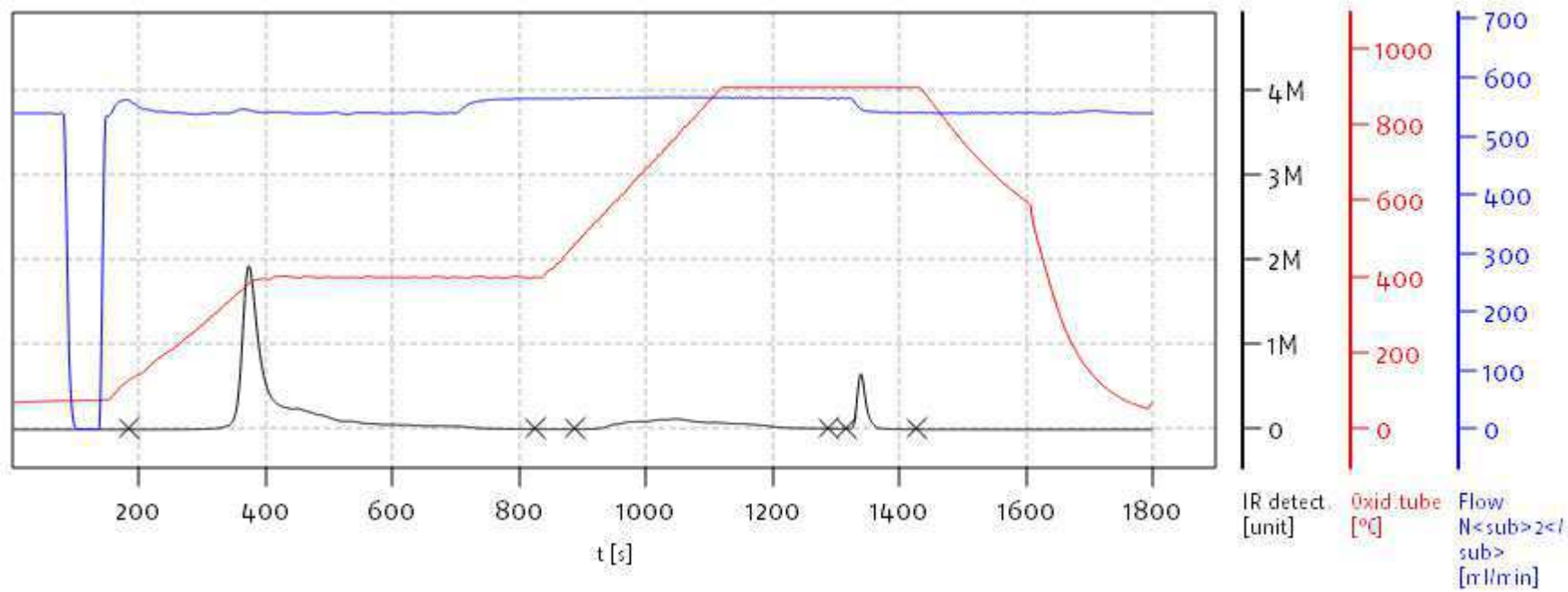
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
12	12	BLA0241-DUP1	510.30		CARBON	1/12/2023 1:32 PM	bl	1.198	3 614 994	1.462	0.117	413 439	899 698	1.080	0.265	0.9923	1.0000



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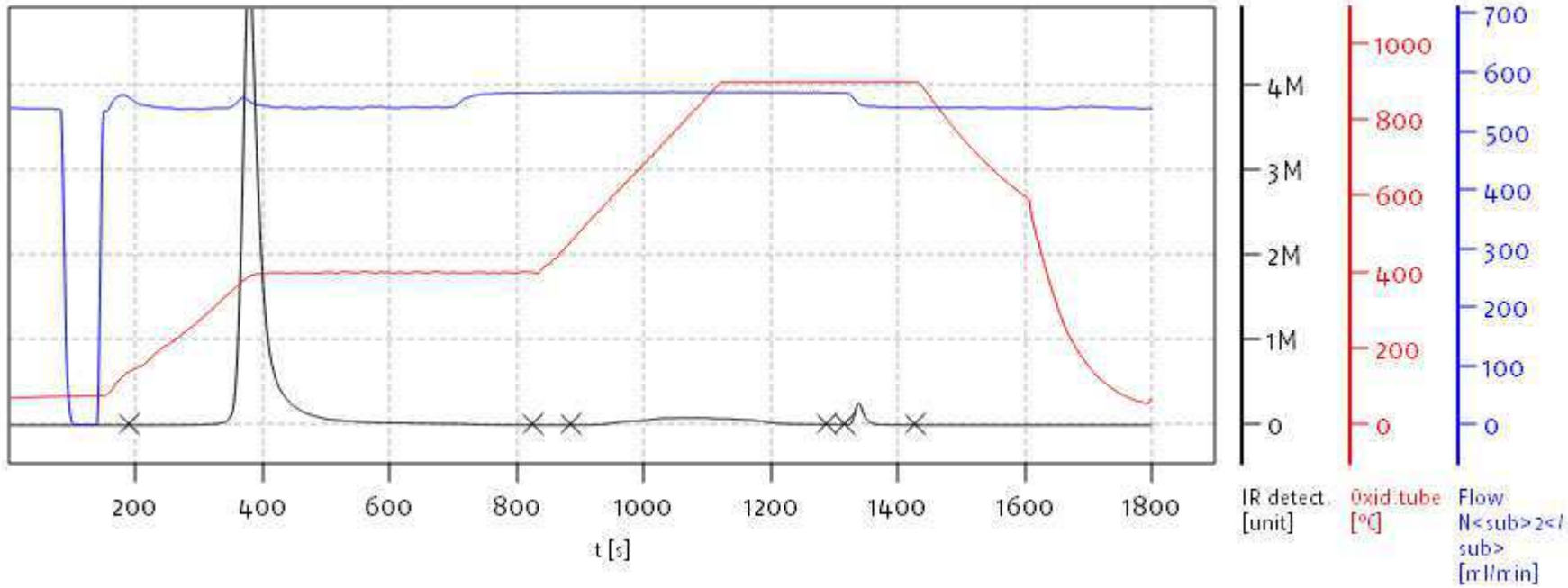
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
13	13	BLA0241-MS1	505.70	0.0091	CARBON	1/12/2023 2:02 PM	bl	2.152	6 965 909	2.353	0.045	172 120	680 685	2.108	0.200	0.9923	1.0000



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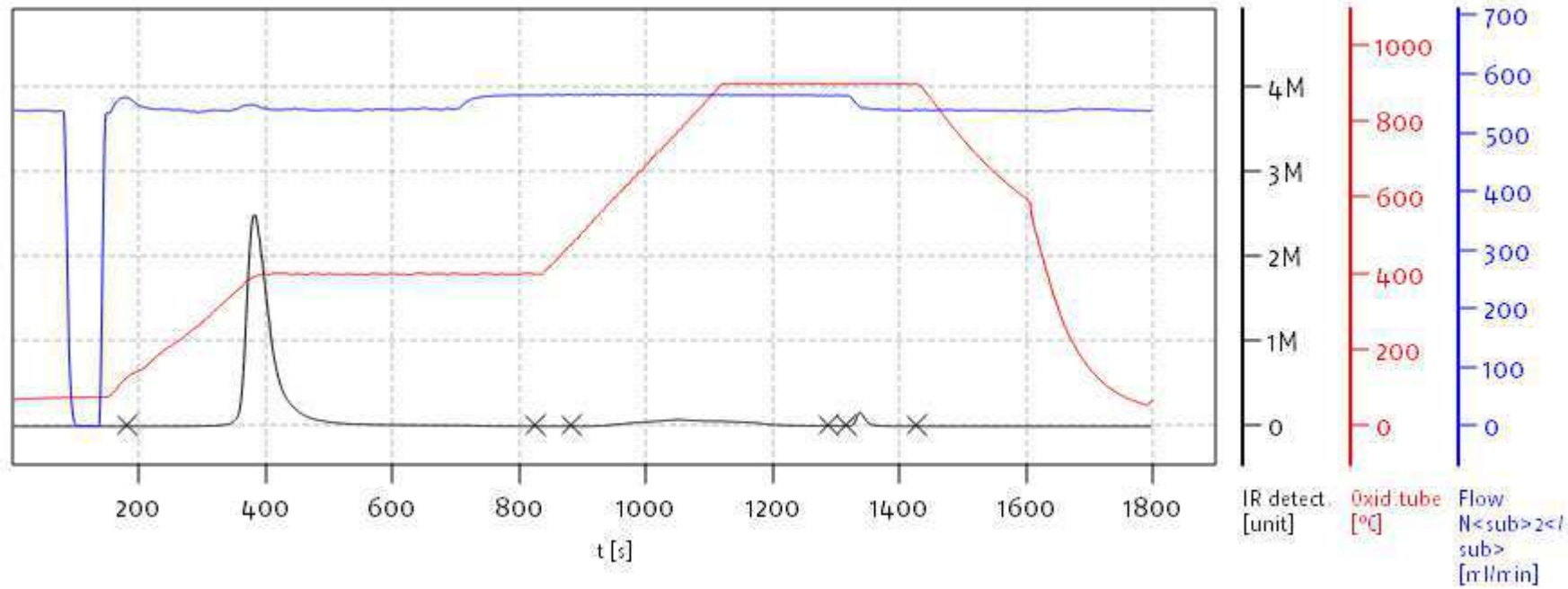
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
14	14	23A0133-02	513.20		CARBON	1/12/2023 2:33 PM	bl	1.281	4 225 666	1.438	0.024	107 740	545 255	1.257	0.156	0.9923	1.0000



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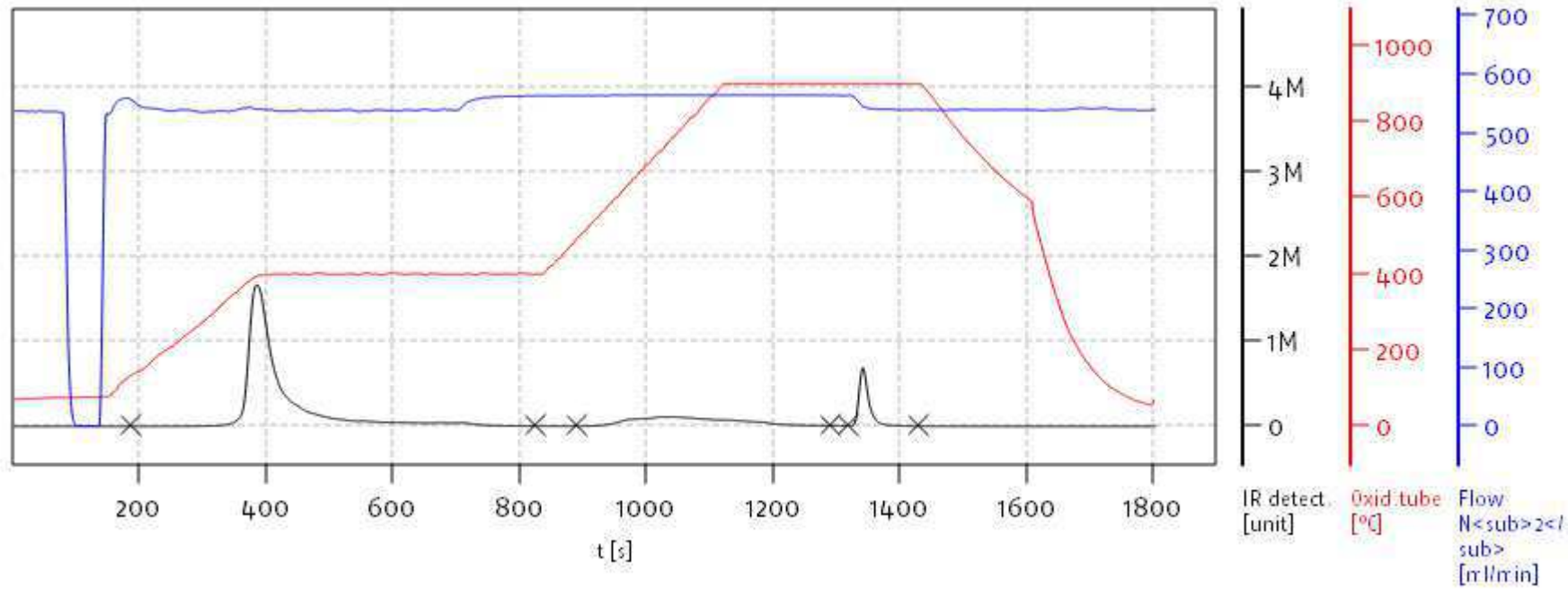
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
15	15	23A0133-03	531.30		CARBON	1/12/2023 3:03 PM	bl	1.130	3 485 751	1.365	0.130	472 817	833 738	1.000	0.235	0.9923	1.0000



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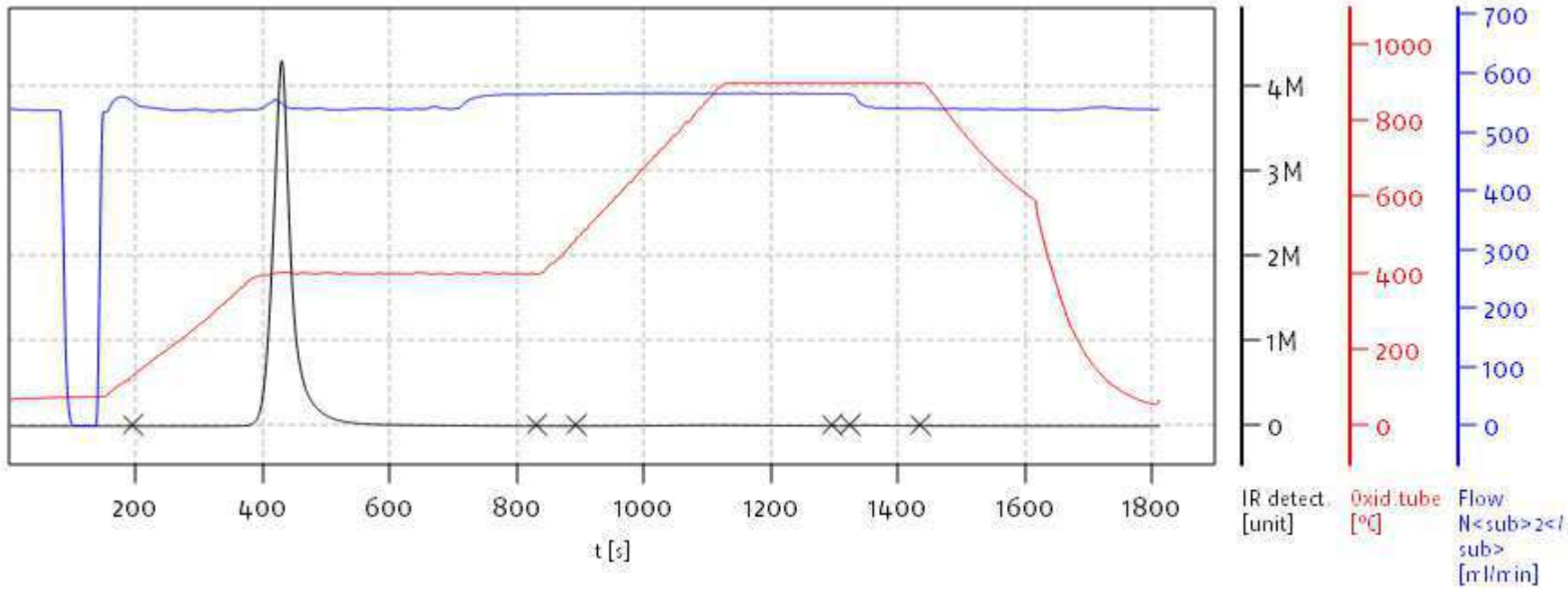
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
16	16	SLA0114-CCV1	19.00		CARBON	1/12/2023 3:34 PM	bl	45.366	5 637 732	45.885	0.000	23 251	90 325	45.366	0.520	0.9923	1.0000



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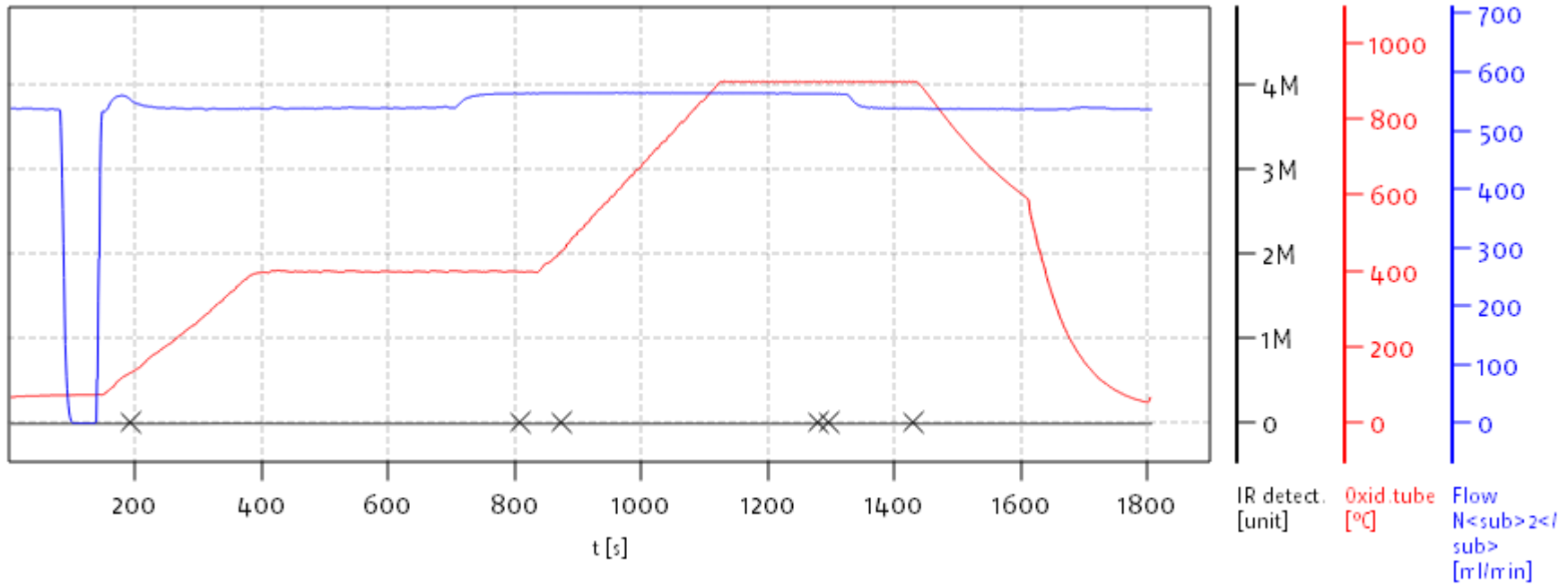
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
17	17	SLA0114-CCB1	503.40		CARBON	1/12/2023 4:04 PM	bl,C3u,C2u	0.000	10 383	0.000	0.000	398	2 141	0.000	0.000	0.9923	1.0000



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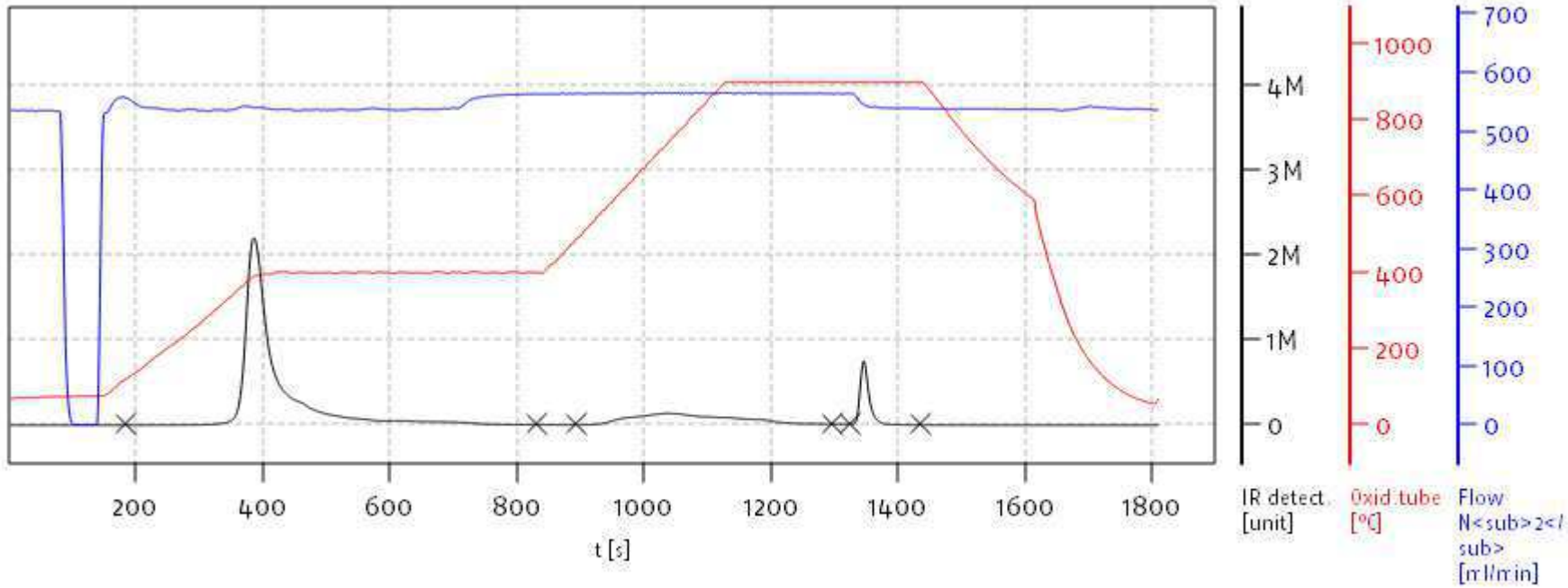
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
18	18	23A0133-04	589.60		CARBON	1/12/2023 4:35 PM	bl	1.232	4 300 828	1.492	0.118	475 939	1 018 511	1.114	0.260	0.9923	1.0000



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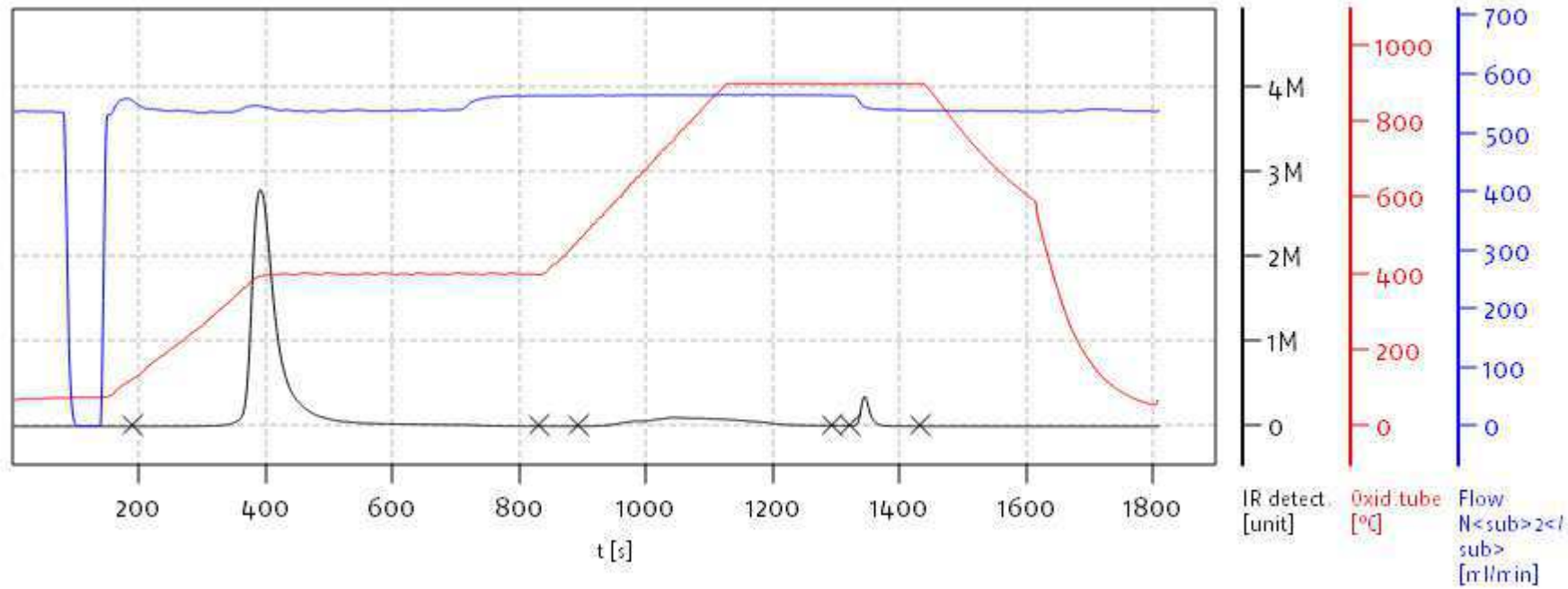
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
19	19	23A0133-05	562.00		CARBON	1/12/2023 5:05 PM	bl	1.406	4 970 808	1.609	0.054	223 054	764 748	1.351	0.203	0.9923	1.0000



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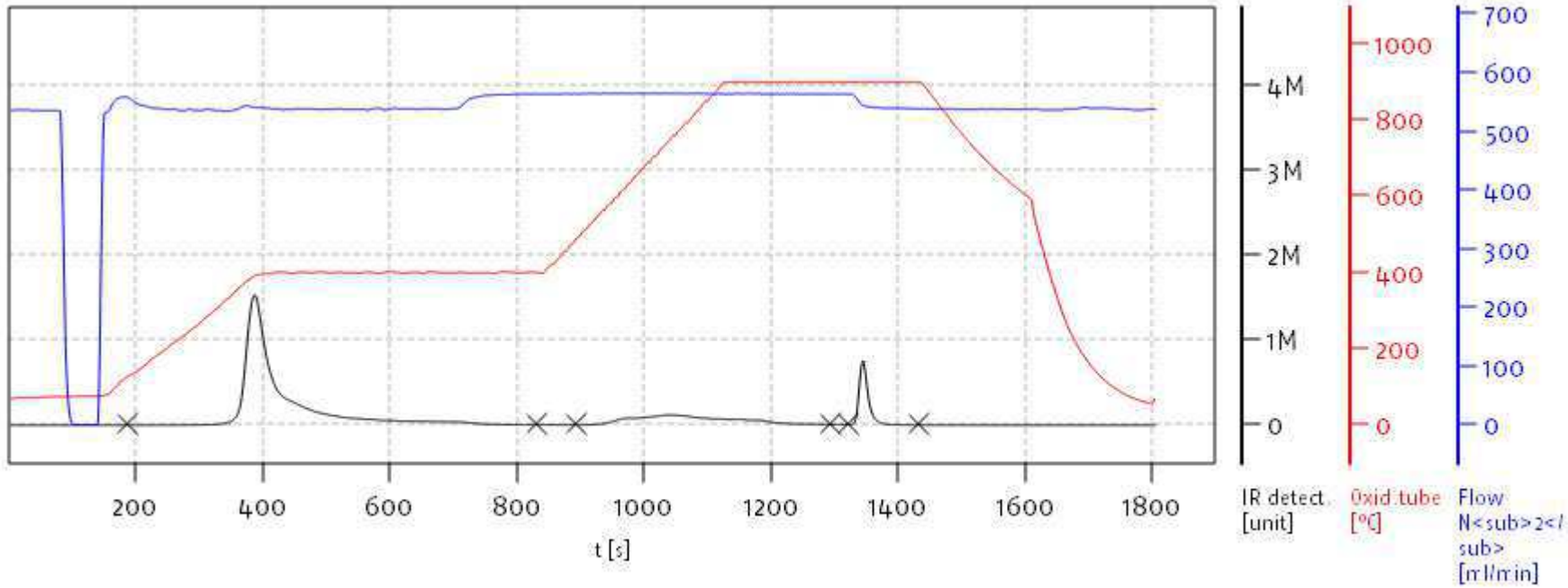
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
20	20	23A0133-06	528.30		CARBON	1/12/2023 5:36 PM	bl	1.094	3 334 222	1.335	0.132	477 329	850 510	0.962	0.241	0.9923	1.0000



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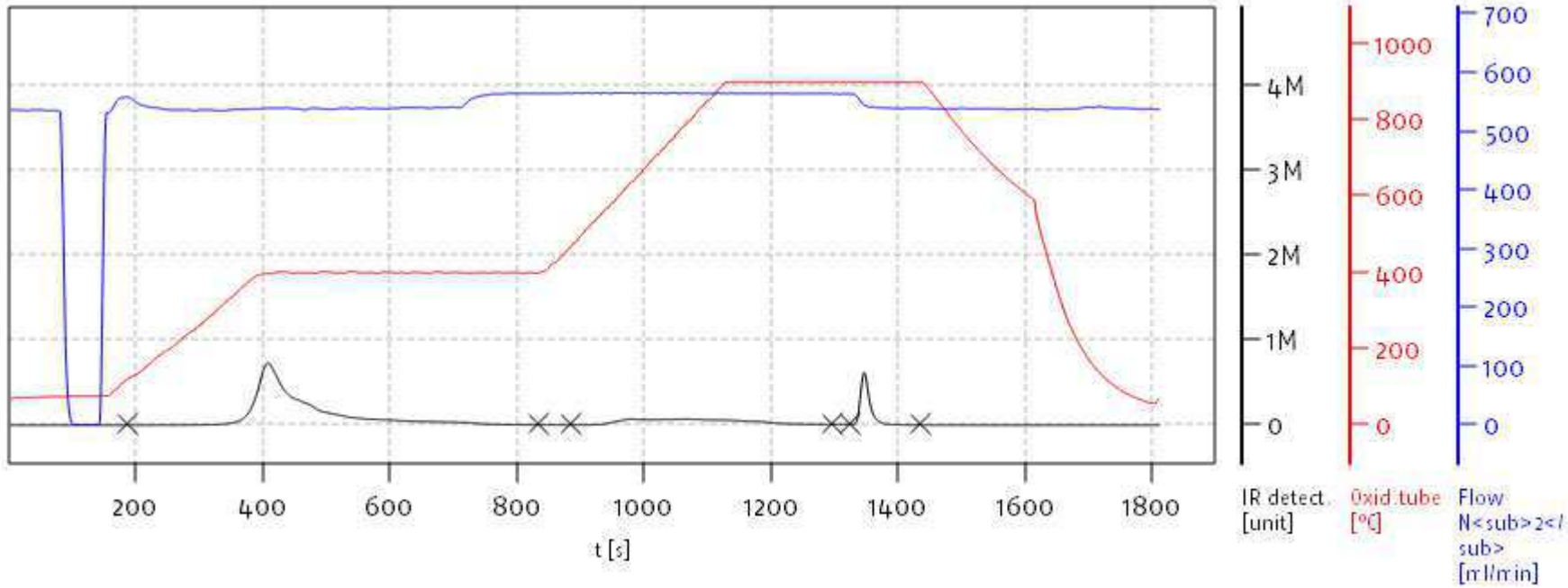
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
21	21	23A0133-07	522.80		CARBON	1/12/2023 6:07 PM	bl	0.802	2 379 540	0.980	0.110	398 915	628 789	0.691	0.178	0.9923	1.0000



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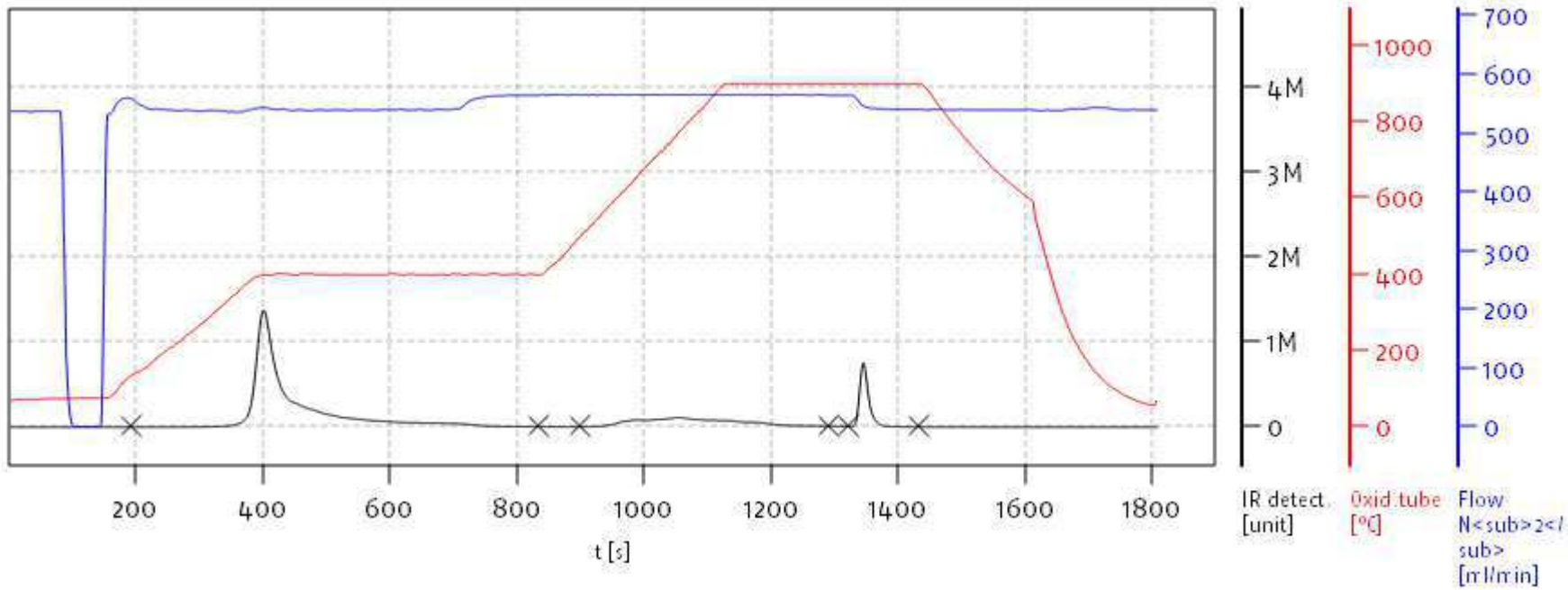
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
22	22	23A0133-08	534.30		CARBON	1/12/2023 6:37 PM	bl	0.983	2 992 524	1.208	0.131	477 861	802 167	0.853	0.225	0.9923	1.0000



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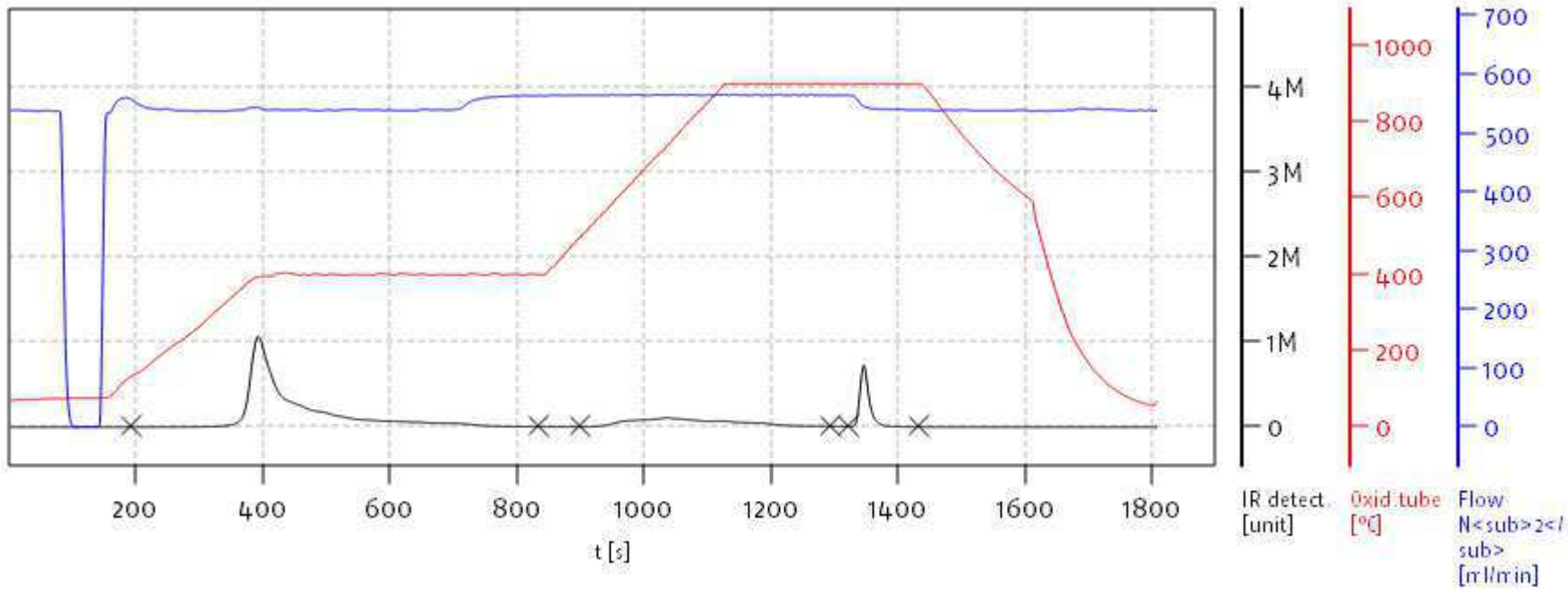
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
23	23	23A0133-09	531.30		CARBON	1/12/2023 7:08 PM	bl	0.950	2 869 225	1.166	0.128	466 491	766 510	0.822	0.216	0.9923	1.0000



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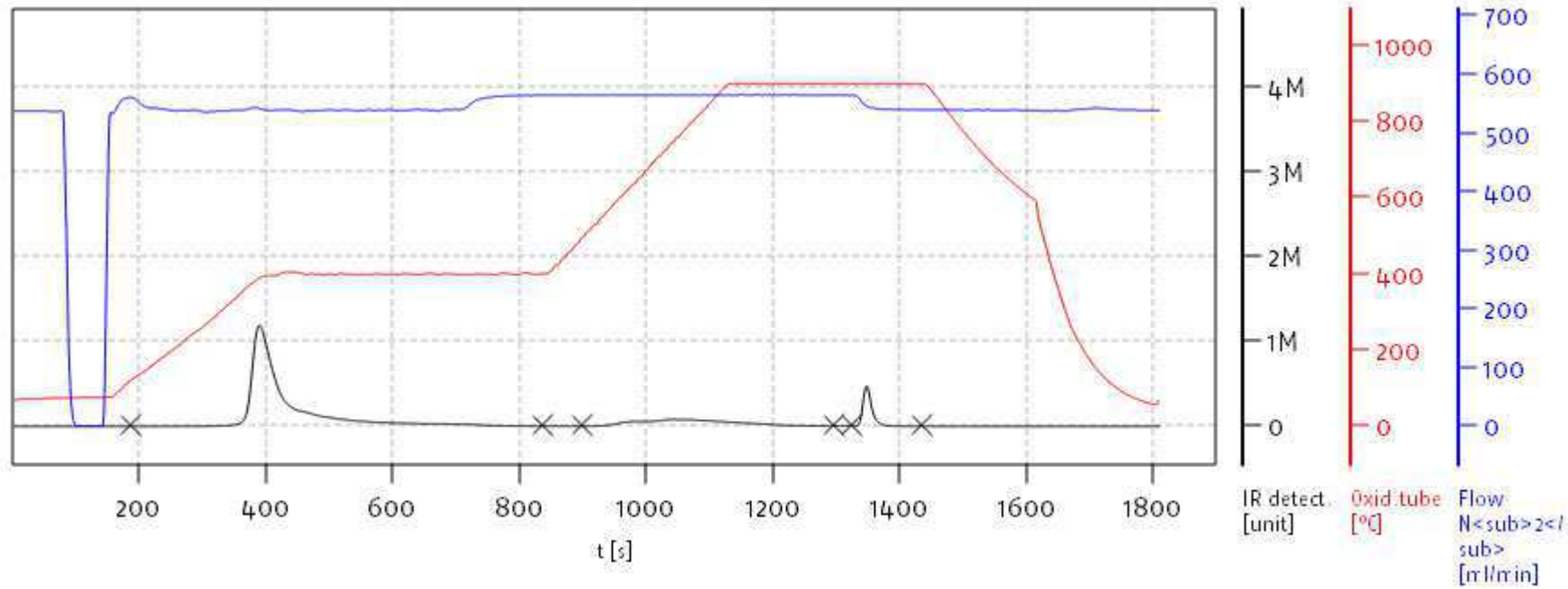
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
24	24	23A0133-10	373.30		CARBON	1/12/2023 7:38 PM	bl	1.146	2 543 351	1.375	0.111	293 784	576 544	1.036	0.228	0.9923	1.0000



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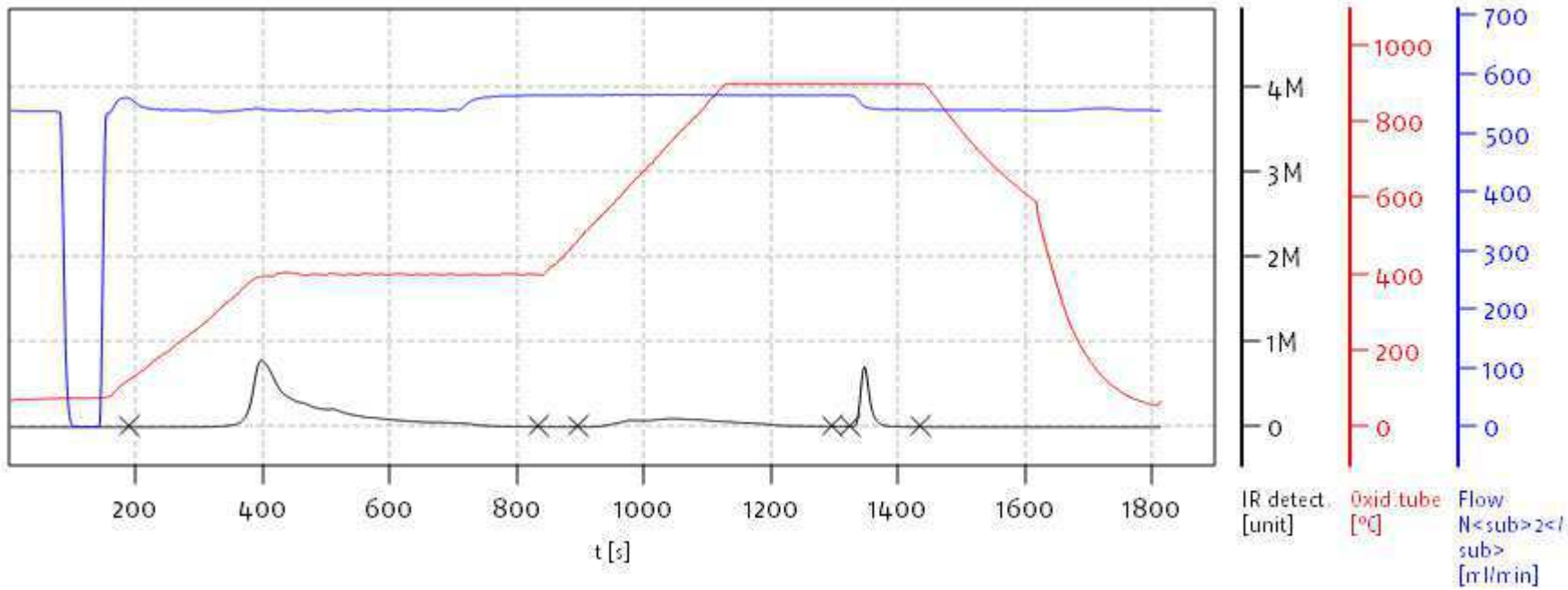
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
25	25	23A0133-11	512.30		CARBON	1/12/2023 8:09 PM	bl	0.978	2 849 553	1.189	0.131	460 220	726 517	0.846	0.212	0.9923	1.0000



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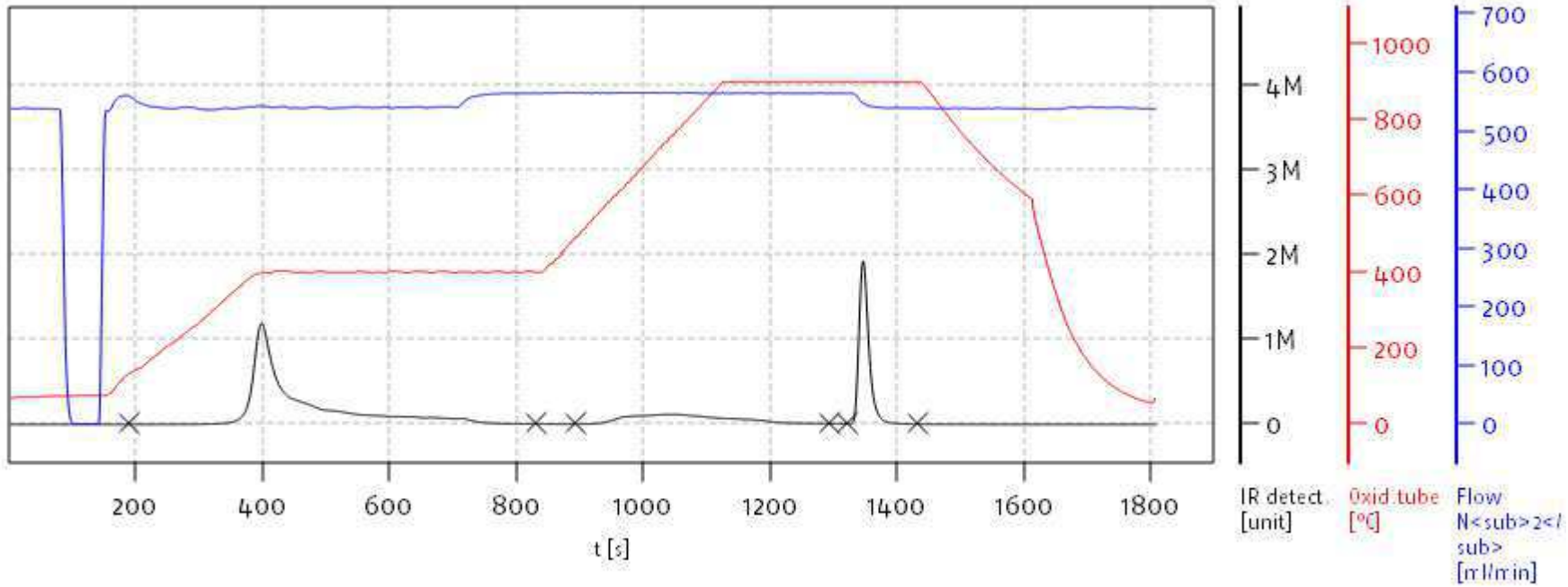
Access: soliTOC superuser

Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
26	26	23A0133-12	518.00		CARBON	1/12/2023 8:39 PM	bl	1.328	3 197 548	1.585	0.387	1 322 248	888 957	0.940	0.258	0.9923	1.0000



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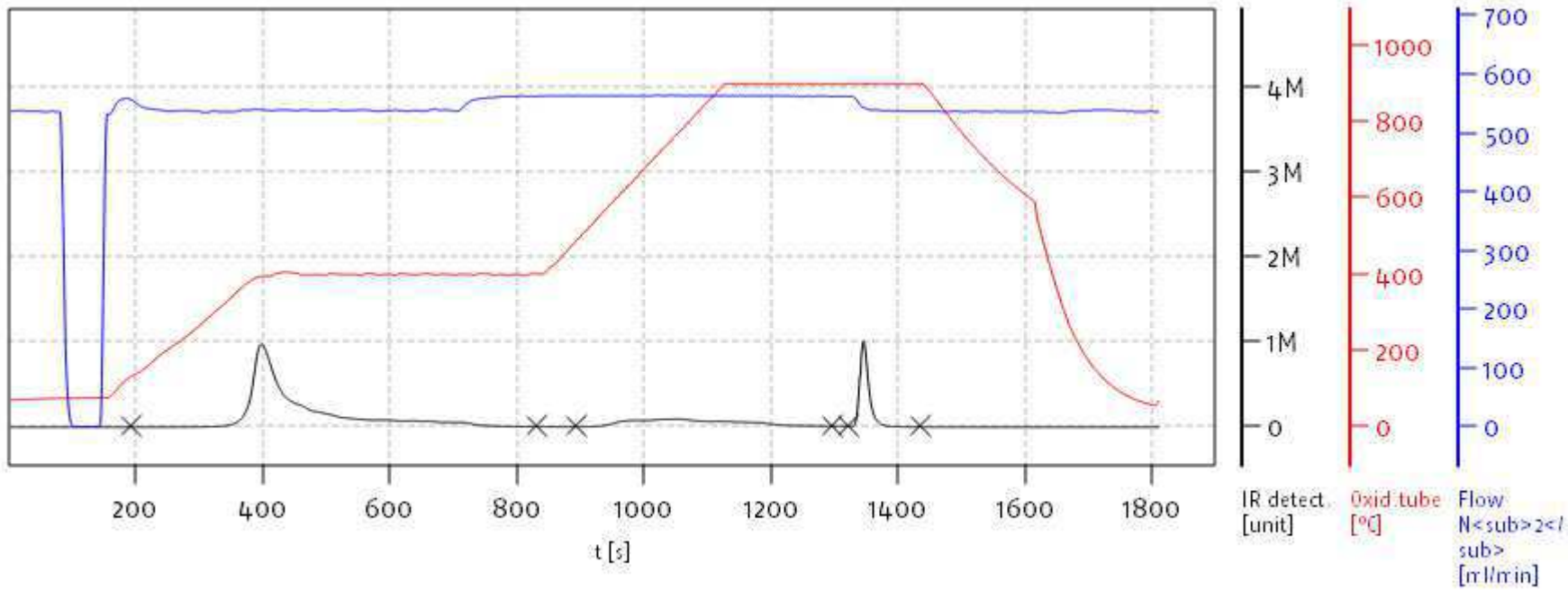
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
27	27	23A0133-13	531.60		CARBON	1/12/2023 9:10 PM	bl	0.993	2 855 610	1.206	0.176	630 473	756 231	0.817	0.212	0.9923	1.0000



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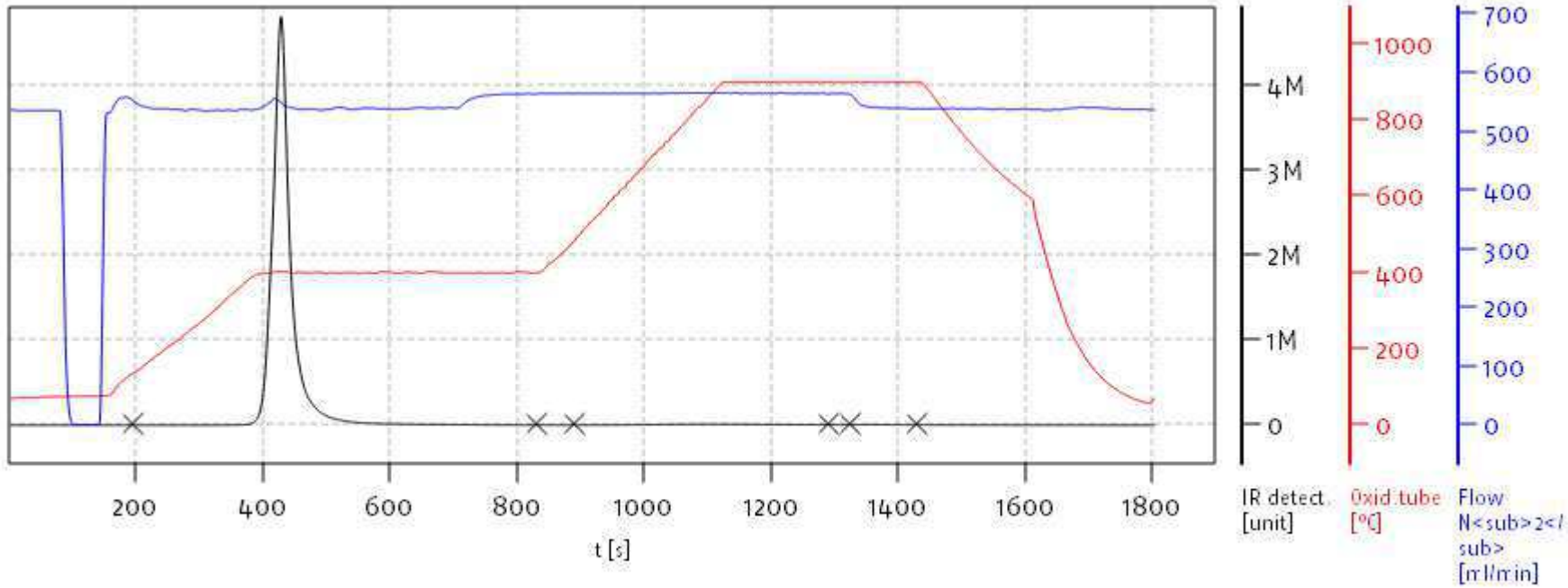
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
28	28	SLA0114-CCV2	19.90		CARBON	1/12/2023 9:40 PM	bl	45.299	5 894 859	45.856	0.000	21 314	98 221	45.299	0.558	0.9923	1.0000



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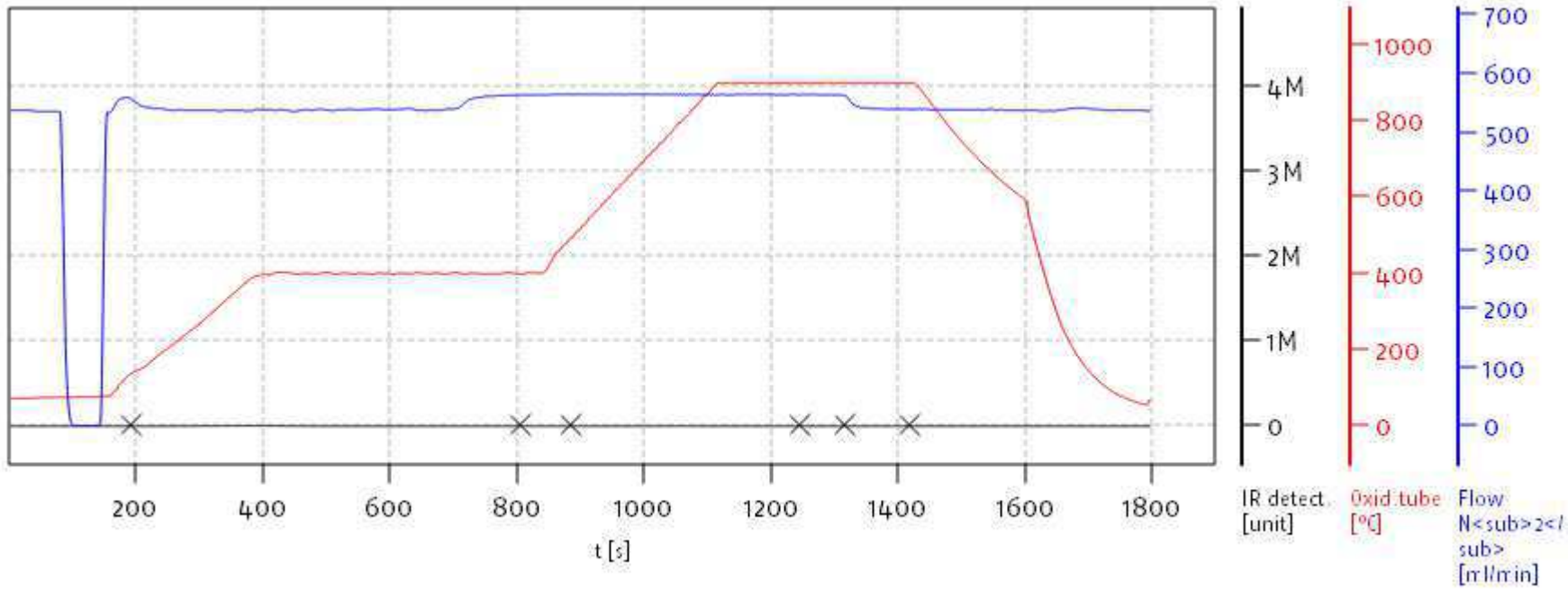
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
29	29	SLA0114-CCB2	501.20		CARBON	1/12/2023 10:11 PM	bl,C2u	0.000	23 506	0.000	0.000	586	4 267	0.000	0.000	0.9923	1.0000



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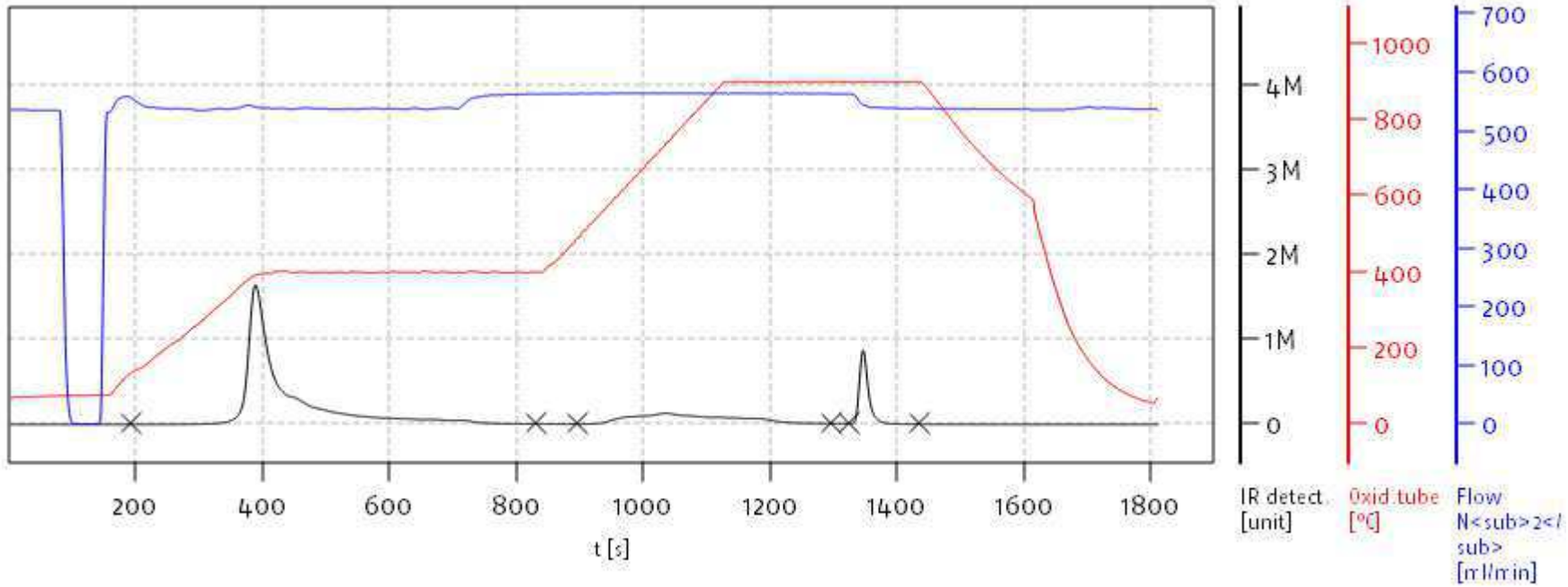
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
30	30	23A0133-14	575.00		CARBON	1/12/2023 10:41 PM	bl	1.107	3 640 204	1.355	0.141	551 291	947 377	0.965	0.248	0.9923	1.0000



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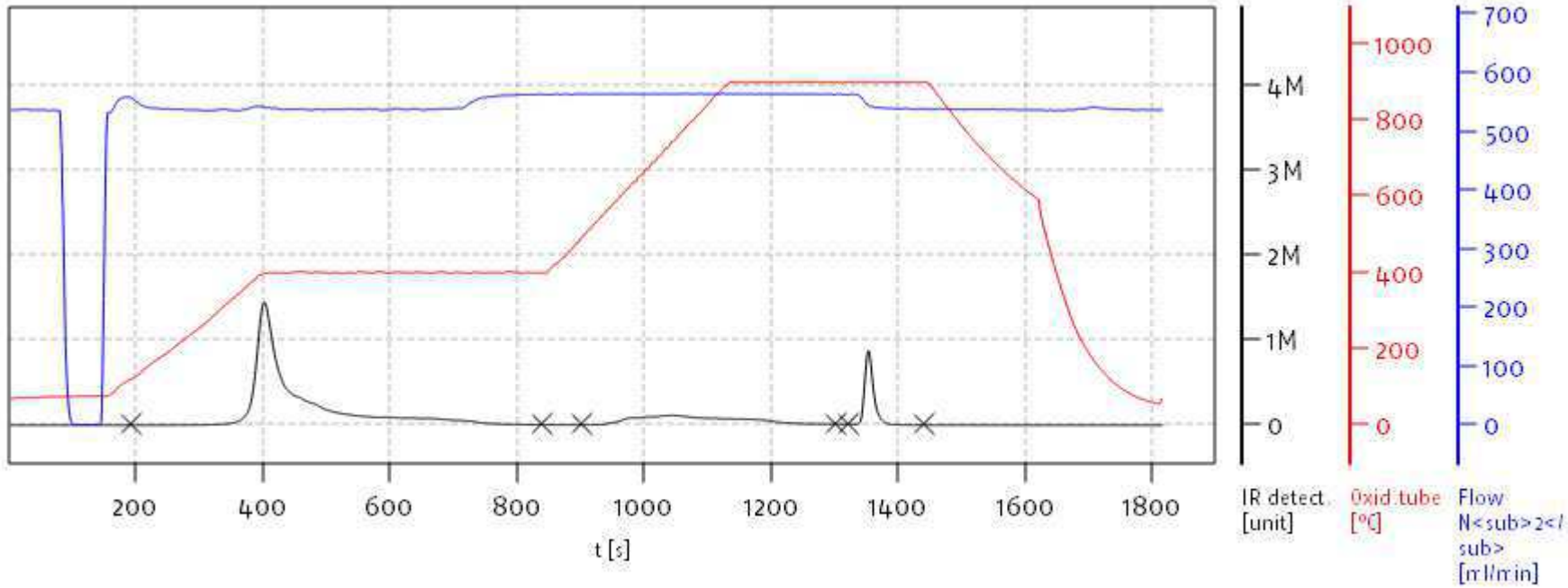
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
31	31	23A0133-15	570.90		CARBON	1/12/2023 11:12 PM	bl	1.074	3 498 128	1.303	0.140	542 751	870 918	0.934	0.229	0.9923	1.0000



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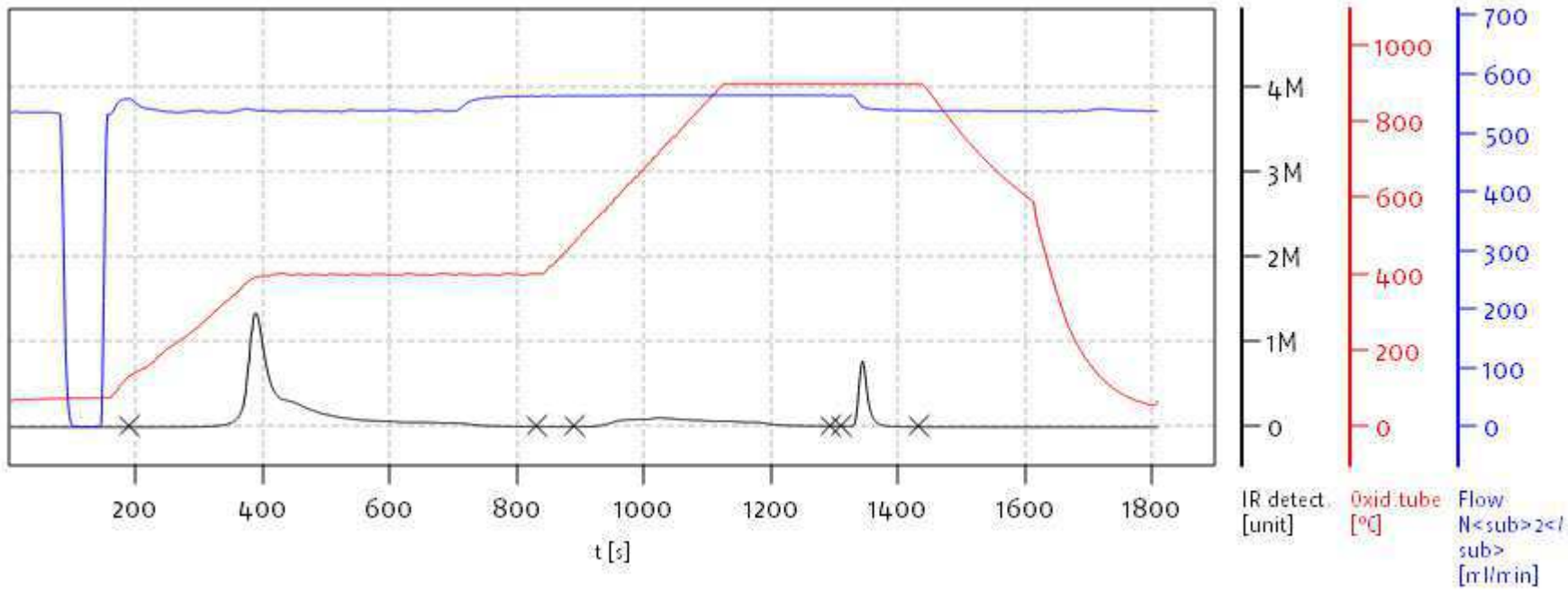
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
32	32	23A0133-16	505.00		CARBON	1/12/2023 11:42 PM	bl	1.080	3 108 614	1.323	0.142	491 037	820 531	0.938	0.243	0.9923	1.0000



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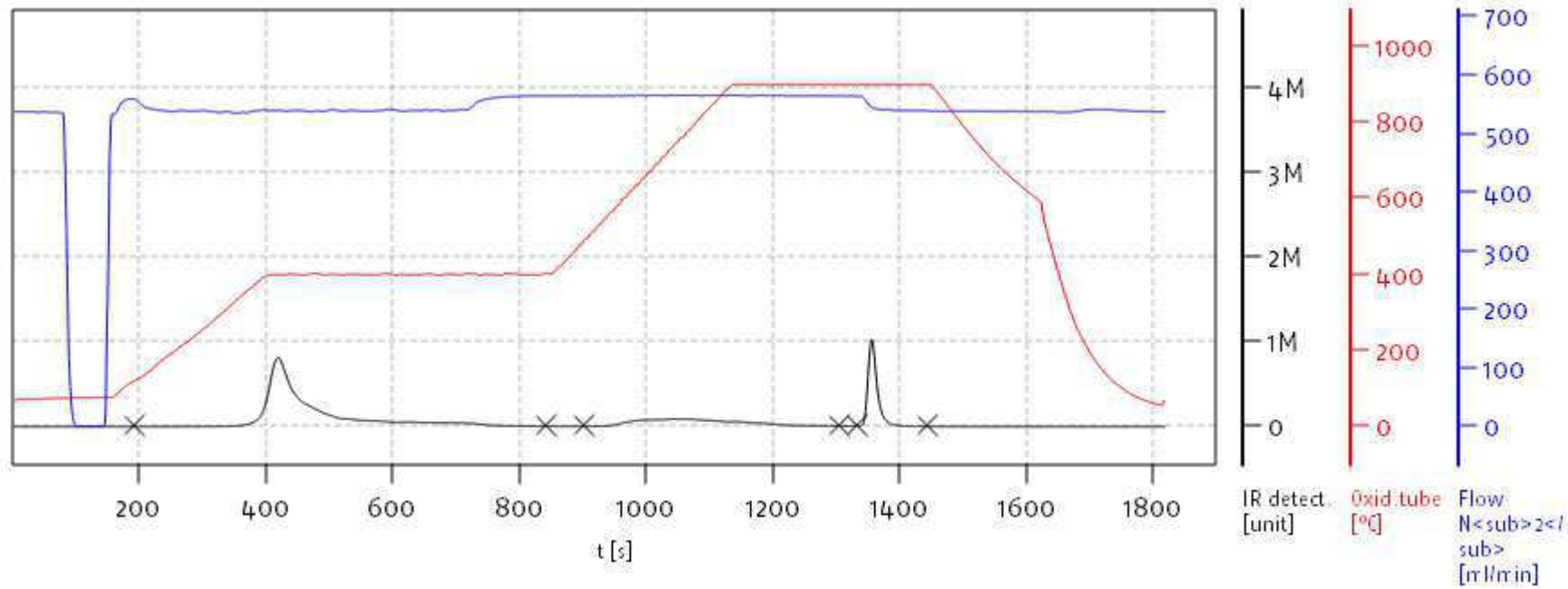
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
33	33	23A0157-01	503.10		CARBON	1/13/2023 12:13 AM	bl	0.862	2 214 563	1.063	0.194	658 052	679 686	0.668	0.201	0.9923	1.0000



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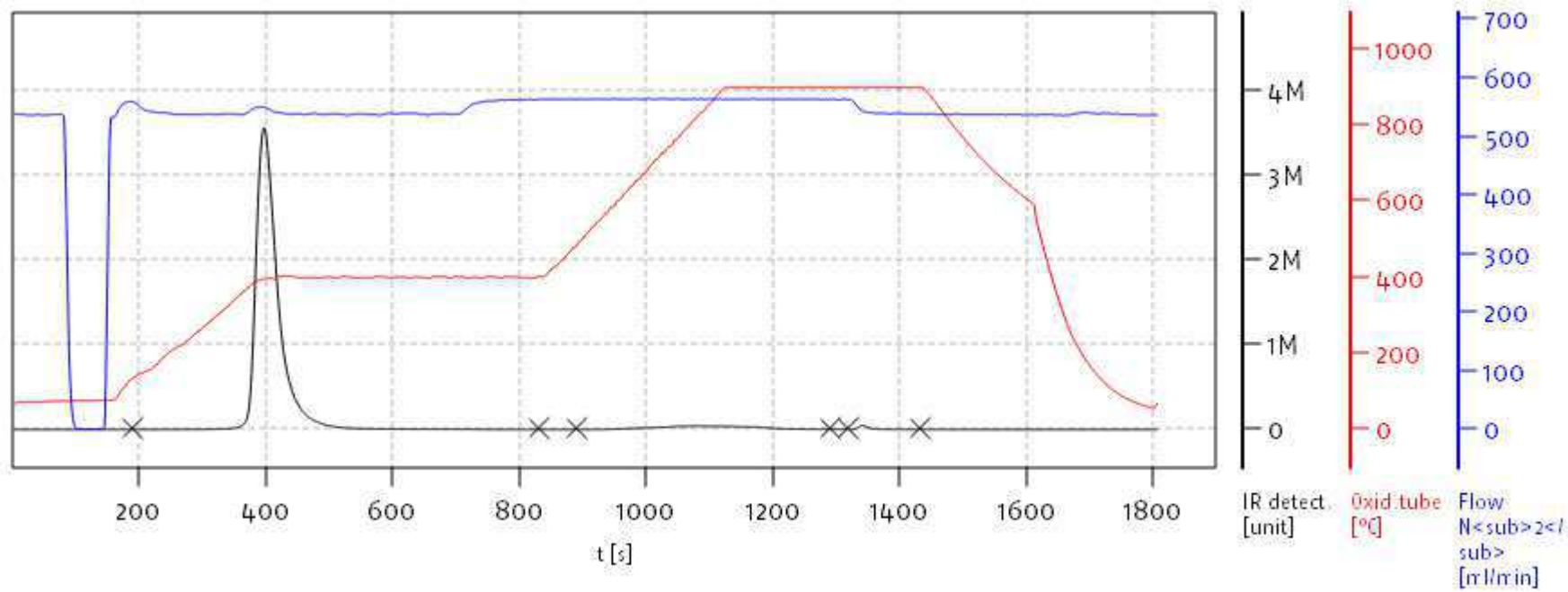
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
34	34	23A0157-02	529.30		CARBON	1/13/2023 12:44 AM	bl	1.548	5 351 270	1.627	0.003	37 071	294 404	1.545	0.078	0.9923	1.0000



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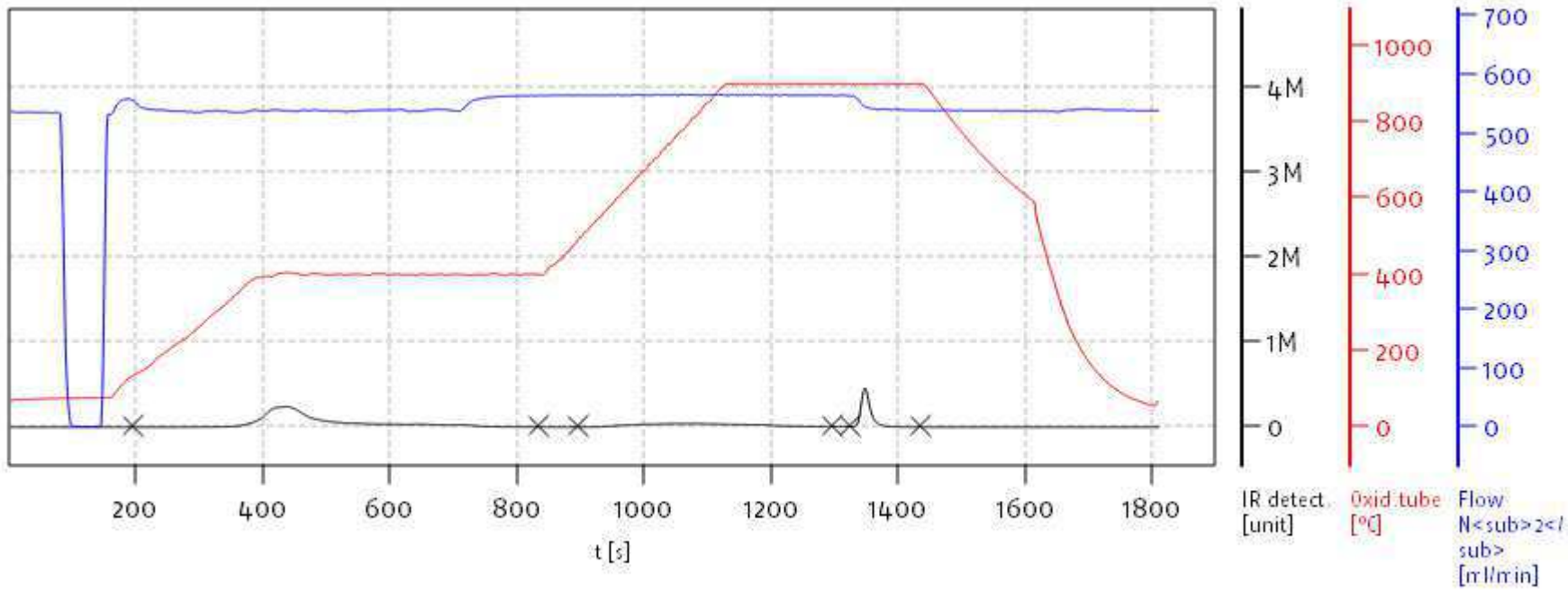
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
35	35	23A0157-03	525.80		CARBON	1/13/2023 1:14 AM	bl	0.377	1 046 860	0.469	0.079	295 403	337 909	0.298	0.092	0.9923	1.0000



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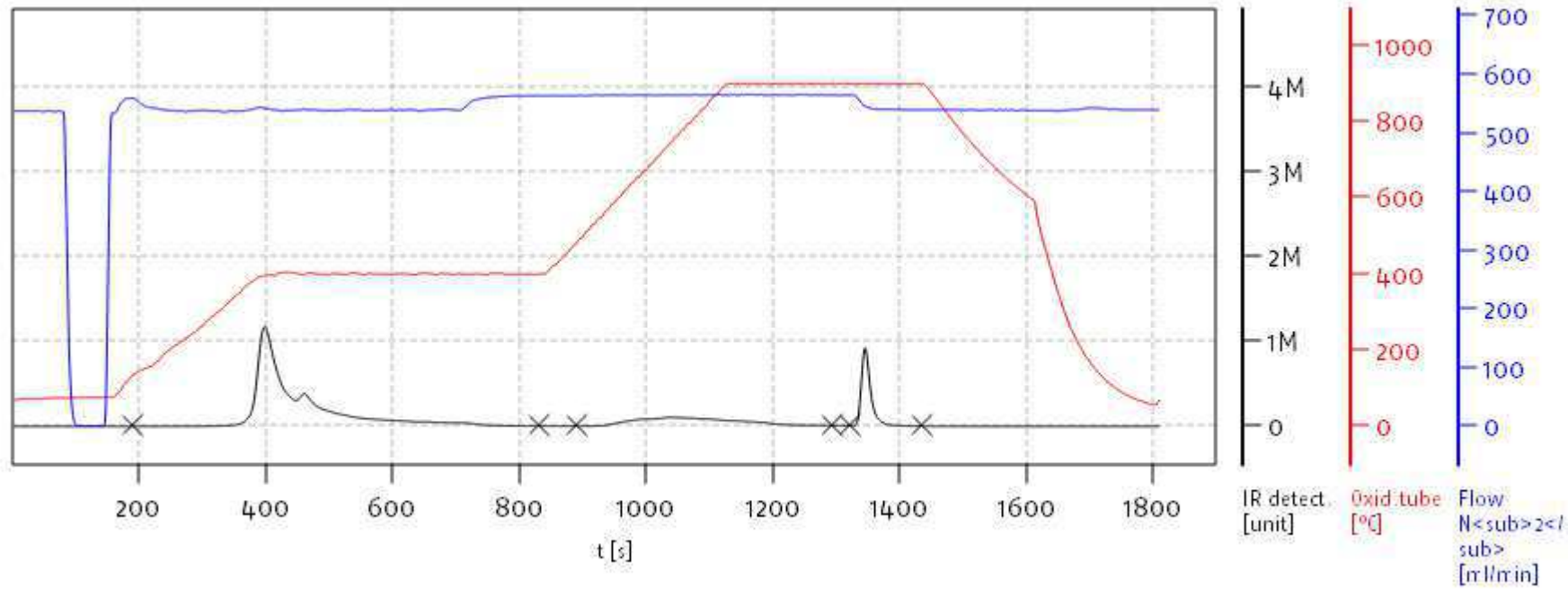
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
36	36	23A0157-04	518.40		CARBON	1/13/2023 1:45 AM	bl	1.056	3 010 049	1.283	0.171	600 638	787 230	0.884	0.227	0.9923	1.0000



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Balance: BAL3
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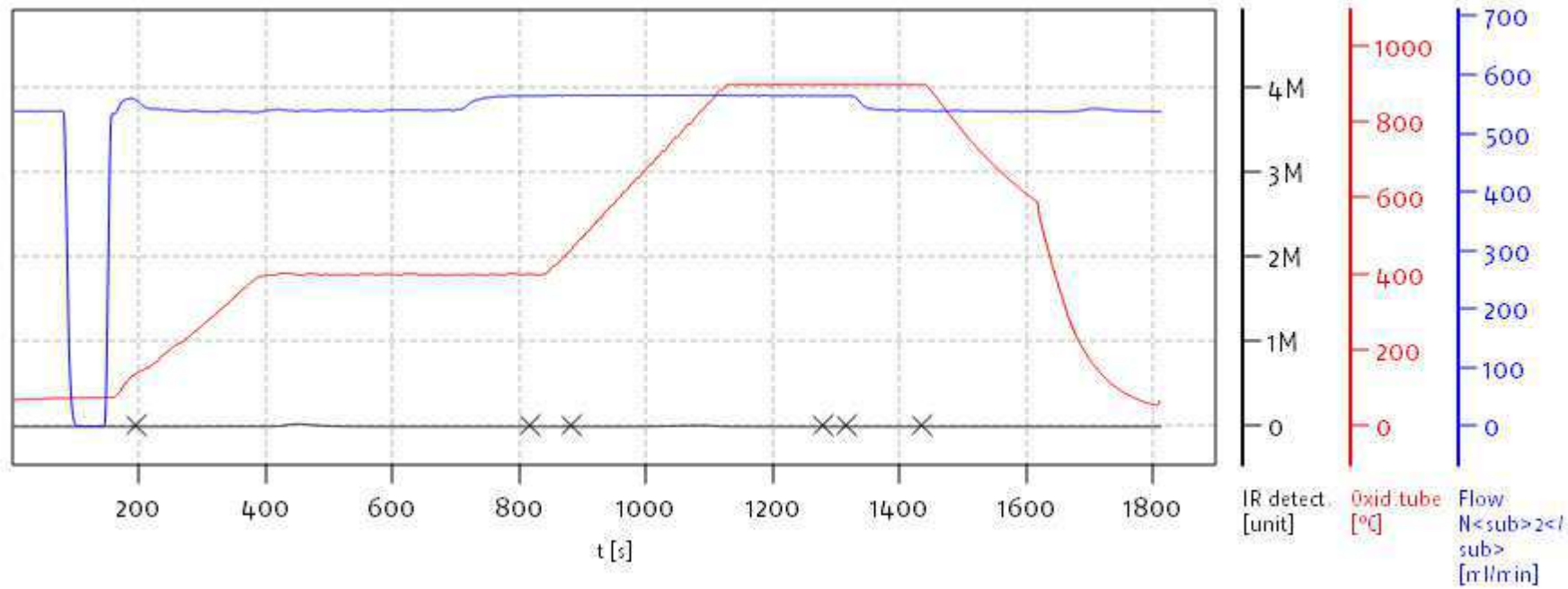
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
37	37	BLA0244-MRL1	543.20		CARBON	1/13/2023 2:15 AM	bl,C2u	0.013	72 929	0.016	0.000	253	37 498	0.013	0.003	0.9923	1.0000



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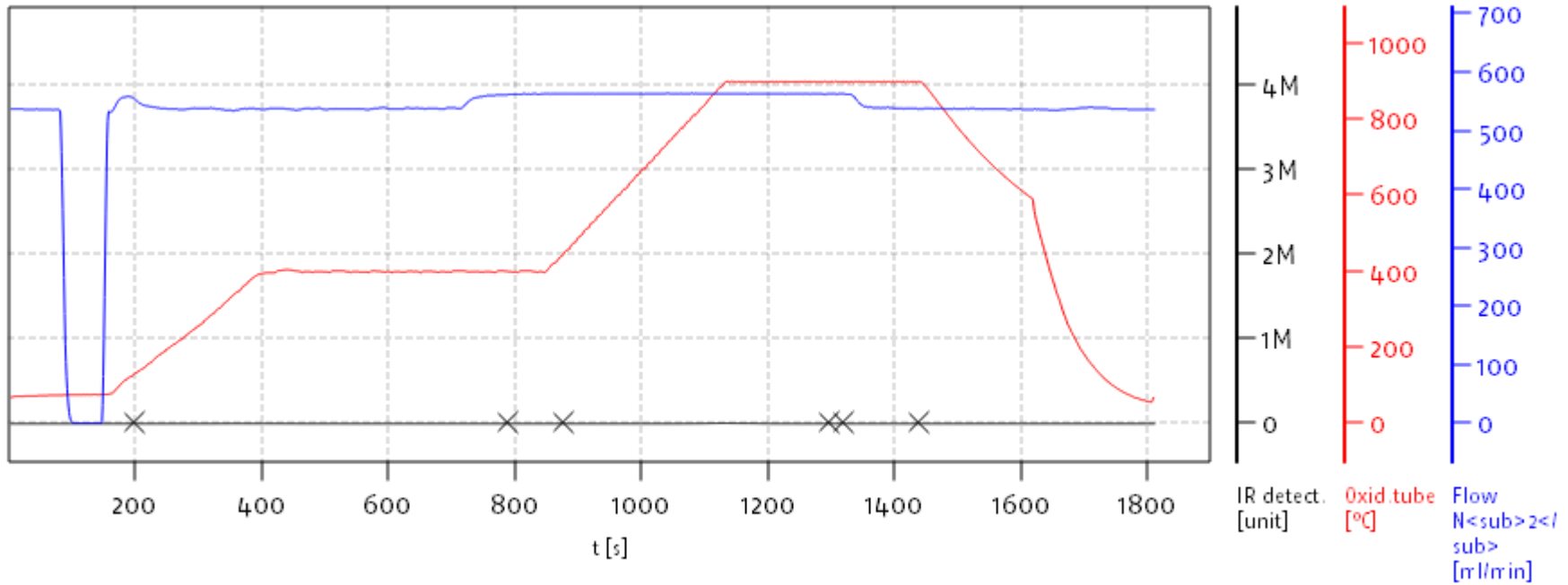
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
38	38	BLA0244-BLK1	562.50		CARBON	1/13/2023 2:46 AM	bl,C2u	0.000	8 372	0.000	0.000	291	17 604	0.000	0.000	0.9923	1.0000



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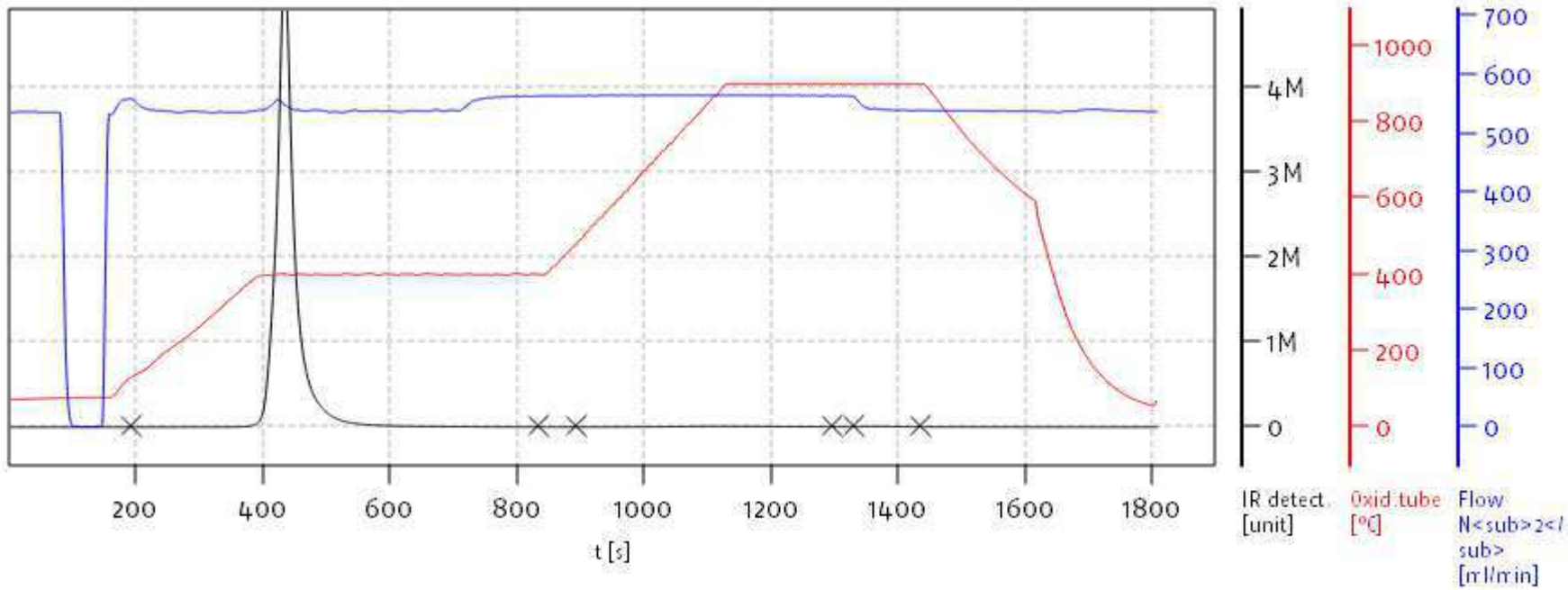
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
39	39	BLA0244-BS1	22.20		CARBON	1/13/2023 3:16 AM	bl	45.931	6 664 523	46.331	0.000	22 744	83 828	45.931	0.400	0.9923	1.0000



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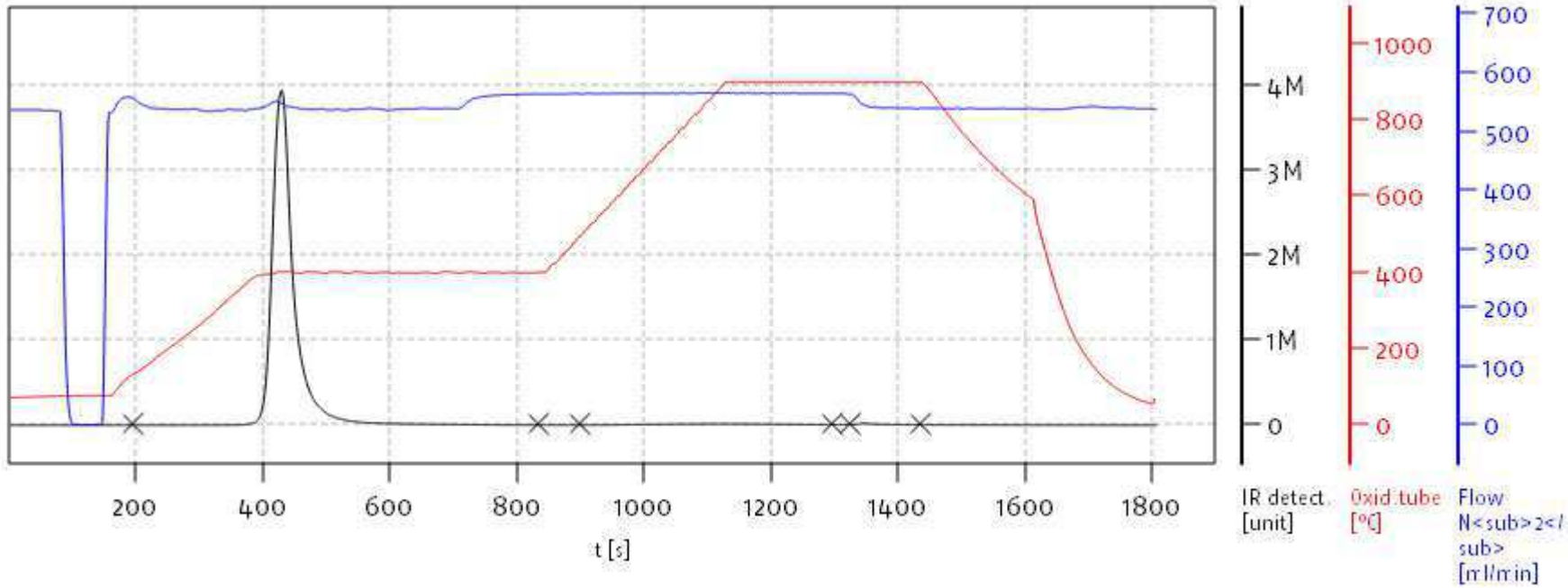
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
40	40	SLA0114-CCV3	19.60		CARBON	1/13/2023 3:47 AM	bl	45.132	5 774 075	45.968	0.086	37 470	132 442	45.045	0.836	0.9923	1.0000



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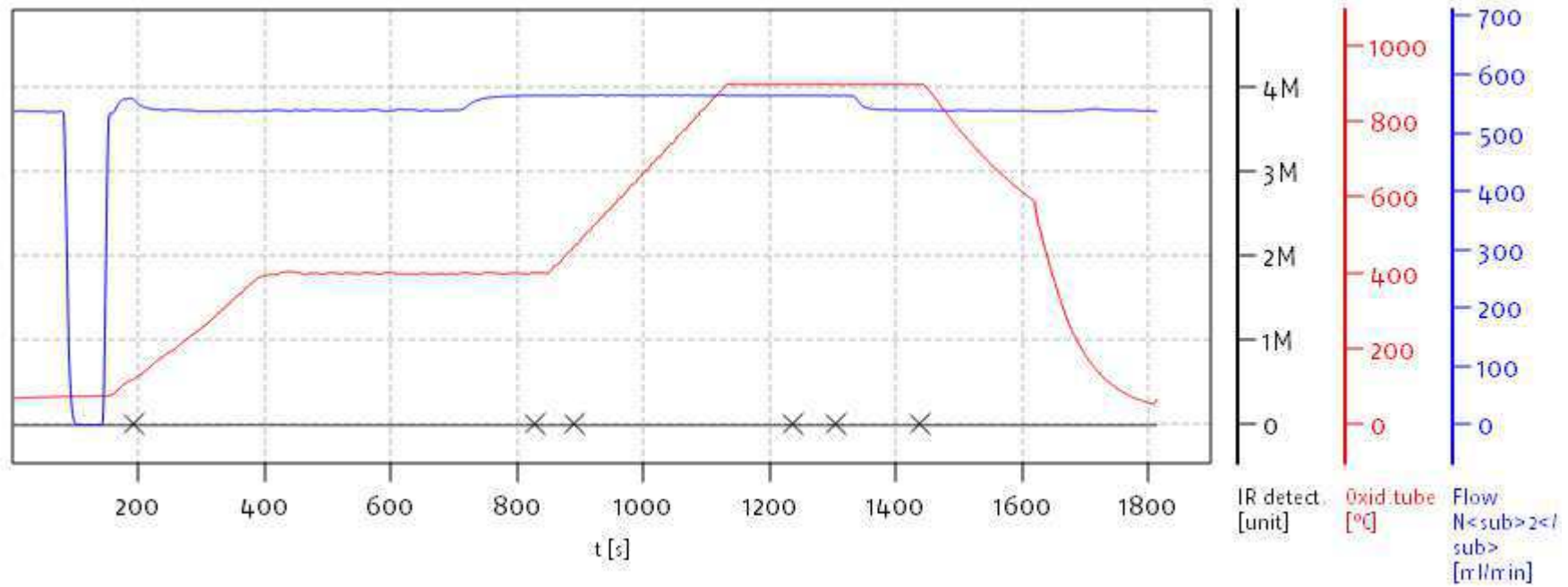
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
41	41	SLA0114-CCB3	519.30		CARBON	1/13/2023 4:18 AM	bl,C3u,C2u	0.000	9 607	0.000	0.000	843	1 141	0.000	0.000	0.9923	1.0000



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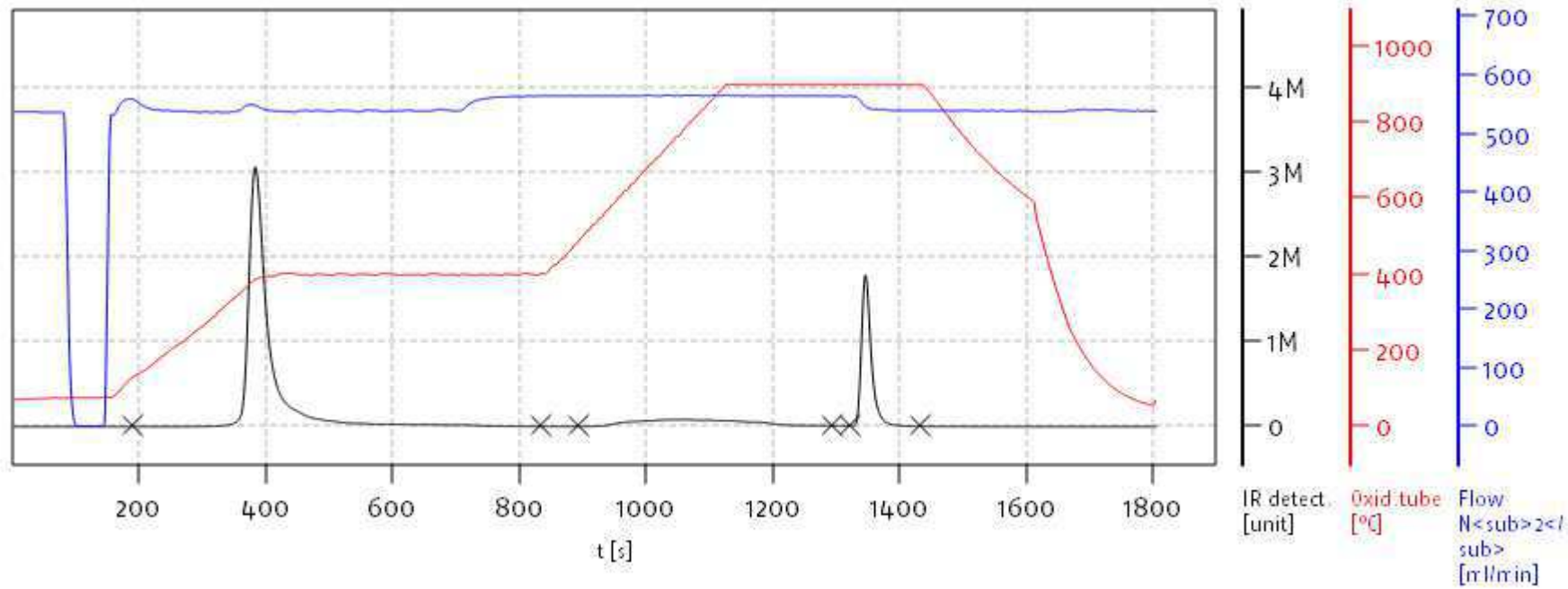
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
42	42	BLA0244-SRM1	273.00		CARBON	1/13/2023 4:48 AM	bl	3.023	4 198 479	3.403	0.676	1 218 239	696 979	2.347	0.380	0.9923	1.0000



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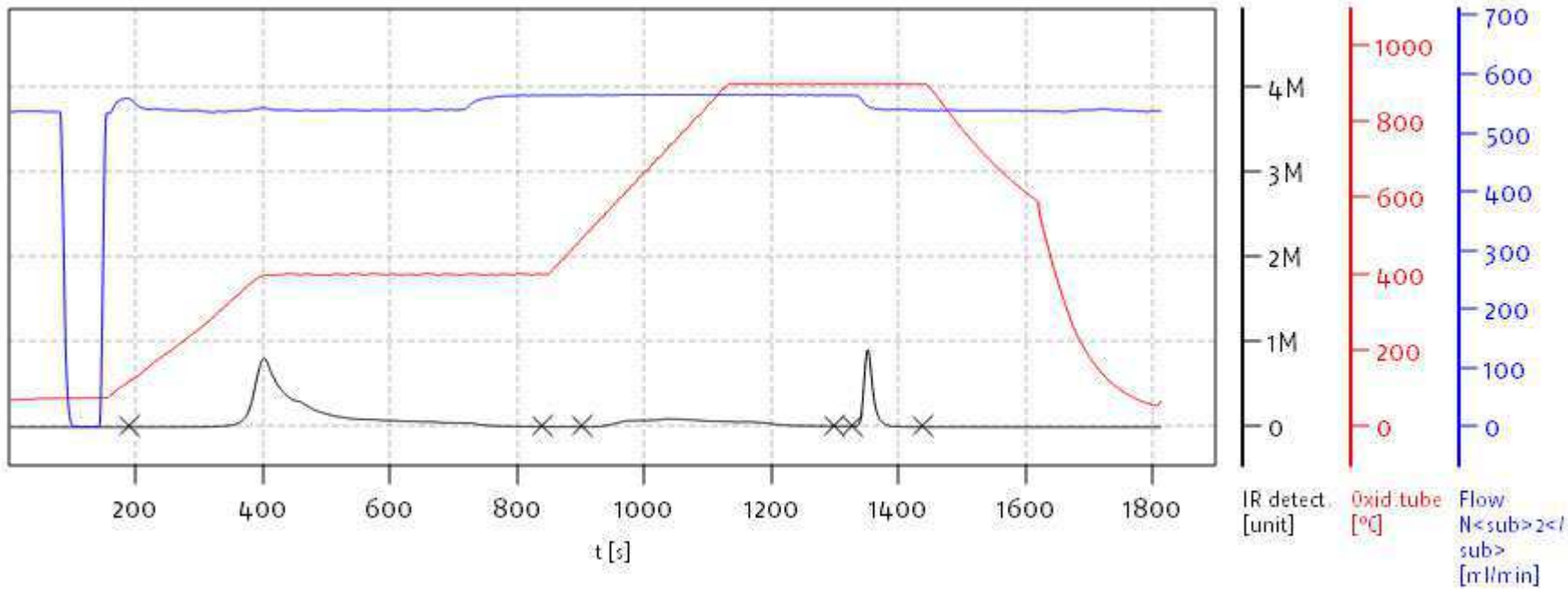
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
43	43	23A0157-05	509.00		CARBON	1/13/2023 5:19 AM	bl	0.961	2 659 356	1.186	0.167	575 116	765 779	0.795	0.225	0.9923	1.0000



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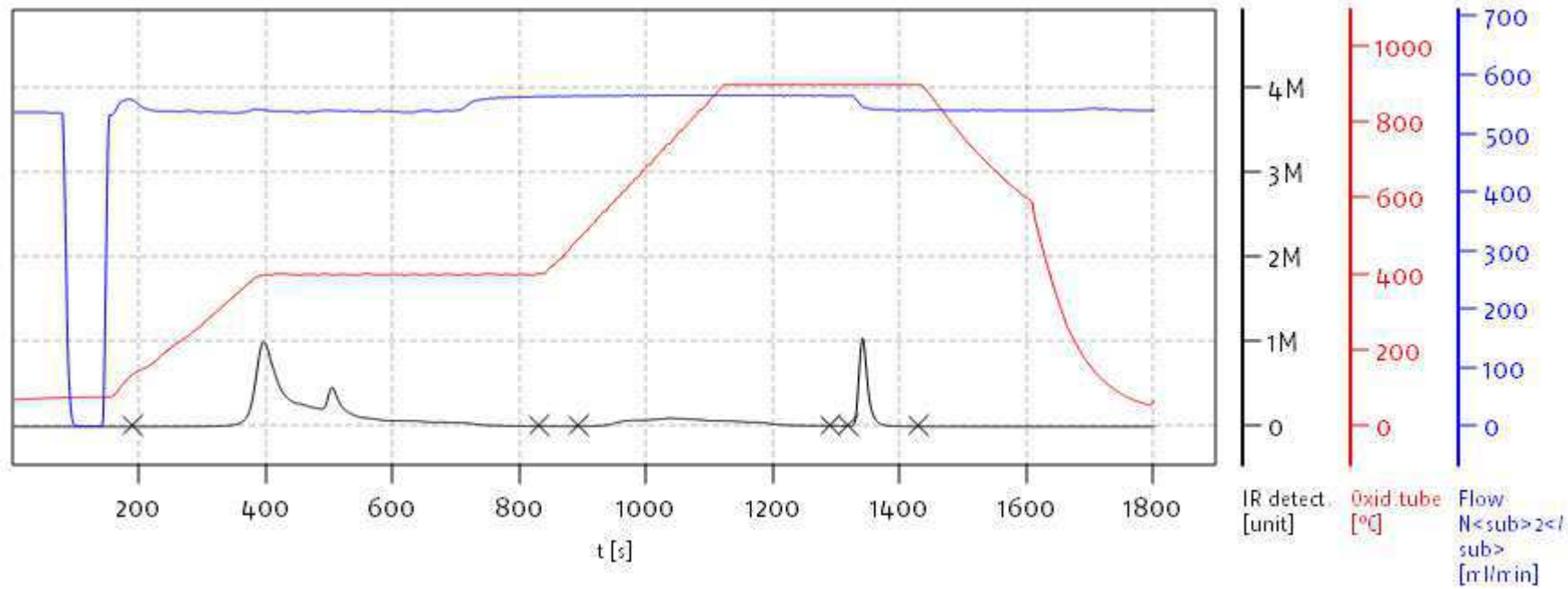
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
44	44	BLA0244-DUP1	523.90		CARBON	1/13/2023 5:49 AM	bl	1.072	3 058 394	1.284	0.183	646 720	742 791	0.889	0.212	0.9923	1.0000



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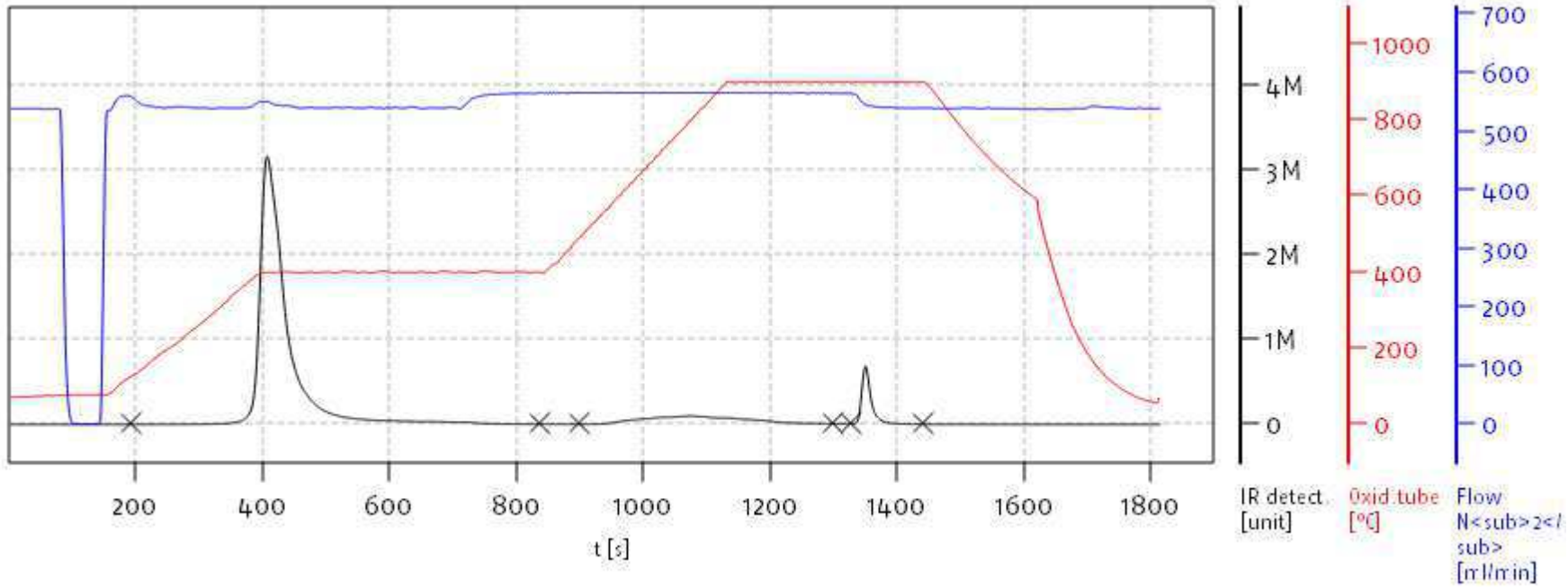
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
45	45	BLA0244-MS1	516.50	0.0085	CARBON	1/13/2023 6:20 AM	bl	1.808	5 677 716	2.018	0.127	450 010	729 480	1.681	0.211	0.9923	1.0000



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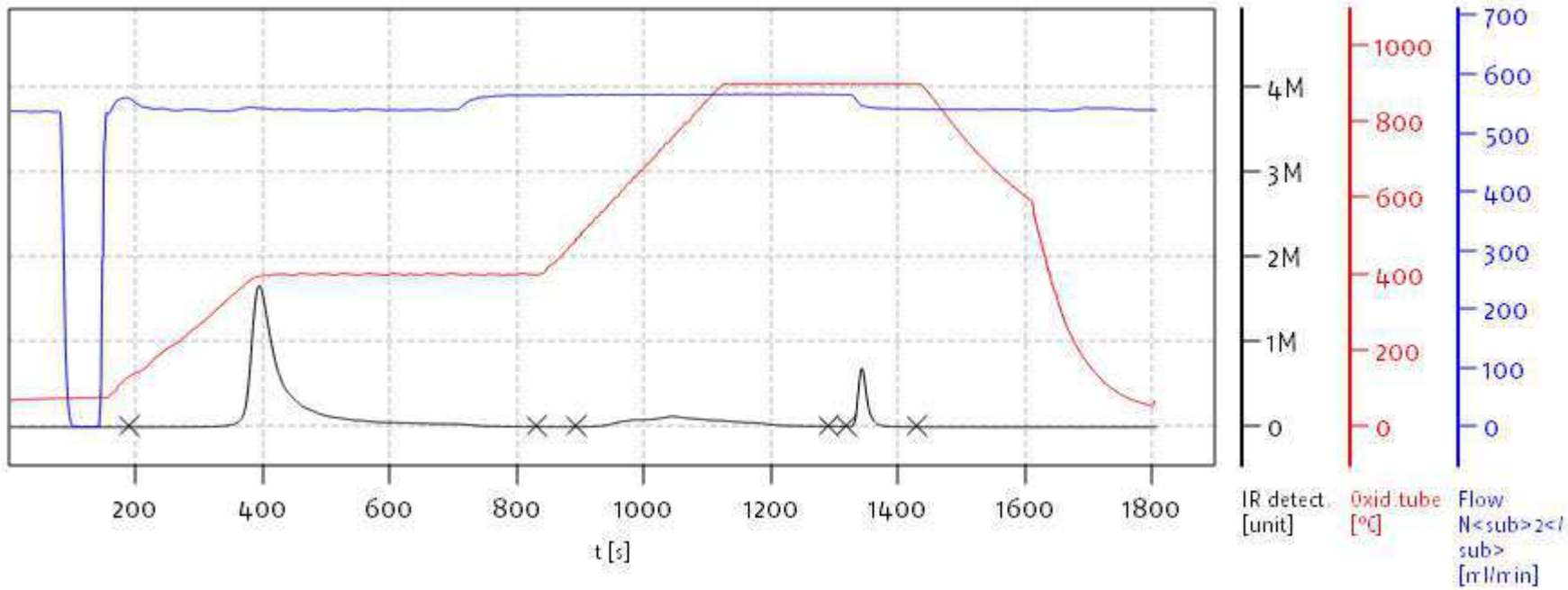
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
46	46	23A0157-06	503.40		CARBON	1/13/2023 6:50 AM	bl	1.220	3 609 333	1.465	0.126	437 404	822 989	1.093	0.245	0.9923	1.0000



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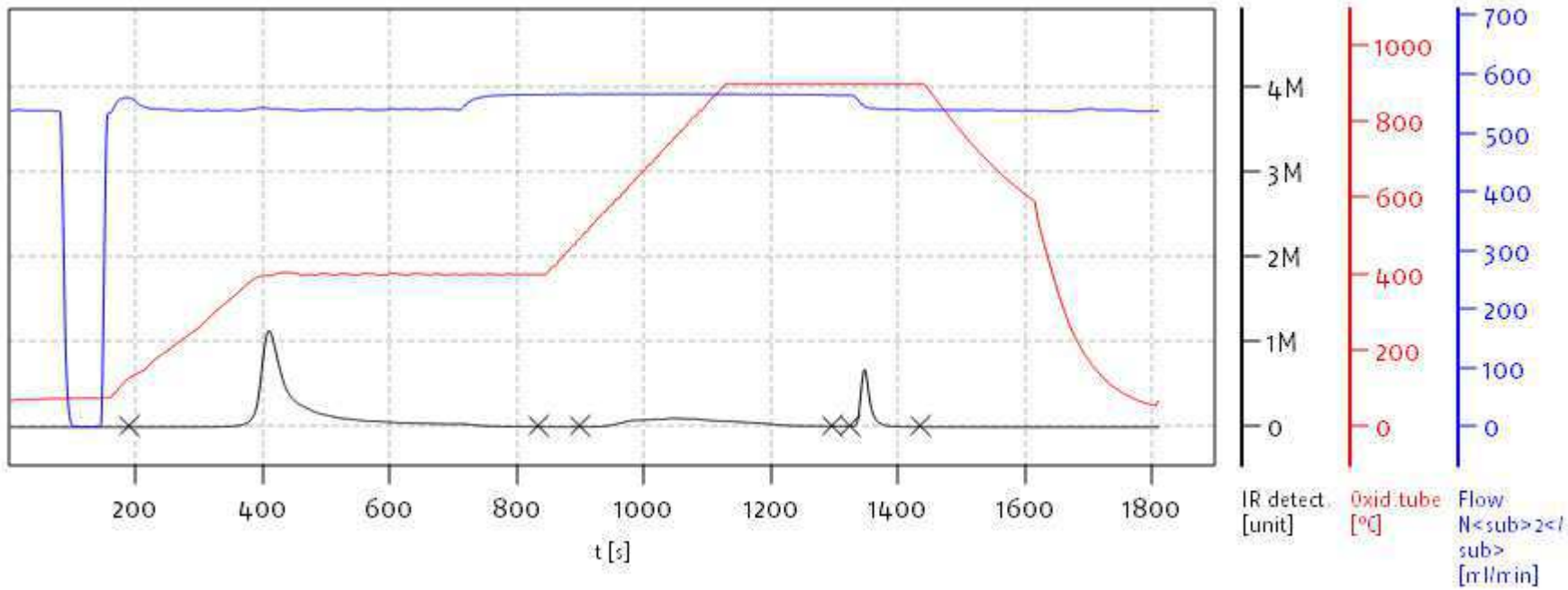
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
47	47	23A0157-07	528.30		CARBON	1/13/2023 7:21 AM	bl	0.869	2 602 099	1.087	0.120	437 562	769 297	0.749	0.218	0.9923	1.0000



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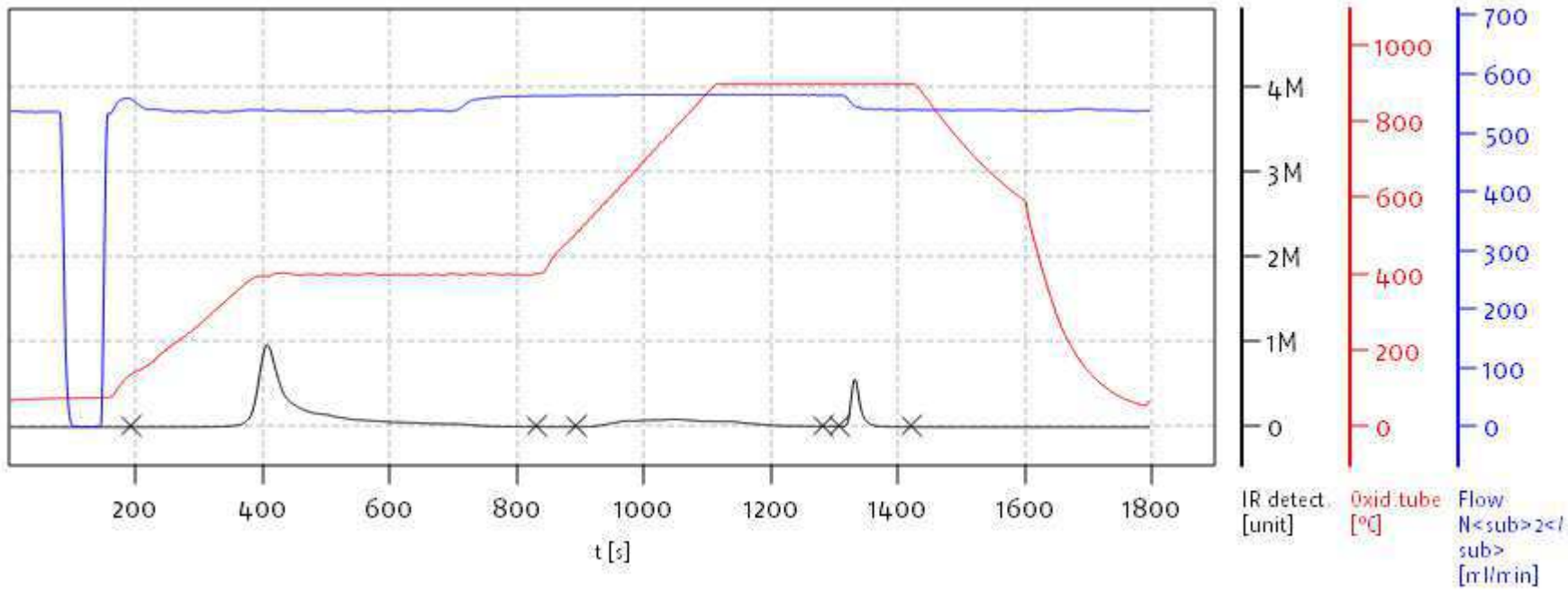
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
48	48	23A0157-08	506.40		CARBON	1/13/2023 7:51 AM	bl	0.832	2 429 110	1.037	0.103	362 972	699 729	0.729	0.206	0.9923	1.0000



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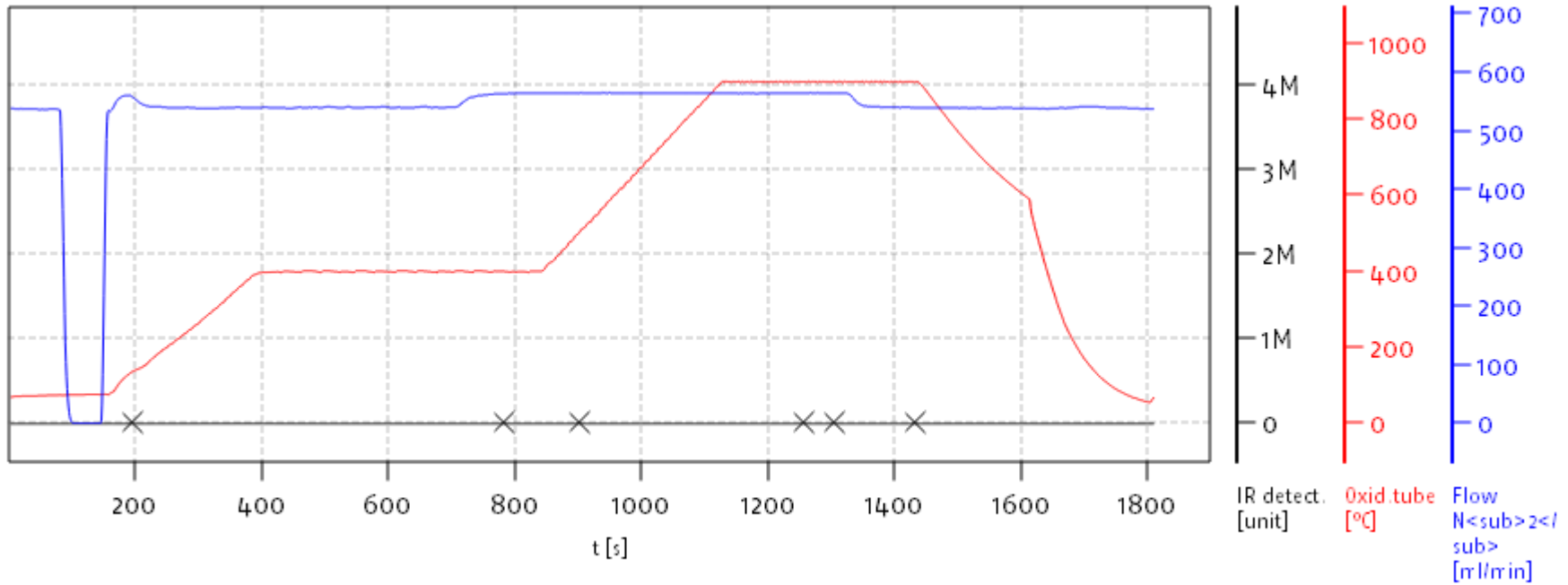
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
49	49	BLANK	1.00		CARBON	1/ 13/2023 8:22 AM	bl	0.000	7 131	0.000	0.000	266	885	0.000	0.000	0.9923	1.0000



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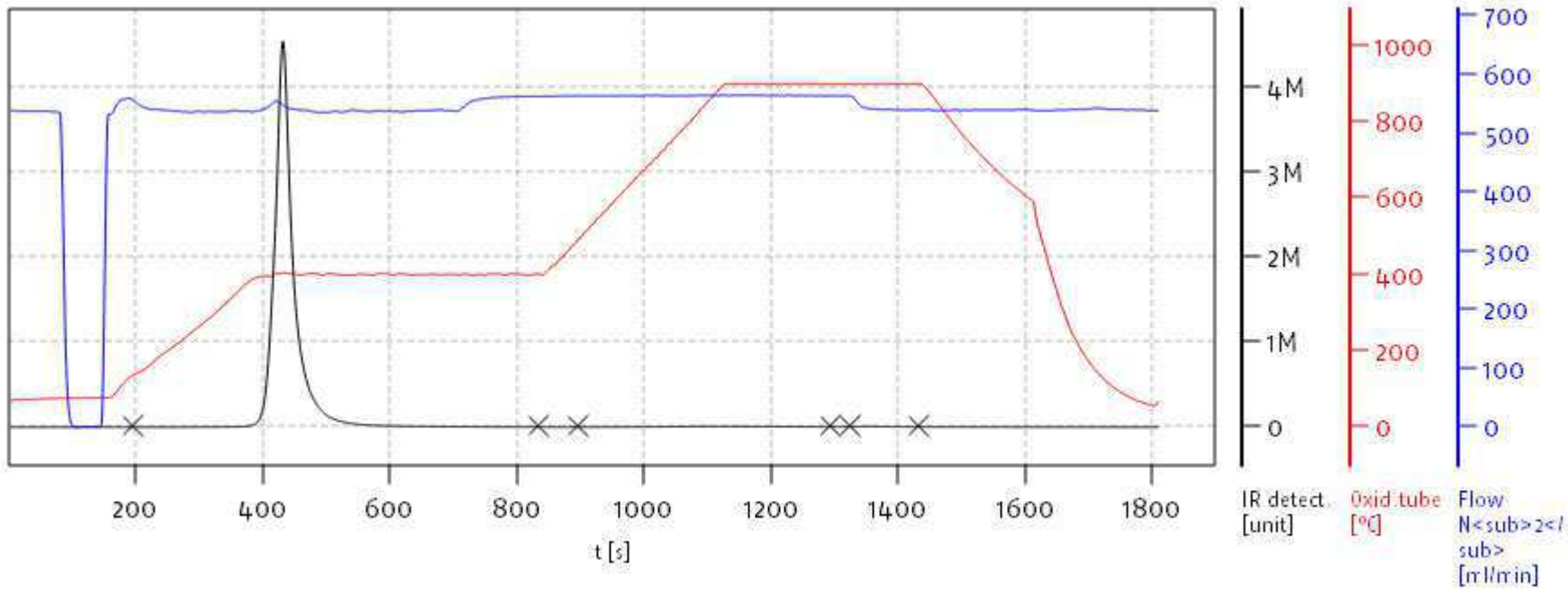
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
50	50	Dfactor	19.50		CARBON	1/13/2023 8:52 AM	bl	44.446	5 830 106	44.849	0.000	21 891	77 373	44.446	0.404	0.9647	1.0000



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Balance: BAL3
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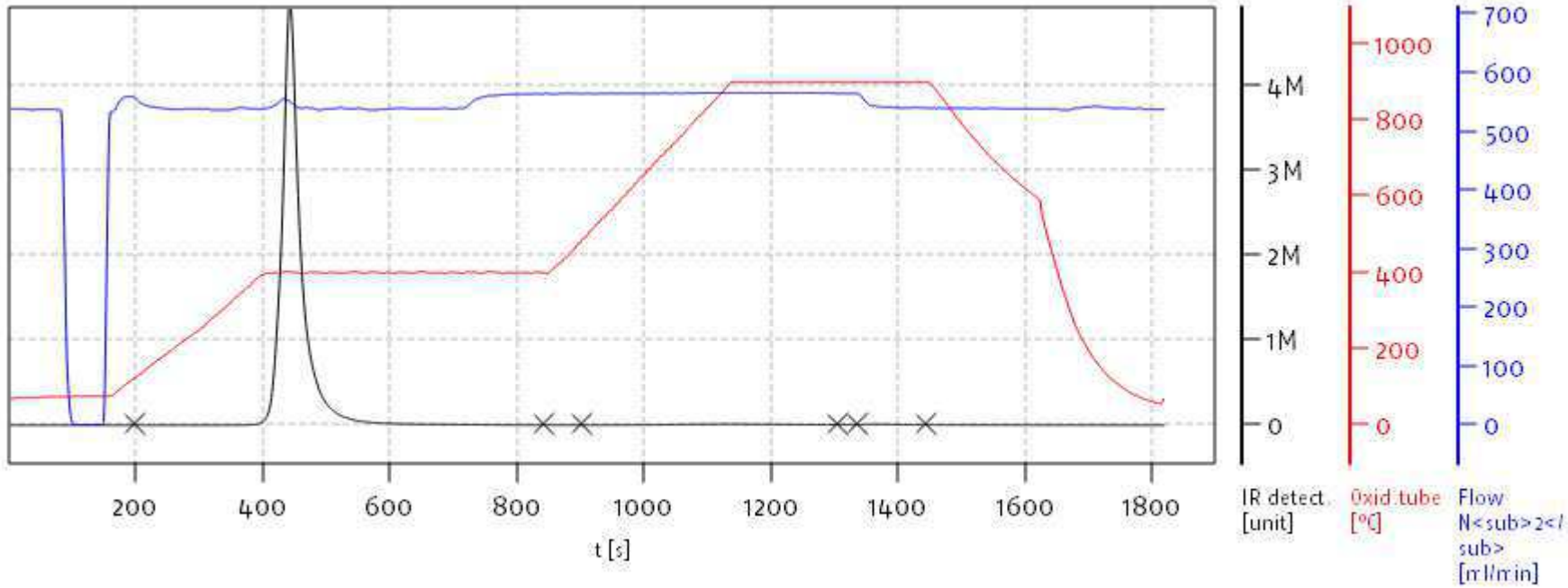
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
51	51	Dfactor	21.70		CARBON	1/13/2023 9:23 AM	bl	44.463	6 478 692	44.986	0.017	28 952	99 930	44.446	0.524	0.9656	1.0000



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Balance: BAL3
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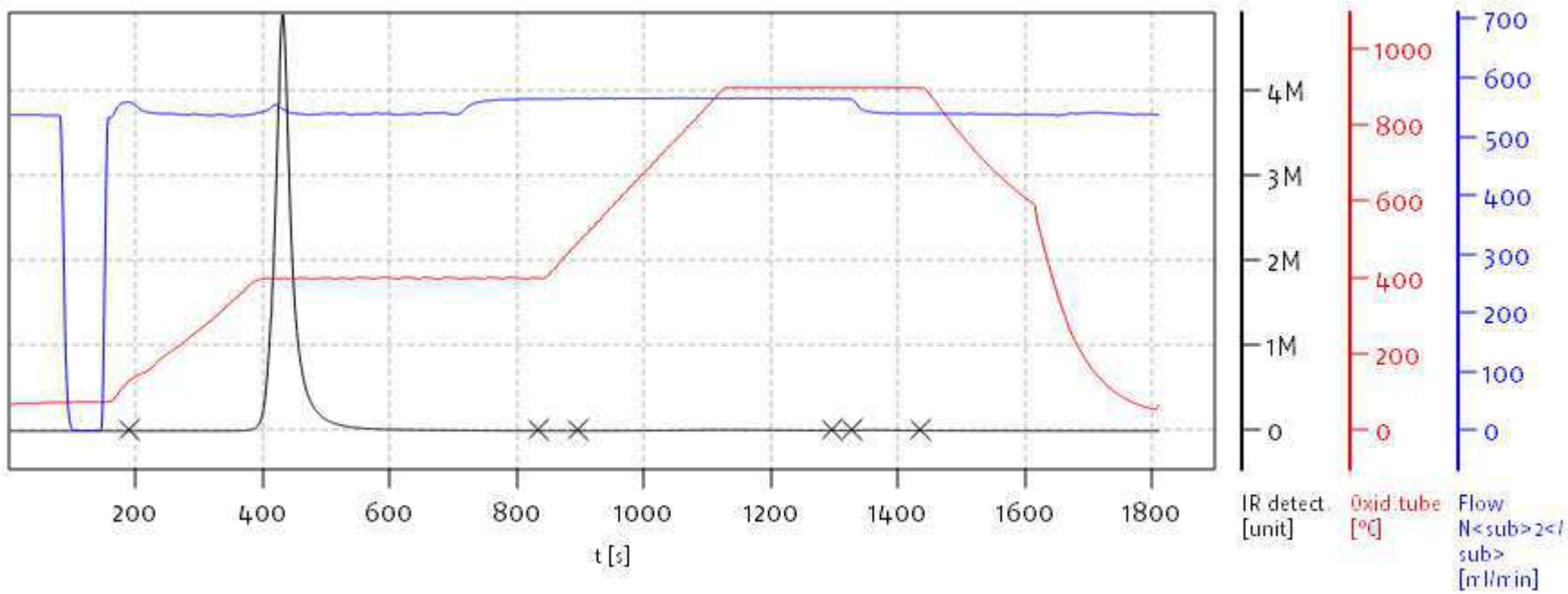
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
52	52	SLA0114-CCV4	20.50		CARBON	1/13/2023 9:54 AM	bl	43.662	6 011 770	44.307	0.040	31 806	111 990	43.622	0.645	0.9652	1.0000



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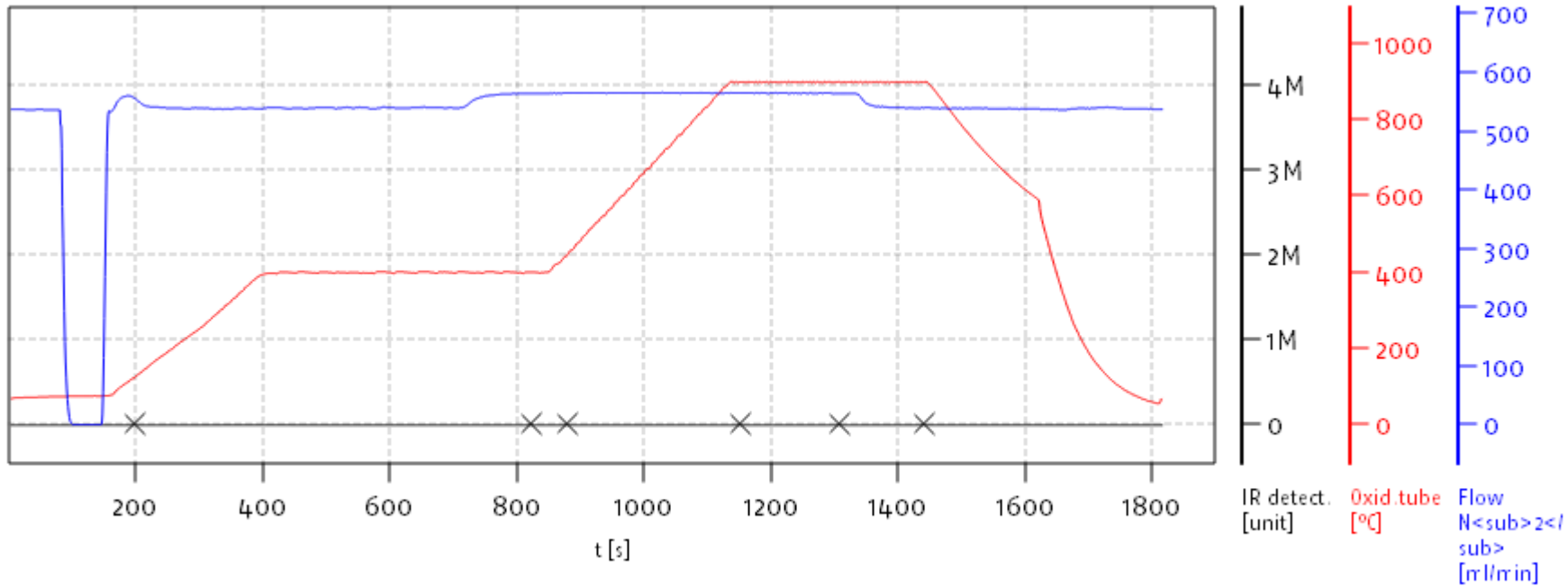
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
53	53	SLA0114-CCB4	505.40		CARBON	1/13/2023 10:24 AM	bl,C3u,C2u	0.000	5 991	0.000	0.000	1 205	753	0.000	0.000	0.9652	1.0000



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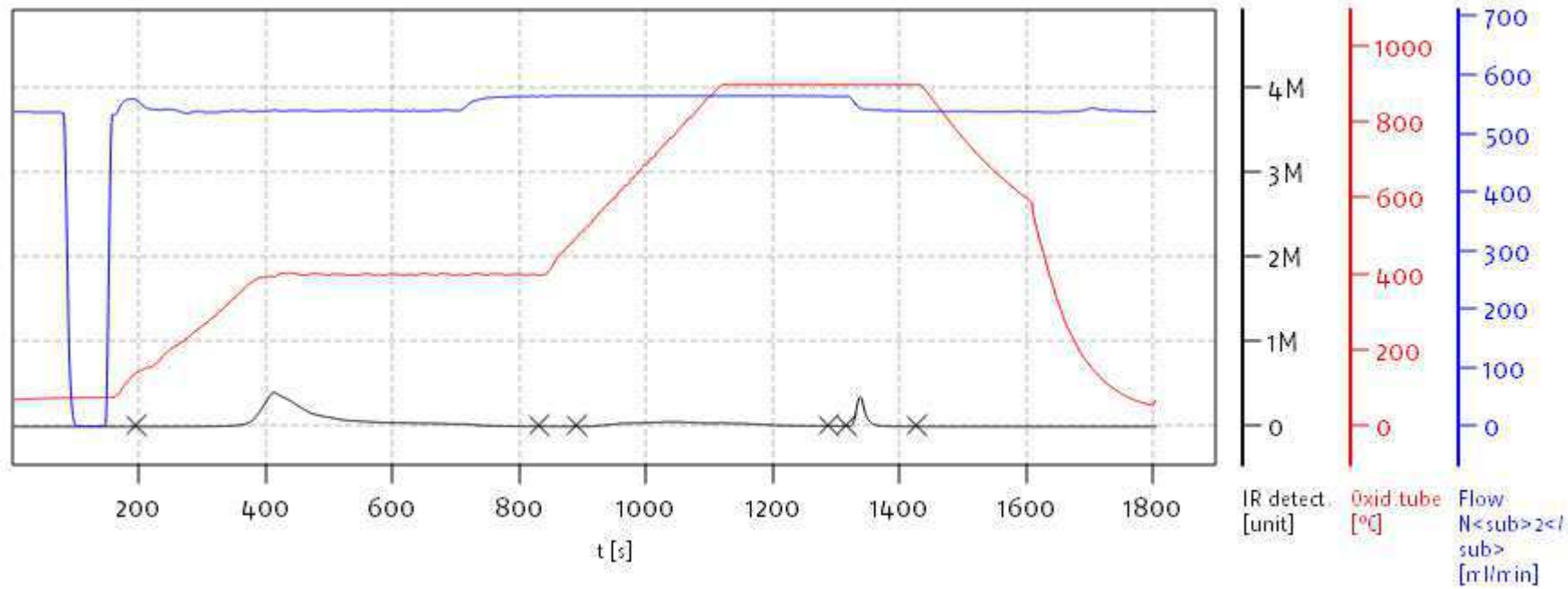
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
54	54	23A0157-09	512.40		CARBON	1/13/2023 10:55 AM	bl	0.511	1 572 733	0.636	0.060	226 391	440 872	0.451	0.125	0.9652	1.0000



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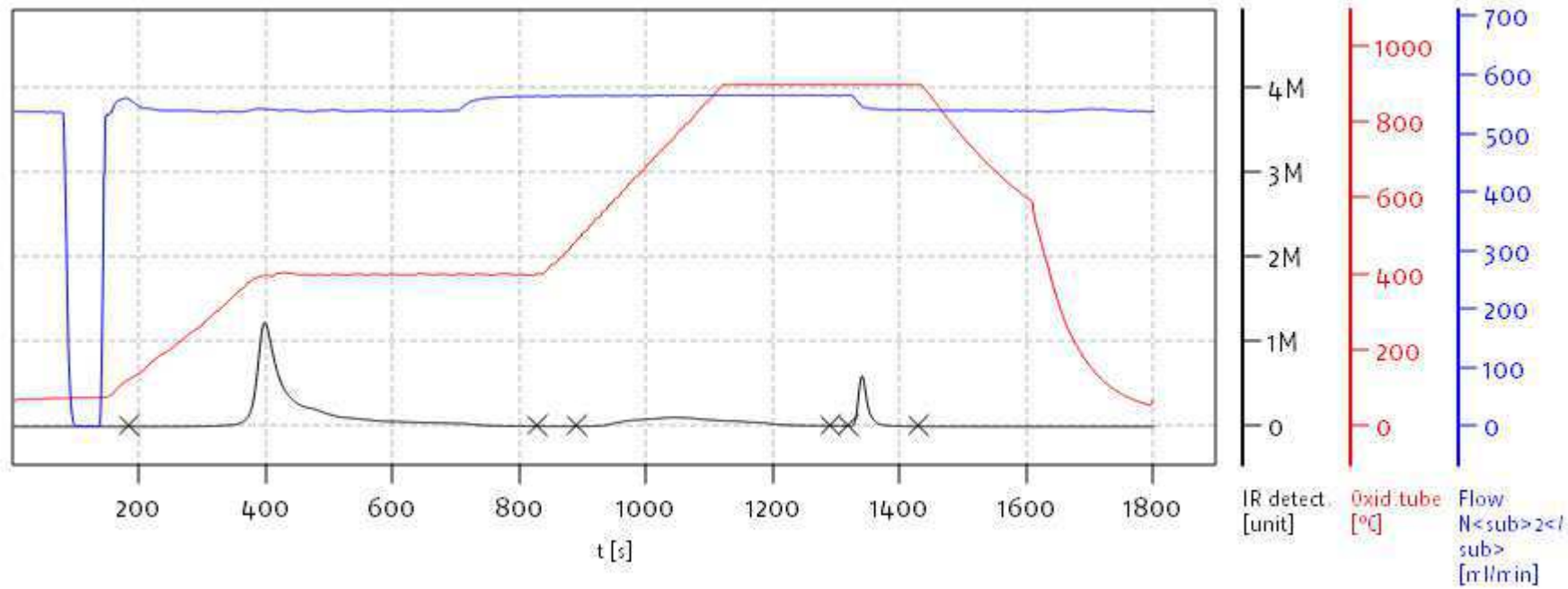
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
55	55	23A0157-10	542.30		CARBON	1/13/2023 11:25 AM	bl	0.887	2 866 980	1.106	0.104	390 903	793 812	0.783	0.219	0.9652	1.0000



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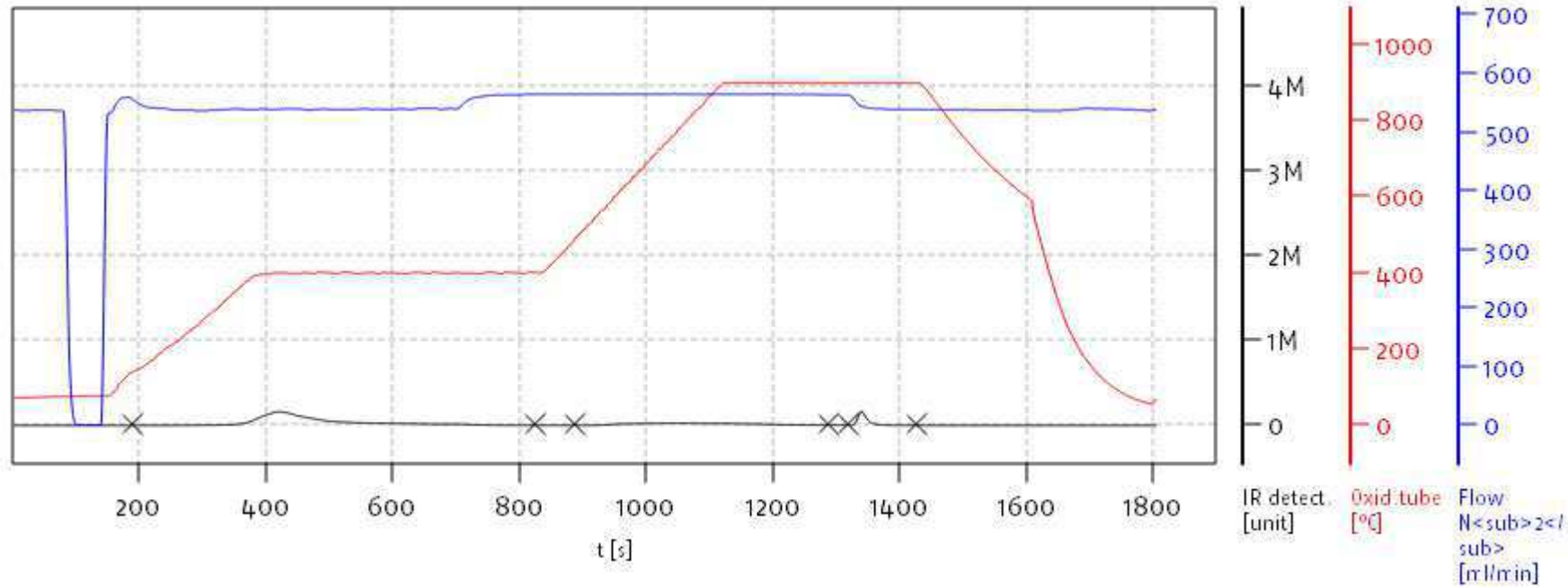
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
56	56	23A0157-11	519.10		CARBON	1/13/2023 11:56 AM	bl	0.231	745 051	0.291	0.024	107 716	226 993	0.207	0.060	0.9652	1.0000



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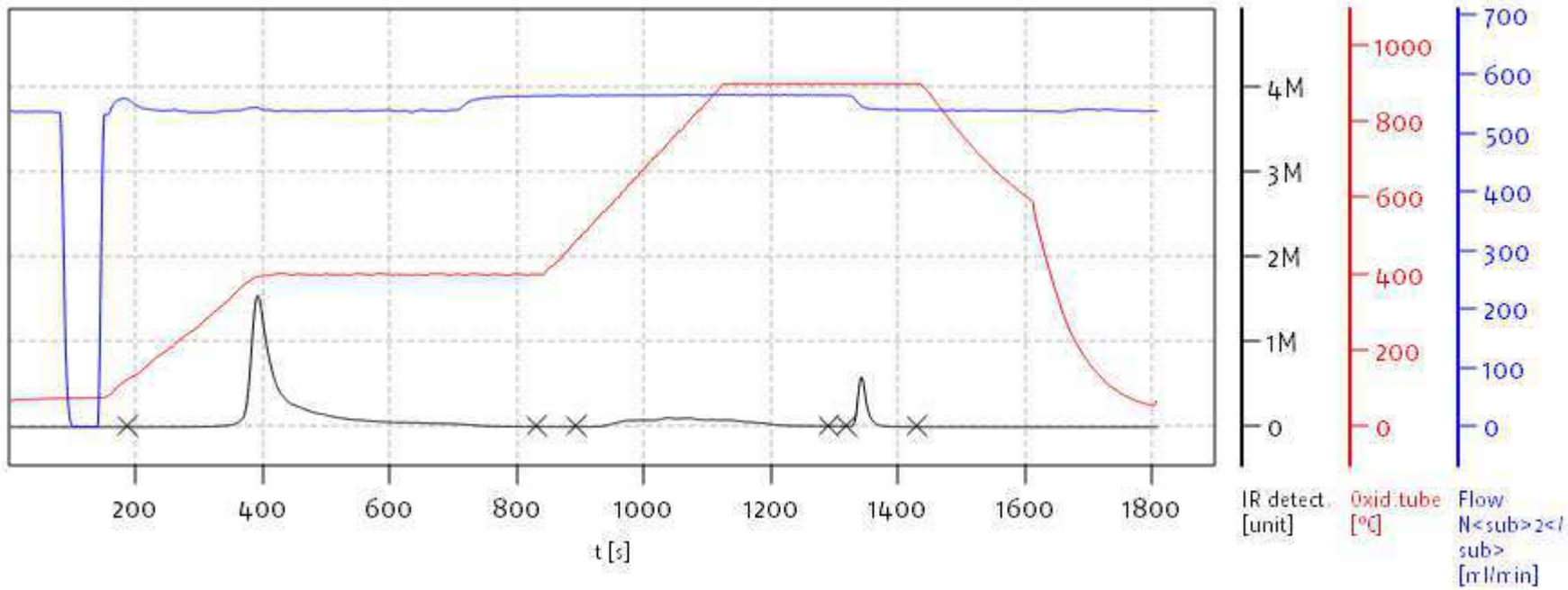
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
57	57	23A0157-12	525.00		CARBON	1/13/2023 12:26 PM	bl	0.988	3 143 127	1.223	0.101	370 543	820 768	0.887	0.234	0.9652	1.0000



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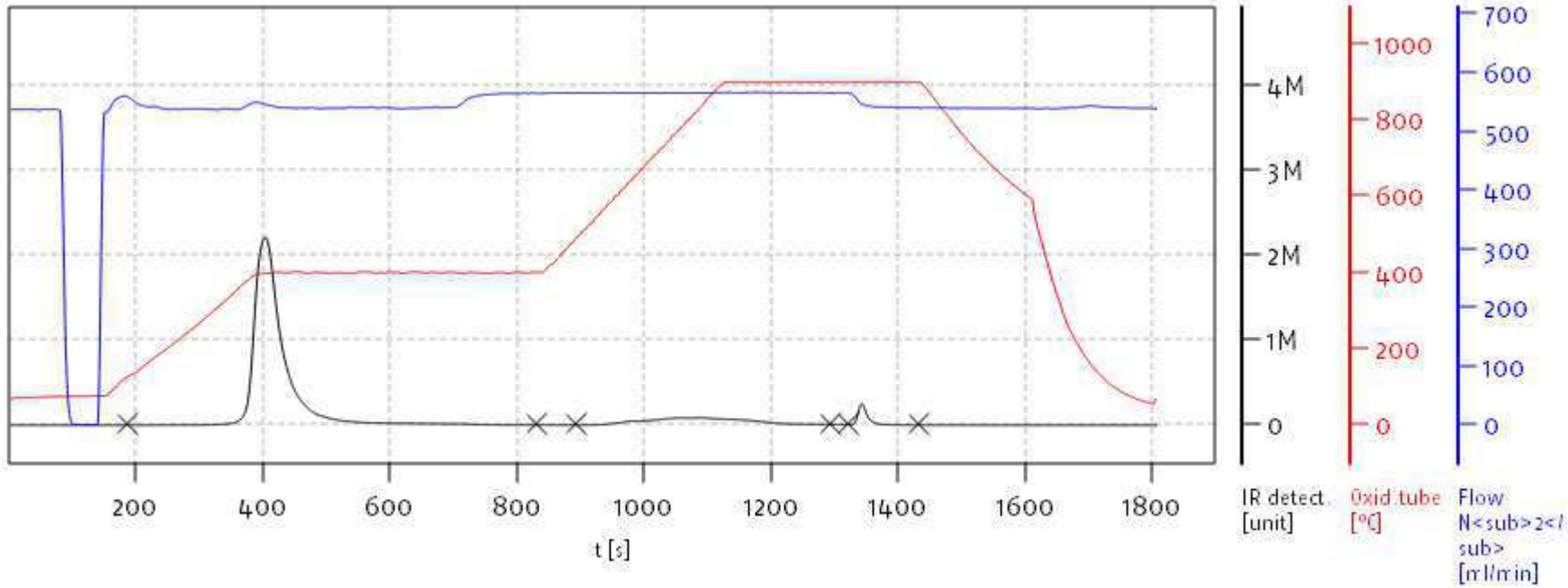
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
58	58	23A0157-13	518.30		CARBON	1/13/2023 12:57 PM	bl	1.280	4 319 559	1.463	0.042	167 156	642 254	1.238	0.184	0.9652	1.0000



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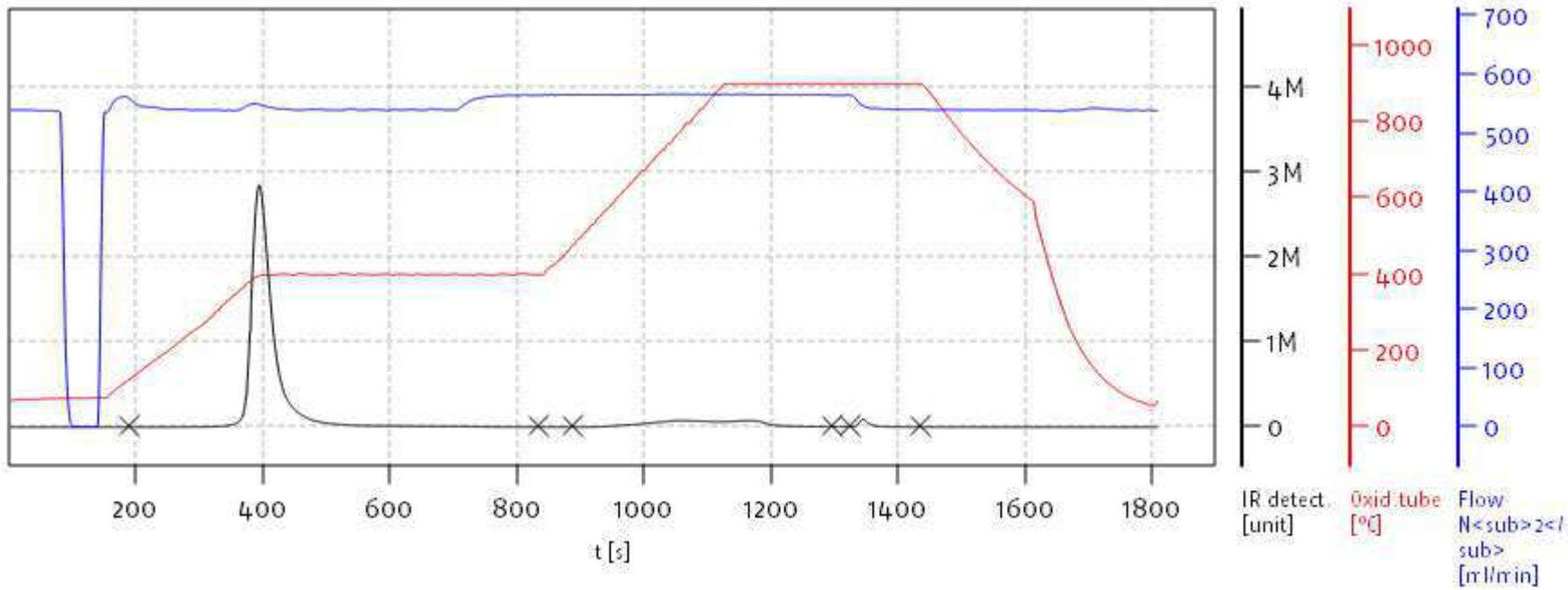
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
59	59	23A0158-01	500.50		CARBON	1/13/2023 1:27 PM	bl	1.249	4 168 851	1.421	0.012	66 898	583 419	1.237	0.172	0.9652	1.0000



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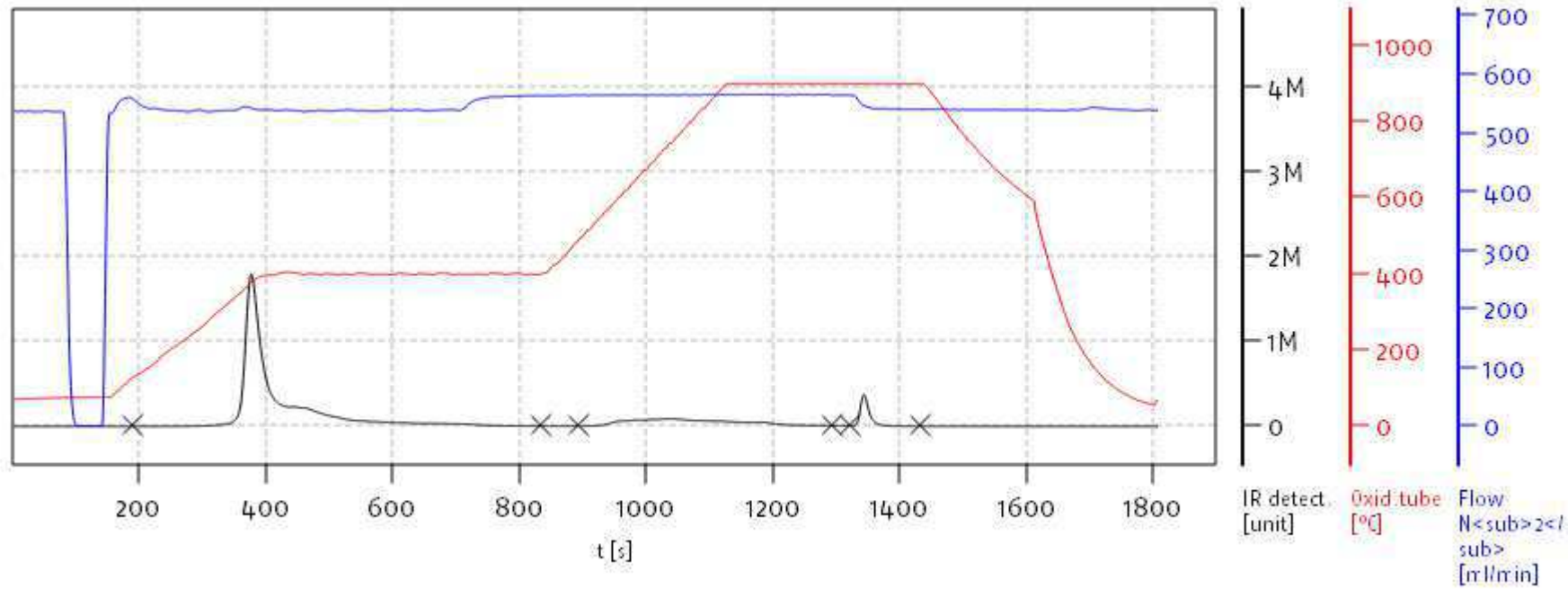
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
60	60	23A0158-02	503.70		CARBON	1/13/2023 1:58 PM	bl	0.987	3 136 471	1.193	0.065	236 807	697 999	0.922	0.206	0.9652	1.0000



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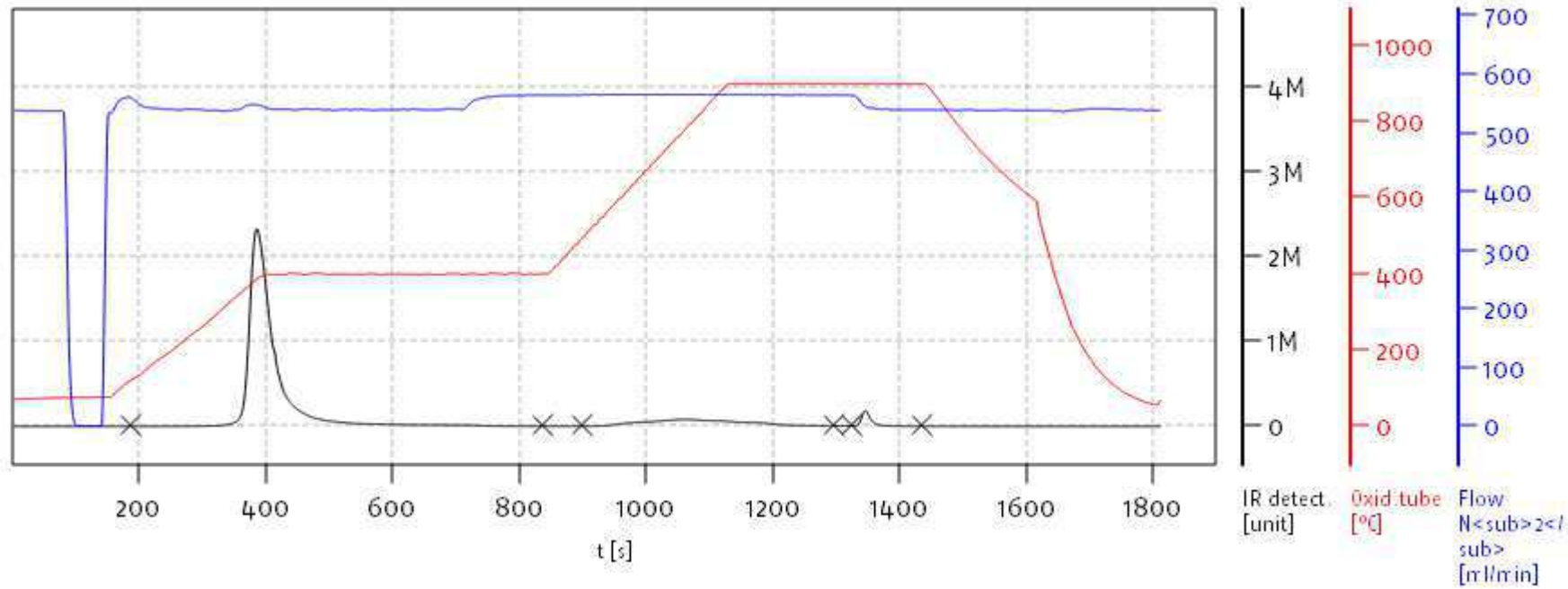
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
61	61	23A0158-03	509.00		CARBON	1/13/2023 2:28 PM	bl	1.166	3 897 764	1.335	0.029	123 281	584 127	1.136	0.170	0.9652	1.0000



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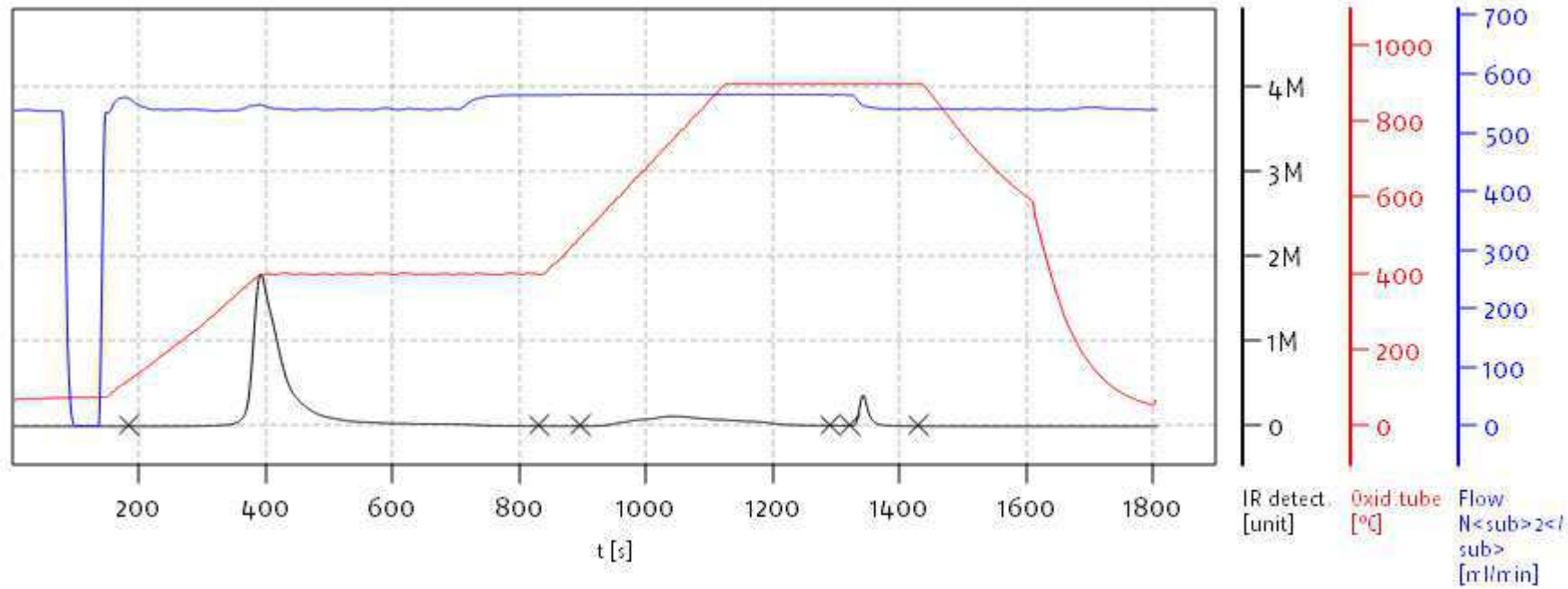
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
62	62	23A0158-04	559.60		CARBON	1/13/2023 2:59 PM	bl	1.057	3 763 091	1.275	0.059	241 443	814 004	0.998	0.218	0.9652	1.0000



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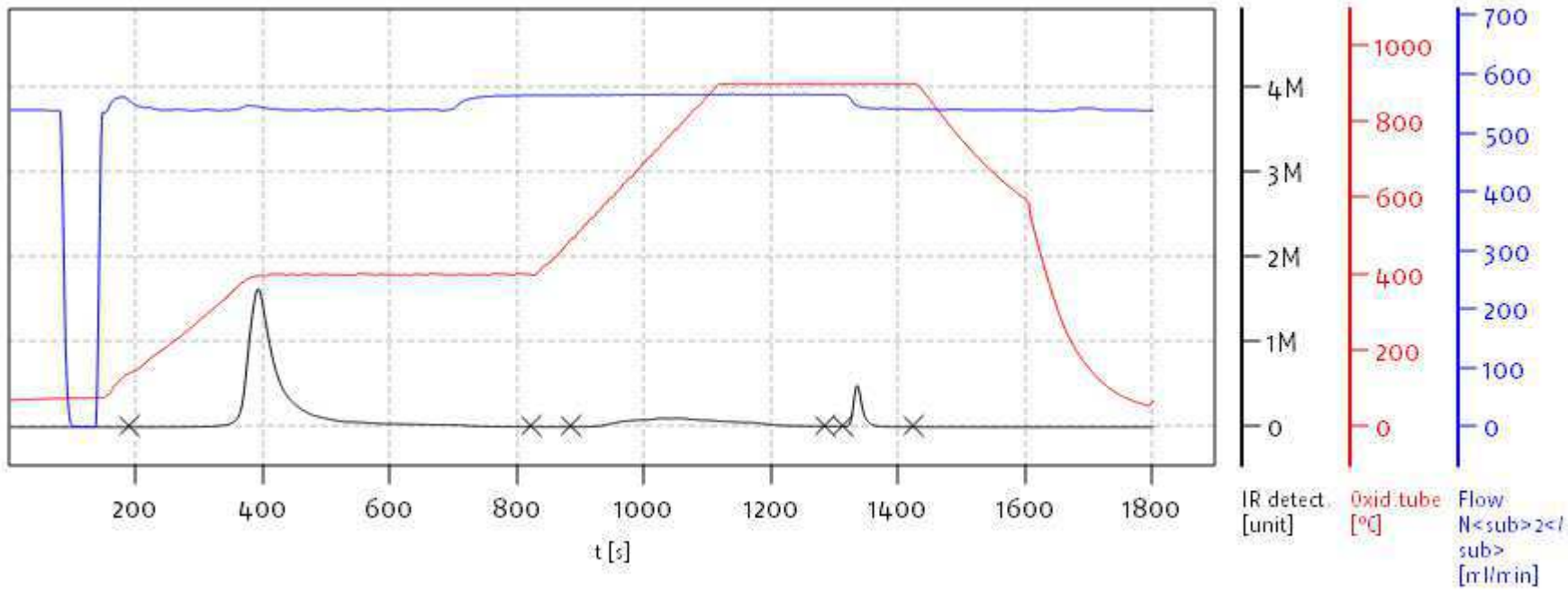
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
63	63	23A0158-05	525.00		CARBON	1/13/2023 3:29 PM	bl	1.060	3 460 914	1.282	0.083	307 285	778 510	0.977	0.222	0.9652	1.0000



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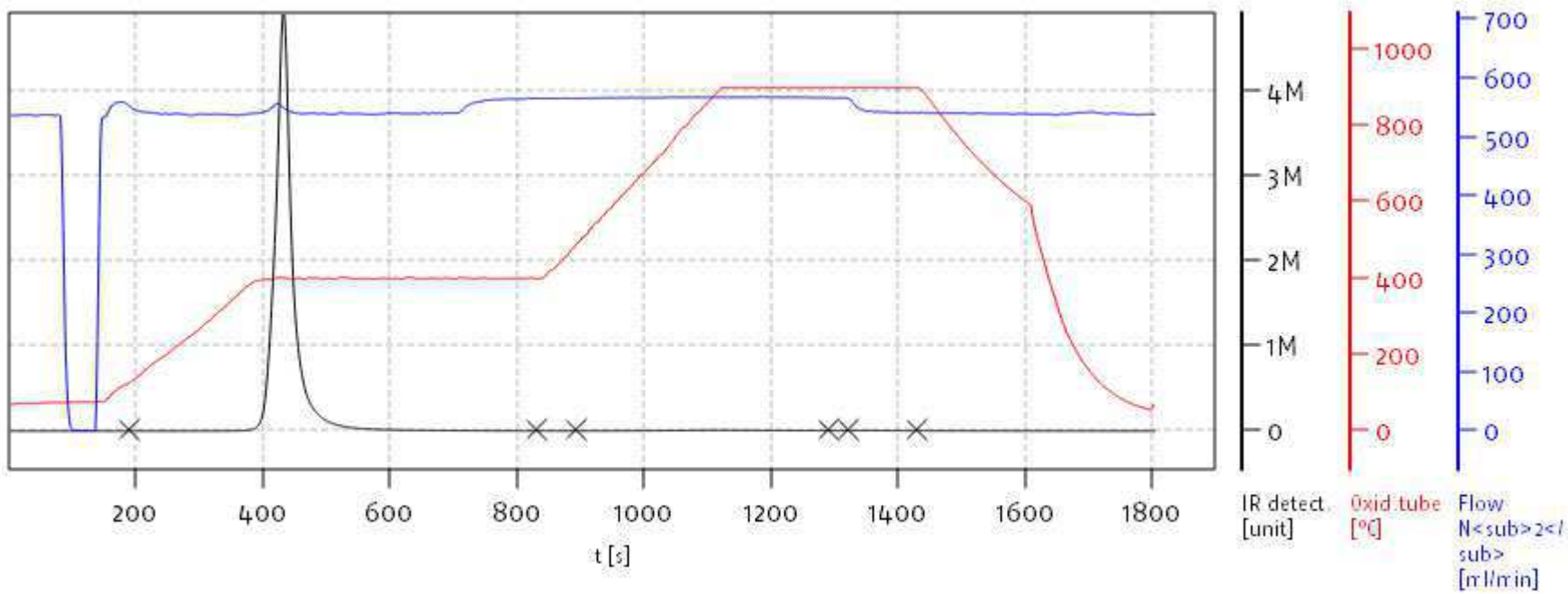
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
64	64	SLA0114-CCV5	19.90		CARBON	1/13/2023 4:00 PM	bl	43.950	5 880 285	44.421	0.000	20 391	87 164	43.950	0.472	0.9652	1.0000



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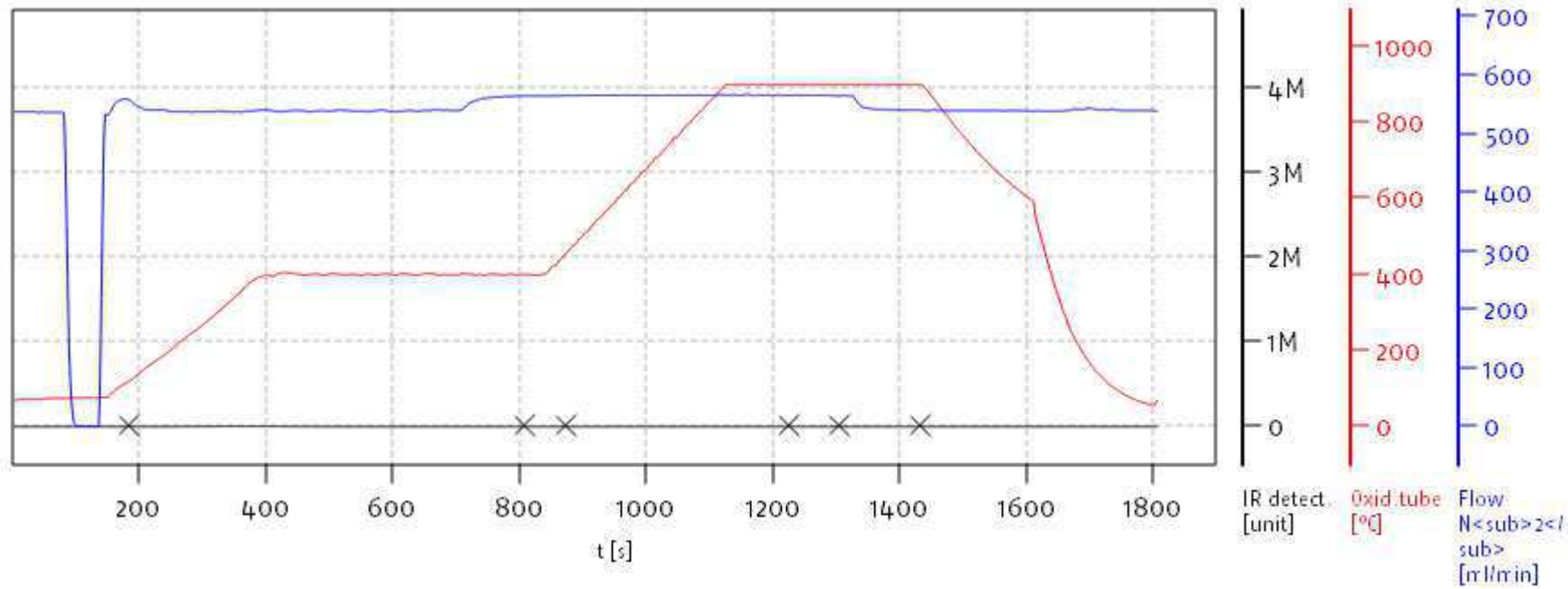
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
65	65	SLA0114-CCB5	522.50		CARBON	1/13/2023 4:30 PM	bl,C3u,C2u	0.000	23 990	0.000	0.000	608	1 735	0.000	0.000	0.9652	1.0000



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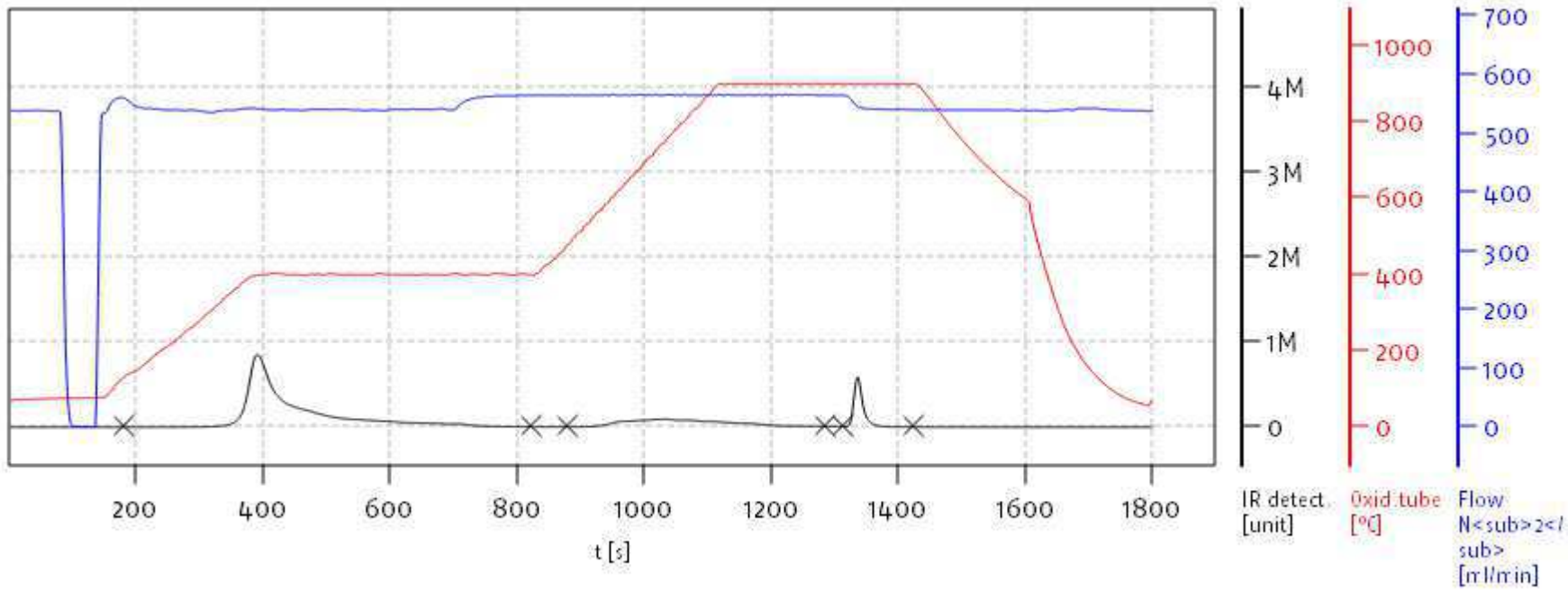
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
66	66	23A0158-06	511.50		CARBON	1/13/2023 5:01 PM	bl	0.829	2 508 264	1.029	0.104	371 504	685 222	0.725	0.199	0.9652	1.0000



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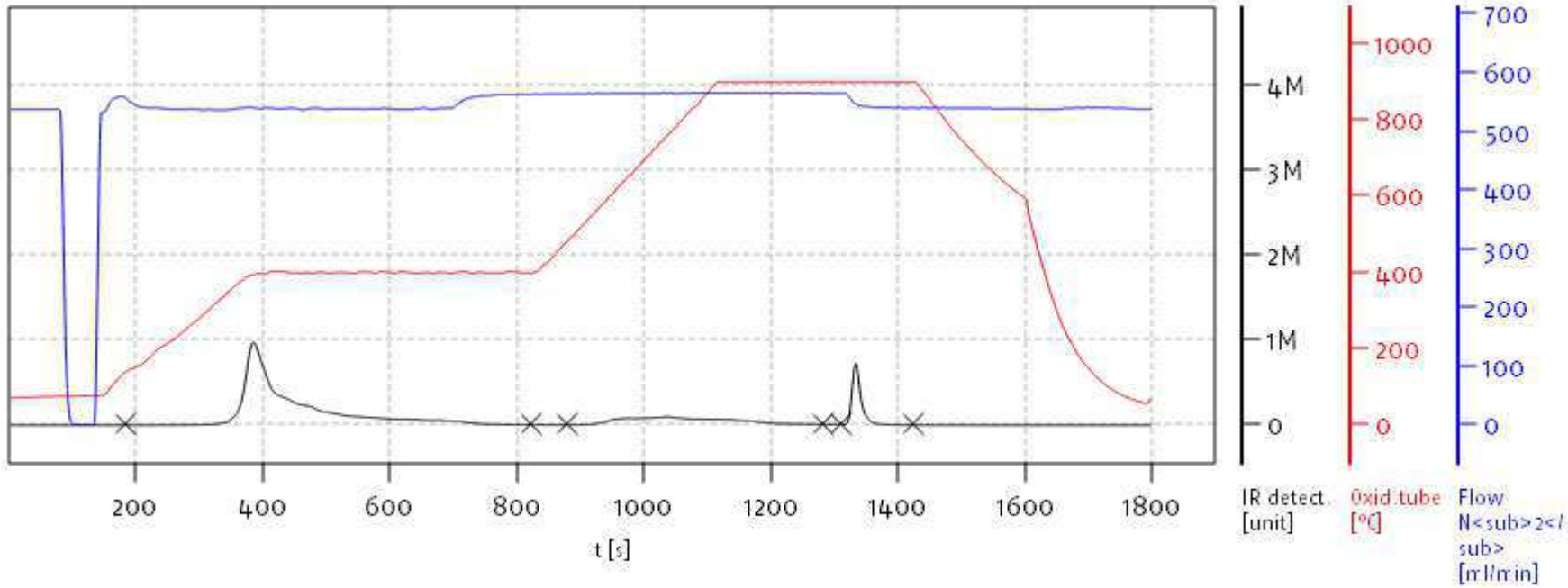
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
67	67	23A0158-07	550.60		CARBON	1/13/2023 5:31 PM	bl	0.904	2 917 320	1.108	0.119	450 697	752 266	0.784	0.204	0.9652	1.0000



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Serial No: 0300.181017
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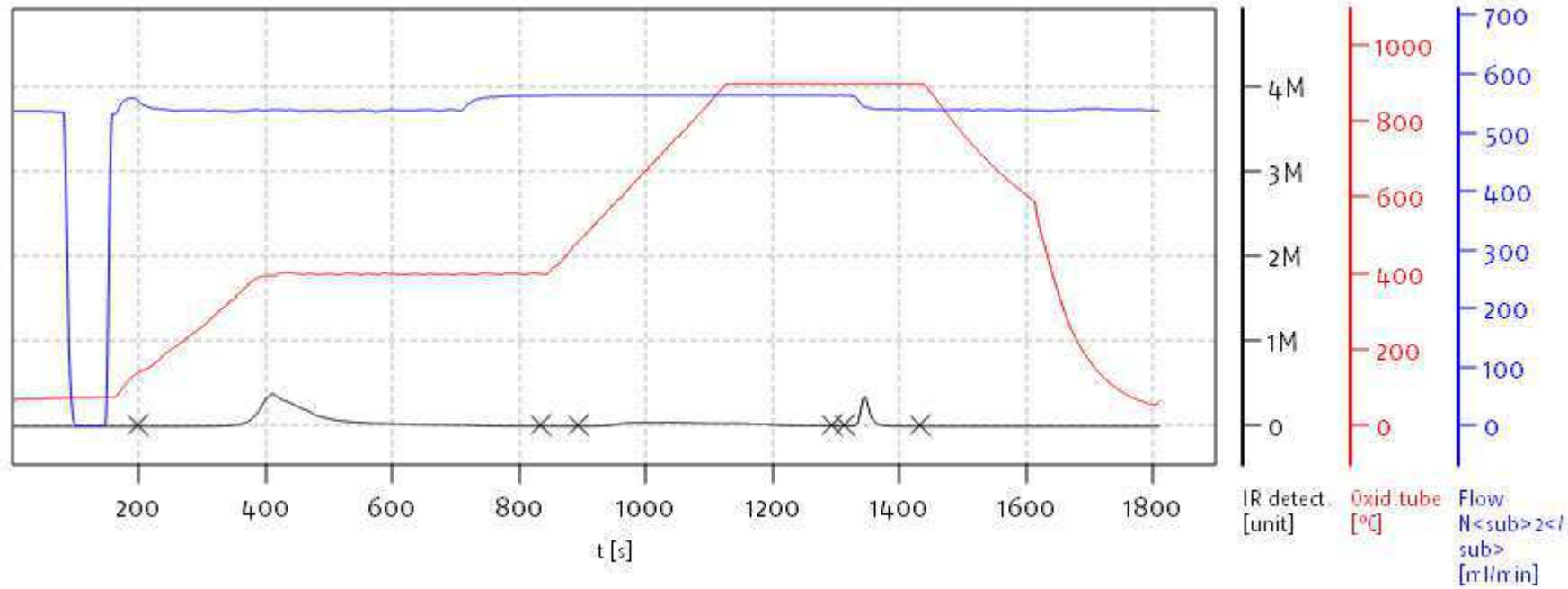
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
68	68	23A0158-08	500.80		CARBON	1/13/2023 6:01 PM	bl	0.472	1 401 567	0.585	0.062	226 589	391 064	0.410	0.113	0.9652	1.0000



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Serial No: 0300.181017
Mode CCC

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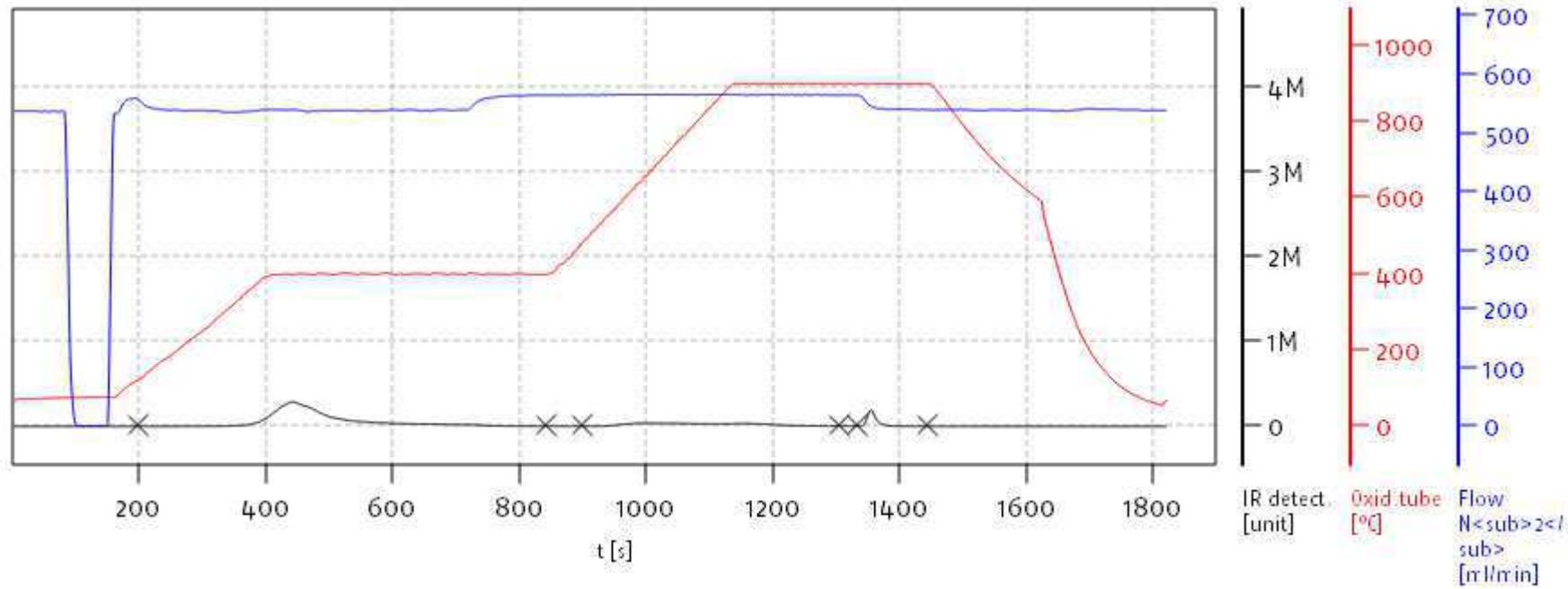
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
69	69	23A0158-09	533.40		CARBON	1/13/2023 6:32 PM	bl	0.365	1 230 969	0.455	0.028	122 623	335 339	0.337	0.090	0.9652	1.0000



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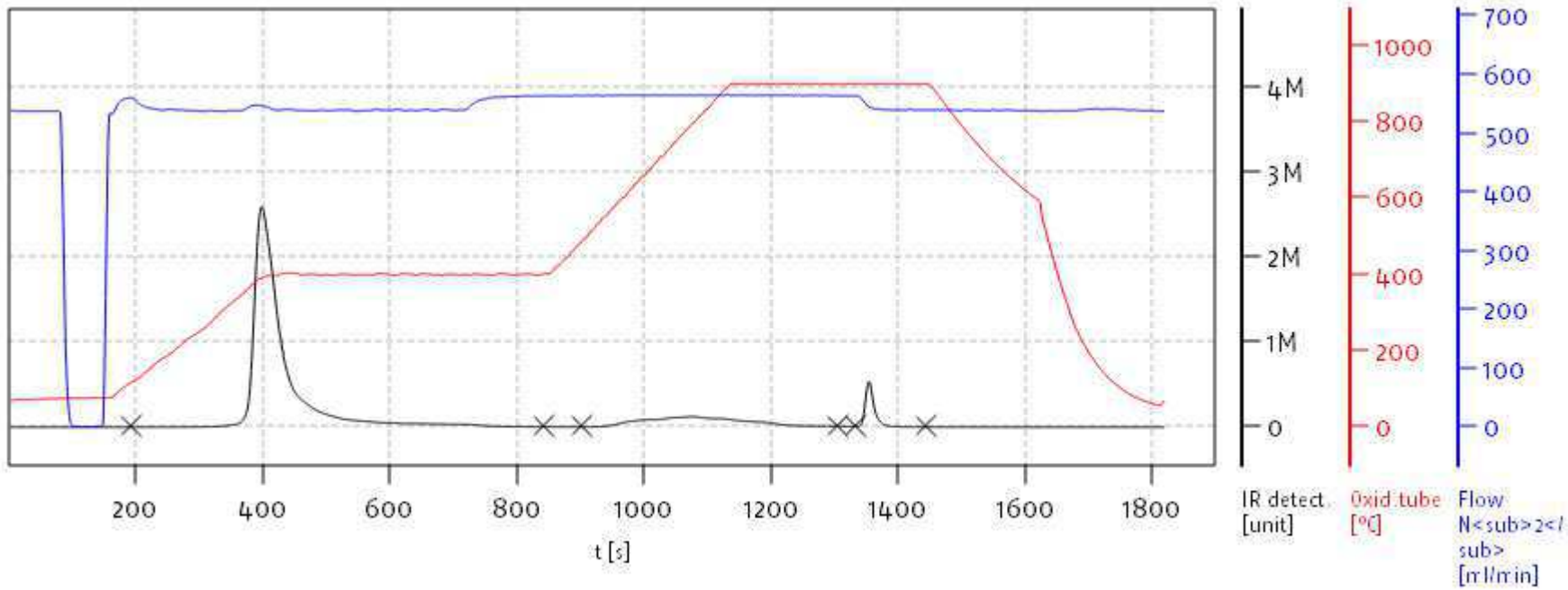
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
70	70	23A0158-10	511.30		CARBON	1/13/2023 7:03 PM	bl	1.541	4 985 897	1.802	0.092	330 339	888 696	1.449	0.261	0.9652	1.0000



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Balance: BAL3
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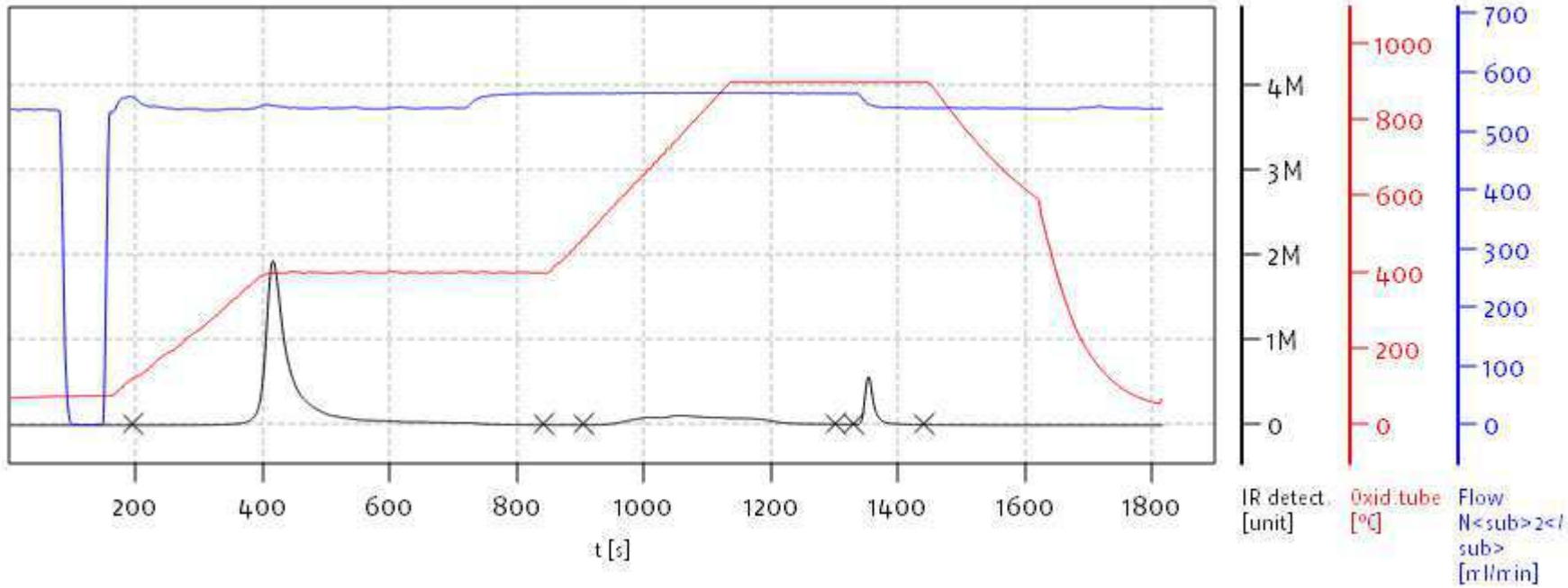
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
71	71	23A0158-11	514.40		CARBON	1/13/2023 7:34 PM	bl	1.077	3 379 297	1.324	0.104	370 711	845 322	0.974	0.246	0.9652	1.0000



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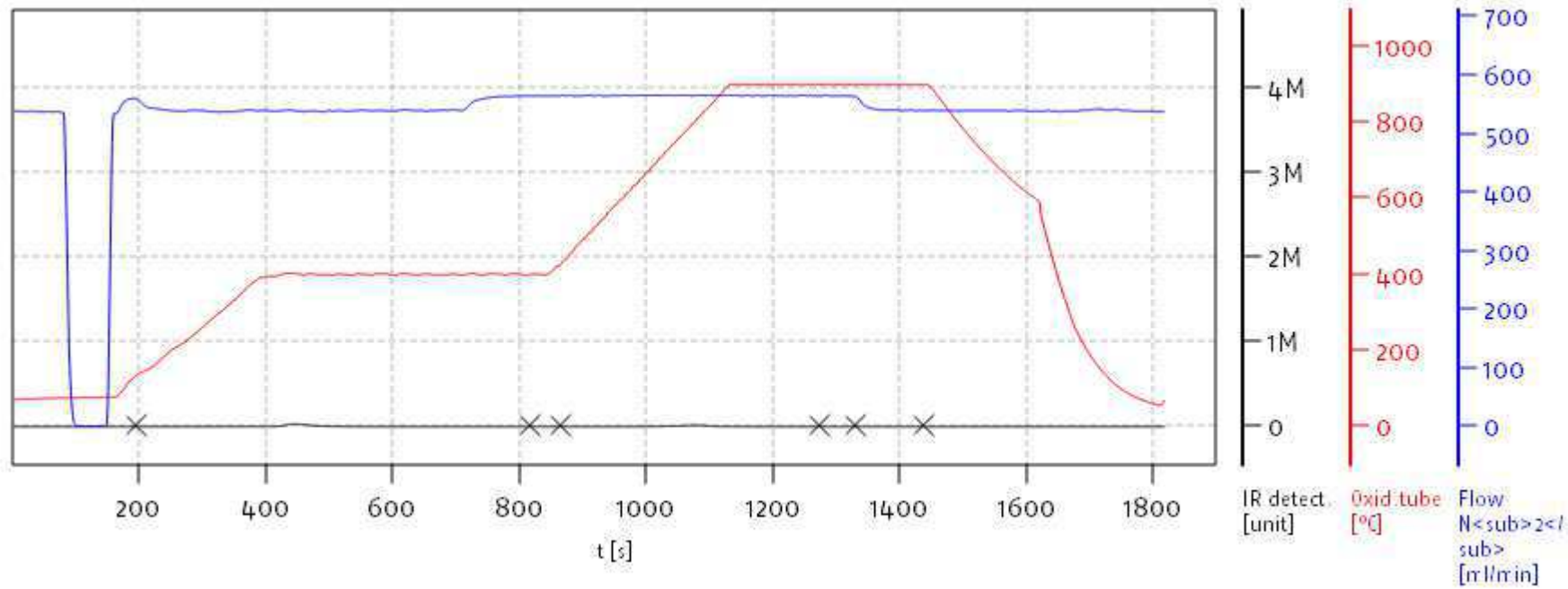
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
72	72	BLA0254-MRL1	545.90		CARBON	1/13/2023 8:04 PM	bl,C2u	0.009	60 612	0.013	0.000	296	38 267	0.009	0.003	0.9652	1.0000



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Serial No: 0300.181017
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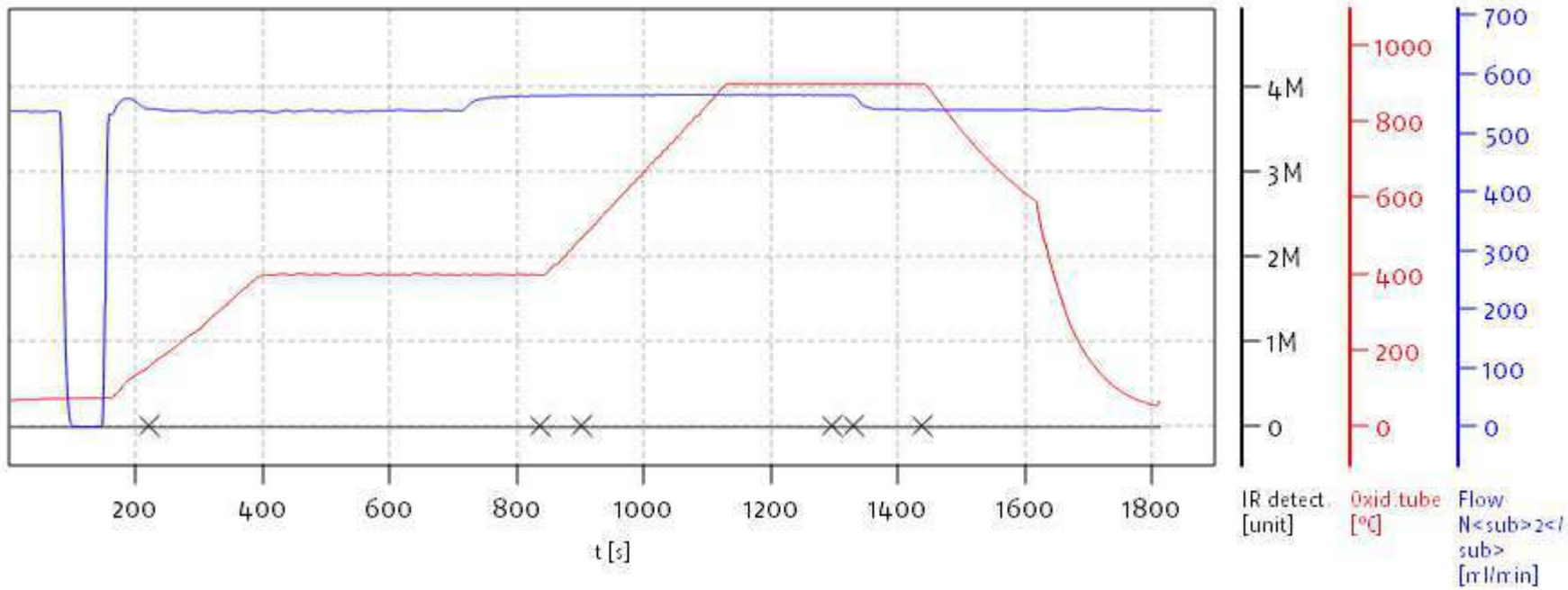
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
73	73	BLA0254-BLK1	516.90		CARBON	1/13/2023 8:35 PM	bl,C2u	0.000	5 427	0.000	0.000	307	6 971	0.000	0.000	0.9652	1.0000



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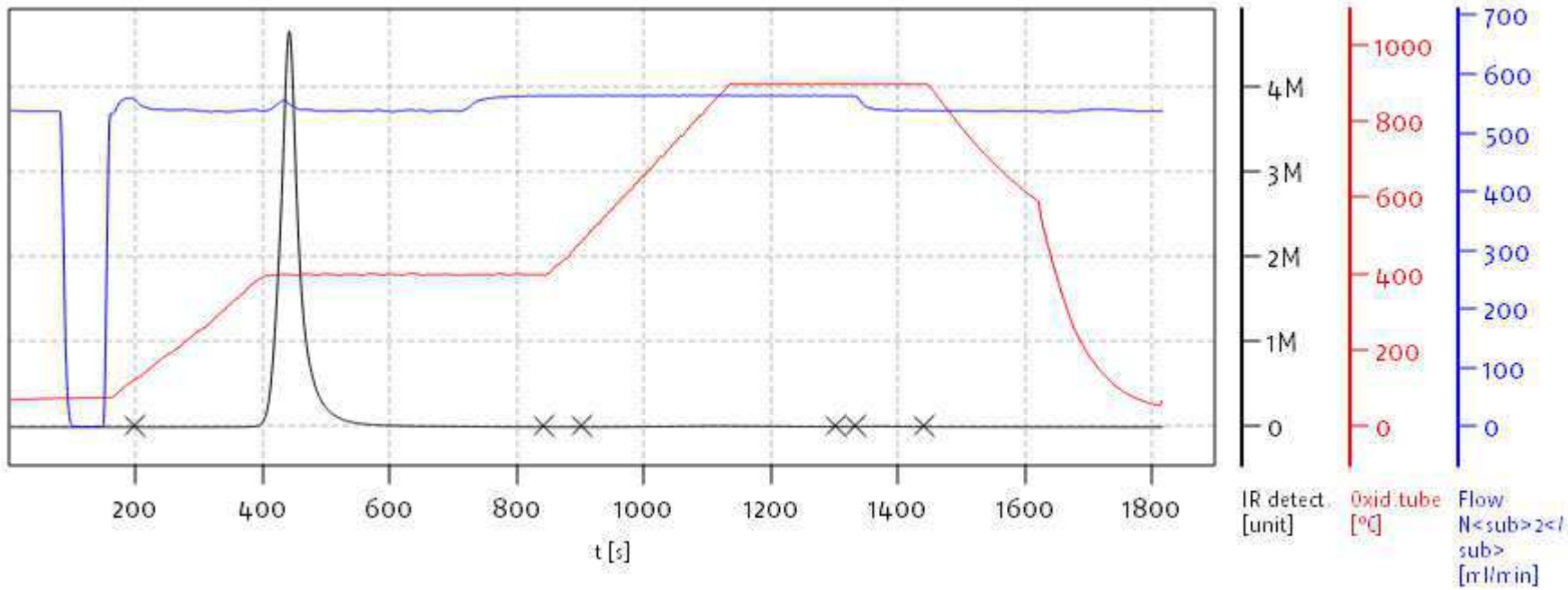
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
74	74	BLA0254-BS1	21.00		CARBON	1/13/2023 9:06 PM	bl	45.052	6 358 745	45.600	0.000	22 882	100 870	45.052	0.548	0.9652	1.0000



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Balance: BAL3
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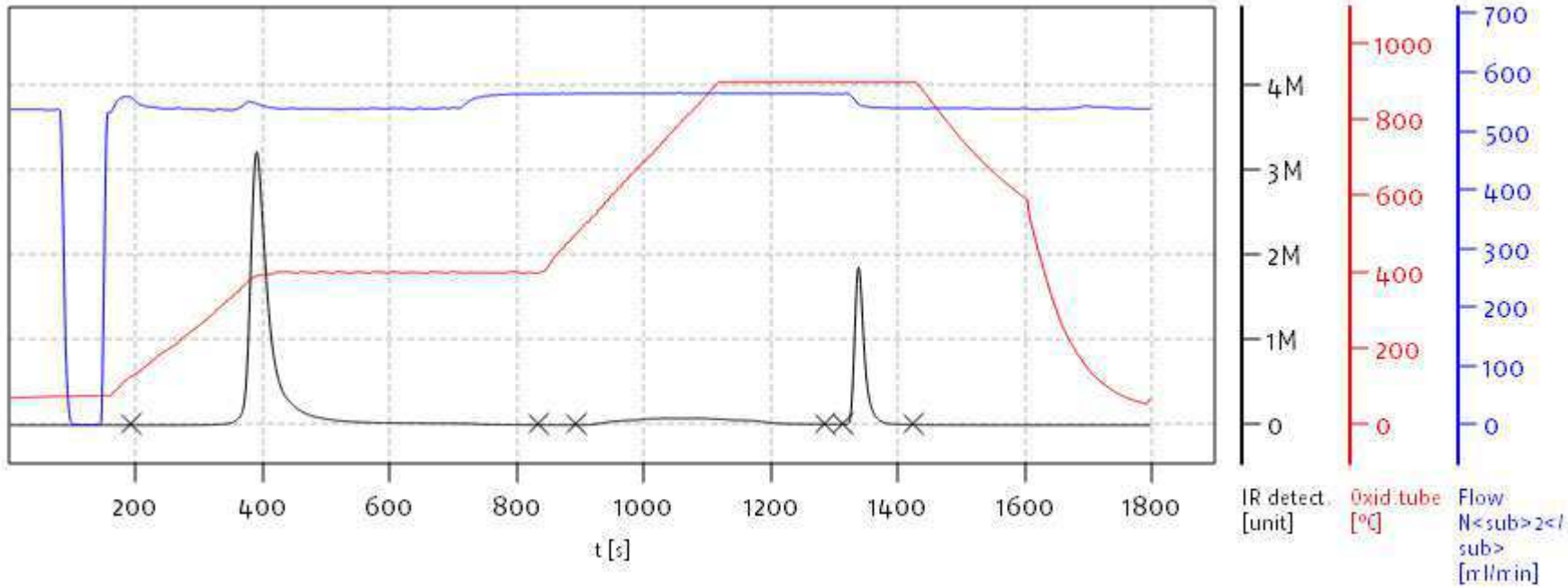
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
75	75	BLA0254-SRM1	284.90		CARBON	1/13/2023 9:36 PM	bl	2.968	4 405 183	3.332	0.672	1 263 132	696 863	2.296	0.364	0.9652	1.0000



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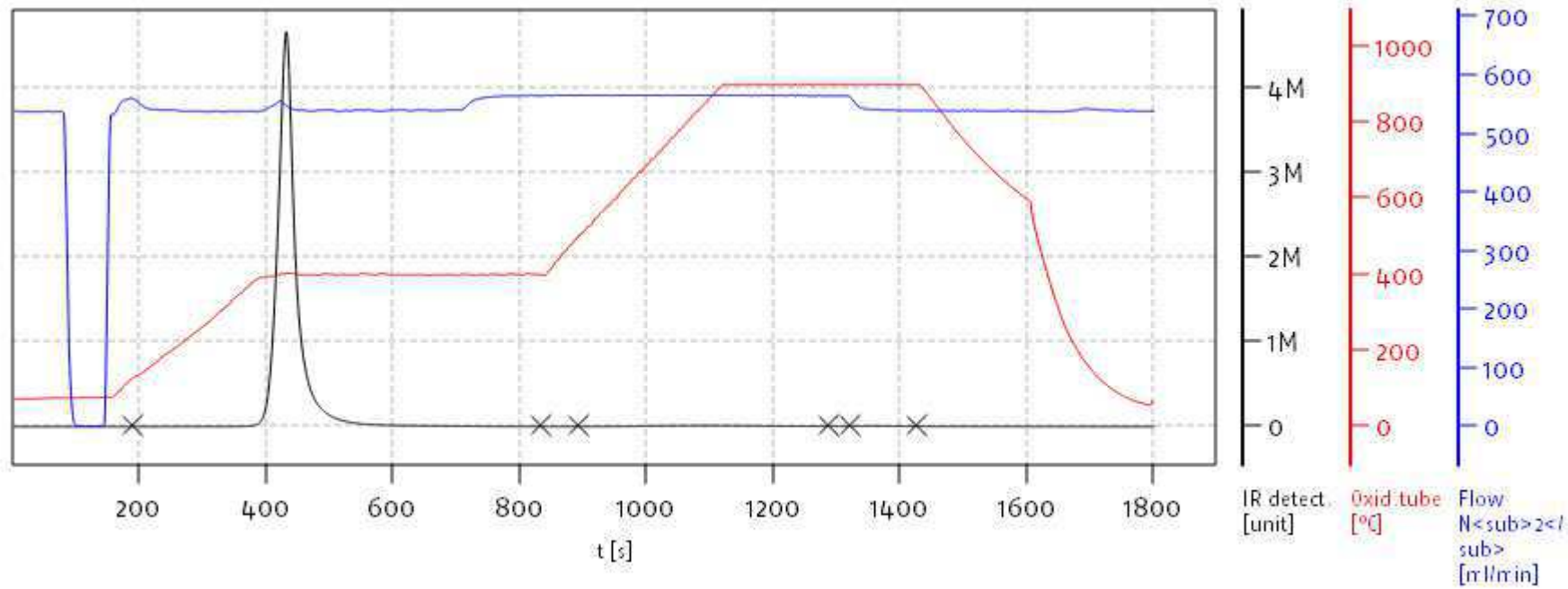
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
76	76	SLA0114-CCV6	19.90		CARBON	1/13/2023 10:06 PM	bl	44.096	5 899 705	44.741	0.000	23 560	109 545	44.096	0.646	0.9652	1.0000



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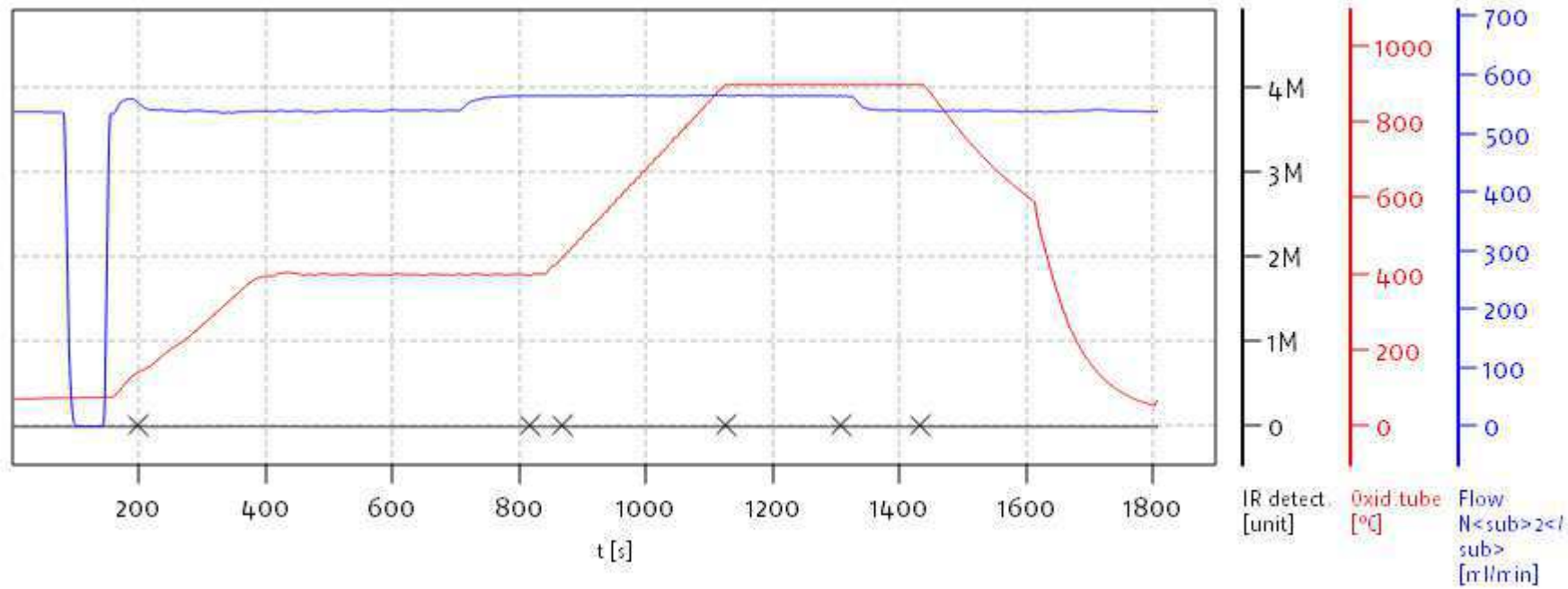
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
77	77	SLA0114-CCB6	500.40		CARBON	1/13/2023 10:37 PM	bl,C3u,C2u	0.000	10 828	0.000	0.000	760	157	0.000	0.000	0.9652	1.0000



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Balance: BAL3
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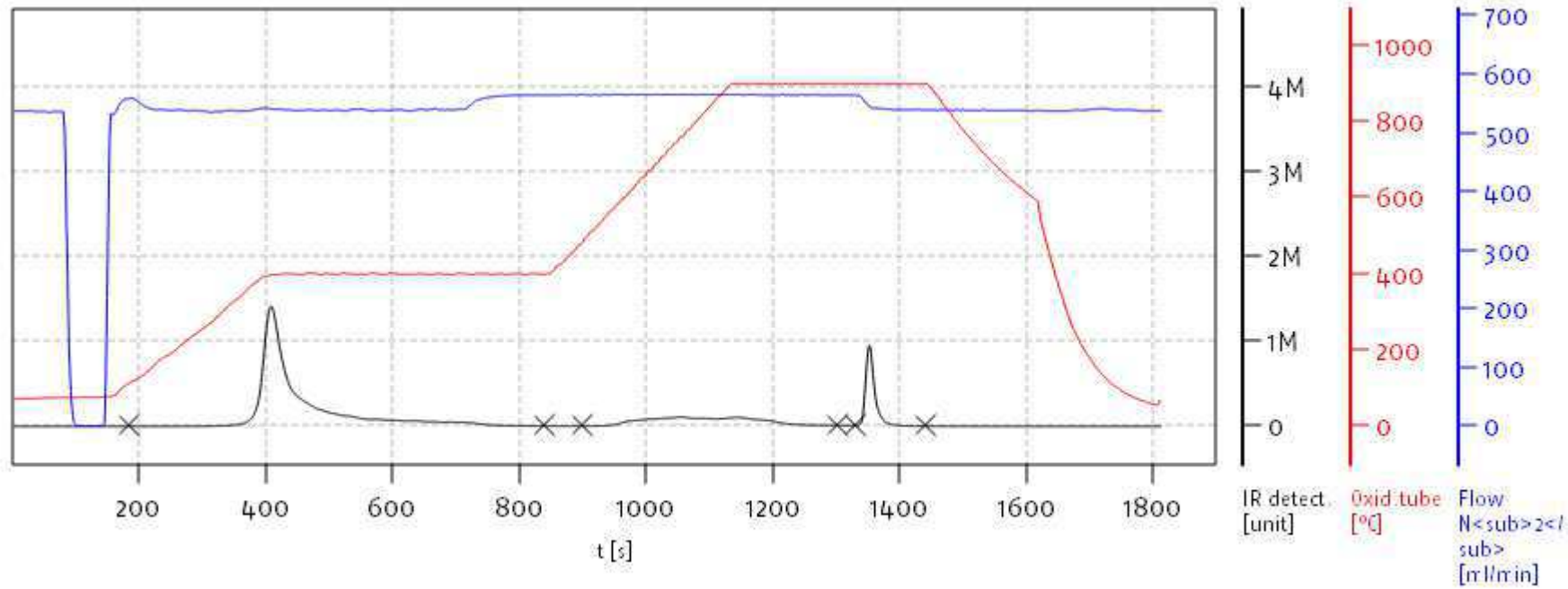
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
78	78	23A0158-12	504.90		CARBON	1/13/2023 11:07 PM	bl	1.114	3 190 093	1.384	0.178	607 357	905 513	0.936	0.269	0.9652	1.0000



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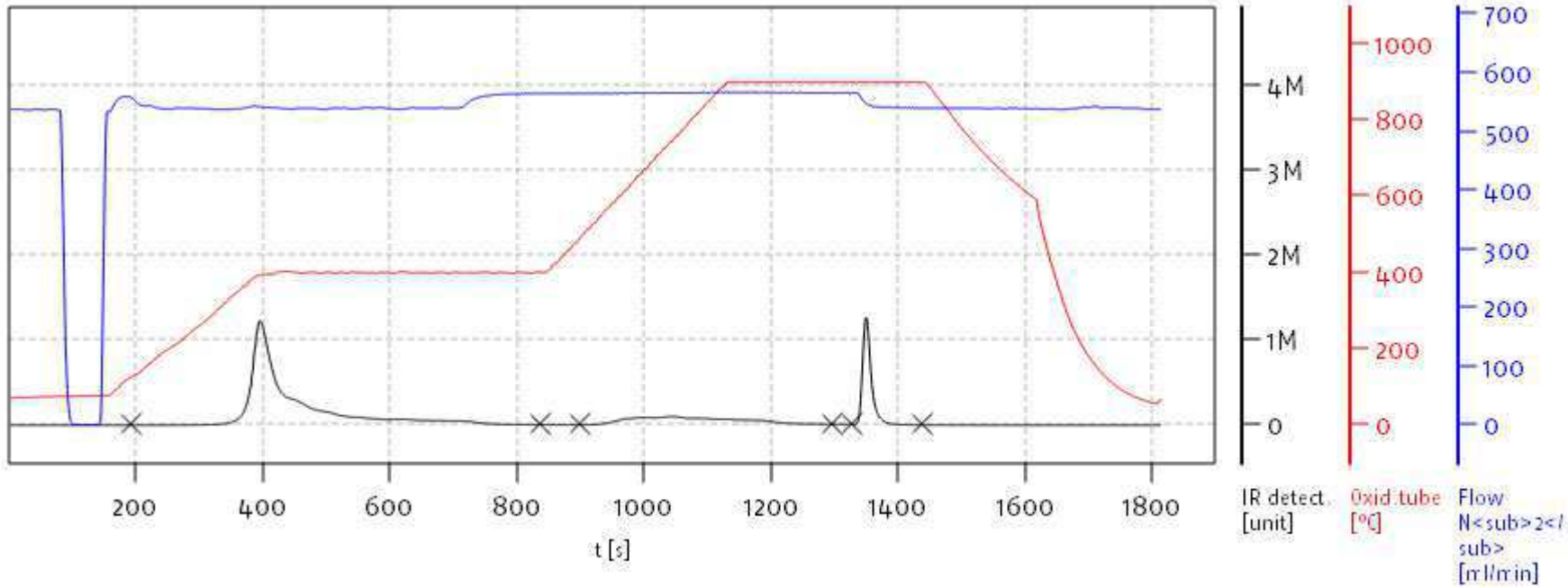
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
79	79	BLA0254-DUP1	508.10		CARBON	1/13/2023 11:38 PM	bl	1.105	3 014 213	1.341	0.227	771 319	799 982	0.879	0.236	0.9652	1.0000



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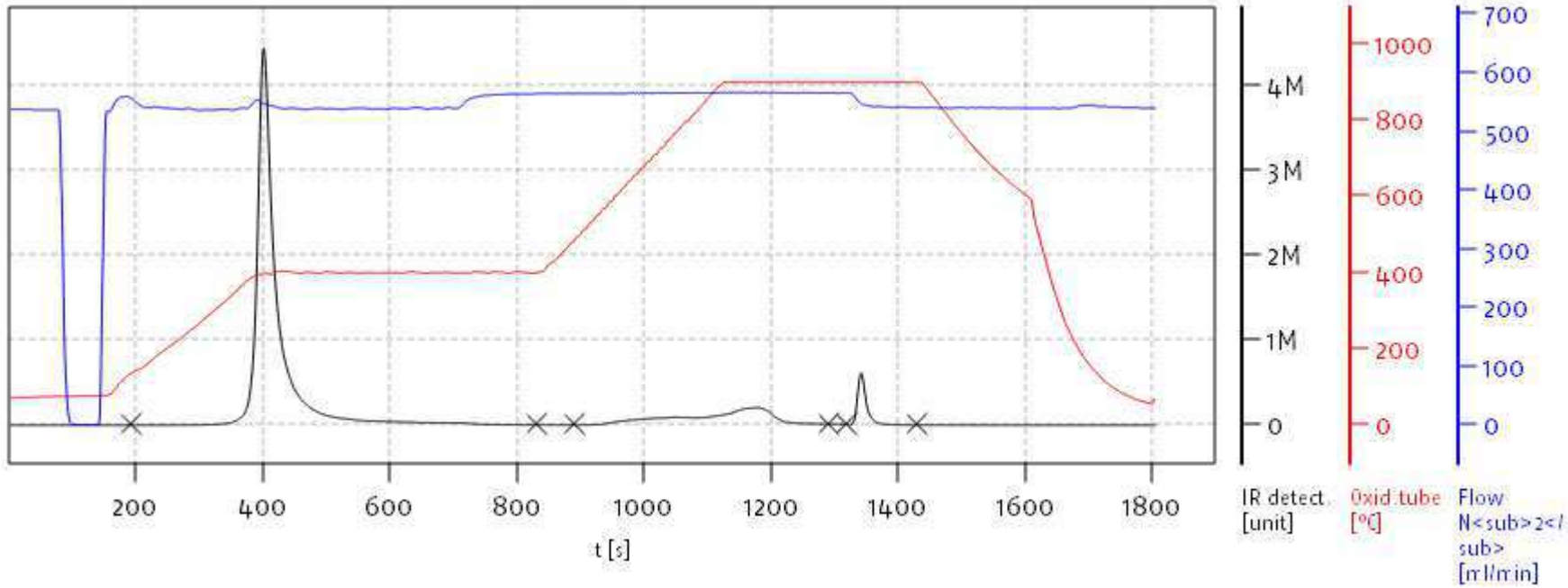
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
80	80	BLA0254-MS1	509.40	0.0082	CARBON	1/14/2023 12:09 AM	bl	1.813	5 846 359	2.157	0.106	374 722	1 160 563	1.707	0.345	0.9652	1.0000



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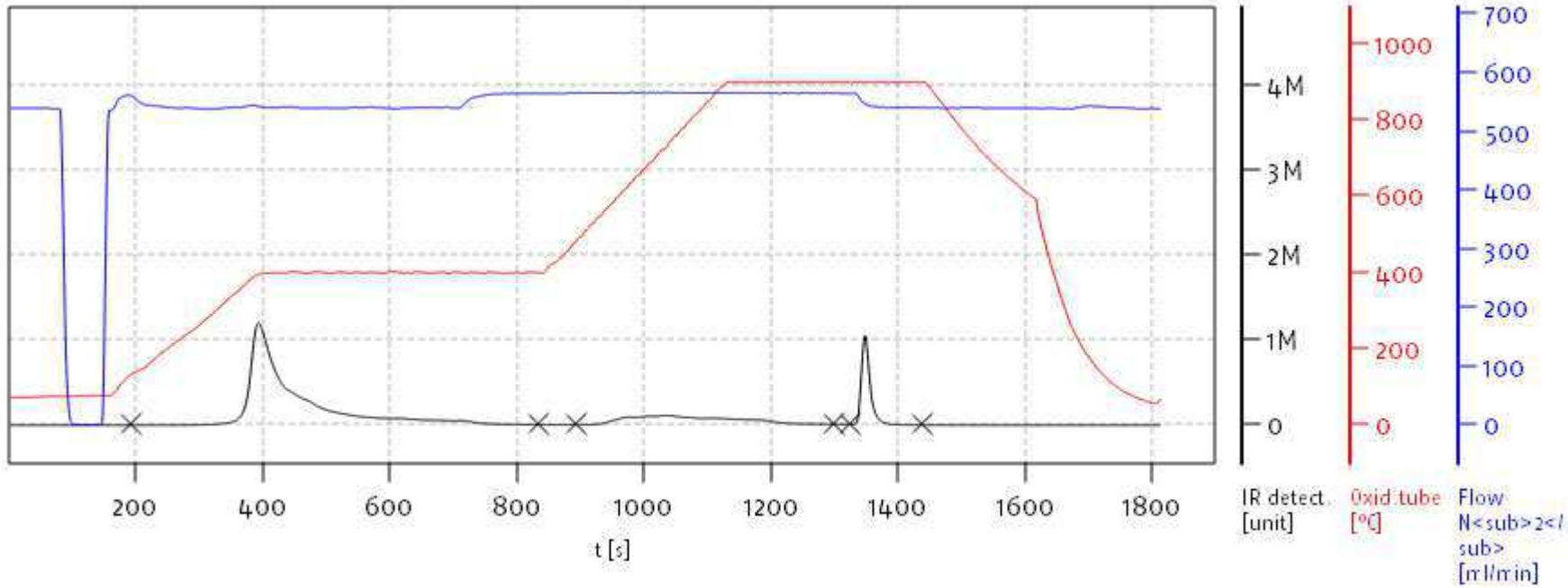
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
81	81	23A0158-13	540.50		CARBON	1/14/2023 12:39 AM	bl	1.116	3 422 920	1.363	0.177	645 679	887 721	0.939	0.247	0.9652	1.0000



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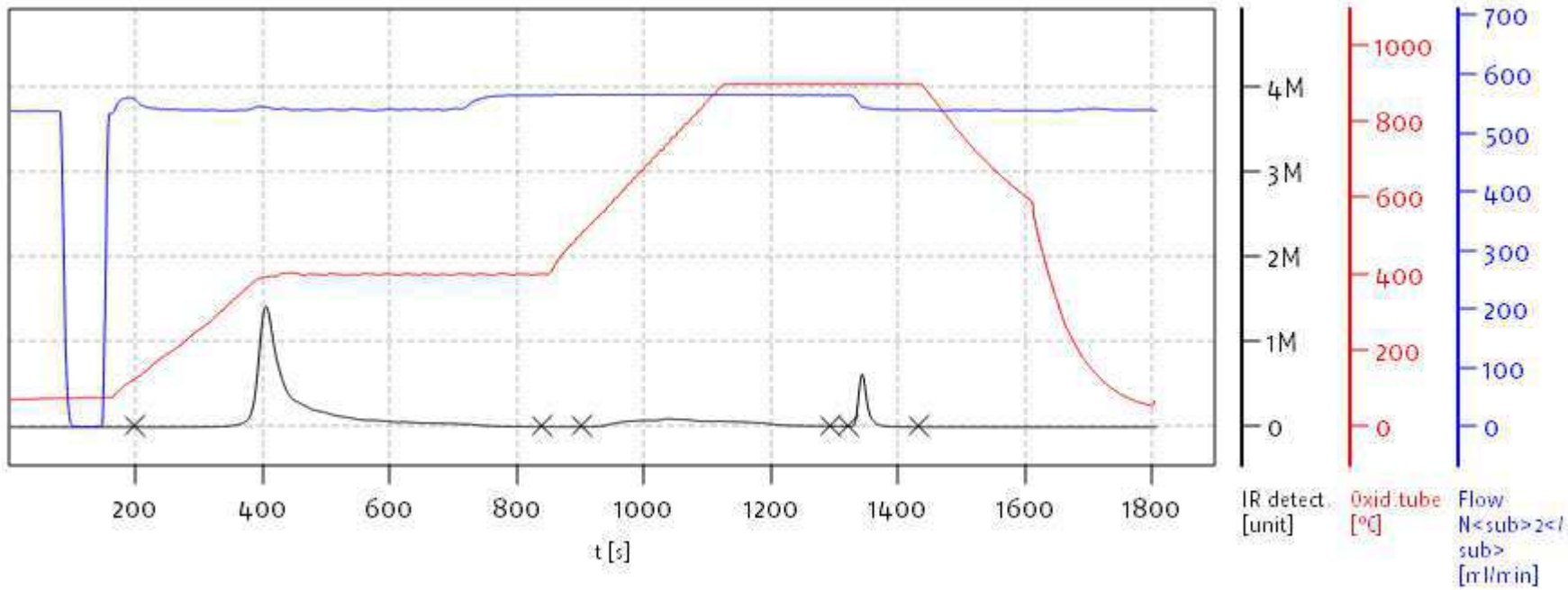
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
82	82	23A0158-14	510.10		CARBON	1/14/2023 1:10 AM	bl	1.007	3 096 158	1.221	0.108	381 040	733 125	0.899	0.214	0.9652	1.0000



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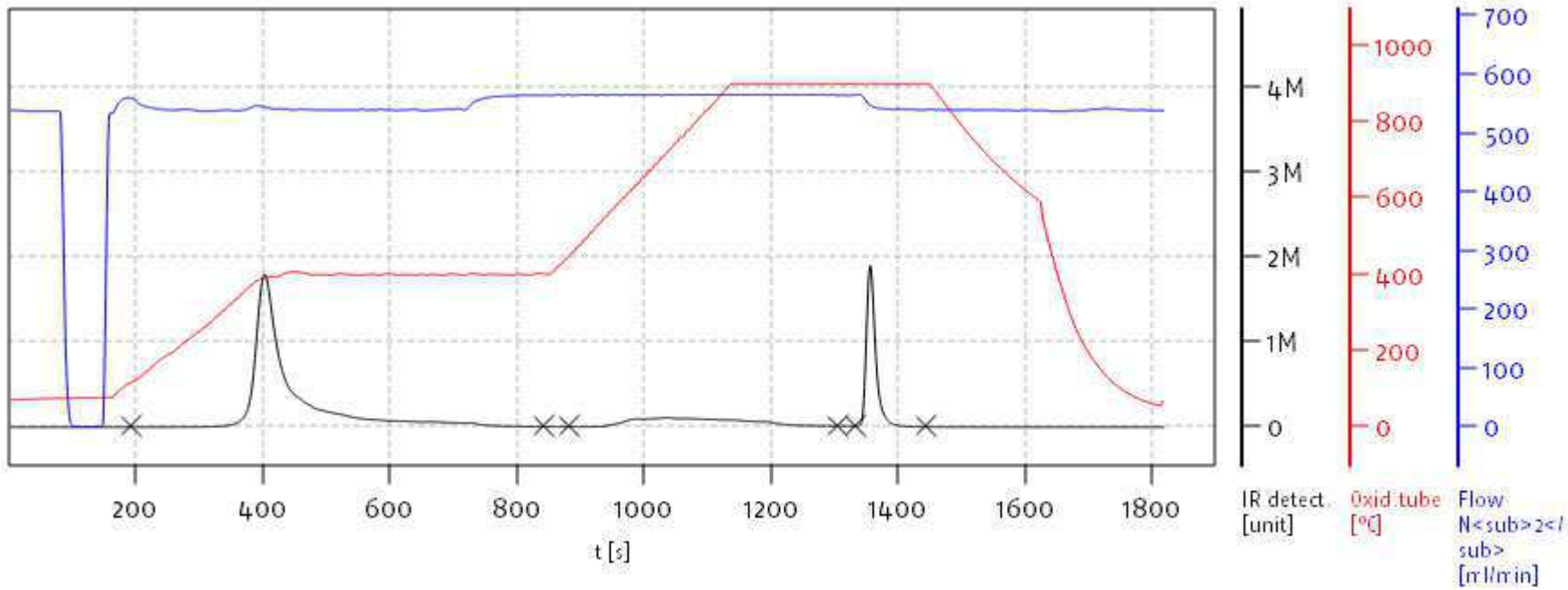
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
83	83	23A0158-15	527.70		CARBON	1/14/2023 1:40 AM	bl	1.482	4 023 287	1.740	0.350	1 219 801	907 176	1.132	0.258	0.9652	1.0000



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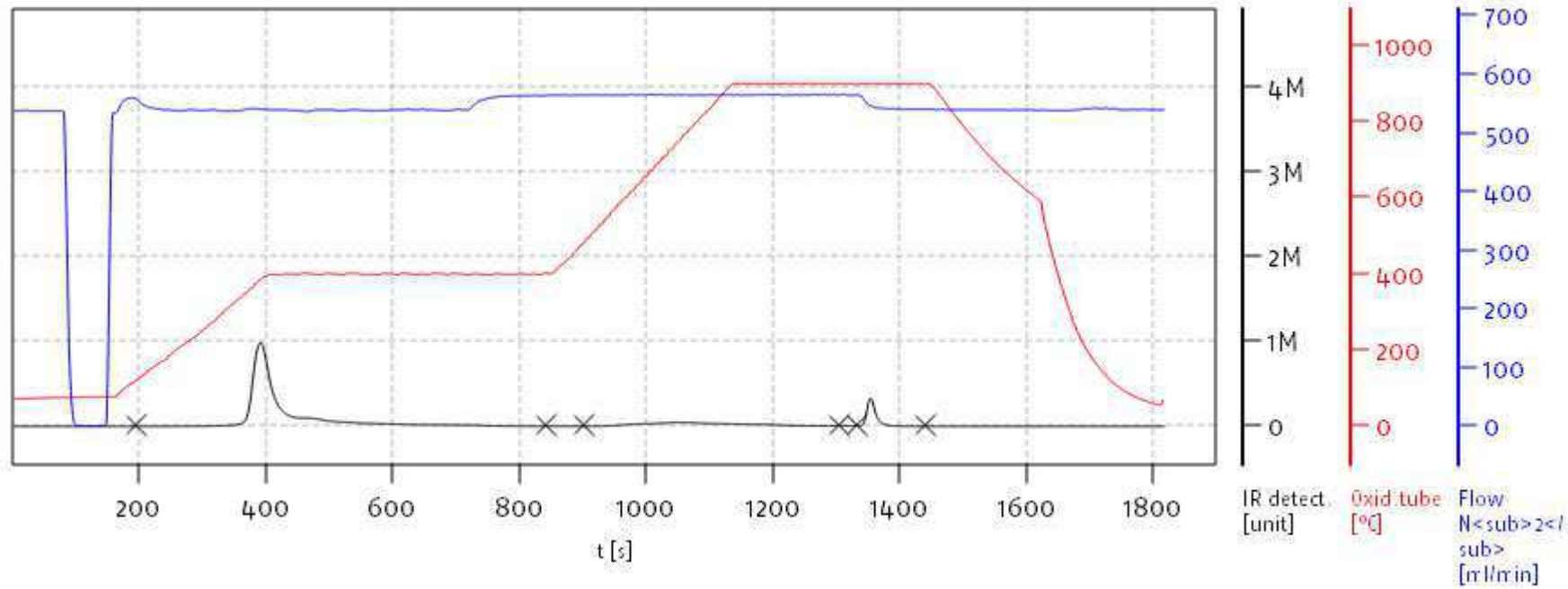
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
84	84	23A0158-16	197.80		CARBON	1/14/2023 2:11 AM	bl	1.454	1 766 598	1.690	0.139	204 539	328 191	1.314	0.236	0.9652	1.0000



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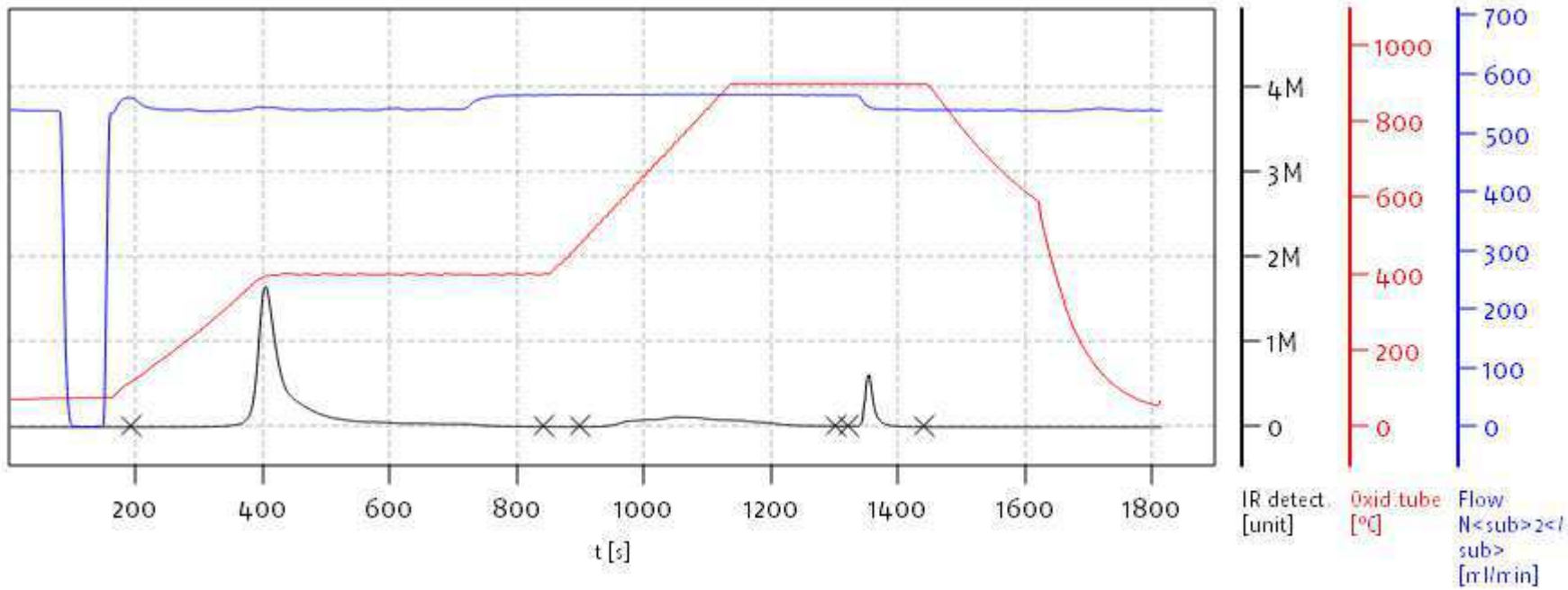
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
85	85	23A0180-01	512.10		CARBON	1/14/2023 2:42 AM	bl	1.033	3 193 947	1.289	0.109	385 580	875 870	0.924	0.257	0.9652	1.0000



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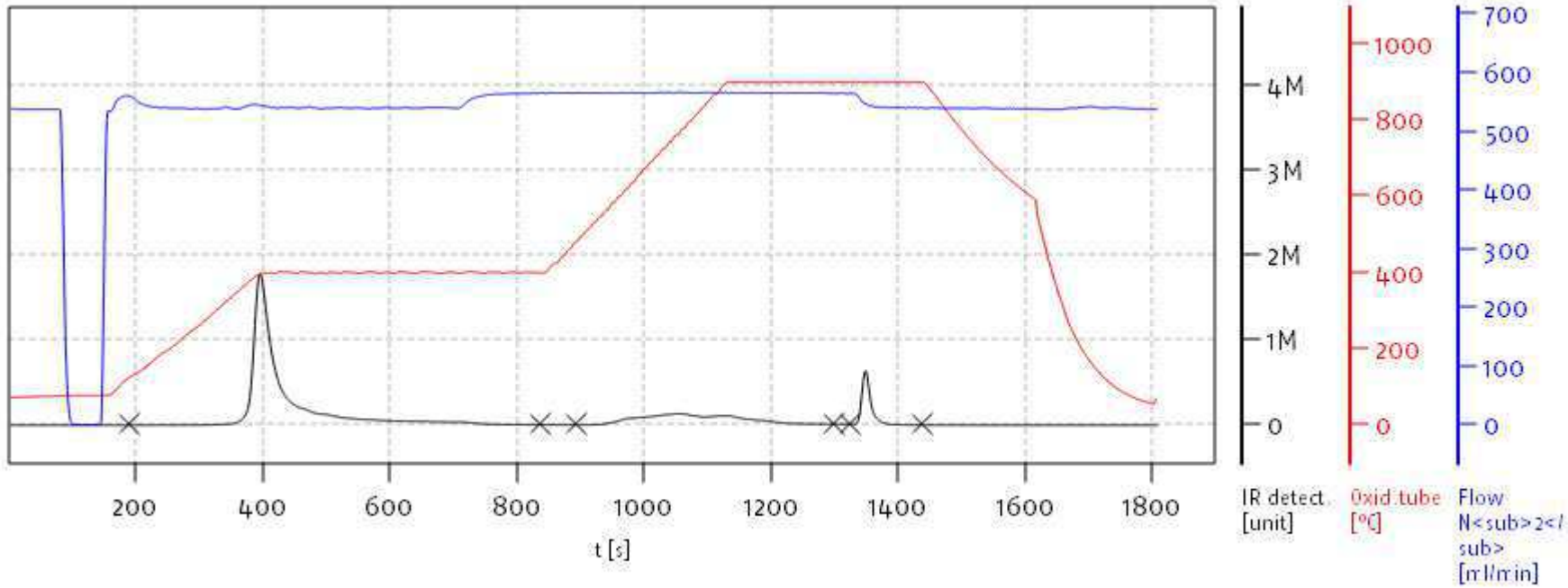
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
86	86	23A0180-02	502.10		CARBON	1/14/2023 3:12 AM	bl	1.046	3 154 931	1.336	0.115	399 502	968 238	0.931	0.290	0.9652	1.0000



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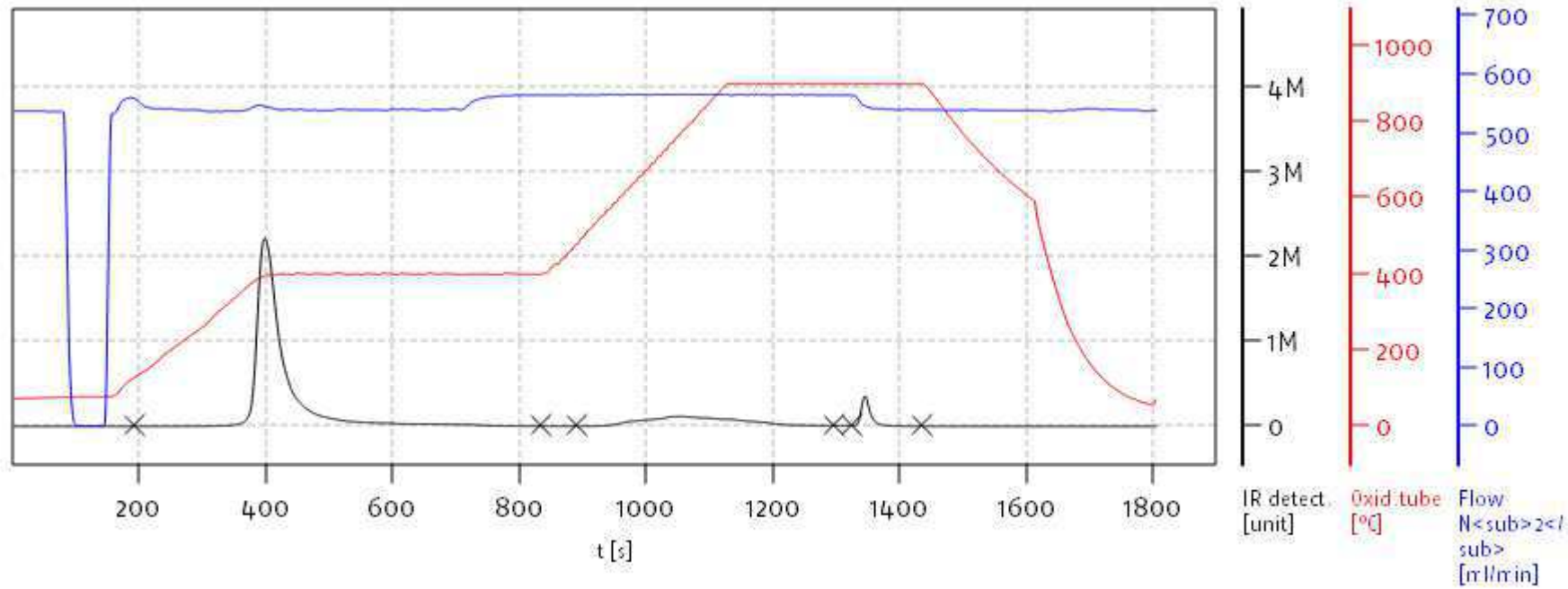
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
87	87	23A0180-03	530.40		CARBON	1/14/2023 3:43 AM	bl	1.156	3 918 302	1.382	0.059	229 708	800 725	1.096	0.226	0.9652	1.0000



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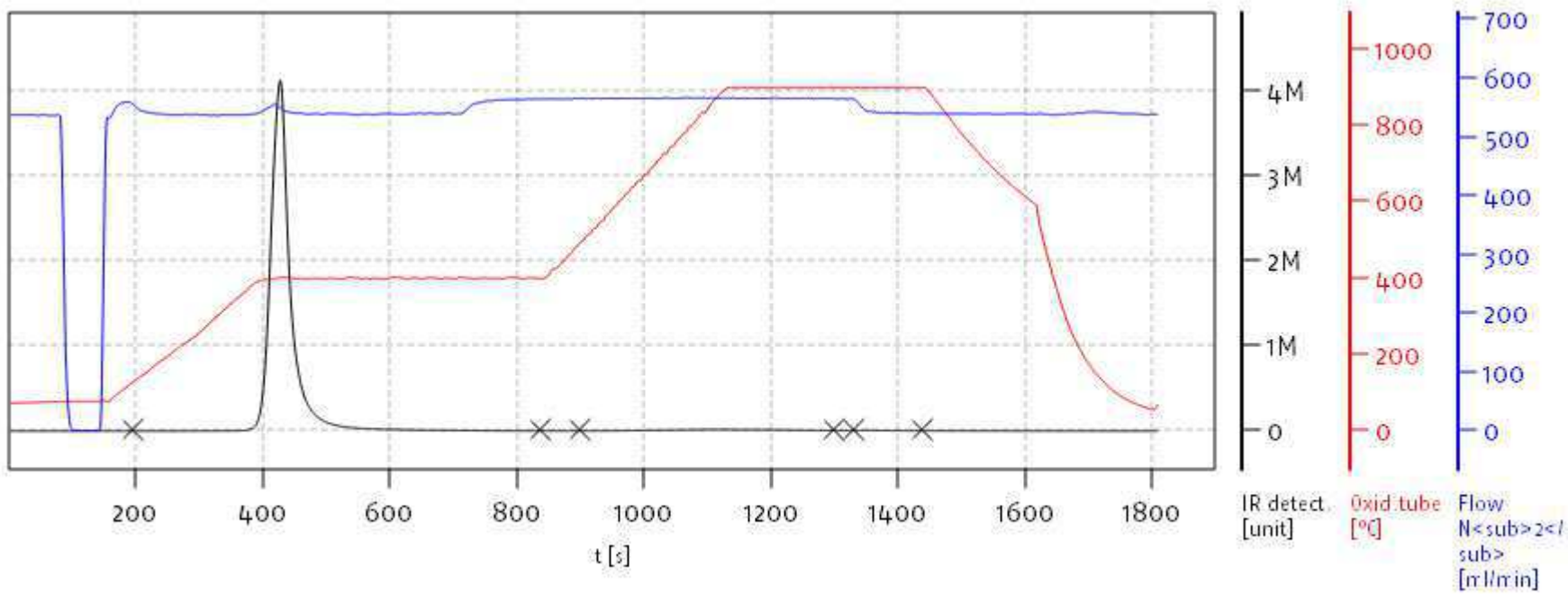
Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
88	88	SLA0114-CCV7	18.60		CARBON	1/14/2023 4:13 AM	bl	44.400	5 553 886	45.420	0.000	21 497	149 122	44.400	1.020	0.9652	1.0000



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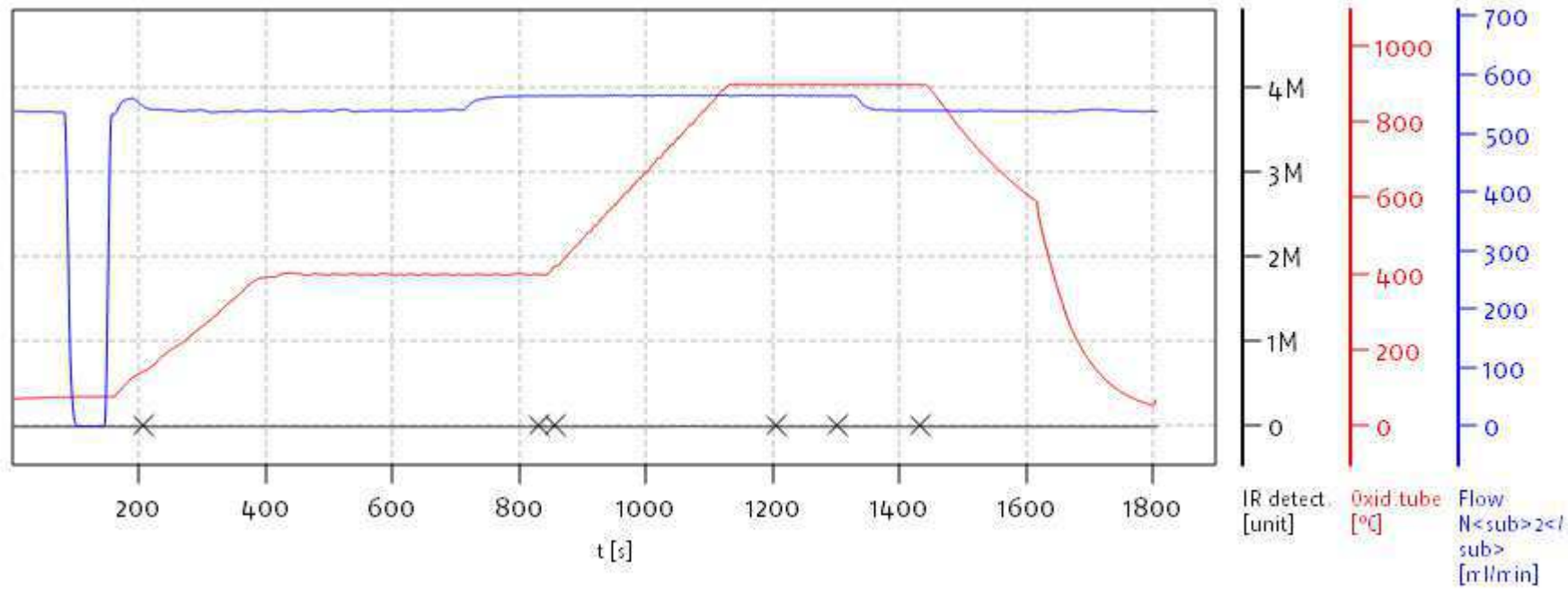
Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
89	89	SLA0114-CCB7	520.30		CARBON	1/14/2023 4:44 AM	bl,C2u	0.000	6 046	0.000	0.000	559	6 211	0.000	0.000	0.9652	1.0000



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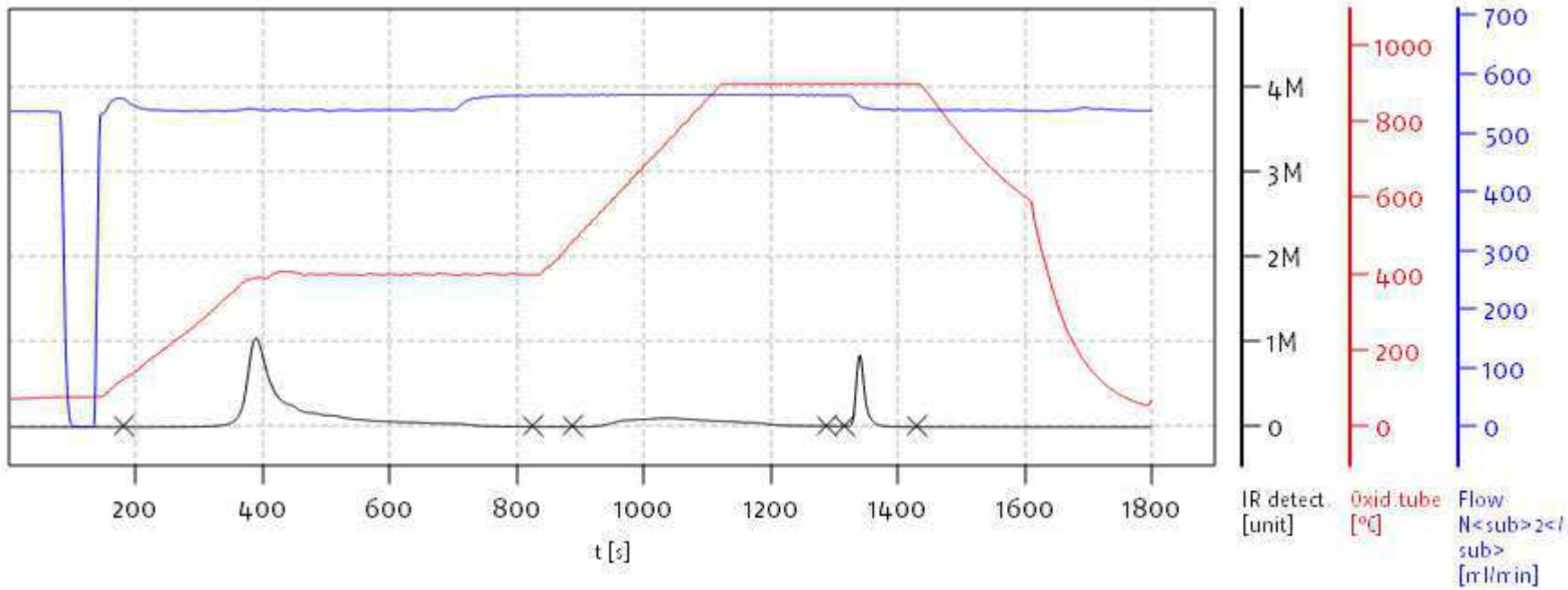
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
90	1	23A0180-04	518.50		CARBON	1/14/2023 5:14 AM	bl	0.938	2 773 552	1.171	0.146	516 080	808 177	0.792	0.233	0.9652	1.0000



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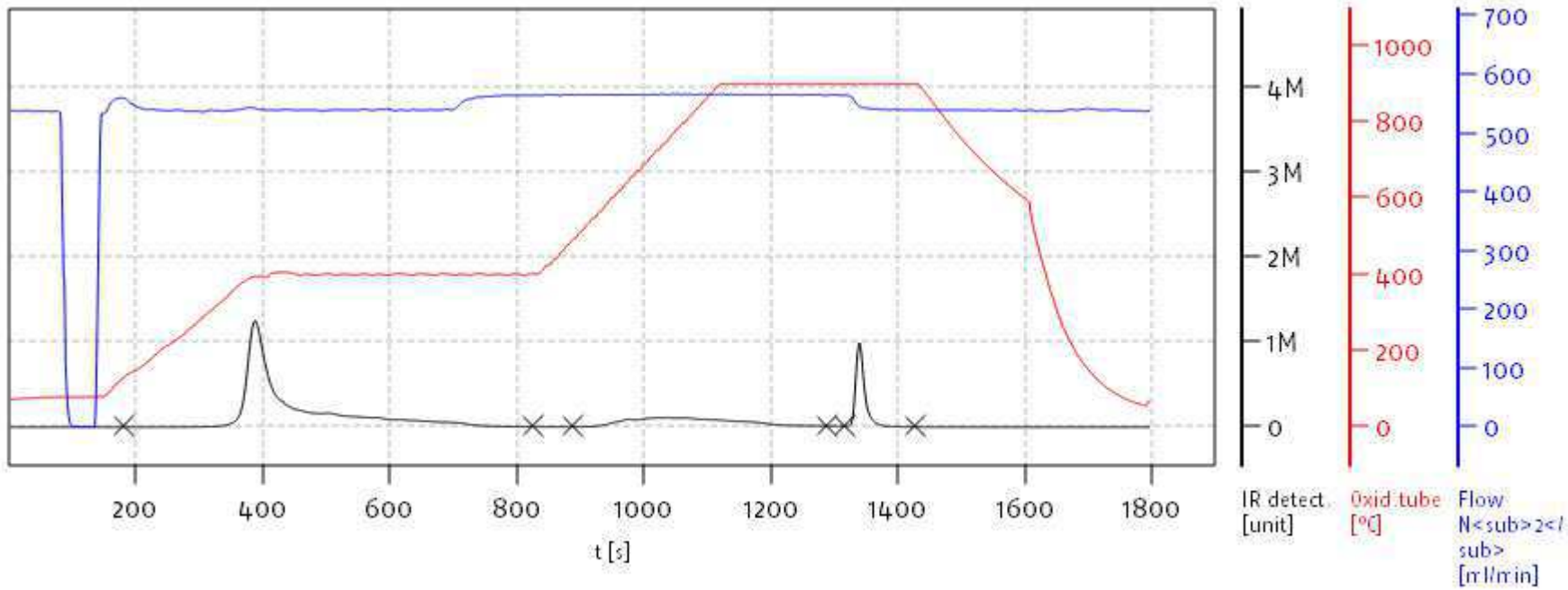
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
91	2	23A0180-05	519.50		CARBON	1/14/2023 5:45 AM	bl	1.063	3 113 642	1.319	0.175	613 404	885 888	0.888	0.256	0.9652	1.0000



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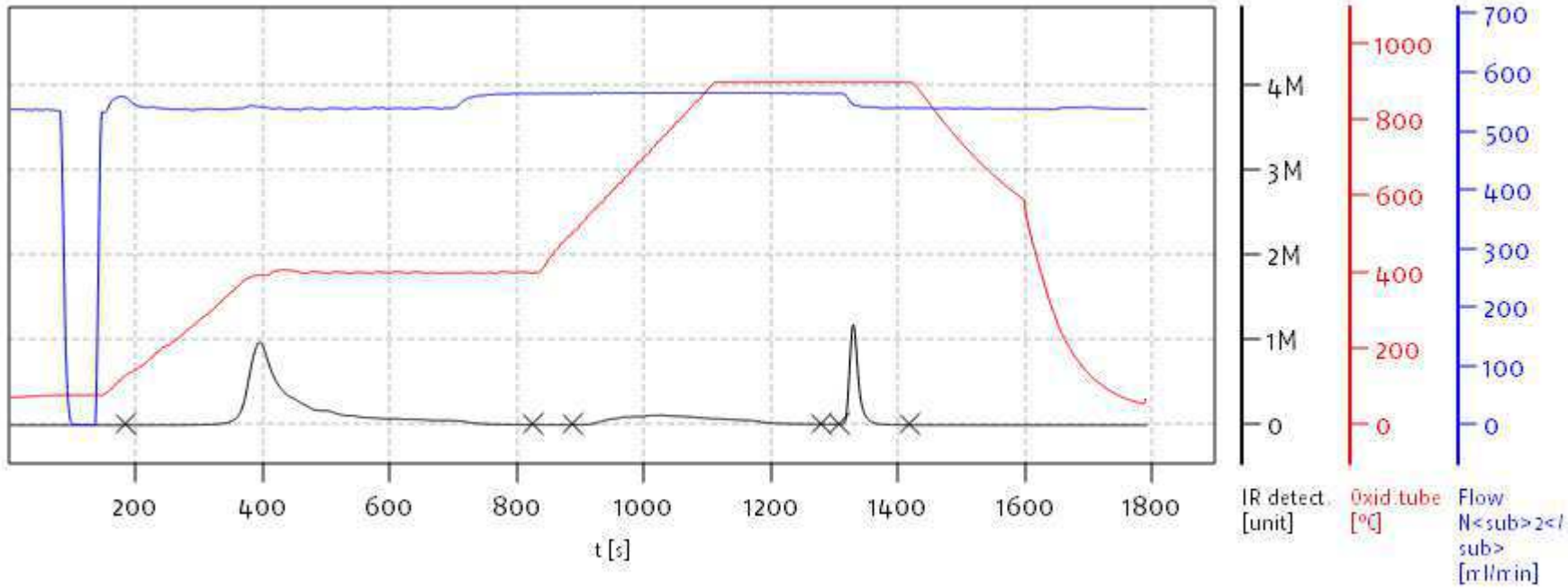
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
92	3	23A0180-06	556.10		CARBON	1/14/2023 6:15 AM	bl	1.007	3 047 904	1.248	0.196	729 523	890 605	0.812	0.241	0.9652	1.0000



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Serial No: 0300.181017
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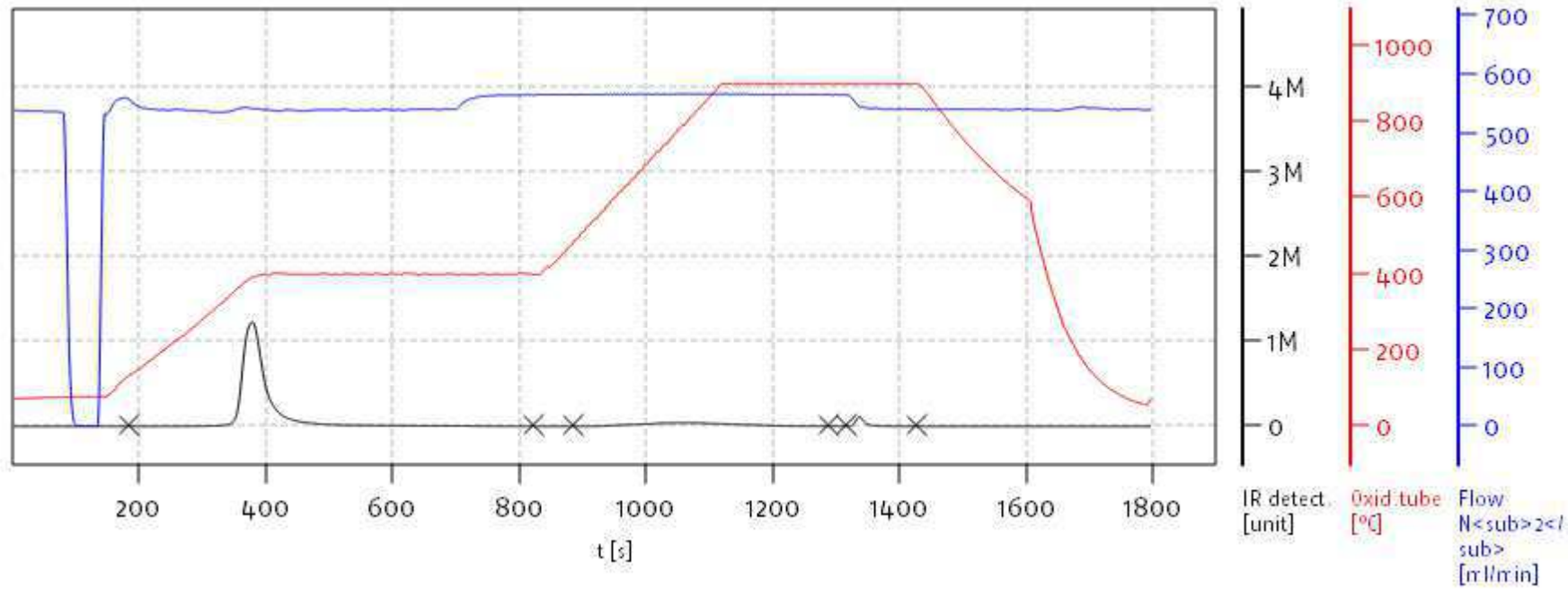
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
93	4	23A0180-07	224.30		CARBON	1/14/2023 6:45 AM	bl	1.339	1 992 417	1.515	0.030	69 947	281 512	1.309	0.176	0.9652	1.0000



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Serial No: 0300.181017
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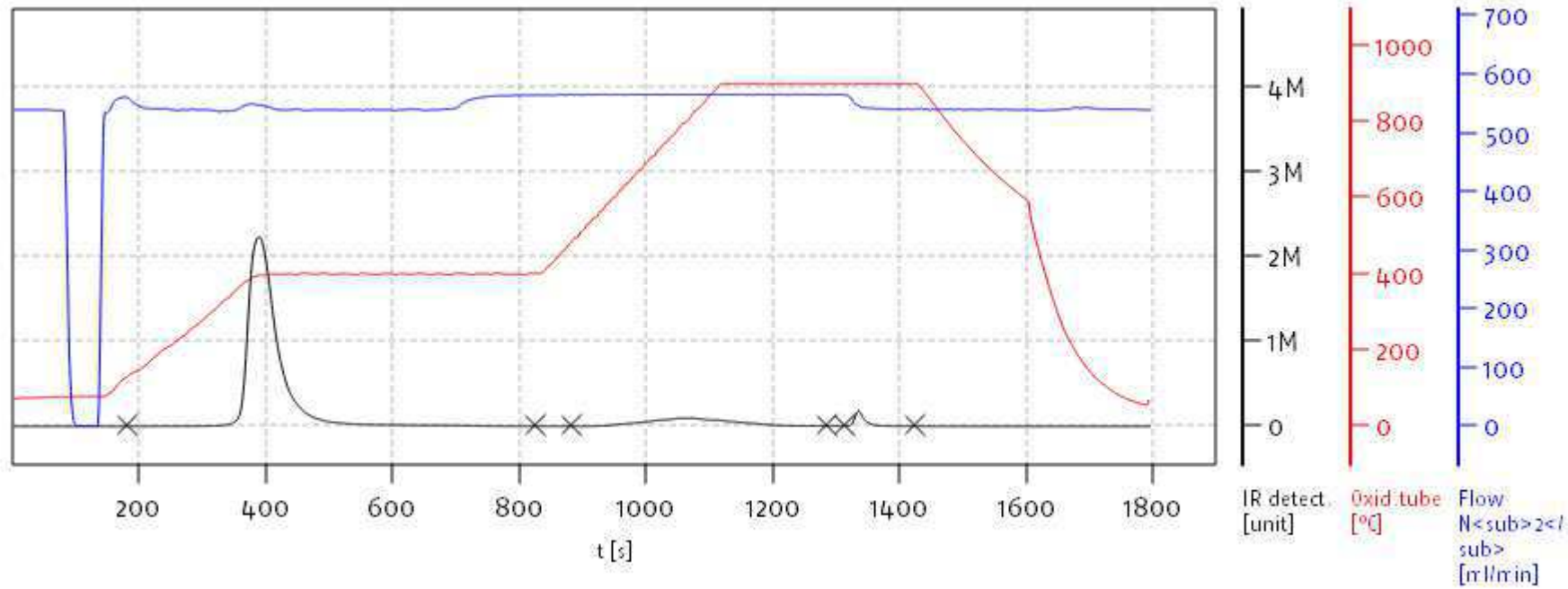
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
94	5	23A0180-08	512.30		CARBON	1/14/2023 7:16 AM	bl	1.331	4 484 538	1.502	0.031	127 608	592 748	1.300	0.171	0.9652	1.0000



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Balance: BAL3
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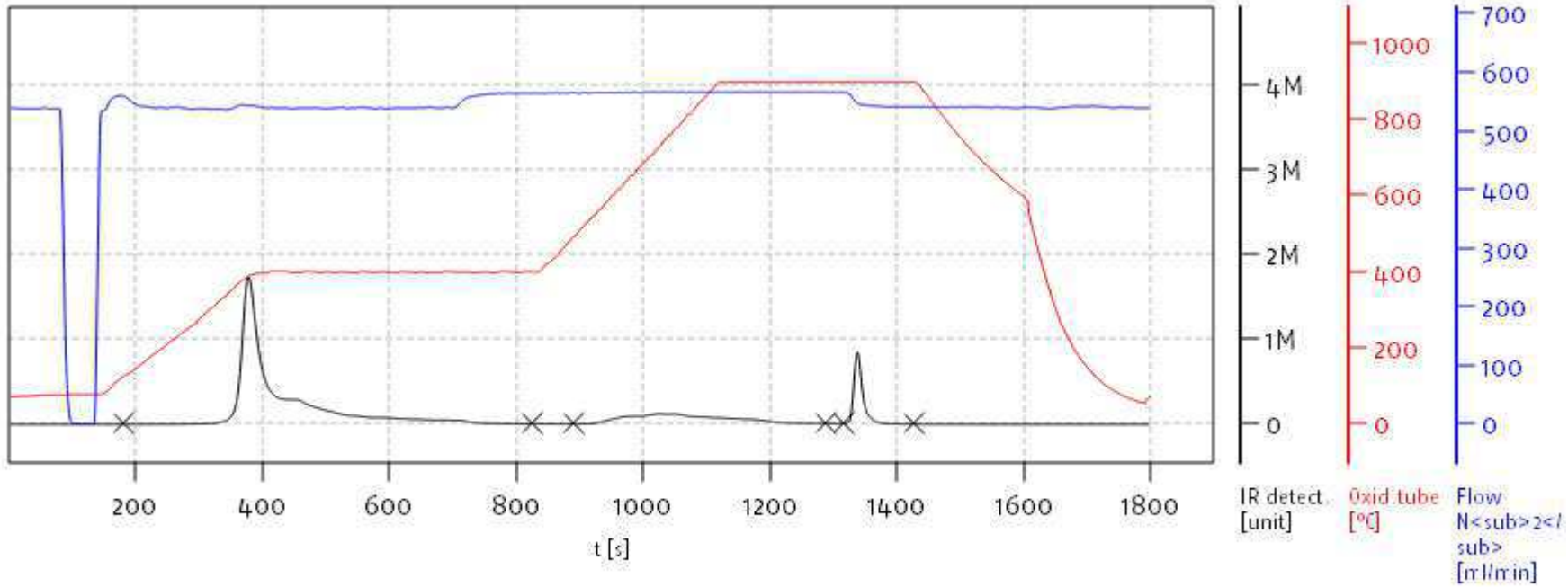
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
95	6	23A0180-09	516.40		CARBON	1/14/2023 7:46 AM	bl	1.191	3 623 543	1.460	0.150	527 484	923 124	1.041	0.269	0.9652	1.0000



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Balance: BAL3
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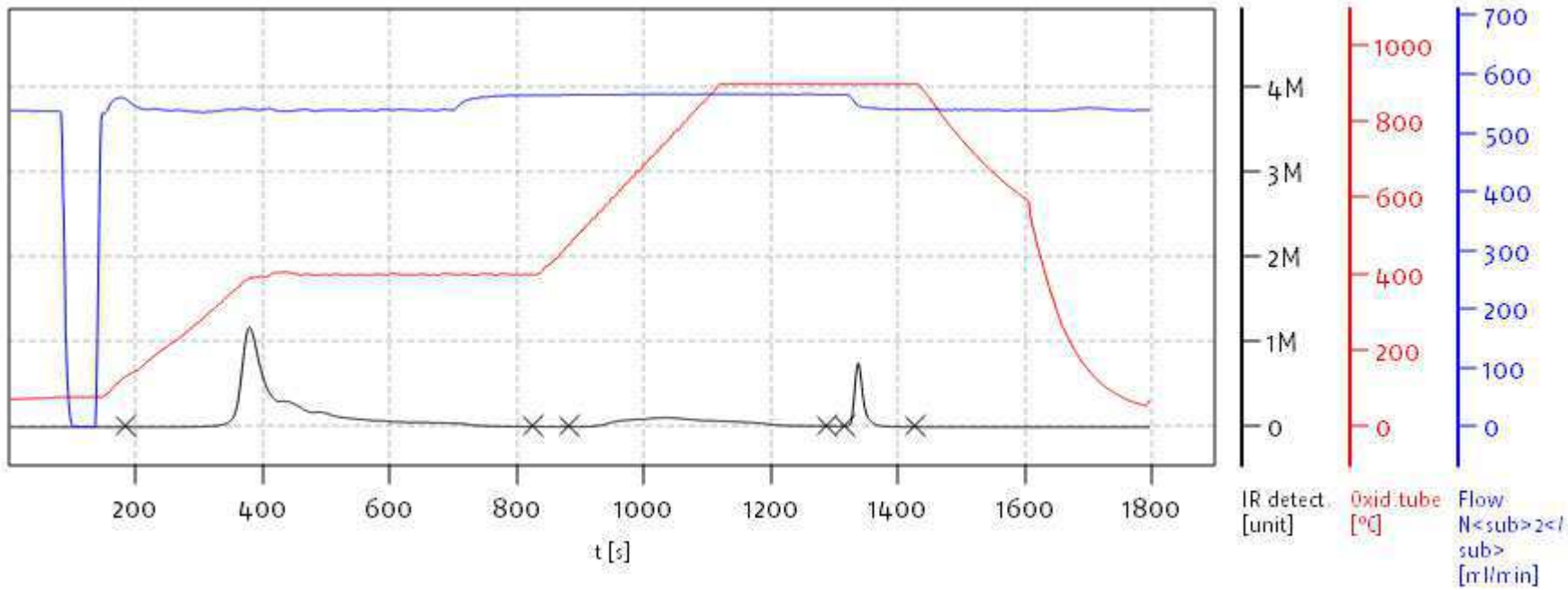
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
96	7	23A0180-10	506.10		CARBON	1/14/2023 8:16 AM	bl	1.027	3 059 573	1.273	0.132	457 995	830 816	0.895	0.246	0.9652	1.0000



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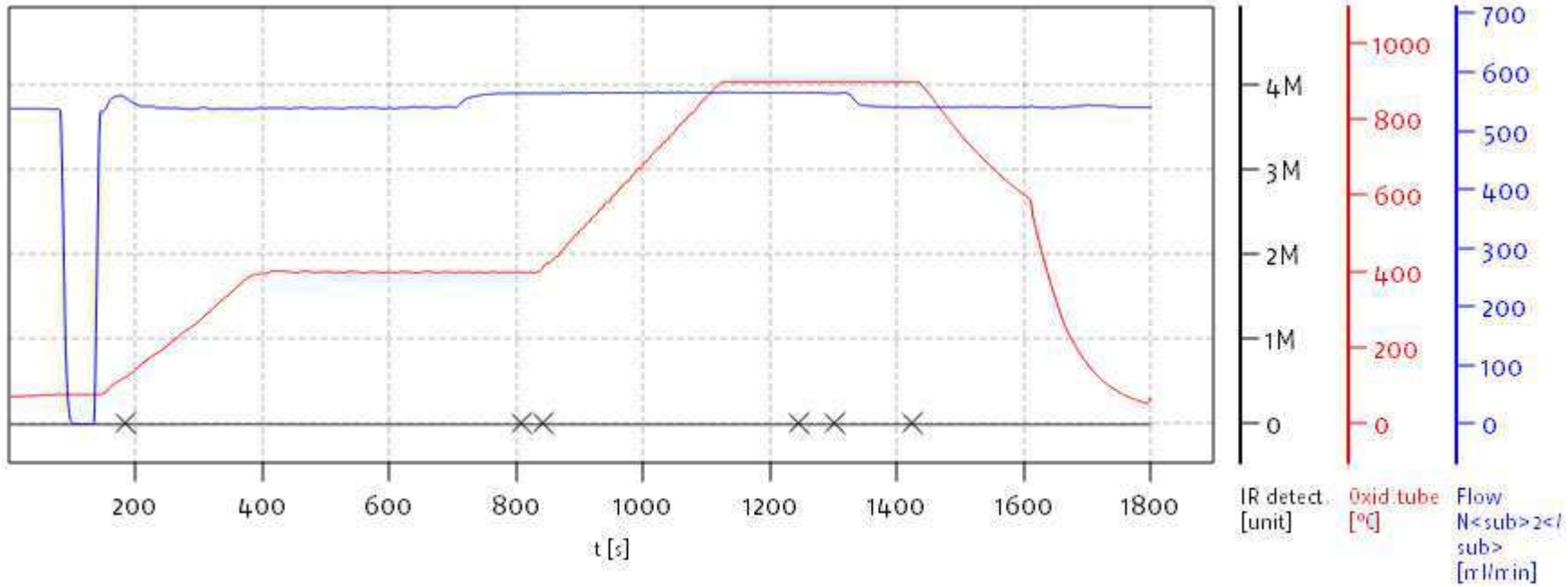
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
97	8	BLANK	1.00		CARBON	1/ 14/2023 8:47 AM	bl	0.000	11 300	0.000	0.000	228	1 076	0.000	0.000	0.9652	1.0000



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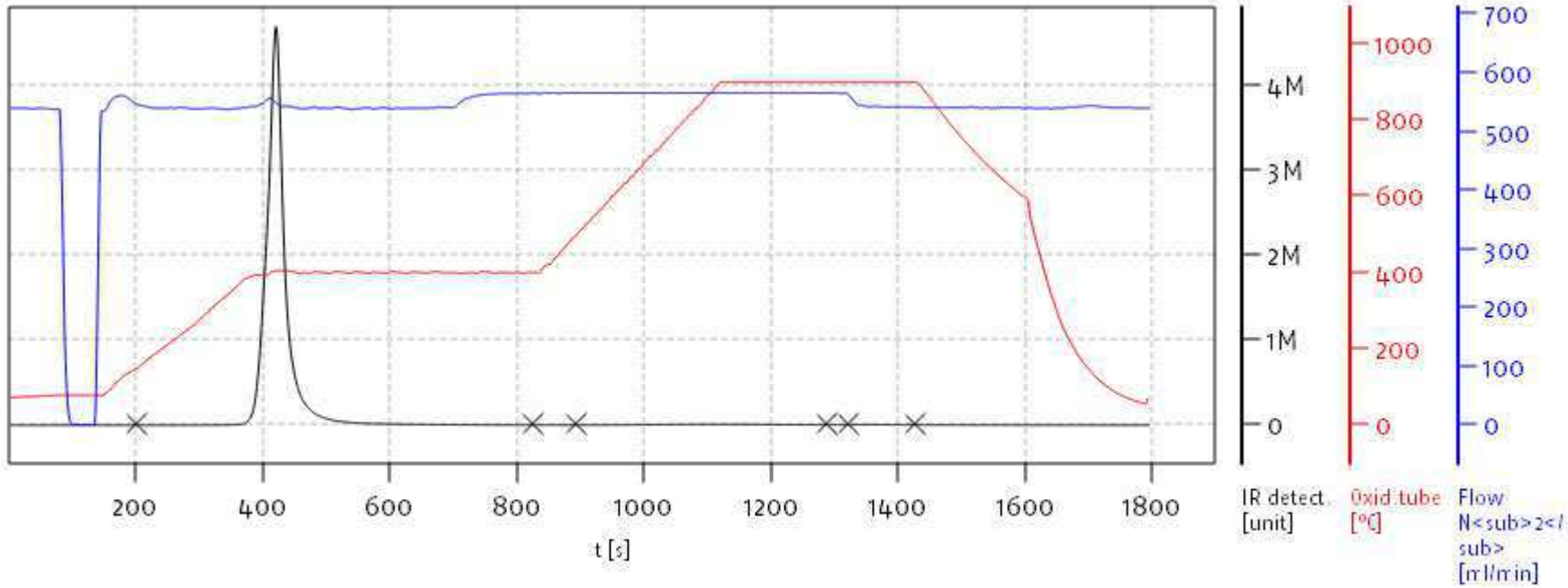
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
98	9	Dfactor	19.20		CARBON	1/14/2023 9:17 AM	bl	44.446	5 779 705	44.966	0.000	20 688	91 109	44.446	0.521	0.9582	1.0000



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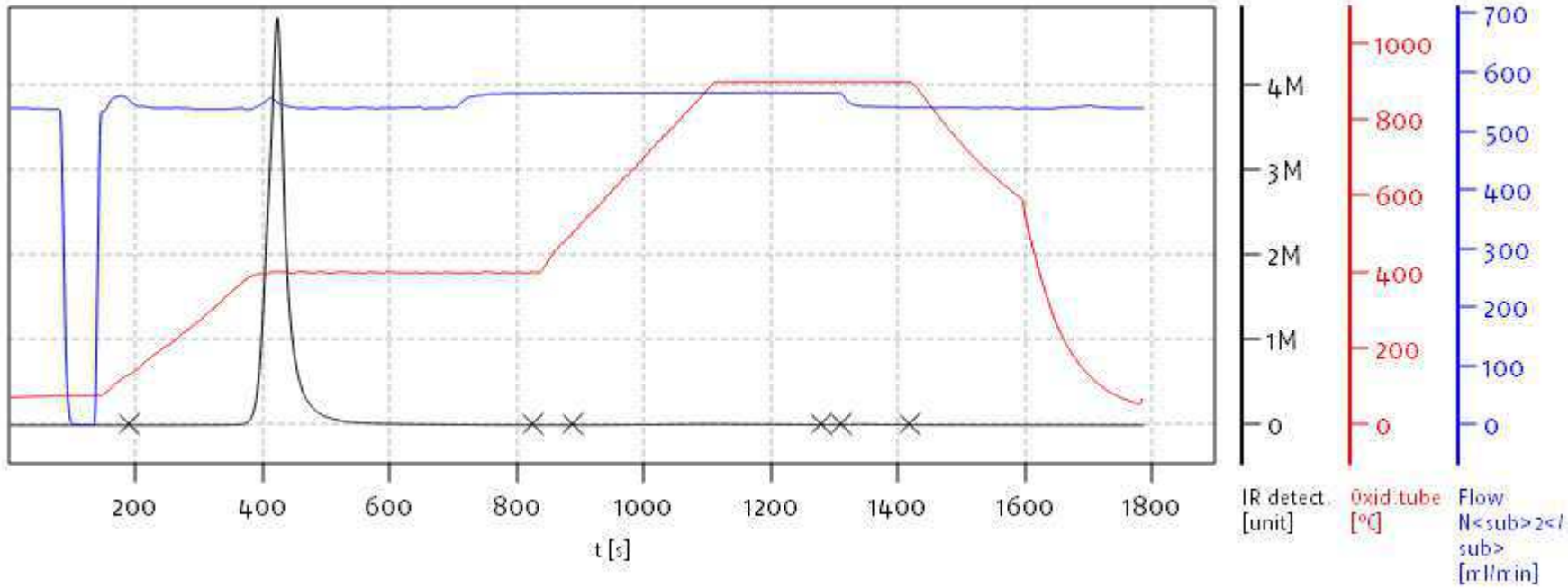
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
99	10	Dfactor	20.70		CARBON	1/14/2023 9:47 AM	bl	44.446	6 292 214	45.053	0.000	25 604	107 701	44.446	0.607	0.9485	1.0000



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Balance: BAL3
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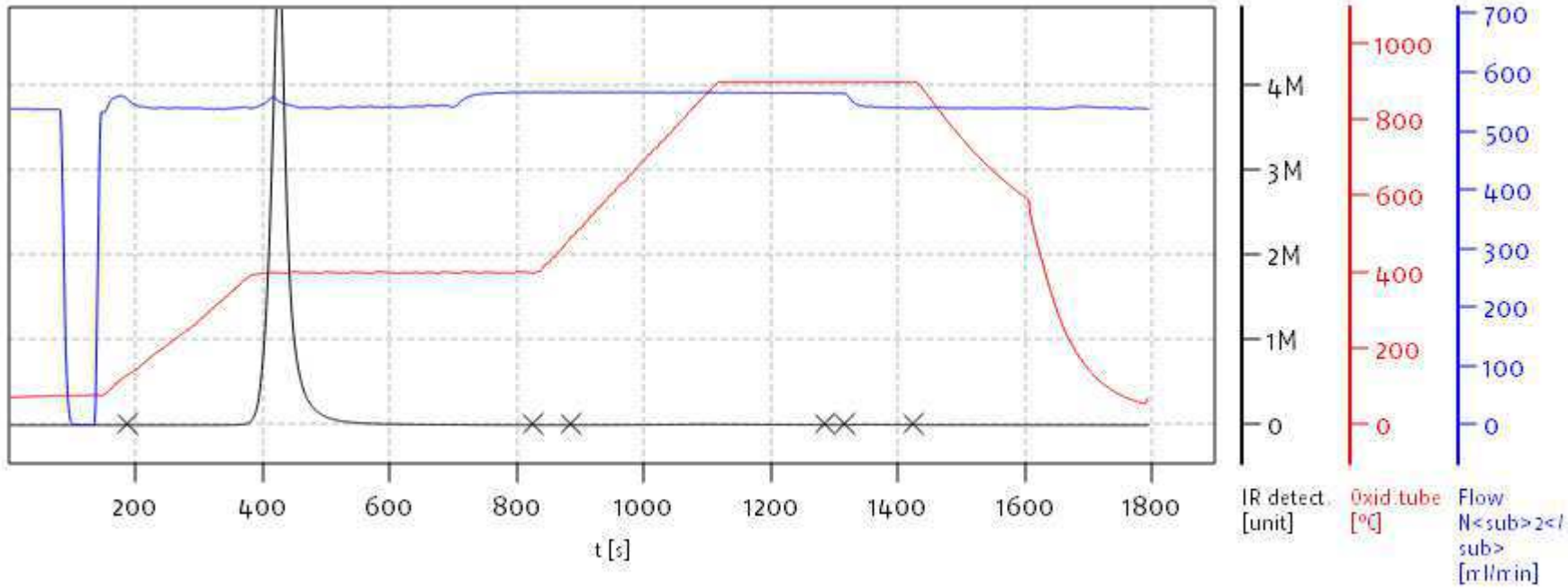
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
100	11	SLA0114-CCV8	21.10		CARBON	1/14/2023 10:18 AM	bl	45.257	6 496 945	45.654	0.000	20 485	80 665	45.257	0.397	0.9534	1.0000



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Balance: BAL3
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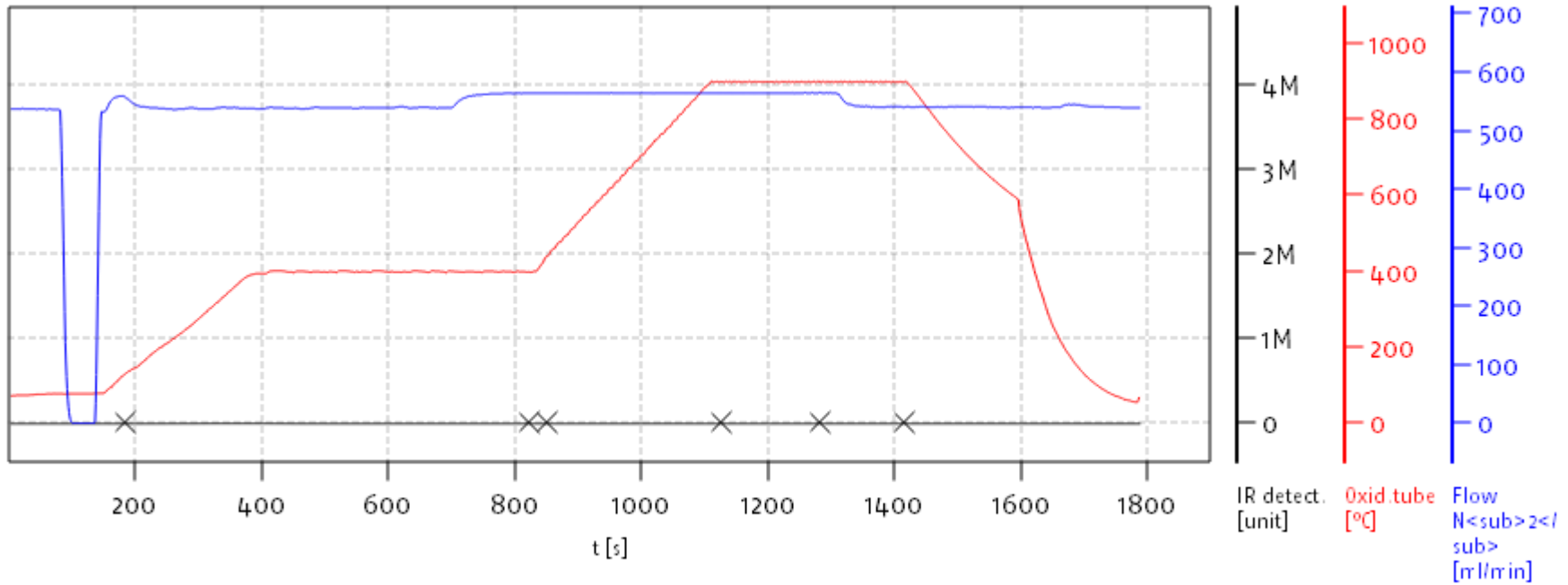
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
101	12	SLA0114-CCB8	510.70		CARBON	1/14/2023 10:48 AM	bl,C3u,C2u	0.000	13 863	0.000	0.000	1 106	844	0.000	0.000	0.9534	1.0000



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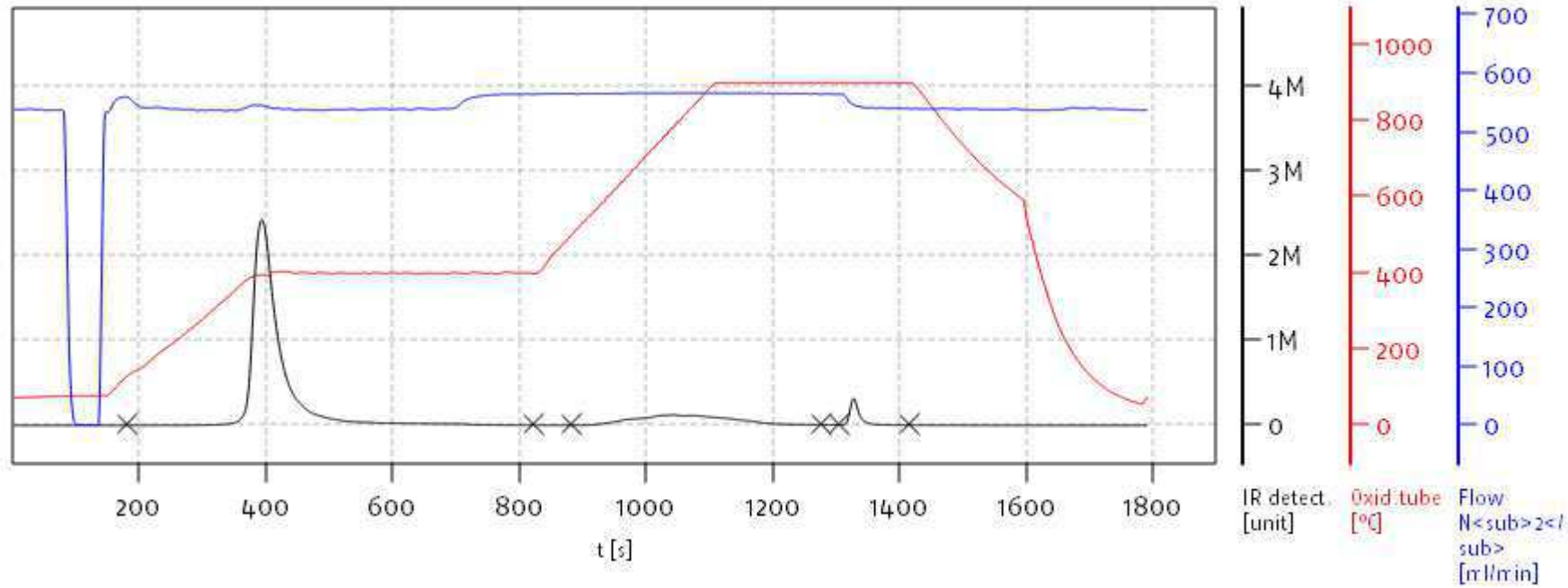
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
102	13	23A0180-11	592.20		CARBON	1/14/2023 11:18 AM	bl	1.128	4 356 362	1.342	0.049	212 110	846 052	1.079	0.214	0.9534	1.0000



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Balance: BAL3
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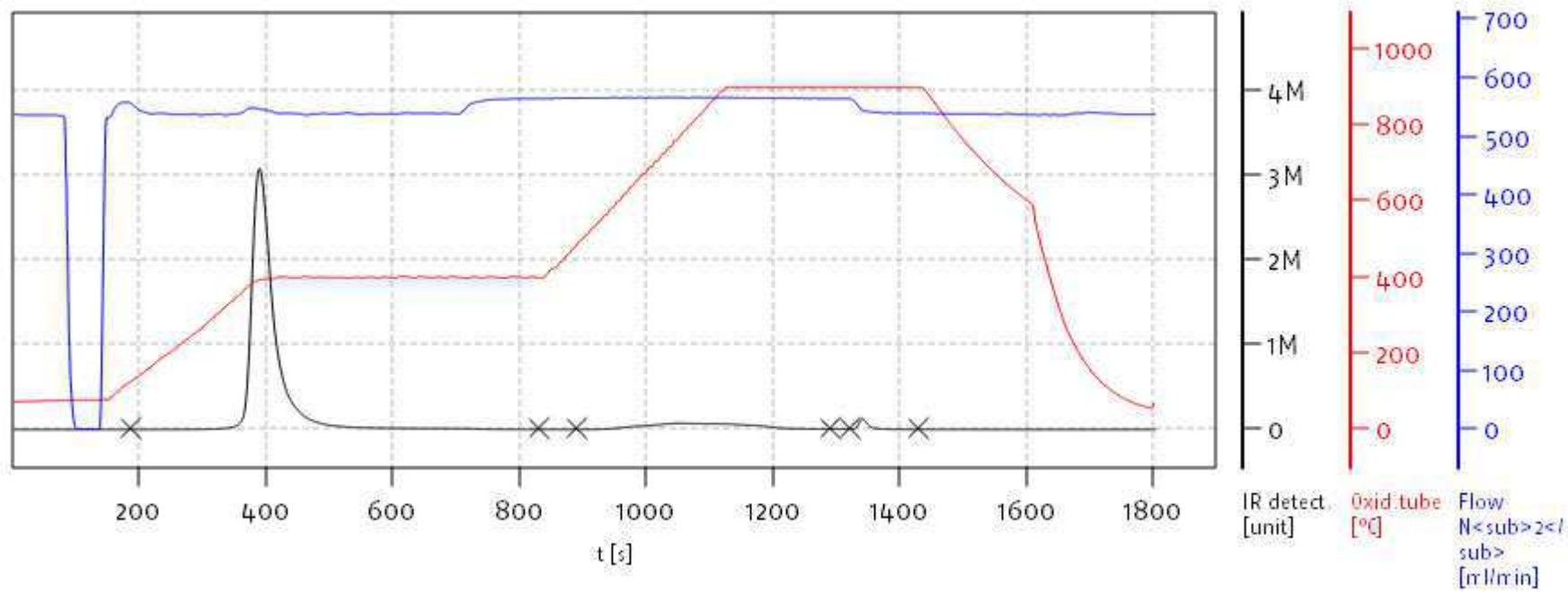
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
103	14	23A0180-12	518.60		CARBON	1/14/2023 11:49 AM	bl	1.359	4 741 244	1.517	0.018	85 712	554 196	1.342	0.158	0.9534	1.0000



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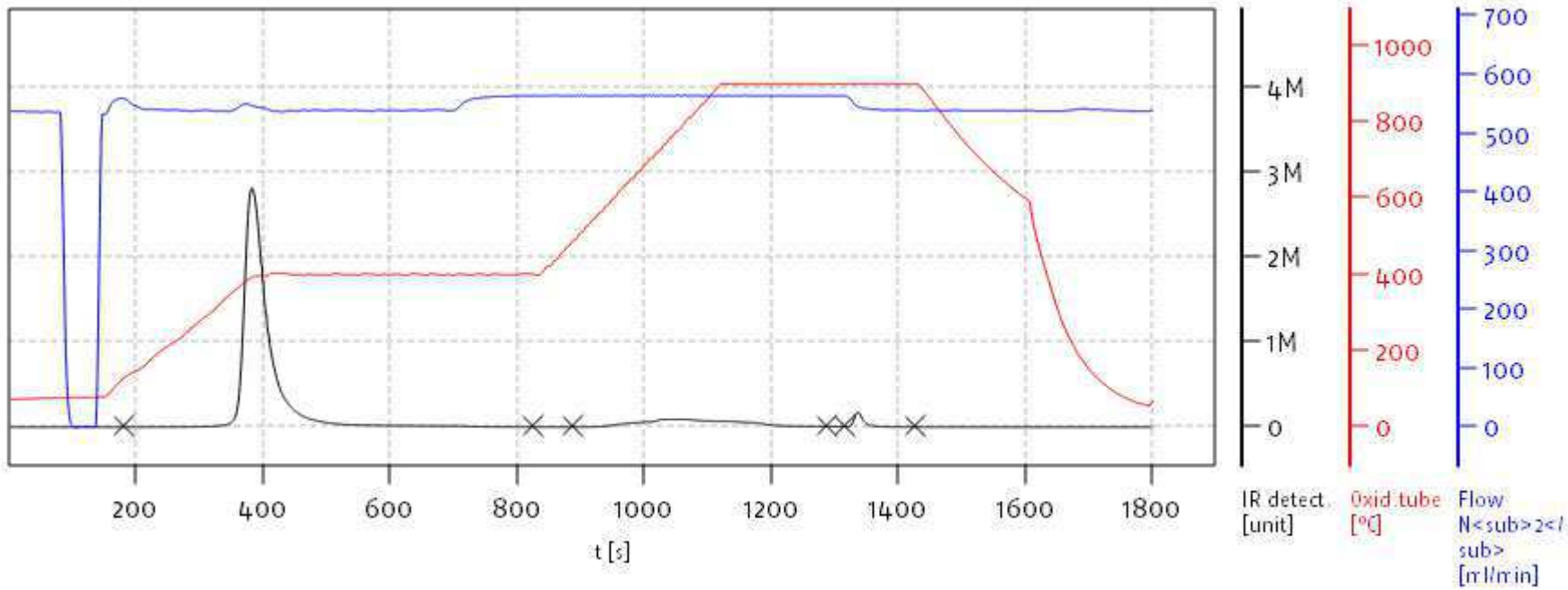
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
104	15	23A0180-13	522.20		CARBON	1/14/2023 12:19 PM	bl	1.310	4 566 905	1.495	0.027	117 619	650 071	1.283	0.185	0.9534	1.0000



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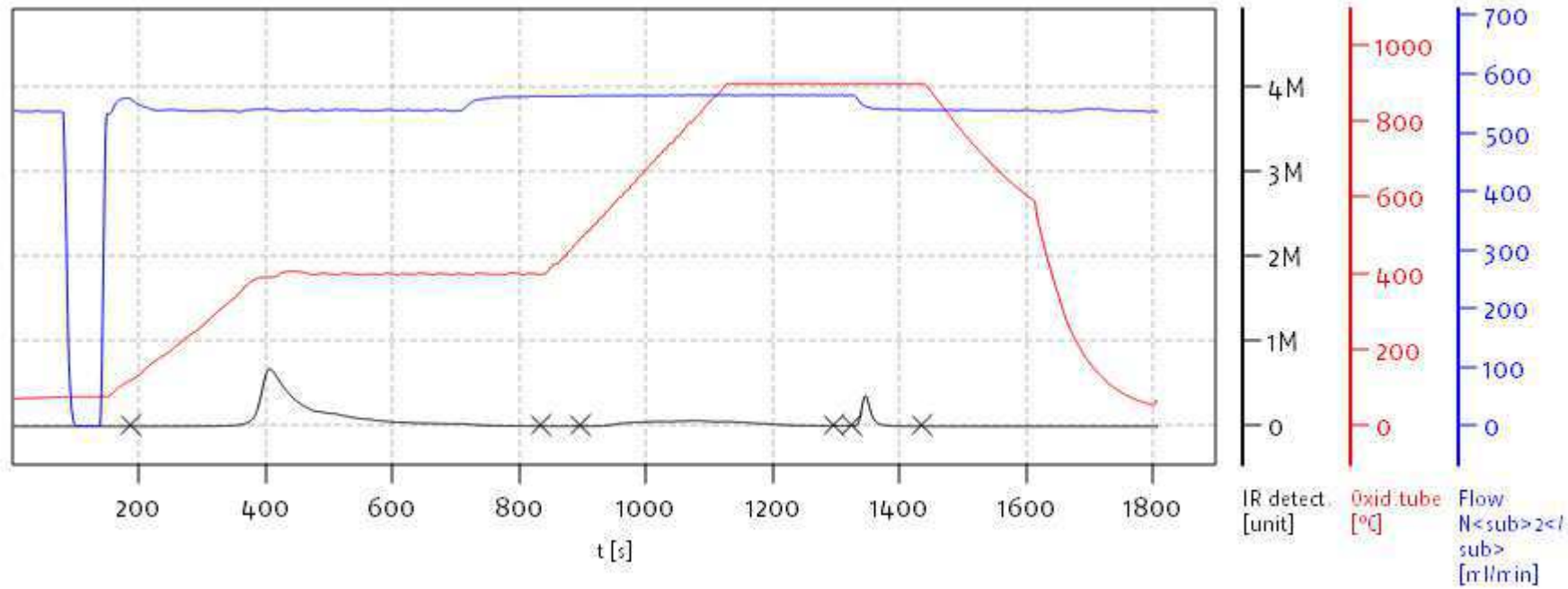
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
105	16	23A0180-14	500.30		CARBON	1/14/2023 12:50 PM	bl	0.696	2 163 651	0.850	0.065	237 010	525 286	0.630	0.154	0.9534	1.0000



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Balance: BAL3
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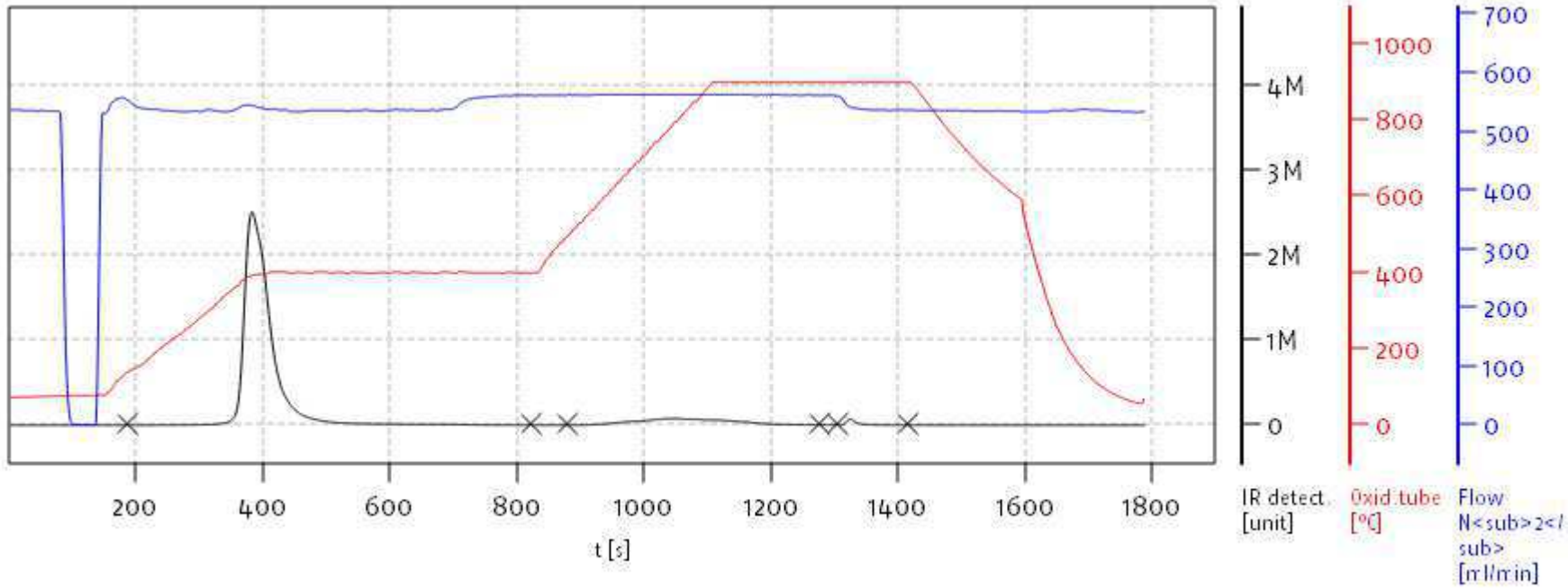
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
106	17	23A0180-15	530.10		CARBON	1/14/2023 1:20 PM	bl	1.246	4 475 474	1.389	0.007	50 846	518 917	1.239	0.144	0.9534	1.0000



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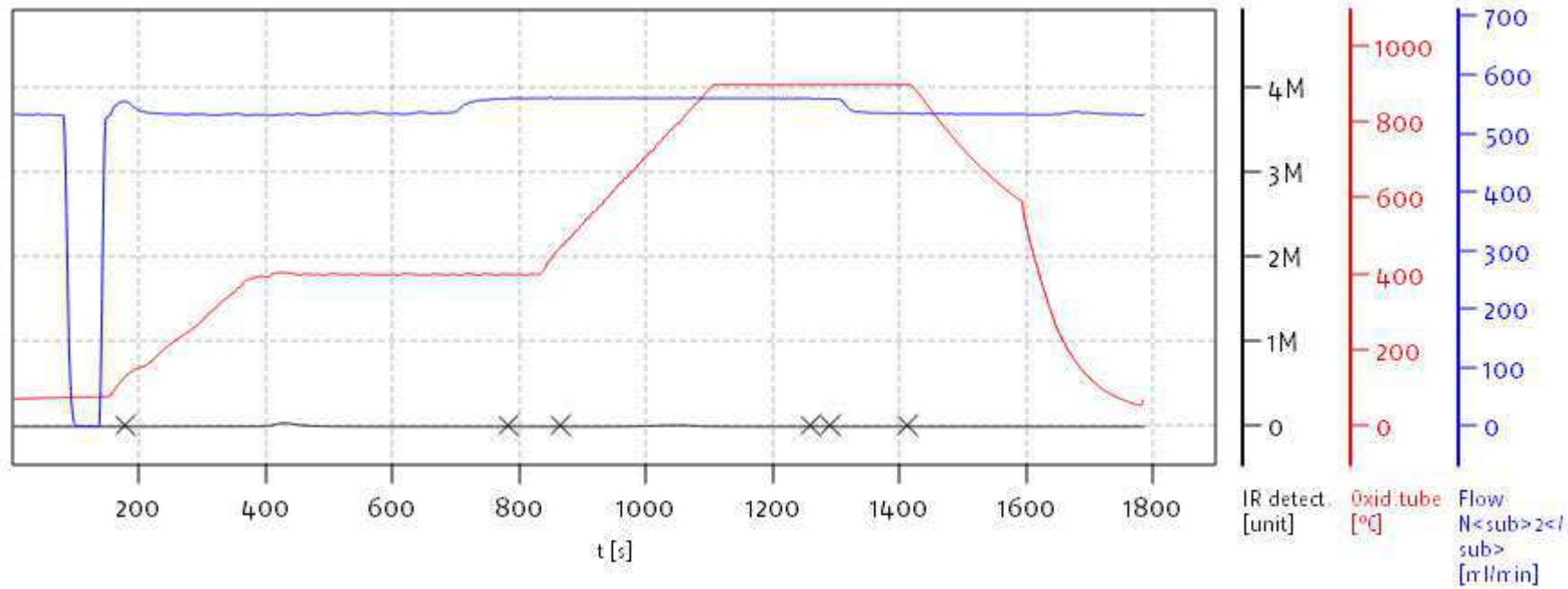
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
107	18	BLA0255-MRL1	581.90		CARBON	1/14/2023 1:50 PM	bl,C2u	0.015	86 824	0.020	0.000	437	43 828	0.015	0.005	0.9534	1.0000



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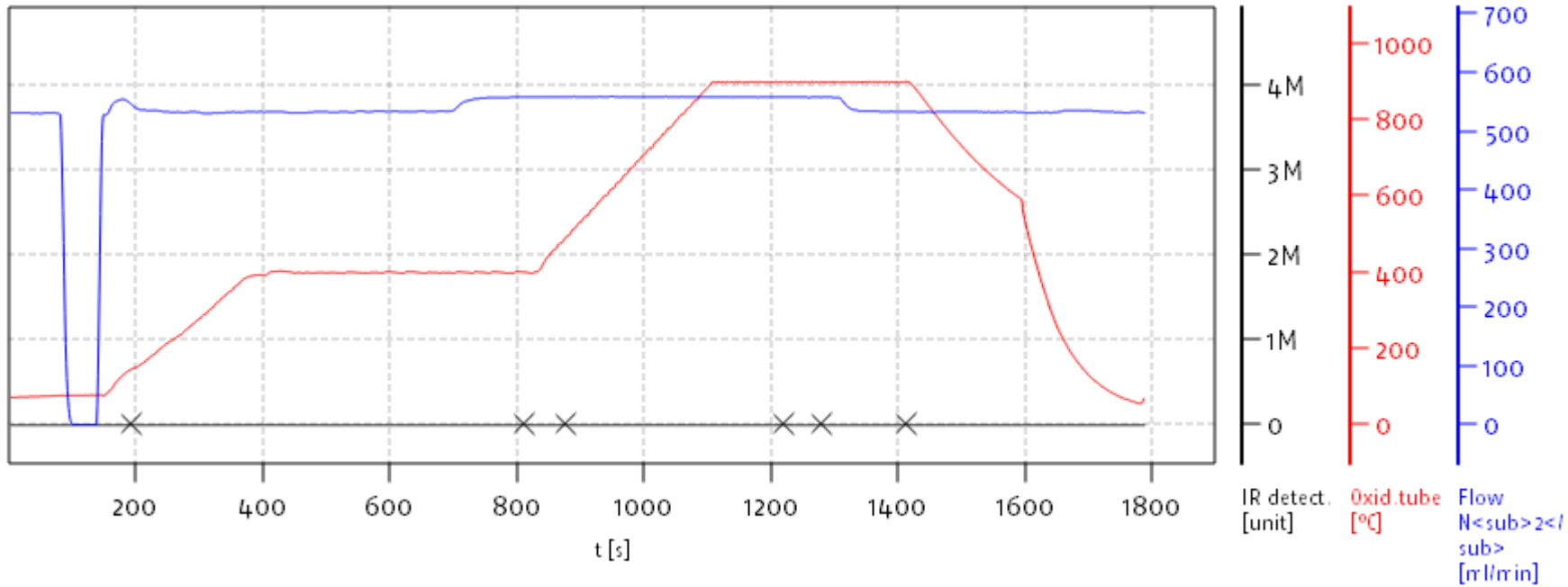
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
108	19	BLA0255-BLK1	539.10		CARBON	1/14/2023 2:20 PM	bl,C3u,C2u	0.000	5 763	0.000	0.000	434	1 623	0.000	0.000	0.9534	1.0000



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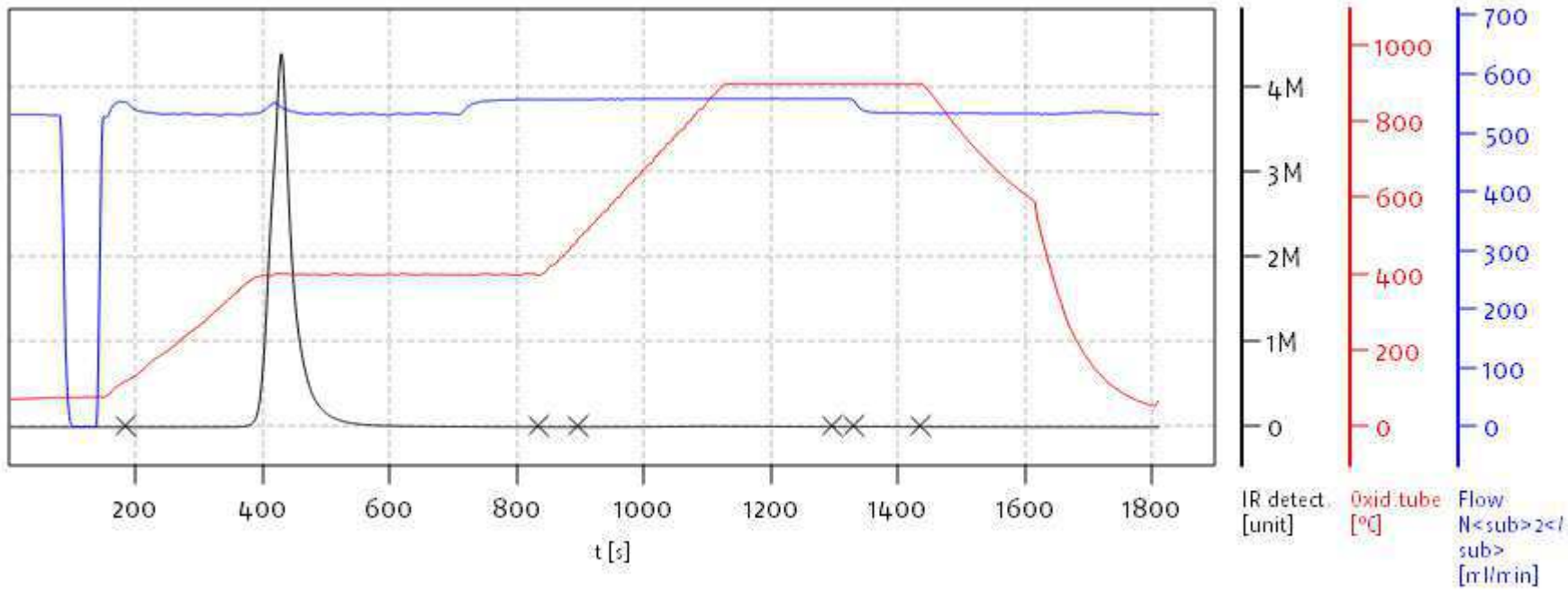
Access: soliTOC superuser

Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
109	20	BLA0255-BS1	21.60		CARBON	1/14/2023 2:51 PM	bl	45.419	6 673 996	45.804	0.000	16 935	80 324	45.419	0.386	0.9534	1.0000



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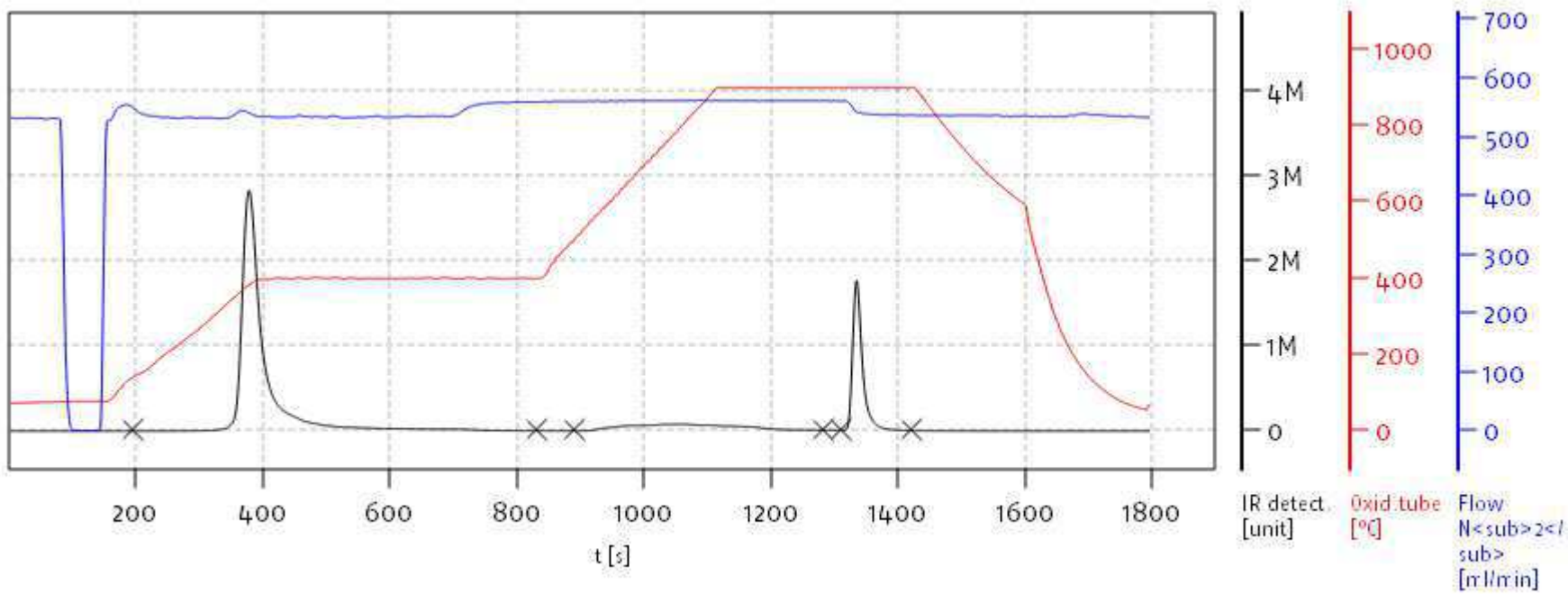
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
110	21	BLA0255-SRM1	261.60		CARBON	1/14/2023 3:21 PM	bl	2.968	4 056 671	3.342	0.695	1 200 595	658 564	2.274	0.374	0.9534	1.0000



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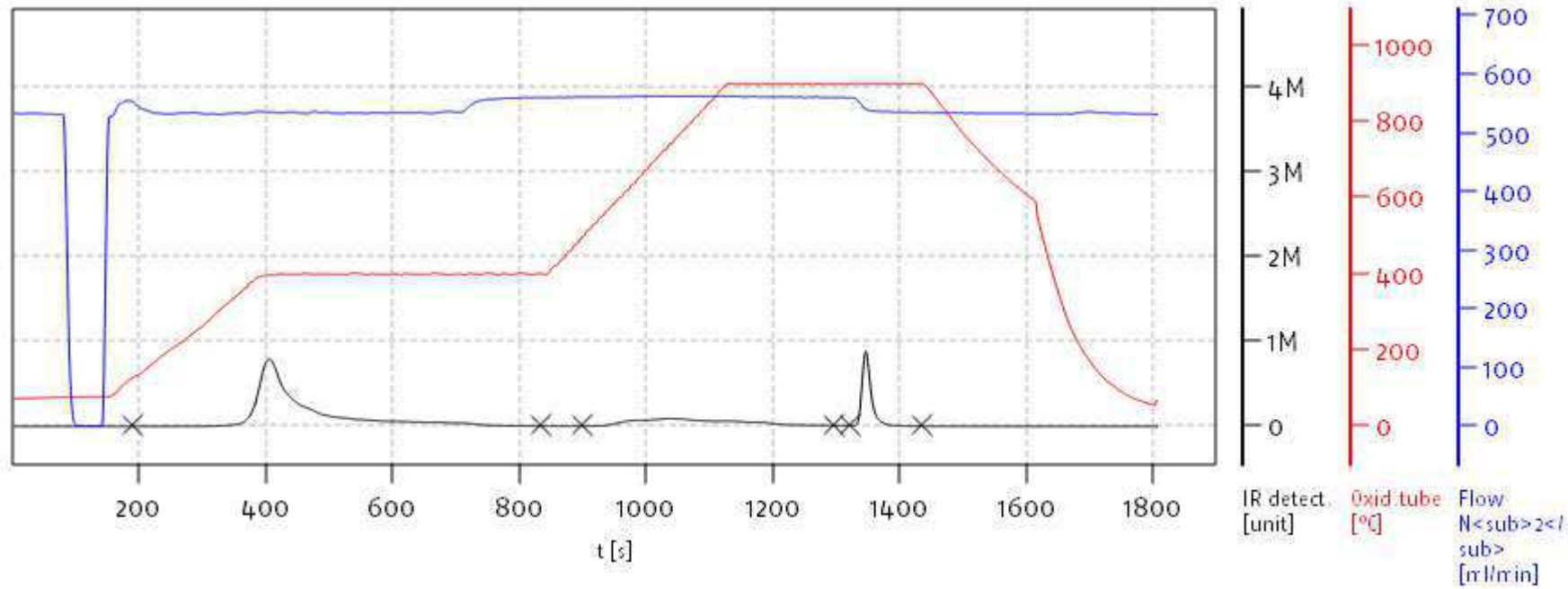
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
111	22	23A0134-01	511.20		CARBON	1/14/2023 3:52 PM	bl	0.836	2 363 019	1.037	0.162	560 913	687 910	0.675	0.200	0.9534	1.0000



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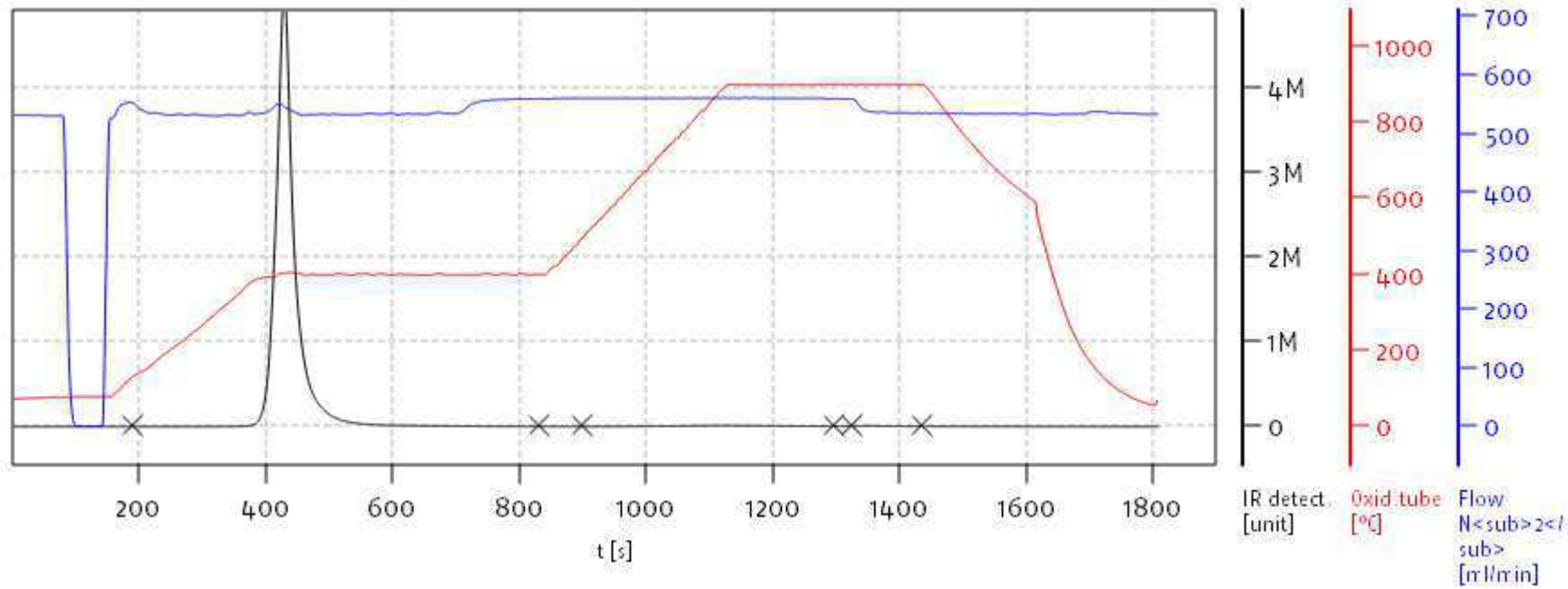
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
112	23	SLA0114-CCV9	21.40		CARBON	1/14/2023 4:22 PM	bl	45.013	6 553 600	45.520	0.000	23 304	96 686	45.013	0.507	0.9534	1.0000



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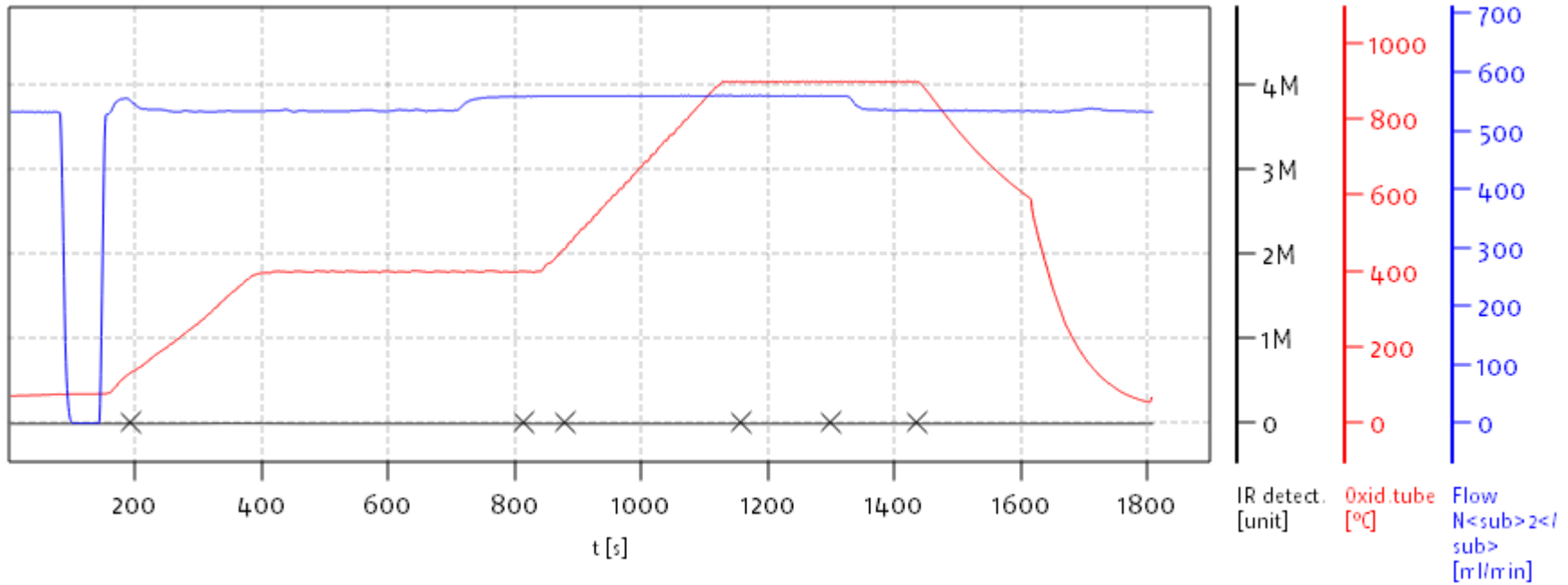
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
113	24	SLA0114-CCB9	523.70		CARBON	1/14/2023 4:53 PM	bl,C3u,C2u	0.000	14 978	0.000	0.000	793	445	0.000	0.000	0.9534	1.0000



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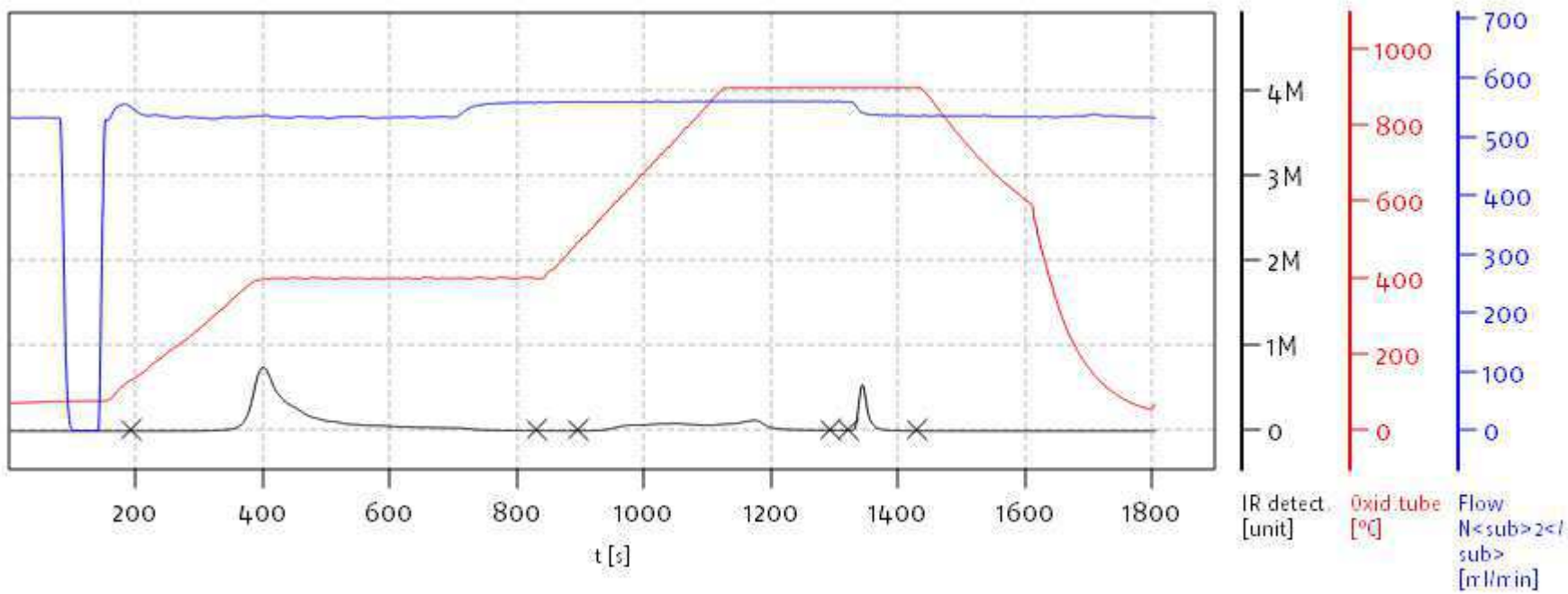
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
114	25	BLA0255-DUP1	501.80		CARBON	1/14/2023 5:23 PM	bl	0.764	2 297 462	1.009	0.096	339 239	818 131	0.668	0.244	0.9534	1.0000



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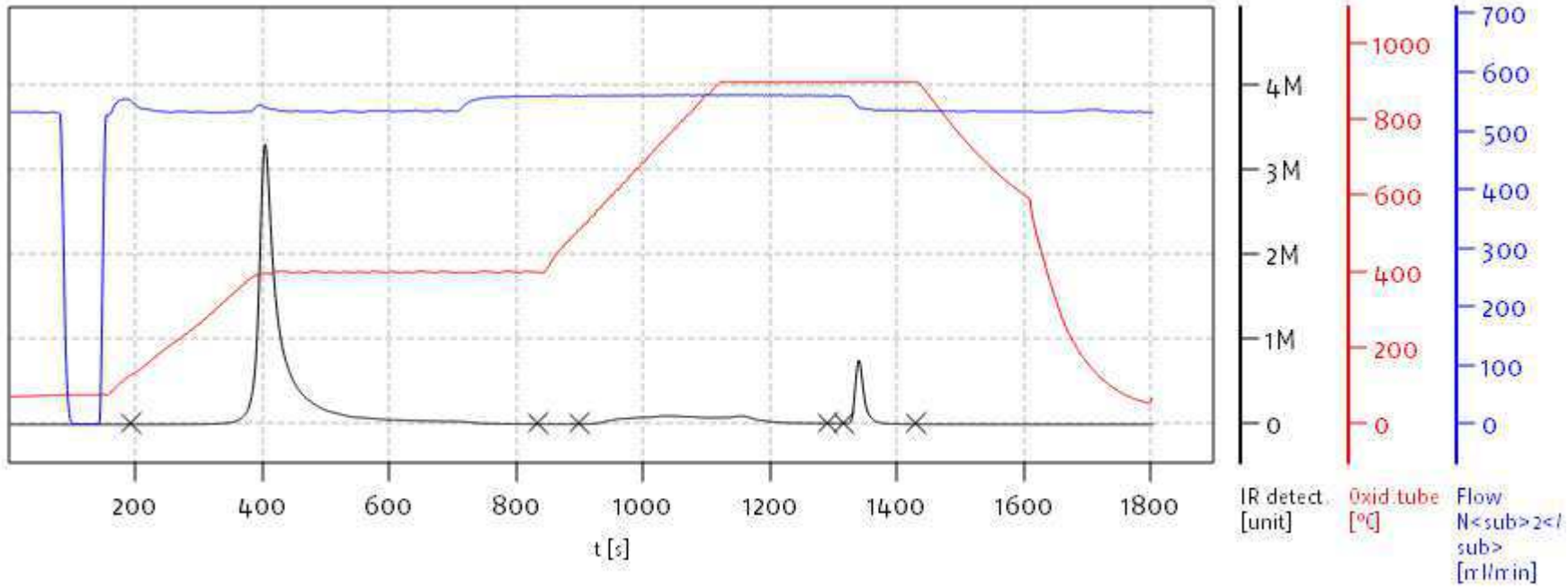
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
115	26	BLA0255-MS1	513.70	0.0085	CARBON	1/14/2023 5:54 PM	bl	1.572	5 024 184	1.821	0.136	478 896	850 946	1.436	0.248	0.9534	1.0000



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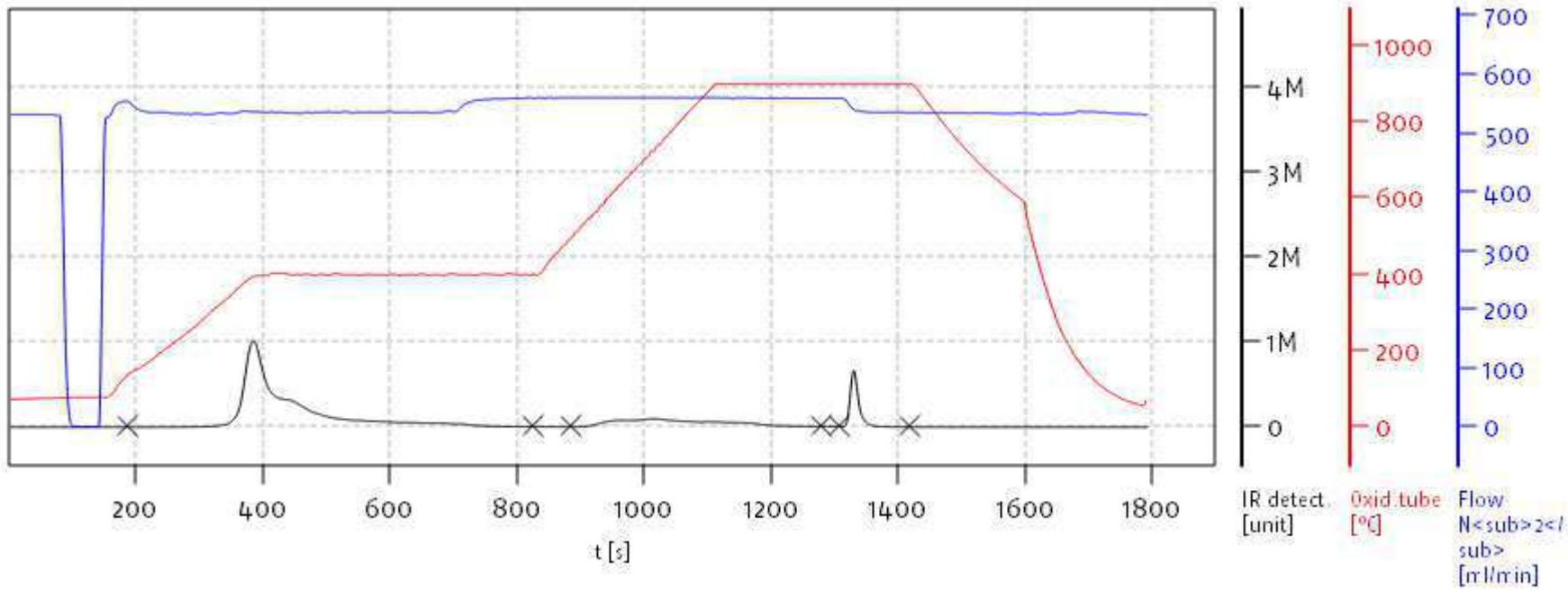
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
116	27	23A0134-02	508.00		CARBON	1/14/2023 6:24 PM	bl	0.917	2 798 219	1.129	0.112	392 782	723 179	0.805	0.212	0.9534	1.0000



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Soli TOC Cube, Carbon
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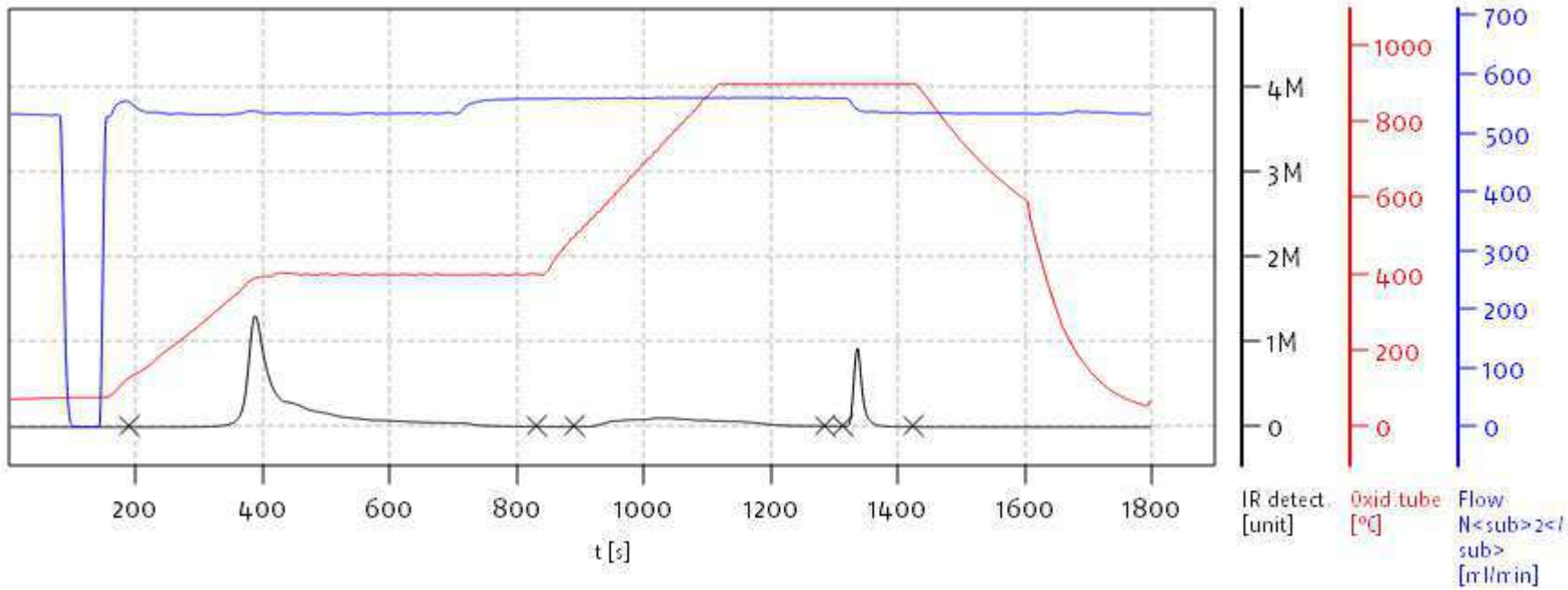
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
117	28	23A0134-03	520.10		CARBON	1/14/2023 6:54 PM	bl	1.028	3 091 906	1.268	0.158	558 918	831 205	0.870	0.240	0.9534	1.0000



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Soli TOC Cube, Carbon
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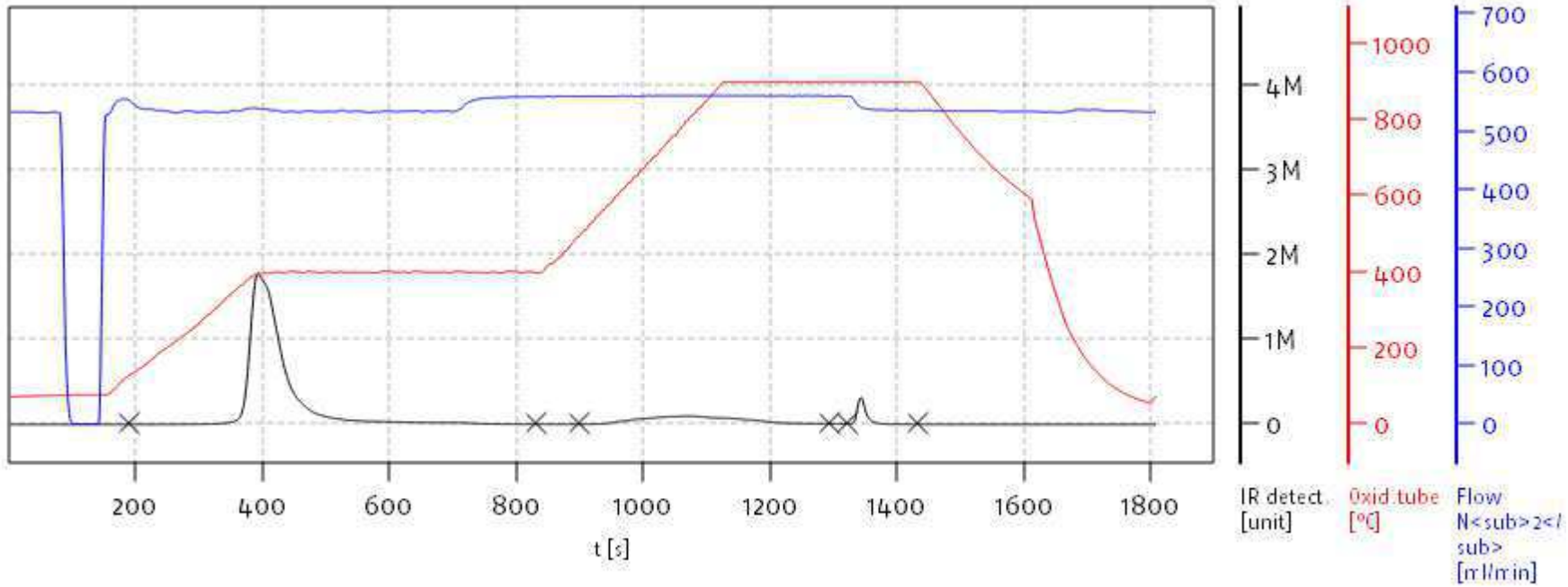
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
118	29	23A0134-04	539.00		CARBON	1/14/2023 7:25 PM	bl	1.148	4 044 464	1.344	0.048	194 588	708 903	1.100	0.196	0.9534	1.0000



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Soli TOC Cube, Carbon
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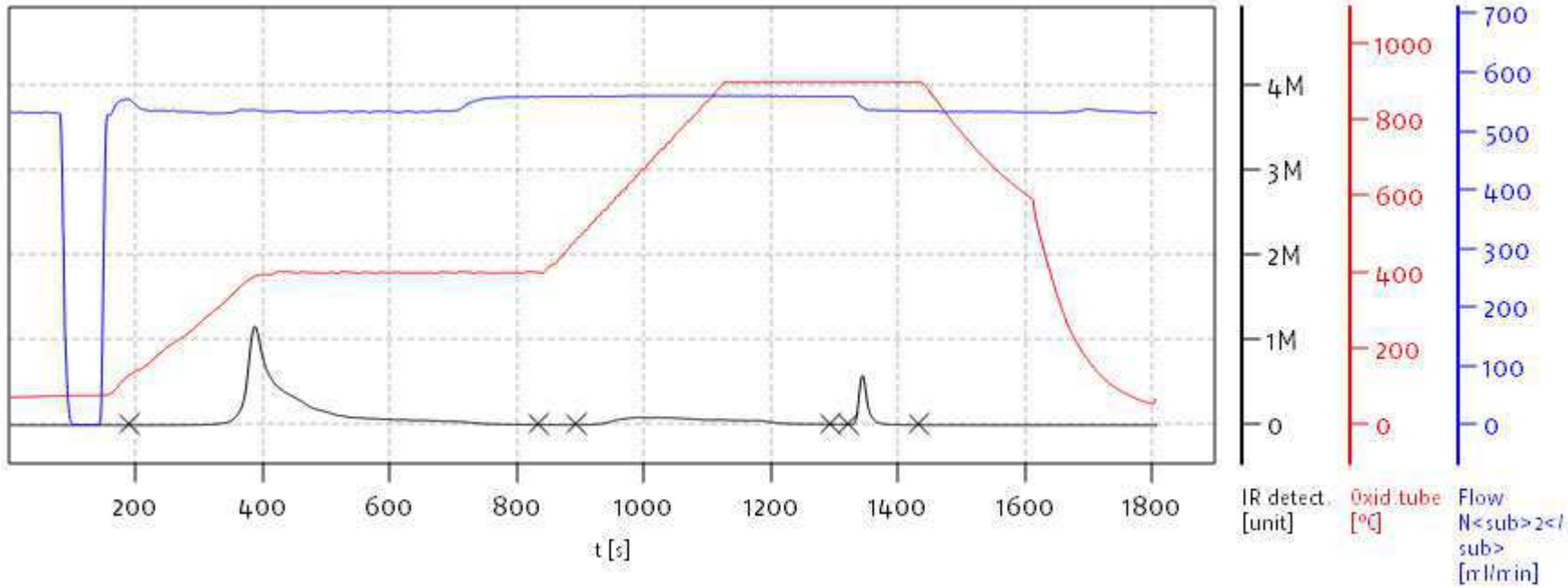
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
119	30	23A0134-05	559.10		CARBON	1/14/2023 7:55 PM	bl	0.896	3 078 447	1.093	0.090	353 057	737 737	0.806	0.197	0.9534	1.0000



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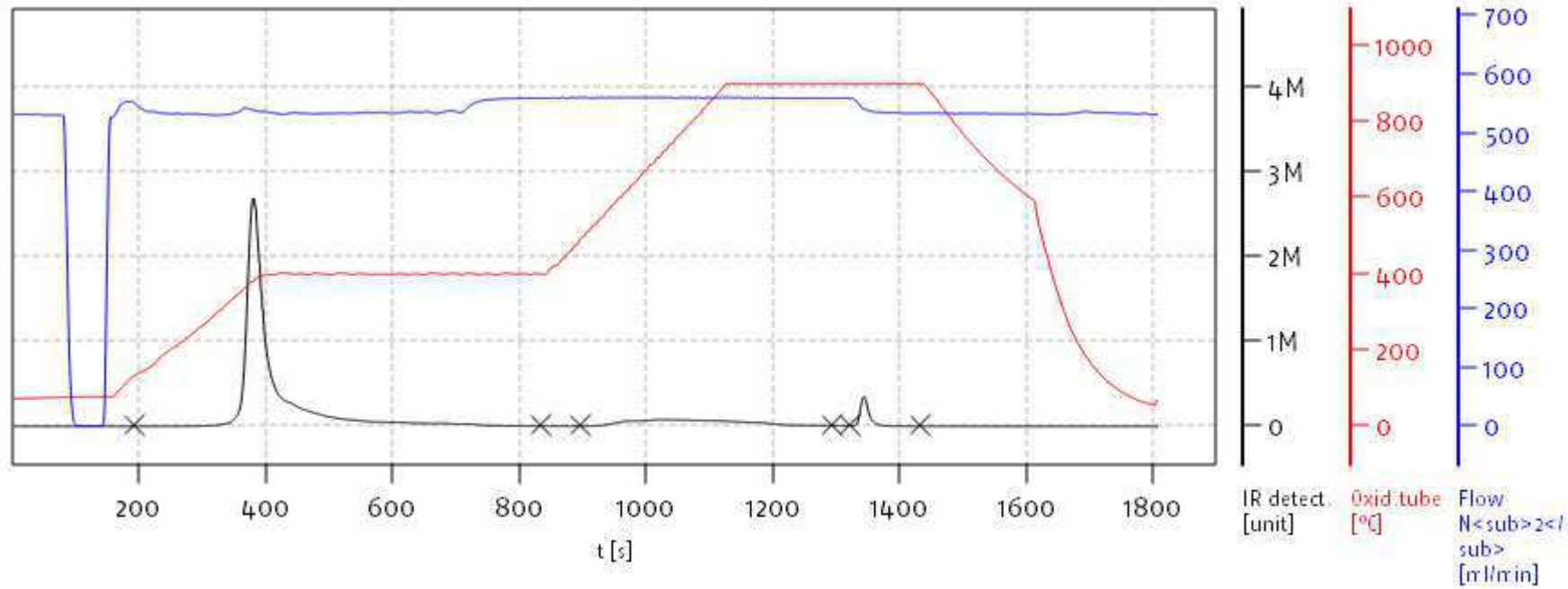
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
120	31	23A0134-06	541.30		CARBON	1/14/2023 8:26 PM	bl	1.175	4 143 472	1.357	0.053	211 929	659 534	1.122	0.181	0.9534	1.0000



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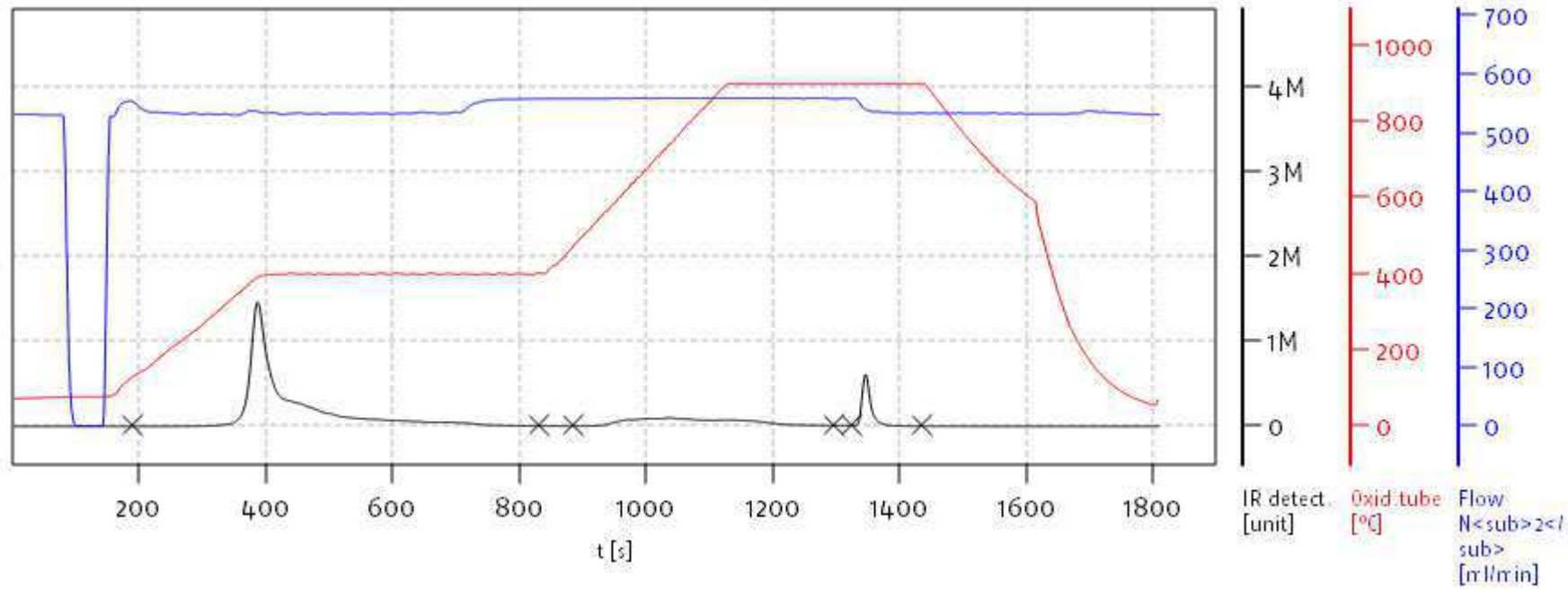
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
121	32	23A0134-07	517.70		CARBON	1/14/2023 8:57 PM	bl	1.001	3 170 422	1.233	0.104	375 392	804 898	0.896	0.233	0.9534	1.0000



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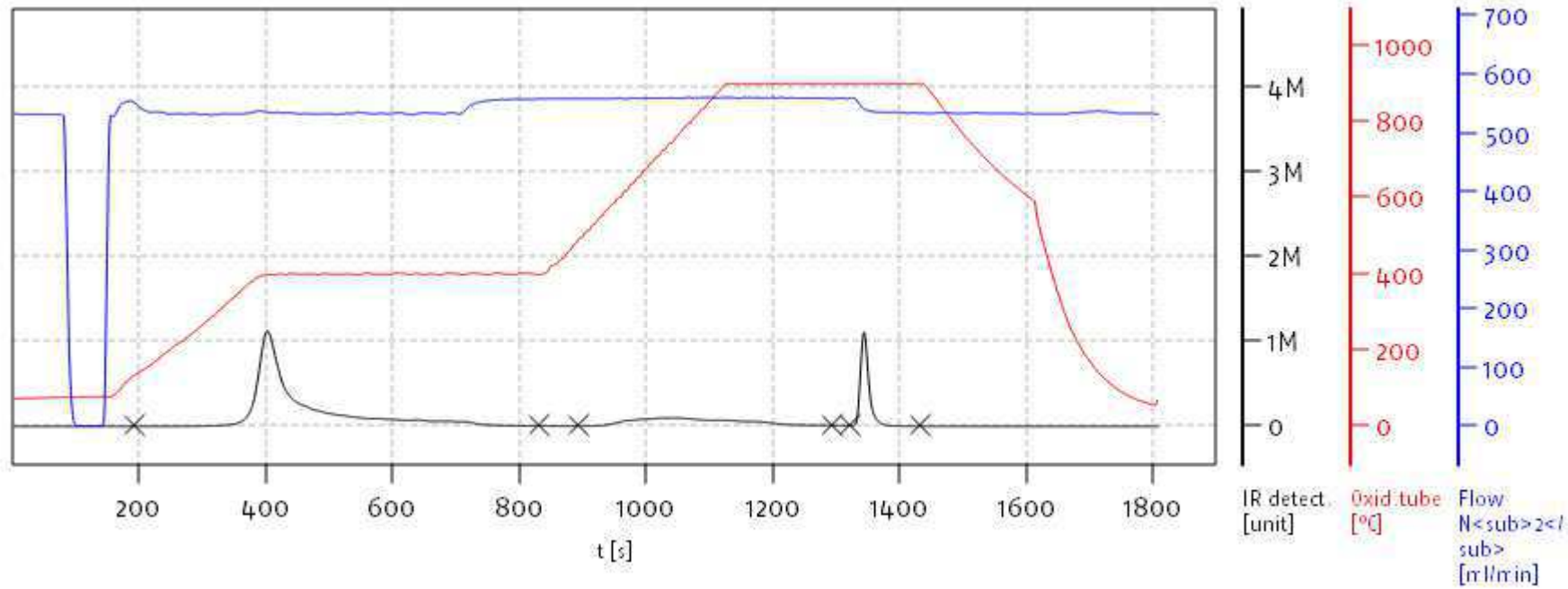
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
122	33	23A0134-08	550.60		CARBON	1/14/2023 9:27 PM	bl	0.967	2 981 331	1.180	0.175	650 245	783 275	0.792	0.213	0.9534	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
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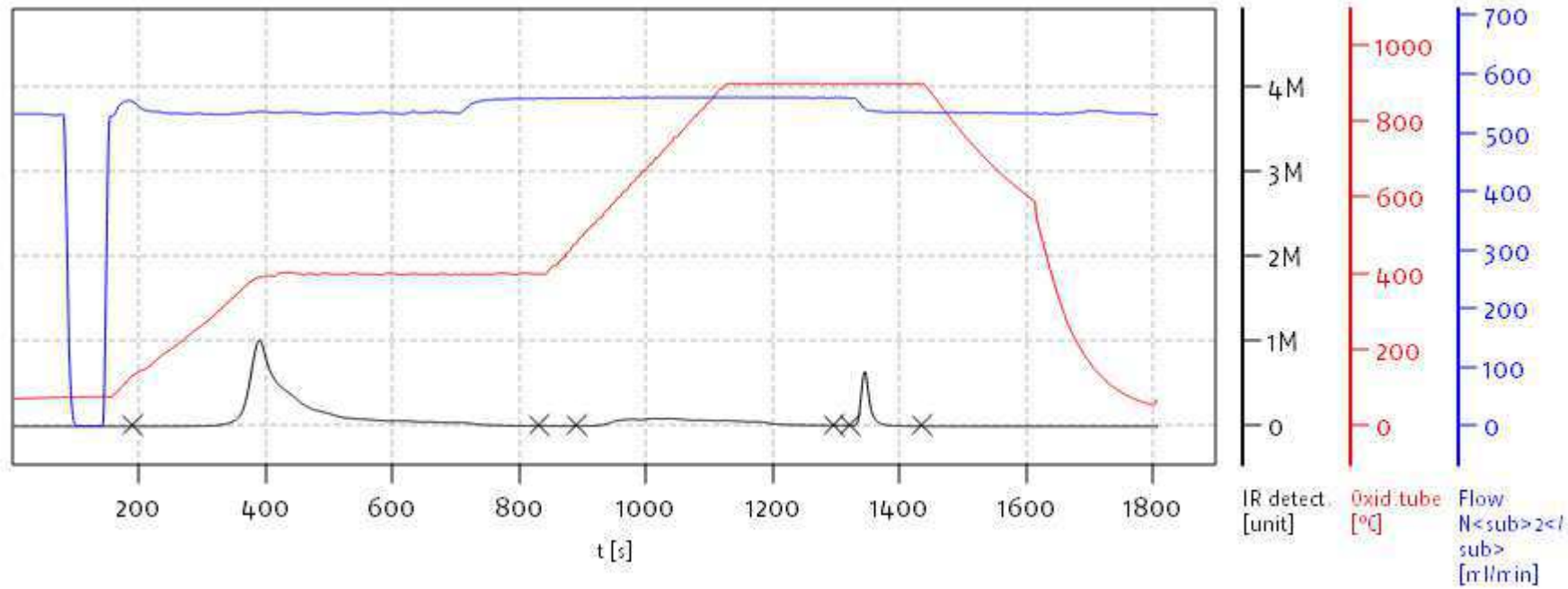
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
123	34	23A0134-09	518.00		CARBON	1/14/2023 9:58 PM	bl	0.958	3 007 847	1.179	0.108	389 488	767 794	0.849	0.222	0.9534	1.0000



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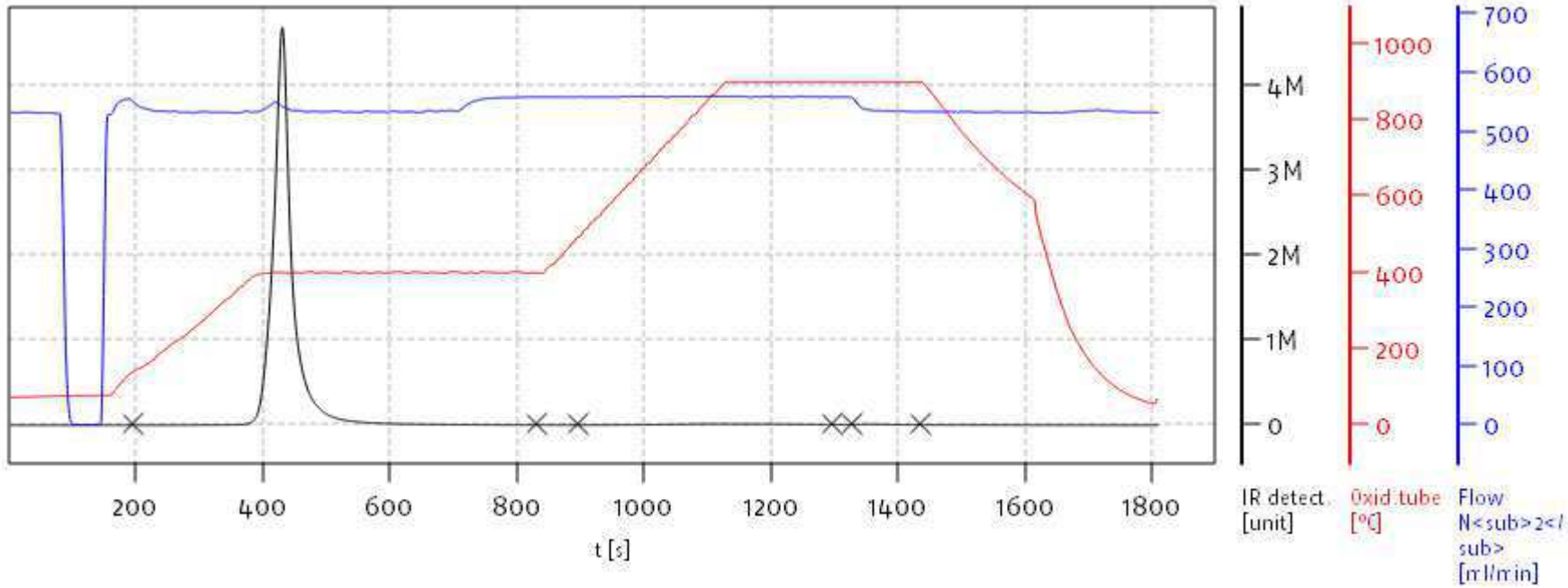
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
124	35	SLA0114-CCVA	20.10		CARBON	1/14/2023 10:28 PM	bl	44.070	6 026 447	44.846	0.017	28 724	127 274	44.054	0.776	0.9534	1.0000



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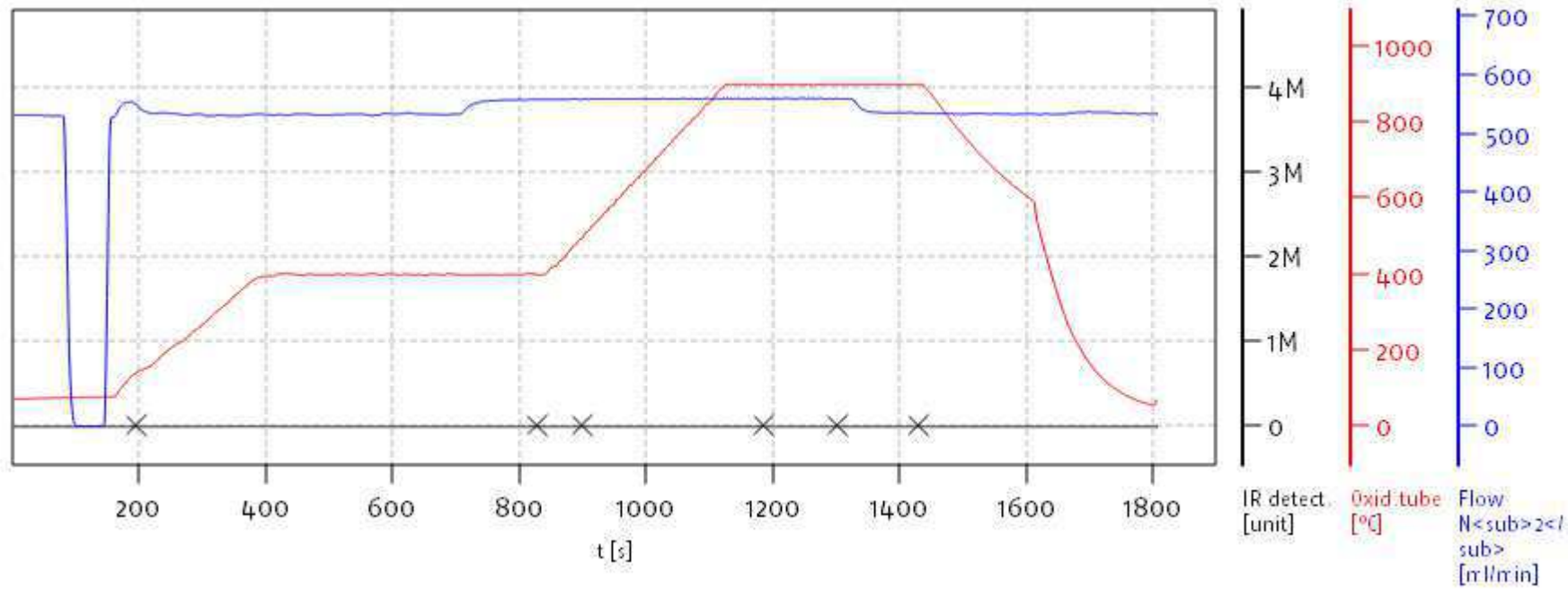
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
125	36	SLA0114-CCBA	543.70		CARBON	1/14/2023 10:59 PM	bl,C3u,C2u	0.000	9 502	0.000	0.000	662	2 023	0.000	0.000	0.9534	1.0000



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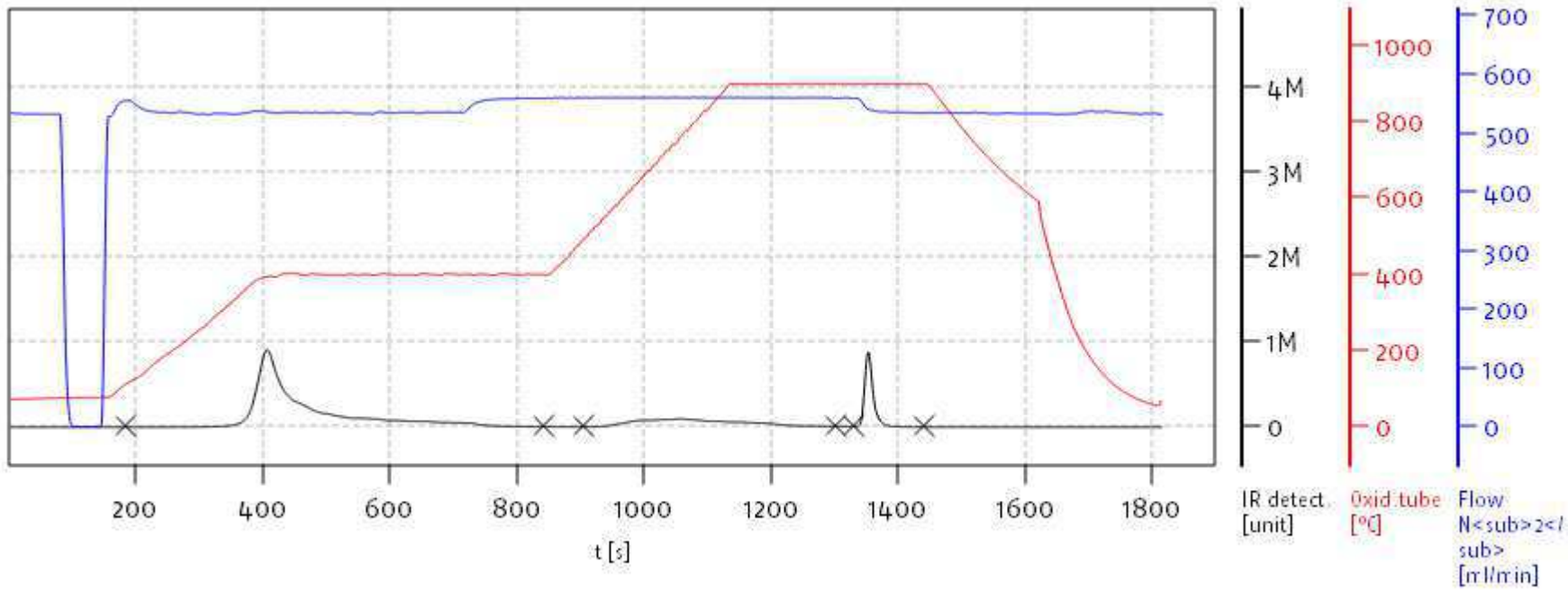
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
126	37	23A0134-10	533.30		CARBON	1/14/2023 11:29 PM	bl	0.893	2 735 647	1.096	0.143	520 685	724 444	0.750	0.203	0.9534	1.0000



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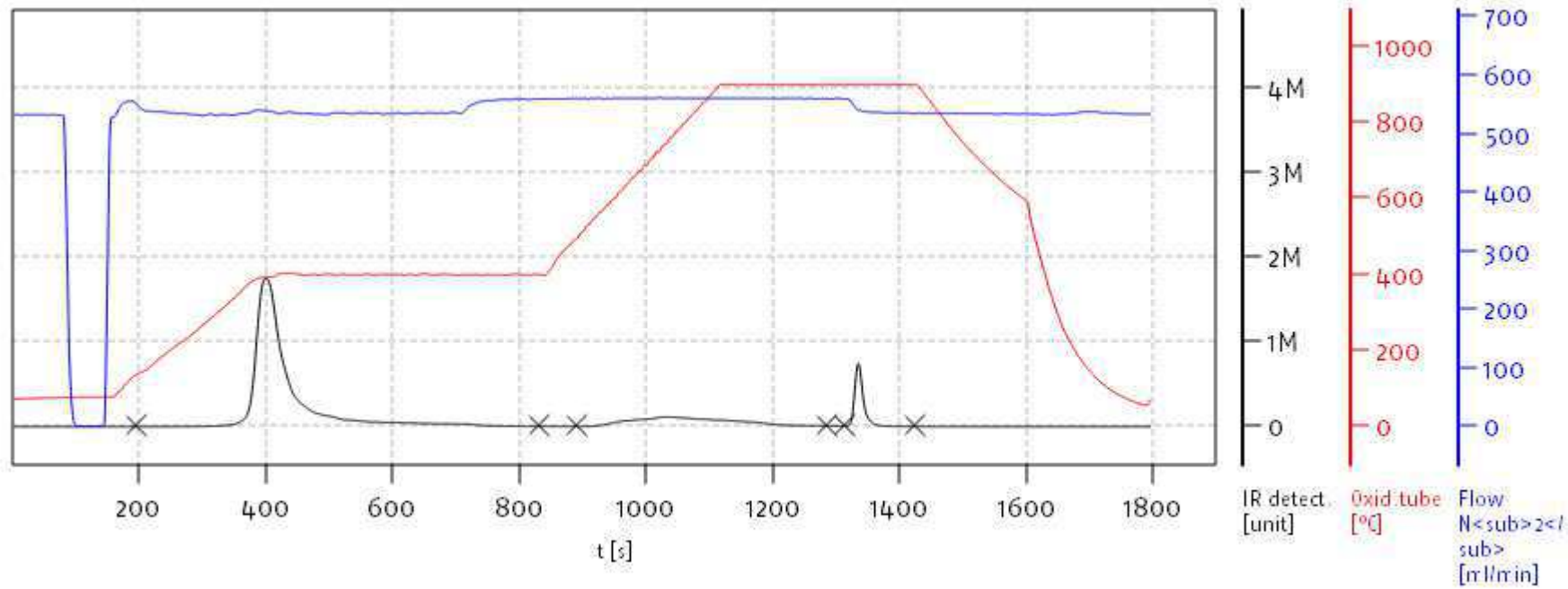
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
127	38	23A0134-11	537.70		CARBON	1/15/2023 12:00 AM	bl	1.149	3 776 165	1.375	0.120	442 294	812 463	1.029	0.226	0.9534	1.0000



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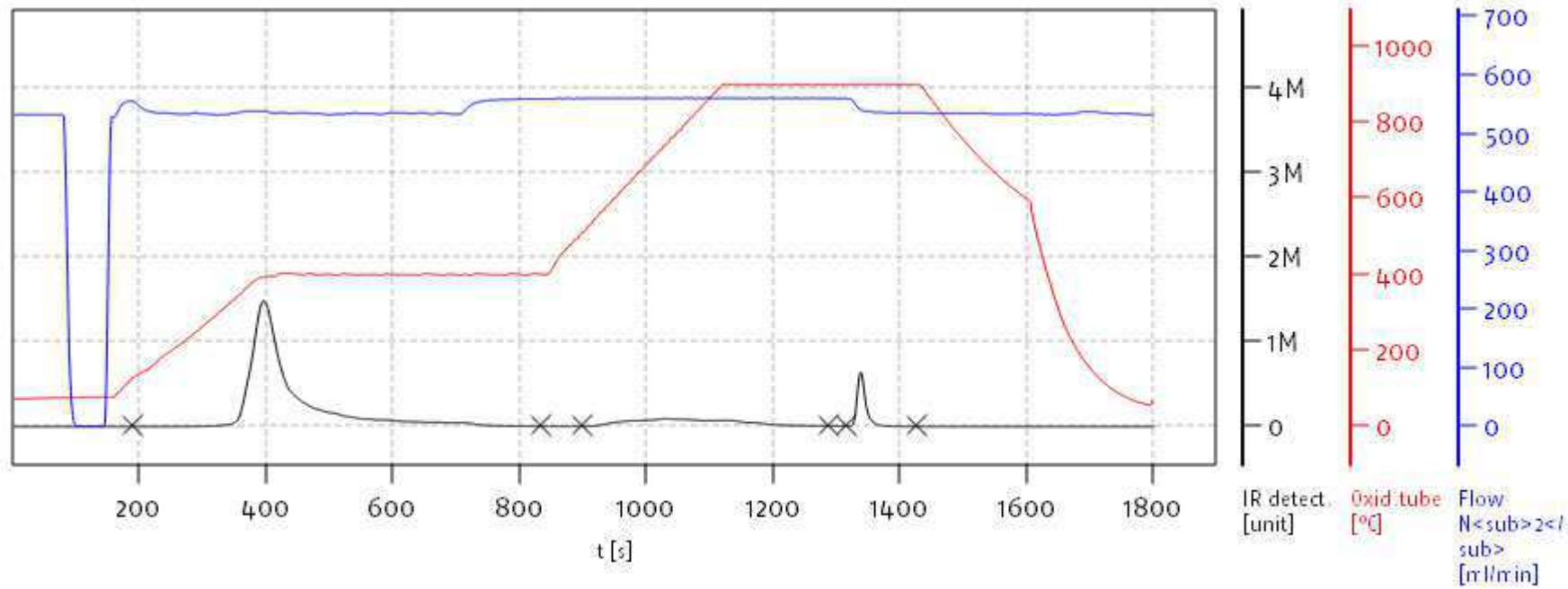
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
128	39	23A0134-12	568.50		CARBON	1/15/2023 12:30 AM	bl	1.119	3 961 830	1.307	0.097	383 561	718 327	1.022	0.188	0.9534	1.0000



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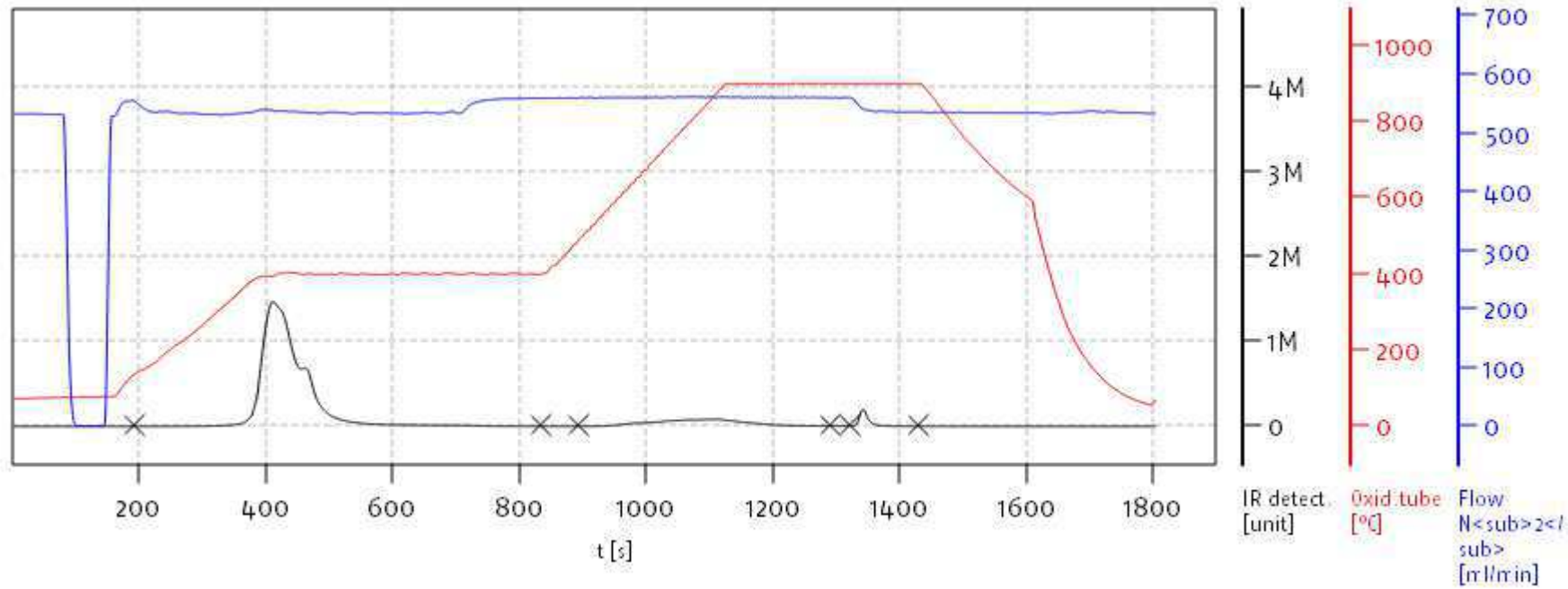
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
129	40	23A0134-13	530.90		CARBON	1/15/2023 1:01 AM	bl	1.113	3 927 115	1.265	0.029	126 660	545 091	1.084	0.151	0.9534	1.0000



Name:

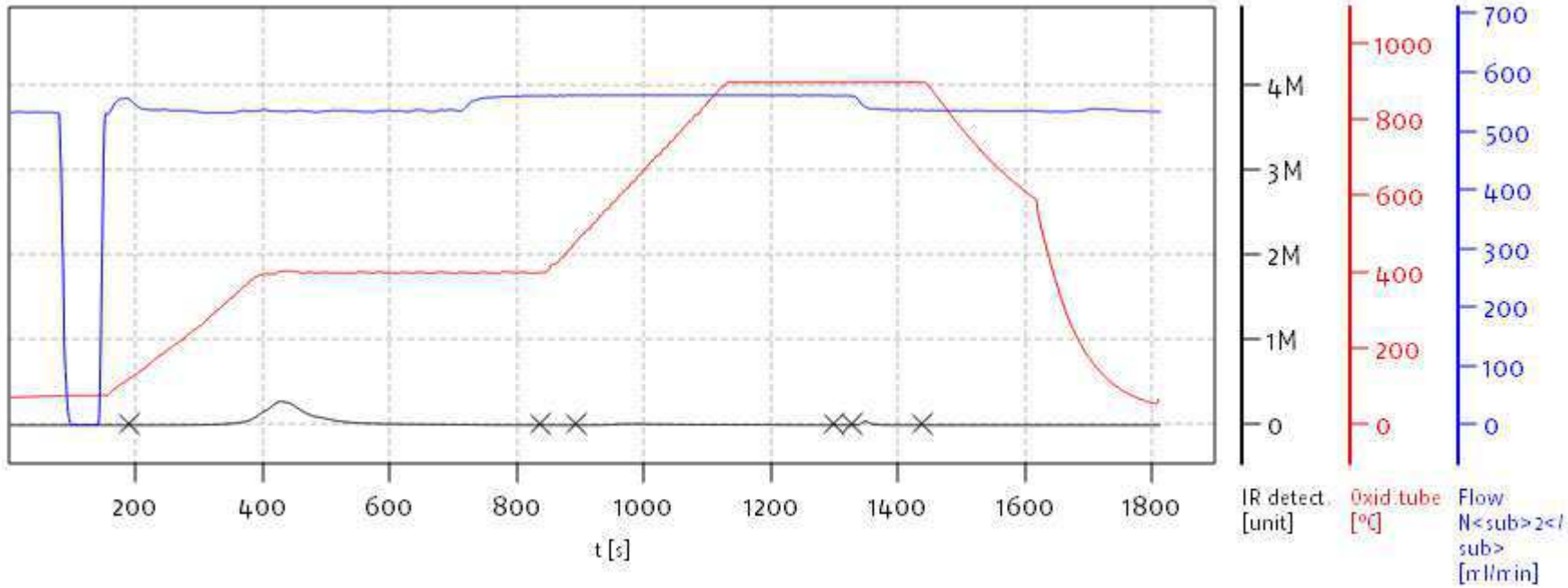
Access: soliTOC superuser

Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
130	41	23A0134-14	591.20		CARBON	1/15/2023 1:31 AM	bl	0.245	1 005 443	0.259	0.001	28 846	81 546	0.244	0.014	0.9534	1.0000



Name:

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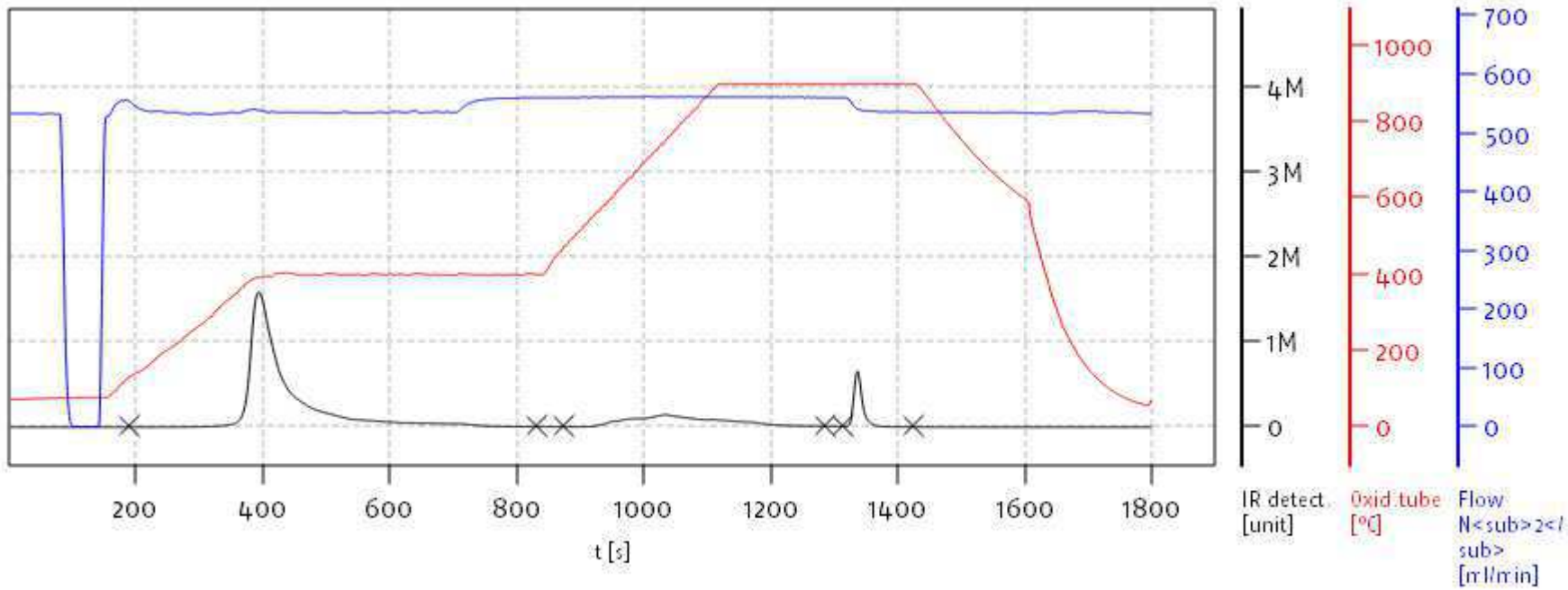
Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
131	42	23A0134-15	581.50		CARBON	1/15/2023 2:02 AM	bl	1.055	3 799 790	1.298	0.098	394 004	938 526	0.958	0.243	0.9534	1.0000



Name:

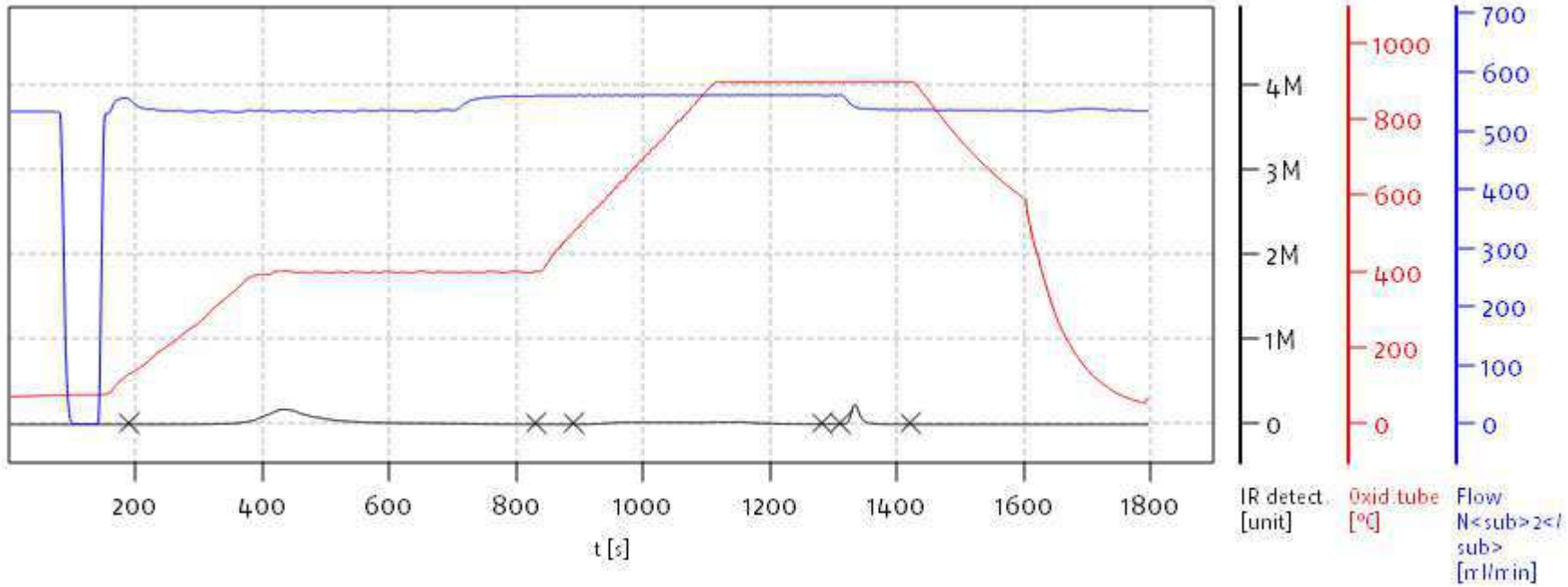
Access: soliTOC superuser

Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
132	43	23A0134-16	557.30		CARBON	1/15/2023 2:32 AM	bl	0.226	752 879	0.285	0.033	146 797	240 001	0.192	0.059	0.9534	1.0000



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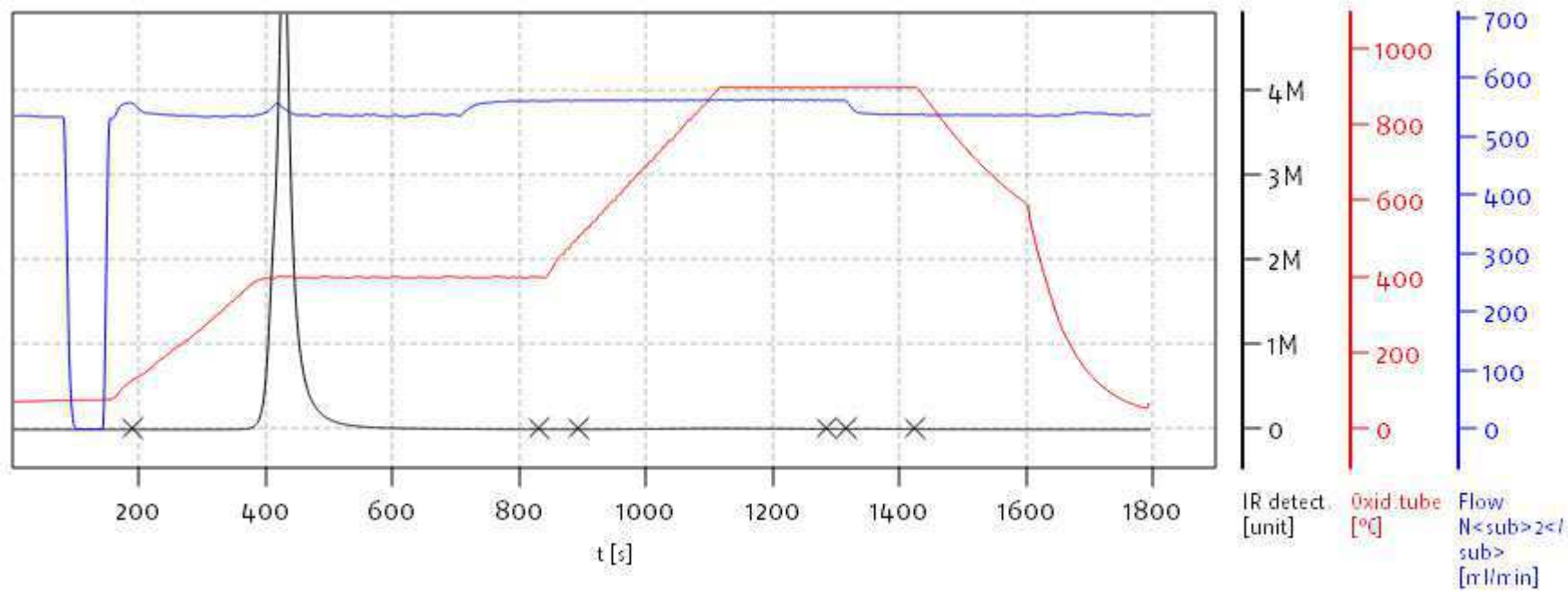
Access: soliTOC superuser

Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
133	44	SLA0114-CCVB	23.00		CARBON	1/15/2023 3:02 AM	bl	44.540	6 967 907	45.158	0.000	25 116	118 360	44.540	0.618	0.9534	1.0000



Name:

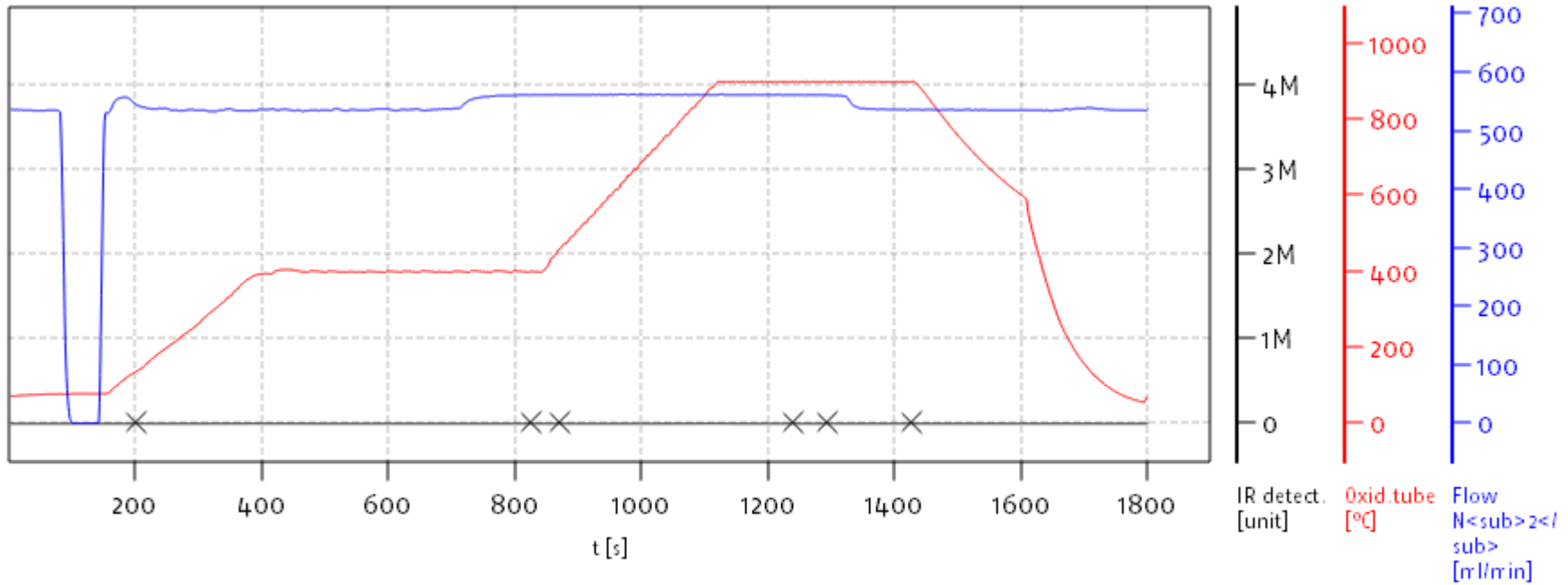
Access: soliTOC superuser

Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
134	45	SLA0114-CCBB	521.70		CARBON	1/15/2023 3:33 AM	bl,C2u	0.000	5 590	0.000	0.000	645	4 079	0.000	0.000	0.9534	1.0000



Name:

Access: soliTOC superuser

Date: Mon Jan 16 07:14:49 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: FD00070
Instrument: TOC Cube
Calibration Date: 04/26/2022 11:29

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
Total Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
Total Inorganic Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
% Soot	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: FD00070
Instrument: TOC Cube
Calibration Date: 04/26/2022 11:29

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
Total Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
Total Inorganic Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
% Soot	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: FD00070
Instrument: TOC Cube
Calibration Date: 04/26/2022 11:29

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
Total Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
Total Inorganic Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
% Soot	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: FD00070
Instrument: TOC Cube
Calibration Date: 04/26/2022 11:29

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
Total Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
Total Inorganic Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
% Soot	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408

INITIAL CALIBRATION DATA

EPA 9060A m

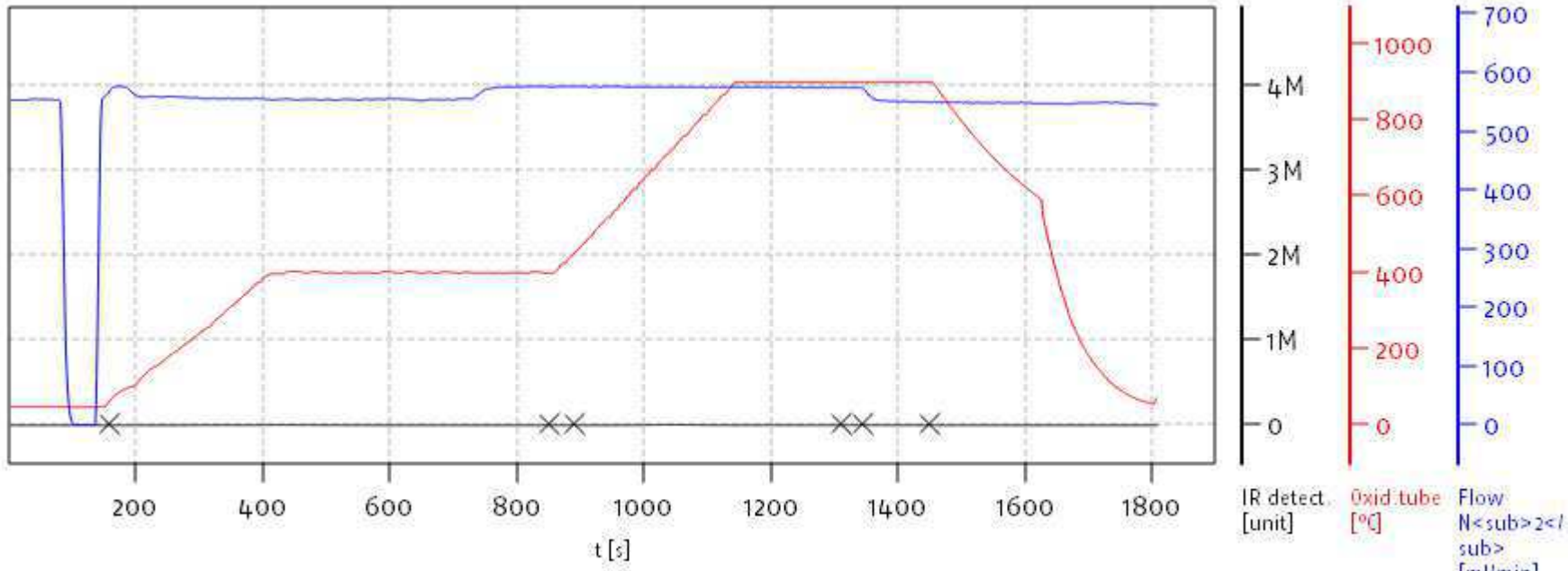
Laboratory:	Analytical Resources, LLC	SDG:	23A0134
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FD00070	Instrument:	TOC Cube
Calibration Date:	04/26/2022 11:29		

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Total Organic Carbon	1424064	15.9	0.9988			
Total Carbon	1424064	15.9	0.9988			
Total Inorganic Carbon	1424064	15.9	0.9988			
% Soot	1424064	15.9	0.9988			

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

Analytical Resources, Incorporated
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
1	1	BLANK	1.00		1.00	CARBON	4/26/2022 11:29 AM	0.000	0.000	0.000	bl	29 049	30 612	3 899	1.0000	1.0000



Name:

Access: soliTOC superuser

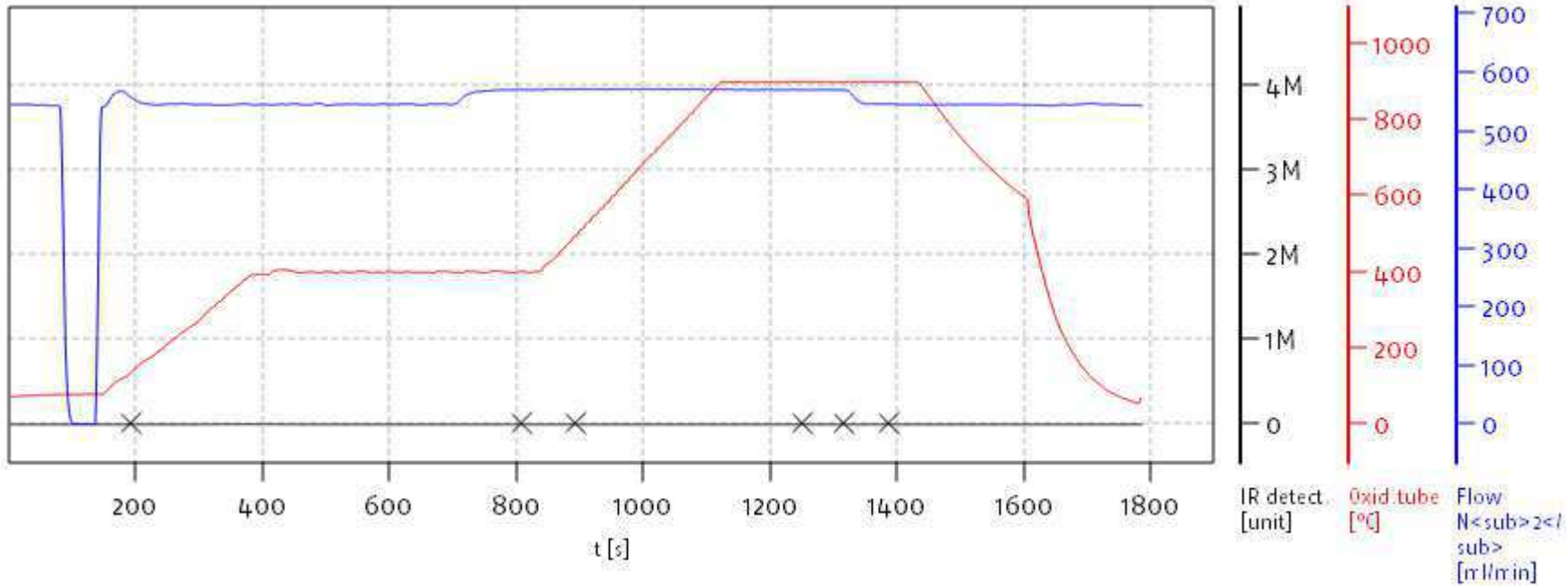
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
2	2	BLANK	1.00		1.00	CARBON	4/26/2022 12:00 PM	0.000	0.000	0.000	bl	11 115	60	8	1.0000	1.0000



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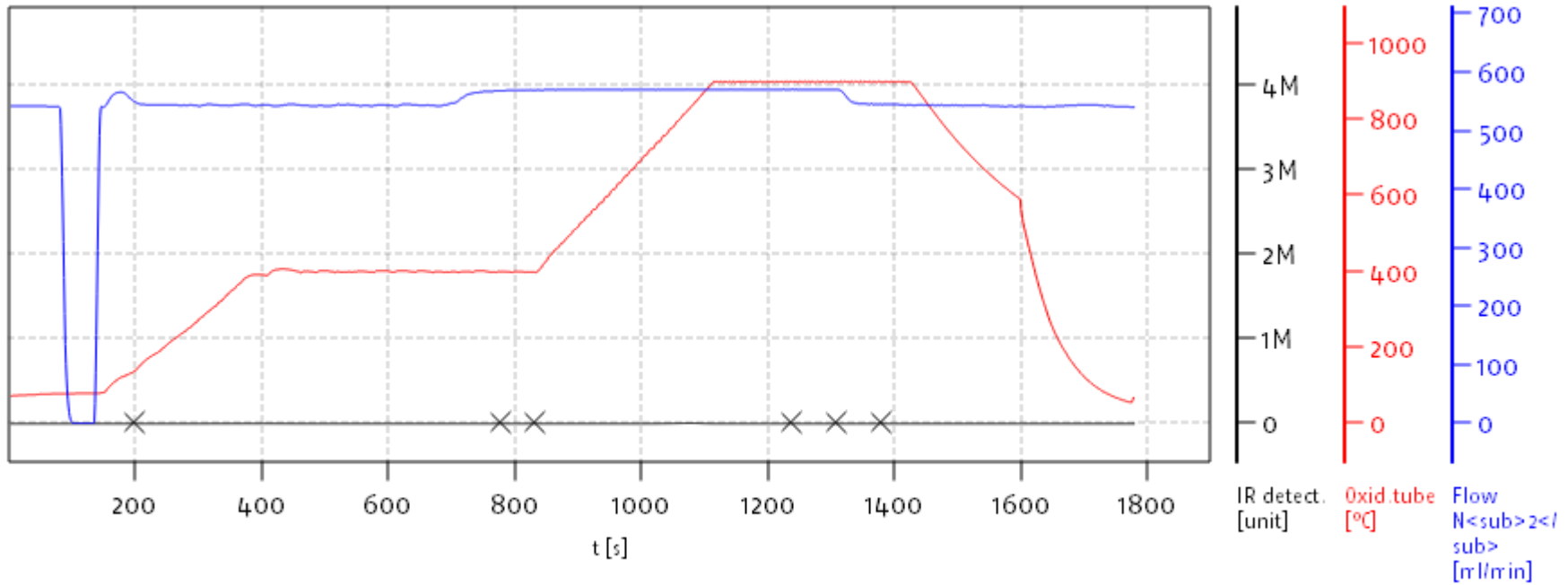
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
3	3	SEQ-CAL1	200.00	0.0027	1.00	CARBON	4/26/2022 12:30 PM	0.010	0.008	0.018	bl,C1u,C2u	7 294	11 739	22	1.0000	0.7425



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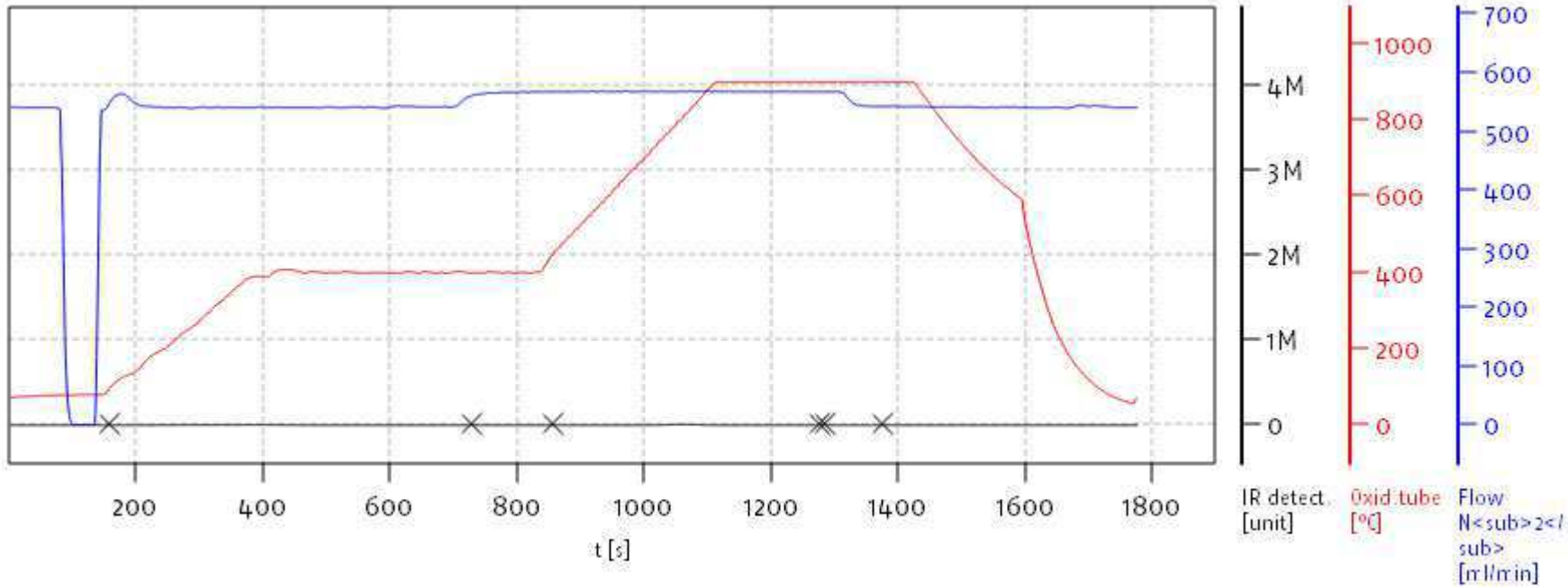
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
4	4	SEQ-CAL2	200.00	0.0049	1.00	CARBON	4/26/2022 1:00 PM	0.023	0.015	0.038	bl,C2u	23 296	19 107	47	1.0000	0.8936



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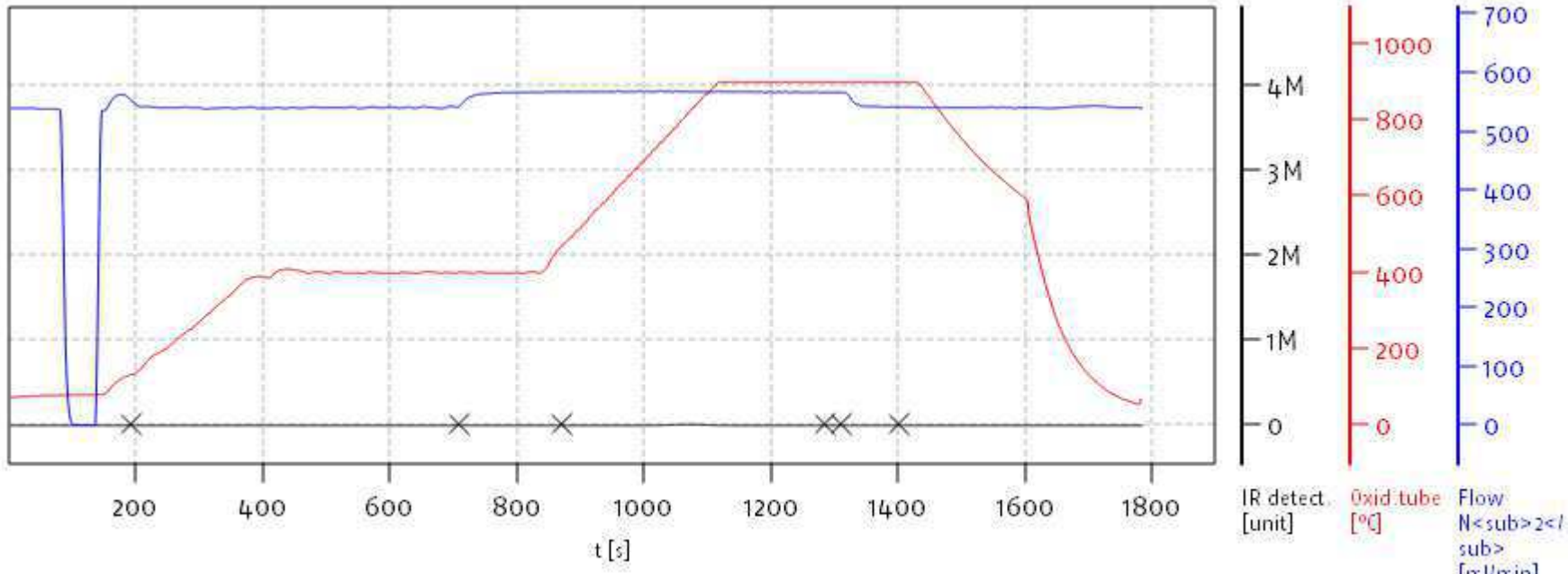
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
5	5	SEQ-CAL3	200.00	0.0071	1.00	CARBON	4/26/2022 1:30 PM	0.006	0.022	0.028	bl,C1u,C2u	2 319	27 530	170	1.0000	0.9343



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Serial No: 0300.181017
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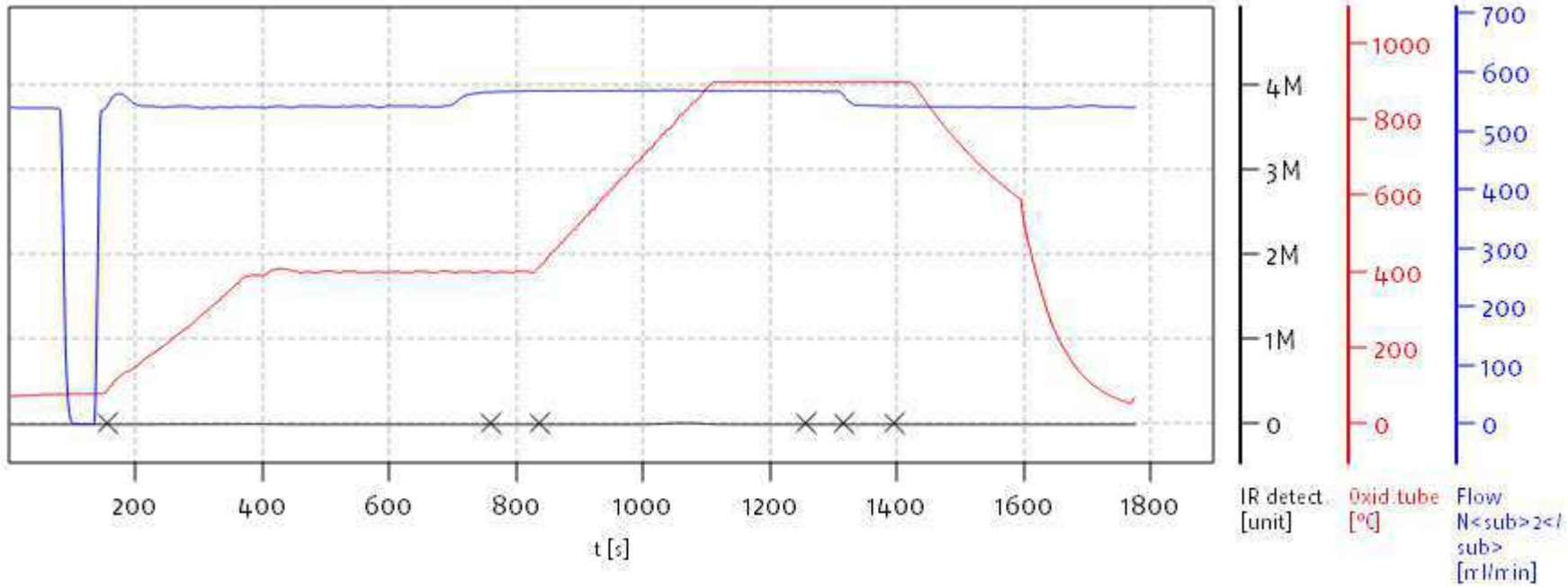
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
6	6	SEQ-CAL4	200.00	0.0098	1.00	CARBON	4/26/2022 2:00 PM	0.020	0.030	0.050	bl,C2u	19 746	38 017	109	1.0000	0.9461



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Serial No: 0300.181017
Mode CCC

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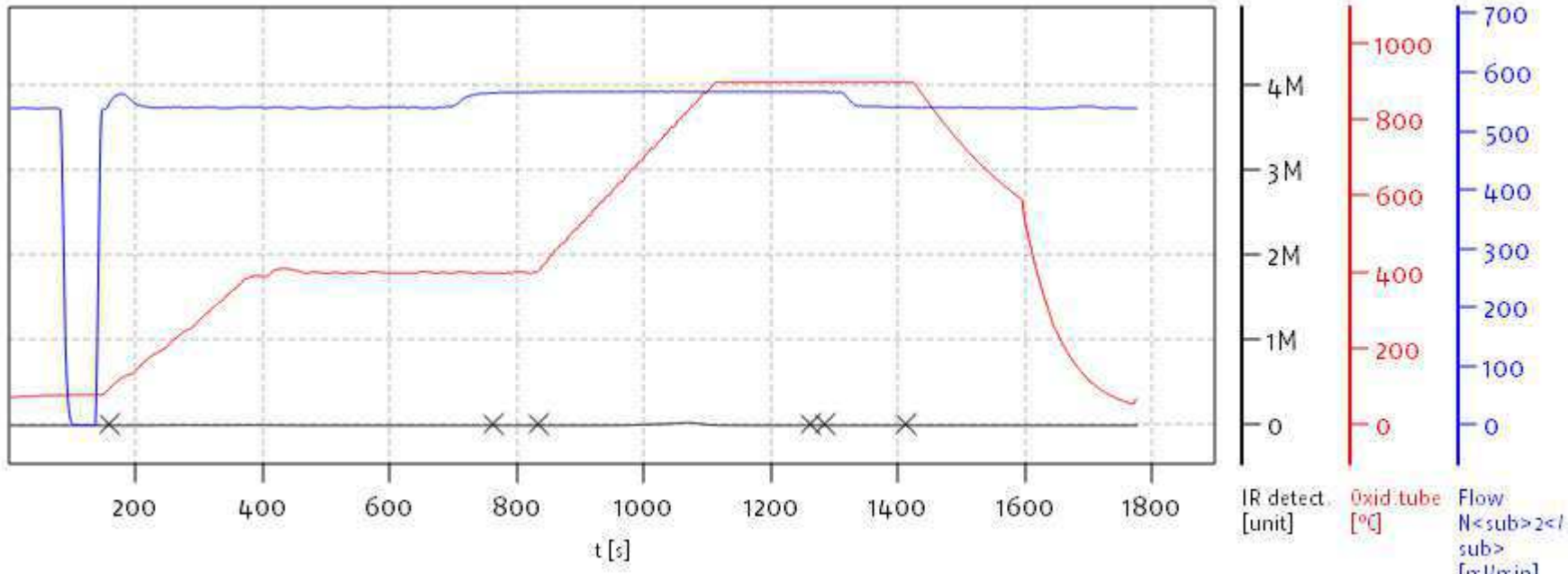
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
7	7	SEQ-CAL5	200.00	0.0148	1.00	CARBON	4/26/2022 2:30 PM	0.021	0.045	0.066	bl,C2u	20 951	92 945	236	1.0000	0.5975



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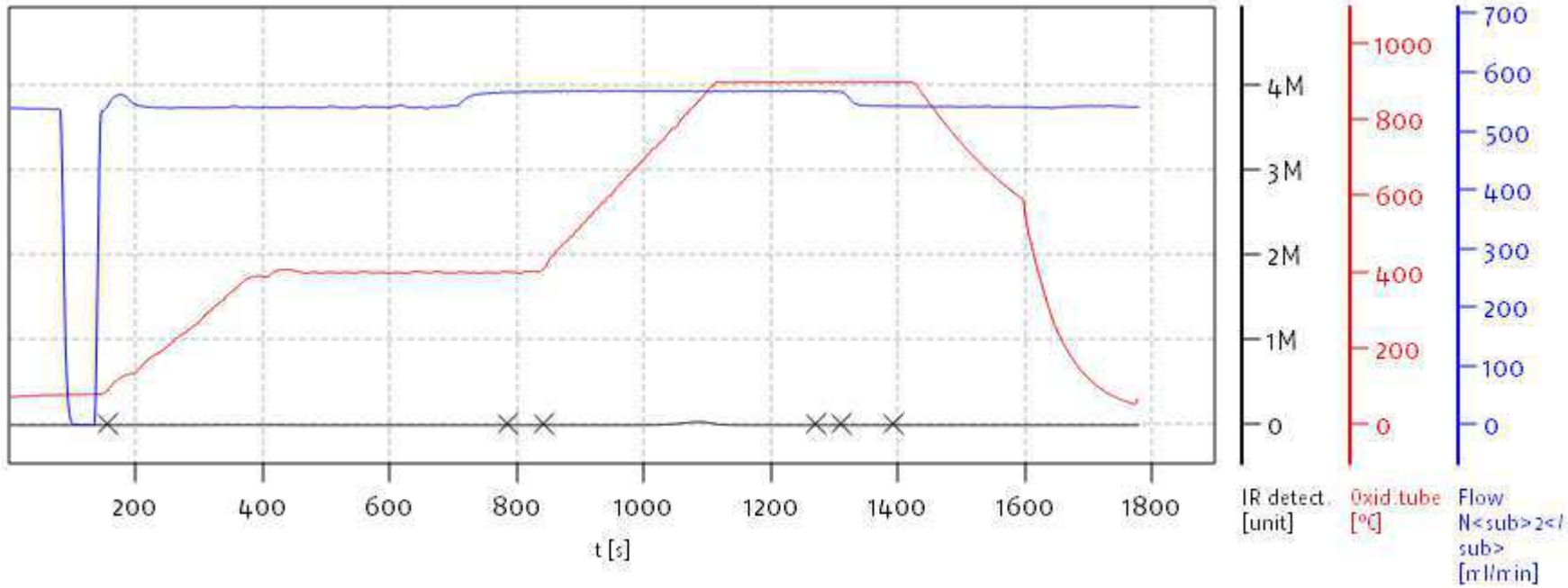
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
8	8	SEQ-CAL6	200.00	0.0196	1.00	CARBON	4/26/2022 3:00 PM	0.012	0.061	0.073	bl,C2u	10 118	82 297	59	1.0000	0.9144



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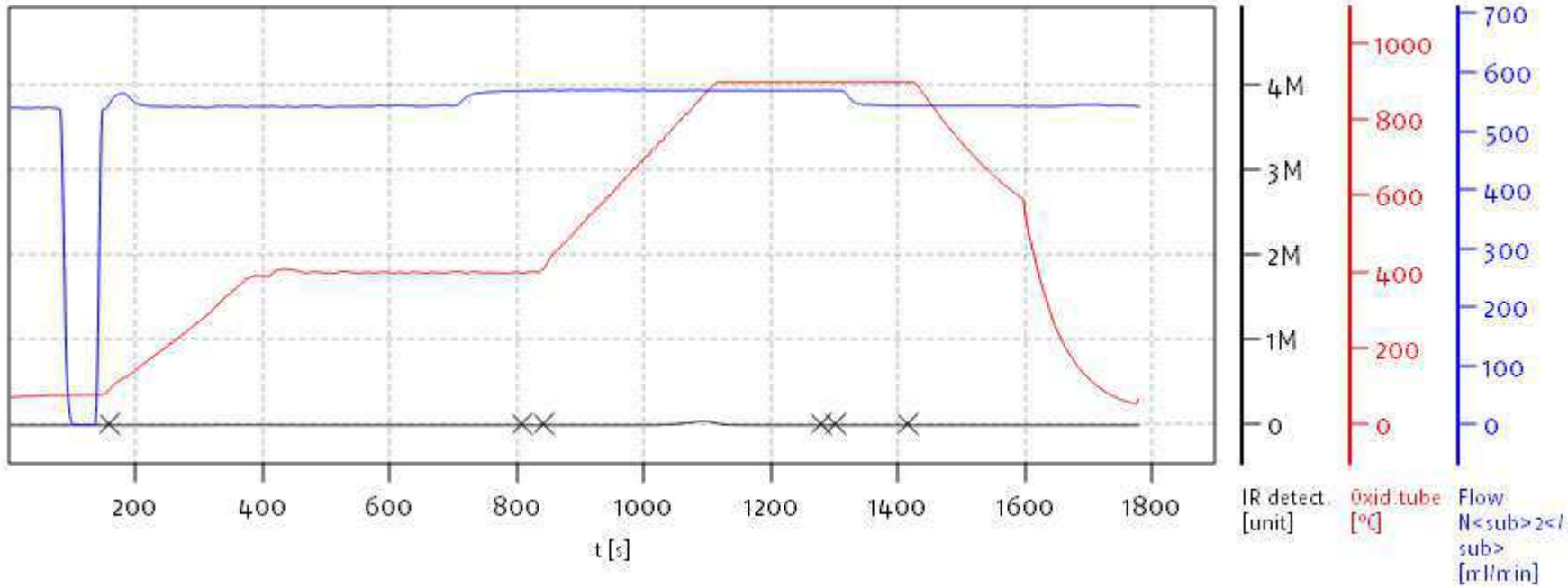
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
9	9	SEQ-CAL7	200.00	0.0247	1.00	CARBON	4/26/2022 3:30 PM	0.013	0.075	0.088	bl,C2u	10 555	101 530	292	1.0000	0.9173



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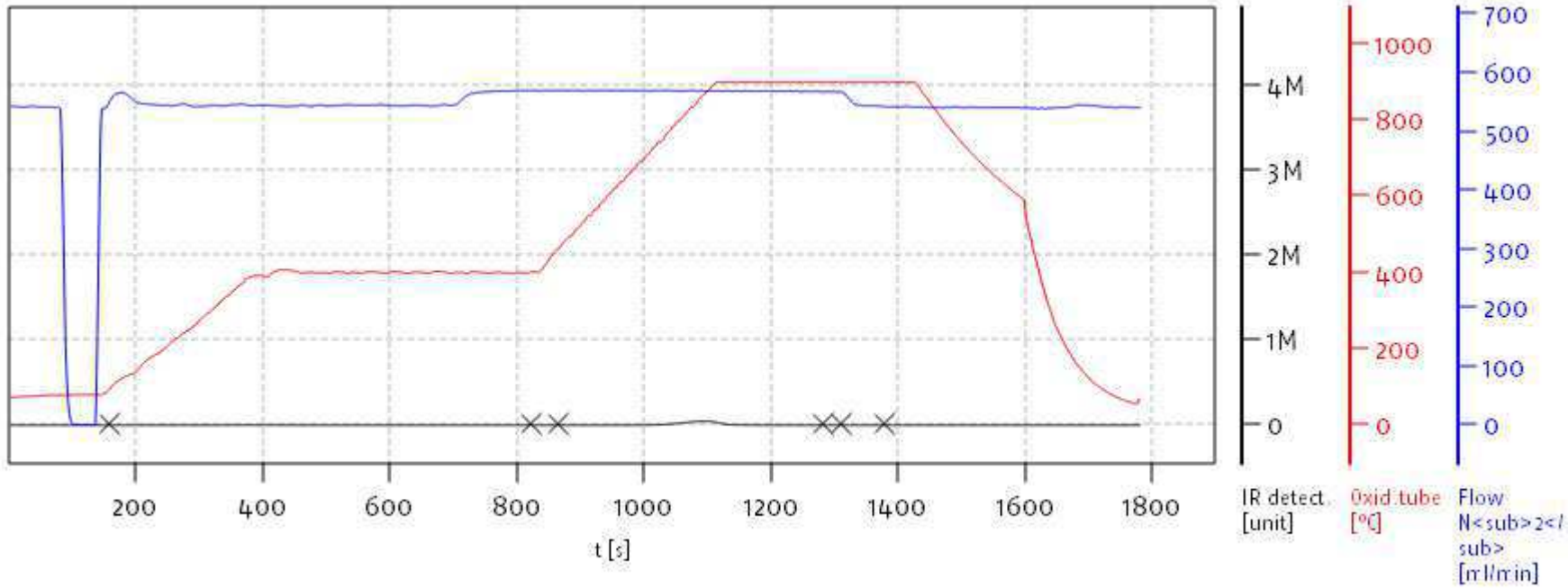
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
10	10	SEQ-CAL8	200.00	0.0298	1.00	CARBON	4/26/2022 4:00 PM	0.009	0.091	0.100	bl,C1u,C2u	6 668	120 822	116	1.0000	0.9312



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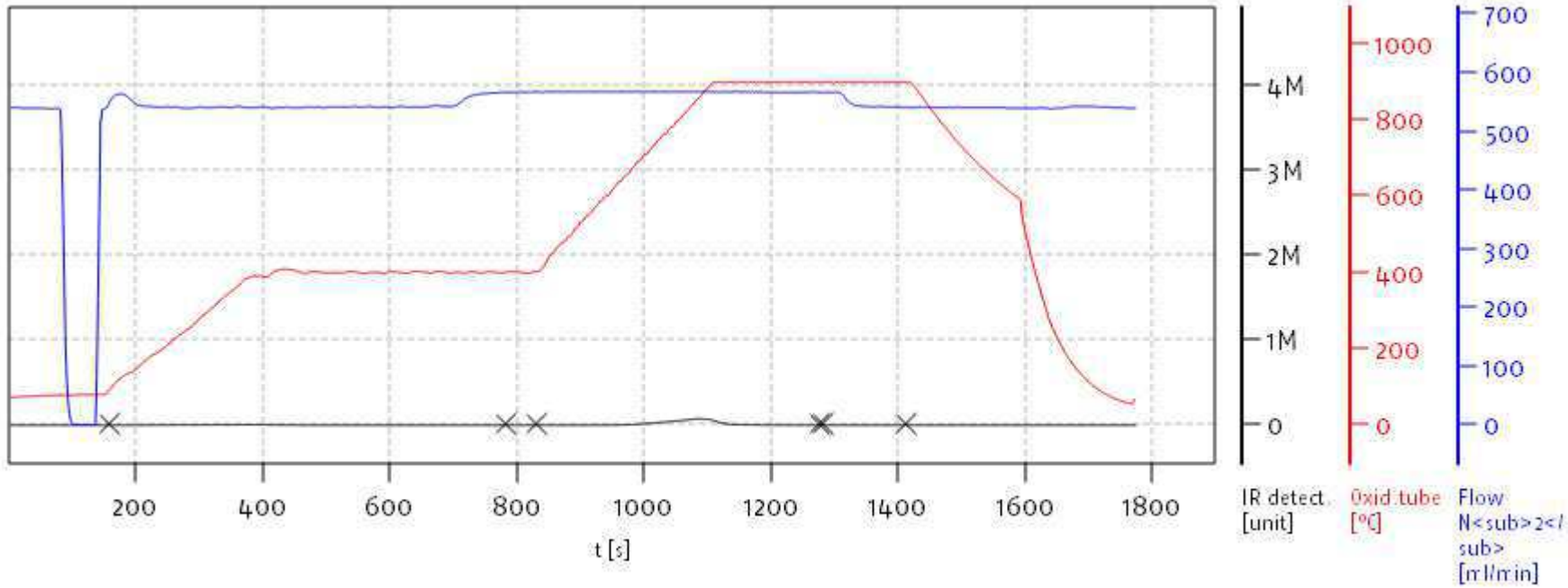
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
11	11	SEQ-CAL9	200.00	0.0402	1.00	CARBON	4/26/2022 4:30 PM	0.031	0.120	0.151	bl,C2u	32 999	260 234	1 044	1.0000	0.5792



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Access: soliTOC superuser

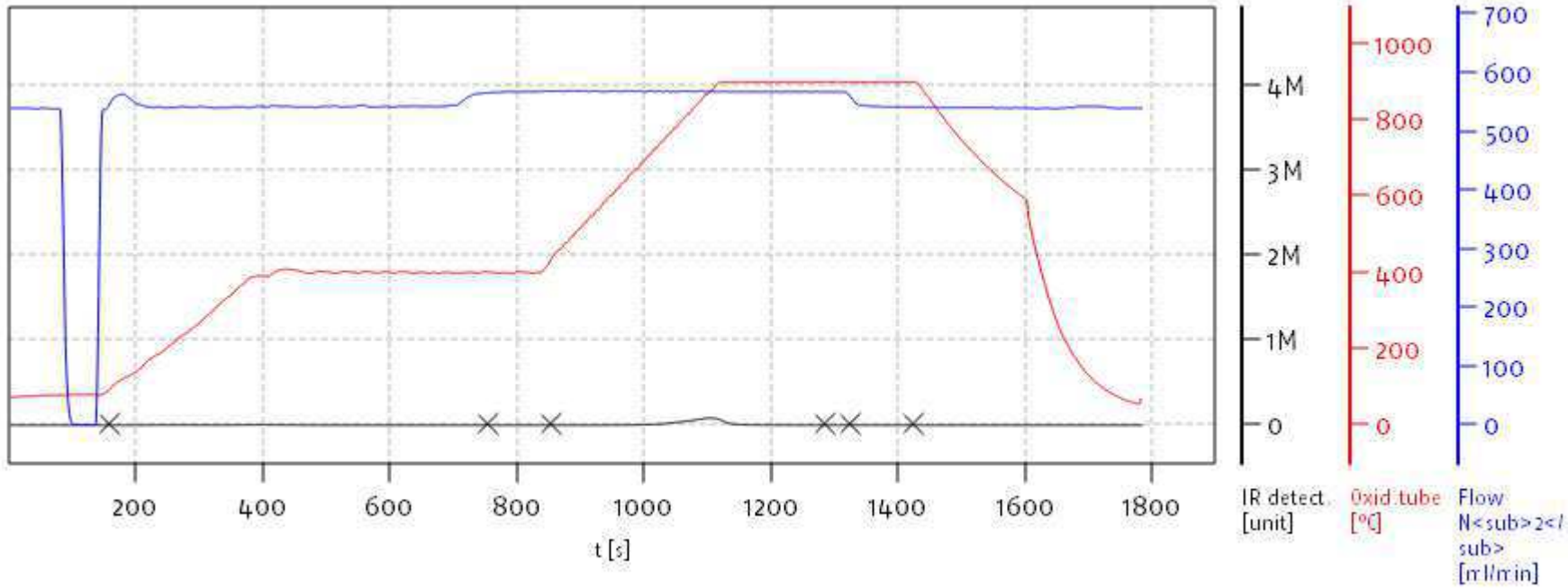
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
12	12	SEQ-CALA	200.00	0.0500	1.00	CARBON	4/26/2022 5:00 PM	0.021	0.151	0.172	bl,C2u	20 147	233 779	913	1.0000	0.8099



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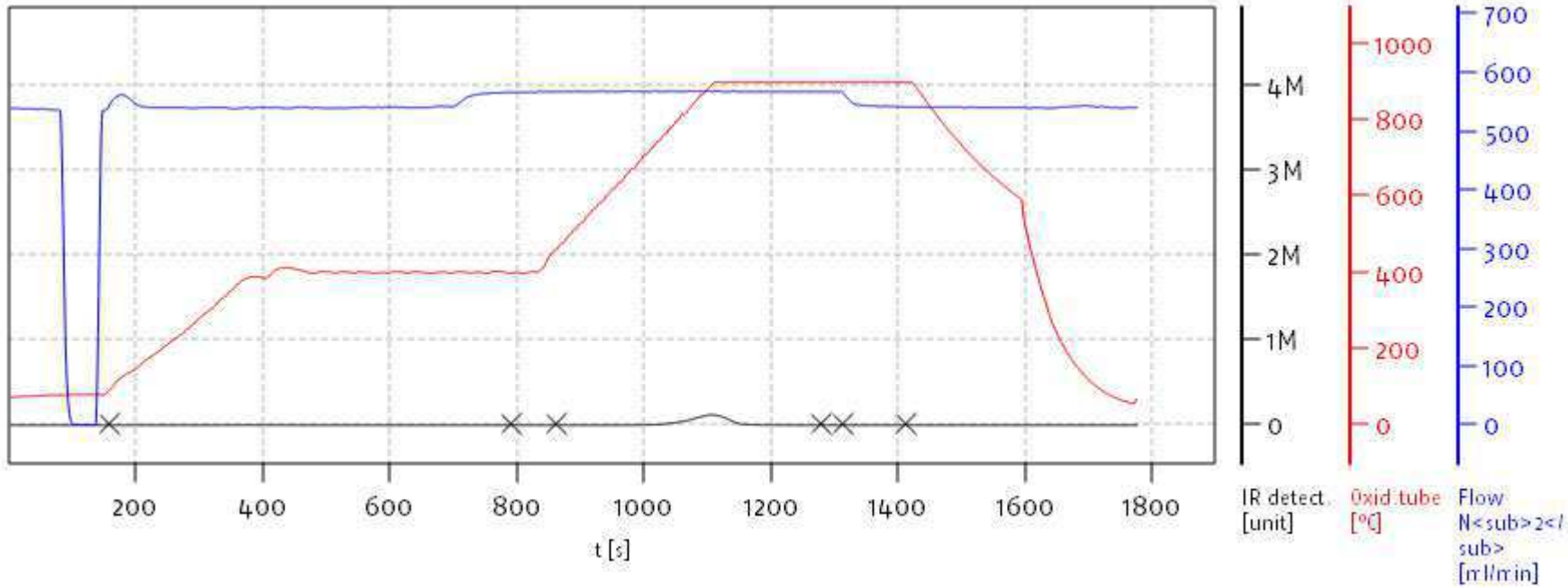
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
13	13	SEQ-CALB	200.00	0.0040	1.00	CARBON	4/26/2022 5:30 PM	0.010	0.258	0.268	bl,C1u,C2u	7 070	323 151	663	1.0000	1.0048



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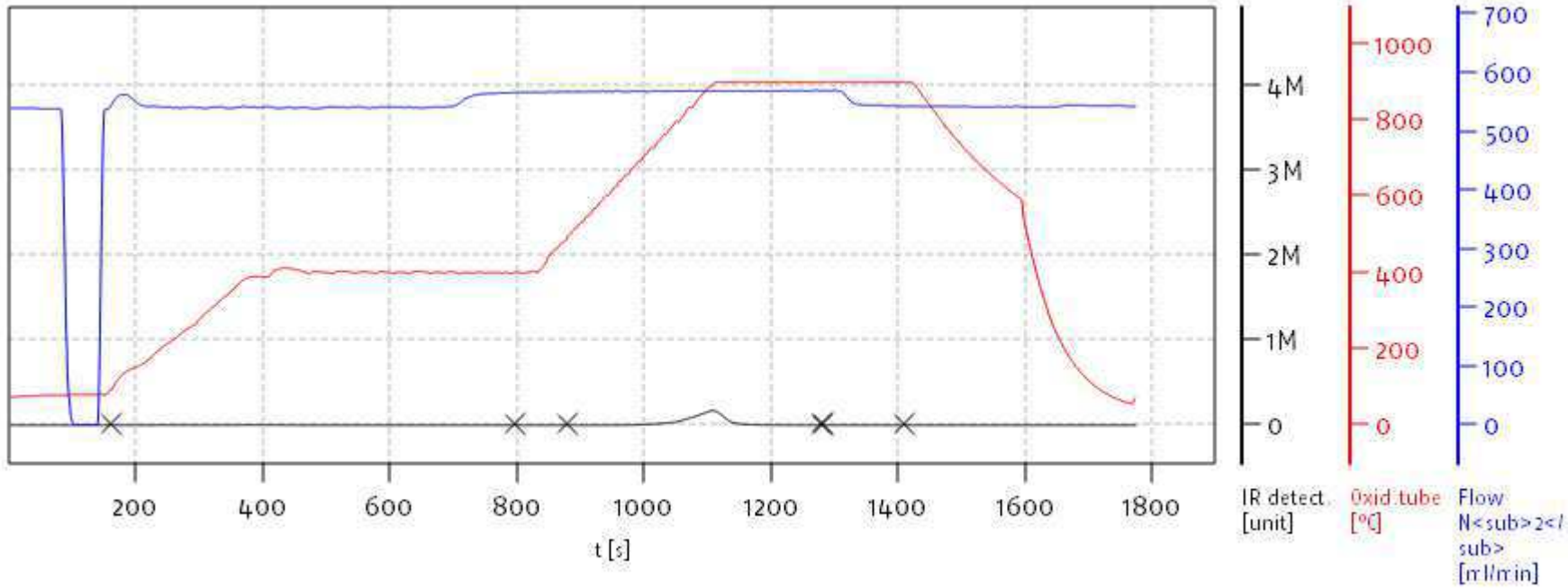
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
14	14	SEQ-CALC	200.00	0.0048	1.00	CARBON	4/26/2022 6:00 PM	0.015	0.324	0.339	bl,C2u	13 785	411 879	575	1.0000	0.9917



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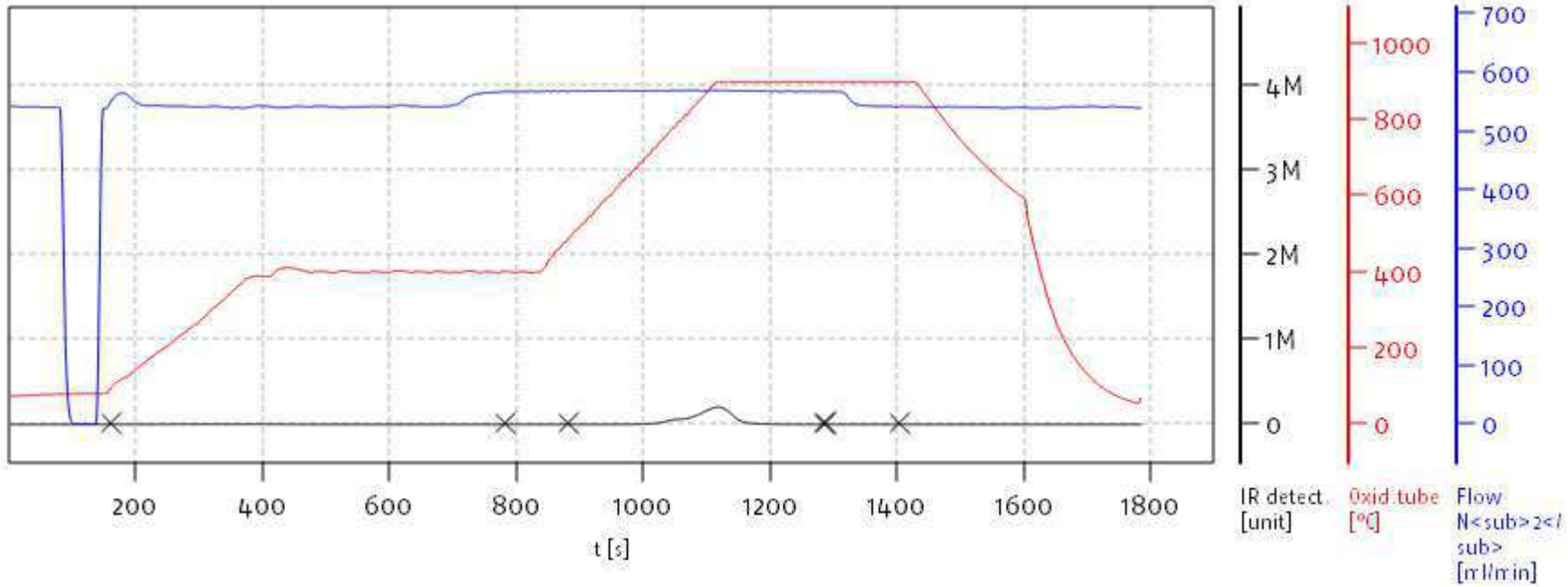
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
15	15	SEQ-CALD	200.00	0.0069	1.00	CARBON	4/26/2022 6:30 PM	0.019	0.444	0.463	bl,C2u	18 465	553 540	263	1.0000	1.0129



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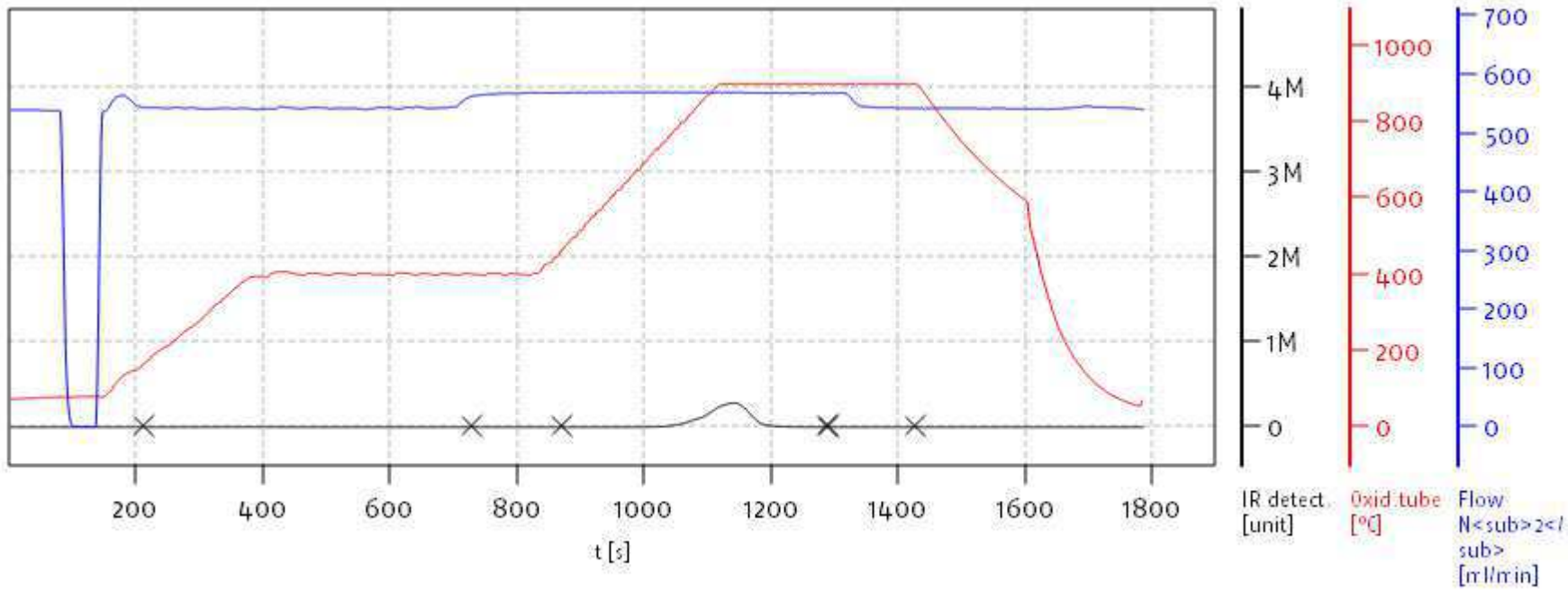
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
16	16	SEQ-CALE	200.00	0.0101	1.00	CARBON	4/26/2022 7:00 PM	0.009	0.600	0.609	bl,C1u,C2u	5 485	839 878	536	1.0000	0.9036



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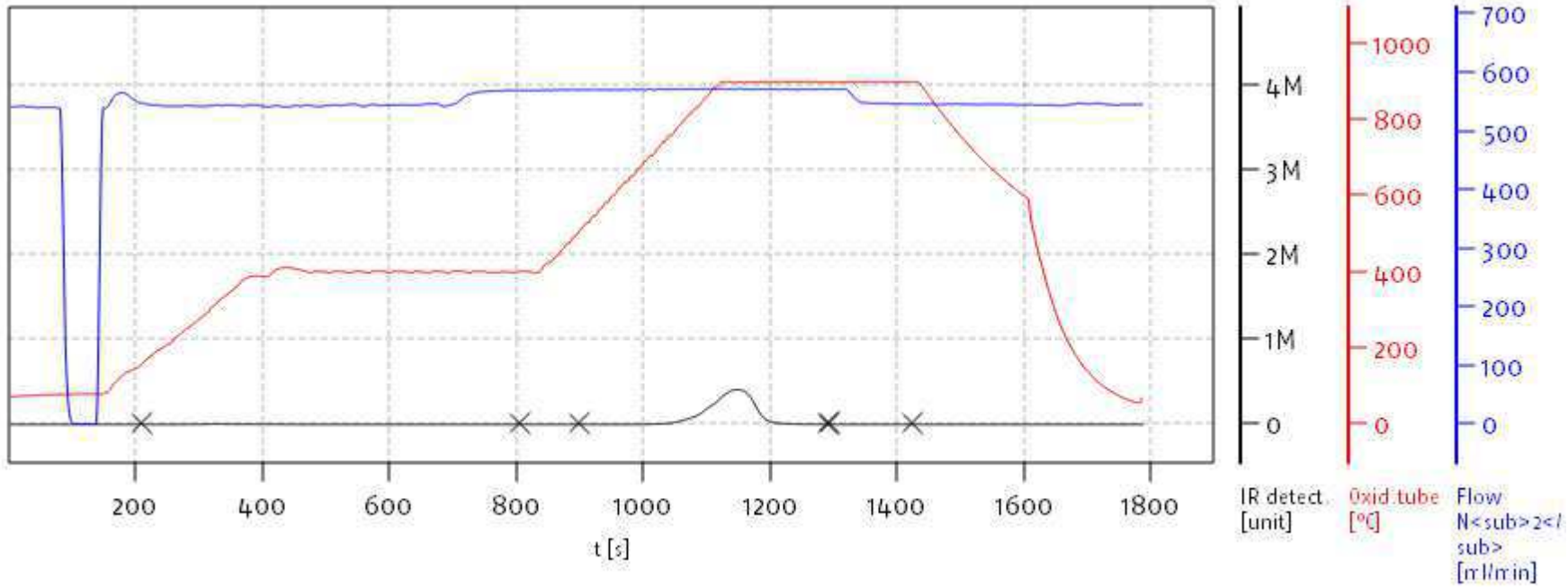
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
17	17	SEQ-CALF	200.00	0.0149	1.00	CARBON	4/26/2022 7:31 PM	0.019	0.906	0.925	bl,C2u	17 439	1 236 200	814	1.0000	0.9279



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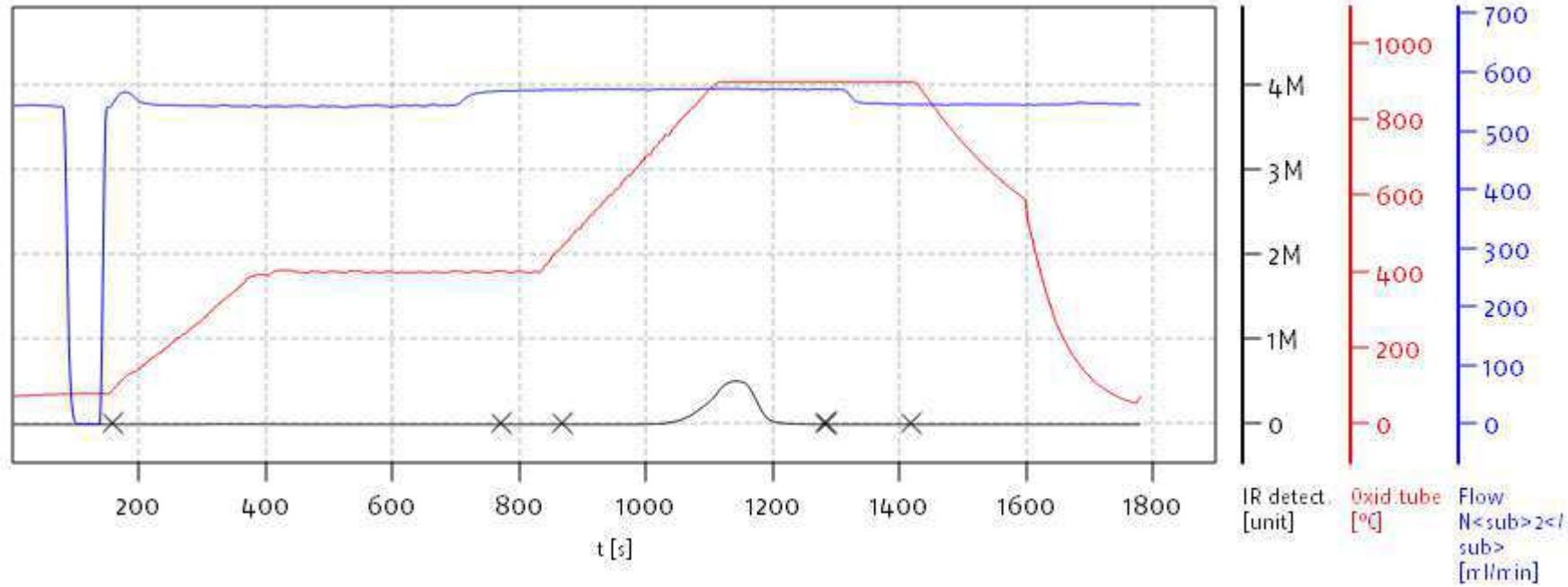
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
18	18	SEQ-CALG	200.00	0.0198	1.00	CARBON	4/26/2022 8:01 PM	0.015	1.206	1.221	bl,C2u	12 557	1 639 190	1 295	1.0000	0.9320



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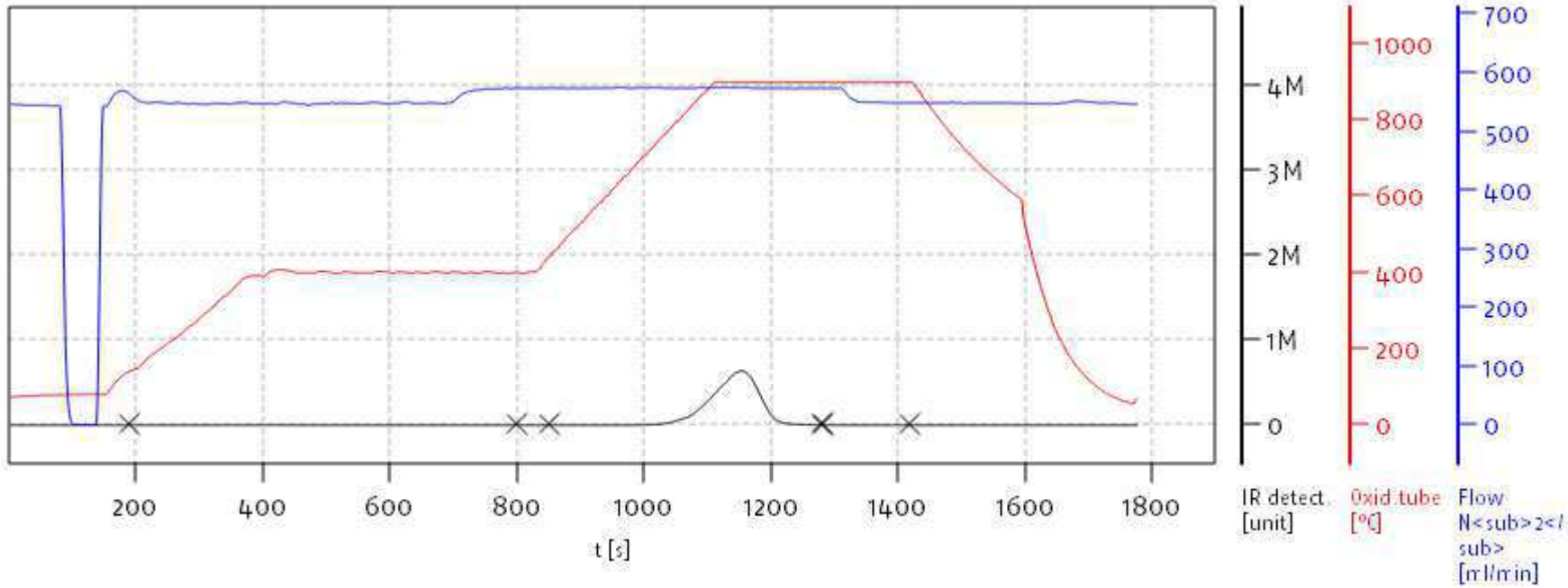
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
19	19	SEQ-CALH	200.00	0.0250	1.00	CARBON	4/26/2022 8:31 PM	0.009	1.524	1.533	bl,C1u,C2u	4 029	2 063 890	2 225	1.0000	0.9357



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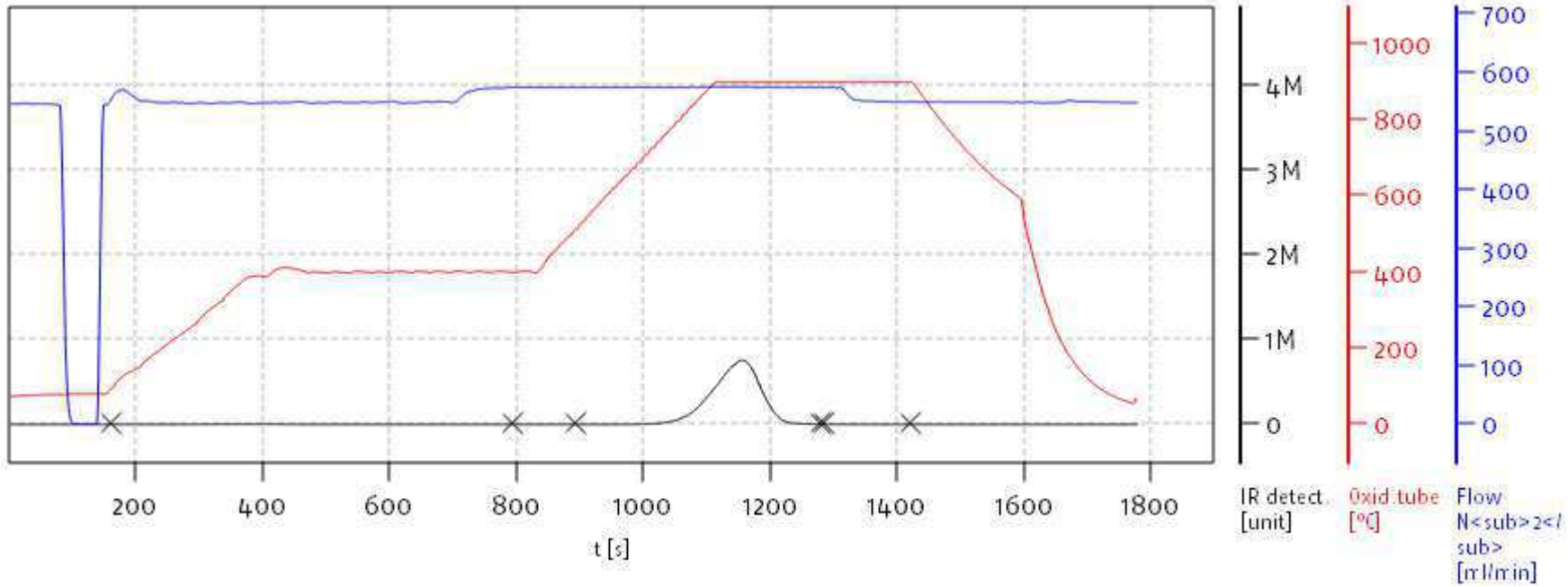
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
20	20	SEQ-CALI	200.00	0.0303	1.00	CARBON	4/26/2022 9:01 PM	0.017	1.800	1.817	bl,C2u	13 926	2 495 900	2 903	1.0000	0.9140



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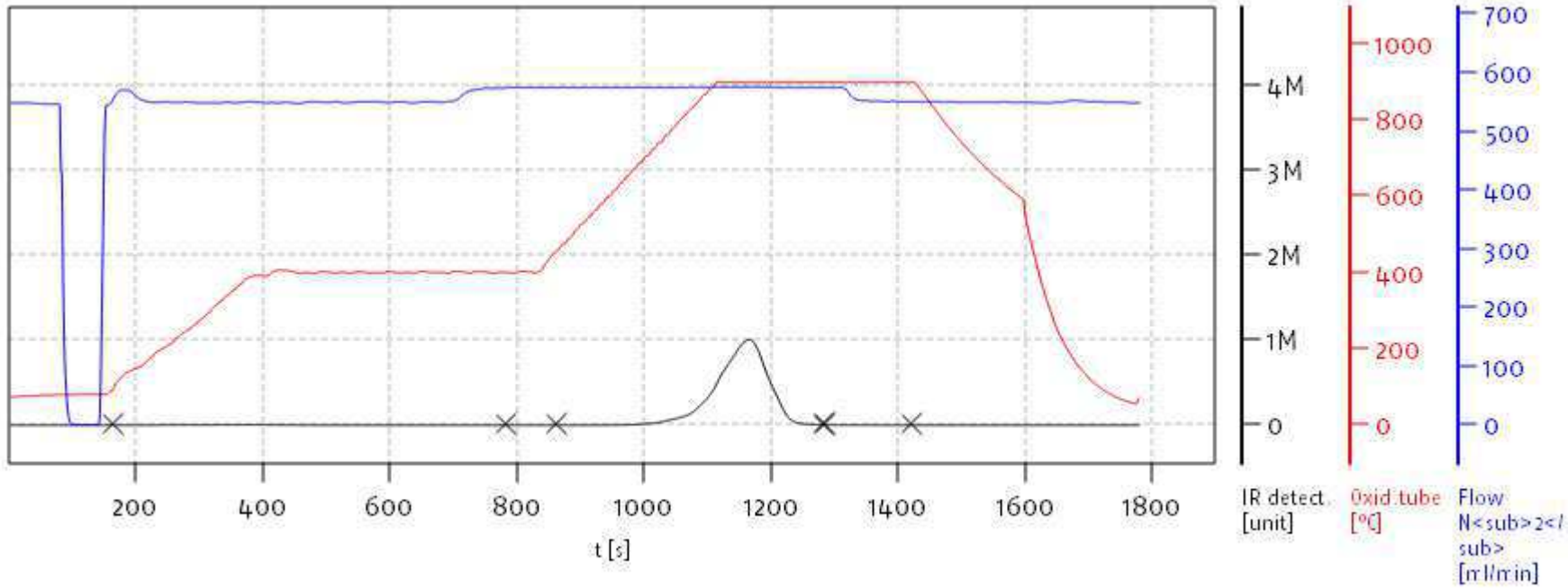
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
21	21	SEQ-CALJ	200.00	0.0415	1.00	CARBON	4/26/2022 9:31 PM	0.031	2.400	2.431	bl,C2u	28 786	3 482 530	5 351	1.0000	0.8737



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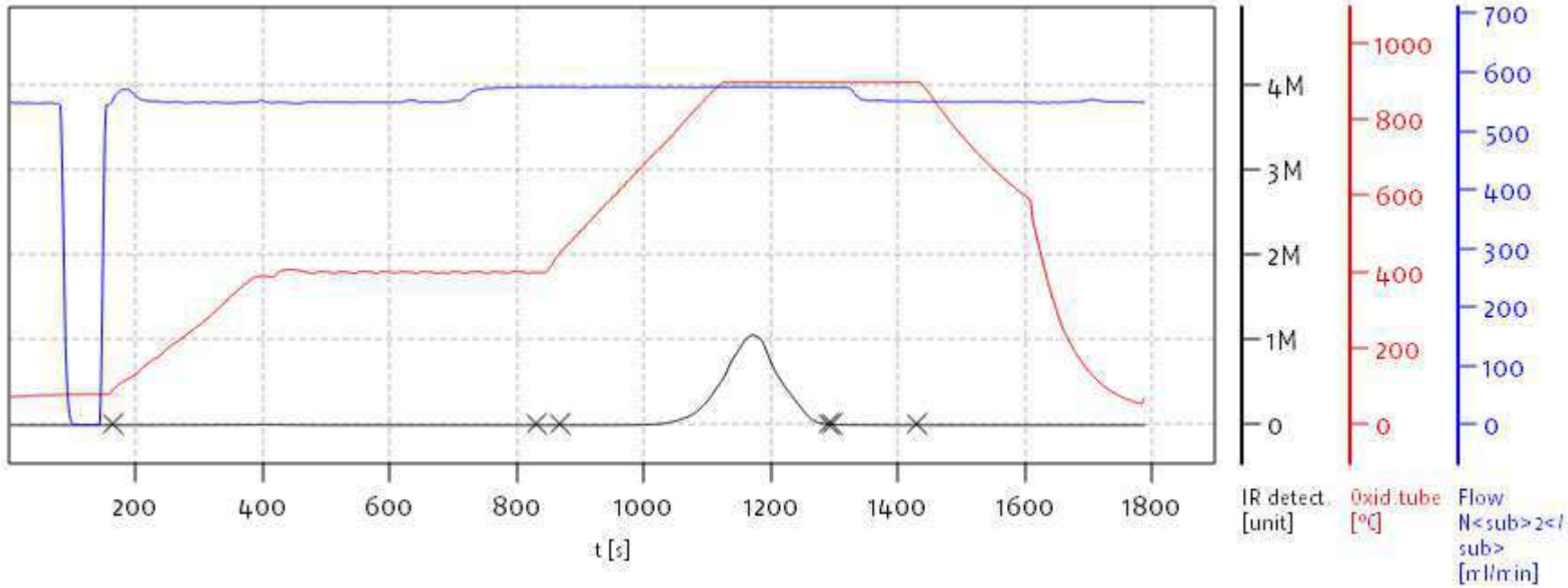
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
22	22	SEQ-CALK	200.00	0.0497	1.00	CARBON	4/26/2022 10:01 PM	0.031	3.012	3.043	bl	23 732	4 105 830	9 736	1.0000	0.9301



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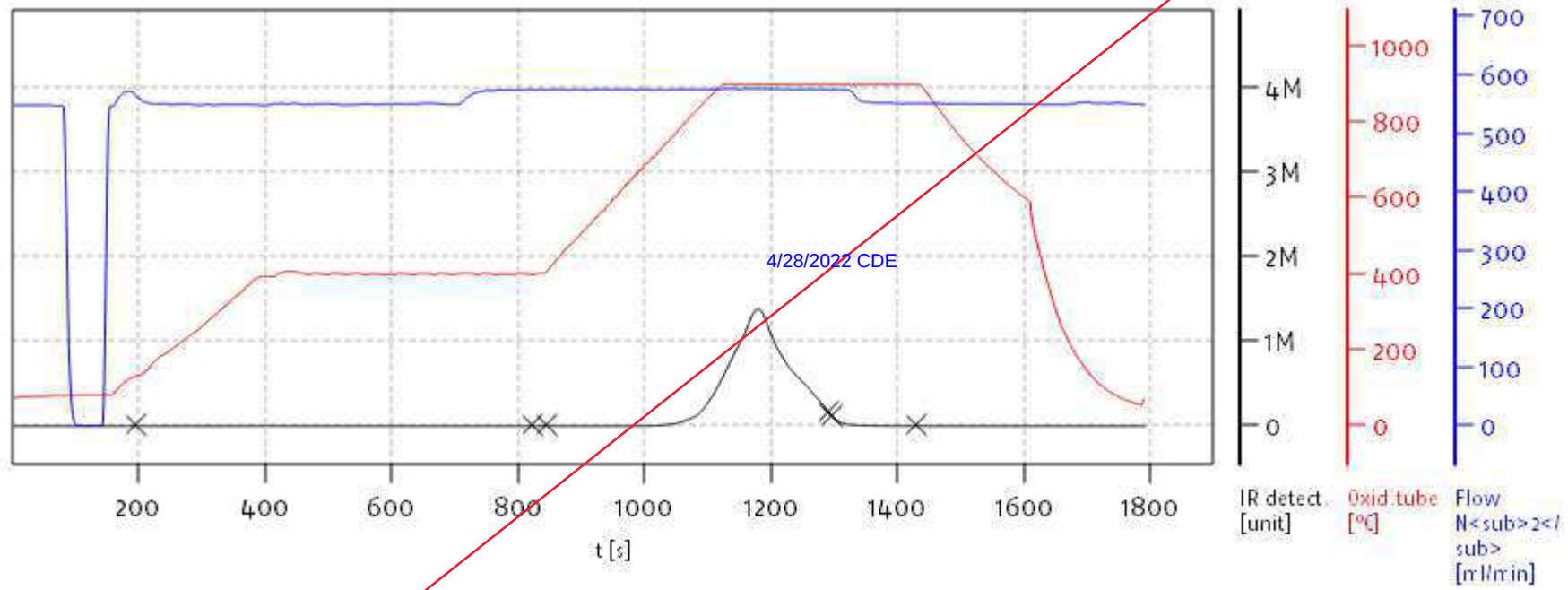
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
23	23	SEQ-CALL	200.00	0.0698	1.00	CARBON	4/26/2022 10:31 PM	0.005	3.805	3.810	bl,C1u	3 605	5 648 620	71 970	1.0000	0.9443



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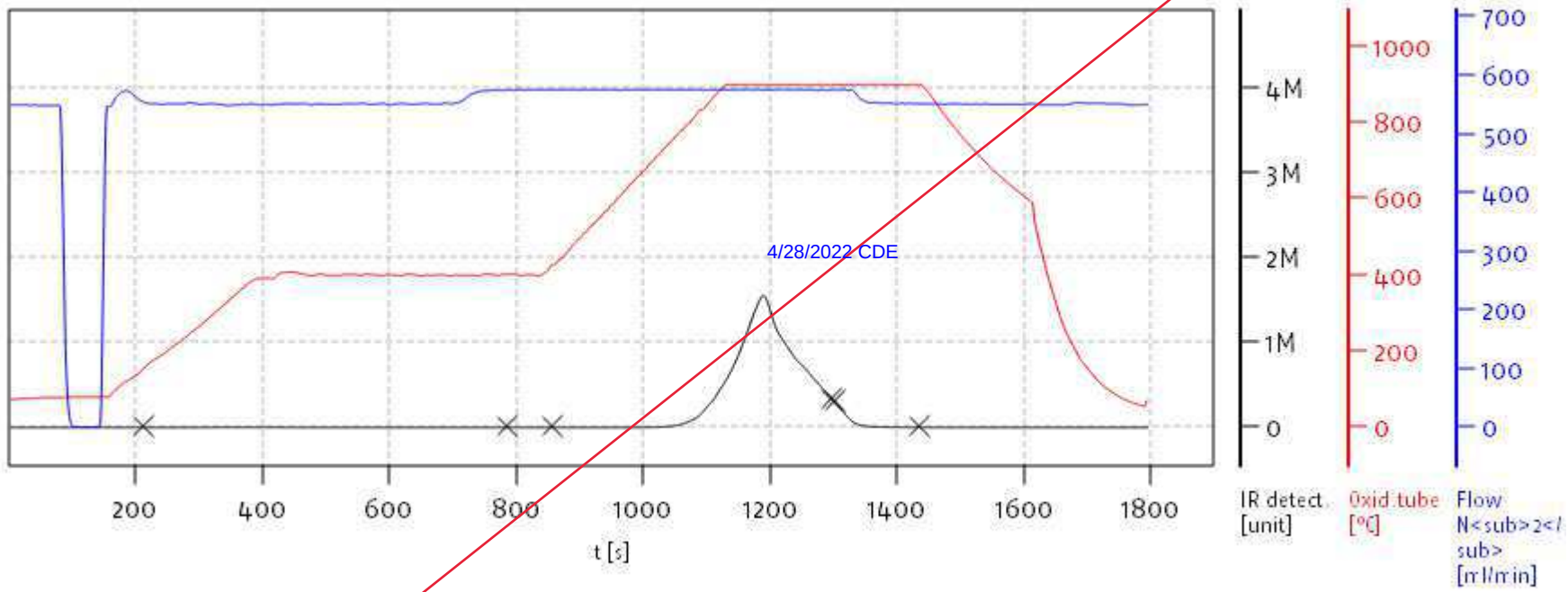
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
24	24	SEQ-CALM	200.00	0.0803	1.00	CARBON	4/26/2022 11:02 PM	0.010	4.637	4.647	bl	10 023	6 397 530	228 171	1.0000	0.9539



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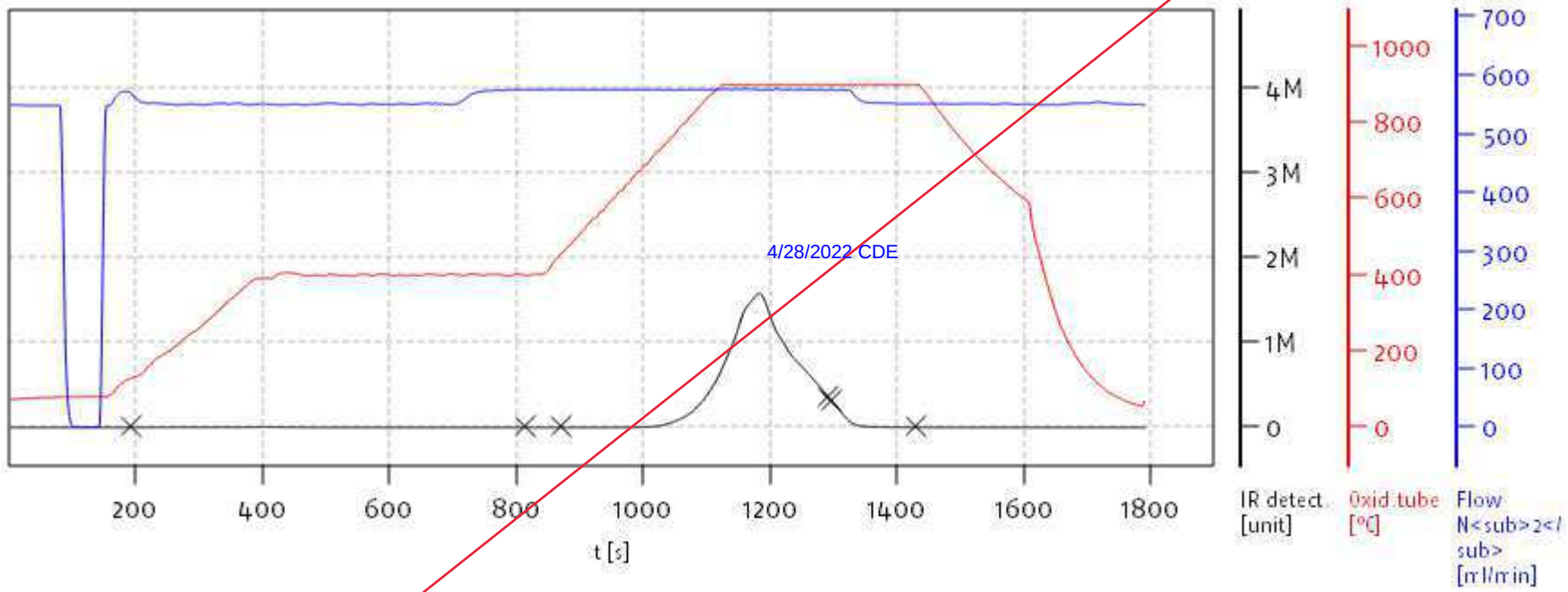
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
25	25	SEQ-CALN	200.00	0.0901	1.00	CARBON	4/26/2022 11:32 PM	0.020	5.219	5.239	bl	23 354	7 186 580	239 986	1.0000	0.9540



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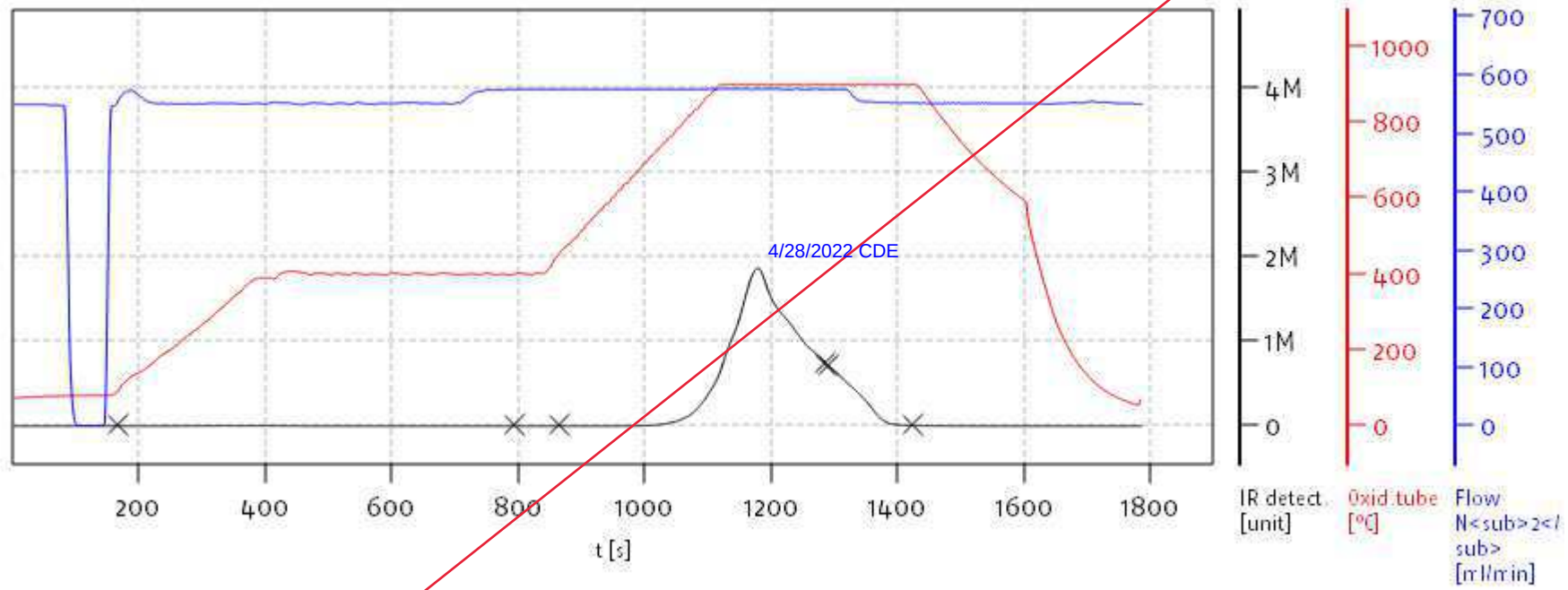
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
26	26	SEQ-CALO	200.00	0.1200	1.00	CARBON	4/27/2022 12:02 AM	0.019	7.915	7.934	bl,C3o	21 248	8 544 610	1 334 580	1.0000	1.0714



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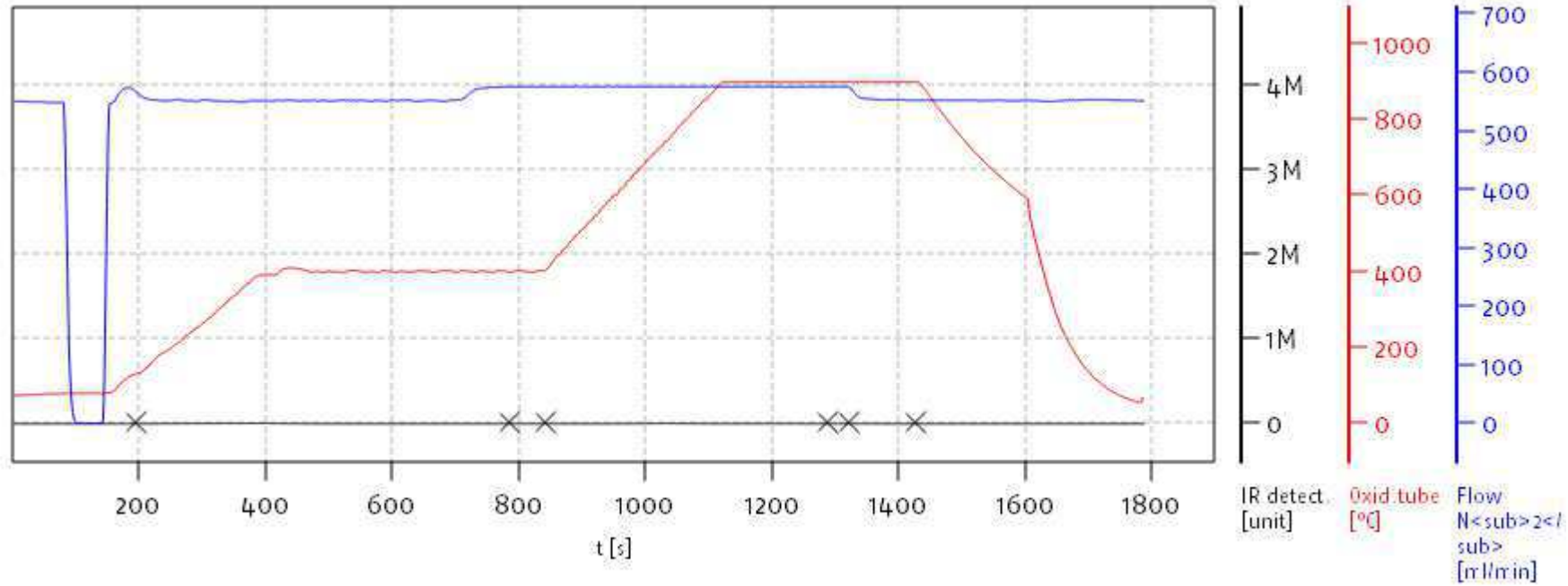
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
27	27	BLANK	1.00		1.00	CARBON	4/27/2022 12:32 AM	0.000	0.000	0.000	bl	29 766	19 596	1 205	1.0000	0.9007



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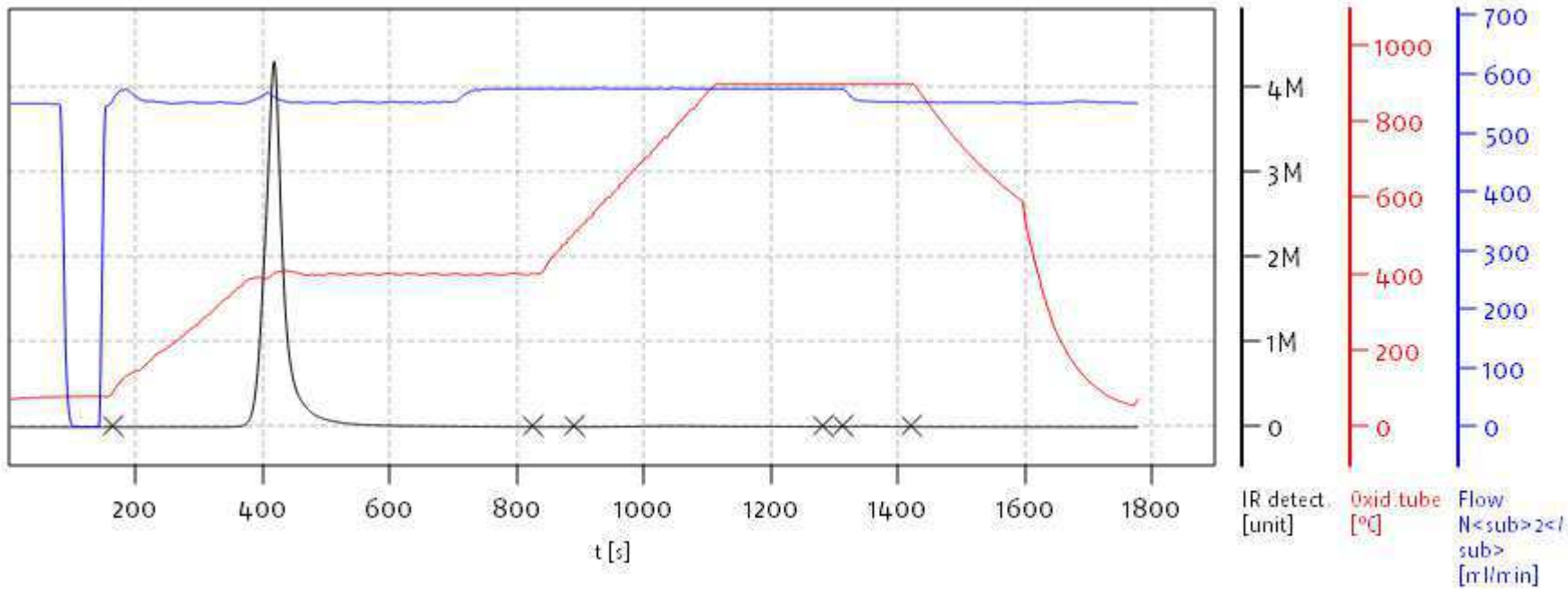
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
28	28	Dfactor	19.00		1.00	CARBON	4/27/2022 1:02 AM	44.678	0.893	45.571	bl	5 588 680	104 999	25 384	0.9581	1.0000



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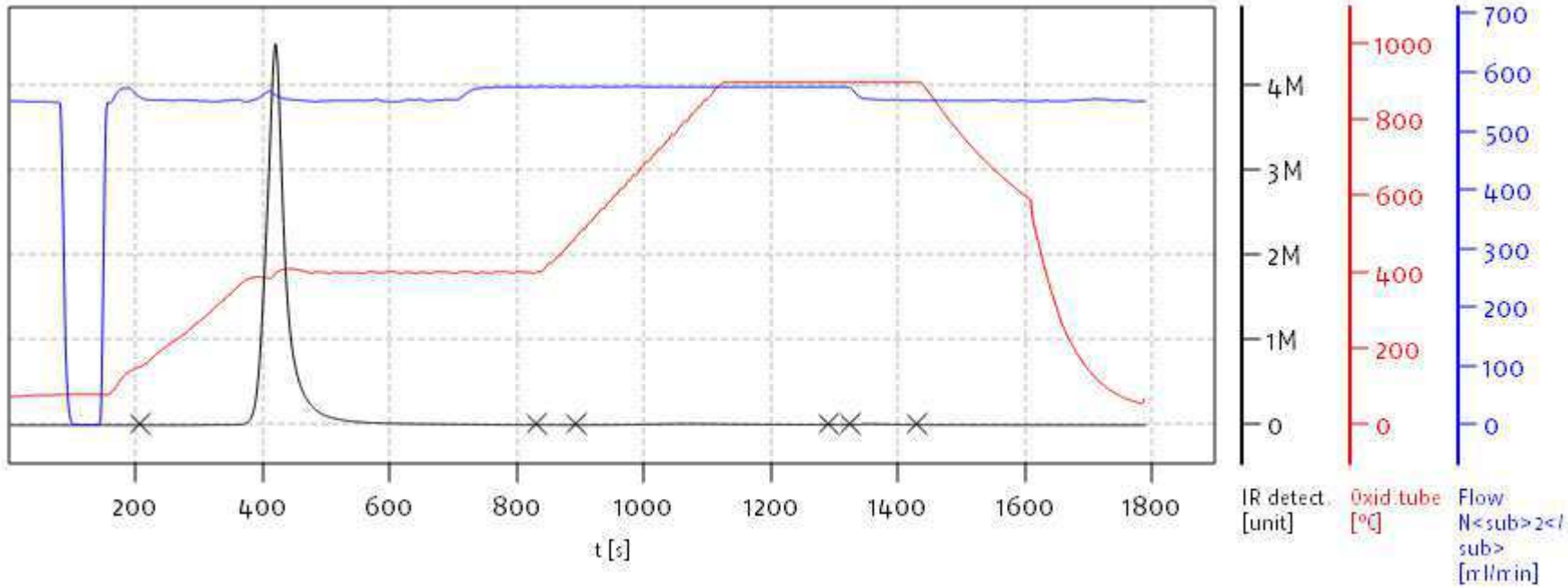
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
29	29	Dfactor	20.80		1.00	CARBON	4/27/2022 1:32 AM	44.694	0.937	45.631	bl	6 076 750	120 961	30 224	0.9647	1.0000



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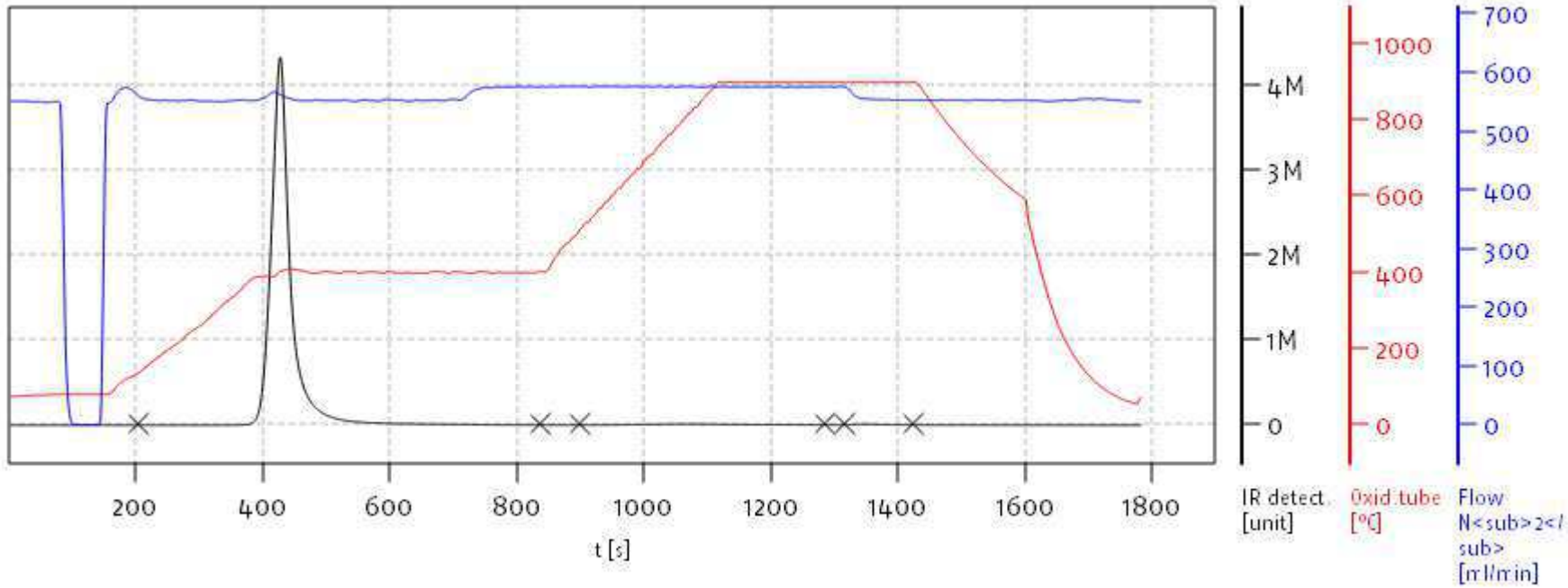
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
30	30	SEQ-ICV1	19.40		1.00	CARBON	4/27/2022 2:03 AM	44.964	0.742	45.706	bl	5 722 450	98 735	27 054	0.9614	0.9007



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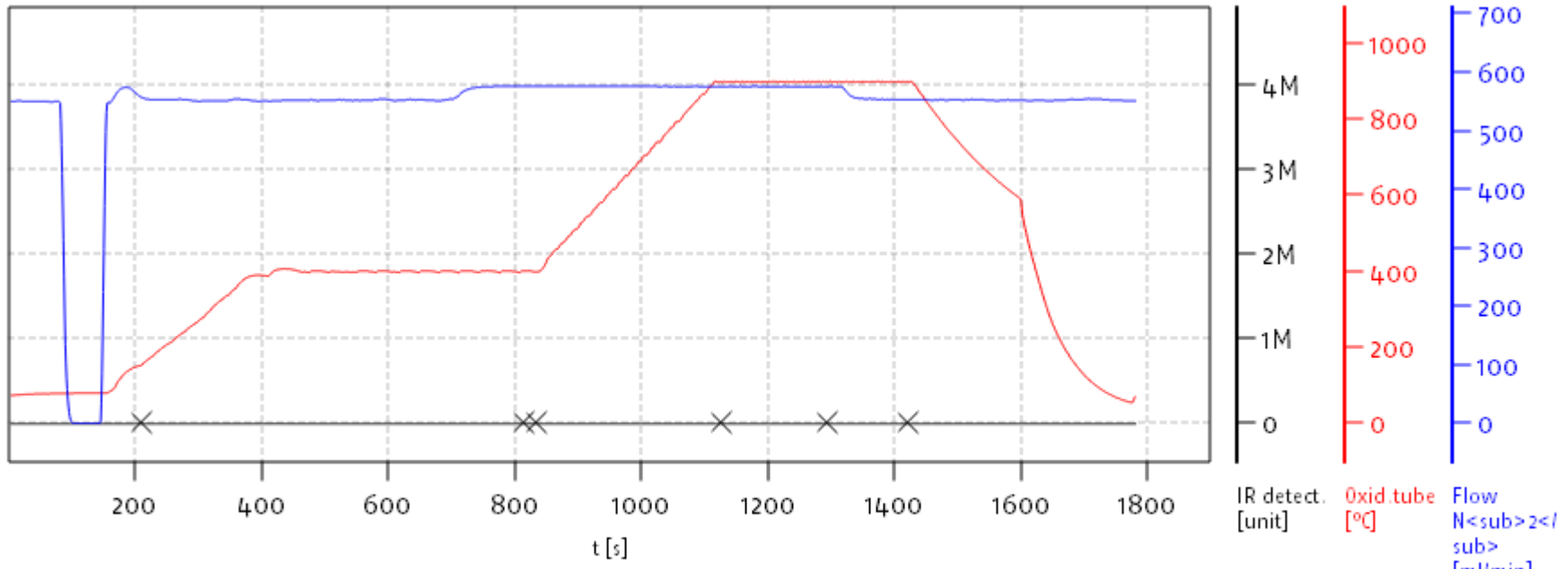
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
31	31	SEQ-ICB1	501.10		1.00	CARBON	4/27/2022 2:33 AM	0.002	0.001	0.003	bl,C1u,C3u,C2u	2 158	225	165	0.9614	0.9007



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Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

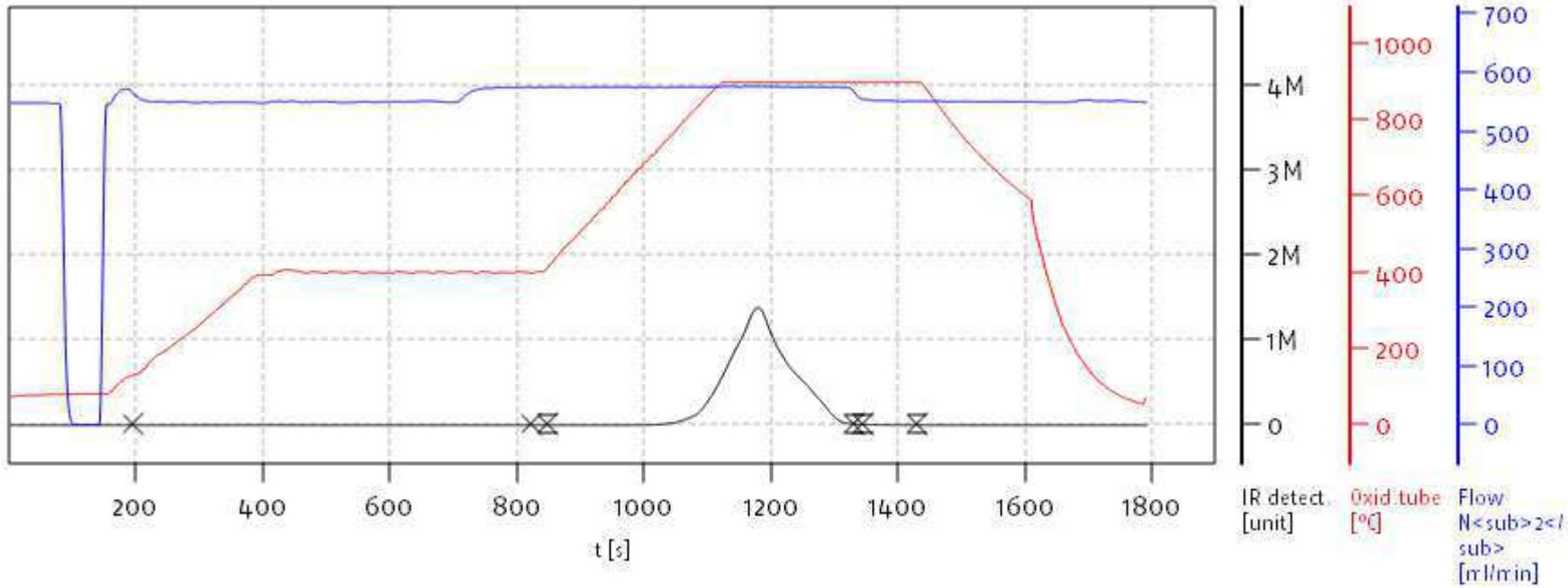
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

Analytical Resources, Incorporated
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
23	23	SEQ-CALL	200.00	0.0698	1.00	CARBON	4/27/2022 11:08 AM	0.005	3.917	3.922	bl,C1u	3 605	**5 260 365**	**0**	1.0000	0.9443



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:10:16 2022

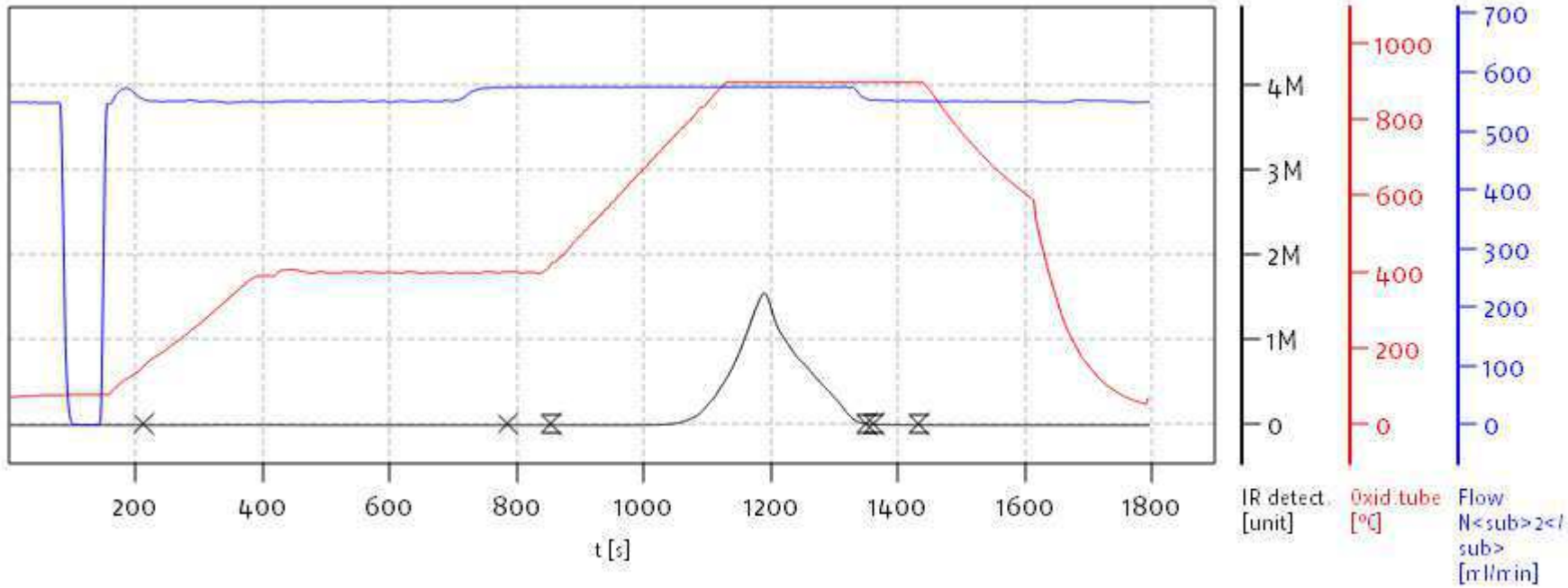
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
24	24	SEQ-CALM	200.00	0.0803	1.00	CARBON	4/27/2022 11:08 AM	0.010	4.637	4.647	bl	10 023	**6 164 833**	**0**	1.0000	0.9539



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:10:16 2022

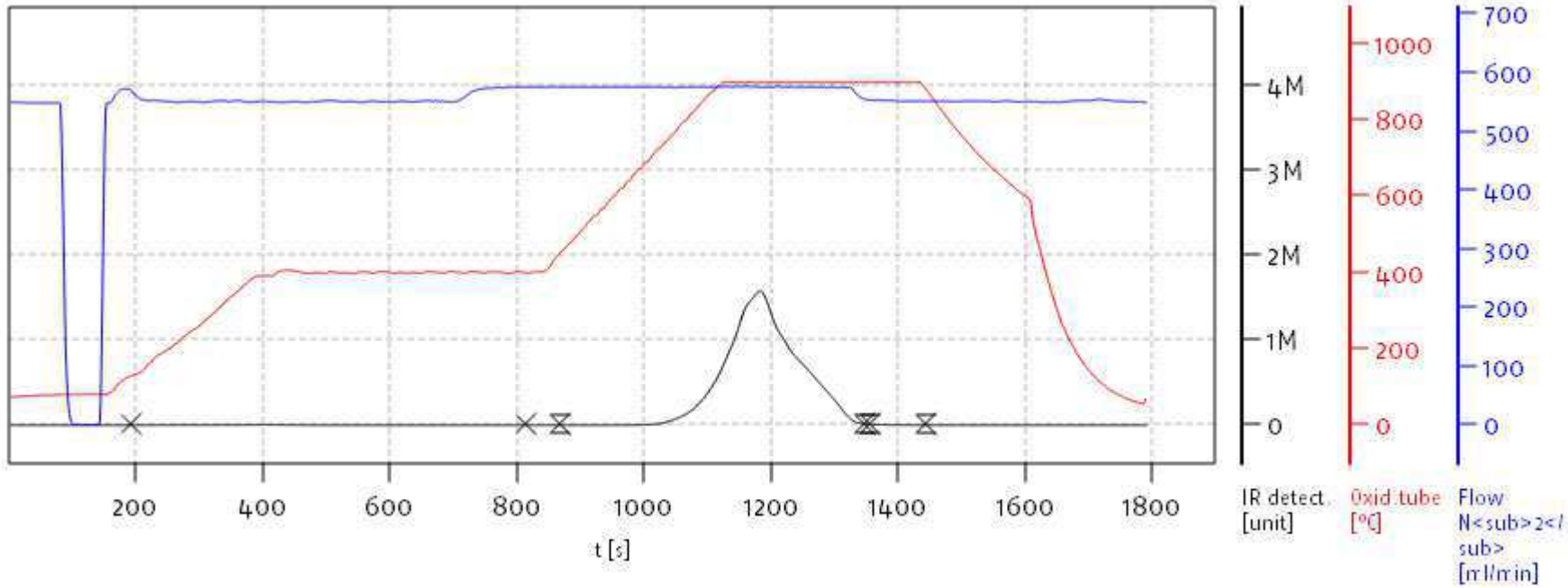
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
25	25	SEQ-CALN	200.00	0.0901	1.00	CARBON	4/27/2022 11:09 AM	0.020	5.219	5.239	bl	23 354	**6 937 833**	**0**	1.0000	0.9540



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:10:16 2022

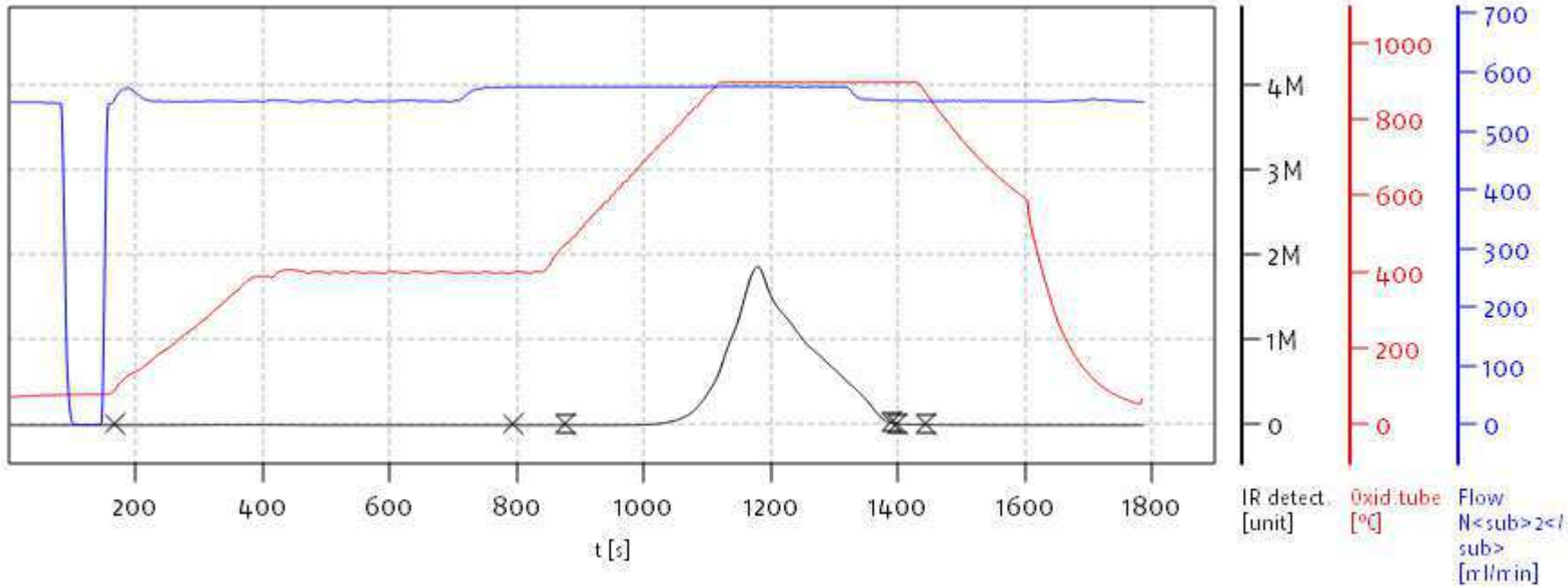
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
26	26	SEQ-CALO	200.00	0.1200	1.00	CARBON	4/27/2022 11:09 AM	0.019	7.915	7.934	bl,C3o	21 248	9 370 139	0	1.0000	1.0714



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:10:16 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

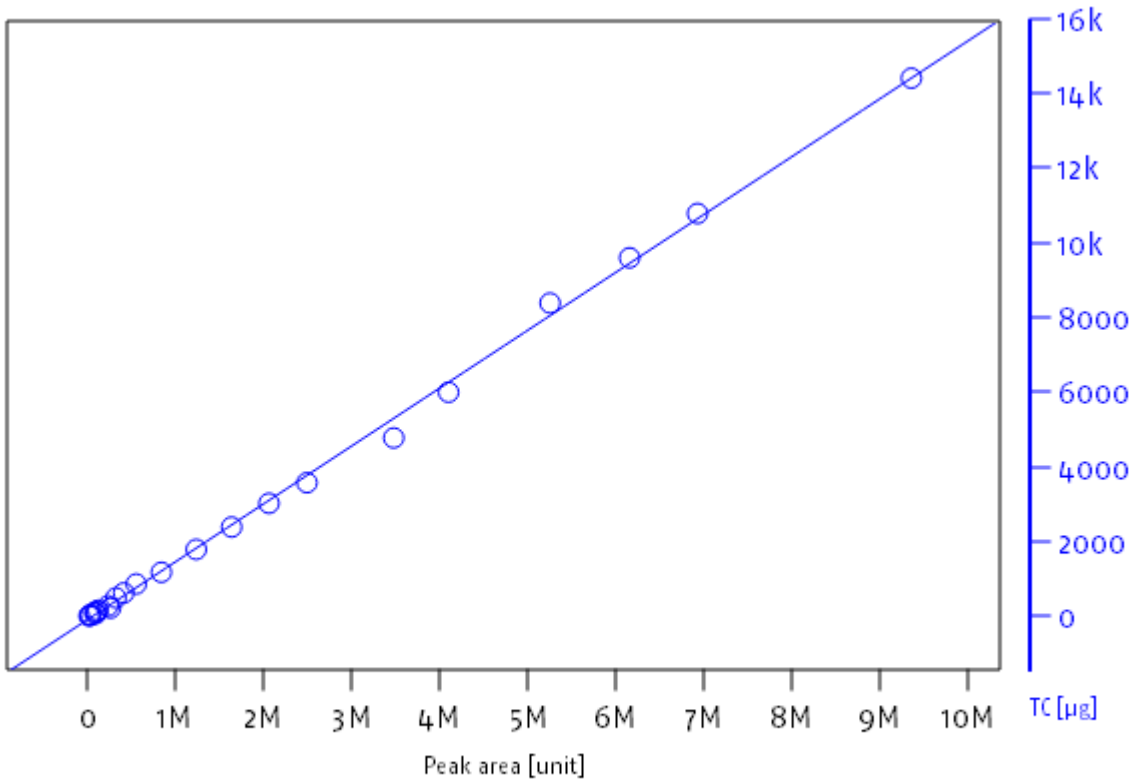
elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: --.--.-- (modified)

Calibration parameters TC, Whole range

a	-4.107546e-02
b	+1.548032e-06
c	+0.000000e+00
d	+0.000000e+00
e	+0.000000e+00
r	0.998372
r_old	0.998372
Proc.-SD	166.070255 µg

Calibration graph TC, Whole range



INSTRUMENT BLANKS
EPA 9060A m

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: TOC Cube
Sequence: SKD0371

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: FD00070
Date Analyzed: 04/27/22 02:33

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SKD0371-ICB1	Total Organic Carbon	0.00	0.02	0.02	%	

Analytical Resources, LLC
Analytical Chemists and Consultants

INSTRUMENT BLANKS
EPA 9060A m

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: TOC Cube
Sequence: SLA0114

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: FD00070
Date Analyzed: 01/12/23 10:00

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLA0114-ICB1	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0114-CCB1	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0114-CCB2	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0114-CCB3	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0114-CCB4	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0114-CCB5	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0114-CCB6	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0114-CCB7	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0114-CCB8	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0114-CCB9	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0114-CCBA	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0114-CCBB	Total Organic Carbon	0.00	0.02	0.02	%	

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: TOC Cube
Calibration: FD00070
Control Limt: +/- 10.00%
Sequence: SKD0371

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SKD0371-ICV1	Total Organic Carbon	44.446	43.7	98.3	%	EPA 9060A m
	Total Carbon	44.446	44.1	99.2	%	EPA 9060A m
	Total Inorganic Carbon	0.0000	0.40		%	EPA 9060A m
	% Soot	0.0000	0.004		%	EPA 9060A m

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 9060A m

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: TOC Cube
Control Limt: +/- 10.00%

SDG: 23A0134
Project: AOC5 MR Phase 1
Calibration: FD00070
Sequence: SLA0114

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLA0114-ICV1	Total Organic Carbon	44.446	46.1	104	%	EPA 9060A m
SLA0114-CCV1	Total Organic Carbon	44.446	45.4	102	%	EPA 9060A m
SLA0114-CCV2	Total Organic Carbon	44.446	45.3	102	%	EPA 9060A m
SLA0114-CCV3	Total Organic Carbon	44.446	45.1	102	%	EPA 9060A m
SLA0114-CCV4	Total Organic Carbon	44.446	43.7	98.2	%	EPA 9060A m
SLA0114-CCV5	Total Organic Carbon	44.446	44.0	98.9	%	EPA 9060A m
SLA0114-CCV6	Total Organic Carbon	44.446	44.1	99.2	%	EPA 9060A m
SLA0114-CCV7	Total Organic Carbon	44.446	44.4	99.9	%	EPA 9060A m
SLA0114-CCV8	Total Organic Carbon	44.446	45.3	102	%	EPA 9060A m
SLA0114-CCV9	Total Organic Carbon	44.446	45.0	101	%	EPA 9060A m
SLA0114-CCVA	Total Organic Carbon	44.446	44.1	99.2	%	EPA 9060A m
SLA0114-CCVB	Total Organic Carbon	44.446	44.5	100	%	EPA 9060A m

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0255-SRM1
Batch: BLA0255
Initial/Final: 0.2616 g / 0.2616 g
Preparation: Plumb 1981
Analyzed: 01/14/2023 15:21
Standard ID: K011789
Expires: 12/24/2023
Standard Lot#: NA
Description: 1941B - Organics in Marine Sediment (Conv

ANALYTE	TRUE (% wet)	FOUND (% wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Total Organic Carbon	2.9900	2.97	0.02	0.02		99.3	80 - 120

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 9060A m

Laboratory: Analytical Resources, LLC SDG: 23A0134

Client: Anchor QEA, LLC Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1205 23A0134-01	01/06/23 08:28	01/06/23 17:26	01/12/23 11:45	6	28	01/14/23 15:52			
LDW23-SS1188 23A0134-02	01/06/23 09:36	01/06/23 17:26	01/12/23 11:45	6	28	01/14/23 18:24			
LDW23-SS1179 23A0134-03	01/06/23 09:52	01/06/23 17:26	01/12/23 11:45	6	28	01/14/23 18:54			
LDW23-SS1242 23A0134-04	01/06/23 11:04	01/06/23 17:26	01/12/23 11:45	6	28	01/14/23 19:25			
LDW23-SS1173 23A0134-05	01/06/23 11:22	01/06/23 17:26	01/12/23 11:45	6	28	01/14/23 19:55			
LDW23-SS1160 23A0134-06	01/06/23 11:41	01/06/23 17:26	01/12/23 11:45	6	28	01/14/23 20:26			
LDW23-SS1152 23A0134-07	01/06/23 12:29	01/06/23 17:26	01/12/23 11:45	5	28	01/14/23 20:57			
LDW23-SS1131 23A0134-08	01/06/23 12:43	01/06/23 17:26	01/12/23 11:45	5	28	01/14/23 21:27			
LDW23-SS1129 23A0134-09	01/06/23 12:57	01/06/23 17:26	01/12/23 11:45	5	28	01/14/23 21:58			
LDW23-SS1124 23A0134-10	01/06/23 13:15	01/06/23 17:26	01/12/23 11:45	5	28	01/14/23 23:29			
LDW23-SS1123 23A0134-11	01/06/23 13:29	01/06/23 17:26	01/12/23 11:45	5	28	01/15/23 00:00			
LDW23-SS1116 23A0134-12	01/06/23 13:44	01/06/23 17:26	01/12/23 11:45	5	28	01/15/23 00:30			
LDW23-IT1210 23A0134-13	01/06/23 14:12	01/06/23 17:26	01/12/23 11:45	5	28	01/15/23 01:01			
LDW23-IT1194 23A0134-14	01/06/23 14:41	01/06/23 17:26	01/12/23 11:45	5	28	01/15/23 01:31			
LDW23-SC1249 23A0134-15	01/06/23 13:46	01/06/23 17:26	01/12/23 11:45	5	28	01/15/23 02:02			
LDW23-SC1077 23A0134-16	01/06/23 15:10	01/06/23 17:26	01/12/23 11:45	5	28	01/15/23 02:32			
Duplicate BLA0255-DUP1	01/06/23 08:28	01/06/23 17:26	01/12/23 11:45	6	28	01/14/23 17:23			
Matrix Spike BLA0255-MS1	01/06/23 08:28	01/06/23 17:26	01/12/23 11:45	6	28	01/14/23 17:54			

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: TOC Cube

Analyte	MDL	RL	Units
Total Organic Carbon	0.02	0.02	%

National Institute of Standards & Technology

Certificate of Analysis

Standard Reference Material® 1941b

Organics in Marine Sediment

This Standard Reference Material (SRM) is marine sediment collected at the mouth of the Baltimore (MD) Harbor. SRM 1941b is intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and chlorinated pesticides in marine sediment and similar matrices. Information values are also provided for total organic carbon (TOC), total carbon, hydrogen, and nitrogen. All of the constituents for which certified, reference, and information values are provided in SRM 1941b were naturally present in the sediment before processing. A unit of SRM 1941b consists of a bottle containing 50 g of radiation-sterilized, freeze-dried sediment.

Certified Mass Fraction Values: Certified mass fraction values for PAHs, PCB congeners, and chlorinated pesticides are provided in Table 1 through Table 3. The certified values for the PAHs, PCB congeners, and chlorinated pesticides are based on the agreement of results obtained at NIST from two or more chemically independent analytical techniques along with results from an interlaboratory comparison study [1]. A NIST certified value is a value for which NIST has the highest confidence in its accuracy in that all known or suspected sources of bias have been investigated or taken into account [1].

Reference Mass Fraction Values: Reference mass fraction values for additional PAHs (some in combination), additional PCB congeners, and additional chlorinated pesticides are provided in Table 4 through Table 7. Reference values for alkylated PAH groups are provided in Table 8 and for selected hopanes and steranes in Table 9. A reference value for total organic carbon is provided in Table 10. Reference values are noncertified values that are the best estimate of the true value; however, the values do not meet the NIST criteria for certification and are provided with associated uncertainties that may reflect only measurement precision, may not include all sources of uncertainty, or may reflect a lack of sufficient statistical agreement among multiple analytical methods [1].

Information Mass Fraction Values: Information mass fraction values are provided in Table 11 for carbon, hydrogen, and nitrogen. An information value is considered to be a value that will be of use to the SRM user, but insufficient information is available to assess the uncertainty associated with the value [1]. Information values cannot be used to establish metrological traceability.

Expiration of Certification: The certification of **SRM 1941b** is valid, within the measurement uncertainty specified, until **01 October 2020**, provided the SRM is handled and stored in accordance with the instructions given in this certificate (see "Instructions for Handling, Storage, and Use"). This certification is nullified if the SRM is damaged, contaminated, or otherwise modified.

Maintenance of SRM Certification: NIST will monitor this SRM over the period of its certification. If substantive technical changes occur that affect the certification before the expiration of this certificate, NIST will notify the purchaser. Registration (see attached sheet or register online) will facilitate notification.

Coordination of the technical measurements leading to the certification of this material was under the leadership of M.M. Schantz and S.A. Wise of the NIST Chemical Sciences Division.

Analytical measurements for the certification of SRM 1941b were performed at NIST by J.R. Kucklick, B.J. Porter, D.L. Poster, M.M. Schantz, P. Schubert, S. Tutschku, and L.L. Yu of the NIST Chemical Sciences Division.

Carlos A. Gonzalez, Chief
Chemical Sciences Division

Gaithersburg, MD 20899
Certificate Issue Date: 16 January 2015

Robert L. Watters, Jr., Director
Office of Reference Materials

Measurements for TOC were provided by a commercial laboratory and T.L. Wade of the Geochemical and Environmental Research Group, Texas A&M University (College Station, TX). The carbon, hydrogen, and nitrogen data were provided by a commercial laboratory. Results for the PAHs, PCBs, and chlorinated pesticides from 38 laboratories (see Appendix A) that participated in an interlaboratory comparison exercise coordinated by NIST were used. Results for the alkylated PAH groups, hopanes, and steranes from 33 laboratories (see Appendix B) that participated in another interlaboratory comparison exercise coordinated by NIST were also used.

Collection and preparation of SRM 1941b were performed by M.P. Cronise and C.N. Fales of the NIST Office of Reference Materials and B.J. Porter and M.M. Schantz of the NIST Chemical Sciences Division. The sediment material was collected with the assistance of G.G. Lauenstein, J. Collier, and J. Lewis (National Oceanic and Atmospheric Administration, Silver Spring, MD).

Consultation on the statistical design of the experimental work and evaluation of the data were provided by S.D. Leigh and J.H. Yen of the NIST Statistical Engineering Division.

Support aspects involved in the issuance of this SRM were coordinated through the NIST Office of Reference Materials.

INSTRUCTIONS FOR HANDLING, STORAGE, AND USE

Handling: This material is naturally occurring marine sediment from an urban area and may contain constituents of unknown toxicities; therefore, caution and care should be exercised during its handling and use.

Storage: SRM 1941b must be stored in its original bottle at temperatures less than 30 °C and away from direct sunlight.

Use: Prior to removal of subsamples for analysis, the contents of the bottle should be mixed. The mass fractions of constituents in SRM 1941b are reported on a dry-mass basis. The SRM, as received, contains a mass fraction of approximately 2.4 % moisture (see "Conversion to Dry-Mass Basis"). The sediment sample should be dried to a constant mass before weighing for analysis; or a separate subsample of the sediment should be removed from the bottle at the time of analysis and dried to determine the mass fraction on a dry-mass basis. If the constituents of interest are volatile, then the moisture must be determined with a separate subsample.

PREPARATION AND ANALYSIS[1]

Sample Collection and Preparation: The sediment used to prepare this SRM was collected from the Chesapeake Bay at the mouth of the Baltimore (MD) Harbor near the Francis Scott Key Bridge (39°12.3'N and 76°31.4'W). This location is very near the site where SRM 1941 and SRM 1941a were collected. The sediment was collected using a Kynar-coated modified Van Veen-type grab sampler. A total of approximately 3300 kg of wet sediment was collected from the site. The sediment was freeze-dried, sieved at 150 μm (100 % passing), homogenized in a cone blender, radiation sterilized (^{60}Co), and then packaged in screw-capped amber glass bottles each containing approximately 50 g.

Conversion to Dry-Mass Basis: The results for the constituents in SRM 1941b are reported on a dry-mass basis; however, the material "as received" contains residual moisture. The amount of moisture in SRM 1941b was determined by measuring the mass loss after freeze-drying subsamples of 1.1 g to 1.3 g for four days at 1 Pa with a –10 °C shelf temperature and a –50 °C condenser temperature. The moisture content in SRM 1941b at the time of the certification analyses was 2.39 % ± 0.08 % (95 % confidence level). Analytical results for the organic constituents were determined on an as-received basis and then converted to a dry-mass basis by dividing by the conversion factor of 0.9761 (gram dry mass per gram as-received mass).

Polycyclic Aromatic Hydrocarbons: The general approach used for the value assignment of the PAHs in SRM 1941b was similar to that reported in detail elsewhere [2]. The approach consisted of combining results from analyses using various combinations of different extraction techniques and solvents, clean-up/isolation procedures, and chromatographic separation and detection techniques: Soxhlet extraction and pressurized-fluid extraction (PFE) using dichloromethane (DCM) or a hexane/acetone mixture, cleanup of the extracts using solid-phase extraction (SPE) or normal-phase liquid chromatography (LC), followed by analysis using the following techniques: (1) reversed-phase liquid chromatography with fluorescence detection (LC-FL) analysis of the total PAH fraction, (2) reversed-phase

[1] Certain commercial equipment, instruments or materials are identified in this certificate to adequately specify the experimental procedure. Such identification does not imply recommendation or endorsement by the National Institute of Standards

LC-FL analysis of isomeric PAH fractions isolated by normal-phase LC (i.e., multidimensional LC), (3) gas chromatography/mass spectrometry (GC/MS) analysis of the PAH fraction on three stationary phases of different selectivity, i.e., a 5 % (all column compositions are given as mole fractions in %) phenyl-substituted methylpolysiloxane phase, a 50 % phenyl-substituted methylpolysiloxane phase, and a relatively non-polar proprietary phase.

Three sets of GC/MS results, designated as GC/MS (I), GC/MS (II), and GC/MS (III), were obtained using three columns with different selectivities for the separation of PAHs. For GC/MS (I) analyses, duplicate subsamples of approximately 1 g from ten bottles of SRM 1941b were extracted using PFE with DCM. Copper powder was added to the extract to remove elemental sulfur. The concentrated extract was passed through an aminopropyl SPE cartridge and eluted with 2 % DCM in hexane (all solvent concentrations are given as volume fractions in %). The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5 MS, J&W Scientific, Folsom, CA). The GC/MS (II) analyses were performed using 5 g subsamples from six bottles of SRM 1941b. These samples were extracted using PFE with DCM. The high molecular mass compounds were removed from the extracts using size exclusion chromatography (SEC) with a preparative-scale divinylbenzene-polystyrene column (10 μm particle size with 10 nm diameter pores), and the sulfur was removed from the extracts by adding copper powder. The concentrated extract was passed through an aminopropyl SPE cartridge and eluted with 10 % DCM in hexane. The analysis was by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 50 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-17 MS, J&W Scientific). For the GC/MS (III), 9 g subsamples from six bottles of SRM 1941b were Soxhlet-extracted for 18 h with 250 mL of a mixture of 50 % hexane/50 % acetone. Copper powder was added to the extract to remove elemental sulfur, and the concentrated extract was passed through a silica SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a relatively non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific).

Two sets of LC-FL results, designated as LC-FL (total) and LC-FL (isomer), were used in the certification process. For the LC-FL (total), subsamples of approximately 1 g from six bottles of SRM 1941b were extracted using PFE with a mixture of 50 % hexane/50 % acetone. The extracts were concentrated and then processed through an aminopropylsilane SPE cartridge using 2 % DCM in hexane to obtain the total PAH fraction. For the LC-FL (isomer), a 5 g subsample from the six bottles was extracted using PFE with DCM and processed through an aminopropylsilane SPE cartridge using 10 % DCM in hexane; the PAH fraction was then fractionated further on a semi-preparative aminopropylsilane column (μBondapak NH_2, 9 mm i.d. × 30 cm, Waters Associates, Milford, MA) to isolate isomeric PAH fractions as described previously [3–6]. The total PAH fraction and the isomeric PAH fractions were analyzed using a 5 μm particle-size polymeric octadecylsilane (C_{18}) column (4.6 mm i.d. × 25 cm, Hypersil-PAH, Keystone Scientific, Inc., Bellefonte, PA) with wavelength-programmed fluorescence detection [4,5].

For the GC/MS and LC-FL measurements described above, selected perdeuterated PAHs were added to the sediment prior to solvent extraction for use as internal standards for quantification purposes.

In addition to the analyses performed at NIST, SRM 1941b was used in an interlaboratory comparison exercise in 1999 as part of the NIST Intercomparison Exercise Program for Organic Contaminants in the Marine Environment [7]. Results from 38 laboratories that participated in this exercise were used as the sixth data set in the determination of the certified values for PAHs in SRM 1941b. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest.

Homogeneity Assessment for PAHs: The homogeneity of SRM 1941b was assessed by analyzing duplicate samples of approximately 1 g from ten bottles selected by stratified random sampling. Samples were extracted, processed, and analyzed as described above for GC/MS (I). No statistically significant differences among bottles were observed for the PAHs at this sample size.

PAH Isomers of Molecular Mass 300 and 302: For the determination of the molecular mass 300 and 302 isomers, three subsamples of approximately 5 g each were extracted using PFE with DCM. The extracts were then concentrated with a solvent change to hexane and passed through an aminopropyl SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 50 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-17MS, J&W Scientific). Perdeuterated dibenzo[*a,i*]pyrene was added to the sediment prior to extraction for use as an internal standard [8].

PCBs and Chlorinated Pesticides: The general approach used for the determination of PCBs and chlorinated pesticides in SRM 1941b consisted of combining results from analyses using various combinations of different extraction techniques and solvents, cleanup/isolation procedures, and chromatographic separation and detection techniques. Techniques and solvents included Soxhlet extraction and PFE using DCM or a hexane/acetone mixture.

clean-up/isolation using SPE or LC, followed by analysis using GC/MS and gas chromatography with electron capture detection (GC-ECD) on two columns with different selectivity for the separation of PCBs and chlorinated pesticides. The analytical methods are described in detail elsewhere [2].

Six sets of results were obtained and designated as GC-ECD (I) A and B, GC/MS (I) A and B, GC/MS (II), and Interlaboratory Comparison Exercise. For the GC-ECD (I) analyses, approximately 10 g subsamples from six bottles of SRM 1941b were extracted using PFE with DCM. Copper powder was added to the extract to remove elemental sulfur, and SEC, as described above, was used to remove the high molecular mass compounds. The concentrated extract was then fractionated on a semi-preparative aminopropylsilane column to isolate two fractions containing: (1) the PCBs and lower-polarity pesticides and (2) the more polar pesticides. GC-ECD analyses of the two fractions were performed on two columns of different selectivities for PCB separations: 0.25 mm × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5, J&W Scientific), and a 0.25 mm × 60 m fused silica capillary column with a non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific). The results from the 5 % phenyl phase are designated as GC-ECD (IA) and the results from the proprietary phase are designated as GC-ECD (IB). For the GC-ECD analyses, two PCB congeners that are not significantly present in the sediment extract (PCB 103 and PCB 198 [9,10]) and endosulfan I-d_4, 4,4'-DDE-d_8, 4,4'-DD-d_8, and 4,4'-DDT-d_8 were added to the sediment prior to extraction for use as internal standards for quantification purposes.

Two sets of results were obtained by GC/MS. For GC/MS (I), approximately 9 g subsamples from six bottles were Soxhlet- extracted with a mixture of 50 % hexane/50 % acetone for approximately 18 h. Copper powder was added to the extract to remove elemental sulfur, and the concentrated extract was passed through a silica SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS with two ionization modes, electron impact (EI) and negative ion chemical ionization (NICI). The GC/MS EI method, GC/MS (IA), used a 0.25 mm i.d. × 60 m fused silica capillary column with a relatively non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific). The GC/MS NICI method, GC/MS (IB), used a 0.25 mm i.d. × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5MS, J&W Scientific). The GC/MS (II) results were obtained in the same manner as the GC/MS (IA) analyses except that three subsamples were Soxhlet-extracted with DCM for approximately 18 h. For the GC/MS analyses, selected carbon-13 labeled PCB congeners and chlorinated pesticides were added to the sediment prior to extraction for use as internal standards for quantification purposes.

In addition to the analyses performed at NIST, SRM 1941b was used in an interlaboratory comparison exercise in 1999 as part of the NIST Intercomparison Exercise Program for Organic Contaminants in the Marine Environment [7]. Results from 38 laboratories that participated in this exercise were used as the sixth data set in the determination of the certified values for PCB congeners and chlorinated pesticides in SRM 1941b. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest.

The reference value for PCB 77 was determined from a separate fraction. The samples were extracted and processed as for GC-ECD (I) above. The first (PCB and lower-polarity pesticide) fraction from the semi-preparative aminopropylsilane column was further fractionated using a Cosmosil PYE (pyrenylethyl group bonded) column (5 μm particle size, 4.6 mm i.d. × 25 cm ; Phenomenex, Torrance, CA) [11]. Three fractions were collected: the first fraction contained the pesticides and multi-*ortho* PCBs, the second fraction contained the polychlorinated naphthalenes, non-*ortho* PCB congeners, and some mono-*ortho* PCB congeners, and the third fraction removed the residual planar compounds from the column. The second fraction was analyzed by GC/MS NICI using the same column as GC/MS (IB) above. Carbon-13 labeled PCB 77 was used as an internal standard for quantification purposes.

Alkylated PAH Groups, Hopanes, and Steranes: SRM 1941b was used in an interlaboratory comparison exercise in 2011 [12]. Results from 33 laboratories that participated in this exercise were used in the determination of the reference values for alkylated PAH groups, hopanes, and steranes in SRM 1941b. Note that not all laboratories returned data for each analyte. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest. For the alkylated PAHs, the majority of the laboratories (>90 %) used the parent PAH for determination of the response factor for the corresponding alkylated group.

Total Organic Carbon (TOC): Two laboratories provided results for TOC using similar procedures. Briefly, subsamples of approximately 200 mg were reacted with 6 mol/L hydrochloric acid and rinsed with deionized water prior to combustion in a gas fusion furnace. The carbon monoxide and carbon dioxide produced were measured and compared to a blank for calculation of the percent TOC. Each laboratory analyzed subsamples from three bottles of SRM 1941b. One of the laboratories also analyzed three subsamples from three bottles of SRM 1941b for carbon, hydrogen, and nitrogen.

Table 1. Certified Mass Fraction Values for PAHs in SRM 1941b

PAHs	Mass Fractions[a] (µg/kg)		
Naphthalene[b,c,d,e,f,g]	848	±	95[h]
Fluorene[b,c,d,e,f,g]	85	±	15[h]
Phenanthrene[b,c,d,e,f,g]	406	±	44[h]
Anthracene[b,c,d,e,f,g]	184	±	18[h]
3-Methylphenanthrene[b,c,d]	105	±	13[h]
2-Methylphenathrene[b,c,d]	128	±	14[h]
1-Methylphenanthrene[b,c,d,g]	73.2	±	5.9[h]
Fluoranthene[b,c,d,e,f,g]	651	±	50[h]
Pyrene[b,c,d,e,f,g]	581	±	39[h]
Benz[*a*]anthracene[b,c,d,e,f,g]	335	±	25[h]
Chrysene[d,f]	291	±	31[h]
Triphenylene[d,f]	108	±	5[i]
Benzo[*b*]fluoranthene[c,e]	453	±	21[h]
Benzo[*k*]fluoranthene[b,c,d,e]	225	±	18[h]
Benzo[*e*]pyrene[b,c,d,g]	325	±	25[h]
Benzo[*a*]pyrene[b,c,d,f,g]	358	±	17[h]
Perylene[b,c,d,f,g]	397	±	45[h]
Benzo[*ghi*]perylene[b,c,d,f,g]	307	±	45[h]
Indeno[1,2,3-*cd*]pyrene[b,c,d,f,g]	341	±	57[h]
Dibenz[*a,j*]anthracene[b,c,d,f]	48.9	±	4.6[h]
Dibenz[*a,c*]anthracene[c,f]	36.7	±	5.2[h]
Dibenz[*a,h*]anthracene[c,f]	53	±	10[h]
Benzo[*b*]chrysene[b,c,d,f]	53	±	12[h]
Picene[b,c,d]	46.6	±	4.7[h]

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] GC/MS (I) on 5 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.
[c] GC/MS (II) on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.
[d] GC/MS (III) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.
[e] LC-FL (total) of total PAH fraction after PFE with DCM.
[f] LC-FL (isomer) of isomeric PAH fractions after PFE with DCM.
[g] 1999 Interlaboratory Comparison Study [7] with 21 to 29 laboratories submitting data for each PAH.
[h] Certified values are weighted means of the results from two to six analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[i] The certified value is an unweighted mean of the results from two analytical methods. The uncertainty listed with the value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the value is metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 2. Certified Mass Fraction Values for PCB Congeners[a] in SRM 1941b

PCB Congeners			Mass Fractions[b] (µg/kg)		
PCB	8	(2,4'-Dichlorobiphenyl)[c,d,e,f,g]	1.65	±	0.19[h]
PCB	18	(2,2',5-Trichlorobiphenyl)[c,d,e,f,g]	2.39	±	0.29[h]
PCB	28	(2,4,4'-Trichlorobiphenyl)[c,d,e,f,g]	4.52	±	0.57[h]
PCB	31	(2,4',5-Trichlorobiphenyl)[c,e,f]	3.18	±	0.41[h]
PCB	44	(2,2'3,5'-Tetrachlorobiphenyl)[c,d,e,f,g]	3.85	±	0.20[i]
PCB	49	(2,2'4,5'-Tetrachlorobiphenyl)[c,d,e,f]	4.34	±	0.28[i]
PCB	52	(2,2',5,5'-Tetrachlorobiphenyl)[c,d,e,f,g]	5.24	±	0.28[i]
PCB	66	(2,3',4,4'-Tetrachlorobiphenyl)[c,e,f,g,j]	4.96	±	0.53[i]
PCB	87	(2,2',3,4,5'-Pentachlorobiphenyl)[c,d,f,j]	1.14	±	0.16[h]
PCB	95	(2,2',3,5',6-Pentachlorobiphenyl)[c,e,f,g]	3.93	±	0.62[i]
PCB	99	(2,2',4,4',5-Pentachlorobiphenyl)[c,d,e,f,g]	2.90	±	0.36[i]
PCB	101	(2,2',4,5,5'-Pentachlorobiphenyl)[c,e,f,g,j]	5.11	±	0.34[i]
PCB	105	(2,3,3',4,4'-Pentachlorobiphenyl)[c,d,e,f,g,j]	1.43	±	0.10[i]
PCB	110	(2,3,3',4',6-Pentachlorobiphenyl)[c,e,f,j]	4.62	±	0.36[i]
PCB	118	(2,3',4,4',5-Pentachlorobiphenyl)[c,d,e,f,g,j]	4.23	±	0.19[i]
PCB	128	(2,2',3,3',4,4'-Hexachlorobiphenyl)[c,d,e,f,g,j]	0.696	±	0.044[i]
PCB	138	(2,2',3,4,4',5'-Hexachlorobiphenyl)[c,e,f,j]	3.60	±	0.28[i]
PCB	149	(2,2',3,4',5',6-Hexachlorobiphenyl)[c,d,e,j]	4.35	±	0.26[h]
PCB	153	(2,2',4,4',5,5'-Hexachlorobiphenyl)[c,d,e,f,g,j]	5.47	±	0.32[i]
PCB	156	(2,3,3',4,4',5-Hexachlorobiphenyl)[c,d,e,f,j]	0.507	±	0.090[h]
PCB	170	(2,2',3,3',4,4',5-Heptachlorobiphenyl)[c,d,e,f,g,j]	1.35	±	0.09[i]
PCB	180	(2,2',3,4,4',5,5'-Heptachlorobiphenyl)[c,d,e,f,g,j]	3.24	±	0.51[i]
PCB	183	(2,2',3,4,4',5',6-Heptachlorobiphenyl)[c,d,e,j]	0.979	±	0.087[h]
PCB	187	(2,2',3,4',5,5',6-Heptachlorobiphenyl)[c,d,e,f,g,j]	2.17	±	0.22[i]
PCB	194	(2,2',3,3',4,4',5,5'-Octachlorobiphenyl)[c,d,e,j]	1.04	±	0.06[h]
PCB	195	(2,2',3,3',4,4',5,6-Octachlorbiphenyl)[c,e,g,j]	0.645	±	0.060[i]
PCB	201	(2,2',3,3',4,5',6,6'-Octachlorobiphenyl)[c,e,j]	0.777	±	0.034[h]
PCB	206	(2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl)[c,e,f,g,j]	2.42	±	0.19[i]
PCB	209	Decachlorobiphenyl[c,d,e,f,g,j]	4.86	±	0.45[i]

[a] PCB congeners are numbered according to the scheme proposed by Ballschmiter and Zell [9] and later revised by Schulte and Malisch [10] to conform to IUPAC rules, except PCB 201. Under the Ballschmiter and Zell numbering system, the IUPAC PCB 201 is listed as PCB 200.

[b] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[c] GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

[d] GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

[e] GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

[f] GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.

[g] 1999 Interlaboratory Comparison Study [7] with 13 to 31 laboratories submitting data for each PCB congener.

[h] Certified values are unweighted means of the results from three to five analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[i] Certified values are weighted means of the results from three to six analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[j] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

Table 3. Certified Mass Fraction Values for Chlorinated Pesticides in SRM 1941b

Chlorinated Pesticides	Mass Fractions[a] (µg/kg)
Hexachlorobenzene[b,c,d,e]	5.83 ± 0.38[f]
cis-Chlordane[b,c,d,e,g]	0.85 ± 0.11[h]
trans-Chlordane[b,c,e]	0.566 ± 0.093[f]
cis-Nonachlor[b,e,g]	0.378 ± 0.053[h]
trans-Nonachlor[b,c,d,e,g]	0.438 ± 0.073[f]
4,4'-DDE[b,d,e,g]	3.22 ± 0.28[h]
4,4'-DDD[b,d,e,g]	4.66 ± 0.46[h]

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.
[c] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).
[d] GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.
[e] 1999 Interlaboratory Comparison Study [7] with 13 to 31 laboratories submitting data for each pesticide.
[f] Certified values are unweighted means of the results from three to five analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[g] GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.
[h] Certified values are weighted means of the results from three to five analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the chlorinated pesticides listed and the values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 4. Reference Mass Fraction Values for PAHs in SRM 1941b

PAHs	Mass Fractions[a] (µg/kg)		
1-Methylnaphthalene[b,c,d,e]	127	±	14[f]
2-Methylnaphthalene[b,c,d,e]	276	±	53[f]
2,6-Dimethylnaphthalene[b,c,d,e]	75.9	±	4.5[f]
2,3,5-Trimethylnaphthalene[b,c,d,e]	25.5	±	5.1[f]
Biphenyl[b,c,d,e]	74.0	±	8.0[f]
Acenaphthylene[b,c,d,e]	53.3	±	6.4[f]
Acenaphthene[b,c,d,e]	38.4	±	5.2[f]
9-Methylphenanthrene[c]	63.5	±	2.5[g]
4-Methylphenanthrene and 9-Methylphenanthrene[b,d]	80.1	±	4.8[f]
2-Methylanthracene[c,d]	36	±	15[f]
8-Methylfluoranthene[b]	49.5	±	2.7[g]
7-Methylfluoranthene[b]	45.4	±	1.5[g]
1-Methylfluoranthene[b]	42.4	±	2.1[g]
3-Methylfluoranthene[b]	28.8	±	1.3[g]
2-Methylpyrene[b]	78.7	±	4.0[g]
4-Methylpyrene[b]	66.4	±	2.6[g]
1-Methylpyrene[b]	52.5	±	2.3[g]
Acephenanthrene[d]	30.5	±	1.9[g]
Benzo[*c*]phenanthrene[b,c,d]	58	±	15[f]
Benzo[*a*]fluoranthene[b,c,d]	73	±	18[f]
Benzo[*j*]fluoranthene[c]	217	±	5[g]
Indeno[1,2,3-*cd*]fluoranthene[d]	9.63	±	0.34[g]
Pentaphene[d]	25.3	±	1.0[g]

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[b] GC/MS (I) on 5 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

[c] GC/MS (II) on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

[d] GC/MS (III) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

[e] 1999 Interlaboratory Comparison Study [7] with 14 to 26 laboratories submitting data for each PAH.

[f] Reference values are weighted means of the results from two to four analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of PAHs listed as determined by the methods indicted. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[g] Reference values are the means of results obtained by NIST using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k, is determined from the Student's t-distribution for the associated degrees of freedom (19 for footnote b and 5 for footnotes c and d) and 95 % confidence level for each analyte. The measurand is the total mass fraction of the PAHs listed as determined by the method indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 5. Reference Mass Fraction Values for PAHs of Molecular Mass 300 and 302 in SRM 1941b

PAHs of Molecular Mass 300 and 302	Mass Fractions[a,b,c] (µg/kg)		
Coronene	72.6	±	4.7
Dibenzo[*b,e*]fluoranthene	10.3	±	0.3
Naphtho[1,2-*b*]fluoranthene	91.0	±	3.1
Naphtho[1,2-*k*]fluoranthene and Naphtho[2,3-*j*]fluoranthene	79.8	±	2.5
Naphtho[2,3-*b*]fluoranthene	23.5	±	0.3
Dibenzo[*b,k*]fluoranthene	95.6	±	3.1
Dibenzo[*a,k*]fluoranthene	26.6	±	0.4
Dibenzo[*j,l*]fluoranthene	63.8	±	1.8
Dibenzo[*a,l*]pyrene	11.1	±	1.0
Naphtho[2,3-*k*]fluoranthene	10.7	±	0.6
Naphtho[1,2-*a*]pyrene	16.7	±	1.4
Naphtho[2,3-*e*]pyrene	33.2	±	2.3
Dibenzo[*a,e*]pyrene	76.1	±	3.6
Naphtho[2,1-*a*]pyrene	59.2	±	1.8
Dibenzo[*e,i*]pyrene	35.0	±	2.4
Naphtho[2,3-*a*]pyrene	16.5	±	0.6
Benzo[*b*]perylene	38.2	±	1.2
Dibenzo[*a,i*]pyrene	25.5	±	1.0
Dibenzo[*a,h*]pyrene	6.94	±	0.29

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[b] Reference values are the means of results obtained by NIST using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k, is determined from the Student's t-distribution for two degrees of freedom and 95 % confidence level for each analyte. The measurand is the total mass fraction of the constituent listed as determined by the method indicted. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[c] GC/MS on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM [8].

Table 6. Reference Mass Fraction Values for PCB Congeners[a] in SRM 1941b

PCB Congeners			Mass Fractions[b,c] (µg/kg)		
PCB	45	(2,2',3,6-Tetrachlorobiphenyl)[d,e]	0.73	±	0.12
PCB	56	(2,3,3',4'-Tetrachlorobiphenyl)[d,f,g]	1.21	±	0.11
PCB	63	(2,3,4',5-Tetrachlorobiphenyl)[e,f,g]	0.213	±	0.040
PCB	70	(2,3',4',5-Tetrachlorobiphenyl)[e,f,g]	4.99	±	0.29
PCB	74	(2,4,4',5-Tetrachlorobiphenyl)[e,f,g]	2.04	±	0.15
PCB	77	(3,3',4,4'-Tetrachlorobiphenyl)[h]	0.31	±	0.03
PCB	107	(2,3,3',4',5-Pentachlorobiphenyl)[d,e,f,g]	0.628	±	0.028
PCB	132	(2,2',3,3',4,6'-Hexachlorobiphenyl)[d,f,g]	1.28	±	0.27
PCB	146	(2,2',3,4',5,5'-Hexachlorobiphenyl)[e,f,g]	1.22	±	0.12
PCB	158	(2,3,3',4,4',6-Hexachlorobiphenyl)[d,e,f,g]	0.65	±	0.15
PCB	163	(2,3,3',4',5,6-Hexachlorobiphenyl)[e,f,g]	1.28	±	0.06
PCB	174	(2,2',3,3',4,5,6'-Heptachlorobiphenyl)[d,e,f,g]	1.51	±	0.39
PCB	193	(2,3,3',4',5,5',6-Heptachlorobiphenyl)[d,e,f,g]	0.292	±	0.075

[a] PCB congeners are numbered according to the scheme proposed by Ballschmiter and Zell [9] and later revised by Schulte and Malisch [10] to conform with IUPAC rules, except PCB 107. Under the Ballschmiter and Zell numbering system, the IUPAC PCB 107 is listed as PCB 108.

[b] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[c] For these PCB congeners except PCB 77, the reference values are unweighted means of the results from two to four analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled within-method variance following the ISO/JCGM Guide [14,15]. For PCB 77, the reference value is the mean of results obtained by NIST using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k, is determined from the Student's t-distribution corresponding to two degrees of freedom and 95 % confidence level for PCB 77. The measurand is the total mass fraction of the PCB Congeners listed as determined by the method or methods indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as microgram per kilogram on a dry-mass basis.

[d] GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

[e] GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

[f] GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

[g] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

[h] GC/MS NICI on a 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC-ECD (I) fractionated using a PYE column.

Table 7. Reference Mass Fraction Values for Selected Chlorinated Pesticides in SRM 1941b

Chlorinated Pesticides	Mass Fractions[a,b] (µg/kg)		
2,4'-DDE[c,d]	0.38	±	0.12
4,4'-DDT[e,f]	1.12	±	0.42

[a] Mass Fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] The reference values are unweighted means of the results from two analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the chlorinated pesticides listed as determined by the methods indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[c] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).
[d] GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).
[e] GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.
[f] 1999 Interlaboratory Comparison Study [7] with 10 laboratories submitting data for 4,4'-DDT.

Table 8. Reference Mass Fraction Values for Alkylated PAH Groups in SRM 1941b

Alkylated PAH Group	Mass Fraction[a,b] (µg/kg)		
C2-decalins	18	±	5
C4-decalins	41	±	4
C2-naphthalenes	187	±	53
C3-naphthalenes	158	±	42
C1-benzothiophenes	25	±	14
C2-benzothiophenes	20	±	11
C3-benzothiophenes	22	±	13
C4-benzothiophenes	18	±	5
C1-fluorenes	57	±	18
C2-fluorenes	122	±	43
C3-fluorenes	128	±	31
C1-phenanthrenes/anthracenes	313	±	99
C2-phenanthrenes/anthracenes	247	±	62
C3-phenanthrenes/anthracenes	165	±	46
C4-phenanthrenes/anthracenes	87	±	36
C1-dibenzothiophenes	54	±	13
C2-dibenzothiophenes	91	±	18
C3-dibenzothiophenes	84	±	15
C4-dibenzothiophenes	57	±	13
C1-fluoranthenes/pyrenes	252	±	48
C2-fluoranthenes/pyrenes	205	±	38
C3-fluoranthenes/pyrenes	102	±	22
C4-fluoranthenes/pyrenes	121	±	59
C1-benzanthraces/chrysenes/triphenylenes	208	±	43
C2-benzanthraces/chrysenes/triphenylenes	120	±	24
C3-benzanthraces/chrysenes/triphenylenes	73	±	31
C4-benzanthraces/chrysenes/triphenylenes	41	±	11

[a] The reference mass fraction value reported on a dry-mass basis is the median of results using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the median, and the coverage factor, $k = 2$. The measurand is the total mass fraction of the alkylated PAH groups listed as determined by the interlaboratory study methods. The values listed are metrologically traceable to the SI unit of mass fraction, expressed as micrograms per kilogram on a dry-mass basis.
[b] Data from the interlaboratory study [12].

Table 9. Reference Mass Fraction Values for Hopanes and Steranes in SRM 1941b

Hopane or Sterane	Mass Fraction[a,b] (µg/kg)
17α(H)-22,29,30-Trisnorhopane	54 ± 18
17α(H)-21β(H)-30-Norhopane	137 ± 21
17α(H)-21β(H)-30-Hopane	215 ± 44
17α(H)-21β(H)-22R-Homohopane	44 ± 10
17α(H)-21β(H)-22S-Homohopane	48 ± 13
5α(H)-14α(H),17α(H)-Cholestane 20R	41 ± 11
5α(H)-14β(H),17β(H)-Cholestane 20R	27 ± 6
5α(H)-14β(H),17β(H)-24-Methylcholestane 20R	21 ± 8
5α(H)-14α(H),17α(H)-24-Ethylcholestane 20R	19 ± 5
5α(H)-14β(H),17β(H)-24-Ethylcholestane 20R	41 ± 9

[a] The reference mass fraction value reported on a dry-mass basis is the median of results using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the median, and the coverage factor, $k = 2$. The measurand is the total mass fraction of the constituent listed as determined by the methods used during the interlaboratory study. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[b] Data from the interlaboratory study [12].

Table 10. Reference Mass Fraction Value for Total Organic Carbon in SRM 1941b

Total Organic Carbon (TOC)	2.99 % ± 0.24 %[a,b]

[a] Mass fraction is reported on a dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] The reference value for total organic carbon is a weighted mean value from routine measurements made by two laboratories [21]. The uncertainty listed is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance. The reporting follows the ISO/JCGM Guides [2]. The measurand is the total mass fraction of TOC listed as determined by the methods indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as a percent on a dry-mass basis.

Table 11. Information Mass Fraction Values for Carbon, Hydrogen, and Nitrogen in SRM 1941b

Elements	Mass Fractions[a] (%)
Carbon	3.3
Hydrogen	1.2
Nitrogen	<0.5

[a] Mass fraction is reported on a dry-mass basis; material as received contains approximately 2.4 % moisture.

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Certificate Revision History: 16 January 2015 (Corrected IUPAC name for PCB-56 and PCB-107; editorial changes); 10 June 2014 (Units corrected from mg/kg to µg/kg in Tables 8 and 9; editorial changes); 10 April 2012 (Reference value added for alkylated PAH groups, hopanes, and steranes; extension of certification period; editorial changes); 16 August 2004 (Reference values for the butyl tins removed; editorial changes); 15 July 2002 (Original certificate date).

Users of this SRM should ensure that the Certificate of Analysis in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail srminfo@nist.gov; or via the Internet at http://www.nist.gov/srm.

APPENDIX A

The laboratories listed below performed measurements that contributed to the certification of PAHs, PCBs, and chlorinated pesticides in SRM 1941b Organics in Marine Sediment.

Arthur D. Little, Inc; Cambridge, MA
Axys Analytical Services; Sidney, BC, Canada
B & B Laboratories; College Station, TX
Battelle Ocean Sciences; Duxbury, MA
Bedford Institute of Oceanography; Dartmouth, NS, Canada
California Department of Fish and Game; Rancho Cordova, CA
Central Contra Costa Sanitary District; Martinez, CA
Chesapeake Biological Laboratory; Solomons, MD
Centro de Investigacionies Energeticas Medioambientales y Tecnologicas; Madrid, Spain
City of Los Angeles Environmental Monitoring Division; Playa del Rey, CA
City of San Jose Environmental Services Department; San Jose, CA
Columbia Analytical Services; Kelso, WA
East Bay Municipal Utility District; Oakland, CA
Florida Department of Environmental Protection; Tallahassee, FL
Manchester Environmental Laboratory; Port Orchard, WA
Murray State University; Murray, KY
Massachusetts Water Resources Authority Central Lab; Winthrop, MA
National Research Council of Canada; Ottawa, Ontario, Canada
National Oceanic and Atmospheric Association (NOAA), National Marine Fisheries Service (NMFS), Auke Bay Laboratory; Juneau, AK
NOAA, National Ocean Service/Center for Coastal Environmental Health and Biomolecular Research; Charleston, SC
NOAA, NMFS, Sandy Hook Marine Laboratory; Highlands, NJ
NOAA, NMFS, Northwest Fisheries Science Center; Seattle, WA
Orange County Sanitation District; Fountain Valley, CA
Philip Analytical Services; Burlington, Ontario, Canada
Serv de Hidrografia Naval; Buenos Aires, Argentina
Skidaway Institute of Technology; Savannah, GA
Southwest Laboratory of Oklahoma; Broken Arrow, OK
Severn Trent Knoxville Laboratory; Knoxville, TN
Texas A&M University, Geochemical and Environmental Research Group; College Station, TX
Texas Parks and Wildlife Department; San Marcos, TX
University of California at Los Angeles, Institute of Geophysics and Planetary Physics; Los Angeles, CA
University of Connecticut, Environmental Research Institute; Storrs, CT
University of Rhode Island, Graduate School of Oceanography; Narragansett, RI
US Department of Agriculture, Environmental Chemistry Laboratory; Beltsville, MD
US Environmental Protection Agency, Atlantic Ecology Division; Narragansett, RI
US Geological Survey, National Water Quality Laboratory; Denver, CO
Woods Hole Group Environmental Lab; Raynham, MA
Wright State University; Dayton, OH

APPENDIX B

The laboratories listed below performed measurements that contributed to the certification of alkylated PAH groups, hopanes, and steranes in SRM 1941b Organics in Marine Sediment.

Alpha Analytical, Inc.; Mansfield, MA
Analytical Resources, Inc.; Tukwila, WA
Axys Analytical Services; Sydney, BC, Canada
Battelle Analytical & Environmental Chemistry Laboratory; Duxbury, MA
Center for Laboratory Sciences; Pasco, WA
Columbia Analytical Services; Jacksonville, FL
Columbia Analytical Services; Rochester, NY
Columbia Analytical Services, Kelso, WA
Florida Department of Environmental Protection; Tallahassee, FL
Florida International University; North Miami, FL
Michigan Department of Natural Resources and Environment; Lansing, MI
Mississippi State Chemical Laboratory; Mississippi State, MS
NIST; Charleston, SC
NIST; Gaithersburg, MD
NOAA/NCCOS/NOS; Charleston, SC
NOAA/NMFS/Alaska Fisheries Science Center; Juneau, AK
NY State Department of Health; Albany, NY
Pace Analytical Services, Inc. Minneapolis; Minneapolis, MN
RJ Lee Group, Inc; Monroeville, PA
TDI/B&B Laboratories, Inc.; College Station, TX
TestAmerica Laboratories; Mobile, AL
TestAmerica Laboratories; West Sacramento, CA
TestAmerica Laboratories; University Park, IL
TestAmerica Laboratories; Schriever, LA
TestAmerica Laboratories; Edison, NJ
TestAmerica Laboratories; Knoxville, TN
TestAmerica Laboratories; Pittsburgh, PA
TestAmerica Laboratories; South Burlington, VT
TestAmerica Laboratories; Tacoma, WA
US Army Engineer Research and Development Center; Vicksburg, MS
USGS Columbia Environmental Research Center; Columbia, MO
University of Iowa, State Hygienic Laboratory; Iowa City, IO
Washington State Public Health Laboratories; Shoreline, WA

NIST

Date of Issue:
31 March 2014

SAFETY DATA SHEET

1. Substance and Source Identification

Product Identifier

SRM Number: 1941b
SRM Name: Organics in Marine Sediment
Other Means of Identification: Not applicable.

Recommended Use of This Material and Restrictions of Use

This Standard Reference Material (SRM) is marine sediment collected at the mouth of the Baltimore (MD) Harbor. SRM 1941b is intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and chlorinated pesticides in marine sediment and similar matrices. All of the constituents for which certified, reference, and information values are provided in SRM 1941b were naturally present in the sediment before processing. A unit of SRM 1941b consists of a bottle containing 50 g of radiation-sterilized, freeze-dried sediment.

Company Information

National Institute of Standards and Technology
Standard Reference Materials Program
100 Bureau Drive, Stop 2300
Gaithersburg, Maryland 20899-2300

Telephone: 301-975-2200
FAX: 301-948-3730
E-mail: SRMMSDS@nist.gov
Website: http://www.nist.gov/srm

Emergency Telephone ChemTrec:
1-800-424-9300 (North America)
+1-703-527-3887 (International)

2. Hazards Identification

Classification

Physical Hazard: Not classified.
Health Hazard: Not classified.

Label Elements
Symbol
No Symbol/Pictogram

Signal Word
Not applicable.

Hazard Statement(s): Not applicable.

Precautionary Statement(s): Not applicable.

Hazards Not Otherwise Classified: Not applicable.

Ingredients(s) with Unknown Acute Toxicity: Not applicable.

3. Composition and Information on Hazardous Ingredients

Substance: Marine sediment

Other Designations: Sediment.

This material is naturally occurring marine sediment from an urban area. The material contains trace amounts of polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and should be handled with care. Components are listed in compliance with OSHA's 29 CFR 1910.1200; for the actual values see the Certificate of Analysis.

Hazardous Component(s)	CAS Number	EC Number (EINECS)	Nominal Mass Concentration (%)
Marine Sediment	Not available	Not available	100

4. First Aid Measures

Description of First Aid Measures:

Inhalation: If adverse effects occur, remove to uncontaminated area. If not breathing, give artificial respiration or oxygen by qualified personnel. Seek immediate medical attention.

Skin Contact: Wash skin with soap and water.

Eye Contact: Flush eyes with water for at least 15 minutes. If necessary, seek medical attention.

Ingestion: If adverse effects occur after ingestion, seek medical treatment.

Most Important Symptoms/Effects, Acute and Delayed: May cause irritation.

Indication of any immediate medical attention and special treatment needed, if necessary: If any of the above symptoms are present, seek medical attention if needed.

5. Fire Fighting Measures

Fire and Explosion Hazards: Negligible fire hazard. Avoid generating dust. See Section 9, "Physical and Chemical Properties" for flammability properties.

Extinguishing Media:
Suitable: Use extinguishing media appropriate for surrounding fire.
Unsuitable: None listed.

Specific Hazards Arising from the Chemical: None listed.

Special Protective Equipment and Precautions for Fire-Fighters: Avoid inhalation of material or combustion byproducts. Wear full protective clothing and NIOSH approved self-contained breathing apparatus (SCBA).

NFPA Ratings (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

Health = 1 Fire = 0 Reactivity = 0

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Any accumulated material on surfaces should be removed and properly disposed of. Use suitable protective equipment; see Section 8, "Exposure Controls and Personal Protection".

Methods and Materials for Containment and Clean up: Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. Keep unnecessary people away, isolate hazard area and deny entry.

7. Handling and Storage

Safe Handling Precautions: Minimize dust generation and accumulation on surfaces. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. See Section 8, "Exposure Controls and Personal Protection".

Storage: Store and handling in accordance with all current regulations and standards.

8. Exposure Controls and Personal Protection

Exposure Limits: No occupational exposure limits have been established for marine sediment. This material is a particulate matter and adequate inhalation/respiratory protection should be used to minimize exposure. The exposure limits for Particulates Not Otherwise Regulated (PNOR) are applicable.

OSHA (PEL): 15 mg/m^3 (TWA, total particulates not otherwise regulated)
OSHA (PEL) 5 mg/m^3 (TWA, respirable particulates not otherwise regulated)

NIOSH (REL): 10 mg/m^3 (TWA, total particulates not otherwise regulated, 8 h)
NIOSH (REL): 5 mg/m^3 (TWA, respirable particulates not otherwise regulated)

Engineering Controls: Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Personal Protection: In accordance with OSHA 29 CFR 1910.132, subpart I, wear appropriate Personal Protective Equipment (PPE) to minimize exposure to this material.

Respiratory Protection: If workplace conditions warrant a respirator, a respiratory protection program that meets OSHA 29CFR 1910.134 must be followed. Refer to NIOSH 42 CFR 84 for applicable certified respirators.

Eye/Face Protection: Wear splash resistant safety goggles with a face shield. An eye wash station should be readily available near areas of use.

Skin and Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Chemical-resistant gloves should be worn at all times when handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Descriptive Properties:

Appearance (physical state, color, etc.):	amorphous powder
Molecular Formula:	not applicable
Molar Mass (g/mol):	not applicable
Odor:	not available
Odor threshold:	not available
pH:	not available
Evaporation rate:	not applicable
Melting point/freezing point (°C):	not available
Specific Gravity (water=1)	not available
Vapor Pressure (mmHg):	not applicable
Vapor Density (air = 1):	not applicable
Viscosity (cP):	not applicable
Solubility(ies):	not available
Partition coefficient (n-octanol/water):	not available
Particle Size:	<150 µm

Thermal Stability Properties:

Autoignition Temperature (°C):	not available
Thermal Decomposition (°C):	not available
Initial boiling point and boiling range (°C):	not available
Explosive Limits, LEL (Volume %):	not available
Explosive Limits, UEL (Volume %):	not available
Flash Point (°C):	not available
Flammability (solid, gas):	not available

10. STABILITY AND REACTIVITY

Reactivity: Stable at normal temperatures and pressure.

Stability: X Stable _____ Unstable

Possible Hazardous Reactions: None listed.

Conditions to Avoid: Avoid generating dust.

Incompatible Materials: None listed.

Fire/Explosion Information: See Section 5, "Fire Fighting Measures".

Hazardous Decomposition: Thermal decomposition will produce oxides of carbon.

Hazardous Polymerization: _____ Will Occur X Will Not Occur

11. TOXICOLOGICAL INFORMATION

Route of Exposure: __X__ Inhalation __X__ Skin _____ Ingestion

Symptoms Related to the Physical, Chemical and Toxicological Characteristics: Generated dust may cause irritation if inhaled.

Potential Health Effects (Acute, Chronic and Delayed):

Inhalation: Generated dust may cause irritation.

Skin Contact: May cause mechanical irritation.

Eye Contact: May cause mechanical irritation.

Ingestion: No data available.

Numerical Measures of Toxicity:

Acute Toxicity: Not classified; no data available.

Skin Corrosion/Irritation: Not classified; no data available.

Serious Eye damage/ Eye irritation: Not classified; no data available.

Respiratory Sensitization: Not classified; no data available.

Skin Sensitization: Not classified; no data available.

Germ Cell Mutagenicity: Not classified; no data available.

Carcinogenicity: Not classified.

Listed as a Carcinogen/Potential Carcinogen _____ Yes __X__ No
Marine sediment is not listed by NTP, IARC or OSHA as a carcinogen.

Reproductive Toxicity: Not classified; no data available.

Specific Target Organ Toxicity, Single Exposure: Not classified; no data available.

Specific Target Organ Toxicity, Repeated Exposure: Not classified; no data available.

Aspiration Hazard: Not classified; no data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Data: No data available.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of waste in accordance with all applicable federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT and IATA: Not regulated by DOT or IATA.

15. REGULATORY INFORMATION

U.S. Regulations:

CERCLA Sections 102a/103 (40 CFR 302.4): Not regulated.

SARA Title III Section 302 (40 CFR 355.30): Not regulated.

SARA Title III Section 304 (40 CFR 355.40): Not regulated.

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21):

ACUTE HEALTH:	No.
CHRONIC HEALTH:	No.
FIRE:	No.
REACTIVE:	No.
PRESSURE:	No.

State Regulations:
California Proposition 65: Not listed.

U.S. TSCA Inventory: Not listed.

TSCA 12(b), Export Notification: Not listed.

Canadian Regulations:
WHMIS Information: Not provided for this material.

16. OTHER INFORMATION

Issue Date: 31 March 2014

Sources: 29 CFR Occupational Health and Safety Office (OSHA) 1910.1000, *Limits for Air Contaminants*, Table Z-1; available at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9992 (accessed Mar 2014).

Center for Disease Control (CDC) NIOSH Pocket Guide to Chemical Hazards, *Particulates not otherwise regulated*; available at http://www.cdc.gov/niosh/npg/npgd0480.html (accessed Mar 2014).

Key of Acronyms:

ACGIH	American Conference of Governmental Industrial Hygienists	NRC	Nuclear Regulatory Commission
ALI	Annual Limit on Intake	NTP	National Toxicology Program
CAS	Chemical Abstracts Service	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
CFR	Code of Federal Regulations	RCRA	Resource Conservation and Recovery Act
DOT	Department of Transportation	REL	Recommended Exposure Limit
EC50	Effective Concentration, 50 %	RM	Reference Material
EINECS	European Inventory of Existing Commercial Chemical Substances	RQ	Reportable Quantity
EPCRA	Emergency Planning and Community Right-to-Know Act	RTECS	Registry of Toxic Effects of Chemical Substances
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments and Reauthorization Act
IATA	International Air Transportation Agency	SCBA	Self-Contained Breathing Apparatus
IDLH	Immediately Dangerous to Life and Health	SRM	Standard Reference Material
LC50	Lethal Concentration, 50 %	STEL	Short Term Exposure Limit
LD50	Lethal Dose, 50 %	TLV	Threshold Limit Value
LEL	Lower Explosive Limit	TPQ	Threshold Planning Quantity
MSDS	Material Safety Data Sheet	TSCA	Toxic Substances Control Act
NFPA	National Fire Protection Association	TWA	Time Weighted Average
NIOSH	National Institute for Occupational Safety and Health	UEL	Upper Explosive Limit
NIST	National Institute of Standards and Technology	WHMIS	Workplace Hazardous Materials Information System

Disclaimer: Physical and chemical data contained in this SDS are provided only for use in assessing the hazardous nature of the material. The SDS was prepared carefully, using current references; however, NIST does not certify the data in the SDS. The certified values for this material are given in the NIST Certificate of Analysis.

Users of this SRM should ensure that the SDS in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail SRMMSDS@nist.gov; or via the Internet at http://www.nist.gov/srm.

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Order discrepancies (other than back ordered items) must be reported to our Customer Relations Department at 301-975-6776 within 5 days of receipt of shipment or this order will be considered complete. NIST SRMs/RMs are generally not returnable - with the exception of defective goods or shipments made in error by NIST. To return a SRM/RM, please call for instructions and a Return SRM/RM Authorization Number before shipment. Returns WILL NOT BE ACCEPTED without prior authorization.

Order	UOM	Ship	UOM	B/O	UOM	Item	Description
1	EACH	1	EACH	0	EACH	1941B	Organics in Marine Sediment
						Total qty:	1 / EACH
							NOT FOR HUMAN CONSUMPTION, LABORATORY USE ONLY.

9/21/16
04:04 PM

1700101

Picked by	
Packed by	
# of pieces	
Weight	

MP Biomedicals, LLC

29525 Fountain Parkway
Solon, Ohio 44139

Telephone: 440/337-1200
Toll Free: 800/854-0530

Fax: 440/337-1180
web: www.mpbio.com

Certificate of Analysis

Product Description: Microcrystalline Cellulose Powder_
Catalog Number: 191499_
Lot: Q9483_

Formula: $(C_6H_{10}O_5)n$	**Formula Weight:** N/A
CAS #: 9004-34-6	**Storage:** 15 - 30°C
Physical Description: White Powder	

Test	Specification	Result
Identity Test	Passes	Passes
Purity	97.0 - 102.0%	97.0 - 102.0%
Moisture	<5.0%	3.4%
Particle Size/Mesh +60 mesh +200 mesh	Wt % <8% >45%	 <1% 55%
pH	5 - 7	6.73
Residue on Ignition	<0.05%	<0.05%
Water Soluble Substances	<12.0 mg/5 g	4.5 mg/5 g
Heavy Metals	<10 ppm	<10 ppm

H001822
Microcrystalline Cellulose Powder (TOC)
Expires 11/30/2022
Prepared By Casey English 2/22/2019

Identification A & B: Passes
Bulk Density: 0.29 g/ml
Bulk Density (graduated cylinder): 0.31 g/ml
Conductivity: 18 µS/cm
Starch: Negative
Ether Soluble Substances: 0.01%
Total Aerobic microbial Count: 100 cfu/g
Total Mold and Yeast Count: 20 cfu/g
Staphylococcus aureus: Absent/1 g
Pseudomonas aeruginosa: Absent/1 g
E. coli: Absent/1 g
Salmonella: Absent/10 g
Particle size:

- 450 mesh: 77%
- d10: 37 um
- d50: 139 um
- d90: 271 um

TUP: <9/600 cm^2
Degree of brightness: >88%
Powder flow-angle of repose: <42°
Recommended Retest Date: 11/30/2022

07/26/2018 - *John Huang, PhD*
MP Biomedicals, LLC.
Quality Control Manager

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MP Biomedicals, LLC

29525 Fountain Parkway
Solon, Ohio 44139

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Certificate of Analysis

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PREPARATION BATCH SUMMARY

ASTM D2216

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0191 Batch Matrix: Solid
Preparation: No Prep-Organics

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1160	23A0134-06		01/10/23 12:03	
LDW23-IT1194	23A0134-14		01/10/23 12:03	

HOLDING TIME SUMMARY

Analysis: ASTM D2216

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1160 23A0134-06	01/06/23 11:41	01/06/23 17:26	01/10/23 12:03	4	28	01/11/23 05:17	5	28	
LDW23-IT1194 23A0134-14	01/06/23 14:41	01/06/23 17:26	01/10/23 12:03	3	28	01/11/23 05:17	5	28	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

ASTM D2216

Laboratory: Analytical Resources, LLC
SDG: 23A0134
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument:

Analyte	MDL	RL	Units
Total Solids		0.01	%

TOTAL SOLIDS BENCHSHEET

Method: PSEP 1986

(dry at 103-105 C)

Instrumentation

Batch:	BLA0362
Date:	1/16/2023 9:35
Analyst:	CR
Drying Oven:	15
Analytical Balance:	B139298002

Batch drying time

Record times as mm/dd/yy hh:mm

Date/time in oven:	1/16/2023 16:12
Date/time out:	1/17/2023 9:25
Elapsed hrs:	17.2

Oven Temp, C 105

TS (%) calculated as:

Final dry wt (g) = (Dry Wt - Tare Wt)

103 TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)

Oven Temps, °C	
Start Temp:	105
End Temp:	103

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0134-01	0.7900	11.2300	6.7800	5.99	**57.38%**	Yes
23A0134-02	0.7900	11.9600	5.9900	5.20	**46.55%**	Yes
23A0134-03	0.8000	11.0900	5.6700	4.87	**47.33%**	Yes
23A0134-04	0.7900	11.6800	5.8400	5.05	**46.37%**	Yes
23A0134-05	0.8000	11.3600	5.7800	4.98	**47.16%**	Yes
23A0134-06	0.8000	11.8000	5.2300	4.43	**40.27%**	Yes
23A0134-07	0.8000	11.6100	5.5200	4.72	**43.66%**	Yes
23A0134-08	0.8100	11.3700	6.5900	5.78	**54.73%**	Yes
23A0134-09	0.8100	11.5100	5.9500	5.14	**48.04%**	Yes
23A0134-10	0.8000	11.1400	5.8100	5.01	**48.45%**	Yes
23A0134-11	0.8000	11.8500	6.5400	5.74	**51.95%**	Yes
23A0134-12	0.7900	11.9100	7.3300	6.54	**58.81%**	Yes
23A0134-13	0.8000	11.1800	6.5600	5.76	**55.49%**	Yes
23A0134-14	0.7900	11.8100	8.8400	8.05	**73.05%**	Yes
23A0134-15	0.8000	11.6600	6.2400	5.44	**50.09%**	Yes
23A0134-16	0.8000	11.9700	9.3800	8.58	**76.81%**	Yes

TOTAL SOLIDS BENCHSHEET

Method: PSEP 1986

(dry at 103-105 C)

Batch:	BLA0362
Date:	1/16/2023 9:35
Analyst:	CR
Drying Oven:	015
Analytical Balance:	B139298002

Instrumentation

Batch drying time

Record times as mm/dd/yy hh:mm

			Oven Temp, C
Date/time in oven:	1/16/23	16:12	105
Date/time out:	1/17/23	9:25	103
Elapsed hrs:	0.0		

TS (%) calculated as:

Final dry wt (g) = (Dry Wt - Tare Wt)

TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)

Oven Temps, °C	
Start Temp:	105
End Temp:	103

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0134-01 C	0.79	11.23	6.78			No yes
23A0134-02	0.79	11.96	5.99			No yes
23A0134-03	0.80	11.89	5.67			No yes
23A0134-04	0.79	11.68	5.84			No yes
23A0134-05	0.80	11.36	5.78			No yes
23A0134-06	0.80	11.80	5.23			No yes
23A0134-07	0.80	11.61	5.52			No yes
23A0134-08	0.81	11.37	6.59			No yes
23A0134-09	0.81	11.51	5.95			No yes
23A0134-10	0.80	11.14	5.81			No yes
23A0134-11	0.80	11.85	6.54			No yes
23A0134-12	0.79	11.91	7.33			No yes
23A0134-13	0.80	11.18	6.56			No yes
23A0134-14	0.79	11.81	8.84			No yes
23A0134-15 C	0.80	11.66	6.24			No yes
23A0134-16 B	0.88	11.97	9.38			No yes

T/S + Screws

3 cups